



wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 03:00 PM BST

PDB ID : 4V6N
EMDB ID: : EMD-5361
Title : Structural characterization of mRNA-tRNA translocation intermediates (50S ribosome of class2 of the six classes)
Authors : Agirrezabala, X.; Liao, H.; Schreiner, E.; Fu, J.; Ortiz-Meoz, R.F.; Schulten, K.; Green, R.; Frank, J.
Deposited on : 2011-12-07
Resolution : 12.10 Å (reported)
Based on PDB ID : 1ZAV, 1MZP, 2I2V

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<http://wwpdb.org/validation/2016/EMValidationReportHelp>

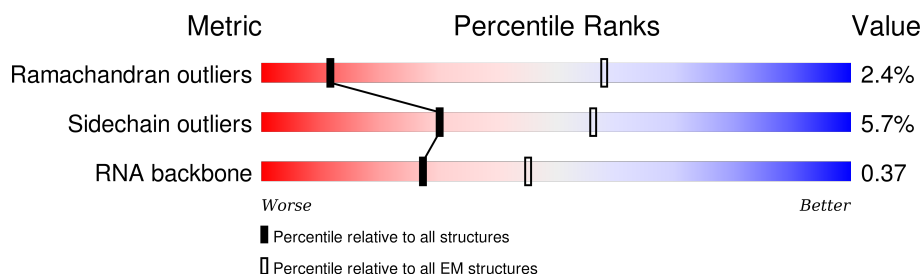
MolProbity : 4.02b-467
Mogul : 1.7.1 (RC1), CSD as537be (2016)
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : trunk27241

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 12.10 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.













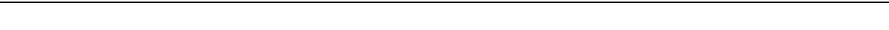

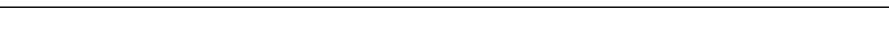
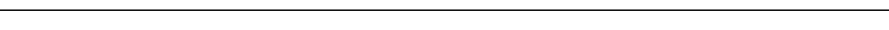











Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	111179	726
Sidechain outliers	111093	686
RNA backbone	3027	244

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	AA	120	
2	AB	2904	
3	AC	234	
4	AD	272	
5	AE	209	
6	AF	201	
7	AG	178	
8	AH	176	
9	AI	149	



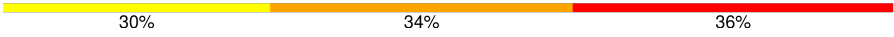





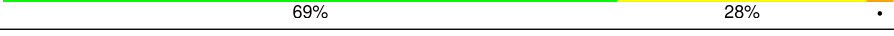
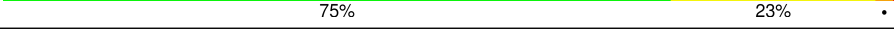
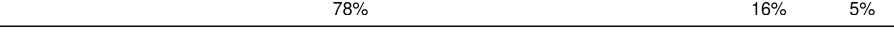

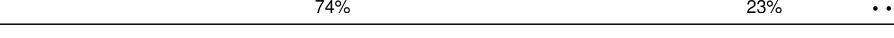
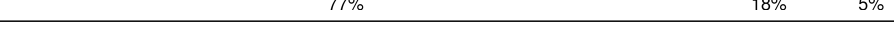
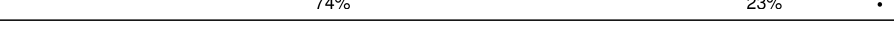


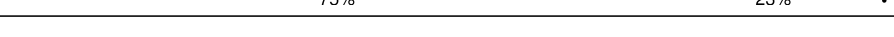
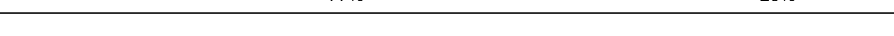

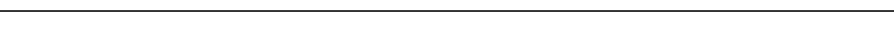

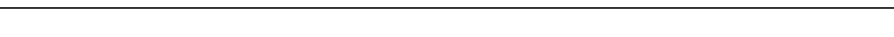
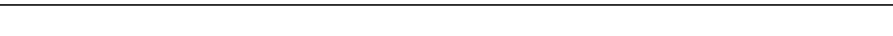
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Mol	Chain	Length	Quality of chain
10	AJ	164	 80% 18% .
11	AK	141	 84% 14% .
12	AL	142	 70% 25% 5%
13	AM	123	 74% 22% .
14	AN	144	 78% 20% .
15	AO	136	 79% 17% .
16	AP	127	 78% 20% .
17	AQ	117	 78% 20% .
18	AR	114	 74% 21% . .
19	AS	117	 78% 17% 5%
20	AT	103	 74% 23% .
21	AU	110	 72% 25% .
22	AV	100	 78% 21% .
23	AW	103	 77% 20% . .
24	AX	94	 84% 14% .
25	AY	84	 77% 18% 5%
26	AZ	77	 70% 25% 5%
27	A0	63	 79% 17% .
28	A1	58	 78% 21% .
29	A2	70	 77% 14% 9%
30	A3	56	 70% 21% 9%
31	A4	54	 72% 22% 6%
32	A5	46	 63% 33% .
33	A6	64	 80% 14% 6%
34	A7	38	 71% 29%

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Mol	Chain	Length	Quality of chain
35	BA	1542	
36	BB	76	
37	BC	47	
38	BD	77	
39	BE	240	
40	BF	232	
41	BG	205	
42	BH	166	
43	BI	135	
44	BJ	178	
45	BK	129	
46	BL	129	
47	BM	103	
48	BN	128	
49	BO	123	
50	BP	117	
51	BQ	100	
52	BR	88	
53	BS	82	
54	BT	83	
55	BU	74	
56	BV	91	
57	BW	86	
58	BX	70	

2 Entry composition

There are 60 unique types of molecules in this entry. The entry contains 152351 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	120	Total	C	N	O	P	0	0
			2566	1144	468	835	119		

- Molecule 2 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	AB	2904	Total	C	N	O	P	0	0
			62351	27824	11469	20155	2903		

- Molecule 3 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	AC	234	Total	C	N	O	S	0	0
			1733	1081	315	330	7		

- Molecule 4 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	AD	272	Total	C	N	O	S	0	0
			2092	1294	425	366	7		

- Molecule 5 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	AE	209	Total	C	N	O	S	0	0
			1565	979	288	294	4		

- Molecule 6 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	AF	201	Total	C	N	O	S	0	0
			1552	974	283	290	5		

- Molecule 7 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AG	178	Total	C	N	O	S	0	0
			1420	905	251	258	6		

- Molecule 8 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AH	176	Total	C	N	O	S	0	0
			1323	832	243	246	2		

- Molecule 9 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AI	149	Total	C	N	O	S	0	0
			1111	699	197	214	1		

- Molecule 10 is a protein called 50S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AJ	164	Total	C	N	O	S	0	0
			1233	776	220	231	6		

- Molecule 11 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AK	141	Total	C	N	O	S	0	0
			1032	651	179	196	6		

- Molecule 12 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AL	142	Total	C	N	O	S	0	0
			1129	714	212	199	4		

- Molecule 13 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AM	123	Total	C	N	O	S	0	0
			947	593	181	167	6		

- Molecule 14 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AN	144	Total	C	N	O	S	0	0
			1053	654	207	190	2		

- Molecule 15 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AO	136	Total	C	N	O	S	0	0
			1074	686	205	177	6		

- Molecule 16 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AP	127	Total	C	N	O	S	0	0
			1008	621	204	178	5		

- Molecule 17 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AQ	117	Total	C	N	O	S	0	0
			900	557	179	163	1		

- Molecule 18 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	AR	114	Total	C	N	O	S	0	0
			917	574	179	163	1		

- Molecule 19 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms				AltConf	Trace
19	AS	117	Total	C	N	O	0	0
			947	604	192	151		

- Molecule 20 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	AT	103	Total	C	N	O	S	0	0
			816	516	153	145	2		

- Molecule 21 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AU	110	Total	C	N	O	S	0	0
			857	532	166	156	3		

- Molecule 22 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	AV	100	Total	C	N	O	S	0	0
			787	496	146	143	2		

- Molecule 23 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AW	103	Total	C	N	O	S	0	0
			789	498	148	143			

- Molecule 24 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AX	94	Total	C	N	O	S	0	0
			753	479	137	134	3		

- Molecule 25 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	AY	84	Total	C	N	O	S	0	0
			634	391	129	113	1		

- Molecule 26 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AZ	77	Total	C	N	O	S	0	0
			625	388	129	106	2		

- Molecule 27 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	A0	63	Total	C	N	O	S	0	0
			509	313	99	95	2		

- Molecule 28 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	A1	58	Total	C	N	O	S	0	0
			449	281	87	79	2		

- Molecule 29 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	A2	70	Total	C	N	O	S	0	0
			549	339	104	100	6		

- Molecule 30 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	A3	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 31 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	A4	54	Total	C	N	O		0	0
			441	284	81	76			

- Molecule 32 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	A5	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

- Molecule 33 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	A6	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 34 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	A7	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

- Molecule 35 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	BA	1542	Total	C	N	O	P	0	0
			33089	14767	6064	10717	1541		

- Molecule 36 is a RNA chain called A site tRNA.

Mol	Chain	Residues	Atoms						AltConf	Trace
36	BB	76	Total	C	N	O	P	S	0	0
			1627	731	287	532	75	2		

- Molecule 37 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	BC	47	Total	C	N	O	P	0	0
			993	445	167	335	46		

- Molecule 38 is a RNA chain called P site tRNA.

Mol	Chain	Residues	Atoms						AltConf	Trace
38	BD	77	Total	C	N	O	P	S	0	0
			1641	734	297	533	76	1		

- Molecule 39 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	BE	240	Total	C	N	O	S	0	0
			1872	1180	332	352	8		

- Molecule 40 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	BF	232	Total	C	N	O	S	0	0
			1822	1149	346	323	4		

- Molecule 41 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	BG	205	Total	C	N	O	S	0	0
			1643	1026	315	298	4		

- Molecule 42 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	BH	166	Total	C	N	O	S	0	0
			1225	761	232	226	6		

- Molecule 43 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	BI	135	Total	C	N	O	S	0	0
			1101	677	198	219	7		

- Molecule 44 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	BJ	178	Total	C	N	O	S	0	0
			1400	874	269	253	4		

- Molecule 45 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	BK	129	Total	C	N	O	S	0	0
			979	616	173	184	6		

- Molecule 46 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	BL	129	Total	C	N	O	S	0	0
			1036	642	208	183	3		

- Molecule 47 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	BM	103	Total	C	N	O	S	0	0
			825	514	158	151	2		

- Molecule 48 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	BN	128	Total	C	N	O	S	0	0
			965	595	196	171	3		

- Molecule 49 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	BO	123	Total	C	N	O	S	0	0
			955	590	196	165	4		

- Molecule 50 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	BP	117	Total	C	N	O	S	0	0
			910	564	183	160	3		

- Molecule 51 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	BQ	100	Total	C	N	O	S	0	0
			805	499	164	139	3		

- Molecule 52 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	BR	88	Total	C	N	O	S	0	0
			716	440	146	129	1		

- Molecule 53 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	BS	82	Total	C	N	O	S	0	0
			649	406	128	114	1		

- Molecule 54 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	BT	83	Total	C	N	O	S	0	0
			672	425	124	120	3		

- Molecule 55 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	BU	74	Total	C	N	O	S	0	0
			626	395	123	107	1		

- Molecule 56 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	BV	91	Total	C	N	O	S	0	0
			727	464	139	122	2		

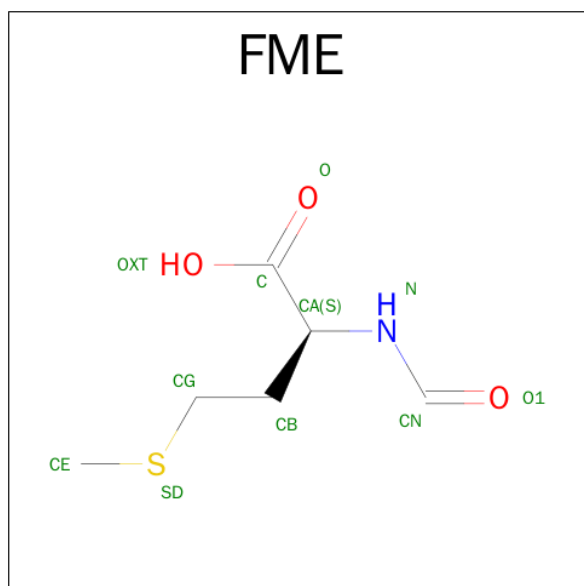
- Molecule 57 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	BW	86	Total	C	N	O	S	0	0
			670	414	138	115	3		

- Molecule 58 is a protein called 30S ribosomal protein S21.

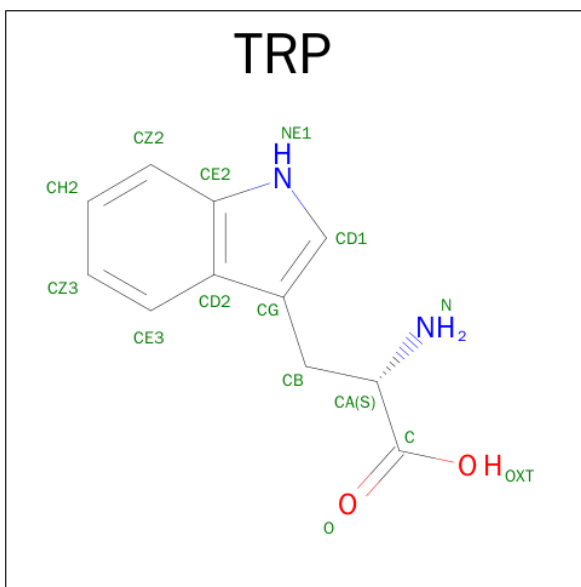
Mol	Chain	Residues	Atoms					AltConf	Trace
58	BX	70	Total	C	N	O	S	0	0
			590	366	125	98	1		

- Molecule 59 is N-FORMYLMETHIONINE (three-letter code: FME) (formula: $C_6H_{11}NO_3S$).



Mol	Chain	Residues	Atoms					AltConf
59	AB	1	Total	C	N	O	S	0
			10	6	1	2	1	

- Molecule 60 is TRYPTOPHAN (three-letter code: TRP) (formula: $C_{11}H_{12}N_2O_2$).

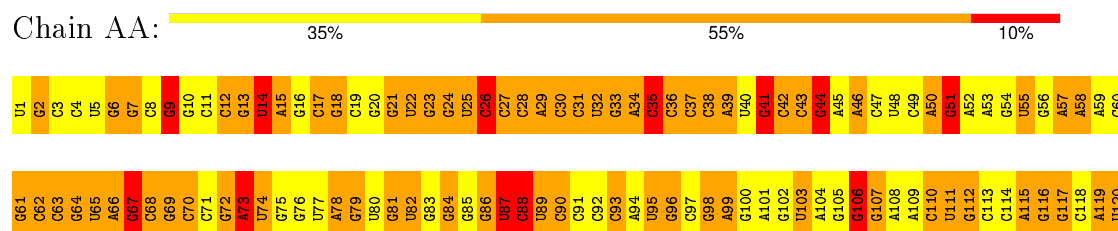


Mol	Chain	Residues	Atoms				AltConf
60	BB	1	Total	C	N	O	0
			14	11	2	1	

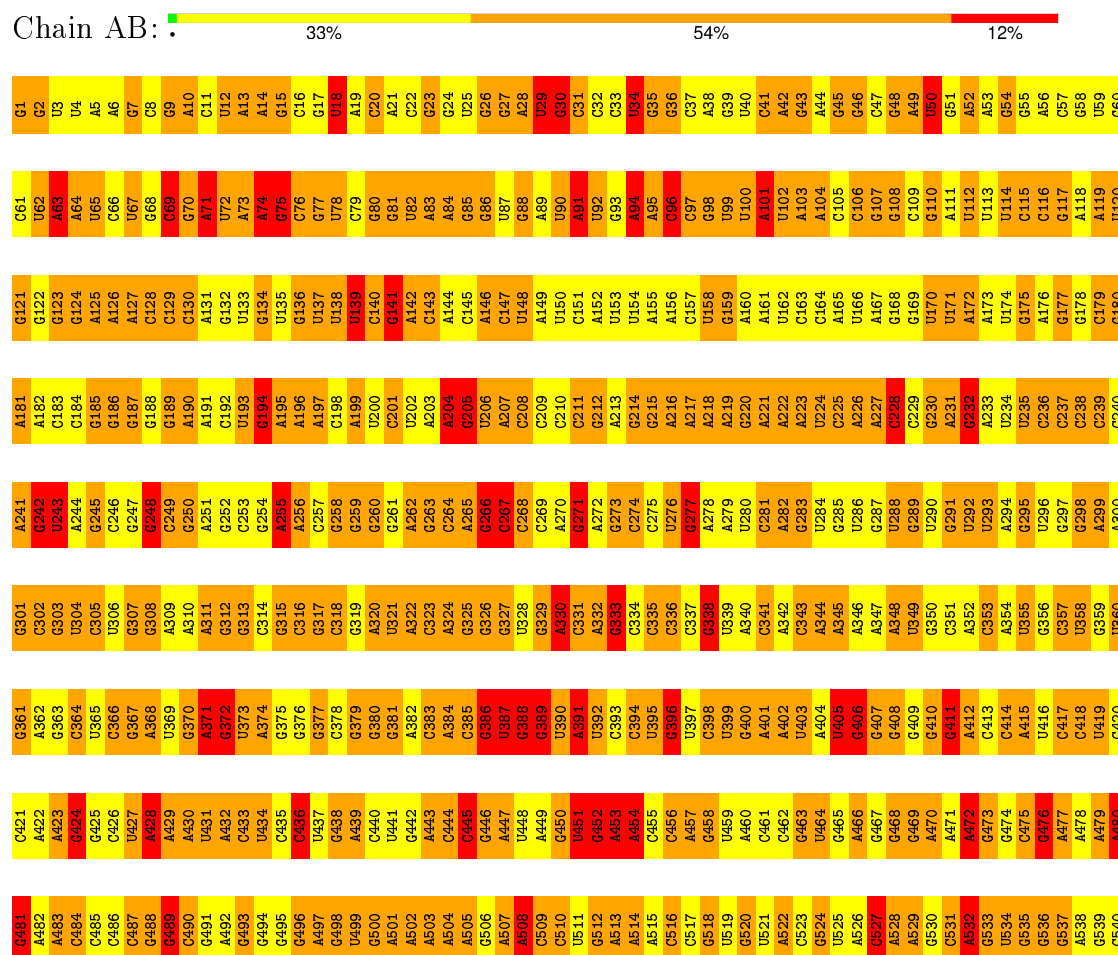
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

• Molecule 1: 5S ribosomal RNA

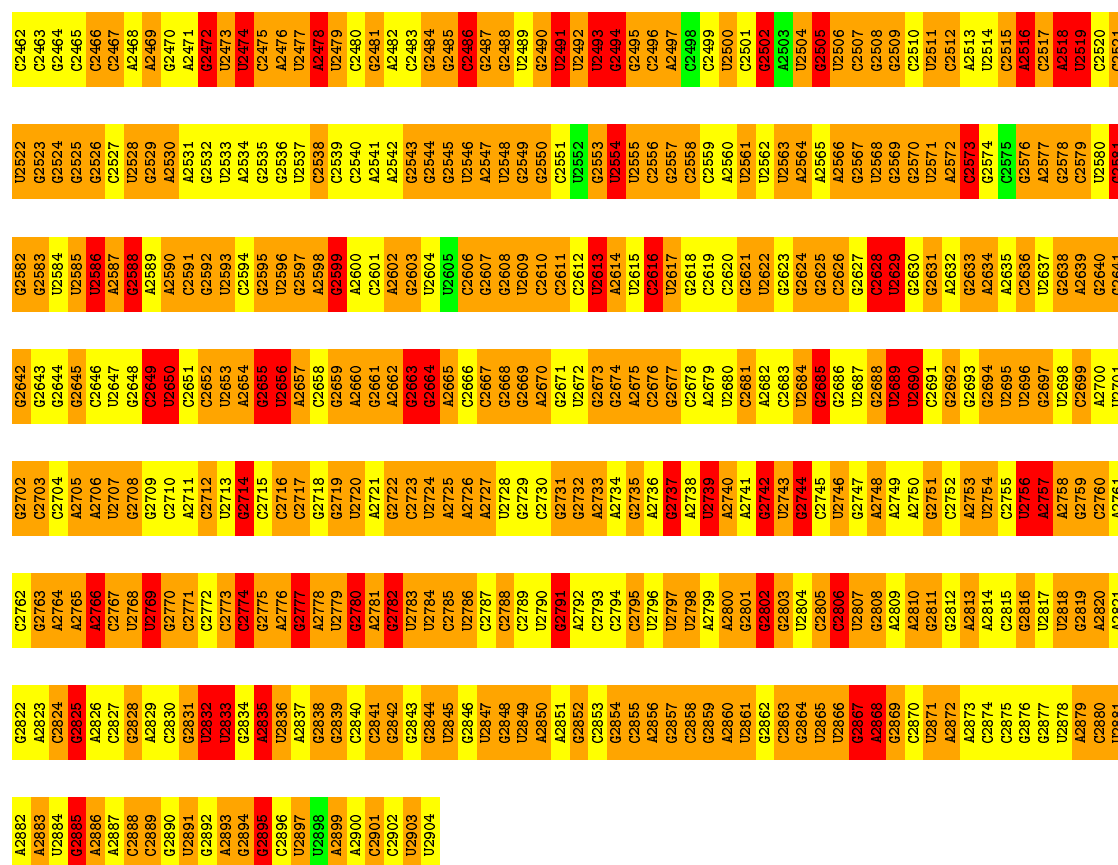


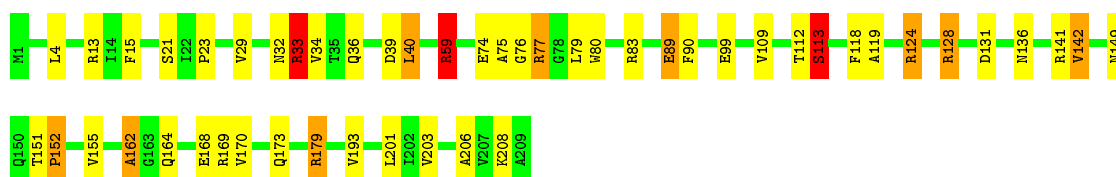
• Molecule 2: 23S ribosomal RNA



U1442	G1382	A1322	A1262	G1202	A1142	U1082	G1022	C902	U842	A782	A721	C601	A541
U1443	A1383	C1323	U1263	U1203	A1143	U1083	U1023	C903	G843	A783	A722	A602	C542
U1444	A1384	A1264	A1264	A1204	A1144	A1084	G1024	C904	A844	G784	C723	A603	C543
U1445	A1385	U1325	A1265	A1205	C1145	A1085	G1025	G905	A845	G785	U724	G604	C544
U1446	A1386	G1326	G1266	G1206	C1146	A1086	A1026	G906	U846	C786	G725	G605	U545
U1447	A1387	A1327	U1267	G1207	A1147	G1087	G1027	G907	U847	C787	G726	U606	U546
U1448	A1388	A1328	A1268	C1208	U1148	A1088	A1028	C908	C848	A788	A727	U607	A547
U1449	G1389	A1329	A1269	U1209	G1149	A1089	C1029	G909	U849	A789	G728	A608	G548
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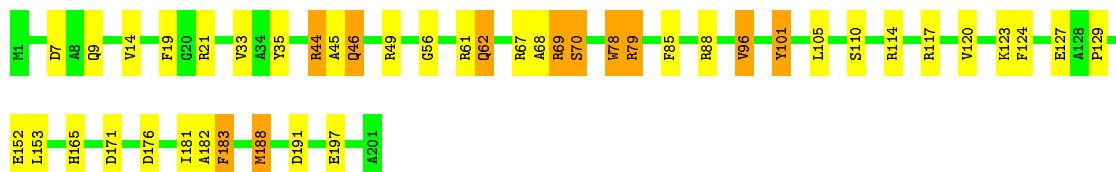
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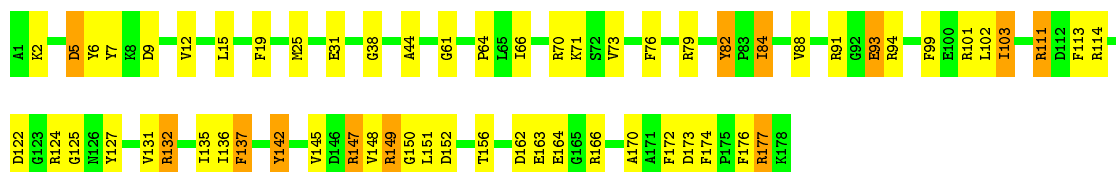
- Molecule 6: 50S ribosomal protein L4

Chain AF: 78% 16% 5%



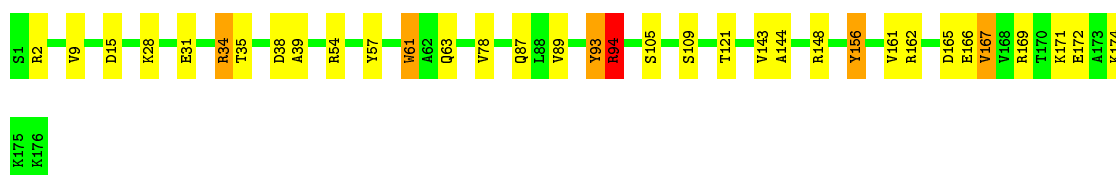
- Molecule 7: 50S ribosomal protein L5

Chain AG: 66% 28% 7%



- Molecule 8: 50S ribosomal protein L6

Chain AH: 81% 16% 3%



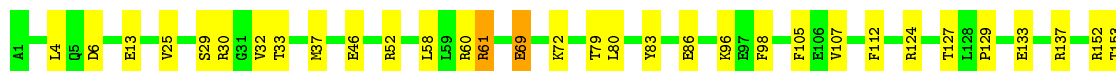
- Molecule 9: 50S ribosomal protein L9

Chain AI: 81% 15% 5%



- Molecule 10: 50S ribosomal protein L10

Chain AJ: 80% 18% 2%





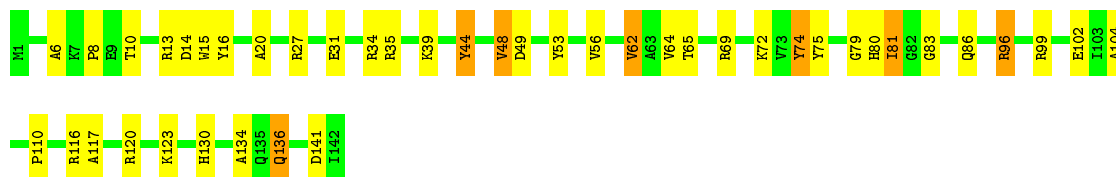
- Molecule 11: 50S ribosomal protein L11

Chain AK: 84% 14%



- Molecule 12: 50S ribosomal protein L13

Chain AL: 70% 25% 5%



- Molecule 13: 50S ribosomal protein L14

Chain AM: 74% 22%



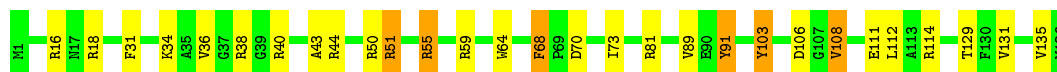
- Molecule 14: 50S ribosomal protein L15

Chain AN: 78% 20%



- Molecule 15: 50S ribosomal protein L16

Chain AO: 79% 17%



- Molecule 16: 50S ribosomal protein L17

Chain AP: 78% 20%



- Molecule 17: 50S ribosomal protein L18

Chain AQ: 78% 20%



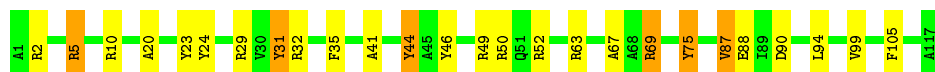
- Molecule 18: 50S ribosomal protein L19

Chain AR: 74% 21%



- Molecule 19: 50S ribosomal protein L20

Chain AS: 78% 17% 5%



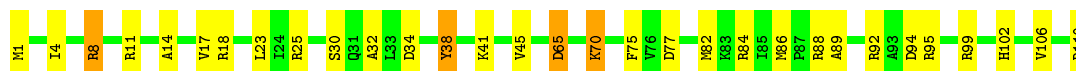
- Molecule 20: 50S ribosomal protein L21

Chain AT: 74% 23%



- Molecule 21: 50S ribosomal protein L22

Chain AU: 72% 25%



- Molecule 22: 50S ribosomal protein L23

Chain AV: 78% 21%



- Molecule 23: 50S ribosomal protein L24

Chain AW: 77% 20%

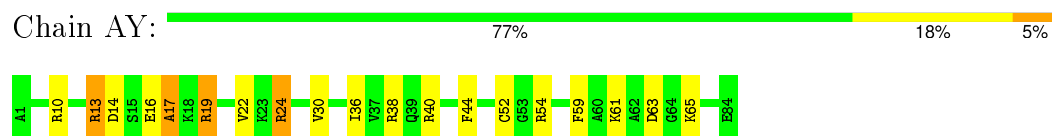


- Molecule 24: 50S ribosomal protein L25

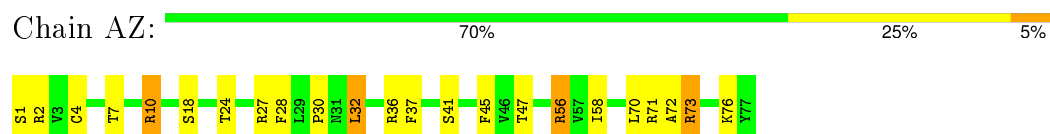
Chain AX: 84% 14%



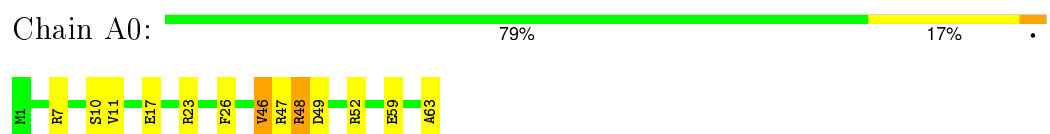
- Molecule 25: 50S ribosomal protein L27



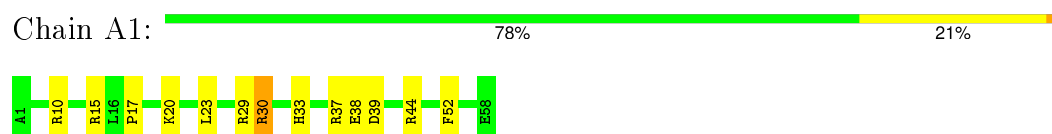
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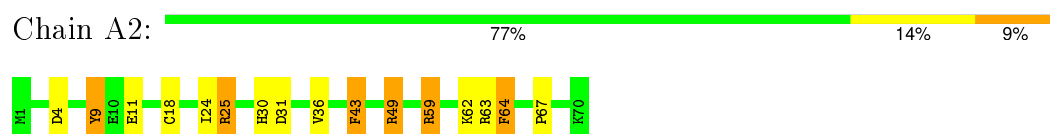
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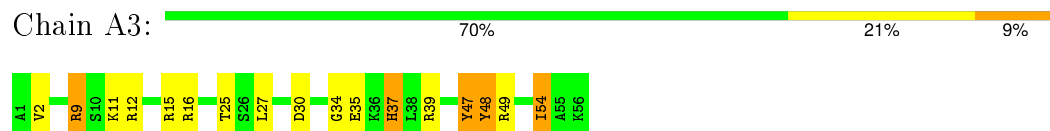
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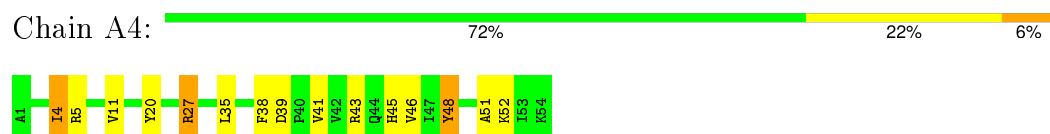
- Molecule 29: 50S ribosomal protein L31



- Molecule 30: 50S ribosomal protein L32



- Molecule 31: 50S ribosomal protein L33



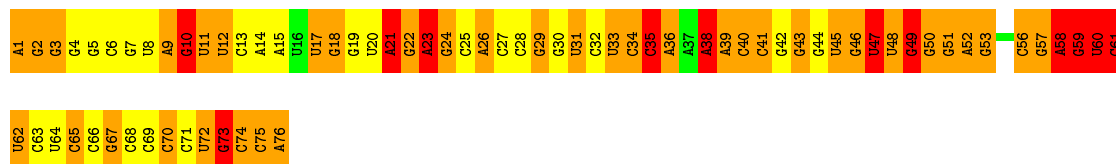
- Molecule 32: 50S ribosomal protein L34



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G1504	U1444	C1384	A1324	U1264	A1204	G1144	U1084	G1024	A964	U904	G844	C784	G724	G664	G604
U1505	G1445	G1385	C1325	C1265	U1205	A1145	U1085	U1025	U965	U905	A845	G785	G725	A665	U605
U1506	A1446	G1386	U1326	G1266	G1206	A1146	U1086	G1026	G966	A906	G846	G786	G726	G666	G606
A1507	U1447	G1387	C1327	G1267	G1207	U1147	G1087	C1027	G967	A907	G847	C787	G727	G667	A607
A1508	C1448	C1388	A1328	G1268	C1208	U1148	G1088	C1028	A968	A908	C848	C788	A728	G668	A608
C1509	C1449	A1389	A1329	A1269	C1209	C1149	G1089	U1029	A969	A909	G849	C789	A729	G669	A609
C1510	U1450	U1390	U1330	G1270	C1210	A1150	U1090	U1030	C970	U910	U850	A790	G730	G670	U610
G1511	G1451	C1391	G1331	A1271	C1211	A1151	U1091	C1031	G971	U911	G851	C791	G731	G671	C611
U1512	C1452	G1392	A1332	G1272	U1212	A1152	A1092	G1032	G972	C912	G852	A792	C732	U672	C612
A1513	G1453	C1393	A1333	C1273	G1213	A1153	A1093	G1033	G973	C913	C853	U793	G733	A673	C613
G1514	G1454	A1394	G1334	A1274	C1214	G1154	G1094	G1034	A974	A914	U854	A794	G734	G674	C614
G1515	G1455	U1395	U1335	G1275	G1215	A1155	U1095	A1035	A975	A915	U855	C795	G735	A675	G615
G1516	A1456	C1396	C1336	G1276	A1216	G1156	C1096	A1036	G976	U916	C856	C796	C736	A676	G616
G1517	G1457	G1397	G1337	C1277	C1217	A1157	C1097	C1037	A977	G917	C857	C797	C737	U677	G617
C1520	G1458	A1398	G1338	G1278	C1218	G1158	C1098	C1038	A978	A918	G858	U798	C738	U678	C618
C1521	G1459	C1399	A1339	G1279	C1219	U1159	G1099	G1039	C979	A919	G859	C799	C739	G679	U619
C1522	G1460	A1400	A1340	A1280	G1220	G1160	C1100	U1040	C980	U920	A860	G800	U740	C680	G620
U1523	U1461	U1341	C1342	C1282	G1222	C1161	A1101	G1041	U981	U921	G861	U801	G741	A681	A621
G1524	C1462	C1343	G1343	U1283	C1223	A1162	A1102	A1042	U982	G922	C862	A802	G742	G682	A622
G1525	G1463	C1343	C1343	U1283	C1223	A1163	C1103	G1043	U983	A923	U863	G803	A743	G683	G623
G1526	U1464	A1404	C1344	C1284	U1224	G1164	A1104	A1044	G984	G924	A864	U804	C744	U684	C624
U1527	G1465	U1345	U1345	A1285	A1225	U1165	A1105	C1045	C985	G925	A865	C805	G745	G685	U625
U1528	C1466	U1406	A1346	U1286	C1226	G1166	G1106	A1046	U986	G926	C866	C806	A746	U686	G626
G1529	U1467	G1407	G1347	A1287	A1227	A1167	C1107	G1047	G987	G927	G867	A807	A747	A687	G627
G1530	C1468	A1408	U1348	A1288	C1228	U1168	G1108	G1048	G988	G928	C868	C808	G748	G688	G628
A1531	U1469	C1409	A1349	A1289	C1229	A1169	C1109	U1049	U989	G929	G869	G809	A749	C689	A629
U1532	U1470	A1410	A1350	G1290	A1230	A1170	A1110	G1050	C990	C930	U870	C810	C750	G690	A630
C1533	U1471	C1411	U1351	U1291	G1231	A1171	A1111	C1051	U991	C931	U871	C811	U751	G691	C631
C1534	U1472	C1412	C1352	C1292	G1232	C1172	C1112	U1052	U992	C932	A872	C812	G752	U692	U632
C1535	G1473	A1413	G1353	C1293	G1233	U1173	C1113	G1053	G993	G933	A873	U813	A753	G693	G633
C1536	G1475	U1414	U1354	G1294	C1234	G1174	C1114	C1054	A994	C934	G874	A814	C754	A694	C634
U1537	G1476	G1415	U1355	U1295	U1235	G1175	A1115	A1055	C995	A935	U875	A815	G755	A695	A635
C1538	U1477	G1416	G1356	C1296	A1236	A1176	U1116	U1056	A996	C936	C876	A816	C756	A696	U636
C1539	U1477	G1417	A1357	G1297	C1237	G1177	A1117	G1057	U997	A937	G877	C817	U757	U697	C637
U1540	U1478	A1418	U1358	U1298	A1238	G1178	U1118	G1058	C998	A938	A878	C818	C758	G698	U638
U1541	C1479	G1419	C1359	A1299	A1239	A1179	C1119	C1059	C999	G939	C879	A819	A759	C699	G639
U1542	A1480	U1420	A1360	G1300	U1240	A1180	C1120	U1060	A1000	C940	U820	U820	G760	G700	A640
C1481	G1481	G1421	G1361	U1301	G1241	G1181	U1121	G1061	C1001	G941	C881	C821	G761	U701	U641
G1482	U1482	A1422	A1362	C1302	G1242	G1182	U1122	U1062	G1002	G942	C882	U822	U762	A702	A642
A1483	C1483	G1423	C1363	C1303	C1243	U1183	U1123	C1063	G1003	U943	C883	C823	G763	G703	C643
U1484	U1484	U1424	U1364	G1304	G1244	G1184	U1124	G1064	A1004	G944	U884	G824	C764	A704	U644
U1485	U1485	U1425	G1365	C1305	C1245	G1185	U1125	U1065	A1005	G945	G885	A825	G765	G705	G645
G1486	G1486	G1426	C1366	A1306	A1246	G1186	U1126	C1066	G1006	A946	G886	C826	A766	A706	G646
G1487	G1487	C1427	C1367	U1307	U1247	G1187	G1127	A1067	U1007	G947	G887	U827	A767	U707	C647
G1488	G1488	A1428	A1368	U1308	A1248	A1188	C1128	G1068	U1008	C948	G888	U828	A768	C708	A648
U1489	G1489	A1429	C1369	G1309	C1249	U1189	C1129	C1069	U1009	A949	A889	G829	G769	U709	A649
U1490	U1490	A1430	G1370	G1310	A1250	G1190	A1130	U1070	U1010	U950	G890	G830	C770	G710	G650
G1491	G1491	A1431	G1371	A1311	A1251	A1191	G1131	C1071	C1011	G951	U891	A831	U771	G711	C651
A1492	A1492	G1432	U1372	G1312	A1252	A1192	C1132	G1072	A1012	U952	A892	G832	U772	A712	U652
A1493	A1493	C1433	G1373	G1313	G1253	G1193	C1133	U1073	G1013	G953	C893	G833	G773	G713	U653
G1494	G1494	A1434	A1374	C1314	C1254	U1194	G1134	G1074	A1014	G954	G894	U834	G774	G714	G654
U1495	U1495	G1435	A1375	G1315	G1255	C1195	U1135	U1075	G1015	U955	G895	U835	G775	A715	A655
C1496	U1496	G1436	G1376	G1316	A1256	A1196	C1136	U1076	U1016	U956	C896	G836	G776	A716	G656
G1497	G1497	U1437	A1377	C1317	A1257	A1197	C1137	G1077	U1017	U957	C897	U837	A777	U717	U657
U1498	U1498	C1438	G1378	A1318	G1258	A1198	G1138	U1078	G1018	A958	G898	G838	G778	A718	C658
G1499	G1499	G1439	G1379	A1319	C1259	U1199	C1139	G1079	A1019	A959	C899	G839	C779	A719	U659
A1500	A1500	U1440	U1380	C1320	G1260	C1200	C1140	A1080	G1020	U960	A900	C840	A780	C720	C660

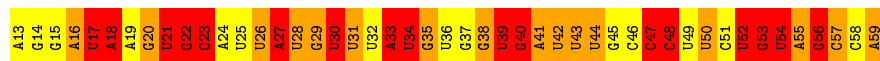
• Molecule 36: A site tRNA

Chain BB: 



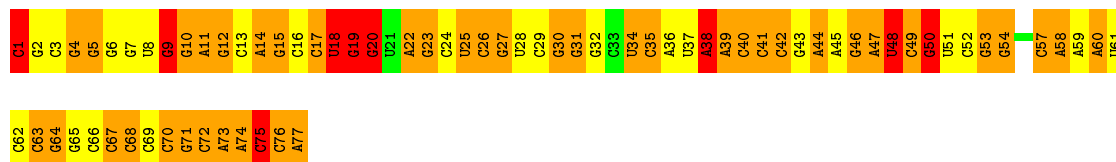
- Molecule 37: mRNA

Chain BC: 




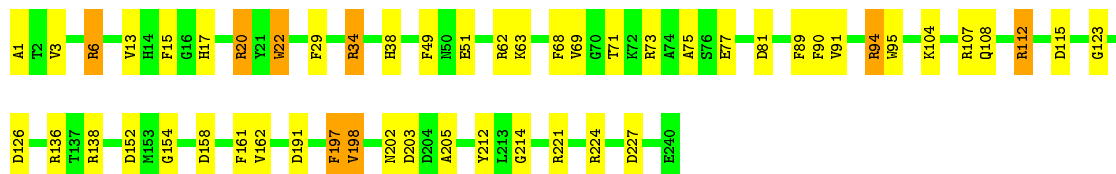
- Molecule 38: P site tRNA

Chain BD: 




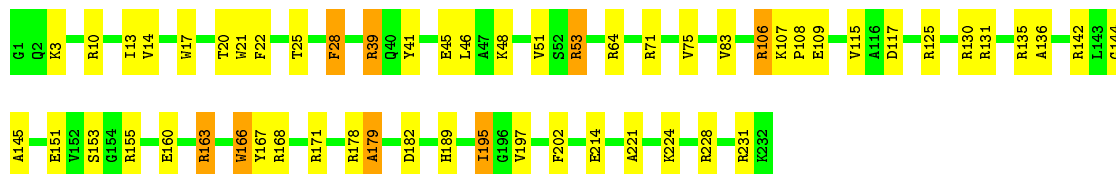
- Molecule 39: 30S ribosomal protein S2

Chain BE: 




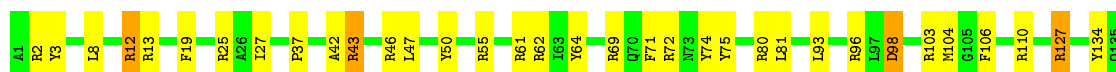
- Molecule 40: 30S ribosomal protein S3

Chain BF: 



- Molecule 41: 30S ribosomal protein S4

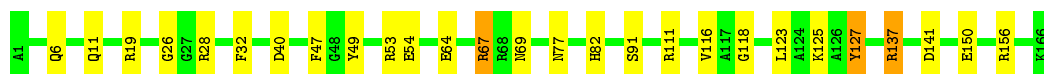
Chain BG: 





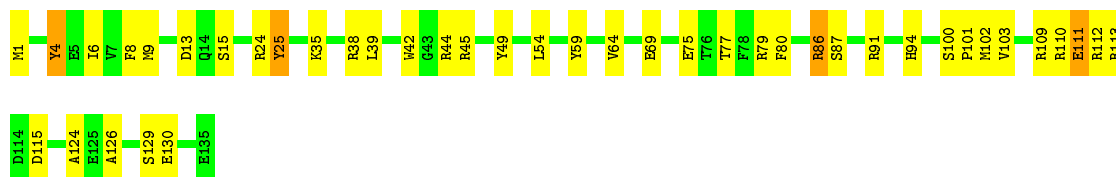
- Molecule 42: 30S ribosomal protein S5

Chain BH: 84% 14% •



- Molecule 43: 30S ribosomal protein S6

Chain BI: 69% 28% •



- Molecule 44: 30S ribosomal protein S7

Chain BJ: 75% 23% ••



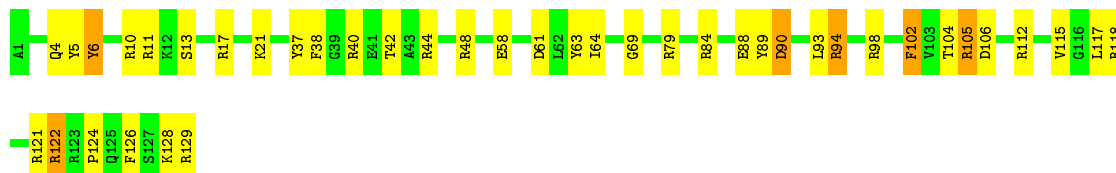
- Molecule 45: 30S ribosomal protein S8

Chain BK: 78% 16% 5%



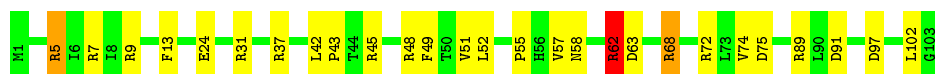
- Molecule 46: 30S ribosomal protein S9

Chain BL: 68% 27% 5%



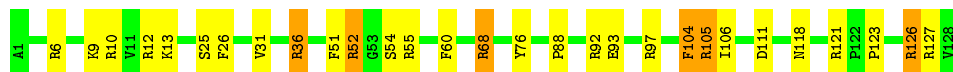
- Molecule 47: 30S ribosomal protein S10

Chain BM: 74% 23% ••



- Molecule 48: 30S ribosomal protein S11

Chain BN: 77% 18% 5%



- Molecule 49: 30S ribosomal protein S12

Chain BO: 74% 23% 3%



- Molecule 50: 30S ribosomal protein S13

Chain BP: 77% 19% 4%



- Molecule 51: 30S ribosomal protein S14

Chain BQ: 67% 31% 2%



- Molecule 52: 30S ribosomal protein S15

Chain BR: 75% 23% 2%



- Molecule 53: 30S ribosomal protein S16

Chain BS: 77% 20% 3%

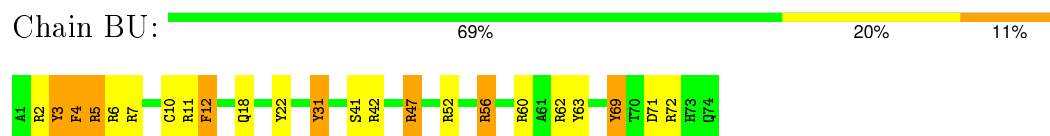


- Molecule 54: 30S ribosomal protein S17

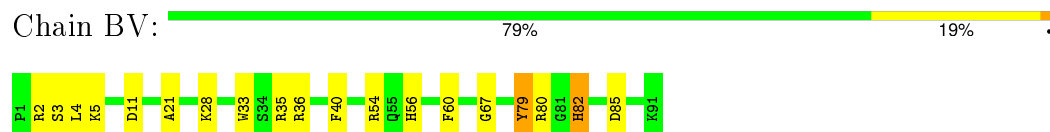
Chain BT: 75% 24% 1%



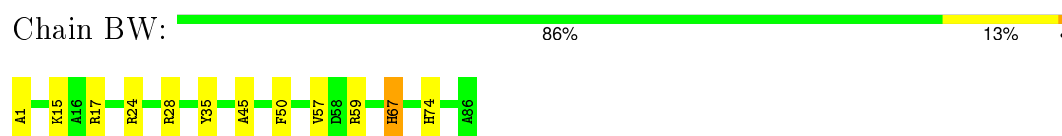
- Molecule 55: 30S ribosomal protein S18



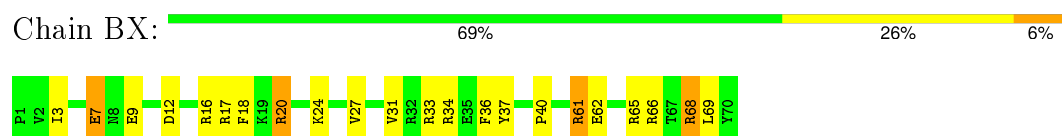
- Molecule 56: 30S ribosomal protein S19



- Molecule 57: 30S ribosomal protein S20



- Molecule 58: 30S ribosomal protein S21



4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	36204	Depositor
Resolution determination method	FSC at 0.5 cut-off	Depositor
CTF correction method	Volumes were CTF-corrected in defocus groups	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	25	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	59000	Depositor
Image detector	TVIPS TemCam-F415 (CCD)	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: 3TD, 5MU, CH, OMG, OMU, MA6, MIA, OMC, H2U, 2MA, 6MZ, 2MG, 5MC, UR3, 4OC, FME, 4SU, 7MG, 1MG, PSU

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 2$	RMSZ	# $ Z > 2$
1	AA	3.14	330/2869 (11.5%)	3.60	681/4474 (15.2%)
10	AJ	1.56	7/1247 (0.6%)	1.92	21/1679 (1.3%)
11	AK	1.50	3/1046 (0.3%)	1.84	19/1410 (1.3%)
12	AL	1.52	7/1152 (0.6%)	1.94	33/1551 (2.1%)
13	AM	1.41	1/956 (0.1%)	1.89	24/1279 (1.9%)
14	AN	1.52	2/1062 (0.2%)	1.98	27/1413 (1.9%)
15	AO	1.48	2/1093 (0.2%)	2.19	34/1460 (2.3%)
16	AP	1.48	4/1021 (0.4%)	2.00	21/1364 (1.5%)
17	AQ	1.49	3/910 (0.3%)	1.93	24/1219 (2.0%)
18	AR	1.56	6/929 (0.6%)	2.07	25/1242 (2.0%)
19	AS	1.57	5/960 (0.5%)	2.21	34/1278 (2.7%)
2	AB	3.07	7254/69257 (10.5%)	3.51	15515/108040 (14.4%)
20	AT	1.56	1/829 (0.1%)	1.93	19/1107 (1.7%)
21	AU	1.47	4/864 (0.5%)	2.01	27/1156 (2.3%)
22	AV	1.49	4/794 (0.5%)	1.86	17/1060 (1.6%)
23	AW	1.53	4/797 (0.5%)	1.94	20/1062 (1.9%)
24	AX	1.46	2/766 (0.3%)	1.80	14/1025 (1.4%)
25	AY	1.51	0/642	1.97	16/848 (1.9%)
26	AZ	1.57	3/635 (0.5%)	2.13	20/848 (2.4%)
27	A0	1.51	1/510 (0.2%)	1.90	10/677 (1.5%)
28	A1	1.41	1/453 (0.2%)	2.05	17/605 (2.8%)
29	A2	1.55	1/559 (0.2%)	2.18	16/745 (2.1%)
3	AC	1.50	7/1748 (0.4%)	1.83	37/2355 (1.6%)
30	A3	1.53	4/450 (0.9%)	2.15	17/599 (2.8%)
31	A4	1.50	0/448	1.96	12/594 (2.0%)
32	A5	1.49	4/380 (1.1%)	2.28	17/498 (3.4%)
33	A6	1.49	3/513 (0.6%)	1.89	11/676 (1.6%)
34	A7	1.42	1/303 (0.3%)	2.16	11/397 (2.8%)
35	BA	3.10	3971/36769 (10.8%)	3.53	8378/57354 (14.6%)
36	BB	3.03	178/1600 (11.1%)	3.53	372/2492 (14.9%)
37	BC	3.13	119/1108 (10.7%)	3.48	238/1724 (13.8%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >2	RMSZ	# Z >2
38	BD	3.05	179/1721 (10.4%)	3.56	400/2683 (14.9%)
39	BE	1.49	8/1904 (0.4%)	1.96	46/2565 (1.8%)
4	AD	1.51	4/2131 (0.2%)	1.99	62/2863 (2.2%)
40	BF	1.49	6/1852 (0.3%)	1.99	48/2490 (1.9%)
41	BG	1.57	9/1665 (0.5%)	2.08	56/2227 (2.5%)
42	BH	1.50	5/1239 (0.4%)	1.87	27/1664 (1.6%)
43	BI	1.55	5/1121 (0.4%)	2.04	41/1509 (2.7%)
44	BJ	1.54	8/1422 (0.6%)	1.94	39/1908 (2.0%)
45	BK	1.42	7/989 (0.7%)	1.98	21/1326 (1.6%)
46	BL	1.56	8/1048 (0.8%)	2.24	44/1394 (3.2%)
47	BM	1.49	3/835 (0.4%)	2.00	25/1127 (2.2%)
48	BN	1.48	2/982 (0.2%)	2.08	28/1323 (2.1%)
49	BO	1.52	4/969 (0.4%)	1.90	23/1300 (1.8%)
5	AE	1.50	6/1586 (0.4%)	1.92	28/2134 (1.3%)
50	BP	1.52	5/919 (0.5%)	2.05	25/1226 (2.0%)
51	BQ	1.62	9/817 (1.1%)	2.10	30/1088 (2.8%)
52	BR	1.47	1/724 (0.1%)	2.09	29/966 (3.0%)
53	BS	1.52	1/659 (0.2%)	2.18	22/884 (2.5%)
54	BT	1.55	4/681 (0.6%)	2.06	19/913 (2.1%)
55	BU	1.55	4/637 (0.6%)	2.18	28/851 (3.3%)
56	BV	1.52	2/744 (0.3%)	1.90	13/995 (1.3%)
57	BW	1.49	2/676 (0.3%)	1.78	7/895 (0.8%)
58	BX	1.58	2/598 (0.3%)	2.02	22/792 (2.8%)
6	AF	1.47	5/1571 (0.3%)	1.92	37/2113 (1.8%)
7	AG	1.60	10/1444 (0.7%)	2.03	49/1937 (2.5%)
8	AH	1.53	3/1343 (0.2%)	1.92	28/1816 (1.5%)
9	AI	1.45	3/1122 (0.3%)	1.96	24/1515 (1.6%)
All	All	2.70	12237/164069 (7.5%)	3.17	26948/244735 (11.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	0	68
10	AJ	0	3
11	AK	0	2
12	AL	0	4
13	AM	0	5
14	AN	0	4
15	AO	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
16	AP	0	8
17	AQ	0	2
18	AR	0	7
19	AS	0	5
2	AB	0	1652
20	AT	0	5
21	AU	0	2
22	AV	0	1
23	AW	0	1
24	AX	0	1
25	AY	0	7
26	AZ	0	2
27	A0	0	4
28	A1	0	1
29	A2	0	3
3	AC	0	2
30	A3	0	3
31	A4	0	2
33	A6	0	5
35	BA	0	910
36	BB	0	37
37	BC	0	28
38	BD	0	45
39	BE	0	4
4	AD	0	11
40	BF	0	7
41	BG	0	2
42	BH	0	3
43	BI	0	5
44	BJ	0	6
45	BK	0	4
46	BL	0	4
47	BM	0	2
48	BN	0	3
49	BO	0	8
5	AE	0	11
50	BP	0	2
51	BQ	0	3
52	BR	0	1
53	BS	0	4
54	BT	0	1
55	BU	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
56	BV	0	4
57	BW	0	2
58	BX	0	3
6	AF	0	3
7	AG	0	8
8	AH	0	5
9	AI	0	3
All	All	0	2936

All (12237) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2225	A	N3-C4	18.05	1.45	1.34
2	AB	2615	U	C2-N3	17.29	1.49	1.37
35	BA	729	A	P-O5'	15.61	1.75	1.59
2	AB	1970	A	N9-C4	15.52	1.47	1.37
2	AB	1008	A	N3-C4	15.09	1.44	1.34
35	BA	1513	A	N3-C4	14.97	1.43	1.34
35	BA	871	U	C2-N3	14.93	1.48	1.37
2	AB	872	U	C2-N3	14.89	1.48	1.37
38	BD	46	G	N3-C4	14.83	1.45	1.35
2	AB	1469	A	N3-C4	14.74	1.43	1.34
35	BA	531	U	C2-N3	14.74	1.48	1.37
2	AB	1637	A	N9-C4	14.69	1.46	1.37
35	BA	1533	C	N1-C6	14.54	1.45	1.37
2	AB	310	A	N3-C4	14.52	1.43	1.34
2	AB	2534	A	N9-C4	14.40	1.46	1.37
2	AB	1322	A	N7-C5	14.37	1.47	1.39
2	AB	2177	C	N1-C6	14.18	1.45	1.37
2	AB	969	G	P-O5'	14.03	1.73	1.59
2	AB	2369	A	N3-C4	14.01	1.43	1.34
2	AB	2216	G	C6-N1	13.97	1.49	1.39
1	AA	39	A	O3'-P	13.89	1.77	1.61
2	AB	992	C	N1-C6	13.87	1.45	1.37
35	BA	1439	G	P-O5'	13.79	1.73	1.59
2	AB	523	C	P-O5'	13.72	1.73	1.59
35	BA	637	C	P-O5'	13.65	1.73	1.59
35	BA	1092	A	N3-C4	13.62	1.43	1.34
2	AB	1626	A	N3-C4	13.61	1.43	1.34
35	BA	336	A	P-O5'	13.57	1.73	1.59
2	AB	1852	U	C2-N3	13.46	1.47	1.37
2	AB	829	A	N3-C4	13.44	1.43	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2276	G	N7-C5	-13.43	1.31	1.39
35	BA	1394	A	N3-C4	13.37	1.42	1.34
35	BA	892	A	C6-N1	13.34	1.44	1.35
36	BB	12	U	C2-N3	13.33	1.47	1.37
37	BC	59	A	N9-C4	13.31	1.45	1.37
35	BA	1101	A	N3-C4	13.27	1.42	1.34
2	AB	918	A	N3-C4	13.21	1.42	1.34
2	AB	582	A	N3-C4	13.15	1.42	1.34
2	AB	1872	A	N3-C4	13.11	1.42	1.34
2	AB	1520	U	C2-N3	13.05	1.46	1.37
2	AB	2670	A	N3-C4	13.04	1.42	1.34
2	AB	1668	A	N3-C4	12.97	1.42	1.34
2	AB	2141	G	N3-C4	12.96	1.44	1.35
2	AB	13	A	N7-C5	12.95	1.47	1.39
1	AA	119	A	N3-C4	12.94	1.42	1.34
2	AB	1681	G	N7-C5	12.91	1.47	1.39
2	AB	1679	A	N3-C4	12.89	1.42	1.34
1	AA	8	C	N1-C6	12.86	1.44	1.37
2	AB	2801	G	N3-C4	12.86	1.44	1.35
35	BA	1500	A	N7-C5	12.84	1.47	1.39
2	AB	2182	U	C2-N3	12.84	1.46	1.37
35	BA	877	G	N7-C5	12.84	1.47	1.39
35	BA	566	G	C2-N3	12.83	1.43	1.32
38	BD	66	C	C4-C5	12.81	1.53	1.43
2	AB	556	A	N3-C4	12.78	1.42	1.34
35	BA	1381	U	C2-N3	12.74	1.46	1.37
35	BA	328	C	C4-C5	12.67	1.53	1.43
2	AB	2551	C	N1-C6	12.64	1.44	1.37
2	AB	2541	A	N3-C4	12.64	1.42	1.34
2	AB	2868	A	N3-C4	12.62	1.42	1.34
2	AB	1887	C	P-O5'	12.54	1.72	1.59
2	AB	1342	A	N3-C4	12.53	1.42	1.34
2	AB	1937	A	P-O5'	12.52	1.72	1.59
2	AB	2659	G	C6-N1	12.51	1.48	1.39
2	AB	48	G	C6-N1	12.47	1.48	1.39
35	BA	1359	C	N1-C6	12.45	1.44	1.37
2	AB	558	U	C2-N3	12.44	1.46	1.37
2	AB	2054	A	N7-C5	12.44	1.46	1.39
38	BD	73	A	N9-C4	12.43	1.45	1.37
35	BA	1414	U	C2-N3	12.43	1.46	1.37
2	AB	1543	G	N3-C4	12.42	1.44	1.35
2	AB	2860	A	N7-C5	12.41	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	117	G	C2-N3	12.40	1.42	1.32
35	BA	1492	A	N3-C4	12.38	1.42	1.34
2	AB	2241	A	P-O5'	12.35	1.72	1.59
35	BA	1469	C	N3-C4	12.33	1.42	1.33
2	AB	1045	C	N1-C6	12.29	1.44	1.37
2	AB	577	G	C8-N7	-12.29	1.23	1.30
2	AB	1865	U	P-O5'	12.25	1.72	1.59
35	BA	243	A	N7-C5	12.25	1.46	1.39
2	AB	288	U	P-O5'	12.24	1.72	1.59
2	AB	1772	A	N3-C4	12.23	1.42	1.34
2	AB	2551	C	C2-N3	12.23	1.45	1.35
1	AA	39	A	N9-C4	12.22	1.45	1.37
2	AB	127	A	N3-C4	12.22	1.42	1.34
35	BA	297	G	N9-C8	12.21	1.46	1.37
35	BA	193	C	N3-C4	12.20	1.42	1.33
2	AB	2432	A	N9-C4	12.19	1.45	1.37
2	AB	2747	G	P-O5'	12.18	1.72	1.59
35	BA	242	G	N7-C5	12.14	1.46	1.39
2	AB	2403	C	N1-C6	12.14	1.44	1.37
2	AB	311	A	N3-C4	12.13	1.42	1.34
35	BA	1085	U	C2-N3	12.13	1.46	1.37
2	AB	2812	G	C8-N7	-12.10	1.23	1.30
2	AB	111	A	C6-N6	12.08	1.43	1.33
35	BA	840	C	N3-C4	12.07	1.42	1.33
2	AB	2824	C	N3-C4	12.06	1.42	1.33
2	AB	351	C	N1-C6	12.06	1.44	1.37
1	AA	73	A	N3-C4	12.05	1.42	1.34
35	BA	987	G	N3-C4	12.05	1.43	1.35
2	AB	2134	A	N3-C4	12.03	1.42	1.34
2	AB	2666	C	N1-C6	11.99	1.44	1.37
35	BA	1527	U	C2-N3	11.98	1.46	1.37
35	BA	86	G	N3-C4	11.97	1.43	1.35
2	AB	689	A	N3-C4	11.96	1.42	1.34
2	AB	2786	U	C2-N3	11.95	1.46	1.37
2	AB	2425	A	N3-C4	11.94	1.42	1.34
2	AB	2201	G	P-O5'	11.91	1.71	1.59
2	AB	406	G	N7-C5	-11.91	1.32	1.39
35	BA	1278	G	N3-C4	11.90	1.43	1.35
35	BA	500	G	P-O5'	11.90	1.71	1.59
35	BA	697	U	C2-N3	11.88	1.46	1.37
2	AB	1916	A	N3-C4	11.86	1.42	1.34
2	AB	1620	G	N1-C2	11.85	1.47	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	4	G	P-O5'	11.85	1.71	1.59
35	BA	637	C	N1-C6	11.85	1.44	1.37
35	BA	689	C	P-O5'	11.84	1.71	1.59
2	AB	164	C	C4-C5	11.82	1.52	1.43
35	BA	530	G	N7-C5	-11.82	1.32	1.39
35	BA	227	G	C6-N1	11.81	1.47	1.39
2	AB	850	U	C2-N3	11.81	1.46	1.37
35	BA	96	U	P-O5'	11.79	1.71	1.59
2	AB	2304	G	C6-N1	11.78	1.47	1.39
35	BA	116	A	N3-C4	11.77	1.42	1.34
2	AB	2112	G	C8-N7	-11.76	1.23	1.30
2	AB	2307	G	C6-N1	11.73	1.47	1.39
2	AB	53	A	N7-C5	11.73	1.46	1.39
2	AB	391	A	P-O5'	11.73	1.71	1.59
2	AB	1057	A	C6-N6	11.71	1.43	1.33
2	AB	1750	G	C8-N7	11.69	1.38	1.30
2	AB	2139	U	C2-N3	11.67	1.46	1.37
2	AB	852	U	C2-N3	11.66	1.46	1.37
35	BA	1409	C	N3-C4	11.66	1.42	1.33
2	AB	485	C	P-O5'	11.65	1.71	1.59
2	AB	2727	A	N7-C5	11.65	1.46	1.39
35	BA	776	G	N7-C5	-11.65	1.32	1.39
2	AB	2398	U	O3'-P	11.65	1.75	1.61
35	BA	68	G	N7-C5	-11.65	1.32	1.39
2	AB	2549	G	C5-C4	11.65	1.46	1.38
2	AB	1297	C	N3-C4	11.64	1.42	1.33
2	AB	1664	A	N7-C5	11.64	1.46	1.39
2	AB	1228	G	C6-N1	11.63	1.47	1.39
2	AB	1381	G	C6-N1	11.61	1.47	1.39
35	BA	1542	A	N7-C5	11.61	1.46	1.39
35	BA	585	G	N9-C8	-11.60	1.29	1.37
35	BA	1236	A	N3-C4	11.58	1.41	1.34
2	AB	2869	G	C8-N7	-11.56	1.24	1.30
2	AB	1439	A	N7-C5	11.54	1.46	1.39
2	AB	625	G	N7-C5	-11.51	1.32	1.39
2	AB	425	G	N7-C5	11.51	1.46	1.39
2	AB	1234	U	N1-C2	11.50	1.49	1.38
35	BA	445	G	C2-N3	11.50	1.42	1.32
35	BA	802	A	N3-C4	11.47	1.41	1.34
2	AB	1590	A	N3-C4	11.46	1.41	1.34
35	BA	289	G	N7-C5	-11.44	1.32	1.39
2	AB	1834	U	C2-N3	11.41	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1177	G	C5-C4	11.40	1.46	1.38
2	AB	1106	G	C6-N1	11.39	1.47	1.39
35	BA	935	A	P-O5'	11.38	1.71	1.59
2	AB	1028	A	C5'-C4'	11.37	1.65	1.51
2	AB	1324	G	N7-C5	-11.37	1.32	1.39
35	BA	430	A	N7-C5	-11.37	1.32	1.39
2	AB	2837	A	N3-C4	11.36	1.41	1.34
2	AB	293	U	C2-N3	11.35	1.45	1.37
2	AB	1868	C	C4'-C3'	-11.35	1.40	1.53
35	BA	1451	U	N3-C4	11.35	1.48	1.38
37	BC	18	A	N3-C4	11.34	1.41	1.34
2	AB	2848	G	N3-C4	11.33	1.43	1.35
35	BA	826	C	P-O5'	11.32	1.71	1.59
2	AB	1947	C	N1-C6	11.32	1.44	1.37
2	AB	152	A	N3-C4	11.31	1.41	1.34
2	AB	609	A	P-O5'	11.30	1.71	1.59
2	AB	1371	G	N7-C5	11.31	1.46	1.39
35	BA	1158	C	N1-C6	-11.30	1.30	1.37
2	AB	2602	A	P-O5'	11.27	1.71	1.59
35	BA	139	A	N3-C4	11.26	1.41	1.34
35	BA	709	U	C2-N3	11.26	1.45	1.37
2	AB	2542	A	N3-C4	11.26	1.41	1.34
2	AB	839	U	C2-N3	11.26	1.45	1.37
2	AB	1834	U	P-O5'	11.26	1.71	1.59
2	AB	181	A	N3-C4	11.25	1.41	1.34
35	BA	1216	A	N9-C4	11.25	1.44	1.37
35	BA	765	G	N7-C5	-11.24	1.32	1.39
35	BA	1026	G	C6-N1	11.23	1.47	1.39
2	AB	717	C	N3-C4	11.22	1.41	1.33
35	BA	568	G	P-O5'	11.22	1.71	1.59
2	AB	1692	U	C2-N3	11.21	1.45	1.37
2	AB	2884	U	C2-N3	11.21	1.45	1.37
37	BC	31	U	C2-N3	11.21	1.45	1.37
35	BA	1015	G	N7-C5	-11.20	1.32	1.39
2	AB	99	U	C2-N3	11.19	1.45	1.37
2	AB	2724	U	C4-C5	11.19	1.53	1.43
2	AB	375	G	N3-C4	11.19	1.43	1.35
2	AB	1265	A	P-O5'	11.19	1.71	1.59
35	BA	359	G	N3-C4	11.19	1.43	1.35
2	AB	800	A	N3-C4	11.17	1.41	1.34
2	AB	1431	A	N9-C4	11.17	1.44	1.37
35	BA	573	A	N3-C4	11.17	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	637	C	C2-N3	11.17	1.44	1.35
2	AB	2090	A	N3-C4	11.16	1.41	1.34
2	AB	1985	C	C2-N3	11.16	1.44	1.35
35	BA	454	G	P-O5'	11.15	1.71	1.59
2	AB	1745	A	N3-C4	11.13	1.41	1.34
2	AB	389	G	P-O5'	11.13	1.70	1.59
35	BA	95	C	C4-C5	11.12	1.51	1.43
2	AB	1799	G	N7-C5	-11.11	1.32	1.39
35	BA	577	G	C6-N1	11.11	1.47	1.39
2	AB	160	A	C8-N7	-11.10	1.23	1.31
2	AB	2311	A	N3-C4	11.09	1.41	1.34
35	BA	106	C	N1-C6	11.09	1.43	1.37
2	AB	618	G	C8-N7	11.09	1.37	1.30
35	BA	453	G	O3'-P	11.08	1.74	1.61
35	BA	347	G	N7-C5	11.07	1.45	1.39
35	BA	742	G	N7-C5	11.07	1.45	1.39
35	BA	1322	C	C4-C5	11.07	1.51	1.43
1	AA	85	G	O3'-P	11.06	1.74	1.61
2	AB	1999	C	P-O5'	11.05	1.70	1.59
35	BA	1114	C	N1-C6	11.04	1.43	1.37
2	AB	1357	C	N3-C4	11.03	1.41	1.33
35	BA	240	G	C6-N1	11.03	1.47	1.39
2	AB	989	G	C2-N3	11.03	1.41	1.32
2	AB	92	U	P-O5'	11.02	1.70	1.59
35	BA	1027	C	N1-C6	11.02	1.43	1.37
35	BA	261	U	P-O5'	11.01	1.70	1.59
2	AB	1731	G	C8-N7	-11.00	1.24	1.30
1	AA	99	A	N9-C4	-11.00	1.31	1.37
2	AB	909	A	P-O5'	11.00	1.70	1.59
2	AB	215	G	P-O5'	10.99	1.70	1.59
35	BA	712	A	N7-C5	10.99	1.45	1.39
2	AB	1556	C	C5-C6	10.98	1.43	1.34
35	BA	1424	U	C2-N3	10.98	1.45	1.37
35	BA	596	A	N7-C5	10.97	1.45	1.39
2	AB	1443	U	P-O5'	10.97	1.70	1.59
1	AA	19	C	N1-C6	10.97	1.43	1.37
2	AB	2395	C	C4-C5	10.96	1.51	1.43
2	AB	2567	G	C8-N7	-10.96	1.24	1.30
35	BA	1474	U	C4-C5	10.96	1.53	1.43
2	AB	819	A	N7-C5	10.95	1.45	1.39
2	AB	1467	U	C2-N3	10.95	1.45	1.37
35	BA	213	G	C5'-C4'	10.94	1.64	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	832	G	C2-N3	10.94	1.41	1.32
2	AB	2383	G	C8-N7	-10.93	1.24	1.30
2	AB	726	G	N1-C2	10.92	1.46	1.37
2	AB	734	A	N9-C4	10.92	1.44	1.37
2	AB	2384	U	C2-N3	-10.92	1.30	1.37
35	BA	633	G	N3-C4	10.92	1.43	1.35
2	AB	498	G	P-O5'	10.91	1.70	1.59
2	AB	1398	C	N1-C6	10.90	1.43	1.37
2	AB	2636	C	N1-C6	10.90	1.43	1.37
1	AA	89	U	C2-N3	10.89	1.45	1.37
2	AB	1509	A	N7-C5	10.89	1.45	1.39
2	AB	858	G	N7-C5	-10.89	1.32	1.39
2	AB	1804	C	C2-N3	10.88	1.44	1.35
35	BA	1048	G	N7-C5	10.88	1.45	1.39
2	AB	1828	G	N3-C4	10.86	1.43	1.35
35	BA	535	A	P-O5'	10.86	1.70	1.59
2	AB	1885	A	N3-C4	10.86	1.41	1.34
35	BA	566	G	C8-N7	-10.85	1.24	1.30
35	BA	456	A	N9-C4	-10.84	1.31	1.37
35	BA	897	C	N3-C4	10.84	1.41	1.33
2	AB	2034	U	C5-C6	10.84	1.44	1.34
2	AB	885	C	C5-C6	10.83	1.43	1.34
2	AB	1695	G	C8-N7	10.83	1.37	1.30
2	AB	208	C	N1-C6	10.83	1.43	1.37
2	AB	2071	A	N9-C4	10.83	1.44	1.37
2	AB	2346	A	N3-C4	10.83	1.41	1.34
37	BC	16	A	C6-N1	10.82	1.43	1.35
35	BA	615	G	N9-C8	-10.82	1.30	1.37
2	AB	1149	G	P-O5'	10.82	1.70	1.59
35	BA	354	G	N1-C2	10.82	1.46	1.37
2	AB	1656	C	P-O5'	10.81	1.70	1.59
2	AB	2469	A	N3-C4	10.81	1.41	1.34
2	AB	105	C	C2-N3	10.80	1.44	1.35
38	BD	7	G	C6-N1	10.80	1.47	1.39
2	AB	1250	G	N7-C5	-10.79	1.32	1.39
35	BA	1082	A	N3-C4	10.79	1.41	1.34
2	AB	1186	G	C2-N3	10.79	1.41	1.32
35	BA	179	A	N3-C4	10.78	1.41	1.34
35	BA	152	A	C6-N1	10.77	1.43	1.35
2	AB	959	A	C2-N3	10.77	1.43	1.33
2	AB	53	A	N3-C4	10.76	1.41	1.34
2	AB	1385	A	N3-C4	10.76	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	324	G	P-O5'	10.76	1.70	1.59
2	AB	323	C	N1-C6	-10.75	1.30	1.37
35	BA	1022	A	N3-C4	10.75	1.41	1.34
2	AB	1490	A	N3-C4	10.74	1.41	1.34
2	AB	724	U	P-O5'	10.73	1.70	1.59
2	AB	764	A	N3-C4	10.73	1.41	1.34
2	AB	1529	G	C6-N1	-10.73	1.32	1.39
35	BA	257	G	N1-C2	10.72	1.46	1.37
2	AB	487	C	P-O5'	10.72	1.70	1.59
35	BA	542	G	N3-C4	10.71	1.43	1.35
2	AB	111	A	N3-C4	10.71	1.41	1.34
2	AB	1271	G	N7-C5	10.70	1.45	1.39
35	BA	1254	A	N3-C4	10.70	1.41	1.34
35	BA	1380	U	P-O5'	10.70	1.70	1.59
2	AB	1669	A	N9-C4	10.69	1.44	1.37
35	BA	840	C	C2-N3	10.69	1.44	1.35
2	AB	2145	C	N1-C6	10.68	1.43	1.37
35	BA	819	A	C6-N1	10.67	1.43	1.35
35	BA	724	G	N7-C5	10.66	1.45	1.39
2	AB	2315	G	C2-N3	10.64	1.41	1.32
2	AB	2816	G	P-O5'	10.64	1.70	1.59
2	AB	2368	C	N1-C6	10.64	1.43	1.37
35	BA	861	G	P-O5'	10.64	1.70	1.59
35	BA	509	A	N3-C4	10.64	1.41	1.34
2	AB	1333	G	N3-C4	10.62	1.42	1.35
2	AB	2520	C	O3'-P	10.62	1.73	1.61
2	AB	2821	A	N3-C4	10.61	1.41	1.34
2	AB	2307	G	N7-C5	10.61	1.45	1.39
35	BA	275	G	P-O5'	10.61	1.70	1.59
2	AB	185	G	N7-C5	10.60	1.45	1.39
2	AB	497	A	N3-C4	10.60	1.41	1.34
35	BA	787	A	P-O5'	10.59	1.70	1.59
36	BB	2	G	N1-C2	10.59	1.46	1.37
2	AB	1989	G	N7-C5	-10.58	1.32	1.39
35	BA	1387	G	C8-N7	10.58	1.37	1.30
2	AB	96	C	P-O5'	10.58	1.70	1.59
35	BA	800	G	N3-C4	10.58	1.42	1.35
2	AB	1948	G	O3'-P	10.58	1.73	1.61
35	BA	1419	G	P-O5'	10.58	1.70	1.59
35	BA	183	C	N1-C6	10.58	1.43	1.37
35	BA	631	C	C2-N3	10.57	1.44	1.35
2	AB	2261	C	P-O5'	10.57	1.70	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1535	A	N3-C4	10.56	1.41	1.34
54	BT	33	TYR	CB-CG	10.56	1.67	1.51
2	AB	1314	C	C2-N3	-10.55	1.27	1.35
2	AB	1244	A	N3-C4	10.55	1.41	1.34
2	AB	2736	A	C8-N7	-10.54	1.24	1.31
2	AB	1546	G	N7-C5	10.53	1.45	1.39
2	AB	2367	G	C6-N1	10.53	1.47	1.39
2	AB	2374	C	O3'-P	-10.52	1.48	1.61
2	AB	2339	C	C4-C5	10.52	1.51	1.43
35	BA	468	A	N3-C4	10.52	1.41	1.34
35	BA	1199	U	C2-N3	10.52	1.45	1.37
2	AB	328	U	C5'-C4'	10.52	1.64	1.51
2	AB	2834	G	P-O5'	10.51	1.70	1.59
2	AB	1486	U	C2-N3	10.51	1.45	1.37
35	BA	1061	G	P-O5'	10.51	1.70	1.59
2	AB	207	A	P-O5'	10.49	1.70	1.59
2	AB	1851	U	C2-N3	10.49	1.45	1.37
35	BA	379	C	N1-C6	10.49	1.43	1.37
35	BA	194	C	N1-C2	10.49	1.50	1.40
35	BA	743	A	P-O5'	10.48	1.70	1.59
2	AB	756	A	N3-C4	10.47	1.41	1.34
2	AB	389	G	C8-N7	10.46	1.37	1.30
35	BA	1044	A	N3-C4	10.46	1.41	1.34
35	BA	870	U	C2-O2	10.46	1.31	1.22
35	BA	121	U	P-O5'	10.45	1.70	1.59
35	BA	777	A	C5-C6	10.45	1.50	1.41
2	AB	1590	A	N9-C4	10.44	1.44	1.37
2	AB	1794	A	N9-C4	10.44	1.44	1.37
2	AB	2207	C	P-O5'	10.44	1.70	1.59
2	AB	1612	C	N1-C6	10.44	1.43	1.37
2	AB	2210	U	N1-C2	10.43	1.48	1.38
2	AB	210	C	C5-C6	10.43	1.42	1.34
2	AB	547	A	N7-C5	10.43	1.45	1.39
35	BA	1038	C	C5-C6	10.43	1.42	1.34
2	AB	340	A	N3-C4	10.42	1.41	1.34
1	AA	76	G	P-O5'	10.42	1.70	1.59
35	BA	1269	A	C5'-C4'	10.42	1.63	1.51
2	AB	2405	G	N3-C4	10.41	1.42	1.35
2	AB	935	C	P-O5'	10.41	1.70	1.59
2	AB	2042	A	C6-N1	-10.41	1.28	1.35
35	BA	1091	U	P-O5'	10.40	1.70	1.59
2	AB	1676	A	N7-C5	10.40	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1673	G	C6-N1	10.40	1.46	1.39
2	AB	1433	A	N7-C5	-10.39	1.33	1.39
2	AB	2778	A	N7-C5	10.39	1.45	1.39
2	AB	1642	G	C6-O6	-10.38	1.14	1.24
2	AB	1853	A	N7-C5	10.38	1.45	1.39
2	AB	86	G	N7-C5	10.38	1.45	1.39
2	AB	1594	U	C2-N3	10.38	1.45	1.37
2	AB	2074	U	P-O5'	10.37	1.70	1.59
35	BA	257	G	O3'-P	10.37	1.73	1.61
2	AB	1407	G	C5'-C4'	10.37	1.63	1.51
1	AA	73	A	N9-C4	-10.36	1.31	1.37
2	AB	2500	U	C4-C5	10.36	1.52	1.43
2	AB	727	A	N3-C4	10.36	1.41	1.34
35	BA	530	G	C2-N3	10.36	1.41	1.32
35	BA	1542	A	N3-C4	10.36	1.41	1.34
35	BA	816	A	P-O5'	10.35	1.70	1.59
2	AB	2600	A	O3'-P	10.35	1.73	1.61
2	AB	1832	C	P-O5'	10.34	1.70	1.59
35	BA	309	A	N3-C4	10.34	1.41	1.34
2	AB	404	A	N3-C4	10.34	1.41	1.34
35	BA	108	G	N7-C5	10.34	1.45	1.39
2	AB	596	U	P-O5'	10.32	1.70	1.59
35	BA	302	G	C5-C4	-10.32	1.31	1.38
35	BA	200	G	N7-C5	10.31	1.45	1.39
35	BA	192	A	N7-C5	-10.31	1.33	1.39
2	AB	2630	G	C2-N3	10.31	1.41	1.32
2	AB	716	A	N7-C5	-10.30	1.33	1.39
2	AB	1109	C	N1-C6	10.30	1.43	1.37
2	AB	303	G	C6-N1	10.30	1.46	1.39
2	AB	1284	A	N9-C4	10.30	1.44	1.37
2	AB	1571	A	C5-C4	10.30	1.46	1.38
35	BA	732	C	N3-C4	10.30	1.41	1.33
2	AB	1162	G	N1-C2	10.29	1.46	1.37
2	AB	1493	C	N3-C4	10.29	1.41	1.33
2	AB	132	G	C6-N1	10.29	1.46	1.39
2	AB	2453	A	N3-C4	10.28	1.41	1.34
35	BA	305	G	N7-C5	10.28	1.45	1.39
35	BA	757	U	C2-N3	10.28	1.45	1.37
35	BA	622	A	C6-N6	10.28	1.42	1.33
35	BA	1505	G	N7-C5	-10.27	1.33	1.39
35	BA	1455	G	N9-C8	-10.26	1.30	1.37
2	AB	2408	U	N1-C2	10.25	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1776	G	N3-C4	10.24	1.42	1.35
2	AB	1517	G	N7-C5	-10.24	1.33	1.39
2	AB	2322	A	C5-C4	-10.24	1.31	1.38
35	BA	1294	G	C8-N7	-10.23	1.24	1.30
2	AB	1092	C	N3-C4	-10.23	1.26	1.33
2	AB	2281	A	N3-C4	10.23	1.41	1.34
2	AB	7	G	N7-C5	10.22	1.45	1.39
2	AB	1334	G	P-O5'	10.22	1.70	1.59
35	BA	949	A	C5-C4	-10.22	1.31	1.38
1	AA	26	C	N1-C6	10.21	1.43	1.37
2	AB	1153	C	N1-C6	10.21	1.43	1.37
35	BA	122	G	C2-N3	10.21	1.41	1.32
2	AB	1098	A	N3-C4	10.21	1.41	1.34
2	AB	1507	C	P-O5'	10.21	1.70	1.59
2	AB	1531	C	C4-C5	10.21	1.51	1.43
2	AB	897	C	P-O5'	10.20	1.70	1.59
2	AB	496	G	C8-N7	10.20	1.37	1.30
2	AB	605	G	C2-N3	10.20	1.41	1.32
2	AB	619	G	C5'-C4'	10.19	1.63	1.51
2	AB	892	A	C8-N7	-10.19	1.24	1.31
2	AB	575	A	C8-N7	-10.19	1.24	1.31
38	BD	16	C	C5-C6	10.19	1.42	1.34
35	BA	930	C	N3-C4	10.18	1.41	1.33
35	BA	953	G	N7-C5	10.18	1.45	1.39
2	AB	248	G	N7-C5	-10.18	1.33	1.39
2	AB	1090	A	N3-C4	10.17	1.41	1.34
35	BA	1077	G	C8-N7	-10.17	1.24	1.30
2	AB	2676	C	N3-C4	10.16	1.41	1.33
2	AB	1932	A	N9-C4	10.16	1.44	1.37
2	AB	1579	A	N3-C4	10.16	1.41	1.34
2	AB	2087	G	C4'-C3'	-10.15	1.42	1.53
2	AB	2543	G	N3-C4	10.15	1.42	1.35
2	AB	161	A	P-O5'	10.15	1.69	1.59
2	AB	251	A	N3-C4	10.14	1.41	1.34
2	AB	1364	G	P-O5'	10.14	1.69	1.59
2	AB	477	A	C6-N1	-10.14	1.28	1.35
2	AB	2749	A	N3-C4	10.14	1.41	1.34
35	BA	101	A	N9-C4	10.14	1.44	1.37
2	AB	2057	G	N9-C4	10.14	1.46	1.38
35	BA	1317	C	P-O5'	10.14	1.69	1.59
35	BA	137	U	N1-C6	10.13	1.47	1.38
1	AA	13	G	N9-C8	-10.13	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	14	U	N1-C6	10.13	1.47	1.38
2	AB	2616	C	P-O5'	10.13	1.69	1.59
2	AB	56	A	N9-C4	-10.13	1.31	1.37
2	AB	716	A	C5'-C4'	10.13	1.63	1.51
2	AB	2155	U	N3-C4	10.13	1.47	1.38
2	AB	1227	G	C2-N3	10.13	1.40	1.32
35	BA	48	C	N1-C6	10.12	1.43	1.37
35	BA	529	G	N7-C5	10.13	1.45	1.39
2	AB	2668	G	C6-O6	-10.12	1.15	1.24
35	BA	1426	G	C2-N3	10.12	1.40	1.32
36	BB	14	A	N7-C5	-10.11	1.33	1.39
2	AB	883	G	N9-C8	10.11	1.45	1.37
35	BA	245	U	P-O5'	10.11	1.69	1.59
35	BA	424	G	C2'-O2'	-10.11	1.28	1.41
35	BA	1441	A	C8-N7	-10.10	1.24	1.31
35	BA	554	A	N9-C4	-10.10	1.31	1.37
35	BA	1473	G	N9-C8	-10.09	1.30	1.37
2	AB	472	A	N9-C4	10.08	1.43	1.37
35	BA	1005	A	N3-C4	10.08	1.40	1.34
2	AB	1615	C	N1-C6	10.08	1.43	1.37
35	BA	878	A	N3-C4	10.07	1.40	1.34
35	BA	1502	A	C5-C4	-10.07	1.31	1.38
2	AB	1404	C	N1-C2	-10.07	1.30	1.40
35	BA	647	C	P-O5'	10.07	1.69	1.59
2	AB	220	G	C8-N7	-10.06	1.25	1.30
35	BA	43	C	C5-C6	10.06	1.42	1.34
35	BA	1491	G	C6-N1	-10.06	1.32	1.39
2	AB	227	A	N3-C4	10.05	1.40	1.34
1	AA	61	G	N7-C5	10.05	1.45	1.39
35	BA	263	A	P-O5'	10.05	1.69	1.59
2	AB	640	C	C5-C6	10.04	1.42	1.34
2	AB	342	A	P-O5'	10.04	1.69	1.59
2	AB	2493	U	C2-N3	10.04	1.44	1.37
35	BA	1435	G	N9-C8	10.04	1.44	1.37
35	BA	1526	G	P-O5'	10.03	1.69	1.59
2	AB	2143	C	N3-C4	10.03	1.41	1.33
1	AA	120	U	C2-N3	10.03	1.44	1.37
35	BA	1466	C	C2-N3	10.02	1.43	1.35
37	BC	46	C	N3-C4	10.02	1.41	1.33
2	AB	1536	C	N1-C6	10.02	1.43	1.37
35	BA	1493	A	C2'-C1'	10.02	1.64	1.53
2	AB	1403	A	N3-C4	10.01	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	372	C	P-O5'	10.01	1.69	1.59
2	AB	1985	C	P-O5'	10.00	1.69	1.59
2	AB	833	A	N3-C4	10.00	1.40	1.34
2	AB	2839	G	N3-C4	10.00	1.42	1.35
2	AB	928	A	N3-C4	-9.99	1.28	1.34
2	AB	315	G	P-O5'	9.98	1.69	1.59
2	AB	866	A	N3-C4	9.98	1.40	1.34
2	AB	342	A	N3-C4	9.97	1.40	1.34
2	AB	1039	A	N3-C4	9.97	1.40	1.34
35	BA	639	G	P-O5'	9.97	1.69	1.59
1	AA	95	U	C5'-C4'	9.97	1.63	1.51
2	AB	501	A	N3-C4	9.97	1.40	1.34
35	BA	248	C	C4'-C3'	9.97	1.64	1.53
2	AB	121	G	N9-C4	9.97	1.46	1.38
2	AB	2600	A	P-O5'	9.97	1.69	1.59
2	AB	2858	C	O3'-P	9.96	1.73	1.61
35	BA	1468	A	C8-N7	-9.96	1.24	1.31
2	AB	1907	G	P-O5'	9.96	1.69	1.59
35	BA	449	G	C2-N3	9.96	1.40	1.32
35	BA	570	G	C4'-O4'	-9.96	1.32	1.45
2	AB	1741	C	P-O5'	9.96	1.69	1.59
35	BA	629	A	N3-C4	9.95	1.40	1.34
35	BA	1219	A	N3-C4	9.95	1.40	1.34
2	AB	949	G	C2-N3	9.95	1.40	1.32
2	AB	1163	G	N1-C2	9.93	1.45	1.37
2	AB	1214	A	C8-N7	-9.93	1.24	1.31
35	BA	494	G	N3-C4	9.93	1.42	1.35
2	AB	2052	A	N3-C4	9.93	1.40	1.34
2	AB	2607	G	P-O5'	9.92	1.69	1.59
35	BA	1338	G	N3-C4	9.92	1.42	1.35
2	AB	1418	G	C8-N7	-9.92	1.25	1.30
35	BA	50	A	N7-C5	9.92	1.45	1.39
35	BA	315	A	N3-C4	9.92	1.40	1.34
35	BA	453	G	C6-N1	-9.91	1.32	1.39
2	AB	623	C	N3-C4	9.91	1.40	1.33
35	BA	1361	G	N3-C4	9.91	1.42	1.35
38	BD	71	G	N7-C5	9.91	1.45	1.39
35	BA	555	U	C4-C5	9.90	1.52	1.43
35	BA	183	C	P-O5'	9.90	1.69	1.59
2	AB	2463	C	C2-N3	9.90	1.43	1.35
35	BA	502	A	N7-C5	9.90	1.45	1.39
2	AB	1684	G	N7-C5	9.90	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2884	U	C3'-C2'	9.89	1.63	1.52
2	AB	733	G	N7-C5	9.89	1.45	1.39
35	BA	1002	G	N1-C2	9.89	1.45	1.37
2	AB	525	U	C2-N3	9.88	1.44	1.37
2	AB	2358	A	N3-C4	9.88	1.40	1.34
2	AB	2018	G	N3-C4	9.87	1.42	1.35
2	AB	299	A	N9-C4	9.87	1.43	1.37
35	BA	8	A	N3-C4	9.87	1.40	1.34
2	AB	363	G	N3-C4	9.87	1.42	1.35
2	AB	2167	U	P-O5'	9.87	1.69	1.59
2	AB	553	G	P-O5'	9.86	1.69	1.59
2	AB	693	A	C8-N7	-9.87	1.24	1.31
2	AB	1234	U	C5-C6	9.86	1.43	1.34
37	BC	22	G	C6-N1	-9.86	1.32	1.39
2	AB	1657	U	C2-N3	9.85	1.44	1.37
2	AB	114	U	P-O5'	9.84	1.69	1.59
35	BA	1257	A	N3-C4	9.84	1.40	1.34
2	AB	1686	C	N3-C4	9.84	1.40	1.33
2	AB	1243	C	N3-C4	9.84	1.40	1.33
2	AB	1841	U	P-O5'	9.83	1.69	1.59
35	BA	860	A	C4'-C3'	9.83	1.64	1.53
2	AB	633	A	C5'-C4'	9.82	1.63	1.51
2	AB	1879	C	N1-C6	9.82	1.43	1.37
35	BA	374	A	C6-N1	-9.82	1.28	1.35
2	AB	972	A	N9-C8	9.82	1.45	1.37
2	AB	1935	G	N9-C4	9.82	1.45	1.38
2	AB	2311	A	P-O5'	9.82	1.69	1.59
2	AB	1296	G	C2-N3	9.81	1.40	1.32
2	AB	1706	C	C5'-C4'	9.81	1.63	1.51
35	BA	70	U	C2-N3	9.81	1.44	1.37
35	BA	803	G	N3-C4	9.81	1.42	1.35
2	AB	1404	C	C5-C6	9.81	1.42	1.34
2	AB	1919	A	N3-C4	9.81	1.40	1.34
2	AB	2455	G	N7-C5	9.81	1.45	1.39
35	BA	510	A	N3-C4	9.80	1.40	1.34
35	BA	528	C	P-O5'	9.80	1.69	1.59
35	BA	1481	U	C5'-C4'	9.80	1.63	1.51
35	BA	121	U	C2-N3	9.80	1.44	1.37
35	BA	415	A	N3-C4	9.79	1.40	1.34
35	BA	24	U	C2-N3	-9.78	1.30	1.37
35	BA	1259	C	C5'-C4'	9.78	1.63	1.51
35	BA	131	A	N3-C4	9.77	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1318	A	C6-N1	-9.77	1.28	1.35
35	BA	214	C	N1-C6	9.77	1.43	1.37
2	AB	1087	G	P-O5'	9.77	1.69	1.59
2	AB	1793	C	N1-C6	9.77	1.43	1.37
2	AB	2803	G	C6-N1	9.76	1.46	1.39
35	BA	206	C	P-O5'	9.76	1.69	1.59
2	AB	2420	C	N3-C4	9.76	1.40	1.33
35	BA	686	U	C4-C5	9.76	1.52	1.43
35	BA	1266	G	P-O5'	9.76	1.69	1.59
35	BA	763	G	N3-C4	9.76	1.42	1.35
1	AA	109	A	N3-C4	9.75	1.40	1.34
35	BA	184	G	N3-C4	9.75	1.42	1.35
2	AB	459	U	N3-C4	9.75	1.47	1.38
35	BA	132	C	C5-C6	9.75	1.42	1.34
2	AB	633	A	P-O5'	9.75	1.69	1.59
2	AB	2806	C	C5-C6	9.75	1.42	1.34
35	BA	282	A	P-O5'	9.75	1.69	1.59
35	BA	1355	G	P-O5'	9.75	1.69	1.59
2	AB	1755	A	P-O5'	9.74	1.69	1.59
2	AB	2191	A	C8-N7	-9.74	1.24	1.31
35	BA	222	C	C4'-C3'	-9.74	1.42	1.53
35	BA	1408	A	N9-C4	9.74	1.43	1.37
2	AB	169	G	C6-N1	9.74	1.46	1.39
35	BA	1488	G	P-O5'	9.74	1.69	1.59
2	AB	2651	C	C4-C5	9.74	1.50	1.43
35	BA	1057	G	N3-C4	9.74	1.42	1.35
2	AB	933	A	N7-C5	9.73	1.45	1.39
2	AB	1706	C	N1-C6	9.73	1.43	1.37
35	BA	103	U	C2-N3	9.73	1.44	1.37
35	BA	627	G	N1-C2	9.73	1.45	1.37
35	BA	929	G	P-O5'	9.72	1.69	1.59
2	AB	1910	G	C8-N7	9.72	1.36	1.30
35	BA	455	G	N3-C4	9.72	1.42	1.35
2	AB	2286	G	C5'-C4'	9.72	1.63	1.51
35	BA	1306	A	O3'-P	9.72	1.72	1.61
2	AB	390	U	N1-C6	9.71	1.46	1.38
2	AB	1112	G	N1-C2	9.71	1.45	1.37
2	AB	1070	A	C5'-C4'	9.71	1.63	1.51
2	AB	477	A	N3-C4	9.71	1.40	1.34
2	AB	108	G	O3'-P	9.71	1.72	1.61
2	AB	2545	G	C4'-C3'	9.71	1.63	1.53
35	BA	1440	U	C2-N3	9.71	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	36	C	P-O5'	9.70	1.69	1.59
2	AB	2818	U	C4'-O4'	-9.70	1.32	1.45
35	BA	776	G	C2'-C1'	9.70	1.64	1.53
35	BA	836	G	C6-N1	9.70	1.46	1.39
2	AB	701	G	N9-C8	-9.69	1.31	1.37
35	BA	1284	C	N1-C6	9.69	1.43	1.37
35	BA	559	A	N7-C5	9.69	1.45	1.39
35	BA	533	A	C6-N1	-9.69	1.28	1.35
35	BA	1144	G	N9-C8	-9.69	1.31	1.37
2	AB	28	A	C4'-O4'	-9.68	1.32	1.45
2	AB	1809	A	P-O5'	9.68	1.69	1.59
2	AB	2088	A	N3-C4	9.68	1.40	1.34
2	AB	562	U	C4-C5	9.67	1.52	1.43
2	AB	885	C	C2-N3	9.66	1.43	1.35
2	AB	1089	A	N7-C5	9.66	1.45	1.39
2	AB	1377	G	P-O5'	9.66	1.69	1.59
2	AB	1631	G	C6-N1	9.65	1.46	1.39
35	BA	117	G	C3'-C2'	9.65	1.63	1.52
2	AB	1157	G	N1-C2	9.65	1.45	1.37
35	BA	1156	G	C2-N3	9.64	1.40	1.32
38	BD	38	A	N9-C4	9.64	1.43	1.37
35	BA	34	C	C4-C5	9.63	1.50	1.43
2	AB	174	U	N1-C2	9.63	1.47	1.38
2	AB	1397	U	P-O5'	9.63	1.69	1.59
2	AB	2273	A	N7-C5	-9.63	1.33	1.39
2	AB	655	A	C5-C4	-9.63	1.32	1.38
2	AB	792	A	N9-C4	9.63	1.43	1.37
2	AB	2834	G	N3-C4	9.63	1.42	1.35
2	AB	1776	G	N7-C5	-9.62	1.33	1.39
2	AB	2127	G	C2-N3	9.63	1.40	1.32
2	AB	652	U	P-O5'	9.62	1.69	1.59
2	AB	75	G	P-O5'	9.62	1.69	1.59
2	AB	1413	A	N7-C5	9.62	1.45	1.39
2	AB	2899	A	P-O5'	9.62	1.69	1.59
36	BB	64	U	C2-N3	9.62	1.44	1.37
2	AB	2576	G	N3-C4	9.61	1.42	1.35
35	BA	16	A	N3-C4	9.61	1.40	1.34
2	AB	2279	G	C8-N7	-9.61	1.25	1.30
35	BA	1068	G	C5-C4	-9.61	1.31	1.38
2	AB	1889	A	C2-N3	9.60	1.42	1.33
2	AB	927	A	N3-C4	9.60	1.40	1.34
2	AB	1982	U	C2-N3	9.59	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2781	A	N9-C8	9.59	1.45	1.37
36	BB	56	C	P-O5'	9.59	1.69	1.59
2	AB	2082	A	N3-C4	9.59	1.40	1.34
2	AB	587	C	N3-C4	9.59	1.40	1.33
2	AB	2003	A	N9-C4	9.59	1.43	1.37
2	AB	1479	G	C5-C4	-9.58	1.31	1.38
35	BA	418	C	N3-C4	9.58	1.40	1.33
35	BA	857	C	N3-C4	9.58	1.40	1.33
2	AB	2553	G	N7-C5	-9.57	1.33	1.39
35	BA	382	A	P-O5'	9.57	1.69	1.59
2	AB	2680	U	N3-C4	9.57	1.47	1.38
35	BA	515	G	P-O5'	9.57	1.69	1.59
35	BA	982	U	P-O5'	9.57	1.69	1.59
2	AB	727	A	C2'-C1'	-9.56	1.42	1.53
35	BA	289	G	P-O5'	9.56	1.69	1.59
2	AB	2253	G	N1-C2	9.56	1.45	1.37
2	AB	2225	A	P-O5'	9.56	1.69	1.59
2	AB	1829	A	N9-C8	9.56	1.45	1.37
35	BA	1297	G	C8-N7	-9.55	1.25	1.30
2	AB	487	C	C4-C5	9.55	1.50	1.43
2	AB	2877	G	N9-C8	9.55	1.44	1.37
35	BA	499	A	N7-C5	9.55	1.45	1.39
35	BA	742	G	C5'-C4'	9.55	1.62	1.51
1	AA	29	A	C6-N6	9.54	1.41	1.33
2	AB	2603	G	N9-C8	-9.54	1.31	1.37
2	AB	42	A	N3-C4	9.54	1.40	1.34
2	AB	569	U	C5'-C4'	9.54	1.62	1.51
2	AB	1242	U	C2-N3	9.54	1.44	1.37
2	AB	2375	G	N7-C5	9.54	1.45	1.39
2	AB	938	G	N3-C4	9.54	1.42	1.35
35	BA	361	G	C6-N1	9.53	1.46	1.39
2	AB	408	G	N9-C8	9.53	1.44	1.37
2	AB	1419	A	P-O5'	9.53	1.69	1.59
35	BA	1188	A	P-O5'	9.53	1.69	1.59
2	AB	2846	G	C2-N3	9.53	1.40	1.32
2	AB	351	C	P-O5'	9.52	1.69	1.59
2	AB	2675	A	N9-C4	9.52	1.43	1.37
35	BA	1234	C	P-O5'	9.52	1.69	1.59
35	BA	1297	G	N9-C4	-9.52	1.30	1.38
2	AB	2346	A	O3'-P	9.51	1.72	1.61
35	BA	1301	U	C4-O4	-9.51	1.16	1.23
35	BA	1531	A	N1-C2	-9.51	1.25	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	712	G	P-O5'	9.50	1.69	1.59
35	BA	900	A	N9-C4	9.50	1.43	1.37
2	AB	1546	G	P-O5'	9.50	1.69	1.59
2	AB	2813	A	C8-N7	-9.50	1.25	1.31
35	BA	481	G	C2-N3	9.50	1.40	1.32
2	AB	1159	U	C2-N3	9.49	1.44	1.37
35	BA	594	U	C2-N3	9.49	1.44	1.37
2	AB	790	U	C2-N3	9.49	1.44	1.37
2	AB	677	A	C8-N7	-9.49	1.25	1.31
2	AB	2042	A	O3'-P	9.49	1.72	1.61
35	BA	1419	G	C2-N3	9.49	1.40	1.32
35	BA	973	G	P-O5'	9.48	1.69	1.59
37	BC	27	A	P-O5'	9.48	1.69	1.59
1	AA	118	C	C4-C5	9.48	1.50	1.43
35	BA	1524	C	C2-N3	9.48	1.43	1.35
2	AB	19	A	N3-C4	9.48	1.40	1.34
35	BA	1153	G	P-O5'	9.48	1.69	1.59
2	AB	1944	U	C5-C6	9.47	1.42	1.34
35	BA	1032	G	C5-C6	9.47	1.51	1.42
2	AB	1241	A	N9-C4	9.47	1.43	1.37
2	AB	2401	U	N1-C6	9.47	1.46	1.38
35	BA	65	A	N3-C4	9.47	1.40	1.34
35	BA	462	G	N7-C5	9.47	1.45	1.39
35	BA	638	U	C4-C5	9.47	1.52	1.43
35	BA	1278	G	C8-N7	-9.47	1.25	1.30
2	AB	375	G	O3'-P	9.46	1.72	1.61
2	AB	134	G	N7-C5	9.46	1.45	1.39
2	AB	1368	G	C8-N7	-9.46	1.25	1.30
35	BA	920	U	C2-N3	9.46	1.44	1.37
2	AB	954	G	N9-C8	-9.46	1.31	1.37
35	BA	1188	A	N3-C4	9.46	1.40	1.34
35	BA	987	G	N7-C5	-9.46	1.33	1.39
35	BA	1454	G	O3'-P	9.45	1.72	1.61
2	AB	2748	A	N3-C4	9.45	1.40	1.34
35	BA	917	G	C5'-C4'	9.45	1.62	1.51
1	AA	104	A	C8-N7	-9.44	1.25	1.31
2	AB	2372	U	C4-C5	9.45	1.52	1.43
2	AB	1020	A	N9-C4	9.44	1.43	1.37
2	AB	2432	A	P-O5'	9.44	1.69	1.59
35	BA	737	C	C2-N3	9.44	1.43	1.35
2	AB	92	U	O3'-P	9.44	1.72	1.61
2	AB	1954	G	N7-C5	9.43	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1383	C	N1-C6	9.43	1.42	1.37
2	AB	1573	G	N7-C5	-9.43	1.33	1.39
2	AB	1993	U	C2-N3	9.42	1.44	1.37
2	AB	1928	A	C6-N1	-9.42	1.28	1.35
2	AB	2659	G	O3'-P	9.42	1.72	1.61
35	BA	935	A	C6-N6	9.42	1.41	1.33
2	AB	2886	A	N3-C4	9.41	1.40	1.34
2	AB	2852	G	C6-N1	9.40	1.46	1.39
35	BA	1045	C	N1-C6	9.40	1.42	1.37
2	AB	771	G	C6-N1	9.39	1.46	1.39
2	AB	1789	A	N9-C4	9.39	1.43	1.37
2	AB	2675	A	C6-N1	-9.39	1.28	1.35
2	AB	1121	C	P-O5'	9.39	1.69	1.59
35	BA	845	A	C8-N7	-9.38	1.25	1.31
35	BA	1230	C	N1-C6	9.38	1.42	1.37
2	AB	172	A	N3-C4	9.38	1.40	1.34
1	AA	25	U	P-O5'	9.38	1.69	1.59
35	BA	980	C	N1-C6	9.38	1.42	1.37
2	AB	1063	G	C8-N7	9.37	1.36	1.30
35	BA	644	U	C2-N3	9.37	1.44	1.37
2	AB	1282	U	C2-N3	9.37	1.44	1.37
35	BA	291	U	P-O5'	9.37	1.69	1.59
35	BA	745	G	O3'-P	9.37	1.72	1.61
35	BA	1105	A	O3'-P	9.36	1.72	1.61
2	AB	2359	C	P-O5'	9.36	1.69	1.59
2	AB	1411	U	P-O5'	9.36	1.69	1.59
2	AB	2775	G	C8-N7	9.36	1.36	1.30
35	BA	916	U	C2-N3	9.36	1.44	1.37
35	BA	473	U	P-O5'	9.35	1.69	1.59
35	BA	1337	G	N9-C8	9.35	1.44	1.37
35	BA	60	A	N7-C5	9.34	1.44	1.39
2	AB	2199	A	C5-C4	-9.34	1.32	1.38
2	AB	822	G	N3-C4	9.34	1.42	1.35
2	AB	1551	A	N7-C5	-9.34	1.33	1.39
35	BA	218	U	N3-C4	9.34	1.46	1.38
2	AB	2871	U	P-O5'	9.33	1.69	1.59
1	AA	26	C	C5-C6	9.33	1.41	1.34
35	BA	943	U	P-O5'	9.33	1.69	1.59
35	BA	1368	A	N3-C4	9.33	1.40	1.34
2	AB	1203	U	N3-C4	9.33	1.46	1.38
2	AB	1271	G	P-O5'	9.33	1.69	1.59
2	AB	1409	U	O3'-P	9.33	1.72	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	118	A	N3-C4	9.32	1.40	1.34
35	BA	649	A	C5'-C4'	9.32	1.62	1.51
35	BA	886	G	N1-C2	9.32	1.45	1.37
35	BA	248	C	C4-C5	9.32	1.50	1.43
2	AB	1901	A	N7-C5	-9.32	1.33	1.39
35	BA	559	A	C4'-C3'	9.32	1.63	1.53
2	AB	1034	G	N7-C5	9.31	1.44	1.39
35	BA	1526	G	C5-C6	9.31	1.51	1.42
2	AB	579	G	C8-N7	-9.31	1.25	1.30
2	AB	2574	G	P-O5'	9.31	1.69	1.59
2	AB	449	A	N3-C4	9.30	1.40	1.34
35	BA	424	G	C8-N7	-9.31	1.25	1.30
38	BD	38	A	N3-C4	9.31	1.40	1.34
35	BA	341	C	O3'-P	9.30	1.72	1.61
2	AB	854	C	C2-O2	-9.30	1.16	1.24
2	AB	1789	A	N3-C4	9.30	1.40	1.34
2	AB	386	G	C6-N1	9.29	1.46	1.39
2	AB	1392	A	N9-C4	9.29	1.43	1.37
2	AB	1965	C	C5'-C4'	9.29	1.62	1.51
2	AB	1930	G	P-O5'	9.29	1.69	1.59
2	AB	331	C	P-O5'	9.29	1.69	1.59
2	AB	1264	A	N9-C4	-9.29	1.32	1.37
2	AB	2097	A	N3-C4	9.29	1.40	1.34
35	BA	1036	A	C8-N7	-9.29	1.25	1.31
35	BA	1423	G	C6-O6	-9.29	1.15	1.24
2	AB	86	G	N9-C8	9.29	1.44	1.37
35	BA	855	U	C2-N3	9.28	1.44	1.37
2	AB	641	U	C4-O4	-9.28	1.16	1.23
35	BA	66	A	N3-C4	9.27	1.40	1.34
35	BA	119	A	N3-C4	9.27	1.40	1.34
2	AB	1680	U	P-O5'	9.27	1.69	1.59
35	BA	495	A	N9-C4	9.27	1.43	1.37
36	BB	70	C	C4'-C3'	-9.27	1.43	1.53
38	BD	74	A	P-O5'	9.27	1.69	1.59
2	AB	509	C	N1-C6	9.27	1.42	1.37
2	AB	1838	C	P-O5'	9.27	1.69	1.59
2	AB	2425	A	C5-C4	-9.27	1.32	1.38
2	AB	1099	G	N3-C4	9.26	1.42	1.35
35	BA	723	U	N1-C2	9.26	1.46	1.38
2	AB	360	U	N1-C2	9.26	1.46	1.38
2	AB	1055	G	P-O5'	9.25	1.69	1.59
35	BA	99	C	O3'-P	9.25	1.72	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	75	G	P-O5'	9.25	1.69	1.59
35	BA	130	A	C2'-C1'	9.25	1.63	1.53
35	BA	601	G	C2-N3	9.25	1.40	1.32
35	BA	1513	A	N7-C5	-9.25	1.33	1.39
2	AB	250	G	C2-N3	9.25	1.40	1.32
2	AB	780	G	N1-C2	9.25	1.45	1.37
2	AB	983	A	N9-C4	9.25	1.43	1.37
35	BA	813	U	N1-C2	9.25	1.46	1.38
2	AB	1417	C	C4-C5	9.24	1.50	1.43
35	BA	1201	A	N7-C5	9.24	1.44	1.39
35	BA	1329	A	C5-C4	9.24	1.45	1.38
35	BA	48	C	C2-O2	-9.24	1.16	1.24
35	BA	889	A	N3-C4	9.24	1.40	1.34
35	BA	1416	G	N3-C4	-9.24	1.28	1.35
35	BA	324	G	C2-N3	9.24	1.40	1.32
2	AB	653	U	P-O5'	9.24	1.69	1.59
2	AB	2115	G	C8-N7	9.24	1.36	1.30
35	BA	156	C	N3-C4	9.24	1.40	1.33
2	AB	1159	U	P-O5'	9.23	1.69	1.59
2	AB	1681	G	C8-N7	9.23	1.36	1.30
2	AB	1976	U	C2-N3	9.23	1.44	1.37
35	BA	82	G	C5'-C4'	9.23	1.62	1.51
38	BD	54	G	N7-C5	9.22	1.44	1.39
2	AB	514	A	N7-C5	-9.22	1.33	1.39
2	AB	1371	G	N9-C8	9.22	1.44	1.37
35	BA	1231	G	C8-N7	-9.22	1.25	1.30
2	AB	2797	U	C2-N3	9.21	1.44	1.37
35	BA	311	C	N1-C6	9.21	1.42	1.37
35	BA	682	G	O3'-P	9.22	1.72	1.61
2	AB	1354	A	N9-C4	-9.21	1.32	1.37
35	BA	722	G	C2-N3	9.21	1.40	1.32
35	BA	304	U	P-O5'	9.21	1.69	1.59
2	AB	1124	G	N7-C5	-9.21	1.33	1.39
2	AB	2487	G	N9-C4	9.21	1.45	1.38
35	BA	368	U	O3'-P	9.21	1.72	1.61
2	AB	2059	A	C5-C4	-9.21	1.32	1.38
35	BA	432	A	C8-N7	-9.21	1.25	1.31
2	AB	1385	A	P-O5'	9.20	1.69	1.59
35	BA	309	A	C8-N7	9.20	1.38	1.31
2	AB	2253	G	N9-C8	-9.20	1.31	1.37
35	BA	143	A	N9-C4	-9.20	1.32	1.37
2	AB	937	C	P-O5'	9.19	1.69	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1573	G	C8-N7	9.19	1.36	1.30
2	AB	2880	C	C4-N4	9.19	1.42	1.33
2	AB	2901	C	N1-C6	9.19	1.42	1.37
2	AB	365	U	P-O5'	9.19	1.69	1.59
2	AB	1679	A	C5-C4	-9.19	1.32	1.38
2	AB	174	U	O3'-P	9.18	1.72	1.61
2	AB	1787	A	P-O5'	9.18	1.69	1.59
35	BA	147	G	N1-C2	9.18	1.45	1.37
2	AB	2009	A	N3-C4	9.17	1.40	1.34
2	AB	784	G	P-O5'	9.17	1.69	1.59
2	AB	2256	G	N3-C4	9.17	1.41	1.35
38	BD	45	A	N3-C4	9.17	1.40	1.34
2	AB	1304	A	N3-C4	9.17	1.40	1.34
2	AB	2774	C	C5-C6	9.17	1.41	1.34
35	BA	1157	A	N9-C4	-9.17	1.32	1.37
35	BA	240	G	N3-C4	9.16	1.41	1.35
2	AB	1815	A	N3-C4	9.16	1.40	1.34
35	BA	237	G	C8-N7	9.16	1.36	1.30
35	BA	38	G	N3-C4	9.16	1.41	1.35
35	BA	378	G	P-O5'	9.16	1.69	1.59
2	AB	1262	A	N7-C5	9.15	1.44	1.39
35	BA	669	G	N3-C4	9.15	1.41	1.35
35	BA	228	A	O3'-P	9.15	1.72	1.61
35	BA	913	A	N9-C4	-9.15	1.32	1.37
2	AB	136	G	N3-C4	9.14	1.41	1.35
2	AB	1384	A	N7-C5	-9.14	1.33	1.39
35	BA	149	A	N3-C4	9.14	1.40	1.34
2	AB	266	G	N7-C5	-9.14	1.33	1.39
2	AB	418	C	P-O5'	9.14	1.68	1.59
35	BA	538	G	C2-N3	9.14	1.40	1.32
2	AB	904	G	P-O5'	9.13	1.68	1.59
35	BA	918	A	N3-C4	9.13	1.40	1.34
1	AA	40	U	C5-C6	9.13	1.42	1.34
2	AB	463	G	C2-N3	9.13	1.40	1.32
35	BA	19	A	N9-C4	9.13	1.43	1.37
35	BA	1470	U	C2-N3	9.13	1.44	1.37
2	AB	340	A	P-O5'	9.13	1.68	1.59
2	AB	2287	A	C6-N6	9.13	1.41	1.33
2	AB	1677	A	C5-C4	-9.12	1.32	1.38
35	BA	146	G	C6-N1	9.12	1.46	1.39
2	AB	2779	U	C5'-C4'	9.12	1.62	1.51
35	BA	329	A	C6-N1	9.12	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	32	U	C2-N3	9.12	1.44	1.37
2	AB	1128	G	C2-N3	9.11	1.40	1.32
35	BA	1243	C	O3'-P	-9.11	1.50	1.61
2	AB	1963	U	P-O5'	9.11	1.68	1.59
35	BA	1422	G	C8-N7	-9.11	1.25	1.30
38	BD	36	A	N7-C5	9.11	1.44	1.39
2	AB	3	U	C2-N3	9.11	1.44	1.37
2	AB	1593	A	N9-C4	9.11	1.43	1.37
35	BA	566	G	N7-C5	-9.11	1.33	1.39
1	AA	15	A	C8-N7	-9.10	1.25	1.31
2	AB	1148	U	N1-C2	9.10	1.46	1.38
35	BA	890	G	C8-N7	-9.10	1.25	1.30
37	BC	25	U	C4-C5	9.10	1.51	1.43
35	BA	1087	G	N9-C8	9.10	1.44	1.37
2	AB	2382	G	N7-C5	9.10	1.44	1.39
35	BA	1003	G	N1-C2	9.10	1.45	1.37
35	BA	126	G	C8-N7	9.09	1.36	1.30
35	BA	1213	A	N7-C5	9.09	1.44	1.39
2	AB	1695	G	C5'-C4'	9.09	1.62	1.51
35	BA	698	G	N9-C4	9.09	1.45	1.38
35	BA	736	C	P-O5'	9.09	1.68	1.59
2	AB	905	A	N3-C4	9.09	1.40	1.34
2	AB	2135	A	N3-C4	9.09	1.40	1.34
2	AB	205	G	N7-C5	9.08	1.44	1.39
35	BA	1430	A	P-O5'	9.08	1.68	1.59
2	AB	1160	G	N1-C2	9.08	1.45	1.37
35	BA	428	G	C2-N3	9.08	1.40	1.32
2	AB	195	A	P-O5'	9.08	1.68	1.59
2	AB	529	A	N3-C4	9.08	1.40	1.34
2	AB	1053	C	N1-C6	9.08	1.42	1.37
2	AB	1818	U	C4'-O4'	-9.08	1.33	1.45
2	AB	2882	A	C5-C6	9.08	1.49	1.41
35	BA	3	A	C8-N7	-9.08	1.25	1.31
35	BA	1495	U	C2-N3	9.08	1.44	1.37
2	AB	2887	A	P-O5'	9.07	1.68	1.59
2	AB	1	G	C2-N3	9.07	1.40	1.32
2	AB	2895	G	N3-C4	9.07	1.41	1.35
2	AB	592	A	P-O5'	9.07	1.68	1.59
2	AB	2188	U	N1-C2	9.07	1.46	1.38
35	BA	135	C	N1-C6	9.07	1.42	1.37
35	BA	1302	C	C4'-C3'	9.07	1.63	1.53
35	BA	491	G	N7-C5	9.07	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1363	A	N7-C5	9.07	1.44	1.39
2	AB	929	U	N1-C2	9.06	1.46	1.38
35	BA	1215	G	C4'-O4'	-9.06	1.33	1.45
35	BA	1253	G	N7-C5	9.06	1.44	1.39
2	AB	2379	G	O3'-P	9.06	1.72	1.61
2	AB	1064	C	C4'-O4'	-9.06	1.33	1.45
35	BA	19	A	C8-N7	-9.06	1.25	1.31
35	BA	1299	A	N3-C4	9.05	1.40	1.34
2	AB	354	A	C6-N1	9.05	1.41	1.35
2	AB	1355	G	N9-C4	9.05	1.45	1.38
2	AB	2107	G	P-O5'	9.05	1.68	1.59
2	AB	2447	G	P-O5'	9.05	1.68	1.59
2	AB	2515	C	P-O5'	9.05	1.68	1.59
35	BA	803	G	C8-N7	9.05	1.36	1.30
35	BA	1116	U	C4'-O4'	-9.05	1.33	1.45
2	AB	14	A	P-O5'	9.04	1.68	1.59
2	AB	1489	C	C5-C6	9.05	1.41	1.34
2	AB	2111	U	C2-N3	-9.04	1.31	1.37
35	BA	446	G	N7-C5	-9.04	1.33	1.39
37	BC	27	A	N3-C4	9.04	1.40	1.34
35	BA	601	G	C8-N7	-9.04	1.25	1.30
35	BA	1135	U	C2-N3	9.04	1.44	1.37
2	AB	546	U	P-O5'	9.04	1.68	1.59
2	AB	773	U	C4'-O4'	-9.04	1.33	1.45
2	AB	1027	A	N7-C5	-9.04	1.33	1.39
2	AB	1161	C	C5'-C4'	9.04	1.62	1.51
2	AB	2518	A	N9-C4	-9.04	1.32	1.37
35	BA	250	A	C6-N6	9.03	1.41	1.33
35	BA	361	G	P-O5'	-9.03	1.50	1.59
1	AA	25	U	O3'-P	9.03	1.72	1.61
2	AB	1603	A	C5-C4	-9.03	1.32	1.38
2	AB	2826	A	N9-C4	9.03	1.43	1.37
35	BA	1189	U	C2-N3	9.03	1.44	1.37
2	AB	893	C	P-O5'	9.03	1.68	1.59
2	AB	2066	C	N1-C2	9.03	1.49	1.40
35	BA	1415	G	C6-N1	9.03	1.45	1.39
35	BA	645	G	N9-C8	9.03	1.44	1.37
2	AB	566	U	C4-C5	9.02	1.51	1.43
35	BA	228	A	C5-C4	-9.02	1.32	1.38
2	AB	94	A	N9-C4	-9.01	1.32	1.37
2	AB	941	A	N3-C4	9.01	1.40	1.34
35	BA	693	G	N9-C8	-9.01	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2046	G	C2-N3	9.01	1.40	1.32
2	AB	2482	A	N9-C4	9.01	1.43	1.37
35	BA	933	G	N3-C4	9.01	1.41	1.35
38	BD	47	A	N3-C4	9.01	1.40	1.34
2	AB	1541	C	C2-N3	9.01	1.43	1.35
2	AB	1259	G	C6-N1	9.00	1.45	1.39
2	AB	1933	G	N1-C2	9.00	1.45	1.37
2	AB	202	U	C2-N3	9.00	1.44	1.37
35	BA	308	C	N3-C4	9.00	1.40	1.33
35	BA	716	A	N9-C4	9.00	1.43	1.37
35	BA	500	G	N7-C5	9.00	1.44	1.39
2	AB	460	A	N9-C4	8.99	1.43	1.37
2	AB	2613	U	C2-N3	8.99	1.44	1.37
36	BB	25	C	C4-C5	8.99	1.50	1.43
2	AB	680	C	N1-C6	8.99	1.42	1.37
2	AB	1746	A	N3-C4	8.99	1.40	1.34
2	AB	2807	U	C2-N3	8.99	1.44	1.37
2	AB	2833	U	C5-C6	8.99	1.42	1.34
2	AB	879	G	C2-N3	8.98	1.40	1.32
35	BA	610	U	C4-C5	8.98	1.51	1.43
2	AB	1570	A	N3-C4	8.97	1.40	1.34
2	AB	2199	A	N7-C5	8.97	1.44	1.39
35	BA	56	U	C2-N3	8.97	1.44	1.37
35	BA	1517	G	C2-N3	8.97	1.40	1.32
38	BD	4	G	C5-C4	8.97	1.44	1.38
2	AB	2240	U	N1-C2	8.97	1.46	1.38
2	AB	2115	G	N1-C2	-8.97	1.30	1.37
35	BA	659	U	N1-C2	8.97	1.46	1.38
2	AB	2682	A	N3-C4	8.96	1.40	1.34
2	AB	2687	U	C2-N3	8.96	1.44	1.37
35	BA	1083	U	C2-N3	8.96	1.44	1.37
2	AB	2181	U	C4'-O4'	-8.96	1.33	1.45
37	BC	25	U	N1-C6	-8.96	1.29	1.38
2	AB	1018	U	N1-C2	8.96	1.46	1.38
35	BA	521	G	N9-C4	8.96	1.45	1.38
2	AB	1951	U	C5'-C4'	8.96	1.62	1.51
2	AB	2670	A	N9-C4	8.96	1.43	1.37
35	BA	886	G	N9-C8	-8.95	1.31	1.37
35	BA	176	C	C4-C5	8.95	1.50	1.43
36	BB	66	C	C5'-C4'	8.95	1.62	1.51
2	AB	912	C	N3-C4	8.95	1.40	1.33
2	AB	2558	C	P-O5'	8.95	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1990	C	P-O5'	8.95	1.68	1.59
2	AB	651	G	N3-C4	8.94	1.41	1.35
2	AB	1275	A	C8-N7	-8.94	1.25	1.31
2	AB	1867	G	C5-C4	8.94	1.44	1.38
2	AB	2834	G	C5-C4	8.94	1.44	1.38
2	AB	508	A	C6-N6	8.94	1.41	1.33
35	BA	717	U	C5-C6	8.94	1.42	1.34
2	AB	767	U	C2-N3	8.93	1.44	1.37
2	AB	1902	C	O3'-P	8.93	1.71	1.61
2	AB	462	C	C5'-C4'	8.93	1.62	1.51
2	AB	735	A	N9-C8	-8.93	1.30	1.37
35	BA	59	A	C8-N7	-8.93	1.25	1.31
2	AB	1890	A	C5-C4	8.93	1.45	1.38
2	AB	2090	A	N7-C5	-8.93	1.33	1.39
2	AB	916	G	N3-C4	8.93	1.41	1.35
2	AB	1253	A	N1-C2	-8.92	1.26	1.34
2	AB	1704	C	N1-C6	8.92	1.42	1.37
35	BA	911	U	P-O5'	8.92	1.68	1.59
35	BA	1137	C	N1-C6	8.92	1.42	1.37
2	AB	2355	G	N1-C2	-8.92	1.30	1.37
2	AB	1786	A	O3'-P	8.91	1.71	1.61
35	BA	1326	U	N1-C2	8.91	1.46	1.38
2	AB	2379	G	P-O5'	8.91	1.68	1.59
2	AB	387	U	C2'-C1'	-8.90	1.43	1.53
2	AB	2411	A	C5-C6	8.90	1.49	1.41
2	AB	2825	G	C2-N3	8.90	1.39	1.32
2	AB	1662	U	C2-N3	8.90	1.44	1.37
2	AB	2110	G	N3-C4	8.90	1.41	1.35
2	AB	2632	A	N7-C5	8.90	1.44	1.39
35	BA	611	C	N1-C6	8.90	1.42	1.37
35	BA	833	G	P-O5'	8.90	1.68	1.59
2	AB	1829	A	N7-C5	-8.90	1.33	1.39
2	AB	2687	U	P-O5'	8.90	1.68	1.59
35	BA	930	C	N1-C6	8.90	1.42	1.37
2	AB	2045	C	C4'-O4'	-8.90	1.33	1.45
2	AB	2170	A	N3-C4	8.89	1.40	1.34
35	BA	535	A	C6-N6	8.89	1.41	1.33
2	AB	37	C	C4-C5	8.89	1.50	1.43
35	BA	958	A	C6-N1	8.89	1.41	1.35
2	AB	273	G	N9-C4	8.88	1.45	1.38
2	AB	2003	A	N7-C5	8.88	1.44	1.39
2	AB	1059	G	N7-C5	-8.88	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2288	A	N3-C4	8.88	1.40	1.34
2	AB	2513	A	C2'-C1'	8.88	1.63	1.53
2	AB	425	G	N1-C2	-8.88	1.30	1.37
2	AB	1458	U	C2-N3	8.88	1.44	1.37
2	AB	1572	A	C6-N6	-8.88	1.26	1.33
2	AB	1591	A	N9-C4	8.88	1.43	1.37
2	AB	991	C	N1-C6	8.87	1.42	1.37
2	AB	2377	A	N7-C5	8.87	1.44	1.39
38	BD	59	A	N3-C4	8.87	1.40	1.34
1	AA	91	C	N3-C4	8.87	1.40	1.33
2	AB	916	G	O3'-P	8.87	1.71	1.61
2	AB	1707	G	C6-N1	8.87	1.45	1.39
2	AB	1040	A	N3-C4	8.87	1.40	1.34
37	BC	29	G	N7-C5	-8.86	1.33	1.39
1	AA	42	C	N1-C6	8.86	1.42	1.37
2	AB	2439	A	N3-C4	8.86	1.40	1.34
1	AA	114	C	P-O5'	8.86	1.68	1.59
35	BA	402	G	N3-C4	8.86	1.41	1.35
2	AB	1314	C	C1'-N1	8.86	1.62	1.48
2	AB	2330	G	N7-C5	8.86	1.44	1.39
35	BA	1167	A	N3-C4	8.86	1.40	1.34
35	BA	1217	C	N1-C6	-8.86	1.31	1.37
2	AB	2869	G	N3-C4	8.85	1.41	1.35
35	BA	448	A	N3-C4	8.85	1.40	1.34
35	BA	908	A	C5-C4	-8.85	1.32	1.38
35	BA	191	G	C2-N3	8.85	1.39	1.32
2	AB	43	G	N3-C4	8.85	1.41	1.35
2	AB	2174	C	C2'-O2'	-8.85	1.30	1.41
2	AB	1074	G	N9-C8	8.85	1.44	1.37
2	AB	1182	G	C6-N1	-8.85	1.33	1.39
35	BA	72	A	N9-C4	8.85	1.43	1.37
2	AB	582	A	C5-C4	-8.84	1.32	1.38
2	AB	1482	G	O3'-P	8.84	1.71	1.61
2	AB	1820	U	O3'-P	8.84	1.71	1.61
2	AB	2778	A	C6-N1	8.84	1.41	1.35
2	AB	139	U	C5-C6	8.84	1.42	1.34
2	AB	1677	A	N9-C4	8.84	1.43	1.37
2	AB	2861	U	C2-N3	8.84	1.44	1.37
2	AB	35	G	N9-C8	8.84	1.44	1.37
2	AB	2280	G	N7-C5	8.83	1.44	1.39
2	AB	2703	C	C2'-C1'	8.83	1.63	1.53
2	AB	1672	A	N3-C4	8.83	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	496	A	P-O5'	8.83	1.68	1.59
35	BA	1324	A	N3-C4	8.83	1.40	1.34
2	AB	1863	G	C5-C6	8.83	1.51	1.42
35	BA	663	A	N7-C5	8.83	1.44	1.39
2	AB	469	G	O3'-P	-8.82	1.50	1.61
35	BA	247	G	C2-N3	8.82	1.39	1.32
35	BA	1052	U	P-O5'	8.82	1.68	1.59
2	AB	280	U	N1-C2	8.82	1.46	1.38
2	AB	1850	G	C2-N3	8.82	1.39	1.32
2	AB	2582	G	C4'-C3'	-8.82	1.43	1.53
35	BA	69	G	C2'-O2'	8.82	1.53	1.41
35	BA	1034	G	P-O5'	8.82	1.68	1.59
2	AB	561	G	C2-N3	8.82	1.39	1.32
35	BA	914	A	N7-C5	8.82	1.44	1.39
2	AB	1122	G	N9-C4	8.81	1.45	1.38
2	AB	2685	G	P-O5'	8.81	1.68	1.59
35	BA	955	U	P-O5'	8.81	1.68	1.59
1	AA	94	A	C6-N1	8.81	1.41	1.35
2	AB	1858	A	C4'-O4'	-8.81	1.34	1.45
2	AB	2516	A	C6-N1	8.81	1.41	1.35
2	AB	2560	A	O3'-P	8.81	1.71	1.61
2	AB	1848	A	N3-C4	8.80	1.40	1.34
35	BA	113	G	N7-C5	8.80	1.44	1.39
2	AB	2725	A	O3'-P	8.80	1.71	1.61
35	BA	57	G	C5-C6	8.80	1.51	1.42
2	AB	311	A	N1-C2	-8.80	1.26	1.34
2	AB	449	A	C5'-C4'	8.80	1.61	1.51
2	AB	1273	U	N1-C2	8.80	1.46	1.38
35	BA	178	C	C4'-O4'	-8.80	1.34	1.45
35	BA	676	A	N7-C5	8.80	1.44	1.39
35	BA	1273	C	O3'-P	8.80	1.71	1.61
2	AB	1419	A	N7-C5	8.79	1.44	1.39
35	BA	14	U	N1-C2	8.79	1.46	1.38
1	AA	30	C	N1-C6	8.79	1.42	1.37
2	AB	501	A	C8-N7	-8.79	1.25	1.31
2	AB	436	C	C4-N4	8.79	1.41	1.33
2	AB	1081	U	C2-N3	8.79	1.44	1.37
2	AB	1683	U	C2-N3	8.79	1.44	1.37
2	AB	2669	G	C6-O6	8.78	1.32	1.24
35	BA	991	U	C2-N3	8.78	1.43	1.37
2	AB	1370	C	C2-N3	8.78	1.42	1.35
2	AB	1066	U	P-O5'	8.78	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2082	A	C5-C4	-8.78	1.32	1.38
1	AA	90	C	N1-C6	-8.78	1.31	1.37
35	BA	1088	G	C6-N1	8.78	1.45	1.39
2	AB	1576	U	O3'-P	8.77	1.71	1.61
2	AB	1052	C	C2-N3	8.77	1.42	1.35
2	AB	2624	G	C6-N1	-8.77	1.33	1.39
35	BA	630	A	N9-C4	8.77	1.43	1.37
2	AB	390	U	C4-O4	-8.77	1.16	1.23
2	AB	2221	G	N1-C2	8.77	1.44	1.37
35	BA	1013	G	N7-C5	8.76	1.44	1.39
2	AB	470	A	P-O5'	8.76	1.68	1.59
2	AB	1634	A	N9-C4	-8.76	1.32	1.37
2	AB	466	A	C6-N6	8.76	1.41	1.33
35	BA	236	A	N3-C4	8.76	1.40	1.34
35	BA	1243	C	N1-C6	8.76	1.42	1.37
2	AB	432	A	C5'-C4'	8.76	1.61	1.51
2	AB	1754	A	N7-C5	-8.76	1.33	1.39
35	BA	750	C	C4-C5	8.75	1.50	1.43
35	BA	1117	A	N3-C4	8.75	1.40	1.34
2	AB	1840	G	N7-C5	-8.75	1.33	1.39
35	BA	45	G	P-O5'	8.75	1.68	1.59
35	BA	1321	U	C2-N3	8.75	1.43	1.37
2	AB	574	A	P-O5'	8.74	1.68	1.59
2	AB	599	A	N3-C4	8.74	1.40	1.34
35	BA	35	G	C6-N1	8.74	1.45	1.39
35	BA	1465	A	N7-C5	-8.74	1.34	1.39
35	BA	162	A	C4'-O4'	-8.74	1.34	1.45
1	AA	10	G	C2-N3	8.74	1.39	1.32
2	AB	1793	C	N3-C4	8.74	1.40	1.33
2	AB	1192	G	P-O5'	8.73	1.68	1.59
2	AB	1722	A	C6-N1	-8.73	1.29	1.35
1	AA	62	C	N1-C6	8.73	1.42	1.37
2	AB	1850	G	N9-C4	8.73	1.45	1.38
2	AB	2065	C	C5'-C4'	8.73	1.61	1.51
2	AB	2879	A	P-O5'	8.73	1.68	1.59
35	BA	1352	C	P-O5'	8.73	1.68	1.59
38	BD	2	G	C2-N3	8.73	1.39	1.32
2	AB	400	G	C2-N3	8.73	1.39	1.32
2	AB	2237	G	C8-N7	-8.73	1.25	1.30
2	AB	1698	A	C8-N7	-8.72	1.25	1.31
2	AB	2287	A	C6-N1	8.72	1.41	1.35
2	AB	2343	U	C4-O4	-8.72	1.16	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1024	G	N3-C4	8.72	1.41	1.35
2	AB	1719	G	C8-N7	8.72	1.36	1.30
35	BA	1266	G	N7-C5	8.72	1.44	1.39
2	AB	2118	U	C4-C5	8.72	1.51	1.43
2	AB	1156	A	N3-C4	8.72	1.40	1.34
35	BA	137	U	P-O5'	8.71	1.68	1.59
35	BA	490	C	P-O5'	8.72	1.68	1.59
38	BD	71	G	N1-C2	8.71	1.44	1.37
35	BA	411	A	C6-N6	8.71	1.41	1.33
35	BA	1173	U	P-O5'	8.71	1.68	1.59
35	BA	1394	A	C3'-O3'	8.71	1.54	1.42
2	AB	1542	U	C2-O2	8.70	1.30	1.22
2	AB	2588	G	C2-N3	8.70	1.39	1.32
35	BA	923	A	C5-C4	-8.70	1.32	1.38
35	BA	1532	U	C4'-O4'	-8.70	1.34	1.45
2	AB	857	G	C6-N1	8.70	1.45	1.39
2	AB	2287	A	N3-C4	8.69	1.40	1.34
2	AB	437	U	C4'-C3'	8.69	1.62	1.53
2	AB	2234	G	P-O5'	8.69	1.68	1.59
35	BA	936	C	N1-C6	8.69	1.42	1.37
2	AB	1439	A	N9-C4	-8.69	1.32	1.37
2	AB	1608	A	N3-C4	8.69	1.40	1.34
2	AB	2032	G	P-O5'	8.69	1.68	1.59
35	BA	447	G	C2-N3	8.69	1.39	1.32
35	BA	1410	A	C5'-C4'	8.69	1.61	1.51
2	AB	2535	G	C2-N3	8.69	1.39	1.32
35	BA	1221	G	C6-N1	-8.69	1.33	1.39
2	AB	441	U	O3'-P	-8.68	1.50	1.61
2	AB	1500	G	P-O5'	8.68	1.68	1.59
2	AB	585	G	P-O5'	8.68	1.68	1.59
2	AB	591	U	N1-C6	8.68	1.45	1.38
35	BA	438	U	C5-C6	8.68	1.42	1.34
35	BA	446	G	N3-C4	8.68	1.41	1.35
35	BA	1308	U	P-O5'	8.68	1.68	1.59
2	AB	2169	A	C5-C4	-8.68	1.32	1.38
2	AB	656	G	N7-C5	8.68	1.44	1.39
2	AB	1374	G	C6-N1	8.68	1.45	1.39
2	AB	1195	G	N7-C5	-8.67	1.34	1.39
2	AB	211	C	P-O5'	8.67	1.68	1.59
35	BA	1171	A	N9-C4	8.67	1.43	1.37
2	AB	2255	G	C2-N3	8.67	1.39	1.32
35	BA	619	U	C2-N3	8.67	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	256	A	C6-N6	-8.66	1.27	1.33
1	AA	35	C	C3'-C2'	8.66	1.62	1.52
2	AB	1124	G	N9-C8	-8.66	1.31	1.37
2	AB	1347	A	C8-N7	-8.66	1.25	1.31
2	AB	2709	G	P-O5'	8.66	1.68	1.59
35	BA	810	C	P-O5'	8.66	1.68	1.59
35	BA	985	C	N3-C4	8.66	1.40	1.33
35	BA	389	A	N3-C4	8.66	1.40	1.34
2	AB	1031	G	C5-C4	-8.66	1.32	1.38
35	BA	129	A	C5'-C4'	8.66	1.61	1.51
35	BA	703	G	N3-C4	8.66	1.41	1.35
1	AA	1	U	C4-O4	-8.65	1.16	1.23
2	AB	250	G	C8-N7	-8.65	1.25	1.30
2	AB	2656	U	C2-N3	8.65	1.43	1.37
2	AB	1938	A	P-O5'	8.65	1.68	1.59
35	BA	1325	C	N3-C4	8.65	1.40	1.33
2	AB	1112	G	C4'-C3'	-8.65	1.43	1.53
2	AB	2706	A	N3-C4	8.65	1.40	1.34
2	AB	2402	U	C5'-C4'	8.65	1.61	1.51
2	AB	1889	A	N7-C5	-8.65	1.34	1.39
35	BA	1288	A	O3'-P	8.64	1.71	1.61
2	AB	1716	U	C5'-C4'	8.64	1.61	1.51
35	BA	1475	G	C8-N7	-8.64	1.25	1.30
2	AB	2842	G	N9-C8	8.64	1.43	1.37
38	BD	10	G	N9-C8	-8.64	1.31	1.37
2	AB	29	U	N1-C2	8.63	1.46	1.38
2	AB	822	G	C4'-C3'	8.63	1.62	1.53
38	BD	40	C	P-O5'	8.63	1.68	1.59
2	AB	58	G	C2-N3	8.63	1.39	1.32
2	AB	1893	C	C5'-C4'	8.63	1.61	1.51
2	AB	1867	G	C2-N3	8.63	1.39	1.32
35	BA	1050	G	P-O5'	8.63	1.68	1.59
2	AB	2470	G	N1-C2	8.63	1.44	1.37
35	BA	902	G	P-O5'	8.63	1.68	1.59
37	BC	41	A	N7-C5	-8.63	1.34	1.39
35	BA	718	A	N9-C4	8.63	1.43	1.37
35	BA	1013	G	C6-N1	-8.62	1.33	1.39
2	AB	2238	G	C4'-O4'	-8.62	1.34	1.45
35	BA	634	C	P-O5'	8.62	1.68	1.59
2	AB	309	A	N9-C8	8.62	1.44	1.37
35	BA	1079	G	P-O5'	8.62	1.68	1.59
2	AB	1739	A	P-O5'	8.62	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	278	A	C8-N7	-8.61	1.25	1.31
35	BA	379	C	C4-C5	8.61	1.49	1.43
35	BA	729	A	C5-C4	-8.61	1.32	1.38
35	BA	988	G	C6-N1	-8.61	1.33	1.39
35	BA	1318	A	N3-C4	-8.61	1.29	1.34
2	AB	929	U	C4'-C3'	-8.61	1.43	1.53
2	AB	1123	C	N1-C6	8.61	1.42	1.37
2	AB	2095	A	N3-C4	8.60	1.40	1.34
2	AB	683	U	O3'-P	8.60	1.71	1.61
2	AB	927	A	C6-N1	-8.60	1.29	1.35
2	AB	2335	A	N3-C4	8.60	1.40	1.34
2	AB	1442	U	N3-C4	8.60	1.46	1.38
35	BA	919	A	N9-C8	8.60	1.44	1.37
2	AB	489	G	N7-C5	-8.59	1.34	1.39
2	AB	1051	G	C3'-C2'	8.59	1.62	1.52
2	AB	1979	U	O4'-C1'	8.59	1.52	1.41
35	BA	761	G	N7-C5	8.59	1.44	1.39
2	AB	1479	G	N7-C5	8.59	1.44	1.39
2	AB	1151	A	N9-C8	-8.59	1.30	1.37
2	AB	1648	U	C2-N3	8.59	1.43	1.37
2	AB	2068	U	C2-N3	8.59	1.43	1.37
2	AB	604	G	C2-N3	8.58	1.39	1.32
2	AB	1723	G	C2-N3	8.58	1.39	1.32
35	BA	1517	G	P-O5'	8.58	1.68	1.59
2	AB	1090	A	C8-N7	-8.58	1.25	1.31
2	AB	2246	G	N3-C4	8.58	1.41	1.35
2	AB	260	G	O4'-C1'	8.58	1.52	1.41
35	BA	620	C	N3-C4	8.57	1.40	1.33
35	BA	1067	A	N3-C4	8.57	1.40	1.34
2	AB	389	G	C2-N3	8.57	1.39	1.32
2	AB	2184	A	C5-C4	-8.57	1.32	1.38
35	BA	452	A	P-O5'	8.57	1.68	1.59
35	BA	1308	U	N1-C2	8.57	1.46	1.38
38	BD	22	A	O3'-P	8.57	1.71	1.61
2	AB	1175	A	C6-N6	-8.57	1.27	1.33
2	AB	705	A	N3-C4	8.57	1.40	1.34
2	AB	2554	U	N1-C2	8.57	1.46	1.38
7	AG	61	GLY	CA-C	8.57	1.65	1.51
35	BA	3	A	N3-C4	8.57	1.40	1.34
38	BD	27	G	C6-N1	8.56	1.45	1.39
2	AB	1195	G	N1-C2	8.56	1.44	1.37
2	AB	246	C	P-O5'	8.56	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1935	G	N9-C8	-8.56	1.31	1.37
2	AB	2518	A	N3-C4	8.56	1.40	1.34
35	BA	680	C	C2-O2	-8.56	1.16	1.24
35	BA	1397	C	P-O5'	8.56	1.68	1.59
2	AB	833	A	C5-C4	-8.56	1.32	1.38
2	AB	2381	A	C5-C4	-8.56	1.32	1.38
2	AB	1275	A	C6-N1	-8.55	1.29	1.35
2	AB	1468	U	C4'-C3'	-8.55	1.43	1.53
2	AB	1840	G	P-O5'	8.55	1.68	1.59
2	AB	2864	G	C5-C4	8.55	1.44	1.38
35	BA	1300	G	P-O5'	8.55	1.68	1.59
2	AB	90	U	C2-O2	8.55	1.30	1.22
35	BA	451	A	C3'-C2'	-8.55	1.43	1.52
36	BB	72	U	C5-C6	8.55	1.41	1.34
2	AB	1076	C	C4-C5	8.55	1.49	1.43
2	AB	2150	C	C4-C5	8.54	1.49	1.43
35	BA	383	A	P-O5'	8.55	1.68	1.59
2	AB	1668	A	P-O5'	8.54	1.68	1.59
2	AB	1825	U	C2-N3	8.54	1.43	1.37
2	AB	2293	G	C8-N7	-8.54	1.25	1.30
2	AB	2808	G	C2-N3	8.54	1.39	1.32
35	BA	1398	A	N3-C4	8.54	1.40	1.34
2	AB	2440	C	O3'-P	8.54	1.71	1.61
2	AB	2659	G	N9-C4	-8.54	1.31	1.38
2	AB	2862	G	C4'-O4'	-8.54	1.34	1.45
35	BA	1024	G	C2-N3	8.54	1.39	1.32
2	AB	544	C	C4-C5	8.54	1.49	1.43
2	AB	1151	A	C5'-C4'	8.54	1.61	1.51
2	AB	2094	A	N3-C4	8.54	1.40	1.34
2	AB	2765	A	P-O5'	8.54	1.68	1.59
2	AB	704	G	N9-C8	-8.54	1.31	1.37
2	AB	1581	G	C5'-C4'	8.53	1.61	1.51
2	AB	199	A	N3-C4	8.53	1.40	1.34
2	AB	222	A	C8-N7	8.53	1.37	1.31
36	BB	60	U	P-O5'	8.53	1.68	1.59
2	AB	2820	A	N3-C4	8.53	1.40	1.34
35	BA	29	U	P-O5'	8.53	1.68	1.59
35	BA	1273	C	N1-C6	8.52	1.42	1.37
2	AB	818	G	C2-N3	8.52	1.39	1.32
2	AB	971	G	N3-C4	8.52	1.41	1.35
2	AB	2644	G	C5-C4	-8.52	1.32	1.38
35	BA	378	G	N1-C2	8.52	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	216	U	C4-C5	8.52	1.51	1.43
35	BA	708	C	C5-C6	8.52	1.41	1.34
2	AB	2788	C	N3-C4	8.52	1.40	1.33
36	BB	38	A	P-O5'	8.52	1.68	1.59
35	BA	25	C	N3-C4	8.51	1.40	1.33
35	BA	467	U	N3-C4	8.51	1.46	1.38
35	BA	1333	A	C6-N1	-8.51	1.29	1.35
35	BA	196	A	N3-C4	8.51	1.40	1.34
36	BB	32	OMC	O3'-P	8.51	1.71	1.61
2	AB	2214	C	C4-C5	8.51	1.49	1.43
2	AB	2587	A	N3-C4	8.51	1.40	1.34
2	AB	1509	A	N3-C4	-8.50	1.29	1.34
35	BA	1332	A	N9-C4	8.50	1.43	1.37
2	AB	2016	U	N3-C4	8.50	1.46	1.38
35	BA	1300	G	N7-C5	8.50	1.44	1.39
35	BA	1306	A	C8-N7	-8.50	1.25	1.31
37	BC	26	U	C2-N3	8.50	1.43	1.37
2	AB	2069	7MG	O3'-P	8.50	1.71	1.61
35	BA	126	G	P-O5'	8.50	1.68	1.59
2	AB	883	G	N7-C5	8.49	1.44	1.39
2	AB	1196	C	C5-C6	8.49	1.41	1.34
35	BA	180	U	C5'-C4'	8.49	1.61	1.51
35	BA	466	A	C5-C4	-8.49	1.32	1.38
35	BA	1472	U	C4'-O4'	-8.49	1.34	1.45
2	AB	769	U	P-O5'	8.49	1.68	1.59
2	AB	784	G	N7-C5	8.49	1.44	1.39
2	AB	30	G	C8-N7	8.49	1.36	1.30
2	AB	928	A	C6-N1	8.49	1.41	1.35
2	AB	2879	A	N9-C4	-8.49	1.32	1.37
2	AB	231	A	C8-N7	-8.48	1.25	1.31
2	AB	1386	C	O3'-P	8.48	1.71	1.61
2	AB	1616	A	N7-C5	8.48	1.44	1.39
35	BA	902	G	C8-N7	-8.48	1.25	1.30
35	BA	1293	C	N1-C6	8.48	1.42	1.37
35	BA	14	U	P-O5'	8.47	1.68	1.59
35	BA	823	C	C2-N3	8.47	1.42	1.35
35	BA	1133	G	N9-C8	-8.47	1.31	1.37
2	AB	2489	U	C5'-C4'	8.47	1.61	1.51
2	AB	2610	C	C3'-C2'	-8.47	1.43	1.52
2	AB	267	C	C4'-O4'	-8.47	1.34	1.45
2	AB	299	A	C4'-O4'	-8.47	1.34	1.45
35	BA	2	A	C6-N1	8.47	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2866	U	C4-C5	8.47	1.51	1.43
35	BA	277	C	P-O5'	8.47	1.68	1.59
2	AB	372	G	N9-C8	8.46	1.43	1.37
2	AB	377	G	N7-C5	-8.46	1.34	1.39
2	AB	1735	A	N7-C5	-8.46	1.34	1.39
2	AB	2264	C	C2-N3	8.46	1.42	1.35
2	AB	1713	A	P-O5'	8.46	1.68	1.59
35	BA	416	G	C5-C4	8.46	1.44	1.38
2	AB	827	U	C2-N3	8.46	1.43	1.37
2	AB	1340	U	C4-C5	8.46	1.51	1.43
35	BA	151	A	C3'-C2'	8.46	1.62	1.52
2	AB	1568	G	C8-N7	-8.46	1.25	1.30
2	AB	290	U	C5-C6	8.45	1.41	1.34
2	AB	648	G	N7-C5	8.46	1.44	1.39
35	BA	1418	A	N7-C5	8.45	1.44	1.39
35	BA	786	G	C6-N1	8.45	1.45	1.39
35	BA	1399	C	N3-C4	8.45	1.39	1.33
2	AB	2478	A	N7-C5	-8.45	1.34	1.39
2	AB	2357	G	N3-C4	8.44	1.41	1.35
2	AB	214	G	C6-N1	8.44	1.45	1.39
2	AB	2751	G	N9-C4	8.44	1.44	1.38
2	AB	926	G	C5-C6	8.44	1.50	1.42
2	AB	950	G	C4'-O4'	-8.44	1.34	1.45
2	AB	2359	C	N1-C6	8.44	1.42	1.37
2	AB	2807	U	N3-C4	8.44	1.46	1.38
35	BA	95	C	O3'-P	8.44	1.71	1.61
35	BA	1183	U	C4-C5	8.44	1.51	1.43
2	AB	896	A	C5-C4	-8.44	1.32	1.38
2	AB	2363	G	N9-C8	-8.44	1.31	1.37
2	AB	2565	A	N1-C2	8.44	1.42	1.34
35	BA	281	G	C5-C4	-8.44	1.32	1.38
37	BC	18	A	C5-C6	8.44	1.48	1.41
2	AB	988	A	P-O5'	8.43	1.68	1.59
2	AB	1508	A	C8-N7	-8.43	1.25	1.31
35	BA	200	G	C8-N7	8.43	1.36	1.30
35	BA	810	C	C5-C6	8.43	1.41	1.34
2	AB	1102	C	P-O5'	8.43	1.68	1.59
2	AB	2203	U	C4-C5	8.43	1.51	1.43
2	AB	2709	G	C2-N3	8.43	1.39	1.32
2	AB	1318	U	C2-N3	8.43	1.43	1.37
2	AB	1465	G	C3'-C2'	8.43	1.62	1.52
35	BA	177	G	N3-C4	-8.43	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	627	G	N9-C4	-8.43	1.31	1.38
2	AB	2583	G	N1-C2	8.42	1.44	1.37
1	AA	116	G	N3-C4	8.42	1.41	1.35
2	AB	1083	U	P-O5'	8.42	1.68	1.59
2	AB	1495	A	N3-C4	8.42	1.40	1.34
38	BD	22	A	P-O5'	8.42	1.68	1.59
2	AB	1153	C	N3-C4	8.41	1.39	1.33
2	AB	1225	G	C4'-O4'	-8.41	1.34	1.45
35	BA	1184	G	C8-N7	8.41	1.35	1.30
2	AB	1201	U	P-O5'	8.41	1.68	1.59
2	AB	1899	A	C2'-C1'	-8.41	1.44	1.53
2	AB	2297	A	O3'-P	8.41	1.71	1.61
2	AB	2650	U	C2-N3	8.41	1.43	1.37
37	BC	53	G	C6-N1	8.41	1.45	1.39
2	AB	1471	G	N3-C4	8.41	1.41	1.35
35	BA	532	A	N7-C5	8.41	1.44	1.39
2	AB	804	A	N3-C4	8.40	1.39	1.34
35	BA	741	G	N7-C5	8.40	1.44	1.39
2	AB	1403	A	N7-C5	8.40	1.44	1.39
35	BA	1134	G	N3-C4	-8.40	1.29	1.35
35	BA	1271	A	C5-C4	-8.40	1.32	1.38
2	AB	601	C	N1-C2	8.40	1.48	1.40
2	AB	2761	A	C3'-C2'	8.40	1.62	1.52
2	AB	636	G	C2-N3	8.39	1.39	1.32
2	AB	1536	C	N3-C4	8.39	1.39	1.33
35	BA	5	U	C2-N3	8.39	1.43	1.37
35	BA	647	C	C4-C5	8.39	1.49	1.43
35	BA	869	G	P-O5'	8.39	1.68	1.59
35	BA	931	C	P-O5'	8.39	1.68	1.59
2	AB	136	G	N9-C8	-8.39	1.31	1.37
2	AB	1958	C	N1-C6	8.39	1.42	1.37
2	AB	2879	A	N9-C8	-8.39	1.31	1.37
2	AB	14	A	N3-C4	8.38	1.39	1.34
2	AB	190	A	P-O5'	8.38	1.68	1.59
2	AB	2758	A	C6-N1	8.39	1.41	1.35
2	AB	2405	G	O3'-P	8.38	1.71	1.61
2	AB	1813	G	C4'-O4'	-8.38	1.34	1.45
2	AB	2651	C	C2-O2	-8.38	1.17	1.24
2	AB	475	C	O3'-P	8.38	1.71	1.61
2	AB	2658	C	N3-C4	8.38	1.39	1.33
35	BA	464	U	C4-C5	8.38	1.51	1.43
2	AB	222	A	P-O5'	8.38	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	454	A	O3'-P	8.38	1.71	1.61
2	AB	1315	C	N1-C6	8.37	1.42	1.37
2	AB	1712	U	C2-N3	8.37	1.43	1.37
2	AB	667	U	P-O5'	8.37	1.68	1.59
2	AB	1319	C	P-O5'	8.37	1.68	1.59
1	AA	105	G	C6-N1	8.37	1.45	1.39
2	AB	1246	A	P-O5'	8.37	1.68	1.59
2	AB	1734	G	C6-N1	8.37	1.45	1.39
2	AB	1778	U	C4'-O4'	-8.36	1.34	1.45
35	BA	1061	G	N7-C5	8.37	1.44	1.39
2	AB	1579	A	P-O5'	8.36	1.68	1.59
35	BA	186	C	C5-C6	8.36	1.41	1.34
35	BA	1030	U	C3'-C2'	8.36	1.62	1.52
35	BA	1153	G	N1-C2	8.36	1.44	1.37
36	BB	58	A	N3-C4	8.36	1.39	1.34
2	AB	938	G	N7-C5	-8.36	1.34	1.39
2	AB	2892	G	C2-N3	8.36	1.39	1.32
35	BA	393	A	N9-C4	8.36	1.42	1.37
2	AB	1692	U	C2'-C1'	8.35	1.62	1.53
2	AB	2013	A	N3-C4	8.35	1.39	1.34
2	AB	2279	G	C6-N1	8.35	1.45	1.39
2	AB	91	A	C5'-C4'	8.35	1.61	1.51
2	AB	956	G	N9-C4	8.35	1.44	1.38
2	AB	1578	U	C5-C6	8.35	1.41	1.34
2	AB	2656	U	C5-C6	8.35	1.41	1.34
36	BB	44	G	C4'-C3'	8.35	1.62	1.53
1	AA	25	U	C2-N3	8.34	1.43	1.37
2	AB	1777	U	C2-N3	8.34	1.43	1.37
35	BA	338	A	N9-C8	-8.34	1.31	1.37
2	AB	1785	A	N3-C4	8.34	1.39	1.34
36	BB	1	A	N9-C4	8.34	1.42	1.37
2	AB	983	A	C6-N1	8.34	1.41	1.35
2	AB	1022	G	C5'-C4'	8.34	1.61	1.51
2	AB	1737	G	C2-N3	8.34	1.39	1.32
2	AB	2237	G	N1-C2	8.34	1.44	1.37
2	AB	2281	A	N7-C5	-8.34	1.34	1.39
2	AB	2637	U	N1-C2	8.34	1.46	1.38
35	BA	254	G	C4'-C3'	8.34	1.62	1.53
2	AB	1794	A	C2'-C1'	-8.33	1.44	1.53
2	AB	1937	A	N3-C4	8.33	1.39	1.34
2	AB	2221	G	C5-C4	-8.33	1.32	1.38
35	BA	1538	C	N1-C6	8.33	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	74	C	N1-C6	8.33	1.42	1.37
2	AB	1284	A	C4'-O4'	-8.33	1.34	1.45
2	AB	1309	G	C8-N7	8.33	1.35	1.30
35	BA	247	G	C8-N7	8.33	1.35	1.30
35	BA	1461	G	N9-C4	8.33	1.44	1.38
2	AB	2319	G	C2-N3	8.33	1.39	1.32
2	AB	613	A	N3-C4	8.33	1.39	1.34
35	BA	994	A	N1-C2	-8.33	1.26	1.34
37	BC	38	G	C3'-C2'	-8.33	1.43	1.52
2	AB	85	G	C2-N3	8.32	1.39	1.32
2	AB	535	G	P-O5'	8.32	1.68	1.59
2	AB	2583	G	C4'-O4'	-8.32	1.34	1.45
2	AB	490	C	N3-C4	8.32	1.39	1.33
2	AB	1697	G	C6-N1	8.32	1.45	1.39
35	BA	511	C	C2-N3	8.32	1.42	1.35
35	BA	810	C	N1-C6	8.32	1.42	1.37
2	AB	845	A	N7-C5	8.32	1.44	1.39
35	BA	579	A	N3-C4	8.32	1.39	1.34
2	AB	1163	G	N7-C5	-8.31	1.34	1.39
36	BB	73	G	P-O5'	8.31	1.68	1.59
2	AB	2304	G	C5-C4	-8.31	1.32	1.38
2	AB	2766	A	N7-C5	8.31	1.44	1.39
2	AB	298	G	N9-C8	8.31	1.43	1.37
2	AB	1074	G	C6-N1	8.31	1.45	1.39
2	AB	296	U	P-O5'	-8.30	1.51	1.59
2	AB	737	C	C5-C6	8.30	1.41	1.34
2	AB	1451	C	O3'-P	8.30	1.71	1.61
35	BA	1319	A	N3-C4	8.30	1.39	1.34
35	BA	1334	G	C2-N3	8.30	1.39	1.32
35	BA	282	A	N9-C4	-8.30	1.32	1.37
35	BA	1362	A	C8-N7	-8.30	1.25	1.31
2	AB	46	G	N9-C4	-8.30	1.31	1.38
2	AB	773	U	C2-N3	8.30	1.43	1.37
2	AB	1480	C	N1-C6	8.30	1.42	1.37
35	BA	302	G	O3'-P	8.30	1.71	1.61
2	AB	2195	U	C2-N3	8.30	1.43	1.37
35	BA	111	G	C5'-C4'	8.30	1.61	1.51
2	AB	1807	G	N9-C8	-8.29	1.32	1.37
38	BD	77	A	P-O5'	8.29	1.68	1.59
2	AB	484	C	N1-C6	8.29	1.42	1.37
2	AB	2462	C	C4'-C3'	-8.29	1.44	1.53
35	BA	600	A	N3-C4	8.29	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1087	G	N1-C2	8.29	1.44	1.37
2	AB	2429	G	N1-C2	8.29	1.44	1.37
35	BA	1266	G	C5'-C4'	8.29	1.61	1.51
35	BA	165	G	P-O5'	8.29	1.68	1.59
35	BA	167	A	N7-C5	-8.29	1.34	1.39
1	AA	86	G	N7-C5	8.28	1.44	1.39
2	AB	56	A	P-O5'	8.28	1.68	1.59
2	AB	302	C	C4-N4	-8.28	1.26	1.33
35	BA	456	A	N3-C4	8.28	1.39	1.34
2	AB	539	G	C8-N7	8.28	1.35	1.30
2	AB	1763	G	N7-C5	-8.28	1.34	1.39
2	AB	2402	U	C2-N3	8.28	1.43	1.37
2	AB	1068	G	P-O5'	8.28	1.68	1.59
2	AB	1127	A	N9-C4	8.28	1.42	1.37
2	AB	2609	U	O3'-P	8.28	1.71	1.61
2	AB	2885	G	N9-C4	8.28	1.44	1.38
35	BA	188	C	P-O5'	8.28	1.68	1.59
35	BA	1396	A	N7-C5	8.28	1.44	1.39
36	BB	11	U	C4-C5	8.28	1.51	1.43
2	AB	508	A	N9-C4	8.28	1.42	1.37
2	AB	1525	A	O3'-P	8.28	1.71	1.61
35	BA	99	C	C2-N3	8.28	1.42	1.35
35	BA	1189	U	P-O5'	8.28	1.68	1.59
2	AB	237	C	C2-N3	8.27	1.42	1.35
2	AB	690	G	C8-N7	8.27	1.35	1.30
2	AB	1553	A	P-O5'	8.27	1.68	1.59
35	BA	584	G	N3-C4	8.27	1.41	1.35
35	BA	772	U	O4'-C1'	8.27	1.52	1.41
35	BA	11	G	N1-C2	8.27	1.44	1.37
2	AB	630	G	C2-N3	8.27	1.39	1.32
2	AB	666	A	C5-C4	-8.27	1.32	1.38
2	AB	904	G	N3-C4	8.27	1.41	1.35
35	BA	1449	C	N1-C6	8.27	1.42	1.37
2	AB	1088	A	P-O5'	8.27	1.68	1.59
35	BA	1133	G	C2-N3	8.27	1.39	1.32
2	AB	2340	A	C3'-C2'	8.26	1.62	1.52
35	BA	286	C	N1-C6	8.26	1.42	1.37
35	BA	423	G	C4'-C3'	8.26	1.62	1.53
2	AB	185	G	C2-N3	8.26	1.39	1.32
2	AB	2057	G	N1-C2	-8.26	1.31	1.37
35	BA	1272	G	C8-N7	8.26	1.35	1.30
2	AB	2785	C	C2-N3	8.26	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	374	A	C4'-O4'	-8.26	1.34	1.45
35	BA	988	G	N7-C5	-8.26	1.34	1.39
1	AA	83	G	C2-N3	8.25	1.39	1.32
2	AB	1540	G	C8-N7	-8.25	1.25	1.30
2	AB	1867	G	N7-C5	8.25	1.44	1.39
35	BA	993	G	O3'-P	8.25	1.71	1.61
36	BB	4	G	N9-C8	8.25	1.43	1.37
1	AA	15	A	N7-C5	-8.25	1.34	1.39
2	AB	321	U	O3'-P	8.25	1.71	1.61
2	AB	985	C	C2-N3	8.25	1.42	1.35
35	BA	421	U	N1-C2	8.25	1.46	1.38
2	AB	620	G	P-O5'	8.25	1.68	1.59
2	AB	770	G	C5-C6	8.25	1.50	1.42
2	AB	1046	A	N3-C4	8.25	1.39	1.34
2	AB	1921	G	N7-C5	8.25	1.44	1.39
35	BA	1311	A	C6-N1	8.24	1.41	1.35
35	BA	1373	G	N9-C8	-8.24	1.32	1.37
35	BA	502	A	P-O5'	-8.24	1.51	1.59
2	AB	1275	A	N7-C5	8.24	1.44	1.39
2	AB	917	A	N7-C5	-8.24	1.34	1.39
2	AB	1223	G	C6-N1	8.24	1.45	1.39
35	BA	242	G	C2-N3	8.24	1.39	1.32
35	BA	867	G	N7-C5	8.24	1.44	1.39
2	AB	984	A	C8-N7	-8.24	1.25	1.31
2	AB	1974	C	C2-N3	8.24	1.42	1.35
2	AB	1255	U	C5'-C4'	8.24	1.61	1.51
2	AB	1974	C	C4'-O4'	-8.24	1.34	1.45
2	AB	2141	G	N7-C5	8.24	1.44	1.39
35	BA	961	U	P-O5'	8.24	1.68	1.59
37	BC	57	C	C4-C5	8.24	1.49	1.43
2	AB	1825	U	C5'-C4'	8.23	1.61	1.51
2	AB	2427	C	N1-C6	8.23	1.42	1.37
35	BA	505	G	C2-N3	8.23	1.39	1.32
1	AA	16	G	N9-C8	-8.23	1.32	1.37
2	AB	359	G	P-O5'	8.23	1.68	1.59
2	AB	781	A	P-O5'	8.23	1.68	1.59
35	BA	506	G	N1-C2	8.23	1.44	1.37
2	AB	179	C	N3-C4	8.23	1.39	1.33
2	AB	1837	C	C5-C6	8.23	1.41	1.34
35	BA	729	A	N9-C4	8.22	1.42	1.37
2	AB	1439	A	N3-C4	8.22	1.39	1.34
35	BA	201	G	N9-C4	8.22	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1155	A	C2'-C1'	8.22	1.62	1.53
2	AB	1183	U	C3'-C2'	8.22	1.61	1.52
2	AB	945	A	C4'-O4'	-8.22	1.34	1.45
2	AB	1909	C	C5-C6	8.22	1.41	1.34
2	AB	320	A	C5-C4	-8.21	1.32	1.38
2	AB	559	G	C5-C4	-8.21	1.32	1.38
2	AB	2252	G	N1-C2	8.21	1.44	1.37
2	AB	2298	A	C5-C4	-8.21	1.32	1.38
2	AB	2396	G	N7-C5	-8.21	1.34	1.39
2	AB	78	U	C2-N3	8.21	1.43	1.37
2	AB	994	C	P-O5'	8.21	1.68	1.59
35	BA	833	G	N3-C4	8.21	1.41	1.35
35	BA	1349	A	P-O5'	8.21	1.68	1.59
1	AA	98	G	C2-N3	8.21	1.39	1.32
2	AB	1955	U	N3-C4	8.21	1.45	1.38
35	BA	650	G	N1-C2	8.21	1.44	1.37
35	BA	1111	A	C5-C6	8.21	1.48	1.41
2	AB	2094	A	O3'-P	-8.21	1.51	1.61
2	AB	467	G	O3'-P	8.21	1.71	1.61
2	AB	1528	A	C5'-C4'	8.20	1.61	1.51
1	AA	80	U	C5-C6	8.20	1.41	1.34
2	AB	1631	G	N3-C4	8.20	1.41	1.35
2	AB	803	U	C4-C5	8.20	1.50	1.43
2	AB	930	G	C5-C4	-8.20	1.32	1.38
2	AB	969	G	N7-C5	-8.20	1.34	1.39
2	AB	1729	U	P-O5'	8.20	1.68	1.59
2	AB	1786	A	N9-C4	-8.20	1.32	1.37
2	AB	2347	C	P-O5'	8.20	1.68	1.59
2	AB	2276	G	C4'-C3'	8.20	1.62	1.53
2	AB	2800	A	N3-C4	8.20	1.39	1.34
35	BA	792	A	C5-C6	8.20	1.48	1.41
2	AB	1512	C	O4'-C1'	8.19	1.52	1.41
2	AB	2892	G	C5-C4	-8.20	1.32	1.38
35	BA	628	G	P-O5'	8.20	1.68	1.59
35	BA	717	U	C2-N3	8.20	1.43	1.37
35	BA	735	C	N1-C6	8.20	1.42	1.37
2	AB	1341	G	C2-N3	8.19	1.39	1.32
35	BA	535	A	C2-N3	8.19	1.41	1.33
2	AB	1616	A	N3-C4	8.19	1.39	1.34
35	BA	737	C	N1-C6	8.19	1.42	1.37
2	AB	891	G	N9-C8	8.18	1.43	1.37
2	AB	1026	G	P-O5'	8.18	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1030	C	N1-C6	8.18	1.42	1.37
2	AB	470	A	N3-C4	8.18	1.39	1.34
2	AB	1195	G	N3-C4	8.18	1.41	1.35
35	BA	935	A	C5'-C4'	8.18	1.61	1.51
2	AB	85	G	P-O5'	8.18	1.68	1.59
2	AB	1361	G	C5-C4	8.18	1.44	1.38
35	BA	59	A	N9-C8	8.18	1.44	1.37
35	BA	554	A	C6-N1	-8.18	1.29	1.35
35	BA	1213	A	C5'-C4'	8.18	1.61	1.51
2	AB	2714	G	C8-N7	-8.17	1.26	1.30
2	AB	2761	A	N7-C5	8.17	1.44	1.39
2	AB	2804	U	N1-C2	8.17	1.46	1.38
2	AB	2810	A	C5-C6	8.17	1.48	1.41
35	BA	1371	G	C6-N1	8.17	1.45	1.39
2	AB	194	G	N3-C4	8.17	1.41	1.35
2	AB	214	G	P-O5'	8.17	1.68	1.59
2	AB	1795	C	C2-N3	8.17	1.42	1.35
2	AB	2708	G	N3-C4	8.17	1.41	1.35
35	BA	810	C	C2-O2	-8.17	1.17	1.24
2	AB	1996	C	O3'-P	8.17	1.71	1.61
2	AB	2491	U	C5-C6	8.17	1.41	1.34
2	AB	407	G	P-O5'	8.17	1.68	1.59
2	AB	2096	C	C3'-C2'	-8.16	1.43	1.52
2	AB	2489	U	C2'-C1'	8.16	1.62	1.53
2	AB	1010	A	N9-C4	8.16	1.42	1.37
2	AB	2077	A	P-O5'	8.16	1.68	1.59
20	AT	34	GLU	CD-OE2	8.16	1.34	1.25
35	BA	869	G	N3-C4	-8.16	1.29	1.35
38	BD	24	C	C5-C6	8.16	1.40	1.34
2	AB	2782	G	C5-C4	-8.16	1.32	1.38
35	BA	1357	A	N7-C5	8.15	1.44	1.39
2	AB	350	G	C8-N7	-8.15	1.26	1.30
2	AB	766	U	O3'-P	8.15	1.71	1.61
2	AB	1034	G	N1-C2	8.15	1.44	1.37
35	BA	1431	A	C5'-C4'	8.15	1.61	1.51
2	AB	2530	A	N3-C4	8.15	1.39	1.34
35	BA	174	A	C6-N6	8.15	1.40	1.33
2	AB	1792	G	C2-N3	8.15	1.39	1.32
2	AB	2161	C	P-O5'	-8.15	1.51	1.59
2	AB	2825	G	C3'-O3'	8.15	1.53	1.42
2	AB	2593	U	C2-N3	-8.14	1.32	1.37
2	AB	2693	G	P-O5'	8.14	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	125	U	C4-C5	8.14	1.50	1.43
35	BA	1437	A	C6-N6	8.14	1.40	1.33
35	BA	313	A	N9-C8	-8.14	1.31	1.37
2	AB	177	G	C2-N3	8.14	1.39	1.32
2	AB	86	G	C2'-C1'	-8.14	1.44	1.53
2	AB	2197	U	C4'-O4'	-8.14	1.34	1.45
2	AB	1906	G	N7-C5	8.14	1.44	1.39
2	AB	2622	U	P-O5'	8.14	1.67	1.59
35	BA	629	A	C6-N1	8.14	1.41	1.35
2	AB	1817	G	N9-C8	8.13	1.43	1.37
35	BA	44	A	N7-C5	8.13	1.44	1.39
35	BA	439	U	N1-C2	8.13	1.45	1.38
36	BB	27	C	C2-N3	8.13	1.42	1.35
2	AB	2721	A	N3-C4	8.13	1.39	1.34
2	AB	677	A	N3-C4	8.13	1.39	1.34
2	AB	700	G	N7-C5	8.13	1.44	1.39
2	AB	1099	G	C6-N1	8.13	1.45	1.39
2	AB	2312	U	C2-N3	8.13	1.43	1.37
2	AB	458	G	N3-C4	8.12	1.41	1.35
2	AB	466	A	N3-C4	8.12	1.39	1.34
2	AB	2223	G	N3-C4	8.13	1.41	1.35
35	BA	416	G	P-O5'	8.13	1.67	1.59
35	BA	358	U	O3'-P	8.12	1.70	1.61
2	AB	2347	C	C5-C6	8.12	1.40	1.34
35	BA	795	C	P-O5'	8.12	1.67	1.59
35	BA	1521	C	N1-C6	8.12	1.42	1.37
2	AB	1677	A	N3-C4	8.12	1.39	1.34
2	AB	701	G	C8-N7	8.12	1.35	1.30
2	AB	1037	G	N9-C8	8.12	1.43	1.37
35	BA	268	U	C2-N3	8.11	1.43	1.37
1	AA	57	A	N9-C4	-8.11	1.32	1.37
2	AB	1002	G	N7-C5	8.11	1.44	1.39
2	AB	1608	A	C8-N7	-8.11	1.25	1.31
35	BA	580	C	P-O5'	8.11	1.67	1.59
2	AB	2890	G	N7-C5	-8.11	1.34	1.39
2	AB	902	C	C2-N3	8.11	1.42	1.35
2	AB	933	A	C6-N1	8.11	1.41	1.35
35	BA	1383	C	C2'-C1'	-8.11	1.44	1.53
2	AB	1354	A	N3-C4	8.11	1.39	1.34
35	BA	731	G	C6-O6	-8.11	1.16	1.24
35	BA	1481	U	C2-O2	8.11	1.29	1.22
2	AB	933	A	P-O5'	8.11	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	631	A	N3-C4	8.10	1.39	1.34
35	BA	184	G	C2'-O2'	8.10	1.52	1.41
2	AB	726	G	C5-C4	-8.10	1.32	1.38
2	AB	2804	U	C2-N3	-8.10	1.32	1.37
35	BA	162	A	N9-C8	-8.10	1.31	1.37
35	BA	552	U	C2-N3	8.10	1.43	1.37
35	BA	870	U	C5-C6	8.10	1.41	1.34
2	AB	1224	U	P-O5'	8.10	1.67	1.59
2	AB	2281	A	C5-C4	-8.10	1.33	1.38
2	AB	2705	A	P-O5'	8.10	1.67	1.59
35	BA	432	A	N7-C5	8.10	1.44	1.39
35	BA	1137	C	N3-C4	8.10	1.39	1.33
2	AB	686	U	C2-N3	8.10	1.43	1.37
2	AB	1044	C	O3'-P	8.10	1.70	1.61
2	AB	1649	G	O3'-P	8.10	1.70	1.61
2	AB	845	A	N3-C4	8.10	1.39	1.34
2	AB	1910	G	N7-C5	-8.10	1.34	1.39
35	BA	932	C	P-O5'	8.10	1.67	1.59
35	BA	964	A	C8-N7	-8.10	1.25	1.31
2	AB	2013	A	C5-C4	-8.09	1.33	1.38
2	AB	2378	A	N3-C4	8.09	1.39	1.34
35	BA	768	A	N3-C4	8.09	1.39	1.34
35	BA	1264	U	N3-C4	8.09	1.45	1.38
35	BA	1487	G	P-O5'	8.09	1.67	1.59
36	BB	18	G	N3-C4	8.09	1.41	1.35
2	AB	1375	U	C2-N3	8.09	1.43	1.37
2	AB	235	U	C4'-C3'	-8.09	1.44	1.53
2	AB	302	C	C4-C5	8.09	1.49	1.43
35	BA	414	A	N9-C4	-8.09	1.32	1.37
2	AB	210	C	N3-C4	8.09	1.39	1.33
2	AB	1045	C	C4-C5	8.09	1.49	1.43
2	AB	2437	G	C2-N3	8.09	1.39	1.32
35	BA	723	U	C4-C5	8.09	1.50	1.43
2	AB	237	C	O3'-P	8.08	1.70	1.61
2	AB	999	U	C4-C5	8.08	1.50	1.43
2	AB	2728	U	C5-C6	8.08	1.41	1.34
2	AB	2825	G	P-O5'	8.08	1.67	1.59
2	AB	2876	G	C6-N1	8.08	1.45	1.39
35	BA	271	C	C2-N3	8.08	1.42	1.35
2	AB	2193	G	C4'-O4'	-8.07	1.35	1.45
2	AB	2213	U	N1-C2	8.07	1.45	1.38
1	AA	10	G	P-O5'	8.07	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	299	G	P-O5'	8.07	1.67	1.59
2	AB	1466	U	P-O5'	8.07	1.67	1.59
35	BA	1005	A	N7-C5	-8.07	1.34	1.39
2	AB	405	U	C5-C6	8.07	1.41	1.34
35	BA	320	A	C6-N6	8.07	1.40	1.33
35	BA	1292	G	C6-N1	8.07	1.45	1.39
35	BA	1433	A	N9-C4	-8.07	1.33	1.37
37	BC	37	G	N1-C2	8.07	1.44	1.37
2	AB	75	G	N3-C4	8.06	1.41	1.35
2	AB	905	A	N7-C5	8.06	1.44	1.39
2	AB	2310	C	O3'-P	8.06	1.70	1.61
35	BA	1222	G	N9-C4	-8.06	1.31	1.38
2	AB	571	U	N1-C2	8.06	1.45	1.38
2	AB	2399	G	N7-C5	8.06	1.44	1.39
2	AB	65	U	C2-N3	8.06	1.43	1.37
35	BA	1018	G	C4'-O4'	-8.06	1.35	1.45
2	AB	625	G	C8-N7	8.05	1.35	1.30
2	AB	957	C	C4-C5	8.05	1.49	1.43
2	AB	1331	G	C2-N3	8.05	1.39	1.32
35	BA	431	A	N3-C4	8.05	1.39	1.34
35	BA	614	C	N1-C6	8.05	1.42	1.37
35	BA	1468	A	C6-N6	8.05	1.40	1.33
2	AB	419	U	C2-N3	8.05	1.43	1.37
2	AB	2761	A	C5'-C4'	8.05	1.61	1.51
35	BA	879	C	C4'-C3'	8.05	1.62	1.53
2	AB	1435	G	C8-N7	8.05	1.35	1.30
2	AB	1240	U	C2-N3	8.05	1.43	1.37
2	AB	1283	G	N3-C4	8.05	1.41	1.35
35	BA	90	C	C2-N3	8.05	1.42	1.35
35	BA	399	G	C2-N3	8.05	1.39	1.32
35	BA	565	U	C4-C5	8.05	1.50	1.43
2	AB	1987	A	N7-C5	8.04	1.44	1.39
2	AB	2633	G	N1-C2	8.05	1.44	1.37
35	BA	306	A	C8-N7	-8.05	1.25	1.31
35	BA	646	G	N9-C8	8.04	1.43	1.37
35	BA	761	G	N9-C8	8.04	1.43	1.37
35	BA	1465	A	C4'-C3'	8.04	1.61	1.53
38	BD	59	A	P-O5'	8.04	1.67	1.59
2	AB	878	A	C8-N7	-8.04	1.25	1.31
35	BA	799	G	N3-C4	8.04	1.41	1.35
2	AB	610	C	P-O5'	8.04	1.67	1.59
2	AB	1348	C	C2'-C1'	8.04	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	506	G	N9-C4	-8.03	1.31	1.38
2	AB	619	G	C5-C6	8.03	1.50	1.42
2	AB	1369	G	C5-C6	8.03	1.50	1.42
2	AB	1813	G	C8-N7	-8.03	1.26	1.30
2	AB	2749	A	C2-N3	8.03	1.40	1.33
37	BC	15	G	N1-C2	8.03	1.44	1.37
35	BA	1366	C	C2-N3	8.03	1.42	1.35
37	BC	26	U	C4'-O4'	-8.03	1.35	1.45
2	AB	495	G	O3'-P	-8.03	1.51	1.61
2	AB	2751	G	N9-C8	-8.03	1.32	1.37
2	AB	1277	G	C6-N1	8.03	1.45	1.39
35	BA	57	G	N9-C8	8.03	1.43	1.37
35	BA	225	C	P-O5'	8.03	1.67	1.59
2	AB	980	A	N3-C4	8.03	1.39	1.34
2	AB	1951	U	N3-C4	8.03	1.45	1.38
2	AB	2613	U	C2'-C1'	8.03	1.62	1.53
2	AB	2808	G	P-O5'	8.03	1.67	1.59
2	AB	2864	G	N7-C5	-8.03	1.34	1.39
35	BA	923	A	P-O5'	8.03	1.67	1.59
2	AB	458	G	C8-N7	8.02	1.35	1.30
2	AB	2080	A	N9-C4	8.02	1.42	1.37
2	AB	1948	G	N3-C4	8.02	1.41	1.35
2	AB	2842	G	P-O5'	8.02	1.67	1.59
2	AB	201	C	N1-C6	8.02	1.42	1.37
2	AB	233	A	C4'-O4'	-8.02	1.35	1.45
2	AB	1344	U	N1-C2	8.02	1.45	1.38
2	AB	1855	U	C4-C5	8.02	1.50	1.43
35	BA	564	C	N3-C4	8.02	1.39	1.33
2	AB	175	G	N7-C5	-8.02	1.34	1.39
2	AB	289	G	C2-N3	8.02	1.39	1.32
35	BA	1074	G	C2'-C1'	8.02	1.62	1.53
35	BA	1450	U	N1-C6	8.02	1.45	1.38
2	AB	1478	G	C2-N3	8.01	1.39	1.32
2	AB	2860	A	C6-N1	-8.01	1.29	1.35
2	AB	646	U	N1-C2	8.01	1.45	1.38
35	BA	1379	G	N1-C2	8.01	1.44	1.37
36	BB	66	C	N3-C4	8.01	1.39	1.33
2	AB	579	G	P-O5'	8.01	1.67	1.59
2	AB	841	G	C2-N3	8.01	1.39	1.32
35	BA	487	A	N9-C8	-8.01	1.31	1.37
35	BA	493	A	N3-C4	8.01	1.39	1.34
35	BA	1456	A	C8-N7	-8.01	1.25	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	726	G	N3-C4	8.01	1.41	1.35
2	AB	1950	G	N1-C2	8.00	1.44	1.37
35	BA	1011	C	C4'-O4'	-8.00	1.35	1.45
2	AB	1360	G	N9-C8	-8.00	1.32	1.37
2	AB	2396	G	N9-C8	-8.00	1.32	1.37
35	BA	900	A	C2-N3	-8.00	1.26	1.33
2	AB	611	C	C5'-C4'	8.00	1.60	1.51
2	AB	1904	G	N7-C5	-8.00	1.34	1.39
35	BA	83	C	N1-C6	8.00	1.42	1.37
35	BA	1208	C	C2-N3	8.00	1.42	1.35
35	BA	1461	G	P-O5'	8.00	1.67	1.59
2	AB	1782	U	P-O5'	7.99	1.67	1.59
35	BA	1031	C	N3-C4	7.99	1.39	1.33
37	BC	43	U	P-O5'	7.99	1.67	1.59
2	AB	109	C	C2-O2	-7.99	1.17	1.24
2	AB	2510	C	P-O5'	7.99	1.67	1.59
2	AB	2633	G	C6-N1	7.99	1.45	1.39
35	BA	1276	G	N3-C4	7.99	1.41	1.35
35	BA	1206	G	N9-C4	-7.99	1.31	1.38
35	BA	1423	G	N1-C2	7.99	1.44	1.37
2	AB	1889	A	C4'-O4'	-7.99	1.35	1.45
35	BA	411	A	C6-N1	-7.99	1.29	1.35
35	BA	1031	C	C4'-O4'	-7.99	1.35	1.45
2	AB	661	A	N9-C8	7.99	1.44	1.37
2	AB	2485	G	N3-C4	7.99	1.41	1.35
2	AB	701	G	C2-N3	7.98	1.39	1.32
2	AB	2010	G	C2-N3	7.98	1.39	1.32
35	BA	95	C	N3-C4	7.98	1.39	1.33
35	BA	1233	G	C2-N3	7.98	1.39	1.32
2	AB	2856	A	C6-N1	-7.98	1.29	1.35
2	AB	2815	C	C4'-O4'	-7.98	1.35	1.45
2	AB	380	G	P-O5'	7.97	1.67	1.59
2	AB	1758	U	C4-C5	7.97	1.50	1.43
2	AB	2197	U	C5-C6	7.97	1.41	1.34
2	AB	2395	C	O3'-P	7.97	1.70	1.61
2	AB	2718	G	C2-N3	7.97	1.39	1.32
2	AB	2544	G	N3-C4	7.97	1.41	1.35
2	AB	605	G	P-O5'	7.97	1.67	1.59
2	AB	730	A	N7-C5	-7.97	1.34	1.39
1	AA	38	C	C4-C5	7.97	1.49	1.43
2	AB	178	G	N7-C5	7.97	1.44	1.39
2	AB	426	C	C2'-O2'	7.97	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1676	A	C5-C4	-7.97	1.33	1.38
2	AB	2521	C	P-O5'	7.97	1.67	1.59
35	BA	1163	A	N3-C4	7.97	1.39	1.34
2	AB	282	A	P-O5'	7.96	1.67	1.59
2	AB	1051	G	C3'-O3'	7.96	1.53	1.42
2	AB	1819	A	N3-C4	7.96	1.39	1.34
2	AB	2635	A	N3-C4	7.96	1.39	1.34
2	AB	1227	G	N3-C4	7.96	1.41	1.35
2	AB	1040	A	N9-C4	7.96	1.42	1.37
2	AB	2090	A	P-O5'	7.96	1.67	1.59
2	AB	2070	A	N7-C5	7.96	1.44	1.39
1	AA	50	A	N3-C4	7.96	1.39	1.34
2	AB	486	C	C3'-C2'	7.95	1.61	1.52
2	AB	864	G	C3'-C2'	7.95	1.61	1.52
35	BA	845	A	O3'-P	7.95	1.70	1.61
35	BA	1081	A	O3'-P	7.95	1.70	1.61
35	BA	1376	U	C4'-O4'	-7.95	1.35	1.45
2	AB	328	U	P-O5'	7.95	1.67	1.59
2	AB	1193	G	N3-C4	7.95	1.41	1.35
2	AB	2560	A	N9-C4	7.95	1.42	1.37
2	AB	57	C	N1-C6	7.95	1.42	1.37
2	AB	381	G	C2-N3	-7.95	1.26	1.32
2	AB	2469	A	C5-C4	-7.95	1.33	1.38
2	AB	911	A	N3-C4	7.95	1.39	1.34
2	AB	1474	U	P-O5'	7.95	1.67	1.59
2	AB	2385	C	N3-C4	-7.95	1.28	1.33
35	BA	1257	A	C5-C4	-7.95	1.33	1.38
2	AB	608	A	N7-C5	7.94	1.44	1.39
2	AB	354	A	N3-C4	7.94	1.39	1.34
2	AB	899	A	O3'-P	7.94	1.70	1.61
2	AB	2785	C	N3-C4	7.94	1.39	1.33
35	BA	243	A	P-O5'	7.94	1.67	1.59
35	BA	509	A	N9-C4	7.94	1.42	1.37
38	BD	20	G	C8-N7	-7.94	1.26	1.30
2	AB	473	G	C5'-C4'	7.94	1.60	1.51
2	AB	935	C	N1-C6	7.94	1.42	1.37
2	AB	1367	A	C4'-C3'	-7.94	1.44	1.53
2	AB	1476	U	P-O5'	7.94	1.67	1.59
2	AB	296	U	C2-N3	7.93	1.43	1.37
2	AB	750	A	C8-N7	-7.93	1.25	1.31
1	AA	69	G	P-O5'	7.93	1.67	1.59
2	AB	1098	A	P-O5'	7.93	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2824	C	C5-C6	7.93	1.40	1.34
2	AB	595	C	C4'-O4'	-7.93	1.35	1.45
37	BC	13	A	N7-C5	7.93	1.44	1.39
35	BA	195	A	N7-C5	7.93	1.44	1.39
1	AA	29	A	N3-C4	7.92	1.39	1.34
2	AB	1177	G	O3'-P	7.92	1.70	1.61
2	AB	345	A	N7-C5	7.92	1.44	1.39
35	BA	433	G	C2-N3	7.92	1.39	1.32
35	BA	685	G	N1-C2	7.92	1.44	1.37
35	BA	743	A	C6-N1	7.92	1.41	1.35
2	AB	1543	G	C2'-C1'	7.92	1.62	1.53
35	BA	219	U	C4-C5	7.91	1.50	1.43
2	AB	759	G	N3-C4	7.91	1.41	1.35
35	BA	186	C	N1-C6	7.91	1.41	1.37
2	AB	857	G	C5'-C4'	7.91	1.60	1.51
35	BA	382	A	C5-C4	-7.91	1.33	1.38
35	BA	763	G	C2-N3	7.91	1.39	1.32
2	AB	2111	U	N3-C4	7.91	1.45	1.38
2	AB	1369	G	C8-N7	7.91	1.35	1.30
2	AB	2383	G	N9-C8	7.91	1.43	1.37
35	BA	1209	C	C5-C6	7.91	1.40	1.34
35	BA	1061	G	C8-N7	7.90	1.35	1.30
2	AB	476	G	C6-N1	7.90	1.45	1.39
2	AB	2381	A	C5'-C4'	7.90	1.60	1.51
2	AB	2725	A	O4'-C1'	7.90	1.51	1.41
2	AB	964	C	O3'-P	7.90	1.70	1.61
2	AB	1011	G	N3-C4	7.90	1.41	1.35
35	BA	3	A	P-O5'	7.90	1.67	1.59
2	AB	60	G	O3'-P	7.90	1.70	1.61
2	AB	679	C	C4-C5	7.90	1.49	1.43
35	BA	179	A	C6-N1	7.90	1.41	1.35
2	AB	546	U	C5'-C4'	7.89	1.60	1.51
35	BA	254	G	N9-C8	-7.89	1.32	1.37
35	BA	1069	C	N3-C4	7.89	1.39	1.33
56	BV	3	SER	CA-CB	7.89	1.64	1.52
2	AB	1475	G	N7-C5	7.89	1.44	1.39
2	AB	1839	G	C5-C4	7.89	1.43	1.38
35	BA	162	A	N9-C4	7.89	1.42	1.37
35	BA	1360	A	N3-C4	7.89	1.39	1.34
2	AB	417	C	C4'-O4'	-7.89	1.35	1.45
2	AB	2413	G	P-O5'	7.89	1.67	1.59
2	AB	226	A	N3-C4	7.89	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2709	G	N7-C5	7.89	1.44	1.39
35	BA	237	G	C2-N3	7.89	1.39	1.32
2	AB	432	A	C2'-C1'	7.89	1.62	1.53
2	AB	434	U	C2-N3	7.89	1.43	1.37
2	AB	1049	C	C2-N3	7.89	1.42	1.35
2	AB	1191	G	N9-C4	-7.89	1.31	1.38
2	AB	2512	C	N1-C6	7.89	1.41	1.37
37	BC	39	U	N1-C2	7.89	1.45	1.38
35	BA	265	G	C4'-C3'	7.88	1.61	1.53
2	AB	2319	G	N3-C4	7.88	1.41	1.35
2	AB	981	A	C8-N7	-7.88	1.26	1.31
2	AB	1109	C	C4'-O4'	-7.88	1.35	1.45
2	AB	1524	G	C6-N1	7.88	1.45	1.39
35	BA	1446	A	N9-C4	-7.88	1.33	1.37
2	AB	2481	G	C2'-C1'	-7.88	1.44	1.53
2	AB	2838	G	N1-C2	-7.88	1.31	1.37
2	AB	2902	C	N3-C4	7.88	1.39	1.33
2	AB	83	A	N7-C5	-7.88	1.34	1.39
2	AB	110	G	N1-C2	7.88	1.44	1.37
35	BA	1041	G	C5-C4	7.88	1.43	1.38
2	AB	935	C	C2-N3	7.88	1.42	1.35
2	AB	1753	G	C5-C4	-7.88	1.32	1.38
2	AB	1002	G	N1-C2	7.87	1.44	1.37
35	BA	1012	A	N7-C5	-7.87	1.34	1.39
35	BA	1270	G	C2-N3	7.87	1.39	1.32
35	BA	1354	U	C5'-C4'	7.87	1.60	1.51
2	AB	2590	A	C6-N6	7.87	1.40	1.33
35	BA	588	G	P-O5'	7.87	1.67	1.59
35	BA	736	C	N1-C2	7.87	1.48	1.40
35	BA	1476	A	C2'-C1'	7.87	1.62	1.53
35	BA	94	G	N7-C5	7.87	1.44	1.39
35	BA	980	C	C2-N3	7.87	1.42	1.35
2	AB	649	G	N3-C4	7.87	1.41	1.35
2	AB	1287	A	N3-C4	7.87	1.39	1.34
35	BA	72	A	C5-C4	-7.87	1.33	1.38
35	BA	251	G	P-O5'	7.87	1.67	1.59
2	AB	1580	A	C4'-C3'	7.87	1.61	1.53
2	AB	1264	A	C5'-C4'	7.86	1.60	1.51
35	BA	418	C	C2-N3	7.86	1.42	1.35
35	BA	1515	G	N7-C5	7.86	1.44	1.39
2	AB	560	C	N3-C4	7.86	1.39	1.33
35	BA	833	G	C6-O6	-7.86	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	776	G	N7-C5	7.86	1.44	1.39
2	AB	1395	A	C4'-O4'	-7.86	1.35	1.45
2	AB	1092	C	P-O5'	7.86	1.67	1.59
2	AB	2391	G	C6-N1	7.86	1.45	1.39
35	BA	12	U	C4-O4	-7.86	1.17	1.23
35	BA	905	U	P-O5'	7.86	1.67	1.59
38	BD	46	G	C5'-C4'	-7.86	1.42	1.51
35	BA	1268	G	N7-C5	7.86	1.44	1.39
2	AB	1265	A	C6-N6	7.85	1.40	1.33
2	AB	1399	C	P-O5'	7.85	1.67	1.59
2	AB	1463	C	N3-C4	7.85	1.39	1.33
2	AB	403	U	C2-N3	-7.85	1.32	1.37
2	AB	673	C	P-O5'	7.85	1.67	1.59
35	BA	78	A	C8-N7	-7.85	1.26	1.31
35	BA	351	G	P-O5'	7.85	1.67	1.59
35	BA	913	A	C6-N1	7.85	1.41	1.35
35	BA	934	C	C2-N3	7.85	1.42	1.35
2	AB	2271	G	N9-C4	7.85	1.44	1.38
2	AB	1340	U	C2-N3	7.85	1.43	1.37
35	BA	306	A	C5-C4	-7.85	1.33	1.38
2	AB	2854	G	O4'-C1'	7.85	1.51	1.41
2	AB	1799	G	C5-C4	-7.84	1.32	1.38
2	AB	2156	G	N7-C5	7.84	1.44	1.39
2	AB	2222	C	N3-C4	7.84	1.39	1.33
35	BA	838	G	N1-C2	7.84	1.44	1.37
1	AA	13	G	C4'-O4'	-7.84	1.35	1.45
2	AB	81	G	N9-C4	-7.84	1.31	1.38
38	BD	25	U	C2-N3	7.84	1.43	1.37
2	AB	1029	A	N3-C4	7.84	1.39	1.34
35	BA	706	A	N1-C2	-7.84	1.27	1.34
35	BA	531	U	N1-C2	7.84	1.45	1.38
2	AB	50	U	C2-N3	7.84	1.43	1.37
2	AB	120	U	C4'-C3'	-7.84	1.44	1.53
2	AB	361	G	C2-N3	7.84	1.39	1.32
2	AB	2567	G	N3-C4	7.84	1.41	1.35
1	AA	55	U	C4-C5	7.83	1.50	1.43
2	AB	1579	A	N9-C4	-7.83	1.33	1.37
2	AB	2157	G	P-O5'	7.83	1.67	1.59
2	AB	1067	A	N3-C4	7.83	1.39	1.34
35	BA	196	A	N9-C4	7.83	1.42	1.37
35	BA	927	G	N3-C4	7.83	1.41	1.35
1	AA	81	G	C2-N2	-7.83	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2394	C	N1-C6	7.83	1.41	1.37
2	AB	2599	G	C8-N7	-7.83	1.26	1.30
35	BA	1363	A	O3'-P	7.83	1.70	1.61
2	AB	351	C	C2'-C1'	7.83	1.61	1.53
2	AB	2170	A	N7-C5	-7.83	1.34	1.39
2	AB	2408	U	P-O5'	7.83	1.67	1.59
35	BA	184	G	C8-N7	7.83	1.35	1.30
35	BA	339	C	N1-C6	-7.83	1.32	1.37
35	BA	1223	C	O3'-P	7.83	1.70	1.61
2	AB	1773	A	N9-C4	-7.83	1.33	1.37
2	AB	1653	G	C8-N7	-7.83	1.26	1.30
2	AB	2235	G	C2-N3	7.83	1.39	1.32
35	BA	1006	G	C8-N7	7.83	1.35	1.30
2	AB	564	C	N3-C4	7.82	1.39	1.33
2	AB	1133	A	N7-C5	7.82	1.44	1.39
2	AB	1956	U	C5-C6	7.82	1.41	1.34
2	AB	1981	A	N3-C4	7.82	1.39	1.34
2	AB	1399	C	N3-C4	7.82	1.39	1.33
2	AB	1635	A	N7-C5	-7.82	1.34	1.39
2	AB	1846	G	C2'-C1'	7.82	1.61	1.53
35	BA	520	A	N3-C4	7.82	1.39	1.34
35	BA	1459	G	C8-N7	-7.82	1.26	1.30
2	AB	1669	A	N9-C8	7.82	1.44	1.37
2	AB	1898	U	C5-C6	7.82	1.41	1.34
1	AA	63	C	P-O5'	7.82	1.67	1.59
2	AB	199	A	N9-C4	7.82	1.42	1.37
2	AB	20	C	C3'-C2'	7.82	1.61	1.52
2	AB	924	G	N1-C2	7.82	1.44	1.37
2	AB	1396	U	N1-C2	7.82	1.45	1.38
2	AB	1549	A	C5-C4	-7.82	1.33	1.38
2	AB	2387	U	C4-C5	7.82	1.50	1.43
35	BA	1363	A	P-O5'	7.82	1.67	1.59
2	AB	382	A	N9-C4	-7.81	1.33	1.37
2	AB	305	C	P-O5'	7.81	1.67	1.59
2	AB	1877	A	N9-C4	-7.81	1.33	1.37
35	BA	159	G	C4'-O4'	-7.81	1.35	1.45
35	BA	815	A	P-O5'	7.81	1.67	1.59
35	BA	1473	G	N1-C2	7.81	1.44	1.37
2	AB	2301	C	N1-C6	7.81	1.41	1.37
2	AB	287	G	N3-C4	-7.81	1.29	1.35
2	AB	676	A	N9-C4	-7.81	1.33	1.37
2	AB	907	G	C4'-O4'	-7.81	1.35	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1609	A	P-O5'	7.81	1.67	1.59
2	AB	56	A	N3-C4	7.81	1.39	1.34
2	AB	220	G	N7-C5	7.81	1.44	1.39
2	AB	950	G	C5'-C4'	7.81	1.60	1.51
2	AB	2550	G	C8-N7	7.81	1.35	1.30
35	BA	776	G	O3'-P	7.81	1.70	1.61
35	BA	1387	G	N3-C4	7.81	1.41	1.35
2	AB	67	U	C5-C6	7.80	1.41	1.34
2	AB	267	C	C2'-C1'	-7.80	1.44	1.53
2	AB	2313	C	N3-C4	7.80	1.39	1.33
2	AB	216	A	P-O5'	7.80	1.67	1.59
2	AB	1695	G	N3-C4	7.80	1.41	1.35
2	AB	2487	G	C2-N3	7.80	1.39	1.32
1	AA	56	G	C8-N7	-7.80	1.26	1.30
2	AB	2872	A	C5-C4	-7.80	1.33	1.38
35	BA	510	A	C5-C4	-7.80	1.33	1.38
2	AB	410	G	N9-C4	7.80	1.44	1.38
2	AB	861	A	C5-C4	-7.80	1.33	1.38
2	AB	1615	C	C4'-O4'	-7.80	1.35	1.45
2	AB	2039	U	O3'-P	7.80	1.70	1.61
2	AB	819	A	N3-C4	7.80	1.39	1.34
2	AB	2271	G	N7-C5	7.80	1.44	1.39
35	BA	549	C	C2'-C1'	7.80	1.61	1.53
35	BA	1385	G	C5-C4	-7.80	1.32	1.38
2	AB	1194	A	N9-C4	7.79	1.42	1.37
2	AB	1900	A	C5-C6	7.79	1.48	1.41
35	BA	676	A	C5'-C4'	7.79	1.60	1.51
2	AB	2814	A	N9-C8	7.79	1.44	1.37
2	AB	2413	G	C2-N2	-7.79	1.26	1.34
2	AB	1958	C	C4-C5	7.79	1.49	1.43
35	BA	610	U	C4-O4	-7.79	1.17	1.23
2	AB	1753	G	C5-C6	7.79	1.50	1.42
2	AB	2344	U	C4'-C3'	7.79	1.61	1.53
35	BA	607	A	N9-C4	-7.79	1.33	1.37
35	BA	1323	G	C2-N3	7.79	1.39	1.32
2	AB	313	G	O3'-P	7.79	1.70	1.61
2	AB	1484	U	C5-C6	7.79	1.41	1.34
2	AB	1935	G	C8-N7	-7.79	1.26	1.30
35	BA	1157	A	N3-C4	7.79	1.39	1.34
2	AB	535	G	N9-C8	-7.78	1.32	1.37
38	BD	71	G	C2-N3	7.78	1.39	1.32
35	BA	259	G	C2-N3	7.78	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1266	G	C6-N1	7.78	1.45	1.39
35	BA	1289	A	N7-C5	-7.78	1.34	1.39
2	AB	1578	U	C4'-O4'	-7.78	1.35	1.45
35	BA	296	U	C2-N3	7.78	1.43	1.37
2	AB	1246	A	N3-C4	7.78	1.39	1.34
2	AB	2238	G	N9-C4	7.78	1.44	1.38
35	BA	1289	A	P-O5'	7.78	1.67	1.59
2	AB	501	A	C4'-O4'	-7.78	1.35	1.45
2	AB	1410	G	N7-C5	-7.78	1.34	1.39
35	BA	1072	G	N3-C4	7.78	1.40	1.35
2	AB	2077	A	N3-C4	7.77	1.39	1.34
2	AB	2133	G	N9-C8	-7.77	1.32	1.37
2	AB	2412	A	N3-C4	7.77	1.39	1.34
2	AB	1324	G	P-O5'	7.77	1.67	1.59
2	AB	2358	A	C5'-C4'	7.77	1.60	1.51
35	BA	110	C	C4'-O4'	-7.77	1.35	1.45
35	BA	118	U	N1-C2	7.77	1.45	1.38
35	BA	212	G	C2-N3	7.77	1.39	1.32
2	AB	43	G	P-O5'	-7.77	1.51	1.59
2	AB	1811	G	O3'-P	7.77	1.70	1.61
2	AB	733	G	C2-N3	7.76	1.39	1.32
35	BA	522	C	C5-C6	7.76	1.40	1.34
35	BA	907	A	N1-C2	-7.76	1.27	1.34
2	AB	532	A	N7-C5	-7.76	1.34	1.39
2	AB	2762	C	C4-C5	7.76	1.49	1.43
35	BA	130	A	P-O5'	7.76	1.67	1.59
35	BA	178	C	C4-N4	7.76	1.41	1.33
2	AB	1682	G	N7-C5	-7.75	1.34	1.39
2	AB	2262	U	N3-C4	7.75	1.45	1.38
2	AB	235	U	C2-N3	7.75	1.43	1.37
2	AB	826	U	P-O5'	7.75	1.67	1.59
2	AB	2136	G	C3'-C2'	7.75	1.61	1.52
1	AA	15	A	C2'-O2'	7.75	1.51	1.41
2	AB	2810	A	N3-C4	7.75	1.39	1.34
35	BA	416	G	N9-C8	7.75	1.43	1.37
38	BD	50	G	P-O5'	7.75	1.67	1.59
2	AB	129	C	C5-C6	7.75	1.40	1.34
2	AB	2659	G	C4'-C3'	7.75	1.61	1.53
35	BA	658	C	P-O5'	7.75	1.67	1.59
36	BB	71	C	C2-N3	7.75	1.42	1.35
2	AB	129	C	C2-O2	7.75	1.31	1.24
35	BA	306	A	C2-N3	7.74	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1276	G	N7-C5	7.74	1.43	1.39
35	BA	1466	C	N3-C4	7.74	1.39	1.33
2	AB	2216	G	N9-C8	7.74	1.43	1.37
35	BA	1069	C	N1-C2	7.74	1.47	1.40
2	AB	2724	U	C2-N3	7.74	1.43	1.37
35	BA	802	A	C5-C4	-7.74	1.33	1.38
35	BA	869	G	C5'-C4'	7.74	1.60	1.51
38	BD	2	G	O3'-P	7.74	1.70	1.61
2	AB	2840	C	N3-C4	7.74	1.39	1.33
2	AB	2228	G	C2-N3	7.73	1.39	1.32
2	AB	2259	U	C4-C5	7.73	1.50	1.43
35	BA	1112	C	C4-C5	7.73	1.49	1.43
35	BA	1477	U	C4-C5	7.73	1.50	1.43
2	AB	1217	U	N1-C2	7.73	1.45	1.38
2	AB	2513	A	N7-C5	-7.73	1.34	1.39
2	AB	1613	G	N7-C5	7.73	1.43	1.39
35	BA	642	A	N3-C4	7.73	1.39	1.34
38	BD	70	C	P-O5'	7.73	1.67	1.59
2	AB	2384	U	P-O5'	7.73	1.67	1.59
35	BA	127	G	N9-C8	-7.73	1.32	1.37
35	BA	938	A	P-O5'	7.73	1.67	1.59
35	BA	954	G	C2-N3	7.73	1.39	1.32
1	AA	54	G	P-O5'	7.73	1.67	1.59
2	AB	1900	A	C5'-C4'	7.73	1.60	1.51
2	AB	2348	U	N1-C2	7.73	1.45	1.38
2	AB	2725	A	N3-C4	7.73	1.39	1.34
35	BA	246	A	C4'-O4'	-7.73	1.35	1.45
2	AB	108	G	P-O5'	7.72	1.67	1.59
2	AB	1199	U	P-O5'	7.72	1.67	1.59
2	AB	1236	G	C4'-C3'	7.72	1.61	1.53
35	BA	742	G	N9-C4	7.72	1.44	1.38
35	BA	1145	A	N9-C4	-7.72	1.33	1.37
2	AB	266	G	N1-C2	7.72	1.44	1.37
2	AB	539	G	N9-C8	-7.72	1.32	1.37
2	AB	769	U	C4-O4	7.72	1.29	1.23
2	AB	2190	G	C2-N3	7.72	1.39	1.32
35	BA	1023	U	N3-C4	7.72	1.45	1.38
35	BA	1438	G	O3'-P	7.72	1.70	1.61
2	AB	1895	C	C4-C5	7.72	1.49	1.43
2	AB	2827	C	N1-C6	7.72	1.41	1.37
35	BA	1455	G	C6-N1	7.72	1.45	1.39
35	BA	459	A	N3-C4	7.72	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	39	A	C4'-O4'	-7.72	1.35	1.45
2	AB	239	C	C4-C5	7.72	1.49	1.43
35	BA	176	C	C5-C6	7.72	1.40	1.34
35	BA	934	C	N3-C4	7.72	1.39	1.33
35	BA	984	C	N1-C6	-7.72	1.32	1.37
35	BA	1244	G	N1-C2	7.72	1.44	1.37
35	BA	1485	U	N1-C6	7.71	1.44	1.38
2	AB	2420	C	C2-N3	7.71	1.42	1.35
2	AB	1596	A	C5'-C4'	7.71	1.60	1.51
2	AB	1721	G	N7-C5	7.71	1.43	1.39
2	AB	2259	U	C2-O2	7.71	1.29	1.22
2	AB	2726	A	N7-C5	7.71	1.43	1.39
35	BA	1115	U	C2-O2	7.71	1.29	1.22
2	AB	49	A	C5'-C4'	7.71	1.60	1.51
2	AB	277	G	N3-C4	7.71	1.40	1.35
2	AB	1075	C	O3'-P	7.71	1.70	1.61
2	AB	2855	C	C4-C5	7.71	1.49	1.43
2	AB	908	C	P-O5'	7.70	1.67	1.59
2	AB	1103	A	C2'-C1'	7.70	1.61	1.53
38	BD	6	G	P-O5'	7.70	1.67	1.59
2	AB	62	U	C2-N3	7.70	1.43	1.37
2	AB	759	G	C5-C4	7.70	1.43	1.38
35	BA	674	G	C4'-O4'	-7.70	1.35	1.45
2	AB	989	G	C8-N7	-7.70	1.26	1.30
2	AB	1729	U	C2-N3	7.70	1.43	1.37
2	AB	8	C	N1-C6	7.70	1.41	1.37
2	AB	942	G	N9-C4	7.70	1.44	1.38
2	AB	1336	A	C2-N3	-7.70	1.26	1.33
35	BA	656	G	N9-C8	7.70	1.43	1.37
2	AB	1797	G	C2-N3	-7.70	1.26	1.32
35	BA	831	A	N3-C4	7.70	1.39	1.34
1	AA	75	G	C6-N1	-7.69	1.34	1.39
2	AB	2152	G	C2-N3	7.69	1.39	1.32
2	AB	2569	G	O3'-P	7.69	1.70	1.61
2	AB	1509	A	C4'-O4'	-7.69	1.35	1.45
2	AB	2140	G	N3-C4	7.69	1.40	1.35
2	AB	648	G	C2-N3	7.69	1.39	1.32
35	BA	969	A	C6-N1	-7.69	1.30	1.35
35	BA	9	G	P-O5'	7.69	1.67	1.59
35	BA	1405	G	C5'-C4'	7.69	1.60	1.51
2	AB	2089	C	O4'-C1'	7.69	1.51	1.41
2	AB	505	A	N7-C5	7.68	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1299	G	N9-C8	7.68	1.43	1.37
2	AB	1494	A	N1-C2	7.68	1.41	1.34
2	AB	1526	C	C4-N4	7.68	1.40	1.33
2	AB	416	U	C4'-O4'	-7.68	1.35	1.45
2	AB	926	G	C5'-C4'	7.68	1.60	1.51
39	BE	90	PHE	CG-CD2	7.68	1.50	1.38
2	AB	567	U	N1-C2	7.68	1.45	1.38
2	AB	1527	G	C8-N7	-7.68	1.26	1.30
35	BA	689	C	O3'-P	7.68	1.70	1.61
35	BA	71	A	N9-C4	-7.68	1.33	1.37
35	BA	115	G	N7-C5	-7.68	1.34	1.39
35	BA	1319	A	C5-C6	7.68	1.48	1.41
1	AA	104	A	P-O5'	7.68	1.67	1.59
2	AB	1129	A	P-O5'	-7.68	1.52	1.59
1	AA	48	U	P-O5'	7.68	1.67	1.59
2	AB	707	G	N9-C4	-7.68	1.31	1.38
2	AB	2497	A	N3-C4	7.68	1.39	1.34
2	AB	2834	G	N9-C4	-7.68	1.31	1.38
2	AB	58	G	P-O5'	7.67	1.67	1.59
2	AB	75	G	C8-N7	-7.67	1.26	1.30
2	AB	1118	C	P-O5'	7.67	1.67	1.59
2	AB	2312	U	O4'-C1'	-7.67	1.31	1.41
2	AB	737	C	P-O5'	7.67	1.67	1.59
2	AB	1223	G	N3-C4	-7.67	1.30	1.35
2	AB	2747	G	C2-N3	7.67	1.38	1.32
35	BA	594	U	C3'-C2'	7.67	1.61	1.52
35	BA	1132	C	P-O5'	7.67	1.67	1.59
36	BB	14	A	O3'-P	7.67	1.70	1.61
2	AB	447	A	N9-C8	-7.67	1.31	1.37
35	BA	714	G	C2-N3	7.67	1.38	1.32
2	AB	60	G	N7-C5	-7.67	1.34	1.39
2	AB	535	G	C5-C4	7.67	1.43	1.38
2	AB	615	U	O3'-P	7.67	1.70	1.61
2	AB	1767	G	C5-C6	7.67	1.50	1.42
35	BA	1000	A	P-O5'	7.67	1.67	1.59
35	BA	1415	G	N7-C5	7.67	1.43	1.39
35	BA	1118	U	P-O5'	7.66	1.67	1.59
38	BD	36	A	C5'-C4'	7.66	1.60	1.51
2	AB	2014	A	N9-C4	7.66	1.42	1.37
35	BA	382	A	C8-N7	-7.66	1.26	1.31
2	AB	923	G	N1-C2	7.66	1.43	1.37
2	AB	1453	A	N3-C4	7.66	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2191	A	C6-N1	7.66	1.41	1.35
1	AA	48	U	C2-N3	7.66	1.43	1.37
2	AB	522	A	C4'-O4'	-7.66	1.35	1.45
2	AB	823	C	N3-C4	7.66	1.39	1.33
35	BA	150	U	O3'-P	7.66	1.70	1.61
35	BA	1199	U	N1-C2	7.66	1.45	1.38
2	AB	1253	A	N7-C5	-7.65	1.34	1.39
35	BA	1113	C	C5-C6	7.65	1.40	1.34
2	AB	2391	G	N1-C2	7.65	1.43	1.37
2	AB	2666	C	N3-C4	7.65	1.39	1.33
35	BA	430	A	C8-N7	-7.65	1.26	1.31
2	AB	462	C	C4'-O4'	-7.65	1.35	1.45
2	AB	2893	A	C8-N7	-7.65	1.26	1.31
35	BA	1281	C	C2-N3	-7.65	1.29	1.35
35	BA	281	G	N7-C5	-7.65	1.34	1.39
35	BA	1213	A	C5-C4	-7.65	1.33	1.38
35	BA	1154	G	N1-C2	7.65	1.43	1.37
35	BA	360	G	N9-C8	7.64	1.43	1.37
35	BA	696	A	N7-C5	7.64	1.43	1.39
1	AA	23	G	N7-C5	7.64	1.43	1.39
2	AB	250	G	P-O5'	7.64	1.67	1.59
2	AB	801	G	N9-C8	7.64	1.43	1.37
2	AB	1348	C	C5'-C4'	7.64	1.60	1.51
35	BA	1025	U	P-O5'	7.64	1.67	1.59
2	AB	1201	U	C4-C5	7.64	1.50	1.43
2	AB	2544	G	C5'-C4'	7.64	1.60	1.51
35	BA	570	G	C8-N7	7.64	1.35	1.30
1	AA	52	A	N9-C4	7.64	1.42	1.37
2	AB	249	C	P-O5'	7.64	1.67	1.59
35	BA	1292	G	O3'-P	7.64	1.70	1.61
35	BA	1311	A	C5'-C4'	7.64	1.60	1.51
2	AB	1679	A	C5-C6	7.64	1.48	1.41
2	AB	2004	G	C8-N7	-7.64	1.26	1.30
2	AB	2252	G	C6-N1	7.64	1.44	1.39
35	BA	716	A	C5-C6	7.64	1.48	1.41
35	BA	804	U	C2-N3	7.64	1.43	1.37
35	BA	42	G	N7-C5	-7.63	1.34	1.39
35	BA	60	A	N3-C4	7.63	1.39	1.34
35	BA	976	G	C3'-O3'	7.63	1.52	1.42
35	BA	81	A	N9-C8	-7.63	1.31	1.37
35	BA	280	C	N1-C6	7.63	1.41	1.37
35	BA	782	A	O3'-P	7.63	1.70	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1448	G	C4'-C3'	7.63	1.61	1.53
36	BB	7	G	N3-C4	7.63	1.40	1.35
38	BD	10	G	N1-C2	7.63	1.43	1.37
2	AB	1435	G	O3'-P	7.63	1.70	1.61
2	AB	1728	C	C2-N3	7.63	1.41	1.35
16	AP	45	ARG	CZ-NH2	7.63	1.43	1.33
35	BA	884	U	O3'-P	7.63	1.70	1.61
35	BA	1333	A	N3-C4	7.63	1.39	1.34
37	BC	55	A	O3'-P	7.63	1.70	1.61
35	BA	229	U	P-O5'	7.63	1.67	1.59
2	AB	2011	U	C2-N3	7.62	1.43	1.37
35	BA	818	G	N7-C5	-7.62	1.34	1.39
35	BA	353	A	N3-C4	7.62	1.39	1.34
2	AB	634	C	O3'-P	7.62	1.70	1.61
2	AB	458	G	C5'-C4'	7.62	1.60	1.51
2	AB	147	C	P-O5'	7.62	1.67	1.59
2	AB	1480	C	C2-O2	-7.62	1.17	1.24
2	AB	2029	G	C2-N3	7.62	1.38	1.32
2	AB	2340	A	O3'-P	7.62	1.70	1.61
35	BA	1077	G	C5-C4	7.62	1.43	1.38
2	AB	140	C	C5-C6	7.61	1.40	1.34
2	AB	663	G	P-O5'	7.61	1.67	1.59
2	AB	2328	A	N3-C4	7.61	1.39	1.34
2	AB	2499	C	C2-N3	7.61	1.41	1.35
2	AB	2569	G	N7-C5	-7.61	1.34	1.39
2	AB	243	U	C4'-O4'	-7.61	1.35	1.45
2	AB	707	G	C6-N1	7.61	1.44	1.39
2	AB	1391	U	N3-C4	7.61	1.45	1.38
35	BA	462	G	C5-C4	7.61	1.43	1.38
2	AB	2122	U	C2-O2	7.61	1.29	1.22
2	AB	2601	C	P-O5'	7.61	1.67	1.59
35	BA	1013	G	N9-C8	7.61	1.43	1.37
35	BA	1521	C	C5'-C4'	7.61	1.60	1.51
36	BB	76	A	C4'-O4'	-7.61	1.35	1.45
2	AB	1149	G	C6-N1	7.61	1.44	1.39
2	AB	1284	A	C5-C4	7.60	1.44	1.38
2	AB	2625	G	N7-C5	-7.60	1.34	1.39
35	BA	710	G	P-O5'	7.60	1.67	1.59
2	AB	1337	G	C2-N3	7.60	1.38	1.32
2	AB	1436	G	N7-C5	-7.60	1.34	1.39
2	AB	2766	A	C6-N1	-7.60	1.30	1.35
2	AB	2819	G	C2'-O2'	7.60	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	5	A	N3-C4	7.60	1.39	1.34
2	AB	513	A	N7-C5	7.60	1.43	1.39
2	AB	782	A	P-O5'	7.60	1.67	1.59
2	AB	2778	A	N9-C4	-7.60	1.33	1.37
35	BA	254	G	C3'-C2'	-7.60	1.44	1.52
2	AB	2173	A	P-O5'	7.60	1.67	1.59
2	AB	2433	A	C4'-C3'	7.60	1.61	1.53
35	BA	83	C	C2-N3	7.60	1.41	1.35
35	BA	174	A	N7-C5	7.59	1.43	1.39
2	AB	2460	U	C3'-C2'	7.59	1.61	1.52
35	BA	1238	A	C5-C4	-7.59	1.33	1.38
35	BA	877	G	N3-C4	7.59	1.40	1.35
2	AB	1552	A	C3'-C2'	7.59	1.61	1.52
2	AB	2180	U	C5-C6	7.59	1.41	1.34
2	AB	1042	G	P-O5'	7.59	1.67	1.59
35	BA	962	C	N1-C2	7.59	1.47	1.40
2	AB	2083	G	C8-N7	7.58	1.35	1.30
35	BA	951	G	C2-N3	7.58	1.38	1.32
38	BD	11	A	C5-C4	-7.58	1.33	1.38
2	AB	81	G	N7-C5	-7.58	1.34	1.39
2	AB	519	U	C2-N3	7.58	1.43	1.37
2	AB	712	G	N7-C5	-7.58	1.34	1.39
2	AB	1431	A	C2-N3	7.58	1.40	1.33
2	AB	2550	G	N7-C5	7.58	1.43	1.39
35	BA	104	G	N3-C4	7.58	1.40	1.35
35	BA	1304	G	O3'-P	7.58	1.70	1.61
35	BA	117	G	N7-C5	-7.58	1.34	1.39
35	BA	1016	A	N3-C4	7.58	1.39	1.34
37	BC	13	A	N9-C4	7.58	1.42	1.37
2	AB	80	G	C6-N1	7.58	1.44	1.39
2	AB	510	C	C2'-C1'	7.58	1.61	1.53
2	AB	892	A	N3-C4	7.58	1.39	1.34
2	AB	2152	G	C6-N1	7.57	1.44	1.39
2	AB	2799	A	C4'-C3'	7.57	1.61	1.53
2	AB	2875	C	N1-C6	7.57	1.41	1.37
35	BA	39	G	N7-C5	7.57	1.43	1.39
35	BA	718	A	C5-C4	-7.57	1.33	1.38
2	AB	1170	C	C5'-C4'	7.57	1.60	1.51
35	BA	553	A	N7-C5	7.57	1.43	1.39
2	AB	150	U	N3-C4	7.57	1.45	1.38
2	AB	1957	C	C2-N3	7.57	1.41	1.35
2	AB	2339	C	C4'-O4'	-7.57	1.35	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2377	A	P-O5'	7.57	1.67	1.59
35	BA	425	G	C6-N1	-7.57	1.34	1.39
2	AB	2891	U	C2-N3	7.57	1.43	1.37
1	AA	41	G	O3'-P	7.57	1.70	1.61
2	AB	145	C	P-O5'	7.57	1.67	1.59
2	AB	2257	U	C2-N3	7.57	1.43	1.37
35	BA	731	G	C5'-C4'	7.57	1.60	1.51
35	BA	1034	G	N1-C2	7.57	1.43	1.37
35	BA	1243	C	C4-C5	-7.57	1.36	1.43
2	AB	644	A	N7-C5	-7.56	1.34	1.39
2	AB	2511	U	C2-O2	7.56	1.29	1.22
35	BA	839	C	P-O5'	7.56	1.67	1.59
35	BA	1515	G	P-O5'	7.56	1.67	1.59
2	AB	2015	A	N3-C4	7.56	1.39	1.34
2	AB	2691	C	C4'-O4'	-7.56	1.35	1.45
2	AB	351	C	N1-C2	7.56	1.47	1.40
2	AB	1989	G	C2-N3	7.56	1.38	1.32
35	BA	822	U	P-O5'	7.56	1.67	1.59
35	BA	938	A	N7-C5	7.56	1.43	1.39
2	AB	242	G	C8-N7	-7.56	1.26	1.30
2	AB	1419	A	C6-N1	-7.56	1.30	1.35
35	BA	487	A	N3-C4	7.56	1.39	1.34
2	AB	223	A	N3-C4	7.56	1.39	1.34
2	AB	2741	A	C6-N1	7.56	1.40	1.35
2	AB	660	C	N1-C6	-7.55	1.32	1.37
2	AB	1691	C	N1-C6	7.55	1.41	1.37
35	BA	860	A	O3'-P	-7.55	1.52	1.61
2	AB	664	G	O3'-P	7.55	1.70	1.61
2	AB	2442	C	N1-C6	7.55	1.41	1.37
2	AB	132	G	N3-C4	7.55	1.40	1.35
2	AB	797	G	N9-C8	7.55	1.43	1.37
2	AB	518	G	C5-C4	7.55	1.43	1.38
2	AB	1300	G	C8-N7	7.55	1.35	1.30
35	BA	1080	A	C3'-C2'	7.55	1.61	1.52
35	BA	676	A	C6-N6	7.55	1.40	1.33
2	AB	570	G	N3-C4	7.55	1.40	1.35
2	AB	1309	G	P-O5'	7.55	1.67	1.59
2	AB	1346	G	N7-C5	-7.55	1.34	1.39
2	AB	2803	G	N7-C5	7.55	1.43	1.39
35	BA	1338	G	C8-N7	7.55	1.35	1.30
2	AB	1001	A	C5-C6	7.54	1.47	1.41
2	AB	1623	G	C2-N3	7.54	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1918	A	C8-N7	-7.54	1.26	1.31
35	BA	322	C	C2-N3	7.54	1.41	1.35
2	AB	20	C	C2-O2	-7.54	1.17	1.24
2	AB	123	G	C2-N2	-7.54	1.27	1.34
2	AB	1127	A	O4'-C1'	-7.54	1.31	1.41
2	AB	2450	A	N9-C4	7.54	1.42	1.37
35	BA	88	U	O3'-P	7.54	1.70	1.61
35	BA	318	G	P-O5'	7.54	1.67	1.59
35	BA	456	A	O3'-P	7.54	1.70	1.61
2	AB	125	A	C2'-C1'	7.54	1.61	1.53
2	AB	1285	A	N9-C4	-7.54	1.33	1.37
35	BA	325	A	N3-C4	7.54	1.39	1.34
35	BA	560	A	N7-C5	7.54	1.43	1.39
35	BA	1029	U	N3-C4	7.54	1.45	1.38
2	AB	1766	G	P-O5'	7.53	1.67	1.59
35	BA	197	A	P-O5'	7.53	1.67	1.59
35	BA	293	G	C5-C4	7.53	1.43	1.38
35	BA	343	U	P-O5'	7.53	1.67	1.59
35	BA	748	G	O3'-P	7.53	1.70	1.61
37	BC	19	A	N9-C8	7.53	1.43	1.37
2	AB	224	U	C2-N3	7.53	1.43	1.37
2	AB	2021	C	C4-C5	7.53	1.49	1.43
2	AB	2426	A	N3-C4	7.53	1.39	1.34
35	BA	40	C	N3-C4	7.53	1.39	1.33
35	BA	266	G	N9-C4	7.53	1.44	1.38
1	AA	102	G	C4'-C3'	7.53	1.61	1.53
2	AB	244	A	N3-C4	7.53	1.39	1.34
35	BA	404	G	N7-C5	7.53	1.43	1.39
35	BA	1295	U	P-O5'	7.53	1.67	1.59
2	AB	1558	C	P-O5'	7.52	1.67	1.59
35	BA	1111	A	N7-C5	7.52	1.43	1.39
35	BA	1292	G	C5-C4	7.52	1.43	1.38
2	AB	783	A	C5-C4	-7.52	1.33	1.38
2	AB	2198	A	N7-C5	-7.52	1.34	1.39
35	BA	703	G	N1-C2	7.52	1.43	1.37
2	AB	1848	A	N9-C4	7.52	1.42	1.37
2	AB	1881	C	C5'-C4'	7.52	1.60	1.51
2	AB	2768	U	C4-C5	7.52	1.50	1.43
1	AA	66	A	C5-C6	7.52	1.47	1.41
2	AB	1959	G	N1-C2	7.52	1.43	1.37
2	AB	355	U	N1-C2	7.52	1.45	1.38
2	AB	34	U	C4'-O4'	-7.52	1.35	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1769	U	C2-N3	7.52	1.43	1.37
35	BA	736	C	N1-C6	-7.52	1.32	1.37
35	BA	919	A	C4'-O4'	-7.52	1.35	1.45
1	AA	85	G	N1-C2	7.51	1.43	1.37
2	AB	42	A	N9-C4	7.51	1.42	1.37
2	AB	2657	A	C3'-C2'	7.51	1.61	1.52
35	BA	485	U	C3'-C2'	7.51	1.61	1.52
35	BA	581	G	C2'-C1'	-7.51	1.45	1.53
35	BA	1191	A	N3-C4	7.51	1.39	1.34
2	AB	2454	G	C2-N3	7.51	1.38	1.32
1	AA	109	A	C2'-C1'	7.51	1.61	1.53
2	AB	165	A	N3-C4	7.51	1.39	1.34
2	AB	937	C	N3-C4	7.51	1.39	1.33
35	BA	83	C	C3'-C2'	7.51	1.61	1.52
2	AB	2548	U	C4-O4	7.51	1.29	1.23
35	BA	1154	G	C4'-O4'	-7.51	1.35	1.45
2	AB	39	G	C5-C6	7.51	1.49	1.42
2	AB	2837	A	C2'-C1'	-7.51	1.45	1.53
37	BC	39	U	C4-C5	7.50	1.50	1.43
2	AB	828	U	C5'-C4'	7.50	1.60	1.51
2	AB	1823	G	N9-C8	-7.50	1.32	1.37
2	AB	2052	A	C4'-O4'	-7.50	1.35	1.45
35	BA	1063	C	C5-C6	7.50	1.40	1.34
2	AB	1182	G	N9-C4	-7.50	1.31	1.38
2	AB	2147	A	C4'-O4'	-7.50	1.35	1.45
2	AB	2578	G	N3-C4	7.50	1.40	1.35
35	BA	1374	A	N1-C2	-7.50	1.27	1.34
36	BB	18	G	C6-O6	-7.50	1.17	1.24
18	AR	98	TYR	CE2-CZ	7.50	1.48	1.38
35	BA	1425	U	N1-C6	7.50	1.44	1.38
2	AB	1951	U	C2'-C1'	-7.49	1.45	1.53
2	AB	2123	G	C2-N3	7.49	1.38	1.32
2	AB	58	G	C6-N1	7.49	1.44	1.39
35	BA	274	A	N3-C4	7.49	1.39	1.34
2	AB	690	G	O3'-P	7.49	1.70	1.61
2	AB	2120	G	P-O5'	7.49	1.67	1.59
2	AB	2689	U	N3-C4	-7.49	1.31	1.38
35	BA	226	G	N7-C5	-7.49	1.34	1.39
38	BD	58	A	C5-C6	7.49	1.47	1.41
2	AB	1748	C	N1-C2	7.49	1.47	1.40
2	AB	1884	G	P-O5'	7.49	1.67	1.59
35	BA	1166	G	C6-N1	-7.49	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1239	A	N9-C4	7.49	1.42	1.37
2	AB	738	G	O3'-P	7.48	1.70	1.61
2	AB	1533	C	C4-N4	7.48	1.40	1.33
2	AB	2572	A	C6-N1	7.48	1.40	1.35
35	BA	383	A	C5-C4	-7.48	1.33	1.38
35	BA	1369	C	N1-C2	7.48	1.47	1.40
37	BC	17	U	N1-C6	7.48	1.44	1.38
2	AB	655	A	C4'-O4'	-7.48	1.35	1.45
2	AB	1070	A	C4'-C3'	7.48	1.61	1.53
2	AB	1077	A	N3-C4	7.48	1.39	1.34
2	AB	2734	A	O3'-P	7.48	1.70	1.61
35	BA	892	A	P-O5'	7.48	1.67	1.59
35	BA	1474	U	C4'-C3'	7.48	1.61	1.53
36	BB	42	G	N9-C8	-7.48	1.32	1.37
2	AB	148	U	C5-C6	7.48	1.40	1.34
2	AB	484	C	C4-C5	7.48	1.49	1.43
2	AB	1914	C	C2-N3	7.48	1.41	1.35
2	AB	2752	C	C2-N3	-7.48	1.29	1.35
2	AB	1517	G	C4'-C3'	7.48	1.61	1.53
36	BB	19	G	C2-N3	7.48	1.38	1.32
2	AB	363	G	N9-C8	-7.47	1.32	1.37
2	AB	485	C	C2'-C1'	7.47	1.61	1.53
35	BA	478	A	C5-C4	-7.47	1.33	1.38
35	BA	734	G	C2-N3	7.47	1.38	1.32
35	BA	1421	G	N7-C5	-7.47	1.34	1.39
2	AB	752	A	C5-C4	7.47	1.44	1.38
2	AB	1607	C	P-O5'	7.47	1.67	1.59
2	AB	1999	C	C4'-O4'	-7.47	1.35	1.45
2	AB	2516	A	C5-C4	-7.47	1.33	1.38
37	BC	46	C	C4'-C3'	7.47	1.61	1.53
2	AB	1694	C	C5-C6	7.47	1.40	1.34
2	AB	1748	C	C5-C6	7.47	1.40	1.34
36	BB	56	C	C4-C5	7.47	1.49	1.43
36	BB	66	C	O3'-P	7.47	1.70	1.61
2	AB	155	A	P-O5'	7.47	1.67	1.59
35	BA	728	A	N7-C5	-7.47	1.34	1.39
2	AB	515	A	O3'-P	7.47	1.70	1.61
2	AB	1776	G	C2'-C1'	-7.47	1.45	1.53
2	AB	2520	C	N1-C6	7.47	1.41	1.37
35	BA	187	G	C8-N7	7.47	1.35	1.30
2	AB	30	G	P-O5'	7.46	1.67	1.59
35	BA	710	G	C2-N2	7.46	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1189	A	C8-N7	-7.46	1.26	1.31
2	AB	1876	A	C6-N1	7.46	1.40	1.35
2	AB	2007	U	O3'-P	-7.46	1.52	1.61
2	AB	2205	A	C6-N6	7.46	1.40	1.33
2	AB	2237	G	P-O5'	7.46	1.67	1.59
35	BA	498	A	N9-C4	7.46	1.42	1.37
2	AB	2731	G	C5-C4	7.46	1.43	1.38
2	AB	70	G	C4'-C3'	7.46	1.61	1.53
35	BA	7	A	N9-C4	-7.46	1.33	1.37
35	BA	264	C	N1-C6	7.46	1.41	1.37
35	BA	758	C	C2-O2	-7.46	1.17	1.24
2	AB	934	U	C2-N3	7.46	1.43	1.37
2	AB	2002	G	N7-C5	7.46	1.43	1.39
35	BA	577	G	N7-C5	7.46	1.43	1.39
2	AB	2041	U	N1-C2	7.46	1.45	1.38
2	AB	2446	G	N7-C5	7.46	1.43	1.39
35	BA	558	G	N9-C8	7.46	1.43	1.37
35	BA	572	A	P-O5'	7.46	1.67	1.59
2	AB	933	A	O3'-P	7.45	1.70	1.61
35	BA	565	U	N1-C2	7.45	1.45	1.38
35	BA	1220	G	O3'-P	7.45	1.70	1.61
2	AB	1016	G	C6-N1	7.45	1.44	1.39
2	AB	2283	C	N3-C4	7.45	1.39	1.33
2	AB	2776	A	C5'-C4'	7.45	1.60	1.51
35	BA	105	G	N3-C4	7.45	1.40	1.35
38	BD	2	G	N3-C4	7.45	1.40	1.35
35	BA	84	U	C5'-C4'	7.45	1.60	1.51
35	BA	1187	G	C3'-C2'	-7.45	1.44	1.52
2	AB	237	C	N1-C6	7.45	1.41	1.37
2	AB	2059	A	N3-C4	7.45	1.39	1.34
2	AB	2640	G	C5'-C4'	7.45	1.60	1.51
35	BA	444	G	C5-C6	7.44	1.49	1.42
38	BD	64	G	C2-N3	7.44	1.38	1.32
2	AB	100	U	N1-C2	7.44	1.45	1.38
2	AB	1461	C	O3'-P	7.44	1.70	1.61
2	AB	2647	U	C2-N3	7.44	1.43	1.37
35	BA	491	G	C5'-C4'	7.44	1.60	1.51
36	BB	49	G	N3-C4	7.44	1.40	1.35
1	AA	35	C	C2-N3	7.44	1.41	1.35
2	AB	849	A	N9-C4	-7.44	1.33	1.37
2	AB	2185	U	C5'-C4'	7.44	1.60	1.51
2	AB	2196	C	N1-C6	7.44	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2287	A	O3'-P	7.44	1.70	1.61
37	BC	42	U	C2-N3	-7.44	1.32	1.37
2	AB	223	A	P-O5'	7.44	1.67	1.59
2	AB	643	A	N9-C4	7.44	1.42	1.37
2	AB	2104	C	N1-C6	-7.44	1.32	1.37
2	AB	2254	C	C4-N4	7.44	1.40	1.33
35	BA	40	C	C2'-C1'	-7.44	1.45	1.53
35	BA	1107	C	C4-C5	7.44	1.49	1.43
2	AB	621	A	C6-N1	-7.44	1.30	1.35
2	AB	1157	G	C6-N1	7.44	1.44	1.39
2	AB	2602	A	C8-N7	7.44	1.36	1.31
2	AB	1440	U	C2-N3	7.44	1.43	1.37
35	BA	434	U	C2-N3	7.44	1.43	1.37
2	AB	1272	A	N7-C5	-7.43	1.34	1.39
2	AB	1860	G	C2-N3	7.43	1.38	1.32
35	BA	625	U	O3'-P	7.43	1.70	1.61
35	BA	1026	G	C2'-O2'	-7.43	1.31	1.41
2	AB	712	G	N9-C4	-7.43	1.32	1.38
2	AB	1620	G	N9-C8	7.43	1.43	1.37
2	AB	1771	C	C5-C6	7.43	1.40	1.34
2	AB	2803	G	C5-C4	7.43	1.43	1.38
35	BA	161	A	N3-C4	7.43	1.39	1.34
35	BA	129	A	N3-C4	7.43	1.39	1.34
2	AB	1052	C	N1-C6	-7.43	1.32	1.37
2	AB	2714	G	N3-C4	7.43	1.40	1.35
35	BA	843	U	C5'-C4'	7.43	1.60	1.51
35	BA	1486	G	N9-C8	7.43	1.43	1.37
2	AB	138	U	O3'-P	7.43	1.70	1.61
2	AB	1745	A	O3'-P	7.43	1.70	1.61
2	AB	1896	G	C8-N7	-7.43	1.26	1.30
2	AB	2629	U	C4'-O4'	-7.43	1.35	1.45
2	AB	2729	G	N1-C2	7.43	1.43	1.37
2	AB	15	G	C5'-C4'	7.42	1.60	1.51
2	AB	830	G	C4'-O4'	-7.42	1.35	1.45
2	AB	1109	C	N3-C4	7.42	1.39	1.33
2	AB	1227	G	C5-C6	7.42	1.49	1.42
2	AB	1519	G	P-O5'	7.42	1.67	1.59
35	BA	317	U	C5-C6	7.42	1.40	1.34
38	BD	31	G	N1-C2	7.42	1.43	1.37
2	AB	1689	A	N3-C4	7.42	1.39	1.34
35	BA	979	C	N3-C4	7.42	1.39	1.33
35	BA	1502	A	N9-C4	7.42	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1281	G	N9-C8	-7.42	1.32	1.37
2	AB	1408	G	N3-C4	7.42	1.40	1.35
35	BA	416	G	N7-C5	-7.42	1.34	1.39
2	AB	224	U	N3-C4	7.42	1.45	1.38
2	AB	2501	C	C5'-C4'	7.42	1.60	1.51
2	AB	492	A	N7-C5	7.42	1.43	1.39
1	AA	79	G	P-O5'	7.42	1.67	1.59
2	AB	75	G	C2-N3	7.42	1.38	1.32
2	AB	326	G	C4'-O4'	-7.42	1.35	1.45
2	AB	694	U	C2-N3	7.42	1.43	1.37
2	AB	2827	C	O3'-P	7.42	1.70	1.61
35	BA	503	C	C5-C6	7.42	1.40	1.34
50	BP	2	ARG	NE-CZ	7.42	1.42	1.33
2	AB	2201	G	O3'-P	-7.42	1.52	1.61
2	AB	1343	G	N1-C2	7.41	1.43	1.37
2	AB	2193	G	P-O5'	7.41	1.67	1.59
2	AB	2327	A	N3-C4	7.41	1.39	1.34
1	AA	49	C	C5-C6	7.41	1.40	1.34
35	BA	853	C	C5'-C4'	7.41	1.60	1.51
2	AB	222	A	C5'-C4'	7.41	1.60	1.51
35	BA	98	A	C6-N1	-7.41	1.30	1.35
35	BA	562	U	C4'-C3'	7.41	1.61	1.53
2	AB	2161	C	C5-C6	7.41	1.40	1.34
35	BA	111	G	N3-C4	7.41	1.40	1.35
35	BA	614	C	C3'-C2'	7.41	1.61	1.52
36	BB	71	C	P-O5'	7.41	1.67	1.59
38	BD	31	G	C6-N1	7.41	1.44	1.39
2	AB	2123	G	N7-C5	7.41	1.43	1.39
2	AB	2373	G	N7-C5	7.41	1.43	1.39
2	AB	434	U	P-O5'	7.40	1.67	1.59
2	AB	1960	A	C8-N7	-7.40	1.26	1.31
35	BA	234	C	N1-C6	7.40	1.41	1.37
35	BA	436	C	O4'-C1'	7.40	1.51	1.41
2	AB	1223	G	N7-C5	7.40	1.43	1.39
2	AB	1533	C	C2-N3	7.40	1.41	1.35
2	AB	2047	C	C2-N3	7.40	1.41	1.35
35	BA	1440	U	N1-C6	7.40	1.44	1.38
38	BD	2	G	C5'-C4'	7.40	1.60	1.51
2	AB	1279	G	C4'-O4'	-7.40	1.35	1.45
2	AB	1300	G	N1-C2	7.40	1.43	1.37
2	AB	1769	U	O3'-P	7.40	1.70	1.61
2	AB	2247	A	C5-C4	-7.40	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1439	G	C6-N1	-7.40	1.34	1.39
2	AB	657	U	C4'-O4'	-7.40	1.35	1.45
2	AB	2020	A	P-O5'	7.40	1.67	1.59
2	AB	2377	A	C5-C4	-7.40	1.33	1.38
36	BB	39	A	N9-C8	7.40	1.43	1.37
35	BA	772	U	C2-N3	7.40	1.43	1.37
2	AB	2305	U	C2-N3	7.39	1.43	1.37
2	AB	2535	G	C5-C4	-7.39	1.33	1.38
2	AB	1582	C	C2-O2	-7.39	1.17	1.24
2	AB	1614	A	N7-C5	7.39	1.43	1.39
2	AB	2300	C	C4'-O4'	-7.39	1.35	1.45
2	AB	2664	G	C8-N7	7.39	1.35	1.30
35	BA	356	A	P-O5'	7.39	1.67	1.59
35	BA	399	G	C6-N1	7.39	1.44	1.39
2	AB	2490	G	N9-C4	7.39	1.43	1.38
2	AB	2562	U	C5-C6	7.39	1.40	1.34
2	AB	1556	C	C2-O2	-7.39	1.17	1.24
2	AB	2311	A	N7-C5	7.39	1.43	1.39
35	BA	1531	A	N3-C4	7.39	1.39	1.34
35	BA	265	G	C8-N7	7.39	1.35	1.30
2	AB	420	C	C5-C6	7.39	1.40	1.34
2	AB	937	C	C5-C6	7.39	1.40	1.34
2	AB	2280	G	N1-C2	7.39	1.43	1.37
35	BA	442	G	C4'-O4'	-7.39	1.35	1.45
35	BA	455	G	N1-C2	7.39	1.43	1.37
35	BA	622	A	O3'-P	7.39	1.70	1.61
1	AA	43	C	N1-C6	7.38	1.41	1.37
1	AA	100	G	N9-C4	7.38	1.43	1.38
1	AA	104	A	C6-N1	-7.38	1.30	1.35
2	AB	2524	G	N9-C8	-7.38	1.32	1.37
35	BA	496	A	N1-C2	-7.38	1.27	1.34
35	BA	756	C	C4-C5	7.38	1.48	1.43
35	BA	1048	G	C4'-O4'	-7.38	1.35	1.45
35	BA	1134	G	C2-N2	7.38	1.42	1.34
2	AB	1162	G	C8-N7	-7.38	1.26	1.30
2	AB	1247	A	N7-C5	7.38	1.43	1.39
2	AB	1565	C	P-O5'	7.38	1.67	1.59
2	AB	2061	G	N3-C4	7.38	1.40	1.35
2	AB	2665	A	O3'-P	7.38	1.70	1.61
35	BA	1017	U	N1-C2	7.38	1.45	1.38
35	BA	1124	G	C5'-C4'	7.38	1.60	1.51
2	AB	156	A	C8-N7	-7.38	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	65	C	C4'-O4'	-7.38	1.35	1.45
2	AB	138	U	N1-C2	7.38	1.45	1.38
2	AB	1078	U	C2-N3	7.38	1.43	1.37
2	AB	1324	G	N9-C8	7.38	1.43	1.37
2	AB	1104	C	N1-C6	7.38	1.41	1.37
35	BA	976	G	C5-C4	-7.38	1.33	1.38
35	BA	1139	G	C2-N3	7.38	1.38	1.32
35	BA	1281	C	C4-C5	7.38	1.48	1.43
35	BA	1458	G	N7-C5	-7.38	1.34	1.39
35	BA	1086	U	N3-C4	7.38	1.45	1.38
35	BA	1069	C	N1-C6	7.37	1.41	1.37
2	AB	6	A	C8-N7	-7.37	1.26	1.31
2	AB	982	C	C5-C6	7.37	1.40	1.34
35	BA	271	C	N3-C4	7.37	1.39	1.33
35	BA	1019	A	C5-C6	7.37	1.47	1.41
35	BA	1506	U	C4'-O4'	7.37	1.55	1.45
35	BA	112	G	N7-C5	7.37	1.43	1.39
35	BA	526	C	C4-C5	7.37	1.48	1.43
35	BA	601	G	N1-C2	7.37	1.43	1.37
35	BA	1333	A	C2-N3	7.37	1.40	1.33
1	AA	48	U	N1-C2	7.37	1.45	1.38
2	AB	1416	G	N1-C2	7.37	1.43	1.37
2	AB	2583	G	C8-N7	-7.37	1.26	1.30
2	AB	2867	G	P-O5'	7.37	1.67	1.59
35	BA	895	G	C6-N1	7.37	1.44	1.39
35	BA	1318	A	C8-N7	7.37	1.36	1.31
2	AB	1902	C	N3-C4	-7.37	1.28	1.33
2	AB	1509	A	O3'-P	-7.36	1.52	1.61
2	AB	2242	G	C5-C4	7.36	1.43	1.38
2	AB	2836	U	C2-O2	7.36	1.28	1.22
35	BA	220	G	C6-O6	-7.36	1.17	1.24
35	BA	1537	U	N1-C2	7.36	1.45	1.38
35	BA	782	A	C8-N7	-7.36	1.26	1.31
1	AA	39	A	C5-C6	-7.36	1.34	1.41
2	AB	36	G	N7-C5	7.36	1.43	1.39
2	AB	126	A	C5'-C4'	7.36	1.60	1.51
2	AB	1512	C	C4-C5	7.36	1.48	1.43
2	AB	166	U	C2-O2	-7.36	1.15	1.22
2	AB	1671	U	C5'-C4'	7.36	1.60	1.51
35	BA	1302	C	N1-C6	7.36	1.41	1.37
2	AB	2062	A	C6-N6	-7.36	1.28	1.33
38	BD	9	G	C6-O6	-7.36	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	738	G	N9-C4	7.36	1.43	1.38
2	AB	2333	A	P-O5'	7.36	1.67	1.59
35	BA	360	G	C3'-O3'	7.35	1.52	1.42
35	BA	366	A	N3-C4	7.35	1.39	1.34
35	BA	1122	U	N3-C4	7.35	1.45	1.38
2	AB	423	A	C6-N6	7.35	1.39	1.33
2	AB	1595	C	C4-C5	7.35	1.48	1.43
2	AB	1850	G	P-O5'	7.35	1.67	1.59
35	BA	1281	C	N1-C6	7.35	1.41	1.37
2	AB	647	G	C4'-O4'	-7.35	1.35	1.45
2	AB	1160	G	C5'-C4'	7.35	1.60	1.51
2	AB	1775	U	O4'-C1'	7.35	1.51	1.41
2	AB	1813	G	C6-O6	-7.35	1.17	1.24
2	AB	1919	A	C8-N7	-7.35	1.26	1.31
35	BA	412	A	C5'-C4'	7.35	1.60	1.51
37	BC	24	A	N9-C4	7.35	1.42	1.37
2	AB	979	A	C6-N1	7.35	1.40	1.35
2	AB	1566	A	C5-C6	7.35	1.47	1.41
2	AB	2492	U	P-O5'	7.35	1.67	1.59
35	BA	1329	A	C6-N6	7.35	1.39	1.33
2	AB	2242	G	N9-C4	7.35	1.43	1.38
35	BA	99	C	C5-C6	7.35	1.40	1.34
37	BC	29	G	C8-N7	7.35	1.35	1.30
2	AB	672	C	C5'-C4'	7.34	1.60	1.51
35	BA	167	A	P-O5'	7.34	1.67	1.59
2	AB	329	G	N1-C2	7.34	1.43	1.37
2	AB	1761	C	N3-C4	7.34	1.39	1.33
35	BA	520	A	P-O5'	7.34	1.67	1.59
35	BA	599	C	N1-C6	-7.34	1.32	1.37
35	BA	1231	G	P-O5'	-7.34	1.52	1.59
2	AB	204	A	C4'-C3'	7.34	1.61	1.53
2	AB	398	C	P-O5'	-7.34	1.52	1.59
2	AB	981	A	C5-C4	7.34	1.43	1.38
2	AB	613	A	C6-N6	7.33	1.39	1.33
2	AB	1029	A	C6-N6	-7.33	1.28	1.33
2	AB	2145	C	C2-N3	-7.33	1.29	1.35
37	BC	43	U	C2-N3	7.33	1.42	1.37
1	AA	61	G	C5'-C4'	7.33	1.60	1.51
1	AA	93	C	P-O5'	7.33	1.67	1.59
2	AB	1349	C	P-O5'	7.33	1.67	1.59
2	AB	1569	A	C6-N1	-7.33	1.30	1.35
35	BA	17	U	C3'-C2'	7.33	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	933	G	C5'-C4'	7.33	1.60	1.51
35	BA	947	G	N7-C5	7.33	1.43	1.39
2	AB	498	G	C5-C6	7.33	1.49	1.42
2	AB	2663	G	O3'-P	7.33	1.70	1.61
2	AB	856	G	N9-C8	7.33	1.43	1.37
2	AB	2254	C	N1-C6	7.33	1.41	1.37
2	AB	353	C	C2'-C1'	7.33	1.61	1.53
2	AB	1003	G	P-O5'	7.33	1.67	1.59
2	AB	1896	G	O4'-C1'	7.33	1.51	1.41
2	AB	2673	G	N9-C8	-7.33	1.32	1.37
2	AB	2711	A	N3-C4	7.33	1.39	1.34
35	BA	91	U	N1-C2	7.33	1.45	1.38
35	BA	247	G	N9-C8	7.33	1.43	1.37
1	AA	106	G	C8-N7	7.33	1.35	1.30
2	AB	490	C	N1-C6	7.33	1.41	1.37
38	BD	34	U	C3'-C2'	7.33	1.61	1.52
2	AB	179	C	C5'-C4'	7.33	1.60	1.51
2	AB	907	G	C2-N3	7.33	1.38	1.32
2	AB	1434	A	N7-C5	7.33	1.43	1.39
2	AB	1964	G	C4'-C3'	7.33	1.61	1.53
44	BJ	128	GLU	CD-OE1	7.33	1.33	1.25
2	AB	890	C	C5-C6	7.32	1.40	1.34
38	BD	15	G	C4'-O4'	-7.32	1.36	1.45
35	BA	1013	G	C5-C4	-7.32	1.33	1.38
2	AB	1763	G	C2-N3	7.32	1.38	1.32
2	AB	2093	G	C8-N7	-7.32	1.26	1.30
35	BA	933	G	O3'-P	7.32	1.70	1.61
1	AA	112	G	N9-C8	7.32	1.43	1.37
2	AB	729	G	C5-C4	-7.32	1.33	1.38
2	AB	623	C	O4'-C1'	7.32	1.51	1.41
2	AB	2616	C	C4'-O4'	-7.32	1.36	1.45
2	AB	2848	G	C2-N3	7.32	1.38	1.32
2	AB	374	A	C6-N1	7.31	1.40	1.35
2	AB	506	G	C8-N7	-7.31	1.26	1.30
35	BA	1037	C	C5-C6	7.31	1.40	1.34
35	BA	1510	C	O3'-P	7.31	1.70	1.61
2	AB	550	C	C4-C5	7.31	1.48	1.43
2	AB	632	A	C6-N6	7.31	1.39	1.33
2	AB	2507	C	C5-C6	7.31	1.40	1.34
2	AB	2778	A	N3-C4	7.31	1.39	1.34
35	BA	1210	C	C4-C5	7.31	1.48	1.43
35	BA	1341	U	C4'-O4'	-7.31	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	986	C	C5'-C4'	7.31	1.60	1.51
35	BA	1233	G	P-O5'	7.31	1.67	1.59
2	AB	966	G	N1-C2	7.31	1.43	1.37
2	AB	1104	C	C4'-O4'	-7.31	1.36	1.45
2	AB	28	A	C5-C4	-7.31	1.33	1.38
2	AB	403	U	C5'-C4'	7.31	1.60	1.51
2	AB	1186	G	C5'-C4'	7.31	1.60	1.51
2	AB	2368	C	C2-N3	7.31	1.41	1.35
2	AB	2673	G	N3-C4	7.31	1.40	1.35
35	BA	492	C	C4'-O4'	-7.31	1.36	1.45
37	BC	13	A	N3-C4	7.31	1.39	1.34
2	AB	981	A	C6-N1	-7.31	1.30	1.35
2	AB	1897	G	P-O5'	7.31	1.67	1.59
2	AB	1934	C	C5-C6	7.31	1.40	1.34
2	AB	2015	A	N9-C4	7.31	1.42	1.37
35	BA	540	G	C5-C4	-7.31	1.33	1.38
2	AB	1765	U	C2-O2	7.30	1.28	1.22
35	BA	490	C	N3-C4	7.30	1.39	1.33
2	AB	529	A	O5'-C5'	-7.30	1.31	1.42
2	AB	1429	G	C5'-C4'	7.30	1.60	1.51
2	AB	478	A	P-O5'	7.30	1.67	1.59
2	AB	550	C	C5'-C4'	7.30	1.60	1.51
35	BA	310	G	C2-N3	7.30	1.38	1.32
2	AB	1197	G	P-O5'	7.30	1.67	1.59
35	BA	948	C	N3-C4	7.30	1.39	1.33
2	AB	367	G	N7-C5	7.30	1.43	1.39
2	AB	1003	G	N3-C4	7.30	1.40	1.35
2	AB	2493	U	P-O5'	7.30	1.67	1.59
35	BA	122	G	N1-C2	7.30	1.43	1.37
2	AB	103	A	N9-C4	-7.30	1.33	1.37
2	AB	433	C	C4-C5	7.30	1.48	1.43
2	AB	1112	G	P-O5'	7.30	1.67	1.59
2	AB	1581	G	O3'-P	7.30	1.70	1.61
35	BA	463	U	N1-C2	7.30	1.45	1.38
35	BA	649	A	N7-C5	7.30	1.43	1.39
2	AB	24	G	C2-N3	7.29	1.38	1.32
2	AB	2341	G	N3-C4	7.29	1.40	1.35
35	BA	281	G	C8-N7	7.29	1.35	1.30
2	AB	426	C	C4'-C3'	7.29	1.61	1.53
2	AB	925	A	N7-C5	-7.29	1.34	1.39
35	BA	1104	G	C2-N2	-7.29	1.27	1.34
35	BA	1108	G	C6-N1	-7.29	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2808	G	C8-N7	-7.29	1.26	1.30
35	BA	723	U	O3'-P	7.29	1.69	1.61
35	BA	1416	G	C8-N7	-7.29	1.26	1.30
2	AB	1310	G	P-O5'	7.29	1.67	1.59
2	AB	483	A	N9-C8	7.29	1.43	1.37
2	AB	922	C	C4'-O4'	-7.29	1.36	1.45
2	AB	2536	G	N7-C5	7.29	1.43	1.39
2	AB	2669	G	O3'-P	7.29	1.69	1.61
2	AB	375	G	C3'-C2'	7.29	1.60	1.52
2	AB	2005	A	C4'-O4'	-7.29	1.36	1.45
2	AB	404	A	P-O5'	7.29	1.67	1.59
2	AB	547	A	C5'-C4'	7.29	1.60	1.51
2	AB	2695	U	C2-N3	7.29	1.42	1.37
35	BA	697	U	C4'-C3'	-7.29	1.45	1.53
2	AB	1520	U	C4-C5	7.28	1.50	1.43
35	BA	1063	C	N3-C4	7.28	1.39	1.33
35	BA	1386	G	N7-C5	-7.28	1.34	1.39
1	AA	10	G	N1-C2	7.28	1.43	1.37
2	AB	384	A	N7-C5	-7.28	1.34	1.39
35	BA	71	A	C6-N1	-7.28	1.30	1.35
35	BA	1510	C	C5-C6	7.28	1.40	1.34
2	AB	316	C	C4-C5	7.28	1.48	1.43
2	AB	2067	G	C4'-C3'	7.28	1.61	1.53
2	AB	2433	A	C2'-C1'	-7.28	1.45	1.53
2	AB	996	A	P-O5'	7.28	1.67	1.59
2	AB	1346	G	C5-C4	7.28	1.43	1.38
2	AB	2099	U	C4'-C3'	7.28	1.61	1.53
2	AB	2596	U	C4'-O4'	-7.27	1.36	1.45
1	AA	13	G	C8-N7	7.27	1.35	1.30
2	AB	689	A	N7-C5	7.27	1.43	1.39
2	AB	763	G	C6-N1	7.27	1.44	1.39
2	AB	75	G	N7-C5	-7.27	1.34	1.39
2	AB	645	C	N1-C6	7.27	1.41	1.37
2	AB	2721	A	N9-C4	-7.27	1.33	1.37
35	BA	1469	C	C5-C6	7.27	1.40	1.34
2	AB	1024	G	C6-N1	7.27	1.44	1.39
2	AB	1430	G	N1-C2	7.27	1.43	1.37
2	AB	1519	G	C6-N1	7.27	1.44	1.39
2	AB	1654	A	O4'-C1'	7.27	1.51	1.41
2	AB	2027	G	O3'-P	7.27	1.69	1.61
35	BA	1310	G	N7-C5	-7.27	1.34	1.39
2	AB	2174	C	C4'-O4'	-7.27	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2592	G	N1-C2	7.27	1.43	1.37
2	AB	2603	G	C8-N7	-7.27	1.26	1.30
2	AB	2045	C	P-O5'	7.27	1.67	1.59
35	BA	305	G	C5-C4	7.27	1.43	1.38
35	BA	676	A	N3-C4	7.27	1.39	1.34
2	AB	490	C	C4'-O4'	-7.26	1.36	1.45
2	AB	1483	G	C8-N7	7.26	1.35	1.30
2	AB	1552	A	C2-N3	7.26	1.40	1.33
2	AB	2780	G	C6-N1	7.26	1.44	1.39
35	BA	315	A	C5'-C4'	7.26	1.60	1.51
35	BA	1195	C	C2'-O2'	7.26	1.51	1.41
35	BA	1212	U	C5-C6	7.26	1.40	1.34
35	BA	1326	U	C3'-C2'	-7.26	1.44	1.52
2	AB	1043	C	C5'-C4'	7.26	1.60	1.51
2	AB	1466	U	C4-C5	7.26	1.50	1.43
2	AB	1729	U	N1-C6	-7.26	1.31	1.38
2	AB	2059	A	P-O5'	7.26	1.67	1.59
35	BA	881	G	C2-N3	7.26	1.38	1.32
2	AB	1061	U	C2'-C1'	7.26	1.61	1.53
2	AB	2740	A	C6-N1	-7.26	1.30	1.35
35	BA	170	U	C4-C5	7.26	1.50	1.43
35	BA	508	U	C4'-C3'	7.26	1.61	1.53
2	AB	2264	C	C4'-C3'	7.26	1.61	1.53
35	BA	48	C	C2-N3	7.26	1.41	1.35
35	BA	1466	C	C4-C5	7.26	1.48	1.43
2	AB	896	A	N9-C4	7.26	1.42	1.37
2	AB	1097	U	C2'-C1'	-7.26	1.45	1.53
35	BA	1201	A	N3-C4	7.25	1.39	1.34
35	BA	1255	G	N9-C8	-7.25	1.32	1.37
2	AB	639	U	C4-C5	7.25	1.50	1.43
2	AB	1416	G	P-O5'	7.25	1.67	1.59
2	AB	2851	A	N9-C4	-7.25	1.33	1.37
35	BA	152	A	C8-N7	7.25	1.36	1.31
35	BA	960	U	C4'-O4'	-7.25	1.36	1.45
37	BC	30	U	C2-N3	7.25	1.42	1.37
2	AB	838	C	P-O5'	7.25	1.67	1.59
2	AB	1573	G	C6-N1	7.25	1.44	1.39
2	AB	1697	G	N1-C2	7.25	1.43	1.37
2	AB	1779	U	C2'-O2'	7.25	1.51	1.41
35	BA	541	G	C2-N3	7.25	1.38	1.32
35	BA	1048	G	C2-N3	7.25	1.38	1.32
35	BA	1504	G	P-O5'	7.25	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	13	C	C4-C5	7.25	1.48	1.43
2	AB	485	C	N3-C4	7.25	1.39	1.33
35	BA	1184	G	N7-C5	-7.25	1.34	1.39
35	BA	274	A	C6-N6	7.25	1.39	1.33
2	AB	2049	G	N3-C4	7.25	1.40	1.35
35	BA	1175	G	C8-N7	-7.25	1.26	1.30
35	BA	1410	A	O3'-P	7.25	1.69	1.61
36	BB	57	G	P-O5'	7.25	1.67	1.59
2	AB	676	A	C6-N6	-7.25	1.28	1.33
35	BA	174	A	C5-C4	-7.25	1.33	1.38
1	AA	9	G	C2-N3	7.24	1.38	1.32
2	AB	73	A	C5-C6	7.24	1.47	1.41
2	AB	207	A	N3-C4	7.24	1.39	1.34
2	AB	1735	A	C4'-O4'	-7.24	1.36	1.45
2	AB	1828	G	C6-N1	7.24	1.44	1.39
35	BA	1139	G	N7-C5	-7.24	1.34	1.39
1	AA	39	A	C8-N7	-7.24	1.26	1.31
2	AB	287	G	C2-N3	7.24	1.38	1.32
2	AB	421	C	C2-N3	7.24	1.41	1.35
1	AA	18	G	C4'-O4'	-7.24	1.36	1.45
2	AB	1259	G	C5'-C4'	7.24	1.60	1.51
2	AB	1348	C	C5-C6	7.24	1.40	1.34
2	AB	1432	G	C8-N7	-7.24	1.26	1.30
2	AB	1888	G	C6-N1	7.24	1.44	1.39
2	AB	1916	A	C8-N7	7.24	1.36	1.31
2	AB	2112	G	C5-C4	-7.24	1.33	1.38
2	AB	2191	A	N3-C4	7.24	1.39	1.34
2	AB	2399	G	C5'-C4'	7.24	1.60	1.51
2	AB	2803	G	C4'-C3'	7.24	1.61	1.53
35	BA	396	C	C2-N3	7.24	1.41	1.35
35	BA	1143	G	C5-C4	-7.24	1.33	1.38
37	BC	33	A	N3-C4	7.24	1.39	1.34
2	AB	569	U	C2-N3	7.24	1.42	1.37
2	AB	1748	C	P-O5'	-7.24	1.52	1.59
35	BA	404	G	N3-C4	7.24	1.40	1.35
35	BA	1418	A	N3-C4	7.24	1.39	1.34
1	AA	66	A	C5-C4	-7.24	1.33	1.38
2	AB	19	A	C5-C6	7.24	1.47	1.41
2	AB	184	C	N3-C4	7.24	1.39	1.33
2	AB	1095	A	C8-N7	-7.24	1.26	1.31
2	AB	1863	G	C5'-C4'	7.24	1.60	1.51
2	AB	2108	A	P-O5'	7.24	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2721	A	P-O5'	7.24	1.67	1.59
35	BA	739	C	C2-O2	-7.24	1.18	1.24
35	BA	1277	C	O3'-P	-7.24	1.52	1.61
35	BA	805	C	C3'-C2'	7.23	1.60	1.52
2	AB	238	C	N3-C4	7.23	1.39	1.33
2	AB	839	U	P-O5'	-7.23	1.52	1.59
2	AB	2655	G	C4'-O4'	-7.23	1.36	1.45
2	AB	2828	G	N9-C4	7.23	1.43	1.38
35	BA	771	G	N1-C2	7.23	1.43	1.37
2	AB	842	U	N1-C2	7.23	1.45	1.38
2	AB	1048	A	N7-C5	-7.23	1.34	1.39
2	AB	1174	U	C4-C5	7.23	1.50	1.43
2	AB	1225	G	C5-C4	-7.23	1.33	1.38
2	AB	1880	U	C3'-C2'	7.23	1.60	1.52
2	AB	2464	G	C6-N1	7.23	1.44	1.39
35	BA	50	A	C5-C4	-7.23	1.33	1.38
35	BA	57	G	O3'-P	7.23	1.69	1.61
35	BA	726	C	C5'-C4'	7.23	1.60	1.51
38	BD	42	C	N1-C2	7.23	1.47	1.40
2	AB	1883	U	P-O5'	7.23	1.67	1.59
2	AB	2876	G	C5-C6	7.23	1.49	1.42
8	AH	169	ARG	CZ-NH2	7.23	1.42	1.33
35	BA	111	G	P-O5'	7.23	1.67	1.59
35	BA	187	G	C5'-C4'	7.23	1.60	1.51
1	AA	47	C	N3-C4	7.22	1.39	1.33
2	AB	508	A	N3-C4	7.22	1.39	1.34
2	AB	2150	C	C4-N4	7.22	1.40	1.33
35	BA	288	A	P-O5'	7.22	1.67	1.59
2	AB	250	G	N3-C4	-7.22	1.30	1.35
2	AB	1519	G	C2-N3	7.22	1.38	1.32
2	AB	2100	G	N7-C5	-7.22	1.34	1.39
2	AB	2101	A	C6-N6	7.22	1.39	1.33
2	AB	2388	A	N7-C5	7.22	1.43	1.39
35	BA	648	A	P-O5'	-7.22	1.52	1.59
35	BA	980	C	C2-O2	-7.22	1.18	1.24
2	AB	2070	A	N3-C4	7.22	1.39	1.34
2	AB	2440	C	N1-C6	7.22	1.41	1.37
35	BA	608	A	C5-C4	7.22	1.43	1.38
2	AB	1508	A	P-O5'	7.22	1.67	1.59
2	AB	1601	G	C8-N7	-7.22	1.26	1.30
2	AB	2425	A	N9-C4	7.22	1.42	1.37
35	BA	391	G	C6-N1	7.22	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1206	G	C6-N1	7.21	1.44	1.39
2	AB	412	A	C4'-O4'	-7.21	1.36	1.45
2	AB	1754	A	N9-C4	-7.21	1.33	1.37
2	AB	2206	C	N3-C4	7.21	1.39	1.33
35	BA	181	A	C5'-C4'	7.21	1.60	1.51
35	BA	446	G	C2-N3	7.21	1.38	1.32
35	BA	462	G	N1-C2	7.21	1.43	1.37
35	BA	643	C	O4'-C1'	7.21	1.51	1.41
2	AB	1200	C	P-O5'	7.21	1.67	1.59
2	AB	1617	C	P-O5'	-7.21	1.52	1.59
2	AB	2837	A	P-O5'	7.21	1.67	1.59
2	AB	2854	G	C5-C4	-7.21	1.33	1.38
2	AB	306	U	C4'-C3'	-7.21	1.45	1.53
2	AB	392	U	C2-N3	7.21	1.42	1.37
2	AB	1964	G	C5-C4	-7.21	1.33	1.38
2	AB	2844	G	C8-N7	-7.21	1.26	1.30
35	BA	837	U	C4-C5	7.21	1.50	1.43
35	BA	1397	C	C5-C6	7.21	1.40	1.34
2	AB	929	U	C2-N3	7.20	1.42	1.37
2	AB	1811	G	C6-O6	-7.20	1.17	1.24
2	AB	2300	C	N1-C6	7.20	1.41	1.37
35	BA	492	C	C2-N3	7.20	1.41	1.35
35	BA	1461	G	N7-C5	7.20	1.43	1.39
2	AB	1964	G	P-O5'	7.20	1.67	1.59
35	BA	718	A	C4'-C3'	-7.20	1.45	1.53
1	AA	64	G	P-O5'	7.20	1.67	1.59
1	AA	70	C	C4-C5	7.20	1.48	1.43
2	AB	346	A	C6-N6	-7.20	1.28	1.33
2	AB	941	A	C5-C4	-7.20	1.33	1.38
2	AB	1790	C	P-O5'	7.20	1.67	1.59
2	AB	676	A	C5'-C4'	7.20	1.59	1.51
2	AB	1291	C	P-O5'	7.20	1.67	1.59
4	AD	212	TRP	CD2-CE2	7.20	1.50	1.41
35	BA	244	U	N3-C4	7.20	1.45	1.38
35	BA	427	U	C5-C6	7.20	1.40	1.34
35	BA	1228	C	P-O5'	7.20	1.67	1.59
2	AB	1213	A	P-O5'	7.19	1.67	1.59
2	AB	2548	U	C4-C5	7.19	1.50	1.43
35	BA	408	A	N7-C5	7.19	1.43	1.39
35	BA	1032	G	N9-C4	-7.19	1.32	1.38
2	AB	602	A	N3-C4	7.19	1.39	1.34
2	AB	956	G	C5-C4	-7.19	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1562	U	C5'-C4'	7.19	1.59	1.51
2	AB	1693	U	C4-C5	7.19	1.50	1.43
2	AB	2715	C	C3'-O3'	7.19	1.52	1.42
35	BA	1111	A	C6-N6	7.19	1.39	1.33
35	BA	376	G	C2-N3	7.19	1.38	1.32
2	AB	1482	G	C5-C4	-7.19	1.33	1.38
2	AB	2769	U	C4-O4	7.19	1.29	1.23
35	BA	1100	C	O3'-P	7.19	1.69	1.61
2	AB	529	A	C5'-C4'	7.18	1.59	1.51
2	AB	1487	U	N1-C2	7.18	1.45	1.38
2	AB	1612	C	P-O5'	7.18	1.67	1.59
2	AB	2001	C	N1-C6	7.18	1.41	1.37
36	BB	42	G	C2-N3	7.18	1.38	1.32
36	BB	43	G	C2-N3	7.18	1.38	1.32
1	AA	52	A	N3-C4	7.18	1.39	1.34
2	AB	1843	C	P-O5'	7.18	1.67	1.59
35	BA	433	G	P-O5'	7.18	1.67	1.59
35	BA	725	G	N7-C5	7.18	1.43	1.39
2	AB	1738	G	C8-N7	7.18	1.35	1.30
35	BA	41	G	C2-N3	7.18	1.38	1.32
2	AB	345	A	N9-C4	7.18	1.42	1.37
35	BA	493	A	C5-C4	-7.18	1.33	1.38
35	BA	453	G	C2-N3	7.18	1.38	1.32
2	AB	1148	U	C2'-O2'	7.18	1.50	1.41
2	AB	2737	G	P-O5'	7.18	1.67	1.59
2	AB	26	G	N1-C2	7.17	1.43	1.37
2	AB	1111	A	N9-C4	7.17	1.42	1.37
35	BA	680	C	N1-C6	7.17	1.41	1.37
35	BA	1503	A	O3'-P	7.17	1.69	1.61
35	BA	1535	C	P-O5'	7.17	1.67	1.59
2	AB	467	G	N9-C4	7.17	1.43	1.38
2	AB	828	U	P-O5'	7.17	1.67	1.59
2	AB	2032	G	N7-C5	-7.17	1.34	1.39
35	BA	134	G	N7-C5	-7.17	1.34	1.39
2	AB	976	G	P-O5'	7.17	1.67	1.59
2	AB	2420	C	C2'-C1'	7.17	1.61	1.53
35	BA	385	C	C2-N3	7.17	1.41	1.35
2	AB	1196	C	N1-C6	7.17	1.41	1.37
2	AB	1903	G	C5'-C4'	7.17	1.59	1.51
35	BA	93	U	C4'-C3'	-7.17	1.45	1.53
2	AB	215	G	C2-N3	7.17	1.38	1.32
2	AB	370	G	C4'-C3'	7.17	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	598	U	C2-N3	7.17	1.42	1.37
2	AB	1575	C	N1-C6	7.17	1.41	1.37
2	AB	1845	G	N1-C2	7.17	1.43	1.37
2	AB	2557	G	N7-C5	-7.17	1.34	1.39
2	AB	643	A	C5'-C4'	7.17	1.59	1.51
2	AB	1065	U	C4'-C3'	-7.17	1.45	1.53
2	AB	1145	C	C4'-O4'	-7.17	1.36	1.45
2	AB	1704	C	C4-C5	7.17	1.48	1.43
2	AB	1839	G	N7-C5	-7.17	1.34	1.39
2	AB	2301	C	O3'-P	7.17	1.69	1.61
35	BA	458	U	O5'-C5'	-7.17	1.31	1.42
35	BA	890	G	N9-C8	-7.17	1.32	1.37
35	BA	1189	U	N1-C2	7.17	1.45	1.38
2	AB	2458	G	C2-N3	7.17	1.38	1.32
2	AB	2697	G	N9-C4	-7.17	1.32	1.38
35	BA	616	G	P-O5'	7.17	1.67	1.59
2	AB	103	A	C5'-C4'	7.16	1.59	1.51
2	AB	1221	C	C4-C5	7.16	1.48	1.43
35	BA	477	C	N3-C4	7.16	1.39	1.33
35	BA	1201	A	C5'-C4'	7.16	1.59	1.51
35	BA	280	C	P-O5'	7.16	1.67	1.59
2	AB	1436	G	C8-N7	-7.16	1.26	1.30
2	AB	2437	G	N1-C2	7.16	1.43	1.37
35	BA	15	G	N1-C2	7.16	1.43	1.37
35	BA	407	U	P-O5'	7.16	1.67	1.59
35	BA	726	C	C2-N3	7.16	1.41	1.35
2	AB	2078	C	P-O5'	7.16	1.67	1.59
2	AB	2353	G	N1-C2	7.16	1.43	1.37
2	AB	2542	A	C5-C4	-7.16	1.33	1.38
35	BA	11	G	C4'-O4'	-7.16	1.36	1.45
1	AA	31	C	C2-N3	7.16	1.41	1.35
2	AB	1877	A	C3'-C2'	7.16	1.60	1.52
35	BA	399	G	N7-C5	7.16	1.43	1.39
35	BA	803	G	P-O5'	7.16	1.67	1.59
2	AB	658	U	C2-O2	7.16	1.28	1.22
2	AB	2622	U	C2-N3	7.16	1.42	1.37
36	BB	59	G	N9-C8	7.16	1.42	1.37
35	BA	124	C	P-O5'	7.15	1.67	1.59
35	BA	255	G	N3-C4	7.15	1.40	1.35
2	AB	2139	U	N1-C2	7.15	1.45	1.38
2	AB	2155	U	P-O5'	7.15	1.67	1.59
2	AB	2226	C	P-O5'	7.15	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2635	A	N7-C5	-7.15	1.34	1.39
2	AB	265	A	N3-C4	-7.15	1.30	1.34
35	BA	949	A	C8-N7	-7.15	1.26	1.31
35	BA	1159	U	C4-C5	7.15	1.50	1.43
2	AB	2877	G	C5-C4	-7.15	1.33	1.38
35	BA	704	A	C5-C4	-7.15	1.33	1.38
1	AA	61	G	C2-N3	7.15	1.38	1.32
2	AB	16	C	N3-C4	7.15	1.39	1.33
2	AB	630	G	O3'-P	-7.15	1.52	1.61
2	AB	951	C	N1-C6	7.15	1.41	1.37
2	AB	2156	G	N1-C2	-7.15	1.32	1.37
18	AR	112	ARG	NE-CZ	7.15	1.42	1.33
35	BA	501	C	N1-C6	7.15	1.41	1.37
35	BA	604	G	N1-C2	7.15	1.43	1.37
35	BA	814	A	N3-C4	-7.15	1.30	1.34
2	AB	35	G	O3'-P	7.15	1.69	1.61
35	BA	583	A	C2'-C1'	-7.15	1.45	1.53
2	AB	979	A	C8-N7	-7.14	1.26	1.31
35	BA	545	C	C4'-C3'	7.14	1.61	1.53
35	BA	1087	G	C5'-C4'	7.14	1.59	1.51
35	BA	1505	G	C6-O6	-7.14	1.17	1.24
2	AB	2509	G	C5'-C4'	7.14	1.59	1.51
35	BA	199	A	C8-N7	-7.14	1.26	1.31
35	BA	281	G	N9-C8	-7.14	1.32	1.37
35	BA	1203	C	C4-N4	7.14	1.40	1.33
35	BA	1502	A	N1-C2	-7.14	1.27	1.34
2	AB	79	C	C2'-C1'	7.14	1.61	1.53
2	AB	1025	G	C4'-C3'	7.14	1.61	1.53
2	AB	1613	G	C2-N3	7.14	1.38	1.32
2	AB	2843	G	C5'-C4'	7.14	1.59	1.51
35	BA	1434	A	P-O5'	-7.14	1.52	1.59
2	AB	2470	G	N7-C5	7.14	1.43	1.39
35	BA	906	A	O3'-P	7.14	1.69	1.61
2	AB	186	G	C5-C4	-7.14	1.33	1.38
2	AB	2171	A	N9-C4	-7.14	1.33	1.37
35	BA	433	G	N7-C5	7.14	1.43	1.39
35	BA	1171	A	C2'-C1'	-7.14	1.45	1.53
2	AB	1860	G	C5-C4	-7.13	1.33	1.38
2	AB	2558	C	N3-C4	7.13	1.39	1.33
35	BA	711	G	C6-N1	7.13	1.44	1.39
38	BD	11	A	C6-N1	-7.13	1.30	1.35
1	AA	86	G	N3-C4	7.13	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	541	A	O3'-P	7.13	1.69	1.61
2	AB	1648	U	C5-C6	7.13	1.40	1.34
35	BA	914	A	N1-C2	-7.13	1.27	1.34
2	AB	2836	U	C2-N3	7.13	1.42	1.37
2	AB	379	G	O3'-P	7.13	1.69	1.61
2	AB	1254	A	P-O5'	7.13	1.66	1.59
2	AB	2139	U	C4-C5	7.13	1.50	1.43
1	AA	102	G	C5'-C4'	7.13	1.59	1.51
2	AB	1407	G	N7-C5	7.13	1.43	1.39
2	AB	1648	U	C4'-C3'	7.13	1.60	1.53
2	AB	2694	G	N9-C8	7.13	1.42	1.37
35	BA	1240	U	N1-C6	-7.13	1.31	1.38
2	AB	1785	A	C2'-C1'	-7.12	1.45	1.53
2	AB	1084	A	C4'-C3'	-7.12	1.45	1.53
2	AB	1453	A	C4'-O4'	-7.12	1.36	1.45
35	BA	972	C	N1-C6	7.12	1.41	1.37
2	AB	98	G	P-O5'	7.12	1.66	1.59
2	AB	947	A	C4'-O4'	-7.12	1.36	1.45
2	AB	1300	G	C2-N3	7.12	1.38	1.32
2	AB	2000	C	C4'-O4'	-7.12	1.36	1.45
2	AB	2361	G	C6-N1	-7.12	1.34	1.39
35	BA	242	G	N3-C4	7.12	1.40	1.35
2	AB	2414	G	O3'-P	7.12	1.69	1.61
2	AB	2439	A	C8-N7	-7.12	1.26	1.31
2	AB	2639	A	N7-C5	7.12	1.43	1.39
6	AF	124	PHE	CG-CD2	7.12	1.49	1.38
35	BA	519	C	C1'-N1	7.12	1.59	1.48
1	AA	65	U	O3'-P	7.12	1.69	1.61
2	AB	1688	U	P-O5'	7.12	1.66	1.59
2	AB	1807	G	C2-N3	7.12	1.38	1.32
2	AB	2421	G	N1-C2	7.12	1.43	1.37
2	AB	2650	U	N1-C2	7.12	1.45	1.38
2	AB	2352	A	P-O5'	7.12	1.66	1.59
2	AB	2557	G	P-O5'	7.12	1.66	1.59
2	AB	1038	G	N7-C5	-7.12	1.34	1.39
2	AB	2500	U	N1-C2	7.12	1.45	1.38
2	AB	2681	C	N1-C6	-7.12	1.32	1.37
35	BA	1511	G	C2'-C1'	7.12	1.61	1.53
2	AB	150	U	N1-C2	7.11	1.45	1.38
2	AB	1844	C	P-O5'	7.11	1.66	1.59
2	AB	2862	G	C8-N7	7.11	1.35	1.30
35	BA	104	G	C2-N3	7.11	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	BD	67	C	C5'-C4'	7.11	1.59	1.51
2	AB	2309	A	C5'-C4'	7.11	1.59	1.51
35	BA	172	A	N3-C4	7.11	1.39	1.34
35	BA	897	C	P-O5'	7.11	1.66	1.59
35	BA	1265	C	C4'-O4'	-7.11	1.36	1.45
2	AB	1354	A	C2'-C1'	7.11	1.61	1.53
35	BA	363	A	P-O5'	7.11	1.66	1.59
35	BA	650	G	C6-N1	-7.11	1.34	1.39
2	AB	1392	A	P-O5'	7.11	1.66	1.59
2	AB	1392	A	C5-C4	-7.11	1.33	1.38
2	AB	2374	C	C4-N4	-7.11	1.27	1.33
37	BC	54	U	C4-C5	7.11	1.50	1.43
1	AA	42	C	N3-C4	7.11	1.39	1.33
2	AB	242	G	C6-N1	7.11	1.44	1.39
2	AB	613	A	C6-N1	-7.11	1.30	1.35
2	AB	868	U	P-O5'	7.11	1.66	1.59
2	AB	1493	C	C4'-C3'	7.11	1.60	1.53
2	AB	2273	A	N3-C4	7.11	1.39	1.34
2	AB	2737	G	C5-C6	7.11	1.49	1.42
2	AB	2729	G	N9-C8	7.10	1.42	1.37
1	AA	11	C	C5'-C4'	7.10	1.59	1.51
1	AA	80	U	P-O5'	7.10	1.66	1.59
35	BA	1535	C	O3'-P	7.10	1.69	1.61
2	AB	1666	G	C2'-O2'	7.10	1.50	1.41
1	AA	67	G	P-O5'	7.10	1.66	1.59
2	AB	1238	G	P-O5'	7.10	1.66	1.59
35	BA	1036	A	C4'-C3'	-7.10	1.45	1.53
35	BA	1408	A	C2'-C1'	-7.10	1.45	1.53
2	AB	233	A	C4'-C3'	7.10	1.60	1.53
2	AB	1244	A	N9-C4	7.10	1.42	1.37
35	BA	85	U	C2-N3	7.10	1.42	1.37
35	BA	515	G	N7-C5	-7.10	1.34	1.39
35	BA	1435	G	C2-N2	-7.10	1.27	1.34
36	BB	67	G	N3-C4	7.10	1.40	1.35
2	AB	1452	G	C2-N3	7.10	1.38	1.32
35	BA	4	U	C5-C6	7.10	1.40	1.34
35	BA	350	G	P-O5'	7.10	1.66	1.59
2	AB	252	G	N3-C4	7.09	1.40	1.35
2	AB	1306	C	O3'-P	7.09	1.69	1.61
35	BA	255	G	N1-C2	7.09	1.43	1.37
35	BA	1147	C	N1-C6	7.09	1.41	1.37
35	BA	1338	G	C5'-C4'	7.09	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	77	G	C6-N1	7.09	1.44	1.39
2	AB	1259	G	N1-C2	-7.09	1.32	1.37
2	AB	1313	U	C4'-O4'	-7.09	1.36	1.45
2	AB	1544	A	C5-C6	7.09	1.47	1.41
2	AB	2617	U	C2-O2	7.09	1.28	1.22
35	BA	752	G	C6-N1	7.09	1.44	1.39
2	AB	629	G	C8-N7	-7.09	1.26	1.30
2	AB	1050	A	C4'-O4'	-7.09	1.36	1.45
2	AB	2145	C	P-O5'	7.09	1.66	1.59
35	BA	61	G	C2-N2	-7.09	1.27	1.34
2	AB	1278	C	P-O5'	-7.09	1.52	1.59
35	BA	1321	U	P-O5'	7.09	1.66	1.59
35	BA	1503	A	C5-C6	7.09	1.47	1.41
2	AB	2743	U	C5-C6	7.08	1.40	1.34
35	BA	783	C	C2-N3	-7.08	1.30	1.35
2	AB	1900	A	P-O5'	-7.08	1.52	1.59
2	AB	2330	G	P-O5'	7.08	1.66	1.59
2	AB	2591	C	C2-N3	7.08	1.41	1.35
38	BD	73	A	C8-N7	-7.08	1.26	1.31
1	AA	108	A	C6-N6	-7.08	1.28	1.33
2	AB	680	C	C2-N3	7.08	1.41	1.35
2	AB	832	U	C3'-O3'	7.08	1.52	1.42
2	AB	1527	G	C6-N1	7.08	1.44	1.39
2	AB	2289	G	C5-C4	7.08	1.43	1.38
2	AB	1552	A	N1-C2	-7.08	1.27	1.34
2	AB	2313	C	C4-C5	7.08	1.48	1.43
2	AB	2411	A	C8-N7	7.08	1.36	1.31
2	AB	2583	G	C5-C4	-7.08	1.33	1.38
35	BA	640	A	C5'-C4'	7.08	1.59	1.51
35	BA	962	C	C2-N3	7.08	1.41	1.35
35	BA	1496	C	C4-C5	7.08	1.48	1.43
36	BB	30	G	O3'-P	7.08	1.69	1.61
2	AB	2299	U	C5-C6	7.08	1.40	1.34
35	BA	563	A	P-O5'	7.08	1.66	1.59
1	AA	16	G	C8-N7	-7.08	1.26	1.30
2	AB	915	C	N3-C4	7.08	1.39	1.33
35	BA	362	G	N9-C8	7.08	1.42	1.37
35	BA	879	C	C2-N3	7.08	1.41	1.35
35	BA	1221	G	N7-C5	7.08	1.43	1.39
37	BC	14	G	C5'-C4'	7.08	1.59	1.51
2	AB	802	A	N3-C4	7.07	1.39	1.34
2	AB	1115	G	N1-C2	7.07	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1757	A	O3'-P	7.07	1.69	1.61
2	AB	2632	A	C4'-O4'	-7.07	1.36	1.45
2	AB	2283	C	P-O5'	7.07	1.66	1.59
2	AB	828	U	C4'-O4'	-7.07	1.36	1.45
2	AB	2434	A	P-O5'	7.07	1.66	1.59
35	BA	698	G	C5'-C4'	7.07	1.59	1.51
2	AB	403	U	C1'-N1	7.07	1.59	1.48
2	AB	1001	A	N9-C4	7.07	1.42	1.37
2	AB	1996	C	C5'-C4'	7.07	1.59	1.51
2	AB	913	U	C5'-C4'	7.07	1.59	1.51
2	AB	1909	C	N1-C6	7.07	1.41	1.37
4	AD	137	GLY	CA-C	7.06	1.63	1.51
35	BA	714	G	N3-C4	7.06	1.40	1.35
36	BB	68	C	O4'-C1'	7.06	1.50	1.41
1	AA	69	G	C2-N3	7.06	1.38	1.32
2	AB	107	G	N7-C5	-7.06	1.35	1.39
2	AB	738	G	N7-C5	-7.06	1.35	1.39
35	BA	540	G	C8-N7	-7.06	1.26	1.30
2	AB	1992	G	N1-C2	7.06	1.43	1.37
35	BA	1180	A	C6-N1	-7.06	1.30	1.35
37	BC	42	U	C5'-C4'	7.06	1.59	1.51
2	AB	780	G	N3-C4	7.06	1.40	1.35
2	AB	1160	G	N3-C4	7.06	1.40	1.35
2	AB	1237	A	O3'-P	7.06	1.69	1.61
35	BA	753	A	N9-C4	7.06	1.42	1.37
38	BD	53	G	C6-N1	7.06	1.44	1.39
1	AA	8	C	P-O5'	7.06	1.66	1.59
2	AB	1634	A	C5-C4	7.06	1.43	1.38
35	BA	518	C	O3'-P	7.06	1.69	1.61
2	AB	1058	U	C4-C5	7.06	1.50	1.43
17	AQ	45	SER	CB-OG	-7.06	1.33	1.42
35	BA	1169	A	N9-C4	7.06	1.42	1.37
2	AB	46	G	C5-C4	7.05	1.43	1.38
2	AB	992	C	C4-C5	7.05	1.48	1.43
2	AB	1393	A	P-O5'	7.05	1.66	1.59
2	AB	2550	G	O3'-P	7.05	1.69	1.61
2	AB	2629	U	C2-N3	7.05	1.42	1.37
35	BA	1005	A	C5'-C4'	7.05	1.59	1.51
36	BB	43	G	C4'-C3'	7.05	1.60	1.53
2	AB	2124	G	N7-C5	7.05	1.43	1.39
2	AB	2359	C	C5'-C4'	7.05	1.59	1.51
35	BA	550	G	C8-N7	-7.05	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1276	G	N9-C8	-7.05	1.32	1.37
35	BA	1457	G	N7-C5	-7.05	1.35	1.39
39	BE	212	TYR	CG-CD1	7.05	1.48	1.39
2	AB	1938	A	C3'-O3'	-7.05	1.32	1.42
35	BA	1095	U	C5'-C4'	7.05	1.59	1.51
35	BA	1400	C	C2-O2	-7.05	1.18	1.24
36	BB	31	U	C2-O2	7.05	1.28	1.22
2	AB	1222	U	C4-C5	7.05	1.49	1.43
35	BA	690	G	C5'-C4'	7.05	1.59	1.51
35	BA	808	C	C5-C6	7.05	1.40	1.34
2	AB	1077	A	C4'-C3'	-7.04	1.45	1.53
35	BA	1514	G	C2-N3	7.04	1.38	1.32
2	AB	1150	C	P-O5'	7.04	1.66	1.59
2	AB	1577	C	N3-C4	7.04	1.38	1.33
35	BA	204	G	C6-N1	7.04	1.44	1.39
35	BA	1297	G	P-O5'	7.04	1.66	1.59
38	BD	48	U	C2'-C1'	7.04	1.61	1.53
2	AB	2343	U	C2-N3	7.04	1.42	1.37
2	AB	2710	C	P-O5'	7.04	1.66	1.59
35	BA	359	G	C5-C6	7.04	1.49	1.42
1	AA	76	G	C5-C4	-7.04	1.33	1.38
2	AB	567	U	C4-C5	7.04	1.49	1.43
2	AB	1992	G	C3'-C2'	7.04	1.60	1.52
2	AB	2606	C	C4-N4	-7.04	1.27	1.33
2	AB	2872	A	C8-N7	-7.04	1.26	1.31
35	BA	64	G	P-O5'	7.04	1.66	1.59
35	BA	883	C	N3-C4	7.04	1.38	1.33
2	AB	2585	U	P-O5'	7.04	1.66	1.59
35	BA	36	C	C2-N3	7.04	1.41	1.35
2	AB	2253	G	C4'-C3'	-7.04	1.45	1.53
2	AB	2806	C	N3-C4	7.04	1.38	1.33
35	BA	7	A	N7-C5	-7.04	1.35	1.39
35	BA	1185	G	C6-N1	7.04	1.44	1.39
2	AB	72	U	O3'-P	7.03	1.69	1.61
2	AB	116	C	P-O5'	7.03	1.66	1.59
2	AB	2112	G	N3-C4	7.03	1.40	1.35
35	BA	734	G	C8-N7	7.03	1.35	1.30
2	AB	1768	C	P-O5'	-7.03	1.52	1.59
1	AA	81	G	C4'-C3'	-7.03	1.45	1.53
2	AB	1819	A	P-O5'	7.03	1.66	1.59
19	AS	50	ARG	NE-CZ	7.03	1.42	1.33
2	AB	1486	U	C4'-C3'	-7.03	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	133	U	C4-C5	7.03	1.49	1.43
23	AW	6	ARG	CZ-NH2	7.03	1.42	1.33
35	BA	915	A	P-O5'	7.03	1.66	1.59
35	BA	1148	U	C5'-C4'	7.03	1.59	1.51
2	AB	261	G	C5-C4	7.03	1.43	1.38
2	AB	2249	U	C4-O4	-7.03	1.18	1.23
35	BA	357	G	N1-C2	7.02	1.43	1.37
2	AB	707	G	N9-C8	7.02	1.42	1.37
2	AB	971	G	N1-C2	7.02	1.43	1.37
2	AB	270	A	C6-N1	7.02	1.40	1.35
1	AA	70	C	N1-C6	7.02	1.41	1.37
2	AB	2763	G	P-O5'	7.02	1.66	1.59
35	BA	573	A	O3'-P	7.02	1.69	1.61
35	BA	771	G	O3'-P	7.02	1.69	1.61
36	BB	9	A	C5'-C4'	7.02	1.59	1.51
2	AB	2844	G	C5-C6	7.02	1.49	1.42
35	BA	1270	G	C6-O6	-7.02	1.17	1.24
35	BA	1496	C	N1-C6	7.02	1.41	1.37
2	AB	172	A	N1-C2	-7.02	1.28	1.34
35	BA	218	U	C5-C6	7.02	1.40	1.34
35	BA	873	A	N3-C4	-7.02	1.30	1.34
2	AB	1073	A	C5'-C4'	7.01	1.59	1.51
2	AB	1262	A	C6-N1	7.01	1.40	1.35
2	AB	1719	G	N9-C8	-7.01	1.32	1.37
35	BA	362	G	O3'-P	7.01	1.69	1.61
2	AB	1204	A	P-O5'	7.01	1.66	1.59
2	AB	2630	G	C5'-C4'	7.01	1.59	1.51
35	BA	445	G	N7-C5	7.01	1.43	1.39
35	BA	453	G	N9-C4	7.01	1.43	1.38
35	BA	961	U	C5'-C4'	7.01	1.59	1.51
35	BA	1484	C	C5-C6	7.01	1.40	1.34
38	BD	46	G	O3'-P	7.01	1.69	1.61
2	AB	2051	A	N9-C4	7.01	1.42	1.37
2	AB	2109	U	C4-O4	7.01	1.29	1.23
35	BA	1088	G	P-O5'	7.01	1.66	1.59
35	BA	1282	C	N1-C6	-7.01	1.32	1.37
35	BA	479	U	P-O5'	7.01	1.66	1.59
35	BA	644	U	N1-C2	7.01	1.44	1.38
1	AA	82	U	O3'-P	7.00	1.69	1.61
2	AB	247	G	C4'-O4'	-7.00	1.36	1.45
2	AB	1612	C	C2-N3	7.00	1.41	1.35
35	BA	153	C	C4-C5	-7.00	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1347	G	C2-N3	7.00	1.38	1.32
35	BA	1406	U	P-O5'	7.00	1.66	1.59
36	BB	61	C	C2'-C1'	7.00	1.61	1.53
2	AB	831	G	P-O5'	7.00	1.66	1.59
2	AB	2571	U	N1-C2	7.00	1.44	1.38
2	AB	132	G	C6-O6	-7.00	1.17	1.24
35	BA	1286	U	C2-N3	7.00	1.42	1.37
2	AB	898	C	O3'-P	7.00	1.69	1.61
2	AB	256	A	C6-N1	7.00	1.40	1.35
2	AB	1623	G	N3-C4	7.00	1.40	1.35
37	BC	37	G	O3'-P	7.00	1.69	1.61
2	AB	947	A	P-O5'	7.00	1.66	1.59
2	AB	1202	G	O4'-C1'	-7.00	1.32	1.41
2	AB	2243	U	C4'-O4'	-7.00	1.36	1.45
35	BA	213	G	C4'-C3'	-7.00	1.45	1.53
2	AB	1031	G	N1-C2	7.00	1.43	1.37
1	AA	40	U	C4'-O4'	-6.99	1.36	1.45
2	AB	510	C	C5'-C4'	6.99	1.59	1.51
2	AB	729	G	P-O5'	6.99	1.66	1.59
36	BB	62	U	C2-N3	6.99	1.42	1.37
2	AB	1683	U	C5-C6	6.99	1.40	1.34
2	AB	2817	U	C2-N3	6.99	1.42	1.37
2	AB	212	G	P-O5'	6.99	1.66	1.59
2	AB	1192	G	C5-C6	6.99	1.49	1.42
2	AB	1714	U	C4-C5	6.99	1.49	1.43
57	BW	74	HIS	CB-CG	6.99	1.62	1.50
2	AB	1088	A	N3-C4	6.99	1.39	1.34
2	AB	1624	U	N1-C2	6.99	1.44	1.38
2	AB	1690	A	N9-C4	-6.99	1.33	1.37
35	BA	348	G	C2'-C1'	6.99	1.61	1.53
1	AA	5	U	N1-C2	6.99	1.44	1.38
2	AB	2282	G	P-O5'	6.99	1.66	1.59
35	BA	172	A	C8-N7	-6.99	1.26	1.31
2	AB	392	U	C2-O2	6.99	1.28	1.22
2	AB	1842	G	C6-N1	6.99	1.44	1.39
35	BA	526	C	N3-C4	6.99	1.38	1.33
37	BC	17	U	C4-O4	6.99	1.29	1.23
2	AB	423	A	C6-N1	-6.98	1.30	1.35
2	AB	480	A	N7-C5	-6.98	1.35	1.39
2	AB	1233	C	P-O5'	6.98	1.66	1.59
2	AB	1626	A	C6-N6	6.98	1.39	1.33
2	AB	1027	A	N9-C4	6.98	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	138	G	N9-C8	6.98	1.42	1.37
35	BA	289	G	C6-N1	6.98	1.44	1.39
35	BA	319	G	C8-N7	-6.98	1.26	1.30
35	BA	416	G	C8-N7	6.98	1.35	1.30
35	BA	619	U	N3-C4	6.98	1.44	1.38
35	BA	1429	A	N7-C5	-6.98	1.35	1.39
2	AB	377	G	P-O5'	6.98	1.66	1.59
2	AB	679	C	C5'-C4'	6.98	1.59	1.51
35	BA	1032	G	N9-C8	-6.98	1.32	1.37
35	BA	1125	U	C3'-C2'	6.98	1.60	1.52
2	AB	283	G	P-O5'	6.98	1.66	1.59
35	BA	77	A	N3-C4	6.98	1.39	1.34
35	BA	722	G	N7-C5	6.98	1.43	1.39
35	BA	1368	A	C6-N1	-6.98	1.30	1.35
2	AB	1579	A	C5'-C4'	6.98	1.59	1.51
2	AB	1700	A	N1-C2	-6.98	1.28	1.34
11	AK	101	SER	CA-CB	6.98	1.63	1.52
35	BA	1027	C	P-O5'	6.98	1.66	1.59
35	BA	1038	C	C4-C5	6.98	1.48	1.43
35	BA	1205	U	C4'-O4'	-6.98	1.36	1.45
2	AB	669	G	P-O5'	6.97	1.66	1.59
2	AB	1216	G	N7-C5	-6.97	1.35	1.39
2	AB	1704	C	N3-C4	-6.97	1.29	1.33
35	BA	609	A	N7-C5	6.97	1.43	1.39
2	AB	1394	U	C4-C5	6.97	1.49	1.43
2	AB	2816	G	N9-C4	-6.97	1.32	1.38
35	BA	898	G	C5-C4	6.97	1.43	1.38
37	BC	40	G	C6-N1	6.97	1.44	1.39
2	AB	365	U	N1-C2	6.97	1.44	1.38
35	BA	605	U	C4-O4	-6.97	1.18	1.23
2	AB	540	C	C4-C5	6.97	1.48	1.43
2	AB	2192	U	C4-C5	6.97	1.49	1.43
2	AB	612	G	N7-C5	6.97	1.43	1.39
2	AB	1957	C	N1-C6	6.97	1.41	1.37
2	AB	46	G	C4'-O4'	-6.97	1.36	1.45
2	AB	500	G	C6-N1	-6.97	1.34	1.39
2	AB	74	A	C5'-C4'	6.96	1.59	1.51
2	AB	1455	G	N7-C5	-6.96	1.35	1.39
2	AB	1487	U	C5-C6	6.96	1.40	1.34
2	AB	2711	A	N9-C4	-6.96	1.33	1.37
2	AB	2731	G	N3-C4	6.96	1.40	1.35
35	BA	215	C	P-O5'	6.96	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	452	A	N3-C4	-6.96	1.30	1.34
2	AB	487	C	N3-C4	6.96	1.38	1.33
2	AB	533	G	C5'-C4'	6.96	1.59	1.51
2	AB	252	G	C1'-N9	6.96	1.59	1.48
2	AB	750	A	P-O5'	6.96	1.66	1.59
2	AB	1430	G	C6-N1	6.96	1.44	1.39
2	AB	1919	A	N9-C4	-6.96	1.33	1.37
35	BA	257	G	P-O5'	6.96	1.66	1.59
2	AB	232	G	N9-C8	6.96	1.42	1.37
2	AB	1305	C	N1-C6	6.96	1.41	1.37
35	BA	804	U	N3-C4	6.96	1.44	1.38
38	BD	48	U	C2-N3	6.96	1.42	1.37
2	AB	2043	C	C5-C6	6.96	1.40	1.34
2	AB	2786	U	P-O5'	6.96	1.66	1.59
35	BA	210	C	C4-C5	6.96	1.48	1.43
36	BB	40	C	C5'-C4'	6.96	1.59	1.51
2	AB	858	G	C2-N3	6.96	1.38	1.32
2	AB	2734	A	C8-N7	-6.96	1.26	1.31
35	BA	35	G	C2-N3	6.96	1.38	1.32
35	BA	113	G	O3'-P	6.96	1.69	1.61
35	BA	1053	G	C6-O6	-6.96	1.17	1.24
35	BA	1419	G	C6-N1	6.96	1.44	1.39
2	AB	802	A	N7-C5	6.95	1.43	1.39
2	AB	2420	C	N1-C6	6.95	1.41	1.37
2	AB	2633	G	O4'-C1'	-6.95	1.32	1.41
2	AB	2686	G	C5-C4	6.95	1.43	1.38
2	AB	2736	A	P-O5'	6.95	1.66	1.59
1	AA	76	G	C4'-O4'	-6.95	1.36	1.45
2	AB	276	U	O4'-C1'	6.95	1.50	1.41
2	AB	1411	U	C2-N3	6.95	1.42	1.37
1	AA	19	C	C2-N3	6.95	1.41	1.35
2	AB	281	C	C3'-C2'	-6.95	1.45	1.52
2	AB	283	G	O3'-P	-6.95	1.52	1.61
2	AB	965	C	C5-C6	6.95	1.40	1.34
2	AB	1134	A	C6-N6	6.95	1.39	1.33
2	AB	1235	G	N1-C2	6.95	1.43	1.37
2	AB	1472	C	C4-C5	6.95	1.48	1.43
2	AB	1910	G	C2-N3	6.95	1.38	1.32
35	BA	285	C	N1-C6	6.95	1.41	1.37
35	BA	772	U	N1-C2	6.95	1.44	1.38
35	BA	1079	G	N7-C5	6.95	1.43	1.39
1	AA	24	G	O3'-P	6.95	1.69	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	185	G	P-O5'	6.95	1.66	1.59
2	AB	612	G	P-O5'	6.95	1.66	1.59
35	BA	412	A	O3'-P	-6.95	1.52	1.61
35	BA	606	G	C8-N7	-6.95	1.26	1.30
2	AB	731	C	C5'-C4'	6.94	1.59	1.51
2	AB	2071	A	N7-C5	-6.94	1.35	1.39
2	AB	2101	A	N3-C4	6.94	1.39	1.34
2	AB	2355	G	C2-N3	6.94	1.38	1.32
2	AB	2682	A	P-O5'	6.94	1.66	1.59
35	BA	1352	C	N1-C6	6.94	1.41	1.37
2	AB	52	A	C5-C4	-6.94	1.33	1.38
2	AB	1213	A	N9-C4	6.94	1.42	1.37
35	BA	260	G	C2-N2	-6.94	1.27	1.34
2	AB	927	A	N9-C4	-6.94	1.33	1.37
2	AB	1210	G	C6-N1	6.94	1.44	1.39
2	AB	1391	U	C4'-O4'	-6.94	1.36	1.45
2	AB	1868	C	C4'-O4'	-6.94	1.36	1.45
2	AB	1903	G	C4'-O4'	-6.94	1.36	1.45
2	AB	2308	G	P-O5'	6.94	1.66	1.59
2	AB	2623	G	P-O5'	6.94	1.66	1.59
2	AB	2793	C	C4'-C3'	-6.94	1.45	1.53
35	BA	1357	A	P-O5'	6.94	1.66	1.59
2	AB	2051	A	C5-C6	6.94	1.47	1.41
35	BA	1112	C	O3'-P	6.94	1.69	1.61
38	BD	30	G	P-O5'	6.94	1.66	1.59
2	AB	241	A	N7-C5	-6.94	1.35	1.39
2	AB	1207	C	C4-C5	6.94	1.48	1.43
35	BA	1245	C	C4-C5	6.94	1.48	1.43
38	BD	36	A	C4'-C3'	-6.94	1.45	1.53
2	AB	537	G	N9-C8	6.93	1.42	1.37
2	AB	2248	C	C5'-C4'	6.93	1.59	1.51
2	AB	2662	A	N3-C4	6.93	1.39	1.34
35	BA	224	U	C4-O4	6.93	1.29	1.23
35	BA	1178	G	N1-C2	6.93	1.43	1.37
35	BA	1306	A	N7-C5	-6.93	1.35	1.39
1	AA	33	G	P-O5'	6.93	1.66	1.59
2	AB	123	G	C5'-C4'	6.93	1.59	1.51
2	AB	890	C	C3'-C2'	6.93	1.60	1.52
2	AB	1091	G	C5-C4	6.93	1.43	1.38
2	AB	2573	C	P-O5'	6.93	1.66	1.59
35	BA	129	A	P-O5'	6.93	1.66	1.59
35	BA	330	C	C5'-C4'	6.93	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	64	G	C4'-O4'	-6.93	1.36	1.45
2	AB	2324	U	C2-N3	6.93	1.42	1.37
35	BA	507	C	C4-C5	-6.93	1.37	1.43
35	BA	833	G	N7-C5	6.93	1.43	1.39
2	AB	51	G	N9-C8	6.93	1.42	1.37
2	AB	1098	A	C6-N6	6.93	1.39	1.33
2	AB	1844	C	C2-N3	6.93	1.41	1.35
2	AB	1924	C	N3-C4	-6.93	1.29	1.33
35	BA	8	A	N9-C4	6.93	1.42	1.37
35	BA	895	G	N3-C4	6.93	1.40	1.35
35	BA	1021	A	C8-N7	-6.93	1.26	1.31
35	BA	1284	C	C4'-C3'	-6.93	1.45	1.53
35	BA	1362	A	N9-C8	6.93	1.43	1.37
2	AB	2379	G	C5-C4	6.93	1.43	1.38
2	AB	2854	G	N7-C5	6.93	1.43	1.39
35	BA	958	A	C5-C6	6.93	1.47	1.41
2	AB	1406	U	C2'-O2'	6.92	1.50	1.41
2	AB	1418	G	C6-O6	-6.92	1.18	1.24
3	AC	60	ARG	CZ-NH1	6.92	1.42	1.33
35	BA	1142	G	N7-C5	6.92	1.43	1.39
2	AB	1675	C	N1-C6	6.92	1.41	1.37
1	AA	72	G	N7-C5	-6.92	1.35	1.39
2	AB	869	G	C8-N7	-6.92	1.26	1.30
2	AB	2462	C	C2'-O2'	6.92	1.50	1.41
2	AB	2599	G	O3'-P	6.92	1.69	1.61
35	BA	746	A	N3-C4	6.92	1.39	1.34
35	BA	1163	A	O3'-P	6.92	1.69	1.61
2	AB	2326	C	C5'-C4'	6.92	1.59	1.51
2	AB	2621	G	C4'-O4'	-6.92	1.36	1.45
35	BA	829	G	C6-O6	-6.92	1.18	1.24
2	AB	887	U	C2-N3	6.92	1.42	1.37
2	AB	905	A	N9-C4	6.92	1.42	1.37
2	AB	974	G	N9-C8	6.92	1.42	1.37
2	AB	1872	A	C5'-C4'	6.92	1.59	1.51
2	AB	1956	U	C4'-O4'	-6.92	1.36	1.45
35	BA	398	U	N1-C6	-6.92	1.31	1.38
35	BA	672	U	C4'-O4'	-6.92	1.36	1.45
36	BB	49	G	P-O5'	6.92	1.66	1.59
2	AB	576	U	C2-O2	6.92	1.28	1.22
2	AB	1394	U	N1-C2	6.92	1.44	1.38
2	AB	1457	U	O3'-P	6.92	1.69	1.61
2	AB	2315	G	C3'-C2'	-6.92	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	122	G	N7-C5	6.92	1.43	1.39
35	BA	702	A	N9-C4	6.92	1.42	1.37
36	BB	65	C	N3-C4	6.92	1.38	1.33
2	AB	363	G	C4'-O4'	-6.92	1.36	1.45
2	AB	638	G	P-O5'	6.92	1.66	1.59
2	AB	761	A	N7-C5	6.92	1.43	1.39
35	BA	790	A	C2-N3	-6.92	1.27	1.33
35	BA	1129	C	C3'-C2'	-6.92	1.45	1.52
1	AA	58	A	P-O5'	6.91	1.66	1.59
2	AB	1322	A	N9-C8	6.91	1.43	1.37
2	AB	1936	A	C4'-O4'	-6.91	1.36	1.45
2	AB	2417	C	C4'-O4'	-6.91	1.36	1.45
2	AB	2434	A	N9-C4	-6.91	1.33	1.37
2	AB	2437	G	C6-N1	-6.91	1.34	1.39
2	AB	2773	C	N1-C6	6.91	1.41	1.37
2	AB	2741	A	O4'-C1'	6.91	1.50	1.41
2	AB	2851	A	N3-C4	6.91	1.39	1.34
35	BA	49	U	C4-O4	-6.91	1.18	1.23
35	BA	819	A	N7-C5	6.91	1.43	1.39
2	AB	126	A	C6-N1	-6.91	1.30	1.35
2	AB	802	A	N9-C4	6.91	1.42	1.37
2	AB	900	A	P-O5'	6.91	1.66	1.59
2	AB	889	C	P-O5'	6.91	1.66	1.59
2	AB	1560	G	C5-C4	-6.91	1.33	1.38
2	AB	2371	G	O3'-P	6.91	1.69	1.61
35	BA	288	A	N3-C4	6.91	1.39	1.34
2	AB	1677	A	C4'-O4'	-6.91	1.36	1.45
2	AB	2745	C	C4-N4	-6.91	1.27	1.33
35	BA	982	U	N1-C2	6.91	1.44	1.38
35	BA	1360	A	C6-N6	-6.91	1.28	1.33
2	AB	20	C	N1-C6	6.90	1.41	1.37
2	AB	1126	A	N9-C4	6.90	1.42	1.37
35	BA	990	C	C5-C6	6.90	1.39	1.34
2	AB	146	A	N3-C4	6.90	1.39	1.34
2	AB	177	G	N7-C5	6.90	1.43	1.39
2	AB	1351	C	C5-C6	6.90	1.39	1.34
2	AB	1828	G	N7-C5	-6.90	1.35	1.39
2	AB	2290	G	N3-C4	6.90	1.40	1.35
2	AB	2645	G	O4'-C1'	6.90	1.50	1.41
2	AB	2717	C	N1-C6	6.90	1.41	1.37
1	AA	97	C	O3'-P	6.90	1.69	1.61
2	AB	597	G	N9-C8	6.90	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	267	C	C4-C5	6.90	1.48	1.43
2	AB	2839	G	C8-N7	-6.90	1.26	1.30
35	BA	666	G	P-O5'	6.90	1.66	1.59
1	AA	12	C	N1-C6	-6.90	1.33	1.37
2	AB	365	U	N1-C6	6.90	1.44	1.38
2	AB	631	A	N9-C4	6.90	1.42	1.37
2	AB	815	C	C5'-C4'	6.90	1.59	1.51
2	AB	1456	G	N1-C2	-6.90	1.32	1.37
2	AB	2900	A	C4'-O4'	-6.90	1.36	1.45
35	BA	693	G	N3-C4	6.90	1.40	1.35
1	AA	109	A	N7-C5	6.90	1.43	1.39
2	AB	1599	U	C5'-C4'	6.90	1.59	1.51
2	AB	593	U	C5-C6	6.89	1.40	1.34
35	BA	117	G	N3-C4	6.89	1.40	1.35
35	BA	796	C	C2-N3	6.89	1.41	1.35
36	BB	29	G	C2-N3	6.89	1.38	1.32
1	AA	81	G	C6-N1	-6.89	1.34	1.39
2	AB	64	A	O3'-P	6.89	1.69	1.61
2	AB	2693	G	N3-C4	6.89	1.40	1.35
2	AB	2780	G	N3-C4	6.89	1.40	1.35
2	AB	2839	G	P-O5'	6.89	1.66	1.59
35	BA	706	A	C2-N3	6.89	1.39	1.33
35	BA	1248	A	C6-N1	-6.89	1.30	1.35
35	BA	869	G	O4'-C1'	6.89	1.50	1.41
2	AB	272	A	N9-C8	-6.89	1.32	1.37
2	AB	914	G	N1-C2	6.89	1.43	1.37
2	AB	1241	A	C8-N7	-6.89	1.26	1.31
2	AB	1380	G	C2-N3	6.89	1.38	1.32
2	AB	2320	U	P-O5'	6.89	1.66	1.59
35	BA	412	A	N7-C5	6.89	1.43	1.39
35	BA	1317	C	N1-C2	6.89	1.47	1.40
36	BB	1	A	C3'-O3'	6.89	1.51	1.42
2	AB	2638	G	N7-C5	6.89	1.43	1.39
2	AB	636	G	N1-C2	6.89	1.43	1.37
2	AB	2094	A	N9-C4	-6.89	1.33	1.37
2	AB	2120	G	C2-N3	6.89	1.38	1.32
35	BA	289	G	C8-N7	6.89	1.35	1.30
35	BA	557	G	N9-C8	6.89	1.42	1.37
2	AB	263	G	C4'-C3'	6.88	1.60	1.53
2	AB	896	A	N3-C4	6.88	1.39	1.34
2	AB	994	C	C2'-C1'	6.88	1.60	1.53
2	AB	1621	U	C4'-O4'	-6.88	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2348	U	P-O5'	6.88	1.66	1.59
35	BA	536	C	N3-C4	6.88	1.38	1.33
35	BA	719	C	N3-C4	6.88	1.38	1.33
35	BA	953	G	N9-C4	6.88	1.43	1.38
35	BA	1344	C	P-O5'	6.88	1.66	1.59
35	BA	1511	G	N7-C5	6.88	1.43	1.39
35	BA	1044	A	N7-C5	6.88	1.43	1.39
2	AB	1330	C	O3'-P	6.88	1.69	1.61
2	AB	1817	G	C4'-O4'	-6.88	1.36	1.45
35	BA	807	A	C4'-C3'	6.88	1.60	1.53
2	AB	252	G	P-O5'	6.88	1.66	1.59
2	AB	1906	G	C4'-C3'	6.88	1.60	1.53
2	AB	356	G	N9-C4	6.88	1.43	1.38
2	AB	693	A	C4'-O4'	-6.88	1.36	1.45
2	AB	1893	C	C2-N3	6.88	1.41	1.35
2	AB	2223	G	C5-C4	-6.88	1.33	1.38
2	AB	2414	G	C2-N3	6.88	1.38	1.32
2	AB	2464	G	N9-C8	-6.88	1.33	1.37
2	AB	2557	G	N3-C4	6.88	1.40	1.35
2	AB	762	U	O3'-P	-6.88	1.52	1.61
2	AB	1922	G	P-O5'	6.88	1.66	1.59
2	AB	1988	G	C4'-O4'	-6.88	1.36	1.45
2	AB	2530	A	N9-C8	6.88	1.43	1.37
35	BA	1499	A	O3'-P	6.88	1.69	1.61
2	AB	2691	C	P-O5'	6.88	1.66	1.59
2	AB	476	G	C6-O6	-6.87	1.18	1.24
2	AB	715	A	N9-C4	6.87	1.42	1.37
2	AB	951	C	C4-N4	6.87	1.40	1.33
2	AB	953	G	C2-N3	6.87	1.38	1.32
2	AB	1587	G	P-O5'	-6.87	1.52	1.59
2	AB	1845	G	P-O5'	6.87	1.66	1.59
2	AB	2731	G	P-O5'	6.87	1.66	1.59
2	AB	2737	G	N7-C5	6.87	1.43	1.39
2	AB	2781	A	N9-C4	-6.87	1.33	1.37
35	BA	1295	U	C2-N3	6.87	1.42	1.37
35	BA	1401	G	N7-C5	6.87	1.43	1.39
37	BC	14	G	C4'-C3'	6.87	1.60	1.53
1	AA	24	G	N7-C5	-6.87	1.35	1.39
2	AB	805	G	C6-N1	-6.87	1.34	1.39
2	AB	2666	C	C5'-C4'	6.87	1.59	1.51
35	BA	722	G	C4'-C3'	-6.87	1.45	1.53
35	BA	949	A	N9-C4	6.87	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1390	U	P-O5'	6.87	1.66	1.59
2	AB	1232	G	N1-C2	6.87	1.43	1.37
2	AB	2137	U	C2-N3	6.87	1.42	1.37
35	BA	846	G	N7-C5	6.87	1.43	1.39
2	AB	914	G	C6-N1	6.87	1.44	1.39
35	BA	670	G	N9-C8	-6.87	1.33	1.37
2	AB	171	U	C4-O4	-6.87	1.18	1.23
2	AB	1550	C	P-O5'	6.87	1.66	1.59
2	AB	1735	A	C5'-C4'	6.87	1.59	1.51
35	BA	1050	G	C5'-C4'	6.87	1.59	1.51
1	AA	33	G	C6-N1	6.87	1.44	1.39
2	AB	958	U	C4'-C3'	-6.87	1.45	1.53
2	AB	1828	G	C5-C4	-6.87	1.33	1.38
2	AB	2629	U	N1-C2	6.87	1.44	1.38
35	BA	1180	A	N3-C4	-6.87	1.30	1.34
35	BA	1420	U	C4'-O4'	-6.87	1.36	1.45
35	BA	1532	U	O3'-P	6.87	1.69	1.61
38	BD	72	C	P-O5'	6.87	1.66	1.59
2	AB	406	G	C8-N7	-6.86	1.26	1.30
2	AB	530	G	N9-C4	-6.86	1.32	1.38
2	AB	1723	G	N3-C4	6.86	1.40	1.35
2	AB	46	G	P-O5'	6.86	1.66	1.59
2	AB	817	C	N3-C4	6.86	1.38	1.33
2	AB	1569	A	N3-C4	6.86	1.39	1.34
35	BA	396	C	C4-N4	6.86	1.40	1.33
35	BA	911	U	C2-N3	6.86	1.42	1.37
2	AB	311	A	C5-C4	-6.86	1.33	1.38
2	AB	567	U	C3'-C2'	-6.86	1.45	1.52
2	AB	708	G	N3-C4	6.86	1.40	1.35
2	AB	1614	A	N9-C4	6.86	1.42	1.37
2	AB	2710	C	O3'-P	6.86	1.69	1.61
35	BA	558	G	C4'-O4'	-6.86	1.36	1.45
35	BA	1039	G	C5-C4	6.86	1.43	1.38
35	BA	1421	G	C8-N7	6.86	1.35	1.30
2	AB	1016	G	N9-C8	6.86	1.42	1.37
35	BA	136	C	C2'-C1'	6.86	1.60	1.53
35	BA	624	C	C4'-O4'	-6.86	1.36	1.45
35	BA	694	A	P-O5'	6.86	1.66	1.59
1	AA	6	G	N9-C8	6.86	1.42	1.37
2	AB	675	A	O3'-P	-6.86	1.52	1.61
2	AB	1220	G	N1-C2	6.86	1.43	1.37
26	AZ	41	SER	CB-OG	-6.86	1.33	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	637	C	C5'-C4'	6.86	1.59	1.51
35	BA	1244	G	C2-N3	6.86	1.38	1.32
35	BA	1254	A	C6-N1	-6.86	1.30	1.35
2	AB	21	A	N3-C4	6.86	1.39	1.34
2	AB	1000	A	N9-C4	6.86	1.42	1.37
35	BA	197	A	N7-C5	6.86	1.43	1.39
35	BA	489	C	C5'-C4'	6.86	1.59	1.51
35	BA	976	G	P-O5'	6.86	1.66	1.59
37	BC	53	G	N1-C2	6.85	1.43	1.37
38	BD	15	G	C5'-C4'	6.85	1.59	1.51
2	AB	1432	G	C6-N1	6.85	1.44	1.39
2	AB	2739	U	N3-C4	6.85	1.44	1.38
35	BA	276	G	N7-C5	-6.85	1.35	1.39
35	BA	513	C	C4'-O4'	-6.85	1.36	1.45
35	BA	905	U	O3'-P	6.85	1.69	1.61
2	AB	317	G	N1-C2	6.85	1.43	1.37
35	BA	779	C	C4-C5	6.85	1.48	1.43
35	BA	941	G	C6-N1	-6.85	1.34	1.39
35	BA	1153	G	C5'-C4'	6.85	1.59	1.51
35	BA	1227	A	N9-C8	6.85	1.43	1.37
2	AB	1601	G	N9-C8	-6.85	1.33	1.37
2	AB	2713	U	P-O5'	6.85	1.66	1.59
2	AB	2803	G	O4'-C1'	6.85	1.50	1.41
35	BA	731	G	N3-C4	6.85	1.40	1.35
1	AA	59	A	N3-C4	6.85	1.39	1.34
1	AA	78	A	C8-N7	-6.85	1.26	1.31
2	AB	945	A	N9-C4	-6.85	1.33	1.37
2	AB	2662	A	N7-C5	-6.85	1.35	1.39
35	BA	242	G	C5-C6	6.85	1.49	1.42
35	BA	320	A	N9-C4	6.85	1.42	1.37
35	BA	717	U	N1-C6	-6.85	1.31	1.38
35	BA	777	A	C4'-C3'	6.85	1.60	1.53
35	BA	1138	G	C4'-O4'	-6.85	1.36	1.45
2	AB	2812	G	P-O5'	6.85	1.66	1.59
35	BA	281	G	C6-N1	6.85	1.44	1.39
2	AB	71	A	C5-C4	-6.84	1.33	1.38
35	BA	196	A	O3'-P	6.84	1.69	1.61
35	BA	694	A	O4'-C1'	6.84	1.50	1.41
35	BA	1286	U	P-O5'	6.84	1.66	1.59
2	AB	322	A	O3'-P	-6.84	1.52	1.61
2	AB	1836	C	C5'-C4'	6.84	1.59	1.51
35	BA	13	U	C2-N3	6.84	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	191	G	C3'-C2'	6.84	1.60	1.52
38	BD	10	G	C4'-C3'	6.84	1.60	1.53
2	AB	1334	G	C4'-C3'	6.84	1.60	1.53
35	BA	378	G	C5'-C4'	6.84	1.59	1.51
35	BA	1038	C	N3-C4	6.84	1.38	1.33
35	BA	1199	U	N3-C4	6.84	1.44	1.38
2	AB	1650	A	C6-N6	6.84	1.39	1.33
2	AB	2219	U	C2-N3	6.84	1.42	1.37
35	BA	925	G	N7-C5	-6.84	1.35	1.39
2	AB	75	G	N9-C4	6.84	1.43	1.38
2	AB	450	G	P-O5'	6.84	1.66	1.59
2	AB	2623	G	N7-C5	6.84	1.43	1.39
2	AB	2886	A	C4'-C3'	6.84	1.60	1.53
35	BA	4	U	C2-N3	6.84	1.42	1.37
35	BA	331	G	C5'-C4'	6.84	1.59	1.51
2	AB	1646	C	C4-C5	6.83	1.48	1.43
2	AB	2895	G	C5'-C4'	6.83	1.59	1.51
2	AB	978	G	C8-N7	-6.83	1.26	1.30
2	AB	2255	G	P-O5'	6.83	1.66	1.59
35	BA	1170	A	P-O5'	6.83	1.66	1.59
35	BA	1240	U	N1-C2	6.83	1.44	1.38
2	AB	787	C	N1-C6	6.83	1.41	1.37
2	AB	1139	G	C5'-C4'	6.83	1.59	1.51
2	AB	1196	C	C4-C5	6.83	1.48	1.43
2	AB	2364	C	P-O5'	6.83	1.66	1.59
2	AB	2846	G	N9-C8	6.83	1.42	1.37
5	AE	89	GLU	CB-CG	6.83	1.65	1.52
39	BE	161	PHE	CG-CD2	6.83	1.49	1.38
2	AB	2821	A	C5-C6	6.83	1.47	1.41
2	AB	271	G	P-O5'	6.83	1.66	1.59
2	AB	1465	G	N9-C4	6.83	1.43	1.38
35	BA	1344	C	C2'-C1'	-6.83	1.45	1.53
2	AB	451	U	C2-N3	-6.83	1.32	1.37
2	AB	2370	G	C2-N2	-6.83	1.27	1.34
2	AB	1676	A	C8-N7	-6.83	1.26	1.31
2	AB	1986	C	P-O5'	6.83	1.66	1.59
2	AB	2041	U	C2-N3	6.83	1.42	1.37
2	AB	102	U	P-O5'	6.82	1.66	1.59
2	AB	284	U	P-O5'	6.82	1.66	1.59
2	AB	958	U	P-O5'	6.82	1.66	1.59
2	AB	2171	A	N7-C5	-6.82	1.35	1.39
2	AB	2344	U	P-O5'	6.82	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2574	G	N1-C2	6.82	1.43	1.37
35	BA	326	G	C2'-O2'	6.82	1.50	1.41
35	BA	544	G	P-O5'	6.82	1.66	1.59
35	BA	1252	A	P-O5'	6.82	1.66	1.59
2	AB	113	U	C4-O4	-6.82	1.18	1.23
2	AB	676	A	N7-C5	-6.82	1.35	1.39
2	AB	1364	G	C8-N7	6.82	1.35	1.30
35	BA	495	A	P-O5'	6.82	1.66	1.59
2	AB	2217	G	N9-C8	6.82	1.42	1.37
35	BA	169	C	N1-C6	6.82	1.41	1.37
35	BA	863	U	C2'-O2'	-6.82	1.32	1.41
35	BA	1084	G	C2-N3	6.82	1.38	1.32
2	AB	54	G	C6-O6	-6.82	1.18	1.24
2	AB	183	C	N1-C6	6.82	1.41	1.37
2	AB	213	A	N7-C5	-6.82	1.35	1.39
2	AB	1081	U	C4-C5	6.82	1.49	1.43
2	AB	1435	G	N3-C4	6.82	1.40	1.35
2	AB	2211	A	N7-C5	-6.82	1.35	1.39
2	AB	2845	U	O4'-C1'	6.82	1.50	1.41
2	AB	542	C	N1-C6	6.82	1.41	1.37
2	AB	1605	C	C4'-O4'	-6.82	1.36	1.45
2	AB	2804	U	C4'-O4'	-6.82	1.36	1.45
35	BA	439	U	C2-N3	6.82	1.42	1.37
35	BA	1483	A	N9-C4	6.82	1.42	1.37
2	AB	1461	C	N1-C6	6.81	1.41	1.37
2	AB	2512	C	N3-C4	6.81	1.38	1.33
35	BA	338	A	C5-C6	-6.81	1.34	1.41
38	BD	61	U	N1-C6	-6.81	1.31	1.38
2	AB	365	U	C3'-C2'	6.81	1.60	1.52
2	AB	1181	U	C4-C5	6.81	1.49	1.43
2	AB	1749	A	N9-C4	6.81	1.42	1.37
35	BA	330	C	C5-C6	6.81	1.39	1.34
2	AB	1122	G	C6-N1	-6.81	1.34	1.39
35	BA	1161	C	N3-C4	6.81	1.38	1.33
2	AB	353	C	N3-C4	6.81	1.38	1.33
2	AB	1233	C	C2'-C1'	6.81	1.60	1.53
2	AB	2627	G	N1-C2	6.81	1.43	1.37
2	AB	2871	U	C5-C6	6.81	1.40	1.34
2	AB	893	C	C4-C5	6.81	1.48	1.43
2	AB	2141	G	C2-N3	6.81	1.38	1.32
2	AB	2179	C	P-O5'	6.81	1.66	1.59
2	AB	2485	G	P-O5'	6.81	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	806	C	N1-C6	6.81	1.41	1.37
35	BA	1000	A	O4'-C1'	6.81	1.50	1.41
2	AB	9	G	O3'-P	6.81	1.69	1.61
2	AB	774	G	N7-C5	-6.81	1.35	1.39
2	AB	384	A	P-O5'	6.80	1.66	1.59
2	AB	1812	U	N1-C2	6.80	1.44	1.38
2	AB	2588	G	C5'-C4'	6.80	1.59	1.51
35	BA	19	A	N3-C4	6.80	1.39	1.34
35	BA	195	A	N3-C4	6.80	1.39	1.34
35	BA	1163	A	N7-C5	6.80	1.43	1.39
1	AA	1	U	C2-N3	6.80	1.42	1.37
2	AB	393	C	C2-N3	6.80	1.41	1.35
2	AB	1907	G	N1-C2	6.80	1.43	1.37
35	BA	1394	A	P-O5'	6.80	1.66	1.59
1	AA	37	C	P-O5'	6.80	1.66	1.59
1	AA	42	C	C5-C6	6.80	1.39	1.34
2	AB	402	A	N7-C5	6.80	1.43	1.39
2	AB	1956	U	N1-C2	6.80	1.44	1.38
2	AB	2443	C	N1-C6	6.80	1.41	1.37
35	BA	12	U	C2-N3	6.80	1.42	1.37
2	AB	110	G	N7-C5	6.80	1.43	1.39
2	AB	230	G	C2-N3	6.80	1.38	1.32
2	AB	2396	G	C5-C6	6.80	1.49	1.42
2	AB	2597	G	C4'-O4'	-6.80	1.36	1.45
2	AB	654	A	N7-C5	-6.80	1.35	1.39
2	AB	937	C	C4'-C3'	6.80	1.60	1.53
2	AB	1030	C	C3'-C2'	-6.80	1.45	1.52
2	AB	1610	A	C5-C6	6.80	1.47	1.41
35	BA	626	G	C5'-C4'	6.80	1.59	1.51
35	BA	631	C	C2'-C1'	-6.80	1.45	1.53
2	AB	909	A	N1-C2	-6.79	1.28	1.34
2	AB	45	G	N1-C2	6.79	1.43	1.37
2	AB	1258	U	N3-C4	6.79	1.44	1.38
2	AB	1866	A	C5-C4	-6.79	1.33	1.38
2	AB	2711	A	N1-C2	-6.79	1.28	1.34
35	BA	958	A	C3'-C2'	6.79	1.60	1.52
35	BA	1113	C	C3'-C2'	6.79	1.60	1.52
2	AB	2123	G	N1-C2	6.79	1.43	1.37
2	AB	2363	G	C2-N3	6.79	1.38	1.32
2	AB	2506	U	C2-O2	6.79	1.28	1.22
2	AB	2566	A	C5-C6	6.79	1.47	1.41
1	AA	59	A	C6-N6	6.79	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1969	A	N7-C5	-6.79	1.35	1.39
35	BA	629	A	C8-N7	6.79	1.36	1.31
35	BA	1372	U	C2-O2	6.79	1.28	1.22
41	BG	19	PHE	CG-CD2	6.79	1.49	1.38
2	AB	810	U	C3'-O3'	-6.79	1.32	1.42
2	AB	1699	G	N1-C2	6.79	1.43	1.37
2	AB	2076	U	O3'-P	-6.79	1.53	1.61
35	BA	815	A	N3-C4	6.79	1.39	1.34
38	BD	12	G	C8-N7	-6.79	1.26	1.30
2	AB	1049	C	P-O5'	6.78	1.66	1.59
2	AB	2527	C	P-O5'	6.78	1.66	1.59
35	BA	353	A	C5'-C4'	6.78	1.59	1.51
36	BB	22	G	C5'-C4'	6.78	1.59	1.51
35	BA	224	U	C4-C5	6.78	1.49	1.43
2	AB	126	A	N3-C4	6.78	1.39	1.34
2	AB	837	C	C2-N3	6.78	1.41	1.35
2	AB	1059	G	N1-C2	6.78	1.43	1.37
35	BA	383	A	N1-C2	-6.78	1.28	1.34
2	AB	2207	C	C4-C5	6.78	1.48	1.43
2	AB	89	A	N9-C8	-6.78	1.32	1.37
2	AB	1388	G	C2-N3	6.78	1.38	1.32
35	BA	585	G	C5-C6	6.78	1.49	1.42
35	BA	1205	U	O3'-P	6.78	1.69	1.61
2	AB	414	C	C4-N4	6.78	1.40	1.33
2	AB	620	G	N7-C5	6.78	1.43	1.39
2	AB	2592	G	N7-C5	-6.78	1.35	1.39
2	AB	524	G	N9-C8	-6.77	1.33	1.37
2	AB	1269	A	C4'-O4'	-6.77	1.36	1.45
2	AB	186	G	P-O5'	6.77	1.66	1.59
2	AB	666	A	C4'-C3'	6.77	1.60	1.53
2	AB	2484	G	C4'-C3'	6.77	1.60	1.53
35	BA	71	A	C8-N7	-6.77	1.26	1.31
35	BA	1083	U	P-O5'	6.77	1.66	1.59
35	BA	1146	A	N3-C4	6.77	1.39	1.34
2	AB	116	C	O4'-C1'	-6.77	1.32	1.41
2	AB	374	A	P-O5'	6.77	1.66	1.59
2	AB	1280	G	C4'-O4'	-6.77	1.36	1.45
2	AB	2505	G	C4'-C3'	6.77	1.60	1.53
2	AB	374	A	N7-C5	6.77	1.43	1.39
2	AB	666	A	N9-C8	-6.77	1.32	1.37
2	AB	908	C	C4-C5	6.77	1.48	1.43
2	AB	1558	C	C5'-C4'	6.77	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	101	A	C5'-C4'	-6.77	1.43	1.51
2	AB	733	G	C8-N7	6.77	1.35	1.30
2	AB	1889	A	N9-C8	-6.77	1.32	1.37
35	BA	848	C	P-O5'	6.77	1.66	1.59
35	BA	871	U	C5-C6	6.77	1.40	1.34
35	BA	1492	A	C8-N7	-6.77	1.26	1.31
2	AB	1721	G	O3'-P	6.77	1.69	1.61
35	BA	295	C	C4-C5	6.77	1.48	1.43
2	AB	549	G	C4'-O4'	-6.76	1.36	1.45
2	AB	647	G	C5-C6	-6.76	1.35	1.42
2	AB	994	C	C4-C5	6.76	1.48	1.43
2	AB	1492	G	P-O5'	6.76	1.66	1.59
2	AB	2537	U	N1-C2	6.76	1.44	1.38
35	BA	963	G	C5'-C4'	6.76	1.59	1.51
35	BA	1190	G	C5-C6	6.76	1.49	1.42
2	AB	11	C	C4-C5	6.76	1.48	1.43
2	AB	1744	A	N3-C4	6.76	1.39	1.34
35	BA	748	G	N9-C4	6.76	1.43	1.38
35	BA	1050	G	C2-N2	-6.76	1.27	1.34
35	BA	1452	C	N1-C6	6.76	1.41	1.37
36	BB	40	C	C2'-C1'	6.76	1.60	1.53
35	BA	348	G	N1-C2	6.76	1.43	1.37
2	AB	2013	A	C8-N7	-6.76	1.26	1.31
2	AB	2032	G	O3'-P	6.76	1.69	1.61
35	BA	286	C	N3-C4	-6.76	1.29	1.33
35	BA	466	A	P-O5'	-6.76	1.52	1.59
2	AB	2902	C	N1-C6	-6.76	1.33	1.37
2	AB	553	G	C2-N3	6.76	1.38	1.32
2	AB	674	G	C6-O6	-6.76	1.18	1.24
2	AB	1952	A	C4'-C3'	-6.76	1.45	1.53
2	AB	2378	A	C5'-C4'	6.76	1.59	1.51
35	BA	533	A	C2-N3	6.76	1.39	1.33
35	BA	606	G	C2-N3	6.76	1.38	1.32
35	BA	692	U	C2-N3	6.76	1.42	1.37
1	AA	22	U	C3'-C2'	6.75	1.60	1.52
2	AB	1225	G	C8-N7	-6.75	1.26	1.30
2	AB	1384	A	C5-C4	-6.75	1.34	1.38
2	AB	1808	A	N3-C4	6.75	1.39	1.34
2	AB	1878	G	C6-N1	-6.75	1.34	1.39
2	AB	2765	A	C6-N6	6.75	1.39	1.33
2	AB	2825	G	C4'-O4'	-6.75	1.36	1.45
35	BA	16	A	C2-N3	-6.75	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	7	G	C8-N7	6.75	1.35	1.30
2	AB	556	A	N1-C2	-6.75	1.28	1.34
35	BA	664	G	N3-C4	6.75	1.40	1.35
35	BA	731	G	C3'-C2'	6.75	1.60	1.52
36	BB	21	A	N9-C4	-6.75	1.33	1.37
36	BB	25	C	C4'-O4'	-6.75	1.36	1.45
2	AB	1912	A	N7-C5	6.75	1.43	1.39
2	AB	1944	U	N1-C2	6.75	1.44	1.38
2	AB	332	A	P-O5'	6.75	1.66	1.59
2	AB	422	A	C8-N7	-6.75	1.26	1.31
2	AB	1866	A	C5'-C4'	6.75	1.59	1.51
2	AB	2150	C	P-O5'	6.75	1.66	1.59
2	AB	506	G	N3-C4	6.75	1.40	1.35
2	AB	579	G	C2-N3	6.75	1.38	1.32
2	AB	1107	G	N1-C2	6.75	1.43	1.37
2	AB	1184	U	C4-C5	6.75	1.49	1.43
2	AB	1213	A	C8-N7	-6.75	1.26	1.31
2	AB	1899	A	N1-C2	-6.75	1.28	1.34
2	AB	2015	A	C2-N3	6.75	1.39	1.33
2	AB	2648	G	N7-C5	6.75	1.43	1.39
35	BA	500	G	C5-C4	6.75	1.43	1.38
38	BD	36	A	C3'-C2'	6.75	1.60	1.52
1	AA	9	G	P-O5'	6.75	1.66	1.59
2	AB	1337	G	O3'-P	6.75	1.69	1.61
2	AB	1293	C	C5-C6	6.74	1.39	1.34
2	AB	1483	G	N3-C4	6.74	1.40	1.35
35	BA	79	G	P-O5'	6.74	1.66	1.59
35	BA	700	G	C8-N7	-6.74	1.26	1.30
35	BA	1119	C	O4'-C1'	6.74	1.50	1.41
35	BA	1156	G	N9-C8	6.74	1.42	1.37
2	AB	989	G	N1-C2	6.74	1.43	1.37
2	AB	1486	U	C3'-C2'	6.74	1.60	1.52
2	AB	1694	C	P-O5'	6.74	1.66	1.59
2	AB	2002	G	C6-O6	-6.74	1.18	1.24
35	BA	611	C	P-O5'	6.74	1.66	1.59
35	BA	784	A	P-O5'	6.74	1.66	1.59
35	BA	1310	G	N9-C8	6.74	1.42	1.37
35	BA	1360	A	N7-C5	6.74	1.43	1.39
2	AB	120	U	C4-C5	6.74	1.49	1.43
2	AB	851	C	N3-C4	6.74	1.38	1.33
2	AB	1080	A	O4'-C1'	6.74	1.50	1.41
2	AB	1798	U	C4'-O4'	-6.74	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	204	G	N9-C4	-6.74	1.32	1.38
35	BA	689	C	N1-C6	6.74	1.41	1.37
1	AA	21	G	N1-C2	6.74	1.43	1.37
2	AB	617	G	N7-C5	-6.74	1.35	1.39
2	AB	1117	C	P-O5'	-6.74	1.53	1.59
35	BA	722	G	P-O5'	6.74	1.66	1.59
2	AB	1220	G	N7-C5	6.74	1.43	1.39
35	BA	586	C	N1-C6	6.74	1.41	1.37
35	BA	1289	A	N9-C8	6.74	1.43	1.37
35	BA	420	U	P-O5'	6.73	1.66	1.59
2	AB	949	G	C8-N7	-6.73	1.26	1.30
2	AB	1028	A	N9-C4	-6.73	1.33	1.37
2	AB	1450	G	N1-C2	6.73	1.43	1.37
35	BA	1247	U	C2'-O2'	-6.73	1.32	1.41
2	AB	344	A	O4'-C1'	6.73	1.50	1.41
2	AB	369	U	N1-C2	6.73	1.44	1.38
2	AB	806	C	C4-N4	6.73	1.40	1.33
2	AB	1040	A	C2-N3	-6.73	1.27	1.33
2	AB	1407	G	C2-N3	6.73	1.38	1.32
2	AB	2271	G	C3'-C2'	-6.73	1.45	1.52
2	AB	1372	U	O4'-C1'	6.73	1.50	1.41
35	BA	403	C	N3-C4	6.73	1.38	1.33
2	AB	124	G	N7-C5	6.73	1.43	1.39
2	AB	202	U	C5-C6	6.73	1.40	1.34
2	AB	321	U	C5'-C4'	6.73	1.59	1.51
2	AB	720	U	C2-O2	6.73	1.28	1.22
2	AB	1074	G	N1-C2	6.73	1.43	1.37
2	AB	1166	G	N9-C8	6.73	1.42	1.37
2	AB	1959	G	N7-C5	6.73	1.43	1.39
35	BA	853	C	C2'-C1'	-6.73	1.46	1.53
35	BA	1355	G	C2-N2	-6.73	1.27	1.34
2	AB	960	A	C6-N1	6.73	1.40	1.35
2	AB	1574	C	N1-C6	-6.73	1.33	1.37
2	AB	300	A	C5'-C4'	6.72	1.59	1.51
2	AB	1903	G	C6-O6	-6.72	1.18	1.24
2	AB	2706	A	C4'-C3'	6.72	1.60	1.53
38	BD	47	A	C5-C4	6.72	1.43	1.38
2	AB	1633	G	C2'-C1'	-6.72	1.46	1.53
2	AB	2847	U	C4-C5	6.72	1.49	1.43
35	BA	1377	A	C2'-C1'	6.72	1.60	1.53
1	AA	11	C	O3'-P	6.72	1.69	1.61
2	AB	494	G	N1-C2	6.72	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	562	U	C2-N3	6.72	1.42	1.37
2	AB	944	C	C4'-O4'	-6.72	1.36	1.45
2	AB	1251	C	O3'-P	6.72	1.69	1.61
35	BA	642	A	O3'-P	6.72	1.69	1.61
2	AB	258	G	C6-N1	6.72	1.44	1.39
2	AB	528	A	C4'-C3'	6.72	1.60	1.53
2	AB	559	G	C2-N3	6.72	1.38	1.32
2	AB	1000	A	N3-C4	6.72	1.38	1.34
2	AB	1136	G	C2'-C1'	6.72	1.60	1.53
2	AB	1285	A	C2'-O2'	6.72	1.50	1.41
2	AB	1967	C	N1-C6	6.72	1.41	1.37
35	BA	27	G	N9-C8	6.72	1.42	1.37
35	BA	778	G	C3'-C2'	6.72	1.60	1.52
35	BA	1072	G	C8-N7	6.72	1.34	1.30
35	BA	1355	G	C6-N1	6.72	1.44	1.39
39	BE	154	GLY	N-CA	-6.72	1.35	1.46
2	AB	2099	U	C2-N3	6.71	1.42	1.37
35	BA	303	A	N9-C4	6.71	1.41	1.37
35	BA	645	G	N3-C4	6.71	1.40	1.35
35	BA	1336	C	C2-N3	6.71	1.41	1.35
35	BA	1474	U	C3'-C2'	-6.71	1.45	1.52
2	AB	1057	A	N3-C4	6.71	1.38	1.34
2	AB	1098	A	C8-N7	-6.71	1.26	1.31
2	AB	1737	G	N1-C2	-6.71	1.32	1.37
2	AB	2326	C	P-O5'	-6.71	1.53	1.59
2	AB	2515	C	C3'-C2'	6.71	1.60	1.52
35	BA	1098	C	P-O5'	6.71	1.66	1.59
35	BA	1502	A	C6-N6	6.71	1.39	1.33
2	AB	657	U	C2-N3	6.71	1.42	1.37
2	AB	2133	G	C6-O6	-6.71	1.18	1.24
2	AB	2249	U	O3'-P	-6.71	1.53	1.61
35	BA	1091	U	C4'-O4'	-6.71	1.36	1.45
2	AB	52	A	C8-N7	-6.71	1.26	1.31
2	AB	2184	A	O3'-P	6.71	1.69	1.61
2	AB	2200	C	C4-C5	6.71	1.48	1.43
35	BA	714	G	O4'-C1'	6.71	1.50	1.41
35	BA	1180	A	N7-C5	-6.71	1.35	1.39
2	AB	4	U	C4'-O4'	-6.71	1.36	1.45
2	AB	515	A	N7-C5	-6.71	1.35	1.39
2	AB	1171	G	C8-N7	-6.71	1.26	1.30
2	AB	2624	G	C5'-C4'	6.71	1.59	1.51
2	AB	240	C	C4-N4	6.71	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	555	G	C2'-C1'	6.71	1.60	1.53
2	AB	1649	G	C2'-C1'	6.71	1.60	1.53
2	AB	1764	C	P-O5'	6.71	1.66	1.59
2	AB	2767	C	N3-C4	6.71	1.38	1.33
2	AB	2881	U	C4-C5	6.71	1.49	1.43
35	BA	1023	U	C4'-O4'	-6.71	1.36	1.45
2	AB	899	A	C5-C4	6.71	1.43	1.38
2	AB	1799	G	C8-N7	-6.71	1.26	1.30
2	AB	2193	G	N7-C5	6.71	1.43	1.39
35	BA	1524	C	P-O5'	-6.71	1.53	1.59
2	AB	189	G	O3'-P	6.70	1.69	1.61
2	AB	681	G	P-O5'	6.70	1.66	1.59
2	AB	2855	C	C5-C6	6.70	1.39	1.34
35	BA	55	A	C6-N1	6.70	1.40	1.35
2	AB	912	C	C2-N3	6.70	1.41	1.35
2	AB	994	C	C2-N3	6.70	1.41	1.35
2	AB	2412	A	C6-N6	6.70	1.39	1.33
2	AB	2567	G	O3'-P	6.70	1.69	1.61
35	BA	534	U	N3-C4	6.70	1.44	1.38
35	BA	1517	G	C5-C4	-6.70	1.33	1.38
37	BC	13	A	C4'-O4'	-6.70	1.36	1.45
1	AA	108	A	C5-C4	-6.70	1.34	1.38
2	AB	848	C	C4-C5	6.70	1.48	1.43
2	AB	1446	C	N1-C6	-6.70	1.33	1.37
35	BA	55	A	N7-C5	6.70	1.43	1.39
2	AB	801	G	C8-N7	6.70	1.34	1.30
2	AB	2359	C	C1'-N1	6.70	1.58	1.48
35	BA	1252	A	O3'-P	6.70	1.69	1.61
2	AB	2863	C	C3'-C2'	6.70	1.60	1.52
35	BA	76	G	O3'-P	6.70	1.69	1.61
2	AB	842	U	O4'-C1'	6.69	1.50	1.41
2	AB	1482	G	C4'-O4'	-6.69	1.36	1.45
2	AB	1622	G	C8-N7	6.69	1.34	1.30
2	AB	2168	G	N7-C5	-6.69	1.35	1.39
2	AB	2286	G	C6-N1	6.69	1.44	1.39
35	BA	724	G	C6-N1	6.69	1.44	1.39
35	BA	1181	G	N3-C4	6.69	1.40	1.35
2	AB	344	A	N7-C5	-6.69	1.35	1.39
2	AB	1077	A	P-O5'	-6.69	1.53	1.59
2	AB	2597	G	C5-C4	-6.69	1.33	1.38
2	AB	2769	U	N1-C2	6.69	1.44	1.38
2	AB	2791	G	C4'-O4'	-6.69	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	646	G	C4'-C3'	-6.69	1.45	1.53
35	BA	674	G	P-O5'	6.69	1.66	1.59
2	AB	986	C	P-O5'	6.69	1.66	1.59
2	AB	2473	U	C2-N3	6.69	1.42	1.37
35	BA	992	U	C2-N3	6.69	1.42	1.37
2	AB	149	A	N3-C4	6.69	1.38	1.34
2	AB	640	C	C4'-C3'	-6.69	1.45	1.53
2	AB	2143	C	P-O5'	6.69	1.66	1.59
35	BA	403	C	C4-C5	6.69	1.48	1.43
35	BA	791	G	N9-C8	-6.69	1.33	1.37
2	AB	74	A	C2'-O2'	-6.69	1.32	1.41
2	AB	584	C	N3-C4	6.69	1.38	1.33
35	BA	946	A	N7-C5	-6.69	1.35	1.39
35	BA	1200	C	N1-C2	6.69	1.46	1.40
35	BA	1411	C	N1-C6	6.69	1.41	1.37
2	AB	890	C	N3-C4	6.68	1.38	1.33
35	BA	149	A	O3'-P	6.68	1.69	1.61
35	BA	1432	G	C5'-C4'	6.68	1.59	1.51
2	AB	1295	C	C4-C5	6.68	1.48	1.43
2	AB	2136	G	C2'-O2'	6.68	1.50	1.41
2	AB	2382	G	O3'-P	6.68	1.69	1.61
2	AB	2391	G	N7-C5	-6.68	1.35	1.39
2	AB	2748	A	O3'-P	6.68	1.69	1.61
35	BA	809	G	P-O5'	6.68	1.66	1.59
35	BA	767	A	P-O5'	6.68	1.66	1.59
2	AB	441	U	N1-C6	-6.68	1.31	1.38
2	AB	685	A	C6-N6	6.68	1.39	1.33
2	AB	1689	A	C6-N6	6.68	1.39	1.33
2	AB	2625	G	N1-C2	6.68	1.43	1.37
35	BA	1422	G	N3-C4	-6.68	1.30	1.35
2	AB	25	U	N1-C2	6.68	1.44	1.38
2	AB	215	G	O3'-P	-6.68	1.53	1.61
35	BA	116	A	N9-C4	6.68	1.41	1.37
35	BA	432	A	N3-C4	6.68	1.38	1.34
35	BA	506	G	C5-C4	-6.68	1.33	1.38
36	BB	13	C	C4'-O4'	-6.68	1.36	1.45
38	BD	75	C	O3'-P	6.68	1.69	1.61
2	AB	1210	G	N3-C4	6.68	1.40	1.35
35	BA	59	A	C5-C6	6.68	1.47	1.41
35	BA	205	A	N1-C2	-6.68	1.28	1.34
35	BA	603	U	O3'-P	6.68	1.69	1.61
35	BA	902	G	C2-N3	6.68	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1080	A	N7-C5	6.68	1.43	1.39
35	BA	1314	C	C4-C5	6.68	1.48	1.43
2	AB	90	U	C2-N3	6.67	1.42	1.37
2	AB	292	U	C2-N3	6.67	1.42	1.37
2	AB	1050	A	N3-C4	6.67	1.38	1.34
2	AB	1094	U	C4'-C3'	6.67	1.60	1.53
2	AB	1805	A	N9-C8	-6.67	1.32	1.37
2	AB	1840	G	N9-C8	6.67	1.42	1.37
35	BA	360	G	C2-N3	6.67	1.38	1.32
35	BA	728	A	C5-C6	6.67	1.47	1.41
35	BA	1124	G	N7-C5	6.67	1.43	1.39
2	AB	2221	G	N3-C4	6.67	1.40	1.35
1	AA	40	U	C3'-C2'	6.67	1.60	1.52
2	AB	1390	U	P-O5'	6.67	1.66	1.59
2	AB	2344	U	O3'-P	6.67	1.69	1.61
2	AB	2745	C	C4'-O4'	-6.67	1.36	1.45
35	BA	1009	U	C4-O4	-6.67	1.18	1.23
2	AB	2632	A	C2'-O2'	6.67	1.50	1.41
2	AB	649	G	P-O5'	6.67	1.66	1.59
2	AB	2867	G	O4'-C1'	6.67	1.50	1.41
35	BA	1129	C	P-O5'	6.67	1.66	1.59
38	BD	6	G	C6-O6	-6.67	1.18	1.24
2	AB	569	U	C2-O2	6.67	1.28	1.22
2	AB	823	C	N1-C6	6.67	1.41	1.37
2	AB	861	A	C5'-C4'	6.67	1.59	1.51
2	AB	882	G	C5-C6	6.67	1.49	1.42
2	AB	2894	G	C6-N1	-6.67	1.34	1.39
2	AB	862	G	N9-C4	6.67	1.43	1.38
2	AB	2854	G	N9-C4	6.67	1.43	1.38
35	BA	1174	G	N7-C5	-6.67	1.35	1.39
35	BA	1222	G	C5-C4	-6.67	1.33	1.38
2	AB	2519	U	C4'-O4'	-6.66	1.36	1.45
2	AB	2778	A	P-O5'	6.66	1.66	1.59
35	BA	349	A	N7-C5	-6.66	1.35	1.39
35	BA	749	A	C6-N1	-6.66	1.30	1.35
35	BA	1016	A	C8-N7	-6.66	1.26	1.31
2	AB	2095	A	P-O5'	6.66	1.66	1.59
35	BA	752	G	C4'-C3'	6.66	1.60	1.53
2	AB	197	A	N7-C5	-6.66	1.35	1.39
2	AB	967	U	P-O5'	6.66	1.66	1.59
2	AB	1285	A	N3-C4	6.66	1.38	1.34
2	AB	1317	G	C6-O6	6.66	1.30	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2610	C	C5'-C4'	6.66	1.59	1.51
2	AB	2894	G	C8-N7	6.66	1.34	1.30
35	BA	545	C	C5'-C4'	6.66	1.59	1.51
35	BA	833	G	C8-N7	6.66	1.34	1.30
2	AB	238	C	O3'-P	6.66	1.69	1.61
2	AB	605	G	N9-C8	-6.66	1.33	1.37
2	AB	1745	A	N1-C2	-6.66	1.28	1.34
35	BA	1174	G	P-O5'	6.66	1.66	1.59
35	BA	1342	C	C2-N3	6.66	1.41	1.35
2	AB	125	A	N3-C4	6.66	1.38	1.34
2	AB	1303	G	C4'-C3'	-6.66	1.45	1.53
2	AB	2667	C	C4-N4	-6.66	1.27	1.33
35	BA	842	U	C2-N3	6.66	1.42	1.37
2	AB	763	G	N1-C2	6.66	1.43	1.37
2	AB	1381	G	O3'-P	6.66	1.69	1.61
2	AB	1963	U	O4'-C1'	6.66	1.50	1.41
35	BA	424	G	C5-C6	6.66	1.49	1.42
2	AB	1790	C	C2-N3	6.65	1.41	1.35
35	BA	448	A	P-O5'	6.65	1.66	1.59
2	AB	570	G	C6-N1	6.65	1.44	1.39
2	AB	897	C	N1-C6	6.65	1.41	1.37
2	AB	2087	G	C2-N3	6.65	1.38	1.32
2	AB	2146	C	N1-C6	6.65	1.41	1.37
2	AB	2253	G	O3'-P	6.65	1.69	1.61
2	AB	2479	U	N1-C6	6.65	1.44	1.38
2	AB	926	G	C2-N3	6.65	1.38	1.32
3	AC	208	TYR	CG-CD1	6.65	1.47	1.39
35	BA	58	C	N1-C6	6.65	1.41	1.37
35	BA	415	A	C5'-C4'	6.65	1.59	1.51
35	BA	751	U	N1-C2	6.65	1.44	1.38
35	BA	851	G	C5-C6	6.65	1.49	1.42
2	AB	2140	G	C6-N1	-6.65	1.34	1.39
35	BA	85	U	N3-C4	6.65	1.44	1.38
1	AA	69	G	N7-C5	-6.65	1.35	1.39
2	AB	1197	G	N1-C2	6.65	1.43	1.37
2	AB	1436	G	C4'-O4'	-6.65	1.36	1.45
2	AB	1463	C	C5-C6	6.65	1.39	1.34
2	AB	1809	A	C3'-C2'	6.65	1.60	1.52
2	AB	2102	G	P-O5'	6.65	1.66	1.59
2	AB	2350	C	C4-C5	6.65	1.48	1.43
2	AB	2425	A	N7-C5	6.65	1.43	1.39
2	AB	2568	U	N1-C6	-6.65	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2736	A	N9-C8	6.65	1.43	1.37
2	AB	1161	C	C5-C6	6.65	1.39	1.34
35	BA	14	U	C2-N3	6.65	1.42	1.37
35	BA	1457	G	O3'-P	6.65	1.69	1.61
35	BA	1499	A	P-O5'	-6.65	1.53	1.59
38	BD	47	A	P-O5'	6.65	1.66	1.59
2	AB	1021	A	C6-N1	-6.64	1.30	1.35
35	BA	792	A	N9-C8	6.64	1.43	1.37
35	BA	997	U	P-O5'	6.64	1.66	1.59
2	AB	831	G	C4'-C3'	6.64	1.60	1.53
2	AB	1470	A	C4'-O4'	-6.64	1.36	1.45
2	AB	2642	G	C2'-C1'	-6.64	1.46	1.53
35	BA	296	U	O4'-C1'	6.64	1.50	1.41
35	BA	480	U	C4-C5	6.64	1.49	1.43
35	BA	906	A	C4'-C3'	6.64	1.60	1.53
35	BA	1168	U	C4'-O4'	-6.64	1.36	1.45
2	AB	304	U	N3-C4	6.64	1.44	1.38
2	AB	359	G	C5-C6	6.64	1.49	1.42
2	AB	412	A	P-O5'	6.64	1.66	1.59
2	AB	591	U	P-O5'	-6.64	1.53	1.59
2	AB	1228	G	N7-C5	6.64	1.43	1.39
2	AB	1306	C	C2'-C1'	-6.64	1.46	1.53
2	AB	1506	U	C2'-C1'	6.64	1.60	1.53
2	AB	1718	G	N1-C2	6.64	1.43	1.37
2	AB	1881	C	C5-C6	6.64	1.39	1.34
2	AB	2327	A	N7-C5	-6.64	1.35	1.39
35	BA	150	U	C2-N3	6.64	1.42	1.37
35	BA	850	U	O3'-P	6.64	1.69	1.61
38	BD	50	G	C2'-O2'	6.64	1.50	1.41
2	AB	262	A	N3-C4	6.64	1.38	1.34
2	AB	976	G	C2-N3	6.64	1.38	1.32
2	AB	2293	G	C2-N3	6.64	1.38	1.32
2	AB	2845	U	N1-C2	6.64	1.44	1.38
2	AB	857	G	N1-C2	6.64	1.43	1.37
2	AB	2315	G	C6-N1	6.64	1.44	1.39
2	AB	531	C	P-O5'	6.63	1.66	1.59
2	AB	1384	A	N9-C8	-6.63	1.32	1.37
35	BA	149	A	C5'-C4'	6.63	1.59	1.51
35	BA	1151	A	C6-N6	6.63	1.39	1.33
55	BU	3	TYR	CE2-CZ	6.63	1.47	1.38
36	BB	34	C	O4'-C1'	6.63	1.50	1.41
2	AB	5	A	C6-N6	6.63	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1541	C	N3-C4	6.63	1.38	1.33
2	AB	2490	G	C8-N7	-6.63	1.26	1.30
35	BA	1258	G	C8-N7	-6.63	1.26	1.30
35	BA	1358	U	P-O5'	6.63	1.66	1.59
2	AB	376	G	C2-N3	6.63	1.38	1.32
2	AB	1022	G	N9-C8	-6.63	1.33	1.37
2	AB	1086	A	C4'-C3'	6.63	1.60	1.53
35	BA	419	C	N3-C4	6.63	1.38	1.33
35	BA	654	G	C2-N3	6.63	1.38	1.32
2	AB	805	G	C8-N7	-6.63	1.26	1.30
2	AB	1442	U	C5-C6	6.63	1.40	1.34
2	AB	1682	G	C6-N1	6.63	1.44	1.39
2	AB	1984	G	N7-C5	6.63	1.43	1.39
2	AB	2226	C	C5'-C4'	6.63	1.59	1.51
2	AB	2387	U	C4'-O4'	-6.63	1.36	1.45
2	AB	2492	U	C4-C5	6.63	1.49	1.43
35	BA	1222	G	N7-C5	6.63	1.43	1.39
35	BA	1309	G	N9-C4	6.63	1.43	1.38
35	BA	1457	G	C2-N3	6.63	1.38	1.32
1	AA	73	A	C5-C4	-6.63	1.34	1.38
2	AB	93	G	C6-N1	6.63	1.44	1.39
2	AB	600	G	P-O5'	6.63	1.66	1.59
2	AB	2390	U	C2-N3	6.63	1.42	1.37
35	BA	1202	U	N1-C2	6.63	1.44	1.38
36	BB	30	G	C8-N7	6.63	1.34	1.30
2	AB	1224	U	N3-C4	6.62	1.44	1.38
2	AB	2364	C	C3'-C2'	6.62	1.60	1.52
35	BA	38	G	C2-N3	6.62	1.38	1.32
35	BA	458	U	C4-C5	6.62	1.49	1.43
2	AB	759	G	N1-C2	6.62	1.43	1.37
2	AB	2750	A	C5-C6	6.62	1.47	1.41
35	BA	239	U	N1-C2	6.62	1.44	1.38
35	BA	1082	A	N9-C8	-6.62	1.32	1.37
2	AB	6	A	C4'-O4'	-6.62	1.36	1.45
2	AB	2739	U	C4'-O4'	-6.62	1.36	1.45
2	AB	2807	U	O4'-C1'	6.62	1.50	1.41
2	AB	265	A	C2-N3	6.62	1.39	1.33
2	AB	2632	A	C6-N1	-6.62	1.30	1.35
35	BA	607	A	N9-C8	-6.62	1.32	1.37
45	BK	79	ARG	NE-CZ	6.62	1.41	1.33
2	AB	482	A	N7-C5	-6.62	1.35	1.39
2	AB	1757	A	C3'-C2'	6.62	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	446	G	C5-C4	6.62	1.43	1.38
38	BD	27	G	C4'-O4'	-6.62	1.36	1.45
2	AB	730	A	C8-N7	-6.62	1.26	1.31
2	AB	1383	A	C4'-O4'	-6.62	1.36	1.45
2	AB	2176	A	N3-C4	6.62	1.38	1.34
2	AB	732	C	P-O5'	6.62	1.66	1.59
2	AB	855	G	C3'-C2'	-6.62	1.45	1.52
2	AB	1425	G	C5-C4	6.62	1.43	1.38
35	BA	277	C	O3'-P	6.62	1.69	1.61
1	AA	104	A	N3-C4	6.61	1.38	1.34
2	AB	715	A	C4'-O4'	-6.61	1.36	1.45
2	AB	834	G	C5-C6	-6.61	1.35	1.42
2	AB	963	U	C2-N3	6.61	1.42	1.37
2	AB	975	A	N3-C4	6.61	1.38	1.34
2	AB	984	A	C6-N6	6.61	1.39	1.33
35	BA	142	G	N3-C4	6.61	1.40	1.35
35	BA	292	G	O3'-P	6.61	1.69	1.61
35	BA	950	U	P-O5'	6.61	1.66	1.59
35	BA	1031	C	C4-C5	6.61	1.48	1.43
35	BA	1339	A	P-O5'	6.61	1.66	1.59
35	BA	1355	G	N1-C2	6.61	1.43	1.37
2	AB	1088	A	N9-C4	6.61	1.41	1.37
2	AB	1254	A	C6-N6	-6.61	1.28	1.33
2	AB	1297	C	P-O5'	6.61	1.66	1.59
35	BA	439	U	C4'-C3'	-6.61	1.45	1.53
35	BA	940	C	C5'-C4'	6.61	1.59	1.51
35	BA	1376	U	C2-N3	6.61	1.42	1.37
36	BB	26	A	O3'-P	6.61	1.69	1.61
2	AB	774	G	C3'-C2'	6.61	1.60	1.52
35	BA	996	A	C4'-O4'	-6.61	1.36	1.45
2	AB	489	G	C3'-C2'	6.61	1.60	1.52
2	AB	921	C	P-O5'	-6.61	1.53	1.59
2	AB	1232	G	C6-N1	-6.61	1.34	1.39
2	AB	1372	U	C4'-C3'	6.61	1.60	1.53
2	AB	1560	G	C5'-C4'	6.61	1.59	1.51
2	AB	1810	A	N3-C4	6.61	1.38	1.34
35	BA	222	C	C4'-O4'	-6.61	1.36	1.45
35	BA	292	G	N7-C5	-6.61	1.35	1.39
2	AB	1372	U	C4-C5	6.61	1.49	1.43
2	AB	1681	G	C5-C6	6.61	1.49	1.42
2	AB	2312	U	C4-O4	-6.61	1.18	1.23
35	BA	146	G	P-O5'	6.61	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	147	G	C6-N1	-6.61	1.34	1.39
35	BA	797	C	C4-N4	6.61	1.39	1.33
35	BA	1523	G	N3-C4	-6.61	1.30	1.35
36	BB	18	G	C2-N3	6.61	1.38	1.32
42	BH	19	ARG	CZ-NH1	6.61	1.41	1.33
2	AB	675	A	N7-C5	6.60	1.43	1.39
36	BB	43	G	N1-C2	6.60	1.43	1.37
2	AB	1253	A	N3-C4	6.60	1.38	1.34
2	AB	1283	G	C2-N3	6.60	1.38	1.32
2	AB	1499	C	C2-O2	-6.60	1.18	1.24
2	AB	1667	G	N7-C5	-6.60	1.35	1.39
2	AB	1731	G	C5'-C4'	6.60	1.59	1.51
2	AB	2878	U	C4-C5	6.60	1.49	1.43
2	AB	2856	A	P-O5'	6.60	1.66	1.59
35	BA	1311	A	C3'-C2'	-6.60	1.45	1.52
2	AB	2355	G	O4'-C1'	6.60	1.50	1.41
2	AB	2624	G	C4'-O4'	-6.60	1.36	1.45
35	BA	1457	G	C6-N1	-6.60	1.34	1.39
2	AB	121	G	C4'-O4'	-6.60	1.36	1.45
2	AB	508	A	C6-N1	-6.60	1.30	1.35
2	AB	669	G	C5-C6	6.60	1.49	1.42
2	AB	2737	G	O4'-C1'	6.60	1.50	1.41
35	BA	393	A	C4'-O4'	-6.60	1.36	1.45
35	BA	1045	C	C4-C5	6.60	1.48	1.43
1	AA	95	U	C2-N3	6.60	1.42	1.37
35	BA	1431	A	N1-C2	-6.60	1.28	1.34
2	AB	550	C	C2-N3	6.59	1.41	1.35
2	AB	609	A	C6-N1	-6.59	1.30	1.35
2	AB	1310	G	C6-N1	-6.59	1.34	1.39
36	BB	72	U	C2-N3	6.59	1.42	1.37
1	AA	28	C	C5-C6	6.59	1.39	1.34
2	AB	675	A	P-O5'	6.59	1.66	1.59
2	AB	2596	U	C5-C6	6.59	1.40	1.34
2	AB	1471	G	C4'-O4'	-6.59	1.36	1.45
35	BA	635	A	N7-C5	-6.59	1.35	1.39
35	BA	660	C	C2-N3	6.59	1.41	1.35
1	AA	33	G	O3'-P	6.59	1.69	1.61
2	AB	258	G	C5'-C4'	6.59	1.59	1.51
2	AB	578	G	C6-N1	-6.59	1.34	1.39
2	AB	2098	U	N1-C6	6.59	1.43	1.38
2	AB	2845	U	C2-N3	6.59	1.42	1.37
2	AB	378	C	C4-C5	6.59	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	622	G	N3-C4	-6.59	1.30	1.35
2	AB	794	A	N3-C4	6.59	1.38	1.34
2	AB	1185	G	C5-C6	6.59	1.49	1.42
2	AB	1457	U	C4-C5	6.59	1.49	1.43
2	AB	1723	G	N9-C8	6.59	1.42	1.37
35	BA	317	U	N1-C6	6.59	1.43	1.38
35	BA	857	C	C4-C5	-6.59	1.37	1.43
2	AB	759	G	C4'-C3'	-6.58	1.46	1.53
2	AB	977	G	C2'-C1'	6.58	1.60	1.53
2	AB	2480	C	C2-O2	-6.58	1.18	1.24
35	BA	1311	A	C8-N7	-6.58	1.26	1.31
2	AB	476	G	C4'-O4'	-6.58	1.36	1.45
2	AB	865	C	P-O5'	-6.58	1.53	1.59
2	AB	1010	A	N3-C4	6.58	1.38	1.34
2	AB	1157	G	N9-C8	6.58	1.42	1.37
2	AB	1195	G	N9-C4	6.58	1.43	1.38
2	AB	1470	A	C8-N7	-6.58	1.26	1.31
2	AB	2372	U	C2-O2	6.58	1.28	1.22
35	BA	655	A	C3'-C2'	6.58	1.60	1.52
35	BA	894	G	N9-C8	6.58	1.42	1.37
35	BA	1396	A	C5'-C4'	6.58	1.59	1.51
2	AB	259	G	C4'-O4'	-6.58	1.36	1.45
2	AB	388	G	P-O5'	6.58	1.66	1.59
2	AB	437	U	C4-O4	-6.58	1.18	1.23
2	AB	1125	G	C2-N3	6.58	1.38	1.32
2	AB	1467	U	C4'-O4'	-6.58	1.36	1.45
2	AB	2600	A	C5-C6	6.58	1.47	1.41
30	A3	34	GLY	N-CA	6.58	1.55	1.46
35	BA	980	C	P-O5'	6.58	1.66	1.59
35	BA	1162	C	C4'-O4'	-6.58	1.36	1.45
35	BA	1170	A	C6-N1	-6.58	1.30	1.35
35	BA	1328	C	O4'-C1'	6.58	1.50	1.41
35	BA	1389	C	N3-C4	6.58	1.38	1.33
38	BD	71	G	C6-N1	-6.58	1.34	1.39
35	BA	1284	C	P-O5'	6.58	1.66	1.59
2	AB	2376	A	C5-C4	-6.58	1.34	1.38
2	AB	943	A	C2'-C1'	6.58	1.60	1.53
10	AJ	30	ARG	CZ-NH1	6.58	1.41	1.33
35	BA	813	U	N3-C4	6.58	1.44	1.38
2	AB	173	A	N7-C5	6.58	1.43	1.39
2	AB	1795	C	C2'-O2'	6.58	1.50	1.41
2	AB	1862	G	C8-N7	6.58	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	910	C	C4'-O4'	-6.58	1.37	1.45
35	BA	949	A	N7-C5	6.58	1.43	1.39
35	BA	1216	A	P-O5'	-6.58	1.53	1.59
2	AB	752	A	C6-N1	-6.57	1.30	1.35
2	AB	1777	U	P-O5'	6.57	1.66	1.59
2	AB	2407	A	P-O5'	6.57	1.66	1.59
19	AS	23	TYR	CE2-CZ	6.57	1.47	1.38
35	BA	1186	G	C4'-C3'	-6.57	1.46	1.53
35	BA	1488	G	C5'-C4'	6.57	1.59	1.51
2	AB	1162	G	N7-C5	-6.57	1.35	1.39
2	AB	2401	U	N3-C4	6.57	1.44	1.38
35	BA	56	U	N1-C2	6.57	1.44	1.38
35	BA	818	G	C3'-C2'	6.57	1.60	1.52
2	AB	524	G	C5-C4	6.57	1.43	1.38
2	AB	1027	A	C4'-O4'	-6.57	1.37	1.45
2	AB	1364	G	N1-C2	6.57	1.43	1.37
2	AB	1395	A	N3-C4	6.57	1.38	1.34
2	AB	2549	G	O3'-P	6.57	1.69	1.61
35	BA	647	C	C2'-C1'	6.57	1.60	1.53
47	BM	49	PHE	CG-CD2	6.57	1.48	1.38
2	AB	952	G	C6-O6	-6.57	1.18	1.24
2	AB	1850	G	N9-C8	-6.57	1.33	1.37
2	AB	2494	G	O3'-P	6.57	1.69	1.61
2	AB	307	G	C5-C4	-6.57	1.33	1.38
2	AB	1550	C	O3'-P	-6.57	1.53	1.61
2	AB	2093	G	N9-C4	-6.57	1.32	1.38
2	AB	2588	G	N9-C8	-6.57	1.33	1.37
35	BA	281	G	N3-C4	6.57	1.40	1.35
35	BA	415	A	N9-C4	6.57	1.41	1.37
2	AB	287	G	N1-C2	6.57	1.43	1.37
2	AB	858	G	C5-C4	6.57	1.43	1.38
2	AB	883	G	C5'-C4'	6.57	1.59	1.51
2	AB	1882	U	P-O5'	6.57	1.66	1.59
35	BA	502	A	N9-C4	6.57	1.41	1.37
35	BA	805	C	C2'-C1'	6.57	1.60	1.53
35	BA	1356	G	N7-C5	6.57	1.43	1.39
2	AB	1754	A	C5-C4	-6.56	1.34	1.38
2	AB	105	C	C4-C5	6.56	1.48	1.43
2	AB	1653	G	N1-C2	6.56	1.43	1.37
2	AB	1669	A	C6-N1	-6.56	1.30	1.35
2	AB	2788	C	C3'-C2'	6.56	1.60	1.52
35	BA	260	G	C2-N3	6.56	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	822	U	C4-O4	-6.56	1.18	1.23
35	BA	1320	C	C5-C6	6.56	1.39	1.34
2	AB	1354	A	C6-N6	6.56	1.39	1.33
2	AB	2247	A	N9-C4	6.56	1.41	1.37
35	BA	181	A	C6-N1	-6.56	1.30	1.35
35	BA	776	G	O4'-C1'	6.56	1.50	1.41
2	AB	251	A	C8-N7	-6.56	1.26	1.31
2	AB	875	G	N3-C4	6.56	1.40	1.35
2	AB	1760	C	C2-O2	-6.56	1.18	1.24
2	AB	1908	C	C4-C5	6.56	1.48	1.43
2	AB	2870	C	C2-N3	6.56	1.41	1.35
35	BA	470	C	C2'-C1'	-6.56	1.46	1.53
35	BA	1375	A	N3-C4	6.56	1.38	1.34
2	AB	856	G	C5-C4	6.56	1.43	1.38
2	AB	1686	C	N1-C6	6.56	1.41	1.37
2	AB	2053	G	O3'-P	6.56	1.69	1.61
35	BA	556	C	C2-N3	6.56	1.41	1.35
35	BA	759	A	N9-C4	-6.56	1.33	1.37
35	BA	1110	A	C6-N1	-6.56	1.30	1.35
36	BB	42	G	O3'-P	6.56	1.69	1.61
2	AB	2321	U	C5-C6	6.56	1.40	1.34
35	BA	524	G	N1-C2	6.56	1.43	1.37
35	BA	839	C	C5-C6	6.56	1.39	1.34
35	BA	1260	G	O3'-P	6.56	1.69	1.61
2	AB	1052	C	C5'-C4'	6.55	1.59	1.51
2	AB	1337	G	C8-N7	6.55	1.34	1.30
2	AB	1691	C	C4-C5	6.55	1.48	1.43
2	AB	1785	A	N9-C8	6.55	1.43	1.37
2	AB	2414	G	C8-N7	-6.55	1.27	1.30
2	AB	2543	G	C2-N3	6.55	1.38	1.32
35	BA	129	A	C4'-O4'	-6.55	1.37	1.45
36	BB	63	C	C4-C5	6.55	1.48	1.43
2	AB	1625	C	P-O5'	-6.55	1.53	1.59
2	AB	2060	A	C5-C4	-6.55	1.34	1.38
2	AB	2083	G	N3-C4	6.55	1.40	1.35
2	AB	2230	G	N9-C4	6.55	1.43	1.38
35	BA	114	U	N3-C4	6.55	1.44	1.38
2	AB	2644	G	N3-C4	6.55	1.40	1.35
2	AB	2688	G	N9-C8	6.55	1.42	1.37
35	BA	1087	G	N1-C2	6.55	1.43	1.37
2	AB	1273	U	C4-C5	6.55	1.49	1.43
2	AB	2465	C	C4-C5	6.55	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	111	G	C2-N2	-6.55	1.28	1.34
35	BA	1483	A	O3'-P	6.55	1.69	1.61
2	AB	1839	G	C6-N1	6.55	1.44	1.39
35	BA	236	A	N7-C5	6.55	1.43	1.39
35	BA	745	G	C2'-C1'	-6.55	1.46	1.53
35	BA	1077	G	C6-N1	6.55	1.44	1.39
2	AB	866	A	N1-C2	-6.55	1.28	1.34
2	AB	2176	A	C2-N3	6.55	1.39	1.33
2	AB	2640	G	P-O5'	6.55	1.66	1.59
35	BA	149	A	N9-C8	6.55	1.43	1.37
2	AB	1131	G	P-O5'	6.54	1.66	1.59
2	AB	2858	C	P-O5'	6.54	1.66	1.59
35	BA	1045	C	C5'-C4'	6.54	1.59	1.51
2	AB	1329	U	P-O5'	-6.54	1.53	1.59
35	BA	81	A	C5-C4	-6.54	1.34	1.38
35	BA	762	U	N1-C2	6.54	1.44	1.38
35	BA	1311	A	C4'-C3'	6.54	1.60	1.53
2	AB	306	U	N1-C6	6.54	1.43	1.38
2	AB	589	U	C2'-C1'	6.54	1.60	1.53
2	AB	612	G	O3'-P	6.54	1.69	1.61
2	AB	1009	A	N3-C4	6.54	1.38	1.34
2	AB	1199	U	C3'-O3'	6.54	1.51	1.42
2	AB	1710	G	C5'-C4'	6.54	1.59	1.51
2	AB	2413	G	C5-C6	6.54	1.48	1.42
35	BA	109	A	C6-N6	-6.54	1.28	1.33
35	BA	495	A	N3-C4	-6.54	1.30	1.34
37	BC	30	U	C2-O2	6.54	1.28	1.22
2	AB	649	G	C6-N1	6.54	1.44	1.39
2	AB	1146	C	N3-C4	6.54	1.38	1.33
2	AB	2048	G	P-O5'	6.54	1.66	1.59
2	AB	711	G	C4'-O4'	-6.54	1.37	1.45
2	AB	802	A	N9-C8	6.54	1.43	1.37
2	AB	1583	A	P-O5'	6.54	1.66	1.59
2	AB	1704	C	C5'-C4'	6.54	1.59	1.51
2	AB	2000	C	C2-N3	6.54	1.41	1.35
10	AJ	69	GLU	CG-CD	6.54	1.61	1.51
2	AB	2022	U	N1-C2	6.54	1.44	1.38
35	BA	1430	A	N9-C4	6.54	1.41	1.37
2	AB	905	A	O3'-P	6.54	1.69	1.61
2	AB	1194	A	C6-N1	-6.54	1.30	1.35
2	AB	1589	U	C5'-C4'	6.54	1.59	1.51
2	AB	2250	G	C5'-C4'	6.54	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	52	A	N9-C4	-6.54	1.33	1.37
2	AB	183	C	C5-C6	6.53	1.39	1.34
2	AB	212	G	C2-N3	6.53	1.38	1.32
2	AB	1079	C	N1-C6	-6.53	1.33	1.37
35	BA	596	A	N3-C4	6.53	1.38	1.34
2	AB	2809	A	C5'-C4'	6.53	1.59	1.51
1	AA	47	C	P-O5'	6.53	1.66	1.59
2	AB	324	A	C4'-C3'	-6.53	1.46	1.53
2	AB	1685	C	N1-C6	6.53	1.41	1.37
2	AB	2213	U	C5-C6	6.53	1.40	1.34
2	AB	2267	A	N3-C4	6.53	1.38	1.34
2	AB	2543	G	P-O5'	6.53	1.66	1.59
35	BA	74	A	C5'-C4'	6.53	1.59	1.51
2	AB	689	A	C6-N1	6.53	1.40	1.35
2	AB	1674	G	C5'-C4'	6.53	1.59	1.51
2	AB	1929	G	C5'-C4'	6.53	1.59	1.51
35	BA	1274	A	C5-C6	-6.53	1.35	1.41
2	AB	1490	A	C2'-C1'	6.53	1.60	1.53
2	AB	2600	A	C6-N1	6.53	1.40	1.35
35	BA	53	A	N3-C4	6.53	1.38	1.34
35	BA	983	A	P-O5'	6.53	1.66	1.59
37	BC	30	U	N1-C2	6.53	1.44	1.38
2	AB	1452	G	C2'-C1'	6.53	1.60	1.53
2	AB	1661	G	C4'-O4'	-6.53	1.37	1.45
2	AB	2130	U	C5-C6	6.53	1.40	1.34
2	AB	2466	C	C2'-C1'	6.53	1.60	1.53
35	BA	937	A	O3'-P	-6.53	1.53	1.61
35	BA	1093	A	N3-C4	-6.53	1.30	1.34
2	AB	1916	A	C4'-C3'	6.52	1.60	1.53
35	BA	347	G	O3'-P	6.52	1.69	1.61
2	AB	1155	A	N9-C8	-6.52	1.32	1.37
2	AB	2848	G	P-O5'	6.52	1.66	1.59
35	BA	794	A	C5'-C4'	6.52	1.59	1.51
2	AB	371	A	N3-C4	6.52	1.38	1.34
35	BA	88	U	N3-C4	6.52	1.44	1.38
35	BA	1187	G	N7-C5	6.52	1.43	1.39
2	AB	1543	G	C2-N3	6.52	1.38	1.32
2	AB	2003	A	N3-C4	6.52	1.38	1.34
2	AB	2841	C	C2-N3	6.52	1.41	1.35
35	BA	1291	U	N1-C2	6.52	1.44	1.38
2	AB	440	C	P-O5'	6.52	1.66	1.59
2	AB	1065	U	N1-C2	6.52	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1215	G	N7-C5	6.52	1.43	1.39
35	BA	102	G	N3-C4	6.52	1.40	1.35
35	BA	385	C	N1-C6	-6.52	1.33	1.37
35	BA	976	G	C4'-O4'	-6.52	1.37	1.45
50	BP	45	SER	CA-CB	-6.52	1.43	1.52
2	AB	751	A	N9-C8	6.51	1.43	1.37
2	AB	939	G	C6-N1	6.51	1.44	1.39
2	AB	1003	G	N9-C8	-6.51	1.33	1.37
2	AB	2895	G	P-O5'	6.51	1.66	1.59
35	BA	213	G	C5-C6	6.51	1.48	1.42
1	AA	83	G	O3'-P	6.51	1.69	1.61
2	AB	216	A	C2'-O2'	6.51	1.50	1.41
35	BA	589	U	P-O5'	6.51	1.66	1.59
35	BA	1038	C	C2'-C1'	6.51	1.60	1.53
1	AA	21	G	C5-C4	6.51	1.43	1.38
2	AB	1572	A	N9-C8	6.51	1.43	1.37
2	AB	2466	C	O3'-P	6.51	1.69	1.61
2	AB	976	G	C8-N7	6.51	1.34	1.30
2	AB	1100	C	P-O5'	6.51	1.66	1.59
2	AB	1359	A	C6-N1	6.51	1.40	1.35
2	AB	2530	A	N9-C4	6.51	1.41	1.37
2	AB	2697	G	C3'-C2'	-6.51	1.45	1.52
35	BA	596	A	P-O5'	6.51	1.66	1.59
1	AA	47	C	C4-N4	6.50	1.39	1.33
2	AB	395	U	N1-C6	6.50	1.43	1.38
2	AB	538	A	P-O5'	6.50	1.66	1.59
2	AB	956	G	O3'-P	6.50	1.69	1.61
2	AB	1859	U	P-O5'	6.50	1.66	1.59
2	AB	1923	U	C5'-C4'	6.50	1.59	1.51
35	BA	184	G	C2-N3	6.50	1.38	1.32
50	BP	97	ARG	NE-CZ	6.50	1.41	1.33
2	AB	444	C	O3'-P	6.50	1.69	1.61
2	AB	580	U	N1-C2	6.50	1.44	1.38
2	AB	1279	G	C8-N7	6.50	1.34	1.30
2	AB	1621	U	C5-C6	6.50	1.40	1.34
2	AB	1924	C	N1-C2	6.50	1.46	1.40
2	AB	2539	C	C5-C6	6.50	1.39	1.34
35	BA	82	G	N9-C4	-6.50	1.32	1.38
35	BA	242	G	C6-N1	-6.50	1.34	1.39
35	BA	686	U	O3'-P	6.50	1.69	1.61
35	BA	880	C	P-O5'	-6.50	1.53	1.59
35	BA	973	G	N7-C5	6.50	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1067	A	C6-N6	6.50	1.39	1.33
35	BA	1204	A	N1-C2	-6.50	1.28	1.34
1	AA	55	U	C2-N3	6.50	1.42	1.37
2	AB	2744	G	C6-N1	6.50	1.44	1.39
2	AB	278	A	N9-C4	6.50	1.41	1.37
2	AB	844	A	N7-C5	6.50	1.43	1.39
2	AB	1468	U	C4-O4	-6.50	1.18	1.23
2	AB	1539	U	C2'-C1'	6.50	1.60	1.53
2	AB	2276	G	P-O5'	6.50	1.66	1.59
2	AB	2707	U	C4-O4	-6.50	1.18	1.23
35	BA	659	U	C5'-C4'	6.50	1.59	1.51
35	BA	971	G	N3-C4	6.50	1.40	1.35
35	BA	1132	C	N3-C4	-6.50	1.29	1.33
2	AB	681	G	C2'-C1'	6.50	1.60	1.53
2	AB	2261	C	N1-C6	6.50	1.41	1.37
2	AB	2489	U	N3-C4	6.50	1.44	1.38
36	BB	63	C	P-O5'	6.50	1.66	1.59
35	BA	711	G	O3'-P	6.50	1.69	1.61
2	AB	270	A	N9-C4	6.49	1.41	1.37
2	AB	730	A	P-O5'	6.49	1.66	1.59
2	AB	1903	G	C2-N2	-6.49	1.28	1.34
2	AB	1925	C	C5'-C4'	6.49	1.59	1.51
35	BA	39	G	C8-N7	-6.49	1.27	1.30
35	BA	796	C	C2'-C1'	-6.49	1.46	1.53
2	AB	699	A	C8-N7	-6.49	1.27	1.31
2	AB	1889	A	C8-N7	-6.49	1.27	1.31
2	AB	1968	G	C5'-C4'	6.49	1.59	1.51
35	BA	128	G	N1-C2	6.49	1.43	1.37
35	BA	295	C	C3'-C2'	-6.49	1.45	1.52
1	AA	105	G	C4'-O4'	-6.49	1.37	1.45
2	AB	152	A	C6-N6	-6.49	1.28	1.33
2	AB	1084	A	P-O5'	6.49	1.66	1.59
2	AB	1532	A	C3'-C2'	-6.49	1.45	1.52
2	AB	1985	C	C4'-C3'	-6.49	1.46	1.53
35	BA	177	G	C4'-O4'	-6.49	1.37	1.45
35	BA	208	U	C2-O2	6.49	1.28	1.22
35	BA	390	U	C4-C5	6.49	1.49	1.43
35	BA	596	A	C5-C4	-6.49	1.34	1.38
35	BA	1071	C	C5-C6	6.49	1.39	1.34
35	BA	1109	C	N3-C4	6.49	1.38	1.33
36	BB	51	G	C2'-C1'	6.49	1.60	1.53
2	AB	1335	C	N1-C6	6.49	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2289	G	C3'-C2'	6.49	1.60	1.52
35	BA	1270	G	C4'-O4'	-6.49	1.37	1.45
35	BA	1355	G	C2-N3	6.49	1.38	1.32
35	BA	621	A	C2'-C1'	6.49	1.60	1.53
1	AA	21	G	C8-N7	6.49	1.34	1.30
2	AB	1120	G	N7-C5	6.49	1.43	1.39
2	AB	2691	C	C4-C5	6.49	1.48	1.43
35	BA	835	U	C4-O4	-6.49	1.18	1.23
35	BA	847	G	N1-C2	6.49	1.43	1.37
35	BA	990	C	P-O5'	6.49	1.66	1.59
35	BA	1234	C	C3'-C2'	-6.49	1.45	1.52
35	BA	1537	U	C5-C6	6.49	1.40	1.34
38	BD	3	C	P-O5'	-6.49	1.53	1.59
2	AB	906	U	C5'-C4'	6.48	1.59	1.51
2	AB	2769	U	P-O5'	6.48	1.66	1.59
35	BA	648	A	C5-C4	-6.48	1.34	1.38
35	BA	1324	A	N7-C5	-6.48	1.35	1.39
2	AB	1389	G	N9-C4	6.48	1.43	1.38
2	AB	2698	U	C2'-O2'	-6.48	1.33	1.41
35	BA	622	A	C4'-C3'	6.48	1.60	1.53
35	BA	906	A	C5-C4	6.48	1.43	1.38
2	AB	1910	G	C2-N2	-6.48	1.28	1.34
2	AB	2377	A	N9-C8	-6.48	1.32	1.37
2	AB	2688	G	N7-C5	-6.48	1.35	1.39
35	BA	794	A	N7-C5	6.48	1.43	1.39
2	AB	810	U	C4-C5	6.48	1.49	1.43
2	AB	2308	G	C2'-O2'	-6.48	1.33	1.41
35	BA	776	G	C2-N2	-6.48	1.28	1.34
37	BC	55	A	N3-C4	6.48	1.38	1.34
1	AA	96	G	C8-N7	-6.48	1.27	1.30
2	AB	84	A	C6-N6	6.48	1.39	1.33
2	AB	116	C	C2'-C1'	-6.48	1.46	1.53
2	AB	591	U	C3'-C2'	6.48	1.60	1.52
2	AB	1049	C	C4-N4	-6.48	1.28	1.33
2	AB	1442	U	P-O5'	-6.48	1.53	1.59
2	AB	1702	G	C5-C4	-6.48	1.33	1.38
2	AB	1851	U	C4-O4	6.48	1.28	1.23
35	BA	1148	U	C1'-N1	6.48	1.58	1.48
2	AB	2431	U	C5'-C4'	6.48	1.59	1.51
2	AB	2849	U	P-O5'	6.48	1.66	1.59
35	BA	517	G	O4'-C1'	-6.48	1.33	1.41
36	BB	24	G	N3-C4	6.48	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	86	G	P-O5'	6.47	1.66	1.59
2	AB	58	G	C8-N7	6.47	1.34	1.30
2	AB	381	G	C4'-O4'	-6.47	1.37	1.45
2	AB	499	U	P-O5'	6.47	1.66	1.59
2	AB	661	A	C4'-O4'	-6.47	1.37	1.45
2	AB	2073	C	C2-N3	6.47	1.41	1.35
2	AB	2208	C	N3-C4	6.47	1.38	1.33
2	AB	2292	U	N1-C2	6.47	1.44	1.38
29	A2	9	TYR	CG-CD1	6.47	1.47	1.39
35	BA	649	A	O3'-P	6.47	1.69	1.61
35	BA	818	G	C6-N1	-6.47	1.35	1.39
35	BA	1057	G	N9-C4	-6.47	1.32	1.38
35	BA	1421	G	N3-C4	6.47	1.40	1.35
2	AB	694	U	P-O5'	6.47	1.66	1.59
2	AB	838	C	C4-C5	-6.47	1.37	1.43
2	AB	1223	G	O3'-P	6.47	1.69	1.61
2	AB	1665	A	N9-C8	6.47	1.43	1.37
2	AB	2491	U	P-O5'	6.47	1.66	1.59
2	AB	2632	A	C5-C6	-6.47	1.35	1.41
2	AB	2782	G	N9-C8	-6.47	1.33	1.37
27	A0	17	GLU	CG-CD	6.47	1.61	1.51
35	BA	193	C	C4-N4	6.47	1.39	1.33
35	BA	337	G	O3'-P	-6.47	1.53	1.61
2	AB	151	C	C2'-O2'	6.47	1.50	1.41
2	AB	1892	C	C4-C5	6.47	1.48	1.43
2	AB	2384	U	C4-C5	6.47	1.49	1.43
2	AB	2420	C	O4'-C1'	6.47	1.50	1.41
35	BA	446	G	O3'-P	6.47	1.69	1.61
35	BA	526	C	C4'-O4'	-6.47	1.37	1.45
35	BA	643	C	N3-C4	6.47	1.38	1.33
2	AB	30	G	C4'-O4'	-6.47	1.37	1.45
2	AB	499	U	N3-C4	6.47	1.44	1.38
2	AB	1399	C	C5'-C4'	6.47	1.59	1.51
2	AB	1438	U	P-O5'	6.47	1.66	1.59
35	BA	24	U	O4'-C1'	6.47	1.50	1.41
35	BA	155	A	C4'-C3'	6.47	1.60	1.53
35	BA	334	C	C3'-C2'	-6.47	1.45	1.52
35	BA	340	U	O3'-P	6.47	1.69	1.61
2	AB	728	G	N9-C4	-6.47	1.32	1.38
2	AB	1072	C	C5'-C4'	6.47	1.59	1.51
2	AB	1316	U	C5-C6	6.47	1.40	1.34
2	AB	1548	A	C5-C6	6.47	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2162	G	C2-N3	6.47	1.38	1.32
2	AB	2679	A	C3'-C2'	-6.47	1.45	1.52
37	BC	46	C	C4-N4	6.47	1.39	1.33
2	AB	512	G	N1-C2	6.46	1.43	1.37
2	AB	580	U	C4'-O4'	-6.46	1.37	1.45
2	AB	2635	A	C2'-C1'	-6.46	1.46	1.53
35	BA	302	G	C2-N3	6.46	1.38	1.32
35	BA	706	A	C4'-C3'	-6.46	1.46	1.53
35	BA	918	A	C3'-C2'	6.46	1.60	1.52
2	AB	2369	A	C2-N3	6.46	1.39	1.33
36	BB	44	G	P-O5'	6.46	1.66	1.59
2	AB	174	U	O4'-C1'	6.46	1.50	1.41
2	AB	1941	C	O4'-C1'	6.46	1.50	1.41
35	BA	147	G	N3-C4	6.46	1.40	1.35
35	BA	278	G	C4'-O4'	-6.46	1.37	1.45
35	BA	697	U	C4-O4	-6.46	1.18	1.23
35	BA	1034	G	N7-C5	6.46	1.43	1.39
35	BA	1320	C	C2-N3	-6.46	1.30	1.35
2	AB	605	G	C6-O6	-6.46	1.18	1.24
2	AB	1155	A	C6-N1	-6.46	1.31	1.35
1	AA	80	U	C2-N3	6.46	1.42	1.37
2	AB	27	G	N3-C4	-6.46	1.30	1.35
2	AB	196	A	N3-C4	6.46	1.38	1.34
2	AB	1283	G	N9-C4	6.46	1.43	1.38
2	AB	1846	G	N9-C8	6.46	1.42	1.37
2	AB	2297	A	N7-C5	-6.46	1.35	1.39
35	BA	700	G	C3'-O3'	-6.46	1.33	1.42
2	AB	259	G	N1-C2	6.46	1.43	1.37
2	AB	1876	A	C6-N6	-6.46	1.28	1.33
2	AB	2809	A	C6-N1	6.46	1.40	1.35
35	BA	22	G	C6-N1	-6.46	1.35	1.39
35	BA	305	G	N9-C4	6.46	1.43	1.38
35	BA	827	U	C4-O4	-6.46	1.18	1.23
2	AB	513	A	P-O5'	6.46	1.66	1.59
2	AB	2411	A	C6-N6	-6.46	1.28	1.33
2	AB	2876	G	C5-C4	-6.46	1.33	1.38
35	BA	499	A	N3-C4	6.46	1.38	1.34
38	BD	49	C	C3'-C2'	6.46	1.60	1.52
2	AB	525	U	P-O5'	6.45	1.66	1.59
2	AB	606	U	P-O5'	-6.45	1.53	1.59
2	AB	1053	C	P-O5'	6.45	1.66	1.59
2	AB	1665	A	P-O5'	6.45	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2192	U	C2-N3	6.45	1.42	1.37
2	AB	2426	A	N7-C5	-6.45	1.35	1.39
35	BA	249	U	C4'-O4'	-6.45	1.37	1.45
35	BA	574	A	C2'-O2'	6.45	1.50	1.41
35	BA	708	C	C4-N4	6.45	1.39	1.33
2	AB	1543	G	C8-N7	-6.45	1.27	1.30
2	AB	2266	A	C3'-C2'	6.45	1.60	1.52
35	BA	1401	G	C2-N3	6.45	1.38	1.32
2	AB	63	A	N1-C2	-6.45	1.28	1.34
2	AB	1350	C	C5-C6	6.45	1.39	1.34
2	AB	2099	U	C3'-C2'	6.45	1.60	1.52
2	AB	2223	G	C8-N7	-6.45	1.27	1.30
35	BA	400	C	C5-C6	6.45	1.39	1.34
35	BA	857	C	C5'-C4'	6.45	1.59	1.51
35	BA	886	G	N3-C4	6.45	1.40	1.35
2	AB	68	G	N9-C4	-6.45	1.32	1.38
2	AB	760	G	N3-C4	6.45	1.40	1.35
2	AB	1421	G	C5'-C4'	6.45	1.59	1.51
2	AB	1627	G	N1-C2	6.45	1.43	1.37
2	AB	1887	C	C3'-O3'	-6.45	1.33	1.42
2	AB	2232	C	C5'-C4'	6.45	1.59	1.51
2	AB	2448	A	N7-C5	6.45	1.43	1.39
2	AB	2606	C	N3-C4	6.45	1.38	1.33
35	BA	171	A	O3'-P	-6.45	1.53	1.61
35	BA	1038	C	C2-N3	6.45	1.41	1.35
2	AB	1629	U	C2-O2	6.45	1.28	1.22
35	BA	393	A	C8-N7	6.45	1.36	1.31
37	BC	16	A	C2'-C1'	6.45	1.60	1.53
2	AB	411	G	C6-N1	6.45	1.44	1.39
2	AB	858	G	C6-O6	-6.45	1.18	1.24
2	AB	1808	A	C6-N6	-6.45	1.28	1.33
2	AB	2347	C	N1-C2	6.45	1.46	1.40
35	BA	639	G	O3'-P	6.45	1.68	1.61
35	BA	760	G	C2-N3	6.45	1.38	1.32
2	AB	176	A	C6-N1	6.44	1.40	1.35
2	AB	217	A	N9-C4	6.44	1.41	1.37
2	AB	1016	G	C2-N3	6.44	1.38	1.32
2	AB	1125	G	N9-C8	-6.44	1.33	1.37
2	AB	2709	G	N3-C4	6.44	1.40	1.35
2	AB	2387	U	C2'-C1'	6.44	1.60	1.53
35	BA	1080	A	N3-C4	6.44	1.38	1.34
36	BB	12	U	O3'-P	6.44	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	518	G	P-O5'	6.44	1.66	1.59
2	AB	836	G	N9-C4	6.44	1.43	1.38
2	AB	512	G	C6-O6	-6.44	1.18	1.24
2	AB	669	G	C2-N3	6.44	1.38	1.32
2	AB	764	A	N9-C8	6.44	1.43	1.37
2	AB	2266	A	N9-C8	-6.44	1.32	1.37
2	AB	884	U	C4-C5	6.44	1.49	1.43
2	AB	1552	A	C8-N7	-6.44	1.27	1.31
2	AB	1582	C	C2'-C1'	6.44	1.60	1.53
2	AB	2063	C	P-O5'	6.44	1.66	1.59
2	AB	2163	A	C2'-C1'	-6.44	1.46	1.53
2	AB	2744	G	C5-C4	-6.44	1.33	1.38
2	AB	2785	C	P-O5'	6.44	1.66	1.59
17	AQ	44	GLY	CA-C	6.44	1.62	1.51
35	BA	895	G	C1'-N9	6.44	1.58	1.48
2	AB	166	U	C2-N3	6.43	1.42	1.37
2	AB	246	C	C5'-C4'	6.43	1.59	1.51
2	AB	1327	A	O4'-C1'	6.43	1.50	1.41
2	AB	1530	G	C6-N1	6.43	1.44	1.39
2	AB	1566	A	C6-N1	-6.43	1.31	1.35
2	AB	2160	C	P-O5'	6.43	1.66	1.59
2	AB	2333	A	C8-N7	-6.43	1.27	1.31
35	BA	620	C	C4-C5	-6.43	1.37	1.43
35	BA	388	G	C8-N7	-6.43	1.27	1.30
35	BA	485	U	C5-C6	6.43	1.40	1.34
35	BA	1441	A	C5-C4	-6.43	1.34	1.38
2	AB	1141	U	C4-O4	-6.43	1.18	1.23
2	AB	2538	C	C4-C5	6.43	1.48	1.43
35	BA	300	A	C5'-C4'	6.43	1.59	1.51
35	BA	1089	G	C6-N1	6.43	1.44	1.39
2	AB	122	G	C5'-C4'	6.43	1.59	1.51
2	AB	659	G	N3-C4	6.43	1.40	1.35
2	AB	1295	C	N1-C6	6.43	1.41	1.37
2	AB	2083	G	C5'-C4'	6.43	1.59	1.51
2	AB	2450	A	P-O5'	6.43	1.66	1.59
2	AB	2773	C	C2-O2	-6.43	1.18	1.24
35	BA	69	G	N9-C8	-6.43	1.33	1.37
35	BA	1303	C	C4-C5	6.43	1.48	1.43
35	BA	1363	A	N9-C4	6.43	1.41	1.37
2	AB	2092	U	N1-C2	6.43	1.44	1.38
2	AB	2367	G	N7-C5	-6.43	1.35	1.39
35	BA	1195	C	C4-C5	-6.43	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	100	U	P-O5'	6.42	1.66	1.59
2	AB	106	C	C2-N3	6.42	1.40	1.35
2	AB	1731	G	C6-O6	-6.42	1.18	1.24
2	AB	1741	C	C5-C6	6.42	1.39	1.34
2	AB	2095	A	N7-C5	6.42	1.43	1.39
2	AB	2561	U	N1-C2	6.42	1.44	1.38
35	BA	413	G	N3-C4	6.42	1.40	1.35
35	BA	438	U	C3'-C2'	-6.42	1.45	1.52
35	BA	573	A	C2'-C1'	6.42	1.60	1.53
35	BA	647	C	C5'-C4'	-6.42	1.43	1.51
36	BB	15	A	N1-C2	6.42	1.40	1.34
2	AB	1569	A	N9-C4	-6.42	1.33	1.37
2	AB	387	U	C3'-O3'	6.42	1.51	1.42
2	AB	1167	C	N1-C6	6.42	1.41	1.37
2	AB	1252	G	C5-C6	6.42	1.48	1.42
2	AB	1452	G	N3-C4	6.42	1.40	1.35
2	AB	1790	C	O3'-P	6.42	1.68	1.61
2	AB	2338	C	C5'-C4'	6.42	1.59	1.51
35	BA	460	A	O3'-P	6.42	1.68	1.61
35	BA	501	C	N3-C4	6.42	1.38	1.33
35	BA	543	U	C4'-O4'	-6.42	1.37	1.45
35	BA	642	A	N7-C5	6.42	1.43	1.39
35	BA	1512	U	O3'-P	6.42	1.68	1.61
2	AB	2135	A	N7-C5	6.42	1.43	1.39
2	AB	2378	A	C4'-C3'	-6.42	1.46	1.53
35	BA	1170	A	C2-N3	6.42	1.39	1.33
37	BC	53	G	C5-C4	6.42	1.42	1.38
2	AB	182	A	N3-C4	6.42	1.38	1.34
2	AB	539	G	N7-C5	-6.42	1.35	1.39
2	AB	753	A	C4'-O4'	-6.42	1.37	1.45
2	AB	1967	C	C5-C6	6.42	1.39	1.34
2	AB	2721	A	C3'-C2'	6.42	1.60	1.52
2	AB	2799	A	N7-C5	-6.42	1.35	1.39
35	BA	68	G	N3-C4	6.42	1.40	1.35
41	BG	64	TYR	CE2-CZ	6.42	1.46	1.38
1	AA	30	C	C5-C6	-6.42	1.29	1.34
2	AB	1493	C	C4'-O4'	-6.42	1.37	1.45
2	AB	2120	G	N9-C8	6.42	1.42	1.37
35	BA	1249	C	C4'-O4'	-6.42	1.37	1.45
35	BA	1316	G	P-O5'	6.42	1.66	1.59
40	BF	41	TYR	CE1-CZ	6.42	1.46	1.38
2	AB	860	U	C4-O4	-6.42	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1673	G	C6-O6	-6.42	1.18	1.24
2	AB	1706	C	C2'-C1'	-6.42	1.46	1.53
2	AB	1921	G	O3'-P	6.42	1.68	1.61
2	AB	934	U	N3-C4	6.41	1.44	1.38
2	AB	1817	G	C3'-C2'	6.41	1.60	1.52
2	AB	1881	C	C2-N3	6.41	1.40	1.35
2	AB	1945	G	C4'-O4'	-6.41	1.37	1.45
35	BA	142	G	C2-N3	6.41	1.37	1.32
35	BA	585	G	O3'-P	6.41	1.68	1.61
35	BA	708	C	C5'-C4'	6.41	1.59	1.51
2	AB	63	A	N3-C4	6.41	1.38	1.34
2	AB	289	G	C8-N7	-6.41	1.27	1.30
2	AB	2735	G	P-O5'	6.41	1.66	1.59
35	BA	182	A	C4'-C3'	-6.41	1.46	1.53
35	BA	250	A	N9-C8	-6.41	1.32	1.37
2	AB	901	C	C4'-C3'	-6.41	1.46	1.53
2	AB	2154	A	C5'-C4'	6.41	1.59	1.51
2	AB	2434	A	N9-C8	-6.41	1.32	1.37
2	AB	215	G	C3'-C2'	-6.41	1.45	1.52
2	AB	549	G	P-O5'	-6.41	1.53	1.59
2	AB	800	A	C2'-C1'	-6.41	1.46	1.53
2	AB	982	C	N1-C6	6.41	1.41	1.37
2	AB	1762	A	N9-C4	6.41	1.41	1.37
2	AB	1813	G	O5'-C5'	-6.41	1.32	1.42
35	BA	822	U	C2-N3	6.41	1.42	1.37
2	AB	1987	A	C2-N3	6.41	1.39	1.33
36	BB	73	G	N1-C2	6.41	1.42	1.37
2	AB	392	U	O3'-P	6.41	1.68	1.61
2	AB	1337	G	C3'-C2'	-6.41	1.45	1.52
2	AB	2130	U	N1-C2	6.41	1.44	1.38
35	BA	586	C	N3-C4	6.41	1.38	1.33
35	BA	630	A	N7-C5	-6.41	1.35	1.39
35	BA	680	C	C4-C5	6.41	1.48	1.43
38	BD	52	C	N1-C6	6.41	1.41	1.37
35	BA	339	C	C2'-C1'	6.40	1.60	1.53
1	AA	114	C	N3-C4	6.40	1.38	1.33
2	AB	1552	A	N7-C5	6.40	1.43	1.39
2	AB	1682	G	C5'-C4'	6.40	1.59	1.51
2	AB	2770	G	C4'-O4'	-6.40	1.37	1.45
2	AB	2802	G	O3'-P	6.40	1.68	1.61
35	BA	53	A	C5'-C4'	6.40	1.59	1.51
35	BA	595	A	C2'-O2'	6.40	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	57	C	C5-C6	6.40	1.39	1.34
2	AB	196	A	N7-C5	-6.40	1.35	1.39
2	AB	362	A	N3-C4	-6.40	1.31	1.34
35	BA	8	A	N1-C2	-6.40	1.28	1.34
35	BA	235	C	P-O5'	6.40	1.66	1.59
35	BA	727	G	C4'-O4'	-6.40	1.37	1.45
35	BA	1061	G	N9-C8	-6.40	1.33	1.37
2	AB	429	A	C5'-C4'	6.40	1.59	1.51
2	AB	2685	G	N3-C4	6.40	1.40	1.35
35	BA	660	C	C5-C6	-6.40	1.29	1.34
1	AA	113	C	C4'-O4'	-6.40	1.37	1.45
2	AB	791	C	C3'-C2'	6.40	1.59	1.52
2	AB	824	U	N1-C2	6.40	1.44	1.38
2	AB	1922	G	N7-C5	-6.40	1.35	1.39
35	BA	584	G	C4'-O4'	-6.40	1.37	1.45
35	BA	1022	A	N9-C4	6.40	1.41	1.37
35	BA	1325	C	C4-C5	6.40	1.48	1.43
1	AA	94	A	O3'-P	6.40	1.68	1.61
2	AB	752	A	O3'-P	6.40	1.68	1.61
2	AB	1782	U	C3'-C2'	6.40	1.59	1.52
1	AA	46	A	C6-N6	-6.39	1.28	1.33
2	AB	1584	U	C4-C5	6.39	1.49	1.43
2	AB	1664	A	N3-C4	6.39	1.38	1.34
35	BA	149	A	C5-C6	6.39	1.46	1.41
35	BA	712	A	C6-N6	6.39	1.39	1.33
35	BA	915	A	C5-C4	6.39	1.43	1.38
35	BA	1030	U	C5-C6	6.39	1.40	1.34
35	BA	1072	G	C3'-O3'	-6.39	1.33	1.42
1	AA	105	G	N1-C2	6.39	1.42	1.37
2	AB	2468	A	N3-C4	-6.39	1.31	1.34
2	AB	796	C	C4-N4	-6.39	1.28	1.33
2	AB	1030	C	C5'-C4'	6.39	1.59	1.51
2	AB	1059	G	N9-C8	-6.39	1.33	1.37
2	AB	1529	G	C6-O6	-6.39	1.18	1.24
35	BA	58	C	C4'-O4'	-6.39	1.37	1.45
2	AB	976	G	N7-C5	6.39	1.43	1.39
2	AB	1167	C	C2-O2	-6.39	1.18	1.24
2	AB	1729	U	C2-O2	6.39	1.28	1.22
2	AB	1860	G	C6-N1	6.39	1.44	1.39
2	AB	2040	G	C2-N3	6.39	1.37	1.32
35	BA	1147	C	C5-C6	6.39	1.39	1.34
2	AB	466	A	C3'-O3'	-6.39	1.33	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2033	A	N9-C8	-6.39	1.32	1.37
35	BA	21	G	C8-N7	-6.39	1.27	1.30
35	BA	554	A	C8-N7	-6.39	1.27	1.31
35	BA	596	A	C6-N1	-6.39	1.31	1.35
35	BA	1123	U	C4-C5	6.39	1.49	1.43
38	BD	17	C	O5'-C5'	-6.39	1.32	1.42
2	AB	691	C	P-O5'	6.39	1.66	1.59
2	AB	2391	G	C8-N7	-6.39	1.27	1.30
35	BA	324	G	C6-N1	6.39	1.44	1.39
35	BA	670	G	P-O5'	6.39	1.66	1.59
35	BA	1329	A	C6-N1	-6.39	1.31	1.35
38	BD	59	A	C3'-C2'	6.39	1.59	1.52
2	AB	190	A	C8-N7	-6.38	1.27	1.31
2	AB	898	C	C2-N3	6.38	1.40	1.35
2	AB	1116	G	C3'-C2'	6.38	1.59	1.52
2	AB	2558	C	C4-C5	6.38	1.48	1.43
35	BA	887	G	P-O5'	6.38	1.66	1.59
35	BA	896	C	N1-C2	6.38	1.46	1.40
35	BA	1092	A	N9-C4	6.38	1.41	1.37
1	AA	107	G	C8-N7	6.38	1.34	1.30
2	AB	1564	C	C4'-O4'	-6.38	1.37	1.45
2	AB	2812	G	C6-N1	6.38	1.44	1.39
35	BA	691	G	N7-C5	-6.38	1.35	1.39
35	BA	893	C	C5-C6	6.38	1.39	1.34
35	BA	894	G	N7-C5	6.38	1.43	1.39
2	AB	54	G	N3-C4	6.38	1.40	1.35
2	AB	1261	C	N1-C6	6.38	1.41	1.37
2	AB	1473	G	C6-N1	6.38	1.44	1.39
2	AB	2755	C	C3'-C2'	6.38	1.59	1.52
2	AB	2888	C	C2-N3	6.38	1.40	1.35
35	BA	162	A	N3-C4	6.38	1.38	1.34
35	BA	1062	U	C5'-C4'	6.38	1.59	1.51
35	BA	1117	A	C5'-C4'	6.38	1.59	1.51
2	AB	1507	C	C5'-C4'	6.38	1.59	1.51
35	BA	1476	A	C5-C6	6.38	1.46	1.41
2	AB	24	G	N1-C2	-6.38	1.32	1.37
2	AB	306	U	C2-N3	6.38	1.42	1.37
2	AB	1704	C	C2-N3	6.38	1.40	1.35
2	AB	1981	A	C5'-C4'	6.38	1.59	1.51
2	AB	2114	A	N3-C4	6.38	1.38	1.34
2	AB	2133	G	N3-C4	6.38	1.40	1.35
35	BA	91	U	O3'-P	6.38	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1036	A	C6-N6	6.38	1.39	1.33
35	BA	1511	G	C1'-N9	6.38	1.58	1.48
36	BB	76	A	N3-C4	6.38	1.38	1.34
38	BD	65	G	P-O5'	6.38	1.66	1.59
2	AB	526	A	N9-C8	6.38	1.42	1.37
2	AB	726	G	O3'-P	6.38	1.68	1.61
2	AB	1096	A	O3'-P	6.38	1.68	1.61
2	AB	2233	U	C2-N3	6.38	1.42	1.37
2	AB	2760	C	C5'-C4'	6.38	1.59	1.51
35	BA	714	G	C8-N7	6.38	1.34	1.30
35	BA	724	G	C2-N3	6.38	1.37	1.32
35	BA	750	C	C5-C6	6.38	1.39	1.34
35	BA	1283	U	P-O5'	6.38	1.66	1.59
43	BI	100	SER	CA-CB	-6.38	1.43	1.52
2	AB	1578	U	O4'-C1'	6.38	1.50	1.41
2	AB	2406	A	N1-C2	-6.38	1.28	1.34
35	BA	1458	G	O3'-P	6.38	1.68	1.61
2	AB	1407	G	C4'-C3'	-6.37	1.46	1.53
2	AB	2050	C	O3'-P	6.37	1.68	1.61
2	AB	2073	C	O3'-P	6.37	1.68	1.61
35	BA	1369	C	C3'-C2'	-6.37	1.45	1.52
2	AB	1051	G	C6-O6	6.37	1.29	1.24
2	AB	1639	C	C2-O2	-6.37	1.18	1.24
2	AB	1712	U	C5'-C4'	-6.37	1.43	1.51
2	AB	2238	G	C2'-C1'	-6.37	1.46	1.53
2	AB	2559	C	C2'-O2'	6.37	1.50	1.41
2	AB	2612	C	C4'-O4'	-6.37	1.37	1.45
2	AB	2762	C	C2-O2	-6.37	1.18	1.24
35	BA	53	A	P-O5'	6.37	1.66	1.59
35	BA	301	G	C5-C4	6.37	1.42	1.38
35	BA	320	A	O3'-P	6.37	1.68	1.61
35	BA	419	C	P-O5'	6.37	1.66	1.59
35	BA	661	G	N1-C2	6.37	1.42	1.37
35	BA	971	G	C3'-C2'	-6.37	1.45	1.52
35	BA	1211	U	C4-C5	-6.37	1.37	1.43
24	AX	11	GLU	CB-CG	6.37	1.64	1.52
2	AB	25	U	C5'-C4'	6.37	1.58	1.51
2	AB	951	C	C3'-C2'	-6.37	1.45	1.52
35	BA	44	A	C4'-O4'	-6.37	1.37	1.45
36	BB	28	C	N1-C6	6.37	1.41	1.37
2	AB	66	C	C3'-O3'	6.37	1.51	1.42
2	AB	1141	U	C4'-C3'	-6.37	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	457	G	N3-C4	6.37	1.40	1.35
2	AB	1446	C	C2-N3	6.37	1.40	1.35
2	AB	1535	A	P-O5'	6.37	1.66	1.59
35	BA	1282	C	N1-C2	6.37	1.46	1.40
35	BA	1324	A	O3'-P	-6.37	1.53	1.61
2	AB	441	U	N3-C4	6.36	1.44	1.38
2	AB	875	G	C3'-C2'	6.36	1.59	1.52
2	AB	1499	C	C4-C5	6.36	1.48	1.43
35	BA	170	U	C5'-C4'	6.36	1.58	1.51
35	BA	170	U	C2'-C1'	6.36	1.60	1.53
35	BA	1264	U	O3'-P	6.36	1.68	1.61
35	BA	152	A	C4'-O4'	-6.36	1.37	1.45
2	AB	1272	A	N9-C4	6.36	1.41	1.37
2	AB	2774	C	N1-C6	6.36	1.41	1.37
7	AG	64	PRO	N-CD	-6.36	1.39	1.47
35	BA	809	G	N9-C4	-6.36	1.32	1.38
2	AB	2589	A	N3-C4	6.36	1.38	1.34
35	BA	239	U	C5-C6	6.36	1.39	1.34
37	BC	59	A	C8-N7	-6.36	1.27	1.31
1	AA	78	A	C2'-O2'	6.36	1.50	1.41
2	AB	100	U	C2-N3	6.36	1.42	1.37
2	AB	1930	G	C4'-C3'	-6.36	1.46	1.53
2	AB	1950	G	N9-C4	6.36	1.43	1.38
2	AB	2185	U	C3'-C2'	6.36	1.59	1.52
2	AB	2383	G	C5'-C4'	6.36	1.58	1.51
2	AB	2437	G	P-O5'	6.36	1.66	1.59
2	AB	2574	G	N7-C5	6.36	1.43	1.39
35	BA	716	A	N7-C5	6.36	1.43	1.39
2	AB	43	G	N7-C5	6.36	1.43	1.39
2	AB	132	G	C2-N2	-6.36	1.28	1.34
2	AB	377	G	O3'-P	6.36	1.68	1.61
2	AB	1475	G	C5-C6	6.36	1.48	1.42
2	AB	2321	U	C5'-C4'	6.36	1.58	1.51
35	BA	198	G	C4'-C3'	-6.36	1.46	1.53
35	BA	900	A	N3-C4	6.36	1.38	1.34
35	BA	1507	A	N3-C4	6.36	1.38	1.34
2	AB	360	U	C2-N3	6.35	1.42	1.37
2	AB	1802	A	C2-N3	-6.35	1.27	1.33
1	AA	34	A	N1-C2	-6.35	1.28	1.34
2	AB	1116	G	C2-N3	6.35	1.37	1.32
2	AB	1670	C	P-O5'	6.35	1.66	1.59
2	AB	1138	G	C6-N1	-6.35	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1895	C	C2-N3	6.35	1.40	1.35
2	AB	2463	C	N1-C6	6.35	1.41	1.37
2	AB	2687	U	C3'-C2'	-6.35	1.45	1.52
2	AB	414	C	C4'-O4'	-6.35	1.37	1.45
2	AB	1735	A	N9-C8	-6.35	1.32	1.37
2	AB	1897	G	C2'-C1'	-6.35	1.46	1.53
2	AB	2707	U	P-O5'	6.35	1.66	1.59
2	AB	2719	G	C6-N1	6.35	1.44	1.39
35	BA	799	G	C8-N7	-6.35	1.27	1.30
35	BA	1138	G	P-O5'	6.35	1.66	1.59
35	BA	1525	G	C8-N7	-6.35	1.27	1.30
2	AB	151	C	O3'-P	6.35	1.68	1.61
2	AB	273	G	C6-N1	6.35	1.44	1.39
2	AB	347	A	P-O5'	6.35	1.66	1.59
2	AB	1395	A	N9-C4	6.35	1.41	1.37
2	AB	1414	C	C4'-O4'	-6.35	1.37	1.45
2	AB	1459	G	C8-N7	-6.35	1.27	1.30
2	AB	1498	C	C4-C5	6.35	1.48	1.43
2	AB	1765	U	C5'-C4'	6.35	1.58	1.51
2	AB	2500	U	C4'-C3'	6.35	1.60	1.53
35	BA	154	U	C3'-C2'	-6.35	1.45	1.52
35	BA	838	G	P-O5'	6.35	1.66	1.59
35	BA	872	A	N9-C4	6.35	1.41	1.37
35	BA	1251	A	P-O5'	-6.35	1.53	1.59
41	BG	61	ARG	CZ-NH1	6.35	1.41	1.33
2	AB	2707	U	N3-C4	6.35	1.44	1.38
2	AB	446	G	C4'-C3'	6.34	1.60	1.53
2	AB	1763	G	N9-C8	-6.34	1.33	1.37
2	AB	2511	U	C5-C6	6.34	1.39	1.34
35	BA	51	A	C5'-C4'	6.34	1.58	1.51
38	BD	66	C	N3-C4	6.34	1.38	1.33
2	AB	1059	G	C5'-C4'	6.34	1.58	1.51
2	AB	1246	A	N9-C4	6.34	1.41	1.37
2	AB	1307	A	O3'-P	6.34	1.68	1.61
2	AB	1342	A	C8-N7	-6.34	1.27	1.31
2	AB	1605	C	C4-N4	6.34	1.39	1.33
2	AB	2859	G	N3-C4	6.34	1.39	1.35
35	BA	1131	G	P-O5'	6.34	1.66	1.59
37	BC	15	G	C8-N7	-6.34	1.27	1.30
2	AB	79	C	C2-N3	6.34	1.40	1.35
2	AB	193	U	C5-C6	6.34	1.39	1.34
2	AB	926	G	C4'-O4'	-6.34	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1843	C	C4-C5	6.34	1.48	1.43
2	AB	2255	G	C5'-C4'	6.34	1.58	1.51
2	AB	2295	C	C4-C5	6.34	1.48	1.43
35	BA	451	A	C2'-C1'	6.34	1.60	1.53
35	BA	563	A	C5'-C4'	6.34	1.58	1.51
35	BA	727	G	O3'-P	-6.34	1.53	1.61
35	BA	1033	G	C8-N7	6.34	1.34	1.30
35	BA	1053	G	C5-C6	-6.34	1.36	1.42
35	BA	1221	G	C8-N7	6.34	1.34	1.30
35	BA	1405	G	N7-C5	-6.34	1.35	1.39
36	BB	68	C	O3'-P	-6.34	1.53	1.61
2	AB	380	G	C5'-C4'	6.34	1.58	1.51
35	BA	294	U	C4-O4	6.34	1.28	1.23
35	BA	821	G	C3'-O3'	6.34	1.51	1.42
2	AB	43	G	C8-N7	-6.34	1.27	1.30
2	AB	409	G	C6-O6	-6.34	1.18	1.24
2	AB	550	C	N3-C4	6.34	1.38	1.33
2	AB	818	G	C2'-C1'	-6.34	1.46	1.53
2	AB	1649	G	C3'-C2'	-6.34	1.45	1.52
35	BA	377	G	C2-N3	6.34	1.37	1.32
2	AB	1116	G	N1-C2	6.33	1.42	1.37
2	AB	1603	A	N9-C8	6.33	1.42	1.37
2	AB	2861	U	C4'-C3'	6.33	1.60	1.53
35	BA	532	A	P-O5'	6.33	1.66	1.59
36	BB	70	C	C2-N3	6.33	1.40	1.35
2	AB	550	C	O3'-P	6.33	1.68	1.61
2	AB	601	C	C5-C6	6.33	1.39	1.34
2	AB	685	A	C3'-C2'	-6.33	1.45	1.52
2	AB	2226	C	C4'-C3'	-6.33	1.46	1.53
2	AB	2325	G	N3-C4	6.33	1.39	1.35
35	BA	381	C	N3-C4	6.33	1.38	1.33
35	BA	1130	A	N9-C8	-6.33	1.32	1.37
35	BA	1309	G	P-O5'	6.33	1.66	1.59
35	BA	1369	C	C4-C5	6.33	1.48	1.43
1	AA	28	C	N3-C4	6.33	1.38	1.33
2	AB	867	C	N1-C2	6.33	1.46	1.40
2	AB	2723	C	C4'-C3'	6.33	1.60	1.53
2	AB	2792	A	P-O5'	6.33	1.66	1.59
35	BA	689	C	C4'-C3'	6.33	1.60	1.53
35	BA	939	G	P-O5'	6.33	1.66	1.59
1	AA	61	G	C5-C4	6.33	1.42	1.38
2	AB	462	C	C4-C5	6.33	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1077	A	N9-C4	6.33	1.41	1.37
2	AB	2278	A	C5-C4	6.33	1.43	1.38
35	BA	1082	A	O3'-P	6.33	1.68	1.61
2	AB	420	C	P-O5'	6.33	1.66	1.59
2	AB	627	A	C8-N7	6.33	1.35	1.31
2	AB	1419	A	N9-C8	6.33	1.42	1.37
2	AB	2223	G	N9-C8	6.33	1.42	1.37
2	AB	2359	C	C5-C6	6.33	1.39	1.34
2	AB	2724	U	C4'-O4'	-6.33	1.37	1.45
35	BA	294	U	C2-N3	6.33	1.42	1.37
35	BA	393	A	C6-N1	6.33	1.40	1.35
35	BA	1453	G	N9-C4	6.33	1.43	1.38
2	AB	107	G	O3'-P	-6.33	1.53	1.61
2	AB	379	G	N3-C4	6.33	1.39	1.35
2	AB	1403	A	C4'-O4'	-6.33	1.37	1.45
2	AB	2695	U	C3'-C2'	-6.33	1.45	1.52
2	AB	784	G	N1-C2	6.33	1.42	1.37
2	AB	788	A	C4'-O4'	-6.33	1.37	1.45
2	AB	2135	A	C2'-C1'	-6.33	1.46	1.53
2	AB	2832	U	N1-C2	6.33	1.44	1.38
2	AB	536	G	C8-N7	6.32	1.34	1.30
2	AB	1825	U	C5-C6	6.32	1.39	1.34
2	AB	2900	A	N7-C5	-6.32	1.35	1.39
35	BA	800	G	N1-C2	-6.32	1.32	1.37
35	BA	1067	A	C8-N7	6.32	1.35	1.31
35	BA	1231	G	C5-C4	-6.32	1.33	1.38
35	BA	1366	C	C2'-C1'	-6.32	1.46	1.53
35	BA	1487	G	C5-C4	-6.32	1.33	1.38
2	AB	5	A	C3'-C2'	6.32	1.59	1.52
2	AB	1968	G	C2-N3	6.32	1.37	1.32
35	BA	489	C	P-O5'	6.32	1.66	1.59
35	BA	1450	U	C2-N3	6.32	1.42	1.37
2	AB	1118	C	N3-C4	-6.32	1.29	1.33
2	AB	1182	G	O3'-P	6.32	1.68	1.61
2	AB	2146	C	C4'-O4'	-6.32	1.37	1.45
2	AB	2814	A	C8-N7	-6.32	1.27	1.31
35	BA	59	A	N3-C4	6.32	1.38	1.34
35	BA	724	G	N3-C4	-6.32	1.31	1.35
35	BA	1052	U	C2-N3	6.32	1.42	1.37
2	AB	2399	G	C4'-C3'	-6.32	1.46	1.53
35	BA	290	C	P-O5'	6.32	1.66	1.59
35	BA	1122	U	N1-C2	6.32	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	344	A	N3-C4	6.32	1.38	1.34
2	AB	847	U	C2-N3	6.32	1.42	1.37
2	AB	1823	G	C6-O6	-6.32	1.18	1.24
2	AB	2300	C	C4-C5	6.32	1.48	1.43
35	BA	182	A	N3-C4	6.32	1.38	1.34
2	AB	428	A	C4'-C3'	6.32	1.60	1.53
2	AB	558	U	C4-O4	6.32	1.28	1.23
2	AB	967	U	O5'-C5'	-6.32	1.32	1.42
2	AB	1423	G	C6-N1	-6.32	1.35	1.39
2	AB	2133	G	C4'-O4'	-6.32	1.37	1.45
2	AB	2239	G	C2-N3	6.32	1.37	1.32
35	BA	495	A	N7-C5	-6.32	1.35	1.39
1	AA	64	G	N9-C4	-6.31	1.32	1.38
2	AB	39	G	N9-C4	6.31	1.43	1.38
2	AB	474	G	N7-C5	-6.31	1.35	1.39
2	AB	1577	C	N1-C6	6.31	1.41	1.37
2	AB	1850	G	C5-C6	6.31	1.48	1.42
2	AB	2779	U	C4-C5	6.31	1.49	1.43
35	BA	26	A	N3-C4	6.31	1.38	1.34
35	BA	146	G	N7-C5	6.31	1.43	1.39
35	BA	437	U	C4-C5	6.31	1.49	1.43
2	AB	45	G	C3'-O3'	6.31	1.50	1.42
2	AB	725	G	N9-C8	-6.31	1.33	1.37
2	AB	72	U	P-O5'	6.31	1.66	1.59
2	AB	551	G	C5'-C4'	6.31	1.58	1.51
2	AB	1491	G	C6-N1	6.31	1.44	1.39
2	AB	2480	C	C4-C5	-6.31	1.38	1.43
35	BA	747	A	N3-C4	-6.31	1.31	1.34
35	BA	867	G	C8-N7	-6.31	1.27	1.30
35	BA	932	C	C5-C6	6.31	1.39	1.34
35	BA	1006	G	C6-O6	-6.31	1.18	1.24
35	BA	1228	C	C4-N4	6.31	1.39	1.33
2	AB	32	C	N1-C6	6.31	1.41	1.37
2	AB	1674	G	O3'-P	-6.31	1.53	1.61
2	AB	2007	U	C2'-C1'	6.31	1.60	1.53
2	AB	2047	C	C5'-C4'	6.31	1.58	1.51
2	AB	2144	G	C6-N1	6.31	1.44	1.39
2	AB	2386	A	N7-C5	6.31	1.43	1.39
35	BA	261	U	C4'-O4'	-6.31	1.37	1.45
35	BA	1382	C	C5-C6	6.31	1.39	1.34
37	BC	33	A	C5'-C4'	6.31	1.58	1.51
2	AB	679	C	C3'-C2'	-6.31	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1028	A	O4'-C1'	-6.31	1.33	1.41
35	BA	851	G	N7-C5	6.31	1.43	1.39
2	AB	1129	A	C4'-C3'	6.30	1.60	1.53
2	AB	2056	G	O3'-P	6.30	1.68	1.61
35	BA	760	G	C4'-C3'	6.30	1.60	1.53
35	BA	1366	C	C4-C5	6.30	1.48	1.43
2	AB	522	A	C6-N1	6.30	1.40	1.35
2	AB	2782	G	N9-C4	6.30	1.43	1.38
35	BA	933	G	C8-N7	6.30	1.34	1.30
2	AB	1134	A	N9-C8	6.30	1.42	1.37
2	AB	2780	G	C4'-C3'	6.30	1.60	1.53
35	BA	300	A	N7-C5	-6.30	1.35	1.39
35	BA	826	C	N1-C6	6.30	1.41	1.37
35	BA	1456	A	C4'-O4'	-6.30	1.37	1.45
2	AB	583	G	N9-C8	-6.30	1.33	1.37
2	AB	589	U	P-O5'	6.30	1.66	1.59
2	AB	977	G	C2-N3	6.30	1.37	1.32
2	AB	2900	A	N3-C4	6.30	1.38	1.34
35	BA	75	G	P-O5'	-6.30	1.53	1.59
35	BA	290	C	C2'-C1'	6.30	1.60	1.53
35	BA	838	G	C4'-O4'	-6.30	1.37	1.45
35	BA	372	C	C2-N3	6.30	1.40	1.35
2	AB	71	A	N3-C4	6.30	1.38	1.34
2	AB	1952	A	C8-N7	-6.30	1.27	1.31
2	AB	2804	U	C4-O4	-6.30	1.18	1.23
35	BA	564	C	N1-C6	6.30	1.41	1.37
35	BA	901	A	O5'-C5'	-6.30	1.32	1.42
35	BA	1134	G	C8-N7	6.30	1.34	1.30
2	AB	1486	U	N1-C6	-6.29	1.32	1.38
2	AB	2666	C	C3'-C2'	6.29	1.59	1.52
35	BA	147	G	O4'-C1'	6.29	1.49	1.41
35	BA	303	A	N3-C4	6.29	1.38	1.34
35	BA	386	C	C5-C6	6.29	1.39	1.34
1	AA	46	A	P-O5'	6.29	1.66	1.59
1	AA	100	G	N9-C8	-6.29	1.33	1.37
2	AB	65	U	P-O5'	6.29	1.66	1.59
2	AB	1106	G	P-O5'	6.29	1.66	1.59
2	AB	120	U	C4'-O4'	-6.29	1.37	1.45
2	AB	488	G	N7-C5	6.29	1.43	1.39
2	AB	1938	A	C2'-C1'	-6.29	1.46	1.53
35	BA	814	A	N9-C8	6.29	1.42	1.37
36	BB	28	C	O3'-P	6.29	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	135	U	C2-N3	6.29	1.42	1.37
2	AB	1980	G	N7-C5	6.29	1.43	1.39
35	BA	521	G	C8-N7	-6.29	1.27	1.30
35	BA	945	G	C8-N7	6.29	1.34	1.30
35	BA	1160	G	C4'-C3'	6.29	1.60	1.53
35	BA	1508	A	O3'-P	6.29	1.68	1.61
2	AB	23	G	N9-C8	6.29	1.42	1.37
2	AB	193	U	C3'-C2'	6.29	1.59	1.52
2	AB	625	G	C1'-N9	6.29	1.58	1.48
2	AB	1568	G	C6-N1	6.29	1.44	1.39
2	AB	1863	G	N3-C4	6.29	1.39	1.35
2	AB	2140	G	C5'-C4'	6.29	1.58	1.51
2	AB	2253	G	C6-O6	-6.29	1.18	1.24
2	AB	2313	C	C3'-C2'	6.29	1.59	1.52
2	AB	2451	A	O3'-P	-6.29	1.53	1.61
35	BA	17	U	C5-C6	6.29	1.39	1.34
12	AL	69	ARG	CD-NE	6.29	1.57	1.46
35	BA	539	A	C6-N1	-6.29	1.31	1.35
2	AB	727	A	P-O5'	6.29	1.66	1.59
2	AB	2818	U	C5-C6	6.29	1.39	1.34
35	BA	698	G	C2'-C1'	-6.29	1.46	1.53
37	BC	31	U	C5'-C4'	6.29	1.58	1.51
1	AA	102	G	N7-C5	6.28	1.43	1.39
2	AB	218	A	P-O5'	6.28	1.66	1.59
2	AB	824	U	C2-N3	6.28	1.42	1.37
2	AB	1366	A	N3-C4	6.28	1.38	1.34
2	AB	1821	A	C5'-C4'	6.28	1.58	1.51
1	AA	54	G	N9-C8	6.28	1.42	1.37
2	AB	2080	A	C5-C4	-6.28	1.34	1.38
2	AB	2143	C	C4'-C3'	-6.28	1.46	1.53
2	AB	2504	PSU	O3'-P	6.28	1.68	1.61
2	AB	83	A	N3-C4	6.28	1.38	1.34
2	AB	1085	A	C4'-O4'	-6.28	1.37	1.45
2	AB	1199	U	C4'-C3'	-6.28	1.46	1.53
2	AB	1816	C	C4'-C3'	6.28	1.60	1.53
2	AB	2149	U	N1-C2	6.28	1.44	1.38
57	BW	17	ARG	NE-CZ	6.28	1.41	1.33
2	AB	378	C	C4'-C3'	-6.28	1.46	1.53
2	AB	852	U	C2-O2	6.28	1.28	1.22
2	AB	1501	G	C2-N3	-6.28	1.27	1.32
1	AA	82	U	C4-O4	6.28	1.28	1.23
2	AB	387	U	C2-N3	6.28	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	896	A	P-O5'	6.28	1.66	1.59
2	AB	1994	C	C4'-C3'	6.28	1.60	1.53
2	AB	2272	U	N1-C2	6.28	1.44	1.38
35	BA	1022	A	N7-C5	-6.28	1.35	1.39
2	AB	2315	G	C4'-O4'	-6.28	1.37	1.45
2	AB	2508	G	O3'-P	6.28	1.68	1.61
35	BA	727	G	N9-C8	6.28	1.42	1.37
35	BA	748	G	N7-C5	6.28	1.43	1.39
2	AB	1451	C	C4'-C3'	6.27	1.60	1.53
2	AB	2732	G	C6-N1	6.27	1.44	1.39
2	AB	2862	G	N3-C4	6.27	1.39	1.35
2	AB	2868	A	P-O5'	6.27	1.66	1.59
35	BA	821	G	N3-C4	6.27	1.39	1.35
2	AB	395	U	O3'-P	6.27	1.68	1.61
2	AB	490	C	C5-C6	6.27	1.39	1.34
2	AB	612	G	C4'-C3'	6.27	1.60	1.53
2	AB	1329	U	N3-C4	6.27	1.44	1.38
2	AB	2900	A	P-O5'	6.27	1.66	1.59
35	BA	597	G	N7-C5	6.27	1.43	1.39
35	BA	1009	U	C3'-C2'	-6.27	1.45	1.52
35	BA	1405	G	P-O5'	6.27	1.66	1.59
2	AB	394	C	C5-C6	6.27	1.39	1.34
2	AB	581	C	N1-C6	6.27	1.41	1.37
2	AB	855	G	N9-C8	-6.27	1.33	1.37
2	AB	979	A	P-O5'	6.27	1.66	1.59
2	AB	1360	G	N3-C4	6.27	1.39	1.35
2	AB	1842	G	C5-C4	-6.27	1.33	1.38
35	BA	55	A	N9-C4	6.27	1.41	1.37
35	BA	89	U	C4'-O4'	-6.27	1.37	1.45
35	BA	717	U	C4'-C3'	6.27	1.60	1.53
35	BA	916	U	N1-C6	6.27	1.43	1.38
38	BD	65	G	C5'-C4'	6.27	1.58	1.51
2	AB	524	G	C8-N7	6.27	1.34	1.30
2	AB	1376	C	N1-C6	-6.27	1.33	1.37
35	BA	618	C	P-O5'	6.27	1.66	1.59
41	BG	169	TRP	CD2-CE2	6.27	1.48	1.41
2	AB	2295	C	N1-C6	-6.27	1.33	1.37
2	AB	2357	G	C3'-C2'	-6.27	1.45	1.52
35	BA	205	A	C4'-C3'	6.27	1.60	1.53
2	AB	635	C	N1-C6	-6.26	1.33	1.37
2	AB	1036	G	C2-N3	6.26	1.37	1.32
35	BA	712	A	C8-N7	-6.26	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	401	A	C5'-C4'	6.26	1.58	1.51
35	BA	566	G	C6-O6	-6.26	1.18	1.24
2	AB	496	G	O3'-P	6.26	1.68	1.61
2	AB	989	G	N9-C8	-6.26	1.33	1.37
2	AB	1230	A	N9-C4	6.26	1.41	1.37
2	AB	1977	A	N3-C4	6.26	1.38	1.34
35	BA	17	U	P-O5'	6.26	1.66	1.59
35	BA	1238	A	N9-C8	-6.26	1.32	1.37
35	BA	1384	C	C3'-C2'	-6.26	1.45	1.52
35	BA	1470	U	C5-C6	6.26	1.39	1.34
35	BA	1490	U	C2-N3	6.26	1.42	1.37
2	AB	2325	G	O3'-P	6.26	1.68	1.61
35	BA	891	U	C4'-O4'	-6.26	1.37	1.45
35	BA	924	C	C4'-C3'	6.26	1.60	1.53
35	BA	963	G	C6-N1	6.26	1.44	1.39
35	BA	1515	G	C6-N1	6.26	1.44	1.39
2	AB	1368	G	N7-C5	6.26	1.43	1.39
35	BA	1024	G	C5'-C4'	6.26	1.58	1.51
2	AB	136	G	N9-C4	-6.26	1.32	1.38
2	AB	812	C	P-O5'	6.26	1.66	1.59
2	AB	1132	U	C2'-C1'	-6.26	1.46	1.53
2	AB	1358	G	C2'-C1'	-6.26	1.46	1.53
2	AB	1855	U	P-O5'	6.26	1.66	1.59
2	AB	2224	G	C4'-O4'	-6.26	1.37	1.45
2	AB	2231	U	C2'-C1'	-6.26	1.46	1.53
35	BA	530	G	P-O5'	6.26	1.66	1.59
35	BA	599	C	N3-C4	6.26	1.38	1.33
35	BA	1473	G	N9-C4	6.26	1.43	1.38
37	BC	13	A	C2'-O2'	6.26	1.49	1.41
2	AB	1239	G	N7-C5	-6.25	1.35	1.39
35	BA	440	C	C4'-C3'	6.25	1.60	1.53
35	BA	1140	C	N1-C6	6.25	1.41	1.37
2	AB	290	U	N1-C2	6.25	1.44	1.38
2	AB	443	A	P-O5'	6.25	1.66	1.59
2	AB	1703	G	C4'-O4'	-6.25	1.37	1.45
2	AB	2470	G	C5'-C4'	6.25	1.58	1.51
35	BA	463	U	C4'-C3'	6.25	1.60	1.53
35	BA	1473	G	C5-C4	-6.25	1.33	1.38
2	AB	283	G	N3-C4	6.25	1.39	1.35
2	AB	1107	G	N9-C4	6.25	1.43	1.38
2	AB	1762	A	C5-C6	6.25	1.46	1.41
35	BA	370	C	N1-C2	6.25	1.46	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	788	U	P-O5'	6.25	1.66	1.59
2	AB	835	C	O4'-C1'	6.25	1.49	1.41
2	AB	2455	G	C6-O6	-6.25	1.18	1.24
35	BA	177	G	P-O5'	6.25	1.66	1.59
2	AB	53	A	P-O5'	6.25	1.66	1.59
2	AB	836	G	N9-C8	6.25	1.42	1.37
2	AB	1136	G	C8-N7	6.25	1.34	1.30
35	BA	32	A	N3-C4	6.25	1.38	1.34
35	BA	359	G	C4'-O4'	-6.25	1.37	1.45
35	BA	910	C	P-O5'	6.25	1.66	1.59
35	BA	988	G	C4'-O4'	-6.25	1.37	1.45
36	BB	35	C	C4'-O4'	-6.25	1.37	1.45
2	AB	95	A	C6-N1	6.25	1.40	1.35
2	AB	1510	G	C6-O6	-6.25	1.18	1.24
2	AB	1920	C	C5-C6	6.25	1.39	1.34
2	AB	2315	G	C2'-C1'	6.25	1.60	1.53
2	AB	2495	G	C6-N1	6.25	1.44	1.39
2	AB	2713	U	C4'-O4'	-6.25	1.37	1.45
30	A3	35	GLU	CB-CG	6.25	1.64	1.52
2	AB	92	U	C5'-C4'	6.24	1.58	1.51
2	AB	422	A	O3'-P	6.24	1.68	1.61
2	AB	459	U	P-O5'	6.24	1.66	1.59
2	AB	1437	C	C4-C5	6.24	1.48	1.43
35	BA	214	C	N3-C4	6.24	1.38	1.33
35	BA	807	A	C5-C4	-6.24	1.34	1.38
35	BA	1475	G	N1-C2	6.24	1.42	1.37
2	AB	247	G	C5-C4	6.24	1.42	1.38
2	AB	1906	G	C8-N7	6.24	1.34	1.30
35	BA	675	A	N9-C4	-6.24	1.34	1.37
51	BQ	12	ARG	CZ-NH2	6.24	1.41	1.33
2	AB	131	A	P-O5'	6.24	1.66	1.59
2	AB	612	G	O4'-C1'	6.24	1.49	1.41
2	AB	1220	G	C2-N3	6.24	1.37	1.32
2	AB	2127	G	O3'-P	6.24	1.68	1.61
35	BA	734	G	N9-C8	-6.24	1.33	1.37
35	BA	1126	U	P-O5'	6.24	1.66	1.59
35	BA	1291	U	C2'-C1'	-6.24	1.46	1.53
35	BA	1477	U	C2-N3	6.24	1.42	1.37
2	AB	1253	A	C2-N3	6.24	1.39	1.33
2	AB	1484	U	P-O5'	-6.24	1.53	1.59
2	AB	2044	C	P-O5'	6.24	1.66	1.59
2	AB	2505	G	C6-N1	6.24	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2512	C	O4'-C1'	6.24	1.49	1.41
35	BA	543	U	C2'-C1'	6.24	1.60	1.53
35	BA	572	A	N3-C4	6.24	1.38	1.34
35	BA	1429	A	O5'-C5'	-6.24	1.32	1.42
35	BA	1481	U	C3'-C2'	6.24	1.59	1.52
2	AB	84	A	N9-C4	-6.24	1.34	1.37
2	AB	100	U	O3'-P	6.24	1.68	1.61
2	AB	1742	U	N3-C4	6.24	1.44	1.38
2	AB	2236	U	C3'-O3'	6.24	1.50	1.42
35	BA	1007	U	C2'-O2'	-6.24	1.33	1.41
35	BA	1028	C	C5-C6	6.24	1.39	1.34
2	AB	895	U	N1-C2	6.24	1.44	1.38
2	AB	1069	A	N9-C4	6.24	1.41	1.37
2	AB	1276	A	C8-N7	-6.24	1.27	1.31
35	BA	550	G	P-O5'	6.24	1.66	1.59
35	BA	925	G	C4'-O4'	-6.24	1.37	1.45
35	BA	1138	G	C5-C4	6.24	1.42	1.38
2	AB	2282	G	C5'-C4'	6.23	1.58	1.51
2	AB	2689	U	C2-N3	6.23	1.42	1.37
2	AB	181	A	C4'-O4'	-6.23	1.37	1.45
2	AB	189	G	N7-C5	-6.23	1.35	1.39
2	AB	1534	U	C5-C6	6.23	1.39	1.34
2	AB	2212	A	N9-C8	6.23	1.42	1.37
2	AB	2781	A	C5-C4	6.23	1.43	1.38
35	BA	785	G	N1-C2	6.23	1.42	1.37
35	BA	1529	G	C5-C4	6.23	1.42	1.38
2	AB	406	G	N3-C4	6.23	1.39	1.35
2	AB	685	A	C6-N1	-6.23	1.31	1.35
2	AB	1556	C	P-O5'	6.23	1.66	1.59
2	AB	1720	U	P-O5'	6.23	1.66	1.59
2	AB	1816	C	O3'-P	6.23	1.68	1.61
2	AB	2474	U	N1-C6	6.23	1.43	1.38
2	AB	2829	A	C5-C4	-6.23	1.34	1.38
35	BA	507	C	C2-O2	-6.23	1.18	1.24
35	BA	1434	A	N9-C8	6.23	1.42	1.37
2	AB	1072	C	N1-C6	6.23	1.40	1.37
2	AB	1356	G	C2-N2	6.23	1.40	1.34
2	AB	2738	A	C4'-C3'	6.23	1.60	1.53
1	AA	13	G	N1-C2	6.23	1.42	1.37
2	AB	1452	G	C6-N1	6.23	1.44	1.39
2	AB	2617	U	N1-C2	6.23	1.44	1.38
35	BA	290	C	N1-C2	6.23	1.46	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1050	G	C5-C4	-6.23	1.33	1.38
35	BA	1448	C	N1-C6	6.23	1.40	1.37
37	BC	48	C	C4-C5	6.23	1.48	1.43
2	AB	637	A	C2-N3	-6.23	1.27	1.33
2	AB	1852	U	N3-C4	6.23	1.44	1.38
35	BA	831	A	C8-N7	-6.23	1.27	1.31
35	BA	1268	G	C8-N7	6.23	1.34	1.30
1	AA	44	G	N3-C4	-6.22	1.31	1.35
2	AB	1493	C	N1-C6	-6.22	1.33	1.37
2	AB	1576	U	C4-C5	6.22	1.49	1.43
1	AA	60	C	C5'-C4'	6.22	1.58	1.51
1	AA	94	A	C3'-C2'	6.22	1.59	1.52
2	AB	1737	G	C8-N7	-6.22	1.27	1.30
2	AB	2143	C	O3'-P	6.22	1.68	1.61
35	BA	299	G	C5'-C4'	6.22	1.58	1.51
2	AB	670	A	C6-N1	-6.22	1.31	1.35
35	BA	911	U	C4'-O4'	-6.22	1.37	1.45
35	BA	1510	C	N1-C6	6.22	1.40	1.37
35	BA	1540	U	C2-N3	6.22	1.42	1.37
2	AB	96	C	C5'-C4'	6.22	1.58	1.51
2	AB	282	A	N3-C4	6.22	1.38	1.34
2	AB	344	A	P-O5'	6.22	1.66	1.59
2	AB	459	U	C2-N3	6.22	1.42	1.37
2	AB	544	C	O3'-P	6.22	1.68	1.61
2	AB	585	G	C5'-C4'	6.22	1.58	1.51
2	AB	1838	C	C5-C6	6.22	1.39	1.34
2	AB	2186	G	N1-C2	6.22	1.42	1.37
2	AB	2436	G	N3-C4	6.22	1.39	1.35
22	AV	84	TYR	CE2-CZ	6.22	1.46	1.38
35	BA	246	A	N3-C4	6.22	1.38	1.34
35	BA	370	C	C2-N3	6.22	1.40	1.35
35	BA	921	U	C4-C5	6.22	1.49	1.43
35	BA	1489	G	N1-C2	6.22	1.42	1.37
2	AB	1374	G	C2'-O2'	6.22	1.49	1.41
1	AA	100	G	C2'-C1'	-6.22	1.46	1.53
1	AA	112	G	C5-C4	-6.22	1.33	1.38
2	AB	273	G	O3'-P	6.22	1.68	1.61
2	AB	441	U	C4-O4	6.22	1.28	1.23
2	AB	487	C	C2-O2	-6.22	1.18	1.24
2	AB	628	G	C8-N7	-6.22	1.27	1.30
2	AB	1092	C	C4-C5	6.22	1.48	1.43
2	AB	1440	U	C5'-C4'	6.22	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	436	C	C5'-C4'	6.22	1.58	1.51
35	BA	523	A	C8-N7	-6.22	1.27	1.31
35	BA	1049	U	C2'-C1'	6.22	1.60	1.53
49	BO	70	GLY	CA-C	6.22	1.61	1.51
2	AB	1138	G	C4'-O4'	-6.21	1.37	1.45
35	BA	358	U	O4'-C1'	6.21	1.49	1.41
35	BA	1425	U	C4-C5	6.21	1.49	1.43
36	BB	12	U	N1-C6	6.21	1.43	1.38
2	AB	344	A	N9-C8	-6.21	1.32	1.37
2	AB	1875	G	C6-N1	6.21	1.43	1.39
2	AB	1923	U	C2-N3	6.21	1.42	1.37
2	AB	2711	A	C6-N1	6.21	1.39	1.35
35	BA	277	C	C2-O2	-6.21	1.18	1.24
35	BA	675	A	N3-C4	6.21	1.38	1.34
35	BA	1249	C	C2'-C1'	6.21	1.60	1.53
35	BA	1343	G	C4'-O4'	-6.21	1.37	1.45
35	BA	1488	G	O3'-P	6.21	1.68	1.61
38	BD	77	A	N7-C5	6.21	1.43	1.39
2	AB	124	G	O3'-P	6.21	1.68	1.61
2	AB	323	C	N3-C4	6.21	1.38	1.33
2	AB	952	G	N7-C5	6.21	1.43	1.39
2	AB	1316	U	C4-C5	6.21	1.49	1.43
2	AB	1406	U	C3'-C2'	-6.21	1.46	1.52
2	AB	2463	C	C2'-C1'	6.21	1.60	1.53
35	BA	306	A	N7-C5	-6.21	1.35	1.39
35	BA	327	A	C2'-C1'	-6.21	1.46	1.53
35	BA	650	G	O3'-P	6.21	1.68	1.61
35	BA	721	G	C6-N1	6.21	1.43	1.39
35	BA	804	U	C3'-C2'	6.21	1.59	1.52
35	BA	923	A	N3-C4	6.21	1.38	1.34
35	BA	1128	C	N3-C4	6.21	1.38	1.33
35	BA	1413	A	C5-C4	-6.21	1.34	1.38
2	AB	577	G	C5-C6	6.21	1.48	1.42
35	BA	574	A	C6-N1	-6.21	1.31	1.35
37	BC	41	A	C6-N1	-6.21	1.31	1.35
2	AB	197	A	N1-C2	-6.21	1.28	1.34
2	AB	551	G	N3-C4	6.21	1.39	1.35
2	AB	2003	A	O3'-P	6.21	1.68	1.61
2	AB	2863	C	N1-C2	6.21	1.46	1.40
35	BA	72	A	N7-C5	6.21	1.43	1.39
2	AB	73	A	C4'-C3'	6.21	1.59	1.53
2	AB	701	G	C5-C6	6.21	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1339	G	C8-N7	6.21	1.34	1.30
2	AB	1502	A	N9-C4	-6.21	1.34	1.37
2	AB	2125	G	C2-N3	6.21	1.37	1.32
2	AB	2555	U	N1-C2	6.21	1.44	1.38
35	BA	486	U	P-O5'	6.21	1.66	1.59
2	AB	1431	A	N3-C4	6.21	1.38	1.34
35	BA	1357	A	C6-N6	6.21	1.39	1.33
37	BC	59	A	C4'-C3'	-6.21	1.46	1.53
45	BK	83	ARG	NE-CZ	6.21	1.41	1.33
51	BQ	80	ARG	NE-CZ	6.21	1.41	1.33
1	AA	44	G	C5'-C4'	6.20	1.58	1.51
2	AB	775	G	C5-C4	-6.20	1.34	1.38
2	AB	1377	G	C5-C4	-6.20	1.34	1.38
2	AB	2408	U	C3'-C2'	6.20	1.59	1.52
35	BA	467	U	O4'-C1'	6.20	1.49	1.41
35	BA	633	G	N9-C8	6.20	1.42	1.37
36	BB	9	A	C2'-C1'	-6.20	1.46	1.53
2	AB	394	C	C4'-C3'	-6.20	1.46	1.53
2	AB	672	C	O3'-P	6.20	1.68	1.61
2	AB	737	C	C3'-O3'	6.20	1.50	1.42
2	AB	2753	A	C8-N7	-6.20	1.27	1.31
2	AB	2878	U	C5-C6	6.20	1.39	1.34
35	BA	933	G	C5-C6	6.20	1.48	1.42
2	AB	1471	G	C5'-C4'	6.20	1.58	1.51
2	AB	1913	A	O4'-C1'	6.20	1.49	1.41
2	AB	2019	A	N9-C8	6.20	1.42	1.37
2	AB	2513	A	N9-C4	6.20	1.41	1.37
35	BA	93	U	C5'-C4'	6.20	1.58	1.51
35	BA	328	C	O3'-P	6.20	1.68	1.61
35	BA	403	C	C5'-C4'	6.20	1.58	1.51
35	BA	1284	C	C2-N3	6.20	1.40	1.35
35	BA	1305	G	C6-N1	6.20	1.43	1.39
2	AB	232	G	N9-C4	6.20	1.43	1.38
2	AB	262	A	C2-N3	6.20	1.39	1.33
2	AB	548	G	C2'-O2'	6.20	1.49	1.41
2	AB	784	G	C2-N3	6.20	1.37	1.32
2	AB	1388	G	O3'-P	6.20	1.68	1.61
2	AB	1529	G	C8-N7	-6.20	1.27	1.30
35	BA	411	A	N9-C4	-6.20	1.34	1.37
2	AB	986	C	C5-C6	6.20	1.39	1.34
1	AA	89	U	N3-C4	6.20	1.44	1.38
2	AB	81	G	N1-C2	6.20	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	161	A	C4'-C3'	-6.20	1.46	1.53
2	AB	1707	G	N9-C4	-6.20	1.32	1.38
2	AB	1709	U	C2-N3	6.20	1.42	1.37
2	AB	1979	U	C5-C6	6.20	1.39	1.34
2	AB	2875	C	O3'-P	-6.20	1.53	1.61
2	AB	1495	A	N7-C5	6.19	1.43	1.39
35	BA	769	G	C4'-O4'	-6.19	1.37	1.45
1	AA	50	A	P-O5'	6.19	1.66	1.59
2	AB	1409	U	P-O5'	6.19	1.66	1.59
35	BA	172	A	C6-N1	6.19	1.39	1.35
35	BA	866	C	C4-C5	-6.19	1.38	1.43
35	BA	1143	G	N3-C4	6.19	1.39	1.35
38	BD	5	G	P-O5'	6.19	1.66	1.59
2	AB	268	C	C4-N4	6.19	1.39	1.33
2	AB	944	C	P-O5'	6.19	1.66	1.59
2	AB	963	U	C5-C6	6.19	1.39	1.34
2	AB	2838	G	C2-N3	6.19	1.37	1.32
35	BA	195	A	C2'-C1'	6.19	1.60	1.53
35	BA	702	A	C5-C6	6.19	1.46	1.41
35	BA	1290	G	C2-N2	6.19	1.40	1.34
38	BD	19	G	O3'-P	6.19	1.68	1.61
2	AB	617	G	C6-N1	6.19	1.43	1.39
2	AB	842	U	C2-N3	6.19	1.42	1.37
2	AB	993	G	C2-N3	6.19	1.37	1.32
2	AB	1148	U	C5'-C4'	6.19	1.58	1.51
2	AB	1601	G	C2-N3	6.19	1.37	1.32
35	BA	1429	A	N3-C4	6.19	1.38	1.34
2	AB	355	U	C4-O4	-6.19	1.18	1.23
35	BA	193	C	P-O5'	6.19	1.66	1.59
35	BA	321	A	C8-N7	-6.19	1.27	1.31
35	BA	356	A	N9-C4	-6.19	1.34	1.37
35	BA	487	A	C2'-O2'	-6.19	1.33	1.41
35	BA	851	G	C4'-O4'	-6.19	1.37	1.45
35	BA	1060	U	C5-C6	6.19	1.39	1.34
2	AB	1497	U	N1-C6	6.19	1.43	1.38
35	BA	397	A	N1-C2	6.19	1.40	1.34
37	BC	53	G	P-O5'	6.19	1.66	1.59
2	AB	141	G	O3'-P	6.18	1.68	1.61
2	AB	1328	A	C6-N6	6.18	1.38	1.33
2	AB	1445	G	N1-C2	6.18	1.42	1.37
2	AB	1699	G	C8-N7	-6.18	1.27	1.30
2	AB	2199	A	C5-C6	6.18	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	138	G	C8-N7	6.18	1.34	1.30
35	BA	511	C	C2'-O2'	6.18	1.49	1.41
2	AB	144	A	N7-C5	6.18	1.43	1.39
2	AB	1726	C	C4-C5	6.18	1.47	1.43
2	AB	2616	C	C5-C6	6.18	1.39	1.34
2	AB	2859	G	C2-N3	6.18	1.37	1.32
35	BA	565	U	C5-C6	6.18	1.39	1.34
35	BA	690	G	P-O5'	6.18	1.66	1.59
35	BA	745	G	C2-N3	6.18	1.37	1.32
37	BC	20	G	N9-C8	6.18	1.42	1.37
35	BA	161	A	C8-N7	-6.18	1.27	1.31
35	BA	1525	G	N9-C4	6.18	1.42	1.38
2	AB	245	G	C8-N7	-6.18	1.27	1.30
2	AB	1181	U	C3'-C2'	6.18	1.59	1.52
2	AB	1636	U	N1-C6	-6.18	1.32	1.38
2	AB	2012	G	N3-C4	6.18	1.39	1.35
2	AB	2229	U	C2-O2	6.18	1.27	1.22
35	BA	255	G	C6-N1	-6.18	1.35	1.39
35	BA	456	A	C6-N1	-6.18	1.31	1.35
37	BC	28	U	C4'-O4'	-6.18	1.37	1.45
2	AB	1931	U	C4-C5	6.18	1.49	1.43
35	BA	1463	U	C2-N3	6.18	1.42	1.37
2	AB	1369	G	O4'-C1'	-6.18	1.33	1.41
35	BA	284	C	P-O5'	6.18	1.66	1.59
2	AB	207	A	C6-N6	6.17	1.38	1.33
2	AB	414	C	C2-N3	6.17	1.40	1.35
2	AB	1818	U	N1-C2	6.17	1.44	1.38
2	AB	2864	G	C2-N3	6.17	1.37	1.32
35	BA	826	C	C4'-C3'	-6.17	1.46	1.53
35	BA	1050	G	C2'-C1'	-6.17	1.46	1.53
2	AB	2413	G	N1-C2	6.17	1.42	1.37
35	BA	1088	G	C8-N7	6.17	1.34	1.30
2	AB	1601	G	N7-C5	6.17	1.43	1.39
2	AB	2070	A	C2'-O2'	6.17	1.49	1.41
2	AB	2823	A	N7-C5	6.17	1.43	1.39
35	BA	7	A	C3'-O3'	6.17	1.50	1.42
35	BA	983	A	C3'-O3'	6.17	1.50	1.42
38	BD	43	G	O3'-P	6.17	1.68	1.61
2	AB	19	A	C4'-C3'	-6.17	1.46	1.53
2	AB	1428	C	C3'-C2'	6.17	1.59	1.52
2	AB	1661	G	P-O5'	6.17	1.66	1.59
2	AB	1827	U	N1-C2	6.17	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2378	A	C2-N3	6.17	1.39	1.33
35	BA	1067	A	C5-C4	-6.17	1.34	1.38
38	BD	44	A	O3'-P	6.17	1.68	1.61
2	AB	1083	U	C5'-C4'	6.17	1.58	1.51
2	AB	2299	U	C4-C5	6.17	1.49	1.43
35	BA	229	U	O3'-P	6.17	1.68	1.61
35	BA	420	U	N1-C2	6.17	1.44	1.38
35	BA	1404	C	N3-C4	6.17	1.38	1.33
42	BH	64	GLU	CG-CD	6.17	1.61	1.51
2	AB	1513	U	C4-C5	6.17	1.49	1.43
2	AB	1547	C	C4'-O4'	-6.17	1.37	1.45
2	AB	2322	A	N7-C5	6.17	1.43	1.39
2	AB	2784	U	C2-N3	6.17	1.42	1.37
35	BA	872	A	N3-C4	6.17	1.38	1.34
38	BD	66	C	C3'-O3'	-6.17	1.33	1.42
2	AB	118	A	C8-N7	-6.17	1.27	1.31
2	AB	342	A	C3'-C2'	6.17	1.59	1.52
2	AB	750	A	C4'-O4'	-6.17	1.37	1.45
35	BA	1113	C	P-O5'	6.17	1.66	1.59
2	AB	779	U	C3'-C2'	6.16	1.59	1.52
2	AB	2620	C	C4-N4	6.16	1.39	1.33
35	BA	103	U	C4'-O4'	-6.16	1.37	1.45
35	BA	658	C	N1-C6	6.16	1.40	1.37
35	BA	694	A	C2-N3	-6.16	1.28	1.33
35	BA	1300	G	C5-C6	6.16	1.48	1.42
2	AB	807	U	C5-C6	6.16	1.39	1.34
2	AB	1150	C	C2-N3	6.16	1.40	1.35
2	AB	2563	U	C5'-C4'	6.16	1.58	1.51
35	BA	501	C	C2-O2	-6.16	1.19	1.24
2	AB	2192	U	N1-C2	6.16	1.44	1.38
35	BA	310	G	N9-C8	6.16	1.42	1.37
36	BB	33	U	C2-O2	6.16	1.27	1.22
2	AB	635	C	C5'-C4'	6.16	1.58	1.51
2	AB	764	A	C8-N7	-6.16	1.27	1.31
2	AB	2781	A	C4'-C3'	6.16	1.59	1.53
35	BA	1112	C	P-O5'	6.16	1.66	1.59
36	BB	27	C	C2-O2	6.16	1.29	1.24
37	BC	46	C	C4-C5	-6.16	1.38	1.43
42	BH	47	PHE	CB-CG	6.16	1.61	1.51
2	AB	49	A	C2'-C1'	-6.16	1.46	1.53
2	AB	537	G	N7-C5	6.16	1.43	1.39
2	AB	1276	A	O3'-P	-6.16	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2881	U	C2-N3	6.16	1.42	1.37
1	AA	99	A	P-O5'	6.16	1.66	1.59
2	AB	322	A	N3-C4	6.16	1.38	1.34
2	AB	435	C	C4-C5	6.16	1.47	1.43
2	AB	515	A	C4'-C3'	6.16	1.59	1.53
2	AB	1391	U	C5-C6	6.16	1.39	1.34
2	AB	1517	G	C5-C4	-6.16	1.34	1.38
2	AB	2310	C	C4'-C3'	6.16	1.59	1.53
2	AB	2511	U	C5'-C4'	6.16	1.58	1.51
2	AB	2810	A	N7-C5	-6.16	1.35	1.39
35	BA	152	A	N9-C4	6.16	1.41	1.37
35	BA	1043	G	N3-C4	-6.16	1.31	1.35
35	BA	1047	G	C5-C4	-6.16	1.34	1.38
35	BA	1326	U	C4'-C3'	-6.16	1.46	1.53
38	BD	51	U	N3-C4	6.16	1.44	1.38
2	AB	88	G	C4'-C3'	6.15	1.59	1.53
35	BA	476	U	C5-C6	6.15	1.39	1.34
35	BA	964	A	C5-C4	-6.15	1.34	1.38
36	BB	76	A	C8-N7	-6.15	1.27	1.31
1	AA	57	A	C4'-O4'	-6.15	1.37	1.45
2	AB	80	G	C2-N3	6.15	1.37	1.32
2	AB	134	G	C6-N1	-6.15	1.35	1.39
2	AB	552	U	C1'-N1	6.15	1.57	1.48
2	AB	1953	A	N1-C2	-6.15	1.28	1.34
2	AB	2040	G	C2'-C1'	-6.15	1.46	1.53
2	AB	2111	U	C3'-C2'	6.15	1.59	1.52
2	AB	2819	G	C8-N7	-6.15	1.27	1.30
35	BA	440	C	C4-C5	-6.15	1.38	1.43
2	AB	69	C	C4-C5	6.15	1.47	1.43
35	BA	612	C	N1-C6	6.15	1.40	1.37
37	BC	50	U	C4'-O4'	-6.15	1.37	1.45
2	AB	440	C	N1-C6	6.15	1.40	1.37
2	AB	1779	U	C2-O2	6.15	1.27	1.22
35	BA	68	G	P-O5'	6.15	1.65	1.59
2	AB	348	A	C5'-C4'	6.15	1.58	1.51
2	AB	2133	G	C8-N7	-6.15	1.27	1.30
35	BA	431	A	C8-N7	6.15	1.35	1.31
35	BA	739	C	C5'-C4'	6.15	1.58	1.51
35	BA	1371	G	N9-C4	-6.15	1.33	1.38
2	AB	2416	C	N1-C6	6.15	1.40	1.37
1	AA	111	U	N1-C6	-6.14	1.32	1.38
2	AB	65	U	C4-C5	-6.14	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	444	C	N3-C4	6.14	1.38	1.33
2	AB	730	A	C5-C6	6.14	1.46	1.41
2	AB	1567	G	N1-C2	6.14	1.42	1.37
2	AB	1926	U	C3'-C2'	6.14	1.59	1.52
2	AB	2733	A	C4'-O4'	-6.14	1.37	1.45
35	BA	250	A	N3-C4	6.14	1.38	1.34
35	BA	1533	C	P-O5'	6.14	1.65	1.59
2	AB	456	C	C4-C5	6.14	1.47	1.43
2	AB	565	C	C4-C5	-6.14	1.38	1.43
2	AB	786	C	C5-C6	6.14	1.39	1.34
2	AB	1795	C	P-O5'	6.14	1.65	1.59
2	AB	2117	A	C2'-C1'	-6.14	1.46	1.53
2	AB	2510	C	C2-N3	6.14	1.40	1.35
2	AB	2891	U	O3'-P	6.14	1.68	1.61
35	BA	174	A	C4'-O4'	-6.14	1.37	1.45
35	BA	408	A	N9-C4	6.14	1.41	1.37
35	BA	972	C	N3-C4	6.14	1.38	1.33
36	BB	2	G	N9-C8	-6.14	1.33	1.37
2	AB	945	A	C5'-C4'	6.14	1.58	1.51
2	AB	1634	A	C5'-C4'	6.14	1.58	1.51
2	AB	135	U	C2'-C1'	6.14	1.60	1.53
2	AB	157	C	C2'-C1'	6.14	1.60	1.53
2	AB	1804	C	C5-C6	6.14	1.39	1.34
2	AB	2548	U	C4'-O4'	-6.14	1.37	1.45
2	AB	2827	C	C2'-O2'	6.14	1.49	1.41
2	AB	1586	A	C6-N6	6.14	1.38	1.33
35	BA	1241	G	N7-C5	6.14	1.43	1.39
37	BC	39	U	C4'-C3'	6.14	1.59	1.53
2	AB	1000	A	C8-N7	-6.14	1.27	1.31
2	AB	1748	C	C5'-C4'	6.14	1.58	1.51
2	AB	2442	C	P-O5'	6.14	1.65	1.59
35	BA	53	A	C4'-O4'	-6.14	1.37	1.45
35	BA	467	U	C4'-C3'	6.14	1.59	1.53
35	BA	821	G	C6-N1	-6.14	1.35	1.39
35	BA	1205	U	C4-C5	6.14	1.49	1.43
35	BA	1526	G	C5'-C4'	6.14	1.58	1.51
1	AA	103	U	C2-N3	6.13	1.42	1.37
2	AB	301	G	C4'-C3'	6.13	1.59	1.53
2	AB	315	G	C5-C6	6.13	1.48	1.42
2	AB	1634	A	C2-N3	6.13	1.39	1.33
2	AB	1652	A	C5'-C4'	6.13	1.58	1.51
2	AB	1948	G	C2-N3	6.13	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2201	G	N3-C4	6.13	1.39	1.35
2	AB	2308	G	C4'-O4'	-6.13	1.37	1.45
2	AB	2377	A	N3-C4	6.13	1.38	1.34
35	BA	1429	A	O3'-P	6.13	1.68	1.61
2	AB	303	G	N1-C2	6.13	1.42	1.37
2	AB	911	A	C8-N7	-6.13	1.27	1.31
2	AB	2233	U	C4-C5	6.13	1.49	1.43
35	BA	25	C	C2-N3	6.13	1.40	1.35
35	BA	164	G	C2-N3	6.13	1.37	1.32
35	BA	236	A	C8-N7	-6.13	1.27	1.31
35	BA	291	U	O3'-P	6.13	1.68	1.61
35	BA	809	G	C3'-C2'	6.13	1.59	1.52
35	BA	1151	A	P-O5'	6.13	1.65	1.59
37	BC	20	G	C6-N1	-6.13	1.35	1.39
1	AA	45	A	C5'-C4'	6.13	1.58	1.51
1	AA	71	C	C5-C6	-6.13	1.29	1.34
2	AB	851	C	N1-C6	-6.13	1.33	1.37
2	AB	1949	G	N3-C4	6.13	1.39	1.35
2	AB	2636	C	N1-C2	-6.13	1.34	1.40
2	AB	2782	G	P-O5'	6.13	1.65	1.59
35	BA	706	A	C4'-O4'	-6.13	1.37	1.45
35	BA	965	U	P-O5'	6.13	1.65	1.59
35	BA	1437	A	N3-C4	6.13	1.38	1.34
2	AB	2180	U	C2'-O2'	-6.13	1.33	1.41
35	BA	535	A	C5-C6	6.13	1.46	1.41
35	BA	595	A	N3-C4	6.13	1.38	1.34
35	BA	1248	A	C4'-O4'	-6.13	1.37	1.45
35	BA	1283	U	C3'-O3'	6.13	1.50	1.42
2	AB	675	A	C6-N1	6.13	1.39	1.35
2	AB	2331	G	C5-C6	6.13	1.48	1.42
35	BA	405	U	P-O5'	6.13	1.65	1.59
35	BA	1275	A	P-O5'	6.13	1.65	1.59
35	BA	1422	G	C2-N3	6.13	1.37	1.32
2	AB	1191	G	C4'-C3'	6.13	1.59	1.53
2	AB	1539	U	C5'-C4'	6.13	1.58	1.51
2	AB	2859	G	O3'-P	6.13	1.68	1.61
35	BA	642	A	P-O5'	-6.13	1.53	1.59
35	BA	697	U	C5-C6	6.13	1.39	1.34
35	BA	1461	G	C2-N3	6.13	1.37	1.32
2	AB	902	C	C5-C6	6.12	1.39	1.34
2	AB	1453	A	C2'-C1'	-6.12	1.46	1.53
7	AG	125	GLY	N-CA	6.12	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	201	G	C2-N3	6.12	1.37	1.32
35	BA	1284	C	C4'-O4'	-6.12	1.37	1.45
1	AA	52	A	C5-C4	-6.12	1.34	1.38
2	AB	439	A	C6-N6	6.12	1.38	1.33
2	AB	735	A	C8-N7	-6.12	1.27	1.31
2	AB	1011	G	C8-N7	-6.12	1.27	1.30
2	AB	1793	C	C4-C5	6.12	1.47	1.43
2	AB	2116	G	C6-N1	6.12	1.43	1.39
35	BA	208	U	C4-C5	6.12	1.49	1.43
35	BA	1146	A	P-O5'	-6.12	1.53	1.59
2	AB	570	G	C5-C4	-6.12	1.34	1.38
2	AB	1260	A	C5-C4	6.12	1.43	1.38
2	AB	1369	G	C4'-C3'	6.12	1.59	1.53
2	AB	2452	C	P-O5'	6.12	1.65	1.59
2	AB	2639	A	C5'-C4'	6.12	1.58	1.51
2	AB	2662	A	C5-C6	6.12	1.46	1.41
2	AB	2736	A	C5-C4	-6.12	1.34	1.38
2	AB	2839	G	C5-C4	-6.12	1.34	1.38
35	BA	38	G	O3'-P	6.12	1.68	1.61
35	BA	557	G	C2-N3	6.12	1.37	1.32
35	BA	1054	C	N1-C2	6.12	1.46	1.40
35	BA	1138	G	N7-C5	6.12	1.43	1.39
35	BA	1418	A	C5'-C4'	6.12	1.58	1.51
35	BA	1483	A	C4'-C3'	-6.12	1.46	1.53
2	AB	2151	U	P-O5'	6.12	1.65	1.59
35	BA	1172	C	C2-N3	6.12	1.40	1.35
38	BD	43	G	N9-C4	-6.12	1.33	1.38
23	AW	21	ARG	CZ-NH1	6.12	1.41	1.33
35	BA	265	G	N7-C5	6.12	1.43	1.39
35	BA	903	G	C4'-C3'	-6.12	1.46	1.53
35	BA	1045	C	C2'-O2'	-6.12	1.33	1.41
35	BA	1478	U	C3'-C2'	6.12	1.59	1.52
2	AB	599	A	C3'-C2'	6.12	1.59	1.52
2	AB	2047	C	C2-O2	6.12	1.29	1.24
2	AB	2824	C	C4'-O4'	-6.12	1.37	1.45
2	AB	242	G	C2-N3	6.12	1.37	1.32
2	AB	324	A	N9-C8	-6.12	1.32	1.37
2	AB	1250	G	C5-C4	6.12	1.42	1.38
2	AB	1711	A	C3'-C2'	6.12	1.59	1.52
2	AB	2182	U	C5-C6	6.12	1.39	1.34
2	AB	2479	U	C4'-C3'	-6.12	1.46	1.53
35	BA	933	G	C5-C4	6.12	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1294	G	N3-C4	6.12	1.39	1.35
35	BA	1432	G	N9-C8	-6.12	1.33	1.37
2	AB	135	U	P-O5'	6.11	1.65	1.59
2	AB	395	U	C5'-C4'	6.11	1.58	1.51
2	AB	545	U	C4'-O4'	-6.11	1.37	1.45
2	AB	743	A	C5'-C4'	6.11	1.58	1.51
2	AB	1073	A	P-O5'	6.11	1.65	1.59
2	AB	1309	G	C4'-C3'	6.11	1.59	1.53
2	AB	1600	C	P-O5'	6.11	1.65	1.59
2	AB	2244	U	P-O5'	6.11	1.65	1.59
2	AB	2343	U	C5-C6	6.11	1.39	1.34
2	AB	2430	A	C8-N7	-6.11	1.27	1.31
2	AB	2577	A	N9-C8	-6.11	1.32	1.37
35	BA	184	G	C6-N1	6.11	1.43	1.39
35	BA	268	U	C3'-C2'	-6.11	1.46	1.52
35	BA	944	G	N3-C4	6.11	1.39	1.35
35	BA	1280	A	N3-C4	6.11	1.38	1.34
2	AB	1276	A	C5'-C4'	6.11	1.58	1.51
2	AB	1496	A	N3-C4	6.11	1.38	1.34
2	AB	2902	C	C5'-C4'	6.11	1.58	1.51
2	AB	731	C	C3'-O3'	6.11	1.50	1.42
2	AB	1177	G	C6-O6	-6.11	1.18	1.24
2	AB	1861	G	C8-N7	6.11	1.34	1.30
2	AB	2374	C	C4-C5	-6.11	1.38	1.43
2	AB	2880	C	C5'-C4'	6.11	1.58	1.51
35	BA	80	A	C4'-C3'	-6.11	1.46	1.53
35	BA	486	U	C4-O4	-6.11	1.18	1.23
2	AB	591	U	C5-C6	6.11	1.39	1.34
2	AB	1164	C	O3'-P	6.11	1.68	1.61
2	AB	1592	C	P-O5'	6.11	1.65	1.59
2	AB	1594	U	P-O5'	6.11	1.65	1.59
2	AB	2071	A	C3'-O3'	-6.11	1.33	1.42
2	AB	2308	G	N1-C2	6.11	1.42	1.37
35	BA	56	U	P-O5'	6.11	1.65	1.59
35	BA	249	U	C2'-C1'	6.11	1.60	1.53
35	BA	1180	A	C8-N7	-6.11	1.27	1.31
2	AB	182	A	N9-C8	-6.11	1.32	1.37
2	AB	943	A	N3-C4	6.11	1.38	1.34
2	AB	2004	G	N9-C4	6.11	1.42	1.38
35	BA	293	G	O3'-P	6.11	1.68	1.61
35	BA	333	U	O4'-C1'	6.11	1.49	1.41
35	BA	1057	G	C6-N1	6.11	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1062	U	C5-C6	6.11	1.39	1.34
37	BC	41	A	C3'-C2'	6.11	1.59	1.52
2	AB	880	G	C3'-O3'	6.11	1.50	1.42
2	AB	1728	C	C4-C5	6.11	1.47	1.43
2	AB	2577	A	C8-N7	6.11	1.35	1.31
35	BA	386	C	C1'-N1	6.11	1.57	1.48
35	BA	1157	A	O4'-C1'	6.11	1.49	1.41
36	BB	47	U	C2-N3	6.11	1.42	1.37
35	BA	1443	C	C2-N3	6.10	1.40	1.35
37	BC	53	G	C6-O6	6.10	1.29	1.24
2	AB	1113	U	C4'-O4'	-6.10	1.37	1.45
2	AB	1809	A	O3'-P	6.10	1.68	1.61
2	AB	2283	C	C5'-C4'	6.10	1.58	1.51
35	BA	348	G	C2-N3	6.10	1.37	1.32
2	AB	636	G	N3-C4	6.10	1.39	1.35
2	AB	1203	U	C3'-C2'	6.10	1.59	1.52
35	BA	646	G	C5-C6	6.10	1.48	1.42
37	BC	16	A	P-O5'	6.10	1.65	1.59
2	AB	484	C	C2-N3	6.10	1.40	1.35
2	AB	1277	G	C2'-O2'	-6.10	1.33	1.41
2	AB	1549	A	N9-C8	-6.10	1.32	1.37
2	AB	1949	G	C6-N1	6.10	1.43	1.39
2	AB	2171	A	C4'-C3'	6.10	1.59	1.53
35	BA	109	A	C5-C4	-6.10	1.34	1.38
35	BA	535	A	C6-N1	-6.10	1.31	1.35
35	BA	812	G	C6-O6	-6.10	1.18	1.24
35	BA	1532	U	C4-C5	6.10	1.49	1.43
1	AA	98	G	C5'-C4'	6.10	1.58	1.51
2	AB	251	A	N7-C5	-6.10	1.35	1.39
2	AB	451	U	P-O5'	6.10	1.65	1.59
2	AB	635	C	O3'-P	6.10	1.68	1.61
2	AB	830	G	O3'-P	6.10	1.68	1.61
2	AB	1168	G	C5-C4	6.10	1.42	1.38
2	AB	2601	C	C2-N3	6.10	1.40	1.35
35	BA	145	G	N7-C5	6.10	1.43	1.39
35	BA	1055	A	O3'-P	6.10	1.68	1.61
35	BA	1079	G	N9-C8	6.10	1.42	1.37
2	AB	2241	A	N3-C4	6.10	1.38	1.34
2	AB	2481	G	P-O5'	6.10	1.65	1.59
37	BC	51	C	C2-N3	6.10	1.40	1.35
2	AB	24	G	C5'-C4'	6.09	1.58	1.51
2	AB	543	G	C4'-O4'	-6.09	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1401	G	C8-N7	-6.09	1.27	1.30
2	AB	1406	U	P-O5'	6.09	1.65	1.59
2	AB	2031	A	C8-N7	-6.09	1.27	1.31
2	AB	2839	G	C3'-O3'	6.09	1.50	1.42
35	BA	35	G	N3-C4	6.09	1.39	1.35
35	BA	83	C	P-O5'	6.09	1.65	1.59
35	BA	270	A	N9-C4	6.09	1.41	1.37
35	BA	481	G	C6-N1	-6.09	1.35	1.39
35	BA	874	G	C6-N1	-6.09	1.35	1.39
1	AA	49	C	P-O5'	6.09	1.65	1.59
2	AB	1017	G	P-O5'	6.09	1.65	1.59
2	AB	1120	G	C6-N1	-6.09	1.35	1.39
2	AB	1699	G	N9-C4	6.09	1.42	1.38
2	AB	1882	U	N3-C4	6.09	1.44	1.38
2	AB	2554	U	C5'-C4'	6.09	1.58	1.51
35	BA	172	A	C4'-O4'	-6.09	1.37	1.45
35	BA	290	C	C2-N3	-6.09	1.30	1.35
35	BA	433	G	N3-C4	6.09	1.39	1.35
35	BA	1378	C	O3'-P	6.09	1.68	1.61
2	AB	800	A	C3'-C2'	6.09	1.59	1.52
2	AB	1379	U	C2'-O2'	-6.09	1.33	1.41
2	AB	1621	U	N3-C4	-6.09	1.32	1.38
35	BA	1120	C	N1-C6	-6.09	1.33	1.37
35	BA	1206	G	N7-C5	6.09	1.43	1.39
2	AB	361	G	N9-C8	6.09	1.42	1.37
2	AB	708	G	P-O5'	6.09	1.65	1.59
2	AB	842	U	N3-C4	6.09	1.44	1.38
2	AB	1175	A	C2-N3	6.09	1.39	1.33
2	AB	1699	G	C2'-C1'	-6.09	1.46	1.53
35	BA	167	A	N9-C4	-6.09	1.34	1.37
35	BA	861	G	C5'-C4'	6.09	1.58	1.51
35	BA	976	G	O3'-P	6.09	1.68	1.61
2	AB	97	C	N1-C6	6.09	1.40	1.37
2	AB	195	A	N9-C4	-6.09	1.34	1.37
2	AB	479	A	C5-C4	-6.09	1.34	1.38
2	AB	925	A	O3'-P	6.09	1.68	1.61
2	AB	1546	G	C4'-C3'	-6.09	1.46	1.53
2	AB	2126	A	P-O5'	6.09	1.65	1.59
35	BA	282	A	N9-C8	6.09	1.42	1.37
35	BA	1357	A	C5'-C4'	6.09	1.58	1.51
2	AB	322	A	C6-N1	6.08	1.39	1.35
2	AB	953	G	N7-C5	6.08	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	117	G	C2-N3	6.08	1.37	1.32
35	BA	864	A	N7-C5	6.08	1.43	1.39
35	BA	1066	C	P-O5'	-6.08	1.53	1.59
35	BA	1127	G	P-O5'	-6.08	1.53	1.59
35	BA	1160	G	C2-N2	-6.08	1.28	1.34
35	BA	1170	A	O3'-P	6.08	1.68	1.61
35	BA	1214	C	P-O5'	6.08	1.65	1.59
35	BA	1478	U	O3'-P	6.08	1.68	1.61
2	AB	88	G	N9-C8	-6.08	1.33	1.37
2	AB	1225	G	C2-N2	-6.08	1.28	1.34
2	AB	2193	G	O3'-P	6.08	1.68	1.61
2	AB	2831	G	C4'-O4'	-6.08	1.37	1.45
35	BA	297	G	C5-C4	6.08	1.42	1.38
35	BA	800	G	C4'-O4'	-6.08	1.37	1.45
38	BD	69	C	N3-C4	6.08	1.38	1.33
2	AB	908	C	C5'-C4'	6.08	1.58	1.51
2	AB	1255	U	C2-N3	6.08	1.42	1.37
2	AB	1438	U	C2'-O2'	6.08	1.49	1.41
2	AB	2513	A	C5'-C4'	6.08	1.58	1.51
2	AB	2587	A	C3'-C2'	6.08	1.59	1.52
2	AB	2589	A	C8-N7	-6.08	1.27	1.31
2	AB	2701	U	O3'-P	6.08	1.68	1.61
2	AB	2749	A	P-O5'	6.08	1.65	1.59
35	BA	1241	G	N9-C8	6.08	1.42	1.37
38	BD	18	U	C4-O4	6.08	1.28	1.23
2	AB	93	G	C4'-O4'	-6.08	1.37	1.45
2	AB	686	U	O3'-P	6.08	1.68	1.61
2	AB	1376	C	P-O5'	6.08	1.65	1.59
35	BA	292	G	C2'-O2'	6.08	1.49	1.41
1	AA	73	A	C4'-O4'	-6.08	1.37	1.45
2	AB	105	C	N1-C6	6.08	1.40	1.37
2	AB	700	G	C2'-C1'	-6.08	1.46	1.53
2	AB	843	G	C4'-O4'	-6.08	1.37	1.45
2	AB	1178	C	C4-C5	6.08	1.47	1.43
2	AB	1930	G	N1-C2	6.08	1.42	1.37
35	BA	11	G	C3'-C2'	6.08	1.59	1.52
35	BA	275	G	C2-N3	6.08	1.37	1.32
35	BA	691	G	C6-N1	-6.08	1.35	1.39
35	BA	766	A	C5-C4	-6.08	1.34	1.38
35	BA	1101	A	C8-N7	-6.08	1.27	1.31
36	BB	74	C	N1-C2	6.08	1.46	1.40
35	BA	460	A	C5'-C4'	6.08	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1428	A	N3-C4	6.08	1.38	1.34
35	BA	1482	G	N9-C4	-6.08	1.33	1.38
2	AB	626	A	C5'-C4'	6.08	1.58	1.51
2	AB	1060	U	N3-C4	6.08	1.44	1.38
2	AB	1219	U	N1-C2	6.08	1.44	1.38
2	AB	1890	A	C6-N1	6.08	1.39	1.35
2	AB	2820	A	N9-C4	6.08	1.41	1.37
2	AB	2873	A	C6-N1	-6.08	1.31	1.35
35	BA	384	G	N7-C5	6.08	1.42	1.39
1	AA	53	A	N3-C4	6.07	1.38	1.34
2	AB	31	C	C4-C5	6.07	1.47	1.43
2	AB	100	U	C2-O2	6.07	1.27	1.22
2	AB	963	U	C4'-O4'	-6.07	1.37	1.45
2	AB	981	A	C4'-C3'	6.07	1.59	1.53
2	AB	1110	G	C5'-C4'	6.07	1.58	1.51
2	AB	1252	G	C4'-O4'	-6.07	1.37	1.45
2	AB	2082	A	N9-C4	-6.07	1.34	1.37
2	AB	2612	C	N1-C6	-6.07	1.33	1.37
35	BA	491	G	P-O5'	6.07	1.65	1.59
35	BA	733	G	N3-C4	6.07	1.39	1.35
35	BA	1509	C	P-O5'	6.07	1.65	1.59
36	BB	2	G	N3-C4	6.07	1.39	1.35
2	AB	699	A	C6-N1	6.07	1.39	1.35
35	BA	127	G	C3'-O3'	6.07	1.50	1.42
35	BA	1441	A	N7-C5	-6.07	1.35	1.39
2	AB	129	C	P-O5'	6.07	1.65	1.59
2	AB	749	A	N3-C4	6.07	1.38	1.34
2	AB	768	G	C8-N7	6.07	1.34	1.30
2	AB	1106	G	C6-O6	-6.07	1.18	1.24
2	AB	1741	C	C5'-C4'	6.07	1.58	1.51
2	AB	2203	U	C4-O4	-6.07	1.18	1.23
2	AB	2891	U	C4'-O4'	-6.07	1.37	1.45
35	BA	824	G	O3'-P	6.07	1.68	1.61
2	AB	2526	G	N1-C2	6.07	1.42	1.37
35	BA	825	A	O4'-C1'	6.07	1.49	1.41
2	AB	153	U	C4-C5	6.07	1.49	1.43
2	AB	369	U	C2-N3	6.07	1.42	1.37
2	AB	475	C	N1-C6	-6.07	1.33	1.37
2	AB	485	C	C3'-C2'	-6.07	1.46	1.52
2	AB	1992	G	C5'-C4'	6.07	1.58	1.51
2	AB	2262	U	C2-O2	6.07	1.27	1.22
2	AB	2613	U	C4'-C3'	6.07	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2877	G	P-O5'	6.07	1.65	1.59
35	BA	307	C	N1-C6	6.07	1.40	1.37
35	BA	626	G	C2-N3	6.07	1.37	1.32
35	BA	1097	C	C2'-O2'	-6.07	1.33	1.41
35	BA	1267	C	N1-C2	6.07	1.46	1.40
35	BA	1307	U	C5'-C4'	6.07	1.58	1.51
35	BA	1308	U	C2-N3	6.07	1.42	1.37
2	AB	595	C	C4'-C3'	-6.07	1.46	1.53
2	AB	2161	C	C2-N3	6.07	1.40	1.35
2	AB	2336	A	C5-C6	6.07	1.46	1.41
2	AB	2561	U	C2'-C1'	6.07	1.60	1.53
2	AB	2712	C	N1-C6	-6.07	1.33	1.37
2	AB	234	U	N1-C6	6.06	1.43	1.38
2	AB	625	G	N1-C2	-6.06	1.32	1.37
2	AB	2621	G	N9-C8	-6.06	1.33	1.37
35	BA	617	G	P-O5'	6.06	1.65	1.59
35	BA	756	C	C5'-C4'	6.06	1.58	1.51
35	BA	1282	C	C5'-C4'	6.06	1.58	1.51
35	BA	1298	U	C4-O4	6.06	1.28	1.23
35	BA	1464	U	C4'-C3'	6.06	1.59	1.53
35	BA	1500	A	C5-C4	-6.06	1.34	1.38
2	AB	62	U	C3'-C2'	6.06	1.59	1.52
2	AB	409	G	P-O5'	6.06	1.65	1.59
2	AB	464	U	C5-C6	6.06	1.39	1.34
2	AB	713	G	C5-C4	-6.06	1.34	1.38
2	AB	1041	G	C6-N1	6.06	1.43	1.39
2	AB	1318	U	N1-C6	6.06	1.43	1.38
35	BA	26	A	C5'-C4'	6.06	1.58	1.51
35	BA	651	C	N1-C6	6.06	1.40	1.37
35	BA	1063	C	C5'-C4'	6.06	1.58	1.51
35	BA	1132	C	N1-C6	6.06	1.40	1.37
2	AB	567	U	C2-N3	6.06	1.42	1.37
2	AB	642	U	C5'-C4'	6.06	1.58	1.51
2	AB	862	G	C2-N2	-6.06	1.28	1.34
2	AB	1140	C	N1-C2	-6.06	1.34	1.40
35	BA	1047	G	N9-C4	-6.06	1.33	1.38
2	AB	7	G	C5'-C4'	6.06	1.58	1.51
2	AB	159	G	C2'-C1'	-6.06	1.46	1.53
2	AB	1096	A	C5-C6	6.06	1.46	1.41
2	AB	1146	C	C4-N4	-6.06	1.28	1.33
2	AB	1515	A	N3-C4	6.06	1.38	1.34
2	AB	1650	A	C4'-C3'	-6.06	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2781	A	C5'-C4'	6.06	1.58	1.51
2	AB	2803	G	N9-C8	6.06	1.42	1.37
35	BA	461	A	C3'-C2'	-6.06	1.46	1.52
35	BA	643	C	C2'-C1'	6.06	1.60	1.53
2	AB	184	C	N1-C2	6.06	1.46	1.40
2	AB	437	U	C4-C5	6.06	1.49	1.43
2	AB	1352	U	C4-O4	6.06	1.28	1.23
2	AB	2154	A	C2'-C1'	-6.06	1.46	1.53
2	AB	2660	A	C5'-C4'	6.06	1.58	1.51
35	BA	140	U	P-O5'	6.06	1.65	1.59
35	BA	194	C	N3-C4	6.06	1.38	1.33
35	BA	391	G	C3'-C2'	6.06	1.59	1.52
35	BA	766	A	C8-N7	6.06	1.35	1.31
35	BA	1304	G	C2-N3	6.06	1.37	1.32
2	AB	109	C	C4'-O4'	-6.06	1.37	1.45
2	AB	998	C	N1-C2	6.06	1.46	1.40
2	AB	1122	G	N1-C2	6.06	1.42	1.37
35	BA	85	U	O4'-C1'	6.06	1.49	1.41
2	AB	181	A	C5-C4	-6.05	1.34	1.38
2	AB	226	A	C5'-C4'	6.05	1.58	1.51
2	AB	960	A	N7-C5	-6.05	1.35	1.39
2	AB	1171	G	O4'-C1'	6.05	1.49	1.41
2	AB	1202	G	C4'-C3'	6.05	1.59	1.53
2	AB	1601	G	C5-C4	-6.05	1.34	1.38
2	AB	1714	U	N3-C4	6.05	1.43	1.38
2	AB	2268	A	P-O5'	-6.05	1.53	1.59
2	AB	2672	U	P-O5'	6.05	1.65	1.59
2	AB	2802	G	C6-N1	6.05	1.43	1.39
35	BA	95	C	C4'-O4'	-6.05	1.37	1.45
35	BA	1147	C	N3-C4	6.05	1.38	1.33
2	AB	838	C	C2-O2	-6.05	1.19	1.24
2	AB	1132	U	C5'-C4'	6.05	1.58	1.51
2	AB	2543	G	C5'-C4'	6.05	1.58	1.51
2	AB	2743	U	O3'-P	6.05	1.68	1.61
2	AB	2876	G	N7-C5	6.05	1.42	1.39
35	BA	502	A	C6-N6	6.05	1.38	1.33
35	BA	1281	C	C5'-C4'	6.05	1.58	1.51
2	AB	372	G	C5-C4	6.05	1.42	1.38
2	AB	863	A	C2-N3	6.05	1.39	1.33
2	AB	1307	A	P-O5'	6.05	1.65	1.59
2	AB	2612	C	C3'-O3'	6.05	1.50	1.42
50	BP	40	GLU	CD-OE1	-6.05	1.19	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	528	A	C8-N7	-6.05	1.27	1.31
2	AB	597	G	N7-C5	6.05	1.42	1.39
2	AB	701	G	C5-C4	-6.05	1.34	1.38
2	AB	2123	G	C8-N7	-6.05	1.27	1.30
2	AB	2130	U	C2-N3	6.05	1.42	1.37
2	AB	2159	G	C5-C4	-6.05	1.34	1.38
2	AB	2290	G	P-O5'	6.05	1.65	1.59
35	BA	628	G	C6-O6	-6.05	1.18	1.24
35	BA	633	G	N7-C5	6.05	1.42	1.39
35	BA	645	G	C2-N3	6.05	1.37	1.32
35	BA	959	A	C5'-C4'	6.05	1.58	1.51
2	AB	569	U	C5-C6	6.05	1.39	1.34
35	BA	1160	G	N1-C2	6.05	1.42	1.37
2	AB	337	C	C5'-C4'	6.05	1.58	1.51
2	AB	388	G	C2'-O2'	-6.05	1.33	1.41
2	AB	1388	G	C4'-C3'	6.05	1.59	1.53
2	AB	2644	G	N1-C2	6.05	1.42	1.37
7	AG	150	GLY	CA-C	6.05	1.61	1.51
35	BA	29	U	C2-O2	6.05	1.27	1.22
35	BA	860	A	N7-C5	-6.05	1.35	1.39
35	BA	921	U	N1-C6	6.05	1.43	1.38
38	BD	69	C	C5-C6	6.05	1.39	1.34
2	AB	285	G	C3'-C2'	6.04	1.59	1.52
2	AB	361	G	N1-C2	6.04	1.42	1.37
2	AB	942	G	P-O5'	6.04	1.65	1.59
2	AB	1274	A	C4'-C3'	6.04	1.59	1.53
2	AB	2104	C	C4-C5	6.04	1.47	1.43
2	AB	2842	G	C6-N1	6.04	1.43	1.39
35	BA	1299	A	N9-C8	6.04	1.42	1.37
2	AB	830	G	C8-N7	6.04	1.34	1.30
2	AB	1397	U	C4-C5	6.04	1.49	1.43
2	AB	2032	G	C2'-O2'	-6.04	1.33	1.41
2	AB	2175	C	C4-N4	6.04	1.39	1.33
2	AB	2677	G	N3-C4	6.04	1.39	1.35
2	AB	2824	C	N1-C6	6.04	1.40	1.37
35	BA	79	G	C6-N1	6.04	1.43	1.39
35	BA	298	A	C6-N1	-6.04	1.31	1.35
35	BA	339	C	O3'-P	-6.04	1.53	1.61
35	BA	391	G	N3-C4	6.04	1.39	1.35
35	BA	791	G	C8-N7	-6.04	1.27	1.30
35	BA	1201	A	C4'-O4'	-6.04	1.37	1.45
35	BA	1247	U	C2-N3	6.04	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1319	A	N9-C8	6.04	1.42	1.37
35	BA	1419	G	N9-C8	-6.04	1.33	1.37
36	BB	27	C	C5'-C4'	6.04	1.58	1.51
2	AB	1003	G	N7-C5	-6.04	1.35	1.39
2	AB	1343	G	C2-N3	6.04	1.37	1.32
2	AB	2581	G	C5-C4	6.04	1.42	1.38
35	BA	95	C	N1-C2	-6.04	1.34	1.40
35	BA	371	A	C5-C4	-6.04	1.34	1.38
35	BA	1031	C	P-O5'	6.04	1.65	1.59
58	BX	34	ARG	NE-CZ	6.04	1.41	1.33
2	AB	892	A	C4'-O4'	-6.04	1.37	1.45
35	BA	993	G	C2-N2	-6.04	1.28	1.34
35	BA	1234	C	C2-N3	6.04	1.40	1.35
2	AB	193	U	C2-N3	6.04	1.42	1.37
2	AB	1293	C	C4'-O4'	-6.04	1.37	1.45
2	AB	1352	U	N1-C6	6.04	1.43	1.38
2	AB	1965	C	N1-C6	6.04	1.40	1.37
2	AB	2641	G	C2-N3	6.04	1.37	1.32
2	AB	2754	U	C4'-O4'	-6.04	1.37	1.45
35	BA	1108	G	N9-C4	-6.04	1.33	1.38
37	BC	13	A	O3'-P	6.04	1.68	1.61
2	AB	438	G	N7-C5	6.04	1.42	1.39
2	AB	1231	U	C4-C5	6.04	1.49	1.43
2	AB	1750	G	C5-C6	-6.04	1.36	1.42
35	BA	711	G	N1-C2	6.04	1.42	1.37
35	BA	1178	G	C4'-C3'	-6.04	1.46	1.53
35	BA	1280	A	C6-N1	6.04	1.39	1.35
2	AB	780	G	C6-N1	6.04	1.43	1.39
2	AB	1710	G	C2-N3	6.04	1.37	1.32
35	BA	725	G	C6-N1	6.04	1.43	1.39
35	BA	795	C	N3-C4	6.04	1.38	1.33
35	BA	977	A	N3-C4	6.04	1.38	1.34
36	BB	23	A	C8-N7	-6.04	1.27	1.31
2	AB	467	G	C5-C6	6.03	1.48	1.42
2	AB	1074	G	N7-C5	6.03	1.42	1.39
2	AB	1125	G	O3'-P	6.03	1.68	1.61
2	AB	1207	C	N1-C2	6.03	1.46	1.40
2	AB	1221	C	C4-N4	6.03	1.39	1.33
2	AB	1349	C	N1-C6	-6.03	1.33	1.37
2	AB	1759	A	N9-C4	6.03	1.41	1.37
2	AB	2046	G	N1-C2	6.03	1.42	1.37
2	AB	2115	G	N9-C8	-6.03	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2769	U	C5-C6	6.03	1.39	1.34
35	BA	798	U	C2-N3	6.03	1.42	1.37
35	BA	842	U	P-O5'	6.03	1.65	1.59
35	BA	1340	A	N3-C4	6.03	1.38	1.34
2	AB	759	G	C2-N2	-6.03	1.28	1.34
2	AB	1567	G	C5-C6	6.03	1.48	1.42
2	AB	124	G	C8-N7	-6.03	1.27	1.30
2	AB	177	G	C2-N2	-6.03	1.28	1.34
2	AB	815	C	N1-C6	6.03	1.40	1.37
2	AB	1519	G	N9-C8	-6.03	1.33	1.37
35	BA	190	A	C5'-C4'	6.03	1.58	1.51
35	BA	217	C	O3'-P	6.03	1.68	1.61
35	BA	937	A	C3'-O3'	6.03	1.50	1.42
2	AB	920	A	C2'-C1'	6.03	1.59	1.53
35	BA	1156	G	N9-C4	6.03	1.42	1.38
2	AB	56	A	O3'-P	6.03	1.68	1.61
2	AB	277	G	C4'-O4'	-6.03	1.37	1.45
2	AB	325	G	N7-C5	-6.03	1.35	1.39
2	AB	403	U	C4'-C3'	-6.03	1.46	1.53
2	AB	1186	G	N3-C4	6.03	1.39	1.35
2	AB	1714	U	C2-O2	6.03	1.27	1.22
2	AB	2392	A	C8-N7	-6.03	1.27	1.31
35	BA	173	U	O3'-P	6.03	1.68	1.61
35	BA	1393	U	C2-N3	6.03	1.42	1.37
38	BD	17	C	C5-C6	6.03	1.39	1.34
2	AB	229	C	C2-N3	6.03	1.40	1.35
2	AB	236	C	O4'-C1'	6.03	1.49	1.41
2	AB	726	G	C2-N2	-6.03	1.28	1.34
2	AB	923	G	C4'-O4'	-6.03	1.37	1.45
2	AB	1151	A	N9-C4	-6.03	1.34	1.37
2	AB	1396	U	C4-C5	6.03	1.49	1.43
2	AB	1454	C	C4'-O4'	-6.03	1.37	1.45
2	AB	1591	A	P-O5'	6.03	1.65	1.59
2	AB	2127	G	N7-C5	6.03	1.42	1.39
35	BA	27	G	C2'-C1'	6.03	1.59	1.53
35	BA	975	A	C6-N1	-6.03	1.31	1.35
35	BA	1522	U	P-O5'	6.03	1.65	1.59
37	BC	22	G	N1-C2	6.03	1.42	1.37
2	AB	2057	G	O3'-P	6.02	1.68	1.61
2	AB	2599	G	C6-N1	6.02	1.43	1.39
35	BA	1264	U	C4'-C3'	6.02	1.59	1.53
35	BA	1525	G	N3-C4	-6.02	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	517	C	C5-C6	6.02	1.39	1.34
2	AB	537	G	P-O5'	6.02	1.65	1.59
35	BA	241	G	O4'-C1'	6.02	1.49	1.41
35	BA	566	G	C5-C4	6.02	1.42	1.38
35	BA	907	A	N3-C4	6.02	1.38	1.34
36	BB	65	C	C4-C5	6.02	1.47	1.43
2	AB	464	U	N1-C2	6.02	1.44	1.38
2	AB	1278	C	C4-N4	6.02	1.39	1.33
2	AB	1994	C	N1-C6	6.02	1.40	1.37
2	AB	2501	C	C2'-C1'	6.02	1.59	1.53
35	BA	503	C	C4'-O4'	-6.02	1.37	1.45
35	BA	979	C	C3'-C2'	6.02	1.59	1.52
35	BA	1146	A	C5-C6	6.02	1.46	1.41
1	AA	113	C	O3'-P	-6.02	1.53	1.61
2	AB	227	A	C5'-C4'	6.02	1.58	1.51
2	AB	594	U	C5-C6	6.02	1.39	1.34
2	AB	1048	A	N3-C4	6.02	1.38	1.34
2	AB	1742	U	C2-N3	6.02	1.42	1.37
2	AB	2091	C	N3-C4	6.02	1.38	1.33
2	AB	2255	G	N9-C8	6.02	1.42	1.37
2	AB	2816	G	C5'-C4'	6.02	1.58	1.51
35	BA	852	G	C4'-C3'	6.02	1.59	1.53
1	AA	76	G	N9-C4	6.02	1.42	1.38
2	AB	474	G	C2-N3	6.02	1.37	1.32
2	AB	481	G	C2-N3	6.02	1.37	1.32
2	AB	634	C	C3'-C2'	6.02	1.59	1.52
2	AB	649	G	C4'-O4'	-6.02	1.37	1.45
2	AB	1443	U	C5'-C4'	6.02	1.58	1.51
2	AB	2284	A	C2'-C1'	6.02	1.59	1.53
35	BA	417	G	C6-N1	6.02	1.43	1.39
35	BA	510	A	C6-N6	-6.02	1.29	1.33
35	BA	1140	C	P-O5'	6.02	1.65	1.59
35	BA	1237	C	C5-C6	-6.02	1.29	1.34
38	BD	2	G	C8-N7	6.02	1.34	1.30
2	AB	150	U	P-O5'	6.02	1.65	1.59
2	AB	1300	G	N9-C4	-6.02	1.33	1.38
2	AB	1663	G	N1-C2	6.02	1.42	1.37
2	AB	1896	G	C3'-O3'	6.02	1.50	1.42
1	AA	43	C	C1'-N1	6.01	1.57	1.48
2	AB	77	G	O3'-P	6.01	1.68	1.61
2	AB	322	A	C2-N3	6.01	1.39	1.33
2	AB	2274	A	P-O5'	6.01	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	482	A	C5-C6	6.01	1.46	1.41
35	BA	1177	G	N9-C8	6.01	1.42	1.37
2	AB	807	U	C3'-C2'	-6.01	1.46	1.52
2	AB	2244	U	C5-C6	6.01	1.39	1.34
35	BA	1415	G	C5'-C4'	6.01	1.58	1.51
2	AB	1522	A	N9-C4	-6.01	1.34	1.37
2	AB	1738	G	N9-C4	-6.01	1.33	1.38
2	AB	2198	A	N3-C4	6.01	1.38	1.34
2	AB	2767	C	C4'-O4'	-6.01	1.37	1.45
10	AJ	83	TYR	CE2-CZ	6.01	1.46	1.38
15	AO	68	PHE	CB-CG	6.01	1.61	1.51
35	BA	112	G	N9-C8	-6.01	1.33	1.37
35	BA	216	U	C4'-O4'	-6.01	1.37	1.45
35	BA	1009	U	P-O5'	6.01	1.65	1.59
35	BA	89	U	N1-C2	6.01	1.44	1.38
35	BA	382	A	C4'-O4'	-6.01	1.37	1.45
35	BA	446	G	N1-C2	6.01	1.42	1.37
35	BA	506	G	N3-C4	6.01	1.39	1.35
2	AB	96	C	C4-C5	6.01	1.47	1.43
2	AB	518	G	C2-N3	6.01	1.37	1.32
35	BA	674	G	C2'-C1'	-6.01	1.46	1.53
35	BA	804	U	P-O5'	6.01	1.65	1.59
2	AB	61	C	C4-C5	6.01	1.47	1.43
2	AB	278	A	N7-C5	6.01	1.42	1.39
2	AB	406	G	C6-O6	-6.01	1.18	1.24
2	AB	802	A	C4'-O4'	-6.01	1.37	1.45
2	AB	2519	U	C4-C5	6.01	1.49	1.43
35	BA	230	G	C2-N3	6.01	1.37	1.32
35	BA	914	A	C5'-C4'	6.01	1.58	1.51
35	BA	1014	A	C5-C6	6.01	1.46	1.41
35	BA	1153	G	C6-O6	-6.01	1.18	1.24
2	AB	228	C	C2'-C1'	6.00	1.59	1.53
2	AB	1115	G	C8-N7	-6.00	1.27	1.30
2	AB	1341	G	N7-C5	6.00	1.42	1.39
2	AB	2211	A	C6-N6	-6.00	1.29	1.33
2	AB	2837	A	N9-C4	-6.00	1.34	1.37
2	AB	203	A	C5'-C4'	6.00	1.58	1.51
2	AB	692	C	C5-C6	6.00	1.39	1.34
2	AB	1517	G	C5'-C4'	6.00	1.58	1.51
2	AB	2343	U	P-O5'	6.00	1.65	1.59
2	AB	2882	A	P-O5'	6.00	1.65	1.59
35	BA	69	G	N9-C4	-6.00	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	204	G	C2-N3	6.00	1.37	1.32
35	BA	259	G	C5'-C4'	6.00	1.58	1.51
35	BA	338	A	C5'-C4'	6.00	1.58	1.51
35	BA	618	C	C2'-C1'	6.00	1.59	1.53
35	BA	692	U	C4-C5	6.00	1.49	1.43
35	BA	1011	C	N1-C6	6.00	1.40	1.37
38	BD	45	A	N7-C5	-6.00	1.35	1.39
2	AB	1066	U	C5'-C4'	6.00	1.58	1.51
2	AB	1110	G	C8-N7	6.00	1.34	1.30
2	AB	2371	G	N3-C4	6.00	1.39	1.35
36	BB	45	U	C1'-N1	6.00	1.57	1.48
38	BD	7	G	C4'-C3'	6.00	1.59	1.53
55	BU	3	TYR	CG-CD1	6.00	1.47	1.39
2	AB	137	U	C5'-C4'	6.00	1.58	1.51
2	AB	848	C	N3-C4	6.00	1.38	1.33
35	BA	804	U	O5'-C5'	-6.00	1.33	1.42
35	BA	809	G	O3'-P	6.00	1.68	1.61
35	BA	855	U	N3-C4	-6.00	1.33	1.38
41	BG	165	GLU	CG-CD	6.00	1.60	1.51
2	AB	385	C	C5-C6	6.00	1.39	1.34
2	AB	1111	A	C2'-O2'	-6.00	1.33	1.41
2	AB	1638	C	C4-N4	-6.00	1.28	1.33
2	AB	2238	G	C5-C6	6.00	1.48	1.42
2	AB	2282	G	N7-C5	-6.00	1.35	1.39
2	AB	302	C	N1-C6	6.00	1.40	1.37
2	AB	1314	C	N1-C6	-6.00	1.33	1.37
2	AB	2725	A	N9-C4	6.00	1.41	1.37
35	BA	164	G	C5'-C4'	6.00	1.58	1.51
36	BB	30	G	P-O5'	6.00	1.65	1.59
37	BC	36	U	C5-C6	6.00	1.39	1.34
2	AB	707	G	C6-O6	6.00	1.29	1.24
2	AB	1596	A	N3-C4	6.00	1.38	1.34
2	AB	1951	U	C2-O2	6.00	1.27	1.22
2	AB	2378	A	C4'-O4'	-6.00	1.37	1.45
35	BA	663	A	N1-C2	-6.00	1.28	1.34
2	AB	703	U	C4-C5	-5.99	1.38	1.43
2	AB	1668	A	C6-N6	5.99	1.38	1.33
2	AB	2739	U	C2'-C1'	5.99	1.59	1.53
35	BA	494	G	O4'-C1'	5.99	1.49	1.41
35	BA	849	G	C2-N3	5.99	1.37	1.32
2	AB	2473	U	O3'-P	5.99	1.68	1.61
2	AB	278	A	N3-C4	5.99	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	513	A	N3-C4	5.99	1.38	1.34
2	AB	534	U	C2-N3	5.99	1.42	1.37
2	AB	1338	G	C5'-C4'	5.99	1.58	1.51
2	AB	1984	G	C2-N3	5.99	1.37	1.32
2	AB	2347	C	C4-C5	5.99	1.47	1.43
2	AB	2440	C	P-O5'	5.99	1.65	1.59
35	BA	24	U	C4-C5	5.99	1.49	1.43
35	BA	789	U	N1-C2	5.99	1.44	1.38
35	BA	856	C	N1-C2	5.99	1.46	1.40
35	BA	1477	U	C4'-O4'	-5.99	1.37	1.45
36	BB	13	C	C5'-C4'	5.99	1.58	1.51
2	AB	249	C	N1-C6	5.99	1.40	1.37
2	AB	543	G	C6-N1	5.99	1.43	1.39
2	AB	954	G	N1-C2	5.99	1.42	1.37
2	AB	1216	G	N9-C8	-5.99	1.33	1.37
2	AB	1968	G	C3'-C2'	5.99	1.59	1.52
2	AB	2429	G	N3-C4	5.99	1.39	1.35
2	AB	2511	U	C2-N3	5.99	1.42	1.37
2	AB	2788	C	C4'-O4'	-5.99	1.37	1.45
35	BA	287	U	N1-C2	5.99	1.44	1.38
36	BB	29	G	O3'-P	5.99	1.68	1.61
37	BC	37	G	C6-O6	-5.99	1.18	1.24
51	BQ	19	TYR	CG-CD2	5.99	1.47	1.39
2	AB	225	C	C2-N3	5.99	1.40	1.35
2	AB	830	G	C4'-C3'	5.99	1.59	1.53
2	AB	1067	A	C5-C4	-5.99	1.34	1.38
2	AB	1959	G	C5-C4	-5.99	1.34	1.38
35	BA	1056	U	C5'-C4'	5.99	1.58	1.51
2	AB	402	A	C2'-O2'	-5.99	1.33	1.41
2	AB	1373	A	C5-C6	-5.99	1.35	1.41
2	AB	2792	A	C2'-C1'	5.99	1.59	1.53
2	AB	2901	C	N3-C4	5.99	1.38	1.33
35	BA	42	G	C2-N3	5.99	1.37	1.32
35	BA	421	U	C2-O2	-5.99	1.17	1.22
35	BA	459	A	N9-C4	5.99	1.41	1.37
2	AB	1476	U	C3'-O3'	5.98	1.50	1.42
2	AB	1477	A	C5-C4	-5.98	1.34	1.38
2	AB	2329	U	C5'-C4'	5.98	1.58	1.51
35	BA	3	A	N1-C2	-5.98	1.28	1.34
2	AB	160	A	N9-C4	-5.98	1.34	1.37
2	AB	983	A	C5-C4	-5.98	1.34	1.38
2	AB	1317	G	C2-N3	5.98	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1992	G	N3-C4	5.98	1.39	1.35
2	AB	2641	G	O5'-C5'	-5.98	1.33	1.42
35	BA	310	G	C6-N1	5.98	1.43	1.39
35	BA	1066	C	C5-C6	5.98	1.39	1.34
35	BA	1215	G	C2-N3	5.98	1.37	1.32
2	AB	139	U	C2-N3	-5.98	1.33	1.37
2	AB	1012	U	C2-N3	5.98	1.42	1.37
2	AB	1033	U	C2'-O2'	5.98	1.49	1.41
2	AB	1112	G	C6-N1	-5.98	1.35	1.39
2	AB	1256	G	C8-N7	-5.98	1.27	1.30
2	AB	2331	G	C1'-N9	-5.98	1.38	1.46
35	BA	262	A	C2'-O2'	5.98	1.49	1.41
35	BA	573	A	C8-N7	-5.98	1.27	1.31
35	BA	1328	C	C2-N3	5.98	1.40	1.35
35	BA	1504	G	C8-N7	5.98	1.34	1.30
38	BD	35	C	C4-C5	5.98	1.47	1.43
2	AB	2725	A	C3'-C2'	5.98	1.59	1.52
37	BC	33	A	N7-C5	5.98	1.42	1.39
2	AB	916	G	C8-N7	-5.98	1.27	1.30
2	AB	1983	G	N9-C4	-5.98	1.33	1.38
2	AB	2366	A	C8-N7	-5.98	1.27	1.31
35	BA	341	C	C4'-O4'	-5.98	1.37	1.45
35	BA	701	U	C4'-O4'	-5.98	1.37	1.45
35	BA	921	U	C2-O2	5.98	1.27	1.22
35	BA	1100	C	C4'-C3'	5.98	1.59	1.53
35	BA	1449	C	C5'-C4'	5.98	1.58	1.51
35	BA	1528	U	C4'-O4'	-5.98	1.37	1.45
36	BB	47	U	C4-C5	5.98	1.49	1.43
2	AB	298	G	C2-N3	5.98	1.37	1.32
2	AB	633	A	N3-C4	5.98	1.38	1.34
2	AB	1128	G	N1-C2	5.98	1.42	1.37
2	AB	1655	A	N3-C4	5.98	1.38	1.34
2	AB	1827	U	C4-C5	5.98	1.49	1.43
2	AB	2011	U	C4'-O4'	-5.98	1.37	1.45
2	AB	2507	C	N1-C6	-5.98	1.33	1.37
35	BA	1173	U	C4-C5	-5.98	1.38	1.43
2	AB	215	G	C2'-O2'	-5.97	1.33	1.41
2	AB	299	A	N7-C5	5.97	1.42	1.39
2	AB	664	G	C2-N2	5.97	1.40	1.34
2	AB	1407	G	C5-C4	5.97	1.42	1.38
2	AB	2302	U	C5'-C4'	5.97	1.58	1.51
35	BA	665	A	N9-C4	5.97	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	787	A	C5'-C4'	5.97	1.58	1.51
35	BA	875	U	P-O5'	5.97	1.65	1.59
35	BA	1369	C	N1-C6	5.97	1.40	1.37
2	AB	498	G	N9-C8	5.97	1.42	1.37
2	AB	711	G	O3'-P	5.97	1.68	1.61
2	AB	776	G	O3'-P	5.97	1.68	1.61
2	AB	979	A	N3-C4	5.97	1.38	1.34
2	AB	2079	U	C5'-C4'	5.97	1.58	1.51
2	AB	2416	C	C4'-C3'	5.97	1.59	1.53
35	BA	345	C	C4'-O4'	-5.97	1.37	1.45
35	BA	522	C	C4-C5	5.97	1.47	1.43
35	BA	1338	G	N7-C5	-5.97	1.35	1.39
38	BD	70	C	N3-C4	5.97	1.38	1.33
2	AB	1302	A	P-O5'	5.97	1.65	1.59
2	AB	2349	G	C3'-C2'	5.97	1.59	1.52
2	AB	2363	G	P-O5'	5.97	1.65	1.59
35	BA	155	A	N9-C4	-5.97	1.34	1.37
35	BA	605	U	N1-C2	5.97	1.44	1.38
2	AB	45	G	N7-C5	-5.97	1.35	1.39
2	AB	909	A	C4'-C3'	-5.97	1.46	1.52
2	AB	978	G	C4'-O4'	-5.97	1.37	1.45
2	AB	1208	C	N3-C4	5.97	1.38	1.33
2	AB	1477	A	C5'-C4'	5.97	1.58	1.51
35	BA	5	U	P-O5'	-5.97	1.53	1.59
35	BA	975	A	O3'-P	5.97	1.68	1.61
35	BA	1226	C	P-O5'	5.97	1.65	1.59
38	BD	22	A	C3'-O3'	-5.97	1.33	1.42
2	AB	2142	A	N1-C2	-5.97	1.28	1.34
35	BA	601	G	C5-C4	-5.97	1.34	1.38
2	AB	78	U	N3-C4	5.97	1.43	1.38
2	AB	446	G	N7-C5	5.97	1.42	1.39
2	AB	476	G	C3'-C2'	5.97	1.59	1.52
2	AB	1862	G	C4'-O4'	-5.97	1.37	1.45
2	AB	1913	A	C1'-N9	5.97	1.57	1.48
2	AB	2531	A	N7-C5	5.97	1.42	1.39
2	AB	2627	G	C8-N7	-5.97	1.27	1.30
2	AB	2754	U	C2-O2	5.97	1.27	1.22
35	BA	208	U	C2'-O2'	5.97	1.49	1.41
35	BA	1014	A	O4'-C1'	5.97	1.49	1.41
35	BA	1353	G	C6-O6	-5.97	1.18	1.24
35	BA	1542	A	C5'-C4'	5.97	1.58	1.51
2	AB	850	U	P-O5'	5.96	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1437	C	C4'-C3'	5.96	1.59	1.53
2	AB	1755	A	N7-C5	-5.96	1.35	1.39
2	AB	1779	U	C4-C5	5.96	1.49	1.43
35	BA	699	C	C2-N3	5.96	1.40	1.35
35	BA	764	C	P-O5'	5.96	1.65	1.59
35	BA	946	A	C4'-O4'	-5.96	1.37	1.45
35	BA	1452	C	O4'-C1'	5.96	1.49	1.41
2	AB	403	U	C2-O2	5.96	1.27	1.22
2	AB	2148	G	C5'-C4'	5.96	1.58	1.51
2	AB	2653	U	C2-O2	5.96	1.27	1.22
35	BA	323	U	C2-N3	-5.96	1.33	1.37
2	AB	85	G	N9-C8	5.96	1.42	1.37
2	AB	1341	G	N1-C2	5.96	1.42	1.37
2	AB	1455	G	C6-O6	-5.96	1.18	1.24
2	AB	2138	G	C2-N3	5.96	1.37	1.32
2	AB	2436	G	O3'-P	-5.96	1.53	1.61
2	AB	2465	C	P-O5'	5.96	1.65	1.59
2	AB	2640	G	N1-C2	5.96	1.42	1.37
6	AF	56	GLY	N-CA	5.96	1.54	1.46
35	BA	163	C	C5-C6	5.96	1.39	1.34
35	BA	735	C	C2-O2	-5.96	1.19	1.24
35	BA	872	A	C2-N3	-5.96	1.28	1.33
35	BA	1125	U	N1-C2	5.96	1.44	1.38
2	AB	206	U	C1'-N1	5.96	1.57	1.48
2	AB	573	U	C2-N3	5.96	1.42	1.37
35	BA	337	G	C4'-O4'	-5.96	1.37	1.45
2	AB	176	A	P-O5'	-5.96	1.53	1.59
2	AB	600	G	C2-N3	5.96	1.37	1.32
2	AB	1317	G	C6-N1	-5.96	1.35	1.39
2	AB	1360	G	N7-C5	-5.96	1.35	1.39
2	AB	2167	U	C3'-O3'	5.96	1.50	1.42
35	BA	335	C	C2'-C1'	5.96	1.59	1.53
35	BA	1391	U	C5'-C4'	5.96	1.58	1.51
37	BC	30	U	C4-C5	5.96	1.49	1.43
2	AB	147	C	C1'-N1	5.96	1.57	1.48
2	AB	630	G	C5'-C4'	5.96	1.58	1.51
2	AB	646	U	C2'-C1'	5.96	1.59	1.53
2	AB	1057	A	C2'-C1'	5.96	1.59	1.53
2	AB	1386	C	C2-N3	5.96	1.40	1.35
2	AB	1464	G	N9-C4	-5.96	1.33	1.38
2	AB	1562	U	P-O5'	5.96	1.65	1.59
2	AB	2181	U	N1-C2	5.96	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	402	G	C5-C4	5.96	1.42	1.38
35	BA	501	C	C2'-O2'	5.96	1.49	1.41
35	BA	670	G	C2'-C1'	5.96	1.59	1.53
49	BO	109	ARG	CZ-NH2	5.96	1.40	1.33
2	AB	82	U	C4'-O4'	-5.96	1.37	1.45
2	AB	1105	U	N3-C4	5.96	1.43	1.38
2	AB	1952	A	P-O5'	5.96	1.65	1.59
35	BA	107	G	C4'-O4'	-5.96	1.37	1.45
35	BA	928	G	N3-C4	5.96	1.39	1.35
35	BA	1238	A	C4'-O4'	-5.96	1.37	1.45
2	AB	442	G	C6-N1	5.95	1.43	1.39
2	AB	648	G	N3-C4	-5.95	1.31	1.35
2	AB	939	G	C3'-C2'	-5.95	1.46	1.52
2	AB	1817	G	P-O5'	5.95	1.65	1.59
2	AB	1824	G	N9-C4	-5.95	1.33	1.38
2	AB	2384	U	C2'-O2'	5.95	1.49	1.41
2	AB	2536	G	C5'-C4'	5.95	1.58	1.51
35	BA	232	G	C4'-O4'	-5.95	1.37	1.45
35	BA	937	A	N3-C4	5.95	1.38	1.34
35	BA	1254	A	C6-N6	5.95	1.38	1.33
2	AB	1171	G	C6-O6	-5.95	1.18	1.24
2	AB	1992	G	C2-N3	5.95	1.37	1.32
2	AB	2176	A	N9-C4	5.95	1.41	1.37
2	AB	170	U	C4'-O4'	-5.95	1.37	1.45
2	AB	482	A	C5-C6	5.95	1.46	1.41
2	AB	686	U	N1-C6	-5.95	1.32	1.38
2	AB	763	G	C5-C4	-5.95	1.34	1.38
2	AB	1401	G	C6-N1	-5.95	1.35	1.39
2	AB	1407	G	C3'-C2'	5.95	1.59	1.52
2	AB	1555	G	C3'-C2'	5.95	1.59	1.52
2	AB	1770	G	N1-C2	5.95	1.42	1.37
2	AB	2850	A	N1-C2	-5.95	1.28	1.34
35	BA	19	A	C2'-O2'	5.95	1.49	1.41
35	BA	67	C	C4'-C3'	5.95	1.59	1.53
35	BA	1187	G	P-O5'	5.95	1.65	1.59
38	BD	43	G	C4'-C3'	5.95	1.59	1.53
2	AB	689	A	C4'-O4'	-5.95	1.37	1.45
2	AB	1012	U	C5'-C4'	5.95	1.58	1.51
2	AB	1161	C	C4-C5	-5.95	1.38	1.43
2	AB	1235	G	C2'-C1'	5.95	1.59	1.53
2	AB	2095	A	C6-N1	5.95	1.39	1.35
14	AN	26	GLY	CA-C	5.95	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	25	C	C4'-C3'	5.95	1.59	1.53
35	BA	27	G	C4'-O4'	-5.95	1.37	1.45
35	BA	816	A	N9-C4	5.95	1.41	1.37
35	BA	1158	C	C2-N3	5.95	1.40	1.35
2	AB	2278	A	C4'-C3'	5.95	1.59	1.53
35	BA	815	A	C6-N6	5.95	1.38	1.33
35	BA	1229	A	C2'-C1'	5.95	1.59	1.53
38	BD	41	C	P-O5'	5.95	1.65	1.59
2	AB	98	G	N9-C8	5.95	1.42	1.37
2	AB	1272	A	N9-C8	-5.95	1.32	1.37
2	AB	1729	U	C4-O4	-5.95	1.18	1.23
35	BA	912	C	C4'-O4'	-5.95	1.37	1.45
35	BA	1479	C	C4-C5	5.95	1.47	1.43
35	BA	1522	U	C2-N3	5.95	1.42	1.37
2	AB	9	G	C2-N3	5.94	1.37	1.32
2	AB	537	G	C3'-C2'	5.94	1.59	1.52
2	AB	1646	C	P-O5'	5.94	1.65	1.59
2	AB	2028	U	N1-C2	5.94	1.43	1.38
35	BA	1445	U	C4-C5	5.94	1.48	1.43
38	BD	11	A	N9-C4	-5.94	1.34	1.37
2	AB	336	C	C4'-C3'	-5.94	1.46	1.52
2	AB	2376	A	O4'-C1'	5.94	1.49	1.41
35	BA	161	A	P-O5'	5.94	1.65	1.59
2	AB	119	A	P-O5'	5.94	1.65	1.59
2	AB	250	G	O3'-P	-5.94	1.54	1.61
2	AB	668	A	P-O5'	5.94	1.65	1.59
2	AB	1607	C	C2-N3	5.94	1.40	1.35
2	AB	1922	G	C2-N3	5.94	1.37	1.32
2	AB	2718	G	O4'-C1'	-5.94	1.33	1.41
35	BA	400	C	C2'-C1'	-5.94	1.46	1.53
35	BA	448	A	C5-C6	5.94	1.46	1.41
35	BA	818	G	C8-N7	-5.94	1.27	1.30
35	BA	923	A	N7-C5	5.94	1.42	1.39
35	BA	1401	G	C6-O6	5.94	1.29	1.24
2	AB	390	U	C2-N3	5.94	1.42	1.37
2	AB	1862	G	N9-C4	5.94	1.42	1.38
2	AB	2384	U	C3'-C2'	5.94	1.59	1.52
2	AB	2750	A	C8-N7	-5.94	1.27	1.31
2	AB	2891	U	C4-O4	-5.94	1.18	1.23
35	BA	839	C	C3'-C2'	5.94	1.59	1.52
2	AB	577	G	C2-N3	5.94	1.37	1.32
2	AB	625	G	C4'-C3'	5.94	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1378	A	C2-N3	-5.94	1.28	1.33
2	AB	1971	U	C4-C5	5.94	1.48	1.43
35	BA	349	A	O3'-P	5.94	1.68	1.61
35	BA	607	A	N7-C5	-5.94	1.35	1.39
35	BA	1187	G	O4'-C1'	5.94	1.49	1.41
35	BA	1269	A	C2'-O2'	5.94	1.49	1.41
2	AB	830	G	N9-C8	5.94	1.42	1.37
2	AB	1015	U	C5'-C4'	5.94	1.58	1.51
35	BA	1254	A	N9-C4	5.94	1.41	1.37
2	AB	252	G	C6-N1	5.93	1.43	1.39
2	AB	459	U	C4'-O4'	-5.93	1.37	1.45
2	AB	1008	A	N1-C2	-5.93	1.29	1.34
2	AB	1439	A	C8-N7	-5.93	1.27	1.31
35	BA	515	G	N9-C8	-5.93	1.33	1.37
35	BA	523	A	C5-C6	5.93	1.46	1.41
35	BA	1088	G	C2'-C1'	5.93	1.59	1.53
2	AB	475	C	C4'-C3'	-5.93	1.46	1.52
2	AB	2548	U	N3-C4	5.93	1.43	1.38
35	BA	1250	A	O3'-P	5.93	1.68	1.61
1	AA	4	C	P-O5'	5.93	1.65	1.59
2	AB	249	C	C5-C6	5.93	1.39	1.34
2	AB	504	A	C5-C6	5.93	1.46	1.41
2	AB	2407	A	C8-N7	-5.93	1.27	1.31
35	BA	96	U	C2'-O2'	-5.93	1.33	1.41
35	BA	614	C	O4'-C1'	5.93	1.49	1.41
35	BA	1494	G	C5-C4	-5.93	1.34	1.38
35	BA	1515	G	C2'-C1'	5.93	1.59	1.53
2	AB	579	G	C5'-C4'	5.93	1.58	1.51
2	AB	970	U	C2-N3	5.93	1.42	1.37
2	AB	1015	U	C3'-C2'	5.93	1.59	1.52
2	AB	2100	G	C6-O6	-5.93	1.18	1.24
35	BA	1007	U	P-O5'	5.93	1.65	1.59
2	AB	1337	G	N9-C4	5.93	1.42	1.38
2	AB	2859	G	N1-C2	5.93	1.42	1.37
35	BA	217	C	C4'-O4'	-5.93	1.37	1.45
35	BA	595	A	C5-C4	5.93	1.42	1.38
38	BD	47	A	C2-N3	5.93	1.38	1.33
2	AB	372	G	C2-N3	5.93	1.37	1.32
2	AB	1507	C	N1-C6	5.93	1.40	1.37
2	AB	1675	C	C2'-C1'	-5.93	1.46	1.53
2	AB	1738	G	C2-N3	5.93	1.37	1.32
2	AB	2767	C	C2-N3	-5.93	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	943	U	O3'-P	5.93	1.68	1.61
35	BA	1083	U	C5-C6	5.93	1.39	1.34
1	AA	5	U	O3'-P	5.92	1.68	1.61
2	AB	824	U	O4'-C1'	5.92	1.49	1.41
2	AB	1579	A	C8-N7	-5.92	1.27	1.31
2	AB	1792	G	C6-N1	5.92	1.43	1.39
2	AB	2559	C	C4-C5	5.92	1.47	1.43
2	AB	2793	C	C5'-C4'	5.92	1.58	1.51
35	BA	486	U	C5'-C4'	5.92	1.58	1.51
35	BA	695	A	C6-N1	-5.92	1.31	1.35
35	BA	954	G	N3-C4	5.92	1.39	1.35
44	BJ	17	PHE	CG-CD2	5.92	1.47	1.38
2	AB	461	C	N1-C2	5.92	1.46	1.40
35	BA	432	A	N9-C4	-5.92	1.34	1.37
35	BA	1229	A	C5-C4	-5.92	1.34	1.38
35	BA	1454	G	C5'-C4'	5.92	1.58	1.51
2	AB	523	C	N1-C2	-5.92	1.34	1.40
2	AB	552	U	P-O5'	5.92	1.65	1.59
2	AB	1980	G	C2'-C1'	5.92	1.59	1.53
2	AB	2681	C	N3-C4	5.92	1.38	1.33
35	BA	245	U	C5-C6	5.92	1.39	1.34
35	BA	708	C	C4-C5	5.92	1.47	1.43
35	BA	990	C	C1'-N1	5.92	1.57	1.48
2	AB	1676	A	O3'-P	-5.92	1.54	1.61
2	AB	2425	A	C2'-C1'	-5.92	1.46	1.53
35	BA	54	C	N3-C4	5.92	1.38	1.33
2	AB	726	G	C2'-O2'	-5.92	1.33	1.41
2	AB	1516	G	P-O5'	5.92	1.65	1.59
2	AB	1675	C	C2-N3	5.92	1.40	1.35
2	AB	1898	U	O3'-P	5.92	1.68	1.61
2	AB	2450	A	C8-N7	-5.92	1.27	1.31
2	AB	2472	G	C6-N1	-5.92	1.35	1.39
35	BA	66	A	O3'-P	5.92	1.68	1.61
35	BA	199	A	N3-C4	5.92	1.38	1.34
35	BA	449	G	P-O5'	-5.92	1.53	1.59
35	BA	552	U	C4'-O4'	-5.92	1.37	1.45
35	BA	793	U	P-O5'	5.92	1.65	1.59
35	BA	1006	G	N3-C4	5.92	1.39	1.35
38	BD	14	A	N9-C4	-5.92	1.34	1.37
2	AB	106	C	O3'-P	5.92	1.68	1.61
2	AB	297	G	C6-N1	5.92	1.43	1.39
2	AB	357	C	C4'-O4'	-5.92	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	585	G	C2'-C1'	5.92	1.59	1.53
2	AB	700	G	N3-C4	5.92	1.39	1.35
2	AB	1393	A	N9-C4	5.92	1.41	1.37
2	AB	1905	C	N1-C2	5.92	1.46	1.40
2	AB	2895	G	C5-C6	5.92	1.48	1.42
35	BA	101	A	C5-C4	-5.92	1.34	1.38
35	BA	184	G	C2'-C1'	5.92	1.59	1.53
35	BA	485	U	C4-C5	5.92	1.48	1.43
35	BA	793	U	N1-C2	5.92	1.43	1.38
35	BA	1491	G	C4'-C3'	5.92	1.59	1.53
45	BK	73	SER	CA-CB	5.92	1.61	1.52
2	AB	459	U	C3'-C2'	5.92	1.59	1.52
2	AB	490	C	C4-C5	5.92	1.47	1.43
2	AB	521	U	N1-C2	5.92	1.43	1.38
2	AB	681	G	C2-N3	5.92	1.37	1.32
2	AB	1359	A	C8-N7	-5.92	1.27	1.31
2	AB	1863	G	P-O5'	-5.92	1.53	1.59
2	AB	2770	G	N3-C4	5.92	1.39	1.35
35	BA	475	C	C5'-C4'	5.92	1.58	1.51
35	BA	678	U	C4'-O4'	-5.92	1.37	1.45
2	AB	1090	A	O3'-P	-5.91	1.54	1.61
2	AB	1223	G	N1-C2	5.91	1.42	1.37
2	AB	1260	A	C2-N3	5.91	1.38	1.33
2	AB	1535	A	N9-C4	-5.91	1.34	1.37
2	AB	1597	A	C2'-O2'	5.91	1.49	1.41
2	AB	1654	A	P-O5'	5.91	1.65	1.59
2	AB	2096	C	C2-N3	5.91	1.40	1.35
2	AB	2299	U	C2'-C1'	5.91	1.59	1.53
2	AB	2596	U	C2-N3	5.91	1.41	1.37
2	AB	2681	C	C4'-O4'	-5.91	1.37	1.45
35	BA	264	C	C3'-C2'	-5.91	1.46	1.52
1	AA	19	C	P-O5'	5.91	1.65	1.59
2	AB	138	U	C3'-C2'	5.91	1.59	1.52
2	AB	783	A	C2-N3	5.91	1.38	1.33
2	AB	1933	G	C6-O6	-5.91	1.18	1.24
35	BA	229	U	C4'-O4'	-5.91	1.37	1.45
35	BA	588	G	N9-C4	-5.91	1.33	1.38
2	AB	493	G	C2'-O2'	5.91	1.49	1.41
2	AB	630	G	C2'-C1'	5.91	1.59	1.53
2	AB	1981	A	C2'-O2'	-5.91	1.33	1.41
2	AB	2525	G	C5-C4	5.91	1.42	1.38
10	AJ	105	PHE	CE1-CZ	5.91	1.48	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	126	G	C5-C6	5.91	1.48	1.42
35	BA	1051	C	C2-N3	5.91	1.40	1.35
2	AB	11	C	C4'-O4'	-5.91	1.37	1.45
2	AB	496	G	P-O5'	5.91	1.65	1.59
2	AB	2149	U	C4'-C3'	-5.91	1.46	1.52
35	BA	459	A	O3'-P	5.91	1.68	1.61
35	BA	934	C	C5-C6	5.91	1.39	1.34
35	BA	1375	A	C8-N7	-5.91	1.27	1.31
35	BA	1506	U	C2-N3	5.91	1.41	1.37
2	AB	547	A	C3'-O3'	5.91	1.50	1.42
2	AB	887	U	P-O5'	5.91	1.65	1.59
2	AB	1160	G	C5-C6	5.91	1.48	1.42
2	AB	1367	A	C5'-C4'	5.91	1.58	1.51
35	BA	512	U	P-O5'	5.91	1.65	1.59
37	BC	57	C	C3'-C2'	5.91	1.59	1.52
51	BQ	20	PHE	CE2-CZ	5.91	1.48	1.37
2	AB	1164	C	P-O5'	-5.91	1.53	1.59
2	AB	1211	C	N1-C6	5.91	1.40	1.37
2	AB	1376	C	C5-C6	5.91	1.39	1.34
2	AB	2275	C	C5-C6	5.91	1.39	1.34
11	AK	7	TYR	CD2-CE2	5.91	1.48	1.39
35	BA	481	G	C5'-C4'	5.91	1.58	1.51
35	BA	1257	A	N7-C5	-5.91	1.35	1.39
1	AA	20	G	C4'-O4'	-5.90	1.37	1.45
2	AB	37	C	C5'-C4'	5.90	1.58	1.51
2	AB	219	A	C6-N6	-5.90	1.29	1.33
2	AB	1959	G	C6-N1	-5.90	1.35	1.39
35	BA	877	G	N1-C2	5.90	1.42	1.37
1	AA	96	G	C6-O6	-5.90	1.18	1.24
2	AB	540	C	C3'-O3'	5.90	1.50	1.42
2	AB	742	A	N9-C4	-5.90	1.34	1.37
2	AB	1126	A	N3-C4	5.90	1.38	1.34
2	AB	1885	A	C4'-O4'	-5.90	1.37	1.45
2	AB	2439	A	C3'-C2'	5.90	1.59	1.52
2	AB	2622	U	C5-C6	5.90	1.39	1.34
35	BA	282	A	C2'-O2'	5.90	1.49	1.41
35	BA	325	A	C6-N6	-5.90	1.29	1.33
35	BA	472	U	C4'-O4'	-5.90	1.37	1.45
35	BA	1154	G	N3-C4	5.90	1.39	1.35
2	AB	206	U	C5'-C4'	5.90	1.58	1.51
2	AB	585	G	C4'-O4'	-5.90	1.37	1.45
2	AB	656	G	N3-C4	5.90	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	680	C	C2-N3	5.90	1.40	1.35
1	AA	85	G	C8-N7	-5.90	1.27	1.30
2	AB	37	C	C4'-C3'	5.90	1.59	1.53
2	AB	257	C	C3'-C2'	5.90	1.59	1.52
2	AB	1623	G	C6-N1	5.90	1.43	1.39
2	AB	2358	A	P-O5'	5.90	1.65	1.59
2	AB	2469	A	C8-N7	-5.90	1.27	1.31
35	BA	558	G	P-O5'	5.90	1.65	1.59
35	BA	1169	A	N9-C8	-5.90	1.33	1.37
35	BA	1173	U	C4-O4	-5.90	1.19	1.23
35	BA	1368	A	C8-N7	-5.90	1.27	1.31
2	AB	554	U	P-O5'	5.90	1.65	1.59
2	AB	1363	C	C4'-O4'	-5.90	1.37	1.45
35	BA	137	U	C2'-C1'	5.90	1.59	1.53
35	BA	895	G	C2'-C1'	-5.90	1.46	1.53
1	AA	56	G	C4'-O4'	-5.89	1.37	1.45
2	AB	285	G	C2-N3	5.89	1.37	1.32
2	AB	1024	G	C2'-C1'	-5.89	1.46	1.53
2	AB	2463	C	C5'-C4'	5.89	1.58	1.51
2	AB	2598	A	C6-N1	-5.89	1.31	1.35
35	BA	57	G	N3-C4	5.89	1.39	1.35
35	BA	1162	C	N1-C2	5.89	1.46	1.40
35	BA	1214	C	C5'-C4'	5.89	1.58	1.51
35	BA	1462	C	C2'-C1'	5.89	1.59	1.53
36	BB	30	G	C4'-C3'	5.89	1.59	1.53
1	AA	2	G	N9-C4	5.89	1.42	1.38
1	AA	21	G	N9-C4	5.89	1.42	1.38
2	AB	1	G	C5'-C4'	5.89	1.58	1.51
2	AB	196	A	C6-N1	5.89	1.39	1.35
2	AB	909	A	C6-N1	-5.89	1.31	1.35
2	AB	2323	G	N7-C5	-5.89	1.35	1.39
2	AB	2427	C	C4-N4	5.89	1.39	1.33
35	BA	119	A	C2'-C1'	-5.89	1.46	1.53
35	BA	206	C	C4-N4	5.89	1.39	1.33
35	BA	672	U	C3'-C2'	5.89	1.59	1.52
2	AB	294	A	C6-N1	5.89	1.39	1.35
2	AB	601	C	P-O5'	5.89	1.65	1.59
2	AB	1767	G	C5'-C4'	5.89	1.58	1.51
35	BA	26	A	N1-C2	-5.89	1.29	1.34
2	AB	177	G	C2'-O2'	5.89	1.49	1.41
2	AB	1472	C	C4-N4	-5.89	1.28	1.33
2	AB	2102	G	N9-C8	-5.89	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2465	C	C4'-C3'	5.89	1.59	1.53
35	BA	499	A	C8-N7	5.89	1.35	1.31
35	BA	659	U	C4-C5	5.89	1.48	1.43
35	BA	750	C	N3-C4	5.89	1.38	1.33
35	BA	1250	A	C6-N6	5.89	1.38	1.33
38	BD	54	G	C3'-O3'	5.89	1.50	1.42
35	BA	1314	C	C2-N3	5.89	1.40	1.35
1	AA	88	C	C3'-C2'	5.89	1.59	1.52
1	AA	119	A	C5'-C4'	5.89	1.58	1.51
2	AB	932	U	C2'-C1'	5.89	1.59	1.53
2	AB	1803	A	P-O5'	5.89	1.65	1.59
2	AB	2037	A	N3-C4	5.89	1.38	1.34
2	AB	2482	A	C5-C4	5.89	1.42	1.38
35	BA	694	A	C4'-O4'	-5.89	1.37	1.45
36	BB	51	G	C5-C6	5.89	1.48	1.42
2	AB	172	A	O3'-P	5.88	1.68	1.61
2	AB	214	G	N9-C8	5.88	1.42	1.37
2	AB	616	A	C5'-C4'	5.88	1.58	1.51
2	AB	759	G	C4'-O4'	-5.88	1.37	1.45
2	AB	1338	G	C3'-O3'	5.88	1.50	1.42
2	AB	1773	A	N3-C4	-5.88	1.31	1.34
2	AB	1866	A	C6-N1	5.88	1.39	1.35
2	AB	2405	G	C5'-C4'	5.88	1.58	1.51
2	AB	2873	A	N9-C4	-5.88	1.34	1.37
35	BA	741	G	N3-C4	5.88	1.39	1.35
35	BA	797	C	C4'-O4'	-5.88	1.38	1.45
36	BB	41	C	C5-C6	5.88	1.39	1.34
2	AB	101	A	O3'-P	5.88	1.68	1.61
2	AB	962	G	C8-N7	-5.88	1.27	1.30
2	AB	1365	A	N3-C4	5.88	1.38	1.34
2	AB	2082	A	C8-N7	-5.88	1.27	1.31
35	BA	435	A	P-O5'	-5.88	1.53	1.59
35	BA	538	G	N3-C4	5.88	1.39	1.35
35	BA	792	A	O4'-C1'	5.88	1.49	1.41
2	AB	501	A	P-O5'	5.88	1.65	1.59
2	AB	646	U	C2-N3	5.88	1.41	1.37
2	AB	724	U	N1-C6	5.88	1.43	1.38
2	AB	1142	A	N9-C8	5.88	1.42	1.37
2	AB	1337	G	N7-C5	5.88	1.42	1.39
2	AB	1613	G	N9-C8	-5.88	1.33	1.37
2	AB	1996	C	P-O5'	5.88	1.65	1.59
2	AB	2108	A	C2'-O2'	-5.88	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2879	A	C5-C4	-5.88	1.34	1.38
2	AB	31	C	C2'-C1'	5.88	1.59	1.53
2	AB	1599	U	C4-C5	5.88	1.48	1.43
2	AB	2528	U	O3'-P	-5.88	1.54	1.61
35	BA	321	A	N9-C8	-5.88	1.33	1.37
35	BA	411	A	N3-C4	5.88	1.38	1.34
2	AB	30	G	N3-C4	5.88	1.39	1.35
2	AB	629	G	N9-C4	5.88	1.42	1.38
2	AB	655	A	N9-C8	5.88	1.42	1.37
2	AB	1210	G	N9-C4	5.88	1.42	1.38
2	AB	1824	G	C2-N3	5.88	1.37	1.32
35	BA	225	C	C5-C6	5.88	1.39	1.34
35	BA	228	A	N3-C4	5.88	1.38	1.34
35	BA	668	G	N1-C2	5.88	1.42	1.37
35	BA	856	C	P-O5'	5.88	1.65	1.59
1	AA	84	G	C2-N3	5.88	1.37	1.32
2	AB	74	A	C4'-C3'	-5.88	1.46	1.52
2	AB	992	C	O3'-P	5.88	1.68	1.61
2	AB	1261	C	C2-O2	-5.88	1.19	1.24
2	AB	2518	A	C5'-C4'	5.88	1.58	1.51
2	AB	2643	G	C2-N3	5.88	1.37	1.32
35	BA	49	U	C2'-C1'	5.88	1.59	1.53
35	BA	1539	C	P-O5'	5.88	1.65	1.59
2	AB	1049	C	C5-C6	5.88	1.39	1.34
2	AB	1077	A	C8-N7	5.88	1.35	1.31
2	AB	2234	G	N9-C8	5.88	1.42	1.37
35	BA	364	A	O4'-C1'	5.88	1.49	1.41
35	BA	553	A	C5-C4	-5.88	1.34	1.38
35	BA	1218	C	O3'-P	5.88	1.68	1.61
1	AA	27	C	C2-O2	-5.87	1.19	1.24
2	AB	760	G	C5-C4	5.87	1.42	1.38
2	AB	1261	C	C4-C5	5.87	1.47	1.43
2	AB	1441	G	C5-C6	5.87	1.48	1.42
2	AB	2131	U	C4'-C3'	5.87	1.59	1.53
2	AB	2417	C	C2-N3	5.87	1.40	1.35
35	BA	2	A	P-O5'	5.87	1.65	1.59
35	BA	266	G	N3-C4	5.87	1.39	1.35
35	BA	899	C	C4'-C3'	-5.87	1.46	1.52
35	BA	1381	U	C4'-C3'	-5.87	1.46	1.52
36	BB	74	C	O3'-P	5.87	1.68	1.61
38	BD	40	C	C5'-C4'	5.87	1.58	1.51
1	AA	7	G	N9-C8	-5.87	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	184	C	C2-N3	5.87	1.40	1.35
2	AB	428	A	N9-C8	5.87	1.42	1.37
2	AB	1135	C	N1-C6	5.87	1.40	1.37
2	AB	1261	C	C2'-C1'	5.87	1.59	1.53
2	AB	1534	U	C4-C5	5.87	1.48	1.43
2	AB	1737	G	C5-C6	5.87	1.48	1.42
35	BA	30	U	P-O5'	5.87	1.65	1.59
35	BA	639	G	C8-N7	-5.87	1.27	1.30
35	BA	813	U	C3'-C2'	-5.87	1.46	1.52
37	BC	46	C	N1-C6	5.87	1.40	1.37
38	BD	60	A	C2'-O2'	-5.87	1.34	1.41
2	AB	432	A	N7-C5	5.87	1.42	1.39
2	AB	1551	A	C8-N7	5.87	1.35	1.31
2	AB	2252	G	C8-N7	5.87	1.34	1.30
35	BA	858	G	P-O5'	5.87	1.65	1.59
35	BA	1072	G	C5'-C4'	5.87	1.58	1.51
35	BA	1473	G	N3-C4	5.87	1.39	1.35
2	AB	1833	C	O3'-P	5.87	1.68	1.61
2	AB	2132	U	C2-N3	5.87	1.41	1.37
35	BA	143	A	N3-C4	5.87	1.38	1.34
35	BA	356	A	N3-C4	5.87	1.38	1.34
35	BA	651	C	C4'-O4'	-5.87	1.38	1.45
35	BA	784	A	N3-C4	5.87	1.38	1.34
35	BA	1006	G	C5'-C4'	5.87	1.58	1.51
35	BA	1032	G	P-O5'	5.87	1.65	1.59
35	BA	1418	A	C6-N1	-5.87	1.31	1.35
35	BA	1488	G	C4'-O4'	-5.87	1.38	1.45
2	AB	2768	U	N3-C4	5.87	1.43	1.38
35	BA	85	U	P-O5'	5.87	1.65	1.59
35	BA	824	G	C6-N1	5.87	1.43	1.39
1	AA	81	G	N1-C2	5.87	1.42	1.37
2	AB	401	A	P-O5'	5.87	1.65	1.59
2	AB	447	A	N3-C4	5.87	1.38	1.34
2	AB	915	C	N1-C6	-5.87	1.33	1.37
2	AB	930	G	P-O5'	-5.87	1.53	1.59
2	AB	1490	A	C5'-C4'	5.87	1.58	1.51
2	AB	1642	G	N1-C2	5.87	1.42	1.37
2	AB	1701	A	C4'-O4'	-5.87	1.38	1.45
2	AB	1822	C	C4'-O4'	-5.87	1.38	1.45
2	AB	2340	A	N7-C5	5.87	1.42	1.39
35	BA	175	C	C5-C6	5.87	1.39	1.34
35	BA	737	C	C5-C6	5.87	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	547	A	P-O5'	5.86	1.65	1.59
2	AB	1232	G	C2-N3	5.86	1.37	1.32
2	AB	2084	C	C4'-C3'	5.86	1.59	1.53
2	AB	2533	U	O3'-P	5.86	1.68	1.61
2	AB	2727	A	C6-N6	5.86	1.38	1.33
35	BA	8	A	C5'-C4'	5.86	1.58	1.51
35	BA	61	G	N7-C5	-5.86	1.35	1.39
35	BA	503	C	C5'-C4'	5.86	1.58	1.51
35	BA	591	U	O3'-P	5.86	1.68	1.61
2	AB	83	A	C6-N1	-5.86	1.31	1.35
2	AB	1281	G	N3-C4	-5.86	1.31	1.35
2	AB	1996	C	C2-N3	5.86	1.40	1.35
2	AB	2043	C	N1-C6	-5.86	1.33	1.37
35	BA	1441	A	C6-N6	5.86	1.38	1.33
2	AB	703	U	C4-O4	5.86	1.28	1.23
2	AB	904	G	C2'-C1'	5.86	1.59	1.53
2	AB	1055	G	C8-N7	5.86	1.34	1.30
2	AB	1421	G	N7-C5	-5.86	1.35	1.39
2	AB	1938	A	N7-C5	-5.86	1.35	1.39
2	AB	2056	G	C3'-C2'	5.86	1.59	1.52
2	AB	2345	G	P-O5'	5.86	1.65	1.59
2	AB	2374	C	C2'-C1'	5.86	1.59	1.53
35	BA	109	A	C8-N7	5.86	1.35	1.31
35	BA	443	C	C4'-C3'	-5.86	1.46	1.52
35	BA	886	G	C4'-O4'	-5.86	1.38	1.45
35	BA	1139	G	C2'-C1'	5.86	1.59	1.53
35	BA	1332	A	C5'-C4'	5.86	1.58	1.51
2	AB	760	G	N1-C2	5.86	1.42	1.37
2	AB	1004	U	C4'-O4'	-5.86	1.38	1.45
2	AB	1311	G	C3'-C2'	-5.86	1.46	1.52
2	AB	1500	G	C6-O6	-5.86	1.18	1.24
2	AB	1740	G	C5'-C4'	5.86	1.58	1.51
35	BA	863	U	O4'-C1'	5.86	1.49	1.41
35	BA	1425	U	C5-C6	5.86	1.39	1.34
2	AB	614	A	C6-N1	5.86	1.39	1.35
2	AB	1157	G	N3-C4	5.86	1.39	1.35
2	AB	1786	A	C3'-C2'	5.86	1.59	1.52
2	AB	2681	C	O4'-C1'	5.86	1.49	1.41
35	BA	48	C	C5-C6	5.86	1.39	1.34
35	BA	1086	U	N1-C2	5.86	1.43	1.38
35	BA	1205	U	C4-O4	5.86	1.28	1.23
2	AB	68	G	C5'-C4'	5.86	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	227	A	C3'-O3'	-5.86	1.33	1.42
2	AB	536	G	N3-C4	-5.86	1.31	1.35
2	AB	894	U	C2-N3	5.86	1.41	1.37
2	AB	2214	C	P-O5'	5.86	1.65	1.59
2	AB	2742	G	C8-N7	5.86	1.34	1.30
35	BA	167	A	O3'-P	5.86	1.68	1.61
35	BA	205	A	C4'-O4'	-5.86	1.38	1.45
35	BA	906	A	N9-C4	5.86	1.41	1.37
35	BA	1112	C	C2-O2	-5.86	1.19	1.24
2	AB	1085	A	N7-C5	-5.85	1.35	1.39
2	AB	1236	G	O4'-C1'	5.85	1.49	1.41
2	AB	1511	G	C2'-C1'	-5.85	1.47	1.53
2	AB	1752	C	N3-C4	5.85	1.38	1.33
35	BA	1137	C	O3'-P	-5.85	1.54	1.61
38	BD	45	A	C6-N1	5.85	1.39	1.35
1	AA	94	A	P-O5'	5.85	1.65	1.59
2	AB	17	G	C5-C4	-5.85	1.34	1.38
2	AB	66	C	N3-C4	5.85	1.38	1.33
2	AB	125	A	P-O5'	-5.85	1.53	1.59
2	AB	210	C	C2-O2	-5.85	1.19	1.24
2	AB	647	G	N3-C4	5.85	1.39	1.35
2	AB	1192	G	C4'-C3'	-5.85	1.46	1.52
2	AB	2718	G	C8-N7	-5.85	1.27	1.30
35	BA	199	A	P-O5'	5.85	1.65	1.59
35	BA	430	A	P-O5'	5.85	1.65	1.59
35	BA	574	A	N9-C4	5.85	1.41	1.37
35	BA	725	G	C8-N7	5.85	1.34	1.30
35	BA	755	G	C6-N1	5.85	1.43	1.39
2	AB	552	U	C4-C5	5.85	1.48	1.43
2	AB	1754	A	O5'-C5'	-5.85	1.33	1.42
2	AB	2040	G	C8-N7	5.85	1.34	1.30
2	AB	2103	C	C5-C6	5.85	1.39	1.34
2	AB	2479	U	P-O5'	5.85	1.65	1.59
35	BA	977	A	C5-C4	5.85	1.42	1.38
41	BG	145	ARG	CZ-NH1	5.85	1.40	1.33
2	AB	273	G	C3'-C2'	5.85	1.59	1.52
2	AB	695	G	C5'-C4'	5.85	1.58	1.51
2	AB	978	G	C6-N1	5.85	1.43	1.39
2	AB	1475	G	C5-C4	-5.85	1.34	1.38
2	AB	1853	A	C3'-O3'	5.85	1.50	1.42
2	AB	2285	C	C4-N4	5.85	1.39	1.33
1	AA	16	G	P-O5'	5.85	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	106	G	N1-C2	5.85	1.42	1.37
2	AB	110	G	N9-C8	5.85	1.42	1.37
2	AB	1308	A	C6-N6	-5.85	1.29	1.33
2	AB	1970	A	P-O5'	5.85	1.65	1.59
2	AB	2109	U	N1-C2	5.85	1.43	1.38
2	AB	2564	A	P-O5'	5.85	1.65	1.59
2	AB	2667	C	N1-C6	5.85	1.40	1.37
35	BA	835	U	N1-C2	5.85	1.43	1.38
35	BA	905	U	C4-O4	5.85	1.28	1.23
2	AB	145	C	C3'-C2'	5.85	1.59	1.52
2	AB	1724	G	N3-C4	5.85	1.39	1.35
2	AB	2159	G	O3'-P	-5.85	1.54	1.61
2	AB	2823	A	N3-C4	5.85	1.38	1.34
2	AB	228	C	P-O5'	-5.84	1.53	1.59
2	AB	665	U	C4-C5	-5.84	1.38	1.43
2	AB	1151	A	C5-C4	-5.84	1.34	1.38
2	AB	1372	U	C5'-C4'	5.84	1.58	1.51
35	BA	305	G	C6-N1	5.84	1.43	1.39
35	BA	1489	G	C3'-O3'	5.84	1.50	1.42
1	AA	104	A	C3'-C2'	5.84	1.59	1.52
2	AB	2337	G	N1-C2	5.84	1.42	1.37
2	AB	2574	G	C5-C4	-5.84	1.34	1.38
2	AB	2831	G	N1-C2	-5.84	1.33	1.37
35	BA	712	A	C6-N1	-5.84	1.31	1.35
2	AB	634	C	N3-C4	5.84	1.38	1.33
2	AB	686	U	P-O5'	5.84	1.65	1.59
2	AB	1026	G	N9-C8	-5.84	1.33	1.37
2	AB	1288	G	C4'-O4'	-5.84	1.38	1.45
2	AB	1739	A	C5'-C4'	5.84	1.58	1.51
35	BA	200	G	C4'-O4'	-5.84	1.38	1.45
35	BA	740	U	N1-C2	5.84	1.43	1.38
35	BA	1349	A	N3-C4	5.84	1.38	1.34
35	BA	1357	A	N3-C4	5.84	1.38	1.34
37	BC	23	C	C4'-O4'	-5.84	1.38	1.45
2	AB	556	A	O4'-C1'	5.84	1.49	1.41
2	AB	2361	G	C3'-C2'	5.84	1.59	1.52
2	AB	2636	C	C4-C5	5.84	1.47	1.43
2	AB	2763	G	C6-O6	-5.84	1.18	1.24
4	AD	82	TYR	CE1-CZ	5.84	1.46	1.38
35	BA	303	A	C6-N1	5.84	1.39	1.35
35	BA	319	G	N3-C4	-5.84	1.31	1.35
35	BA	521	G	C2-N2	5.84	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1253	G	C8-N7	-5.84	1.27	1.30
2	AB	170	U	P-O5'	5.84	1.65	1.59
2	AB	1311	G	N1-C2	5.84	1.42	1.37
2	AB	1918	A	P-O5'	-5.84	1.53	1.59
2	AB	2349	G	C6-N1	5.84	1.43	1.39
35	BA	1420	U	O4'-C1'	5.84	1.49	1.41
2	AB	901	C	C5'-C4'	5.84	1.58	1.51
2	AB	946	C	N1-C6	5.84	1.40	1.37
2	AB	1026	G	C8-N7	-5.84	1.27	1.30
2	AB	1449	G	C2-N2	5.84	1.40	1.34
2	AB	1703	G	C2-N3	5.84	1.37	1.32
2	AB	2298	A	N9-C4	-5.84	1.34	1.37
2	AB	2639	A	P-O5'	5.84	1.65	1.59
35	BA	219	U	C5-C6	5.84	1.39	1.34
35	BA	270	A	C2-N3	-5.84	1.28	1.33
35	BA	1242	G	C8-N7	5.84	1.34	1.30
2	AB	590	A	N7-C5	5.83	1.42	1.39
2	AB	1453	A	C5-C4	-5.83	1.34	1.38
2	AB	2278	A	N9-C8	5.83	1.42	1.37
35	BA	209	U	O3'-P	5.83	1.68	1.61
35	BA	382	A	N7-C5	5.83	1.42	1.39
2	AB	678	C	P-O5'	5.83	1.65	1.59
2	AB	2169	A	C6-N1	-5.83	1.31	1.35
2	AB	2768	U	P-O5'	5.83	1.65	1.59
35	BA	25	C	O3'-P	5.83	1.68	1.61
35	BA	750	C	O3'-P	5.83	1.68	1.61
2	AB	883	G	N9-C4	5.83	1.42	1.38
2	AB	1656	C	N1-C6	5.83	1.40	1.37
2	AB	2089	C	O3'-P	-5.83	1.54	1.61
2	AB	2409	G	P-O5'	5.83	1.65	1.59
2	AB	2886	A	C5'-C4'	5.83	1.58	1.51
35	BA	254	G	O3'-P	5.83	1.68	1.61
35	BA	313	A	N1-C2	-5.83	1.29	1.34
35	BA	354	G	C2-N3	5.83	1.37	1.32
35	BA	557	G	C6-O6	-5.83	1.19	1.24
35	BA	1432	G	C2-N3	5.83	1.37	1.32
2	AB	1668	A	C8-N7	-5.83	1.27	1.31
2	AB	2547	A	C2'-C1'	5.83	1.59	1.53
35	BA	1397	C	C4-C5	-5.83	1.38	1.43
1	AA	27	C	C2'-O2'	5.83	1.49	1.41
1	AA	42	C	C4'-O4'	-5.83	1.38	1.45
1	AA	51	G	C5-C4	5.83	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1056	G	C2-N2	-5.83	1.28	1.34
2	AB	2404	U	O3'-P	5.83	1.68	1.61
32	A5	34	ARG	CZ-NH2	5.83	1.40	1.33
35	BA	790	A	C5'-C4'	5.83	1.58	1.51
35	BA	1228	C	C4'-O4'	-5.83	1.38	1.45
37	BC	17	U	C2-N3	5.83	1.41	1.37
38	BD	36	A	O3'-P	5.83	1.68	1.61
35	BA	696	A	N1-C2	-5.83	1.29	1.34
2	AB	406	G	C6-N1	-5.83	1.35	1.39
2	AB	1154	G	N9-C4	5.83	1.42	1.38
2	AB	1214	A	C6-N6	-5.83	1.29	1.33
2	AB	2208	C	C5'-C4'	5.83	1.58	1.51
2	AB	2467	C	N1-C6	5.83	1.40	1.37
35	BA	905	U	C5'-C4'	5.83	1.58	1.51
35	BA	1499	A	C8-N7	5.83	1.35	1.31
52	BR	23	SER	CB-OG	5.83	1.49	1.42
2	AB	1430	G	N3-C4	-5.82	1.31	1.35
2	AB	1443	U	C3'-C2'	-5.82	1.46	1.52
2	AB	1972	G	C2-N3	5.82	1.37	1.32
38	BD	27	G	N9-C4	5.82	1.42	1.38
2	AB	628	G	N9-C8	-5.82	1.33	1.37
2	AB	1929	G	P-O5'	5.82	1.65	1.59
2	AB	2044	C	C4-C5	5.82	1.47	1.43
35	BA	255	G	N9-C8	5.82	1.42	1.37
35	BA	455	G	N7-C5	-5.82	1.35	1.39
35	BA	1535	C	C4-C5	5.82	1.47	1.43
2	AB	1135	C	C2'-C1'	5.82	1.59	1.53
2	AB	1820	U	P-O5'	5.82	1.65	1.59
2	AB	2551	C	C2-O2	-5.82	1.19	1.24
2	AB	2636	C	O3'-P	5.82	1.68	1.61
2	AB	2832	U	N3-C4	5.82	1.43	1.38
35	BA	213	G	N7-C5	-5.82	1.35	1.39
35	BA	716	A	C4'-C3'	-5.82	1.46	1.52
35	BA	1139	G	O4'-C1'	-5.82	1.34	1.41
2	AB	2174	C	N1-C6	5.82	1.40	1.37
35	BA	1288	A	N1-C2	-5.82	1.29	1.34
2	AB	321	U	C2'-C1'	5.82	1.59	1.53
2	AB	661	A	C4'-C3'	-5.82	1.46	1.52
2	AB	1171	G	C6-N1	5.82	1.43	1.39
2	AB	1216	G	C5-C4	-5.82	1.34	1.38
2	AB	1748	C	C4'-C3'	5.82	1.59	1.53
2	AB	1842	G	C2-N3	5.82	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2383	G	C2-N3	5.82	1.37	1.32
2	AB	2661	G	C6-O6	-5.82	1.19	1.24
35	BA	981	U	P-O5'	5.82	1.65	1.59
35	BA	1330	U	O3'-P	5.82	1.68	1.61
2	AB	2476	A	N7-C5	5.82	1.42	1.39
2	AB	2842	G	N7-C5	5.82	1.42	1.39
35	BA	199	A	C6-N6	-5.82	1.29	1.33
35	BA	372	C	C2-O2	-5.82	1.19	1.24
2	AB	909	A	N3-C4	5.81	1.38	1.34
2	AB	1938	A	C8-N7	-5.81	1.27	1.31
2	AB	2419	U	P-O5'	5.81	1.65	1.59
2	AB	1547	C	C5'-C4'	5.81	1.58	1.51
2	AB	1719	G	N7-C5	-5.81	1.35	1.39
2	AB	2842	G	C6-O6	-5.81	1.19	1.24
35	BA	624	C	C4-C5	-5.81	1.38	1.43
35	BA	757	U	C4-C5	5.81	1.48	1.43
35	BA	959	A	N9-C4	-5.81	1.34	1.37
35	BA	1151	A	C2'-O2'	-5.81	1.34	1.41
35	BA	1240	U	C4-O4	-5.81	1.19	1.23
40	BF	22	PHE	CE2-CZ	5.81	1.48	1.37
2	AB	425	G	O4'-C1'	5.81	1.49	1.41
2	AB	1565	C	O3'-P	-5.81	1.54	1.61
2	AB	1630	A	C2'-C1'	5.81	1.59	1.53
2	AB	2096	C	N1-C6	5.81	1.40	1.37
2	AB	2357	G	C8-N7	-5.81	1.27	1.30
2	AB	2851	A	P-O5'	5.81	1.65	1.59
2	AB	2885	G	C8-N7	-5.81	1.27	1.30
35	BA	710	G	O5'-C5'	-5.81	1.33	1.42
35	BA	998	C	N3-C4	5.81	1.38	1.33
36	BB	76	A	C6-N6	5.81	1.38	1.33
37	BC	40	G	N1-C2	5.81	1.42	1.37
45	BK	64	TYR	CD1-CE1	5.81	1.48	1.39
2	AB	287	G	N9-C8	-5.81	1.33	1.37
2	AB	1137	G	C4'-O4'	-5.81	1.38	1.45
2	AB	1819	A	C6-N6	5.81	1.38	1.33
2	AB	2589	A	N9-C4	-5.81	1.34	1.37
2	AB	2606	C	C2'-C1'	5.81	1.59	1.53
2	AB	2784	U	P-O5'	5.81	1.65	1.59
35	BA	227	G	N3-C4	-5.81	1.31	1.35
36	BB	3	G	C5-C4	5.81	1.42	1.38
2	AB	1146	C	C2-N3	5.81	1.40	1.35
2	AB	1555	G	C5'-C4'	5.81	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	155	A	N1-C2	5.81	1.39	1.34
35	BA	757	U	C4-O4	-5.81	1.19	1.23
2	AB	595	C	P-O5'	5.80	1.65	1.59
2	AB	636	G	C2-N2	-5.80	1.28	1.34
2	AB	1809	A	N9-C4	5.80	1.41	1.37
2	AB	1830	C	O3'-P	5.80	1.68	1.61
2	AB	2758	A	C8-N7	-5.80	1.27	1.31
35	BA	1288	A	N7-C5	-5.80	1.35	1.39
38	BD	37	U	C4-C5	5.80	1.48	1.43
2	AB	1265	A	C5-C6	-5.80	1.35	1.41
2	AB	1854	A	C3'-C2'	5.80	1.59	1.52
2	AB	2390	U	P-O5'	5.80	1.65	1.59
35	BA	69	G	C2-N3	5.80	1.37	1.32
35	BA	900	A	C8-N7	-5.80	1.27	1.31
35	BA	1075	U	C2-N3	-5.80	1.33	1.37
2	AB	362	A	C3'-C2'	5.80	1.59	1.52
2	AB	616	A	N9-C4	5.80	1.41	1.37
2	AB	845	A	C5-C4	-5.80	1.34	1.38
2	AB	1070	A	N9-C4	5.80	1.41	1.37
2	AB	1380	G	C5'-C4'	5.80	1.58	1.51
2	AB	1572	A	C6-N1	-5.80	1.31	1.35
2	AB	1737	G	P-O5'	5.80	1.65	1.59
2	AB	2055	C	C5-C6	5.80	1.39	1.34
2	AB	2613	U	C2-O2	5.80	1.27	1.22
2	AB	2663	G	C5-C4	-5.80	1.34	1.38
35	BA	1423	G	C5-C4	5.80	1.42	1.38
1	AA	107	G	C2-N3	5.80	1.37	1.32
2	AB	592	A	C6-N1	5.80	1.39	1.35
35	BA	1273	C	N3-C4	5.80	1.38	1.33
1	AA	81	G	O4'-C1'	5.80	1.49	1.41
2	AB	664	G	C2'-C1'	-5.80	1.47	1.53
2	AB	1824	G	O3'-P	5.80	1.68	1.61
2	AB	2425	A	C2'-O2'	5.80	1.49	1.41
35	BA	734	G	P-O5'	5.80	1.65	1.59
1	AA	31	C	C4'-O4'	-5.80	1.38	1.45
2	AB	265	A	C3'-O3'	5.80	1.50	1.42
2	AB	444	C	N1-C6	5.80	1.40	1.37
2	AB	477	A	C4'-O4'	-5.80	1.38	1.45
35	BA	492	C	O3'-P	5.80	1.68	1.61
36	BB	1	A	N1-C2	-5.80	1.29	1.34
2	AB	316	C	N3-C4	-5.79	1.29	1.33
2	AB	844	A	N3-C4	5.79	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1218	G	N7-C5	-5.79	1.35	1.39
35	BA	180	U	C4'-O4'	-5.79	1.38	1.45
2	AB	1068	G	N9-C4	5.79	1.42	1.38
2	AB	1641	A	C5'-C4'	5.79	1.58	1.51
2	AB	1815	A	N9-C4	5.79	1.41	1.37
2	AB	2353	G	C8-N7	5.79	1.34	1.30
35	BA	374	A	C4'-C3'	-5.79	1.46	1.52
35	BA	592	G	C2-N2	-5.79	1.28	1.34
35	BA	942	G	N1-C2	5.79	1.42	1.37
38	BD	1	C	N1-C6	5.79	1.40	1.37
2	AB	981	A	O3'-P	5.79	1.68	1.61
2	AB	1061	U	P-O5'	5.79	1.65	1.59
2	AB	1562	U	C4'-C3'	5.79	1.59	1.53
2	AB	2155	U	C2-O2	5.79	1.27	1.22
35	BA	99	C	C2-O2	-5.79	1.19	1.24
35	BA	1316	G	C4'-O4'	-5.79	1.38	1.45
35	BA	1432	G	P-O5'	5.79	1.65	1.59
35	BA	1467	C	C2-N3	5.79	1.40	1.35
2	AB	8	C	C4-N4	-5.79	1.28	1.33
2	AB	771	G	C2-N3	5.79	1.37	1.32
35	BA	379	C	P-O5'	5.79	1.65	1.59
35	BA	918	A	N9-C8	-5.79	1.33	1.37
38	BD	7	G	C4'-O4'	-5.79	1.38	1.45
2	AB	695	G	N9-C4	-5.79	1.33	1.38
2	AB	1097	U	C1'-N1	5.79	1.57	1.48
2	AB	1107	G	C8-N7	-5.79	1.27	1.30
2	AB	1263	U	N3-C4	5.79	1.43	1.38
2	AB	1330	C	N1-C6	-5.79	1.33	1.37
2	AB	2618	G	C8-N7	-5.79	1.27	1.30
1	AA	38	C	C2'-C1'	5.79	1.59	1.53
2	AB	1190	G	C8-N7	-5.79	1.27	1.30
2	AB	1909	C	C4-C5	5.79	1.47	1.43
2	AB	2274	A	C8-N7	-5.79	1.27	1.31
2	AB	2295	C	P-O5'	5.79	1.65	1.59
2	AB	2599	G	C5-C4	-5.79	1.34	1.38
36	BB	33	U	C2'-O2'	5.79	1.49	1.41
1	AA	45	A	N3-C4	5.79	1.38	1.34
2	AB	471	A	C6-N1	-5.79	1.31	1.35
2	AB	531	C	C4'-O4'	-5.79	1.38	1.45
2	AB	965	C	P-O5'	5.79	1.65	1.59
2	AB	985	C	O3'-P	5.79	1.68	1.61
2	AB	2347	C	C4'-O4'	-5.79	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2411	A	P-O5'	5.79	1.65	1.59
2	AB	2581	G	N3-C4	-5.79	1.31	1.35
2	AB	2662	A	O3'-P	5.79	1.68	1.61
2	AB	2881	U	N1-C2	5.79	1.43	1.38
35	BA	64	G	N7-C5	5.79	1.42	1.39
35	BA	240	G	N9-C4	5.79	1.42	1.38
35	BA	251	G	C2'-C1'	5.79	1.59	1.53
35	BA	394	G	O3'-P	5.79	1.68	1.61
35	BA	965	U	C2-O2	5.79	1.27	1.22
35	BA	1211	U	C5'-C4'	5.79	1.58	1.51
35	BA	1249	C	C5'-C4'	5.79	1.58	1.51
2	AB	43	G	C4'-O4'	-5.78	1.38	1.45
2	AB	589	U	N1-C6	5.78	1.43	1.38
2	AB	837	C	C5-C6	5.78	1.39	1.34
2	AB	863	A	N9-C4	5.78	1.41	1.37
2	AB	1107	G	P-O5'	5.78	1.65	1.59
2	AB	1458	U	O3'-P	5.78	1.68	1.61
2	AB	1860	G	C6-O6	-5.78	1.19	1.24
2	AB	1988	G	N3-C4	5.78	1.39	1.35
2	AB	2622	U	O4'-C1'	5.78	1.49	1.41
35	BA	166	U	C3'-C2'	5.78	1.59	1.52
35	BA	1348	U	C2-O2	5.78	1.27	1.22
2	AB	122	G	N9-C4	-5.78	1.33	1.38
2	AB	2526	G	N3-C4	5.78	1.39	1.35
35	BA	356	A	N9-C8	5.78	1.42	1.37
2	AB	15	G	C8-N7	5.78	1.34	1.30
2	AB	875	G	C5-C6	5.78	1.48	1.42
2	AB	1531	C	N1-C6	-5.78	1.33	1.37
35	BA	1164	G	C2-N3	5.78	1.37	1.32
35	BA	1274	A	N9-C4	5.78	1.41	1.37
35	BA	1536	C	N1-C2	-5.78	1.34	1.40
2	AB	600	G	C5-C6	5.78	1.48	1.42
2	AB	1359	A	O3'-P	5.78	1.68	1.61
12	AL	74	TYR	CE1-CZ	5.78	1.46	1.38
35	BA	1342	C	C4'-O4'	-5.78	1.38	1.45
2	AB	502	A	C4'-C3'	5.78	1.59	1.53
2	AB	1900	A	C4'-C3'	5.78	1.59	1.53
2	AB	2733	A	N9-C8	-5.78	1.33	1.37
35	BA	161	A	C5-C4	-5.78	1.34	1.38
35	BA	162	A	C6-N1	5.78	1.39	1.35
35	BA	910	C	N1-C6	5.78	1.40	1.37
2	AB	206	U	N1-C6	-5.78	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	305	C	C5-C6	5.78	1.39	1.34
2	AB	340	A	N7-C5	-5.78	1.35	1.39
2	AB	1017	G	O3'-P	5.78	1.68	1.61
2	AB	1253	A	C2'-O2'	5.78	1.49	1.41
2	AB	2314	A	C8-N7	5.78	1.35	1.31
2	AB	2800	A	N7-C5	5.78	1.42	1.39
35	BA	547	A	C6-N6	5.78	1.38	1.33
35	BA	563	A	C4'-O4'	-5.78	1.38	1.45
35	BA	583	A	C5-C6	5.78	1.46	1.41
35	BA	695	A	P-O5'	5.78	1.65	1.59
35	BA	1164	G	C2'-C1'	-5.78	1.47	1.53
35	BA	1399	C	P-O5'	5.78	1.65	1.59
35	BA	1502	A	O3'-P	-5.78	1.54	1.61
36	BB	3	G	N9-C8	5.78	1.41	1.37
2	AB	512	G	N7-C5	-5.77	1.35	1.39
2	AB	1487	U	P-O5'	5.77	1.65	1.59
2	AB	1650	A	C8-N7	-5.77	1.27	1.31
11	AK	84	GLY	CA-C	5.77	1.61	1.51
2	AB	12	U	N1-C6	5.77	1.43	1.38
2	AB	660	C	C2'-C1'	5.77	1.59	1.53
2	AB	918	A	C5-C4	-5.77	1.34	1.38
2	AB	1005	C	C5'-C4'	5.77	1.58	1.51
2	AB	1207	C	N1-C6	5.77	1.40	1.37
2	AB	1396	U	C4-O4	5.77	1.28	1.23
2	AB	2097	A	C2'-O2'	-5.77	1.34	1.41
2	AB	2171	A	P-O5'	5.77	1.65	1.59
35	BA	307	C	C5'-C4'	5.77	1.58	1.51
36	BB	15	A	N9-C4	5.77	1.41	1.37
36	BB	28	C	N3-C4	5.77	1.38	1.33
2	AB	76	C	C2-N3	5.77	1.40	1.35
35	BA	396	C	O5'-C5'	-5.77	1.33	1.42
2	AB	69	C	P-O5'	5.77	1.65	1.59
2	AB	78	U	C5-C6	5.77	1.39	1.34
2	AB	239	C	C4'-O4'	-5.77	1.38	1.45
2	AB	290	U	C4'-C3'	-5.77	1.46	1.52
2	AB	503	A	N1-C2	5.77	1.39	1.34
2	AB	540	C	N1-C6	5.77	1.40	1.37
2	AB	784	G	C5-C4	5.77	1.42	1.38
2	AB	1013	C	O3'-P	5.77	1.68	1.61
2	AB	1763	G	C8-N7	5.77	1.34	1.30
2	AB	1883	U	C5'-C4'	5.77	1.58	1.51
2	AB	2713	U	C5'-C4'	5.77	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	668	G	P-O5'	5.77	1.65	1.59
36	BB	34	C	N3-C4	5.77	1.38	1.33
2	AB	217	A	N7-C5	5.77	1.42	1.39
2	AB	391	A	N9-C4	5.77	1.41	1.37
2	AB	424	G	N7-C5	-5.77	1.35	1.39
2	AB	514	A	C3'-C2'	5.77	1.59	1.52
2	AB	1099	G	N9-C4	-5.77	1.33	1.38
2	AB	2436	G	N9-C8	5.77	1.41	1.37
35	BA	781	A	C6-N1	5.77	1.39	1.35
35	BA	1155	A	N3-C4	5.77	1.38	1.34
35	BA	1196	A	P-O5'	5.77	1.65	1.59
35	BA	1488	G	N1-C2	5.77	1.42	1.37
1	AA	56	G	N1-C2	5.77	1.42	1.37
2	AB	698	C	C5-C6	5.77	1.39	1.34
2	AB	1447	C	C2'-C1'	5.77	1.59	1.53
2	AB	2607	G	N3-C4	5.77	1.39	1.35
36	BB	49	G	C2'-C1'	5.77	1.59	1.53
2	AB	2061	G	C3'-C2'	5.76	1.59	1.52
2	AB	2144	G	C2-N3	5.76	1.37	1.32
35	BA	46	G	N7-C5	5.76	1.42	1.39
35	BA	82	G	N1-C2	5.76	1.42	1.37
35	BA	449	G	C6-O6	-5.76	1.19	1.24
35	BA	1024	G	N7-C5	-5.76	1.35	1.39
35	BA	1197	A	N9-C8	5.76	1.42	1.37
35	BA	1365	G	N1-C2	5.76	1.42	1.37
38	BD	38	A	C4'-O4'	-5.76	1.38	1.45
2	AB	1981	A	N9-C4	5.76	1.41	1.37
35	BA	5	U	C5-C6	5.76	1.39	1.34
1	AA	25	U	C3'-C2'	5.76	1.59	1.52
2	AB	235	U	C2-O2	5.76	1.27	1.22
2	AB	755	U	C2-N3	-5.76	1.33	1.37
2	AB	1102	C	O3'-P	5.76	1.68	1.61
2	AB	2816	G	N1-C2	5.76	1.42	1.37
2	AB	2877	G	N7-C5	5.76	1.42	1.39
35	BA	546	A	N9-C8	5.76	1.42	1.37
35	BA	648	A	C2-N3	5.76	1.38	1.33
35	BA	925	G	C5-C6	5.76	1.48	1.42
35	BA	1166	G	C4'-C3'	-5.76	1.46	1.52
2	AB	1384	A	P-O5'	5.76	1.65	1.59
2	AB	1589	U	P-O5'	5.76	1.65	1.59
2	AB	2037	A	N1-C2	5.76	1.39	1.34
7	AG	101	ARG	CD-NE	5.76	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	286	C	P-O5'	5.76	1.65	1.59
35	BA	1102	A	C5'-C4'	5.76	1.58	1.51
35	BA	1172	C	C4'-O4'	-5.76	1.38	1.45
47	BM	5	ARG	CZ-NH2	5.76	1.40	1.33
2	AB	344	A	N9-C4	5.76	1.41	1.37
2	AB	419	U	C4'-O4'	-5.76	1.38	1.45
2	AB	2126	A	N9-C8	5.76	1.42	1.37
35	BA	140	U	C4-C5	5.76	1.48	1.43
35	BA	1458	G	C8-N7	5.76	1.34	1.30
2	AB	1050	A	N9-C4	5.76	1.41	1.37
2	AB	1625	C	C4-C5	5.76	1.47	1.43
2	AB	1666	G	C8-N7	5.76	1.34	1.30
2	AB	1857	G	C6-N1	-5.76	1.35	1.39
2	AB	1935	G	P-O5'	5.76	1.65	1.59
2	AB	2386	A	C6-N6	5.76	1.38	1.33
35	BA	1207	2MG	O3'-P	5.76	1.68	1.61
35	BA	1294	G	N9-C8	-5.76	1.33	1.37
35	BA	1317	C	C3'-C2'	5.76	1.59	1.52
2	AB	1280	G	P-O5'	5.75	1.65	1.59
2	AB	2121	G	C2'-C1'	5.75	1.59	1.53
2	AB	2406	A	P-O5'	-5.75	1.53	1.59
2	AB	2408	U	C2-N3	5.75	1.41	1.37
2	AB	555	G	P-O5'	5.75	1.65	1.59
2	AB	841	G	C2'-O2'	-5.75	1.34	1.41
2	AB	856	G	C2-N3	5.75	1.37	1.32
2	AB	1180	U	C4-C5	5.75	1.48	1.43
2	AB	1980	G	N9-C8	-5.75	1.33	1.37
2	AB	2487	G	C2'-O2'	5.75	1.49	1.41
2	AB	2617	U	C4-O4	-5.75	1.19	1.23
35	BA	7	A	O3'-P	5.75	1.68	1.61
35	BA	159	G	O3'-P	-5.75	1.54	1.61
35	BA	357	G	N7-C5	-5.75	1.35	1.39
35	BA	475	C	C2-N3	5.75	1.40	1.35
35	BA	1071	C	N3-C4	-5.75	1.29	1.33
35	BA	1458	G	C6-N1	5.75	1.43	1.39
2	AB	629	G	C3'-C2'	5.75	1.59	1.52
2	AB	642	U	C2-N3	5.75	1.41	1.37
2	AB	1413	A	N3-C4	5.75	1.38	1.34
2	AB	2737	G	C5-C4	-5.75	1.34	1.38
35	BA	273	U	P-O5'	5.75	1.65	1.59
35	BA	408	A	N9-C8	5.75	1.42	1.37
35	BA	1529	G	N3-C4	5.75	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	BP	22	TYR	CG-CD2	5.75	1.46	1.39
2	AB	245	G	C5'-C4'	5.75	1.58	1.51
2	AB	909	A	N9-C4	5.75	1.41	1.37
35	BA	942	G	C5-C6	5.75	1.48	1.42
35	BA	1145	A	C3'-C2'	-5.75	1.46	1.52
35	BA	1342	C	C2'-C1'	-5.75	1.47	1.53
37	BC	34	U	N1-C2	5.75	1.43	1.38
2	AB	711	G	C8-N7	-5.75	1.27	1.30
2	AB	1110	G	O3'-P	5.75	1.68	1.61
2	AB	2040	G	N1-C2	5.75	1.42	1.37
2	AB	2148	G	N3-C4	5.75	1.39	1.35
2	AB	2205	A	N1-C2	-5.75	1.29	1.34
35	BA	1279	G	C4'-O4'	-5.75	1.38	1.45
2	AB	853	C	O3'-P	5.75	1.68	1.61
2	AB	1842	G	N9-C8	-5.75	1.33	1.37
2	AB	1995	U	C4'-C3'	5.75	1.59	1.53
35	BA	869	G	C4'-C3'	-5.75	1.46	1.52
35	BA	1108	G	P-O5'	5.75	1.65	1.59
2	AB	1114	C	N1-C2	5.75	1.45	1.40
35	BA	1245	C	C3'-C2'	5.75	1.59	1.52
1	AA	111	U	C4'-O4'	-5.74	1.38	1.45
2	AB	574	A	O4'-C1'	5.74	1.49	1.41
2	AB	623	C	C2-O2	-5.74	1.19	1.24
2	AB	663	G	N3-C4	5.74	1.39	1.35
2	AB	1467	U	C2-O2	5.74	1.27	1.22
2	AB	1882	U	C2-O2	5.74	1.27	1.22
2	AB	2312	U	C4'-O4'	-5.74	1.38	1.45
35	BA	421	U	O3'-P	5.74	1.68	1.61
35	BA	633	G	C2'-C1'	5.74	1.59	1.53
35	BA	671	G	C4'-O4'	-5.74	1.38	1.45
36	BB	36	A	N7-C5	5.74	1.42	1.39
2	AB	868	U	C2'-O2'	5.74	1.49	1.41
2	AB	1820	U	C4-C5	5.74	1.48	1.43
35	BA	1383	C	C2-O2	-5.74	1.19	1.24
2	AB	89	A	C8-N7	-5.74	1.27	1.31
2	AB	674	G	P-O5'	5.74	1.65	1.59
2	AB	1073	A	N3-C4	5.74	1.38	1.34
2	AB	1294	U	C4-C5	5.74	1.48	1.43
2	AB	1400	U	C2-O2	5.74	1.27	1.22
2	AB	1723	G	N9-C4	-5.74	1.33	1.38
2	AB	2816	G	C2'-O2'	-5.74	1.34	1.41
35	BA	23	C	C5-C6	5.74	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	101	A	C6-N6	5.74	1.38	1.33
35	BA	533	A	N9-C8	-5.74	1.33	1.37
35	BA	1182	G	C4'-C3'	5.74	1.59	1.53
2	AB	101	A	C4'-O4'	-5.74	1.38	1.45
2	AB	524	G	C6-O6	-5.74	1.19	1.24
2	AB	681	G	C5-C4	5.74	1.42	1.38
2	AB	750	A	N7-C5	-5.74	1.35	1.39
2	AB	1994	C	C4-C5	5.74	1.47	1.43
2	AB	2260	C	C2-O2	-5.74	1.19	1.24
2	AB	2339	C	C3'-O3'	5.74	1.50	1.42
2	AB	2755	C	C4-C5	5.74	1.47	1.43
2	AB	2765	A	N9-C8	-5.74	1.33	1.37
35	BA	2	A	N1-C2	-5.74	1.29	1.34
38	BD	39	A	P-O5'	5.74	1.65	1.59
2	AB	1441	G	N3-C4	5.74	1.39	1.35
2	AB	2488	G	N3-C4	5.74	1.39	1.35
2	AB	2544	G	C5-C6	5.74	1.48	1.42
35	BA	89	U	C2-N3	5.74	1.41	1.37
35	BA	930	C	C4'-O4'	-5.74	1.38	1.45
35	BA	963	G	O3'-P	5.74	1.68	1.61
37	BC	15	G	C5-C6	5.74	1.48	1.42
2	AB	3	U	C4'-O4'	-5.74	1.38	1.45
2	AB	271	G	C5'-C4'	5.74	1.58	1.51
2	AB	304	U	C4'-O4'	-5.74	1.38	1.45
2	AB	721	A	C4'-C3'	5.74	1.59	1.53
2	AB	763	G	C4'-O4'	-5.74	1.38	1.45
2	AB	1266	G	C4'-C3'	5.74	1.59	1.53
2	AB	1418	G	C3'-C2'	5.74	1.59	1.52
2	AB	1636	U	C2-N3	5.74	1.41	1.37
35	BA	15	G	C5-C6	5.74	1.48	1.42
35	BA	353	A	C6-N6	5.74	1.38	1.33
35	BA	430	A	C4'-O4'	-5.74	1.38	1.45
35	BA	1038	C	C4'-O4'	-5.74	1.38	1.45
35	BA	1353	G	C2-N2	-5.74	1.28	1.34
35	BA	451	A	C5'-C4'	5.73	1.58	1.51
35	BA	615	G	P-O5'	5.73	1.65	1.59
2	AB	102	U	N1-C2	5.73	1.43	1.38
2	AB	818	G	C5-C4	5.73	1.42	1.38
2	AB	1652	A	C5-C6	-5.73	1.35	1.41
2	AB	1663	G	N7-C5	5.73	1.42	1.39
2	AB	2075	U	C2-N3	5.73	1.41	1.37
2	AB	2340	A	C4'-O4'	-5.73	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	222	C	C4-N4	-5.73	1.28	1.33
35	BA	311	C	C4-N4	5.73	1.39	1.33
35	BA	392	C	C4-N4	5.73	1.39	1.33
35	BA	831	A	N9-C4	5.73	1.41	1.37
35	BA	1468	A	N3-C4	5.73	1.38	1.34
35	BA	1536	C	N1-C6	5.73	1.40	1.37
41	BG	3	TYR	CE2-CZ	5.73	1.46	1.38
2	AB	295	G	N7-C5	5.73	1.42	1.39
2	AB	1341	G	C8-N7	-5.73	1.27	1.30
2	AB	1431	A	C8-N7	-5.73	1.27	1.31
2	AB	1457	U	C2-N3	-5.73	1.33	1.37
2	AB	1502	A	O4'-C1'	5.73	1.49	1.41
2	AB	1701	A	C2'-C1'	5.73	1.59	1.53
2	AB	1968	G	N9-C8	5.73	1.41	1.37
2	AB	2430	A	C6-N1	-5.73	1.31	1.35
35	BA	56	U	C2'-C1'	5.73	1.59	1.53
35	BA	1235	U	N1-C2	5.73	1.43	1.38
2	AB	2741	A	P-O5'	5.73	1.65	1.59
35	BA	375	U	C2'-C1'	5.73	1.59	1.53
35	BA	1015	G	N1-C2	5.73	1.42	1.37
36	BB	11	U	C4'-O4'	-5.73	1.38	1.45
2	AB	32	C	C4'-O4'	-5.73	1.38	1.45
2	AB	93	G	C5-C4	5.73	1.42	1.38
2	AB	206	U	C5-C6	5.73	1.39	1.34
2	AB	493	G	C4'-O4'	-5.73	1.38	1.45
2	AB	783	A	O3'-P	5.73	1.68	1.61
2	AB	1225	G	N3-C4	5.73	1.39	1.35
2	AB	1401	G	O3'-P	5.73	1.68	1.61
2	AB	2606	C	P-O5'	5.73	1.65	1.59
35	BA	898	G	C4'-C3'	-5.73	1.46	1.52
35	BA	1085	U	P-O5'	5.73	1.65	1.59
1	AA	23	G	P-O5'	5.73	1.65	1.59
2	AB	254	G	O3'-P	5.73	1.68	1.61
2	AB	280	U	C2-N3	5.73	1.41	1.37
2	AB	1125	G	N3-C4	5.73	1.39	1.35
2	AB	1620	G	C6-O6	-5.73	1.19	1.24
2	AB	1706	C	C4-C5	5.73	1.47	1.43
2	AB	2349	G	P-O5'	5.73	1.65	1.59
2	AB	2788	C	C4-N4	5.73	1.39	1.33
35	BA	1141	C	C4-N4	5.73	1.39	1.33
2	AB	288	U	C4-C5	5.72	1.48	1.43
2	AB	437	U	C1'-N1	5.72	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	604	G	C6-O6	-5.72	1.19	1.24
2	AB	1695	G	C2'-C1'	-5.72	1.47	1.53
2	AB	1933	G	N7-C5	-5.72	1.35	1.39
2	AB	2056	G	P-O5'	5.72	1.65	1.59
2	AB	2438	U	O3'-P	5.72	1.68	1.61
2	AB	2461	A	N7-C5	5.72	1.42	1.39
2	AB	2686	G	N3-C4	5.72	1.39	1.35
2	AB	2777	G	C2-N3	5.72	1.37	1.32
35	BA	238	A	C5-C4	-5.72	1.34	1.38
35	BA	663	A	C5-C4	-5.72	1.34	1.38
2	AB	451	U	N1-C2	5.72	1.43	1.38
2	AB	537	G	C4'-C3'	5.72	1.59	1.53
2	AB	2271	G	C2'-C1'	5.72	1.59	1.53
37	BC	45	G	C5-C4	-5.72	1.34	1.38
2	AB	845	A	N9-C8	5.72	1.42	1.37
2	AB	1722	A	C5'-C4'	5.72	1.58	1.51
2	AB	2001	C	N3-C4	5.72	1.38	1.33
2	AB	2640	G	C2-N2	5.72	1.40	1.34
35	BA	650	G	C2-N3	5.72	1.37	1.32
35	BA	1033	G	N9-C8	5.72	1.41	1.37
35	BA	1340	A	P-O5'	5.72	1.65	1.59
35	BA	1439	G	C8-N7	-5.72	1.27	1.30
1	AA	67	G	C8-N7	-5.72	1.27	1.30
2	AB	300	A	C6-N6	5.72	1.38	1.33
2	AB	519	U	N3-C4	5.72	1.43	1.38
2	AB	680	C	C4'-O4'	-5.72	1.38	1.45
2	AB	1022	G	C2-N2	-5.72	1.28	1.34
2	AB	1046	A	N9-C4	-5.72	1.34	1.37
2	AB	1091	G	N7-C5	-5.72	1.35	1.39
2	AB	1234	U	N3-C4	5.72	1.43	1.38
2	AB	1755	A	C2'-O2'	5.72	1.49	1.41
2	AB	1921	G	N1-C2	5.72	1.42	1.37
2	AB	1960	A	C6-N6	5.72	1.38	1.33
35	BA	756	C	C4'-C3'	-5.72	1.46	1.52
35	BA	931	C	C5'-C4'	5.72	1.58	1.51
35	BA	1434	A	O3'-P	5.72	1.68	1.61
2	AB	238	C	C5-C6	5.72	1.39	1.34
2	AB	404	A	C3'-C2'	5.72	1.59	1.52
2	AB	2373	G	C6-O6	-5.72	1.19	1.24
35	BA	92	U	C2-O2	5.72	1.27	1.22
35	BA	517	G	N9-C4	-5.72	1.33	1.38
2	AB	388	G	C2-N3	5.72	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1358	G	N3-C4	5.72	1.39	1.35
2	AB	2514	U	P-O5'	5.72	1.65	1.59
35	BA	146	G	N3-C4	-5.72	1.31	1.35
35	BA	469	C	C2'-O2'	-5.72	1.34	1.41
35	BA	753	A	P-O5'	5.72	1.65	1.59
2	AB	1207	C	P-O5'	5.71	1.65	1.59
2	AB	1464	G	C6-N1	5.71	1.43	1.39
2	AB	1718	G	C2'-O2'	-5.71	1.34	1.41
2	AB	1792	G	N9-C4	-5.71	1.33	1.38
2	AB	1953	A	C5'-C4'	5.71	1.58	1.51
35	BA	30	U	N1-C6	5.71	1.43	1.38
35	BA	351	G	N9-C4	-5.71	1.33	1.38
35	BA	896	C	C4'-O4'	-5.71	1.38	1.45
35	BA	1185	G	C5'-C4'	5.71	1.58	1.51
35	BA	1475	G	C6-N1	5.71	1.43	1.39
36	BB	18	G	C4'-O4'	-5.71	1.38	1.45
2	AB	1077	A	N7-C5	5.71	1.42	1.39
35	BA	461	A	C6-N1	-5.71	1.31	1.35
35	BA	778	G	C5'-C4'	5.71	1.58	1.51
35	BA	845	A	N9-C4	5.71	1.41	1.37
1	AA	76	G	C2-N2	5.71	1.40	1.34
2	AB	145	C	C2'-C1'	5.71	1.59	1.53
2	AB	216	A	O5'-C5'	-5.71	1.33	1.42
2	AB	233	A	C5-C6	-5.71	1.35	1.41
2	AB	411	G	N9-C4	-5.71	1.33	1.38
2	AB	919	U	C2-N3	5.71	1.41	1.37
2	AB	954	G	C5-C4	5.71	1.42	1.38
2	AB	1013	C	C2-N3	5.71	1.40	1.35
2	AB	1268	A	N9-C4	-5.71	1.34	1.37
2	AB	1616	A	O3'-P	5.71	1.68	1.61
2	AB	1646	C	C5-C6	5.71	1.39	1.34
2	AB	1960	A	C5'-C4'	5.71	1.58	1.51
2	AB	2654	A	N3-C4	5.71	1.38	1.34
7	AG	164	GLU	CG-CD	5.71	1.60	1.51
35	BA	23	C	C4'-C3'	5.71	1.59	1.53
35	BA	82	G	O3'-P	5.71	1.68	1.61
35	BA	1113	C	C4'-O4'	-5.71	1.38	1.45
35	BA	1211	U	C5-C6	5.71	1.39	1.34
36	BB	21	A	C3'-C2'	5.71	1.59	1.52
37	BC	35	G	N9-C4	5.71	1.42	1.38
38	BD	4	G	N9-C4	-5.71	1.33	1.38
2	AB	218	A	C6-N1	-5.71	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	463	G	C2-N2	-5.71	1.28	1.34
2	AB	1157	G	C4'-O4'	-5.71	1.38	1.45
2	AB	1389	G	N3-C4	5.71	1.39	1.35
2	AB	1545	A	N9-C8	-5.71	1.33	1.37
2	AB	2638	G	C5-C6	5.71	1.48	1.42
2	AB	862	G	C2-N3	5.71	1.37	1.32
2	AB	1245	G	P-O5'	-5.71	1.54	1.59
33	A6	63	TYR	CE1-CZ	5.71	1.46	1.38
35	BA	331	G	N7-C5	5.71	1.42	1.39
35	BA	945	G	N7-C5	-5.71	1.35	1.39
35	BA	976	G	C6-N1	-5.71	1.35	1.39
35	BA	1007	U	C4-C5	5.71	1.48	1.43
36	BB	44	G	N7-C5	-5.71	1.35	1.39
2	AB	167	A	O3'-P	5.71	1.68	1.61
2	AB	361	G	N7-C5	5.71	1.42	1.39
2	AB	586	A	N9-C4	5.71	1.41	1.37
2	AB	1367	A	N1-C2	-5.71	1.29	1.34
2	AB	1540	G	C5'-C4'	5.71	1.58	1.51
2	AB	1733	G	O3'-P	5.71	1.68	1.61
2	AB	2151	U	C2-O2	5.71	1.27	1.22
2	AB	2402	U	N3-C4	5.71	1.43	1.38
2	AB	2539	C	C2-N3	5.71	1.40	1.35
35	BA	812	G	C2-N3	5.71	1.37	1.32
1	AA	63	C	C4-C5	5.71	1.47	1.43
1	AA	105	G	O3'-P	5.71	1.68	1.61
2	AB	731	C	N3-C4	5.71	1.38	1.33
2	AB	1628	G	C6-N1	5.71	1.43	1.39
35	BA	951	G	C3'-C2'	-5.71	1.46	1.52
2	AB	32	C	C5-C6	5.70	1.39	1.34
2	AB	696	G	C6-N1	5.70	1.43	1.39
2	AB	759	G	P-O5'	5.70	1.65	1.59
2	AB	906	U	O3'-P	5.70	1.68	1.61
2	AB	908	C	N1-C2	-5.70	1.34	1.40
2	AB	1097	U	C3'-C2'	5.70	1.59	1.52
2	AB	1272	A	C4'-C3'	5.70	1.59	1.53
2	AB	1443	U	C4-C5	5.70	1.48	1.43
2	AB	1573	G	C2-N3	5.70	1.37	1.32
2	AB	1724	G	P-O5'	5.70	1.65	1.59
35	BA	107	G	C5-C4	5.70	1.42	1.38
35	BA	1268	G	C2'-C1'	5.70	1.59	1.53
38	BD	29	C	C3'-C2'	-5.70	1.46	1.52
2	AB	574	A	N3-C4	5.70	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	642	U	N1-C2	5.70	1.43	1.38
2	AB	873	C	C4-C5	5.70	1.47	1.43
2	AB	1066	U	C5-C6	5.70	1.39	1.34
2	AB	1313	U	C4-C5	5.70	1.48	1.43
2	AB	1315	C	C5-C6	5.70	1.39	1.34
35	BA	886	G	O5'-C5'	-5.70	1.33	1.42
35	BA	1111	A	C4'-O4'	-5.70	1.38	1.45
35	BA	1478	U	C4'-C3'	5.70	1.59	1.53
2	AB	90	U	N1-C2	5.70	1.43	1.38
2	AB	947	A	N3-C4	5.70	1.38	1.34
2	AB	1779	U	O3'-P	5.70	1.68	1.61
2	AB	2332	C	C5-C6	5.70	1.39	1.34
2	AB	2689	U	C5-C6	5.70	1.39	1.34
35	BA	1069	C	P-O5'	-5.70	1.54	1.59
35	BA	1140	C	C2'-C1'	-5.70	1.47	1.53
35	BA	1436	U	C4'-O4'	-5.70	1.38	1.45
2	AB	654	A	N9-C4	5.70	1.41	1.37
2	AB	1868	C	N1-C6	5.70	1.40	1.37
2	AB	2064	C	C2-N3	5.70	1.40	1.35
2	AB	2472	G	N3-C4	5.70	1.39	1.35
2	AB	2850	A	C6-N1	5.70	1.39	1.35
35	BA	627	G	O4'-C1'	5.70	1.49	1.41
35	BA	1267	C	C4'-O4'	-5.70	1.38	1.45
2	AB	1667	G	P-O5'	5.70	1.65	1.59
2	AB	2276	G	C5-C6	5.70	1.48	1.42
35	BA	777	A	C2'-C1'	5.70	1.59	1.53
35	BA	864	A	C5'-C4'	5.70	1.58	1.51
35	BA	885	G	C4'-O4'	-5.70	1.38	1.45
35	BA	889	A	C5-C6	5.70	1.46	1.41
35	BA	1097	C	O3'-P	-5.70	1.54	1.61
2	AB	40	U	P-O5'	5.70	1.65	1.59
2	AB	364	C	C3'-C2'	-5.70	1.46	1.52
2	AB	1006	C	N3-C4	-5.70	1.29	1.33
2	AB	1180	U	N1-C2	5.70	1.43	1.38
2	AB	2014	A	P-O5'	5.70	1.65	1.59
35	BA	43	C	C4-C5	5.70	1.47	1.43
35	BA	255	G	C2-N2	5.70	1.40	1.34
35	BA	731	G	N9-C4	5.70	1.42	1.38
35	BA	942	G	N3-C4	5.70	1.39	1.35
2	AB	329	G	O5'-C5'	-5.69	1.33	1.42
2	AB	858	G	O3'-P	5.69	1.68	1.61
2	AB	1900	A	C3'-C2'	5.69	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	860	A	P-O5'	5.69	1.65	1.59
35	BA	934	C	C2'-O2'	-5.69	1.34	1.41
2	AB	806	C	O4'-C1'	5.69	1.49	1.41
2	AB	1050	A	C2'-C1'	-5.69	1.47	1.53
2	AB	1596	A	N9-C4	5.69	1.41	1.37
2	AB	1621	U	C4'-C3'	5.69	1.59	1.53
2	AB	1985	C	N3-C4	-5.69	1.29	1.33
2	AB	2826	A	N3-C4	-5.69	1.31	1.34
2	AB	2856	A	C2-N3	5.69	1.38	1.33
35	BA	224	U	C5'-C4'	5.69	1.58	1.51
35	BA	1298	U	P-O5'	5.69	1.65	1.59
35	BA	1423	G	C8-N7	-5.69	1.27	1.30
2	AB	277	G	N9-C4	-5.69	1.33	1.38
2	AB	871	U	O3'-P	5.69	1.68	1.61
2	AB	2505	G	N7-C5	5.69	1.42	1.39
2	AB	2557	G	C2-N3	5.69	1.37	1.32
2	AB	2586	U	C4'-C3'	5.69	1.59	1.53
2	AB	2738	A	O4'-C1'	5.69	1.49	1.41
2	AB	2862	G	C3'-C2'	5.69	1.59	1.52
35	BA	100	G	O3'-P	-5.69	1.54	1.61
35	BA	1469	C	P-O5'	-5.69	1.54	1.59
1	AA	81	G	O3'-P	5.69	1.68	1.61
2	AB	1524	G	N7-C5	-5.69	1.35	1.39
2	AB	1696	G	C5'-C4'	5.69	1.58	1.51
1	AA	7	G	N1-C2	5.69	1.42	1.37
2	AB	1024	G	N7-C5	5.69	1.42	1.39
2	AB	1310	G	C2-N3	5.69	1.37	1.32
2	AB	1811	G	N7-C5	5.69	1.42	1.39
2	AB	1815	A	C2'-C1'	5.69	1.59	1.53
2	AB	2209	G	C8-N7	-5.69	1.27	1.30
2	AB	2363	G	N3-C4	5.69	1.39	1.35
35	BA	653	U	N1-C2	5.69	1.43	1.38
35	BA	1277	C	C4'-C3'	5.69	1.59	1.53
36	BB	42	G	N1-C2	-5.69	1.33	1.37
2	AB	1020	A	C2'-C1'	5.69	1.59	1.53
2	AB	1164	C	N1-C2	5.69	1.45	1.40
2	AB	2811	G	C2-N3	5.69	1.37	1.32
2	AB	2854	G	C3'-C2'	5.69	1.59	1.52
35	BA	207	C	N1-C6	5.69	1.40	1.37
2	AB	105	C	N1-C2	5.68	1.45	1.40
2	AB	622	G	N1-C2	5.68	1.42	1.37
2	AB	1395	A	C2'-C1'	-5.68	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1559	U	C2-O2	5.68	1.27	1.22
2	AB	1747	U	C5'-C4'	-5.68	1.44	1.51
2	AB	2408	U	C5-C6	5.68	1.39	1.34
2	AB	2750	A	C6-N6	5.68	1.38	1.33
35	BA	349	A	C2'-C1'	-5.68	1.47	1.53
35	BA	397	A	N7-C5	-5.68	1.35	1.39
35	BA	833	G	C2'-C1'	5.68	1.59	1.53
35	BA	988	G	N1-C2	5.68	1.42	1.37
35	BA	1329	A	N7-C5	-5.68	1.35	1.39
35	BA	1374	A	O5'-C5'	-5.68	1.33	1.42
38	BD	2	G	N7-C5	5.68	1.42	1.39
2	AB	298	G	C5-C4	5.68	1.42	1.38
2	AB	1743	G	P-O5'	5.68	1.65	1.59
2	AB	2154	A	N3-C4	5.68	1.38	1.34
2	AB	2578	G	C8-N7	-5.68	1.27	1.30
2	AB	2852	G	C2-N3	5.68	1.37	1.32
35	BA	214	C	C5-C6	5.68	1.38	1.34
35	BA	227	G	O3'-P	-5.68	1.54	1.61
35	BA	278	G	C4'-C3'	-5.68	1.46	1.52
35	BA	973	G	O4'-C1'	5.68	1.49	1.41
39	BE	197	PHE	CG-CD1	5.68	1.47	1.38
2	AB	324	A	C4'-O4'	-5.68	1.38	1.45
2	AB	1175	A	P-O5'	5.68	1.65	1.59
2	AB	1300	G	N7-C5	-5.68	1.35	1.39
2	AB	1658	C	C2-N3	5.68	1.40	1.35
2	AB	2236	U	C2-N3	-5.68	1.33	1.37
35	BA	1245	C	C4'-O4'	-5.68	1.38	1.45
2	AB	240	C	N3-C4	5.68	1.38	1.33
2	AB	337	C	C5-C6	5.68	1.38	1.34
2	AB	1191	G	N1-C2	5.68	1.42	1.37
2	AB	2242	G	N7-C5	-5.68	1.35	1.39
35	BA	406	G	P-O5'	5.68	1.65	1.59
35	BA	615	G	C5'-C4'	5.68	1.58	1.51
35	BA	776	G	N1-C2	5.68	1.42	1.37
35	BA	1101	A	C5-C4	-5.68	1.34	1.38
37	BC	14	G	C2'-O2'	-5.68	1.34	1.41
2	AB	176	A	N7-C5	-5.68	1.35	1.39
2	AB	473	G	C6-N1	-5.68	1.35	1.39
2	AB	1667	G	C6-O6	-5.68	1.19	1.24
2	AB	2885	G	O3'-P	-5.68	1.54	1.61
35	BA	553	A	C4'-O4'	-5.68	1.38	1.45
35	BA	1073	U	C1'-N1	5.68	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	17	C	C4'-C3'	5.68	1.59	1.53
2	AB	597	G	O4'-C1'	5.68	1.49	1.41
2	AB	903	C	N1-C6	5.68	1.40	1.37
2	AB	1147	A	N7-C5	5.68	1.42	1.39
2	AB	1167	C	C4'-C3'	5.68	1.59	1.53
2	AB	1742	U	C4-C5	5.68	1.48	1.43
2	AB	2287	A	C5-C6	5.68	1.46	1.41
2	AB	2432	A	N9-C8	-5.68	1.33	1.37
2	AB	2461	A	C4'-O4'	-5.68	1.38	1.45
2	AB	2884	U	P-O5'	5.68	1.65	1.59
35	BA	724	G	C8-N7	-5.68	1.27	1.30
35	BA	727	G	N3-C4	5.68	1.39	1.35
35	BA	1083	U	C3'-C2'	5.68	1.59	1.52
38	BD	14	A	O4'-C1'	5.68	1.49	1.41
42	BH	127	TYR	CB-CG	5.68	1.60	1.51
2	AB	395	U	C2-N3	5.67	1.41	1.37
2	AB	2516	A	N9-C4	5.67	1.41	1.37
2	AB	2595	G	O3'-P	5.67	1.68	1.61
2	AB	2619	C	C4-N4	5.67	1.39	1.33
2	AB	2635	A	P-O5'	5.67	1.65	1.59
35	BA	160	A	P-O5'	5.67	1.65	1.59
35	BA	314	C	P-O5'	5.67	1.65	1.59
35	BA	828	U	C5-C6	5.67	1.39	1.34
35	BA	1236	A	P-O5'	5.67	1.65	1.59
2	AB	373	U	C5-C6	5.67	1.39	1.34
2	AB	1484	U	C4-O4	5.67	1.28	1.23
2	AB	1780	A	C8-N7	5.67	1.35	1.31
2	AB	2353	G	C5'-C4'	5.67	1.58	1.51
35	BA	738	C	C1'-N1	5.67	1.57	1.48
35	BA	1481	U	C2-N3	5.67	1.41	1.37
1	AA	104	A	N7-C5	-5.67	1.35	1.39
2	AB	23	G	C4'-O4'	-5.67	1.38	1.45
2	AB	516	C	C4'-O4'	-5.67	1.38	1.45
2	AB	662	G	C3'-O3'	5.67	1.50	1.42
2	AB	884	U	P-O5'	5.67	1.65	1.59
2	AB	1639	C	C4-C5	5.67	1.47	1.43
35	BA	312	C	N1-C6	-5.67	1.33	1.37
35	BA	1215	G	C6-N1	-5.67	1.35	1.39
2	AB	343	C	P-O5'	5.67	1.65	1.59
2	AB	539	G	P-O5'	5.67	1.65	1.59
2	AB	560	C	N1-C6	5.67	1.40	1.37
2	AB	1023	U	C3'-O3'	5.67	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1133	A	C1'-N9	5.67	1.57	1.48
2	AB	1310	G	C8-N7	5.67	1.34	1.30
2	AB	253	C	C4'-C3'	-5.67	1.46	1.52
2	AB	1263	U	N1-C2	5.67	1.43	1.38
2	AB	2022	U	C5'-C4'	5.67	1.58	1.51
2	AB	2113	U	C3'-C2'	5.67	1.59	1.52
2	AB	1475	G	C4'-O4'	-5.67	1.38	1.45
35	BA	417	G	P-O5'	5.67	1.65	1.59
1	AA	83	G	C4'-O4'	-5.67	1.38	1.45
2	AB	258	G	O3'-P	5.67	1.68	1.61
2	AB	1324	G	C6-N1	-5.67	1.35	1.39
35	BA	700	G	C6-N1	5.67	1.43	1.39
35	BA	1370	G	C6-N1	5.67	1.43	1.39
1	AA	83	G	C5'-C4'	5.66	1.58	1.51
2	AB	491	G	C8-N7	5.66	1.34	1.30
2	AB	665	U	C2-N3	5.66	1.41	1.37
2	AB	1194	A	C5-C4	-5.66	1.34	1.38
2	AB	2112	G	C4'-O4'	-5.66	1.38	1.45
2	AB	2198	A	P-O5'	5.66	1.65	1.59
2	AB	2521	C	C5-C6	5.66	1.38	1.34
35	BA	142	G	C6-O6	-5.66	1.19	1.24
35	BA	494	G	O3'-P	-5.66	1.54	1.61
35	BA	567	G	N1-C2	5.66	1.42	1.37
35	BA	593	U	C2-N3	5.66	1.41	1.37
35	BA	601	G	C2-N2	5.66	1.40	1.34
35	BA	843	U	C2-N3	5.66	1.41	1.37
2	AB	323	C	C2'-C1'	-5.66	1.47	1.53
2	AB	1785	A	N9-C4	5.66	1.41	1.37
35	BA	288	A	C5-C4	-5.66	1.34	1.38
35	BA	667	G	N1-C2	5.66	1.42	1.37
1	AA	93	C	O3'-P	-5.66	1.54	1.61
2	AB	1752	C	N1-C6	5.66	1.40	1.37
2	AB	2446	G	N9-C8	5.66	1.41	1.37
2	AB	37	C	C4'-O4'	-5.66	1.38	1.45
2	AB	300	A	N3-C4	5.66	1.38	1.34
2	AB	1557	C	O4'-C1'	5.66	1.49	1.41
2	AB	1627	G	O3'-P	5.66	1.68	1.61
2	AB	1730	C	P-O5'	5.66	1.65	1.59
2	AB	2392	A	N3-C4	5.66	1.38	1.34
2	AB	2585	U	C3'-C2'	5.66	1.59	1.52
2	AB	2776	A	C5-C4	5.66	1.42	1.38
2	AB	2791	G	C2-N2	-5.66	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	37	U	N1-C2	5.66	1.43	1.38
35	BA	243	A	C6-N6	-5.66	1.29	1.33
2	AB	1225	G	C6-N1	5.66	1.43	1.39
2	AB	1884	G	C2-N3	5.66	1.37	1.32
2	AB	2105	U	N1-C6	5.66	1.43	1.38
2	AB	2188	U	N1-C6	5.66	1.43	1.38
35	BA	1504	G	C5'-C4'	5.66	1.58	1.51
2	AB	615	U	C5'-C4'	5.66	1.58	1.51
2	AB	750	A	C3'-C2'	5.66	1.59	1.52
2	AB	980	A	C5-C4	5.66	1.42	1.38
2	AB	1158	C	C4'-O4'	-5.66	1.38	1.45
2	AB	1795	C	N1-C6	5.66	1.40	1.37
2	AB	2122	U	C3'-C2'	5.66	1.59	1.52
2	AB	2840	C	C5-C6	5.66	1.38	1.34
35	BA	132	C	N3-C4	-5.66	1.29	1.33
35	BA	139	A	C5-C4	-5.66	1.34	1.38
35	BA	700	G	C2-N3	5.66	1.37	1.32
35	BA	1538	C	P-O5'	5.66	1.65	1.59
2	AB	311	A	C6-N6	5.65	1.38	1.33
2	AB	911	A	P-O5'	5.65	1.65	1.59
2	AB	1036	G	C5-C6	-5.65	1.36	1.42
2	AB	1063	G	O3'-P	5.65	1.68	1.61
2	AB	1246	A	C5'-C4'	5.65	1.58	1.51
2	AB	1715	G	C4'-O4'	-5.65	1.38	1.45
2	AB	1523	U	O3'-P	5.65	1.68	1.61
2	AB	2172	U	P-O5'	5.65	1.65	1.59
35	BA	729	A	C6-N6	-5.65	1.29	1.33
36	BB	58	A	C8-N7	-5.65	1.27	1.31
2	AB	221	A	N7-C5	-5.65	1.35	1.39
2	AB	221	A	C2-N3	-5.65	1.28	1.33
2	AB	725	G	N7-C5	-5.65	1.35	1.39
2	AB	1129	A	N9-C4	-5.65	1.34	1.37
2	AB	2169	A	C2'-C1'	5.65	1.59	1.53
5	AE	80	TRP	NE1-CE2	5.65	1.44	1.37
35	BA	1259	C	N3-C4	5.65	1.38	1.33
38	BD	71	G	C5-C6	5.65	1.48	1.42
2	AB	661	A	P-O5'	5.65	1.65	1.59
2	AB	1258	U	N1-C6	5.65	1.43	1.38
2	AB	1907	G	N7-C5	-5.65	1.35	1.39
35	BA	221	C	C4-C5	5.65	1.47	1.43
35	BA	825	A	P-O5'	5.65	1.65	1.59
2	AB	332	A	N3-C4	5.65	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	736	C	O5'-C5'	-5.65	1.33	1.42
2	AB	2341	G	C2'-O2'	5.65	1.49	1.41
2	AB	2345	G	C6-O6	-5.65	1.19	1.24
2	AB	2648	G	O3'-P	5.65	1.68	1.61
35	BA	203	G	N9-C8	-5.65	1.33	1.37
35	BA	1131	G	C2-N3	5.65	1.37	1.32
35	BA	1361	G	C6-N1	5.65	1.43	1.39
1	AA	59	A	C5-C4	-5.65	1.34	1.38
2	AB	1808	A	C4'-C3'	5.65	1.59	1.53
2	AB	2099	U	O3'-P	5.65	1.68	1.61
2	AB	2131	U	C5'-C4'	5.65	1.58	1.51
35	BA	1394	A	N7-C5	-5.65	1.35	1.39
2	AB	246	C	N3-C4	5.64	1.38	1.33
2	AB	2021	C	N3-C4	5.64	1.38	1.33
35	BA	16	A	C4'-O4'	-5.64	1.38	1.45
35	BA	406	G	N7-C5	5.64	1.42	1.39
35	BA	916	U	N3-C4	5.64	1.43	1.38
35	BA	1523	G	P-O5'	5.64	1.65	1.59
2	AB	5	A	N9-C4	5.64	1.41	1.37
2	AB	362	A	C4'-O4'	-5.64	1.38	1.45
2	AB	541	A	C5'-C4'	5.64	1.58	1.51
2	AB	1115	G	N7-C5	-5.64	1.35	1.39
2	AB	1249	U	C2'-C1'	5.64	1.59	1.53
2	AB	1706	C	N3-C4	5.64	1.37	1.33
2	AB	1855	U	C5-C6	5.64	1.39	1.34
35	BA	195	A	C2'-O2'	5.64	1.49	1.41
35	BA	346	G	N9-C8	5.64	1.41	1.37
35	BA	1264	U	C4'-O4'	-5.64	1.38	1.45
2	AB	1378	A	C6-N6	-5.64	1.29	1.33
2	AB	1477	A	N7-C5	5.64	1.42	1.39
2	AB	1506	U	C2-O2	-5.64	1.17	1.22
35	BA	73	C	C4-C5	5.64	1.47	1.43
35	BA	1330	U	C5'-C4'	5.64	1.58	1.51
2	AB	1499	C	O4'-C1'	5.64	1.49	1.41
2	AB	1657	U	C4-C5	5.64	1.48	1.43
2	AB	2203	U	P-O5'	5.64	1.65	1.59
2	AB	2210	U	C5-C6	5.64	1.39	1.34
2	AB	2463	C	P-O5'	5.64	1.65	1.59
2	AB	2625	G	N3-C4	-5.64	1.31	1.35
35	BA	1005	A	C5-C6	5.64	1.46	1.41
35	BA	1222	G	P-O5'	5.64	1.65	1.59
35	BA	1338	G	C6-N1	-5.64	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	721	A	C5'-C4'	5.64	1.58	1.51
2	AB	1391	U	C2'-O2'	5.64	1.49	1.41
35	BA	502	A	N9-C8	-5.64	1.33	1.37
46	BL	44	ARG	CZ-NH1	5.64	1.40	1.33
2	AB	396	G	N1-C2	5.64	1.42	1.37
2	AB	1110	G	N9-C8	-5.64	1.33	1.37
2	AB	2639	A	C6-N6	-5.64	1.29	1.33
35	BA	191	G	C4'-C3'	-5.64	1.47	1.52
35	BA	311	C	C2-N3	5.64	1.40	1.35
35	BA	1234	C	C5-C6	5.64	1.38	1.34
35	BA	1475	G	C2'-O2'	5.64	1.49	1.41
2	AB	1091	G	N1-C2	5.63	1.42	1.37
35	BA	74	A	C2'-O2'	5.63	1.49	1.41
35	BA	354	G	N9-C4	-5.63	1.33	1.38
35	BA	873	A	O3'-P	5.63	1.68	1.61
35	BA	894	G	N1-C2	5.63	1.42	1.37
35	BA	895	G	C8-N7	5.63	1.34	1.30
2	AB	1247	A	C3'-C2'	5.63	1.59	1.52
35	BA	229	U	C2-N3	5.63	1.41	1.37
35	BA	238	A	P-O5'	-5.63	1.54	1.59
35	BA	336	A	C2'-C1'	-5.63	1.47	1.53
35	BA	997	U	C4'-C3'	-5.63	1.47	1.52
35	BA	1114	C	C4'-O4'	-5.63	1.38	1.45
1	AA	74	U	C2-N3	5.63	1.41	1.37
2	AB	65	U	C2-O2	5.63	1.27	1.22
2	AB	85	G	N3-C4	5.63	1.39	1.35
2	AB	122	G	C6-N1	5.63	1.43	1.39
2	AB	455	C	C3'-C2'	5.63	1.59	1.52
2	AB	774	G	C5'-C4'	5.63	1.58	1.51
2	AB	937	C	O4'-C1'	-5.63	1.34	1.41
2	AB	961	C	C3'-C2'	5.63	1.59	1.52
2	AB	1118	C	C5'-C4'	5.63	1.58	1.51
2	AB	1313	U	N1-C2	5.63	1.43	1.38
2	AB	1454	C	N3-C4	5.63	1.37	1.33
2	AB	2467	C	C4-C5	5.63	1.47	1.43
2	AB	2752	C	P-O5'	5.63	1.65	1.59
2	AB	2762	C	O3'-P	5.63	1.68	1.61
35	BA	103	U	O4'-C1'	5.63	1.49	1.41
35	BA	202	G	C5'-C4'	5.63	1.58	1.51
35	BA	378	G	C2'-O2'	5.63	1.49	1.41
35	BA	626	G	C3'-C2'	5.63	1.59	1.52
35	BA	666	G	C5'-C4'	5.63	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1222	G	N1-C2	5.63	1.42	1.37
35	BA	1356	G	P-O5'	5.63	1.65	1.59
36	BB	18	G	N9-C4	5.63	1.42	1.38
37	BC	20	G	C2-N3	5.63	1.37	1.32
2	AB	707	G	O3'-P	5.63	1.68	1.61
2	AB	1203	U	N1-C6	5.63	1.43	1.38
2	AB	1325	U	N1-C6	5.63	1.43	1.38
2	AB	1606	C	C2-N3	5.63	1.40	1.35
2	AB	1710	G	N7-C5	5.63	1.42	1.39
35	BA	1334	G	N1-C2	5.63	1.42	1.37
35	BA	1416	G	N9-C8	5.63	1.41	1.37
35	BA	1492	A	N7-C5	-5.63	1.35	1.39
35	BA	1525	G	C4'-O4'	-5.63	1.38	1.45
2	AB	17	G	C2-N3	5.63	1.37	1.32
2	AB	1142	A	C6-N6	5.63	1.38	1.33
2	AB	1337	G	N9-C8	-5.63	1.33	1.37
2	AB	1494	A	N9-C4	-5.63	1.34	1.37
2	AB	1803	A	C2'-C1'	5.63	1.59	1.53
2	AB	1924	C	C4'-O4'	-5.63	1.38	1.45
2	AB	2709	G	O3'-P	-5.63	1.54	1.61
2	AB	2866	U	C4-O4	-5.63	1.19	1.23
35	BA	215	C	C3'-C2'	-5.63	1.46	1.52
35	BA	361	G	N1-C2	5.63	1.42	1.37
35	BA	445	G	C8-N7	5.63	1.34	1.30
35	BA	541	G	P-O5'	5.63	1.65	1.59
35	BA	655	A	C6-N1	5.63	1.39	1.35
35	BA	679	C	C2-N3	5.63	1.40	1.35
2	AB	2	G	C2-N3	5.63	1.37	1.32
2	AB	563	A	C8-N7	-5.63	1.27	1.31
2	AB	1078	U	O3'-P	5.63	1.68	1.61
2	AB	1352	U	C3'-C2'	5.63	1.59	1.52
2	AB	2125	G	N9-C4	-5.63	1.33	1.38
2	AB	2521	C	N1-C6	5.63	1.40	1.37
2	AB	2555	U	N3-C4	5.63	1.43	1.38
2	AB	2852	G	C3'-O3'	5.63	1.50	1.42
35	BA	1195	C	C2-N3	5.63	1.40	1.35
2	AB	1283	G	C6-N1	5.62	1.43	1.39
2	AB	489	G	C6-N1	-5.62	1.35	1.39
2	AB	507	A	N9-C8	-5.62	1.33	1.37
2	AB	539	G	O3'-P	5.62	1.67	1.61
2	AB	696	G	N3-C4	5.62	1.39	1.35
2	AB	881	G	C2'-C1'	5.62	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	964	C	C5-C6	5.62	1.38	1.34
2	AB	2731	G	C2-N3	5.62	1.37	1.32
35	BA	501	C	C4-C5	5.62	1.47	1.43
35	BA	537	G	N9-C4	5.62	1.42	1.38
35	BA	1054	C	O4'-C1'	-5.62	1.34	1.41
38	BD	59	A	C6-N1	-5.62	1.31	1.35
2	AB	63	A	N9-C4	5.62	1.41	1.37
2	AB	1718	G	N3-C4	5.62	1.39	1.35
2	AB	2353	G	C6-O6	5.62	1.29	1.24
2	AB	2577	A	C5-C4	-5.62	1.34	1.38
35	BA	90	C	C4-C5	-5.62	1.38	1.43
35	BA	328	C	N3-C4	-5.62	1.30	1.33
35	BA	687	A	N9-C4	5.62	1.41	1.37
35	BA	687	A	N9-C8	-5.62	1.33	1.37
35	BA	768	A	N7-C5	-5.62	1.35	1.39
35	BA	1000	A	C6-N6	5.62	1.38	1.33
35	BA	1093	A	O3'-P	5.62	1.67	1.61
36	BB	53	G	N3-C4	5.62	1.39	1.35
36	BB	67	G	P-O5'	5.62	1.65	1.59
44	BJ	47	GLU	CD-OE2	-5.62	1.19	1.25
2	AB	1645	G	O3'-P	5.62	1.67	1.61
2	AB	2068	U	N3-C4	-5.62	1.33	1.38
2	AB	2466	C	C4'-O4'	-5.62	1.38	1.45
35	BA	47	C	N3-C4	5.62	1.37	1.33
35	BA	200	G	C5'-C4'	5.62	1.58	1.51
35	BA	365	U	C4'-C3'	5.62	1.59	1.53
35	BA	906	A	C2'-O2'	5.62	1.49	1.41
1	AA	59	A	C4'-O4'	-5.62	1.38	1.45
2	AB	530	G	N7-C5	-5.62	1.35	1.39
2	AB	1041	G	P-O5'	5.62	1.65	1.59
2	AB	1647	U	C5-C6	5.62	1.39	1.34
2	AB	2282	G	C6-O6	-5.62	1.19	1.24
2	AB	2408	U	C4-O4	-5.62	1.19	1.23
2	AB	2553	G	C4'-O4'	-5.62	1.38	1.45
2	AB	2625	G	C6-N1	-5.62	1.35	1.39
35	BA	575	G	N9-C4	5.62	1.42	1.38
2	AB	1058	U	C5-C6	5.62	1.39	1.34
2	AB	1469	A	C6-N6	5.62	1.38	1.33
2	AB	2595	G	C8-N7	-5.62	1.27	1.30
35	BA	990	C	C2-N3	-5.62	1.31	1.35
2	AB	685	A	C8-N7	5.62	1.35	1.31
2	AB	1193	G	N9-C4	-5.62	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1782	U	P-OP2	-5.62	1.39	1.49
2	AB	2042	A	N3-C4	5.62	1.38	1.34
2	AB	2698	U	P-O5'	5.62	1.65	1.59
35	BA	1420	U	C5-C6	5.62	1.39	1.34
2	AB	255	A	C4'-C3'	5.61	1.59	1.53
2	AB	394	C	C4-C5	5.61	1.47	1.43
2	AB	861	A	C5-C6	5.61	1.46	1.41
2	AB	994	C	O4'-C1'	5.61	1.49	1.41
2	AB	1686	C	C5'-C4'	5.61	1.58	1.51
2	AB	2018	G	N9-C8	5.61	1.41	1.37
2	AB	2430	A	N3-C4	5.61	1.38	1.34
2	AB	2690	U	C2-N3	5.61	1.41	1.37
35	BA	163	C	C2-O2	-5.61	1.19	1.24
37	BC	25	U	C2'-O2'	5.61	1.49	1.41
46	BL	37	TYR	CE2-CZ	5.61	1.45	1.38
2	AB	454	A	N7-C5	-5.61	1.35	1.39
2	AB	526	A	C2'-O2'	-5.61	1.34	1.41
2	AB	2157	G	C2-N3	5.61	1.37	1.32
2	AB	2804	U	C2-O2	5.61	1.27	1.22
2	AB	2862	G	O4'-C1'	5.61	1.49	1.41
35	BA	111	G	N9-C8	-5.61	1.33	1.37
35	BA	1065	U	C4-O4	-5.61	1.19	1.23
35	BA	1090	U	C3'-C2'	5.61	1.59	1.52
1	AA	8	C	O4'-C1'	5.61	1.49	1.41
2	AB	89	A	N7-C5	5.61	1.42	1.39
2	AB	1262	A	N9-C8	5.61	1.42	1.37
2	AB	1744	A	N1-C2	5.61	1.39	1.34
2	AB	1894	C	P-O5'	-5.61	1.54	1.59
2	AB	2591	C	N1-C6	5.61	1.40	1.37
35	BA	119	A	C4'-C3'	5.61	1.59	1.53
35	BA	969	A	N7-C5	5.61	1.42	1.39
35	BA	1393	U	N1-C2	5.61	1.43	1.38
35	BA	1434	A	C6-N6	5.61	1.38	1.33
36	BB	30	G	N3-C4	5.61	1.39	1.35
36	BB	35	C	N1-C6	5.61	1.40	1.37
38	BD	36	A	N9-C4	5.61	1.41	1.37
2	AB	413	C	C4'-O4'	-5.61	1.38	1.45
2	AB	1130	U	P-O5'	5.61	1.65	1.59
2	AB	1247	A	C6-N6	-5.61	1.29	1.33
2	AB	2221	G	O4'-C1'	5.61	1.49	1.41
35	BA	434	U	C5-C6	5.61	1.39	1.34
35	BA	1288	A	C6-N6	5.61	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	101	A	N3-C4	5.61	1.38	1.34
2	AB	847	U	N3-C4	5.61	1.43	1.38
2	AB	928	A	C6-N6	5.61	1.38	1.33
2	AB	1534	U	C2'-O2'	-5.61	1.34	1.41
2	AB	2669	G	C8-N7	5.61	1.34	1.30
2	AB	2789	C	C4'-O4'	-5.61	1.38	1.45
2	AB	2892	G	C5'-C4'	5.61	1.58	1.51
35	BA	281	G	C6-O6	-5.61	1.19	1.24
35	BA	544	G	N9-C8	5.61	1.41	1.37
2	AB	619	G	N1-C2	-5.61	1.33	1.37
2	AB	899	A	C5'-C4'	5.61	1.58	1.51
2	AB	1532	A	C4'-O4'	-5.61	1.38	1.45
2	AB	1732	C	C2'-C1'	5.61	1.59	1.53
2	AB	1776	G	N9-C8	-5.61	1.33	1.37
2	AB	1842	G	C3'-C2'	-5.61	1.46	1.52
2	AB	2100	G	C3'-O3'	5.61	1.50	1.42
2	AB	2114	A	C6-N1	5.61	1.39	1.35
2	AB	2340	A	C5'-C4'	5.61	1.58	1.51
35	BA	367	U	C2-N3	5.61	1.41	1.37
35	BA	642	A	C2'-O2'	5.61	1.49	1.41
2	AB	312	G	C5-C4	5.60	1.42	1.38
2	AB	1743	G	C5-C4	5.60	1.42	1.38
35	BA	1005	A	C3'-C2'	5.60	1.59	1.52
2	AB	347	A	C8-N7	-5.60	1.27	1.31
2	AB	390	U	C3'-C2'	5.60	1.59	1.52
2	AB	1361	G	N9-C4	-5.60	1.33	1.38
2	AB	1660	G	N3-C4	5.60	1.39	1.35
2	AB	1702	G	N1-C2	5.60	1.42	1.37
2	AB	2865	U	C4-C5	5.60	1.48	1.43
35	BA	36	C	C5'-C4'	5.60	1.58	1.51
35	BA	662	U	C5-C6	5.60	1.39	1.34
35	BA	871	U	C4'-O4'	-5.60	1.38	1.45
35	BA	987	G	C6-N1	5.60	1.43	1.39
2	AB	761	A	C5-C6	5.60	1.46	1.41
2	AB	1733	G	N3-C4	5.60	1.39	1.35
35	BA	455	G	C4'-O4'	-5.60	1.38	1.45
35	BA	913	A	P-O5'	5.60	1.65	1.59
2	AB	144	A	C2'-C1'	5.60	1.59	1.53
2	AB	291	G	O4'-C1'	5.60	1.49	1.41
2	AB	882	G	C6-O6	-5.60	1.19	1.24
2	AB	1668	A	C2'-C1'	-5.60	1.47	1.53
2	AB	2690	U	N1-C2	5.60	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	AL	96	ARG	NE-CZ	5.60	1.40	1.33
35	BA	894	G	N3-C4	5.60	1.39	1.35
2	AB	54	G	C6-N1	5.60	1.43	1.39
2	AB	266	G	C8-N7	-5.60	1.27	1.30
2	AB	328	U	N1-C2	5.60	1.43	1.38
2	AB	352	A	C4'-O4'	-5.60	1.38	1.45
2	AB	637	A	N1-C2	-5.60	1.29	1.34
2	AB	983	A	C2'-C1'	5.60	1.59	1.53
2	AB	2340	A	C2'-C1'	5.60	1.59	1.53
2	AB	2437	G	C5-C4	5.60	1.42	1.38
2	AB	2757	A	N3-C4	5.60	1.38	1.34
2	AB	2812	G	N3-C4	5.60	1.39	1.35
7	AG	124	ARG	NE-CZ	5.60	1.40	1.33
35	BA	75	G	N9-C8	5.60	1.41	1.37
35	BA	492	C	N1-C6	5.60	1.40	1.37
35	BA	506	G	C6-N1	5.60	1.43	1.39
2	AB	868	U	C2-N3	5.60	1.41	1.37
35	BA	317	U	C5'-C4'	5.60	1.58	1.51
2	AB	846	U	C5-C6	5.59	1.39	1.34
2	AB	896	A	C5-C6	5.59	1.46	1.41
2	AB	975	A	N1-C2	-5.59	1.29	1.34
2	AB	1332	G	C6-N1	-5.59	1.35	1.39
2	AB	2077	A	C5'-C4'	5.59	1.58	1.51
35	BA	364	A	C3'-C2'	5.59	1.59	1.52
2	AB	451	U	C4'-O4'	-5.59	1.38	1.45
2	AB	906	U	C4'-O4'	-5.59	1.38	1.45
2	AB	1817	G	N7-C5	5.59	1.42	1.39
2	AB	2478	A	P-O5'	5.59	1.65	1.59
2	AB	2676	C	C4'-O4'	-5.59	1.38	1.45
35	BA	399	G	O3'-P	5.59	1.67	1.61
35	BA	431	A	P-O5'	5.59	1.65	1.59
35	BA	611	C	C2'-O2'	5.59	1.49	1.41
1	AA	30	C	C4-C5	5.59	1.47	1.43
2	AB	1952	A	C2'-C1'	-5.59	1.47	1.53
2	AB	2383	G	C5-C4	5.59	1.42	1.38
35	BA	347	G	C6-N1	5.59	1.43	1.39
35	BA	548	G	P-O5'	5.59	1.65	1.59
35	BA	970	C	N3-C4	5.59	1.37	1.33
36	BB	50	G	C4'-O4'	-5.59	1.38	1.45
38	BD	44	A	C6-N6	5.59	1.38	1.33
43	BI	91	ARG	NE-CZ	5.59	1.40	1.33
2	AB	13	A	N3-C4	5.59	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	648	G	C3'-O3'	5.59	1.50	1.42
2	AB	928	A	C2-N3	5.59	1.38	1.33
2	AB	1135	C	N1-C2	5.59	1.45	1.40
2	AB	1253	A	P-O5'	-5.59	1.54	1.59
2	AB	1258	U	N1-C2	5.59	1.43	1.38
2	AB	1586	A	C8-N7	-5.59	1.27	1.31
2	AB	2801	G	N9-C4	5.59	1.42	1.38
35	BA	169	C	C4-C5	5.59	1.47	1.43
35	BA	599	C	C4-C5	5.59	1.47	1.43
35	BA	1178	G	C3'-C2'	-5.59	1.46	1.52
36	BB	26	A	N9-C4	5.59	1.41	1.37
2	AB	473	G	C2'-C1'	-5.59	1.47	1.53
2	AB	910	A	C2'-O2'	-5.59	1.34	1.41
2	AB	2785	C	N1-C6	-5.59	1.33	1.37
35	BA	68	G	C2'-C1'	5.59	1.59	1.53
1	AA	93	C	C1'-N1	5.59	1.57	1.48
2	AB	1413	A	C4'-C3'	5.59	1.59	1.53
2	AB	1424	G	C5-C6	5.59	1.48	1.42
2	AB	1705	A	C5'-C4'	5.59	1.58	1.51
2	AB	1848	A	C2-N3	-5.59	1.28	1.33
2	AB	1941	C	C5'-C4'	5.59	1.58	1.51
2	AB	2101	A	C4'-O4'	-5.59	1.38	1.45
2	AB	2476	A	O4'-C1'	5.59	1.49	1.41
35	BA	57	G	N9-C4	5.59	1.42	1.38
35	BA	106	C	C2'-O2'	5.59	1.49	1.41
35	BA	507	C	C5-C6	5.59	1.38	1.34
35	BA	947	G	C8-N7	-5.59	1.27	1.30
35	BA	1321	U	C5'-C4'	5.59	1.58	1.51
35	BA	1431	A	N9-C4	5.59	1.41	1.37
35	BA	1520	C	N1-C6	-5.59	1.33	1.37
2	AB	718	A	C2'-C1'	5.58	1.59	1.53
35	BA	352	C	C4'-C3'	5.58	1.59	1.53
2	AB	707	G	C5'-C4'	5.58	1.58	1.51
2	AB	845	A	N9-C4	5.58	1.41	1.37
2	AB	981	A	N9-C8	5.58	1.42	1.37
2	AB	1214	A	C3'-C2'	5.58	1.59	1.52
2	AB	1316	U	C2-N3	5.58	1.41	1.37
2	AB	1716	U	C4'-O4'	-5.58	1.38	1.45
2	AB	2177	C	C2-N3	5.58	1.40	1.35
32	A5	35	ARG	CZ-NH2	5.58	1.40	1.33
35	BA	1027	C	C5'-C4'	5.58	1.58	1.51
35	BA	1202	U	C2-O2	5.58	1.27	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1662	U	N1-C6	5.58	1.43	1.38
2	AB	2082	A	N7-C5	-5.58	1.35	1.39
35	BA	807	A	C5'-C4'	5.58	1.58	1.51
35	BA	1115	U	C4'-C3'	5.58	1.59	1.53
2	AB	1228	G	C4'-O4'	-5.58	1.38	1.45
2	AB	1702	G	C5'-C4'	5.58	1.58	1.51
2	AB	1729	U	O4'-C1'	5.58	1.49	1.41
35	BA	310	G	N1-C2	5.58	1.42	1.37
35	BA	875	U	C2'-O2'	5.58	1.49	1.41
2	AB	264	C	O3'-P	5.58	1.67	1.61
2	AB	810	U	C4'-O4'	-5.58	1.38	1.45
2	AB	849	A	N7-C5	5.58	1.42	1.39
2	AB	1647	U	O3'-P	5.58	1.67	1.61
2	AB	2079	U	C4'-O4'	-5.58	1.38	1.45
2	AB	2098	U	C4'-O4'	-5.58	1.38	1.45
2	AB	2634	A	C5'-C4'	5.58	1.58	1.51
35	BA	90	C	N3-C4	5.58	1.37	1.33
35	BA	346	G	C4'-O4'	-5.58	1.38	1.45
35	BA	998	C	C4-C5	5.58	1.47	1.43
35	BA	1066	C	N3-C4	-5.58	1.30	1.33
35	BA	1157	A	C2-N3	5.58	1.38	1.33
35	BA	1295	U	N1-C6	5.58	1.43	1.38
38	BD	34	U	O3'-P	5.58	1.67	1.61
39	BE	51	GLU	CG-CD	5.58	1.60	1.51
2	AB	800	A	C6-N1	-5.58	1.31	1.35
2	AB	1482	G	N1-C2	5.58	1.42	1.37
35	BA	78	A	N3-C4	5.58	1.38	1.34
35	BA	298	A	N3-C4	-5.58	1.31	1.34
35	BA	1394	A	O3'-P	-5.58	1.54	1.61
38	BD	74	A	C2'-O2'	5.58	1.48	1.41
1	AA	33	G	C2-N3	5.58	1.37	1.32
2	AB	442	G	N9-C4	5.58	1.42	1.38
2	AB	798	G	N1-C2	5.58	1.42	1.37
2	AB	1148	U	C2-N3	5.58	1.41	1.37
2	AB	1151	A	C4'-O4'	-5.58	1.38	1.45
2	AB	2083	G	C2'-C1'	5.58	1.59	1.53
2	AB	2231	U	N3-C4	-5.58	1.33	1.38
2	AB	2794	C	N1-C6	5.58	1.40	1.37
2	AB	2866	U	C4'-C3'	-5.58	1.47	1.52
35	BA	91	U	C2-N3	5.58	1.41	1.37
35	BA	482	A	N9-C8	5.58	1.42	1.37
35	BA	584	G	C2'-C1'	-5.58	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	773	G	C6-N1	-5.58	1.35	1.39
2	AB	185	G	C3'-C2'	-5.57	1.46	1.52
2	AB	528	A	C4'-O4'	-5.57	1.38	1.45
2	AB	2484	G	C8-N7	5.57	1.34	1.30
2	AB	2754	U	C2-N3	5.57	1.41	1.37
35	BA	1202	U	C4'-C3'	5.57	1.59	1.53
35	BA	1231	G	O3'-P	5.57	1.67	1.61
35	BA	1377	A	N1-C2	5.57	1.39	1.34
2	AB	960	A	C3'-O3'	5.57	1.50	1.42
2	AB	1832	C	O5'-C5'	-5.57	1.33	1.42
2	AB	2014	A	N3-C4	-5.57	1.31	1.34
35	BA	725	G	C4'-O4'	-5.57	1.38	1.45
1	AA	2	G	C5-C4	5.57	1.42	1.38
2	AB	496	G	C2'-C1'	5.57	1.59	1.53
2	AB	1775	U	N3-C4	5.57	1.43	1.38
2	AB	2261	C	C4'-O4'	-5.57	1.38	1.45
2	AB	2348	U	C2-N3	5.57	1.41	1.37
2	AB	2606	C	C5-C6	5.57	1.38	1.34
2	AB	2890	G	C4'-C3'	-5.57	1.47	1.52
16	AP	96	ARG	CZ-NH1	5.57	1.40	1.33
35	BA	119	A	N9-C4	-5.57	1.34	1.37
35	BA	1331	G	C2-N3	5.57	1.37	1.32
35	BA	1346	A	C8-N7	-5.57	1.27	1.31
2	AB	58	G	N9-C8	5.57	1.41	1.37
2	AB	1172	C	C4'-O4'	-5.57	1.38	1.45
2	AB	2900	A	C6-N6	-5.57	1.29	1.33
35	BA	543	U	C3'-C2'	5.57	1.59	1.52
35	BA	913	A	C6-N6	5.57	1.38	1.33
35	BA	1073	U	C4-C5	5.57	1.48	1.43
2	AB	677	A	N9-C4	-5.57	1.34	1.37
2	AB	851	C	O3'-P	5.57	1.67	1.61
2	AB	1098	A	C5'-C4'	5.57	1.58	1.51
2	AB	1182	G	P-O5'	5.57	1.65	1.59
2	AB	2679	A	N9-C4	-5.57	1.34	1.37
35	BA	278	G	C2'-C1'	-5.57	1.47	1.53
35	BA	405	U	C4-O4	5.57	1.28	1.23
35	BA	562	U	P-O5'	5.57	1.65	1.59
35	BA	1212	U	C4-C5	5.57	1.48	1.43
35	BA	1421	G	P-O5'	5.57	1.65	1.59
2	AB	110	G	C3'-C2'	-5.57	1.46	1.52
2	AB	290	U	C2'-C1'	-5.57	1.47	1.53
2	AB	2539	C	C4-C5	5.57	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2708	G	N7-C5	-5.57	1.35	1.39
35	BA	505	G	N9-C8	5.57	1.41	1.37
35	BA	506	G	N9-C4	-5.57	1.33	1.38
35	BA	712	A	N3-C4	-5.57	1.31	1.34
35	BA	906	A	C6-N1	-5.57	1.31	1.35
35	BA	1138	G	C6-N1	5.57	1.43	1.39
35	BA	1275	A	N3-C4	-5.57	1.31	1.34
2	AB	494	G	C3'-C2'	5.56	1.59	1.52
2	AB	739	A	C6-N6	5.56	1.38	1.33
2	AB	837	C	C2'-C1'	5.56	1.59	1.53
2	AB	1536	C	C3'-C2'	5.56	1.59	1.52
2	AB	1926	U	C4-O4	-5.56	1.19	1.23
2	AB	410	G	C5-C6	5.56	1.48	1.42
2	AB	808	G	O3'-P	-5.56	1.54	1.61
2	AB	994	C	C5'-C4'	5.56	1.58	1.51
2	AB	1393	A	C2-N3	5.56	1.38	1.33
2	AB	1664	A	C6-N6	-5.56	1.29	1.33
2	AB	2040	G	P-O5'	5.56	1.65	1.59
2	AB	2390	U	C4'-O4'	-5.56	1.38	1.45
2	AB	2649	C	C4-N4	-5.56	1.28	1.33
2	AB	2716	C	C2-O2	-5.56	1.19	1.24
26	AZ	45	PHE	CB-CG	5.56	1.60	1.51
35	BA	15	G	N3-C4	-5.56	1.31	1.35
35	BA	425	G	C4'-O4'	-5.56	1.38	1.45
35	BA	1229	A	C5'-C4'	5.56	1.58	1.51
35	BA	1274	A	C6-N1	5.56	1.39	1.35
36	BB	2	G	P-O5'	5.56	1.65	1.59
36	BB	41	C	C2-N3	5.56	1.40	1.35
2	AB	329	G	C6-N1	5.56	1.43	1.39
2	AB	672	C	C3'-C2'	5.56	1.59	1.52
2	AB	1389	G	P-O5'	5.56	1.65	1.59
2	AB	2564	A	C5-C6	5.56	1.46	1.41
35	BA	1353	G	N3-C4	-5.56	1.31	1.35
2	AB	570	G	C3'-C2'	5.56	1.59	1.52
2	AB	582	A	C6-N1	-5.56	1.31	1.35
2	AB	765	C	N1-C6	5.56	1.40	1.37
2	AB	1185	G	N1-C2	5.56	1.42	1.37
2	AB	1615	C	C1'-N1	5.56	1.57	1.48
2	AB	1634	A	N9-C8	5.56	1.42	1.37
2	AB	2210	U	C4-C5	5.56	1.48	1.43
2	AB	2890	G	N1-C2	-5.56	1.33	1.37
35	BA	225	C	C4'-O4'	-5.56	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	451	A	N9-C8	-5.56	1.33	1.37
35	BA	604	G	P-O5'	5.56	1.65	1.59
35	BA	785	G	C3'-C2'	5.56	1.59	1.52
35	BA	1513	A	C8-N7	5.56	1.35	1.31
2	AB	1037	G	N3-C4	5.56	1.39	1.35
2	AB	1235	G	C4'-C3'	5.56	1.59	1.53
2	AB	1470	A	N3-C4	5.56	1.38	1.34
2	AB	2125	G	C2'-O2'	5.56	1.48	1.41
2	AB	2430	A	C2-N3	5.56	1.38	1.33
2	AB	2691	C	C5-C6	-5.56	1.29	1.34
2	AB	2761	A	O3'-P	5.56	1.67	1.61
35	BA	1119	C	C4'-O4'	-5.56	1.38	1.45
35	BA	1413	A	C4'-O4'	-5.56	1.38	1.45
37	BC	46	C	C4'-O4'	-5.56	1.38	1.45
2	AB	248	G	C5-C4	-5.56	1.34	1.38
35	BA	1221	G	C2-N3	5.56	1.37	1.32
35	BA	1327	C	C5-C6	-5.56	1.29	1.34
2	AB	644	A	N1-C2	-5.55	1.29	1.34
2	AB	2055	C	C4'-O4'	-5.55	1.38	1.45
2	AB	2215	C	C4-N4	-5.55	1.28	1.33
35	BA	147	G	C4'-O4'	-5.55	1.38	1.45
35	BA	1104	G	C2'-C1'	-5.55	1.47	1.53
35	BA	1180	A	N9-C4	5.55	1.41	1.37
2	AB	757	G	C5'-C4'	5.55	1.58	1.51
2	AB	1515	A	C4'-O4'	-5.55	1.38	1.45
2	AB	2466	C	C5'-C4'	5.55	1.58	1.51
35	BA	270	A	N7-C5	-5.55	1.35	1.39
35	BA	608	A	C6-N6	5.55	1.38	1.33
35	BA	829	G	C6-N1	5.55	1.43	1.39
2	AB	10	A	N3-C4	5.55	1.38	1.34
2	AB	136	G	C8-N7	5.55	1.34	1.30
2	AB	326	G	C6-O6	-5.55	1.19	1.24
2	AB	1016	G	O5'-C5'	-5.55	1.33	1.42
2	AB	1031	G	C3'-C2'	-5.55	1.46	1.52
2	AB	1367	A	C6-N6	5.55	1.38	1.33
2	AB	2429	G	C8-N7	5.55	1.34	1.30
2	AB	2598	A	P-O5'	-5.55	1.54	1.59
2	AB	2619	C	O3'-P	5.55	1.67	1.61
35	BA	974	A	C2'-O2'	-5.55	1.34	1.41
35	BA	977	A	C6-N1	-5.55	1.31	1.35
35	BA	1513	A	N9-C8	-5.55	1.33	1.37
56	BV	60	PHE	CG-CD1	5.55	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	609	A	N7-C5	-5.55	1.35	1.39
2	AB	778	G	C2-N2	5.55	1.40	1.34
2	AB	896	A	C4'-C3'	-5.55	1.47	1.52
2	AB	1520	U	C5-C6	5.55	1.39	1.34
2	AB	1871	A	C3'-C2'	5.55	1.59	1.52
35	BA	926	G	C2-N2	-5.55	1.29	1.34
2	AB	1096	A	C6-N1	-5.55	1.31	1.35
2	AB	2412	A	C4'-C3'	-5.55	1.47	1.52
35	BA	1462	C	C5-C6	5.55	1.38	1.34
2	AB	121	G	O3'-P	5.55	1.67	1.61
2	AB	217	A	C8-N7	-5.55	1.27	1.31
2	AB	329	G	C1'-N9	5.55	1.57	1.48
2	AB	1259	G	C8-N7	5.55	1.34	1.30
2	AB	1896	G	C5-C6	5.55	1.47	1.42
35	BA	567	G	N9-C4	5.55	1.42	1.38
35	BA	593	U	C2-O2	5.55	1.27	1.22
35	BA	1158	C	C4'-O4'	-5.55	1.38	1.45
35	BA	1171	A	C5'-C4'	5.55	1.58	1.51
35	BA	1259	C	C2-N3	5.55	1.40	1.35
2	AB	208	C	P-O5'	-5.54	1.54	1.59
2	AB	1474	U	C3'-O3'	5.54	1.50	1.42
2	AB	2294	G	C5-C6	5.54	1.47	1.42
2	AB	2437	G	C4'-O4'	-5.54	1.38	1.45
2	AB	2608	G	C2'-C1'	5.54	1.59	1.53
35	BA	1472	U	N1-C2	5.54	1.43	1.38
35	BA	1534	A	C6-N6	-5.54	1.29	1.33
2	AB	1732	C	C2-N3	5.54	1.40	1.35
35	BA	337	G	C8-N7	-5.54	1.27	1.30
38	BD	12	G	P-O5'	5.54	1.65	1.59
2	AB	181	A	C2'-O2'	5.54	1.48	1.41
2	AB	321	U	N3-C4	-5.54	1.33	1.38
2	AB	751	A	C4'-O4'	-5.54	1.38	1.45
2	AB	1323	C	C4-C5	-5.54	1.38	1.43
2	AB	1410	G	C6-N1	5.54	1.43	1.39
2	AB	1551	A	N9-C4	5.54	1.41	1.37
2	AB	1710	G	O3'-P	-5.54	1.54	1.61
2	AB	2103	C	C4'-O4'	-5.54	1.38	1.45
2	AB	2557	G	N1-C2	5.54	1.42	1.37
35	BA	1169	A	O3'-P	5.54	1.67	1.61
35	BA	1534	A	N3-C4	-5.54	1.31	1.34
38	BD	39	A	C5'-C4'	5.54	1.58	1.51
2	AB	1230	A	C5-C4	5.54	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1339	G	P-O5'	5.54	1.65	1.59
2	AB	1413	A	C4'-O4'	-5.54	1.38	1.45
2	AB	1575	C	C4'-O4'	-5.54	1.38	1.45
35	BA	1347	G	N7-C5	5.54	1.42	1.39
38	BD	7	G	N3-C4	-5.54	1.31	1.35
1	AA	34	A	O3'-P	5.54	1.67	1.61
2	AB	131	A	O3'-P	-5.54	1.54	1.61
2	AB	320	A	N3-C4	-5.54	1.31	1.34
2	AB	618	G	C2'-O2'	5.54	1.48	1.41
2	AB	682	G	N3-C4	-5.54	1.31	1.35
2	AB	2641	G	N7-C5	-5.54	1.35	1.39
2	AB	2740	A	O4'-C1'	5.54	1.48	1.41
2	AB	2865	U	P-O5'	5.54	1.65	1.59
35	BA	33	A	O3'-P	-5.54	1.54	1.61
35	BA	298	A	C4'-C3'	-5.54	1.47	1.52
35	BA	1386	G	C2-N3	5.54	1.37	1.32
38	BD	53	G	C6-O6	-5.54	1.19	1.24
2	AB	1997	C	N1-C6	5.54	1.40	1.37
35	BA	385	C	P-O5'	5.54	1.65	1.59
35	BA	940	C	C2-N3	5.54	1.40	1.35
2	AB	166	U	C5-C6	5.54	1.39	1.34
2	AB	368	A	P-O5'	5.54	1.65	1.59
2	AB	463	G	N3-C4	-5.54	1.31	1.35
2	AB	1162	G	C5'-C4'	5.54	1.57	1.51
2	AB	1628	G	N7-C5	5.54	1.42	1.39
2	AB	1822	C	P-O5'	5.54	1.65	1.59
2	AB	2164	C	P-O5'	5.54	1.65	1.59
35	BA	266	G	C2'-C1'	5.54	1.59	1.53
35	BA	449	G	C6-N1	-5.54	1.35	1.39
35	BA	1067	A	N7-C5	5.54	1.42	1.39
35	BA	1074	G	C2-N3	5.54	1.37	1.32
35	BA	1224	U	C2-N3	5.54	1.41	1.37
35	BA	1400	C	C4'-C3'	5.54	1.59	1.53
35	BA	1435	G	N1-C2	5.54	1.42	1.37
36	BB	75	C	C2-N3	5.54	1.40	1.35
37	BC	27	A	C4'-C3'	-5.54	1.47	1.52
2	AB	124	G	P-O5'	-5.53	1.54	1.59
2	AB	140	C	C2'-O2'	-5.53	1.34	1.41
2	AB	164	C	N1-C2	5.53	1.45	1.40
2	AB	438	G	C2-N2	-5.53	1.29	1.34
2	AB	1292	G	C8-N7	5.53	1.34	1.30
2	AB	2276	G	O4'-C1'	5.53	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2840	C	C2'-C1'	-5.53	1.47	1.53
35	BA	609	A	C3'-C2'	5.53	1.59	1.52
1	AA	4	C	N3-C4	5.53	1.37	1.33
35	BA	559	A	O5'-C5'	-5.53	1.33	1.42
35	BA	858	G	C6-O6	5.53	1.29	1.24
2	AB	86	G	C4'-O4'	-5.53	1.38	1.45
2	AB	445	C	N1-C6	5.53	1.40	1.37
2	AB	839	U	C4'-O4'	-5.53	1.38	1.45
2	AB	980	A	N9-C8	5.53	1.42	1.37
2	AB	991	C	P-O5'	5.53	1.65	1.59
2	AB	1277	G	N7-C5	5.53	1.42	1.39
2	AB	1322	A	C4'-O4'	-5.53	1.38	1.45
2	AB	1474	U	O3'-P	5.53	1.67	1.61
2	AB	1986	C	C3'-C2'	5.53	1.59	1.52
2	AB	2000	C	C5'-C4'	5.53	1.57	1.51
2	AB	2435	A	N7-C5	-5.53	1.35	1.39
2	AB	2720	U	C2-N3	5.53	1.41	1.37
22	AV	84	TYR	CE1-CZ	5.53	1.45	1.38
35	BA	6	G	C4'-O4'	-5.53	1.38	1.45
35	BA	916	U	N1-C2	5.53	1.43	1.38
35	BA	957	U	C2-N3	5.53	1.41	1.37
35	BA	993	G	C8-N7	-5.53	1.27	1.30
35	BA	1266	G	C2'-C1'	5.53	1.59	1.53
35	BA	1272	G	C2'-C1'	-5.53	1.47	1.53
1	AA	87	U	C4-O4	-5.53	1.19	1.23
2	AB	21	A	C5'-C4'	5.53	1.57	1.51
2	AB	75	G	C6-N1	5.53	1.43	1.39
2	AB	584	C	N1-C6	-5.53	1.33	1.37
2	AB	1691	C	P-O5'	5.53	1.65	1.59
2	AB	1899	A	C3'-C2'	5.53	1.59	1.52
2	AB	2227	A	N3-C4	5.53	1.38	1.34
2	AB	2343	U	N1-C2	5.53	1.43	1.38
35	BA	1220	G	C8-N7	5.53	1.34	1.30
2	AB	23	G	C4'-C3'	5.53	1.59	1.53
2	AB	447	A	N1-C2	5.53	1.39	1.34
2	AB	480	A	O3'-P	5.53	1.67	1.61
2	AB	548	G	C2-N3	5.53	1.37	1.32
2	AB	618	G	N3-C4	5.53	1.39	1.35
2	AB	665	U	N1-C2	5.53	1.43	1.38
2	AB	1094	U	C5-C6	5.53	1.39	1.34
2	AB	1766	G	C2'-C1'	5.53	1.59	1.53
2	AB	2365	G	C2-N3	5.53	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2747	G	C5-C4	5.53	1.42	1.38
35	BA	74	A	C2'-C1'	-5.53	1.47	1.53
35	BA	485	U	P-O5'	5.53	1.65	1.59
35	BA	542	G	C5'-C4'	5.53	1.57	1.51
35	BA	1375	A	N9-C4	5.53	1.41	1.37
38	BD	6	G	C2-N3	5.53	1.37	1.32
2	AB	25	U	C3'-C2'	-5.53	1.46	1.52
2	AB	140	C	C4-N4	-5.53	1.28	1.33
2	AB	327	G	C2-N3	5.53	1.37	1.32
2	AB	663	G	C3'-C2'	5.53	1.59	1.52
2	AB	2124	G	N1-C2	5.53	1.42	1.37
2	AB	2333	A	C2-N3	5.53	1.38	1.33
35	BA	378	G	C3'-C2'	-5.53	1.46	1.52
35	BA	675	A	N7-C5	-5.53	1.35	1.39
35	BA	1135	U	N1-C2	5.53	1.43	1.38
35	BA	1152	A	C5-C6	-5.53	1.36	1.41
35	BA	1468	A	N9-C4	5.53	1.41	1.37
35	BA	1487	G	N7-C5	-5.53	1.35	1.39
35	BA	1514	G	C8-N7	-5.53	1.27	1.30
36	BB	50	G	N9-C8	-5.53	1.33	1.37
38	BD	52	C	O4'-C1'	5.53	1.48	1.41
2	AB	125	A	N9-C4	5.52	1.41	1.37
2	AB	395	U	C5-C6	5.52	1.39	1.34
2	AB	645	C	C1'-N1	5.52	1.57	1.48
2	AB	1628	G	N3-C4	5.52	1.39	1.35
2	AB	1756	G	N9-C4	-5.52	1.33	1.38
2	AB	2175	C	N3-C4	5.52	1.37	1.33
2	AB	2366	A	O3'-P	-5.52	1.54	1.61
35	BA	292	G	C5-C4	-5.52	1.34	1.38
35	BA	442	G	C2-N3	5.52	1.37	1.32
1	AA	14	U	N3-C4	5.52	1.43	1.38
2	AB	1509	A	C4'-C3'	5.52	1.59	1.53
2	AB	1595	C	N1-C2	5.52	1.45	1.40
2	AB	1655	A	C5'-C4'	5.52	1.57	1.51
7	AG	149	ARG	NE-CZ	5.52	1.40	1.33
35	BA	258	G	P-O5'	5.52	1.65	1.59
35	BA	885	G	C5-C4	-5.52	1.34	1.38
35	BA	1092	A	C5-C6	-5.52	1.36	1.41
35	BA	1171	A	C5-C6	5.52	1.46	1.41
35	BA	1364	U	C4-O4	5.52	1.28	1.23
36	BB	48	U	C2-N3	5.52	1.41	1.37
2	AB	424	G	C8-N7	-5.52	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1290	C	N1-C6	5.52	1.40	1.37
35	BA	363	A	N9-C8	-5.52	1.33	1.37
35	BA	606	G	N3-C4	-5.52	1.31	1.35
35	BA	1478	U	N1-C2	5.52	1.43	1.38
2	AB	356	G	C3'-O3'	5.52	1.49	1.42
2	AB	901	C	C4'-O4'	-5.52	1.38	1.45
2	AB	1260	A	N9-C4	5.52	1.41	1.37
2	AB	1412	U	N1-C6	5.52	1.43	1.38
2	AB	2162	G	O3'-P	5.52	1.67	1.61
2	AB	2242	G	C8-N7	-5.52	1.27	1.30
2	AB	2661	G	P-O5'	5.52	1.65	1.59
35	BA	420	U	N1-C6	5.52	1.43	1.38
35	BA	777	A	N9-C8	-5.52	1.33	1.37
35	BA	863	U	C2-N3	5.52	1.41	1.37
35	BA	965	U	C4-O4	-5.52	1.19	1.23
35	BA	1002	G	C4'-O4'	-5.52	1.38	1.45
2	AB	3	U	C5-C6	5.52	1.39	1.34
2	AB	817	C	C3'-C2'	5.52	1.59	1.52
2	AB	924	G	C2-N3	5.52	1.37	1.32
2	AB	1084	A	N3-C4	5.52	1.38	1.34
2	AB	1143	A	C4'-C3'	5.52	1.59	1.53
2	AB	1191	G	C2-N3	5.52	1.37	1.32
2	AB	1526	C	P-O5'	5.52	1.65	1.59
2	AB	1535	A	C4'-O4'	-5.52	1.38	1.45
2	AB	2078	C	C5-C6	5.52	1.38	1.34
35	BA	1504	G	C6-N1	5.52	1.43	1.39
36	BB	65	C	C2-N3	5.52	1.40	1.35
37	BC	35	G	N3-C4	-5.52	1.31	1.35
54	BT	56	ASP	CB-CG	5.52	1.63	1.51
2	AB	1733	G	C2-N3	5.52	1.37	1.32
2	AB	2757	A	C8-N7	-5.52	1.27	1.31
2	AB	2759	G	C2'-C1'	-5.52	1.47	1.53
24	AX	31	TYR	CE2-CZ	5.52	1.45	1.38
35	BA	108	G	N9-C8	-5.52	1.33	1.37
35	BA	1171	A	P-O5'	5.52	1.65	1.59
35	BA	1383	C	C4-C5	5.52	1.47	1.43
2	AB	323	C	C4-C5	5.51	1.47	1.43
2	AB	396	G	N9-C4	5.51	1.42	1.38
2	AB	705	A	N1-C2	5.51	1.39	1.34
2	AB	906	U	C2-O2	-5.51	1.17	1.22
2	AB	1066	U	C4'-O4'	-5.51	1.38	1.45
2	AB	1523	U	O4'-C1'	5.51	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2246	G	C6-O6	-5.51	1.19	1.24
2	AB	2622	U	C2-O2	5.51	1.27	1.22
2	AB	2639	A	C5-C4	-5.51	1.34	1.38
2	AB	2889	C	C4-C5	5.51	1.47	1.43
21	AU	30	SER	CA-CB	5.51	1.61	1.52
35	BA	836	G	C5'-C4'	5.51	1.57	1.51
38	BD	70	C	C4-C5	5.51	1.47	1.43
2	AB	1672	A	C5'-C4'	5.51	1.57	1.51
2	AB	2080	A	N1-C2	-5.51	1.29	1.34
2	AB	2811	G	N7-C5	-5.51	1.35	1.39
35	BA	515	G	N1-C2	5.51	1.42	1.37
38	BD	47	A	C6-N6	-5.51	1.29	1.33
1	AA	106	G	C6-N1	5.51	1.43	1.39
2	AB	547	A	C8-N7	5.51	1.35	1.31
2	AB	580	U	P-O5'	5.51	1.65	1.59
2	AB	1390	U	N3-C4	5.51	1.43	1.38
35	BA	191	G	N7-C5	-5.51	1.35	1.39
35	BA	240	G	C3'-C2'	-5.51	1.46	1.52
35	BA	671	G	C3'-C2'	5.51	1.59	1.52
35	BA	954	G	C6-N1	5.51	1.43	1.39
35	BA	1540	U	C5'-C4'	5.51	1.57	1.51
2	AB	28	A	N7-C5	5.51	1.42	1.39
2	AB	770	G	N7-C5	-5.51	1.35	1.39
2	AB	1251	C	C4-C5	5.51	1.47	1.43
2	AB	1294	U	C4'-C3'	5.51	1.59	1.53
2	AB	2001	C	C4'-O4'	-5.51	1.38	1.45
2	AB	2708	G	P-O5'	5.51	1.65	1.59
2	AB	2881	U	C5'-C4'	5.51	1.57	1.51
35	BA	35	G	N1-C2	5.51	1.42	1.37
35	BA	151	A	N9-C4	5.51	1.41	1.37
35	BA	531	U	O3'-P	5.51	1.67	1.61
35	BA	557	G	N1-C2	5.51	1.42	1.37
35	BA	821	G	C8-N7	-5.51	1.27	1.30
35	BA	884	U	C3'-O3'	5.51	1.49	1.42
36	BB	27	C	C4-C5	5.51	1.47	1.43
1	AA	47	C	C2'-C1'	5.51	1.59	1.53
1	AA	54	G	C4'-O4'	-5.51	1.38	1.45
2	AB	287	G	C5-C6	5.51	1.47	1.42
2	AB	503	A	N3-C4	5.51	1.38	1.34
2	AB	1437	C	N1-C6	5.51	1.40	1.37
2	AB	2084	C	O5'-C5'	-5.51	1.34	1.42
2	AB	2366	A	N3-C4	5.51	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2470	G	O4'-C1'	5.51	1.48	1.41
35	BA	79	G	N3-C4	5.51	1.39	1.35
35	BA	118	U	C5'-C4'	5.51	1.57	1.51
2	AB	21	A	C8-N7	-5.51	1.27	1.31
2	AB	228	C	O5'-C5'	-5.51	1.34	1.42
2	AB	843	G	N3-C4	5.51	1.39	1.35
2	AB	899	A	C2'-O2'	5.51	1.48	1.41
2	AB	1263	U	C2'-C1'	-5.51	1.47	1.53
2	AB	1803	A	N3-C4	5.51	1.38	1.34
2	AB	1828	G	C2-N3	5.51	1.37	1.32
35	BA	38	G	C4'-O4'	-5.51	1.38	1.45
35	BA	143	A	N7-C5	5.51	1.42	1.39
35	BA	327	A	C4'-C3'	5.51	1.59	1.53
35	BA	698	G	P-O5'	-5.51	1.54	1.59
36	BB	10	G	C8-N7	-5.51	1.27	1.30
1	AA	52	A	P-O5'	5.50	1.65	1.59
2	AB	1299	G	C6-N1	-5.50	1.35	1.39
2	AB	1954	G	C6-O6	5.50	1.29	1.24
35	BA	168	G	N3-C4	5.50	1.39	1.35
35	BA	1448	C	C2-O2	5.50	1.29	1.24
35	BA	1529	G	O3'-P	5.50	1.67	1.61
2	AB	173	A	P-O5'	5.50	1.65	1.59
2	AB	551	G	P-O5'	5.50	1.65	1.59
2	AB	648	G	C4'-O4'	-5.50	1.38	1.45
2	AB	845	A	C4'-O4'	-5.50	1.38	1.45
2	AB	1485	U	C2-N3	5.50	1.41	1.37
2	AB	1985	C	C3'-O3'	5.50	1.49	1.42
2	AB	1996	C	N3-C4	5.50	1.37	1.33
2	AB	2026	U	C2'-O2'	-5.50	1.34	1.41
2	AB	2602	A	C5-C4	-5.50	1.34	1.38
35	BA	232	G	N1-C2	5.50	1.42	1.37
35	BA	1084	G	C8-N7	5.50	1.34	1.30
2	AB	953	G	C5'-C4'	5.50	1.57	1.51
2	AB	1409	U	N3-C4	5.50	1.43	1.38
2	AB	1413	A	P-O5'	5.50	1.65	1.59
2	AB	1928	A	N3-C4	5.50	1.38	1.34
2	AB	2458	G	C6-N1	5.50	1.43	1.39
35	BA	646	G	C5'-C4'	5.50	1.57	1.51
35	BA	879	C	C5'-C4'	5.50	1.57	1.51
35	BA	1005	A	C8-N7	-5.50	1.27	1.31
38	BD	61	U	N1-C2	5.50	1.43	1.38
2	AB	173	A	N1-C2	-5.50	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	255	A	O4'-C1'	5.50	1.48	1.41
2	AB	2268	A	C5'-C4'	5.50	1.57	1.51
2	AB	2576	G	N1-C2	5.50	1.42	1.37
36	BB	48	U	C1'-N1	5.50	1.56	1.48
2	AB	297	G	O5'-C5'	-5.50	1.34	1.42
2	AB	392	U	C2'-O2'	5.50	1.48	1.41
2	AB	398	C	C2'-O2'	5.50	1.48	1.41
2	AB	483	A	N3-C4	-5.50	1.31	1.34
2	AB	1369	G	C2-N3	5.50	1.37	1.32
2	AB	2226	C	C2-O2	-5.50	1.19	1.24
2	AB	2398	U	C2-N3	5.50	1.41	1.37
35	BA	42	G	C8-N7	5.50	1.34	1.30
35	BA	968	A	N9-C4	5.50	1.41	1.37
35	BA	1010	U	N1-C2	5.50	1.43	1.38
35	BA	1534	A	P-O5'	5.50	1.65	1.59
37	BC	52	U	C2-N3	5.50	1.41	1.37
47	BM	55	PRO	N-CD	-5.50	1.40	1.47
1	AA	6	G	P-O5'	5.50	1.65	1.59
2	AB	1089	A	C5-C4	-5.50	1.34	1.38
2	AB	2450	A	C5-C4	-5.50	1.34	1.38
2	AB	2882	A	N3-C4	5.50	1.38	1.34
35	BA	110	C	C3'-C2'	5.50	1.58	1.52
35	BA	368	U	C2-N3	5.50	1.41	1.37
35	BA	371	A	C4'-O4'	-5.50	1.38	1.45
35	BA	562	U	C4-C5	5.50	1.48	1.43
35	BA	1029	U	C5'-C4'	5.50	1.57	1.51
35	BA	1183	U	C4-O4	-5.50	1.19	1.23
2	AB	549	G	C5'-C4'	5.50	1.57	1.51
2	AB	1526	C	C4-C5	5.50	1.47	1.43
2	AB	1932	A	C2'-O2'	5.50	1.48	1.41
2	AB	1977	A	C6-N6	5.50	1.38	1.33
2	AB	2420	C	C3'-C2'	5.50	1.58	1.52
2	AB	2857	G	N3-C4	-5.50	1.31	1.35
35	BA	370	C	N3-C4	-5.50	1.30	1.33
35	BA	444	G	C2-N3	5.50	1.37	1.32
35	BA	844	G	N7-C5	-5.50	1.35	1.39
2	AB	889	C	O3'-P	5.49	1.67	1.61
2	AB	1848	A	C6-N1	-5.49	1.31	1.35
2	AB	2645	G	C4'-O4'	-5.49	1.38	1.45
2	AB	2799	A	C5-C4	-5.49	1.34	1.38
35	BA	808	C	N1-C2	5.49	1.45	1.40
35	BA	1177	G	C8-N7	5.49	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1526	G	C2-N3	5.49	1.37	1.32
51	BQ	28	ALA	N-CA	5.49	1.57	1.46
2	AB	98	G	C2-N2	5.49	1.40	1.34
2	AB	1057	A	C8-N7	5.49	1.35	1.31
35	BA	1239	A	P-O5'	5.49	1.65	1.59
35	BA	1486	G	P-O5'	5.49	1.65	1.59
2	AB	541	A	C2'-O2'	5.49	1.48	1.41
2	AB	878	A	C5-C4	-5.49	1.34	1.38
2	AB	2855	C	C2-O2	-5.49	1.19	1.24
35	BA	132	C	P-O5'	5.49	1.65	1.59
35	BA	769	G	C8-N7	-5.49	1.27	1.30
35	BA	1208	C	N3-C4	5.49	1.37	1.33
2	AB	478	A	C5'-C4'	-5.49	1.44	1.51
2	AB	508	A	N9-C8	5.49	1.42	1.37
2	AB	1070	A	N3-C4	5.49	1.38	1.34
2	AB	1124	G	C8-N7	-5.49	1.27	1.30
2	AB	1165	A	N9-C8	-5.49	1.33	1.37
2	AB	2386	A	N9-C8	5.49	1.42	1.37
2	AB	2626	C	N3-C4	5.49	1.37	1.33
2	AB	2628	C	C5'-C4'	5.49	1.57	1.51
2	AB	2766	A	P-O5'	5.49	1.65	1.59
2	AB	2825	G	N3-C4	-5.49	1.31	1.35
2	AB	2883	A	C5'-C4'	5.49	1.57	1.51
35	BA	86	G	N7-C5	-5.49	1.35	1.39
35	BA	537	G	N7-C5	5.49	1.42	1.39
35	BA	909	A	C5-C4	-5.49	1.34	1.38
48	BN	25	SER	CB-OG	5.49	1.49	1.42
2	AB	623	C	P-O5'	5.49	1.65	1.59
2	AB	1567	G	P-O5'	5.49	1.65	1.59
2	AB	1695	G	N7-C5	-5.49	1.35	1.39
2	AB	1843	C	N1-C6	5.49	1.40	1.37
2	AB	174	U	C4-O4	-5.49	1.19	1.23
2	AB	274	C	C2'-C1'	5.49	1.59	1.53
2	AB	1286	A	C4'-C3'	5.49	1.59	1.53
2	AB	1519	G	C2'-C1'	-5.49	1.47	1.53
2	AB	1926	U	C3'-O3'	5.49	1.49	1.42
2	AB	2380	C	C5'-C4'	5.49	1.57	1.51
2	AB	2492	U	C4'-O4'	-5.49	1.38	1.45
2	AB	2638	G	C6-N1	-5.49	1.35	1.39
35	BA	89	U	N3-C4	5.49	1.43	1.38
35	BA	343	U	C4'-C3'	-5.49	1.47	1.52
35	BA	1101	A	O4'-C1'	5.49	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	20	C	N3-C4	5.48	1.37	1.33
2	AB	24	G	C5-C4	-5.48	1.34	1.38
2	AB	910	A	C3'-C2'	5.48	1.58	1.52
2	AB	1526	C	C5'-C4'	5.48	1.57	1.51
2	AB	1576	U	C5'-C4'	5.48	1.57	1.51
2	AB	2426	A	N9-C8	-5.48	1.33	1.37
2	AB	2458	G	N7-C5	5.48	1.42	1.39
13	AM	14	SER	CB-OG	5.48	1.49	1.42
35	BA	1408	A	P-O5'	-5.48	1.54	1.59
1	AA	23	G	C5'-C4'	-5.48	1.44	1.51
2	AB	238	C	C4'-C3'	-5.48	1.47	1.52
2	AB	542	C	P-O5'	5.48	1.65	1.59
2	AB	1887	C	N3-C4	5.48	1.37	1.33
2	AB	2202	U	C2-N3	5.48	1.41	1.37
35	BA	59	A	O3'-P	5.48	1.67	1.61
2	AB	79	C	N1-C6	5.48	1.40	1.37
2	AB	199	A	C6-N1	-5.48	1.31	1.35
2	AB	499	U	N1-C6	5.48	1.42	1.38
2	AB	1823	G	N1-C2	5.48	1.42	1.37
2	AB	1922	G	C3'-C2'	5.48	1.58	1.52
2	AB	2140	G	C4'-O4'	-5.48	1.38	1.45
2	AB	2142	A	C4'-C3'	5.48	1.59	1.53
2	AB	2642	G	C6-N1	5.48	1.43	1.39
51	BQ	54	SER	CB-OG	-5.48	1.35	1.42
2	AB	1935	G	C2-N3	5.48	1.37	1.32
35	BA	414	A	C4'-C3'	5.48	1.59	1.53
35	BA	1043	G	N7-C5	-5.48	1.35	1.39
2	AB	1511	G	C1'-N9	-5.48	1.39	1.46
2	AB	2560	A	C2-N3	5.48	1.38	1.33
35	BA	6	G	C3'-C2'	5.48	1.58	1.52
35	BA	276	G	C4'-O4'	-5.48	1.38	1.45
35	BA	515	G	O4'-C1'	-5.48	1.34	1.41
35	BA	950	U	C2-N3	5.48	1.41	1.37
2	AB	284	U	C5'-C4'	5.48	1.57	1.51
2	AB	1179	G	O4'-C1'	5.48	1.48	1.41
2	AB	1739	A	C4'-O4'	-5.48	1.38	1.45
35	BA	444	G	P-O5'	5.48	1.65	1.59
2	AB	304	U	O3'-P	5.47	1.67	1.61
2	AB	471	A	C3'-O3'	5.47	1.49	1.42
2	AB	808	G	C3'-C2'	5.47	1.58	1.52
2	AB	960	A	O4'-C1'	5.47	1.48	1.41
2	AB	999	U	C4'-O4'	-5.47	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2119	A	C5'-C4'	5.47	1.57	1.51
2	AB	2252	G	C2'-O2'	-5.47	1.34	1.41
35	BA	343	U	C4'-O4'	-5.47	1.38	1.45
35	BA	713	G	P-O5'	5.47	1.65	1.59
35	BA	1395	C	C5'-C4'	5.47	1.57	1.51
36	BB	70	C	C4'-O4'	-5.47	1.38	1.45
2	AB	453	A	O5'-C5'	-5.47	1.34	1.42
2	AB	885	C	O3'-P	5.47	1.67	1.61
2	AB	1190	G	C2'-C1'	5.47	1.59	1.53
2	AB	1364	G	C5'-C4'	5.47	1.57	1.51
2	AB	1579	A	C2'-C1'	5.47	1.59	1.53
2	AB	1670	C	C3'-C2'	-5.47	1.46	1.52
2	AB	1782	U	C4'-C3'	5.47	1.59	1.53
2	AB	2373	G	N9-C8	5.47	1.41	1.37
2	AB	2378	A	N1-C2	-5.47	1.29	1.34
2	AB	2562	U	N3-C4	5.47	1.43	1.38
35	BA	1122	U	C2-N3	5.47	1.41	1.37
38	BD	76	C	N3-C4	5.47	1.37	1.33
2	AB	185	G	O4'-C1'	-5.47	1.34	1.41
35	BA	95	C	P-O5'	5.47	1.65	1.59
35	BA	1194	U	P-O5'	5.47	1.65	1.59
2	AB	1000	A	C5-C4	-5.47	1.34	1.38
2	AB	1434	A	C4'-C3'	-5.47	1.47	1.52
2	AB	1567	G	O3'-P	5.47	1.67	1.61
2	AB	1904	G	C5-C6	5.47	1.47	1.42
2	AB	2283	C	C4-C5	5.47	1.47	1.43
2	AB	2490	G	N9-C8	-5.47	1.34	1.37
2	AB	2821	A	C4'-O4'	-5.47	1.38	1.45
35	BA	156	C	N1-C6	5.47	1.40	1.37
35	BA	241	G	C5-C4	5.47	1.42	1.38
35	BA	292	G	C2'-C1'	5.47	1.59	1.53
35	BA	295	C	C4'-C3'	-5.47	1.47	1.52
35	BA	1323	G	C3'-C2'	-5.47	1.46	1.52
38	BD	58	A	C4'-C3'	-5.47	1.47	1.52
38	BD	67	C	P-O5'	5.47	1.65	1.59
2	AB	751	A	O4'-C1'	5.47	1.48	1.41
2	AB	931	U	C5-C6	5.47	1.39	1.34
2	AB	831	G	N3-C4	5.47	1.39	1.35
2	AB	2271	G	C4'-O4'	-5.47	1.38	1.45
35	BA	176	C	N1-C6	5.47	1.40	1.37
35	BA	429	U	O5'-C5'	-5.47	1.34	1.42
35	BA	520	A	C6-N6	5.47	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	BL	37	TYR	CE1-CZ	5.47	1.45	1.38
1	AA	114	C	C5'-C4'	5.46	1.57	1.51
2	AB	255	A	O3'-P	5.46	1.67	1.61
2	AB	1848	A	C5-C4	-5.46	1.34	1.38
2	AB	1866	A	N3-C4	5.46	1.38	1.34
21	AU	32	ALA	CA-CB	5.46	1.64	1.52
35	BA	178	C	N3-C4	-5.46	1.30	1.33
35	BA	491	G	O3'-P	5.46	1.67	1.61
38	BD	10	G	C4'-O4'	-5.46	1.38	1.45
2	AB	858	G	P-O5'	5.46	1.65	1.59
2	AB	875	G	C4'-C3'	5.46	1.59	1.53
2	AB	1425	G	C4'-O4'	-5.46	1.38	1.45
18	AR	87	ARG	NE-CZ	5.46	1.40	1.33
35	BA	157	U	C4-C5	5.46	1.48	1.43
35	BA	231	U	C4'-C3'	5.46	1.59	1.53
35	BA	515	G	C6-O6	-5.46	1.19	1.24
35	BA	1272	G	C3'-O3'	-5.46	1.34	1.42
37	BC	40	G	C5'-C4'	5.46	1.57	1.51
2	AB	155	A	C4'-C3'	-5.46	1.47	1.52
2	AB	1288	G	C8-N7	-5.46	1.27	1.30
2	AB	1386	C	C4'-C3'	5.46	1.59	1.53
2	AB	1470	A	C5-C4	-5.46	1.34	1.38
2	AB	2253	G	N9-C4	5.46	1.42	1.38
2	AB	2279	G	N1-C2	5.46	1.42	1.37
2	AB	2512	C	C5'-C4'	5.46	1.57	1.51
35	BA	323	U	C4-C5	5.46	1.48	1.43
35	BA	324	G	C3'-C2'	-5.46	1.46	1.52
35	BA	329	A	N1-C2	-5.46	1.29	1.34
35	BA	1002	G	N7-C5	5.46	1.42	1.39
35	BA	1293	C	O4'-C1'	5.46	1.48	1.41
35	BA	1344	C	C4'-O4'	-5.46	1.38	1.45
2	AB	948	C	P-O5'	5.46	1.65	1.59
2	AB	1698	A	C6-N6	5.46	1.38	1.33
2	AB	2040	G	C4'-C3'	5.46	1.59	1.53
35	BA	1459	G	C2-N3	5.46	1.37	1.32
2	AB	631	A	N9-C8	5.46	1.42	1.37
2	AB	994	C	C4-N4	5.46	1.38	1.33
2	AB	1060	U	N1-C6	5.46	1.42	1.38
2	AB	1365	A	O4'-C1'	-5.46	1.34	1.41
2	AB	1640	A	N9-C4	-5.46	1.34	1.37
2	AB	1980	G	C2-N3	5.46	1.37	1.32
2	AB	2142	A	N7-C5	5.46	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2273	A	N9-C4	-5.46	1.34	1.37
2	AB	2296	U	C4-C5	5.46	1.48	1.43
35	BA	154	U	C5-C6	5.46	1.39	1.34
35	BA	201	G	N7-C5	5.46	1.42	1.39
35	BA	271	C	C3'-C2'	5.46	1.58	1.52
35	BA	1039	G	C5'-C4'	5.46	1.57	1.51
35	BA	1227	A	O5'-C5'	-5.46	1.34	1.42
35	BA	1286	U	N1-C6	-5.46	1.33	1.38
2	AB	551	G	C5-C6	5.46	1.47	1.42
2	AB	646	U	C4'-O4'	-5.46	1.38	1.45
2	AB	858	G	C5-C6	5.46	1.47	1.42
2	AB	1208	C	O4'-C1'	5.46	1.48	1.41
2	AB	1290	C	P-O5'	5.46	1.65	1.59
2	AB	1914	C	C4'-C3'	5.46	1.59	1.53
2	AB	2008	C	C2-O2	5.46	1.29	1.24
2	AB	2072	C	C2'-C1'	5.46	1.59	1.53
2	AB	2420	C	N1-C2	-5.46	1.34	1.40
35	BA	557	G	N3-C4	5.46	1.39	1.35
36	BB	31	U	C4-C5	5.46	1.48	1.43
2	AB	18	U	C2-N3	-5.46	1.33	1.37
2	AB	887	U	C1'-N1	5.46	1.56	1.48
2	AB	1470	A	C2-N3	-5.46	1.28	1.33
35	BA	1166	G	N9-C4	5.46	1.42	1.38
35	BA	1254	A	C5-C6	-5.46	1.36	1.41
2	AB	110	G	N9-C4	5.45	1.42	1.38
2	AB	672	C	N1-C2	5.45	1.45	1.40
2	AB	909	A	C1'-N9	5.45	1.56	1.48
2	AB	934	U	C1'-N1	5.45	1.56	1.48
2	AB	1031	G	C4'-O4'	-5.45	1.38	1.45
2	AB	1235	G	C5-C4	5.45	1.42	1.38
2	AB	1607	C	N1-C6	-5.45	1.33	1.37
2	AB	1891	G	C6-N1	-5.45	1.35	1.39
2	AB	2005	A	N9-C4	-5.45	1.34	1.37
2	AB	2199	A	O5'-C5'	-5.45	1.34	1.42
2	AB	2534	A	N9-C8	-5.45	1.33	1.37
2	AB	2659	G	C3'-C2'	5.45	1.58	1.52
2	AB	2756	U	O3'-P	5.45	1.67	1.61
35	BA	445	G	N9-C4	5.45	1.42	1.38
35	BA	1246	A	P-O5'	5.45	1.65	1.59
38	BD	58	A	C4'-O4'	-5.45	1.38	1.45
2	AB	82	U	C2-N3	5.45	1.41	1.37
2	AB	1317	G	C4'-O4'	-5.45	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1853	A	P-O5'	5.45	1.65	1.59
2	AB	2385	C	C4-C5	5.45	1.47	1.43
35	BA	347	G	O4'-C1'	-5.45	1.34	1.41
35	BA	511	C	C3'-C2'	-5.45	1.46	1.52
2	AB	577	G	O3'-P	5.45	1.67	1.61
2	AB	910	A	C4'-O4'	-5.45	1.38	1.45
2	AB	1157	G	P-O5'	5.45	1.65	1.59
2	AB	1393	A	C6-N6	5.45	1.38	1.33
2	AB	1653	G	O3'-P	5.45	1.67	1.61
30	A3	9	ARG	CD-NE	5.45	1.55	1.46
35	BA	754	C	C4-C5	5.45	1.47	1.43
38	BD	54	G	C2-N3	5.45	1.37	1.32
2	AB	561	G	O4'-C1'	5.45	1.48	1.41
2	AB	872	U	N1-C2	5.45	1.43	1.38
2	AB	1037	G	O3'-P	-5.45	1.54	1.61
2	AB	1537	G	C8-N7	5.45	1.34	1.30
2	AB	1778	U	C5'-C4'	5.45	1.57	1.51
2	AB	2205	A	N3-C4	5.45	1.38	1.34
2	AB	2296	U	C4'-O4'	-5.45	1.38	1.45
2	AB	2385	C	C2-N3	5.45	1.40	1.35
2	AB	2768	U	C2'-C1'	5.45	1.59	1.53
2	AB	2851	A	O3'-P	-5.45	1.54	1.61
35	BA	346	G	N9-C4	-5.45	1.33	1.38
35	BA	392	C	C2'-C1'	5.45	1.59	1.53
35	BA	546	A	C3'-C2'	5.45	1.58	1.52
35	BA	1216	A	N3-C4	5.45	1.38	1.34
1	AA	81	G	C4'-O4'	-5.45	1.38	1.45
2	AB	1082	U	C2'-O2'	5.45	1.48	1.41
35	BA	863	U	C2-O2	5.45	1.27	1.22
2	AB	58	G	N7-C5	-5.45	1.35	1.39
2	AB	481	G	N3-C4	5.45	1.39	1.35
2	AB	1031	G	C6-N1	5.45	1.43	1.39
2	AB	1204	A	C8-N7	-5.45	1.27	1.31
2	AB	1280	G	N9-C8	-5.45	1.34	1.37
2	AB	2104	C	C2-N3	5.45	1.40	1.35
2	AB	2485	G	C5-C4	5.45	1.42	1.38
2	AB	2809	A	C4'-C3'	-5.45	1.47	1.52
35	BA	454	G	N7-C5	-5.45	1.35	1.39
35	BA	997	U	C5-C6	5.45	1.39	1.34
35	BA	1067	A	C2'-O2'	5.45	1.48	1.41
35	BA	1183	U	C2-N3	5.45	1.41	1.37
39	BE	112	ARG	NE-CZ	5.45	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	453	A	N3-C4	5.44	1.38	1.34
2	AB	517	C	P-O5'	5.44	1.65	1.59
2	AB	784	G	C3'-C2'	5.44	1.58	1.52
35	BA	1204	A	C4'-O4'	-5.44	1.38	1.45
35	BA	1336	C	P-O5'	5.44	1.65	1.59
38	BD	20	G	C3'-O3'	-5.44	1.34	1.42
1	AA	46	A	C4'-O4'	-5.44	1.38	1.45
2	AB	173	A	C6-N6	5.44	1.38	1.33
2	AB	479	A	C6-N6	5.44	1.38	1.33
2	AB	824	U	C3'-O3'	5.44	1.49	1.42
2	AB	1132	U	C2-N3	5.44	1.41	1.37
2	AB	1563	U	C3'-O3'	5.44	1.49	1.42
35	BA	260	G	N7-C5	5.44	1.42	1.39
35	BA	342	C	C5-C6	5.44	1.38	1.34
35	BA	354	G	N7-C5	5.44	1.42	1.39
35	BA	1437	A	C8-N7	-5.44	1.27	1.31
2	AB	966	G	N7-C5	-5.44	1.35	1.39
2	AB	1657	U	C3'-C2'	5.44	1.58	1.52
2	AB	2455	G	C5-C4	-5.44	1.34	1.38
2	AB	2565	A	C5'-C4'	5.44	1.57	1.51
35	BA	283	U	C2'-C1'	5.44	1.59	1.53
35	BA	365	U	C2-N3	5.44	1.41	1.37
35	BA	1423	G	C2-N2	5.44	1.40	1.34
35	BA	1448	C	C5-C6	5.44	1.38	1.34
2	AB	351	C	N3-C4	5.44	1.37	1.33
2	AB	1229	C	O3'-P	5.44	1.67	1.61
35	BA	398	U	C4-C5	5.44	1.48	1.43
35	BA	809	G	N3-C4	5.44	1.39	1.35
35	BA	837	U	C4'-C3'	5.44	1.59	1.53
37	BC	14	G	C2-N3	5.44	1.37	1.32
1	AA	97	C	C5-C6	5.44	1.38	1.34
2	AB	94	A	N3-C4	5.44	1.38	1.34
2	AB	157	C	C5-C6	5.44	1.38	1.34
2	AB	442	G	N3-C4	-5.44	1.31	1.35
2	AB	1702	G	N9-C8	5.44	1.41	1.37
2	AB	1833	C	C4'-O4'	-5.44	1.38	1.45
12	AL	53	TYR	CE1-CZ	5.44	1.45	1.38
35	BA	800	G	O3'-P	5.44	1.67	1.61
35	BA	889	A	N9-C4	5.44	1.41	1.37
35	BA	1273	C	C2'-C1'	5.44	1.59	1.53
2	AB	754	U	C4-C5	5.44	1.48	1.43
2	AB	1724	G	C4'-C3'	-5.44	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1075	C	C1'-N1	5.43	1.56	1.48
2	AB	1276	A	C3'-C2'	5.43	1.58	1.52
2	AB	2145	C	C4'-C3'	5.43	1.59	1.53
2	AB	2323	G	C2-N2	-5.43	1.29	1.34
2	AB	2415	G	N7-C5	5.43	1.42	1.39
2	AB	2509	G	C5-C6	-5.43	1.36	1.42
35	BA	19	A	N7-C5	5.43	1.42	1.39
35	BA	1035	A	C3'-C2'	-5.43	1.46	1.52
35	BA	1185	G	C4'-C3'	5.43	1.59	1.53
35	BA	1346	A	C6-N1	5.43	1.39	1.35
2	AB	29	U	C2-N3	-5.43	1.33	1.37
2	AB	87	U	C3'-O3'	5.43	1.49	1.42
2	AB	758	C	C5-C6	5.43	1.38	1.34
2	AB	1425	G	N1-C2	5.43	1.42	1.37
2	AB	1574	C	O3'-P	5.43	1.67	1.61
2	AB	2013	A	N9-C8	-5.43	1.33	1.37
2	AB	2067	G	C2-N2	5.43	1.40	1.34
2	AB	2102	G	N9-C4	5.43	1.42	1.38
2	AB	2223	G	N7-C5	5.43	1.42	1.39
2	AB	2460	U	N3-C4	5.43	1.43	1.38
35	BA	128	G	C2-N3	5.43	1.37	1.32
35	BA	217	C	N1-C6	5.43	1.40	1.37
35	BA	430	A	N9-C4	5.43	1.41	1.37
35	BA	1124	G	C4'-O4'	-5.43	1.38	1.45
2	AB	8	C	C2'-O2'	5.43	1.48	1.41
2	AB	484	C	N1-C2	5.43	1.45	1.40
2	AB	651	G	C5-C6	5.43	1.47	1.42
2	AB	1901	A	C6-N6	5.43	1.38	1.33
2	AB	2475	C	N1-C6	5.43	1.40	1.37
35	BA	1327	C	C4-C5	5.43	1.47	1.43
1	AA	5	U	C2-N3	5.43	1.41	1.37
1	AA	108	A	N9-C4	-5.43	1.34	1.37
2	AB	80	G	N9-C8	5.43	1.41	1.37
2	AB	528	A	P-O5'	-5.43	1.54	1.59
2	AB	697	G	N1-C2	5.43	1.42	1.37
2	AB	799	G	C8-N7	5.43	1.34	1.30
2	AB	1044	C	C2-N3	5.43	1.40	1.35
2	AB	1833	C	N1-C6	5.43	1.40	1.37
2	AB	2798	U	C2-O2	5.43	1.27	1.22
35	BA	265	G	N3-C4	5.43	1.39	1.35
35	BA	702	A	P-O5'	5.43	1.65	1.59
35	BA	765	G	O4'-C1'	-5.43	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1203	C	C5-C6	5.43	1.38	1.34
43	BI	87	SER	CA-CB	5.43	1.61	1.52
2	AB	1192	G	C5-C4	-5.43	1.34	1.38
2	AB	2362	C	C4'-O4'	-5.43	1.38	1.45
2	AB	2518	A	P-O5'	5.43	1.65	1.59
2	AB	2654	A	C6-N1	-5.43	1.31	1.35
14	AN	10	GLU	CD-OE1	-5.43	1.19	1.25
35	BA	507	C	N1-C6	5.43	1.40	1.37
35	BA	566	G	N3-C4	5.43	1.39	1.35
2	AB	54	G	C2-N3	5.43	1.37	1.32
2	AB	318	C	P-O5'	5.43	1.65	1.59
2	AB	907	G	C2'-C1'	5.43	1.59	1.53
2	AB	1378	A	C4'-O4'	-5.43	1.38	1.45
2	AB	1501	G	C2'-O2'	5.43	1.48	1.41
2	AB	1512	C	C4'-O4'	-5.43	1.38	1.45
2	AB	1781	U	C2-N3	5.43	1.41	1.37
2	AB	2331	G	N9-C8	5.43	1.41	1.37
2	AB	2532	G	C5-C4	-5.43	1.34	1.38
2	AB	2770	G	O4'-C1'	5.43	1.48	1.41
35	BA	96	U	C4'-O4'	-5.43	1.38	1.45
35	BA	272	C	C4-C5	5.43	1.47	1.43
35	BA	399	G	P-O5'	5.43	1.65	1.59
35	BA	416	G	C4'-O4'	-5.43	1.38	1.45
35	BA	420	U	C4-O4	5.43	1.27	1.23
35	BA	1473	G	C5'-C4'	5.43	1.57	1.51
2	AB	54	G	C3'-C2'	-5.42	1.46	1.52
2	AB	279	A	C3'-C2'	-5.42	1.46	1.52
2	AB	779	U	C5'-C4'	5.42	1.57	1.51
2	AB	1284	A	C3'-C2'	5.42	1.58	1.52
2	AB	1963	U	C3'-C2'	5.42	1.58	1.52
2	AB	2228	G	C4'-O4'	-5.42	1.38	1.45
2	AB	2502	G	C2-N3	5.42	1.37	1.32
2	AB	2822	G	C2'-C1'	-5.42	1.47	1.53
2	AB	2873	A	C5-C6	5.42	1.46	1.41
35	BA	176	C	C4'-O4'	-5.42	1.38	1.45
35	BA	230	G	C2-N2	-5.42	1.29	1.34
35	BA	642	A	C4'-O4'	-5.42	1.38	1.45
35	BA	667	G	C2'-C1'	-5.42	1.47	1.53
35	BA	1012	A	C5-C4	-5.42	1.34	1.38
35	BA	1090	U	C4'-C3'	-5.42	1.47	1.52
2	AB	49	A	C3'-O3'	5.42	1.49	1.42
2	AB	856	G	C5-C6	5.42	1.47	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1674	G	N9-C4	-5.42	1.33	1.38
2	AB	2214	C	C5-C6	5.42	1.38	1.34
35	BA	1385	G	C4'-O4'	-5.42	1.38	1.45
2	AB	350	G	C6-N1	-5.42	1.35	1.39
2	AB	615	U	C3'-C2'	5.42	1.58	1.52
2	AB	655	A	P-O5'	5.42	1.65	1.59
2	AB	1064	C	N3-C4	5.42	1.37	1.33
2	AB	1678	A	N3-C4	5.42	1.38	1.34
2	AB	2047	C	C4-C5	5.42	1.47	1.43
2	AB	2324	U	C4-O4	-5.42	1.19	1.23
2	AB	2744	G	C4'-O4'	-5.42	1.38	1.45
35	BA	364	A	P-O5'	5.42	1.65	1.59
35	BA	379	C	N3-C4	-5.42	1.30	1.33
35	BA	418	C	C2-O2	-5.42	1.19	1.24
35	BA	1387	G	O3'-P	5.42	1.67	1.61
35	BA	1416	G	C3'-O3'	5.42	1.49	1.42
35	BA	1536	C	C2'-O2'	5.42	1.48	1.41
1	AA	7	G	C5-C4	5.42	1.42	1.38
2	AB	544	C	N3-C4	-5.42	1.30	1.33
2	AB	813	U	C4'-C3'	5.42	1.59	1.53
2	AB	881	G	C3'-O3'	-5.42	1.34	1.42
2	AB	2676	C	P-O5'	5.42	1.65	1.59
35	BA	368	U	C4-C5	5.42	1.48	1.43
35	BA	609	A	N9-C4	-5.42	1.34	1.37
35	BA	1163	A	C2'-C1'	-5.42	1.47	1.53
2	AB	408	G	C2-N3	5.42	1.37	1.32
2	AB	978	G	N3-C4	5.42	1.39	1.35
2	AB	1920	C	C4'-O4'	-5.42	1.38	1.45
2	AB	2141	G	C5-C4	-5.42	1.34	1.38
2	AB	2626	C	P-O5'	5.42	1.65	1.59
15	AO	111	GLU	CD-OE1	-5.42	1.19	1.25
35	BA	883	C	N1-C2	5.42	1.45	1.40
46	BL	124	PRO	N-CD	-5.42	1.40	1.47
1	AA	90	C	P-O5'	5.42	1.65	1.59
2	AB	974	G	C4'-O4'	-5.42	1.38	1.45
2	AB	1675	C	C4-C5	-5.42	1.38	1.43
2	AB	1876	A	N7-C5	5.42	1.42	1.39
2	AB	2242	G	P-O5'	5.42	1.65	1.59
2	AB	2842	G	C2-N3	5.42	1.37	1.32
35	BA	44	A	C5-C4	-5.42	1.34	1.38
35	BA	168	G	N9-C4	-5.42	1.33	1.38
35	BA	337	G	C6-O6	-5.42	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	496	A	N9-C8	5.42	1.42	1.37
35	BA	782	A	N7-C5	5.42	1.42	1.39
35	BA	910	C	C5'-C4'	5.42	1.57	1.51
35	BA	1334	G	N7-C5	5.42	1.42	1.39
38	BD	60	A	N3-C4	5.42	1.38	1.34
45	BK	57	GLU	CD-OE1	5.42	1.31	1.25
1	AA	112	G	N9-C4	5.42	1.42	1.38
2	AB	834	G	C2'-O2'	5.42	1.48	1.41
2	AB	983	A	C6-N6	5.42	1.38	1.33
2	AB	1404	C	C5'-C4'	5.42	1.57	1.51
2	AB	2568	U	C5-C6	5.42	1.39	1.34
35	BA	244	U	N1-C2	5.42	1.43	1.38
35	BA	450	G	N3-C4	5.42	1.39	1.35
35	BA	897	C	N1-C6	5.42	1.40	1.37
35	BA	1218	C	C2'-C1'	5.42	1.59	1.53
2	AB	801	G	C6-N1	-5.41	1.35	1.39
2	AB	1399	C	C4-C5	-5.41	1.38	1.43
2	AB	1460	U	C4-C5	5.41	1.48	1.43
2	AB	1612	C	C5'-C4'	5.41	1.57	1.51
2	AB	1815	A	C5-C4	5.41	1.42	1.38
2	AB	2110	G	C2-N3	5.41	1.37	1.32
2	AB	2394	C	C4'-O4'	-5.41	1.38	1.45
2	AB	2530	A	P-O5'	5.41	1.65	1.59
2	AB	2863	C	N3-C4	5.41	1.37	1.33
35	BA	591	U	O5'-C5'	-5.41	1.34	1.42
35	BA	1014	A	C4'-O4'	-5.41	1.38	1.45
35	BA	1352	C	C5-C6	5.41	1.38	1.34
36	BB	33	U	O3'-P	5.41	1.67	1.61
37	BC	56	G	C6-O6	5.41	1.29	1.24
1	AA	26	C	C2-O2	-5.41	1.19	1.24
1	AA	112	G	C5'-C4'	5.41	1.57	1.51
2	AB	1596	A	N7-C5	5.41	1.42	1.39
2	AB	1673	G	P-O5'	5.41	1.65	1.59
2	AB	2012	G	C2-N3	5.41	1.37	1.32
2	AB	2080	A	N7-C5	5.41	1.42	1.39
35	BA	7	A	N3-C4	5.41	1.38	1.34
35	BA	324	G	C2-N2	-5.41	1.29	1.34
35	BA	874	G	C2-N3	5.41	1.37	1.32
35	BA	1234	C	C2'-C1'	-5.41	1.47	1.53
35	BA	1400	C	N1-C6	5.41	1.40	1.37
1	AA	25	U	C5'-C4'	5.41	1.57	1.51
1	AA	29	A	O5'-C5'	-5.41	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	608	A	N1-C2	5.41	1.39	1.34
2	AB	669	G	N9-C4	5.41	1.42	1.38
2	AB	749	A	C2-N3	-5.41	1.28	1.33
2	AB	1077	A	O4'-C1'	5.41	1.48	1.41
2	AB	1186	G	C4'-O4'	-5.41	1.38	1.45
2	AB	2249	U	C2-O2	5.41	1.27	1.22
2	AB	2398	U	C4-C5	5.41	1.48	1.43
2	AB	2588	G	C1'-N9	5.41	1.56	1.48
35	BA	220	G	N3-C4	5.41	1.39	1.35
35	BA	702	A	C5-C4	-5.41	1.34	1.38
35	BA	1150	A	C4'-C3'	5.41	1.59	1.53
1	AA	89	U	C4-C5	5.41	1.48	1.43
2	AB	46	G	N1-C2	5.41	1.42	1.37
2	AB	96	C	C5-C6	-5.41	1.30	1.34
2	AB	541	A	N3-C4	-5.41	1.31	1.34
2	AB	612	G	N1-C2	5.41	1.42	1.37
2	AB	825	A	N7-C5	-5.41	1.36	1.39
2	AB	1385	A	N9-C4	5.41	1.41	1.37
2	AB	2225	A	O4'-C1'	5.41	1.48	1.41
35	BA	240	G	P-O5'	5.41	1.65	1.59
35	BA	1353	G	P-O5'	5.41	1.65	1.59
35	BA	1404	C	C5-C6	5.41	1.38	1.34
36	BB	52	A	O3'-P	5.41	1.67	1.61
38	BD	18	U	N1-C2	5.41	1.43	1.38
2	AB	898	C	C3'-C2'	5.41	1.58	1.52
2	AB	1765	U	C2-N3	5.41	1.41	1.37
2	AB	2752	C	C3'-O3'	5.41	1.49	1.42
35	BA	137	U	C4'-C3'	5.41	1.59	1.53
35	BA	526	C	C2-N3	5.41	1.40	1.35
35	BA	988	G	C2-N2	-5.41	1.29	1.34
35	BA	1064	G	C2-N2	-5.41	1.29	1.34
36	BB	26	A	C5-C4	-5.41	1.34	1.38
38	BD	41	C	C4-N4	-5.41	1.29	1.33
2	AB	661	A	C5-C4	-5.41	1.34	1.38
2	AB	1022	G	C2-N3	5.41	1.37	1.32
2	AB	1766	G	C8-N7	-5.41	1.27	1.30
35	BA	1161	C	P-O5'	5.41	1.65	1.59
35	BA	1182	G	N7-C5	5.41	1.42	1.39
2	AB	439	A	C4'-O4'	-5.40	1.38	1.45
2	AB	796	C	C2-N3	-5.40	1.31	1.35
2	AB	1257	C	C4'-C3'	5.40	1.59	1.53
2	AB	1346	G	C2-N3	5.40	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2379	G	N9-C8	5.40	1.41	1.37
35	BA	449	G	N7-C5	5.40	1.42	1.39
35	BA	461	A	C5-C6	5.40	1.46	1.41
35	BA	675	A	C8-N7	5.40	1.35	1.31
35	BA	956	U	C2-N3	5.40	1.41	1.37
1	AA	69	G	C5-C4	-5.40	1.34	1.38
2	AB	254	G	C2-N3	5.40	1.37	1.32
2	AB	427	U	C2'-C1'	5.40	1.59	1.53
2	AB	480	A	C2-N3	-5.40	1.28	1.33
2	AB	594	U	N3-C4	5.40	1.43	1.38
2	AB	647	G	C2-N3	5.40	1.37	1.32
2	AB	717	C	N1-C6	5.40	1.40	1.37
2	AB	742	A	N1-C2	5.40	1.39	1.34
2	AB	820	A	N7-C5	-5.40	1.36	1.39
2	AB	975	A	C8-N7	-5.40	1.27	1.31
2	AB	1775	U	C5'-C4'	5.40	1.57	1.51
2	AB	1836	C	P-O5'	5.40	1.65	1.59
2	AB	2812	G	O3'-P	5.40	1.67	1.61
35	BA	162	A	O3'-P	-5.40	1.54	1.61
35	BA	542	G	P-O5'	5.40	1.65	1.59
35	BA	683	G	N9-C4	5.40	1.42	1.38
35	BA	898	G	C8-N7	5.40	1.34	1.30
1	AA	106	G	P-O5'	5.40	1.65	1.59
2	AB	155	A	N9-C8	-5.40	1.33	1.37
2	AB	1365	A	C3'-C2'	5.40	1.58	1.52
2	AB	1603	A	N3-C4	-5.40	1.31	1.34
2	AB	1687	G	C5'-C4'	5.40	1.57	1.51
2	AB	2112	G	N9-C8	5.40	1.41	1.37
2	AB	2451	A	C4'-C3'	-5.40	1.47	1.52
2	AB	2821	A	C8-N7	5.40	1.35	1.31
4	AD	170	TYR	CG-CD1	5.40	1.46	1.39
35	BA	51	A	C2'-C1'	-5.40	1.47	1.53
35	BA	266	G	N7-C5	5.40	1.42	1.39
35	BA	903	G	C5-C6	-5.40	1.36	1.42
35	BA	1096	C	C4'-O4'	-5.40	1.38	1.45
35	BA	1345	U	C2-N3	5.40	1.41	1.37
35	BA	1435	G	P-O5'	5.40	1.65	1.59
49	BO	13	ARG	NE-CZ	5.40	1.40	1.33
2	AB	1972	G	C8-N7	-5.40	1.27	1.30
2	AB	2839	G	C2-N3	5.40	1.37	1.32
2	AB	685	A	N7-C5	5.40	1.42	1.39
2	AB	1588	G	C6-N1	5.40	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1961	C	C5-C6	5.40	1.38	1.34
2	AB	2728	U	P-O5'	5.40	1.65	1.59
2	AB	2762	C	C5'-C4'	5.40	1.57	1.51
2	AB	2859	G	C5'-C4'	5.40	1.57	1.51
38	BD	39	A	C4'-O4'	-5.40	1.38	1.45
46	BL	63	TYR	CG-CD2	5.40	1.46	1.39
1	AA	100	G	C2-N3	5.40	1.37	1.32
2	AB	1418	G	C2-N2	-5.40	1.29	1.34
2	AB	1909	C	N3-C4	5.40	1.37	1.33
2	AB	1971	U	N1-C2	5.40	1.43	1.38
2	AB	2002	G	N9-C8	5.40	1.41	1.37
2	AB	2878	U	N1-C6	5.40	1.42	1.38
2	AB	142	A	C6-N1	5.39	1.39	1.35
2	AB	877	A	N3-C4	5.39	1.38	1.34
2	AB	897	C	C2-N3	5.39	1.40	1.35
2	AB	915	C	P-O5'	5.39	1.65	1.59
2	AB	1069	A	N3-C4	5.39	1.38	1.34
2	AB	1426	G	C2'-O2'	-5.39	1.34	1.41
2	AB	2085	U	C5-C6	5.39	1.39	1.34
3	AC	213	SER	CB-OG	-5.39	1.35	1.42
35	BA	863	U	P-O5'	5.39	1.65	1.59
36	BB	45	U	C5'-C4'	5.39	1.57	1.51
2	AB	134	G	C2'-C1'	5.39	1.59	1.53
2	AB	416	U	C5'-C4'	5.39	1.57	1.51
2	AB	762	U	C4'-C3'	5.39	1.59	1.53
35	BA	63	C	C2'-C1'	5.39	1.59	1.53
35	BA	990	C	C4-N4	-5.39	1.29	1.33
2	AB	396	G	C4'-O4'	-5.39	1.38	1.45
2	AB	2198	A	O3'-P	5.39	1.67	1.61
2	AB	2700	A	C2'-O2'	5.39	1.48	1.41
35	BA	233	C	C5'-C4'	5.39	1.57	1.51
35	BA	707	U	C5'-C4'	5.39	1.57	1.51
41	BG	191	SER	CB-OG	5.39	1.49	1.42
2	AB	138	U	N3-C4	5.39	1.43	1.38
2	AB	405	U	C2-O2	5.39	1.27	1.22
2	AB	609	A	N3-C4	5.39	1.38	1.34
2	AB	816	C	O3'-P	5.39	1.67	1.61
2	AB	1088	A	C8-N7	5.39	1.35	1.31
2	AB	1483	G	C6-N1	5.39	1.43	1.39
2	AB	1699	G	C2-N2	-5.39	1.29	1.34
2	AB	1886	U	N1-C6	-5.39	1.33	1.38
2	AB	1899	A	N3-C4	5.39	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2013	A	C6-N6	-5.39	1.29	1.33
2	AB	2554	U	C4'-O4'	-5.39	1.38	1.45
2	AB	2783	U	C2-N3	5.39	1.41	1.37
35	BA	412	A	C4'-C3'	5.39	1.59	1.53
35	BA	699	C	N1-C6	5.39	1.40	1.37
35	BA	879	C	N3-C4	-5.39	1.30	1.33
35	BA	1413	A	C8-N7	-5.39	1.27	1.31
2	AB	810	U	C2-N3	5.39	1.41	1.37
2	AB	1548	A	C8-N7	5.39	1.35	1.31
1	AA	23	G	C2-N3	5.39	1.37	1.32
2	AB	128	C	C4-C5	5.39	1.47	1.43
2	AB	771	G	C4'-O4'	-5.39	1.38	1.45
2	AB	968	C	C5'-C4'	5.39	1.57	1.51
2	AB	1677	A	C2'-O2'	5.39	1.48	1.41
2	AB	2582	G	P-O5'	5.39	1.65	1.59
2	AB	2797	U	C2-O2	5.39	1.27	1.22
35	BA	15	G	C5-C4	5.39	1.42	1.38
35	BA	208	U	N1-C6	5.39	1.42	1.38
35	BA	468	A	O3'-P	5.39	1.67	1.61
35	BA	1025	U	C4'-C3'	-5.39	1.47	1.52
35	BA	1198	G	C3'-C2'	5.39	1.58	1.52
35	BA	1446	A	N7-C5	-5.39	1.36	1.39
35	BA	1499	A	N3-C4	5.39	1.38	1.34
2	AB	413	C	C5-C6	5.38	1.38	1.34
2	AB	1311	G	C6-N1	5.38	1.43	1.39
2	AB	1503	A	P-O5'	5.38	1.65	1.59
2	AB	1519	G	N1-C2	5.38	1.42	1.37
2	AB	1880	U	C2-N3	5.38	1.41	1.37
22	AV	95	PHE	CE1-CZ	5.38	1.47	1.37
35	BA	232	G	P-O5'	-5.38	1.54	1.59
35	BA	369	G	N9-C8	-5.38	1.34	1.37
35	BA	1128	C	C4-C5	5.38	1.47	1.43
2	AB	2340	A	N3-C4	5.38	1.38	1.34
2	AB	2490	G	C5-C4	5.38	1.42	1.38
2	AB	2685	G	C4'-O4'	-5.38	1.38	1.45
2	AB	2751	G	C4'-O4'	-5.38	1.38	1.45
35	BA	70	U	C5'-C4'	5.38	1.57	1.51
35	BA	652	U	C5'-C4'	5.38	1.57	1.51
35	BA	1504	G	C2-N3	5.38	1.37	1.32
2	AB	41	C	N1-C6	5.38	1.40	1.37
2	AB	224	U	C3'-O3'	5.38	1.49	1.42
2	AB	252	G	C5-C4	-5.38	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	389	G	N9-C8	5.38	1.41	1.37
2	AB	595	C	N1-C6	-5.38	1.33	1.37
2	AB	729	G	C4'-O4'	-5.38	1.38	1.45
2	AB	1290	C	C3'-C2'	-5.38	1.46	1.52
2	AB	1513	U	C3'-C2'	5.38	1.58	1.52
2	AB	1887	C	C1'-N1	5.38	1.56	1.48
2	AB	1935	G	O3'-P	5.38	1.67	1.61
2	AB	1959	G	C2-N2	-5.38	1.29	1.34
2	AB	2029	G	N3-C4	5.38	1.39	1.35
35	BA	964	A	N9-C4	5.38	1.41	1.37
2	AB	654	A	N3-C4	5.38	1.38	1.34
2	AB	870	U	P-O5'	5.38	1.65	1.59
35	BA	627	G	C5-C4	5.38	1.42	1.38
35	BA	1138	G	C3'-C2'	5.38	1.58	1.52
2	AB	12	U	C2'-C1'	5.38	1.59	1.53
2	AB	261	G	N7-C5	-5.38	1.36	1.39
2	AB	463	G	N7-C5	5.38	1.42	1.39
2	AB	1148	U	P-O5'	5.38	1.65	1.59
2	AB	1983	G	C2-N3	5.38	1.37	1.32
2	AB	2331	G	C6-N1	5.38	1.43	1.39
2	AB	2338	C	N1-C6	5.38	1.40	1.37
2	AB	2434	A	C6-N6	-5.38	1.29	1.33
2	AB	2474	U	O3'-P	5.38	1.67	1.61
2	AB	2713	U	O3'-P	5.38	1.67	1.61
35	BA	876	C	N1-C6	5.38	1.40	1.37
35	BA	1365	G	C5'-C4'	5.38	1.57	1.51
2	AB	91	A	O3'-P	5.38	1.67	1.61
2	AB	168	G	C4'-C3'	-5.38	1.47	1.52
2	AB	186	G	N7-C5	5.38	1.42	1.39
2	AB	465	G	C6-N1	-5.38	1.35	1.39
2	AB	566	U	C2-N3	5.38	1.41	1.37
2	AB	1096	A	N3-C4	5.38	1.38	1.34
2	AB	1304	A	C6-N6	5.38	1.38	1.33
2	AB	1523	U	N3-C4	-5.38	1.33	1.38
2	AB	1662	U	C4-C5	5.38	1.48	1.43
2	AB	1798	U	C2'-C1'	5.38	1.59	1.53
2	AB	2776	A	C5-C6	5.38	1.45	1.41
35	BA	476	U	C4-C5	5.38	1.48	1.43
35	BA	488	C	C2'-O2'	-5.38	1.34	1.41
35	BA	1335	U	C2-N3	5.38	1.41	1.37
2	AB	1007	C	C5-C6	5.38	1.38	1.34
2	AB	1977	A	N9-C4	-5.38	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	AR	98	TYR	CG-CD2	5.38	1.46	1.39
35	BA	547	A	N3-C4	5.38	1.38	1.34
2	AB	166	U	N3-C4	5.37	1.43	1.38
2	AB	321	U	C5-C6	5.37	1.39	1.34
2	AB	366	C	N1-C2	5.37	1.45	1.40
2	AB	661	A	C3'-O3'	5.37	1.49	1.42
2	AB	2189	U	C2-N3	5.37	1.41	1.37
2	AB	2307	G	C2-N3	5.37	1.37	1.32
35	BA	424	G	O4'-C1'	5.37	1.48	1.41
35	BA	646	G	N9-C4	-5.37	1.33	1.38
2	AB	111	A	C5-C4	-5.37	1.34	1.38
2	AB	956	G	C2'-C1'	5.37	1.59	1.53
2	AB	1088	A	C2'-O2'	5.37	1.48	1.41
2	AB	1979	U	C2'-C1'	-5.37	1.47	1.53
2	AB	2235	G	C3'-C2'	5.37	1.58	1.52
2	AB	2801	G	O3'-P	5.37	1.67	1.61
10	AJ	98	PHE	CG-CD2	5.37	1.46	1.38
35	BA	55	A	C2-N3	5.37	1.38	1.33
35	BA	1310	G	N1-C2	5.37	1.42	1.37
35	BA	1410	A	N3-C4	5.37	1.38	1.34
2	AB	1047	G	N3-C4	-5.37	1.31	1.35
2	AB	1232	G	C3'-O3'	5.37	1.49	1.42
2	AB	1538	G	N9-C8	5.37	1.41	1.37
2	AB	2337	G	C2-N2	-5.37	1.29	1.34
35	BA	1514	G	N9-C8	5.37	1.41	1.37
2	AB	326	G	C5-C4	5.37	1.42	1.38
2	AB	1744	A	C2-N3	5.37	1.38	1.33
2	AB	2026	U	N1-C2	5.37	1.43	1.38
2	AB	2144	G	C2-N2	-5.37	1.29	1.34
2	AB	2336	A	P-O5'	5.37	1.65	1.59
2	AB	2484	G	P-OP2	-5.37	1.39	1.49
2	AB	2824	C	C4-C5	5.37	1.47	1.43
35	BA	136	C	O3'-P	5.37	1.67	1.61
35	BA	1388	C	P-O5'	-5.37	1.54	1.59
35	BA	1464	U	C4'-O4'	-5.37	1.38	1.45
36	BB	39	A	C5'-C4'	5.37	1.57	1.51
2	AB	725	G	C4'-O4'	-5.37	1.38	1.45
2	AB	806	C	C2-O2	-5.37	1.19	1.24
2	AB	1455	G	N3-C4	5.37	1.39	1.35
2	AB	1573	G	N1-C2	5.37	1.42	1.37
2	AB	1721	G	C3'-O3'	-5.37	1.34	1.42
2	AB	2363	G	C8-N7	5.37	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2704	C	O3'-P	5.37	1.67	1.61
34	A7	28	SER	CA-CB	5.37	1.61	1.52
2	AB	877	A	O3'-P	5.37	1.67	1.61
2	AB	1224	U	C5'-C4'	5.37	1.57	1.51
2	AB	1357	C	N1-C6	5.37	1.40	1.37
2	AB	1688	U	O5'-C5'	-5.37	1.34	1.42
2	AB	2439	A	O3'-P	5.37	1.67	1.61
2	AB	2846	G	C8-N7	-5.37	1.27	1.30
2	AB	2904	U	N1-C2	5.37	1.43	1.38
8	AH	93	TYR	CE1-CZ	5.37	1.45	1.38
35	BA	820	U	C2-N3	5.37	1.41	1.37
36	BB	10	G	C4'-C3'	5.37	1.59	1.53
36	BB	69	C	O3'-P	5.37	1.67	1.61
2	AB	218	A	C3'-O3'	5.36	1.49	1.42
2	AB	891	G	P-O5'	5.36	1.65	1.59
2	AB	1184	U	C4'-O4'	-5.36	1.38	1.45
2	AB	1308	A	C5'-C4'	5.36	1.57	1.51
2	AB	2256	G	O4'-C1'	5.36	1.48	1.41
2	AB	2715	C	C2-N3	5.36	1.40	1.35
35	BA	658	C	N1-C2	5.36	1.45	1.40
35	BA	739	C	N3-C4	5.36	1.37	1.33
35	BA	929	G	N7-C5	-5.36	1.36	1.39
2	AB	921	C	C4-N4	-5.36	1.29	1.33
2	AB	2057	G	C5-C4	-5.36	1.34	1.38
35	BA	1400	C	C1'-N1	5.36	1.56	1.48
2	AB	204	A	O3'-P	5.36	1.67	1.61
2	AB	1025	G	C4'-O4'	-5.36	1.38	1.45
2	AB	1029	A	C5-C6	5.36	1.45	1.41
2	AB	1131	G	C5-C4	-5.36	1.34	1.38
2	AB	2306	C	N1-C6	5.36	1.40	1.37
2	AB	2346	A	C2'-O2'	5.36	1.48	1.41
35	BA	658	C	C5'-C4'	5.36	1.57	1.51
35	BA	1539	C	C2-O2	-5.36	1.19	1.24
37	BC	56	G	O3'-P	-5.36	1.54	1.61
2	AB	14	A	C6-N6	5.36	1.38	1.33
2	AB	386	G	O3'-P	5.36	1.67	1.61
2	AB	912	C	N1-C6	5.36	1.40	1.37
2	AB	2532	G	O3'-P	5.36	1.67	1.61
35	BA	1482	G	C2-N3	5.36	1.37	1.32
37	BC	23	C	C2-O2	-5.36	1.19	1.24
2	AB	76	C	O5'-C5'	-5.36	1.34	1.42
2	AB	710	U	C4-C5	5.36	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1079	C	P-O5'	-5.36	1.54	1.59
2	AB	2237	G	C3'-O3'	5.36	1.49	1.42
35	BA	107	G	C2'-C1'	5.36	1.59	1.53
35	BA	396	C	C5'-C4'	5.36	1.57	1.51
35	BA	607	A	C8-N7	5.36	1.35	1.31
35	BA	625	U	C3'-C2'	5.36	1.58	1.52
35	BA	749	A	P-O5'	5.36	1.65	1.59
35	BA	1095	U	O3'-P	-5.36	1.54	1.61
35	BA	1187	G	C5-C4	-5.36	1.34	1.38
2	AB	271	G	O3'-P	5.36	1.67	1.61
2	AB	490	C	C5'-C4'	5.36	1.57	1.51
2	AB	550	C	P-O5'	5.36	1.65	1.59
2	AB	552	U	C5-C6	5.36	1.39	1.34
2	AB	1831	G	N9-C8	5.36	1.41	1.37
2	AB	2022	U	N3-C4	5.36	1.43	1.38
2	AB	2180	U	C5'-C4'	5.36	1.57	1.51
2	AB	2247	A	N7-C5	-5.36	1.36	1.39
2	AB	2341	G	C5-C4	-5.36	1.34	1.38
2	AB	2873	A	P-O5'	5.36	1.65	1.59
35	BA	277	C	N3-C4	5.36	1.37	1.33
35	BA	1054	C	N1-C6	5.36	1.40	1.37
35	BA	1108	G	C2'-C1'	5.36	1.59	1.53
35	BA	1139	G	C2-N2	-5.36	1.29	1.34
35	BA	1211	U	N1-C2	5.36	1.43	1.38
35	BA	1336	C	N1-C2	-5.36	1.34	1.40
36	BB	9	A	C2-N3	-5.36	1.28	1.33
36	BB	75	C	C5-C6	5.36	1.38	1.34
38	BD	54	G	C6-N1	5.36	1.43	1.39
2	AB	442	G	N7-C5	-5.35	1.36	1.39
2	AB	1216	G	N9-C4	-5.35	1.33	1.38
2	AB	1303	G	P-O5'	5.35	1.65	1.59
35	BA	1036	A	P-O5'	5.35	1.65	1.59
35	BA	1388	C	C1'-N1	5.35	1.56	1.48
38	BD	36	A	N9-C8	-5.35	1.33	1.37
38	BD	51	U	O4'-C1'	5.35	1.48	1.41
2	AB	298	G	N1-C2	5.35	1.42	1.37
2	AB	324	A	C5-C6	-5.35	1.36	1.41
2	AB	530	G	N1-C2	5.35	1.42	1.37
2	AB	1477	A	C4'-C3'	5.35	1.59	1.53
2	AB	2790	U	C2'-C1'	5.35	1.59	1.53
49	BO	93	ARG	NE-CZ	5.35	1.40	1.33
2	AB	340	A	C4'-C3'	5.35	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1014	A	N9-C4	5.35	1.41	1.37
2	AB	1028	A	C6-N1	-5.35	1.31	1.35
2	AB	1248	G	C3'-O3'	5.35	1.49	1.42
2	AB	2874	C	C4'-O4'	-5.35	1.38	1.45
10	AJ	129	PRO	N-CD	-5.35	1.40	1.47
35	BA	273	U	C2-N3	5.35	1.41	1.37
35	BA	643	C	C1'-N1	5.35	1.56	1.48
35	BA	1105	A	C5-C4	-5.35	1.35	1.38
2	AB	140	C	N1-C2	5.35	1.45	1.40
2	AB	941	A	C5-C6	5.35	1.45	1.41
2	AB	1144	A	C6-N6	-5.35	1.29	1.33
2	AB	1176	U	C2'-O2'	-5.35	1.34	1.41
2	AB	1264	A	C5-C4	-5.35	1.35	1.38
2	AB	1400	U	C1'-N1	5.35	1.56	1.48
2	AB	1424	G	N3-C4	5.35	1.39	1.35
2	AB	2638	G	C2-N3	5.35	1.37	1.32
7	AG	19	PHE	CG-CD2	5.35	1.46	1.38
35	BA	76	G	C5-C4	-5.35	1.34	1.38
35	BA	446	G	C5-C6	5.35	1.47	1.42
35	BA	1076	U	C4-C5	5.35	1.48	1.43
35	BA	1394	A	N9-C8	5.35	1.42	1.37
2	AB	358	U	C4'-O4'	-5.35	1.38	1.45
2	AB	401	A	N7-C5	-5.35	1.36	1.39
2	AB	516	C	C2'-O2'	5.35	1.48	1.41
2	AB	1246	A	C5-C4	5.35	1.42	1.38
2	AB	1250	G	C5'-C4'	5.35	1.57	1.51
2	AB	1319	C	C4-N4	5.35	1.38	1.33
2	AB	1407	G	N9-C4	5.35	1.42	1.38
2	AB	2640	G	C5-C6	5.35	1.47	1.42
2	AB	2655	G	N9-C8	5.35	1.41	1.37
35	BA	250	A	O4'-C1'	5.35	1.48	1.41
35	BA	305	G	N1-C2	5.35	1.42	1.37
35	BA	1458	G	N9-C4	5.35	1.42	1.38
37	BC	18	A	C5-C4	-5.35	1.35	1.38
2	AB	86	G	O3'-P	5.35	1.67	1.61
2	AB	202	U	N1-C6	-5.35	1.33	1.38
2	AB	597	G	C4'-O4'	-5.35	1.38	1.45
2	AB	1567	G	C6-N1	-5.35	1.35	1.39
2	AB	1937	A	C6-N1	-5.35	1.31	1.35
2	AB	2060	A	N1-C2	-5.35	1.29	1.34
35	BA	369	G	C2-N2	-5.35	1.29	1.34
35	BA	590	U	N3-C4	-5.35	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	618	C	N1-C6	-5.35	1.33	1.37
35	BA	933	G	C4'-O4'	-5.35	1.38	1.45
35	BA	949	A	P-O5'	5.35	1.65	1.59
1	AA	14	U	C2'-C1'	5.34	1.59	1.53
1	AA	34	A	C6-N6	-5.34	1.29	1.33
2	AB	1100	C	C2'-C1'	5.34	1.59	1.53
2	AB	1393	A	N3-C4	5.34	1.38	1.34
2	AB	1456	G	P-O5'	5.34	1.65	1.59
2	AB	1704	C	C4'-O4'	-5.34	1.38	1.45
2	AB	1870	C	N3-C4	5.34	1.37	1.33
2	AB	1878	G	C5-C6	5.34	1.47	1.42
2	AB	2384	U	N1-C2	5.34	1.43	1.38
2	AB	2559	C	C4'-O4'	-5.34	1.38	1.45
35	BA	22	G	C5-C4	-5.34	1.34	1.38
35	BA	333	U	N1-C2	5.34	1.43	1.38
35	BA	487	A	P-O5'	5.34	1.65	1.59
35	BA	634	C	C5-C6	5.34	1.38	1.34
35	BA	1152	A	C2'-O2'	5.34	1.48	1.41
35	BA	1434	A	C5-C6	5.34	1.45	1.41
1	AA	14	U	C4'-C3'	5.34	1.59	1.53
2	AB	57	C	C4-C5	5.34	1.47	1.43
2	AB	1788	C	P-O5'	5.34	1.65	1.59
2	AB	2871	U	C4'-O4'	-5.34	1.38	1.45
35	BA	112	G	C3'-C2'	-5.34	1.46	1.52
35	BA	460	A	C6-N6	5.34	1.38	1.33
35	BA	585	G	N3-C4	5.34	1.39	1.35
35	BA	653	U	C3'-C2'	5.34	1.58	1.52
35	BA	798	U	C5-C6	5.34	1.39	1.34
35	BA	1265	C	C4-C5	5.34	1.47	1.43
2	AB	822	G	C8-N7	-5.34	1.27	1.30
2	AB	1605	C	O4'-C1'	5.34	1.48	1.41
2	AB	1605	C	C2-N3	5.34	1.40	1.35
35	BA	322	C	N1-C2	5.34	1.45	1.40
35	BA	335	C	N3-C4	5.34	1.37	1.33
35	BA	922	G	C2-N3	5.34	1.37	1.32
35	BA	1073	U	C5-C6	5.34	1.39	1.34
38	BD	28	U	C4'-O4'	-5.34	1.38	1.45
2	AB	522	A	P-O5'	5.34	1.65	1.59
2	AB	753	A	N3-C4	5.34	1.38	1.34
2	AB	820	A	C4'-O4'	-5.34	1.38	1.45
2	AB	1173	U	C4-C5	5.34	1.48	1.43
2	AB	2048	G	O4'-C1'	5.34	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2396	G	N1-C2	5.34	1.42	1.37
35	BA	172	A	C2-N3	-5.34	1.28	1.33
35	BA	1300	G	C3'-O3'	5.34	1.49	1.42
35	BA	1513	A	C6-N1	-5.34	1.31	1.35
2	AB	781	A	N9-C4	5.34	1.41	1.37
2	AB	869	G	C5-C4	5.34	1.42	1.38
2	AB	1504	A	C5'-C4'	5.34	1.57	1.51
2	AB	1993	U	C3'-C2'	5.34	1.58	1.52
2	AB	2014	A	C6-N6	5.34	1.38	1.33
2	AB	2138	G	C8-N7	5.34	1.34	1.30
2	AB	2514	U	C2-N3	5.34	1.41	1.37
19	AS	24	TYR	CE1-CZ	5.34	1.45	1.38
35	BA	467	U	N1-C2	5.34	1.43	1.38
35	BA	1436	U	O3'-P	5.34	1.67	1.61
35	BA	1450	U	C4-C5	5.34	1.48	1.43
55	BU	69	TYR	CE1-CZ	5.34	1.45	1.38
2	AB	681	G	N7-C5	5.34	1.42	1.39
2	AB	1608	A	N9-C4	5.34	1.41	1.37
2	AB	1622	G	P-O5'	5.34	1.65	1.59
2	AB	1743	G	N3-C4	5.34	1.39	1.35
35	BA	83	C	C4-C5	5.34	1.47	1.43
35	BA	331	G	N1-C2	5.34	1.42	1.37
35	BA	829	G	C5-C4	5.34	1.42	1.38
37	BC	47	C	N1-C6	5.34	1.40	1.37
2	AB	1979	U	C2-N3	5.33	1.41	1.37
35	BA	333	U	C5-C6	5.33	1.39	1.34
35	BA	509	A	C3'-C2'	-5.33	1.46	1.52
35	BA	521	G	N1-C2	5.33	1.42	1.37
35	BA	859	G	N3-C4	5.33	1.39	1.35
2	AB	15	G	C4'-C3'	5.33	1.59	1.53
2	AB	950	G	O3'-P	-5.33	1.54	1.61
2	AB	1075	C	C4'-O4'	-5.33	1.38	1.45
2	AB	1384	A	N9-C4	5.33	1.41	1.37
2	AB	1396	U	C2-N3	5.33	1.41	1.37
2	AB	1784	A	N1-C2	-5.33	1.29	1.34
2	AB	1927	A	N3-C4	5.33	1.38	1.34
35	BA	679	C	C4-C5	5.33	1.47	1.43
35	BA	771	G	C5'-C4'	5.33	1.57	1.51
35	BA	1103	C	C2-N3	5.33	1.40	1.35
2	AB	575	A	C6-N6	-5.33	1.29	1.33
2	AB	803	U	C2'-C1'	5.33	1.59	1.53
2	AB	1277	G	N1-C2	-5.33	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1728	C	O3'-P	5.33	1.67	1.61
2	AB	1738	G	C6-N1	-5.33	1.35	1.39
2	AB	1893	C	N1-C6	5.33	1.40	1.37
2	AB	1970	A	C6-N1	5.33	1.39	1.35
33	A6	41	ARG	NE-CZ	5.33	1.40	1.33
35	BA	308	C	C5-C6	5.33	1.38	1.34
35	BA	491	G	N9-C8	-5.33	1.34	1.37
35	BA	567	G	C5-C6	5.33	1.47	1.42
2	AB	1048	A	N9-C4	5.33	1.41	1.37
2	AB	1282	U	C4'-O4'	-5.33	1.38	1.45
2	AB	1984	G	O4'-C1'	5.33	1.48	1.41
2	AB	2008	C	N3-C4	5.33	1.37	1.33
35	BA	383	A	N3-C4	5.33	1.38	1.34
2	AB	559	G	P-O5'	-5.33	1.54	1.59
2	AB	990	A	C6-N6	5.33	1.38	1.33
2	AB	2048	G	N3-C4	5.33	1.39	1.35
2	AB	2788	C	C4'-C3'	-5.33	1.47	1.52
35	BA	300	A	O3'-P	5.33	1.67	1.61
35	BA	875	U	N3-C4	5.33	1.43	1.38
35	BA	1440	U	C3'-C2'	5.33	1.58	1.52
2	AB	1768	C	C4-C5	5.33	1.47	1.43
36	BB	69	C	P-O5'	5.33	1.65	1.59
2	AB	873	C	O3'-P	-5.33	1.54	1.61
2	AB	1511	G	C4'-O4'	-5.33	1.38	1.45
2	AB	2411	A	C3'-O3'	5.33	1.49	1.42
35	BA	1004	A	P-O5'	5.33	1.65	1.59
35	BA	1061	G	O4'-C1'	5.33	1.48	1.41
35	BA	1082	A	C5'-C4'	5.33	1.57	1.51
36	BB	35	C	C4'-C3'	5.33	1.59	1.53
2	AB	960	A	C8-N7	-5.32	1.27	1.31
2	AB	1214	A	C2-N3	5.32	1.38	1.33
2	AB	1617	C	N3-C4	5.32	1.37	1.33
2	AB	1699	G	P-O5'	-5.32	1.54	1.59
2	AB	1998	A	N3-C4	5.32	1.38	1.34
2	AB	2010	G	N1-C2	5.32	1.42	1.37
2	AB	2509	G	C2'-C1'	5.32	1.59	1.53
2	AB	2674	G	C6-O6	5.32	1.28	1.24
6	AF	101	TYR	CB-CG	5.32	1.59	1.51
35	BA	42	G	C6-N1	-5.32	1.35	1.39
35	BA	215	C	C5'-C4'	5.32	1.57	1.51
35	BA	709	U	P-O5'	5.32	1.65	1.59
35	BA	734	G	O3'-P	5.32	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	765	G	P-O5'	5.32	1.65	1.59
35	BA	1022	A	C6-N6	5.32	1.38	1.33
35	BA	1245	C	C2-O2	-5.32	1.19	1.24
35	BA	1270	G	N9-C8	5.32	1.41	1.37
35	BA	1272	G	C3'-C2'	5.32	1.58	1.52
36	BB	45	U	C2-N3	-5.32	1.34	1.37
2	AB	1471	G	C8-N7	-5.32	1.27	1.30
2	AB	1860	G	N7-C5	5.32	1.42	1.39
2	AB	2207	C	N1-C2	5.32	1.45	1.40
2	AB	2742	G	C4'-O4'	-5.32	1.38	1.45
2	AB	2753	A	O3'-P	5.32	1.67	1.61
2	AB	2837	A	C4'-O4'	-5.32	1.38	1.45
35	BA	840	C	C5-C6	5.32	1.38	1.34
35	BA	1319	A	C5-C4	-5.32	1.35	1.38
1	AA	71	C	C2-N3	5.32	1.40	1.35
2	AB	211	C	C5'-C4'	5.32	1.57	1.51
2	AB	382	A	P-O5'	5.32	1.65	1.59
2	AB	504	A	C3'-O3'	5.32	1.49	1.42
2	AB	561	G	N9-C4	5.32	1.42	1.38
2	AB	796	C	P-O5'	5.32	1.65	1.59
2	AB	973	A	C8-N7	-5.32	1.27	1.31
2	AB	1023	U	P-O5'	5.32	1.65	1.59
2	AB	1065	U	C5'-C4'	5.32	1.57	1.51
2	AB	1463	C	C3'-O3'	5.32	1.49	1.42
2	AB	2364	C	C2-N3	5.32	1.40	1.35
2	AB	2832	U	C4'-C3'	-5.32	1.47	1.52
5	AE	76	GLY	CA-C	5.32	1.60	1.51
35	BA	343	U	N1-C6	-5.32	1.33	1.38
35	BA	748	G	C8-N7	5.32	1.34	1.30
35	BA	1110	A	O3'-P	5.32	1.67	1.61
35	BA	1325	C	O3'-P	5.32	1.67	1.61
37	BC	24	A	N9-C8	-5.32	1.33	1.37
2	AB	2052	A	N9-C4	5.32	1.41	1.37
19	AS	31	TYR	CG-CD2	5.32	1.46	1.39
35	BA	53	A	C2'-C1'	5.32	1.59	1.53
35	BA	1079	G	C2'-C1'	5.32	1.59	1.53
37	BC	35	G	C4'-C3'	-5.32	1.47	1.52
2	AB	782	A	N1-C2	-5.32	1.29	1.34
2	AB	1083	U	C4-C5	5.32	1.48	1.43
2	AB	1086	A	C8-N7	-5.32	1.27	1.31
2	AB	1349	C	C3'-O3'	5.32	1.49	1.42
2	AB	1610	A	N3-C4	5.32	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1647	U	N3-C4	-5.32	1.33	1.38
2	AB	1861	G	C2-N2	5.32	1.39	1.34
2	AB	2531	A	P-O5'	5.32	1.65	1.59
35	BA	56	U	C4'-O4'	-5.32	1.38	1.45
35	BA	62	U	N1-C6	5.32	1.42	1.38
35	BA	774	G	C4'-C3'	-5.32	1.47	1.52
35	BA	1167	A	C1'-N9	5.32	1.56	1.48
36	BB	42	G	C6-O6	-5.32	1.19	1.24
2	AB	127	A	P-O5'	5.32	1.65	1.59
2	AB	1354	A	N1-C2	-5.32	1.29	1.34
2	AB	2275	C	N3-C4	-5.32	1.30	1.33
35	BA	308	C	C2-N3	5.32	1.40	1.35
35	BA	754	C	N1-C6	5.32	1.40	1.37
35	BA	1198	G	O3'-P	5.32	1.67	1.61
35	BA	1370	G	C5'-C4'	5.32	1.57	1.51
2	AB	162	U	C4'-C3'	5.31	1.58	1.53
2	AB	286	U	C5-C6	5.31	1.39	1.34
2	AB	997	G	N7-C5	5.31	1.42	1.39
2	AB	2314	A	C5-C4	5.31	1.42	1.38
35	BA	430	A	C6-N1	5.31	1.39	1.35
35	BA	993	G	C4'-C3'	5.31	1.58	1.53
38	BD	63	C	C4'-O4'	-5.31	1.38	1.45
1	AA	50	A	C3'-C2'	5.31	1.58	1.52
1	AA	60	C	C2'-O2'	5.31	1.48	1.41
2	AB	715	A	C5'-C4'	5.31	1.57	1.51
2	AB	1080	A	N3-C4	5.31	1.38	1.34
2	AB	1324	G	C2'-O2'	5.31	1.48	1.41
2	AB	1487	U	C2-O2	5.31	1.27	1.22
2	AB	1500	G	C5'-C4'	5.31	1.57	1.51
2	AB	1745	A	C4'-O4'	-5.31	1.38	1.45
2	AB	1903	G	N3-C4	-5.31	1.31	1.35
2	AB	2159	G	C5-C6	5.31	1.47	1.42
2	AB	2436	G	P-O5'	5.31	1.65	1.59
2	AB	2782	G	N7-C5	5.31	1.42	1.39
35	BA	593	U	C5-C6	5.31	1.39	1.34
36	BB	2	G	C8-N7	-5.31	1.27	1.30
2	AB	2493	U	N3-C4	5.31	1.43	1.38
2	AB	2611	C	C5'-C4'	5.31	1.57	1.51
35	BA	1153	G	N7-C5	5.31	1.42	1.39
1	AA	36	C	C2-N3	-5.31	1.31	1.35
1	AA	94	A	C2-N3	5.31	1.38	1.33
1	AA	103	U	C5-C6	5.31	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	334	C	C2-O2	-5.31	1.19	1.24
2	AB	475	C	N3-C4	-5.31	1.30	1.33
2	AB	914	G	O4'-C1'	5.31	1.48	1.41
2	AB	938	G	C5'-C4'	-5.31	1.45	1.51
2	AB	1038	G	N9-C8	-5.31	1.34	1.37
2	AB	1260	A	C5'-C4'	-5.31	1.45	1.51
2	AB	1334	G	C5-C4	5.31	1.42	1.38
2	AB	1416	G	C4'-O4'	-5.31	1.38	1.45
2	AB	1561	C	O5'-C5'	-5.31	1.34	1.42
2	AB	1769	U	C4-C5	5.31	1.48	1.43
2	AB	1975	G	C5-C4	-5.31	1.34	1.38
2	AB	2028	U	C5'-C4'	5.31	1.57	1.51
35	BA	111	G	O4'-C1'	5.31	1.48	1.41
35	BA	546	A	C2'-C1'	-5.31	1.47	1.53
35	BA	792	A	C6-N1	-5.31	1.31	1.35
2	AB	703	U	C2'-O2'	5.31	1.48	1.41
2	AB	722	A	P-O5'	5.31	1.65	1.59
2	AB	1259	G	C2-N2	5.31	1.39	1.34
2	AB	1632	A	N3-C4	5.31	1.38	1.34
2	AB	2372	U	C2-N3	5.31	1.41	1.37
2	AB	2483	C	C5-C6	5.31	1.38	1.34
2	AB	2591	C	C5-C6	5.31	1.38	1.34
35	BA	104	G	N9-C4	5.31	1.42	1.38
35	BA	612	C	P-O5'	5.31	1.65	1.59
35	BA	857	C	N1-C6	-5.31	1.33	1.37
35	BA	1184	G	C5-C6	5.31	1.47	1.42
40	BF	22	PHE	CG-CD2	5.31	1.46	1.38
2	AB	1036	G	C8-N7	-5.31	1.27	1.30
2	AB	1838	C	C5'-C4'	-5.31	1.45	1.51
2	AB	1863	G	C2'-C1'	-5.31	1.47	1.53
35	BA	200	G	C3'-O3'	5.31	1.49	1.42
35	BA	821	G	N9-C4	-5.31	1.33	1.38
35	BA	1263	C	C3'-O3'	-5.31	1.34	1.42
2	AB	189	G	C6-O6	5.30	1.28	1.24
2	AB	235	U	C4-C5	5.30	1.48	1.43
2	AB	266	G	N9-C8	-5.30	1.34	1.37
2	AB	277	G	P-O5'	5.30	1.65	1.59
2	AB	1334	G	N3-C4	5.30	1.39	1.35
2	AB	1439	A	C2'-C1'	-5.30	1.47	1.53
2	AB	2039	U	C2-N3	5.30	1.41	1.37
2	AB	2474	U	N3-C4	5.30	1.43	1.38
2	AB	2812	G	C2-N3	5.30	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	339	C	C5'-C4'	5.30	1.57	1.51
35	BA	827	U	P-O5'	5.30	1.65	1.59
38	BD	37	U	C2-O2	5.30	1.27	1.22
2	AB	1992	G	N7-C5	5.30	1.42	1.39
2	AB	2839	G	C6-N1	5.30	1.43	1.39
2	AB	210	C	C4'-O4'	-5.30	1.38	1.45
2	AB	1361	G	N3-C4	-5.30	1.31	1.35
2	AB	1383	A	N1-C2	5.30	1.39	1.34
2	AB	1753	G	O3'-P	5.30	1.67	1.61
2	AB	1802	A	C5-C4	-5.30	1.35	1.38
2	AB	1848	A	P-O5'	5.30	1.65	1.59
2	AB	2559	C	N3-C4	5.30	1.37	1.33
32	A5	39	ARG	CZ-NH1	5.30	1.40	1.33
35	BA	237	G	C2'-O2'	5.30	1.48	1.41
35	BA	1054	C	C5'-C4'	5.30	1.57	1.51
35	BA	1084	G	C5'-C4'	5.30	1.57	1.51
35	BA	1393	U	C4'-O4'	-5.30	1.38	1.45
35	BA	1410	A	C2-N3	5.30	1.38	1.33
2	AB	260	G	P-O5'	5.30	1.65	1.59
2	AB	301	G	C5-C4	-5.30	1.34	1.38
2	AB	549	G	C8-N7	-5.30	1.27	1.30
2	AB	668	A	O3'-P	5.30	1.67	1.61
2	AB	1185	G	C2-N3	5.30	1.36	1.32
2	AB	1690	A	O3'-P	5.30	1.67	1.61
2	AB	1783	A	P-O5'	5.30	1.65	1.59
2	AB	2227	A	C2-N3	5.30	1.38	1.33
2	AB	2828	G	N9-C8	-5.30	1.34	1.37
35	BA	6	G	C8-N7	5.30	1.34	1.30
35	BA	1200	C	C5'-C4'	5.30	1.57	1.51
35	BA	1268	G	C2'-O2'	5.30	1.48	1.41
35	BA	1339	A	N3-C4	5.30	1.38	1.34
35	BA	1370	G	O4'-C1'	5.30	1.48	1.41
37	BC	45	G	P-O5'	5.30	1.65	1.59
35	BA	613	C	C4-C5	5.30	1.47	1.43
1	AA	47	C	O3'-P	5.30	1.67	1.61
1	AA	75	G	N7-C5	5.30	1.42	1.39
2	AB	957	C	C4'-C3'	5.30	1.58	1.53
2	AB	1346	G	N1-C2	5.30	1.42	1.37
2	AB	1381	G	N9-C4	5.30	1.42	1.38
2	AB	1437	C	P-O5'	5.30	1.65	1.59
2	AB	1755	A	C6-N1	-5.30	1.31	1.35
2	AB	2382	G	C4'-O4'	-5.30	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2697	G	N3-C4	5.30	1.39	1.35
35	BA	550	G	C3'-C2'	5.30	1.58	1.52
35	BA	1144	G	C5'-C4'	5.30	1.57	1.51
38	BD	16	C	N1-C2	5.30	1.45	1.40
2	AB	500	G	N3-C4	5.29	1.39	1.35
2	AB	544	C	N1-C2	5.29	1.45	1.40
2	AB	931	U	C4'-O4'	-5.29	1.38	1.45
2	AB	1414	C	C5-C6	5.29	1.38	1.34
2	AB	2711	A	C8-N7	-5.29	1.27	1.31
35	BA	44	A	P-O5'	5.29	1.65	1.59
35	BA	351	G	C6-N1	5.29	1.43	1.39
35	BA	466	A	N7-C5	-5.29	1.36	1.39
2	AB	1288	G	N7-C5	5.29	1.42	1.39
2	AB	1422	G	N9-C8	-5.29	1.34	1.37
2	AB	1436	G	C2-N3	5.29	1.36	1.32
2	AB	1455	G	C2-N3	5.29	1.36	1.32
2	AB	1510	G	C5'-C4'	5.29	1.57	1.51
2	AB	1616	A	C4'-O4'	-5.29	1.38	1.45
2	AB	2043	C	C4-C5	5.29	1.47	1.43
2	AB	2352	A	C5'-C4'	5.29	1.57	1.51
2	AB	2775	G	N9-C8	5.29	1.41	1.37
2	AB	2864	G	C5'-C4'	5.29	1.57	1.51
35	BA	121	U	C4'-O4'	-5.29	1.38	1.45
35	BA	660	C	P-O5'	5.29	1.65	1.59
35	BA	1218	C	C3'-C2'	-5.29	1.47	1.52
1	AA	79	G	C5-C6	5.29	1.47	1.42
2	AB	846	U	O3'-P	5.29	1.67	1.61
2	AB	1276	A	N7-C5	-5.29	1.36	1.39
2	AB	1836	C	N1-C2	5.29	1.45	1.40
2	AB	1874	C	C5'-C4'	5.29	1.57	1.51
2	AB	2178	C	C4-C5	5.29	1.47	1.43
2	AB	2395	C	P-O5'	-5.29	1.54	1.59
2	AB	2635	A	C6-N6	5.29	1.38	1.33
2	AB	2695	U	P-O5'	5.29	1.65	1.59
16	AP	102	PHE	CE1-CZ	5.29	1.47	1.37
35	BA	488	C	N1-C6	-5.29	1.33	1.37
35	BA	1378	C	O4'-C1'	5.29	1.48	1.41
38	BD	43	G	C6-N1	-5.29	1.35	1.39
2	AB	1063	G	N1-C2	5.29	1.42	1.37
2	AB	1292	G	N1-C2	5.29	1.42	1.37
2	AB	1360	G	C8-N7	5.29	1.34	1.30
35	BA	648	A	C2'-C1'	-5.29	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	666	G	N7-C5	5.29	1.42	1.39
35	BA	1208	C	C5-C6	5.29	1.38	1.34
35	BA	1311	A	C4'-O4'	-5.29	1.38	1.45
35	BA	1473	G	C4'-C3'	5.29	1.58	1.53
2	AB	118	A	N7-C5	5.29	1.42	1.39
2	AB	253	C	C5'-C4'	5.29	1.57	1.51
2	AB	400	G	O4'-C1'	5.29	1.48	1.41
2	AB	1069	A	C4'-C3'	5.29	1.58	1.53
2	AB	1252	G	N7-C5	5.29	1.42	1.39
2	AB	1318	U	C4-C5	5.29	1.48	1.43
2	AB	1386	C	N3-C4	5.29	1.37	1.33
2	AB	1517	G	N9-C8	-5.29	1.34	1.37
35	BA	274	A	C5'-C4'	5.29	1.57	1.51
35	BA	1250	A	C5-C4	-5.29	1.35	1.38
38	BD	51	U	N1-C6	5.29	1.42	1.38
38	BD	58	A	N7-C5	-5.29	1.36	1.39
1	AA	83	G	C6-N1	-5.29	1.35	1.39
2	AB	1248	G	P-O5'	-5.29	1.54	1.59
2	AB	1297	C	C2-O2	-5.29	1.19	1.24
35	BA	95	C	O5'-C5'	-5.29	1.34	1.42
35	BA	508	U	C3'-C2'	-5.29	1.47	1.52
35	BA	1515	G	C5'-C4'	5.29	1.57	1.51
1	AA	68	C	O3'-P	5.29	1.67	1.61
1	AA	98	G	C4'-C3'	-5.29	1.47	1.52
2	AB	267	C	N1-C2	5.29	1.45	1.40
2	AB	287	G	C3'-C2'	5.29	1.58	1.52
2	AB	304	U	C2'-C1'	-5.29	1.47	1.53
2	AB	547	A	C3'-C2'	5.29	1.58	1.52
2	AB	676	A	N1-C2	-5.29	1.29	1.34
2	AB	1088	A	O3'-P	5.29	1.67	1.61
2	AB	1109	C	C5-C6	5.29	1.38	1.34
2	AB	1356	G	N1-C2	5.29	1.42	1.37
2	AB	2133	G	N9-C4	5.29	1.42	1.38
35	BA	390	U	O3'-P	5.29	1.67	1.61
35	BA	484	G	C2-N3	5.29	1.36	1.32
35	BA	486	U	N3-C4	5.29	1.43	1.38
35	BA	825	A	C8-N7	5.29	1.35	1.31
35	BA	1085	U	N1-C2	-5.29	1.33	1.38
43	BI	15	SER	CB-OG	5.29	1.49	1.42
2	AB	425	G	C2-N2	5.28	1.39	1.34
2	AB	461	C	C1'-N1	5.28	1.56	1.48
2	AB	1363	C	C4-N4	5.28	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1631	G	C4'-O4'	-5.28	1.38	1.45
35	BA	1061	G	C2-N3	5.28	1.36	1.32
38	BD	22	A	C5'-C4'	5.28	1.57	1.51
2	AB	376	G	C6-O6	5.28	1.28	1.24
2	AB	753	A	N7-C5	-5.28	1.36	1.39
2	AB	1597	A	N9-C8	5.28	1.42	1.37
2	AB	2430	A	C5-C4	-5.28	1.35	1.38
2	AB	124	G	C5-C4	-5.28	1.34	1.38
2	AB	624	C	C5-C6	5.28	1.38	1.34
2	AB	1325	U	C4'-O4'	-5.28	1.38	1.45
2	AB	1546	G	C8-N7	5.28	1.34	1.30
35	BA	17	U	N3-C4	5.28	1.43	1.38
35	BA	258	G	N3-C4	5.28	1.39	1.35
35	BA	397	A	N9-C4	5.28	1.41	1.37
35	BA	650	G	C8-N7	-5.28	1.27	1.30
35	BA	730	G	N3-C4	5.28	1.39	1.35
35	BA	1273	C	P-O5'	5.28	1.65	1.59
2	AB	285	G	N7-C5	5.28	1.42	1.39
2	AB	309	A	P-O5'	5.28	1.65	1.59
2	AB	800	A	C4'-C3'	5.28	1.58	1.53
2	AB	2749	A	C6-N6	5.28	1.38	1.33
19	AS	69	ARG	CZ-NH1	5.28	1.40	1.33
35	BA	437	U	C5'-C4'	5.28	1.57	1.51
35	BA	1138	G	N3-C4	5.28	1.39	1.35
43	BI	101	PRO	N-CD	-5.28	1.40	1.47
54	BT	59	GLU	CB-CG	5.28	1.62	1.52
2	AB	155	A	N9-C4	-5.28	1.34	1.37
2	AB	182	A	C6-N6	5.28	1.38	1.33
2	AB	265	A	N7-C5	5.28	1.42	1.39
2	AB	699	A	C4'-O4'	-5.28	1.38	1.45
2	AB	1376	C	O3'-P	5.28	1.67	1.61
2	AB	1726	C	C1'-N1	5.28	1.56	1.48
2	AB	2261	C	C2'-C1'	5.28	1.59	1.53
2	AB	2263	C	P-O5'	5.28	1.65	1.59
35	BA	192	A	C6-N1	-5.28	1.31	1.35
35	BA	513	C	C4-C5	5.28	1.47	1.43
35	BA	535	A	O3'-P	-5.28	1.54	1.61
35	BA	1348	U	O4'-C1'	5.28	1.48	1.41
37	BC	24	A	C2'-C1'	5.28	1.59	1.53
2	AB	1027	A	C5-C4	-5.28	1.35	1.38
2	AB	1147	A	C6-N6	5.28	1.38	1.33
2	AB	1180	U	O4'-C1'	5.28	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1330	C	C2-N3	5.28	1.40	1.35
2	AB	1744	A	C5'-C4'	5.28	1.57	1.51
2	AB	1814	G	C2-N3	5.28	1.36	1.32
2	AB	2173	A	C4'-O4'	-5.28	1.38	1.45
2	AB	2353	G	C2'-O2'	5.28	1.48	1.41
35	BA	55	A	N9-C8	-5.28	1.33	1.37
35	BA	768	A	C8-N7	5.28	1.35	1.31
35	BA	868	C	C5'-C4'	5.28	1.57	1.51
35	BA	944	G	C2'-C1'	5.28	1.59	1.53
35	BA	1431	A	N3-C4	5.28	1.38	1.34
35	BA	1439	G	C3'-C2'	-5.28	1.47	1.52
2	AB	1551	A	C5'-C4'	5.27	1.57	1.51
2	AB	2293	G	N9-C8	5.27	1.41	1.37
2	AB	2293	G	C6-O6	-5.27	1.19	1.24
2	AB	2597	G	N1-C2	5.27	1.42	1.37
2	AB	2690	U	C4-O4	-5.27	1.19	1.23
2	AB	2811	G	C2-N2	-5.27	1.29	1.34
2	AB	2887	A	C5-C4	5.27	1.42	1.38
5	AE	34	VAL	CB-CG2	5.27	1.64	1.52
7	AG	163	GLU	CG-CD	5.27	1.59	1.51
2	AB	292	U	O3'-P	5.27	1.67	1.61
2	AB	475	C	P-O5'	5.27	1.65	1.59
2	AB	1011	G	C4'-O4'	-5.27	1.38	1.45
2	AB	1338	G	N7-C5	-5.27	1.36	1.39
2	AB	1452	G	C4'-C3'	5.27	1.58	1.53
2	AB	1489	C	C4-N4	5.27	1.38	1.33
2	AB	1499	C	C3'-C2'	5.27	1.58	1.52
2	AB	2328	A	N1-C2	-5.27	1.29	1.34
35	BA	425	G	C2-N3	5.27	1.36	1.32
35	BA	699	C	C4'-C3'	5.27	1.58	1.53
35	BA	763	G	N7-C5	5.27	1.42	1.39
35	BA	778	G	N9-C8	-5.27	1.34	1.37
35	BA	1146	A	C2'-C1'	5.27	1.59	1.53
44	BJ	111	GLY	CA-C	5.27	1.60	1.51
2	AB	21	A	N1-C2	-5.27	1.29	1.34
2	AB	1451	C	O4'-C1'	-5.27	1.34	1.41
2	AB	2400	G	C5'-C4'	5.27	1.57	1.51
2	AB	2432	A	C2'-O2'	-5.27	1.34	1.41
35	BA	1457	G	N9-C8	-5.27	1.34	1.37
1	AA	91	C	C5-C6	5.27	1.38	1.34
2	AB	74	A	C5-C4	-5.27	1.35	1.38
2	AB	149	A	N9-C8	5.27	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	826	U	C4'-C3'	5.27	1.58	1.53
2	AB	1268	A	C5'-C4'	5.27	1.57	1.51
2	AB	1694	C	N1-C2	5.27	1.45	1.40
2	AB	1922	G	N1-C2	5.27	1.42	1.37
2	AB	2220	U	C2-N3	5.27	1.41	1.37
2	AB	2290	G	C2-N2	5.27	1.39	1.34
2	AB	2480	C	N1-C6	5.27	1.40	1.37
2	AB	2636	C	P-O5'	5.27	1.65	1.59
35	BA	145	G	C5'-C4'	5.27	1.57	1.51
35	BA	1307	U	P-O5'	5.27	1.65	1.59
37	BC	37	G	C8-N7	5.27	1.34	1.30
38	BD	44	A	C8-N7	-5.27	1.27	1.31
40	BF	178	ARG	NE-CZ	5.27	1.40	1.33
1	AA	37	C	C3'-O3'	-5.27	1.34	1.42
2	AB	244	A	C5-C4	-5.27	1.35	1.38
2	AB	460	A	C5'-C4'	5.27	1.57	1.51
2	AB	969	G	C2-N3	5.27	1.36	1.32
2	AB	1043	C	N3-C4	5.27	1.37	1.33
2	AB	1119	U	C3'-C2'	-5.27	1.47	1.52
2	AB	1321	A	N9-C4	5.27	1.41	1.37
2	AB	1781	U	C2-O2	5.27	1.27	1.22
2	AB	1979	U	C3'-C2'	5.27	1.58	1.52
35	BA	37	U	C5-C6	5.27	1.38	1.34
35	BA	518	C	C5-C6	5.27	1.38	1.34
35	BA	653	U	C5-C6	5.27	1.38	1.34
35	BA	918	A	N9-C4	5.27	1.41	1.37
35	BA	963	G	C4'-O4'	-5.27	1.38	1.45
35	BA	1119	C	N3-C4	5.27	1.37	1.33
1	AA	48	U	C4-C5	5.27	1.48	1.43
2	AB	1872	A	N7-C5	-5.27	1.36	1.39
2	AB	2698	U	N1-C2	5.27	1.43	1.38
35	BA	819	A	C6-N6	-5.27	1.29	1.33
35	BA	1148	U	O3'-P	5.27	1.67	1.61
2	AB	2036	C	O4'-C1'	-5.26	1.34	1.41
5	AE	179	ARG	NE-CZ	5.26	1.39	1.33
35	BA	348	G	C8-N7	5.26	1.34	1.30
35	BA	1340	A	C5'-C4'	5.26	1.57	1.51
35	BA	1528	U	C5-C6	-5.26	1.29	1.34
36	BB	9	A	N9-C8	5.26	1.42	1.37
36	BB	70	C	O3'-P	5.26	1.67	1.61
2	AB	442	G	C5'-C4'	5.26	1.57	1.51
2	AB	1125	G	C5'-C4'	5.26	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1613	G	C6-O6	-5.26	1.19	1.24
35	BA	678	U	C2-O2	5.26	1.27	1.22
35	BA	837	U	P-O5'	-5.26	1.54	1.59
2	AB	3	U	N1-C6	-5.26	1.33	1.38
2	AB	144	A	C5-C4	-5.26	1.35	1.38
2	AB	455	C	C5'-C4'	5.26	1.57	1.51
2	AB	1591	A	C8-N7	-5.26	1.27	1.31
2	AB	1982	U	C5-C6	5.26	1.38	1.34
2	AB	2003	A	C2-N3	5.26	1.38	1.33
2	AB	2100	G	C6-N1	5.26	1.43	1.39
2	AB	2216	G	C2-N2	-5.26	1.29	1.34
2	AB	2269	G	C6-O6	-5.26	1.19	1.24
2	AB	2433	A	C5-C6	5.26	1.45	1.41
35	BA	421	U	O4'-C1'	5.26	1.48	1.41
35	BA	1494	G	C5'-C4'	5.26	1.57	1.51
37	BC	37	G	C2-N2	-5.26	1.29	1.34
2	AB	298	G	C5'-C4'	5.26	1.57	1.51
2	AB	627	A	C6-N6	5.26	1.38	1.33
2	AB	1305	C	C5'-C4'	5.26	1.57	1.51
2	AB	2025	C	P-O5'	5.26	1.65	1.59
2	AB	2363	G	N1-C2	5.26	1.42	1.37
2	AB	2392	A	O3'-P	5.26	1.67	1.61
2	AB	2703	C	N1-C2	5.26	1.45	1.40
35	BA	923	A	C6-N1	5.26	1.39	1.35
35	BA	1035	A	N9-C8	-5.26	1.33	1.37
35	BA	1164	G	C6-N1	-5.26	1.35	1.39
35	BA	1252	A	N7-C5	-5.26	1.36	1.39
35	BA	1308	U	N3-C4	5.26	1.43	1.38
2	AB	1534	U	N1-C6	5.26	1.42	1.38
35	BA	1167	A	O3'-P	5.26	1.67	1.61
2	AB	91	A	N7-C5	5.26	1.42	1.39
2	AB	1553	A	N1-C2	-5.26	1.29	1.34
2	AB	2142	A	P-O5'	5.26	1.65	1.59
35	BA	503	C	O3'-P	5.26	1.67	1.61
35	BA	765	G	C3'-C2'	5.26	1.58	1.52
1	AA	116	G	C2-N3	5.25	1.36	1.32
2	AB	176	A	N1-C2	-5.25	1.29	1.34
2	AB	789	A	P-O5'	-5.25	1.54	1.59
2	AB	956	G	C5'-C4'	5.25	1.57	1.51
2	AB	1152	C	P-O5'	5.25	1.65	1.59
2	AB	1966	A	N7-C5	-5.25	1.36	1.39
2	AB	2277	G	N1-C2	5.25	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2371	G	N9-C4	-5.25	1.33	1.38
35	BA	738	C	C5'-C4'	5.25	1.57	1.51
38	BD	72	C	C5-C6	5.25	1.38	1.34
2	AB	92	U	C2-N3	5.25	1.41	1.37
2	AB	131	A	C2-N3	-5.25	1.28	1.33
2	AB	274	C	C4'-O4'	-5.25	1.38	1.45
2	AB	312	G	N9-C4	5.25	1.42	1.38
2	AB	561	G	N1-C2	5.25	1.42	1.37
2	AB	820	A	N3-C4	5.25	1.38	1.34
2	AB	1275	A	N3-C4	5.25	1.38	1.34
2	AB	2462	C	N3-C4	5.25	1.37	1.33
2	AB	2752	C	C2'-O2'	5.25	1.48	1.41
35	BA	56	U	N3-C4	5.25	1.43	1.38
35	BA	62	U	C4'-O4'	-5.25	1.38	1.45
35	BA	615	G	N3-C4	5.25	1.39	1.35
35	BA	630	A	N3-C4	5.25	1.38	1.34
38	BD	58	A	C2-N3	5.25	1.38	1.33
2	AB	54	G	C5-C4	-5.25	1.34	1.38
2	AB	481	G	N9-C4	-5.25	1.33	1.38
2	AB	676	A	O3'-P	5.25	1.67	1.61
2	AB	724	U	C4-C5	5.25	1.48	1.43
2	AB	914	G	C2-N3	5.25	1.36	1.32
2	AB	1313	U	C5'-C4'	5.25	1.57	1.51
2	AB	1512	C	C5'-C4'	5.25	1.57	1.51
2	AB	1537	G	C6-N1	5.25	1.43	1.39
2	AB	1616	A	C5'-C4'	5.25	1.57	1.51
2	AB	1948	G	C6-N1	5.25	1.43	1.39
2	AB	2184	A	N9-C4	-5.25	1.34	1.37
2	AB	2188	U	C5-C6	5.25	1.38	1.34
35	BA	284	C	O3'-P	5.25	1.67	1.61
35	BA	844	G	N1-C2	5.25	1.42	1.37
35	BA	1056	U	O3'-P	5.25	1.67	1.61
35	BA	1387	G	N9-C8	5.25	1.41	1.37
36	BB	9	A	O3'-P	-5.25	1.54	1.61
2	AB	263	G	C2-N2	-5.25	1.29	1.34
2	AB	618	G	N9-C8	5.25	1.41	1.37
2	AB	2422	C	N3-C4	5.25	1.37	1.33
2	AB	2446	G	N9-C4	5.25	1.42	1.38
35	BA	86	G	C5'-C4'	5.25	1.57	1.51
35	BA	433	G	O4'-C1'	5.25	1.48	1.41
35	BA	1094	G	P-O5'	5.25	1.65	1.59
38	BD	54	G	C4'-O4'	-5.25	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	19	A	N1-C2	-5.25	1.29	1.34
2	AB	110	G	C6-N1	5.25	1.43	1.39
2	AB	314	C	N3-C4	5.25	1.37	1.33
2	AB	501	A	N9-C4	-5.25	1.34	1.37
2	AB	1755	A	C4'-C3'	-5.25	1.47	1.52
2	AB	1779	U	N3-C4	5.25	1.43	1.38
2	AB	2020	A	C3'-C2'	5.25	1.58	1.52
2	AB	2026	U	C3'-C2'	5.25	1.58	1.52
2	AB	2031	A	N7-C5	5.25	1.42	1.39
2	AB	2689	U	C5'-C4'	5.25	1.57	1.51
35	BA	288	A	N9-C4	-5.25	1.34	1.37
35	BA	326	G	C8-N7	-5.25	1.27	1.30
35	BA	844	G	C5-C4	-5.25	1.34	1.38
36	BB	36	A	P-O5'	5.25	1.65	1.59
2	AB	11	C	C1'-N1	5.25	1.56	1.48
2	AB	15	G	C6-O6	5.25	1.28	1.24
2	AB	122	G	P-O5'	5.25	1.65	1.59
2	AB	489	G	C8-N7	5.25	1.34	1.30
2	AB	707	G	N3-C4	-5.25	1.31	1.35
2	AB	1468	U	C4'-O4'	-5.25	1.38	1.45
2	AB	1834	U	C5-C6	-5.25	1.29	1.34
2	AB	2215	C	C3'-C2'	5.25	1.58	1.52
2	AB	2313	C	C2-O2	-5.25	1.19	1.24
2	AB	2676	C	C2'-C1'	5.25	1.59	1.53
28	A1	30	ARG	N-CA	-5.25	1.35	1.46
35	BA	735	C	C4-C5	5.25	1.47	1.43
36	BB	41	C	N1-C2	5.25	1.45	1.40
36	BB	59	G	N7-C5	-5.25	1.36	1.39
1	AA	103	U	C4-O4	5.25	1.27	1.23
2	AB	194	G	P-O5'	5.25	1.65	1.59
2	AB	1026	G	O4'-C1'	5.25	1.48	1.41
2	AB	1051	G	N7-C5	-5.25	1.36	1.39
2	AB	1700	A	C5'-C4'	5.25	1.57	1.51
2	AB	2314	A	C2'-C1'	5.25	1.59	1.53
2	AB	2447	G	N7-C5	-5.25	1.36	1.39
2	AB	2803	G	N1-C2	5.25	1.42	1.37
35	BA	567	G	O4'-C1'	5.25	1.48	1.41
35	BA	831	A	O3'-P	5.25	1.67	1.61
35	BA	1170	A	C4'-C3'	5.25	1.58	1.53
1	AA	50	A	N9-C8	5.24	1.42	1.37
2	AB	146	A	C2-N3	5.24	1.38	1.33
2	AB	313	G	C3'-C2'	5.24	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	526	A	C4'-C3'	-5.24	1.47	1.52
2	AB	627	A	C6-N1	-5.24	1.31	1.35
2	AB	920	A	N3-C4	5.24	1.38	1.34
2	AB	929	U	C4-C5	5.24	1.48	1.43
2	AB	1502	A	C8-N7	5.24	1.35	1.31
2	AB	1689	A	C4'-C3'	5.24	1.58	1.53
2	AB	1843	C	C3'-C2'	5.24	1.58	1.52
2	AB	1957	C	O4'-C1'	5.24	1.48	1.41
2	AB	2127	G	C3'-C2'	5.24	1.58	1.52
2	AB	2205	A	P-O5'	5.24	1.65	1.59
2	AB	2279	G	C4'-C3'	5.24	1.58	1.53
2	AB	2636	C	C2'-C1'	5.24	1.59	1.53
35	BA	240	G	N7-C5	-5.24	1.36	1.39
35	BA	705	G	N9-C4	-5.24	1.33	1.38
35	BA	894	G	C1'-N9	5.24	1.56	1.48
2	AB	78	U	N1-C2	5.24	1.43	1.38
2	AB	129	C	N3-C4	5.24	1.37	1.33
35	BA	386	C	C4-C5	5.24	1.47	1.43
35	BA	681	A	C5-C4	-5.24	1.35	1.38
35	BA	1163	A	N9-C8	-5.24	1.33	1.37
2	AB	401	A	C6-N1	-5.24	1.31	1.35
2	AB	643	A	N3-C4	5.24	1.38	1.34
2	AB	735	A	C2-N3	5.24	1.38	1.33
2	AB	785	G	O5'-C5'	-5.24	1.34	1.42
2	AB	2548	U	C4'-C3'	5.24	1.58	1.53
2	AB	2694	G	C6-O6	-5.24	1.19	1.24
2	AB	200	U	C4'-O4'	-5.24	1.38	1.45
2	AB	1288	G	C6-N1	-5.24	1.35	1.39
2	AB	1644	C	C4'-C3'	5.24	1.58	1.53
2	AB	2035	G	C2-N3	5.24	1.36	1.32
2	AB	2262	U	P-O5'	5.24	1.65	1.59
2	AB	2586	U	C5'-C4'	5.24	1.57	1.51
2	AB	2607	G	C4'-C3'	5.24	1.58	1.53
2	AB	2682	A	C5-C6	-5.24	1.36	1.41
35	BA	509	A	P-O5'	5.24	1.65	1.59
35	BA	579	A	N9-C4	5.24	1.41	1.37
35	BA	779	C	N1-C2	5.24	1.45	1.40
35	BA	835	U	N3-C4	-5.24	1.33	1.38
35	BA	928	G	C6-N1	5.24	1.43	1.39
35	BA	990	C	O3'-P	5.24	1.67	1.61
35	BA	1387	G	N7-C5	5.24	1.42	1.39
48	BN	36	ARG	CZ-NH1	5.24	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	165	A	N7-C5	5.24	1.42	1.39
2	AB	1672	A	C4'-O4'	-5.24	1.38	1.45
2	AB	2759	G	P-O5'	5.24	1.65	1.59
35	BA	1099	G	P-O5'	5.24	1.65	1.59
2	AB	692	C	O3'-P	5.24	1.67	1.61
2	AB	695	G	P-O5'	5.24	1.65	1.59
2	AB	1903	G	C5-C4	-5.24	1.34	1.38
2	AB	2254	C	C5'-C4'	5.24	1.57	1.51
2	AB	2536	G	C4'-C3'	5.24	1.58	1.53
2	AB	2610	C	N3-C4	-5.24	1.30	1.33
35	BA	104	G	C3'-C2'	-5.24	1.47	1.52
35	BA	283	U	N3-C4	5.24	1.43	1.38
35	BA	364	A	N1-C2	-5.24	1.29	1.34
35	BA	968	A	P-O5'	5.24	1.65	1.59
2	AB	1400	U	C5'-C4'	5.23	1.57	1.51
2	AB	1569	A	C2'-C1'	5.23	1.59	1.53
2	AB	206	U	C4'-O4'	-5.23	1.38	1.45
2	AB	437	U	O4'-C1'	5.23	1.48	1.41
2	AB	584	C	P-O5'	5.23	1.65	1.59
2	AB	637	A	C2'-C1'	5.23	1.59	1.53
2	AB	2643	G	N9-C4	-5.23	1.33	1.38
2	AB	2778	A	C5'-C4'	5.23	1.57	1.51
35	BA	46	G	C3'-C2'	5.23	1.58	1.52
35	BA	78	A	C5'-C4'	5.23	1.57	1.51
35	BA	821	G	C3'-C2'	-5.23	1.47	1.52
35	BA	1416	G	C4'-O4'	-5.23	1.38	1.45
2	AB	643	A	C8-N7	-5.23	1.27	1.31
2	AB	899	A	N9-C4	5.23	1.41	1.37
2	AB	1722	A	C5-C4	-5.23	1.35	1.38
2	AB	2777	G	C5-C4	-5.23	1.34	1.38
35	BA	860	A	N9-C4	-5.23	1.34	1.37
36	BB	27	C	N3-C4	5.23	1.37	1.33
1	AA	38	C	C5'-C4'	5.23	1.57	1.51
2	AB	119	A	C3'-O3'	5.23	1.49	1.42
2	AB	354	A	N7-C5	-5.23	1.36	1.39
2	AB	638	G	C6-N1	5.23	1.43	1.39
2	AB	1025	G	C6-N1	5.23	1.43	1.39
2	AB	1899	A	P-O5'	5.23	1.65	1.59
2	AB	1943	U	C4'-O4'	-5.23	1.38	1.45
35	BA	21	G	N7-C5	-5.23	1.36	1.39
38	BD	30	G	O3'-P	5.23	1.67	1.61
2	AB	684	G	C4'-C3'	5.23	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1684	G	C5'-C4'	5.23	1.57	1.51
2	AB	1742	U	C4-O4	5.23	1.27	1.23
2	AB	1885	A	N9-C4	5.23	1.41	1.37
35	BA	588	G	N7-C5	5.23	1.42	1.39
35	BA	989	U	C5'-C4'	5.23	1.57	1.51
35	BA	1009	U	C5-C6	5.23	1.38	1.34
35	BA	1271	A	N3-C4	-5.23	1.31	1.34
35	BA	1310	G	C4'-C3'	5.23	1.58	1.53
35	BA	1357	A	N9-C4	-5.23	1.34	1.37
35	BA	1504	G	N1-C2	5.23	1.42	1.37
2	AB	182	A	P-O5'	5.23	1.65	1.59
2	AB	374	A	C3'-C2'	-5.23	1.47	1.52
2	AB	740	C	N3-C4	5.23	1.37	1.33
2	AB	1711	A	N9-C4	-5.23	1.34	1.37
35	BA	155	A	N3-C4	5.23	1.38	1.34
35	BA	427	U	P-O5'	5.23	1.65	1.59
35	BA	923	A	C3'-C2'	5.23	1.58	1.52
35	BA	1057	G	C6-O6	-5.23	1.19	1.24
1	AA	19	C	C4'-O4'	-5.22	1.38	1.45
2	AB	388	G	C2'-C1'	5.22	1.59	1.53
2	AB	457	A	N3-C4	5.22	1.38	1.34
2	AB	561	G	C6-O6	-5.22	1.19	1.24
2	AB	696	G	C8-N7	-5.22	1.27	1.30
2	AB	1573	G	O3'-P	5.22	1.67	1.61
2	AB	2526	G	C4'-C3'	5.22	1.58	1.53
35	BA	190	A	N9-C4	5.22	1.41	1.37
35	BA	1175	G	N3-C4	5.22	1.39	1.35
2	AB	535	G	N3-C4	5.22	1.39	1.35
2	AB	715	A	C2'-O2'	5.22	1.48	1.41
2	AB	1491	G	N3-C4	5.22	1.39	1.35
2	AB	1628	G	P-O5'	5.22	1.65	1.59
2	AB	1653	G	C2-N3	5.22	1.36	1.32
2	AB	2038	G	N1-C2	5.22	1.42	1.37
2	AB	2060	A	N3-C4	5.22	1.38	1.34
35	BA	196	A	N1-C2	-5.22	1.29	1.34
35	BA	1415	G	C2'-O2'	5.22	1.48	1.41
2	AB	616	A	O3'-P	5.22	1.67	1.61
35	BA	61	G	C2-N3	5.22	1.36	1.32
35	BA	541	G	O4'-C1'	5.22	1.48	1.41
35	BA	1033	G	N7-C5	-5.22	1.36	1.39
35	BA	1090	U	O3'-P	5.22	1.67	1.61
38	BD	1	C	N3-C4	5.22	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	36	G	P-O5'	5.22	1.65	1.59
2	AB	632	A	C6-N1	-5.22	1.31	1.35
2	AB	926	G	C8-N7	5.22	1.34	1.30
2	AB	1075	C	C4-C5	5.22	1.47	1.43
2	AB	1085	A	O4'-C1'	-5.22	1.34	1.41
2	AB	1341	G	C5-C4	-5.22	1.34	1.38
2	AB	1510	G	O3'-P	5.22	1.67	1.61
2	AB	1904	G	C6-O6	-5.22	1.19	1.24
2	AB	2604	U	C3'-C2'	5.22	1.58	1.52
2	AB	2814	A	C6-N6	5.22	1.38	1.33
35	BA	81	A	N1-C2	-5.22	1.29	1.34
35	BA	138	G	N3-C4	5.22	1.39	1.35
35	BA	618	C	C2-O2	5.22	1.29	1.24
35	BA	752	G	C2'-O2'	-5.22	1.34	1.41
35	BA	1508	A	C2-N3	5.22	1.38	1.33
38	BD	64	G	N3-C4	-5.22	1.31	1.35
2	AB	42	A	P-O5'	5.22	1.65	1.59
2	AB	661	A	O5'-C5'	-5.22	1.34	1.42
2	AB	2060	A	C2'-C1'	5.22	1.59	1.53
35	BA	8	A	C4'-C3'	5.22	1.58	1.53
35	BA	135	C	P-O5'	5.22	1.65	1.59
35	BA	274	A	C4'-O4'	-5.22	1.38	1.45
35	BA	357	G	N9-C4	-5.22	1.33	1.38
35	BA	603	U	N3-C4	5.22	1.43	1.38
35	BA	949	A	N1-C2	-5.22	1.29	1.34
2	AB	476	G	N9-C4	5.22	1.42	1.38
2	AB	515	A	P-O5'	-5.22	1.54	1.59
2	AB	975	A	N9-C4	5.22	1.41	1.37
2	AB	1269	A	C2'-C1'	-5.22	1.47	1.53
2	AB	1609	A	O3'-P	5.22	1.67	1.61
2	AB	1620	G	N7-C5	-5.22	1.36	1.39
35	BA	54	C	N1-C6	5.22	1.40	1.37
35	BA	401	C	C5-C6	-5.22	1.30	1.34
35	BA	609	A	C2-N3	-5.22	1.28	1.33
35	BA	1092	A	C4'-O4'	-5.22	1.38	1.45
35	BA	1462	C	N1-C6	-5.22	1.34	1.37
2	AB	193	U	C2'-C1'	-5.21	1.47	1.53
2	AB	332	A	C5'-C4'	5.21	1.57	1.51
2	AB	480	A	N3-C4	5.21	1.38	1.34
2	AB	1070	A	C6-N1	5.21	1.39	1.35
2	AB	1248	G	N3-C4	5.21	1.39	1.35
2	AB	1534	U	O3'-P	5.21	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1648	U	C4'-O4'	-5.21	1.38	1.45
2	AB	2004	G	C5'-C4'	5.21	1.57	1.51
2	AB	2056	G	C5-C6	5.21	1.47	1.42
2	AB	2615	U	C5'-C4'	5.21	1.57	1.51
2	AB	2672	U	C2-N3	5.21	1.41	1.37
35	BA	420	U	C4-C5	5.21	1.48	1.43
35	BA	434	U	C5'-C4'	5.21	1.57	1.51
35	BA	615	G	C6-N1	5.21	1.43	1.39
35	BA	973	G	N3-C4	5.21	1.39	1.35
35	BA	1040	U	C2-O2	5.21	1.27	1.22
35	BA	1343	G	C2'-C1'	-5.21	1.47	1.53
35	BA	1379	G	C4'-C3'	-5.21	1.47	1.52
2	AB	160	A	N3-C4	5.21	1.38	1.34
2	AB	219	A	N3-C4	5.21	1.38	1.34
2	AB	276	U	C4-C5	5.21	1.48	1.43
2	AB	491	G	N9-C8	5.21	1.41	1.37
2	AB	918	A	N9-C4	-5.21	1.34	1.37
35	BA	447	G	P-O5'	5.21	1.65	1.59
35	BA	1461	G	C3'-O3'	5.21	1.49	1.42
2	AB	810	U	C2'-O2'	5.21	1.48	1.41
2	AB	1035	U	C2-N3	-5.21	1.34	1.37
2	AB	1363	C	C5'-C4'	5.21	1.57	1.51
2	AB	2510	C	N3-C4	5.21	1.37	1.33
2	AB	2533	U	C2-N3	5.21	1.41	1.37
2	AB	2737	G	N9-C4	5.21	1.42	1.38
2	AB	2804	U	C3'-C2'	5.21	1.58	1.52
2	AB	2862	G	C5-C6	5.21	1.47	1.42
35	BA	247	G	C5-C6	5.21	1.47	1.42
35	BA	645	G	C6-N1	5.21	1.43	1.39
35	BA	670	G	N7-C5	-5.21	1.36	1.39
35	BA	1509	C	N1-C6	5.21	1.40	1.37
38	BD	73	A	P-O5'	5.21	1.65	1.59
1	AA	23	G	C3'-C2'	-5.21	1.47	1.52
2	AB	994	C	C5-C6	5.21	1.38	1.34
2	AB	1369	G	C2'-O2'	-5.21	1.34	1.41
35	BA	1190	G	C2-N3	5.21	1.36	1.32
1	AA	14	U	C4'-O4'	-5.21	1.38	1.45
1	AA	15	A	N9-C4	-5.21	1.34	1.37
1	AA	60	C	C2-N3	5.21	1.40	1.35
2	AB	225	C	N1-C6	5.21	1.40	1.37
2	AB	261	G	C2-N3	5.21	1.36	1.32
2	AB	1127	A	N7-C5	-5.21	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1308	A	C2'-O2'	5.21	1.48	1.41
2	AB	1410	G	C2-N2	-5.21	1.29	1.34
2	AB	1539	U	C4'-C3'	5.21	1.58	1.53
2	AB	1907	G	C2-N3	5.21	1.36	1.32
2	AB	2209	G	C5-C4	5.21	1.42	1.38
2	AB	2243	U	C2-N3	5.21	1.41	1.37
2	AB	2271	G	C8-N7	5.21	1.34	1.30
35	BA	326	G	C4'-C3'	-5.21	1.47	1.52
35	BA	415	A	C6-N6	5.21	1.38	1.33
35	BA	431	A	C2'-C1'	-5.21	1.47	1.53
35	BA	476	U	N3-C4	5.21	1.43	1.38
35	BA	1004	A	O3'-P	5.21	1.67	1.61
35	BA	1041	G	C3'-C2'	5.21	1.58	1.52
35	BA	1187	G	N9-C4	5.21	1.42	1.38
1	AA	87	U	P-O5'	5.21	1.65	1.59
2	AB	2	G	N7-C5	-5.21	1.36	1.39
2	AB	2156	G	C4'-O4'	-5.21	1.38	1.45
2	AB	2546	U	P-O5'	5.21	1.65	1.59
2	AB	2849	U	C4'-O4'	-5.21	1.38	1.45
35	BA	127	G	C2-N3	5.21	1.36	1.32
35	BA	134	G	C4'-C3'	5.21	1.58	1.53
35	BA	577	G	N9-C8	5.21	1.41	1.37
35	BA	764	C	C4-C5	5.21	1.47	1.43
35	BA	923	A	C4'-O4'	-5.21	1.38	1.45
35	BA	1121	U	O4'-C1'	5.21	1.48	1.41
35	BA	1287	A	N3-C4	5.21	1.38	1.34
35	BA	1524	C	O4'-C1'	5.21	1.48	1.41
35	BA	1542	A	C6-N6	5.21	1.38	1.33
37	BC	38	G	P-O5'	5.21	1.65	1.59
44	BJ	153	TYR	CD1-CE1	5.21	1.47	1.39
2	AB	918	A	C6-N1	-5.21	1.31	1.35
35	BA	587	G	O4'-C1'	5.21	1.48	1.41
35	BA	633	G	C5'-C4'	5.21	1.57	1.51
2	AB	465	G	C5'-C4'	5.20	1.57	1.51
2	AB	830	G	C5'-C4'	5.20	1.57	1.51
2	AB	889	C	N1-C6	5.20	1.40	1.37
2	AB	1029	A	C6-N1	-5.20	1.31	1.35
2	AB	1177	G	O4'-C1'	-5.20	1.34	1.41
2	AB	1356	G	C4'-O4'	-5.20	1.38	1.45
2	AB	2356	U	C5'-C4'	5.20	1.57	1.51
33	A6	44	ARG	CZ-NH1	5.20	1.39	1.33
35	BA	514	C	P-O5'	-5.20	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	BD	53	G	C2-N3	5.20	1.36	1.32
2	AB	224	U	C4-O4	-5.20	1.19	1.23
2	AB	374	A	O3'-P	5.20	1.67	1.61
2	AB	709	U	C3'-C2'	5.20	1.58	1.52
2	AB	709	U	N1-C2	5.20	1.43	1.38
2	AB	1082	U	P-O5'	-5.20	1.54	1.59
2	AB	1362	C	P-O5'	5.20	1.65	1.59
2	AB	1552	A	C2'-C1'	-5.20	1.47	1.53
2	AB	1581	G	C2-N3	5.20	1.36	1.32
12	AL	99	ARG	CZ-NH1	5.20	1.39	1.33
35	BA	417	G	C5'-C4'	5.20	1.57	1.51
35	BA	791	G	C2-N2	-5.20	1.29	1.34
35	BA	1539	C	C2-N3	5.20	1.40	1.35
2	AB	47	C	C2-O2	-5.20	1.19	1.24
2	AB	334	C	O4'-C1'	5.20	1.48	1.41
2	AB	461	C	C4'-O4'	-5.20	1.38	1.45
2	AB	2317	A	C5'-C4'	5.20	1.57	1.51
2	AB	2462	C	P-OP1	-5.20	1.40	1.49
2	AB	2711	A	C3'-C2'	5.20	1.58	1.52
2	AB	2826	A	C2'-C1'	5.20	1.59	1.53
35	BA	31	G	O3'-P	5.20	1.67	1.61
35	BA	107	G	N7-C5	-5.20	1.36	1.39
35	BA	363	A	C5-C6	5.20	1.45	1.41
35	BA	770	C	N1-C2	5.20	1.45	1.40
35	BA	1119	C	C5-C6	5.20	1.38	1.34
35	BA	1387	G	C2-N2	5.20	1.39	1.34
55	BU	22	TYR	CE1-CZ	5.20	1.45	1.38
2	AB	107	G	N3-C4	5.20	1.39	1.35
2	AB	260	G	C5-C4	-5.20	1.34	1.38
2	AB	428	A	C2'-C1'	-5.20	1.47	1.53
2	AB	1039	A	C2'-O2'	-5.20	1.34	1.41
2	AB	2733	A	C4'-C3'	5.20	1.58	1.53
6	AF	70	SER	CA-CB	5.20	1.60	1.52
35	BA	923	A	C6-N6	5.20	1.38	1.33
35	BA	1530	G	C3'-C2'	5.20	1.58	1.52
38	BD	35	C	C3'-C2'	5.20	1.58	1.52
2	AB	68	G	C2-N3	5.20	1.36	1.32
2	AB	531	C	C5-C6	5.20	1.38	1.34
2	AB	1603	A	C5'-C4'	5.20	1.57	1.51
2	AB	1874	C	O3'-P	-5.20	1.54	1.61
2	AB	1914	C	N3-C4	-5.20	1.30	1.33
2	AB	1916	A	C2-N3	-5.20	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2511	U	C4-C5	5.20	1.48	1.43
5	AE	162	ALA	C-N	5.20	1.42	1.33
35	BA	547	A	C6-N1	5.20	1.39	1.35
35	BA	561	U	C3'-O3'	5.20	1.49	1.42
35	BA	808	C	C1'-N1	5.20	1.56	1.48
38	BD	42	C	O4'-C1'	5.20	1.48	1.41
1	AA	61	G	N3-C4	5.20	1.39	1.35
2	AB	410	G	C5'-C4'	5.20	1.57	1.51
2	AB	919	U	C5'-C4'	5.20	1.57	1.51
2	AB	1002	G	C4'-C3'	5.20	1.58	1.53
2	AB	1101	U	N3-C4	5.20	1.43	1.38
2	AB	1562	U	N1-C6	-5.20	1.33	1.38
2	AB	2125	G	C8-N7	-5.20	1.27	1.30
2	AB	2179	C	N3-C4	5.20	1.37	1.33
2	AB	2376	A	O3'-P	5.20	1.67	1.61
2	AB	2508	G	C4'-O4'	-5.20	1.38	1.45
6	AF	117	ARG	CZ-NH1	5.20	1.39	1.33
30	A3	47	TYR	CE2-CZ	5.20	1.45	1.38
35	BA	520	A	N9-C4	5.20	1.41	1.37
38	BD	22	A	C2'-C1'	5.20	1.59	1.53
2	AB	1293	C	N3-C4	5.19	1.37	1.33
2	AB	1501	G	O5'-C5'	-5.19	1.34	1.42
2	AB	1649	G	C2-N3	5.19	1.36	1.32
35	BA	1529	G	C4'-O4'	-5.19	1.38	1.45
2	AB	2311	A	N9-C8	-5.19	1.33	1.37
35	BA	658	C	C3'-O3'	5.19	1.49	1.42
35	BA	1506	U	C4'-C3'	5.19	1.58	1.53
35	BA	1534	A	C2-N3	5.19	1.38	1.33
1	AA	58	A	N3-C4	5.19	1.38	1.34
2	AB	94	A	C4'-C3'	-5.19	1.47	1.52
2	AB	288	U	N1-C2	5.19	1.43	1.38
2	AB	1275	A	P-O5'	5.19	1.65	1.59
2	AB	1515	A	N1-C2	-5.19	1.29	1.34
2	AB	1646	C	C4'-O4'	-5.19	1.38	1.45
2	AB	1682	G	C2-N3	5.19	1.36	1.32
2	AB	1739	A	C6-N1	-5.19	1.31	1.35
2	AB	1834	U	C4-C5	5.19	1.48	1.43
2	AB	2570	G	C6-O6	5.19	1.28	1.24
2	AB	2685	G	N9-C8	5.19	1.41	1.37
2	AB	2749	A	N9-C8	-5.19	1.33	1.37
35	BA	576	C	N3-C4	5.19	1.37	1.33
35	BA	1184	G	N9-C4	-5.19	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	976	G	C5-C4	-5.19	1.34	1.38
2	AB	1050	A	N9-C8	-5.19	1.33	1.37
35	BA	386	C	C2'-C1'	5.19	1.59	1.53
35	BA	751	U	C1'-N1	5.19	1.56	1.48
35	BA	870	U	P-O5'	-5.19	1.54	1.59
2	AB	134	G	C4'-O4'	-5.19	1.38	1.45
2	AB	306	U	C4'-O4'	-5.19	1.38	1.45
2	AB	706	A	N9-C8	5.19	1.41	1.37
2	AB	868	U	C5-C6	5.19	1.38	1.34
2	AB	976	G	N1-C2	5.19	1.41	1.37
2	AB	1042	G	C6-N1	5.19	1.43	1.39
2	AB	1898	U	P-O5'	5.19	1.65	1.59
2	AB	2375	G	N3-C4	5.19	1.39	1.35
2	AB	2897	U	C5'-C4'	5.19	1.57	1.51
35	BA	1323	G	O5'-C5'	-5.19	1.34	1.42
1	AA	55	U	C5-C6	5.19	1.38	1.34
2	AB	5	A	C5'-C4'	5.19	1.57	1.51
2	AB	48	G	P-O5'	5.19	1.65	1.59
2	AB	1803	A	C5-C6	5.19	1.45	1.41
2	AB	338	G	C2'-C1'	5.18	1.59	1.53
2	AB	405	U	C4'-C3'	5.18	1.58	1.53
2	AB	433	C	P-O5'	5.18	1.65	1.59
2	AB	1952	A	N9-C8	5.18	1.41	1.37
35	BA	546	A	N7-C5	5.18	1.42	1.39
35	BA	566	G	O3'-P	5.18	1.67	1.61
2	AB	1347	A	C6-N6	5.18	1.38	1.33
2	AB	1536	C	C4'-C3'	5.18	1.58	1.53
2	AB	1687	G	N7-C5	5.18	1.42	1.39
35	BA	316	C	P-O5'	5.18	1.65	1.59
35	BA	1099	G	C8-N7	-5.18	1.27	1.30
2	AB	33	C	C2'-C1'	-5.18	1.47	1.53
2	AB	188	G	O3'-P	5.18	1.67	1.61
2	AB	1305	C	C2-O2	5.18	1.29	1.24
2	AB	2414	G	N7-C5	-5.18	1.36	1.39
35	BA	434	U	O4'-C1'	5.18	1.48	1.41
35	BA	1281	C	C3'-C2'	5.18	1.58	1.52
35	BA	1292	G	N9-C8	5.18	1.41	1.37
2	AB	84	A	N9-C8	-5.18	1.33	1.37
2	AB	308	G	N3-C4	5.18	1.39	1.35
2	AB	615	U	N1-C6	5.18	1.42	1.38
2	AB	2722	G	C6-N1	5.18	1.43	1.39
35	BA	253	A	N7-C5	5.18	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	683	G	C5-C4	-5.18	1.34	1.38
35	BA	802	A	C5'-C4'	5.18	1.57	1.51
35	BA	1201	A	C5-C4	5.18	1.42	1.38
36	BB	66	C	C5-C6	5.18	1.38	1.34
51	BQ	36	SER	CB-OG	-5.18	1.35	1.42
2	AB	1307	A	C5-C4	-5.18	1.35	1.38
35	BA	830	G	C2-N3	5.18	1.36	1.32
35	BA	1093	A	N7-C5	-5.18	1.36	1.39
1	AA	109	A	C3'-C2'	5.18	1.58	1.52
2	AB	1	G	C4'-O4'	-5.18	1.38	1.45
2	AB	415	A	N9-C4	-5.18	1.34	1.37
2	AB	440	C	O4'-C1'	5.18	1.48	1.41
2	AB	508	A	C5-C4	-5.18	1.35	1.38
2	AB	811	U	O4'-C1'	5.18	1.48	1.41
2	AB	2294	G	P-O5'	5.18	1.65	1.59
2	AB	2831	G	C5-C6	5.18	1.47	1.42
35	BA	241	G	C4'-C3'	-5.18	1.47	1.52
2	AB	202	U	C4'-O4'	-5.17	1.38	1.45
2	AB	241	A	C5'-C4'	5.17	1.57	1.51
2	AB	1292	G	C5-C6	5.17	1.47	1.42
2	AB	1327	A	C5-C4	-5.17	1.35	1.38
2	AB	1683	U	C4'-O4'	-5.17	1.38	1.45
2	AB	1818	U	N3-C4	5.17	1.43	1.38
2	AB	2839	G	O3'-P	-5.17	1.54	1.61
35	BA	359	G	C4'-C3'	5.17	1.58	1.53
35	BA	391	G	C4'-C3'	-5.17	1.47	1.52
35	BA	758	C	C4'-O4'	-5.17	1.38	1.45
35	BA	1128	C	C5-C6	5.17	1.38	1.34
35	BA	1194	U	C4-O4	-5.17	1.19	1.23
2	AB	1254	A	N9-C8	-5.17	1.33	1.37
2	AB	1316	U	O4'-C1'	5.17	1.48	1.41
16	AP	26	GLY	CA-C	5.17	1.60	1.51
23	AW	36	GLU	CB-CG	5.17	1.61	1.52
35	BA	336	A	C2-N3	5.17	1.38	1.33
35	BA	526	C	O4'-C1'	5.17	1.48	1.41
35	BA	962	C	C5'-C4'	-5.17	1.45	1.51
36	BB	13	C	O3'-P	5.17	1.67	1.61
1	AA	51	G	O3'-P	5.17	1.67	1.61
2	AB	239	C	C5-C6	5.17	1.38	1.34
2	AB	777	G	C5'-C4'	5.17	1.57	1.51
2	AB	833	A	C3'-C2'	-5.17	1.47	1.52
2	AB	2570	G	C5-C4	5.17	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	335	C	O5'-C5'	-5.17	1.34	1.42
35	BA	1048	G	C3'-O3'	5.17	1.49	1.42
35	BA	1099	G	N1-C2	5.17	1.41	1.37
38	BD	32	G	P-O5'	5.17	1.65	1.59
38	BD	59	A	C5'-C4'	5.17	1.57	1.51
2	AB	1669	A	C4'-C3'	-5.17	1.47	1.52
2	AB	2153	C	C4-C5	5.17	1.47	1.43
35	BA	7	A	C6-N6	5.17	1.38	1.33
35	BA	107	G	C2-N2	-5.17	1.29	1.34
35	BA	395	C	C2-N3	5.17	1.39	1.35
38	BD	32	G	C3'-C2'	5.17	1.58	1.52
2	AB	156	A	N7-C5	-5.17	1.36	1.39
2	AB	797	G	P-O5'	5.17	1.65	1.59
2	AB	886	A	C4'-O4'	-5.17	1.38	1.45
2	AB	1030	C	C2-O2	-5.17	1.19	1.24
2	AB	1207	C	C4'-O4'	-5.17	1.38	1.45
2	AB	1443	U	C5-C6	-5.17	1.29	1.34
2	AB	1636	U	O4'-C1'	5.17	1.48	1.41
2	AB	1848	A	C8-N7	-5.17	1.27	1.31
2	AB	1862	G	N1-C2	5.17	1.41	1.37
35	BA	895	G	C5'-C4'	5.17	1.57	1.51
35	BA	906	A	C5-C6	5.17	1.45	1.41
35	BA	1108	G	C5'-C4'	5.17	1.57	1.51
35	BA	1405	G	C3'-C2'	-5.17	1.47	1.52
39	BE	214	GLY	N-CA	5.17	1.53	1.46
2	AB	709	U	C4'-O4'	-5.17	1.38	1.45
2	AB	992	C	C2'-O2'	5.17	1.48	1.41
2	AB	1237	A	C6-N1	5.17	1.39	1.35
2	AB	2468	A	C4'-C3'	5.17	1.58	1.53
2	AB	2862	G	P-O5'	5.17	1.65	1.59
2	AB	2873	A	C4'-O4'	-5.17	1.38	1.45
35	BA	382	A	N3-C4	5.17	1.38	1.34
38	BD	39	A	C8-N7	-5.17	1.27	1.31
1	AA	60	C	C4-N4	-5.17	1.29	1.33
2	AB	788	A	N7-C5	5.17	1.42	1.39
2	AB	2528	U	C2-N3	-5.17	1.34	1.37
35	BA	69	G	N3-C4	5.17	1.39	1.35
35	BA	444	G	N3-C4	5.17	1.39	1.35
36	BB	24	G	O3'-P	5.17	1.67	1.61
1	AA	61	G	C3'-C2'	5.16	1.58	1.52
2	AB	69	C	C5-C6	5.16	1.38	1.34
2	AB	541	A	C8-N7	-5.16	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	575	A	C5-C4	-5.16	1.35	1.38
2	AB	1188	U	C4-O4	-5.16	1.19	1.23
2	AB	1326	U	N1-C2	-5.16	1.33	1.38
2	AB	1793	C	P-O5'	5.16	1.65	1.59
2	AB	2132	U	C1'-N1	5.16	1.56	1.48
2	AB	2227	A	N7-C5	-5.16	1.36	1.39
2	AB	2668	G	N9-C4	5.16	1.42	1.38
35	BA	127	G	C8-N7	5.16	1.34	1.30
35	BA	196	A	C2'-C1'	-5.16	1.47	1.53
35	BA	697	U	C5'-C4'	5.16	1.57	1.51
35	BA	948	C	C3'-C2'	5.16	1.58	1.52
35	BA	1146	A	C4'-C3'	5.16	1.58	1.53
35	BA	1170	A	N7-C5	-5.16	1.36	1.39
53	BS	30	GLY	CA-C	5.16	1.60	1.51
2	AB	2635	A	C4'-C3'	5.16	1.58	1.53
35	BA	96	U	N1-C6	5.16	1.42	1.38
35	BA	1014	A	N3-C4	5.16	1.38	1.34
2	AB	340	A	N1-C2	5.16	1.39	1.34
2	AB	363	G	P-O5'	5.16	1.65	1.59
2	AB	575	A	N9-C8	-5.16	1.33	1.37
2	AB	912	C	C4'-O4'	-5.16	1.38	1.45
2	AB	1587	G	C8-N7	5.16	1.34	1.30
2	AB	1694	C	C2-N3	5.16	1.39	1.35
35	BA	285	C	P-O5'	5.16	1.65	1.59
35	BA	539	A	C5-C4	-5.16	1.35	1.38
35	BA	639	G	N7-C5	-5.16	1.36	1.39
35	BA	857	C	C4'-O4'	-5.16	1.38	1.45
35	BA	1202	U	N1-C6	-5.16	1.33	1.38
2	AB	1638	C	N1-C6	5.16	1.40	1.37
2	AB	1759	A	C2'-C1'	5.16	1.59	1.53
2	AB	2063	C	C4-C5	5.16	1.47	1.43
2	AB	2261	C	C2-N3	5.16	1.39	1.35
2	AB	2447	G	C6-N1	5.16	1.43	1.39
2	AB	2738	A	C8-N7	5.16	1.35	1.31
35	BA	499	A	C5-C4	-5.16	1.35	1.38
35	BA	778	G	C3'-O3'	5.16	1.49	1.42
35	BA	1399	C	C5-C6	5.16	1.38	1.34
37	BC	29	G	N3-C4	-5.16	1.31	1.35
38	BD	30	G	C5-C4	5.16	1.42	1.38
2	AB	871	U	C4-O4	5.16	1.27	1.23
2	AB	945	A	C3'-C2'	5.16	1.58	1.52
2	AB	1085	A	C3'-C2'	5.16	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1544	A	N9-C4	-5.16	1.34	1.37
2	AB	2262	U	C3'-C2'	-5.16	1.47	1.52
35	BA	768	A	C6-N6	5.16	1.38	1.33
35	BA	1164	G	C1'-N9	5.16	1.56	1.48
35	BA	1501	C	C4-N4	5.16	1.38	1.33
2	AB	133	U	C2-N3	5.16	1.41	1.37
2	AB	2088	A	O3'-P	5.16	1.67	1.61
2	AB	2406	A	C2'-C1'	5.16	1.59	1.53
2	AB	2527	C	C5'-C4'	5.16	1.57	1.51
2	AB	2682	A	C2'-C1'	5.16	1.59	1.53
2	AB	2724	U	C4'-C3'	-5.16	1.47	1.52
35	BA	309	A	N1-C2	-5.16	1.29	1.34
35	BA	699	C	C5-C6	5.16	1.38	1.34
35	BA	898	G	C5'-C4'	5.16	1.57	1.51
35	BA	935	A	C4'-O4'	-5.16	1.38	1.45
35	BA	964	A	O4'-C1'	5.16	1.48	1.41
35	BA	1290	G	C2-N3	5.16	1.36	1.32
36	BB	59	G	C8-N7	-5.16	1.27	1.30
2	AB	643	A	P-O5'	5.15	1.65	1.59
2	AB	873	C	C2'-O2'	5.15	1.48	1.41
2	AB	1439	A	C6-N6	-5.15	1.29	1.33
2	AB	1566	A	C2'-C1'	-5.15	1.47	1.53
2	AB	2741	A	C5-C6	-5.15	1.36	1.41
2	AB	1044	C	C5-C6	5.15	1.38	1.34
2	AB	1178	C	C3'-C2'	5.15	1.58	1.52
2	AB	1219	U	C4-C5	5.15	1.48	1.43
2	AB	1690	A	N7-C5	-5.15	1.36	1.39
2	AB	1736	U	P-O5'	5.15	1.65	1.59
2	AB	1787	A	C5'-C4'	5.15	1.57	1.51
2	AB	1859	U	C5'-C4'	5.15	1.57	1.51
2	AB	2396	G	C8-N7	-5.15	1.27	1.30
2	AB	2567	G	C3'-C2'	5.15	1.58	1.52
35	BA	457	G	C5-C6	5.15	1.47	1.42
35	BA	1092	A	C5'-C4'	5.15	1.57	1.51
35	BA	1538	C	C3'-C2'	5.15	1.58	1.52
37	BC	21	U	C4-C5	5.15	1.48	1.43
2	AB	92	U	N1-C2	-5.15	1.33	1.38
2	AB	108	G	N7-C5	5.15	1.42	1.39
2	AB	452	G	N9-C4	5.15	1.42	1.38
2	AB	698	C	C2-N3	5.15	1.39	1.35
2	AB	732	C	C5'-C4'	5.15	1.57	1.51
2	AB	1211	C	C5'-C4'	5.15	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1284	A	O3'-P	5.15	1.67	1.61
2	AB	1382	G	C2-N3	5.15	1.36	1.32
2	AB	1518	C	C4-C5	5.15	1.47	1.43
2	AB	1801	A	C2'-C1'	5.15	1.59	1.53
2	AB	1913	A	C6-N1	-5.15	1.31	1.35
2	AB	2168	G	C3'-O3'	-5.15	1.34	1.42
2	AB	2317	A	C6-N6	-5.15	1.29	1.33
2	AB	2765	A	C4'-O4'	-5.15	1.38	1.45
35	BA	210	C	P-O5'	5.15	1.65	1.59
35	BA	236	A	P-O5'	5.15	1.64	1.59
35	BA	1361	G	O3'-P	5.15	1.67	1.61
36	BB	1	A	C6-N6	-5.15	1.29	1.33
2	AB	326	G	O3'-P	5.15	1.67	1.61
2	AB	1588	G	C6-O6	-5.15	1.19	1.24
2	AB	1714	U	C5-C6	5.15	1.38	1.34
35	BA	111	G	C4'-O4'	-5.15	1.38	1.45
35	BA	942	G	N7-C5	5.15	1.42	1.39
45	BK	12	ARG	CZ-NH2	5.15	1.39	1.33
2	AB	96	C	N1-C6	-5.15	1.34	1.37
2	AB	232	G	N7-C5	5.15	1.42	1.39
2	AB	1338	G	P-O5'	5.15	1.64	1.59
2	AB	1451	C	N1-C6	5.15	1.40	1.37
2	AB	1713	A	N3-C4	-5.15	1.31	1.34
2	AB	2639	A	O3'-P	5.15	1.67	1.61
2	AB	2822	G	C5'-C4'	5.15	1.57	1.51
35	BA	90	C	C4'-O4'	-5.15	1.38	1.45
35	BA	177	G	C8-N7	5.15	1.34	1.30
35	BA	350	G	N9-C8	5.15	1.41	1.37
35	BA	622	A	C3'-C2'	5.15	1.58	1.52
35	BA	708	C	O3'-P	5.15	1.67	1.61
35	BA	853	C	C1'-N1	5.15	1.56	1.48
35	BA	960	U	C3'-C2'	5.15	1.58	1.52
35	BA	973	G	C5-C4	-5.15	1.34	1.38
35	BA	1133	G	C2'-C1'	5.15	1.59	1.53
2	AB	328	U	C2'-O2'	5.15	1.48	1.41
2	AB	628	G	N7-C5	-5.15	1.36	1.39
2	AB	1745	A	P-O5'	-5.15	1.54	1.59
2	AB	2699	C	C5-C6	5.15	1.38	1.34
35	BA	1115	U	O3'-P	5.15	1.67	1.61
1	AA	69	G	C6-O6	5.14	1.28	1.24
2	AB	659	G	N9-C4	5.14	1.42	1.38
2	AB	1518	C	P-O5'	-5.14	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1671	U	N1-C2	5.14	1.43	1.38
2	AB	2298	A	N3-C4	5.14	1.38	1.34
2	AB	2412	A	C5-C6	-5.14	1.36	1.41
2	AB	2562	U	C3'-O3'	-5.14	1.34	1.42
2	AB	2683	C	C2'-C1'	-5.14	1.47	1.53
2	AB	2766	A	C2'-O2'	-5.14	1.34	1.41
2	AB	2857	G	C6-O6	-5.14	1.19	1.24
35	BA	53	A	C8-N7	-5.14	1.27	1.31
35	BA	269	C	C2-O2	-5.14	1.19	1.24
35	BA	596	A	N9-C4	-5.14	1.34	1.37
35	BA	1025	U	N3-C4	5.14	1.43	1.38
37	BC	43	U	O4'-C1'	5.14	1.48	1.41
2	AB	77	G	C4'-O4'	-5.14	1.38	1.45
2	AB	329	G	C4'-O4'	-5.14	1.38	1.45
2	AB	1367	A	N9-C4	5.14	1.41	1.37
2	AB	1562	U	C4-O4	-5.14	1.19	1.23
2	AB	2338	C	C2-N3	5.14	1.39	1.35
2	AB	2902	C	C4-C5	5.14	1.47	1.43
35	BA	373	A	C3'-O3'	5.14	1.49	1.42
35	BA	405	U	O3'-P	5.14	1.67	1.61
35	BA	816	A	C5'-C4'	5.14	1.57	1.51
35	BA	1123	U	C4-O4	-5.14	1.19	1.23
35	BA	1496	C	C2'-C1'	5.14	1.59	1.53
2	AB	43	G	N9-C4	5.14	1.42	1.38
2	AB	198	C	C2-N3	5.14	1.39	1.35
2	AB	252	G	N7-C5	5.14	1.42	1.39
2	AB	1271	G	C6-O6	-5.14	1.19	1.24
35	BA	995	C	C5-C6	5.14	1.38	1.34
35	BA	1210	C	C5-C6	5.14	1.38	1.34
35	BA	1397	C	C5'-C4'	5.14	1.57	1.51
38	BD	37	U	P-O5'	5.14	1.64	1.59
2	AB	269	C	C2'-O2'	5.14	1.48	1.41
2	AB	576	U	C2'-C1'	5.14	1.59	1.53
2	AB	2213	U	C2'-C1'	5.14	1.59	1.53
2	AB	2598	A	N3-C4	5.14	1.38	1.34
2	AB	2803	G	O3'-P	5.14	1.67	1.61
35	BA	283	U	O4'-C1'	5.14	1.48	1.41
35	BA	1197	A	P-O5'	5.14	1.64	1.59
35	BA	1442	G	O3'-P	5.14	1.67	1.61
36	BB	70	C	C3'-C2'	-5.14	1.47	1.52
38	BD	9	G	C6-N1	5.14	1.43	1.39
1	AA	35	C	C2'-C1'	5.14	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2131	U	C2'-C1'	5.14	1.59	1.53
2	AB	2799	A	C2-N3	5.14	1.38	1.33
36	BB	9	A	N7-C5	5.14	1.42	1.39
2	AB	227	A	C3'-C2'	-5.14	1.47	1.52
2	AB	341	C	P-O5'	5.14	1.64	1.59
2	AB	783	A	C4'-O4'	-5.14	1.38	1.45
2	AB	995	C	C2-O2	-5.14	1.19	1.24
2	AB	1445	G	C6-O6	-5.14	1.19	1.24
2	AB	2320	U	C5-C6	5.14	1.38	1.34
2	AB	2363	G	O3'-P	5.14	1.67	1.61
2	AB	2817	U	P-O5'	-5.14	1.54	1.59
3	AC	10	VAL	CB-CG1	5.14	1.63	1.52
35	BA	820	U	C3'-O3'	5.14	1.49	1.42
35	BA	979	C	C2'-O2'	5.14	1.48	1.41
35	BA	994	A	C3'-C2'	-5.14	1.47	1.52
35	BA	1157	A	C6-N1	5.14	1.39	1.35
36	BB	41	C	C3'-O3'	5.14	1.49	1.42
2	AB	199	A	P-O5'	5.13	1.64	1.59
2	AB	373	U	C4'-C3'	5.13	1.58	1.53
2	AB	566	U	O3'-P	5.13	1.67	1.61
2	AB	741	U	N1-C6	-5.13	1.33	1.38
2	AB	933	A	N3-C4	5.13	1.38	1.34
2	AB	2027	G	N1-C2	5.13	1.41	1.37
35	BA	17	U	O4'-C1'	5.13	1.48	1.41
35	BA	38	G	O5'-C5'	-5.13	1.34	1.42
35	BA	381	C	O3'-P	-5.13	1.54	1.61
35	BA	407	U	C2-N3	5.13	1.41	1.37
35	BA	774	G	O3'-P	-5.13	1.54	1.61
35	BA	1030	U	N1-C2	5.13	1.43	1.38
2	AB	767	U	C5-C6	5.13	1.38	1.34
2	AB	984	A	C3'-C2'	-5.13	1.47	1.52
2	AB	1005	C	C4-C5	5.13	1.47	1.43
2	AB	1071	G	P-O5'	5.13	1.64	1.59
2	AB	1721	G	P-O5'	-5.13	1.54	1.59
35	BA	566	G	N9-C8	5.13	1.41	1.37
35	BA	633	G	O3'-P	5.13	1.67	1.61
35	BA	1029	U	C4-C5	5.13	1.48	1.43
36	BB	22	G	C4'-C3'	-5.13	1.47	1.52
2	AB	2661	G	C6-N1	5.13	1.43	1.39
9	AI	133	GLN	CG-CD	5.13	1.62	1.51
35	BA	231	U	P-O5'	5.13	1.64	1.59
35	BA	599	C	C1'-N1	5.13	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	873	A	C1'-N9	5.13	1.56	1.48
2	AB	276	U	C5-C6	5.13	1.38	1.34
2	AB	350	G	C2-N3	-5.13	1.28	1.32
2	AB	1070	A	N7-C5	5.13	1.42	1.39
2	AB	1777	U	O4'-C1'	5.13	1.48	1.41
2	AB	2636	C	C4'-O4'	-5.13	1.38	1.45
35	BA	258	G	C4'-O4'	-5.13	1.38	1.45
35	BA	587	G	C8-N7	-5.13	1.27	1.30
35	BA	1041	G	C4'-O4'	-5.13	1.38	1.45
35	BA	1409	C	C2-O2	-5.13	1.19	1.24
2	AB	327	G	O4'-C1'	5.13	1.48	1.41
2	AB	382	A	C6-N1	-5.13	1.31	1.35
2	AB	794	A	C3'-O3'	5.13	1.49	1.42
2	AB	1635	A	N3-C4	5.13	1.38	1.34
2	AB	2108	A	N3-C4	5.13	1.38	1.34
2	AB	2480	C	C5-C6	5.13	1.38	1.34
2	AB	2718	G	P-O5'	5.13	1.64	1.59
2	AB	2821	A	N7-C5	-5.13	1.36	1.39
35	BA	295	C	C2-N3	5.13	1.39	1.35
35	BA	452	A	O3'-P	-5.13	1.54	1.61
35	BA	640	A	C5-C6	5.13	1.45	1.41
35	BA	1475	G	O3'-P	-5.13	1.54	1.61
2	AB	94	A	O4'-C1'	5.13	1.48	1.41
2	AB	682	G	C1'-N9	5.13	1.56	1.48
37	BC	53	G	N9-C4	5.13	1.42	1.38
1	AA	36	C	O3'-P	5.12	1.67	1.61
2	AB	1068	G	N3-C4	5.12	1.39	1.35
2	AB	2027	G	C6-N1	5.12	1.43	1.39
2	AB	2090	A	O3'-P	5.12	1.67	1.61
2	AB	2139	U	C2-O2	5.12	1.26	1.22
42	BH	118	GLY	CA-C	5.12	1.60	1.51
2	AB	423	A	C8-N7	-5.12	1.27	1.31
2	AB	1377	G	N7-C5	5.12	1.42	1.39
2	AB	1569	A	O3'-P	5.12	1.67	1.61
2	AB	1801	A	N9-C4	-5.12	1.34	1.37
2	AB	2262	U	C4'-O4'	-5.12	1.38	1.45
2	AB	2780	G	P-O5'	5.12	1.64	1.59
8	AH	61	TRP	CB-CG	5.12	1.59	1.50
35	BA	853	C	C2'-O2'	5.12	1.48	1.41
35	BA	857	C	O3'-P	5.12	1.67	1.61
1	AA	51	G	C8-N7	-5.12	1.27	1.30
2	AB	132	G	N7-C5	-5.12	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	690	G	C6-O6	-5.12	1.19	1.24
2	AB	790	U	C5'-C4'	5.12	1.57	1.51
2	AB	1517	G	C2-N3	5.12	1.36	1.32
2	AB	1546	G	C5-C6	5.12	1.47	1.42
2	AB	1857	G	N9-C8	-5.12	1.34	1.37
2	AB	1916	A	C2'-C1'	5.12	1.58	1.53
2	AB	2129	C	C5-C6	5.12	1.38	1.34
22	AV	80	TRP	CD2-CE3	5.12	1.48	1.40
35	BA	256	U	N1-C6	5.12	1.42	1.38
35	BA	315	A	O3'-P	5.12	1.67	1.61
35	BA	416	G	C2-N3	5.12	1.36	1.32
35	BA	447	G	C4'-O4'	-5.12	1.38	1.45
35	BA	488	C	P-O5'	5.12	1.64	1.59
35	BA	1244	G	N3-C4	5.12	1.39	1.35
2	AB	1051	G	O5'-C5'	-5.12	1.34	1.42
35	BA	179	A	C8-N7	-5.12	1.27	1.31
35	BA	541	G	O3'-P	5.12	1.67	1.61
37	BC	15	G	C3'-C2'	-5.12	1.47	1.52
2	AB	114	U	C4'-O4'	-5.12	1.38	1.45
2	AB	343	C	C2-N3	5.12	1.39	1.35
2	AB	456	C	O3'-P	5.12	1.67	1.61
2	AB	468	G	C2'-C1'	-5.12	1.47	1.53
2	AB	783	A	P-O5'	5.12	1.64	1.59
2	AB	1796	U	C2'-C1'	-5.12	1.47	1.53
2	AB	1821	A	C4'-O4'	-5.12	1.38	1.45
32	A5	28	ARG	CD-NE	5.12	1.55	1.46
35	BA	574	A	P-O5'	5.12	1.64	1.59
35	BA	639	G	C6-N1	5.12	1.43	1.39
36	BB	52	A	C2'-C1'	-5.12	1.47	1.53
2	AB	1239	G	C6-N1	-5.12	1.35	1.39
2	AB	1671	U	O3'-P	5.12	1.67	1.61
2	AB	2227	A	C6-N6	-5.12	1.29	1.33
35	BA	586	C	C5-C6	5.12	1.38	1.34
35	BA	859	G	C6-N1	5.12	1.43	1.39
36	BB	10	G	C2-N3	5.12	1.36	1.32
2	AB	1042	G	C2-N2	5.12	1.39	1.34
2	AB	1063	G	C2-N3	5.12	1.36	1.32
2	AB	1427	A	C3'-C2'	5.12	1.58	1.52
35	BA	336	A	C6-N6	5.12	1.38	1.33
35	BA	476	U	C2'-C1'	5.12	1.58	1.53
35	BA	1332	A	C4'-O4'	-5.12	1.38	1.45
35	BA	1350	A	N3-C4	5.12	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1447	A	N9-C4	-5.12	1.34	1.37
36	BB	7	G	C4'-O4'	-5.12	1.38	1.45
38	BD	63	C	P-O5'	5.12	1.64	1.59
2	AB	170	U	N1-C2	5.11	1.43	1.38
2	AB	498	G	C4'-O4'	-5.11	1.39	1.45
2	AB	726	G	C2-N3	5.11	1.36	1.32
2	AB	1989	G	C5-C6	5.11	1.47	1.42
2	AB	2512	C	C2'-O2'	5.11	1.48	1.41
35	BA	24	U	C2-O2	5.11	1.26	1.22
35	BA	56	U	C2-O2	5.11	1.26	1.22
35	BA	506	G	O3'-P	-5.11	1.55	1.61
35	BA	1264	U	O4'-C1'	5.11	1.48	1.41
35	BA	1297	G	C2-N3	5.11	1.36	1.32
36	BB	75	C	C4'-O4'	-5.11	1.39	1.45
37	BC	54	U	C2-N3	5.11	1.41	1.37
1	AA	39	A	N1-C2	-5.11	1.29	1.34
1	AA	118	C	N3-C4	5.11	1.37	1.33
2	AB	129	C	C4'-O4'	-5.11	1.39	1.45
2	AB	527	C	C2'-O2'	-5.11	1.35	1.41
2	AB	1849	G	N9-C4	5.11	1.42	1.38
2	AB	2472	G	C5'-C4'	5.11	1.57	1.51
35	BA	398	U	C2-N3	-5.11	1.34	1.37
35	BA	597	G	C6-N1	5.11	1.43	1.39
35	BA	893	C	P-O5'	5.11	1.64	1.59
2	AB	324	A	C6-N6	-5.11	1.29	1.33
2	AB	446	G	P-O5'	5.11	1.64	1.59
2	AB	572	A	P-O5'	5.11	1.64	1.59
2	AB	725	G	C2-N3	5.11	1.36	1.32
2	AB	980	A	P-O5'	5.11	1.64	1.59
2	AB	1010	A	N1-C2	-5.11	1.29	1.34
2	AB	1304	A	C5'-C4'	5.11	1.57	1.51
2	AB	1513	U	C2-N3	5.11	1.41	1.37
2	AB	2334	U	C4'-O4'	-5.11	1.39	1.45
9	AI	48	GLU	CG-CD	5.11	1.59	1.51
35	BA	540	G	N1-C2	5.11	1.41	1.37
35	BA	634	C	C5'-C4'	5.11	1.57	1.51
35	BA	863	U	C3'-O3'	5.11	1.49	1.42
35	BA	930	C	O4'-C1'	5.11	1.48	1.41
35	BA	983	A	O4'-C1'	-5.11	1.35	1.41
35	BA	1030	U	C4'-C3'	5.11	1.58	1.53
35	BA	1037	C	N3-C4	5.11	1.37	1.33
35	BA	1060	U	C4-O4	-5.11	1.19	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	BT	36	PHE	CE2-CZ	5.11	1.47	1.37
2	AB	211	C	N3-C4	5.11	1.37	1.33
2	AB	362	A	C5'-C4'	-5.11	1.45	1.51
2	AB	366	C	P-O5'	5.11	1.64	1.59
2	AB	472	A	C8-N7	5.11	1.35	1.31
2	AB	812	C	C4'-O4'	-5.11	1.39	1.45
2	AB	894	U	C3'-C2'	-5.11	1.47	1.52
2	AB	1303	G	N7-C5	5.11	1.42	1.39
2	AB	2072	C	N1-C2	5.11	1.45	1.40
17	AQ	52	SER	CB-OG	-5.11	1.35	1.42
21	AU	70	LYS	CD-CE	5.11	1.64	1.51
35	BA	87	C	C4'-O4'	-5.11	1.39	1.45
2	AB	191	A	C5-C4	-5.11	1.35	1.38
2	AB	371	A	C3'-C2'	5.11	1.58	1.52
2	AB	417	C	C5-C6	5.11	1.38	1.34
2	AB	475	C	C5-C6	5.11	1.38	1.34
2	AB	521	U	N1-C6	-5.11	1.33	1.38
2	AB	903	C	C2-N3	-5.11	1.31	1.35
2	AB	2401	U	P-O5'	5.11	1.64	1.59
35	BA	155	A	C5-C4	-5.11	1.35	1.38
35	BA	208	U	N3-C4	5.11	1.43	1.38
35	BA	1181	G	N1-C2	-5.11	1.33	1.37
38	BD	30	G	C2-N2	5.11	1.39	1.34
38	BD	73	A	C5-C6	-5.11	1.36	1.41
44	BJ	77	ARG	CZ-NH1	5.11	1.39	1.33
2	AB	96	C	O3'-P	5.11	1.67	1.61
2	AB	123	G	N7-C5	-5.11	1.36	1.39
2	AB	188	G	N3-C4	-5.11	1.31	1.35
2	AB	616	A	C6-N1	5.11	1.39	1.35
2	AB	672	C	C5-C6	5.11	1.38	1.34
2	AB	1180	U	C4'-O4'	-5.11	1.39	1.45
2	AB	1460	U	O4'-C1'	5.11	1.48	1.41
2	AB	1465	G	N7-C5	-5.11	1.36	1.39
2	AB	1877	A	C2'-C1'	-5.11	1.47	1.53
2	AB	2248	C	C2-N3	5.11	1.39	1.35
2	AB	2540	C	P-O5'	5.11	1.64	1.59
2	AB	2546	U	C2-N3	5.11	1.41	1.37
2	AB	2577	A	N9-C4	5.11	1.41	1.37
2	AB	2649	C	N1-C6	5.11	1.40	1.37
2	AB	2816	G	C3'-C2'	-5.11	1.47	1.52
35	BA	667	G	P-O5'	5.11	1.64	1.59
58	BX	40	PRO	N-CD	-5.11	1.40	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	79	G	C5-C4	-5.10	1.34	1.38
35	BA	428	G	O3'-P	5.10	1.67	1.61
35	BA	1330	U	C4-C5	5.10	1.48	1.43
2	AB	635	C	N1-C2	-5.10	1.35	1.40
2	AB	758	C	C2'-C1'	-5.10	1.47	1.53
2	AB	1308	A	C5-C6	5.10	1.45	1.41
2	AB	1319	C	C4-C5	-5.10	1.38	1.43
2	AB	1828	G	C8-N7	-5.10	1.27	1.30
2	AB	2079	U	C2-O2	5.10	1.26	1.22
2	AB	2256	G	P-O5'	5.10	1.64	1.59
2	AB	2321	U	P-O5'	5.10	1.64	1.59
2	AB	2466	C	N1-C6	5.10	1.40	1.37
2	AB	2475	C	C4'-O4'	-5.10	1.39	1.45
35	BA	147	G	C6-O6	-5.10	1.19	1.24
35	BA	157	U	N3-C4	-5.10	1.33	1.38
35	BA	929	G	C6-N1	-5.10	1.35	1.39
35	BA	1057	G	C2-N3	5.10	1.36	1.32
35	BA	1084	G	C3'-C2'	5.10	1.58	1.52
35	BA	1304	G	O4'-C1'	5.10	1.48	1.41
1	AA	45	A	C8-N7	-5.10	1.27	1.31
2	AB	286	U	N1-C2	5.10	1.43	1.38
2	AB	1140	C	O3'-P	5.10	1.67	1.61
2	AB	1543	G	O3'-P	5.10	1.67	1.61
35	BA	515	G	C5'-C4'	5.10	1.57	1.51
35	BA	694	A	C6-N6	5.10	1.38	1.33
1	AA	25	U	C4'-C3'	5.10	1.58	1.53
2	AB	683	U	P-O5'	5.10	1.64	1.59
2	AB	771	G	C2'-O2'	5.10	1.48	1.41
2	AB	935	C	C4'-O4'	-5.10	1.39	1.45
2	AB	1737	G	C4'-O4'	-5.10	1.39	1.45
35	BA	772	U	C5-C6	5.10	1.38	1.34
35	BA	932	C	O3'-P	5.10	1.67	1.61
35	BA	1090	U	C5-C6	5.10	1.38	1.34
35	BA	1094	G	N9-C8	-5.10	1.34	1.37
35	BA	1185	G	O3'-P	5.10	1.67	1.61
35	BA	1371	G	C4'-C3'	5.10	1.58	1.53
2	AB	533	G	C5-C6	5.10	1.47	1.42
2	AB	667	U	N3-C4	5.10	1.43	1.38
2	AB	779	U	C4-C5	5.10	1.48	1.43
2	AB	980	A	C2-N3	5.10	1.38	1.33
2	AB	1541	C	P-O5'	5.10	1.64	1.59
2	AB	1581	G	N9-C8	-5.10	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1830	C	C4-C5	5.10	1.47	1.43
2	AB	2122	U	N1-C2	5.10	1.43	1.38
2	AB	2382	G	C2'-C1'	5.10	1.58	1.53
2	AB	2551	C	P-O5'	5.10	1.64	1.59
2	AB	2749	A	N1-C2	5.10	1.39	1.34
2	AB	2846	G	N7-C5	-5.10	1.36	1.39
35	BA	60	A	C5-C4	-5.10	1.35	1.38
35	BA	992	U	C4-O4	5.10	1.27	1.23
35	BA	1041	G	N3-C4	5.10	1.39	1.35
2	AB	355	U	C2'-O2'	-5.10	1.35	1.41
2	AB	673	C	N1-C2	5.10	1.45	1.40
2	AB	1350	C	C2-O2	-5.10	1.19	1.24
2	AB	1456	G	N7-C5	-5.10	1.36	1.39
2	AB	1908	C	N1-C2	5.10	1.45	1.40
2	AB	2611	C	C5-C6	5.10	1.38	1.34
35	BA	102	G	C4'-O4'	-5.10	1.39	1.45
35	BA	1087	G	N3-C4	5.10	1.39	1.35
36	BB	1	A	N7-C5	5.10	1.42	1.39
2	AB	569	U	P-O5'	5.09	1.64	1.59
2	AB	959	A	C3'-C2'	-5.09	1.47	1.52
2	AB	1130	U	C4'-O4'	-5.09	1.39	1.45
2	AB	1741	C	C4-C5	5.09	1.47	1.43
2	AB	2067	G	C3'-C2'	5.09	1.58	1.52
2	AB	2086	U	C4-C5	5.09	1.48	1.43
2	AB	2600	A	N9-C8	-5.09	1.33	1.37
35	BA	140	U	C4'-O4'	-5.09	1.39	1.45
35	BA	168	G	C4'-O4'	-5.09	1.39	1.45
35	BA	1045	C	C2-N3	5.09	1.39	1.35
35	BA	1151	A	C5'-C4'	5.09	1.57	1.51
35	BA	1184	G	C5'-C4'	5.09	1.57	1.51
35	BA	1476	A	C6-N6	-5.09	1.29	1.33
2	AB	1228	G	N9-C8	-5.09	1.34	1.37
35	BA	354	G	N9-C8	-5.09	1.34	1.37
35	BA	577	G	P-O5'	5.09	1.64	1.59
2	AB	288	U	C4-O4	-5.09	1.19	1.23
2	AB	998	C	C4'-O4'	-5.09	1.39	1.45
2	AB	1638	C	O3'-P	5.09	1.67	1.61
2	AB	1681	G	C5'-C4'	5.09	1.57	1.51
2	AB	2354	C	O3'-P	5.09	1.67	1.61
2	AB	2394	C	N1-C2	5.09	1.45	1.40
2	AB	2699	C	N1-C6	5.09	1.40	1.37
35	BA	492	C	P-O5'	-5.09	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	269	C	P-O5'	5.09	1.64	1.59
2	AB	574	A	N1-C2	-5.09	1.29	1.34
2	AB	1273	U	C5-C6	5.09	1.38	1.34
2	AB	2904	U	C2-N3	5.09	1.41	1.37
35	BA	620	C	C4-N4	5.09	1.38	1.33
35	BA	660	C	C4'-O4'	-5.09	1.39	1.45
35	BA	806	C	C2'-C1'	5.09	1.58	1.53
35	BA	1179	A	N9-C4	5.09	1.41	1.37
35	BA	1191	A	C5-C4	-5.09	1.35	1.38
35	BA	1249	C	O3'-P	-5.09	1.55	1.61
35	BA	1383	C	N3-C4	5.09	1.37	1.33
35	BA	1433	A	O3'-P	5.09	1.67	1.61
46	BL	6	TYR	CE2-CZ	5.09	1.45	1.38
2	AB	787	C	N3-C4	5.09	1.37	1.33
2	AB	1156	A	N9-C4	5.09	1.41	1.37
2	AB	2782	G	C8-N7	5.09	1.34	1.30
35	BA	662	U	N1-C6	5.09	1.42	1.38
35	BA	667	G	C5-C4	5.09	1.42	1.38
35	BA	669	G	C2-N2	-5.09	1.29	1.34
1	AA	46	A	C6-N1	-5.09	1.31	1.35
2	AB	362	A	C2'-O2'	-5.09	1.35	1.41
2	AB	614	A	P-OP1	-5.09	1.40	1.49
2	AB	1360	G	C5-C4	-5.09	1.34	1.38
2	AB	1695	G	P-O5'	-5.09	1.54	1.59
2	AB	2237	G	C2'-C1'	-5.09	1.47	1.53
2	AB	2306	C	C2-N3	5.09	1.39	1.35
35	BA	638	U	C2-O2	5.09	1.26	1.22
35	BA	1380	U	N1-C2	5.09	1.43	1.38
35	BA	1489	G	C5'-C4'	5.09	1.57	1.51
44	BJ	60	ALA	CA-C	5.09	1.66	1.52
1	AA	57	A	P-O5'	5.08	1.64	1.59
2	AB	1811	G	N9-C8	5.08	1.41	1.37
2	AB	2578	G	C2-N3	5.08	1.36	1.32
2	AB	2719	G	C4'-O4'	-5.08	1.39	1.45
35	BA	16	A	C4'-C3'	5.08	1.58	1.53
35	BA	296	U	N1-C6	5.08	1.42	1.38
35	BA	763	G	N9-C8	5.08	1.41	1.37
35	BA	1528	U	C2-N3	5.08	1.41	1.37
37	BC	26	U	N3-C4	-5.08	1.33	1.38
46	BL	129	ARG	NE-CZ	5.08	1.39	1.33
2	AB	443	A	C2'-C1'	5.08	1.58	1.53
2	AB	666	A	C3'-O3'	5.08	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	978	G	P-O5'	5.08	1.64	1.59
2	AB	1722	A	N9-C8	-5.08	1.33	1.37
2	AB	1946	U	C4'-O4'	-5.08	1.39	1.45
2	AB	2244	U	N1-C2	5.08	1.43	1.38
2	AB	2333	A	C4'-C3'	5.08	1.58	1.53
35	BA	75	G	O3'-P	5.08	1.67	1.61
35	BA	970	C	C2-O2	-5.08	1.19	1.24
2	AB	1574	C	C3'-C2'	-5.08	1.47	1.52
2	AB	1659	G	N1-C2	5.08	1.41	1.37
2	AB	1763	G	C5-C4	5.08	1.42	1.38
2	AB	2384	U	C5'-C4'	5.08	1.57	1.51
2	AB	2645	G	N9-C8	-5.08	1.34	1.37
18	AR	87	ARG	CZ-NH2	5.08	1.39	1.33
35	BA	134	G	P-O5'	5.08	1.64	1.59
35	BA	353	A	C6-N1	-5.08	1.31	1.35
35	BA	993	G	C5-C4	-5.08	1.34	1.38
44	BJ	56	SER	CB-OG	-5.08	1.35	1.42
35	BA	186	C	C2-N3	5.08	1.39	1.35
35	BA	756	C	C5-C6	-5.08	1.30	1.34
35	BA	819	A	C3'-C2'	-5.08	1.47	1.52
35	BA	936	C	C3'-C2'	5.08	1.58	1.52
35	BA	1490	U	N1-C2	5.08	1.43	1.38
37	BC	38	G	C2'-C1'	5.08	1.58	1.53
2	AB	240	C	N1-C6	5.08	1.40	1.37
2	AB	781	A	C6-N1	5.08	1.39	1.35
2	AB	1945	G	C2'-C1'	-5.08	1.47	1.53
2	AB	2110	G	C2-N2	-5.08	1.29	1.34
2	AB	2665	A	C4'-O4'	-5.08	1.39	1.45
35	BA	142	G	P-O5'	5.08	1.64	1.59
35	BA	398	U	C5-C6	5.08	1.38	1.34
35	BA	448	A	C3'-O3'	5.08	1.49	1.42
37	BC	18	A	N1-C2	-5.08	1.29	1.34
2	AB	64	A	N9-C8	-5.08	1.33	1.37
2	AB	1387	A	C6-N1	5.08	1.39	1.35
2	AB	2695	U	C3'-O3'	5.08	1.49	1.42
35	BA	461	A	C5'-C4'	5.08	1.57	1.51
1	AA	36	C	C5-C6	5.08	1.38	1.34
2	AB	184	C	C4-C5	5.08	1.47	1.43
2	AB	713	G	N7-C5	-5.08	1.36	1.39
2	AB	1699	G	N3-C4	5.08	1.39	1.35
12	AL	117	ALA	CA-CB	5.08	1.63	1.52
35	BA	105	G	C5'-C4'	5.08	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1110	A	P-O5'	5.08	1.64	1.59
35	BA	1329	A	C8-N7	5.08	1.35	1.31
35	BA	1488	G	C3'-O3'	5.08	1.49	1.42
1	AA	100	G	O3'-P	5.07	1.67	1.61
2	AB	167	A	C3'-O3'	-5.07	1.35	1.42
2	AB	408	G	C6-N1	5.07	1.43	1.39
2	AB	463	G	P-O5'	5.07	1.64	1.59
2	AB	962	G	N9-C8	-5.07	1.34	1.37
2	AB	1454	C	C2-O2	-5.07	1.19	1.24
2	AB	1582	C	C4'-C3'	5.07	1.58	1.53
2	AB	1811	G	C2-N3	5.07	1.36	1.32
2	AB	2186	G	N7-C5	5.07	1.42	1.39
2	AB	2303	G	C2'-C1'	-5.07	1.47	1.53
2	AB	2777	G	C5'-C4'	5.07	1.57	1.51
35	BA	679	C	C1'-N1	5.07	1.56	1.48
35	BA	949	A	C4'-O4'	-5.07	1.39	1.45
35	BA	978	A	C4'-O4'	-5.07	1.39	1.45
2	AB	1631	G	C2'-O2'	5.07	1.48	1.41
2	AB	2539	C	C2'-O2'	-5.07	1.35	1.41
35	BA	47	C	C2'-C1'	5.07	1.58	1.53
35	BA	113	G	C5-C6	5.07	1.47	1.42
35	BA	1195	C	C4'-O4'	-5.07	1.39	1.45
2	AB	385	C	C2-N3	5.07	1.39	1.35
2	AB	557	C	C5'-C4'	5.07	1.57	1.51
2	AB	1471	G	N9-C8	5.07	1.41	1.37
2	AB	1987	A	P-O5'	5.07	1.64	1.59
2	AB	2601	C	N3-C4	5.07	1.37	1.33
35	BA	76	G	C6-O6	-5.07	1.19	1.24
35	BA	1149	C	O3'-P	5.07	1.67	1.61
35	BA	1476	A	N3-C4	5.07	1.37	1.34
2	AB	1335	C	C5'-C4'	5.07	1.57	1.51
2	AB	1613	G	C5-C4	5.07	1.41	1.38
2	AB	1794	A	C4'-O4'	-5.07	1.39	1.45
2	AB	2602	A	N9-C4	5.07	1.40	1.37
35	BA	332	G	N1-C2	5.07	1.41	1.37
35	BA	578	C	C5'-C4'	5.07	1.57	1.51
35	BA	1312	G	N9-C8	-5.07	1.34	1.37
35	BA	1338	G	C5-C6	5.07	1.47	1.42
2	AB	403	U	C5-C6	5.07	1.38	1.34
2	AB	530	G	C6-O6	-5.07	1.19	1.24
2	AB	667	U	C2-N3	5.07	1.41	1.37
2	AB	2544	G	C6-O6	-5.07	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2773	C	C4'-O4'	-5.07	1.39	1.45
2	AB	2891	U	N1-C2	5.07	1.43	1.38
35	BA	99	C	C4-C5	5.07	1.47	1.43
35	BA	597	G	N3-C4	5.07	1.39	1.35
35	BA	644	U	C4-C5	5.07	1.48	1.43
35	BA	946	A	N9-C8	-5.07	1.33	1.37
35	BA	1251	A	C5'-C4'	5.07	1.57	1.51
35	BA	1379	G	C5-C6	-5.07	1.37	1.42
36	BB	2	G	C2'-O2'	5.07	1.48	1.41
2	AB	1083	U	C4'-C3'	-5.07	1.47	1.52
2	AB	1151	A	N7-C5	5.07	1.42	1.39
2	AB	1611	C	P-O5'	5.07	1.64	1.59
2	AB	1633	G	P-O5'	5.07	1.64	1.59
2	AB	1800	C	C2'-C1'	-5.07	1.47	1.53
2	AB	2756	U	P-O5'	5.07	1.64	1.59
35	BA	76	G	C6-N1	5.07	1.43	1.39
35	BA	249	U	N1-C2	5.07	1.43	1.38
35	BA	958	A	N9-C8	5.07	1.41	1.37
35	BA	1417	G	C6-N1	-5.07	1.36	1.39
40	BF	41	TYR	CG-CD1	5.07	1.45	1.39
2	AB	420	C	O3'-P	5.06	1.67	1.61
2	AB	807	U	O4'-C1'	5.06	1.48	1.41
2	AB	1138	G	N9-C4	-5.06	1.33	1.38
2	AB	1565	C	N1-C2	5.06	1.45	1.40
2	AB	1796	U	N1-C6	5.06	1.42	1.38
2	AB	2237	G	C5-C4	5.06	1.41	1.38
35	BA	800	G	N9-C8	5.06	1.41	1.37
1	AA	19	C	C4-C5	5.06	1.47	1.43
2	AB	422	A	C6-N6	-5.06	1.29	1.33
2	AB	1405	U	N1-C6	5.06	1.42	1.38
2	AB	1429	G	P-O5'	5.06	1.64	1.59
2	AB	1451	C	C5-C6	5.06	1.38	1.34
2	AB	2550	G	C2-N3	5.06	1.36	1.32
35	BA	670	G	C5-C4	-5.06	1.34	1.38
35	BA	786	G	C2-N3	5.06	1.36	1.32
35	BA	841	C	N1-C6	5.06	1.40	1.37
35	BA	900	A	C5'-C4'	5.06	1.57	1.51
35	BA	902	G	C6-N1	5.06	1.43	1.39
35	BA	965	U	C5'-C4'	-5.06	1.45	1.51
35	BA	982	U	C4'-O4'	-5.06	1.39	1.45
35	BA	1241	G	C5-C4	-5.06	1.34	1.38
35	BA	1351	U	N1-C6	5.06	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	441	U	C2'-C1'	5.06	1.58	1.53
2	AB	2569	G	C3'-C2'	5.06	1.58	1.52
35	BA	243	A	N9-C4	5.06	1.40	1.37
1	AA	91	C	C2'-C1'	5.06	1.58	1.53
2	AB	38	A	C6-N1	5.06	1.39	1.35
2	AB	135	U	C5-C6	5.06	1.38	1.34
2	AB	424	G	C2'-C1'	5.06	1.58	1.53
2	AB	674	G	C4'-O4'	-5.06	1.39	1.45
2	AB	1242	U	C5'-C4'	5.06	1.57	1.51
2	AB	1344	U	C5'-C4'	5.06	1.57	1.51
2	AB	1571	A	C6-N1	5.06	1.39	1.35
2	AB	2035	G	N1-C2	-5.06	1.33	1.37
2	AB	2081	U	N1-C6	-5.06	1.33	1.38
2	AB	2429	G	C6-N1	5.06	1.43	1.39
2	AB	2444	G	C5'-C4'	5.06	1.57	1.51
2	AB	2753	A	N3-C4	5.06	1.37	1.34
3	AC	9	ARG	CZ-NH2	5.06	1.39	1.33
21	AU	18	ARG	NE-CZ	5.06	1.39	1.33
35	BA	1075	U	N3-C4	5.06	1.43	1.38
35	BA	1488	G	O4'-C1'	-5.06	1.35	1.41
36	BB	38	A	C6-N1	-5.06	1.32	1.35
1	AA	78	A	N3-C4	5.06	1.37	1.34
2	AB	1219	U	C5'-C4'	5.06	1.57	1.51
2	AB	1293	C	C2-O2	-5.06	1.19	1.24
2	AB	2160	C	C5'-C4'	5.06	1.57	1.51
2	AB	2514	U	N1-C2	5.06	1.43	1.38
23	AW	31	GLY	N-CA	5.06	1.53	1.46
35	BA	202	G	C6-O6	-5.06	1.19	1.24
35	BA	861	G	C8-N7	-5.06	1.27	1.30
35	BA	1446	A	N3-C4	5.06	1.37	1.34
37	BC	28	U	N1-C2	5.06	1.43	1.38
2	AB	818	G	C5'-C4'	5.06	1.57	1.51
2	AB	1093	G	C8-N7	-5.06	1.27	1.30
2	AB	1227	G	C4'-O4'	-5.06	1.39	1.45
2	AB	1955	U	C1'-N1	5.06	1.56	1.48
12	AL	81	ILE	C-N	5.06	1.42	1.33
35	BA	1327	C	C5'-C4'	-5.06	1.45	1.51
2	AB	595	C	C4-N4	5.05	1.38	1.33
2	AB	1034	G	C2-N3	5.05	1.36	1.32
2	AB	1435	G	N9-C8	-5.05	1.34	1.37
35	BA	136	C	C4-C5	5.05	1.47	1.43
35	BA	389	A	N1-C2	-5.05	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	438	U	O3'-P	5.05	1.67	1.61
35	BA	659	U	C2'-C1'	-5.05	1.47	1.53
35	BA	1349	A	C2-N3	-5.05	1.29	1.33
2	AB	546	U	C2'-C1'	5.05	1.58	1.53
2	AB	762	U	N3-C4	-5.05	1.33	1.38
2	AB	1371	G	O3'-P	5.05	1.67	1.61
2	AB	2826	A	C4'-O4'	-5.05	1.39	1.45
35	BA	1015	G	C8-N7	-5.05	1.27	1.30
35	BA	1137	C	C5'-C4'	5.05	1.57	1.51
35	BA	1261	A	C5-C4	-5.05	1.35	1.38
36	BB	5	G	C4'-O4'	-5.05	1.39	1.45
2	AB	178	G	N1-C2	5.05	1.41	1.37
2	AB	243	U	P-O5'	5.05	1.64	1.59
2	AB	948	C	C2-N3	5.05	1.39	1.35
2	AB	958	U	N3-C4	5.05	1.43	1.38
2	AB	1517	G	C4'-O4'	-5.05	1.39	1.45
2	AB	1676	A	N9-C8	5.05	1.41	1.37
2	AB	1834	U	C5'-C4'	5.05	1.57	1.51
2	AB	1861	G	C3'-C2'	5.05	1.58	1.52
2	AB	2360	G	C3'-C2'	5.05	1.58	1.52
35	BA	136	C	C4'-C3'	-5.05	1.47	1.52
35	BA	688	G	N7-C5	-5.05	1.36	1.39
35	BA	747	A	N9-C8	-5.05	1.33	1.37
38	BD	74	A	N9-C8	5.05	1.41	1.37
1	AA	18	G	N7-C5	-5.05	1.36	1.39
2	AB	291	G	O3'-P	5.05	1.67	1.61
2	AB	638	G	C8-N7	-5.05	1.27	1.30
2	AB	697	G	C6-O6	-5.05	1.19	1.24
2	AB	1590	A	C5'-C4'	5.05	1.57	1.51
2	AB	1828	G	C2-N2	5.05	1.39	1.34
2	AB	1932	A	C3'-C2'	5.05	1.58	1.52
2	AB	2249	U	C4-C5	5.05	1.48	1.43
2	AB	2554	U	O3'-P	5.05	1.67	1.61
2	AB	2840	C	N1-C2	5.05	1.45	1.40
3	AC	132	GLY	N-CA	5.05	1.53	1.46
35	BA	22	G	N3-C4	5.05	1.39	1.35
35	BA	248	C	C5'-C4'	5.05	1.57	1.51
35	BA	364	A	C8-N7	-5.05	1.28	1.31
35	BA	817	C	C2-N3	5.05	1.39	1.35
46	BL	69	GLY	CA-C	5.05	1.59	1.51
2	AB	704	G	C4'-O4'	-5.05	1.39	1.45
2	AB	829	A	O5'-C5'	-5.05	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2106	U	C2-N3	5.05	1.41	1.37
2	AB	2363	G	C6-N1	5.05	1.43	1.39
2	AB	2538	C	P-O5'	5.05	1.64	1.59
35	BA	253	A	C4'-C3'	5.05	1.58	1.53
35	BA	327	A	C6-N1	5.05	1.39	1.35
35	BA	543	U	P-O5'	-5.05	1.54	1.59
35	BA	936	C	C4-C5	5.05	1.47	1.43
35	BA	1495	U	C4'-O4'	-5.05	1.39	1.45
2	AB	122	G	N7-C5	5.05	1.42	1.39
2	AB	256	A	C8-N7	-5.05	1.28	1.31
2	AB	757	G	C8-N7	-5.05	1.27	1.30
2	AB	1567	G	C2-N3	5.05	1.36	1.32
2	AB	1717	A	O4'-C1'	5.05	1.48	1.41
2	AB	2644	G	C4'-O4'	-5.05	1.39	1.45
35	BA	43	C	C3'-O3'	5.05	1.49	1.42
35	BA	1012	A	O4'-C1'	5.05	1.48	1.41
35	BA	1348	U	N1-C6	5.05	1.42	1.38
1	AA	65	U	N1-C2	-5.04	1.34	1.38
2	AB	92	U	C2-O2	5.04	1.26	1.22
2	AB	446	G	C5-C4	-5.04	1.34	1.38
2	AB	772	C	C2-N3	5.04	1.39	1.35
2	AB	811	U	C2-O2	5.04	1.26	1.22
2	AB	1011	G	C6-N1	5.04	1.43	1.39
2	AB	1213	A	C2'-C1'	5.04	1.58	1.53
2	AB	1438	U	C4-C5	5.04	1.48	1.43
35	BA	641	U	N1-C2	5.04	1.43	1.38
35	BA	1286	U	C2'-C1'	5.04	1.58	1.53
2	AB	1459	G	C5'-C4'	5.04	1.57	1.51
2	AB	1794	A	O4'-C1'	5.04	1.48	1.41
2	AB	1953	A	P-O5'	5.04	1.64	1.59
2	AB	2715	C	P-O5'	5.04	1.64	1.59
35	BA	1106	G	C4'-O4'	-5.04	1.39	1.45
2	AB	79	C	C4'-O4'	-5.04	1.39	1.45
2	AB	127	A	C3'-O3'	-5.04	1.35	1.42
2	AB	276	U	N3-C4	5.04	1.43	1.38
2	AB	504	A	N3-C4	5.04	1.37	1.34
2	AB	522	A	O3'-P	5.04	1.67	1.61
2	AB	523	C	C5'-C4'	5.04	1.57	1.51
2	AB	559	G	N9-C4	-5.04	1.33	1.38
2	AB	1300	G	C4'-O4'	-5.04	1.39	1.45
2	AB	1366	A	C5-C6	5.04	1.45	1.41
2	AB	1743	G	C2-N3	5.04	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1836	C	N1-C6	5.04	1.40	1.37
2	AB	1929	G	C5-C6	5.04	1.47	1.42
2	AB	2093	G	C3'-C2'	-5.04	1.47	1.52
2	AB	2604	U	P-O5'	5.04	1.64	1.59
35	BA	27	G	C2-N2	-5.04	1.29	1.34
35	BA	291	U	C4'-O4'	5.04	1.52	1.45
35	BA	816	A	C5-C4	-5.04	1.35	1.38
35	BA	901	A	C6-N1	-5.04	1.32	1.35
2	AB	302	C	C4'-O4'	-5.04	1.39	1.45
2	AB	818	G	C8-N7	-5.04	1.27	1.30
2	AB	1617	C	N1-C6	5.04	1.40	1.37
2	AB	1856	U	C5'-C4'	5.04	1.57	1.51
2	AB	2861	U	N1-C2	5.04	1.43	1.38
51	BQ	41	TRP	CE3-CZ3	5.04	1.47	1.38
1	AA	118	C	C2-N3	5.04	1.39	1.35
2	AB	294	A	O3'-P	-5.04	1.55	1.61
2	AB	708	G	C6-O6	-5.04	1.19	1.24
2	AB	1604	C	C5'-C4'	5.04	1.57	1.51
2	AB	1994	C	C4-N4	5.04	1.38	1.33
35	BA	99	C	N3-C4	5.04	1.37	1.33
35	BA	382	A	N9-C4	5.04	1.40	1.37
35	BA	1010	U	C2'-C1'	5.04	1.58	1.53
38	BD	57	C	N1-C6	5.04	1.40	1.37
41	BG	3	TYR	CG-CD1	5.04	1.45	1.39
2	AB	1044	C	C1'-N1	5.04	1.56	1.48
2	AB	1641	A	O4'-C1'	5.04	1.48	1.41
2	AB	2149	U	C4-C5	5.04	1.48	1.43
2	AB	2194	U	C4'-O4'	-5.04	1.39	1.45
36	BB	74	C	C2-N3	5.04	1.39	1.35
38	BD	7	G	O4'-C1'	-5.04	1.35	1.41
2	AB	84	A	O3'-P	5.04	1.67	1.61
2	AB	473	G	N7-C5	-5.04	1.36	1.39
2	AB	494	G	C5-C6	-5.04	1.37	1.42
2	AB	698	C	P-O5'	5.04	1.64	1.59
2	AB	1613	G	N3-C4	5.04	1.39	1.35
2	AB	2183	A	P-O5'	5.04	1.64	1.59
2	AB	2433	A	C5-C4	-5.04	1.35	1.38
35	BA	136	C	C5-C6	5.04	1.38	1.34
35	BA	346	G	P-O5'	5.04	1.64	1.59
35	BA	1144	G	N3-C4	-5.04	1.31	1.35
35	BA	1158	C	C2-O2	-5.04	1.20	1.24
35	BA	1177	G	C3'-O3'	5.04	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1228	C	C5-C6	5.04	1.38	1.34
35	BA	1382	C	C2-O2	5.04	1.28	1.24
1	AA	22	U	P-O5'	-5.03	1.54	1.59
2	AB	433	C	C2-N3	5.03	1.39	1.35
2	AB	935	C	C3'-C2'	5.03	1.58	1.52
2	AB	1144	A	N3-C4	5.03	1.37	1.34
2	AB	2116	G	C5'-C4'	5.03	1.57	1.51
2	AB	2220	U	O4'-C1'	-5.03	1.35	1.41
2	AB	2506	U	C4'-O4'	-5.03	1.39	1.45
2	AB	2737	G	N1-C2	5.03	1.41	1.37
35	BA	648	A	N7-C5	-5.03	1.36	1.39
35	BA	727	G	N7-C5	-5.03	1.36	1.39
35	BA	1295	U	C5'-C4'	5.03	1.57	1.51
35	BA	1298	U	C2-O2	5.03	1.26	1.22
35	BA	1482	G	C5'-C4'	5.03	1.57	1.51
2	AB	477	A	C4'-C3'	-5.03	1.47	1.52
2	AB	1389	G	C2-N2	-5.03	1.29	1.34
2	AB	1966	A	P-O5'	5.03	1.64	1.59
2	AB	2158	A	C4'-O4'	-5.03	1.39	1.45
2	AB	2418	A	P-O5'	5.03	1.64	1.59
35	BA	331	G	C8-N7	-5.03	1.27	1.30
35	BA	652	U	N3-C4	-5.03	1.33	1.38
35	BA	887	G	N9-C8	5.03	1.41	1.37
35	BA	1010	U	C4-O4	5.03	1.27	1.23
35	BA	1029	U	O3'-P	5.03	1.67	1.61
36	BB	43	G	O4'-C1'	5.03	1.48	1.41
2	AB	241	A	N1-C2	5.03	1.38	1.34
2	AB	527	C	C4-N4	5.03	1.38	1.33
2	AB	531	C	C2'-C1'	5.03	1.58	1.53
2	AB	1514	G	N9-C8	5.03	1.41	1.37
2	AB	1707	G	O5'-C5'	-5.03	1.34	1.42
2	AB	2049	G	C5-C4	-5.03	1.34	1.38
2	AB	2159	G	C2'-C1'	-5.03	1.47	1.53
2	AB	2170	A	C3'-O3'	-5.03	1.35	1.42
2	AB	2399	G	P-OP1	-5.03	1.40	1.49
2	AB	2434	A	C2'-C1'	5.03	1.58	1.53
2	AB	2763	G	N9-C8	5.03	1.41	1.37
35	BA	624	C	C5'-C4'	-5.03	1.45	1.51
35	BA	1110	A	C6-N6	-5.03	1.29	1.33
1	AA	112	G	N7-C5	5.03	1.42	1.39
2	AB	1179	G	C3'-C2'	5.03	1.58	1.52
2	AB	2603	G	C3'-C2'	5.03	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2760	C	C4-C5	5.03	1.47	1.43
2	AB	2763	G	C6-N1	5.03	1.43	1.39
35	BA	817	C	O5'-C5'	-5.03	1.34	1.42
35	BA	849	G	N9-C4	-5.03	1.33	1.38
35	BA	1085	U	C2'-O2'	-5.03	1.35	1.41
2	AB	11	C	C2'-C1'	-5.03	1.47	1.53
2	AB	1452	G	O4'-C1'	-5.03	1.35	1.41
2	AB	1590	A	C2-N3	-5.03	1.29	1.33
35	BA	8	A	C2-N3	5.03	1.38	1.33
35	BA	318	G	C5'-C4'	5.03	1.57	1.51
35	BA	418	C	C2'-C1'	-5.03	1.47	1.53
35	BA	688	G	C6-N1	5.03	1.43	1.39
35	BA	745	G	C4'-O4'	-5.03	1.39	1.45
2	AB	192	C	C2-O2	-5.03	1.20	1.24
2	AB	231	A	N1-C2	-5.03	1.29	1.34
2	AB	558	U	C2'-C1'	5.03	1.58	1.53
2	AB	588	U	C4'-C3'	-5.03	1.47	1.52
2	AB	1067	A	N9-C4	5.03	1.40	1.37
2	AB	1286	A	C4'-O4'	-5.03	1.39	1.45
2	AB	1924	C	C5-C6	5.03	1.38	1.34
2	AB	2360	G	N1-C2	5.03	1.41	1.37
2	AB	2560	A	P-O5'	-5.03	1.54	1.59
2	AB	2710	C	N1-C6	-5.03	1.34	1.37
2	AB	2717	C	N3-C4	5.03	1.37	1.33
35	BA	497	G	N3-C4	5.03	1.39	1.35
35	BA	603	U	P-O5'	5.03	1.64	1.59
35	BA	682	G	C2-N3	5.03	1.36	1.32
2	AB	94	A	C2'-O2'	5.02	1.48	1.41
2	AB	272	A	C6-N1	-5.02	1.32	1.35
2	AB	368	A	N7-C5	5.02	1.42	1.39
2	AB	1101	U	C4-O4	-5.02	1.19	1.23
2	AB	1540	G	P-O5'	5.02	1.64	1.59
2	AB	1802	A	N1-C2	5.02	1.38	1.34
2	AB	1897	G	N3-C4	5.02	1.39	1.35
2	AB	2260	C	C5-C6	5.02	1.38	1.34
2	AB	2868	A	C4'-O4'	-5.02	1.39	1.45
26	AZ	4	CYS	CB-SG	5.02	1.90	1.82
35	BA	362	G	C6-N1	-5.02	1.36	1.39
37	BC	17	U	P-O5'	5.02	1.64	1.59
2	AB	18	U	N1-C2	5.02	1.43	1.38
2	AB	194	G	C6-N1	-5.02	1.36	1.39
2	AB	350	G	C5'-C4'	5.02	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1895	C	C4'-C3'	5.02	1.58	1.53
2	AB	2183	A	N9-C4	5.02	1.40	1.37
2	AB	2329	U	O3'-P	5.02	1.67	1.61
2	AB	2523	G	C6-O6	-5.02	1.19	1.24
2	AB	2683	C	C4'-O4'	-5.02	1.39	1.45
2	AB	2779	U	C4'-C3'	5.02	1.58	1.53
2	AB	2879	A	N3-C4	-5.02	1.31	1.34
35	BA	370	C	C4'-O4'	-5.02	1.39	1.45
35	BA	429	U	C2'-C1'	-5.02	1.47	1.53
35	BA	575	G	N9-C8	-5.02	1.34	1.37
35	BA	713	G	C6-N1	5.02	1.43	1.39
35	BA	1324	A	C5'-C4'	5.02	1.57	1.51
35	BA	1396	A	C4'-O4'	-5.02	1.39	1.45
2	AB	438	G	N3-C4	5.02	1.39	1.35
2	AB	742	A	C8-N7	-5.02	1.28	1.31
2	AB	768	G	C5-C4	5.02	1.41	1.38
2	AB	2439	A	C6-N6	-5.02	1.29	1.33
35	BA	312	C	C5-C6	5.02	1.38	1.34
2	AB	23	G	N3-C4	5.02	1.39	1.35
2	AB	47	C	N3-C4	-5.02	1.30	1.33
2	AB	149	A	C6-N1	-5.02	1.32	1.35
2	AB	1119	U	C3'-O3'	5.02	1.49	1.42
2	AB	1387	A	C2-N3	5.02	1.38	1.33
2	AB	1453	A	N9-C4	5.02	1.40	1.37
2	AB	1724	G	O3'-P	5.02	1.67	1.61
2	AB	1761	C	C4'-C3'	5.02	1.58	1.53
2	AB	1946	U	O3'-P	5.02	1.67	1.61
2	AB	2157	G	C2'-C1'	-5.02	1.47	1.53
2	AB	2204	G	N9-C4	5.02	1.42	1.38
2	AB	2219	U	P-O5'	-5.02	1.54	1.59
2	AB	2637	U	N3-C4	-5.02	1.33	1.38
2	AB	2766	A	C4'-C3'	5.02	1.58	1.53
2	AB	2865	U	N3-C4	5.02	1.43	1.38
2	AB	2878	U	C2-N3	5.02	1.41	1.37
35	BA	183	C	C5-C6	5.02	1.38	1.34
35	BA	362	G	N1-C2	5.02	1.41	1.37
35	BA	926	G	C3'-C2'	5.02	1.58	1.52
35	BA	1176	A	N9-C4	5.02	1.40	1.37
35	BA	1452	C	O5'-C5'	-5.02	1.34	1.42
40	BF	144	GLY	N-CA	5.02	1.53	1.46
2	AB	367	G	N9-C8	-5.02	1.34	1.37
2	AB	1189	A	N7-C5	5.02	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1324	G	C2-N3	5.02	1.36	1.32
2	AB	1887	C	N1-C6	5.02	1.40	1.37
2	AB	2096	C	P-O5'	5.02	1.64	1.59
2	AB	2323	G	C5'-C4'	5.02	1.57	1.51
2	AB	2721	A	C8-N7	-5.02	1.28	1.31
35	BA	10	A	C5-C4	-5.02	1.35	1.38
35	BA	357	G	C2-N3	5.02	1.36	1.32
35	BA	605	U	C3'-C2'	5.02	1.58	1.52
35	BA	694	A	N3-C4	-5.02	1.31	1.34
35	BA	1028	C	N1-C6	5.02	1.40	1.37
35	BA	1115	U	N1-C6	5.02	1.42	1.38
35	BA	1536	C	C4'-C3'	-5.02	1.47	1.52
38	BD	53	G	C2'-C1'	5.02	1.58	1.53
2	AB	1232	G	C8-N7	5.02	1.33	1.30
2	AB	1372	U	C2-O2	5.02	1.26	1.22
2	AB	2892	G	P-OP1	-5.02	1.40	1.49
35	BA	851	G	C6-O6	-5.02	1.19	1.24
1	AA	115	A	O3'-P	5.01	1.67	1.61
2	AB	175	G	C5-C6	5.01	1.47	1.42
2	AB	1129	A	C4'-O4'	-5.01	1.39	1.45
2	AB	1773	A	C5-C6	5.01	1.45	1.41
2	AB	2897	U	C2-O2	5.01	1.26	1.22
3	AC	7	ARG	NE-CZ	5.01	1.39	1.33
35	BA	287	U	N1-C6	-5.01	1.33	1.38
35	BA	781	A	N3-C4	5.01	1.37	1.34
35	BA	808	C	N3-C4	5.01	1.37	1.33
37	BC	45	G	N9-C8	-5.01	1.34	1.37
51	BQ	84	ARG	CZ-NH2	5.01	1.39	1.33
2	AB	31	C	C4'-O4'	-5.01	1.39	1.45
2	AB	1218	G	P-O5'	5.01	1.64	1.59
2	AB	1398	C	C2'-C1'	-5.01	1.47	1.53
2	AB	1746	A	C6-N1	-5.01	1.32	1.35
35	BA	346	G	O3'-P	5.01	1.67	1.61
35	BA	1118	U	C3'-C2'	5.01	1.58	1.52
1	AA	44	G	C4'-C3'	5.01	1.58	1.53
2	AB	173	A	C5'-C4'	5.01	1.57	1.51
2	AB	669	G	C3'-C2'	5.01	1.58	1.52
2	AB	893	C	C2-N3	-5.01	1.31	1.35
2	AB	1500	G	O4'-C1'	5.01	1.48	1.41
2	AB	1996	C	C2'-C1'	-5.01	1.47	1.53
2	AB	2140	G	N9-C8	-5.01	1.34	1.37
2	AB	2440	C	C5-C6	-5.01	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2535	G	C5'-C4'	5.01	1.57	1.51
2	AB	2546	U	N1-C6	5.01	1.42	1.38
35	BA	147	G	C8-N7	-5.01	1.27	1.30
35	BA	169	C	N1-C2	5.01	1.45	1.40
35	BA	406	G	C2-N3	5.01	1.36	1.32
35	BA	411	A	C5'-C4'	5.01	1.57	1.51
35	BA	544	G	C8-N7	5.01	1.33	1.30
35	BA	731	G	O3'-P	-5.01	1.55	1.61
35	BA	915	A	C6-N6	5.01	1.38	1.33
35	BA	1179	A	N9-C8	-5.01	1.33	1.37
2	AB	532	A	C5-C6	5.01	1.45	1.41
2	AB	590	A	N3-C4	5.01	1.37	1.34
2	AB	1582	C	O3'-P	5.01	1.67	1.61
2	AB	1961	C	N3-C4	5.01	1.37	1.33
2	AB	2693	G	C8-N7	5.01	1.33	1.30
35	BA	5	U	N1-C6	5.01	1.42	1.38
35	BA	384	G	C2-N3	5.01	1.36	1.32
35	BA	859	G	C5-C4	-5.01	1.34	1.38
35	BA	1158	C	P-O5'	5.01	1.64	1.59
35	BA	1358	U	C3'-O3'	5.01	1.49	1.42
35	BA	1496	C	C3'-C2'	-5.01	1.47	1.52
38	BD	71	G	N9-C4	5.01	1.42	1.38
2	AB	509	C	C4'-C3'	5.01	1.58	1.53
2	AB	949	G	C5-C6	5.01	1.47	1.42
2	AB	1950	G	C5-C4	-5.01	1.34	1.38
35	BA	851	G	N9-C8	-5.01	1.34	1.37
35	BA	1307	U	O3'-P	5.01	1.67	1.61
45	BK	76	ARG	CZ-NH1	5.01	1.39	1.33
2	AB	141	G	N9-C8	-5.01	1.34	1.37
2	AB	481	G	O4'-C1'	-5.01	1.35	1.41
2	AB	579	G	N7-C5	-5.01	1.36	1.39
2	AB	622	G	O3'-P	5.01	1.67	1.61
2	AB	1505	A	C4'-C3'	5.01	1.58	1.53
35	BA	125	U	O4'-C1'	5.01	1.48	1.41
35	BA	487	A	N1-C2	-5.01	1.29	1.34
35	BA	1055	A	N9-C4	5.01	1.40	1.37
36	BB	19	G	P-O5'	5.01	1.64	1.59
38	BD	31	G	C2'-C1'	5.01	1.58	1.53
2	AB	714	U	C4-O4	5.00	1.27	1.23
10	AJ	13	GLU	CG-CD	5.00	1.59	1.51
35	BA	960	U	C2-N3	5.00	1.41	1.37
35	BA	1164	G	C5-C4	-5.00	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1274	A	C6-N1	-5.00	1.32	1.35
2	AB	1606	C	C4-C5	5.00	1.47	1.43
2	AB	1625	C	N3-C4	5.00	1.37	1.33
2	AB	2035	G	C2'-O2'	5.00	1.48	1.41
2	AB	2117	A	N9-C4	5.00	1.40	1.37
2	AB	2334	U	C3'-C2'	5.00	1.58	1.52
2	AB	2717	C	O4'-C1'	5.00	1.48	1.41
9	AI	136	SER	CB-OG	-5.00	1.35	1.42
18	AR	50	ARG	CD-NE	-5.00	1.38	1.46
35	BA	119	A	C6-N6	5.00	1.38	1.33
35	BA	453	G	N9-C8	5.00	1.41	1.37
35	BA	784	A	N7-C5	-5.00	1.36	1.39
35	BA	1404	C	P-O5'	5.00	1.64	1.59
36	BB	28	C	C2'-C1'	5.00	1.58	1.53
1	AA	52	A	C2-N3	-5.00	1.29	1.33
2	AB	548	G	O3'-P	5.00	1.67	1.61
2	AB	802	A	C5'-C4'	5.00	1.57	1.51
2	AB	1074	G	C8-N7	-5.00	1.27	1.30
2	AB	1330	C	N3-C4	-5.00	1.30	1.33
2	AB	1648	U	N3-C4	5.00	1.43	1.38
2	AB	2288	A	C5'-C4'	5.00	1.57	1.51
2	AB	2868	A	N1-C2	5.00	1.38	1.34
35	BA	563	A	C6-N6	5.00	1.38	1.33
35	BA	1066	C	C1'-N1	5.00	1.56	1.48
35	BA	1253	G	C2-N3	5.00	1.36	1.32
35	BA	1470	U	C2-O2	5.00	1.26	1.22
37	BC	23	C	C4-N4	5.00	1.38	1.33

All (26948) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2855	C	N3-C4-C5	-23.45	112.52	121.90
2	AB	1264	A	N9-C4-C5	22.40	114.76	105.80
29	A2	25	ARG	NE-CZ-NH1	21.63	131.12	120.30
2	AB	248	G	C2-N3-C4	20.59	122.19	111.90
2	AB	6	A	C8-N9-C4	-20.57	97.57	105.80
16	AP	12	ARG	NE-CZ-NH1	20.42	130.51	120.30
2	AB	1954	G	C4-C5-N7	-20.25	102.70	110.80
2	AB	1213	A	C8-N9-C4	-19.99	97.81	105.80
2	AB	2381	A	C8-N9-C4	-19.97	97.81	105.80
35	BA	222	C	O4'-C1'-N1	19.94	124.16	108.20
35	BA	567	G	C8-N9-C4	-19.53	98.59	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1517	G	C8-N9-C4	-19.53	98.59	106.40
48	BN	105	ARG	NE-CZ-NH1	19.35	129.97	120.30
2	AB	2323	G	C8-N9-C4	-19.34	98.67	106.40
2	AB	1984	G	N9-C4-C5	19.30	113.12	105.40
35	BA	741	G	C8-N9-C4	19.27	114.11	106.40
35	BA	370	C	C6-N1-C2	-18.94	112.72	120.30
35	BA	221	C	O4'-C1'-N1	18.48	122.98	108.20
2	AB	2066	C	O4'-C1'-N1	18.46	122.97	108.20
35	BA	473	U	O4'-C1'-N1	18.38	122.91	108.20
2	AB	281	C	C6-N1-C2	-18.33	112.97	120.30
2	AB	1493	C	N3-C4-C5	-18.23	114.61	121.90
2	AB	1547	C	O4'-C1'-N1	18.16	122.73	108.20
2	AB	485	C	O4'-C1'-N1	18.15	122.72	108.20
43	BI	86	ARG	NE-CZ-NH1	18.13	129.37	120.30
2	AB	222	A	O4'-C1'-N9	18.01	122.61	108.20
21	AU	25	ARG	NE-CZ-NH1	17.88	129.24	120.30
35	BA	1451	U	O4'-C1'-N1	17.86	122.49	108.20
2	AB	774	G	C8-N9-C4	-17.80	99.28	106.40
2	AB	6	A	N9-C4-C5	17.69	112.88	105.80
2	AB	1515	A	N9-C4-C5	17.64	112.86	105.80
2	AB	248	G	N3-C4-C5	-17.64	119.78	128.60
2	AB	1963	U	O4'-C1'-N1	17.52	122.22	108.20
2	AB	2358	A	C6-N1-C2	17.41	129.04	118.60
2	AB	2590	A	O4'-C1'-N9	17.35	122.08	108.20
2	AB	1465	G	C2-N3-C4	17.30	120.55	111.90
18	AR	71	ARG	NE-CZ-NH2	-17.27	111.67	120.30
4	AD	202	ARG	NE-CZ-NH1	17.23	128.92	120.30
35	BA	1184	G	N9-C4-C5	17.19	112.28	105.40
2	AB	420	C	O4'-C1'-N1	17.15	121.92	108.20
2	AB	2381	A	N9-C4-C5	17.12	112.65	105.80
2	AB	1998	A	O4'-C1'-N9	17.10	121.88	108.20
35	BA	1384	C	N3-C4-C5	-17.08	115.07	121.90
2	AB	2475	C	N1-C2-O2	17.04	129.13	118.90
30	A3	12	ARG	NE-CZ-NH1	17.03	128.81	120.30
2	AB	1408	G	O4'-C1'-N9	17.01	121.81	108.20
35	BA	1270	G	C8-N9-C4	-16.99	99.60	106.40
2	AB	1104	C	C6-N1-C2	-16.98	113.51	120.30
2	AB	2358	A	N1-C2-N3	-16.94	120.83	129.30
2	AB	1833	C	C6-N1-C2	-16.89	113.54	120.30
41	BG	103	ARG	NE-CZ-NH2	-16.87	111.86	120.30
2	AB	2486	C	N1-C2-O2	16.86	129.02	118.90
2	AB	2502	G	N3-C4-C5	-16.84	120.18	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2542	A	N9-C4-C5	16.83	112.53	105.80
35	BA	292	G	C8-N9-C4	-16.82	99.67	106.40
2	AB	1383	A	C2-N3-C4	16.80	119.00	110.60
35	BA	1454	G	C8-N9-C4	-16.79	99.69	106.40
2	AB	1519	G	C6-N1-C2	-16.76	115.05	125.10
2	AB	494	G	C8-N9-C4	-16.73	99.71	106.40
2	AB	2250	G	N7-C8-N9	16.73	121.47	113.10
35	BA	1246	A	C8-N9-C4	-16.72	99.11	105.80
35	BA	800	G	N3-C4-C5	-16.66	120.27	128.60
35	BA	381	C	O4'-C1'-N1	16.63	121.51	108.20
35	BA	840	C	N3-C4-C5	-16.60	115.26	121.90
35	BA	48	C	C6-N1-C2	-16.56	113.67	120.30
35	BA	1152	A	O4'-C1'-N9	16.54	121.43	108.20
35	BA	1258	G	C8-N9-C4	-16.52	99.79	106.40
2	AB	2328	A	N9-C4-C5	16.50	112.40	105.80
2	AB	786	C	O4'-C1'-N1	16.50	121.40	108.20
53	BS	8	ARG	NE-CZ-NH2	-16.47	112.06	120.30
2	AB	2872	A	C8-N9-C4	-16.47	99.21	105.80
2	AB	1881	C	C6-N1-C2	-16.46	113.71	120.30
2	AB	611	C	O4'-C1'-N1	16.43	121.35	108.20
41	BG	103	ARG	NE-CZ-NH1	16.41	128.50	120.30
35	BA	281	G	N9-C4-C5	16.39	111.96	105.40
2	AB	1013	C	O4'-C1'-N1	16.39	121.31	108.20
2	AB	2127	G	C8-N9-C4	-16.38	99.85	106.40
2	AB	1984	G	C8-N9-C4	-16.35	99.86	106.40
35	BA	1395	C	N3-C4-C5	-16.34	115.36	121.90
2	AB	730	A	N9-C4-C5	-16.34	99.27	105.80
35	BA	44	A	N1-C6-N6	16.32	128.39	118.60
2	AB	2797	U	O4'-C1'-N1	16.25	121.20	108.20
48	BN	105	ARG	NE-CZ-NH2	-16.25	112.17	120.30
2	AB	1423	G	N9-C4-C5	16.23	111.89	105.40
2	AB	616	A	O4'-C1'-N9	16.22	121.18	108.20
35	BA	109	A	O4'-C1'-N9	16.22	121.17	108.20
2	AB	1762	A	C8-N9-C4	-16.21	99.32	105.80
2	AB	1250	G	C8-N9-C4	-16.19	99.92	106.40
35	BA	658	C	C6-N1-C2	-16.19	113.82	120.30
35	BA	1245	C	N3-C4-C5	-16.18	115.43	121.90
35	BA	614	C	O4'-C1'-N1	16.15	121.12	108.20
2	AB	328	U	O4'-C1'-N1	16.12	121.10	108.20
35	BA	1073	U	O4'-C1'-N1	16.09	121.07	108.20
35	BA	1400	C	O4'-C1'-N1	16.09	121.07	108.20
35	BA	492	C	N3-C4-C5	16.06	128.32	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	237	G	C4-C5-N7	16.04	117.22	110.80
2	AB	1290	C	C6-N1-C2	-16.04	113.89	120.30
35	BA	313	A	C2-N3-C4	16.03	118.62	110.60
35	BA	197	A	O4'-C1'-N9	16.02	121.02	108.20
35	BA	387	U	O4'-C1'-N1	15.97	120.97	108.20
35	BA	1453	G	O4'-C1'-N9	15.94	120.95	108.20
35	BA	441	A	N9-C4-C5	15.93	112.17	105.80
2	AB	2569	G	N3-C2-N2	-15.93	108.75	119.90
2	AB	1069	A	O4'-C1'-N9	15.92	120.94	108.20
45	BK	85	TYR	CB-CG-CD1	-15.91	111.45	121.00
2	AB	717	C	O4'-C1'-N1	15.91	120.93	108.20
2	AB	2748	A	N1-C2-N3	-15.90	121.35	129.30
35	BA	1517	G	N9-C4-C5	15.89	111.76	105.40
2	AB	1348	C	O4'-C1'-N1	15.88	120.91	108.20
35	BA	824	G	C8-N9-C4	-15.86	100.06	106.40
35	BA	714	G	C8-N9-C4	-15.85	100.06	106.40
35	BA	987	G	O4'-C1'-N9	15.84	120.87	108.20
35	BA	348	G	N9-C4-C5	15.84	111.74	105.40
2	AB	1549	A	N1-C2-N3	-15.83	121.38	129.30
2	AB	2091	C	N3-C2-O2	-15.83	110.82	121.90
2	AB	2872	A	N9-C4-C5	15.82	112.13	105.80
35	BA	1277	C	O4'-C1'-N1	15.81	120.85	108.20
2	AB	428	A	N1-C6-N6	-15.78	109.13	118.60
2	AB	1549	A	C2-N3-C4	15.78	118.49	110.60
2	AB	2558	C	N3-C4-C5	-15.77	115.59	121.90
2	AB	748	G	C8-N9-C4	-15.77	100.09	106.40
2	AB	1904	G	O4'-C1'-N9	15.77	120.81	108.20
2	AB	1581	G	C4-C5-N7	-15.76	104.49	110.80
35	BA	401	C	C5-C6-N1	15.76	128.88	121.00
2	AB	2520	C	O4'-C1'-N1	15.71	120.77	108.20
35	BA	1015	G	C8-N9-C4	-15.65	100.14	106.40
2	AB	2250	G	C5-N7-C8	-15.65	96.47	104.30
53	BS	17	TYR	CB-CG-CD2	-15.65	111.61	121.00
2	AB	2900	A	O4'-C1'-N9	15.64	120.71	108.20
2	AB	125	A	C5-N7-C8	15.63	111.72	103.90
36	BB	45	U	O4'-C1'-N1	15.63	120.71	108.20
19	AS	50	ARG	NE-CZ-NH2	-15.63	112.49	120.30
35	BA	1362	A	N1-C6-N6	-15.63	109.22	118.60
15	AO	114	ARG	NE-CZ-NH1	-15.60	112.50	120.30
2	AB	1538	G	C8-N9-C4	-15.59	100.16	106.40
35	BA	944	G	C8-N9-C4	-15.59	100.17	106.40
2	AB	1171	G	C4-C5-N7	-15.58	104.57	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	51	G	C8-N9-C4	-15.57	100.17	106.40
2	AB	1943	U	O4'-C1'-N1	15.57	120.66	108.20
2	AB	74	A	N1-C2-N3	-15.57	121.52	129.30
35	BA	556	C	C6-N1-C2	-15.56	114.08	120.30
2	AB	2678	C	N3-C4-C5	-15.55	115.68	121.90
19	AS	24	TYR	CB-CG-CD1	-15.53	111.68	121.00
2	AB	2403	C	C2-N3-C4	15.52	127.66	119.90
2	AB	281	C	N3-C4-C5	-15.51	115.70	121.90
35	BA	1136	C	O4'-C1'-N1	15.46	120.57	108.20
2	AB	130	C	C6-N1-C2	-15.46	114.12	120.30
2	AB	1567	G	C5-C6-O6	-15.46	119.32	128.60
35	BA	416	G	N3-C4-C5	-15.40	120.90	128.60
2	AB	793	A	C8-N9-C4	-15.39	99.65	105.80
5	AE	59	ARG	NE-CZ-NH1	-15.38	112.61	120.30
41	BG	110	ARG	NE-CZ-NH1	15.37	127.99	120.30
2	AB	1382	G	O4'-C1'-N9	15.37	120.49	108.20
1	AA	116	G	N9-C4-C5	15.36	111.54	105.40
2	AB	1866	A	C8-N9-C4	-15.35	99.66	105.80
2	AB	1171	G	C5-N7-C8	15.34	111.97	104.30
9	AI	123	ARG	NE-CZ-NH2	-15.34	112.63	120.30
35	BA	1124	G	N9-C4-C5	15.33	111.53	105.40
2	AB	1574	C	N3-C4-C5	-15.32	115.77	121.90
45	BK	76	ARG	NE-CZ-NH1	15.31	127.96	120.30
35	BA	321	A	N9-C4-C5	-15.31	99.67	105.80
36	BB	38	A	N1-C6-N6	15.31	127.78	118.60
36	BB	67	G	N3-C4-C5	-15.29	120.95	128.60
35	BA	1287	A	N9-C4-C5	15.28	111.91	105.80
2	AB	1968	G	C8-N9-C4	-15.28	100.29	106.40
2	AB	1240	U	O4'-C1'-N1	15.28	120.42	108.20
35	BA	42	G	C8-N9-C4	-15.27	100.29	106.40
2	AB	891	G	N3-C4-C5	-15.26	120.97	128.60
2	AB	24	G	C8-N9-C4	-15.26	100.30	106.40
35	BA	929	G	C5-C6-N1	15.25	119.12	111.50
2	AB	2792	A	C8-N9-C4	15.24	111.90	105.80
2	AB	1142	A	C8-N9-C4	-15.24	99.71	105.80
35	BA	556	C	N3-C4-C5	-15.22	115.81	121.90
2	AB	149	A	C5-C6-N6	-15.21	111.53	123.70
35	BA	1054	C	C6-N1-C2	-15.19	114.22	120.30
38	BD	16	C	C2-N3-C4	15.17	127.49	119.90
35	BA	1094	G	N3-C4-C5	-15.17	121.02	128.60
35	BA	348	G	C8-N9-C4	-15.16	100.34	106.40
2	AB	2238	G	C2-N3-C4	15.15	119.48	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	336	C	N3-C4-C5	-15.14	115.84	121.90
35	BA	217	C	C5-C6-N1	-15.14	113.43	121.00
2	AB	460	A	C8-N9-C4	-15.14	99.74	105.80
50	BP	69	ARG	NE-CZ-NH2	-15.13	112.73	120.30
2	AB	1124	G	C4-C5-N7	-15.13	104.75	110.80
18	AR	61	ARG	NE-CZ-NH2	15.13	127.86	120.30
35	BA	1434	A	C2-N3-C4	15.13	118.16	110.60
35	BA	134	G	C8-N9-C4	-15.12	100.35	106.40
2	AB	2323	G	N7-C8-N9	15.11	120.65	113.10
38	BD	9	G	O4'-C1'-N9	15.03	120.22	108.20
2	AB	889	C	N1-C2-O2	15.02	127.91	118.90
2	AB	2528	U	O4'-C1'-N1	15.01	120.21	108.20
2	AB	2014	A	C8-N9-C4	-15.01	99.80	105.80
2	AB	1423	G	C8-N9-C4	-14.99	100.40	106.40
35	BA	416	G	C8-N9-C4	-14.99	100.41	106.40
2	AB	1768	C	O4'-C1'-N1	14.98	120.18	108.20
35	BA	1502	A	C2-N3-C4	14.98	118.09	110.60
28	A1	29	ARG	NE-CZ-NH2	14.97	127.79	120.30
2	AB	1975	G	N9-C4-C5	14.97	111.39	105.40
1	AA	51	G	C4-C5-N7	-14.96	104.82	110.80
2	AB	615	U	C5-C6-N1	-14.95	115.22	122.70
1	AA	113	C	O4'-C1'-N1	14.95	120.16	108.20
2	AB	2354	C	N1-C2-O2	14.95	127.87	118.90
2	AB	492	A	N7-C8-N9	14.94	121.27	113.80
35	BA	1071	C	C6-N1-C2	-14.92	114.33	120.30
35	BA	824	G	N9-C4-C5	14.92	111.37	105.40
2	AB	1043	C	C6-N1-C2	14.91	126.27	120.30
35	BA	378	G	O4'-C1'-N9	14.90	120.12	108.20
35	BA	72	A	N1-C2-N3	-14.89	121.85	129.30
35	BA	282	A	N9-C4-C5	14.89	111.75	105.80
35	BA	313	A	N9-C4-C5	14.88	111.75	105.80
2	AB	2362	C	O4'-C1'-N1	14.87	120.10	108.20
32	A5	19	ARG	NE-CZ-NH1	-14.87	112.87	120.30
2	AB	450	G	C4-C5-N7	-14.86	104.86	110.80
35	BA	1240	U	O4'-C1'-N1	14.85	120.08	108.20
2	AB	2188	U	O4'-C1'-N1	14.84	120.07	108.20
2	AB	1517	G	C8-N9-C4	-14.83	100.47	106.40
39	BE	136	ARG	NE-CZ-NH2	-14.81	112.89	120.30
50	BP	89	ARG	NE-CZ-NH1	14.80	127.70	120.30
2	AB	1984	G	C4-C5-N7	-14.80	104.88	110.80
9	AI	97	ARG	NE-CZ-NH1	14.80	127.70	120.30
2	AB	1459	G	C5-C6-N1	14.79	118.90	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	862	G	C8-N9-C4	-14.79	100.48	106.40
2	AB	1002	G	O4'-C1'-N9	14.78	120.03	108.20
2	AB	463	G	O4'-C1'-N9	14.77	120.02	108.20
35	BA	900	A	C5-C6-N1	14.77	125.08	117.70
2	AB	1619	G	C8-N9-C4	-14.77	100.49	106.40
2	AB	2103	C	N1-C2-O2	14.77	127.76	118.90
2	AB	2707	U	O4'-C1'-N1	14.77	120.01	108.20
2	AB	1009	A	N9-C4-C5	14.76	111.70	105.80
2	AB	107	G	N3-C4-C5	-14.76	121.22	128.60
2	AB	1008	A	O4'-C1'-N9	14.75	120.00	108.20
2	AB	1274	A	N1-C6-N6	-14.75	109.75	118.60
2	AB	2127	G	N7-C8-N9	14.75	120.47	113.10
35	BA	1135	U	O4'-C1'-N1	14.75	120.00	108.20
2	AB	1324	G	C8-N9-C4	-14.74	100.50	106.40
2	AB	1224	U	O4'-C1'-N1	14.73	119.99	108.20
2	AB	65	U	N3-C4-O4	-14.73	109.09	119.40
2	AB	2594	C	O4'-C1'-N1	14.71	119.97	108.20
35	BA	1063	C	N3-C4-C5	-14.71	116.01	121.90
2	AB	1309	G	C8-N9-C4	-14.70	100.52	106.40
35	BA	132	C	O4'-C1'-N1	14.68	119.94	108.20
41	BG	69	ARG	NE-CZ-NH2	-14.68	112.96	120.30
2	AB	897	C	O4'-C1'-N1	14.67	119.94	108.20
2	AB	45	G	C8-N9-C4	-14.66	100.54	106.40
2	AB	1822	C	N3-C4-C5	-14.65	116.04	121.90
2	AB	2424	C	C4-C5-C6	14.65	124.73	117.40
2	AB	1775	U	O4'-C1'-N1	14.62	119.89	108.20
35	BA	97	G	N3-C4-C5	-14.61	121.30	128.60
2	AB	1889	A	N1-C2-N3	-14.60	122.00	129.30
35	BA	281	G	C8-N9-C4	-14.60	100.56	106.40
2	AB	1020	A	C8-N9-C4	-14.59	99.96	105.80
2	AB	1352	U	O4'-C1'-N1	14.58	119.86	108.20
2	AB	1386	C	C5-C6-N1	14.58	128.29	121.00
2	AB	2756	U	N3-C2-O2	-14.58	112.00	122.20
2	AB	1726	C	O4'-C1'-N1	14.57	119.86	108.20
2	AB	1546	G	C5-N7-C8	-14.56	97.02	104.30
36	BB	59	G	N3-C4-C5	-14.54	121.33	128.60
2	AB	889	C	O4'-C1'-N1	14.53	119.82	108.20
35	BA	558	G	C4-C5-N7	14.53	116.61	110.80
37	BC	59	A	C8-N9-C4	-14.53	99.99	105.80
35	BA	525	C	N3-C4-C5	-14.52	116.09	121.90
2	AB	797	G	C8-N9-C4	-14.52	100.59	106.40
2	AB	252	G	N1-C6-O6	-14.51	111.19	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	AN	33	ARG	NE-CZ-NH2	-14.51	113.04	120.30
38	BD	32	G	N7-C8-N9	14.51	120.35	113.10
35	BA	396	C	O4'-C1'-N1	14.51	119.81	108.20
2	AB	2871	U	C5-C6-N1	-14.50	115.45	122.70
2	AB	1211	C	O4'-C1'-N1	14.49	119.80	108.20
35	BA	752	G	O4'-C1'-N9	14.49	119.79	108.20
2	AB	2462	C	C6-N1-C2	-14.49	114.50	120.30
2	AB	1500	G	N3-C4-C5	-14.48	121.36	128.60
2	AB	737	C	C6-N1-C2	-14.48	114.51	120.30
2	AB	230	G	N9-C4-C5	14.47	111.19	105.40
2	AB	2759	G	O4'-C1'-N9	14.47	119.77	108.20
35	BA	1105	A	C8-N9-C4	-14.47	100.01	105.80
2	AB	1983	G	C8-N9-C4	14.46	112.19	106.40
2	AB	1590	A	C4-C5-C6	-14.46	109.77	117.00
2	AB	1515	A	C4-C5-N7	-14.45	103.47	110.70
2	AB	428	A	C5-C6-N1	14.45	124.92	117.70
35	BA	1260	G	C8-N9-C4	-14.45	100.62	106.40
2	AB	477	A	N1-C2-N3	-14.45	122.08	129.30
51	BQ	52	ARG	NE-CZ-NH1	14.45	127.52	120.30
2	AB	1205	A	O4'-C1'-N9	14.42	119.73	108.20
2	AB	230	G	C8-N9-C4	-14.41	100.64	106.40
2	AB	277	G	C5-N7-C8	-14.41	97.10	104.30
9	AI	123	ARG	NE-CZ-NH1	14.40	127.50	120.30
2	AB	1085	A	O4'-C1'-N9	14.40	119.72	108.20
35	BA	777	A	C4-C5-C6	-14.40	109.80	117.00
1	AA	102	G	N9-C4-C5	14.40	111.16	105.40
2	AB	2053	G	C2-N3-C4	14.39	119.10	111.90
2	AB	1836	C	N3-C4-C5	14.39	127.66	121.90
2	AB	391	A	C8-N9-C4	-14.38	100.05	105.80
2	AB	1436	G	C5-C6-O6	-14.38	119.97	128.60
35	BA	733	G	C8-N9-C4	-14.38	100.65	106.40
41	BG	110	ARG	NE-CZ-NH2	-14.38	113.11	120.30
2	AB	277	G	C4-C5-N7	14.37	116.55	110.80
2	AB	2492	U	O4'-C1'-N1	14.37	119.70	108.20
2	AB	74	A	C2-N3-C4	14.37	117.78	110.60
2	AB	812	C	O4'-C1'-N1	14.37	119.69	108.20
2	AB	2250	G	C8-N9-C4	-14.37	100.65	106.40
2	AB	2773	C	O4'-C1'-N1	14.37	119.69	108.20
35	BA	1270	G	N9-C4-C5	14.36	111.14	105.40
2	AB	1645	G	C6-N1-C2	-14.36	116.48	125.10
35	BA	113	G	C5-N7-C8	-14.34	97.13	104.30
2	AB	359	G	C5-C6-O6	-14.33	120.00	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	82	U	O4'-C1'-N1	14.33	119.66	108.20
2	AB	1357	C	N3-C4-C5	-14.32	116.17	121.90
2	AB	2398	U	N3-C4-O4	14.30	129.41	119.40
35	BA	1315	U	O4'-C1'-N1	14.30	119.64	108.20
35	BA	416	G	N9-C4-C5	14.30	111.12	105.40
2	AB	2863	C	O4'-C1'-N1	14.29	119.64	108.20
7	AG	127	TYR	CB-CG-CD1	-14.29	112.43	121.00
2	AB	2332	C	C6-N1-C2	-14.29	114.59	120.30
2	AB	1743	G	N7-C8-N9	14.28	120.24	113.10
35	BA	269	C	O4'-C1'-N1	14.27	119.61	108.20
35	BA	777	A	N7-C8-N9	14.27	120.93	113.80
35	BA	1475	G	N7-C8-N9	14.27	120.23	113.10
2	AB	81	G	N9-C4-C5	14.25	111.10	105.40
2	AB	1279	G	C5-N7-C8	-14.24	97.18	104.30
2	AB	248	G	N1-C2-N3	-14.24	115.36	123.90
2	AB	1892	C	C5-C6-N1	14.24	128.12	121.00
35	BA	589	U	O4'-C1'-N1	14.23	119.59	108.20
35	BA	443	C	N1-C2-O2	14.23	127.44	118.90
2	AB	2900	A	N9-C4-C5	14.23	111.49	105.80
2	AB	1160	G	N3-C4-C5	-14.23	121.49	128.60
2	AB	485	C	N1-C2-O2	14.22	127.43	118.90
2	AB	585	G	C5-N7-C8	-14.21	97.19	104.30
2	AB	1554	U	N3-C2-O2	-14.21	112.25	122.20
2	AB	1234	U	O4'-C1'-N1	14.21	119.57	108.20
15	AO	51	ARG	NE-CZ-NH2	14.21	127.41	120.30
35	BA	1055	A	N1-C2-N3	-14.20	122.20	129.30
2	AB	2276	G	C8-N9-C4	-14.20	100.72	106.40
35	BA	749	A	O4'-C1'-N9	14.20	119.56	108.20
2	AB	2688	G	C8-N9-C4	-14.19	100.72	106.40
2	AB	1781	U	O4'-C1'-N1	14.19	119.55	108.20
35	BA	536	C	N3-C4-C5	-14.19	116.22	121.90
2	AB	204	A	N1-C6-N6	-14.16	110.10	118.60
2	AB	1022	G	N3-C4-C5	-14.15	121.52	128.60
2	AB	837	C	N3-C4-N4	14.15	127.91	118.00
2	AB	445	C	N3-C4-C5	-14.14	116.25	121.90
35	BA	903	G	C8-N9-C4	-14.14	100.75	106.40
2	AB	2855	C	C2-N3-C4	14.13	126.96	119.90
2	AB	1694	C	O4'-C1'-N1	14.12	119.50	108.20
2	AB	753	A	C8-N9-C4	-14.12	100.15	105.80
1	AA	47	C	O4'-C1'-N1	14.11	119.49	108.20
2	AB	1144	A	C2-N3-C4	14.11	117.66	110.60
2	AB	1407	G	C4-C5-N7	-14.11	105.16	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BC	15	G	O4'-C1'-N9	14.11	119.49	108.20
35	BA	183	C	O4'-C1'-N1	14.10	119.48	108.20
1	AA	45	A	N1-C2-N3	14.09	136.34	129.30
2	AB	1145	C	C6-N1-C2	-14.09	114.66	120.30
2	AB	2290	G	C8-N9-C4	-14.09	100.77	106.40
1	AA	45	A	C6-N1-C2	-14.09	110.15	118.60
2	AB	2736	A	O4'-C1'-N9	14.07	119.46	108.20
2	AB	2123	G	C4-C5-N7	-14.07	105.17	110.80
2	AB	2595	G	O4'-C1'-N9	14.07	119.45	108.20
35	BA	1320	C	N3-C4-C5	-14.07	116.27	121.90
49	BO	30	ARG	NE-CZ-NH2	-14.05	113.27	120.30
35	BA	1159	U	O4'-C1'-N1	14.05	119.44	108.20
2	AB	330	A	N1-C6-N6	14.04	127.02	118.60
2	AB	517	C	N3-C4-C5	-14.04	116.28	121.90
2	AB	1297	C	N1-C2-O2	14.04	127.32	118.90
2	AB	1009	A	C4-C5-N7	-14.03	103.68	110.70
2	AB	1121	C	O4'-C1'-N1	14.03	119.42	108.20
37	BC	35	G	C8-N9-C4	-14.03	100.79	106.40
2	AB	228	C	N1-C2-O2	14.02	127.31	118.90
35	BA	567	G	N7-C8-N9	14.02	120.11	113.10
29	A2	63	ARG	NE-CZ-NH1	14.00	127.30	120.30
43	BI	110	ARG	NE-CZ-NH1	14.00	127.30	120.30
35	BA	761	G	C4-C5-N7	-13.99	105.20	110.80
2	AB	43	G	C8-N9-C4	-13.99	100.81	106.40
2	AB	742	A	C2-N3-C4	13.98	117.59	110.60
2	AB	1929	G	O4'-C1'-N9	13.96	119.37	108.20
15	AO	38	ARG	NE-CZ-NH1	13.96	127.28	120.30
2	AB	993	G	C8-N9-C4	-13.94	100.82	106.40
2	AB	52	A	C8-N9-C4	-13.94	100.23	105.80
2	AB	1997	C	N3-C4-C5	-13.93	116.33	121.90
35	BA	623	C	C2-N3-C4	13.93	126.86	119.90
6	AF	114	ARG	NE-CZ-NH2	-13.93	113.34	120.30
2	AB	2057	G	C8-N9-C4	-13.92	100.83	106.40
2	AB	64	A	C8-N9-C4	-13.91	100.23	105.80
2	AB	1140	C	N3-C4-C5	-13.91	116.33	121.90
2	AB	1522	A	N1-C2-N3	-13.90	122.35	129.30
2	AB	1888	G	O4'-C1'-N9	13.90	119.32	108.20
35	BA	791	G	N3-C4-C5	-13.89	121.65	128.60
2	AB	94	A	O4'-C1'-N9	13.89	119.31	108.20
2	AB	231	A	C8-N9-C4	-13.89	100.24	105.80
2	AB	752	A	O4'-C1'-N9	13.89	119.31	108.20
2	AB	1562	U	O4'-C1'-N1	13.88	119.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1416	G	N3-C4-C5	-13.88	121.66	128.60
2	AB	485	C	C6-N1-C2	13.88	125.85	120.30
2	AB	1590	A	O4'-C1'-N9	13.88	119.30	108.20
35	BA	1384	C	C2-N3-C4	13.88	126.84	119.90
2	AB	637	A	N9-C4-C5	13.88	111.35	105.80
35	BA	468	A	O4'-C1'-N9	13.87	119.30	108.20
36	BB	51	G	O4'-C1'-N9	13.87	119.30	108.20
35	BA	1162	C	C6-N1-C2	-13.87	114.75	120.30
35	BA	597	G	O4'-C1'-N9	13.86	119.29	108.20
2	AB	1111	A	C2-N3-C4	13.85	117.52	110.60
35	BA	660	C	O4'-C1'-N1	13.84	119.27	108.20
35	BA	1059	C	O4'-C1'-N1	13.82	119.26	108.20
2	AB	2414	G	C8-N9-C4	-13.81	100.88	106.40
35	BA	1011	C	O4'-C1'-N1	13.81	119.25	108.20
1	AA	10	G	C5-C6-N1	13.81	118.40	111.50
2	AB	1895	C	N3-C4-C5	-13.81	116.38	121.90
2	AB	1870	C	N3-C2-O2	-13.80	112.24	121.90
38	BD	1	C	N1-C2-O2	13.80	127.18	118.90
2	AB	1724	G	N9-C4-C5	13.79	110.92	105.40
2	AB	1174	U	N3-C4-O4	13.79	129.05	119.40
10	AJ	52	ARG	NE-CZ-NH1	-13.79	113.41	120.30
2	AB	1918	A	O4'-C1'-N9	13.78	119.23	108.20
35	BA	847	G	C2-N3-C4	13.78	118.79	111.90
2	AB	2167	U	O4'-C1'-N1	13.77	119.22	108.20
2	AB	912	C	N3-C4-C5	-13.77	116.39	121.90
38	BD	27	G	C8-N9-C4	-13.77	100.89	106.40
37	BC	21	U	C5-C6-N1	-13.76	115.82	122.70
35	BA	1063	C	C4-C5-C6	13.76	124.28	117.40
35	BA	1104	G	C8-N9-C4	-13.76	100.90	106.40
2	AB	1399	C	O4'-C1'-N1	13.76	119.20	108.20
35	BA	565	U	C5-C6-N1	-13.76	115.82	122.70
2	AB	1543	G	N3-C4-C5	-13.75	121.72	128.60
2	AB	2072	C	N3-C4-N4	13.75	127.63	118.00
2	AB	1494	A	N9-C4-C5	13.75	111.30	105.80
2	AB	295	G	O4'-C1'-N9	13.75	119.20	108.20
2	AB	450	G	N9-C4-C5	13.74	110.89	105.40
2	AB	1861	G	N3-C4-C5	-13.74	121.73	128.60
2	AB	1354	A	N1-C6-N6	-13.74	110.36	118.60
2	AB	643	A	N7-C8-N9	13.73	120.67	113.80
35	BA	382	A	O4'-C1'-N9	13.73	119.19	108.20
35	BA	1281	C	C2-N3-C4	13.73	126.77	119.90
35	BA	1268	G	O4'-C1'-N9	13.73	119.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	948	C	O4'-C1'-N1	13.72	119.18	108.20
2	AB	2780	G	C8-N9-C4	-13.71	100.91	106.40
2	AB	136	G	C5-C6-N1	13.71	118.36	111.50
35	BA	1274	A	C8-N9-C4	-13.70	100.32	105.80
2	AB	1145	C	N3-C4-C5	-13.70	116.42	121.90
2	AB	494	G	N9-C4-C5	13.69	110.87	105.40
35	BA	910	C	C6-N1-C2	13.68	125.77	120.30
2	AB	283	G	O4'-C1'-N9	13.68	119.15	108.20
2	AB	1277	G	C2-N3-C4	13.68	118.74	111.90
2	AB	1554	U	N1-C2-O2	13.68	132.38	122.80
35	BA	216	U	O4'-C1'-N1	13.68	119.14	108.20
35	BA	770	C	N3-C4-C5	-13.68	116.43	121.90
2	AB	294	A	C2-N3-C4	13.68	117.44	110.60
2	AB	421	C	O4'-C1'-N1	13.67	119.14	108.20
23	AW	6	ARG	NE-CZ-NH1	13.67	127.14	120.30
2	AB	2340	A	C8-N9-C4	-13.65	100.34	105.80
2	AB	1426	G	C8-N9-C4	-13.64	100.94	106.40
35	BA	29	U	C5-C6-N1	-13.64	115.88	122.70
2	AB	2766	A	N1-C6-N6	13.63	126.78	118.60
35	BA	1165	U	O4'-C1'-N1	13.62	119.10	108.20
2	AB	113	U	O4'-C1'-N1	13.62	119.09	108.20
2	AB	1426	G	N7-C8-N9	13.62	119.91	113.10
2	AB	717	C	N3-C4-C5	-13.61	116.46	121.90
2	AB	1434	A	O4'-C1'-N9	13.61	119.08	108.20
2	AB	2024	G	C8-N9-C4	-13.59	100.96	106.40
35	BA	777	A	C8-N9-C4	-13.59	100.36	105.80
2	AB	460	A	N9-C4-C5	13.59	111.23	105.80
2	AB	2508	G	N3-C4-C5	-13.59	121.81	128.60
2	AB	990	A	N1-C6-N6	-13.58	110.45	118.60
35	BA	1064	G	N3-C4-C5	-13.58	121.81	128.60
2	AB	2806	C	N1-C2-O2	13.57	127.04	118.90
35	BA	185	U	O4'-C1'-N1	13.57	119.05	108.20
2	AB	1109	C	N3-C4-C5	-13.56	116.48	121.90
2	AB	1493	C	O4'-C1'-N1	13.55	119.04	108.20
35	BA	275	G	C4-C5-N7	-13.55	105.38	110.80
2	AB	620	G	O4'-C1'-N9	13.55	119.04	108.20
35	BA	1387	G	C5-C6-O6	-13.55	120.47	128.60
35	BA	897	C	N1-C2-O2	13.54	127.03	118.90
2	AB	1903	G	C2-N3-C4	13.54	118.67	111.90
2	AB	575	A	O4'-C1'-N9	13.53	119.02	108.20
2	AB	1786	A	C2-N3-C4	13.52	117.36	110.60
4	AD	216	ARG	NE-CZ-NH1	13.51	127.06	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2	G	C8-N9-C4	-13.50	101.00	106.40
2	AB	2177	C	N3-C4-C5	-13.50	116.50	121.90
14	AN	69	ARG	NE-CZ-NH1	13.50	127.05	120.30
35	BA	79	G	C5-C6-O6	-13.50	120.50	128.60
35	BA	470	C	N1-C2-O2	13.49	127.00	118.90
2	AB	2465	C	C4-C5-C6	13.49	124.15	117.40
35	BA	534	U	C5-C6-N1	-13.49	115.95	122.70
2	AB	1552	A	O4'-C1'-N9	13.49	118.99	108.20
35	BA	590	U	C4-C5-C6	13.49	127.80	119.70
35	BA	1337	G	C4-C5-N7	13.49	116.19	110.80
1	AA	69	G	C2-N3-C4	13.49	118.64	111.90
35	BA	929	G	O4'-C1'-N9	13.49	118.99	108.20
35	BA	1432	G	C8-N9-C4	-13.49	101.00	106.40
2	AB	128	C	C6-N1-C2	13.48	125.69	120.30
35	BA	165	G	C8-N9-C4	-13.48	101.01	106.40
2	AB	1277	G	N3-C4-C5	-13.48	121.86	128.60
17	AQ	94	ARG	NE-CZ-NH2	-13.48	113.56	120.30
35	BA	1360	A	N1-C2-N3	-13.48	122.56	129.30
2	AB	1350	C	O4'-C1'-N1	13.47	118.98	108.20
2	AB	1512	C	O4'-C1'-N1	13.47	118.98	108.20
35	BA	1353	G	C8-N9-C4	-13.47	101.01	106.40
2	AB	585	G	N7-C8-N9	13.46	119.83	113.10
35	BA	198	G	C2-N3-C4	13.45	118.63	111.90
2	AB	1511	G	N1-C6-O6	-13.45	111.83	119.90
35	BA	187	G	C5-C6-O6	-13.45	120.53	128.60
35	BA	408	A	C5-C6-N1	-13.44	110.98	117.70
35	BA	1005	A	O4'-C1'-N9	13.44	118.95	108.20
2	AB	2641	G	C5-C6-N1	13.43	118.22	111.50
1	AA	33	G	N9-C4-C5	13.43	110.77	105.40
2	AB	1492	G	C5-C6-O6	-13.42	120.55	128.60
35	BA	158	G	C4-C5-N7	-13.42	105.43	110.80
35	BA	313	A	C8-N9-C4	-13.42	100.43	105.80
35	BA	315	A	N9-C4-C5	13.42	111.17	105.80
2	AB	1286	A	O4'-C1'-N9	13.42	118.93	108.20
2	AB	2465	C	N3-C4-C5	-13.42	116.53	121.90
35	BA	510	A	C8-N9-C4	-13.41	100.44	105.80
2	AB	776	G	N3-C4-C5	-13.41	121.90	128.60
2	AB	1309	G	C2-N3-C4	13.41	118.60	111.90
35	BA	404	G	N9-C4-C5	13.41	110.76	105.40
2	AB	1076	C	C3'-C2'-C1'	13.40	112.22	101.50
2	AB	1208	C	C6-N1-C2	-13.40	114.94	120.30
2	AB	49	A	C5-N7-C8	13.40	110.60	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2780	G	N9-C4-C5	13.39	110.76	105.40
2	AB	2177	C	N3-C4-N4	13.39	127.37	118.00
2	AB	954	G	N7-C8-N9	13.38	119.79	113.10
2	AB	3	U	O4'-C1'-N1	13.38	118.91	108.20
2	AB	1604	C	N1-C2-O2	13.38	126.93	118.90
2	AB	644	A	C8-N9-C4	-13.38	100.45	105.80
2	AB	1264	A	C4-C5-N7	-13.38	104.01	110.70
2	AB	2798	U	C4-C5-C6	13.38	127.73	119.70
2	AB	1725	U	O4'-C1'-N1	13.37	118.90	108.20
2	AB	2402	U	O4'-C1'-N1	13.37	118.90	108.20
38	BD	18	U	O4'-C1'-N1	13.37	118.90	108.20
35	BA	1330	U	O4'-C1'-N1	13.37	118.90	108.20
2	AB	453	A	N1-C6-N6	-13.37	110.58	118.60
2	AB	1381	G	C8-N9-C4	-13.37	101.05	106.40
35	BA	1099	G	C8-N9-C4	-13.37	101.05	106.40
35	BA	104	G	C8-N9-C4	-13.36	101.05	106.40
35	BA	1197	A	O4'-C1'-N9	13.36	118.89	108.20
2	AB	2452	C	O4'-C1'-N1	13.36	118.89	108.20
35	BA	586	C	N3-C4-C5	13.35	127.24	121.90
2	AB	1104	C	N3-C4-C5	-13.34	116.56	121.90
2	AB	1426	G	C5-N7-C8	-13.34	97.63	104.30
19	AS	69	ARG	NE-CZ-NH1	13.34	126.97	120.30
36	BB	38	A	C5-C6-N6	-13.34	113.03	123.70
2	AB	294	A	N1-C2-N3	-13.34	122.63	129.30
2	AB	23	G	C4-C5-N7	13.34	116.14	110.80
2	AB	883	G	C8-N9-C4	-13.34	101.06	106.40
2	AB	2091	C	N1-C2-O2	13.34	126.90	118.90
2	AB	1206	G	O4'-C1'-N9	13.33	118.86	108.20
2	AB	1782	U	N3-C2-O2	-13.33	112.87	122.20
35	BA	1051	C	C3'-C2'-C1'	13.33	112.16	101.50
40	BF	228	ARG	NE-CZ-NH2	-13.33	113.64	120.30
2	AB	1910	G	C8-N9-C4	-13.33	101.07	106.40
2	AB	1914	C	N1-C2-O2	13.32	126.89	118.90
2	AB	2611	C	O4'-C1'-N1	13.32	118.86	108.20
2	AB	1336	A	C2-N3-C4	13.31	117.26	110.60
2	AB	1472	C	N3-C4-C5	-13.31	116.58	121.90
2	AB	1724	G	O4'-C1'-N9	13.31	118.84	108.20
2	AB	1741	C	O4'-C1'-N1	13.30	118.84	108.20
2	AB	1999	C	C6-N1-C2	-13.30	114.98	120.30
2	AB	1714	U	N1-C2-N3	13.30	122.88	114.90
2	AB	1975	G	C8-N9-C4	-13.29	101.08	106.40
51	BQ	8	ARG	NE-CZ-NH1	13.29	126.94	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	AN	132	ARG	NE-CZ-NH2	-13.29	113.66	120.30
35	BA	1057	G	N3-C2-N2	-13.28	110.60	119.90
2	AB	2200	C	N3-C4-C5	-13.28	116.59	121.90
2	AB	2692	G	N9-C4-C5	13.28	110.71	105.40
35	BA	1533	C	O4'-C1'-N1	13.27	118.82	108.20
2	AB	126	A	C2-N3-C4	13.27	117.23	110.60
2	AB	1389	G	C8-N9-C4	-13.26	101.09	106.40
45	BK	116	ARG	NE-CZ-NH1	13.26	126.93	120.30
35	BA	1482	G	N3-C4-C5	-13.26	121.97	128.60
2	AB	779	U	O4'-C1'-N1	13.26	118.80	108.20
2	AB	2214	C	N3-C2-O2	-13.25	112.62	121.90
35	BA	1220	G	C4-C5-N7	-13.25	105.50	110.80
2	AB	11	C	N3-C4-C5	-13.25	116.60	121.90
2	AB	2720	U	N3-C2-O2	-13.25	112.93	122.20
35	BA	310	G	O4'-C1'-N9	13.25	118.80	108.20
2	AB	2775	G	C8-N9-C4	-13.24	101.10	106.40
2	AB	248	G	N3-C4-N9	13.24	133.94	126.00
35	BA	46	G	C6-N1-C2	-13.24	117.16	125.10
35	BA	111	G	C4-C5-N7	-13.24	105.50	110.80
35	BA	1154	G	O4'-C1'-N9	13.24	118.79	108.20
2	AB	2280	G	C6-C5-N7	-13.22	122.47	130.40
35	BA	1094	G	C4-C5-N7	-13.21	105.52	110.80
37	BC	41	A	C4-C5-C6	-13.20	110.40	117.00
2	AB	942	G	C5-C6-N1	13.20	118.10	111.50
35	BA	1395	C	C2-N3-C4	13.19	126.49	119.90
2	AB	695	G	N3-C4-C5	-13.19	122.01	128.60
2	AB	784	G	N7-C8-N9	13.19	119.69	113.10
2	AB	2127	G	N9-C4-C5	13.19	110.67	105.40
2	AB	228	C	C2-N3-C4	13.18	126.49	119.90
35	BA	847	G	N3-C4-C5	-13.17	122.01	128.60
2	AB	2861	U	C2-N3-C4	-13.17	119.10	127.00
2	AB	589	U	C5-C6-N1	-13.17	116.11	122.70
2	AB	27	G	N3-C4-C5	-13.17	122.02	128.60
2	AB	270	A	O4'-C1'-N9	13.16	118.73	108.20
35	BA	569	C	O4'-C1'-N1	13.16	118.73	108.20
35	BA	302	G	C2-N3-C4	13.16	118.48	111.90
2	AB	1830	C	N3-C4-C5	-13.15	116.64	121.90
2	AB	707	G	C2-N3-C4	13.15	118.48	111.90
37	BC	56	G	O4'-C1'-N9	13.14	118.71	108.20
2	AB	24	G	N9-C4-C5	13.14	110.65	105.40
2	AB	2328	A	C8-N9-C4	-13.14	100.55	105.80
1	AA	69	G	N3-C4-C5	-13.13	122.03	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2053	G	N9-C4-C5	13.13	110.65	105.40
35	BA	518	C	O4'-C1'-N1	13.13	118.71	108.20
35	BA	1453	G	C8-N9-C4	-13.13	101.15	106.40
2	AB	1289	C	O4'-C1'-N1	13.12	118.70	108.20
2	AB	434	U	C2-N3-C4	-13.12	119.13	127.00
2	AB	2691	C	C6-N1-C2	13.12	125.55	120.30
35	BA	1460	C	N1-C2-O2	13.12	126.77	118.90
2	AB	907	G	C8-N9-C4	-13.11	101.16	106.40
35	BA	450	G	C5-C6-N1	13.11	118.05	111.50
35	BA	917	G	N3-C4-C5	-13.11	122.05	128.60
35	BA	1074	G	N3-C4-C5	-13.10	122.05	128.60
2	AB	430	A	N1-C2-N3	-13.09	122.75	129.30
2	AB	2177	C	C4-C5-C6	13.09	123.95	117.40
35	BA	869	G	C5-C6-N1	13.09	118.05	111.50
35	BA	908	A	C8-N9-C4	-13.09	100.56	105.80
52	BR	83	ARG	NE-CZ-NH2	-13.08	113.76	120.30
2	AB	979	A	C5-C6-N1	13.08	124.24	117.70
35	BA	93	U	O4'-C1'-N1	13.08	118.67	108.20
2	AB	2627	G	N9-C4-C5	-13.08	100.17	105.40
2	AB	2801	G	C8-N9-C4	-13.08	101.17	106.40
2	AB	1701	A	C8-N9-C4	-13.08	100.57	105.80
35	BA	162	A	O4'-C1'-N9	13.07	118.66	108.20
2	AB	1189	A	N1-C2-N3	-13.07	122.76	129.30
54	BT	76	ARG	NE-CZ-NH1	13.07	126.83	120.30
33	A6	29	ARG	NE-CZ-NH1	-13.05	113.77	120.30
36	BB	29	G	C8-N9-C4	-13.05	101.18	106.40
55	BU	56	ARG	NE-CZ-NH1	13.05	126.82	120.30
35	BA	1068	G	C8-N9-C4	-13.04	101.18	106.40
2	AB	2589	A	N9-C4-C5	13.04	111.02	105.80
35	BA	191	G	C5-C6-N1	13.04	118.02	111.50
2	AB	149	A	C5-C6-N1	13.03	124.22	117.70
35	BA	837	U	O4'-C1'-N1	13.03	118.63	108.20
2	AB	2361	G	N3-C2-N2	-13.03	110.78	119.90
35	BA	1440	U	C5-C4-O4	-13.03	118.08	125.90
35	BA	158	G	N9-C4-C5	13.03	110.61	105.40
35	BA	574	A	O4'-C1'-N9	13.03	118.62	108.20
38	BD	72	C	N1-C2-O2	13.02	126.71	118.90
35	BA	625	U	O4'-C1'-N1	13.02	118.61	108.20
2	AB	851	C	C6-N1-C2	13.02	125.51	120.30
2	AB	2145	C	O4'-C1'-N1	13.02	118.61	108.20
2	AB	536	G	N9-C4-C5	13.01	110.61	105.40
35	BA	1258	G	N9-C4-C5	13.01	110.61	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	492	A	C5-N7-C8	-13.01	97.39	103.90
2	AB	2328	A	C4-C5-N7	-13.01	104.19	110.70
2	AB	176	A	C4-C5-C6	-13.01	110.50	117.00
2	AB	508	A	O4'-C1'-N9	13.01	118.61	108.20
2	AB	929	U	O4'-C1'-N1	13.00	118.60	108.20
36	BB	66	C	N3-C2-O2	-13.00	112.80	121.90
35	BA	106	C	O4'-C1'-N1	13.00	118.60	108.20
2	AB	205	G	C4-C5-N7	-13.00	105.60	110.80
2	AB	1933	G	C8-N9-C4	-12.99	101.20	106.40
2	AB	2712	C	O4'-C1'-N1	12.99	118.60	108.20
35	BA	590	U	O4'-C1'-N1	12.99	118.59	108.20
2	AB	2758	A	N1-C6-N6	12.98	126.39	118.60
37	BC	45	G	C8-N9-C4	-12.98	101.21	106.40
2	AB	623	C	C5-C6-N1	12.98	127.49	121.00
2	AB	2248	C	N3-C4-C5	-12.98	116.71	121.90
2	AB	2641	G	C5-C6-O6	-12.98	120.81	128.60
2	AB	2090	A	C8-N9-C4	-12.97	100.61	105.80
2	AB	2334	U	O4'-C1'-N1	12.97	118.58	108.20
2	AB	1463	C	O4'-C1'-N1	12.96	118.57	108.20
2	AB	1423	G	N9-C1'-C2'	-12.96	97.15	114.00
57	BW	28	ARG	NE-CZ-NH2	-12.96	113.82	120.30
1	AA	47	C	N1-C2-O2	12.96	126.67	118.90
2	AB	2554	U	C5-C6-N1	-12.96	116.22	122.70
2	AB	335	C	N3-C4-C5	12.96	127.08	121.90
2	AB	1127	A	C8-N9-C4	-12.96	100.62	105.80
35	BA	1287	A	C8-N9-C4	-12.94	100.62	105.80
35	BA	910	C	N1-C2-O2	12.94	126.66	118.90
35	BA	1133	G	N3-C4-C5	-12.93	122.14	128.60
2	AB	2778	A	C2-N3-C4	12.92	117.06	110.60
2	AB	864	G	C8-N9-C4	-12.92	101.23	106.40
2	AB	1009	A	C5-N7-C8	12.92	110.36	103.90
2	AB	1431	A	N1-C6-N6	-12.92	110.85	118.60
2	AB	2277	G	C5-C6-N1	12.91	117.96	111.50
2	AB	2500	U	O4'-C1'-N1	12.91	118.53	108.20
2	AB	387	U	C1'-O4'-C4'	-12.91	99.57	109.90
35	BA	342	C	O4'-C1'-N1	12.91	118.53	108.20
2	AB	176	A	C5-C6-N1	12.91	124.15	117.70
2	AB	1954	G	N9-C4-C5	12.90	110.56	105.40
2	AB	1596	A	N1-C2-N3	-12.90	122.85	129.30
2	AB	323	C	O4'-C1'-N1	12.90	118.52	108.20
2	AB	1062	G	C5-C6-O6	-12.89	120.87	128.60
35	BA	66	A	C8-N9-C4	-12.88	100.65	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	380	G	O4'-C1'-N9	12.87	118.50	108.20
2	AB	1788	C	N3-C4-N4	12.87	127.01	118.00
2	AB	1996	C	N1-C2-O2	12.87	126.62	118.90
2	AB	488	G	N3-C4-C5	-12.87	122.17	128.60
2	AB	1283	G	C4-C5-N7	12.87	115.95	110.80
2	AB	1709	U	O4'-C1'-N1	12.87	118.49	108.20
35	BA	444	G	C2-N3-C4	12.87	118.33	111.90
35	BA	176	C	O4'-C1'-N1	12.86	118.49	108.20
35	BA	401	C	C6-N1-C2	-12.86	115.16	120.30
1	AA	20	G	N7-C8-N9	12.86	119.53	113.10
1	AA	51	G	C8-N9-C4	-12.86	101.26	106.40
35	BA	623	C	N3-C4-C5	-12.85	116.76	121.90
2	AB	440	C	N1-C2-O2	12.85	126.61	118.90
2	AB	799	G	C8-N9-C4	-12.85	101.26	106.40
2	AB	2225	A	C5-C6-N1	12.84	124.12	117.70
44	BJ	91	ARG	NE-CZ-NH1	12.84	126.72	120.30
2	AB	1213	A	N9-C4-C5	12.84	110.94	105.80
38	BD	12	G	C8-N9-C4	-12.84	101.27	106.40
35	BA	459	A	C8-N9-C4	-12.83	100.67	105.80
35	BA	695	A	O4'-C1'-N9	12.83	118.46	108.20
35	BA	816	A	C4-C5-C6	-12.82	110.59	117.00
2	AB	256	A	C5-N7-C8	-12.82	97.49	103.90
2	AB	1423	G	C4-C5-N7	-12.82	105.67	110.80
35	BA	897	C	N3-C2-O2	-12.82	112.92	121.90
2	AB	2381	A	N7-C8-N9	12.82	120.21	113.80
2	AB	1056	G	N9-C4-C5	-12.81	100.27	105.40
35	BA	699	C	C2-N3-C4	12.81	126.30	119.90
2	AB	1607	C	N3-C4-C5	-12.80	116.78	121.90
35	BA	1054	C	N3-C4-N4	-12.80	109.04	118.00
2	AB	16	C	C5-C6-N1	12.80	127.40	121.00
2	AB	1836	C	C5-C4-N4	-12.79	111.25	120.20
35	BA	1200	C	N3-C4-C5	-12.79	116.78	121.90
40	BF	39	ARG	NE-CZ-NH1	12.79	126.69	120.30
35	BA	1221	G	C5-C6-O6	-12.79	120.93	128.60
35	BA	1492	A	C4-C5-N7	-12.78	104.31	110.70
2	AB	985	C	N3-C4-C5	-12.78	116.79	121.90
2	AB	1659	G	O4'-C1'-N9	12.78	118.43	108.20
2	AB	2857	G	C2-N3-C4	12.78	118.29	111.90
2	AB	477	A	C6-N1-C2	12.78	126.27	118.60
2	AB	1766	G	N3-C4-C5	-12.78	122.21	128.60
2	AB	1195	G	C8-N9-C4	-12.77	101.29	106.40
35	BA	1440	U	O4'-C1'-N1	12.77	118.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1498	C	N1-C2-O2	12.77	126.56	118.90
2	AB	2502	G	C2-N3-C4	12.77	118.28	111.90
35	BA	714	G	N7-C8-N9	12.77	119.48	113.10
18	AR	87	ARG	NE-CZ-NH2	-12.77	113.92	120.30
2	AB	28	A	N9-C4-C5	12.76	110.91	105.80
1	AA	20	G	C8-N9-C4	-12.76	101.30	106.40
2	AB	239	C	C5-C6-N1	12.76	127.38	121.00
2	AB	768	G	C4-C5-N7	-12.76	105.69	110.80
2	AB	1034	G	C5-C6-O6	-12.76	120.94	128.60
2	AB	1057	A	C8-N9-C4	-12.75	100.70	105.80
2	AB	2722	G	C6-C5-N7	12.75	138.05	130.40
38	BD	22	A	C1'-O4'-C4'	-12.75	99.70	109.90
2	AB	1331	G	N3-C4-C5	-12.75	122.23	128.60
2	AB	2175	C	C4-C5-C6	12.75	123.77	117.40
2	AB	610	C	C5-C6-N1	12.74	127.37	121.00
2	AB	1755	A	C8-N9-C4	-12.74	100.70	105.80
8	AH	34	ARG	NE-CZ-NH1	12.74	126.67	120.30
2	AB	2785	C	O4'-C1'-N1	12.73	118.39	108.20
2	AB	684	G	C5-C6-O6	-12.72	120.97	128.60
2	AB	817	C	N3-C4-C5	-12.72	116.81	121.90
2	AB	2792	A	N9-C4-C5	-12.71	100.71	105.80
38	BD	32	G	C8-N9-C4	-12.71	101.31	106.40
2	AB	495	G	N3-C4-C5	-12.71	122.24	128.60
35	BA	425	G	C8-N9-C4	-12.71	101.32	106.40
42	BH	137	ARG	NE-CZ-NH1	12.71	126.65	120.30
2	AB	1213	A	N7-C8-N9	12.71	120.15	113.80
2	AB	1822	C	C2-N3-C4	12.70	126.25	119.90
35	BA	129	A	O4'-C1'-N9	12.71	118.36	108.20
35	BA	469	C	C5-C6-N1	12.70	127.35	121.00
2	AB	1866	A	N9-C4-C5	12.70	110.88	105.80
2	AB	2369	A	N7-C8-N9	-12.70	107.45	113.80
35	BA	288	A	N1-C2-N3	-12.69	122.95	129.30
2	AB	684	G	O4'-C1'-N9	12.69	118.35	108.20
35	BA	143	A	N9-C4-C5	12.69	110.88	105.80
2	AB	16	C	N1-C2-O2	12.68	126.51	118.90
2	AB	1981	A	C8-N9-C4	-12.68	100.73	105.80
2	AB	192	C	N1-C2-O2	12.68	126.51	118.90
35	BA	657	U	C5-C6-N1	-12.68	116.36	122.70
2	AB	1765	U	O4'-C1'-N1	12.67	118.34	108.20
2	AB	269	C	O4'-C1'-N1	12.67	118.33	108.20
2	AB	84	A	N1-C6-N6	-12.67	111.00	118.60
35	BA	100	G	O4'-C1'-N9	12.67	118.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	778	G	C2-N3-C4	12.66	118.23	111.90
38	BD	30	G	O4'-C1'-N9	12.66	118.33	108.20
2	AB	2371	G	C4'-C3'-C2'	-12.66	89.94	102.60
2	AB	155	A	C2-N3-C4	12.66	116.93	110.60
2	AB	2698	U	N3-C2-O2	-12.66	113.34	122.20
2	AB	763	G	C2-N3-C4	12.65	118.22	111.90
2	AB	124	G	N1-C6-O6	12.64	127.48	119.90
2	AB	841	G	N9-C4-C5	12.64	110.45	105.40
2	AB	2114	A	C8-N9-C4	-12.64	100.75	105.80
35	BA	1021	A	N7-C8-N9	12.64	120.12	113.80
35	BA	1026	G	C8-N9-C4	-12.64	101.34	106.40
35	BA	237	G	C6-C5-N7	-12.63	122.82	130.40
1	AA	116	G	C4-C5-N7	-12.63	105.75	110.80
20	AT	21	ARG	NE-CZ-NH2	12.63	126.61	120.30
36	BB	11	U	C4'-C3'-C2'	-12.63	89.97	102.60
2	AB	924	G	C5-C6-O6	-12.62	121.03	128.60
2	AB	1575	C	O4'-C1'-N1	12.62	118.30	108.20
35	BA	664	G	C5-N7-C8	-12.62	97.99	104.30
2	AB	665	U	C4-C5-C6	12.62	127.27	119.70
2	AB	2516	A	N1-C2-N3	-12.62	122.99	129.30
1	AA	38	C	O4'-C1'-N1	12.61	118.29	108.20
2	AB	545	U	C5-C6-N1	-12.61	116.39	122.70
10	AJ	137	ARG	NE-CZ-NH1	-12.61	114.00	120.30
1	AA	20	G	C2-N3-C4	12.60	118.20	111.90
2	AB	678	C	N3-C4-N4	12.60	126.82	118.00
2	AB	796	C	N3-C4-C5	-12.60	116.86	121.90
35	BA	404	G	C4-C5-N7	-12.60	105.76	110.80
38	BD	29	C	C2-N3-C4	12.60	126.20	119.90
8	AH	162	ARG	NE-CZ-NH1	-12.59	114.00	120.30
1	AA	3	C	N3-C4-C5	12.58	126.93	121.90
35	BA	1475	G	C8-N9-C4	-12.58	101.37	106.40
35	BA	106	C	N3-C4-C5	12.57	126.93	121.90
35	BA	1489	G	N1-C6-O6	-12.57	112.36	119.90
35	BA	1492	A	C5-N7-C8	12.57	110.19	103.90
2	AB	33	C	N1-C2-O2	12.57	126.44	118.90
35	BA	300	A	C8-N9-C4	-12.57	100.77	105.80
2	AB	1738	G	O4'-C1'-N9	12.56	118.25	108.20
35	BA	777	A	C5-N7-C8	-12.56	97.62	103.90
35	BA	859	G	C2-N3-C4	12.56	118.18	111.90
1	AA	38	C	C5-C6-N1	12.55	127.28	121.00
2	AB	898	C	N1-C2-O2	12.55	126.43	118.90
2	AB	2531	A	N1-C2-N3	-12.55	123.03	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	794	A	C5-N7-C8	12.54	110.17	103.90
2	AB	1173	U	O4'-C1'-N1	12.54	118.23	108.20
2	AB	1864	U	C3'-C2'-C1'	12.54	111.54	101.50
2	AB	2114	A	N9-C4-C5	12.54	110.82	105.80
2	AB	150	U	O4'-C1'-N1	12.54	118.23	108.20
2	AB	666	A	N1-C2-N3	-12.54	123.03	129.30
2	AB	801	G	C8-N9-C4	-12.54	101.39	106.40
2	AB	1298	C	N1-C2-O2	12.54	126.42	118.90
35	BA	1411	C	O4'-C1'-N1	12.54	118.23	108.20
2	AB	1314	C	N3-C4-C5	-12.53	116.89	121.90
2	AB	2565	A	N1-C2-N3	-12.53	123.03	129.30
2	AB	2721	A	C8-N9-C4	-12.53	100.79	105.80
40	BF	130	ARG	NE-CZ-NH1	12.53	126.56	120.30
2	AB	2011	U	O4'-C1'-N1	12.53	118.22	108.20
2	AB	27	G	C8-N9-C4	-12.52	101.39	106.40
2	AB	1298	C	C6-N1-C2	12.52	125.31	120.30
2	AB	2217	G	C8-N9-C4	-12.52	101.39	106.40
35	BA	25	C	C5-C6-N1	12.52	127.26	121.00
35	BA	462	G	N3-C4-C5	-12.52	122.34	128.60
1	AA	91	C	O4'-C1'-N1	12.52	118.22	108.20
2	AB	2542	A	C8-N9-C4	-12.52	100.79	105.80
2	AB	2872	A	N7-C8-N9	12.52	120.06	113.80
2	AB	60	G	C4-C5-N7	-12.52	105.79	110.80
2	AB	2120	G	C5-C6-O6	-12.52	121.09	128.60
2	AB	1283	G	C6-C5-N7	-12.51	122.89	130.40
35	BA	1275	A	O4'-C1'-N9	12.51	118.21	108.20
2	AB	155	A	O4'-C1'-N9	12.51	118.21	108.20
2	AB	487	C	N3-C4-C5	-12.51	116.90	121.90
35	BA	1381	U	C4-C5-C6	12.51	127.20	119.70
4	AD	155	ARG	NE-CZ-NH2	-12.50	114.05	120.30
2	AB	428	A	C4-C5-C6	-12.50	110.75	117.00
2	AB	1391	U	C1'-O4'-C4'	-12.50	99.90	109.90
2	AB	530	G	C2-N3-C4	12.49	118.15	111.90
2	AB	584	C	C2-N3-C4	-12.49	113.65	119.90
2	AB	1762	A	N9-C4-C5	12.49	110.80	105.80
2	AB	1479	G	C4-C5-N7	-12.49	105.80	110.80
2	AB	1867	G	C8-N9-C4	12.49	111.40	106.40
35	BA	288	A	C2-N3-C4	12.49	116.84	110.60
2	AB	535	G	C4-C5-N7	-12.48	105.81	110.80
2	AB	2070	A	N9-C4-C5	12.48	110.79	105.80
2	AB	2800	A	N9-C4-C5	12.48	110.79	105.80
35	BA	1248	A	O4'-C1'-N9	12.48	118.19	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	640	A	C6-N1-C2	-12.48	111.11	118.60
2	AB	336	C	C6-N1-C2	-12.47	115.31	120.30
2	AB	2525	G	O4'-C1'-N9	12.47	118.18	108.20
36	BB	1	A	O4'-C1'-N9	12.47	118.18	108.20
2	AB	16	C	O4'-C1'-N1	12.47	118.18	108.20
2	AB	1918	A	N1-C2-N3	-12.47	123.06	129.30
35	BA	147	G	C8-N9-C4	-12.47	101.41	106.40
35	BA	1254	A	C2-N3-C4	-12.47	104.36	110.60
2	AB	2243	U	O4'-C1'-N1	12.46	118.17	108.20
2	AB	2401	U	O4'-C1'-N1	12.46	118.17	108.20
39	BE	62	ARG	NE-CZ-NH1	12.46	126.53	120.30
2	AB	1106	G	C5-C6-O6	12.46	136.07	128.60
35	BA	1424	U	C2-N3-C4	-12.46	119.53	127.00
35	BA	388	G	N9-C4-C5	-12.46	100.42	105.40
2	AB	495	G	C2-N3-C4	12.45	118.12	111.90
2	AB	2828	G	N3-C4-N9	12.45	133.47	126.00
35	BA	289	G	N7-C8-N9	-12.45	106.88	113.10
35	BA	399	G	C5-C6-O6	-12.45	121.13	128.60
2	AB	667	U	C2-N3-C4	-12.45	119.53	127.00
2	AB	2044	C	C6-N1-C2	-12.44	115.33	120.30
37	BC	45	G	O4'-C1'-N9	12.43	118.14	108.20
2	AB	1524	G	N9-C4-C5	-12.43	100.43	105.40
35	BA	113	G	N7-C8-N9	12.43	119.31	113.10
2	AB	1686	C	N3-C4-C5	-12.43	116.93	121.90
35	BA	792	A	N1-C6-N6	-12.42	111.15	118.60
2	AB	1628	G	N7-C8-N9	12.42	119.31	113.10
35	BA	1284	C	N3-C4-N4	-12.42	109.31	118.00
2	AB	2615	U	O4'-C1'-N1	12.42	118.14	108.20
2	AB	1804	C	O4'-C1'-N1	12.42	118.13	108.20
35	BA	1209	C	O4'-C1'-N1	12.42	118.13	108.20
2	AB	643	A	C8-N9-C4	-12.41	100.83	105.80
2	AB	1441	G	C4-C5-N7	-12.41	105.83	110.80
35	BA	479	U	C4-C5-C6	12.41	127.15	119.70
2	AB	332	A	N9-C4-C5	12.41	110.76	105.80
2	AB	1584	U	C5-C4-O4	12.41	133.34	125.90
2	AB	1645	G	N7-C8-N9	12.41	119.30	113.10
35	BA	1306	A	N1-C6-N6	12.40	126.04	118.60
2	AB	1045	C	O4'-C1'-N1	12.40	118.12	108.20
35	BA	105	G	N9-C4-C5	12.40	110.36	105.40
2	AB	1130	U	O4'-C1'-N1	12.40	118.12	108.20
2	AB	2843	G	O4'-C1'-N9	12.40	118.12	108.20
2	AB	1991	U	C2-N3-C4	-12.40	119.56	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	38	C	C6-N1-C2	-12.40	115.34	120.30
35	BA	993	G	N3-C4-C5	-12.40	122.40	128.60
35	BA	403	C	C4-C5-C6	-12.39	111.20	117.40
2	AB	2722	G	C4-C5-N7	-12.39	105.84	110.80
2	AB	1333	G	C8-N9-C4	-12.38	101.45	106.40
35	BA	1416	G	C8-N9-C4	-12.38	101.45	106.40
2	AB	1534	U	C5-C6-N1	-12.38	116.51	122.70
35	BA	1281	C	O4'-C1'-N1	12.38	118.10	108.20
2	AB	793	A	N9-C4-C5	12.37	110.75	105.80
35	BA	271	C	C5-C6-N1	12.37	127.19	121.00
35	BA	1439	G	N3-C4-C5	-12.37	122.42	128.60
26	AZ	36	ARG	NE-CZ-NH2	12.37	126.48	120.30
35	BA	882	C	O4'-C1'-N1	12.37	118.09	108.20
35	BA	399	G	C6-N1-C2	-12.36	117.69	125.10
35	BA	476	U	O4'-C1'-N1	12.36	118.09	108.20
2	AB	677	A	N9-C4-C5	-12.36	100.86	105.80
2	AB	1160	G	N3-C4-N9	12.36	133.41	126.00
2	AB	1739	A	N1-C2-N3	-12.35	123.12	129.30
2	AB	229	C	O4'-C1'-N1	12.35	118.08	108.20
35	BA	48	C	C5-C6-N1	12.35	127.17	121.00
2	AB	695	G	O4'-C1'-N9	12.35	118.08	108.20
2	AB	2106	U	O4'-C1'-N1	12.35	118.08	108.20
2	AB	1857	G	N3-C4-C5	-12.34	122.43	128.60
1	AA	31	C	N3-C4-C5	-12.34	116.96	121.90
2	AB	561	G	O4'-C1'-N9	12.34	118.07	108.20
35	BA	48	C	C2-N3-C4	12.33	126.07	119.90
38	BD	48	U	O4'-C1'-N1	12.33	118.07	108.20
2	AB	1479	G	N9-C4-C5	12.33	110.33	105.40
35	BA	1040	U	O4'-C1'-N1	12.33	118.06	108.20
35	BA	768	A	O4'-C1'-N9	12.33	118.06	108.20
2	AB	2509	G	N9-C4-C5	12.33	110.33	105.40
1	AA	39	A	C8-N9-C4	-12.32	100.87	105.80
2	AB	1912	A	O4'-C1'-N9	12.32	118.06	108.20
2	AB	2869	G	C8-N9-C4	-12.32	101.47	106.40
35	BA	164	G	C5'-C4'-O4'	12.32	123.89	109.10
2	AB	906	U	C4-C5-C6	12.32	127.09	119.70
2	AB	1109	C	N3-C4-N4	12.32	126.62	118.00
35	BA	1291	U	N3-C2-O2	-12.32	113.58	122.20
2	AB	2802	G	C5'-C4'-O4'	12.32	123.88	109.10
35	BA	425	G	N3-C4-C5	-12.32	122.44	128.60
5	AE	124	ARG	NE-CZ-NH2	12.31	126.46	120.30
2	AB	1190	G	O4'-C1'-N9	12.31	118.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1264	A	C8-N9-C4	-12.31	100.88	105.80
25	AY	13	ARG	NE-CZ-NH2	-12.31	114.15	120.30
35	BA	1198	G	C8-N9-C4	-12.31	101.48	106.40
2	AB	2756	U	N1-C2-O2	12.30	131.41	122.80
35	BA	452	A	C3'-C2'-C1'	-12.29	91.67	101.50
2	AB	1940	U	N3-C2-O2	-12.29	113.60	122.20
35	BA	1178	G	C8-N9-C4	-12.29	101.48	106.40
2	AB	1497	U	C5-C6-N1	-12.29	116.56	122.70
2	AB	528	A	O4'-C1'-N9	12.28	118.03	108.20
2	AB	585	G	C4-C5-N7	12.28	115.71	110.80
2	AB	29	U	N1-C2-N3	12.28	122.27	114.90
35	BA	890	G	N3-C4-C5	-12.27	122.46	128.60
2	AB	1581	G	N3-C4-C5	-12.27	122.46	128.60
27	A0	48	ARG	NE-CZ-NH1	12.27	126.44	120.30
2	AB	2402	U	N3-C2-O2	-12.27	113.61	122.20
35	BA	1051	C	N3-C2-O2	-12.27	113.31	121.90
2	AB	2743	U	C5-C4-O4	-12.26	118.55	125.90
35	BA	530	G	N3-C4-C5	-12.25	122.47	128.60
35	BA	23	C	C1'-O4'-C4'	12.25	119.70	109.90
38	BD	27	G	C2-N3-C4	12.25	118.03	111.90
2	AB	1993	U	O4'-C1'-N1	12.25	118.00	108.20
35	BA	32	A	C5-C6-N6	-12.25	113.90	123.70
35	BA	714	G	N3-C4-C5	-12.25	122.48	128.60
2	AB	369	U	C5-C4-O4	-12.24	118.55	125.90
35	BA	443	C	N3-C2-O2	-12.24	113.33	121.90
38	BD	38	A	N1-C2-N3	-12.24	123.18	129.30
35	BA	917	G	N9-C4-C5	12.24	110.29	105.40
35	BA	946	A	C8-N9-C4	-12.23	100.91	105.80
2	AB	2134	A	O4'-C1'-N9	12.23	117.99	108.20
35	BA	1190	G	C8-N9-C4	-12.23	101.51	106.40
35	BA	267	C	C2-N3-C4	12.23	126.02	119.90
2	AB	1178	C	N1-C2-O2	12.23	126.24	118.90
2	AB	1894	C	O4'-C1'-N1	12.23	117.98	108.20
35	BA	1233	G	C4'-C3'-C2'	-12.23	90.37	102.60
46	BL	44	ARG	NE-CZ-NH1	12.23	126.41	120.30
2	AB	511	U	C4-C5-C6	12.22	127.03	119.70
2	AB	1727	C	N1-C2-O2	12.22	126.23	118.90
35	BA	403	C	N3-C4-C5	12.22	126.79	121.90
2	AB	1152	C	N1-C2-O2	12.22	126.23	118.90
1	AA	116	G	O4'-C1'-N9	12.22	117.97	108.20
2	AB	178	G	C2-N3-C4	12.22	118.01	111.90
2	AB	473	G	N7-C8-N9	12.21	119.21	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	587	G	O4'-C1'-N9	12.21	117.97	108.20
2	AB	1381	G	O4'-C1'-N9	12.21	117.97	108.20
2	AB	60	G	O4'-C4'-C3'	12.21	116.21	104.00
2	AB	1990	C	C3'-C2'-C1'	12.21	111.27	101.50
35	BA	1304	G	C8-N9-C4	-12.21	101.52	106.40
35	BA	1384	C	C6-N1-C2	-12.20	115.42	120.30
2	AB	1890	A	N1-C6-N6	-12.20	111.28	118.60
35	BA	1523	G	N1-C6-O6	-12.20	112.58	119.90
35	BA	184	G	O4'-C1'-N9	12.20	117.96	108.20
2	AB	1728	C	O4'-C1'-N1	12.20	117.96	108.20
2	AB	405	U	O4'-C1'-N1	12.20	117.96	108.20
2	AB	1220	G	N3-C4-C5	-12.20	122.50	128.60
2	AB	331	C	N3-C4-C5	12.19	126.78	121.90
2	AB	489	G	C8-N9-C4	-12.18	101.53	106.40
2	AB	311	A	C5-N7-C8	-12.18	97.81	103.90
37	BC	40	G	N3-C4-C5	-12.17	122.51	128.60
2	AB	52	A	C2-N3-C4	12.17	116.69	110.60
2	AB	365	U	C5-C4-O4	-12.17	118.60	125.90
2	AB	738	G	C5-C6-O6	-12.16	121.30	128.60
2	AB	2018	G	O4'-C1'-N9	12.16	117.93	108.20
36	BB	70	C	C5-C4-N4	-12.16	111.69	120.20
35	BA	861	G	C2-N3-C4	12.16	117.98	111.90
2	AB	1307	A	N9-C4-C5	-12.15	100.94	105.80
35	BA	48	C	N3-C4-C5	-12.15	117.04	121.90
2	AB	396	G	C8-N9-C4	-12.15	101.54	106.40
35	BA	1033	G	N9-C4-C5	12.14	110.26	105.40
35	BA	1454	G	N7-C8-N9	12.14	119.17	113.10
2	AB	610	C	C6-N1-C2	-12.14	115.44	120.30
35	BA	1216	A	C5-N7-C8	12.14	109.97	103.90
35	BA	856	C	O4'-C1'-N1	12.13	117.91	108.20
2	AB	1004	U	N3-C4-O4	12.13	127.89	119.40
2	AB	2288	A	N1-C6-N6	12.13	125.88	118.60
2	AB	813	U	C4-C5-C6	12.13	126.98	119.70
35	BA	1195	C	C6-N1-C2	-12.12	115.45	120.30
2	AB	1134	A	N1-C2-N3	-12.12	123.24	129.30
2	AB	2087	G	N3-C4-N9	12.12	133.27	126.00
35	BA	1033	G	C8-N9-C4	-12.11	101.56	106.40
2	AB	813	U	C5-C6-N1	-12.11	116.65	122.70
35	BA	289	G	C5-N7-C8	12.11	110.35	104.30
2	AB	214	G	N9-C4-C5	12.10	110.24	105.40
5	AE	59	ARG	NE-CZ-NH2	12.10	126.35	120.30
35	BA	970	C	O4'-C1'-N1	12.10	117.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	79	G	C8-N9-C4	-12.10	101.56	106.40
35	BA	669	G	N3-C4-N9	12.10	133.26	126.00
38	BD	14	A	N1-C2-N3	12.10	135.35	129.30
46	BL	63	TYR	CB-CG-CD1	12.10	128.26	121.00
2	AB	289	G	N7-C8-N9	12.10	119.15	113.10
2	AB	2284	A	C8-N9-C4	-12.10	100.96	105.80
2	AB	1151	A	N9-C4-C5	12.09	110.64	105.80
2	AB	2852	G	C6-N1-C2	-12.09	117.84	125.10
4	AD	102	TYR	CB-CG-CD1	-12.09	113.75	121.00
35	BA	173	U	O4'-C1'-N1	12.09	117.87	108.20
2	AB	1284	A	C5'-C4'-O4'	12.09	123.60	109.10
2	AB	2899	A	C8-N9-C4	-12.09	100.97	105.80
2	AB	1057	A	N9-C4-C5	12.08	110.63	105.80
35	BA	200	G	O4'-C1'-N9	12.08	117.87	108.20
35	BA	733	G	N7-C8-N9	12.08	119.14	113.10
2	AB	1645	G	N3-C4-C5	-12.08	122.56	128.60
35	BA	1096	C	O4'-C1'-N1	12.07	117.86	108.20
2	AB	1200	C	O4'-C1'-N1	12.07	117.86	108.20
2	AB	1007	C	C6-N1-C2	-12.07	115.47	120.30
2	AB	1652	A	N1-C6-N6	-12.07	111.36	118.60
2	AB	1092	C	N3-C4-C5	12.07	126.73	121.90
2	AB	1909	C	N3-C4-C5	-12.06	117.08	121.90
19	AS	2	ARG	NE-CZ-NH2	-12.06	114.27	120.30
2	AB	1333	G	N7-C8-N9	12.06	119.13	113.10
2	AB	1024	G	C4-C5-N7	-12.06	105.98	110.80
2	AB	2289	G	N3-C4-C5	-12.05	122.57	128.60
35	BA	1287	A	C6-C5-N7	12.05	140.74	132.30
2	AB	1106	G	C8-N9-C4	-12.05	101.58	106.40
35	BA	1173	U	C5-C6-N1	-12.05	116.67	122.70
2	AB	2694	G	C8-N9-C4	-12.05	101.58	106.40
35	BA	325	A	O4'-C1'-N9	12.05	117.84	108.20
1	AA	40	U	N3-C4-O4	-12.04	110.97	119.40
2	AB	649	G	C8-N9-C4	-12.05	101.58	106.40
2	AB	2154	A	C5-N7-C8	-12.04	97.88	103.90
2	AB	2400	G	C2-N3-C4	12.04	117.92	111.90
35	BA	426	U	O4'-C1'-N1	12.04	117.83	108.20
35	BA	1078	U	N1-C2-N3	12.04	122.12	114.90
35	BA	1502	A	N1-C2-N3	-12.04	123.28	129.30
2	AB	389	G	O4'-C1'-N9	12.03	117.83	108.20
2	AB	993	G	N9-C4-C5	12.03	110.21	105.40
2	AB	1307	A	C8-N9-C4	12.03	110.61	105.80
2	AB	2815	C	O4'-C1'-N1	12.02	117.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1035	U	C5-C4-O4	12.02	133.11	125.90
2	AB	507	A	C6-N1-C2	-12.02	111.39	118.60
38	BD	69	C	C6-N1-C2	-12.01	115.50	120.30
35	BA	538	G	O4'-C1'-N9	12.01	117.81	108.20
2	AB	953	G	C4-C5-N7	-12.01	106.00	110.80
2	AB	1990	C	C4'-C3'-C2'	-12.00	90.60	102.60
2	AB	2032	G	C5-C6-N1	12.00	117.50	111.50
2	AB	1437	C	C3'-C2'-C1'	12.00	111.10	101.50
2	AB	1500	G	N3-C4-N9	12.00	133.20	126.00
2	AB	2043	C	N3-C4-C5	-12.00	117.10	121.90
1	AA	94	A	N9-C4-C5	-11.99	101.00	105.80
2	AB	1577	C	O4'-C1'-N1	11.99	117.79	108.20
35	BA	88	U	O4'-C1'-N1	11.99	117.79	108.20
2	AB	2588	G	C3'-C2'-C1'	-11.99	91.91	101.50
36	BB	65	C	C5-C6-N1	11.99	126.99	121.00
26	AZ	73	ARG	NE-CZ-NH2	-11.99	114.31	120.30
2	AB	486	C	C5-C6-N1	11.98	126.99	121.00
2	AB	489	G	N3-C4-C5	-11.98	122.61	128.60
2	AB	1646	C	O4'-C4'-C3'	11.98	115.98	104.00
35	BA	845	A	C8-N9-C4	-11.98	101.01	105.80
37	BC	21	U	C4-C5-C6	11.98	126.89	119.70
37	BC	40	G	C2-N3-C4	11.98	117.89	111.90
2	AB	2056	G	C4-C5-N7	-11.98	106.01	110.80
53	BS	28	ARG	NE-CZ-NH1	11.98	126.29	120.30
2	AB	500	G	N3-C4-C5	-11.97	122.61	128.60
35	BA	1051	C	O4'-C1'-N1	11.97	117.78	108.20
2	AB	2376	A	C8-N9-C4	-11.97	101.01	105.80
2	AB	1309	G	N3-C4-C5	-11.97	122.62	128.60
35	BA	260	G	C4-C5-N7	-11.97	106.01	110.80
2	AB	206	U	C5-C4-O4	11.96	133.08	125.90
2	AB	342	A	N9-C4-C5	11.96	110.58	105.80
2	AB	2157	G	O4'-C1'-N9	11.96	117.77	108.20
2	AB	664	G	C5-N7-C8	11.96	110.28	104.30
35	BA	217	C	C6-N1-C2	11.96	125.08	120.30
35	BA	941	G	C5-C6-N1	11.96	117.48	111.50
2	AB	1287	A	C5'-C4'-O4'	11.96	123.45	109.10
2	AB	1601	G	C4-C5-N7	-11.96	106.02	110.80
35	BA	92	U	C5-C6-N1	-11.96	116.72	122.70
2	AB	2086	U	O4'-C1'-N1	11.95	117.76	108.20
35	BA	97	G	N1-C6-O6	-11.95	112.73	119.90
2	AB	458	G	O4'-C1'-N9	11.95	117.76	108.20
50	BP	78	ARG	NE-CZ-NH1	11.95	126.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	803	G	N3-C4-C5	-11.94	122.63	128.60
2	AB	2509	G	C8-N9-C4	-11.94	101.62	106.40
35	BA	354	G	C4-C5-C6	11.94	125.97	118.80
35	BA	1102	A	C4-C5-N7	11.94	116.67	110.70
35	BA	1120	C	O4'-C1'-N1	11.94	117.75	108.20
35	BA	1276	G	N3-C4-C5	-11.94	122.63	128.60
2	AB	1279	G	C4-C5-N7	11.94	115.58	110.80
35	BA	1120	C	C3'-C2'-C1'	11.94	111.05	101.50
2	AB	1404	C	N3-C4-C5	-11.93	117.13	121.90
35	BA	590	U	N3-C2-O2	-11.93	113.85	122.20
35	BA	776	G	C8-N9-C4	-11.93	101.63	106.40
2	AB	1109	C	C2-N3-C4	11.93	125.87	119.90
2	AB	324	A	N1-C2-N3	-11.93	123.33	129.30
2	AB	1104	C	C2-N3-C4	11.93	125.86	119.90
35	BA	130	A	C4-C5-N7	11.93	116.67	110.70
35	BA	244	U	C2-N3-C4	-11.93	119.84	127.00
2	AB	2501	C	C6-N1-C2	-11.93	115.53	120.30
35	BA	1370	G	C6-N1-C2	-11.93	117.94	125.10
35	BA	537	G	N3-C4-C5	-11.93	122.64	128.60
2	AB	739	A	N1-C2-N3	-11.92	123.34	129.30
35	BA	422	C	O4'-C1'-N1	11.92	117.74	108.20
2	AB	692	C	N3-C4-C5	-11.92	117.13	121.90
35	BA	1220	G	N9-C4-C5	11.92	110.17	105.40
35	BA	900	A	C4-C5-C6	-11.92	111.04	117.00
2	AB	1511	G	O4'-C1'-N9	11.91	117.73	108.20
2	AB	1586	A	C8-N9-C4	-11.91	101.03	105.80
2	AB	815	C	O4'-C1'-N1	11.91	117.73	108.20
35	BA	769	G	C4-C5-N7	-11.91	106.04	110.80
35	BA	834	U	O4'-C1'-N1	11.91	117.73	108.20
35	BA	1192	C	C5-C6-N1	11.91	126.95	121.00
35	BA	310	G	C8-N9-C4	-11.90	101.64	106.40
2	AB	1677	A	N1-C6-N6	-11.90	111.46	118.60
2	AB	1967	C	N3-C4-C5	-11.90	117.14	121.90
2	AB	2339	C	C4-C5-C6	-11.90	111.45	117.40
2	AB	2635	A	O4'-C1'-N9	11.90	117.72	108.20
2	AB	2763	G	C8-N9-C4	-11.90	101.64	106.40
2	AB	585	G	C3'-C2'-C1'	-11.90	91.98	101.50
2	AB	1208	C	C5-C6-N1	11.90	126.95	121.00
35	BA	1416	G	N9-C4-C5	11.90	110.16	105.40
2	AB	2775	G	N9-C4-C5	11.89	110.16	105.40
2	AB	764	A	C8-N9-C4	-11.89	101.04	105.80
35	BA	623	C	N1-C2-O2	11.89	126.04	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	BU	2	ARG	NE-CZ-NH1	11.89	126.25	120.30
2	AB	710	U	O4'-C1'-N1	11.89	117.71	108.20
2	AB	2774	C	C4-C5-C6	-11.89	111.46	117.40
38	BD	73	A	C8-N9-C4	-11.89	101.05	105.80
2	AB	2678	C	N3-C4-N4	11.88	126.32	118.00
35	BA	376	G	C5-N7-C8	-11.88	98.36	104.30
2	AB	553	G	N9-C1'-C2'	-11.88	98.56	114.00
2	AB	2263	C	C3'-C2'-C1'	11.88	111.00	101.50
2	AB	2483	C	N3-C4-N4	11.88	126.32	118.00
25	AY	13	ARG	NE-CZ-NH1	11.88	126.24	120.30
2	AB	102	U	O4'-C1'-N1	11.87	117.70	108.20
35	BA	634	C	O4'-C1'-N1	11.87	117.70	108.20
1	AA	3	C	C5-C4-N4	-11.87	111.89	120.20
2	AB	848	C	N3-C4-N4	11.87	126.31	118.00
35	BA	1250	A	N9-C4-C5	11.87	110.55	105.80
35	BA	584	G	N1-C6-O6	11.87	127.02	119.90
35	BA	1120	C	N3-C4-C5	-11.87	117.15	121.90
2	AB	2541	A	C4-C5-N7	-11.87	104.77	110.70
2	AB	918	A	N1-C6-N6	-11.86	111.48	118.60
2	AB	1809	A	C8-N9-C4	-11.86	101.06	105.80
2	AB	1847	A	O4'-C1'-N9	11.86	117.69	108.20
35	BA	112	G	C6-N1-C2	-11.86	117.98	125.10
2	AB	297	G	N1-C6-O6	11.86	127.01	119.90
2	AB	1245	G	N3-C4-C5	-11.85	122.67	128.60
35	BA	85	U	O4'-C1'-N1	11.85	117.68	108.20
35	BA	392	C	C6-N1-C2	-11.85	115.56	120.30
47	BM	48	ARG	NE-CZ-NH1	11.85	126.23	120.30
2	AB	879	G	C8-N9-C4	-11.85	101.66	106.40
35	BA	1218	C	N3-C4-C5	-11.85	117.16	121.90
2	AB	1645	G	C6-C5-N7	-11.85	123.29	130.40
35	BA	11	G	N1-C6-O6	-11.85	112.79	119.90
2	AB	883	G	N9-C4-C5	11.85	110.14	105.40
35	BA	1434	A	N1-C2-N3	-11.84	123.38	129.30
35	BA	1513	A	C8-N9-C4	-11.84	101.06	105.80
2	AB	486	C	C6-N1-C2	-11.84	115.56	120.30
2	AB	1862	G	C8-N9-C4	-11.84	101.66	106.40
2	AB	421	C	C6-N1-C2	-11.84	115.56	120.30
35	BA	471	U	O4'-C1'-N1	11.84	117.67	108.20
2	AB	1324	G	N9-C4-C5	11.84	110.14	105.40
35	BA	161	A	O4'-C1'-N9	11.83	117.66	108.20
1	AA	89	U	C1'-O4'-C4'	-11.82	100.44	109.90
2	AB	1437	C	O4'-C1'-N1	11.82	117.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1893	C	O4'-C1'-N1	11.82	117.65	108.20
35	BA	261	U	O4'-C1'-N1	11.82	117.65	108.20
2	AB	2077	A	O4'-C1'-N9	11.81	117.65	108.20
2	AB	1724	G	C4-C5-N7	-11.81	106.08	110.80
2	AB	45	G	N9-C4-C5	11.80	110.12	105.40
2	AB	1532	A	C2-N3-C4	11.80	116.50	110.60
2	AB	1718	G	N3-C4-C5	-11.80	122.70	128.60
35	BA	1353	G	N3-C4-C5	-11.80	122.70	128.60
34	A7	24	ARG	NE-CZ-NH1	-11.79	114.40	120.30
2	AB	1942	C	N1-C2-O2	11.79	125.98	118.90
2	AB	342	A	C8-N9-C4	-11.79	101.08	105.80
16	AP	12	ARG	NE-CZ-NH2	-11.79	114.41	120.30
38	BD	71	G	O4'-C1'-N9	11.79	117.63	108.20
35	BA	788	U	N3-C4-O4	11.78	127.65	119.40
54	BT	76	ARG	NE-CZ-NH2	-11.78	114.41	120.30
2	AB	2127	G	O4'-C1'-N9	11.78	117.62	108.20
35	BA	130	A	N9-C4-C5	-11.78	101.09	105.80
36	BB	29	G	N9-C4-C5	11.78	110.11	105.40
35	BA	394	G	N3-C4-C5	-11.78	122.71	128.60
35	BA	809	G	N1-C6-O6	11.78	126.97	119.90
2	AB	2471	A	C8-N9-C4	-11.78	101.09	105.80
35	BA	1392	G	C8-N9-C4	-11.77	101.69	106.40
2	AB	2242	G	N9-C4-C5	-11.77	100.69	105.40
38	BD	7	G	O4'-C1'-N9	11.77	117.61	108.20
2	AB	1889	A	C2-N3-C4	11.77	116.48	110.60
35	BA	1057	G	C8-N9-C4	-11.77	101.69	106.40
2	AB	1888	G	C6-C5-N7	-11.76	123.34	130.40
2	AB	655	A	N1-C6-N6	-11.76	111.55	118.60
2	AB	1084	A	C8-N9-C4	-11.75	101.10	105.80
2	AB	2678	C	C4-C5-C6	11.75	123.28	117.40
35	BA	637	C	C5-C4-N4	-11.75	111.97	120.20
1	AA	9	G	C6-C5-N7	-11.75	123.35	130.40
2	AB	89	A	O4'-C1'-N9	11.75	117.60	108.20
2	AB	2627	G	C4-C5-N7	11.75	115.50	110.80
2	AB	1841	U	C2-N3-C4	-11.75	119.95	127.00
2	AB	2140	G	C5-C6-O6	-11.74	121.55	128.60
35	BA	329	A	C2-N3-C4	11.74	116.47	110.60
35	BA	340	U	O4'-C1'-N1	11.74	117.60	108.20
2	AB	1525	A	C6-C5-N7	11.74	140.52	132.30
35	BA	241	G	O4'-C1'-N9	11.74	117.59	108.20
2	AB	256	A	N7-C8-N9	11.74	119.67	113.80
2	AB	2279	G	C6-C5-N7	-11.74	123.36	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	100	ARG	NE-CZ-NH1	11.74	126.17	120.30
2	AB	2632	A	N9-C4-C5	11.74	110.50	105.80
2	AB	2145	C	N1-C2-O2	11.73	125.94	118.90
2	AB	2755	C	N3-C2-O2	-11.73	113.69	121.90
35	BA	46	G	C5-C6-N1	11.73	117.36	111.50
2	AB	2444	G	C4-C5-N7	-11.73	106.11	110.80
2	AB	1191	G	N3-C4-C5	-11.73	122.74	128.60
35	BA	453	G	C8-N9-C4	-11.72	101.71	106.40
2	AB	254	G	O4'-C1'-N9	11.72	117.58	108.20
35	BA	317	U	O4'-C1'-N1	11.72	117.58	108.20
15	AO	55	ARG	NE-CZ-NH2	11.72	126.16	120.30
35	BA	1348	U	O4'-C1'-N1	11.72	117.58	108.20
2	AB	2113	U	C4'-C3'-C2'	-11.71	90.89	102.60
2	AB	411	G	N9-C4-C5	11.71	110.08	105.40
35	BA	27	G	C5-N7-C8	11.71	110.16	104.30
35	BA	1334	G	N9-C4-C5	11.71	110.08	105.40
35	BA	719	C	N3-C4-C5	-11.71	117.22	121.90
2	AB	1746	A	C2-N3-C4	11.71	116.45	110.60
18	AR	71	ARG	NE-CZ-NH1	11.71	126.15	120.30
2	AB	1994	C	N1-C2-O2	11.70	125.92	118.90
35	BA	567	G	N3-C4-C5	-11.70	122.75	128.60
2	AB	1367	A	C5-C6-N1	11.70	123.55	117.70
2	AB	2736	A	C4-C5-N7	11.70	116.55	110.70
2	AB	2868	A	C8-N9-C4	-11.70	101.12	105.80
35	BA	434	U	N1-C2-N3	11.70	121.92	114.90
2	AB	1735	A	N1-C6-N6	-11.69	111.58	118.60
35	BA	52	C	O4'-C1'-N1	11.69	117.55	108.20
2	AB	312	G	N7-C8-N9	11.69	118.94	113.10
2	AB	2808	G	C4-C5-N7	-11.69	106.12	110.80
58	BX	66	ARG	NE-CZ-NH1	11.69	126.14	120.30
2	AB	126	A	N3-C4-C5	-11.69	118.62	126.80
2	AB	1037	G	C8-N9-C4	-11.69	101.73	106.40
2	AB	695	G	N9-C4-C5	11.68	110.07	105.40
2	AB	1665	A	N9-C4-C5	11.68	110.47	105.80
2	AB	2032	G	C2-N3-C4	11.68	117.74	111.90
35	BA	809	G	N9-C4-C5	11.68	110.07	105.40
2	AB	11	C	C2-N3-C4	11.68	125.74	119.90
2	AB	1238	G	O4'-C1'-N9	11.68	117.54	108.20
2	AB	1302	A	O4'-C4'-C3'	11.68	115.68	104.00
2	AB	2120	G	C5-C6-N1	11.68	117.34	111.50
35	BA	971	G	N3-C2-N2	-11.68	111.72	119.90
35	BA	476	U	N3-C4-O4	11.67	127.57	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1205	A	C2-N3-C4	11.67	116.44	110.60
35	BA	134	G	N7-C8-N9	11.67	118.94	113.10
2	AB	136	G	N3-C4-C5	-11.67	122.77	128.60
2	AB	1704	C	O4'-C1'-N1	11.67	117.53	108.20
2	AB	649	G	O4'-C1'-N9	11.66	117.53	108.20
2	AB	1713	A	N1-C6-N6	11.66	125.60	118.60
2	AB	2507	C	C4-C5-C6	-11.66	111.57	117.40
2	AB	68	G	C5-C6-N1	11.66	117.33	111.50
2	AB	186	G	O4'-C1'-N9	11.66	117.53	108.20
35	BA	1233	G	O4'-C4'-C3'	11.65	115.65	104.00
2	AB	715	A	C8-N9-C4	-11.65	101.14	105.80
2	AB	1736	U	O4'-C1'-N1	11.65	117.52	108.20
2	AB	2001	C	O4'-C1'-N1	11.65	117.52	108.20
2	AB	2181	U	O4'-C1'-N1	11.65	117.52	108.20
2	AB	2536	G	C5-N7-C8	-11.65	98.47	104.30
36	BB	73	G	N3-C4-C5	-11.65	122.78	128.60
2	AB	816	C	C6-N1-C2	-11.64	115.64	120.30
2	AB	609	A	C3'-C2'-C1'	11.64	110.81	101.50
35	BA	406	G	N9-C1'-C2'	-11.64	98.87	114.00
2	AB	28	A	O4'-C1'-N9	11.64	117.51	108.20
2	AB	1317	G	N3-C4-C5	-11.64	122.78	128.60
35	BA	1390	U	O4'-C1'-N1	11.63	117.51	108.20
2	AB	4	U	O4'-C1'-N1	11.63	117.50	108.20
2	AB	1438	U	O4'-C1'-N1	11.63	117.50	108.20
35	BA	105	G	N3-C4-C5	-11.63	122.79	128.60
2	AB	640	C	C5-C6-N1	11.63	126.81	121.00
2	AB	1990	C	C2-N3-C4	11.62	125.71	119.90
2	AB	615	U	C4-C5-C6	11.62	126.67	119.70
2	AB	855	G	N3-C4-C5	-11.62	122.79	128.60
35	BA	861	G	N1-C6-O6	-11.62	112.93	119.90
2	AB	2798	U	N3-C4-C5	-11.62	107.63	114.60
2	AB	250	G	C4-C5-N7	-11.62	106.15	110.80
2	AB	1133	A	N1-C2-N3	-11.62	123.49	129.30
2	AB	1464	G	C8-N9-C4	-11.62	101.75	106.40
35	BA	1488	G	C6-C5-N7	-11.61	123.43	130.40
2	AB	712	G	N9-C4-C5	11.61	110.05	105.40
46	BL	44	ARG	NE-CZ-NH2	-11.61	114.50	120.30
35	BA	314	C	N3-C4-C5	-11.61	117.26	121.90
15	AO	18	ARG	NE-CZ-NH1	-11.61	114.50	120.30
2	AB	818	G	C8-N9-C4	-11.60	101.76	106.40
35	BA	726	C	C3'-C2'-C1'	-11.60	92.22	101.50
35	BA	846	G	C5-N7-C8	-11.60	98.50	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	33	G	C8-N9-C4	-11.60	101.76	106.40
2	AB	1277	G	O4'-C1'-N9	11.60	117.48	108.20
2	AB	993	G	O4'-C1'-N9	11.60	117.48	108.20
2	AB	1628	G	C8-N9-C4	-11.60	101.76	106.40
35	BA	908	A	N9-C4-C5	11.59	110.44	105.80
36	BB	33	U	O4'-C1'-N1	11.59	117.48	108.20
2	AB	229	C	N3-C4-C5	-11.59	117.26	121.90
2	AB	1520	U	C4-C5-C6	11.59	126.66	119.70
2	AB	506	G	O4'-C1'-C2'	-11.59	94.21	105.80
2	AB	2627	G	C6-C5-N7	-11.59	123.45	130.40
35	BA	1233	G	O4'-C1'-N9	11.59	117.47	108.20
2	AB	2062	A	O4'-C1'-N9	11.59	117.47	108.20
2	AB	2276	G	N9-C4-C5	11.59	110.03	105.40
2	AB	522	A	C5-C6-N1	11.58	123.49	117.70
2	AB	27	G	C2-N3-C4	11.58	117.69	111.90
2	AB	2288	A	N9-C4-C5	11.58	110.43	105.80
2	AB	2626	C	N3-C4-C5	-11.58	117.27	121.90
2	AB	1228	G	N7-C8-N9	11.57	118.88	113.10
2	AB	1684	G	N3-C4-C5	-11.57	122.82	128.60
35	BA	608	A	N1-C2-N3	11.57	135.08	129.30
2	AB	1437	C	C5-C6-N1	-11.57	115.22	121.00
16	AP	45	ARG	NE-CZ-NH2	-11.56	114.52	120.30
35	BA	637	C	N1-C2-O2	11.56	125.84	118.90
2	AB	473	G	C8-N9-C4	-11.55	101.78	106.40
2	AB	1056	G	C4-C5-N7	11.55	115.42	110.80
35	BA	727	G	N9-C4-C5	11.55	110.02	105.40
2	AB	1368	G	N7-C8-N9	11.55	118.87	113.10
1	AA	10	G	C4-C5-N7	11.55	115.42	110.80
35	BA	640	A	C5-C6-N1	11.54	123.47	117.70
35	BA	1306	A	C5-C6-N6	-11.54	114.46	123.70
35	BA	1363	A	N7-C8-N9	11.54	119.57	113.80
35	BA	1458	G	C5-N7-C8	11.54	110.07	104.30
38	BD	1	C	N3-C4-C5	-11.54	117.28	121.90
2	AB	81	G	C4-C5-N7	-11.54	106.19	110.80
2	AB	310	A	N3-C4-C5	-11.54	118.72	126.80
2	AB	1996	C	N3-C2-O2	-11.54	113.82	121.90
35	BA	559	A	N1-C2-N3	-11.54	123.53	129.30
35	BA	685	G	N9-C4-C5	11.54	110.02	105.40
36	BB	24	G	C8-N9-C4	-11.54	101.78	106.40
2	AB	2396	G	C5-C6-O6	-11.54	121.68	128.60
35	BA	350	G	C8-N9-C4	-11.54	101.78	106.40
40	BF	106	ARG	NE-CZ-NH1	11.54	126.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	543	G	O4'-C4'-C3'	11.53	115.53	104.00
35	BA	162	A	C1'-O4'-C4'	11.53	119.13	109.90
2	AB	481	G	C4-C5-N7	-11.53	106.19	110.80
2	AB	529	A	N1-C2-N3	-11.53	123.53	129.30
2	AB	846	U	O4'-C1'-N1	11.53	117.42	108.20
2	AB	946	C	O4'-C1'-N1	11.53	117.42	108.20
1	AA	60	C	C2-N3-C4	11.53	125.66	119.90
2	AB	2538	C	C6-N1-C2	11.53	124.91	120.30
35	BA	289	G	C2-N3-C4	11.53	117.66	111.90
2	AB	68	G	C6-N1-C2	-11.52	118.19	125.10
2	AB	2337	G	C8-N9-C4	-11.52	101.79	106.40
35	BA	832	G	C8-N9-C4	-11.51	101.80	106.40
12	AL	27	ARG	NE-CZ-NH1	-11.51	114.55	120.30
15	AO	51	ARG	NE-CZ-NH1	-11.51	114.55	120.30
35	BA	538	G	C4-C5-N7	-11.51	106.20	110.80
2	AB	204	A	C5-C6-N6	11.51	132.91	123.70
2	AB	1975	G	N3-C4-C5	-11.51	122.85	128.60
2	AB	305	C	C3'-C2'-C1'	11.50	110.70	101.50
2	AB	2637	U	O4'-C1'-N1	11.50	117.40	108.20
2	AB	1498	C	C6-N1-C2	11.50	124.90	120.30
35	BA	846	G	N7-C8-N9	11.50	118.85	113.10
53	BS	35	ARG	NE-CZ-NH1	11.50	126.05	120.30
2	AB	2744	G	C5-C6-O6	-11.49	121.70	128.60
2	AB	266	G	C5-N7-C8	11.49	110.05	104.30
2	AB	2541	A	N9-C4-C5	11.49	110.40	105.80
2	AB	726	G	C6-C5-N7	-11.49	123.51	130.40
2	AB	2216	G	C8-N9-C4	-11.49	101.80	106.40
35	BA	545	C	C6-N1-C2	-11.49	115.70	120.30
2	AB	2115	G	C5-N7-C8	-11.49	98.56	104.30
2	AB	2147	A	N1-C6-N6	-11.49	111.71	118.60
35	BA	688	G	C5-C6-N1	11.49	117.24	111.50
35	BA	1488	G	N3-C4-C5	-11.49	122.86	128.60
39	BE	34	ARG	NE-CZ-NH1	11.49	126.04	120.30
2	AB	1156	A	C8-N9-C4	-11.48	101.21	105.80
35	BA	1081	A	N9-C4-C5	11.48	110.39	105.80
2	AB	1029	A	C2-N3-C4	11.48	116.34	110.60
2	AB	2327	A	N1-C2-N3	-11.48	123.56	129.30
2	AB	2814	A	O4'-C1'-N9	11.48	117.38	108.20
2	AB	97	C	O4'-C1'-N1	11.48	117.38	108.20
2	AB	2804	U	C5-C4-O4	11.48	132.79	125.90
13	AM	64	ARG	NE-CZ-NH2	-11.48	114.56	120.30
35	BA	1183	U	N1-C2-N3	11.47	121.78	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	267	C	N3-C4-C5	-11.47	117.31	121.90
35	BA	925	G	C8-N9-C4	-11.47	101.81	106.40
2	AB	1250	G	N3-C4-C5	-11.47	122.86	128.60
2	AB	2311	A	N7-C8-N9	11.47	119.53	113.80
2	AB	2818	U	C5-C6-N1	-11.47	116.97	122.70
2	AB	2869	G	C4-C5-N7	-11.47	106.21	110.80
2	AB	2018	G	C8-N9-C4	-11.46	101.81	106.40
2	AB	6	A	N7-C8-N9	11.46	119.53	113.80
2	AB	294	A	C6-C5-N7	11.46	140.32	132.30
2	AB	1633	G	N3-C4-C5	-11.46	122.87	128.60
35	BA	663	A	N9-C4-C5	11.46	110.38	105.80
2	AB	441	U	C5-C4-O4	-11.46	119.03	125.90
2	AB	533	G	C8-N9-C4	-11.46	101.82	106.40
32	A5	39	ARG	NE-CZ-NH2	-11.46	114.57	120.30
35	BA	410	G	C8-N9-C4	-11.46	101.82	106.40
35	BA	693	G	O4'-C1'-N9	11.46	117.36	108.20
2	AB	212	G	N1-C6-O6	-11.45	113.03	119.90
35	BA	176	C	C6-N1-C2	11.45	124.88	120.30
2	AB	340	A	N1-C6-N6	-11.45	111.73	118.60
2	AB	953	G	N9-C4-C5	11.45	109.98	105.40
35	BA	756	C	N3-C4-C5	-11.45	117.32	121.90
2	AB	1763	G	N7-C8-N9	11.44	118.82	113.10
2	AB	2695	U	O4'-C1'-N1	11.45	117.36	108.20
35	BA	916	U	O4'-C1'-N1	11.44	117.35	108.20
35	BA	1099	G	N7-C8-N9	11.44	118.82	113.10
35	BA	1460	C	C2-N3-C4	11.44	125.62	119.90
2	AB	1235	G	N3-C2-N2	11.43	127.90	119.90
35	BA	318	G	O4'-C1'-N9	11.43	117.35	108.20
2	AB	1054	A	N1-C2-N3	-11.43	123.59	129.30
2	AB	2156	G	N1-C2-N2	-11.42	105.92	116.20
2	AB	2302	U	O4'-C1'-N1	11.42	117.34	108.20
35	BA	177	G	O4'-C1'-N9	11.42	117.34	108.20
1	AA	99	A	N9-C4-C5	11.42	110.37	105.80
2	AB	927	A	N9-C4-C5	11.42	110.37	105.80
2	AB	1254	A	C6-N1-C2	-11.42	111.75	118.60
2	AB	1649	G	O4'-C1'-N9	11.42	117.33	108.20
35	BA	1541	U	N1-C2-N3	11.42	121.75	114.90
2	AB	205	G	N3-C4-C5	-11.41	122.89	128.60
2	AB	804	A	O4'-C1'-N9	11.41	117.33	108.20
35	BA	247	G	N3-C4-C5	-11.41	122.89	128.60
2	AB	1515	A	N1-C2-N3	11.41	135.01	129.30
2	AB	2097	A	N9-C4-C5	11.41	110.36	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1608	A	O4'-C1'-N9	11.41	117.33	108.20
35	BA	162	A	N1-C6-N6	-11.41	111.75	118.60
35	BA	471	U	C5-C6-N1	-11.41	117.00	122.70
35	BA	727	G	N3-C4-C5	-11.41	122.90	128.60
2	AB	2780	G	N3-C4-C5	-11.40	122.90	128.60
36	BB	11	U	C3'-C2'-C1'	11.40	110.62	101.50
2	AB	1918	A	C8-N9-C4	-11.39	101.24	105.80
2	AB	1334	G	N7-C8-N9	11.39	118.80	113.10
35	BA	170	U	N1-C2-O2	-11.39	114.83	122.80
35	BA	376	G	C4-C5-N7	11.39	115.36	110.80
2	AB	907	G	N9-C4-C5	11.39	109.96	105.40
2	AB	1522	A	C2-N3-C4	11.39	116.29	110.60
2	AB	1581	G	N9-C4-C5	11.39	109.95	105.40
2	AB	2804	U	C4-C5-C6	11.39	126.53	119.70
2	AB	1022	G	N3-C4-N9	11.39	132.83	126.00
1	AA	40	U	C5-C4-O4	11.38	132.73	125.90
2	AB	1626	A	O4'-C1'-N9	11.38	117.31	108.20
55	BU	52	ARG	NE-CZ-NH2	-11.38	114.61	120.30
1	AA	3	C	C4-C5-C6	-11.38	111.71	117.40
1	AA	26	C	N1-C2-O2	11.38	125.73	118.90
2	AB	1790	C	O4'-C1'-N1	11.38	117.30	108.20
2	AB	2095	A	C4'-C3'-C2'	11.38	113.98	102.60
2	AB	2189	U	O4'-C1'-N1	11.38	117.30	108.20
35	BA	761	G	N9-C4-C5	11.38	109.95	105.40
35	BA	781	A	C8-N9-C4	-11.38	101.25	105.80
2	AB	102	U	C4-C5-C6	11.37	126.52	119.70
2	AB	107	G	C8-N9-C4	-11.37	101.85	106.40
38	BD	44	A	C5-C6-N1	11.37	123.38	117.70
2	AB	717	C	C2-N3-C4	11.37	125.58	119.90
2	AB	1453	A	C8-N9-C4	-11.37	101.25	105.80
2	AB	621	A	N1-C6-N6	-11.37	111.78	118.60
2	AB	2092	U	C3'-C2'-C1'	11.37	110.59	101.50
35	BA	220	G	C5-C6-O6	-11.37	121.78	128.60
1	AA	102	G	C4-C5-N7	-11.36	106.25	110.80
2	AB	496	G	C2-N3-C4	11.36	117.58	111.90
2	AB	1150	C	N3-C4-C5	-11.36	117.36	121.90
2	AB	1561	C	N3-C4-C5	-11.36	117.36	121.90
2	AB	2664	G	N9-C4-C5	11.36	109.94	105.40
35	BA	900	A	C5-C6-N6	-11.36	114.61	123.70
2	AB	1442	U	O4'-C1'-N1	11.36	117.29	108.20
2	AB	2032	G	N1-C6-O6	-11.36	113.09	119.90
35	BA	344	A	N7-C8-N9	11.36	119.48	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2216	G	N9-C4-C5	11.35	109.94	105.40
35	BA	859	G	C4-C5-N7	-11.35	106.26	110.80
35	BA	890	G	C4-C5-C6	11.35	125.61	118.80
2	AB	126	A	N9-C4-C5	11.35	110.34	105.80
2	AB	1819	A	N9-C4-C5	11.35	110.34	105.80
2	AB	2651	C	C2-N3-C4	11.34	125.57	119.90
38	BD	1	C	C2-N3-C4	11.34	125.57	119.90
2	AB	1462	C	N1-C2-O2	11.34	125.70	118.90
35	BA	1336	C	C6-N1-C2	-11.34	115.76	120.30
35	BA	122	G	N9-C4-C5	-11.34	100.86	105.40
2	AB	1461	C	N1-C2-O2	11.34	125.70	118.90
35	BA	284	C	O4'-C1'-N1	11.34	117.27	108.20
35	BA	1466	C	C6-N1-C2	11.34	124.83	120.30
36	BB	76	A	C5-C6-N1	11.34	123.37	117.70
35	BA	869	G	C5-C6-O6	-11.34	121.80	128.60
2	AB	759	G	N7-C8-N9	11.33	118.77	113.10
2	AB	1469	A	C5-C6-N6	-11.33	114.63	123.70
35	BA	1162	C	C5-C6-N1	11.33	126.67	121.00
2	AB	2777	G	C5-N7-C8	-11.33	98.63	104.30
35	BA	38	G	C8-N9-C4	-11.33	101.87	106.40
1	AA	10	G	N9-C4-C5	-11.33	100.87	105.40
35	BA	790	A	N1-C6-N6	11.32	125.39	118.60
35	BA	1400	C	C2-N3-C4	11.32	125.56	119.90
38	BD	77	A	C8-N9-C4	-11.32	101.27	105.80
2	AB	2474	U	O4'-C1'-N1	11.32	117.26	108.20
35	BA	302	G	N3-C4-C5	-11.32	122.94	128.60
1	AA	83	G	C5-C6-N1	11.32	117.16	111.50
2	AB	49	A	N7-C8-N9	-11.32	108.14	113.80
2	AB	1117	C	N3-C4-C5	-11.32	117.37	121.90
35	BA	850	U	N3-C4-O4	11.32	127.32	119.40
2	AB	84	A	C5-C6-N1	11.31	123.36	117.70
2	AB	686	U	O4'-C1'-N1	11.31	117.25	108.20
35	BA	1192	C	N1-C2-O2	11.31	125.69	118.90
2	AB	2798	U	C5-C6-N1	-11.31	117.04	122.70
2	AB	1402	U	N3-C2-O2	-11.31	114.28	122.20
2	AB	1456	G	N3-C2-N2	-11.31	111.98	119.90
11	AK	126	ARG	NE-CZ-NH1	11.31	125.96	120.30
2	AB	2352	A	C2-N3-C4	11.31	116.25	110.60
2	AB	2568	U	O4'-C1'-N1	11.31	117.25	108.20
1	AA	25	U	O4'-C1'-N1	11.31	117.25	108.20
2	AB	2734	A	N7-C8-N9	11.31	119.45	113.80
2	AB	1007	C	O4'-C1'-N1	11.30	117.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1663	G	C5-C6-O6	11.30	135.38	128.60
35	BA	610	U	C5'-C4'-O4'	11.30	122.67	109.10
35	BA	71	A	O4'-C1'-N9	11.30	117.24	108.20
2	AB	1585	C	C4-C5-C6	-11.30	111.75	117.40
2	AB	2310	C	C6-N1-C2	-11.30	115.78	120.30
2	AB	33	C	C6-N1-C2	11.30	124.82	120.30
35	BA	537	G	N3-C4-N9	11.30	132.78	126.00
2	AB	1063	G	C4-C5-N7	11.30	115.32	110.80
2	AB	1396	U	C5-C4-O4	-11.30	119.12	125.90
2	AB	1493	C	C5-C4-N4	11.29	128.11	120.20
35	BA	867	G	N3-C4-C5	-11.29	122.95	128.60
1	AA	63	C	O4'-C1'-N1	11.29	117.23	108.20
2	AB	359	G	N1-C6-O6	11.29	126.67	119.90
2	AB	1783	A	C8-N9-C4	-11.29	101.28	105.80
2	AB	1450	G	O4'-C1'-N9	11.29	117.23	108.20
2	AB	1170	C	O4'-C1'-N1	11.28	117.22	108.20
35	BA	479	U	N3-C4-C5	-11.28	107.83	114.60
35	BA	1116	U	O4'-C1'-N1	11.28	117.22	108.20
2	AB	2775	G	N3-C4-C5	-11.27	122.96	128.60
2	AB	2804	U	N1-C2-N3	11.27	121.66	114.90
35	BA	1198	G	N3-C4-C5	-11.27	122.96	128.60
2	AB	958	U	N3-C2-O2	-11.27	114.31	122.20
35	BA	624	C	C6-N1-C2	-11.27	115.79	120.30
35	BA	1004	A	C5-C6-N6	-11.27	114.68	123.70
35	BA	1048	G	C4-C5-N7	-11.27	106.29	110.80
35	BA	1236	A	N1-C6-N6	-11.27	111.84	118.60
2	AB	69	C	N3-C2-O2	-11.27	114.01	121.90
2	AB	1676	A	N1-C2-N3	-11.27	123.67	129.30
35	BA	177	G	C3'-C2'-C1'	11.27	110.51	101.50
35	BA	1196	A	N1-C6-N6	-11.27	111.84	118.60
2	AB	222	A	N9-C4-C5	11.26	110.31	105.80
2	AB	1012	U	C5-C4-O4	-11.26	119.14	125.90
2	AB	278	A	C4-C5-N7	-11.26	105.07	110.70
35	BA	1496	C	C4-C5-C6	11.26	123.03	117.40
35	BA	1105	A	O4'-C1'-N9	11.26	117.21	108.20
2	AB	1787	A	C5-C6-N1	11.26	123.33	117.70
35	BA	436	C	C4-C5-C6	11.26	123.03	117.40
35	BA	826	C	O4'-C1'-N1	11.26	117.21	108.20
2	AB	516	C	N3-C4-C5	11.25	126.40	121.90
2	AB	1016	G	O4'-C1'-N9	11.25	117.20	108.20
2	AB	1991	U	N1-C2-N3	11.25	121.65	114.90
1	AA	97	C	C6-N1-C2	-11.25	115.80	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	94	A	C5-N7-C8	-11.25	98.28	103.90
2	AB	441	U	C2-N3-C4	-11.25	120.25	127.00
3	AC	9	ARG	NE-CZ-NH2	-11.25	114.68	120.30
35	BA	1320	C	C2-N3-C4	11.25	125.53	119.90
1	AA	118	C	N3-C4-N4	11.25	125.87	118.00
2	AB	1124	G	N3-C4-C5	-11.25	122.98	128.60
35	BA	247	G	N9-C4-C5	11.25	109.90	105.40
35	BA	314	C	N3-C2-O2	-11.25	114.03	121.90
2	AB	530	G	N1-C2-N3	-11.24	117.15	123.90
2	AB	2334	U	C5-C4-O4	11.24	132.65	125.90
2	AB	2609	U	C5-C4-O4	-11.24	119.15	125.90
35	BA	321	A	C4-C5-N7	11.24	116.32	110.70
35	BA	580	C	C5-C6-N1	11.24	126.62	121.00
1	AA	75	G	N3-C4-C5	-11.24	122.98	128.60
2	AB	2274	A	C5-N7-C8	11.24	109.52	103.90
35	BA	1477	U	O4'-C1'-N1	11.24	117.19	108.20
2	AB	1603	A	C2-N3-C4	11.24	116.22	110.60
2	AB	524	G	C4-C5-N7	-11.24	106.31	110.80
2	AB	695	G	C8-N9-C4	-11.24	101.91	106.40
55	BU	42	ARG	NE-CZ-NH2	-11.24	114.68	120.30
2	AB	381	G	C8-N9-C4	-11.23	101.91	106.40
2	AB	896	A	N9-C4-C5	-11.23	101.31	105.80
2	AB	2093	G	N3-C4-C5	-11.23	122.98	128.60
2	AB	2760	C	O4'-C1'-N1	11.23	117.19	108.20
2	AB	617	G	C8-N9-C4	-11.23	101.91	106.40
2	AB	1279	G	N7-C8-N9	11.23	118.72	113.10
35	BA	1089	G	C8-N9-C4	-11.23	101.91	106.40
38	BD	51	U	C6-N1-C2	-11.23	114.26	121.00
36	BB	13	C	N3-C4-N4	11.23	125.86	118.00
2	AB	1564	C	C5-C6-N1	11.23	126.61	121.00
2	AB	2462	C	N3-C2-O2	-11.23	114.04	121.90
35	BA	1365	G	C4-C5-C6	11.23	125.54	118.80
2	AB	2121	G	N3-C4-C5	-11.22	122.99	128.60
2	AB	1147	A	N9-C4-C5	-11.22	101.31	105.80
35	BA	1082	A	N7-C8-N9	11.22	119.41	113.80
2	AB	1595	C	N1-C2-O2	11.22	125.63	118.90
2	AB	2326	C	C3'-C2'-C1'	11.22	110.47	101.50
35	BA	25	C	N3-C4-C5	-11.22	117.41	121.90
35	BA	368	U	C5-C6-N1	-11.22	117.09	122.70
2	AB	380	G	C4-C5-N7	-11.21	106.31	110.80
2	AB	929	U	C6-N1-C2	-11.21	114.27	121.00
35	BA	1089	G	N9-C4-C5	11.21	109.89	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2839	G	N1-C2-N3	-11.21	117.17	123.90
2	AB	1321	A	C1'-O4'-C4'	-11.21	100.93	109.90
2	AB	2428	G	N3-C4-C5	-11.21	123.00	128.60
35	BA	1050	G	N9-C4-C5	11.20	109.88	105.40
1	AA	10	G	C5-N7-C8	-11.20	98.70	104.30
1	AA	13	G	O4'-C1'-N9	11.20	117.16	108.20
2	AB	1984	G	C4-C5-C6	11.20	125.52	118.80
2	AB	2806	C	N3-C2-O2	-11.19	114.06	121.90
2	AB	1557	C	N1-C2-O2	11.19	125.62	118.90
2	AB	328	U	C5-C6-N1	-11.19	117.10	122.70
35	BA	1495	U	O4'-C1'-N1	11.19	117.15	108.20
2	AB	817	C	C2-N3-C4	11.19	125.49	119.90
2	AB	2349	G	O4'-C1'-N9	11.18	117.15	108.20
2	AB	2700	A	N7-C8-N9	11.18	119.39	113.80
35	BA	148	G	O4'-C1'-N9	11.18	117.14	108.20
35	BA	27	G	N7-C8-N9	-11.18	107.51	113.10
2	AB	603	A	C8-N9-C4	-11.17	101.33	105.80
2	AB	2220	U	N1-C1'-C2'	-11.17	99.48	114.00
35	BA	1489	G	C2-N3-C4	11.17	117.48	111.90
2	AB	2770	G	N9-C4-C5	11.17	109.87	105.40
2	AB	818	G	N7-C8-N9	11.17	118.68	113.10
2	AB	1249	U	C5-C6-N1	-11.17	117.12	122.70
46	BL	121	ARG	NE-CZ-NH2	-11.17	114.72	120.30
35	BA	454	G	C2-N3-C4	11.17	117.48	111.90
35	BA	703	G	N3-C4-C5	-11.17	123.02	128.60
35	BA	970	C	O4'-C1'-C2'	-11.17	94.63	105.80
2	AB	735	A	C4-C5-N7	-11.16	105.12	110.70
2	AB	942	G	C2-N3-C4	11.16	117.48	111.90
2	AB	1546	G	N7-C8-N9	11.16	118.68	113.10
2	AB	2369	A	C5-N7-C8	11.16	109.48	103.90
2	AB	1106	G	C5-C6-N1	-11.16	105.92	111.50
2	AB	2361	G	N1-C2-N3	11.16	130.60	123.90
2	AB	2179	C	N3-C4-C5	-11.16	117.44	121.90
35	BA	304	U	C3'-C2'-C1'	11.16	110.42	101.50
2	AB	1991	U	N3-C2-O2	-11.15	114.39	122.20
35	BA	404	G	O4'-C1'-N9	11.15	117.12	108.20
1	AA	7	G	N3-C4-C5	-11.15	123.02	128.60
1	AA	18	G	O4'-C4'-C3'	11.15	115.15	104.00
2	AB	1217	U	O4'-C1'-N1	11.15	117.12	108.20
2	AB	477	A	C8-N9-C4	-11.15	101.34	105.80
2	AB	1844	C	C6-N1-C2	-11.15	115.84	120.30
2	AB	968	C	C6-N1-C2	-11.15	115.84	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	869	G	C6-N1-C2	-11.15	118.41	125.10
21	AU	92	ARG	NE-CZ-NH1	11.15	125.87	120.30
2	AB	1700	A	C5-C6-N1	11.14	123.27	117.70
35	BA	1029	U	O4'-C1'-N1	11.14	117.12	108.20
2	AB	665	U	O4'-C1'-N1	11.14	117.11	108.20
2	AB	1751	U	C5-C6-N1	-11.14	117.13	122.70
2	AB	274	C	C6-N1-C2	-11.14	115.84	120.30
2	AB	1902	C	C5-C6-N1	-11.14	115.43	121.00
35	BA	963	G	C5-C6-O6	11.14	135.28	128.60
35	BA	441	A	C8-N9-C4	-11.14	101.34	105.80
2	AB	1997	C	N1-C2-O2	11.14	125.58	118.90
13	AM	64	ARG	NE-CZ-NH1	11.14	125.87	120.30
35	BA	797	C	C5-C6-N1	11.14	126.57	121.00
35	BA	645	G	C8-N9-C4	-11.13	101.95	106.40
35	BA	993	G	C4-C5-N7	-11.13	106.35	110.80
35	BA	1044	A	O4'-C1'-N9	11.13	117.11	108.20
2	AB	1310	G	C4-C5-N7	-11.13	106.35	110.80
35	BA	1	A	C2-N3-C4	11.13	116.17	110.60
36	BB	59	G	O4'-C1'-N9	11.13	117.10	108.20
2	AB	887	U	C3'-C2'-C1'	11.12	110.40	101.50
2	AB	1935	G	C8-N9-C4	-11.12	101.95	106.40
2	AB	2152	G	C5-C6-O6	-11.13	121.92	128.60
2	AB	652	U	O4'-C1'-N1	11.12	117.10	108.20
2	AB	2275	C	N3-C2-O2	-11.12	114.11	121.90
2	AB	858	G	C8-N9-C4	-11.12	101.95	106.40
2	AB	1636	U	O4'-C1'-N1	11.12	117.09	108.20
2	AB	2586	U	O4'-C1'-N1	11.12	117.09	108.20
2	AB	1702	G	N1-C2-N3	-11.12	117.23	123.90
35	BA	764	C	N3-C4-C5	-11.11	117.45	121.90
2	AB	1854	A	N9-C4-C5	11.11	110.24	105.80
35	BA	647	C	O4'-C1'-N1	11.11	117.09	108.20
35	BA	809	G	N3-C4-C5	-11.11	123.05	128.60
2	AB	1763	G	C8-N9-C4	-11.11	101.96	106.40
2	AB	2753	A	C6-N1-C2	-11.10	111.94	118.60
1	AA	70	C	C4-C5-C6	-11.10	111.85	117.40
2	AB	624	C	O4'-C1'-N1	11.10	117.08	108.20
2	AB	2475	C	N3-C2-O2	-11.10	114.13	121.90
2	AB	2737	G	C3'-C2'-C1'	11.10	110.38	101.50
35	BA	239	U	C3'-C2'-C1'	-11.10	92.62	101.50
38	BD	25	U	C3'-C2'-C1'	11.10	110.38	101.50
35	BA	1353	G	N9-C4-C5	11.10	109.84	105.40
2	AB	364	C	O4'-C1'-N1	11.10	117.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1913	A	O4'-C1'-N9	11.10	117.08	108.20
35	BA	1355	G	C8-N9-C4	-11.10	101.96	106.40
2	AB	2806	C	O4'-C1'-N1	11.10	117.08	108.20
2	AB	1486	U	O4'-C1'-N1	11.09	117.08	108.20
2	AB	2236	U	C5-C6-N1	-11.09	117.15	122.70
2	AB	2283	C	O4'-C1'-N1	11.09	117.07	108.20
2	AB	1645	G	C8-N9-C4	-11.09	101.96	106.40
35	BA	532	A	N9-C4-C5	11.09	110.24	105.80
35	BA	321	A	C5-N7-C8	-11.09	98.36	103.90
2	AB	149	A	C2-N3-C4	11.09	116.14	110.60
2	AB	1161	C	C6-N1-C2	11.09	124.73	120.30
2	AB	2481	G	C4-C5-N7	-11.09	106.36	110.80
35	BA	231	U	C4'-C3'-C2'	-11.09	91.51	102.60
35	BA	1308	U	C4-C5-C6	11.09	126.35	119.70
2	AB	184	C	C2-N3-C4	11.08	125.44	119.90
2	AB	1620	G	C5-C6-O6	-11.08	121.95	128.60
2	AB	1061	U	C5-C6-N1	11.08	128.24	122.70
2	AB	2263	C	N3-C4-C5	-11.08	117.47	121.90
2	AB	2792	A	C2-N3-C4	-11.08	105.06	110.60
35	BA	1447	A	N9-C4-C5	11.08	110.23	105.80
2	AB	1743	G	C8-N9-C4	-11.08	101.97	106.40
2	AB	647	G	N3-C4-C5	-11.08	123.06	128.60
2	AB	2408	U	O4'-C1'-N1	11.08	117.06	108.20
2	AB	1308	A	N1-C2-N3	-11.07	123.76	129.30
2	AB	1615	C	N3-C4-C5	-11.07	117.47	121.90
2	AB	2154	A	N9-C4-C5	-11.07	101.37	105.80
35	BA	1458	G	C4-C5-N7	-11.07	106.37	110.80
35	BA	32	A	N1-C6-N6	11.07	125.24	118.60
35	BA	877	G	N9-C4-C5	11.07	109.83	105.40
2	AB	218	A	N1-C6-N6	-11.07	111.96	118.60
36	BB	13	C	N3-C4-C5	-11.07	117.47	121.90
35	BA	419	C	N3-C2-O2	-11.07	114.15	121.90
2	AB	984	A	N9-C4-C5	-11.06	101.38	105.80
35	BA	407	U	N3-C2-O2	-11.06	114.46	122.20
2	AB	1861	G	N9-C4-C5	11.06	109.82	105.40
35	BA	218	U	N1-C2-N3	11.06	121.54	114.90
10	AJ	60	ARG	NE-CZ-NH1	11.06	125.83	120.30
35	BA	668	G	N9-C4-C5	11.06	109.82	105.40
35	BA	760	G	C8-N9-C4	-11.06	101.98	106.40
35	BA	1316	G	C4'-C3'-C2'	-11.06	91.54	102.60
2	AB	214	G	C8-N9-C4	-11.06	101.98	106.40
36	BB	59	G	C4-C5-C6	11.06	125.43	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	124	G	C4-C5-C6	11.05	125.43	118.80
2	AB	982	C	N1-C2-O2	11.05	125.53	118.90
2	AB	1921	G	C4-C5-N7	-11.05	106.38	110.80
2	AB	1356	G	C5-C6-N1	11.05	117.03	111.50
2	AB	2270	A	N1-C2-N3	-11.05	123.77	129.30
2	AB	2890	G	N3-C4-C5	-11.05	123.07	128.60
2	AB	1321	A	N1-C2-N3	11.05	134.82	129.30
2	AB	1901	A	N7-C8-N9	11.05	119.32	113.80
2	AB	1412	U	C5-C4-O4	-11.04	119.27	125.90
35	BA	1310	G	C8-N9-C4	-11.04	101.98	106.40
1	AA	26	C	C4-C5-C6	-11.04	111.88	117.40
2	AB	514	A	N1-C2-N3	-11.04	123.78	129.30
2	AB	1848	A	C8-N9-C4	-11.04	101.38	105.80
35	BA	86	G	O4'-C1'-N9	11.04	117.03	108.20
2	AB	636	G	C2-N3-C4	-11.04	106.38	111.90
2	AB	2045	C	O4'-C1'-N1	11.04	117.03	108.20
2	AB	2217	G	N7-C8-N9	11.04	118.62	113.10
2	AB	737	C	C5-C6-N1	11.04	126.52	121.00
35	BA	917	G	C8-N9-C4	-11.03	101.99	106.40
1	AA	52	A	C4-C5-N7	11.03	116.22	110.70
2	AB	1435	G	C4-C5-N7	-11.03	106.39	110.80
35	BA	1096	C	N3-C4-N4	-11.03	110.28	118.00
40	BF	10	ARG	NE-CZ-NH1	11.03	125.81	120.30
2	AB	899	A	O4'-C1'-N9	11.03	117.02	108.20
38	BD	63	C	C5-C6-N1	11.03	126.51	121.00
35	BA	597	G	C5-C6-N1	11.02	117.01	111.50
2	AB	125	A	C4-C5-N7	-11.02	105.19	110.70
2	AB	1894	C	C5-C4-N4	-11.02	112.48	120.20
35	BA	633	G	C4-C5-N7	-11.02	106.39	110.80
35	BA	1501	C	N1-C2-O2	11.02	125.51	118.90
35	BA	888	G	C5-N7-C8	-11.02	98.79	104.30
35	BA	969	A	C1'-O4'-C4'	-11.02	101.08	109.90
35	BA	1158	C	N3-C2-O2	-11.02	114.19	121.90
2	AB	1333	G	C5-C6-N1	11.02	117.01	111.50
35	BA	2	A	C2-N3-C4	11.02	116.11	110.60
2	AB	2659	G	C5-N7-C8	-11.01	98.79	104.30
2	AB	1829	A	C8-N9-C4	-11.01	101.39	105.80
35	BA	1177	G	C2-N3-C4	11.01	117.41	111.90
2	AB	1524	G	C4-C5-N7	11.01	115.20	110.80
38	BD	67	C	N3-C2-O2	-11.01	114.19	121.90
2	AB	125	A	N7-C8-N9	-11.01	108.30	113.80
2	AB	848	C	N3-C4-C5	-11.01	117.50	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	398	U	N3-C2-O2	-11.01	114.50	122.20
2	AB	1054	A	C2-N3-C4	11.01	116.10	110.60
2	AB	1056	G	C6-N1-C2	-11.01	118.50	125.10
2	AB	2554	U	O4'-C1'-N1	11.01	117.00	108.20
2	AB	2876	G	O4'-C1'-N9	11.01	117.01	108.20
35	BA	886	G	O4'-C1'-N9	11.01	117.00	108.20
2	AB	1465	G	N3-C4-C5	-11.00	123.10	128.60
2	AB	1665	A	C8-N9-C4	-11.00	101.40	105.80
35	BA	1124	G	C4-C5-N7	-11.00	106.40	110.80
35	BA	841	C	O4'-C1'-N1	11.00	117.00	108.20
1	AA	53	A	C8-N9-C4	-11.00	101.40	105.80
2	AB	194	G	C8-N9-C4	-11.00	102.00	106.40
2	AB	717	C	N1-C1'-C2'	-11.00	99.70	114.00
30	A3	48	TYR	CB-CG-CD2	-11.00	114.40	121.00
2	AB	23	G	C5-N7-C8	-11.00	98.80	104.30
2	AB	470	A	N1-C6-N6	-11.00	112.00	118.60
2	AB	822	G	O4'-C1'-N9	11.00	117.00	108.20
2	AB	1331	G	N9-C4-C5	11.00	109.80	105.40
2	AB	64	A	N7-C8-N9	11.00	119.30	113.80
2	AB	161	A	C8-N9-C4	-11.00	101.40	105.80
1	AA	116	G	C8-N9-C4	-10.99	102.00	106.40
2	AB	2735	G	N1-C6-O6	10.99	126.50	119.90
35	BA	126	G	N1-C6-O6	10.99	126.50	119.90
35	BA	473	U	N1-C1'-C2'	-10.99	99.71	114.00
47	BM	7	ARG	NE-CZ-NH2	-10.99	114.80	120.30
2	AB	1918	A	N7-C8-N9	10.99	119.30	113.80
2	AB	2254	C	N1-C2-O2	10.99	125.49	118.90
2	AB	712	G	C4-C5-N7	-10.99	106.41	110.80
2	AB	2748	A	C5-C6-N1	10.99	123.19	117.70
35	BA	264	C	C2-N3-C4	10.99	125.39	119.90
2	AB	913	U	C5-C4-O4	10.98	132.49	125.90
35	BA	1301	U	O4'-C1'-N1	10.98	116.99	108.20
2	AB	2070	A	C8-N9-C4	-10.98	101.41	105.80
35	BA	187	G	C2-N3-C4	10.98	117.39	111.90
2	AB	624	C	N3-C4-N4	10.98	125.69	118.00
2	AB	689	A	C5'-C4'-O4'	10.98	122.28	109.10
2	AB	197	A	C4-C5-C6	-10.98	111.51	117.00
2	AB	1160	G	C2-N3-C4	10.98	117.39	111.90
2	AB	2072	C	C5-C4-N4	-10.98	112.52	120.20
2	AB	2766	A	C5'-C4'-O4'	10.98	122.27	109.10
35	BA	1394	A	C4-C5-N7	10.98	116.19	110.70
35	BA	233	C	C3'-C2'-C1'	10.97	110.28	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	94	A	C4-C5-N7	10.97	116.19	110.70
2	AB	1305	C	C2-N3-C4	-10.97	114.42	119.90
2	AB	1041	G	O4'-C1'-N9	10.97	116.97	108.20
2	AB	2645	G	N1-C6-O6	-10.97	113.32	119.90
35	BA	7	A	C5'-C4'-O4'	10.97	122.26	109.10
2	AB	472	A	C2-N3-C4	10.96	116.08	110.60
2	AB	2623	G	C2-N3-C4	10.97	117.38	111.90
35	BA	1489	G	C5'-C4'-O4'	10.97	122.26	109.10
35	BA	470	C	N3-C4-C5	-10.96	117.52	121.90
2	AB	2206	C	C2-N3-C4	10.96	125.38	119.90
2	AB	1393	A	C4-C5-C6	-10.96	111.52	117.00
41	BG	127	ARG	NE-CZ-NH1	10.96	125.78	120.30
2	AB	1027	A	C8-N9-C4	-10.96	101.42	105.80
2	AB	321	U	C6-N1-C2	-10.95	114.43	121.00
35	BA	951	G	C8-N9-C4	-10.95	102.02	106.40
35	BA	1488	G	C2-N3-C4	10.95	117.38	111.90
2	AB	2311	A	O4'-C1'-N9	10.95	116.96	108.20
2	AB	261	G	C8-N9-C4	-10.95	102.02	106.40
35	BA	1342	C	O4'-C1'-N1	10.95	116.96	108.20
2	AB	1401	G	N3-C4-C5	-10.95	123.12	128.60
35	BA	471	U	N3-C2-O2	-10.95	114.54	122.20
35	BA	1196	A	C5-C6-N6	10.95	132.46	123.70
2	AB	2495	G	C8-N9-C4	-10.95	102.02	106.40
2	AB	23	G	C6-C5-N7	-10.95	123.83	130.40
35	BA	381	C	N1-C2-O2	10.94	125.47	118.90
2	AB	436	C	N3-C4-C5	-10.94	117.52	121.90
2	AB	584	C	O4'-C1'-N1	10.94	116.95	108.20
35	BA	715	A	N7-C8-N9	10.94	119.27	113.80
2	AB	291	G	C2-N3-C4	10.94	117.37	111.90
2	AB	672	C	N3-C4-C5	-10.94	117.53	121.90
2	AB	396	G	N9-C4-C5	10.94	109.78	105.40
2	AB	2721	A	N7-C8-N9	10.93	119.27	113.80
35	BA	1014	A	P-O3'-C3'	10.93	132.82	119.70
35	BA	74	A	N1-C2-N3	10.93	134.76	129.30
35	BA	565	U	N3-C4-O4	-10.93	111.75	119.40
2	AB	1068	G	N3-C2-N2	-10.93	112.25	119.90
2	AB	1975	G	C4-C5-N7	-10.93	106.43	110.80
1	AA	45	A	N9-C4-C5	10.92	110.17	105.80
2	AB	909	A	C5-N7-C8	10.92	109.36	103.90
2	AB	1462	C	C2-N3-C4	10.92	125.36	119.90
2	AB	363	G	N7-C8-N9	10.92	118.56	113.10
2	AB	1315	C	N1-C2-O2	10.92	125.45	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	545	C	N3-C4-N4	10.92	125.64	118.00
39	BE	62	ARG	NE-CZ-NH2	-10.92	114.84	120.30
2	AB	176	A	C6-C5-N7	10.92	139.94	132.30
2	AB	1389	G	O4'-C1'-N9	10.91	116.93	108.20
2	AB	380	G	C5-N7-C8	10.91	109.75	104.30
35	BA	1479	C	O4'-C1'-N1	10.91	116.93	108.20
35	BA	1487	G	N3-C4-C5	-10.91	123.14	128.60
35	BA	631	C	C5-C6-N1	10.91	126.45	121.00
35	BA	975	A	N7-C8-N9	10.91	119.25	113.80
35	BA	1327	C	N3-C4-N4	10.91	125.64	118.00
2	AB	1514	G	C6-C5-N7	-10.90	123.86	130.40
2	AB	2167	U	C5-C4-O4	10.90	132.44	125.90
35	BA	1539	C	N1-C2-O2	10.90	125.44	118.90
2	AB	2443	C	C6-N1-C2	-10.90	115.94	120.30
2	AB	819	A	N9-C4-C5	10.90	110.16	105.80
2	AB	1811	G	C6-C5-N7	-10.90	123.86	130.40
35	BA	839	C	C4-C5-C6	-10.90	111.95	117.40
2	AB	259	G	C6-N1-C2	-10.90	118.56	125.10
2	AB	273	G	N3-C2-N2	-10.90	112.27	119.90
2	AB	1241	A	N1-C2-N3	-10.90	123.85	129.30
35	BA	441	A	C4-C5-N7	-10.90	105.25	110.70
2	AB	1643	G	N3-C4-N9	10.89	132.54	126.00
35	BA	1111	A	C2-N3-C4	10.89	116.05	110.60
35	BA	1432	G	N7-C8-N9	10.89	118.55	113.10
2	AB	1189	A	C6-N1-C2	10.89	125.13	118.60
2	AB	2142	A	N1-C6-N6	-10.89	112.06	118.60
2	AB	2276	G	C1'-O4'-C4'	10.89	118.61	109.90
35	BA	180	U	C5-C6-N1	-10.89	117.25	122.70
38	BD	29	C	N3-C4-C5	-10.89	117.54	121.90
2	AB	1533	C	C5-C6-N1	10.89	126.44	121.00
35	BA	387	U	C1'-O4'-C4'	-10.89	101.19	109.90
35	BA	468	A	C5-C6-N1	10.89	123.14	117.70
35	BA	1420	U	O4'-C1'-N1	10.89	116.91	108.20
35	BA	956	U	O4'-C1'-N1	10.89	116.91	108.20
1	AA	32	U	C5-C4-O4	-10.89	119.37	125.90
2	AB	28	A	C4-C5-N7	-10.88	105.26	110.70
35	BA	682	G	N7-C8-N9	10.89	118.54	113.10
2	AB	95	A	C8-N9-C4	-10.88	101.45	105.80
2	AB	1839	G	N3-C4-C5	-10.88	123.16	128.60
2	AB	2327	A	C2-N3-C4	10.88	116.04	110.60
2	AB	717	C	N1-C2-O2	10.88	125.43	118.90
2	AB	1357	C	N1-C2-O2	10.88	125.43	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	779	U	C4-C5-C6	10.88	126.23	119.70
2	AB	2677	G	N1-C2-N3	-10.88	117.37	123.90
35	BA	118	U	C5-C4-O4	-10.88	119.37	125.90
35	BA	1131	G	C5-C6-O6	-10.88	122.07	128.60
2	AB	66	C	N3-C4-C5	-10.88	117.55	121.90
2	AB	1315	C	N3-C4-C5	-10.88	117.55	121.90
35	BA	266	G	N9-C4-C5	10.88	109.75	105.40
35	BA	940	C	C6-N1-C2	-10.88	115.95	120.30
2	AB	307	G	C1'-O4'-C4'	-10.87	101.20	109.90
2	AB	1369	G	C8-N9-C4	-10.87	102.05	106.40
35	BA	934	C	N1-C2-O2	10.87	125.42	118.90
29	A2	63	ARG	NE-CZ-NH2	-10.87	114.86	120.30
35	BA	799	G	C2-N3-C4	10.87	117.33	111.90
2	AB	18	U	O4'-C1'-N1	10.87	116.89	108.20
2	AB	127	A	N1-C6-N6	-10.87	112.08	118.60
2	AB	737	C	C4-C5-C6	-10.87	111.97	117.40
2	AB	1283	G	N9-C4-C5	-10.87	101.05	105.40
2	AB	1783	A	C2-N3-C4	10.87	116.03	110.60
2	AB	2126	A	C1'-O4'-C4'	10.86	118.59	109.90
2	AB	379	G	C5-C6-N1	10.86	116.93	111.50
35	BA	1303	C	C6-N1-C2	-10.86	115.96	120.30
35	BA	1177	G	C8-N9-C4	-10.85	102.06	106.40
35	BA	1472	U	C2-N3-C4	-10.85	120.49	127.00
2	AB	2542	A	O4'-C1'-N9	10.85	116.88	108.20
2	AB	2675	A	N9-C4-C5	-10.85	101.46	105.80
35	BA	432	A	C4-C5-N7	-10.85	105.28	110.70
46	BL	17	ARG	NE-CZ-NH2	-10.85	114.88	120.30
2	AB	1795	C	N1-C2-O2	10.84	125.41	118.90
32	A5	39	ARG	NE-CZ-NH1	10.84	125.72	120.30
35	BA	156	C	C3'-C2'-C1'	10.84	110.17	101.50
2	AB	1795	C	N3-C2-O2	-10.84	114.31	121.90
35	BA	1381	U	C5-C6-N1	-10.84	117.28	122.70
38	BD	73	A	C5-N7-C8	10.84	109.32	103.90
2	AB	179	C	O4'-C1'-N1	10.84	116.87	108.20
35	BA	248	C	C5-C4-N4	-10.84	112.61	120.20
35	BA	1105	A	N9-C4-C5	10.84	110.13	105.80
35	BA	1465	A	O4'-C1'-N9	10.84	116.87	108.20
2	AB	252	G	C5-C6-O6	10.83	135.10	128.60
2	AB	730	A	N1-C2-N3	10.83	134.72	129.30
35	BA	1071	C	C5-C6-N1	10.83	126.42	121.00
35	BA	1051	C	N1-C2-O2	10.83	125.40	118.90
35	BA	1064	G	N3-C2-N2	10.83	127.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BJ	159	ARG	NE-CZ-NH2	-10.83	114.88	120.30
2	AB	1703	G	N1-C6-O6	-10.83	113.40	119.90
2	AB	1689	A	O4'-C1'-N9	10.83	116.86	108.20
2	AB	1989	G	N3-C4-C5	-10.82	123.19	128.60
2	AB	2048	G	C6-N1-C2	-10.82	118.61	125.10
2	AB	2576	G	C2-N3-C4	-10.82	106.49	111.90
35	BA	454	G	N3-C4-C5	-10.82	123.19	128.60
35	BA	1215	G	C5-C6-O6	-10.82	122.11	128.60
38	BD	75	C	C1'-O4'-C4'	-10.82	101.24	109.90
2	AB	8	C	O4'-C1'-N1	10.82	116.86	108.20
35	BA	1460	C	N3-C4-C5	-10.82	117.57	121.90
35	BA	1533	C	N3-C4-N4	10.82	125.58	118.00
2	AB	1588	G	N3-C4-N9	10.82	132.49	126.00
2	AB	2358	A	C2-N3-C4	10.82	116.01	110.60
35	BA	1336	C	N3-C2-O2	-10.82	114.33	121.90
35	BA	151	A	C5-N7-C8	10.81	109.31	103.90
35	BA	1153	G	C8-N9-C4	-10.81	102.07	106.40
2	AB	367	G	N3-C4-C5	-10.81	123.19	128.60
2	AB	2213	U	C5-C6-N1	-10.81	117.29	122.70
35	BA	669	G	C6-C5-N7	-10.81	123.91	130.40
38	BD	35	C	C6-N1-C2	-10.81	115.97	120.30
2	AB	2868	A	N7-C8-N9	10.81	119.21	113.80
35	BA	1470	U	C4-C5-C6	10.81	126.19	119.70
2	AB	335	C	C4-C5-C6	-10.81	112.00	117.40
2	AB	546	U	O4'-C1'-N1	10.81	116.85	108.20
35	BA	1237	C	O4'-C1'-N1	10.81	116.85	108.20
2	AB	1	G	C2-N3-C4	10.80	117.30	111.90
2	AB	2212	A	N7-C8-N9	-10.81	108.40	113.80
35	BA	1147	C	C2-N3-C4	10.80	125.30	119.90
35	BA	727	G	C8-N9-C4	-10.80	102.08	106.40
30	A3	49	ARG	NE-CZ-NH1	10.80	125.70	120.30
2	AB	640	C	C6-N1-C2	-10.80	115.98	120.30
2	AB	2160	C	O4'-C1'-N1	10.80	116.84	108.20
39	BE	81	ASP	CB-CG-OD1	-10.80	108.58	118.30
2	AB	979	A	C4-C5-C6	-10.80	111.60	117.00
2	AB	535	G	O4'-C1'-N9	10.79	116.84	108.20
2	AB	977	G	C8-N9-C4	-10.79	102.08	106.40
2	AB	896	A	C5-C6-N6	-10.79	115.07	123.70
18	AR	20	ARG	NE-CZ-NH2	10.79	125.70	120.30
2	AB	1511	G	C6-N1-C2	-10.79	118.63	125.10
2	AB	1828	G	C8-N9-C4	-10.79	102.08	106.40
1	AA	51	G	N9-C4-C5	10.79	109.71	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	224	U	O4'-C1'-N1	10.79	116.83	108.20
2	AB	376	G	N9-C4-C5	-10.79	101.09	105.40
2	AB	1541	C	O4'-C1'-N1	10.79	116.83	108.20
2	AB	1732	C	O4'-C1'-N1	10.79	116.83	108.20
35	BA	460	A	C8-N9-C4	-10.78	101.49	105.80
2	AB	1464	G	N7-C8-N9	10.78	118.49	113.10
35	BA	411	A	C4-C5-N7	-10.78	105.31	110.70
35	BA	784	A	C8-N9-C4	-10.78	101.49	105.80
35	BA	969	A	O4'-C4'-C3'	10.78	114.78	104.00
2	AB	877	A	N1-C6-N6	-10.78	112.13	118.60
50	BP	112	ARG	NE-CZ-NH2	-10.78	114.91	120.30
2	AB	157	C	C6-N1-C2	-10.78	115.99	120.30
2	AB	707	G	N9-C4-C5	10.78	109.71	105.40
2	AB	2197	U	C6-N1-C2	-10.78	114.53	121.00
2	AB	438	G	C5-C6-O6	-10.77	122.14	128.60
2	AB	2562	U	N1-C2-N3	10.77	121.36	114.90
35	BA	95	C	C6-N1-C2	10.77	124.61	120.30
35	BA	1049	U	N3-C2-O2	-10.77	114.66	122.20
2	AB	595	C	N1-C2-O2	10.77	125.36	118.90
2	AB	1680	U	O4'-C1'-N1	10.77	116.82	108.20
2	AB	1707	G	O4'-C1'-N9	10.77	116.81	108.20
35	BA	176	C	C2-N3-C4	10.77	125.28	119.90
35	BA	1011	C	C2-N3-C4	10.77	125.28	119.90
2	AB	98	G	C3'-C2'-C1'	10.76	110.11	101.50
2	AB	799	G	C2-N3-C4	10.76	117.28	111.90
35	BA	231	U	C3'-C2'-C1'	10.76	110.11	101.50
1	AA	118	C	O4'-C1'-N1	10.76	116.81	108.20
2	AB	2084	C	O4'-C1'-N1	10.76	116.81	108.20
46	BL	118	ARG	NE-CZ-NH1	10.76	125.68	120.30
26	AZ	37	PHE	CB-CG-CD1	-10.76	113.27	120.80
2	AB	1098	A	C5-C6-N1	10.76	123.08	117.70
2	AB	2371	G	N3-C2-N2	10.76	127.43	119.90
35	BA	1515	G	N3-C4-N9	10.76	132.45	126.00
2	AB	307	G	O4'-C4'-C3'	10.75	114.75	104.00
2	AB	864	G	N9-C4-C5	10.75	109.70	105.40
2	AB	2285	C	C6-N1-C2	-10.75	116.00	120.30
35	BA	1342	C	C2-N3-C4	10.75	125.28	119.90
35	BA	213	G	C8-N9-C4	-10.75	102.10	106.40
2	AB	229	C	C2-N3-C4	10.75	125.28	119.90
2	AB	1856	U	O4'-C1'-N1	10.75	116.80	108.20
35	BA	318	G	C5-C6-O6	-10.75	122.15	128.60
2	AB	1975	G	O4'-C1'-N9	10.75	116.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	312	G	C8-N9-C4	-10.75	102.10	106.40
2	AB	464	U	C1'-O4'-C4'	10.75	118.50	109.90
3	AC	134	ARG	NE-CZ-NH1	10.75	125.67	120.30
35	BA	733	G	N9-C4-C5	10.75	109.70	105.40
2	AB	1739	A	N1-C6-N6	-10.74	112.15	118.60
35	BA	164	G	C8-N9-C4	-10.74	102.10	106.40
35	BA	512	U	N3-C4-O4	10.74	126.92	119.40
35	BA	51	A	O4'-C1'-N9	10.74	116.79	108.20
2	AB	1346	G	C8-N9-C4	-10.74	102.11	106.40
2	AB	1854	A	C8-N9-C4	-10.74	101.50	105.80
16	AP	64	ARG	NE-CZ-NH2	10.74	125.67	120.30
2	AB	2397	G	N3-C4-C5	-10.74	123.23	128.60
2	AB	2515	C	O4'-C1'-N1	10.74	116.79	108.20
41	BG	164	ARG	NE-CZ-NH1	-10.74	114.93	120.30
2	AB	16	C	C4-C5-C6	-10.74	112.03	117.40
2	AB	1834	U	C5-C6-N1	10.74	128.07	122.70
2	AB	1867	G	N9-C4-C5	-10.74	101.11	105.40
35	BA	713	G	N1-C6-O6	10.74	126.34	119.90
2	AB	1519	G	C8-N9-C4	10.73	110.69	106.40
2	AB	1702	G	N1-C2-N2	10.73	125.86	116.20
35	BA	756	C	O4'-C1'-N1	10.73	116.79	108.20
2	AB	315	G	O4'-C1'-N9	10.73	116.78	108.20
2	AB	1625	C	O4'-C1'-N1	10.73	116.78	108.20
35	BA	510	A	N9-C4-C5	10.73	110.09	105.80
35	BA	1454	G	O4'-C1'-N9	10.73	116.79	108.20
2	AB	2169	A	N1-C6-N6	-10.73	112.16	118.60
2	AB	2817	U	C5-C4-O4	-10.73	119.46	125.90
2	AB	1822	C	O4'-C1'-N1	10.73	116.78	108.20
35	BA	1439	G	O4'-C1'-N9	10.73	116.78	108.20
35	BA	1452	C	O4'-C1'-N1	10.73	116.78	108.20
35	BA	257	G	C8-N9-C4	-10.72	102.11	106.40
38	BD	67	C	N1-C2-O2	10.72	125.33	118.90
2	AB	1620	G	C8-N9-C4	-10.72	102.11	106.40
35	BA	64	G	C8-N9-C4	-10.72	102.11	106.40
2	AB	558	U	C3'-C2'-C1'	10.72	110.08	101.50
35	BA	829	G	C4-C5-N7	-10.72	106.51	110.80
35	BA	1001	C	O4'-C1'-N1	10.72	116.77	108.20
2	AB	680	C	C6-N1-C2	-10.72	116.01	120.30
35	BA	694	A	N9-C4-C5	10.72	110.09	105.80
35	BA	57	G	C8-N9-C4	-10.71	102.11	106.40
15	AO	16	ARG	NE-CZ-NH1	10.71	125.66	120.30
35	BA	422	C	N1-C2-O2	10.71	125.33	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1136	C	N3-C2-O2	-10.71	114.40	121.90
36	BB	7	G	C5-C6-N1	10.71	116.86	111.50
2	AB	2626	C	C4-C5-C6	10.71	122.75	117.40
2	AB	376	G	C4-C5-N7	10.71	115.08	110.80
2	AB	1701	A	N7-C8-N9	10.71	119.15	113.80
23	AW	93	ARG	NE-CZ-NH1	10.71	125.65	120.30
35	BA	450	G	C6-N1-C2	-10.71	118.67	125.10
2	AB	699	A	N7-C8-N9	10.70	119.15	113.80
2	AB	1271	G	O4'-C1'-N9	10.70	116.76	108.20
2	AB	1410	G	N1-C6-O6	10.70	126.32	119.90
35	BA	405	U	O4'-C1'-N1	10.70	116.76	108.20
1	AA	87	U	O4'-C1'-N1	10.70	116.76	108.20
2	AB	740	C	C6-N1-C2	-10.70	116.02	120.30
2	AB	1315	C	C2-N3-C4	10.70	125.25	119.90
2	AB	1903	G	N3-C4-C5	-10.70	123.25	128.60
35	BA	1318	A	C8-N9-C4	-10.70	101.52	105.80
2	AB	1655	A	N9-C4-C5	10.70	110.08	105.80
38	BD	50	G	O4'-C1'-N9	10.69	116.76	108.20
2	AB	47	C	C6-N1-C2	-10.69	116.02	120.30
2	AB	1305	C	N3-C4-C5	10.69	126.17	121.90
35	BA	462	G	N7-C8-N9	10.69	118.44	113.10
37	BC	38	G	C8-N9-C4	-10.69	102.12	106.40
2	AB	524	G	N3-C4-C5	-10.69	123.26	128.60
2	AB	1870	C	N1-C2-O2	10.69	125.31	118.90
2	AB	2087	G	N9-C4-C5	-10.69	101.13	105.40
2	AB	2748	A	C2-N3-C4	10.69	115.94	110.60
2	AB	559	G	C8-N9-C4	-10.68	102.13	106.40
2	AB	1349	C	N3-C4-N4	10.68	125.48	118.00
2	AB	2163	A	C8-N9-C4	-10.68	101.53	105.80
2	AB	956	G	O4'-C1'-N9	10.68	116.75	108.20
2	AB	55	G	C5-C6-O6	-10.68	122.19	128.60
2	AB	1413	A	C4-C5-N7	-10.68	105.36	110.70
2	AB	1087	G	C5-C6-O6	-10.68	122.19	128.60
35	BA	1406	U	C2-N3-C4	-10.68	120.59	127.00
2	AB	415	A	C8-N9-C4	-10.67	101.53	105.80
2	AB	1136	G	N3-C4-C5	-10.67	123.26	128.60
35	BA	853	C	C3'-C2'-C1'	10.67	110.04	101.50
35	BA	1355	G	O4'-C1'-N9	10.67	116.74	108.20
52	BR	16	ARG	NE-CZ-NH2	-10.67	114.96	120.30
1	AA	45	A	C8-N9-C4	-10.67	101.53	105.80
35	BA	92	U	C4-C5-C6	10.67	126.10	119.70
2	AB	915	C	N3-C4-C5	-10.67	117.63	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1842	G	N1-C2-N3	-10.67	117.50	123.90
2	AB	232	G	C8-N9-C4	-10.67	102.13	106.40
35	BA	559	A	C4-C5-C6	-10.67	111.67	117.00
2	AB	2471	A	N9-C4-C5	10.66	110.07	105.80
2	AB	2800	A	N1-C2-N3	-10.66	123.97	129.30
2	AB	215	G	O4'-C1'-N9	10.66	116.73	108.20
2	AB	725	G	N3-C4-C5	-10.66	123.27	128.60
2	AB	951	C	C5-C4-N4	-10.66	112.74	120.20
2	AB	1874	C	N3-C4-C5	-10.66	117.64	121.90
38	BD	74	A	C2-N3-C4	10.66	115.93	110.60
56	BV	40	PHE	CB-CG-CD2	10.66	128.26	120.80
35	BA	917	G	C4-C5-N7	-10.66	106.54	110.80
2	AB	2695	U	C5-C4-O4	-10.66	119.51	125.90
2	AB	292	U	O4'-C1'-N1	10.65	116.72	108.20
2	AB	890	C	C5-C6-N1	-10.65	115.67	121.00
2	AB	906	U	N3-C4-C5	-10.65	108.21	114.60
2	AB	1134	A	C8-N9-C4	-10.65	101.54	105.80
2	AB	2284	A	C4'-C3'-C2'	-10.65	91.95	102.60
2	AB	2446	G	N3-C4-C5	-10.65	123.27	128.60
35	BA	330	C	C1'-O4'-C4'	-10.65	101.38	109.90
38	BD	29	C	O4'-C1'-N1	10.65	116.72	108.20
2	AB	2758	A	N9-C1'-C2'	-10.65	100.15	114.00
20	AT	13	ARG	NE-CZ-NH2	-10.65	114.97	120.30
46	BL	48	ARG	NE-CZ-NH1	10.65	125.63	120.30
35	BA	339	C	C5-C6-N1	10.65	126.33	121.00
35	BA	247	G	C5'-C4'-O4'	10.65	121.88	109.10
35	BA	1094	G	C2-N3-C4	10.65	117.22	111.90
2	AB	2432	A	O4'-C1'-N9	10.65	116.72	108.20
2	AB	52	A	N1-C2-N3	-10.64	123.98	129.30
35	BA	1214	C	N1-C2-O2	10.64	125.29	118.90
2	AB	2488	G	N3-C4-C5	-10.64	123.28	128.60
35	BA	198	G	N3-C4-C5	-10.64	123.28	128.60
35	BA	156	C	O4'-C1'-N1	10.64	116.71	108.20
2	AB	113	U	N3-C4-O4	10.64	126.85	119.40
35	BA	715	A	C5-N7-C8	-10.64	98.58	103.90
35	BA	1488	G	C5-N7-C8	-10.64	98.98	104.30
35	BA	240	G	C4-C5-N7	10.63	115.05	110.80
2	AB	279	A	C3'-C2'-C1'	10.63	110.01	101.50
2	AB	1176	U	O4'-C1'-N1	10.63	116.71	108.20
35	BA	804	U	O4'-C1'-N1	10.63	116.71	108.20
35	BA	1244	G	N1-C6-O6	-10.63	113.52	119.90
2	AB	348	A	C1'-O4'-C4'	10.63	118.40	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	257	ARG	NE-CZ-NH1	10.63	125.61	120.30
35	BA	361	G	C2-N3-C4	10.63	117.22	111.90
2	AB	71	A	O4'-C1'-N9	10.62	116.70	108.20
35	BA	158	G	N3-C4-C5	-10.63	123.29	128.60
35	BA	1446	A	N1-C6-N6	10.63	124.98	118.60
38	BD	70	C	N3-C2-O2	-10.62	114.46	121.90
2	AB	1064	C	C6-N1-C2	-10.62	116.05	120.30
34	A7	24	ARG	NE-CZ-NH2	10.62	125.61	120.30
2	AB	1748	C	O4'-C1'-N1	10.62	116.70	108.20
2	AB	2828	G	N3-C4-C5	-10.62	123.29	128.60
1	AA	113	C	N1-C2-O2	10.62	125.27	118.90
35	BA	364	A	C4-C5-N7	-10.62	105.39	110.70
2	AB	699	A	N1-C2-N3	-10.62	123.99	129.30
2	AB	830	G	C6-N1-C2	-10.62	118.73	125.10
2	AB	1275	A	C4-C5-C6	10.62	122.31	117.00
2	AB	1792	G	O4'-C1'-N9	10.62	116.69	108.20
2	AB	886	A	N1-C2-N3	10.62	134.61	129.30
2	AB	1230	A	N7-C8-N9	10.61	119.11	113.80
35	BA	698	G	N9-C4-C5	-10.62	101.15	105.40
2	AB	2307	G	P-O3'-C3'	10.61	132.44	119.70
2	AB	1468	U	N3-C4-O4	10.61	126.83	119.40
2	AB	1154	G	O4'-C1'-N9	10.61	116.69	108.20
35	BA	1163	A	C8-N9-C4	10.61	110.04	105.80
2	AB	531	C	C4-C5-C6	10.61	122.70	117.40
35	BA	164	G	N7-C8-N9	10.61	118.40	113.10
35	BA	474	G	N3-C4-C5	-10.61	123.30	128.60
2	AB	2739	U	O4'-C1'-N1	10.61	116.68	108.20
35	BA	462	G	C2-N3-C4	10.61	117.20	111.90
2	AB	43	G	N7-C8-N9	10.60	118.40	113.10
2	AB	2730	C	C3'-C2'-C1'	10.60	109.98	101.50
2	AB	636	G	C8-N9-C4	-10.60	102.16	106.40
2	AB	1659	G	N9-C1'-C2'	-10.60	100.22	114.00
2	AB	1837	C	P-O3'-C3'	10.60	132.42	119.70
2	AB	717	C	C5-C6-N1	10.60	126.30	121.00
2	AB	1475	G	O4'-C1'-N9	10.60	116.68	108.20
2	AB	1517	G	N3-C4-C5	-10.60	123.30	128.60
2	AB	27	G	N7-C8-N9	10.60	118.40	113.10
2	AB	164	C	N1-C2-O2	10.60	125.26	118.90
2	AB	1994	C	C4-C5-C6	-10.60	112.10	117.40
2	AB	626	A	C5-N7-C8	10.59	109.20	103.90
2	AB	2469	A	C4-C5-C6	-10.59	111.70	117.00
35	BA	392	C	C5'-C4'-O4'	10.59	121.81	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	455	C	N1-C2-O2	10.59	125.25	118.90
2	AB	1906	G	N3-C2-N2	-10.59	112.49	119.90
2	AB	2395	C	C5-C6-N1	-10.59	115.70	121.00
35	BA	169	C	O4'-C1'-N1	10.59	116.67	108.20
35	BA	930	C	O4'-C1'-N1	10.59	116.67	108.20
41	BG	3	TYR	CB-CG-CD2	-10.59	114.65	121.00
2	AB	57	C	O4'-C1'-N1	10.59	116.67	108.20
2	AB	1579	A	N7-C8-N9	10.59	119.09	113.80
2	AB	2256	G	C8-N9-C4	-10.59	102.17	106.40
35	BA	763	G	N1-C2-N3	-10.59	117.55	123.90
35	BA	1200	C	C4-C5-C6	10.59	122.69	117.40
35	BA	1092	A	N1-C6-N6	-10.59	112.25	118.60
2	AB	1134	A	C2-N3-C4	10.58	115.89	110.60
10	AJ	61	ARG	NE-CZ-NH1	10.58	125.59	120.30
35	BA	687	A	N9-C4-C5	-10.58	101.57	105.80
2	AB	1902	C	C3'-C2'-C1'	10.58	109.97	101.50
38	BD	3	C	C5-C4-N4	-10.58	112.79	120.20
2	AB	1233	C	N3-C4-N4	10.58	125.41	118.00
2	AB	1567	G	N1-C6-O6	10.58	126.25	119.90
35	BA	1100	C	N3-C4-C5	-10.58	117.67	121.90
35	BA	1294	G	C5-C6-O6	10.58	134.95	128.60
2	AB	247	G	N3-C4-C5	-10.58	123.31	128.60
2	AB	559	G	N1-C2-N3	-10.58	117.56	123.90
2	AB	297	G	C4-C5-N7	-10.57	106.57	110.80
2	AB	1286	A	C1'-O4'-C4'	10.57	118.36	109.90
35	BA	318	G	N1-C6-O6	10.57	126.24	119.90
35	BA	627	G	N3-C4-C5	-10.57	123.31	128.60
2	AB	678	C	C4-C5-C6	10.57	122.68	117.40
35	BA	1203	C	N3-C4-N4	10.57	125.40	118.00
2	AB	1774	C	O4'-C1'-N1	10.57	116.65	108.20
36	BB	22	G	C5-C6-O6	10.57	134.94	128.60
1	AA	16	G	N7-C8-N9	10.56	118.38	113.10
35	BA	326	G	C4-C5-N7	-10.56	106.58	110.80
35	BA	1434	A	C5-N7-C8	10.56	109.18	103.90
35	BA	897	C	N3-C4-C5	-10.56	117.67	121.90
35	BA	58	C	O4'-C1'-N1	10.56	116.65	108.20
2	AB	1427	A	O4'-C1'-N9	10.56	116.65	108.20
2	AB	938	G	C8-N9-C4	-10.56	102.18	106.40
35	BA	97	G	C2-N3-C4	10.56	117.18	111.90
35	BA	1541	U	N3-C2-O2	-10.56	114.81	122.20
2	AB	26	G	C8-N9-C4	-10.55	102.18	106.40
2	AB	1701	A	O4'-C1'-N9	10.56	116.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2851	A	N9-C4-C5	10.55	110.02	105.80
35	BA	81	A	N9-C4-C5	10.55	110.02	105.80
35	BA	936	C	N3-C4-C5	-10.55	117.68	121.90
35	BA	1124	G	N3-C4-N9	-10.55	119.67	126.00
35	BA	774	G	C2-N3-C4	-10.55	106.62	111.90
38	BD	70	C	O4'-C1'-N1	10.55	116.64	108.20
2	AB	301	G	O4'-C1'-N9	10.55	116.64	108.20
2	AB	1125	G	C4-C5-N7	-10.55	106.58	110.80
2	AB	1876	A	C6-N1-C2	-10.55	112.27	118.60
35	BA	1260	G	N9-C4-C5	10.55	109.62	105.40
2	AB	517	C	C2-N3-C4	10.55	125.17	119.90
2	AB	791	C	O4'-C1'-N1	10.55	116.64	108.20
2	AB	965	C	C5-C6-N1	-10.55	115.72	121.00
2	AB	1892	C	C4-C5-C6	-10.55	112.12	117.40
2	AB	2246	G	C8-N9-C4	-10.55	102.18	106.40
2	AB	2779	U	N3-C2-O2	-10.55	114.82	122.20
35	BA	361	G	N9-C4-C5	10.55	109.62	105.40
2	AB	1673	G	C4-C5-N7	-10.54	106.58	110.80
2	AB	1942	C	O4'-C1'-N1	10.54	116.64	108.20
2	AB	2763	G	C4'-C3'-C2'	-10.54	92.06	102.60
35	BA	364	A	C5-N7-C8	10.54	109.17	103.90
35	BA	424	G	C2-N3-C4	10.54	117.17	111.90
35	BA	1057	G	N9-C4-C5	10.54	109.62	105.40
2	AB	1126	A	O4'-C1'-N9	10.54	116.63	108.20
35	BA	1297	G	C5-C6-O6	-10.54	122.27	128.60
2	AB	2516	A	C2-N3-C4	10.54	115.87	110.60
35	BA	760	G	N9-C4-C5	10.54	109.62	105.40
35	BA	207	C	N1-C2-O2	10.54	125.22	118.90
2	AB	185	G	C5-C6-O6	-10.54	122.28	128.60
2	AB	2217	G	C5-N7-C8	-10.54	99.03	104.30
35	BA	179	A	O4'-C1'-N9	10.54	116.63	108.20
2	AB	1089	A	C6-N1-C2	-10.53	112.28	118.60
2	AB	1309	G	N9-C4-C5	10.53	109.61	105.40
2	AB	1795	C	O4'-C1'-N1	10.53	116.63	108.20
2	AB	1921	G	C2-N3-C4	10.53	117.17	111.90
7	AG	166	ARG	NE-CZ-NH2	10.53	125.57	120.30
35	BA	1537	U	P-O3'-C3'	10.53	132.34	119.70
2	AB	212	G	C6-C5-N7	10.53	136.72	130.40
2	AB	1808	A	N1-C2-N3	-10.53	124.03	129.30
2	AB	1922	G	N7-C8-N9	-10.53	107.83	113.10
2	AB	778	G	N3-C4-C5	-10.53	123.34	128.60
2	AB	2484	G	N1-C6-O6	10.53	126.22	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	BE	20	ARG	NE-CZ-NH1	10.53	125.56	120.30
35	BA	1241	G	N1-C2-N3	-10.53	117.58	123.90
35	BA	1246	A	N9-C4-C5	10.53	110.01	105.80
2	AB	439	A	O4'-C1'-N9	10.52	116.62	108.20
2	AB	974	G	O4'-C1'-N9	10.52	116.62	108.20
2	AB	1413	A	C6-C5-N7	10.52	139.67	132.30
35	BA	816	A	C5-C6-N1	10.52	122.96	117.70
2	AB	2358	A	C5-C6-N1	-10.52	112.44	117.70
2	AB	1357	C	N3-C2-O2	-10.52	114.54	121.90
2	AB	2402	U	C4-C5-C6	10.52	126.01	119.70
35	BA	275	G	C5-N7-C8	10.52	109.56	104.30
2	AB	1958	C	C5-C4-N4	-10.52	112.84	120.20
2	AB	2440	C	O4'-C1'-N1	10.52	116.61	108.20
35	BA	1529	G	N3-C4-N9	10.52	132.31	126.00
2	AB	2531	A	C6-N1-C2	10.51	124.91	118.60
35	BA	289	G	C4-C5-N7	-10.51	106.59	110.80
35	BA	874	G	C5-C6-O6	-10.51	122.29	128.60
38	BD	51	U	C4-C5-C6	10.51	126.01	119.70
2	AB	944	C	N3-C4-C5	-10.51	117.70	121.90
2	AB	1014	A	C8-N9-C4	-10.51	101.59	105.80
2	AB	1817	G	C8-N9-C4	-10.51	102.20	106.40
2	AB	2240	U	C5-C6-N1	-10.51	117.44	122.70
35	BA	333	U	N3-C2-O2	-10.51	114.84	122.20
35	BA	492	C	C2-N3-C4	-10.51	114.64	119.90
35	BA	1030	U	N3-C2-O2	-10.51	114.84	122.20
2	AB	1946	U	C5-C4-O4	-10.51	119.59	125.90
2	AB	2175	C	N3-C4-C5	-10.51	117.70	121.90
2	AB	2800	A	C4-C5-N7	-10.51	105.45	110.70
35	BA	903	G	N9-C4-C5	10.51	109.60	105.40
35	BA	215	C	O4'-C1'-N1	10.51	116.60	108.20
35	BA	315	A	C8-N9-C4	-10.51	101.60	105.80
35	BA	593	U	N1-C2-N3	10.51	121.20	114.90
36	BB	5	G	C4-C5-N7	-10.51	106.60	110.80
2	AB	2376	A	N1-C6-N6	10.50	124.90	118.60
26	AZ	28	PHE	CB-CG-CD1	10.50	128.15	120.80
35	BA	4	U	N3-C2-O2	-10.50	114.85	122.20
35	BA	588	G	C4-C5-N7	-10.50	106.60	110.80
40	BF	10	ARG	NE-CZ-NH2	-10.50	115.05	120.30
2	AB	283	G	N3-C2-N2	-10.50	112.55	119.90
2	AB	1367	A	N1-C2-N3	10.50	134.55	129.30
2	AB	2889	C	O4'-C1'-N1	10.50	116.60	108.20
17	AQ	93	ASP	CB-CG-OD2	-10.50	108.85	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	407	U	C2-N3-C4	-10.50	120.70	127.00
35	BA	1165	U	C3'-C2'-C1'	10.50	109.90	101.50
2	AB	2647	U	N3-C4-O4	10.50	126.75	119.40
2	AB	176	A	C2-N3-C4	10.49	115.85	110.60
2	AB	488	G	C4-C5-C6	10.49	125.10	118.80
2	AB	2565	A	O4'-C1'-N9	10.49	116.59	108.20
2	AB	278	A	N9-C4-C5	10.49	110.00	105.80
2	AB	460	A	C4-C5-N7	-10.49	105.46	110.70
2	AB	490	C	N3-C4-C5	-10.49	117.70	121.90
2	AB	1127	A	O4'-C1'-N9	-10.49	99.81	108.20
2	AB	2645	G	C5-N7-C8	-10.49	99.06	104.30
35	BA	1221	G	C2-N3-C4	10.49	117.14	111.90
2	AB	1862	G	O4'-C1'-N9	10.48	116.58	108.20
2	AB	2265	U	C5-C4-O4	-10.48	119.61	125.90
2	AB	2564	A	O4'-C1'-N9	10.48	116.58	108.20
35	BA	821	G	N1-C2-N3	10.48	130.19	123.90
1	AA	58	A	O4'-C1'-N9	10.48	116.58	108.20
35	BA	724	G	C5'-C4'-O4'	10.48	121.67	109.10
35	BA	1289	A	N1-C6-N6	-10.48	112.31	118.60
2	AB	6	A	N1-C2-N3	-10.48	124.06	129.30
2	AB	808	G	C1'-O4'-C4'	10.48	118.28	109.90
2	AB	1017	G	N9-C4-C5	10.48	109.59	105.40
2	AB	1704	C	C6-N1-C2	-10.48	116.11	120.30
2	AB	2247	A	C5-N7-C8	10.48	109.14	103.90
35	BA	264	C	N3-C4-C5	-10.48	117.71	121.90
35	BA	1412	C	C1'-O4'-C4'	-10.48	101.52	109.90
2	AB	353	C	O4'-C1'-N1	10.47	116.58	108.20
35	BA	201	G	O4'-C1'-N9	10.47	116.58	108.20
35	BA	514	C	N3-C2-O2	-10.47	114.57	121.90
35	BA	645	G	N9-C1'-C2'	-10.47	100.38	114.00
35	BA	976	G	N1-C6-O6	-10.47	113.61	119.90
2	AB	261	G	N7-C8-N9	10.47	118.34	113.10
2	AB	1393	A	C5-C6-N1	10.47	122.94	117.70
35	BA	1483	A	N1-C2-N3	10.47	134.54	129.30
1	AA	19	C	N1-C2-O2	10.47	125.18	118.90
1	AA	56	G	N9-C4-C5	-10.47	101.21	105.40
2	AB	2340	A	N9-C4-C5	10.47	109.99	105.80
2	AB	2360	G	C4-C5-N7	-10.47	106.61	110.80
2	AB	2869	G	N9-C1'-C2'	-10.47	100.39	114.00
35	BA	976	G	C5-N7-C8	-10.47	99.07	104.30
57	BW	28	ARG	NE-CZ-NH1	10.47	125.53	120.30
2	AB	1741	C	C5-C4-N4	-10.46	112.88	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	748	G	C3'-C2'-C1'	10.46	109.87	101.50
2	AB	1989	G	C8-N9-C4	-10.46	102.22	106.40
2	AB	2127	G	C5-N7-C8	-10.46	99.07	104.30
35	BA	515	G	C8-N9-C4	-10.46	102.22	106.40
35	BA	717	U	O4'-C1'-N1	10.46	116.57	108.20
38	BD	72	C	O4'-C1'-N1	10.46	116.57	108.20
35	BA	1337	G	C5-C6-N1	10.46	116.73	111.50
2	AB	869	G	N1-C6-O6	-10.46	113.62	119.90
2	AB	1157	G	C6-C5-N7	-10.46	124.12	130.40
2	AB	1531	C	N3-C2-O2	-10.46	114.58	121.90
35	BA	600	A	O4'-C1'-N9	10.46	116.57	108.20
37	BC	17	U	C5-C6-N1	-10.46	117.47	122.70
2	AB	1325	U	N1-C2-N3	10.46	121.17	114.90
2	AB	2838	G	N3-C2-N2	-10.45	112.58	119.90
35	BA	561	U	O4'-C1'-N1	10.46	116.56	108.20
35	BA	1246	A	N7-C8-N9	10.45	119.03	113.80
2	AB	806	C	N1-C2-O2	10.45	125.17	118.90
2	AB	1291	C	C6-N1-C2	-10.45	116.12	120.30
2	AB	53	A	N1-C2-N3	-10.45	124.08	129.30
2	AB	1801	A	N1-C2-N3	10.45	134.53	129.30
35	BA	307	C	O4'-C1'-N1	10.45	116.56	108.20
35	BA	266	G	C8-N9-C4	-10.45	102.22	106.40
35	BA	419	C	N3-C4-C5	-10.45	117.72	121.90
2	AB	1052	C	C2-N3-C4	-10.44	114.68	119.90
1	AA	33	G	O4'-C1'-N9	10.44	116.56	108.20
35	BA	92	U	N1-C2-N3	10.44	121.17	114.90
35	BA	246	A	N1-C6-N6	-10.44	112.33	118.60
2	AB	743	A	C5-N7-C8	-10.44	98.68	103.90
2	AB	1377	G	C2-N3-C4	10.44	117.12	111.90
2	AB	1922	G	C5-N7-C8	10.44	109.52	104.30
45	BK	85	TYR	CB-CG-CD2	10.44	127.26	121.00
2	AB	327	G	O4'-C1'-N9	10.44	116.55	108.20
35	BA	833	G	C8-N9-C4	-10.44	102.22	106.40
2	AB	391	A	N7-C8-N9	10.44	119.02	113.80
12	AL	120	ARG	NE-CZ-NH1	-10.44	115.08	120.30
2	AB	760	G	C6-N1-C2	-10.43	118.84	125.10
2	AB	2025	C	C4-C5-C6	-10.43	112.18	117.40
2	AB	2175	C	C5-C6-N1	-10.43	115.78	121.00
2	AB	2315	G	O4'-C1'-N9	10.43	116.55	108.20
2	AB	2567	G	C5-C6-O6	-10.43	122.34	128.60
2	AB	1308	A	C2-N3-C4	10.43	115.81	110.60
2	AB	2676	C	N1-C2-O2	10.43	125.16	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1331	G	C8-N9-C4	-10.43	102.23	106.40
2	AB	2600	A	N9-C4-C5	-10.43	101.63	105.80
35	BA	302	G	N3-C2-N2	10.43	127.20	119.90
35	BA	1193	G	N7-C8-N9	10.43	118.31	113.10
35	BA	1384	C	C5-C6-N1	10.43	126.22	121.00
35	BA	1531	A	C8-N9-C4	-10.43	101.63	105.80
2	AB	1386	C	C4-C5-C6	-10.43	112.19	117.40
35	BA	506	G	N9-C4-C5	10.43	109.57	105.40
35	BA	950	U	O4'-C1'-N1	10.43	116.54	108.20
2	AB	1	G	N3-C4-C5	-10.42	123.39	128.60
2	AB	16	C	N3-C2-O2	-10.42	114.60	121.90
2	AB	2158	A	O4'-C1'-N9	10.42	116.54	108.20
2	AB	914	G	C4-C5-C6	10.42	125.05	118.80
2	AB	1591	A	C1'-O4'-C4'	-10.42	101.56	109.90
35	BA	387	U	O4'-C1'-C2'	10.42	116.98	107.60
2	AB	2424	C	C5-C6-N1	-10.42	115.79	121.00
2	AB	981	A	O4'-C1'-N9	10.42	116.53	108.20
2	AB	1587	G	C2-N3-C4	10.42	117.11	111.90
2	AB	1370	C	C5-C6-N1	10.42	126.21	121.00
2	AB	1440	U	C5-C6-N1	10.41	127.91	122.70
2	AB	1688	U	O4'-C1'-N1	10.41	116.53	108.20
35	BA	456	A	C8-N9-C4	-10.41	101.64	105.80
35	BA	765	G	O4'-C1'-N9	10.41	116.53	108.20
2	AB	912	C	C2-N3-C4	10.41	125.11	119.90
2	AB	412	A	N9-C4-C5	10.41	109.96	105.80
2	AB	1619	G	C5'-C4'-C3'	-10.41	99.34	116.00
35	BA	1221	G	C5-C6-N1	10.41	116.70	111.50
2	AB	807	U	N3-C2-O2	-10.41	114.91	122.20
2	AB	884	U	O4'-C1'-N1	10.41	116.53	108.20
2	AB	894	U	C5-C4-O4	-10.41	119.66	125.90
35	BA	202	G	C4-C5-N7	-10.41	106.64	110.80
2	AB	2761	A	C4-C5-C6	10.40	122.20	117.00
2	AB	1461	C	C2-N3-C4	10.40	125.10	119.90
2	AB	1979	U	N3-C2-O2	-10.40	114.92	122.20
2	AB	703	U	O4'-C1'-N1	10.40	116.52	108.20
35	BA	313	A	C4-C5-N7	-10.40	105.50	110.70
35	BA	416	G	C2-N3-C4	10.40	117.10	111.90
35	BA	1488	G	N3-C4-N9	10.40	132.24	126.00
35	BA	357	G	N3-C2-N2	-10.40	112.62	119.90
39	BE	221	ARG	NE-CZ-NH2	-10.40	115.10	120.30
2	AB	924	G	C4-C5-N7	-10.40	106.64	110.80
35	BA	117	G	O4'-C1'-N9	10.40	116.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	802	A	C8-N9-C4	-10.40	101.64	105.80
2	AB	660	C	O4'-C1'-N1	10.39	116.52	108.20
49	BO	109	ARG	NE-CZ-NH2	-10.39	115.10	120.30
2	AB	624	C	N3-C4-C5	-10.39	117.74	121.90
35	BA	66	A	N7-C8-N9	10.39	119.00	113.80
2	AB	166	U	O4'-C1'-N1	10.39	116.51	108.20
2	AB	1521	G	N9-C4-C5	10.39	109.56	105.40
35	BA	54	C	O4'-C1'-N1	10.39	116.51	108.20
35	BA	110	C	N1-C2-O2	10.39	125.13	118.90
35	BA	794	A	N1-C2-N3	-10.39	124.11	129.30
2	AB	994	C	O4'-C1'-N1	10.38	116.51	108.20
35	BA	85	U	N3-C2-O2	-10.38	114.93	122.20
1	AA	64	G	N3-C4-C5	-10.38	123.41	128.60
15	AO	18	ARG	NE-CZ-NH2	10.38	125.49	120.30
15	AO	55	ARG	NE-CZ-NH1	-10.38	115.11	120.30
35	BA	669	G	C4-C5-N7	10.38	114.95	110.80
35	BA	1245	C	C6-N1-C2	-10.38	116.15	120.30
2	AB	2647	U	C5-C4-O4	-10.38	119.67	125.90
35	BA	819	A	O4'-C1'-N9	10.38	116.50	108.20
35	BA	1258	G	N7-C8-N9	10.38	118.29	113.10
35	BA	1330	U	N3-C4-O4	-10.38	112.13	119.40
2	AB	2852	G	C5-C6-N1	10.38	116.69	111.50
18	AR	98	TYR	CB-CG-CD2	-10.38	114.77	121.00
35	BA	1353	G	C2-N3-C4	10.38	117.09	111.90
35	BA	1475	G	O4'-C1'-N9	10.38	116.50	108.20
35	BA	1497	G	N9-C1'-C2'	-10.38	100.51	114.00
35	BA	378	G	C5-C6-N1	10.38	116.69	111.50
2	AB	1201	U	C5-C6-N1	-10.37	117.51	122.70
2	AB	462	C	N3-C4-C5	-10.37	117.75	121.90
2	AB	622	G	O4'-C1'-N9	10.37	116.50	108.20
35	BA	266	G	C4-C5-N7	-10.37	106.65	110.80
35	BA	537	G	C6-C5-N7	-10.37	124.18	130.40
36	BB	76	A	N1-C6-N6	-10.37	112.38	118.60
35	BA	617	G	N1-C6-O6	-10.37	113.68	119.90
2	AB	1705	A	C8-N9-C4	-10.37	101.65	105.80
2	AB	2113	U	C3'-C2'-C1'	10.37	109.80	101.50
2	AB	1250	G	C2-N3-C4	10.37	117.08	111.90
35	BA	641	U	O4'-C1'-N1	10.37	116.50	108.20
13	AM	70	ARG	NE-CZ-NH2	-10.37	115.12	120.30
1	AA	20	G	C5-C6-N1	10.36	116.68	111.50
2	AB	442	G	C5-N7-C8	10.36	109.48	104.30
2	AB	855	G	N3-C4-N9	10.36	132.22	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1964	G	N3-C4-N9	-10.36	119.78	126.00
2	AB	2347	C	O4'-C1'-N1	10.36	116.49	108.20
22	AV	3	ARG	NE-CZ-NH1	10.36	125.48	120.30
24	AX	18	ARG	NE-CZ-NH1	10.36	125.48	120.30
2	AB	1972	G	C2-N3-C4	10.36	117.08	111.90
2	AB	886	A	O4'-C1'-N9	10.36	116.49	108.20
2	AB	1021	A	C4-C5-C6	-10.36	111.82	117.00
2	AB	1335	C	O4'-C1'-N1	10.36	116.49	108.20
2	AB	1746	A	N3-C4-C5	-10.36	119.55	126.80
2	AB	2040	G	N9-C4-C5	10.36	109.54	105.40
2	AB	1630	A	N1-C6-N6	-10.36	112.39	118.60
2	AB	1936	A	O4'-C1'-N9	10.36	116.49	108.20
35	BA	161	A	C8-N9-C4	-10.36	101.66	105.80
35	BA	1334	G	N3-C4-C5	-10.36	123.42	128.60
2	AB	1837	C	O4'-C1'-N1	10.35	116.48	108.20
35	BA	113	G	C4-C5-N7	10.35	114.94	110.80
35	BA	378	G	C5-C6-O6	-10.35	122.39	128.60
35	BA	997	U	C4-C5-C6	10.35	125.91	119.70
2	AB	2053	G	N1-C2-N3	-10.35	117.69	123.90
35	BA	340	U	C5-C4-O4	-10.35	119.69	125.90
2	AB	929	U	C5-C6-N1	10.35	127.88	122.70
2	AB	2118	U	C1'-O4'-C4'	-10.35	101.62	109.90
2	AB	1538	G	N7-C8-N9	10.35	118.27	113.10
2	AB	2859	G	C3'-C2'-C1'	10.35	109.78	101.50
35	BA	929	G	C4-C5-C6	-10.35	112.59	118.80
35	BA	992	U	O4'-C1'-N1	10.35	116.48	108.20
2	AB	2743	U	N3-C4-O4	10.34	126.64	119.40
35	BA	35	G	N3-C2-N2	-10.34	112.66	119.90
35	BA	220	G	O4'-C1'-N9	10.34	116.47	108.20
35	BA	458	U	O4'-C1'-N1	10.34	116.47	108.20
2	AB	691	C	N3-C2-O2	-10.34	114.66	121.90
2	AB	894	U	N3-C2-O2	-10.34	114.96	122.20
35	BA	874	G	C5-C6-N1	10.34	116.67	111.50
2	AB	337	C	N3-C4-C5	-10.34	117.76	121.90
35	BA	1517	G	N3-C4-N9	-10.34	119.80	126.00
35	BA	1534	A	N1-C2-N3	-10.34	124.13	129.30
7	AG	94	ARG	NE-CZ-NH2	-10.34	115.13	120.30
35	BA	221	C	N3-C4-N4	10.34	125.24	118.00
2	AB	1874	C	O4'-C1'-N1	10.34	116.47	108.20
35	BA	44	A	C5-N7-C8	-10.34	98.73	103.90
37	BC	56	G	C5-C6-N1	10.34	116.67	111.50
2	AB	1724	G	C8-N9-C4	-10.33	102.27	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	237	G	O4'-C1'-N9	10.33	116.47	108.20
2	AB	535	G	C6-C5-N7	10.33	136.60	130.40
2	AB	1162	G	C8-N9-C4	-10.33	102.27	106.40
2	AB	1331	G	C2-N3-C4	10.33	117.07	111.90
2	AB	2045	C	C2-N3-C4	-10.33	114.73	119.90
35	BA	1428	A	C4'-C3'-C2'	-10.33	92.27	102.60
2	AB	630	G	N3-C4-C5	-10.33	123.43	128.60
35	BA	141	G	N1-C2-N2	-10.33	106.90	116.20
35	BA	902	G	N3-C2-N2	-10.33	112.67	119.90
2	AB	2199	A	N1-C6-N6	-10.33	112.40	118.60
2	AB	2295	C	O4'-C1'-N1	10.33	116.46	108.20
35	BA	800	G	N9-C4-C5	10.33	109.53	105.40
35	BA	1487	G	C6-N1-C2	-10.33	118.90	125.10
2	AB	2279	G	N7-C8-N9	10.32	118.26	113.10
2	AB	2336	A	C3'-C2'-C1'	10.32	109.76	101.50
2	AB	1378	A	C8-N9-C4	-10.32	101.67	105.80
2	AB	2413	G	C4-C5-N7	10.32	114.93	110.80
2	AB	590	A	C8-N9-C4	10.32	109.93	105.80
2	AB	1673	G	N9-C4-C5	10.32	109.53	105.40
35	BA	1194	U	O4'-C1'-N1	10.32	116.45	108.20
35	BA	158	G	C8-N9-C4	-10.31	102.27	106.40
35	BA	677	U	N3-C4-O4	10.31	126.62	119.40
35	BA	731	G	N3-C4-C5	-10.31	123.44	128.60
2	AB	45	G	C4-C5-N7	-10.31	106.67	110.80
2	AB	911	A	N9-C4-C5	10.31	109.93	105.80
2	AB	225	C	N3-C4-C5	-10.31	117.78	121.90
2	AB	1539	U	C4-C5-C6	10.31	125.89	119.70
2	AB	1677	A	C8-N9-C4	-10.31	101.67	105.80
2	AB	1645	G	C5-N7-C8	-10.31	99.14	104.30
57	BW	59	ARG	NE-CZ-NH1	10.31	125.45	120.30
35	BA	664	G	N7-C8-N9	10.31	118.25	113.10
42	BH	156	ARG	NE-CZ-NH1	-10.31	115.15	120.30
2	AB	402	A	O4'-C1'-N9	10.31	116.44	108.20
2	AB	1480	C	N3-C4-C5	-10.31	117.78	121.90
2	AB	2857	G	O4'-C1'-N9	10.31	116.44	108.20
35	BA	1049	U	O4'-C1'-N1	10.30	116.44	108.20
1	AA	43	C	O4'-C4'-C3'	10.30	114.34	106.10
2	AB	612	G	N3-C4-N9	10.30	132.18	126.00
2	AB	752	A	C5-N7-C8	10.30	109.05	103.90
2	AB	2832	U	O4'-C1'-N1	10.30	116.44	108.20
2	AB	473	G	O4'-C1'-N9	10.30	116.44	108.20
2	AB	2511	U	O4'-C1'-N1	10.30	116.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	110	C	O4'-C1'-N1	10.30	116.44	108.20
35	BA	231	U	O4'-C1'-N1	10.30	116.44	108.20
36	BB	29	G	O4'-C1'-N9	10.30	116.44	108.20
2	AB	489	G	N9-C4-C5	10.30	109.52	105.40
2	AB	126	A	C4-C5-C6	10.30	122.15	117.00
2	AB	874	G	C2-N3-C4	10.30	117.05	111.90
2	AB	1063	G	C5-N7-C8	-10.30	99.15	104.30
35	BA	1523	G	C5-C6-O6	10.30	134.78	128.60
37	BC	52	U	O4'-C1'-N1	10.30	116.44	108.20
2	AB	2099	U	C4'-C3'-C2'	-10.30	92.30	102.60
2	AB	1226	A	C2-N3-C4	10.29	115.75	110.60
2	AB	2664	G	C8-N9-C4	-10.29	102.28	106.40
35	BA	408	A	C8-N9-C4	-10.29	101.68	105.80
2	AB	541	A	O4'-C1'-N9	10.29	116.43	108.20
2	AB	2044	C	N3-C2-O2	-10.29	114.69	121.90
2	AB	307	G	C4'-C3'-C2'	-10.29	92.31	102.60
2	AB	1779	U	C3'-C2'-C1'	10.29	109.73	101.50
35	BA	534	U	C6-N1-C2	10.29	127.17	121.00
35	BA	696	A	O4'-C1'-N9	10.29	116.43	108.20
2	AB	1992	G	N3-C2-N2	-10.29	112.70	119.90
2	AB	2610	C	O4'-C1'-N1	10.29	116.43	108.20
35	BA	1386	G	O4'-C1'-N9	10.29	116.43	108.20
38	BD	27	G	N7-C8-N9	10.29	118.25	113.10
35	BA	359	G	C4-C5-N7	-10.29	106.69	110.80
46	BL	40	ARG	NE-CZ-NH2	-10.29	115.16	120.30
2	AB	2028	U	N1-C2-O2	-10.29	115.60	122.80
2	AB	2604	U	C2-N3-C4	-10.29	120.83	127.00
35	BA	1483	A	C6-N1-C2	-10.28	112.43	118.60
2	AB	106	C	C6-N1-C2	-10.28	116.19	120.30
2	AB	2784	U	C4-C5-C6	-10.28	113.53	119.70
35	BA	808	C	O4'-C1'-N1	10.28	116.42	108.20
2	AB	1826	G	N3-C4-C5	-10.28	123.46	128.60
25	AY	10	ARG	NE-CZ-NH1	10.28	125.44	120.30
2	AB	922	C	O4'-C1'-N1	10.27	116.42	108.20
2	AB	2463	C	C2-N3-C4	10.27	125.04	119.90
2	AB	1775	U	N3-C4-O4	-10.27	112.21	119.40
2	AB	2216	G	C4-C5-N7	-10.27	106.69	110.80
35	BA	1330	U	N3-C4-C5	10.27	120.76	114.60
2	AB	286	U	C5-C4-O4	-10.27	119.74	125.90
2	AB	527	C	C6-N1-C2	-10.27	116.19	120.30
35	BA	999	C	N1-C2-O2	10.27	125.06	118.90
2	AB	2101	A	O4'-C1'-N9	10.27	116.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1265	C	O4'-C1'-N1	10.27	116.41	108.20
2	AB	1305	C	C5-C6-N1	-10.27	115.87	121.00
2	AB	2792	A	N7-C8-N9	-10.27	108.67	113.80
35	BA	1501	C	N3-C2-O2	-10.27	114.71	121.90
2	AB	1237	A	N1-C6-N6	-10.26	112.44	118.60
35	BA	469	C	C4-C5-C6	-10.26	112.27	117.40
1	AA	7	G	N3-C4-N9	10.26	132.16	126.00
35	BA	485	U	C5-C4-O4	10.26	132.06	125.90
2	AB	757	G	O4'-C1'-N9	10.26	116.41	108.20
2	AB	963	U	C5-C4-O4	-10.26	119.74	125.90
2	AB	1420	A	N1-C6-N6	10.26	124.75	118.60
2	AB	2470	G	C5-C6-O6	10.26	134.75	128.60
2	AB	1137	G	C5-N7-C8	-10.26	99.17	104.30
35	BA	23	C	N3-C2-O2	-10.26	114.72	121.90
2	AB	1445	G	O4'-C1'-N9	10.26	116.41	108.20
35	BA	27	G	C5-C6-O6	-10.26	122.45	128.60
2	AB	1836	C	C2-N3-C4	-10.26	114.77	119.90
35	BA	1158	C	C4-C5-C6	10.26	122.53	117.40
35	BA	1533	C	C2-N3-C4	10.26	125.03	119.90
2	AB	649	G	C4-C5-N7	-10.25	106.70	110.80
2	AB	1675	C	N3-C4-C5	10.25	126.00	121.90
35	BA	361	G	O4'-C1'-N9	10.25	116.40	108.20
2	AB	266	G	C6-N1-C2	-10.25	118.95	125.10
2	AB	2053	G	C8-N9-C4	-10.25	102.30	106.40
35	BA	671	G	C5-C6-O6	-10.25	122.45	128.60
2	AB	2769	U	O4'-C1'-N1	10.25	116.40	108.20
1	AA	34	A	P-O3'-C3'	10.25	132.00	119.70
2	AB	696	G	N3-C4-N9	10.25	132.15	126.00
2	AB	2008	C	N1-C2-O2	10.25	125.05	118.90
35	BA	821	G	C2-N3-C4	-10.25	106.78	111.90
2	AB	1220	G	O4'-C1'-N9	10.25	116.40	108.20
2	AB	2692	G	C8-N9-C4	-10.25	102.30	106.40
35	BA	595	A	C4-C5-N7	-10.25	105.58	110.70
2	AB	52	A	N7-C8-N9	10.24	118.92	113.80
2	AB	1973	G	N3-C4-C5	-10.24	123.48	128.60
35	BA	1041	G	O4'-C1'-N9	10.24	116.39	108.20
3	AC	162	ARG	NE-CZ-NH1	10.24	125.42	120.30
35	BA	64	G	N7-C8-N9	10.24	118.22	113.10
35	BA	1466	C	N1-C2-O2	10.24	125.05	118.90
2	AB	837	C	C5-C4-N4	-10.24	113.03	120.20
2	AB	1731	G	C8-N9-C4	-10.24	102.30	106.40
2	AB	2602	A	C2-N3-C4	10.24	115.72	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1054	A	O4'-C1'-N9	10.24	116.39	108.20
2	AB	2120	G	C4-C5-N7	10.24	114.89	110.80
6	AF	69	ARG	NE-CZ-NH1	10.23	125.42	120.30
2	AB	1344	U	O4'-C1'-N1	10.23	116.39	108.20
19	AS	69	ARG	NH1-CZ-NH2	-10.23	108.15	119.40
2	AB	27	G	N9-C4-C5	10.23	109.49	105.40
2	AB	1588	G	N3-C2-N2	-10.23	112.74	119.90
47	BM	45	ARG	NE-CZ-NH2	-10.23	115.19	120.30
2	AB	2320	U	N3-C2-O2	-10.23	115.04	122.20
35	BA	536	C	N3-C4-N4	10.23	125.16	118.00
35	BA	661	G	N3-C4-C5	-10.23	123.49	128.60
35	BA	963	G	N1-C6-O6	-10.23	113.76	119.90
43	BI	8	PHE	CB-CG-CD1	10.23	127.96	120.80
35	BA	1124	G	C8-N9-C4	-10.22	102.31	106.40
2	AB	1325	U	C2-N3-C4	-10.22	120.87	127.00
35	BA	784	A	O4'-C4'-C3'	10.22	114.28	106.10
47	BM	31	ARG	NE-CZ-NH1	10.22	125.41	120.30
2	AB	924	G	N9-C4-C5	10.22	109.49	105.40
35	BA	1303	C	C5-C6-N1	10.22	126.11	121.00
1	AA	24	G	N1-C6-O6	-10.22	113.77	119.90
2	AB	329	G	C2-N3-C4	10.22	117.01	111.90
2	AB	854	C	N3-C4-C5	-10.22	117.81	121.90
2	AB	2012	G	N9-C4-C5	10.22	109.49	105.40
19	AS	63	ARG	NE-CZ-NH1	10.22	125.41	120.30
35	BA	177	G	C5-N7-C8	-10.22	99.19	104.30
35	BA	253	A	O4'-C1'-N9	10.22	116.38	108.20
35	BA	1258	G	C4-C5-N7	-10.22	106.71	110.80
2	AB	512	G	N1-C6-O6	-10.21	113.77	119.90
2	AB	2388	A	N7-C8-N9	10.22	118.91	113.80
37	BC	40	G	C6-N1-C2	-10.21	118.97	125.10
2	AB	2254	C	O4'-C1'-N1	10.21	116.37	108.20
2	AB	112	U	O4'-C1'-N1	10.21	116.37	108.20
2	AB	759	G	C8-N9-C4	-10.21	102.32	106.40
2	AB	1785	A	O4'-C1'-N9	10.21	116.37	108.20
2	AB	2801	G	N3-C4-C5	-10.21	123.49	128.60
35	BA	191	G	C4-C5-N7	10.21	114.88	110.80
35	BA	521	G	C6-N1-C2	-10.21	118.98	125.10
35	BA	643	C	O4'-C1'-N1	10.21	116.37	108.20
2	AB	1150	C	C2-N3-C4	10.20	125.00	119.90
2	AB	2625	G	C4-C5-N7	10.20	114.88	110.80
35	BA	1398	A	O4'-C1'-N9	10.20	116.36	108.20
2	AB	1497	U	C4-C5-C6	10.20	125.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2805	C	N3-C4-C5	-10.20	117.82	121.90
35	BA	919	A	N9-C4-C5	10.20	109.88	105.80
2	AB	421	C	C5-C6-N1	10.20	126.10	121.00
2	AB	1489	C	C5-C4-N4	-10.20	113.06	120.20
2	AB	1700	A	C4-C5-C6	-10.20	111.90	117.00
2	AB	1879	C	C3'-C2'-C1'	10.20	109.66	101.50
2	AB	2694	G	N3-C4-C5	-10.20	123.50	128.60
42	BH	141	ASP	CB-CG-OD1	-10.20	109.12	118.30
2	AB	2807	U	C2-N3-C4	-10.20	120.88	127.00
2	AB	507	A	N9-C4-C5	10.20	109.88	105.80
41	BG	153	ARG	NE-CZ-NH1	10.20	125.40	120.30
2	AB	753	A	N9-C4-C5	10.19	109.88	105.80
2	AB	1435	G	C8-N9-C4	-10.19	102.32	106.40
35	BA	428	G	C5-N7-C8	-10.19	99.20	104.30
35	BA	1102	A	C5-N7-C8	-10.20	98.80	103.90
38	BD	58	A	O4'-C1'-N9	-10.20	100.04	108.20
35	BA	377	G	C5-C6-N1	10.19	116.59	111.50
35	BA	730	G	N3-C4-C5	-10.19	123.50	128.60
35	BA	614	C	C2-N3-C4	10.19	124.99	119.90
37	BC	52	U	O3'-P-O5'	-10.19	84.64	104.00
2	AB	46	G	C2-N3-C4	10.19	116.99	111.90
2	AB	361	G	C4-C5-C6	10.19	124.91	118.80
2	AB	179	C	C2-N3-C4	-10.19	114.81	119.90
2	AB	1846	G	C2-N3-C4	10.19	116.99	111.90
2	AB	1910	G	N7-C8-N9	10.18	118.19	113.10
2	AB	2797	U	C6-N1-C2	-10.18	114.89	121.00
35	BA	321	A	O4'-C1'-N9	10.18	116.35	108.20
2	AB	1401	G	C2-N3-C4	10.18	116.99	111.90
2	AB	2168	G	C2-N3-C4	10.18	116.99	111.90
35	BA	368	U	C4-C5-C6	10.18	125.81	119.70
35	BA	1171	A	C5-N7-C8	10.18	108.99	103.90
35	BA	1215	G	C5-C6-N1	10.18	116.59	111.50
2	AB	351	C	O4'-C1'-N1	10.18	116.34	108.20
2	AB	931	U	N3-C2-O2	-10.18	115.08	122.20
2	AB	1916	A	N9-C4-C5	10.18	109.87	105.80
2	AB	2356	U	C4-C5-C6	10.18	125.81	119.70
2	AB	630	G	N3-C4-N9	10.18	132.10	126.00
2	AB	2834	G	O4'-C1'-N9	10.18	116.34	108.20
2	AB	678	C	N3-C4-C5	-10.18	117.83	121.90
2	AB	1379	U	O4'-C1'-N1	10.18	116.34	108.20
35	BA	101	A	C5-N7-C8	10.18	108.99	103.90
35	BA	1064	G	C2-N3-C4	10.18	116.99	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	BQ	52	ARG	NE-CZ-NH2	-10.18	115.21	120.30
35	BA	1417	G	O4'-C1'-N9	-10.18	100.06	108.20
2	AB	911	A	C8-N9-C4	-10.17	101.73	105.80
35	BA	372	C	N3-C2-O2	-10.17	114.78	121.90
2	AB	640	C	C4-C5-C6	-10.17	112.31	117.40
2	AB	1155	A	N7-C8-N9	-10.17	108.71	113.80
2	AB	1598	A	C8-N9-C4	-10.17	101.73	105.80
2	AB	1826	G	O4'-C1'-N9	10.17	116.33	108.20
35	BA	143	A	O4'-C1'-N9	10.17	116.34	108.20
2	AB	1048	A	C8-N9-C4	-10.17	101.73	105.80
2	AB	1397	U	N1-C2-O2	10.17	129.92	122.80
35	BA	833	G	N9-C4-C5	10.17	109.47	105.40
35	BA	1038	C	N3-C2-O2	-10.17	114.78	121.90
35	BA	484	G	C8-N9-C4	10.16	110.47	106.40
2	AB	1159	U	N3-C2-O2	-10.16	115.09	122.20
35	BA	574	A	C4-C5-C6	-10.16	111.92	117.00
2	AB	2367	G	C6-N1-C2	-10.16	119.00	125.10
35	BA	241	G	C8-N9-C4	-10.16	102.33	106.40
35	BA	418	C	C5-C6-N1	10.16	126.08	121.00
2	AB	810	U	C5-C4-O4	10.16	132.00	125.90
2	AB	1012	U	N3-C2-O2	-10.16	115.09	122.20
2	AB	1557	C	C5-C6-N1	10.16	126.08	121.00
2	AB	2572	A	O4'-C1'-N9	10.16	116.33	108.20
2	AB	2753	A	C8-N9-C4	-10.16	101.74	105.80
58	BX	20	ARG	NE-CZ-NH2	-10.16	115.22	120.30
2	AB	512	G	C6-N1-C2	-10.16	119.00	125.10
2	AB	1576	U	O4'-C1'-N1	10.16	116.33	108.20
2	AB	81	G	N3-C4-C5	-10.15	123.52	128.60
2	AB	396	G	C4-C5-N7	-10.15	106.74	110.80
2	AB	1745	A	C4-C5-N7	10.15	115.78	110.70
2	AB	2539	C	N3-C4-N4	10.15	125.11	118.00
2	AB	2712	C	N3-C2-O2	-10.15	114.79	121.90
2	AB	2784	U	C5-C4-O4	-10.15	119.81	125.90
2	AB	620	G	C1'-O4'-C4'	-10.15	101.78	109.90
2	AB	1838	C	C5-C4-N4	10.15	127.30	120.20
35	BA	507	C	O4'-C1'-N1	10.15	116.32	108.20
1	AA	116	G	N3-C4-N9	-10.14	119.91	126.00
2	AB	140	C	O4'-C1'-N1	10.14	116.32	108.20
2	AB	1061	U	C4-C5-C6	-10.14	113.61	119.70
2	AB	1914	C	N3-C2-O2	-10.14	114.80	121.90
2	AB	1079	C	O4'-C1'-N1	10.14	116.31	108.20
2	AB	1500	G	C2-N3-C4	10.14	116.97	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1711	A	O4'-C1'-N9	-10.14	100.09	108.20
35	BA	72	A	C4-C5-C6	-10.14	111.93	117.00
2	AB	2308	G	N7-C8-N9	10.14	118.17	113.10
35	BA	922	G	C5-C6-N1	10.14	116.57	111.50
2	AB	701	G	N9-C1'-C2'	-10.14	100.82	114.00
2	AB	2413	G	C5'-C4'-O4'	10.14	121.27	109.10
35	BA	536	C	C6-N1-C2	-10.14	116.24	120.30
35	BA	714	G	C5-N7-C8	-10.14	99.23	104.30
2	AB	1898	U	O4'-C1'-N1	10.14	116.31	108.20
19	AS	23	TYR	CB-CG-CD1	-10.14	114.92	121.00
2	AB	60	G	N9-C4-C5	10.14	109.45	105.40
2	AB	239	C	C4-C5-C6	-10.14	112.33	117.40
2	AB	1532	A	N1-C2-N3	-10.14	124.23	129.30
2	AB	2591	C	N1-C2-O2	10.14	124.98	118.90
35	BA	1325	C	N3-C4-C5	-10.14	117.84	121.90
35	BA	1536	C	N1-C2-O2	10.14	124.98	118.90
2	AB	490	C	C2-N3-C4	10.13	124.97	119.90
2	AB	1372	U	N1-C2-N3	10.14	120.98	114.90
2	AB	2753	A	C5-C6-N1	10.14	122.77	117.70
35	BA	1362	A	O4'-C1'-N9	10.13	116.31	108.20
2	AB	797	G	N3-C4-C5	-10.13	123.53	128.60
2	AB	601	C	N3-C4-C5	-10.13	117.85	121.90
2	AB	1435	G	N9-C4-C5	10.13	109.45	105.40
35	BA	620	C	O4'-C1'-N1	10.13	116.31	108.20
2	AB	381	G	N3-C4-C5	-10.13	123.54	128.60
2	AB	636	G	N3-C4-N9	-10.13	119.92	126.00
2	AB	851	C	N1-C2-O2	10.13	124.98	118.90
2	AB	1250	G	O4'-C1'-N9	10.13	116.30	108.20
2	AB	1279	G	N1-C6-O6	-10.13	113.82	119.90
35	BA	1511	G	C8-N9-C4	-10.13	102.35	106.40
2	AB	2012	G	C8-N9-C4	-10.13	102.35	106.40
2	AB	2026	U	C5-C6-N1	-10.12	117.64	122.70
35	BA	1517	G	N7-C8-N9	10.13	118.16	113.10
14	AN	60	ARG	NE-CZ-NH2	-10.12	115.24	120.30
35	BA	302	G	N9-C4-C5	10.12	109.45	105.40
37	BC	33	A	N1-C2-N3	-10.12	124.24	129.30
2	AB	498	G	N3-C4-C5	-10.12	123.54	128.60
2	AB	1170	C	N3-C4-C5	-10.12	117.85	121.90
2	AB	1985	C	N3-C4-N4	10.12	125.08	118.00
35	BA	552	U	O4'-C1'-N1	10.12	116.30	108.20
2	AB	735	A	C4-C5-C6	10.12	122.06	117.00
2	AB	725	G	C4-C5-N7	-10.12	106.75	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1002	G	C4-C5-N7	-10.12	106.75	110.80
35	BA	332	G	N3-C2-N2	-10.12	112.82	119.90
2	AB	2040	G	C4'-C3'-C2'	-10.12	92.48	102.60
2	AB	2238	G	N1-C6-O6	-10.11	113.83	119.90
35	BA	585	G	N7-C8-N9	10.11	118.16	113.10
36	BB	73	G	C6-N1-C2	-10.12	119.03	125.10
35	BA	669	G	N3-C4-C5	-10.11	123.54	128.60
2	AB	267	C	N3-C4-C5	-10.11	117.86	121.90
35	BA	223	A	O4'-C1'-N9	10.11	116.29	108.20
2	AB	799	G	N9-C4-C5	10.11	109.44	105.40
2	AB	950	G	C4-C5-N7	-10.11	106.76	110.80
35	BA	1287	A	N3-C4-N9	-10.11	119.31	127.40
2	AB	1174	U	C5-C4-O4	-10.11	119.84	125.90
2	AB	1299	G	O4'-C1'-N9	10.11	116.28	108.20
35	BA	1088	G	N1-C6-O6	10.11	125.96	119.90
2	AB	1848	A	C4-C5-C6	-10.10	111.95	117.00
2	AB	2497	A	C2-N3-C4	10.10	115.65	110.60
23	AW	95	PHE	CB-CG-CD2	-10.10	113.73	120.80
35	BA	1222	G	C3'-C2'-C1'	10.10	109.58	101.50
35	BA	1401	G	C3'-C2'-C1'	10.10	109.58	101.50
37	BC	38	G	C3'-C2'-C1'	-10.10	93.42	101.50
2	AB	1373	A	C5-C6-N1	10.10	122.75	117.70
2	AB	2049	G	C5-N7-C8	10.10	109.35	104.30
35	BA	449	G	N3-C4-N9	10.10	132.06	126.00
35	BA	559	A	C5-C6-N1	10.10	122.75	117.70
2	AB	1135	C	O4'-C1'-N1	10.10	116.28	108.20
2	AB	1667	G	N1-C2-N3	-10.10	117.84	123.90
46	BL	84	ARG	NE-CZ-NH1	-10.10	115.25	120.30
1	AA	58	A	N1-C6-N6	-10.10	112.54	118.60
2	AB	1805	A	N1-C2-N3	-10.10	124.25	129.30
31	A4	5	ARG	NE-CZ-NH2	10.10	125.35	120.30
35	BA	276	G	C2-N3-C4	10.10	116.95	111.90
35	BA	417	G	C2-N3-C4	10.10	116.95	111.90
35	BA	602	A	O4'-C1'-N9	10.10	116.28	108.20
35	BA	941	G	C5-C6-O6	-10.10	122.54	128.60
1	AA	107	G	C5'-C4'-O4'	10.09	121.21	109.10
2	AB	734	A	C5'-C4'-O4'	10.09	121.21	109.10
2	AB	305	C	C4-C5-C6	-10.09	112.36	117.40
2	AB	453	A	C8-N9-C4	-10.09	101.76	105.80
2	AB	891	G	N9-C4-C5	10.09	109.44	105.40
2	AB	1806	C	N1-C1'-C2'	-10.09	100.88	114.00
35	BA	645	G	C6-C5-N7	-10.09	124.35	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	125	A	O4'-C4'-C3'	10.09	114.17	106.10
2	AB	923	G	N9-C1'-C2'	-10.09	100.89	114.00
2	AB	2218	G	N3-C4-C5	-10.09	123.56	128.60
2	AB	2459	A	C8-N9-C4	-10.09	101.77	105.80
35	BA	795	C	C5-C4-N4	10.09	127.26	120.20
35	BA	1376	U	N1-C2-N3	10.09	120.95	114.90
52	BR	79	ARG	NE-CZ-NH1	-10.08	115.26	120.30
2	AB	1399	C	N3-C4-C5	10.08	125.93	121.90
2	AB	1954	G	C5-N7-C8	10.08	109.34	104.30
2	AB	661	A	O4'-C1'-N9	10.08	116.27	108.20
2	AB	2700	A	C8-N9-C4	-10.08	101.77	105.80
2	AB	253	C	C5-C6-N1	10.08	126.04	121.00
2	AB	2137	U	O4'-C1'-N1	10.08	116.26	108.20
36	BB	50	G	C5'-C4'-O4'	10.08	121.19	109.10
2	AB	1322	A	C2-N3-C4	10.08	115.64	110.60
2	AB	2569	G	C5-N7-C8	10.08	109.34	104.30
2	AB	2767	C	N3-C4-C5	-10.08	117.87	121.90
1	AA	92	C	N3-C4-C5	10.07	125.93	121.90
2	AB	1367	A	C6-N1-C2	-10.07	112.56	118.60
2	AB	1955	U	C4-C5-C6	10.07	125.75	119.70
2	AB	2527	C	N3-C2-O2	-10.07	114.85	121.90
2	AB	363	G	N3-C4-C5	-10.07	123.56	128.60
2	AB	494	G	O4'-C1'-N9	10.07	116.26	108.20
35	BA	187	G	C5-C6-N1	10.07	116.54	111.50
35	BA	489	C	N3-C4-C5	-10.07	117.87	121.90
2	AB	155	A	C4-C5-N7	-10.07	105.67	110.70
2	AB	732	C	C4'-C3'-C2'	-10.07	92.53	102.60
35	BA	729	A	C5-C6-N1	10.07	122.74	117.70
35	BA	609	A	C8-N9-C4	10.07	109.83	105.80
2	AB	655	A	N1-C2-N3	-10.07	124.27	129.30
2	AB	2129	C	O4'-C1'-N1	10.07	116.25	108.20
2	AB	2226	C	N1-C2-O2	10.07	124.94	118.90
35	BA	652	U	O4'-C1'-N1	10.07	116.25	108.20
35	BA	1206	G	N9-C4-C5	10.07	109.43	105.40
37	BC	35	G	N3-C4-C5	-10.07	123.57	128.60
35	BA	337	G	C5-C6-O6	10.06	134.64	128.60
35	BA	303	A	C8-N9-C4	-10.06	101.78	105.80
39	BE	138	ARG	NE-CZ-NH1	10.06	125.33	120.30
2	AB	1064	C	N3-C4-C5	-10.06	117.88	121.90
2	AB	1933	G	O4'-C1'-N9	10.06	116.25	108.20
35	BA	1036	A	N7-C8-N9	10.06	118.83	113.80
35	BA	1489	G	C5-C6-N1	10.06	116.53	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2154	A	C4-C5-N7	10.06	115.73	110.70
35	BA	1095	U	O4'-C1'-N1	10.06	116.25	108.20
2	AB	781	A	N1-C6-N6	-10.06	112.57	118.60
2	AB	1265	A	C8-N9-C4	-10.06	101.78	105.80
2	AB	1874	C	C6-N1-C2	-10.06	116.28	120.30
2	AB	1990	C	N1-C2-O2	10.06	124.93	118.90
14	AN	132	ARG	NE-CZ-NH1	10.06	125.33	120.30
2	AB	585	G	C8-N9-C4	-10.06	102.38	106.40
35	BA	1439	G	C5-C6-N1	10.05	116.53	111.50
2	AB	1300	G	C4-C5-N7	10.05	114.82	110.80
35	BA	355	C	C5'-C4'-O4'	10.05	121.16	109.10
35	BA	1417	G	C8-N9-C4	-10.05	102.38	106.40
1	AA	106	G	C2-N3-C4	10.05	116.92	111.90
35	BA	155	A	O4'-C1'-N9	10.05	116.24	108.20
2	AB	2712	C	N1-C2-O2	10.05	124.93	118.90
10	AJ	30	ARG	NE-CZ-NH2	-10.05	115.28	120.30
35	BA	372	C	N1-C2-O2	10.05	124.93	118.90
40	BF	228	ARG	NE-CZ-NH1	10.05	125.32	120.30
2	AB	393	C	C5-C4-N4	-10.04	113.17	120.20
35	BA	1064	G	C8-N9-C4	-10.04	102.38	106.40
2	AB	303	G	C6-C5-N7	-10.04	124.37	130.40
2	AB	1784	A	C4-C5-C6	-10.04	111.98	117.00
35	BA	502	A	O4'-C1'-N9	10.04	116.23	108.20
37	BC	31	U	O4'-C1'-N1	10.04	116.23	108.20
38	BD	10	G	C5-N7-C8	-10.04	99.28	104.30
35	BA	1409	C	O4'-C1'-N1	10.04	116.23	108.20
2	AB	208	C	O4'-C1'-N1	10.04	116.23	108.20
2	AB	2670	A	O4'-C1'-N9	10.04	116.23	108.20
2	AB	318	C	O4'-C1'-N1	10.04	116.23	108.20
2	AB	705	A	N1-C6-N6	-10.04	112.58	118.60
2	AB	1145	C	O4'-C1'-N1	10.04	116.23	108.20
2	AB	1370	C	C6-N1-C2	-10.04	116.28	120.30
35	BA	1476	A	C5-N7-C8	10.04	108.92	103.90
35	BA	1214	C	C6-N1-C2	10.04	124.31	120.30
2	AB	1492	G	C6-N1-C2	-10.03	119.08	125.10
2	AB	2783	U	O4'-C1'-N1	10.03	116.23	108.20
35	BA	92	U	O4'-C1'-N1	10.03	116.23	108.20
2	AB	2247	A	N7-C8-N9	-10.03	108.78	113.80
36	BB	70	C	N3-C4-N4	10.03	125.02	118.00
2	AB	760	G	N1-C2-N3	10.03	129.92	123.90
1	AA	40	U	C2-N3-C4	-10.03	120.98	127.00
35	BA	847	G	C6-N1-C2	-10.03	119.08	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2028	U	O4'-C1'-N1	10.03	116.22	108.20
2	AB	267	C	N3-C4-N4	10.03	125.02	118.00
35	BA	845	A	N7-C8-N9	10.03	118.81	113.80
36	BB	12	U	C2-N3-C4	-10.03	120.98	127.00
2	AB	280	U	N1-C2-O2	10.02	129.82	122.80
35	BA	1529	G	N3-C4-C5	-10.02	123.59	128.60
2	AB	1297	C	N3-C4-C5	-10.02	117.89	121.90
8	AH	54	ARG	NE-CZ-NH1	10.02	125.31	120.30
1	AA	6	G	C8-N9-C4	-10.02	102.39	106.40
2	AB	2121	G	C2-N3-C4	10.02	116.91	111.90
35	BA	1313	U	C1'-O4'-C4'	-10.02	101.88	109.90
2	AB	2440	C	C6-N1-C2	-10.02	116.29	120.30
2	AB	2681	C	C4-C5-C6	-10.02	112.39	117.40
2	AB	2903	U	C5-C6-N1	-10.02	117.69	122.70
35	BA	131	A	N1-C6-N6	-10.02	112.59	118.60
1	AA	60	C	N3-C4-C5	-10.02	117.89	121.90
2	AB	1459	G	O4'-C1'-N9	10.02	116.21	108.20
36	BB	35	C	O4'-C1'-N1	10.02	116.21	108.20
2	AB	2048	G	C5-C6-N1	10.02	116.51	111.50
2	AB	11	C	N1-C2-O2	10.01	124.91	118.90
2	AB	591	U	C5-C6-N1	-10.01	117.69	122.70
54	BT	10	ARG	NE-CZ-NH1	10.01	125.31	120.30
38	BD	58	A	C4-C5-C6	-10.01	111.99	117.00
2	AB	1613	G	N7-C8-N9	10.01	118.11	113.10
2	AB	2168	G	C8-N9-C4	-10.01	102.40	106.40
35	BA	176	C	C5-C6-N1	-10.01	116.00	121.00
35	BA	419	C	N1-C2-O2	10.01	124.91	118.90
35	BA	1163	A	N9-C4-C5	-10.01	101.80	105.80
2	AB	1984	G	N3-C4-C5	-10.01	123.60	128.60
35	BA	119	A	O4'-C1'-N9	-10.01	100.19	108.20
36	BB	72	U	O4'-C1'-N1	10.01	116.21	108.20
2	AB	1106	G	N9-C4-C5	10.01	109.40	105.40
2	AB	2682	A	C8-N9-C4	10.01	109.80	105.80
35	BA	679	C	C5-C4-N4	-10.01	113.20	120.20
2	AB	759	G	C2-N3-C4	10.00	116.90	111.90
35	BA	200	G	N1-C6-O6	10.00	125.90	119.90
39	BE	29	PHE	CB-CG-CD2	-10.00	113.80	120.80
2	AB	1386	C	N1-C1'-C2'	-10.00	101.00	112.00
35	BA	1139	G	N3-C2-N2	-10.00	112.90	119.90
2	AB	2116	G	N3-C2-N2	-10.00	112.90	119.90
35	BA	1370	G	C5-C6-N1	10.00	116.50	111.50
2	AB	1294	U	C3'-C2'-C1'	-10.00	93.50	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1198	G	N9-C4-C5	10.00	109.40	105.40
2	AB	1657	U	O4'-C1'-N1	9.99	116.19	108.20
2	AB	2168	G	N1-C2-N3	-9.99	117.90	123.90
35	BA	478	A	N9-C4-C5	9.99	109.80	105.80
1	AA	104	A	N3-C4-C5	-9.99	119.81	126.80
2	AB	190	A	O4'-C1'-N9	9.99	116.19	108.20
2	AB	1455	G	N3-C4-N9	9.99	132.00	126.00
35	BA	4	U	C1'-O4'-C4'	9.99	117.89	109.90
35	BA	664	G	C4-C5-N7	9.99	114.80	110.80
2	AB	715	A	C5-C6-N1	9.99	122.69	117.70
38	BD	67	C	O4'-C1'-N1	9.99	116.19	108.20
2	AB	293	U	C2-N3-C4	-9.99	121.01	127.00
2	AB	514	A	C4'-C3'-C2'	-9.99	92.61	102.60
2	AB	1277	G	C6-N1-C2	-9.99	119.11	125.10
35	BA	315	A	C4-C5-N7	-9.99	105.71	110.70
35	BA	1087	G	N3-C4-C5	-9.98	123.61	128.60
2	AB	884	U	N3-C2-O2	-9.98	115.21	122.20
1	AA	54	G	C8-N9-C4	-9.98	102.41	106.40
2	AB	29	U	C2-N3-C4	-9.98	121.01	127.00
2	AB	171	U	O4'-C1'-N1	9.98	116.19	108.20
2	AB	1160	G	C6-C5-N7	-9.98	124.41	130.40
2	AB	2755	C	O4'-C1'-N1	9.98	116.19	108.20
35	BA	165	G	N9-C4-C5	9.98	109.39	105.40
38	BD	43	G	N3-C2-N2	-9.98	112.91	119.90
2	AB	112	U	C5-C6-N1	-9.98	117.71	122.70
2	AB	882	G	C8-N9-C4	-9.98	102.41	106.40
2	AB	1004	U	C5-C4-O4	-9.98	119.91	125.90
2	AB	1052	C	C6-N1-C2	-9.98	116.31	120.30
2	AB	1358	G	C8-N9-C4	-9.98	102.41	106.40
2	AB	2679	A	C8-N9-C4	-9.98	101.81	105.80
35	BA	485	U	O4'-C1'-N1	9.98	116.18	108.20
2	AB	691	C	C5-C6-N1	9.97	125.98	121.00
2	AB	1467	U	C5-C6-N1	9.97	127.69	122.70
2	AB	1863	G	O4'-C1'-N9	9.97	116.18	108.20
2	AB	2647	U	O4'-C1'-N1	9.97	116.18	108.20
2	AB	2758	A	N9-C4-C5	9.97	109.79	105.80
35	BA	714	G	C6-C5-N7	-9.97	124.42	130.40
36	BB	73	G	C2-N3-C4	9.97	116.89	111.90
37	BC	15	G	C8-N9-C4	-9.97	102.41	106.40
2	AB	2878	U	O4'-C1'-N1	9.97	116.17	108.20
35	BA	108	G	C4-C5-N7	-9.97	106.81	110.80
38	BD	10	G	C2-N3-C4	9.97	116.88	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2305	U	O4'-C1'-N1	9.96	116.17	108.20
2	AB	2659	G	C5-C6-O6	9.96	134.58	128.60
35	BA	1311	A	C2-N3-C4	9.96	115.58	110.60
1	AA	43	C	C1'-O4'-C4'	-9.96	101.93	109.90
2	AB	129	C	C4-C5-C6	-9.96	112.42	117.40
2	AB	281	C	C2-N3-C4	9.96	124.88	119.90
2	AB	330	A	C5-C6-N6	-9.96	115.73	123.70
2	AB	374	A	C5-C6-N1	9.96	122.68	117.70
35	BA	678	U	C5'-C4'-O4'	9.96	121.06	109.10
35	BA	746	A	C5-C6-N1	9.96	122.68	117.70
2	AB	447	A	O4'-C1'-N9	9.96	116.17	108.20
2	AB	1675	C	C5-C6-N1	9.96	125.98	121.00
35	BA	227	G	C6-N1-C2	-9.96	119.12	125.10
54	BT	27	PHE	CB-CG-CD1	-9.96	113.83	120.80
2	AB	324	A	N1-C6-N6	-9.95	112.63	118.60
2	AB	1180	U	N3-C2-O2	-9.96	115.23	122.20
35	BA	564	C	O4'-C1'-N1	9.96	116.16	108.20
35	BA	388	G	C8-N9-C4	9.95	110.38	106.40
2	AB	2365	G	C8-N9-C4	-9.95	102.42	106.40
2	AB	1734	G	O4'-C1'-N9	9.95	116.16	108.20
35	BA	32	A	C8-N9-C4	-9.95	101.82	105.80
35	BA	377	G	N3-C4-C5	-9.95	123.62	128.60
35	BA	770	C	C2-N3-C4	9.95	124.87	119.90
2	AB	324	A	C2-N3-C4	9.95	115.57	110.60
2	AB	438	G	N1-C6-O6	9.95	125.87	119.90
2	AB	2508	G	C2-N3-C4	9.94	116.87	111.90
35	BA	802	A	O4'-C1'-N9	9.95	116.16	108.20
35	BA	1290	G	C5-N7-C8	-9.95	99.33	104.30
2	AB	401	A	N7-C8-N9	9.94	118.77	113.80
35	BA	165	G	N3-C4-C5	-9.94	123.63	128.60
2	AB	1305	C	O4'-C1'-N1	9.94	116.15	108.20
2	AB	2466	C	N3-C2-O2	-9.94	114.94	121.90
2	AB	2532	G	O4'-C1'-N9	9.94	116.15	108.20
35	BA	530	G	N3-C4-N9	9.94	131.96	126.00
2	AB	845	A	N9-C4-C5	9.94	109.77	105.80
2	AB	1155	A	C5-N7-C8	9.94	108.87	103.90
2	AB	1699	G	N9-C4-C5	-9.94	101.43	105.40
35	BA	130	A	C6-C5-N7	-9.94	125.34	132.30
35	BA	923	A	N1-C6-N6	9.94	124.56	118.60
2	AB	2001	C	N1-C2-O2	9.93	124.86	118.90
2	AB	2555	U	N1-C2-O2	9.93	129.75	122.80
35	BA	781	A	O4'-C1'-N9	9.93	116.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	836	G	C2-N3-C4	9.93	116.87	111.90
2	AB	54	G	N1-C6-O6	-9.93	113.94	119.90
2	AB	748	G	N9-C4-C5	9.93	109.37	105.40
2	AB	1509	A	C5-C6-N1	-9.93	112.73	117.70
2	AB	2207	C	N1-C2-O2	9.93	124.86	118.90
35	BA	246	A	O4'-C1'-N9	9.93	116.14	108.20
2	AB	2844	G	N3-C4-N9	9.93	131.96	126.00
2	AB	976	G	N7-C8-N9	-9.93	108.14	113.10
5	AE	141	ARG	NE-CZ-NH1	9.93	125.26	120.30
35	BA	146	G	O4'-C1'-N9	9.93	116.14	108.20
35	BA	211	G	N9-C4-C5	9.93	109.37	105.40
38	BD	14	A	C6-N1-C2	-9.93	112.64	118.60
1	AA	61	G	C4-C5-N7	-9.92	106.83	110.80
2	AB	159	G	C5-C6-O6	-9.92	122.65	128.60
2	AB	758	C	N1-C2-O2	9.92	124.85	118.90
2	AB	1011	G	O4'-C1'-N9	9.92	116.14	108.20
2	AB	2056	G	N9-C4-C5	9.92	109.37	105.40
35	BA	43	C	N1-C2-O2	9.92	124.85	118.90
2	AB	751	A	C8-N9-C4	-9.92	101.83	105.80
2	AB	1013	C	N1-C2-O2	9.92	124.85	118.90
2	AB	1311	G	C8-N9-C4	-9.92	102.43	106.40
2	AB	1407	G	O4'-C1'-N9	9.92	116.14	108.20
2	AB	1926	U	C6-N1-C2	-9.92	115.05	121.00
35	BA	995	C	C2-N3-C4	9.92	124.86	119.90
35	BA	346	G	O4'-C1'-N9	9.92	116.14	108.20
2	AB	253	C	N1-C2-O2	9.92	124.85	118.90
35	BA	220	G	N9-C1'-C2'	-9.92	101.09	112.00
35	BA	714	G	C1'-O4'-C4'	-9.92	101.97	109.90
2	AB	1177	G	N7-C8-N9	9.91	118.06	113.10
1	AA	119	A	C5-C6-N1	9.91	122.66	117.70
2	AB	869	G	N3-C4-C5	-9.91	123.64	128.60
2	AB	1931	U	N3-C4-C5	-9.91	108.65	114.60
35	BA	960	U	C5-C6-N1	9.91	127.66	122.70
35	BA	1063	C	C1'-O4'-C4'	9.91	117.83	109.90
37	BC	47	C	N1-C2-O2	9.91	124.85	118.90
48	BN	127	ARG	NE-CZ-NH1	-9.91	115.34	120.30
2	AB	347	A	C4-C5-C6	-9.91	112.05	117.00
2	AB	60	G	C5-N7-C8	9.91	109.25	104.30
2	AB	456	C	N1-C2-O2	9.91	124.85	118.90
2	AB	522	A	C2-N3-C4	9.91	115.56	110.60
2	AB	791	C	C6-N1-C2	-9.91	116.34	120.30
2	AB	959	A	N7-C8-N9	-9.91	108.85	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	207	C	N3-C4-N4	9.91	124.94	118.00
1	AA	40	U	N1-C2-N3	9.91	120.84	114.90
2	AB	399	U	C5'-C4'-O4'	9.91	120.99	109.10
2	AB	865	C	N3-C4-C5	-9.91	117.94	121.90
2	AB	49	A	C4-C5-N7	-9.91	105.75	110.70
2	AB	769	U	N3-C2-O2	-9.91	115.27	122.20
2	AB	2000	C	C2-N3-C4	9.91	124.85	119.90
2	AB	2288	A	C4-C5-C6	9.91	121.95	117.00
2	AB	523	C	N1-C1'-C2'	-9.90	101.11	112.00
2	AB	641	U	C4-C5-C6	9.90	125.64	119.70
2	AB	2049	G	C4-C5-N7	-9.90	106.84	110.80
2	AB	2506	U	C5-C4-O4	9.90	131.84	125.90
35	BA	57	G	O4'-C1'-N9	9.90	116.12	108.20
2	AB	247	G	N3-C4-N9	9.90	131.94	126.00
2	AB	339	U	O4'-C1'-N1	9.90	116.12	108.20
2	AB	2600	A	C8-N9-C4	9.90	109.76	105.80
2	AB	144	A	N9-C4-C5	9.90	109.76	105.80
35	BA	9	G	C8-N9-C4	-9.90	102.44	106.40
35	BA	1340	A	O4'-C1'-N9	9.90	116.12	108.20
38	BD	54	G	N3-C4-C5	-9.90	123.65	128.60
2	AB	2532	G	N1-C6-O6	-9.90	113.96	119.90
35	BA	122	G	C8-N9-C4	9.90	110.36	106.40
2	AB	2726	A	N1-C2-N3	9.89	134.25	129.30
35	BA	700	G	N3-C4-C5	-9.89	123.65	128.60
55	BU	42	ARG	NE-CZ-NH1	9.89	125.25	120.30
2	AB	1934	C	O4'-C1'-N1	9.89	116.11	108.20
2	AB	1958	C	N3-C4-N4	9.89	124.92	118.00
1	AA	112	G	C8-N9-C4	-9.89	102.44	106.40
2	AB	1865	U	O4'-C1'-N1	9.89	116.11	108.20
2	AB	1521	G	C8-N9-C4	-9.89	102.44	106.40
2	AB	1990	C	O4'-C1'-N1	9.89	116.11	108.20
2	AB	2005	A	N1-C6-N6	-9.89	112.67	118.60
2	AB	2692	G	O4'-C1'-N9	9.89	116.11	108.20
2	AB	2897	U	N3-C4-O4	9.89	126.32	119.40
31	A4	39	ASP	CB-CG-OD1	-9.89	109.40	118.30
35	BA	1104	G	C2-N3-C4	9.89	116.84	111.90
35	BA	1193	G	N3-C4-C5	-9.89	123.66	128.60
1	AA	45	A	C5-C6-N1	9.88	122.64	117.70
35	BA	14	U	C4-C5-C6	9.89	125.63	119.70
2	AB	1219	U	N3-C2-O2	-9.88	115.28	122.20
2	AB	1517	G	C2-N3-C4	9.88	116.84	111.90
2	AB	1813	G	C5-C6-N1	9.88	116.44	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2246	G	N9-C4-C5	9.89	109.36	105.40
2	AB	2396	G	N1-C6-O6	9.88	125.83	119.90
2	AB	2797	U	C4'-C3'-C2'	-9.88	92.72	102.60
2	AB	1660	G	N3-C2-N2	-9.88	112.98	119.90
35	BA	20	U	O4'-C1'-N1	9.88	116.11	108.20
1	AA	71	C	C5-C6-N1	9.88	125.94	121.00
2	AB	188	G	N9-C4-C5	9.88	109.35	105.40
2	AB	654	A	C5'-C4'-O4'	9.88	120.96	109.10
2	AB	1097	U	N3-C2-O2	-9.88	115.28	122.20
10	AJ	124	ARG	NE-CZ-NH2	-9.88	115.36	120.30
35	BA	590	U	N1-C2-N3	9.88	120.83	114.90
2	AB	1183	U	O4'-C1'-N1	9.88	116.10	108.20
2	AB	1682	G	C8-N9-C4	-9.88	102.45	106.40
2	AB	2689	U	C5-C6-N1	-9.88	117.76	122.70
2	AB	90	U	O4'-C1'-N1	9.88	116.10	108.20
2	AB	1770	G	N3-C4-C5	-9.88	123.66	128.60
38	BD	51	U	N1-C2-N3	9.87	120.82	114.90
41	BG	2	ARG	NE-CZ-NH2	-9.88	115.36	120.30
2	AB	1452	G	C2-N3-C4	9.87	116.84	111.90
2	AB	2673	G	C5-N7-C8	-9.87	99.36	104.30
2	AB	2690	U	C4-C5-C6	9.87	125.62	119.70
7	AG	76	PHE	CB-CG-CD1	-9.87	113.89	120.80
35	BA	795	C	N3-C4-C5	-9.87	117.95	121.90
35	BA	1096	C	C5-C4-N4	9.87	127.11	120.20
36	BB	59	G	C8-N9-C4	-9.87	102.45	106.40
38	BD	3	C	N3-C4-N4	9.87	124.91	118.00
38	BD	49	C	O4'-C1'-N1	9.87	116.10	108.20
35	BA	1287	A	N1-C6-N6	-9.87	112.68	118.60
35	BA	50	A	C2-N3-C4	9.87	115.53	110.60
35	BA	68	G	N3-C4-N9	9.87	131.92	126.00
35	BA	818	G	C8-N9-C4	-9.87	102.45	106.40
1	AA	31	C	C2-N3-C4	9.87	124.83	119.90
27	A0	23	ARG	NE-CZ-NH2	-9.87	115.37	120.30
2	AB	1937	A	N1-C2-N3	-9.86	124.37	129.30
35	BA	534	U	C4-C5-C6	9.87	125.62	119.70
35	BA	799	G	C5-C6-O6	-9.87	122.68	128.60
2	AB	764	A	N9-C4-C5	9.86	109.75	105.80
2	AB	408	G	C8-N9-C4	-9.86	102.46	106.40
2	AB	875	G	N1-C6-O6	-9.86	113.98	119.90
2	AB	1879	C	C4'-C3'-C2'	-9.86	92.74	102.60
2	AB	1954	G	N3-C4-C5	-9.86	123.67	128.60
35	BA	200	G	N3-C4-C5	-9.86	123.67	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	252	U	C5-C4-O4	9.86	131.82	125.90
2	AB	1528	A	N9-C4-C5	9.86	109.74	105.80
35	BA	800	G	N1-C6-O6	9.86	125.82	119.90
2	AB	970	U	O4'-C1'-N1	9.86	116.08	108.20
2	AB	1681	G	N3-C4-C5	-9.86	123.67	128.60
2	AB	967	U	C3'-C2'-C1'	-9.85	93.62	101.50
2	AB	1539	U	C5-C6-N1	-9.85	117.77	122.70
2	AB	1876	A	N9-C4-C5	9.85	109.74	105.80
2	AB	1663	G	N1-C6-O6	-9.85	113.99	119.90
4	AD	237	ARG	NE-CZ-NH1	9.85	125.23	120.30
7	AG	5	ASP	CB-CG-OD1	-9.85	109.43	118.30
14	AN	126	ARG	NE-CZ-NH1	9.85	125.23	120.30
35	BA	219	U	O4'-C1'-N1	9.85	116.08	108.20
2	AB	582	A	N1-C2-N3	-9.85	124.38	129.30
2	AB	774	G	N9-C4-C5	9.85	109.34	105.40
2	AB	1767	G	C4'-C3'-C2'	-9.85	92.75	102.60
2	AB	1843	C	C6-N1-C2	9.85	124.24	120.30
35	BA	1132	C	C6-N1-C2	-9.85	116.36	120.30
2	AB	776	G	O4'-C1'-N9	9.85	116.08	108.20
35	BA	512	U	C5-C4-O4	-9.85	119.99	125.90
2	AB	511	U	N3-C4-C5	-9.84	108.69	114.60
2	AB	2428	G	C5-C6-O6	-9.84	122.69	128.60
2	AB	2450	A	C8-N9-C4	-9.84	101.86	105.80
35	BA	293	G	C4-C5-N7	-9.84	106.86	110.80
1	AA	70	C	C2-N3-C4	9.84	124.82	119.90
2	AB	664	G	N7-C8-N9	-9.84	108.18	113.10
35	BA	38	G	N7-C8-N9	9.84	118.02	113.10
38	BD	74	A	C8-N9-C4	-9.84	101.86	105.80
2	AB	2079	U	C5'-C4'-O4'	9.84	120.91	109.10
35	BA	1072	G	N1-C6-O6	-9.84	114.00	119.90
35	BA	727	G	C4-C5-C6	9.84	124.70	118.80
2	AB	1502	A	C5-C6-N6	-9.84	115.83	123.70
35	BA	171	A	C3'-C2'-C1'	9.84	109.37	101.50
43	BI	4	TYR	CG-CD1-CE1	-9.84	113.43	121.30
2	AB	2405	G	C8-N9-C4	-9.83	102.47	106.40
29	A2	25	ARG	NE-CZ-NH2	-9.83	115.38	120.30
2	AB	1711	A	C5-C6-N1	9.83	122.62	117.70
2	AB	2074	U	N1-C2-O2	9.83	129.68	122.80
35	BA	684	U	C4-C5-C6	9.83	125.60	119.70
2	AB	112	U	C1'-O4'-C4'	-9.83	102.04	109.90
2	AB	2078	C	C4-C5-C6	-9.83	112.48	117.40
35	BA	75	G	N3-C4-C5	-9.83	123.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	61	G	N3-C4-C5	-9.83	123.69	128.60
2	AB	822	G	C4-C5-N7	-9.83	106.87	110.80
2	AB	1043	C	N1-C2-O2	9.83	124.80	118.90
2	AB	1490	A	N1-C2-N3	-9.83	124.39	129.30
2	AB	2481	G	N9-C4-C5	9.83	109.33	105.40
35	BA	571	U	O4'-C1'-N1	9.83	116.06	108.20
35	BA	288	A	N9-C4-C5	9.82	109.73	105.80
2	AB	647	G	C4-C5-N7	-9.82	106.87	110.80
2	AB	1983	G	N7-C8-N9	-9.82	108.19	113.10
35	BA	24	U	C5-C4-O4	-9.82	120.00	125.90
35	BA	1190	G	N9-C4-C5	9.82	109.33	105.40
2	AB	259	G	C5-C6-N1	9.82	116.41	111.50
45	BK	12	ARG	NE-CZ-NH1	9.82	125.21	120.30
2	AB	347	A	N7-C8-N9	9.82	118.71	113.80
2	AB	2169	A	N1-C2-N3	-9.82	124.39	129.30
2	AB	2573	C	N1-C2-O2	9.82	124.79	118.90
2	AB	2774	C	N3-C4-C5	9.82	125.83	121.90
35	BA	1028	C	C5'-C4'-O4'	9.82	120.88	109.10
2	AB	631	A	C8-N9-C4	-9.82	101.87	105.80
2	AB	1009	A	N3-C4-C5	-9.82	119.93	126.80
2	AB	1750	G	C5-N7-C8	-9.82	99.39	104.30
2	AB	1866	A	C4-C5-C6	9.82	121.91	117.00
35	BA	262	A	C5-C6-N1	9.82	122.61	117.70
35	BA	290	C	C5'-C4'-O4'	9.82	120.88	109.10
35	BA	1076	U	C2-N3-C4	-9.82	121.11	127.00
35	BA	488	C	O4'-C1'-N1	9.81	116.05	108.20
35	BA	797	C	C6-N1-C2	-9.81	116.38	120.30
36	BB	50	G	C8-N9-C4	-9.81	102.47	106.40
2	AB	334	C	N1-C2-O2	9.81	124.79	118.90
35	BA	800	G	C4-C5-C6	9.81	124.69	118.80
2	AB	1413	A	O4'-C1'-N9	9.80	116.04	108.20
35	BA	29	U	O4'-C1'-N1	9.80	116.04	108.20
35	BA	975	A	C5-N7-C8	-9.81	99.00	103.90
35	BA	1236	A	C5-C6-N1	9.81	122.60	117.70
2	AB	334	C	O4'-C1'-N1	9.80	116.04	108.20
2	AB	1209	U	C6-N1-C2	-9.80	115.12	121.00
2	AB	1643	G	N9-C4-C5	-9.80	101.48	105.40
2	AB	2550	G	C5-N7-C8	-9.80	99.40	104.30
35	BA	1468	A	C5-N7-C8	9.80	108.80	103.90
2	AB	285	G	O4'-C1'-N9	9.80	116.04	108.20
2	AB	788	A	O4'-C4'-C3'	9.80	113.94	106.10
2	AB	1082	U	O4'-C1'-N1	9.80	116.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1452	G	N1-C2-N3	-9.80	118.02	123.90
3	AC	162	ARG	NE-CZ-NH2	-9.80	115.40	120.30
35	BA	593	U	C2-N3-C4	-9.80	121.12	127.00
2	AB	2055	C	O4'-C1'-N1	9.80	116.04	108.20
2	AB	2112	G	C8-N9-C4	-9.80	102.48	106.40
2	AB	2900	A	C8-N9-C4	-9.80	101.88	105.80
1	AA	94	A	C4-C5-C6	-9.80	112.10	117.00
2	AB	197	A	N1-C2-N3	9.80	134.20	129.30
2	AB	2020	A	C8-N9-C4	-9.80	101.88	105.80
2	AB	897	C	N1-C2-O2	-9.80	113.02	118.90
35	BA	428	G	C2-N3-C4	-9.80	107.00	111.90
2	AB	403	U	O4'-C1'-N1	9.79	116.04	108.20
2	AB	1819	A	C4-C5-N7	-9.80	105.80	110.70
2	AB	1128	G	C6-N1-C2	-9.79	119.22	125.10
35	BA	850	U	O4'-C1'-N1	9.79	116.04	108.20
35	BA	914	A	C8-N9-C4	9.79	109.72	105.80
35	BA	944	G	N7-C8-N9	9.79	118.00	113.10
2	AB	775	G	C5-C6-N1	9.79	116.39	111.50
35	BA	486	U	O4'-C1'-N1	9.79	116.03	108.20
35	BA	731	G	C8-N9-C4	-9.79	102.48	106.40
2	AB	1876	A	N1-C2-N3	9.79	134.19	129.30
2	AB	953	G	N3-C2-N2	-9.79	113.05	119.90
2	AB	1640	A	C2-N3-C4	9.79	115.49	110.60
2	AB	2642	G	C4-C5-N7	-9.79	106.89	110.80
35	BA	1370	G	O4'-C1'-N9	9.79	116.03	108.20
2	AB	468	G	C2-N3-C4	9.79	116.79	111.90
2	AB	1494	A	C8-N9-C4	-9.79	101.89	105.80
2	AB	1840	G	C8-N9-C4	-9.79	102.49	106.40
2	AB	2048	G	C8-N9-C4	-9.79	102.49	106.40
35	BA	568	G	N9-C4-C5	9.78	109.31	105.40
35	BA	978	A	C8-N9-C4	-9.79	101.89	105.80
35	BA	987	G	C8-N9-C4	-9.79	102.49	106.40
35	BA	1424	U	O4'-C1'-N1	9.79	116.03	108.20
2	AB	65	U	C2-N3-C4	-9.78	121.13	127.00
2	AB	1043	C	N1-C2-N3	-9.78	112.35	119.20
2	AB	1281	G	C5-C6-N1	9.78	116.39	111.50
2	AB	1894	C	N3-C4-N4	9.78	124.85	118.00
2	AB	2838	G	C5-C6-N1	9.78	116.39	111.50
2	AB	500	G	C4-C5-C6	9.78	124.67	118.80
2	AB	1403	A	N7-C8-N9	9.78	118.69	113.80
36	BB	67	G	N9-C4-C5	9.78	109.31	105.40
2	AB	1507	C	N3-C4-C5	9.78	125.81	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2026	U	N3-C2-O2	-9.78	115.36	122.20
35	BA	778	G	N3-C4-C5	-9.78	123.71	128.60
35	BA	1293	C	C4-C5-C6	-9.78	112.51	117.40
2	AB	163	C	O4'-C1'-N1	9.77	116.02	108.20
2	AB	551	G	C2-N3-C4	9.77	116.79	111.90
2	AB	696	G	N3-C4-C5	-9.77	123.71	128.60
2	AB	1710	G	O4'-C1'-N9	9.77	116.02	108.20
2	AB	812	C	N1-C2-O2	9.77	124.76	118.90
2	AB	937	C	N3-C4-C5	-9.77	117.99	121.90
2	AB	41	C	N3-C4-C5	-9.77	117.99	121.90
2	AB	1887	C	N1-C2-O2	9.77	124.76	118.90
35	BA	1287	A	C4-C5-N7	-9.77	105.81	110.70
38	BD	28	U	N1-C2-O2	-9.77	115.96	122.80
2	AB	392	U	C5-C6-N1	-9.76	117.82	122.70
35	BA	170	U	N1-C2-N3	9.76	120.76	114.90
35	BA	1250	A	C8-N9-C4	-9.76	101.89	105.80
2	AB	998	C	N1-C2-O2	9.76	124.76	118.90
36	BB	2	G	C4-C5-N7	-9.76	106.90	110.80
37	BC	38	G	C5-C6-N1	9.76	116.38	111.50
1	AA	85	G	N9-C4-C5	-9.76	101.50	105.40
2	AB	2331	G	N9-C1'-C2'	-9.76	101.27	112.00
2	AB	9	G	N9-C4-C5	-9.76	101.50	105.40
2	AB	225	C	N3-C4-N4	9.76	124.83	118.00
2	AB	1165	A	O4'-C1'-N9	9.76	116.01	108.20
2	AB	1361	G	N3-C4-C5	-9.76	123.72	128.60
2	AB	1788	C	C5-C4-N4	-9.76	113.37	120.20
2	AB	2539	C	N3-C4-C5	-9.76	118.00	121.90
35	BA	560	A	C2-N3-C4	9.76	115.48	110.60
2	AB	924	G	C6-C5-N7	9.76	136.25	130.40
2	AB	1609	A	O4'-C1'-N9	9.76	116.00	108.20
35	BA	709	U	O4'-C1'-N1	9.76	116.00	108.20
35	BA	1414	U	C5-C6-N1	-9.76	117.82	122.70
2	AB	775	G	C6-N1-C2	-9.75	119.25	125.10
35	BA	1120	C	C4'-C3'-C2'	-9.75	92.85	102.60
2	AB	1168	G	N3-C4-C5	-9.75	123.72	128.60
2	AB	2770	G	C8-N9-C4	-9.75	102.50	106.40
49	BO	120	ARG	NE-CZ-NH1	9.75	125.18	120.30
2	AB	331	C	C5'-C4'-O4'	9.75	120.80	109.10
2	AB	1740	G	C5-C6-O6	-9.75	122.75	128.60
35	BA	760	G	C2-N3-C4	9.75	116.78	111.90
2	AB	240	C	N1-C2-O2	9.75	124.75	118.90
2	AB	1839	G	C8-N9-C4	-9.75	102.50	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2881	U	C2-N3-C4	-9.75	121.15	127.00
35	BA	766	A	C1'-O4'-C4'	-9.75	102.10	109.90
35	BA	1021	A	C8-N9-C4	-9.75	101.90	105.80
2	AB	1558	C	O4'-C1'-N1	9.74	116.00	108.20
35	BA	322	C	N1-C2-O2	9.74	124.75	118.90
2	AB	406	G	C8-N9-C4	-9.74	102.50	106.40
2	AB	437	U	O4'-C1'-N1	9.74	115.99	108.20
2	AB	887	U	N3-C2-O2	-9.74	115.38	122.20
2	AB	1277	G	N9-C4-C5	9.74	109.30	105.40
2	AB	2053	G	C4-C5-N7	-9.74	106.90	110.80
2	AB	718	A	C5-C6-N1	9.74	122.57	117.70
35	BA	220	G	C4-C5-N7	-9.74	106.91	110.80
35	BA	286	C	N1-C2-O2	9.74	124.74	118.90
35	BA	680	C	O4'-C1'-N1	9.74	115.99	108.20
35	BA	1241	G	N1-C2-N2	9.74	124.97	116.20
35	BA	1276	G	C4-C5-N7	-9.74	106.90	110.80
2	AB	806	C	C6-N1-C2	9.74	124.19	120.30
2	AB	1232	G	N1-C6-O6	-9.74	114.06	119.90
2	AB	2450	A	N7-C8-N9	9.74	118.67	113.80
2	AB	2731	G	N3-C2-N2	-9.74	113.08	119.90
35	BA	751	U	O4'-C1'-N1	9.74	115.99	108.20
35	BA	276	G	C8-N9-C4	-9.73	102.51	106.40
35	BA	237	G	N9-C4-C5	-9.73	101.51	105.40
2	AB	1150	C	O4'-C1'-N1	9.73	115.98	108.20
35	BA	1411	C	C2-N3-C4	9.73	124.77	119.90
36	BB	38	A	O4'-C1'-N9	9.73	115.98	108.20
2	AB	230	G	N3-C4-N9	-9.73	120.16	126.00
2	AB	1890	A	C5-C6-N1	9.73	122.56	117.70
2	AB	2098	U	C1'-O4'-C4'	-9.73	102.12	109.90
37	BC	22	G	O4'-C1'-N9	9.73	115.98	108.20
2	AB	1524	G	N3-C4-N9	9.72	131.83	126.00
35	BA	1400	C	N1-C2-O2	9.72	124.73	118.90
38	BD	70	C	C5-C4-N4	9.72	127.01	120.20
2	AB	424	G	C2-N3-C4	9.72	116.76	111.90
2	AB	850	U	C4-C5-C6	9.72	125.53	119.70
2	AB	2215	C	N3-C4-N4	9.72	124.80	118.00
2	AB	2239	G	C8-N9-C4	-9.72	102.51	106.40
2	AB	2294	G	N3-C4-C5	-9.72	123.74	128.60
10	AJ	124	ARG	NE-CZ-NH1	9.72	125.16	120.30
35	BA	289	G	N3-C4-C5	-9.72	123.74	128.60
35	BA	541	G	O4'-C1'-N9	9.72	115.98	108.20
35	BA	1221	G	C5-N7-C8	-9.72	99.44	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	BI	130	GLU	OE1-CD-OE2	9.72	134.97	123.30
58	BX	17	ARG	NE-CZ-NH1	9.72	125.16	120.30
2	AB	168	G	C5-N7-C8	-9.72	99.44	104.30
2	AB	1864	U	C5-C4-O4	9.72	131.73	125.90
2	AB	2197	U	C5-C6-N1	9.72	127.56	122.70
2	AB	1901	A	C5-N7-C8	-9.72	99.04	103.90
2	AB	2881	U	C1'-O4'-C4'	-9.72	102.13	109.90
36	BB	67	G	C4-C5-C6	9.72	124.63	118.80
55	BU	2	ARG	NE-CZ-NH2	-9.72	115.44	120.30
2	AB	2415	G	C5-C6-O6	-9.71	122.77	128.60
2	AB	2529	G	N1-C6-O6	-9.71	114.07	119.90
2	AB	2602	A	O4'-C4'-C3'	9.71	113.87	106.10
2	AB	51	G	N7-C8-N9	9.71	117.96	113.10
2	AB	583	G	C5-C6-O6	9.71	134.43	128.60
35	BA	1510	C	C3'-C2'-C1'	-9.71	93.73	101.50
2	AB	1820	U	O4'-C1'-N1	9.71	115.97	108.20
35	BA	408	A	C6-N1-C2	9.71	124.42	118.60
35	BA	944	G	N9-C4-C5	9.71	109.28	105.40
2	AB	2804	U	C6-N1-C2	-9.71	115.18	121.00
35	BA	467	U	C5-C6-N1	-9.71	117.85	122.70
2	AB	116	C	C6-N1-C2	9.70	124.18	120.30
2	AB	630	G	C6-C5-N7	-9.70	124.58	130.40
35	BA	402	G	C4-C5-N7	-9.70	106.92	110.80
2	AB	588	U	O4'-C1'-N1	9.70	115.96	108.20
2	AB	2269	G	N3-C4-C5	-9.70	123.75	128.60
2	AB	2529	G	C8-N9-C4	-9.70	102.52	106.40
35	BA	936	C	C6-N1-C2	-9.70	116.42	120.30
2	AB	507	A	C5-C6-N1	9.70	122.55	117.70
2	AB	1228	G	C8-N9-C4	-9.70	102.52	106.40
35	BA	1133	G	C8-N9-C4	-9.70	102.52	106.40
35	BA	1233	G	C8-N9-C4	-9.70	102.52	106.40
2	AB	895	U	O4'-C1'-C2'	-9.70	96.10	105.80
2	AB	2180	U	O4'-C1'-N1	9.70	115.96	108.20
35	BA	344	A	C8-N9-C4	-9.70	101.92	105.80
35	BA	639	G	N3-C2-N2	-9.70	113.11	119.90
35	BA	698	G	N3-C4-N9	9.70	131.82	126.00
35	BA	424	G	C8-N9-C4	-9.69	102.52	106.40
2	AB	530	G	C4-C5-N7	9.69	114.68	110.80
2	AB	2730	C	O4'-C1'-N1	9.69	115.95	108.20
35	BA	1344	C	C4-C5-C6	-9.69	112.55	117.40
39	BE	224	ARG	NE-CZ-NH2	-9.69	115.45	120.30
35	BA	724	G	C2-N3-C4	9.69	116.75	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	801	U	O4'-C1'-N1	9.69	115.95	108.20
35	BA	1537	U	N3-C4-O4	-9.69	112.62	119.40
2	AB	564	C	O4'-C1'-N1	9.68	115.95	108.20
37	BC	40	G	C4-C5-N7	-9.68	106.93	110.80
2	AB	161	A	N1-C6-N6	-9.68	112.79	118.60
2	AB	256	A	C4-C5-N7	9.68	115.54	110.70
35	BA	799	G	C5-C6-N1	9.68	116.34	111.50
2	AB	1531	C	C2-N3-C4	-9.68	115.06	119.90
2	AB	1551	A	C8-N9-C4	-9.68	101.93	105.80
2	AB	2683	C	N3-C4-C5	-9.68	118.03	121.90
35	BA	559	A	C2-N3-C4	9.68	115.44	110.60
2	AB	100	U	C4-C5-C6	9.68	125.51	119.70
2	AB	655	A	C2-N3-C4	9.68	115.44	110.60
35	BA	1153	G	N9-C4-C5	9.68	109.27	105.40
1	AA	51	G	C6-C5-N7	9.68	136.21	130.40
36	BB	5	G	C8-N9-C4	-9.68	102.53	106.40
2	AB	1731	G	N7-C8-N9	9.67	117.94	113.10
2	AB	2536	G	C5-C6-N1	9.67	116.34	111.50
2	AB	2824	C	C4-C5-C6	-9.67	112.56	117.40
2	AB	115	C	N3-C4-C5	-9.67	118.03	121.90
2	AB	1000	A	N1-C2-N3	-9.67	124.46	129.30
35	BA	184	G	N9-C4-C5	9.67	109.27	105.40
2	AB	526	A	N1-C2-N3	-9.67	124.47	129.30
2	AB	1103	A	O4'-C1'-N9	9.67	115.94	108.20
2	AB	1424	G	O4'-C1'-N9	9.67	115.94	108.20
35	BA	358	U	O4'-C1'-N1	9.67	115.94	108.20
35	BA	631	C	C3'-C2'-C1'	9.67	109.23	101.50
2	AB	1381	G	N9-C4-C5	9.67	109.27	105.40
2	AB	1667	G	C2-N3-C4	9.67	116.73	111.90
35	BA	200	G	C5-N7-C8	-9.67	99.47	104.30
35	BA	270	A	C4-C5-C6	-9.67	112.17	117.00
35	BA	726	C	O4'-C1'-N1	9.67	115.93	108.20
35	BA	727	G	C5-C6-N1	-9.67	106.67	111.50
35	BA	1482	G	N3-C4-N9	9.67	131.80	126.00
37	BC	44	U	N3-C4-O4	-9.67	112.63	119.40
2	AB	2432	A	N7-C8-N9	9.66	118.63	113.80
2	AB	2693	G	N1-C6-O6	9.66	125.70	119.90
35	BA	269	C	N3-C4-N4	-9.66	111.23	118.00
2	AB	4	U	N3-C2-O2	-9.66	115.44	122.20
1	AA	53	A	O4'-C1'-N9	9.66	115.93	108.20
2	AB	1607	C	C2-N3-C4	9.66	124.73	119.90
2	AB	1721	G	O4'-C1'-N9	9.66	115.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	142	G	C5-C6-N1	9.66	116.33	111.50
35	BA	778	G	O4'-C1'-N9	9.66	115.93	108.20
35	BA	933	G	N3-C4-C5	-9.66	123.77	128.60
35	BA	1336	C	C5-C6-N1	9.66	125.83	121.00
2	AB	401	A	C8-N9-C4	-9.66	101.94	105.80
2	AB	775	G	C4-C5-N7	9.66	114.66	110.80
2	AB	942	G	N3-C4-C5	-9.66	123.77	128.60
2	AB	2614	A	N1-C6-N6	9.66	124.39	118.60
2	AB	1808	A	N1-C6-N6	-9.65	112.81	118.60
35	BA	925	G	N7-C8-N9	9.65	117.93	113.10
2	AB	1918	A	C5-N7-C8	-9.65	99.07	103.90
36	BB	57	G	O4'-C1'-N9	9.65	115.92	108.20
2	AB	1142	A	N7-C8-N9	9.65	118.62	113.80
35	BA	560	A	O4'-C1'-N9	9.65	115.92	108.20
36	BB	75	C	N1-C2-O2	9.65	124.69	118.90
2	AB	22	C	O4'-C1'-N1	9.65	115.92	108.20
2	AB	2136	G	C5-C6-O6	9.65	134.39	128.60
35	BA	757	U	N3-C2-O2	-9.65	115.45	122.20
2	AB	1438	U	C5-C6-N1	-9.65	117.88	122.70
2	AB	1591	A	C4'-C3'-C2'	-9.65	92.95	102.60
2	AB	1733	G	N3-C4-C5	-9.65	123.78	128.60
35	BA	518	C	C6-N1-C2	-9.65	116.44	120.30
2	AB	475	C	N3-C4-C5	9.64	125.76	121.90
2	AB	2373	G	N9-C4-C5	-9.64	101.54	105.40
35	BA	43	C	N3-C4-N4	9.64	124.75	118.00
35	BA	777	A	N3-C4-N9	-9.64	119.69	127.40
2	AB	304	U	N3-C4-C5	-9.64	108.81	114.60
2	AB	389	G	N3-C4-C5	-9.64	123.78	128.60
2	AB	1435	G	C5-C6-O6	-9.64	122.81	128.60
2	AB	1808	A	C8-N9-C4	-9.64	101.94	105.80
2	AB	2431	U	C5-C6-N1	9.64	127.52	122.70
18	AR	108	ARG	NE-CZ-NH2	9.64	125.12	120.30
35	BA	1316	G	C2-N3-C4	9.64	116.72	111.90
2	AB	464	U	C5-C6-N1	-9.64	117.88	122.70
2	AB	857	G	C6-N1-C2	-9.63	119.32	125.10
2	AB	2039	U	O4'-C1'-N1	9.63	115.91	108.20
2	AB	319	G	C2-N3-C4	9.63	116.72	111.90
2	AB	487	C	N3-C4-N4	9.63	124.74	118.00
2	AB	1452	G	N3-C2-N2	9.63	126.64	119.90
2	AB	2282	G	C5-N7-C8	9.63	109.11	104.30
2	AB	2400	G	C5-C6-N1	9.63	116.32	111.50
2	AB	2497	A	N1-C2-N3	-9.63	124.48	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2673	G	N7-C8-N9	9.63	117.92	113.10
2	AB	980	A	N9-C4-C5	9.63	109.65	105.80
2	AB	2281	A	C2-N3-C4	9.63	115.41	110.60
35	BA	471	U	C4-C5-C6	9.63	125.48	119.70
2	AB	2406	A	O4'-C1'-N9	9.63	115.90	108.20
2	AB	779	U	C5-C6-N1	-9.62	117.89	122.70
2	AB	1380	G	N9-C4-C5	9.62	109.25	105.40
2	AB	1537	G	N3-C4-N9	9.62	131.78	126.00
35	BA	256	U	C5-C6-N1	-9.63	117.89	122.70
2	AB	1174	U	N1-C2-N3	9.62	120.67	114.90
2	AB	2154	A	N7-C8-N9	9.62	118.61	113.80
35	BA	113	G	C2-N3-C4	-9.62	107.09	111.90
35	BA	615	G	N7-C8-N9	9.62	117.91	113.10
2	AB	871	U	O4'-C1'-N1	9.62	115.90	108.20
2	AB	2076	U	O4'-C1'-N1	9.62	115.90	108.20
2	AB	2213	U	C4-C5-C6	9.62	125.47	119.70
35	BA	1082	A	C5-N7-C8	-9.62	99.09	103.90
35	BA	1295	U	C5'-C4'-O4'	9.62	120.64	109.10
2	AB	333	G	N1-C2-N3	9.62	129.67	123.90
2	AB	1567	G	C8-N9-C4	-9.62	102.55	106.40
2	AB	2288	A	N3-C4-C5	-9.62	120.07	126.80
35	BA	894	G	C3'-C2'-C1'	9.61	109.19	101.50
35	BA	1181	G	N7-C8-N9	-9.62	108.29	113.10
35	BA	1277	C	N3-C4-N4	-9.61	111.27	118.00
2	AB	176	A	C1'-O4'-C4'	9.61	117.59	109.90
2	AB	768	G	N9-C4-C5	9.61	109.25	105.40
35	BA	393	A	C5-C6-N6	-9.61	116.01	123.70
35	BA	566	G	N3-C4-C5	-9.61	123.79	128.60
35	BA	1309	G	C8-N9-C4	-9.61	102.56	106.40
35	BA	1220	G	C5-C6-O6	-9.61	122.83	128.60
38	BD	53	G	C4-C5-C6	9.61	124.57	118.80
2	AB	558	U	O4'-C1'-N1	9.61	115.89	108.20
2	AB	785	G	N9-C1'-C2'	-9.61	101.43	112.00
2	AB	891	G	C4-C5-C6	9.61	124.57	118.80
2	AB	1628	G	N3-C4-C5	-9.61	123.80	128.60
35	BA	562	U	O4'-C1'-N1	9.61	115.89	108.20
35	BA	1285	A	P-O3'-C3'	9.61	131.23	119.70
2	AB	1399	C	C2-N3-C4	-9.61	115.10	119.90
16	AP	90	ARG	NE-CZ-NH1	9.61	125.10	120.30
2	AB	1579	A	C5-C6-N1	9.60	122.50	117.70
2	AB	1218	G	N3-C4-N9	9.60	131.76	126.00
2	AB	1994	C	C5-C6-N1	9.60	125.80	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2770	G	C4-C5-N7	-9.60	106.96	110.80
35	BA	141	G	C8-N9-C4	-9.60	102.56	106.40
35	BA	1273	C	O4'-C1'-N1	9.60	115.88	108.20
2	AB	488	G	C6-C5-N7	-9.60	124.64	130.40
2	AB	2608	G	O4'-C1'-N9	9.60	115.88	108.20
35	BA	450	G	C5-N7-C8	-9.60	99.50	104.30
35	BA	999	C	N3-C2-O2	-9.60	115.18	121.90
35	BA	1476	A	N7-C8-N9	-9.60	109.00	113.80
2	AB	737	C	O4'-C1'-N1	9.60	115.88	108.20
2	AB	1258	U	N3-C2-O2	-9.60	115.48	122.20
2	AB	1511	G	C5-C6-N1	9.60	116.30	111.50
2	AB	2142	A	C8-N9-C4	9.60	109.64	105.80
41	BG	50	TYR	CB-CG-CD1	-9.60	115.24	121.00
37	BC	41	A	C8-N9-C4	-9.60	101.96	105.80
2	AB	2280	G	N3-C4-C5	-9.59	123.80	128.60
2	AB	1985	C	C5-C4-N4	-9.59	113.49	120.20
2	AB	2412	A	C2-N3-C4	-9.59	105.80	110.60
35	BA	202	G	C2-N3-C4	9.59	116.70	111.90
35	BA	423	G	O4'-C1'-N9	9.59	115.87	108.20
35	BA	546	A	C5-C6-N1	9.59	122.50	117.70
2	AB	782	A	C4-C5-C6	-9.59	112.21	117.00
2	AB	1004	U	O4'-C1'-N1	9.59	115.87	108.20
2	AB	1129	A	C2-N3-C4	-9.59	105.81	110.60
2	AB	1770	G	C8-N9-C4	-9.59	102.56	106.40
2	AB	1959	G	N3-C4-C5	-9.59	123.80	128.60
2	AB	473	G	C5-N7-C8	-9.59	99.51	104.30
2	AB	2466	C	N1-C2-O2	9.59	124.65	118.90
2	AB	2766	A	C5-C6-N6	-9.59	116.03	123.70
35	BA	449	G	O4'-C1'-N9	9.59	115.87	108.20
38	BD	17	C	O4'-C1'-N1	9.59	115.87	108.20
2	AB	209	C	C2-N3-C4	9.59	124.69	119.90
4	AD	213	ARG	NE-CZ-NH1	9.59	125.09	120.30
36	BB	61	C	N1-C2-O2	9.59	124.65	118.90
37	BC	52	U	C2-N3-C4	-9.59	121.25	127.00
2	AB	464	U	O4'-C1'-N1	9.58	115.87	108.20
2	AB	960	A	N1-C2-N3	-9.58	124.51	129.30
2	AB	1122	G	C3'-C2'-C1'	-9.58	93.83	101.50
2	AB	1755	A	C5-C6-N1	9.58	122.49	117.70
35	BA	182	A	C8-N9-C4	-9.58	101.97	105.80
35	BA	627	G	O4'-C1'-N9	9.58	115.87	108.20
35	BA	888	G	C5-C6-O6	-9.58	122.85	128.60
2	AB	2422	C	N3-C4-C5	-9.58	118.07	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BJ	108	ARG	NE-CZ-NH2	-9.58	115.51	120.30
1	AA	40	U	N3-C2-O2	-9.58	115.50	122.20
2	AB	461	C	N1-C2-O2	9.58	124.65	118.90
2	AB	909	A	C4-C5-N7	-9.58	105.91	110.70
2	AB	2298	A	C8-N9-C4	-9.58	101.97	105.80
2	AB	2564	A	C5-C6-N1	-9.58	112.91	117.70
35	BA	360	G	N7-C8-N9	-9.58	108.31	113.10
35	BA	1541	U	O4'-C1'-N1	9.58	115.86	108.20
37	BC	32	U	N3-C4-C5	9.58	120.35	114.60
2	AB	1776	G	C5'-C4'-O4'	9.57	120.59	109.10
1	AA	6	G	N9-C4-C5	9.57	109.23	105.40
2	AB	175	G	O4'-C1'-N9	9.57	115.86	108.20
2	AB	732	C	O4'-C1'-N1	9.57	115.86	108.20
2	AB	2122	U	N3-C2-O2	-9.57	115.50	122.20
35	BA	1184	G	C8-N9-C4	-9.57	102.57	106.40
2	AB	2244	U	N1-C1'-C2'	-9.57	101.47	112.00
35	BA	716	A	N1-C6-N6	9.57	124.34	118.60
35	BA	1396	A	N1-C6-N6	9.57	124.34	118.60
2	AB	453	A	N9-C4-C5	9.57	109.63	105.80
2	AB	1090	A	O4'-C1'-N9	9.57	115.86	108.20
35	BA	1470	U	O4'-C1'-N1	9.57	115.86	108.20
37	BC	51	C	O4'-C1'-N1	9.57	115.86	108.20
2	AB	2616	C	O4'-C1'-N1	9.57	115.86	108.20
2	AB	1057	A	N7-C8-N9	9.57	118.58	113.80
2	AB	2403	C	N3-C4-C5	-9.57	118.07	121.90
2	AB	2696	U	C5'-C4'-O4'	9.57	120.58	109.10
2	AB	124	G	C5-C6-O6	-9.57	122.86	128.60
2	AB	2214	C	O4'-C1'-N1	9.57	115.85	108.20
1	AA	75	G	N9-C4-C5	9.56	109.22	105.40
2	AB	216	A	N9-C1'-C2'	-9.56	101.48	112.00
2	AB	399	U	C4-C5-C6	9.56	125.44	119.70
2	AB	655	A	N7-C8-N9	-9.56	109.02	113.80
2	AB	1947	C	C6-N1-C2	-9.56	116.47	120.30
2	AB	2814	A	C8-N9-C4	-9.56	101.97	105.80
2	AB	686	U	C2-N3-C4	-9.56	121.26	127.00
35	BA	41	G	O4'-C1'-N9	9.56	115.85	108.20
2	AB	2133	G	N7-C8-N9	9.56	117.88	113.10
2	AB	2166	U	O4'-C1'-N1	9.56	115.85	108.20
2	AB	2332	C	N3-C4-C5	-9.56	118.08	121.90
37	BC	40	G	C8-N9-C4	-9.56	102.58	106.40
35	BA	286	C	N3-C2-O2	-9.56	115.21	121.90
35	BA	378	G	C6-N1-C2	-9.56	119.36	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	613	C	N3-C4-N4	-9.56	111.31	118.00
2	AB	170	U	O4'-C1'-N1	9.56	115.85	108.20
2	AB	1062	G	N3-C4-C5	-9.56	123.82	128.60
2	AB	1938	A	C8-N9-C4	-9.56	101.98	105.80
35	BA	1503	A	C2-N3-C4	9.56	115.38	110.60
2	AB	677	A	C8-N9-C4	9.55	109.62	105.80
2	AB	1020	A	O4'-C1'-N9	9.55	115.84	108.20
2	AB	1609	A	N1-C6-N6	9.55	124.33	118.60
2	AB	108	G	O4'-C1'-N9	9.55	115.84	108.20
2	AB	1874	C	N3-C2-O2	-9.55	115.21	121.90
2	AB	1926	U	N3-C4-C5	-9.55	108.87	114.60
2	AB	1997	C	O4'-C1'-N1	9.55	115.84	108.20
2	AB	2516	A	C5-N7-C8	-9.55	99.12	103.90
35	BA	714	G	N9-C4-C5	9.55	109.22	105.40
35	BA	1453	G	N7-C8-N9	9.55	117.88	113.10
2	AB	54	G	C2-N3-C4	9.55	116.67	111.90
2	AB	1607	C	O4'-C4'-C3'	9.55	113.74	106.10
2	AB	410	G	C3'-C2'-C1'	-9.55	93.86	101.50
2	AB	1220	G	C6-N1-C2	-9.55	119.37	125.10
2	AB	1536	C	C6-N1-C2	-9.55	116.48	120.30
2	AB	2240	U	C4-C5-C6	9.55	125.43	119.70
2	AB	2777	G	C4-C5-N7	9.55	114.62	110.80
35	BA	275	G	N9-C4-C5	9.55	109.22	105.40
35	BA	357	G	C6-C5-N7	-9.55	124.67	130.40
35	BA	1489	G	N3-C4-C5	-9.55	123.83	128.60
2	AB	24	G	C5-C6-N1	9.55	116.27	111.50
2	AB	294	A	C4-C5-C6	-9.54	112.23	117.00
2	AB	1426	G	C6-N1-C2	-9.55	119.37	125.10
2	AB	2153	C	C2-N3-C4	9.55	124.67	119.90
2	AB	2210	U	N3-C4-O4	9.55	126.08	119.40
2	AB	472	A	C5-C6-N1	9.54	122.47	117.70
2	AB	2469	A	C1'-O4'-C4'	-9.54	102.27	109.90
35	BA	551	U	C5-C4-O4	-9.54	120.17	125.90
35	BA	704	A	N1-C2-N3	-9.54	124.53	129.30
2	AB	1733	G	N3-C4-N9	9.54	131.73	126.00
2	AB	2736	A	N9-C4-C5	-9.54	101.98	105.80
6	AF	61	ARG	NE-CZ-NH1	-9.54	115.53	120.30
7	AG	9	ASP	CB-CG-OD2	-9.54	109.71	118.30
35	BA	733	G	C4-C5-N7	-9.54	106.98	110.80
2	AB	812	C	C6-N1-C2	9.54	124.12	120.30
2	AB	1098	A	C4-C5-C6	-9.54	112.23	117.00
2	AB	1849	G	C8-N9-C4	-9.54	102.58	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
48	BN	121	ARG	NE-CZ-NH1	9.54	125.07	120.30
2	AB	1386	C	C6-N1-C2	-9.54	116.48	120.30
2	AB	1896	G	O4'-C1'-N9	9.54	115.83	108.20
2	AB	2164	C	N3-C4-C5	-9.54	118.08	121.90
22	AV	3	ARG	NE-CZ-NH2	-9.54	115.53	120.30
35	BA	425	G	N7-C8-N9	9.54	117.87	113.10
35	BA	459	A	N7-C8-N9	9.54	118.57	113.80
2	AB	748	G	N3-C4-C5	-9.54	123.83	128.60
2	AB	1243	C	N3-C4-C5	-9.54	118.09	121.90
2	AB	2844	G	N3-C4-C5	-9.54	123.83	128.60
2	AB	2692	G	N3-C4-C5	-9.53	123.83	128.60
35	BA	300	A	N7-C8-N9	9.53	118.57	113.80
35	BA	1399	C	O4'-C1'-N1	9.53	115.83	108.20
37	BC	33	A	C5'-C4'-C3'	-9.54	100.74	116.00
38	BD	3	C	O4'-C1'-N1	9.54	115.83	108.20
46	BL	11	ARG	NE-CZ-NH2	9.53	125.07	120.30
1	AA	43	C	N3-C2-O2	-9.53	115.23	121.90
2	AB	1275	A	C1'-O4'-C4'	-9.53	102.27	109.90
35	BA	446	G	N1-C2-N2	9.53	124.78	116.20
2	AB	1654	A	C8-N9-C4	-9.53	101.99	105.80
2	AB	1713	A	C5-C6-N6	-9.53	116.08	123.70
2	AB	2741	A	C6-N1-C2	-9.53	112.88	118.60
15	AO	31	PHE	CB-CG-CD2	-9.53	114.13	120.80
35	BA	526	C	O4'-C1'-N1	9.53	115.82	108.20
35	BA	1184	G	C4-C5-N7	-9.53	106.99	110.80
35	BA	1387	G	C8-N9-C4	-9.53	102.59	106.40
2	AB	2419	U	O4'-C1'-N1	9.53	115.82	108.20
2	AB	1245	G	O4'-C1'-N9	9.53	115.82	108.20
2	AB	184	C	N3-C4-C5	-9.52	118.09	121.90
2	AB	2447	G	N7-C8-N9	-9.52	108.34	113.10
35	BA	350	G	C2-N3-C4	9.52	116.66	111.90
35	BA	436	C	N3-C4-C5	-9.52	118.09	121.90
35	BA	567	G	N9-C4-C5	9.52	109.21	105.40
35	BA	1216	A	C2-N3-C4	-9.52	105.84	110.60
2	AB	1740	G	C8-N9-C4	-9.52	102.59	106.40
2	AB	2645	G	C8-N9-C4	-9.52	102.59	106.40
2	AB	2877	G	C4'-C3'-C2'	-9.52	93.08	102.60
35	BA	712	A	C6-C5-N7	9.52	138.97	132.30
35	BA	1066	C	C5-C4-N4	-9.52	113.53	120.20
35	BA	1290	G	C5-C6-O6	-9.52	122.89	128.60
2	AB	9	G	C5-C6-O6	9.52	134.31	128.60
2	AB	136	G	C6-N1-C2	-9.52	119.39	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	290	U	O4'-C1'-N1	9.52	115.81	108.20
2	AB	534	U	C5-C6-N1	-9.52	117.94	122.70
2	AB	629	G	C3'-C2'-C1'	9.52	109.11	101.50
2	AB	2401	U	C2-N3-C4	-9.52	121.29	127.00
2	AB	630	G	O4'-C1'-N9	9.52	115.81	108.20
35	BA	226	G	C8-N9-C4	-9.52	102.59	106.40
35	BA	1194	U	C5'-C4'-O4'	9.52	120.52	109.10
52	BR	87	ARG	NE-CZ-NH2	-9.52	115.54	120.30
2	AB	221	A	C2-N3-C4	9.52	115.36	110.60
2	AB	766	U	N3-C4-O4	9.52	126.06	119.40
2	AB	2700	A	C2-N3-C4	9.52	115.36	110.60
35	BA	1153	G	C5-C6-O6	-9.52	122.89	128.60
2	AB	1588	G	N3-C4-C5	-9.51	123.84	128.60
2	AB	958	U	C2-N3-C4	-9.51	121.29	127.00
2	AB	2130	U	O4'-C1'-N1	9.51	115.81	108.20
2	AB	2589	A	C4-C5-N7	-9.51	105.94	110.70
1	AA	72	G	N3-C2-N2	9.51	126.56	119.90
2	AB	527	C	P-O3'-C3'	9.51	131.11	119.70
2	AB	1368	G	N1-C2-N3	9.51	129.60	123.90
35	BA	120	A	C8-N9-C4	-9.51	102.00	105.80
35	BA	143	A	C4-C5-N7	-9.51	105.94	110.70
2	AB	490	C	C3'-C2'-C1'	9.51	109.11	101.50
2	AB	1137	G	C4-C5-N7	9.51	114.60	110.80
2	AB	2028	U	N3-C2-O2	9.51	128.86	122.20
2	AB	1890	A	N7-C8-N9	9.51	118.55	113.80
2	AB	2324	U	O4'-C1'-N1	9.51	115.81	108.20
35	BA	270	A	O4'-C1'-N9	9.51	115.81	108.20
35	BA	462	G	O4'-C1'-N9	9.51	115.81	108.20
39	BE	107	ARG	NE-CZ-NH1	9.51	125.05	120.30
2	AB	849	A	O4'-C1'-N9	9.50	115.80	108.20
2	AB	1250	G	N9-C4-C5	9.50	109.20	105.40
2	AB	1745	A	C5-C6-N6	-9.50	116.10	123.70
2	AB	2256	G	N3-C4-C5	-9.50	123.85	128.60
35	BA	1201	A	P-O3'-C3'	9.50	131.10	119.70
35	BA	1224	U	C5-C6-N1	9.50	127.45	122.70
37	BC	40	G	O4'-C1'-N9	9.50	115.80	108.20
2	AB	1420	A	O4'-C1'-N9	9.50	115.80	108.20
2	AB	523	C	O4'-C1'-N1	9.50	115.80	108.20
2	AB	1426	G	C4-C5-N7	9.50	114.60	110.80
2	AB	1256	G	C8-N9-C4	-9.50	102.60	106.40
35	BA	1337	G	C6-N1-C2	-9.50	119.40	125.10
1	AA	42	C	C4-C5-C6	-9.49	112.65	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	418	C	C5-C6-N1	9.49	125.75	121.00
2	AB	2595	G	C6-N1-C2	-9.49	119.40	125.10
35	BA	1248	A	N9-C4-C5	9.49	109.60	105.80
35	BA	499	A	N7-C8-N9	-9.49	109.05	113.80
2	AB	363	G	O4'-C1'-N9	9.49	115.79	108.20
2	AB	2796	U	O4'-C1'-N1	9.49	115.79	108.20
35	BA	1195	C	C4-C5-C6	9.49	122.14	117.40
2	AB	372	G	N9-C4-C5	9.49	109.19	105.40
2	AB	778	G	C5-C6-N1	9.49	116.25	111.50
35	BA	559	A	C6-C5-N7	9.49	138.94	132.30
35	BA	894	G	N1-C2-N3	-9.49	118.21	123.90
2	AB	436	C	O4'-C1'-N1	9.49	115.79	108.20
2	AB	1535	A	O4'-C1'-N9	9.49	115.79	108.20
2	AB	2014	A	N7-C8-N9	9.49	118.54	113.80
35	BA	178	C	N1-C2-O2	9.49	124.59	118.90
38	BD	65	G	O4'-C1'-N9	9.49	115.79	108.20
2	AB	278	A	C5-N7-C8	9.49	108.64	103.90
2	AB	2502	G	N3-C4-N9	9.49	131.69	126.00
2	AB	415	A	O4'-C1'-N9	9.48	115.79	108.20
35	BA	29	U	C6-N1-C2	9.48	126.69	121.00
35	BA	1181	G	O4'-C1'-N9	9.48	115.79	108.20
35	BA	1424	U	N3-C2-O2	-9.48	115.56	122.20
2	AB	2337	G	O4'-C1'-N9	9.48	115.78	108.20
35	BA	1468	A	C4-C5-N7	-9.48	105.96	110.70
41	BG	96	ARG	NE-CZ-NH2	-9.48	115.56	120.30
35	BA	242	G	N3-C2-N2	-9.48	113.26	119.90
35	BA	1415	G	C3'-C2'-C1'	9.48	109.08	101.50
2	AB	512	G	C5-N7-C8	-9.48	99.56	104.30
2	AB	6	A	C4-C5-N7	-9.48	105.96	110.70
2	AB	289	G	C5-N7-C8	-9.48	99.56	104.30
2	AB	1547	C	C5-C6-N1	-9.48	116.26	121.00
35	BA	326	G	N3-C2-N2	-9.48	113.27	119.90
35	BA	663	A	C2-N3-C4	9.48	115.34	110.60
2	AB	474	G	C5-C6-O6	-9.47	122.92	128.60
2	AB	1806	C	C6-N1-C2	-9.47	116.51	120.30
2	AB	1946	U	N3-C4-O4	9.47	126.03	119.40
35	BA	540	G	C8-N9-C4	-9.47	102.61	106.40
2	AB	831	G	N3-C4-N9	9.47	131.68	126.00
2	AB	894	U	C2-N3-C4	-9.47	121.32	127.00
2	AB	1588	G	C6-C5-N7	-9.47	124.72	130.40
35	BA	627	G	C8-N9-C4	-9.47	102.61	106.40
1	AA	93	C	C4-C5-C6	-9.47	112.67	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2897	U	C1'-O4'-C4'	-9.47	102.33	109.90
35	BA	1225	A	C8-N9-C4	-9.47	102.01	105.80
2	AB	2856	A	C5-C6-N6	-9.47	116.13	123.70
35	BA	359	G	N9-C4-C5	9.47	109.19	105.40
2	AB	2242	G	C2-N3-C4	-9.46	107.17	111.90
35	BA	400	C	C5-C6-N1	-9.46	116.27	121.00
35	BA	962	C	C6-N1-C2	-9.46	116.52	120.30
35	BA	1435	G	C6-C5-N7	-9.46	124.72	130.40
2	AB	1355	G	O4'-C1'-N9	9.46	115.77	108.20
2	AB	1462	C	N3-C4-C5	-9.46	118.11	121.90
2	AB	2446	G	C4-C5-N7	-9.46	107.02	110.80
2	AB	984	A	C3'-C2'-C1'	9.46	109.07	101.50
2	AB	2024	G	N9-C4-C5	9.46	109.18	105.40
35	BA	1114	C	P-O3'-C3'	9.46	131.05	119.70
2	AB	2164	C	N1-C2-O2	9.46	124.58	118.90
35	BA	435	A	N9-C4-C5	-9.46	102.02	105.80
38	BD	64	G	C5'-C4'-O4'	9.46	120.45	109.10
2	AB	192	C	N3-C2-O2	-9.46	115.28	121.90
2	AB	1725	U	C4'-C3'-C2'	-9.46	93.14	102.60
2	AB	1747	U	O4'-C1'-N1	9.46	115.77	108.20
2	AB	236	C	N1-C2-O2	9.45	124.57	118.90
2	AB	1880	U	N3-C4-O4	9.45	126.02	119.40
2	AB	1901	A	C8-N9-C4	-9.45	102.02	105.80
35	BA	445	G	N3-C4-C5	-9.46	123.87	128.60
35	BA	1290	G	N7-C8-N9	9.45	117.83	113.10
2	AB	715	A	C5-C6-N6	-9.45	116.14	123.70
2	AB	2617	U	C1'-O4'-C4'	-9.45	102.34	109.90
31	A4	46	VAL	CA-CB-CG2	9.45	125.08	110.90
2	AB	17	G	N3-C4-C5	-9.45	123.88	128.60
2	AB	1051	G	C5-C6-N1	9.45	116.22	111.50
36	BB	67	G	C4-C5-N7	-9.45	107.02	110.80
38	BD	19	G	O4'-C1'-N9	9.45	115.76	108.20
35	BA	334	C	O4'-C1'-N1	9.45	115.76	108.20
2	AB	1185	G	C4-C5-N7	-9.45	107.02	110.80
2	AB	2104	C	C6-N1-C2	9.45	124.08	120.30
2	AB	2346	A	N9-C4-C5	9.45	109.58	105.80
2	AB	2372	U	C4'-C3'-C2'	-9.45	93.16	102.60
2	AB	2465	C	O4'-C1'-N1	9.45	115.76	108.20
38	BD	12	G	C6-N1-C2	-9.45	119.43	125.10
2	AB	2182	U	O4'-C1'-N1	9.44	115.75	108.20
2	AB	2215	C	C5-C4-N4	-9.44	113.59	120.20
41	BG	43	ARG	NE-CZ-NH1	9.44	125.02	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	198	C	C5-C6-N1	9.44	125.72	121.00
2	AB	439	A	C2-N3-C4	9.44	115.32	110.60
2	AB	2420	C	C2-N3-C4	-9.44	115.18	119.90
2	AB	1508	A	O4'-C1'-N9	9.44	115.75	108.20
2	AB	1993	U	C4'-C3'-C2'	-9.44	93.16	102.60
2	AB	2555	U	N3-C4-O4	-9.44	112.79	119.40
35	BA	1092	A	C5-N7-C8	9.44	108.62	103.90
2	AB	478	A	C5-C6-N1	9.44	122.42	117.70
2	AB	841	G	C4-C5-N7	-9.44	107.03	110.80
2	AB	1542	U	N3-C2-O2	-9.44	115.59	122.20
2	AB	1483	G	C6-N1-C2	-9.43	119.44	125.10
16	AP	2	ARG	NE-CZ-NH2	-9.43	115.58	120.30
35	BA	1376	U	C2-N3-C4	-9.43	121.34	127.00
35	BA	593	U	N3-C2-O2	-9.43	115.60	122.20
1	AA	69	G	N7-C8-N9	-9.43	108.39	113.10
2	AB	306	U	N1-C2-N3	9.43	120.56	114.90
2	AB	2432	A	C8-N9-C4	-9.43	102.03	105.80
2	AB	2813	A	N1-C2-N3	-9.43	124.58	129.30
35	BA	135	C	O4'-C1'-N1	9.43	115.74	108.20
35	BA	1071	C	C2-N3-C4	9.43	124.61	119.90
2	AB	104	A	N1-C6-N6	-9.43	112.94	118.60
2	AB	2754	U	C5-C6-N1	-9.43	117.99	122.70
16	AP	2	ARG	NE-CZ-NH1	9.43	125.01	120.30
2	AB	1179	G	C8-N9-C4	-9.43	102.63	106.40
2	AB	1189	A	C8-N9-C4	-9.43	102.03	105.80
2	AB	1974	C	C5-C6-N1	9.43	125.71	121.00
35	BA	176	C	N3-C4-C5	-9.43	118.13	121.90
2	AB	168	G	N7-C8-N9	9.42	117.81	113.10
2	AB	749	A	C8-N9-C4	-9.42	102.03	105.80
2	AB	1286	A	C4-C5-C6	-9.42	112.29	117.00
2	AB	1091	G	C4'-C3'-C2'	-9.42	93.18	102.60
2	AB	2486	C	O4'-C1'-N1	9.42	115.74	108.20
2	AB	2633	G	C6-N1-C2	-9.42	119.45	125.10
35	BA	504	C	N3-C2-O2	-9.42	115.30	121.90
35	BA	914	A	O4'-C1'-N9	9.42	115.74	108.20
2	AB	65	U	C5-C4-O4	9.42	131.55	125.90
2	AB	2610	C	C3'-C2'-C1'	9.42	109.03	101.50
35	BA	282	A	C2-N3-C4	9.42	115.31	110.60
35	BA	688	G	C6-N1-C2	-9.42	119.45	125.10
2	AB	1600	C	O4'-C1'-N1	9.42	115.73	108.20
2	AB	1601	G	N3-C2-N2	9.42	126.49	119.90
2	AB	2700	A	N1-C2-N3	-9.42	124.59	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1772	A	O4'-C1'-N9	9.42	115.73	108.20
2	AB	2337	G	N7-C8-N9	9.42	117.81	113.10
2	AB	2603	G	N7-C8-N9	9.42	117.81	113.10
17	AQ	16	ARG	NE-CZ-NH2	-9.42	115.59	120.30
25	AY	19	ARG	NE-CZ-NH1	-9.42	115.59	120.30
35	BA	1415	G	C5-N7-C8	-9.42	99.59	104.30
2	AB	514	A	C8-N9-C4	-9.41	102.03	105.80
2	AB	1684	G	C4-C5-N7	-9.41	107.03	110.80
2	AB	1851	U	C1'-O4'-C4'	9.41	117.43	109.90
35	BA	506	G	C8-N9-C4	-9.41	102.63	106.40
35	BA	313	A	N3-C4-C5	-9.41	120.21	126.80
35	BA	683	G	C5-C6-O6	9.41	134.25	128.60
35	BA	719	C	C2-N3-C4	9.41	124.61	119.90
35	BA	998	C	O4'-C1'-N1	9.41	115.73	108.20
35	BA	1323	G	C6-N1-C2	-9.41	119.45	125.10
35	BA	1347	G	N9-C4-C5	9.41	109.17	105.40
40	BF	131	ARG	NE-CZ-NH1	9.41	125.01	120.30
35	BA	1289	A	C8-N9-C4	-9.41	102.03	105.80
2	AB	369	U	N3-C2-O2	9.41	128.79	122.20
35	BA	1142	G	N3-C2-N2	-9.41	113.31	119.90
2	AB	2886	A	O4'-C1'-N9	9.41	115.73	108.20
36	BB	53	G	C8-N9-C4	-9.41	102.64	106.40
2	AB	958	U	N1-C2-N3	9.41	120.54	114.90
2	AB	1149	G	O4'-C1'-N9	9.41	115.73	108.20
35	BA	170	U	C2-N3-C4	-9.41	121.36	127.00
35	BA	472	U	C5-C4-O4	-9.41	120.25	125.90
35	BA	1131	G	C8-N9-C4	-9.41	102.64	106.40
35	BA	207	C	C5'-C4'-O4'	9.41	120.39	109.10
35	BA	1087	G	N9-C4-C5	9.41	109.16	105.40
2	AB	514	A	N1-C6-N6	-9.40	112.96	118.60
2	AB	540	C	O4'-C1'-N1	9.40	115.72	108.20
2	AB	691	C	C6-N1-C2	-9.40	116.54	120.30
2	AB	1672	A	N1-C2-N3	-9.40	124.60	129.30
2	AB	1786	A	N1-C2-N3	-9.40	124.60	129.30
2	AB	2249	U	N3-C2-O2	-9.40	115.62	122.20
35	BA	200	G	N7-C8-N9	9.40	117.80	113.10
35	BA	919	A	C8-N9-C4	-9.40	102.04	105.80
2	AB	1940	U	C1'-O4'-C4'	-9.40	102.38	109.90
2	AB	212	G	C4-C5-N7	-9.40	107.04	110.80
2	AB	765	C	O4'-C1'-N1	9.40	115.72	108.20
2	AB	2112	G	O4'-C1'-N9	9.40	115.72	108.20
35	BA	235	C	C6-N1-C2	-9.40	116.54	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	269	C	C5-C4-N4	9.40	126.78	120.20
35	BA	306	A	N1-C6-N6	-9.40	112.96	118.60
35	BA	377	G	C6-N1-C2	-9.40	119.46	125.10
2	AB	2698	U	O4'-C1'-N1	9.40	115.72	108.20
2	AB	34	U	O4'-C1'-N1	9.40	115.72	108.20
2	AB	933	A	N1-C6-N6	-9.40	112.96	118.60
2	AB	365	U	N1-C1'-C2'	-9.40	101.66	112.00
2	AB	1193	G	C5-C6-O6	-9.40	122.96	128.60
2	AB	2291	U	C6-N1-C2	-9.40	115.36	121.00
35	BA	519	C	O4'-C1'-N1	9.40	115.72	108.20
35	BA	1084	G	C2-N3-C4	9.40	116.60	111.90
35	BA	1337	G	C5-N7-C8	-9.40	99.60	104.30
1	AA	59	A	O4'-C1'-N9	9.39	115.72	108.20
2	AB	697	G	N3-C4-C5	-9.39	123.90	128.60
2	AB	999	U	C6-N1-C2	-9.39	115.36	121.00
2	AB	2115	G	N7-C8-N9	9.39	117.80	113.10
2	AB	845	A	C8-N9-C4	-9.39	102.04	105.80
2	AB	1340	U	O4'-C1'-N1	9.39	115.71	108.20
12	AL	44	TYR	CB-CG-CD1	9.39	126.64	121.00
35	BA	1072	G	C5-C6-N1	9.39	116.20	111.50
35	BA	1026	G	C2-N3-C4	9.39	116.59	111.90
35	BA	1342	C	C4'-C3'-C2'	-9.39	93.21	102.60
1	AA	33	G	C4-C5-N7	-9.39	107.04	110.80
2	AB	708	G	C6-C5-N7	-9.39	124.77	130.40
35	BA	211	G	N3-C4-C5	-9.39	123.91	128.60
35	BA	310	G	C6-C5-N7	-9.39	124.77	130.40
2	AB	467	G	C8-N9-C4	-9.39	102.65	106.40
2	AB	1452	G	O4'-C4'-C3'	9.39	113.61	106.10
35	BA	217	C	C4-C5-C6	9.39	122.09	117.40
2	AB	1792	G	N1-C2-N3	-9.38	118.27	123.90
36	BB	67	G	C8-N9-C4	-9.38	102.65	106.40
2	AB	1362	C	C3'-C2'-C1'	9.38	109.01	101.50
35	BA	1178	G	C5-C6-O6	9.38	134.23	128.60
2	AB	1204	A	C5-C6-N6	-9.38	116.19	123.70
35	BA	173	U	P-O3'-C3'	9.38	130.96	119.70
35	BA	1386	G	C8-N9-C4	-9.38	102.65	106.40
35	BA	1504	G	C1'-O4'-C4'	-9.38	102.39	109.90
38	BD	73	A	C4-C5-N7	-9.38	106.01	110.70
2	AB	1469	A	N7-C8-N9	9.38	118.49	113.80
35	BA	1458	G	N9-C4-C5	9.38	109.15	105.40
2	AB	2660	A	O4'-C1'-N9	9.38	115.70	108.20
2	AB	2533	U	C5-C4-O4	9.38	131.53	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1274	A	C2-N3-C4	9.37	115.29	110.60
2	AB	1598	A	N7-C8-N9	9.37	118.49	113.80
35	BA	1008	U	C4-C5-C6	9.38	125.33	119.70
35	BA	1191	A	N1-C6-N6	9.37	124.22	118.60
2	AB	1445	G	N3-C4-C5	-9.37	123.91	128.60
2	AB	260	G	N1-C6-O6	-9.37	114.28	119.90
3	AC	71	ARG	NE-CZ-NH2	-9.37	115.61	120.30
35	BA	831	A	O4'-C1'-N9	9.37	115.70	108.20
35	BA	178	C	N3-C2-O2	-9.37	115.34	121.90
35	BA	786	G	O4'-C1'-N9	9.37	115.70	108.20
47	BM	89	ARG	NE-CZ-NH2	9.37	124.98	120.30
2	AB	811	U	N1-C2-N3	9.37	120.52	114.90
20	AT	13	ARG	NE-CZ-NH1	9.37	124.98	120.30
2	AB	2186	G	C4-C5-N7	-9.37	107.05	110.80
2	AB	1741	C	N3-C2-O2	-9.37	115.34	121.90
2	AB	2272	U	N3-C2-O2	-9.37	115.64	122.20
2	AB	2388	A	C8-N9-C4	-9.37	102.05	105.80
26	AZ	2	ARG	NE-CZ-NH2	-9.36	115.62	120.30
35	BA	565	U	O4'-C1'-N1	9.36	115.69	108.20
38	BD	72	C	N3-C2-O2	-9.37	115.34	121.90
2	AB	51	G	N9-C4-C5	9.36	109.14	105.40
2	AB	100	U	C5-C6-N1	-9.36	118.02	122.70
2	AB	1515	A	O4'-C1'-N9	9.36	115.69	108.20
2	AB	2053	G	N3-C4-C5	-9.36	123.92	128.60
35	BA	227	G	C2-N3-C4	9.36	116.58	111.90
35	BA	364	A	N1-C2-N3	-9.36	124.62	129.30
35	BA	1453	G	C4-C5-C6	9.36	124.42	118.80
2	AB	1188	U	N3-C2-O2	-9.36	115.65	122.20
2	AB	1243	C	O4'-C1'-N1	9.36	115.69	108.20
2	AB	1700	A	C6-C5-N7	9.36	138.85	132.30
2	AB	1554	U	O4'-C1'-N1	9.36	115.69	108.20
2	AB	1935	G	C4-C5-N7	-9.36	107.06	110.80
2	AB	2141	G	O4'-C1'-N9	9.36	115.69	108.20
35	BA	361	G	C4-C5-N7	-9.36	107.06	110.80
35	BA	840	C	N3-C4-N4	9.36	124.55	118.00
2	AB	11	C	O4'-C1'-N1	9.36	115.69	108.20
2	AB	226	A	O4'-C1'-N9	9.36	115.69	108.20
2	AB	311	A	N7-C8-N9	9.36	118.48	113.80
2	AB	1676	A	C5-N7-C8	-9.36	99.22	103.90
2	AB	1926	U	C2-N1-C1'	9.36	128.93	117.70
35	BA	4	U	C5-C4-O4	-9.36	120.29	125.90
35	BA	1131	G	C5-C6-N1	9.36	116.18	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	894	G	C2-N3-C4	9.36	116.58	111.90
35	BA	1499	A	N1-C2-N3	-9.36	124.62	129.30
2	AB	245	G	N1-C2-N3	9.35	129.51	123.90
2	AB	393	C	N3-C4-N4	9.35	124.55	118.00
2	AB	2784	U	O4'-C1'-N1	9.35	115.68	108.20
35	BA	567	G	O4'-C1'-N9	9.35	115.68	108.20
2	AB	60	G	C1'-O4'-C4'	-9.35	102.42	109.90
2	AB	1606	C	O4'-C1'-N1	9.35	115.68	108.20
35	BA	107	G	C8-N9-C4	-9.35	102.66	106.40
35	BA	754	C	C5'-C4'-O4'	9.35	120.32	109.10
2	AB	617	G	C2-N3-C4	9.35	116.57	111.90
2	AB	971	G	O4'-C1'-N9	9.35	115.68	108.20
35	BA	634	C	N3-C4-C5	9.35	125.64	121.90
35	BA	741	G	N9-C4-C5	-9.35	101.66	105.40
2	AB	596	U	C5-C6-N1	-9.35	118.03	122.70
2	AB	1877	A	O4'-C1'-N9	9.35	115.68	108.20
1	AA	26	C	C2-N3-C4	9.35	124.57	119.90
2	AB	803	U	N3-C4-C5	-9.35	108.99	114.60
2	AB	1406	U	C5-C4-O4	9.35	131.51	125.90
2	AB	1519	G	N7-C8-N9	-9.35	108.43	113.10
2	AB	1591	A	N9-C4-C5	-9.35	102.06	105.80
2	AB	2115	G	C6-C5-N7	-9.35	124.79	130.40
2	AB	2583	G	N1-C2-N3	-9.35	118.29	123.90
2	AB	2788	C	C4'-C3'-C2'	-9.35	93.25	102.60
35	BA	525	C	C5-C4-N4	9.35	126.74	120.20
35	BA	690	G	N9-C4-C5	9.35	109.14	105.40
2	AB	1602	U	C2-N3-C4	-9.34	121.39	127.00
2	AB	2252	G	C6-N1-C2	-9.34	119.49	125.10
35	BA	340	U	N3-C4-O4	9.34	125.94	119.40
35	BA	920	U	C5-C4-O4	-9.34	120.30	125.90
1	AA	5	U	C5'-C4'-O4'	9.34	120.31	109.10
2	AB	95	A	N7-C8-N9	9.34	118.47	113.80
35	BA	1052	U	O4'-C1'-N1	9.34	115.67	108.20
36	BB	71	C	N1-C2-O2	9.34	124.50	118.90
38	BD	54	G	C2-N3-C4	9.34	116.57	111.90
1	AA	35	C	O5'-P-OP2	-9.34	97.29	105.70
35	BA	971	G	C5-N7-C8	9.34	108.97	104.30
35	BA	1073	U	C5-C6-N1	-9.34	118.03	122.70
2	AB	714	U	C5-C4-O4	9.34	131.50	125.90
2	AB	803	U	N1-C1'-C2'	-9.34	101.73	112.00
2	AB	940	G	N9-C4-C5	9.34	109.14	105.40
2	AB	2222	C	C5-C4-N4	-9.34	113.66	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1196	C	O4'-C1'-N1	9.34	115.67	108.20
2	AB	1373	A	N1-C6-N6	-9.34	113.00	118.60
2	AB	1841	U	N3-C4-C5	9.34	120.20	114.60
2	AB	2404	U	C6-N1-C2	-9.34	115.40	121.00
2	AB	2681	C	C5-C6-N1	9.34	125.67	121.00
35	BA	1325	C	N3-C2-O2	-9.34	115.36	121.90
35	BA	481	G	N3-C2-N2	9.34	126.44	119.90
35	BA	1112	C	N3-C2-O2	-9.34	115.36	121.90
2	AB	197	A	C2-N3-C4	-9.33	105.93	110.60
2	AB	1264	A	C6-C5-N7	9.33	138.83	132.30
2	AB	2118	U	O4'-C1'-N1	9.33	115.67	108.20
2	AB	1165	A	C2-N3-C4	-9.33	105.93	110.60
2	AB	2092	U	N1-C2-O2	9.33	129.33	122.80
2	AB	2186	G	N1-C6-O6	9.33	125.50	119.90
2	AB	742	A	C8-N9-C4	-9.33	102.07	105.80
2	AB	1029	A	N3-C4-C5	-9.33	120.27	126.80
2	AB	2103	C	O4'-C1'-N1	9.33	115.66	108.20
35	BA	281	G	N3-C4-C5	-9.33	123.94	128.60
35	BA	562	U	N3-C4-O4	9.33	125.93	119.40
35	BA	1355	G	N9-C4-C5	9.33	109.13	105.40
2	AB	1960	A	N1-C6-N6	-9.33	113.00	118.60
35	BA	639	G	N3-C4-C5	-9.33	123.94	128.60
35	BA	271	C	O4'-C1'-N1	9.32	115.66	108.20
35	BA	541	G	N9-C4-C5	-9.32	101.67	105.40
35	BA	569	C	N1-C2-O2	9.32	124.49	118.90
2	AB	2852	G	N3-C4-C5	9.32	133.26	128.60
35	BA	275	G	N1-C2-N3	-9.32	118.31	123.90
2	AB	2569	G	N1-C2-N2	9.32	124.59	116.20
35	BA	65	A	C5-C6-N1	9.32	122.36	117.70
35	BA	601	G	N1-C2-N3	-9.32	118.31	123.90
2	AB	245	G	C6-N1-C2	-9.32	119.51	125.10
2	AB	1089	A	C4-C5-C6	9.32	121.66	117.00
2	AB	2463	C	N3-C4-N4	9.32	124.52	118.00
35	BA	101	A	C3'-C2'-C1'	-9.32	94.05	101.50
35	BA	258	G	N3-C4-C5	-9.32	123.94	128.60
35	BA	401	C	N1-C2-O2	9.32	124.49	118.90
35	BA	859	G	C6-C5-N7	9.32	135.99	130.40
35	BA	1087	G	C4-C5-N7	-9.32	107.07	110.80
35	BA	1365	G	C5-C6-N1	-9.32	106.84	111.50
2	AB	119	A	C2-N3-C4	9.31	115.26	110.60
2	AB	130	C	C5-C6-N1	9.31	125.66	121.00
35	BA	302	G	C5-C6-O6	-9.31	123.01	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	56	C	C5-C6-N1	9.31	125.66	121.00
35	BA	1141	C	O4'-C1'-N1	9.31	115.65	108.20
38	BD	32	G	O4'-C1'-N9	9.31	115.65	108.20
38	BD	66	C	N3-C2-O2	-9.31	115.38	121.90
2	AB	1791	A	N1-C6-N6	9.31	124.19	118.60
35	BA	1535	C	N1-C2-O2	9.31	124.49	118.90
36	BB	2	G	C5-N7-C8	9.31	108.95	104.30
2	AB	1645	G	N1-C2-N2	-9.31	107.82	116.20
2	AB	2328	A	N3-C4-C5	-9.31	120.28	126.80
2	AB	2879	A	N7-C8-N9	9.31	118.45	113.80
35	BA	568	G	C4-C5-N7	-9.31	107.08	110.80
2	AB	180	G	C3'-C2'-C1'	-9.30	94.06	101.50
2	AB	268	C	N3-C4-C5	9.30	125.62	121.90
2	AB	2250	G	C6-C5-N7	-9.31	124.82	130.40
2	AB	1403	A	N9-C4-C5	9.30	109.52	105.80
2	AB	2271	G	C2-N3-C4	9.30	116.55	111.90
2	AB	2272	U	C3'-C2'-C1'	9.30	108.94	101.50
2	AB	2375	G	N1-C2-N2	9.30	124.57	116.20
2	AB	2405	G	N9-C4-C5	9.30	109.12	105.40
2	AB	2493	U	N3-C4-O4	9.30	125.91	119.40
2	AB	2576	G	N1-C2-N3	9.30	129.48	123.90
35	BA	1171	A	C4-C5-N7	-9.30	106.05	110.70
38	BD	74	A	C5-C6-N6	-9.31	116.25	123.70
2	AB	1388	G	C5-C6-O6	-9.30	123.02	128.60
2	AB	1525	A	N9-C4-C5	9.30	109.52	105.80
2	AB	2354	C	N3-C2-O2	-9.30	115.39	121.90
2	AB	2652	C	N3-C4-C5	9.30	125.62	121.90
35	BA	316	C	C6-N1-C2	-9.30	116.58	120.30
35	BA	358	U	C4-C5-C6	9.30	125.28	119.70
35	BA	1147	C	O4'-C1'-N1	9.30	115.64	108.20
36	BB	56	C	N1-C2-O2	9.30	124.48	118.90
2	AB	272	A	C2-N3-C4	9.30	115.25	110.60
2	AB	1295	C	N3-C4-N4	9.30	124.51	118.00
35	BA	767	A	C2-N3-C4	9.30	115.25	110.60
2	AB	1745	A	C5-C6-N1	9.30	122.35	117.70
2	AB	1823	G	C2-N3-C4	9.30	116.55	111.90
35	BA	73	C	C4-C5-C6	-9.30	112.75	117.40
35	BA	941	G	C6-N1-C2	-9.30	119.52	125.10
2	AB	1392	A	C5-N7-C8	9.30	108.55	103.90
2	AB	46	G	N3-C4-C5	-9.29	123.95	128.60
2	AB	331	C	O4'-C1'-N1	9.29	115.64	108.20
2	AB	1441	G	C5'-C4'-O4'	9.29	120.25	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2788	C	N3-C4-N4	9.29	124.51	118.00
35	BA	760	G	C4-C5-N7	-9.30	107.08	110.80
2	AB	677	A	N1-C6-N6	-9.29	113.02	118.60
2	AB	1763	G	C5-C6-O6	-9.29	123.03	128.60
35	BA	1478	U	C4'-C3'-C2'	-9.29	93.31	102.60
2	AB	1271	G	C5-C6-N1	9.29	116.14	111.50
35	BA	1013	G	N7-C8-N9	-9.29	108.45	113.10
2	AB	1406	U	N3-C4-C5	-9.29	109.03	114.60
2	AB	666	A	C2-N3-C4	9.29	115.24	110.60
2	AB	2027	G	O4'-C1'-N9	9.29	115.63	108.20
2	AB	951	C	O4'-C1'-N1	9.28	115.63	108.20
2	AB	1175	A	C5-C6-N1	9.28	122.34	117.70
2	AB	1580	A	C3'-C2'-C1'	-9.29	94.07	101.50
1	AA	90	C	N1-C2-O2	9.28	124.47	118.90
2	AB	1179	G	N7-C8-N9	9.28	117.74	113.10
2	AB	66	C	C4-C5-C6	9.28	122.04	117.40
2	AB	912	C	O4'-C1'-N1	9.28	115.63	108.20
2	AB	1740	G	N1-C6-O6	9.28	125.47	119.90
35	BA	1068	G	C2-N3-C4	9.28	116.54	111.90
35	BA	1107	C	N3-C4-C5	-9.28	118.19	121.90
2	AB	3	U	O4'-C4'-C3'	9.28	113.52	106.10
2	AB	10	A	N1-C6-N6	-9.28	113.03	118.60
2	AB	1129	A	N1-C2-N3	9.28	133.94	129.30
2	AB	1403	A	C8-N9-C4	-9.28	102.09	105.80
2	AB	2195	U	C5-C4-O4	-9.28	120.33	125.90
35	BA	1137	C	N3-C2-O2	-9.28	115.40	121.90
2	AB	1276	A	C8-N9-C4	-9.28	102.09	105.80
35	BA	62	U	N3-C2-O2	-9.28	115.70	122.20
2	AB	1094	U	C4'-C3'-C2'	-9.28	93.32	102.60
2	AB	2323	G	C5-C6-O6	-9.28	123.03	128.60
2	AB	2715	C	C6-N1-C2	-9.28	116.59	120.30
35	BA	83	C	C6-N1-C2	9.28	124.01	120.30
2	AB	400	G	C5-C6-N1	9.27	116.14	111.50
2	AB	530	G	C5-N7-C8	-9.27	99.66	104.30
2	AB	1501	G	N3-C2-N2	-9.27	113.41	119.90
2	AB	716	A	C8-N9-C4	-9.27	102.09	105.80
35	BA	104	G	N3-C4-C5	-9.27	123.96	128.60
35	BA	1288	A	C6-N1-C2	9.27	124.16	118.60
2	AB	1455	G	C5'-C4'-O4'	9.27	120.23	109.10
2	AB	2369	A	C5-C6-N1	9.27	122.33	117.70
2	AB	2392	A	O4'-C1'-N9	9.27	115.61	108.20
35	BA	1303	C	N3-C4-C5	-9.27	118.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1019	A	N9-C4-C5	-9.27	102.09	105.80
2	AB	2254	C	N3-C2-O2	-9.27	115.41	121.90
2	AB	461	C	N3-C2-O2	-9.27	115.41	121.90
2	AB	1140	C	C3'-C2'-C1'	9.27	108.91	101.50
2	AB	2533	U	N3-C4-O4	-9.27	112.92	119.40
35	BA	632	U	N3-C2-O2	-9.27	115.71	122.20
35	BA	1414	U	C4-C5-C6	9.27	125.26	119.70
2	AB	88	G	O4'-C1'-N9	9.26	115.61	108.20
2	AB	1104	C	C5-C6-N1	9.26	125.63	121.00
2	AB	809	G	N1-C2-N3	9.26	129.46	123.90
2	AB	2152	G	C2-N3-C4	9.26	116.53	111.90
7	AG	172	PHE	CB-CG-CD1	-9.26	114.32	120.80
2	AB	1868	C	C6-N1-C2	9.26	124.00	120.30
35	BA	144	G	C4-C5-N7	-9.26	107.10	110.80
1	AA	81	G	N3-C4-C5	-9.26	123.97	128.60
2	AB	108	G	N3-C4-N9	-9.26	120.45	126.00
35	BA	428	G	N7-C8-N9	9.26	117.73	113.10
35	BA	446	G	C4-C5-N7	-9.26	107.10	110.80
2	AB	393	C	O4'-C1'-N1	9.25	115.60	108.20
2	AB	1493	C	C1'-O4'-C4'	9.25	117.30	109.90
2	AB	2697	G	C5-C6-N1	9.25	116.13	111.50
36	BB	73	G	C4-C5-N7	-9.25	107.10	110.80
2	AB	478	A	C2-N3-C4	9.25	115.23	110.60
2	AB	1220	G	C5-C6-O6	-9.25	123.05	128.60
2	AB	2000	C	O4'-C1'-N1	9.25	115.60	108.20
2	AB	2627	G	C2-N3-C4	-9.25	107.28	111.90
35	BA	1470	U	N3-C4-C5	-9.25	109.05	114.60
2	AB	843	G	C8-N9-C4	-9.25	102.70	106.40
2	AB	1226	A	N1-C2-N3	-9.25	124.68	129.30
2	AB	2308	G	C8-N9-C4	-9.24	102.70	106.40
2	AB	585	G	O4'-C1'-N9	9.24	115.59	108.20
2	AB	1519	G	N1-C2-N3	9.24	129.45	123.90
2	AB	2896	C	N1-C2-O2	9.24	124.45	118.90
42	BH	137	ARG	NE-CZ-NH2	-9.24	115.68	120.30
2	AB	2146	C	C2-N3-C4	9.24	124.52	119.90
35	BA	376	G	C4'-C3'-C2'	-9.24	93.36	102.60
35	BA	868	C	N3-C4-C5	-9.24	118.20	121.90
35	BA	410	G	C1'-O4'-C4'	-9.24	102.51	109.90
2	AB	494	G	C4-C5-N7	-9.24	107.10	110.80
2	AB	1436	G	N1-C6-O6	9.24	125.44	119.90
2	AB	1520	U	N3-C4-C5	-9.24	109.06	114.60
8	AH	57	TYR	CB-CG-CD1	-9.24	115.46	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BJ	91	ARG	NE-CZ-NH2	-9.24	115.68	120.30
2	AB	1537	G	C4-C5-N7	9.24	114.49	110.80
35	BA	1282	C	O4'-C1'-N1	9.24	115.59	108.20
1	AA	102	G	C8-N9-C4	-9.23	102.71	106.40
2	AB	259	G	N1-C6-O6	-9.23	114.36	119.90
2	AB	590	A	N9-C4-C5	-9.23	102.11	105.80
2	AB	2788	C	C5-C4-N4	-9.23	113.73	120.20
35	BA	524	G	C3'-C2'-C1'	9.23	108.89	101.50
2	AB	1136	G	C2-N3-C4	9.23	116.52	111.90
35	BA	403	C	O4'-C1'-N1	9.23	115.59	108.20
35	BA	485	U	C4-C5-C6	9.23	125.24	119.70
35	BA	938	A	C4-C5-C6	-9.23	112.38	117.00
37	BC	29	G	N7-C8-N9	-9.23	108.48	113.10
35	BA	938	A	C5-C6-N1	9.23	122.32	117.70
1	AA	24	G	N3-C4-C5	-9.23	123.98	128.60
2	AB	633	A	C5-C6-N1	9.23	122.32	117.70
2	AB	1184	U	O4'-C1'-N1	9.23	115.58	108.20
2	AB	1314	C	C2-N3-C4	9.23	124.52	119.90
2	AB	1445	G	C2-N3-C4	9.23	116.52	111.90
2	AB	2496	C	O4'-C1'-N1	9.23	115.58	108.20
35	BA	646	G	C2-N3-C4	9.23	116.52	111.90
35	BA	738	C	N1-C2-O2	9.23	124.44	118.90
2	AB	464	U	C4-C5-C6	9.23	125.24	119.70
1	AA	69	G	N1-C2-N3	-9.23	118.36	123.90
2	AB	1673	G	N3-C4-N9	-9.23	120.46	126.00
2	AB	1910	G	C5-N7-C8	-9.23	99.69	104.30
2	AB	2429	G	N9-C4-C5	9.23	109.09	105.40
2	AB	2853	C	N3-C2-O2	-9.23	115.44	121.90
35	BA	364	A	C6-C5-N7	9.23	138.76	132.30
35	BA	1536	C	C3'-C2'-C1'	-9.23	94.12	101.50
1	AA	46	A	O4'-C1'-N9	9.22	115.58	108.20
1	AA	88	C	O4'-C1'-N1	9.22	115.58	108.20
2	AB	69	C	N3-C4-C5	-9.22	118.21	121.90
2	AB	312	G	C3'-C2'-C1'	-9.22	94.12	101.50
2	AB	2691	C	C5-C6-N1	-9.22	116.39	121.00
2	AB	707	G	N3-C4-C5	-9.22	123.99	128.60
2	AB	1021	A	C5-N7-C8	-9.22	99.29	103.90
2	AB	1918	A	C4-C5-N7	9.22	115.31	110.70
2	AB	1992	G	C6-C5-N7	-9.22	124.87	130.40
2	AB	2529	G	C4-C5-N7	-9.22	107.11	110.80
35	BA	36	C	O4'-C1'-N1	9.22	115.58	108.20
35	BA	482	A	C4-C5-C6	-9.22	112.39	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	579	A	O4'-C1'-N9	9.22	115.58	108.20
35	BA	1233	G	N9-C4-C5	9.22	109.09	105.40
2	AB	856	G	N9-C4-C5	-9.22	101.71	105.40
35	BA	467	U	N1-C1'-C2'	9.22	125.98	114.00
35	BA	483	C	C5-C6-N1	9.22	125.61	121.00
35	BA	692	U	O4'-C1'-N1	9.22	115.57	108.20
35	BA	1139	G	N1-C2-N2	9.22	124.50	116.20
35	BA	1232	U	O4'-C1'-N1	9.22	115.57	108.20
2	AB	228	C	N3-C4-C5	-9.21	118.21	121.90
35	BA	2	A	N3-C4-C5	-9.22	120.35	126.80
35	BA	1453	G	C4-C5-N7	-9.22	107.11	110.80
2	AB	1115	G	C4-C5-N7	-9.21	107.11	110.80
2	AB	1830	C	C4-C5-C6	9.21	122.01	117.40
2	AB	93	G	C6-C5-N7	-9.21	124.87	130.40
2	AB	194	G	N1-C6-O6	-9.21	114.37	119.90
2	AB	398	C	N3-C4-C5	-9.21	118.22	121.90
2	AB	546	U	C2-N3-C4	-9.21	121.47	127.00
1	AA	26	C	C5'-C4'-O4'	9.21	120.15	109.10
2	AB	885	C	N1-C2-O2	9.21	124.43	118.90
2	AB	1848	A	C6-C5-N7	9.21	138.75	132.30
35	BA	638	U	C2-N3-C4	-9.21	121.47	127.00
35	BA	1416	G	C6-N1-C2	-9.21	119.57	125.10
2	AB	1686	C	C4-C5-C6	9.21	122.00	117.40
2	AB	1717	A	C8-N9-C4	-9.21	102.12	105.80
2	AB	2490	G	N9-C4-C5	-9.21	101.72	105.40
2	AB	2641	G	C6-N1-C2	-9.21	119.57	125.10
2	AB	930	G	C5-C6-O6	-9.21	123.08	128.60
2	AB	1825	U	C5-C6-N1	-9.21	118.10	122.70
2	AB	1994	C	N3-C2-O2	-9.21	115.45	121.90
2	AB	2542	A	N3-C4-C5	-9.21	120.35	126.80
2	AB	670	A	C6-N1-C2	9.21	124.12	118.60
2	AB	1792	G	N9-C1'-C2'	-9.21	101.87	112.00
2	AB	1808	A	C5-C6-N1	9.21	122.30	117.70
2	AB	2541	A	C6-C5-N7	9.21	138.74	132.30
35	BA	487	A	C4-C5-N7	-9.21	106.10	110.70
2	AB	1056	G	C5-C6-O6	-9.20	123.08	128.60
2	AB	1237	A	C4-C5-C6	-9.20	112.40	117.00
2	AB	1899	A	P-O3'-C3'	9.20	130.74	119.70
35	BA	945	G	C5-C6-O6	-9.20	123.08	128.60
2	AB	24	G	C5-C6-O6	-9.20	123.08	128.60
2	AB	598	U	O4'-C1'-N1	9.20	115.56	108.20
2	AB	1674	G	C5-C6-N1	9.20	116.10	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2036	C	C5-C4-N4	-9.20	113.76	120.20
35	BA	274	A	N1-C6-N6	9.20	124.12	118.60
35	BA	971	G	C4-C5-N7	-9.20	107.12	110.80
2	AB	653	U	C3'-C2'-C1'	9.20	108.86	101.50
19	AS	35	PHE	CB-CG-CD2	-9.20	114.36	120.80
1	AA	45	A	O4'-C1'-N9	9.20	115.56	108.20
2	AB	185	G	N9-C1'-C2'	-9.20	101.89	112.00
2	AB	387	U	N3-C2-O2	-9.20	115.76	122.20
35	BA	691	G	O4'-C1'-N9	9.20	115.56	108.20
2	AB	1245	G	C4-C5-C6	9.19	124.32	118.80
35	BA	190	A	C4-C5-N7	9.19	115.30	110.70
35	BA	993	G	C6-N1-C2	-9.19	119.58	125.10
2	AB	759	G	N3-C4-C5	-9.19	124.00	128.60
2	AB	1006	C	N3-C2-O2	-9.19	115.47	121.90
2	AB	1127	A	N7-C8-N9	9.19	118.40	113.80
2	AB	2143	C	N3-C2-O2	-9.19	115.47	121.90
35	BA	859	G	C5-C6-N1	9.19	116.10	111.50
38	BD	9	G	C3'-C2'-C1'	9.19	108.85	101.50
51	BQ	84	ARG	NE-CZ-NH2	-9.19	115.70	120.30
2	AB	2509	G	N3-C4-C5	-9.19	124.00	128.60
35	BA	809	G	C8-N9-C4	-9.19	102.72	106.40
2	AB	2265	U	N3-C4-O4	9.19	125.83	119.40
12	AL	44	TYR	CB-CG-CD2	-9.19	115.49	121.00
35	BA	1160	G	C4'-C3'-C2'	-9.19	93.41	102.60
36	BB	28	C	N3-C4-C5	9.19	125.58	121.90
38	BD	37	U	N1-C2-N3	9.19	120.41	114.90
2	AB	784	G	C5-N7-C8	-9.19	99.71	104.30
2	AB	785	G	C8-N9-C4	-9.19	102.73	106.40
2	AB	1193	G	C5-C6-N1	9.19	116.09	111.50
2	AB	2685	G	N3-C4-C5	-9.19	124.01	128.60
2	AB	1721	G	C8-N9-C4	-9.19	102.73	106.40
35	BA	927	G	C4'-C3'-C2'	-9.19	93.42	102.60
35	BA	842	U	C5-C4-O4	9.18	131.41	125.90
35	BA	984	C	O4'-C1'-N1	9.18	115.55	108.20
35	BA	1174	G	N7-C8-N9	-9.18	108.51	113.10
38	BD	46	G	N3-C4-C5	-9.18	124.01	128.60
2	AB	415	A	C5-N7-C8	-9.18	99.31	103.90
2	AB	2704	C	C6-N1-C2	9.18	123.97	120.30
38	BD	11	A	N1-C2-N3	-9.18	124.71	129.30
2	AB	1234	U	C4-C5-C6	9.18	125.21	119.70
35	BA	1166	G	C8-N9-C4	-9.18	102.73	106.40
43	BI	4	TYR	CB-CG-CD1	-9.18	115.49	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1982	U	O4'-C1'-N1	9.18	115.54	108.20
2	AB	641	U	N3-C4-C5	-9.18	109.09	114.60
2	AB	2005	A	N9-C4-C5	9.18	109.47	105.80
2	AB	2043	C	C5'-C4'-O4'	9.18	120.11	109.10
35	BA	564	C	C6-N1-C2	9.18	123.97	120.30
35	BA	1048	G	N3-C4-C5	-9.18	124.01	128.60
35	BA	752	G	C2-N3-C4	9.18	116.49	111.90
35	BA	1133	G	O4'-C1'-N9	9.18	115.54	108.20
1	AA	12	C	N1-C2-O2	9.17	124.40	118.90
2	AB	1349	C	C5-C4-N4	-9.17	113.78	120.20
2	AB	2462	C	N3-C4-N4	9.17	124.42	118.00
35	BA	29	U	N1-C2-O2	9.17	129.22	122.80
2	AB	1630	A	C5-C6-N1	9.17	122.29	117.70
2	AB	1809	A	N7-C8-N9	9.17	118.39	113.80
2	AB	1830	C	O4'-C1'-N1	9.17	115.54	108.20
2	AB	1988	G	C6-C5-N7	-9.17	124.90	130.40
2	AB	2074	U	O4'-C1'-N1	9.17	115.54	108.20
2	AB	2649	C	C4'-C3'-C2'	-9.17	93.43	102.60
2	AB	2698	U	C4-C5-C6	9.17	125.20	119.70
35	BA	257	G	C5-N7-C8	-9.17	99.71	104.30
35	BA	1457	G	C5-C6-N1	9.17	116.09	111.50
2	AB	2773	C	C5-C6-N1	9.17	125.58	121.00
35	BA	56	U	O4'-C1'-N1	9.17	115.54	108.20
35	BA	770	C	N3-C4-N4	9.17	124.42	118.00
35	BA	670	G	C8-N9-C4	-9.17	102.73	106.40
35	BA	787	A	C2-N3-C4	9.17	115.18	110.60
50	BP	112	ARG	NE-CZ-NH1	9.17	124.88	120.30
1	AA	69	G	N9-C4-C5	9.17	109.07	105.40
37	BC	37	G	C8-N9-C4	-9.17	102.73	106.40
2	AB	1642	G	C5-C6-N1	9.16	116.08	111.50
2	AB	1647	U	N3-C4-O4	9.16	125.81	119.40
35	BA	1531	A	C4-C5-C6	-9.16	112.42	117.00
2	AB	1367	A	C4-C5-C6	-9.16	112.42	117.00
2	AB	1403	A	N1-C2-N3	-9.16	124.72	129.30
2	AB	1714	U	O4'-C1'-N1	9.16	115.53	108.20
35	BA	549	C	N3-C4-C5	-9.16	118.24	121.90
2	AB	1596	A	O4'-C1'-N9	9.16	115.53	108.20
2	AB	367	G	C4-C5-N7	-9.16	107.14	110.80
2	AB	388	G	O4'-C1'-N9	9.16	115.53	108.20
17	AQ	33	ARG	NE-CZ-NH2	-9.16	115.72	120.30
35	BA	376	G	N1-C2-N3	-9.16	118.41	123.90
35	BA	36	C	N3-C4-C5	-9.15	118.24	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1413	A	O4'-C1'-N9	9.15	115.52	108.20
35	BA	85	U	C2-N3-C4	-9.15	121.51	127.00
35	BA	795	C	O4'-C1'-N1	9.15	115.52	108.20
38	BD	1	C	C6-N1-C2	9.15	123.96	120.30
2	AB	1475	G	C2-N3-C4	9.15	116.47	111.90
2	AB	262	A	O4'-C1'-N9	9.15	115.52	108.20
2	AB	632	A	O4'-C1'-N9	9.15	115.52	108.20
2	AB	1493	C	C2-N3-C4	9.15	124.47	119.90
2	AB	1675	C	C6-N1-C2	-9.15	116.64	120.30
2	AB	1852	U	C4-C5-C6	9.15	125.19	119.70
2	AB	2522	U	N3-C2-O2	-9.15	115.80	122.20
12	AL	69	ARG	NE-CZ-NH2	9.15	124.87	120.30
2	AB	2128	G	C6-C5-N7	-9.15	124.91	130.40
2	AB	2404	U	C5-C6-N1	9.15	127.27	122.70
35	BA	788	U	N3-C4-C5	-9.15	109.11	114.60
35	BA	1454	G	C5-N7-C8	-9.15	99.73	104.30
2	AB	715	A	N9-C4-C5	9.14	109.46	105.80
2	AB	652	U	N3-C2-O2	-9.14	115.80	122.20
2	AB	730	A	C6-C5-N7	-9.14	125.90	132.30
2	AB	1118	C	C6-N1-C2	-9.14	116.64	120.30
2	AB	1523	U	C3'-C2'-C1'	-9.14	94.19	101.50
2	AB	2286	G	N9-C4-C5	9.14	109.06	105.40
2	AB	2839	G	C2-N3-C4	9.14	116.47	111.90
35	BA	389	A	C2-N3-C4	9.14	115.17	110.60
35	BA	1084	G	N1-C6-O6	-9.14	114.41	119.90
35	BA	1086	U	C4'-C3'-C2'	-9.14	93.45	102.60
35	BA	552	U	C6-N1-C2	-9.14	115.52	121.00
2	AB	348	A	N9-C4-C5	9.14	109.46	105.80
2	AB	1365	A	C5-C6-N6	-9.14	116.39	123.70
2	AB	1675	C	O4'-C1'-C2'	-9.14	96.66	105.80
2	AB	2340	A	O4'-C1'-N9	9.14	115.51	108.20
35	BA	22	G	N9-C4-C5	9.14	109.06	105.40
35	BA	413	G	C4-C5-N7	9.14	114.46	110.80
35	BA	552	U	N1-C2-N3	9.14	120.38	114.90
35	BA	772	U	O4'-C1'-N1	9.14	115.51	108.20
1	AA	93	C	N1-C2-O2	9.13	124.38	118.90
2	AB	721	A	C8-N9-C4	-9.14	102.15	105.80
2	AB	732	C	C3'-C2'-C1'	9.14	108.81	101.50
35	BA	1450	U	C6-N1-C2	-9.14	115.52	121.00
2	AB	396	G	N3-C4-C5	-9.13	124.03	128.60
2	AB	869	G	O4'-C1'-N9	9.13	115.51	108.20
2	AB	1830	C	N1-C1'-C2'	-9.13	101.95	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1276	G	C2-N3-C4	9.13	116.47	111.90
35	BA	1458	G	C2-N3-C4	9.13	116.47	111.90
35	BA	1188	A	C8-N9-C4	9.13	109.45	105.80
2	AB	465	G	C8-N9-C4	-9.13	102.75	106.40
2	AB	1673	G	N3-C2-N2	-9.13	113.51	119.90
2	AB	1212	G	O4'-C1'-N9	9.13	115.50	108.20
2	AB	2304	G	C6-N1-C2	-9.13	119.62	125.10
35	BA	141	G	C4'-C3'-C2'	-9.13	93.47	102.60
35	BA	461	A	O4'-C1'-N9	9.13	115.50	108.20
2	AB	57	C	N1-C2-O2	9.13	124.38	118.90
2	AB	108	G	N3-C2-N2	-9.13	113.51	119.90
2	AB	375	G	N3-C4-C5	-9.13	124.03	128.60
2	AB	898	C	N3-C2-O2	-9.13	115.51	121.90
2	AB	2135	A	C5-C6-N1	9.13	122.26	117.70
2	AB	2848	G	C3'-C2'-C1'	-9.13	94.20	101.50
35	BA	551	U	C2-N3-C4	-9.13	121.52	127.00
35	BA	1529	G	C1'-O4'-C4'	-9.13	102.60	109.90
2	AB	136	G	N1-C6-O6	-9.13	114.42	119.90
2	AB	457	A	C5-N7-C8	9.12	108.46	103.90
2	AB	1068	G	N1-C2-N2	9.12	124.41	116.20
35	BA	656	G	C5-C6-O6	-9.13	123.12	128.60
2	AB	2540	C	C4-C5-C6	9.12	121.96	117.40
2	AB	1060	U	O4'-C1'-N1	9.12	115.50	108.20
2	AB	2345	G	C5-C6-O6	9.12	134.07	128.60
35	BA	202	G	C6-C5-N7	9.12	135.87	130.40
2	AB	874	G	N1-C2-N3	-9.12	118.43	123.90
2	AB	1149	G	C1'-O4'-C4'	-9.12	102.60	109.90
2	AB	2341	G	C1'-O4'-C4'	-9.12	102.61	109.90
2	AB	2531	A	O4'-C1'-N9	9.12	115.50	108.20
35	BA	848	C	O4'-C1'-N1	9.12	115.50	108.20
2	AB	1699	G	N3-C4-N9	9.12	131.47	126.00
14	AN	59	ARG	NE-CZ-NH2	-9.12	115.74	120.30
35	BA	101	A	N7-C8-N9	-9.12	109.24	113.80
35	BA	1228	C	C4'-C3'-C2'	-9.12	93.48	102.60
2	AB	2358	A	O4'-C1'-N9	9.12	115.49	108.20
35	BA	1342	C	N1-C2-N3	-9.12	112.82	119.20
2	AB	2777	G	N9-C4-C5	-9.11	101.75	105.40
35	BA	239	U	C1'-O4'-C4'	-9.11	102.61	109.90
51	BQ	19	TYR	CB-CG-CD2	-9.11	115.53	121.00
1	AA	25	U	C1'-O4'-C4'	-9.11	102.61	109.90
2	AB	856	G	N1-C2-N3	9.11	129.37	123.90
35	BA	1193	G	O4'-C1'-N9	9.11	115.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	43	G	N1-C2-N2	9.11	124.40	116.20
2	AB	1702	G	C8-N9-C4	-9.11	102.76	106.40
2	AB	1755	A	N9-C4-C5	9.11	109.44	105.80
43	BI	91	ARG	NE-CZ-NH2	-9.11	115.74	120.30
2	AB	2125	G	C4-C5-N7	-9.11	107.16	110.80
50	BP	97	ARG	NE-CZ-NH2	-9.11	115.75	120.30
2	AB	402	A	C5-C6-N1	-9.11	113.14	117.70
35	BA	625	U	C5-C6-N1	9.11	127.25	122.70
35	BA	1230	C	C5-C4-N4	-9.11	113.82	120.20
1	AA	76	G	C8-N9-C4	-9.11	102.76	106.40
2	AB	2752	C	N3-C4-C5	9.11	125.54	121.90
35	BA	1193	G	N9-C1'-C2'	-9.11	101.98	112.00
2	AB	1330	C	N3-C4-N4	9.11	124.37	118.00
7	AG	79	ARG	NE-CZ-NH2	9.11	124.85	120.30
35	BA	681	A	C5'-C4'-O4'	9.11	120.03	109.10
35	BA	6	G	C8-N9-C4	-9.11	102.76	106.40
37	BC	36	U	O4'-C1'-N1	9.11	115.48	108.20
38	BD	27	G	O4'-C1'-N9	9.11	115.48	108.20
1	AA	66	A	C4'-C3'-O3'	9.10	131.20	113.00
2	AB	667	U	N1-C2-N3	9.10	120.36	114.90
2	AB	880	G	C8-N9-C4	-9.10	102.76	106.40
2	AB	2351	G	N3-C2-N2	9.10	126.27	119.90
2	AB	2474	U	C3'-C2'-C1'	9.10	108.78	101.50
35	BA	626	G	C1'-O4'-C4'	9.10	117.18	109.90
35	BA	1287	A	O4'-C1'-N9	9.10	115.48	108.20
2	AB	2757	A	O4'-C1'-N9	9.10	115.48	108.20
35	BA	932	C	O4'-C1'-N1	9.10	115.48	108.20
35	BA	1176	A	C3'-C2'-C1'	9.10	108.78	101.50
35	BA	1397	C	C6-N1-C2	-9.10	116.66	120.30
2	AB	530	G	C6-C5-N7	-9.10	124.94	130.40
2	AB	2524	G	C4-C5-N7	-9.10	107.16	110.80
2	AB	514	A	C5-N7-C8	-9.09	99.35	103.90
2	AB	856	G	N3-C2-N2	-9.09	113.53	119.90
2	AB	1302	A	O4'-C1'-N9	9.09	115.47	108.20
35	BA	448	A	C8-N9-C4	9.09	109.44	105.80
2	AB	24	G	N7-C8-N9	9.09	117.64	113.10
2	AB	419	U	C4-C5-C6	9.09	125.16	119.70
2	AB	1882	U	O4'-C1'-N1	9.09	115.47	108.20
2	AB	1394	U	N1-C2-N3	9.09	120.35	114.90
35	BA	1019	A	C5-C6-N1	-9.09	113.16	117.70
2	AB	228	C	C6-N1-C2	9.09	123.94	120.30
2	AB	364	C	N3-C4-C5	-9.09	118.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	667	U	O4'-C1'-N1	9.09	115.47	108.20
2	AB	1410	G	C8-N9-C4	-9.09	102.77	106.40
2	AB	2843	G	C5-C6-O6	-9.09	123.15	128.60
35	BA	124	C	C4-C5-C6	9.09	121.94	117.40
2	AB	1460	U	N1-C2-N3	9.09	120.35	114.90
2	AB	1721	G	C2-N3-C4	9.09	116.44	111.90
2	AB	2256	G	O4'-C1'-N9	9.09	115.47	108.20
2	AB	2514	U	N3-C4-C5	-9.09	109.15	114.60
2	AB	2529	G	N3-C4-C5	-9.09	124.06	128.60
35	BA	34	C	O4'-C1'-N1	9.09	115.47	108.20
35	BA	440	C	C3'-C2'-C1'	9.09	108.77	101.50
2	AB	404	A	O4'-C1'-N9	9.08	115.47	108.20
2	AB	842	U	C2-N3-C4	-9.08	121.55	127.00
2	AB	1622	G	N3-C4-C5	-9.08	124.06	128.60
2	AB	1643	G	C8-N9-C4	9.08	110.03	106.40
2	AB	2293	G	C8-N9-C4	-9.08	102.77	106.40
2	AB	2787	C	O4'-C1'-N1	9.08	115.47	108.20
35	BA	1195	C	N3-C4-C5	-9.08	118.27	121.90
2	AB	1465	G	N3-C4-N9	9.08	131.45	126.00
2	AB	1893	C	N3-C4-C5	-9.08	118.27	121.90
2	AB	2631	G	C2-N3-C4	9.08	116.44	111.90
35	BA	316	C	C3'-C2'-C1'	9.08	108.76	101.50
35	BA	1142	G	C6-N1-C2	-9.08	119.65	125.10
35	BA	1356	G	N3-C4-C5	-9.08	124.06	128.60
2	AB	33	C	C1'-O4'-C4'	-9.08	102.64	109.90
2	AB	61	C	C6-N1-C2	-9.08	116.67	120.30
2	AB	100	U	C5-C4-O4	-9.08	120.45	125.90
2	AB	699	A	C5-N7-C8	-9.08	99.36	103.90
2	AB	708	G	C4-C5-N7	9.08	114.43	110.80
2	AB	1944	U	C5-C4-O4	-9.08	120.45	125.90
2	AB	2149	U	O4'-C1'-N1	9.08	115.46	108.20
2	AB	1902	C	N3-C2-O2	-9.08	115.55	121.90
35	BA	555	U	O4'-C1'-N1	9.08	115.46	108.20
2	AB	4	U	C5'-C4'-O4'	9.07	119.99	109.10
2	AB	630	G	C2-N3-C4	9.07	116.44	111.90
2	AB	2879	A	C5-N7-C8	-9.07	99.36	103.90
2	AB	1124	G	C5-N7-C8	9.07	108.84	104.30
2	AB	2298	A	N9-C4-C5	9.07	109.43	105.80
35	BA	1041	G	C3'-C2'-C1'	-9.07	94.24	101.50
2	AB	60	G	C8-N9-C4	-9.07	102.77	106.40
2	AB	2442	C	N1-C2-O2	9.07	124.34	118.90
2	AB	2694	G	N9-C4-C5	9.07	109.03	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1356	G	C8-N9-C4	-9.07	102.77	106.40
2	AB	2468	A	C2-N3-C4	9.07	115.14	110.60
2	AB	2542	A	C6-N1-C2	-9.07	113.16	118.60
2	AB	980	A	C8-N9-C4	-9.07	102.17	105.80
2	AB	1121	C	N3-C4-C5	-9.07	118.27	121.90
2	AB	2423	U	C5'-C4'-O4'	9.07	119.98	109.10
2	AB	2663	G	C3'-C2'-C1'	-9.07	94.25	101.50
35	BA	388	G	N3-C4-N9	9.07	131.44	126.00
35	BA	735	C	O4'-C1'-N1	9.07	115.45	108.20
35	BA	779	C	N1-C2-O2	9.07	124.34	118.90
1	AA	51	G	N3-C4-C5	-9.06	124.07	128.60
2	AB	2193	G	C4-C5-N7	-9.06	107.17	110.80
2	AB	673	C	N1-C2-O2	9.06	124.34	118.90
2	AB	917	A	C8-N9-C4	-9.06	102.17	105.80
2	AB	2365	G	N3-C4-C5	-9.06	124.07	128.60
2	AB	2745	C	N3-C4-C5	9.06	125.53	121.90
17	AQ	7	ARG	NE-CZ-NH1	9.06	124.83	120.30
35	BA	308	C	O4'-C1'-N1	9.06	115.45	108.20
35	BA	505	G	C2-N3-C4	9.06	116.43	111.90
35	BA	551	U	N3-C2-O2	-9.06	115.86	122.20
35	BA	652	U	C3'-C2'-C1'	9.06	108.75	101.50
36	BB	43	G	O4'-C1'-N9	9.06	115.45	108.20
2	AB	2	G	C5-C6-O6	-9.06	123.16	128.60
2	AB	482	A	C6-C5-N7	-9.06	125.96	132.30
2	AB	112	U	C4-C5-C6	9.06	125.14	119.70
2	AB	304	U	O4'-C1'-N1	9.06	115.45	108.20
2	AB	973	A	N9-C4-C5	-9.06	102.17	105.80
2	AB	1987	A	N9-C4-C5	9.06	109.42	105.80
38	BD	4	G	C4'-C3'-C2'	-9.06	93.54	102.60
2	AB	789	A	P-O3'-C3'	9.06	130.57	119.70
2	AB	1219	U	C5'-C4'-O4'	9.06	119.97	109.10
35	BA	33	A	N9-C4-C5	9.06	109.42	105.80
2	AB	1799	G	O4'-C1'-N9	9.06	115.44	108.20
35	BA	589	U	C5-C6-N1	-9.06	118.17	122.70
2	AB	142	A	C3'-C2'-C1'	9.05	108.74	101.50
2	AB	2455	G	N7-C8-N9	9.05	117.63	113.10
35	BA	1220	G	O4'-C1'-N9	9.06	115.44	108.20
1	AA	87	U	C3'-C2'-C1'	-9.05	94.26	101.50
2	AB	1528	A	C4-C5-N7	-9.05	106.17	110.70
35	BA	1060	U	C5-C6-N1	-9.05	118.17	122.70
35	BA	1206	G	N7-C8-N9	9.05	117.63	113.10
38	BD	76	C	O4'-C1'-N1	9.05	115.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	532	A	C5'-C4'-O4'	-9.05	98.24	109.10
2	AB	2214	C	C5-C4-N4	9.05	126.54	120.20
2	AB	1018	U	O4'-C1'-N1	9.05	115.44	108.20
35	BA	1527	U	C4-C5-C6	9.05	125.13	119.70
2	AB	869	G	C4-C5-N7	-9.05	107.18	110.80
2	AB	1849	G	O4'-C1'-N9	9.05	115.44	108.20
35	BA	567	G	C4-C5-C6	9.05	124.23	118.80
35	BA	1230	C	N3-C4-N4	9.05	124.33	118.00
38	BD	42	C	O4'-C1'-N1	9.05	115.44	108.20
2	AB	471	A	C2-N3-C4	-9.04	106.08	110.60
2	AB	935	C	C4'-C3'-C2'	-9.05	93.55	102.60
2	AB	2392	A	N9-C4-C5	-9.05	102.18	105.80
37	BC	28	U	O4'-C1'-N1	9.05	115.44	108.20
2	AB	2189	U	C2-N3-C4	-9.04	121.57	127.00
35	BA	14	U	C5-C6-N1	-9.04	118.18	122.70
2	AB	216	A	O4'-C1'-N9	9.04	115.43	108.20
35	BA	65	A	C8-N9-C4	-9.04	102.18	105.80
2	AB	372	G	C6-C5-N7	9.04	135.82	130.40
2	AB	1494	A	C4-C5-N7	-9.04	106.18	110.70
2	AB	2588	G	C4'-C3'-C2'	9.04	111.64	102.60
2	AB	2804	U	N1-C2-O2	-9.04	116.47	122.80
35	BA	858	G	N9-C4-C5	9.04	109.02	105.40
2	AB	347	A	C5-C6-N1	9.04	122.22	117.70
2	AB	735	A	P-O3'-C3'	9.04	130.55	119.70
2	AB	1498	C	O4'-C1'-N1	9.04	115.43	108.20
2	AB	2018	G	N9-C4-C5	9.04	109.02	105.40
36	BB	31	U	O4'-C1'-N1	9.04	115.43	108.20
2	AB	2181	U	C5-C6-N1	-9.04	118.18	122.70
2	AB	2446	G	C2-N3-C4	9.04	116.42	111.90
2	AB	2640	G	C6-N1-C2	-9.04	119.68	125.10
35	BA	495	A	C5-N7-C8	9.04	108.42	103.90
35	BA	773	G	N3-C4-C5	-9.04	124.08	128.60
48	BN	10	ARG	NE-CZ-NH1	9.04	124.82	120.30
2	AB	507	A	C8-N9-C4	-9.03	102.19	105.80
2	AB	1661	G	C5'-C4'-O4'	9.04	119.94	109.10
2	AB	2664	G	N3-C4-C5	-9.04	124.08	128.60
2	AB	214	G	C4-C5-N7	-9.03	107.19	110.80
2	AB	238	C	O4'-C1'-N1	9.03	115.43	108.20
2	AB	2532	G	C4-C5-N7	9.03	114.41	110.80
2	AB	2628	C	O4'-C1'-N1	9.03	115.42	108.20
2	AB	2787	C	N3-C4-C5	9.03	125.51	121.90
35	BA	878	A	C5-C6-N1	9.03	122.22	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1395	C	N3-C4-N4	9.03	124.32	118.00
35	BA	24	U	N3-C4-O4	9.03	125.72	119.40
35	BA	478	A	C4'-C3'-C2'	-9.03	93.57	102.60
1	AA	17	C	C6-N1-C2	9.03	123.91	120.30
35	BA	333	U	O4'-C1'-N1	9.03	115.42	108.20
36	BB	11	U	C5-C6-N1	-9.03	118.19	122.70
2	AB	734	A	C2-N3-C4	9.03	115.11	110.60
2	AB	765	C	C5-C4-N4	-9.03	113.88	120.20
2	AB	843	G	C6-C5-N7	-9.03	124.98	130.40
2	AB	1453	A	N9-C4-C5	9.03	109.41	105.80
2	AB	2094	A	O4'-C1'-N9	9.03	115.42	108.20
35	BA	186	C	N3-C2-O2	-9.03	115.58	121.90
35	BA	367	U	C2-N3-C4	-9.03	121.58	127.00
35	BA	387	U	C3'-C2'-C1'	-9.03	94.28	101.50
35	BA	1078	U	C2-N3-C4	-9.03	121.58	127.00
2	AB	623	C	N1-C2-O2	9.02	124.31	118.90
35	BA	883	C	N1-C2-O2	9.02	124.31	118.90
35	BA	1348	U	C5-C6-N1	-9.02	118.19	122.70
2	AB	49	A	N1-C6-N6	-9.02	113.19	118.60
2	AB	1346	G	N3-C4-C5	-9.02	124.09	128.60
2	AB	1468	U	C5-C6-N1	-9.02	118.19	122.70
2	AB	2154	A	C4-C5-C6	-9.02	112.49	117.00
2	AB	545	U	C6-N1-C2	9.02	126.41	121.00
2	AB	442	G	C5-C6-O6	-9.02	123.19	128.60
2	AB	552	U	C3'-C2'-C1'	9.02	108.72	101.50
2	AB	587	C	O4'-C1'-N1	9.02	115.42	108.20
2	AB	802	A	C8-N9-C4	-9.02	102.19	105.80
2	AB	1475	G	C5'-C4'-C3'	-9.02	101.57	116.00
2	AB	1151	A	C5-C6-N1	-9.02	113.19	117.70
2	AB	1372	U	C2-N3-C4	-9.02	121.59	127.00
35	BA	150	U	O4'-C1'-N1	9.02	115.41	108.20
2	AB	244	A	N1-C6-N6	-9.01	113.19	118.60
2	AB	730	A	C4-C5-N7	9.01	115.21	110.70
2	AB	617	G	N7-C8-N9	9.01	117.61	113.10
35	BA	699	C	N3-C4-C5	-9.01	118.30	121.90
2	AB	290	U	N1-C2-O2	-9.01	116.49	122.80
2	AB	548	G	C4-C5-N7	-9.01	107.20	110.80
2	AB	1743	G	N3-C2-N2	9.01	126.21	119.90
2	AB	2124	G	C6-N1-C2	-9.01	119.69	125.10
2	AB	995	C	C2-N3-C4	9.01	124.41	119.90
2	AB	1942	C	C6-N1-C2	9.01	123.90	120.30
35	BA	694	A	O4'-C1'-N9	9.01	115.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	906	A	C8-N9-C4	-9.01	102.20	105.80
2	AB	1138	G	C2-N3-C4	9.01	116.40	111.90
2	AB	68	G	C5-C6-O6	-9.01	123.20	128.60
2	AB	206	U	N1-C1'-C2'	-9.01	102.09	112.00
2	AB	2290	G	C5'-C4'-O4'	9.01	119.91	109.10
35	BA	143	A	C8-N9-C4	-9.01	102.20	105.80
35	BA	392	C	O4'-C1'-N1	9.01	115.41	108.20
35	BA	1182	G	N7-C8-N9	9.01	117.60	113.10
37	BC	40	G	C5-C6-O6	-9.01	123.20	128.60
1	AA	100	G	C4-C5-N7	-9.00	107.20	110.80
2	AB	160	A	C6-C5-N7	9.00	138.60	132.30
2	AB	508	A	N1-C6-N6	-9.00	113.20	118.60
2	AB	637	A	C2-N3-C4	9.00	115.10	110.60
2	AB	1986	C	C6-N1-C2	-9.00	116.70	120.30
2	AB	2447	G	C5-N7-C8	9.00	108.80	104.30
35	BA	800	G	C8-N9-C4	-9.00	102.80	106.40
35	BA	911	U	C5-C6-N1	-9.00	118.20	122.70
38	BD	15	G	C8-N9-C4	-9.00	102.80	106.40
2	AB	2046	G	N3-C2-N2	9.00	126.20	119.90
35	BA	441	A	C4-C5-C6	9.00	121.50	117.00
2	AB	1581	G	C4-C5-C6	9.00	124.20	118.80
2	AB	2171	A	N9-C4-C5	9.00	109.40	105.80
2	AB	1158	C	C2-N3-C4	9.00	124.40	119.90
35	BA	1531	A	N7-C8-N9	9.00	118.30	113.80
2	AB	287	G	C6-N1-C2	-9.00	119.70	125.10
2	AB	2139	U	N3-C2-O2	-9.00	115.90	122.20
2	AB	2270	A	C4-C5-C6	-9.00	112.50	117.00
2	AB	2405	G	N3-C4-C5	-9.00	124.10	128.60
28	A1	29	ARG	NE-CZ-NH1	-9.00	115.80	120.30
35	BA	1149	C	O4'-C1'-N1	9.00	115.40	108.20
52	BR	76	ARG	NE-CZ-NH2	9.00	124.80	120.30
2	AB	1296	G	C2-N3-C4	-8.99	107.40	111.90
2	AB	2057	G	N3-C2-N2	-8.99	113.60	119.90
35	BA	776	G	O4'-C4'-C3'	8.99	113.30	106.10
2	AB	2614	A	C5-C6-N1	-8.99	113.20	117.70
35	BA	1266	G	N3-C2-N2	-8.99	113.60	119.90
35	BA	1439	G	C2-N3-C4	8.99	116.40	111.90
35	BA	1455	G	N1-C6-O6	8.99	125.30	119.90
2	AB	989	G	N7-C8-N9	8.99	117.60	113.10
2	AB	1469	A	C8-N9-C4	-8.99	102.20	105.80
35	BA	325	A	C2-N3-C4	-8.99	106.11	110.60
35	BA	440	C	O4'-C1'-N1	8.99	115.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	508	U	N1-C2-N3	8.99	120.29	114.90
35	BA	520	A	O4'-C1'-N9	8.99	115.39	108.20
46	BL	118	ARG	NE-CZ-NH2	-8.99	115.81	120.30
2	AB	1921	G	O4'-C1'-N9	8.99	115.39	108.20
2	AB	2019	A	N1-C6-N6	-8.99	113.21	118.60
35	BA	668	G	C6-N1-C2	-8.99	119.71	125.10
2	AB	977	G	N9-C4-C5	8.98	108.99	105.40
2	AB	2031	A	N9-C4-C5	-8.98	102.21	105.80
1	AA	92	C	N1-C2-O2	8.98	124.29	118.90
2	AB	2688	G	C5-C6-O6	-8.98	123.21	128.60
2	AB	372	G	C4-C5-N7	-8.98	107.21	110.80
2	AB	1229	C	C6-N1-C2	-8.98	116.71	120.30
2	AB	2116	G	N3-C4-N9	8.98	131.39	126.00
2	AB	2721	A	C5-N7-C8	-8.98	99.41	103.90
2	AB	1955	U	N3-C4-C5	-8.98	109.21	114.60
2	AB	2883	A	N3-C4-N9	8.98	134.58	127.40
7	AG	166	ARG	NE-CZ-NH1	-8.98	115.81	120.30
35	BA	218	U	C2-N3-C4	-8.98	121.61	127.00
2	AB	2446	G	P-O3'-C3'	8.98	130.47	119.70
2	AB	650	C	N1-C2-O2	8.98	124.29	118.90
35	BA	1441	A	C8-N9-C4	-8.98	102.21	105.80
2	AB	667	U	C4-C5-C6	8.98	125.09	119.70
2	AB	950	G	C1'-O4'-C4'	8.98	117.08	109.90
2	AB	1234	U	C5'-C4'-O4'	8.98	119.87	109.10
2	AB	1401	G	C5-C6-O6	-8.98	123.21	128.60
2	AB	2231	U	C4-C5-C6	8.98	125.09	119.70
35	BA	316	C	O4'-C1'-N1	8.98	115.38	108.20
35	BA	842	U	O4'-C1'-N1	8.98	115.38	108.20
35	BA	957	U	C4-C5-C6	8.98	125.09	119.70
35	BA	1448	C	N1-C2-O2	8.98	124.28	118.90
2	AB	599	A	C8-N9-C4	-8.97	102.21	105.80
2	AB	1324	G	N3-C2-N2	-8.97	113.62	119.90
2	AB	1345	C	N3-C2-O2	-8.97	115.62	121.90
2	AB	1746	A	N9-C4-C5	8.97	109.39	105.80
2	AB	2528	U	C2-N3-C4	-8.97	121.61	127.00
35	BA	1080	A	C6-N1-C2	-8.97	113.22	118.60
35	BA	1235	U	N3-C2-O2	-8.97	115.92	122.20
2	AB	361	G	C6-C5-N7	-8.97	125.02	130.40
2	AB	1213	A	C4-C5-N7	-8.97	106.21	110.70
2	AB	1454	C	O4'-C1'-N1	8.97	115.38	108.20
2	AB	2419	U	C2-N3-C4	-8.97	121.62	127.00
2	AB	2589	A	C8-N9-C4	-8.97	102.21	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	172	A	C2-N3-C4	8.97	115.08	110.60
35	BA	674	G	C8-N9-C4	-8.97	102.81	106.40
2	AB	316	C	N3-C2-O2	-8.97	115.62	121.90
2	AB	2171	A	C2-N3-C4	8.97	115.08	110.60
35	BA	655	A	C8-N9-C4	-8.97	102.21	105.80
35	BA	1050	G	C4-C5-N7	-8.97	107.21	110.80
2	AB	2520	C	C4-C5-C6	-8.97	112.92	117.40
19	AS	69	ARG	NE-CZ-NH2	8.97	124.78	120.30
35	BA	432	A	C5-N7-C8	8.97	108.38	103.90
36	BB	21	A	N1-C2-N3	-8.97	124.81	129.30
2	AB	442	G	N3-C2-N2	-8.97	113.62	119.90
2	AB	1194	A	N1-C2-N3	-8.97	124.82	129.30
2	AB	528	A	C6-N1-C2	-8.96	113.22	118.60
2	AB	639	U	O4'-C1'-N1	8.96	115.37	108.20
2	AB	734	A	N1-C2-N3	-8.97	124.82	129.30
2	AB	2210	U	C5-C4-O4	-8.97	120.52	125.90
35	BA	444	G	N3-C4-C5	-8.97	124.12	128.60
35	BA	1432	G	N9-C4-C5	8.96	108.99	105.40
36	BB	38	A	C5'-C4'-O4'	8.97	119.86	109.10
2	AB	126	A	C1'-O4'-C4'	-8.96	102.73	109.90
2	AB	962	G	O4'-C1'-N9	8.96	115.37	108.20
2	AB	1191	G	C4-C5-N7	-8.96	107.22	110.80
2	AB	1771	C	N3-C4-N4	8.96	124.27	118.00
30	A3	16	ARG	NE-CZ-NH1	-8.96	115.82	120.30
2	AB	1343	G	N3-C2-N2	8.96	126.17	119.90
2	AB	1922	G	C5-C6-O6	-8.96	123.22	128.60
2	AB	2138	G	C8-N9-C4	-8.96	102.82	106.40
35	BA	103	U	N1-C2-O2	-8.96	116.53	122.80
35	BA	405	U	C2-N3-C4	-8.96	121.62	127.00
35	BA	759	A	C8-N9-C4	8.96	109.38	105.80
35	BA	937	A	C8-N9-C4	-8.96	102.22	105.80
35	BA	1334	G	C6-N1-C2	-8.96	119.72	125.10
2	AB	194	G	C5-C6-N1	8.96	115.98	111.50
2	AB	879	G	N1-C2-N2	8.96	124.26	116.20
2	AB	1648	U	C2-N3-C4	-8.96	121.63	127.00
1	AA	45	A	N9-C1'-C2'	-8.96	102.15	112.00
2	AB	1414	C	C5-C4-N4	-8.96	113.93	120.20
2	AB	1702	G	C1'-O4'-C4'	-8.96	102.74	109.90
2	AB	2502	G	C3'-C2'-C1'	8.96	108.67	101.50
35	BA	409	U	C6-N1-C2	-8.96	115.63	121.00
2	AB	438	G	C4-C5-N7	-8.95	107.22	110.80
2	AB	1092	C	C2-N3-C4	-8.95	115.42	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1981	A	O4'-C1'-N9	8.95	115.36	108.20
35	BA	1028	C	C5-C6-N1	-8.95	116.52	121.00
54	BT	26	ARG	NE-CZ-NH1	8.95	124.78	120.30
35	BA	46	G	C5-N7-C8	-8.95	99.82	104.30
35	BA	577	G	C1'-O4'-C4'	8.95	117.06	109.90
35	BA	958	A	C1'-O4'-C4'	8.95	117.06	109.90
2	AB	206	U	C1'-O4'-C4'	-8.95	102.74	109.90
36	BB	10	G	N7-C8-N9	8.95	117.58	113.10
2	AB	2365	G	N7-C8-N9	8.95	117.57	113.10
35	BA	117	G	N1-C6-O6	-8.95	114.53	119.90
35	BA	656	G	N1-C6-O6	8.95	125.27	119.90
2	AB	319	G	N1-C2-N3	-8.95	118.53	123.90
2	AB	1978	A	C8-N9-C4	-8.95	102.22	105.80
2	AB	2147	A	O4'-C1'-N9	8.95	115.36	108.20
35	BA	205	A	O4'-C1'-N9	8.95	115.36	108.20
2	AB	2679	A	N9-C4-C5	8.94	109.38	105.80
35	BA	456	A	N9-C4-C5	8.95	109.38	105.80
35	BA	670	G	C6-C5-N7	-8.94	125.03	130.40
35	BA	1087	G	O4'-C1'-N9	8.94	115.36	108.20
2	AB	1005	C	N3-C4-C5	-8.94	118.32	121.90
2	AB	1062	G	C6-N1-C2	-8.94	119.73	125.10
35	BA	607	A	C4-C5-C6	8.94	121.47	117.00
2	AB	2188	U	N3-C4-O4	8.94	125.66	119.40
35	BA	997	U	N1-C2-N3	8.94	120.27	114.90
35	BA	1261	A	N9-C4-C5	8.94	109.38	105.80
2	AB	322	A	C8-N9-C4	-8.94	102.22	105.80
2	AB	325	G	C8-N9-C4	-8.94	102.82	106.40
2	AB	1723	G	P-O3'-C3'	8.94	130.43	119.70
2	AB	2238	G	N3-C4-C5	-8.94	124.13	128.60
2	AB	2255	G	C5-C6-N1	8.94	115.97	111.50
35	BA	402	G	N9-C4-C5	8.94	108.97	105.40
35	BA	467	U	C1'-O4'-C4'	8.94	117.05	109.90
35	BA	698	G	C4-C5-N7	8.94	114.38	110.80
35	BA	488	C	N3-C4-N4	8.94	124.26	118.00
35	BA	1035	A	O4'-C1'-N9	8.94	115.35	108.20
35	BA	1254	A	N1-C2-N3	8.94	133.77	129.30
35	BA	1316	G	O4'-C1'-N9	8.94	115.35	108.20
35	BA	1416	G	C4-C5-C6	8.94	124.16	118.80
1	AA	80	U	N3-C4-O4	8.94	125.66	119.40
2	AB	303	G	C2-N3-C4	8.94	116.37	111.90
2	AB	675	A	C8-N9-C4	8.94	109.38	105.80
2	AB	874	G	O4'-C1'-N9	8.94	115.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1124	G	O4'-C1'-N9	8.94	115.35	108.20
2	AB	1022	G	C4-C5-N7	-8.94	107.23	110.80
2	AB	2817	U	C5'-C4'-O4'	8.94	119.82	109.10
35	BA	341	C	C6-N1-C2	-8.94	116.73	120.30
35	BA	1394	A	C5-N7-C8	-8.94	99.43	103.90
36	BB	10	G	C8-N9-C4	-8.94	102.83	106.40
2	AB	1017	G	C4-C5-N7	-8.93	107.23	110.80
51	BQ	89	ARG	NE-CZ-NH1	8.93	124.77	120.30
2	AB	1956	U	C5-C6-N1	-8.93	118.23	122.70
2	AB	2651	C	N3-C4-C5	-8.93	118.33	121.90
2	AB	2902	C	C6-N1-C2	8.93	123.87	120.30
35	BA	1190	G	O4'-C1'-N9	8.93	115.35	108.20
2	AB	116	C	N1-C2-O2	8.93	124.26	118.90
2	AB	1147	A	O4'-C1'-N9	8.93	115.34	108.20
2	AB	1774	C	N3-C4-C5	-8.93	118.33	121.90
2	AB	2461	A	C8-N9-C4	8.93	109.37	105.80
2	AB	2770	G	N1-C6-O6	-8.93	114.54	119.90
35	BA	439	U	C4-C5-C6	8.93	125.06	119.70
35	BA	647	C	C5-C4-N4	-8.93	113.95	120.20
1	AA	104	A	N3-C4-N9	8.93	134.54	127.40
2	AB	1290	C	N3-C4-C5	-8.93	118.33	121.90
2	AB	2650	U	C6-N1-C2	-8.93	115.64	121.00
35	BA	156	C	N1-C2-O2	8.93	124.25	118.90
35	BA	1513	A	N7-C8-N9	8.93	118.26	113.80
40	BF	71	ARG	NE-CZ-NH2	-8.93	115.84	120.30
2	AB	1198	U	O4'-C1'-N1	8.92	115.34	108.20
2	AB	2153	C	N3-C4-C5	-8.92	118.33	121.90
35	BA	1362	A	C5-C6-N1	8.92	122.16	117.70
2	AB	1964	G	C5-C6-O6	-8.92	123.25	128.60
35	BA	1025	U	C2-N3-C4	-8.92	121.65	127.00
2	AB	264	C	N3-C4-C5	-8.92	118.33	121.90
2	AB	1746	A	N1-C2-N3	-8.92	124.84	129.30
35	BA	1002	G	C4-C5-C6	8.92	124.15	118.80
35	BA	1087	G	C5-N7-C8	8.92	108.76	104.30
35	BA	1210	C	N1-C2-O2	8.92	124.25	118.90
2	AB	1441	G	N9-C4-C5	8.92	108.97	105.40
2	AB	1648	U	O4'-C1'-N1	8.92	115.33	108.20
2	AB	2361	G	C6-N1-C2	-8.92	119.75	125.10
2	AB	2645	G	C6-N1-C2	-8.91	119.75	125.10
35	BA	1220	G	N1-C6-O6	8.91	125.25	119.90
2	AB	7	G	C5-N7-C8	-8.91	99.84	104.30
2	AB	319	G	C8-N9-C4	-8.91	102.83	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	779	U	N3-C4-O4	8.91	125.64	119.40
2	AB	1970	A	C8-N9-C4	-8.91	102.23	105.80
2	AB	2264	C	C5-C4-N4	-8.91	113.96	120.20
2	AB	977	G	N3-C4-C5	-8.91	124.14	128.60
35	BA	200	G	C5-C6-O6	-8.91	123.25	128.60
2	AB	1031	G	C2-N3-C4	8.91	116.36	111.90
2	AB	1192	G	N9-C1'-C2'	-8.91	102.20	112.00
2	AB	1800	C	C2-N3-C4	8.91	124.36	119.90
2	AB	2375	G	C4-C5-N7	-8.91	107.23	110.80
2	AB	328	U	C4-C5-C6	8.91	125.05	119.70
2	AB	1218	G	O4'-C1'-N9	8.91	115.33	108.20
2	AB	1460	U	N3-C4-O4	8.91	125.64	119.40
2	AB	2495	G	N3-C4-C5	-8.91	124.14	128.60
35	BA	144	G	N9-C4-C5	8.91	108.96	105.40
35	BA	1132	C	O4'-C1'-N1	8.91	115.33	108.20
2	AB	1315	C	N3-C4-N4	8.91	124.23	118.00
2	AB	2352	A	O4'-C1'-N9	8.91	115.33	108.20
2	AB	1667	G	C5-C6-O6	8.91	133.94	128.60
2	AB	2150	C	C4-C5-C6	-8.91	112.95	117.40
2	AB	2566	A	C3'-C2'-C1'	-8.91	94.38	101.50
35	BA	181	A	C3'-C2'-C1'	-8.91	94.37	101.50
35	BA	298	A	O4'-C1'-N9	8.91	115.33	108.20
1	AA	11	C	N3-C4-N4	-8.90	111.77	118.00
2	AB	672	C	C6-N1-C2	-8.90	116.74	120.30
2	AB	1205	A	N1-C2-N3	-8.90	124.85	129.30
2	AB	1751	U	C2-N3-C4	-8.90	121.66	127.00
2	AB	2332	C	N3-C2-O2	-8.90	115.67	121.90
2	AB	2560	A	C5'-C4'-O4'	8.90	119.78	109.10
2	AB	2687	U	C4-C5-C6	8.90	125.04	119.70
25	AY	19	ARG	NE-CZ-NH2	8.90	124.75	120.30
35	BA	1112	C	N3-C4-C5	-8.90	118.34	121.90
35	BA	1294	G	N1-C6-O6	-8.90	114.56	119.90
40	BF	163	ARG	NE-CZ-NH1	8.90	124.75	120.30
2	AB	794	A	N7-C8-N9	-8.90	109.35	113.80
2	AB	123	G	C1'-O4'-C4'	8.90	117.02	109.90
2	AB	1631	G	C8-N9-C4	-8.90	102.84	106.40
38	BD	53	G	C6-C5-N7	-8.90	125.06	130.40
2	AB	92	U	O4'-C1'-N1	8.90	115.32	108.20
2	AB	585	G	C6-C5-N7	-8.90	125.06	130.40
2	AB	707	G	N1-C2-N3	-8.90	118.56	123.90
2	AB	1433	A	C8-N9-C4	-8.90	102.24	105.80
11	AK	126	ARG	NE-CZ-NH2	-8.90	115.85	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	71	G	C5-C6-O6	-8.90	123.26	128.60
35	BA	405	U	C4-C5-C6	8.90	125.04	119.70
35	BA	413	G	N3-C2-N2	-8.90	113.67	119.90
1	AA	106	G	C5'-C4'-O4'	8.89	119.77	109.10
2	AB	2581	G	C2-N3-C4	8.89	116.35	111.90
2	AB	2729	G	C8-N9-C4	-8.89	102.84	106.40
2	AB	1410	G	C5-C6-O6	-8.89	123.26	128.60
2	AB	1533	C	C2-N3-C4	8.89	124.35	119.90
2	AB	1557	C	C2-N3-C4	8.89	124.35	119.90
2	AB	2332	C	N1-C2-N3	8.89	125.42	119.20
2	AB	2476	A	N1-C6-N6	8.89	123.94	118.60
35	BA	958	A	O4'-C1'-N9	8.89	115.31	108.20
35	BA	1328	C	O4'-C1'-N1	8.89	115.31	108.20
35	BA	1274	A	N9-C4-C5	8.89	109.36	105.80
2	AB	2416	C	C6-N1-C2	-8.89	116.74	120.30
2	AB	315	G	C6-C5-N7	-8.89	125.07	130.40
2	AB	2398	U	C5-C4-O4	-8.89	120.57	125.90
2	AB	2456	C	C4-C5-C6	8.89	121.84	117.40
2	AB	2807	U	O4'-C1'-N1	8.89	115.31	108.20
50	BP	107	THR	CA-CB-CG2	-8.89	99.96	112.40
2	AB	859	G	O4'-C1'-N9	8.89	115.31	108.20
2	AB	1168	G	C2-N3-C4	8.88	116.34	111.90
35	BA	806	C	N1-C2-O2	8.89	124.23	118.90
2	AB	1168	G	N3-C4-N9	8.88	131.33	126.00
2	AB	1453	A	C2-N3-C4	8.88	115.04	110.60
2	AB	2351	G	N9-C4-C5	8.88	108.95	105.40
35	BA	797	C	C4-C5-C6	-8.88	112.96	117.40
35	BA	892	A	C4-C5-C6	-8.88	112.56	117.00
35	BA	1211	U	C4-C5-C6	8.88	125.03	119.70
38	BD	47	A	O4'-C1'-N9	8.88	115.31	108.20
2	AB	372	G	C8-N9-C4	-8.88	102.85	106.40
2	AB	1455	G	C4-C5-N7	8.88	114.35	110.80
2	AB	1585	C	N3-C4-C5	8.88	125.45	121.90
2	AB	2270	A	C5-C6-N1	8.88	122.14	117.70
2	AB	481	G	O4'-C1'-N9	8.88	115.31	108.20
2	AB	2196	C	C4-C5-C6	-8.88	112.96	117.40
35	BA	538	G	C1'-O4'-C4'	8.88	117.00	109.90
35	BA	738	C	C5-C4-N4	-8.88	113.98	120.20
35	BA	929	G	C6-C5-N7	8.88	135.73	130.40
35	BA	1430	A	O4'-C1'-N9	8.88	115.30	108.20
37	BC	32	U	C2-N3-C4	-8.88	121.67	127.00
2	AB	2020	A	N1-C6-N6	8.88	123.93	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1187	G	N3-C4-C5	-8.88	124.16	128.60
35	BA	209	U	N1-C2-N3	8.88	120.23	114.90
2	AB	1063	G	O4'-C1'-N9	8.88	115.30	108.20
2	AB	1339	G	N1-C2-N3	-8.87	118.58	123.90
2	AB	1942	C	P-O3'-C3'	8.87	130.35	119.70
28	A1	44	ARG	NE-CZ-NH1	8.88	124.74	120.30
35	BA	339	C	O4'-C1'-N1	8.87	115.30	108.20
1	AA	24	G	N3-C4-N9	8.87	131.32	126.00
35	BA	1317	C	N3-C2-O2	-8.87	115.69	121.90
2	AB	2061	G	N1-C6-O6	8.87	125.22	119.90
35	BA	299	G	C8-N9-C4	-8.87	102.85	106.40
35	BA	303	A	N1-C6-N6	8.87	123.92	118.60
35	BA	348	G	C4-C5-N7	-8.87	107.25	110.80
35	BA	1225	A	N1-C2-N3	8.87	133.73	129.30
35	BA	1415	G	C2-N3-C4	8.87	116.33	111.90
2	AB	853	C	C5'-C4'-O4'	8.87	119.74	109.10
2	AB	1237	A	C6-C5-N7	8.87	138.51	132.30
2	AB	1510	G	N7-C8-N9	8.87	117.53	113.10
2	AB	1708	C	N3-C4-C5	-8.87	118.35	121.90
15	AO	59	ARG	NE-CZ-NH2	-8.87	115.87	120.30
2	AB	2153	C	N3-C4-N4	8.87	124.21	118.00
35	BA	1421	G	C8-N9-C4	-8.87	102.85	106.40
2	AB	2602	A	C4-C5-C6	8.87	121.43	117.00
2	AB	1446	C	O4'-C1'-N1	8.86	115.29	108.20
2	AB	2618	G	C8-N9-C4	-8.86	102.85	106.40
2	AB	2791	G	N3-C4-C5	-8.87	124.17	128.60
41	BG	106	PHE	CB-CG-CD2	-8.87	114.59	120.80
2	AB	610	C	C3'-C2'-C1'	8.86	108.59	101.50
2	AB	1102	C	C6-N1-C2	8.86	123.84	120.30
2	AB	2195	U	N3-C4-O4	8.86	125.60	119.40
2	AB	2282	G	N1-C6-O6	-8.86	114.58	119.90
15	AO	64	TRP	CD1-NE1-CE2	8.86	116.98	109.00
2	AB	2311	A	C5-N7-C8	-8.86	99.47	103.90
2	AB	2536	G	N7-C8-N9	8.86	117.53	113.10
2	AB	2717	C	N3-C2-O2	-8.86	115.70	121.90
2	AB	2755	C	N1-C2-O2	8.86	124.22	118.90
2	AB	2761	A	C4-C5-N7	-8.86	106.27	110.70
2	AB	847	U	C4'-C3'-C2'	-8.86	93.74	102.60
2	AB	2583	G	C8-N9-C4	-8.86	102.86	106.40
2	AB	542	C	N1-C2-O2	8.86	124.22	118.90
2	AB	2779	U	N1-C2-O2	8.86	129.00	122.80
2	AB	570	G	O4'-C4'-C3'	8.86	113.19	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2468	A	N1-C2-N3	-8.86	124.87	129.30
35	BA	313	A	N7-C8-N9	8.86	118.23	113.80
35	BA	809	G	C5-C6-O6	-8.86	123.29	128.60
2	AB	1530	G	C6-N1-C2	-8.86	119.79	125.10
2	AB	2479	U	N1-C2-O2	-8.86	116.60	122.80
2	AB	2557	G	C5-C6-O6	-8.86	123.29	128.60
32	A5	14	ARG	NE-CZ-NH2	8.86	124.73	120.30
35	BA	474	G	C4-C5-C6	8.86	124.11	118.80
2	AB	2495	G	N9-C4-C5	8.85	108.94	105.40
2	AB	2545	G	C5-N7-C8	-8.85	99.87	104.30
35	BA	1249	C	C5-C4-N4	8.85	126.40	120.20
2	AB	627	A	O4'-C4'-C3'	8.85	113.18	106.10
2	AB	1092	C	O4'-C1'-N1	8.85	115.28	108.20
2	AB	1424	G	C4-C5-N7	-8.85	107.26	110.80
2	AB	2172	U	C5-C4-O4	8.85	131.21	125.90
4	AD	239	PHE	CB-CG-CD1	-8.85	114.60	120.80
35	BA	1104	G	O4'-C1'-N9	8.85	115.28	108.20
35	BA	458	U	C4'-C3'-C2'	-8.85	93.75	102.60
37	BC	45	G	N9-C4-C5	8.85	108.94	105.40
2	AB	68	G	C5-N7-C8	-8.85	99.88	104.30
2	AB	407	G	N3-C2-N2	8.85	126.09	119.90
2	AB	2425	A	C5-C6-N1	8.85	122.12	117.70
35	BA	685	G	C8-N9-C4	-8.85	102.86	106.40
35	BA	1129	C	N3-C4-C5	-8.85	118.36	121.90
35	BA	1369	C	O4'-C1'-N1	8.85	115.28	108.20
35	BA	1424	U	N1-C2-N3	8.85	120.21	114.90
38	BD	3	C	N3-C2-O2	-8.85	115.70	121.90
2	AB	179	C	N3-C4-N4	-8.85	111.81	118.00
2	AB	654	A	C8-N9-C4	-8.85	102.26	105.80
2	AB	1697	G	C4-C5-N7	-8.85	107.26	110.80
2	AB	1864	U	O4'-C1'-N1	8.85	115.28	108.20
2	AB	1967	C	C2-N3-C4	8.85	124.32	119.90
2	AB	2307	G	C5-N7-C8	-8.85	99.88	104.30
35	BA	1055	A	C2-N3-C4	8.85	115.02	110.60
35	BA	1345	U	N3-C4-O4	8.85	125.59	119.40
35	BA	1159	U	C3'-C2'-C1'	8.85	108.58	101.50
37	BC	56	G	C6-N1-C2	-8.85	119.79	125.10
2	AB	2004	G	C5-C6-O6	-8.84	123.29	128.60
2	AB	2795	C	C5-C4-N4	-8.84	114.01	120.20
2	AB	2826	A	N9-C1'-C2'	-8.84	102.27	112.00
35	BA	354	G	N3-C4-C5	-8.84	124.18	128.60
35	BA	877	G	C4-C5-N7	-8.84	107.26	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	899	C	N1-C2-O2	8.84	124.21	118.90
35	BA	1097	C	C5-C6-N1	8.84	125.42	121.00
2	AB	856	G	C2-N3-C4	-8.84	107.48	111.90
2	AB	1229	C	N3-C4-C5	-8.84	118.36	121.90
2	AB	1241	A	N9-C4-C5	-8.84	102.26	105.80
2	AB	1685	C	C5'-C4'-O4'	8.84	119.71	109.10
2	AB	1750	G	N7-C8-N9	8.84	117.52	113.10
2	AB	1940	U	N1-C2-O2	8.84	128.99	122.80
2	AB	2481	G	C8-N9-C4	-8.84	102.86	106.40
2	AB	2652	C	C5-C4-N4	-8.84	114.01	120.20
2	AB	2756	U	C5-C4-O4	-8.84	120.59	125.90
2	AB	1971	U	O4'-C1'-N1	8.84	115.27	108.20
2	AB	2376	A	N9-C4-C5	8.84	109.33	105.80
35	BA	542	G	C5'-C4'-C3'	-8.84	101.86	116.00
2	AB	91	A	O4'-C4'-C3'	8.84	113.17	106.10
2	AB	2623	G	N3-C4-N9	8.84	131.30	126.00
2	AB	2645	G	N7-C8-N9	8.84	117.52	113.10
2	AB	650	C	C5'-C4'-O4'	8.84	119.70	109.10
2	AB	712	G	C5-C6-O6	-8.84	123.30	128.60
2	AB	1107	G	C5-C6-N1	8.84	115.92	111.50
2	AB	1721	G	N7-C8-N9	8.84	117.52	113.10
2	AB	2319	G	N7-C8-N9	8.84	117.52	113.10
2	AB	2615	U	C4-C5-C6	8.84	125.00	119.70
2	AB	263	G	C4-C5-C6	-8.83	113.50	118.80
2	AB	721	A	C5'-C4'-O4'	8.83	119.70	109.10
2	AB	1634	A	C1'-O4'-C4'	-8.83	102.83	109.90
2	AB	2285	C	C5-C6-N1	8.83	125.42	121.00
35	BA	177	G	N7-C8-N9	8.83	117.52	113.10
35	BA	644	U	C2-N3-C4	-8.83	121.70	127.00
1	AA	81	G	N9-C4-C5	8.83	108.93	105.40
2	AB	35	G	C8-N9-C4	-8.83	102.87	106.40
2	AB	889	C	N3-C2-O2	-8.83	115.72	121.90
2	AB	1609	A	C5-C6-N1	-8.83	113.28	117.70
35	BA	907	A	C1'-O4'-C4'	-8.83	102.83	109.90
35	BA	1128	C	O4'-C1'-N1	8.83	115.27	108.20
36	BB	68	C	N3-C4-C5	-8.83	118.37	121.90
2	AB	447	A	C5-C6-N6	-8.83	116.64	123.70
2	AB	2820	A	N1-C2-N3	-8.83	124.89	129.30
2	AB	18	U	C5-C4-O4	-8.83	120.60	125.90
2	AB	536	G	C8-N9-C4	-8.83	102.87	106.40
2	AB	1310	G	N9-C4-C5	8.83	108.93	105.40
2	AB	1681	G	C2-N3-C4	8.83	116.31	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1988	G	O4'-C1'-N9	8.83	115.26	108.20
35	BA	499	A	O4'-C4'-C3'	8.83	113.16	106.10
2	AB	613	A	C5'-C4'-O4'	8.82	119.69	109.10
2	AB	2565	A	C2-N3-C4	8.82	115.01	110.60
2	AB	637	A	C5'-C4'-C3'	-8.82	101.88	116.00
2	AB	679	C	O4'-C1'-N1	8.82	115.26	108.20
35	BA	569	C	N3-C2-O2	-8.82	115.72	121.90
2	AB	390	U	O4'-C1'-N1	8.82	115.26	108.20
2	AB	425	G	N7-C8-N9	8.82	117.51	113.10
2	AB	1667	G	N1-C6-O6	-8.82	114.61	119.90
1	AA	37	C	C1'-O4'-C4'	-8.82	102.84	109.90
2	AB	186	G	C6-N1-C2	-8.82	119.81	125.10
2	AB	1710	G	C8-N9-C4	8.82	109.93	106.40
2	AB	1815	A	C4-C5-C6	-8.82	112.59	117.00
2	AB	2123	G	C6-N1-C2	-8.82	119.81	125.10
35	BA	478	A	O4'-C1'-N9	8.82	115.26	108.20
2	AB	1888	G	C4-C5-C6	8.82	124.09	118.80
35	BA	994	A	C4-C5-C6	-8.82	112.59	117.00
2	AB	1603	A	N1-C2-N3	-8.82	124.89	129.30
2	AB	1441	G	N3-C4-C5	-8.82	124.19	128.60
2	AB	1537	G	C2-N3-C4	8.82	116.31	111.90
2	AB	2493	U	C4-C5-C6	8.82	124.99	119.70
2	AB	2557	G	C5-N7-C8	8.82	108.71	104.30
2	AB	2641	G	C2-N3-C4	8.82	116.31	111.90
2	AB	2758	A	C5-C6-N1	-8.82	113.29	117.70
35	BA	72	A	C6-C5-N7	8.81	138.47	132.30
35	BA	1083	U	N3-C4-O4	-8.81	113.23	119.40
2	AB	29	U	C6-N1-C2	-8.81	115.71	121.00
2	AB	2436	G	C8-N9-C4	-8.81	102.88	106.40
2	AB	1792	G	C2-N3-C4	8.81	116.31	111.90
2	AB	2211	A	C5-C6-N6	-8.81	116.65	123.70
2	AB	2670	A	C5-N7-C8	8.81	108.31	103.90
2	AB	2415	G	N1-C6-O6	8.81	125.19	119.90
22	AV	77	ARG	NE-CZ-NH1	8.81	124.71	120.30
35	BA	102	G	N3-C4-N9	8.81	131.29	126.00
35	BA	215	C	C2-N3-C4	8.81	124.31	119.90
35	BA	462	G	N3-C4-N9	8.81	131.29	126.00
35	BA	888	G	C4-C5-N7	8.81	114.32	110.80
35	BA	1168	U	C2-N1-C1'	8.81	128.27	117.70
2	AB	522	A	C8-N9-C4	8.81	109.32	105.80
2	AB	616	A	N1-C6-N6	8.81	123.89	118.60
2	AB	1357	C	C5-C4-N4	8.81	126.37	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2211	A	C4-C5-C6	-8.81	112.59	117.00
35	BA	191	G	O4'-C1'-N9	8.81	115.25	108.20
2	AB	1365	A	N1-C2-N3	8.81	133.70	129.30
35	BA	380	G	O4'-C1'-N9	8.81	115.25	108.20
36	BB	1	A	C8-N9-C4	-8.81	102.28	105.80
35	BA	849	G	C3'-C2'-C1'	8.81	108.55	101.50
35	BA	889	A	C3'-C2'-C1'	-8.81	94.45	101.50
1	AA	64	G	C4-C5-N7	-8.80	107.28	110.80
2	AB	1017	G	C8-N9-C4	-8.80	102.88	106.40
2	AB	1339	G	N1-C2-N2	8.80	124.12	116.20
2	AB	1602	U	O4'-C4'-C3'	8.80	113.14	106.10
2	AB	2089	C	N3-C4-N4	8.80	124.16	118.00
35	BA	1297	G	C8-N9-C4	-8.80	102.88	106.40
2	AB	896	A	N1-C6-N6	8.80	123.88	118.60
2	AB	998	C	O4'-C1'-N1	8.80	115.24	108.20
2	AB	1230	A	C5-N7-C8	-8.80	99.50	103.90
35	BA	858	G	C2-N3-C4	8.80	116.30	111.90
35	BA	1267	C	C2-N3-C4	8.80	124.30	119.90
2	AB	1904	G	C4'-C3'-C2'	-8.80	93.80	102.60
2	AB	2541	A	C5-N7-C8	8.80	108.30	103.90
35	BA	823	C	C6-N1-C2	8.80	123.82	120.30
35	BA	1178	G	N7-C8-N9	8.80	117.50	113.10
1	AA	4	C	O4'-C1'-N1	8.79	115.24	108.20
2	AB	2632	A	C4-C5-N7	-8.80	106.30	110.70
2	AB	2308	G	C5-N7-C8	-8.79	99.90	104.30
35	BA	370	C	C5-C6-N1	8.79	125.40	121.00
35	BA	583	A	N7-C8-N9	8.79	118.20	113.80
2	AB	2465	C	C5-C6-N1	-8.79	116.60	121.00
35	BA	965	U	O4'-C1'-N1	8.79	115.23	108.20
35	BA	1502	A	N3-C4-C5	-8.79	120.65	126.80
38	BD	36	A	N1-C6-N6	8.79	123.88	118.60
2	AB	423	A	N9-C4-C5	-8.79	102.28	105.80
2	AB	1408	G	C8-N9-C4	-8.79	102.88	106.40
35	BA	328	C	C4-C5-C6	-8.79	113.00	117.40
37	BC	48	C	N3-C2-O2	-8.79	115.75	121.90
2	AB	1585	C	O4'-C1'-N1	8.79	115.23	108.20
35	BA	347	G	C2-N3-C4	8.79	116.29	111.90
35	BA	428	G	N1-C2-N3	8.79	129.17	123.90
35	BA	880	C	P-O3'-C3'	8.79	130.25	119.70
36	BB	36	A	C3'-C2'-C1'	8.79	108.53	101.50
36	BB	50	G	N7-C8-N9	8.79	117.49	113.10
2	AB	2110	G	P-O3'-C3'	8.79	130.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2177	C	C5-C6-N1	-8.79	116.61	121.00
2	AB	551	G	N3-C2-N2	8.78	126.05	119.90
2	AB	2761	A	C5-C6-N1	-8.79	113.31	117.70
36	BB	59	G	C6-C5-N7	-8.78	125.13	130.40
37	BC	14	G	N9-C4-C5	8.78	108.91	105.40
50	BP	106	ARG	NE-CZ-NH2	8.78	124.69	120.30
2	AB	346	A	C6-C5-N7	8.78	138.45	132.30
2	AB	2245	U	C4-C5-C6	8.78	124.97	119.70
2	AB	2282	G	C4-C5-N7	-8.78	107.29	110.80
35	BA	666	G	N7-C8-N9	8.78	117.49	113.10
35	BA	748	G	N1-C6-O6	-8.78	114.63	119.90
35	BA	1158	C	C2-N3-C4	-8.78	115.51	119.90
35	BA	1542	A	C4-C5-N7	-8.78	106.31	110.70
2	AB	730	A	C3'-C2'-C1'	-8.78	94.48	101.50
4	AD	3	VAL	CA-CB-CG2	8.78	124.07	110.90
35	BA	1329	A	C3'-C2'-C1'	-8.78	94.48	101.50
2	AB	1435	G	N1-C6-O6	8.78	125.17	119.90
2	AB	1749	A	C5-C6-N1	-8.78	113.31	117.70
1	AA	21	G	O4'-C1'-N9	8.78	115.22	108.20
2	AB	567	U	C2-N3-C4	-8.78	121.73	127.00
2	AB	2553	G	C5-N7-C8	8.78	108.69	104.30
35	BA	23	C	C6-N1-C2	-8.78	116.79	120.30
2	AB	622	G	C4-C5-N7	-8.78	107.29	110.80
2	AB	968	C	N1-C2-N3	8.78	125.34	119.20
2	AB	2556	C	O4'-C1'-N1	8.78	115.22	108.20
35	BA	1313	U	O4'-C1'-C2'	8.78	115.50	107.60
1	AA	87	U	N3-C2-O2	-8.77	116.06	122.20
2	AB	389	G	N9-C4-C5	8.77	108.91	105.40
2	AB	2074	U	N3-C2-O2	-8.77	116.06	122.20
35	BA	278	G	C5-C6-O6	-8.77	123.34	128.60
1	AA	94	A	C5-N7-C8	-8.77	99.51	103.90
2	AB	1839	G	C3'-C2'-C1'	8.77	108.52	101.50
35	BA	710	G	N3-C2-N2	-8.77	113.76	119.90
2	AB	1071	G	C8-N9-C4	-8.77	102.89	106.40
2	AB	1909	C	C6-N1-C2	-8.77	116.79	120.30
35	BA	1442	G	C6-N1-C2	-8.77	119.84	125.10
2	AB	2167	U	N3-C4-C5	-8.77	109.34	114.60
2	AB	2198	A	N1-C6-N6	-8.77	113.34	118.60
35	BA	418	C	C4-C5-C6	-8.77	113.02	117.40
35	BA	626	G	N1-C2-N2	-8.77	108.31	116.20
41	BG	164	ARG	NE-CZ-NH2	8.77	124.69	120.30
1	AA	20	G	C5-N7-C8	-8.77	99.92	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	524	G	N3-C2-N2	8.77	126.04	119.90
2	AB	1118	C	O4'-C1'-N1	8.77	115.22	108.20
36	BB	56	C	C5'-C4'-O4'	8.77	119.62	109.10
2	AB	2146	C	N1-C2-O2	8.77	124.16	118.90
2	AB	2336	A	C4-C5-C6	-8.77	112.62	117.00
2	AB	2395	C	O4'-C1'-N1	8.77	115.21	108.20
35	BA	22	G	C8-N9-C4	-8.77	102.89	106.40
35	BA	763	G	C3'-C2'-C1'	8.77	108.51	101.50
2	AB	25	U	N3-C2-O2	8.76	128.34	122.20
2	AB	1646	C	C3'-C2'-C1'	8.76	108.51	101.50
2	AB	280	U	N3-C2-O2	-8.76	116.07	122.20
2	AB	1806	C	O4'-C1'-N1	8.76	115.21	108.20
2	AB	1849	G	N3-C4-N9	-8.76	120.74	126.00
35	BA	543	U	O4'-C4'-C3'	8.76	113.11	106.10
31	A4	27	ARG	NE-CZ-NH2	-8.76	115.92	120.30
35	BA	11	G	C5-C6-N1	8.76	115.88	111.50
35	BA	561	U	C5-C4-O4	8.76	131.16	125.90
2	AB	719	C	N1-C2-O2	8.76	124.16	118.90
2	AB	997	G	N3-C4-C5	-8.76	124.22	128.60
2	AB	2473	U	O4'-C1'-N1	8.76	115.21	108.20
2	AB	2603	G	C6-N1-C2	-8.76	119.84	125.10
2	AB	2814	A	C5-N7-C8	8.76	108.28	103.90
5	AE	203	VAL	CA-CB-CG1	8.76	124.04	110.90
35	BA	182	A	N9-C4-C5	8.76	109.30	105.80
35	BA	1142	G	C5-C6-N1	8.76	115.88	111.50
35	BA	1269	A	N3-C4-N9	-8.76	120.39	127.40
35	BA	1360	A	C6-N1-C2	8.76	123.86	118.60
36	BB	12	U	N3-C2-O2	-8.76	116.07	122.20
38	BD	77	A	N7-C8-N9	8.76	118.18	113.80
1	AA	60	C	C5-C6-N1	8.76	125.38	121.00
2	AB	512	G	C6-C5-N7	-8.76	125.15	130.40
2	AB	650	C	O4'-C1'-N1	8.76	115.20	108.20
2	AB	1930	G	N7-C8-N9	8.76	117.48	113.10
2	AB	1583	A	C6-N1-C2	-8.76	113.35	118.60
2	AB	1705	A	N9-C4-C5	8.76	109.30	105.80
35	BA	903	G	O4'-C1'-N9	8.76	115.21	108.20
2	AB	1887	C	N3-C2-O2	-8.76	115.77	121.90
2	AB	2125	G	N1-C6-O6	-8.76	114.65	119.90
2	AB	2341	G	O4'-C1'-N9	8.76	115.20	108.20
21	AU	110	ARG	NE-CZ-NH2	8.76	124.68	120.30
36	BB	24	G	N1-C6-O6	-8.76	114.65	119.90
36	BB	39	A	C5'-C4'-O4'	8.76	119.61	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	381	G	N9-C4-C5	8.75	108.90	105.40
2	AB	2520	C	C6-N1-C2	-8.75	116.80	120.30
35	BA	765	G	C5-C6-O6	-8.75	123.35	128.60
46	BL	84	ARG	NE-CZ-NH2	8.75	124.68	120.30
2	AB	2707	U	N3-C2-O2	-8.75	116.07	122.20
35	BA	237	G	C5-N7-C8	-8.75	99.92	104.30
48	BN	111	ASP	CB-CG-OD2	-8.75	110.42	118.30
2	AB	227	A	C8-N9-C4	-8.75	102.30	105.80
2	AB	559	G	C5-C6-N1	8.75	115.88	111.50
2	AB	564	C	N3-C4-C5	-8.75	118.40	121.90
2	AB	310	A	C2-N3-C4	8.75	114.97	110.60
2	AB	760	G	C5-C6-O6	-8.75	123.35	128.60
2	AB	2888	C	C2-N3-C4	8.75	124.28	119.90
35	BA	133	U	N1-C2-O2	8.75	128.93	122.80
35	BA	218	U	C5-C6-N1	-8.75	118.33	122.70
35	BA	631	C	C2-N3-C4	8.75	124.28	119.90
35	BA	151	A	C4-C5-N7	-8.75	106.33	110.70
35	BA	445	G	C4-C5-C6	8.75	124.05	118.80
35	BA	549	C	N3-C4-N4	8.75	124.12	118.00
35	BA	1490	U	O4'-C1'-N1	8.75	115.20	108.20
2	AB	1661	G	C5-C6-N1	8.74	115.87	111.50
35	BA	1357	A	C2-N3-C4	8.74	114.97	110.60
2	AB	209	C	N3-C4-C5	-8.74	118.40	121.90
2	AB	228	C	N3-C4-N4	8.74	124.12	118.00
2	AB	280	U	C5-C4-O4	-8.74	120.65	125.90
2	AB	776	G	N7-C8-N9	8.74	117.47	113.10
2	AB	922	C	C4-C5-C6	-8.74	113.03	117.40
2	AB	1669	A	C2-N3-C4	8.74	114.97	110.60
35	BA	350	G	N9-C4-C5	8.74	108.90	105.40
35	BA	756	C	C4'-C3'-C2'	-8.74	93.86	102.60
35	BA	761	G	C5-N7-C8	8.74	108.67	104.30
35	BA	746	A	N9-C4-C5	-8.74	102.30	105.80
2	AB	1321	A	C6-N1-C2	-8.74	113.36	118.60
2	AB	1413	A	C1'-O4'-C4'	8.74	116.89	109.90
2	AB	1633	G	C4-C5-C6	8.74	124.04	118.80
2	AB	2264	C	N3-C4-N4	8.74	124.12	118.00
2	AB	2425	A	C4'-C3'-C2'	8.74	111.34	102.60
35	BA	39	G	C4-C5-N7	-8.74	107.30	110.80
35	BA	233	C	N1-C2-O2	-8.74	113.66	118.90
35	BA	452	A	N1-C6-N6	8.74	123.84	118.60
2	AB	103	A	C5-C6-N6	8.74	130.69	123.70
2	AB	341	C	C5-C6-N1	8.74	125.37	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1080	A	C8-N9-C4	-8.74	102.31	105.80
35	BA	41	G	N1-C6-O6	-8.74	114.66	119.90
35	BA	1241	G	C2-N3-C4	8.74	116.27	111.90
35	BA	1353	G	N7-C8-N9	8.74	117.47	113.10
41	BG	164	ARG	CD-NE-CZ	8.74	135.83	123.60
2	AB	481	G	C5-N7-C8	8.73	108.67	104.30
2	AB	1735	A	C8-N9-C4	-8.73	102.31	105.80
2	AB	2543	G	C5'-C4'-O4'	8.73	119.58	109.10
35	BA	608	A	C6-N1-C2	-8.73	113.36	118.60
35	BA	1099	G	O4'-C1'-N9	8.73	115.19	108.20
35	BA	1468	A	C6-C5-N7	8.73	138.41	132.30
2	AB	2753	A	N1-C2-N3	8.73	133.67	129.30
2	AB	124	G	C8-N9-C4	-8.73	102.91	106.40
2	AB	363	G	C8-N9-C4	-8.73	102.91	106.40
2	AB	555	G	N1-C2-N3	-8.73	118.66	123.90
2	AB	1142	A	N1-C2-N3	-8.73	124.94	129.30
2	AB	2058	A	O4'-C1'-N9	8.73	115.18	108.20
2	AB	2326	C	N1-C2-O2	8.73	124.14	118.90
35	BA	58	C	C1'-O4'-C4'	8.73	116.89	109.90
35	BA	613	C	C3'-C2'-C1'	8.73	108.49	101.50
2	AB	1451	C	N1-C2-O2	8.73	124.14	118.90
2	AB	1361	G	N9-C1'-C2'	-8.73	102.40	112.00
2	AB	2238	G	N1-C2-N3	-8.73	118.66	123.90
2	AB	2465	C	N3-C4-N4	8.73	124.11	118.00
2	AB	2896	C	O4'-C1'-N1	8.73	115.18	108.20
35	BA	1380	U	N3-C2-O2	-8.73	116.09	122.20
35	BA	102	G	C2-N3-C4	8.73	116.26	111.90
35	BA	1337	G	N3-C2-N2	-8.73	113.79	119.90
35	BA	1439	G	C5-C6-O6	-8.73	123.36	128.60
41	BG	2	ARG	NE-CZ-NH1	8.73	124.66	120.30
35	BA	708	C	N1-C2-O2	8.73	124.14	118.90
2	AB	280	U	O4'-C1'-N1	8.72	115.18	108.20
2	AB	653	U	O4'-C1'-N1	8.72	115.18	108.20
2	AB	1067	A	C2-N3-C4	8.72	114.96	110.60
2	AB	1404	C	O4'-C1'-N1	8.72	115.18	108.20
2	AB	335	C	O4'-C1'-N1	8.72	115.18	108.20
2	AB	862	G	C6-N1-C2	-8.72	119.86	125.10
2	AB	1373	A	C5-N7-C8	-8.72	99.54	103.90
2	AB	2759	G	N3-C4-C5	-8.72	124.24	128.60
2	AB	1621	U	O4'-C1'-N1	8.72	115.18	108.20
2	AB	2379	G	C8-N9-C4	-8.72	102.91	106.40
2	AB	2470	G	N7-C8-N9	8.72	117.46	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2745	C	N1-C2-O2	8.72	124.14	118.90
35	BA	1051	C	C2-N3-C4	-8.72	115.54	119.90
36	BB	59	G	N3-C4-N9	8.72	131.24	126.00
2	AB	332	A	C4-C5-N7	-8.72	106.34	110.70
2	AB	1303	G	O4'-C1'-N9	8.72	115.18	108.20
35	BA	481	G	N1-C2-N3	-8.72	118.67	123.90
1	AA	62	C	N1-C2-O2	8.72	124.13	118.90
2	AB	1497	U	O4'-C1'-N1	8.72	115.18	108.20
2	AB	2877	G	N3-C4-N9	-8.72	120.77	126.00
19	AS	50	ARG	NE-CZ-NH1	8.72	124.66	120.30
35	BA	290	C	C1'-O4'-C4'	8.72	116.88	109.90
35	BA	1068	G	N9-C4-C5	8.72	108.89	105.40
35	BA	1174	G	C5-N7-C8	8.72	108.66	104.30
35	BA	1270	G	N7-C8-N9	8.72	117.46	113.10
35	BA	1503	A	P-O3'-C3'	8.72	130.16	119.70
2	AB	263	G	C4-C5-N7	8.72	114.29	110.80
2	AB	1586	A	C3'-C2'-C1'	-8.72	94.53	101.50
35	BA	981	U	N3-C4-O4	8.72	125.50	119.40
35	BA	1293	C	N1-C1'-C2'	-8.72	102.41	112.00
35	BA	1416	G	C2-N3-C4	8.72	116.26	111.90
2	AB	267	C	C2-N3-C4	8.72	124.26	119.90
2	AB	249	C	C2-N3-C4	8.71	124.26	119.90
2	AB	2146	C	O4'-C1'-N1	8.71	115.17	108.20
2	AB	2250	G	C2-N3-C4	8.71	116.26	111.90
2	AB	2661	G	O4'-C1'-N9	8.71	115.17	108.20
9	AI	27	ARG	NE-CZ-NH1	-8.71	115.94	120.30
35	BA	139	A	C4-C5-N7	8.71	115.06	110.70
35	BA	1031	C	C4-C5-C6	-8.71	113.04	117.40
35	BA	1251	A	O4'-C1'-N9	8.71	115.17	108.20
2	AB	1012	U	C2-N3-C4	-8.71	121.77	127.00
2	AB	2218	G	C4'-C3'-C2'	-8.71	93.89	102.60
18	AR	88	ARG	NE-CZ-NH1	-8.71	115.94	120.30
35	BA	807	A	C5'-C4'-O4'	8.71	119.56	109.10
2	AB	751	A	N1-C6-N6	-8.71	113.37	118.60
2	AB	1745	A	C4-C5-C6	-8.71	112.64	117.00
2	AB	2169	A	C2-N3-C4	8.71	114.96	110.60
35	BA	98	A	C4'-C3'-C2'	-8.71	93.89	102.60
35	BA	372	C	N3-C4-C5	-8.71	118.42	121.90
35	BA	1222	G	C5-N7-C8	-8.71	99.94	104.30
1	AA	73	A	C2-N3-C4	8.71	114.95	110.60
2	AB	1884	G	C2-N3-C4	8.71	116.25	111.90
35	BA	50	A	N1-C2-N3	-8.71	124.95	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	197	A	C8-N9-C4	-8.71	102.32	105.80
35	BA	657	U	C5-C4-O4	8.71	131.12	125.90
35	BA	1281	C	N3-C4-C5	-8.71	118.42	121.90
2	AB	418	C	C6-N1-C2	-8.71	116.82	120.30
35	BA	183	C	C1'-O4'-C4'	-8.71	102.94	109.90
35	BA	1361	G	N9-C4-C5	8.71	108.88	105.40
2	AB	1500	G	N3-C2-N2	8.70	125.99	119.90
2	AB	1694	C	N3-C2-O2	-8.71	115.81	121.90
2	AB	1762	A	C5-C6-N1	8.70	122.05	117.70
2	AB	457	A	C4-C5-N7	-8.70	106.35	110.70
2	AB	252	G	O4'-C1'-N9	8.70	115.16	108.20
2	AB	966	G	C3'-C2'-C1'	-8.70	94.54	101.50
2	AB	1156	A	C5-C6-N1	8.70	122.05	117.70
2	AB	2322	A	O4'-C4'-C3'	8.70	113.06	106.10
2	AB	2571	U	N3-C4-O4	8.70	125.49	119.40
35	BA	310	G	N3-C4-C5	-8.70	124.25	128.60
2	AB	997	G	C5-C6-O6	-8.70	123.38	128.60
2	AB	269	C	C6-N1-C2	-8.70	116.82	120.30
2	AB	1189	A	N9-C4-C5	8.70	109.28	105.80
2	AB	1345	C	C6-N1-C2	-8.70	116.82	120.30
2	AB	1364	G	N1-C6-O6	-8.70	114.68	119.90
2	AB	1515	A	C8-N9-C4	-8.70	102.32	105.80
48	BN	127	ARG	NE-CZ-NH2	8.70	124.65	120.30
2	AB	1525	A	N1-C2-N3	-8.70	124.95	129.30
2	AB	2440	C	N3-C4-C5	-8.70	118.42	121.90
2	AB	2792	A	N3-C4-C5	8.70	132.89	126.80
19	AS	31	TYR	CB-CG-CD2	8.70	126.22	121.00
35	BA	44	A	C5-C6-N1	-8.70	113.35	117.70
35	BA	933	G	N3-C4-N9	8.70	131.22	126.00
2	AB	333	G	O4'-C1'-N9	-8.70	101.24	108.20
2	AB	799	G	N3-C4-C5	-8.70	124.25	128.60
2	AB	879	G	C6-C5-N7	8.70	135.62	130.40
2	AB	1283	G	N3-C4-N9	8.70	131.22	126.00
2	AB	1743	G	C5-N7-C8	-8.70	99.95	104.30
35	BA	63	C	O4'-C1'-N1	8.70	115.16	108.20
35	BA	505	G	N1-C2-N3	-8.70	118.68	123.90
2	AB	2007	U	C4'-C3'-C2'	-8.70	93.91	102.60
1	AA	33	G	N3-C4-N9	-8.69	120.78	126.00
2	AB	678	C	C5-C6-N1	-8.69	116.65	121.00
2	AB	50	U	O4'-C1'-N1	8.69	115.15	108.20
2	AB	119	A	N1-C2-N3	-8.69	124.95	129.30
35	BA	102	G	N3-C4-C5	-8.69	124.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	506	G	C5'-C4'-O4'	8.69	119.53	109.10
35	BA	1230	C	C2-N3-C4	8.69	124.25	119.90
1	AA	107	G	C4-C5-N7	8.69	114.28	110.80
2	AB	1158	C	N3-C4-C5	-8.69	118.42	121.90
2	AB	187	G	N3-C4-N9	8.69	131.21	126.00
2	AB	2375	G	N9-C4-C5	8.69	108.88	105.40
2	AB	1970	A	C5-N7-C8	8.69	108.24	103.90
2	AB	2253	G	N7-C8-N9	8.69	117.44	113.10
2	AB	557	C	C6-N1-C2	-8.68	116.83	120.30
2	AB	626	A	C4-C5-N7	-8.68	106.36	110.70
35	BA	180	U	C5'-C4'-O4'	8.68	119.52	109.10
2	AB	695	G	N7-C8-N9	8.68	117.44	113.10
2	AB	783	A	C3'-C2'-C1'	-8.68	94.55	101.50
2	AB	2853	C	N1-C2-O2	8.68	124.11	118.90
35	BA	167	A	O4'-C1'-N9	8.68	115.15	108.20
36	BB	72	U	O4'-C4'-C3'	8.68	113.05	106.10
2	AB	2	G	C6-N1-C2	-8.68	119.89	125.10
2	AB	144	A	C4-C5-N7	-8.68	106.36	110.70
2	AB	1764	C	C5-C4-N4	-8.68	114.12	120.20
2	AB	752	A	C6-C5-N7	8.68	138.37	132.30
35	BA	347	G	N3-C4-C5	-8.68	124.26	128.60
35	BA	483	C	C6-N1-C2	-8.68	116.83	120.30
2	AB	843	G	O4'-C1'-N9	8.68	115.14	108.20
35	BA	824	G	N7-C8-N9	8.68	117.44	113.10
2	AB	470	A	O4'-C1'-N9	8.68	115.14	108.20
2	AB	771	G	N3-C4-C5	-8.68	124.26	128.60
2	AB	1115	G	C8-N9-C4	-8.68	102.93	106.40
2	AB	1955	U	C1'-O4'-C4'	-8.68	102.96	109.90
2	AB	2586	U	N3-C2-O2	-8.68	116.13	122.20
35	BA	105	G	C4-C5-C6	8.68	124.01	118.80
35	BA	457	G	N9-C4-C5	-8.68	101.93	105.40
35	BA	584	G	C5-C6-N1	-8.68	107.16	111.50
36	BB	22	G	N1-C6-O6	-8.68	114.69	119.90
38	BD	70	C	N3-C4-N4	-8.68	111.93	118.00
2	AB	1159	U	C6-N1-C2	-8.67	115.80	121.00
2	AB	1658	C	C2-N3-C4	8.67	124.24	119.90
1	AA	69	G	C4-C5-N7	-8.67	107.33	110.80
2	AB	483	A	C8-N9-C4	-8.67	102.33	105.80
2	AB	1144	A	N1-C2-N3	-8.67	124.96	129.30
35	BA	401	C	O4'-C1'-N1	8.67	115.14	108.20
35	BA	977	A	O4'-C1'-N9	8.67	115.14	108.20
36	BB	39	A	C8-N9-C4	-8.67	102.33	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1858	A	N3-C4-N9	8.67	134.34	127.40
35	BA	241	G	N7-C8-N9	8.67	117.44	113.10
35	BA	1034	G	N3-C4-C5	-8.67	124.26	128.60
35	BA	877	G	N1-C6-O6	8.67	125.10	119.90
35	BA	1323	G	N7-C8-N9	8.67	117.44	113.10
35	BA	1394	A	O4'-C1'-C2'	-8.67	97.13	105.80
2	AB	1745	A	C5-N7-C8	-8.67	99.57	103.90
2	AB	911	A	C2-N3-C4	8.67	114.93	110.60
2	AB	1062	G	C5-C6-N1	8.67	115.83	111.50
2	AB	2087	G	C4-C5-N7	8.67	114.27	110.80
2	AB	1770	G	N9-C4-C5	8.66	108.87	105.40
2	AB	2271	G	O4'-C1'-N9	8.66	115.13	108.20
35	BA	1118	U	O4'-C1'-N1	8.66	115.13	108.20
2	AB	1888	G	N3-C4-C5	-8.66	124.27	128.60
2	AB	2842	G	O4'-C1'-N9	8.66	115.13	108.20
6	AF	21	ARG	NE-CZ-NH2	8.66	124.63	120.30
35	BA	1158	C	N3-C4-C5	-8.66	118.44	121.90
35	BA	1499	A	N9-C4-C5	8.66	109.27	105.80
2	AB	43	G	N3-C2-N2	-8.66	113.84	119.90
2	AB	285	G	N7-C8-N9	-8.66	108.77	113.10
35	BA	460	A	N3-C4-N9	-8.66	120.47	127.40
2	AB	1133	A	C2-N3-C4	8.66	114.93	110.60
2	AB	2038	G	C5-C6-O6	-8.66	123.40	128.60
2	AB	2041	U	C2-N3-C4	-8.66	121.81	127.00
2	AB	2245	U	O4'-C1'-N1	8.66	115.13	108.20
35	BA	247	G	C8-N9-C4	-8.66	102.94	106.40
52	BR	83	ARG	NE-CZ-NH1	8.66	124.63	120.30
2	AB	281	C	C5-C6-N1	8.66	125.33	121.00
2	AB	1446	C	C4-C5-C6	8.66	121.73	117.40
2	AB	1651	G	C4'-C3'-C2'	-8.66	93.94	102.60
35	BA	348	G	C4-C5-C6	8.66	124.00	118.80
2	AB	1762	A	O4'-C4'-C3'	8.66	113.03	106.10
35	BA	771	G	C5-C6-N1	8.66	115.83	111.50
2	AB	1162	G	C4-C5-N7	-8.65	107.34	110.80
2	AB	1998	A	C5'-C4'-O4'	8.65	119.49	109.10
2	AB	2250	G	N3-C4-C5	-8.65	124.27	128.60
2	AB	56	A	N9-C4-C5	8.65	109.26	105.80
2	AB	1658	C	N1-C2-O2	8.65	124.09	118.90
2	AB	1804	C	N3-C4-C5	-8.65	118.44	121.90
2	AB	2894	G	O4'-C1'-N9	8.65	115.12	108.20
35	BA	1113	C	N3-C4-C5	-8.65	118.44	121.90
35	BA	1144	G	N3-C2-N2	-8.65	113.84	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	242	G	O4'-C1'-N9	8.65	115.12	108.20
1	AA	31	C	C4-C5-C6	8.65	121.72	117.40
2	AB	468	G	C5-C6-N1	8.65	115.82	111.50
2	AB	494	G	C4'-C3'-C2'	-8.65	93.95	102.60
2	AB	520	G	N9-C1'-C2'	-8.65	102.49	112.00
2	AB	1328	A	C1'-O4'-C4'	-8.65	102.98	109.90
2	AB	1468	U	C5-C4-O4	-8.65	120.71	125.90
2	AB	2171	A	O4'-C1'-N9	8.65	115.12	108.20
35	BA	763	G	C2-N3-C4	8.65	116.22	111.90
2	AB	559	G	C2-N3-C4	8.65	116.22	111.90
2	AB	1285	A	C3'-C2'-C1'	8.65	108.42	101.50
2	AB	1568	G	C3'-C2'-C1'	-8.65	94.58	101.50
2	AB	1747	U	N3-C4-C5	-8.65	109.41	114.60
35	BA	211	G	C8-N9-C4	-8.65	102.94	106.40
35	BA	400	C	C4-C5-C6	8.65	121.72	117.40
2	AB	2248	C	C2-N3-C4	8.65	124.22	119.90
2	AB	2376	A	C5-C6-N6	-8.65	116.78	123.70
35	BA	843	U	N3-C4-O4	8.65	125.45	119.40
47	BM	97	ASP	CB-CG-OD1	-8.65	110.52	118.30
35	BA	1046	A	C5'-C4'-C3'	-8.64	102.17	116.00
2	AB	626	A	N7-C8-N9	-8.64	109.48	113.80
2	AB	1058	U	O4'-C1'-N1	8.64	115.11	108.20
2	AB	1141	U	C6-N1-C2	-8.64	115.81	121.00
2	AB	1856	U	C2-N3-C4	-8.64	121.81	127.00
35	BA	190	A	N9-C4-C5	-8.64	102.34	105.80
35	BA	1078	U	N3-C2-O2	-8.64	116.15	122.20
2	AB	1197	G	C6-C5-N7	-8.64	125.22	130.40
2	AB	1536	C	C5-C6-N1	8.64	125.32	121.00
2	AB	1817	G	N7-C8-N9	8.64	117.42	113.10
2	AB	2026	U	C5-C4-O4	-8.64	120.72	125.90
2	AB	2280	G	C4-C5-C6	8.64	123.98	118.80
35	BA	1367	C	N3-C2-O2	8.64	127.95	121.90
2	AB	558	U	C4'-C3'-C2'	-8.64	93.96	102.60
2	AB	684	G	C5-C6-N1	8.64	115.82	111.50
2	AB	2792	A	C5'-C4'-O4'	8.64	119.47	109.10
35	BA	41	G	N9-C4-C5	8.64	108.86	105.40
35	BA	647	C	N3-C4-N4	8.64	124.05	118.00
2	AB	1163	G	C6-N1-C2	-8.64	119.92	125.10
35	BA	868	C	C5-C6-N1	8.64	125.32	121.00
35	BA	910	C	C5-C6-N1	-8.64	116.68	121.00
35	BA	1039	G	C2-N3-C4	-8.64	107.58	111.90
35	BA	1074	G	C4-C5-C6	8.64	123.98	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1344	C	C3'-C2'-C1'	8.64	108.41	101.50
1	AA	59	A	N1-C2-N3	-8.63	124.98	129.30
1	AA	114	C	N3-C2-O2	-8.63	115.86	121.90
2	AB	1310	G	C5-C6-N1	8.64	115.82	111.50
2	AB	1747	U	C4-C5-C6	8.64	124.88	119.70
2	AB	1495	A	N9-C4-C5	-8.63	102.35	105.80
2	AB	2462	C	N1-C2-N3	8.63	125.24	119.20
35	BA	566	G	N3-C4-N9	8.63	131.18	126.00
35	BA	239	U	C6-N1-C2	-8.63	115.82	121.00
35	BA	1246	A	C4'-C3'-C2'	-8.63	93.97	102.60
2	AB	856	G	C4-C5-N7	8.63	114.25	110.80
2	AB	2722	G	C5-C6-O6	-8.63	123.42	128.60
2	AB	1163	G	N3-C2-N2	-8.63	113.86	119.90
2	AB	1251	C	C6-N1-C2	-8.63	116.85	120.30
2	AB	2444	G	C2-N3-C4	8.63	116.21	111.90
1	AA	9	G	C4-C5-C6	8.62	123.97	118.80
2	AB	483	A	N1-C2-N3	-8.62	124.99	129.30
2	AB	794	A	N1-C6-N6	8.62	123.78	118.60
2	AB	938	G	C5-C6-N1	8.62	115.81	111.50
2	AB	1354	A	C4-C5-C6	-8.62	112.69	117.00
2	AB	1517	G	N7-C8-N9	8.62	117.41	113.10
35	BA	63	C	C6-N1-C2	-8.62	116.85	120.30
35	BA	493	A	C8-N9-C4	-8.62	102.35	105.80
35	BA	964	A	O4'-C1'-N9	8.62	115.10	108.20
35	BA	991	U	C1'-O4'-C4'	-8.62	103.00	109.90
1	AA	54	G	C8-N9-C1'	8.62	138.21	127.00
2	AB	942	G	C6-N1-C2	-8.62	119.93	125.10
35	BA	485	U	N1-C2-N3	8.62	120.07	114.90
2	AB	1349	C	C5'-C4'-O4'	8.62	119.44	109.10
35	BA	645	G	O4'-C1'-N9	8.62	115.10	108.20
2	AB	1085	A	C5-C6-N1	-8.62	113.39	117.70
2	AB	1459	G	C6-N1-C2	-8.62	119.93	125.10
2	AB	1564	C	C4-C5-C6	-8.62	113.09	117.40
2	AB	1590	A	N9-C4-C5	-8.62	102.35	105.80
2	AB	1800	C	N1-C2-O2	8.62	124.07	118.90
35	BA	360	G	C5-C6-O6	-8.62	123.43	128.60
35	BA	626	G	C4-C5-C6	8.62	123.97	118.80
37	BC	15	G	N7-C8-N9	8.62	117.41	113.10
38	BD	2	G	N3-C4-C5	-8.62	124.29	128.60
38	BD	51	U	N3-C4-C5	-8.62	109.43	114.60
1	AA	113	C	C6-N1-C2	8.62	123.75	120.30
2	AB	74	A	N3-C4-C5	-8.61	120.77	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	779	U	N3-C4-C5	-8.61	109.43	114.60
2	AB	964	C	N3-C2-O2	-8.61	115.87	121.90
2	AB	1476	U	N1-C1'-C2'	-8.62	102.52	112.00
2	AB	1783	A	C1'-O4'-C4'	8.61	116.79	109.90
2	AB	2660	A	C3'-C2'-C1'	8.62	108.39	101.50
9	AI	68	ARG	NE-CZ-NH1	8.62	124.61	120.30
32	A5	5	PHE	CB-CG-CD1	8.61	126.83	120.80
35	BA	544	G	C1'-O4'-C4'	-8.62	103.01	109.90
35	BA	972	C	C5-C4-N4	-8.61	114.17	120.20
35	BA	1198	G	C1'-O4'-C4'	-8.61	103.01	109.90
2	AB	1093	G	C2-N3-C4	8.61	116.21	111.90
2	AB	1297	C	C6-N1-C2	8.61	123.75	120.30
2	AB	2055	C	C4'-C3'-C2'	-8.61	93.99	102.60
35	BA	94	G	N1-C2-N2	8.61	123.95	116.20
35	BA	204	G	C5-N7-C8	-8.61	99.99	104.30
35	BA	844	G	C8-N9-C4	-8.61	102.95	106.40
2	AB	2161	C	C3'-C2'-C1'	-8.61	94.61	101.50
35	BA	491	G	C4-C5-N7	-8.61	107.36	110.80
35	BA	714	G	C4-C5-C6	8.61	123.97	118.80
2	AB	29	U	C4-C5-C6	8.61	124.86	119.70
35	BA	408	A	N9-C4-C5	8.61	109.24	105.80
2	AB	1415	U	N3-C4-O4	8.61	125.43	119.40
2	AB	1997	C	C2-N3-C4	8.61	124.20	119.90
2	AB	2381	A	N3-C4-N9	-8.61	120.51	127.40
2	AB	2833	U	O4'-C1'-N1	8.61	115.09	108.20
35	BA	90	C	C3'-C2'-C1'	-8.61	94.61	101.50
35	BA	645	G	N3-C4-C5	-8.61	124.30	128.60
35	BA	1020	G	P-O3'-C3'	8.61	130.03	119.70
35	BA	1041	G	N3-C4-C5	-8.61	124.30	128.60
2	AB	29	U	C5-C6-N1	-8.61	118.40	122.70
2	AB	415	A	N7-C8-N9	8.61	118.10	113.80
2	AB	707	G	C8-N9-C4	-8.61	102.96	106.40
35	BA	269	C	P-O3'-C3'	8.61	130.03	119.70
2	AB	1288	G	N3-C4-C5	-8.61	124.30	128.60
2	AB	1529	G	O4'-C1'-N9	8.61	115.08	108.20
2	AB	2215	C	N1-C2-O2	8.61	124.06	118.90
2	AB	2609	U	N3-C4-O4	8.61	125.42	119.40
35	BA	1318	A	N9-C4-C5	8.61	109.24	105.80
35	BA	1434	A	N7-C8-N9	-8.61	109.50	113.80
38	BD	12	G	C5-C6-N1	8.61	115.80	111.50
50	BP	70	ARG	NE-CZ-NH1	-8.61	116.00	120.30
35	BA	259	G	C6-C5-N7	-8.60	125.24	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	29	A	C6-N1-C2	8.60	123.76	118.60
2	AB	178	G	N3-C4-C5	-8.60	124.30	128.60
2	AB	730	A	C2-N3-C4	-8.60	106.30	110.60
35	BA	1253	G	O4'-C1'-N9	8.60	115.08	108.20
2	AB	1519	G	C5-N7-C8	8.60	108.60	104.30
2	AB	1969	A	O4'-C1'-N9	8.60	115.08	108.20
2	AB	2810	A	N9-C4-C5	-8.60	102.36	105.80
35	BA	1467	C	C4-C5-C6	8.60	121.70	117.40
2	AB	2563	U	N3-C4-O4	8.60	125.42	119.40
30	A3	15	ARG	NE-CZ-NH1	8.60	124.60	120.30
35	BA	278	G	N9-C4-C5	8.60	108.84	105.40
35	BA	376	G	N1-C2-N2	8.60	123.94	116.20
35	BA	423	G	C8-N9-C4	-8.60	102.96	106.40
1	AA	21	G	C5-N7-C8	8.60	108.60	104.30
2	AB	1342	A	C6-C5-N7	8.60	138.32	132.30
35	BA	1417	G	C6-N1-C2	-8.60	119.94	125.10
2	AB	2103	C	C6-N1-C2	8.60	123.74	120.30
2	AB	526	A	C4-C5-C6	-8.60	112.70	117.00
2	AB	564	C	C2-N3-C4	8.60	124.20	119.90
2	AB	1324	G	N3-C4-N9	-8.60	120.84	126.00
2	AB	333	G	C2-N3-C4	-8.60	107.60	111.90
2	AB	624	C	C4-C5-C6	8.60	121.70	117.40
2	AB	1446	C	N3-C4-C5	-8.60	118.46	121.90
2	AB	2165	C	N3-C4-N4	-8.60	111.98	118.00
2	AB	2545	G	N3-C4-C5	-8.60	124.30	128.60
35	BA	2	A	C5-N7-C8	8.60	108.20	103.90
35	BA	148	G	C6-C5-N7	-8.60	125.24	130.40
35	BA	235	C	N3-C2-O2	-8.59	115.88	121.90
2	AB	813	U	O4'-C1'-N1	8.59	115.07	108.20
2	AB	1538	G	N3-C2-N2	-8.59	113.89	119.90
35	BA	47	C	N3-C2-O2	-8.59	115.89	121.90
35	BA	745	G	O4'-C1'-N9	8.59	115.08	108.20
35	BA	361	G	N3-C4-C5	-8.59	124.30	128.60
2	AB	1525	A	C4-C5-N7	-8.59	106.40	110.70
2	AB	1556	C	O4'-C1'-N1	8.59	115.07	108.20
2	AB	1808	A	C4-C5-N7	8.59	115.00	110.70
2	AB	1930	G	C5-N7-C8	-8.59	100.00	104.30
2	AB	2439	A	N7-C8-N9	8.59	118.09	113.80
35	BA	306	A	C5-N7-C8	8.59	108.19	103.90
35	BA	1112	C	N1-C2-O2	8.59	124.05	118.90
50	BP	69	ARG	NE-CZ-NH1	8.59	124.59	120.30
2	AB	107	G	N9-C4-C5	8.59	108.83	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	960	A	C1'-O4'-C4'	-8.59	103.03	109.90
2	AB	1464	G	N9-C4-C5	8.59	108.83	105.40
2	AB	2545	G	C4'-C3'-C2'	-8.59	94.01	102.60
35	BA	521	G	C3'-C2'-C1'	-8.59	94.63	101.50
35	BA	1252	A	C8-N9-C4	-8.59	102.36	105.80
2	AB	199	A	O4'-C1'-N9	8.59	115.07	108.20
2	AB	482	A	C4-C5-N7	8.59	114.99	110.70
2	AB	1650	A	C1'-O4'-C4'	-8.59	103.03	109.90
2	AB	1879	C	O4'-C1'-N1	8.59	115.07	108.20
2	AB	1949	G	N3-C4-C5	-8.59	124.31	128.60
2	AB	2004	G	C6-C5-N7	8.59	135.55	130.40
2	AB	2241	A	N7-C8-N9	8.59	118.09	113.80
35	BA	1511	G	N7-C8-N9	8.59	117.39	113.10
35	BA	87	C	O4'-C1'-N1	8.58	115.07	108.20
35	BA	777	A	N1-C2-N3	-8.58	125.01	129.30
2	AB	2	G	O4'-C1'-N9	8.58	115.07	108.20
2	AB	2692	G	C4-C5-N7	-8.58	107.37	110.80
35	BA	538	G	C5-N7-C8	8.58	108.59	104.30
35	BA	785	G	N9-C4-C5	8.58	108.83	105.40
35	BA	972	C	N3-C4-C5	8.58	125.33	121.90
1	AA	2	G	N1-C2-N3	8.58	129.05	123.90
1	AA	69	G	C5-N7-C8	8.58	108.59	104.30
1	AA	91	C	N1-C2-O2	8.58	124.05	118.90
35	BA	6	G	N9-C4-C5	8.58	108.83	105.40
35	BA	1125	U	C5-C6-N1	-8.58	118.41	122.70
2	AB	980	A	C4-C5-N7	-8.58	106.41	110.70
2	AB	1140	C	N3-C2-O2	-8.58	115.89	121.90
2	AB	2347	C	C4'-C3'-C2'	-8.58	94.02	102.60
35	BA	1144	G	O4'-C1'-N9	8.58	115.06	108.20
35	BA	1504	G	N1-C6-O6	-8.58	114.75	119.90
2	AB	69	C	O4'-C1'-N1	8.58	115.06	108.20
2	AB	119	A	N7-C8-N9	-8.58	109.51	113.80
2	AB	1845	G	C4-C5-N7	-8.58	107.37	110.80
2	AB	2544	G	C4-C5-N7	-8.58	107.37	110.80
35	BA	265	G	C5-N7-C8	-8.58	100.01	104.30
35	BA	299	G	C5-C6-O6	-8.58	123.45	128.60
35	BA	910	C	N1-C2-N3	-8.58	113.19	119.20
35	BA	1514	G	N3-C2-N2	-8.58	113.90	119.90
2	AB	1981	A	N7-C8-N9	8.57	118.09	113.80
2	AB	2276	G	C4-C5-N7	-8.57	107.37	110.80
2	AB	2719	G	C5'-C4'-O4'	8.57	119.39	109.10
12	AL	35	ARG	NE-CZ-NH2	-8.57	116.01	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	151	A	O4'-C1'-N9	8.57	115.06	108.20
35	BA	313	A	N1-C2-N3	-8.57	125.01	129.30
35	BA	1404	C	C3'-C2'-C1'	-8.57	94.64	101.50
35	BA	1506	U	C5-C6-N1	-8.57	118.41	122.70
38	BD	11	A	N1-C6-N6	-8.57	113.45	118.60
2	AB	844	A	C5-C6-N1	8.57	121.99	117.70
2	AB	868	U	O4'-C1'-N1	8.57	115.06	108.20
35	BA	73	C	O4'-C1'-N1	8.57	115.06	108.20
35	BA	990	C	N3-C4-C5	-8.57	118.47	121.90
2	AB	179	C	N3-C4-C5	8.57	125.33	121.90
2	AB	725	G	C8-N9-C4	-8.57	102.97	106.40
2	AB	961	C	C4-C5-C6	-8.57	113.12	117.40
2	AB	1347	A	C5-N7-C8	8.57	108.18	103.90
2	AB	2529	G	C3'-C2'-C1'	8.57	108.36	101.50
35	BA	1371	G	C5-N7-C8	-8.57	100.02	104.30
2	AB	301	G	C4'-C3'-C2'	-8.57	94.03	102.60
2	AB	1062	G	C2-N3-C4	8.57	116.18	111.90
2	AB	953	G	N1-C6-O6	-8.57	114.76	119.90
2	AB	1073	A	C5-C6-N6	-8.57	116.85	123.70
2	AB	1101	U	N3-C2-O2	-8.57	116.20	122.20
2	AB	1376	C	N1-C2-O2	8.57	124.04	118.90
2	AB	1496	A	O4'-C1'-N9	8.57	115.05	108.20
2	AB	1871	A	C6-C5-N7	-8.57	126.30	132.30
2	AB	1894	C	C6-N1-C2	8.57	123.73	120.30
2	AB	2280	G	N7-C8-N9	8.57	117.38	113.10
2	AB	2420	C	N3-C2-O2	-8.57	115.90	121.90
2	AB	2014	A	N9-C4-C5	8.56	109.23	105.80
2	AB	2516	A	N7-C8-N9	8.56	118.08	113.80
2	AB	2769	U	C6-N1-C2	-8.56	115.86	121.00
17	AQ	15	ARG	NE-CZ-NH1	8.56	124.58	120.30
35	BA	684	U	C5-C6-N1	-8.56	118.42	122.70
2	AB	256	A	N9-C4-C5	-8.56	102.38	105.80
2	AB	426	C	C2-N3-C4	8.56	124.18	119.90
2	AB	1485	U	C5'-C4'-O4'	8.56	119.37	109.10
35	BA	1006	G	C5-C6-O6	-8.56	123.46	128.60
2	AB	1359	A	C5-C6-N1	-8.56	113.42	117.70
2	AB	1579	A	C5-N7-C8	-8.56	99.62	103.90
2	AB	1669	A	C5-C6-N1	8.56	121.98	117.70
2	AB	1846	G	N3-C4-N9	8.56	131.14	126.00
35	BA	668	G	C4-C5-N7	-8.56	107.38	110.80
2	AB	2248	C	C4-C5-C6	8.56	121.68	117.40
35	BA	1149	C	C5-C4-N4	-8.56	114.21	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	49	G	C8-N9-C4	-8.56	102.98	106.40
37	BC	13	A	O4'-C1'-N9	8.56	115.05	108.20
37	BC	29	G	C6-N1-C2	-8.56	119.96	125.10
2	AB	212	G	N3-C4-N9	-8.56	120.86	126.00
2	AB	287	G	C5-C6-O6	-8.56	123.46	128.60
2	AB	452	G	C5-N7-C8	8.56	108.58	104.30
2	AB	664	G	C4-C5-N7	-8.56	107.38	110.80
2	AB	1488	C	C1'-O4'-C4'	-8.56	103.05	109.90
35	BA	2	A	C6-N1-C2	-8.56	113.47	118.60
35	BA	642	A	C8-N9-C4	-8.56	102.38	105.80
35	BA	1539	C	C4-C5-C6	8.56	121.68	117.40
2	AB	763	G	N3-C4-C5	-8.56	124.32	128.60
2	AB	2340	A	C4-C5-N7	-8.56	106.42	110.70
52	BR	87	ARG	NE-CZ-NH1	8.56	124.58	120.30
2	AB	1724	G	N1-C6-O6	-8.56	114.77	119.90
2	AB	2461	A	C6-N1-C2	8.56	123.73	118.60
2	AB	879	G	N1-C2-N3	-8.55	118.77	123.90
2	AB	2592	G	N3-C4-C5	-8.55	124.32	128.60
35	BA	574	A	C6-C5-N7	8.55	138.29	132.30
35	BA	597	G	C5-C6-O6	-8.55	123.47	128.60
37	BC	41	A	C5-C6-N1	8.55	121.98	117.70
55	BU	4	PHE	CB-CG-CD1	-8.55	114.81	120.80
35	BA	191	G	C4-C5-C6	-8.55	113.67	118.80
35	BA	1076	U	N1-C2-N3	8.55	120.03	114.90
2	AB	113	U	C4-C5-C6	8.55	124.83	119.70
2	AB	1071	G	O4'-C1'-N9	8.55	115.04	108.20
2	AB	1265	A	O4'-C1'-N9	8.55	115.04	108.20
2	AB	1297	C	N3-C2-O2	-8.55	115.91	121.90
2	AB	1502	A	O4'-C4'-C3'	8.55	112.94	106.10
2	AB	2443	C	N3-C2-O2	-8.55	115.91	121.90
18	AR	19	PHE	CB-CG-CD1	-8.55	114.81	120.80
35	BA	239	U	N1-C2-N3	8.55	120.03	114.90
35	BA	703	G	N3-C2-N2	8.55	125.89	119.90
35	BA	877	G	C5-C6-O6	-8.55	123.47	128.60
2	AB	118	A	N1-C2-N3	-8.55	125.03	129.30
35	BA	1465	A	C4'-C3'-C2'	-8.55	94.05	102.60
2	AB	456	C	N3-C4-C5	-8.55	118.48	121.90
2	AB	742	A	N7-C8-N9	8.55	118.07	113.80
2	AB	892	A	C6-N1-C2	8.55	123.73	118.60
2	AB	2109	U	C4-C5-C6	8.55	124.83	119.70
2	AB	2666	C	C2-N3-C4	8.55	124.17	119.90
46	BL	112	ARG	NE-CZ-NH1	8.55	124.57	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	344	A	N9-C1'-C2'	-8.55	102.60	112.00
2	AB	1036	G	N3-C4-C5	-8.54	124.33	128.60
2	AB	1341	G	C6-C5-N7	-8.54	125.27	130.40
2	AB	2423	U	N1-C2-N3	8.54	120.03	114.90
2	AB	2695	U	N3-C4-O4	8.55	125.38	119.40
10	AJ	152	ARG	NE-CZ-NH2	8.54	124.57	120.30
35	BA	252	U	N3-C4-O4	-8.54	113.42	119.40
2	AB	279	A	O4'-C4'-C3'	8.54	112.93	106.10
2	AB	554	U	O4'-C1'-N1	8.54	115.03	108.20
2	AB	389	G	C5-C6-O6	-8.54	123.48	128.60
2	AB	1144	A	N9-C4-C5	8.54	109.22	105.80
2	AB	1727	C	C5'-C4'-O4'	8.54	119.35	109.10
2	AB	1931	U	C4-C5-C6	8.54	124.83	119.70
2	AB	2602	A	C8-N9-C4	-8.54	102.38	105.80
2	AB	2618	G	C5'-C4'-O4'	8.54	119.35	109.10
35	BA	850	U	C5-C4-O4	-8.54	120.78	125.90
35	BA	930	C	C5-C6-N1	-8.54	116.73	121.00
35	BA	1403	C	C6-N1-C2	8.54	123.72	120.30
35	BA	1461	G	O4'-C1'-N9	8.54	115.03	108.20
35	BA	1481	U	C2-N3-C4	-8.54	121.88	127.00
2	AB	832	U	C5-C4-O4	8.54	131.02	125.90
2	AB	1319	C	C3'-C2'-C1'	8.54	108.33	101.50
2	AB	1595	C	C3'-C2'-C1'	8.54	108.33	101.50
2	AB	2381	A	C5-N7-C8	-8.54	99.63	103.90
35	BA	324	G	C4-C5-C6	8.54	123.92	118.80
35	BA	467	U	O4'-C1'-N1	8.54	115.03	108.20
35	BA	968	A	C5'-C4'-O4'	8.54	119.35	109.10
38	BD	77	A	N3-C4-N9	-8.54	120.57	127.40
2	AB	921	C	N3-C2-O2	-8.54	115.92	121.90
2	AB	1039	A	N3-C4-C5	-8.54	120.82	126.80
35	BA	2	A	C4-C5-N7	-8.54	106.43	110.70
2	AB	26	G	N7-C8-N9	8.54	117.37	113.10
2	AB	1383	A	C5-C6-N1	8.54	121.97	117.70
2	AB	1613	G	C4-C5-N7	-8.54	107.39	110.80
2	AB	1750	G	N3-C4-C5	-8.54	124.33	128.60
2	AB	2270	A	C6-C5-N7	8.53	138.27	132.30
2	AB	2527	C	C4-C5-C6	8.54	121.67	117.40
35	BA	1334	G	C8-N9-C4	-8.54	102.98	106.40
2	AB	822	G	N9-C4-C5	8.53	108.81	105.40
2	AB	1548	A	O4'-C1'-N9	8.53	115.03	108.20
2	AB	1570	A	C6-C5-N7	8.53	138.27	132.30
2	AB	1596	A	C2-N3-C4	8.53	114.87	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	53	A	O4'-C1'-N9	8.53	115.03	108.20
35	BA	663	A	N1-C2-N3	-8.53	125.03	129.30
35	BA	867	G	C4-C5-N7	-8.53	107.39	110.80
35	BA	1071	C	O4'-C1'-N1	8.53	115.03	108.20
35	BA	1182	G	O4'-C1'-N9	8.53	115.03	108.20
36	BB	43	G	C3'-C2'-C1'	8.53	108.33	101.50
2	AB	990	A	C5-N7-C8	8.53	108.17	103.90
2	AB	1151	A	N7-C8-N9	8.53	118.06	113.80
2	AB	338	G	N9-C4-C5	8.53	108.81	105.40
2	AB	1573	G	N3-C2-N2	8.53	125.87	119.90
2	AB	1590	A	C5-C6-N1	8.53	121.97	117.70
2	AB	2621	G	N3-C4-C5	-8.53	124.33	128.60
35	BA	730	G	N9-C4-C5	8.53	108.81	105.40
2	AB	1702	G	C4'-C3'-C2'	-8.53	94.07	102.60
2	AB	2392	A	C4-C5-C6	-8.53	112.74	117.00
2	AB	2827	C	C5-C4-N4	-8.53	114.23	120.20
35	BA	28	A	O4'-C1'-N9	8.53	115.02	108.20
35	BA	428	G	C6-N1-C2	-8.53	119.98	125.10
35	BA	1463	U	C4-C5-C6	8.53	124.82	119.70
2	AB	345	A	O4'-C1'-N9	8.53	115.02	108.20
2	AB	785	G	C5-C6-O6	-8.53	123.48	128.60
2	AB	300	A	C2-N3-C4	-8.53	106.34	110.60
2	AB	1046	A	C3'-C2'-C1'	-8.53	94.68	101.50
2	AB	2323	G	O4'-C4'-C3'	8.53	112.92	106.10
35	BA	1377	A	C4-C5-C6	-8.53	112.74	117.00
36	BB	13	C	P-O3'-C3'	8.53	129.93	119.70
2	AB	366	C	N3-C2-O2	-8.52	115.93	121.90
2	AB	940	G	N3-C4-C5	-8.52	124.34	128.60
2	AB	1326	U	O4'-C1'-N1	8.52	115.02	108.20
35	BA	764	C	C2'-C3'-O3'	8.52	128.25	109.50
2	AB	159	G	N1-C6-O6	8.52	125.01	119.90
2	AB	559	G	C5-N7-C8	-8.52	100.04	104.30
2	AB	735	A	C5-N7-C8	8.52	108.16	103.90
2	AB	960	A	C4-C5-C6	-8.52	112.74	117.00
2	AB	1149	G	C4'-C3'-C2'	-8.52	94.08	102.60
2	AB	1949	G	C1'-O4'-C4'	-8.52	103.08	109.90
2	AB	2257	U	O4'-C1'-N1	8.52	115.02	108.20
35	BA	295	C	O4'-C1'-N1	8.52	115.02	108.20
35	BA	538	G	N9-C4-C5	8.52	108.81	105.40
35	BA	1136	C	P-O3'-C3'	8.52	129.93	119.70
35	BA	1496	C	N3-C4-C5	-8.52	118.49	121.90
2	AB	1747	U	C5-C6-N1	-8.52	118.44	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	105	G	C2-N3-C4	8.52	116.16	111.90
2	AB	174	U	C5'-C4'-O4'	8.52	119.32	109.10
2	AB	1461	C	N1-C1'-C2'	-8.52	102.63	112.00
2	AB	1743	G	N3-C4-C5	-8.52	124.34	128.60
2	AB	2083	G	N7-C8-N9	-8.52	108.84	113.10
2	AB	2727	A	C4-C5-N7	-8.52	106.44	110.70
35	BA	485	U	C5-C6-N1	-8.52	118.44	122.70
38	BD	32	G	C5-N7-C8	-8.52	100.04	104.30
35	BA	1009	U	N1-C2-O2	-8.52	116.84	122.80
2	AB	1029	A	N3-C4-N9	8.52	134.21	127.40
2	AB	1569	A	O4'-C1'-N9	8.52	115.01	108.20
35	BA	17	U	O4'-C1'-N1	8.52	115.01	108.20
35	BA	547	A	N1-C2-N3	-8.52	125.04	129.30
35	BA	1417	G	N9-C4-C5	8.52	108.81	105.40
1	AA	38	C	C4-C5-C6	-8.51	113.14	117.40
2	AB	582	A	O4'-C1'-N9	8.51	115.01	108.20
2	AB	830	G	C8-N9-C4	-8.51	103.00	106.40
2	AB	1965	C	N1-C2-O2	8.51	124.01	118.90
35	BA	617	G	O4'-C1'-N9	8.51	115.01	108.20
35	BA	827	U	O4'-C1'-N1	8.51	115.01	108.20
2	AB	1353	A	C5-N7-C8	8.51	108.16	103.90
35	BA	751	U	C2-N3-C4	-8.51	121.89	127.00
37	BC	13	A	N9-C1'-C2'	-8.51	102.63	112.00
2	AB	542	C	O4'-C1'-N1	8.51	115.01	108.20
2	AB	1609	A	C8-N9-C4	8.51	109.20	105.80
2	AB	2178	C	C1'-O4'-C4'	-8.51	103.09	109.90
2	AB	137	U	O4'-C1'-N1	8.51	115.01	108.20
2	AB	1626	A	O4'-C1'-C2'	-8.51	97.29	105.80
2	AB	2798	U	N3-C4-O4	8.51	125.36	119.40
37	BC	35	G	N7-C8-N9	8.51	117.36	113.10
38	BD	10	G	C4-C5-N7	8.51	114.20	110.80
2	AB	801	G	N9-C4-C5	8.51	108.80	105.40
2	AB	1615	C	C5-C6-N1	-8.51	116.75	121.00
35	BA	140	U	N3-C4-O4	8.51	125.35	119.40
35	BA	779	C	C6-N1-C2	8.51	123.70	120.30
35	BA	1084	G	N3-C4-C5	-8.51	124.35	128.60
35	BA	1221	G	N3-C4-C5	-8.51	124.35	128.60
37	BC	42	U	N1-C2-N3	8.51	120.00	114.90
2	AB	346	A	O4'-C1'-N9	8.50	115.00	108.20
2	AB	1130	U	N3-C2-O2	-8.50	116.25	122.20
2	AB	774	G	N7-C8-N9	8.50	117.35	113.10
2	AB	913	U	O4'-C1'-N1	8.50	115.00	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1180	U	O4'-C1'-N1	8.50	115.00	108.20
2	AB	1688	U	N3-C2-O2	-8.50	116.25	122.20
35	BA	82	G	C4-C5-C6	8.50	123.90	118.80
35	BA	402	G	C8-N9-C4	-8.50	103.00	106.40
35	BA	703	G	C4-C5-N7	-8.50	107.40	110.80
35	BA	995	C	C4-C5-C6	-8.50	113.15	117.40
36	BB	30	G	N1-C2-N2	8.50	123.85	116.20
1	AA	74	U	C5-C4-O4	-8.50	120.80	125.90
1	AA	113	C	N3-C4-N4	-8.50	112.05	118.00
2	AB	778	G	C8-N9-C4	-8.50	103.00	106.40
2	AB	916	G	N3-C2-N2	8.50	125.85	119.90
2	AB	1052	C	N1-C2-N3	8.50	125.15	119.20
2	AB	1525	A	C2-N3-C4	8.50	114.85	110.60
2	AB	2300	C	N3-C4-N4	8.50	123.95	118.00
35	BA	260	G	C5-N7-C8	8.50	108.55	104.30
2	AB	2677	G	N3-C2-N2	8.50	125.85	119.90
2	AB	2741	A	C5-C6-N1	8.50	121.95	117.70
35	BA	884	U	N3-C4-O4	8.50	125.35	119.40
37	BC	23	C	O4'-C1'-N1	8.50	115.00	108.20
2	AB	278	A	C8-N9-C4	-8.50	102.40	105.80
2	AB	769	U	C2-N3-C4	-8.50	121.90	127.00
35	BA	470	C	C6-N1-C2	-8.50	116.90	120.30
2	AB	1248	G	N3-C4-C5	-8.50	124.35	128.60
2	AB	1929	G	O4'-C1'-C2'	-8.50	97.30	105.80
2	AB	2617	U	C6-N1-C2	-8.50	115.90	121.00
2	AB	2790	U	C5-C6-N1	-8.50	118.45	122.70
2	AB	2855	C	N3-C4-N4	8.50	123.95	118.00
35	BA	618	C	C6-N1-C2	-8.50	116.90	120.30
35	BA	755	G	C4-C5-N7	8.50	114.20	110.80
38	BD	34	U	C5-C6-N1	-8.50	118.45	122.70
2	AB	95	A	O4'-C4'-C3'	8.49	112.90	106.10
2	AB	297	G	C5-C6-O6	-8.49	123.50	128.60
2	AB	494	G	N7-C8-N9	8.49	117.35	113.10
35	BA	1111	A	C5'-C4'-O4'	8.49	119.29	109.10
1	AA	15	A	O4'-C1'-N9	8.49	114.99	108.20
2	AB	705	A	O4'-C1'-N9	8.49	115.00	108.20
2	AB	1164	C	O4'-C1'-N1	8.49	115.00	108.20
2	AB	1776	G	C5-C6-O6	-8.49	123.50	128.60
2	AB	2136	G	O4'-C1'-N9	8.49	115.00	108.20
35	BA	1500	A	N1-C2-N3	-8.49	125.05	129.30
36	BB	65	C	O4'-C1'-N1	8.49	115.00	108.20
2	AB	73	A	C8-N9-C4	-8.49	102.40	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	757	G	C4-C5-N7	-8.49	107.40	110.80
2	AB	805	G	C8-N9-C4	-8.49	103.00	106.40
2	AB	1506	U	C5-C6-N1	-8.49	118.45	122.70
2	AB	2104	C	C5-C6-N1	-8.49	116.75	121.00
35	BA	254	G	N7-C8-N9	8.49	117.35	113.10
2	AB	329	G	N9-C4-C5	8.49	108.80	105.40
2	AB	592	A	O4'-C1'-C2'	8.49	115.24	107.60
2	AB	2212	A	C3'-C2'-C1'	-8.49	94.71	101.50
35	BA	704	A	C2-N3-C4	8.49	114.84	110.60
35	BA	1053	G	C2-N3-C4	-8.49	107.65	111.90
35	BA	178	C	O4'-C1'-N1	8.49	114.99	108.20
35	BA	414	A	N7-C8-N9	8.49	118.05	113.80
35	BA	758	C	O4'-C4'-C3'	8.49	112.89	106.10
2	AB	92	U	N3-C4-C5	-8.49	109.51	114.60
2	AB	375	G	C4-C5-C6	8.49	123.89	118.80
2	AB	1933	G	N7-C8-N9	8.49	117.34	113.10
2	AB	1934	C	N1-C2-O2	8.49	123.99	118.90
2	AB	2726	A	C2-N3-C4	-8.49	106.36	110.60
35	BA	683	G	N1-C6-O6	-8.49	114.81	119.90
35	BA	708	C	C4'-C3'-C2'	-8.49	94.11	102.60
35	BA	1371	G	O4'-C1'-N9	8.49	114.99	108.20
36	BB	30	G	N3-C4-C5	-8.49	124.36	128.60
2	AB	2253	G	C8-N9-C4	-8.48	103.01	106.40
2	AB	2799	A	C5'-C4'-O4'	8.48	119.28	109.10
35	BA	18	C	N3-C4-C5	-8.48	118.51	121.90
35	BA	682	G	C8-N9-C4	-8.48	103.01	106.40
35	BA	943	U	C6-N1-C2	-8.48	115.91	121.00
2	AB	26	G	N3-C4-N9	-8.48	120.91	126.00
2	AB	2722	G	O4'-C1'-N9	8.48	114.98	108.20
35	BA	379	C	C5-C6-N1	-8.48	116.76	121.00
35	BA	962	C	C5'-C4'-O4'	8.48	119.28	109.10
35	BA	1173	U	N1-C2-O2	8.48	128.74	122.80
35	BA	1393	U	C1'-O4'-C4'	-8.48	103.11	109.90
38	BD	66	C	N1-C2-O2	8.48	123.99	118.90
2	AB	533	G	C4-C5-N7	-8.48	107.41	110.80
2	AB	1974	C	O4'-C1'-C2'	8.48	115.23	107.60
2	AB	2091	C	C1'-O4'-C4'	-8.48	103.12	109.90
2	AB	2268	A	N9-C4-C5	8.48	109.19	105.80
35	BA	310	G	C6-N1-C2	-8.48	120.01	125.10
35	BA	443	C	O4'-C1'-N1	8.48	114.98	108.20
2	AB	977	G	C2-N3-C4	8.48	116.14	111.90
6	AF	114	ARG	NE-CZ-NH1	8.48	124.54	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	398	U	C1'-O4'-C4'	-8.48	103.12	109.90
35	BA	460	A	N9-C4-C5	8.48	109.19	105.80
35	BA	464	U	C5'-C4'-O4'	8.48	119.27	109.10
35	BA	482	A	C6-C5-N7	8.48	138.23	132.30
2	AB	1191	G	C4-C5-C6	8.47	123.89	118.80
2	AB	266	G	C4-C5-N7	-8.47	107.41	110.80
2	AB	818	G	C5-C6-O6	-8.47	123.52	128.60
2	AB	2653	U	C6-N1-C2	-8.47	115.92	121.00
6	AF	35	TYR	CB-CG-CD2	-8.47	115.92	121.00
35	BA	118	U	N3-C4-O4	8.47	125.33	119.40
2	AB	449	A	C5-C6-N1	8.47	121.94	117.70
2	AB	597	G	N1-C2-N2	8.47	123.82	116.20
2	AB	611	C	P-O3'-C3'	8.47	129.87	119.70
2	AB	637	A	P-O3'-C3'	8.47	129.87	119.70
2	AB	847	U	C1'-O4'-C4'	-8.47	103.12	109.90
2	AB	2006	C	O4'-C4'-C3'	8.47	112.88	106.10
2	AB	2061	G	C8-N9-C4	-8.47	103.01	106.40
2	AB	2728	U	N3-C2-O2	-8.47	116.27	122.20
35	BA	1257	A	C8-N9-C4	-8.47	102.41	105.80
2	AB	1762	A	N7-C8-N9	8.47	118.03	113.80
2	AB	2426	A	C3'-C2'-C1'	-8.47	94.72	101.50
2	AB	2807	U	N1-C2-N3	8.47	119.98	114.90
35	BA	161	A	C6-C5-N7	8.47	138.23	132.30
35	BA	38	G	C4-C5-C6	8.47	123.88	118.80
35	BA	209	U	C3'-C2'-C1'	-8.47	94.72	101.50
2	AB	198	C	C6-N1-C2	-8.47	116.91	120.30
2	AB	684	G	C2-N3-C4	8.47	116.13	111.90
2	AB	855	G	C2-N3-C4	8.47	116.13	111.90
2	AB	1615	C	C2-N3-C4	8.47	124.14	119.90
2	AB	2226	C	N3-C2-O2	-8.47	115.97	121.90
35	BA	248	C	N3-C4-N4	8.47	123.93	118.00
2	AB	1519	G	C5-C6-O6	-8.47	123.52	128.60
35	BA	37	U	C5-C4-O4	-8.47	120.82	125.90
2	AB	589	U	C5-C4-O4	-8.46	120.82	125.90
2	AB	1257	C	C5-C6-N1	8.47	125.23	121.00
2	AB	1475	G	N3-C4-C5	-8.46	124.37	128.60
35	BA	247	G	O4'-C1'-N9	8.47	114.97	108.20
35	BA	331	G	C4-C5-N7	-8.47	107.41	110.80
46	BL	48	ARG	NE-CZ-NH2	-8.47	116.07	120.30
2	AB	2681	C	O4'-C1'-N1	8.46	114.97	108.20
38	BD	20	G	O4'-C1'-N9	8.46	114.97	108.20
2	AB	140	C	C2-N3-C4	8.46	124.13	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1861	G	C4-C5-N7	-8.46	107.42	110.80
2	AB	2546	U	O4'-C1'-N1	8.46	114.97	108.20
35	BA	614	C	N3-C4-N4	8.46	123.92	118.00
38	BD	68	C	O4'-C1'-N1	8.46	114.97	108.20
2	AB	609	A	C8-N9-C4	-8.46	102.42	105.80
2	AB	1637	A	C5'-C4'-O4'	8.46	119.25	109.10
35	BA	973	G	C5-C6-N1	8.46	115.73	111.50
38	BD	37	U	C4-C5-C6	8.46	124.78	119.70
2	AB	2802	G	C5-C6-O6	-8.46	123.53	128.60
35	BA	432	A	O4'-C1'-N9	8.46	114.97	108.20
43	BI	80	PHE	CB-CG-CD1	8.46	126.72	120.80
2	AB	369	U	C3'-C2'-C1'	8.46	108.26	101.50
2	AB	969	G	C5-C6-O6	-8.46	123.53	128.60
2	AB	1430	G	C4-C5-N7	-8.46	107.42	110.80
35	BA	428	G	C4-C5-N7	8.46	114.18	110.80
35	BA	505	G	C8-N9-C4	-8.46	103.02	106.40
35	BA	581	G	C1'-O4'-C4'	-8.46	103.14	109.90
35	BA	776	G	C1'-O4'-C4'	-8.46	103.14	109.90
35	BA	917	G	C4-C5-C6	8.46	123.87	118.80
35	BA	836	G	C6-N1-C2	-8.45	120.03	125.10
2	AB	1020	A	N7-C8-N9	8.45	118.03	113.80
35	BA	1426	G	C5-C6-O6	-8.45	123.53	128.60
37	BC	32	U	P-O3'-C3'	8.45	129.84	119.70
2	AB	844	A	C6-C5-N7	8.45	138.22	132.30
2	AB	2090	A	N1-C2-N3	-8.45	125.07	129.30
35	BA	201	G	C6-N1-C2	8.45	130.17	125.10
35	BA	1113	C	P-O3'-C3'	8.45	129.84	119.70
2	AB	164	C	C4'-C3'-C2'	-8.45	94.15	102.60
2	AB	625	G	C8-N9-C4	-8.45	103.02	106.40
2	AB	658	U	C5-C4-O4	-8.45	120.83	125.90
2	AB	807	U	C5-C4-O4	-8.45	120.83	125.90
2	AB	979	A	N9-C4-C5	-8.45	102.42	105.80
2	AB	1239	G	C6-C5-N7	-8.45	125.33	130.40
2	AB	1645	G	C4-C5-C6	8.45	123.87	118.80
35	BA	2	A	O4'-C1'-N9	8.45	114.96	108.20
35	BA	383	A	C8-N9-C4	-8.45	102.42	105.80
35	BA	624	C	N3-C2-O2	-8.45	115.98	121.90
35	BA	710	G	C8-N9-C4	-8.45	103.02	106.40
36	BB	73	G	C1'-O4'-C4'	-8.45	103.14	109.90
2	AB	2024	G	C5-C6-O6	-8.45	123.53	128.60
2	AB	2890	G	C2-N3-C4	8.45	116.12	111.90
2	AB	1209	U	N3-C2-O2	-8.45	116.29	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	757	G	N1-C6-O6	8.44	124.97	119.90
2	AB	1973	G	N3-C2-N2	-8.45	113.99	119.90
2	AB	2055	C	N3-C4-N4	-8.44	112.09	118.00
35	BA	756	C	C3'-C2'-C1'	8.45	108.26	101.50
2	AB	1536	C	N3-C4-C5	-8.44	118.52	121.90
2	AB	2091	C	N3-C4-C5	8.44	125.28	121.90
1	AA	73	A	C5-C6-N6	-8.44	116.95	123.70
2	AB	1111	A	N1-C2-N3	-8.44	125.08	129.30
2	AB	2599	G	N9-C4-C5	-8.44	102.02	105.40
35	BA	109	A	C5-N7-C8	-8.44	99.68	103.90
35	BA	581	G	O4'-C1'-N9	-8.44	101.45	108.20
35	BA	830	G	O4'-C1'-N9	-8.44	101.45	108.20
1	AA	51	G	C6-N1-C2	-8.44	120.04	125.10
2	AB	1416	G	N1-C6-O6	-8.44	114.84	119.90
2	AB	2040	G	C3'-C2'-C1'	8.44	108.25	101.50
35	BA	1097	C	O4'-C1'-N1	8.44	114.95	108.20
2	AB	1752	C	O4'-C1'-N1	8.44	114.95	108.20
2	AB	1981	A	C1'-O4'-C4'	-8.44	103.15	109.90
2	AB	129	C	N1-C2-O2	8.44	123.96	118.90
2	AB	1826	G	C4-C5-N7	-8.44	107.42	110.80
2	AB	1968	G	N7-C8-N9	8.44	117.32	113.10
35	BA	321	A	C8-N9-C4	8.44	109.17	105.80
35	BA	1157	A	C3'-C2'-C1'	8.44	108.25	101.50
2	AB	184	C	N1-C2-N3	-8.43	113.30	119.20
2	AB	776	G	C4-C5-C6	8.43	123.86	118.80
2	AB	988	A	O4'-C1'-N9	8.43	114.95	108.20
2	AB	2040	G	C2-N3-C4	8.43	116.12	111.90
2	AB	2827	C	N1-C2-O2	8.43	123.96	118.90
35	BA	1349	A	C2-N3-C4	-8.43	106.38	110.60
2	AB	2189	U	C4-C5-C6	8.43	124.76	119.70
32	A5	21	ARG	NE-CZ-NH2	8.43	124.52	120.30
35	BA	82	G	N9-C4-C5	8.43	108.77	105.40
35	BA	754	C	N3-C2-O2	-8.43	116.00	121.90
2	AB	508	A	C4'-C3'-C2'	-8.43	94.17	102.60
2	AB	924	G	N1-C2-N3	-8.43	118.84	123.90
2	AB	1232	G	C5-C6-N1	8.43	115.72	111.50
2	AB	2082	A	C8-N9-C4	-8.43	102.43	105.80
2	AB	2328	A	C4-C5-C6	8.43	121.22	117.00
35	BA	362	G	N9-C4-C5	8.43	108.77	105.40
2	AB	2672	U	N3-C4-O4	8.43	125.30	119.40
35	BA	696	A	C5-N7-C8	-8.43	99.69	103.90
35	BA	922	G	C5-C6-O6	-8.43	123.54	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	977	A	C3'-C2'-C1'	-8.43	94.76	101.50
35	BA	1410	A	O4'-C1'-N9	8.43	114.94	108.20
2	AB	2402	U	N1-C2-N3	8.43	119.96	114.90
35	BA	471	U	N1-C2-N3	8.43	119.96	114.90
1	AA	97	C	C2-N3-C4	8.43	124.11	119.90
35	BA	1173	U	C4-C5-C6	8.43	124.75	119.70
2	AB	80	G	C6-C5-N7	-8.42	125.35	130.40
2	AB	515	A	C8-N9-C4	-8.42	102.43	105.80
2	AB	2337	G	C5'-C4'-O4'	8.42	119.21	109.10
2	AB	2544	G	N3-C4-C5	-8.42	124.39	128.60
35	BA	215	C	N1-C2-O2	8.42	123.95	118.90
35	BA	239	U	N3-C2-O2	-8.42	116.31	122.20
35	BA	954	G	N7-C8-N9	8.42	117.31	113.10
35	BA	993	G	N9-C4-C5	8.42	108.77	105.40
2	AB	514	A	C5-C6-N6	8.42	130.44	123.70
2	AB	696	G	C2-N3-C4	8.42	116.11	111.90
35	BA	859	G	O4'-C1'-N9	-8.42	101.46	108.20
2	AB	166	U	N1-C2-O2	8.42	128.69	122.80
2	AB	1651	G	N3-C4-N9	-8.42	120.95	126.00
35	BA	519	C	N1-C2-O2	-8.42	113.85	118.90
35	BA	789	U	C2-N3-C4	-8.42	121.95	127.00
2	AB	1899	A	C6-N1-C2	8.42	123.65	118.60
2	AB	2330	G	N3-C4-C5	-8.42	124.39	128.60
24	AX	57	TYR	CB-CG-CD2	-8.42	115.95	121.00
2	AB	638	G	C2-N3-C4	8.42	116.11	111.90
2	AB	647	G	N1-C2-N3	-8.42	118.85	123.90
35	BA	823	C	N1-C2-O2	8.42	123.95	118.90
39	BE	94	ARG	NE-CZ-NH2	-8.42	116.09	120.30
2	AB	1117	C	N3-C2-O2	-8.41	116.01	121.90
2	AB	1992	G	C4-C5-C6	8.41	123.85	118.80
2	AB	2418	A	C5-C6-N1	8.41	121.91	117.70
2	AB	134	G	C5-C6-O6	-8.41	123.55	128.60
2	AB	332	A	C4-C5-C6	8.41	121.21	117.00
2	AB	460	A	C6-C5-N7	8.41	138.19	132.30
2	AB	830	G	N3-C4-C5	-8.41	124.39	128.60
2	AB	1217	U	C5-C4-O4	-8.41	120.85	125.90
2	AB	1580	A	N1-C6-N6	-8.41	113.55	118.60
2	AB	1600	C	C4-C5-C6	-8.41	113.19	117.40
2	AB	2123	G	C5-C6-O6	-8.41	123.55	128.60
2	AB	2437	G	O4'-C1'-N9	8.41	114.93	108.20
35	BA	56	U	C2-N3-C4	-8.41	121.95	127.00
35	BA	318	G	C5'-C4'-O4'	8.41	119.19	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	469	C	O4'-C1'-N1	8.41	114.93	108.20
2	AB	929	U	N1-C2-N3	8.41	119.95	114.90
2	AB	2405	G	C3'-C2'-C1'	8.41	108.23	101.50
2	AB	2648	G	C4-C5-N7	8.41	114.16	110.80
2	AB	2672	U	O4'-C1'-N1	8.41	114.93	108.20
2	AB	2747	G	N3-C2-N2	-8.41	114.01	119.90
35	BA	43	C	C5-C4-N4	-8.41	114.31	120.20
35	BA	148	G	N3-C4-C5	-8.41	124.39	128.60
35	BA	775	G	C8-N9-C4	-8.41	103.04	106.40
35	BA	1292	G	N1-C6-O6	-8.41	114.85	119.90
2	AB	453	A	C5-C6-N6	8.41	130.43	123.70
35	BA	270	A	C5-C6-N1	8.41	121.90	117.70
2	AB	931	U	C5-C4-O4	8.40	130.94	125.90
2	AB	1541	C	C5'-C4'-O4'	8.40	119.19	109.10
2	AB	1833	C	C5-C6-N1	8.40	125.20	121.00
2	AB	1846	G	N3-C4-C5	-8.40	124.40	128.60
2	AB	2357	G	N3-C4-C5	-8.40	124.40	128.60
2	AB	2025	C	C5'-C4'-O4'	8.40	119.18	109.10
2	AB	2040	G	O4'-C1'-N9	8.40	114.92	108.20
35	BA	685	G	C4-C5-C6	8.40	123.84	118.80
35	BA	987	G	C6-N1-C2	-8.40	120.06	125.10
2	AB	524	G	O4'-C1'-N9	8.40	114.92	108.20
2	AB	1823	G	N3-C2-N2	8.40	125.78	119.90
2	AB	2574	G	C8-N9-C4	-8.40	103.04	106.40
2	AB	2581	G	P-O3'-C3'	8.40	129.78	119.70
35	BA	253	A	C4'-C3'-C2'	-8.40	94.20	102.60
35	BA	579	A	N7-C8-N9	8.40	118.00	113.80
35	BA	1279	G	O5'-P-OP2	-8.40	98.14	105.70
38	BD	24	C	N1-C2-O2	8.40	123.94	118.90
35	BA	364	A	N9-C4-C5	8.40	109.16	105.80
1	AA	17	C	O4'-C1'-N1	8.40	114.92	108.20
1	AA	95	U	C2-N3-C4	-8.40	121.96	127.00
2	AB	697	G	C5-C6-O6	-8.40	123.56	128.60
2	AB	1584	U	P-O3'-C3'	8.40	129.78	119.70
2	AB	1907	G	N1-C2-N3	-8.40	118.86	123.90
2	AB	2512	C	N1-C2-O2	8.40	123.94	118.90
35	BA	231	U	N1-C2-N3	8.40	119.94	114.90
35	BA	595	A	C5-N7-C8	8.40	108.10	103.90
42	BH	19	ARG	NE-CZ-NH1	8.40	124.50	120.30
2	AB	107	G	C4'-C3'-C2'	-8.39	94.21	102.60
35	BA	1125	U	C4-C5-C6	8.39	124.74	119.70
2	AB	1309	G	C1'-O4'-C4'	-8.39	103.19	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	126	G	C5-C6-O6	-8.39	123.56	128.60
35	BA	978	A	C4-C5-C6	-8.39	112.80	117.00
35	BA	1526	G	O4'-C1'-N9	8.39	114.92	108.20
37	BC	25	U	C5-C6-N1	-8.39	118.50	122.70
2	AB	2616	C	C4-C5-C6	-8.39	113.20	117.40
2	AB	2484	G	C5-C6-O6	-8.39	123.57	128.60
2	AB	2772	C	O4'-C1'-N1	8.39	114.91	108.20
35	BA	1258	G	C3'-C2'-C1'	8.39	108.21	101.50
35	BA	1371	G	N3-C4-N9	8.39	131.03	126.00
36	BB	28	C	C2-N3-C4	-8.39	115.70	119.90
38	BD	44	A	O4'-C1'-N9	8.39	114.91	108.20
2	AB	468	G	N1-C6-O6	-8.39	114.87	119.90
2	AB	1436	G	N3-C4-N9	8.39	131.03	126.00
2	AB	2281	A	N1-C2-N3	-8.39	125.11	129.30
35	BA	326	G	N1-C2-N2	8.39	123.75	116.20
35	BA	1196	A	C5'-C4'-O4'	8.39	119.16	109.10
1	AA	111	U	C1'-O4'-C4'	-8.38	103.19	109.90
2	AB	1674	G	O4'-C1'-N9	8.38	114.91	108.20
2	AB	1760	C	N3-C4-C5	-8.39	118.55	121.90
35	BA	1157	A	O4'-C1'-N9	8.39	114.91	108.20
2	AB	2231	U	C5-C6-N1	-8.38	118.51	122.70
2	AB	2544	G	C5-N7-C8	8.38	108.49	104.30
2	AB	2718	G	O4'-C1'-N9	8.38	114.91	108.20
15	AO	103	TYR	CG-CD2-CE2	-8.38	114.59	121.30
2	AB	524	G	N9-C4-C5	8.38	108.75	105.40
35	BA	1244	G	C5-C6-N1	8.38	115.69	111.50
1	AA	15	A	N1-C6-N6	8.38	123.63	118.60
2	AB	134	G	O4'-C4'-C3'	8.38	112.81	106.10
2	AB	964	C	C6-N1-C2	-8.38	116.95	120.30
2	AB	2687	U	C5-C6-N1	-8.38	118.51	122.70
35	BA	899	C	O4'-C1'-N1	8.38	114.91	108.20
35	BA	1035	A	C8-N9-C4	-8.38	102.45	105.80
35	BA	1508	A	N9-C4-C5	8.38	109.15	105.80
39	BE	136	ARG	NE-CZ-NH1	8.38	124.49	120.30
35	BA	1342	C	N3-C4-N4	8.38	123.87	118.00
2	AB	918	A	O4'-C1'-N9	8.38	114.90	108.20
2	AB	1264	A	N3-C4-N9	-8.38	120.70	127.40
2	AB	2186	G	O4'-C1'-N9	8.38	114.90	108.20
2	AB	2473	U	C4-C5-C6	8.38	124.73	119.70
2	AB	2735	G	O4'-C1'-N9	8.38	114.90	108.20
35	BA	1101	A	N1-C6-N6	-8.38	113.57	118.60
2	AB	864	G	N7-C8-N9	8.38	117.29	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2375	G	C2-N3-C4	8.38	116.09	111.90
35	BA	1510	C	C5-C4-N4	-8.38	114.34	120.20
2	AB	715	A	C6-N1-C2	-8.37	113.58	118.60
2	AB	818	G	C4'-C3'-C2'	-8.37	94.23	102.60
2	AB	2052	A	O4'-C4'-C3'	8.37	112.80	106.10
2	AB	2280	G	N3-C2-N2	-8.37	114.04	119.90
2	AB	6	A	C2-N3-C4	8.37	114.79	110.60
2	AB	524	G	N1-C2-N2	-8.37	108.67	116.20
2	AB	719	C	N3-C2-O2	-8.37	116.04	121.90
2	AB	1392	A	C8-N9-C4	-8.37	102.45	105.80
2	AB	899	A	N7-C8-N9	8.37	117.98	113.80
2	AB	1104	C	C5'-C4'-C3'	-8.37	102.61	116.00
35	BA	343	U	C5-C4-O4	8.37	130.92	125.90
38	BD	35	C	O4'-C4'-C3'	8.37	112.80	106.10
35	BA	1116	U	C4'-C3'-C2'	-8.37	94.23	102.60
36	BB	19	G	C5-C6-N1	8.37	115.69	111.50
39	BE	73	ARG	NE-CZ-NH1	8.37	124.49	120.30
2	AB	136	G	C2-N3-C4	8.37	116.08	111.90
2	AB	1056	G	N1-C2-N3	8.37	128.92	123.90
2	AB	879	G	C2-N3-C4	8.37	116.08	111.90
2	AB	1316	U	N1-C2-N3	8.37	119.92	114.90
2	AB	1521	G	C4-C5-N7	-8.37	107.45	110.80
2	AB	1958	C	C5-C6-N1	-8.37	116.81	121.00
2	AB	1607	C	C4-C5-C6	8.37	121.58	117.40
2	AB	2514	U	C6-N1-C2	-8.37	115.98	121.00
2	AB	2740	A	O4'-C1'-N9	8.37	114.89	108.20
2	AB	2838	G	C5-C6-O6	-8.37	123.58	128.60
35	BA	57	G	N3-C4-C5	-8.37	124.42	128.60
2	AB	658	U	C2-N3-C4	-8.37	121.98	127.00
35	BA	908	A	C4-C5-C6	8.37	121.18	117.00
36	BB	12	U	N1-C2-N3	8.37	119.92	114.90
2	AB	1659	G	N1-C6-O6	-8.36	114.88	119.90
35	BA	85	U	C5-C4-O4	-8.36	120.88	125.90
35	BA	811	C	N1-C2-O2	8.36	123.92	118.90
35	BA	1450	U	C3'-C2'-C1'	8.37	108.19	101.50
2	AB	279	A	N1-C2-N3	8.36	133.48	129.30
2	AB	808	G	C4'-C3'-C2'	-8.36	94.24	102.60
2	AB	844	A	C5-C6-N6	-8.36	117.01	123.70
2	AB	1018	U	C6-N1-C2	-8.36	115.98	121.00
2	AB	1746	A	C4-C5-N7	-8.36	106.52	110.70
2	AB	834	G	N7-C8-N9	8.36	117.28	113.10
2	AB	2284	A	C3'-C2'-C1'	8.36	108.19	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2655	G	O4'-C1'-N9	8.36	114.89	108.20
19	AS	52	ARG	NE-CZ-NH2	-8.36	116.12	120.30
35	BA	752	G	N3-C4-C5	-8.36	124.42	128.60
35	BA	903	G	N7-C8-N9	8.36	117.28	113.10
35	BA	1032	G	O4'-C1'-N9	8.36	114.89	108.20
35	BA	1248	A	C8-N9-C4	-8.36	102.45	105.80
2	AB	128	C	O4'-C1'-N1	8.36	114.89	108.20
2	AB	1661	G	N1-C6-O6	-8.36	114.88	119.90
2	AB	1935	G	N7-C8-N9	8.36	117.28	113.10
2	AB	704	G	C4-C5-N7	-8.36	107.46	110.80
2	AB	1694	C	C5-C6-N1	-8.36	116.82	121.00
2	AB	2734	A	C8-N9-C4	-8.36	102.46	105.80
32	A5	5	PHE	CB-CG-CD2	-8.36	114.95	120.80
35	BA	958	A	C2-N3-C4	8.36	114.78	110.60
35	BA	1004	A	C4-C5-N7	8.36	114.88	110.70
35	BA	1133	G	C4-C5-N7	-8.36	107.46	110.80
35	BA	1289	A	C5-C6-N6	8.36	130.39	123.70
2	AB	991	C	N3-C4-N4	8.36	123.85	118.00
2	AB	1880	U	C5-C4-O4	-8.36	120.89	125.90
36	BB	9	A	N9-C4-C5	8.36	109.14	105.80
42	BH	19	ARG	NE-CZ-NH2	-8.36	116.12	120.30
2	AB	2294	G	C5-C6-O6	-8.35	123.59	128.60
35	BA	1453	G	N3-C4-C5	-8.35	124.42	128.60
2	AB	263	G	N9-C4-C5	-8.35	102.06	105.40
2	AB	588	U	N1-C1'-C2'	-8.35	102.81	112.00
2	AB	862	G	N9-C4-C5	8.35	108.74	105.40
2	AB	1202	G	C4-C5-N7	8.35	114.14	110.80
2	AB	1334	G	C8-N9-C4	-8.35	103.06	106.40
2	AB	1453	A	O4'-C1'-N9	8.35	114.88	108.20
2	AB	2633	G	O4'-C1'-N9	8.35	114.88	108.20
2	AB	53	A	C2-N3-C4	8.35	114.78	110.60
2	AB	193	U	C4'-C3'-C2'	-8.35	94.25	102.60
2	AB	651	G	O4'-C1'-N9	8.35	114.88	108.20
2	AB	475	C	C2-N3-C4	-8.35	115.73	119.90
2	AB	621	A	C5-C6-N6	8.35	130.38	123.70
2	AB	1077	A	C8-N9-C4	8.35	109.14	105.80
2	AB	1108	U	O4'-C1'-N1	8.35	114.88	108.20
2	AB	1367	A	N1-C6-N6	-8.35	113.59	118.60
35	BA	68	G	C4-C5-N7	8.35	114.14	110.80
35	BA	1137	C	C6-N1-C2	-8.35	116.96	120.30
35	BA	221	C	C5-C4-N4	-8.35	114.36	120.20
35	BA	792	A	C2-N3-C4	8.35	114.77	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BC	45	G	N7-C8-N9	8.35	117.28	113.10
2	AB	520	G	C5-C6-O6	-8.35	123.59	128.60
2	AB	1510	G	C2-N3-C4	8.35	116.07	111.90
35	BA	164	G	C2-N3-C4	8.35	116.07	111.90
35	BA	192	A	C4-C5-C6	-8.35	112.83	117.00
1	AA	16	G	C2-N3-C4	8.34	116.07	111.90
2	AB	133	U	N3-C4-O4	8.34	125.24	119.40
2	AB	1448	G	C5'-C4'-O4'	8.34	119.11	109.10
2	AB	1513	U	N3-C2-O2	-8.34	116.36	122.20
2	AB	1814	G	C5-N7-C8	8.34	108.47	104.30
2	AB	2574	G	C5-C6-O6	8.34	133.60	128.60
35	BA	37	U	C2-N3-C4	-8.34	122.00	127.00
35	BA	661	G	C2-N3-C4	8.34	116.07	111.90
2	AB	673	C	N3-C4-C5	8.34	125.24	121.90
2	AB	687	C	O4'-C1'-N1	8.34	114.87	108.20
35	BA	136	C	N3-C2-O2	-8.34	116.06	121.90
35	BA	615	G	C5'-C4'-O4'	8.34	119.11	109.10
35	BA	1299	A	C6-N1-C2	8.34	123.60	118.60
35	BA	1401	G	C5'-C4'-O4'	8.34	119.11	109.10
2	AB	1750	G	C8-N9-C4	-8.34	103.06	106.40
2	AB	479	A	C3'-C2'-C1'	8.34	108.17	101.50
2	AB	843	G	N7-C8-N9	8.34	117.27	113.10
2	AB	1600	C	C5-C6-N1	8.34	125.17	121.00
2	AB	1702	G	C2-N3-C4	8.34	116.07	111.90
2	AB	367	G	N9-C4-C5	8.33	108.73	105.40
2	AB	671	C	C6-N1-C2	8.33	123.63	120.30
2	AB	938	G	C5-C6-O6	-8.33	123.60	128.60
2	AB	2321	U	P-O3'-C3'	8.33	129.70	119.70
2	AB	2045	C	N3-C4-C5	8.33	125.23	121.90
35	BA	108	G	N7-C8-N9	8.33	117.27	113.10
35	BA	674	G	N7-C8-N9	8.33	117.27	113.10
35	BA	728	A	C8-N9-C4	-8.33	102.47	105.80
35	BA	942	G	P-O3'-C3'	8.33	129.70	119.70
35	BA	1115	U	O4'-C1'-N1	8.33	114.87	108.20
35	BA	1183	U	C2-N3-C4	-8.33	122.00	127.00
35	BA	1435	G	C4-C5-N7	8.33	114.13	110.80
35	BA	1482	G	C2-N3-C4	8.33	116.07	111.90
2	AB	196	A	O4'-C4'-C3'	8.33	112.76	106.10
2	AB	1124	G	N9-C4-C5	8.33	108.73	105.40
15	AO	81	ARG	NE-CZ-NH2	-8.33	116.13	120.30
35	BA	715	A	C2-N3-C4	-8.33	106.44	110.60
2	AB	615	U	P-O3'-C3'	8.33	129.69	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1571	A	N7-C8-N9	8.33	117.97	113.80
35	BA	6	G	C5-C6-O6	-8.33	123.60	128.60
2	AB	472	A	C5-C6-N6	-8.33	117.04	123.70
2	AB	1158	C	C1'-O4'-C4'	8.33	116.56	109.90
2	AB	1241	A	C4-C5-C6	-8.33	112.84	117.00
2	AB	1293	C	O4'-C1'-N1	8.33	114.86	108.20
2	AB	2592	G	C2-N3-C4	8.33	116.06	111.90
2	AB	2767	C	C6-N1-C2	-8.33	116.97	120.30
2	AB	1678	A	C5-C6-N1	-8.33	113.54	117.70
2	AB	2529	G	N9-C4-C5	8.33	108.73	105.40
35	BA	541	G	C5-C6-N1	8.33	115.66	111.50
35	BA	1364	U	C5-C6-N1	-8.33	118.54	122.70
38	BD	19	G	N3-C4-C5	-8.33	124.44	128.60
2	AB	1069	A	C2-N3-C4	8.32	114.76	110.60
2	AB	1182	G	N1-C2-N3	-8.32	118.91	123.90
2	AB	278	A	O4'-C1'-N9	-8.32	101.54	108.20
2	AB	1155	A	N9-C1'-C2'	-8.32	102.84	112.00
2	AB	1514	G	C4-C5-N7	8.32	114.13	110.80
2	AB	1617	C	C2-N3-C4	8.32	124.06	119.90
2	AB	1624	U	O4'-C1'-N1	8.32	114.86	108.20
2	AB	2044	C	N1-C2-O2	8.32	123.89	118.90
2	AB	2579	C	C2-N3-C4	8.32	124.06	119.90
35	BA	1116	U	N1-C2-O2	-8.32	116.97	122.80
35	BA	53	A	O4'-C4'-C3'	8.32	112.76	106.10
35	BA	142	G	C6-N1-C2	-8.32	120.11	125.10
35	BA	1269	A	N9-C4-C5	8.32	109.13	105.80
2	AB	912	C	N1-C2-O2	8.32	123.89	118.90
2	AB	4	U	C2-N3-C4	-8.32	122.01	127.00
2	AB	2329	U	O4'-C1'-N1	8.32	114.86	108.20
35	BA	327	A	C5-N7-C8	8.32	108.06	103.90
35	BA	856	C	C4-C5-C6	8.32	121.56	117.40
35	BA	1101	A	O4'-C1'-N9	8.32	114.86	108.20
2	AB	1327	A	C8-N9-C4	-8.32	102.47	105.80
2	AB	2839	G	C8-N9-C4	-8.32	103.07	106.40
35	BA	92	U	C3'-C2'-C1'	8.32	108.16	101.50
35	BA	476	U	C5-C4-O4	-8.32	120.91	125.90
35	BA	1387	G	C5-N7-C8	-8.32	100.14	104.30
2	AB	48	G	N3-C4-C5	-8.32	124.44	128.60
2	AB	790	U	C3'-C2'-C1'	8.32	108.16	101.50
2	AB	1078	U	N1-C2-N3	8.32	119.89	114.90
2	AB	1314	C	C1'-O4'-C4'	-8.32	103.25	109.90
2	AB	1474	U	N3-C4-O4	8.32	125.22	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	49	C	C6-N1-C2	-8.32	116.97	120.30
2	AB	1342	A	C4-C5-C6	-8.32	112.84	117.00
2	AB	2656	U	C2-N3-C4	-8.32	122.01	127.00
35	BA	522	C	C4-C5-C6	-8.32	113.24	117.40
2	AB	578	G	N3-C4-C5	-8.31	124.44	128.60
2	AB	1796	U	N1-C2-N3	8.31	119.89	114.90
2	AB	2323	G	C5-N7-C8	-8.31	100.14	104.30
35	BA	483	C	O4'-C1'-N1	8.31	114.85	108.20
35	BA	765	G	C6-N1-C2	-8.31	120.11	125.10
2	AB	2383	G	C4-C5-N7	8.31	114.12	110.80
2	AB	155	A	N9-C4-C5	8.31	109.12	105.80
2	AB	2546	U	C4-C5-C6	8.31	124.69	119.70
2	AB	2660	A	C6-C5-N7	8.31	138.12	132.30
35	BA	432	A	C8-N9-C4	8.31	109.12	105.80
35	BA	1064	G	N9-C4-C5	8.31	108.72	105.40
35	BA	1356	G	C2-N3-C4	8.31	116.06	111.90
35	BA	1536	C	N3-C2-O2	-8.31	116.08	121.90
1	AA	56	G	N3-C4-N9	8.31	130.99	126.00
2	AB	522	A	N1-C6-N6	-8.31	113.61	118.60
2	AB	2869	G	N3-C4-C5	-8.31	124.45	128.60
2	AB	652	U	N1-C1'-C2'	-8.31	102.86	112.00
2	AB	1653	G	C1'-O4'-C4'	-8.31	103.25	109.90
2	AB	1999	C	C4'-C3'-C2'	-8.31	94.29	102.60
2	AB	2542	A	C4-C5-C6	8.31	121.15	117.00
35	BA	503	C	C5-C6-N1	8.31	125.15	121.00
35	BA	791	G	C4-C5-N7	-8.31	107.48	110.80
35	BA	1385	G	C6-C5-N7	-8.31	125.42	130.40
35	BA	1426	G	N1-C2-N3	-8.31	118.92	123.90
2	AB	966	G	C5-C6-O6	-8.31	123.62	128.60
2	AB	1785	A	N1-C6-N6	-8.31	113.62	118.60
2	AB	2323	G	N9-C4-C5	8.31	108.72	105.40
35	BA	556	C	O4'-C1'-N1	8.31	114.84	108.20
35	BA	1056	U	C1'-O4'-C4'	8.31	116.55	109.90
39	BE	6	ARG	NE-CZ-NH2	8.31	124.45	120.30
2	AB	1498	C	C2-N3-C4	8.30	124.05	119.90
2	AB	2025	C	C6-N1-C2	8.30	123.62	120.30
2	AB	2275	C	O4'-C1'-N1	8.30	114.84	108.20
2	AB	2518	A	O4'-C1'-C2'	-8.30	97.50	105.80
35	BA	754	C	N1-C2-O2	8.30	123.88	118.90
2	AB	97	C	C4'-C3'-C2'	-8.30	94.30	102.60
2	AB	516	C	N1-C2-O2	8.30	123.88	118.90
2	AB	2761	A	C8-N9-C4	8.30	109.12	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	527	C	C5-C6-N1	8.30	125.15	121.00
2	AB	1056	G	C5-C6-N1	8.30	115.65	111.50
2	AB	1152	C	C4-C5-C6	-8.30	113.25	117.40
2	AB	1323	C	C1'-O4'-C4'	-8.30	103.26	109.90
2	AB	1934	C	C5-C6-N1	8.30	125.15	121.00
2	AB	1968	G	N9-C4-C5	8.30	108.72	105.40
2	AB	2209	G	N9-C1'-C2'	-8.30	102.87	112.00
2	AB	2340	A	C2-N3-C4	8.30	114.75	110.60
2	AB	2813	A	N7-C8-N9	8.30	117.95	113.80
35	BA	579	A	C8-N9-C4	-8.30	102.48	105.80
35	BA	1191	A	O4'-C4'-C3'	8.30	112.74	106.10
38	BD	66	C	N3-C4-C5	-8.30	118.58	121.90
2	AB	103	A	N9-C4-C5	8.30	109.12	105.80
2	AB	944	C	C4-C5-C6	8.30	121.55	117.40
2	AB	1904	G	C5-C6-O6	-8.30	123.62	128.60
2	AB	2501	C	O4'-C1'-N1	8.30	114.84	108.20
35	BA	1337	G	C5-C6-O6	-8.30	123.62	128.60
2	AB	1094	U	N3-C2-O2	-8.30	116.39	122.20
2	AB	2509	G	C6-N1-C2	-8.30	120.12	125.10
35	BA	1260	G	C2-N3-C4	8.30	116.05	111.90
36	BB	70	C	O4'-C1'-N1	8.30	114.84	108.20
1	AA	80	U	C5-C4-O4	-8.29	120.92	125.90
2	AB	622	G	N9-C4-C5	8.30	108.72	105.40
2	AB	796	C	C6-N1-C2	-8.30	116.98	120.30
2	AB	2529	G	N3-C2-N2	-8.30	114.09	119.90
2	AB	2562	U	N3-C4-C5	-8.30	109.62	114.60
2	AB	909	A	C6-C5-N7	8.29	138.10	132.30
2	AB	1920	C	O4'-C1'-N1	8.29	114.83	108.20
35	BA	806	C	C6-N1-C2	8.29	123.62	120.30
2	AB	576	U	O4'-C1'-N1	8.29	114.83	108.20
2	AB	1934	C	N3-C2-O2	-8.29	116.10	121.90
35	BA	1177	G	N3-C4-C5	-8.29	124.45	128.60
35	BA	1487	G	C4-C5-C6	8.29	123.78	118.80
1	AA	18	G	C1'-O4'-C4'	-8.29	103.27	109.90
2	AB	797	G	C6-C5-N7	-8.29	125.43	130.40
2	AB	1467	U	N1-C1'-C2'	-8.29	102.88	112.00
2	AB	725	G	C2-N3-C4	8.29	116.04	111.90
2	AB	748	G	C5-C6-O6	-8.29	123.63	128.60
2	AB	843	G	C5-N7-C8	-8.29	100.16	104.30
35	BA	1011	C	N1-C2-N3	-8.29	113.40	119.20
2	AB	2553	G	O4'-C1'-N9	8.29	114.83	108.20
35	BA	329	A	N9-C4-C5	8.29	109.11	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	81	G	C4-C5-N7	-8.29	107.49	110.80
2	AB	470	A	C2-N3-C4	8.29	114.74	110.60
2	AB	804	A	C8-N9-C4	-8.29	102.49	105.80
2	AB	1343	G	N1-C2-N3	-8.29	118.93	123.90
2	AB	1621	U	N3-C2-O2	-8.29	116.40	122.20
2	AB	1884	G	C5-C6-N1	8.29	115.64	111.50
2	AB	2235	G	N3-C4-C5	-8.29	124.46	128.60
35	BA	1310	G	N9-C4-C5	8.29	108.71	105.40
2	AB	2262	U	N3-C2-O2	-8.28	116.40	122.20
2	AB	2510	C	N3-C2-O2	-8.28	116.10	121.90
35	BA	1453	G	N9-C4-C5	8.28	108.71	105.40
2	AB	102	U	N1-C2-N3	8.28	119.87	114.90
2	AB	285	G	N1-C6-O6	-8.28	114.93	119.90
35	BA	510	A	C5-N7-C8	-8.28	99.76	103.90
35	BA	743	A	O4'-C1'-N9	8.28	114.83	108.20
35	BA	1392	G	C6-N1-C2	-8.28	120.13	125.10
35	BA	1461	G	N7-C8-N9	8.28	117.24	113.10
2	AB	124	G	N3-C4-C5	-8.28	124.46	128.60
2	AB	186	G	N3-C4-N9	8.28	130.97	126.00
2	AB	1644	C	N1-C2-O2	8.28	123.87	118.90
2	AB	2113	U	C5-C4-O4	-8.28	120.93	125.90
35	BA	1097	C	C4-C5-C6	-8.28	113.26	117.40
2	AB	2403	C	N1-C2-N3	-8.28	113.41	119.20
35	BA	363	A	C1'-O4'-C4'	-8.28	103.28	109.90
35	BA	1346	A	O4'-C1'-N9	8.28	114.82	108.20
35	BA	1429	A	C1'-O4'-C4'	-8.28	103.28	109.90
2	AB	364	C	N1-C1'-C2'	-8.28	102.89	112.00
2	AB	803	U	O4'-C1'-N1	8.28	114.82	108.20
2	AB	1025	G	O4'-C1'-N9	8.28	114.82	108.20
2	AB	1791	A	O4'-C1'-N9	-8.28	101.58	108.20
2	AB	2665	A	C3'-C2'-C1'	8.28	108.12	101.50
2	AB	2674	G	N3-C4-C5	-8.28	124.46	128.60
35	BA	487	A	N9-C4-C5	8.28	109.11	105.80
35	BA	1138	G	N3-C2-N2	-8.28	114.11	119.90
2	AB	57	C	C6-N1-C2	8.27	123.61	120.30
2	AB	1352	U	C5-C6-N1	-8.27	118.56	122.70
2	AB	2678	C	C6-N1-C2	-8.27	116.99	120.30
35	BA	199	A	C8-N9-C4	-8.27	102.49	105.80
35	BA	313	A	O4'-C1'-N9	8.27	114.82	108.20
35	BA	1127	G	N7-C8-N9	-8.27	108.96	113.10
35	BA	1360	A	C2-N3-C4	8.27	114.74	110.60
2	AB	1436	G	N3-C4-C5	-8.27	124.47	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2138	G	C3'-C2'-C1'	8.27	108.12	101.50
2	AB	2630	G	C8-N9-C4	-8.27	103.09	106.40
19	AS	75	TYR	CB-CG-CD2	-8.27	116.04	121.00
35	BA	131	A	C5-N7-C8	-8.27	99.77	103.90
35	BA	156	C	C4'-C3'-C2'	-8.27	94.33	102.60
35	BA	1036	A	C8-N9-C4	-8.27	102.49	105.80
35	BA	1110	A	C3'-C2'-C1'	-8.27	94.89	101.50
2	AB	431	U	O4'-C1'-N1	8.27	114.81	108.20
2	AB	1012	U	N1-C2-N3	8.27	119.86	114.90
2	AB	1715	G	N1-C6-O6	-8.27	114.94	119.90
2	AB	1811	G	C4-C5-C6	8.27	123.76	118.80
2	AB	1918	A	C4-C5-C6	-8.27	112.87	117.00
35	BA	198	G	N3-C4-N9	8.27	130.96	126.00
35	BA	476	U	C5-C6-N1	-8.27	118.57	122.70
35	BA	1333	A	C8-N9-C4	-8.27	102.49	105.80
35	BA	1515	G	N9-C4-C5	-8.27	102.09	105.40
36	BB	39	A	O4'-C1'-N9	8.27	114.81	108.20
38	BD	45	A	C8-N9-C4	-8.27	102.49	105.80
1	AA	46	A	C8-N9-C4	-8.26	102.50	105.80
2	AB	873	C	N1-C2-O2	8.26	123.86	118.90
2	AB	967	U	N3-C4-C5	-8.26	109.64	114.60
2	AB	1483	G	N3-C4-C5	-8.26	124.47	128.60
2	AB	2023	C	N1-C2-O2	8.26	123.86	118.90
2	AB	2463	C	C5-C6-N1	8.26	125.13	121.00
2	AB	2756	U	N3-C4-O4	8.26	125.18	119.40
35	BA	760	G	N7-C8-N9	8.26	117.23	113.10
35	BA	1219	A	N9-C4-C5	8.26	109.11	105.80
2	AB	1866	A	N1-C6-N6	8.26	123.56	118.60
2	AB	2011	U	C2-N3-C4	-8.26	122.04	127.00
2	AB	2450	A	C1'-O4'-C4'	-8.26	103.29	109.90
19	AS	63	ARG	NH1-CZ-NH2	-8.26	110.31	119.40
1	AA	44	G	N3-C4-C5	-8.26	124.47	128.60
2	AB	2269	G	N3-C4-N9	8.26	130.96	126.00
2	AB	2383	G	C5-C6-O6	-8.26	123.64	128.60
35	BA	110	C	N3-C2-O2	-8.26	116.12	121.90
2	AB	1676	A	N7-C8-N9	8.26	117.93	113.80
35	BA	93	U	C3'-C2'-C1'	8.26	108.11	101.50
35	BA	1002	G	N9-C4-C5	8.26	108.70	105.40
35	BA	1486	G	C3'-C2'-C1'	-8.26	94.89	101.50
2	AB	550	C	O4'-C1'-N1	8.26	114.80	108.20
2	AB	756	A	N1-C2-N3	-8.26	125.17	129.30
2	AB	1273	U	O4'-C1'-N1	-8.26	101.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1740	G	C5-N7-C8	-8.26	100.17	104.30
2	AB	2174	C	N3-C4-C5	-8.26	118.60	121.90
35	BA	45	G	C8-N9-C4	-8.26	103.10	106.40
35	BA	298	A	N7-C8-N9	-8.26	109.67	113.80
35	BA	1049	U	C3'-C2'-C1'	-8.26	94.90	101.50
35	BA	1178	G	N3-C4-C5	-8.26	124.47	128.60
2	AB	356	G	N3-C4-N9	8.25	130.95	126.00
35	BA	528	C	N3-C4-C5	-8.25	118.60	121.90
35	BA	1034	G	C6-C5-N7	-8.25	125.45	130.40
2	AB	470	A	C3'-C2'-C1'	-8.25	94.90	101.50
2	AB	1593	A	C8-N9-C4	-8.25	102.50	105.80
2	AB	1740	G	O4'-C1'-N9	8.25	114.80	108.20
2	AB	2868	A	P-O5'-C5'	8.25	134.10	120.90
35	BA	388	G	O4'-C1'-N9	8.25	114.80	108.20
35	BA	984	C	N3-C4-C5	-8.25	118.60	121.90
35	BA	1021	A	C5-N7-C8	-8.25	99.77	103.90
37	BC	35	G	C2-N3-C4	8.25	116.03	111.90
43	BI	49	TYR	CB-CG-CD2	8.25	125.95	121.00
1	AA	13	G	C5-C6-N1	-8.25	107.38	111.50
2	AB	350	G	N7-C8-N9	8.25	117.22	113.10
2	AB	684	G	N3-C4-N9	8.25	130.95	126.00
2	AB	1572	A	O4'-C1'-N9	8.25	114.80	108.20
2	AB	31	C	N1-C2-O2	8.25	123.85	118.90
2	AB	973	A	N3-C4-N9	8.25	134.00	127.40
2	AB	1634	A	N3-C4-C5	-8.25	121.02	126.80
35	BA	411	A	N9-C4-C5	8.25	109.10	105.80
2	AB	1642	G	C8-N9-C4	-8.25	103.10	106.40
35	BA	244	U	C5-C6-N1	-8.25	118.58	122.70
35	BA	670	G	N7-C8-N9	8.25	117.22	113.10
35	BA	689	C	N1-C2-O2	8.25	123.85	118.90
35	BA	1322	C	N3-C4-C5	-8.25	118.60	121.90
35	BA	1500	A	C2-N3-C4	8.25	114.72	110.60
35	BA	1522	U	C4-C5-C6	8.25	124.65	119.70
37	BC	58	C	N3-C4-C5	-8.25	118.60	121.90
2	AB	15	G	N9-C4-C5	8.25	108.70	105.40
2	AB	2114	A	C4-C5-N7	-8.25	106.58	110.70
6	AF	197	GLU	OE1-CD-OE2	8.25	133.20	123.30
35	BA	859	G	C5-N7-C8	8.25	108.42	104.30
2	AB	2549	G	N7-C8-N9	8.25	117.22	113.10
2	AB	2596	U	N3-C4-C5	-8.25	109.65	114.60
2	AB	2900	A	C4-C5-N7	-8.25	106.58	110.70
35	BA	647	C	C3'-C2'-C1'	8.25	108.10	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1198	G	C4'-C3'-C2'	-8.25	94.35	102.60
2	AB	728	G	C5-C6-O6	-8.24	123.65	128.60
2	AB	1222	U	N3-C4-O4	8.24	125.17	119.40
2	AB	1758	U	C5-C6-N1	8.24	126.82	122.70
2	AB	1769	U	C4-C5-C6	8.24	124.65	119.70
2	AB	1819	A	C5-C6-N1	8.24	121.82	117.70
2	AB	2110	G	C5-C6-O6	-8.24	123.65	128.60
2	AB	2783	U	C5-C6-N1	-8.24	118.58	122.70
2	AB	2838	G	N1-C2-N2	8.24	123.62	116.20
35	BA	44	A	N7-C8-N9	8.24	117.92	113.80
35	BA	194	C	O4'-C1'-N1	8.24	114.79	108.20
35	BA	973	G	N1-C6-O6	-8.24	114.95	119.90
35	BA	1321	U	N1-C2-O2	8.24	128.57	122.80
35	BA	1487	G	C6-C5-N7	-8.24	125.45	130.40
2	AB	1412	U	N3-C2-O2	-8.24	116.43	122.20
2	AB	1744	A	C5-C6-N1	8.24	121.82	117.70
35	BA	64	G	C6-N1-C2	-8.24	120.16	125.10
35	BA	625	U	C4-C5-C6	-8.24	114.76	119.70
35	BA	738	C	N3-C4-N4	8.24	123.77	118.00
35	BA	840	C	C5'-C4'-O4'	8.24	118.99	109.10
35	BA	1358	U	N3-C2-O2	-8.24	116.43	122.20
1	AA	28	C	C4'-C3'-C2'	-8.24	94.36	102.60
2	AB	1069	A	N1-C2-N3	-8.24	125.18	129.30
2	AB	1432	G	C5-C6-O6	-8.24	123.66	128.60
2	AB	1469	A	C5-C6-N1	8.24	121.82	117.70
35	BA	141	G	C2-N3-C4	-8.24	107.78	111.90
2	AB	325	G	O4'-C1'-N9	8.24	114.79	108.20
2	AB	2456	C	N3-C4-C5	-8.24	118.61	121.90
2	AB	2641	G	C8-N9-C4	-8.24	103.11	106.40
35	BA	163	C	O4'-C1'-N1	8.24	114.79	108.20
35	BA	1234	C	C2-N3-C4	8.24	124.02	119.90
36	BB	69	C	C5-C4-N4	-8.24	114.43	120.20
55	BU	6	ARG	NE-CZ-NH1	8.24	124.42	120.30
2	AB	346	A	C4-C5-C6	-8.23	112.88	117.00
2	AB	1519	G	C5-C6-N1	8.23	115.62	111.50
2	AB	1761	C	C3'-C2'-C1'	8.23	108.09	101.50
2	AB	2540	C	C5'-C4'-O4'	8.23	118.98	109.10
35	BA	887	G	C6-C5-N7	-8.23	125.46	130.40
35	BA	927	G	C8-N9-C4	-8.23	103.11	106.40
1	AA	34	A	N1-C6-N6	-8.23	113.66	118.60
2	AB	316	C	O4'-C1'-N1	8.23	114.78	108.20
2	AB	2061	G	C4-C5-N7	-8.23	107.51	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2682	A	O4'-C1'-N9	8.23	114.79	108.20
2	AB	2776	A	C4-C5-N7	-8.23	106.58	110.70
35	BA	167	A	C3'-C2'-C1'	8.23	108.08	101.50
36	BB	27	C	C2-N3-C4	-8.23	115.78	119.90
35	BA	915	A	C4'-C3'-C2'	-8.23	94.37	102.60
35	BA	1047	G	C5-N7-C8	-8.23	100.19	104.30
2	AB	1615	C	C5-C4-N4	8.23	125.96	120.20
2	AB	2217	G	C6-C5-N7	-8.23	125.46	130.40
2	AB	2669	G	N3-C2-N2	-8.23	114.14	119.90
36	BB	66	C	N1-C2-O2	8.23	123.84	118.90
2	AB	329	G	N1-C2-N3	-8.23	118.96	123.90
2	AB	360	U	O4'-C1'-N1	8.23	114.78	108.20
2	AB	1533	C	O4'-C1'-N1	8.23	114.78	108.20
35	BA	376	G	N7-C8-N9	8.23	117.21	113.10
2	AB	702	U	N1-C2-N3	8.22	119.83	114.90
35	BA	118	U	C3'-C2'-C1'	8.22	108.08	101.50
35	BA	470	C	N3-C4-N4	8.22	123.76	118.00
35	BA	262	A	C2-N3-C4	8.22	114.71	110.60
35	BA	443	C	C5-C6-N1	-8.22	116.89	121.00
35	BA	641	U	O4'-C4'-C3'	8.22	112.68	106.10
35	BA	899	C	C6-N1-C2	8.22	123.59	120.30
35	BA	1006	G	O4'-C1'-N9	8.22	114.78	108.20
35	BA	1297	G	N7-C8-N9	8.22	117.21	113.10
2	AB	1137	G	C5'-C4'-O4'	8.22	118.97	109.10
2	AB	1505	A	C5-N7-C8	8.22	108.01	103.90
2	AB	2218	G	C8-N9-C4	-8.22	103.11	106.40
2	AB	2551	C	C5-C6-N1	8.22	125.11	121.00
35	BA	2	A	C5-C6-N1	8.22	121.81	117.70
35	BA	401	C	C2-N3-C4	8.22	124.01	119.90
35	BA	855	U	N3-C4-O4	8.22	125.15	119.40
35	BA	952	U	N1-C1'-C2'	-8.22	102.96	112.00
2	AB	848	C	N3-C2-O2	-8.22	116.15	121.90
2	AB	1479	G	C2-N3-C4	8.22	116.01	111.90
2	AB	1766	G	N3-C4-N9	8.22	130.93	126.00
2	AB	2153	C	C5-C6-N1	8.22	125.11	121.00
2	AB	2595	G	C5-C6-N1	8.22	115.61	111.50
2	AB	2797	U	N3-C2-O2	-8.22	116.45	122.20
35	BA	694	A	C2-N3-C4	8.22	114.71	110.60
35	BA	898	G	C4-C5-N7	-8.22	107.51	110.80
35	BA	1327	C	C5-C4-N4	-8.22	114.45	120.20
2	AB	284	U	C6-N1-C2	-8.21	116.07	121.00
2	AB	1119	U	N1-C2-O2	-8.21	117.05	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1157	G	N3-C4-N9	8.21	130.93	126.00
2	AB	1416	G	C4-N9-C1'	-8.21	115.82	126.50
2	AB	1630	A	N9-C4-C5	-8.22	102.51	105.80
2	AB	2414	G	N9-C4-C5	8.21	108.69	105.40
2	AB	2616	C	N3-C4-C5	8.22	125.19	121.90
34	A7	12	ARG	NE-CZ-NH2	-8.21	116.19	120.30
36	BB	70	C	C5-C6-N1	8.21	125.11	121.00
2	AB	2126	A	N1-C2-N3	-8.21	125.19	129.30
1	AA	111	U	N1-C2-N3	8.21	119.83	114.90
1	AA	118	C	C5-C4-N4	-8.21	114.45	120.20
2	AB	2402	U	C2-N3-C4	-8.21	122.07	127.00
2	AB	2852	G	N9-C4-C5	-8.21	102.12	105.40
35	BA	365	U	C2-N3-C4	-8.21	122.07	127.00
2	AB	2879	A	N1-C6-N6	-8.21	113.67	118.60
35	BA	444	G	C4-C5-N7	-8.21	107.52	110.80
35	BA	664	G	N9-C4-C5	-8.21	102.12	105.40
35	BA	795	C	N3-C2-O2	-8.21	116.15	121.90
1	AA	9	G	C5'-C4'-O4'	8.21	118.95	109.10
2	AB	448	U	O4'-C4'-C3'	8.21	112.67	106.10
2	AB	637	A	C8-N9-C4	-8.21	102.52	105.80
2	AB	1544	A	C5'-C4'-O4'	8.21	118.95	109.10
2	AB	2288	A	C4-C5-N7	-8.21	106.59	110.70
35	BA	145	G	C2-N3-C4	8.21	116.00	111.90
35	BA	1361	G	O4'-C1'-N9	8.21	114.77	108.20
2	AB	1873	G	N1-C2-N3	-8.21	118.98	123.90
2	AB	2646	C	O4'-C1'-N1	8.21	114.77	108.20
39	BE	197	PHE	CB-CG-CD1	-8.21	115.06	120.80
2	AB	186	G	C6-C5-N7	-8.21	125.48	130.40
35	BA	1189	U	C4-C5-C6	8.21	124.62	119.70
2	AB	1611	C	O4'-C1'-N1	8.20	114.76	108.20
2	AB	2421	G	C4-C5-C6	8.21	123.72	118.80
35	BA	547	A	C5-C6-N1	-8.21	113.60	117.70
2	AB	1481	U	C4-C5-C6	8.20	124.62	119.70
2	AB	2530	A	C1'-O4'-C4'	-8.20	103.34	109.90
35	BA	835	U	C5-C4-O4	-8.20	120.98	125.90
35	BA	1468	A	C8-N9-C4	-8.20	102.52	105.80
2	AB	1637	A	C8-N9-C4	-8.20	102.52	105.80
2	AB	1949	G	C2-N3-C4	8.20	116.00	111.90
2	AB	2043	C	O4'-C1'-N1	8.20	114.76	108.20
37	BC	18	A	O4'-C4'-C3'	8.20	112.66	106.10
2	AB	2123	G	C5-C6-N1	8.20	115.60	111.50
35	BA	637	C	N3-C2-O2	-8.20	116.16	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	559	G	N9-C4-C5	8.20	108.68	105.40
2	AB	1024	G	N9-C4-C5	8.20	108.68	105.40
2	AB	1030	C	O4'-C1'-N1	8.20	114.76	108.20
2	AB	2097	A	C8-N9-C4	-8.20	102.52	105.80
38	BD	69	C	O4'-C1'-N1	8.20	114.76	108.20
2	AB	400	G	C4-C5-N7	8.20	114.08	110.80
2	AB	1595	C	N3-C4-C5	-8.20	118.62	121.90
2	AB	2041	U	C6-N1-C2	-8.20	116.08	121.00
35	BA	672	U	N3-C4-O4	8.20	125.14	119.40
35	BA	980	C	C5-C6-N1	8.20	125.10	121.00
35	BA	1293	C	C5-C4-N4	-8.20	114.46	120.20
2	AB	178	G	C5-N7-C8	-8.20	100.20	104.30
2	AB	1989	G	N9-C4-C5	8.20	108.68	105.40
2	AB	2129	C	N3-C4-C5	-8.20	118.62	121.90
31	A4	39	ASP	CB-CG-OD2	8.20	125.68	118.30
35	BA	794	A	C6-C5-N7	8.20	138.04	132.30
35	BA	973	G	P-O3'-C3'	8.20	129.54	119.70
2	AB	1978	A	N9-C4-C5	8.19	109.08	105.80
2	AB	2046	G	N3-C4-C5	-8.19	124.50	128.60
2	AB	2675	A	C4-C5-N7	8.20	114.80	110.70
35	BA	24	U	N1-C2-N3	8.20	119.82	114.90
35	BA	911	U	C4-C5-C6	8.19	124.62	119.70
35	BA	1002	G	C5-C6-N1	-8.20	107.40	111.50
2	AB	2720	U	N1-C2-N3	8.19	119.82	114.90
35	BA	1288	A	C8-N9-C4	-8.19	102.52	105.80
2	AB	51	G	C1'-O4'-C4'	8.19	116.45	109.90
2	AB	353	C	C4-C5-C6	-8.19	113.30	117.40
2	AB	1782	U	N1-C2-O2	8.19	128.53	122.80
2	AB	2187	U	O4'-C1'-N1	8.19	114.75	108.20
35	BA	485	U	N3-C2-O2	-8.19	116.47	122.20
2	AB	2214	C	C4-C5-C6	8.19	121.50	117.40
35	BA	288	A	C5-C6-N6	-8.19	117.15	123.70
35	BA	314	C	C6-N1-C2	-8.19	117.02	120.30
35	BA	611	C	O4'-C1'-N1	8.19	114.75	108.20
2	AB	1525	A	C4-C5-C6	-8.19	112.91	117.00
2	AB	2263	C	C4'-C3'-C2'	-8.19	94.41	102.60
2	AB	2681	C	N3-C4-C5	8.19	125.18	121.90
35	BA	270	A	C8-N9-C4	-8.19	102.52	105.80
35	BA	700	G	C4-C5-N7	-8.19	107.52	110.80
35	BA	1222	G	C5-C6-O6	-8.19	123.69	128.60
2	AB	288	U	N3-C2-O2	-8.19	116.47	122.20
2	AB	2290	G	N1-C2-N3	-8.19	118.99	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2897	U	C5-C4-O4	-8.19	120.99	125.90
35	BA	6	G	C6-N1-C2	-8.19	120.19	125.10
35	BA	265	G	C4-C5-N7	8.19	114.08	110.80
35	BA	1394	A	C2-N3-C4	-8.19	106.51	110.60
2	AB	1744	A	C8-N9-C4	-8.19	102.53	105.80
2	AB	1856	U	N3-C2-O2	-8.19	116.47	122.20
2	AB	2535	G	C5-C6-N1	8.19	115.59	111.50
35	BA	510	A	N7-C8-N9	8.19	117.89	113.80
35	BA	697	U	N1-C2-N3	8.19	119.81	114.90
35	BA	1022	A	N7-C8-N9	-8.19	109.71	113.80
2	AB	41	C	N3-C4-N4	8.18	123.73	118.00
2	AB	411	G	N3-C4-C5	-8.18	124.51	128.60
2	AB	2309	A	N7-C8-N9	-8.18	109.71	113.80
2	AB	2369	A	C8-N9-C4	8.18	109.07	105.80
2	AB	49	A	O4'-C1'-N9	8.18	114.75	108.20
2	AB	1082	U	N1-C2-O2	8.18	128.53	122.80
2	AB	1386	C	C1'-O4'-C4'	-8.18	103.35	109.90
2	AB	1594	U	N3-C2-O2	-8.18	116.47	122.20
2	AB	2415	G	N1-C2-N2	-8.18	108.83	116.20
35	BA	96	U	C3'-C2'-C1'	8.18	108.05	101.50
35	BA	1043	G	C8-N9-C4	8.18	109.67	106.40
2	AB	160	A	C5-N7-C8	8.18	107.99	103.90
2	AB	833	A	O4'-C1'-N9	8.18	114.74	108.20
2	AB	1821	A	N1-C6-N6	-8.18	113.69	118.60
2	AB	1124	G	C2-N3-C4	8.18	115.99	111.90
2	AB	2453	A	C2-N3-C4	8.18	114.69	110.60
32	A5	12	ARG	NE-CZ-NH1	-8.18	116.21	120.30
35	BA	42	G	C6-C5-N7	-8.18	125.49	130.40
35	BA	200	G	C8-N9-C4	-8.18	103.13	106.40
38	BD	13	C	O4'-C4'-C3'	8.18	112.64	106.10
48	BN	6	ARG	NE-CZ-NH1	8.18	124.39	120.30
35	BA	904	U	C5-C4-O4	8.18	130.81	125.90
2	AB	175	G	C8-N9-C4	-8.18	103.13	106.40
24	AX	82	TYR	CB-CG-CD1	-8.18	116.09	121.00
2	AB	500	G	N3-C4-N9	8.18	130.91	126.00
2	AB	790	U	C5-C4-O4	-8.18	121.00	125.90
2	AB	1156	A	N1-C6-N6	-8.18	113.69	118.60
2	AB	1354	A	C5-C6-N6	8.18	130.24	123.70
2	AB	2253	G	C1'-O4'-C4'	-8.18	103.36	109.90
6	AF	69	ARG	NE-CZ-NH2	-8.18	116.21	120.30
35	BA	79	G	C2-N3-C4	8.18	115.99	111.90
35	BA	444	G	C8-N9-C4	-8.18	103.13	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	607	A	N3-C4-C5	-8.18	121.08	126.80
35	BA	886	G	N9-C4-C5	-8.18	102.13	105.40
35	BA	1514	G	C8-N9-C4	-8.18	103.13	106.40
35	BA	9	G	N9-C4-C5	8.18	108.67	105.40
35	BA	1244	G	O4'-C1'-N9	8.18	114.74	108.20
2	AB	993	G	C4-C5-N7	-8.17	107.53	110.80
2	AB	1392	A	N9-C4-C5	8.17	109.07	105.80
2	AB	1573	G	C1'-O4'-C4'	-8.17	103.36	109.90
35	BA	205	A	N9-C4-C5	8.17	109.07	105.80
35	BA	346	G	N3-C4-C5	-8.17	124.51	128.60
35	BA	502	A	C3'-C2'-C1'	-8.17	94.96	101.50
35	BA	657	U	C4-C5-C6	8.17	124.60	119.70
2	AB	1857	G	N7-C8-N9	8.17	117.19	113.10
35	BA	949	A	O4'-C1'-N9	8.17	114.74	108.20
35	BA	1038	C	N1-C2-O2	8.17	123.80	118.90
35	BA	1077	G	N3-C2-N2	-8.17	114.18	119.90
35	BA	1318	A	O4'-C4'-C3'	8.17	112.64	106.10
2	AB	685	A	C5-C6-N1	8.17	121.78	117.70
35	BA	108	G	C8-N9-C4	-8.17	103.13	106.40
37	BC	25	U	C6-N1-C2	8.17	125.90	121.00
2	AB	1262	A	N9-C4-C5	8.17	109.07	105.80
53	BS	17	TYR	CB-CG-CD1	8.17	125.90	121.00
2	AB	505	A	C3'-C2'-C1'	8.17	108.03	101.50
2	AB	1588	G	N1-C2-N2	8.17	123.55	116.20
2	AB	1597	A	O4'-C1'-N9	8.17	114.73	108.20
2	AB	1605	C	O4'-C1'-N1	8.17	114.73	108.20
2	AB	2463	C	C5-C4-N4	-8.17	114.48	120.20
8	AH	54	ARG	NE-CZ-NH2	-8.17	116.22	120.30
35	BA	808	C	C6-N1-C2	8.17	123.57	120.30
1	AA	47	C	N3-C2-O2	-8.17	116.18	121.90
1	AA	118	C	C6-N1-C2	8.17	123.57	120.30
2	AB	36	G	C5-N7-C8	-8.17	100.22	104.30
2	AB	1106	G	C4-C5-C6	8.17	123.70	118.80
2	AB	1255	U	C6-N1-C2	8.17	125.90	121.00
2	AB	1567	G	N9-C4-C5	8.17	108.67	105.40
2	AB	794	A	C5-C6-N6	-8.16	117.17	123.70
2	AB	1214	A	N9-C4-C5	-8.16	102.53	105.80
2	AB	1281	G	C6-N1-C2	-8.16	120.20	125.10
2	AB	2336	A	P-O3'-C3'	8.16	129.50	119.70
2	AB	2607	G	C5-N7-C8	-8.16	100.22	104.30
35	BA	795	C	C5-C6-N1	8.16	125.08	121.00
2	AB	641	U	N3-C2-O2	-8.16	116.49	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2174	C	O4'-C1'-N1	8.16	114.73	108.20
2	AB	2584	U	C5-C6-N1	-8.16	118.62	122.70
2	AB	2847	U	C3'-C2'-C1'	8.16	108.03	101.50
35	BA	944	G	N3-C4-C5	-8.16	124.52	128.60
2	AB	126	A	C4-C5-N7	-8.16	106.62	110.70
2	AB	717	C	N3-C2-O2	-8.16	116.19	121.90
2	AB	1577	C	C1'-O4'-C4'	8.16	116.43	109.90
2	AB	333	G	C6-N1-C2	-8.16	120.20	125.10
2	AB	552	U	C4'-C3'-C2'	-8.16	94.44	102.60
2	AB	725	G	C4-C5-C6	8.16	123.70	118.80
2	AB	2158	A	N1-C6-N6	8.16	123.50	118.60
2	AB	2656	U	N3-C4-C5	8.16	119.50	114.60
38	BD	1	C	N1-C2-N3	-8.16	113.49	119.20
1	AA	65	U	N3-C2-O2	-8.16	116.49	122.20
2	AB	55	G	N3-C4-N9	8.16	130.89	126.00
35	BA	1271	A	C8-N9-C4	-8.16	102.54	105.80
2	AB	557	C	N3-C2-O2	-8.16	116.19	121.90
2	AB	1537	G	N9-C4-C5	-8.16	102.14	105.40
2	AB	2661	G	C2-N3-C4	8.16	115.98	111.90
35	BA	556	C	C4-C5-C6	8.16	121.48	117.40
2	AB	2703	C	C2-N3-C4	8.16	123.98	119.90
35	BA	124	C	N3-C4-C5	-8.16	118.64	121.90
35	BA	450	G	N3-C4-C5	-8.16	124.52	128.60
35	BA	546	A	N9-C4-C5	8.16	109.06	105.80
35	BA	591	U	N3-C2-O2	-8.16	116.49	122.20
35	BA	1367	C	O4'-C1'-N1	8.16	114.72	108.20
35	BA	1447	A	O4'-C1'-N9	8.16	114.72	108.20
2	AB	62	U	O4'-C1'-N1	8.15	114.72	108.20
2	AB	1248	G	N1-C6-O6	-8.15	115.01	119.90
2	AB	2135	A	N1-C6-N6	-8.15	113.71	118.60
2	AB	1861	G	C4-C5-C6	8.15	123.69	118.80
2	AB	2458	G	C1'-O4'-C4'	-8.15	103.38	109.90
35	BA	281	G	C2-N3-C4	8.15	115.98	111.90
35	BA	141	G	N1-C2-N3	8.15	128.79	123.90
35	BA	350	G	N3-C4-C5	-8.15	124.52	128.60
35	BA	1540	U	P-O3'-C3'	8.15	129.49	119.70
2	AB	173	A	C5-N7-C8	-8.15	99.83	103.90
2	AB	561	G	N1-C2-N3	-8.15	119.01	123.90
2	AB	582	A	N9-C4-C5	8.15	109.06	105.80
2	AB	1133	A	N9-C4-C5	8.15	109.06	105.80
2	AB	1231	U	C5-C4-O4	-8.15	121.01	125.90
35	BA	683	G	N1-C2-N3	-8.15	119.01	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1344	C	N3-C2-O2	8.15	127.61	121.90
35	BA	1495	U	C4'-C3'-C2'	-8.15	94.45	102.60
35	BA	150	U	C6-N1-C2	-8.15	116.11	121.00
2	AB	44	A	C4-C5-C6	-8.15	112.93	117.00
2	AB	318	C	C5-C6-N1	8.15	125.07	121.00
2	AB	436	C	N3-C4-N4	8.15	123.70	118.00
2	AB	944	C	C4'-C3'-C2'	-8.15	94.45	102.60
2	AB	1078	U	C4-C5-C6	8.15	124.59	119.70
2	AB	1617	C	C5-C6-N1	8.15	125.07	121.00
1	AA	73	A	N1-C2-N3	-8.14	125.23	129.30
2	AB	921	C	O4'-C4'-C3'	8.14	112.61	106.10
2	AB	1182	G	O4'-C1'-N9	8.14	114.72	108.20
2	AB	2674	G	O4'-C1'-N9	8.14	114.72	108.20
35	BA	1156	G	C8-N9-C4	-8.14	103.14	106.40
2	AB	1232	G	N7-C8-N9	-8.14	109.03	113.10
2	AB	1481	U	N1-C2-O2	8.14	128.50	122.80
2	AB	2486	C	N3-C2-O2	-8.14	116.20	121.90
35	BA	457	G	N3-C4-N9	8.14	130.89	126.00
35	BA	1220	G	N1-C2-N3	8.14	128.79	123.90
35	BA	1323	G	C5-N7-C8	-8.14	100.23	104.30
35	BA	1377	A	C5-C6-N1	8.14	121.77	117.70
37	BC	39	U	O4'-C1'-N1	8.14	114.72	108.20
2	AB	1455	G	N9-C4-C5	-8.14	102.14	105.40
2	AB	2126	A	N1-C6-N6	8.14	123.48	118.60
2	AB	892	A	N9-C4-C5	-8.14	102.54	105.80
2	AB	1851	U	N3-C4-O4	8.14	125.10	119.40
2	AB	2336	A	C2-N3-C4	8.14	114.67	110.60
2	AB	130	C	C5-C4-N4	-8.14	114.50	120.20
2	AB	196	A	C1'-O4'-C4'	-8.14	103.39	109.90
2	AB	2076	U	N3-C2-O2	-8.14	116.50	122.20
2	AB	2216	G	C5-N7-C8	8.14	108.37	104.30
35	BA	506	G	C5-C6-N1	8.14	115.57	111.50
2	AB	2263	C	C4-C5-C6	8.14	121.47	117.40
35	BA	667	G	C4-C5-C6	8.14	123.68	118.80
35	BA	668	G	C1'-O4'-C4'	8.14	116.41	109.90
35	BA	1525	G	C8-N9-C4	-8.14	103.14	106.40
40	BF	39	ARG	NE-CZ-NH2	-8.14	116.23	120.30
2	AB	481	G	C6-C5-N7	8.13	135.28	130.40
2	AB	1031	G	O4'-C1'-N9	8.13	114.71	108.20
2	AB	2660	A	C5-C6-N1	8.14	121.77	117.70
2	AB	2802	G	N7-C8-N9	8.14	117.17	113.10
26	AZ	56	ARG	NE-CZ-NH1	-8.14	116.23	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1619	G	N9-C4-C5	8.13	108.65	105.40
2	AB	2071	A	C8-N9-C4	-8.13	102.55	105.80
22	AV	51	PHE	CB-CG-CD2	-8.13	115.11	120.80
35	BA	1072	G	O4'-C1'-N9	8.13	114.71	108.20
35	BA	1206	G	C2-N3-C4	8.13	115.97	111.90
1	AA	70	C	C5-C6-N1	8.13	125.07	121.00
2	AB	689	A	C6-N1-C2	8.13	123.48	118.60
2	AB	790	U	O4'-C1'-N1	8.13	114.71	108.20
2	AB	1174	U	C6-N1-C2	-8.13	116.12	121.00
2	AB	1209	U	N3-C4-O4	8.13	125.09	119.40
2	AB	1595	C	C2-N3-C4	8.13	123.97	119.90
2	AB	1879	C	C4-C5-C6	-8.13	113.33	117.40
2	AB	2071	A	C2-N3-C4	8.13	114.67	110.60
2	AB	1723	G	C4'-C3'-C2'	-8.13	94.47	102.60
2	AB	1858	A	N1-C6-N6	-8.13	113.72	118.60
2	AB	2123	G	N3-C2-N2	-8.13	114.21	119.90
2	AB	2463	C	N1-C2-O2	8.13	123.78	118.90
2	AB	2773	C	C4-C5-C6	-8.13	113.33	117.40
35	BA	38	G	C6-C5-N7	-8.13	125.52	130.40
2	AB	2086	U	N3-C4-O4	8.13	125.09	119.40
2	AB	2480	C	O4'-C1'-N1	8.13	114.70	108.20
35	BA	319	G	N3-C4-N9	8.13	130.88	126.00
2	AB	2562	U	C4-C5-C6	8.13	124.58	119.70
2	AB	2848	G	O4'-C1'-N9	8.13	114.70	108.20
35	BA	969	A	O4'-C1'-N9	8.13	114.70	108.20
2	AB	329	G	C8-N9-C4	-8.13	103.15	106.40
2	AB	674	G	N7-C8-N9	8.13	117.16	113.10
2	AB	858	G	C4-C5-N7	-8.13	107.55	110.80
2	AB	1062	G	C8-N9-C4	-8.13	103.15	106.40
2	AB	1153	C	O4'-C1'-N1	8.13	114.70	108.20
2	AB	1290	C	C5-C6-N1	8.13	125.06	121.00
2	AB	1684	G	N9-C4-C5	8.13	108.65	105.40
2	AB	2393	U	N3-C2-O2	-8.13	116.51	122.20
2	AB	2555	U	N3-C2-O2	-8.13	116.51	122.20
35	BA	97	G	C6-N1-C2	-8.13	120.22	125.10
2	AB	122	G	C2-N3-C4	8.12	115.96	111.90
2	AB	1361	G	O4'-C1'-N9	8.12	114.70	108.20
2	AB	1683	U	P-O3'-C3'	8.12	129.45	119.70
2	AB	2388	A	C1'-O4'-C4'	-8.12	103.40	109.90
11	AK	64	ARG	NE-CZ-NH1	8.13	124.36	120.30
35	BA	622	A	C4-C5-C6	-8.12	112.94	117.00
35	BA	1069	C	O4'-C1'-N1	8.12	114.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1312	G	P-O3'-C3'	8.12	129.45	119.70
2	AB	841	G	N3-C4-C5	-8.12	124.54	128.60
2	AB	1155	A	C8-N9-C4	8.12	109.05	105.80
2	AB	1426	G	C5-C6-N1	8.12	115.56	111.50
2	AB	1502	A	N1-C6-N6	8.12	123.47	118.60
2	AB	2237	G	N3-C4-C5	-8.12	124.54	128.60
35	BA	1183	U	N3-C2-O2	-8.12	116.51	122.20
2	AB	44	A	C4'-C3'-C2'	-8.12	94.48	102.60
2	AB	458	G	N1-C6-O6	8.12	124.77	119.90
2	AB	813	U	N3-C2-O2	-8.12	116.52	122.20
2	AB	2332	C	P-O3'-C3'	8.12	129.44	119.70
2	AB	2418	A	C6-N1-C2	-8.12	113.73	118.60
2	AB	2864	G	C8-N9-C4	-8.12	103.15	106.40
2	AB	26	G	C5'-C4'-O4'	8.12	118.84	109.10
2	AB	437	U	N1-C2-N3	8.12	119.77	114.90
2	AB	578	G	C2-N3-C4	8.12	115.96	111.90
2	AB	1034	G	N1-C6-O6	8.12	124.77	119.90
8	AH	78	VAL	CG1-CB-CG2	-8.12	97.91	110.90
2	AB	532	A	C4-C5-C6	-8.12	112.94	117.00
2	AB	1167	C	P-O3'-C3'	8.12	129.44	119.70
2	AB	2203	U	C1'-O4'-C4'	-8.12	103.41	109.90
2	AB	2624	G	O4'-C1'-N9	8.12	114.69	108.20
2	AB	2669	G	C6-N1-C2	-8.12	120.23	125.10
2	AB	2740	A	C8-N9-C4	-8.12	102.55	105.80
35	BA	881	G	N3-C4-C5	-8.12	124.54	128.60
35	BA	1293	C	O4'-C1'-N1	8.12	114.69	108.20
35	BA	1320	C	C6-N1-C2	-8.12	117.05	120.30
1	AA	101	A	N3-C4-C5	-8.12	121.12	126.80
2	AB	608	A	C5'-C4'-O4'	8.12	118.84	109.10
2	AB	1061	U	O4'-C1'-N1	8.12	114.69	108.20
35	BA	1146	A	C5-C6-N6	-8.12	117.21	123.70
2	AB	1220	G	N1-C6-O6	8.11	124.77	119.90
2	AB	1866	A	C5'-C4'-O4'	8.11	118.84	109.10
35	BA	394	G	C2-N3-C4	8.12	115.96	111.90
35	BA	1538	C	C4'-C3'-C2'	-8.12	94.48	102.60
35	BA	1270	G	C4-C5-N7	-8.11	107.55	110.80
35	BA	1401	G	N3-C4-C5	-8.11	124.54	128.60
35	BA	1489	G	O4'-C1'-N9	8.12	114.69	108.20
2	AB	820	A	N1-C2-N3	-8.11	125.24	129.30
2	AB	1091	G	C5-C6-O6	-8.11	123.73	128.60
2	AB	1590	A	C5-C6-N6	-8.11	117.21	123.70
2	AB	2156	G	C2-N3-C4	-8.11	107.84	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2208	C	C6-N1-C2	-8.11	117.06	120.30
2	AB	2426	A	C5'-C4'-C3'	-8.11	103.02	116.00
2	AB	2499	C	C6-N1-C2	8.11	123.55	120.30
2	AB	2579	C	O4'-C1'-N1	8.11	114.69	108.20
2	AB	2744	G	C6-N1-C2	-8.11	120.23	125.10
35	BA	583	A	C2-N3-C4	8.11	114.66	110.60
35	BA	687	A	C8-N9-C4	8.11	109.05	105.80
35	BA	1193	G	C8-N9-C4	-8.11	103.16	106.40
2	AB	700	G	C8-N9-C4	8.11	109.64	106.40
2	AB	1631	G	C5-N7-C8	-8.11	100.25	104.30
35	BA	564	C	C3'-C2'-C1'	8.11	107.99	101.50
35	BA	864	A	N1-C6-N6	-8.11	113.73	118.60
2	AB	1055	G	C5-C6-O6	-8.11	123.73	128.60
2	AB	1230	A	N9-C1'-C2'	-8.11	103.08	112.00
2	AB	1930	G	C4-C5-N7	8.11	114.04	110.80
2	AB	2334	U	N3-C4-O4	-8.11	113.72	119.40
2	AB	2797	U	N1-C2-N3	8.11	119.77	114.90
2	AB	2872	A	C5-C6-N6	8.11	130.19	123.70
2	AB	1369	G	N7-C8-N9	8.11	117.15	113.10
2	AB	1634	A	C4-C5-C6	8.11	121.05	117.00
35	BA	226	G	N9-C4-C5	8.11	108.64	105.40
35	BA	1238	A	C4-C5-C6	8.11	121.05	117.00
2	AB	713	G	C8-N9-C4	-8.11	103.16	106.40
2	AB	2392	A	C3'-C2'-C1'	-8.11	95.01	101.50
35	BA	291	U	O4'-C1'-N1	8.11	114.69	108.20
55	BU	5	ARG	NE-CZ-NH1	-8.11	116.25	120.30
2	AB	1516	G	N3-C2-N2	-8.11	114.23	119.90
2	AB	1688	U	N1-C2-O2	8.11	128.47	122.80
35	BA	690	G	C5'-C4'-O4'	8.11	118.83	109.10
35	BA	807	A	C8-N9-C4	-8.11	102.56	105.80
2	AB	228	C	N1-C2-N3	-8.10	113.53	119.20
2	AB	291	G	N1-C2-N3	-8.10	119.04	123.90
2	AB	1204	A	C5'-C4'-O4'	-8.10	99.38	109.10
2	AB	1525	A	C5-C6-N1	8.10	121.75	117.70
2	AB	1972	G	N1-C2-N3	-8.10	119.04	123.90
35	BA	1365	G	C4-C5-N7	-8.10	107.56	110.80
1	AA	40	U	C5'-C4'-C3'	-8.10	103.04	116.00
2	AB	292	U	C2-N3-C4	-8.10	122.14	127.00
2	AB	1753	G	N1-C2-N3	8.10	128.76	123.90
35	BA	1427	C	C2-N3-C4	-8.10	115.85	119.90
2	AB	874	G	C5-C6-O6	-8.10	123.74	128.60
2	AB	2198	A	C3'-C2'-C1'	8.10	107.98	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2211	A	N1-C6-N6	8.10	123.46	118.60
2	AB	2285	C	N1-C2-O2	-8.10	114.04	118.90
35	BA	203	G	N1-C2-N3	-8.10	119.04	123.90
35	BA	813	U	N1-C2-O2	8.10	128.47	122.80
35	BA	892	A	C6-C5-N7	8.10	137.97	132.30
35	BA	969	A	C4-C5-N7	-8.10	106.65	110.70
2	AB	122	G	N3-C4-C5	-8.10	124.55	128.60
2	AB	638	G	C6-N1-C2	-8.10	120.24	125.10
2	AB	875	G	C5-C6-O6	8.10	133.46	128.60
2	AB	1148	U	C2-N3-C4	-8.10	122.14	127.00
2	AB	2274	A	C4-C5-N7	-8.10	106.65	110.70
2	AB	1297	C	C5'-C4'-O4'	8.10	118.82	109.10
34	A7	12	ARG	NE-CZ-NH1	8.10	124.35	120.30
35	BA	1004	A	N1-C6-N6	8.10	123.46	118.60
2	AB	159	G	N3-C4-C5	-8.10	124.55	128.60
2	AB	808	G	O4'-C1'-C2'	-8.10	97.70	105.80
2	AB	766	U	C5-C4-O4	-8.09	121.04	125.90
2	AB	1252	G	C6-C5-N7	-8.09	125.54	130.40
2	AB	2872	A	C4-C5-N7	-8.09	106.65	110.70
2	AB	867	C	C5-C6-N1	-8.09	116.95	121.00
2	AB	1363	C	O4'-C1'-N1	8.09	114.67	108.20
2	AB	1384	A	C5-C6-N1	8.09	121.75	117.70
2	AB	1681	G	C5-N7-C8	-8.09	100.25	104.30
2	AB	1706	C	N3-C2-O2	-8.09	116.23	121.90
2	AB	2648	G	N9-C4-C5	-8.09	102.16	105.40
35	BA	246	A	C4-C5-N7	-8.09	106.65	110.70
35	BA	564	C	C5'-C4'-O4'	8.09	118.81	109.10
35	BA	631	C	N1-C2-N3	-8.09	113.53	119.20
35	BA	888	G	C5-C6-N1	8.09	115.55	111.50
35	BA	1333	A	N7-C8-N9	8.09	117.85	113.80
38	BD	1	C	C6-N1-C1'	-8.09	111.09	120.80
2	AB	1014	A	O4'-C1'-N9	8.09	114.67	108.20
2	AB	2880	C	C4-C5-C6	-8.09	113.35	117.40
2	AB	1043	C	C2-N1-C1'	-8.09	109.90	118.80
2	AB	1575	C	N1-C2-O2	8.09	123.75	118.90
2	AB	2341	G	O4'-C4'-C3'	8.09	112.57	106.10
2	AB	2473	U	N3-C2-O2	-8.09	116.54	122.20
35	BA	1327	C	C4'-C3'-C2'	-8.09	94.51	102.60
1	AA	52	A	C5-N7-C8	-8.09	99.86	103.90
2	AB	1531	C	O5'-P-OP1	-8.09	98.42	105.70
2	AB	1573	G	C6-N1-C2	-8.09	120.25	125.10
35	BA	190	A	C2-N3-C4	8.09	114.64	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	699	A	C2-N3-C4	8.09	114.64	110.60
35	BA	1220	G	N3-C4-C5	-8.09	124.56	128.60
35	BA	1455	G	C5-C6-N1	-8.09	107.46	111.50
2	AB	1192	G	O4'-C1'-N9	8.09	114.67	108.20
2	AB	1575	C	N3-C4-N4	8.09	123.66	118.00
35	BA	661	G	C4-C5-C6	8.09	123.65	118.80
35	BA	1216	A	N1-C6-N6	-8.09	113.75	118.60
2	AB	317	G	O4'-C1'-N9	8.08	114.67	108.20
2	AB	532	A	C1'-O4'-C4'	8.08	116.36	109.90
35	BA	650	G	C4-C5-N7	-8.08	107.57	110.80
1	AA	46	A	N1-C6-N6	-8.08	113.75	118.60
2	AB	335	C	C1'-O4'-C4'	8.08	116.36	109.90
2	AB	741	U	C5-C4-O4	-8.08	121.05	125.90
2	AB	809	G	C6-N1-C2	-8.08	120.25	125.10
2	AB	1295	C	C6-N1-C2	-8.08	117.07	120.30
2	AB	1770	G	O4'-C1'-N9	8.08	114.67	108.20
2	AB	753	A	N1-C2-N3	-8.08	125.26	129.30
2	AB	1356	G	C6-N1-C2	-8.08	120.25	125.10
2	AB	1418	G	N3-C4-C5	-8.08	124.56	128.60
2	AB	1495	A	C5-C6-N6	-8.08	117.24	123.70
35	BA	938	A	N9-C1'-C2'	-8.08	103.11	112.00
2	AB	4	U	N1-C2-N3	8.08	119.75	114.90
2	AB	1684	G	N9-C1'-C2'	-8.08	103.11	112.00
2	AB	303	G	N3-C4-N9	8.08	130.84	126.00
2	AB	938	G	N7-C8-N9	8.08	117.14	113.10
35	BA	91	U	O4'-C1'-N1	8.08	114.66	108.20
35	BA	310	G	C4-C5-C6	8.08	123.64	118.80
2	AB	124	G	C6-C5-N7	-8.07	125.56	130.40
2	AB	421	C	N1-C1'-C2'	-8.07	103.12	112.00
2	AB	1662	U	N1-C2-N3	8.07	119.74	114.90
2	AB	2188	U	C5-C4-O4	-8.07	121.06	125.90
2	AB	2348	U	N1-C2-O2	8.07	128.45	122.80
2	AB	2454	G	C6-N1-C2	-8.07	120.25	125.10
35	BA	357	G	C4-C5-C6	8.07	123.64	118.80
2	AB	2607	G	N7-C8-N9	8.07	117.14	113.10
2	AB	2725	A	C4-C5-C6	-8.07	112.96	117.00
20	AT	95	ASP	CB-CG-OD2	-8.07	111.03	118.30
35	BA	190	A	N1-C2-N3	-8.07	125.26	129.30
2	AB	460	A	N3-C4-N9	-8.07	120.94	127.40
35	BA	112	G	P-O3'-C3'	8.07	129.39	119.70
1	AA	15	A	C5-N7-C8	8.07	107.94	103.90
35	BA	357	G	C6-N1-C2	-8.07	120.26	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	796	C	N1-C2-O2	8.07	123.74	118.90
2	AB	1431	A	C5-C6-N1	8.07	121.73	117.70
2	AB	1515	A	C5-N7-C8	8.07	107.94	103.90
2	AB	1676	A	C8-N9-C4	-8.07	102.57	105.80
2	AB	1890	A	C4-C5-C6	-8.07	112.96	117.00
2	AB	1735	A	N7-C8-N9	8.07	117.83	113.80
2	AB	1933	G	C5-N7-C8	-8.07	100.27	104.30
2	AB	2214	C	C5-C6-N1	-8.07	116.97	121.00
2	AB	2221	G	C6-C5-N7	-8.07	125.56	130.40
35	BA	402	G	C5-C6-O6	-8.07	123.76	128.60
35	BA	476	U	C4-C5-C6	8.07	124.54	119.70
35	BA	536	C	N3-C2-O2	-8.07	116.25	121.90
35	BA	531	U	C4-C5-C6	8.07	124.54	119.70
35	BA	858	G	N3-C4-C5	-8.07	124.56	128.60
2	AB	383	C	P-O3'-C3'	8.07	129.38	119.70
2	AB	479	A	O4'-C1'-C2'	-8.07	97.73	105.80
2	AB	1989	G	C2-N3-C4	8.07	115.93	111.90
2	AB	2037	A	N7-C8-N9	8.07	117.83	113.80
35	BA	1503	A	C5-N7-C8	8.07	107.93	103.90
58	BX	7	GLU	OE1-CD-OE2	8.07	132.98	123.30
1	AA	88	C	C2-N3-C4	8.06	123.93	119.90
35	BA	248	C	O4'-C1'-N1	8.06	114.65	108.20
35	BA	1287	A	C5-C6-N1	8.06	121.73	117.70
2	AB	257	C	N1-C2-O2	8.06	123.74	118.90
2	AB	765	C	N3-C4-N4	8.06	123.64	118.00
2	AB	1808	A	N7-C8-N9	8.06	117.83	113.80
35	BA	889	A	C5-C6-N1	8.06	121.73	117.70
35	BA	1094	G	N3-C4-N9	8.06	130.84	126.00
2	AB	84	A	C6-N1-C2	-8.06	113.76	118.60
2	AB	200	U	N3-C2-O2	-8.06	116.56	122.20
2	AB	485	C	N1-C2-N3	-8.06	113.56	119.20
2	AB	862	G	N7-C8-N9	8.06	117.13	113.10
2	AB	739	A	C2-N3-C4	8.06	114.63	110.60
2	AB	2641	G	N3-C4-C5	-8.06	124.57	128.60
35	BA	778	G	C2-N3-C4	8.06	115.93	111.90
35	BA	835	U	O4'-C1'-N1	8.06	114.65	108.20
1	AA	44	G	O4'-C1'-C2'	-8.06	97.74	105.80
2	AB	73	A	C4-C5-C6	-8.06	112.97	117.00
2	AB	500	G	C6-C5-N7	-8.06	125.56	130.40
2	AB	642	U	N3-C2-O2	-8.06	116.56	122.20
2	AB	776	G	N9-C4-C5	8.06	108.62	105.40
2	AB	982	C	N3-C2-O2	-8.06	116.26	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1142	A	C4-C5-C6	-8.06	112.97	117.00
2	AB	1401	G	N1-C2-N3	-8.06	119.06	123.90
2	AB	1735	A	O4'-C1'-N9	8.06	114.65	108.20
2	AB	2225	A	C4-C5-C6	-8.06	112.97	117.00
2	AB	2719	G	C5-C6-N1	-8.06	107.47	111.50
8	AH	94	ARG	NE-CZ-NH2	-8.06	116.27	120.30
35	BA	1105	A	N7-C8-N9	8.06	117.83	113.80
35	BA	1164	G	C6-C5-N7	-8.06	125.56	130.40
35	BA	1475	G	N1-C6-O6	-8.06	115.06	119.90
38	BD	75	C	O4'-C4'-C3'	8.06	112.55	106.10
51	BQ	100	TRP	CE2-CD2-CG	8.06	113.75	107.30
1	AA	43	C	N1-C2-O2	8.06	123.73	118.90
2	AB	367	G	N7-C8-N9	8.05	117.13	113.10
2	AB	1904	G	C5-N7-C8	8.06	108.33	104.30
2	AB	2745	C	O4'-C1'-N1	8.05	114.64	108.20
35	BA	41	G	C5-C6-N1	8.05	115.53	111.50
35	BA	859	G	N9-C4-C5	8.05	108.62	105.40
2	AB	338	G	C8-N9-C4	-8.05	103.18	106.40
2	AB	514	A	N7-C8-N9	8.05	117.83	113.80
2	AB	1151	A	C4-C5-C6	8.05	121.03	117.00
2	AB	1369	G	N9-C4-C5	8.05	108.62	105.40
2	AB	2468	A	N9-C4-C5	8.05	109.02	105.80
35	BA	131	A	N7-C8-N9	8.05	117.83	113.80
35	BA	481	G	N3-C4-C5	-8.05	124.57	128.60
35	BA	598	U	N3-C2-O2	-8.05	116.56	122.20
35	BA	711	G	C8-N9-C4	-8.05	103.18	106.40
35	BA	777	A	N3-C4-C5	8.05	132.44	126.80
35	BA	885	G	C3'-C2'-C1'	-8.05	95.06	101.50
35	BA	1003	G	O4'-C1'-N9	8.05	114.64	108.20
35	BA	1201	A	C8-N9-C4	8.05	109.02	105.80
46	BL	98	ARG	NE-CZ-NH1	8.05	124.33	120.30
2	AB	220	G	C4-C5-C6	8.05	123.63	118.80
2	AB	1370	C	O4'-C1'-N1	8.05	114.64	108.20
2	AB	2632	A	N1-C2-N3	-8.05	125.27	129.30
35	BA	614	C	N3-C4-C5	-8.05	118.68	121.90
35	BA	891	U	O4'-C1'-N1	8.05	114.64	108.20
35	BA	1507	A	N9-C4-C5	8.05	109.02	105.80
35	BA	1220	G	C4-C5-C6	8.05	123.63	118.80
2	AB	2215	C	N3-C2-O2	-8.05	116.27	121.90
2	AB	2501	C	N3-C2-O2	-8.05	116.27	121.90
40	BF	21	TRP	NE1-CE2-CD2	-8.05	99.25	107.30
2	AB	713	G	C4-C5-C6	8.05	123.63	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2870	C	N1-C2-O2	8.05	123.73	118.90
3	AC	9	ARG	NE-CZ-NH1	8.05	124.32	120.30
35	BA	127	G	N7-C8-N9	8.05	117.12	113.10
35	BA	1004	A	C5-C6-N1	8.05	121.72	117.70
2	AB	566	U	N3-C2-O2	-8.05	116.57	122.20
2	AB	2686	G	N3-C4-C5	-8.05	124.58	128.60
2	AB	560	C	C4-C5-C6	8.04	121.42	117.40
2	AB	807	U	O4'-C1'-N1	8.04	114.64	108.20
2	AB	1931	U	C4'-C3'-C2'	-8.04	94.56	102.60
35	BA	64	G	C5-N7-C8	-8.04	100.28	104.30
35	BA	862	C	N1-C2-O2	8.04	123.73	118.90
1	AA	18	G	N9-C4-C5	8.04	108.62	105.40
2	AB	115	C	N3-C4-N4	8.04	123.63	118.00
2	AB	266	G	N3-C4-C5	-8.04	124.58	128.60
2	AB	420	C	C4'-C3'-C2'	-8.04	94.56	102.60
2	AB	1830	C	N3-C2-O2	-8.04	116.27	121.90
2	AB	1831	G	O4'-C1'-N9	8.04	114.63	108.20
7	AG	82	TYR	CB-CG-CD2	-8.04	116.17	121.00
35	BA	1222	G	N3-C2-N2	-8.04	114.27	119.90
35	BA	1113	C	C6-N1-C2	-8.04	117.08	120.30
35	BA	1272	G	C8-N9-C4	-8.04	103.18	106.40
2	AB	445	C	C3'-C2'-C1'	8.04	107.93	101.50
2	AB	1534	U	C1'-O4'-C4'	-8.04	103.47	109.90
2	AB	1945	G	N1-C2-N2	-8.04	108.96	116.20
2	AB	107	G	C6-N1-C2	-8.04	120.28	125.10
2	AB	122	G	C4-C5-N7	-8.04	107.58	110.80
2	AB	653	U	C4-C5-C6	8.04	124.52	119.70
2	AB	1012	U	N3-C4-O4	8.04	125.03	119.40
2	AB	2103	C	N3-C2-O2	-8.04	116.27	121.90
35	BA	816	A	N1-C2-N3	-8.04	125.28	129.30
35	BA	900	A	C6-C5-N7	8.04	137.93	132.30
2	AB	760	G	C5-C6-N1	8.04	115.52	111.50
2	AB	809	G	N3-C2-N2	-8.04	114.28	119.90
2	AB	2036	C	O4'-C1'-N1	8.04	114.63	108.20
35	BA	209	U	C4-C5-C6	8.04	124.52	119.70
35	BA	976	G	C6-C5-N7	-8.04	125.58	130.40
2	AB	1137	G	C1'-O4'-C4'	8.03	116.33	109.90
2	AB	1827	U	C1'-O4'-C4'	8.03	116.33	109.90
35	BA	570	G	N3-C4-C5	-8.03	124.58	128.60
35	BA	758	C	O4'-C1'-N1	8.04	114.63	108.20
36	BB	53	G	O4'-C1'-N9	8.04	114.63	108.20
36	BB	57	G	C8-N9-C4	-8.04	103.19	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	46	G	N3-C2-N2	-8.03	114.28	119.90
2	AB	447	A	N1-C6-N6	8.03	123.42	118.60
2	AB	873	C	O4'-C1'-N1	8.03	114.63	108.20
2	AB	1428	C	N3-C2-O2	-8.03	116.28	121.90
35	BA	626	G	N3-C2-N2	8.03	125.52	119.90
35	BA	708	C	O4'-C1'-N1	8.03	114.62	108.20
35	BA	1470	U	N3-C4-O4	8.03	125.02	119.40
44	BJ	61	PHE	CB-CG-CD2	8.03	126.42	120.80
2	AB	113	U	C5-C6-N1	-8.03	118.69	122.70
2	AB	157	C	C5-C6-N1	8.03	125.01	121.00
2	AB	161	A	N9-C4-C5	8.03	109.01	105.80
2	AB	442	G	N7-C8-N9	-8.03	109.08	113.10
2	AB	810	U	N3-C4-C5	-8.03	109.78	114.60
2	AB	914	G	N9-C4-C5	8.03	108.61	105.40
2	AB	2238	G	C8-N9-C4	-8.03	103.19	106.40
2	AB	1938	A	C4'-C3'-C2'	-8.03	94.57	102.60
2	AB	2275	C	C5-C6-N1	-8.03	116.99	121.00
35	BA	103	U	O4'-C1'-N1	8.03	114.62	108.20
35	BA	432	A	C6-C5-N7	8.03	137.92	132.30
35	BA	654	G	C4-C5-N7	-8.03	107.59	110.80
35	BA	907	A	C4-C5-C6	-8.03	112.98	117.00
35	BA	974	A	O4'-C1'-C2'	8.03	114.83	107.60
35	BA	1349	A	N1-C2-N3	8.03	133.31	129.30
35	BA	1355	G	C5'-C4'-O4'	8.03	118.73	109.10
36	BB	34	C	O4'-C1'-C2'	-8.03	97.77	105.80
2	AB	782	A	C6-C5-N7	8.03	137.92	132.30
2	AB	1640	A	N3-C4-C5	-8.03	121.18	126.80
2	AB	2791	G	C8-N9-C4	-8.03	103.19	106.40
1	AA	51	G	C5-C6-N1	8.03	115.51	111.50
2	AB	2193	G	C6-N1-C2	-8.03	120.28	125.10
2	AB	2559	C	O4'-C1'-N1	8.03	114.62	108.20
35	BA	568	G	C8-N9-C4	-8.03	103.19	106.40
35	BA	789	U	N1-C2-N3	8.03	119.72	114.90
35	BA	1069	C	C5-C4-N4	-8.03	114.58	120.20
35	BA	1073	U	C4'-C3'-C2'	-8.03	94.57	102.60
35	BA	1164	G	C5-N7-C8	-8.03	100.29	104.30
36	BB	62	U	N3-C4-O4	8.03	125.02	119.40
37	BC	37	G	C5-C6-N1	8.03	115.51	111.50
2	AB	301	G	C6-C5-N7	-8.02	125.59	130.40
2	AB	1465	G	C5-C6-N1	8.02	115.51	111.50
2	AB	2188	U	N1-C1'-C2'	-8.02	103.17	112.00
14	AN	41	ARG	NE-CZ-NH2	-8.02	116.29	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	161	A	N9-C4-C5	8.02	109.01	105.80
35	BA	235	C	N1-C2-O2	8.02	123.71	118.90
35	BA	1065	U	C2-N3-C4	-8.02	122.19	127.00
35	BA	1345	U	O4'-C1'-N1	8.02	114.62	108.20
35	BA	1526	G	N1-C2-N2	8.02	123.42	116.20
2	AB	2246	G	O4'-C1'-N9	8.02	114.62	108.20
2	AB	2437	G	C1'-O4'-C4'	8.02	116.32	109.90
35	BA	521	G	O4'-C1'-C2'	8.02	114.82	107.60
35	BA	647	C	C4'-C3'-C2'	-8.02	94.58	102.60
1	AA	38	C	N3-C4-N4	8.02	123.61	118.00
2	AB	56	A	C3'-C2'-C1'	-8.02	95.08	101.50
2	AB	1832	C	C2-N3-C4	8.02	123.91	119.90
2	AB	529	A	C8-N9-C4	-8.02	102.59	105.80
2	AB	2142	A	N7-C8-N9	-8.02	109.79	113.80
2	AB	2148	G	C4-C5-N7	-8.02	107.59	110.80
2	AB	2280	G	C4'-C3'-C2'	-8.02	94.58	102.60
35	BA	1074	G	C4'-C3'-C2'	-8.02	94.58	102.60
2	AB	794	A	C4-C5-N7	-8.02	106.69	110.70
2	AB	1342	A	C5-N7-C8	8.02	107.91	103.90
2	AB	2329	U	C5-C6-N1	-8.02	118.69	122.70
35	BA	1010	U	N1-C2-O2	8.02	128.41	122.80
35	BA	1102	A	C2-N3-C4	-8.02	106.59	110.60
2	AB	1066	U	C5-C6-N1	-8.02	118.69	122.70
2	AB	1426	G	C5-C6-O6	-8.02	123.79	128.60
36	BB	33	U	C4'-C3'-C2'	-8.02	94.58	102.60
2	AB	1901	A	C2-N3-C4	8.02	114.61	110.60
35	BA	556	C	P-O3'-C3'	8.02	129.32	119.70
35	BA	578	C	C2-N3-C4	8.02	123.91	119.90
2	AB	1586	A	N7-C8-N9	8.01	117.81	113.80
2	AB	2775	G	C6-C5-N7	-8.01	125.59	130.40
2	AB	188	G	C4-C5-N7	-8.01	107.59	110.80
35	BA	100	G	C4-C5-N7	-8.01	107.59	110.80
35	BA	746	A	C8-N9-C4	8.01	109.00	105.80
38	BD	34	U	C5'-C4'-C3'	-8.01	103.18	116.00
38	BD	38	A	O4'-C1'-N9	8.01	114.61	108.20
36	BB	69	C	N1-C2-O2	8.01	123.71	118.90
1	AA	60	C	N1-C2-O2	8.01	123.71	118.90
2	AB	121	G	O4'-C4'-C3'	8.01	112.51	106.10
2	AB	358	U	N3-C4-O4	8.01	125.01	119.40
2	AB	744	U	O4'-C1'-N1	8.01	114.61	108.20
2	AB	787	C	N3-C4-N4	8.01	123.61	118.00
2	AB	848	C	N1-C2-O2	8.01	123.71	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1053	G	O4'-C1'-N9	8.01	114.61	108.20
2	AB	1783	A	N1-C2-N3	-8.01	125.30	129.30
2	AB	2406	A	N1-C2-N3	-8.01	125.30	129.30
2	AB	2718	G	C4-C5-N7	-8.01	107.60	110.80
2	AB	292	U	C5-C4-O4	-8.01	121.09	125.90
2	AB	644	A	N3-C4-C5	-8.01	121.20	126.80
2	AB	673	C	C5'-C4'-O4'	8.01	118.71	109.10
2	AB	729	G	N7-C8-N9	-8.01	109.10	113.10
35	BA	297	G	N3-C2-N2	-8.01	114.29	119.90
35	BA	1171	A	N9-C4-C5	8.01	109.00	105.80
2	AB	865	C	C2-N3-C4	8.01	123.90	119.90
2	AB	1430	G	C5-N7-C8	8.01	108.30	104.30
2	AB	1456	G	C4'-C3'-C2'	-8.01	94.59	102.60
2	AB	1661	G	C2-N3-C4	8.01	115.90	111.90
2	AB	2132	U	C5'-C4'-O4'	8.01	118.71	109.10
2	AB	2398	U	O4'-C1'-N1	8.01	114.61	108.20
37	BC	48	C	C5-C4-N4	-8.01	114.59	120.20
2	AB	2442	C	C5-C4-N4	-8.01	114.60	120.20
35	BA	568	G	N3-C2-N2	8.01	125.50	119.90
35	BA	1459	G	C2-N3-C4	8.01	115.90	111.90
38	BD	4	G	C3'-C2'-C1'	8.01	107.90	101.50
38	BD	24	C	C2-N3-C4	8.01	123.90	119.90
35	BA	678	U	C2-N3-C4	-8.00	122.20	127.00
1	AA	84	G	C6-N1-C2	-8.00	120.30	125.10
2	AB	331	C	C5-C4-N4	-8.00	114.60	120.20
2	AB	482	A	C8-N9-C4	-8.00	102.60	105.80
35	BA	801	U	C4-C5-C6	8.00	124.50	119.70
2	AB	1162	G	O4'-C1'-N9	8.00	114.60	108.20
35	BA	1401	G	N9-C4-C5	8.00	108.60	105.40
43	BI	44	ARG	NE-CZ-NH1	8.00	124.30	120.30
2	AB	729	G	C6-N1-C2	-8.00	120.30	125.10
2	AB	799	G	N7-C8-N9	8.00	117.10	113.10
2	AB	1350	C	C4-C5-C6	-8.00	113.40	117.40
35	BA	24	U	N3-C2-O2	-8.00	116.60	122.20
2	AB	1466	U	O4'-C1'-N1	8.00	114.60	108.20
2	AB	2183	A	N9-C4-C5	8.00	109.00	105.80
2	AB	2481	G	N3-C2-N2	8.00	125.50	119.90
35	BA	354	G	N9-C4-C5	8.00	108.60	105.40
41	BG	64	TYR	CB-CG-CD1	-8.00	116.20	121.00
2	AB	126	A	N1-C6-N6	8.00	123.40	118.60
2	AB	1666	G	C4-C5-N7	-8.00	107.60	110.80
2	AB	2771	C	C5'-C4'-O4'	8.00	118.70	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	986	U	C5-C6-N1	-8.00	118.70	122.70
35	BA	1334	G	C5-C6-N1	8.00	115.50	111.50
36	BB	52	A	C4-C5-C6	-8.00	113.00	117.00
2	AB	2452	C	N3-C4-C5	-8.00	118.70	121.90
2	AB	2871	U	C4-C5-C6	8.00	124.50	119.70
35	BA	1202	U	C6-N1-C2	-8.00	116.20	121.00
2	AB	44	A	C3'-C2'-C1'	7.99	107.89	101.50
2	AB	2012	G	N3-C4-C5	-7.99	124.60	128.60
2	AB	2884	U	N3-C4-O4	-7.99	113.80	119.40
35	BA	1046	A	O4'-C1'-N9	7.99	114.59	108.20
35	BA	1361	G	N3-C4-C5	-7.99	124.60	128.60
35	BA	1504	G	C5-C6-O6	7.99	133.40	128.60
36	BB	28	C	C5-C4-N4	-7.99	114.60	120.20
41	BG	72	ARG	NE-CZ-NH1	7.99	124.30	120.30
2	AB	1204	A	N1-C6-N6	7.99	123.39	118.60
2	AB	2042	A	C8-N9-C4	-7.99	102.60	105.80
2	AB	2280	G	N1-C2-N2	7.99	123.39	116.20
2	AB	2602	A	N3-C4-C5	-7.99	121.21	126.80
2	AB	2787	C	C1'-O4'-C4'	7.99	116.29	109.90
35	BA	393	A	N1-C6-N6	7.99	123.39	118.60
35	BA	962	C	C4-C5-C6	7.99	121.40	117.40
2	AB	20	C	N1-C1'-C2'	-7.99	103.21	112.00
2	AB	1995	U	C5-C4-O4	7.99	130.69	125.90
2	AB	2581	G	C4-C5-N7	-7.99	107.60	110.80
2	AB	808	G	O4'-C1'-N9	7.99	114.59	108.20
2	AB	1108	U	C4'-C3'-C2'	-7.99	94.61	102.60
2	AB	1336	A	C1'-O4'-C4'	7.99	116.29	109.90
2	AB	1675	C	C4-C5-C6	-7.99	113.41	117.40
2	AB	1876	A	C8-N9-C4	-7.99	102.60	105.80
2	AB	2637	U	C1'-O4'-C4'	7.99	116.29	109.90
35	BA	485	U	O4'-C4'-C3'	7.99	112.49	106.10
35	BA	1034	G	C4-C5-C6	7.99	123.59	118.80
35	BA	1347	G	C4-C5-N7	-7.99	107.61	110.80
35	BA	1483	A	C5-C6-N1	7.99	121.69	117.70
1	AA	13	G	C4-C5-N7	-7.99	107.61	110.80
2	AB	592	A	C4-C5-C6	-7.99	113.01	117.00
2	AB	1599	U	N3-C4-C5	-7.99	109.81	114.60
35	BA	362	G	C5'-C4'-O4'	7.99	118.68	109.10
37	BC	59	A	N7-C8-N9	7.99	117.79	113.80
2	AB	889	C	N1-C1'-C2'	-7.99	103.22	112.00
2	AB	1893	C	P-O3'-C3'	7.99	129.28	119.70
2	AB	2558	C	C5'-C4'-O4'	7.99	118.68	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	197	A	N9-C4-C5	7.99	108.99	105.80
35	BA	1337	G	C4-C5-C6	-7.99	114.01	118.80
2	AB	413	C	O4'-C1'-N1	7.98	114.59	108.20
35	BA	1377	A	C4'-C3'-C2'	-7.98	94.62	102.60
2	AB	125	A	C6-C5-N7	7.98	137.89	132.30
2	AB	637	A	C4-C5-N7	-7.98	106.71	110.70
2	AB	2686	G	N3-C4-N9	7.98	130.79	126.00
35	BA	357	G	N3-C4-C5	-7.98	124.61	128.60
35	BA	394	G	C6-N1-C2	-7.98	120.31	125.10
37	BC	14	G	N1-C2-N2	-7.98	109.02	116.20
44	BJ	52	ARG	NE-CZ-NH1	7.98	124.29	120.30
2	AB	145	C	N3-C4-C5	-7.98	118.71	121.90
2	AB	841	G	C8-N9-C4	-7.98	103.21	106.40
2	AB	2351	G	C4-C5-N7	-7.98	107.61	110.80
8	AH	165	ASP	CB-CG-OD2	-7.98	111.12	118.30
35	BA	511	C	C6-N1-C2	-7.98	117.11	120.30
35	BA	957	U	C5-C6-N1	-7.98	118.71	122.70
38	BD	65	G	C8-N9-C4	-7.98	103.21	106.40
2	AB	1935	G	N3-C2-N2	-7.98	114.31	119.90
2	AB	2666	C	N1-C2-O2	7.98	123.69	118.90
35	BA	685	G	C4-C5-N7	-7.98	107.61	110.80
2	AB	264	C	C5-C6-N1	7.98	124.99	121.00
2	AB	466	A	C5-C6-N1	-7.98	113.71	117.70
2	AB	1054	A	C8-N9-C4	-7.98	102.61	105.80
2	AB	1191	G	C2-N3-C4	7.98	115.89	111.90
2	AB	1484	U	C2-N3-C4	-7.98	122.21	127.00
2	AB	2507	C	C5-C6-N1	7.98	124.99	121.00
2	AB	2669	G	N1-C2-N3	7.98	128.69	123.90
35	BA	100	G	N1-C2-N3	-7.98	119.11	123.90
35	BA	1524	C	C5-C4-N4	-7.98	114.62	120.20
42	BH	53	ARG	NE-CZ-NH2	-7.98	116.31	120.30
2	AB	1535	A	C3'-C2'-C1'	-7.98	95.12	101.50
2	AB	2774	C	O4'-C1'-N1	7.98	114.58	108.20
2	AB	350	G	C8-N9-C4	-7.97	103.21	106.40
2	AB	774	G	C3'-C2'-C1'	-7.97	95.12	101.50
2	AB	2549	G	C5-N7-C8	-7.97	100.31	104.30
35	BA	1017	U	O4'-C1'-N1	7.97	114.58	108.20
35	BA	1476	A	C4-C5-N7	-7.97	106.71	110.70
49	BO	35	ARG	NE-CZ-NH2	7.97	124.29	120.30
2	AB	145	C	N1-C2-O2	7.97	123.68	118.90
2	AB	265	A	C2-N3-C4	7.97	114.59	110.60
2	AB	1365	A	C6-N1-C2	-7.97	113.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1965	C	O4'-C1'-N1	7.97	114.58	108.20
2	AB	1973	G	C2-N3-C4	7.97	115.89	111.90
2	AB	2072	C	C4-C5-C6	7.97	121.39	117.40
2	AB	2089	C	C2-N3-C4	7.97	123.89	119.90
2	AB	2241	A	C5-N7-C8	-7.97	99.91	103.90
13	AM	12	ASP	CB-CG-OD2	-7.97	111.12	118.30
2	AB	1069	A	C5'-C4'-O4'	7.97	118.67	109.10
2	AB	2398	U	N3-C4-C5	-7.97	109.82	114.60
2	AB	2413	G	N9-C4-C5	-7.97	102.21	105.40
35	BA	546	A	C8-N9-C4	-7.97	102.61	105.80
2	AB	441	U	N1-C2-N3	7.97	119.68	114.90
2	AB	1232	G	C6-N1-C2	-7.97	120.32	125.10
2	AB	1630	A	N7-C8-N9	-7.97	109.81	113.80
2	AB	2371	G	N1-C2-N2	-7.97	109.03	116.20
35	BA	161	A	C5-C6-N1	7.97	121.69	117.70
38	BD	53	G	C5-C6-N1	-7.97	107.52	111.50
2	AB	1058	U	N3-C4-O4	7.97	124.98	119.40
2	AB	2238	G	C1'-O4'-C4'	-7.97	103.53	109.90
2	AB	2280	G	C8-N9-C4	-7.97	103.21	106.40
2	AB	2483	C	C5-C4-N4	-7.97	114.62	120.20
35	BA	1253	G	N3-C4-C5	-7.97	124.62	128.60
38	BD	34	U	O4'-C1'-C2'	7.97	114.77	107.60
2	AB	1295	C	C5'-C4'-O4'	7.97	118.66	109.10
2	AB	1404	C	C4'-C3'-C2'	-7.97	94.63	102.60
2	AB	1469	A	N1-C6-N6	7.97	123.38	118.60
2	AB	2319	G	O4'-C1'-N9	7.97	114.57	108.20
35	BA	412	A	C2-N3-C4	7.97	114.58	110.60
35	BA	1146	A	O4'-C1'-N9	7.97	114.57	108.20
36	BB	24	G	N7-C8-N9	7.97	117.08	113.10
2	AB	710	U	C5-C4-O4	-7.96	121.12	125.90
2	AB	976	G	C6-N1-C2	-7.96	120.32	125.10
2	AB	1302	A	C4'-C3'-C2'	-7.96	94.64	102.60
35	BA	675	A	N9-C4-C5	7.96	108.99	105.80
35	BA	690	G	N3-C2-N2	-7.96	114.33	119.90
38	BD	22	A	P-O3'-C3'	7.96	129.26	119.70
2	AB	954	G	C5-N7-C8	-7.96	100.32	104.30
2	AB	1160	G	C4-C5-C6	7.96	123.58	118.80
2	AB	1227	G	N3-C4-N9	7.96	130.78	126.00
2	AB	2163	A	N7-C8-N9	7.96	117.78	113.80
2	AB	213	A	C8-N9-C4	-7.96	102.61	105.80
2	AB	435	C	N1-C2-O2	7.96	123.68	118.90
2	AB	728	G	N3-C2-N2	7.96	125.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2200	C	C4-C5-C6	7.96	121.38	117.40
2	AB	2587	A	O4'-C1'-N9	7.96	114.57	108.20
35	BA	1117	A	C5-C6-N1	7.96	121.68	117.70
35	BA	1406	U	O4'-C1'-N1	7.96	114.57	108.20
2	AB	612	G	C8-N9-C4	7.96	109.58	106.40
2	AB	1930	G	C6-C5-N7	-7.96	125.62	130.40
2	AB	2444	G	C5-N7-C8	7.96	108.28	104.30
2	AB	2828	G	N7-C8-N9	7.96	117.08	113.10
35	BA	71	A	N1-C6-N6	7.96	123.38	118.60
35	BA	172	A	C8-N9-C4	-7.96	102.62	105.80
2	AB	297	G	N9-C4-C5	7.96	108.58	105.40
2	AB	595	C	N3-C4-C5	-7.96	118.72	121.90
2	AB	1361	G	N7-C8-N9	7.96	117.08	113.10
2	AB	2496	C	P-O3'-C3'	7.96	129.25	119.70
35	BA	453	G	O4'-C1'-N9	7.96	114.56	108.20
35	BA	584	G	O4'-C1'-N9	7.96	114.56	108.20
35	BA	957	U	O4'-C1'-N1	7.96	114.56	108.20
35	BA	989	U	C5'-C4'-O4'	7.96	118.65	109.10
35	BA	1346	A	C6-N1-C2	-7.96	113.83	118.60
2	AB	614	A	O4'-C1'-N9	7.96	114.56	108.20
2	AB	1552	A	N7-C8-N9	7.96	117.78	113.80
2	AB	1891	G	N7-C8-N9	7.96	117.08	113.10
35	BA	741	G	N7-C8-N9	-7.96	109.12	113.10
35	BA	58	C	C5'-C4'-O4'	7.95	118.64	109.10
35	BA	713	G	C5-C6-O6	-7.95	123.83	128.60
35	BA	1156	G	C5'-C4'-O4'	7.95	118.64	109.10
35	BA	1432	G	C4-C5-N7	-7.95	107.62	110.80
2	AB	418	C	N3-C2-O2	-7.95	116.33	121.90
35	BA	618	C	P-O3'-C3'	7.95	129.24	119.70
2	AB	844	A	C4-C5-C6	-7.95	113.02	117.00
2	AB	970	U	C4'-C3'-C2'	-7.95	94.65	102.60
2	AB	1321	A	N7-C8-N9	7.95	117.78	113.80
2	AB	2238	G	C5-C6-O6	7.95	133.37	128.60
2	AB	2272	U	C4-C5-C6	7.95	124.47	119.70
2	AB	2423	U	C2-N3-C4	-7.95	122.23	127.00
35	BA	444	G	N1-C2-N3	-7.95	119.13	123.90
35	BA	459	A	N1-C2-N3	-7.95	125.33	129.30
51	BQ	100	TRP	CG-CD2-CE3	-7.95	126.74	133.90
2	AB	279	A	C8-N9-C4	-7.95	102.62	105.80
2	AB	1028	A	C3'-C2'-C1'	-7.95	95.14	101.50
2	AB	1196	C	N1-C2-O2	7.95	123.67	118.90
2	AB	1858	A	O4'-C1'-N9	7.95	114.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2204	G	C1'-O4'-C4'	-7.95	103.54	109.90
2	AB	2585	U	C6-N1-C2	-7.95	116.23	121.00
2	AB	2661	G	C4-C5-N7	-7.95	107.62	110.80
35	BA	186	C	N1-C2-O2	7.95	123.67	118.90
35	BA	855	U	C5-C4-O4	-7.95	121.13	125.90
35	BA	590	U	N3-C4-C5	-7.95	109.83	114.60
2	AB	1373	A	N7-C8-N9	7.95	117.77	113.80
2	AB	1737	G	C8-N9-C4	-7.95	103.22	106.40
2	AB	1934	C	C6-N1-C2	-7.95	117.12	120.30
2	AB	1975	G	C6-N1-C2	-7.95	120.33	125.10
35	BA	1513	A	O4'-C4'-C3'	-7.95	96.05	104.00
35	BA	1523	G	C8-N9-C4	-7.95	103.22	106.40
2	AB	984	A	O4'-C1'-C2'	-7.94	97.86	105.80
35	BA	55	A	N7-C8-N9	7.94	117.77	113.80
35	BA	443	C	C4-C5-C6	7.94	121.37	117.40
2	AB	125	A	N1-C2-N3	-7.94	125.33	129.30
2	AB	608	A	N9-C4-C5	7.94	108.98	105.80
2	AB	1288	G	N3-C4-N9	7.94	130.76	126.00
2	AB	1710	G	C4-N9-C1'	-7.94	116.17	126.50
2	AB	1734	G	C5-C6-N1	7.94	115.47	111.50
2	AB	2024	G	N3-C2-N2	-7.94	114.34	119.90
2	AB	2135	A	O4'-C1'-N9	7.94	114.55	108.20
35	BA	1284	C	C5-C4-N4	7.94	125.76	120.20
37	BC	44	U	C5-C6-N1	-7.94	118.73	122.70
2	AB	879	G	N7-C8-N9	7.94	117.07	113.10
2	AB	1076	C	C5-C6-N1	7.94	124.97	121.00
2	AB	2429	G	O4'-C4'-C3'	7.94	112.45	106.10
35	BA	443	C	N1-C1'-C2'	-7.94	103.27	112.00
35	BA	669	G	O4'-C1'-N9	7.94	114.55	108.20
36	BB	40	C	C5-C4-N4	-7.94	114.64	120.20
2	AB	444	C	N3-C4-C5	-7.94	118.72	121.90
2	AB	1382	G	N9-C1'-C2'	-7.94	103.27	112.00
2	AB	2183	A	C5-C6-N6	-7.94	117.35	123.70
35	BA	43	C	N3-C2-O2	-7.94	116.34	121.90
35	BA	479	U	O4'-C1'-N1	7.94	114.55	108.20
2	AB	3	U	C5-C6-N1	-7.94	118.73	122.70
2	AB	1109	C	N1-C2-O2	7.94	123.66	118.90
14	AN	47	ARG	NE-CZ-NH1	7.94	124.27	120.30
35	BA	1353	G	C4-C5-N7	-7.94	107.62	110.80
2	AB	776	G	C2-N3-C4	7.94	115.87	111.90
2	AB	2747	G	C8-N9-C4	-7.94	103.23	106.40
35	BA	139	A	O4'-C1'-N9	7.94	114.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	668	A	C8-N9-C4	-7.93	102.63	105.80
2	AB	1001	A	N9-C4-C5	-7.93	102.63	105.80
2	AB	1036	G	C4-C5-N7	-7.93	107.63	110.80
2	AB	1309	G	N7-C8-N9	7.93	117.07	113.10
2	AB	1521	G	N3-C4-C5	-7.93	124.63	128.60
35	BA	1336	C	N1-C2-O2	7.93	123.66	118.90
35	BA	1364	U	N3-C4-O4	7.93	124.95	119.40
37	BC	48	C	C1'-O4'-C4'	-7.93	103.55	109.90
2	AB	450	G	C5-N7-C8	7.93	108.27	104.30
2	AB	680	C	C5'-C4'-O4'	7.93	118.62	109.10
2	AB	738	G	C6-N1-C2	-7.93	120.34	125.10
2	AB	1082	U	N3-C2-O2	-7.93	116.65	122.20
2	AB	1442	U	C4-C5-C6	7.93	124.46	119.70
2	AB	1789	A	C8-N9-C4	-7.93	102.63	105.80
35	BA	993	G	C5-C6-O6	7.93	133.36	128.60
35	BA	1151	A	C6-N1-C2	-7.93	113.84	118.60
35	BA	1323	G	C6-C5-N7	-7.93	125.64	130.40
36	BB	64	U	C5-C4-O4	-7.93	121.14	125.90
1	AA	31	C	N1-C2-O2	7.93	123.66	118.90
2	AB	1839	G	N9-C4-C5	7.93	108.57	105.40
2	AB	2198	A	N1-C2-N3	-7.93	125.33	129.30
2	AB	2649	C	N1-C1'-C2'	-7.93	103.28	112.00
2	AB	2845	U	C4-C5-C6	7.93	124.46	119.70
35	BA	774	G	C4-C5-N7	7.93	113.97	110.80
51	BQ	74	ARG	NE-CZ-NH2	-7.93	116.33	120.30
2	AB	1241	A	O4'-C4'-C3'	7.93	112.44	106.10
35	BA	146	G	N1-C6-O6	7.93	124.66	119.90
35	BA	1035	A	N7-C8-N9	7.93	117.77	113.80
2	AB	340	A	C5-C6-N1	7.93	121.66	117.70
2	AB	2358	A	N3-C4-C5	-7.93	121.25	126.80
2	AB	2391	G	C8-N9-C4	-7.93	103.23	106.40
2	AB	581	C	N3-C4-N4	7.93	123.55	118.00
2	AB	870	U	C5'-C4'-O4'	7.93	118.61	109.10
2	AB	2578	G	N3-C4-C5	-7.93	124.64	128.60
2	AB	2692	G	N3-C2-N2	7.93	125.45	119.90
35	BA	542	G	N9-C1'-C2'	-7.93	103.28	112.00
35	BA	570	G	C6-C5-N7	-7.93	125.64	130.40
2	AB	328	U	N1-C2-O2	7.92	128.35	122.80
2	AB	637	A	N3-C4-C5	-7.92	121.25	126.80
2	AB	738	G	C1'-O4'-C4'	7.92	116.24	109.90
2	AB	1046	A	P-O3'-C3'	7.92	129.21	119.70
35	BA	367	U	C1'-O4'-C4'	-7.92	103.56	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	872	A	O4'-C1'-N9	7.92	114.54	108.20
35	BA	1237	C	C1'-O4'-C4'	7.92	116.24	109.90
35	BA	1455	G	N7-C8-N9	7.92	117.06	113.10
2	AB	1309	G	N1-C6-O6	7.92	124.65	119.90
2	AB	2045	C	C6-N1-C2	-7.92	117.13	120.30
35	BA	304	U	C4'-C3'-C2'	-7.92	94.68	102.60
35	BA	1131	G	C6-N1-C2	-7.92	120.35	125.10
2	AB	499	U	O4'-C1'-N1	7.92	114.54	108.20
2	AB	732	C	C5-C4-N4	-7.92	114.66	120.20
2	AB	754	U	O4'-C1'-N1	7.92	114.54	108.20
2	AB	1394	U	C6-N1-C2	-7.92	116.25	121.00
2	AB	1522	A	N1-C6-N6	-7.92	113.85	118.60
2	AB	1912	A	N1-C6-N6	-7.92	113.85	118.60
2	AB	1986	C	C5'-C4'-O4'	7.92	118.61	109.10
35	BA	541	G	C8-N9-C4	7.92	109.57	106.40
1	AA	12	C	C2-N3-C4	7.92	123.86	119.90
2	AB	1089	A	N1-C2-N3	7.92	133.26	129.30
2	AB	1265	A	N7-C8-N9	7.92	117.76	113.80
2	AB	1377	G	N1-C6-O6	-7.92	115.15	119.90
35	BA	41	G	N3-C4-C5	-7.92	124.64	128.60
35	BA	163	C	C4-C5-C6	-7.92	113.44	117.40
35	BA	597	G	C5-N7-C8	-7.92	100.34	104.30
35	BA	634	C	C4-C5-C6	-7.92	113.44	117.40
2	AB	310	A	C8-N9-C4	-7.92	102.63	105.80
2	AB	2518	A	C5-C6-N1	7.92	121.66	117.70
35	BA	467	U	C4-C5-C6	7.92	124.45	119.70
35	BA	792	A	C5-C6-N6	7.92	130.03	123.70
2	AB	133	U	C4'-C3'-C2'	-7.92	94.69	102.60
2	AB	425	G	N9-C1'-C2'	-7.92	103.29	112.00
2	AB	2760	C	P-O3'-C3'	7.92	129.20	119.70
2	AB	2825	G	O4'-C1'-N9	7.92	114.53	108.20
1	AA	75	G	C8-N9-C4	-7.91	103.23	106.40
2	AB	96	C	C1'-O4'-C4'	-7.91	103.57	109.90
2	AB	461	C	C6-N1-C2	-7.91	117.13	120.30
2	AB	496	G	C5-C6-N1	7.91	115.46	111.50
2	AB	683	U	C6-N1-C2	7.91	125.75	121.00
2	AB	1205	A	C5-C6-N6	-7.91	117.37	123.70
2	AB	1348	C	C6-N1-C2	-7.91	117.14	120.30
2	AB	2367	G	O4'-C1'-N9	7.91	114.53	108.20
2	AB	2470	G	N1-C6-O6	-7.91	115.15	119.90
35	BA	1099	G	N9-C4-C5	7.91	108.57	105.40
35	BA	1104	G	N3-C4-C5	-7.91	124.64	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1392	G	N7-C8-N9	7.91	117.06	113.10
35	BA	1539	C	N3-C4-C5	-7.91	118.73	121.90
37	BC	13	A	C4-C5-C6	7.91	120.96	117.00
2	AB	1326	U	C5-C6-N1	-7.91	118.74	122.70
2	AB	1517	G	N9-C4-C5	7.91	108.56	105.40
35	BA	1533	C	C5-C4-N4	-7.91	114.66	120.20
1	AA	34	A	C3'-C2'-C1'	7.91	107.83	101.50
2	AB	341	C	N1-C1'-C2'	-7.91	103.30	112.00
2	AB	940	G	C2-N3-C4	7.91	115.86	111.90
2	AB	1368	G	C8-N9-C4	-7.91	103.23	106.40
35	BA	322	C	C6-N1-C2	-7.91	117.14	120.30
35	BA	1491	G	N3-C4-C5	-7.91	124.64	128.60
2	AB	386	G	C4'-C3'-C2'	-7.91	94.69	102.60
2	AB	488	G	O4'-C1'-N9	7.91	114.53	108.20
2	AB	709	U	O4'-C1'-N1	7.91	114.53	108.20
2	AB	2222	C	N3-C4-N4	7.91	123.54	118.00
35	BA	292	G	N7-C8-N9	7.91	117.05	113.10
2	AB	131	A	C2-N3-C4	7.91	114.55	110.60
2	AB	759	G	C5-C6-N1	7.91	115.45	111.50
2	AB	2460	U	C5-C6-N1	-7.91	118.75	122.70
2	AB	413	C	C2-N3-C4	7.91	123.85	119.90
2	AB	421	C	N3-C2-O2	-7.91	116.36	121.90
2	AB	507	A	N1-C6-N6	-7.91	113.86	118.60
35	BA	259	G	O4'-C1'-N9	7.91	114.53	108.20
35	BA	430	A	N9-C4-C5	-7.91	102.64	105.80
35	BA	1419	G	N1-C6-O6	-7.91	115.16	119.90
53	BS	31	ARG	NE-CZ-NH1	7.91	124.25	120.30
2	AB	2416	C	C5-C6-N1	7.90	124.95	121.00
2	AB	2444	G	N9-C4-C5	7.90	108.56	105.40
2	AB	631	A	C4-C5-C6	-7.90	113.05	117.00
2	AB	731	C	O4'-C1'-N1	7.90	114.52	108.20
2	AB	984	A	O4'-C1'-N9	7.90	114.52	108.20
2	AB	1033	U	N3-C2-O2	-7.90	116.67	122.20
2	AB	2255	G	O4'-C1'-N9	7.90	114.52	108.20
35	BA	191	G	C5-C6-O6	-7.90	123.86	128.60
35	BA	800	G	C2-N3-C4	7.90	115.85	111.90
35	BA	852	G	N9-C4-C5	7.90	108.56	105.40
35	BA	1488	G	C4-C5-N7	7.90	113.96	110.80
38	BD	58	A	C5-C6-N1	7.90	121.65	117.70
2	AB	2004	G	C4-C5-N7	-7.90	107.64	110.80
2	AB	2592	G	C8-N9-C4	-7.90	103.24	106.40
2	AB	2752	C	C6-N1-C2	7.90	123.46	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	40	U	C5-C6-N1	-7.90	118.75	122.70
2	AB	720	U	O4'-C1'-N1	7.90	114.52	108.20
2	AB	1189	A	C4-C5-N7	-7.90	106.75	110.70
2	AB	1257	C	N3-C4-N4	7.90	123.53	118.00
2	AB	126	A	N1-C2-N3	-7.90	125.35	129.30
2	AB	1227	G	N9-C4-C5	-7.90	102.24	105.40
2	AB	1601	G	C5-C6-O6	-7.90	123.86	128.60
2	AB	1899	A	C8-N9-C4	7.90	108.96	105.80
35	BA	500	G	N3-C2-N2	-7.90	114.37	119.90
35	BA	538	G	C2-N3-C4	-7.90	107.95	111.90
41	BG	183	ARG	NE-CZ-NH1	7.90	124.25	120.30
2	AB	116	C	N3-C4-C5	7.90	125.06	121.90
2	AB	1592	C	N1-C2-O2	7.90	123.64	118.90
2	AB	1921	G	N9-C4-C5	7.90	108.56	105.40
35	BA	611	C	N3-C2-O2	-7.90	116.37	121.90
1	AA	64	G	N9-C4-C5	7.89	108.56	105.40
2	AB	519	U	O4'-C1'-N1	7.89	114.52	108.20
2	AB	2087	G	C6-C5-N7	-7.89	125.66	130.40
2	AB	2289	G	C4-C5-C6	7.89	123.54	118.80
35	BA	544	G	C2-N3-C4	-7.89	107.95	111.90
2	AB	603	A	C5-C6-N1	-7.89	113.75	117.70
2	AB	833	A	N9-C4-C5	7.89	108.96	105.80
2	AB	1823	G	N7-C8-N9	7.89	117.05	113.10
2	AB	2277	G	C6-N1-C2	-7.89	120.36	125.10
2	AB	2729	G	N3-C4-C5	-7.89	124.65	128.60
35	BA	108	G	N3-C4-C5	-7.89	124.65	128.60
35	BA	1102	A	N9-C4-C5	-7.89	102.64	105.80
36	BB	5	G	O4'-C1'-N9	7.89	114.51	108.20
2	AB	2406	A	N1-C6-N6	7.89	123.33	118.60
35	BA	530	G	C5-N7-C8	7.89	108.25	104.30
35	BA	1105	A	C5-N7-C8	-7.89	99.95	103.90
2	AB	581	C	C5-C4-N4	-7.89	114.68	120.20
2	AB	863	A	N1-C6-N6	7.89	123.33	118.60
2	AB	1478	G	C5'-C4'-O4'	7.89	118.57	109.10
3	AC	79	THR	CA-CB-CG2	7.89	123.45	112.40
36	BB	49	G	N7-C8-N9	7.89	117.05	113.10
2	AB	1134	A	N9-C4-C5	7.89	108.95	105.80
2	AB	2502	G	C8-N9-C4	-7.89	103.25	106.40
35	BA	150	U	N3-C2-O2	-7.89	116.68	122.20
2	AB	563	A	N9-C4-C5	-7.89	102.64	105.80
35	BA	110	C	C1'-O4'-C4'	7.89	116.21	109.90
35	BA	755	G	C6-C5-N7	-7.89	125.67	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	284	U	O4'-C1'-N1	7.88	114.51	108.20
2	AB	1440	U	O4'-C1'-N1	7.88	114.51	108.20
2	AB	2164	C	C2-N3-C4	7.88	123.84	119.90
35	BA	1493	A	C2-N3-C4	-7.88	106.66	110.60
2	AB	2260	C	C6-N1-C2	7.88	123.45	120.30
35	BA	240	G	C6-N1-C2	-7.88	120.37	125.10
2	AB	807	U	N1-C2-N3	7.88	119.63	114.90
2	AB	1131	G	C5-C6-N1	-7.88	107.56	111.50
2	AB	1662	U	C6-N1-C2	-7.88	116.27	121.00
2	AB	2481	G	P-O3'-C3'	7.88	129.16	119.70
5	AE	15	PHE	CB-CG-CD2	-7.88	115.28	120.80
28	A1	15	ARG	NE-CZ-NH1	-7.88	116.36	120.30
35	BA	479	U	C5-C4-O4	7.88	130.63	125.90
35	BA	1065	U	O4'-C4'-C3'	7.88	112.41	106.10
35	BA	1179	A	N1-C2-N3	-7.88	125.36	129.30
2	AB	932	U	N1-C1'-C2'	7.88	124.24	114.00
2	AB	1101	U	N1-C2-N3	7.88	119.63	114.90
2	AB	1305	C	N3-C4-N4	-7.88	112.48	118.00
2	AB	1414	C	O4'-C1'-N1	7.88	114.50	108.20
2	AB	2388	A	C5-N7-C8	-7.88	99.96	103.90
35	BA	93	U	N1-C2-O2	-7.88	117.28	122.80
35	BA	1066	C	O4'-C1'-N1	7.88	114.50	108.20
35	BA	1443	C	C3'-C2'-C1'	-7.88	95.20	101.50
2	AB	397	U	O4'-C1'-N1	7.88	114.50	108.20
2	AB	418	C	N1-C2-O2	7.88	123.63	118.90
2	AB	473	G	N3-C4-C5	-7.88	124.66	128.60
2	AB	890	C	N3-C2-O2	-7.88	116.39	121.90
2	AB	1247	A	C1'-O4'-C4'	7.88	116.20	109.90
2	AB	2123	G	C5-N7-C8	7.88	108.24	104.30
2	AB	2571	U	C5-C4-O4	-7.88	121.17	125.90
2	AB	2668	G	C8-N9-C4	-7.88	103.25	106.40
2	AB	2857	G	N3-C2-N2	7.88	125.41	119.90
26	AZ	28	PHE	CB-CG-CD2	-7.88	115.28	120.80
34	A7	22	VAL	CA-CB-CG2	7.88	122.72	110.90
35	BA	135	C	C2-N3-C4	7.88	123.84	119.90
35	BA	276	G	N1-C2-N3	-7.88	119.17	123.90
35	BA	380	G	C5-C6-N1	7.88	115.44	111.50
35	BA	390	U	N3-C4-C5	-7.88	109.87	114.60
35	BA	1082	A	O4'-C1'-N9	7.88	114.50	108.20
35	BA	1466	C	O4'-C1'-N1	7.88	114.50	108.20
38	BD	12	G	O4'-C1'-N9	7.88	114.50	108.20
2	AB	428	A	C6-N1-C2	-7.88	113.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1648	U	N1-C2-N3	7.88	119.63	114.90
2	AB	1762	A	P-O3'-C3'	7.88	129.15	119.70
2	AB	2724	U	P-O3'-C3'	7.88	129.15	119.70
2	AB	2784	U	N3-C4-C5	7.88	119.33	114.60
35	BA	657	U	C6-N1-C2	7.88	125.73	121.00
35	BA	1324	A	C4'-C3'-C2'	-7.88	94.72	102.60
43	BI	86	ARG	NE-CZ-NH2	-7.88	116.36	120.30
45	BK	64	TYR	CB-CG-CD2	-7.88	116.28	121.00
2	AB	362	A	N1-C2-N3	7.88	133.24	129.30
2	AB	400	G	N1-C6-O6	-7.88	115.17	119.90
2	AB	1002	G	C4'-C3'-O3'	7.88	128.75	113.00
2	AB	2505	G	N1-C2-N2	7.88	123.29	116.20
35	BA	117	G	N3-C4-C5	-7.88	124.66	128.60
1	AA	64	G	O4'-C1'-N9	7.87	114.50	108.20
2	AB	13	A	C8-N9-C4	-7.87	102.65	105.80
2	AB	1257	C	C5-C4-N4	-7.87	114.69	120.20
2	AB	2061	G	O4'-C1'-N9	7.87	114.50	108.20
35	BA	127	G	C2-N3-C4	7.87	115.84	111.90
35	BA	1081	A	C8-N9-C4	-7.87	102.65	105.80
35	BA	1341	U	C2-N3-C4	-7.87	122.28	127.00
38	BD	7	G	C8-N9-C4	-7.87	103.25	106.40
38	BD	22	A	C2-N3-C4	7.87	114.54	110.60
2	AB	778	G	N1-C6-O6	-7.87	115.18	119.90
2	AB	898	C	C4-C5-C6	7.87	121.34	117.40
2	AB	2302	U	C2-N3-C4	-7.87	122.28	127.00
2	AB	2697	G	N3-C2-N2	-7.87	114.39	119.90
2	AB	2698	U	P-O3'-C3'	7.87	129.15	119.70
35	BA	147	G	N7-C8-N9	7.87	117.04	113.10
35	BA	1040	U	C5-C6-N1	-7.87	118.76	122.70
36	BB	43	G	C6-C5-N7	-7.87	125.68	130.40
2	AB	75	G	C5-N7-C8	7.87	108.23	104.30
35	BA	127	G	N1-C2-N3	-7.87	119.18	123.90
35	BA	581	G	C5'-C4'-O4'	7.87	118.54	109.10
36	BB	25	C	N3-C4-C5	-7.87	118.75	121.90
46	BL	6	TYR	CG-CD1-CE1	-7.87	115.00	121.30
2	AB	1464	G	C5-N7-C8	-7.87	100.36	104.30
2	AB	2269	G	C2-N3-C4	7.87	115.83	111.90
2	AB	2402	U	C5'-C4'-O4'	7.87	118.54	109.10
2	AB	2618	G	C5-C6-O6	7.87	133.32	128.60
36	BB	1	A	C4-C5-C6	-7.87	113.07	117.00
2	AB	1138	G	N3-C4-C5	-7.87	124.67	128.60
35	BA	75	G	N9-C4-C5	7.87	108.55	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	583	A	C8-N9-C4	-7.87	102.65	105.80
35	BA	1529	G	C5-C6-N1	7.87	115.43	111.50
2	AB	1956	U	O4'-C1'-N1	7.87	114.49	108.20
2	AB	2630	G	O4'-C1'-N9	7.87	114.49	108.20
35	BA	1408	A	C4'-C3'-C2'	-7.87	94.73	102.60
37	BC	41	A	N1-C2-N3	-7.87	125.37	129.30
2	AB	268	C	N1-C2-O2	7.86	123.62	118.90
2	AB	601	C	N1-C2-O2	7.86	123.62	118.90
2	AB	1242	U	N1-C2-N3	7.86	119.62	114.90
2	AB	1700	A	N1-C6-N6	-7.86	113.88	118.60
2	AB	2801	G	N9-C4-C5	7.86	108.55	105.40
35	BA	1115	U	C5'-C4'-O4'	7.86	118.54	109.10
35	BA	138	G	O4'-C1'-N9	7.86	114.49	108.20
35	BA	1359	C	N1-C2-O2	7.86	123.62	118.90
2	AB	370	G	C3'-C2'-C1'	7.86	107.79	101.50
2	AB	2286	G	C5-C6-O6	7.86	133.32	128.60
2	AB	2292	U	O4'-C1'-N1	7.86	114.49	108.20
35	BA	855	U	C4'-C3'-C2'	-7.86	94.74	102.60
37	BC	27	A	O4'-C4'-C3'	-7.86	96.14	104.00
52	BR	14	PHE	CB-CG-CD1	7.86	126.30	120.80
2	AB	60	G	C6-C5-N7	7.86	135.12	130.40
2	AB	1625	C	C5'-C4'-O4'	7.86	118.53	109.10
35	BA	650	G	C5-C6-N1	7.86	115.43	111.50
2	AB	1262	A	N1-C2-N3	-7.86	125.37	129.30
2	AB	1534	U	N1-C2-N3	7.86	119.61	114.90
2	AB	2424	C	C1'-O4'-C4'	7.86	116.19	109.90
35	BA	60	A	N1-C6-N6	7.86	123.31	118.60
35	BA	814	A	C2-N3-C4	7.86	114.53	110.60
2	AB	977	G	N1-C2-N2	7.86	123.27	116.20
35	BA	65	A	N7-C8-N9	7.86	117.73	113.80
35	BA	274	A	O4'-C1'-N9	7.86	114.48	108.20
38	BD	10	G	N7-C8-N9	7.86	117.03	113.10
39	BE	161	PHE	CB-CG-CD1	-7.86	115.30	120.80
1	AA	12	C	C3'-C2'-C1'	-7.85	95.22	101.50
2	AB	975	A	N7-C8-N9	7.85	117.73	113.80
2	AB	1610	A	C5-N7-C8	-7.85	99.97	103.90
2	AB	1103	A	P-O3'-C3'	7.85	129.12	119.70
2	AB	1554	U	C5-C4-O4	-7.85	121.19	125.90
2	AB	2206	C	N3-C4-N4	7.85	123.50	118.00
2	AB	2282	G	P-O3'-C3'	7.85	129.12	119.70
2	AB	2436	G	N7-C8-N9	7.85	117.03	113.10
2	AB	2589	A	N1-C6-N6	-7.85	113.89	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	700	G	C6-N1-C2	-7.85	120.39	125.10
46	BL	69	GLY	C-N-CA	7.85	138.79	122.30
2	AB	289	G	C8-N9-C4	-7.85	103.26	106.40
2	AB	620	G	C3'-C2'-C1'	7.85	107.78	101.50
35	BA	146	G	C4-C5-N7	-7.85	107.66	110.80
1	AA	66	A	P-O3'-C3'	7.85	129.12	119.70
2	AB	303	G	C4-C5-N7	7.85	113.94	110.80
2	AB	1663	G	C4-C5-N7	-7.85	107.66	110.80
2	AB	1734	G	C6-N1-C2	-7.85	120.39	125.10
2	AB	1814	G	N1-C2-N3	-7.85	119.19	123.90
2	AB	226	A	N1-C2-N3	-7.85	125.38	129.30
2	AB	2338	C	O4'-C1'-N1	7.85	114.48	108.20
2	AB	2539	C	C2-N3-C4	7.85	123.82	119.90
2	AB	522	A	N9-C4-C5	-7.85	102.66	105.80
2	AB	918	A	N1-C2-N3	-7.85	125.38	129.30
2	AB	1209	U	C5-C4-O4	-7.85	121.19	125.90
35	BA	1327	C	C3'-C2'-C1'	7.85	107.78	101.50
2	AB	1228	G	N9-C4-C5	7.84	108.54	105.40
2	AB	1278	C	N1-C2-O2	7.84	123.61	118.90
2	AB	1951	U	C2-N3-C4	-7.84	122.29	127.00
2	AB	2047	C	O4'-C1'-N1	7.84	114.47	108.20
2	AB	2056	G	C8-N9-C4	-7.84	103.26	106.40
2	AB	2757	A	C4-C5-C6	-7.84	113.08	117.00
2	AB	1684	G	C2-N3-C4	7.84	115.82	111.90
2	AB	21	A	C8-N9-C4	-7.84	102.66	105.80
2	AB	589	U	C4-C5-C6	7.84	124.41	119.70
2	AB	1933	G	C5-C6-O6	-7.84	123.89	128.60
35	BA	81	A	C4-C5-N7	-7.84	106.78	110.70
35	BA	570	G	C4-C5-C6	7.84	123.50	118.80
35	BA	986	U	C4'-C3'-C2'	-7.84	94.76	102.60
35	BA	1351	U	N3-C4-C5	7.84	119.31	114.60
2	AB	342	A	C1'-O4'-C4'	-7.84	103.63	109.90
2	AB	1286	A	C5-C6-N1	7.84	121.62	117.70
2	AB	2046	G	N1-C2-N2	-7.84	109.14	116.20
35	BA	665	A	C8-N9-C4	-7.84	102.66	105.80
35	BA	789	U	N3-C2-O2	-7.84	116.71	122.20
35	BA	996	A	C5-C6-N1	7.84	121.62	117.70
35	BA	1104	G	N9-C4-C5	7.84	108.54	105.40
36	BB	13	C	C4-C5-C6	7.84	121.32	117.40
2	AB	502	A	O4'-C1'-N9	7.84	114.47	108.20
2	AB	926	G	N9-C4-C5	7.84	108.53	105.40
2	AB	999	U	N1-C2-N3	7.84	119.60	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2761	A	N7-C8-N9	-7.84	109.88	113.80
35	BA	1100	C	C6-N1-C2	-7.84	117.17	120.30
2	AB	411	G	C6-N1-C2	-7.84	120.40	125.10
2	AB	596	U	C2-N3-C4	-7.84	122.30	127.00
2	AB	1152	C	N3-C2-O2	-7.84	116.42	121.90
2	AB	1846	G	C5'-C4'-O4'	7.84	118.50	109.10
2	AB	2270	A	C2-N3-C4	7.84	114.52	110.60
35	BA	973	G	C5-N7-C8	-7.84	100.38	104.30
42	BH	67	ARG	NE-CZ-NH2	7.84	124.22	120.30
2	AB	157	C	O4'-C1'-N1	7.83	114.47	108.20
2	AB	294	A	O4'-C1'-N9	7.83	114.47	108.20
2	AB	835	C	C1'-O4'-C4'	-7.83	103.63	109.90
2	AB	1651	G	N9-C4-C5	7.83	108.53	105.40
35	BA	82	G	N3-C4-C5	-7.83	124.68	128.60
35	BA	924	C	C2-N3-C4	7.83	123.82	119.90
2	AB	142	A	N1-C6-N6	-7.83	113.90	118.60
2	AB	1132	U	N1-C2-O2	-7.83	117.32	122.80
2	AB	1334	G	C5-N7-C8	-7.83	100.38	104.30
2	AB	1389	G	N9-C4-C5	7.83	108.53	105.40
2	AB	1450	G	C3'-C2'-C1'	7.83	107.77	101.50
2	AB	1847	A	N9-C1'-C2'	-7.83	103.38	112.00
2	AB	2621	G	C6-N1-C2	-7.83	120.40	125.10
2	AB	2642	G	C5-C6-O6	-7.83	123.90	128.60
2	AB	368	A	C5'-C4'-O4'	7.83	118.50	109.10
2	AB	804	A	N7-C8-N9	7.83	117.72	113.80
2	AB	921	C	C5-C4-N4	-7.83	114.72	120.20
2	AB	1202	G	C5-N7-C8	-7.83	100.38	104.30
2	AB	2110	G	C5-C6-N1	7.83	115.42	111.50
2	AB	2152	G	N3-C4-C5	-7.83	124.68	128.60
2	AB	310	A	N9-C4-C5	7.83	108.93	105.80
2	AB	1795	C	C4-C5-C6	7.83	121.31	117.40
2	AB	2823	A	N1-C2-N3	7.83	133.22	129.30
35	BA	30	U	C5-C4-O4	-7.83	121.20	125.90
35	BA	1312	G	O4'-C1'-N9	7.83	114.46	108.20
2	AB	735	A	N1-C2-N3	-7.83	125.39	129.30
2	AB	1453	A	N1-C2-N3	-7.83	125.39	129.30
2	AB	2382	G	C2-N3-C4	7.83	115.81	111.90
35	BA	480	U	C2-N3-C4	-7.83	122.30	127.00
35	BA	790	A	C5-C6-N6	-7.83	117.44	123.70
2	AB	1260	A	O4'-C1'-N9	7.83	114.46	108.20
2	AB	1990	C	N1-C2-N3	-7.83	113.72	119.20
2	AB	2568	U	N3-C2-O2	-7.83	116.72	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	113	G	N3-C4-C5	7.83	132.51	128.60
35	BA	906	A	N1-C6-N6	7.83	123.30	118.60
40	BF	21	TRP	CE2-CD2-CG	7.83	113.56	107.30
2	AB	109	C	N1-C2-O2	7.83	123.59	118.90
2	AB	217	A	C8-N9-C4	-7.83	102.67	105.80
2	AB	976	G	N3-C2-N2	-7.83	114.42	119.90
2	AB	2530	A	N9-C1'-C2'	-7.83	103.39	112.00
35	BA	37	U	P-O3'-C3'	7.83	129.09	119.70
35	BA	537	G	N7-C8-N9	7.83	117.01	113.10
35	BA	1041	G	N3-C4-N9	7.83	130.69	126.00
36	BB	66	C	C4-C5-C6	-7.83	113.49	117.40
2	AB	416	U	N1-C2-N3	7.82	119.59	114.90
2	AB	713	G	N9-C4-C5	7.82	108.53	105.40
2	AB	1574	C	N3-C4-N4	7.82	123.48	118.00
2	AB	1941	C	N3-C4-C5	-7.82	118.77	121.90
2	AB	1967	C	O4'-C4'-C3'	7.82	112.36	106.10
2	AB	2678	C	N3-C2-O2	-7.82	116.42	121.90
35	BA	105	G	C4-C5-N7	-7.82	107.67	110.80
2	AB	324	A	C5-C6-N1	7.82	121.61	117.70
2	AB	325	G	C3'-C2'-C1'	-7.82	95.24	101.50
2	AB	666	A	C4-C5-N7	-7.82	106.79	110.70
2	AB	2094	A	P-O3'-C3'	7.82	129.09	119.70
2	AB	2727	A	N9-C4-C5	7.82	108.93	105.80
35	BA	138	G	C4'-C3'-C2'	-7.82	94.78	102.60
2	AB	2107	G	N9-C4-C5	7.82	108.53	105.40
2	AB	2118	U	N1-C2-N3	7.82	119.59	114.90
35	BA	251	G	O4'-C1'-C2'	-7.82	97.98	105.80
35	BA	708	C	C4-C5-C6	-7.82	113.49	117.40
35	BA	1007	U	C5-C6-N1	-7.82	118.79	122.70
38	BD	37	U	P-O3'-C3'	7.82	129.08	119.70
35	BA	1442	G	C5-C6-N1	7.82	115.41	111.50
2	AB	57	C	N3-C2-O2	-7.82	116.43	121.90
2	AB	631	A	C5-C6-N1	7.82	121.61	117.70
2	AB	817	C	N3-C4-N4	7.82	123.47	118.00
2	AB	840	C	N1-C2-O2	7.82	123.59	118.90
2	AB	1653	G	C3'-C2'-C1'	-7.82	95.25	101.50
35	BA	684	U	N1-C1'-C2'	-7.82	103.40	112.00
35	BA	954	G	C6-C5-N7	-7.82	125.71	130.40
2	AB	2050	C	C6-N1-C2	7.82	123.43	120.30
2	AB	2300	C	C2-N3-C4	7.82	123.81	119.90
2	AB	2480	C	N3-C4-N4	-7.82	112.53	118.00
35	BA	97	G	C4-C5-N7	-7.82	107.67	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	585	G	C2-N3-C4	7.82	115.81	111.90
35	BA	1266	G	N1-C2-N2	7.82	123.23	116.20
1	AA	101	A	C2-N3-C4	7.81	114.51	110.60
2	AB	121	G	C4-C5-N7	7.81	113.93	110.80
2	AB	831	G	N3-C4-C5	-7.81	124.69	128.60
2	AB	1015	U	N3-C4-C5	-7.81	109.91	114.60
38	BD	69	C	C5-C6-N1	7.81	124.91	121.00
2	AB	432	A	C2-N3-C4	7.81	114.51	110.60
2	AB	469	G	P-O3'-C3'	7.81	129.07	119.70
2	AB	774	G	N3-C4-C5	-7.81	124.69	128.60
2	AB	2467	C	O4'-C4'-C3'	-7.81	96.19	104.00
2	AB	2788	C	O4'-C4'-C3'	7.81	112.35	106.10
13	AM	17	ARG	NE-CZ-NH2	-7.81	116.39	120.30
19	AS	63	ARG	NE-CZ-NH2	7.81	124.21	120.30
2	AB	1813	G	C2-N3-C4	7.81	115.81	111.90
11	AK	41	PHE	CB-CG-CD2	-7.81	115.33	120.80
2	AB	1262	A	C6-C5-N7	7.81	137.77	132.30
2	AB	1570	A	N9-C4-C5	7.81	108.92	105.80
2	AB	2495	G	C2-N3-C4	7.81	115.81	111.90
6	AF	35	TYR	CG-CD2-CE2	-7.81	115.05	121.30
35	BA	11	G	C6-N1-C2	-7.81	120.41	125.10
35	BA	332	G	C4-C5-N7	-7.81	107.68	110.80
35	BA	348	G	N3-C4-C5	-7.81	124.69	128.60
35	BA	1044	A	C5-N7-C8	-7.81	100.00	103.90
35	BA	1497	G	O4'-C1'-N9	7.81	114.45	108.20
39	BE	20	ARG	NE-CZ-NH2	-7.81	116.39	120.30
2	AB	1132	U	O4'-C1'-N1	7.81	114.45	108.20
2	AB	1663	G	N9-C4-C5	7.81	108.52	105.40
2	AB	1749	A	C4-C5-N7	-7.81	106.80	110.70
2	AB	2470	G	O4'-C1'-N9	7.81	114.45	108.20
4	AD	79	ARG	NE-CZ-NH2	7.81	124.20	120.30
11	AK	61	TYR	CB-CG-CD1	7.81	125.69	121.00
35	BA	116	A	C8-N9-C4	-7.81	102.68	105.80
35	BA	569	C	N3-C4-C5	-7.81	118.78	121.90
35	BA	1490	U	C6-N1-C2	-7.81	116.31	121.00
35	BA	1532	U	C5-C6-N1	-7.81	118.80	122.70
2	AB	249	C	O4'-C1'-N1	7.81	114.44	108.20
2	AB	1455	G	C5-C6-N1	7.81	115.40	111.50
35	BA	331	G	N9-C4-C5	7.81	108.52	105.40
35	BA	363	A	C2-N3-C4	7.81	114.50	110.60
1	AA	50	A	C5-C6-N1	7.80	121.60	117.70
2	AB	45	G	N3-C4-N9	-7.80	121.32	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	873	C	C4-C5-C6	-7.80	113.50	117.40
2	AB	1153	C	C4-C5-C6	-7.80	113.50	117.40
2	AB	1159	U	C5-C6-N1	7.80	126.60	122.70
2	AB	1542	U	O4'-C1'-N1	7.80	114.44	108.20
2	AB	1875	G	N1-C6-O6	7.80	124.58	119.90
2	AB	2513	A	O4'-C1'-N9	7.80	114.44	108.20
35	BA	23	C	N1-C2-O2	7.80	123.58	118.90
35	BA	356	A	N9-C4-C5	7.80	108.92	105.80
35	BA	449	G	C6-C5-N7	-7.80	125.72	130.40
35	BA	929	G	C5-C6-O6	-7.80	123.92	128.60
35	BA	1030	U	O4'-C1'-N1	7.80	114.44	108.20
2	AB	2877	G	C8-N9-C4	-7.80	103.28	106.40
1	AA	85	G	C4-C5-N7	7.80	113.92	110.80
2	AB	221	A	N3-C4-C5	-7.80	121.34	126.80
2	AB	519	U	C2-N3-C4	-7.80	122.32	127.00
2	AB	597	G	N3-C2-N2	-7.80	114.44	119.90
2	AB	1943	U	N1-C2-O2	7.80	128.26	122.80
35	BA	1237	C	N1-C1'-C2'	-7.80	103.42	112.00
2	AB	647	G	N9-C4-C5	7.80	108.52	105.40
2	AB	893	C	N3-C4-N4	7.80	123.46	118.00
2	AB	1969	A	C2-N3-C4	7.80	114.50	110.60
2	AB	2558	C	O4'-C1'-N1	7.80	114.44	108.20
35	BA	1174	G	O4'-C1'-N9	7.80	114.44	108.20
35	BA	1304	G	O4'-C1'-N9	7.80	114.44	108.20
36	BB	11	U	C2-N3-C4	-7.80	122.32	127.00
36	BB	30	G	O4'-C1'-N9	7.80	114.44	108.20
2	AB	65	U	N3-C4-C5	7.80	119.28	114.60
2	AB	864	G	C4-C5-C6	7.80	123.48	118.80
2	AB	1066	U	O4'-C4'-C3'	7.80	112.34	106.10
2	AB	1454	C	O4'-C4'-C3'	7.80	112.34	106.10
2	AB	1697	G	C3'-C2'-C1'	-7.80	95.26	101.50
2	AB	1233	C	C6-N1-C2	-7.80	117.18	120.30
2	AB	1677	A	C5-C6-N1	7.80	121.60	117.70
2	AB	1861	G	N3-C2-N2	-7.80	114.44	119.90
2	AB	2525	G	C3'-C2'-C1'	7.80	107.74	101.50
2	AB	2744	G	C5-N7-C8	7.80	108.20	104.30
2	AB	2795	C	O4'-C1'-N1	7.80	114.44	108.20
2	AB	332	A	C8-N9-C4	-7.79	102.68	105.80
2	AB	2319	G	C8-N9-C4	-7.79	103.28	106.40
38	BD	60	A	C3'-C2'-C1'	7.79	107.74	101.50
1	AA	107	G	N9-C4-C5	-7.79	102.28	105.40
2	AB	1630	A	C8-N9-C4	7.79	108.92	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2262	U	O4'-C1'-N1	7.79	114.44	108.20
2	AB	2304	G	O4'-C1'-N9	-7.79	101.97	108.20
2	AB	2775	G	C4-C5-C6	7.79	123.48	118.80
5	AE	33	ARG	NE-CZ-NH1	-7.79	116.40	120.30
2	AB	100	U	N3-C4-O4	7.79	124.85	119.40
2	AB	550	C	C6-N1-C2	7.79	123.42	120.30
2	AB	1089	A	N3-C4-C5	-7.79	121.35	126.80
2	AB	2333	A	N1-C6-N6	-7.79	113.92	118.60
35	BA	77	A	C1'-O4'-C4'	7.79	116.13	109.90
35	BA	649	A	O4'-C1'-N9	7.79	114.43	108.20
35	BA	968	A	P-O3'-C3'	7.79	129.05	119.70
35	BA	1124	G	C5'-C4'-C3'	-7.79	103.53	116.00
2	AB	474	G	N1-C6-O6	7.79	124.57	119.90
2	AB	1519	G	C4-C5-N7	-7.79	107.68	110.80
2	AB	336	C	O4'-C1'-N1	7.79	114.43	108.20
2	AB	571	U	C4-C5-C6	7.79	124.37	119.70
2	AB	1842	G	C2-N3-C4	7.79	115.80	111.90
2	AB	2179	C	C4-C5-C6	7.79	121.30	117.40
35	BA	509	A	O4'-C1'-N9	7.79	114.43	108.20
35	BA	1262	C	N3-C4-C5	7.79	125.02	121.90
1	AA	91	C	N3-C4-C5	-7.79	118.78	121.90
2	AB	742	A	C5-N7-C8	-7.79	100.01	103.90
2	AB	1449	G	C5-C6-O6	-7.79	123.93	128.60
2	AB	2355	G	C1'-O4'-C4'	-7.79	103.67	109.90
2	AB	2826	A	C1'-O4'-C4'	7.79	116.13	109.90
2	AB	17	G	C8-N9-C4	-7.79	103.28	106.40
2	AB	771	G	C2-N3-C4	7.79	115.79	111.90
35	BA	1170	A	N9-C4-C5	7.79	108.92	105.80
50	BP	78	ARG	NH1-CZ-NH2	-7.79	110.84	119.40
2	AB	785	G	O4'-C1'-N9	7.78	114.43	108.20
2	AB	873	C	C2-N3-C4	7.78	123.79	119.90
2	AB	2002	G	C8-N9-C4	-7.78	103.29	106.40
2	AB	2572	A	C1'-O4'-C4'	7.78	116.13	109.90
35	BA	1161	C	C5'-C4'-O4'	7.78	118.44	109.10
37	BC	30	U	C4-C5-C6	7.78	124.37	119.70
35	BA	1300	G	C5-N7-C8	-7.78	100.41	104.30
35	BA	75	G	C6-C5-N7	-7.78	125.73	130.40
35	BA	342	C	C6-N1-C2	-7.78	117.19	120.30
35	BA	454	G	N3-C4-N9	7.78	130.67	126.00
37	BC	20	G	O4'-C1'-N9	7.78	114.42	108.20
35	BA	359	G	N3-C2-N2	-7.78	114.45	119.90
35	BA	590	U	C6-N1-C2	-7.78	116.33	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	254	G	N1-C6-O6	7.78	124.57	119.90
2	AB	350	G	O4'-C1'-N9	7.78	114.42	108.20
2	AB	1597	A	C3'-C2'-C1'	7.78	107.72	101.50
2	AB	1674	G	C6-N1-C2	-7.78	120.43	125.10
2	AB	1807	G	C4'-C3'-C2'	-7.78	94.82	102.60
2	AB	2602	A	N9-C4-C5	7.78	108.91	105.80
38	BD	12	G	N7-C8-N9	7.78	116.99	113.10
2	AB	394	C	O4'-C1'-N1	7.78	114.42	108.20
2	AB	1457	U	C5-C4-O4	-7.78	121.23	125.90
2	AB	1762	A	C6-N1-C2	-7.78	113.94	118.60
2	AB	2555	U	C5-C4-O4	7.78	130.57	125.90
35	BA	449	G	N3-C4-C5	-7.78	124.71	128.60
35	BA	804	U	C2-N3-C4	-7.78	122.33	127.00
35	BA	853	C	N3-C4-C5	-7.78	118.79	121.90
35	BA	976	G	O4'-C1'-N9	7.78	114.42	108.20
37	BC	55	A	C4-C5-N7	-7.78	106.81	110.70
2	AB	1423	G	O4'-C1'-N9	7.77	114.42	108.20
2	AB	2706	A	C4-C5-N7	7.77	114.59	110.70
2	AB	305	C	N3-C4-C5	7.77	125.01	121.90
2	AB	2788	C	O4'-C1'-N1	7.77	114.42	108.20
35	BA	446	G	C8-N9-C4	-7.77	103.29	106.40
35	BA	1313	U	C5-C4-O4	-7.77	121.24	125.90
35	BA	1380	U	C5-C4-O4	7.77	130.56	125.90
2	AB	479	A	C5-C6-N1	7.77	121.58	117.70
2	AB	1897	G	C5-C6-O6	-7.77	123.94	128.60
35	BA	184	G	N3-C4-N9	-7.77	121.34	126.00
35	BA	693	G	N1-C6-O6	-7.77	115.24	119.90
2	AB	2200	C	N3-C2-O2	-7.77	116.46	121.90
2	AB	2405	G	C2-N3-C4	7.77	115.78	111.90
2	AB	2527	C	C5-C6-N1	-7.77	117.12	121.00
35	BA	337	G	C3'-C2'-C1'	-7.77	95.28	101.50
35	BA	443	C	C5-C4-N4	7.77	125.64	120.20
35	BA	1016	A	C8-N9-C4	-7.77	102.69	105.80
35	BA	1063	C	N3-C2-O2	-7.77	116.46	121.90
35	BA	1153	G	N7-C8-N9	7.77	116.98	113.10
35	BA	1314	C	C2-N3-C4	-7.77	116.02	119.90
35	BA	1368	A	N3-C4-N9	7.77	133.62	127.40
2	AB	636	G	N9-C4-C5	7.77	108.51	105.40
2	AB	899	A	C8-N9-C4	-7.77	102.69	105.80
2	AB	1277	G	C5-C6-N1	7.77	115.38	111.50
2	AB	1327	A	C5-N7-C8	-7.77	100.02	103.90
2	AB	1862	G	N9-C4-C5	7.77	108.51	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2018	G	C1'-O4'-C4'	7.77	116.11	109.90
2	AB	2065	C	C5-C4-N4	7.77	125.64	120.20
2	AB	2365	G	C4-C5-C6	7.77	123.46	118.80
2	AB	2383	G	C5'-C4'-O4'	7.77	118.42	109.10
35	BA	266	G	C3'-C2'-C1'	-7.77	95.28	101.50
35	BA	310	G	C5-C6-O6	-7.77	123.94	128.60
35	BA	408	A	N1-C6-N6	7.77	123.26	118.60
35	BA	711	G	N3-C2-N2	-7.77	114.46	119.90
35	BA	1018	G	C4'-C3'-C2'	-7.77	94.83	102.60
35	BA	1493	A	P-O3'-C3'	7.77	129.02	119.70
35	BA	1534	A	O4'-C1'-N9	7.77	114.41	108.20
36	BB	12	U	N3-C4-C5	7.77	119.26	114.60
44	BJ	4	ARG	NE-CZ-NH2	-7.77	116.42	120.30
2	AB	2728	U	O4'-C1'-N1	7.77	114.41	108.20
21	AU	99	ARG	NE-CZ-NH2	7.77	124.18	120.30
35	BA	577	G	C5'-C4'-O4'	7.77	118.42	109.10
35	BA	1190	G	N7-C8-N9	7.77	116.98	113.10
35	BA	1323	G	C8-N9-C4	-7.77	103.29	106.40
36	BB	28	C	C3'-C2'-C1'	-7.77	95.29	101.50
2	AB	916	G	C5-C6-N1	7.76	115.38	111.50
2	AB	1074	G	C1'-O4'-C4'	-7.76	103.69	109.90
2	AB	2699	C	O4'-C1'-N1	7.76	114.41	108.20
35	BA	565	U	N3-C2-O2	-7.76	116.77	122.20
35	BA	1240	U	N3-C4-O4	7.76	124.83	119.40
2	AB	293	U	C5-C6-N1	-7.76	118.82	122.70
2	AB	2334	U	C4'-C3'-C2'	-7.76	94.84	102.60
35	BA	1387	G	N9-C4-C5	7.76	108.50	105.40
1	AA	78	A	C5-N7-C8	7.76	107.78	103.90
2	AB	629	G	C6-N1-C2	-7.76	120.44	125.10
2	AB	695	G	C2-N3-C4	7.76	115.78	111.90
2	AB	879	G	C5-C6-N1	7.76	115.38	111.50
2	AB	1465	G	C8-N9-C4	-7.76	103.30	106.40
2	AB	1706	C	N1-C2-O2	7.76	123.56	118.90
2	AB	1953	A	C3'-C2'-C1'	7.76	107.71	101.50
2	AB	2545	G	C6-N1-C2	-7.76	120.44	125.10
35	BA	352	C	C6-N1-C2	-7.76	117.20	120.30
38	BD	12	G	N9-C4-C5	7.76	108.50	105.40
2	AB	863	A	C4-C5-C6	7.76	120.88	117.00
2	AB	1711	A	C6-N1-C2	-7.76	113.94	118.60
2	AB	2080	A	N9-C1'-C2'	-7.76	103.47	112.00
35	BA	159	G	N3-C4-C5	-7.76	124.72	128.60
35	BA	771	G	C6-N1-C2	-7.76	120.44	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	987	G	N1-C2-N3	7.76	128.56	123.90
35	BA	1159	U	C2-N3-C4	-7.76	122.34	127.00
2	AB	942	G	C8-N9-C4	-7.76	103.30	106.40
2	AB	1756	G	N9-C4-C5	7.76	108.50	105.40
2	AB	181	A	C5'-C4'-O4'	7.76	118.41	109.10
2	AB	1215	G	C8-N9-C4	7.76	109.50	106.40
2	AB	2890	G	C8-N9-C4	-7.76	103.30	106.40
35	BA	890	G	N3-C4-N9	7.76	130.65	126.00
35	BA	75	G	C8-N9-C4	-7.75	103.30	106.40
35	BA	549	C	C2-N3-C4	7.75	123.78	119.90
35	BA	954	G	C8-N9-C4	-7.75	103.30	106.40
36	BB	29	G	C4-C5-N7	-7.75	107.70	110.80
2	AB	15	G	C5'-C4'-O4'	-7.75	99.80	109.10
2	AB	1663	G	N3-C2-N2	-7.75	114.47	119.90
2	AB	2065	C	N3-C4-C5	-7.75	118.80	121.90
35	BA	112	G	N1-C2-N3	7.75	128.55	123.90
37	BC	28	U	P-O3'-C3'	7.75	129.00	119.70
2	AB	288	U	N1-C2-O2	7.75	128.22	122.80
2	AB	533	G	N3-C4-C5	-7.75	124.72	128.60
2	AB	1432	G	N1-C6-O6	7.75	124.55	119.90
2	AB	1558	C	C4'-C3'-C2'	-7.75	94.85	102.60
2	AB	2402	U	P-O3'-C3'	7.75	129.00	119.70
2	AB	2520	C	C3'-C2'-C1'	-7.75	95.30	101.50
2	AB	2536	G	C5-C6-O6	-7.75	123.95	128.60
35	BA	457	G	N1-C2-N2	-7.75	109.22	116.20
1	AA	52	A	N9-C4-C5	-7.75	102.70	105.80
2	AB	2884	U	O4'-C1'-N1	7.75	114.40	108.20
2	AB	7	G	C6-C5-N7	-7.75	125.75	130.40
2	AB	51	G	C2-N3-C4	7.75	115.77	111.90
2	AB	250	G	C4'-C3'-C2'	-7.75	94.85	102.60
2	AB	522	A	N1-C2-N3	-7.75	125.43	129.30
2	AB	975	A	C8-N9-C4	-7.75	102.70	105.80
2	AB	1751	U	C4-C5-C6	7.75	124.35	119.70
43	BI	113	ARG	NE-CZ-NH1	-7.75	116.43	120.30
53	BS	8	ARG	NE-CZ-NH1	7.75	124.17	120.30
1	AA	67	G	C8-N9-C4	-7.75	103.30	106.40
2	AB	1182	G	N3-C4-C5	-7.75	124.73	128.60
2	AB	1222	U	O4'-C1'-N1	7.75	114.40	108.20
2	AB	2349	G	C1'-O4'-C4'	7.75	116.10	109.90
2	AB	2436	G	N3-C2-N2	7.75	125.32	119.90
35	BA	354	G	C4-C5-N7	-7.75	107.70	110.80
35	BA	1081	A	C4-C5-N7	-7.75	106.83	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1324	A	C8-N9-C4	-7.75	102.70	105.80
2	AB	1113	U	O4'-C1'-N1	7.75	114.40	108.20
35	BA	1290	G	C8-N9-C4	-7.75	103.30	106.40
35	BA	1423	G	N3-C4-N9	7.75	130.65	126.00
36	BB	25	C	N3-C4-N4	7.75	123.42	118.00
2	AB	1403	A	C5-N7-C8	-7.74	100.03	103.90
2	AB	1581	G	C6-N1-C2	-7.74	120.45	125.10
2	AB	2061	G	C5-C6-O6	-7.74	123.95	128.60
2	AB	2642	G	N1-C6-O6	7.74	124.55	119.90
35	BA	289	G	N9-C4-C5	7.74	108.50	105.40
35	BA	1491	G	C3'-C2'-C1'	7.74	107.69	101.50
1	AA	2	G	O4'-C1'-N9	7.74	114.39	108.20
2	AB	526	A	C4-C5-N7	7.74	114.57	110.70
2	AB	1590	A	N3-C4-C5	7.74	132.22	126.80
2	AB	2252	G	N3-C4-C5	-7.74	124.73	128.60
41	BG	74	TYR	CB-CG-CD1	-7.74	116.36	121.00
35	BA	650	G	O4'-C4'-C3'	7.74	112.29	106.10
35	BA	1406	U	C4-C5-C6	7.74	124.34	119.70
2	AB	109	C	C4-C5-C6	-7.74	113.53	117.40
2	AB	807	U	N3-C4-O4	7.74	124.82	119.40
2	AB	1367	A	C2-N3-C4	-7.74	106.73	110.60
2	AB	1369	G	N3-C4-C5	-7.74	124.73	128.60
2	AB	1798	U	O4'-C1'-N1	7.74	114.39	108.20
2	AB	2177	C	C5-C4-N4	-7.74	114.78	120.20
2	AB	2455	G	C8-N9-C4	-7.74	103.31	106.40
2	AB	2672	U	C4-C5-C6	7.74	124.34	119.70
2	AB	2692	G	C2-N3-C4	7.74	115.77	111.90
4	AD	68	ARG	CD-NE-CZ	7.74	134.43	123.60
35	BA	195	A	C4'-C3'-C2'	-7.74	94.86	102.60
36	BB	69	C	N3-C2-O2	-7.74	116.48	121.90
2	AB	1171	G	C6-C5-N7	7.74	135.04	130.40
2	AB	1324	G	C5-C6-N1	-7.74	107.63	111.50
13	AM	31	ARG	NE-CZ-NH1	-7.74	116.43	120.30
35	BA	144	G	C8-N9-C4	-7.74	103.31	106.40
35	BA	540	G	C6-C5-N7	-7.74	125.76	130.40
2	AB	375	G	C4-C5-N7	-7.74	107.71	110.80
2	AB	753	A	C5'-C4'-O4'	7.74	118.38	109.10
2	AB	2138	G	N3-C4-C5	-7.74	124.73	128.60
35	BA	795	C	N1-C2-O2	7.74	123.54	118.90
38	BD	63	C	N3-C4-N4	7.74	123.42	118.00
58	BX	27	VAL	CA-CB-CG1	7.74	122.50	110.90
2	AB	2102	G	N3-C4-C5	-7.73	124.73	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	570	G	C1'-O4'-C4'	7.73	116.09	109.90
35	BA	1359	C	C6-N1-C2	-7.73	117.21	120.30
35	BA	1528	U	O4'-C1'-N1	7.73	114.39	108.20
38	BD	27	G	C1'-O4'-C4'	7.73	116.09	109.90
1	AA	57	A	P-O3'-C3'	7.73	128.98	119.70
2	AB	406	G	N1-C6-O6	7.73	124.54	119.90
2	AB	1512	C	C6-N1-C2	7.73	123.39	120.30
2	AB	1845	G	C5-N7-C8	7.73	108.17	104.30
2	AB	2817	U	O4'-C1'-N1	7.73	114.39	108.20
19	AS	41	ALA	N-CA-CB	7.73	120.93	110.10
2	AB	162	U	N3-C4-O4	-7.73	113.99	119.40
2	AB	190	A	N1-C6-N6	7.73	123.24	118.60
2	AB	1899	A	N9-C4-C5	-7.73	102.71	105.80
2	AB	2488	G	N3-C4-N9	7.73	130.64	126.00
35	BA	811	C	N3-C2-O2	-7.73	116.49	121.90
35	BA	1534	A	P-O3'-C3'	7.73	128.98	119.70
36	BB	26	A	O5'-P-OP2	-7.73	98.74	105.70
2	AB	94	A	P-O3'-C3'	7.73	128.97	119.70
2	AB	2597	G	O4'-C1'-N9	7.73	114.38	108.20
35	BA	667	G	N3-C4-C5	-7.73	124.73	128.60
35	BA	1493	A	C5-N7-C8	7.73	107.76	103.90
2	AB	40	U	C3'-C2'-C1'	7.73	107.68	101.50
2	AB	608	A	C8-N9-C4	-7.73	102.71	105.80
2	AB	933	A	C4'-C3'-C2'	7.73	110.33	102.60
2	AB	1187	G	C8-N9-C4	-7.73	103.31	106.40
2	AB	1431	A	C2-N3-C4	-7.73	106.74	110.60
2	AB	1858	A	N3-C4-C5	-7.73	121.39	126.80
2	AB	2557	G	C4-C5-N7	-7.73	107.71	110.80
2	AB	2890	G	N9-C4-C5	7.73	108.49	105.40
35	BA	881	G	C8-N9-C4	-7.73	103.31	106.40
35	BA	1292	G	C3'-C2'-C1'	7.73	107.68	101.50
36	BB	7	G	C4-C5-N7	7.73	113.89	110.80
2	AB	55	G	N3-C4-C5	-7.72	124.74	128.60
2	AB	106	C	C5-C6-N1	7.72	124.86	121.00
2	AB	118	A	C3'-C2'-C1'	7.72	107.68	101.50
2	AB	2782	G	N9-C4-C5	7.72	108.49	105.40
35	BA	362	G	N3-C4-C5	-7.72	124.74	128.60
35	BA	609	A	N9-C4-C5	-7.72	102.71	105.80
35	BA	663	A	C8-N9-C4	-7.72	102.71	105.80
35	BA	781	A	N9-C4-C5	7.72	108.89	105.80
2	AB	217	A	N7-C8-N9	7.72	117.66	113.80
2	AB	524	G	N9-C1'-C2'	-7.72	103.50	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	641	U	N1-C2-N3	7.72	119.53	114.90
2	AB	1273	U	N1-C1'-C2'	7.72	124.04	114.00
2	AB	1617	C	C6-N1-C2	-7.72	117.21	120.30
35	BA	375	U	O4'-C1'-N1	7.72	114.38	108.20
35	BA	831	A	C5-C6-N1	7.72	121.56	117.70
35	BA	1206	G	C8-N9-C4	-7.72	103.31	106.40
38	BD	3	C	C2-N3-C4	-7.72	116.04	119.90
38	BD	25	U	N3-C4-O4	7.72	124.81	119.40
35	BA	79	G	C5-C6-N1	7.72	115.36	111.50
35	BA	383	A	N9-C4-C5	7.72	108.89	105.80
35	BA	1049	U	C5-C4-O4	-7.72	121.27	125.90
35	BA	1144	G	N7-C8-N9	7.72	116.96	113.10
35	BA	1393	U	C4-C5-C6	7.72	124.33	119.70
48	BN	97	ARG	NE-CZ-NH1	7.72	124.16	120.30
1	AA	68	C	O4'-C1'-N1	7.72	114.38	108.20
2	AB	400	G	N9-C4-C5	-7.72	102.31	105.40
2	AB	1083	U	C3'-C2'-C1'	7.72	107.68	101.50
2	AB	1371	G	N9-C1'-C2'	-7.72	103.51	112.00
2	AB	1460	U	P-O3'-C3'	7.72	128.96	119.70
2	AB	1756	G	C8-N9-C4	-7.72	103.31	106.40
2	AB	1832	C	N1-C2-O2	7.72	123.53	118.90
2	AB	1957	C	O4'-C1'-N1	7.72	114.38	108.20
2	AB	2051	A	C8-N9-C4	-7.72	102.71	105.80
2	AB	2428	G	C2-N3-C4	7.72	115.76	111.90
2	AB	2799	A	C5-C6-N1	7.72	121.56	117.70
35	BA	243	A	C5-N7-C8	-7.72	100.04	103.90
35	BA	494	G	O4'-C1'-N9	-7.72	102.02	108.20
35	BA	544	G	N1-C2-N3	7.72	128.53	123.90
35	BA	1246	A	C5-N7-C8	-7.72	100.04	103.90
35	BA	1525	G	C4-C5-C6	7.72	123.43	118.80
36	BB	68	C	C5'-C4'-O4'	7.72	118.36	109.10
41	BG	62	ARG	NE-CZ-NH1	7.72	124.16	120.30
1	AA	41	G	C4-C5-N7	-7.72	107.71	110.80
2	AB	191	A	C5-C6-N1	-7.72	113.84	117.70
2	AB	1820	U	N1-C2-N3	7.72	119.53	114.90
35	BA	83	C	N1-C2-O2	7.72	123.53	118.90
35	BA	184	G	N9-C1'-C2'	-7.72	103.51	112.00
2	AB	811	U	C2-N3-C4	-7.72	122.37	127.00
2	AB	1049	C	C4'-C3'-C2'	-7.72	94.88	102.60
2	AB	1434	A	C8-N9-C4	7.72	108.89	105.80
2	AB	2043	C	C5'-C4'-C3'	-7.72	103.65	116.00
35	BA	106	C	C6-N1-C2	-7.72	117.21	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	168	G	C4-C5-N7	-7.72	107.71	110.80
35	BA	582	C	P-O3'-C3'	7.72	128.96	119.70
35	BA	996	A	N1-C6-N6	-7.72	113.97	118.60
35	BA	1536	C	P-O3'-C3'	7.72	128.96	119.70
1	AA	50	A	C5-N7-C8	-7.71	100.04	103.90
2	AB	1343	G	C8-N9-C4	-7.71	103.31	106.40
2	AB	1733	G	N3-C2-N2	-7.71	114.50	119.90
2	AB	2821	A	C4'-C3'-C2'	-7.71	94.89	102.60
2	AB	2900	A	N3-C4-C5	-7.71	121.40	126.80
35	BA	282	A	C8-N9-C4	-7.71	102.71	105.80
36	BB	61	C	N3-C2-O2	-7.71	116.50	121.90
35	BA	1147	C	N3-C4-C5	-7.71	118.81	121.90
2	AB	757	G	C5-C6-O6	-7.71	123.97	128.60
2	AB	1466	U	C5-C4-O4	-7.71	121.27	125.90
2	AB	1557	C	N1-C2-N3	-7.71	113.80	119.20
2	AB	2554	U	N1-C2-O2	7.71	128.20	122.80
51	BQ	80	ARG	NE-CZ-NH1	7.71	124.16	120.30
35	BA	1034	G	C6-N1-C2	-7.71	120.47	125.10
35	BA	1102	A	N7-C8-N9	7.71	117.66	113.80
2	AB	88	G	N7-C8-N9	7.71	116.95	113.10
2	AB	104	A	C2-N3-C4	7.71	114.45	110.60
2	AB	822	G	C6-C5-N7	7.71	135.03	130.40
2	AB	950	G	N3-C4-C5	-7.71	124.75	128.60
2	AB	1093	G	O4'-C1'-N9	7.71	114.37	108.20
2	AB	1871	A	N3-C4-N9	7.71	133.57	127.40
2	AB	2592	G	C6-N1-C2	-7.71	120.47	125.10
2	AB	2805	C	N3-C4-N4	7.71	123.40	118.00
4	AD	95	TYR	CB-CG-CD2	-7.71	116.38	121.00
35	BA	687	A	C2-N3-C4	7.71	114.45	110.60
35	BA	791	G	N9-C4-C5	7.71	108.48	105.40
35	BA	1326	U	C3'-C2'-C1'	-7.71	95.33	101.50
38	BD	13	C	C5-C4-N4	7.71	125.59	120.20
2	AB	445	C	O4'-C1'-N1	7.71	114.36	108.20
2	AB	1195	G	O4'-C1'-N9	7.71	114.36	108.20
2	AB	1610	A	N7-C8-N9	7.71	117.65	113.80
2	AB	1749	A	C8-N9-C4	-7.71	102.72	105.80
2	AB	2819	G	C6-N1-C2	-7.71	120.48	125.10
12	AL	96	ARG	NE-CZ-NH1	-7.71	116.45	120.30
35	BA	33	A	C8-N9-C4	-7.71	102.72	105.80
35	BA	425	G	N9-C4-C5	7.71	108.48	105.40
35	BA	719	C	C3'-C2'-C1'	7.71	107.67	101.50
35	BA	832	G	C5-N7-C8	-7.71	100.45	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1253	A	C5-N7-C8	7.71	107.75	103.90
2	AB	1844	C	C5-C6-N1	7.71	124.85	121.00
2	AB	2383	G	O4'-C1'-N9	7.71	114.36	108.20
35	BA	723	U	C2-N3-C4	-7.71	122.38	127.00
1	AA	94	A	N1-C2-N3	-7.70	125.45	129.30
1	AA	98	G	C4-C5-C6	7.70	123.42	118.80
2	AB	622	G	O5'-P-OP2	-7.70	98.77	105.70
2	AB	2196	C	P-O3'-C3'	7.70	128.94	119.70
2	AB	2589	A	C5'-C4'-O4'	7.70	118.34	109.10
35	BA	79	G	O4'-C1'-N9	7.70	114.36	108.20
35	BA	150	U	N3-C4-O4	7.70	124.79	119.40
35	BA	905	U	O4'-C1'-C2'	7.70	114.53	107.60
38	BD	25	U	C5-C4-O4	-7.70	121.28	125.90
2	AB	752	A	C4-C5-C6	-7.70	113.15	117.00
2	AB	817	C	C4'-C3'-C2'	-7.70	94.90	102.60
2	AB	2017	U	N3-C2-O2	-7.70	116.81	122.20
35	BA	629	A	C3'-C2'-C1'	7.70	107.66	101.50
2	AB	126	A	C8-N9-C4	-7.70	102.72	105.80
2	AB	164	C	C2-N3-C4	7.70	123.75	119.90
2	AB	1467	U	O4'-C1'-N1	7.70	114.36	108.20
2	AB	1711	A	C5'-C4'-O4'	7.70	118.34	109.10
2	AB	1960	A	O4'-C1'-C2'	7.70	114.53	107.60
2	AB	2636	C	C4-C5-C6	-7.70	113.55	117.40
33	A6	41	ARG	NE-CZ-NH2	-7.70	116.45	120.30
35	BA	326	G	C8-N9-C4	-7.70	103.32	106.40
35	BA	564	C	C1'-O4'-C4'	7.70	116.06	109.90
35	BA	916	U	P-O3'-C3'	7.70	128.94	119.70
2	AB	685	A	C5-C6-N6	-7.70	117.54	123.70
2	AB	733	G	C5-C6-N1	7.70	115.35	111.50
2	AB	1050	A	O4'-C1'-N9	7.70	114.36	108.20
2	AB	2242	G	N1-C2-N3	7.70	128.52	123.90
2	AB	2349	G	C5'-C4'-O4'	7.70	118.34	109.10
35	BA	441	A	N3-C4-C5	-7.70	121.41	126.80
35	BA	542	G	O4'-C1'-N9	7.70	114.36	108.20
2	AB	1933	G	N3-C4-N9	-7.70	121.38	126.00
35	BA	666	G	C8-N9-C4	-7.70	103.32	106.40
2	AB	13	A	N9-C4-C5	7.70	108.88	105.80
2	AB	1786	A	N1-C6-N6	-7.70	113.98	118.60
2	AB	1929	G	C4-C5-N7	-7.70	107.72	110.80
2	AB	2173	A	O4'-C4'-C3'	7.70	112.26	106.10
23	AW	6	ARG	NE-CZ-NH2	-7.70	116.45	120.30
35	BA	809	G	C4-C5-N7	-7.70	107.72	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1408	A	O4'-C1'-N9	7.70	114.36	108.20
2	AB	1046	A	N9-C4-C5	7.69	108.88	105.80
2	AB	1161	C	C5-C6-N1	-7.69	117.15	121.00
2	AB	2336	A	N1-C2-N3	-7.69	125.45	129.30
35	BA	1510	C	O4'-C1'-N1	7.69	114.36	108.20
2	AB	225	C	C2-N3-C4	7.69	123.75	119.90
2	AB	282	A	C4'-C3'-C2'	-7.69	94.91	102.60
2	AB	488	G	N3-C4-N9	7.69	130.62	126.00
2	AB	1721	G	N3-C4-C5	-7.69	124.75	128.60
2	AB	2414	G	C5-C6-O6	-7.69	123.98	128.60
2	AB	2614	A	C4-C5-C6	7.69	120.85	117.00
35	BA	208	U	N3-C4-C5	-7.69	109.98	114.60
35	BA	823	C	O4'-C1'-N1	7.69	114.36	108.20
35	BA	852	G	C3'-C2'-C1'	7.69	107.65	101.50
35	BA	914	A	C5'-C4'-O4'	7.69	118.33	109.10
35	BA	1065	U	N1-C2-N3	7.69	119.52	114.90
38	BD	64	G	C4-C5-N7	-7.69	107.72	110.80
2	AB	453	A	C4-C5-N7	-7.69	106.86	110.70
2	AB	1605	C	N3-C4-C5	-7.69	118.82	121.90
2	AB	1660	G	C5-C6-O6	-7.69	123.99	128.60
2	AB	2230	G	C5'-C4'-O4'	7.69	118.33	109.10
2	AB	2425	A	C1'-O4'-C4'	-7.69	103.75	109.90
29	A2	59	ARG	NE-CZ-NH1	7.69	124.14	120.30
35	BA	601	G	C5'-C4'-O4'	7.69	118.33	109.10
35	BA	711	G	N1-C2-N2	7.69	123.12	116.20
35	BA	1268	G	C2-N3-C4	7.69	115.75	111.90
2	AB	744	U	N3-C4-O4	-7.69	114.02	119.40
2	AB	998	C	C2-N3-C4	7.69	123.74	119.90
2	AB	2620	C	C6-N1-C2	7.69	123.38	120.30
35	BA	874	G	O4'-C1'-N9	7.69	114.35	108.20
35	BA	1148	U	C5'-C4'-O4'	7.69	118.33	109.10
35	BA	1220	G	C8-N9-C4	-7.69	103.32	106.40
1	AA	103	U	C5-C6-N1	-7.69	118.86	122.70
2	AB	146	A	N1-C6-N6	-7.69	113.99	118.60
2	AB	914	G	C8-N9-C4	-7.69	103.33	106.40
2	AB	1564	C	C6-N1-C2	-7.69	117.22	120.30
2	AB	2014	A	N1-C6-N6	7.69	123.21	118.60
2	AB	2314	A	O4'-C1'-N9	7.69	114.35	108.20
2	AB	2621	G	O4'-C1'-N9	7.69	114.35	108.20
2	AB	2782	G	N1-C6-O6	-7.69	115.29	119.90
2	AB	2904	U	C4-C5-C6	7.69	124.31	119.70
35	BA	1221	G	N7-C8-N9	7.69	116.94	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	281	C	N3-C2-O2	-7.69	116.52	121.90
2	AB	987	C	C5-C6-N1	7.69	124.84	121.00
2	AB	847	U	C2-N3-C4	-7.68	122.39	127.00
2	AB	1857	G	C8-N9-C4	-7.68	103.33	106.40
2	AB	2525	G	N1-C6-O6	-7.68	115.29	119.90
35	BA	258	G	N3-C4-N9	7.68	130.61	126.00
35	BA	496	A	N7-C8-N9	-7.68	109.96	113.80
35	BA	690	G	C4-C5-N7	-7.68	107.73	110.80
38	BD	24	C	C4'-C3'-C2'	-7.68	94.92	102.60
2	AB	45	G	N1-C6-O6	7.68	124.51	119.90
2	AB	49	A	C6-C5-N7	7.68	137.68	132.30
2	AB	2723	C	N1-C2-O2	-7.68	114.29	118.90
35	BA	346	G	C6-C5-N7	-7.68	125.79	130.40
2	AB	1024	G	C6-N1-C2	-7.68	120.49	125.10
2	AB	1776	G	N3-C4-C5	-7.68	124.76	128.60
35	BA	23	C	C3'-C2'-C1'	7.68	107.64	101.50
35	BA	222	C	C6-N1-C2	7.68	123.37	120.30
2	AB	2424	C	N3-C4-N4	7.68	123.38	118.00
2	AB	2731	G	N3-C4-C5	-7.68	124.76	128.60
35	BA	177	G	C6-C5-N7	-7.68	125.79	130.40
35	BA	586	C	C5-C4-N4	-7.68	114.82	120.20
2	AB	1948	G	O4'-C1'-N9	7.68	114.34	108.20
2	AB	2135	A	C4-C5-C6	-7.68	113.16	117.00
2	AB	2530	A	O4'-C1'-C2'	7.68	114.51	107.60
2	AB	2831	G	C4-C5-C6	-7.68	114.19	118.80
35	BA	244	U	N3-C2-O2	-7.68	116.83	122.20
35	BA	450	G	N3-C4-N9	7.68	130.61	126.00
35	BA	905	U	O4'-C1'-N1	-7.68	102.06	108.20
35	BA	998	C	C4-C5-C6	-7.68	113.56	117.40
2	AB	1297	C	C1'-O4'-C4'	7.67	116.04	109.90
2	AB	2076	U	N1-C2-N3	7.67	119.50	114.90
2	AB	2462	C	N3-C4-C5	-7.67	118.83	121.90
2	AB	2856	A	C5-C6-N1	7.67	121.54	117.70
35	BA	493	A	O4'-C1'-N9	7.67	114.34	108.20
35	BA	900	A	C6-N1-C2	-7.67	114.00	118.60
35	BA	1233	G	C5-C6-N1	7.67	115.34	111.50
35	BA	1316	G	N3-C4-C5	-7.67	124.76	128.60
2	AB	180	G	C8-N9-C4	-7.67	103.33	106.40
2	AB	200	U	C2-N3-C4	-7.67	122.40	127.00
2	AB	203	A	N1-C6-N6	-7.67	114.00	118.60
2	AB	215	G	C5-N7-C8	-7.67	100.46	104.30
2	AB	1150	C	C5-C4-N4	7.67	125.57	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1639	C	C2-N1-C1'	-7.67	110.36	118.80
2	AB	2273	A	C8-N9-C4	-7.67	102.73	105.80
2	AB	2714	G	C4-C5-N7	-7.67	107.73	110.80
35	BA	1002	G	C6-C5-N7	-7.67	125.80	130.40
2	AB	319	G	C5-C6-O6	-7.67	124.00	128.60
2	AB	952	G	N7-C8-N9	7.67	116.94	113.10
2	AB	1570	A	N1-C2-N3	-7.67	125.47	129.30
35	BA	907	A	C4'-C3'-C2'	-7.67	94.93	102.60
2	AB	1579	A	C5'-C4'-O4'	7.67	118.30	109.10
2	AB	1734	G	C5-C6-O6	-7.67	124.00	128.60
2	AB	2632	A	C6-C5-N7	7.67	137.67	132.30
1	AA	116	G	C6-C5-N7	7.67	135.00	130.40
2	AB	99	U	N1-C2-O2	7.67	128.17	122.80
2	AB	1089	A	C3'-C2'-C1'	7.67	107.63	101.50
2	AB	2509	G	C5-C6-N1	7.67	115.33	111.50
2	AB	2649	C	C5-C6-N1	7.67	124.83	121.00
35	BA	193	C	C4'-C3'-C2'	-7.67	94.93	102.60
35	BA	232	G	N1-C6-O6	-7.67	115.30	119.90
35	BA	537	G	C2-N3-C4	7.67	115.73	111.90
35	BA	625	U	N3-C2-O2	-7.67	116.83	122.20
35	BA	663	A	C4-C5-N7	-7.67	106.87	110.70
1	AA	84	G	C4-C5-N7	7.67	113.87	110.80
2	AB	950	G	N9-C4-C5	7.67	108.47	105.40
2	AB	1045	C	C4-C5-C6	-7.67	113.57	117.40
35	BA	3	A	C5-C6-N6	-7.67	117.57	123.70
35	BA	205	A	C5-N7-C8	7.67	107.73	103.90
1	AA	94	A	N7-C8-N9	7.66	117.63	113.80
2	AB	618	G	N7-C8-N9	-7.66	109.27	113.10
2	AB	1139	G	C5-C6-O6	-7.66	124.00	128.60
2	AB	1350	C	N3-C4-N4	-7.66	112.64	118.00
2	AB	1622	G	C5-C6-O6	-7.66	124.00	128.60
2	AB	1628	G	C5-N7-C8	-7.66	100.47	104.30
2	AB	2464	G	N7-C8-N9	7.66	116.93	113.10
35	BA	132	C	N1-C1'-C2'	-7.66	103.57	112.00
35	BA	717	U	P-O3'-C3'	7.66	128.90	119.70
35	BA	1053	G	C3'-C2'-C1'	7.66	107.63	101.50
2	AB	1878	G	C3'-C2'-C1'	-7.66	95.37	101.50
2	AB	309	A	C6-N1-C2	-7.66	114.00	118.60
2	AB	1984	G	N7-C8-N9	7.66	116.93	113.10
35	BA	1447	A	C5'-C4'-O4'	7.66	118.29	109.10
55	BU	56	ARG	NE-CZ-NH2	-7.66	116.47	120.30
2	AB	1585	C	C5-C4-N4	-7.66	114.84	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2719	G	C4-C5-C6	7.66	123.39	118.80
35	BA	545	C	N3-C4-C5	-7.66	118.84	121.90
35	BA	1020	G	N3-C4-C5	-7.66	124.77	128.60
35	BA	1471	U	O4'-C1'-N1	7.66	114.33	108.20
35	BA	648	A	N1-C2-N3	-7.66	125.47	129.30
41	BG	19	PHE	CG-CD2-CE2	-7.66	112.38	120.80
56	BV	40	PHE	CB-CG-CD1	-7.66	115.44	120.80
2	AB	202	U	C5'-C4'-O4'	7.66	118.29	109.10
2	AB	962	G	C5-C6-N1	7.66	115.33	111.50
2	AB	1428	C	N1-C2-O2	7.66	123.49	118.90
2	AB	1714	U	N3-C2-O2	-7.66	116.84	122.20
2	AB	1818	U	C2-N3-C4	-7.66	122.41	127.00
2	AB	1934	C	C4-C5-C6	-7.66	113.57	117.40
2	AB	2382	G	O3'-P-O5'	-7.66	89.46	104.00
35	BA	203	G	C2-N3-C4	7.66	115.73	111.90
35	BA	1112	C	O4'-C1'-N1	7.66	114.32	108.20
35	BA	1277	C	C5-C4-N4	7.66	125.56	120.20
35	BA	1035	A	C3'-C2'-C1'	7.65	107.62	101.50
40	BF	22	PHE	CB-CG-CD1	7.65	126.16	120.80
48	BN	54	SER	N-CA-CB	-7.65	99.02	110.50
2	AB	434	U	N1-C2-N3	7.65	119.49	114.90
2	AB	692	C	N3-C4-N4	7.65	123.36	118.00
2	AB	782	A	C1'-O4'-C4'	7.65	116.02	109.90
2	AB	1521	G	N7-C8-N9	7.65	116.93	113.10
2	AB	1997	C	N3-C2-O2	-7.65	116.54	121.90
2	AB	2787	C	C4-C5-C6	-7.65	113.57	117.40
35	BA	1111	A	C5'-C4'-C3'	-7.65	103.76	116.00
35	BA	1174	G	N1-C6-O6	-7.65	115.31	119.90
35	BA	1264	U	C4'-C3'-C2'	-7.65	94.95	102.60
35	BA	1266	G	N3-C4-C5	-7.65	124.77	128.60
2	AB	1380	G	C6-N1-C2	-7.65	120.51	125.10
2	AB	1775	U	C3'-C2'-C1'	-7.65	95.38	101.50
2	AB	1813	G	N3-C4-N9	7.65	130.59	126.00
2	AB	2754	U	C2-N3-C4	-7.65	122.41	127.00
2	AB	2844	G	C4'-C3'-C2'	-7.65	94.95	102.60
35	BA	7	A	O4'-C4'-C3'	-7.65	96.35	104.00
35	BA	883	C	O4'-C1'-N1	7.65	114.32	108.20
35	BA	919	A	C2-N3-C4	7.65	114.42	110.60
35	BA	1242	G	N1-C6-O6	-7.65	115.31	119.90
2	AB	69	C	N1-C2-O2	7.65	123.49	118.90
2	AB	325	G	N7-C8-N9	7.65	116.92	113.10
2	AB	372	G	C5-C6-N1	7.65	115.32	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1262	A	C4-C5-N7	-7.65	106.88	110.70
2	AB	1501	G	N1-C2-N2	7.65	123.08	116.20
35	BA	278	G	C4-C5-N7	-7.65	107.74	110.80
35	BA	1068	G	C4-C5-C6	7.65	123.39	118.80
2	AB	1655	A	N1-C6-N6	7.65	123.19	118.60
2	AB	2024	G	N7-C8-N9	7.65	116.92	113.10
35	BA	134	G	C5-N7-C8	-7.65	100.48	104.30
35	BA	645	G	N9-C4-C5	7.65	108.46	105.40
35	BA	662	U	O4'-C1'-N1	7.65	114.32	108.20
2	AB	882	G	C5-C6-O6	7.65	133.19	128.60
2	AB	2115	G	N3-C4-C5	-7.65	124.78	128.60
2	AB	2763	G	N7-C8-N9	7.65	116.92	113.10
35	BA	68	G	C2-N3-C4	7.65	115.72	111.90
35	BA	1438	G	C5-N7-C8	-7.65	100.48	104.30
2	AB	155	A	N3-C4-C5	-7.64	121.45	126.80
2	AB	1003	G	C5-C6-O6	-7.64	124.01	128.60
2	AB	1481	U	C5-C4-O4	7.64	130.49	125.90
2	AB	2428	G	C6-N1-C2	-7.64	120.51	125.10
21	AU	84	ARG	NE-CZ-NH1	-7.64	116.48	120.30
35	BA	1049	U	N3-C4-O4	7.64	124.75	119.40
35	BA	1346	A	O5'-P-OP1	-7.64	98.82	105.70
2	AB	1374	G	N3-C4-C5	-7.64	124.78	128.60
2	AB	1786	A	C5-C6-N1	7.64	121.52	117.70
2	AB	2046	G	C6-N1-C2	-7.64	120.51	125.10
2	AB	2183	A	N1-C6-N6	7.64	123.19	118.60
2	AB	2709	G	N1-C6-O6	-7.64	115.31	119.90
2	AB	2862	G	O4'-C1'-N9	7.64	114.31	108.20
35	BA	745	G	N3-C2-N2	-7.64	114.55	119.90
35	BA	1241	G	C5-C6-O6	-7.64	124.01	128.60
2	AB	111	A	O4'-C1'-N9	7.64	114.31	108.20
2	AB	2268	A	C8-N9-C4	-7.64	102.74	105.80
2	AB	2390	U	C5-C4-O4	7.64	130.49	125.90
2	AB	2785	C	C3'-C2'-C1'	7.64	107.61	101.50
35	BA	373	A	C5-N7-C8	7.64	107.72	103.90
2	AB	106	C	N3-C4-N4	7.64	123.35	118.00
2	AB	547	A	C5-C6-N1	-7.64	113.88	117.70
2	AB	668	A	C4-C5-C6	-7.64	113.18	117.00
2	AB	894	U	O4'-C1'-N1	7.64	114.31	108.20
2	AB	942	G	C5-C6-O6	-7.64	124.02	128.60
2	AB	1568	G	C4-C5-N7	-7.64	107.74	110.80
2	AB	1780	A	C8-N9-C4	-7.64	102.74	105.80
2	AB	1929	G	C5'-C4'-O4'	-7.64	99.93	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2731	G	N7-C8-N9	7.64	116.92	113.10
35	BA	106	C	C5-C4-N4	-7.64	114.85	120.20
35	BA	190	A	C5-C6-N1	7.64	121.52	117.70
35	BA	240	G	O4'-C1'-N9	7.64	114.31	108.20
35	BA	575	G	C5'-C4'-O4'	7.64	118.27	109.10
35	BA	960	U	P-O3'-C3'	7.64	128.87	119.70
35	BA	1266	G	C2-N3-C4	7.64	115.72	111.90
2	AB	1570	A	C4'-C3'-C2'	-7.64	94.96	102.60
2	AB	1004	U	C5-C6-N1	-7.64	118.88	122.70
2	AB	1186	G	N3-C2-N2	7.64	125.25	119.90
2	AB	2416	C	N1-C2-O2	7.64	123.48	118.90
35	BA	221	C	C3'-C2'-C1'	7.64	107.61	101.50
35	BA	223	A	N1-C6-N6	-7.64	114.02	118.60
35	BA	656	G	C6-C5-N7	-7.64	125.82	130.40
1	AA	112	G	N9-C4-C5	7.63	108.45	105.40
2	AB	2493	U	O4'-C1'-N1	7.63	114.31	108.20
2	AB	2652	C	N3-C2-O2	-7.63	116.56	121.90
2	AB	2813	A	C2-N3-C4	7.63	114.42	110.60
35	BA	41	G	C4-C5-N7	-7.63	107.75	110.80
35	BA	450	G	C4-C5-N7	7.63	113.85	110.80
35	BA	961	U	C4-C5-C6	-7.63	115.12	119.70
2	AB	9	G	C5-C6-N1	-7.63	107.68	111.50
2	AB	1544	A	C1'-O4'-C4'	-7.63	103.79	109.90
35	BA	1442	G	C5-C6-O6	-7.63	124.02	128.60
2	AB	177	G	N1-C6-O6	-7.63	115.32	119.90
2	AB	196	A	O5'-C5'-C4'	-7.63	97.20	111.70
2	AB	370	G	C4'-C3'-C2'	-7.63	94.97	102.60
2	AB	972	A	C4-C5-C6	-7.63	113.19	117.00
2	AB	1409	U	C5-C4-O4	-7.63	121.32	125.90
2	AB	1553	A	N1-C2-N3	-7.63	125.48	129.30
2	AB	2008	C	N3-C2-O2	-7.63	116.56	121.90
35	BA	559	A	N7-C8-N9	7.63	117.62	113.80
35	BA	678	U	N1-C2-N3	7.63	119.48	114.90
35	BA	734	G	N1-C2-N3	-7.63	119.32	123.90
2	AB	2583	G	C2-N3-C4	7.63	115.72	111.90
35	BA	582	C	C5-C6-N1	-7.63	117.19	121.00
35	BA	1143	G	C6-C5-N7	-7.63	125.82	130.40
43	BI	8	PHE	CB-CG-CD2	-7.63	115.46	120.80
2	AB	80	G	C4-C5-N7	7.63	113.85	110.80
2	AB	469	G	C8-N9-C4	-7.63	103.35	106.40
2	AB	929	U	C2-N1-C1'	7.63	126.86	117.70
35	BA	408	A	C4-C5-C6	7.63	120.81	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	561	U	N3-C4-C5	-7.63	110.02	114.60
36	BB	70	C	C4-C5-C6	-7.63	113.59	117.40
37	BC	49	U	C2-N3-C4	-7.63	122.42	127.00
2	AB	185	G	C5-N7-C8	-7.63	100.49	104.30
2	AB	1277	G	C8-N9-C4	-7.63	103.35	106.40
2	AB	1472	C	C2-N3-C4	7.63	123.71	119.90
2	AB	2667	C	N3-C4-C5	-7.62	118.85	121.90
35	BA	337	G	C5'-C4'-O4'	7.62	118.25	109.10
35	BA	989	U	N1-C1'-C2'	-7.62	103.61	112.00
35	BA	992	U	C5-C4-O4	-7.62	121.33	125.90
36	BB	58	A	C5'-C4'-O4'	7.62	118.25	109.10
38	BD	12	G	N1-C6-O6	-7.62	115.33	119.90
52	BR	14	PHE	CB-CG-CD2	-7.62	115.46	120.80
2	AB	327	G	C2-N3-C4	-7.62	108.09	111.90
2	AB	580	U	C6-N1-C2	-7.62	116.43	121.00
2	AB	2684	U	C5'-C4'-O4'	7.62	118.25	109.10
2	AB	2771	C	C6-N1-C2	-7.62	117.25	120.30
23	AW	5	ARG	NE-CZ-NH1	7.62	124.11	120.30
35	BA	361	G	C8-N9-C4	-7.62	103.35	106.40
35	BA	464	U	N3-C4-C5	-7.62	110.03	114.60
35	BA	493	A	N9-C4-C5	7.62	108.85	105.80
35	BA	535	A	N1-C2-N3	-7.62	125.49	129.30
35	BA	1093	A	C4'-C3'-C2'	-7.62	94.98	102.60
35	BA	1445	U	N1-C2-O2	7.62	128.13	122.80
1	AA	12	C	C1'-O4'-C4'	-7.62	103.80	109.90
2	AB	442	G	N1-C2-N2	7.62	123.06	116.20
2	AB	1734	G	C5'-C4'-O4'	7.62	118.24	109.10
2	AB	713	G	C6-C5-N7	-7.62	125.83	130.40
2	AB	1220	G	C5-N7-C8	-7.62	100.49	104.30
2	AB	1921	G	N1-C2-N3	-7.62	119.33	123.90
2	AB	2288	A	C8-N9-C4	-7.62	102.75	105.80
2	AB	2726	A	C4'-C3'-C2'	7.62	110.22	102.60
35	BA	1219	A	N1-C6-N6	7.62	123.17	118.60
2	AB	1275	A	C5-C6-N1	-7.62	113.89	117.70
2	AB	2127	G	N3-C4-N9	-7.62	121.43	126.00
2	AB	2241	A	C2-N3-C4	-7.62	106.79	110.60
35	BA	732	C	C4-C5-C6	-7.62	113.59	117.40
35	BA	1179	A	O4'-C1'-N9	7.62	114.29	108.20
2	AB	119	A	C5-N7-C8	7.62	107.71	103.90
2	AB	141	G	C6-C5-N7	-7.62	125.83	130.40
2	AB	314	C	O4'-C1'-N1	7.62	114.29	108.20
2	AB	1965	C	C6-N1-C2	7.62	123.35	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2128	G	N3-C4-N9	7.62	130.57	126.00
35	BA	57	G	C6-N1-C2	-7.62	120.53	125.10
35	BA	539	A	C4-C5-C6	7.62	120.81	117.00
35	BA	1374	A	N9-C1'-C2'	-7.62	103.62	112.00
40	BF	142	ARG	NE-CZ-NH2	7.62	124.11	120.30
1	AA	65	U	C5-C6-N1	7.61	126.51	122.70
2	AB	80	G	C6-N1-C2	-7.61	120.53	125.10
2	AB	254	G	C5-C6-O6	-7.61	124.03	128.60
2	AB	1573	G	N1-C2-N2	-7.61	109.35	116.20
2	AB	2634	A	C5-N7-C8	7.61	107.71	103.90
35	BA	348	G	N9-C1'-C2'	-7.61	103.63	112.00
35	BA	636	U	N1-C2-O2	-7.61	117.47	122.80
2	AB	1739	A	C8-N9-C4	-7.61	102.75	105.80
2	AB	1823	G	C8-N9-C4	-7.61	103.36	106.40
2	AB	166	U	N3-C2-O2	-7.61	116.87	122.20
2	AB	514	A	C3'-C2'-C1'	7.61	107.59	101.50
2	AB	1480	C	C2-N3-C4	7.61	123.70	119.90
2	AB	2038	G	N1-C6-O6	7.61	124.47	119.90
2	AB	2175	C	C5-C4-N4	7.61	125.53	120.20
35	BA	204	G	N7-C8-N9	7.61	116.91	113.10
35	BA	1003	G	N9-C4-C5	7.61	108.44	105.40
2	AB	727	A	C4'-C3'-C2'	-7.61	94.99	102.60
2	AB	1275	A	C5-C6-N6	7.61	129.79	123.70
2	AB	2046	G	C5-C6-N1	7.61	115.31	111.50
35	BA	613	C	C6-N1-C2	7.61	123.34	120.30
46	BL	63	TYR	CB-CG-CD2	-7.61	116.44	121.00
2	AB	37	C	C1'-O4'-C4'	-7.61	103.81	109.90
2	AB	428	A	C6-C5-N7	7.61	137.63	132.30
2	AB	756	A	C4-C5-C6	-7.61	113.20	117.00
2	AB	1914	C	N3-C4-C5	7.61	124.94	121.90
35	BA	849	G	C4-C5-N7	-7.61	107.76	110.80
35	BA	998	C	N1-C2-O2	7.61	123.47	118.90
2	AB	557	C	N3-C4-C5	-7.61	118.86	121.90
2	AB	609	A	N9-C1'-C2'	-7.61	103.63	112.00
2	AB	1429	G	N1-C2-N3	7.61	128.46	123.90
2	AB	1664	A	C5'-C4'-O4'	7.61	118.23	109.10
2	AB	1859	U	N1-C2-N3	7.61	119.46	114.90
35	BA	167	A	C1'-O4'-C4'	7.61	115.98	109.90
35	BA	321	A	C1'-O4'-C4'	7.61	115.98	109.90
35	BA	611	C	C5-C6-N1	-7.61	117.20	121.00
35	BA	927	G	C2-N3-C4	7.61	115.70	111.90
35	BA	1298	U	C5'-C4'-C3'	-7.61	103.83	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	38	A	C2-N3-C4	7.61	114.40	110.60
1	AA	95	U	C5-C6-N1	-7.60	118.90	122.70
2	AB	546	U	C5'-C4'-O4'	7.60	118.22	109.10
2	AB	1097	U	N1-C2-N3	7.60	119.46	114.90
2	AB	1131	G	C8-N9-C4	-7.60	103.36	106.40
2	AB	1759	A	N7-C8-N9	7.60	117.60	113.80
2	AB	1815	A	C6-C5-N7	7.60	137.62	132.30
2	AB	2883	A	C3'-C2'-C1'	7.60	107.58	101.50
2	AB	105	C	C3'-C2'-C1'	7.60	107.58	101.50
2	AB	408	G	N3-C4-C5	-7.60	124.80	128.60
2	AB	1931	U	C1'-O4'-C4'	-7.60	103.82	109.90
2	AB	2025	C	N1-C2-O2	7.60	123.46	118.90
35	BA	377	G	C4-C5-N7	-7.60	107.76	110.80
35	BA	744	C	N3-C4-C5	-7.60	118.86	121.90
1	AA	93	C	C6-N1-C2	-7.60	117.26	120.30
2	AB	2455	G	N9-C4-C5	7.60	108.44	105.40
35	BA	399	G	N1-C2-N3	7.60	128.46	123.90
35	BA	1494	G	C6-C5-N7	-7.60	125.84	130.40
2	AB	359	G	O4'-C1'-N9	7.60	114.28	108.20
2	AB	1641	A	N9-C4-C5	-7.60	102.76	105.80
2	AB	2049	G	N3-C4-C5	-7.60	124.80	128.60
35	BA	257	G	N7-C8-N9	7.60	116.90	113.10
35	BA	709	U	C4-C5-C6	7.60	124.26	119.70
35	BA	1471	U	C4-C5-C6	7.60	124.26	119.70
2	AB	886	A	C6-N1-C2	-7.60	114.04	118.60
2	AB	1210	G	C5-N7-C8	7.60	108.10	104.30
2	AB	1474	U	O4'-C1'-N1	7.60	114.28	108.20
2	AB	1620	G	N3-C4-N9	-7.60	121.44	126.00
2	AB	1694	C	N1-C2-O2	7.60	123.46	118.90
2	AB	2272	U	O4'-C1'-N1	7.60	114.28	108.20
2	AB	2900	A	C1'-O4'-C4'	7.60	115.98	109.90
2	AB	1567	G	O5'-P-OP1	-7.60	98.86	105.70
2	AB	2207	C	C5'-C4'-O4'	7.60	118.22	109.10
2	AB	2547	A	C5-N7-C8	-7.60	100.10	103.90
2	AB	2664	G	C5'-C4'-O4'	7.60	118.22	109.10
35	BA	546	A	C5-C6-N6	-7.60	117.62	123.70
35	BA	1489	G	N1-C2-N3	-7.60	119.34	123.90
2	AB	141	G	N3-C2-N2	7.59	125.22	119.90
2	AB	308	G	C2-N3-C4	-7.59	108.10	111.90
2	AB	1838	C	O4'-C1'-N1	7.59	114.28	108.20
2	AB	2375	G	N1-C2-N3	-7.59	119.34	123.90
35	BA	145	G	N1-C2-N3	-7.59	119.34	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	748	G	C5-C6-O6	7.59	133.16	128.60
2	AB	177	G	N3-C4-C5	-7.59	124.80	128.60
2	AB	1161	C	C5'-C4'-O4'	7.59	118.21	109.10
2	AB	2409	G	C2-N3-C4	7.59	115.70	111.90
35	BA	254	G	C5-N7-C8	-7.59	100.50	104.30
35	BA	396	C	N1-C1'-C2'	-7.59	103.65	112.00
2	AB	632	A	C3'-C2'-C1'	7.59	107.57	101.50
2	AB	781	A	C6-N1-C2	-7.59	114.05	118.60
2	AB	797	G	N9-C1'-C2'	-7.59	103.65	112.00
2	AB	992	C	C4'-C3'-C2'	-7.59	95.01	102.60
2	AB	1180	U	N1-C2-O2	7.59	128.11	122.80
2	AB	1426	G	O4'-C1'-N9	7.59	114.27	108.20
2	AB	1850	G	P-O3'-C3'	7.59	128.81	119.70
2	AB	2211	A	C3'-C2'-C1'	7.59	107.57	101.50
28	A1	30	ARG	NE-CZ-NH2	-7.59	116.50	120.30
35	BA	532	A	C8-N9-C4	-7.59	102.76	105.80
35	BA	694	A	C4'-C3'-C2'	-7.59	95.01	102.60
35	BA	1046	A	C4'-C3'-C2'	-7.59	95.01	102.60
35	BA	1356	G	N9-C4-C5	7.59	108.44	105.40
2	AB	1787	A	C8-N9-C4	-7.59	102.76	105.80
2	AB	1821	A	N7-C8-N9	7.59	117.59	113.80
2	AB	2128	G	C5-C6-O6	7.59	133.15	128.60
2	AB	2309	A	C5-N7-C8	7.59	107.69	103.90
2	AB	2694	G	C6-N1-C2	-7.59	120.55	125.10
35	BA	417	G	C5'-C4'-O4'	7.59	118.21	109.10
35	BA	1219	A	C5'-C4'-O4'	7.59	118.21	109.10
35	BA	1217	C	C3'-C2'-C1'	7.59	107.57	101.50
2	AB	508	A	C3'-C2'-C1'	7.59	107.57	101.50
2	AB	729	G	C5-N7-C8	7.59	108.09	104.30
2	AB	1151	A	N9-C1'-C2'	-7.59	103.66	112.00
14	AN	58	TYR	CD1-CE1-CZ	-7.59	112.97	119.80
2	AB	486	C	C4-C5-C6	-7.58	113.61	117.40
2	AB	1396	U	C2-N3-C4	-7.58	122.45	127.00
2	AB	1688	U	C5-C6-N1	-7.58	118.91	122.70
35	BA	590	U	C5-C6-N1	-7.58	118.91	122.70
35	BA	756	C	O4'-C4'-C3'	7.58	112.17	106.10
35	BA	764	C	C4-C5-C6	7.58	121.19	117.40
35	BA	944	G	P-O3'-C3'	7.58	128.80	119.70
2	AB	914	G	C4-C5-N7	-7.58	107.77	110.80
2	AB	1079	C	C2-N3-C4	7.58	123.69	119.90
2	AB	1420	A	C5-C6-N1	-7.58	113.91	117.70
2	AB	1870	C	C6-N1-C2	-7.58	117.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1925	C	C4-C5-C6	7.58	121.19	117.40
2	AB	2557	G	N1-C6-O6	7.58	124.45	119.90
2	AB	2771	C	C5-C6-N1	7.58	124.79	121.00
2	AB	2883	A	N9-C4-C5	-7.58	102.77	105.80
4	AD	188	ARG	NE-CZ-NH2	7.58	124.09	120.30
35	BA	117	G	N9-C4-C5	7.58	108.43	105.40
35	BA	182	A	N1-C2-N3	-7.58	125.51	129.30
35	BA	650	G	N9-C4-C5	7.58	108.43	105.40
35	BA	948	C	O4'-C1'-N1	7.58	114.27	108.20
35	BA	1015	G	N7-C8-N9	7.58	116.89	113.10
35	BA	1439	G	C6-N1-C2	-7.58	120.55	125.10
1	AA	2	G	N1-C2-N2	-7.58	109.38	116.20
1	AA	76	G	N9-C4-C5	7.58	108.43	105.40
2	AB	277	G	C6-C5-N7	-7.58	125.85	130.40
2	AB	618	G	C1'-O4'-C4'	-7.58	103.83	109.90
2	AB	932	U	O4'-C1'-N1	-7.58	102.14	108.20
2	AB	1445	G	C1'-O4'-C4'	-7.58	103.83	109.90
2	AB	2196	C	O4'-C1'-N1	7.58	114.26	108.20
2	AB	2245	U	C6-N1-C2	-7.58	116.45	121.00
2	AB	2513	A	C5-N7-C8	7.58	107.69	103.90
2	AB	874	G	N3-C4-C5	-7.58	124.81	128.60
2	AB	946	C	N1-C2-O2	7.58	123.45	118.90
35	BA	386	C	C3'-C2'-C1'	-7.58	95.44	101.50
35	BA	745	G	C4'-C3'-C2'	7.58	110.18	102.60
35	BA	1503	A	N1-C2-N3	-7.58	125.51	129.30
38	BD	25	U	O4'-C1'-N1	7.58	114.26	108.20
2	AB	392	U	C5'-C4'-O4'	7.58	118.19	109.10
2	AB	2170	A	C6-C5-N7	7.58	137.60	132.30
2	AB	2236	U	P-O3'-C3'	7.58	128.79	119.70
2	AB	2372	U	N3-C4-C5	-7.58	110.05	114.60
2	AB	2497	A	N7-C8-N9	7.58	117.59	113.80
35	BA	439	U	O4'-C1'-N1	7.58	114.26	108.20
35	BA	1310	G	C4'-C3'-C2'	-7.58	95.02	102.60
2	AB	1022	G	C2-N3-C4	7.58	115.69	111.90
35	BA	468	A	C5'-C4'-O4'	7.58	118.19	109.10
35	BA	505	G	N3-C4-C5	-7.58	124.81	128.60
35	BA	1448	C	N3-C2-O2	-7.58	116.60	121.90
2	AB	453	A	P-O3'-C3'	7.58	128.79	119.70
2	AB	495	G	N3-C4-N9	7.58	130.54	126.00
2	AB	979	A	C8-N9-C4	7.58	108.83	105.80
2	AB	1009	A	P-O3'-C3'	7.58	128.79	119.70
2	AB	1916	A	C5-C6-N1	-7.58	113.91	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1211	U	C3'-C2'-C1'	7.58	107.56	101.50
35	BA	1325	C	N1-C2-O2	7.58	123.45	118.90
2	AB	67	U	O4'-C1'-N1	7.57	114.26	108.20
2	AB	197	A	C5-C6-N1	7.57	121.49	117.70
2	AB	1636	U	C2-N3-C4	-7.57	122.45	127.00
2	AB	2127	G	N1-C2-N3	-7.57	119.36	123.90
2	AB	2233	U	N1-C1'-C2'	-7.57	103.67	112.00
35	BA	121	U	C5-C4-O4	7.57	130.44	125.90
35	BA	1367	C	N1-C2-N3	-7.57	113.90	119.20
36	BB	41	C	C6-N1-C2	-7.57	117.27	120.30
37	BC	44	U	C3'-C2'-C1'	7.57	107.56	101.50
2	AB	2873	A	O4'-C1'-C2'	-7.57	98.23	105.80
35	BA	113	G	N1-C2-N3	7.57	128.44	123.90
2	AB	348	A	C8-N9-C4	-7.57	102.77	105.80
2	AB	496	G	N3-C4-C5	-7.57	124.81	128.60
2	AB	886	A	N9-C4-C5	-7.57	102.77	105.80
2	AB	1509	A	C4-C5-C6	7.57	120.78	117.00
2	AB	1764	C	C3'-C2'-C1'	-7.57	95.44	101.50
35	BA	603	U	C5-C4-O4	-7.57	121.36	125.90
35	BA	660	C	N1-C1'-C2'	-7.57	103.67	112.00
35	BA	1448	C	O4'-C4'-C3'	7.57	112.16	106.10
2	AB	383	C	N1-C2-O2	7.57	123.44	118.90
2	AB	1429	G	O4'-C1'-N9	-7.57	102.14	108.20
2	AB	2538	C	C5'-C4'-O4'	7.57	118.18	109.10
33	A6	29	ARG	NE-CZ-NH2	7.57	124.08	120.30
35	BA	1029	U	C1'-O4'-C4'	7.57	115.95	109.90
2	AB	625	G	C5'-C4'-O4'	7.57	118.18	109.10
2	AB	799	G	C5-N7-C8	-7.57	100.52	104.30
2	AB	1933	G	N9-C4-C5	7.57	108.43	105.40
25	AY	17	ALA	N-CA-CB	-7.57	99.51	110.10
35	BA	183	C	C2-N3-C4	7.57	123.68	119.90
35	BA	220	G	C6-C5-N7	7.57	134.94	130.40
35	BA	688	G	N3-C2-N2	7.57	125.20	119.90
35	BA	876	C	N1-C1'-C2'	-7.57	103.68	112.00
35	BA	1430	A	N1-C2-N3	-7.57	125.52	129.30
2	AB	915	C	O4'-C4'-C3'	-7.57	96.44	104.00
2	AB	2808	G	N9-C4-C5	7.57	108.43	105.40
35	BA	76	G	C2-N3-C4	7.57	115.68	111.90
35	BA	117	G	C8-N9-C4	-7.56	103.38	106.40
35	BA	207	C	C2-N3-C4	7.56	123.68	119.90
35	BA	646	G	C5-C6-N1	7.56	115.28	111.50
35	BA	969	A	C2-N3-C4	7.56	114.38	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	BE	158	ASP	CB-CG-OD1	-7.56	111.49	118.30
2	AB	712	G	C8-N9-C4	-7.56	103.38	106.40
2	AB	991	C	C2-N3-C4	7.56	123.68	119.90
2	AB	1324	G	C5-C6-O6	7.56	133.14	128.60
2	AB	1854	A	O4'-C1'-N9	7.56	114.25	108.20
35	BA	42	G	N9-C4-C5	7.56	108.42	105.40
35	BA	683	G	C8-N9-C4	-7.56	103.38	106.40
35	BA	1276	G	N3-C4-N9	7.56	130.54	126.00
35	BA	1502	A	N9-C4-C5	7.56	108.83	105.80
2	AB	1587	G	C5'-C4'-O4'	7.56	118.17	109.10
35	BA	677	U	C4-C5-C6	7.56	124.24	119.70
2	AB	879	G	N9-C4-C5	7.56	108.42	105.40
2	AB	894	U	N1-C2-O2	7.56	128.09	122.80
2	AB	1011	G	C5-C6-O6	-7.56	124.06	128.60
2	AB	1156	A	C6-C5-N7	7.56	137.59	132.30
2	AB	1354	A	C5-N7-C8	-7.56	100.12	103.90
2	AB	1571	A	N1-C2-N3	7.56	133.08	129.30
2	AB	2229	U	C5'-C4'-O4'	7.56	118.17	109.10
2	AB	2275	C	N1-C2-O2	7.56	123.44	118.90
2	AB	2389	G	C5-C6-N1	7.56	115.28	111.50
35	BA	861	G	N1-C2-N3	-7.56	119.36	123.90
37	BC	18	A	C5-C6-N6	-7.56	117.65	123.70
2	AB	125	A	C6-N1-C2	7.56	123.14	118.60
2	AB	177	G	N3-C4-N9	7.56	130.53	126.00
2	AB	405	U	N3-C2-O2	-7.56	116.91	122.20
2	AB	1093	G	N9-C1'-C2'	-7.56	103.69	112.00
2	AB	1630	A	C4-C5-C6	-7.56	113.22	117.00
35	BA	583	A	C5-N7-C8	-7.56	100.12	103.90
35	BA	1044	A	N7-C8-N9	7.56	117.58	113.80
35	BA	1455	G	P-O3'-C3'	7.56	128.77	119.70
54	BT	5	ARG	NE-CZ-NH1	7.56	124.08	120.30
2	AB	713	G	C5'-C4'-O4'	7.56	118.17	109.10
2	AB	1116	G	C5-C6-N1	7.56	115.28	111.50
2	AB	1518	C	N1-C1'-C2'	-7.56	103.69	112.00
35	BA	1222	G	N1-C6-O6	7.56	124.43	119.90
38	BD	70	C	N1-C2-O2	7.56	123.43	118.90
2	AB	1838	C	C2-N3-C4	7.55	123.68	119.90
2	AB	2664	G	C4-C5-C6	7.55	123.33	118.80
35	BA	259	G	N1-C6-O6	-7.55	115.37	119.90
35	BA	536	C	P-O3'-C3'	7.55	128.76	119.70
35	BA	620	C	C4-C5-C6	7.55	121.18	117.40
35	BA	764	C	N3-C4-N4	7.55	123.29	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	867	G	O4'-C1'-N9	7.55	114.24	108.20
35	BA	1472	U	O4'-C1'-N1	7.55	114.24	108.20
36	BB	49	G	N1-C2-N3	-7.55	119.37	123.90
40	BF	20	THR	CA-CB-CG2	7.55	122.97	112.40
1	AA	109	A	N9-C4-C5	7.55	108.82	105.80
2	AB	1036	G	C4-C5-C6	7.55	123.33	118.80
2	AB	1242	U	C2-N3-C4	-7.55	122.47	127.00
2	AB	1545	A	C4-C5-N7	-7.55	106.92	110.70
2	AB	2346	A	C8-N9-C4	-7.55	102.78	105.80
35	BA	498	A	N1-C6-N6	7.55	123.13	118.60
35	BA	1503	A	C4-C5-N7	-7.55	106.92	110.70
2	AB	1439	A	O4'-C1'-N9	7.55	114.24	108.20
2	AB	1479	G	N3-C4-C5	-7.55	124.83	128.60
2	AB	1811	G	O4'-C1'-N9	7.55	114.24	108.20
2	AB	2033	A	C5-C6-N1	7.55	121.48	117.70
2	AB	2645	G	C5-C6-N1	7.55	115.28	111.50
2	AB	2709	G	N1-C2-N3	7.55	128.43	123.90
35	BA	156	C	N3-C2-O2	-7.55	116.61	121.90
35	BA	378	G	C8-N9-C4	-7.55	103.38	106.40
35	BA	1435	G	N1-C2-N3	-7.55	119.37	123.90
2	AB	493	G	N3-C4-C5	-7.55	124.83	128.60
2	AB	1294	U	O4'-C1'-N1	7.55	114.24	108.20
2	AB	2761	A	C5-N7-C8	7.55	107.67	103.90
9	AI	7	ASP	CB-CG-OD2	-7.55	111.51	118.30
35	BA	909	A	C2-N3-C4	7.55	114.38	110.60
35	BA	1134	G	N9-C4-C5	7.55	108.42	105.40
2	AB	2620	C	N1-C2-O2	7.55	123.43	118.90
2	AB	2786	U	O4'-C1'-N1	7.55	114.24	108.20
35	BA	1355	G	C4-C5-C6	7.55	123.33	118.80
44	BJ	112	ASP	CB-CG-OD1	-7.55	111.51	118.30
2	AB	47	C	C5-C6-N1	7.55	124.77	121.00
2	AB	1753	G	N3-C2-N2	-7.55	114.62	119.90
35	BA	195	A	C5'-C4'-C3'	-7.55	103.92	116.00
35	BA	1392	G	N1-C6-O6	-7.55	115.37	119.90
35	BA	1411	C	N3-C4-C5	-7.55	118.88	121.90
55	BU	72	ARG	NE-CZ-NH1	7.55	124.07	120.30
35	BA	588	G	N3-C2-N2	-7.54	114.62	119.90
35	BA	1532	U	O4'-C1'-N1	-7.54	102.16	108.20
2	AB	612	G	N3-C4-C5	-7.54	124.83	128.60
2	AB	1438	U	N3-C2-O2	-7.54	116.92	122.20
2	AB	2475	C	C5-C6-N1	7.54	124.77	121.00
35	BA	218	U	N3-C2-O2	-7.54	116.92	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1057	G	N1-C2-N2	7.54	122.99	116.20
2	AB	1022	G	C4-C5-C6	7.54	123.33	118.80
2	AB	2557	G	C8-N9-C4	-7.54	103.38	106.40
2	AB	2663	G	N9-C4-C5	7.54	108.42	105.40
35	BA	434	U	C6-N1-C2	-7.54	116.48	121.00
35	BA	456	A	N3-C4-C5	-7.54	121.52	126.80
35	BA	470	C	N3-C2-O2	-7.54	116.62	121.90
35	BA	1379	G	N9-C4-C5	-7.54	102.38	105.40
35	BA	1379	G	O4'-C1'-N9	7.54	114.23	108.20
2	AB	741	U	N3-C4-O4	7.54	124.68	119.40
35	BA	1386	G	C8-N9-C1'	7.54	136.80	127.00
37	BC	45	G	C5-C6-O6	-7.54	124.08	128.60
2	AB	74	A	C8-N9-C4	-7.54	102.78	105.80
2	AB	184	C	C4'-C3'-C2'	-7.54	95.06	102.60
2	AB	449	A	C3'-C2'-C1'	-7.54	95.47	101.50
2	AB	990	A	C4-C5-N7	-7.54	106.93	110.70
2	AB	1530	G	C8-N9-C4	-7.54	103.38	106.40
2	AB	1940	U	O4'-C1'-N1	7.54	114.23	108.20
21	AU	75	PHE	CB-CG-CD2	-7.54	115.52	120.80
35	BA	111	G	N3-C4-C5	-7.54	124.83	128.60
35	BA	331	G	C8-N9-C4	-7.54	103.39	106.40
35	BA	1496	C	C5-C6-N1	-7.54	117.23	121.00
35	BA	1033	G	N3-C2-N2	-7.54	114.62	119.90
35	BA	1183	U	C6-N1-C2	-7.54	116.48	121.00
35	BA	1387	G	N1-C6-O6	7.54	124.42	119.90
2	AB	1286	A	C5-C6-N6	-7.54	117.67	123.70
2	AB	1689	A	N3-C4-N9	7.54	133.43	127.40
2	AB	1959	G	C2-N3-C4	7.54	115.67	111.90
2	AB	2530	A	C5-N7-C8	7.54	107.67	103.90
35	BA	299	G	C6-N1-C2	-7.54	120.58	125.10
35	BA	824	G	N3-C4-N9	-7.54	121.48	126.00
2	AB	251	A	C5-N7-C8	7.53	107.67	103.90
2	AB	1760	C	C2-N3-C4	7.53	123.67	119.90
2	AB	1913	A	C1'-O4'-C4'	-7.53	103.87	109.90
2	AB	2266	A	C6-N1-C2	7.53	123.12	118.60
35	BA	166	U	C4'-C3'-C2'	-7.53	95.07	102.60
35	BA	243	A	C1'-O4'-C4'	-7.53	103.87	109.90
35	BA	554	A	O4'-C4'-C3'	-7.53	96.47	104.00
35	BA	1216	A	C6-C5-N7	7.53	137.57	132.30
35	BA	1224	U	C6-N1-C2	-7.53	116.48	121.00
2	AB	713	G	C6-N1-C2	-7.53	120.58	125.10
2	AB	1997	C	C4-C5-C6	7.53	121.17	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	168	G	C6-C5-N7	7.53	134.92	130.40
35	BA	1152	A	C8-N9-C4	-7.53	102.79	105.80
2	AB	659	G	N1-C6-O6	-7.53	115.38	119.90
2	AB	1279	G	C6-C5-N7	-7.53	125.88	130.40
2	AB	1993	U	N1-C2-O2	-7.53	117.53	122.80
2	AB	2145	C	N3-C2-O2	-7.53	116.63	121.90
2	AB	2641	G	N1-C2-N2	7.53	122.98	116.20
2	AB	2844	G	O4'-C1'-N9	7.53	114.22	108.20
8	AH	38	ASP	CB-CG-OD2	-7.53	111.52	118.30
12	AL	8	PRO	N-CA-CB	7.53	112.34	103.30
35	BA	187	G	N3-C4-C5	-7.53	124.83	128.60
35	BA	413	G	C6-C5-N7	-7.53	125.88	130.40
35	BA	1108	G	N9-C4-C5	7.53	108.41	105.40
35	BA	1316	G	C8-N9-C4	-7.53	103.39	106.40
2	AB	2499	C	O4'-C1'-N1	7.53	114.22	108.20
2	AB	112	U	O4'-C4'-C3'	7.53	112.12	106.10
2	AB	1959	G	N3-C4-N9	7.53	130.52	126.00
2	AB	2003	A	C5-C6-N6	-7.53	117.68	123.70
2	AB	2245	U	N1-C2-N3	7.53	119.42	114.90
2	AB	2254	C	N3-C4-N4	7.53	123.27	118.00
2	AB	2659	G	N7-C8-N9	7.53	116.86	113.10
35	BA	409	U	O4'-C1'-N1	7.53	114.22	108.20
35	BA	818	G	C2-N3-C4	7.53	115.66	111.90
35	BA	853	C	C5'-C4'-O4'	7.53	118.13	109.10
2	AB	2183	A	C8-N9-C4	-7.53	102.79	105.80
2	AB	2320	U	N1-C2-N3	7.53	119.42	114.90
35	BA	1366	C	C5-C6-N1	7.53	124.76	121.00
2	AB	1106	G	C4-C5-N7	-7.52	107.79	110.80
2	AB	2187	U	C1'-O4'-C4'	7.52	115.92	109.90
35	BA	747	A	N9-C4-C5	-7.52	102.79	105.80
55	BU	60	ARG	NE-CZ-NH2	7.52	124.06	120.30
2	AB	240	C	N3-C2-O2	-7.52	116.63	121.90
2	AB	1055	G	C3'-C2'-C1'	-7.52	95.48	101.50
2	AB	1407	G	C3'-C2'-C1'	-7.52	95.48	101.50
2	AB	2359	C	C6-N1-C2	-7.52	117.29	120.30
2	AB	2553	G	C2-N3-C4	7.52	115.66	111.90
35	BA	5	U	C5-C6-N1	-7.52	118.94	122.70
35	BA	129	A	N1-C2-N3	-7.52	125.54	129.30
35	BA	615	G	C4-C5-N7	-7.52	107.79	110.80
35	BA	1298	U	P-O3'-C3'	7.52	128.73	119.70
35	BA	1469	C	N3-C4-C5	-7.52	118.89	121.90
2	AB	1711	A	C4-C5-C6	-7.52	113.24	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2510	C	N1-C2-O2	7.52	123.41	118.90
35	BA	986	U	C4-C5-C6	7.52	124.21	119.70
35	BA	1260	G	O4'-C1'-N9	-7.52	102.18	108.20
2	AB	331	C	N1-C2-O2	7.52	123.41	118.90
2	AB	495	G	C5-C6-O6	-7.52	124.09	128.60
2	AB	1078	U	N3-C4-C5	-7.52	110.09	114.60
2	AB	1172	C	O4'-C1'-N1	7.52	114.22	108.20
2	AB	2338	C	C6-N1-C2	-7.52	117.29	120.30
2	AB	2585	U	N1-C2-O2	-7.52	117.54	122.80
35	BA	184	G	C1'-O4'-C4'	-7.52	103.88	109.90
35	BA	635	A	C5-N7-C8	7.52	107.66	103.90
38	BD	11	A	C4-C5-C6	-7.52	113.24	117.00
2	AB	851	C	O4'-C1'-N1	7.52	114.21	108.20
2	AB	1178	C	C2-N3-C4	7.52	123.66	119.90
2	AB	1536	C	C2-N3-C4	7.52	123.66	119.90
2	AB	1920	C	N3-C4-N4	-7.52	112.74	118.00
2	AB	2467	C	C2-N3-C4	7.52	123.66	119.90
2	AB	2634	A	N7-C8-N9	-7.52	110.04	113.80
35	BA	143	A	N3-C4-C5	-7.52	121.54	126.80
35	BA	1170	A	C8-N9-C4	-7.52	102.79	105.80
2	AB	2736	A	C3'-C2'-C1'	-7.52	95.49	101.50
35	BA	1380	U	N3-C4-C5	-7.52	110.09	114.60
2	AB	675	A	C2-N3-C4	7.51	114.36	110.60
2	AB	1261	C	O4'-C1'-N1	7.51	114.21	108.20
2	AB	1396	U	P-O3'-C3'	7.51	128.72	119.70
2	AB	2184	A	C4'-C3'-C2'	7.51	110.11	102.60
2	AB	2813	A	C4'-C3'-C2'	-7.51	95.09	102.60
35	BA	46	G	C2-N3-C4	7.51	115.66	111.90
35	BA	351	G	C2-N3-C4	7.51	115.66	111.90
35	BA	971	G	N1-C2-N2	7.51	122.96	116.20
2	AB	1271	G	C6-C5-N7	7.51	134.91	130.40
2	AB	2629	U	C5-C6-N1	-7.51	118.94	122.70
2	AB	2793	C	C6-N1-C2	7.51	123.31	120.30
35	BA	156	C	O4'-C1'-C2'	-7.51	98.29	105.80
35	BA	1113	C	C2-N3-C4	7.51	123.66	119.90
2	AB	114	U	C5-C6-N1	-7.51	118.94	122.70
2	AB	2783	U	C4-C5-C6	7.51	124.21	119.70
17	AQ	36	TYR	CB-CG-CD1	-7.51	116.49	121.00
35	BA	288	A	C5'-C4'-O4'	7.51	118.11	109.10
35	BA	913	A	C5-N7-C8	-7.51	100.14	103.90
2	AB	102	U	C6-N1-C2	-7.51	116.49	121.00
2	AB	262	A	C5-N7-C8	-7.51	100.14	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	699	A	C4-C5-N7	7.51	114.45	110.70
2	AB	1697	G	N3-C4-C5	-7.51	124.84	128.60
2	AB	2008	C	C3'-C2'-C1'	7.51	107.51	101.50
35	BA	870	U	O4'-C1'-N1	7.51	114.21	108.20
35	BA	883	C	C5-C4-N4	7.51	125.46	120.20
38	BD	49	C	P-O5'-C5'	7.51	132.92	120.90
2	AB	111	A	C6-N1-C2	-7.51	114.09	118.60
2	AB	590	A	N1-C6-N6	-7.51	114.09	118.60
2	AB	633	A	C2-N3-C4	7.51	114.35	110.60
2	AB	679	C	C2-N3-C4	-7.51	116.15	119.90
2	AB	1681	G	N3-C4-N9	7.51	130.50	126.00
2	AB	2153	C	C3'-C2'-C1'	7.51	107.51	101.50
2	AB	2589	A	C6-N1-C2	-7.51	114.09	118.60
2	AB	1	G	N3-C4-N9	7.51	130.50	126.00
2	AB	426	C	N3-C4-N4	7.51	123.25	118.00
2	AB	459	U	C2-N3-C4	-7.51	122.50	127.00
2	AB	490	C	N1-C2-O2	7.51	123.40	118.90
2	AB	546	U	C5-C4-O4	-7.51	121.40	125.90
2	AB	927	A	C8-N9-C4	-7.51	102.80	105.80
2	AB	1068	G	C5-C6-N1	7.51	115.25	111.50
2	AB	1230	A	N9-C4-C5	-7.51	102.80	105.80
2	AB	2571	U	C4-C5-C6	7.51	124.20	119.70
35	BA	803	G	C2-N3-C4	7.51	115.65	111.90
35	BA	1015	G	N1-C6-O6	-7.51	115.40	119.90
35	BA	1068	G	N7-C8-N9	7.51	116.85	113.10
35	BA	1146	A	C8-N9-C4	7.51	108.80	105.80
35	BA	1465	A	C8-N9-C4	-7.51	102.80	105.80
38	BD	50	G	N1-C6-O6	-7.51	115.40	119.90
2	AB	627	A	C5-C6-N1	7.50	121.45	117.70
2	AB	1532	A	N9-C4-C5	7.50	108.80	105.80
2	AB	2344	U	N3-C4-C5	-7.50	110.10	114.60
35	BA	1150	A	O4'-C1'-N9	7.50	114.20	108.20
48	BN	92	ARG	NE-CZ-NH1	-7.50	116.55	120.30
2	AB	555	G	C2-N3-C4	7.50	115.65	111.90
2	AB	1078	U	C3'-C2'-C1'	-7.50	95.50	101.50
2	AB	1131	G	C4-C5-C6	7.50	123.30	118.80
2	AB	1261	C	N1-C1'-C2'	-7.50	103.75	112.00
2	AB	1747	U	C1'-O4'-C4'	7.50	115.90	109.90
2	AB	1936	A	C5-N7-C8	7.50	107.65	103.90
2	AB	2009	A	N1-C2-N3	-7.50	125.55	129.30
2	AB	2277	G	C5'-C4'-O4'	7.50	118.10	109.10
35	BA	329	A	N3-C4-C5	-7.50	121.55	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1076	C	C6-N1-C2	-7.50	117.30	120.30
2	AB	1762	A	C6-C5-N7	7.50	137.55	132.30
2	AB	2140	G	N1-C6-O6	7.50	124.40	119.90
2	AB	2490	G	C5-N7-C8	7.50	108.05	104.30
2	AB	2589	A	N3-C4-C5	-7.50	121.55	126.80
35	BA	1133	G	C2-N3-C4	7.50	115.65	111.90
2	AB	2529	G	O4'-C1'-N9	-7.50	102.20	108.20
35	BA	983	A	P-O3'-C3'	7.50	128.70	119.70
35	BA	1164	G	C4-C5-N7	7.50	113.80	110.80
1	AA	97	C	N3-C4-C5	-7.50	118.90	121.90
1	AA	120	U	N1-C2-O2	7.50	128.05	122.80
2	AB	1179	G	N1-C2-N2	7.50	122.95	116.20
35	BA	23	C	O4'-C1'-C2'	-7.50	98.30	105.80
35	BA	676	A	N7-C8-N9	7.50	117.55	113.80
35	BA	867	G	C2-N3-C4	7.50	115.65	111.90
35	BA	1337	G	N3-C4-C5	7.50	132.35	128.60
1	AA	20	G	N3-C4-C5	-7.50	124.85	128.60
2	AB	1236	G	C2-N3-C4	7.50	115.65	111.90
2	AB	2268	A	C4-C5-C6	7.50	120.75	117.00
2	AB	2896	C	P-O5'-C5'	7.50	132.89	120.90
35	BA	577	G	C4-C5-C6	-7.50	114.30	118.80
35	BA	723	U	O4'-C1'-N1	7.50	114.20	108.20
38	BD	38	A	O5'-P-OP2	-7.50	98.95	105.70
1	AA	89	U	C2-N3-C4	-7.49	122.50	127.00
2	AB	15	G	N3-C4-C5	-7.49	124.85	128.60
2	AB	432	A	C5-C6-N1	7.49	121.45	117.70
2	AB	981	A	C2-N3-C4	-7.49	106.85	110.60
2	AB	1078	U	O4'-C1'-N1	7.49	114.19	108.20
2	AB	1459	G	C4-C5-C6	-7.49	114.30	118.80
5	AE	80	TRP	NE1-CE2-CZ2	7.49	138.64	130.40
35	BA	627	G	N7-C8-N9	7.49	116.85	113.10
35	BA	651	C	N3-C4-C5	-7.49	118.90	121.90
35	BA	679	C	N3-C4-N4	7.49	123.25	118.00
35	BA	899	C	C5'-C4'-O4'	7.49	118.09	109.10
35	BA	960	U	C2'-C3'-O3'	7.49	125.98	109.50
35	BA	1102	A	N1-C6-N6	7.49	123.10	118.60
35	BA	1179	A	C6-N1-C2	7.49	123.10	118.60
2	AB	528	A	C5-C6-N1	7.49	121.45	117.70
2	AB	1017	G	C2-N3-C4	7.49	115.65	111.90
35	BA	122	G	N3-C4-N9	7.49	130.50	126.00
2	AB	84	A	C4-C5-C6	-7.49	113.25	117.00
2	AB	501	A	N1-C6-N6	7.49	123.09	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1336	A	N1-C2-N3	-7.49	125.55	129.30
35	BA	499	A	C8-N9-C4	7.49	108.80	105.80
35	BA	608	A	P-O3'-C3'	7.49	128.69	119.70
35	BA	684	U	O4'-C1'-N1	7.49	114.19	108.20
35	BA	1134	G	C8-N9-C4	-7.49	103.40	106.40
2	AB	26	G	C5-N7-C8	-7.49	100.56	104.30
35	BA	708	C	C6-N1-C2	7.49	123.30	120.30
35	BA	871	U	C6-N1-C2	-7.49	116.51	121.00
37	BC	52	U	N1-C2-N3	7.49	119.39	114.90
38	BD	62	C	N3-C4-C5	7.49	124.89	121.90
2	AB	263	G	C2-N3-C4	7.49	115.64	111.90
2	AB	1085	A	C5-N7-C8	7.49	107.64	103.90
35	BA	336	A	N9-C4-C5	-7.49	102.81	105.80
35	BA	601	G	C5-C6-O6	-7.49	124.11	128.60
35	BA	912	C	O4'-C1'-N1	7.49	114.19	108.20
2	AB	199	A	C6-N1-C2	7.49	123.09	118.60
2	AB	337	C	N3-C2-O2	-7.49	116.66	121.90
2	AB	1382	G	C8-N9-C4	-7.49	103.41	106.40
2	AB	2143	C	N3-C4-C5	-7.49	118.91	121.90
35	BA	299	G	O4'-C1'-N9	7.49	114.19	108.20
35	BA	548	G	C5-C6-N1	7.49	115.24	111.50
35	BA	904	U	C6-N1-C2	-7.49	116.51	121.00
35	BA	1024	G	C6-N1-C2	7.49	129.59	125.10
38	BD	50	G	C5-C6-O6	7.49	133.09	128.60
2	AB	2814	A	N9-C4-C5	7.48	108.79	105.80
35	BA	9	G	C4'-C3'-C2'	-7.48	95.12	102.60
2	AB	801	G	C5'-C4'-O4'	7.48	118.08	109.10
2	AB	1003	G	N3-C4-C5	-7.48	124.86	128.60
2	AB	1147	A	C4-C5-C6	-7.48	113.26	117.00
2	AB	1936	A	C4-C5-C6	7.48	120.74	117.00
2	AB	2714	G	C5-C6-O6	-7.48	124.11	128.60
2	AB	2877	G	N3-C2-N2	-7.48	114.66	119.90
2	AB	1038	G	N9-C1'-C2'	-7.48	103.77	112.00
35	BA	75	G	C2-N3-C4	7.48	115.64	111.90
35	BA	203	G	N3-C2-N2	7.48	125.14	119.90
35	BA	540	G	C2-N3-C4	7.48	115.64	111.90
35	BA	1307	U	N3-C2-O2	-7.48	116.96	122.20
2	AB	60	G	C5'-C4'-C3'	-7.48	104.03	116.00
2	AB	1250	G	C4-C5-N7	-7.48	107.81	110.80
2	AB	2371	G	C1'-O4'-C4'	-7.48	103.92	109.90
2	AB	2745	C	C6-N1-C2	7.48	123.29	120.30
35	BA	115	G	C8-N9-C4	-7.48	103.41	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1186	G	N1-C6-O6	-7.48	115.41	119.90
1	AA	106	G	N9-C4-C5	7.48	108.39	105.40
2	AB	63	A	C5'-C4'-O4'	7.48	118.07	109.10
2	AB	80	G	C5-C6-O6	-7.48	124.11	128.60
2	AB	762	U	N3-C2-O2	-7.48	116.97	122.20
2	AB	1520	U	C5-C6-N1	-7.48	118.96	122.70
2	AB	1687	G	O4'-C1'-N9	7.48	114.18	108.20
35	BA	558	G	N9-C4-C5	-7.48	102.41	105.40
35	BA	562	U	C5-C6-N1	-7.48	118.96	122.70
35	BA	631	C	C1'-O4'-C4'	7.48	115.88	109.90
35	BA	676	A	C8-N9-C4	-7.48	102.81	105.80
35	BA	1060	U	N1-C2-N3	7.48	119.39	114.90
2	AB	2461	A	N9-C4-C5	-7.48	102.81	105.80
2	AB	1053	C	N3-C4-C5	7.47	124.89	121.90
2	AB	1118	C	N1-C1'-C2'	-7.47	103.78	112.00
2	AB	1333	G	C5-N7-C8	-7.47	100.56	104.30
2	AB	1447	C	N3-C2-O2	-7.47	116.67	121.90
2	AB	1520	U	N1-C2-N3	7.47	119.39	114.90
35	BA	317	U	N1-C2-O2	-7.47	117.57	122.80
35	BA	775	G	C4-C5-C6	7.47	123.28	118.80
35	BA	926	G	O3'-P-O5'	7.47	118.20	104.00
2	AB	488	G	C2-N3-C4	7.47	115.64	111.90
2	AB	606	U	C5-C4-O4	7.47	130.38	125.90
2	AB	1292	G	C2-N3-C4	7.47	115.64	111.90
2	AB	2290	G	N3-C2-N2	7.47	125.13	119.90
32	A5	40	ALA	CB-CA-C	7.47	121.31	110.10
35	BA	322	C	N3-C2-O2	-7.47	116.67	121.90
35	BA	775	G	C5'-C4'-O4'	7.47	118.07	109.10
39	BE	49	PHE	CB-CG-CD2	7.47	126.03	120.80
2	AB	117	G	N3-C4-C5	-7.47	124.86	128.60
2	AB	386	G	O4'-C4'-C3'	7.47	112.08	106.10
2	AB	1253	A	N3-C4-C5	-7.47	121.57	126.80
2	AB	2888	C	C3'-C2'-C1'	7.47	107.48	101.50
35	BA	626	G	N3-C4-C5	-7.47	124.86	128.60
36	BB	56	C	N3-C2-O2	-7.47	116.67	121.90
1	AA	17	C	C5-C6-N1	-7.47	117.27	121.00
2	AB	470	A	N3-C4-C5	-7.47	121.57	126.80
2	AB	1135	C	C5'-C4'-O4'	7.47	118.06	109.10
35	BA	182	A	C4-C5-C6	7.47	120.73	117.00
35	BA	1430	A	C5-C6-N1	7.47	121.44	117.70
2	AB	2612	C	C5-C6-N1	7.47	124.73	121.00
35	BA	77	A	C2-N3-C4	-7.47	106.87	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	954	G	N3-C4-C5	-7.47	124.87	128.60
53	BS	39	PHE	CB-CG-CD1	-7.47	115.57	120.80
2	AB	708	G	N9-C4-C5	-7.47	102.41	105.40
2	AB	1009	A	C2-N3-C4	7.47	114.33	110.60
2	AB	1640	A	C4-C5-N7	-7.47	106.97	110.70
2	AB	2444	G	O4'-C1'-N9	7.47	114.17	108.20
2	AB	2548	U	O4'-C1'-N1	7.47	114.17	108.20
2	AB	2756	U	C2'-C3'-O3'	7.47	125.93	109.50
2	AB	2779	U	O5'-C5'-C4'	7.47	125.89	111.70
2	AB	2786	U	N3-C2-O2	-7.47	116.97	122.20
35	BA	147	G	N9-C4-C5	7.47	108.39	105.40
35	BA	1373	G	C5'-C4'-O4'	7.47	118.06	109.10
35	BA	1428	A	C8-N9-C4	-7.47	102.81	105.80
46	BL	89	TYR	CG-CD1-CE1	-7.47	115.33	121.30
2	AB	813	U	N3-C4-O4	7.46	124.62	119.40
2	AB	834	G	C6-C5-N7	-7.46	125.92	130.40
2	AB	1763	G	O4'-C1'-N9	7.46	114.17	108.20
2	AB	2541	A	C8-N9-C4	-7.46	102.81	105.80
14	AN	69	ARG	NH1-CZ-NH2	-7.46	111.19	119.40
35	BA	49	U	C5-C4-O4	-7.46	121.42	125.90
35	BA	104	G	C5'-C4'-O4'	7.46	118.06	109.10
2	AB	312	G	N3-C4-C5	-7.46	124.87	128.60
2	AB	484	C	C1'-O4'-C4'	-7.46	103.93	109.90
2	AB	903	C	C6-N1-C2	-7.46	117.32	120.30
2	AB	978	G	C4-C5-N7	-7.46	107.81	110.80
2	AB	1199	U	N3-C2-O2	-7.46	116.98	122.20
2	AB	1675	C	O4'-C1'-N1	7.46	114.17	108.20
2	AB	2105	U	C5-C4-O4	-7.46	121.42	125.90
35	BA	982	U	C6-N1-C2	-7.46	116.52	121.00
2	AB	2564	A	C4-C5-C6	7.46	120.73	117.00
2	AB	2660	A	C4-C5-C6	-7.46	113.27	117.00
27	A0	48	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	AA	112	G	N9-C1'-C2'	-7.46	103.80	112.00
2	AB	518	G	C5-C6-O6	-7.46	124.12	128.60
2	AB	1891	G	C2-N3-C4	7.46	115.63	111.90
2	AB	2862	G	C8-N9-C4	7.46	109.38	106.40
35	BA	39	G	C6-C5-N7	7.46	134.88	130.40
35	BA	57	G	C4-C5-N7	7.46	113.78	110.80
35	BA	211	G	C5'-C4'-O4'	7.46	118.05	109.10
35	BA	424	G	N7-C8-N9	7.46	116.83	113.10
35	BA	548	G	C6-N1-C2	-7.46	120.62	125.10
2	AB	140	C	N3-C4-C5	-7.46	118.92	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	900	A	C2'-C3'-O3'	7.46	125.90	109.50
2	AB	1032	A	C3'-C2'-C1'	7.46	107.47	101.50
2	AB	1294	U	O4'-C4'-C3'	-7.46	96.54	104.00
2	AB	1503	A	N1-C2-N3	7.46	133.03	129.30
2	AB	1856	U	N1-C2-N3	7.46	119.37	114.90
2	AB	1896	G	N3-C4-C5	-7.46	124.87	128.60
2	AB	1907	G	C8-N9-C4	-7.46	103.42	106.40
2	AB	1988	G	N9-C1'-C2'	-7.46	103.80	112.00
2	AB	2729	G	N9-C4-C5	7.46	108.38	105.40
6	AF	14	VAL	CA-CB-CG2	7.46	122.08	110.90
2	AB	477	A	O4'-C1'-N9	7.46	114.16	108.20
2	AB	2468	A	C5-C6-N6	7.46	129.66	123.70
35	BA	508	U	C6-N1-C2	-7.46	116.53	121.00
35	BA	831	A	N9-C1'-C2'	-7.46	103.80	112.00
35	BA	1017	U	N3-C2-O2	-7.46	116.98	122.20
35	BA	1461	G	C5-C6-N1	7.46	115.23	111.50
36	BB	38	A	C1'-O4'-C4'	-7.46	103.94	109.90
1	AA	79	G	N9-C4-C5	7.45	108.38	105.40
2	AB	531	C	N3-C4-C5	-7.45	118.92	121.90
2	AB	590	A	C5-C6-N1	7.45	121.43	117.70
2	AB	850	U	N3-C4-C5	-7.45	110.13	114.60
2	AB	915	C	C5'-C4'-O4'	7.45	118.04	109.10
2	AB	971	G	C4-C5-C6	7.45	123.27	118.80
2	AB	1832	C	C4'-C3'-C2'	-7.45	95.15	102.60
35	BA	423	G	C4-C5-N7	-7.45	107.82	110.80
2	AB	1152	C	C2-N3-C4	7.45	123.63	119.90
2	AB	1519	G	N3-C4-N9	7.45	130.47	126.00
2	AB	2688	G	C4-C5-N7	7.45	113.78	110.80
35	BA	1201	A	C4-C5-C6	-7.45	113.27	117.00
35	BA	1291	U	C4'-C3'-C2'	-7.45	95.15	102.60
35	BA	1436	U	N3-C2-O2	-7.45	116.98	122.20
2	AB	1239	G	C5'-C4'-O4'	7.45	118.04	109.10
2	AB	1404	C	C3'-C2'-C1'	7.45	107.46	101.50
2	AB	1693	U	N3-C2-O2	-7.45	116.98	122.20
2	AB	1851	U	C5-C4-O4	-7.45	121.43	125.90
2	AB	2165	C	C6-N1-C2	7.45	123.28	120.30
2	AB	2514	U	O5'-P-OP2	-7.45	99.00	105.70
2	AB	2683	C	C2-N3-C4	7.45	123.62	119.90
35	BA	1386	G	N9-C4-C5	7.45	108.38	105.40
2	AB	284	U	N1-C2-N3	7.45	119.37	114.90
2	AB	386	G	C6-N1-C2	-7.45	120.63	125.10
2	AB	1699	G	C6-C5-N7	-7.45	125.93	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2109	U	C6-N1-C2	-7.45	116.53	121.00
2	AB	2116	G	N9-C4-C5	-7.45	102.42	105.40
7	AG	101	ARG	NE-CZ-NH1	-7.45	116.58	120.30
13	AM	108	ARG	NE-CZ-NH1	-7.45	116.58	120.30
35	BA	358	U	C6-N1-C2	-7.45	116.53	121.00
35	BA	581	G	C4-C5-N7	7.45	113.78	110.80
2	AB	44	A	C5'-C4'-O4'	7.45	118.04	109.10
2	AB	263	G	N1-C2-N3	-7.45	119.43	123.90
2	AB	2402	U	C4'-C3'-C2'	-7.45	95.15	102.60
4	AD	211	ARG	NE-CZ-NH2	7.45	124.02	120.30
1	AA	119	A	O4'-C1'-N9	7.45	114.16	108.20
2	AB	671	C	C5-C6-N1	-7.45	117.28	121.00
2	AB	1557	C	C4-C5-C6	-7.45	113.68	117.40
2	AB	2185	U	N1-C1'-C2'	-7.45	103.81	112.00
2	AB	2468	A	C4-C5-N7	-7.45	106.98	110.70
35	BA	249	U	C6-N1-C2	-7.45	116.53	121.00
35	BA	347	G	C4-C5-C6	7.45	123.27	118.80
35	BA	766	A	N1-C2-N3	-7.45	125.58	129.30
35	BA	1074	G	N3-C4-N9	7.45	130.47	126.00
35	BA	272	C	O4'-C1'-N1	7.44	114.16	108.20
35	BA	881	G	C6-N1-C2	-7.44	120.63	125.10
2	AB	2607	G	C5-C6-O6	-7.44	124.14	128.60
2	AB	2648	G	N1-C2-N3	-7.44	119.44	123.90
2	AB	2785	C	N3-C4-C5	-7.44	118.92	121.90
35	BA	230	G	C5-C6-N1	7.44	115.22	111.50
35	BA	670	G	N1-C6-O6	7.44	124.37	119.90
35	BA	703	G	C8-N9-C4	-7.44	103.42	106.40
35	BA	969	A	N3-C4-C5	-7.44	121.59	126.80
1	AA	71	C	O4'-C1'-N1	7.44	114.15	108.20
1	AA	75	G	C4-C5-C6	7.44	123.26	118.80
2	AB	1263	U	C2-N3-C4	-7.44	122.54	127.00
2	AB	2301	C	C5-C6-N1	-7.44	117.28	121.00
2	AB	2384	U	N3-C2-O2	-7.44	116.99	122.20
19	AS	75	TYR	CG-CD1-CE1	-7.44	115.35	121.30
35	BA	47	C	C5'-C4'-C3'	-7.44	104.10	116.00
35	BA	548	G	N3-C4-N9	7.44	130.47	126.00
35	BA	1222	G	O4'-C1'-N9	7.44	114.15	108.20
36	BB	10	G	N3-C2-N2	-7.44	114.69	119.90
2	AB	452	G	C5'-C4'-O4'	7.44	118.03	109.10
35	BA	360	G	O4'-C1'-N9	7.44	114.15	108.20
35	BA	977	A	C4'-C3'-C2'	7.44	110.04	102.60
35	BA	997	U	C6-N1-C2	-7.44	116.54	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1503	A	N1-C6-N6	7.44	123.06	118.60
2	AB	210	C	N1-C2-O2	7.44	123.36	118.90
2	AB	226	A	C2-N3-C4	7.44	114.32	110.60
2	AB	419	U	C1'-O4'-C4'	7.44	115.85	109.90
2	AB	484	C	C6-N1-C2	7.44	123.28	120.30
2	AB	1518	C	O4'-C1'-N1	7.44	114.15	108.20
2	AB	2186	G	C5-C6-O6	-7.44	124.14	128.60
2	AB	2803	G	N1-C6-O6	-7.44	115.44	119.90
21	AU	86	MET	CA-CB-CG	-7.44	100.66	113.30
35	BA	1131	G	N7-C8-N9	7.44	116.82	113.10
35	BA	1445	U	O4'-C1'-N1	7.44	114.15	108.20
2	AB	1124	G	C8-N9-C4	-7.44	103.43	106.40
2	AB	1147	A	C4-C5-N7	7.44	114.42	110.70
35	BA	572	A	N1-C2-N3	-7.44	125.58	129.30
38	BD	29	C	C6-N1-C2	-7.44	117.33	120.30
2	AB	55	G	C5-C6-N1	7.43	115.22	111.50
2	AB	328	U	P-O3'-C3'	7.43	128.62	119.70
2	AB	408	G	N9-C4-C5	7.43	108.37	105.40
2	AB	716	A	C6-N1-C2	-7.43	114.14	118.60
2	AB	1545	A	C3'-C2'-C1'	-7.43	95.55	101.50
13	AM	71	ARG	NE-CZ-NH2	7.43	124.02	120.30
35	BA	1354	U	C5'-C4'-O4'	7.43	118.02	109.10
2	AB	869	G	C6-N1-C2	-7.43	120.64	125.10
2	AB	1921	G	N3-C4-C5	-7.43	124.88	128.60
2	AB	1931	U	N3-C2-O2	-7.43	117.00	122.20
2	AB	2746	U	O4'-C1'-N1	7.43	114.15	108.20
35	BA	502	A	N1-C6-N6	7.43	123.06	118.60
2	AB	817	C	O4'-C1'-N1	7.43	114.14	108.20
2	AB	1002	G	N9-C4-C5	7.43	108.37	105.40
2	AB	1089	A	P-O3'-C3'	7.43	128.62	119.70
2	AB	1724	G	C6-N1-C2	-7.43	120.64	125.10
35	BA	315	A	O4'-C1'-N9	7.43	114.14	108.20
35	BA	815	A	C8-N9-C4	-7.43	102.83	105.80
37	BC	59	A	C4-C5-N7	-7.43	106.98	110.70
2	AB	2593	U	C1'-O4'-C4'	-7.43	103.96	109.90
2	AB	2671	G	N3-C4-C5	-7.43	124.89	128.60
35	BA	198	G	N1-C2-N2	7.43	122.89	116.20
35	BA	642	A	C5-C6-N6	-7.43	117.76	123.70
35	BA	898	G	C5-C6-N1	7.43	115.21	111.50
35	BA	1110	A	C5-C6-N6	-7.43	117.76	123.70
38	BD	31	G	N1-C6-O6	7.43	124.36	119.90
2	AB	296	U	C2-N3-C4	-7.43	122.54	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	363	G	C5-N7-C8	-7.43	100.59	104.30
2	AB	630	G	C4-C5-N7	7.43	113.77	110.80
2	AB	1550	C	O4'-C1'-N1	7.43	114.14	108.20
2	AB	2038	G	N3-C2-N2	-7.43	114.70	119.90
37	BC	18	A	C1'-O4'-C4'	-7.43	103.96	109.90
1	AA	53	A	C5-C6-N6	-7.43	117.76	123.70
2	AB	370	G	O4'-C4'-C3'	7.43	112.04	106.10
2	AB	1495	A	N3-C4-N9	7.43	133.34	127.40
2	AB	1883	U	C5-C4-O4	-7.43	121.44	125.90
2	AB	2429	G	C3'-C2'-C1'	7.43	107.44	101.50
35	BA	464	U	O4'-C1'-N1	7.43	114.14	108.20
35	BA	767	A	C4'-C3'-C2'	-7.43	95.17	102.60
35	BA	1250	A	C5'-C4'-O4'	7.43	118.01	109.10
35	BA	1321	U	N3-C2-O2	-7.43	117.00	122.20
40	BF	28	PHE	CB-CG-CD2	-7.43	115.60	120.80
2	AB	119	A	C1'-O4'-C4'	-7.42	103.96	109.90
2	AB	543	G	C3'-C2'-C1'	7.42	107.44	101.50
2	AB	981	A	C8-N9-C4	-7.42	102.83	105.80
2	AB	1152	C	O4'-C1'-N1	7.42	114.14	108.20
2	AB	1531	C	N1-C2-O2	7.42	123.35	118.90
2	AB	1615	C	C4-C5-C6	7.42	121.11	117.40
2	AB	1984	G	C5-C6-N1	-7.42	107.79	111.50
2	AB	2199	A	O4'-C1'-N9	7.42	114.14	108.20
2	AB	2322	A	C1'-O4'-C4'	-7.42	103.96	109.90
2	AB	2569	G	N7-C8-N9	-7.42	109.39	113.10
2	AB	2782	G	C2-N3-C4	7.42	115.61	111.90
35	BA	106	C	C4-C5-C6	-7.42	113.69	117.40
35	BA	220	G	C5-C6-N1	7.42	115.21	111.50
35	BA	399	G	N3-C2-N2	-7.42	114.70	119.90
35	BA	540	G	N3-C4-C5	-7.42	124.89	128.60
35	BA	1152	A	N7-C8-N9	7.42	117.51	113.80
38	BD	47	A	N1-C6-N6	7.42	123.06	118.60
1	AA	83	G	N3-C4-C5	-7.42	124.89	128.60
2	AB	807	U	C2-N3-C4	-7.42	122.55	127.00
2	AB	2598	A	P-O3'-C3'	7.42	128.61	119.70
2	AB	2708	G	P-O3'-C3'	7.42	128.61	119.70
35	BA	68	G	C6-C5-N7	-7.42	125.95	130.40
2	AB	236	C	C4-C5-C6	-7.42	113.69	117.40
2	AB	2290	G	N9-C4-C5	7.42	108.37	105.40
35	BA	777	A	C6-N1-C2	7.42	123.05	118.60
35	BA	843	U	O4'-C1'-N1	7.42	114.14	108.20
35	BA	863	U	O4'-C1'-N1	7.42	114.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1428	A	N1-C2-N3	-7.42	125.59	129.30
35	BA	1462	C	N3-C4-C5	-7.42	118.93	121.90
2	AB	976	G	N9-C4-C5	7.42	108.37	105.40
35	BA	577	G	O4'-C1'-C2'	-7.42	98.38	105.80
35	BA	689	C	N3-C2-O2	-7.42	116.71	121.90
2	AB	836	G	C2-N3-C4	-7.42	108.19	111.90
2	AB	1564	C	C5'-C4'-O4'	7.42	118.00	109.10
2	AB	1750	G	C6-C5-N7	-7.42	125.95	130.40
35	BA	678	U	C5-C4-O4	-7.42	121.45	125.90
35	BA	918	A	O4'-C4'-C3'	7.42	112.03	106.10
35	BA	998	C	C1'-O4'-C4'	-7.42	103.97	109.90
35	BA	1145	A	N9-C4-C5	7.42	108.77	105.80
35	BA	1530	G	C8-N9-C4	-7.42	103.43	106.40
1	AA	71	C	C4-C5-C6	-7.42	113.69	117.40
2	AB	109	C	N3-C4-C5	7.42	124.87	121.90
2	AB	1349	C	C5'-C4'-C3'	-7.42	104.13	116.00
2	AB	2252	G	C4-C5-N7	-7.42	107.83	110.80
2	AB	2369	A	C6-C5-N7	7.42	137.49	132.30
42	BH	28	ARG	CD-NE-CZ	7.42	133.98	123.60
35	BA	413	G	N1-C2-N2	7.42	122.87	116.20
35	BA	644	U	C3'-C2'-C1'	-7.42	95.57	101.50
39	BE	15	PHE	CB-CG-CD2	-7.42	115.61	120.80
2	AB	389	G	C5-C6-N1	7.41	115.21	111.50
2	AB	642	U	C4-C5-C6	7.41	124.15	119.70
2	AB	1787	A	C6-N1-C2	-7.41	114.15	118.60
35	BA	413	G	O4'-C1'-N9	7.41	114.13	108.20
35	BA	506	G	C6-N1-C2	-7.41	120.65	125.10
35	BA	617	G	N3-C4-C5	-7.41	124.89	128.60
35	BA	1229	A	O3'-P-O5'	-7.41	89.92	104.00
2	AB	409	G	O4'-C1'-N9	7.41	114.13	108.20
2	AB	768	G	C6-C5-N7	7.41	134.85	130.40
2	AB	1595	C	C4'-C3'-C2'	-7.41	95.19	102.60
2	AB	1724	G	C5'-C4'-O4'	7.41	117.99	109.10
35	BA	1422	G	C2-N3-C4	7.41	115.61	111.90
2	AB	69	C	C6-N1-C2	-7.41	117.34	120.30
2	AB	654	A	N1-C6-N6	-7.41	114.15	118.60
2	AB	1540	G	C4-C5-N7	-7.41	107.84	110.80
2	AB	1862	G	C5-C6-O6	-7.41	124.15	128.60
2	AB	2597	G	C8-N9-C4	-7.41	103.44	106.40
35	BA	545	C	C5-C4-N4	-7.41	115.01	120.20
35	BA	1381	U	C5-C4-O4	7.41	130.35	125.90
2	AB	1	G	C5-C6-N1	7.41	115.20	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	595	C	O4'-C1'-N1	7.41	114.13	108.20
2	AB	724	U	N1-C2-N3	7.41	119.34	114.90
2	AB	1373	A	C2-N3-C4	7.41	114.30	110.60
2	AB	1823	G	N1-C2-N3	-7.41	119.45	123.90
2	AB	1892	C	C5'-C4'-O4'	7.41	117.99	109.10
2	AB	2239	G	N1-C2-N3	-7.41	119.45	123.90
2	AB	2535	G	O4'-C1'-N9	7.41	114.13	108.20
35	BA	980	C	C4-C5-C6	-7.41	113.70	117.40
35	BA	1345	U	C2-N3-C4	-7.41	122.56	127.00
35	BA	1494	G	N3-C4-C5	-7.41	124.90	128.60
2	AB	735	A	C2-N3-C4	7.41	114.30	110.60
2	AB	749	A	N9-C4-C5	7.41	108.76	105.80
2	AB	829	A	C4-C5-C6	7.41	120.70	117.00
2	AB	865	C	C5-C6-N1	7.41	124.70	121.00
2	AB	1324	G	C2-N3-C4	-7.41	108.20	111.90
35	BA	45	G	N7-C8-N9	7.41	116.80	113.10
38	BD	17	C	C3'-C2'-C1'	7.41	107.43	101.50
2	AB	210	C	O4'-C1'-N1	7.41	114.12	108.20
2	AB	837	C	N3-C4-C5	-7.41	118.94	121.90
2	AB	2383	G	N3-C4-N9	7.41	130.44	126.00
2	AB	2415	G	N3-C2-N2	7.41	125.08	119.90
2	AB	2812	G	C5'-C4'-O4'	7.41	117.98	109.10
35	BA	231	U	N3-C2-O2	-7.41	117.02	122.20
35	BA	1245	C	N3-C2-O2	-7.41	116.72	121.90
2	AB	1709	U	C2-N3-C4	-7.40	122.56	127.00
15	AO	44	ARG	NE-CZ-NH2	7.40	124.00	120.30
35	BA	207	C	N3-C4-C5	-7.40	118.94	121.90
35	BA	314	C	N1-C2-O2	7.40	123.34	118.90
1	AA	54	G	C2'-C3'-O3'	7.40	125.78	109.50
2	AB	592	A	C5-C6-N1	7.40	121.40	117.70
2	AB	2881	U	N3-C2-O2	-7.40	117.02	122.20
35	BA	14	U	N3-C2-O2	-7.40	117.02	122.20
56	BV	60	PHE	CB-CG-CD1	-7.40	115.62	120.80
2	AB	1137	G	N9-C4-C5	-7.40	102.44	105.40
2	AB	2027	G	C8-N9-C4	-7.40	103.44	106.40
11	AK	133	ARG	NE-CZ-NH1	7.40	124.00	120.30
35	BA	601	G	C2-N3-C4	7.40	115.60	111.90
35	BA	954	G	C5-N7-C8	-7.40	100.60	104.30
35	BA	1311	A	N3-C4-C5	-7.40	121.62	126.80
1	AA	32	U	C1'-O4'-C4'	-7.40	103.98	109.90
2	AB	175	G	C4'-C3'-C2'	-7.40	95.20	102.60
2	AB	1686	C	C5-C6-N1	-7.40	117.30	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	895	G	C5'-C4'-O4'	7.40	117.98	109.10
35	BA	1064	G	N1-C2-N2	-7.40	109.54	116.20
37	BC	22	G	C2'-C3'-O3'	7.40	125.78	109.50
1	AA	47	C	C5-C6-N1	7.40	124.70	121.00
2	AB	1236	G	C5-C6-N1	7.40	115.20	111.50
2	AB	2019	A	P-O3'-C3'	7.40	128.58	119.70
2	AB	2206	C	N1-C2-N3	-7.40	114.02	119.20
2	AB	2598	A	C6-N1-C2	7.40	123.04	118.60
35	BA	116	A	C5-C6-N1	7.40	121.40	117.70
35	BA	343	U	C5'-C4'-O4'	7.40	117.98	109.10
35	BA	784	A	C1'-O4'-C4'	-7.40	103.98	109.90
35	BA	928	G	P-O3'-C3'	7.40	128.58	119.70
35	BA	1233	G	N3-C2-N2	-7.40	114.72	119.90
35	BA	1454	G	C6-C5-N7	-7.40	125.96	130.40
2	AB	654	A	C2-N3-C4	7.40	114.30	110.60
2	AB	2606	C	N3-C2-O2	-7.40	116.72	121.90
36	BB	11	U	O4'-C1'-N1	7.40	114.12	108.20
2	AB	539	G	C5-C6-N1	-7.39	107.80	111.50
2	AB	2740	A	N7-C8-N9	7.39	117.50	113.80
35	BA	94	G	C2-N3-C4	7.39	115.60	111.90
35	BA	122	G	N1-C6-O6	-7.39	115.46	119.90
35	BA	449	G	P-O3'-C3'	7.39	128.57	119.70
35	BA	463	U	O4'-C1'-N1	7.39	114.12	108.20
35	BA	987	G	C5-C6-N1	7.39	115.20	111.50
35	BA	1250	A	C2-N3-C4	7.39	114.30	110.60
35	BA	1338	G	N3-C4-C5	-7.39	124.90	128.60
35	BA	1363	A	C8-N9-C4	-7.39	102.84	105.80
2	AB	634	C	C4-C5-C6	-7.39	113.70	117.40
2	AB	969	G	O4'-C1'-N9	7.39	114.11	108.20
2	AB	2522	U	O4'-C1'-N1	7.39	114.11	108.20
11	AK	57	VAL	CA-CB-CG2	7.39	121.99	110.90
35	BA	26	A	C8-N9-C4	-7.39	102.84	105.80
35	BA	828	U	C4'-C3'-C2'	-7.39	95.21	102.60
35	BA	1137	C	N3-C4-C5	-7.39	118.94	121.90
35	BA	1382	C	C4-C5-C6	-7.39	113.70	117.40
2	AB	42	A	N7-C8-N9	-7.39	110.11	113.80
2	AB	251	A	C2-N3-C4	-7.39	106.91	110.60
2	AB	285	G	C5-C6-N1	7.39	115.19	111.50
2	AB	970	U	C5-C4-O4	-7.39	121.47	125.90
2	AB	1160	G	C4'-C3'-C2'	-7.39	95.21	102.60
52	BR	79	ARG	CD-NE-CZ	7.39	133.94	123.60
1	AA	44	G	C8-N9-C4	-7.39	103.44	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1185	G	C8-N9-C1'	7.39	136.60	127.00
2	AB	2608	G	C4'-C3'-C2'	-7.39	95.21	102.60
35	BA	576	C	C6-N1-C2	7.39	123.25	120.30
35	BA	1250	A	C4-C5-C6	7.39	120.69	117.00
2	AB	390	U	C5-C4-O4	-7.39	121.47	125.90
2	AB	556	A	C1'-O4'-C4'	-7.39	103.99	109.90
2	AB	1043	C	C2-N3-C4	7.39	123.59	119.90
2	AB	1242	U	C6-N1-C2	-7.39	116.57	121.00
2	AB	2066	C	C1'-O4'-C4'	7.39	115.81	109.90
2	AB	2102	G	C6-N1-C2	-7.39	120.67	125.10
2	AB	2747	G	N7-C8-N9	7.39	116.79	113.10
35	BA	450	G	C5-C6-O6	-7.39	124.17	128.60
35	BA	565	U	C5-C4-O4	7.39	130.33	125.90
2	AB	1248	G	C8-N9-C4	7.38	109.35	106.40
2	AB	1467	U	C6-N1-C2	-7.38	116.57	121.00
2	AB	1742	U	C1'-O4'-C4'	-7.38	103.99	109.90
2	AB	2440	C	C4-C5-C6	7.38	121.09	117.40
2	AB	2786	U	N1-C2-O2	7.38	127.97	122.80
35	BA	1537	U	C5-C4-O4	7.38	130.33	125.90
2	AB	93	G	C5-C6-N1	-7.38	107.81	111.50
2	AB	2507	C	O4'-C1'-C2'	7.38	114.25	107.60
20	AT	35	PHE	CB-CG-CD2	7.38	125.97	120.80
35	BA	710	G	C4'-C3'-C2'	-7.38	95.22	102.60
1	AA	101	A	C8-N9-C4	-7.38	102.85	105.80
2	AB	481	G	N9-C4-C5	7.38	108.35	105.40
2	AB	579	G	C5'-C4'-O4'	7.38	117.96	109.10
2	AB	1926	U	C4'-C3'-C2'	-7.38	95.22	102.60
2	AB	2206	C	N3-C4-C5	-7.38	118.95	121.90
2	AB	2241	A	O4'-C1'-N9	7.38	114.11	108.20
2	AB	2271	G	N1-C2-N3	-7.38	119.47	123.90
35	BA	424	G	N3-C4-C5	-7.38	124.91	128.60
35	BA	616	G	C8-N9-C4	-7.38	103.45	106.40
35	BA	685	G	C5-C6-N1	-7.38	107.81	111.50
35	BA	913	A	C1'-O4'-C4'	7.38	115.81	109.90
35	BA	936	C	N3-C2-O2	-7.38	116.73	121.90
35	BA	1517	G	N1-C2-N3	-7.38	119.47	123.90
2	AB	1127	A	C2-N3-C4	7.38	114.29	110.60
2	AB	2332	C	O4'-C1'-N1	7.38	114.10	108.20
35	BA	372	C	P-O3'-C3'	7.38	128.56	119.70
35	BA	579	A	C3'-C2'-C1'	7.38	107.40	101.50
2	AB	660	C	N1-C2-O2	7.38	123.33	118.90
2	AB	913	U	N3-C4-O4	-7.38	114.23	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1220	G	N3-C4-N9	7.38	130.43	126.00
2	AB	1454	C	C6-N1-C2	7.38	123.25	120.30
2	AB	1588	G	C2-N3-C4	7.38	115.59	111.90
2	AB	1845	G	C5'-C4'-O4'	7.38	117.95	109.10
2	AB	1929	G	N9-C4-C5	7.38	108.35	105.40
2	AB	1967	C	C1'-O4'-C4'	-7.38	104.00	109.90
35	BA	144	G	C4'-C3'-C2'	-7.38	95.22	102.60
35	BA	319	G	C6-N1-C2	-7.38	120.67	125.10
35	BA	436	C	N3-C4-N4	7.38	123.16	118.00
35	BA	721	G	C8-N9-C4	-7.38	103.45	106.40
35	BA	1049	U	N1-C2-O2	7.38	127.97	122.80
35	BA	1297	G	C6-N1-C2	-7.38	120.67	125.10
35	BA	1510	C	N3-C4-N4	7.38	123.17	118.00
1	AA	109	A	N3-C4-C5	-7.38	121.64	126.80
2	AB	81	G	C2-N3-C4	7.38	115.59	111.90
2	AB	708	G	C4-N9-C1'	-7.38	116.91	126.50
2	AB	1058	U	N3-C2-O2	-7.38	117.04	122.20
2	AB	1134	A	O4'-C1'-N9	7.38	114.10	108.20
35	BA	503	C	C4-C5-C6	-7.38	113.71	117.40
35	BA	586	C	C2-N3-C4	-7.38	116.21	119.90
35	BA	825	A	O4'-C1'-N9	7.38	114.10	108.20
35	BA	864	A	N1-C2-N3	7.38	132.99	129.30
35	BA	1169	A	C4-C5-N7	-7.38	107.01	110.70
35	BA	1529	G	O4'-C4'-C3'	7.38	112.00	106.10
38	BD	54	G	N1-C2-N2	7.38	122.84	116.20
2	AB	406	G	C5-C6-O6	-7.38	124.17	128.60
2	AB	2204	G	N9-C1'-C2'	-7.38	103.89	112.00
35	BA	934	C	N1-C1'-C2'	7.38	123.59	114.00
35	BA	1021	A	C4-C5-C6	-7.38	113.31	117.00
2	AB	125	A	O4'-C1'-N9	7.37	114.10	108.20
2	AB	1125	G	O4'-C1'-N9	7.37	114.10	108.20
2	AB	1766	G	C6-C5-N7	-7.37	125.98	130.40
2	AB	2887	A	C5'-C4'-O4'	7.37	117.95	109.10
35	BA	268	U	N3-C4-C5	-7.37	110.17	114.60
35	BA	297	G	C4-C5-N7	7.37	113.75	110.80
35	BA	364	A	C2-N3-C4	7.37	114.29	110.60
35	BA	1232	U	C5'-C4'-O4'	7.37	117.95	109.10
2	AB	369	U	O4'-C1'-N1	7.37	114.10	108.20
2	AB	1373	A	C4'-C3'-C2'	-7.37	95.23	102.60
35	BA	236	A	N1-C2-N3	-7.37	125.61	129.30
35	BA	446	G	N3-C2-N2	-7.37	114.74	119.90
35	BA	1072	G	C6-N1-C2	-7.37	120.68	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1110	A	N9-C4-C5	-7.37	102.85	105.80
35	BA	1153	G	C4-C5-N7	-7.37	107.85	110.80
35	BA	1165	U	N3-C2-O2	-7.37	117.04	122.20
35	BA	1236	A	C6-N1-C2	-7.37	114.18	118.60
35	BA	1306	A	C8-N9-C4	-7.37	102.85	105.80
35	BA	1381	U	N3-C4-C5	-7.37	110.18	114.60
2	AB	55	G	O4'-C1'-N9	7.37	114.10	108.20
2	AB	255	A	O4'-C1'-N9	7.37	114.10	108.20
2	AB	1776	G	O4'-C1'-N9	7.37	114.10	108.20
2	AB	1958	C	C6-N1-C2	7.37	123.25	120.30
2	AB	2075	U	N1-C2-O2	7.37	127.96	122.80
2	AB	2381	A	N1-C2-N3	-7.37	125.61	129.30
35	BA	908	A	N1-C2-N3	-7.37	125.61	129.30
35	BA	1383	C	N3-C2-O2	-7.37	116.74	121.90
1	AA	111	U	N3-C4-O4	7.37	124.56	119.40
2	AB	86	G	C5-N7-C8	-7.37	100.62	104.30
2	AB	1408	G	N1-C2-N3	7.37	128.32	123.90
2	AB	2545	G	N7-C8-N9	7.37	116.78	113.10
35	BA	311	C	O4'-C1'-N1	7.37	114.09	108.20
35	BA	929	G	P-O3'-C3'	7.37	128.54	119.70
35	BA	1225	A	N9-C4-C5	7.37	108.75	105.80
2	AB	70	G	C5'-C4'-O4'	7.37	117.94	109.10
35	BA	529	G	O4'-C4'-C3'	7.37	111.99	106.10
35	BA	713	G	C4-C5-N7	-7.37	107.85	110.80
35	BA	1163	A	C4'-C3'-C2'	7.37	109.97	102.60
56	BV	60	PHE	CB-CG-CD2	7.37	125.96	120.80
1	AA	7	G	C4-C5-C6	7.37	123.22	118.80
1	AA	84	G	O4'-C1'-N9	-7.37	102.31	108.20
2	AB	43	G	C6-N1-C2	-7.37	120.68	125.10
2	AB	1197	G	C4-C5-N7	7.37	113.75	110.80
2	AB	1256	G	N3-C2-N2	-7.37	114.74	119.90
2	AB	1560	G	O4'-C1'-N9	-7.37	102.31	108.20
2	AB	2228	G	N1-C6-O6	-7.37	115.48	119.90
35	BA	55	A	O4'-C1'-N9	7.37	114.09	108.20
36	BB	67	G	C5'-C4'-C3'	-7.37	104.22	116.00
2	AB	87	U	C5-C6-N1	-7.36	119.02	122.70
2	AB	1525	A	N1-C6-N6	-7.36	114.18	118.60
2	AB	2279	G	C5-N7-C8	-7.36	100.62	104.30
2	AB	2328	A	C5-N7-C8	7.36	107.58	103.90
35	BA	107	G	N7-C8-N9	7.36	116.78	113.10
35	BA	1086	U	C3'-C2'-C1'	7.36	107.39	101.50
2	AB	371	A	C2-N3-C4	-7.36	106.92	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	304	U	O4'-C1'-N1	7.36	114.09	108.20
35	BA	772	U	C5'-C4'-O4'	7.36	117.94	109.10
35	BA	802	A	N9-C4-C5	7.36	108.75	105.80
38	BD	27	G	N3-C4-C5	-7.36	124.92	128.60
2	AB	1108	U	C6-N1-C2	-7.36	116.58	121.00
2	AB	1419	A	C5'-C4'-O4'	7.36	117.93	109.10
2	AB	1838	C	N3-C4-N4	-7.36	112.85	118.00
2	AB	2198	A	C2-N3-C4	7.36	114.28	110.60
2	AB	2418	A	N9-C1'-C2'	-7.36	103.90	112.00
2	AB	2433	A	N1-C2-N3	-7.36	125.62	129.30
35	BA	177	G	N9-C1'-C2'	-7.36	103.90	112.00
35	BA	414	A	N9-C4-C5	7.36	108.74	105.80
35	BA	1035	A	C4-C5-N7	-7.36	107.02	110.70
35	BA	1088	G	C5-N7-C8	-7.36	100.62	104.30
37	BC	53	G	C6-N1-C2	-7.36	120.68	125.10
2	AB	1670	C	N1-C1'-C2'	-7.36	103.91	112.00
2	AB	156	A	C2-N3-C4	-7.36	106.92	110.60
2	AB	322	A	N1-C2-N3	-7.36	125.62	129.30
2	AB	2502	G	N1-C2-N3	-7.36	119.49	123.90
2	AB	2506	U	C3'-C2'-C1'	7.36	107.39	101.50
35	BA	1356	G	N1-C6-O6	-7.36	115.49	119.90
35	BA	1371	G	C2-N3-C4	7.36	115.58	111.90
37	BC	26	U	O4'-C1'-N1	7.36	114.09	108.20
2	AB	537	G	N1-C6-O6	7.36	124.31	119.90
2	AB	1002	G	N9-C1'-C2'	-7.36	103.91	112.00
2	AB	1205	A	C4-C5-C6	-7.36	113.32	117.00
2	AB	1660	G	C4'-C3'-C2'	-7.36	95.24	102.60
2	AB	1760	C	N1-C2-O2	7.36	123.31	118.90
2	AB	2544	G	N9-C4-C5	7.36	108.34	105.40
2	AB	2770	G	C5-C6-O6	7.36	133.01	128.60
2	AB	2801	G	C4-C5-C6	7.36	123.21	118.80
2	AB	2842	G	C5'-C4'-O4'	7.36	117.93	109.10
35	BA	557	G	C3'-C2'-C1'	7.36	107.38	101.50
35	BA	990	C	N3-C2-O2	-7.36	116.75	121.90
35	BA	1507	A	C3'-C2'-C1'	-7.36	95.61	101.50
2	AB	2021	C	O4'-C1'-N1	7.35	114.08	108.20
2	AB	2564	A	C4-C5-N7	-7.35	107.02	110.70
35	BA	58	C	O4'-C1'-C2'	-7.35	98.45	105.80
35	BA	65	A	C4-C5-C6	-7.35	113.32	117.00
35	BA	520	A	N1-C2-N3	-7.35	125.62	129.30
35	BA	1435	G	C3'-C2'-C1'	7.35	107.38	101.50
2	AB	13	A	N7-C8-N9	7.35	117.48	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	172	A	C5'-C4'-O4'	7.35	117.92	109.10
2	AB	781	A	C8-N9-C4	-7.35	102.86	105.80
2	AB	1189	A	C5'-C4'-C3'	-7.35	104.24	116.00
2	AB	1877	A	C4'-C3'-C2'	-7.35	95.25	102.60
2	AB	2020	A	N9-C4-C5	7.35	108.74	105.80
2	AB	2779	U	C5'-C4'-C3'	-7.35	104.23	116.00
2	AB	2891	U	O4'-C1'-N1	7.35	114.08	108.20
35	BA	948	C	C5-C6-N1	7.35	124.68	121.00
2	AB	220	G	N7-C8-N9	7.35	116.78	113.10
2	AB	400	G	N3-C4-N9	7.35	130.41	126.00
2	AB	551	G	N1-C2-N3	-7.35	119.49	123.90
2	AB	555	G	N9-C4-C5	-7.35	102.46	105.40
35	BA	697	U	N1-C2-O2	-7.35	117.65	122.80
35	BA	1100	C	N3-C2-O2	-7.35	116.75	121.90
2	AB	668	A	C5-C6-N1	7.35	121.38	117.70
2	AB	1179	G	C5-N7-C8	-7.35	100.62	104.30
2	AB	2381	A	C5-C6-N1	7.35	121.38	117.70
35	BA	4	U	O4'-C4'-C3'	-7.35	96.65	104.00
35	BA	5	U	O4'-C1'-N1	7.35	114.08	108.20
35	BA	1201	A	C2'-C3'-O3'	7.35	125.67	109.50
2	AB	751	A	O4'-C1'-N9	7.35	114.08	108.20
2	AB	843	G	C4-C5-N7	7.35	113.74	110.80
2	AB	932	U	N3-C2-O2	-7.35	117.06	122.20
2	AB	2214	C	P-O3'-C3'	7.35	128.52	119.70
2	AB	2669	G	C8-N9-C4	-7.35	103.46	106.40
2	AB	2729	G	C2-N3-C4	7.35	115.57	111.90
7	AG	177	ARG	NE-CZ-NH2	7.35	123.97	120.30
35	BA	524	G	O4'-C1'-C2'	-7.35	98.45	105.80
35	BA	803	G	C6-C5-N7	-7.35	125.99	130.40
2	AB	700	G	C2-N3-C4	7.35	115.57	111.90
2	AB	1309	G	C5-N7-C8	-7.35	100.63	104.30
2	AB	2340	A	N7-C8-N9	7.35	117.47	113.80
35	BA	639	G	N3-C4-N9	7.35	130.41	126.00
1	AA	6	G	O4'-C1'-N9	7.34	114.08	108.20
2	AB	47	C	C3'-C2'-C1'	-7.34	95.62	101.50
2	AB	880	G	N7-C8-N9	7.34	116.77	113.10
2	AB	1806	C	C4'-C3'-C2'	-7.34	95.26	102.60
35	BA	48	C	C5'-C4'-C3'	-7.34	104.25	116.00
35	BA	142	G	C4'-C3'-C2'	-7.34	95.26	102.60
2	AB	96	C	C4-C5-C6	-7.34	113.73	117.40
2	AB	440	C	N3-C2-O2	-7.34	116.76	121.90
2	AB	924	G	C8-N9-C4	-7.34	103.46	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1233	C	C5-C4-N4	-7.34	115.06	120.20
2	AB	2632	A	C5-C6-N1	7.34	121.37	117.70
2	AB	335	C	C6-N1-C2	7.34	123.24	120.30
2	AB	1655	A	C5-C6-N6	-7.34	117.83	123.70
2	AB	2173	A	C4-C5-C6	-7.34	113.33	117.00
2	AB	2349	G	N3-C4-C5	-7.34	124.93	128.60
2	AB	2394	C	O4'-C1'-N1	7.34	114.07	108.20
2	AB	2471	A	N7-C8-N9	7.34	117.47	113.80
2	AB	2595	G	C5-C6-O6	-7.34	124.19	128.60
35	BA	957	U	N1-C2-N3	7.34	119.30	114.90
35	BA	1365	G	N9-C4-C5	7.34	108.34	105.40
35	BA	1429	A	C3'-C2'-C1'	-7.34	95.63	101.50
35	BA	1492	A	N1-C2-N3	7.34	132.97	129.30
2	AB	637	A	N1-C6-N6	-7.34	114.20	118.60
2	AB	924	G	C2-N3-C4	7.34	115.57	111.90
2	AB	1310	G	C6-C5-N7	7.34	134.80	130.40
2	AB	1801	A	C6-N1-C2	-7.34	114.20	118.60
2	AB	2592	G	N9-C4-C5	7.34	108.34	105.40
35	BA	431	A	N1-C6-N6	-7.34	114.20	118.60
2	AB	981	A	N1-C2-N3	7.34	132.97	129.30
2	AB	1000	A	C2-N3-C4	7.34	114.27	110.60
2	AB	71	A	C2-N3-C4	7.34	114.27	110.60
2	AB	564	C	O4'-C4'-C3'	7.34	111.97	106.10
2	AB	2274	A	O4'-C1'-N9	7.34	114.07	108.20
2	AB	2342	C	C6-N1-C2	-7.34	117.36	120.30
2	AB	2554	U	N3-C2-O2	-7.34	117.06	122.20
2	AB	2637	U	C3'-C2'-C1'	7.34	107.37	101.50
2	AB	2791	G	N9-C4-C5	7.34	108.33	105.40
35	BA	233	C	O4'-C1'-N1	7.34	114.07	108.20
35	BA	785	G	C4-C5-N7	-7.34	107.86	110.80
58	BX	65	ARG	NE-CZ-NH1	7.34	123.97	120.30
2	AB	601	C	C5'-C4'-O4'	7.33	117.90	109.10
2	AB	682	G	O4'-C1'-N9	7.33	114.07	108.20
2	AB	1183	U	C5'-C4'-O4'	7.33	117.90	109.10
35	BA	1275	A	C5-C6-N6	7.33	129.57	123.70
36	BB	5	G	N9-C4-C5	7.33	108.33	105.40
1	AA	45	A	C4-C5-N7	-7.33	107.03	110.70
2	AB	762	U	C4-C5-C6	-7.33	115.30	119.70
2	AB	1631	G	C5-C6-O6	7.33	133.00	128.60
2	AB	2311	A	O4'-C1'-C2'	-7.33	98.47	105.80
35	BA	445	G	N1-C2-N3	-7.33	119.50	123.90
35	BA	694	A	C4-C5-N7	-7.33	107.03	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	837	U	N3-C4-O4	7.33	124.53	119.40
1	AA	87	U	C6-N1-C2	-7.33	116.60	121.00
2	AB	257	C	C3'-C2'-C1'	-7.33	95.63	101.50
2	AB	573	U	C5-C6-N1	-7.33	119.03	122.70
2	AB	853	C	C2-N3-C4	-7.33	116.23	119.90
2	AB	2556	C	N3-C2-O2	-7.33	116.77	121.90
2	AB	2827	C	O4'-C1'-N1	7.33	114.06	108.20
2	AB	2897	U	C4-C5-C6	7.33	124.10	119.70
12	AL	99	ARG	NE-CZ-NH2	-7.33	116.64	120.30
35	BA	7	A	C2-N3-C4	7.33	114.27	110.60
35	BA	42	G	N7-C8-N9	7.33	116.77	113.10
35	BA	344	A	C5-N7-C8	-7.33	100.23	103.90
35	BA	1079	G	C4'-C3'-C2'	-7.33	95.27	102.60
38	BD	25	U	C6-N1-C2	-7.33	116.60	121.00
2	AB	1058	U	C5'-C4'-O4'	7.33	117.90	109.10
2	AB	2472	G	N3-C2-N2	7.33	125.03	119.90
2	AB	2570	G	N7-C8-N9	7.33	116.77	113.10
35	BA	1167	A	N3-C4-N9	7.33	133.26	127.40
35	BA	1333	A	N1-C2-N3	-7.33	125.64	129.30
40	BF	53	ARG	NE-CZ-NH2	-7.33	116.64	120.30
2	AB	850	U	C5-C6-N1	-7.33	119.04	122.70
2	AB	939	G	C4-C5-N7	-7.33	107.87	110.80
2	AB	1530	G	C5-C6-N1	7.33	115.16	111.50
2	AB	1952	A	O4'-C4'-C3'	7.33	111.96	106.10
35	BA	359	G	C8-N9-C4	-7.33	103.47	106.40
35	BA	831	A	C6-N1-C2	-7.33	114.20	118.60
36	BB	65	C	C4-C5-C6	-7.33	113.73	117.40
2	AB	151	C	N1-C2-N3	7.33	124.33	119.20
2	AB	1789	A	N9-C4-C5	7.33	108.73	105.80
35	BA	75	G	N9-C1'-C2'	-7.33	103.94	112.00
36	BB	60	U	C3'-C2'-C1'	7.33	107.36	101.50
2	AB	10	A	C4'-C3'-C2'	-7.33	95.28	102.60
2	AB	156	A	O4'-C1'-N9	7.33	114.06	108.20
2	AB	1297	C	N3-C4-N4	7.33	123.13	118.00
2	AB	1672	A	C2-N3-C4	7.33	114.26	110.60
2	AB	2529	G	C6-N1-C2	-7.33	120.70	125.10
35	BA	145	G	C4'-C3'-C2'	-7.33	95.28	102.60
35	BA	1080	A	C5-C6-N1	7.33	121.36	117.70
37	BC	18	A	N9-C4-C5	7.33	108.73	105.80
40	BF	130	ARG	NH1-CZ-NH2	-7.33	111.34	119.40
1	AA	60	C	N3-C4-N4	7.32	123.13	118.00
2	AB	127	A	C5-C6-N6	7.32	129.56	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	449	A	P-O3'-C3'	7.32	128.49	119.70
2	AB	1808	A	C5-N7-C8	-7.32	100.24	103.90
2	AB	2392	A	N1-C2-N3	-7.32	125.64	129.30
35	BA	964	A	N9-C1'-C2'	-7.32	103.94	112.00
35	BA	1060	U	C4'-C3'-C2'	-7.32	95.28	102.60
38	BD	20	G	C4-C5-N7	-7.32	107.87	110.80
2	AB	744	U	C5-C4-O4	7.32	130.29	125.90
35	BA	337	G	C8-N9-C4	-7.32	103.47	106.40
35	BA	663	A	C6-C5-N7	7.32	137.43	132.30
35	BA	726	C	N1-C2-O2	7.32	123.29	118.90
2	AB	220	G	N3-C4-C5	-7.32	124.94	128.60
2	AB	1369	G	C5-N7-C8	-7.32	100.64	104.30
2	AB	2473	U	C2-N3-C4	-7.32	122.61	127.00
35	BA	328	C	O4'-C1'-N1	7.32	114.06	108.20
35	BA	585	G	C5-N7-C8	-7.32	100.64	104.30
38	BD	2	G	C4-C5-C6	7.32	123.19	118.80
2	AB	836	G	C4-C5-N7	-7.32	107.87	110.80
2	AB	1629	U	O4'-C1'-N1	7.32	114.06	108.20
2	AB	1635	A	C5-C6-N1	7.32	121.36	117.70
2	AB	2835	A	C5-C6-N6	-7.32	117.84	123.70
35	BA	22	G	C6-N1-C2	7.32	129.49	125.10
35	BA	1003	G	C4-C5-N7	-7.32	107.87	110.80
37	BC	24	A	C4-C5-N7	-7.32	107.04	110.70
1	AA	119	A	C3'-C2'-C1'	-7.32	95.65	101.50
2	AB	149	A	N1-C6-N6	7.32	122.99	118.60
2	AB	512	G	C5-C6-N1	7.32	115.16	111.50
2	AB	1570	A	C4-C5-N7	-7.32	107.04	110.70
2	AB	1868	C	C5-C6-N1	-7.32	117.34	121.00
35	BA	572	A	N1-C6-N6	-7.32	114.21	118.60
35	BA	1203	C	C5-C4-N4	-7.32	115.08	120.20
35	BA	1268	G	N3-C4-N9	7.32	130.39	126.00
1	AA	103	U	C4-C5-C6	7.32	124.09	119.70
2	AB	785	G	C5-C6-N1	7.32	115.16	111.50
2	AB	1282	U	O4'-C1'-N1	7.32	114.05	108.20
35	BA	1209	C	C5-C4-N4	-7.32	115.08	120.20
35	BA	1507	A	C4-C5-N7	-7.32	107.04	110.70
2	AB	399	U	N1-C1'-C2'	-7.31	103.95	112.00
2	AB	1172	C	C4'-C3'-C2'	-7.31	95.29	102.60
2	AB	1966	A	C5'-C4'-O4'	-7.31	100.32	109.10
2	AB	2365	G	N9-C4-C5	7.31	108.33	105.40
35	BA	753	A	C5-C6-N1	7.31	121.36	117.70
35	BA	1537	U	O4'-C1'-N1	7.31	114.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	990	A	C6-C5-N7	7.31	137.42	132.30
2	AB	1324	G	N1-C2-N2	7.31	122.78	116.20
2	AB	2563	U	C6-N1-C2	-7.31	116.61	121.00
2	AB	2777	G	C6-C5-N7	-7.31	126.01	130.40
35	BA	6	G	C3'-C2'-C1'	-7.31	95.65	101.50
35	BA	613	C	O4'-C1'-N1	7.31	114.05	108.20
35	BA	1024	G	C4'-C3'-C2'	-7.31	95.29	102.60
35	BA	1210	C	N3-C2-O2	-7.31	116.78	121.90
35	BA	1238	A	C5'-C4'-O4'	7.31	117.87	109.10
35	BA	1513	A	C1'-O4'-C4'	-7.31	104.05	109.90
2	AB	1242	U	C4-C5-C6	7.31	124.09	119.70
2	AB	2650	U	C5-C4-O4	7.31	130.29	125.90
35	BA	1031	C	C3'-C2'-C1'	-7.31	95.65	101.50
2	AB	779	U	C4'-C3'-C2'	-7.31	95.29	102.60
2	AB	2068	U	C4-C5-C6	7.31	124.09	119.70
2	AB	2171	A	C8-N9-C4	-7.31	102.88	105.80
2	AB	2510	C	N3-C4-N4	7.31	123.12	118.00
2	AB	2622	U	C5-C6-N1	-7.31	119.05	122.70
2	AB	2869	G	O4'-C4'-C3'	7.31	111.95	106.10
2	AB	2893	A	N9-C4-C5	-7.31	102.88	105.80
35	BA	16	A	N7-C8-N9	7.31	117.45	113.80
35	BA	711	G	N7-C8-N9	7.31	116.75	113.10
1	AA	77	U	O4'-C1'-N1	7.31	114.05	108.20
2	AB	241	A	N1-C6-N6	7.31	122.98	118.60
2	AB	629	G	C8-N9-C4	-7.31	103.48	106.40
2	AB	1041	G	N9-C4-C5	7.31	108.32	105.40
2	AB	1055	G	N3-C4-C5	-7.31	124.95	128.60
2	AB	1295	C	N3-C4-C5	-7.31	118.98	121.90
2	AB	1318	U	C5-C6-N1	-7.31	119.05	122.70
2	AB	1402	U	N3-C4-O4	-7.31	114.28	119.40
2	AB	2138	G	C6-C5-N7	-7.31	126.02	130.40
2	AB	2541	A	C5'-C4'-O4'	7.31	117.87	109.10
35	BA	167	A	C5'-C4'-C3'	-7.31	104.31	116.00
35	BA	183	C	N1-C2-O2	7.31	123.28	118.90
35	BA	380	G	C6-N1-C2	-7.31	120.72	125.10
35	BA	1005	A	C4'-C3'-C2'	-7.31	95.29	102.60
35	BA	1473	G	C4'-C3'-C2'	-7.31	95.29	102.60
36	BB	59	G	C1'-O4'-C4'	-7.31	104.06	109.90
2	AB	953	G	C5'-C4'-O4'	7.31	117.87	109.10
2	AB	1498	C	C1'-O4'-C4'	7.31	115.75	109.90
35	BA	314	C	O4'-C1'-N1	7.31	114.05	108.20
35	BA	646	G	C4-C5-C6	-7.31	114.42	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	35	C	N1-C2-O2	7.31	123.28	118.90
36	BB	38	A	N1-C2-N3	-7.31	125.65	129.30
37	BC	35	G	N9-C4-C5	7.31	108.32	105.40
2	AB	78	U	N3-C2-O2	7.30	127.31	122.20
2	AB	130	C	N3-C4-N4	7.30	123.11	118.00
2	AB	177	G	C5-N7-C8	-7.30	100.65	104.30
2	AB	313	G	N3-C4-C5	-7.30	124.95	128.60
2	AB	430	A	P-O3'-C3'	7.30	128.47	119.70
2	AB	561	G	P-O3'-C3'	7.30	128.47	119.70
2	AB	2827	C	N3-C4-N4	7.30	123.11	118.00
35	BA	104	G	N9-C4-C5	7.30	108.32	105.40
35	BA	326	G	N9-C4-C5	7.30	108.32	105.40
36	BB	33	U	C3'-C2'-C1'	7.30	107.34	101.50
36	BB	48	U	C5-C6-N1	-7.30	119.05	122.70
35	BA	986	U	O4'-C1'-N1	7.30	114.04	108.20
38	BD	4	G	O4'-C1'-N9	7.30	114.04	108.20
2	AB	175	G	C5-N7-C8	7.30	107.95	104.30
2	AB	276	U	C1'-O4'-C4'	-7.30	104.06	109.90
2	AB	434	U	N3-C2-O2	-7.30	117.09	122.20
2	AB	1824	G	N1-C2-N2	7.30	122.77	116.20
2	AB	1841	U	N1-C2-N3	7.30	119.28	114.90
2	AB	2328	A	C5'-C4'-O4'	7.30	117.86	109.10
2	AB	2497	A	C6-N1-C2	7.30	122.98	118.60
2	AB	2707	U	N1-C1'-C2'	-7.30	103.97	112.00
2	AB	2778	A	N3-C4-C5	-7.30	121.69	126.80
35	BA	112	G	N3-C4-N9	7.30	130.38	126.00
35	BA	463	U	C4-C5-C6	7.30	124.08	119.70
35	BA	877	G	C8-N9-C4	-7.30	103.48	106.40
35	BA	1143	G	C2-N3-C4	-7.30	108.25	111.90
35	BA	1394	A	P-O3'-C3'	7.30	128.46	119.70
35	BA	1526	G	C5'-C4'-O4'	7.30	117.86	109.10
2	AB	44	A	N3-C4-C5	7.30	131.91	126.80
2	AB	718	A	C6-N1-C2	-7.30	114.22	118.60
2	AB	1828	G	C1'-O4'-C4'	-7.30	104.06	109.90
2	AB	2158	A	C8-N9-C4	-7.30	102.88	105.80
2	AB	2442	C	N3-C2-O2	-7.30	116.79	121.90
35	BA	1104	G	N7-C8-N9	7.30	116.75	113.10
35	BA	1226	C	N3-C2-O2	-7.30	116.79	121.90
2	AB	1430	G	C2-N3-C4	7.30	115.55	111.90
35	BA	410	G	C4'-C3'-C2'	-7.30	95.30	102.60
2	AB	10	A	C5-C6-N1	7.30	121.35	117.70
2	AB	1155	A	N1-C2-N3	-7.30	125.65	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1286	A	C6-C5-N7	7.30	137.41	132.30
2	AB	1635	A	C8-N9-C4	-7.30	102.88	105.80
2	AB	2296	U	C3'-C2'-C1'	-7.30	95.66	101.50
2	AB	2603	G	C5-C6-O6	-7.30	124.22	128.60
35	BA	647	C	C6-N1-C2	-7.30	117.38	120.30
35	BA	1181	G	N3-C4-C5	-7.30	124.95	128.60
2	AB	1382	G	N3-C2-N2	-7.29	114.79	119.90
2	AB	2636	C	O4'-C1'-N1	7.29	114.04	108.20
2	AB	111	A	C5-C6-N1	7.29	121.35	117.70
2	AB	612	G	N9-C4-C5	-7.29	102.48	105.40
2	AB	1044	C	C5-C6-N1	7.29	124.65	121.00
2	AB	2039	U	N3-C2-O2	-7.29	117.09	122.20
35	BA	16	A	C5-N7-C8	-7.29	100.25	103.90
35	BA	558	G	C6-C5-N7	-7.29	126.02	130.40
35	BA	1078	U	C1'-O4'-C4'	-7.29	104.06	109.90
2	AB	125	A	C3'-C2'-C1'	7.29	107.33	101.50
2	AB	1094	U	O4'-C4'-C3'	7.29	111.93	106.10
2	AB	1337	G	N3-C4-C5	-7.29	124.95	128.60
2	AB	2259	U	C5-C4-O4	-7.29	121.53	125.90
35	BA	727	G	C2-N3-C4	7.29	115.55	111.90
35	BA	1157	A	N1-C6-N6	7.29	122.97	118.60
35	BA	1289	A	P-O3'-C3'	7.29	128.45	119.70
2	AB	866	A	C3'-C2'-C1'	-7.29	95.67	101.50
2	AB	1991	U	C3'-C2'-C1'	7.29	107.33	101.50
35	BA	958	A	N1-C6-N6	7.29	122.97	118.60
2	AB	54	G	C5'-C4'-O4'	7.29	117.85	109.10
2	AB	1310	G	C5-N7-C8	7.29	107.94	104.30
2	AB	1378	A	O4'-C4'-C3'	7.29	111.93	106.10
2	AB	1599	U	N3-C2-O2	-7.29	117.10	122.20
2	AB	1749	A	C4-C5-C6	7.29	120.64	117.00
2	AB	1771	C	C6-N1-C2	-7.29	117.39	120.30
2	AB	2562	U	N3-C4-O4	7.29	124.50	119.40
35	BA	220	G	N9-C4-C5	7.29	108.32	105.40
35	BA	462	G	C5-N7-C8	-7.29	100.66	104.30
35	BA	796	C	C1'-O4'-C4'	-7.29	104.07	109.90
35	BA	1233	G	C4-C5-N7	-7.29	107.89	110.80
2	AB	893	C	N3-C2-O2	-7.29	116.80	121.90
2	AB	1060	U	N3-C4-O4	7.29	124.50	119.40
2	AB	1259	G	C3'-C2'-C1'	-7.29	95.67	101.50
35	BA	161	A	C6-N1-C2	-7.29	114.23	118.60
2	AB	351	C	C3'-C2'-C1'	7.29	107.33	101.50
2	AB	1120	G	N1-C2-N2	-7.29	109.64	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1619	G	N7-C8-N9	7.29	116.74	113.10
21	AU	106	VAL	CA-CB-CG2	7.29	121.83	110.90
35	BA	7	A	O4'-C1'-C2'	-7.29	98.51	105.80
35	BA	532	A	N3-C4-C5	-7.29	121.70	126.80
35	BA	607	A	N9-C4-C5	7.29	108.71	105.80
35	BA	883	C	N3-C4-C5	-7.29	118.99	121.90
35	BA	1400	C	C5-C6-N1	7.29	124.64	121.00
35	BA	1487	G	O4'-C1'-N9	-7.29	102.37	108.20
42	BH	49	TYR	CG-CD1-CE1	-7.29	115.47	121.30
1	AA	76	G	C2-N3-C4	7.28	115.54	111.90
2	AB	303	G	O4'-C1'-N9	-7.28	102.37	108.20
2	AB	445	C	C4'-C3'-C2'	-7.28	95.32	102.60
2	AB	629	G	C4-C5-N7	-7.28	107.89	110.80
2	AB	1278	C	N3-C2-O2	-7.28	116.80	121.90
2	AB	1633	G	C6-C5-N7	-7.28	126.03	130.40
2	AB	1800	C	N1-C2-N3	-7.28	114.10	119.20
2	AB	2032	G	C6-N1-C2	-7.28	120.73	125.10
2	AB	2160	C	C6-N1-C2	-7.28	117.39	120.30
35	BA	33	A	C5'-C4'-O4'	7.28	117.84	109.10
35	BA	453	G	N9-C4-C5	7.28	108.31	105.40
35	BA	465	A	C8-N9-C4	7.28	108.71	105.80
35	BA	938	A	O4'-C1'-N9	7.28	114.03	108.20
35	BA	1184	G	N3-C4-N9	-7.28	121.63	126.00
35	BA	1286	U	C2-N3-C4	-7.28	122.63	127.00
35	BA	1335	U	N1-C2-N3	7.28	119.27	114.90
2	AB	1043	C	O4'-C1'-N1	7.28	114.03	108.20
2	AB	1744	A	C5-C6-N6	-7.28	117.88	123.70
2	AB	1783	A	O4'-C1'-C2'	-7.28	98.52	105.80
35	BA	503	C	C6-N1-C2	-7.28	117.39	120.30
38	BD	67	C	N3-C4-C5	-7.28	118.99	121.90
2	AB	540	C	N3-C4-C5	-7.28	118.99	121.90
2	AB	1274	A	C5-C6-N6	7.28	129.52	123.70
2	AB	1706	C	N3-C4-N4	-7.28	112.90	118.00
2	AB	2002	G	N7-C8-N9	7.28	116.74	113.10
2	AB	2368	C	C5'-C4'-O4'	7.28	117.84	109.10
18	AR	98	TYR	CB-CG-CD1	7.28	125.37	121.00
35	BA	1116	U	N1-C2-N3	7.28	119.27	114.90
37	BC	52	U	C4-C5-C6	7.28	124.07	119.70
2	AB	1232	G	N3-C2-N2	-7.28	114.81	119.90
2	AB	1869	G	N3-C4-C5	-7.28	124.96	128.60
2	AB	2724	U	O4'-C1'-N1	7.28	114.02	108.20
35	BA	130	A	C5-N7-C8	-7.28	100.26	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1070	U	C2-N3-C4	-7.28	122.63	127.00
2	AB	1881	C	N1-C2-N3	7.28	124.29	119.20
2	AB	2709	G	C5'-C4'-O4'	7.28	117.83	109.10
35	BA	586	C	N3-C2-O2	-7.28	116.81	121.90
35	BA	922	G	C3'-C2'-C1'	-7.28	95.68	101.50
35	BA	939	G	N9-C1'-C2'	-7.28	104.00	112.00
2	AB	727	A	C3'-C2'-C1'	7.28	107.32	101.50
2	AB	773	U	C5'-C4'-O4'	-7.28	100.37	109.10
2	AB	2290	G	N7-C8-N9	7.28	116.74	113.10
35	BA	18	C	C6-N1-C2	-7.28	117.39	120.30
35	BA	903	G	C5-C6-N1	7.28	115.14	111.50
35	BA	1223	C	O3'-P-O5'	-7.28	90.18	104.00
35	BA	1391	U	N1-C2-O2	-7.28	117.71	122.80
2	AB	127	A	N1-C2-N3	-7.27	125.66	129.30
2	AB	616	A	C5-C6-N6	-7.27	117.88	123.70
2	AB	867	C	C1'-O4'-C4'	-7.27	104.08	109.90
22	AV	85	VAL	CB-CA-C	7.27	125.22	111.40
35	BA	8	A	N1-C2-N3	-7.27	125.66	129.30
35	BA	685	G	C3'-C2'-C1'	7.27	107.32	101.50
2	AB	2094	A	N1-C2-N3	-7.27	125.66	129.30
35	BA	97	G	C4'-C3'-C2'	-7.27	95.33	102.60
35	BA	258	G	C2-N3-C4	7.27	115.54	111.90
35	BA	553	A	O4'-C1'-N9	7.27	114.02	108.20
2	AB	254	G	C8-N9-C4	-7.27	103.49	106.40
2	AB	546	U	C1'-O4'-C4'	7.27	115.72	109.90
35	BA	448	A	N7-C8-N9	-7.27	110.16	113.80
35	BA	896	C	C1'-O4'-C4'	-7.27	104.08	109.90
35	BA	1453	G	P-O3'-C3'	7.27	128.43	119.70
2	AB	685	A	P-O3'-C3'	7.27	128.42	119.70
2	AB	752	A	C5'-C4'-O4'	7.27	117.82	109.10
2	AB	2121	G	N1-C6-O6	7.27	124.26	119.90
2	AB	2567	G	N9-C4-C5	-7.27	102.49	105.40
26	AZ	56	ARG	NE-CZ-NH2	7.27	123.94	120.30
35	BA	400	C	N1-C2-O2	7.27	123.26	118.90
35	BA	1139	G	C5-C6-N1	7.27	115.14	111.50
35	BA	1542	A	N9-C4-C5	7.27	108.71	105.80
46	BL	79	ARG	NE-CZ-NH2	7.27	123.94	120.30
2	AB	587	C	N3-C4-C5	7.27	124.81	121.90
2	AB	738	G	C5-C6-N1	7.27	115.13	111.50
2	AB	1691	C	O4'-C1'-N1	7.27	114.01	108.20
35	BA	299	G	C5-C6-N1	7.27	115.13	111.50
35	BA	339	C	C4-C5-C6	-7.27	113.77	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	851	G	C3'-C2'-C1'	-7.27	95.69	101.50
35	BA	1182	G	C4-C5-N7	-7.27	107.89	110.80
37	BC	59	A	N9-C4-C5	7.27	108.71	105.80
2	AB	546	U	N3-C2-O2	-7.27	117.11	122.20
2	AB	742	A	N1-C2-N3	-7.27	125.67	129.30
2	AB	2674	G	C2-N3-C4	7.27	115.53	111.90
35	BA	1492	A	C6-C5-N7	7.27	137.39	132.30
2	AB	136	G	C8-N9-C4	7.26	109.31	106.40
2	AB	1044	C	N1-C2-O2	7.26	123.26	118.90
2	AB	1174	U	N3-C4-C5	-7.26	110.24	114.60
2	AB	1438	U	C3'-C2'-C1'	7.26	107.31	101.50
2	AB	1775	U	C5-C4-O4	7.26	130.26	125.90
2	AB	2050	C	C2-N3-C4	7.26	123.53	119.90
2	AB	2737	G	C5-N7-C8	-7.26	100.67	104.30
11	AK	107	GLU	OE1-CD-OE2	7.26	132.02	123.30
34	A7	19	ARG	NE-CZ-NH1	7.26	123.93	120.30
35	BA	174	A	N1-C2-N3	-7.26	125.67	129.30
35	BA	347	G	C3'-C2'-C1'	-7.26	95.69	101.50
35	BA	651	C	O4'-C4'-C3'	7.26	111.91	106.10
35	BA	781	A	N1-C6-N6	-7.26	114.24	118.60
35	BA	1268	G	N3-C4-C5	-7.26	124.97	128.60
2	AB	445	C	C5'-C4'-O4'	7.26	117.81	109.10
2	AB	2736	A	C5'-C4'-O4'	7.26	117.81	109.10
35	BA	1133	G	N7-C8-N9	7.26	116.73	113.10
2	AB	168	G	C4-C5-N7	7.26	113.70	110.80
2	AB	462	C	O3'-P-O5'	-7.26	90.20	104.00
2	AB	913	U	C2-N3-C4	-7.26	122.64	127.00
2	AB	1229	C	C5'-C4'-O4'	7.26	117.81	109.10
2	AB	1262	A	C5-N7-C8	7.26	107.53	103.90
2	AB	1304	A	C4-C5-C6	-7.26	113.37	117.00
2	AB	2163	A	O4'-C1'-N9	7.26	114.01	108.20
2	AB	2447	G	C4'-C3'-C2'	-7.26	95.34	102.60
35	BA	652	U	C4'-C3'-C2'	-7.26	95.34	102.60
35	BA	670	G	N9-C1'-C2'	-7.26	104.01	112.00
35	BA	684	U	N3-C4-O4	7.26	124.48	119.40
38	BD	10	G	C4'-C3'-C2'	-7.26	95.34	102.60
50	BP	96	VAL	CA-CB-CG1	7.26	121.79	110.90
2	AB	831	G	C5-C6-O6	-7.26	124.25	128.60
2	AB	2512	C	N3-C4-C5	-7.26	119.00	121.90
2	AB	2576	G	C4-C5-C6	7.26	123.16	118.80
2	AB	2660	A	C4'-C3'-C2'	-7.26	95.34	102.60
35	BA	123	U	N3-C4-O4	-7.26	114.32	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	791	G	C2-N3-C4	7.26	115.53	111.90
35	BA	1356	G	C4-C5-N7	-7.26	107.90	110.80
40	BF	106	ARG	NE-CZ-NH2	-7.26	116.67	120.30
2	AB	1457	U	N3-C2-O2	-7.26	117.12	122.20
2	AB	2192	U	C1'-O4'-C4'	-7.26	104.09	109.90
35	BA	989	U	N1-C2-N3	7.26	119.25	114.90
2	AB	263	G	N9-C1'-C2'	-7.26	104.02	112.00
2	AB	369	U	N3-C4-O4	7.26	124.48	119.40
2	AB	549	G	C8-N9-C4	-7.26	103.50	106.40
2	AB	1661	G	C8-N9-C4	-7.26	103.50	106.40
2	AB	1768	C	C6-N1-C2	7.26	123.20	120.30
5	AE	118	PHE	CB-CG-CD2	-7.26	115.72	120.80
19	AS	10	ARG	NE-CZ-NH2	-7.26	116.67	120.30
35	BA	282	A	C4-C5-N7	-7.26	107.07	110.70
35	BA	634	C	C5-C4-N4	-7.26	115.12	120.20
35	BA	960	U	C6-N1-C2	-7.26	116.65	121.00
35	BA	1255	G	N3-C4-C5	-7.26	124.97	128.60
35	BA	1364	U	N3-C2-O2	-7.26	117.12	122.20
35	BA	1385	G	N3-C4-C5	-7.26	124.97	128.60
35	BA	1430	A	N1-C6-N6	-7.26	114.25	118.60
36	BB	4	G	N1-C2-N3	-7.26	119.55	123.90
2	AB	991	C	N3-C4-C5	-7.25	119.00	121.90
2	AB	1035	U	O4'-C1'-N1	7.25	114.00	108.20
2	AB	1502	A	C8-N9-C4	7.25	108.70	105.80
2	AB	2540	C	N3-C4-C5	-7.25	119.00	121.90
32	A5	19	ARG	NE-CZ-NH2	7.25	123.93	120.30
35	BA	512	U	N1-C2-O2	7.25	127.88	122.80
2	AB	1005	C	C3'-C2'-C1'	7.25	107.30	101.50
2	AB	1459	G	N7-C8-N9	7.25	116.73	113.10
2	AB	2082	A	C1'-O4'-C4'	7.25	115.70	109.90
2	AB	2558	C	C2-N3-C4	7.25	123.53	119.90
2	AB	2656	U	C5-C4-O4	-7.25	121.55	125.90
2	AB	2810	A	N3-C4-N9	7.25	133.20	127.40
35	BA	624	C	C5-C6-N1	7.25	124.63	121.00
35	BA	1359	C	N3-C2-O2	-7.25	116.82	121.90
2	AB	425	G	N3-C4-C5	-7.25	124.97	128.60
2	AB	609	A	N1-C6-N6	-7.25	114.25	118.60
2	AB	1193	G	N9-C4-C5	-7.25	102.50	105.40
2	AB	1394	U	N3-C2-O2	-7.25	117.12	122.20
2	AB	2097	A	C5-C6-N1	7.25	121.33	117.70
2	AB	2144	G	C3'-C2'-C1'	7.25	107.30	101.50
2	AB	2761	A	C4'-C3'-C2'	-7.25	95.35	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2765	A	C5-N7-C8	-7.25	100.27	103.90
35	BA	566	G	C8-N9-C4	-7.25	103.50	106.40
43	BI	126	ALA	C-N-CA	7.25	137.53	122.30
2	AB	1310	G	N3-C4-C5	-7.25	124.97	128.60
2	AB	2043	C	C2-N3-C4	7.25	123.53	119.90
2	AB	2123	G	N9-C4-C5	7.25	108.30	105.40
2	AB	2310	C	C5'-C4'-O4'	7.25	117.80	109.10
1	AA	87	U	N1-C2-N3	7.25	119.25	114.90
2	AB	57	C	C5-C6-N1	-7.25	117.38	121.00
2	AB	319	G	N3-C2-N2	7.25	124.97	119.90
2	AB	543	G	C2-N3-C4	7.25	115.52	111.90
2	AB	1516	G	O4'-C1'-N9	7.25	114.00	108.20
2	AB	1519	G	C4-C5-C6	7.25	123.15	118.80
2	AB	2076	U	C6-N1-C2	-7.25	116.65	121.00
2	AB	2698	U	N1-C2-O2	7.25	127.87	122.80
35	BA	27	G	N1-C6-O6	7.25	124.25	119.90
35	BA	815	A	N9-C4-C5	7.25	108.70	105.80
35	BA	885	G	N9-C4-C5	7.25	108.30	105.40
1	AA	21	G	N7-C8-N9	-7.25	109.48	113.10
2	AB	42	A	C5-N7-C8	7.25	107.52	103.90
2	AB	200	U	N1-C2-N3	7.25	119.25	114.90
2	AB	569	U	C1'-O4'-C4'	-7.25	104.10	109.90
2	AB	582	A	N9-C1'-C2'	-7.25	104.03	112.00
2	AB	971	G	N1-C6-O6	7.25	124.25	119.90
2	AB	1296	G	C8-N9-C4	7.25	109.30	106.40
2	AB	1481	U	N3-C2-O2	-7.25	117.13	122.20
2	AB	1827	U	N1-C2-N3	7.25	119.25	114.90
2	AB	1925	C	N3-C4-N4	7.25	123.07	118.00
2	AB	2370	G	N3-C4-C5	-7.25	124.98	128.60
35	BA	442	G	C5-C6-N1	7.25	115.12	111.50
35	BA	961	U	C5-C4-O4	-7.25	121.55	125.90
35	BA	1211	U	N1-C2-N3	7.25	119.25	114.90
2	AB	121	G	N9-C4-C5	-7.25	102.50	105.40
2	AB	305	C	C5-C6-N1	7.25	124.62	121.00
2	AB	1125	G	N3-C4-C5	-7.25	124.98	128.60
2	AB	2559	C	N3-C4-C5	-7.25	119.00	121.90
1	AA	118	C	C4-C5-C6	-7.24	113.78	117.40
2	AB	370	G	C5-C6-N1	7.24	115.12	111.50
2	AB	371	A	C6-C5-N7	-7.24	127.23	132.30
2	AB	1133	A	N7-C8-N9	7.24	117.42	113.80
2	AB	2344	U	N3-C4-O4	7.24	124.47	119.40
2	AB	2526	G	N9-C4-C5	-7.24	102.50	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	817	C	P-O3'-C3'	7.24	128.39	119.70
35	BA	1080	A	C4'-C3'-C2'	-7.24	95.36	102.60
36	BB	67	G	C5-C6-O6	-7.24	124.25	128.60
38	BD	66	C	O4'-C1'-N1	7.24	113.99	108.20
2	AB	778	G	N7-C8-N9	7.24	116.72	113.10
2	AB	901	C	C2-N3-C4	7.24	123.52	119.90
2	AB	997	G	N3-C4-N9	7.24	130.34	126.00
2	AB	2323	G	P-O3'-C3'	7.24	128.39	119.70
35	BA	391	G	N9-C4-C5	-7.24	102.50	105.40
35	BA	923	A	C5-C6-N6	-7.24	117.91	123.70
35	BA	1360	A	N7-C8-N9	7.24	117.42	113.80
1	AA	47	C	C1'-O4'-C4'	-7.24	104.11	109.90
2	AB	194	G	N7-C8-N9	7.24	116.72	113.10
2	AB	548	G	C5-C6-N1	7.24	115.12	111.50
2	AB	998	C	N3-C4-N4	7.24	123.07	118.00
2	AB	1945	G	N3-C2-N2	7.24	124.97	119.90
2	AB	2225	A	N1-C6-N6	-7.24	114.25	118.60
35	BA	129	A	C5-N7-C8	7.24	107.52	103.90
1	AA	98	G	C6-C5-N7	-7.24	126.06	130.40
2	AB	300	A	O4'-C1'-N9	7.24	113.99	108.20
2	AB	582	A	N3-C4-C5	-7.24	121.73	126.80
2	AB	2289	G	N3-C4-N9	7.24	130.34	126.00
2	AB	2758	A	C4-C5-C6	7.24	120.62	117.00
35	BA	119	A	C4'-C3'-C2'	-7.24	95.36	102.60
35	BA	489	C	C4-C5-C6	7.24	121.02	117.40
35	BA	561	U	C4-C5-C6	7.24	124.04	119.70
35	BA	995	C	C5-C6-N1	7.24	124.62	121.00
35	BA	1302	C	C6-N1-C2	-7.24	117.41	120.30
35	BA	1324	A	C5-N7-C8	-7.24	100.28	103.90
35	BA	1329	A	C4-C5-N7	-7.24	107.08	110.70
35	BA	1401	G	C4-C5-N7	-7.24	107.90	110.80
41	BG	50	TYR	CG-CD2-CE2	-7.24	115.51	121.30
1	AA	16	G	N3-C4-C5	-7.24	124.98	128.60
2	AB	88	G	N1-C6-O6	7.24	124.24	119.90
2	AB	511	U	C5-C6-N1	-7.24	119.08	122.70
2	AB	1204	A	C5-N7-C8	7.24	107.52	103.90
2	AB	1380	G	N3-C4-C5	-7.24	124.98	128.60
2	AB	2594	C	C5-C6-N1	-7.24	117.38	121.00
37	BC	42	U	C2-N3-C4	-7.24	122.66	127.00
2	AB	191	A	O4'-C1'-N9	7.24	113.99	108.20
2	AB	537	G	C5-C6-O6	-7.24	124.26	128.60
2	AB	766	U	C5'-C4'-O4'	7.24	117.78	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	914	G	N3-C2-N2	-7.24	114.84	119.90
2	AB	2086	U	N1-C1'-C2'	-7.24	104.04	112.00
16	AP	47	VAL	CA-CB-CG1	7.24	121.75	110.90
35	BA	444	G	N9-C4-C5	7.24	108.29	105.40
38	BD	77	A	N1-C2-N3	-7.24	125.68	129.30
43	BI	115	ASP	CB-CG-OD2	7.24	124.81	118.30
1	AA	110	C	C4-C5-C6	-7.23	113.78	117.40
2	AB	1307	A	N7-C8-N9	-7.23	110.18	113.80
2	AB	1631	G	N7-C8-N9	7.23	116.72	113.10
2	AB	1688	U	C4-C5-C6	7.23	124.04	119.70
2	AB	46	G	C5'-C4'-O4'	7.23	117.78	109.10
2	AB	162	U	C2-N3-C4	-7.23	122.66	127.00
2	AB	440	C	C2-N3-C4	7.23	123.52	119.90
2	AB	2491	U	C6-N1-C2	-7.23	116.66	121.00
33	A6	13	PHE	CB-CG-CD2	-7.23	115.74	120.80
35	BA	161	A	C5'-C4'-O4'	-7.23	100.42	109.10
35	BA	472	U	O4'-C1'-N1	7.23	113.99	108.20
37	BC	45	G	C5-C6-N1	7.23	115.12	111.50
2	AB	379	G	C4-C5-C6	-7.23	114.46	118.80
2	AB	465	G	N7-C8-N9	7.23	116.72	113.10
2	AB	1321	A	N1-C6-N6	-7.23	114.26	118.60
2	AB	1765	U	N3-C2-O2	-7.23	117.14	122.20
2	AB	1792	G	N9-C4-C5	7.23	108.29	105.40
35	BA	57	G	N3-C4-N9	7.23	130.34	126.00
35	BA	330	C	N3-C2-O2	-7.23	116.84	121.90
2	AB	2015	A	C8-N9-C4	-7.23	102.91	105.80
2	AB	2592	G	O4'-C1'-N9	7.23	113.98	108.20
35	BA	393	A	C6-N1-C2	-7.23	114.26	118.60
35	BA	550	G	O4'-C1'-N9	7.23	113.98	108.20
2	AB	677	A	C5'-C4'-O4'	7.23	117.77	109.10
2	AB	750	A	C5'-C4'-C3'	-7.23	104.44	116.00
2	AB	1322	A	C4'-C3'-C2'	-7.23	95.37	102.60
2	AB	1520	U	N3-C2-O2	-7.23	117.14	122.20
2	AB	1870	C	O4'-C1'-N1	7.23	113.98	108.20
2	AB	2529	G	N1-C2-N3	7.23	128.24	123.90
20	AT	72	VAL	CA-CB-CG2	7.23	121.74	110.90
35	BA	564	C	C5-C6-N1	-7.23	117.39	121.00
2	AB	2697	G	N9-C4-C5	7.23	108.29	105.40
35	BA	1210	C	O4'-C1'-N1	7.23	113.98	108.20
2	AB	516	C	C5-C4-N4	-7.22	115.14	120.20
2	AB	620	G	N3-C4-C5	-7.22	124.99	128.60
2	AB	1895	C	C2-N3-C4	7.22	123.51	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2732	G	C1'-O4'-C4'	7.22	115.68	109.90
2	AB	2749	A	N9-C4-C5	-7.22	102.91	105.80
35	BA	207	C	N3-C2-O2	-7.22	116.84	121.90
35	BA	271	C	C4-C5-C6	-7.22	113.79	117.40
35	BA	514	C	C2-N3-C4	-7.22	116.29	119.90
35	BA	697	U	C2-N3-C4	-7.22	122.67	127.00
35	BA	839	C	C5-C4-N4	-7.22	115.14	120.20
35	BA	1505	G	C3'-C2'-C1'	-7.22	95.72	101.50
35	BA	1540	U	C4-C5-C6	7.22	124.03	119.70
47	BM	9	ARG	NE-CZ-NH2	-7.22	116.69	120.30
1	AA	72	G	N1-C2-N2	-7.22	109.70	116.20
2	AB	1238	G	N1-C6-O6	7.22	124.23	119.90
2	AB	1543	G	C4-C5-C6	7.22	123.13	118.80
2	AB	2387	U	C5-C6-N1	-7.22	119.09	122.70
35	BA	361	G	N1-C2-N3	-7.22	119.57	123.90
35	BA	768	A	N1-C6-N6	-7.22	114.27	118.60
35	BA	832	G	N7-C8-N9	7.22	116.71	113.10
35	BA	1317	C	C2-N3-C4	-7.22	116.29	119.90
35	BA	1421	G	N3-C4-C5	-7.22	124.99	128.60
1	AA	66	A	C5'-C4'-O4'	7.22	117.77	109.10
2	AB	2383	G	N9-C4-C5	-7.22	102.51	105.40
2	AB	2595	G	C4'-C3'-C2'	-7.22	95.38	102.60
35	BA	1367	C	C4-C5-C6	-7.22	113.79	117.40
2	AB	508	A	N7-C8-N9	-7.22	110.19	113.80
2	AB	1396	U	O4'-C1'-N1	7.22	113.98	108.20
2	AB	2004	G	C5-C6-N1	7.22	115.11	111.50
2	AB	2388	A	C4-C5-C6	7.22	120.61	117.00
35	BA	190	A	C4-C5-C6	-7.22	113.39	117.00
35	BA	428	G	C3'-C2'-C1'	7.22	107.28	101.50
35	BA	817	C	C2-N3-C4	7.22	123.51	119.90
35	BA	1216	A	N3-C4-N9	-7.22	121.62	127.40
35	BA	1436	U	C5'-C4'-O4'	-7.22	100.44	109.10
2	AB	797	G	N9-C4-C5	7.22	108.29	105.40
2	AB	2101	A	N1-C2-N3	-7.22	125.69	129.30
35	BA	316	C	C2-N3-C4	7.22	123.51	119.90
35	BA	436	C	O4'-C1'-N1	7.22	113.97	108.20
35	BA	771	G	N9-C4-C5	7.22	108.29	105.40
35	BA	810	C	O4'-C1'-N1	7.22	113.97	108.20
35	BA	1014	A	N1-C6-N6	-7.22	114.27	118.60
35	BA	1022	A	C5-N7-C8	7.22	107.51	103.90
2	AB	231	A	C2'-C3'-O3'	7.22	125.38	109.50
2	AB	504	A	O4'-C4'-C3'	7.22	111.87	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	837	C	N1-C1'-C2'	-7.22	104.06	112.00
2	AB	1319	C	C4'-C3'-C2'	-7.22	95.38	102.60
2	AB	1487	U	N3-C4-O4	7.22	124.45	119.40
2	AB	2064	C	C4-C5-C6	7.22	121.01	117.40
2	AB	2202	U	C5-C4-O4	7.22	130.23	125.90
2	AB	2897	U	C4'-C3'-C2'	-7.22	95.38	102.60
35	BA	1287	A	C4-C5-C6	-7.22	113.39	117.00
2	AB	438	G	O4'-C1'-N9	7.21	113.97	108.20
2	AB	565	C	C5'-C4'-C3'	-7.21	104.45	116.00
2	AB	619	G	C5-C6-O6	7.21	132.93	128.60
2	AB	643	A	C5-N7-C8	-7.21	100.29	103.90
2	AB	1626	A	C2-N3-C4	-7.21	106.99	110.60
2	AB	2879	A	C5'-C4'-O4'	7.21	117.76	109.10
35	BA	68	G	N3-C4-C5	-7.21	124.99	128.60
35	BA	463	U	N3-C2-O2	-7.21	117.15	122.20
35	BA	519	C	C6-N1-C2	-7.21	117.41	120.30
35	BA	719	C	O4'-C4'-C3'	7.21	111.87	106.10
35	BA	1150	A	C3'-C2'-C1'	7.21	107.27	101.50
35	BA	1428	A	C4-C5-C6	-7.21	113.39	117.00
35	BA	1435	G	O4'-C1'-N9	7.21	113.97	108.20
35	BA	1536	C	C5'-C4'-O4'	7.21	117.76	109.10
2	AB	2035	G	N1-C2-N3	-7.21	119.57	123.90
2	AB	2078	C	C4'-C3'-C2'	-7.21	95.39	102.60
2	AB	2391	G	N1-C6-O6	7.21	124.23	119.90
2	AB	2608	G	C3'-C2'-C1'	7.21	107.27	101.50
35	BA	378	G	N9-C1'-C2'	-7.21	104.07	112.00
35	BA	636	U	O4'-C1'-N1	7.21	113.97	108.20
35	BA	845	A	P-O3'-C3'	7.21	128.36	119.70
35	BA	1538	C	C3'-C2'-C1'	7.21	107.27	101.50
2	AB	294	A	N1-C6-N6	-7.21	114.27	118.60
2	AB	540	C	N3-C4-N4	7.21	123.05	118.00
2	AB	730	A	N3-C4-N9	7.21	133.17	127.40
2	AB	2250	G	N9-C4-C5	7.21	108.28	105.40
2	AB	2685	G	C5'-C4'-O4'	7.21	117.75	109.10
2	AB	2827	C	N3-C2-O2	-7.21	116.85	121.90
26	AZ	73	ARG	NH1-CZ-NH2	7.21	127.33	119.40
34	A7	12	ARG	CD-NE-CZ	7.21	133.69	123.60
35	BA	4	U	N1-C2-N3	7.21	119.23	114.90
35	BA	164	G	N3-C4-C5	-7.21	125.00	128.60
36	BB	30	G	N3-C2-N2	-7.21	114.85	119.90
56	BV	35	ARG	NE-CZ-NH2	-7.21	116.69	120.30
1	AA	37	C	N3-C4-N4	7.21	123.05	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	386	G	N3-C4-N9	7.21	130.33	126.00
2	AB	463	G	N1-C2-N2	7.21	122.69	116.20
35	BA	205	A	C5-C6-N6	7.21	129.47	123.70
55	BU	31	TYR	CG-CD1-CE1	-7.21	115.53	121.30
2	AB	354	A	N3-C4-N9	-7.21	121.63	127.40
2	AB	586	A	O4'-C1'-N9	7.21	113.97	108.20
2	AB	813	U	C4'-C3'-C2'	-7.21	95.39	102.60
2	AB	964	C	N1-C2-O2	7.21	123.22	118.90
2	AB	1157	G	C3'-C2'-C1'	7.21	107.27	101.50
2	AB	1982	U	C4'-C3'-C2'	-7.21	95.39	102.60
2	AB	2088	A	C8-N9-C4	-7.21	102.92	105.80
2	AB	2279	G	C4-C5-C6	7.21	123.12	118.80
35	BA	547	A	P-O3'-C3'	7.21	128.35	119.70
2	AB	46	G	N3-C4-N9	7.21	130.32	126.00
2	AB	142	A	C6-N1-C2	-7.21	114.28	118.60
2	AB	285	G	C8-N9-C4	7.21	109.28	106.40
2	AB	1899	A	N3-C4-N9	7.21	133.16	127.40
5	AE	206	ALA	CB-CA-C	7.21	120.91	110.10
35	BA	1068	G	C6-C5-N7	-7.21	126.08	130.40
2	AB	2862	G	N3-C2-N2	-7.21	114.86	119.90
35	BA	135	C	N1-C2-O2	7.21	123.22	118.90
2	AB	632	A	C2-N3-C4	7.20	114.20	110.60
2	AB	1128	G	N1-C6-O6	-7.20	115.58	119.90
2	AB	1529	G	C8-N9-C4	-7.20	103.52	106.40
2	AB	2136	G	C5'-C4'-O4'	7.20	117.74	109.10
2	AB	2154	A	C5-C6-N1	7.20	121.30	117.70
2	AB	2323	G	C4'-C3'-C2'	-7.20	95.40	102.60
2	AB	2493	U	C5-C4-O4	-7.20	121.58	125.90
2	AB	2680	U	N3-C2-O2	-7.20	117.16	122.20
35	BA	895	G	C2-N3-C4	7.20	115.50	111.90
35	BA	1173	U	N3-C2-O2	-7.20	117.16	122.20
35	BA	1416	G	N3-C2-N2	-7.20	114.86	119.90
38	BD	49	C	C5-C6-N1	7.20	124.60	121.00
2	AB	716	A	O4'-C1'-N9	7.20	113.96	108.20
10	AJ	98	PHE	CG-CD2-CE2	-7.20	112.88	120.80
35	BA	920	U	N3-C4-O4	7.20	124.44	119.40
36	BB	23	A	N1-C2-N3	-7.20	125.70	129.30
2	AB	469	G	N1-C6-O6	-7.20	115.58	119.90
2	AB	926	G	C5'-C4'-O4'	7.20	117.74	109.10
2	AB	1522	A	C6-N1-C2	7.20	122.92	118.60
2	AB	1818	U	O4'-C1'-N1	7.20	113.96	108.20
2	AB	2013	A	O4'-C1'-N9	7.20	113.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2594	C	N1-C1'-C2'	-7.20	104.08	112.00
10	AJ	137	ARG	NE-CZ-NH2	7.20	123.90	120.30
35	BA	1526	G	N3-C2-N2	-7.20	114.86	119.90
2	AB	124	G	N7-C8-N9	7.20	116.70	113.10
2	AB	797	G	C5-N7-C8	-7.20	100.70	104.30
2	AB	1291	C	N1-C2-O2	-7.20	114.58	118.90
2	AB	1534	U	C4-C5-C6	7.20	124.02	119.70
2	AB	1902	C	N1-C2-O2	7.20	123.22	118.90
2	AB	2134	A	C5-C6-N1	7.20	121.30	117.70
35	BA	51	A	C3'-C2'-C1'	7.20	107.26	101.50
35	BA	578	C	C5'-C4'-O4'	7.20	117.74	109.10
35	BA	589	U	C3'-C2'-C1'	-7.20	95.74	101.50
35	BA	962	C	C1'-O4'-C4'	7.20	115.66	109.90
35	BA	1509	C	O4'-C1'-N1	7.20	113.96	108.20
35	BA	1342	C	C5-C4-N4	-7.20	115.16	120.20
2	AB	374	A	N9-C4-C5	-7.20	102.92	105.80
2	AB	989	G	C2-N3-C4	-7.20	108.30	111.90
2	AB	1481	U	N3-C4-C5	-7.20	110.28	114.60
2	AB	1943	U	N3-C2-O2	-7.20	117.16	122.20
2	AB	2037	A	C1'-O4'-C4'	-7.20	104.14	109.90
2	AB	2164	C	O4'-C4'-C3'	7.20	111.86	106.10
2	AB	2397	G	N3-C4-N9	7.20	130.32	126.00
2	AB	2532	G	C5-C6-O6	7.20	132.92	128.60
16	AP	46	ARG	NE-CZ-NH1	7.20	123.90	120.30
35	BA	938	A	C2-N3-C4	7.20	114.20	110.60
2	AB	1245	G	N3-C4-N9	7.19	130.32	126.00
2	AB	1390	U	N1-C1'-C2'	-7.19	104.09	112.00
2	AB	2237	G	C6-N1-C2	-7.19	120.78	125.10
2	AB	2277	G	C2-N3-C4	7.19	115.50	111.90
2	AB	616	A	C8-N9-C4	-7.19	102.92	105.80
2	AB	786	C	N1-C1'-C2'	-7.19	104.09	112.00
2	AB	2738	A	C8-N9-C4	-7.19	102.92	105.80
35	BA	72	A	N7-C8-N9	-7.19	110.20	113.80
35	BA	890	G	N7-C8-N9	7.19	116.70	113.10
35	BA	1472	U	N1-C2-N3	7.19	119.22	114.90
2	AB	20	C	N1-C2-O2	7.19	123.21	118.90
2	AB	603	A	C3'-C2'-C1'	-7.19	95.75	101.50
2	AB	2496	C	N1-C2-O2	7.19	123.22	118.90
35	BA	69	G	C5-C6-O6	-7.19	124.29	128.60
35	BA	246	A	O4'-C1'-C2'	-7.19	98.61	105.80
35	BA	1274	A	N7-C8-N9	7.19	117.39	113.80
36	BB	67	G	O4'-C1'-N9	7.19	113.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	371	A	C4-C5-C6	7.19	120.59	117.00
2	AB	830	G	N1-C2-N3	7.19	128.21	123.90
2	AB	904	G	C4-C5-N7	-7.19	107.92	110.80
2	AB	693	A	C1'-O4'-C4'	7.19	115.65	109.90
2	AB	1425	G	C2-N3-C4	7.19	115.49	111.90
2	AB	2716	C	O4'-C1'-N1	7.19	113.95	108.20
35	BA	193	C	O4'-C1'-N1	7.19	113.95	108.20
35	BA	305	G	C5-C6-O6	7.19	132.91	128.60
35	BA	983	A	C5-C6-N6	-7.19	117.95	123.70
35	BA	1297	G	C5-N7-C8	-7.19	100.71	104.30
2	AB	2459	A	N7-C8-N9	7.19	117.39	113.80
2	AB	2596	U	C5-C4-O4	7.19	130.21	125.90
35	BA	1184	G	C5-C6-N1	-7.19	107.91	111.50
2	AB	1064	C	C5-C4-N4	7.18	125.23	120.20
2	AB	2031	A	C8-N9-C4	7.18	108.67	105.80
2	AB	2903	U	N3-C4-O4	7.18	124.43	119.40
35	BA	1123	U	C5'-C4'-C3'	-7.18	104.50	116.00
36	BB	11	U	C6-N1-C2	7.18	125.31	121.00
2	AB	366	C	C2-N1-C1'	-7.18	110.90	118.80
2	AB	2227	A	C8-N9-C4	-7.18	102.93	105.80
2	AB	2237	G	N7-C8-N9	7.18	116.69	113.10
2	AB	2649	C	C6-N1-C2	-7.18	117.43	120.30
2	AB	2785	C	N1-C2-O2	7.18	123.21	118.90
35	BA	194	C	C6-N1-C2	-7.18	117.43	120.30
35	BA	670	G	C4-C5-C6	7.18	123.11	118.80
35	BA	703	G	C2-N3-C4	7.18	115.49	111.90
35	BA	1087	G	C4-C5-C6	7.18	123.11	118.80
35	BA	1474	U	N3-C4-O4	7.18	124.43	119.40
38	BD	19	G	C2-N3-C4	7.18	115.49	111.90
2	AB	236	C	N3-C2-O2	-7.18	116.87	121.90
2	AB	268	C	C4-C5-C6	-7.18	113.81	117.40
2	AB	603	A	C5'-C4'-C3'	-7.18	104.51	116.00
2	AB	1999	C	N3-C2-O2	-7.18	116.87	121.90
2	AB	2892	G	C5-C6-N1	7.18	115.09	111.50
35	BA	1061	G	C2-N3-C4	7.18	115.49	111.90
35	BA	1344	C	N3-C4-C5	7.18	124.77	121.90
2	AB	270	A	C6-N1-C2	-7.18	114.29	118.60
2	AB	1611	C	C5'-C4'-O4'	7.18	117.72	109.10
2	AB	2611	C	O5'-C5'-C4'	-7.18	98.06	111.70
2	AB	2677	G	C4'-C3'-C2'	-7.18	95.42	102.60
35	BA	256	U	C4-C5-C6	7.18	124.01	119.70
35	BA	816	A	C5'-C4'-O4'	7.18	117.72	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1697	G	C2-N3-C4	7.18	115.49	111.90
2	AB	2523	G	N3-C4-C5	-7.18	125.01	128.60
35	BA	726	C	C4-C5-C6	-7.18	113.81	117.40
35	BA	797	C	N1-C1'-C2'	-7.18	104.10	112.00
2	AB	909	A	N7-C8-N9	-7.18	110.21	113.80
2	AB	1119	U	N1-C2-N3	7.18	119.20	114.90
2	AB	2182	U	N3-C2-O2	-7.18	117.18	122.20
35	BA	372	C	C6-N1-C2	-7.18	117.43	120.30
35	BA	1203	C	C2-N3-C4	7.18	123.49	119.90
2	AB	411	G	C4-C5-C6	7.17	123.10	118.80
2	AB	1893	C	C3'-C2'-C1'	7.17	107.24	101.50
2	AB	265	A	N1-C2-N3	-7.17	125.71	129.30
2	AB	738	G	O4'-C4'-C3'	-7.17	96.83	104.00
2	AB	446	G	C1'-O4'-C4'	7.17	115.64	109.90
2	AB	1179	G	N3-C4-C5	-7.17	125.01	128.60
2	AB	1826	G	C2-N3-C4	7.17	115.49	111.90
2	AB	2401	U	N1-C1'-C2'	-7.17	104.11	112.00
2	AB	2822	G	O4'-C1'-C2'	7.17	114.06	107.60
35	BA	1174	G	N3-C4-N9	7.17	130.30	126.00
42	BH	141	ASP	CB-CG-OD2	7.17	124.75	118.30
2	AB	1992	G	N7-C8-N9	7.17	116.69	113.10
2	AB	2739	U	P-O3'-C3'	7.17	128.30	119.70
2	AB	2747	G	N3-C4-C5	-7.17	125.02	128.60
35	BA	522	C	O4'-C1'-N1	7.17	113.94	108.20
2	AB	351	C	C1'-O4'-C4'	7.17	115.63	109.90
2	AB	392	U	C4-C5-C6	7.17	124.00	119.70
2	AB	574	A	N7-C8-N9	-7.17	110.22	113.80
2	AB	739	A	C6-N1-C2	7.17	122.90	118.60
2	AB	1136	G	N9-C1'-C2'	-7.17	104.11	112.00
2	AB	1524	G	C6-C5-N7	-7.17	126.10	130.40
2	AB	1973	G	N1-C2-N2	7.17	122.65	116.20
2	AB	2243	U	C6-N1-C2	-7.17	116.70	121.00
2	AB	2443	C	C5-C4-N4	7.17	125.22	120.20
35	BA	112	G	C5-N7-C8	-7.17	100.72	104.30
35	BA	345	C	C5'-C4'-O4'	7.17	117.70	109.10
35	BA	447	G	C5'-C4'-O4'	7.17	117.70	109.10
35	BA	1139	G	C6-C5-N7	-7.17	126.10	130.40
35	BA	1233	G	C3'-C2'-C1'	7.17	107.23	101.50
35	BA	1373	G	N1-C2-N3	-7.17	119.60	123.90
2	AB	412	A	C5-N7-C8	7.17	107.48	103.90
35	BA	145	G	C5-C6-O6	-7.17	124.30	128.60
35	BA	332	G	N9-C4-C5	7.17	108.27	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	83	G	O4'-C1'-N9	7.17	113.93	108.20
35	BA	129	A	C4-C5-N7	-7.17	107.12	110.70
35	BA	978	A	N3-C4-N9	-7.17	121.67	127.40
35	BA	1153	G	N1-C6-O6	7.17	124.20	119.90
36	BB	26	A	C6-N1-C2	-7.17	114.30	118.60
1	AA	29	A	N1-C2-N3	-7.16	125.72	129.30
2	AB	263	G	C3'-C2'-C1'	-7.16	95.77	101.50
2	AB	644	A	N9-C4-C5	7.16	108.67	105.80
2	AB	1198	U	C2-N3-C4	-7.16	122.70	127.00
2	AB	1221	C	C6-N1-C2	7.16	123.17	120.30
2	AB	1749	A	N9-C4-C5	7.16	108.67	105.80
2	AB	1888	G	C5-C6-N1	-7.16	107.92	111.50
2	AB	1904	G	C2-N3-C4	7.16	115.48	111.90
2	AB	2506	U	N3-C2-O2	-7.16	117.19	122.20
35	BA	124	C	N3-C4-N4	7.16	123.01	118.00
35	BA	245	U	N1-C1'-C2'	-7.16	104.12	112.00
35	BA	941	G	N9-C1'-C2'	-7.16	104.12	112.00
2	AB	46	G	C5'-C4'-C3'	-7.16	104.54	116.00
2	AB	517	C	C6-N1-C2	-7.16	117.44	120.30
2	AB	1062	G	N7-C8-N9	7.16	116.68	113.10
2	AB	1393	A	C6-C5-N7	7.16	137.31	132.30
2	AB	1474	U	C5-C4-O4	-7.16	121.60	125.90
2	AB	1695	G	O4'-C1'-N9	7.16	113.93	108.20
2	AB	1875	G	C8-N9-C4	-7.16	103.54	106.40
2	AB	2136	G	C5-C6-N1	-7.16	107.92	111.50
35	BA	38	G	O4'-C1'-N9	7.16	113.93	108.20
35	BA	253	A	N1-C2-N3	-7.16	125.72	129.30
35	BA	270	A	C6-C5-N7	7.16	137.31	132.30
35	BA	481	G	C2-N3-C4	7.16	115.48	111.90
35	BA	765	G	N3-C4-N9	7.16	130.30	126.00
35	BA	1257	A	C3'-C2'-C1'	7.16	107.23	101.50
2	AB	36	G	C5-C6-N1	-7.16	107.92	111.50
2	AB	295	G	C2-N3-C4	7.16	115.48	111.90
2	AB	924	G	N1-C2-N2	7.16	122.64	116.20
2	AB	1194	A	N1-C6-N6	7.16	122.89	118.60
2	AB	1998	A	P-O3'-C3'	7.16	128.29	119.70
2	AB	2567	G	N1-C6-O6	7.16	124.19	119.90
2	AB	2574	G	C4-C5-C6	7.16	123.09	118.80
35	BA	341	C	C5'-C4'-O4'	7.16	117.69	109.10
35	BA	773	G	C5-C6-N1	7.16	115.08	111.50
35	BA	1110	A	C8-N9-C4	7.16	108.66	105.80
35	BA	1416	G	O4'-C1'-N9	7.16	113.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	32	U	O4'-C1'-N1	7.16	113.93	108.20
2	AB	32	C	P-O3'-C3'	7.16	128.29	119.70
2	AB	1418	G	C6-N1-C2	-7.16	120.81	125.10
2	AB	63	A	C5-N7-C8	7.16	107.48	103.90
2	AB	164	C	P-O3'-C3'	7.16	128.29	119.70
2	AB	366	C	C5-C6-N1	-7.16	117.42	121.00
2	AB	999	U	O4'-C1'-N1	7.16	113.92	108.20
2	AB	1883	U	C2-N3-C4	-7.16	122.71	127.00
2	AB	2232	C	C5-C4-N4	-7.16	115.19	120.20
2	AB	2294	G	N1-C6-O6	7.16	124.19	119.90
2	AB	2481	G	N1-C2-N3	-7.16	119.61	123.90
2	AB	2564	A	C6-N1-C2	7.16	122.89	118.60
35	BA	399	G	N3-C4-C5	-7.16	125.02	128.60
35	BA	473	U	C4-C5-C6	7.16	123.99	119.70
35	BA	1235	U	C4-C5-C6	7.16	123.99	119.70
2	AB	382	A	C8-N9-C4	7.15	108.66	105.80
2	AB	1770	G	C4-C5-C6	7.15	123.09	118.80
2	AB	2055	C	C5-C4-N4	7.15	125.21	120.20
2	AB	2743	U	C5-C6-N1	-7.15	119.12	122.70
2	AB	117	G	C6-C5-N7	-7.15	126.11	130.40
2	AB	951	C	C1'-O4'-C4'	-7.15	104.18	109.90
2	AB	959	A	C4-C5-C6	7.15	120.58	117.00
2	AB	2308	G	C5-C6-O6	-7.15	124.31	128.60
2	AB	2483	C	N3-C4-C5	-7.15	119.04	121.90
2	AB	2786	U	C1'-O4'-C4'	-7.15	104.18	109.90
2	AB	2802	G	C8-N9-C4	-7.15	103.54	106.40
2	AB	2888	C	O4'-C1'-N1	7.15	113.92	108.20
7	AG	162	ASP	CB-CG-OD2	-7.15	111.86	118.30
35	BA	694	A	C3'-C2'-C1'	7.15	107.22	101.50
35	BA	832	G	C4-C5-N7	7.15	113.66	110.80
35	BA	1362	A	C4-C5-C6	-7.15	113.42	117.00
37	BC	44	U	C5-C4-O4	7.15	130.19	125.90
2	AB	1667	G	N1-C2-N2	7.15	122.64	116.20
2	AB	1902	C	O4'-C1'-N1	7.15	113.92	108.20
2	AB	2061	G	N9-C4-C5	7.15	108.26	105.40
35	BA	182	A	C2-N3-C4	7.15	114.18	110.60
2	AB	17	G	N9-C4-C5	7.15	108.26	105.40
2	AB	528	A	N1-C2-N3	7.15	132.87	129.30
2	AB	915	C	P-O3'-C3'	7.15	128.28	119.70
2	AB	1040	A	O4'-C1'-N9	7.15	113.92	108.20
2	AB	1460	U	C5-C4-O4	-7.15	121.61	125.90
2	AB	2223	G	N3-C4-C5	-7.15	125.03	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2725	A	C8-N9-C4	-7.15	102.94	105.80
35	BA	739	C	C5'-C4'-C3'	-7.15	104.56	116.00
35	BA	837	U	C5-C4-O4	-7.15	121.61	125.90
35	BA	1111	A	C8-N9-C4	7.15	108.66	105.80
2	AB	560	C	N3-C4-C5	-7.15	119.04	121.90
2	AB	1901	A	N9-C1'-C2'	-7.15	104.14	112.00
2	AB	2196	C	C5-C6-N1	7.15	124.57	121.00
2	AB	2676	C	N3-C2-O2	-7.15	116.90	121.90
35	BA	580	C	P-O3'-C3'	7.15	128.28	119.70
35	BA	1278	G	C5-C6-O6	-7.15	124.31	128.60
35	BA	1430	A	C4-C5-C6	-7.15	113.43	117.00
36	BB	28	C	C5'-C4'-O4'	7.15	117.68	109.10
1	AA	40	U	C5'-C4'-O4'	7.15	117.67	109.10
2	AB	460	A	N7-C8-N9	7.15	117.37	113.80
15	AO	129	THR	CA-CB-CG2	7.15	122.40	112.40
35	BA	205	A	N1-C6-N6	-7.15	114.31	118.60
35	BA	993	G	C4-C5-C6	7.15	123.09	118.80
35	BA	1216	A	C4-C5-N7	-7.15	107.13	110.70
2	AB	347	A	C6-N1-C2	-7.14	114.31	118.60
2	AB	1300	G	C5-N7-C8	-7.14	100.73	104.30
2	AB	1461	C	N3-C4-C5	-7.14	119.04	121.90
2	AB	2070	A	C5'-C4'-O4'	7.14	117.67	109.10
2	AB	2459	A	N9-C4-C5	7.14	108.66	105.80
2	AB	2530	A	O4'-C1'-N9	-7.14	102.48	108.20
2	AB	2874	C	N1-C2-O2	7.14	123.19	118.90
35	BA	242	G	C2-N3-C4	-7.14	108.33	111.90
35	BA	591	U	N1-C2-N3	7.14	119.19	114.90
35	BA	1034	G	O4'-C1'-N9	7.14	113.92	108.20
35	BA	1073	U	N1-C2-N3	7.14	119.19	114.90
2	AB	758	C	C6-N1-C2	7.14	123.16	120.30
2	AB	2331	G	C3'-C2'-C1'	7.14	107.22	101.50
35	BA	72	A	N3-C4-N9	-7.14	121.69	127.40
35	BA	173	U	C5-C4-O4	-7.14	121.61	125.90
35	BA	384	G	C5-C6-O6	-7.14	124.31	128.60
35	BA	758	C	N3-C4-C5	-7.14	119.04	121.90
1	AA	104	A	C2-N3-C4	7.14	114.17	110.60
2	AB	383	C	N3-C4-C5	-7.14	119.04	121.90
2	AB	1023	U	O4'-C1'-N1	7.14	113.91	108.20
2	AB	1975	G	C2-N3-C4	7.14	115.47	111.90
2	AB	2023	C	C5-C6-N1	7.14	124.57	121.00
35	BA	1210	C	N3-C4-C5	-7.14	119.04	121.90
35	BA	1534	A	C8-N9-C4	-7.14	102.94	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	BI	79	ARG	NE-CZ-NH1	7.14	123.87	120.30
2	AB	351	C	N3-C2-O2	-7.14	116.90	121.90
2	AB	1382	G	C4'-C3'-C2'	-7.14	95.46	102.60
2	AB	1823	G	N9-C4-C5	7.14	108.26	105.40
35	BA	885	G	C8-N9-C4	-7.14	103.54	106.40
35	BA	1178	G	C2-N3-C4	7.14	115.47	111.90
35	BA	1192	C	C3'-C2'-C1'	-7.14	95.79	101.50
2	AB	123	G	N3-C2-N2	-7.14	114.90	119.90
2	AB	935	C	N1-C2-O2	7.14	123.18	118.90
2	AB	1286	A	O4'-C1'-C2'	-7.14	98.66	105.80
2	AB	1395	A	N1-C6-N6	7.14	122.88	118.60
2	AB	1397	U	C5-C4-O4	-7.14	121.62	125.90
2	AB	1683	U	N3-C4-C5	7.14	118.88	114.60
2	AB	2274	A	N7-C8-N9	-7.14	110.23	113.80
2	AB	2286	G	C8-N9-C4	-7.14	103.55	106.40
35	BA	409	U	C5-C6-N1	7.14	126.27	122.70
35	BA	1202	U	C4'-C3'-C2'	-7.14	95.46	102.60
2	AB	106	C	N3-C4-C5	-7.14	119.05	121.90
2	AB	1218	G	N9-C4-C5	-7.14	102.55	105.40
2	AB	1280	G	C5-N7-C8	-7.14	100.73	104.30
2	AB	2775	G	C2-N3-C4	7.14	115.47	111.90
35	BA	567	G	C6-N1-C2	-7.14	120.82	125.10
35	BA	700	G	C8-N9-C4	-7.14	103.55	106.40
35	BA	809	G	C4-C5-C6	7.14	123.08	118.80
2	AB	120	U	O4'-C1'-N1	7.13	113.91	108.20
2	AB	450	G	O4'-C1'-N9	7.13	113.91	108.20
2	AB	1197	G	N7-C8-N9	7.13	116.67	113.10
2	AB	1309	G	C5-C6-O6	-7.13	124.32	128.60
2	AB	1674	G	C5'-C4'-O4'	-7.13	100.54	109.10
2	AB	2152	G	C8-N9-C4	-7.13	103.55	106.40
2	AB	2855	C	O4'-C1'-N1	7.13	113.91	108.20
35	BA	167	A	C5'-C4'-O4'	7.13	117.66	109.10
35	BA	546	A	C6-N1-C2	-7.13	114.32	118.60
2	AB	2224	G	C8-N9-C4	-7.13	103.55	106.40
35	BA	996	A	C4-C5-C6	-7.13	113.43	117.00
1	AA	6	G	C4-C5-N7	-7.13	107.95	110.80
2	AB	241	A	P-O3'-C3'	7.13	128.26	119.70
2	AB	984	A	C5-C6-N1	7.13	121.27	117.70
2	AB	1248	G	N3-C4-N9	7.13	130.28	126.00
2	AB	1400	U	O4'-C1'-N1	7.13	113.91	108.20
2	AB	2311	A	N3-C4-C5	-7.13	121.81	126.80
35	BA	259	G	N3-C2-N2	-7.13	114.91	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1092	A	C5-C6-N6	7.13	129.41	123.70
37	BC	40	G	N9-C4-C5	7.13	108.25	105.40
37	BC	48	C	P-O3'-C3'	7.13	128.26	119.70
38	BD	36	A	C6-C5-N7	7.13	137.29	132.30
2	AB	531	C	C5-C4-N4	7.13	125.19	120.20
35	BA	870	U	O4'-C1'-C2'	-7.13	98.67	105.80
35	BA	1291	U	C3'-C2'-C1'	7.13	107.20	101.50
35	BA	1375	A	O4'-C1'-N9	7.13	113.90	108.20
2	AB	1	G	N1-C2-N3	-7.13	119.62	123.90
2	AB	11	C	C3'-C2'-C1'	7.13	107.20	101.50
2	AB	594	U	O4'-C1'-C2'	7.13	114.02	107.60
2	AB	874	G	N9-C1'-C2'	-7.13	104.16	112.00
2	AB	930	G	N3-C4-N9	-7.13	121.72	126.00
2	AB	1182	G	N9-C4-C5	7.13	108.25	105.40
2	AB	1215	G	N7-C8-N9	-7.13	109.53	113.10
2	AB	1216	G	N7-C8-N9	-7.13	109.54	113.10
2	AB	2026	U	N3-C4-O4	7.13	124.39	119.40
2	AB	2407	A	N7-C8-N9	7.13	117.36	113.80
2	AB	2446	G	C1'-O4'-C4'	7.13	115.60	109.90
2	AB	2721	A	N9-C4-C5	7.13	108.65	105.80
24	AX	82	TYR	CB-CG-CD2	7.13	125.28	121.00
35	BA	217	C	C4'-C3'-C2'	-7.13	95.47	102.60
35	BA	1010	U	C4-C5-C6	7.13	123.98	119.70
2	AB	256	A	C2-N3-C4	-7.13	107.04	110.60
2	AB	808	G	C5-C6-O6	-7.13	124.32	128.60
2	AB	1448	G	N7-C8-N9	-7.13	109.54	113.10
2	AB	1514	G	C5-N7-C8	-7.13	100.74	104.30
2	AB	2863	C	P-O3'-C3'	7.13	128.25	119.70
35	BA	770	C	O4'-C1'-N1	7.13	113.90	108.20
35	BA	1218	C	C5-C4-N4	7.13	125.19	120.20
2	AB	625	G	N1-C6-O6	-7.12	115.62	119.90
2	AB	2147	A	P-O3'-C3'	7.12	128.25	119.70
35	BA	57	G	N7-C8-N9	7.12	116.66	113.10
2	AB	1902	C	C5-C4-N4	-7.12	115.21	120.20
2	AB	2894	G	N9-C4-C5	7.12	108.25	105.40
35	BA	1123	U	O4'-C4'-C3'	7.12	111.80	106.10
35	BA	1178	G	N1-C6-O6	-7.12	115.63	119.90
35	BA	1298	U	C5-C6-N1	-7.12	119.14	122.70
1	AA	107	G	N3-C4-N9	7.12	130.27	126.00
2	AB	699	A	C8-N9-C4	-7.12	102.95	105.80
2	AB	842	U	N3-C4-C5	7.12	118.87	114.60
2	AB	968	C	N3-C4-N4	7.12	122.98	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	103	U	N1-C2-N3	7.12	119.17	114.90
35	BA	669	G	C4'-C3'-C2'	-7.12	95.48	102.60
2	AB	392	U	C2-N3-C4	-7.12	122.73	127.00
2	AB	2214	C	N1-C2-O2	7.12	123.17	118.90
35	BA	423	G	N3-C4-C5	-7.12	125.04	128.60
35	BA	886	G	N7-C8-N9	7.12	116.66	113.10
1	AA	2	G	C5-C6-O6	-7.12	124.33	128.60
2	AB	260	G	C5-C6-O6	7.12	132.87	128.60
2	AB	335	C	C5-C4-N4	-7.12	115.22	120.20
2	AB	868	U	N1-C2-O2	-7.12	117.82	122.80
35	BA	319	G	N1-C6-O6	-7.12	115.63	119.90
35	BA	653	U	N3-C2-O2	-7.12	117.22	122.20
35	BA	898	G	C1'-O4'-C4'	-7.12	104.20	109.90
35	BA	1299	A	C5-C6-N1	-7.12	114.14	117.70
2	AB	2186	G	C4-C5-C6	7.12	123.07	118.80
2	AB	2263	C	C2-N3-C4	7.12	123.46	119.90
2	AB	2383	G	C5'-C4'-C3'	-7.12	104.61	116.00
2	AB	2414	G	C5'-C4'-C3'	7.12	127.39	116.00
35	BA	720	C	C5-C4-N4	-7.12	115.22	120.20
35	BA	1211	U	O4'-C1'-N1	7.12	113.89	108.20
51	BQ	98	ALA	N-CA-CB	-7.12	100.14	110.10
1	AA	113	C	N3-C4-C5	7.12	124.75	121.90
2	AB	446	G	C8-N9-C4	-7.12	103.55	106.40
2	AB	580	U	N1-C2-N3	7.12	119.17	114.90
2	AB	846	U	O5'-C5'-C4'	-7.12	98.18	111.70
2	AB	914	G	N1-C6-O6	7.12	124.17	119.90
2	AB	1253	A	C2-N3-C4	7.12	114.16	110.60
2	AB	1315	C	O4'-C1'-N1	7.12	113.89	108.20
2	AB	1395	A	C8-N9-C4	-7.12	102.95	105.80
2	AB	1930	G	C8-N9-C4	-7.12	103.55	106.40
2	AB	1966	A	C5-C6-N6	-7.12	118.01	123.70
2	AB	2354	C	C5'-C4'-C3'	-7.12	104.61	116.00
35	BA	240	G	P-O3'-C3'	7.12	128.24	119.70
35	BA	784	A	N7-C8-N9	7.12	117.36	113.80
35	BA	814	A	C5'-C4'-O4'	7.12	117.64	109.10
35	BA	988	G	C4-C5-N7	7.12	113.65	110.80
2	AB	212	G	N9-C4-C5	7.11	108.25	105.40
2	AB	849	A	C8-N9-C4	7.11	108.64	105.80
2	AB	2447	G	C8-N9-C4	7.11	109.25	106.40
35	BA	668	G	C5-C6-N1	7.11	115.06	111.50
35	BA	752	G	N3-C2-N2	7.11	124.88	119.90
35	BA	752	G	C8-N9-C4	-7.11	103.55	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	946	A	N9-C4-C5	7.11	108.65	105.80
35	BA	1418	A	N9-C4-C5	7.11	108.64	105.80
2	AB	366	C	C5'-C4'-C3'	7.11	127.38	116.00
2	AB	717	C	C6-N1-C2	-7.11	117.45	120.30
2	AB	1489	C	N3-C4-N4	7.11	122.98	118.00
35	BA	328	C	C4'-C3'-C2'	7.11	109.71	102.60
2	AB	11	C	C5-C4-N4	7.11	125.18	120.20
2	AB	68	G	C4-C5-N7	7.11	113.64	110.80
2	AB	1758	U	C4-C5-C6	-7.11	115.43	119.70
2	AB	1968	G	N9-C1'-C2'	-7.11	104.18	112.00
2	AB	2612	C	C6-N1-C2	-7.11	117.46	120.30
35	BA	90	C	C6-N1-C2	-7.11	117.46	120.30
35	BA	272	C	C5'-C4'-O4'	7.11	117.63	109.10
35	BA	376	G	C6-C5-N7	-7.11	126.13	130.40
35	BA	834	U	C4'-C3'-C2'	-7.11	95.49	102.60
35	BA	918	A	C4'-C3'-C2'	-7.11	95.49	102.60
35	BA	1160	G	C4-C5-N7	-7.11	107.96	110.80
2	AB	720	U	N3-C4-C5	-7.11	110.33	114.60
2	AB	1631	G	C5'-C4'-O4'	7.11	117.63	109.10
2	AB	1914	C	N1-C1'-C2'	-7.11	104.18	112.00
35	BA	481	G	N1-C6-O6	-7.11	115.63	119.90
2	AB	1753	G	C6-N1-C2	-7.11	120.83	125.10
2	AB	1813	G	C5-C6-O6	-7.11	124.34	128.60
2	AB	2175	C	O4'-C1'-N1	7.11	113.89	108.20
2	AB	2300	C	P-O3'-C3'	7.11	128.23	119.70
2	AB	2587	A	C4-C5-C6	-7.11	113.45	117.00
2	AB	2594	C	N3-C2-O2	-7.11	116.92	121.90
2	AB	2732	G	N3-C4-N9	7.11	130.26	126.00
35	BA	668	G	C5-C6-O6	-7.11	124.33	128.60
35	BA	712	A	C4-C5-C6	-7.11	113.45	117.00
35	BA	821	G	N3-C2-N2	-7.11	114.92	119.90
35	BA	1198	G	N7-C8-N9	7.11	116.65	113.10
35	BA	1505	G	N3-C2-N2	-7.11	114.92	119.90
49	BO	8	ARG	NE-CZ-NH1	7.11	123.85	120.30
2	AB	44	A	C5'-C4'-C3'	-7.11	104.63	116.00
2	AB	831	G	C5-C6-N1	7.11	115.05	111.50
2	AB	990	A	C3'-C2'-C1'	7.11	107.19	101.50
2	AB	2373	G	C6-C5-N7	-7.11	126.14	130.40
35	BA	49	U	N3-C4-C5	7.11	118.86	114.60
35	BA	269	C	N1-C2-O2	7.11	123.16	118.90
35	BA	319	G	C2-N3-C4	7.11	115.45	111.90
35	BA	373	A	C6-C5-N7	7.11	137.27	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1197	A	N1-C6-N6	7.11	122.86	118.60
2	AB	976	G	C4-C5-C6	7.10	123.06	118.80
2	AB	1507	C	P-O3'-C3'	7.10	128.22	119.70
2	AB	1718	G	N3-C4-N9	7.10	130.26	126.00
2	AB	96	C	C5-C6-N1	7.10	124.55	121.00
2	AB	348	A	C2-N3-C4	7.10	114.15	110.60
2	AB	944	C	O4'-C4'-C3'	7.10	111.78	106.10
2	AB	1792	G	N3-C4-C5	-7.10	125.05	128.60
2	AB	2111	U	C4'-C3'-C2'	-7.10	95.50	102.60
2	AB	2130	U	C5-C6-N1	-7.10	119.15	122.70
35	BA	126	G	N3-C4-N9	-7.10	121.74	126.00
35	BA	862	C	N3-C2-O2	-7.10	116.93	121.90
35	BA	876	C	C2-N3-C4	7.10	123.45	119.90
35	BA	920	U	O5'-P-OP2	-7.10	99.31	105.70
35	BA	1163	A	C5'-C4'-O4'	7.10	117.62	109.10
35	BA	1311	A	O4'-C1'-N9	7.10	113.88	108.20
2	AB	66	C	N1-C1'-C2'	-7.10	104.19	112.00
2	AB	1323	C	C3'-C2'-C1'	-7.10	95.82	101.50
2	AB	2034	U	N1-C2-N3	7.10	119.16	114.90
2	AB	2900	A	C4-C5-C6	7.10	120.55	117.00
35	BA	101	A	C5'-C4'-O4'	7.10	117.62	109.10
35	BA	381	C	C5-C4-N4	-7.10	115.23	120.20
35	BA	515	G	C4-C5-N7	-7.10	107.96	110.80
2	AB	268	C	C5-C4-N4	-7.10	115.23	120.20
2	AB	377	G	N3-C2-N2	-7.10	114.93	119.90
2	AB	470	A	C1'-O4'-C4'	-7.10	104.22	109.90
2	AB	683	U	C5-C6-N1	-7.10	119.15	122.70
2	AB	839	U	N1-C2-O2	7.10	127.77	122.80
2	AB	950	G	C5-N7-C8	7.10	107.85	104.30
2	AB	962	G	N7-C8-N9	7.10	116.65	113.10
2	AB	1179	G	N9-C4-C5	7.10	108.24	105.40
35	BA	223	A	C2-N3-C4	7.10	114.15	110.60
35	BA	361	G	C4-C5-C6	7.10	123.06	118.80
35	BA	449	G	C5-N7-C8	-7.10	100.75	104.30
35	BA	552	U	C2-N3-C4	-7.10	122.74	127.00
35	BA	836	G	C8-N9-C4	-7.10	103.56	106.40
2	AB	205	G	C4-C5-C6	7.10	123.06	118.80
2	AB	1256	G	N7-C8-N9	7.10	116.65	113.10
2	AB	1263	U	C1'-O4'-C4'	-7.10	104.22	109.90
2	AB	1581	G	C5-N7-C8	7.10	107.85	104.30
2	AB	1677	A	N9-C4-C5	7.10	108.64	105.80
35	BA	192	A	O4'-C1'-N9	7.10	113.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	9	G	N3-C4-C5	-7.10	125.05	128.60
43	BI	4	TYR	CZ-CE2-CD2	-7.10	113.41	119.80
2	AB	118	A	C6-N1-C2	7.10	122.86	118.60
2	AB	678	C	C3'-C2'-C1'	7.10	107.18	101.50
35	BA	1021	A	C5-C6-N1	7.10	121.25	117.70
2	AB	73	A	C5-C6-N1	7.09	121.25	117.70
2	AB	1075	C	N3-C2-O2	-7.09	116.93	121.90
2	AB	1155	A	C5-C6-N1	7.09	121.25	117.70
2	AB	1840	G	C6-N1-C2	-7.09	120.84	125.10
2	AB	1902	C	O4'-C4'-C3'	7.09	111.78	106.10
2	AB	2267	A	N7-C8-N9	7.09	117.35	113.80
2	AB	2429	G	C4'-C3'-C2'	-7.09	95.50	102.60
35	BA	1440	U	C2-N3-C4	-7.09	122.74	127.00
58	BX	33	ARG	NE-CZ-NH1	-7.09	116.75	120.30
2	AB	1098	A	C5'-C4'-O4'	7.09	117.61	109.10
2	AB	2719	G	N3-C4-C5	-7.09	125.05	128.60
35	BA	7	A	N3-C4-C5	-7.09	121.83	126.80
35	BA	111	G	N9-C4-C5	7.09	108.24	105.40
35	BA	458	U	C5'-C4'-O4'	7.09	117.61	109.10
2	AB	363	G	C2-N3-C4	7.09	115.44	111.90
2	AB	706	A	O4'-C1'-N9	7.09	113.87	108.20
2	AB	943	A	C4-C5-N7	7.09	114.25	110.70
2	AB	1959	G	C6-C5-N7	-7.09	126.14	130.40
2	AB	2120	G	C8-N9-C4	-7.09	103.56	106.40
2	AB	2505	G	C2-N3-C4	7.09	115.44	111.90
35	BA	458	U	C2-N3-C4	-7.09	122.75	127.00
35	BA	463	U	N1-C2-N3	7.09	119.16	114.90
35	BA	914	A	N7-C8-N9	-7.09	110.25	113.80
35	BA	1306	A	N9-C1'-C2'	-7.09	104.20	112.00
35	BA	1320	C	N1-C2-O2	7.09	123.16	118.90
36	BB	11	U	C1'-O4'-C4'	-7.09	104.23	109.90
2	AB	349	U	C1'-O4'-C4'	-7.09	104.23	109.90
2	AB	457	A	O4'-C1'-N9	7.09	113.87	108.20
2	AB	627	A	C4'-C3'-C2'	-7.09	95.51	102.60
2	AB	1343	G	N9-C4-C5	7.09	108.24	105.40
2	AB	1942	C	C2-N3-C4	7.09	123.44	119.90
2	AB	2023	C	N3-C2-O2	-7.09	116.94	121.90
2	AB	2355	G	C8-N9-C4	-7.09	103.56	106.40
25	AY	24	ARG	NE-CZ-NH2	-7.09	116.75	120.30
35	BA	857	C	O4'-C1'-N1	7.09	113.87	108.20
35	BA	1492	A	C1'-O4'-C4'	-7.09	104.23	109.90
46	BL	6	TYR	CB-CG-CD2	-7.09	116.75	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	477	C	N3-C4-N4	7.09	122.96	118.00
35	BA	891	U	N3-C4-O4	-7.09	114.44	119.40
38	BD	12	G	C8-N9-C1'	7.09	136.21	127.00
2	AB	587	C	C4-C5-C6	-7.09	113.86	117.40
2	AB	1031	G	C5'-C4'-C3'	7.09	127.34	116.00
2	AB	2148	G	O4'-C1'-N9	7.09	113.87	108.20
2	AB	2152	G	N1-C6-O6	7.09	124.15	119.90
2	AB	2545	G	N9-C1'-C2'	-7.09	104.20	112.00
2	AB	2738	A	C2-N3-C4	-7.09	107.06	110.60
2	AB	2816	G	C5-C6-O6	-7.09	124.35	128.60
35	BA	431	A	N7-C8-N9	-7.09	110.26	113.80
35	BA	702	A	C5-N7-C8	7.09	107.44	103.90
35	BA	1037	C	C5-C4-N4	-7.09	115.24	120.20
35	BA	1153	G	N3-C4-N9	-7.09	121.75	126.00
35	BA	1268	G	C6-C5-N7	-7.09	126.15	130.40
36	BB	59	G	C3'-C2'-C1'	7.09	107.17	101.50
1	AA	50	A	N1-C6-N6	-7.08	114.35	118.60
2	AB	104	A	N1-C2-N3	-7.08	125.76	129.30
35	BA	894	G	N3-C4-C5	-7.08	125.06	128.60
40	BF	202	PHE	CB-CG-CD2	-7.08	115.84	120.80
2	AB	707	G	C4-C5-C6	7.08	123.05	118.80
2	AB	879	G	C4'-C3'-C2'	-7.08	95.52	102.60
2	AB	1951	U	O4'-C1'-N1	-7.08	102.53	108.20
2	AB	2068	U	C5-C6-N1	-7.08	119.16	122.70
2	AB	2373	G	C4-C5-N7	7.08	113.63	110.80
35	BA	40	C	N3-C4-C5	-7.08	119.07	121.90
35	BA	501	C	O4'-C1'-N1	7.08	113.87	108.20
35	BA	601	G	N9-C1'-C2'	-7.08	104.21	112.00
35	BA	1197	A	C5-C6-N1	-7.08	114.16	117.70
35	BA	1474	U	C5-C6-N1	-7.08	119.16	122.70
2	AB	178	G	N7-C8-N9	7.08	116.64	113.10
2	AB	283	G	N1-C2-N2	7.08	122.57	116.20
2	AB	761	A	P-O3'-C3'	7.08	128.20	119.70
2	AB	893	C	C5-C4-N4	-7.08	115.24	120.20
2	AB	1307	A	C5-C6-N1	7.08	121.24	117.70
2	AB	1647	U	C5-C6-N1	-7.08	119.16	122.70
2	AB	2878	U	C6-N1-C2	-7.08	116.75	121.00
35	BA	55	A	C5-N7-C8	-7.08	100.36	103.90
35	BA	259	G	C4-C5-C6	7.08	123.05	118.80
2	AB	1047	G	C4'-C3'-C2'	-7.08	95.52	102.60
2	AB	2091	C	C4'-C3'-C2'	-7.08	95.52	102.60
2	AB	2146	C	N3-C4-C5	-7.08	119.07	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2887	A	C5-C6-N1	7.08	121.24	117.70
20	AT	20	VAL	CA-CB-CG1	7.08	121.52	110.90
29	A2	11	GLU	OE1-CD-OE2	7.08	131.80	123.30
35	BA	591	U	C2-N3-C4	-7.08	122.75	127.00
35	BA	1462	C	O4'-C1'-N1	7.08	113.86	108.20
2	AB	51	G	C5'-C4'-O4'	7.08	117.59	109.10
2	AB	163	C	C6-N1-C2	-7.08	117.47	120.30
2	AB	424	G	N1-C2-N2	7.08	122.57	116.20
2	AB	496	G	C5'-C4'-C3'	-7.08	104.68	116.00
2	AB	529	A	C6-N1-C2	7.08	122.85	118.60
2	AB	1665	A	N9-C1'-C2'	-7.08	104.22	112.00
2	AB	1869	G	C5-C6-O6	7.08	132.85	128.60
2	AB	2040	G	N3-C4-C5	-7.08	125.06	128.60
2	AB	2881	U	O4'-C4'-C3'	7.08	111.76	106.10
35	BA	333	U	C2-N3-C4	-7.08	122.75	127.00
35	BA	569	C	N1-C1'-C2'	-7.08	104.21	112.00
35	BA	1270	G	C5-C6-O6	-7.08	124.35	128.60
35	BA	1384	C	O4'-C1'-N1	7.08	113.86	108.20
1	AA	109	A	C4-C5-N7	-7.08	107.16	110.70
2	AB	330	A	N7-C8-N9	7.08	117.34	113.80
2	AB	711	G	N3-C4-C5	-7.08	125.06	128.60
2	AB	2004	G	C6-N1-C2	-7.08	120.85	125.10
2	AB	2008	C	N3-C4-C5	-7.08	119.07	121.90
35	BA	708	C	C3'-C2'-C1'	7.08	107.16	101.50
2	AB	182	A	C4-C5-N7	-7.08	107.16	110.70
2	AB	1713	A	C8-N9-C4	7.08	108.63	105.80
2	AB	2290	G	C3'-C2'-C1'	7.08	107.16	101.50
2	AB	2474	U	N3-C4-C5	7.08	118.85	114.60
2	AB	2565	A	C5-N7-C8	-7.08	100.36	103.90
2	AB	2598	A	N1-C2-N3	-7.08	125.76	129.30
35	BA	860	A	N7-C8-N9	-7.08	110.26	113.80
35	BA	1221	G	O4'-C1'-N9	7.08	113.86	108.20
35	BA	1228	C	O4'-C1'-N1	7.08	113.86	108.20
2	AB	286	U	N3-C4-O4	7.07	124.35	119.40
2	AB	922	C	C5-C4-N4	-7.07	115.25	120.20
2	AB	1299	G	C1'-O4'-C4'	7.07	115.56	109.90
2	AB	1334	G	N3-C4-C5	-7.07	125.06	128.60
2	AB	1890	A	C8-N9-C4	-7.07	102.97	105.80
2	AB	1954	G	O4'-C1'-N9	7.07	113.86	108.20
35	BA	860	A	C8-N9-C4	7.07	108.63	105.80
2	AB	314	C	C3'-C2'-C1'	-7.07	95.84	101.50
2	AB	391	A	C6-N1-C2	-7.07	114.36	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1063	C	C5-C6-N1	-7.07	117.46	121.00
35	BA	1396	A	C4-C5-N7	-7.07	107.16	110.70
2	AB	14	A	O4'-C1'-N9	7.07	113.86	108.20
2	AB	367	G	C4-C5-C6	7.07	123.04	118.80
2	AB	533	G	N9-C4-C5	7.07	108.23	105.40
2	AB	2828	G	O4'-C1'-N9	7.07	113.86	108.20
34	A7	36	ARG	NE-CZ-NH1	-7.07	116.77	120.30
35	BA	146	G	C5-C6-O6	-7.07	124.36	128.60
35	BA	182	A	N3-C4-C5	-7.07	121.85	126.80
35	BA	770	C	N1-C1'-C2'	-7.07	104.22	112.00
35	BA	982	U	C5-C6-N1	7.07	126.23	122.70
2	AB	99	U	N3-C2-O2	-7.07	117.25	122.20
35	BA	184	G	C8-N9-C4	-7.07	103.57	106.40
47	BM	37	ARG	NE-CZ-NH2	-7.07	116.77	120.30
2	AB	19	A	C6-C5-N7	7.07	137.25	132.30
2	AB	281	C	N1-C2-O2	7.07	123.14	118.90
2	AB	565	C	C5'-C4'-O4'	7.07	117.58	109.10
2	AB	1828	G	N9-C4-C5	7.07	108.23	105.40
2	AB	2403	C	C4'-C3'-C2'	-7.07	95.53	102.60
2	AB	2469	A	C5-C6-N1	7.07	121.23	117.70
35	BA	212	G	N9-C1'-C2'	-7.07	104.22	112.00
35	BA	418	C	N1-C2-O2	7.07	123.14	118.90
35	BA	433	G	C6-C5-N7	-7.07	126.16	130.40
35	BA	1323	G	N1-C2-N3	7.07	128.14	123.90
35	BA	1399	C	O4'-C4'-C3'	7.07	111.75	106.10
1	AA	10	G	N7-C8-N9	7.07	116.63	113.10
2	AB	862	G	N3-C4-C5	-7.07	125.07	128.60
2	AB	1378	A	N9-C4-C5	7.07	108.63	105.80
2	AB	1909	C	O4'-C1'-N1	7.07	113.85	108.20
2	AB	2280	G	C2-N3-C4	7.07	115.43	111.90
35	BA	1	A	N3-C4-C5	-7.07	121.85	126.80
35	BA	1065	U	N3-C2-O2	-7.07	117.25	122.20
35	BA	1177	G	C5-N7-C8	-7.07	100.77	104.30
2	AB	2542	A	C5-C6-N1	7.06	121.23	117.70
35	BA	172	A	N7-C8-N9	7.06	117.33	113.80
1	AA	103	U	C2-N3-C4	-7.06	122.76	127.00
2	AB	143	C	O4'-C1'-N1	7.06	113.85	108.20
2	AB	2339	C	N3-C4-C5	7.06	124.72	121.90
35	BA	403	C	N3-C4-N4	-7.06	113.06	118.00
35	BA	746	A	C6-N1-C2	-7.06	114.36	118.60
2	AB	2868	A	C5-N7-C8	-7.06	100.37	103.90
35	BA	26	A	C6-N1-C2	7.06	122.84	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	282	A	N1-C2-N3	-7.06	125.77	129.30
35	BA	1531	A	C5-N7-C8	-7.06	100.37	103.90
1	AA	15	A	C8-N9-C4	-7.06	102.98	105.80
2	AB	535	G	C4'-C3'-C2'	-7.06	95.54	102.60
2	AB	2214	C	N3-C4-C5	-7.06	119.08	121.90
35	BA	1034	G	C3'-C2'-C1'	-7.06	95.85	101.50
35	BA	1037	C	C4-C5-C6	-7.06	113.87	117.40
35	BA	1291	U	N1-C2-O2	7.06	127.74	122.80
40	BF	83	VAL	CA-CB-CG1	7.06	121.49	110.90
49	BO	53	ARG	NE-CZ-NH2	-7.06	116.77	120.30
2	AB	279	A	C4'-C3'-C2'	-7.06	95.54	102.60
2	AB	564	C	C1'-O4'-C4'	-7.06	104.25	109.90
2	AB	1380	G	C8-N9-C4	-7.06	103.58	106.40
2	AB	1758	U	C6-N1-C2	-7.06	116.77	121.00
2	AB	2351	G	C2-N3-C4	7.06	115.43	111.90
35	BA	200	G	N9-C4-C5	7.06	108.22	105.40
35	BA	403	C	C6-N1-C2	7.06	123.12	120.30
35	BA	837	U	N1-C2-N3	7.06	119.14	114.90
35	BA	838	G	N7-C8-N9	7.06	116.63	113.10
35	BA	1280	A	P-O3'-C3'	7.06	128.17	119.70
35	BA	1444	U	O4'-C1'-N1	7.06	113.84	108.20
2	AB	266	G	C2-N3-C4	7.06	115.43	111.90
2	AB	543	G	C4'-C3'-C2'	-7.06	95.54	102.60
2	AB	968	C	C5-C4-N4	-7.06	115.26	120.20
2	AB	1987	A	C2-N3-C4	7.06	114.13	110.60
2	AB	2483	C	C2-N3-C4	7.06	123.43	119.90
2	AB	2722	G	N3-C2-N2	-7.06	114.96	119.90
35	BA	1386	G	C5-C6-N1	7.06	115.03	111.50
35	BA	1428	A	C6-C5-N7	7.06	137.24	132.30
2	AB	1829	A	C5-N7-C8	7.05	107.43	103.90
2	AB	2228	G	N3-C4-C5	-7.05	125.07	128.60
2	AB	2330	G	N9-C4-C5	7.05	108.22	105.40
2	AB	2731	G	O4'-C4'-C3'	7.05	111.74	106.10
35	BA	46	G	N7-C8-N9	7.05	116.63	113.10
35	BA	107	G	C6-C5-N7	7.05	134.63	130.40
35	BA	1064	G	O4'-C4'-C3'	7.05	111.74	106.10
47	BM	63	ASP	CB-CG-OD1	-7.05	111.95	118.30
2	AB	886	A	C8-N9-C4	7.05	108.62	105.80
2	AB	1029	A	C5-C6-N1	7.05	121.23	117.70
2	AB	2077	A	C4-C5-C6	7.05	120.53	117.00
4	AD	261	ARG	NE-CZ-NH2	-7.05	116.77	120.30
35	BA	756	C	O4'-C1'-C2'	-7.05	98.75	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	894	U	N3-C4-C5	7.05	118.83	114.60
2	AB	2436	G	N1-C2-N2	-7.05	109.85	116.20
2	AB	2494	G	N3-C4-C5	-7.05	125.07	128.60
35	BA	323	U	C4'-C3'-C2'	-7.05	95.55	102.60
35	BA	1324	A	C3'-C2'-C1'	7.05	107.14	101.50
35	BA	1453	G	C5-C6-N1	-7.05	107.97	111.50
2	AB	71	A	C5-N7-C8	-7.05	100.38	103.90
2	AB	297	G	N3-C2-N2	-7.05	114.97	119.90
2	AB	298	G	N1-C2-N3	-7.05	119.67	123.90
2	AB	593	U	C4-C5-C6	-7.05	115.47	119.70
2	AB	769	U	C5-C6-N1	-7.05	119.17	122.70
2	AB	809	G	O4'-C1'-N9	7.05	113.84	108.20
2	AB	1278	C	C6-N1-C2	-7.05	117.48	120.30
2	AB	1311	G	C6-C5-N7	-7.05	126.17	130.40
35	BA	164	G	N1-C2-N3	-7.05	119.67	123.90
35	BA	182	A	C4-C5-N7	-7.05	107.18	110.70
35	BA	293	G	N3-C4-C5	-7.05	125.08	128.60
35	BA	530	G	C4-C5-C6	7.05	123.03	118.80
35	BA	839	C	C5-C6-N1	7.05	124.53	121.00
35	BA	1037	C	N3-C4-C5	7.05	124.72	121.90
35	BA	1086	U	O4'-C1'-C2'	-7.05	98.75	105.80
35	BA	1280	A	C5-C6-N1	7.05	121.22	117.70
35	BA	1463	U	O4'-C1'-N1	7.05	113.84	108.20
36	BB	40	C	C6-N1-C2	7.05	123.12	120.30
38	BD	28	U	N1-C2-N3	7.05	119.13	114.90
1	AA	51	G	C5-C6-O6	-7.05	124.37	128.60
2	AB	36	G	C6-C5-N7	-7.05	126.17	130.40
2	AB	1191	G	N9-C4-C5	7.05	108.22	105.40
2	AB	1559	U	C5-C4-O4	-7.05	121.67	125.90
2	AB	1657	U	C4'-C3'-C2'	-7.05	95.55	102.60
2	AB	1780	A	N9-C4-C5	7.05	108.62	105.80
2	AB	339	U	C5-C4-O4	-7.05	121.67	125.90
2	AB	858	G	N3-C4-C5	-7.05	125.08	128.60
2	AB	1334	G	O4'-C1'-N9	7.05	113.84	108.20
2	AB	1376	C	C4-C5-C6	-7.05	113.88	117.40
2	AB	1413	A	N1-C2-N3	-7.05	125.78	129.30
2	AB	2272	U	C5'-C4'-O4'	7.05	117.56	109.10
2	AB	2443	C	N3-C4-N4	-7.05	113.07	118.00
2	AB	2714	G	N3-C4-N9	7.05	130.23	126.00
2	AB	2838	G	C5'-C4'-O4'	7.05	117.56	109.10
17	AQ	13	ARG	NE-CZ-NH1	7.05	123.82	120.30
35	BA	292	G	N9-C4-C5	7.05	108.22	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2486	C	C6-N1-C2	7.04	123.12	120.30
2	AB	2803	G	O4'-C1'-N9	7.04	113.84	108.20
35	BA	321	A	C4-C5-C6	-7.04	113.48	117.00
1	AA	34	A	N1-C2-N3	7.04	132.82	129.30
1	AA	36	C	O4'-C1'-N1	7.04	113.83	108.20
2	AB	821	A	N9-C4-C5	7.04	108.62	105.80
2	AB	1311	G	C6-N1-C2	-7.04	120.87	125.10
2	AB	1894	C	N1-C2-O2	7.04	123.13	118.90
2	AB	2469	A	N1-C2-N3	-7.04	125.78	129.30
19	AS	29	ARG	NE-CZ-NH2	7.04	123.82	120.30
35	BA	374	A	C5-N7-C8	-7.04	100.38	103.90
35	BA	728	A	C4-C5-C6	-7.04	113.48	117.00
35	BA	840	C	C1'-O4'-C4'	-7.04	104.27	109.90
35	BA	922	G	C6-N1-C2	-7.04	120.87	125.10
35	BA	1461	G	C5'-C4'-O4'	7.04	117.55	109.10
2	AB	1192	G	N1-C6-O6	-7.04	115.67	119.90
2	AB	1505	A	N7-C8-N9	-7.04	110.28	113.80
9	AI	144	VAL	CA-CB-CG1	7.04	121.46	110.90
35	BA	38	G	C1'-O4'-C4'	7.04	115.53	109.90
35	BA	651	C	C6-N1-C2	-7.04	117.48	120.30
2	AB	1582	C	N3-C4-C5	-7.04	119.08	121.90
2	AB	2865	U	N3-C4-O4	7.04	124.33	119.40
35	BA	812	G	N1-C2-N3	7.04	128.12	123.90
35	BA	1374	A	C4-C5-C6	-7.04	113.48	117.00
1	AA	51	G	C5-N7-C8	7.04	107.82	104.30
1	AA	116	G	N1-C2-N3	-7.04	119.68	123.90
2	AB	42	A	C8-N9-C4	7.04	108.62	105.80
2	AB	63	A	C3'-C2'-C1'	7.04	107.13	101.50
2	AB	179	C	C4-C5-C6	-7.04	113.88	117.40
2	AB	1218	G	N1-C2-N2	-7.04	109.87	116.20
2	AB	1702	G	N3-C2-N2	-7.04	114.97	119.90
2	AB	2091	C	C2-N3-C4	-7.04	116.38	119.90
2	AB	2104	C	C4-C5-C6	7.04	120.92	117.40
2	AB	2278	A	N9-C1'-C2'	-7.04	104.26	112.00
35	BA	294	U	C5-C6-N1	-7.04	119.18	122.70
35	BA	513	C	C1'-O4'-C4'	7.04	115.53	109.90
35	BA	977	A	N1-C2-N3	7.04	132.82	129.30
35	BA	1235	U	N1-C2-N3	7.04	119.12	114.90
37	BC	36	U	C2-N3-C4	-7.04	122.78	127.00
2	AB	2276	G	N1-C6-O6	-7.04	115.68	119.90
2	AB	2447	G	N3-C4-N9	7.04	130.22	126.00
2	AB	2607	G	C4-C5-N7	7.04	113.61	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	410	G	C6-N1-C2	-7.04	120.88	125.10
35	BA	1541	U	C2-N3-C4	-7.04	122.78	127.00
2	AB	48	G	C2-N3-C4	7.04	115.42	111.90
2	AB	372	G	C5-C6-O6	-7.04	124.38	128.60
2	AB	2404	U	N3-C4-C5	-7.04	110.38	114.60
2	AB	2574	G	C6-C5-N7	-7.04	126.18	130.40
35	BA	793	U	O4'-C1'-C2'	-7.04	98.77	105.80
35	BA	1091	U	C5'-C4'-C3'	-7.04	104.74	116.00
35	BA	1258	G	C4'-C3'-C2'	-7.04	95.56	102.60
2	AB	993	G	C3'-C2'-C1'	-7.03	95.87	101.50
2	AB	1598	A	C5-N7-C8	-7.03	100.38	103.90
2	AB	1660	G	N1-C2-N2	7.03	122.53	116.20
2	AB	1668	A	N9-C4-C5	7.03	108.61	105.80
2	AB	2067	G	C6-C5-N7	-7.03	126.18	130.40
2	AB	2371	G	O4'-C1'-N9	7.03	113.83	108.20
35	BA	331	G	N3-C2-N2	7.03	124.82	119.90
35	BA	1406	U	C5-C6-N1	-7.03	119.18	122.70
2	AB	686	U	N3-C2-O2	-7.03	117.28	122.20
35	BA	234	C	C5'-C4'-C3'	7.03	127.25	116.00
35	BA	480	U	N3-C2-O2	-7.03	117.28	122.20
1	AA	114	C	C6-N1-C2	-7.03	117.49	120.30
2	AB	10	A	O4'-C1'-N9	7.03	113.83	108.20
2	AB	572	A	P-O3'-C3'	7.03	128.13	119.70
2	AB	692	C	C5'-C4'-O4'	7.03	117.54	109.10
2	AB	780	G	C2-N3-C4	7.03	115.42	111.90
2	AB	1034	G	C5'-C4'-C3'	-7.03	104.75	116.00
2	AB	1090	A	N9-C4-C5	-7.03	102.99	105.80
2	AB	1744	A	C3'-C2'-C1'	7.03	107.12	101.50
2	AB	1965	C	N3-C4-C5	-7.03	119.09	121.90
2	AB	2392	A	C5-C6-N1	7.03	121.22	117.70
35	BA	14	U	C5-C4-O4	-7.03	121.68	125.90
35	BA	637	C	C5-C6-N1	7.03	124.52	121.00
35	BA	792	A	O4'-C1'-C2'	-7.03	98.77	105.80
2	AB	487	C	C6-N1-C2	7.03	123.11	120.30
2	AB	853	C	N3-C4-C5	7.03	124.71	121.90
2	AB	1543	G	N3-C4-N9	7.03	130.22	126.00
18	AR	92	ARG	NE-CZ-NH1	7.03	123.81	120.30
35	BA	18	C	C1'-O4'-C4'	7.03	115.52	109.90
35	BA	242	G	O5'-P-OP2	-7.03	99.37	105.70
35	BA	1346	A	N1-C2-N3	7.03	132.81	129.30
36	BB	38	A	C2-N3-C4	7.03	114.11	110.60
2	AB	150	U	C4-C5-C6	7.03	123.92	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	798	G	N1-C6-O6	-7.03	115.68	119.90
2	AB	1218	G	N7-C8-N9	-7.03	109.59	113.10
2	AB	1442	U	C5-C6-N1	-7.03	119.19	122.70
2	AB	1580	A	C1'-O4'-C4'	-7.03	104.28	109.90
2	AB	1718	G	C2-N3-C4	7.03	115.41	111.90
2	AB	2094	A	C6-N1-C2	7.03	122.82	118.60
2	AB	2298	A	N9-C1'-C2'	-7.03	104.27	112.00
2	AB	2338	C	C1'-O4'-C4'	-7.03	104.28	109.90
2	AB	2549	G	N9-C4-C5	-7.03	102.59	105.40
35	BA	219	U	N1-C1'-C2'	-7.03	104.27	112.00
35	BA	1023	U	N3-C4-C5	-7.03	110.38	114.60
35	BA	1115	U	C5-C6-N1	-7.03	119.19	122.70
2	AB	172	A	N1-C2-N3	7.03	132.81	129.30
2	AB	769	U	C3'-C2'-C1'	7.03	107.12	101.50
2	AB	906	U	C5-C4-O4	7.03	130.12	125.90
2	AB	1175	A	C1'-O4'-C4'	7.03	115.52	109.90
2	AB	1456	G	C5-C6-N1	7.03	115.01	111.50
2	AB	1535	A	C2-N3-C4	7.03	114.11	110.60
2	AB	2181	U	C4-C5-C6	7.03	123.92	119.70
2	AB	2282	G	C5-C6-N1	7.03	115.01	111.50
35	BA	623	C	N3-C4-N4	7.03	122.92	118.00
35	BA	927	G	C5-C6-O6	-7.03	124.39	128.60
35	BA	1208	C	C5-C6-N1	7.03	124.51	121.00
2	AB	190	A	N7-C8-N9	7.02	117.31	113.80
2	AB	941	A	P-O3'-C3'	7.02	128.13	119.70
2	AB	283	G	C8-N9-C4	-7.02	103.59	106.40
2	AB	457	A	C4-C5-C6	7.02	120.51	117.00
2	AB	1807	G	O4'-C1'-N9	7.02	113.82	108.20
2	AB	2111	U	C2-N3-C4	-7.02	122.79	127.00
2	AB	2379	G	N7-C8-N9	7.02	116.61	113.10
2	AB	2706	A	N1-C6-N6	-7.02	114.39	118.60
35	BA	725	G	N1-C6-O6	7.02	124.11	119.90
35	BA	1434	A	N1-C6-N6	7.02	122.81	118.60
2	AB	1542	U	N1-C2-O2	7.02	127.71	122.80
2	AB	1967	C	N1-C2-O2	7.02	123.11	118.90
2	AB	1974	C	C3'-C2'-C1'	-7.02	95.88	101.50
2	AB	2373	G	N1-C2-N2	-7.02	109.88	116.20
2	AB	2383	G	N7-C8-N9	7.02	116.61	113.10
36	BB	56	C	C4-C5-C6	-7.02	113.89	117.40
2	AB	576	U	N1-C1'-C2'	-7.02	104.28	112.00
2	AB	2691	C	N3-C4-N4	7.02	122.91	118.00
2	AB	2730	C	O4'-C4'-C3'	7.02	111.72	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	180	U	C6-N1-C2	7.02	125.21	121.00
35	BA	327	A	C4-C5-N7	-7.02	107.19	110.70
35	BA	611	C	C5'-C4'-O4'	7.02	117.52	109.10
35	BA	1163	A	C5-N7-C8	-7.02	100.39	103.90
37	BC	14	G	C8-N9-C4	-7.02	103.59	106.40
38	BD	62	C	O4'-C1'-N1	7.02	113.82	108.20
2	AB	1065	U	C5-C4-O4	-7.02	121.69	125.90
2	AB	1649	G	N3-C2-N2	7.02	124.81	119.90
35	BA	29	U	C2-N1-C1'	-7.02	109.28	117.70
35	BA	250	A	C5-C6-N1	7.02	121.21	117.70
35	BA	687	A	N1-C2-N3	-7.02	125.79	129.30
35	BA	824	G	C4-C5-N7	-7.02	107.99	110.80
2	AB	60	G	C2-N3-C4	7.02	115.41	111.90
2	AB	277	G	P-O5'-C5'	7.02	132.13	120.90
2	AB	1231	U	N3-C4-O4	7.02	124.31	119.40
2	AB	1655	A	C5'-C4'-O4'	7.02	117.52	109.10
19	AS	29	ARG	CD-NE-CZ	7.02	133.42	123.60
35	BA	856	C	N3-C4-C5	-7.02	119.09	121.90
35	BA	1451	U	C5-C4-O4	7.02	130.11	125.90
2	AB	285	G	N9-C1'-C2'	-7.01	104.28	112.00
2	AB	437	U	N1-C1'-C2'	-7.01	104.28	112.00
2	AB	1106	G	N7-C8-N9	7.01	116.61	113.10
2	AB	1215	G	N3-C4-C5	-7.01	125.09	128.60
2	AB	1907	G	C4-C5-C6	7.01	123.01	118.80
2	AB	2731	G	C8-N9-C4	-7.01	103.59	106.40
2	AB	2775	G	O5'-P-OP2	-7.01	99.39	105.70
35	BA	281	G	C4-C5-C6	7.01	123.01	118.80
35	BA	642	A	C1'-O4'-C4'	7.01	115.51	109.90
35	BA	669	G	N9-C4-C5	-7.01	102.59	105.40
35	BA	899	C	C5-C6-N1	-7.01	117.49	121.00
35	BA	918	A	C3'-C2'-C1'	7.01	107.11	101.50
1	AA	39	A	N7-C8-N9	7.01	117.31	113.80
2	AB	342	A	N1-C6-N6	7.01	122.81	118.60
2	AB	726	G	C4-C5-C6	7.01	123.01	118.80
2	AB	1037	G	C5-C6-O6	-7.01	124.39	128.60
35	BA	39	G	N7-C8-N9	7.01	116.61	113.10
35	BA	131	A	C8-N9-C4	-7.01	103.00	105.80
36	BB	15	A	C8-N9-C4	-7.01	103.00	105.80
1	AA	73	A	N3-C4-C5	-7.01	121.89	126.80
2	AB	690	G	C2-N3-C4	7.01	115.41	111.90
2	AB	724	U	C6-N1-C2	-7.01	116.79	121.00
2	AB	1085	A	C4-C5-C6	7.01	120.51	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1131	G	C6-C5-N7	-7.01	126.19	130.40
2	AB	1725	U	P-O3'-C3'	7.01	128.11	119.70
35	BA	275	G	C6-C5-N7	7.01	134.61	130.40
35	BA	1374	A	C5'-C4'-C3'	-7.01	104.78	116.00
2	AB	1703	G	N7-C8-N9	7.01	116.61	113.10
2	AB	2419	U	C4'-C3'-C2'	-7.01	95.59	102.60
2	AB	2459	A	C5-N7-C8	-7.01	100.39	103.90
4	AD	198	GLU	OE1-CD-OE2	7.01	131.71	123.30
36	BB	7	G	N3-C4-N9	7.01	130.21	126.00
2	AB	1876	A	N7-C8-N9	7.01	117.30	113.80
2	AB	2532	G	N3-C4-N9	7.01	130.21	126.00
2	AB	2724	U	N3-C4-C5	-7.01	110.39	114.60
35	BA	1301	U	N1-C2-O2	-7.01	117.89	122.80
35	BA	1364	U	C5'-C4'-C3'	-7.01	104.79	116.00
38	BD	10	G	C6-C5-N7	-7.01	126.19	130.40
2	AB	325	G	C6-C5-N7	-7.01	126.20	130.40
2	AB	530	G	N1-C6-O6	-7.01	115.70	119.90
2	AB	796	C	N3-C2-O2	-7.01	117.00	121.90
2	AB	900	A	O4'-C1'-N9	-7.01	102.59	108.20
2	AB	1540	G	C5-C6-O6	7.01	132.80	128.60
2	AB	1935	G	N1-C2-N2	7.01	122.51	116.20
2	AB	2389	G	C6-N1-C2	-7.01	120.90	125.10
26	AZ	71	ARG	NE-CZ-NH2	7.01	123.80	120.30
35	BA	587	G	C6-C5-N7	-7.01	126.20	130.40
2	AB	313	G	N7-C8-N9	-7.00	109.60	113.10
2	AB	2452	C	C4-C5-C6	7.00	120.90	117.40
35	BA	210	C	C6-N1-C1'	-7.00	112.39	120.80
35	BA	958	A	C8-N9-C4	-7.00	103.00	105.80
35	BA	1192	C	N1-C1'-C2'	-7.00	104.30	112.00
35	BA	1290	G	C4-C5-N7	7.00	113.60	110.80
38	BD	3	C	C4'-C3'-C2'	-7.00	95.59	102.60
38	BD	13	C	C6-N1-C2	-7.00	117.50	120.30
2	AB	160	A	C8-N9-C4	7.00	108.60	105.80
2	AB	443	A	O4'-C1'-N9	7.00	113.80	108.20
2	AB	541	A	C8-N9-C4	-7.00	103.00	105.80
2	AB	1561	C	C4-C5-C6	7.00	120.90	117.40
2	AB	2621	G	C3'-C2'-C1'	-7.00	95.90	101.50
2	AB	2809	A	C4-C5-C6	7.00	120.50	117.00
35	BA	788	U	C4-C5-C6	7.00	123.90	119.70
35	BA	1058	G	C2-N3-C4	-7.00	108.40	111.90
36	BB	30	G	C2-N3-C4	7.00	115.40	111.90
41	BG	174	ALA	N-CA-CB	-7.00	100.30	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	205	G	C2-N3-C4	7.00	115.40	111.90
2	AB	951	C	N3-C4-N4	7.00	122.90	118.00
2	AB	1464	G	N3-C2-N2	-7.00	115.00	119.90
2	AB	1677	A	C6-N1-C2	-7.00	114.40	118.60
2	AB	2178	C	O4'-C4'-C3'	7.00	111.70	106.10
2	AB	2414	G	C4-C5-N7	-7.00	108.00	110.80
35	BA	570	G	N9-C4-C5	7.00	108.20	105.40
35	BA	756	C	C5-C4-N4	7.00	125.10	120.20
36	BB	72	U	C5-C4-O4	-7.00	121.70	125.90
2	AB	939	G	O4'-C1'-N9	7.00	113.80	108.20
2	AB	1541	C	C1'-O4'-C4'	7.00	115.50	109.90
2	AB	2317	A	C1'-O4'-C4'	-7.00	104.30	109.90
2	AB	64	A	C5-N7-C8	-7.00	100.40	103.90
2	AB	337	C	N1-C2-N3	7.00	124.10	119.20
2	AB	469	G	C5-N7-C8	-7.00	100.80	104.30
2	AB	763	G	C4'-C3'-C2'	-7.00	95.60	102.60
2	AB	930	G	N7-C8-N9	-7.00	109.60	113.10
2	AB	1326	U	N3-C2-O2	-7.00	117.30	122.20
2	AB	1398	C	N1-C2-O2	7.00	123.10	118.90
2	AB	1508	A	N1-C2-N3	-7.00	125.80	129.30
2	AB	2012	G	P-O3'-C3'	7.00	128.10	119.70
2	AB	2547	A	C4-C5-C6	-7.00	113.50	117.00
2	AB	2569	G	C4-C5-N7	-7.00	108.00	110.80
35	BA	529	G	N3-C4-C5	-7.00	125.10	128.60
35	BA	580	C	C4-C5-C6	-7.00	113.90	117.40
35	BA	640	A	N1-C2-N3	7.00	132.80	129.30
35	BA	1094	G	C4-C5-C6	7.00	123.00	118.80
38	BD	75	C	C5'-C4'-C3'	-7.00	104.80	116.00
1	AA	20	G	N1-C6-O6	-7.00	115.70	119.90
2	AB	415	A	N9-C4-C5	7.00	108.60	105.80
2	AB	891	G	C4-C5-N7	-7.00	108.00	110.80
2	AB	963	U	N3-C4-O4	7.00	124.30	119.40
2	AB	2050	C	N1-C2-N3	-7.00	114.30	119.20
2	AB	2256	G	N9-C4-C5	7.00	108.20	105.40
35	BA	302	G	C6-N1-C2	-7.00	120.90	125.10
35	BA	693	G	C5-C6-O6	7.00	132.80	128.60
35	BA	769	G	N1-C6-O6	7.00	124.10	119.90
35	BA	1139	G	C8-N9-C4	-7.00	103.60	106.40
35	BA	1162	C	O4'-C1'-N1	7.00	113.80	108.20
35	BA	1292	G	N3-C2-N2	-7.00	115.00	119.90
2	AB	296	U	C5-C6-N1	-7.00	119.20	122.70
2	AB	599	A	N1-C2-N3	-7.00	125.80	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	838	C	C6-N1-C2	-7.00	117.50	120.30
2	AB	2147	A	C5-C6-N1	7.00	121.20	117.70
35	BA	1180	A	C3'-C2'-C1'	7.00	107.10	101.50
35	BA	1429	A	O4'-C1'-C2'	7.00	113.90	107.60
37	BC	55	A	C6-C5-N7	7.00	137.20	132.30
1	AA	106	G	C8-N9-C4	-6.99	103.60	106.40
2	AB	1157	G	C4-C5-C6	6.99	123.00	118.80
2	AB	1442	U	N1-C2-O2	-6.99	117.91	122.80
2	AB	1763	G	C5-N7-C8	-6.99	100.80	104.30
2	AB	1853	A	O4'-C1'-N9	-6.99	102.61	108.20
35	BA	318	G	C4-C5-N7	6.99	113.60	110.80
35	BA	818	G	N9-C4-C5	6.99	108.20	105.40
35	BA	1311	A	C4-C5-N7	-6.99	107.20	110.70
35	BA	1534	A	C2-N3-C4	6.99	114.10	110.60
1	AA	9	G	N3-C4-N9	6.99	130.19	126.00
2	AB	38	A	C4'-C3'-C2'	-6.99	95.61	102.60
2	AB	388	G	C6-C5-N7	-6.99	126.20	130.40
2	AB	989	G	C5-C6-N1	6.99	115.00	111.50
2	AB	1102	C	N3-C4-C5	-6.99	119.10	121.90
2	AB	1519	G	N3-C4-C5	-6.99	125.10	128.60
2	AB	2462	C	O4'-C4'-C3'	6.99	111.69	106.10
2	AB	2682	A	N9-C4-C5	-6.99	103.00	105.80
35	BA	1164	G	N3-C4-C5	-6.99	125.10	128.60
35	BA	1279	G	N3-C4-N9	6.99	130.19	126.00
1	AA	12	C	N3-C4-C5	-6.99	119.10	121.90
2	AB	107	G	C4-C5-C6	6.99	122.99	118.80
2	AB	346	A	C4-C5-N7	-6.99	107.20	110.70
2	AB	456	C	N3-C4-N4	6.99	122.89	118.00
2	AB	721	A	C1'-O4'-C4'	6.99	115.49	109.90
2	AB	872	U	C3'-C2'-C1'	6.99	107.09	101.50
2	AB	1456	G	C2-N3-C4	6.99	115.39	111.90
2	AB	2741	A	P-O3'-C3'	6.99	128.09	119.70
35	BA	345	C	N3-C2-O2	-6.99	117.01	121.90
35	BA	1100	C	N3-C4-N4	6.99	122.89	118.00
35	BA	1109	C	O4'-C1'-N1	6.99	113.79	108.20
35	BA	1266	G	N7-C8-N9	6.99	116.59	113.10
36	BB	72	U	O3'-P-O5'	-6.99	90.72	104.00
2	AB	918	A	C5-C6-N1	6.99	121.19	117.70
2	AB	978	G	N3-C2-N2	-6.99	115.01	119.90
2	AB	1107	G	C6-N1-C2	-6.99	120.91	125.10
2	AB	1475	G	N9-C4-C5	6.99	108.19	105.40
2	AB	2316	G	O4'-C1'-N9	6.99	113.79	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	995	C	N1-C1'-C2'	6.99	123.08	114.00
2	AB	2857	G	C8-N9-C4	-6.99	103.61	106.40
35	BA	1002	G	C8-N9-C4	-6.99	103.61	106.40
35	BA	1046	A	N1-C2-N3	-6.99	125.81	129.30
2	AB	1215	G	C3'-C2'-C1'	-6.99	95.91	101.50
2	AB	2190	G	C5-C6-N1	6.99	114.99	111.50
2	AB	2733	A	C5-N7-C8	-6.99	100.41	103.90
14	AN	122	VAL	CG1-CB-CG2	-6.99	99.72	110.90
35	BA	98	A	C5-C6-N1	6.99	121.19	117.70
35	BA	1102	A	C5'-C4'-O4'	6.99	117.48	109.10
35	BA	1119	C	N3-C2-O2	-6.99	117.01	121.90
2	AB	1441	G	C5-N7-C8	6.98	107.79	104.30
2	AB	1503	A	C2-N3-C4	-6.98	107.11	110.60
2	AB	2391	G	C5-C6-O6	-6.98	124.41	128.60
2	AB	2758	A	C8-N9-C4	-6.98	103.01	105.80
22	AV	12	ARG	NE-CZ-NH1	6.98	123.79	120.30
35	BA	521	G	C1'-O4'-C4'	-6.98	104.31	109.90
35	BA	888	G	C4-C5-C6	-6.98	114.61	118.80
1	AA	108	A	N1-C6-N6	-6.98	114.41	118.60
2	AB	546	U	O4'-C1'-C2'	-6.98	98.82	105.80
2	AB	937	C	C4'-C3'-C2'	-6.98	95.62	102.60
2	AB	1888	G	C8-N9-C4	-6.98	103.61	106.40
2	AB	2648	G	C5-C6-N1	6.98	114.99	111.50
35	BA	389	A	N9-C4-C5	6.98	108.59	105.80
35	BA	988	G	C4'-C3'-C2'	-6.98	95.62	102.60
2	AB	360	U	C2-N3-C4	-6.98	122.81	127.00
2	AB	578	G	C5-C6-N1	6.98	114.99	111.50
2	AB	1639	C	C2-N3-C4	6.98	123.39	119.90
2	AB	1913	A	C8-N9-C4	-6.98	103.01	105.80
2	AB	2148	G	C8-N9-C4	-6.98	103.61	106.40
35	BA	182	A	C5-C6-N1	-6.98	114.21	117.70
35	BA	1445	U	C3'-C2'-C1'	6.98	107.08	101.50
1	AA	45	A	C4'-C3'-C2'	-6.98	95.62	102.60
2	AB	232	G	C3'-C2'-C1'	-6.98	95.92	101.50
2	AB	1253	A	C4-C5-N7	-6.98	107.21	110.70
2	AB	1781	U	N3-C2-O2	-6.98	117.31	122.20
2	AB	2093	G	C4-C5-N7	-6.98	108.01	110.80
2	AB	2326	C	N3-C4-C5	-6.98	119.11	121.90
35	BA	32	A	N9-C1'-C2'	-6.98	104.32	112.00
35	BA	824	G	C5-C6-N1	6.98	114.99	111.50
2	AB	514	A	C6-C5-N7	-6.98	127.42	132.30
2	AB	1762	A	C5-C6-N6	-6.98	118.12	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2018	G	C4-C5-N7	-6.98	108.01	110.80
2	AB	2490	G	C8-N9-C4	6.98	109.19	106.40
35	BA	223	A	C8-N9-C4	-6.98	103.01	105.80
35	BA	425	G	C3'-C2'-C1'	-6.98	95.92	101.50
35	BA	1395	C	C6-N1-C2	-6.98	117.51	120.30
2	AB	647	G	C4-C5-C6	6.98	122.99	118.80
2	AB	765	C	C1'-O4'-C4'	6.98	115.48	109.90
2	AB	1517	G	N1-C2-N3	-6.98	119.71	123.90
2	AB	1886	U	N3-C4-O4	6.98	124.28	119.40
2	AB	2181	U	C4'-C3'-C2'	-6.98	95.62	102.60
35	BA	115	G	C6-N1-C2	-6.98	120.91	125.10
35	BA	178	C	C4-C5-C6	6.98	120.89	117.40
35	BA	1377	A	C2-N3-C4	6.98	114.09	110.60
36	BB	40	C	N3-C4-N4	6.98	122.88	118.00
1	AA	70	C	N1-C2-O2	6.97	123.08	118.90
2	AB	181	A	N1-C2-N3	-6.97	125.81	129.30
2	AB	277	G	C5-C6-N1	6.97	114.99	111.50
2	AB	669	G	O4'-C1'-N9	6.97	113.78	108.20
2	AB	678	C	C5-C4-N4	-6.97	115.32	120.20
2	AB	1739	A	C2-N3-C4	6.97	114.09	110.60
2	AB	2087	G	N3-C4-C5	-6.97	125.11	128.60
2	AB	2318	G	N3-C4-C5	-6.97	125.11	128.60
2	AB	2470	G	C5-N7-C8	-6.97	100.81	104.30
35	BA	353	A	O4'-C1'-C2'	6.97	113.88	107.60
35	BA	893	C	O4'-C1'-N1	6.97	113.78	108.20
35	BA	1250	A	N3-C4-C5	-6.97	121.92	126.80
35	BA	1533	C	N3-C4-C5	-6.97	119.11	121.90
36	BB	72	U	C4'-C3'-C2'	-6.97	95.63	102.60
43	BI	59	TYR	CB-CG-CD2	-6.97	116.81	121.00
48	BN	52	ARG	NE-CZ-NH2	-6.97	116.81	120.30
1	AA	109	A	C2-N3-C4	6.97	114.09	110.60
2	AB	58	G	O4'-C1'-N9	6.97	113.78	108.20
2	AB	669	G	N9-C1'-C2'	-6.97	104.33	112.00
2	AB	675	A	N7-C8-N9	-6.97	110.31	113.80
2	AB	769	U	O4'-C4'-C3'	6.97	111.68	106.10
2	AB	888	C	P-O3'-C3'	6.97	128.07	119.70
2	AB	1246	A	C4-C5-N7	-6.97	107.21	110.70
35	BA	1344	C	N1-C2-O2	-6.97	114.72	118.90
36	BB	5	G	C6-N1-C2	-6.97	120.92	125.10
45	BK	116	ARG	NE-CZ-NH2	-6.97	116.81	120.30
2	AB	880	G	O4'-C1'-N9	6.97	113.78	108.20
35	BA	926	G	C5-C6-O6	6.97	132.78	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1380	U	C1'-O4'-C4'	6.97	115.48	109.90
2	AB	25	U	N1-C2-O2	-6.97	117.92	122.80
2	AB	740	C	O4'-C1'-N1	6.97	113.78	108.20
2	AB	1249	U	C4-C5-C6	6.97	123.88	119.70
2	AB	2041	U	O4'-C1'-N1	6.97	113.78	108.20
2	AB	2282	G	N3-C2-N2	6.97	124.78	119.90
2	AB	2391	G	P-O3'-C3'	6.97	128.06	119.70
2	AB	2750	A	O4'-C1'-N9	6.97	113.78	108.20
2	AB	1328	A	O4'-C1'-C2'	6.97	113.87	107.60
2	AB	2165	C	C4-C5-C6	-6.97	113.92	117.40
2	AB	2598	A	C5-N7-C8	6.97	107.38	103.90
35	BA	77	A	N3-C4-N9	-6.97	121.83	127.40
35	BA	423	G	N9-C4-C5	6.97	108.19	105.40
35	BA	718	A	C5-C6-N6	-6.97	118.13	123.70
35	BA	764	C	C4'-C3'-C2'	-6.97	95.63	102.60
46	BL	5	TYR	CB-CG-CD2	-6.97	116.82	121.00
2	AB	1087	G	N1-C6-O6	6.97	124.08	119.90
26	AZ	2	ARG	NE-CZ-NH1	6.97	123.78	120.30
53	BS	56	ARG	NE-CZ-NH1	-6.97	116.82	120.30
2	AB	104	A	O4'-C1'-N9	6.96	113.77	108.20
2	AB	270	A	N9-C1'-C2'	-6.96	104.34	112.00
2	AB	824	U	C5-C4-O4	-6.96	121.72	125.90
2	AB	1743	G	N1-C2-N3	-6.96	119.72	123.90
2	AB	1813	G	C3'-C2'-C1'	6.96	107.07	101.50
2	AB	2525	G	C8-N9-C4	-6.96	103.61	106.40
35	BA	759	A	N9-C4-C5	-6.96	103.02	105.80
35	BA	902	G	C5'-C4'-C3'	-6.96	104.86	116.00
2	AB	48	G	C5-C6-O6	6.96	132.78	128.60
2	AB	148	U	O4'-C1'-N1	6.96	113.77	108.20
2	AB	376	G	O4'-C1'-N9	6.96	113.77	108.20
2	AB	394	C	N3-C4-C5	-6.96	119.11	121.90
2	AB	325	G	N1-C6-O6	6.96	124.08	119.90
2	AB	503	A	C5-C6-N1	6.96	121.18	117.70
2	AB	806	C	O4'-C1'-N1	6.96	113.77	108.20
2	AB	1182	G	C6-N1-C2	6.96	129.28	125.10
2	AB	1223	G	C2-N3-C4	6.96	115.38	111.90
2	AB	1298	C	N1-C2-N3	-6.96	114.33	119.20
2	AB	1310	G	C2-N3-C4	6.96	115.38	111.90
2	AB	1452	G	N3-C4-C5	-6.96	125.12	128.60
2	AB	1465	G	N1-C2-N3	-6.96	119.72	123.90
2	AB	2191	A	N7-C8-N9	6.96	117.28	113.80
2	AB	2652	C	C2-N3-C4	-6.96	116.42	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2886	A	C4-C5-C6	-6.96	113.52	117.00
35	BA	297	G	C6-C5-N7	-6.96	126.22	130.40
35	BA	639	G	C6-C5-N7	-6.96	126.22	130.40
35	BA	973	G	C3'-C2'-C1'	6.96	107.07	101.50
2	AB	134	G	C5-N7-C8	-6.96	100.82	104.30
2	AB	331	C	N3-C2-O2	-6.96	117.03	121.90
35	BA	211	G	C4'-C3'-C2'	-6.96	95.64	102.60
35	BA	231	U	O4'-C4'-C3'	6.96	111.67	106.10
35	BA	249	U	C1'-O4'-C4'	-6.96	104.33	109.90
35	BA	987	G	C5-C6-O6	-6.96	124.42	128.60
45	BK	65	PHE	CB-CG-CD1	6.96	125.67	120.80
2	AB	423	A	O4'-C1'-N9	6.96	113.77	108.20
2	AB	623	C	O4'-C1'-N1	6.96	113.77	108.20
2	AB	1212	G	C2-N3-C4	6.96	115.38	111.90
2	AB	1280	G	C6-C5-N7	-6.96	126.22	130.40
2	AB	1694	C	C4-C5-C6	6.96	120.88	117.40
2	AB	2004	G	C2-N3-C4	6.96	115.38	111.90
2	AB	2664	G	P-O3'-C3'	6.96	128.05	119.70
35	BA	974	A	N7-C8-N9	6.96	117.28	113.80
35	BA	1085	U	N3-C2-O2	-6.96	117.33	122.20
46	BL	10	ARG	NE-CZ-NH1	6.96	123.78	120.30
2	AB	374	A	C6-N1-C2	-6.96	114.43	118.60
2	AB	452	G	C4-C5-N7	-6.96	108.02	110.80
2	AB	1186	G	C5-C6-O6	-6.96	124.43	128.60
2	AB	1424	G	C6-C5-N7	6.96	134.57	130.40
2	AB	1428	C	C1'-O4'-C4'	6.96	115.47	109.90
2	AB	2014	A	C5-C6-N6	-6.96	118.14	123.70
2	AB	2768	U	C1'-O4'-C4'	-6.96	104.33	109.90
35	BA	600	A	N3-C4-C5	-6.96	121.93	126.80
35	BA	1081	A	C4-C5-C6	6.96	120.48	117.00
35	BA	1245	C	C4-C5-C6	6.96	120.88	117.40
35	BA	1483	A	C5-N7-C8	6.96	107.38	103.90
2	AB	307	G	C2-N3-C4	6.96	115.38	111.90
2	AB	714	U	N3-C4-O4	-6.96	114.53	119.40
2	AB	1473	G	C5'-C4'-O4'	6.96	117.45	109.10
2	AB	2520	C	C5-C6-N1	6.96	124.48	121.00
35	BA	792	A	C1'-O4'-C4'	6.96	115.46	109.90
2	AB	105	C	O4'-C4'-C3'	6.95	111.66	106.10
2	AB	319	G	N1-C6-O6	6.95	124.07	119.90
2	AB	342	A	O4'-C1'-C2'	6.95	113.86	107.60
2	AB	2576	G	N9-C4-C5	6.95	108.18	105.40
2	AB	2748	A	C5'-C4'-C3'	-6.95	104.87	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	446	G	N1-C2-N3	-6.95	119.73	123.90
35	BA	570	G	C5'-C4'-C3'	-6.95	104.88	116.00
35	BA	736	C	N3-C4-N4	6.95	122.87	118.00
38	BD	12	G	N9-C1'-C2'	-6.95	104.35	112.00
2	AB	494	G	O4'-C4'-C3'	6.95	111.66	106.10
2	AB	659	G	C4-C5-N7	6.95	113.58	110.80
2	AB	1827	U	O4'-C1'-N1	6.95	113.76	108.20
35	BA	173	U	N3-C4-O4	6.95	124.27	119.40
35	BA	746	A	C1'-O4'-C4'	-6.95	104.34	109.90
38	BD	1	C	C1'-O4'-C4'	-6.95	104.34	109.90
2	AB	18	U	N1-C2-O2	6.95	127.67	122.80
2	AB	69	C	C5'-C4'-O4'	6.95	117.44	109.10
2	AB	230	G	P-O3'-C3'	6.95	128.04	119.70
2	AB	369	U	N1-C2-N3	-6.95	110.73	114.90
2	AB	730	A	C8-N9-C4	6.95	108.58	105.80
2	AB	943	A	C6-C5-N7	-6.95	127.43	132.30
2	AB	1406	U	C6-N1-C2	-6.95	116.83	121.00
2	AB	2369	A	C4-C5-C6	-6.95	113.53	117.00
2	AB	2765	A	N7-C8-N9	6.95	117.28	113.80
2	AB	2897	U	O4'-C4'-C3'	6.95	111.66	106.10
4	AD	176	ARG	NE-CZ-NH1	6.95	123.78	120.30
30	A3	37	HIS	CA-CB-CG	6.95	125.42	113.60
35	BA	769	G	C5-N7-C8	6.95	107.78	104.30
35	BA	778	G	C4-C5-N7	-6.95	108.02	110.80
35	BA	933	G	P-O3'-C3'	6.95	128.04	119.70
35	BA	997	U	C1'-O4'-C4'	-6.95	104.34	109.90
35	BA	1387	G	C5-C6-N1	6.95	114.98	111.50
36	BB	31	U	N1-C2-N3	6.95	119.07	114.90
2	AB	768	G	N1-C2-N2	6.95	122.45	116.20
2	AB	1855	U	C3'-C2'-C1'	6.95	107.06	101.50
2	AB	2160	C	N3-C4-N4	6.95	122.86	118.00
35	BA	988	G	C5'-C4'-C3'	-6.95	104.88	116.00
2	AB	1462	C	C3'-C2'-C1'	-6.95	95.94	101.50
2	AB	2084	C	N1-C1'-C2'	-6.95	104.36	112.00
37	BC	37	G	O4'-C1'-N9	6.95	113.76	108.20
1	AA	95	U	C4-C5-C6	6.95	123.87	119.70
1	AA	95	U	N3-C2-O2	-6.95	117.34	122.20
2	AB	513	A	N1-C6-N6	-6.95	114.43	118.60
2	AB	875	G	C5'-C4'-O4'	6.95	117.44	109.10
2	AB	1207	C	N1-C1'-C2'	-6.95	104.36	112.00
2	AB	2263	C	O4'-C1'-C2'	-6.95	98.85	105.80
2	AB	2425	A	P-O3'-C3'	6.95	128.03	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	639	G	C8-N9-C4	-6.95	103.62	106.40
35	BA	1209	C	N3-C4-N4	6.95	122.86	118.00
35	BA	1525	G	C3'-C2'-C1'	-6.95	95.94	101.50
2	AB	689	A	N1-C2-N3	-6.94	125.83	129.30
2	AB	1576	U	C1'-O4'-C4'	6.94	115.45	109.90
2	AB	2455	G	C5-N7-C8	-6.94	100.83	104.30
2	AB	2538	C	O4'-C1'-N1	6.94	113.75	108.20
35	BA	246	A	C5-N7-C8	6.94	107.37	103.90
35	BA	324	G	N9-C4-C5	6.94	108.18	105.40
35	BA	536	C	O4'-C1'-N1	6.94	113.75	108.20
35	BA	1198	G	C4-C5-N7	-6.94	108.02	110.80
35	BA	1393	U	N3-C4-O4	6.94	124.26	119.40
2	AB	1295	C	O4'-C1'-N1	6.94	113.75	108.20
2	AB	1850	G	O4'-C4'-C3'	6.94	111.66	106.10
2	AB	2127	G	C2-N3-C4	6.94	115.37	111.90
2	AB	2406	A	C6-N1-C2	6.94	122.77	118.60
2	AB	2666	C	O4'-C1'-N1	6.94	113.75	108.20
2	AB	2726	A	C4-C5-N7	-6.94	107.23	110.70
35	BA	622	A	O4'-C1'-N9	6.94	113.75	108.20
35	BA	1383	C	C3'-C2'-C1'	6.94	107.05	101.50
36	BB	4	G	C4'-C3'-C2'	-6.94	95.66	102.60
2	AB	477	A	N7-C8-N9	6.94	117.27	113.80
2	AB	1623	G	C5-C6-N1	6.94	114.97	111.50
2	AB	2264	C	C1'-O4'-C4'	-6.94	104.35	109.90
2	AB	2885	G	C8-N9-C4	-6.94	103.62	106.40
35	BA	79	G	N1-C6-O6	6.94	124.06	119.90
35	BA	1489	G	C3'-C2'-C1'	6.94	107.05	101.50
2	AB	2163	A	C5-C6-N6	-6.94	118.15	123.70
35	BA	22	G	N1-C2-N3	-6.94	119.74	123.90
2	AB	22	C	C5'-C4'-O4'	6.94	117.42	109.10
2	AB	246	C	O4'-C4'-C3'	6.94	111.65	106.10
2	AB	463	G	N3-C4-N9	6.94	130.16	126.00
2	AB	633	A	N1-C6-N6	-6.94	114.44	118.60
2	AB	949	G	N1-C6-O6	6.94	124.06	119.90
2	AB	1028	A	N1-C2-N3	6.94	132.77	129.30
2	AB	1076	C	C1'-O4'-C4'	6.94	115.45	109.90
2	AB	1819	A	C6-C5-N7	6.94	137.16	132.30
35	BA	110	C	C5-C6-N1	-6.94	117.53	121.00
35	BA	713	G	N9-C4-C5	6.94	108.17	105.40
35	BA	998	C	C5-C4-N4	-6.94	115.34	120.20
35	BA	1377	A	O4'-C1'-N9	6.94	113.75	108.20
2	AB	450	G	N3-C2-N2	-6.94	115.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1492	G	N1-C6-O6	6.94	124.06	119.90
2	AB	1645	G	N3-C4-N9	6.94	130.16	126.00
2	AB	1794	A	C8-N9-C4	-6.94	103.03	105.80
2	AB	1824	G	N1-C2-N3	-6.94	119.74	123.90
35	BA	528	C	N3-C2-O2	-6.94	117.05	121.90
35	BA	1514	G	N7-C8-N9	6.94	116.57	113.10
2	AB	891	G	C2-N3-C4	6.93	115.37	111.90
2	AB	961	C	O4'-C4'-C3'	6.93	111.65	106.10
2	AB	989	G	C4-C5-N7	6.93	113.57	110.80
2	AB	1147	A	C8-N9-C4	6.93	108.57	105.80
2	AB	1236	G	N3-C4-N9	6.93	130.16	126.00
2	AB	1300	G	P-O3'-C3'	6.93	128.02	119.70
2	AB	1341	G	C4-C5-C6	6.93	122.96	118.80
2	AB	1878	G	C4-C5-N7	6.93	113.57	110.80
2	AB	1945	G	N3-C4-C5	-6.93	125.13	128.60
2	AB	2214	C	N1-C2-N3	6.93	124.05	119.20
2	AB	2349	G	C4-C5-C6	6.93	122.96	118.80
2	AB	2641	G	N3-C2-N2	-6.93	115.05	119.90
2	AB	2759	G	C2-N3-C4	6.93	115.37	111.90
35	BA	148	G	C4-C5-C6	6.93	122.96	118.80
35	BA	172	A	N9-C1'-C2'	-6.93	104.37	112.00
35	BA	830	G	C5-C6-O6	-6.93	124.44	128.60
35	BA	890	G	C6-C5-N7	-6.93	126.24	130.40
35	BA	1243	C	C5-C6-N1	-6.93	117.53	121.00
35	BA	1280	A	C5-C6-N6	-6.93	118.15	123.70
35	BA	1463	U	C5-C6-N1	-6.93	119.23	122.70
2	AB	1573	G	N3-C4-C5	-6.93	125.13	128.60
35	BA	402	G	N3-C4-C5	-6.93	125.13	128.60
35	BA	595	A	N9-C4-C5	6.93	108.57	105.80
35	BA	655	A	O4'-C1'-N9	6.93	113.75	108.20
35	BA	1074	G	O5'-P-OP2	-6.93	99.46	105.70
35	BA	1198	G	C2-N3-C4	6.93	115.37	111.90
35	BA	1260	G	N3-C2-N2	6.93	124.75	119.90
35	BA	1284	C	C5'-C4'-O4'	6.93	117.42	109.10
35	BA	1341	U	C5-C4-O4	-6.93	121.74	125.90
36	BB	36	A	N1-C6-N6	6.93	122.76	118.60
38	BD	31	G	C5-C6-O6	-6.93	124.44	128.60
2	AB	954	G	N3-C4-N9	6.93	130.16	126.00
2	AB	1667	G	C5'-C4'-O4'	-6.93	100.78	109.10
2	AB	2152	G	N9-C4-C5	6.93	108.17	105.40
35	BA	67	C	C5-C4-N4	-6.93	115.35	120.20
2	AB	480	A	C5'-C4'-O4'	6.93	117.42	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	498	G	C2-N3-C4	6.93	115.36	111.90
2	AB	1151	A	C8-N9-C4	-6.93	103.03	105.80
2	AB	1804	C	C2-N3-C4	6.93	123.36	119.90
2	AB	1903	G	N1-C6-O6	6.93	124.06	119.90
2	AB	1904	G	N3-C4-C5	-6.93	125.14	128.60
2	AB	2039	U	C5'-C4'-O4'	6.93	117.42	109.10
2	AB	2816	G	N9-C4-C5	6.93	108.17	105.40
2	AB	2820	A	C4-C5-C6	-6.93	113.53	117.00
35	BA	202	G	C4-N9-C1'	-6.93	117.49	126.50
35	BA	718	A	C4-C5-N7	6.93	114.17	110.70
35	BA	858	G	C4-C5-N7	-6.93	108.03	110.80
35	BA	983	A	C2-N3-C4	6.93	114.06	110.60
35	BA	1373	G	N9-C1'-C2'	-6.93	104.38	112.00
2	AB	2855	C	C6-N1-C2	-6.93	117.53	120.30
35	BA	455	G	N9-C1'-C2'	6.93	123.01	114.00
43	BI	38	ARG	NE-CZ-NH2	-6.93	116.84	120.30
2	AB	437	U	C2-N3-C4	-6.93	122.84	127.00
2	AB	521	U	O4'-C1'-N1	6.93	113.74	108.20
2	AB	890	C	O4'-C1'-N1	6.93	113.74	108.20
2	AB	1521	G	C2-N3-C4	6.93	115.36	111.90
2	AB	1796	U	C5-C4-O4	6.93	130.06	125.90
2	AB	1803	A	N1-C2-N3	-6.93	125.84	129.30
35	BA	369	G	C2-N3-C4	6.93	115.36	111.90
35	BA	839	C	C4'-C3'-C2'	-6.93	95.67	102.60
35	BA	917	G	C2-N3-C4	6.93	115.36	111.90
35	BA	1225	A	N1-C6-N6	-6.93	114.44	118.60
35	BA	1261	A	C4-C5-C6	6.93	120.46	117.00
36	BB	12	U	C6-N1-C2	-6.93	116.84	121.00
36	BB	49	G	C5-N7-C8	-6.93	100.84	104.30
1	AA	42	C	N3-C4-C5	6.92	124.67	121.90
2	AB	1502	A	C1'-O4'-C4'	-6.92	104.36	109.90
2	AB	1733	G	C6-C5-N7	-6.92	126.25	130.40
2	AB	1792	G	C3'-C2'-C1'	6.92	107.04	101.50
35	BA	336	A	O4'-C1'-N9	6.92	113.74	108.20
35	BA	459	A	C4-C5-C6	-6.92	113.54	117.00
35	BA	681	A	C1'-O4'-C4'	6.92	115.44	109.90
35	BA	974	A	C1'-O4'-C4'	-6.92	104.36	109.90
35	BA	1059	C	N3-C4-C5	-6.92	119.13	121.90
35	BA	44	A	C4'-C3'-C2'	-6.92	95.68	102.60
35	BA	257	G	N9-C4-C5	6.92	108.17	105.40
35	BA	650	G	C6-N1-C2	-6.92	120.95	125.10
35	BA	1375	A	C5-N7-C8	6.92	107.36	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	69	C	C4'-C3'-C2'	-6.92	95.68	102.60
2	AB	1063	G	C6-C5-N7	-6.92	126.25	130.40
2	AB	2343	U	C6-N1-C2	-6.92	116.85	121.00
35	BA	595	A	C8-N9-C4	-6.92	103.03	105.80
35	BA	684	U	C5-C4-O4	-6.92	121.75	125.90
35	BA	1299	A	N1-C2-N3	-6.92	125.84	129.30
2	AB	986	C	C5-C4-N4	-6.92	115.36	120.20
2	AB	1416	G	P-O3'-C3'	6.92	128.00	119.70
35	BA	1301	U	C5-C4-O4	6.92	130.05	125.90
1	AA	57	A	O4'-C1'-N9	6.92	113.73	108.20
2	AB	879	G	C3'-C2'-C1'	6.92	107.03	101.50
2	AB	1555	G	N1-C6-O6	-6.92	115.75	119.90
2	AB	1964	G	N1-C6-O6	6.92	124.05	119.90
2	AB	2049	G	N9-C4-C5	6.92	108.17	105.40
2	AB	2126	A	N7-C8-N9	-6.92	110.34	113.80
2	AB	2393	U	C4-C5-C6	6.92	123.85	119.70
35	BA	209	U	N3-C2-O2	-6.92	117.36	122.20
35	BA	224	U	C4'-C3'-C2'	-6.92	95.68	102.60
35	BA	1047	G	C5-C6-N1	6.92	114.96	111.50
35	BA	1392	G	C5-C6-N1	6.92	114.96	111.50
37	BC	20	G	C8-N9-C4	-6.92	103.63	106.40
1	AA	86	G	O4'-C1'-N9	6.92	113.73	108.20
2	AB	396	G	C4-C5-C6	6.92	122.95	118.80
2	AB	512	G	N7-C8-N9	6.92	116.56	113.10
2	AB	1284	A	C2-N3-C4	6.92	114.06	110.60
35	BA	633	G	P-O3'-C3'	6.92	128.00	119.70
35	BA	817	C	C3'-C2'-C1'	-6.92	95.97	101.50
35	BA	1015	G	N9-C4-C5	6.92	108.17	105.40
35	BA	1080	A	N1-C2-N3	6.92	132.76	129.30
35	BA	1469	C	C5-C6-N1	6.92	124.46	121.00
38	BD	31	G	O4'-C1'-N9	6.92	113.73	108.20
2	AB	280	U	C5-C6-N1	-6.92	119.24	122.70
2	AB	1067	A	C4'-C3'-C2'	-6.92	95.69	102.60
2	AB	2844	G	C6-C5-N7	-6.92	126.25	130.40
2	AB	2852	G	N1-C6-O6	-6.92	115.75	119.90
38	BD	76	C	C2-N3-C4	6.92	123.36	119.90
2	AB	1631	G	N3-C2-N2	6.91	124.74	119.90
2	AB	1657	U	C5'-C4'-O4'	6.91	117.40	109.10
2	AB	2032	G	C4-C5-C6	-6.91	114.65	118.80
2	AB	2318	G	C1'-O4'-C4'	-6.91	104.37	109.90
2	AB	2585	U	N1-C2-N3	6.91	119.05	114.90
35	BA	927	G	N9-C4-C5	6.91	108.17	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	BU	12	PHE	CB-CG-CD2	-6.91	115.96	120.80
1	AA	4	C	C6-N1-C2	6.91	123.06	120.30
2	AB	1128	G	O4'-C4'-C3'	6.91	111.63	106.10
2	AB	1378	A	C2-N3-C4	6.91	114.06	110.60
35	BA	725	G	C5-C6-O6	-6.91	124.45	128.60
35	BA	1042	A	N7-C8-N9	-6.91	110.34	113.80
2	AB	212	G	C5-C6-N1	6.91	114.95	111.50
2	AB	335	C	C5'-C4'-O4'	6.91	117.39	109.10
2	AB	418	C	C4-C5-C6	-6.91	113.94	117.40
2	AB	958	U	C3'-C2'-C1'	6.91	107.03	101.50
2	AB	1507	C	C5-C4-N4	-6.91	115.36	120.20
2	AB	1665	A	N3-C4-C5	-6.91	121.96	126.80
2	AB	2121	G	N3-C4-N9	6.91	130.15	126.00
2	AB	2314	A	C5-C6-N1	-6.91	114.25	117.70
35	BA	943	U	C1'-O4'-C4'	-6.91	104.37	109.90
2	AB	356	G	N1-C6-O6	6.91	124.05	119.90
2	AB	559	G	O4'-C1'-N9	6.91	113.73	108.20
2	AB	594	U	C3'-C2'-C1'	-6.91	95.97	101.50
2	AB	625	G	C5-C6-N1	6.91	114.95	111.50
2	AB	907	G	C4-C5-N7	-6.91	108.04	110.80
2	AB	1005	C	N3-C4-N4	6.91	122.84	118.00
2	AB	2029	G	C4'-C3'-C2'	-6.91	95.69	102.60
2	AB	2418	A	N1-C6-N6	-6.91	114.45	118.60
32	A5	3	ARG	NE-CZ-NH1	-6.91	116.85	120.30
35	BA	157	U	N3-C4-O4	6.91	124.24	119.40
35	BA	800	G	C6-C5-N7	-6.91	126.25	130.40
35	BA	1043	G	C5'-C4'-C3'	-6.91	104.95	116.00
35	BA	1317	C	O4'-C1'-N1	6.91	113.73	108.20
2	AB	1716	U	O4'-C1'-C2'	-6.91	98.89	105.80
23	AW	61	GLU	OE1-CD-OE2	6.91	131.59	123.30
35	BA	1317	C	C6-N1-C2	-6.91	117.54	120.30
2	AB	188	G	N3-C2-N2	-6.91	115.07	119.90
2	AB	1161	C	N1-C2-N3	-6.91	114.37	119.20
2	AB	1189	A	N3-C4-N9	-6.91	121.88	127.40
2	AB	2630	G	N1-C2-N3	-6.91	119.76	123.90
2	AB	2737	G	C4'-C3'-C2'	-6.91	95.69	102.60
2	AB	2749	A	O4'-C1'-C2'	6.91	113.82	107.60
35	BA	541	G	C5-C6-O6	-6.91	124.46	128.60
2	AB	584	C	N3-C2-O2	-6.90	117.07	121.90
2	AB	713	G	N1-C2-N3	6.90	128.04	123.90
2	AB	759	G	C5-N7-C8	-6.90	100.85	104.30
2	AB	1555	G	C4'-C3'-C2'	-6.90	95.70	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1788	C	C1'-O4'-C4'	-6.90	104.38	109.90
2	AB	2742	G	N3-C2-N2	-6.90	115.07	119.90
2	AB	2745	C	C1'-O4'-C4'	6.90	115.42	109.90
1	AA	64	G	C2-N3-C4	6.90	115.35	111.90
2	AB	454	A	C2-N3-C4	6.90	114.05	110.60
2	AB	758	C	C4-C5-C6	-6.90	113.95	117.40
2	AB	943	A	N9-C4-C5	-6.90	103.04	105.80
2	AB	1234	U	N3-C4-C5	-6.90	110.46	114.60
35	BA	1321	U	N3-C4-O4	6.90	124.23	119.40
35	BA	1377	A	N1-C2-N3	-6.90	125.85	129.30
2	AB	1050	A	O3'-P-O5'	-6.90	90.89	104.00
2	AB	1133	A	O4'-C1'-N9	6.90	113.72	108.20
2	AB	1197	G	C5'-C4'-O4'	6.90	117.38	109.10
2	AB	1281	G	C2-N3-C4	6.90	115.35	111.90
2	AB	1926	U	C4-C5-C6	6.90	123.84	119.70
11	AK	133	ARG	NE-CZ-NH2	-6.90	116.85	120.30
35	BA	42	G	C5-N7-C8	-6.90	100.85	104.30
35	BA	288	A	C5-C6-N1	6.90	121.15	117.70
35	BA	412	A	N3-C4-C5	-6.90	121.97	126.80
35	BA	760	G	N1-C6-O6	-6.90	115.76	119.90
35	BA	947	G	C4-C5-N7	-6.90	108.04	110.80
35	BA	1034	G	N3-C4-N9	6.90	130.14	126.00
54	BT	33	TYR	CZ-CE2-CD2	-6.90	113.59	119.80
2	AB	268	C	C2-N1-C1'	-6.90	111.21	118.80
2	AB	1112	G	C8-N9-C4	6.90	109.16	106.40
2	AB	1362	C	C4'-C3'-C2'	-6.90	95.70	102.60
35	BA	224	U	O4'-C1'-N1	6.90	113.72	108.20
1	AA	41	G	N3-C4-C5	-6.90	125.15	128.60
1	AA	118	C	C5-C6-N1	6.90	124.45	121.00
2	AB	65	U	C5-C6-N1	-6.90	119.25	122.70
2	AB	1066	U	C5'-C4'-C3'	-6.90	104.96	116.00
2	AB	2438	U	O4'-C1'-N1	6.90	113.72	108.20
2	AB	2630	G	C2-N3-C4	6.90	115.35	111.90
35	BA	8	A	C6-N1-C2	6.90	122.74	118.60
35	BA	134	G	O5'-P-OP2	-6.90	99.49	105.70
2	AB	514	A	C6-N1-C2	6.90	122.74	118.60
2	AB	2156	G	N1-C2-N3	6.90	128.04	123.90
1	AA	97	C	N3-C4-N4	6.89	122.83	118.00
2	AB	220	G	C6-N1-C2	-6.89	120.96	125.10
2	AB	228	C	O4'-C1'-C2'	-6.89	98.91	105.80
2	AB	351	C	N1-C2-O2	6.89	123.04	118.90
2	AB	474	G	C3'-C2'-C1'	-6.89	95.98	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	829	A	N3-C4-C5	-6.89	121.97	126.80
2	AB	1272	A	C8-N9-C4	-6.89	103.04	105.80
2	AB	2823	A	N9-C4-C5	6.89	108.56	105.80
35	BA	13	U	N1-C1'-C2'	6.89	122.96	114.00
35	BA	682	G	C4'-C3'-C2'	6.89	109.50	102.60
35	BA	948	C	N1-C1'-C2'	-6.89	104.42	112.00
2	AB	110	G	C8-N9-C4	-6.89	103.64	106.40
2	AB	617	G	N1-C2-N3	-6.89	119.76	123.90
2	AB	852	U	C5-C6-N1	6.89	126.15	122.70
2	AB	874	G	C4'-C3'-C2'	-6.89	95.71	102.60
2	AB	1147	A	C5-N7-C8	-6.89	100.45	103.90
2	AB	1538	G	N1-C2-N2	6.89	122.40	116.20
2	AB	2633	G	N7-C8-N9	6.89	116.55	113.10
35	BA	63	C	C1'-O4'-C4'	6.89	115.41	109.90
35	BA	237	G	C1'-O4'-C4'	6.89	115.41	109.90
35	BA	294	U	C4'-C3'-C2'	-6.89	95.71	102.60
35	BA	465	A	N9-C4-C5	-6.89	103.04	105.80
36	BB	59	G	O4'-C4'-C3'	6.89	111.61	106.10
37	BC	17	U	C5'-C4'-C3'	-6.89	104.97	116.00
37	BC	59	A	C1'-O4'-C4'	6.89	115.41	109.90
2	AB	232	G	C6-C5-N7	-6.89	126.27	130.40
2	AB	1214	A	C4'-C3'-C2'	-6.89	95.71	102.60
2	AB	1806	C	N3-C4-N4	6.89	122.82	118.00
35	BA	174	A	C5'-C4'-O4'	6.89	117.37	109.10
35	BA	920	U	C1'-O4'-C4'	6.89	115.41	109.90
2	AB	463	G	N3-C2-N2	-6.89	115.08	119.90
2	AB	1198	U	N3-C2-O2	-6.89	117.38	122.20
2	AB	1251	C	N3-C2-O2	-6.89	117.08	121.90
2	AB	1678	A	N1-C6-N6	6.89	122.73	118.60
2	AB	1715	G	N3-C4-C5	-6.89	125.16	128.60
2	AB	1727	C	N3-C2-O2	-6.89	117.08	121.90
2	AB	1767	G	C3'-C2'-C1'	6.89	107.01	101.50
2	AB	2091	C	C6-N1-C2	6.89	123.06	120.30
2	AB	2293	G	N3-C4-C5	-6.89	125.16	128.60
7	AG	127	TYR	CG-CD2-CE2	-6.89	115.79	121.30
35	BA	278	G	C8-N9-C4	-6.89	103.64	106.40
35	BA	543	U	C2-N3-C4	-6.89	122.87	127.00
2	AB	666	A	C4-C5-C6	6.89	120.44	117.00
2	AB	916	G	O4'-C1'-N9	6.89	113.71	108.20
2	AB	953	G	C6-N1-C2	-6.89	120.97	125.10
2	AB	989	G	N9-C4-C5	-6.89	102.64	105.40
2	AB	1466	U	P-O3'-C3'	6.89	127.97	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	335	C	N1-C2-O2	6.89	123.03	118.90
35	BA	898	G	C6-N1-C2	-6.89	120.97	125.10
2	AB	553	G	C4'-C3'-C2'	-6.89	95.71	102.60
2	AB	602	A	C6-N1-C2	-6.89	114.47	118.60
2	AB	1636	U	C5'-C4'-O4'	6.89	117.36	109.10
2	AB	1840	G	C5-C6-N1	6.89	114.94	111.50
2	AB	2022	U	N3-C4-O4	6.89	124.22	119.40
35	BA	15	G	N3-C2-N2	-6.89	115.08	119.90
35	BA	1173	U	O4'-C1'-N1	6.89	113.71	108.20
35	BA	1506	U	C2-N3-C4	-6.89	122.87	127.00
38	BD	22	A	N1-C2-N3	-6.89	125.86	129.30
2	AB	129	C	C5-C6-N1	6.88	124.44	121.00
2	AB	156	A	O4'-C4'-C3'	6.88	111.61	106.10
2	AB	1056	G	C6-C5-N7	-6.88	126.27	130.40
2	AB	1811	G	C5'-C4'-O4'	6.88	117.36	109.10
2	AB	2060	A	N1-C6-N6	-6.88	114.47	118.60
2	AB	2535	G	C3'-C2'-C1'	-6.88	95.99	101.50
2	AB	2809	A	C8-N9-C4	-6.88	103.05	105.80
35	BA	121	U	O4'-C1'-N1	-6.88	102.69	108.20
35	BA	1218	C	C4-C5-C6	6.88	120.84	117.40
35	BA	1515	G	C6-C5-N7	-6.88	126.27	130.40
42	BH	127	TYR	CB-CG-CD2	-6.88	116.87	121.00
2	AB	758	C	P-O3'-C3'	6.88	127.96	119.70
2	AB	1590	A	C6-C5-N7	6.88	137.12	132.30
2	AB	2461	A	C5-C6-N1	-6.88	114.26	117.70
35	BA	161	A	C4-C5-N7	-6.88	107.26	110.70
35	BA	360	G	N1-C6-O6	6.88	124.03	119.90
35	BA	1300	G	C5'-C4'-O4'	6.88	117.36	109.10
36	BB	27	C	C5-C4-N4	-6.88	115.38	120.20
2	AB	1658	C	C3'-C2'-C1'	6.88	107.00	101.50
2	AB	2269	G	C4-C5-N7	-6.88	108.05	110.80
2	AB	2697	G	C6-N1-C2	-6.88	120.97	125.10
35	BA	140	U	N3-C4-C5	-6.88	110.47	114.60
2	AB	723	C	O4'-C1'-N1	6.88	113.70	108.20
2	AB	1128	G	C4'-C3'-C2'	-6.88	95.72	102.60
2	AB	2116	G	C6-C5-N7	-6.88	126.27	130.40
2	AB	2367	G	N9-C1'-C2'	-6.88	104.43	112.00
5	AE	80	TRP	CD1-NE1-CE2	6.88	115.19	109.00
2	AB	706	A	C5-C6-N1	-6.88	114.26	117.70
2	AB	893	C	C1'-O4'-C4'	-6.88	104.40	109.90
2	AB	1825	U	O4'-C1'-N1	6.88	113.70	108.20
2	AB	2386	A	C5-N7-C8	-6.88	100.46	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	AG	7	TYR	CB-CG-CD1	-6.88	116.87	121.00
35	BA	182	A	C3'-C2'-C1'	-6.88	96.00	101.50
35	BA	337	G	P-O3'-C3'	6.88	127.95	119.70
35	BA	635	A	C4-C5-C6	-6.88	113.56	117.00
35	BA	1003	G	C6-N1-C2	-6.88	120.97	125.10
2	AB	87	U	C5'-C4'-O4'	6.88	117.35	109.10
2	AB	189	G	N3-C4-C5	-6.88	125.16	128.60
2	AB	536	G	C4-C5-N7	-6.88	108.05	110.80
2	AB	606	U	C2-N3-C4	6.88	131.13	127.00
2	AB	1097	U	C4-C5-C6	6.88	123.83	119.70
18	AR	100	ARG	NE-CZ-NH1	-6.88	116.86	120.30
35	BA	683	G	N3-C2-N2	6.88	124.71	119.90
35	BA	777	A	N1-C6-N6	-6.88	114.47	118.60
35	BA	951	G	N9-C4-C5	6.88	108.15	105.40
35	BA	1394	A	N7-C8-N9	6.88	117.24	113.80
38	BD	47	A	C4-C5-N7	-6.88	107.26	110.70
2	AB	226	A	N9-C4-C5	-6.88	103.05	105.80
2	AB	733	G	C5-N7-C8	-6.88	100.86	104.30
2	AB	2661	G	N3-C4-C5	-6.88	125.16	128.60
2	AB	48	G	C5'-C4'-O4'	6.87	117.35	109.10
2	AB	1084	A	N7-C8-N9	6.87	117.24	113.80
2	AB	1117	C	N1-C2-O2	6.87	123.02	118.90
2	AB	2867	G	C4-C5-N7	6.87	113.55	110.80
35	BA	198	G	N1-C6-O6	-6.87	115.78	119.90
35	BA	466	A	C3'-C2'-C1'	6.87	107.00	101.50
35	BA	626	G	N1-C6-O6	6.87	124.02	119.90
35	BA	725	G	O4'-C1'-N9	6.87	113.70	108.20
35	BA	1394	A	N9-C4-C5	-6.87	103.05	105.80
1	AA	56	G	O4'-C1'-N9	6.87	113.70	108.20
2	AB	38	A	O4'-C1'-N9	6.87	113.70	108.20
2	AB	2152	G	C5'-C4'-C3'	-6.87	105.01	116.00
2	AB	2258	C	N1-C2-O2	6.87	123.02	118.90
2	AB	2393	U	N1-C2-N3	6.87	119.02	114.90
16	AP	112	TYR	CB-CG-CD2	-6.87	116.88	121.00
35	BA	498	A	C5-N7-C8	6.87	107.34	103.90
35	BA	759	A	C1'-O4'-C4'	-6.87	104.40	109.90
38	BD	10	G	N1-C2-N3	-6.87	119.78	123.90
2	AB	87	U	N3-C2-O2	-6.87	117.39	122.20
2	AB	915	C	C6-N1-C2	-6.87	117.55	120.30
2	AB	1202	G	O4'-C1'-C2'	6.87	113.78	107.60
2	AB	2027	G	C2-N3-C4	6.87	115.33	111.90
2	AB	2839	G	N9-C4-C5	6.87	108.15	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	858	G	C8-N9-C4	-6.87	103.65	106.40
2	AB	183	C	C5-C6-N1	-6.87	117.56	121.00
2	AB	775	G	C4'-C3'-C2'	-6.87	95.73	102.60
2	AB	781	A	N3-C4-C5	-6.87	121.99	126.80
2	AB	1269	A	O4'-C1'-N9	6.87	113.69	108.20
2	AB	2266	A	N1-C2-N3	-6.87	125.87	129.30
2	AB	2468	A	O3'-P-O5'	-6.87	90.95	104.00
2	AB	2752	C	C4-C5-C6	-6.87	113.97	117.40
35	BA	610	U	O4'-C1'-N1	6.87	113.69	108.20
37	BC	35	G	C6-N1-C2	-6.87	120.98	125.10
2	AB	872	U	C4'-C3'-C2'	-6.87	95.73	102.60
2	AB	2335	A	O4'-C1'-N9	6.87	113.69	108.20
2	AB	2594	C	N1-C2-O2	6.87	123.02	118.90
2	AB	199	A	O3'-P-O5'	-6.87	90.95	104.00
2	AB	809	G	C6-C5-N7	-6.87	126.28	130.40
2	AB	907	G	O5'-P-OP2	-6.87	99.52	105.70
2	AB	1758	U	C5-C4-O4	-6.87	121.78	125.90
2	AB	1824	G	C4-C5-C6	6.87	122.92	118.80
2	AB	2436	G	C5-N7-C8	-6.87	100.87	104.30
35	BA	577	G	C3'-C2'-C1'	6.87	106.99	101.50
35	BA	1019	A	N3-C4-N9	6.87	132.89	127.40
35	BA	1352	C	C2-N3-C4	6.87	123.33	119.90
2	AB	40	U	C4'-C3'-C2'	-6.86	95.74	102.60
2	AB	671	C	O4'-C1'-N1	6.86	113.69	108.20
2	AB	895	U	C1'-O4'-C4'	6.86	115.39	109.90
2	AB	935	C	C4-C5-C6	6.86	120.83	117.40
2	AB	1088	A	N1-C6-N6	-6.86	114.48	118.60
2	AB	1205	A	C5-C6-N1	6.86	121.13	117.70
2	AB	1569	A	C6-C5-N7	6.86	137.10	132.30
2	AB	1714	U	C6-N1-C2	-6.86	116.88	121.00
2	AB	2036	C	N3-C4-C5	6.86	124.64	121.90
35	BA	128	G	P-O3'-C3'	6.86	127.94	119.70
35	BA	333	U	N1-C2-N3	6.86	119.02	114.90
35	BA	686	U	O4'-C1'-N1	6.86	113.69	108.20
35	BA	1020	G	C8-N9-C4	-6.86	103.66	106.40
35	BA	1176	A	O4'-C1'-N9	6.86	113.69	108.20
2	AB	683	U	C5-C4-O4	-6.86	121.78	125.90
2	AB	2390	U	N3-C2-O2	-6.86	117.40	122.20
2	AB	2766	A	C6-N1-C2	6.86	122.72	118.60
23	AW	48	VAL	CA-CB-CG2	6.86	121.19	110.90
2	AB	1929	G	C2-N3-C4	6.86	115.33	111.90
2	AB	1991	U	C4-C5-C6	6.86	123.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2136	G	C6-N1-C2	6.86	129.22	125.10
2	AB	2601	C	N3-C4-C5	-6.86	119.16	121.90
32	A5	18	PHE	CB-CG-CD1	-6.86	116.00	120.80
35	BA	239	U	O4'-C1'-N1	-6.86	102.71	108.20
35	BA	741	G	C2-N3-C4	-6.86	108.47	111.90
35	BA	1399	C	N1-C1'-C2'	-6.86	104.45	112.00
35	BA	1434	A	N3-C4-C5	-6.86	122.00	126.80
58	BX	61	ARG	NE-CZ-NH2	-6.86	116.87	120.30
2	AB	1861	G	C2-N3-C4	6.86	115.33	111.90
2	AB	2633	G	C6-C5-N7	-6.86	126.28	130.40
35	BA	44	A	C8-N9-C4	-6.86	103.06	105.80
2	AB	211	C	O4'-C1'-N1	6.86	113.69	108.20
2	AB	247	G	O4'-C1'-N9	-6.86	102.72	108.20
2	AB	988	A	C2-N3-C4	6.86	114.03	110.60
2	AB	1084	A	N9-C4-C5	6.86	108.54	105.80
2	AB	1215	G	N1-C6-O6	-6.86	115.79	119.90
2	AB	1745	A	N9-C1'-C2'	-6.86	104.46	112.00
2	AB	2279	G	O4'-C1'-N9	6.86	113.69	108.20
2	AB	2355	G	N7-C8-N9	6.86	116.53	113.10
2	AB	2668	G	N7-C8-N9	6.86	116.53	113.10
2	AB	2748	A	N1-C6-N6	-6.86	114.49	118.60
2	AB	2864	G	O4'-C1'-N9	6.86	113.69	108.20
35	BA	1195	C	N3-C4-N4	6.86	122.80	118.00
35	BA	1351	U	N3-C4-O4	-6.86	114.60	119.40
1	AA	48	U	O4'-C1'-N1	6.86	113.68	108.20
2	AB	620	G	C2-N3-C4	6.86	115.33	111.90
2	AB	630	G	C5-N7-C8	-6.86	100.87	104.30
2	AB	1316	U	O4'-C1'-N1	6.86	113.68	108.20
2	AB	2004	G	C5-N7-C8	6.86	107.73	104.30
2	AB	2211	A	C2-N3-C4	-6.86	107.17	110.60
2	AB	2727	A	C6-C5-N7	6.86	137.10	132.30
35	BA	1142	G	N9-C4-C5	6.86	108.14	105.40
35	BA	1198	G	O4'-C1'-N9	6.86	113.69	108.20
35	BA	1464	U	C6-N1-C2	-6.86	116.89	121.00
35	BA	257	G	C6-C5-N7	-6.85	126.29	130.40
36	BB	42	G	N1-C6-O6	6.85	124.01	119.90
1	AA	61	G	C3'-C2'-C1'	6.85	106.98	101.50
2	AB	779	U	N1-C2-N3	6.85	119.01	114.90
2	AB	2179	C	O4'-C1'-N1	6.85	113.68	108.20
2	AB	2441	U	O4'-C1'-N1	6.85	113.68	108.20
2	AB	2505	G	O4'-C1'-N9	6.85	113.68	108.20
12	AL	62	VAL	CA-CB-CG1	6.85	121.18	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	402	G	C5-C6-N1	6.85	114.93	111.50
35	BA	478	A	N3-C4-N9	-6.85	121.92	127.40
35	BA	1219	A	C4-C5-N7	-6.85	107.27	110.70
35	BA	1379	G	C3'-C2'-C1'	-6.85	96.02	101.50
2	AB	1918	A	P-O3'-C3'	6.85	127.92	119.70
35	BA	1095	U	N1-C2-O2	6.85	127.59	122.80
35	BA	1529	G	C2-N3-C4	6.85	115.33	111.90
1	AA	38	C	N1-C2-O2	6.85	123.01	118.90
2	AB	253	C	C6-N1-C2	-6.85	117.56	120.30
2	AB	590	A	C1'-O4'-C4'	-6.85	104.42	109.90
2	AB	644	A	C2-N3-C4	6.85	114.03	110.60
2	AB	931	U	O4'-C1'-N1	6.85	113.68	108.20
2	AB	946	C	C1'-O4'-C4'	6.85	115.38	109.90
2	AB	1047	G	C5-C6-O6	6.85	132.71	128.60
2	AB	1824	G	N3-C4-C5	-6.85	125.17	128.60
2	AB	2195	U	O4'-C1'-N1	6.85	113.68	108.20
35	BA	1029	U	C5-C6-N1	6.85	126.12	122.70
35	BA	1158	C	N1-C2-N3	6.85	124.00	119.20
2	AB	123	G	C8-N9-C4	-6.85	103.66	106.40
2	AB	599	A	N9-C4-C5	6.85	108.54	105.80
2	AB	818	G	C4-C5-N7	-6.85	108.06	110.80
2	AB	2149	U	C5-C6-N1	-6.85	119.28	122.70
2	AB	2326	C	O4'-C1'-N1	6.85	113.68	108.20
2	AB	2683	C	N1-C2-O2	6.85	123.01	118.90
35	BA	710	G	C1'-O4'-C4'	-6.85	104.42	109.90
35	BA	1025	U	N1-C2-N3	6.85	119.01	114.90
35	BA	1393	U	O4'-C1'-C2'	6.85	113.76	107.60
1	AA	110	C	C5-C6-N1	6.85	124.42	121.00
2	AB	93	G	N3-C2-N2	-6.85	115.11	119.90
2	AB	909	A	C5-C6-N1	6.85	121.12	117.70
2	AB	1376	C	O4'-C1'-N1	6.85	113.68	108.20
2	AB	1522	A	N3-C4-C5	-6.85	122.01	126.80
2	AB	1561	C	O4'-C1'-N1	6.85	113.68	108.20
2	AB	1652	A	C5-C6-N1	6.85	121.12	117.70
2	AB	2421	G	C1'-O4'-C4'	6.85	115.38	109.90
4	AD	270	ARG	NE-CZ-NH1	6.85	123.72	120.30
2	AB	3	U	C6-N1-C2	6.84	125.11	121.00
2	AB	44	A	O4'-C1'-N9	6.84	113.68	108.20
2	AB	1584	U	N3-C4-C5	-6.84	110.49	114.60
2	AB	1665	A	C4-C5-C6	6.84	120.42	117.00
2	AB	1799	G	C8-N9-C4	-6.84	103.66	106.40
2	AB	1957	C	N1-C1'-C2'	-6.84	104.47	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2547	A	N7-C8-N9	6.84	117.22	113.80
35	BA	8	A	C3'-C2'-C1'	6.84	106.97	101.50
35	BA	67	C	C3'-C2'-C1'	6.84	106.98	101.50
35	BA	752	G	N7-C8-N9	6.84	116.52	113.10
35	BA	1326	U	C4-C5-C6	6.84	123.81	119.70
2	AB	608	A	N7-C8-N9	6.84	117.22	113.80
2	AB	1495	A	C3'-C2'-C1'	-6.84	96.03	101.50
2	AB	1512	C	C5-C6-N1	-6.84	117.58	121.00
51	BQ	72	PHE	CB-CG-CD1	-6.84	116.01	120.80
1	AA	38	C	C5-C4-N4	-6.84	115.41	120.20
2	AB	1756	G	C4'-C3'-C2'	-6.84	95.76	102.60
2	AB	2207	C	N3-C4-C5	6.84	124.64	121.90
2	AB	2404	U	O4'-C1'-N1	6.84	113.67	108.20
35	BA	245	U	O4'-C1'-N1	6.84	113.67	108.20
2	AB	2	G	N9-C4-C5	6.84	108.14	105.40
2	AB	189	G	C8-N9-C4	-6.84	103.66	106.40
2	AB	406	G	O4'-C1'-N9	6.84	113.67	108.20
2	AB	2551	C	N1-C2-O2	6.84	123.00	118.90
2	AB	2574	G	N1-C6-O6	-6.84	115.80	119.90
2	AB	2797	U	C2-N3-C4	-6.84	122.90	127.00
35	BA	71	A	C6-N1-C2	6.84	122.70	118.60
35	BA	890	G	N1-C6-O6	6.84	124.00	119.90
35	BA	1031	C	C5-C6-N1	6.84	124.42	121.00
35	BA	583	A	P-O3'-C3'	6.84	127.91	119.70
35	BA	642	A	N9-C4-C5	6.84	108.53	105.80
35	BA	1394	A	C6-C5-N7	-6.84	127.51	132.30
2	AB	1266	G	C5-C6-O6	-6.84	124.50	128.60
2	AB	1737	G	C6-C5-N7	-6.84	126.30	130.40
2	AB	2732	G	C8-N9-C4	6.84	109.14	106.40
2	AB	2748	A	C4-C5-C6	-6.84	113.58	117.00
35	BA	1072	G	N9-C1'-C2'	-6.84	104.48	112.00
35	BA	1134	G	C5'-C4'-O4'	6.84	117.30	109.10
35	BA	1269	A	C4-C5-N7	-6.84	107.28	110.70
35	BA	1273	C	C5-C6-N1	-6.84	117.58	121.00
49	BO	55	ARG	NE-CZ-NH2	-6.84	116.88	120.30
2	AB	792	A	C5-N7-C8	6.83	107.32	103.90
4	AD	140	VAL	CA-CB-CG2	6.83	121.15	110.90
35	BA	205	A	C8-N9-C4	-6.83	103.07	105.80
35	BA	425	G	O4'-C1'-N9	-6.83	102.73	108.20
35	BA	1001	C	N1-C1'-C2'	-6.83	104.48	112.00
35	BA	1176	A	C1'-O4'-C4'	6.83	115.37	109.90
2	AB	1100	C	C2-N3-C4	6.83	123.32	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1910	G	O5'-P-OP2	-6.83	99.55	105.70
2	AB	2662	A	C8-N9-C4	-6.83	103.07	105.80
35	BA	60	A	N1-C2-N3	-6.83	125.88	129.30
35	BA	300	A	O4'-C1'-N9	6.83	113.67	108.20
35	BA	745	G	N1-C2-N2	6.83	122.35	116.20
35	BA	859	G	N1-C2-N3	-6.83	119.80	123.90
35	BA	926	G	O4'-C4'-C3'	6.83	111.57	106.10
35	BA	1167	A	N3-C4-C5	-6.83	122.02	126.80
1	AA	39	A	N3-C4-N9	-6.83	121.93	127.40
2	AB	264	C	N3-C2-O2	-6.83	117.12	121.90
2	AB	1572	A	C8-N9-C4	-6.83	103.07	105.80
2	AB	1574	C	C2-N1-C1'	-6.83	111.28	118.80
2	AB	2155	U	C2-N3-C4	-6.83	122.90	127.00
27	A0	49	ASP	CB-CG-OD2	-6.83	112.15	118.30
35	BA	580	C	N1-C2-O2	6.83	123.00	118.90
35	BA	800	G	N3-C4-N9	6.83	130.10	126.00
35	BA	961	U	N3-C4-C5	6.83	118.70	114.60
35	BA	1086	U	N1-C2-N3	6.83	119.00	114.90
35	BA	1101	A	N1-C2-N3	-6.83	125.88	129.30
35	BA	1299	A	O4'-C1'-N9	6.83	113.67	108.20
35	BA	1448	C	O4'-C1'-N1	6.83	113.67	108.20
38	BD	64	G	C5'-C4'-C3'	-6.83	105.07	116.00
2	AB	701	G	N3-C2-N2	-6.83	115.12	119.90
2	AB	777	G	C4-C5-C6	6.83	122.90	118.80
2	AB	1859	U	N3-C4-O4	6.83	124.18	119.40
2	AB	1895	C	C4-C5-C6	6.83	120.81	117.40
2	AB	2767	C	C2-N3-C4	6.83	123.31	119.90
35	BA	997	U	N3-C4-C5	-6.83	110.50	114.60
36	BB	40	C	N1-C2-N3	-6.83	114.42	119.20
2	AB	1151	A	C5-N7-C8	-6.83	100.49	103.90
2	AB	2154	A	C5'-C4'-C3'	-6.83	105.07	116.00
2	AB	2674	G	N3-C2-N2	-6.83	115.12	119.90
12	AL	116	ARG	NE-CZ-NH2	-6.83	116.89	120.30
35	BA	259	G	N9-C1'-C2'	-6.83	104.49	112.00
35	BA	677	U	C5-C4-O4	-6.83	121.80	125.90
35	BA	975	A	C8-N9-C4	-6.83	103.07	105.80
35	BA	1269	A	C6-C5-N7	6.83	137.08	132.30
35	BA	1453	G	N3-C2-N2	-6.83	115.12	119.90
36	BB	13	C	O4'-C1'-N1	6.83	113.66	108.20
37	BC	34	U	C5-C6-N1	-6.83	119.29	122.70
2	AB	384	A	C5'-C4'-O4'	6.83	117.29	109.10
2	AB	958	U	C4-C5-C6	6.83	123.80	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2026	U	N1-C2-N3	6.83	119.00	114.90
35	BA	922	G	N7-C8-N9	6.83	116.51	113.10
2	AB	610	C	O4'-C1'-N1	6.83	113.66	108.20
35	BA	275	G	C2-N3-C4	6.83	115.31	111.90
35	BA	1320	C	N3-C2-O2	-6.83	117.12	121.90
2	AB	829	A	N7-C8-N9	-6.82	110.39	113.80
2	AB	971	G	N9-C4-C5	6.82	108.13	105.40
2	AB	2160	C	C5-C4-N4	-6.82	115.42	120.20
2	AB	2527	C	N1-C2-O2	6.82	122.99	118.90
35	BA	182	A	C6-N1-C2	6.82	122.69	118.60
35	BA	434	U	C2-N3-C4	-6.82	122.91	127.00
35	BA	733	G	N1-C6-O6	-6.82	115.81	119.90
37	BC	15	G	C4-C5-N7	-6.82	108.07	110.80
2	AB	182	A	C4-C5-C6	6.82	120.41	117.00
2	AB	1800	C	C1'-O4'-C4'	-6.82	104.44	109.90
2	AB	2082	A	O4'-C1'-N9	6.82	113.66	108.20
2	AB	2559	C	C5'-C4'-O4'	6.82	117.29	109.10
35	BA	354	G	C6-C5-N7	-6.82	126.31	130.40
2	AB	244	A	O4'-C1'-N9	6.82	113.66	108.20
2	AB	331	C	C2-N3-C4	-6.82	116.49	119.90
2	AB	542	C	N3-C2-O2	-6.82	117.13	121.90
2	AB	597	G	O4'-C1'-N9	6.82	113.66	108.20
2	AB	2068	U	C5'-C4'-O4'	6.82	117.28	109.10
2	AB	2126	A	C8-N9-C4	6.82	108.53	105.80
2	AB	2386	A	C6-C5-N7	-6.82	127.53	132.30
35	BA	233	C	N1-C2-N3	6.82	123.97	119.20
36	BB	42	G	C4-C5-C6	6.82	122.89	118.80
2	AB	498	G	N3-C4-N9	6.82	130.09	126.00
2	AB	592	A	C2-N3-C4	6.82	114.01	110.60
2	AB	865	C	C6-N1-C2	-6.82	117.57	120.30
2	AB	2593	U	C4-C5-C6	6.82	123.79	119.70
1	AA	4	C	C5-C4-N4	-6.82	115.43	120.20
2	AB	339	U	N1-C2-N3	6.82	118.99	114.90
2	AB	776	G	C8-N9-C4	-6.82	103.67	106.40
2	AB	901	C	C3'-C2'-C1'	-6.82	96.05	101.50
2	AB	1494	A	N7-C8-N9	6.82	117.21	113.80
2	AB	1741	C	N3-C4-N4	6.82	122.77	118.00
2	AB	1799	G	C4-C5-N7	6.82	113.53	110.80
2	AB	2545	G	C6-C5-N7	-6.82	126.31	130.40
35	BA	369	G	C3'-C2'-C1'	-6.82	96.05	101.50
35	BA	441	A	C2-N3-C4	6.82	114.01	110.60
35	BA	857	C	N3-C2-O2	-6.82	117.13	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	862	C	C1'-O4'-C4'	-6.82	104.44	109.90
38	BD	25	U	C2-N3-C4	-6.82	122.91	127.00
1	AA	11	C	C5-C4-N4	6.82	124.97	120.20
2	AB	189	G	C4-C5-N7	-6.82	108.07	110.80
2	AB	338	G	C4-C5-N7	-6.82	108.07	110.80
2	AB	1220	G	C6-C5-N7	-6.82	126.31	130.40
2	AB	1460	U	N3-C2-O2	-6.82	117.43	122.20
2	AB	1896	G	N9-C1'-C2'	-6.82	104.50	112.00
2	AB	2289	G	N7-C8-N9	6.82	116.51	113.10
2	AB	2475	C	C2-N3-C4	6.82	123.31	119.90
35	BA	321	A	N3-C4-C5	6.82	131.57	126.80
35	BA	763	G	N1-C2-N2	6.82	122.33	116.20
37	BC	31	U	C2-N3-C4	-6.82	122.91	127.00
2	AB	867	C	C6-N1-C2	6.81	123.03	120.30
2	AB	1013	C	N1-C1'-C2'	-6.81	104.50	112.00
2	AB	1100	C	C5-C4-N4	6.81	124.97	120.20
2	AB	1625	C	C3'-C2'-C1'	6.81	106.95	101.50
2	AB	1626	A	C4-C5-N7	-6.81	107.29	110.70
2	AB	1805	A	C1'-O4'-C4'	6.81	115.35	109.90
2	AB	1816	C	N3-C4-C5	-6.81	119.17	121.90
2	AB	2532	G	N9-C4-C5	-6.81	102.67	105.40
35	BA	731	G	C4'-C3'-C2'	-6.81	95.79	102.60
35	BA	1038	C	N3-C4-N4	6.81	122.77	118.00
35	BA	1235	U	C6-N1-C2	-6.81	116.91	121.00
2	AB	695	G	C5-C6-O6	-6.81	124.51	128.60
2	AB	1079	C	N1-C2-N3	-6.81	114.43	119.20
2	AB	1107	G	C6-C5-N7	6.81	134.49	130.40
2	AB	1261	C	C5-C6-N1	-6.81	117.59	121.00
2	AB	2041	U	N3-C4-C5	6.81	118.69	114.60
2	AB	2479	U	C2-N3-C4	-6.81	122.91	127.00
6	AF	33	VAL	CG1-CB-CG2	-6.81	100.00	110.90
35	BA	351	G	C3'-C2'-C1'	6.81	106.95	101.50
35	BA	506	G	C5-C6-O6	-6.81	124.51	128.60
35	BA	1263	C	O4'-C1'-N1	6.81	113.65	108.20
1	AA	53	A	N9-C4-C5	6.81	108.52	105.80
35	BA	157	U	C5'-C4'-O4'	6.81	117.27	109.10
2	AB	156	A	C4-C5-C6	-6.81	113.59	117.00
2	AB	192	C	C4-C5-C6	-6.81	114.00	117.40
2	AB	255	A	P-O3'-C3'	6.81	127.87	119.70
2	AB	1298	C	N3-C4-N4	-6.81	113.23	118.00
2	AB	1733	G	C4-C5-C6	6.81	122.89	118.80
2	AB	1896	G	N3-C4-N9	6.81	130.09	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1930	G	C2-N3-C4	6.81	115.31	111.90
2	AB	2307	G	C2-N3-C4	6.81	115.31	111.90
2	AB	2602	A	C6-C5-N7	-6.81	127.53	132.30
2	AB	2623	G	N9-C4-C5	-6.81	102.68	105.40
2	AB	2770	G	N3-C4-C5	-6.81	125.19	128.60
2	AB	2870	C	N3-C2-O2	-6.81	117.13	121.90
2	AB	2875	C	C5-C6-N1	-6.81	117.59	121.00
35	BA	44	A	C5-C6-N6	-6.81	118.25	123.70
35	BA	1043	G	N7-C8-N9	-6.81	109.69	113.10
35	BA	1415	G	N3-C4-C5	-6.81	125.19	128.60
38	BD	20	G	C5-N7-C8	6.81	107.70	104.30
2	AB	214	G	N3-C4-C5	-6.81	125.20	128.60
2	AB	715	A	N3-C4-C5	-6.81	122.03	126.80
2	AB	1178	C	N3-C2-O2	-6.81	117.13	121.90
2	AB	1836	C	C6-N1-C2	-6.81	117.58	120.30
2	AB	2865	U	C5-C4-O4	-6.81	121.82	125.90
10	AJ	46	GLU	OE1-CD-OE2	6.81	131.47	123.30
35	BA	468	A	N1-C6-N6	-6.81	114.52	118.60
35	BA	716	A	C5-C6-N6	-6.81	118.25	123.70
35	BA	1396	A	P-O3'-C3'	6.81	127.87	119.70
35	BA	1419	G	N7-C8-N9	6.81	116.50	113.10
2	AB	684	G	N3-C4-C5	-6.81	125.20	128.60
2	AB	1259	G	C2-N3-C4	6.81	115.30	111.90
2	AB	1401	G	N3-C2-N2	6.81	124.66	119.90
2	AB	2116	G	O4'-C1'-N9	6.81	113.64	108.20
2	AB	2668	G	C2-N3-C4	6.81	115.30	111.90
35	BA	999	C	C5-C6-N1	6.81	124.40	121.00
35	BA	1471	U	C5-C6-N1	-6.81	119.30	122.70
2	AB	31	C	O4'-C1'-N1	6.80	113.64	108.20
2	AB	57	C	P-O3'-C3'	6.80	127.86	119.70
2	AB	751	A	C4-C5-C6	-6.80	113.60	117.00
2	AB	1185	G	N9-C4-C5	6.80	108.12	105.40
2	AB	1831	G	C4-C5-N7	6.80	113.52	110.80
2	AB	2539	C	O4'-C1'-N1	6.80	113.64	108.20
2	AB	2560	A	C5-N7-C8	6.80	107.30	103.90
35	BA	318	G	N3-C4-N9	6.80	130.08	126.00
35	BA	641	U	C1'-O4'-C4'	-6.80	104.46	109.90
35	BA	1053	G	C4-C5-C6	6.80	122.88	118.80
1	AA	15	A	O4'-C1'-C2'	-6.80	99.00	105.80
2	AB	422	A	N9-C4-C5	-6.80	103.08	105.80
2	AB	987	C	C3'-C2'-C1'	-6.80	96.06	101.50
2	AB	1030	C	N3-C4-C5	6.80	124.62	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1403	A	C2-N3-C4	6.80	114.00	110.60
2	AB	2888	C	N3-C4-C5	-6.80	119.18	121.90
35	BA	565	U	C4'-C3'-C2'	-6.80	95.80	102.60
35	BA	1188	A	O4'-C1'-N9	6.80	113.64	108.20
35	BA	1428	A	C3'-C2'-C1'	6.80	106.94	101.50
2	AB	54	G	N3-C4-C5	-6.80	125.20	128.60
2	AB	99	U	O4'-C1'-N1	6.80	113.64	108.20
2	AB	1563	U	C1'-O4'-C4'	-6.80	104.46	109.90
2	AB	1813	G	C4'-C3'-C2'	-6.80	95.80	102.60
2	AB	2486	C	C4'-C3'-C2'	-6.80	95.80	102.60
2	AB	2758	A	C4-C5-N7	-6.80	107.30	110.70
35	BA	262	A	N1-C6-N6	-6.80	114.52	118.60
35	BA	546	A	C2-N3-C4	6.80	114.00	110.60
35	BA	861	G	C5-C6-N1	6.80	114.90	111.50
35	BA	1026	G	C5-N7-C8	-6.80	100.90	104.30
35	BA	1364	U	C5'-C4'-O4'	6.80	117.26	109.10
38	BD	54	G	C4-C5-C6	6.80	122.88	118.80
1	AA	30	C	N1-C2-O2	-6.80	114.82	118.90
2	AB	245	G	N9-C4-C5	-6.80	102.68	105.40
2	AB	1248	G	C5-C6-N1	6.80	114.90	111.50
2	AB	1383	A	N1-C2-N3	-6.80	125.90	129.30
2	AB	2323	G	N1-C6-O6	6.80	123.98	119.90
2	AB	2733	A	N7-C8-N9	6.80	117.20	113.80
35	BA	1284	C	C1'-O4'-C4'	6.80	115.34	109.90
1	AA	111	U	N3-C4-C5	-6.80	110.52	114.60
2	AB	399	U	C5-C6-N1	-6.80	119.30	122.70
2	AB	797	G	C5-C6-O6	-6.80	124.52	128.60
37	BC	57	C	O4'-C1'-N1	6.80	113.64	108.20
2	AB	25	U	N1-C1'-C2'	-6.80	104.52	112.00
2	AB	216	A	C3'-C2'-C1'	-6.80	96.06	101.50
2	AB	555	G	C4-C5-N7	6.80	113.52	110.80
2	AB	651	G	N3-C4-C5	-6.80	125.20	128.60
2	AB	2353	G	N1-C2-N2	6.80	122.32	116.20
35	BA	35	G	N9-C4-C5	6.80	108.12	105.40
35	BA	515	G	N1-C6-O6	-6.80	115.82	119.90
35	BA	1372	U	N3-C2-O2	-6.80	117.44	122.20
41	BG	19	PHE	CZ-CE2-CD2	6.80	128.25	120.10
43	BI	38	ARG	NE-CZ-NH1	6.80	123.70	120.30
2	AB	28	A	C4-C5-C6	6.79	120.40	117.00
2	AB	89	A	P-O3'-C3'	6.79	127.85	119.70
2	AB	446	G	C3'-C2'-C1'	6.79	106.94	101.50
2	AB	1077	A	N1-C6-N6	-6.79	114.52	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1535	A	N9-C1'-C2'	-6.79	104.53	112.00
2	AB	2313	C	C4-C5-C6	-6.79	114.00	117.40
35	BA	494	G	C8-N9-C4	-6.79	103.68	106.40
35	BA	496	A	C1'-O4'-C4'	-6.79	104.46	109.90
35	BA	866	C	O4'-C1'-N1	6.79	113.64	108.20
35	BA	1035	A	O4'-C4'-C3'	6.79	111.54	106.10
2	AB	375	G	N9-C4-C5	6.79	108.12	105.40
2	AB	984	A	C4'-C3'-C2'	-6.79	95.81	102.60
2	AB	1769	U	N3-C4-C5	-6.79	110.52	114.60
2	AB	2092	U	N3-C2-O2	-6.79	117.44	122.20
2	AB	2668	G	C5-C6-O6	-6.79	124.52	128.60
35	BA	86	G	C8-N9-C1'	6.79	135.83	127.00
35	BA	510	A	N3-C4-N9	-6.79	121.97	127.40
35	BA	525	C	C6-N1-C2	-6.79	117.58	120.30
35	BA	718	A	N1-C6-N6	6.79	122.68	118.60
35	BA	724	G	C4'-C3'-C2'	-6.79	95.81	102.60
35	BA	937	A	C6-C5-N7	6.79	137.06	132.30
35	BA	1102	A	C4'-C3'-C2'	-6.79	95.81	102.60
35	BA	1151	A	C4-C5-C6	-6.79	113.60	117.00
35	BA	1162	C	C5'-C4'-O4'	6.79	117.25	109.10
35	BA	1202	U	C1'-O4'-C4'	-6.79	104.47	109.90
36	BB	66	C	C4'-C3'-C2'	-6.79	95.81	102.60
38	BD	73	A	P-O3'-C3'	6.79	127.85	119.70
2	AB	411	G	C8-N9-C4	-6.79	103.68	106.40
2	AB	521	U	C5'-C4'-O4'	6.79	117.25	109.10
2	AB	849	A	N1-C2-N3	-6.79	125.91	129.30
2	AB	1058	U	C5-C4-O4	-6.79	121.83	125.90
2	AB	1175	A	O4'-C1'-C2'	-6.79	99.01	105.80
2	AB	1271	G	C2-N3-C4	6.79	115.30	111.90
2	AB	1448	G	C4-C5-N7	-6.79	108.08	110.80
2	AB	1459	G	C3'-C2'-C1'	6.79	106.93	101.50
2	AB	1990	C	N3-C4-N4	6.79	122.75	118.00
2	AB	2140	G	C4'-C3'-C2'	-6.79	95.81	102.60
35	BA	579	A	C5'-C4'-O4'	6.79	117.25	109.10
35	BA	637	C	O4'-C4'-C3'	6.79	111.53	106.10
35	BA	685	G	N3-C2-N2	6.79	124.65	119.90
35	BA	758	C	C2-N3-C4	6.79	123.30	119.90
35	BA	822	U	C5'-C4'-O4'	6.79	117.25	109.10
2	AB	458	G	C5'-C4'-C3'	-6.79	105.14	116.00
2	AB	513	A	C3'-C2'-C1'	6.79	106.93	101.50
2	AB	1097	U	C6-N1-C2	-6.79	116.93	121.00
2	AB	1199	U	O4'-C1'-N1	6.79	113.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2255	G	C5-C6-O6	-6.79	124.53	128.60
2	AB	2893	A	C5-C6-N6	-6.79	118.27	123.70
35	BA	700	G	N7-C8-N9	6.79	116.50	113.10
35	BA	990	C	N1-C2-O2	6.79	122.97	118.90
35	BA	1301	U	O4'-C1'-C2'	-6.79	99.01	105.80
36	BB	36	A	C5'-C4'-O4'	6.79	117.25	109.10
38	BD	7	G	C4-C5-C6	6.79	122.87	118.80
2	AB	707	G	O4'-C1'-N9	6.79	113.63	108.20
2	AB	862	G	C4-C5-C6	6.79	122.87	118.80
2	AB	1032	A	O4'-C4'-C3'	6.79	111.53	106.10
2	AB	1191	G	N1-C2-N2	6.79	122.31	116.20
2	AB	2045	C	N1-C2-N3	6.79	123.95	119.20
2	AB	2211	A	N3-C4-N9	-6.79	121.97	127.40
2	AB	2473	U	C5-C4-O4	6.79	129.97	125.90
2	AB	2696	U	O4'-C1'-N1	6.79	113.63	108.20
2	AB	2895	G	C8-N9-C4	-6.79	103.69	106.40
35	BA	625	U	C5-C4-O4	-6.79	121.83	125.90
35	BA	1043	G	C6-N1-C2	-6.79	121.03	125.10
35	BA	1332	A	C2-N3-C4	-6.79	107.21	110.60
48	BN	68	ARG	NE-CZ-NH1	6.79	123.69	120.30
2	AB	1558	C	P-O3'-C3'	6.79	127.84	119.70
2	AB	2557	G	C5'-C4'-O4'	6.79	117.24	109.10
35	BA	60	A	C8-N9-C4	6.79	108.52	105.80
35	BA	1199	U	O4'-C1'-N1	6.79	113.63	108.20
38	BD	44	A	C4-C5-C6	-6.79	113.61	117.00
2	AB	1615	C	N1-C2-O2	6.79	122.97	118.90
2	AB	1672	A	C4-C5-C6	-6.79	113.61	117.00
2	AB	1954	G	C8-N9-C4	-6.79	103.69	106.40
2	AB	2528	U	P-O3'-C3'	6.79	127.84	119.70
2	AB	2852	G	O4'-C1'-N9	6.79	113.63	108.20
2	AB	2858	C	C5'-C4'-O4'	6.79	117.24	109.10
35	BA	487	A	N3-C4-C5	-6.79	122.05	126.80
35	BA	905	U	C1'-O4'-C4'	-6.79	104.47	109.90
35	BA	1192	C	C6-N1-C2	-6.79	117.59	120.30
1	AA	83	G	C8-N9-C4	-6.78	103.69	106.40
2	AB	819	A	C5'-C4'-O4'	6.78	117.24	109.10
2	AB	916	G	C5'-C4'-O4'	6.78	117.24	109.10
2	AB	1401	G	C5'-C4'-O4'	6.78	117.24	109.10
2	AB	1699	G	C4-C5-N7	6.78	113.51	110.80
2	AB	2301	C	C4-C5-C6	6.78	120.79	117.40
2	AB	2659	G	N1-C6-O6	-6.78	115.83	119.90
2	AB	2804	U	O4'-C1'-N1	6.78	113.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	275	G	N1-C6-O6	-6.78	115.83	119.90
35	BA	293	G	C4-C5-C6	6.78	122.87	118.80
35	BA	623	C	N1-C2-N3	-6.78	114.45	119.20
35	BA	723	U	P-O3'-C3'	6.78	127.84	119.70
35	BA	847	G	N3-C4-N9	6.78	130.07	126.00
35	BA	1272	G	C5-C6-O6	-6.78	124.53	128.60
38	BD	71	G	N9-C1'-C2'	-6.78	104.54	112.00
2	AB	365	U	N3-C4-O4	6.78	124.15	119.40
2	AB	406	G	C5'-C4'-O4'	6.78	117.24	109.10
2	AB	881	G	C2-N3-C4	6.78	115.29	111.90
2	AB	2050	C	C4-C5-C6	-6.78	114.01	117.40
2	AB	2454	G	N1-C2-N3	6.78	127.97	123.90
35	BA	52	C	C5-C6-N1	6.78	124.39	121.00
35	BA	701	U	C5-C6-N1	-6.78	119.31	122.70
2	AB	366	C	N1-C2-O2	6.78	122.97	118.90
2	AB	1140	C	N3-C4-N4	6.78	122.75	118.00
2	AB	1794	A	C5'-C4'-C3'	-6.78	105.15	116.00
2	AB	2322	A	O4'-C1'-N9	-6.78	102.78	108.20
2	AB	2431	U	C6-N1-C2	-6.78	116.93	121.00
2	AB	2549	G	N3-C4-N9	6.78	130.07	126.00
2	AB	2652	C	C3'-C2'-C1'	6.78	106.92	101.50
35	BA	132	C	N1-C2-O2	6.78	122.97	118.90
35	BA	505	G	N1-C2-N2	6.78	122.30	116.20
35	BA	1450	U	C5-C4-O4	6.78	129.97	125.90
38	BD	7	G	N7-C8-N9	6.78	116.49	113.10
1	AA	5	U	P-O3'-C3'	6.78	127.83	119.70
2	AB	2639	A	C5'-C4'-O4'	6.78	117.23	109.10
35	BA	1433	A	C5-N7-C8	-6.78	100.51	103.90
1	AA	58	A	N9-C4-C5	-6.78	103.09	105.80
2	AB	225	C	C5-C4-N4	-6.78	115.46	120.20
2	AB	2692	G	N1-C2-N3	-6.78	119.83	123.90
17	AQ	108	ASP	CB-CG-OD2	-6.78	112.20	118.30
35	BA	307	C	P-O3'-C3'	6.78	127.83	119.70
35	BA	694	A	O4'-C1'-C2'	-6.78	99.02	105.80
35	BA	843	U	C4-C5-C6	6.78	123.77	119.70
40	BF	160	GLU	OE1-CD-OE2	6.78	131.43	123.30
2	AB	808	G	N9-C4-C5	6.78	108.11	105.40
2	AB	1012	U	N1-C1'-C2'	6.78	122.81	114.00
2	AB	1507	C	C4-C5-C6	-6.78	114.01	117.40
2	AB	1663	G	C4-C5-C6	6.78	122.86	118.80
2	AB	2723	C	C4'-C3'-C2'	-6.78	95.82	102.60
35	BA	89	U	C4-C5-C6	6.78	123.77	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	477	C	C6-N1-C2	-6.78	117.59	120.30
35	BA	1206	G	N3-C4-C5	-6.78	125.21	128.60
1	AA	58	A	C2-N3-C4	-6.77	107.21	110.60
2	AB	2471	A	C3'-C2'-C1'	-6.77	96.08	101.50
35	BA	411	A	C5-N7-C8	6.77	107.29	103.90
2	AB	227	A	C5'-C4'-O4'	6.77	117.23	109.10
2	AB	256	A	C5'-C4'-O4'	6.77	117.23	109.10
2	AB	936	A	O4'-C1'-N9	6.77	113.62	108.20
2	AB	1110	G	O4'-C1'-C2'	-6.77	99.03	105.80
2	AB	1130	U	C4-C5-C6	6.77	123.76	119.70
2	AB	2538	C	C2-N3-C4	6.77	123.29	119.90
2	AB	2592	G	C4-C5-N7	-6.77	108.09	110.80
35	BA	446	G	C6-C5-N7	6.77	134.46	130.40
35	BA	484	G	N9-C4-C5	-6.77	102.69	105.40
35	BA	664	G	N9-C1'-C2'	-6.77	104.55	112.00
35	BA	815	A	C5-C6-N1	6.77	121.09	117.70
35	BA	887	G	C6-N1-C2	-6.77	121.04	125.10
35	BA	1371	G	C6-C5-N7	-6.77	126.34	130.40
36	BB	49	G	C2-N3-C4	6.77	115.29	111.90
38	BD	14	A	C4-C5-C6	6.77	120.39	117.00
42	BH	111	ARG	NE-CZ-NH1	6.77	123.69	120.30
2	AB	432	A	O4'-C1'-N9	6.77	113.62	108.20
2	AB	458	G	N9-C4-C5	6.77	108.11	105.40
35	BA	32	A	C2-N3-C4	6.77	113.98	110.60
35	BA	103	U	C4-C5-C6	6.77	123.76	119.70
35	BA	782	A	N9-C1'-C2'	-6.77	104.55	112.00
2	AB	98	G	C5-C6-N1	6.77	114.89	111.50
2	AB	274	C	O4'-C1'-N1	6.77	113.61	108.20
2	AB	467	G	N3-C4-C5	-6.77	125.22	128.60
2	AB	819	A	C8-N9-C4	-6.77	103.09	105.80
2	AB	1453	A	N1-C6-N6	-6.77	114.54	118.60
2	AB	1739	A	C5-C6-N6	6.77	129.12	123.70
2	AB	1953	A	N1-C2-N3	6.77	132.69	129.30
2	AB	2014	A	O4'-C1'-N9	6.77	113.62	108.20
2	AB	2207	C	C4-C5-C6	-6.77	114.02	117.40
2	AB	2649	C	C4-C5-C6	-6.77	114.02	117.40
2	AB	2793	C	N3-C4-C5	6.77	124.61	121.90
19	AS	87	VAL	CA-CB-CG2	6.77	121.05	110.90
35	BA	752	G	O4'-C1'-C2'	-6.77	99.03	105.80
35	BA	1272	G	N9-C4-C5	6.77	108.11	105.40
35	BA	1319	A	C5'-C4'-O4'	6.77	117.22	109.10
1	AA	89	U	O4'-C1'-N1	6.77	113.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	105	G	C6-N1-C2	-6.77	121.04	125.10
2	AB	61	C	N3-C4-C5	-6.77	119.19	121.90
2	AB	293	U	C4-C5-C6	6.77	123.76	119.70
2	AB	682	G	C5-C6-O6	6.77	132.66	128.60
2	AB	891	G	C8-N9-C4	-6.77	103.69	106.40
2	AB	1010	A	C5-N7-C8	6.77	107.28	103.90
2	AB	2141	G	C4-C5-C6	6.77	122.86	118.80
35	BA	97	G	C5-C6-O6	6.77	132.66	128.60
35	BA	767	A	N3-C4-C5	-6.77	122.06	126.80
35	BA	1182	G	C8-N9-C4	-6.77	103.69	106.40
41	BG	43	ARG	CD-NE-CZ	6.77	133.08	123.60
2	AB	2734	A	C5'-C4'-C3'	-6.77	105.17	116.00
35	BA	328	C	P-O3'-C3'	6.77	127.82	119.70
36	BB	2	G	N7-C8-N9	-6.77	109.72	113.10
1	AA	19	C	N3-C2-O2	-6.76	117.16	121.90
2	AB	612	G	P-O3'-C3'	6.76	127.82	119.70
2	AB	1403	A	N3-C4-C5	-6.76	122.06	126.80
2	AB	1877	A	C4-C5-N7	-6.76	107.32	110.70
35	BA	34	C	C2-N3-C4	6.76	123.28	119.90
35	BA	456	A	N7-C8-N9	6.76	117.18	113.80
35	BA	668	G	P-O3'-C3'	6.76	127.82	119.70
2	AB	911	A	C5-C6-N6	-6.76	118.29	123.70
2	AB	1895	C	C4'-C3'-C2'	-6.76	95.84	102.60
2	AB	2252	G	P-O5'-C5'	6.76	131.72	120.90
2	AB	2313	C	N1-C1'-C2'	-6.76	104.56	112.00
35	BA	1380	U	C6-N1-C2	-6.76	116.94	121.00
1	AA	102	G	N1-C6-O6	6.76	123.96	119.90
2	AB	1	G	C4'-C3'-C2'	-6.76	95.84	102.60
2	AB	388	G	N9-C4-C5	-6.76	102.70	105.40
2	AB	682	G	P-O3'-C3'	6.76	127.81	119.70
2	AB	805	G	C4'-C3'-C2'	-6.76	95.84	102.60
2	AB	1388	G	C5-C6-N1	6.76	114.88	111.50
2	AB	1620	G	C5-C6-N1	6.76	114.88	111.50
2	AB	1978	A	N7-C8-N9	6.76	117.18	113.80
2	AB	2429	G	C4-C5-N7	-6.76	108.10	110.80
2	AB	2903	U	N3-C2-O2	-6.76	117.47	122.20
35	BA	421	U	C1'-O4'-C4'	6.76	115.31	109.90
35	BA	1009	U	C6-N1-C2	-6.76	116.94	121.00
53	BS	5	ARG	NE-CZ-NH1	6.76	123.68	120.30
2	AB	1123	C	C5-C4-N4	-6.76	115.47	120.20
2	AB	1173	U	C2-N3-C4	-6.76	122.94	127.00
2	AB	1788	C	O4'-C1'-N1	6.76	113.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2111	U	N1-C2-N3	6.76	118.95	114.90
2	AB	2367	G	C5'-C4'-O4'	6.76	117.21	109.10
2	AB	2667	C	N3-C4-N4	6.76	122.73	118.00
35	BA	846	G	C8-N9-C4	-6.76	103.70	106.40
35	BA	1269	A	C2-N3-C4	-6.76	107.22	110.60
2	AB	969	G	N9-C1'-C2'	-6.76	104.57	112.00
2	AB	1368	G	C5-N7-C8	-6.76	100.92	104.30
2	AB	1734	G	C8-N9-C4	-6.76	103.70	106.40
2	AB	1943	U	C5'-C4'-O4'	6.76	117.21	109.10
35	BA	361	G	C5-N7-C8	6.76	107.68	104.30
2	AB	416	U	C4-C5-C6	6.76	123.75	119.70
2	AB	784	G	C4'-C3'-C2'	-6.76	95.84	102.60
2	AB	877	A	N9-C4-C5	6.76	108.50	105.80
2	AB	1121	C	C6-N1-C2	-6.76	117.60	120.30
2	AB	1157	G	C2-N3-C4	6.76	115.28	111.90
2	AB	1185	G	C6-N1-C2	-6.76	121.05	125.10
2	AB	1988	G	N3-C2-N2	-6.76	115.17	119.90
2	AB	2048	G	N9-C1'-C2'	-6.76	104.57	112.00
35	BA	501	C	C5-C6-N1	6.76	124.38	121.00
35	BA	536	C	N1-C2-O2	6.76	122.95	118.90
2	AB	6	A	C6-C5-N7	6.75	137.03	132.30
2	AB	172	A	C3'-C2'-C1'	6.75	106.90	101.50
2	AB	832	U	C1'-O4'-C4'	-6.75	104.50	109.90
2	AB	1273	U	C3'-C2'-C1'	-6.75	96.10	101.50
2	AB	2237	G	N3-C4-N9	6.75	130.05	126.00
2	AB	2757	A	C6-C5-N7	6.75	137.03	132.30
2	AB	2872	A	C8-N9-C1'	6.75	139.86	127.70
35	BA	1011	C	C4-C5-C6	-6.75	114.02	117.40
2	AB	80	G	O4'-C1'-N9	6.75	113.60	108.20
2	AB	91	A	O4'-C1'-N9	6.75	113.60	108.20
2	AB	529	A	N9-C4-C5	6.75	108.50	105.80
2	AB	1085	A	C5'-C4'-O4'	6.75	117.20	109.10
2	AB	2326	C	C6-N1-C2	-6.75	117.60	120.30
2	AB	2502	G	N9-C4-C5	6.75	108.10	105.40
2	AB	2730	C	C4'-C3'-C2'	-6.75	95.85	102.60
35	BA	715	A	C4-C5-C6	-6.75	113.62	117.00
35	BA	756	C	P-O3'-C3'	6.75	127.81	119.70
2	AB	363	G	C1'-O4'-C4'	6.75	115.30	109.90
2	AB	1120	G	N9-C1'-C2'	-6.75	104.57	112.00
2	AB	1444	G	N3-C4-C5	-6.75	125.22	128.60
2	AB	1860	G	N3-C4-N9	-6.75	121.95	126.00
2	AB	2198	A	O4'-C1'-N9	6.75	113.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2338	C	O4'-C4'-C3'	6.75	111.50	106.10
2	AB	2528	U	C5-C6-N1	-6.75	119.32	122.70
2	AB	2724	U	C3'-C2'-C1'	-6.75	96.10	101.50
2	AB	2750	A	O4'-C4'-C3'	6.75	111.50	106.10
35	BA	32	A	N7-C8-N9	6.75	117.18	113.80
35	BA	151	A	N9-C4-C5	6.75	108.50	105.80
35	BA	640	A	C5'-C4'-O4'	6.75	117.20	109.10
35	BA	836	G	O5'-P-OP2	-6.75	99.62	105.70
35	BA	965	U	O4'-C1'-C2'	-6.75	99.05	105.80
2	AB	728	G	C2-N3-C4	6.75	115.28	111.90
2	AB	1253	A	C5'-C4'-O4'	6.75	117.20	109.10
2	AB	1645	G	O4'-C1'-N9	6.75	113.60	108.20
2	AB	1683	U	C1'-O4'-C4'	6.75	115.30	109.90
2	AB	2009	A	C8-N9-C4	-6.75	103.10	105.80
35	BA	337	G	O4'-C1'-N9	6.75	113.60	108.20
35	BA	623	C	O4'-C1'-N1	6.75	113.60	108.20
35	BA	872	A	P-O3'-C3'	6.75	127.80	119.70
2	AB	237	C	O4'-C1'-N1	6.75	113.60	108.20
2	AB	297	G	C5-N7-C8	6.75	107.67	104.30
2	AB	952	G	N3-C4-C5	-6.75	125.23	128.60
2	AB	1155	A	O4'-C1'-N9	6.75	113.60	108.20
2	AB	1521	G	C5-C6-N1	6.75	114.87	111.50
2	AB	1951	U	C5-C6-N1	-6.75	119.33	122.70
2	AB	2085	U	C1'-O4'-C4'	-6.75	104.50	109.90
2	AB	2487	G	C5-C6-O6	-6.75	124.55	128.60
2	AB	2654	A	C1'-O4'-C4'	-6.75	104.50	109.90
2	AB	2785	C	O4'-C1'-C2'	-6.75	99.05	105.80
2	AB	2804	U	N3-C4-C5	-6.75	110.55	114.60
6	AF	19	PHE	CB-CG-CD2	6.75	125.52	120.80
35	BA	143	A	C2-N3-C4	6.75	113.97	110.60
35	BA	172	A	N1-C6-N6	6.75	122.65	118.60
35	BA	1513	A	N9-C4-C5	6.75	108.50	105.80
36	BB	63	C	N3-C4-C5	-6.75	119.20	121.90
1	AA	95	U	P-O3'-C3'	6.75	127.80	119.70
2	AB	216	A	C4-C5-C6	-6.75	113.63	117.00
2	AB	512	G	C4-C5-N7	6.75	113.50	110.80
2	AB	913	U	N1-C2-N3	6.75	118.95	114.90
2	AB	990	A	C5-C6-N1	6.75	121.07	117.70
2	AB	1253	A	N1-C2-N3	-6.75	125.93	129.30
2	AB	1384	A	N1-C6-N6	-6.75	114.55	118.60
2	AB	1545	A	O4'-C1'-N9	6.75	113.60	108.20
2	AB	1613	G	N3-C4-C5	-6.75	125.23	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2521	C	N3-C2-O2	6.75	126.62	121.90
35	BA	4	U	N3-C4-O4	6.75	124.12	119.40
35	BA	936	C	C4-C5-C6	6.75	120.77	117.40
35	BA	993	G	N1-C6-O6	-6.75	115.85	119.90
35	BA	1018	G	C2-N3-C4	-6.75	108.53	111.90
35	BA	1220	G	C6-N1-C2	-6.75	121.05	125.10
2	AB	790	U	N1-C2-O2	6.75	127.52	122.80
2	AB	806	C	C5-C6-N1	-6.75	117.63	121.00
2	AB	1991	U	C6-N1-C2	-6.75	116.95	121.00
2	AB	2101	A	C2-N3-C4	6.75	113.97	110.60
2	AB	2242	G	C4-C5-N7	6.75	113.50	110.80
37	BC	14	G	N3-C4-N9	-6.75	121.95	126.00
38	BD	69	C	N1-C2-N3	6.75	123.92	119.20
2	AB	1026	G	N3-C4-N9	6.74	130.05	126.00
2	AB	1301	A	C3'-C2'-C1'	-6.74	96.11	101.50
2	AB	1709	U	C3'-C2'-C1'	6.74	106.89	101.50
2	AB	1731	G	C6-N1-C2	-6.74	121.05	125.10
2	AB	1994	C	O4'-C1'-N1	6.74	113.59	108.20
2	AB	2604	U	C4'-C3'-C2'	-6.74	95.86	102.60
2	AB	2608	G	N1-C6-O6	6.74	123.95	119.90
2	AB	2831	G	N9-C4-C5	-6.74	102.70	105.40
35	BA	406	G	N3-C4-C5	-6.74	125.23	128.60
36	BB	7	G	C8-N9-C4	6.74	109.10	106.40
41	BG	69	ARG	NE-CZ-NH1	6.74	123.67	120.30
2	AB	306	U	N3-C2-O2	-6.74	117.48	122.20
2	AB	341	C	C2-N3-C4	6.74	123.27	119.90
2	AB	370	G	C6-C5-N7	6.74	134.44	130.40
2	AB	2557	G	C5'-C4'-C3'	-6.74	105.21	116.00
35	BA	345	C	O4'-C1'-N1	6.74	113.59	108.20
35	BA	359	G	C4'-C3'-C2'	-6.74	95.86	102.60
35	BA	414	A	C5-N7-C8	-6.74	100.53	103.90
2	AB	1869	G	C5-C6-N1	-6.74	108.13	111.50
2	AB	2050	C	N3-C4-N4	6.74	122.72	118.00
2	AB	2331	G	C4'-C3'-C2'	-6.74	95.86	102.60
2	AB	2662	A	O4'-C1'-N9	6.74	113.59	108.20
2	AB	2690	U	N3-C4-C5	-6.74	110.56	114.60
35	BA	1257	A	O4'-C4'-C3'	6.74	111.49	106.10
35	BA	1324	A	N7-C8-N9	6.74	117.17	113.80
35	BA	1447	A	C5'-C4'-C3'	-6.74	105.22	116.00
2	AB	455	C	C2-N3-C4	6.74	123.27	119.90
2	AB	632	A	N3-C4-C5	-6.74	122.08	126.80
2	AB	692	C	C2-N3-C4	6.74	123.27	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1002	G	C4-C5-C6	6.74	122.84	118.80
2	AB	1034	G	C6-N1-C2	-6.74	121.06	125.10
2	AB	1419	A	C2-N3-C4	-6.74	107.23	110.60
2	AB	1460	U	O4'-C1'-N1	6.74	113.59	108.20
2	AB	2263	C	C5-C4-N4	6.74	124.92	120.20
35	BA	197	A	N7-C8-N9	6.74	117.17	113.80
35	BA	732	C	C5-C6-N1	6.74	124.37	121.00
35	BA	1330	U	C2-N3-C4	-6.74	122.96	127.00
35	BA	1334	G	C4-C5-C6	6.74	122.84	118.80
36	BB	43	G	C6-N1-C2	-6.74	121.06	125.10
36	BB	59	G	C5-N7-C8	6.74	107.67	104.30
38	BD	9	G	C5'-C4'-O4'	-6.74	101.01	109.10
2	AB	29	U	N3-C4-O4	-6.74	114.68	119.40
2	AB	767	U	O4'-C1'-N1	6.74	113.59	108.20
2	AB	2192	U	O4'-C4'-C3'	6.74	111.49	106.10
35	BA	1	A	N1-C6-N6	-6.74	114.56	118.60
35	BA	577	G	N3-C4-N9	-6.74	121.96	126.00
35	BA	731	G	C6-C5-N7	-6.74	126.36	130.40
35	BA	785	G	C3'-C2'-C1'	-6.74	96.11	101.50
35	BA	1192	C	C2-N3-C4	6.74	123.27	119.90
2	AB	283	G	N3-C4-C5	-6.74	125.23	128.60
2	AB	290	U	N3-C4-O4	6.74	124.11	119.40
2	AB	361	G	O4'-C1'-N9	6.74	113.59	108.20
2	AB	691	C	C4-C5-C6	-6.74	114.03	117.40
2	AB	851	C	N3-C2-O2	-6.74	117.19	121.90
2	AB	1100	C	N3-C2-O2	6.74	126.61	121.90
2	AB	1653	G	C5'-C4'-C3'	-6.74	105.22	116.00
2	AB	2215	C	C5'-C4'-O4'	6.74	117.18	109.10
2	AB	2409	G	N3-C4-C5	-6.74	125.23	128.60
2	AB	2825	G	C4-C5-C6	6.74	122.84	118.80
2	AB	2869	G	P-O3'-C3'	6.74	127.78	119.70
35	BA	730	G	C8-N9-C4	-6.74	103.71	106.40
35	BA	1283	U	O4'-C1'-N1	6.74	113.59	108.20
2	AB	908	C	O4'-C1'-C2'	6.73	113.66	107.60
2	AB	1904	G	N3-C2-N2	6.73	124.61	119.90
35	BA	1351	U	C3'-C2'-C1'	6.73	106.89	101.50
35	BA	1372	U	C5-C6-N1	-6.73	119.33	122.70
2	AB	149	A	N1-C2-N3	-6.73	125.93	129.30
2	AB	258	G	C8-N9-C4	-6.73	103.71	106.40
2	AB	1014	A	N7-C8-N9	6.73	117.17	113.80
2	AB	1220	G	C4-C5-C6	6.73	122.84	118.80
2	AB	2212	A	P-O3'-C3'	6.73	127.78	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2514	U	C4-C5-C6	6.73	123.74	119.70
2	AB	2577	A	N9-C4-C5	6.73	108.49	105.80
35	BA	20	U	N1-C2-N3	6.73	118.94	114.90
35	BA	130	A	N1-C2-N3	-6.73	125.93	129.30
35	BA	187	G	O4'-C1'-N9	6.73	113.59	108.20
35	BA	1467	C	C5-C6-N1	-6.73	117.63	121.00
1	AA	17	C	C4-C5-C6	6.73	120.77	117.40
2	AB	210	C	C5-C4-N4	-6.73	115.49	120.20
2	AB	578	G	C5-C6-O6	-6.73	124.56	128.60
2	AB	2476	A	N7-C8-N9	6.73	117.17	113.80
35	BA	639	G	C4-C5-C6	6.73	122.84	118.80
35	BA	802	A	N1-C2-N3	-6.73	125.94	129.30
35	BA	852	G	C4'-C3'-C2'	-6.73	95.87	102.60
38	BD	46	G	N3-C4-N9	6.73	130.04	126.00
2	AB	567	U	C1'-O4'-C4'	-6.73	104.52	109.90
2	AB	1120	G	N3-C2-N2	6.73	124.61	119.90
2	AB	1809	A	N9-C4-C5	6.73	108.49	105.80
2	AB	2510	C	C6-N1-C2	-6.73	117.61	120.30
2	AB	2668	G	N1-C6-O6	6.73	123.94	119.90
35	BA	520	A	C2-N3-C4	6.73	113.96	110.60
38	BD	37	U	C5-C6-N1	-6.73	119.34	122.70
1	AA	28	C	C5-C4-N4	-6.73	115.49	120.20
1	AA	51	G	C1'-O4'-C4'	-6.73	104.52	109.90
2	AB	570	G	C3'-C2'-C1'	6.73	106.88	101.50
2	AB	1250	G	N7-C8-N9	6.73	116.46	113.10
2	AB	1533	C	N1-C2-N3	-6.73	114.49	119.20
2	AB	1903	G	C4-C5-C6	6.73	122.84	118.80
35	BA	1270	G	C8-N9-C1'	6.73	135.75	127.00
2	AB	1121	C	N1-C1'-C2'	-6.73	104.60	112.00
2	AB	1847	A	O4'-C4'-C3'	-6.73	97.27	104.00
2	AB	1949	G	C4'-C3'-C2'	-6.73	95.87	102.60
2	AB	2407	A	P-O3'-C3'	6.73	127.77	119.70
9	AI	27	ARG	NH1-CZ-NH2	6.73	126.80	119.40
35	BA	365	U	C4-C5-C6	-6.73	115.66	119.70
35	BA	1304	G	N1-C6-O6	-6.73	115.86	119.90
38	BD	26	C	O4'-C1'-C2'	-6.73	99.07	105.80
2	AB	398	C	N1-C2-O2	6.72	122.93	118.90
2	AB	2590	A	N1-C2-N3	-6.72	125.94	129.30
2	AB	2876	G	C2-N3-C4	6.72	115.26	111.90
35	BA	775	G	N3-C4-C5	-6.72	125.24	128.60
35	BA	794	A	C8-N9-C4	6.72	108.49	105.80
35	BA	1156	G	N3-C4-C5	-6.72	125.24	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1323	G	O4'-C4'-C3'	-6.72	97.28	104.00
35	BA	1373	G	C5-N7-C8	-6.72	100.94	104.30
35	BA	1399	C	O4'-C1'-C2'	-6.72	99.08	105.80
35	BA	1421	G	N9-C4-C5	6.72	108.09	105.40
35	BA	1513	A	N1-C2-N3	-6.72	125.94	129.30
2	AB	39	G	O4'-C1'-N9	6.72	113.58	108.20
2	AB	305	C	C4'-C3'-C2'	-6.72	95.88	102.60
2	AB	1764	C	O4'-C1'-N1	6.72	113.58	108.20
2	AB	2291	U	C5'-C4'-O4'	6.72	117.17	109.10
2	AB	2424	C	N3-C4-C5	-6.72	119.21	121.90
2	AB	2668	G	C4'-C3'-C2'	-6.72	95.88	102.60
2	AB	2735	G	C5-C6-N1	-6.72	108.14	111.50
2	AB	2752	C	C5-C4-N4	-6.72	115.50	120.20
35	BA	362	G	C5-C6-N1	6.72	114.86	111.50
35	BA	550	G	C5'-C4'-O4'	6.72	117.17	109.10
35	BA	890	G	C4-C5-N7	-6.72	108.11	110.80
35	BA	1243	C	C4'-C3'-C2'	-6.72	95.88	102.60
36	BB	71	C	C3'-C2'-C1'	6.72	106.88	101.50
44	BJ	155	TRP	NE1-CE2-CZ2	6.72	137.79	130.40
2	AB	90	U	N3-C4-O4	-6.72	114.69	119.40
2	AB	180	G	N9-C4-C5	6.72	108.09	105.40
2	AB	502	A	N1-C2-N3	6.72	132.66	129.30
2	AB	649	G	N7-C8-N9	6.72	116.46	113.10
2	AB	654	A	P-O3'-C3'	6.72	127.77	119.70
2	AB	766	U	N3-C4-C5	-6.72	110.57	114.60
2	AB	1105	U	O4'-C1'-N1	6.72	113.58	108.20
2	AB	2126	A	N9-C4-C5	-6.72	103.11	105.80
35	BA	575	G	C5'-C4'-C3'	-6.72	105.25	116.00
35	BA	1419	G	C5-C6-O6	6.72	132.63	128.60
1	AA	33	G	C6-C5-N7	6.72	134.43	130.40
1	AA	38	C	N3-C2-O2	-6.72	117.20	121.90
2	AB	163	C	C5-C6-N1	6.72	124.36	121.00
2	AB	176	A	O4'-C1'-N9	6.72	113.58	108.20
2	AB	188	G	C6-N1-C2	-6.72	121.07	125.10
2	AB	788	A	C5-C6-N6	6.72	129.07	123.70
2	AB	849	A	C6-C5-N7	6.72	137.00	132.30
2	AB	1643	G	N3-C2-N2	-6.72	115.20	119.90
2	AB	2664	G	C5-C6-O6	6.72	132.63	128.60
35	BA	80	A	O4'-C1'-N9	6.72	113.58	108.20
35	BA	385	C	O4'-C1'-N1	6.72	113.58	108.20
35	BA	1526	G	N3-C4-C5	-6.72	125.24	128.60
56	BV	54	ARG	NE-CZ-NH1	6.72	123.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	10	A	C3'-C2'-C1'	6.72	106.87	101.50
2	AB	763	G	C6-N1-C2	-6.72	121.07	125.10
35	BA	973	G	C8-N9-C4	-6.72	103.71	106.40
2	AB	90	U	C5-C4-O4	6.72	129.93	125.90
2	AB	929	U	C3'-C2'-C1'	6.72	106.87	101.50
2	AB	1874	C	N1-C2-N3	6.72	123.90	119.20
2	AB	1931	U	O4'-C4'-C3'	6.72	111.47	106.10
2	AB	1985	C	N1-C2-O2	6.72	122.93	118.90
2	AB	2556	C	N1-C2-O2	6.72	122.93	118.90
35	BA	134	G	N1-C6-O6	-6.72	115.87	119.90
35	BA	257	G	O5'-P-OP2	-6.72	99.66	105.70
35	BA	803	G	C8-N9-C4	-6.72	103.71	106.40
35	BA	1408	A	C2-N3-C4	6.72	113.96	110.60
2	AB	326	G	N3-C4-N9	6.71	130.03	126.00
2	AB	512	G	C8-N9-C4	-6.71	103.71	106.40
2	AB	1420	A	C6-N1-C2	6.71	122.63	118.60
2	AB	1654	A	N9-C4-C5	6.71	108.49	105.80
2	AB	1768	C	N3-C4-C5	6.71	124.59	121.90
2	AB	1886	U	C5-C4-O4	-6.71	121.87	125.90
2	AB	1923	U	C1'-O4'-C4'	6.71	115.27	109.90
2	AB	2026	U	C2-N3-C4	-6.71	122.97	127.00
2	AB	2179	C	C5'-C4'-O4'	6.71	117.16	109.10
35	BA	971	G	C6-C5-N7	6.71	134.43	130.40
35	BA	1201	A	C1'-O4'-C4'	-6.71	104.53	109.90
2	AB	1367	A	O3'-P-O5'	6.71	116.75	104.00
2	AB	1490	A	C3'-C2'-C1'	6.71	106.87	101.50
35	BA	85	U	N1-C2-O2	6.71	127.50	122.80
35	BA	584	G	C5-C6-O6	-6.71	124.57	128.60
35	BA	627	G	N1-C6-O6	-6.71	115.87	119.90
35	BA	630	A	C8-N9-C4	-6.71	103.11	105.80
2	AB	553	G	O4'-C1'-N9	6.71	113.57	108.20
2	AB	848	C	O4'-C1'-N1	6.71	113.57	108.20
2	AB	1054	A	N9-C4-C5	6.71	108.48	105.80
2	AB	1368	G	C6-C5-N7	-6.71	126.37	130.40
2	AB	1907	G	C2-N3-C4	6.71	115.26	111.90
2	AB	2564	A	N9-C4-C5	6.71	108.48	105.80
2	AB	2664	G	O3'-P-O5'	-6.71	91.25	104.00
2	AB	2802	G	C3'-C2'-C1'	-6.71	96.13	101.50
6	AF	171	ASP	CB-CG-OD1	-6.71	112.26	118.30
35	BA	389	A	O4'-C1'-N9	6.71	113.57	108.20
35	BA	411	A	C6-N1-C2	6.71	122.63	118.60
35	BA	427	U	C1'-O4'-C4'	-6.71	104.53	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1202	U	C5'-C4'-C3'	-6.71	105.26	116.00
35	BA	1368	A	N1-C6-N6	-6.71	114.57	118.60
38	BD	7	G	N3-C2-N2	-6.71	115.20	119.90
46	BL	89	TYR	CD1-CE1-CZ	6.71	125.84	119.80
2	AB	148	U	N1-C1'-C2'	-6.71	104.62	112.00
2	AB	351	C	N1-C1'-C2'	-6.71	104.62	112.00
2	AB	1072	C	N1-C1'-C2'	-6.71	104.62	112.00
2	AB	1519	G	N3-C2-N2	-6.71	115.20	119.90
2	AB	2476	A	C5-C6-N6	-6.71	118.33	123.70
35	BA	1144	G	C5-N7-C8	-6.71	100.94	104.30
2	AB	1057	A	N1-C2-N3	-6.71	125.95	129.30
2	AB	1302	A	C1'-O4'-C4'	-6.71	104.53	109.90
2	AB	1776	G	C2-N3-C4	6.71	115.25	111.90
2	AB	2042	A	C6-C5-N7	6.71	137.00	132.30
2	AB	2633	G	C8-N9-C4	-6.71	103.72	106.40
35	BA	132	C	N3-C4-N4	-6.71	113.30	118.00
35	BA	1159	U	C5-C4-O4	-6.71	121.88	125.90
35	BA	1467	C	O4'-C1'-N1	6.71	113.57	108.20
2	AB	329	G	N1-C2-N2	6.71	122.24	116.20
2	AB	408	G	C6-N1-C2	-6.71	121.08	125.10
2	AB	450	G	C8-N9-C4	-6.71	103.72	106.40
2	AB	1318	U	O4'-C1'-N1	6.71	113.56	108.20
2	AB	1510	G	C5-N7-C8	-6.71	100.95	104.30
2	AB	2530	A	C3'-C2'-C1'	-6.71	96.14	101.50
2	AB	2663	G	C2'-C3'-O3'	6.71	124.43	113.70
2	AB	2879	A	C2-N3-C4	6.71	113.95	110.60
15	AO	40	ARG	NE-CZ-NH2	-6.71	116.95	120.30
35	BA	306	A	C1'-O4'-C4'	-6.71	104.53	109.90
37	BC	37	G	C6-N1-C2	-6.71	121.08	125.10
2	AB	328	U	N3-C2-O2	-6.71	117.51	122.20
2	AB	689	A	C5-C6-N1	-6.71	114.35	117.70
2	AB	744	U	C6-N1-C2	-6.71	116.98	121.00
2	AB	1024	G	N1-C2-N3	6.71	127.92	123.90
2	AB	1128	G	O4'-C1'-C2'	-6.71	99.09	105.80
35	BA	1159	U	O5'-C5'-C4'	-6.71	98.96	111.70
2	AB	313	G	C4-C5-N7	-6.70	108.12	110.80
2	AB	1025	G	C5-N7-C8	6.70	107.65	104.30
2	AB	1314	C	N1-C2-O2	6.70	122.92	118.90
2	AB	1379	U	C6-N1-C2	-6.70	116.98	121.00
2	AB	1443	U	N3-C4-C5	-6.70	110.58	114.60
2	AB	1990	C	C6-N1-C2	6.70	122.98	120.30
2	AB	2226	C	O4'-C1'-N1	6.70	113.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2536	G	C6-N1-C2	-6.70	121.08	125.10
2	AB	2825	G	C1'-O4'-C4'	-6.70	104.54	109.90
35	BA	37	U	N3-C4-O4	6.70	124.09	119.40
35	BA	309	A	N1-C6-N6	-6.70	114.58	118.60
35	BA	711	G	O4'-C1'-N9	6.70	113.56	108.20
35	BA	1030	U	C5-C6-N1	-6.70	119.35	122.70
35	BA	1106	G	C3'-C2'-C1'	-6.70	96.14	101.50
36	BB	9	A	C4-C5-N7	-6.70	107.35	110.70
38	BD	74	A	N3-C4-C5	-6.70	122.11	126.80
40	BF	22	PHE	CB-CG-CD2	-6.70	116.11	120.80
2	AB	599	A	O4'-C1'-N9	6.70	113.56	108.20
2	AB	673	C	N3-C2-O2	-6.70	117.21	121.90
2	AB	1037	G	N3-C2-N2	-6.70	115.21	119.90
2	AB	1975	G	C3'-C2'-C1'	6.70	106.86	101.50
35	BA	279	A	N1-C6-N6	-6.70	114.58	118.60
2	AB	456	C	C6-N1-C2	6.70	122.98	120.30
2	AB	587	C	N3-C2-O2	-6.70	117.21	121.90
2	AB	916	G	C3'-C2'-C1'	-6.70	96.14	101.50
2	AB	966	G	O4'-C1'-N9	6.70	113.56	108.20
2	AB	1077	A	C4-C5-C6	-6.70	113.65	117.00
2	AB	1171	G	N9-C4-C5	6.70	108.08	105.40
2	AB	2319	G	C5-N7-C8	-6.70	100.95	104.30
35	BA	3	A	O4'-C1'-N9	6.70	113.56	108.20
35	BA	805	C	C4'-C3'-C2'	-6.70	95.90	102.60
35	BA	1102	A	N3-C4-C5	6.70	131.49	126.80
2	AB	165	A	N1-C6-N6	6.70	122.62	118.60
2	AB	439	A	N1-C2-N3	-6.70	125.95	129.30
2	AB	1505	A	N1-C2-N3	6.70	132.65	129.30
2	AB	1683	U	C2-N3-C4	-6.70	122.98	127.00
2	AB	2010	G	C6-C5-N7	-6.70	126.38	130.40
2	AB	2178	C	C3'-C2'-C1'	6.70	106.86	101.50
4	AD	216	ARG	NE-CZ-NH2	-6.70	116.95	120.30
35	BA	122	G	C6-C5-N7	-6.70	126.38	130.40
35	BA	592	G	N3-C4-C5	-6.70	125.25	128.60
35	BA	696	A	C5-C6-N1	6.70	121.05	117.70
35	BA	706	A	N1-C6-N6	6.70	122.62	118.60
2	AB	334	C	C2-N3-C4	6.70	123.25	119.90
2	AB	1170	C	C5-C4-N4	6.70	124.89	120.20
2	AB	2281	A	N9-C1'-C2'	-6.70	104.63	112.00
2	AB	2326	C	N3-C2-O2	-6.70	117.21	121.90
2	AB	2753	A	C3'-C2'-C1'	6.70	106.86	101.50
35	BA	958	A	N1-C2-N3	-6.70	125.95	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
41	BG	98	ASP	CB-CG-OD2	-6.70	112.27	118.30
2	AB	561	G	N3-C2-N2	6.70	124.59	119.90
2	AB	691	C	C3'-C2'-C1'	6.70	106.86	101.50
2	AB	1266	G	P-O3'-C3'	6.70	127.73	119.70
2	AB	2013	A	N7-C8-N9	6.70	117.15	113.80
2	AB	2113	U	C2-N3-C4	-6.70	122.98	127.00
2	AB	2483	C	O4'-C1'-N1	-6.70	102.84	108.20
2	AB	2837	A	O4'-C1'-N9	6.70	113.56	108.20
35	BA	1514	G	O4'-C1'-N9	6.70	113.56	108.20
37	BC	18	A	C8-N9-C4	-6.70	103.12	105.80
37	BC	43	U	C1'-O4'-C4'	-6.70	104.54	109.90
55	BU	69	TYR	CG-CD1-CE1	-6.70	115.94	121.30
1	AA	90	C	C4'-C3'-C2'	-6.69	95.91	102.60
2	AB	241	A	C8-N9-C4	-6.69	103.12	105.80
2	AB	748	G	O4'-C1'-C2'	-6.69	99.11	105.80
2	AB	1199	U	C1'-O4'-C4'	-6.69	104.55	109.90
2	AB	2831	G	C4'-C3'-C2'	-6.69	95.91	102.60
35	BA	7	A	N9-C4-C5	6.69	108.48	105.80
35	BA	598	U	C4-C5-C6	6.69	123.72	119.70
35	BA	627	G	C4-C5-C6	6.69	122.82	118.80
35	BA	1203	C	C1'-O4'-C4'	-6.69	104.55	109.90
35	BA	1310	G	C1'-O4'-C4'	-6.69	104.55	109.90
2	AB	239	C	C6-N1-C2	-6.69	117.62	120.30
2	AB	358	U	O4'-C1'-N1	6.69	113.55	108.20
2	AB	712	G	N3-C4-C5	-6.69	125.25	128.60
2	AB	2495	G	C4'-C3'-C2'	-6.69	95.91	102.60
2	AB	2868	A	N9-C1'-C2'	-6.69	104.64	112.00
24	AX	9	ARG	NE-CZ-NH2	-6.69	116.95	120.30
35	BA	767	A	N1-C2-N3	-6.69	125.95	129.30
35	BA	1409	C	N3-C4-C5	-6.69	119.22	121.90
2	AB	154	U	C5'-C4'-C3'	-6.69	105.30	116.00
2	AB	296	U	N1-C2-O2	-6.69	118.12	122.80
2	AB	1251	C	N3-C4-C5	-6.69	119.22	121.90
2	AB	2401	U	N1-C2-N3	6.69	118.91	114.90
2	AB	2583	G	N3-C2-N2	6.69	124.58	119.90
2	AB	2788	C	C6-N1-C2	6.69	122.98	120.30
2	AB	2803	G	C5-C6-O6	6.69	132.61	128.60
35	BA	127	G	N1-C2-N2	6.69	122.22	116.20
35	BA	448	A	C6-N1-C2	6.69	122.61	118.60
35	BA	1218	C	N1-C1'-C2'	-6.69	104.64	112.00
38	BD	16	C	N1-C2-N3	-6.69	114.52	119.20
2	AB	323	C	C3'-C2'-C1'	6.69	106.85	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2300	C	N1-C2-O2	6.69	122.91	118.90
35	BA	930	C	C4-C5-C6	6.69	120.74	117.40
1	AA	53	A	C4'-C3'-C2'	-6.69	95.91	102.60
1	AA	91	C	C5'-C4'-C3'	-6.69	105.30	116.00
2	AB	294	A	C5-C6-N1	6.69	121.04	117.70
2	AB	355	U	O4'-C1'-N1	6.69	113.55	108.20
2	AB	672	C	C2-N3-C4	6.69	123.24	119.90
2	AB	890	C	N1-C2-O2	6.69	122.91	118.90
2	AB	956	G	C8-N9-C4	-6.69	103.72	106.40
2	AB	956	G	C3'-C2'-C1'	-6.69	96.15	101.50
2	AB	1072	C	C6-N1-C2	-6.69	117.62	120.30
2	AB	1078	U	C5'-C4'-C3'	-6.69	105.30	116.00
2	AB	1327	A	N7-C8-N9	6.69	117.14	113.80
2	AB	1819	A	O4'-C1'-N9	6.69	113.55	108.20
2	AB	2473	U	C3'-C2'-C1'	6.69	106.85	101.50
2	AB	2535	G	C6-N1-C2	-6.69	121.09	125.10
35	BA	303	A	N7-C8-N9	6.69	117.14	113.80
35	BA	464	U	N3-C4-O4	6.69	124.08	119.40
35	BA	1326	U	O4'-C1'-N1	6.69	113.55	108.20
41	BG	80	ARG	NE-CZ-NH1	6.69	123.64	120.30
2	AB	1481	U	C5-C6-N1	-6.69	119.36	122.70
35	BA	305	G	O4'-C1'-N9	6.69	113.55	108.20
35	BA	400	C	N3-C4-N4	6.69	122.68	118.00
35	BA	975	A	N1-C6-N6	-6.69	114.59	118.60
38	BD	13	C	O4'-C1'-N1	6.69	113.55	108.20
2	AB	596	U	C5-C4-O4	-6.68	121.89	125.90
2	AB	942	G	C5-N7-C8	6.68	107.64	104.30
2	AB	1442	U	C4'-C3'-C2'	-6.68	95.92	102.60
2	AB	2038	G	N7-C8-N9	6.68	116.44	113.10
2	AB	2123	G	N1-C2-N2	6.68	122.22	116.20
2	AB	2614	A	N1-C2-N3	-6.68	125.96	129.30
2	AB	2737	G	C4-C5-N7	6.68	113.47	110.80
2	AB	2883	A	N3-C4-C5	-6.68	122.12	126.80
35	BA	6	G	C5-C6-N1	6.68	114.84	111.50
37	BC	14	G	C6-N1-C2	-6.68	121.09	125.10
1	AA	19	C	C2-N1-C1'	-6.68	111.45	118.80
2	AB	647	G	N1-C2-N2	6.68	122.21	116.20
2	AB	1837	C	N3-C2-O2	-6.68	117.22	121.90
2	AB	1993	U	C5-C6-N1	6.68	126.04	122.70
2	AB	2507	C	C6-N1-C2	-6.68	117.63	120.30
35	BA	679	C	C2-N3-C4	-6.68	116.56	119.90
35	BA	833	G	C8-N9-C1'	6.68	135.69	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1273	C	C5'-C4'-O4'	6.68	117.12	109.10
2	AB	1123	C	O4'-C1'-N1	6.68	113.54	108.20
2	AB	1888	G	O3'-P-O5'	-6.68	91.31	104.00
35	BA	981	U	C5-C4-O4	-6.68	121.89	125.90
35	BA	1191	A	C3'-C2'-C1'	6.68	106.84	101.50
35	BA	1320	C	C5-C4-N4	6.68	124.88	120.20
2	AB	19	A	C4-C5-C6	-6.68	113.66	117.00
2	AB	24	G	N3-C4-N9	-6.68	121.99	126.00
2	AB	399	U	N3-C4-C5	-6.68	110.59	114.60
2	AB	499	U	C5'-C4'-O4'	6.68	117.11	109.10
2	AB	507	A	C4'-C3'-C2'	-6.68	95.92	102.60
2	AB	561	G	N3-C4-N9	-6.68	121.99	126.00
2	AB	719	C	C5-C4-N4	-6.68	115.53	120.20
2	AB	829	A	O4'-C1'-N9	6.68	113.54	108.20
2	AB	1344	U	C5-C6-N1	-6.68	119.36	122.70
2	AB	2207	C	C6-N1-C2	6.68	122.97	120.30
2	AB	2290	G	N3-C4-C5	-6.68	125.26	128.60
2	AB	2367	G	C5-C6-N1	6.68	114.84	111.50
2	AB	2417	C	C6-N1-C2	-6.68	117.63	120.30
2	AB	2562	U	O4'-C1'-N1	6.68	113.54	108.20
35	BA	107	G	C4-C5-N7	-6.68	108.13	110.80
35	BA	635	A	O5'-C5'-C4'	6.68	124.39	111.70
35	BA	965	U	N3-C4-C5	-6.68	110.59	114.60
53	BS	14	ARG	NE-CZ-NH1	6.68	123.64	120.30
2	AB	1794	A	C5'-C4'-O4'	6.68	117.11	109.10
31	A4	20	TYR	CB-CG-CD1	-6.68	116.99	121.00
35	BA	335	C	C5-C4-N4	-6.68	115.53	120.20
2	AB	186	G	C4-C5-N7	6.68	113.47	110.80
2	AB	402	A	C6-N1-C2	6.68	122.61	118.60
2	AB	683	U	N3-C4-C5	6.68	118.61	114.60
2	AB	965	C	C4-C5-C6	6.68	120.74	117.40
2	AB	1094	U	N1-C2-O2	6.68	127.47	122.80
2	AB	2685	G	O4'-C4'-C3'	6.68	111.44	106.10
35	BA	71	A	C5-C6-N1	-6.68	114.36	117.70
35	BA	533	A	O4'-C4'-C3'	6.68	111.44	106.10
35	BA	660	C	N3-C2-O2	-6.68	117.23	121.90
35	BA	1133	G	N9-C4-C5	6.68	108.07	105.40
1	AA	18	G	O4'-C1'-C2'	6.67	113.61	107.60
2	AB	1	G	C3'-C2'-C1'	6.67	106.84	101.50
2	AB	75	G	C8-N9-C4	-6.67	103.73	106.40
2	AB	327	G	C3'-C2'-C1'	-6.67	96.16	101.50
2	AB	753	A	C6-N1-C2	6.67	122.61	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	831	G	O4'-C1'-C2'	6.67	113.61	107.60
2	AB	831	G	C8-N9-C4	-6.67	103.73	106.40
2	AB	1187	G	C4-C5-C6	6.67	122.81	118.80
2	AB	1620	G	N9-C4-C5	6.67	108.07	105.40
2	AB	1832	C	O4'-C1'-N1	6.67	113.54	108.20
2	AB	1864	U	N3-C4-C5	-6.67	110.60	114.60
2	AB	2045	C	C5-C4-N4	-6.67	115.53	120.20
2	AB	2083	G	N1-C6-O6	-6.67	115.89	119.90
2	AB	2335	A	C5-N7-C8	6.67	107.24	103.90
2	AB	2626	C	C6-N1-C2	-6.67	117.63	120.30
35	BA	178	C	C5-C6-N1	-6.67	117.66	121.00
35	BA	344	A	N1-C2-N3	-6.67	125.96	129.30
35	BA	567	G	C4-C5-N7	-6.67	108.13	110.80
35	BA	898	G	N3-C4-C5	-6.67	125.26	128.60
48	BN	12	ARG	NE-CZ-NH2	6.67	123.64	120.30
2	AB	441	U	N3-C2-O2	-6.67	117.53	122.20
2	AB	1052	C	O4'-C1'-N1	6.67	113.54	108.20
2	AB	1724	G	N3-C4-C5	-6.67	125.26	128.60
2	AB	1966	A	C2-N3-C4	6.67	113.94	110.60
2	AB	2153	C	C5-C4-N4	-6.67	115.53	120.20
2	AB	2896	C	N3-C2-O2	-6.67	117.23	121.90
35	BA	450	G	P-O3'-C3'	6.67	127.71	119.70
35	BA	797	C	C3'-C2'-C1'	6.67	106.84	101.50
35	BA	816	A	O4'-C1'-N9	-6.67	102.86	108.20
35	BA	1344	C	C4'-C3'-C2'	-6.67	95.93	102.60
2	AB	150	U	C1'-O4'-C4'	-6.67	104.56	109.90
2	AB	857	G	C8-N9-C4	-6.67	103.73	106.40
2	AB	1585	C	C5-C6-N1	6.67	124.34	121.00
2	AB	2092	U	O4'-C1'-N1	6.67	113.54	108.20
2	AB	2187	U	N3-C2-O2	-6.67	117.53	122.20
35	BA	38	G	C5-N7-C8	-6.67	100.96	104.30
35	BA	66	A	O4'-C1'-N9	6.67	113.54	108.20
35	BA	188	C	C6-N1-C2	-6.67	117.63	120.30
35	BA	506	G	N3-C4-N9	-6.67	122.00	126.00
35	BA	613	C	C5-C4-N4	6.67	124.87	120.20
35	BA	1025	U	P-O3'-C3'	6.67	127.70	119.70
35	BA	1200	C	N3-C4-N4	6.67	122.67	118.00
35	BA	1275	A	C4-C5-N7	-6.67	107.36	110.70
38	BD	65	G	N7-C8-N9	6.67	116.44	113.10
45	BK	64	TYR	CD1-CE1-CZ	-6.67	113.80	119.80
2	AB	103	A	C5-C6-N1	-6.67	114.36	117.70
2	AB	1859	U	C4-C5-C6	6.67	123.70	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	434	U	N1-C2-O2	-6.67	118.13	122.80
35	BA	774	G	C5-N7-C8	-6.67	100.97	104.30
35	BA	1333	A	C5-N7-C8	-6.67	100.56	103.90
45	BK	79	ARG	NE-CZ-NH1	6.67	123.64	120.30
2	AB	104	A	N3-C4-N9	6.67	132.74	127.40
2	AB	177	G	O4'-C1'-N9	6.67	113.53	108.20
2	AB	1063	G	N3-C2-N2	6.67	124.57	119.90
2	AB	1451	C	C2-N3-C4	6.67	123.23	119.90
2	AB	1619	G	N3-C4-N9	-6.67	122.00	126.00
2	AB	1664	A	C5'-C4'-C3'	-6.67	105.33	116.00
2	AB	1782	U	C5-C4-O4	-6.67	121.90	125.90
2	AB	1893	C	N1-C1'-C2'	-6.67	104.67	112.00
35	BA	499	A	O4'-C1'-N9	6.67	113.53	108.20
35	BA	847	G	C4-C5-N7	-6.67	108.13	110.80
35	BA	874	G	C2-N3-C4	6.67	115.23	111.90
38	BD	53	G	N3-C4-C5	-6.67	125.27	128.60
2	AB	386	G	N3-C4-C5	-6.67	125.27	128.60
2	AB	405	U	C5-C4-O4	-6.67	121.90	125.90
2	AB	1067	A	C5-C6-N1	6.67	121.03	117.70
2	AB	1595	C	O4'-C1'-N1	6.67	113.53	108.20
2	AB	1607	C	C1'-O4'-C4'	-6.67	104.57	109.90
2	AB	1839	G	C6-N1-C2	-6.67	121.10	125.10
2	AB	2204	G	N9-C4-C5	-6.67	102.73	105.40
2	AB	2253	G	C2-N3-C4	6.67	115.23	111.90
2	AB	2749	A	C5'-C4'-O4'	6.67	117.10	109.10
35	BA	371	A	N1-C6-N6	-6.67	114.60	118.60
35	BA	748	G	N3-C4-C5	-6.67	125.27	128.60
35	BA	824	G	C6-N1-C2	-6.67	121.10	125.10
35	BA	1174	G	C8-N9-C4	6.67	109.07	106.40
35	BA	1217	C	C5-C6-N1	6.67	124.33	121.00
38	BD	46	G	C6-C5-N7	-6.67	126.40	130.40
1	AA	96	G	N1-C6-O6	-6.67	115.90	119.90
2	AB	266	G	N7-C8-N9	-6.67	109.77	113.10
2	AB	411	G	C4-C5-N7	-6.67	108.13	110.80
2	AB	1255	U	C2'-C3'-O3'	6.67	124.36	113.70
2	AB	1532	A	C8-N9-C4	-6.67	103.13	105.80
2	AB	2709	G	N3-C2-N2	-6.67	115.23	119.90
2	AB	2883	A	C8-N9-C4	6.67	108.47	105.80
35	BA	303	A	C5'-C4'-O4'	6.67	117.10	109.10
1	AA	120	U	N3-C2-O2	-6.66	117.54	122.20
2	AB	138	U	C1'-O4'-C4'	6.66	115.23	109.90
2	AB	586	A	N3-C4-N9	-6.66	122.07	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1047	G	C4-C5-N7	-6.66	108.14	110.80
2	AB	1070	A	C3'-C2'-C1'	6.66	106.83	101.50
2	AB	1241	A	C5-C6-N6	-6.66	118.37	123.70
2	AB	1593	A	C4'-C3'-C2'	-6.66	95.94	102.60
35	BA	26	A	N1-C2-N3	-6.66	125.97	129.30
35	BA	1242	G	C5-C6-O6	6.66	132.60	128.60
35	BA	1380	U	N1-C2-O2	6.66	127.47	122.80
35	BA	1393	U	C3'-C2'-C1'	-6.66	96.17	101.50
41	BG	43	ARG	NE-CZ-NH2	-6.66	116.97	120.30
2	AB	776	G	C4-C5-N7	-6.66	108.14	110.80
2	AB	796	C	C4-C5-C6	6.66	120.73	117.40
2	AB	1017	G	O3'-P-O5'	-6.66	91.34	104.00
2	AB	1785	A	C5-C6-N1	6.66	121.03	117.70
7	AG	176	PHE	CB-CG-CD1	-6.66	116.14	120.80
35	BA	396	C	N1-C2-O2	6.66	122.90	118.90
35	BA	554	A	N3-C4-N9	6.66	132.73	127.40
1	AA	107	G	C5-C6-N1	6.66	114.83	111.50
2	AB	23	G	N1-C6-O6	-6.66	115.90	119.90
2	AB	350	G	C3'-C2'-C1'	6.66	106.83	101.50
2	AB	513	A	N7-C8-N9	6.66	117.13	113.80
2	AB	532	A	O4'-C1'-N9	6.66	113.53	108.20
2	AB	2216	G	C1'-O4'-C4'	-6.66	104.57	109.90
2	AB	2500	U	P-O3'-C3'	6.66	127.69	119.70
35	BA	126	G	C5'-C4'-O4'	6.66	117.09	109.10
35	BA	640	A	O4'-C1'-C2'	6.66	113.59	107.60
36	BB	1	A	C4'-C3'-C2'	-6.66	95.94	102.60
37	BC	25	U	C5-C4-O4	6.66	129.90	125.90
41	BG	74	TYR	CG-CD1-CE1	-6.66	115.97	121.30
2	AB	45	G	C8-N9-C1'	6.66	135.66	127.00
2	AB	423	A	C5'-C4'-O4'	6.66	117.09	109.10
2	AB	449	A	C6-N1-C2	-6.66	114.61	118.60
2	AB	461	C	N3-C4-C5	6.66	124.56	121.90
2	AB	858	G	N9-C4-C5	6.66	108.06	105.40
2	AB	979	A	C6-N1-C2	-6.66	114.60	118.60
2	AB	983	A	C3'-C2'-C1'	-6.66	96.17	101.50
2	AB	1498	C	N1-C2-N3	-6.66	114.54	119.20
2	AB	1999	C	C5-C6-N1	6.66	124.33	121.00
2	AB	2083	G	N9-C4-C5	6.66	108.06	105.40
2	AB	2230	G	C8-N9-C4	-6.66	103.74	106.40
20	AT	90	ARG	CD-NE-CZ	6.66	132.92	123.60
35	BA	142	G	C5-C6-O6	-6.66	124.61	128.60
35	BA	1226	C	N3-C4-C5	-6.66	119.24	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	BV	36	ARG	NE-CZ-NH1	6.66	123.63	120.30
2	AB	310	A	C5-C6-N1	6.66	121.03	117.70
2	AB	453	A	C6-C5-N7	6.66	136.96	132.30
2	AB	1250	G	N1-C6-O6	6.66	123.89	119.90
2	AB	1800	C	C4-C5-C6	-6.66	114.07	117.40
2	AB	2296	U	P-O5'-C5'	6.66	131.55	120.90
2	AB	2887	A	C5-C6-N6	-6.66	118.38	123.70
35	BA	532	A	C2-N3-C4	6.66	113.93	110.60
36	BB	7	G	C6-N1-C2	-6.66	121.11	125.10
2	AB	1538	G	N9-C4-C5	6.66	108.06	105.40
2	AB	2026	U	C4-C5-C6	6.66	123.69	119.70
2	AB	2749	A	C2-N3-C4	-6.66	107.27	110.60
35	BA	400	C	C6-N1-C2	6.66	122.96	120.30
35	BA	103	U	C3'-C2'-C1'	-6.65	96.18	101.50
2	AB	692	C	O4'-C1'-N1	6.65	113.52	108.20
2	AB	1161	C	N1-C2-O2	6.65	122.89	118.90
2	AB	1918	A	N9-C1'-C2'	-6.65	104.68	112.00
2	AB	2228	G	N1-C2-N3	-6.65	119.91	123.90
2	AB	2264	C	C5-C6-N1	6.65	124.33	121.00
35	BA	132	C	N3-C4-C5	6.65	124.56	121.90
35	BA	246	A	N1-C2-N3	-6.65	125.97	129.30
35	BA	322	C	C3'-C2'-C1'	-6.65	96.18	101.50
35	BA	926	G	N1-C6-O6	-6.65	115.91	119.90
35	BA	1001	C	N3-C4-N4	6.65	122.66	118.00
35	BA	1342	C	C3'-C2'-C1'	6.65	106.82	101.50
37	BC	17	U	C5'-C4'-O4'	6.65	117.08	109.10
1	AA	24	G	C6-N1-C2	-6.65	121.11	125.10
2	AB	142	A	C4'-C3'-C2'	-6.65	95.95	102.60
2	AB	649	G	N9-C1'-C2'	-6.65	104.69	112.00
2	AB	871	U	N1-C1'-C2'	-6.65	104.68	112.00
2	AB	1766	G	C8-N9-C4	-6.65	103.74	106.40
2	AB	2511	U	C5'-C4'-O4'	6.65	117.08	109.10
2	AB	2681	C	N3-C4-N4	-6.65	113.34	118.00
35	BA	724	G	N1-C6-O6	-6.65	115.91	119.90
35	BA	1367	C	C5-C6-N1	6.65	124.33	121.00
35	BA	1455	G	C4-C5-C6	6.65	122.79	118.80
2	AB	871	U	N3-C2-O2	-6.65	117.55	122.20
2	AB	973	A	C8-N9-C4	6.65	108.46	105.80
2	AB	2431	U	C2-N3-C4	-6.65	123.01	127.00
2	AB	2731	G	C1'-O4'-C4'	-6.65	104.58	109.90
35	BA	724	G	O4'-C1'-C2'	-6.65	99.15	105.80
1	AA	86	G	N1-C2-N3	6.65	127.89	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	726	G	C4-C5-N7	6.65	113.46	110.80
35	BA	394	G	N3-C4-N9	6.65	129.99	126.00
35	BA	518	C	C5-C6-N1	6.65	124.32	121.00
35	BA	1039	G	N7-C8-N9	6.65	116.42	113.10
35	BA	1473	G	C4-C5-N7	-6.65	108.14	110.80
36	BB	42	G	C4-C5-N7	-6.65	108.14	110.80
37	BC	50	U	N1-C2-O2	6.65	127.45	122.80
1	AA	25	U	P-O3'-C3'	6.65	127.67	119.70
2	AB	667	U	C5-C4-O4	-6.65	121.91	125.90
2	AB	956	G	C6-N1-C2	-6.65	121.11	125.10
2	AB	2746	U	N1-C2-O2	-6.65	118.15	122.80
2	AB	2775	G	N1-C6-O6	6.65	123.89	119.90
2	AB	966	G	C4-C5-N7	6.64	113.46	110.80
2	AB	1028	A	C8-N9-C4	-6.64	103.14	105.80
2	AB	1695	G	C4'-C3'-C2'	-6.64	95.96	102.60
2	AB	1879	C	O4'-C4'-C3'	6.64	111.42	106.10
2	AB	2046	G	O4'-C1'-N9	6.64	113.52	108.20
2	AB	2611	C	P-O3'-C3'	6.64	127.67	119.70
2	AB	2764	A	N9-C1'-C2'	-6.64	104.69	112.00
2	AB	2880	C	C5-C6-N1	6.64	124.32	121.00
35	BA	500	G	C5'-C4'-O4'	6.64	117.07	109.10
35	BA	505	G	C4-C5-N7	-6.64	108.14	110.80
2	AB	416	U	C6-N1-C2	-6.64	117.01	121.00
2	AB	1235	G	C8-N9-C4	-6.64	103.74	106.40
2	AB	2112	G	O4'-C1'-C2'	-6.64	99.16	105.80
20	AT	92	TRP	NE1-CE2-CZ2	6.64	137.71	130.40
35	BA	101	A	C6-N1-C2	-6.64	114.61	118.60
35	BA	736	C	O4'-C1'-N1	6.64	113.51	108.20
35	BA	1288	A	N1-C2-N3	-6.64	125.98	129.30
35	BA	1454	G	C5'-C4'-O4'	6.64	117.07	109.10
1	AA	35	C	N1-C2-O2	6.64	122.89	118.90
2	AB	155	A	N1-C2-N3	-6.64	125.98	129.30
2	AB	592	A	N1-C6-N6	-6.64	114.62	118.60
2	AB	1179	G	N3-C2-N2	-6.64	115.25	119.90
2	AB	2345	G	C6-C5-N7	-6.64	126.42	130.40
2	AB	2458	G	O4'-C4'-C3'	6.64	111.41	106.10
35	BA	211	G	C2-N3-C4	6.64	115.22	111.90
35	BA	405	U	N1-C2-N3	6.64	118.89	114.90
1	AA	101	A	N9-C4-C5	6.64	108.46	105.80
2	AB	248	G	C8-N9-C4	-6.64	103.74	106.40
2	AB	419	U	N1-C2-N3	6.64	118.88	114.90
2	AB	899	A	N9-C1'-C2'	-6.64	104.70	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1026	G	N9-C4-C5	-6.64	102.74	105.40
2	AB	1346	G	N7-C8-N9	6.64	116.42	113.10
2	AB	1906	G	N1-C2-N3	6.64	127.88	123.90
2	AB	2658	C	C4-C5-C6	-6.64	114.08	117.40
35	BA	838	G	C5-N7-C8	-6.64	100.98	104.30
35	BA	990	C	O4'-C1'-N1	6.64	113.51	108.20
35	BA	1456	A	N1-C2-N3	6.64	132.62	129.30
35	BA	1525	G	N1-C6-O6	6.64	123.88	119.90
37	BC	49	U	N3-C4-O4	-6.64	114.75	119.40
38	BD	64	G	C8-N9-C4	-6.64	103.74	106.40
40	BF	168	ARG	NE-CZ-NH1	-6.64	116.98	120.30
2	AB	132	G	C8-N9-C1'	6.64	135.63	127.00
2	AB	436	C	C4-C5-C6	6.64	120.72	117.40
2	AB	822	G	C5-C6-N1	6.64	114.82	111.50
2	AB	1395	A	C4-C5-N7	-6.64	107.38	110.70
2	AB	1398	C	N3-C2-O2	-6.64	117.25	121.90
2	AB	1458	U	O4'-C1'-N1	6.64	113.51	108.20
2	AB	1937	A	C6-N1-C2	6.64	122.58	118.60
2	AB	2016	U	N3-C4-O4	6.64	124.05	119.40
35	BA	105	G	C6-N1-C2	6.64	129.08	125.10
35	BA	1503	A	N7-C8-N9	-6.64	110.48	113.80
2	AB	928	A	O4'-C1'-N9	6.64	113.51	108.20
2	AB	1760	C	C3'-C2'-C1'	6.64	106.81	101.50
2	AB	1777	U	C5-C6-N1	-6.64	119.38	122.70
2	AB	1826	G	N9-C1'-C2'	-6.64	104.70	112.00
2	AB	1863	G	N9-C1'-C2'	-6.64	104.70	112.00
2	AB	1930	G	N3-C4-N9	6.64	129.98	126.00
2	AB	2002	G	C3'-C2'-C1'	6.64	106.81	101.50
2	AB	2005	A	C5-C6-N6	6.64	129.01	123.70
2	AB	2100	G	C8-N9-C4	-6.64	103.75	106.40
2	AB	2112	G	C5'-C4'-O4'	6.64	117.06	109.10
35	BA	622	A	C4'-C3'-C2'	-6.64	95.96	102.60
35	BA	732	C	N1-C2-O2	6.64	122.88	118.90
35	BA	1345	U	N1-C2-N3	6.64	118.88	114.90
36	BB	5	G	N3-C4-C5	-6.64	125.28	128.60
2	AB	252	G	N9-C1'-C2'	-6.63	104.70	112.00
2	AB	534	U	N3-C2-O2	-6.63	117.56	122.20
2	AB	579	G	C8-N9-C4	-6.63	103.75	106.40
2	AB	791	C	C5'-C4'-C3'	-6.63	105.38	116.00
2	AB	1657	U	C5'-C4'-C3'	-6.63	105.38	116.00
2	AB	2416	C	N3-C2-O2	-6.63	117.25	121.90
35	BA	107	G	C1'-O4'-C4'	-6.63	104.59	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	643	C	C4-C5-C6	-6.63	114.08	117.40
35	BA	964	A	C4-C5-C6	6.63	120.32	117.00
35	BA	1224	U	C3'-C2'-C1'	6.63	106.81	101.50
35	BA	204	G	C5'-C4'-O4'	6.63	117.06	109.10
2	AB	75	G	N1-C2-N3	-6.63	119.92	123.90
2	AB	379	G	C4'-C3'-C2'	-6.63	95.97	102.60
2	AB	445	C	C4-C5-C6	6.63	120.72	117.40
2	AB	1540	G	O4'-C1'-N9	6.63	113.50	108.20
2	AB	1711	A	C5-N7-C8	-6.63	100.58	103.90
2	AB	1715	G	C2-N3-C4	6.63	115.22	111.90
2	AB	2488	G	C1'-O4'-C4'	-6.63	104.59	109.90
2	AB	2489	U	C5-C4-O4	-6.63	121.92	125.90
2	AB	2683	C	C3'-C2'-C1'	6.63	106.81	101.50
2	AB	2759	G	C5-C6-O6	-6.63	124.62	128.60
2	AB	2777	G	N7-C8-N9	6.63	116.42	113.10
2	AB	2782	G	C8-N9-C4	-6.63	103.75	106.40
35	BA	18	C	C2-N3-C4	6.63	123.22	119.90
35	BA	144	G	P-O3'-C3'	6.63	127.66	119.70
35	BA	262	A	C6-N1-C2	-6.63	114.62	118.60
35	BA	272	C	C6-N1-C2	-6.63	117.65	120.30
35	BA	698	G	C5-C6-N1	6.63	114.82	111.50
35	BA	734	G	C1'-O4'-C4'	6.63	115.21	109.90
35	BA	1464	U	C1'-O4'-C4'	6.63	115.20	109.90
38	BD	62	C	N1-C1'-C2'	-6.63	104.71	112.00
1	AA	32	U	N3-C4-O4	6.63	124.04	119.40
2	AB	1157	G	N3-C4-C5	-6.63	125.28	128.60
2	AB	2213	U	P-O3'-C3'	6.63	127.66	119.70
35	BA	819	A	N3-C4-C5	6.63	131.44	126.80
35	BA	898	G	P-O3'-C3'	6.63	127.66	119.70
2	AB	196	A	C8-N9-C4	-6.63	103.15	105.80
2	AB	389	G	C2-N3-C4	6.63	115.21	111.90
2	AB	1667	G	C6-N1-C2	6.63	129.08	125.10
2	AB	1895	C	C3'-C2'-C1'	6.63	106.80	101.50
2	AB	2654	A	O4'-C1'-N9	6.63	113.50	108.20
35	BA	140	U	N3-C2-O2	-6.63	117.56	122.20
35	BA	599	C	N3-C4-C5	-6.63	119.25	121.90
35	BA	1053	G	C5-C6-N1	-6.63	108.19	111.50
35	BA	1104	G	N1-C2-N3	-6.63	119.92	123.90
35	BA	1412	C	C4'-C3'-C2'	-6.63	95.97	102.60
2	AB	371	A	C5-C6-N1	-6.63	114.39	117.70
2	AB	675	A	N9-C4-C5	-6.63	103.15	105.80
2	AB	912	C	C1'-O4'-C4'	-6.63	104.60	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1057	A	O4'-C1'-C2'	-6.63	99.17	105.80
2	AB	1968	G	C6-C5-N7	-6.63	126.42	130.40
2	AB	2017	U	C5'-C4'-O4'	6.63	117.05	109.10
2	AB	2685	G	N3-C2-N2	6.63	124.54	119.90
35	BA	474	G	N9-C1'-C2'	-6.63	104.71	112.00
35	BA	716	A	N7-C8-N9	-6.63	110.49	113.80
35	BA	789	U	O4'-C4'-C3'	6.63	111.40	106.10
35	BA	1171	A	N9-C1'-C2'	-6.63	104.71	112.00
35	BA	1189	U	N3-C4-C5	-6.63	110.62	114.60
35	BA	1446	A	O4'-C1'-N9	6.63	113.50	108.20
35	BA	1507	A	N3-C4-C5	-6.63	122.16	126.80
42	BH	156	ARG	NH1-CZ-NH2	6.63	126.69	119.40
2	AB	169	G	C8-N9-C4	-6.62	103.75	106.40
2	AB	1628	G	C6-N1-C2	-6.62	121.12	125.10
2	AB	1631	G	N9-C4-C5	6.62	108.05	105.40
2	AB	2232	C	C6-N1-C2	6.62	122.95	120.30
2	AB	2829	A	C8-N9-C4	-6.62	103.15	105.80
35	BA	236	A	C2-N3-C4	6.62	113.91	110.60
35	BA	868	C	C2-N3-C4	6.62	123.21	119.90
35	BA	913	A	C4-C5-C6	-6.62	113.69	117.00
35	BA	1069	C	N3-C4-N4	6.62	122.64	118.00
2	AB	104	A	C3'-C2'-C1'	6.62	106.80	101.50
2	AB	835	C	O4'-C1'-N1	6.62	113.50	108.20
2	AB	1262	A	C2-N3-C4	6.62	113.91	110.60
2	AB	2101	A	C4-C5-C6	-6.62	113.69	117.00
2	AB	2276	G	O4'-C4'-C3'	-6.62	97.38	104.00
2	AB	2379	G	N1-C2-N3	6.62	127.87	123.90
2	AB	2759	G	C6-N1-C2	-6.62	121.13	125.10
37	BC	48	C	C4'-C3'-C2'	-6.62	95.98	102.60
48	BN	55	ARG	NE-CZ-NH1	6.62	123.61	120.30
2	AB	186	G	C8-N9-C4	6.62	109.05	106.40
2	AB	294	A	C4-C5-N7	-6.62	107.39	110.70
2	AB	798	G	C4-C5-N7	6.62	113.45	110.80
2	AB	1263	U	N1-C2-N3	6.62	118.87	114.90
2	AB	1564	C	C5'-C4'-C3'	-6.62	105.41	116.00
2	AB	1821	A	C5-N7-C8	-6.62	100.59	103.90
2	AB	1901	A	C4-C5-N7	6.62	114.01	110.70
35	BA	124	C	C3'-C2'-C1'	6.62	106.80	101.50
35	BA	764	C	P-O3'-C3'	6.62	127.65	119.70
35	BA	775	G	C4-C5-N7	-6.62	108.15	110.80
35	BA	1308	U	C6-N1-C2	-6.62	117.03	121.00
48	BN	104	PHE	CB-CG-CD2	-6.62	116.17	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	AS	49	ARG	NE-CZ-NH2	-6.62	116.99	120.30
2	AB	929	U	C4'-C3'-C2'	-6.62	95.98	102.60
2	AB	1550	C	N3-C2-O2	-6.62	117.27	121.90
2	AB	2051	A	O4'-C1'-N9	6.62	113.50	108.20
2	AB	2370	G	C4-C5-N7	-6.62	108.15	110.80
35	BA	1314	C	N3-C2-O2	-6.62	117.27	121.90
1	AA	21	G	C5'-C4'-O4'	6.62	117.04	109.10
1	AA	54	G	C5-C6-N1	6.62	114.81	111.50
2	AB	1524	G	C5'-C4'-C3'	-6.62	105.41	116.00
2	AB	1673	G	O4'-C1'-N9	6.62	113.49	108.20
2	AB	1788	C	N3-C4-C5	-6.62	119.25	121.90
2	AB	2183	A	C5'-C4'-O4'	6.62	117.04	109.10
2	AB	2464	G	C6-N1-C2	-6.62	121.13	125.10
35	BA	513	C	O4'-C1'-N1	6.62	113.49	108.20
35	BA	1237	C	P-O3'-C3'	6.62	127.64	119.70
35	BA	1334	G	C4-C5-N7	-6.62	108.15	110.80
2	AB	27	G	C5-N7-C8	-6.62	100.99	104.30
2	AB	120	U	C2-N3-C4	-6.62	123.03	127.00
2	AB	1910	G	N9-C4-C5	6.62	108.05	105.40
2	AB	2351	G	C6-C5-N7	6.62	134.37	130.40
2	AB	2807	U	N3-C2-O2	-6.62	117.57	122.20
35	BA	584	G	C6-N1-C2	6.62	129.07	125.10
35	BA	1075	U	N1-C2-N3	6.62	118.87	114.90
2	AB	15	G	C2-N3-C4	6.61	115.21	111.90
2	AB	1569	A	C5-C6-N1	6.61	121.01	117.70
2	AB	1811	G	N7-C8-N9	6.61	116.41	113.10
2	AB	2287	A	C6-C5-N7	6.61	136.93	132.30
2	AB	2454	G	C5'-C4'-O4'	6.61	117.03	109.10
35	BA	662	U	C5-C6-N1	-6.61	119.39	122.70
2	AB	259	G	N3-C4-C5	-6.61	125.29	128.60
2	AB	1588	G	C4-C5-C6	6.61	122.77	118.80
35	BA	1003	G	N1-C6-O6	-6.61	115.93	119.90
2	AB	1326	U	P-O3'-C3'	6.61	127.63	119.70
2	AB	1625	C	N3-C4-C5	-6.61	119.26	121.90
2	AB	2191	A	C8-N9-C4	-6.61	103.16	105.80
2	AB	2266	A	C5-C6-N6	6.61	128.99	123.70
35	BA	173	U	N3-C2-O2	-6.61	117.57	122.20
35	BA	273	U	O4'-C1'-N1	6.61	113.49	108.20
35	BA	1074	G	O4'-C4'-C3'	6.61	111.39	106.10
35	BA	1214	C	P-O3'-C3'	6.61	127.63	119.70
35	BA	1314	C	O4'-C4'-C3'	6.61	111.39	106.10
2	AB	730	A	C5-C6-N1	-6.61	114.40	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2531	A	N7-C8-N9	6.61	117.10	113.80
35	BA	960	U	N3-C2-O2	-6.61	117.57	122.20
35	BA	1454	G	N9-C4-C5	6.61	108.04	105.40
2	AB	218	A	N1-C2-N3	-6.61	126.00	129.30
2	AB	582	A	C2-N3-C4	6.61	113.90	110.60
2	AB	1394	U	O4'-C1'-N1	6.61	113.49	108.20
2	AB	1756	G	C6-N1-C2	-6.61	121.14	125.10
2	AB	2414	G	O4'-C1'-N9	-6.61	102.91	108.20
35	BA	24	U	C5-C6-N1	-6.61	119.40	122.70
35	BA	105	G	N3-C2-N2	6.61	124.53	119.90
35	BA	376	G	N9-C4-C5	-6.61	102.76	105.40
35	BA	1244	G	C6-C5-N7	6.61	134.37	130.40
2	AB	551	G	C6-C5-N7	6.61	134.36	130.40
2	AB	780	G	C4'-C3'-C2'	-6.61	96.00	102.60
2	AB	1674	G	N3-C4-C5	-6.61	125.30	128.60
2	AB	2311	A	C5-C6-N1	6.61	121.00	117.70
35	BA	35	G	C4-C5-N7	-6.61	108.16	110.80
35	BA	387	U	O4'-C4'-C3'	6.61	111.39	106.10
35	BA	412	A	C6-N1-C2	-6.61	114.64	118.60
35	BA	430	A	N3-C4-C5	6.61	131.42	126.80
35	BA	494	G	N7-C8-N9	6.61	116.40	113.10
35	BA	749	A	N1-C2-N3	-6.61	126.00	129.30
35	BA	1071	C	N3-C4-N4	6.61	122.62	118.00
35	BA	1084	G	N7-C8-N9	-6.61	109.80	113.10
2	AB	614	A	C5-C6-N1	-6.60	114.40	117.70
2	AB	1255	U	N1-C2-O2	6.60	127.42	122.80
2	AB	1678	A	P-O3'-C3'	6.60	127.62	119.70
35	BA	86	G	N1-C2-N2	-6.60	110.26	116.20
35	BA	305	G	C4-C5-N7	-6.60	108.16	110.80
35	BA	1222	G	C4-C5-N7	6.60	113.44	110.80
36	BB	9	A	P-O3'-C3'	6.60	127.62	119.70
37	BC	45	G	N3-C4-C5	-6.60	125.30	128.60
1	AA	30	C	O4'-C1'-C2'	6.60	113.54	107.60
2	AB	342	A	C4-C5-N7	-6.60	107.40	110.70
2	AB	1348	C	P-O3'-C3'	6.60	127.62	119.70
2	AB	1826	G	C5-N7-C8	6.60	107.60	104.30
2	AB	1895	C	N3-C4-N4	6.60	122.62	118.00
2	AB	2614	A	C6-N1-C2	6.60	122.56	118.60
2	AB	2787	C	C5-C4-N4	-6.60	115.58	120.20
35	BA	137	U	N1-C1'-C2'	-6.60	104.74	112.00
35	BA	141	G	C3'-C2'-C1'	6.60	106.78	101.50
35	BA	474	G	O4'-C1'-N9	6.60	113.48	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	859	G	N7-C8-N9	-6.60	109.80	113.10
35	BA	865	A	N9-C4-C5	-6.60	103.16	105.80
35	BA	981	U	C4'-C3'-C2'	-6.60	96.00	102.60
35	BA	1497	G	N1-C6-O6	-6.60	115.94	119.90
2	AB	1157	G	N9-C4-C5	-6.60	102.76	105.40
2	AB	2340	A	C1'-O4'-C4'	6.60	115.18	109.90
2	AB	2855	C	C4-C5-C6	6.60	120.70	117.40
35	BA	316	C	N1-C1'-C2'	-6.60	104.74	112.00
35	BA	515	G	N7-C8-N9	6.60	116.40	113.10
35	BA	1056	U	C2-N3-C4	-6.60	123.04	127.00
43	BI	6	ILE	CA-CB-CG1	6.60	123.54	111.00
1	AA	58	A	C4-C5-C6	-6.60	113.70	117.00
1	AA	108	A	O4'-C1'-N9	-6.60	102.92	108.20
2	AB	232	G	N7-C8-N9	6.60	116.40	113.10
2	AB	490	C	C1'-O4'-C4'	6.60	115.18	109.90
2	AB	1196	C	C2-N3-C4	6.60	123.20	119.90
2	AB	2168	G	C8-N9-C1'	6.60	135.58	127.00
2	AB	2714	G	C8-N9-C4	6.60	109.04	106.40
2	AB	2735	G	C5-C6-O6	-6.60	124.64	128.60
2	AB	977	G	N1-C2-N3	-6.60	119.94	123.90
2	AB	1162	G	N3-C4-C5	-6.60	125.30	128.60
2	AB	1256	G	N1-C2-N3	6.60	127.86	123.90
2	AB	1501	G	N9-C4-C5	-6.60	102.76	105.40
2	AB	2186	G	N9-C4-C5	6.60	108.04	105.40
2	AB	2419	U	N3-C4-C5	6.60	118.56	114.60
35	BA	202	G	C5-N7-C8	6.60	107.60	104.30
35	BA	418	C	C2-N3-C4	-6.60	116.60	119.90
35	BA	667	G	N7-C8-N9	6.60	116.40	113.10
1	AA	69	G	C4-C5-C6	6.60	122.76	118.80
2	AB	1207	C	O4'-C1'-N1	6.60	113.48	108.20
2	AB	2264	C	N1-C2-O2	6.60	122.86	118.90
2	AB	2729	G	C5-N7-C8	-6.60	101.00	104.30
35	BA	298	A	C6-N1-C2	-6.60	114.64	118.60
35	BA	504	C	N1-C2-O2	6.60	122.86	118.90
2	AB	83	A	N1-C6-N6	6.59	122.56	118.60
2	AB	109	C	C5-C6-N1	6.59	124.30	121.00
2	AB	313	G	N9-C4-C5	6.59	108.04	105.40
2	AB	328	U	C3'-C2'-C1'	6.59	106.78	101.50
2	AB	357	C	O4'-C1'-N1	6.59	113.47	108.20
2	AB	492	A	O4'-C4'-C3'	6.59	111.38	106.10
2	AB	780	G	C5-N7-C8	-6.59	101.00	104.30
2	AB	836	G	C5-N7-C8	6.59	107.60	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	851	C	N3-C4-C5	-6.59	119.26	121.90
2	AB	896	A	N7-C8-N9	-6.59	110.50	113.80
2	AB	942	G	O4'-C1'-N9	6.59	113.47	108.20
2	AB	1075	C	N1-C2-O2	6.59	122.86	118.90
2	AB	1186	G	C4-C5-N7	-6.59	108.16	110.80
2	AB	1859	U	O4'-C1'-N1	6.59	113.48	108.20
2	AB	2855	C	N1-C2-O2	6.59	122.86	118.90
35	BA	87	C	N3-C4-N4	6.59	122.62	118.00
35	BA	517	G	O4'-C1'-N9	6.59	113.48	108.20
35	BA	761	G	N3-C2-N2	-6.59	115.28	119.90
35	BA	1010	U	O4'-C1'-N1	6.59	113.48	108.20
35	BA	1526	G	C5-C6-N1	-6.59	108.20	111.50
37	BC	16	A	C8-N9-C4	-6.59	103.16	105.80
37	BC	55	A	N1-C2-N3	-6.59	126.00	129.30
38	BD	16	C	C5'-C4'-O4'	-6.59	101.19	109.10
1	AA	100	G	C8-N9-C4	-6.59	103.76	106.40
2	AB	346	A	C2-N3-C4	6.59	113.90	110.60
2	AB	406	G	N3-C2-N2	-6.59	115.28	119.90
2	AB	961	C	C5-C6-N1	6.59	124.30	121.00
2	AB	1393	A	N1-C6-N6	-6.59	114.64	118.60
2	AB	1892	C	C6-N1-C2	-6.59	117.66	120.30
2	AB	2338	C	N1-C1'-C2'	-6.59	104.75	112.00
35	BA	230	G	C1'-O4'-C4'	6.59	115.17	109.90
35	BA	887	G	N3-C4-N9	6.59	129.96	126.00
2	AB	234	U	O4'-C1'-N1	6.59	113.47	108.20
2	AB	321	U	N1-C2-N3	6.59	118.86	114.90
2	AB	548	G	N9-C4-C5	6.59	108.04	105.40
2	AB	597	G	C4-C5-C6	-6.59	114.84	118.80
2	AB	1414	C	N3-C4-N4	6.59	122.61	118.00
2	AB	1494	A	C4-C5-C6	6.59	120.30	117.00
2	AB	1789	A	C4'-C3'-C2'	-6.59	96.01	102.60
2	AB	1845	G	C5'-C4'-C3'	-6.59	105.45	116.00
2	AB	1967	C	C5-C4-N4	6.59	124.81	120.20
2	AB	2035	G	C2-N3-C4	6.59	115.19	111.90
2	AB	2162	G	O4'-C1'-N9	6.59	113.47	108.20
2	AB	2207	C	N1-C1'-C2'	-6.59	104.75	112.00
35	BA	186	C	O4'-C1'-N1	6.59	113.47	108.20
35	BA	879	C	C5-C4-N4	-6.59	115.58	120.20
35	BA	1516	2MG	P-O3'-C3'	6.59	127.61	119.70
36	BB	53	G	N7-C8-N9	6.59	116.40	113.10
2	AB	89	A	C8-N9-C4	6.59	108.44	105.80
2	AB	1143	A	C8-N9-C4	-6.59	103.16	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1246	A	C5-N7-C8	6.59	107.19	103.90
2	AB	1286	A	C8-N9-C4	-6.59	103.16	105.80
2	AB	1290	C	O4'-C1'-N1	6.59	113.47	108.20
2	AB	1292	G	C1'-O4'-C4'	-6.59	104.63	109.90
2	AB	2235	G	C4-C5-N7	-6.59	108.16	110.80
2	AB	2294	G	C2-N3-C4	6.59	115.19	111.90
2	AB	2367	G	C5-C6-O6	-6.59	124.65	128.60
2	AB	2461	A	C1'-O4'-C4'	6.59	115.17	109.90
35	BA	529	G	C4-C5-N7	-6.59	108.16	110.80
35	BA	976	G	C4'-C3'-C2'	-6.59	96.01	102.60
35	BA	1094	G	C5-N7-C8	6.59	107.59	104.30
35	BA	1125	U	C3'-C2'-C1'	-6.59	96.23	101.50
35	BA	1497	G	C5-C6-O6	6.59	132.55	128.60
2	AB	419	U	C2-N3-C4	-6.59	123.05	127.00
2	AB	1380	G	C4-C5-C6	6.59	122.75	118.80
35	BA	1202	U	C3'-C2'-C1'	6.59	106.77	101.50
2	AB	296	U	O4'-C1'-N1	6.59	113.47	108.20
2	AB	906	U	C5'-C4'-O4'	6.59	117.00	109.10
2	AB	1079	C	N1-C2-O2	6.59	122.85	118.90
2	AB	1947	C	N3-C4-C5	-6.59	119.27	121.90
2	AB	2340	A	N3-C4-C5	-6.59	122.19	126.80
2	AB	2657	A	O4'-C4'-C3'	6.59	111.37	106.10
7	AG	70	ARG	NE-CZ-NH2	6.59	123.59	120.30
35	BA	276	G	N3-C4-C5	-6.59	125.31	128.60
35	BA	318	G	P-O3'-C3'	6.59	127.61	119.70
35	BA	904	U	O4'-C1'-N1	6.59	113.47	108.20
35	BA	1031	C	C5'-C4'-O4'	-6.59	101.20	109.10
35	BA	1278	G	C5'-C4'-O4'	6.59	117.00	109.10
38	BD	40	C	N1-C2-O2	6.59	122.85	118.90
2	AB	558	U	C5-C4-O4	6.58	129.85	125.90
2	AB	614	A	C5-C6-N6	6.58	128.97	123.70
2	AB	869	G	C2-N3-C4	6.58	115.19	111.90
35	BA	494	G	C1'-O4'-C4'	-6.58	104.63	109.90
2	AB	60	G	C4'-C3'-C2'	-6.58	96.02	102.60
2	AB	440	C	C2-N1-C1'	-6.58	111.56	118.80
2	AB	1272	A	N1-C2-N3	-6.58	126.01	129.30
2	AB	1339	G	N7-C8-N9	-6.58	109.81	113.10
2	AB	1586	A	N9-C4-C5	6.58	108.43	105.80
2	AB	1760	C	N3-C4-N4	6.58	122.61	118.00
2	AB	2485	G	N3-C4-C5	-6.58	125.31	128.60
2	AB	2563	U	O4'-C1'-N1	6.58	113.47	108.20
2	AB	2722	G	C5-C6-N1	6.58	114.79	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2877	G	C5-C6-N1	6.58	114.79	111.50
35	BA	82	G	C8-N9-C4	-6.58	103.77	106.40
35	BA	312	C	C5'-C4'-O4'	6.58	117.00	109.10
35	BA	377	G	C2-N3-C4	6.58	115.19	111.90
35	BA	910	C	O4'-C1'-N1	6.58	113.47	108.20
35	BA	1324	A	C4-C5-N7	6.58	113.99	110.70
1	AA	6	G	C1'-O4'-C4'	6.58	115.17	109.90
2	AB	1057	A	N3-C4-N9	-6.58	122.14	127.40
2	AB	1057	A	C5-N7-C8	-6.58	100.61	103.90
2	AB	2001	C	C2-N3-C4	6.58	123.19	119.90
2	AB	2122	U	P-O3'-C3'	6.58	127.60	119.70
11	AK	7	TYR	CB-CG-CD1	-6.58	117.05	121.00
27	A0	52	ARG	NE-CZ-NH2	6.58	123.59	120.30
35	BA	212	G	C8-N9-C4	-6.58	103.77	106.40
35	BA	687	A	N7-C8-N9	-6.58	110.51	113.80
35	BA	867	G	C4-C5-C6	6.58	122.75	118.80
35	BA	970	C	C5-C4-N4	-6.58	115.59	120.20
35	BA	1068	G	N3-C4-C5	-6.58	125.31	128.60
35	BA	1100	C	C4-C5-C6	6.58	120.69	117.40
2	AB	1650	A	C5-C6-N1	6.58	120.99	117.70
2	AB	2397	G	C4-C5-N7	-6.58	108.17	110.80
2	AB	2601	C	N1-C2-O2	6.58	122.85	118.90
17	AQ	30	ARG	NE-CZ-NH1	-6.58	117.01	120.30
35	BA	581	G	C5-N7-C8	-6.58	101.01	104.30
35	BA	860	A	C5'-C4'-C3'	-6.58	105.47	116.00
1	AA	2	G	C6-N1-C2	-6.58	121.15	125.10
2	AB	15	G	C1'-O4'-C4'	-6.58	104.64	109.90
2	AB	62	U	C6-N1-C2	-6.58	117.05	121.00
2	AB	151	C	N3-C2-O2	-6.58	117.29	121.90
2	AB	168	G	C6-C5-N7	-6.58	126.45	130.40
2	AB	252	G	C6-N1-C2	-6.58	121.15	125.10
2	AB	409	G	C4-C5-N7	-6.58	108.17	110.80
2	AB	760	G	C1'-O4'-C4'	-6.58	104.64	109.90
2	AB	1463	C	C4'-C3'-C2'	-6.58	96.02	102.60
2	AB	1655	A	C4-C5-N7	-6.58	107.41	110.70
2	AB	1873	G	N1-C6-O6	6.58	123.85	119.90
2	AB	2612	C	C5'-C4'-O4'	6.58	116.99	109.10
35	BA	506	G	N9-C1'-C2'	-6.58	104.76	112.00
35	BA	560	A	C5-C6-N1	6.58	120.99	117.70
35	BA	562	U	N1-C2-N3	6.58	118.85	114.90
35	BA	754	C	C6-N1-C2	-6.58	117.67	120.30
35	BA	1506	U	O4'-C1'-N1	6.58	113.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	655	A	C5-C6-N6	6.58	128.96	123.70
2	AB	2884	U	C5-C4-O4	6.58	129.85	125.90
35	BA	112	G	C6-C5-N7	-6.58	126.45	130.40
35	BA	151	A	N1-C6-N6	6.58	122.55	118.60
35	BA	176	C	O4'-C4'-C3'	6.58	111.36	106.10
35	BA	1300	G	C2-N3-C4	6.58	115.19	111.90
35	BA	1334	G	N3-C2-N2	-6.58	115.30	119.90
1	AA	32	U	C2-N3-C4	-6.58	123.06	127.00
1	AA	39	A	C2-N3-C4	-6.58	107.31	110.60
2	AB	83	A	C1'-O4'-C4'	-6.58	104.64	109.90
2	AB	597	G	N1-C6-O6	-6.58	115.95	119.90
2	AB	836	G	C4-C5-C6	6.58	122.75	118.80
2	AB	906	U	C5-C6-N1	-6.58	119.41	122.70
2	AB	1288	G	C4-C5-C6	6.58	122.75	118.80
2	AB	1797	G	C2-N3-C4	6.58	115.19	111.90
2	AB	1814	G	N7-C8-N9	-6.58	109.81	113.10
35	BA	51	A	C2-N3-C4	6.58	113.89	110.60
35	BA	71	A	N3-C4-C5	-6.58	122.20	126.80
35	BA	219	U	C5-C6-N1	-6.58	119.41	122.70
35	BA	335	C	N3-C4-N4	6.58	122.60	118.00
35	BA	735	C	N3-C4-N4	-6.58	113.40	118.00
35	BA	869	G	C2-N3-C4	6.58	115.19	111.90
2	AB	266	G	N3-C4-N9	6.57	129.94	126.00
2	AB	879	G	C4-C5-N7	-6.57	108.17	110.80
2	AB	902	C	N3-C4-C5	-6.57	119.27	121.90
2	AB	1471	G	O4'-C1'-N9	6.57	113.46	108.20
2	AB	1786	A	C4-C5-C6	-6.57	113.71	117.00
2	AB	2148	G	N3-C4-C5	-6.57	125.31	128.60
35	BA	395	C	N3-C4-N4	6.57	122.60	118.00
35	BA	799	G	N3-C4-C5	-6.57	125.31	128.60
35	BA	1328	C	O4'-C4'-C3'	6.57	111.36	106.10
35	BA	1347	G	N1-C2-N2	6.57	122.12	116.20
36	BB	24	G	C5-N7-C8	-6.57	101.01	104.30
1	AA	52	A	O4'-C1'-N9	6.57	113.46	108.20
2	AB	2064	C	N1-C2-O2	6.57	122.84	118.90
2	AB	2405	G	N7-C8-N9	6.57	116.39	113.10
2	AB	2538	C	N3-C4-C5	-6.57	119.27	121.90
35	BA	26	A	C2-N3-C4	6.57	113.89	110.60
35	BA	236	A	C5-N7-C8	6.57	107.19	103.90
35	BA	564	C	O4'-C1'-C2'	-6.57	99.23	105.80
2	AB	833	A	N7-C8-N9	-6.57	110.52	113.80
2	AB	1093	G	C8-N9-C4	-6.57	103.77	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1163	G	C5-C6-N1	6.57	114.79	111.50
2	AB	1172	C	C5-C6-N1	6.57	124.29	121.00
2	AB	1511	G	C1'-O4'-C4'	-6.57	104.64	109.90
2	AB	1654	A	C5'-C4'-C3'	-6.57	105.49	116.00
2	AB	1929	G	C8-N9-C4	-6.57	103.77	106.40
35	BA	230	G	O4'-C4'-C3'	-6.57	97.43	104.00
35	BA	530	G	C2-N3-C4	6.57	115.19	111.90
35	BA	1007	U	O4'-C1'-N1	6.57	113.46	108.20
35	BA	1171	A	C4'-C3'-C2'	6.57	109.17	102.60
35	BA	1281	C	C5-C4-N4	6.57	124.80	120.20
1	AA	10	G	C4-C5-C6	-6.57	114.86	118.80
2	AB	772	C	P-O3'-C3'	6.57	127.58	119.70
2	AB	913	U	C3'-C2'-C1'	6.57	106.75	101.50
2	AB	1677	A	O5'-P-OP2	-6.57	99.79	105.70
2	AB	2776	A	O4'-C1'-C2'	-6.57	99.23	105.80
35	BA	59	A	N9-C4-C5	-6.57	103.17	105.80
35	BA	689	C	C4-C5-C6	6.57	120.68	117.40
35	BA	1000	A	C1'-O4'-C4'	-6.57	104.65	109.90
35	BA	1133	G	C4-C5-C6	6.57	122.74	118.80
1	AA	67	G	N3-C2-N2	-6.57	115.30	119.90
1	AA	114	C	C5-C4-N4	6.57	124.80	120.20
1	AA	120	U	C1'-O4'-C4'	-6.57	104.65	109.90
2	AB	900	A	C5'-C4'-O4'	6.57	116.98	109.10
2	AB	1468	U	O4'-C1'-N1	6.57	113.45	108.20
2	AB	1606	C	C5-C6-N1	-6.57	117.72	121.00
2	AB	2067	G	C5-C6-O6	-6.57	124.66	128.60
2	AB	2429	G	C8-N9-C4	-6.57	103.77	106.40
2	AB	2574	G	C1'-O4'-C4'	6.57	115.15	109.90
2	AB	2794	C	C2-N3-C4	6.57	123.18	119.90
35	BA	853	C	N3-C4-N4	6.57	122.60	118.00
35	BA	868	C	N1-C2-O2	6.57	122.84	118.90
42	BH	49	TYR	CB-CG-CD2	-6.57	117.06	121.00
2	AB	706	A	C5-C6-N6	6.56	128.95	123.70
2	AB	1096	A	C2-N3-C4	6.56	113.88	110.60
2	AB	1424	G	N9-C4-C5	6.56	108.03	105.40
2	AB	1829	A	N9-C4-C5	6.56	108.43	105.80
2	AB	2488	G	C2-N3-C4	6.56	115.18	111.90
2	AB	399	U	O4'-C1'-N1	6.56	113.45	108.20
2	AB	1048	A	N9-C4-C5	6.56	108.42	105.80
2	AB	1174	U	C4-C5-C6	6.56	123.64	119.70
2	AB	1687	G	N3-C4-C5	-6.56	125.32	128.60
2	AB	1769	U	N1-C2-N3	6.56	118.84	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1981	A	O4'-C4'-C3'	6.56	111.35	106.10
2	AB	2444	G	C6-C5-N7	6.56	134.34	130.40
2	AB	2621	G	N1-C2-N3	6.56	127.84	123.90
2	AB	2704	C	O4'-C1'-N1	6.56	113.45	108.20
19	AS	94	LEU	CB-CG-CD1	6.56	122.16	111.00
35	BA	148	G	N3-C4-N9	6.56	129.94	126.00
36	BB	72	U	C1'-O4'-C4'	-6.56	104.65	109.90
2	AB	386	G	C2-N3-C4	6.56	115.18	111.90
2	AB	430	A	C2-N3-C4	6.56	113.88	110.60
2	AB	1133	A	C8-N9-C4	-6.56	103.17	105.80
2	AB	1847	A	N1-C2-N3	6.56	132.58	129.30
2	AB	2776	A	C6-C5-N7	6.56	136.89	132.30
13	AM	80	ASP	CB-CG-OD2	-6.56	112.39	118.30
35	BA	81	A	C3'-C2'-C1'	6.56	106.75	101.50
35	BA	1233	G	C1'-O4'-C4'	-6.56	104.65	109.90
35	BA	1541	U	C6-N1-C2	-6.56	117.06	121.00
37	BC	13	A	N1-C2-N3	6.56	132.58	129.30
2	AB	1144	A	C8-N9-C4	-6.56	103.18	105.80
2	AB	1240	U	C3'-C2'-C1'	-6.56	96.25	101.50
2	AB	1491	G	C5-C6-O6	-6.56	124.67	128.60
2	AB	1588	G	C6-N1-C2	-6.56	121.17	125.10
2	AB	1933	G	N1-C2-N3	-6.56	119.97	123.90
2	AB	2089	C	C5-C4-N4	-6.56	115.61	120.20
35	BA	105	G	N1-C2-N3	-6.56	119.96	123.90
35	BA	112	G	N3-C4-C5	-6.56	125.32	128.60
35	BA	227	G	N9-C4-C5	6.56	108.02	105.40
35	BA	761	G	N3-C4-C5	-6.56	125.32	128.60
35	BA	1010	U	N3-C2-O2	-6.56	117.61	122.20
35	BA	1050	G	C8-N9-C4	-6.56	103.78	106.40
35	BA	1104	G	N9-C1'-C2'	-6.56	104.78	112.00
35	BA	1211	U	C6-N1-C2	-6.56	117.06	121.00
37	BC	24	A	N9-C4-C5	6.56	108.42	105.80
2	AB	104	A	N9-C4-C5	-6.56	103.18	105.80
2	AB	266	G	N3-C2-N2	-6.56	115.31	119.90
2	AB	443	A	C3'-C2'-C1'	6.56	106.75	101.50
2	AB	1122	G	C8-N9-C4	-6.56	103.78	106.40
2	AB	1156	A	O4'-C4'-C3'	6.56	111.35	106.10
2	AB	1236	G	N3-C4-C5	-6.56	125.32	128.60
2	AB	1330	C	C5-C4-N4	-6.56	115.61	120.20
2	AB	1800	C	P-O3'-C3'	6.56	127.57	119.70
2	AB	2010	G	C5'-C4'-O4'	6.56	116.97	109.10
2	AB	2234	G	N1-C2-N2	-6.56	110.30	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2260	C	C5-C6-N1	-6.56	117.72	121.00
2	AB	2520	C	N3-C4-C5	6.56	124.52	121.90
2	AB	2784	U	C5-C6-N1	6.56	125.98	122.70
2	AB	2888	C	N3-C2-O2	6.56	126.49	121.90
35	BA	417	G	N1-C2-N3	-6.56	119.97	123.90
35	BA	1062	U	C4-C5-C6	6.56	123.63	119.70
35	BA	1211	U	N1-C2-O2	-6.56	118.21	122.80
35	BA	1428	A	O4'-C1'-N9	6.56	113.44	108.20
55	BU	63	TYR	CB-CG-CD1	-6.56	117.06	121.00
2	AB	1369	G	C1'-O4'-C4'	6.56	115.14	109.90
2	AB	1474	U	C3'-C2'-C1'	6.56	106.75	101.50
1	AA	111	U	C4-C5-C6	6.55	123.63	119.70
2	AB	793	A	C5'-C4'-O4'	6.55	116.97	109.10
2	AB	1173	U	N1-C2-N3	6.55	118.83	114.90
2	AB	2013	A	C5'-C4'-O4'	6.55	116.97	109.10
2	AB	2625	G	N3-C2-N2	-6.55	115.31	119.90
35	BA	457	G	N3-C4-C5	-6.55	125.32	128.60
35	BA	683	G	C2-N3-C4	6.55	115.18	111.90
35	BA	970	C	N1-C2-O2	6.55	122.83	118.90
35	BA	1258	G	O4'-C1'-N9	6.55	113.44	108.20
2	AB	2260	C	O4'-C1'-N1	6.55	113.44	108.20
2	AB	2705	A	C8-N9-C4	-6.55	103.18	105.80
4	AD	13	ARG	NE-CZ-NH1	-6.55	117.02	120.30
35	BA	443	C	N3-C4-N4	-6.55	113.41	118.00
35	BA	492	C	O4'-C1'-N1	6.55	113.44	108.20
35	BA	825	A	C8-N9-C4	6.55	108.42	105.80
36	BB	74	C	C4-C5-C6	-6.55	114.12	117.40
1	AA	26	C	N3-C2-O2	-6.55	117.31	121.90
2	AB	122	G	N9-C4-C5	6.55	108.02	105.40
2	AB	271	G	N9-C4-C5	6.55	108.02	105.40
2	AB	1327	A	O4'-C1'-N9	6.55	113.44	108.20
2	AB	1440	U	C5'-C4'-O4'	6.55	116.96	109.10
2	AB	1720	U	C5'-C4'-O4'	6.55	116.96	109.10
35	BA	182	A	O4'-C1'-N9	6.55	113.44	108.20
35	BA	508	U	N3-C4-O4	6.55	123.99	119.40
35	BA	792	A	O4'-C1'-N9	6.55	113.44	108.20
35	BA	1056	U	N1-C2-N3	6.55	118.83	114.90
35	BA	1170	A	O4'-C1'-N9	6.55	113.44	108.20
35	BA	1281	C	C6-N1-C2	-6.55	117.68	120.30
1	AA	84	G	C2-N3-C4	-6.55	108.62	111.90
1	AA	85	G	C6-C5-N7	-6.55	126.47	130.40
2	AB	578	G	O3'-P-O5'	-6.55	91.55	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	901	C	N1-C2-O2	6.55	122.83	118.90
2	AB	978	G	C2'-C3'-O3'	6.55	124.18	113.70
2	AB	1120	G	C4'-C3'-C2'	-6.55	96.05	102.60
2	AB	1455	G	C5'-C4'-C3'	-6.55	105.52	116.00
2	AB	1510	G	C8-N9-C4	-6.55	103.78	106.40
2	AB	1621	U	N1-C1'-C2'	-6.55	104.80	112.00
2	AB	1844	C	C5'-C4'-O4'	6.55	116.96	109.10
2	AB	2081	U	C5'-C4'-C3'	-6.55	105.52	116.00
2	AB	2382	G	N1-C2-N3	-6.55	119.97	123.90
2	AB	2824	C	C5-C6-N1	6.55	124.28	121.00
35	BA	192	A	N1-C2-N3	-6.55	126.03	129.30
35	BA	192	A	C8-N9-C4	-6.55	103.18	105.80
35	BA	530	G	P-O3'-C3'	6.55	127.56	119.70
35	BA	616	G	C5-C6-O6	-6.55	124.67	128.60
35	BA	867	G	C5-C6-O6	6.55	132.53	128.60
35	BA	1136	C	N1-C2-N3	6.55	123.78	119.20
37	BC	20	G	N9-C4-C5	6.55	108.02	105.40
2	AB	319	G	N7-C8-N9	6.55	116.37	113.10
2	AB	1806	C	C5-C6-N1	6.55	124.27	121.00
26	AZ	70	LEU	CB-CG-CD2	6.55	122.13	111.00
35	BA	41	G	O4'-C4'-C3'	-6.55	97.45	104.00
35	BA	565	U	C3'-C2'-C1'	6.55	106.74	101.50
2	AB	174	U	O4'-C1'-N1	6.55	113.44	108.20
2	AB	1030	C	P-O3'-C3'	6.55	127.56	119.70
2	AB	1087	G	C6-N1-C2	-6.55	121.17	125.10
2	AB	1492	G	N1-C2-N3	6.55	127.83	123.90
2	AB	1574	C	C2-N3-C4	6.55	123.17	119.90
2	AB	1659	G	C5-N7-C8	-6.55	101.03	104.30
2	AB	2284	A	O4'-C1'-C2'	-6.55	99.25	105.80
2	AB	2542	A	C4-C5-N7	-6.55	107.43	110.70
13	AM	70	ARG	NE-CZ-NH1	6.55	123.57	120.30
35	BA	76	G	C1'-O4'-C4'	-6.55	104.66	109.90
35	BA	421	U	C3'-C2'-C1'	6.55	106.74	101.50
35	BA	656	G	O4'-C1'-N9	-6.55	102.96	108.20
35	BA	681	A	O4'-C1'-C2'	-6.55	99.25	105.80
35	BA	1508	A	C4-C5-N7	-6.55	107.43	110.70
41	BG	141	VAL	CA-CB-CG2	6.55	120.72	110.90
2	AB	242	G	N7-C8-N9	6.54	116.37	113.10
2	AB	457	A	C1'-O4'-C4'	6.54	115.14	109.90
2	AB	500	G	C5'-C4'-O4'	6.54	116.95	109.10
2	AB	1722	A	C5'-C4'-C3'	6.54	126.47	116.00
2	AB	1936	A	N1-C6-N6	6.54	122.53	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2053	G	C5'-C4'-O4'	6.54	116.95	109.10
2	AB	2861	U	N3-C4-C5	6.54	118.53	114.60
35	BA	211	G	C3'-C2'-C1'	6.54	106.74	101.50
35	BA	1073	U	N3-C2-O2	-6.54	117.62	122.20
1	AA	99	A	C4-C5-C6	6.54	120.27	117.00
2	AB	348	A	O4'-C4'-C3'	-6.54	97.46	104.00
2	AB	598	U	N3-C4-O4	6.54	123.98	119.40
2	AB	1153	C	C5-C6-N1	6.54	124.27	121.00
2	AB	1279	G	N3-C4-N9	6.54	129.93	126.00
2	AB	1501	G	C5-N7-C8	6.54	107.57	104.30
2	AB	1582	C	C4'-C3'-C2'	-6.54	96.06	102.60
2	AB	2002	G	N3-C4-N9	-6.54	122.07	126.00
2	AB	2126	A	C4-C5-N7	6.54	113.97	110.70
2	AB	2307	G	N7-C8-N9	6.54	116.37	113.10
28	A1	15	ARG	NE-CZ-NH2	6.54	123.57	120.30
30	A3	12	ARG	NH1-CZ-NH2	-6.54	112.20	119.40
35	BA	547	A	C6-N1-C2	6.54	122.53	118.60
35	BA	831	A	C6-C5-N7	6.54	136.88	132.30
35	BA	831	A	C8-N9-C4	-6.54	103.18	105.80
35	BA	1248	A	N3-C4-C5	-6.54	122.22	126.80
36	BB	43	G	N1-C6-O6	-6.54	115.97	119.90
38	BD	52	C	C6-N1-C1'	6.54	128.65	120.80
2	AB	415	A	P-O3'-C3'	6.54	127.55	119.70
2	AB	650	C	C2-N3-C4	6.54	123.17	119.90
2	AB	815	C	C4-C5-C6	-6.54	114.13	117.40
2	AB	1216	G	C4-C5-N7	-6.54	108.18	110.80
2	AB	1907	G	N3-C4-C5	-6.54	125.33	128.60
2	AB	2500	U	C1'-O4'-C4'	-6.54	104.67	109.90
16	AP	63	ARG	NE-CZ-NH1	6.54	123.57	120.30
35	BA	1	A	N3-C4-N9	6.54	132.63	127.40
35	BA	20	U	C6-N1-C2	-6.54	117.08	121.00
35	BA	389	A	C5-C6-N1	6.54	120.97	117.70
35	BA	686	U	C5-C6-N1	-6.54	119.43	122.70
2	AB	1771	C	C5-C4-N4	-6.54	115.62	120.20
2	AB	2487	G	C8-N9-C4	-6.54	103.78	106.40
7	AG	147	ARG	CD-NE-CZ	6.54	132.76	123.60
35	BA	98	A	O4'-C4'-C3'	6.54	111.33	106.10
35	BA	791	G	C5-C6-O6	-6.54	124.68	128.60
35	BA	996	A	N9-C4-C5	6.54	108.42	105.80
2	AB	203	A	C6-C5-N7	6.54	136.88	132.30
2	AB	348	A	N1-C2-N3	-6.54	126.03	129.30
2	AB	545	U	N1-C2-N3	-6.54	110.98	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	581	C	C4-C5-C6	-6.54	114.13	117.40
2	AB	669	G	C1'-O4'-C4'	6.54	115.13	109.90
2	AB	1108	U	N1-C2-N3	6.54	118.82	114.90
2	AB	1185	G	C4-N9-C1'	-6.54	118.00	126.50
2	AB	2385	C	N3-C4-N4	6.54	122.58	118.00
2	AB	2706	A	C5-C6-N1	6.54	120.97	117.70
2	AB	2813	A	C3'-C2'-C1'	6.54	106.73	101.50
35	BA	92	U	N3-C4-C5	-6.54	110.68	114.60
35	BA	737	C	O4'-C1'-N1	6.54	113.43	108.20
35	BA	1509	C	N1-C2-O2	6.54	122.82	118.90
2	AB	1634	A	C2-N3-C4	6.54	113.87	110.60
2	AB	1896	G	N3-C2-N2	-6.54	115.32	119.90
2	AB	2383	G	C2-N3-C4	6.54	115.17	111.90
2	AB	2688	G	C6-N1-C2	-6.54	121.18	125.10
35	BA	177	G	C4-C5-N7	6.54	113.42	110.80
35	BA	936	C	C2-N3-C4	6.54	123.17	119.90
35	BA	1036	A	C4-C5-C6	6.54	120.27	117.00
35	BA	1178	G	N9-C4-C5	6.54	108.02	105.40
2	AB	190	A	C5-C6-N6	-6.54	118.47	123.70
2	AB	866	A	O4'-C1'-N9	6.54	113.43	108.20
2	AB	1241	A	N7-C8-N9	6.54	117.07	113.80
2	AB	2111	U	O4'-C4'-C3'	6.54	111.33	106.10
2	AB	2180	U	C5-C4-O4	-6.54	121.98	125.90
2	AB	2358	A	C4-C5-C6	6.54	120.27	117.00
35	BA	650	G	C4'-C3'-C2'	-6.54	96.06	102.60
35	BA	830	G	C8-N9-C4	-6.54	103.79	106.40
35	BA	1227	A	P-O3'-C3'	6.54	127.54	119.70
2	AB	49	A	C5-C6-N1	6.53	120.97	117.70
2	AB	156	A	C5'-C4'-O4'	6.53	116.94	109.10
2	AB	168	G	C8-N9-C4	-6.53	103.79	106.40
2	AB	437	U	C4'-C3'-C2'	-6.53	96.07	102.60
2	AB	445	C	N3-C4-N4	6.53	122.57	118.00
2	AB	623	C	N3-C4-C5	-6.53	119.29	121.90
2	AB	972	A	O4'-C1'-N9	6.53	113.43	108.20
2	AB	1043	C	C1'-O4'-C4'	6.53	115.13	109.90
2	AB	1238	G	C4'-C3'-C2'	-6.53	96.07	102.60
2	AB	1423	G	N3-C4-C5	-6.53	125.33	128.60
2	AB	1710	G	N7-C8-N9	-6.53	109.83	113.10
2	AB	1710	G	N9-C4-C5	-6.53	102.79	105.40
2	AB	1789	A	C6-C5-N7	6.53	136.87	132.30
35	BA	46	G	C4-C5-N7	6.53	113.41	110.80
35	BA	193	C	N1-C2-O2	6.53	122.82	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	459	A	O4'-C1'-N9	6.53	113.43	108.20
35	BA	562	U	C4-C5-C6	6.53	123.62	119.70
35	BA	794	A	C4-C5-C6	-6.53	113.73	117.00
35	BA	988	G	C3'-C2'-C1'	6.53	106.73	101.50
35	BA	1533	C	N1-C2-N3	-6.53	114.63	119.20
38	BD	7	G	C1'-O4'-C4'	6.53	115.13	109.90
2	AB	318	C	C4-C5-C6	-6.53	114.13	117.40
2	AB	2892	G	C5-N7-C8	-6.53	101.03	104.30
35	BA	133	U	N1-C2-N3	-6.53	110.98	114.90
2	AB	12	U	C6-N1-C2	-6.53	117.08	121.00
2	AB	189	G	C1'-O4'-C4'	6.53	115.12	109.90
2	AB	556	A	N9-C1'-C2'	-6.53	104.82	112.00
2	AB	582	A	C8-N9-C4	-6.53	103.19	105.80
2	AB	784	G	O4'-C1'-N9	6.53	113.42	108.20
2	AB	1076	C	C4'-C3'-C2'	-6.53	96.07	102.60
2	AB	1165	A	N3-C4-C5	6.53	131.37	126.80
2	AB	1218	G	N3-C4-C5	-6.53	125.33	128.60
2	AB	1226	A	N3-C4-N9	6.53	132.62	127.40
2	AB	1904	G	N1-C6-O6	6.53	123.82	119.90
2	AB	2429	G	N3-C4-C5	-6.53	125.33	128.60
2	AB	2864	G	C6-C5-N7	-6.53	126.48	130.40
35	BA	130	A	N3-C4-N9	6.53	132.62	127.40
35	BA	637	C	N3-C4-N4	6.53	122.57	118.00
36	BB	76	A	C6-C5-N7	6.53	136.87	132.30
2	AB	220	G	N3-C2-N2	-6.53	115.33	119.90
2	AB	2281	A	C5-C6-N6	-6.53	118.48	123.70
35	BA	199	A	C5'-C4'-O4'	6.53	116.94	109.10
35	BA	1405	G	N3-C2-N2	-6.53	115.33	119.90
36	BB	58	A	N1-C2-N3	6.53	132.56	129.30
2	AB	981	A	C3'-C2'-C1'	-6.53	96.28	101.50
2	AB	1728	C	C5-C6-N1	6.53	124.26	121.00
2	AB	1851	U	N1-C2-O2	6.53	127.37	122.80
2	AB	1979	U	C2-N3-C4	-6.53	123.08	127.00
2	AB	2015	A	N1-C2-N3	-6.53	126.04	129.30
35	BA	38	G	N9-C4-C5	6.53	108.01	105.40
35	BA	167	A	C2-N3-C4	-6.53	107.34	110.60
35	BA	267	C	C3'-C2'-C1'	6.53	106.72	101.50
35	BA	521	G	N3-C4-N9	6.53	129.92	126.00
35	BA	1273	C	C6-N1-C2	6.53	122.91	120.30
2	AB	75	G	N3-C4-C5	-6.53	125.34	128.60
2	AB	118	A	C4-C5-C6	6.53	120.26	117.00
2	AB	205	G	N9-C4-C5	6.53	108.01	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	987	C	C4-C5-C6	-6.53	114.14	117.40
2	AB	1409	U	N3-C4-O4	6.53	123.97	119.40
2	AB	1606	C	C4-C5-C6	6.53	120.66	117.40
2	AB	1659	G	N7-C8-N9	6.53	116.36	113.10
2	AB	2201	G	C8-N9-C4	-6.53	103.79	106.40
2	AB	2487	G	N1-C2-N3	-6.53	119.98	123.90
2	AB	2728	U	P-O3'-C3'	6.53	127.53	119.70
35	BA	290	C	O4'-C1'-N1	6.53	113.42	108.20
35	BA	596	A	C5-C6-N1	6.53	120.96	117.70
2	AB	48	G	C1'-O4'-C4'	-6.52	104.68	109.90
2	AB	88	G	N9-C1'-C2'	-6.52	104.82	112.00
2	AB	218	A	N9-C1'-C2'	6.52	122.48	114.00
2	AB	1489	C	O4'-C1'-N1	6.52	113.42	108.20
2	AB	1542	U	C6-N1-C2	-6.52	117.09	121.00
2	AB	1756	G	P-O3'-C3'	6.52	127.53	119.70
2	AB	2383	G	N3-C2-N2	-6.52	115.33	119.90
2	AB	7	G	C2-N3-C4	-6.52	108.64	111.90
2	AB	209	C	C5-C4-N4	6.52	124.77	120.20
2	AB	522	A	N3-C4-N9	6.52	132.62	127.40
2	AB	605	G	C8-N9-C4	6.52	109.01	106.40
2	AB	858	G	N3-C2-N2	-6.52	115.33	119.90
2	AB	1117	C	O4'-C1'-N1	6.52	113.42	108.20
2	AB	1195	G	N1-C6-O6	6.52	123.81	119.90
2	AB	1358	G	C2-N3-C4	-6.52	108.64	111.90
2	AB	1864	U	C4'-C3'-C2'	-6.52	96.08	102.60
2	AB	2490	G	N1-C2-N3	6.52	127.81	123.90
18	AR	26	GLU	OE1-CD-OE2	6.52	131.13	123.30
35	BA	279	A	C5-C6-N1	6.52	120.96	117.70
35	BA	785	G	C4-C5-C6	6.52	122.71	118.80
35	BA	836	G	N3-C4-C5	-6.52	125.34	128.60
35	BA	1333	A	C5-C6-N6	-6.52	118.48	123.70
2	AB	1540	G	C8-N9-C4	-6.52	103.79	106.40
2	AB	2586	U	N3-C4-O4	6.52	123.97	119.40
2	AB	2858	C	N3-C4-C5	6.52	124.51	121.90
24	AX	57	TYR	CG-CD2-CE2	-6.52	116.08	121.30
35	BA	1026	G	C6-C5-N7	-6.52	126.49	130.40
1	AA	23	G	C4-C5-N7	-6.52	108.19	110.80
1	AA	92	C	N3-C2-O2	-6.52	117.34	121.90
2	AB	278	A	N1-C6-N6	6.52	122.51	118.60
2	AB	490	C	C5-C4-N4	6.52	124.76	120.20
2	AB	559	G	C5-C6-O6	-6.52	124.69	128.60
2	AB	727	A	O4'-C1'-N9	6.52	113.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	818	G	C3'-C2'-C1'	6.52	106.72	101.50
2	AB	1239	G	N3-C4-C5	-6.52	125.34	128.60
2	AB	1584	U	N3-C2-O2	-6.52	117.64	122.20
2	AB	1854	A	O3'-P-O5'	-6.52	91.61	104.00
2	AB	2002	G	N9-C4-C5	6.52	108.01	105.40
2	AB	2247	A	C4'-C3'-C2'	-6.52	96.08	102.60
2	AB	2598	A	C4-C5-N7	-6.52	107.44	110.70
2	AB	2751	G	C3'-C2'-C1'	-6.52	96.28	101.50
35	BA	46	G	C5-C6-O6	-6.52	124.69	128.60
35	BA	197	A	N1-C6-N6	6.52	122.51	118.60
35	BA	537	G	C8-N9-C4	-6.52	103.79	106.40
35	BA	917	G	P-O3'-C3'	6.52	127.52	119.70
35	BA	961	U	C4'-C3'-C2'	-6.52	96.08	102.60
2	AB	134	G	N3-C2-N2	-6.52	115.34	119.90
2	AB	678	C	O4'-C1'-C2'	-6.52	99.28	105.80
2	AB	709	U	C5-C6-N1	-6.52	119.44	122.70
2	AB	838	C	C4-C5-C6	6.52	120.66	117.40
2	AB	1741	C	N1-C2-O2	6.52	122.81	118.90
2	AB	1756	G	C6-C5-N7	-6.52	126.49	130.40
2	AB	2425	A	C3'-C2'-C1'	-6.52	96.29	101.50
5	AE	169	ARG	NE-CZ-NH1	-6.52	117.04	120.30
22	AV	34	VAL	CA-CB-CG2	6.52	120.68	110.90
27	A0	63	ALA	CB-CA-C	-6.52	100.33	110.10
35	BA	81	A	C8-N9-C4	-6.52	103.19	105.80
35	BA	137	U	C1'-O4'-C4'	6.52	115.11	109.90
35	BA	1168	U	C6-N1-C1'	-6.52	112.08	121.20
35	BA	1229	A	C5-C6-N1	6.52	120.96	117.70
36	BB	1	A	C6-C5-N7	6.52	136.86	132.30
2	AB	704	G	N7-C8-N9	6.52	116.36	113.10
2	AB	1732	C	N1-C2-O2	6.52	122.81	118.90
2	AB	2811	G	C6-C5-N7	-6.52	126.49	130.40
35	BA	170	U	P-O3'-C3'	6.52	127.52	119.70
35	BA	1222	G	C4'-C3'-C2'	-6.52	96.08	102.60
1	AA	44	G	C2-N3-C4	6.51	115.16	111.90
2	AB	82	U	C1'-O4'-C4'	6.51	115.11	109.90
2	AB	2591	C	C5-C4-N4	6.51	124.76	120.20
2	AB	2757	A	C6-N1-C2	6.51	122.51	118.60
35	BA	831	A	C5'-C4'-O4'	6.51	116.92	109.10
35	BA	1061	G	C5-N7-C8	-6.51	101.04	104.30
35	BA	1473	G	C5'-C4'-O4'	6.51	116.92	109.10
2	AB	2816	G	N3-C4-C5	-6.51	125.34	128.60
35	BA	6	G	N3-C4-C5	-6.51	125.34	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	107	G	O4'-C4'-C3'	6.51	111.31	106.10
35	BA	886	G	C5-N7-C8	-6.51	101.04	104.30
38	BD	45	A	C5-N7-C8	-6.51	100.64	103.90
2	AB	1029	A	C4'-C3'-C2'	-6.51	96.09	102.60
2	AB	1054	A	C3'-C2'-C1'	6.51	106.71	101.50
2	AB	1199	U	O4'-C4'-C3'	6.51	111.31	106.10
2	AB	1209	U	N1-C2-N3	6.51	118.81	114.90
2	AB	1893	C	C1'-O4'-C4'	6.51	115.11	109.90
2	AB	2102	G	P-O3'-C3'	6.51	127.52	119.70
2	AB	2405	G	C5-C6-N1	6.51	114.76	111.50
2	AB	2677	G	C6-N1-C2	6.51	129.01	125.10
2	AB	2733	A	N9-C4-C5	-6.51	103.19	105.80
7	AG	79	ARG	CD-NE-CZ	6.51	132.72	123.60
41	BG	187	ARG	NE-CZ-NH1	6.51	123.56	120.30
2	AB	154	U	C5-C4-O4	6.51	129.81	125.90
2	AB	555	G	N7-C8-N9	6.51	116.36	113.10
2	AB	561	G	C1'-O4'-C4'	6.51	115.11	109.90
2	AB	848	C	C5-C4-N4	-6.51	115.64	120.20
2	AB	1794	A	C5-C6-N1	6.51	120.95	117.70
2	AB	1866	A	C5-C6-N1	-6.51	114.44	117.70
2	AB	2027	G	C5-C6-O6	-6.51	124.69	128.60
2	AB	2066	C	N1-C2-N3	-6.51	114.64	119.20
2	AB	2565	A	N7-C8-N9	6.51	117.05	113.80
2	AB	2766	A	N1-C2-N3	-6.51	126.05	129.30
2	AB	2851	A	C5-C6-N1	6.51	120.95	117.70
35	BA	1211	U	C5-C6-N1	-6.51	119.44	122.70
2	AB	858	G	C5-C6-O6	-6.51	124.69	128.60
2	AB	1549	A	N3-C4-C5	-6.51	122.24	126.80
2	AB	1632	A	C8-N9-C4	6.51	108.40	105.80
2	AB	2392	A	C5-N7-C8	-6.51	100.65	103.90
2	AB	2502	G	C1'-O4'-C4'	6.51	115.11	109.90
12	AL	49	ASP	CB-CG-OD2	-6.51	112.44	118.30
35	BA	1494	G	C1'-O4'-C4'	6.51	115.11	109.90
2	AB	561	G	C8-N9-C4	-6.51	103.80	106.40
2	AB	1570	A	C5-C6-N1	6.51	120.95	117.70
2	AB	1892	C	C2-N3-C4	6.51	123.15	119.90
2	AB	2101	A	C1'-O4'-C4'	6.51	115.11	109.90
2	AB	2440	C	C2'-C3'-O3'	6.51	124.11	113.70
2	AB	2446	G	C5'-C4'-O4'	6.51	116.91	109.10
2	AB	2478	A	C8-N9-C4	-6.51	103.20	105.80
35	BA	149	A	C3'-C2'-C1'	6.51	106.71	101.50
35	BA	1224	U	N3-C4-O4	-6.51	114.85	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	22	A	C5-C6-N1	6.51	120.95	117.70
39	BE	94	ARG	CD-NE-CZ	6.51	132.71	123.60
2	AB	889	C	N1-C2-N3	-6.50	114.65	119.20
2	AB	2110	G	O5'-C5'-C4'	6.50	124.06	111.70
35	BA	352	C	C5'-C4'-O4'	6.50	116.91	109.10
1	AA	70	C	O4'-C1'-N1	6.50	113.40	108.20
2	AB	245	G	N3-C4-N9	6.50	129.90	126.00
2	AB	407	G	O4'-C1'-C2'	-6.50	99.30	105.80
2	AB	557	C	P-O3'-C3'	6.50	127.50	119.70
2	AB	677	A	C4-C5-C6	-6.50	113.75	117.00
2	AB	1402	U	N1-C2-O2	6.50	127.35	122.80
2	AB	1904	G	N3-C4-N9	6.50	129.90	126.00
35	BA	16	A	C4-C5-C6	-6.50	113.75	117.00
35	BA	306	A	N7-C8-N9	-6.50	110.55	113.80
35	BA	906	A	C2'-C3'-O3'	6.50	124.11	113.70
35	BA	936	C	O4'-C1'-N1	6.50	113.40	108.20
58	BX	12	ASP	CB-CG-OD1	6.50	124.15	118.30
2	AB	175	G	C5-C6-N1	6.50	114.75	111.50
2	AB	583	G	C3'-C2'-C1'	6.50	106.70	101.50
2	AB	941	A	O4'-C1'-N9	6.50	113.40	108.20
2	AB	1359	A	O4'-C1'-N9	6.50	113.40	108.20
2	AB	1436	G	O4'-C1'-N9	6.50	113.40	108.20
2	AB	1891	G	C8-N9-C4	-6.50	103.80	106.40
2	AB	2648	G	C5'-C4'-C3'	-6.50	105.60	116.00
2	AB	2669	G	C5-C6-N1	6.50	114.75	111.50
8	AH	148	ARG	NE-CZ-NH1	6.50	123.55	120.30
35	BA	130	A	N9-C1'-C2'	-6.50	104.85	112.00
35	BA	190	A	C5-N7-C8	-6.50	100.65	103.90
35	BA	749	A	C4'-C3'-C2'	-6.50	96.10	102.60
35	BA	1133	G	C5-C6-O6	-6.50	124.70	128.60
35	BA	1324	A	N1-C6-N6	-6.50	114.70	118.60
35	BA	1413	A	C5-N7-C8	6.50	107.15	103.90
2	AB	379	G	C5-N7-C8	-6.50	101.05	104.30
2	AB	1890	A	C6-N1-C2	-6.50	114.70	118.60
2	AB	2506	U	C6-N1-C2	-6.50	117.10	121.00
2	AB	2866	U	C5-C6-N1	-6.50	119.45	122.70
35	BA	559	A	O4'-C1'-N9	6.50	113.40	108.20
35	BA	677	U	O4'-C1'-C2'	6.50	113.45	107.60
35	BA	1527	U	N1-C2-O2	-6.50	118.25	122.80
1	AA	54	G	O4'-C4'-C3'	6.50	111.30	106.10
2	AB	285	G	C6-N1-C2	-6.50	121.20	125.10
2	AB	379	G	O4'-C1'-N9	6.50	113.40	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	944	C	C5-C4-N4	6.50	124.75	120.20
2	AB	2289	G	C8-N9-C4	-6.50	103.80	106.40
2	AB	2409	G	C4'-C3'-C2'	-6.50	96.10	102.60
2	AB	2467	C	N1-C2-O2	6.50	122.80	118.90
2	AB	2797	U	O4'-C1'-C2'	-6.50	99.30	105.80
4	AD	63	ILE	C-N-CA	6.50	137.95	121.70
35	BA	185	U	C5'-C4'-O4'	6.50	116.90	109.10
35	BA	543	U	N1-C2-N3	6.50	118.80	114.90
35	BA	552	U	O4'-C4'-C3'	6.50	111.30	106.10
35	BA	585	G	C8-N9-C4	-6.50	103.80	106.40
35	BA	630	A	C5'-C4'-O4'	6.50	116.90	109.10
35	BA	746	A	P-O3'-C3'	6.50	127.50	119.70
35	BA	843	U	N3-C4-C5	-6.50	110.70	114.60
35	BA	896	C	C2-N3-C4	6.50	123.15	119.90
35	BA	1426	G	C3'-C2'-C1'	6.50	106.70	101.50
2	AB	720	U	N1-C2-N3	6.50	118.80	114.90
2	AB	1638	C	N3-C4-N4	6.50	122.55	118.00
2	AB	1869	G	C4-C5-C6	6.50	122.70	118.80
2	AB	2262	U	C1'-O4'-C4'	-6.50	104.70	109.90
2	AB	2463	C	N1-C2-N3	-6.50	114.65	119.20
35	BA	374	A	N7-C8-N9	6.50	117.05	113.80
35	BA	627	G	C2-N3-C4	6.50	115.15	111.90
35	BA	824	G	C5-C6-O6	-6.50	124.70	128.60
35	BA	1368	A	N9-C4-C5	-6.50	103.20	105.80
2	AB	89	A	C4-C5-N7	-6.50	107.45	110.70
2	AB	134	G	N7-C8-N9	6.50	116.35	113.10
2	AB	769	U	C4'-C3'-C2'	-6.50	96.11	102.60
2	AB	1212	G	C5-N7-C8	-6.50	101.05	104.30
2	AB	1233	C	N3-C4-C5	-6.50	119.30	121.90
2	AB	1490	A	C5-C6-N6	-6.50	118.50	123.70
2	AB	2286	G	C1'-O4'-C4'	-6.50	104.70	109.90
14	AN	58	TYR	CG-CD2-CE2	-6.50	116.10	121.30
35	BA	821	G	C5'-C4'-O4'	6.50	116.89	109.10
35	BA	857	C	N3-C4-C5	-6.50	119.30	121.90
35	BA	1103	C	C5'-C4'-O4'	6.50	116.89	109.10
38	BD	26	C	C3'-C2'-C1'	6.50	106.70	101.50
56	BV	33	TRP	C-N-CA	6.50	137.94	121.70
2	AB	38	A	C8-N9-C4	-6.49	103.20	105.80
2	AB	138	U	N3-C2-O2	-6.49	117.66	122.20
2	AB	705	A	C5-C6-N1	6.49	120.95	117.70
2	AB	811	U	C6-N1-C2	-6.49	117.10	121.00
2	AB	1452	G	C4'-C3'-C2'	-6.49	96.11	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1549	A	C5'-C4'-O4'	6.49	116.89	109.10
2	AB	1563	U	C5-C4-O4	6.49	129.80	125.90
2	AB	2023	C	C6-N1-C2	-6.49	117.70	120.30
35	BA	332	G	N1-C2-N2	6.49	122.04	116.20
2	AB	354	A	C6-N1-C2	6.49	122.50	118.60
2	AB	479	A	N7-C8-N9	-6.49	110.55	113.80
2	AB	2886	A	N9-C4-C5	-6.49	103.20	105.80
35	BA	468	A	C8-N9-C4	6.49	108.40	105.80
35	BA	505	G	C1'-O4'-C4'	-6.49	104.71	109.90
35	BA	541	G	C2'-C3'-O3'	6.49	124.09	113.70
35	BA	1215	G	N7-C8-N9	6.49	116.35	113.10
2	AB	674	G	N3-C4-C5	-6.49	125.36	128.60
2	AB	836	G	C5-C6-O6	6.49	132.49	128.60
2	AB	1016	G	C2-N3-C4	6.49	115.14	111.90
2	AB	1044	C	C4-C5-C6	-6.49	114.16	117.40
2	AB	1393	A	O4'-C1'-N9	-6.49	103.01	108.20
2	AB	1644	C	N3-C2-O2	-6.49	117.36	121.90
2	AB	1650	A	C8-N9-C4	-6.49	103.20	105.80
2	AB	2063	C	N3-C4-N4	6.49	122.54	118.00
2	AB	2669	G	N1-C6-O6	-6.49	116.01	119.90
2	AB	2712	C	C3'-C2'-C1'	6.49	106.69	101.50
32	A5	3	ARG	NE-CZ-NH2	6.49	123.55	120.30
35	BA	174	A	C5-N7-C8	-6.49	100.66	103.90
35	BA	197	A	C5-C6-N6	-6.49	118.51	123.70
35	BA	822	U	N3-C2-O2	6.49	126.74	122.20
35	BA	874	G	N3-C4-C5	-6.49	125.36	128.60
35	BA	924	C	N1-C1'-C2'	-6.49	104.86	112.00
35	BA	1094	G	N9-C4-C5	6.49	108.00	105.40
35	BA	1249	C	N3-C4-N4	-6.49	113.46	118.00
35	BA	1539	C	N3-C2-O2	-6.49	117.36	121.90
36	BB	69	C	C4-C5-C6	-6.49	114.16	117.40
2	AB	341	C	C6-N1-C2	-6.49	117.70	120.30
2	AB	648	G	C4-C5-N7	-6.49	108.20	110.80
2	AB	1334	G	C4-C5-C6	6.49	122.69	118.80
2	AB	1459	G	C5-N7-C8	-6.49	101.06	104.30
2	AB	2197	U	O3'-P-O5'	-6.49	91.67	104.00
43	BI	112	ARG	NE-CZ-NH1	6.49	123.55	120.30
2	AB	425	G	C5-N7-C8	-6.49	101.06	104.30
2	AB	1307	A	O4'-C1'-N9	6.49	113.39	108.20
2	AB	1808	A	C1'-O4'-C4'	6.49	115.09	109.90
2	AB	2471	A	C4-C5-N7	-6.49	107.46	110.70
2	AB	2861	U	N1-C2-N3	6.49	118.79	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	214	C	N1-C2-O2	6.49	122.79	118.90
2	AB	269	C	C5-C6-N1	6.49	124.24	121.00
2	AB	338	G	C6-N1-C2	-6.49	121.21	125.10
2	AB	1071	G	C5-C6-N1	6.49	114.74	111.50
2	AB	1566	A	P-O5'-C5'	6.49	131.28	120.90
2	AB	1672	A	C8-N9-C4	-6.49	103.21	105.80
2	AB	1691	C	C5'-C4'-O4'	6.49	116.88	109.10
2	AB	1896	G	C6-N1-C2	-6.49	121.21	125.10
2	AB	2505	G	C1'-O4'-C4'	-6.49	104.71	109.90
2	AB	2839	G	N3-C4-C5	-6.49	125.36	128.60
35	BA	30	U	N3-C2-O2	-6.49	117.66	122.20
35	BA	667	G	C6-C5-N7	-6.49	126.51	130.40
2	AB	769	U	C5-C4-O4	-6.48	122.01	125.90
2	AB	2479	U	N3-C4-O4	-6.48	114.86	119.40
35	BA	316	C	C5-C6-N1	6.48	124.24	121.00
35	BA	1520	C	O4'-C1'-N1	6.48	113.39	108.20
38	BD	77	A	C5-N7-C8	-6.48	100.66	103.90
2	AB	210	C	N3-C2-O2	-6.48	117.36	121.90
2	AB	1351	C	C4'-C3'-C2'	-6.48	96.12	102.60
2	AB	1421	G	C6-C5-N7	-6.48	126.51	130.40
2	AB	1540	G	N1-C2-N2	6.48	122.03	116.20
2	AB	1549	A	P-O3'-C3'	6.48	127.48	119.70
2	AB	1568	G	C5-N7-C8	6.48	107.54	104.30
2	AB	2236	U	O4'-C1'-N1	6.48	113.39	108.20
2	AB	2339	C	C6-N1-C2	6.48	122.89	120.30
14	AN	81	ASP	CB-CG-OD1	-6.48	112.47	118.30
35	BA	146	G	C6-N1-C2	-6.48	121.21	125.10
35	BA	569	C	C5'-C4'-C3'	-6.48	105.63	116.00
35	BA	906	A	C6-N1-C2	6.48	122.49	118.60
42	BH	123	LEU	CB-CG-CD2	6.48	122.02	111.00
2	AB	27	G	C5-C6-N1	6.48	114.74	111.50
2	AB	73	A	O4'-C1'-N9	6.48	113.38	108.20
2	AB	387	U	C5-C4-O4	-6.48	122.01	125.90
2	AB	530	G	N3-C4-C5	-6.48	125.36	128.60
2	AB	582	A	C4-C5-C6	6.48	120.24	117.00
2	AB	1768	C	C5-C4-N4	-6.48	115.66	120.20
2	AB	1914	C	C5-C6-N1	-6.48	117.76	121.00
2	AB	2876	G	C6-C5-N7	-6.48	126.51	130.40
35	BA	626	G	C6-C5-N7	-6.48	126.51	130.40
35	BA	740	U	C1'-O4'-C4'	-6.48	104.72	109.90
38	BD	63	C	C2-N3-C4	6.48	123.14	119.90
2	AB	1437	C	C6-N1-C2	6.48	122.89	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1658	C	C4'-C3'-C2'	-6.48	96.12	102.60
2	AB	2149	U	C4-C5-C6	6.48	123.59	119.70
5	AE	83	ARG	CD-NE-CZ	6.48	132.67	123.60
19	AS	44	TYR	CB-CG-CD2	-6.48	117.11	121.00
35	BA	375	U	C2-N3-C4	-6.48	123.11	127.00
35	BA	430	A	C5'-C4'-O4'	6.48	116.88	109.10
35	BA	1057	G	N7-C8-N9	6.48	116.34	113.10
35	BA	1311	A	N1-C2-N3	-6.48	126.06	129.30
2	AB	29	U	N3-C2-O2	-6.48	117.67	122.20
2	AB	160	A	C4-C5-N7	-6.48	107.46	110.70
2	AB	666	A	N7-C8-N9	-6.48	110.56	113.80
2	AB	752	A	N7-C8-N9	-6.48	110.56	113.80
2	AB	763	G	P-O5'-C5'	6.48	131.26	120.90
2	AB	1059	G	C5'-C4'-O4'	6.48	116.87	109.10
2	AB	1075	C	C2-N1-C1'	-6.48	111.67	118.80
2	AB	1498	C	O4'-C1'-C2'	-6.48	99.32	105.80
2	AB	1986	C	C2-N3-C4	6.48	123.14	119.90
2	AB	2474	U	C4'-C3'-C2'	-6.48	96.12	102.60
2	AB	2596	U	N3-C2-O2	-6.48	117.67	122.20
35	BA	99	C	O4'-C1'-N1	6.48	113.38	108.20
35	BA	568	G	O4'-C1'-N9	6.48	113.38	108.20
35	BA	726	C	C6-N1-C2	6.48	122.89	120.30
51	BQ	100	TRP	CD1-CG-CD2	-6.48	101.12	106.30
2	AB	511	U	C5-C4-O4	6.48	129.78	125.90
2	AB	1189	A	C5'-C4'-O4'	6.48	116.87	109.10
2	AB	1249	U	C4'-C3'-C2'	-6.48	96.12	102.60
2	AB	2127	G	C5'-C4'-O4'	6.48	116.87	109.10
35	BA	421	U	C5-C4-O4	-6.48	122.01	125.90
35	BA	747	A	C2-N3-C4	6.48	113.84	110.60
2	AB	1111	A	O4'-C4'-C3'	6.47	111.28	106.10
2	AB	1547	C	N3-C2-O2	-6.47	117.37	121.90
2	AB	1580	A	O4'-C1'-C2'	6.47	113.43	107.60
2	AB	2294	G	N9-C4-C5	6.47	107.99	105.40
34	A7	4	ARG	NE-CZ-NH1	-6.47	117.06	120.30
35	BA	145	G	N9-C4-C5	6.47	107.99	105.40
35	BA	162	A	C5-C6-N6	6.47	128.88	123.70
35	BA	274	A	N9-C1'-C2'	-6.47	104.88	112.00
35	BA	586	C	O4'-C1'-N1	6.47	113.38	108.20
35	BA	1328	C	C3'-C2'-C1'	6.47	106.68	101.50
35	BA	1423	G	N9-C4-C5	-6.47	102.81	105.40
2	AB	398	C	N3-C4-N4	6.47	122.53	118.00
2	AB	1073	A	C5-C6-N1	6.47	120.94	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1665	A	C2-N3-C4	6.47	113.84	110.60
2	AB	1928	A	O4'-C1'-N9	6.47	113.38	108.20
2	AB	2070	A	N1-C2-N3	-6.47	126.06	129.30
2	AB	2162	G	C2-N3-C4	6.47	115.14	111.90
2	AB	2649	C	C2-N3-C4	6.47	123.14	119.90
2	AB	2841	C	O4'-C1'-N1	6.47	113.38	108.20
35	BA	142	G	C4-C5-N7	-6.47	108.21	110.80
35	BA	633	G	N9-C4-C5	6.47	107.99	105.40
35	BA	742	G	N7-C8-N9	6.47	116.34	113.10
35	BA	1167	A	C5'-C4'-O4'	6.47	116.87	109.10
35	BA	1236	A	N9-C1'-C2'	-6.47	104.88	112.00
35	BA	1441	A	C5-N7-C8	6.47	107.14	103.90
41	BG	42	ALA	N-CA-CB	-6.47	101.04	110.10
44	BJ	84	TYR	CB-CG-CD1	6.47	124.88	121.00
2	AB	67	U	N1-C2-N3	6.47	118.78	114.90
2	AB	325	G	O4'-C1'-C2'	6.47	113.42	107.60
2	AB	754	U	N3-C4-C5	-6.47	110.72	114.60
2	AB	2048	G	O4'-C1'-N9	6.47	113.38	108.20
35	BA	301	G	C4-C5-N7	-6.47	108.21	110.80
2	AB	94	A	C4-C5-N7	6.47	113.94	110.70
2	AB	222	A	O4'-C1'-C2'	-6.47	99.33	105.80
2	AB	248	G	C6-C5-N7	-6.47	126.52	130.40
2	AB	627	A	C1'-O4'-C4'	-6.47	104.72	109.90
2	AB	897	C	C6-N1-C2	-6.47	117.71	120.30
2	AB	981	A	C6-C5-N7	6.47	136.83	132.30
2	AB	1073	A	C5'-C4'-C3'	-6.47	105.65	116.00
2	AB	1123	C	N1-C1'-C2'	-6.47	104.88	112.00
2	AB	1595	C	N3-C4-N4	6.47	122.53	118.00
2	AB	2394	C	C5-C4-N4	-6.47	115.67	120.20
2	AB	2428	G	C4-C5-N7	-6.47	108.21	110.80
2	AB	2593	U	C5'-C4'-C3'	-6.47	105.65	116.00
36	BB	48	U	C1'-O4'-C4'	-6.47	104.72	109.90
2	AB	73	A	N9-C4-C5	6.47	108.39	105.80
2	AB	295	G	N3-C4-C5	-6.47	125.37	128.60
2	AB	534	U	C4-C5-C6	6.47	123.58	119.70
2	AB	1021	A	C5-C6-N1	6.47	120.93	117.70
2	AB	1121	C	N3-C2-O2	-6.47	117.37	121.90
35	BA	859	G	N3-C4-C5	-6.47	125.37	128.60
46	BL	38	PHE	CB-CG-CD2	-6.47	116.27	120.80
2	AB	38	A	N7-C8-N9	6.47	117.03	113.80
2	AB	1258	U	N1-C2-O2	6.47	127.33	122.80
2	AB	1583	A	N1-C2-N3	6.47	132.53	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1598	A	C5'-C4'-O4'	6.47	116.86	109.10
2	AB	1997	C	N3-C4-N4	6.47	122.53	118.00
2	AB	2281	A	C8-N9-C4	-6.47	103.21	105.80
2	AB	2427	C	O4'-C1'-N1	6.47	113.37	108.20
2	AB	2559	C	N3-C2-O2	-6.47	117.37	121.90
35	BA	180	U	O4'-C1'-N1	6.47	113.37	108.20
35	BA	690	G	O4'-C1'-N9	6.47	113.37	108.20
35	BA	770	C	C4-C5-C6	6.47	120.63	117.40
35	BA	945	G	N1-C6-O6	6.47	123.78	119.90
35	BA	1093	A	O4'-C4'-C3'	6.47	111.27	106.10
52	BR	73	ASP	CB-CG-OD2	-6.47	112.48	118.30
2	AB	113	U	C5-C4-O4	-6.46	122.02	125.90
2	AB	1782	U	N3-C4-O4	6.46	123.92	119.40
2	AB	1849	G	O4'-C4'-C3'	6.46	111.27	106.10
2	AB	1874	C	C5-C6-N1	6.46	124.23	121.00
2	AB	2674	G	N1-C2-N2	6.46	122.02	116.20
35	BA	795	C	C6-N1-C2	-6.46	117.72	120.30
35	BA	810	C	N3-C2-O2	-6.46	117.37	121.90
35	BA	1494	G	C4-C5-C6	6.46	122.68	118.80
37	BC	43	U	P-O3'-C3'	6.46	127.46	119.70
37	BC	48	C	C2-N3-C4	-6.46	116.67	119.90
39	BE	112	ARG	NE-CZ-NH1	6.46	123.53	120.30
2	AB	722	A	C8-N9-C4	-6.46	103.22	105.80
2	AB	1039	A	C8-N9-C4	-6.46	103.22	105.80
2	AB	1406	U	C2-N3-C4	6.46	130.88	127.00
2	AB	337	C	O4'-C1'-N1	6.46	113.37	108.20
2	AB	998	C	C5'-C4'-O4'	6.46	116.85	109.10
2	AB	1931	U	C6-N1-C2	-6.46	117.12	121.00
2	AB	2559	C	C1'-O4'-C4'	-6.46	104.73	109.90
2	AB	2770	G	O4'-C1'-N9	6.46	113.37	108.20
2	AB	2839	G	N1-C6-O6	6.46	123.78	119.90
35	BA	272	C	C5-C6-N1	6.46	124.23	121.00
35	BA	672	U	C5'-C4'-O4'	6.46	116.85	109.10
35	BA	1317	C	C4-C5-C6	6.46	120.63	117.40
2	AB	103	A	O4'-C1'-N9	6.46	113.37	108.20
2	AB	251	A	C8-N9-C4	-6.46	103.22	105.80
2	AB	928	A	N9-C1'-C2'	-6.46	104.89	112.00
2	AB	1291	C	C4-C5-C6	6.46	120.63	117.40
2	AB	2615	U	P-O3'-C3'	6.46	127.45	119.70
36	BB	30	G	N9-C4-C5	6.46	107.98	105.40
2	AB	264	C	C6-N1-C2	-6.46	117.72	120.30
2	AB	560	C	C5-C6-N1	-6.46	117.77	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1227	G	C8-N9-C4	6.46	108.98	106.40
2	AB	1715	G	C4-C5-N7	-6.46	108.22	110.80
2	AB	2075	U	C1'-O4'-C4'	-6.46	104.73	109.90
2	AB	2439	A	C8-N9-C4	-6.46	103.22	105.80
2	AB	2558	C	C1'-O4'-C4'	6.46	115.07	109.90
2	AB	2744	G	C5-C6-N1	6.46	114.73	111.50
35	BA	109	A	N9-C1'-C2'	-6.46	104.89	112.00
35	BA	201	G	N9-C4-C5	-6.46	102.82	105.40
35	BA	416	G	C4-C5-N7	-6.46	108.22	110.80
35	BA	434	U	C5-C4-O4	6.46	129.78	125.90
35	BA	499	A	C1'-O4'-C4'	-6.46	104.73	109.90
35	BA	892	A	N3-C4-N9	-6.46	122.23	127.40
38	BD	4	G	C4-C5-N7	-6.46	108.22	110.80
47	BM	72	ARG	NE-CZ-NH2	-6.46	117.07	120.30
2	AB	546	U	N1-C2-N3	6.46	118.77	114.90
2	AB	780	G	N3-C4-C5	-6.46	125.37	128.60
2	AB	1518	C	C1'-O4'-C4'	-6.46	104.73	109.90
2	AB	1800	C	C5-C6-N1	6.46	124.23	121.00
2	AB	2173	A	O4'-C1'-N9	6.46	113.36	108.20
35	BA	1080	A	N1-C6-N6	-6.46	114.73	118.60
46	BL	10	ARG	CD-NE-CZ	6.46	132.64	123.60
2	AB	202	U	C1'-O4'-C4'	6.46	115.06	109.90
2	AB	2429	G	C2-N3-C4	6.46	115.13	111.90
35	BA	99	C	C6-N1-C2	6.46	122.88	120.30
35	BA	1027	C	N3-C2-O2	-6.46	117.38	121.90
35	BA	1362	A	C6-N1-C2	-6.46	114.73	118.60
35	BA	1412	C	C5-C4-N4	-6.46	115.68	120.20
2	AB	93	G	C4-C5-C6	6.45	122.67	118.80
2	AB	107	G	C5-C6-N1	6.45	114.73	111.50
2	AB	549	G	N7-C8-N9	6.45	116.33	113.10
2	AB	1061	U	C6-N1-C2	-6.45	117.13	121.00
2	AB	1651	G	C5'-C4'-C3'	-6.45	105.67	116.00
2	AB	1685	C	N3-C2-O2	-6.45	117.38	121.90
2	AB	2138	G	C4-C5-C6	6.45	122.67	118.80
2	AB	2268	A	C5'-C4'-O4'	6.45	116.84	109.10
35	BA	469	C	N1-C2-O2	6.45	122.77	118.90
35	BA	494	G	N3-C4-C5	-6.45	125.37	128.60
35	BA	758	C	C5'-C4'-O4'	-6.45	101.36	109.10
35	BA	852	G	C1'-O4'-C4'	6.45	115.06	109.90
35	BA	960	U	C2-N1-C1'	6.45	125.44	117.70
35	BA	1089	G	C4-C5-C6	6.45	122.67	118.80
35	BA	1229	A	P-O3'-C3'	6.45	127.44	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	248	G	N1-C2-N2	6.45	122.01	116.20
2	AB	756	A	C5-C6-N1	6.45	120.93	117.70
2	AB	1867	G	C5-C6-N1	-6.45	108.27	111.50
35	BA	146	G	N3-C2-N2	-6.45	115.38	119.90
35	BA	567	G	N1-C2-N3	6.45	127.77	123.90
35	BA	1475	G	N9-C4-C5	6.45	107.98	105.40
1	AA	106	G	N3-C4-C5	-6.45	125.37	128.60
2	AB	86	G	C4-C5-N7	6.45	113.38	110.80
2	AB	842	U	C5-C4-O4	-6.45	122.03	125.90
2	AB	939	G	C5-N7-C8	6.45	107.53	104.30
2	AB	1593	A	C5-N7-C8	6.45	107.13	103.90
2	AB	1973	G	N3-C4-N9	6.45	129.87	126.00
2	AB	2004	G	C4'-C3'-C2'	-6.45	96.15	102.60
2	AB	2184	A	N9-C4-C5	6.45	108.38	105.80
2	AB	2469	A	C5-C6-N6	-6.45	118.54	123.70
35	BA	30	U	N3-C4-O4	6.45	123.92	119.40
35	BA	1488	G	N7-C8-N9	6.45	116.33	113.10
2	AB	679	C	C6-N1-C2	6.45	122.88	120.30
2	AB	897	C	N1-C2-N3	6.45	123.71	119.20
2	AB	1521	G	C6-C5-N7	6.45	134.27	130.40
2	AB	2218	G	N9-C4-C5	6.45	107.98	105.40
2	AB	2330	G	C2-N3-C4	6.45	115.12	111.90
35	BA	15	G	C3'-C2'-C1'	6.45	106.66	101.50
35	BA	296	U	C4'-C3'-C2'	-6.45	96.15	102.60
35	BA	671	G	N1-C6-O6	6.45	123.77	119.90
35	BA	736	C	C4-C5-C6	6.45	120.62	117.40
2	AB	718	A	O4'-C1'-N9	6.45	113.36	108.20
35	BA	474	G	C2-N3-C4	6.45	115.12	111.90
2	AB	258	G	O5'-P-OP1	6.45	118.44	110.70
2	AB	395	U	C5-C4-O4	-6.45	122.03	125.90
2	AB	1076	C	O4'-C1'-C2'	-6.45	99.35	105.80
2	AB	1128	G	N3-C4-C5	-6.45	125.38	128.60
2	AB	1499	C	O4'-C1'-N1	6.45	113.36	108.20
2	AB	1645	G	N9-C1'-C2'	-6.45	104.91	112.00
2	AB	1738	G	C5-C6-N1	6.45	114.72	111.50
35	BA	66	A	N3-C4-C5	-6.45	122.29	126.80
35	BA	365	U	C5-C4-O4	-6.45	122.03	125.90
35	BA	1141	C	C4-C5-C6	-6.45	114.18	117.40
35	BA	1147	C	N1-C2-O2	6.45	122.77	118.90
35	BA	1238	A	N3-C4-C5	-6.45	122.29	126.80
2	AB	1170	C	O5'-P-OP1	-6.44	99.90	105.70
11	AK	114	ALA	N-CA-CB	-6.44	101.08	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1514	G	C5-C6-O6	-6.44	124.73	128.60
2	AB	9	G	N3-C2-N2	6.44	124.41	119.90
2	AB	434	U	P-O3'-C3'	6.44	127.43	119.70
2	AB	1235	G	C4-C5-N7	-6.44	108.22	110.80
4	AD	42	ARG	NE-CZ-NH1	6.44	123.52	120.30
35	BA	237	G	N9-C1'-C2'	-6.44	104.91	112.00
35	BA	475	C	C1'-O4'-C4'	6.44	115.05	109.90
35	BA	640	A	N9-C1'-C2'	-6.44	104.91	112.00
35	BA	745	G	C1'-O4'-C4'	6.44	115.05	109.90
35	BA	963	G	O3'-P-O5'	-6.44	91.76	104.00
2	AB	37	C	C4'-C3'-C2'	-6.44	96.16	102.60
2	AB	205	G	C5-N7-C8	6.44	107.52	104.30
2	AB	1148	U	N1-C2-N3	6.44	118.76	114.90
2	AB	1245	G	N3-C2-N2	-6.44	115.39	119.90
2	AB	1963	U	N3-C2-O2	-6.44	117.69	122.20
2	AB	2436	G	O4'-C1'-N9	6.44	113.35	108.20
35	BA	172	A	O4'-C4'-C3'	6.44	111.25	106.10
35	BA	211	G	N7-C8-N9	6.44	116.32	113.10
35	BA	943	U	N1-C2-N3	6.44	118.76	114.90
35	BA	1050	G	N3-C4-C5	-6.44	125.38	128.60
35	BA	1213	A	C4'-C3'-C2'	-6.44	96.16	102.60
35	BA	1474	U	C2-N3-C4	-6.44	123.14	127.00
35	BA	1513	A	C6-N1-C2	6.44	122.46	118.60
38	BD	34	U	C3'-C2'-C1'	-6.44	96.35	101.50
2	AB	851	C	C5-C6-N1	-6.44	117.78	121.00
2	AB	1858	A	C3'-C2'-C1'	-6.44	96.35	101.50
35	BA	1215	G	C1'-O4'-C4'	-6.44	104.75	109.90
35	BA	1215	G	C8-N9-C4	-6.44	103.82	106.40
2	AB	49	A	C3'-C2'-C1'	6.44	106.65	101.50
2	AB	781	A	C5-C6-N6	6.44	128.85	123.70
2	AB	805	G	C5-C6-O6	-6.44	124.74	128.60
2	AB	940	G	C8-N9-C4	-6.44	103.83	106.40
2	AB	1903	G	N9-C4-C5	6.44	107.97	105.40
2	AB	2108	A	N1-C2-N3	-6.44	126.08	129.30
2	AB	2183	A	C4-C5-N7	-6.44	107.48	110.70
2	AB	2550	G	P-O3'-C3'	6.44	127.43	119.70
2	AB	2756	U	P-O3'-C3'	6.44	127.42	119.70
25	AY	44	PHE	CB-CG-CD1	-6.44	116.29	120.80
35	BA	272	C	C1'-O4'-C4'	-6.44	104.75	109.90
35	BA	705	G	C5-C6-O6	6.44	132.46	128.60
35	BA	858	G	C8-N9-C1'	6.44	135.37	127.00
35	BA	1027	C	C5-C6-N1	-6.44	117.78	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1338	G	C6-C5-N7	-6.44	126.54	130.40
35	BA	1368	A	C8-N9-C4	6.44	108.38	105.80
35	BA	1385	G	C4-C5-C6	6.44	122.66	118.80
2	AB	432	A	C6-C5-N7	6.44	136.81	132.30
2	AB	2768	U	N3-C4-C5	-6.44	110.74	114.60
15	AO	91	TYR	CB-CG-CD1	-6.44	117.14	121.00
35	BA	71	A	C4-C5-C6	6.44	120.22	117.00
35	BA	105	G	O4'-C1'-N9	6.44	113.35	108.20
2	AB	507	A	C6-C5-N7	6.43	136.81	132.30
2	AB	619	G	C4-C5-N7	6.43	113.37	110.80
2	AB	795	C	C6-N1-C2	-6.43	117.73	120.30
2	AB	1108	U	N3-C4-O4	6.43	123.90	119.40
2	AB	1653	G	N3-C2-N2	6.43	124.40	119.90
2	AB	1777	U	N3-C2-O2	-6.43	117.70	122.20
2	AB	1804	C	N3-C4-N4	6.43	122.50	118.00
2	AB	1938	A	C3'-C2'-C1'	6.43	106.65	101.50
2	AB	2290	G	N1-C6-O6	-6.43	116.04	119.90
2	AB	2732	G	N9-C4-C5	-6.43	102.83	105.40
35	BA	1	A	N1-C2-N3	-6.43	126.08	129.30
35	BA	53	A	N1-C2-N3	-6.43	126.08	129.30
35	BA	1057	G	O4'-C1'-N9	6.43	113.35	108.20
35	BA	1270	G	N3-C4-N9	-6.43	122.14	126.00
35	BA	1365	G	C6-C5-N7	-6.43	126.54	130.40
1	AA	83	G	C5-C6-O6	-6.43	124.74	128.60
2	AB	121	G	C6-C5-N7	-6.43	126.54	130.40
2	AB	528	A	C5'-C4'-C3'	-6.43	105.71	116.00
2	AB	959	A	N9-C4-C5	-6.43	103.23	105.80
2	AB	1051	G	C5-C6-O6	-6.43	124.74	128.60
2	AB	1266	G	N9-C4-C5	6.43	107.97	105.40
2	AB	2768	U	O4'-C1'-N1	6.43	113.35	108.20
2	AB	2873	A	C6-C5-N7	6.43	136.80	132.30
3	AC	36	ALA	N-CA-CB	-6.43	101.09	110.10
35	BA	712	A	C4-C5-N7	-6.43	107.48	110.70
35	BA	973	G	C6-C5-N7	-6.43	126.54	130.40
35	BA	1304	G	C1'-O4'-C4'	-6.43	104.75	109.90
2	AB	686	U	C5-C6-N1	-6.43	119.48	122.70
2	AB	1812	U	C2-N3-C4	-6.43	123.14	127.00
2	AB	2138	G	N7-C8-N9	6.43	116.31	113.10
35	BA	196	A	C5-N7-C8	6.43	107.12	103.90
35	BA	766	A	C5-N7-C8	-6.43	100.69	103.90
1	AA	57	A	C2'-C3'-O3'	6.43	123.99	113.70
1	AA	107	G	N1-C2-N3	-6.43	120.04	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	274	C	N1-C2-O2	-6.43	115.04	118.90
2	AB	729	G	O4'-C1'-N9	6.43	113.34	108.20
2	AB	1622	G	C4'-C3'-C2'	-6.43	96.17	102.60
2	AB	1852	U	C1'-O4'-C4'	-6.43	104.76	109.90
2	AB	2371	G	N9-C4-C5	6.43	107.97	105.40
2	AB	2806	C	P-O3'-C3'	6.43	127.42	119.70
35	BA	164	G	C5-N7-C8	-6.43	101.08	104.30
35	BA	1066	C	N3-C4-N4	6.43	122.50	118.00
35	BA	1364	U	O4'-C1'-N1	6.43	113.34	108.20
35	BA	1441	A	N1-C2-N3	-6.43	126.08	129.30
2	AB	430	A	O4'-C4'-C3'	6.43	111.24	106.10
2	AB	798	G	N9-C4-C5	-6.43	102.83	105.40
2	AB	2163	A	C5-N7-C8	-6.43	100.69	103.90
35	BA	122	G	C1'-O4'-C4'	-6.43	104.76	109.90
35	BA	794	A	C2-N3-C4	6.43	113.81	110.60
35	BA	803	G	N3-C4-N9	6.43	129.86	126.00
2	AB	608	A	C6-N1-C2	-6.43	114.74	118.60
2	AB	1449	G	C6-N1-C2	-6.43	121.25	125.10
2	AB	1664	A	N1-C2-N3	-6.43	126.09	129.30
2	AB	1719	G	C6-N1-C2	-6.43	121.24	125.10
2	AB	2453	A	N1-C2-N3	-6.43	126.09	129.30
2	AB	2623	G	N1-C2-N3	-6.43	120.04	123.90
2	AB	2685	G	N3-C4-N9	6.43	129.86	126.00
7	AG	7	TYR	CZ-CE2-CD2	-6.43	114.02	119.80
35	BA	338	A	N7-C8-N9	6.43	117.01	113.80
35	BA	374	A	N1-C6-N6	-6.43	114.74	118.60
35	BA	684	U	N3-C2-O2	-6.43	117.70	122.20
35	BA	1169	A	C1'-O4'-C4'	-6.43	104.76	109.90
35	BA	1266	G	C8-N9-C4	-6.43	103.83	106.40
1	AA	31	C	N1-C2-N3	-6.42	114.70	119.20
2	AB	188	G	C5-C6-N1	6.42	114.71	111.50
2	AB	1363	C	C4'-C3'-C2'	-6.42	96.17	102.60
2	AB	1987	A	C8-N9-C4	-6.42	103.23	105.80
2	AB	2016	U	N3-C4-C5	-6.42	110.75	114.60
2	AB	2120	G	C8-N9-C1'	6.42	135.35	127.00
2	AB	2900	A	C2-N3-C4	6.42	113.81	110.60
6	AF	67	ARG	NE-CZ-NH1	6.42	123.51	120.30
35	BA	292	G	N9-C1'-C2'	-6.42	104.93	112.00
35	BA	658	C	C5-C6-N1	6.42	124.21	121.00
35	BA	924	C	O4'-C4'-C3'	-6.42	97.58	104.00
35	BA	1170	A	N1-C2-N3	-6.42	126.09	129.30
35	BA	1369	C	C5-C4-N4	-6.42	115.70	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	BE	3	VAL	CG1-CB-CG2	-6.42	100.62	110.90
2	AB	195	A	O4'-C1'-N9	6.42	113.34	108.20
2	AB	1459	G	C2-N3-C4	6.42	115.11	111.90
2	AB	2256	G	N7-C8-N9	6.42	116.31	113.10
2	AB	2451	A	N1-C6-N6	6.42	122.45	118.60
35	BA	330	C	N1-C2-O2	6.42	122.75	118.90
35	BA	1297	G	N9-C4-C5	6.42	107.97	105.40
36	BB	73	G	N9-C4-C5	6.42	107.97	105.40
1	AA	63	C	C6-N1-C2	-6.42	117.73	120.30
2	AB	11	C	N1-C2-N3	-6.42	114.70	119.20
2	AB	186	G	C5-C6-N1	6.42	114.71	111.50
2	AB	385	C	O4'-C1'-N1	6.42	113.34	108.20
2	AB	751	A	C6-C5-N7	6.42	136.79	132.30
2	AB	966	G	N7-C8-N9	6.42	116.31	113.10
2	AB	2070	A	N7-C8-N9	6.42	117.01	113.80
2	AB	2341	G	N3-C2-N2	6.42	124.40	119.90
2	AB	2446	G	C5-N7-C8	6.42	107.51	104.30
6	AF	78	TRP	NE1-CE2-CZ2	6.42	137.46	130.40
35	BA	514	C	C5-C4-N4	-6.42	115.71	120.20
35	BA	616	G	N9-C4-C5	6.42	107.97	105.40
35	BA	773	G	C4'-C3'-C2'	-6.42	96.18	102.60
35	BA	797	C	C1'-O4'-C4'	6.42	115.04	109.90
2	AB	270	A	C5-N7-C8	-6.42	100.69	103.90
2	AB	2094	A	C4-C5-C6	-6.42	113.79	117.00
2	AB	97	C	C5-C4-N4	-6.42	115.71	120.20
2	AB	701	G	N3-C4-C5	-6.42	125.39	128.60
2	AB	903	C	N3-C2-O2	-6.42	117.41	121.90
2	AB	960	A	C2-N3-C4	6.42	113.81	110.60
2	AB	1547	C	C5'-C4'-O4'	6.42	116.80	109.10
2	AB	2028	U	N3-C4-C5	-6.42	110.75	114.60
2	AB	2780	G	N7-C8-N9	6.42	116.31	113.10
2	AB	2852	G	C4-C5-C6	-6.42	114.95	118.80
20	AT	82	HIS	CA-CB-CG	6.42	124.51	113.60
35	BA	425	G	C2-N3-C4	6.42	115.11	111.90
35	BA	849	G	N7-C8-N9	-6.42	109.89	113.10
35	BA	900	A	C8-N9-C4	-6.42	103.23	105.80
35	BA	927	G	C5-C6-N1	6.42	114.71	111.50
35	BA	1156	G	C6-C5-N7	-6.42	126.55	130.40
35	BA	1160	G	C2-N3-C4	6.42	115.11	111.90
35	BA	1190	G	N1-C2-N2	6.42	121.98	116.20
35	BA	1331	G	C4-C5-C6	6.42	122.65	118.80
2	AB	494	G	C2-N3-C4	6.42	115.11	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1151	A	O4'-C1'-N9	-6.42	103.07	108.20
2	AB	2165	C	N1-C2-O2	6.42	122.75	118.90
2	AB	2582	G	C2-N3-C4	6.42	115.11	111.90
24	AX	48	MET	CG-SD-CE	6.42	110.47	100.20
35	BA	1463	U	C2-N3-C4	-6.42	123.15	127.00
37	BC	24	A	C8-N9-C4	-6.42	103.23	105.80
37	BC	27	A	P-O3'-C3'	6.42	127.40	119.70
2	AB	1989	G	C4-C5-C6	6.42	122.65	118.80
2	AB	2241	A	N9-C4-C5	-6.42	103.23	105.80
2	AB	2766	A	C8-N9-C4	6.42	108.37	105.80
35	BA	346	G	O3'-P-O5'	6.42	116.19	104.00
35	BA	703	G	C4-C5-C6	6.42	122.65	118.80
35	BA	760	G	C1'-O4'-C4'	-6.42	104.77	109.90
35	BA	1206	G	C4-C5-N7	-6.42	108.23	110.80
2	AB	118	A	C5'-C4'-O4'	6.41	116.80	109.10
2	AB	520	G	N1-C6-O6	6.41	123.75	119.90
2	AB	550	C	N3-C4-C5	-6.41	119.33	121.90
2	AB	1314	C	O4'-C4'-C3'	6.41	111.23	106.10
2	AB	1416	G	C5-C6-O6	6.41	132.45	128.60
2	AB	1456	G	N3-C4-C5	-6.41	125.39	128.60
2	AB	1496	A	C1'-O4'-C4'	6.41	115.03	109.90
2	AB	1658	C	N3-C4-C5	-6.41	119.33	121.90
2	AB	1728	C	C4-C5-C6	-6.41	114.19	117.40
2	AB	2252	G	N9-C4-C5	6.41	107.97	105.40
2	AB	2353	G	N3-C2-N2	-6.41	115.41	119.90
2	AB	2655	G	C4-C5-N7	6.41	113.36	110.80
35	BA	234	C	N3-C4-N4	-6.41	113.51	118.00
35	BA	791	G	N3-C4-N9	6.41	129.85	126.00
35	BA	1093	A	C3'-C2'-C1'	6.41	106.63	101.50
40	BF	64	ARG	NE-CZ-NH2	-6.41	117.09	120.30
48	BN	51	PHE	CB-CG-CD2	-6.41	116.31	120.80
2	AB	222	A	N1-C6-N6	-6.41	114.75	118.60
2	AB	576	U	C1'-O4'-C4'	6.41	115.03	109.90
2	AB	1159	U	C2-N3-C4	-6.41	123.15	127.00
35	BA	199	A	N1-C6-N6	6.41	122.45	118.60
38	BD	72	C	C2-N1-C1'	-6.41	111.75	118.80
2	AB	503	A	C5-N7-C8	-6.41	100.69	103.90
2	AB	1617	C	N3-C4-C5	-6.41	119.34	121.90
2	AB	2024	G	N1-C2-N2	6.41	121.97	116.20
35	BA	203	G	N9-C1'-C2'	-6.41	104.95	112.00
35	BA	944	G	C5-C6-N1	6.41	114.71	111.50
35	BA	1412	C	C5-C6-N1	6.41	124.20	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	421	C	C2-N1-C1'	6.41	125.85	118.80
2	AB	710	U	N3-C4-O4	6.41	123.89	119.40
2	AB	1060	U	C5-C4-O4	-6.41	122.06	125.90
2	AB	1298	C	C5-C4-N4	6.41	124.69	120.20
2	AB	2138	G	N3-C2-N2	-6.41	115.41	119.90
2	AB	2139	U	N1-C2-O2	6.41	127.29	122.80
2	AB	2358	A	C5-C6-N6	6.41	128.83	123.70
2	AB	2635	A	C3'-C2'-C1'	6.41	106.63	101.50
2	AB	2708	G	O4'-C1'-N9	6.41	113.33	108.20
4	AD	239	PHE	CB-CG-CD2	6.41	125.29	120.80
35	BA	454	G	C6-C5-N7	-6.41	126.56	130.40
35	BA	524	G	C5-N7-C8	6.41	107.50	104.30
35	BA	1074	G	C2-N3-C4	6.41	115.10	111.90
2	AB	218	A	C3'-C2'-C1'	6.41	106.63	101.50
2	AB	423	A	C5-C6-N1	6.41	120.90	117.70
2	AB	2734	A	C5-N7-C8	-6.41	100.70	103.90
35	BA	122	G	P-O3'-C3'	6.41	127.39	119.70
2	AB	117	G	C3'-C2'-C1'	6.41	106.62	101.50
2	AB	379	G	N1-C6-O6	-6.41	116.06	119.90
2	AB	489	G	C2-N3-C4	6.41	115.10	111.90
2	AB	735	A	N9-C4-C5	6.41	108.36	105.80
2	AB	856	G	C4'-C3'-C2'	-6.41	96.19	102.60
2	AB	867	C	C4-C5-C6	6.41	120.60	117.40
2	AB	971	G	C5-C6-O6	-6.41	124.76	128.60
2	AB	1140	C	C6-N1-C2	-6.41	117.74	120.30
2	AB	1479	G	C8-N9-C1'	6.41	135.33	127.00
2	AB	1658	C	N3-C4-N4	6.41	122.48	118.00
2	AB	1901	A	N1-C2-N3	-6.41	126.10	129.30
2	AB	1987	A	N1-C2-N3	-6.41	126.10	129.30
2	AB	2228	G	C2-N3-C4	6.41	115.10	111.90
17	AQ	7	ARG	NE-CZ-NH2	-6.41	117.10	120.30
35	BA	94	G	N1-C2-N3	-6.41	120.06	123.90
35	BA	241	G	P-O3'-C3'	6.41	127.39	119.70
35	BA	345	C	O4'-C4'-C3'	6.41	111.22	106.10
35	BA	549	C	C4'-C3'-C2'	-6.41	96.19	102.60
35	BA	586	C	C4'-C3'-C2'	-6.41	96.19	102.60
35	BA	1195	C	C5'-C4'-C3'	-6.41	105.75	116.00
35	BA	1211	U	C2-N3-C4	-6.41	123.16	127.00
2	AB	134	G	C6-N1-C2	-6.40	121.26	125.10
2	AB	175	G	C6-N1-C2	-6.40	121.26	125.10
37	BC	35	G	C4-C5-N7	-6.40	108.24	110.80
2	AB	200	U	O4'-C1'-N1	6.40	113.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	306	U	C4-C5-C6	6.40	123.54	119.70
2	AB	489	G	C8-N9-C1'	6.40	135.32	127.00
2	AB	706	A	C5'-C4'-O4'	6.40	116.78	109.10
2	AB	940	G	C4'-C3'-C2'	-6.40	96.20	102.60
2	AB	1239	G	C4-C5-C6	6.40	122.64	118.80
2	AB	1608	A	N9-C4-C5	-6.40	103.24	105.80
2	AB	2116	G	N1-C6-O6	6.40	123.74	119.90
35	BA	136	C	N1-C2-O2	6.40	122.74	118.90
35	BA	187	G	C6-N1-C2	-6.40	121.26	125.10
35	BA	560	A	N3-C4-C5	-6.40	122.32	126.80
35	BA	884	U	O4'-C1'-C2'	-6.40	99.40	105.80
35	BA	1270	G	C4'-C3'-C2'	-6.40	96.20	102.60
35	BA	1288	A	O4'-C1'-N9	6.40	113.32	108.20
2	AB	530	G	N3-C4-N9	6.40	129.84	126.00
2	AB	682	G	N1-C2-N3	-6.40	120.06	123.90
2	AB	1331	G	N3-C2-N2	6.40	124.38	119.90
2	AB	1630	A	N1-C2-N3	-6.40	126.10	129.30
2	AB	1808	A	C3'-C2'-C1'	6.40	106.62	101.50
22	AV	51	PHE	CB-CG-CD1	6.40	125.28	120.80
35	BA	60	A	N7-C8-N9	-6.40	110.60	113.80
35	BA	446	G	N9-C1'-C2'	-6.40	104.96	112.00
35	BA	933	G	C2-N3-C4	6.40	115.10	111.90
35	BA	1206	G	C5-N7-C8	-6.40	101.10	104.30
1	AA	51	G	O4'-C1'-N9	6.40	113.32	108.20
1	AA	92	C	C5'-C4'-O4'	6.40	116.78	109.10
2	AB	976	G	N3-C4-C5	-6.40	125.40	128.60
2	AB	1344	U	N3-C2-O2	-6.40	117.72	122.20
2	AB	1522	A	N9-C4-C5	6.40	108.36	105.80
2	AB	1601	G	C5-N7-C8	6.40	107.50	104.30
2	AB	2005	A	C8-N9-C4	-6.40	103.24	105.80
2	AB	2111	U	N1-C2-O2	-6.40	118.32	122.80
28	A1	39	ASP	CB-CG-OD1	6.40	124.06	118.30
35	BA	550	G	C5-C6-O6	-6.40	124.76	128.60
35	BA	998	C	C6-N1-C2	6.40	122.86	120.30
37	BC	58	C	N3-C4-N4	6.40	122.48	118.00
1	AA	100	G	C4-C5-C6	6.40	122.64	118.80
2	AB	1009	A	C4-C5-C6	6.40	120.20	117.00
2	AB	1395	A	N9-C4-C5	6.40	108.36	105.80
2	AB	2114	A	C4'-C3'-C2'	-6.40	96.20	102.60
35	BA	400	C	N3-C4-C5	-6.40	119.34	121.90
35	BA	1401	G	C2-N3-C4	6.40	115.10	111.90
2	AB	1079	C	N3-C4-C5	-6.40	119.34	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	816	A	C5-C6-N6	-6.40	118.58	123.70
35	BA	919	A	O4'-C1'-N9	6.40	113.32	108.20
2	AB	495	G	C3'-C2'-C1'	-6.39	96.38	101.50
2	AB	509	C	O4'-C1'-N1	6.39	113.31	108.20
2	AB	1056	G	C2-N3-C4	-6.39	108.70	111.90
2	AB	1372	U	N3-C4-O4	-6.39	114.92	119.40
2	AB	1652	A	C6-C5-N7	6.39	136.78	132.30
2	AB	1916	A	C4-C5-N7	-6.39	107.50	110.70
35	BA	127	G	C5-N7-C8	-6.39	101.10	104.30
35	BA	773	G	N3-C4-N9	6.39	129.84	126.00
35	BA	815	A	N3-C4-N9	-6.39	122.28	127.40
35	BA	928	G	N1-C6-O6	-6.39	116.06	119.90
35	BA	1113	C	C5-C6-N1	6.39	124.20	121.00
35	BA	1283	U	C3'-C2'-C1'	6.39	106.62	101.50
35	BA	1313	U	C3'-C2'-C1'	-6.39	96.38	101.50
35	BA	1474	U	C5-C4-O4	-6.39	122.06	125.90
36	BB	47	U	C4'-C3'-C2'	-6.39	96.20	102.60
38	BD	7	G	C6-C5-N7	-6.39	126.56	130.40
2	AB	171	U	C6-N1-C2	-6.39	117.17	121.00
2	AB	583	G	N1-C6-O6	-6.39	116.06	119.90
2	AB	599	A	N3-C4-N9	-6.39	122.29	127.40
2	AB	637	A	N1-C2-N3	6.39	132.50	129.30
2	AB	739	A	N1-C6-N6	-6.39	114.76	118.60
2	AB	838	C	C5-C6-N1	-6.39	117.80	121.00
2	AB	927	A	C4-C5-N7	-6.39	107.50	110.70
2	AB	1924	C	C6-N1-C2	-6.39	117.74	120.30
2	AB	2067	G	N3-C4-N9	6.39	129.84	126.00
35	BA	220	G	C5'-C4'-O4'	6.39	116.77	109.10
35	BA	319	G	N3-C4-C5	-6.39	125.40	128.60
35	BA	549	C	N1-C2-O2	6.39	122.73	118.90
35	BA	1089	G	N3-C4-C5	-6.39	125.40	128.60
35	BA	1291	U	O4'-C1'-C2'	-6.39	99.41	105.80
35	BA	1329	A	N9-C4-C5	6.39	108.36	105.80
37	BC	28	U	C6-N1-C2	-6.39	117.17	121.00
2	AB	880	G	C5-N7-C8	-6.39	101.10	104.30
35	BA	785	G	C5'-C4'-O4'	6.39	116.77	109.10
1	AA	64	G	C4-C5-C6	6.39	122.63	118.80
2	AB	75	G	N3-C4-N9	6.39	129.83	126.00
2	AB	271	G	C5-C6-O6	-6.39	124.77	128.60
2	AB	762	U	N3-C4-C5	6.39	118.43	114.60
2	AB	791	C	C1'-O4'-C4'	-6.39	104.79	109.90
2	AB	1342	A	C5-C6-N1	6.39	120.89	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1927	A	C2'-C3'-O3'	6.39	123.92	113.70
2	AB	2012	G	C4-C5-N7	-6.39	108.24	110.80
2	AB	2070	A	C5-C6-N6	-6.39	118.59	123.70
2	AB	2099	U	C3'-C2'-C1'	6.39	106.61	101.50
2	AB	2167	U	C2-N3-C4	6.39	130.83	127.00
2	AB	2586	U	C4-C5-C6	6.39	123.53	119.70
35	BA	145	G	N1-C6-O6	6.39	123.73	119.90
35	BA	941	G	N3-C4-C5	-6.39	125.41	128.60
2	AB	596	U	N1-C2-O2	-6.39	118.33	122.80
2	AB	1164	C	C6-N1-C2	-6.39	117.75	120.30
2	AB	1235	G	N1-C2-N2	-6.39	110.45	116.20
9	AI	27	ARG	NE-CZ-NH2	-6.39	117.11	120.30
35	BA	1181	G	C5-N7-C8	6.39	107.49	104.30
36	BB	69	C	C5-C6-N1	6.39	124.19	121.00
1	AA	62	C	C6-N1-C2	6.39	122.86	120.30
1	AA	99	A	C8-N9-C4	-6.39	103.25	105.80
2	AB	31	C	C5'-C4'-O4'	6.39	116.76	109.10
2	AB	790	U	N3-C4-C5	6.39	118.43	114.60
2	AB	904	G	C8-N9-C4	-6.39	103.85	106.40
2	AB	1696	G	C4-C5-N7	6.39	113.35	110.80
2	AB	1862	G	N1-C6-O6	6.39	123.73	119.90
2	AB	2160	C	N1-C2-O2	6.39	122.73	118.90
2	AB	2254	C	C6-N1-C2	-6.39	117.75	120.30
2	AB	2329	U	C4-C5-C6	6.39	123.53	119.70
35	BA	681	A	C4-C5-N7	6.39	113.89	110.70
35	BA	1192	C	O4'-C1'-N1	6.39	113.31	108.20
1	AA	42	C	C5-C6-N1	6.38	124.19	121.00
1	AA	78	A	C5-C6-N1	-6.38	114.51	117.70
2	AB	233	A	C5-C6-N1	6.38	120.89	117.70
2	AB	388	G	C5-C6-O6	-6.38	124.77	128.60
2	AB	557	C	O5'-P-OP1	-6.38	99.95	105.70
2	AB	601	C	C6-N1-C2	-6.38	117.75	120.30
2	AB	1672	A	C6-C5-N7	6.38	136.77	132.30
2	AB	2256	G	O4'-C1'-C2'	-6.38	99.42	105.80
2	AB	2486	C	N1-C2-N3	-6.38	114.73	119.20
2	AB	2493	U	C5-C6-N1	-6.38	119.51	122.70
35	BA	126	G	C6-C5-N7	6.38	134.23	130.40
35	BA	382	A	C5-C6-N1	6.38	120.89	117.70
35	BA	572	A	C2-N3-C4	6.38	113.79	110.60
35	BA	637	C	C1'-O4'-C4'	-6.38	104.79	109.90
35	BA	1215	G	C5'-C4'-C3'	-6.38	105.78	116.00
36	BB	6	C	O4'-C1'-N1	6.38	113.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1314	C	C5-C4-N4	6.38	124.67	120.20
2	AB	1530	G	N1-C6-O6	-6.38	116.07	119.90
2	AB	2790	U	C4-C5-C6	6.38	123.53	119.70
35	BA	316	C	N3-C4-C5	-6.38	119.35	121.90
35	BA	321	A	C2-N3-C4	-6.38	107.41	110.60
2	AB	481	G	N1-C6-O6	-6.38	116.07	119.90
2	AB	534	U	O4'-C1'-N1	6.38	113.31	108.20
2	AB	743	A	C2-N3-C4	6.38	113.79	110.60
2	AB	1234	U	C5-C6-N1	-6.38	119.51	122.70
2	AB	1471	G	C3'-C2'-C1'	6.38	106.61	101.50
2	AB	1543	G	C5-N7-C8	6.38	107.49	104.30
14	AN	95	LEU	CB-CG-CD1	6.38	121.85	111.00
35	BA	410	G	N7-C8-N9	6.38	116.29	113.10
35	BA	737	C	C6-N1-C2	-6.38	117.75	120.30
35	BA	902	G	C1'-O4'-C4'	6.38	115.01	109.90
35	BA	1269	A	N1-C6-N6	6.38	122.43	118.60
35	BA	1403	C	N1-C2-O2	6.38	122.73	118.90
35	BA	1521	C	C5-C4-N4	6.38	124.67	120.20
2	AB	433	C	O4'-C1'-N1	6.38	113.30	108.20
2	AB	1784	A	C5-C6-N6	-6.38	118.60	123.70
35	BA	1221	G	N3-C2-N2	6.38	124.37	119.90
35	BA	1371	G	N3-C4-C5	-6.38	125.41	128.60
2	AB	276	U	C2-N3-C4	-6.38	123.17	127.00
2	AB	307	G	C6-N1-C2	-6.38	121.27	125.10
2	AB	464	U	C2-N1-C1'	6.38	125.35	117.70
2	AB	468	G	N3-C4-C5	-6.38	125.41	128.60
2	AB	819	A	N9-C1'-C2'	-6.38	104.98	112.00
2	AB	1309	G	C6-C5-N7	-6.38	126.57	130.40
2	AB	1390	U	N3-C4-O4	6.38	123.86	119.40
2	AB	1392	A	C4-C5-N7	-6.38	107.51	110.70
2	AB	1445	G	N3-C4-N9	6.38	129.83	126.00
2	AB	2050	C	C5-C4-N4	-6.38	115.73	120.20
2	AB	2133	G	C8-N9-C4	-6.38	103.85	106.40
2	AB	2147	A	C6-N1-C2	-6.38	114.77	118.60
2	AB	2660	A	N1-C2-N3	-6.38	126.11	129.30
21	AU	88	ARG	NE-CZ-NH2	6.38	123.49	120.30
35	BA	123	U	C1'-O4'-C4'	6.38	115.00	109.90
35	BA	939	G	C8-N9-C4	-6.38	103.85	106.40
35	BA	947	G	N3-C4-C5	-6.38	125.41	128.60
35	BA	1132	C	C5'-C4'-O4'	6.38	116.75	109.10
35	BA	1255	G	C2-N3-C4	6.38	115.09	111.90
35	BA	1532	U	C1'-O4'-C4'	-6.38	104.80	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	BU	41	SER	N-CA-CB	-6.38	100.93	110.50
2	AB	1337	G	C4-C5-N7	-6.38	108.25	110.80
2	AB	1830	C	N3-C4-N4	6.38	122.46	118.00
2	AB	2256	G	C4-C5-C6	6.38	122.62	118.80
35	BA	428	G	C6-C5-N7	-6.38	126.58	130.40
35	BA	475	C	C5'-C4'-C3'	-6.38	105.80	116.00
35	BA	616	G	C1'-O4'-C4'	-6.38	104.80	109.90
35	BA	1004	A	C5-N7-C8	-6.38	100.71	103.90
35	BA	1140	C	C5'-C4'-O4'	6.38	116.75	109.10
35	BA	1188	A	N7-C8-N9	-6.38	110.61	113.80
35	BA	1238	A	C6-N1-C2	-6.38	114.77	118.60
35	BA	1410	A	C5'-C4'-C3'	-6.38	105.80	116.00
44	BJ	95	ARG	NE-CZ-NH2	-6.38	117.11	120.30
2	AB	979	A	C6-C5-N7	6.38	136.76	132.30
2	AB	1440	U	N1-C1'-C2'	-6.38	104.99	112.00
2	AB	1529	G	N1-C2-N2	6.38	121.94	116.20
35	BA	32	A	P-O3'-C3'	6.38	127.35	119.70
35	BA	835	U	C5-C6-N1	-6.38	119.51	122.70
35	BA	1369	C	C3'-C2'-C1'	6.38	106.60	101.50
35	BA	1529	G	C3'-C2'-C1'	6.38	106.60	101.50
36	BB	38	A	C4'-C3'-C2'	-6.38	96.22	102.60
37	BC	42	U	O4'-C4'-C3'	6.38	111.20	106.10
2	AB	95	A	N9-C4-C5	6.37	108.35	105.80
2	AB	306	U	C6-N1-C2	-6.37	117.18	121.00
2	AB	725	G	N9-C4-C5	6.37	107.95	105.40
2	AB	782	A	N1-C6-N6	-6.37	114.78	118.60
2	AB	1392	A	C6-N1-C2	-6.37	114.78	118.60
2	AB	1401	G	N3-C4-N9	6.37	129.82	126.00
2	AB	1884	G	C6-N1-C2	-6.37	121.28	125.10
2	AB	1989	G	C5-N7-C8	6.37	107.49	104.30
2	AB	2418	A	N1-C2-N3	6.37	132.49	129.30
7	AG	149	ARG	NE-CZ-NH2	-6.37	117.11	120.30
35	BA	13	U	N1-C2-O2	6.37	127.26	122.80
35	BA	200	G	N9-C1'-C2'	-6.37	104.99	112.00
35	BA	718	A	N7-C8-N9	-6.37	110.61	113.80
36	BB	17	H2U	P-O3'-C3'	6.37	127.35	119.70
38	BD	10	G	N3-C4-N9	6.37	129.82	126.00
43	BI	103	VAL	CA-CB-CG1	6.37	120.46	110.90
2	AB	1391	U	C5'-C4'-O4'	6.37	116.75	109.10
2	AB	1889	A	C4'-C3'-C2'	-6.37	96.23	102.60
2	AB	2748	A	C5'-C4'-O4'	6.37	116.75	109.10
35	BA	366	A	N7-C8-N9	-6.37	110.61	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	554	A	N3-C4-C5	-6.37	122.34	126.80
35	BA	680	C	C4'-C3'-C2'	-6.37	96.23	102.60
35	BA	867	G	N9-C4-C5	6.37	107.95	105.40
35	BA	1334	G	C5'-C4'-O4'	6.37	116.75	109.10
1	AA	10	G	N1-C6-O6	-6.37	116.08	119.90
1	AA	37	C	O4'-C1'-C2'	6.37	113.33	107.60
1	AA	93	C	N3-C2-O2	-6.37	117.44	121.90
2	AB	270	A	C8-N9-C4	-6.37	103.25	105.80
2	AB	488	G	C3'-C2'-C1'	-6.37	96.40	101.50
2	AB	818	G	C5-C6-N1	6.37	114.69	111.50
2	AB	877	A	C8-N9-C4	-6.37	103.25	105.80
2	AB	1133	A	C6-N1-C2	6.37	122.42	118.60
2	AB	1196	C	C1'-O4'-C4'	-6.37	104.80	109.90
2	AB	2128	G	C4-C5-C6	6.37	122.62	118.80
2	AB	2900	A	C5-N7-C8	6.37	107.08	103.90
35	BA	655	A	N9-C4-C5	6.37	108.35	105.80
35	BA	888	G	P-O3'-C3'	6.37	127.34	119.70
35	BA	1452	C	N3-C4-C5	6.37	124.45	121.90
2	AB	574	A	O4'-C1'-N9	6.37	113.29	108.20
2	AB	588	U	C5-C6-N1	-6.37	119.52	122.70
2	AB	971	G	N3-C4-C5	-6.37	125.42	128.60
2	AB	1293	C	C5-C6-N1	6.37	124.18	121.00
2	AB	1931	U	O4'-C1'-N1	6.37	113.30	108.20
2	AB	2024	G	C4'-C3'-C2'	-6.37	96.23	102.60
35	BA	141	G	N9-C4-C5	6.37	107.95	105.40
35	BA	644	U	O4'-C1'-N1	6.37	113.30	108.20
35	BA	803	G	C5'-C4'-O4'	6.37	116.74	109.10
35	BA	1105	A	N1-C6-N6	-6.37	114.78	118.60
2	AB	659	G	C5-C6-N1	6.37	114.68	111.50
2	AB	1303	G	O4'-C4'-C3'	6.37	111.19	106.10
2	AB	1501	G	N7-C8-N9	-6.37	109.92	113.10
2	AB	2298	A	N1-C2-N3	-6.37	126.12	129.30
2	AB	2601	C	C2-N3-C4	6.37	123.08	119.90
2	AB	2631	G	C4-C5-N7	6.37	113.35	110.80
35	BA	1201	A	N9-C4-C5	-6.37	103.25	105.80
38	BD	75	C	C2-N3-C4	6.37	123.08	119.90
2	AB	276	U	O4'-C1'-C2'	6.37	113.33	107.60
2	AB	445	C	C5-C6-N1	-6.37	117.82	121.00
2	AB	810	U	C4-C5-C6	6.37	123.52	119.70
2	AB	842	U	C3'-C2'-C1'	-6.37	96.41	101.50
2	AB	952	G	O4'-C1'-N9	6.37	113.29	108.20
2	AB	2488	G	C5-C6-O6	-6.37	124.78	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2604	U	C5-C6-N1	-6.37	119.52	122.70
33	A6	54	LEU	CB-CG-CD1	6.37	121.82	111.00
35	BA	373	A	C3'-C2'-C1'	6.37	106.59	101.50
35	BA	492	C	C5-C4-N4	-6.37	115.74	120.20
35	BA	1300	G	C5-C6-O6	-6.37	124.78	128.60
41	BG	167	PRO	N-CA-CB	6.37	110.94	103.30
2	AB	98	G	C8-N9-C4	-6.36	103.86	106.40
2	AB	661	A	N7-C8-N9	-6.36	110.62	113.80
2	AB	665	U	O4'-C4'-C3'	6.36	111.19	106.10
2	AB	775	G	C5-N7-C8	-6.36	101.12	104.30
2	AB	1171	G	C5-C6-O6	-6.36	124.78	128.60
2	AB	1740	G	N7-C8-N9	6.36	116.28	113.10
2	AB	1821	A	C8-N9-C4	-6.36	103.25	105.80
2	AB	1992	G	C6-N1-C2	-6.36	121.28	125.10
2	AB	2527	C	O4'-C4'-C3'	6.36	111.19	106.10
2	AB	2861	U	C5-C6-N1	-6.36	119.52	122.70
5	AE	13	ARG	CD-NE-CZ	6.36	132.51	123.60
35	BA	431	A	C1'-O4'-C4'	-6.36	104.81	109.90
35	BA	1468	A	N1-C2-N3	-6.36	126.12	129.30
2	AB	273	G	O4'-C1'-N9	6.36	113.29	108.20
2	AB	958	U	O4'-C1'-N1	6.36	113.29	108.20
2	AB	1018	U	N3-C2-O2	-6.36	117.75	122.20
2	AB	1789	A	C5-N7-C8	6.36	107.08	103.90
2	AB	2111	U	C1'-O4'-C4'	-6.36	104.81	109.90
2	AB	2567	G	O4'-C1'-C2'	6.36	113.33	107.60
35	BA	87	C	N3-C4-C5	-6.36	119.36	121.90
35	BA	1142	G	C8-N9-C4	-6.36	103.86	106.40
35	BA	1179	A	N9-C1'-C2'	-6.36	105.00	112.00
35	BA	1447	A	C1'-O4'-C4'	6.36	114.99	109.90
44	BJ	1	PRO	CA-N-CD	-6.36	102.59	111.50
2	AB	76	C	C6-N1-C2	6.36	122.84	120.30
2	AB	149	A	C4-C5-C6	-6.36	113.82	117.00
2	AB	783	A	C4-C5-C6	6.36	120.18	117.00
2	AB	880	G	C5-C6-O6	-6.36	124.78	128.60
2	AB	976	G	C5'-C4'-O4'	6.36	116.73	109.10
2	AB	1026	G	C6-N1-C2	-6.36	121.28	125.10
2	AB	1575	C	N3-C2-O2	-6.36	117.45	121.90
2	AB	1797	G	C5-N7-C8	-6.36	101.12	104.30
2	AB	2182	U	N1-C2-N3	6.36	118.72	114.90
35	BA	55	A	N9-C1'-C2'	-6.36	105.00	112.00
35	BA	495	A	P-O3'-C3'	6.36	127.33	119.70
35	BA	914	A	N1-C2-N3	6.36	132.48	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1191	A	C5-C6-N6	-6.36	118.61	123.70
35	BA	1252	A	N9-C4-C5	6.36	108.34	105.80
2	AB	149	A	N9-C4-C5	6.36	108.34	105.80
2	AB	450	G	N1-C2-N2	6.36	121.92	116.20
2	AB	910	A	N7-C8-N9	6.36	116.98	113.80
2	AB	2051	A	C5'-C4'-O4'	6.36	116.73	109.10
2	AB	2238	G	N3-C4-N9	6.36	129.81	126.00
35	BA	209	U	C6-N1-C2	-6.36	117.19	121.00
35	BA	329	A	C8-N9-C4	-6.36	103.26	105.80
35	BA	1329	A	C5-N7-C8	6.36	107.08	103.90
46	BL	122	ARG	NE-CZ-NH2	-6.36	117.12	120.30
2	AB	479	A	P-O3'-C3'	6.36	127.33	119.70
2	AB	900	A	C5'-C4'-C3'	-6.36	105.83	116.00
2	AB	1071	G	C2-N3-C4	6.36	115.08	111.90
2	AB	1799	G	C5'-C4'-O4'	6.36	116.73	109.10
2	AB	2000	C	N1-C2-N3	-6.36	114.75	119.20
2	AB	2411	A	C4-C5-C6	-6.36	113.82	117.00
2	AB	2698	U	N1-C2-N3	6.36	118.71	114.90
35	BA	236	A	C4-C5-C6	6.36	120.18	117.00
35	BA	318	G	C6-C5-N7	-6.36	126.59	130.40
35	BA	908	A	N3-C4-C5	-6.36	122.35	126.80
35	BA	1277	C	C5'-C4'-O4'	6.36	116.73	109.10
35	BA	1318	A	C1'-O4'-C4'	-6.36	104.81	109.90
35	BA	1334	G	O4'-C1'-N9	-6.36	103.11	108.20
35	BA	1486	G	N1-C6-O6	6.36	123.71	119.90
35	BA	1523	G	N7-C8-N9	6.36	116.28	113.10
35	BA	1529	G	C5-N7-C8	-6.36	101.12	104.30
36	BB	49	G	C4-C5-N7	6.36	113.34	110.80
36	BB	57	G	N3-C4-C5	-6.36	125.42	128.60
2	AB	332	A	C5'-C4'-O4'	6.36	116.73	109.10
2	AB	1296	G	N1-C2-N2	-6.36	110.48	116.20
2	AB	1930	G	N3-C4-C5	-6.36	125.42	128.60
2	AB	2228	G	C8-N9-C4	-6.36	103.86	106.40
2	AB	2567	G	C5'-C4'-O4'	6.36	116.73	109.10
21	AU	11	ARG	NE-CZ-NH1	6.36	123.48	120.30
35	BA	661	G	O4'-C1'-N9	6.36	113.28	108.20
35	BA	1050	G	C5-C6-O6	6.36	132.41	128.60
35	BA	1490	U	C3'-C2'-C1'	6.36	106.58	101.50
36	BB	57	G	N9-C4-C5	6.36	107.94	105.40
2	AB	989	G	C5-N7-C8	-6.35	101.12	104.30
2	AB	1942	C	N3-C4-C5	-6.35	119.36	121.90
2	AB	134	G	C4'-C3'-C2'	-6.35	96.25	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1199	U	N1-C2-O2	6.35	127.25	122.80
2	AB	1969	A	N1-C2-N3	-6.35	126.12	129.30
30	A3	15	ARG	NE-CZ-NH2	-6.35	117.12	120.30
35	BA	1006	G	C5-C6-N1	6.35	114.68	111.50
35	BA	1307	U	C2-N3-C4	-6.35	123.19	127.00
2	AB	308	G	C5-C6-N1	-6.35	108.32	111.50
2	AB	1650	A	C5-C6-N6	-6.35	118.62	123.70
2	AB	1975	G	C4-C5-C6	6.35	122.61	118.80
2	AB	2037	A	N1-C2-N3	-6.35	126.12	129.30
3	AC	137	MET	CA-CB-CG	-6.35	102.50	113.30
35	BA	1401	G	O4'-C1'-C2'	-6.35	99.45	105.80
2	AB	338	G	C5-C6-N1	6.35	114.67	111.50
2	AB	527	C	N1-C1'-C2'	6.35	122.25	114.00
2	AB	1210	G	O5'-P-OP2	-6.35	99.98	105.70
2	AB	1551	A	O4'-C1'-N9	6.35	113.28	108.20
2	AB	1777	U	C5-C4-O4	-6.35	122.09	125.90
2	AB	2173	A	N1-C6-N6	-6.35	114.79	118.60
9	AI	50	ARG	NE-CZ-NH1	6.35	123.47	120.30
35	BA	33	A	P-O3'-C3'	6.35	127.32	119.70
35	BA	315	A	N3-C4-C5	-6.35	122.36	126.80
35	BA	577	G	C5-C6-N1	6.35	114.67	111.50
35	BA	638	U	O4'-C1'-N1	6.35	113.28	108.20
35	BA	681	A	N9-C4-C5	-6.35	103.26	105.80
35	BA	1138	G	N3-C4-N9	6.35	129.81	126.00
2	AB	189	G	C3'-C2'-C1'	6.35	106.58	101.50
2	AB	623	C	C6-N1-C2	-6.35	117.76	120.30
2	AB	801	G	C6-C5-N7	-6.35	126.59	130.40
2	AB	1994	C	C1'-O4'-C4'	6.35	114.98	109.90
2	AB	2735	G	N3-C2-N2	-6.35	115.46	119.90
35	BA	393	A	P-O5'-C5'	6.35	131.06	120.90
35	BA	732	C	C2-N3-C4	6.35	123.07	119.90
35	BA	1265	C	C1'-O4'-C4'	6.35	114.98	109.90
35	BA	1525	G	C5-C6-N1	-6.35	108.33	111.50
2	AB	2416	C	C3'-C2'-C1'	6.35	106.58	101.50
2	AB	2809	A	C6-C5-N7	-6.35	127.86	132.30
35	BA	10	A	C4'-C3'-C2'	-6.35	96.25	102.60
35	BA	490	C	C5'-C4'-O4'	6.35	116.72	109.10
35	BA	727	G	C3'-C2'-C1'	-6.35	96.42	101.50
35	BA	842	U	N3-C2-O2	-6.35	117.76	122.20
2	AB	189	G	C2-N3-C4	6.34	115.07	111.90
2	AB	537	G	N9-C4-C5	6.34	107.94	105.40
2	AB	659	G	O4'-C1'-N9	6.34	113.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	708	G	O4'-C1'-N9	6.34	113.28	108.20
2	AB	768	G	N1-C2-N3	-6.34	120.09	123.90
2	AB	836	G	C5-C6-N1	-6.34	108.33	111.50
2	AB	880	G	N9-C1'-C2'	-6.34	105.02	112.00
2	AB	1152	C	C5-C6-N1	6.34	124.17	121.00
2	AB	1459	G	C5-C6-O6	-6.34	124.79	128.60
2	AB	1876	A	N1-C6-N6	-6.34	114.79	118.60
2	AB	2401	U	N3-C2-O2	-6.34	117.76	122.20
2	AB	2823	A	C4'-C3'-C2'	-6.34	96.25	102.60
35	BA	273	U	C5-C4-O4	-6.34	122.09	125.90
35	BA	1071	C	C4-C5-C6	-6.34	114.23	117.40
2	AB	1340	U	C5'-C4'-O4'	6.34	116.71	109.10
35	BA	510	A	O4'-C1'-C2'	-6.34	99.46	105.80
38	BD	23	G	C4'-C3'-C2'	-6.34	96.26	102.60
38	BD	43	G	C6-C5-N7	-6.34	126.59	130.40
38	BD	47	A	N3-C4-C5	-6.34	122.36	126.80
44	BJ	155	TRP	CD1-CG-CD2	-6.34	101.23	106.30
1	AA	23	G	C3'-C2'-C1'	6.34	106.57	101.50
2	AB	469	G	C6-C5-N7	-6.34	126.59	130.40
2	AB	772	C	N1-C1'-C2'	-6.34	105.02	112.00
2	AB	1410	G	C8-N9-C1'	6.34	135.24	127.00
2	AB	1484	U	N1-C2-N3	6.34	118.70	114.90
2	AB	2461	A	N1-C6-N6	6.34	122.40	118.60
2	AB	2699	C	N3-C2-O2	-6.34	117.46	121.90
35	BA	213	G	C2-N3-C4	6.34	115.07	111.90
35	BA	260	G	N3-C4-C5	-6.34	125.43	128.60
35	BA	311	C	C5-C4-N4	-6.34	115.76	120.20
35	BA	359	G	N3-C4-C5	-6.34	125.43	128.60
35	BA	922	G	C8-N9-C4	-6.34	103.86	106.40
35	BA	1258	G	N3-C4-C5	-6.34	125.43	128.60
35	BA	1367	C	C2-N3-C4	6.34	123.07	119.90
39	BE	29	PHE	CB-CG-CD1	6.34	125.24	120.80
1	AA	15	A	C5-C6-N6	-6.34	118.63	123.70
2	AB	628	G	C5-N7-C8	6.34	107.47	104.30
2	AB	1317	G	C8-N9-C4	-6.34	103.86	106.40
2	AB	2200	C	C6-N1-C2	-6.34	117.77	120.30
2	AB	2205	A	C5-C6-N1	6.34	120.87	117.70
35	BA	31	G	N3-C4-C5	-6.34	125.43	128.60
35	BA	658	C	N3-C2-O2	-6.34	117.46	121.90
35	BA	957	U	N3-C2-O2	-6.34	117.76	122.20
35	BA	976	G	C6-N1-C2	-6.34	121.30	125.10
35	BA	1090	U	O4'-C1'-N1	6.34	113.27	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1460	C	N3-C2-O2	-6.34	117.46	121.90
35	BA	1496	C	N1-C2-N3	6.34	123.64	119.20
2	AB	403	U	N3-C4-C5	-6.34	110.80	114.60
2	AB	494	G	N3-C4-C5	-6.34	125.43	128.60
2	AB	1003	G	C8-N9-C4	-6.34	103.86	106.40
2	AB	1015	U	N3-C2-O2	-6.34	117.76	122.20
2	AB	2505	G	N1-C2-N3	-6.34	120.10	123.90
2	AB	2590	A	O4'-C1'-C2'	-6.34	99.46	105.80
35	BA	353	A	C6-N1-C2	6.34	122.40	118.60
35	BA	727	G	C6-C5-N7	-6.34	126.60	130.40
35	BA	913	A	N7-C8-N9	6.34	116.97	113.80
35	BA	1089	G	N7-C8-N9	6.34	116.27	113.10
2	AB	51	G	N3-C4-C5	-6.34	125.43	128.60
2	AB	231	A	P-O3'-C3'	6.34	127.30	119.70
2	AB	664	G	C3'-C2'-C1'	6.34	106.57	101.50
2	AB	674	G	O4'-C4'-C3'	6.34	111.17	106.10
2	AB	1436	G	C6-N1-C2	-6.34	121.30	125.10
2	AB	1543	G	C8-N9-C4	-6.34	103.87	106.40
2	AB	1857	G	N9-C4-C5	6.34	107.94	105.40
35	BA	502	A	N9-C1'-C2'	-6.34	105.03	112.00
35	BA	729	A	O4'-C1'-N9	6.34	113.27	108.20
35	BA	1082	A	C6-N1-C2	6.34	122.40	118.60
35	BA	1103	C	C5-C6-N1	6.34	124.17	121.00
2	AB	847	U	C4-C5-C6	6.33	123.50	119.70
2	AB	1750	G	C2-N3-C4	6.33	115.07	111.90
31	A4	51	ALA	CB-CA-C	6.33	119.60	110.10
35	BA	81	A	C4-C5-C6	6.33	120.17	117.00
35	BA	1251	A	C3'-C2'-C1'	6.33	106.57	101.50
37	BC	16	A	N1-C6-N6	6.33	122.40	118.60
2	AB	478	A	C3'-C2'-C1'	6.33	106.57	101.50
2	AB	604	G	C5-C6-O6	-6.33	124.80	128.60
2	AB	1329	U	C4'-C3'-C2'	6.33	108.93	102.60
2	AB	1435	G	N3-C4-N9	-6.33	122.20	126.00
2	AB	1451	C	C4-C5-C6	-6.33	114.23	117.40
2	AB	1556	C	C6-N1-C2	-6.33	117.77	120.30
2	AB	2477	U	C6-N1-C2	-6.33	117.20	121.00
2	AB	2540	C	C6-N1-C2	6.33	122.83	120.30
2	AB	2735	G	N9-C1'-C2'	-6.33	105.03	112.00
29	A2	43	PHE	CB-CG-CD2	-6.33	116.37	120.80
35	BA	946	A	N7-C8-N9	6.33	116.97	113.80
35	BA	1439	G	N9-C4-C5	6.33	107.93	105.40
36	BB	28	C	O4'-C1'-N1	6.33	113.27	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	96	G	N1-C2-N3	-6.33	120.10	123.90
2	AB	256	A	C5-C6-N1	-6.33	114.53	117.70
2	AB	556	A	O4'-C4'-C3'	6.33	111.17	106.10
2	AB	657	U	N3-C2-O2	-6.33	117.77	122.20
2	AB	1099	G	O4'-C1'-N9	6.33	113.27	108.20
2	AB	1239	G	N3-C4-N9	6.33	129.80	126.00
2	AB	1949	G	N9-C4-C5	6.33	107.93	105.40
2	AB	2004	G	C5'-C4'-C3'	-6.33	105.87	116.00
2	AB	2421	G	C6-C5-N7	-6.33	126.60	130.40
2	AB	2444	G	N3-C4-C5	-6.33	125.43	128.60
2	AB	2472	G	C4'-C3'-C2'	-6.33	96.27	102.60
35	BA	418	C	N3-C4-C5	6.33	124.43	121.90
35	BA	427	U	O4'-C1'-N1	6.33	113.27	108.20
35	BA	639	G	C1'-O4'-C4'	-6.33	104.83	109.90
35	BA	791	G	C8-N9-C4	-6.33	103.87	106.40
35	BA	1185	G	N7-C8-N9	6.33	116.27	113.10
35	BA	1265	C	N3-C4-N4	6.33	122.43	118.00
50	BP	91	ARG	NE-CZ-NH1	6.33	123.47	120.30
58	BX	17	ARG	NH1-CZ-NH2	-6.33	112.44	119.40
2	AB	769	U	N1-C2-O2	6.33	127.23	122.80
2	AB	1364	G	C8-N9-C4	-6.33	103.87	106.40
2	AB	1535	A	C1'-O4'-C4'	-6.33	104.84	109.90
2	AB	1549	A	N9-C4-C5	6.33	108.33	105.80
2	AB	1809	A	C4'-C3'-C2'	-6.33	96.27	102.60
2	AB	2506	U	N3-C4-C5	-6.33	110.80	114.60
35	BA	1007	U	C2-N3-C4	-6.33	123.20	127.00
1	AA	39	A	N3-C4-C5	6.33	131.23	126.80
1	AA	100	G	N3-C4-C5	-6.33	125.44	128.60
2	AB	848	C	C4-C5-C6	6.33	120.56	117.40
2	AB	879	G	O4'-C1'-N9	6.33	113.26	108.20
2	AB	953	G	O4'-C1'-N9	6.33	113.26	108.20
2	AB	1704	C	C5-C4-N4	6.33	124.63	120.20
2	AB	2111	U	O4'-C1'-N1	6.33	113.26	108.20
2	AB	2545	G	N3-C4-N9	6.33	129.80	126.00
2	AB	2762	C	N3-C4-N4	-6.33	113.57	118.00
35	BA	430	A	C4-C5-N7	6.33	113.86	110.70
35	BA	684	U	C5'-C4'-O4'	6.33	116.69	109.10
35	BA	955	U	C4'-C3'-C2'	-6.33	96.27	102.60
35	BA	1293	C	N3-C2-O2	6.33	126.33	121.90
37	BC	29	G	N1-C6-O6	-6.33	116.10	119.90
2	AB	225	C	C4-C5-C6	6.33	120.56	117.40
2	AB	1487	U	C2-N3-C4	6.33	130.80	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1908	C	C4-C5-C6	-6.33	114.24	117.40
2	AB	2635	A	C5'-C4'-O4'	6.33	116.69	109.10
2	AB	2857	G	N3-C4-C5	-6.33	125.44	128.60
20	AT	78	ARG	NE-CZ-NH1	-6.33	117.14	120.30
2	AB	419	U	C5-C6-N1	-6.33	119.54	122.70
2	AB	907	G	C5-C6-O6	6.33	132.40	128.60
2	AB	1257	C	C2-N3-C4	6.33	123.06	119.90
2	AB	2665	A	C6-N1-C2	-6.33	114.81	118.60
2	AB	2831	G	C4-C5-N7	6.33	113.33	110.80
2	AB	2862	G	N1-C2-N3	6.33	127.69	123.90
35	BA	939	G	C4-C5-N7	-6.33	108.27	110.80
2	AB	169	G	N9-C1'-C2'	-6.32	105.04	112.00
2	AB	1146	C	N1-C2-O2	6.32	122.69	118.90
2	AB	2611	C	N1-C2-O2	6.32	122.69	118.90
35	BA	317	U	N1-C2-N3	6.32	118.69	114.90
35	BA	319	G	O4'-C4'-C3'	-6.32	97.68	104.00
35	BA	611	C	N1-C2-O2	6.32	122.69	118.90
35	BA	1003	G	C5-C6-N1	6.32	114.66	111.50
35	BA	1177	G	C5-C6-N1	6.32	114.66	111.50
2	AB	155	A	N9-C1'-C2'	-6.32	105.05	112.00
2	AB	2356	U	N3-C4-C5	-6.32	110.81	114.60
2	AB	2419	U	C3'-C2'-C1'	6.32	106.56	101.50
2	AB	2563	U	N3-C4-C5	-6.32	110.81	114.60
35	BA	533	A	C5-C6-N1	6.32	120.86	117.70
35	BA	725	G	N9-C1'-C2'	-6.32	105.05	112.00
35	BA	1062	U	O4'-C1'-C2'	6.32	113.29	107.60
35	BA	1153	G	C6-N1-C2	-6.32	121.31	125.10
37	BC	40	G	N1-C6-O6	6.32	123.69	119.90
2	AB	161	A	N7-C8-N9	6.32	116.96	113.80
2	AB	182	A	C5-N7-C8	6.32	107.06	103.90
2	AB	928	A	C1'-O4'-C4'	6.32	114.96	109.90
2	AB	1009	A	C8-N9-C4	-6.32	103.27	105.80
2	AB	1824	G	C6-C5-N7	-6.32	126.61	130.40
2	AB	2031	A	C5'-C4'-O4'	6.32	116.68	109.10
2	AB	2709	G	C6-N1-C2	-6.32	121.31	125.10
35	BA	129	A	C6-N1-C2	6.32	122.39	118.60
35	BA	1502	A	C4'-C3'-C2'	-6.32	96.28	102.60
38	BD	74	A	C6-C5-N7	-6.32	127.88	132.30
2	AB	945	A	O4'-C4'-C3'	6.32	111.16	106.10
2	AB	1311	G	N1-C2-N3	6.32	127.69	123.90
2	AB	2012	G	C5-C6-O6	-6.32	124.81	128.60
35	BA	793	U	O3'-P-O5'	-6.32	91.99	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	BC	32	U	C5-C6-N1	-6.32	119.54	122.70
2	AB	623	C	C2-N3-C4	6.32	123.06	119.90
2	AB	653	U	C4'-C3'-C2'	-6.32	96.28	102.60
2	AB	693	A	C2-N3-C4	6.32	113.76	110.60
2	AB	1133	A	C5-N7-C8	-6.32	100.74	103.90
2	AB	1805	A	C2-N3-C4	6.32	113.76	110.60
2	AB	2048	G	N1-C2-N3	6.32	127.69	123.90
2	AB	2135	A	C5-N7-C8	-6.32	100.74	103.90
2	AB	2608	G	N3-C4-C5	-6.32	125.44	128.60
35	BA	1303	C	O4'-C1'-N1	6.32	113.25	108.20
35	BA	1515	G	N3-C4-C5	-6.32	125.44	128.60
36	BB	29	G	N3-C2-N2	-6.32	115.48	119.90
38	BD	69	C	N3-C4-N4	6.32	122.42	118.00
2	AB	33	C	P-O3'-C3'	6.32	127.28	119.70
2	AB	240	C	N3-C4-C5	-6.32	119.37	121.90
2	AB	487	C	P-O3'-C3'	6.32	127.28	119.70
2	AB	645	C	O4'-C4'-C3'	6.32	111.15	106.10
2	AB	825	A	C2-N3-C4	6.32	113.76	110.60
2	AB	983	A	C1'-O4'-C4'	-6.32	104.85	109.90
2	AB	1130	U	O4'-C1'-C2'	-6.32	99.48	105.80
2	AB	1995	U	N1-C2-O2	6.32	127.22	122.80
2	AB	2715	C	N3-C4-N4	6.32	122.42	118.00
2	AB	2882	A	C4-C5-C6	-6.32	113.84	117.00
2	AB	913	U	O4'-C4'-C3'	6.31	111.15	106.10
2	AB	1333	G	N3-C4-C5	-6.31	125.44	128.60
35	BA	357	G	N1-C2-N2	6.31	121.88	116.20
35	BA	924	C	N3-C4-N4	6.31	122.42	118.00
35	BA	1483	A	N7-C8-N9	-6.31	110.64	113.80
36	BB	60	U	N3-C2-O2	-6.31	117.78	122.20
40	BF	168	ARG	CD-NE-CZ	6.31	132.44	123.60
45	BK	65	PHE	CB-CG-CD2	-6.31	116.38	120.80
2	AB	441	U	N3-C4-O4	6.31	123.82	119.40
2	AB	454	A	C4-C5-N7	-6.31	107.54	110.70
2	AB	484	C	N1-C2-O2	6.31	122.69	118.90
2	AB	604	G	C1'-O4'-C4'	6.31	114.95	109.90
2	AB	627	A	N1-C6-N6	-6.31	114.81	118.60
2	AB	731	C	N1-C2-N3	6.31	123.62	119.20
2	AB	1253	A	N9-C4-C5	6.31	108.33	105.80
2	AB	1355	G	N9-C1'-C2'	-6.31	105.06	112.00
2	AB	1842	G	O4'-C1'-N9	6.31	113.25	108.20
2	AB	2262	U	C4'-C3'-C2'	-6.31	96.29	102.60
2	AB	2778	A	O4'-C1'-N9	-6.31	103.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1249	C	C4-C5-C6	6.31	120.56	117.40
35	BA	1313	U	O4'-C1'-N1	6.31	113.25	108.20
35	BA	1494	G	C5-C6-O6	6.31	132.39	128.60
2	AB	177	G	N9-C1'-C2'	6.31	122.20	114.00
2	AB	712	G	O4'-C1'-N9	-6.31	103.15	108.20
2	AB	1055	G	N3-C4-N9	6.31	129.79	126.00
2	AB	1137	G	C5-C6-O6	-6.31	124.81	128.60
2	AB	1145	C	C5-C4-N4	6.31	124.62	120.20
2	AB	1310	G	O4'-C4'-C3'	6.31	111.15	106.10
2	AB	1456	G	N1-C2-N2	6.31	121.88	116.20
2	AB	1594	U	N1-C2-O2	6.31	127.22	122.80
2	AB	2550	G	N3-C2-N2	-6.31	115.48	119.90
23	AW	95	PHE	CB-CG-CD1	6.31	125.22	120.80
35	BA	177	G	C4'-C3'-C2'	-6.31	96.29	102.60
35	BA	723	U	C5-C4-O4	-6.31	122.11	125.90
2	AB	1053	C	C2-N3-C4	-6.31	116.75	119.90
2	AB	1259	G	C5-C6-O6	-6.31	124.81	128.60
2	AB	1543	G	C4-C5-N7	-6.31	108.28	110.80
2	AB	1620	G	C6-C5-N7	6.31	134.19	130.40
2	AB	1711	A	N1-C6-N6	-6.31	114.81	118.60
2	AB	1791	A	N7-C8-N9	6.31	116.95	113.80
2	AB	2025	C	N3-C4-C5	6.31	124.42	121.90
2	AB	2089	C	N1-C2-O2	6.31	122.69	118.90
2	AB	2340	A	N1-C2-N3	-6.31	126.14	129.30
2	AB	2428	G	N1-C6-O6	6.31	123.69	119.90
2	AB	2454	G	C4-C5-N7	6.31	113.32	110.80
35	BA	110	C	C5'-C4'-O4'	6.31	116.67	109.10
35	BA	407	U	C3'-C2'-C1'	-6.31	96.45	101.50
35	BA	697	U	C5'-C4'-O4'	6.31	116.67	109.10
35	BA	718	A	N1-C2-N3	-6.31	126.14	129.30
48	BN	6	ARG	NE-CZ-NH2	-6.31	117.14	120.30
1	AA	90	C	N3-C2-O2	-6.31	117.48	121.90
2	AB	103	A	N1-C6-N6	-6.31	114.81	118.60
2	AB	180	G	C1'-O4'-C4'	-6.31	104.86	109.90
2	AB	995	C	C1'-O4'-C4'	-6.31	104.85	109.90
2	AB	1311	G	C4-C5-C6	6.31	122.58	118.80
2	AB	1336	A	O4'-C1'-N9	6.31	113.25	108.20
2	AB	1345	C	C5-C6-N1	6.31	124.15	121.00
2	AB	1413	A	C5-N7-C8	6.31	107.05	103.90
2	AB	1841	U	C5-C4-O4	-6.31	122.11	125.90
2	AB	1920	C	C5-C4-N4	6.31	124.61	120.20
2	AB	1938	A	O4'-C4'-C3'	6.31	111.15	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2814	A	C4-C5-N7	-6.31	107.55	110.70
33	A6	63	TYR	CB-CG-CD2	-6.31	117.22	121.00
35	BA	172	A	N1-C2-N3	-6.31	126.15	129.30
35	BA	721	G	C6-C5-N7	-6.31	126.61	130.40
35	BA	973	G	N7-C8-N9	6.31	116.25	113.10
35	BA	1026	G	N7-C8-N9	6.31	116.25	113.10
35	BA	1223	C	O4'-C1'-N1	6.31	113.25	108.20
36	BB	61	C	O4'-C4'-C3'	6.31	111.15	106.10
2	AB	283	G	N7-C8-N9	6.31	116.25	113.10
2	AB	1060	U	C5-C6-N1	-6.31	119.55	122.70
2	AB	1065	U	N3-C4-O4	6.31	123.81	119.40
35	BA	1108	G	N3-C4-C5	-6.31	125.45	128.60
35	BA	1262	C	C2-N3-C4	-6.31	116.75	119.90
48	BN	121	ARG	NH1-CZ-NH2	-6.31	112.46	119.40
1	AA	78	A	C4-C5-N7	-6.30	107.55	110.70
1	AA	113	C	O5'-P-OP2	-6.30	100.03	105.70
2	AB	201	C	C5-C6-N1	6.30	124.15	121.00
2	AB	237	C	N3-C4-C5	-6.30	119.38	121.90
2	AB	347	A	C5-N7-C8	-6.30	100.75	103.90
2	AB	712	G	N1-C6-O6	6.30	123.68	119.90
2	AB	1653	G	N1-C2-N3	-6.30	120.12	123.90
2	AB	1845	G	O5'-P-OP2	-6.30	100.03	105.70
20	AT	79	ARG	NE-CZ-NH1	-6.30	117.15	120.30
30	A3	47	TYR	CB-CG-CD1	-6.30	117.22	121.00
35	BA	103	U	N3-C4-O4	6.30	123.81	119.40
35	BA	259	G	C6-N1-C2	-6.30	121.32	125.10
35	BA	580	C	C6-N1-C2	-6.30	117.78	120.30
35	BA	1246	A	C6-N1-C2	-6.30	114.82	118.60
35	BA	1253	G	P-O3'-C3'	6.30	127.27	119.70
35	BA	1319	A	C4'-C3'-C2'	-6.30	96.30	102.60
1	AA	45	A	N1-C6-N6	-6.30	114.82	118.60
2	AB	845	A	C6-N1-C2	-6.30	114.82	118.60
2	AB	1412	U	N1-C2-N3	6.30	118.68	114.90
2	AB	1488	C	N3-C4-C5	-6.30	119.38	121.90
2	AB	2308	G	C5'-C4'-O4'	6.30	116.66	109.10
35	BA	153	C	C6-N1-C2	-6.30	117.78	120.30
35	BA	1291	U	N1-C2-N3	6.30	118.68	114.90
1	AA	63	C	C4-C5-C6	-6.30	114.25	117.40
2	AB	895	U	N3-C2-O2	-6.30	117.79	122.20
2	AB	1238	G	C5-C6-O6	-6.30	124.82	128.60
2	AB	1574	C	C6-N1-C1'	6.30	128.36	120.80
2	AB	1668	A	C8-N9-C4	-6.30	103.28	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1927	A	C8-N9-C4	-6.30	103.28	105.80
2	AB	2003	A	C6-C5-N7	6.30	136.71	132.30
2	AB	2744	G	C4'-C3'-C2'	-6.30	96.30	102.60
21	AU	77	ASP	CB-CG-OD1	-6.30	112.63	118.30
35	BA	76	G	C4'-C3'-C2'	-6.30	96.30	102.60
35	BA	407	U	N1-C2-N3	6.30	118.68	114.90
35	BA	1428	A	N9-C4-C5	6.30	108.32	105.80
38	BD	59	A	C6-N1-C2	6.30	122.38	118.60
2	AB	266	G	O4'-C1'-N9	6.30	113.24	108.20
2	AB	301	G	C8-N9-C4	-6.30	103.88	106.40
2	AB	343	C	C4'-C3'-C2'	-6.30	96.30	102.60
2	AB	461	C	C5-C4-N4	-6.30	115.79	120.20
2	AB	929	U	C2-N3-C4	-6.30	123.22	127.00
2	AB	1021	A	N7-C8-N9	6.30	116.95	113.80
2	AB	1114	C	O4'-C1'-N1	6.30	113.24	108.20
2	AB	1846	G	O4'-C1'-N9	6.30	113.24	108.20
2	AB	1890	A	O4'-C1'-N9	6.30	113.24	108.20
2	AB	2331	G	C1'-O4'-C4'	-6.30	104.86	109.90
2	AB	2351	G	N3-C4-C5	-6.30	125.45	128.60
2	AB	2383	G	C5-C6-N1	6.30	114.65	111.50
2	AB	2574	G	N7-C8-N9	6.30	116.25	113.10
35	BA	365	U	O4'-C4'-C3'	-6.30	97.70	104.00
35	BA	791	G	C4-C5-C6	6.30	122.58	118.80
35	BA	800	G	O4'-C1'-N9	6.30	113.24	108.20
35	BA	1299	A	C6-C5-N7	-6.30	127.89	132.30
35	BA	1425	U	N1-C2-N3	6.30	118.68	114.90
35	BA	1427	C	O4'-C1'-N1	6.30	113.24	108.20
2	AB	121	G	N3-C4-C5	-6.30	125.45	128.60
2	AB	175	G	N9-C4-C5	6.30	107.92	105.40
2	AB	1697	G	C4-C5-C6	6.30	122.58	118.80
35	BA	260	G	C2'-C3'-O3'	6.30	123.78	113.70
35	BA	498	A	C4-C5-N7	-6.30	107.55	110.70
35	BA	665	A	C2-N3-C4	6.30	113.75	110.60
1	AA	73	A	C5-C6-N1	6.30	120.85	117.70
2	AB	1647	U	C5-C4-O4	-6.30	122.12	125.90
2	AB	2300	C	O4'-C1'-N1	6.30	113.24	108.20
2	AB	2528	U	N3-C2-O2	-6.30	117.79	122.20
35	BA	898	G	C5-C6-O6	-6.30	124.82	128.60
35	BA	971	G	O4'-C1'-N9	6.30	113.24	108.20
2	AB	658	U	O4'-C1'-N1	6.29	113.24	108.20
2	AB	2089	C	C5-C6-N1	6.29	124.15	121.00
35	BA	104	G	N1-C6-O6	-6.29	116.12	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	399	G	N1-C6-O6	6.29	123.68	119.90
1	AA	91	C	C2-N3-C4	6.29	123.05	119.90
2	AB	28	A	N3-C4-C5	-6.29	122.39	126.80
2	AB	215	G	C4'-C3'-C2'	-6.29	96.31	102.60
2	AB	256	A	C6-C5-N7	-6.29	127.89	132.30
2	AB	579	G	C4-C5-N7	6.29	113.32	110.80
2	AB	742	A	C4'-C3'-C2'	-6.29	96.31	102.60
2	AB	1136	G	N3-C4-N9	6.29	129.78	126.00
2	AB	1709	U	C5-C6-N1	-6.29	119.55	122.70
2	AB	1746	A	N9-C1'-C2'	-6.29	105.08	112.00
2	AB	2124	G	N3-C4-C5	-6.29	125.45	128.60
3	AC	78	PHE	CB-CG-CD1	-6.29	116.39	120.80
13	AM	106	GLU	OE1-CD-OE2	6.29	130.85	123.30
25	AY	10	ARG	NE-CZ-NH2	-6.29	117.15	120.30
35	BA	231	U	C2-N3-C4	-6.29	123.22	127.00
35	BA	369	G	C8-N9-C4	6.29	108.92	106.40
35	BA	426	U	N3-C2-O2	-6.29	117.80	122.20
35	BA	512	U	O4'-C1'-N1	6.29	113.23	108.20
35	BA	1188	A	C5-N7-C8	6.29	107.05	103.90
2	AB	141	G	N1-C2-N2	-6.29	110.54	116.20
2	AB	1080	A	N9-C4-C5	6.29	108.32	105.80
2	AB	2398	U	C5'-C4'-C3'	-6.29	105.93	116.00
11	AK	77	VAL	CA-CB-CG1	6.29	120.34	110.90
35	BA	377	G	N3-C4-N9	6.29	129.78	126.00
35	BA	689	C	O4'-C1'-N1	6.29	113.23	108.20
35	BA	789	U	N3-C4-C5	6.29	118.38	114.60
35	BA	852	G	P-O3'-C3'	6.29	127.25	119.70
35	BA	968	A	C6-C5-N7	-6.29	127.90	132.30
2	AB	166	U	C4'-C3'-C2'	-6.29	96.31	102.60
2	AB	480	A	C6-N1-C2	6.29	122.37	118.60
2	AB	2055	C	C3'-C2'-C1'	6.29	106.53	101.50
18	AR	14	GLN	CA-CB-CG	6.29	127.24	113.40
35	BA	259	G	N3-C4-C5	-6.29	125.45	128.60
35	BA	1536	C	C2-N1-C1'	-6.29	111.88	118.80
2	AB	649	G	N1-C2-N2	6.29	121.86	116.20
2	AB	926	G	C6-N1-C2	-6.29	121.33	125.10
2	AB	1019	U	C3'-C2'-C1'	6.29	106.53	101.50
2	AB	2668	G	N3-C4-C5	-6.29	125.45	128.60
35	BA	7	A	O4'-C1'-N9	6.29	113.23	108.20
35	BA	54	C	C5-C4-N4	6.29	124.60	120.20
35	BA	287	U	P-O3'-C3'	6.29	127.25	119.70
35	BA	929	G	N9-C1'-C2'	-6.29	105.08	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	931	C	C5'-C4'-O4'	6.29	116.64	109.10
35	BA	1055	A	C6-N1-C2	6.29	122.37	118.60
35	BA	1477	U	C2-N3-C4	-6.29	123.23	127.00
37	BC	27	A	N9-C4-C5	-6.29	103.28	105.80
53	BS	61	VAL	CA-CB-CG1	6.29	120.33	110.90
2	AB	134	G	O5'-P-OP1	-6.29	100.04	105.70
2	AB	463	G	N3-C4-C5	-6.29	125.46	128.60
2	AB	1026	G	C8-N9-C4	6.29	108.92	106.40
2	AB	1055	G	C2-N3-C4	6.29	115.04	111.90
2	AB	1220	G	N7-C8-N9	6.29	116.24	113.10
2	AB	1423	G	C6-C5-N7	6.29	134.17	130.40
2	AB	2111	U	C5-C4-O4	-6.29	122.13	125.90
2	AB	2186	G	C5-N7-C8	6.29	107.44	104.30
2	AB	2684	U	N1-C2-N3	6.29	118.67	114.90
35	BA	25	C	C6-N1-C2	-6.29	117.78	120.30
35	BA	678	U	N3-C4-C5	6.29	118.37	114.60
35	BA	1438	G	N9-C4-C5	6.29	107.92	105.40
1	AA	10	G	C4-N9-C1'	-6.29	118.33	126.50
2	AB	560	C	O4'-C1'-N1	6.29	113.23	108.20
2	AB	2345	G	N9-C4-C5	-6.29	102.89	105.40
2	AB	2546	U	C5-C6-N1	-6.29	119.56	122.70
35	BA	392	C	N3-C2-O2	-6.29	117.50	121.90
35	BA	643	C	O4'-C4'-C3'	6.29	111.13	106.10
35	BA	1492	A	N1-C6-N6	-6.29	114.83	118.60
36	BB	39	A	C4-C5-C6	6.29	120.14	117.00
56	BV	2	ARG	NE-CZ-NH2	-6.29	117.16	120.30
2	AB	108	G	C5'-C4'-O4'	6.28	116.64	109.10
2	AB	607	U	O4'-C1'-N1	6.28	113.23	108.20
2	AB	1047	G	C1'-O4'-C4'	-6.28	104.87	109.90
2	AB	1088	A	C5-C6-N1	6.28	120.84	117.70
2	AB	1107	G	C5-N7-C8	6.28	107.44	104.30
2	AB	1565	C	N3-C4-C5	6.28	124.41	121.90
2	AB	1586	A	N3-C4-N9	-6.28	122.37	127.40
2	AB	2326	C	C5-C6-N1	6.28	124.14	121.00
2	AB	2719	G	N7-C8-N9	6.28	116.24	113.10
2	AB	2836	U	C5-C6-N1	6.28	125.84	122.70
8	AH	61	TRP	CE2-CD2-CG	6.28	112.33	107.30
35	BA	88	U	C2-N3-C4	-6.28	123.23	127.00
35	BA	110	C	C5-C4-N4	-6.28	115.80	120.20
35	BA	746	A	C4-C5-C6	-6.28	113.86	117.00
35	BA	1360	A	C8-N9-C4	-6.28	103.29	105.80
2	AB	1744	A	O4'-C1'-N9	6.28	113.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2121	G	C5-C6-O6	-6.28	124.83	128.60
2	AB	2441	U	C4'-C3'-C2'	-6.28	96.32	102.60
2	AB	2855	C	N3-C2-O2	-6.28	117.50	121.90
35	BA	461	A	C8-N9-C4	-6.28	103.29	105.80
35	BA	1062	U	C5-C6-N1	-6.28	119.56	122.70
35	BA	1279	G	N7-C8-N9	6.28	116.24	113.10
2	AB	298	G	N7-C8-N9	6.28	116.24	113.10
2	AB	354	A	C5-C6-N1	-6.28	114.56	117.70
2	AB	374	A	C2-N3-C4	6.28	113.74	110.60
2	AB	492	A	C3'-C2'-C1'	6.28	106.53	101.50
2	AB	665	U	C5-C6-N1	-6.28	119.56	122.70
2	AB	1122	G	O4'-C1'-N9	6.28	113.22	108.20
2	AB	1322	A	N3-C4-C5	-6.28	122.40	126.80
2	AB	1619	G	C5'-C4'-O4'	6.28	116.64	109.10
2	AB	2090	A	N7-C8-N9	6.28	116.94	113.80
2	AB	2193	G	O4'-C4'-C3'	6.28	111.12	106.10
2	AB	2604	U	N3-C4-C5	6.28	118.37	114.60
35	BA	482	A	C5'-C4'-O4'	6.28	116.64	109.10
35	BA	940	C	P-O3'-C3'	6.28	127.24	119.70
2	AB	180	G	N3-C4-C5	-6.28	125.46	128.60
2	AB	690	G	O5'-P-OP2	-6.28	100.05	105.70
2	AB	748	G	C1'-O4'-C4'	-6.28	104.88	109.90
2	AB	1551	A	N1-C2-N3	-6.28	126.16	129.30
2	AB	1749	A	N1-C6-N6	6.28	122.37	118.60
2	AB	2590	A	C4'-C3'-C2'	-6.28	96.32	102.60
35	BA	334	C	N1-C1'-C2'	-6.28	105.09	112.00
35	BA	406	G	N3-C4-N9	6.28	129.77	126.00
35	BA	752	G	C1'-O4'-C4'	6.28	114.92	109.90
2	AB	169	G	O4'-C1'-C2'	6.28	113.25	107.60
2	AB	634	C	N3-C4-C5	6.28	124.41	121.90
2	AB	651	G	C5-C6-O6	-6.28	124.83	128.60
2	AB	897	C	C2-N3-C4	-6.28	116.76	119.90
2	AB	1046	A	C8-N9-C4	-6.28	103.29	105.80
2	AB	1358	G	O4'-C1'-C2'	6.28	113.25	107.60
2	AB	1988	G	N1-C2-N3	6.28	127.67	123.90
2	AB	2530	A	N1-C2-N3	-6.28	126.16	129.30
2	AB	2627	G	N1-C6-O6	6.28	123.67	119.90
35	BA	1203	C	N3-C4-C5	-6.28	119.39	121.90
2	AB	131	A	P-O3'-C3'	6.28	127.23	119.70
2	AB	223	A	O4'-C1'-N9	6.28	113.22	108.20
2	AB	1184	U	C5'-C4'-O4'	6.28	116.63	109.10
2	AB	1811	G	C2-N3-C4	-6.28	108.76	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2019	A	C3'-C2'-C1'	-6.28	96.48	101.50
2	AB	2115	G	C8-N9-C4	-6.28	103.89	106.40
2	AB	2232	C	C5'-C4'-O4'	6.28	116.63	109.10
2	AB	2548	U	C3'-C2'-C1'	6.28	106.52	101.50
35	BA	327	A	N1-C6-N6	6.28	122.36	118.60
35	BA	429	U	O4'-C1'-N1	-6.28	103.18	108.20
35	BA	515	G	C3'-C2'-C1'	-6.28	96.48	101.50
2	AB	834	G	C5-N7-C8	-6.27	101.16	104.30
2	AB	1824	G	C5-N7-C8	-6.27	101.16	104.30
35	BA	872	A	N1-C2-N3	6.27	132.44	129.30
2	AB	266	G	C5-C6-N1	6.27	114.64	111.50
2	AB	742	A	O4'-C1'-N9	6.27	113.22	108.20
2	AB	1129	A	C5-C6-N6	-6.27	118.68	123.70
2	AB	1495	A	C2-N3-C4	6.27	113.74	110.60
2	AB	1511	G	O4'-C1'-C2'	6.27	113.25	107.60
2	AB	2093	G	C4-C5-C6	6.27	122.56	118.80
2	AB	2170	A	C5'-C4'-C3'	6.27	126.04	116.00
2	AB	2357	G	N3-C4-N9	6.27	129.76	126.00
2	AB	2764	A	N1-C6-N6	-6.27	114.84	118.60
17	AQ	56	LYS	CB-CG-CD	6.27	127.91	111.60
35	BA	325	A	O3'-P-O5'	6.27	115.92	104.00
35	BA	509	A	C4'-C3'-C2'	-6.27	96.33	102.60
35	BA	1129	C	C4-C5-C6	6.27	120.54	117.40
35	BA	1154	G	N9-C1'-C2'	-6.27	105.10	112.00
35	BA	1267	C	N1-C1'-C2'	-6.27	105.10	112.00
2	AB	313	G	C5-N7-C8	6.27	107.44	104.30
2	AB	1326	U	N1-C2-N3	6.27	118.66	114.90
2	AB	342	A	O4'-C4'-C3'	6.27	111.11	106.10
2	AB	487	C	N1-C1'-C2'	-6.27	105.10	112.00
2	AB	1012	U	O4'-C1'-N1	6.27	113.22	108.20
2	AB	1106	G	N3-C4-N9	-6.27	122.24	126.00
2	AB	1243	C	N3-C2-O2	-6.27	117.51	121.90
2	AB	1464	G	C5-C6-O6	-6.27	124.84	128.60
2	AB	1535	A	N1-C2-N3	-6.27	126.17	129.30
2	AB	1728	C	C1'-O4'-C4'	6.27	114.92	109.90
2	AB	2018	G	N3-C2-N2	6.27	124.29	119.90
2	AB	2788	C	C3'-C2'-C1'	6.27	106.52	101.50
2	AB	2789	C	C4'-C3'-C2'	-6.27	96.33	102.60
19	AS	31	TYR	CB-CG-CD1	-6.27	117.24	121.00
35	BA	72	A	C5-N7-C8	6.27	107.03	103.90
35	BA	166	U	O4'-C1'-N1	6.27	113.22	108.20
35	BA	365	U	N1-C2-N3	6.27	118.66	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1226	C	O4'-C1'-N1	6.27	113.22	108.20
35	BA	1236	A	O4'-C1'-N9	6.27	113.22	108.20
35	BA	1453	G	C5-C6-O6	6.27	132.36	128.60
35	BA	1535	C	C5-C6-N1	6.27	124.14	121.00
1	AA	24	G	C6-C5-N7	-6.27	126.64	130.40
1	AA	51	G	O4'-C4'-C3'	6.27	111.11	106.10
1	AA	64	G	C6-N1-C2	-6.27	121.34	125.10
2	AB	780	G	C6-C5-N7	-6.27	126.64	130.40
2	AB	780	G	C8-N9-C1'	6.27	135.15	127.00
2	AB	783	A	C6-N1-C2	-6.27	114.84	118.60
2	AB	1214	A	O4'-C1'-N9	6.27	113.21	108.20
2	AB	1632	A	N7-C8-N9	-6.27	110.67	113.80
2	AB	1689	A	N3-C4-C5	-6.27	122.41	126.80
35	BA	215	C	N3-C4-C5	-6.27	119.39	121.90
35	BA	329	A	N1-C6-N6	-6.27	114.84	118.60
35	BA	1054	C	O4'-C1'-N1	6.27	113.21	108.20
35	BA	1121	U	C5'-C4'-O4'	6.27	116.62	109.10
35	BA	1259	C	O4'-C1'-N1	6.27	113.21	108.20
38	BD	35	C	C4'-C3'-C2'	-6.27	96.33	102.60
2	AB	682	G	N1-C2-N2	6.27	121.84	116.20
2	AB	2795	C	N3-C4-N4	6.27	122.39	118.00
35	BA	457	G	N3-C2-N2	6.27	124.29	119.90
35	BA	663	A	C4'-C3'-C2'	-6.27	96.33	102.60
2	AB	303	G	N9-C4-C5	-6.26	102.89	105.40
2	AB	503	A	C2-N3-C4	6.26	113.73	110.60
2	AB	931	U	C2-N1-C1'	6.26	125.22	117.70
2	AB	1012	U	C1'-O4'-C4'	-6.26	104.89	109.90
2	AB	1787	A	N9-C4-C5	6.26	108.31	105.80
2	AB	2103	C	C5-C6-N1	-6.26	117.87	121.00
2	AB	2648	G	C2-N3-C4	6.26	115.03	111.90
2	AB	2801	G	N3-C2-N2	-6.26	115.52	119.90
35	BA	145	G	C4-C5-N7	-6.26	108.29	110.80
35	BA	528	C	C5'-C4'-O4'	6.26	116.62	109.10
35	BA	647	C	C5-C6-N1	6.26	124.13	121.00
35	BA	1421	G	N3-C2-N2	-6.26	115.51	119.90
2	AB	277	G	N3-C4-N9	6.26	129.76	126.00
2	AB	327	G	C1'-O4'-C4'	-6.26	104.89	109.90
2	AB	486	C	C5-C4-N4	-6.26	115.82	120.20
2	AB	1358	G	C6-C5-N7	-6.26	126.64	130.40
2	AB	1661	G	N3-C4-C5	-6.26	125.47	128.60
2	AB	2145	C	P-O3'-C3'	6.26	127.22	119.70
35	BA	655	A	N1-C2-N3	-6.26	126.17	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	661	G	N1-C2-N3	-6.26	120.14	123.90
39	BE	69	VAL	CA-CB-CG2	-6.26	101.51	110.90
2	AB	787	C	O4'-C1'-N1	6.26	113.21	108.20
2	AB	1525	A	C1'-O4'-C4'	6.26	114.91	109.90
2	AB	1538	G	N3-C4-N9	-6.26	122.24	126.00
2	AB	2397	G	N7-C8-N9	-6.26	109.97	113.10
2	AB	2532	G	C6-C5-N7	-6.26	126.64	130.40
2	AB	2682	A	C2-N3-C4	-6.26	107.47	110.60
35	BA	538	G	C5-C6-N1	-6.26	108.37	111.50
35	BA	562	U	O4'-C1'-C2'	6.26	113.23	107.60
38	BD	16	C	C4-C5-C6	-6.26	114.27	117.40
55	BU	31	TYR	CB-CG-CD2	-6.26	117.24	121.00
2	AB	7	G	C4-C5-N7	6.26	113.30	110.80
2	AB	2405	G	O4'-C1'-N9	6.26	113.21	108.20
2	AB	2474	U	C4-C5-C6	-6.26	115.94	119.70
2	AB	2475	C	N3-C4-C5	-6.26	119.40	121.90
2	AB	2808	G	C5-N7-C8	6.26	107.43	104.30
35	BA	430	A	C4'-C3'-C2'	-6.26	96.34	102.60
35	BA	511	C	C5-C4-N4	-6.26	115.82	120.20
35	BA	1312	G	N1-C6-O6	-6.26	116.14	119.90
35	BA	1328	C	C2-N3-C4	-6.26	116.77	119.90
37	BC	38	G	C1'-O4'-C4'	-6.26	104.89	109.90
38	BD	75	C	O4'-C1'-N1	6.26	113.21	108.20
44	BJ	61	PHE	CB-CG-CD1	-6.26	116.42	120.80
46	BL	104	THR	CA-CB-CG2	6.26	121.16	112.40
2	AB	1053	C	C5'-C4'-O4'	6.26	116.61	109.10
2	AB	1125	G	C2'-C3'-O3'	6.26	123.71	113.70
2	AB	1516	G	N9-C1'-C2'	-6.26	105.12	112.00
2	AB	2096	C	C4'-C3'-C2'	6.26	108.86	102.60
2	AB	2351	G	C5-C6-N1	6.26	114.63	111.50
8	AH	166	GLU	OE1-CD-OE2	6.26	130.81	123.30
35	BA	1491	G	C4'-C3'-C2'	-6.26	96.34	102.60
36	BB	1	A	N1-C6-N6	-6.26	114.84	118.60
38	BD	35	C	O4'-C1'-N1	6.26	113.21	108.20
1	AA	9	G	C8-N9-C4	6.26	108.90	106.40
2	AB	623	C	C3'-C2'-C1'	-6.26	96.50	101.50
2	AB	830	G	N9-C4-C5	6.26	107.90	105.40
2	AB	1383	A	C6-N1-C2	-6.26	114.85	118.60
2	AB	1708	C	C4-C5-C6	6.26	120.53	117.40
2	AB	2400	G	N3-C4-C5	-6.26	125.47	128.60
2	AB	2443	C	N1-C2-N3	6.26	123.58	119.20
2	AB	2788	C	C5-C6-N1	-6.26	117.87	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	A5	16	HIS	CA-CB-CG	6.26	124.23	113.60
35	BA	236	A	N9-C1'-C2'	-6.26	105.12	112.00
35	BA	720	C	N3-C4-N4	6.26	122.38	118.00
35	BA	1020	G	O4'-C1'-N9	6.26	113.20	108.20
2	AB	1570	A	O4'-C1'-N9	6.25	113.20	108.20
2	AB	1750	G	O4'-C1'-N9	6.25	113.20	108.20
35	BA	85	U	N3-C4-C5	6.25	118.35	114.60
35	BA	295	C	C2-N3-C4	-6.25	116.77	119.90
35	BA	1089	G	C8-N9-C1'	6.25	135.13	127.00
2	AB	193	U	O4'-C1'-N1	6.25	113.20	108.20
2	AB	889	C	C2-N3-C4	6.25	123.03	119.90
2	AB	1257	C	C4-C5-C6	-6.25	114.27	117.40
2	AB	1813	G	N3-C4-C5	-6.25	125.47	128.60
2	AB	2057	G	C6-N1-C2	-6.25	121.35	125.10
2	AB	2478	A	C2-N3-C4	6.25	113.73	110.60
2	AB	2800	A	C6-N1-C2	6.25	122.35	118.60
2	AB	2821	A	C5-N7-C8	-6.25	100.77	103.90
35	BA	484	G	N3-C4-N9	6.25	129.75	126.00
35	BA	902	G	N1-C2-N2	6.25	121.83	116.20
35	BA	1287	A	O3'-P-O5'	6.25	115.88	104.00
35	BA	1502	A	C5-N7-C8	6.25	107.03	103.90
36	BB	14	A	P-O3'-C3'	6.25	127.20	119.70
37	BC	45	G	C2-N3-C4	6.25	115.03	111.90
38	BD	49	C	C2'-C3'-O3'	6.25	123.70	113.70
47	BM	43	PRO	N-CA-CB	6.25	110.80	103.30
2	AB	315	G	C3'-C2'-C1'	-6.25	96.50	101.50
2	AB	412	A	C3'-C2'-C1'	-6.25	96.50	101.50
2	AB	840	C	C3'-C2'-C1'	6.25	106.50	101.50
2	AB	930	G	C5-N7-C8	6.25	107.43	104.30
2	AB	2735	G	N1-C2-N2	6.25	121.83	116.20
16	AP	96	ARG	NE-CZ-NH1	6.25	123.43	120.30
35	BA	705	G	N9-C4-C5	6.25	107.90	105.40
35	BA	1034	G	N1-C2-N2	-6.25	110.57	116.20
35	BA	1290	G	N1-C2-N3	-6.25	120.15	123.90
1	AA	2	G	C5'-C4'-O4'	6.25	116.60	109.10
2	AB	307	G	N3-C4-C5	-6.25	125.47	128.60
2	AB	1259	G	N3-C2-N2	6.25	124.28	119.90
35	BA	1342	C	N3-C4-C5	-6.25	119.40	121.90
2	AB	71	A	C6-C5-N7	-6.25	127.93	132.30
2	AB	1672	A	N9-C4-C5	6.25	108.30	105.80
35	BA	236	A	N7-C8-N9	-6.25	110.68	113.80
35	BA	285	C	C6-N1-C2	-6.25	117.80	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	506	G	C5-N7-C8	-6.25	101.18	104.30
35	BA	569	C	O4'-C4'-C3'	6.25	111.10	106.10
35	BA	731	G	C4-C5-C6	6.25	122.55	118.80
35	BA	1031	C	O4'-C1'-N1	6.25	113.20	108.20
35	BA	1266	G	N9-C4-C5	6.25	107.90	105.40
36	BB	57	G	C4-C5-N7	-6.25	108.30	110.80
54	BT	36	PHE	CB-CG-CD1	-6.25	116.43	120.80
2	AB	184	C	N3-C4-N4	6.25	122.37	118.00
2	AB	218	A	C5-C6-N1	6.25	120.82	117.70
2	AB	1081	U	C2-N3-C4	-6.25	123.25	127.00
2	AB	1558	C	O4'-C4'-C3'	6.25	111.10	106.10
2	AB	2335	A	N7-C8-N9	-6.25	110.68	113.80
2	AB	2372	U	C3'-C2'-C1'	6.25	106.50	101.50
25	AY	30	VAL	O-C-N	6.25	132.69	122.70
35	BA	126	G	N3-C2-N2	6.25	124.27	119.90
35	BA	582	C	C2-N3-C4	-6.25	116.78	119.90
35	BA	847	G	C3'-C2'-C1'	-6.25	96.50	101.50
35	BA	1303	C	C3'-C2'-C1'	6.25	106.50	101.50
35	BA	1396	A	N9-C4-C5	6.25	108.30	105.80
35	BA	1419	G	N9-C1'-C2'	-6.25	105.13	112.00
37	BC	52	U	C5-C6-N1	-6.25	119.58	122.70
2	AB	1968	G	C1'-O4'-C4'	-6.25	104.90	109.90
2	AB	2037	A	C8-N9-C4	-6.25	103.30	105.80
2	AB	2318	G	N7-C8-N9	6.25	116.22	113.10
35	BA	562	U	N3-C4-C5	-6.25	110.85	114.60
35	BA	612	C	C5'-C4'-C3'	-6.25	106.01	116.00
35	BA	624	C	N1-C2-O2	6.25	122.65	118.90
35	BA	1253	G	C2-N3-C4	6.25	115.02	111.90
38	BD	25	U	C4'-C3'-C2'	-6.25	96.36	102.60
2	AB	398	C	C2-N3-C4	6.24	123.02	119.90
2	AB	559	G	N7-C8-N9	6.24	116.22	113.10
2	AB	738	G	N3-C2-N2	-6.24	115.53	119.90
2	AB	1430	G	N9-C1'-C2'	-6.24	105.13	112.00
2	AB	1601	G	C5-C6-N1	6.24	114.62	111.50
2	AB	1846	G	C5-C6-N1	6.24	114.62	111.50
2	AB	1851	U	O4'-C1'-N1	6.24	113.20	108.20
2	AB	2174	C	C4'-C3'-C2'	-6.24	96.36	102.60
2	AB	2211	A	P-O3'-C3'	6.24	127.19	119.70
2	AB	2692	G	C4-C5-C6	6.24	122.55	118.80
35	BA	240	G	C6-C5-N7	-6.24	126.65	130.40
35	BA	309	A	N9-C4-C5	6.24	108.30	105.80
35	BA	690	G	C5-C6-O6	-6.24	124.85	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1311	A	C4'-C3'-C2'	-6.24	96.36	102.60
35	BA	1506	U	N3-C2-O2	-6.24	117.83	122.20
37	BC	52	U	C5'-C4'-O4'	6.24	116.59	109.10
38	BD	35	C	C2-N3-C4	6.24	123.02	119.90
2	AB	206	U	C4'-C3'-C2'	-6.24	96.36	102.60
2	AB	626	A	N9-C1'-C2'	-6.24	105.13	112.00
2	AB	791	C	C2-N3-C4	-6.24	116.78	119.90
2	AB	1429	G	C1'-O4'-C4'	6.24	114.89	109.90
2	AB	1812	U	N3-C4-C5	6.24	118.34	114.60
2	AB	1959	G	C5'-C4'-O4'	6.24	116.59	109.10
2	AB	2529	G	C5-C6-O6	6.24	132.34	128.60
2	AB	2873	A	C4-C5-C6	-6.24	113.88	117.00
35	BA	33	A	O4'-C1'-N9	6.24	113.19	108.20
35	BA	1048	G	C4-C5-C6	6.24	122.55	118.80
2	AB	39	G	C8-N9-C4	-6.24	103.90	106.40
2	AB	725	G	C5-C6-N1	-6.24	108.38	111.50
2	AB	876	C	C2-N3-C4	6.24	123.02	119.90
2	AB	1567	G	N7-C8-N9	6.24	116.22	113.10
2	AB	2391	G	C1'-O4'-C4'	6.24	114.89	109.90
2	AB	2620	C	C1'-O4'-C4'	-6.24	104.91	109.90
2	AB	2815	C	C1'-O4'-C4'	6.24	114.89	109.90
2	AB	2823	A	C4-C5-N7	-6.24	107.58	110.70
28	A1	30	ARG	NE-CZ-NH1	6.24	123.42	120.30
35	BA	165	G	C2-N3-C4	6.24	115.02	111.90
35	BA	347	G	C6-C5-N7	-6.24	126.66	130.40
35	BA	934	C	O4'-C1'-C2'	-6.24	99.56	105.80
35	BA	1339	A	O4'-C1'-N9	6.24	113.19	108.20
35	BA	1434	A	C6-N1-C2	6.24	122.34	118.60
35	BA	1514	G	C6-N1-C2	-6.24	121.36	125.10
37	BC	44	U	C2-N3-C4	-6.24	123.26	127.00
2	AB	160	A	C4-C5-C6	-6.24	113.88	117.00
2	AB	2115	G	C4-C5-N7	6.24	113.30	110.80
3	AC	196	LEU	CB-CG-CD2	6.24	121.61	111.00
26	AZ	72	ALA	CB-CA-C	6.24	119.46	110.10
35	BA	817	C	N3-C4-N4	6.24	122.37	118.00
35	BA	819	A	C4-C5-C6	-6.24	113.88	117.00
35	BA	983	A	C1'-O4'-C4'	-6.24	104.91	109.90
35	BA	1145	A	N1-C2-N3	6.24	132.42	129.30
35	BA	1163	A	O4'-C4'-C3'	-6.24	97.76	104.00
35	BA	1185	G	C5-C6-O6	6.24	132.34	128.60
35	BA	1197	A	C2-N3-C4	-6.24	107.48	110.60
38	BD	44	A	N1-C6-N6	-6.24	114.86	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1650	A	O4'-C4'-C3'	6.24	111.09	106.10
4	AD	220	ARG	NE-CZ-NH2	-6.24	117.18	120.30
35	BA	900	A	C4'-C3'-C2'	-6.24	96.36	102.60
35	BA	1104	G	N1-C2-N2	6.24	121.81	116.20
38	BD	6	G	O4'-C1'-N9	6.24	113.19	108.20
2	AB	34	U	O4'-C4'-C3'	6.24	111.09	106.10
2	AB	303	G	C5-N7-C8	-6.24	101.18	104.30
2	AB	481	G	N3-C2-N2	-6.24	115.53	119.90
2	AB	1373	A	N1-C2-N3	-6.24	126.18	129.30
2	AB	1450	G	C4'-C3'-C2'	-6.24	96.36	102.60
2	AB	1721	G	N9-C4-C5	6.24	107.89	105.40
2	AB	2007	U	C5'-C4'-C3'	-6.24	106.02	116.00
2	AB	2805	C	C2-N3-C4	6.24	123.02	119.90
35	BA	97	G	N9-C4-C5	6.24	107.89	105.40
35	BA	100	G	C2'-C3'-O3'	6.24	123.68	113.70
35	BA	549	C	C3'-C2'-C1'	6.24	106.49	101.50
35	BA	987	G	N9-C4-C5	6.24	107.89	105.40
35	BA	1097	C	C5-C4-N4	-6.24	115.83	120.20
1	AA	12	C	O4'-C1'-C2'	6.23	113.21	107.60
1	AA	30	C	C6-N1-C2	-6.23	117.81	120.30
2	AB	393	C	C4'-C3'-C2'	-6.23	96.37	102.60
2	AB	518	G	N1-C6-O6	6.23	123.64	119.90
2	AB	699	A	C6-C5-N7	-6.23	127.94	132.30
4	AD	164	VAL	CA-CB-CG1	6.23	120.25	110.90
35	BA	310	G	N7-C8-N9	6.23	116.22	113.10
35	BA	433	G	N1-C6-O6	-6.23	116.16	119.90
35	BA	800	G	C5'-C4'-O4'	6.23	116.58	109.10
35	BA	805	C	C3'-C2'-C1'	6.23	106.49	101.50
35	BA	1469	C	O4'-C1'-N1	6.23	113.19	108.20
2	AB	336	C	C4-C5-C6	6.23	120.52	117.40
2	AB	587	C	N1-C2-O2	6.23	122.64	118.90
2	AB	599	A	C4'-C3'-C2'	-6.23	96.37	102.60
2	AB	963	U	N1-C2-O2	-6.23	118.44	122.80
2	AB	1195	G	C5-C6-O6	-6.23	124.86	128.60
2	AB	1258	U	C5-C4-O4	-6.23	122.16	125.90
2	AB	1715	G	O4'-C1'-N9	6.23	113.19	108.20
2	AB	2177	C	C5'-C4'-C3'	-6.23	106.03	116.00
2	AB	2594	C	C6-N1-C2	6.23	122.79	120.30
35	BA	69	G	C4-C5-N7	-6.23	108.31	110.80
35	BA	1252	A	N1-C6-N6	6.23	122.34	118.60
50	BP	106	ARG	NH1-CZ-NH2	-6.23	112.54	119.40
2	AB	1007	C	N3-C4-N4	6.23	122.36	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1226	A	N1-C6-N6	6.23	122.34	118.60
2	AB	1736	U	C5-C6-N1	-6.23	119.58	122.70
2	AB	2037	A	O4'-C1'-C2'	6.23	113.21	107.60
2	AB	2099	U	C1'-O4'-C4'	6.23	114.88	109.90
2	AB	2554	U	C4-C5-C6	6.23	123.44	119.70
2	AB	2858	C	C5-C4-N4	-6.23	115.84	120.20
35	BA	578	C	C3'-C2'-C1'	-6.23	96.52	101.50
35	BA	721	G	C6-N1-C2	-6.23	121.36	125.10
35	BA	923	A	N9-C4-C5	6.23	108.29	105.80
35	BA	1234	C	N1-C2-O2	6.23	122.64	118.90
35	BA	1363	A	O4'-C1'-C2'	-6.23	99.57	105.80
37	BC	31	U	C3'-C2'-C1'	6.23	106.48	101.50
2	AB	299	A	O4'-C1'-N9	6.23	113.18	108.20
2	AB	418	C	C6-N1-C1'	6.23	128.28	120.80
2	AB	2239	G	N7-C8-N9	6.23	116.22	113.10
2	AB	2410	G	C5'-C4'-O4'	6.23	116.58	109.10
2	AB	2581	G	C6-C5-N7	6.23	134.14	130.40
35	BA	1000	A	O3'-P-O5'	-6.23	92.16	104.00
37	BC	53	G	N3-C4-C5	-6.23	125.49	128.60
2	AB	858	G	C5-N7-C8	6.23	107.41	104.30
2	AB	1156	A	C4-C5-C6	-6.23	113.89	117.00
2	AB	1316	U	C5'-C4'-O4'	6.23	116.57	109.10
2	AB	1371	G	O4'-C1'-N9	6.23	113.18	108.20
2	AB	1676	A	P-O3'-C3'	6.23	127.17	119.70
2	AB	1924	C	C2-N3-C4	6.23	123.01	119.90
2	AB	2372	U	N3-C4-O4	6.23	123.76	119.40
2	AB	2483	C	N1-C2-O2	6.23	122.64	118.90
2	AB	2578	G	N3-C4-N9	6.23	129.74	126.00
2	AB	2837	A	N3-C4-C5	-6.23	122.44	126.80
35	BA	1159	U	N1-C2-N3	6.23	118.64	114.90
35	BA	1294	G	N9-C4-C5	-6.23	102.91	105.40
36	BB	13	C	C2-N3-C4	6.23	123.01	119.90
2	AB	700	G	N9-C1'-C2'	-6.23	105.15	112.00
2	AB	1386	C	O4'-C4'-C3'	-6.23	97.77	104.00
2	AB	2433	A	C8-N9-C4	-6.23	103.31	105.80
2	AB	2468	A	C3'-C2'-C1'	6.23	106.48	101.50
2	AB	2614	A	N9-C4-C5	6.23	108.29	105.80
35	BA	929	G	C8-N9-C4	-6.23	103.91	106.40
35	BA	1087	G	C8-N9-C4	-6.23	103.91	106.40
35	BA	1412	C	N3-C4-N4	6.23	122.36	118.00
2	AB	33	C	N1-C2-N3	-6.22	114.84	119.20
2	AB	660	C	C5'-C4'-C3'	-6.22	106.04	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	790	U	C1'-O4'-C4'	-6.22	104.92	109.90
2	AB	921	C	C2-N3-C4	-6.22	116.79	119.90
2	AB	1307	A	C4-C5-N7	6.22	113.81	110.70
2	AB	1338	G	N3-C2-N2	6.22	124.26	119.90
2	AB	2703	C	C5-C4-N4	-6.22	115.84	120.20
2	AB	2864	G	N3-C4-C5	-6.22	125.49	128.60
6	AF	182	ALA	CB-CA-C	6.22	119.44	110.10
10	AJ	25	VAL	CA-CB-CG2	6.22	120.24	110.90
26	AZ	47	THR	CA-CB-CG2	6.22	121.12	112.40
35	BA	555	U	N3-C2-O2	-6.22	117.84	122.20
35	BA	875	U	C2-N3-C4	-6.22	123.27	127.00
35	BA	1074	G	C5-C6-O6	-6.22	124.87	128.60
2	AB	161	A	O4'-C1'-N9	6.22	113.18	108.20
2	AB	167	A	O4'-C1'-N9	6.22	113.18	108.20
2	AB	543	G	N3-C4-C5	-6.22	125.49	128.60
2	AB	628	G	C5'-C4'-O4'	6.22	116.57	109.10
2	AB	681	G	C5-C6-O6	6.22	132.33	128.60
2	AB	793	A	P-O3'-C3'	6.22	127.17	119.70
2	AB	1033	U	C5-C6-N1	-6.22	119.59	122.70
2	AB	1454	C	N1-C1'-C2'	6.22	122.09	114.00
2	AB	1647	U	C2-N3-C4	6.22	130.73	127.00
2	AB	2608	G	N9-C1'-C2'	-6.22	105.16	112.00
2	AB	2835	A	C5-C6-N1	6.22	120.81	117.70
35	BA	268	U	C6-N1-C2	-6.22	117.27	121.00
35	BA	389	A	C5-C6-N6	-6.22	118.72	123.70
35	BA	670	G	C5-N7-C8	-6.22	101.19	104.30
36	BB	61	C	P-O5'-C5'	6.22	130.85	120.90
1	AA	84	G	C5-C6-N1	6.22	114.61	111.50
2	AB	116	C	P-O3'-C3'	6.22	127.17	119.70
2	AB	371	A	N1-C2-N3	6.22	132.41	129.30
2	AB	2270	A	N9-C1'-C2'	-6.22	105.16	112.00
2	AB	2797	U	O4'-C4'-C3'	6.22	111.08	106.10
35	BA	192	A	C4-C5-N7	6.22	113.81	110.70
35	BA	872	A	N9-C4-C5	-6.22	103.31	105.80
38	BD	63	C	C3'-C2'-C1'	-6.22	96.52	101.50
2	AB	102	U	C5-C6-N1	-6.22	119.59	122.70
2	AB	1327	A	C2-N3-C4	6.22	113.71	110.60
2	AB	2402	U	C3'-C2'-C1'	6.22	106.47	101.50
2	AB	2413	G	C5-N7-C8	-6.22	101.19	104.30
35	BA	452	A	C6-C5-N7	-6.22	127.95	132.30
35	BA	744	C	C1'-O4'-C4'	-6.22	104.92	109.90
35	BA	852	G	C8-N9-C4	-6.22	103.91	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	4	G	N9-C1'-C2'	-6.22	105.16	112.00
38	BD	63	C	N3-C4-C5	-6.22	119.41	121.90
2	AB	65	U	C4'-C3'-C2'	-6.22	96.38	102.60
2	AB	434	U	O4'-C4'-C3'	6.22	111.07	106.10
2	AB	1036	G	C1'-O4'-C4'	6.22	114.87	109.90
2	AB	1912	A	C5-C6-N6	6.22	128.67	123.70
2	AB	2588	G	N3-C4-C5	-6.22	125.49	128.60
35	BA	1022	A	O4'-C1'-N9	6.22	113.17	108.20
35	BA	1142	G	C4-C5-N7	-6.22	108.31	110.80
35	BA	1236	A	C5'-C4'-O4'	6.22	116.56	109.10
1	AA	43	C	O4'-C1'-N1	6.22	113.17	108.20
1	AA	51	G	C2-N3-C4	6.22	115.01	111.90
1	AA	99	A	N3-C4-C5	-6.22	122.45	126.80
2	AB	455	C	O3'-P-O5'	6.22	115.81	104.00
2	AB	736	C	C2-N3-C4	-6.22	116.79	119.90
2	AB	909	A	P-O3'-C3'	6.22	127.16	119.70
2	AB	1853	A	C4-C5-N7	-6.22	107.59	110.70
2	AB	2067	G	C6-N1-C2	-6.22	121.37	125.10
2	AB	2082	A	O4'-C4'-C3'	-6.22	97.78	104.00
2	AB	2260	C	C5-C4-N4	-6.22	115.85	120.20
2	AB	2410	G	C4'-C3'-C2'	-6.22	96.38	102.60
35	BA	157	U	O4'-C1'-N1	6.22	113.17	108.20
35	BA	202	G	N1-C2-N3	-6.22	120.17	123.90
35	BA	470	C	C2-N3-C4	6.22	123.01	119.90
35	BA	774	G	C6-C5-N7	-6.22	126.67	130.40
35	BA	1463	U	N1-C2-N3	6.22	118.63	114.90
36	BB	34	C	N1-C1'-C2'	6.22	122.08	114.00
36	BB	62	U	C6-N1-C2	-6.22	117.27	121.00
38	BD	5	G	C5-N7-C8	-6.22	101.19	104.30
38	BD	60	A	C1'-O4'-C4'	6.22	114.87	109.90
2	AB	632	A	N9-C4-C5	6.21	108.29	105.80
2	AB	1337	G	N1-C6-O6	-6.21	116.17	119.90
2	AB	2161	C	C5'-C4'-C3'	6.21	125.94	116.00
35	BA	281	G	O4'-C1'-N9	6.21	113.17	108.20
35	BA	1110	A	C5-C6-N1	6.21	120.81	117.70
35	BA	1355	G	C4-C5-N7	-6.21	108.31	110.80
38	BD	74	A	C5-C6-N1	6.21	120.81	117.70
2	AB	2625	G	C6-N1-C2	-6.21	121.37	125.10
2	AB	2812	G	C2-N3-C4	6.21	115.01	111.90
35	BA	1118	U	C5-C4-O4	6.21	129.63	125.90
1	AA	48	U	C5-C4-O4	-6.21	122.17	125.90
2	AB	130	C	N3-C2-O2	-6.21	117.55	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	548	G	C6-C5-N7	6.21	134.13	130.40
2	AB	733	G	N3-C2-N2	6.21	124.25	119.90
2	AB	839	U	N1-C2-N3	-6.21	111.17	114.90
2	AB	872	U	N3-C4-C5	6.21	118.33	114.60
2	AB	1018	U	C5'-C4'-O4'	6.21	116.55	109.10
2	AB	1021	A	C4'-C3'-O3'	6.21	125.42	113.00
2	AB	1436	G	C5-N7-C8	6.21	107.41	104.30
2	AB	2425	A	N7-C8-N9	-6.21	110.69	113.80
2	AB	2691	C	C5-C4-N4	-6.21	115.85	120.20
2	AB	2810	A	C4-C5-N7	6.21	113.81	110.70
35	BA	103	U	C2-N3-C4	-6.21	123.27	127.00
35	BA	294	U	C5-C4-O4	-6.21	122.17	125.90
35	BA	1050	G	C2-N3-C4	6.21	115.00	111.90
35	BA	1075	U	O4'-C1'-N1	6.21	113.17	108.20
35	BA	1187	G	C4-C5-N7	-6.21	108.31	110.80
35	BA	1484	C	C1'-O4'-C4'	-6.21	104.93	109.90
36	BB	15	A	C4-C5-N7	-6.21	107.59	110.70
37	BC	18	A	P-O3'-C3'	6.21	127.15	119.70
38	BD	44	A	P-O5'-C5'	6.21	130.84	120.90
2	AB	655	A	C5-N7-C8	6.21	107.00	103.90
2	AB	1197	G	C5-N7-C8	-6.21	101.19	104.30
2	AB	1494	A	C5'-C4'-O4'	6.21	116.55	109.10
35	BA	889	A	C1'-O4'-C4'	-6.21	104.93	109.90
1	AA	53	A	N1-C6-N6	6.21	122.33	118.60
2	AB	216	A	C6-C5-N7	6.21	136.65	132.30
2	AB	1301	A	C5-N7-C8	6.21	107.00	103.90
2	AB	1479	G	C4-N9-C1'	-6.21	118.43	126.50
2	AB	2017	U	N1-C2-O2	6.21	127.15	122.80
2	AB	2074	U	C3'-C2'-C1'	-6.21	96.53	101.50
2	AB	2467	C	C1'-O4'-C4'	6.21	114.87	109.90
2	AB	2704	C	C1'-O4'-C4'	6.21	114.87	109.90
2	AB	2781	A	O4'-C1'-N9	6.21	113.17	108.20
2	AB	2806	C	C4'-C3'-C2'	-6.21	96.39	102.60
2	AB	2872	A	N1-C6-N6	-6.21	114.88	118.60
15	AO	34	LYS	CA-CB-CG	6.21	127.06	113.40
35	BA	300	A	N9-C4-C5	6.21	108.28	105.80
35	BA	783	C	C5'-C4'-C3'	-6.21	106.07	116.00
2	AB	117	G	N3-C4-N9	6.21	129.72	126.00
2	AB	697	G	C4-C5-C6	6.21	122.52	118.80
2	AB	1129	A	O4'-C1'-N9	6.21	113.17	108.20
2	AB	1135	C	N1-C2-O2	-6.21	115.18	118.90
2	AB	1781	U	C4-C5-C6	6.21	123.42	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1949	G	C4-C5-C6	6.21	122.52	118.80
2	AB	2366	A	O4'-C1'-N9	6.21	113.17	108.20
2	AB	2523	G	C4'-C3'-C2'	-6.21	96.39	102.60
2	AB	2624	G	C4-C5-N7	-6.21	108.32	110.80
2	AB	1252	G	C4-C5-C6	6.21	122.52	118.80
2	AB	1704	C	N3-C4-N4	-6.21	113.66	118.00
2	AB	1797	G	C8-N9-C4	-6.21	103.92	106.40
2	AB	2015	A	O4'-C1'-N9	6.21	113.16	108.20
35	BA	691	G	N3-C4-N9	6.21	129.72	126.00
35	BA	1401	G	C4-C5-C6	6.21	122.52	118.80
2	AB	213	A	O4'-C1'-N9	6.20	113.16	108.20
2	AB	256	A	C5-C6-N6	6.20	128.66	123.70
2	AB	312	G	O4'-C1'-C2'	6.20	113.18	107.60
2	AB	1396	U	N3-C4-C5	6.20	118.32	114.60
2	AB	1593	A	O4'-C1'-N9	6.20	113.16	108.20
2	AB	1628	G	C2-N3-C4	6.20	115.00	111.90
2	AB	1699	G	P-O3'-C3'	6.20	127.14	119.70
2	AB	1850	G	C8-N9-C4	-6.20	103.92	106.40
2	AB	2315	G	C5-C6-N1	6.20	114.60	111.50
2	AB	2774	C	N3-C4-N4	-6.20	113.66	118.00
2	AB	2892	G	N7-C8-N9	6.20	116.20	113.10
35	BA	1200	C	C2-N3-C4	6.20	123.00	119.90
42	BH	11	GLN	CB-CA-C	6.20	122.81	110.40
2	AB	261	G	N3-C4-C5	-6.20	125.50	128.60
2	AB	505	A	N9-C1'-C2'	-6.20	105.18	112.00
2	AB	506	G	C4-C5-N7	-6.20	108.32	110.80
2	AB	1175	A	N1-C6-N6	-6.20	114.88	118.60
2	AB	2064	C	C5-C6-N1	-6.20	117.90	121.00
35	BA	26	A	N9-C4-C5	6.20	108.28	105.80
2	AB	869	G	N3-C4-N9	6.20	129.72	126.00
2	AB	986	C	C4-C5-C6	-6.20	114.30	117.40
2	AB	1012	U	O4'-C1'-C2'	-6.20	99.60	105.80
2	AB	1622	G	C8-N9-C4	-6.20	103.92	106.40
2	AB	2228	G	N1-C2-N2	6.20	121.78	116.20
2	AB	2630	G	N7-C8-N9	6.20	116.20	113.10
2	AB	2841	C	C4-C5-C6	-6.20	114.30	117.40
28	A1	37	ARG	NE-CZ-NH1	-6.20	117.20	120.30
35	BA	229	U	N1-C2-N3	6.20	118.62	114.90
35	BA	240	G	N9-C4-C5	-6.20	102.92	105.40
35	BA	557	G	N9-C1'-C2'	-6.20	105.18	112.00
35	BA	1160	G	N3-C4-C5	-6.20	125.50	128.60
2	AB	1204	A	O4'-C4'-C3'	6.20	111.06	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2216	G	C2-N3-C4	6.20	115.00	111.90
2	AB	2218	G	N7-C8-N9	6.20	116.20	113.10
2	AB	2670	A	N7-C8-N9	-6.20	110.70	113.80
9	AI	146	VAL	CA-CB-CG1	-6.20	101.60	110.90
21	AU	84	ARG	NE-CZ-NH2	6.20	123.40	120.30
35	BA	403	C	N1-C1'-C2'	-6.20	105.18	112.00
35	BA	468	A	N7-C8-N9	-6.20	110.70	113.80
35	BA	1022	A	O5'-P-OP2	-6.20	100.12	105.70
35	BA	1336	C	P-O3'-C3'	6.20	127.14	119.70
36	BB	25	C	C5'-C4'-C3'	-6.20	106.08	116.00
2	AB	329	G	C4-C5-N7	-6.20	108.32	110.80
2	AB	612	G	O4'-C1'-N9	6.20	113.16	108.20
2	AB	709	U	C4'-C3'-C2'	-6.20	96.40	102.60
2	AB	1903	G	N7-C8-N9	-6.20	110.00	113.10
2	AB	2311	A	C8-N9-C4	-6.20	103.32	105.80
35	BA	47	C	N3-C4-C5	-6.20	119.42	121.90
35	BA	199	A	N7-C8-N9	6.20	116.90	113.80
35	BA	790	A	O4'-C1'-N9	6.20	113.16	108.20
35	BA	1070	U	N1-C2-N3	6.20	118.62	114.90
35	BA	1130	A	C5'-C4'-C3'	-6.20	106.08	116.00
2	AB	2	G	C5-C6-N1	6.20	114.60	111.50
2	AB	1310	G	C5-C6-O6	-6.20	124.88	128.60
2	AB	1521	G	C1'-O4'-C4'	6.20	114.86	109.90
2	AB	1720	U	C5-C6-N1	-6.20	119.60	122.70
2	AB	1784	A	O4'-C4'-C3'	6.20	111.06	106.10
2	AB	2025	C	O4'-C1'-N1	6.20	113.16	108.20
2	AB	2361	G	N9-C4-C5	6.20	107.88	105.40
4	AD	166	ARG	NE-CZ-NH1	-6.20	117.20	120.30
35	BA	633	G	C5-N7-C8	6.20	107.40	104.30
35	BA	668	G	C8-N9-C4	-6.20	103.92	106.40
35	BA	1487	G	C4'-C3'-C2'	-6.20	96.41	102.60
2	AB	88	G	C1'-O4'-C4'	-6.19	104.94	109.90
2	AB	1364	G	N3-C4-C5	-6.19	125.50	128.60
35	BA	366	A	P-O3'-C3'	6.19	127.13	119.70
35	BA	792	A	N3-C4-C5	-6.19	122.46	126.80
35	BA	925	G	C5-N7-C8	-6.19	101.20	104.30
35	BA	1437	A	C6-C5-N7	-6.19	127.96	132.30
36	BB	22	G	C4-N9-C1'	-6.19	118.45	126.50
2	AB	165	A	C4-C5-N7	-6.19	107.60	110.70
2	AB	716	A	C5-C6-N6	-6.19	118.75	123.70
2	AB	734	A	N3-C4-C5	-6.19	122.47	126.80
2	AB	859	G	C1'-O4'-C4'	6.19	114.85	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	943	A	C4'-C3'-C2'	-6.19	96.41	102.60
2	AB	1078	U	N3-C4-O4	6.19	123.73	119.40
2	AB	1115	G	C6-N1-C2	-6.19	121.38	125.10
2	AB	1614	A	C8-N9-C4	6.19	108.28	105.80
2	AB	1841	U	C5-C6-N1	-6.19	119.60	122.70
2	AB	2302	U	P-O3'-C3'	6.19	127.13	119.70
35	BA	410	G	N9-C4-C5	6.19	107.88	105.40
35	BA	897	C	C1'-O4'-C4'	-6.19	104.95	109.90
35	BA	1048	G	N9-C4-C5	6.19	107.88	105.40
36	BB	57	G	N3-C2-N2	-6.19	115.56	119.90
42	BH	49	TYR	CD1-CG-CD2	6.19	124.71	117.90
2	AB	36	G	C4-C5-C6	6.19	122.51	118.80
2	AB	1415	U	C6-N1-C2	-6.19	117.29	121.00
2	AB	1739	A	C6-N1-C2	6.19	122.31	118.60
2	AB	2437	G	N1-C2-N3	-6.19	120.19	123.90
2	AB	2450	A	C4'-C3'-C2'	-6.19	96.41	102.60
2	AB	2524	G	C8-N9-C4	-6.19	103.92	106.40
35	BA	208	U	N1-C1'-C2'	-6.19	105.19	112.00
35	BA	568	G	N1-C2-N3	-6.19	120.19	123.90
35	BA	1027	C	N1-C2-O2	6.19	122.61	118.90
35	BA	1181	G	N3-C2-N2	-6.19	115.57	119.90
35	BA	1226	C	N1-C2-O2	6.19	122.61	118.90
2	AB	717	C	C5-C4-N4	6.19	124.53	120.20
2	AB	914	G	N3-C4-C5	-6.19	125.50	128.60
2	AB	1632	A	C1'-O4'-C4'	6.19	114.85	109.90
2	AB	1798	U	C5-C4-O4	6.19	129.61	125.90
2	AB	2293	G	C6-N1-C2	-6.19	121.39	125.10
4	AD	170	TYR	CB-CG-CD2	-6.19	117.29	121.00
6	AF	110	SER	N-CA-CB	-6.19	101.22	110.50
35	BA	455	G	O4'-C1'-N9	6.19	113.15	108.20
35	BA	1173	U	N1-C1'-C2'	-6.19	105.19	112.00
35	BA	1492	A	C5'-C4'-O4'	6.19	116.53	109.10
55	BU	71	ASP	CB-CG-OD1	6.19	123.87	118.30
2	AB	161	A	C2-N3-C4	6.19	113.69	110.60
2	AB	164	C	C3'-C2'-C1'	6.19	106.45	101.50
2	AB	444	C	P-O3'-C3'	6.19	127.13	119.70
2	AB	684	G	C5'-C4'-O4'	6.19	116.52	109.10
2	AB	812	C	C4'-C3'-C2'	-6.19	96.41	102.60
2	AB	924	G	C5-C6-N1	6.19	114.59	111.50
2	AB	1006	C	C5-C4-N4	-6.19	115.87	120.20
2	AB	1787	A	O5'-P-OP2	-6.19	100.13	105.70
2	AB	2185	U	C5'-C4'-O4'	6.19	116.53	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2336	A	N1-C6-N6	-6.19	114.89	118.60
2	AB	2375	G	N1-C6-O6	-6.19	116.19	119.90
2	AB	2603	G	C8-N9-C4	-6.19	103.92	106.40
5	AE	29	VAL	CG1-CB-CG2	-6.19	101.00	110.90
35	BA	880	C	C4'-C3'-C2'	-6.19	96.41	102.60
35	BA	902	G	N7-C8-N9	6.19	116.19	113.10
35	BA	978	A	C6-C5-N7	6.19	136.63	132.30
38	BD	52	C	C2-N3-C4	6.19	122.99	119.90
2	AB	985	C	N1-C2-O2	6.19	122.61	118.90
2	AB	1234	U	C5'-C4'-C3'	-6.19	106.10	116.00
2	AB	2355	G	C4-C5-N7	6.19	113.27	110.80
35	BA	53	A	C2-N3-C4	6.19	113.69	110.60
35	BA	302	G	C4-C5-C6	6.19	122.51	118.80
35	BA	1301	U	N1-C1'-C2'	-6.19	105.20	112.00
2	AB	358	U	C4'-C3'-C2'	-6.18	96.42	102.60
2	AB	390	U	C5-C6-N1	-6.18	119.61	122.70
2	AB	1751	U	O4'-C1'-N1	6.18	113.15	108.20
2	AB	2567	G	C3'-C2'-C1'	-6.18	96.55	101.50
2	AB	2877	G	C1'-O4'-C4'	-6.18	104.95	109.90
35	BA	929	G	C6-N1-C2	-6.18	121.39	125.10
35	BA	1539	C	O4'-C1'-N1	6.18	113.15	108.20
36	BB	35	C	N3-C2-O2	-6.18	117.57	121.90
2	AB	622	G	C5'-C4'-O4'	6.18	116.52	109.10
2	AB	703	U	N1-C2-O2	-6.18	118.47	122.80
2	AB	849	A	C4-C5-C6	-6.18	113.91	117.00
2	AB	888	C	C5'-C4'-O4'	6.18	116.52	109.10
2	AB	936	A	C8-N9-C4	6.18	108.27	105.80
2	AB	1105	U	N3-C4-O4	-6.18	115.07	119.40
2	AB	1144	A	C5-C6-N1	6.18	120.79	117.70
2	AB	1859	U	N3-C2-O2	-6.18	117.87	122.20
2	AB	2500	U	C3'-C2'-C1'	6.18	106.45	101.50
35	BA	69	G	N9-C4-C5	6.18	107.87	105.40
35	BA	360	G	C5-N7-C8	6.18	107.39	104.30
38	BD	10	G	C5'-C4'-O4'	6.18	116.52	109.10
40	BF	21	TRP	CD1-NE1-CE2	6.18	114.56	109.00
49	BO	8	ARG	NE-CZ-NH2	-6.18	117.21	120.30
2	AB	453	A	N3-C4-N9	-6.18	122.45	127.40
2	AB	981	A	N7-C8-N9	6.18	116.89	113.80
2	AB	2241	A	N9-C1'-C2'	-6.18	105.20	112.00
35	BA	110	C	C6-N1-C2	6.18	122.77	120.30
35	BA	230	G	N9-C1'-C2'	-6.18	105.20	112.00
35	BA	804	U	C5'-C4'-O4'	6.18	116.52	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1527	U	N1-C2-N3	6.18	118.61	114.90
2	AB	480	A	N9-C4-C5	-6.18	103.33	105.80
2	AB	932	U	O4'-C4'-C3'	6.18	111.04	106.10
2	AB	1611	C	P-O3'-C3'	6.18	127.11	119.70
2	AB	1710	G	N3-C4-C5	6.18	131.69	128.60
2	AB	1765	U	C3'-C2'-C1'	-6.18	96.56	101.50
2	AB	2542	A	C2-N3-C4	6.18	113.69	110.60
35	BA	379	C	P-O3'-C3'	6.18	127.12	119.70
35	BA	1087	G	N7-C8-N9	-6.18	110.01	113.10
36	BB	12	U	P-O3'-C3'	6.18	127.12	119.70
43	BI	45	ARG	NE-CZ-NH1	6.18	123.39	120.30
1	AA	16	G	C8-N9-C4	-6.18	103.93	106.40
2	AB	820	A	O4'-C1'-N9	6.18	113.14	108.20
2	AB	1283	G	O4'-C1'-N9	6.18	113.14	108.20
2	AB	2694	G	C2-N3-C4	6.18	114.99	111.90
35	BA	438	U	O4'-C1'-N1	6.18	113.14	108.20
35	BA	604	G	C5-C6-O6	-6.18	124.89	128.60
35	BA	710	G	N1-C6-O6	-6.18	116.19	119.90
35	BA	781	A	N7-C8-N9	6.18	116.89	113.80
35	BA	807	A	N7-C8-N9	6.18	116.89	113.80
40	BF	155	ARG	NE-CZ-NH2	-6.18	117.21	120.30
2	AB	141	G	C4-C5-C6	6.18	122.51	118.80
2	AB	174	U	C6-N1-C2	-6.18	117.30	121.00
2	AB	549	G	N9-C1'-C2'	6.18	122.03	114.00
2	AB	596	U	C4-C5-C6	6.18	123.41	119.70
2	AB	727	A	N7-C8-N9	6.18	116.89	113.80
2	AB	737	C	C3'-C2'-C1'	6.18	106.44	101.50
2	AB	762	U	O4'-C1'-N1	6.18	113.14	108.20
2	AB	943	A	O4'-C1'-C2'	-6.18	99.62	105.80
2	AB	1175	A	C5-N7-C8	-6.18	100.81	103.90
2	AB	1262	A	O4'-C1'-N9	6.18	113.14	108.20
2	AB	1334	G	N9-C4-C5	6.18	107.87	105.40
2	AB	2564	A	C8-N9-C4	-6.18	103.33	105.80
2	AB	2588	G	O4'-C4'-C3'	-6.18	97.82	104.00
11	AK	102	ARG	NE-CZ-NH2	-6.18	117.21	120.30
34	A7	20	ASP	CB-CG-OD2	-6.18	112.74	118.30
35	BA	56	U	N3-C2-O2	-6.18	117.88	122.20
35	BA	553	A	N9-C4-C5	6.18	108.27	105.80
35	BA	600	A	C8-N9-C4	-6.18	103.33	105.80
35	BA	627	G	C5-N7-C8	-6.18	101.21	104.30
35	BA	700	G	C5'-C4'-O4'	6.18	116.51	109.10
35	BA	818	G	C6-C5-N7	6.18	134.11	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	906	A	C2-N3-C4	6.18	113.69	110.60
2	AB	426	C	N3-C4-C5	-6.17	119.43	121.90
2	AB	968	C	N1-C2-O2	-6.17	115.19	118.90
2	AB	2078	C	O4'-C1'-N1	6.17	113.14	108.20
2	AB	2636	C	C5-C4-N4	-6.17	115.88	120.20
3	AC	60	ARG	NE-CZ-NH2	-6.17	117.21	120.30
4	AD	203	VAL	CA-CB-CG2	6.17	120.16	110.90
35	BA	144	G	C5-C6-O6	-6.17	124.90	128.60
35	BA	343	U	C5-C6-N1	-6.17	119.61	122.70
35	BA	627	G	C6-C5-N7	-6.17	126.70	130.40
35	BA	724	G	N7-C8-N9	6.17	116.19	113.10
35	BA	739	C	C2-N3-C4	-6.17	116.81	119.90
35	BA	1001	C	C1'-O4'-C4'	-6.17	104.96	109.90
35	BA	1060	U	C1'-O4'-C4'	-6.17	104.96	109.90
35	BA	1279	G	C5-N7-C8	-6.17	101.21	104.30
36	BB	19	G	N3-C4-N9	6.17	129.71	126.00
40	BF	125	ARG	NE-CZ-NH1	6.17	123.39	120.30
2	AB	1495	A	C5-N7-C8	-6.17	100.81	103.90
2	AB	2482	A	N1-C6-N6	-6.17	114.90	118.60
15	AO	114	ARG	CD-NE-CZ	6.17	132.24	123.60
28	A1	39	ASP	CB-CG-OD2	-6.17	112.75	118.30
35	BA	198	G	N3-C2-N2	-6.17	115.58	119.90
35	BA	296	U	N1-C2-O2	6.17	127.12	122.80
35	BA	405	U	C5'-C4'-O4'	6.17	116.51	109.10
35	BA	849	G	C5-N7-C8	6.17	107.39	104.30
1	AA	5	U	N1-C2-N3	6.17	118.60	114.90
2	AB	405	U	N1-C2-O2	6.17	127.12	122.80
2	AB	720	U	P-O3'-C3'	6.17	127.11	119.70
2	AB	952	G	C5-C6-O6	-6.17	124.90	128.60
2	AB	1055	G	C6-C5-N7	-6.17	126.70	130.40
2	AB	1120	G	C6-C5-N7	6.17	134.10	130.40
2	AB	1704	C	N1-C2-N3	6.17	123.52	119.20
2	AB	2194	U	C5-C6-N1	6.17	125.78	122.70
2	AB	2382	G	C4-N9-C1'	-6.17	118.48	126.50
5	AE	21	SER	N-CA-CB	6.17	119.76	110.50
7	AG	176	PHE	CG-CD1-CE1	-6.17	114.01	120.80
35	BA	1126	U	C2-N3-C4	-6.17	123.30	127.00
35	BA	1300	G	N7-C8-N9	6.17	116.19	113.10
1	AA	87	U	N3-C4-O4	6.17	123.72	119.40
2	AB	447	A	N7-C8-N9	6.17	116.89	113.80
2	AB	1032	A	O4'-C1'-N9	-6.17	103.26	108.20
35	BA	133	U	P-O3'-C3'	6.17	127.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	831	A	C4-C5-C6	-6.17	113.92	117.00
2	AB	751	A	N9-C4-C5	6.17	108.27	105.80
2	AB	770	G	C5'-C4'-O4'	6.17	116.50	109.10
2	AB	830	G	C5-C6-N1	6.17	114.58	111.50
2	AB	901	C	O4'-C1'-N1	6.17	113.13	108.20
2	AB	993	G	N9-C1'-C2'	-6.17	105.21	112.00
2	AB	1024	G	C4'-C3'-C2'	-6.17	96.43	102.60
2	AB	1359	A	P-O3'-C3'	6.17	127.10	119.70
2	AB	1409	U	P-O3'-C3'	6.17	127.10	119.70
2	AB	1547	C	C4-C5-C6	6.17	120.48	117.40
2	AB	2359	C	N3-C4-C5	-6.17	119.43	121.90
2	AB	2884	U	C2-N3-C4	-6.17	123.30	127.00
35	BA	324	G	C4-C5-N7	-6.17	108.33	110.80
35	BA	359	G	C3'-C2'-C1'	6.17	106.43	101.50
35	BA	394	G	C1'-O4'-C4'	-6.17	104.97	109.90
35	BA	458	U	C5'-C4'-C3'	-6.17	106.13	116.00
35	BA	676	A	C5-N7-C8	-6.17	100.82	103.90
35	BA	1062	U	N1-C1'-C2'	-6.17	105.21	112.00
35	BA	1261	A	N7-C8-N9	-6.17	110.72	113.80
35	BA	1382	C	N3-C4-N4	-6.17	113.68	118.00
37	BC	13	A	C6-N1-C2	-6.17	114.90	118.60
2	AB	128	C	C5-C6-N1	-6.17	117.92	121.00
2	AB	143	C	N1-C2-O2	6.17	122.60	118.90
2	AB	603	A	N7-C8-N9	6.17	116.88	113.80
2	AB	727	A	C5-C6-N1	6.17	120.78	117.70
2	AB	938	G	C5-N7-C8	-6.17	101.22	104.30
2	AB	1049	C	P-O3'-C3'	6.17	127.10	119.70
2	AB	1050	A	N9-C4-C5	-6.17	103.33	105.80
2	AB	1057	A	O3'-P-O5'	-6.17	92.28	104.00
2	AB	1100	C	N3-C4-C5	-6.17	119.43	121.90
2	AB	1267	U	N3-C2-O2	-6.17	117.88	122.20
2	AB	1314	C	C3'-C2'-C1'	-6.17	96.57	101.50
2	AB	1715	G	P-O3'-C3'	6.17	127.10	119.70
2	AB	1717	A	N9-C4-C5	6.17	108.27	105.80
2	AB	1794	A	C2-N3-C4	6.17	113.68	110.60
2	AB	2011	U	C5-C4-O4	-6.17	122.20	125.90
2	AB	2127	G	C5-C6-O6	-6.17	124.90	128.60
2	AB	2368	C	N3-C4-N4	-6.17	113.68	118.00
2	AB	2454	G	C2-N3-C4	-6.17	108.82	111.90
2	AB	2578	G	C4-C5-N7	-6.17	108.33	110.80
2	AB	2873	A	O4'-C1'-N9	6.17	113.13	108.20
35	BA	12	U	P-O3'-C3'	6.17	127.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1175	G	C5'-C4'-O4'	6.17	116.50	109.10
35	BA	1234	C	N3-C4-C5	-6.17	119.43	121.90
35	BA	1486	G	C5-C6-O6	-6.17	124.90	128.60
36	BB	58	A	O4'-C1'-C2'	6.17	113.15	107.60
41	BG	136	VAL	CG1-CB-CG2	-6.17	101.03	110.90
1	AA	18	G	C5-C6-O6	-6.17	124.90	128.60
2	AB	1203	U	O4'-C1'-N1	6.17	113.13	108.20
35	BA	534	U	N1-C1'-C2'	-6.17	105.22	112.00
35	BA	659	U	C2-N3-C4	-6.17	123.30	127.00
37	BC	54	U	C5-C4-O4	6.17	129.60	125.90
2	AB	52	A	O4'-C1'-N9	6.16	113.13	108.20
2	AB	152	A	C8-N9-C4	-6.16	103.33	105.80
2	AB	607	U	C4'-C3'-C2'	-6.16	96.44	102.60
2	AB	789	A	C8-N9-C4	-6.16	103.33	105.80
2	AB	1004	U	O4'-C4'-C3'	6.16	111.03	106.10
2	AB	1785	A	N9-C1'-C2'	-6.16	105.22	112.00
2	AB	1974	C	C5-C4-N4	-6.16	115.89	120.20
2	AB	2671	G	C8-N9-C4	-6.16	103.94	106.40
2	AB	2864	G	C1'-O4'-C4'	-6.16	104.97	109.90
35	BA	252	U	O4'-C1'-N1	6.16	113.13	108.20
35	BA	271	C	C5'-C4'-O4'	6.16	116.50	109.10
35	BA	769	G	N9-C4-C5	6.16	107.86	105.40
35	BA	1294	G	N7-C8-N9	6.16	116.18	113.10
2	AB	1202	G	O4'-C1'-N9	-6.16	103.27	108.20
2	AB	1444	G	N3-C4-N9	6.16	129.70	126.00
2	AB	2620	C	N1-C2-N3	-6.16	114.89	119.20
35	BA	736	C	N3-C4-C5	-6.16	119.44	121.90
36	BB	72	U	C6-N1-C2	-6.16	117.30	121.00
2	AB	135	U	N3-C2-O2	-6.16	117.89	122.20
2	AB	1519	G	O4'-C1'-N9	6.16	113.13	108.20
2	AB	1814	G	C5'-C4'-O4'	6.16	116.49	109.10
2	AB	1827	U	C5-C4-O4	-6.16	122.20	125.90
2	AB	2380	C	N3-C4-N4	6.16	122.31	118.00
2	AB	2601	C	P-O3'-C3'	6.16	127.09	119.70
2	AB	2761	A	N1-C6-N6	6.16	122.30	118.60
9	AI	113	SER	N-CA-CB	-6.16	101.26	110.50
35	BA	112	G	C4-C5-C6	6.16	122.50	118.80
35	BA	637	C	C6-N1-C2	-6.16	117.84	120.30
35	BA	791	G	N9-C1'-C2'	-6.16	105.22	112.00
35	BA	878	A	C4-C5-C6	-6.16	113.92	117.00
35	BA	1109	C	N1-C2-O2	6.16	122.60	118.90
35	BA	1178	G	C3'-C2'-C1'	6.16	106.43	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1478	U	C6-N1-C2	-6.16	117.30	121.00
36	BB	7	G	N9-C4-C5	-6.16	102.94	105.40
38	BD	11	A	O4'-C1'-N9	6.16	113.13	108.20
50	BP	92	ARG	CD-NE-CZ	6.16	132.22	123.60
2	AB	122	G	C6-N1-C2	-6.16	121.41	125.10
2	AB	406	G	N7-C8-N9	6.16	116.18	113.10
2	AB	458	G	C3'-C2'-C1'	-6.16	96.57	101.50
2	AB	731	C	C2-N3-C4	-6.16	116.82	119.90
2	AB	1526	C	N3-C4-C5	-6.16	119.44	121.90
2	AB	1723	G	C5-C6-O6	-6.16	124.91	128.60
2	AB	2822	G	C8-N9-C4	-6.16	103.94	106.40
35	BA	414	A	O4'-C4'-C3'	-6.16	97.84	104.00
35	BA	528	C	C4-C5-C6	6.16	120.48	117.40
35	BA	895	G	C3'-C2'-C1'	-6.16	96.57	101.50
35	BA	1387	G	N3-C4-C5	-6.16	125.52	128.60
58	BX	34	ARG	NE-CZ-NH2	-6.16	117.22	120.30
2	AB	15	G	C4'-C3'-C2'	-6.16	96.44	102.60
2	AB	812	C	C5-C4-N4	6.16	124.51	120.20
2	AB	846	U	N3-C2-O2	-6.16	117.89	122.20
2	AB	1223	G	C6-N1-C2	-6.16	121.41	125.10
2	AB	2237	G	C5-C6-N1	6.16	114.58	111.50
37	BC	38	G	C6-N1-C2	-6.16	121.41	125.10
2	AB	40	U	N3-C2-O2	-6.16	117.89	122.20
2	AB	273	G	C5-N7-C8	6.16	107.38	104.30
2	AB	1176	U	N3-C2-O2	-6.16	117.89	122.20
2	AB	1606	C	N3-C4-C5	-6.16	119.44	121.90
2	AB	1810	A	C8-N9-C4	-6.16	103.34	105.80
2	AB	2170	A	C4-C5-N7	-6.16	107.62	110.70
2	AB	2362	C	C5-C4-N4	-6.16	115.89	120.20
2	AB	2740	A	C5-C6-N1	6.16	120.78	117.70
2	AB	2786	U	N1-C1'-C2'	-6.16	105.23	112.00
29	A2	49	ARG	NE-CZ-NH1	6.16	123.38	120.30
35	BA	86	G	C6-N1-C2	-6.16	121.41	125.10
35	BA	719	C	N3-C4-N4	6.16	122.31	118.00
35	BA	874	G	P-O3'-C3'	6.16	127.09	119.70
35	BA	1145	A	C4-C5-N7	-6.16	107.62	110.70
35	BA	1265	C	N3-C2-O2	-6.16	117.59	121.90
35	BA	1296	C	C4-C5-C6	6.16	120.48	117.40
35	BA	1539	C	C5-C6-N1	-6.16	117.92	121.00
51	BQ	68	ARG	NE-CZ-NH2	-6.16	117.22	120.30
2	AB	632	A	C4'-C3'-C2'	-6.15	96.45	102.60
35	BA	669	G	C2-N3-C4	6.15	114.98	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1010	U	C1'-O4'-C4'	6.15	114.82	109.90
35	BA	1384	C	C3'-C2'-C1'	6.15	106.42	101.50
2	AB	2	G	N3-C2-N2	-6.15	115.59	119.90
2	AB	75	G	C2-N3-C4	6.15	114.98	111.90
2	AB	140	C	O3'-P-O5'	6.15	115.69	104.00
2	AB	662	G	N3-C2-N2	-6.15	115.59	119.90
2	AB	844	A	C1'-O4'-C4'	-6.15	104.98	109.90
2	AB	945	A	P-O3'-C3'	6.15	127.08	119.70
2	AB	953	G	N1-C2-N2	6.15	121.74	116.20
2	AB	1111	A	N3-C4-C5	-6.15	122.49	126.80
2	AB	1138	G	N3-C2-N2	6.15	124.21	119.90
2	AB	1163	G	O4'-C1'-N9	6.15	113.12	108.20
2	AB	1369	G	P-O3'-C3'	6.15	127.08	119.70
2	AB	1397	U	N3-C2-O2	-6.15	117.89	122.20
2	AB	2496	C	N3-C2-O2	-6.15	117.59	121.90
2	AB	2514	U	N3-C4-O4	6.15	123.71	119.40
2	AB	2793	C	P-O3'-C3'	6.15	127.08	119.70
35	BA	100	G	C2-N3-C4	6.15	114.98	111.90
35	BA	629	A	C4-C5-C6	-6.15	113.92	117.00
35	BA	1017	U	C5'-C4'-O4'	6.15	116.48	109.10
35	BA	1097	C	C1'-O4'-C4'	6.15	114.82	109.90
35	BA	1139	G	N9-C4-C5	-6.15	102.94	105.40
1	AA	97	C	O5'-C5'-C4'	-6.15	100.02	111.70
2	AB	112	U	N3-C4-C5	-6.15	110.91	114.60
2	AB	262	A	O4'-C4'-C3'	6.15	111.02	106.10
2	AB	1466	U	C6-N1-C2	-6.15	117.31	121.00
2	AB	1846	G	C1'-O4'-C4'	6.15	114.82	109.90
2	AB	2033	A	C5-C6-N6	-6.15	118.78	123.70
2	AB	2204	G	N3-C4-N9	6.15	129.69	126.00
2	AB	2352	A	N1-C2-N3	-6.15	126.22	129.30
2	AB	2547	A	C4-C5-N7	6.15	113.78	110.70
2	AB	2792	A	C5-C6-N6	6.15	128.62	123.70
35	BA	65	A	O4'-C1'-N9	6.15	113.12	108.20
35	BA	395	C	N3-C4-C5	-6.15	119.44	121.90
35	BA	565	U	C2-N3-C4	-6.15	123.31	127.00
35	BA	606	G	C6-C5-N7	-6.15	126.71	130.40
35	BA	792	A	C3'-C2'-C1'	6.15	106.42	101.50
35	BA	1137	C	N1-C2-O2	6.15	122.59	118.90
35	BA	1302	C	O4'-C1'-N1	6.15	113.12	108.20
2	AB	56	A	P-O3'-C3'	6.15	127.08	119.70
2	AB	379	G	N7-C8-N9	6.15	116.17	113.10
12	AL	48	VAL	CA-CB-CG2	6.15	120.12	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	AN	126	ARG	NE-CZ-NH2	-6.15	117.23	120.30
35	BA	733	G	C3'-C2'-C1'	-6.15	96.58	101.50
35	BA	749	A	C6-N1-C2	6.15	122.29	118.60
35	BA	1267	C	O4'-C1'-N1	6.15	113.12	108.20
2	AB	710	U	C2-N3-C4	-6.15	123.31	127.00
2	AB	1229	C	C4-C5-C6	6.15	120.47	117.40
2	AB	1634	A	C6-C5-N7	-6.15	128.00	132.30
35	BA	239	U	N1-C1'-C2'	6.15	121.99	114.00
35	BA	264	C	C1'-O4'-C4'	-6.15	104.98	109.90
35	BA	330	C	O4'-C1'-N1	6.15	113.12	108.20
35	BA	517	G	C5-C6-N1	6.15	114.57	111.50
35	BA	816	A	C6-C5-N7	6.15	136.60	132.30
35	BA	1486	G	N3-C2-N2	6.15	124.20	119.90
41	BG	12	ARG	NE-CZ-NH2	-6.15	117.23	120.30
2	AB	9	G	C2-N3-C4	-6.15	108.83	111.90
2	AB	2188	U	C6-N1-C2	-6.15	117.31	121.00
2	AB	2851	A	C6-N1-C2	-6.15	114.91	118.60
4	AD	198	GLU	CA-CB-CG	6.15	126.92	113.40
8	AH	57	TYR	CG-CD2-CE2	-6.15	116.38	121.30
35	BA	528	C	O3'-P-O5'	6.15	115.68	104.00
35	BA	528	C	N1-C1'-C2'	-6.15	105.24	112.00
35	BA	666	G	C4'-C3'-C2'	-6.15	96.45	102.60
35	BA	1246	A	O4'-C1'-N9	6.15	113.12	108.20
35	BA	1475	G	C4-C5-N7	-6.15	108.34	110.80
1	AA	92	C	C4-C5-C6	-6.14	114.33	117.40
2	AB	244	A	C5-C6-N6	6.14	128.62	123.70
2	AB	280	U	N3-C4-C5	6.14	118.29	114.60
2	AB	1174	U	N1-C2-O2	-6.14	118.50	122.80
2	AB	1571	A	N1-C6-N6	6.14	122.29	118.60
2	AB	1753	G	C1'-O4'-C4'	-6.14	104.98	109.90
2	AB	1859	U	C5-C6-N1	-6.14	119.63	122.70
2	AB	2284	A	N9-C4-C5	6.14	108.26	105.80
2	AB	2540	C	C5-C6-N1	-6.14	117.93	121.00
2	AB	2805	C	O4'-C4'-C3'	-6.14	97.86	104.00
29	A2	31	ASP	CB-CG-OD1	-6.14	112.77	118.30
35	BA	539	A	O4'-C1'-N9	6.14	113.12	108.20
35	BA	978	A	N9-C4-C5	6.14	108.26	105.80
35	BA	1072	G	C5-N7-C8	-6.14	101.23	104.30
35	BA	1126	U	O4'-C1'-N1	6.14	113.11	108.20
35	BA	1412	C	O4'-C1'-N1	6.14	113.12	108.20
38	BD	38	A	C5-C6-N1	6.14	120.77	117.70
2	AB	48	G	C4-C5-C6	6.14	122.49	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	883	G	C4-C5-N7	-6.14	108.34	110.80
2	AB	1189	A	C6-C5-N7	6.14	136.60	132.30
2	AB	1195	G	P-O3'-C3'	6.14	127.07	119.70
2	AB	1650	A	C6-N1-C2	-6.14	114.91	118.60
2	AB	2067	G	O4'-C1'-N9	6.14	113.11	108.20
2	AB	2284	A	N7-C8-N9	6.14	116.87	113.80
2	AB	2835	A	C6-N1-C2	-6.14	114.91	118.60
35	BA	268	U	O4'-C1'-N1	6.14	113.11	108.20
35	BA	760	G	N3-C4-C5	-6.14	125.53	128.60
35	BA	1047	G	C4-C5-N7	6.14	113.26	110.80
35	BA	1347	G	P-O3'-C3'	6.14	127.07	119.70
36	BB	2	G	C3'-C2'-C1'	-6.14	96.59	101.50
1	AA	24	G	C5-C6-O6	6.14	132.28	128.60
2	AB	1978	A	C3'-C2'-C1'	-6.14	96.59	101.50
2	AB	2578	G	C5'-C4'-O4'	6.14	116.47	109.10
35	BA	28	A	C2-N3-C4	6.14	113.67	110.60
35	BA	1282	C	N3-C4-C5	6.14	124.36	121.90
2	AB	261	G	C5-N7-C8	-6.14	101.23	104.30
2	AB	456	C	N3-C2-O2	-6.14	117.60	121.90
2	AB	543	G	C4-C5-N7	-6.14	108.34	110.80
2	AB	1046	A	N3-C4-C5	-6.14	122.50	126.80
2	AB	1115	G	C5-N7-C8	6.14	107.37	104.30
2	AB	2182	U	C4'-C3'-C2'	-6.14	96.46	102.60
35	BA	74	A	C4-C5-C6	6.14	120.07	117.00
35	BA	1249	C	P-O3'-C3'	6.14	127.07	119.70
35	BA	1268	G	O4'-C4'-C3'	6.14	111.01	106.10
37	BC	36	U	C5-C6-N1	-6.14	119.63	122.70
2	AB	466	A	C6-N1-C2	6.14	122.28	118.60
2	AB	1018	U	N1-C2-N3	6.14	118.58	114.90
2	AB	1591	A	O4'-C4'-C3'	6.14	111.01	106.10
2	AB	1986	C	N3-C4-C5	-6.14	119.44	121.90
2	AB	2059	A	O4'-C4'-C3'	6.14	111.01	106.10
2	AB	2490	G	C4-C5-N7	-6.14	108.34	110.80
2	AB	2506	U	N1-C2-O2	6.14	127.10	122.80
2	AB	2555	U	C5'-C4'-O4'	6.14	116.47	109.10
2	AB	2775	G	N1-C2-N3	-6.14	120.22	123.90
35	BA	463	U	C6-N1-C2	-6.14	117.32	121.00
2	AB	79	C	C1'-O4'-C4'	6.14	114.81	109.90
2	AB	137	U	C1'-O4'-C4'	-6.14	104.99	109.90
2	AB	191	A	N1-C2-N3	-6.14	126.23	129.30
2	AB	1837	C	C6-N1-C2	-6.14	117.85	120.30
2	AB	1932	A	C1'-O4'-C4'	6.14	114.81	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2149	U	N3-C2-O2	-6.14	117.90	122.20
2	AB	2479	U	N1-C2-N3	6.14	118.58	114.90
35	BA	773	G	O3'-P-O5'	-6.14	92.34	104.00
35	BA	1523	G	C6-N1-C2	-6.14	121.42	125.10
35	BA	1542	A	C4-C5-C6	6.14	120.07	117.00
46	BL	98	ARG	CG-CD-NE	6.14	124.69	111.80
2	AB	49	A	C5'-C4'-O4'	6.13	116.46	109.10
2	AB	281	C	C4-C5-C6	6.13	120.47	117.40
2	AB	526	A	C5-C6-N6	-6.13	118.79	123.70
2	AB	951	C	N3-C4-C5	6.13	124.35	121.90
2	AB	1980	G	C4-C5-N7	-6.13	108.35	110.80
2	AB	2283	C	N1-C1'-C2'	-6.13	105.25	112.00
2	AB	2689	U	C3'-C2'-C1'	-6.13	96.59	101.50
2	AB	2857	G	N1-C2-N3	-6.13	120.22	123.90
35	BA	539	A	C6-C5-N7	-6.13	128.01	132.30
35	BA	1251	A	N1-C6-N6	-6.13	114.92	118.60
37	BC	53	G	C5-C6-O6	-6.13	124.92	128.60
38	BD	77	A	N9-C4-C5	6.13	108.25	105.80
2	AB	6	A	N3-C4-N9	-6.13	122.49	127.40
2	AB	169	G	C6-N1-C2	-6.13	121.42	125.10
2	AB	1033	U	P-O3'-C3'	6.13	127.06	119.70
2	AB	1901	A	C1'-O4'-C4'	-6.13	104.99	109.90
2	AB	2092	U	P-O3'-C3'	6.13	127.06	119.70
2	AB	2133	G	P-O3'-C3'	6.13	127.06	119.70
2	AB	2154	A	C3'-C2'-C1'	6.13	106.41	101.50
2	AB	2730	C	C4-C5-C6	6.13	120.47	117.40
38	BD	31	G	C4-C5-N7	-6.13	108.35	110.80
2	AB	454	A	C6-C5-N7	6.13	136.59	132.30
2	AB	1338	G	C4'-C3'-C2'	-6.13	96.47	102.60
2	AB	1604	C	N3-C2-O2	-6.13	117.61	121.90
2	AB	2068	U	N3-C4-O4	6.13	123.69	119.40
2	AB	2402	U	C5-C6-N1	-6.13	119.63	122.70
2	AB	2422	C	O4'-C1'-N1	6.13	113.11	108.20
2	AB	2454	G	N1-C2-N2	-6.13	110.68	116.20
35	BA	75	G	C4-C5-C6	6.13	122.48	118.80
35	BA	157	U	C5-C4-O4	-6.13	122.22	125.90
35	BA	241	G	C4-C5-N7	-6.13	108.35	110.80
35	BA	251	G	N1-C2-N2	-6.13	110.68	116.20
35	BA	805	C	C6-N1-C2	6.13	122.75	120.30
35	BA	973	G	O4'-C4'-C3'	6.13	111.00	106.10
35	BA	1213	A	O4'-C1'-N9	6.13	113.11	108.20
2	AB	1061	U	C2-N1-C1'	6.13	125.06	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1408	G	N7-C8-N9	6.13	116.17	113.10
2	AB	2131	U	C4-C5-C6	6.13	123.38	119.70
2	AB	2419	U	O4'-C1'-C2'	-6.13	99.67	105.80
35	BA	209	U	O4'-C1'-C2'	-6.13	99.67	105.80
35	BA	725	G	C5'-C4'-O4'	6.13	116.46	109.10
35	BA	928	G	C8-N9-C4	-6.13	103.95	106.40
2	AB	733	G	O4'-C1'-N9	6.13	113.10	108.20
2	AB	1524	G	C5'-C4'-O4'	6.13	116.45	109.10
2	AB	2252	G	N3-C2-N2	-6.13	115.61	119.90
2	AB	2551	C	C6-N1-C2	-6.13	117.85	120.30
38	BD	68	C	N3-C2-O2	-6.13	117.61	121.90
2	AB	45	G	C5-C6-O6	-6.13	124.92	128.60
2	AB	171	U	N1-C1'-C2'	-6.13	105.26	112.00
2	AB	430	A	C6-N1-C2	6.13	122.28	118.60
2	AB	515	A	C1'-O4'-C4'	6.13	114.80	109.90
2	AB	737	C	N3-C4-C5	6.13	124.35	121.90
2	AB	1142	A	C5-C6-N1	6.13	120.76	117.70
2	AB	1166	G	C5-C6-N1	6.13	114.56	111.50
2	AB	2000	C	N1-C2-O2	6.13	122.58	118.90
2	AB	2846	G	C5'-C4'-O4'	6.13	116.45	109.10
31	A4	46	VAL	CG1-CB-CG2	-6.13	101.10	110.90
35	BA	45	G	O4'-C1'-N9	6.13	113.10	108.20
35	BA	675	A	N9-C1'-C2'	-6.13	105.26	112.00
35	BA	783	C	N3-C4-C5	-6.13	119.45	121.90
35	BA	1358	U	C1'-O4'-C4'	-6.13	105.00	109.90
35	BA	1449	C	N3-C4-N4	6.13	122.29	118.00
2	AB	52	A	C5-C6-N1	-6.12	114.64	117.70
2	AB	2277	G	C6-C5-N7	6.12	134.07	130.40
2	AB	2393	U	C6-N1-C2	-6.12	117.33	121.00
35	BA	1483	A	P-O3'-C3'	6.12	127.05	119.70
2	AB	114	U	P-O3'-C3'	6.12	127.05	119.70
2	AB	551	G	C5-C6-N1	6.12	114.56	111.50
2	AB	723	C	C3'-C2'-C1'	-6.12	96.60	101.50
2	AB	737	C	N1-C2-N3	6.12	123.49	119.20
2	AB	985	C	C2-N3-C4	6.12	122.96	119.90
2	AB	1004	U	C3'-C2'-C1'	6.12	106.40	101.50
2	AB	1844	C	N3-C2-O2	-6.12	117.61	121.90
2	AB	2218	G	C2-N3-C4	6.12	114.96	111.90
2	AB	2237	G	C8-N9-C4	-6.12	103.95	106.40
35	BA	68	G	N9-C4-C5	-6.12	102.95	105.40
35	BA	191	G	N9-C4-C5	-6.12	102.95	105.40
35	BA	367	U	N1-C2-N3	6.12	118.57	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	456	A	C5-N7-C8	-6.12	100.84	103.90
35	BA	693	G	N7-C8-N9	6.12	116.16	113.10
2	AB	981	A	C4-C5-C6	-6.12	113.94	117.00
2	AB	1147	A	N3-C4-C5	6.12	131.09	126.80
2	AB	1333	G	C6-N1-C2	-6.12	121.43	125.10
2	AB	2481	G	N3-C4-C5	-6.12	125.54	128.60
2	AB	2720	U	N3-C4-O4	6.12	123.69	119.40
2	AB	2844	G	N7-C8-N9	6.12	116.16	113.10
6	AF	44	ARG	NE-CZ-NH2	6.12	123.36	120.30
35	BA	545	C	O4'-C4'-C3'	-6.12	97.88	104.00
35	BA	859	G	C5'-C4'-O4'	6.12	116.44	109.10
35	BA	947	G	C2-N3-C4	6.12	114.96	111.90
35	BA	1083	U	P-O3'-C3'	6.12	127.05	119.70
35	BA	1144	G	C6-N1-C2	-6.12	121.43	125.10
35	BA	1393	U	C6-N1-C2	-6.12	117.33	121.00
37	BC	37	G	C5'-C4'-O4'	6.12	116.45	109.10
42	BH	47	PHE	CB-CG-CD1	-6.12	116.52	120.80
2	AB	670	A	N1-C2-N3	-6.12	126.24	129.30
2	AB	2663	G	P-O3'-C3'	6.12	127.04	119.70
5	AE	155	VAL	CA-CB-CG1	6.12	120.08	110.90
6	AF	14	VAL	CG1-CB-CG2	-6.12	101.11	110.90
35	BA	293	G	N1-C6-O6	6.12	123.57	119.90
35	BA	962	C	C2-N3-C4	-6.12	116.84	119.90
35	BA	1180	A	C5'-C4'-O4'	6.12	116.44	109.10
2	AB	23	G	N7-C8-N9	6.12	116.16	113.10
2	AB	137	U	O3'-P-O5'	-6.12	92.38	104.00
2	AB	522	A	C6-N1-C2	-6.12	114.93	118.60
2	AB	1164	C	P-O3'-C3'	6.12	127.04	119.70
2	AB	1512	C	C5'-C4'-O4'	6.12	116.44	109.10
2	AB	1828	G	C3'-C2'-C1'	-6.12	96.61	101.50
2	AB	2246	G	C4-C5-N7	-6.12	108.35	110.80
35	BA	232	G	C8-N9-C4	-6.12	103.95	106.40
35	BA	633	G	N3-C4-C5	-6.12	125.54	128.60
35	BA	837	U	C4'-C3'-C2'	-6.12	96.48	102.60
57	BW	50	PHE	CB-CG-CD1	6.12	125.08	120.80
2	AB	187	G	N3-C4-C5	-6.12	125.54	128.60
2	AB	327	G	C5-C6-N1	-6.12	108.44	111.50
2	AB	1201	U	O4'-C1'-N1	6.12	113.09	108.20
2	AB	2179	C	C2-N3-C4	6.12	122.96	119.90
35	BA	647	C	N1-C1'-C2'	-6.12	105.27	112.00
2	AB	63	A	C4'-C3'-C2'	-6.12	96.48	102.60
2	AB	400	G	O4'-C1'-C2'	-6.12	99.68	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	402	A	C3'-C2'-C1'	-6.12	96.61	101.50
2	AB	884	U	N1-C2-O2	6.12	127.08	122.80
2	AB	914	G	C6-N1-C2	-6.12	121.43	125.10
2	AB	1083	U	N3-C4-C5	-6.12	110.93	114.60
2	AB	1116	G	C2-N3-C4	6.12	114.96	111.90
2	AB	1447	C	C4-C5-C6	6.12	120.46	117.40
2	AB	1674	G	C2-N3-C4	6.12	114.96	111.90
2	AB	2410	G	C4-C5-N7	-6.12	108.35	110.80
2	AB	2688	G	N7-C8-N9	6.12	116.16	113.10
2	AB	2864	G	N3-C2-N2	6.12	124.18	119.90
35	BA	508	U	N3-C4-C5	-6.12	110.93	114.60
35	BA	1008	U	C5-C6-N1	-6.12	119.64	122.70
35	BA	1093	A	C8-N9-C4	-6.12	103.35	105.80
2	AB	15	G	N1-C2-N3	-6.11	120.23	123.90
2	AB	30	G	C5'-C4'-O4'	6.11	116.44	109.10
2	AB	855	G	N9-C1'-C2'	-6.11	105.28	112.00
2	AB	869	G	C5-C6-O6	6.11	132.27	128.60
2	AB	1118	C	N3-C4-C5	-6.11	119.45	121.90
2	AB	1225	G	O4'-C4'-C3'	6.11	110.99	106.10
2	AB	2429	G	C5-C6-O6	6.11	132.27	128.60
2	AB	2490	G	C2-N3-C4	-6.11	108.84	111.90
2	AB	2649	C	C3'-C2'-C1'	6.11	106.39	101.50
35	BA	92	U	N3-C4-O4	6.11	123.68	119.40
35	BA	111	G	C4-C5-C6	6.11	122.47	118.80
35	BA	139	A	O5'-C5'-C4'	-6.11	100.08	111.70
35	BA	159	G	O4'-C4'-C3'	6.11	110.99	106.10
35	BA	1484	C	C5-C6-N1	-6.11	117.94	121.00
38	BD	31	G	C6-N1-C2	-6.11	121.43	125.10
38	BD	35	C	C5-C6-N1	6.11	124.06	121.00
2	AB	662	G	N1-C2-N2	6.11	121.70	116.20
35	BA	284	C	N3-C2-O2	-6.11	117.62	121.90
35	BA	646	G	C6-C5-N7	6.11	134.07	130.40
35	BA	864	A	C5-C6-N6	6.11	128.59	123.70
35	BA	895	G	N9-C4-C5	6.11	107.84	105.40
36	BB	38	A	C8-N9-C4	-6.11	103.36	105.80
2	AB	66	C	O4'-C1'-N1	6.11	113.09	108.20
2	AB	162	U	N1-C2-N3	6.11	118.57	114.90
2	AB	645	C	C5'-C4'-O4'	6.11	116.43	109.10
2	AB	1658	C	N1-C2-N3	-6.11	114.92	119.20
2	AB	2381	A	O4'-C1'-N9	6.11	113.09	108.20
35	BA	91	U	C3'-C2'-C1'	6.11	106.39	101.50
35	BA	722	G	O3'-P-O5'	6.11	115.61	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	765	G	N1-C2-N3	6.11	127.57	123.90
35	BA	1322	C	N3-C4-N4	6.11	122.28	118.00
2	AB	976	G	C3'-C2'-C1'	6.11	106.39	101.50
2	AB	1739	A	C5'-C4'-C3'	-6.11	106.22	116.00
2	AB	1873	G	C2-N3-C4	6.11	114.95	111.90
2	AB	2416	C	N3-C4-N4	6.11	122.28	118.00
35	BA	1182	G	N9-C4-C5	6.11	107.84	105.40
1	AA	28	C	N3-C4-N4	6.11	122.28	118.00
2	AB	85	G	C2'-C3'-O3'	6.11	123.47	113.70
2	AB	1003	G	C5-C6-N1	6.11	114.55	111.50
2	AB	1254	A	N1-C2-N3	6.11	132.35	129.30
2	AB	1353	A	N7-C8-N9	-6.11	110.75	113.80
2	AB	1602	U	O4'-C1'-N1	6.11	113.09	108.20
2	AB	1659	G	C5-C6-N1	6.11	114.55	111.50
2	AB	1802	A	C3'-C2'-C1'	6.11	106.39	101.50
2	AB	2696	U	N3-C4-C5	-6.11	110.94	114.60
2	AB	2722	G	N3-C4-N9	-6.11	122.33	126.00
2	AB	2850	A	O5'-P-OP2	-6.11	100.20	105.70
35	BA	106	C	C2-N3-C4	-6.11	116.85	119.90
35	BA	189	A	C4'-C3'-C2'	-6.11	96.49	102.60
35	BA	324	G	C5'-C4'-O4'	6.11	116.43	109.10
35	BA	336	A	C4-C5-N7	6.11	113.75	110.70
35	BA	781	A	C5'-C4'-O4'	6.11	116.43	109.10
35	BA	1026	G	N3-C4-C5	-6.11	125.55	128.60
35	BA	1138	G	O4'-C4'-C3'	-6.11	97.89	104.00
35	BA	1225	A	C5-C6-N6	6.11	128.59	123.70
35	BA	1258	G	C4-C5-C6	6.11	122.47	118.80
35	BA	1429	A	C8-N9-C4	-6.11	103.36	105.80
38	BD	3	C	N1-C2-N3	6.11	123.47	119.20
1	AA	79	G	N3-C4-C5	-6.11	125.55	128.60
2	AB	588	U	C2-N3-C4	-6.11	123.34	127.00
2	AB	825	A	C8-N9-C4	-6.11	103.36	105.80
2	AB	985	C	C1'-O4'-C4'	6.11	114.78	109.90
2	AB	2540	C	C1'-O4'-C4'	-6.11	105.02	109.90
35	BA	586	C	C4-C5-C6	-6.11	114.35	117.40
35	BA	1280	A	C4-C5-C6	-6.11	113.95	117.00
35	BA	1466	C	N3-C4-C5	6.11	124.34	121.90
36	BB	43	G	N3-C2-N2	-6.11	115.63	119.90
2	AB	46	G	O4'-C1'-N9	6.10	113.08	108.20
2	AB	959	A	C8-N9-C4	6.10	108.24	105.80
2	AB	1032	A	N1-C6-N6	-6.10	114.94	118.60
2	AB	1493	C	P-O3'-C3'	6.10	127.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1980	G	N3-C4-C5	-6.10	125.55	128.60
35	BA	50	A	C3'-C2'-C1'	6.10	106.38	101.50
35	BA	690	G	C6-N1-C2	-6.10	121.44	125.10
35	BA	1129	C	C3'-C2'-C1'	6.10	106.38	101.50
1	AA	65	U	N1-C2-O2	6.10	127.07	122.80
2	AB	848	C	C4'-C3'-C2'	-6.10	96.50	102.60
2	AB	1295	C	C5-C4-N4	-6.10	115.93	120.20
2	AB	1387	A	C6-N1-C2	-6.10	114.94	118.60
2	AB	1537	G	C6-C5-N7	-6.10	126.74	130.40
2	AB	1994	C	C2-N3-C4	6.10	122.95	119.90
2	AB	2021	C	C3'-C2'-C1'	-6.10	96.62	101.50
2	AB	2820	A	O4'-C4'-C3'	6.10	110.98	106.10
22	AV	69	ARG	NE-CZ-NH2	-6.10	117.25	120.30
35	BA	236	A	N3-C4-C5	-6.10	122.53	126.80
35	BA	1436	U	C2-N3-C4	-6.10	123.34	127.00
2	AB	1195	G	N3-C2-N2	-6.10	115.63	119.90
2	AB	1235	G	N9-C4-C5	6.10	107.84	105.40
2	AB	1235	G	N7-C8-N9	6.10	116.15	113.10
2	AB	1246	A	C6-N1-C2	6.10	122.26	118.60
2	AB	2128	G	C5-C6-N1	-6.10	108.45	111.50
2	AB	2429	G	C4-C5-C6	6.10	122.46	118.80
17	AQ	15	ARG	NH1-CZ-NH2	-6.10	112.69	119.40
35	BA	427	U	N3-C4-C5	-6.10	110.94	114.60
44	BJ	110	ARG	NE-CZ-NH2	-6.10	117.25	120.30
2	AB	1436	G	C5-C6-N1	6.10	114.55	111.50
2	AB	1520	U	C5-C4-O4	6.10	129.56	125.90
2	AB	1558	C	C3'-C2'-C1'	6.10	106.38	101.50
2	AB	2068	U	N3-C2-O2	-6.10	117.93	122.20
2	AB	2149	U	N3-C4-C5	-6.10	110.94	114.60
2	AB	2212	A	C5-C6-N1	6.10	120.75	117.70
2	AB	2410	G	C8-N9-C4	-6.10	103.96	106.40
35	BA	318	G	N9-C4-C5	-6.10	102.96	105.40
35	BA	694	A	C5-N7-C8	6.10	106.95	103.90
35	BA	1370	G	C4'-C3'-C2'	-6.10	96.50	102.60
36	BB	58	A	C6-N1-C2	-6.10	114.94	118.60
45	BK	112	ASP	CB-CA-C	6.10	122.60	110.40
49	BO	35	ARG	NH1-CZ-NH2	-6.10	112.69	119.40
51	BQ	41	TRP	CH2-CZ2-CE2	6.10	123.50	117.40
2	AB	9	G	C6-N1-C2	6.10	128.76	125.10
2	AB	380	G	N7-C8-N9	-6.10	110.05	113.10
2	AB	395	U	C2-N3-C4	-6.10	123.34	127.00
2	AB	1340	U	P-O3'-C3'	6.10	127.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2248	C	P-O3'-C3'	6.10	127.02	119.70
2	AB	2653	U	N3-C4-C5	-6.10	110.94	114.60
35	BA	380	G	N1-C6-O6	-6.10	116.24	119.90
35	BA	448	A	C5'-C4'-O4'	6.10	116.42	109.10
35	BA	451	A	O3'-P-O5'	6.10	115.58	104.00
35	BA	498	A	P-O3'-C3'	6.10	127.02	119.70
2	AB	270	A	C4-C5-N7	6.10	113.75	110.70
2	AB	1142	A	P-O3'-C3'	6.10	127.02	119.70
35	BA	635	A	N7-C8-N9	-6.10	110.75	113.80
35	BA	654	G	C4'-C3'-C2'	-6.10	96.50	102.60
2	AB	367	G	C8-N9-C4	-6.09	103.96	106.40
2	AB	1035	U	N3-C4-O4	-6.09	115.13	119.40
2	AB	1616	A	C8-N9-C4	6.09	108.24	105.80
2	AB	1660	G	O4'-C1'-N9	6.09	113.08	108.20
2	AB	1839	G	C2-N3-C4	6.09	114.95	111.90
2	AB	2049	G	N7-C8-N9	-6.09	110.05	113.10
2	AB	2095	A	C3'-C2'-C1'	-6.09	96.62	101.50
20	AT	55	ASP	CB-CG-OD1	-6.09	112.81	118.30
35	BA	102	G	N3-C2-N2	-6.09	115.63	119.90
35	BA	206	C	O4'-C1'-N1	6.09	113.08	108.20
35	BA	497	G	N1-C2-N3	6.09	127.56	123.90
35	BA	646	G	N1-C2-N3	-6.09	120.24	123.90
35	BA	737	C	C4'-C3'-C2'	-6.09	96.50	102.60
35	BA	1249	C	N3-C4-C5	-6.09	119.46	121.90
38	BD	49	C	N3-C2-O2	-6.09	117.64	121.90
35	BA	34	C	N3-C4-C5	-6.09	119.46	121.90
35	BA	159	G	C1'-O4'-C4'	-6.09	105.03	109.90
35	BA	496	A	O4'-C1'-N9	6.09	113.08	108.20
35	BA	1025	U	C5-C4-O4	-6.09	122.24	125.90
35	BA	1226	C	O3'-P-O5'	6.09	115.58	104.00
35	BA	1428	A	N3-C4-N9	-6.09	122.53	127.40
35	BA	1488	G	N1-C6-O6	-6.09	116.24	119.90
2	AB	908	C	C1'-O4'-C4'	-6.09	105.03	109.90
2	AB	1117	C	C2-N3-C4	6.09	122.95	119.90
2	AB	1204	A	N7-C8-N9	-6.09	110.75	113.80
2	AB	1740	G	N3-C2-N2	6.09	124.16	119.90
2	AB	1888	G	C4'-C3'-C2'	-6.09	96.51	102.60
2	AB	2752	C	O4'-C1'-N1	6.09	113.07	108.20
35	BA	60	A	C5-C6-N6	-6.09	118.83	123.70
35	BA	130	A	P-O3'-C3'	6.09	127.01	119.70
35	BA	308	C	N3-C2-O2	-6.09	117.64	121.90
35	BA	364	A	C6-N1-C2	6.09	122.25	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	422	C	C6-N1-C2	6.09	122.74	120.30
35	BA	813	U	N3-C2-O2	-6.09	117.94	122.20
35	BA	969	A	N1-C6-N6	-6.09	114.94	118.60
35	BA	1245	C	N3-C4-N4	6.09	122.27	118.00
2	AB	900	A	C8-N9-C4	-6.09	103.36	105.80
2	AB	904	G	C4-C5-C6	6.09	122.45	118.80
2	AB	1234	U	P-O3'-C3'	6.09	127.01	119.70
2	AB	1245	G	C6-N1-C2	-6.09	121.45	125.10
2	AB	1739	A	C4-C5-N7	-6.09	107.66	110.70
2	AB	1879	C	C5-C6-N1	6.09	124.05	121.00
2	AB	2189	U	C5-C6-N1	-6.09	119.66	122.70
35	BA	334	C	C2-N3-C4	-6.09	116.86	119.90
35	BA	474	G	C6-C5-N7	-6.09	126.75	130.40
35	BA	1127	G	C5-N7-C8	6.09	107.34	104.30
35	BA	1210	C	C5-C6-N1	6.09	124.05	121.00
36	BB	27	C	C5'-C4'-O4'	6.09	116.41	109.10
55	BU	71	ASP	CB-CG-OD2	-6.09	112.82	118.30
2	AB	681	G	N7-C8-N9	6.09	116.14	113.10
2	AB	1348	C	N1-C1'-C2'	-6.09	105.30	112.00
2	AB	2002	G	N3-C2-N2	-6.09	115.64	119.90
2	AB	2597	G	C5-N7-C8	-6.09	101.26	104.30
3	AC	220	ALA	CB-CA-C	6.09	119.23	110.10
35	BA	705	G	N9-C1'-C2'	-6.09	105.30	112.00
1	AA	7	G	C6-C5-N7	-6.09	126.75	130.40
2	AB	64	A	N9-C4-C5	6.09	108.23	105.80
2	AB	664	G	N3-C4-C5	-6.09	125.56	128.60
2	AB	1215	G	C4-C5-N7	-6.09	108.36	110.80
2	AB	1321	A	C8-N9-C4	-6.09	103.37	105.80
2	AB	2515	C	C6-N1-C2	-6.09	117.86	120.30
31	A4	48	TYR	CB-CG-CD1	-6.09	117.35	121.00
35	BA	35	G	C4-C5-C6	6.09	122.45	118.80
35	BA	141	G	N3-C2-N2	6.09	124.16	119.90
35	BA	298	A	P-O3'-C3'	6.09	127.00	119.70
35	BA	707	U	O4'-C1'-N1	6.09	113.07	108.20
35	BA	1319	A	C3'-C2'-C1'	6.09	106.37	101.50
35	BA	1350	A	N9-C1'-C2'	-6.09	105.31	112.00
39	BE	95	TRP	CA-CB-CG	6.09	125.26	113.70
1	AA	20	G	C8-N9-C1'	6.08	134.91	127.00
2	AB	402	A	P-O3'-C3'	6.08	127.00	119.70
2	AB	697	G	C6-N1-C2	-6.08	121.45	125.10
2	AB	1066	U	N3-C2-O2	-6.08	117.94	122.20
2	AB	2332	C	N1-C1'-C2'	-6.08	105.31	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2379	G	N3-C2-N2	-6.08	115.64	119.90
2	AB	2565	A	P-O3'-C3'	6.08	127.00	119.70
35	BA	1216	A	N7-C8-N9	-6.08	110.76	113.80
35	BA	1456	A	C3'-C2'-C1'	-6.08	96.63	101.50
1	AA	61	G	N1-C6-O6	-6.08	116.25	119.90
2	AB	267	C	N1-C2-O2	6.08	122.55	118.90
2	AB	877	A	N9-C1'-C2'	-6.08	105.31	112.00
2	AB	936	A	N9-C4-C5	-6.08	103.37	105.80
2	AB	1260	A	C6-N1-C2	6.08	122.25	118.60
2	AB	1964	G	C8-N9-C4	-6.08	103.97	106.40
2	AB	1990	C	O4'-C1'-C2'	-6.08	99.72	105.80
2	AB	2574	G	N1-C2-N3	-6.08	120.25	123.90
2	AB	2610	C	N1-C2-O2	6.08	122.55	118.90
2	AB	2630	G	N1-C2-N2	6.08	121.67	116.20
35	BA	132	C	C4-C5-C6	-6.08	114.36	117.40
35	BA	1005	A	N1-C6-N6	-6.08	114.95	118.60
35	BA	1355	G	P-O3'-C3'	6.08	127.00	119.70
36	BB	42	G	C8-N9-C4	6.08	108.83	106.40
37	BC	42	U	N3-C2-O2	-6.08	117.94	122.20
1	AA	46	A	C5-N7-C8	-6.08	100.86	103.90
2	AB	410	G	C5-N7-C8	6.08	107.34	104.30
2	AB	515	A	O4'-C4'-C3'	-6.08	97.92	104.00
2	AB	997	G	O4'-C1'-N9	6.08	113.06	108.20
2	AB	1613	G	O3'-P-O5'	-6.08	92.44	104.00
2	AB	1788	C	C5-C6-N1	6.08	124.04	121.00
2	AB	2664	G	C4-C5-N7	-6.08	108.37	110.80
35	BA	410	G	C5-C6-N1	6.08	114.54	111.50
35	BA	542	G	C5-C6-N1	6.08	114.54	111.50
35	BA	1022	A	C3'-C2'-C1'	6.08	106.37	101.50
35	BA	1091	U	C2-N3-C4	-6.08	123.35	127.00
2	AB	1136	G	P-O3'-C3'	6.08	127.00	119.70
2	AB	1985	C	C5-C6-N1	6.08	124.04	121.00
2	AB	2014	A	C6-N1-C2	-6.08	114.95	118.60
2	AB	2734	A	O4'-C1'-N9	6.08	113.06	108.20
35	BA	587	G	N3-C4-N9	6.08	129.65	126.00
35	BA	1186	G	C1'-O4'-C4'	-6.08	105.04	109.90
1	AA	78	A	C5'-C4'-O4'	6.08	116.39	109.10
2	AB	186	G	N3-C4-C5	-6.08	125.56	128.60
2	AB	1737	G	N7-C8-N9	6.08	116.14	113.10
2	AB	2133	G	N3-C4-C5	-6.08	125.56	128.60
2	AB	2844	G	C8-N9-C4	-6.08	103.97	106.40
15	AO	111	GLU	OE1-CD-OE2	6.08	130.59	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	162	A	O4'-C1'-C2'	-6.08	99.72	105.80
35	BA	485	U	N3-C4-C5	-6.08	110.95	114.60
35	BA	789	U	C5'-C4'-O4'	6.08	116.39	109.10
35	BA	1039	G	C4'-C3'-C2'	-6.08	96.52	102.60
35	BA	1480	A	C2-N3-C4	6.08	113.64	110.60
36	BB	75	C	C2-N3-C4	6.08	122.94	119.90
1	AA	85	G	C5-N7-C8	-6.08	101.26	104.30
2	AB	193	U	C5-C4-O4	-6.08	122.25	125.90
2	AB	910	A	O4'-C1'-N9	-6.08	103.34	108.20
2	AB	1680	U	N1-C2-O2	6.08	127.05	122.80
2	AB	1967	C	N3-C2-O2	-6.08	117.65	121.90
2	AB	2688	G	C6-C5-N7	-6.08	126.75	130.40
2	AB	2723	C	C4-C5-C6	-6.08	114.36	117.40
35	BA	1376	U	O4'-C1'-N1	6.08	113.06	108.20
2	AB	57	C	C4'-C3'-C2'	-6.08	96.52	102.60
2	AB	105	C	C6-N1-C2	-6.08	117.87	120.30
2	AB	517	C	C4-C5-C6	6.08	120.44	117.40
2	AB	543	G	N3-C2-N2	-6.08	115.65	119.90
2	AB	926	G	N1-C2-N3	6.08	127.55	123.90
2	AB	1037	G	N1-C2-N2	6.08	121.67	116.20
2	AB	1704	C	N3-C2-O2	-6.08	117.65	121.90
2	AB	2719	G	C8-N9-C4	-6.08	103.97	106.40
35	BA	143	A	C4-C5-C6	6.08	120.04	117.00
35	BA	657	U	N1-C2-N3	-6.08	111.25	114.90
35	BA	1267	C	O4'-C1'-C2'	-6.08	99.72	105.80
2	AB	304	U	C5-C4-O4	6.07	129.54	125.90
2	AB	537	G	C8-N9-C4	-6.07	103.97	106.40
2	AB	555	G	C5-N7-C8	-6.07	101.26	104.30
2	AB	1409	U	C5'-C4'-O4'	6.07	116.39	109.10
2	AB	2139	U	C2-N3-C4	-6.07	123.36	127.00
35	BA	197	A	C5'-C4'-C3'	-6.07	106.28	116.00
35	BA	408	A	C4-C5-N7	-6.07	107.66	110.70
35	BA	928	G	C5-C6-O6	6.07	132.24	128.60
36	BB	60	U	O4'-C1'-N1	6.07	113.06	108.20
38	BD	37	U	N3-C4-C5	-6.07	110.96	114.60
2	AB	177	G	N7-C8-N9	6.07	116.14	113.10
2	AB	961	C	C4'-C3'-C2'	-6.07	96.53	102.60
2	AB	1102	C	C5-C6-N1	-6.07	117.96	121.00
2	AB	1703	G	C5-C6-O6	6.07	132.24	128.60
2	AB	1756	G	C4-C5-C6	6.07	122.44	118.80
2	AB	1899	A	C3'-C2'-C1'	6.07	106.36	101.50
2	AB	2655	G	N3-C4-N9	6.07	129.64	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1293	C	N1-C2-O2	-6.07	115.26	118.90
35	BA	1458	G	N7-C8-N9	-6.07	110.06	113.10
2	AB	645	C	C2-N1-C1'	6.07	125.48	118.80
2	AB	2411	A	C4'-C3'-C2'	-6.07	96.53	102.60
2	AB	2618	G	N3-C2-N2	-6.07	115.65	119.90
35	BA	445	G	C6-C5-N7	-6.07	126.76	130.40
35	BA	615	G	N3-C4-C5	-6.07	125.56	128.60
35	BA	616	G	N7-C8-N9	6.07	116.14	113.10
35	BA	725	G	C4'-C3'-C2'	-6.07	96.53	102.60
35	BA	812	G	C3'-C2'-C1'	-6.07	96.64	101.50
35	BA	1442	G	C2-N3-C4	6.07	114.94	111.90
41	BG	183	ARG	NE-CZ-NH2	-6.07	117.27	120.30
2	AB	1342	A	N7-C8-N9	-6.07	110.77	113.80
2	AB	1883	U	N1-C2-O2	-6.07	118.55	122.80
2	AB	2020	A	O4'-C1'-N9	6.07	113.06	108.20
2	AB	2477	U	N1-C2-N3	6.07	118.54	114.90
2	AB	2627	G	N3-C4-C5	6.07	131.63	128.60
35	BA	642	A	N1-C2-N3	6.07	132.33	129.30
35	BA	947	G	C5-C6-N1	6.07	114.53	111.50
35	BA	1428	A	C5-C6-N1	6.07	120.73	117.70
2	AB	811	U	C2-N1-C1'	6.07	124.98	117.70
2	AB	1034	G	C5-N7-C8	-6.07	101.27	104.30
2	AB	1423	G	N3-C4-N9	-6.07	122.36	126.00
2	AB	1564	C	N3-C4-N4	-6.07	113.75	118.00
2	AB	1744	A	C5'-C4'-O4'	6.07	116.38	109.10
2	AB	1744	A	N9-C4-C5	6.07	108.23	105.80
2	AB	1922	G	N1-C6-O6	6.07	123.54	119.90
2	AB	1977	A	O4'-C1'-N9	6.07	113.05	108.20
2	AB	2726	A	C3'-C2'-C1'	-6.07	96.65	101.50
35	BA	224	U	O4'-C1'-C2'	-6.07	99.73	105.80
35	BA	558	G	C5-N7-C8	-6.07	101.27	104.30
35	BA	876	C	C4-C5-C6	-6.07	114.37	117.40
37	BC	43	U	N3-C2-O2	-6.07	117.95	122.20
45	BK	113	ARG	NE-CZ-NH2	-6.07	117.27	120.30
2	AB	248	G	C1'-O4'-C4'	-6.07	105.05	109.90
2	AB	325	G	N3-C2-N2	-6.07	115.66	119.90
2	AB	1045	C	N3-C4-C5	6.07	124.33	121.90
2	AB	1089	A	C6-C5-N7	-6.07	128.05	132.30
2	AB	1266	G	C8-N9-C4	-6.07	103.97	106.40
2	AB	1369	G	C2-N3-C4	6.07	114.93	111.90
2	AB	1767	G	O4'-C1'-N9	6.07	113.05	108.20
2	AB	2023	C	C4-C5-C6	-6.07	114.37	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2736	A	C6-C5-N7	-6.07	128.05	132.30
2	AB	2848	G	C5-C6-N1	6.07	114.53	111.50
2	AB	2886	A	C5-C6-N1	6.07	120.73	117.70
35	BA	155	A	N7-C8-N9	-6.07	110.77	113.80
35	BA	581	G	C8-N9-C4	-6.07	103.97	106.40
35	BA	645	G	C4-C5-C6	6.07	122.44	118.80
35	BA	1335	U	C2-N3-C4	-6.07	123.36	127.00
36	BB	63	C	N1-C2-O2	6.07	122.54	118.90
2	AB	355	U	C3'-C2'-C1'	-6.06	96.65	101.50
2	AB	1130	U	N1-C2-N3	6.06	118.54	114.90
2	AB	2618	G	O3'-P-O5'	-6.06	92.48	104.00
2	AB	2671	G	C8-N9-C1'	6.06	134.88	127.00
2	AB	2781	A	P-O5'-C5'	6.06	130.60	120.90
35	BA	572	A	C5-C6-N6	6.06	128.55	123.70
35	BA	1189	U	N3-C4-O4	6.06	123.64	119.40
2	AB	347	A	N1-C2-N3	6.06	132.33	129.30
2	AB	468	G	O4'-C1'-N9	6.06	113.05	108.20
2	AB	1612	C	C2-N3-C4	6.06	122.93	119.90
2	AB	1760	C	C5-C6-N1	6.06	124.03	121.00
2	AB	1866	A	C6-C5-N7	-6.06	128.06	132.30
2	AB	1903	G	C4-C5-N7	-6.06	108.38	110.80
2	AB	2058	A	C8-N9-C4	6.06	108.22	105.80
35	BA	80	A	C8-N9-C4	-6.06	103.38	105.80
35	BA	488	C	C5-C4-N4	-6.06	115.96	120.20
35	BA	1315	U	N3-C2-O2	-6.06	117.96	122.20
35	BA	1435	G	P-O3'-C3'	6.06	126.97	119.70
2	AB	1543	G	P-O3'-C3'	6.06	126.97	119.70
2	AB	1675	C	C4'-C3'-C2'	-6.06	96.54	102.60
2	AB	2218	G	C4-C5-C6	6.06	122.44	118.80
2	AB	2883	A	N9-C1'-C2'	-6.06	105.33	112.00
35	BA	337	G	C5-C6-N1	-6.06	108.47	111.50
35	BA	384	G	C5-C6-N1	6.06	114.53	111.50
35	BA	662	U	C6-N1-C2	6.06	124.64	121.00
35	BA	1361	G	C4-C5-N7	-6.06	108.38	110.80
35	BA	1391	U	C2-N3-C4	-6.06	123.36	127.00
2	AB	569	U	N3-C2-O2	-6.06	117.96	122.20
2	AB	1043	C	N1-C1'-C2'	-6.06	105.34	112.00
2	AB	2226	C	O4'-C1'-C2'	-6.06	99.74	105.80
2	AB	2266	A	C4'-C3'-C2'	-6.06	96.54	102.60
2	AB	2355	G	N3-C4-C5	-6.06	125.57	128.60
35	BA	261	U	C4'-C3'-O3'	6.06	125.12	113.00
35	BA	766	A	O4'-C1'-C2'	6.06	113.05	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1069	C	N3-C2-O2	6.06	126.14	121.90
35	BA	1083	U	C1'-O4'-C4'	-6.06	105.05	109.90
39	BE	49	PHE	CB-CG-CD1	-6.06	116.56	120.80
2	AB	472	A	C5'-C4'-C3'	-6.06	106.31	116.00
2	AB	999	U	C5-C6-N1	6.06	125.73	122.70
2	AB	1108	U	C3'-C2'-C1'	6.06	106.35	101.50
2	AB	1468	U	C4-C5-C6	6.06	123.33	119.70
2	AB	1479	G	C5-N7-C8	6.06	107.33	104.30
2	AB	2709	G	C2-N3-C4	-6.06	108.87	111.90
2	AB	2865	U	C5'-C4'-C3'	-6.06	106.31	116.00
35	BA	662	U	C2-N3-C4	6.06	130.63	127.00
35	BA	1050	G	O4'-C1'-N9	6.06	113.05	108.20
35	BA	1320	C	O4'-C1'-N1	6.06	113.05	108.20
50	BP	70	ARG	NE-CZ-NH2	6.06	123.33	120.30
54	BT	61	ARG	NE-CZ-NH1	6.06	123.33	120.30
1	AA	89	U	P-O3'-C3'	6.06	126.97	119.70
2	AB	93	G	O5'-P-OP2	-6.06	100.25	105.70
2	AB	2889	C	C4'-C3'-C2'	-6.06	96.54	102.60
35	BA	271	C	C6-N1-C2	-6.06	117.88	120.30
35	BA	537	G	C4-C5-C6	6.06	122.43	118.80
35	BA	824	G	N9-C1'-C2'	-6.06	105.34	112.00
35	BA	875	U	N3-C2-O2	-6.06	117.96	122.20
35	BA	1202	U	N3-C4-C5	-6.06	110.97	114.60
35	BA	1385	G	C5-C6-O6	6.06	132.23	128.60
35	BA	1385	G	O4'-C1'-N9	6.06	113.05	108.20
35	BA	1385	G	C6-N1-C2	-6.06	121.47	125.10
38	BD	45	A	N1-C6-N6	-6.06	114.97	118.60
1	AA	32	U	C3'-C2'-C1'	-6.05	96.66	101.50
1	AA	111	U	O4'-C1'-C2'	6.05	113.05	107.60
2	AB	40	U	C2-N3-C4	-6.05	123.37	127.00
2	AB	802	A	N7-C8-N9	6.05	116.83	113.80
2	AB	1438	U	C4-C5-C6	6.05	123.33	119.70
2	AB	1857	G	N3-C4-N9	6.05	129.63	126.00
2	AB	1986	C	N3-C4-N4	6.05	122.24	118.00
2	AB	2306	C	N1-C2-O2	6.05	122.53	118.90
2	AB	2657	A	C5-C6-N6	-6.05	118.86	123.70
35	BA	116	A	C4-C5-C6	-6.05	113.97	117.00
35	BA	1531	A	N9-C1'-C2'	-6.05	105.34	112.00
1	AA	76	G	N1-C2-N3	-6.05	120.27	123.90
2	AB	192	C	N3-C4-C5	6.05	124.32	121.90
2	AB	222	A	C8-N9-C4	-6.05	103.38	105.80
2	AB	400	G	N1-C2-N3	-6.05	120.27	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	489	G	C4-C5-C6	6.05	122.43	118.80
2	AB	558	U	C5'-C4'-O4'	-6.05	101.84	109.10
2	AB	1169	A	C5'-C4'-O4'	6.05	116.36	109.10
2	AB	1965	C	N1-C2-N3	-6.05	114.96	119.20
2	AB	2227	A	N1-C2-N3	6.05	132.33	129.30
2	AB	2359	C	C2-N3-C4	6.05	122.93	119.90
10	AJ	127	THR	O-C-N	6.05	132.38	122.70
35	BA	115	G	C4-C5-N7	6.05	113.22	110.80
35	BA	1440	U	N3-C4-O4	6.05	123.64	119.40
2	AB	51	G	N1-C2-N3	-6.05	120.27	123.90
2	AB	316	C	N1-C2-O2	6.05	122.53	118.90
2	AB	339	U	C2-N3-C4	-6.05	123.37	127.00
2	AB	998	C	C5-C4-N4	-6.05	115.96	120.20
2	AB	1505	A	C2-N3-C4	-6.05	107.57	110.60
2	AB	1670	C	N3-C4-C5	6.05	124.32	121.90
2	AB	2407	A	C5'-C4'-O4'	6.05	116.36	109.10
2	AB	2464	G	N3-C4-C5	-6.05	125.57	128.60
35	BA	449	G	N9-C4-C5	-6.05	102.98	105.40
35	BA	543	U	C1'-O4'-C4'	-6.05	105.06	109.90
35	BA	1191	A	C4-C5-N7	-6.05	107.67	110.70
35	BA	1259	C	N3-C4-N4	-6.05	113.76	118.00
37	BC	49	U	C5-C6-N1	-6.05	119.67	122.70
2	AB	426	C	O4'-C1'-N1	6.05	113.04	108.20
2	AB	573	U	C4-C5-C6	6.05	123.33	119.70
2	AB	624	C	N1-C1'-C2'	-6.05	105.34	112.00
2	AB	646	U	C2-N1-C1'	6.05	124.96	117.70
2	AB	926	G	N3-C2-N2	-6.05	115.67	119.90
2	AB	2125	G	N9-C4-C5	6.05	107.82	105.40
2	AB	2193	G	O4'-C1'-N9	6.05	113.04	108.20
2	AB	2564	A	O4'-C4'-C3'	6.05	110.94	106.10
2	AB	2729	G	N7-C8-N9	6.05	116.12	113.10
15	AO	114	ARG	NE-CZ-NH2	6.05	123.33	120.30
35	BA	498	A	O4'-C4'-C3'	6.05	110.94	106.10
35	BA	715	A	N9-C4-C5	-6.05	103.38	105.80
35	BA	819	A	C3'-C2'-C1'	6.05	106.34	101.50
35	BA	1521	C	C5'-C4'-O4'	6.05	116.36	109.10
55	BU	62	ARG	NE-CZ-NH1	6.05	123.33	120.30
2	AB	62	U	C4'-C3'-C2'	-6.05	96.55	102.60
2	AB	455	C	P-O3'-C3'	6.05	126.96	119.70
2	AB	878	A	C4'-C3'-C2'	-6.05	96.55	102.60
2	AB	902	C	C6-N1-C2	-6.05	117.88	120.30
2	AB	2432	A	C2'-C3'-O3'	6.05	123.38	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	298	A	C5-C6-N6	-6.05	118.86	123.70
35	BA	532	A	C4-C5-C6	6.05	120.02	117.00
35	BA	571	U	C4-C5-C6	6.05	123.33	119.70
35	BA	1009	U	O4'-C1'-N1	6.05	113.04	108.20
35	BA	1198	G	C4-C5-C6	6.05	122.43	118.80
35	BA	1291	U	C4-C5-C6	6.05	123.33	119.70
35	BA	1416	G	C6-C5-N7	-6.05	126.77	130.40
2	AB	152	A	N3-C4-C5	-6.05	122.57	126.80
2	AB	247	G	C5-N7-C8	6.05	107.32	104.30
2	AB	396	G	P-O3'-C3'	6.05	126.95	119.70
2	AB	739	A	C4-C5-C6	-6.05	113.98	117.00
2	AB	902	C	N1-C2-O2	6.05	122.53	118.90
2	AB	1256	G	C2-N3-C4	-6.05	108.88	111.90
2	AB	1609	A	C4-C5-N7	-6.05	107.68	110.70
2	AB	2062	A	C1'-O4'-C4'	6.05	114.74	109.90
35	BA	610	U	C2-N3-C4	6.05	130.63	127.00
35	BA	730	G	C4-C5-N7	-6.05	108.38	110.80
35	BA	842	U	P-O3'-C3'	6.05	126.95	119.70
35	BA	948	C	N3-C4-C5	-6.05	119.48	121.90
35	BA	1374	A	C5'-C4'-O4'	6.05	116.36	109.10
2	AB	2	G	N3-C4-C5	-6.04	125.58	128.60
2	AB	782	A	C5-C6-N1	6.04	120.72	117.70
2	AB	1799	G	N3-C2-N2	-6.04	115.67	119.90
2	AB	1884	G	C5-N7-C8	-6.04	101.28	104.30
2	AB	2316	G	C6-N1-C2	-6.04	121.47	125.10
2	AB	2356	U	C5-C4-O4	6.04	129.53	125.90
35	BA	14	U	C2-N3-C4	-6.04	123.37	127.00
35	BA	365	U	C5-C6-N1	6.04	125.72	122.70
36	BB	59	G	C5-C6-O6	6.04	132.23	128.60
2	AB	14	A	C5'-C4'-O4'	6.04	116.35	109.10
2	AB	23	G	C8-N9-C4	-6.04	103.98	106.40
2	AB	247	G	C4-N9-C1'	-6.04	118.64	126.50
2	AB	356	G	C6-C5-N7	-6.04	126.77	130.40
2	AB	416	U	C4'-C3'-C2'	-6.04	96.56	102.60
2	AB	544	C	O4'-C4'-C3'	6.04	110.93	106.10
2	AB	1886	U	C5'-C4'-O4'	6.04	116.35	109.10
2	AB	2258	C	N3-C4-N4	6.04	122.23	118.00
2	AB	2345	G	C4'-C3'-C2'	-6.04	96.56	102.60
2	AB	2617	U	N1-C1'-C2'	-6.04	105.35	112.00
2	AB	2780	G	C4-C5-C6	6.04	122.43	118.80
2	AB	2809	A	N3-C4-C5	-6.04	122.57	126.80
35	BA	184	G	C5'-C4'-C3'	-6.04	106.33	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	244	U	N3-C4-O4	-6.04	115.17	119.40
35	BA	773	G	C6-N1-C2	-6.04	121.47	125.10
35	BA	803	G	C4'-C3'-C2'	6.04	108.64	102.60
35	BA	998	C	N3-C4-N4	6.04	122.23	118.00
38	BD	9	G	C6-N1-C2	-6.04	121.47	125.10
2	AB	110	G	O4'-C1'-N9	6.04	113.03	108.20
2	AB	245	G	N3-C2-N2	-6.04	115.67	119.90
2	AB	866	A	N9-C4-C5	6.04	108.22	105.80
2	AB	1374	G	N3-C4-N9	6.04	129.62	126.00
2	AB	1538	G	P-O3'-C3'	6.04	126.95	119.70
2	AB	1964	G	N9-C4-C5	6.04	107.82	105.40
2	AB	1967	C	P-O3'-C3'	6.04	126.95	119.70
2	AB	2068	U	N1-C2-N3	6.04	118.52	114.90
2	AB	2278	A	N9-C4-C5	-6.04	103.38	105.80
2	AB	2411	A	C3'-C2'-C1'	-6.04	96.67	101.50
35	BA	1	A	N7-C8-N9	6.04	116.82	113.80
35	BA	1242	G	C5'-C4'-O4'	6.04	116.35	109.10
35	BA	1414	U	N3-C4-O4	6.04	123.63	119.40
2	AB	543	G	N1-C2-N2	6.04	121.64	116.20
2	AB	1570	A	C2-N3-C4	6.04	113.62	110.60
2	AB	2041	U	C5'-C4'-O4'	6.04	116.35	109.10
2	AB	2648	G	C5-N7-C8	-6.04	101.28	104.30
35	BA	809	G	O4'-C1'-N9	6.04	113.03	108.20
35	BA	934	C	C3'-C2'-C1'	6.04	106.33	101.50
35	BA	1139	G	C4-C5-N7	6.04	113.22	110.80
35	BA	1375	A	N1-C6-N6	6.04	122.22	118.60
36	BB	23	A	O4'-C1'-N9	6.04	113.03	108.20
44	BJ	5	VAL	CB-CA-C	6.04	122.88	111.40
2	AB	1	G	N1-C2-N2	6.04	121.64	116.20
2	AB	601	C	C4-C5-C6	6.04	120.42	117.40
2	AB	887	U	N1-C2-N3	6.04	118.52	114.90
2	AB	1159	U	N1-C2-N3	6.04	118.52	114.90
2	AB	1661	G	C6-N1-C2	-6.04	121.48	125.10
2	AB	1989	G	C4-C5-N7	-6.04	108.39	110.80
2	AB	2165	C	N1-C2-N3	-6.04	114.97	119.20
2	AB	2205	A	C4-C5-C6	-6.04	113.98	117.00
2	AB	2262	U	N1-C2-O2	6.04	127.03	122.80
13	AM	12	ASP	CB-CG-OD1	6.04	123.73	118.30
35	BA	5	U	C5'-C4'-C3'	-6.04	106.34	116.00
35	BA	76	G	N3-C4-C5	-6.04	125.58	128.60
35	BA	123	U	C5-C4-O4	6.04	129.52	125.90
35	BA	765	G	C5-C6-N1	6.04	114.52	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1239	A	C4'-C3'-C2'	6.04	108.64	102.60
2	AB	5	A	C5'-C4'-O4'	6.04	116.34	109.10
2	AB	256	A	N3-C4-C5	6.04	131.03	126.80
2	AB	601	C	N3-C2-O2	-6.04	117.67	121.90
35	BA	17	U	N3-C4-C5	-6.04	110.98	114.60
35	BA	1534	A	N7-C8-N9	6.04	116.82	113.80
2	AB	438	G	C8-N9-C4	-6.04	103.99	106.40
2	AB	447	A	N9-C4-C5	-6.04	103.39	105.80
2	AB	1512	C	N3-C4-N4	-6.04	113.78	118.00
2	AB	1521	G	O5'-C5'-C4'	6.04	123.17	111.70
2	AB	2043	C	C6-N1-C2	6.04	122.71	120.30
2	AB	2200	C	O4'-C1'-N1	6.04	113.03	108.20
2	AB	2317	A	O4'-C4'-C3'	6.04	110.93	106.10
2	AB	2554	U	C1'-O4'-C4'	-6.04	105.07	109.90
2	AB	2679	A	N1-C2-N3	-6.04	126.28	129.30
34	A7	19	ARG	NE-CZ-NH2	-6.04	117.28	120.30
35	BA	778	G	C8-N9-C4	-6.04	103.99	106.40
35	BA	808	C	C5-C6-N1	-6.04	117.98	121.00
35	BA	812	G	C6-N1-C2	-6.04	121.48	125.10
35	BA	1370	G	C2-N3-C4	6.04	114.92	111.90
37	BC	47	C	O4'-C1'-N1	6.04	113.03	108.20
2	AB	932	U	O3'-P-O5'	-6.03	92.54	104.00
2	AB	2086	U	N3-C4-C5	-6.03	110.98	114.60
2	AB	2495	G	N7-C8-N9	6.03	116.12	113.10
35	BA	108	G	C2-N3-C4	6.03	114.92	111.90
35	BA	468	A	O5'-P-OP1	-6.03	100.27	105.70
35	BA	1032	G	C2-N3-C4	6.03	114.92	111.90
2	AB	1318	U	N1-C1'-C2'	-6.03	105.36	112.00
2	AB	1397	U	C6-N1-C2	6.03	124.62	121.00
2	AB	1683	U	N3-C2-O2	-6.03	117.98	122.20
2	AB	1900	A	O4'-C1'-N9	6.03	113.03	108.20
2	AB	2143	C	O4'-C1'-N1	6.03	113.03	108.20
35	BA	165	G	C5-N7-C8	-6.03	101.28	104.30
35	BA	236	A	C4-C5-N7	-6.03	107.68	110.70
35	BA	1461	G	C8-N9-C4	-6.03	103.99	106.40
1	AA	58	A	C1'-O4'-C4'	-6.03	105.08	109.90
1	AA	114	C	C1'-O4'-C4'	-6.03	105.08	109.90
2	AB	664	G	N1-C6-O6	6.03	123.52	119.90
2	AB	857	G	N9-C4-C5	6.03	107.81	105.40
2	AB	1042	G	C8-N9-C4	-6.03	103.99	106.40
2	AB	1240	U	C1'-O4'-C4'	6.03	114.72	109.90
2	AB	1260	A	C4'-C3'-C2'	-6.03	96.57	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1548	A	C5-C6-N1	-6.03	114.68	117.70
2	AB	2208	C	C1'-O4'-C4'	6.03	114.72	109.90
2	AB	2301	C	C5-C4-N4	6.03	124.42	120.20
2	AB	2325	G	C5'-C4'-O4'	6.03	116.34	109.10
2	AB	2481	G	C5'-C4'-O4'	6.03	116.34	109.10
2	AB	2589	A	C4-C5-C6	6.03	120.02	117.00
2	AB	2726	A	C5-C6-N1	-6.03	114.69	117.70
35	BA	171	A	C4-C5-C6	6.03	120.02	117.00
35	BA	389	A	C5-N7-C8	-6.03	100.88	103.90
35	BA	777	A	C6-C5-N7	6.03	136.52	132.30
35	BA	1191	A	O5'-C5'-C4'	-6.03	100.24	111.70
36	BB	18	G	N3-C4-C5	-6.03	125.58	128.60
37	BC	16	A	C2-N3-C4	6.03	113.61	110.60
43	BI	113	ARG	NE-CZ-NH2	6.03	123.31	120.30
2	AB	561	G	C6-N1-C2	6.03	128.72	125.10
2	AB	1749	A	C4'-C3'-C2'	-6.03	96.57	102.60
2	AB	2560	A	N1-C2-N3	-6.03	126.29	129.30
35	BA	334	C	N3-C4-C5	6.03	124.31	121.90
35	BA	388	G	C1'-O4'-C4'	-6.03	105.08	109.90
35	BA	540	G	O4'-C1'-N9	6.03	113.02	108.20
35	BA	755	G	C5-N7-C8	-6.03	101.29	104.30
35	BA	1126	U	C3'-C2'-C1'	6.03	106.32	101.50
1	AA	102	G	P-O3'-C3'	6.03	126.93	119.70
2	AB	238	C	P-O3'-C3'	6.03	126.93	119.70
2	AB	250	G	N9-C4-C5	6.03	107.81	105.40
2	AB	575	A	C5'-C4'-C3'	6.03	125.64	116.00
2	AB	1290	C	N1-C2-O2	-6.03	115.28	118.90
2	AB	1795	C	C5'-C4'-O4'	6.03	116.33	109.10
2	AB	2382	G	C8-N9-C1'	6.03	134.84	127.00
2	AB	2452	C	N3-C2-O2	-6.03	117.68	121.90
2	AB	2755	C	C1'-O4'-C4'	6.03	114.72	109.90
20	AT	51	VAL	CG1-CB-CG2	-6.03	101.25	110.90
35	BA	74	A	C5-C6-N1	-6.03	114.69	117.70
35	BA	546	A	C4-C5-N7	-6.03	107.69	110.70
35	BA	663	A	C3'-C2'-C1'	6.03	106.32	101.50
35	BA	1143	G	C4-C5-N7	6.03	113.21	110.80
1	AA	100	G	C5-N7-C8	6.03	107.31	104.30
2	AB	207	A	C4'-C3'-C2'	-6.03	96.58	102.60
2	AB	274	C	C5'-C4'-O4'	6.03	116.33	109.10
2	AB	337	C	C6-N1-C2	-6.03	117.89	120.30
2	AB	346	A	C5-C6-N6	-6.03	118.88	123.70
2	AB	482	A	N7-C8-N9	6.03	116.81	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	530	G	N1-C2-N2	6.03	121.62	116.20
2	AB	1354	A	C6-C5-N7	6.03	136.52	132.30
2	AB	1393	A	C1'-O4'-C4'	6.03	114.72	109.90
2	AB	1409	U	C1'-O4'-C4'	6.03	114.72	109.90
2	AB	1817	G	N1-C6-O6	-6.03	116.28	119.90
2	AB	2096	C	N3-C2-O2	-6.03	117.68	121.90
2	AB	2809	A	N1-C6-N6	6.03	122.22	118.60
35	BA	27	G	C4-C5-N7	-6.03	108.39	110.80
35	BA	407	U	C4'-C3'-C2'	6.03	108.63	102.60
35	BA	636	U	C4'-C3'-C2'	-6.03	96.57	102.60
35	BA	987	G	N3-C4-C5	-6.03	125.59	128.60
35	BA	1412	C	C6-N1-C2	-6.03	117.89	120.30
46	BL	6	TYR	CZ-CE2-CD2	-6.03	114.38	119.80
1	AA	10	G	N1-C2-N3	-6.02	120.29	123.90
2	AB	82	U	O4'-C1'-C2'	-6.02	99.78	105.80
2	AB	691	C	O4'-C1'-N1	6.02	113.02	108.20
2	AB	744	U	N1-C2-N3	6.02	118.52	114.90
2	AB	1789	A	C5-C6-N1	6.02	120.71	117.70
2	AB	1811	G	C5-C6-N1	-6.02	108.49	111.50
35	BA	603	U	C2-N3-C4	-6.02	123.39	127.00
35	BA	1154	G	C4-C5-C6	6.02	122.41	118.80
35	BA	1311	A	P-O3'-C3'	6.02	126.93	119.70
40	BF	136	ALA	CB-CA-C	6.02	119.14	110.10
2	AB	1575	C	C6-N1-C2	-6.02	117.89	120.30
2	AB	2028	U	C6-N1-C2	-6.02	117.39	121.00
2	AB	2098	U	O4'-C4'-C3'	6.02	110.92	106.10
2	AB	2648	G	C5-C6-O6	-6.02	124.99	128.60
2	AB	2726	A	N9-C4-C5	6.02	108.21	105.80
35	BA	331	G	N1-C2-N2	-6.02	110.78	116.20
35	BA	1199	U	N3-C4-C5	-6.02	110.99	114.60
35	BA	1282	C	C4'-C3'-C2'	-6.02	96.58	102.60
35	BA	1500	A	C5-C6-N6	6.02	128.52	123.70
35	BA	1526	G	N9-C4-C5	6.02	107.81	105.40
2	AB	116	C	N3-C4-N4	-6.02	113.79	118.00
2	AB	780	G	N7-C8-N9	6.02	116.11	113.10
2	AB	1560	G	C5'-C4'-O4'	6.02	116.33	109.10
2	AB	1620	G	C6-N1-C2	-6.02	121.49	125.10
2	AB	2123	G	C6-C5-N7	6.02	134.01	130.40
2	AB	2290	G	C2-N3-C4	6.02	114.91	111.90
35	BA	1424	U	C5-C4-O4	-6.02	122.29	125.90
38	BD	54	G	C4-C5-N7	-6.02	108.39	110.80
1	AA	114	C	N3-C4-N4	-6.02	113.79	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	81	G	C4-C5-C6	6.02	122.41	118.80
2	AB	156	A	C8-N9-C4	-6.02	103.39	105.80
2	AB	266	G	P-O3'-C3'	6.02	126.92	119.70
2	AB	945	A	N1-C6-N6	6.02	122.21	118.60
2	AB	984	A	C5-C6-N6	-6.02	118.89	123.70
2	AB	1040	A	C1'-O4'-C4'	-6.02	105.08	109.90
2	AB	1266	G	O4'-C1'-C2'	-6.02	99.78	105.80
2	AB	1553	A	C2-N3-C4	6.02	113.61	110.60
2	AB	1980	G	C1'-O4'-C4'	6.02	114.72	109.90
2	AB	2615	U	C5'-C4'-O4'	6.02	116.32	109.10
5	AE	39	ASP	CB-CG-OD2	-6.02	112.88	118.30
35	BA	1169	A	C5-N7-C8	6.02	106.91	103.90
38	BD	5	G	N3-C2-N2	6.02	124.11	119.90
2	AB	175	G	C6-C5-N7	6.02	134.01	130.40
2	AB	710	U	N1-C1'-C2'	-6.02	105.38	112.00
2	AB	1557	C	C5'-C4'-O4'	-6.02	101.88	109.10
2	AB	1866	A	N3-C4-C5	-6.02	122.59	126.80
2	AB	2259	U	N3-C2-O2	-6.02	117.99	122.20
2	AB	2272	U	P-O3'-C3'	6.02	126.92	119.70
2	AB	2642	G	C3'-C2'-C1'	-6.02	96.69	101.50
3	AC	5	THR	CA-CB-CG2	6.02	120.82	112.40
4	AD	270	ARG	NE-CZ-NH2	-6.02	117.29	120.30
35	BA	870	U	N1-C1'-C2'	-6.02	105.38	112.00
35	BA	908	A	C2-N3-C4	6.02	113.61	110.60
35	BA	954	G	C6-N1-C2	-6.02	121.49	125.10
35	BA	976	G	C5-C6-N1	6.02	114.51	111.50
44	BJ	102	TRP	CA-CB-CG	6.02	125.13	113.70
2	AB	171	U	N1-C2-N3	6.02	118.51	114.90
2	AB	483	A	P-O3'-C3'	6.02	126.92	119.70
2	AB	2802	G	C5'-C4'-C3'	-6.02	106.37	116.00
2	AB	2877	G	C6-N1-C2	-6.02	121.49	125.10
35	BA	236	A	C8-N9-C4	6.02	108.21	105.80
35	BA	558	G	C6-N1-C2	-6.02	121.49	125.10
35	BA	1225	A	N9-C1'-C2'	-6.02	105.38	112.00
2	AB	468	G	C6-N1-C2	-6.01	121.49	125.10
2	AB	762	U	N1-C2-O2	6.01	127.01	122.80
2	AB	1569	A	C4-C5-N7	-6.01	107.69	110.70
2	AB	1682	G	C1'-O4'-C4'	-6.01	105.09	109.90
2	AB	1838	C	N3-C4-C5	-6.01	119.49	121.90
2	AB	1979	U	C4-C5-C6	6.01	123.31	119.70
2	AB	2099	U	C5-C4-O4	-6.01	122.29	125.90
2	AB	2100	G	N1-C6-O6	6.01	123.51	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2278	A	C2-N3-C4	-6.01	107.59	110.60
2	AB	2568	U	C5'-C4'-O4'	6.01	116.32	109.10
2	AB	2671	G	C4-C5-C6	6.01	122.41	118.80
35	BA	102	G	N1-C2-N2	6.01	121.61	116.20
35	BA	430	A	C2-N3-C4	-6.01	107.59	110.60
35	BA	672	U	C4-C5-C6	6.01	123.31	119.70
35	BA	726	C	C4'-C3'-C2'	6.01	108.61	102.60
35	BA	747	A	C5-C6-N1	6.01	120.71	117.70
35	BA	794	A	OP1-P-OP2	6.01	128.62	119.60
1	AA	9	G	O4'-C4'-C3'	-6.01	97.99	104.00
2	AB	254	G	O4'-C1'-C2'	-6.01	99.79	105.80
2	AB	1684	G	C4-C5-C6	6.01	122.41	118.80
2	AB	2113	U	N1-C2-N3	6.01	118.51	114.90
2	AB	2298	A	N1-C6-N6	-6.01	114.99	118.60
4	AD	249	VAL	CA-CB-CG1	6.01	119.92	110.90
35	BA	97	G	N3-C4-N9	6.01	129.61	126.00
35	BA	206	C	C2'-C3'-O3'	6.01	123.32	113.70
35	BA	795	C	O4'-C4'-C3'	6.01	110.91	106.10
35	BA	1085	U	N1-C2-N3	6.01	118.51	114.90
2	AB	238	C	N3-C4-C5	-6.01	119.50	121.90
2	AB	717	C	C3'-C2'-C1'	6.01	106.31	101.50
2	AB	820	A	N9-C4-C5	6.01	108.20	105.80
2	AB	881	G	N3-C2-N2	6.01	124.11	119.90
2	AB	1343	G	C2-N3-C4	6.01	114.91	111.90
2	AB	1708	C	N3-C4-N4	6.01	122.21	118.00
2	AB	1942	C	N1-C2-N3	-6.01	114.99	119.20
2	AB	1972	G	N3-C4-C5	-6.01	125.59	128.60
2	AB	2509	G	N1-C6-O6	-6.01	116.29	119.90
2	AB	2543	G	O4'-C1'-N9	6.01	113.01	108.20
2	AB	317	G	C8-N9-C4	-6.01	104.00	106.40
2	AB	989	G	N3-C4-C5	6.01	131.60	128.60
2	AB	1429	G	C6-N1-C2	-6.01	121.50	125.10
2	AB	1432	G	C1'-O4'-C4'	6.01	114.71	109.90
2	AB	1436	G	C2-N3-C4	6.01	114.91	111.90
2	AB	1540	G	N3-C2-N2	-6.01	115.69	119.90
2	AB	1774	C	C4-C5-C6	6.01	120.41	117.40
2	AB	1869	G	C4-C5-N7	-6.01	108.40	110.80
2	AB	1952	A	C3'-C2'-C1'	6.01	106.31	101.50
2	AB	2019	A	C2'-C3'-O3'	6.01	123.32	113.70
2	AB	2366	A	N1-C2-N3	-6.01	126.30	129.30
2	AB	2645	G	N9-C4-C5	6.01	107.80	105.40
35	BA	213	G	P-O3'-C3'	-6.01	112.49	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	392	C	N3-C4-C5	6.01	124.30	121.90
35	BA	727	G	N3-C2-N2	6.01	124.11	119.90
35	BA	824	G	C5'-C4'-O4'	6.01	116.31	109.10
35	BA	968	A	C4-C5-N7	6.01	113.70	110.70
2	AB	132	G	C2-N3-C4	6.01	114.90	111.90
2	AB	496	G	C8-N9-C4	-6.01	104.00	106.40
2	AB	542	C	C4'-C3'-C2'	-6.01	96.59	102.60
2	AB	1099	G	C5'-C4'-O4'	6.01	116.31	109.10
2	AB	1408	G	C5-C6-O6	6.01	132.21	128.60
2	AB	1682	G	O4'-C1'-N9	-6.01	103.39	108.20
35	BA	739	C	N1-C2-O2	6.01	122.50	118.90
1	AA	29	A	C5-C6-N1	-6.01	114.70	117.70
2	AB	752	A	C5-C6-N1	6.01	120.70	117.70
2	AB	926	G	N3-C4-C5	-6.01	125.60	128.60
2	AB	975	A	N1-C2-N3	6.01	132.30	129.30
2	AB	1116	G	N3-C4-C5	-6.01	125.60	128.60
2	AB	1125	G	N3-C2-N2	6.01	124.10	119.90
2	AB	1579	A	C8-N9-C4	-6.01	103.40	105.80
2	AB	1932	A	O4'-C4'-C3'	-6.01	97.99	104.00
2	AB	1944	U	C5'-C4'-C3'	-6.01	106.39	116.00
35	BA	1231	G	C3'-C2'-C1'	6.01	106.31	101.50
35	BA	1417	G	C2'-C3'-O3'	6.01	123.31	113.70
36	BB	73	G	O4'-C1'-N9	-6.01	103.39	108.20
37	BC	39	U	C2'-C3'-O3'	6.01	123.31	113.70
2	AB	695	G	C4-C5-N7	-6.00	108.40	110.80
2	AB	1077	A	N9-C4-C5	-6.00	103.40	105.80
35	BA	947	G	N9-C4-C5	6.00	107.80	105.40
1	AA	71	C	N1-C2-O2	6.00	122.50	118.90
1	AA	115	A	C4-C5-C6	-6.00	114.00	117.00
2	AB	629	G	C5-C6-N1	6.00	114.50	111.50
2	AB	952	G	C6-N1-C2	-6.00	121.50	125.10
2	AB	966	G	C5-N7-C8	-6.00	101.30	104.30
2	AB	1839	G	N7-C8-N9	6.00	116.10	113.10
2	AB	2212	A	C2-N3-C4	6.00	113.60	110.60
2	AB	2216	G	N3-C4-C5	-6.00	125.60	128.60
2	AB	2273	A	O4'-C1'-N9	6.00	113.00	108.20
2	AB	2651	C	C3'-C2'-C1'	6.00	106.30	101.50
35	BA	90	C	N3-C4-N4	6.00	122.20	118.00
35	BA	354	G	C6-N1-C2	-6.00	121.50	125.10
35	BA	1499	A	C6-N1-C2	6.00	122.20	118.60
2	AB	374	A	C4-C5-C6	-6.00	114.00	117.00
2	AB	389	G	C3'-C2'-C1'	6.00	106.30	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	455	C	N3-C4-N4	-6.00	113.80	118.00
2	AB	1031	G	N1-C2-N3	-6.00	120.30	123.90
2	AB	1067	A	C3'-C2'-C1'	6.00	106.30	101.50
2	AB	2129	C	O4'-C4'-C3'	6.00	110.90	106.10
2	AB	2414	G	C6-N1-C2	-6.00	121.50	125.10
25	AY	40	ARG	CB-CA-C	6.00	122.40	110.40
35	BA	128	G	C8-N9-C4	-6.00	104.00	106.40
35	BA	1074	G	C3'-C2'-C1'	6.00	106.30	101.50
35	BA	1143	G	N1-C2-N2	-6.00	110.80	116.20
35	BA	1210	C	C2-N3-C4	6.00	122.90	119.90
35	BA	1215	G	C3'-C2'-C1'	-6.00	96.70	101.50
35	BA	1398	A	C8-N9-C4	-6.00	103.40	105.80
2	AB	1381	G	C4-C5-N7	-6.00	108.40	110.80
2	AB	2696	U	N3-C4-O4	6.00	123.60	119.40
35	BA	680	C	C5'-C4'-C3'	-6.00	106.40	116.00
35	BA	766	A	C5'-C4'-C3'	-6.00	106.40	116.00
35	BA	1103	C	C5'-C4'-C3'	-6.00	106.40	116.00
35	BA	1139	G	C5-C6-O6	-6.00	125.00	128.60
35	BA	1154	G	C4-C5-N7	-6.00	108.40	110.80
1	AA	92	C	C1'-O4'-C4'	-6.00	105.10	109.90
2	AB	690	G	C4-C5-N7	6.00	113.20	110.80
2	AB	1070	A	C6-C5-N7	6.00	136.50	132.30
2	AB	1083	U	C4-C5-C6	6.00	123.30	119.70
2	AB	1103	A	C5'-C4'-C3'	-6.00	106.40	116.00
2	AB	1602	U	N3-C4-C5	6.00	118.20	114.60
2	AB	1893	C	N3-C2-O2	-6.00	117.70	121.90
2	AB	1904	G	N1-C2-N2	-6.00	110.80	116.20
2	AB	2474	U	N3-C4-O4	-6.00	115.20	119.40
2	AB	2876	G	C4-C5-N7	6.00	113.20	110.80
35	BA	126	G	C4-C5-N7	-6.00	108.40	110.80
2	AB	1173	U	N1-C2-O2	-6.00	118.60	122.80
2	AB	1567	G	C1'-O4'-C4'	-6.00	105.10	109.90
2	AB	1836	C	O4'-C1'-N1	6.00	113.00	108.20
2	AB	1954	G	C4-C5-C6	6.00	122.40	118.80
35	BA	398	U	C2-N3-C4	-6.00	123.40	127.00
35	BA	938	A	P-O3'-C3'	6.00	126.90	119.70
35	BA	1211	U	P-O3'-C3'	6.00	126.90	119.70
35	BA	1368	A	C4'-C3'-C2'	-6.00	96.60	102.60
2	AB	1137	G	OP1-P-O3'	6.00	118.39	105.20
2	AB	1998	A	O5'-P-OP1	-6.00	100.31	105.70
2	AB	2035	G	C5-C6-O6	-6.00	125.00	128.60
35	BA	856	C	C5-C6-N1	-6.00	118.00	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	BT	33	TYR	CG-CD1-CE1	-6.00	116.50	121.30
58	BX	18	PHE	CB-CG-CD2	-6.00	116.60	120.80
2	AB	504	A	C1'-O4'-C4'	-5.99	105.11	109.90
2	AB	708	G	C8-N9-C1'	5.99	134.79	127.00
2	AB	1459	G	N1-C6-O6	-5.99	116.30	119.90
2	AB	1627	G	C6-N1-C2	-5.99	121.50	125.10
2	AB	1665	A	C4-C5-N7	-5.99	107.70	110.70
2	AB	1761	C	C5-C6-N1	5.99	124.00	121.00
2	AB	2015	A	N1-C6-N6	5.99	122.20	118.60
2	AB	2107	G	O4'-C1'-N9	5.99	113.00	108.20
2	AB	2399	G	N3-C4-N9	5.99	129.60	126.00
2	AB	2604	U	N1-C2-N3	5.99	118.50	114.90
35	BA	117	G	C2-N3-C4	5.99	114.90	111.90
35	BA	729	A	C6-N1-C2	-5.99	115.00	118.60
35	BA	1035	A	C4'-C3'-C2'	-5.99	96.61	102.60
35	BA	1297	G	C5-C6-N1	5.99	114.50	111.50
35	BA	1342	C	N1-C2-O2	5.99	122.50	118.90
36	BB	76	A	C8-N9-C4	-5.99	103.40	105.80
38	BD	15	G	C6-N1-C2	-5.99	121.50	125.10
2	AB	40	U	O4'-C1'-N1	5.99	112.99	108.20
2	AB	322	A	O4'-C1'-N9	-5.99	103.41	108.20
2	AB	764	A	O4'-C1'-C2'	-5.99	99.81	105.80
2	AB	787	C	C5-C4-N4	-5.99	116.00	120.20
2	AB	788	A	C5-C6-N1	-5.99	114.70	117.70
2	AB	1903	G	C1'-O4'-C4'	5.99	114.69	109.90
2	AB	2740	A	N1-C2-N3	-5.99	126.30	129.30
2	AB	2811	G	N9-C1'-C2'	-5.99	105.41	112.00
35	BA	473	U	N1-C2-N3	5.99	118.50	114.90
35	BA	629	A	C4'-C3'-C2'	-5.99	96.61	102.60
1	AA	76	G	O4'-C1'-N9	5.99	112.99	108.20
2	AB	440	C	C5-C4-N4	5.99	124.39	120.20
2	AB	645	C	N3-C4-N4	5.99	122.19	118.00
2	AB	703	U	C4-C5-C6	5.99	123.30	119.70
2	AB	1047	G	C8-N9-C4	-5.99	104.00	106.40
2	AB	1115	G	P-O5'-C5'	5.99	130.48	120.90
2	AB	1145	C	N3-C2-O2	-5.99	117.71	121.90
2	AB	1193	G	C4'-C3'-C2'	-5.99	96.61	102.60
2	AB	1213	A	C5-C6-N1	5.99	120.70	117.70
2	AB	1382	G	N9-C4-C5	5.99	107.80	105.40
2	AB	1565	C	C5-C4-N4	-5.99	116.01	120.20
2	AB	1669	A	N1-C2-N3	-5.99	126.31	129.30
2	AB	2095	A	C5-N7-C8	-5.99	100.91	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2322	A	C2-N3-C4	5.99	113.59	110.60
2	AB	2444	G	C5'-C4'-C3'	-5.99	106.41	116.00
2	AB	2587	A	C5-N7-C8	-5.99	100.91	103.90
13	AM	32	TYR	CB-CG-CD2	-5.99	117.41	121.00
35	BA	1241	G	O5'-P-OP1	-5.99	100.31	105.70
35	BA	1346	A	C4-C5-C6	-5.99	114.00	117.00
36	BB	13	C	C5-C6-N1	-5.99	118.00	121.00
54	BT	61	ARG	NE-CZ-NH2	-5.99	117.31	120.30
2	AB	100	U	O4'-C1'-N1	5.99	112.99	108.20
2	AB	215	G	C5-C6-N1	5.99	114.50	111.50
2	AB	260	G	C8-N9-C4	-5.99	104.00	106.40
2	AB	508	A	N3-C4-N9	5.99	132.19	127.40
2	AB	727	A	C8-N9-C4	-5.99	103.40	105.80
2	AB	2144	G	C5-C6-O6	-5.99	125.01	128.60
2	AB	2408	U	N1-C2-N3	5.99	118.49	114.90
2	AB	2685	G	C1'-O4'-C4'	-5.99	105.11	109.90
2	AB	2858	C	C5'-C4'-C3'	-5.99	106.42	116.00
2	AB	1193	G	C5-N7-C8	-5.99	101.31	104.30
2	AB	1455	G	C2-N3-C4	5.99	114.89	111.90
35	BA	823	C	C4'-C3'-O3'	5.99	124.97	113.00
2	AB	63	A	N7-C8-N9	-5.99	110.81	113.80
2	AB	702	U	C1'-O4'-C4'	-5.99	105.11	109.90
2	AB	785	G	N7-C8-N9	5.99	116.09	113.10
2	AB	1252	G	C5-C6-N1	-5.99	108.51	111.50
2	AB	1569	A	P-O3'-C3'	5.99	126.88	119.70
2	AB	1731	G	N3-C4-C5	-5.99	125.61	128.60
35	BA	155	A	N1-C2-N3	-5.99	126.31	129.30
35	BA	311	C	C3'-C2'-C1'	-5.99	96.71	101.50
35	BA	633	G	C6-C5-N7	5.99	133.99	130.40
35	BA	933	G	N1-C6-O6	5.99	123.49	119.90
2	AB	1841	U	N1-C2-O2	-5.98	118.61	122.80
2	AB	2019	A	C8-N9-C4	-5.98	103.41	105.80
2	AB	2071	A	O4'-C1'-N9	5.98	112.99	108.20
35	BA	87	C	C5'-C4'-O4'	-5.98	101.92	109.10
35	BA	542	G	C5'-C4'-O4'	5.98	116.28	109.10
35	BA	1294	G	C3'-C2'-C1'	-5.98	96.71	101.50
1	AA	65	U	N3-C4-O4	5.98	123.59	119.40
2	AB	612	G	C2-N3-C4	5.98	114.89	111.90
2	AB	885	C	N3-C2-O2	-5.98	117.71	121.90
2	AB	1343	G	N3-C4-C5	-5.98	125.61	128.60
2	AB	1363	C	C1'-O4'-C4'	-5.98	105.11	109.90
2	AB	2177	C	N1-C1'-C2'	-5.98	105.42	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2369	A	N1-C6-N6	-5.98	115.01	118.60
2	AB	2382	G	C5-C6-N1	-5.98	108.51	111.50
35	BA	230	G	N3-C2-N2	-5.98	115.71	119.90
35	BA	274	A	O4'-C4'-C3'	5.98	110.89	106.10
35	BA	663	A	O4'-C1'-N9	5.98	112.99	108.20
35	BA	742	G	O4'-C1'-N9	5.98	112.98	108.20
1	AA	32	U	O4'-C1'-C2'	5.98	112.98	107.60
2	AB	162	U	C5-C4-O4	5.98	129.49	125.90
2	AB	251	A	C5'-C4'-O4'	5.98	116.28	109.10
2	AB	466	A	C2-N3-C4	-5.98	107.61	110.60
2	AB	932	U	C2-N1-C1'	5.98	124.88	117.70
2	AB	1216	G	C2-N3-C4	5.98	114.89	111.90
2	AB	1580	A	C5-C6-N1	5.98	120.69	117.70
2	AB	2348	U	O4'-C1'-N1	5.98	112.98	108.20
2	AB	2518	A	C4-C5-C6	-5.98	114.01	117.00
35	BA	359	G	C5-C6-O6	5.98	132.19	128.60
35	BA	797	C	C4'-C3'-C2'	-5.98	96.62	102.60
35	BA	1094	G	C8-N9-C4	-5.98	104.01	106.40
2	AB	297	G	C8-N9-C4	-5.98	104.01	106.40
2	AB	1435	G	C3'-C2'-C1'	5.98	106.28	101.50
2	AB	2428	G	C5-N7-C8	5.98	107.29	104.30
2	AB	2464	G	C5'-C4'-O4'	5.98	116.28	109.10
36	BB	59	G	C5-C6-N1	-5.98	108.51	111.50
1	AA	11	C	C5'-C4'-O4'	5.98	116.27	109.10
2	AB	570	G	C8-N9-C4	-5.98	104.01	106.40
2	AB	712	G	C6-C5-N7	5.98	133.99	130.40
2	AB	816	C	C2'-C3'-O3'	5.98	123.27	113.70
2	AB	1132	U	C2-N3-C4	-5.98	123.41	127.00
2	AB	1240	U	N3-C4-O4	5.98	123.58	119.40
2	AB	1303	G	C5'-C4'-O4'	5.98	116.27	109.10
2	AB	1491	G	C2-N3-C4	5.98	114.89	111.90
2	AB	1496	A	C4-C5-N7	-5.98	107.71	110.70
2	AB	1866	A	C4'-C3'-C2'	-5.98	96.62	102.60
2	AB	1984	G	C5'-C4'-O4'	5.98	116.27	109.10
2	AB	2248	C	C2-N1-C1'	-5.98	112.22	118.80
2	AB	2300	C	C5-C4-N4	-5.98	116.02	120.20
2	AB	2788	C	N1-C1'-C2'	-5.98	105.42	112.00
35	BA	581	G	O4'-C1'-C2'	5.98	112.98	107.60
35	BA	632	U	O4'-C1'-C2'	-5.98	99.82	105.80
35	BA	882	C	N1-C1'-C2'	-5.98	105.42	112.00
35	BA	1099	G	C5-C6-N1	-5.98	108.51	111.50
36	BB	72	U	C3'-C2'-C1'	5.98	106.28	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	77	A	C5'-C4'-O4'	5.98	116.27	109.10
2	AB	509	C	N3-C2-O2	-5.98	117.72	121.90
2	AB	541	A	N7-C8-N9	5.98	116.79	113.80
2	AB	703	U	C2-N1-C1'	5.98	124.87	117.70
2	AB	1097	U	O4'-C1'-N1	5.98	112.98	108.20
2	AB	1256	G	C4-C5-C6	5.98	122.39	118.80
2	AB	1368	G	C6-N1-C2	-5.98	121.51	125.10
2	AB	1758	U	N3-C4-O4	5.98	123.58	119.40
2	AB	1819	A	C6-N1-C2	-5.98	115.02	118.60
35	BA	261	U	C5-C4-O4	5.98	129.49	125.90
35	BA	453	G	N3-C4-C5	-5.98	125.61	128.60
35	BA	759	A	C6-C5-N7	-5.98	128.12	132.30
2	AB	6	A	C5'-C4'-O4'	5.97	116.27	109.10
2	AB	370	G	C6-N1-C2	-5.97	121.52	125.10
2	AB	610	C	N3-C4-C5	-5.97	119.51	121.90
2	AB	984	A	C4-C5-C6	-5.97	114.01	117.00
2	AB	1207	C	N3-C4-C5	5.97	124.29	121.90
2	AB	1867	G	C2-N3-C4	-5.97	108.91	111.90
2	AB	1919	A	C5-C6-N1	5.97	120.69	117.70
2	AB	2139	U	C5-C6-N1	-5.97	119.71	122.70
2	AB	2728	U	N1-C2-O2	5.97	126.98	122.80
35	BA	71	A	C4'-C3'-C2'	-5.97	96.62	102.60
35	BA	639	G	N7-C8-N9	5.97	116.09	113.10
35	BA	973	G	C6-N1-C2	-5.97	121.52	125.10
35	BA	1012	A	C6-C5-N7	-5.97	128.12	132.30
35	BA	1034	G	N3-C2-N2	5.97	124.08	119.90
2	AB	62	U	C3'-C2'-C1'	5.97	106.28	101.50
2	AB	777	G	C6-C5-N7	-5.97	126.82	130.40
2	AB	1107	G	C5'-C4'-C3'	-5.97	106.44	116.00
2	AB	1245	G	C6-C5-N7	-5.97	126.82	130.40
2	AB	2138	G	N1-C2-N2	5.97	121.57	116.20
2	AB	2247	A	C6-N1-C2	-5.97	115.02	118.60
2	AB	2415	G	C4'-C3'-C2'	-5.97	96.63	102.60
35	BA	842	U	O4'-C4'-C3'	-5.97	98.03	104.00
35	BA	878	A	C1'-O4'-C4'	-5.97	105.12	109.90
35	BA	1163	A	N3-C4-N9	5.97	132.18	127.40
35	BA	1482	G	C6-N1-C2	-5.97	121.52	125.10
35	BA	1484	C	C2-N3-C4	5.97	122.89	119.90
35	BA	1494	G	C8-N9-C4	-5.97	104.01	106.40
35	BA	1505	G	N1-C2-N3	5.97	127.48	123.90
41	BG	187	ARG	CD-NE-CZ	5.97	131.96	123.60
2	AB	1509	A	C2-N3-C4	5.97	113.59	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2081	U	C5-C4-O4	5.97	129.48	125.90
2	AB	2164	C	C1'-O4'-C4'	-5.97	105.12	109.90
2	AB	2899	A	N1-C6-N6	5.97	122.18	118.60
4	AD	62	ARG	NE-CZ-NH1	5.97	123.28	120.30
35	BA	1246	A	C5-C6-N1	5.97	120.69	117.70
2	AB	121	G	N1-C2-N3	-5.97	120.32	123.90
2	AB	354	A	C8-N9-C4	-5.97	103.41	105.80
2	AB	479	A	N1-C6-N6	-5.97	115.02	118.60
2	AB	1266	G	N1-C2-N3	-5.97	120.32	123.90
2	AB	1339	G	O4'-C1'-N9	5.97	112.98	108.20
2	AB	1946	U	C4'-C3'-C2'	-5.97	96.63	102.60
2	AB	2428	G	N3-C4-N9	5.97	129.58	126.00
2	AB	2468	A	C5-C6-N1	-5.97	114.72	117.70
2	AB	2564	A	O5'-P-OP2	-5.97	100.33	105.70
35	BA	252	U	C5-C6-N1	-5.97	119.72	122.70
35	BA	1233	G	N1-C6-O6	-5.97	116.32	119.90
35	BA	1237	C	O4'-C1'-C2'	-5.97	99.83	105.80
35	BA	1338	G	C8-N9-C4	-5.97	104.01	106.40
35	BA	1494	G	C5'-C4'-C3'	-5.97	106.45	116.00
2	AB	639	U	C4-C5-C6	-5.97	116.12	119.70
2	AB	1051	G	C4-C5-C6	-5.97	115.22	118.80
2	AB	1282	U	N3-C2-O2	-5.97	118.02	122.20
2	AB	2024	G	C6-N1-C2	-5.97	121.52	125.10
2	AB	2105	U	N3-C4-C5	5.97	118.18	114.60
2	AB	2386	A	C4-C5-N7	5.97	113.68	110.70
2	AB	2421	G	N3-C2-N2	-5.97	115.72	119.90
35	BA	600	A	C5-C6-N6	-5.97	118.93	123.70
35	BA	1254	A	C5-N7-C8	5.97	106.88	103.90
2	AB	154	U	P-O3'-C3'	5.97	126.86	119.70
2	AB	258	G	C6-N1-C2	-5.97	121.52	125.10
2	AB	1408	G	N3-C4-C5	-5.97	125.62	128.60
2	AB	2408	U	C4-C5-C6	5.97	123.28	119.70
2	AB	2856	A	N7-C8-N9	5.97	116.78	113.80
35	BA	67	C	N3-C4-N4	5.97	122.18	118.00
35	BA	145	G	N3-C4-C5	-5.97	125.62	128.60
35	BA	192	A	C4'-C3'-C2'	-5.97	96.63	102.60
35	BA	519	C	N1-C2-N3	5.97	123.38	119.20
35	BA	739	C	N3-C4-C5	5.97	124.29	121.90
35	BA	766	A	O4'-C4'-C3'	5.97	110.87	106.10
35	BA	1198	G	OP2-P-O3'	5.97	118.33	105.20
38	BD	26	C	C1'-O4'-C4'	5.97	114.67	109.90
2	AB	76	C	N1-C2-N3	-5.96	115.03	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	180	G	C6-N1-C2	-5.96	121.52	125.10
2	AB	412	A	C8-N9-C4	-5.96	103.41	105.80
2	AB	487	C	N1-C2-O2	5.96	122.48	118.90
2	AB	499	U	C5-C4-O4	5.96	129.48	125.90
2	AB	627	A	P-O3'-C3'	5.96	126.86	119.70
2	AB	743	A	N7-C8-N9	5.96	116.78	113.80
2	AB	819	A	N7-C8-N9	5.96	116.78	113.80
2	AB	1531	C	N1-C1'-C2'	-5.96	105.44	112.00
2	AB	1824	G	C8-N9-C1'	5.96	134.75	127.00
2	AB	1849	G	N9-C4-C5	5.96	107.79	105.40
2	AB	2287	A	P-O3'-C3'	5.96	126.86	119.70
2	AB	2500	U	C5'-C4'-O4'	5.96	116.26	109.10
2	AB	2516	A	C8-N9-C4	-5.96	103.41	105.80
2	AB	2650	U	N3-C2-O2	-5.96	118.02	122.20
2	AB	2775	G	N7-C8-N9	5.96	116.08	113.10
2	AB	2864	G	N1-C2-N2	-5.96	110.83	116.20
35	BA	888	G	N7-C8-N9	5.96	116.08	113.10
35	BA	1457	G	N1-C6-O6	-5.96	116.32	119.90
36	BB	10	G	N1-C2-N3	5.96	127.48	123.90
1	AA	3	C	C5-C6-N1	5.96	123.98	121.00
1	AA	101	A	C4-C5-N7	-5.96	107.72	110.70
2	AB	319	G	O4'-C1'-N9	5.96	112.97	108.20
2	AB	456	C	O4'-C1'-N1	5.96	112.97	108.20
2	AB	888	C	N3-C4-N4	5.96	122.17	118.00
2	AB	931	U	N1-C2-N3	5.96	118.48	114.90
2	AB	2209	G	C5'-C4'-O4'	5.96	116.26	109.10
35	BA	432	A	N7-C8-N9	-5.96	110.82	113.80
35	BA	1417	G	C1'-O4'-C4'	-5.96	105.13	109.90
1	AA	58	A	C2'-C3'-O3'	5.96	123.24	113.70
2	AB	386	G	N3-C2-N2	-5.96	115.73	119.90
2	AB	1603	A	C5-C6-N1	5.96	120.68	117.70
2	AB	2164	C	N3-C2-O2	-5.96	117.73	121.90
2	AB	2517	C	P-O3'-C3'	5.96	126.85	119.70
2	AB	2732	G	C4'-C3'-C2'	5.96	108.56	102.60
2	AB	2789	C	C1'-O4'-C4'	-5.96	105.13	109.90
2	AB	2881	U	N1-C2-N3	5.96	118.48	114.90
35	BA	1152	A	C1'-O4'-C4'	-5.96	105.13	109.90
35	BA	1523	G	P-O3'-C3'	5.96	126.85	119.70
41	BG	64	TYR	CB-CG-CD2	5.96	124.58	121.00
1	AA	79	G	N7-C8-N9	5.96	116.08	113.10
2	AB	801	G	N3-C4-C5	-5.96	125.62	128.60
2	AB	1371	G	C4'-C3'-C2'	-5.96	96.64	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	761	G	C8-N9-C4	-5.96	104.02	106.40
35	BA	1019	A	C8-N9-C4	5.96	108.18	105.80
35	BA	1203	C	O4'-C1'-N1	5.96	112.97	108.20
51	BQ	32	ASP	CB-CG-OD1	-5.96	112.94	118.30
1	AA	114	C	C4-C5-C6	5.96	120.38	117.40
2	AB	309	A	C5-C6-N1	5.96	120.68	117.70
2	AB	850	U	N1-C2-O2	5.96	126.97	122.80
2	AB	1552	A	C5-N7-C8	-5.96	100.92	103.90
2	AB	1879	C	N3-C4-C5	5.96	124.28	121.90
2	AB	2041	U	C5-C6-N1	5.96	125.68	122.70
2	AB	2599	G	C4-C5-N7	5.96	113.18	110.80
2	AB	2636	C	N3-C2-O2	-5.96	117.73	121.90
2	AB	2702	G	O4'-C1'-N9	5.96	112.97	108.20
2	AB	2849	U	O5'-P-OP2	-5.96	100.34	105.70
4	AD	12	ARG	NE-CZ-NH2	-5.96	117.32	120.30
35	BA	44	A	C6-C5-N7	-5.96	128.13	132.30
35	BA	118	U	C5-C6-N1	5.96	125.68	122.70
35	BA	211	G	P-O3'-C3'	5.96	126.85	119.70
35	BA	1335	U	N3-C2-O2	-5.96	118.03	122.20
35	BA	1351	U	C2-N3-C4	-5.96	123.42	127.00
35	BA	1493	A	N3-C4-N9	-5.96	122.63	127.40
2	AB	156	A	C1'-O4'-C4'	-5.96	105.14	109.90
2	AB	326	G	N3-C4-C5	-5.96	125.62	128.60
2	AB	1854	A	C4-C5-N7	-5.96	107.72	110.70
2	AB	1877	A	C4-C5-C6	5.96	119.98	117.00
30	A3	54	ILE	CB-CA-C	5.96	123.51	111.60
35	BA	399	G	C5-C6-N1	5.96	114.48	111.50
35	BA	878	A	N1-C2-N3	5.96	132.28	129.30
35	BA	1122	U	C4-C5-C6	5.96	123.27	119.70
35	BA	1204	A	C8-N9-C4	-5.96	103.42	105.80
2	AB	81	G	C6-N1-C2	-5.96	121.53	125.10
2	AB	614	A	N9-C4-C5	5.96	108.18	105.80
2	AB	757	G	C4-C5-C6	5.96	122.37	118.80
2	AB	2315	G	N3-C4-C5	-5.96	125.62	128.60
2	AB	2862	G	C6-N1-C2	-5.96	121.53	125.10
27	A0	7	ARG	NE-CZ-NH2	-5.96	117.32	120.30
35	BA	1075	U	C3'-C2'-C1'	5.96	106.26	101.50
36	BB	36	A	O4'-C1'-C2'	-5.96	99.84	105.80
37	BC	30	U	C5-C6-N1	-5.96	119.72	122.70
54	BT	79	GLU	OE1-CD-OE2	5.96	130.45	123.30
2	AB	320	A	C8-N9-C4	-5.95	103.42	105.80
2	AB	374	A	C5-N7-C8	-5.95	100.92	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	391	A	C2-N3-C4	5.95	113.58	110.60
2	AB	834	G	O4'-C1'-N9	5.95	112.96	108.20
2	AB	2342	C	C3'-C2'-C1'	5.95	106.26	101.50
2	AB	2356	U	C5'-C4'-O4'	5.95	116.24	109.10
2	AB	2435	A	C8-N9-C4	-5.95	103.42	105.80
2	AB	2629	U	C4-C5-C6	5.95	123.27	119.70
35	BA	423	G	N7-C8-N9	5.95	116.08	113.10
35	BA	952	U	O4'-C1'-N1	5.95	112.96	108.20
35	BA	1416	G	C8-N9-C1'	5.95	134.74	127.00
35	BA	1466	C	N1-C2-N3	-5.95	115.03	119.20
51	BQ	40	ARG	NE-CZ-NH1	5.95	123.28	120.30
51	BQ	91	GLU	OE1-CD-OE2	5.95	130.44	123.30
2	AB	1382	G	C4-C5-N7	-5.95	108.42	110.80
2	AB	1908	C	N3-C4-C5	5.95	124.28	121.90
2	AB	2042	A	N9-C4-C5	5.95	108.18	105.80
2	AB	2884	U	OP2-P-O3'	5.95	118.30	105.20
29	A2	67	PRO	CA-N-CD	-5.95	103.17	111.50
35	BA	304	U	C1'-O4'-C4'	5.95	114.66	109.90
35	BA	425	G	C4-C5-C6	5.95	122.37	118.80
35	BA	927	G	O4'-C1'-N9	5.95	112.96	108.20
2	AB	320	A	O4'-C1'-N9	5.95	112.96	108.20
2	AB	553	G	N9-C4-C5	5.95	107.78	105.40
2	AB	1125	G	C5-N7-C8	5.95	107.28	104.30
2	AB	1319	C	C6-N1-C2	-5.95	117.92	120.30
2	AB	2601	C	N1-C2-N3	-5.95	115.03	119.20
21	AU	99	ARG	CD-NE-CZ	5.95	131.93	123.60
35	BA	1065	U	C5-C6-N1	-5.95	119.72	122.70
1	AA	91	C	P-O3'-C3'	5.95	126.84	119.70
2	AB	77	G	C5-C6-N1	5.95	114.47	111.50
2	AB	139	U	N3-C4-O4	5.95	123.56	119.40
2	AB	660	C	C5-C6-N1	5.95	123.97	121.00
2	AB	1328	A	N1-C6-N6	-5.95	115.03	118.60
2	AB	1741	C	N3-C4-C5	5.95	124.28	121.90
2	AB	2054	A	C4-C5-N7	-5.95	107.72	110.70
2	AB	2812	G	C5'-C4'-C3'	-5.95	106.48	116.00
2	AB	2897	U	N3-C2-O2	-5.95	118.04	122.20
35	BA	33	A	N3-C4-N9	-5.95	122.64	127.40
35	BA	558	G	C1'-O4'-C4'	-5.95	105.14	109.90
35	BA	784	A	C4'-C3'-C2'	-5.95	96.65	102.60
35	BA	1278	G	C5-C6-N1	5.95	114.47	111.50
38	BD	7	G	N9-C4-C5	5.95	107.78	105.40
2	AB	1991	U	O4'-C1'-N1	5.95	112.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2264	C	O4'-C1'-N1	5.95	112.96	108.20
35	BA	79	G	C5'-C4'-O4'	5.95	116.24	109.10
2	AB	92	U	N3-C4-O4	5.95	123.56	119.40
2	AB	549	G	O4'-C1'-N9	5.95	112.96	108.20
2	AB	570	G	C5'-C4'-C3'	-5.95	106.49	116.00
2	AB	584	C	C5-C6-N1	-5.95	118.03	121.00
2	AB	658	U	C5-C6-N1	-5.95	119.73	122.70
2	AB	1207	C	N1-C2-O2	5.95	122.47	118.90
2	AB	1760	C	C5'-C4'-O4'	-5.95	101.96	109.10
2	AB	2253	G	C4-C5-N7	-5.95	108.42	110.80
2	AB	2321	U	O4'-C1'-N1	5.95	112.96	108.20
2	AB	2627	G	C5-C6-O6	-5.95	125.03	128.60
2	AB	2878	U	N3-C4-O4	5.95	123.56	119.40
35	BA	300	A	C5-N7-C8	-5.95	100.93	103.90
35	BA	309	A	C1'-O4'-C4'	-5.95	105.14	109.90
35	BA	353	A	N1-C2-N3	-5.95	126.33	129.30
35	BA	596	A	C2-N3-C4	5.95	113.57	110.60
35	BA	1059	C	C4'-C3'-C2'	-5.95	96.66	102.60
35	BA	1505	G	N9-C4-C5	-5.95	103.02	105.40
36	BB	35	C	C2'-C3'-O3'	5.95	123.21	113.70
37	BC	15	G	N9-C4-C5	5.95	107.78	105.40
37	BC	55	A	C2-N3-C4	5.95	113.57	110.60
2	AB	213	A	C5'-C4'-O4'	5.94	116.23	109.10
2	AB	1299	G	C6-C5-N7	-5.94	126.83	130.40
2	AB	1718	G	C4-C5-N7	-5.94	108.42	110.80
2	AB	1736	U	C5-C4-O4	5.94	129.47	125.90
4	AD	202	ARG	NE-CZ-NH2	-5.94	117.33	120.30
35	BA	1035	A	C6-C5-N7	5.94	136.46	132.30
35	BA	1152	A	O4'-C1'-C2'	5.94	112.95	107.60
2	AB	71	A	C1'-O4'-C4'	5.94	114.66	109.90
2	AB	577	G	C5-C6-O6	5.94	132.16	128.60
2	AB	741	U	O4'-C1'-N1	5.94	112.95	108.20
2	AB	1195	G	N7-C8-N9	5.94	116.07	113.10
2	AB	1362	C	O4'-C1'-C2'	-5.94	99.86	105.80
2	AB	1640	A	C6-N1-C2	-5.94	115.03	118.60
2	AB	1729	U	P-O3'-C3'	5.94	126.83	119.70
2	AB	2224	G	P-O3'-C3'	5.94	126.83	119.70
33	A6	57	VAL	CG1-CB-CG2	-5.94	101.39	110.90
35	BA	165	G	N1-C2-N2	5.94	121.55	116.20
35	BA	734	G	C2-N3-C4	5.94	114.87	111.90
35	BA	1140	C	C3'-C2'-C1'	5.94	106.25	101.50
35	BA	1525	G	C4-C5-N7	-5.94	108.42	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	54	G	C6-N1-C2	-5.94	121.53	125.10
2	AB	707	G	C5-C6-N1	-5.94	108.53	111.50
2	AB	957	C	C5-C6-N1	5.94	123.97	121.00
2	AB	1000	A	C4'-C3'-C2'	-5.94	96.66	102.60
2	AB	2090	A	C2-N3-C4	5.94	113.57	110.60
2	AB	2527	C	N3-C4-C5	-5.94	119.52	121.90
35	BA	502	A	N7-C8-N9	5.94	116.77	113.80
35	BA	988	G	O4'-C4'-C3'	5.94	110.85	106.10
35	BA	1289	A	O4'-C1'-N9	5.94	112.95	108.20
2	AB	358	U	C5-C6-N1	-5.94	119.73	122.70
2	AB	959	A	C5-N7-C8	5.94	106.87	103.90
2	AB	1193	G	O4'-C1'-N9	5.94	112.95	108.20
2	AB	1358	G	C1'-O4'-C4'	-5.94	105.15	109.90
2	AB	1488	C	C4-C5-C6	5.94	120.37	117.40
2	AB	1538	G	C5-C6-N1	5.94	114.47	111.50
2	AB	1592	C	N3-C2-O2	-5.94	117.74	121.90
2	AB	1687	G	O4'-C1'-C2'	-5.94	99.86	105.80
2	AB	2076	U	C5-C6-N1	5.94	125.67	122.70
2	AB	2632	A	N3-C4-N9	-5.94	122.65	127.40
35	BA	197	A	N3-C4-N9	-5.94	122.65	127.40
35	BA	385	C	C5'-C4'-C3'	5.94	125.50	116.00
35	BA	644	U	C5-C6-N1	-5.94	119.73	122.70
35	BA	1170	A	C3'-C2'-C1'	5.94	106.25	101.50
35	BA	1266	G	O3'-P-O5'	5.94	115.28	104.00
1	AA	30	C	C1'-O4'-C4'	-5.94	105.15	109.90
1	AA	50	A	C4-C5-N7	5.94	113.67	110.70
2	AB	546	U	C2-N1-C1'	5.94	124.83	117.70
2	AB	786	C	C6-N1-C2	5.94	122.67	120.30
2	AB	806	C	N3-C2-O2	-5.94	117.74	121.90
2	AB	853	C	C3'-C2'-C1'	5.94	106.25	101.50
2	AB	924	G	O4'-C4'-C3'	5.94	110.85	106.10
2	AB	1528	A	C8-N9-C4	-5.94	103.42	105.80
2	AB	1985	C	O5'-P-OP2	-5.94	100.36	105.70
2	AB	2023	C	O4'-C1'-N1	5.94	112.95	108.20
2	AB	2731	G	N1-C2-N2	5.94	121.54	116.20
2	AB	2893	A	C5-C6-N1	5.94	120.67	117.70
35	BA	226	G	N3-C2-N2	5.94	124.06	119.90
35	BA	388	G	N1-C2-N2	5.94	121.54	116.20
35	BA	692	U	N3-C4-C5	-5.94	111.04	114.60
35	BA	1088	G	C5-C6-N1	-5.94	108.53	111.50
35	BA	1184	G	C5-C6-O6	5.94	132.16	128.60
2	AB	814	C	C3'-C2'-C1'	-5.94	96.75	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1738	G	N9-C1'-C2'	-5.94	105.47	112.00
2	AB	2234	G	C4'-C3'-C2'	-5.94	96.66	102.60
2	AB	2589	A	O4'-C1'-N9	5.94	112.95	108.20
35	BA	12	U	C4-C5-C6	5.94	123.26	119.70
35	BA	925	G	C2-N3-C4	5.94	114.87	111.90
2	AB	408	G	O4'-C1'-N9	5.93	112.95	108.20
2	AB	537	G	C4-C5-N7	-5.93	108.43	110.80
2	AB	1204	A	C4-C5-C6	-5.93	114.03	117.00
2	AB	1268	A	C5'-C4'-O4'	5.93	116.22	109.10
2	AB	1366	A	C8-N9-C4	-5.93	103.43	105.80
2	AB	1455	G	C5-C6-O6	-5.93	125.04	128.60
2	AB	1673	G	N1-C6-O6	5.93	123.46	119.90
2	AB	1765	U	N1-C1'-C2'	-5.93	105.47	112.00
2	AB	1941	C	C6-N1-C2	-5.93	117.93	120.30
2	AB	2104	C	N3-C4-C5	-5.93	119.53	121.90
2	AB	2153	C	O4'-C4'-C3'	5.93	110.85	106.10
2	AB	2378	A	C4-C5-C6	5.93	119.97	117.00
2	AB	2477	U	N1-C1'-C2'	5.93	121.71	114.00
2	AB	2482	A	C4-C5-N7	-5.93	107.73	110.70
2	AB	2751	G	N9-C4-C5	-5.93	103.03	105.40
2	AB	2877	G	N1-C6-O6	-5.93	116.34	119.90
35	BA	259	G	N3-C4-N9	5.93	129.56	126.00
35	BA	511	C	C5-C6-N1	5.93	123.97	121.00
35	BA	538	G	O4'-C4'-C3'	-5.93	98.06	104.00
35	BA	1039	G	N1-C2-N3	5.93	127.46	123.90
35	BA	1228	C	C5-C4-N4	-5.93	116.05	120.20
1	AA	43	C	N3-C4-C5	-5.93	119.53	121.90
2	AB	117	G	C5'-C4'-O4'	5.93	116.22	109.10
2	AB	404	A	P-O3'-C3'	5.93	126.82	119.70
2	AB	439	A	N7-C8-N9	5.93	116.77	113.80
2	AB	472	A	N3-C4-C5	-5.93	122.65	126.80
2	AB	891	G	N3-C4-N9	5.93	129.56	126.00
2	AB	976	G	C4-C5-N7	-5.93	108.43	110.80
2	AB	1136	G	N1-C6-O6	-5.93	116.34	119.90
2	AB	1885	A	C5-C6-N1	5.93	120.67	117.70
2	AB	2235	G	N9-C4-C5	5.93	107.77	105.40
2	AB	2737	G	C8-N9-C4	-5.93	104.03	106.40
35	BA	94	G	N3-C2-N2	-5.93	115.75	119.90
35	BA	213	G	C5'-C4'-C3'	-5.93	106.51	116.00
35	BA	307	C	N1-C2-O2	5.93	122.46	118.90
35	BA	398	U	O4'-C1'-C2'	5.93	112.94	107.60
35	BA	462	G	O4'-C4'-C3'	5.93	110.85	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	719	C	N3-C2-O2	5.93	126.05	121.90
35	BA	797	C	O4'-C1'-C2'	-5.93	99.87	105.80
35	BA	1072	G	C4-C5-N7	5.93	113.17	110.80
35	BA	1257	A	N1-C6-N6	-5.93	115.04	118.60
35	BA	1275	A	C4'-C3'-C2'	-5.93	96.67	102.60
35	BA	1340	A	C5'-C4'-O4'	5.93	116.22	109.10
37	BC	33	A	P-O3'-C3'	5.93	126.82	119.70
37	BC	40	G	C1'-O4'-C4'	-5.93	105.15	109.90
2	AB	1008	A	C4-C5-C6	-5.93	114.03	117.00
2	AB	1241	A	N1-C6-N6	5.93	122.16	118.60
2	AB	1515	A	C5-C6-N1	-5.93	114.73	117.70
2	AB	2713	U	C5-C4-O4	5.93	129.46	125.90
30	A3	9	ARG	NE-CZ-NH2	5.93	123.27	120.30
52	BR	88	ARG	NE-CZ-NH2	5.93	123.27	120.30
2	AB	309	A	N7-C8-N9	-5.93	110.83	113.80
2	AB	395	U	C5-C6-N1	-5.93	119.73	122.70
2	AB	412	A	C4-C5-N7	-5.93	107.73	110.70
2	AB	988	A	N9-C4-C5	5.93	108.17	105.80
2	AB	1599	U	N1-C2-O2	5.93	126.95	122.80
2	AB	1775	U	C2-N3-C4	-5.93	123.44	127.00
2	AB	1899	A	O4'-C1'-N9	5.93	112.94	108.20
2	AB	2637	U	O3'-P-O5'	5.93	115.27	104.00
2	AB	2658	C	C1'-O4'-C4'	-5.93	105.16	109.90
18	AR	19	PHE	N-CA-CB	-5.93	99.92	110.60
35	BA	95	C	C4-C5-C6	-5.93	114.44	117.40
35	BA	960	U	O4'-C1'-N1	5.93	112.94	108.20
35	BA	1150	A	C5-N7-C8	5.93	106.86	103.90
35	BA	1310	G	C6-N1-C2	-5.93	121.54	125.10
35	BA	1433	A	N9-C4-C5	5.93	108.17	105.80
36	BB	36	A	C5-N7-C8	-5.93	100.94	103.90
49	BO	65	TYR	CB-CG-CD1	-5.93	117.44	121.00
2	AB	236	C	C5-C6-N1	5.93	123.96	121.00
2	AB	1421	G	N3-C4-C5	-5.93	125.64	128.60
2	AB	1478	G	C4-C5-N7	5.93	113.17	110.80
2	AB	2226	C	C1'-O4'-C4'	5.93	114.64	109.90
4	AD	95	TYR	CG-CD1-CE1	-5.93	116.56	121.30
35	BA	616	G	C6-N1-C2	-5.93	121.54	125.10
1	AA	46	A	C5-C6-N6	5.93	128.44	123.70
2	AB	226	A	N3-C4-N9	5.93	132.14	127.40
2	AB	713	G	N3-C4-C5	-5.93	125.64	128.60
2	AB	1903	G	N1-C2-N3	-5.93	120.34	123.90
2	AB	1977	A	N1-C2-N3	5.93	132.26	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2161	C	N3-C4-C5	-5.93	119.53	121.90
2	AB	2267	A	C5-C6-N1	5.93	120.66	117.70
2	AB	2633	G	N3-C2-N2	-5.93	115.75	119.90
2	AB	2710	C	C5-C4-N4	-5.93	116.05	120.20
2	AB	2765	A	C5-C6-N6	-5.93	118.96	123.70
35	BA	475	C	C5'-C4'-O4'	5.93	116.21	109.10
35	BA	602	A	N1-C6-N6	-5.93	115.04	118.60
35	BA	646	G	N1-C2-N2	5.93	121.53	116.20
35	BA	1054	C	C5-C6-N1	5.93	123.96	121.00
38	BD	28	U	C2-N3-C4	-5.93	123.44	127.00
1	AA	95	U	N1-C2-N3	5.92	118.45	114.90
2	AB	9	G	C4-N9-C1'	-5.92	118.80	126.50
2	AB	636	G	N3-C4-C5	5.92	131.56	128.60
2	AB	669	G	C4-C5-N7	5.92	113.17	110.80
2	AB	1275	A	C5-N7-C8	5.92	106.86	103.90
2	AB	1624	U	C4-C5-C6	5.92	123.25	119.70
2	AB	1814	G	N3-C2-N2	5.92	124.05	119.90
2	AB	1869	G	C1'-O4'-C4'	-5.92	105.16	109.90
2	AB	2006	C	O4'-C1'-N1	5.92	112.94	108.20
2	AB	2107	G	N3-C4-N9	-5.92	122.44	126.00
2	AB	2570	G	O4'-C1'-N9	5.92	112.94	108.20
2	AB	2735	G	C6-C5-N7	-5.92	126.84	130.40
35	BA	603	U	P-O3'-C3'	5.92	126.81	119.70
35	BA	1049	U	P-O3'-C3'	5.92	126.81	119.70
35	BA	1136	C	N3-C4-C5	-5.92	119.53	121.90
37	BC	15	G	C1'-O4'-C4'	-5.92	105.16	109.90
38	BD	13	C	N3-C4-N4	-5.92	113.85	118.00
2	AB	62	U	N1-C2-N3	5.92	118.45	114.90
2	AB	959	A	C6-C5-N7	-5.92	128.15	132.30
2	AB	1008	A	N1-C2-N3	-5.92	126.34	129.30
2	AB	1496	A	N1-C2-N3	-5.92	126.34	129.30
2	AB	1659	G	C6-N1-C2	-5.92	121.55	125.10
2	AB	2319	G	C5-C6-N1	5.92	114.46	111.50
2	AB	2367	G	C1'-O4'-C4'	5.92	114.64	109.90
35	BA	37	U	N1-C2-N3	5.92	118.45	114.90
35	BA	98	A	N1-C6-N6	-5.92	115.05	118.60
35	BA	325	A	C6-C5-N7	5.92	136.45	132.30
35	BA	544	G	C8-N9-C4	5.92	108.77	106.40
38	BD	23	G	O4'-C1'-N9	-5.92	103.46	108.20
51	BQ	81	ILE	CA-CB-CG1	5.92	122.25	111.00
2	AB	569	U	N1-C2-N3	5.92	118.45	114.90
2	AB	665	U	N3-C4-C5	-5.92	111.05	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1416	G	OP2-P-O3'	5.92	118.23	105.20
2	AB	1535	A	C5-C6-N1	5.92	120.66	117.70
2	AB	2099	U	C2-N3-C4	-5.92	123.45	127.00
2	AB	2118	U	N1-C1'-C2'	-5.92	105.49	112.00
2	AB	2703	C	N1-C2-N3	-5.92	115.05	119.20
2	AB	2792	A	O4'-C1'-N9	5.92	112.94	108.20
35	BA	983	A	N1-C6-N6	5.92	122.15	118.60
36	BB	9	A	C5-C6-N1	-5.92	114.74	117.70
2	AB	156	A	C4-C5-N7	5.92	113.66	110.70
2	AB	1229	C	C3'-C2'-C1'	-5.92	96.76	101.50
2	AB	1337	G	N7-C8-N9	5.92	116.06	113.10
2	AB	1650	A	N9-C1'-C2'	-5.92	105.49	112.00
2	AB	1667	G	O4'-C4'-C3'	5.92	110.84	106.10
2	AB	1766	G	C4-C5-C6	5.92	122.35	118.80
2	AB	2159	G	O4'-C4'-C3'	-5.92	98.08	104.00
35	BA	243	A	P-O3'-C3'	5.92	126.80	119.70
2	AB	740	C	C5-C6-N1	5.92	123.96	121.00
2	AB	825	A	N3-C4-C5	-5.92	122.66	126.80
2	AB	1500	G	C5'-C4'-O4'	5.92	116.20	109.10
2	AB	1515	A	C6-C5-N7	5.92	136.44	132.30
2	AB	1714	U	N3-C4-C5	-5.92	111.05	114.60
2	AB	2526	G	N1-C2-N3	-5.92	120.35	123.90
2	AB	2561	U	N3-C4-O4	5.92	123.54	119.40
24	AX	56	PHE	CB-CG-CD1	-5.92	116.66	120.80
35	BA	6	G	C2-N3-C4	5.92	114.86	111.90
35	BA	65	A	C5-N7-C8	-5.92	100.94	103.90
35	BA	856	C	C2-N3-C4	5.92	122.86	119.90
35	BA	1077	G	C4-C5-N7	-5.92	108.43	110.80
35	BA	1117	A	N9-C1'-C2'	-5.92	105.49	112.00
35	BA	1152	A	N1-C6-N6	5.92	122.15	118.60
35	BA	1316	G	O4'-C4'-C3'	5.92	110.83	106.10
35	BA	1492	A	N9-C4-C5	5.92	108.17	105.80
1	AA	67	G	N3-C4-N9	-5.92	122.45	126.00
2	AB	119	A	P-O5'-C5'	5.92	130.37	120.90
2	AB	1017	G	N3-C4-C5	-5.92	125.64	128.60
2	AB	1315	C	N3-C2-O2	-5.92	117.76	121.90
2	AB	1719	G	N9-C4-C5	5.92	107.77	105.40
2	AB	1791	A	C8-N9-C4	-5.92	103.43	105.80
2	AB	1937	A	O4'-C1'-C2'	-5.92	99.88	105.80
2	AB	2093	G	C8-N9-C4	-5.92	104.03	106.40
2	AB	2219	U	C3'-C2'-C1'	5.92	106.23	101.50
2	AB	2550	G	N1-C2-N2	5.92	121.52	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2629	U	N1-C2-N3	-5.92	111.35	114.90
2	AB	2848	G	N1-C6-O6	-5.92	116.35	119.90
35	BA	37	U	C5-C6-N1	-5.92	119.74	122.70
35	BA	69	G	N7-C8-N9	5.92	116.06	113.10
35	BA	129	A	N9-C4-C5	5.92	108.17	105.80
35	BA	449	G	C5'-C4'-O4'	-5.92	102.00	109.10
35	BA	819	A	N9-C4-C5	-5.92	103.43	105.80
44	BJ	24	LYS	CB-CA-C	5.92	122.23	110.40
44	BJ	52	ARG	NH1-CZ-NH2	-5.92	112.89	119.40
58	BX	16	ARG	NE-CZ-NH2	-5.92	117.34	120.30
2	AB	200	U	C5'-C4'-O4'	5.92	116.20	109.10
2	AB	1082	U	C5-C4-O4	-5.92	122.35	125.90
2	AB	1797	G	N7-C8-N9	5.92	116.06	113.10
2	AB	2293	G	C4-C5-N7	-5.92	108.43	110.80
2	AB	2429	G	N1-C2-N3	-5.92	120.35	123.90
2	AB	2789	C	O4'-C1'-N1	-5.92	103.47	108.20
35	BA	622	A	C5-C6-N1	5.92	120.66	117.70
2	AB	219	A	C6-N1-C2	5.91	122.15	118.60
2	AB	1633	G	C2-N3-C4	5.91	114.86	111.90
2	AB	1779	U	C5-C4-O4	5.91	129.45	125.90
2	AB	1831	G	C6-C5-N7	-5.91	126.85	130.40
2	AB	2061	G	N3-C4-C5	-5.91	125.64	128.60
2	AB	2410	G	N3-C4-C5	-5.91	125.64	128.60
35	BA	83	C	N3-C4-C5	5.91	124.27	121.90
35	BA	168	G	N9-C1'-C2'	-5.91	105.50	112.00
35	BA	757	U	N1-C2-N3	5.91	118.45	114.90
35	BA	1204	A	C5'-C4'-O4'	5.91	116.20	109.10
35	BA	1212	U	C5'-C4'-O4'	5.91	116.19	109.10
35	BA	1442	G	O4'-C1'-N9	5.91	112.93	108.20
36	BB	64	U	N3-C4-O4	5.91	123.54	119.40
1	AA	7	G	C2-N3-C4	5.91	114.86	111.90
2	AB	384	A	C5-N7-C8	5.91	106.86	103.90
2	AB	750	A	O5'-C5'-C4'	5.91	122.93	111.70
2	AB	1587	G	C4'-C3'-O3'	5.91	124.82	113.00
2	AB	2111	U	C5'-C4'-O4'	5.91	116.19	109.10
2	AB	2590	A	P-O3'-C3'	5.91	126.80	119.70
2	AB	2753	A	N9-C4-C5	5.91	108.17	105.80
35	BA	642	A	C6-N1-C2	-5.91	115.05	118.60
35	BA	691	G	N7-C8-N9	-5.91	110.14	113.10
35	BA	823	C	C5-C6-N1	-5.91	118.04	121.00
35	BA	968	A	N1-C2-N3	5.91	132.26	129.30
35	BA	1417	G	N3-C4-C5	-5.91	125.64	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	205	G	C5-C6-O6	5.91	132.15	128.60
2	AB	322	A	C1'-O4'-C4'	5.91	114.63	109.90
2	AB	458	G	C4-N9-C1'	-5.91	118.82	126.50
2	AB	514	A	C4-C5-N7	5.91	113.66	110.70
2	AB	738	G	N1-C6-O6	5.91	123.45	119.90
2	AB	1175	A	C4-C5-N7	5.91	113.66	110.70
2	AB	1492	G	O4'-C1'-N9	5.91	112.93	108.20
2	AB	1685	C	C6-N1-C2	-5.91	117.94	120.30
2	AB	1744	A	C6-C5-N7	5.91	136.44	132.30
2	AB	2122	U	C6-N1-C2	-5.91	117.45	121.00
35	BA	61	G	C4'-C3'-C2'	-5.91	96.69	102.60
35	BA	413	G	C5-C6-O6	-5.91	125.05	128.60
35	BA	505	G	C5-N7-C8	5.91	107.25	104.30
35	BA	541	G	C4-N9-C1'	-5.91	118.82	126.50
35	BA	1270	G	N1-C6-O6	5.91	123.45	119.90
35	BA	1440	U	N3-C4-C5	5.91	118.15	114.60
35	BA	1476	A	N1-C2-N3	5.91	132.25	129.30
2	AB	271	G	N3-C2-N2	-5.91	115.76	119.90
2	AB	306	U	C2-N3-C4	-5.91	123.45	127.00
2	AB	685	A	O4'-C1'-N9	5.91	112.93	108.20
2	AB	979	A	C5-C6-N6	-5.91	118.97	123.70
2	AB	1088	A	C3'-C2'-C1'	5.91	106.23	101.50
2	AB	1272	A	C4-C5-N7	-5.91	107.75	110.70
2	AB	1472	C	C4'-C3'-O3'	5.91	124.82	113.00
2	AB	1649	G	N1-C2-N2	-5.91	110.88	116.20
2	AB	1786	A	C5'-C4'-O4'	5.91	116.19	109.10
2	AB	1878	G	C5-N7-C8	-5.91	101.35	104.30
2	AB	2662	A	C6-C5-N7	-5.91	128.16	132.30
3	AC	74	ARG	NE-CZ-NH2	-5.91	117.34	120.30
35	BA	83	C	C4'-C3'-C2'	-5.91	96.69	102.60
35	BA	876	C	C5-C6-N1	5.91	123.95	121.00
35	BA	924	C	O4'-C1'-N1	5.91	112.93	108.20
35	BA	1079	G	O4'-C4'-C3'	5.91	110.83	106.10
35	BA	1233	G	N7-C8-N9	5.91	116.05	113.10
35	BA	1269	A	C5-C6-N1	-5.91	114.75	117.70
35	BA	1387	G	C2-N3-C4	5.91	114.86	111.90
37	BC	58	C	C2-N3-C4	5.91	122.85	119.90
42	BH	156	ARG	CD-NE-CZ	5.91	131.87	123.60
1	AA	54	G	N7-C8-N9	5.91	116.05	113.10
2	AB	272	A	N7-C8-N9	5.91	116.75	113.80
2	AB	299	A	C3'-C2'-C1'	5.91	106.22	101.50
2	AB	702	U	C6-N1-C2	-5.91	117.46	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2882	A	C6-C5-N7	5.91	136.44	132.30
35	BA	134	G	C8-N9-C1'	5.91	134.68	127.00
35	BA	1352	C	O4'-C1'-N1	5.91	112.92	108.20
37	BC	46	C	OP1-P-OP2	-5.91	110.74	119.60
2	AB	321	U	N3-C2-O2	-5.91	118.07	122.20
2	AB	1225	G	C5-C6-N1	5.91	114.45	111.50
2	AB	1396	U	C6-N1-C2	-5.91	117.46	121.00
2	AB	1871	A	N9-C4-C5	-5.91	103.44	105.80
2	AB	2060	A	N7-C8-N9	-5.91	110.85	113.80
2	AB	2198	A	C8-N9-C4	-5.91	103.44	105.80
35	BA	1404	C	N3-C2-O2	-5.91	117.77	121.90
2	AB	1527	G	O4'-C1'-N9	5.90	112.92	108.20
2	AB	1746	A	C4-C5-C6	5.90	119.95	117.00
2	AB	2684	U	C6-N1-C2	-5.90	117.46	121.00
2	AB	2802	G	C5-C6-N1	5.90	114.45	111.50
35	BA	145	G	P-O3'-C3'	5.90	126.78	119.70
35	BA	278	G	N3-C4-C5	-5.90	125.65	128.60
35	BA	305	G	C6-C5-N7	5.90	133.94	130.40
2	AB	159	G	C8-N9-C4	-5.90	104.04	106.40
2	AB	295	G	C8-N9-C4	-5.90	104.04	106.40
2	AB	378	C	C1'-O4'-C4'	-5.90	105.18	109.90
2	AB	783	A	N1-C6-N6	-5.90	115.06	118.60
2	AB	1440	U	C6-N1-C2	-5.90	117.46	121.00
2	AB	2398	U	N3-C2-O2	-5.90	118.07	122.20
20	AT	92	TRP	NE1-CE2-CD2	-5.90	101.40	107.30
35	BA	1260	G	N3-C4-N9	-5.90	122.46	126.00
35	BA	1331	G	P-O3'-C3'	5.90	126.78	119.70
35	BA	1437	A	C8-N9-C4	-5.90	103.44	105.80
36	BB	38	A	O5'-P-OP1	-5.90	100.39	105.70
58	BX	66	ARG	NE-CZ-NH2	-5.90	117.35	120.30
1	AA	26	C	C3'-C2'-C1'	-5.90	96.78	101.50
1	AA	35	C	C5-C4-N4	5.90	124.33	120.20
2	AB	935	C	N3-C4-C5	-5.90	119.54	121.90
2	AB	1041	G	C4-C5-N7	-5.90	108.44	110.80
2	AB	1428	C	C6-N1-C2	-5.90	117.94	120.30
2	AB	2038	G	C5'-C4'-O4'	5.90	116.18	109.10
35	BA	197	A	OP1-P-OP2	5.90	128.45	119.60
35	BA	410	G	C2-N3-C4	5.90	114.85	111.90
35	BA	798	U	C6-N1-C2	-5.90	117.46	121.00
2	AB	478	A	C4-C5-N7	-5.90	107.75	110.70
2	AB	2396	G	N3-C4-C5	-5.90	125.65	128.60
2	AB	2886	A	C2-N3-C4	-5.90	107.65	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	A3	39	ARG	NE-CZ-NH1	5.90	123.25	120.30
35	BA	114	U	C2-N3-C4	-5.90	123.46	127.00
35	BA	1339	A	C5-N7-C8	5.90	106.85	103.90
2	AB	52	A	C4'-C3'-C2'	-5.90	96.70	102.60
2	AB	160	A	N7-C8-N9	-5.90	110.85	113.80
2	AB	184	C	C5-C6-N1	5.90	123.95	121.00
2	AB	250	G	N1-C2-N3	-5.90	120.36	123.90
2	AB	312	G	N3-C4-N9	5.90	129.54	126.00
2	AB	404	A	C4'-C3'-C2'	-5.90	96.70	102.60
2	AB	725	G	C5'-C4'-O4'	5.90	116.18	109.10
2	AB	736	C	C5'-C4'-O4'	5.90	116.18	109.10
2	AB	1241	A	C5'-C4'-O4'	5.90	116.18	109.10
2	AB	1319	C	O4'-C1'-N1	-5.90	103.48	108.20
2	AB	1445	G	O4'-C1'-C2'	5.90	112.91	107.60
2	AB	1639	C	C6-N1-C1'	5.90	127.88	120.80
2	AB	1982	U	C5-C4-O4	5.90	129.44	125.90
2	AB	2223	G	C5-N7-C8	-5.90	101.35	104.30
2	AB	2360	G	C5-C6-O6	-5.90	125.06	128.60
2	AB	2650	U	C5'-C4'-C3'	-5.90	106.56	116.00
2	AB	2770	G	C5'-C4'-O4'	5.90	116.18	109.10
35	BA	183	C	C5'-C4'-O4'	5.90	116.18	109.10
35	BA	529	G	C1'-O4'-C4'	-5.90	105.18	109.90
35	BA	1062	U	C1'-O4'-C4'	-5.90	105.18	109.90
35	BA	1323	G	C5'-C4'-O4'	5.90	116.18	109.10
35	BA	1351	U	O4'-C1'-N1	5.90	112.92	108.20
1	AA	98	G	N3-C4-C5	-5.90	125.65	128.60
2	AB	342	A	N3-C4-C5	-5.90	122.67	126.80
2	AB	993	G	C8-N9-C1'	5.90	134.66	127.00
2	AB	994	C	C3'-C2'-C1'	-5.90	96.78	101.50
2	AB	1870	C	C2-N3-C4	-5.90	116.95	119.90
2	AB	2010	G	N9-C4-C5	-5.90	103.04	105.40
2	AB	2159	G	C8-N9-C4	-5.90	104.04	106.40
2	AB	2196	C	N3-C4-C5	5.90	124.26	121.90
2	AB	2878	U	N1-C2-N3	5.90	118.44	114.90
2	AB	484	C	C5-C4-N4	-5.89	116.07	120.20
2	AB	637	A	C3'-C2'-C1'	-5.89	96.78	101.50
2	AB	921	C	O4'-C1'-N1	5.89	112.92	108.20
2	AB	1017	G	N1-C2-N3	-5.89	120.36	123.90
2	AB	1213	A	C2-N3-C4	5.89	113.55	110.60
2	AB	1632	A	O4'-C1'-N9	5.89	112.92	108.20
2	AB	1668	A	C4-C5-N7	-5.89	107.75	110.70
2	AB	2042	A	C5-C6-N1	5.89	120.65	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2461	A	N1-C2-N3	-5.89	126.35	129.30
35	BA	827	U	C5-C4-O4	-5.89	122.36	125.90
35	BA	1436	U	O4'-C1'-N1	5.89	112.92	108.20
35	BA	1439	G	N3-C4-N9	5.89	129.54	126.00
36	BB	46	7MG	P-O3'-C3'	5.89	126.77	119.70
2	AB	106	C	O4'-C1'-N1	5.89	112.92	108.20
2	AB	126	A	C5'-C4'-O4'	5.89	116.17	109.10
2	AB	495	G	N1-C6-O6	5.89	123.44	119.90
2	AB	883	G	O4'-C1'-C2'	5.89	112.90	107.60
2	AB	1016	G	N3-C4-C5	-5.89	125.65	128.60
2	AB	1046	A	N7-C8-N9	5.89	116.75	113.80
2	AB	1434	A	N9-C1'-C2'	-5.89	105.52	112.00
2	AB	1473	G	C4-C5-N7	-5.89	108.44	110.80
2	AB	1633	G	N3-C4-N9	5.89	129.53	126.00
2	AB	1645	G	N1-C2-N3	5.89	127.44	123.90
2	AB	1944	U	C2-N3-C4	-5.89	123.46	127.00
2	AB	2315	G	C2-N3-C4	5.89	114.85	111.90
2	AB	2566	A	C4'-C3'-C2'	5.89	108.49	102.60
2	AB	2750	A	N3-C4-N9	5.89	132.12	127.40
16	AP	50	PRO	N-CA-CB	5.89	110.37	103.30
35	BA	117	G	C5-C6-O6	5.89	132.14	128.60
35	BA	207	C	C5-C4-N4	-5.89	116.08	120.20
35	BA	243	A	N7-C8-N9	5.89	116.75	113.80
35	BA	1415	G	N7-C8-N9	5.89	116.05	113.10
35	BA	1450	U	N1-C2-O2	-5.89	118.67	122.80
2	AB	19	A	N1-C6-N6	-5.89	115.07	118.60
2	AB	274	C	N3-C4-N4	5.89	122.12	118.00
2	AB	586	A	C8-N9-C4	-5.89	103.44	105.80
2	AB	896	A	C8-N9-C4	5.89	108.16	105.80
2	AB	1028	A	N7-C8-N9	5.89	116.75	113.80
2	AB	1568	G	N3-C2-N2	-5.89	115.78	119.90
2	AB	2679	A	C2-N3-C4	5.89	113.55	110.60
19	AS	20	ALA	CB-CA-C	5.89	118.94	110.10
35	BA	684	U	N1-C2-N3	5.89	118.44	114.90
35	BA	946	A	C4-C5-N7	-5.89	107.75	110.70
1	AA	105	G	O4'-C1'-N9	5.89	112.91	108.20
2	AB	675	A	P-O3'-C3'	5.89	126.77	119.70
2	AB	913	U	C4-C5-C6	5.89	123.23	119.70
2	AB	2156	G	C5-C6-O6	-5.89	125.07	128.60
2	AB	2514	U	O5'-P-OP1	-5.89	100.40	105.70
2	AB	2801	G	N7-C8-N9	5.89	116.05	113.10
35	BA	128	G	C3'-C2'-C1'	-5.89	96.79	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	181	A	C1'-O4'-C4'	-5.89	105.19	109.90
35	BA	286	C	C5'-C4'-O4'	5.89	116.17	109.10
35	BA	895	G	C6-C5-N7	5.89	133.93	130.40
35	BA	1098	C	O3'-P-O5'	-5.89	92.81	104.00
35	BA	1253	G	N9-C1'-C2'	-5.89	105.52	112.00
35	BA	1497	G	C6-C5-N7	-5.89	126.87	130.40
35	BA	1523	G	N9-C4-C5	5.89	107.76	105.40
1	AA	80	U	N3-C2-O2	-5.89	118.08	122.20
2	AB	2700	A	O4'-C1'-N9	5.89	112.91	108.20
21	AU	25	ARG	NE-CZ-NH2	-5.89	117.36	120.30
35	BA	69	G	C5'-C4'-O4'	5.89	116.17	109.10
35	BA	742	G	C1'-O4'-C4'	5.89	114.61	109.90
35	BA	797	C	C5-C4-N4	-5.89	116.08	120.20
35	BA	864	A	N9-C4-C5	-5.89	103.44	105.80
35	BA	1187	G	N1-C6-O6	-5.89	116.37	119.90
35	BA	1380	U	O4'-C1'-C2'	-5.89	99.91	105.80
38	BD	69	C	C5-C4-N4	-5.89	116.08	120.20
2	AB	9	G	C6-C5-N7	-5.89	126.87	130.40
2	AB	66	C	C5-C6-N1	-5.89	118.06	121.00
2	AB	343	C	C3'-C2'-C1'	5.89	106.21	101.50
2	AB	457	A	N3-C4-C5	-5.89	122.68	126.80
2	AB	1254	A	C5-C6-N1	5.89	120.64	117.70
2	AB	1317	G	N9-C4-C5	5.89	107.75	105.40
2	AB	1341	G	C1'-O4'-C4'	5.89	114.61	109.90
2	AB	1608	A	N3-C4-N9	5.89	132.11	127.40
2	AB	1807	G	C4-C5-N7	-5.89	108.45	110.80
23	AW	99	SER	CB-CA-C	5.89	121.28	110.10
35	BA	90	C	P-O3'-C3'	5.89	126.77	119.70
35	BA	934	C	C5-C6-N1	5.89	123.94	121.00
2	AB	1038	G	O4'-C1'-N9	5.88	112.91	108.20
2	AB	1355	G	C1'-O4'-C4'	5.88	114.61	109.90
2	AB	1386	C	N3-C4-C5	5.88	124.25	121.90
2	AB	1578	U	N3-C4-C5	-5.88	111.07	114.60
2	AB	1720	U	C4-C5-C6	5.88	123.23	119.70
2	AB	2170	A	C5-N7-C8	5.88	106.84	103.90
2	AB	2720	U	N1-C2-O2	5.88	126.92	122.80
2	AB	2867	G	C3'-C2'-C1'	-5.88	96.79	101.50
8	AH	78	VAL	CA-CB-CG2	5.88	119.73	110.90
35	BA	248	C	C5'-C4'-O4'	5.88	116.16	109.10
35	BA	645	G	C1'-O4'-C4'	-5.88	105.19	109.90
35	BA	913	A	C8-N9-C4	-5.88	103.45	105.80
35	BA	1233	G	N3-C4-C5	-5.88	125.66	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1379	G	N3-C4-N9	5.88	129.53	126.00
35	BA	1421	G	O4'-C1'-N9	5.88	112.91	108.20
36	BB	31	U	N3-C2-O2	-5.88	118.08	122.20
38	BD	25	U	C5'-C4'-C3'	-5.88	106.58	116.00
42	BH	111	ARG	N-CA-CB	-5.88	100.01	110.60
43	BI	42	TRP	CD1-NE1-CE2	5.88	114.30	109.00
2	AB	247	G	C4-C5-N7	-5.88	108.45	110.80
2	AB	539	G	C6-N1-C2	5.88	128.63	125.10
2	AB	778	G	C6-N1-C2	-5.88	121.57	125.10
35	BA	94	G	C6-C5-N7	5.88	133.93	130.40
35	BA	156	C	C2-N1-C1'	-5.88	112.33	118.80
35	BA	382	A	C1'-O4'-C4'	5.88	114.61	109.90
35	BA	974	A	C2-N3-C4	5.88	113.54	110.60
35	BA	1308	U	O4'-C1'-N1	5.88	112.91	108.20
36	BB	62	U	C5-C4-O4	-5.88	122.37	125.90
37	BC	24	A	C5'-C4'-C3'	-5.88	106.59	116.00
1	AA	55	U	O4'-C1'-N1	5.88	112.91	108.20
2	AB	490	C	O4'-C1'-N1	5.88	112.91	108.20
2	AB	556	A	C2-N3-C4	-5.88	107.66	110.60
2	AB	1726	C	N3-C4-C5	-5.88	119.55	121.90
2	AB	1959	G	C4-C5-C6	5.88	122.33	118.80
2	AB	2583	G	O4'-C4'-C3'	5.88	110.81	106.10
2	AB	2782	G	N1-C2-N3	-5.88	120.37	123.90
35	BA	160	A	N9-C4-C5	5.88	108.15	105.80
35	BA	245	U	C5'-C4'-O4'	5.88	116.16	109.10
35	BA	894	G	N1-C6-O6	-5.88	116.37	119.90
35	BA	1447	A	C3'-C2'-C1'	5.88	106.20	101.50
2	AB	1117	C	C6-N1-C2	-5.88	117.95	120.30
2	AB	1872	A	C8-N9-C4	-5.88	103.45	105.80
2	AB	2220	U	N1-C2-N3	5.88	118.43	114.90
35	BA	213	G	C5'-C4'-O4'	5.88	116.16	109.10
35	BA	961	U	C2-N3-C4	-5.88	123.47	127.00
35	BA	1179	A	C3'-C2'-C1'	-5.88	96.80	101.50
2	AB	553	G	C1'-O4'-C4'	-5.88	105.20	109.90
2	AB	865	C	N3-C4-N4	5.88	122.11	118.00
2	AB	930	G	N9-C4-C5	5.88	107.75	105.40
2	AB	2623	G	C4-C5-N7	5.88	113.15	110.80
2	AB	2778	A	O4'-C4'-C3'	5.88	110.80	106.10
35	BA	573	A	O5'-P-OP2	-5.88	100.41	105.70
35	BA	609	A	N9-C1'-C2'	-5.88	105.53	112.00
2	AB	195	A	C4'-C3'-C2'	5.88	108.48	102.60
2	AB	371	A	C8-N9-C4	5.88	108.15	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	425	G	O4'-C1'-N9	5.88	112.90	108.20
2	AB	1210	G	O4'-C1'-C2'	5.88	112.89	107.60
2	AB	2288	A	C5-C6-N6	-5.88	119.00	123.70
2	AB	2414	G	C5-C6-N1	5.88	114.44	111.50
2	AB	2442	C	C4'-C3'-C2'	-5.88	96.72	102.60
2	AB	2506	U	C4'-C3'-C2'	-5.88	96.72	102.60
35	BA	713	G	C8-N9-C4	-5.88	104.05	106.40
35	BA	1077	G	O3'-P-O5'	-5.88	92.84	104.00
35	BA	1318	A	C5-N7-C8	-5.88	100.96	103.90
36	BB	52	A	C5-N7-C8	-5.88	100.96	103.90
37	BC	53	G	C5-N7-C8	5.88	107.24	104.30
41	BG	74	TYR	CZ-CE2-CD2	-5.88	114.51	119.80
2	AB	1478	G	C3'-C2'-C1'	-5.88	96.80	101.50
2	AB	1622	G	C2-N3-C4	5.88	114.84	111.90
2	AB	1869	G	O5'-C5'-C4'	-5.88	100.54	111.70
2	AB	2893	A	O3'-P-O5'	-5.88	92.84	104.00
35	BA	83	C	C2-N1-C1'	-5.88	112.34	118.80
35	BA	485	U	C3'-C2'-C1'	5.88	106.20	101.50
35	BA	600	A	C5'-C4'-C3'	-5.88	106.60	116.00
2	AB	108	G	N9-C4-C5	5.87	107.75	105.40
2	AB	128	C	N3-C4-N4	5.87	122.11	118.00
2	AB	173	A	N7-C8-N9	5.87	116.74	113.80
2	AB	537	G	N3-C4-N9	-5.87	122.48	126.00
2	AB	925	A	C4-C5-N7	5.87	113.64	110.70
2	AB	1389	G	N1-C6-O6	-5.87	116.38	119.90
2	AB	1529	G	N7-C8-N9	5.87	116.04	113.10
2	AB	1773	A	C5-N7-C8	-5.87	100.96	103.90
2	AB	2141	G	N1-C6-O6	5.87	123.42	119.90
2	AB	2212	A	C8-N9-C4	5.87	108.15	105.80
2	AB	2811	G	C1'-O4'-C4'	5.87	114.60	109.90
14	AN	60	ARG	NH1-CZ-NH2	5.87	125.86	119.40
28	A1	52	PHE	CB-CG-CD2	5.87	124.91	120.80
35	BA	590	U	N3-C4-O4	5.87	123.51	119.40
35	BA	908	A	O4'-C1'-N9	5.87	112.90	108.20
35	BA	1155	A	C8-N9-C4	-5.87	103.45	105.80
35	BA	1371	G	C4-C5-N7	5.87	113.15	110.80
35	BA	1509	C	N3-C2-O2	-5.87	117.79	121.90
35	BA	1511	G	C5-N7-C8	-5.87	101.36	104.30
35	BA	1531	A	O4'-C1'-N9	5.87	112.90	108.20
36	BB	28	C	C5'-C4'-C3'	-5.87	106.60	116.00
2	AB	150	U	N3-C4-O4	5.87	123.51	119.40
2	AB	985	C	N1-C1'-C2'	5.87	121.63	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1140	C	C5'-C4'-O4'	5.87	116.15	109.10
2	AB	1211	C	C2-N3-C4	5.87	122.84	119.90
2	AB	1356	G	C5-N7-C8	-5.87	101.36	104.30
2	AB	1378	A	C6-C5-N7	5.87	136.41	132.30
2	AB	1384	A	C6-N1-C2	-5.87	115.08	118.60
2	AB	2703	C	C5-C6-N1	5.87	123.94	121.00
2	AB	2838	G	C5-N7-C8	-5.87	101.36	104.30
35	BA	1285	A	N9-C4-C5	-5.87	103.45	105.80
39	BE	162	VAL	CA-CB-CG1	5.87	119.71	110.90
2	AB	695	G	C5-N7-C8	-5.87	101.36	104.30
2	AB	2032	G	C6-C5-N7	5.87	133.92	130.40
2	AB	675	A	C4-C5-C6	-5.87	114.07	117.00
2	AB	742	A	C5-C6-N1	5.87	120.63	117.70
2	AB	1042	G	N3-C4-C5	-5.87	125.67	128.60
2	AB	1332	G	C3'-C2'-C1'	5.87	106.19	101.50
2	AB	1540	G	N7-C8-N9	5.87	116.03	113.10
2	AB	1640	A	N9-C4-C5	5.87	108.15	105.80
2	AB	2209	G	C2-N3-C4	-5.87	108.97	111.90
2	AB	2547	A	O4'-C1'-N9	5.87	112.89	108.20
2	AB	2641	G	N9-C4-C5	5.87	107.75	105.40
15	AO	38	ARG	NE-CZ-NH2	-5.87	117.36	120.30
22	AV	35	ALA	N-CA-CB	5.87	118.32	110.10
35	BA	278	G	C5'-C4'-O4'	5.87	116.14	109.10
35	BA	281	G	C4-C5-N7	-5.87	108.45	110.80
35	BA	1057	G	C5-N7-C8	-5.87	101.37	104.30
35	BA	1235	U	C2-N3-C4	-5.87	123.48	127.00
35	BA	1274	A	N3-C4-N9	-5.87	122.70	127.40
35	BA	1373	G	N3-C2-N2	5.87	124.01	119.90
35	BA	1504	G	C6-N1-C2	-5.87	121.58	125.10
36	BB	51	G	C8-N9-C4	-5.87	104.05	106.40
2	AB	103	A	C6-N1-C2	5.87	122.12	118.60
2	AB	1642	G	C6-N1-C2	-5.87	121.58	125.10
2	AB	2494	G	C2-N3-C4	5.87	114.83	111.90
14	AN	47	ARG	NE-CZ-NH2	-5.87	117.37	120.30
35	BA	382	A	P-O3'-C3'	5.87	126.74	119.70
35	BA	388	G	N1-C6-O6	-5.87	116.38	119.90
35	BA	625	U	C1'-O4'-C4'	5.87	114.59	109.90
35	BA	822	U	C6-N1-C2	-5.87	117.48	121.00
35	BA	1330	U	C4-C5-C6	-5.87	116.18	119.70
35	BA	1542	A	C3'-C2'-C1'	-5.87	96.81	101.50
1	AA	42	C	C4'-C3'-C2'	-5.87	96.73	102.60
2	AB	71	A	N7-C8-N9	5.87	116.73	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	726	G	O3'-P-O5'	-5.87	92.85	104.00
2	AB	729	G	C4-C5-N7	-5.87	108.45	110.80
2	AB	913	U	N3-C2-O2	-5.87	118.09	122.20
2	AB	942	G	N3-C4-N9	5.87	129.52	126.00
2	AB	1936	A	P-O3'-C3'	5.87	126.74	119.70
2	AB	1991	U	C4'-C3'-C2'	-5.87	96.73	102.60
2	AB	2501	C	N3-C4-C5	-5.87	119.55	121.90
2	AB	2530	A	N7-C8-N9	-5.87	110.87	113.80
2	AB	2777	G	N1-C6-O6	-5.87	116.38	119.90
35	BA	166	U	N3-C2-O2	-5.87	118.09	122.20
35	BA	368	U	C5'-C4'-C3'	-5.87	106.61	116.00
35	BA	1154	G	C6-N1-C2	-5.87	121.58	125.10
35	BA	1235	U	O4'-C1'-N1	5.87	112.89	108.20
35	BA	1426	G	C4-C5-N7	5.87	113.15	110.80
35	BA	1443	C	O4'-C1'-C2'	5.87	112.88	107.60
36	BB	56	C	C4'-C3'-C2'	-5.87	96.73	102.60
2	AB	138	U	N1-C2-N3	5.86	118.42	114.90
2	AB	316	C	C6-N1-C2	-5.86	117.95	120.30
2	AB	1194	A	C5'-C4'-O4'	5.86	116.14	109.10
2	AB	1324	G	C6-N1-C2	5.86	128.62	125.10
2	AB	1603	A	N7-C8-N9	-5.86	110.87	113.80
2	AB	1891	G	C5-C6-O6	-5.86	125.08	128.60
2	AB	1927	A	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	2027	G	N1-C6-O6	5.86	123.42	119.90
2	AB	2437	G	C5-C6-N1	5.86	114.43	111.50
2	AB	2887	A	C1'-O4'-C4'	-5.86	105.21	109.90
35	BA	417	G	C1'-O4'-C4'	5.86	114.59	109.90
35	BA	1089	G	C4-C5-N7	-5.86	108.45	110.80
35	BA	1124	G	C6-C5-N7	5.86	133.92	130.40
2	AB	307	G	C5-C6-N1	5.86	114.43	111.50
2	AB	321	U	O4'-C1'-N1	5.86	112.89	108.20
2	AB	388	G	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	697	G	N3-C4-N9	5.86	129.52	126.00
2	AB	1336	A	C5'-C4'-O4'	5.86	116.13	109.10
2	AB	2162	G	C2'-C3'-O3'	5.86	123.08	113.70
2	AB	2481	G	O4'-C1'-N9	5.86	112.89	108.20
2	AB	2732	G	O4'-C1'-N9	5.86	112.89	108.20
35	BA	571	U	C5-C6-N1	-5.86	119.77	122.70
35	BA	1145	A	C1'-O4'-C4'	-5.86	105.21	109.90
35	BA	1380	U	C4-C5-C6	5.86	123.22	119.70
35	BA	1515	G	C5-C6-O6	5.86	132.12	128.60
2	AB	857	G	N9-C1'-C2'	-5.86	105.55	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	904	G	N9-C4-C5	5.86	107.74	105.40
2	AB	948	C	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	1146	C	N3-C2-O2	-5.86	117.80	121.90
2	AB	1515	A	C4-C5-C6	5.86	119.93	117.00
2	AB	1663	G	N9-C1'-C2'	-5.86	105.55	112.00
2	AB	1701	A	C5-N7-C8	-5.86	100.97	103.90
2	AB	2156	G	N3-C2-N2	5.86	124.00	119.90
2	AB	2192	U	P-O3'-C3'	5.86	126.73	119.70
2	AB	2291	U	C5-C6-N1	5.86	125.63	122.70
2	AB	2337	G	N9-C4-C5	5.86	107.74	105.40
2	AB	2353	G	C2-N3-C4	5.86	114.83	111.90
2	AB	2723	C	N3-C4-C5	5.86	124.24	121.90
2	AB	2763	G	O4'-C4'-C3'	5.86	110.79	106.10
15	AO	50	ARG	NE-CZ-NH1	-5.86	117.37	120.30
35	BA	44	A	C4-C5-C6	5.86	119.93	117.00
35	BA	147	G	O4'-C1'-C2'	-5.86	99.94	105.80
35	BA	477	C	N3-C4-C5	-5.86	119.56	121.90
35	BA	727	G	C5-C6-O6	5.86	132.12	128.60
35	BA	776	G	N3-C4-N9	-5.86	122.48	126.00
36	BB	76	A	C2-N3-C4	5.86	113.53	110.60
1	AA	46	A	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	116	C	O4'-C1'-N1	5.86	112.89	108.20
2	AB	494	G	C5-C6-N1	5.86	114.43	111.50
2	AB	1905	C	N3-C4-N4	5.86	122.10	118.00
2	AB	2364	C	N1-C2-O2	5.86	122.42	118.90
2	AB	2741	A	C8-N9-C4	-5.86	103.46	105.80
14	AN	59	ARG	NE-CZ-NH1	5.86	123.23	120.30
35	BA	89	U	C2-N3-C4	-5.86	123.48	127.00
35	BA	483	C	C4-C5-C6	-5.86	114.47	117.40
35	BA	556	C	N3-C4-N4	5.86	122.10	118.00
35	BA	1345	U	C4'-C3'-C2'	-5.86	96.74	102.60
36	BB	7	G	C5-C6-O6	-5.86	125.08	128.60
51	BQ	80	ARG	NE-CZ-NH2	-5.86	117.37	120.30
2	AB	71	A	C8-N9-C4	-5.86	103.46	105.80
2	AB	293	U	N1-C2-O2	-5.86	118.70	122.80
2	AB	474	G	C8-N9-C4	-5.86	104.06	106.40
2	AB	495	G	C4-C5-C6	5.86	122.31	118.80
2	AB	1157	G	N1-C2-N3	-5.86	120.39	123.90
2	AB	1570	A	C4-C5-C6	-5.86	114.07	117.00
2	AB	1784	A	C3'-C2'-C1'	5.86	106.19	101.50
2	AB	1932	A	C2-N3-C4	5.86	113.53	110.60
2	AB	2136	G	C1'-O4'-C4'	5.86	114.59	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	101	ARG	NE-CZ-NH1	5.86	123.23	120.30
35	BA	380	G	C6-C5-N7	5.86	133.91	130.40
35	BA	957	U	C2-N1-C1'	5.86	124.73	117.70
35	BA	1170	A	C5-N7-C8	5.86	106.83	103.90
35	BA	1355	G	C3'-C2'-C1'	5.86	106.19	101.50
41	BG	127	ARG	NE-CZ-NH2	-5.86	117.37	120.30
1	AA	16	G	C4-C5-N7	-5.86	108.46	110.80
2	AB	136	G	N3-C4-N9	5.86	129.51	126.00
2	AB	159	G	C4-C5-N7	-5.86	108.46	110.80
2	AB	360	U	N3-C4-O4	-5.86	115.30	119.40
2	AB	396	G	C2-N3-C4	5.86	114.83	111.90
2	AB	1218	G	C8-N9-C4	5.86	108.74	106.40
2	AB	1317	G	C2-N3-C4	5.86	114.83	111.90
2	AB	1325	U	C5-C6-N1	-5.86	119.77	122.70
2	AB	1434	A	O4'-C4'-C3'	-5.86	98.14	104.00
2	AB	1770	G	C4-C5-N7	-5.86	108.46	110.80
2	AB	2362	C	C1'-O4'-C4'	5.86	114.58	109.90
12	AL	53	TYR	CZ-CE2-CD2	-5.86	114.53	119.80
35	BA	312	C	C1'-O4'-C4'	5.86	114.58	109.90
35	BA	652	U	O4'-C4'-C3'	5.86	110.78	106.10
35	BA	1425	U	C3'-C2'-C1'	5.86	106.18	101.50
35	BA	1426	G	N1-C6-O6	5.86	123.41	119.90
49	BO	90	PRO	N-CA-CB	5.86	110.33	103.30
2	AB	1595	C	N3-C2-O2	-5.85	117.80	121.90
2	AB	2277	G	N1-C2-N2	5.85	121.47	116.20
35	BA	490	C	C4-C5-C6	5.85	120.33	117.40
1	AA	47	C	C3'-C2'-C1'	-5.85	96.82	101.50
2	AB	161	A	C5'-C4'-O4'	5.85	116.12	109.10
2	AB	329	G	N1-C6-O6	5.85	123.41	119.90
2	AB	471	A	C1'-O4'-C4'	-5.85	105.22	109.90
2	AB	777	G	N3-C4-C5	-5.85	125.67	128.60
2	AB	887	U	C5'-C4'-C3'	-5.85	106.64	116.00
2	AB	938	G	C6-N1-C2	-5.85	121.59	125.10
2	AB	1304	A	C8-N9-C4	-5.85	103.46	105.80
2	AB	1537	G	C8-N9-C4	5.85	108.74	106.40
2	AB	1537	G	C5-C6-O6	-5.85	125.09	128.60
2	AB	1652	A	C4-C5-N7	-5.85	107.77	110.70
2	AB	2851	A	C2-N3-C4	5.85	113.53	110.60
35	BA	13	U	C1'-O4'-C4'	5.85	114.58	109.90
35	BA	815	A	C4-C5-C6	-5.85	114.07	117.00
35	BA	850	U	C1'-O4'-C4'	-5.85	105.22	109.90
35	BA	910	C	C4'-C3'-C2'	-5.85	96.75	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1257	A	N9-C4-C5	5.85	108.14	105.80
35	BA	1267	C	C6-N1-C2	-5.85	117.96	120.30
2	AB	36	G	N3-C4-C5	-5.85	125.67	128.60
2	AB	369	U	O4'-C4'-C3'	5.85	110.78	106.10
2	AB	446	G	C2-N3-C4	5.85	114.83	111.90
2	AB	462	C	N3-C2-O2	-5.85	117.80	121.90
2	AB	1179	G	C5-C6-N1	5.85	114.42	111.50
2	AB	1541	C	C4-C5-C6	5.85	120.33	117.40
2	AB	2571	U	N1-C2-N3	5.85	118.41	114.90
7	AG	132	ARG	NE-CZ-NH2	5.85	123.23	120.30
35	BA	78	A	C6-N1-C2	-5.85	115.09	118.60
35	BA	205	A	C4-C5-N7	-5.85	107.77	110.70
35	BA	216	U	C5-C4-O4	-5.85	122.39	125.90
35	BA	922	G	C5-N7-C8	-5.85	101.37	104.30
35	BA	1074	G	C6-C5-N7	-5.85	126.89	130.40
36	BB	53	G	C5'-C4'-O4'	5.85	116.12	109.10
41	BG	134	TYR	CB-CG-CD2	-5.85	117.49	121.00
2	AB	151	C	C2-N3-C4	-5.85	116.97	119.90
2	AB	431	U	P-O3'-C3'	5.85	126.72	119.70
2	AB	450	G	N3-C4-C5	-5.85	125.67	128.60
2	AB	574	A	C5-N7-C8	5.85	106.83	103.90
2	AB	697	G	N1-C6-O6	5.85	123.41	119.90
2	AB	811	U	O4'-C1'-N1	5.85	112.88	108.20
2	AB	1338	G	C8-N9-C4	-5.85	104.06	106.40
2	AB	1978	A	O4'-C1'-N9	5.85	112.88	108.20
2	AB	2087	G	C5-C6-N1	5.85	114.42	111.50
2	AB	2299	U	C5'-C4'-O4'	5.85	116.12	109.10
2	AB	2355	G	C5-N7-C8	-5.85	101.38	104.30
2	AB	2757	A	C5'-C4'-C3'	-5.85	106.64	116.00
12	AL	27	ARG	NH1-CZ-NH2	5.85	125.83	119.40
35	BA	241	G	C5'-C4'-C3'	5.85	125.36	116.00
35	BA	404	G	N9-C1'-C2'	-5.85	105.57	112.00
35	BA	715	A	C4-C5-N7	5.85	113.62	110.70
35	BA	774	G	N9-C4-C5	-5.85	103.06	105.40
35	BA	1067	A	C3'-C2'-C1'	-5.85	96.82	101.50
35	BA	1489	G	N1-C2-N2	5.85	121.46	116.20
2	AB	249	C	C4-C5-C6	-5.85	114.48	117.40
2	AB	290	U	C3'-C2'-C1'	5.85	106.18	101.50
2	AB	595	C	C2-N3-C4	5.85	122.82	119.90
2	AB	1650	A	N7-C8-N9	5.85	116.72	113.80
2	AB	1691	C	C6-N1-C2	-5.85	117.96	120.30
2	AB	1880	U	O4'-C1'-N1	5.85	112.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2586	U	C4'-C3'-C2'	-5.85	96.75	102.60
2	AB	2619	C	N3-C4-N4	5.85	122.09	118.00
2	AB	2877	G	C4-C5-N7	5.85	113.14	110.80
35	BA	2	A	N1-C6-N6	-5.85	115.09	118.60
35	BA	672	U	C5-C4-O4	-5.85	122.39	125.90
35	BA	696	A	C3'-C2'-C1'	5.85	106.18	101.50
1	AA	83	G	N3-C4-N9	5.85	129.51	126.00
1	AA	117	G	C4-C5-N7	-5.85	108.46	110.80
2	AB	64	A	O4'-C1'-N9	5.85	112.88	108.20
2	AB	361	G	N3-C4-C5	-5.85	125.68	128.60
2	AB	874	G	C3'-C2'-C1'	5.85	106.18	101.50
2	AB	1077	A	N7-C8-N9	-5.85	110.88	113.80
2	AB	1598	A	C5'-C4'-C3'	-5.85	106.65	116.00
2	AB	1785	A	C5'-C4'-O4'	5.85	116.12	109.10
2	AB	2897	U	N1-C2-N3	5.85	118.41	114.90
35	BA	80	A	C3'-C2'-C1'	5.85	106.18	101.50
35	BA	256	U	C2-N3-C4	-5.85	123.49	127.00
35	BA	290	C	N3-C4-C5	-5.85	119.56	121.90
47	BM	62	ARG	NE-CZ-NH1	5.85	123.22	120.30
2	AB	85	G	N9-C1'-C2'	-5.84	105.57	112.00
2	AB	354	A	C5-N7-C8	5.84	106.82	103.90
2	AB	377	G	P-O3'-C3'	5.84	126.71	119.70
2	AB	886	A	O4'-C4'-C3'	5.84	110.78	106.10
2	AB	956	G	N3-C2-N2	-5.84	115.81	119.90
2	AB	1140	C	C4-C5-C6	5.84	120.32	117.40
2	AB	1336	A	N3-C4-N9	5.84	132.08	127.40
2	AB	1909	C	C2-N3-C4	5.84	122.82	119.90
2	AB	1937	A	P-O3'-C3'	5.84	126.71	119.70
2	AB	2037	A	C5-N7-C8	-5.84	100.98	103.90
2	AB	2295	C	C5'-C4'-C3'	-5.84	106.65	116.00
35	BA	439	U	C5'-C4'-O4'	5.84	116.11	109.10
35	BA	757	U	C6-N1-C2	-5.84	117.49	121.00
35	BA	821	G	O4'-C4'-C3'	-5.84	98.16	104.00
35	BA	1081	A	C6-N1-C2	-5.84	115.09	118.60
35	BA	1116	U	C2-N3-C4	-5.84	123.49	127.00
35	BA	1278	G	O4'-C1'-N9	5.84	112.88	108.20
35	BA	1474	U	N1-C2-N3	5.84	118.41	114.90
2	AB	961	C	C1'-O4'-C4'	-5.84	105.23	109.90
2	AB	1324	G	C4-C5-C6	5.84	122.31	118.80
2	AB	2393	U	C5'-C4'-O4'	5.84	116.11	109.10
35	BA	59	A	O4'-C4'-C3'	5.84	110.77	106.10
35	BA	1138	G	C8-N9-C4	5.84	108.74	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1500	A	O4'-C1'-N9	5.84	112.87	108.20
2	AB	945	A	P-O5'-C5'	5.84	130.25	120.90
2	AB	953	G	N3-C4-N9	-5.84	122.50	126.00
2	AB	978	G	C5-N7-C8	5.84	107.22	104.30
2	AB	1459	G	N3-C4-N9	5.84	129.50	126.00
2	AB	1501	G	C5-C6-O6	-5.84	125.09	128.60
2	AB	1673	G	C5-C6-O6	-5.84	125.09	128.60
2	AB	1899	A	C5-C6-N1	-5.84	114.78	117.70
2	AB	2017	U	C4-C5-C6	5.84	123.20	119.70
2	AB	2085	U	C6-N1-C2	-5.84	117.50	121.00
2	AB	2099	U	C5-C6-N1	-5.84	119.78	122.70
2	AB	2298	A	C5-N7-C8	-5.84	100.98	103.90
2	AB	2381	A	C3'-C2'-C1'	5.84	106.17	101.50
2	AB	2417	C	C1'-O4'-C4'	5.84	114.57	109.90
2	AB	2620	C	C2-N3-C4	5.84	122.82	119.90
35	BA	1286	U	O4'-C1'-N1	5.84	112.87	108.20
36	BB	33	U	C4-C5-C6	5.84	123.20	119.70
47	BM	13	PHE	CB-CG-CD1	-5.84	116.71	120.80
2	AB	231	A	N9-C4-C5	5.84	108.14	105.80
2	AB	383	C	N3-C2-O2	-5.84	117.81	121.90
2	AB	621	A	N9-C1'-C2'	-5.84	105.58	112.00
2	AB	1175	A	C3'-C2'-C1'	5.84	106.17	101.50
2	AB	1505	A	C4-C5-N7	-5.84	107.78	110.70
2	AB	1977	A	C5-C6-N1	-5.84	114.78	117.70
2	AB	2412	A	C5'-C4'-O4'	5.84	116.11	109.10
2	AB	2436	G	C4-C5-N7	5.84	113.14	110.80
2	AB	2523	G	C4-C5-N7	-5.84	108.47	110.80
2	AB	2700	A	N9-C4-C5	5.84	108.14	105.80
2	AB	2762	C	O4'-C1'-N1	5.84	112.87	108.20
35	BA	21	G	N3-C4-C5	-5.84	125.68	128.60
35	BA	787	A	N1-C2-N3	-5.84	126.38	129.30
35	BA	1496	C	N3-C4-N4	5.84	122.09	118.00
36	BB	9	A	C5-N7-C8	5.84	106.82	103.90
37	BC	39	U	N3-C2-O2	-5.84	118.11	122.20
2	AB	63	A	N9-C4-C5	-5.84	103.47	105.80
2	AB	793	A	P-O5'-C5'	-5.84	111.56	120.90
2	AB	1128	G	C6-C5-N7	-5.84	126.90	130.40
2	AB	1133	A	N1-C6-N6	5.84	122.10	118.60
2	AB	1151	A	C4-C5-N7	-5.84	107.78	110.70
2	AB	1203	U	C5-C4-O4	5.84	129.40	125.90
35	BA	446	G	N3-C4-C5	-5.84	125.68	128.60
36	BB	11	U	N3-C2-O2	-5.84	118.11	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BJ	155	TRP	CE2-CD2-CG	5.84	111.97	107.30
2	AB	193	U	N3-C4-O4	5.84	123.49	119.40
2	AB	1387	A	C5-C6-N1	5.84	120.62	117.70
2	AB	1735	A	C5-C6-N6	5.84	128.37	123.70
2	AB	1858	A	C2-N3-C4	5.84	113.52	110.60
2	AB	1863	G	C6-N1-C2	-5.84	121.60	125.10
2	AB	2007	U	C3'-C2'-C1'	5.84	106.17	101.50
35	BA	104	G	N7-C8-N9	5.84	116.02	113.10
35	BA	256	U	O4'-C1'-N1	5.84	112.87	108.20
35	BA	891	U	N3-C2-O2	-5.84	118.11	122.20
35	BA	997	U	C5-C6-N1	-5.84	119.78	122.70
35	BA	1417	G	C5-C6-N1	5.84	114.42	111.50
2	AB	1212	G	N1-C2-N3	-5.83	120.40	123.90
2	AB	1645	G	O4'-C4'-C3'	5.83	110.77	106.10
2	AB	1986	C	C5-C6-N1	5.83	123.92	121.00
2	AB	2099	U	C5'-C4'-O4'	5.83	116.10	109.10
2	AB	2490	G	C6-C5-N7	5.83	133.90	130.40
35	BA	242	G	C5-C6-O6	-5.83	125.10	128.60
35	BA	1075	U	O4'-C1'-C2'	-5.83	99.97	105.80
38	BD	53	G	C1'-O4'-C4'	-5.83	105.23	109.90
2	AB	257	C	N1-C1'-C2'	-5.83	105.58	112.00
2	AB	592	A	C2'-C3'-O3'	5.83	123.03	113.70
2	AB	608	A	C4-C5-C6	5.83	119.92	117.00
2	AB	1237	A	C5'-C4'-O4'	5.83	116.10	109.10
2	AB	1439	A	C4-C5-N7	-5.83	107.78	110.70
2	AB	2608	G	N3-C2-N2	5.83	123.98	119.90
2	AB	2699	C	N1-C2-O2	5.83	122.40	118.90
35	BA	1014	A	N9-C1'-C2'	5.83	121.58	114.00
35	BA	1343	G	O4'-C1'-N9	5.83	112.87	108.20
35	BA	1413	A	C4'-C3'-C2'	-5.83	96.77	102.60
47	BM	62	ARG	NE-CZ-NH2	-5.83	117.38	120.30
2	AB	41	C	C4-C5-C6	5.83	120.32	117.40
2	AB	435	C	O4'-C1'-N1	5.83	112.86	108.20
2	AB	774	G	C2-N3-C4	5.83	114.82	111.90
2	AB	926	G	C8-N9-C4	-5.83	104.07	106.40
2	AB	1136	G	C8-N9-C4	-5.83	104.07	106.40
2	AB	1381	G	N7-C8-N9	5.83	116.02	113.10
2	AB	1583	A	N3-C4-N9	5.83	132.06	127.40
2	AB	1931	U	N1-C2-N3	5.83	118.40	114.90
2	AB	2125	G	C5-C6-O6	5.83	132.10	128.60
2	AB	2311	A	C2-N3-C4	5.83	113.52	110.60
2	AB	2490	G	N3-C4-N9	5.83	129.50	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2839	G	C5-C6-O6	-5.83	125.10	128.60
35	BA	40	C	C3'-C2'-C1'	5.83	106.16	101.50
35	BA	602	A	C5-C6-N1	5.83	120.62	117.70
35	BA	676	A	N9-C4-C5	5.83	108.13	105.80
35	BA	1488	G	N1-C2-N3	-5.83	120.40	123.90
38	BD	5	G	N1-C2-N2	-5.83	110.95	116.20
1	AA	76	G	C5'-C4'-C3'	5.83	125.33	116.00
2	AB	2038	G	C8-N9-C1'	5.83	134.58	127.00
2	AB	2272	U	N1-C2-O2	5.83	126.88	122.80
2	AB	2904	U	N3-C4-O4	5.83	123.48	119.40
35	BA	3	A	C5'-C4'-C3'	-5.83	106.67	116.00
35	BA	429	U	C5'-C4'-O4'	-5.83	102.10	109.10
2	AB	340	A	N9-C1'-C2'	-5.83	105.59	112.00
2	AB	589	U	C4'-C3'-C2'	-5.83	96.77	102.60
2	AB	789	A	C5-N7-C8	-5.83	100.98	103.90
2	AB	887	U	C2-N3-C4	-5.83	123.50	127.00
2	AB	1156	A	C4'-C3'-C2'	-5.83	96.77	102.60
2	AB	1747	U	N3-C2-O2	-5.83	118.12	122.20
2	AB	1822	C	N1-C2-N3	-5.83	115.12	119.20
2	AB	1848	A	C5-C6-N1	5.83	120.61	117.70
2	AB	2103	C	C2-N3-C4	5.83	122.81	119.90
2	AB	2447	G	N1-C2-N2	-5.83	110.95	116.20
2	AB	2631	G	N1-C2-N3	-5.83	120.40	123.90
2	AB	2683	C	N3-C4-N4	5.83	122.08	118.00
4	AD	212	TRP	NE1-CE2-CD2	-5.83	101.47	107.30
28	A1	10	ARG	NE-CZ-NH2	5.83	123.21	120.30
35	BA	600	A	N1-C6-N6	5.83	122.10	118.60
35	BA	836	G	P-O3'-C3'	5.83	126.69	119.70
35	BA	1223	C	N1-C2-O2	-5.83	115.40	118.90
35	BA	1303	C	C4'-C3'-C2'	-5.83	96.77	102.60
37	BC	14	G	C4-C5-N7	-5.83	108.47	110.80
2	AB	443	A	O4'-C4'-C3'	5.83	110.76	106.10
2	AB	809	G	N9-C1'-C2'	-5.83	105.59	112.00
2	AB	1292	G	O4'-C1'-C2'	5.83	112.84	107.60
2	AB	2145	C	C5-C6-N1	-5.83	118.09	121.00
30	A3	47	TYR	CZ-CE2-CD2	-5.83	114.56	119.80
35	BA	861	G	C5-C6-O6	5.83	132.10	128.60
35	BA	922	G	C4-C5-C6	-5.83	115.30	118.80
35	BA	1131	G	C5'-C4'-O4'	5.83	116.09	109.10
38	BD	6	G	C4'-C3'-C2'	-5.83	96.77	102.60
38	BD	60	A	C6-N1-C2	5.83	122.10	118.60
1	AA	31	C	O4'-C1'-N1	5.83	112.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	113	U	N3-C4-C5	-5.83	111.11	114.60
2	AB	1920	C	N1-C1'-C2'	-5.83	105.59	112.00
2	AB	2576	G	C6-C5-N7	-5.83	126.91	130.40
2	AB	2671	G	C5-N7-C8	5.83	107.21	104.30
4	AD	51	ARG	CD-NE-CZ	5.83	131.76	123.60
7	AG	99	PHE	N-CA-C	5.83	126.73	111.00
25	AY	61	LYS	O-C-N	-5.83	113.38	122.70
35	BA	548	G	P-O3'-C3'	5.83	126.69	119.70
35	BA	595	A	N1-C2-N3	5.83	132.21	129.30
35	BA	838	G	C5-C6-O6	-5.83	125.11	128.60
35	BA	986	U	N3-C2-O2	-5.83	118.12	122.20
35	BA	1040	U	N1-C2-N3	5.83	118.39	114.90
35	BA	1319	A	N1-C2-N3	-5.83	126.39	129.30
36	BB	7	G	C5-N7-C8	-5.83	101.39	104.30
2	AB	37	C	N3-C2-O2	-5.82	117.82	121.90
2	AB	586	A	N9-C4-C5	5.82	108.13	105.80
2	AB	1546	G	C6-N1-C2	-5.82	121.61	125.10
2	AB	2223	G	C6-C5-N7	-5.82	126.91	130.40
22	AV	84	TYR	CB-CG-CD2	-5.82	117.51	121.00
35	BA	472	U	N3-C4-O4	5.82	123.48	119.40
35	BA	540	G	N3-C4-N9	5.82	129.49	126.00
35	BA	1041	G	C1'-O4'-C4'	-5.82	105.24	109.90
35	BA	1511	G	O4'-C1'-N9	-5.82	103.54	108.20
38	BD	68	C	N3-C4-N4	5.82	122.08	118.00
53	BS	14	ARG	NE-CZ-NH2	-5.82	117.39	120.30
55	BU	72	ARG	NH1-CZ-NH2	-5.82	112.99	119.40
2	AB	375	G	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	970	U	O4'-C1'-C2'	-5.82	99.98	105.80
2	AB	1107	G	C3'-C2'-C1'	-5.82	96.84	101.50
2	AB	1372	U	O4'-C1'-N1	5.82	112.86	108.20
2	AB	1806	C	C3'-C2'-C1'	5.82	106.16	101.50
35	BA	157	U	C5-C6-N1	-5.82	119.79	122.70
35	BA	1059	C	O4'-C4'-C3'	5.82	110.76	106.10
35	BA	1450	U	O4'-C1'-N1	5.82	112.86	108.20
38	BD	20	G	C1'-O4'-C4'	-5.82	105.24	109.90
2	AB	374	A	N1-C6-N6	-5.82	115.11	118.60
2	AB	647	G	C5'-C4'-C3'	-5.82	106.69	116.00
2	AB	893	C	N1-C2-O2	5.82	122.39	118.90
2	AB	1464	G	O5'-P-OP1	5.82	117.68	110.70
12	AL	104	ALA	CB-CA-C	5.82	118.83	110.10
35	BA	57	G	C5-C6-N1	5.82	114.41	111.50
35	BA	149	A	C4'-C3'-C2'	-5.82	96.78	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1319	A	C2-N3-C4	5.82	113.51	110.60
35	BA	1409	C	C5'-C4'-O4'	5.82	116.08	109.10
1	AA	88	C	N3-C4-C5	-5.82	119.57	121.90
2	AB	1854	A	N7-C8-N9	5.82	116.71	113.80
2	AB	2354	C	C2-N3-C4	5.82	122.81	119.90
2	AB	2856	A	C8-N9-C4	-5.82	103.47	105.80
1	AA	45	A	C6-C5-N7	5.82	136.37	132.30
2	AB	611	C	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	820	A	C1'-O4'-C4'	-5.82	105.25	109.90
2	AB	1179	G	C2-N3-C4	5.82	114.81	111.90
2	AB	1388	G	C2-N3-C4	-5.82	108.99	111.90
2	AB	1414	C	C6-N1-C2	5.82	122.63	120.30
2	AB	1833	C	C5'-C4'-O4'	5.82	116.08	109.10
2	AB	2044	C	N3-C4-C5	-5.82	119.57	121.90
2	AB	2312	U	N3-C2-O2	-5.82	118.13	122.20
2	AB	2724	U	O4'-C1'-C2'	5.82	112.84	107.60
2	AB	2815	C	N1-C2-O2	5.82	122.39	118.90
28	A1	23	LEU	CB-CA-C	5.82	121.25	110.20
35	BA	72	A	C5-C6-N1	5.82	120.61	117.70
35	BA	366	A	N9-C4-C5	-5.82	103.47	105.80
35	BA	526	C	C2-N3-C4	-5.82	116.99	119.90
35	BA	604	G	C5-C6-N1	5.82	114.41	111.50
35	BA	1132	C	C2-N3-C4	5.82	122.81	119.90
35	BA	1153	G	C1'-O4'-C4'	5.82	114.56	109.90
35	BA	1249	C	O4'-C4'-C3'	5.82	110.75	106.10
36	BB	48	U	C4-C5-C6	5.82	123.19	119.70
53	BS	78	VAL	CA-CB-CG2	5.82	119.63	110.90
56	BV	67	GLY	CA-C-O	-5.82	110.13	120.60
2	AB	1222	U	N3-C4-C5	-5.82	111.11	114.60
2	AB	1326	U	C1'-O4'-C4'	-5.82	105.25	109.90
2	AB	2040	G	N1-C6-O6	-5.82	116.41	119.90
2	AB	2579	C	N3-C4-N4	5.82	122.07	118.00
2	AB	2780	G	C2-N3-C4	5.82	114.81	111.90
8	AH	161	VAL	CA-CB-CG1	5.82	119.62	110.90
35	BA	514	C	N1-C2-O2	5.82	122.39	118.90
35	BA	1086	U	O4'-C1'-N1	5.82	112.85	108.20
35	BA	1215	G	O4'-C4'-C3'	5.82	110.75	106.10
36	BB	33	U	C5'-C4'-C3'	-5.82	106.70	116.00
38	BD	43	G	C4-C5-C6	5.82	122.29	118.80
48	BN	93	GLU	OE1-CD-OE2	5.82	130.28	123.30
2	AB	634	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	919	U	P-O3'-C3'	5.81	126.68	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1720	U	N3-C4-C5	-5.81	111.11	114.60
2	AB	2547	A	C8-N9-C4	-5.81	103.47	105.80
2	AB	2871	U	O4'-C1'-N1	5.81	112.85	108.20
35	BA	22	G	C4-C5-N7	-5.81	108.47	110.80
35	BA	847	G	C4-C5-C6	5.81	122.29	118.80
35	BA	1034	G	C4-N9-C1'	-5.81	118.94	126.50
35	BA	1528	U	C5-C4-O4	-5.81	122.41	125.90
1	AA	99	A	C4-C5-N7	-5.81	107.79	110.70
1	AA	117	G	C5-C6-O6	-5.81	125.11	128.60
2	AB	3	U	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	690	G	C5'-C4'-O4'	5.81	116.08	109.10
2	AB	700	G	C4-C5-N7	-5.81	108.47	110.80
2	AB	828	U	C5-C4-O4	-5.81	122.41	125.90
2	AB	996	A	C2-N3-C4	5.81	113.51	110.60
2	AB	1547	C	C5-C4-N4	-5.81	116.13	120.20
2	AB	2602	A	C1'-O4'-C4'	-5.81	105.25	109.90
2	AB	2682	A	C5-C6-N6	5.81	128.35	123.70
35	BA	57	G	N1-C2-N3	5.81	127.39	123.90
35	BA	389	A	N3-C4-C5	-5.81	122.73	126.80
35	BA	423	G	P-O3'-C3'	5.81	126.67	119.70
35	BA	800	G	C5-C6-O6	-5.81	125.11	128.60
35	BA	989	U	C2-N3-C4	-5.81	123.51	127.00
35	BA	1032	G	C4-C5-N7	-5.81	108.47	110.80
2	AB	1064	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	2325	G	N1-C6-O6	5.81	123.39	119.90
2	AB	2491	U	C3'-C2'-C1'	-5.81	96.85	101.50
35	BA	4	U	C2-N3-C4	-5.81	123.51	127.00
35	BA	82	G	O4'-C1'-N9	5.81	112.85	108.20
35	BA	570	G	C8-N9-C4	-5.81	104.08	106.40
2	AB	373	U	O5'-C5'-C4'	-5.81	100.66	111.70
2	AB	547	A	C5-N7-C8	-5.81	101.00	103.90
2	AB	715	A	C2-N3-C4	5.81	113.50	110.60
2	AB	720	U	N3-C2-O2	-5.81	118.13	122.20
2	AB	1345	C	N1-C2-O2	5.81	122.39	118.90
2	AB	1593	A	N9-C4-C5	5.81	108.12	105.80
2	AB	1814	G	C3'-C2'-C1'	5.81	106.15	101.50
2	AB	1888	G	C5-N7-C8	-5.81	101.39	104.30
2	AB	1981	A	N9-C4-C5	5.81	108.12	105.80
2	AB	2237	G	C4-C5-N7	-5.81	108.48	110.80
2	AB	2387	U	C4-C5-C6	5.81	123.19	119.70
2	AB	2601	C	O4'-C1'-N1	5.81	112.85	108.20
2	AB	2617	U	C4'-C3'-C2'	-5.81	96.79	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2864	G	C4-C5-C6	5.81	122.28	118.80
35	BA	166	U	C6-N1-C2	-5.81	117.51	121.00
35	BA	474	G	C5-C6-N1	-5.81	108.59	111.50
35	BA	606	G	C4-C5-C6	5.81	122.28	118.80
35	BA	1079	G	N3-C4-C5	-5.81	125.69	128.60
35	BA	1209	C	C1'-O4'-C4'	5.81	114.55	109.90
38	BD	48	U	C5-C4-O4	-5.81	122.41	125.90
2	AB	308	G	C1'-O4'-C4'	-5.81	105.25	109.90
2	AB	574	A	P-O3'-C3'	5.81	126.67	119.70
2	AB	826	U	N3-C2-O2	-5.81	118.14	122.20
2	AB	1349	C	O4'-C1'-N1	5.81	112.85	108.20
2	AB	1528	A	O4'-C1'-N9	5.81	112.85	108.20
2	AB	1734	G	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	1892	C	O4'-C1'-N1	5.81	112.85	108.20
2	AB	1948	G	C4-C5-C6	5.81	122.28	118.80
2	AB	2228	G	N7-C8-N9	5.81	116.00	113.10
2	AB	2277	G	N3-C2-N2	-5.81	115.83	119.90
2	AB	2291	U	C5-C4-O4	5.81	129.38	125.90
2	AB	2373	G	C5-N7-C8	-5.81	101.40	104.30
2	AB	2795	C	C6-N1-C2	-5.81	117.98	120.30
12	AL	6	ALA	N-CA-CB	5.81	118.23	110.10
35	BA	180	U	C2-N3-C4	-5.81	123.52	127.00
35	BA	878	A	O4'-C1'-N9	5.81	112.85	108.20
35	BA	1007	U	N3-C2-O2	-5.81	118.13	122.20
35	BA	1104	G	C5-C6-N1	5.81	114.40	111.50
35	BA	1341	U	C5-C6-N1	-5.81	119.80	122.70
35	BA	1484	C	O4'-C1'-C2'	5.81	112.83	107.60
38	BD	28	U	C5'-C4'-O4'	5.81	116.07	109.10
2	AB	90	U	C5-C6-N1	-5.81	119.80	122.70
2	AB	486	C	N3-C4-N4	5.81	122.06	118.00
2	AB	679	C	O3'-P-O5'	5.81	115.03	104.00
2	AB	1037	G	N9-C4-C5	5.81	107.72	105.40
2	AB	1466	U	N1-C2-N3	5.81	118.38	114.90
2	AB	2444	G	C5'-C4'-O4'	5.81	116.07	109.10
2	AB	2592	G	C4-C5-C6	5.81	122.28	118.80
35	BA	488	C	N3-C4-C5	-5.81	119.58	121.90
35	BA	828	U	O4'-C1'-N1	5.81	112.84	108.20
35	BA	936	C	C5'-C4'-O4'	5.81	116.07	109.10
35	BA	1383	C	C2-N3-C4	-5.81	117.00	119.90
44	BJ	78	ARG	NE-CZ-NH2	-5.81	117.40	120.30
1	AA	107	G	C2-N3-C4	5.80	114.80	111.90
2	AB	384	A	O4'-C1'-N9	-5.80	103.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	728	G	N9-C1'-C2'	-5.80	105.61	112.00
2	AB	756	A	C3'-C2'-C1'	-5.80	96.86	101.50
2	AB	832	U	C3'-C2'-C1'	-5.80	96.86	101.50
2	AB	1121	C	N1-C2-O2	5.80	122.38	118.90
2	AB	1266	G	C6-C5-N7	5.80	133.88	130.40
2	AB	1309	G	N1-C2-N3	-5.80	120.42	123.90
35	BA	131	A	O4'-C1'-N9	5.80	112.84	108.20
35	BA	368	U	C2-N3-C4	-5.80	123.52	127.00
35	BA	1205	U	C4'-C3'-C2'	-5.80	96.80	102.60
35	BA	1414	U	C6-N1-C2	5.80	124.48	121.00
36	BB	23	A	N1-C6-N6	5.80	122.08	118.60
36	BB	64	U	C4'-C3'-C2'	-5.80	96.80	102.60
48	BN	60	PHE	CB-CG-CD1	-5.80	116.74	120.80
2	AB	742	A	N3-C4-C5	-5.80	122.74	126.80
2	AB	779	U	C5'-C4'-O4'	-5.80	102.14	109.10
2	AB	1391	U	C4'-C3'-C2'	-5.80	96.80	102.60
2	AB	2532	G	C6-N1-C2	-5.80	121.62	125.10
2	AB	2803	G	C3'-C2'-C1'	-5.80	96.86	101.50
35	BA	698	G	C2-N3-C4	5.80	114.80	111.90
35	BA	711	G	C5'-C4'-O4'	5.80	116.06	109.10
35	BA	730	G	C5-C6-O6	-5.80	125.12	128.60
35	BA	850	U	C5'-C4'-C3'	-5.80	106.72	116.00
35	BA	1421	G	C4'-C3'-C2'	-5.80	96.80	102.60
2	AB	229	C	N1-C2-N3	-5.80	115.14	119.20
2	AB	320	A	C2-N3-C4	5.80	113.50	110.60
2	AB	416	U	C1'-O4'-C4'	5.80	114.54	109.90
2	AB	520	G	N9-C4-C5	5.80	107.72	105.40
2	AB	609	A	C5-C6-N1	5.80	120.60	117.70
2	AB	638	G	N3-C4-C5	-5.80	125.70	128.60
2	AB	1952	A	N1-C2-N3	-5.80	126.40	129.30
2	AB	2293	G	N9-C4-C5	5.80	107.72	105.40
2	AB	2305	U	N3-C4-O4	5.80	123.46	119.40
2	AB	2386	A	C1'-O4'-C4'	5.80	114.54	109.90
2	AB	2823	A	C6-C5-N7	5.80	136.36	132.30
2	AB	2872	A	C4-C5-C6	5.80	119.90	117.00
7	AG	174	PHE	CB-CG-CD1	5.80	124.86	120.80
18	AR	17	PRO	N-CA-CB	5.80	110.26	103.30
35	BA	9	G	O4'-C1'-N9	5.80	112.84	108.20
35	BA	352	C	N1-C2-O2	5.80	122.38	118.90
35	BA	608	A	O4'-C1'-N9	5.80	112.84	108.20
35	BA	635	A	P-O3'-C3'	5.80	126.66	119.70
35	BA	658	C	C2-N3-C4	-5.80	117.00	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1469	C	C4'-C3'-C2'	-5.80	96.80	102.60
37	BC	29	G	C2-N3-C4	5.80	114.80	111.90
42	BH	156	ARG	NE-CZ-NH2	-5.80	117.40	120.30
44	BJ	5	VAL	CA-CB-CG2	-5.80	102.20	110.90
2	AB	586	A	O5'-P-OP2	-5.80	100.48	105.70
2	AB	763	G	N9-C4-C5	5.80	107.72	105.40
2	AB	1009	A	N7-C8-N9	-5.80	110.90	113.80
2	AB	1133	A	P-O5'-C5'	5.80	130.18	120.90
2	AB	1405	U	C4'-C3'-C2'	-5.80	96.80	102.60
2	AB	1450	G	C4'-C3'-O3'	5.80	124.60	113.00
2	AB	1703	G	C2-N3-C4	5.80	114.80	111.90
2	AB	1963	U	O5'-C5'-C4'	-5.80	100.68	111.70
2	AB	2279	G	C8-N9-C4	-5.80	104.08	106.40
2	AB	2800	A	C4-C5-C6	5.80	119.90	117.00
18	AR	51	ASN	CB-CA-C	5.80	122.00	110.40
35	BA	51	A	P-O3'-C3'	5.80	126.66	119.70
35	BA	78	A	C5-N7-C8	5.80	106.80	103.90
35	BA	138	G	C6-N1-C2	-5.80	121.62	125.10
35	BA	554	A	C1'-O4'-C4'	5.80	114.54	109.90
35	BA	796	C	N3-C2-O2	-5.80	117.84	121.90
35	BA	1359	C	O3'-P-O5'	-5.80	92.98	104.00
35	BA	1466	C	C4-C5-C6	-5.80	114.50	117.40
37	BC	21	U	C3'-C2'-C1'	5.80	106.14	101.50
1	AA	18	G	N3-C4-N9	-5.80	122.52	126.00
2	AB	276	U	N1-C2-N3	5.80	118.38	114.90
2	AB	545	U	C3'-C2'-C1'	-5.80	96.86	101.50
2	AB	1642	G	C5-C6-O6	-5.80	125.12	128.60
2	AB	2460	U	C2-N3-C4	-5.80	123.52	127.00
35	BA	660	C	C2-N3-C4	-5.80	117.00	119.90
2	AB	23	G	O4'-C1'-N9	-5.80	103.56	108.20
2	AB	75	G	C5'-C4'-O4'	5.80	116.06	109.10
2	AB	101	A	N1-C2-N3	-5.80	126.40	129.30
2	AB	140	C	N1-C2-O2	5.80	122.38	118.90
2	AB	388	G	C4-C5-N7	5.80	113.12	110.80
2	AB	569	U	C4-C5-C6	5.80	123.18	119.70
2	AB	927	A	C5-C6-N1	5.80	120.60	117.70
2	AB	1651	G	C8-N9-C4	-5.80	104.08	106.40
4	AD	68	ARG	NE-CZ-NH2	-5.80	117.40	120.30
7	AG	114	ARG	NE-CZ-NH1	-5.80	117.40	120.30
17	AQ	41	ALA	N-CA-CB	-5.80	101.98	110.10
35	BA	337	G	C8-N9-C1'	5.80	134.54	127.00
2	AB	220	G	N1-C2-N3	5.79	127.38	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1201	U	C4'-C3'-C2'	-5.79	96.81	102.60
2	AB	1823	G	C4-C5-N7	-5.79	108.48	110.80
35	BA	406	G	C5-C6-N1	5.79	114.40	111.50
35	BA	925	G	O4'-C4'-C3'	5.79	110.74	106.10
35	BA	1507	A	C8-N9-C4	-5.79	103.48	105.80
2	AB	150	U	N3-C2-O2	-5.79	118.14	122.20
2	AB	191	A	C6-C5-N7	-5.79	128.25	132.30
2	AB	443	A	C4-C5-C6	-5.79	114.10	117.00
2	AB	649	G	N1-C6-O6	5.79	123.38	119.90
2	AB	776	G	N3-C4-N9	5.79	129.48	126.00
2	AB	921	C	N1-C2-N3	5.79	123.26	119.20
2	AB	1334	G	C5'-C4'-O4'	5.79	116.05	109.10
2	AB	1469	A	O4'-C4'-C3'	-5.79	98.21	104.00
2	AB	1702	G	O4'-C1'-N9	5.79	112.83	108.20
2	AB	1878	G	C6-C5-N7	-5.79	126.92	130.40
2	AB	1925	C	C5'-C4'-O4'	5.79	116.05	109.10
2	AB	1950	G	C6-C5-N7	-5.79	126.92	130.40
7	AG	170	ALA	N-CA-CB	-5.79	101.99	110.10
18	AR	42	PHE	CB-CG-CD2	-5.79	116.74	120.80
35	BA	553	A	C2-N3-C4	5.79	113.50	110.60
35	BA	888	G	N9-C1'-C2'	-5.79	105.63	112.00
35	BA	915	A	C1'-O4'-C4'	-5.79	105.27	109.90
1	AA	59	A	C4'-C3'-C2'	-5.79	96.81	102.60
2	AB	158	U	C1'-O4'-C4'	-5.79	105.27	109.90
2	AB	338	G	C3'-C2'-C1'	5.79	106.13	101.50
2	AB	751	A	N1-C2-N3	-5.79	126.41	129.30
2	AB	819	A	N1-C6-N6	5.79	122.08	118.60
2	AB	1665	A	C2'-C3'-O3'	5.79	122.97	113.70
2	AB	2347	C	O4'-C1'-C2'	-5.79	100.01	105.80
2	AB	2550	G	C5-C6-O6	-5.79	125.12	128.60
5	AE	79	LEU	CB-CG-CD1	5.79	120.84	111.00
13	AM	63	VAL	CA-CB-CG1	5.79	119.59	110.90
35	BA	12	U	C2-N3-C4	-5.79	123.53	127.00
35	BA	163	C	N1-C2-O2	-5.79	115.43	118.90
35	BA	944	G	C2-N3-C4	5.79	114.80	111.90
35	BA	947	G	C4'-C3'-C2'	-5.79	96.81	102.60
2	AB	51	G	O3'-P-O5'	-5.79	93.00	104.00
2	AB	371	A	O5'-C5'-C4'	5.79	122.70	111.70
2	AB	1069	A	P-O3'-C3'	5.79	126.65	119.70
2	AB	1589	U	N3-C2-O2	-5.79	118.15	122.20
2	AB	2164	C	P-O3'-C3'	5.79	126.65	119.70
2	AB	2165	C	C4'-C3'-C2'	-5.79	96.81	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2360	G	C6-C5-N7	5.79	133.87	130.40
35	BA	92	U	N3-C2-O2	-5.79	118.15	122.20
35	BA	1053	G	O4'-C1'-C2'	-5.79	100.01	105.80
41	BG	71	PHE	N-CA-CB	-5.79	100.18	110.60
2	AB	164	C	N3-C2-O2	-5.79	117.85	121.90
2	AB	412	A	C2-N3-C4	5.79	113.50	110.60
2	AB	530	G	N7-C8-N9	5.79	116.00	113.10
2	AB	545	U	N1-C2-O2	5.79	126.85	122.80
2	AB	611	C	C2'-C3'-O3'	5.79	122.96	113.70
2	AB	643	A	C1'-O4'-C4'	-5.79	105.27	109.90
2	AB	693	A	C8-N9-C4	-5.79	103.48	105.80
2	AB	1027	A	P-O3'-C3'	5.79	126.65	119.70
2	AB	1137	G	O4'-C1'-N9	5.79	112.83	108.20
2	AB	1228	G	N3-C2-N2	-5.79	115.85	119.90
2	AB	1263	U	C6-N1-C2	-5.79	117.53	121.00
2	AB	1632	A	N9-C4-C5	-5.79	103.48	105.80
2	AB	1670	C	C3'-C2'-C1'	5.79	106.13	101.50
2	AB	1762	A	C4-C5-C6	-5.79	114.11	117.00
2	AB	1893	C	N1-C2-O2	5.79	122.37	118.90
2	AB	2424	C	N1-C1'-C2'	-5.79	105.63	112.00
23	AW	86	PHE	CB-CG-CD1	5.79	124.85	120.80
35	BA	148	G	N9-C1'-C2'	-5.79	105.63	112.00
35	BA	965	U	N1-C1'-C2'	-5.79	105.63	112.00
36	BB	45	U	N1-C2-N3	5.79	118.37	114.90
2	AB	531	C	N1-C1'-C2'	5.79	121.52	114.00
2	AB	2210	U	P-O3'-C3'	5.79	126.64	119.70
2	AB	2263	C	O4'-C1'-N1	5.79	112.83	108.20
2	AB	2872	A	N3-C4-N9	-5.79	122.77	127.40
18	AR	38	ARG	CD-NE-CZ	5.79	131.70	123.60
35	BA	1304	G	C6-N1-C2	-5.79	121.63	125.10
2	AB	612	G	C6-C5-N7	-5.79	126.93	130.40
2	AB	647	G	C2-N3-C4	5.79	114.79	111.90
2	AB	966	G	C5-C6-N1	5.79	114.39	111.50
2	AB	976	G	C4'-C3'-O3'	5.79	124.57	113.00
2	AB	1090	A	N1-C6-N6	-5.79	115.13	118.60
2	AB	1096	A	N1-C2-N3	-5.79	126.41	129.30
2	AB	1567	G	C6-N1-C2	-5.79	121.63	125.10
2	AB	2072	C	C5-C6-N1	-5.79	118.11	121.00
2	AB	2116	G	C4-C5-N7	5.79	113.11	110.80
24	AX	31	TYR	C-N-CA	5.79	134.45	122.30
35	BA	477	C	C4'-C3'-C2'	-5.79	96.81	102.60
35	BA	659	U	C5-C4-O4	-5.79	122.43	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	818	G	C5-C6-N1	5.79	114.39	111.50
35	BA	1074	G	C6-N1-C2	-5.79	121.63	125.10
35	BA	1385	G	N1-C6-O6	-5.79	116.43	119.90
2	AB	415	A	C5-C6-N1	5.78	120.59	117.70
2	AB	837	C	C4-C5-C6	5.78	120.29	117.40
2	AB	1155	A	C5'-C4'-O4'	5.78	116.04	109.10
2	AB	1377	G	N1-C2-N3	-5.78	120.43	123.90
2	AB	1484	U	C5'-C4'-O4'	5.78	116.04	109.10
2	AB	1569	A	N9-C1'-C2'	-5.78	105.64	112.00
2	AB	1597	A	C8-N9-C4	-5.78	103.49	105.80
2	AB	2015	A	P-O5'-C5'	5.78	130.15	120.90
2	AB	2026	U	O4'-C1'-N1	5.78	112.83	108.20
2	AB	2148	G	N9-C4-C5	5.78	107.71	105.40
2	AB	2476	A	C8-N9-C4	-5.78	103.49	105.80
2	AB	2527	C	N3-C4-N4	5.78	122.05	118.00
2	AB	2595	G	C3'-C2'-C1'	5.78	106.13	101.50
5	AE	193	VAL	CG1-CB-CG2	-5.78	101.64	110.90
13	AM	35	VAL	CA-CB-CG1	-5.78	102.22	110.90
16	AP	29	VAL	CG1-CB-CG2	-5.78	101.65	110.90
18	AR	100	ARG	NE-CZ-NH2	5.78	123.19	120.30
35	BA	131	A	C5-C6-N1	5.78	120.59	117.70
35	BA	373	A	C4-C5-N7	-5.78	107.81	110.70
35	BA	685	G	N1-C2-N3	-5.78	120.43	123.90
35	BA	1222	G	C6-C5-N7	-5.78	126.93	130.40
35	BA	1499	A	C8-N9-C4	-5.78	103.49	105.80
2	AB	54	G	C5-C6-N1	5.78	114.39	111.50
2	AB	313	G	C4'-C3'-C2'	-5.78	96.82	102.60
2	AB	677	A	C6-N1-C2	-5.78	115.13	118.60
2	AB	985	C	C5-C4-N4	5.78	124.25	120.20
2	AB	1510	G	P-O3'-C3'	-5.78	112.76	119.70
2	AB	1948	G	C4-C5-N7	-5.78	108.49	110.80
2	AB	2120	G	C5-N7-C8	-5.78	101.41	104.30
2	AB	2467	C	N3-C4-C5	-5.78	119.59	121.90
8	AH	61	TRP	CD1-CG-CD2	-5.78	101.67	106.30
25	AY	44	PHE	CB-CG-CD2	5.78	124.85	120.80
35	BA	145	G	O4'-C1'-N9	5.78	112.83	108.20
35	BA	819	A	C8-N9-C4	5.78	108.11	105.80
35	BA	1083	U	C5-C4-O4	5.78	129.37	125.90
35	BA	1233	G	N1-C2-N2	5.78	121.40	116.20
36	BB	60	U	C5-C6-N1	-5.78	119.81	122.70
50	BP	57	ASP	CB-CG-OD2	-5.78	113.10	118.30
2	AB	79	C	O4'-C1'-N1	5.78	112.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	96	C	N3-C4-C5	5.78	124.21	121.90
2	AB	317	G	N7-C8-N9	5.78	115.99	113.10
2	AB	846	U	N1-C2-O2	5.78	126.85	122.80
2	AB	922	C	C5-C6-N1	5.78	123.89	121.00
2	AB	1236	G	N7-C8-N9	5.78	115.99	113.10
2	AB	1943	U	P-O5'-C5'	5.78	130.15	120.90
2	AB	2021	C	C1'-O4'-C4'	-5.78	105.28	109.90
2	AB	2117	A	O4'-C1'-N9	5.78	112.83	108.20
2	AB	2143	C	C6-N1-C2	-5.78	117.99	120.30
2	AB	2687	U	C1'-O4'-C4'	-5.78	105.28	109.90
3	AC	74	ARG	NE-CZ-NH1	5.78	123.19	120.30
35	BA	35	G	C5-C6-N1	-5.78	108.61	111.50
35	BA	272	C	N3-C2-O2	-5.78	117.85	121.90
35	BA	293	G	C5-N7-C8	5.78	107.19	104.30
35	BA	658	C	N1-C2-N3	5.78	123.25	119.20
35	BA	851	G	C6-C5-N7	5.78	133.87	130.40
35	BA	1246	A	N1-C6-N6	-5.78	115.13	118.60
2	AB	988	A	N3-C4-C5	-5.78	122.75	126.80
2	AB	1423	G	N7-C8-N9	5.78	115.99	113.10
2	AB	1477	A	N1-C6-N6	-5.78	115.13	118.60
2	AB	1871	A	C4-C5-C6	5.78	119.89	117.00
35	BA	151	A	P-O3'-C3'	5.78	126.64	119.70
35	BA	1345	U	O4'-C1'-C2'	-5.78	100.02	105.80
35	BA	1430	A	C6-C5-N7	5.78	136.35	132.30
38	BD	62	C	N3-C4-N4	-5.78	113.95	118.00
2	AB	191	A	C6-N1-C2	5.78	122.07	118.60
2	AB	548	G	N1-C6-O6	-5.78	116.43	119.90
2	AB	1185	G	N7-C8-N9	-5.78	110.21	113.10
2	AB	1689	A	C5'-C4'-O4'	5.78	116.03	109.10
2	AB	2049	G	C2-N3-C4	5.78	114.79	111.90
2	AB	2205	A	C6-C5-N7	5.78	136.34	132.30
2	AB	2549	G	N3-C4-C5	-5.78	125.71	128.60
35	BA	77	A	N3-C4-C5	5.78	130.84	126.80
35	BA	836	G	C5-C6-O6	-5.78	125.13	128.60
35	BA	1193	G	C4-C5-C6	5.78	122.27	118.80
35	BA	1202	U	C5'-C4'-O4'	5.78	116.03	109.10
2	AB	129	C	C2-N3-C4	5.78	122.79	119.90
2	AB	501	A	C8-N9-C4	-5.78	103.49	105.80
2	AB	618	G	N3-C4-C5	-5.78	125.71	128.60
2	AB	637	A	C6-N1-C2	-5.78	115.14	118.60
2	AB	887	U	O4'-C1'-N1	5.78	112.82	108.20
2	AB	1891	G	N3-C4-C5	-5.78	125.71	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1991	U	C6-N1-C1'	5.78	129.29	121.20
2	AB	2059	A	O3'-P-O5'	5.78	114.97	104.00
2	AB	2341	G	C5-N7-C8	-5.78	101.41	104.30
2	AB	2876	G	C4'-C3'-C2'	-5.78	96.82	102.60
10	AJ	52	ARG	NH1-CZ-NH2	5.78	125.75	119.40
24	AX	18	ARG	NH1-CZ-NH2	-5.78	113.05	119.40
35	BA	5	U	O4'-C1'-C2'	-5.78	100.03	105.80
35	BA	50	A	P-O3'-C3'	5.78	126.63	119.70
35	BA	551	U	N1-C2-N3	5.78	118.36	114.90
35	BA	663	A	N9-C1'-C2'	-5.78	105.65	112.00
35	BA	739	C	O4'-C1'-N1	5.78	112.82	108.20
35	BA	854	U	O4'-C1'-N1	5.78	112.82	108.20
35	BA	1317	C	C5'-C4'-O4'	5.78	116.03	109.10
38	BD	36	A	C5-C6-N6	-5.78	119.08	123.70
2	AB	1078	U	C1'-O4'-C4'	-5.77	105.28	109.90
2	AB	1185	G	C4-C5-C6	5.77	122.26	118.80
2	AB	1431	A	C5-N7-C8	5.77	106.79	103.90
2	AB	1525	A	N3-C4-N9	-5.77	122.78	127.40
35	BA	541	G	N3-C4-N9	5.77	129.47	126.00
2	AB	311	A	C8-N9-C4	-5.77	103.49	105.80
2	AB	509	C	C5-C4-N4	-5.77	116.16	120.20
2	AB	1293	C	N1-C1'-C2'	-5.77	105.65	112.00
2	AB	1378	A	N1-C2-N3	-5.77	126.41	129.30
2	AB	1382	G	N3-C4-C5	-5.77	125.71	128.60
2	AB	1563	U	C5'-C4'-C3'	-5.77	106.76	116.00
2	AB	2002	G	C5-N7-C8	-5.77	101.41	104.30
2	AB	2145	C	N3-C4-C5	5.77	124.21	121.90
2	AB	2446	G	C4-C5-C6	5.77	122.26	118.80
2	AB	2463	C	C6-N1-C2	-5.77	117.99	120.30
2	AB	2764	A	N1-C2-N3	5.77	132.19	129.30
35	BA	568	G	C3'-C2'-C1'	5.77	106.12	101.50
35	BA	1177	G	N9-C4-C5	5.77	107.71	105.40
58	BX	36	PHE	CB-CG-CD2	-5.77	116.76	120.80
1	AA	3	C	C2-N3-C4	-5.77	117.01	119.90
2	AB	475	C	O4'-C1'-N1	5.77	112.82	108.20
6	AF	45	ALA	CB-CA-C	5.77	118.76	110.10
38	BD	26	C	N3-C4-C5	-5.77	119.59	121.90
1	AA	63	C	C5-C6-N1	5.77	123.89	121.00
2	AB	136	G	N9-C1'-C2'	-5.77	105.65	112.00
2	AB	224	U	C5-C6-N1	5.77	125.58	122.70
2	AB	524	G	C2-N3-C4	5.77	114.78	111.90
2	AB	1095	A	C8-N9-C4	-5.77	103.49	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1296	G	C6-C5-N7	-5.77	126.94	130.40
2	AB	2202	U	C4-C5-C6	5.77	123.16	119.70
2	AB	2765	A	C5'-C4'-O4'	5.77	116.02	109.10
35	BA	229	U	C2-N3-C4	-5.77	123.54	127.00
35	BA	1068	G	N1-C2-N3	-5.77	120.44	123.90
35	BA	1317	C	N1-C2-O2	5.77	122.36	118.90
35	BA	1438	G	C8-N9-C4	-5.77	104.09	106.40
51	BQ	64	ARG	NE-CZ-NH1	5.77	123.19	120.30
2	AB	108	G	C6-C5-N7	5.77	133.86	130.40
2	AB	211	C	N1-C2-O2	5.77	122.36	118.90
2	AB	220	G	C5-C6-O6	5.77	132.06	128.60
2	AB	771	G	C6-N1-C2	-5.77	121.64	125.10
2	AB	813	U	C2-N3-C4	-5.77	123.54	127.00
2	AB	1186	G	N1-C2-N2	-5.77	111.01	116.20
2	AB	1645	G	C1'-O4'-C4'	-5.77	105.29	109.90
2	AB	1856	U	C5'-C4'-O4'	5.77	116.02	109.10
2	AB	2179	C	C5-C6-N1	-5.77	118.12	121.00
2	AB	2250	G	C4-C5-N7	5.77	113.11	110.80
2	AB	2594	C	P-O3'-C3'	5.77	126.62	119.70
2	AB	2627	G	C4-N9-C1'	-5.77	119.00	126.50
2	AB	2693	G	C5-C6-O6	-5.77	125.14	128.60
35	BA	277	C	N1-C1'-C2'	-5.77	105.66	112.00
35	BA	1279	G	C6-C5-N7	-5.77	126.94	130.40
2	AB	2083	G	P-O3'-C3'	5.77	126.62	119.70
2	AB	2273	A	C4'-C3'-C2'	-5.77	96.83	102.60
2	AB	2586	U	N1-C2-O2	5.77	126.84	122.80
35	BA	1158	C	N3-C4-N4	5.77	122.04	118.00
35	BA	1326	U	C5'-C4'-C3'	5.77	125.23	116.00
2	AB	491	G	P-O3'-C3'	5.76	126.62	119.70
2	AB	797	G	N1-C6-O6	5.76	123.36	119.90
2	AB	1505	A	C5'-C4'-O4'	5.76	116.02	109.10
2	AB	1786	A	O4'-C1'-N9	5.76	112.81	108.20
2	AB	2533	U	O4'-C1'-N1	5.76	112.81	108.20
2	AB	2795	C	C5-C6-N1	5.76	123.88	121.00
35	BA	600	A	C4-C5-C6	5.76	119.88	117.00
35	BA	1262	C	N3-C2-O2	-5.76	117.86	121.90
36	BB	3	G	O4'-C1'-N9	5.76	112.81	108.20
38	BD	20	G	N3-C4-C5	-5.76	125.72	128.60
2	AB	1001	A	N9-C1'-C2'	-5.76	105.66	112.00
35	BA	381	C	N3-C2-O2	-5.76	117.87	121.90
35	BA	1038	C	C3'-C2'-C1'	-5.76	96.89	101.50
2	AB	577	G	N1-C6-O6	-5.76	116.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	625	G	N3-C4-C5	-5.76	125.72	128.60
2	AB	979	A	C5'-C4'-C3'	-5.76	106.78	116.00
2	AB	1042	G	C2-N3-C4	5.76	114.78	111.90
2	AB	1130	U	C2-N3-C4	-5.76	123.54	127.00
2	AB	1448	G	C5-N7-C8	5.76	107.18	104.30
2	AB	1632	A	O3'-P-O5'	5.76	114.95	104.00
2	AB	1739	A	N7-C8-N9	5.76	116.68	113.80
2	AB	1830	C	N1-C2-N3	5.76	123.23	119.20
2	AB	2322	A	N7-C8-N9	-5.76	110.92	113.80
2	AB	2351	G	N1-C2-N2	-5.76	111.01	116.20
2	AB	2462	C	C5-C4-N4	-5.76	116.17	120.20
35	BA	240	G	N1-C6-O6	-5.76	116.44	119.90
35	BA	487	A	O4'-C1'-C2'	-5.76	100.04	105.80
35	BA	515	G	O4'-C1'-N9	5.76	112.81	108.20
35	BA	657	U	N3-C4-C5	-5.76	111.14	114.60
35	BA	756	C	C5'-C4'-O4'	5.76	116.01	109.10
35	BA	833	G	N7-C8-N9	5.76	115.98	113.10
35	BA	1060	U	C3'-C2'-C1'	5.76	106.11	101.50
35	BA	1101	A	C8-N9-C4	-5.76	103.50	105.80
35	BA	1246	A	C3'-C2'-C1'	5.76	106.11	101.50
35	BA	1446	A	C5-C6-N6	-5.76	119.09	123.70
38	BD	65	G	C3'-C2'-C1'	5.76	106.11	101.50
1	AA	15	A	C4-C5-N7	-5.76	107.82	110.70
2	AB	367	G	C5'-C4'-O4'	5.76	116.01	109.10
2	AB	611	C	C5-C6-N1	5.76	123.88	121.00
2	AB	880	G	C6-N1-C2	-5.76	121.64	125.10
2	AB	1057	A	C5'-C4'-O4'	5.76	116.01	109.10
2	AB	1623	G	N1-C6-O6	-5.76	116.44	119.90
2	AB	1681	G	C5-C6-N1	-5.76	108.62	111.50
2	AB	2425	A	C6-N1-C2	-5.76	115.14	118.60
2	AB	2611	C	C5'-C4'-O4'	5.76	116.01	109.10
35	BA	513	C	P-O3'-C3'	5.76	126.61	119.70
35	BA	597	G	C6-N1-C2	-5.76	121.64	125.10
35	BA	635	A	C6-C5-N7	5.76	136.33	132.30
2	AB	1875	G	C5-C6-O6	-5.76	125.14	128.60
2	AB	2258	C	N3-C2-O2	-5.76	117.87	121.90
2	AB	2382	G	N3-C4-N9	5.76	129.46	126.00
2	AB	2428	G	O4'-C1'-N9	5.76	112.81	108.20
2	AB	2823	A	C6-N1-C2	-5.76	115.14	118.60
2	AB	2893	A	C5'-C4'-C3'	-5.76	106.79	116.00
35	BA	498	A	C1'-O4'-C4'	-5.76	105.29	109.90
35	BA	508	U	N1-C2-O2	-5.76	118.77	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1094	G	C5'-C4'-C3'	-5.76	106.79	116.00
35	BA	1297	G	P-O3'-C3'	5.76	126.61	119.70
36	BB	29	G	N1-C2-N3	5.76	127.36	123.90
2	AB	312	G	C1'-O4'-C4'	-5.76	105.30	109.90
2	AB	579	G	C5'-C4'-C3'	-5.76	106.79	116.00
2	AB	906	U	N1-C2-N3	5.76	118.35	114.90
2	AB	1073	A	N1-C6-N6	5.76	122.05	118.60
2	AB	1201	U	C2-N3-C4	-5.76	123.55	127.00
2	AB	1643	G	C2-N3-C4	5.76	114.78	111.90
2	AB	1726	C	N3-C2-O2	-5.76	117.87	121.90
2	AB	1762	A	C1'-O4'-C4'	-5.76	105.30	109.90
2	AB	2787	C	C2-N3-C4	-5.76	117.02	119.90
35	BA	94	G	C4-N9-C1'	-5.76	119.02	126.50
35	BA	756	C	C4-C5-C6	5.76	120.28	117.40
35	BA	932	C	C5'-C4'-O4'	5.76	116.01	109.10
35	BA	1000	A	C6-N1-C2	5.76	122.05	118.60
41	BG	46	ARG	NE-CZ-NH1	-5.76	117.42	120.30
2	AB	604	G	N3-C4-C5	-5.75	125.72	128.60
2	AB	808	G	N3-C2-N2	-5.75	115.87	119.90
2	AB	946	C	C5'-C4'-C3'	-5.75	106.79	116.00
2	AB	1880	U	C5-C6-N1	-5.75	119.82	122.70
2	AB	2724	U	N1-C2-N3	5.75	118.35	114.90
3	AC	53	ARG	NE-CZ-NH1	-5.75	117.42	120.30
35	BA	43	C	O4'-C1'-N1	5.75	112.80	108.20
35	BA	274	A	N7-C8-N9	5.75	116.68	113.80
35	BA	750	C	N3-C4-C5	-5.75	119.60	121.90
35	BA	1265	C	C5-C4-N4	-5.75	116.17	120.20
35	BA	1424	U	C5'-C4'-O4'	5.75	116.01	109.10
37	BC	46	C	N1-C2-O2	5.75	122.35	118.90
1	AA	61	G	C5'-C4'-O4'	5.75	116.00	109.10
2	AB	210	C	N3-C4-N4	5.75	122.03	118.00
2	AB	1021	A	C2-N3-C4	5.75	113.48	110.60
2	AB	1368	G	C2-N3-C4	-5.75	109.02	111.90
2	AB	1673	G	N1-C2-N2	5.75	121.38	116.20
2	AB	1746	A	O3'-P-O5'	-5.75	93.07	104.00
2	AB	1945	G	N1-C6-O6	-5.75	116.45	119.90
2	AB	1997	C	C5-C6-N1	-5.75	118.12	121.00
2	AB	2212	A	C5-N7-C8	5.75	106.78	103.90
2	AB	2256	G	C5-C6-N1	-5.75	108.62	111.50
2	AB	2545	G	C2-N3-C4	5.75	114.78	111.90
2	AB	2678	C	N1-C2-O2	5.75	122.35	118.90
2	AB	2686	G	N1-C2-N3	5.75	127.35	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	AK	61	TYR	CG-CD1-CE1	5.75	125.90	121.30
35	BA	233	C	C2-N3-C4	-5.75	117.02	119.90
35	BA	616	G	C5'-C4'-O4'	5.75	116.00	109.10
35	BA	1149	C	N3-C4-N4	5.75	122.03	118.00
35	BA	1398	A	N9-C4-C5	5.75	108.10	105.80
38	BD	1	C	C4-C5-C6	5.75	120.28	117.40
38	BD	76	C	C5-C4-N4	5.75	124.23	120.20
2	AB	44	A	P-O3'-C3'	5.75	126.60	119.70
2	AB	189	G	N9-C4-C5	5.75	107.70	105.40
2	AB	1228	G	C4-C5-N7	-5.75	108.50	110.80
2	AB	1383	A	N3-C4-C5	-5.75	122.77	126.80
2	AB	1513	U	O4'-C1'-N1	5.75	112.80	108.20
2	AB	1732	C	O4'-C4'-C3'	5.75	110.70	106.10
2	AB	1749	A	C5'-C4'-O4'	5.75	116.00	109.10
2	AB	2838	G	N3-C4-C5	-5.75	125.72	128.60
35	BA	26	A	C5'-C4'-O4'	5.75	116.00	109.10
35	BA	537	G	C5-N7-C8	-5.75	101.42	104.30
35	BA	748	G	C2-N3-C4	5.75	114.78	111.90
36	BB	36	A	C5-C6-N6	-5.75	119.10	123.70
38	BD	3	C	C6-N1-C2	-5.75	118.00	120.30
43	BI	111	GLU	OE1-CD-OE2	5.75	130.20	123.30
44	BJ	155	TRP	CH2-CZ2-CE2	5.75	123.15	117.40
52	BR	52	ARG	NE-CZ-NH2	-5.75	117.42	120.30
2	AB	703	U	C5-C6-N1	-5.75	119.83	122.70
2	AB	1136	G	C6-N1-C2	-5.75	121.65	125.10
2	AB	1646	C	C4'-C3'-C2'	-5.75	96.85	102.60
35	BA	126	G	O4'-C1'-N9	5.75	112.80	108.20
35	BA	1175	G	N9-C4-C5	-5.75	103.10	105.40
38	BD	9	G	C4-N9-C1'	-5.75	119.03	126.50
1	AA	69	G	N1-C2-N2	5.75	121.37	116.20
2	AB	255	A	C2-N3-C4	5.75	113.47	110.60
2	AB	781	A	N1-C2-N3	5.75	132.17	129.30
2	AB	961	C	N1-C2-N3	-5.75	115.18	119.20
2	AB	1407	G	C5-N7-C8	5.75	107.17	104.30
2	AB	1483	G	N1-C2-N3	5.75	127.35	123.90
2	AB	1902	C	C6-N1-C2	5.75	122.60	120.30
2	AB	1919	A	O4'-C1'-N9	5.75	112.80	108.20
2	AB	2024	G	O4'-C1'-N9	5.75	112.80	108.20
2	AB	2089	C	C3'-C2'-C1'	-5.75	96.90	101.50
2	AB	2408	U	C6-N1-C2	-5.75	117.55	121.00
2	AB	2511	U	N3-C4-O4	-5.75	115.38	119.40
2	AB	2792	A	C5'-C4'-C3'	-5.75	106.80	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	173	U	C5-C6-N1	-5.75	119.83	122.70
35	BA	310	G	N1-C6-O6	5.75	123.35	119.90
35	BA	402	G	N7-C8-N9	5.75	115.97	113.10
35	BA	515	G	C2-N3-C4	5.75	114.77	111.90
35	BA	520	A	N1-C6-N6	-5.75	115.15	118.60
35	BA	615	G	N9-C4-C5	5.75	107.70	105.40
35	BA	936	C	N3-C4-N4	5.75	122.02	118.00
2	AB	330	A	C4'-C3'-C2'	-5.75	96.85	102.60
2	AB	382	A	N7-C8-N9	-5.75	110.93	113.80
2	AB	509	C	C2-N3-C4	-5.75	117.03	119.90
2	AB	1036	G	O4'-C1'-N9	5.75	112.80	108.20
2	AB	1234	U	N3-C4-O4	5.75	123.42	119.40
2	AB	1988	G	C6-N1-C2	-5.75	121.65	125.10
2	AB	2429	G	N1-C6-O6	-5.75	116.45	119.90
2	AB	2821	A	C4-C5-N7	5.75	113.57	110.70
2	AB	2854	G	C5'-C4'-C3'	-5.75	106.81	116.00
35	BA	1089	G	N3-C2-N2	-5.75	115.88	119.90
35	BA	1133	G	C5'-C4'-O4'	5.75	116.00	109.10
37	BC	33	A	C1'-O4'-C4'	-5.75	105.30	109.90
37	BC	41	A	C4-C5-N7	5.75	113.57	110.70
2	AB	36	G	N1-C6-O6	5.75	123.35	119.90
2	AB	215	G	C6-N1-C2	-5.75	121.65	125.10
2	AB	924	G	N3-C4-N9	-5.75	122.55	126.00
2	AB	1396	U	C1'-O4'-C4'	5.75	114.50	109.90
2	AB	1559	U	N3-C4-O4	5.75	123.42	119.40
35	BA	150	U	N1-C2-N3	5.75	118.35	114.90
35	BA	398	U	N1-C2-O2	5.75	126.82	122.80
2	AB	101	A	C8-N9-C4	-5.74	103.50	105.80
2	AB	416	U	N3-C2-O2	-5.74	118.18	122.20
2	AB	494	G	N1-C2-N2	5.74	121.37	116.20
2	AB	1141	U	N3-C4-C5	-5.74	111.15	114.60
2	AB	1309	G	O4'-C1'-C2'	5.74	112.77	107.60
2	AB	1784	A	C2-N3-C4	5.74	113.47	110.60
2	AB	1889	A	N3-C4-C5	-5.74	122.78	126.80
2	AB	1900	A	N1-C6-N6	5.74	122.05	118.60
2	AB	1965	C	C2-N3-C4	5.74	122.77	119.90
2	AB	2543	G	C8-N9-C4	-5.74	104.10	106.40
2	AB	2834	G	C1'-O4'-C4'	5.74	114.49	109.90
2	AB	2846	G	O4'-C4'-C3'	5.74	110.69	106.10
35	BA	348	G	C8-N9-C1'	5.74	134.47	127.00
35	BA	847	G	C5-C6-N1	5.74	114.37	111.50
35	BA	988	G	N9-C4-C5	-5.74	103.10	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1039	G	N1-C2-N2	-5.74	111.03	116.20
35	BA	1349	A	C4'-C3'-C2'	-5.74	96.86	102.60
35	BA	1447	A	C8-N9-C4	-5.74	103.50	105.80
2	AB	675	A	C5-C6-N1	5.74	120.57	117.70
2	AB	694	U	N1-C1'-C2'	-5.74	105.68	112.00
2	AB	897	C	C3'-C2'-C1'	5.74	106.09	101.50
2	AB	1210	G	P-O3'-C3'	5.74	126.59	119.70
2	AB	1720	U	C1'-O4'-C4'	5.74	114.49	109.90
2	AB	2553	G	N1-C6-O6	-5.74	116.45	119.90
35	BA	70	U	C2-N3-C4	-5.74	123.56	127.00
1	AA	61	G	N9-C4-C5	5.74	107.70	105.40
2	AB	253	C	N3-C2-O2	-5.74	117.88	121.90
2	AB	1166	G	N7-C8-N9	-5.74	110.23	113.10
2	AB	1601	G	C6-C5-N7	5.74	133.84	130.40
2	AB	2625	G	N3-C4-C5	5.74	131.47	128.60
35	BA	585	G	N3-C4-C5	-5.74	125.73	128.60
35	BA	799	G	C4-N9-C1'	-5.74	119.04	126.50
35	BA	1479	C	P-O5'-C5'	5.74	130.09	120.90
2	AB	210	C	C4-C5-C6	-5.74	114.53	117.40
2	AB	951	C	C3'-C2'-C1'	-5.74	96.91	101.50
2	AB	987	C	P-O3'-C3'	5.74	126.59	119.70
2	AB	1167	C	C4'-C3'-C2'	-5.74	96.86	102.60
2	AB	1477	A	C5-C6-N1	5.74	120.57	117.70
2	AB	1495	A	C5-C6-N1	5.74	120.57	117.70
2	AB	1605	C	N3-C4-N4	5.74	122.02	118.00
2	AB	1824	G	C4'-C3'-C2'	-5.74	96.86	102.60
2	AB	2717	C	C6-N1-C2	-5.74	118.00	120.30
10	AJ	98	PHE	CB-CG-CD2	-5.74	116.78	120.80
35	BA	96	U	C4'-C3'-C2'	-5.74	96.86	102.60
35	BA	158	G	C4-C5-C6	5.74	122.24	118.80
35	BA	332	G	N3-C4-C5	-5.74	125.73	128.60
35	BA	501	C	N3-C4-N4	5.74	122.02	118.00
35	BA	574	A	C5-C6-N1	5.74	120.57	117.70
35	BA	742	G	P-O3'-C3'	5.74	126.58	119.70
35	BA	1344	C	C5'-C4'-O4'	5.74	115.99	109.10
35	BA	1389	C	N1-C2-O2	5.74	122.34	118.90
37	BC	36	U	N1-C2-N3	5.74	118.34	114.90
38	BD	52	C	O4'-C1'-N1	5.74	112.79	108.20
39	BE	152	ASP	CB-CG-OD1	-5.74	113.14	118.30
35	BA	446	G	C5-N7-C8	5.74	107.17	104.30
2	AB	219	A	C4-C5-C6	-5.74	114.13	117.00
2	AB	273	G	C8-N9-C4	-5.74	104.11	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	442	G	N1-C6-O6	5.74	123.34	119.90
2	AB	517	C	O4'-C1'-N1	5.74	112.79	108.20
2	AB	524	G	C1'-O4'-C4'	-5.74	105.31	109.90
2	AB	584	C	N1-C2-N3	5.74	123.22	119.20
2	AB	916	G	N3-C4-N9	5.74	129.44	126.00
2	AB	1038	G	N3-C4-N9	5.74	129.44	126.00
2	AB	1097	U	C2-N3-C4	-5.74	123.56	127.00
2	AB	1122	G	O4'-C4'-C3'	-5.74	98.27	104.00
2	AB	1248	G	N7-C8-N9	-5.74	110.23	113.10
2	AB	1506	U	C5'-C4'-C3'	-5.74	106.82	116.00
2	AB	1591	A	C4-C5-C6	-5.74	114.13	117.00
2	AB	1826	G	C5'-C4'-C3'	-5.74	106.82	116.00
2	AB	2064	C	N3-C2-O2	-5.74	117.89	121.90
2	AB	2113	U	O4'-C1'-N1	5.74	112.79	108.20
2	AB	2361	G	C2-N3-C4	-5.74	109.03	111.90
2	AB	2656	U	O4'-C1'-N1	5.74	112.79	108.20
35	BA	315	A	P-O3'-C3'	5.74	126.58	119.70
35	BA	681	A	C3'-C2'-C1'	5.74	106.09	101.50
35	BA	892	A	C5-C6-N1	5.74	120.57	117.70
35	BA	992	U	N3-C2-O2	-5.74	118.19	122.20
35	BA	1114	C	N1-C2-O2	5.74	122.34	118.90
35	BA	1434	A	C4-C5-N7	-5.74	107.83	110.70
2	AB	183	C	C2-N3-C4	5.73	122.77	119.90
2	AB	275	C	N1-C2-O2	5.73	122.34	118.90
2	AB	1080	A	O4'-C1'-N9	5.73	112.79	108.20
2	AB	1609	A	C5-N7-C8	5.73	106.77	103.90
2	AB	1947	C	C4'-C3'-C2'	-5.73	96.87	102.60
12	AL	16	TYR	CB-CG-CD1	-5.73	117.56	121.00
35	BA	454	G	C8-N9-C4	-5.73	104.11	106.40
35	BA	804	U	N3-C4-C5	5.73	118.04	114.60
35	BA	873	A	O5'-C5'-C4'	5.73	122.59	111.70
36	BB	74	C	C5-C4-N4	-5.73	116.19	120.20
2	AB	24	G	O4'-C4'-C3'	-5.73	98.27	104.00
2	AB	140	C	C5'-C4'-C3'	-5.73	106.83	116.00
2	AB	149	A	C3'-C2'-C1'	5.73	106.08	101.50
2	AB	194	G	C4'-C3'-C2'	-5.73	96.87	102.60
2	AB	248	G	C6-N1-C2	5.73	128.54	125.10
2	AB	675	A	C5-C6-N6	-5.73	119.11	123.70
2	AB	963	U	C5-C6-N1	-5.73	119.83	122.70
2	AB	972	A	N9-C1'-C2'	-5.73	105.69	112.00
2	AB	1365	A	C5-C6-N1	5.73	120.57	117.70
2	AB	1441	G	C4-C5-C6	5.73	122.24	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1689	A	N1-C2-N3	5.73	132.17	129.30
2	AB	2231	U	N3-C2-O2	-5.73	118.19	122.20
2	AB	2300	C	N3-C2-O2	-5.73	117.89	121.90
2	AB	2414	G	C5-N7-C8	5.73	107.17	104.30
2	AB	2597	G	N3-C4-N9	-5.73	122.56	126.00
5	AE	23	PRO	N-CA-CB	5.73	110.18	103.30
10	AJ	4	LEU	CB-CG-CD2	5.73	120.75	111.00
35	BA	513	C	N3-C4-N4	-5.73	113.99	118.00
35	BA	578	C	N3-C4-C5	-5.73	119.61	121.90
38	BD	2	G	C4-C5-N7	-5.73	108.51	110.80
2	AB	627	A	N9-C1'-C2'	5.73	121.45	114.00
2	AB	690	G	C5-N7-C8	-5.73	101.44	104.30
2	AB	1242	U	N3-C2-O2	-5.73	118.19	122.20
2	AB	2116	G	N3-C4-C5	-5.73	125.73	128.60
2	AB	2130	U	C3'-C2'-C1'	5.73	106.08	101.50
2	AB	2593	U	O4'-C1'-C2'	5.73	112.76	107.60
2	AB	2791	G	C6-N1-C2	-5.73	121.66	125.10
23	AW	84	PHE	CB-CG-CD2	-5.73	116.79	120.80
35	BA	25	C	C5-C4-N4	5.73	124.21	120.20
35	BA	43	C	C2-N3-C4	5.73	122.77	119.90
35	BA	287	U	O4'-C1'-N1	5.73	112.78	108.20
35	BA	434	U	O4'-C1'-N1	5.73	112.78	108.20
35	BA	636	U	N1-C2-N3	5.73	118.34	114.90
35	BA	811	C	N3-C4-N4	5.73	122.01	118.00
35	BA	1332	A	C5-C6-N1	-5.73	114.83	117.70
2	AB	118	A	C2-N3-C4	5.73	113.47	110.60
2	AB	301	G	C3'-C2'-C1'	5.73	106.08	101.50
2	AB	494	G	C3'-C2'-C1'	5.73	106.08	101.50
2	AB	505	A	N1-C6-N6	5.73	122.04	118.60
2	AB	911	A	C5-C6-N1	5.73	120.56	117.70
2	AB	2600	A	C5'-C4'-O4'	5.73	115.97	109.10
35	BA	222	C	N3-C4-N4	-5.73	113.99	118.00
35	BA	1441	A	C1'-O4'-C4'	-5.73	105.32	109.90
1	AA	5	U	C5-C4-O4	-5.73	122.46	125.90
1	AA	38	C	C6-N1-C1'	5.73	127.67	120.80
2	AB	150	U	N3-C4-C5	-5.73	111.16	114.60
2	AB	487	C	O4'-C1'-N1	5.73	112.78	108.20
2	AB	761	A	C6-N1-C2	5.73	122.04	118.60
2	AB	1297	C	C2-N3-C4	5.73	122.76	119.90
2	AB	1356	G	N7-C8-N9	5.73	115.96	113.10
2	AB	1875	G	C4-C5-C6	5.73	122.24	118.80
2	AB	1959	G	N9-C1'-C2'	-5.73	105.70	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2288	A	C2-N3-C4	5.73	113.46	110.60
2	AB	2606	C	C2-N3-C4	-5.73	117.04	119.90
35	BA	14	U	C6-N1-C2	-5.73	117.56	121.00
35	BA	147	G	C5-N7-C8	-5.73	101.44	104.30
35	BA	305	G	N1-C6-O6	-5.73	116.46	119.90
35	BA	399	G	C4-C5-C6	5.73	122.24	118.80
35	BA	610	U	N3-C4-O4	5.73	123.41	119.40
35	BA	749	A	N7-C8-N9	5.73	116.66	113.80
35	BA	799	G	C6-N1-C2	-5.73	121.66	125.10
35	BA	833	G	N3-C4-C5	-5.73	125.74	128.60
35	BA	884	U	N3-C4-C5	-5.73	111.16	114.60
35	BA	971	G	P-O5'-C5'	5.73	130.06	120.90
35	BA	1487	G	C2-N3-C4	5.73	114.76	111.90
1	AA	39	A	O4'-C1'-N9	-5.73	103.62	108.20
2	AB	1311	G	N7-C8-N9	5.73	115.96	113.10
2	AB	1784	A	C5-C6-N1	5.73	120.56	117.70
13	AM	11	ALA	C-N-CA	5.73	136.01	121.70
35	BA	31	G	C4-C5-N7	-5.73	108.51	110.80
35	BA	340	U	N3-C2-O2	-5.73	118.19	122.20
35	BA	1273	C	P-O3'-C3'	5.73	126.57	119.70
35	BA	1421	G	N9-C1'-C2'	-5.73	105.70	112.00
48	BN	126	ARG	NE-CZ-NH2	-5.73	117.44	120.30
1	AA	77	U	C4-C5-C6	-5.72	116.27	119.70
2	AB	79	C	O4'-C1'-C2'	-5.72	100.08	105.80
2	AB	217	A	C4-C5-C6	-5.72	114.14	117.00
2	AB	273	G	C5'-C4'-O4'	5.72	115.97	109.10
2	AB	319	G	N9-C4-C5	5.72	107.69	105.40
2	AB	540	C	C3'-C2'-C1'	5.72	106.08	101.50
2	AB	1017	G	O4'-C1'-N9	5.72	112.78	108.20
2	AB	1280	G	C4-C5-N7	5.72	113.09	110.80
2	AB	1720	U	C4'-C3'-C2'	5.72	108.33	102.60
2	AB	1860	G	C5-N7-C8	-5.72	101.44	104.30
2	AB	2174	C	C6-N1-C2	-5.72	118.01	120.30
2	AB	2481	G	N7-C8-N9	5.72	115.96	113.10
17	AQ	64	TYR	CB-CG-CD2	-5.72	117.56	121.00
35	BA	292	G	C2-N3-C4	5.72	114.76	111.90
35	BA	294	U	C4-C5-C6	5.72	123.14	119.70
35	BA	973	G	C4-C5-N7	5.72	113.09	110.80
35	BA	1064	G	N3-C4-N9	5.72	129.44	126.00
35	BA	1160	G	C1'-O4'-C4'	-5.72	105.32	109.90
35	BA	1391	U	C5-C6-N1	-5.72	119.84	122.70
35	BA	1495	U	N3-C4-O4	5.72	123.41	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	75	G	C3'-C2'-C1'	-5.72	96.92	101.50
2	AB	54	G	C8-N9-C4	-5.72	104.11	106.40
2	AB	56	A	C2-N3-C4	5.72	113.46	110.60
2	AB	112	U	C5-C4-O4	5.72	129.33	125.90
2	AB	495	G	N1-C2-N3	-5.72	120.47	123.90
2	AB	1314	C	C5-C6-N1	-5.72	118.14	121.00
2	AB	1580	A	P-O5'-C5'	5.72	130.06	120.90
2	AB	1732	C	N3-C4-N4	-5.72	114.00	118.00
2	AB	2218	G	O4'-C4'-C3'	5.72	110.68	106.10
2	AB	2310	C	C2-N1-C1'	5.72	125.09	118.80
10	AJ	152	ARG	CD-NE-CZ	5.72	131.61	123.60
20	AT	66	HIS	CA-CB-CG	5.72	123.33	113.60
35	BA	50	A	N9-C4-C5	5.72	108.09	105.80
35	BA	158	G	C5'-C4'-O4'	5.72	115.97	109.10
35	BA	189	A	C4-C5-C6	-5.72	114.14	117.00
35	BA	698	G	N1-C2-N2	5.72	121.35	116.20
35	BA	1024	G	N3-C4-N9	5.72	129.43	126.00
40	BF	142	ARG	CD-NE-CZ	5.72	131.61	123.60
44	BJ	26	VAL	CA-CB-CG1	-5.72	102.31	110.90
47	BM	68	ARG	NE-CZ-NH1	-5.72	117.44	120.30
2	AB	73	A	C6-C5-N7	5.72	136.30	132.30
2	AB	567	U	P-O3'-C3'	5.72	126.56	119.70
2	AB	1392	A	N3-C4-N9	-5.72	122.82	127.40
2	AB	1861	G	C8-N9-C4	-5.72	104.11	106.40
2	AB	2697	G	N1-C6-O6	-5.72	116.47	119.90
35	BA	63	C	N3-C2-O2	-5.72	117.89	121.90
35	BA	110	C	N3-C4-N4	5.72	122.00	118.00
35	BA	524	G	P-O3'-C3'	5.72	126.57	119.70
35	BA	605	U	C4'-C3'-C2'	-5.72	96.88	102.60
35	BA	775	G	N1-C6-O6	5.72	123.33	119.90
2	AB	206	U	N3-C4-O4	-5.72	115.40	119.40
2	AB	321	U	N1-C1'-C2'	5.72	121.44	114.00
2	AB	338	G	C4'-C3'-C2'	-5.72	96.88	102.60
2	AB	360	U	N3-C4-C5	5.72	118.03	114.60
2	AB	570	G	N1-C6-O6	5.72	123.33	119.90
2	AB	684	G	C6-N1-C2	-5.72	121.67	125.10
2	AB	774	G	C5-N7-C8	-5.72	101.44	104.30
2	AB	795	C	C4'-C3'-C2'	-5.72	96.88	102.60
2	AB	894	U	P-O3'-C3'	5.72	126.56	119.70
2	AB	1000	A	C5'-C4'-O4'	5.72	115.96	109.10
2	AB	1177	G	C4-C5-N7	-5.72	108.51	110.80
2	AB	1266	G	N3-C4-N9	-5.72	122.57	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1683	U	C5'-C4'-O4'	5.72	115.96	109.10
2	AB	1905	C	C5'-C4'-O4'	5.72	115.96	109.10
2	AB	2652	C	N1-C2-O2	5.72	122.33	118.90
2	AB	2726	A	P-O3'-C3'	5.72	126.56	119.70
2	AB	2758	A	O4'-C4'-C3'	5.72	110.68	106.10
2	AB	2893	A	P-O3'-C3'	5.72	126.56	119.70
35	BA	113	G	N9-C4-C5	-5.72	103.11	105.40
35	BA	322	C	C6-N1-C1'	5.72	127.66	120.80
35	BA	448	A	C1'-O4'-C4'	5.72	114.47	109.90
35	BA	805	C	C1'-O4'-C4'	5.72	114.48	109.90
35	BA	1173	U	C6-N1-C2	5.72	124.43	121.00
40	BF	51	VAL	CA-CB-CG1	5.72	119.48	110.90
52	BR	62	ARG	NE-CZ-NH2	5.72	123.16	120.30
2	AB	615	U	N3-C2-O2	-5.72	118.20	122.20
2	AB	1457	U	N3-C4-O4	5.72	123.40	119.40
2	AB	2560	A	N7-C8-N9	-5.72	110.94	113.80
35	BA	1364	U	O4'-C1'-C2'	-5.72	100.08	105.80
53	BS	60	TRP	CD1-CG-CD2	-5.72	101.73	106.30
1	AA	74	U	C4'-C3'-C2'	5.72	108.32	102.60
2	AB	27	G	C8-N9-C1'	5.72	134.43	127.00
2	AB	59	U	N1-C1'-C2'	-5.72	105.71	112.00
2	AB	1284	A	O4'-C1'-N9	5.72	112.77	108.20
2	AB	1392	A	N1-C2-N3	5.72	132.16	129.30
2	AB	2194	U	C6-N1-C2	-5.72	117.57	121.00
2	AB	2222	C	C2-N3-C4	-5.72	117.04	119.90
2	AB	2320	U	P-O3'-C3'	5.72	126.56	119.70
2	AB	2434	A	C8-N9-C4	5.72	108.09	105.80
2	AB	2612	C	C2-N3-C4	-5.72	117.04	119.90
2	AB	2762	C	C5-C4-N4	5.72	124.20	120.20
18	AR	50	ARG	NE-CZ-NH2	5.72	123.16	120.30
35	BA	628	G	N3-C4-C5	5.72	131.46	128.60
35	BA	942	G	C5'-C4'-O4'	5.72	115.96	109.10
35	BA	1329	A	C8-N9-C4	-5.72	103.51	105.80
2	AB	968	C	O5'-P-OP1	-5.71	100.56	105.70
2	AB	971	G	C4-C5-N7	-5.71	108.51	110.80
2	AB	972	A	C4-C5-N7	5.71	113.56	110.70
2	AB	1008	A	N1-C6-N6	-5.71	115.17	118.60
2	AB	1255	U	C3'-C2'-C1'	5.71	106.07	101.50
2	AB	1378	A	C4-C5-N7	-5.71	107.84	110.70
2	AB	1937	A	C5-C6-N6	-5.71	119.13	123.70
2	AB	2146	C	N3-C2-O2	-5.71	117.90	121.90
2	AB	2289	G	C4'-C3'-C2'	-5.71	96.89	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2825	G	C6-N1-C2	-5.71	121.67	125.10
6	AF	88	ARG	NE-CZ-NH2	-5.71	117.44	120.30
19	AS	46	TYR	CG-CD2-CE2	-5.71	116.73	121.30
35	BA	610	U	C6-N1-C2	5.71	124.43	121.00
35	BA	820	U	C2-N3-C4	-5.71	123.57	127.00
35	BA	903	G	N3-C2-N2	-5.71	115.90	119.90
35	BA	1232	U	N1-C2-O2	-5.71	118.80	122.80
38	BD	50	G	C3'-C2'-C1'	-5.71	96.93	101.50
2	AB	155	A	N7-C8-N9	-5.71	110.94	113.80
2	AB	612	G	C5-N7-C8	-5.71	101.44	104.30
2	AB	655	A	C3'-C2'-C1'	-5.71	96.93	101.50
2	AB	923	G	C3'-C2'-C1'	-5.71	96.93	101.50
2	AB	1230	A	C8-N9-C4	-5.71	103.52	105.80
2	AB	2066	C	C5'-C4'-O4'	5.71	115.95	109.10
2	AB	2623	G	C1'-O4'-C4'	-5.71	105.33	109.90
35	BA	194	C	C5-C4-N4	-5.71	116.20	120.20
35	BA	297	G	O4'-C1'-N9	5.71	112.77	108.20
35	BA	563	A	C4-C5-C6	-5.71	114.14	117.00
35	BA	800	G	C8-N9-C1'	5.71	134.43	127.00
36	BB	56	C	C1'-O4'-C4'	-5.71	105.33	109.90
1	AA	89	U	C4-C5-C6	5.71	123.13	119.70
2	AB	134	G	C8-N9-C4	-5.71	104.11	106.40
2	AB	1067	A	N3-C4-C5	-5.71	122.80	126.80
2	AB	1071	G	N1-C2-N3	-5.71	120.47	123.90
2	AB	1180	U	N1-C1'-C2'	-5.71	105.72	112.00
2	AB	1233	C	C4-C5-C6	5.71	120.26	117.40
2	AB	1857	G	C6-N1-C2	-5.71	121.67	125.10
2	AB	2132	U	C1'-O4'-C4'	5.71	114.47	109.90
2	AB	2228	G	O4'-C4'-C3'	5.71	110.67	106.10
2	AB	2666	C	C5'-C4'-C3'	-5.71	106.86	116.00
14	AN	113	ALA	CA-C-N	5.71	127.62	116.20
35	BA	97	G	C4-C5-C6	5.71	122.23	118.80
35	BA	106	C	N3-C2-O2	-5.71	117.90	121.90
35	BA	328	C	C5'-C4'-O4'	5.71	115.95	109.10
35	BA	604	G	C6-N1-C2	-5.71	121.67	125.10
35	BA	918	A	N1-C2-N3	5.71	132.16	129.30
38	BD	16	C	O4'-C1'-N1	5.71	112.77	108.20
2	AB	73	A	N1-C6-N6	-5.71	115.17	118.60
2	AB	77	G	C6-C5-N7	5.71	133.83	130.40
2	AB	1279	G	C5-C6-O6	5.71	132.03	128.60
2	AB	1362	C	N1-C2-O2	5.71	122.33	118.90
2	AB	1455	G	N3-C4-C5	-5.71	125.75	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1742	U	C5-C6-N1	5.71	125.56	122.70
35	BA	1152	A	N1-C2-N3	-5.71	126.44	129.30
2	AB	526	A	C5-N7-C8	-5.71	101.05	103.90
2	AB	950	G	C2-N3-C4	5.71	114.75	111.90
2	AB	962	G	N1-C6-O6	-5.71	116.47	119.90
2	AB	1500	G	C4-C5-C6	5.71	122.22	118.80
2	AB	1742	U	C4'-C3'-C2'	-5.71	96.89	102.60
2	AB	2052	A	P-O3'-C3'	5.71	126.55	119.70
2	AB	2133	G	N3-C4-N9	5.71	129.43	126.00
2	AB	2521	C	C5'-C4'-O4'	5.71	115.95	109.10
2	AB	2701	U	C1'-O4'-C4'	5.71	114.47	109.90
35	BA	1394	A	N1-C2-N3	5.71	132.15	129.30
35	BA	1404	C	C5'-C4'-O4'	5.71	115.95	109.10
35	BA	1475	G	C5-C6-O6	5.71	132.03	128.60
43	BI	13	ASP	CB-CG-OD1	-5.71	113.16	118.30
1	AA	7	G	N1-C2-N2	5.71	121.33	116.20
2	AB	172	A	C2-N3-C4	-5.71	107.75	110.60
2	AB	930	G	C4'-C3'-C2'	-5.71	96.89	102.60
2	AB	1120	G	C4-C5-N7	-5.71	108.52	110.80
2	AB	1200	C	C5'-C4'-O4'	5.71	115.95	109.10
2	AB	1983	G	N3-C4-C5	-5.71	125.75	128.60
2	AB	2485	G	N1-C2-N3	5.71	127.32	123.90
2	AB	2596	U	C2-N3-C4	5.71	130.42	127.00
3	AC	82	ALA	O-C-N	5.71	131.83	122.70
32	A5	12	ARG	NE-CZ-NH2	5.71	123.15	120.30
35	BA	176	C	O5'-P-OP1	-5.71	100.56	105.70
35	BA	345	C	P-O3'-C3'	5.71	126.55	119.70
35	BA	373	A	N1-C2-N3	-5.71	126.45	129.30
35	BA	651	C	C3'-C2'-C1'	5.71	106.07	101.50
35	BA	865	A	C5'-C4'-C3'	-5.71	106.87	116.00
35	BA	945	G	C6-N1-C2	-5.71	121.68	125.10
35	BA	980	C	N1-C2-O2	5.71	122.32	118.90
35	BA	1002	G	C5'-C4'-C3'	-5.71	106.87	116.00
2	AB	199	A	C5-C6-N6	5.71	128.26	123.70
2	AB	948	C	C2-N3-C4	-5.71	117.05	119.90
2	AB	2515	C	C4'-C3'-C2'	-5.71	96.89	102.60
6	AF	62	GLN	C-N-CA	5.71	135.96	121.70
1	AA	18	G	N1-C6-O6	5.70	123.32	119.90
2	AB	11	C	C4'-C3'-C2'	-5.70	96.90	102.60
2	AB	83	A	N3-C4-C5	-5.70	122.81	126.80
2	AB	301	G	O4'-C4'-C3'	5.70	110.66	106.10
2	AB	338	G	C1'-O4'-C4'	-5.70	105.34	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	381	G	C4-C5-N7	-5.70	108.52	110.80
2	AB	891	G	N9-C1'-C2'	-5.70	105.73	112.00
2	AB	906	U	O4'-C1'-N1	5.70	112.76	108.20
2	AB	1477	A	C2-N3-C4	5.70	113.45	110.60
2	AB	1711	A	C4-C5-N7	5.70	113.55	110.70
2	AB	1763	G	C2'-C3'-O3'	5.70	122.83	113.70
2	AB	1808	A	C2-N3-C4	5.70	113.45	110.60
2	AB	2098	U	N3-C4-O4	-5.70	115.41	119.40
2	AB	2730	C	N1-C2-O2	5.70	122.32	118.90
2	AB	2846	G	C5-C6-N1	5.70	114.35	111.50
35	BA	27	G	C2-N3-C4	5.70	114.75	111.90
35	BA	82	G	C6-C5-N7	-5.70	126.98	130.40
35	BA	696	A	C5-C6-N6	-5.70	119.14	123.70
35	BA	1193	G	N1-C2-N2	-5.70	111.07	116.20
38	BD	76	C	N1-C2-O2	5.70	122.32	118.90
2	AB	134	G	C1'-O4'-C4'	-5.70	105.34	109.90
2	AB	1502	A	O4'-C1'-N9	5.70	112.76	108.20
2	AB	1804	C	N1-C2-O2	5.70	122.32	118.90
2	AB	2804	U	C4'-C3'-C2'	-5.70	96.90	102.60
2	AB	2843	G	C8-N9-C4	-5.70	104.12	106.40
7	AG	174	PHE	CB-CA-C	5.70	121.81	110.40
35	BA	266	G	C8-N9-C1'	5.70	134.41	127.00
35	BA	763	G	C5-C6-N1	5.70	114.35	111.50
35	BA	1400	C	C6-N1-C2	-5.70	118.02	120.30
1	AA	6	G	N3-C4-C5	-5.70	125.75	128.60
2	AB	855	G	O4'-C1'-N9	5.70	112.76	108.20
2	AB	1392	A	C5'-C4'-C3'	-5.70	106.88	116.00
2	AB	1498	C	C5-C4-N4	-5.70	116.21	120.20
2	AB	2274	A	C2-N3-C4	5.70	113.45	110.60
2	AB	2348	U	C5-C4-O4	5.70	129.32	125.90
21	AU	14	ALA	N-CA-CB	-5.70	102.12	110.10
35	BA	154	U	O4'-C1'-N1	5.70	112.76	108.20
35	BA	538	G	N3-C4-N9	-5.70	122.58	126.00
35	BA	759	A	C5-C6-N1	-5.70	114.85	117.70
35	BA	888	G	O4'-C1'-N9	5.70	112.76	108.20
35	BA	1239	A	N7-C8-N9	5.70	116.65	113.80
35	BA	1517	G	C4'-C3'-C2'	-5.70	96.90	102.60
2	AB	81	G	C8-N9-C4	-5.70	104.12	106.40
2	AB	633	A	C4-C5-C6	-5.70	114.15	117.00
2	AB	1303	G	N3-C2-N2	-5.70	115.91	119.90
2	AB	1320	C	O4'-C1'-N1	5.70	112.76	108.20
2	AB	2766	A	C5-N7-C8	-5.70	101.05	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	A6	3	ILE	CA-CB-CG1	5.70	121.83	111.00
35	BA	46	G	N3-C4-C5	-5.70	125.75	128.60
35	BA	98	A	C1'-O4'-C4'	-5.70	105.34	109.90
35	BA	160	A	O4'-C1'-N9	5.70	112.76	108.20
35	BA	168	G	N7-C8-N9	-5.70	110.25	113.10
35	BA	521	G	C5-C6-N1	5.70	114.35	111.50
35	BA	568	G	N3-C4-C5	-5.70	125.75	128.60
35	BA	587	G	N9-C4-C5	-5.70	103.12	105.40
35	BA	1197	A	O5'-P-OP2	-5.70	100.57	105.70
43	BI	35	LYS	N-CA-CB	-5.70	100.34	110.60
53	BS	41	PRO	N-CD-CG	5.70	111.75	103.20
2	AB	164	C	C6-N1-C2	5.70	122.58	120.30
2	AB	1039	A	C4-C5-C6	5.70	119.85	117.00
2	AB	1251	C	N3-C4-N4	5.70	121.99	118.00
2	AB	2634	A	O4'-C1'-N9	5.70	112.76	108.20
2	AB	2682	A	N1-C6-N6	-5.70	115.18	118.60
35	BA	1458	G	C6-N1-C2	-5.70	121.68	125.10
52	BR	79	ARG	NH1-CZ-NH2	5.70	125.67	119.40
2	AB	253	C	C2-N3-C4	5.70	122.75	119.90
2	AB	411	G	O4'-C1'-N9	5.70	112.76	108.20
2	AB	428	A	C1'-O4'-C4'	-5.70	105.34	109.90
2	AB	486	C	C1'-O4'-C4'	5.70	114.46	109.90
2	AB	1216	G	N1-C6-O6	-5.70	116.48	119.90
2	AB	1642	G	N9-C1'-C2'	-5.70	105.73	112.00
2	AB	2026	U	C1'-O4'-C4'	5.70	114.46	109.90
2	AB	2443	C	O4'-C4'-C3'	-5.70	98.31	104.00
35	BA	24	U	O4'-C1'-N1	5.70	112.76	108.20
35	BA	160	A	C8-N9-C4	-5.70	103.52	105.80
35	BA	299	G	N7-C8-N9	5.70	115.95	113.10
35	BA	804	U	N1-C2-O2	-5.70	118.81	122.80
35	BA	923	A	O3'-P-O5'	5.70	114.82	104.00
35	BA	985	C	C5'-C4'-O4'	5.70	115.94	109.10
35	BA	1020	G	C6-C5-N7	-5.70	126.98	130.40
35	BA	1205	U	C2-N1-C1'	-5.70	110.86	117.70
35	BA	1378	C	C2-N3-C4	-5.70	117.05	119.90
35	BA	1529	G	C4'-C3'-C2'	-5.70	96.90	102.60
36	BB	49	G	N3-C4-C5	-5.70	125.75	128.60
46	BL	90	ASP	CB-CG-OD2	-5.70	113.17	118.30
52	BR	62	ARG	C-N-CA	5.70	135.94	121.70
2	AB	356	G	N9-C4-C5	-5.69	103.12	105.40
2	AB	599	A	C1'-O4'-C4'	-5.69	105.34	109.90
2	AB	1239	G	N7-C8-N9	-5.69	110.25	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1262	A	N7-C8-N9	-5.69	110.95	113.80
2	AB	1898	U	C5-C6-N1	-5.69	119.85	122.70
2	AB	1930	G	N1-C2-N2	5.69	121.33	116.20
2	AB	2460	U	O4'-C1'-N1	5.69	112.75	108.20
35	BA	451	A	O4'-C1'-N9	5.69	112.75	108.20
35	BA	1379	G	C5'-C4'-C3'	5.69	125.11	116.00
51	BQ	41	TRP	NE1-CE2-CZ2	5.69	136.66	130.40
2	AB	830	G	O5'-C5'-C4'	5.69	122.52	111.70
2	AB	881	G	N9-C1'-C2'	-5.69	105.74	112.00
2	AB	1025	G	N7-C8-N9	-5.69	110.25	113.10
2	AB	1086	A	OP1-P-OP2	5.69	128.14	119.60
2	AB	1445	G	C6-N1-C2	-5.69	121.69	125.10
2	AB	1450	G	N9-C4-C5	5.69	107.68	105.40
2	AB	2294	G	C4-C5-C6	5.69	122.22	118.80
2	AB	2298	A	C2-N3-C4	5.69	113.45	110.60
2	AB	2312	U	C4'-C3'-C2'	-5.69	96.91	102.60
2	AB	2460	U	N1-C2-N3	5.69	118.32	114.90
2	AB	2657	A	N9-C4-C5	-5.69	103.52	105.80
6	AF	176	ASP	CB-CG-OD1	-5.69	113.18	118.30
12	AL	20	ALA	CB-CA-C	5.69	118.64	110.10
35	BA	61	G	C8-N9-C4	-5.69	104.12	106.40
35	BA	213	G	C3'-C2'-C1'	5.69	106.05	101.50
35	BA	458	U	C4-C5-C6	-5.69	116.28	119.70
35	BA	574	A	N1-C6-N6	-5.69	115.19	118.60
35	BA	616	G	N3-C4-C5	-5.69	125.75	128.60
2	AB	144	A	C8-N9-C4	-5.69	103.52	105.80
2	AB	181	A	N3-C4-C5	-5.69	122.82	126.80
2	AB	401	A	N1-C2-N3	5.69	132.15	129.30
2	AB	785	G	O4'-C4'-C3'	5.69	110.65	106.10
2	AB	1418	G	N3-C4-N9	5.69	129.41	126.00
2	AB	1545	A	C5-N7-C8	5.69	106.75	103.90
2	AB	1813	G	N1-C2-N3	-5.69	120.49	123.90
2	AB	1971	U	C4'-C3'-O3'	5.69	124.38	113.00
2	AB	2054	A	N7-C8-N9	-5.69	110.95	113.80
2	AB	2468	A	N1-C6-N6	-5.69	115.19	118.60
2	AB	2472	G	N3-C4-C5	-5.69	125.75	128.60
2	AB	2660	A	C2-N3-C4	5.69	113.45	110.60
29	A2	36	VAL	CG1-CB-CG2	-5.69	101.80	110.90
35	BA	46	G	C8-N9-C4	-5.69	104.12	106.40
35	BA	215	C	N3-C4-N4	5.69	121.98	118.00
35	BA	255	G	N3-C4-C5	-5.69	125.75	128.60
35	BA	356	A	C4-C5-N7	-5.69	107.86	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	433	G	C5-N7-C8	-5.69	101.45	104.30
1	AA	108	A	C4'-C3'-C2'	5.69	108.29	102.60
1	AA	113	C	N3-C2-O2	-5.69	117.92	121.90
2	AB	1344	U	C2-N3-C4	-5.69	123.59	127.00
2	AB	1766	G	C6-N1-C2	-5.69	121.69	125.10
2	AB	1807	G	N9-C1'-C2'	-5.69	105.74	112.00
2	AB	1964	G	N3-C2-N2	5.69	123.88	119.90
2	AB	2577	A	C4-C5-N7	-5.69	107.86	110.70
30	A3	30	ASP	CB-CG-OD1	-5.69	113.18	118.30
35	BA	830	G	C6-N1-C2	-5.69	121.69	125.10
2	AB	771	G	C4-C5-C6	5.69	122.21	118.80
2	AB	785	G	P-O3'-C3'	5.69	126.53	119.70
2	AB	1293	C	C5'-C4'-O4'	5.69	115.93	109.10
2	AB	1295	C	C4'-C3'-C2'	-5.69	96.91	102.60
2	AB	2046	G	N7-C8-N9	5.69	115.94	113.10
2	AB	2296	U	N1-C2-N3	5.69	118.31	114.90
2	AB	2307	G	C6-C5-N7	-5.69	126.99	130.40
2	AB	2385	C	C1'-O4'-C4'	-5.69	105.35	109.90
2	AB	2466	C	N3-C4-C5	-5.69	119.62	121.90
2	AB	2685	G	N1-C2-N2	-5.69	111.08	116.20
35	BA	243	A	O5'-P-OP1	-5.69	100.58	105.70
35	BA	529	G	O4'-C1'-N9	5.69	112.75	108.20
35	BA	763	G	N3-C4-N9	5.69	129.41	126.00
35	BA	871	U	C6-N1-C1'	5.69	129.16	121.20
35	BA	878	A	O3'-P-O5'	-5.69	93.19	104.00
36	BB	40	C	N3-C2-O2	5.69	125.88	121.90
37	BC	25	U	C1'-O4'-C4'	-5.69	105.35	109.90
42	BH	32	PHE	CB-CG-CD2	-5.69	116.82	120.80
2	AB	584	C	C6-N1-C2	5.69	122.58	120.30
2	AB	1140	C	C4'-C3'-C2'	-5.69	96.91	102.60
2	AB	1313	U	C5-C6-N1	-5.69	119.86	122.70
2	AB	1591	A	C5-C6-N1	5.69	120.54	117.70
2	AB	2322	A	N1-C2-N3	-5.69	126.46	129.30
2	AB	2675	A	P-O3'-C3'	5.69	126.52	119.70
2	AB	2693	G	C4-C5-C6	5.69	122.21	118.80
35	BA	427	U	C5'-C4'-O4'	-5.69	102.28	109.10
35	BA	1284	C	O5'-C5'-C4'	5.69	122.50	111.70
2	AB	451	U	C5'-C4'-O4'	5.68	115.92	109.10
2	AB	515	A	N7-C8-N9	5.68	116.64	113.80
2	AB	710	U	C1'-O4'-C4'	5.68	114.45	109.90
2	AB	856	G	C4-N9-C1'	-5.68	119.11	126.50
2	AB	1443	U	N3-C4-O4	5.68	123.38	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2521	C	C2-N3-C4	5.68	122.74	119.90
2	AB	2591	C	N3-C4-N4	-5.68	114.02	118.00
2	AB	2770	G	C2-N3-C4	5.68	114.74	111.90
2	AB	2877	G	O4'-C4'-C3'	5.68	110.65	106.10
19	AS	24	TYR	CD1-CG-CD2	5.68	124.15	117.90
35	BA	179	A	N1-C6-N6	-5.68	115.19	118.60
35	BA	1086	U	C1'-O4'-C4'	5.68	114.45	109.90
35	BA	1088	G	C6-C5-N7	-5.68	126.99	130.40
35	BA	1361	G	C2-N3-C4	5.68	114.74	111.90
52	BR	71	ARG	NE-CZ-NH2	5.68	123.14	120.30
1	AA	54	G	C4-N9-C1'	-5.68	119.11	126.50
2	AB	495	G	C4-C5-N7	-5.68	108.53	110.80
2	AB	753	A	C4-C5-N7	-5.68	107.86	110.70
2	AB	815	C	C5-C4-N4	-5.68	116.22	120.20
2	AB	1270	C	O5'-P-OP1	-5.68	100.59	105.70
2	AB	1315	C	C4-C5-C6	5.68	120.24	117.40
2	AB	1362	C	O4'-C1'-N1	5.68	112.75	108.20
2	AB	1447	C	C1'-O4'-C4'	5.68	114.45	109.90
2	AB	1583	A	N3-C4-C5	-5.68	122.82	126.80
2	AB	1646	C	O4'-C1'-N1	5.68	112.75	108.20
2	AB	2157	G	C8-N9-C4	-5.68	104.13	106.40
2	AB	2877	G	N3-C4-C5	5.68	131.44	128.60
35	BA	233	C	C4'-C3'-C2'	-5.68	96.92	102.60
35	BA	335	C	N3-C2-O2	-5.68	117.92	121.90
35	BA	544	G	N7-C8-N9	-5.68	110.26	113.10
35	BA	549	C	C6-N1-C2	5.68	122.57	120.30
35	BA	701	U	O3'-P-O5'	-5.68	93.20	104.00
35	BA	928	G	N9-C4-C5	5.68	107.67	105.40
35	BA	1120	C	N1-C2-O2	5.68	122.31	118.90
2	AB	314	C	C4'-C3'-C2'	5.68	108.28	102.60
2	AB	1554	U	N1-C1'-C2'	-5.68	105.75	112.00
2	AB	2164	C	O4'-C1'-N1	5.68	112.75	108.20
2	AB	2171	A	N1-C6-N6	-5.68	115.19	118.60
2	AB	2314	A	C4-C5-C6	5.68	119.84	117.00
2	AB	2499	C	N1-C2-N3	-5.68	115.22	119.20
6	AF	183	PHE	CB-CG-CD2	-5.68	116.82	120.80
38	BD	43	G	C5-N7-C8	-5.68	101.46	104.30
2	AB	118	A	O4'-C1'-N9	5.68	112.74	108.20
2	AB	188	G	N3-C4-N9	-5.68	122.59	126.00
2	AB	363	G	N9-C4-C5	5.68	107.67	105.40
2	AB	1090	A	N3-C4-N9	5.68	131.94	127.40
2	AB	1146	C	C5-C4-N4	5.68	124.18	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1579	A	C6-N1-C2	-5.68	115.19	118.60
2	AB	1637	A	C2-N3-C4	-5.68	107.76	110.60
2	AB	1769	U	C5'-C4'-O4'	-5.68	102.28	109.10
2	AB	1966	A	O4'-C4'-C3'	5.68	110.64	106.10
2	AB	2152	G	C6-N1-C2	-5.68	121.69	125.10
35	BA	188	C	O4'-C1'-C2'	-5.68	100.12	105.80
35	BA	294	U	C2-N1-C1'	-5.68	110.89	117.70
35	BA	416	G	C4-C5-C6	5.68	122.21	118.80
35	BA	1291	U	C2-N3-C4	-5.68	123.59	127.00
35	BA	1408	A	C8-N9-C4	-5.68	103.53	105.80
40	BF	197	VAL	CG1-CB-CG2	-5.68	101.81	110.90
45	BK	127	TYR	CA-CB-CG	5.68	124.19	113.40
49	BO	88	ASP	CB-CG-OD2	-5.68	113.19	118.30
2	AB	54	G	C5'-C4'-C3'	-5.68	106.92	116.00
2	AB	516	C	C2-N1-C1'	-5.68	112.56	118.80
2	AB	1074	G	O4'-C1'-N9	5.68	112.74	108.20
2	AB	1784	A	C4-C5-N7	5.68	113.54	110.70
35	BA	1459	G	N3-C4-N9	5.68	129.41	126.00
1	AA	21	G	C6-N1-C2	-5.68	121.69	125.10
1	AA	83	G	C6-N1-C2	-5.68	121.69	125.10
2	AB	890	C	C1'-O4'-C4'	5.68	114.44	109.90
2	AB	1033	U	N1-C2-O2	5.68	126.77	122.80
2	AB	1275	A	N3-C4-C5	-5.68	122.83	126.80
2	AB	1390	U	N1-C2-O2	-5.68	118.83	122.80
2	AB	1913	A	N7-C8-N9	5.68	116.64	113.80
2	AB	2345	G	N1-C6-O6	-5.68	116.49	119.90
2	AB	2562	U	C6-N1-C2	-5.68	117.59	121.00
2	AB	2646	C	N1-C2-N3	-5.68	115.23	119.20
35	BA	247	G	C2-N3-C4	5.68	114.74	111.90
35	BA	614	C	N1-C1'-C2'	-5.68	105.76	112.00
35	BA	1094	G	C6-N1-C2	-5.68	121.69	125.10
35	BA	1409	C	C5-C6-N1	5.68	123.84	121.00
35	BA	1525	G	C5-N7-C8	5.68	107.14	104.30
36	BB	4	G	C5-N7-C8	5.68	107.14	104.30
2	AB	300	A	C6-N1-C2	5.67	122.00	118.60
2	AB	317	G	C6-C5-N7	-5.67	127.00	130.40
2	AB	340	A	C4-C5-C6	-5.67	114.16	117.00
2	AB	424	G	N1-C2-N3	-5.67	120.50	123.90
2	AB	452	G	C8-N9-C4	-5.67	104.13	106.40
2	AB	561	G	N3-C4-C5	5.67	131.44	128.60
2	AB	1084	A	C5'-C4'-O4'	5.67	115.91	109.10
2	AB	1148	U	C4-C5-C6	5.67	123.11	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1149	G	C5-N7-C8	-5.67	101.46	104.30
2	AB	1333	G	C4-C5-N7	5.67	113.07	110.80
2	AB	1407	G	N9-C4-C5	5.67	107.67	105.40
2	AB	1430	G	C8-N9-C4	5.67	108.67	106.40
2	AB	1601	G	N1-C2-N2	-5.67	111.09	116.20
2	AB	2425	A	O4'-C4'-C3'	-5.67	98.33	104.00
2	AB	2560	A	N9-C4-C5	-5.67	103.53	105.80
2	AB	2679	A	N7-C8-N9	5.67	116.64	113.80
23	AW	36	GLU	CA-CB-CG	5.67	125.88	113.40
35	BA	14	U	C3'-C2'-C1'	5.67	106.04	101.50
35	BA	222	C	N3-C4-C5	5.67	124.17	121.90
35	BA	463	U	N3-C4-O4	5.67	123.37	119.40
2	AB	414	C	C5-C6-N1	5.67	123.84	121.00
2	AB	520	G	C4-C5-N7	-5.67	108.53	110.80
2	AB	861	A	C5'-C4'-C3'	-5.67	106.92	116.00
2	AB	1873	G	C1'-O4'-C4'	-5.67	105.36	109.90
2	AB	1891	G	N1-C2-N3	-5.67	120.50	123.90
2	AB	2078	C	N3-C4-C5	5.67	124.17	121.90
35	BA	506	G	O4'-C1'-N9	5.67	112.74	108.20
35	BA	821	G	N7-C8-N9	5.67	115.94	113.10
2	AB	426	C	O4'-C1'-C2'	5.67	112.70	107.60
2	AB	440	C	C4-C5-C6	5.67	120.24	117.40
2	AB	637	A	C6-C5-N7	5.67	136.27	132.30
2	AB	709	U	N3-C4-O4	5.67	123.37	119.40
2	AB	1423	G	C2-N3-C4	5.67	114.74	111.90
2	AB	1756	G	N3-C4-C5	-5.67	125.76	128.60
2	AB	2129	C	N1-C2-O2	5.67	122.30	118.90
2	AB	2310	C	C1'-O4'-C4'	5.67	114.44	109.90
2	AB	2382	G	N3-C4-C5	-5.67	125.76	128.60
2	AB	2551	C	C5-C4-N4	-5.67	116.23	120.20
2	AB	2578	G	P-O5'-C5'	5.67	129.97	120.90
17	AQ	103	VAL	CA-CB-CG1	5.67	119.41	110.90
35	BA	639	G	C5'-C4'-O4'	5.67	115.91	109.10
2	AB	699	A	N1-C6-N6	5.67	122.00	118.60
2	AB	941	A	C5'-C4'-O4'	5.67	115.90	109.10
2	AB	1159	U	C3'-C2'-C1'	5.67	106.04	101.50
2	AB	1906	G	C5-N7-C8	-5.67	101.47	104.30
2	AB	2765	A	N1-C2-N3	-5.67	126.47	129.30
2	AB	2858	C	N1-C2-O2	5.67	122.30	118.90
35	BA	431	A	O4'-C1'-C2'	5.67	112.70	107.60
35	BA	642	A	N3-C4-C5	-5.67	122.83	126.80
35	BA	1062	U	O5'-C5'-C4'	-5.67	100.93	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	36	A	N1-C2-N3	-5.67	126.47	129.30
2	AB	56	A	C8-N9-C4	-5.67	103.53	105.80
2	AB	107	G	O4'-C1'-N9	5.67	112.73	108.20
2	AB	439	A	C8-N9-C4	-5.67	103.53	105.80
2	AB	1098	A	N9-C4-C5	-5.67	103.53	105.80
2	AB	1242	U	N1-C1'-C2'	-5.67	105.77	112.00
2	AB	1682	G	C5'-C4'-O4'	5.67	115.90	109.10
2	AB	1774	C	N1-C1'-C2'	5.67	121.37	114.00
2	AB	2363	G	N9-C4-C5	-5.67	103.13	105.40
35	BA	751	U	O3'-P-O5'	-5.67	93.23	104.00
35	BA	905	U	N3-C2-O2	-5.67	118.23	122.20
37	BC	34	U	N1-C2-O2	5.67	126.77	122.80
49	BO	103	CYS	CA-CB-SG	-5.67	103.80	114.00
2	AB	24	G	C8-N9-C1'	5.67	134.37	127.00
2	AB	872	U	C2-N3-C4	-5.67	123.60	127.00
2	AB	1130	U	P-O3'-C3'	5.67	126.50	119.70
2	AB	1406	U	C5-C6-N1	5.67	125.53	122.70
2	AB	1465	G	C8-N9-C1'	5.67	134.37	127.00
2	AB	1587	G	N1-C2-N3	-5.67	120.50	123.90
2	AB	1675	C	P-O3'-C3'	5.67	126.50	119.70
2	AB	1874	C	C5-C4-N4	5.67	124.17	120.20
2	AB	2410	G	N7-C8-N9	5.67	115.93	113.10
2	AB	2447	G	N3-C4-C5	-5.67	125.77	128.60
35	BA	381	C	C6-N1-C2	5.67	122.57	120.30
35	BA	542	G	N3-C4-C5	-5.67	125.77	128.60
35	BA	691	G	N3-C4-C5	-5.67	125.77	128.60
35	BA	705	G	N1-C6-O6	-5.67	116.50	119.90
35	BA	951	G	C6-N1-C2	5.67	128.50	125.10
36	BB	43	G	C5-N7-C8	-5.67	101.47	104.30
2	AB	990	A	O4'-C1'-N9	5.67	112.73	108.20
2	AB	1773	A	N1-C2-N3	-5.67	126.47	129.30
2	AB	2244	U	P-O3'-C3'	5.67	126.50	119.70
2	AB	2767	C	C4'-C3'-C2'	-5.67	96.94	102.60
2	AB	2789	C	C2-N3-C4	-5.67	117.07	119.90
2	AB	2871	U	C3'-C2'-C1'	5.67	106.03	101.50
13	AM	108	ARG	CD-NE-CZ	5.67	131.53	123.60
23	AW	1	ALA	O-C-N	-5.67	113.64	122.70
35	BA	72	A	C2-N3-C4	5.67	113.43	110.60
35	BA	161	A	N3-C4-N9	-5.67	122.87	127.40
35	BA	282	A	N3-C4-C5	-5.67	122.83	126.80
35	BA	1309	G	N7-C8-N9	5.67	115.93	113.10
37	BC	45	G	N1-C2-N2	5.67	121.30	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	243	U	C6-N1-C2	-5.66	117.60	121.00
2	AB	535	G	N9-C1'-C2'	-5.66	105.77	112.00
2	AB	1604	C	C5-C4-N4	-5.66	116.24	120.20
35	BA	609	A	O4'-C1'-N9	5.66	112.73	108.20
35	BA	628	G	N3-C4-N9	-5.66	122.60	126.00
35	BA	885	G	N3-C2-N2	-5.66	115.94	119.90
35	BA	1191	A	C1'-O4'-C4'	-5.66	105.37	109.90
35	BA	1304	G	N7-C8-N9	5.66	115.93	113.10
36	BB	57	G	C1'-O4'-C4'	5.66	114.43	109.90
37	BC	27	A	C6-N1-C2	5.66	122.00	118.60
2	AB	176	A	N1-C2-N3	-5.66	126.47	129.30
2	AB	188	G	P-O3'-C3'	5.66	126.49	119.70
2	AB	775	G	O4'-C4'-C3'	5.66	110.63	106.10
2	AB	796	C	C2-N3-C4	5.66	122.73	119.90
2	AB	816	C	C5-C4-N4	-5.66	116.24	120.20
2	AB	891	G	C5'-C4'-O4'	5.66	115.89	109.10
2	AB	933	A	C5-C6-N6	5.66	128.23	123.70
2	AB	1015	U	N1-C1'-C2'	-5.66	105.77	112.00
2	AB	1867	G	N1-C6-O6	5.66	123.30	119.90
2	AB	2655	G	C1'-O4'-C4'	-5.66	105.37	109.90
2	AB	2706	A	C4-C5-C6	-5.66	114.17	117.00
35	BA	112	G	N1-C2-N2	-5.66	111.11	116.20
35	BA	699	C	N1-C2-N3	-5.66	115.24	119.20
35	BA	1338	G	C4-C5-N7	5.66	113.06	110.80
37	BC	13	A	N3-C4-C5	-5.66	122.84	126.80
2	AB	123	G	C4-C5-C6	5.66	122.20	118.80
2	AB	258	G	C2-N3-C4	5.66	114.73	111.90
2	AB	1620	G	P-O3'-C3'	5.66	126.49	119.70
2	AB	2101	A	C5-C6-N1	5.66	120.53	117.70
2	AB	2312	U	N1-C2-N3	5.66	118.30	114.90
2	AB	2364	C	C3'-C2'-C1'	5.66	106.03	101.50
2	AB	2693	G	O4'-C1'-N9	5.66	112.73	108.20
13	AM	71	ARG	CD-NE-CZ	5.66	131.52	123.60
35	BA	442	G	C3'-C2'-C1'	5.66	106.03	101.50
35	BA	1042	A	C2-N3-C4	5.66	113.43	110.60
35	BA	1353	G	C4-C5-C6	5.66	122.20	118.80
2	AB	74	A	N9-C4-C5	5.66	108.06	105.80
2	AB	277	G	N7-C8-N9	5.66	115.93	113.10
2	AB	313	G	C2-N3-C4	5.66	114.73	111.90
2	AB	1318	U	O4'-C1'-C2'	5.66	112.69	107.60
2	AB	1560	G	N1-C2-N3	-5.66	120.50	123.90
2	AB	1639	C	N3-C4-C5	-5.66	119.64	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1876	A	C5-C6-N1	5.66	120.53	117.70
2	AB	2168	G	N3-C4-C5	-5.66	125.77	128.60
2	AB	2249	U	N1-C2-O2	5.66	126.76	122.80
2	AB	2622	U	N3-C4-O4	5.66	123.36	119.40
2	AB	2708	G	N9-C1'-C2'	-5.66	105.78	112.00
35	BA	259	G	C5-C6-O6	5.66	132.00	128.60
35	BA	504	C	C3'-C2'-C1'	5.66	106.03	101.50
35	BA	1015	G	C2-N3-C4	5.66	114.73	111.90
35	BA	1123	U	N3-C4-C5	-5.66	111.20	114.60
35	BA	1159	U	C5'-C4'-O4'	5.66	115.89	109.10
46	BL	115	VAL	CA-CB-CG2	5.66	119.39	110.90
2	AB	220	G	C6-C5-N7	-5.66	127.01	130.40
2	AB	771	G	C4-C5-N7	-5.66	108.54	110.80
2	AB	783	A	C5'-C4'-O4'	5.66	115.89	109.10
2	AB	1275	A	N3-C4-N9	5.66	131.93	127.40
2	AB	1405	U	O5'-P-OP2	-5.66	100.61	105.70
2	AB	1668	A	C5-N7-C8	5.66	106.73	103.90
2	AB	1948	G	C5-N7-C8	5.66	107.13	104.30
2	AB	2549	G	C5'-C4'-O4'	5.66	115.89	109.10
35	BA	299	G	P-O3'-C3'	5.66	126.49	119.70
35	BA	351	G	C5-N7-C8	-5.66	101.47	104.30
44	BJ	128	GLU	OE1-CD-OE2	5.66	130.09	123.30
1	AA	17	C	N1-C2-O2	5.66	122.29	118.90
2	AB	510	C	C1'-O4'-C4'	5.66	114.42	109.90
2	AB	800	A	C1'-O4'-C4'	5.66	114.42	109.90
2	AB	1209	U	C5-C6-N1	5.66	125.53	122.70
2	AB	1376	C	N1-C2-N3	-5.66	115.24	119.20
2	AB	1434	A	P-O3'-C3'	5.66	126.49	119.70
2	AB	1550	C	C4'-C3'-C2'	-5.66	96.94	102.60
2	AB	1731	G	O4'-C1'-N9	5.66	112.72	108.20
2	AB	1904	G	N7-C8-N9	-5.66	110.27	113.10
2	AB	2106	U	C2'-C3'-O3'	5.66	122.75	113.70
2	AB	2116	G	O4'-C4'-C3'	5.66	110.62	106.10
2	AB	2253	G	N3-C2-N2	5.66	123.86	119.90
2	AB	2303	G	O4'-C1'-N9	5.66	112.72	108.20
2	AB	2513	A	OP2-P-O3'	5.66	117.64	105.20
2	AB	2784	U	N1-C2-N3	-5.66	111.51	114.90
35	BA	81	A	N3-C4-C5	-5.66	122.84	126.80
35	BA	234	C	C6-N1-C2	-5.66	118.04	120.30
35	BA	246	A	C6-C5-N7	5.66	136.26	132.30
35	BA	318	G	C5-N7-C8	-5.66	101.47	104.30
35	BA	996	A	C6-C5-N7	5.66	136.26	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	715	A	O4'-C4'-C3'	5.65	110.62	106.10
2	AB	729	G	C5-C6-N1	5.65	114.33	111.50
2	AB	1236	G	C5-N7-C8	-5.65	101.47	104.30
2	AB	2390	U	N1-C1'-C2'	-5.65	105.78	112.00
35	BA	473	U	C5'-C4'-O4'	5.65	115.88	109.10
35	BA	718	A	C4-C5-C6	-5.65	114.17	117.00
35	BA	773	G	N3-C2-N2	-5.65	115.94	119.90
35	BA	1152	A	C5'-C4'-O4'	5.65	115.89	109.10
35	BA	1283	U	C5-C6-N1	5.65	125.53	122.70
38	BD	65	G	N9-C4-C5	5.65	107.66	105.40
2	AB	1145	C	C4-C5-C6	5.65	120.23	117.40
2	AB	1533	C	N1-C2-O2	5.65	122.29	118.90
2	AB	1756	G	C3'-C2'-C1'	5.65	106.02	101.50
2	AB	2484	G	O4'-C1'-N9	5.65	112.72	108.20
2	AB	2887	A	N7-C8-N9	5.65	116.63	113.80
35	BA	52	C	N3-C4-N4	5.65	121.96	118.00
35	BA	306	A	C5-C6-N1	5.65	120.53	117.70
35	BA	1086	U	C2-N3-C4	-5.65	123.61	127.00
35	BA	1501	C	C5-C4-N4	-5.65	116.24	120.20
1	AA	12	C	C5-C4-N4	5.65	124.16	120.20
1	AA	46	A	N7-C8-N9	5.65	116.63	113.80
2	AB	361	G	C2-N3-C4	-5.65	109.07	111.90
2	AB	1204	A	P-O3'-C3'	5.65	126.48	119.70
2	AB	1540	G	N1-C6-O6	-5.65	116.51	119.90
2	AB	1613	G	P-O3'-C3'	5.65	126.48	119.70
2	AB	1621	U	C1'-O4'-C4'	-5.65	105.38	109.90
2	AB	2868	A	O4'-C4'-C3'	5.65	110.62	106.10
35	BA	467	U	N1-C2-O2	-5.65	118.84	122.80
35	BA	665	A	N7-C8-N9	5.65	116.62	113.80
35	BA	992	U	N3-C4-O4	5.65	123.36	119.40
35	BA	1219	A	C4'-C3'-C2'	-5.65	96.95	102.60
36	BB	9	A	C5'-C4'-O4'	5.65	115.88	109.10
36	BB	24	G	N3-C4-C5	-5.65	125.78	128.60
52	BR	52	ARG	CD-NE-CZ	5.65	131.51	123.60
2	AB	355	U	N1-C2-O2	5.65	126.75	122.80
2	AB	721	A	N7-C8-N9	5.65	116.62	113.80
2	AB	2329	U	C5'-C4'-O4'	5.65	115.88	109.10
17	AQ	99	TYR	CG-CD2-CE2	5.65	125.82	121.30
35	BA	217	C	C3'-C2'-C1'	5.65	106.02	101.50
35	BA	267	C	N3-C4-N4	5.65	121.95	118.00
35	BA	694	A	N7-C8-N9	-5.65	110.98	113.80
35	BA	1235	U	O4'-C4'-C3'	-5.65	98.35	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1292	G	C5-C6-N1	5.65	114.33	111.50
41	BG	185	PRO	N-CD-CG	5.65	111.67	103.20
2	AB	1105	U	C2-N3-C4	-5.65	123.61	127.00
2	AB	1110	G	P-O3'-C3'	5.65	126.48	119.70
2	AB	1385	A	N9-C1'-C2'	5.65	121.34	114.00
2	AB	1574	C	O4'-C1'-N1	-5.65	103.68	108.20
2	AB	1966	A	C1'-O4'-C4'	-5.65	105.38	109.90
2	AB	2376	A	C2-N3-C4	5.65	113.42	110.60
2	AB	2460	U	C5'-C4'-C3'	-5.65	106.96	116.00
7	AG	6	TYR	CB-CG-CD2	-5.65	117.61	121.00
35	BA	41	G	C6-N1-C2	-5.65	121.71	125.10
35	BA	113	G	C6-C5-N7	-5.65	127.01	130.40
35	BA	308	C	C2-N3-C4	-5.65	117.08	119.90
35	BA	557	G	C5-C6-N1	5.65	114.32	111.50
35	BA	732	C	C4'-C3'-C2'	-5.65	96.95	102.60
35	BA	732	C	N1-C2-N3	-5.65	115.25	119.20
35	BA	1131	G	N9-C4-C5	5.65	107.66	105.40
35	BA	1325	C	N3-C4-N4	5.65	121.95	118.00
36	BB	48	U	N3-C2-O2	-5.65	118.25	122.20
44	BJ	17	PHE	CB-CG-CD2	5.65	124.75	120.80
1	AA	67	G	C2-N3-C4	-5.65	109.08	111.90
2	AB	5	A	C4'-C3'-C2'	-5.65	96.95	102.60
2	AB	321	U	C5'-C4'-C3'	5.65	125.03	116.00
2	AB	344	A	C5-N7-C8	5.65	106.72	103.90
2	AB	604	G	C5'-C4'-C3'	5.65	125.03	116.00
2	AB	883	G	N3-C4-N9	-5.65	122.61	126.00
2	AB	1044	C	C4'-C3'-C2'	-5.65	96.95	102.60
2	AB	1053	C	N3-C4-N4	-5.65	114.05	118.00
2	AB	1197	G	N9-C4-C5	-5.65	103.14	105.40
2	AB	1878	G	C5-C6-N1	-5.65	108.68	111.50
2	AB	1889	A	O4'-C1'-N9	5.65	112.72	108.20
2	AB	1952	A	N1-C6-N6	5.65	121.99	118.60
2	AB	2249	U	C2-N3-C4	-5.65	123.61	127.00
2	AB	2752	C	C1'-O4'-C4'	-5.65	105.38	109.90
2	AB	2837	A	N7-C8-N9	-5.65	110.98	113.80
35	BA	248	C	C4-C5-C6	-5.65	114.58	117.40
35	BA	381	C	N3-C4-N4	5.65	121.95	118.00
35	BA	1226	C	C3'-C2'-C1'	5.65	106.02	101.50
2	AB	12	U	C4-C5-C6	5.64	123.09	119.70
2	AB	197	A	N3-C4-C5	5.64	130.75	126.80
2	AB	1166	G	N3-C2-N2	5.64	123.85	119.90
2	AB	1770	G	C2-N3-C4	5.64	114.72	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1776	G	N3-C4-N9	5.64	129.39	126.00
2	AB	2071	A	N3-C4-N9	5.64	131.92	127.40
2	AB	2083	G	C5'-C4'-C3'	-5.64	106.97	116.00
2	AB	2480	C	N3-C4-C5	5.64	124.16	121.90
2	AB	2497	A	C5-N7-C8	-5.64	101.08	103.90
2	AB	2781	A	C4-C5-C6	-5.64	114.18	117.00
7	AG	122	ASP	CB-CG-OD2	-5.64	113.22	118.30
15	AO	89	VAL	CA-CB-CG1	-5.64	102.43	110.90
18	AR	21	PRO	N-CA-CB	5.64	110.07	103.30
35	BA	400	C	O3'-P-O5'	-5.64	93.27	104.00
35	BA	550	G	C8-N9-C4	-5.64	104.14	106.40
35	BA	767	A	N7-C8-N9	-5.64	110.98	113.80
35	BA	920	U	O4'-C1'-N1	5.64	112.72	108.20
35	BA	942	G	C6-N1-C2	-5.64	121.71	125.10
37	BC	23	C	O4'-C4'-C3'	-5.64	98.36	104.00
38	BD	16	C	N3-C2-O2	5.64	125.85	121.90
49	BO	30	ARG	NH1-CZ-NH2	5.64	125.61	119.40
2	AB	116	C	C5-C6-N1	-5.64	118.18	121.00
2	AB	182	A	C5-C6-N1	-5.64	114.88	117.70
2	AB	538	A	C2-N3-C4	5.64	113.42	110.60
2	AB	604	G	C5-C6-N1	5.64	114.32	111.50
2	AB	726	G	C5'-C4'-O4'	5.64	115.87	109.10
2	AB	1182	G	C2-N3-C4	5.64	114.72	111.90
2	AB	1349	C	C1'-O4'-C4'	-5.64	105.39	109.90
2	AB	1417	C	N3-C4-C5	-5.64	119.64	121.90
2	AB	1667	G	C4'-C3'-C2'	-5.64	96.96	102.60
2	AB	1719	G	C5'-C4'-O4'	5.64	115.87	109.10
2	AB	1720	U	N1-C2-O2	-5.64	118.85	122.80
2	AB	2148	G	C4-C5-C6	5.64	122.19	118.80
2	AB	2267	A	C5-N7-C8	-5.64	101.08	103.90
2	AB	2751	G	C5-N7-C8	5.64	107.12	104.30
35	BA	81	A	O4'-C4'-C3'	5.64	110.61	106.10
35	BA	647	C	O4'-C1'-C2'	-5.64	100.16	105.80
35	BA	696	A	C4-C5-C6	-5.64	114.18	117.00
35	BA	1273	C	N1-C2-O2	5.64	122.28	118.90
35	BA	1378	C	N3-C2-O2	-5.64	117.95	121.90
35	BA	1378	C	C6-N1-C2	-5.64	118.04	120.30
36	BB	29	G	C4-C5-C6	5.64	122.19	118.80
36	BB	74	C	C2-N3-C4	5.64	122.72	119.90
2	AB	508	A	O4'-C4'-C3'	5.64	110.61	106.10
2	AB	1906	G	C1'-O4'-C4'	5.64	114.41	109.90
2	AB	2762	C	N1-C1'-C2'	-5.64	105.79	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	223	A	C5-C6-N6	5.64	128.21	123.70
35	BA	534	U	O4'-C1'-N1	5.64	112.71	108.20
35	BA	549	C	N1-C2-N3	-5.64	115.25	119.20
1	AA	60	C	C3'-C2'-C1'	5.64	106.01	101.50
2	AB	24	G	C5-N7-C8	-5.64	101.48	104.30
2	AB	27	G	N1-C2-N3	-5.64	120.52	123.90
2	AB	359	G	O4'-C4'-C3'	-5.64	98.36	104.00
2	AB	690	G	N3-C4-C5	-5.64	125.78	128.60
2	AB	691	C	C1'-O4'-C4'	5.64	114.41	109.90
2	AB	701	G	C4-C5-C6	5.64	122.18	118.80
2	AB	1411	U	N3-C2-O2	-5.64	118.25	122.20
2	AB	1816	C	C2-N3-C4	5.64	122.72	119.90
2	AB	1885	A	C5-N7-C8	5.64	106.72	103.90
2	AB	2085	U	O4'-C4'-C3'	-5.64	98.36	104.00
2	AB	2163	A	N1-C6-N6	5.64	121.98	118.60
2	AB	2280	G	C5-N7-C8	-5.64	101.48	104.30
2	AB	2294	G	C4-C5-N7	-5.64	108.54	110.80
2	AB	2306	C	C2-N3-C4	5.64	122.72	119.90
2	AB	2385	C	C5-C4-N4	-5.64	116.25	120.20
2	AB	2800	A	P-O5'-C5'	5.64	129.92	120.90
21	AU	45	VAL	CA-CB-CG2	5.64	119.36	110.90
26	AZ	10	ARG	NE-CZ-NH2	-5.64	117.48	120.30
26	AZ	32	LEU	CB-CG-CD1	5.64	120.59	111.00
35	BA	522	C	N3-C4-N4	-5.64	114.05	118.00
35	BA	579	A	O4'-C4'-C3'	5.64	110.61	106.10
35	BA	608	A	C4-C5-N7	-5.64	107.88	110.70
35	BA	715	A	N3-C4-C5	5.64	130.75	126.80
35	BA	1435	G	C8-N9-C4	-5.64	104.14	106.40
2	AB	1375	U	N3-C2-O2	-5.64	118.25	122.20
2	AB	1493	C	O4'-C1'-C2'	-5.64	100.16	105.80
2	AB	1737	G	C5'-C4'-O4'	5.64	115.87	109.10
2	AB	2103	C	N3-C4-N4	5.64	121.95	118.00
2	AB	2528	U	C4'-C3'-C2'	-5.64	96.96	102.60
2	AB	2841	C	C5'-C4'-C3'	-5.64	106.98	116.00
35	BA	229	U	C5-C6-N1	-5.64	119.88	122.70
35	BA	580	C	N3-C2-O2	-5.64	117.95	121.90
2	AB	189	G	O4'-C1'-C2'	-5.64	100.16	105.80
2	AB	199	A	C5-C6-N1	-5.64	114.88	117.70
2	AB	336	C	C2-N3-C4	5.64	122.72	119.90
2	AB	677	A	C5-C6-N1	5.64	120.52	117.70
2	AB	1882	U	N1-C2-O2	-5.64	118.85	122.80
2	AB	2258	C	C5-C4-N4	-5.64	116.25	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2433	A	C6-N1-C2	5.64	121.98	118.60
2	AB	2607	G	C8-N9-C4	-5.64	104.14	106.40
35	BA	105	G	C2-N3-C4	5.64	114.72	111.90
35	BA	1221	G	N3-C4-N9	5.64	129.38	126.00
35	BA	1540	U	N3-C4-C5	-5.64	111.22	114.60
38	BD	50	G	N3-C4-C5	-5.64	125.78	128.60
2	AB	29	U	C3'-C2'-C1'	-5.63	96.99	101.50
2	AB	114	U	C4-C5-C6	5.63	123.08	119.70
2	AB	481	G	N7-C8-N9	-5.63	110.28	113.10
2	AB	946	C	C5'-C4'-O4'	5.63	115.86	109.10
2	AB	1108	U	N3-C4-C5	-5.63	111.22	114.60
2	AB	1142	A	C1'-O4'-C4'	5.63	114.41	109.90
2	AB	1172	C	O5'-P-OP1	-5.63	100.63	105.70
2	AB	1222	U	N3-C2-O2	-5.63	118.26	122.20
2	AB	1409	U	O4'-C1'-N1	5.63	112.71	108.20
2	AB	1461	C	C3'-C2'-C1'	5.63	106.01	101.50
2	AB	1548	A	C5-C6-N6	5.63	128.21	123.70
2	AB	1716	U	C5-C6-N1	-5.63	119.88	122.70
2	AB	2027	G	N1-C2-N2	5.63	121.27	116.20
2	AB	2282	G	C6-N1-C2	-5.63	121.72	125.10
2	AB	2345	G	C2-N3-C4	-5.63	109.08	111.90
2	AB	2496	C	C3'-C2'-C1'	5.63	106.01	101.50
2	AB	2522	U	C6-N1-C2	-5.63	117.62	121.00
2	AB	2842	G	C4-C5-N7	5.63	113.05	110.80
4	AD	102	TYR	CG-CD1-CE1	-5.63	116.79	121.30
35	BA	499	A	P-O3'-C3'	5.63	126.46	119.70
35	BA	605	U	C4-C5-C6	5.63	123.08	119.70
35	BA	632	U	C4-C5-C6	5.63	123.08	119.70
35	BA	799	G	C8-N9-C1'	5.63	134.32	127.00
35	BA	844	G	P-O3'-C3'	5.63	126.46	119.70
35	BA	1079	G	C3'-C2'-C1'	5.63	106.01	101.50
35	BA	1529	G	N7-C8-N9	5.63	115.92	113.10
2	AB	418	C	C3'-C2'-C1'	5.63	106.01	101.50
2	AB	1906	G	N3-C4-C5	-5.63	125.78	128.60
7	AG	44	ALA	C-N-CA	5.63	135.78	121.70
35	BA	211	G	C6-N1-C2	-5.63	121.72	125.10
35	BA	1175	G	OP2-P-O3'	5.63	117.59	105.20
35	BA	1422	G	C4'-C3'-C2'	-5.63	96.97	102.60
36	BB	19	G	N9-C4-C5	-5.63	103.15	105.40
2	AB	263	G	N1-C2-N2	5.63	121.27	116.20
2	AB	266	G	C4'-C3'-C2'	-5.63	96.97	102.60
2	AB	417	C	N1-C2-O2	5.63	122.28	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	463	G	C2-N3-C4	5.63	114.72	111.90
2	AB	625	G	C6-N1-C2	-5.63	121.72	125.10
2	AB	979	A	C3'-C2'-C1'	5.63	106.00	101.50
2	AB	1088	A	C4'-C3'-C2'	-5.63	96.97	102.60
2	AB	1168	G	N1-C2-N3	-5.63	120.52	123.90
2	AB	1213	A	C4'-C3'-C2'	-5.63	96.97	102.60
2	AB	1867	G	C5-N7-C8	5.63	107.11	104.30
2	AB	1907	G	C5-C6-O6	5.63	131.98	128.60
2	AB	2123	G	C4'-C3'-O3'	5.63	124.26	113.00
2	AB	2579	C	N3-C4-C5	-5.63	119.65	121.90
2	AB	2591	C	N1-C1'-C2'	-5.63	105.81	112.00
2	AB	2664	G	N1-C6-O6	-5.63	116.52	119.90
35	BA	183	C	P-O3'-C3'	5.63	126.46	119.70
35	BA	304	U	N3-C2-O2	-5.63	118.26	122.20
35	BA	458	U	C3'-C2'-C1'	5.63	106.01	101.50
2	AB	467	G	N7-C8-N9	5.63	115.92	113.10
2	AB	562	U	C6-N1-C2	5.63	124.38	121.00
2	AB	818	G	N3-C2-N2	5.63	123.84	119.90
2	AB	1404	C	N3-C2-O2	-5.63	117.96	121.90
2	AB	1552	A	N1-C2-N3	-5.63	126.48	129.30
35	BA	879	C	N3-C4-N4	5.63	121.94	118.00
35	BA	1530	G	N9-C4-C5	5.63	107.65	105.40
1	AA	66	A	N9-C4-C5	5.63	108.05	105.80
2	AB	557	C	N1-C2-O2	5.63	122.28	118.90
2	AB	579	G	N9-C4-C5	-5.63	103.15	105.40
2	AB	641	U	C3'-C2'-C1'	5.63	106.00	101.50
2	AB	643	A	N1-C6-N6	5.63	121.98	118.60
2	AB	949	G	N1-C2-N2	-5.63	111.14	116.20
2	AB	1593	A	C6-C5-N7	5.63	136.24	132.30
2	AB	1709	U	C4-C5-C6	5.63	123.08	119.70
2	AB	1902	C	C2-N3-C4	-5.63	117.09	119.90
2	AB	2227	A	C6-N1-C2	-5.63	115.22	118.60
2	AB	2266	A	C3'-C2'-C1'	-5.63	97.00	101.50
2	AB	2380	C	C6-N1-C1'	5.63	127.55	120.80
2	AB	2760	C	C4-C5-C6	-5.63	114.58	117.40
35	BA	114	U	C4-C5-C6	5.63	123.08	119.70
35	BA	177	G	N1-C2-N3	5.63	127.28	123.90
35	BA	304	U	O4'-C1'-C2'	-5.63	100.17	105.80
35	BA	765	G	N3-C4-C5	-5.63	125.79	128.60
35	BA	1043	G	C5'-C4'-O4'	5.63	115.86	109.10
35	BA	1184	G	C2-N3-C4	5.63	114.71	111.90
35	BA	1266	G	C5-N7-C8	-5.63	101.48	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1500	A	C5-N7-C8	-5.63	101.09	103.90
36	BB	38	A	N9-C4-C5	5.63	108.05	105.80
38	BD	49	C	C4'-C3'-C2'	-5.63	96.97	102.60
2	AB	1101	U	C2-N3-C4	-5.63	123.62	127.00
2	AB	1722	A	N9-C4-C5	5.63	108.05	105.80
2	AB	1738	G	N9-C4-C5	5.63	107.65	105.40
2	AB	1788	C	C3'-C2'-C1'	-5.63	97.00	101.50
2	AB	1898	U	P-O3'-C3'	5.63	126.45	119.70
2	AB	2403	C	O4'-C1'-N1	5.63	112.70	108.20
2	AB	2720	U	C5'-C4'-O4'	5.63	115.85	109.10
11	AK	33	ASN	O-C-N	5.63	131.70	122.70
35	BA	131	A	C4-C5-C6	-5.63	114.19	117.00
35	BA	202	G	C8-N9-C1'	5.63	134.31	127.00
35	BA	347	G	C5-N7-C8	-5.63	101.49	104.30
35	BA	524	G	C5'-C4'-C3'	-5.63	107.00	116.00
35	BA	1253	G	C4-C5-C6	5.63	122.18	118.80
35	BA	1256	A	C6-C5-N7	-5.63	128.36	132.30
36	BB	50	G	C3'-C2'-C1'	-5.63	97.00	101.50
36	BB	56	C	C6-N1-C2	-5.63	118.05	120.30
2	AB	1883	U	N1-C2-N3	5.62	118.28	114.90
2	AB	2536	G	N3-C4-C5	-5.62	125.79	128.60
2	AB	2616	C	C2-N3-C4	-5.62	117.09	119.90
35	BA	509	A	C1'-O4'-C4'	-5.62	105.40	109.90
35	BA	1298	U	N3-C2-O2	-5.62	118.26	122.20
35	BA	1494	G	O4'-C1'-N9	5.62	112.70	108.20
50	BP	89	ARG	NH1-CZ-NH2	-5.62	113.21	119.40
2	AB	81	G	C5-C6-O6	-5.62	125.23	128.60
2	AB	156	A	N7-C8-N9	5.62	116.61	113.80
2	AB	487	C	C2-N3-C4	5.62	122.71	119.90
2	AB	708	G	C5-N7-C8	-5.62	101.49	104.30
2	AB	718	A	C1'-O4'-C4'	-5.62	105.40	109.90
2	AB	877	A	C5-C6-N6	5.62	128.20	123.70
2	AB	1317	G	C4-C5-N7	-5.62	108.55	110.80
2	AB	1410	G	N7-C8-N9	5.62	115.91	113.10
2	AB	1511	G	N7-C8-N9	-5.62	110.29	113.10
2	AB	2056	G	C6-C5-N7	5.62	133.77	130.40
2	AB	2286	G	N1-C6-O6	-5.62	116.53	119.90
2	AB	2488	G	C3'-C2'-C1'	-5.62	97.00	101.50
8	AH	89	VAL	CG1-CB-CG2	-5.62	101.90	110.90
18	AR	30	TRP	CZ3-CH2-CZ2	-5.62	114.85	121.60
35	BA	184	G	C5-C6-N1	5.62	114.31	111.50
35	BA	419	C	C3'-C2'-C1'	5.62	106.00	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	857	C	N1-C2-O2	5.62	122.27	118.90
35	BA	1191	A	C5-N7-C8	5.62	106.71	103.90
35	BA	1257	A	O4'-C1'-C2'	-5.62	100.18	105.80
35	BA	1452	C	C6-N1-C2	-5.62	118.05	120.30
35	BA	1486	G	N3-C4-C5	-5.62	125.79	128.60
2	AB	142	A	N1-C2-N3	5.62	132.11	129.30
2	AB	1219	U	N1-C2-O2	5.62	126.73	122.80
2	AB	1269	A	N3-C4-C5	-5.62	122.86	126.80
2	AB	1276	A	O5'-C5'-C4'	-5.62	101.02	111.70
2	AB	1452	G	O4'-C1'-N9	-5.62	103.70	108.20
2	AB	2271	G	N3-C2-N2	5.62	123.83	119.90
2	AB	2703	C	C5'-C4'-O4'	5.62	115.85	109.10
35	BA	229	U	C4-C5-C6	5.62	123.07	119.70
35	BA	938	A	N1-C2-N3	-5.62	126.49	129.30
35	BA	1404	C	N1-C2-O2	5.62	122.27	118.90
41	BG	104	MET	CG-SD-CE	-5.62	91.21	100.20
2	AB	47	C	C4-C5-C6	-5.62	114.59	117.40
2	AB	713	G	N3-C2-N2	-5.62	115.97	119.90
2	AB	1124	G	O4'-C1'-N9	5.62	112.70	108.20
2	AB	1987	A	C5-C6-N1	5.62	120.51	117.70
2	AB	2019	A	C2-N3-C4	5.62	113.41	110.60
2	AB	2280	G	N1-C6-O6	5.62	123.27	119.90
2	AB	2486	C	C2-N3-C4	5.62	122.71	119.90
2	AB	2835	A	N9-C4-C5	5.62	108.05	105.80
7	AG	124	ARG	NE-CZ-NH2	-5.62	117.49	120.30
35	BA	775	G	C6-N1-C2	5.62	128.47	125.10
1	AA	112	G	C6-N1-C2	-5.62	121.73	125.10
2	AB	212	G	C5-C6-O6	5.62	131.97	128.60
2	AB	458	G	C6-N1-C2	5.62	128.47	125.10
2	AB	680	C	C4'-C3'-O3'	5.62	124.24	113.00
2	AB	1287	A	N9-C4-C5	-5.62	103.55	105.80
2	AB	1668	A	C5'-C4'-O4'	5.62	115.84	109.10
2	AB	1916	A	C4-C5-C6	5.62	119.81	117.00
2	AB	1919	A	C5'-C4'-C3'	-5.62	107.01	116.00
2	AB	1951	U	C4'-C3'-C2'	5.62	108.22	102.60
2	AB	2001	C	C6-N1-C2	5.62	122.55	120.30
2	AB	2081	U	C3'-C2'-C1'	5.62	106.00	101.50
2	AB	2151	U	N3-C2-O2	-5.62	118.27	122.20
2	AB	2156	G	C4-C5-N7	-5.62	108.55	110.80
2	AB	2378	A	C8-N9-C4	-5.62	103.55	105.80
2	AB	2703	C	N3-C4-N4	5.62	121.93	118.00
35	BA	137	U	N1-C2-N3	5.62	118.27	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	448	A	C5-C6-N1	-5.62	114.89	117.70
35	BA	660	C	N1-C2-O2	5.62	122.27	118.90
35	BA	981	U	C1'-O4'-C4'	-5.62	105.41	109.90
35	BA	1057	G	C6-N1-C2	-5.62	121.73	125.10
35	BA	1151	A	C5-C6-N1	5.62	120.51	117.70
35	BA	1186	G	N3-C2-N2	-5.62	115.97	119.90
36	BB	73	G	C8-N9-C4	-5.62	104.15	106.40
2	AB	183	C	O4'-C1'-N1	5.62	112.69	108.20
2	AB	1479	G	N7-C8-N9	-5.62	110.29	113.10
2	AB	1794	A	N9-C1'-C2'	-5.62	105.82	112.00
2	AB	2376	A	N1-C2-N3	-5.62	126.49	129.30
2	AB	2621	G	C5-C6-N1	5.62	114.31	111.50
22	AV	34	VAL	CG1-CB-CG2	-5.62	101.91	110.90
35	BA	260	G	C6-N1-C2	5.62	128.47	125.10
35	BA	310	G	N3-C2-N2	-5.62	115.97	119.90
35	BA	741	G	N3-C4-N9	5.62	129.37	126.00
35	BA	746	A	N3-C4-N9	5.62	131.89	127.40
35	BA	1102	A	C6-C5-N7	-5.62	128.37	132.30
35	BA	1412	C	N3-C2-O2	-5.62	117.97	121.90
57	BW	57	VAL	CA-CB-CG1	5.62	119.33	110.90
1	AA	6	G	C8-N9-C1'	5.62	134.30	127.00
2	AB	608	A	C3'-C2'-C1'	5.62	105.99	101.50
2	AB	704	G	N3-C4-C5	-5.62	125.79	128.60
2	AB	1003	G	P-O3'-C3'	5.62	126.44	119.70
2	AB	1062	G	N1-C6-O6	5.62	123.27	119.90
2	AB	1670	C	N3-C4-N4	-5.62	114.07	118.00
2	AB	2063	C	C4'-C3'-C2'	-5.62	96.98	102.60
2	AB	2075	U	N3-C2-O2	-5.62	118.27	122.20
2	AB	2346	A	C5'-C4'-O4'	5.62	115.84	109.10
2	AB	2631	G	C5-N7-C8	-5.62	101.49	104.30
2	AB	2798	U	N1-C1'-C2'	5.62	121.30	114.00
35	BA	276	G	C5-C6-N1	5.62	114.31	111.50
35	BA	521	G	C6-C5-N7	-5.62	127.03	130.40
35	BA	554	A	P-O3'-C3'	5.62	126.44	119.70
35	BA	559	A	C8-N9-C4	-5.62	103.55	105.80
35	BA	738	C	O4'-C4'-C3'	5.62	110.59	106.10
2	AB	88	G	C5-C6-O6	-5.61	125.23	128.60
2	AB	114	U	C2'-C3'-O3'	5.61	122.68	113.70
2	AB	238	C	N3-C2-O2	-5.61	117.97	121.90
2	AB	309	A	C5-N7-C8	5.61	106.71	103.90
2	AB	648	G	C1'-O4'-C4'	5.61	114.39	109.90
2	AB	917	A	N9-C4-C5	5.61	108.05	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1385	A	N1-C2-N3	-5.61	126.49	129.30
2	AB	1515	A	C2-N3-C4	-5.61	107.79	110.60
2	AB	1566	A	N3-C4-C5	-5.61	122.87	126.80
2	AB	2056	G	O4'-C1'-N9	-5.61	103.71	108.20
35	BA	721	G	O4'-C1'-N9	-5.61	103.71	108.20
35	BA	975	A	C4-C5-N7	5.61	113.51	110.70
35	BA	1330	U	C4'-C3'-C2'	-5.61	96.99	102.60
36	BB	35	C	C5-C4-N4	-5.61	116.27	120.20
2	AB	71	A	C5'-C4'-O4'	-5.61	102.37	109.10
2	AB	2825	G	C4'-C3'-C2'	-5.61	96.99	102.60
35	BA	382	A	C6-N1-C2	-5.61	115.23	118.60
35	BA	548	G	N3-C4-C5	-5.61	125.79	128.60
35	BA	1192	C	C1'-O4'-C4'	-5.61	105.41	109.90
35	BA	1493	A	N1-C6-N6	-5.61	115.23	118.60
36	BB	34	C	N3-C4-C5	-5.61	119.66	121.90
2	AB	145	C	C6-N1-C2	5.61	122.54	120.30
2	AB	583	G	C4-C5-N7	-5.61	108.56	110.80
2	AB	652	U	N3-C4-O4	5.61	123.33	119.40
2	AB	721	A	O4'-C1'-N9	-5.61	103.71	108.20
2	AB	722	A	N7-C8-N9	5.61	116.61	113.80
2	AB	1074	G	O3'-P-O5'	-5.61	93.34	104.00
2	AB	1110	G	C6-N1-C2	-5.61	121.73	125.10
2	AB	1248	G	C2-N3-C4	5.61	114.70	111.90
2	AB	1400	U	C5-C6-N1	5.61	125.50	122.70
2	AB	1462	C	C5-C4-N4	5.61	124.13	120.20
2	AB	1761	C	O4'-C4'-C3'	5.61	110.59	106.10
2	AB	1801	A	C6-C5-N7	-5.61	128.37	132.30
2	AB	2036	C	C3'-C2'-C1'	5.61	105.99	101.50
2	AB	2138	G	C5-N7-C8	-5.61	101.50	104.30
2	AB	2400	G	N7-C8-N9	5.61	115.91	113.10
2	AB	2856	A	N1-C6-N6	5.61	121.97	118.60
2	AB	2868	A	N1-C2-N3	5.61	132.10	129.30
19	AS	49	ARG	NE-CZ-NH1	-5.61	117.50	120.30
35	BA	218	U	C4-C5-C6	5.61	123.07	119.70
35	BA	308	C	C5-C4-N4	-5.61	116.27	120.20
35	BA	378	G	N7-C8-N9	5.61	115.91	113.10
35	BA	1019	A	C6-N1-C2	5.61	121.97	118.60
35	BA	1047	G	C6-N1-C2	-5.61	121.73	125.10
2	AB	92	U	C4-C5-C6	5.61	123.06	119.70
2	AB	411	G	P-O3'-C3'	5.61	126.43	119.70
2	AB	566	U	O4'-C1'-N1	5.61	112.69	108.20
2	AB	1338	G	C5-C6-N1	-5.61	108.70	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1703	G	C5-C6-N1	5.61	114.30	111.50
2	AB	2886	A	C5'-C4'-C3'	-5.61	107.03	116.00
35	BA	219	U	C4'-C3'-C2'	-5.61	96.99	102.60
35	BA	538	G	C8-N9-C4	-5.61	104.16	106.40
35	BA	1159	U	P-O5'-C5'	5.61	129.88	120.90
35	BA	1496	C	O4'-C1'-N1	5.61	112.69	108.20
38	BD	58	A	C6-C5-N7	5.61	136.23	132.30
2	AB	55	G	C5'-C4'-O4'	5.61	115.83	109.10
2	AB	173	A	N1-C6-N6	-5.61	115.24	118.60
2	AB	242	G	N9-C4-C5	-5.61	103.16	105.40
2	AB	836	G	C8-N9-C4	-5.61	104.16	106.40
2	AB	1111	A	C8-N9-C4	-5.61	103.56	105.80
2	AB	1772	A	N3-C4-N9	5.61	131.89	127.40
2	AB	2129	C	C2-N3-C4	5.61	122.70	119.90
2	AB	2165	C	C5-C4-N4	5.61	124.13	120.20
2	AB	2199	A	C5-N7-C8	-5.61	101.10	103.90
2	AB	2208	C	C5-C6-N1	5.61	123.80	121.00
2	AB	2685	G	C8-N9-C4	-5.61	104.16	106.40
3	AC	29	LEU	CB-CG-CD2	-5.61	101.47	111.00
23	AW	33	VAL	CA-CB-CG2	5.61	119.31	110.90
35	BA	266	G	N3-C2-N2	-5.61	115.97	119.90
35	BA	389	A	C8-N9-C4	-5.61	103.56	105.80
35	BA	940	C	C2-N3-C4	-5.61	117.10	119.90
35	BA	1026	G	N1-C2-N3	-5.61	120.54	123.90
35	BA	1048	G	C2-N3-C4	5.61	114.70	111.90
35	BA	1495	U	C2-N3-C4	5.61	130.37	127.00
1	AA	56	G	C4-C5-N7	5.61	113.04	110.80
2	AB	315	G	C5-N7-C8	-5.61	101.50	104.30
2	AB	366	C	C2-N3-C4	-5.61	117.10	119.90
2	AB	832	U	N3-C4-O4	-5.61	115.48	119.40
2	AB	1337	G	N9-C4-C5	5.61	107.64	105.40
2	AB	1443	U	N1-C1'-C2'	-5.61	105.83	112.00
2	AB	1469	A	C5-N7-C8	-5.61	101.10	103.90
2	AB	1529	G	C1'-O4'-C4'	5.61	114.39	109.90
2	AB	1660	G	C4-C5-N7	-5.61	108.56	110.80
2	AB	1848	A	N3-C4-N9	-5.61	122.92	127.40
27	A0	23	ARG	NH1-CZ-NH2	5.61	125.56	119.40
35	BA	79	G	N3-C2-N2	5.61	123.82	119.90
35	BA	115	G	C6-C5-N7	-5.61	127.04	130.40
35	BA	178	C	N3-C4-N4	5.61	121.92	118.00
35	BA	462	G	C5-C6-O6	-5.61	125.24	128.60
35	BA	651	C	C2-N3-C4	5.61	122.70	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1342	C	C5-C6-N1	5.61	123.80	121.00
37	BC	29	G	C5-N7-C8	5.61	107.10	104.30
38	BD	31	G	C4'-C3'-C2'	-5.61	97.00	102.60
44	BJ	137	ARG	NE-CZ-NH1	-5.61	117.50	120.30
2	AB	1048	A	N3-C4-N9	-5.60	122.92	127.40
2	AB	1162	G	C4-C5-C6	5.60	122.16	118.80
2	AB	1168	G	N7-C8-N9	5.60	115.90	113.10
2	AB	1264	A	C1'-O4'-C4'	-5.60	105.42	109.90
2	AB	2281	A	N1-C6-N6	5.60	121.96	118.60
2	AB	2787	C	C5-C6-N1	5.60	123.80	121.00
35	BA	649	A	O4'-C1'-C2'	-5.60	100.20	105.80
38	BD	7	G	C5-C6-N1	-5.60	108.70	111.50
1	AA	13	G	O4'-C4'-C3'	5.60	110.58	106.10
2	AB	298	G	C8-N9-C4	-5.60	104.16	106.40
2	AB	427	U	C5-C4-O4	-5.60	122.54	125.90
2	AB	580	U	C5-C4-O4	-5.60	122.54	125.90
2	AB	817	C	C4-C5-C6	5.60	120.20	117.40
2	AB	904	G	N3-C2-N2	-5.60	115.98	119.90
2	AB	1135	C	C1'-O4'-C4'	-5.60	105.42	109.90
2	AB	1229	C	N3-C4-N4	5.60	121.92	118.00
2	AB	1901	A	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	2047	C	N3-C4-C5	-5.60	119.66	121.90
2	AB	2138	G	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	2140	G	C6-C5-N7	5.60	133.76	130.40
2	AB	2410	G	N9-C4-C5	5.60	107.64	105.40
2	AB	2412	A	C4-C5-C6	5.60	119.80	117.00
2	AB	2416	C	C5-C4-N4	-5.60	116.28	120.20
23	AW	10	VAL	CA-CB-CG1	5.60	119.31	110.90
35	BA	184	G	C5-C6-O6	-5.60	125.24	128.60
35	BA	840	C	C4-C5-C6	5.60	120.20	117.40
35	BA	906	A	N7-C8-N9	5.60	116.60	113.80
35	BA	935	A	C5-C6-N1	5.60	120.50	117.70
35	BA	1279	G	C4-C5-N7	5.60	113.04	110.80
48	BN	106	ILE	CB-CA-C	5.60	122.80	111.60
2	AB	34	U	N1-C1'-C2'	5.60	121.28	114.00
2	AB	575	A	O4'-C4'-C3'	-5.60	98.40	104.00
2	AB	867	C	O4'-C1'-C2'	5.60	112.64	107.60
2	AB	1667	G	N3-C4-N9	5.60	129.36	126.00
2	AB	1921	G	N9-C1'-C2'	-5.60	105.84	112.00
2	AB	2286	G	O4'-C4'-C3'	5.60	110.58	106.10
2	AB	2582	G	C5-N7-C8	-5.60	101.50	104.30
35	BA	448	A	O4'-C1'-N9	5.60	112.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	918	A	N1-C6-N6	-5.60	115.24	118.60
1	AA	115	A	C5'-C4'-O4'	5.60	115.82	109.10
2	AB	71	A	N3-C4-C5	-5.60	122.88	126.80
2	AB	467	G	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	906	U	P-O3'-C3'	5.60	126.42	119.70
2	AB	1076	C	C4'-C3'-O3'	5.60	124.20	113.00
2	AB	1342	A	O4'-C1'-N9	5.60	112.68	108.20
2	AB	1408	G	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	1535	A	C5-C6-N6	-5.60	119.22	123.70
2	AB	1999	C	C5'-C4'-C3'	-5.60	107.04	116.00
2	AB	2246	G	P-O3'-C3'	5.60	126.42	119.70
2	AB	2249	U	C3'-C2'-C1'	5.60	105.98	101.50
2	AB	2262	U	C3'-C2'-C1'	-5.60	97.02	101.50
2	AB	2342	C	N3-C4-C5	-5.60	119.66	121.90
2	AB	2347	C	C1'-O4'-C4'	5.60	114.38	109.90
35	BA	69	G	N3-C4-C5	-5.60	125.80	128.60
1	AA	92	C	C5-C4-N4	-5.60	116.28	120.20
2	AB	1491	G	N3-C4-C5	-5.60	125.80	128.60
2	AB	1679	A	C4-C5-C6	-5.60	114.20	117.00
2	AB	1762	A	N3-C4-N9	-5.60	122.92	127.40
2	AB	1855	U	N1-C2-N3	5.60	118.26	114.90
4	AD	235	GLU	OE1-CD-OE2	5.60	130.02	123.30
35	BA	388	G	N3-C2-N2	-5.60	115.98	119.90
35	BA	419	C	N3-C4-N4	5.60	121.92	118.00
35	BA	483	C	C6-N1-C1'	5.60	127.52	120.80
35	BA	743	A	C6-N1-C2	-5.60	115.24	118.60
35	BA	1190	G	N3-C4-N9	-5.60	122.64	126.00
35	BA	1357	A	N1-C2-N3	-5.60	126.50	129.30
38	BD	9	G	C5-N7-C8	5.60	107.10	104.30
51	BQ	20	PHE	CB-CG-CD2	-5.60	116.88	120.80
58	BX	33	ARG	NE-CZ-NH2	-5.60	117.50	120.30
2	AB	79	C	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	213	A	N9-C1'-C2'	-5.60	105.84	112.00
2	AB	580	U	C2-N3-C4	-5.60	123.64	127.00
2	AB	924	G	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	1498	C	C5'-C4'-O4'	5.60	115.81	109.10
2	AB	2738	A	N9-C4-C5	5.60	108.04	105.80
35	BA	854	U	C5-C6-N1	-5.60	119.90	122.70
2	AB	147	C	O4'-C1'-N1	5.59	112.67	108.20
2	AB	214	G	C2-N3-C4	5.59	114.70	111.90
2	AB	219	A	P-O3'-C3'	5.59	126.41	119.70
2	AB	477	A	N9-C4-C5	5.59	108.04	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	826	U	N1-C2-O2	5.59	126.72	122.80
2	AB	886	A	C2-N3-C4	-5.59	107.80	110.60
2	AB	922	C	C4'-C3'-C2'	-5.59	97.01	102.60
2	AB	971	G	C3'-C2'-C1'	5.59	105.97	101.50
2	AB	997	G	C2-N3-C4	5.59	114.70	111.90
2	AB	2101	A	C6-C5-N7	5.59	136.22	132.30
2	AB	2865	U	C5'-C4'-O4'	5.59	115.81	109.10
2	AB	2895	G	C4-C5-N7	-5.59	108.56	110.80
35	BA	432	A	C3'-C2'-C1'	5.59	105.98	101.50
35	BA	1384	C	C5-C4-N4	5.59	124.12	120.20
35	BA	1442	G	C5'-C4'-O4'	5.59	115.81	109.10
35	BA	1495	U	N3-C4-C5	-5.59	111.24	114.60
44	BJ	176	TYR	CD1-CE1-CZ	-5.59	114.77	119.80
51	BQ	100	TRP	NE1-CE2-CD2	-5.59	101.70	107.30
2	AB	1534	U	C5'-C4'-C3'	-5.59	107.05	116.00
2	AB	1869	G	C5'-C4'-O4'	5.59	115.81	109.10
2	AB	2195	U	C4'-C3'-C2'	-5.59	97.01	102.60
2	AB	2433	A	C3'-C2'-C1'	5.59	105.97	101.50
35	BA	375	U	C3'-C2'-C1'	-5.59	97.03	101.50
35	BA	1274	A	C4'-C3'-C2'	-5.59	97.01	102.60
35	BA	1364	U	C4-C5-C6	5.59	123.06	119.70
1	AA	22	U	C3'-C2'-C1'	-5.59	97.03	101.50
2	AB	155	A	C5-N7-C8	5.59	106.69	103.90
2	AB	173	A	N1-C2-N3	-5.59	126.50	129.30
2	AB	571	U	O3'-P-O5'	5.59	114.62	104.00
2	AB	649	G	C5-C6-N1	-5.59	108.70	111.50
2	AB	748	G	P-O3'-C3'	5.59	126.41	119.70
2	AB	931	U	N3-C4-O4	-5.59	115.48	119.40
2	AB	1396	U	C5-C6-N1	5.59	125.50	122.70
2	AB	1983	G	P-O3'-C3'	5.59	126.41	119.70
2	AB	2240	U	C6-N1-C2	5.59	124.36	121.00
2	AB	2547	A	N1-C6-N6	-5.59	115.25	118.60
2	AB	2565	A	N9-C1'-C2'	-5.59	105.85	112.00
2	AB	2802	G	C6-C5-N7	5.59	133.75	130.40
4	AD	176	ARG	CD-NE-CZ	5.59	131.43	123.60
35	BA	535	A	C5'-C4'-C3'	-5.59	107.05	116.00
35	BA	695	A	C8-N9-C4	-5.59	103.56	105.80
35	BA	1360	A	N9-C1'-C2'	-5.59	105.85	112.00
35	BA	1406	U	N1-C2-N3	5.59	118.25	114.90
2	AB	577	G	C6-N1-C2	-5.59	121.75	125.10
2	AB	1261	C	N3-C4-C5	-5.59	119.67	121.90
2	AB	1456	G	O4'-C4'-C3'	5.59	110.57	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1529	G	C3'-C2'-C1'	5.59	105.97	101.50
2	AB	2371	G	C5-C6-N1	5.59	114.30	111.50
2	AB	2562	U	C5'-C4'-O4'	5.59	115.81	109.10
2	AB	2781	A	C4'-C3'-C2'	-5.59	97.01	102.60
35	BA	143	A	P-O3'-C3'	5.59	126.41	119.70
35	BA	143	A	N9-C1'-C2'	-5.59	105.85	112.00
35	BA	391	G	C4'-C3'-C2'	-5.59	97.01	102.60
35	BA	657	U	O4'-C1'-N1	5.59	112.67	108.20
35	BA	1125	U	N1-C2-N3	5.59	118.25	114.90
35	BA	1461	G	N9-C1'-C2'	-5.59	105.85	112.00
2	AB	108	G	C5-C6-N1	5.59	114.29	111.50
2	AB	614	A	C8-N9-C4	-5.59	103.56	105.80
2	AB	1037	G	N9-C1'-C2'	-5.59	105.85	112.00
2	AB	2282	G	C2-N3-C4	5.59	114.69	111.90
2	AB	2447	G	N1-C2-N3	5.59	127.25	123.90
35	BA	3	A	N1-C6-N6	5.59	121.95	118.60
35	BA	325	A	N1-C6-N6	-5.59	115.25	118.60
35	BA	888	G	C8-N9-C4	-5.59	104.17	106.40
35	BA	1178	G	C4-C5-C6	5.59	122.15	118.80
35	BA	1194	U	C2-N3-C4	-5.59	123.65	127.00
38	BD	30	G	C5-C6-N1	5.59	114.29	111.50
2	AB	237	C	C5-C4-N4	5.59	124.11	120.20
2	AB	302	C	C5-C4-N4	5.59	124.11	120.20
2	AB	884	U	P-O3'-C3'	5.59	126.40	119.70
2	AB	1292	G	N1-C6-O6	-5.59	116.55	119.90
2	AB	1358	G	N9-C1'-C2'	-5.59	105.86	112.00
2	AB	1427	A	C4-C5-N7	-5.59	107.91	110.70
2	AB	1743	G	C1'-O4'-C4'	-5.59	105.43	109.90
2	AB	2157	G	N9-C4-C5	5.59	107.64	105.40
2	AB	2197	U	N1-C2-N3	5.59	118.25	114.90
2	AB	2294	G	C5-N7-C8	5.59	107.09	104.30
2	AB	2350	C	O5'-C5'-C4'	5.59	122.32	111.70
2	AB	2403	C	C5'-C4'-O4'	5.59	115.80	109.10
2	AB	2510	C	C4'-C3'-C2'	-5.59	97.01	102.60
2	AB	2821	A	C2-N3-C4	5.59	113.39	110.60
3	AC	187	GLU	OE1-CD-OE2	5.59	130.00	123.30
7	AG	73	VAL	CA-CB-CG1	5.59	119.28	110.90
35	BA	854	U	C4-C5-C6	5.59	123.05	119.70
35	BA	949	A	N9-C1'-C2'	-5.59	105.86	112.00
35	BA	1006	G	C5-N7-C8	-5.59	101.51	104.30
35	BA	1334	G	C5-C6-O6	-5.59	125.25	128.60
36	BB	26	A	C5-C6-N1	5.59	120.49	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	29	G	N3-C4-N9	-5.59	122.65	126.00
2	AB	863	A	C5-C6-N1	-5.58	114.91	117.70
2	AB	1567	G	C5-C6-N1	5.58	114.29	111.50
2	AB	2881	U	C5'-C4'-O4'	5.58	115.80	109.10
35	BA	996	A	C5'-C4'-C3'	-5.58	107.06	116.00
35	BA	1107	C	C4'-C3'-C2'	-5.58	97.02	102.60
35	BA	1168	U	O4'-C1'-N1	5.58	112.67	108.20
2	AB	427	U	P-O3'-C3'	5.58	126.40	119.70
2	AB	493	G	C4-C5-C6	5.58	122.15	118.80
2	AB	625	G	C5'-C4'-C3'	-5.58	107.06	116.00
2	AB	674	G	C5-C6-N1	5.58	114.29	111.50
2	AB	775	G	C6-C5-N7	-5.58	127.05	130.40
2	AB	867	C	C4'-C3'-C2'	5.58	108.18	102.60
2	AB	1001	A	C3'-C2'-C1'	5.58	105.97	101.50
2	AB	1774	C	C6-N1-C2	-5.58	118.07	120.30
2	AB	2033	A	C6-N1-C2	-5.58	115.25	118.60
2	AB	2223	G	O4'-C1'-N9	5.58	112.67	108.20
2	AB	2406	A	N9-C4-C5	5.58	108.03	105.80
2	AB	2765	A	C4-C5-C6	-5.58	114.21	117.00
35	BA	339	C	C2-N3-C4	5.58	122.69	119.90
35	BA	1096	C	C4-C5-C6	-5.58	114.61	117.40
35	BA	1395	C	C1'-O4'-C4'	-5.58	105.43	109.90
35	BA	1428	A	C5'-C4'-O4'	5.58	115.80	109.10
35	BA	1480	A	O5'-P-OP2	5.58	117.40	110.70
38	BD	5	G	N7-C8-N9	5.58	115.89	113.10
2	AB	424	G	C6-C5-N7	5.58	133.75	130.40
2	AB	426	C	C5-C6-N1	5.58	123.79	121.00
2	AB	737	C	N3-C2-O2	-5.58	117.99	121.90
2	AB	989	G	C4-N9-C1'	-5.58	119.24	126.50
2	AB	1093	G	N7-C8-N9	5.58	115.89	113.10
2	AB	1395	A	C6-C5-N7	5.58	136.21	132.30
35	BA	2	A	O4'-C1'-C2'	-5.58	100.22	105.80
35	BA	501	C	C6-N1-C2	-5.58	118.07	120.30
35	BA	661	G	N3-C4-N9	5.58	129.35	126.00
35	BA	919	A	C4'-C3'-C2'	-5.58	97.02	102.60
2	AB	107	G	C2-N3-C4	5.58	114.69	111.90
2	AB	277	G	O4'-C1'-N9	-5.58	103.74	108.20
2	AB	1552	A	C4-C5-C6	-5.58	114.21	117.00
2	AB	1564	C	O4'-C1'-N1	5.58	112.66	108.20
2	AB	1732	C	C4'-C3'-C2'	-5.58	97.02	102.60
2	AB	2169	A	C5-C6-N1	5.58	120.49	117.70
2	AB	2290	G	O4'-C1'-N9	5.58	112.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	48	C	N1-C1'-C2'	5.58	121.25	114.00
35	BA	52	C	C6-N1-C2	-5.58	118.07	120.30
35	BA	174	A	C3'-C2'-C1'	-5.58	97.04	101.50
35	BA	244	U	N1-C2-N3	5.58	118.25	114.90
44	BJ	168	SER	N-CA-CB	-5.58	102.13	110.50
2	AB	404	A	C4-C5-N7	5.58	113.49	110.70
2	AB	629	G	C4'-C3'-C2'	-5.58	97.02	102.60
2	AB	2035	G	N7-C8-N9	-5.58	110.31	113.10
2	AB	2262	U	C2-N3-C4	-5.58	123.65	127.00
2	AB	2894	G	C8-N9-C4	-5.58	104.17	106.40
9	AI	29	PHE	CB-CG-CD1	-5.58	116.89	120.80
35	BA	184	G	N1-C2-N3	-5.58	120.55	123.90
35	BA	1128	C	C4'-C3'-C2'	-5.58	97.02	102.60
35	BA	1218	C	N3-C2-O2	-5.58	118.00	121.90
38	BD	68	C	N3-C4-C5	-5.58	119.67	121.90
53	BS	51	ARG	NE-CZ-NH1	-5.58	117.51	120.30
2	AB	1462	C	N1-C2-N3	-5.58	115.30	119.20
35	BA	504	C	O4'-C1'-N1	5.58	112.66	108.20
35	BA	862	C	C4'-C3'-C2'	-5.58	97.02	102.60
35	BA	998	C	C4'-C3'-C2'	-5.58	97.02	102.60
35	BA	1143	G	C4'-C3'-O3'	5.58	124.15	113.00
36	BB	71	C	C6-N1-C2	5.58	122.53	120.30
37	BC	33	A	N7-C8-N9	-5.58	111.01	113.80
2	AB	203	A	C4-C5-N7	-5.58	107.91	110.70
2	AB	255	A	C1'-O4'-C4'	5.58	114.36	109.90
2	AB	283	G	C3'-C2'-C1'	5.58	105.96	101.50
2	AB	286	U	O3'-P-O5'	-5.58	93.41	104.00
2	AB	336	C	C5'-C4'-C3'	-5.58	107.08	116.00
2	AB	338	G	O4'-C4'-C3'	5.58	110.56	106.10
2	AB	376	G	N1-C6-O6	-5.58	116.56	119.90
2	AB	407	G	C2-N3-C4	5.58	114.69	111.90
2	AB	477	A	C2-N3-C4	5.58	113.39	110.60
2	AB	878	A	O4'-C1'-N9	5.58	112.66	108.20
2	AB	922	C	N3-C4-C5	5.58	124.13	121.90
2	AB	1185	G	C1'-O4'-C4'	-5.58	105.44	109.90
2	AB	1321	A	P-O5'-C5'	5.58	129.82	120.90
2	AB	2087	G	O4'-C1'-N9	5.58	112.66	108.20
2	AB	2869	G	C1'-O4'-C4'	-5.58	105.44	109.90
35	BA	59	A	P-O3'-C3'	5.58	126.39	119.70
35	BA	212	G	O4'-C1'-N9	5.58	112.66	108.20
35	BA	586	C	N1-C2-O2	5.58	122.25	118.90
35	BA	961	U	C1'-O4'-C4'	-5.58	105.44	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1294	G	N3-C4-N9	5.58	129.35	126.00
2	AB	58	G	C6-C5-N7	-5.57	127.06	130.40
2	AB	387	U	C2-N3-C4	-5.57	123.66	127.00
2	AB	620	G	N3-C4-N9	5.57	129.34	126.00
2	AB	938	G	C3'-C2'-C1'	5.57	105.96	101.50
2	AB	973	A	N7-C8-N9	-5.57	111.01	113.80
2	AB	1234	U	O3'-P-O5'	-5.57	93.41	104.00
2	AB	1402	U	C2-N3-C4	-5.57	123.66	127.00
2	AB	1573	G	O4'-C4'-C3'	5.57	110.56	106.10
2	AB	1620	G	N1-C2-N2	5.57	121.22	116.20
2	AB	1954	G	C6-C5-N7	5.57	133.74	130.40
2	AB	2712	C	O4'-C4'-C3'	5.57	110.56	106.10
2	AB	2883	A	C5-C6-N1	5.57	120.49	117.70
21	AU	17	VAL	CG1-CB-CG2	-5.57	101.98	110.90
35	BA	144	G	C6-C5-N7	5.57	133.74	130.40
35	BA	250	A	C4-C5-C6	-5.57	114.21	117.00
35	BA	404	G	C6-C5-N7	5.57	133.74	130.40
35	BA	501	C	C5'-C4'-C3'	5.57	124.92	116.00
35	BA	716	A	C5-N7-C8	5.57	106.69	103.90
37	BC	18	A	C5-C6-N1	5.57	120.49	117.70
2	AB	1609	A	C4-C5-C6	5.57	119.79	117.00
2	AB	2093	G	N3-C4-N9	5.57	129.34	126.00
2	AB	2094	A	O3'-P-O5'	-5.57	93.41	104.00
2	AB	2779	U	P-O3'-C3'	5.57	126.39	119.70
35	BA	484	G	P-O5'-C5'	5.57	129.82	120.90
35	BA	898	G	C6-C5-N7	5.57	133.74	130.40
35	BA	1184	G	N3-C4-C5	-5.57	125.81	128.60
35	BA	1511	G	N3-C4-C5	-5.57	125.81	128.60
2	AB	542	C	P-O3'-C3'	5.57	126.39	119.70
2	AB	564	C	C5'-C4'-O4'	5.57	115.79	109.10
2	AB	597	G	C4'-C3'-C2'	5.57	108.17	102.60
2	AB	699	A	C3'-C2'-C1'	-5.57	97.04	101.50
2	AB	1084	A	C1'-O4'-C4'	5.57	114.36	109.90
2	AB	1171	G	C8-N9-C4	-5.57	104.17	106.40
2	AB	1513	U	C4'-C3'-C2'	-5.57	97.03	102.60
2	AB	1537	G	N1-C2-N3	-5.57	120.56	123.90
2	AB	1815	A	C5'-C4'-O4'	-5.57	102.42	109.10
2	AB	1828	G	O4'-C1'-C2'	5.57	112.61	107.60
2	AB	1964	G	O4'-C1'-N9	5.57	112.66	108.20
2	AB	2691	C	C5'-C4'-C3'	5.57	124.91	116.00
35	BA	278	G	N1-C6-O6	5.57	123.24	119.90
35	BA	748	G	C5'-C4'-C3'	5.57	124.91	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	808	C	N1-C2-O2	5.57	122.24	118.90
35	BA	878	A	N1-C6-N6	-5.57	115.26	118.60
35	BA	1345	U	N3-C4-C5	-5.57	111.26	114.60
35	BA	1421	G	C6-C5-N7	-5.57	127.06	130.40
37	BC	41	A	N7-C8-N9	5.57	116.58	113.80
1	AA	118	C	N3-C4-C5	-5.57	119.67	121.90
2	AB	94	A	C5-C6-N6	-5.57	119.25	123.70
2	AB	855	G	C5'-C4'-O4'	5.57	115.78	109.10
2	AB	1029	A	O4'-C1'-N9	5.57	112.66	108.20
2	AB	1270	C	N3-C4-C5	-5.57	119.67	121.90
2	AB	1583	A	C6-C5-N7	-5.57	128.40	132.30
35	BA	39	G	C8-N9-C4	-5.57	104.17	106.40
35	BA	993	G	C5-N7-C8	5.57	107.08	104.30
35	BA	1263	C	OP2-P-O3'	5.57	117.45	105.20
40	BF	45	GLU	OE1-CD-OE2	5.57	129.98	123.30
2	AB	261	G	C2-N3-C4	5.57	114.68	111.90
2	AB	265	A	C5'-C4'-O4'	5.57	115.78	109.10
2	AB	452	G	P-O3'-C3'	5.57	126.38	119.70
2	AB	543	G	C5'-C4'-C3'	-5.57	107.09	116.00
2	AB	591	U	P-O3'-C3'	5.57	126.38	119.70
2	AB	599	A	O4'-C4'-C3'	5.57	110.55	106.10
2	AB	846	U	C5'-C4'-C3'	-5.57	107.09	116.00
2	AB	856	G	N3-C4-N9	5.57	129.34	126.00
2	AB	864	G	C8-N9-C1'	5.57	134.24	127.00
2	AB	1010	A	C2-N3-C4	5.57	113.38	110.60
2	AB	1188	U	C5-C6-N1	-5.57	119.92	122.70
2	AB	1368	G	C4-C5-C6	5.57	122.14	118.80
2	AB	1492	G	P-O3'-C3'	5.57	126.38	119.70
2	AB	1609	A	N7-C8-N9	-5.57	111.02	113.80
2	AB	2079	U	C1'-O4'-C4'	5.57	114.35	109.90
2	AB	2154	A	C4'-C3'-C2'	-5.57	97.03	102.60
2	AB	2625	G	N9-C4-C5	-5.57	103.17	105.40
35	BA	393	A	N7-C8-N9	-5.57	111.02	113.80
35	BA	628	G	C6-N1-C2	-5.57	121.76	125.10
35	BA	666	G	C5-C6-O6	5.57	131.94	128.60
35	BA	1224	U	C2-N3-C4	-5.57	123.66	127.00
35	BA	1334	G	C2-N3-C4	5.57	114.68	111.90
38	BD	29	C	C5-C6-N1	5.57	123.78	121.00
41	BG	61	ARG	NE-CZ-NH2	5.57	123.08	120.30
44	BJ	59	GLU	OE1-CD-OE2	5.57	129.98	123.30
1	AA	30	C	C3'-C2'-C1'	-5.57	97.05	101.50
2	AB	247	G	C2-N3-C4	5.57	114.68	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	622	G	C4-C5-C6	5.57	122.14	118.80
2	AB	750	A	C1'-O4'-C4'	5.57	114.35	109.90
2	AB	1483	G	O4'-C1'-N9	5.57	112.65	108.20
2	AB	1494	A	O4'-C1'-N9	5.57	112.65	108.20
2	AB	1863	G	C5-C6-O6	-5.57	125.26	128.60
2	AB	1945	G	C3'-C2'-C1'	5.57	105.95	101.50
2	AB	2058	A	N1-C6-N6	-5.57	115.26	118.60
2	AB	2807	U	C4-C5-C6	5.57	123.04	119.70
35	BA	1124	G	O4'-C1'-C2'	-5.57	100.23	105.80
35	BA	1342	C	C2-N1-C1'	-5.57	112.68	118.80
43	BI	42	TRP	CA-CB-CG	5.57	124.27	113.70
48	BN	26	PHE	CB-CG-CD2	5.57	124.70	120.80
2	AB	501	A	C4-C5-N7	-5.56	107.92	110.70
2	AB	1353	A	C4-C5-N7	-5.56	107.92	110.70
2	AB	1602	U	C1'-O4'-C4'	-5.56	105.45	109.90
2	AB	2043	C	C4'-C3'-C2'	-5.56	97.04	102.60
2	AB	2252	G	C4-C5-C6	5.56	122.14	118.80
13	AM	102	PRO	N-CA-CB	5.56	109.98	103.30
35	BA	132	C	C1'-O4'-C4'	5.56	114.35	109.90
35	BA	981	U	C4'-C3'-O3'	5.56	124.13	113.00
35	BA	1067	A	N7-C8-N9	-5.56	111.02	113.80
35	BA	1219	A	C8-N9-C4	-5.56	103.58	105.80
35	BA	1458	G	C8-N9-C4	-5.56	104.17	106.40
2	AB	216	A	C8-N9-C4	-5.56	103.58	105.80
2	AB	732	C	P-O3'-C3'	5.56	126.38	119.70
2	AB	866	A	N9-C1'-C2'	5.56	121.23	114.00
2	AB	1046	A	C5-C6-N6	-5.56	119.25	123.70
2	AB	1347	A	C8-N9-C4	-5.56	103.58	105.80
2	AB	1361	G	N3-C4-N9	5.56	129.34	126.00
2	AB	1375	U	O4'-C1'-N1	5.56	112.65	108.20
2	AB	2355	G	N3-C4-N9	5.56	129.34	126.00
2	AB	2591	C	C2-N3-C4	5.56	122.68	119.90
2	AB	2655	G	C5'-C4'-O4'	-5.56	102.43	109.10
17	AQ	111	ARG	NE-CZ-NH1	5.56	123.08	120.30
35	BA	362	G	C6-N1-C2	-5.56	121.76	125.10
35	BA	1041	G	C4-C5-N7	-5.56	108.58	110.80
35	BA	1112	C	C3'-C2'-C1'	5.56	105.95	101.50
2	AB	1146	C	C5-C6-N1	5.56	123.78	121.00
2	AB	2161	C	C4-C5-C6	5.56	120.18	117.40
13	AM	86	LEU	CB-CG-CD2	5.56	120.45	111.00
35	BA	107	G	C5-C6-N1	5.56	114.28	111.50
35	BA	148	G	C5-C6-O6	-5.56	125.26	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	895	G	C4-C5-N7	-5.56	108.58	110.80
37	BC	21	U	C2-N3-C4	-5.56	123.66	127.00
2	AB	287	G	C5-C6-N1	5.56	114.28	111.50
2	AB	957	C	C2-N3-C4	5.56	122.68	119.90
2	AB	994	C	N3-C4-C5	-5.56	119.68	121.90
2	AB	1243	C	N1-C2-O2	5.56	122.24	118.90
2	AB	1825	U	C4-C5-C6	5.56	123.04	119.70
2	AB	2208	C	N3-C2-O2	-5.56	118.01	121.90
2	AB	2289	G	N1-C2-N2	-5.56	111.20	116.20
2	AB	2632	A	C4'-C3'-C2'	-5.56	97.04	102.60
2	AB	2829	A	N1-C6-N6	5.56	121.94	118.60
35	BA	93	U	N3-C4-O4	5.56	123.29	119.40
35	BA	103	U	C5'-C4'-O4'	5.56	115.77	109.10
35	BA	106	C	C5'-C4'-C3'	5.56	124.89	116.00
35	BA	176	C	N1-C2-O2	5.56	122.24	118.90
35	BA	346	G	C2-N3-C4	5.56	114.68	111.90
35	BA	493	A	C5'-C4'-C3'	-5.56	107.11	116.00
35	BA	626	G	C5-C6-N1	-5.56	108.72	111.50
35	BA	674	G	O4'-C1'-N9	5.56	112.65	108.20
35	BA	739	C	N3-C2-O2	-5.56	118.01	121.90
35	BA	1092	A	C4-C5-N7	-5.56	107.92	110.70
35	BA	1464	U	N1-C2-N3	5.56	118.24	114.90
39	BE	34	ARG	NE-CZ-NH2	-5.56	117.52	120.30
1	AA	61	G	C5-C6-O6	5.56	131.94	128.60
2	AB	102	U	N3-C4-C5	-5.56	111.27	114.60
2	AB	152	A	N1-C2-N3	5.56	132.08	129.30
2	AB	222	A	C2-N3-C4	5.56	113.38	110.60
2	AB	365	U	N3-C2-O2	-5.56	118.31	122.20
2	AB	870	U	N3-C4-O4	-5.56	115.51	119.40
2	AB	1155	A	C4-C5-N7	-5.56	107.92	110.70
2	AB	1158	C	N1-C1'-C2'	-5.56	105.89	112.00
2	AB	2077	A	C5-C6-N1	-5.56	114.92	117.70
2	AB	2190	G	C6-N1-C2	-5.56	121.77	125.10
2	AB	2526	G	N3-C2-N2	5.56	123.79	119.90
2	AB	2709	G	N7-C8-N9	5.56	115.88	113.10
4	AD	16	VAL	CA-CB-CG2	5.56	119.24	110.90
35	BA	194	C	N3-C4-N4	5.56	121.89	118.00
35	BA	265	G	C5'-C4'-O4'	5.56	115.77	109.10
35	BA	281	G	N1-C2-N3	-5.56	120.57	123.90
35	BA	439	U	C5-C6-N1	-5.56	119.92	122.70
35	BA	525	C	C2-N3-C4	5.56	122.68	119.90
35	BA	1401	G	N1-C2-N3	-5.56	120.57	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2737	G	N7-C8-N9	5.56	115.88	113.10
35	BA	150	U	C5-C4-O4	-5.56	122.57	125.90
35	BA	780	A	C4'-C3'-C2'	5.56	108.16	102.60
35	BA	821	G	C5-N7-C8	-5.56	101.52	104.30
35	BA	1427	C	C5'-C4'-O4'	5.56	115.77	109.10
38	BD	60	A	N1-C2-N3	-5.56	126.52	129.30
1	AA	49	C	N3-C4-N4	-5.55	114.11	118.00
2	AB	1107	G	C1'-O4'-C4'	-5.55	105.46	109.90
2	AB	1415	U	P-O3'-C3'	5.55	126.37	119.70
2	AB	1508	A	N7-C8-N9	5.55	116.58	113.80
2	AB	1591	A	C4'-C3'-O3'	5.55	124.11	113.00
2	AB	1933	G	C4'-C3'-C2'	-5.55	97.05	102.60
2	AB	2126	A	C5-C6-N6	-5.55	119.26	123.70
2	AB	2506	U	O4'-C1'-N1	5.55	112.64	108.20
29	A2	59	ARG	NE-CZ-NH2	-5.55	117.52	120.30
35	BA	71	A	N7-C8-N9	5.55	116.58	113.80
35	BA	479	U	C3'-C2'-C1'	5.55	105.94	101.50
35	BA	625	U	C2-N3-C4	-5.55	123.67	127.00
35	BA	701	U	P-O3'-C3'	5.55	126.36	119.70
35	BA	749	A	C3'-C2'-C1'	5.55	105.94	101.50
35	BA	831	A	C5'-C4'-C3'	-5.55	107.11	116.00
35	BA	990	C	C5-C6-N1	-5.55	118.22	121.00
2	AB	1363	C	N3-C4-C5	-5.55	119.68	121.90
2	AB	1365	A	O3'-P-O5'	5.55	114.55	104.00
2	AB	2024	G	C5'-C4'-C3'	-5.55	107.12	116.00
2	AB	2509	G	C5'-C4'-O4'	5.55	115.76	109.10
35	BA	639	G	C6-N1-C2	-5.55	121.77	125.10
35	BA	963	G	O4'-C1'-N9	5.55	112.64	108.20
35	BA	1044	A	C5-C6-N1	5.55	120.48	117.70
37	BC	30	U	N1-C2-O2	-5.55	118.91	122.80
2	AB	399	U	N3-C4-O4	5.55	123.29	119.40
2	AB	571	U	C5-C4-O4	5.55	129.23	125.90
2	AB	900	A	P-O3'-C3'	5.55	126.36	119.70
2	AB	961	C	C2-N3-C4	5.55	122.67	119.90
2	AB	1629	U	N3-C2-O2	-5.55	118.31	122.20
2	AB	2063	C	C1'-O4'-C4'	-5.55	105.46	109.90
2	AB	2141	G	N3-C4-C5	-5.55	125.82	128.60
2	AB	2162	G	N3-C2-N2	5.55	123.79	119.90
2	AB	2220	U	C1'-O4'-C4'	-5.55	105.46	109.90
2	AB	2506	U	C5'-C4'-O4'	5.55	115.76	109.10
2	AB	2586	U	C3'-C2'-C1'	5.55	105.94	101.50
2	AB	2646	C	C3'-C2'-C1'	5.55	105.94	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	257	G	N1-C2-N2	5.55	121.20	116.20
35	BA	367	U	C3'-C2'-C1'	5.55	105.94	101.50
35	BA	386	C	C4-C5-C6	-5.55	114.62	117.40
35	BA	777	A	C1'-O4'-C4'	5.55	114.34	109.90
35	BA	1054	C	N1-C1'-C2'	-5.55	105.89	112.00
35	BA	1420	U	O4'-C4'-C3'	5.55	110.54	106.10
35	BA	1459	G	N3-C4-C5	-5.55	125.82	128.60
2	AB	42	A	N3-C4-N9	5.55	131.84	127.40
2	AB	290	U	C4'-C3'-C2'	-5.55	97.05	102.60
2	AB	325	G	C5-C6-O6	-5.55	125.27	128.60
2	AB	928	A	C5'-C4'-O4'	5.55	115.76	109.10
2	AB	1400	U	C1'-O4'-C4'	5.55	114.34	109.90
2	AB	1575	C	N3-C4-C5	-5.55	119.68	121.90
2	AB	2713	U	C5-C6-N1	5.55	125.47	122.70
2	AB	2872	A	C5-C6-N1	-5.55	114.93	117.70
2	AB	2895	G	N9-C4-C5	5.55	107.62	105.40
12	AL	117	ALA	CB-CA-C	5.55	118.42	110.10
35	BA	174	A	O4'-C1'-N9	5.55	112.64	108.20
35	BA	181	A	N7-C8-N9	-5.55	111.03	113.80
35	BA	206	C	C2-N3-C4	5.55	122.67	119.90
35	BA	285	C	P-O3'-C3'	5.55	126.36	119.70
35	BA	940	C	C6-N1-C1'	5.55	127.46	120.80
35	BA	1315	U	N1-C1'-C2'	-5.55	105.89	112.00
35	BA	1508	A	C4-C5-C6	5.55	119.78	117.00
35	BA	1532	U	C5'-C4'-O4'	5.55	115.76	109.10
36	BB	58	A	C1'-O4'-C4'	-5.55	105.46	109.90
37	BC	27	A	N1-C6-N6	-5.55	115.27	118.60
2	AB	80	G	C4'-C3'-C2'	-5.55	97.05	102.60
2	AB	88	G	C8-N9-C4	-5.55	104.18	106.40
2	AB	561	G	N9-C1'-C2'	-5.55	105.90	112.00
2	AB	979	A	O3'-P-O5'	5.55	114.54	104.00
2	AB	1506	U	C5-C4-O4	-5.55	122.57	125.90
2	AB	1862	G	N3-C4-N9	-5.55	122.67	126.00
33	A6	41	ARG	CD-NE-CZ	5.55	131.37	123.60
35	BA	524	G	C5'-C4'-O4'	5.55	115.76	109.10
35	BA	1384	C	C2'-C3'-O3'	5.55	122.58	113.70
2	AB	453	A	C2-N3-C4	-5.55	107.83	110.60
2	AB	1183	U	C4'-C3'-C2'	-5.55	97.05	102.60
2	AB	1703	G	N3-C4-C5	-5.55	125.83	128.60
2	AB	1918	A	N9-C4-C5	-5.55	103.58	105.80
2	AB	2791	G	C5'-C4'-O4'	5.55	115.76	109.10
35	BA	952	U	C5'-C4'-O4'	5.55	115.76	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1018	G	C5-N7-C8	-5.55	101.53	104.30
35	BA	1418	A	O4'-C1'-N9	-5.55	103.76	108.20
2	AB	781	A	O4'-C1'-N9	-5.54	103.76	108.20
2	AB	1128	G	C4-C5-C6	5.54	122.13	118.80
2	AB	1439	A	N1-C6-N6	-5.54	115.27	118.60
2	AB	2680	U	N1-C2-O2	5.54	126.68	122.80
35	BA	44	A	O4'-C1'-N9	5.54	112.64	108.20
35	BA	663	A	O5'-C5'-C4'	-5.54	101.17	111.70
35	BA	767	A	C5-C6-N6	5.54	128.14	123.70
2	AB	227	A	P-O3'-C3'	5.54	126.35	119.70
2	AB	303	G	N3-C4-C5	-5.54	125.83	128.60
2	AB	534	U	C3'-C2'-C1'	-5.54	97.06	101.50
2	AB	1038	G	C2-N3-C4	5.54	114.67	111.90
2	AB	1115	G	C1'-O4'-C4'	5.54	114.33	109.90
2	AB	1187	G	C8-N9-C1'	5.54	134.21	127.00
2	AB	1228	G	C5-N7-C8	-5.54	101.53	104.30
2	AB	1256	G	C4-C5-N7	-5.54	108.58	110.80
2	AB	1334	G	N3-C2-N2	-5.54	116.02	119.90
2	AB	1743	G	C2-N3-C4	5.54	114.67	111.90
2	AB	2054	A	C8-N9-C4	5.54	108.02	105.80
35	BA	170	U	N1-C1'-C2'	-5.54	105.90	112.00
35	BA	1275	A	N1-C6-N6	-5.54	115.27	118.60
35	BA	1368	A	C3'-C2'-C1'	5.54	105.94	101.50
36	BB	58	A	C2'-C3'-O3'	5.54	122.57	113.70
38	BD	54	G	N3-C2-N2	-5.54	116.02	119.90
40	BF	231	ARG	NE-CZ-NH2	5.54	123.07	120.30
2	AB	66	C	N1-C2-O2	5.54	122.22	118.90
2	AB	168	G	N1-C6-O6	-5.54	116.58	119.90
2	AB	287	G	C5'-C4'-O4'	5.54	115.75	109.10
2	AB	314	C	P-O3'-C3'	5.54	126.35	119.70
2	AB	1034	G	C3'-C2'-C1'	5.54	105.93	101.50
2	AB	1225	G	C4'-C3'-C2'	-5.54	97.06	102.60
2	AB	1347	A	N1-C6-N6	5.54	121.92	118.60
2	AB	1530	G	N7-C8-N9	5.54	115.87	113.10
2	AB	1638	C	N3-C4-C5	-5.54	119.68	121.90
2	AB	1672	A	O4'-C4'-C3'	5.54	110.53	106.10
2	AB	1723	G	C3'-C2'-C1'	-5.54	97.07	101.50
2	AB	2100	G	C5-C6-O6	-5.54	125.28	128.60
2	AB	2310	C	N3-C2-O2	-5.54	118.02	121.90
6	AF	96	VAL	CA-CB-CG1	-5.54	102.59	110.90
15	AO	73	ILE	CA-CB-CG1	5.54	121.53	111.00
35	BA	565	U	C1'-O4'-C4'	5.54	114.33	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1353	G	N1-C6-O6	5.54	123.22	119.90
35	BA	1409	C	N3-C4-N4	5.54	121.88	118.00
54	BT	33	TYR	CB-CG-CD1	-5.54	117.67	121.00
2	AB	1266	G	N3-C2-N2	5.54	123.78	119.90
2	AB	2357	G	C4'-C3'-C2'	5.54	108.14	102.60
2	AB	2382	G	C6-N1-C2	5.54	128.42	125.10
9	AI	38	PRO	N-CA-CB	5.54	109.95	103.30
35	BA	693	G	C4'-C3'-C2'	-5.54	97.06	102.60
35	BA	1018	G	C1'-O4'-C4'	-5.54	105.47	109.90
35	BA	1396	A	C4-C5-C6	5.54	119.77	117.00
1	AA	43	C	C5'-C4'-C3'	-5.54	107.14	116.00
2	AB	117	G	C2-N3-C4	5.54	114.67	111.90
2	AB	268	C	N3-C2-O2	-5.54	118.02	121.90
2	AB	1372	U	C5-C4-O4	5.54	129.22	125.90
2	AB	1583	A	P-O3'-C3'	5.54	126.35	119.70
2	AB	1686	C	C5'-C4'-O4'	5.54	115.75	109.10
2	AB	2302	U	N3-C4-C5	5.54	117.92	114.60
2	AB	2474	U	C2-N3-C4	-5.54	123.68	127.00
2	AB	2578	G	C4-C5-C6	5.54	122.12	118.80
2	AB	2860	A	N1-C2-N3	-5.54	126.53	129.30
2	AB	2871	U	C6-N1-C2	5.54	124.32	121.00
12	AL	64	VAL	CG1-CB-CG2	-5.54	102.04	110.90
35	BA	20	U	N1-C1'-C2'	-5.54	105.91	112.00
35	BA	76	G	C5'-C4'-C3'	-5.54	107.14	116.00
35	BA	218	U	N3-C4-O4	5.54	123.28	119.40
35	BA	320	A	O4'-C4'-C3'	-5.54	98.46	104.00
35	BA	1074	G	C8-N9-C1'	5.54	134.20	127.00
35	BA	1111	A	N3-C4-C5	-5.54	122.92	126.80
35	BA	1446	A	C5'-C4'-O4'	5.54	115.75	109.10
37	BC	54	U	O4'-C1'-N1	5.54	112.63	108.20
38	BD	11	A	N3-C4-N9	-5.54	122.97	127.40
53	BS	31	ARG	NE-CZ-NH2	-5.54	117.53	120.30
2	AB	79	C	N3-C4-N4	-5.54	114.12	118.00
2	AB	119	A	P-O3'-C3'	5.54	126.34	119.70
2	AB	868	U	N3-C4-C5	-5.54	111.28	114.60
2	AB	943	A	C1'-O4'-C4'	5.54	114.33	109.90
2	AB	1068	G	C5'-C4'-O4'	5.54	115.75	109.10
2	AB	2248	C	C5-C6-N1	-5.54	118.23	121.00
2	AB	2801	G	C4-C5-N7	-5.54	108.58	110.80
35	BA	1288	A	N1-C6-N6	5.54	121.92	118.60
35	BA	1483	A	C4'-C3'-C2'	-5.54	97.06	102.60
35	BA	1526	G	P-O3'-C3'	5.54	126.34	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	37	C	N1-C1'-C2'	-5.54	105.91	112.00
2	AB	399	U	N1-C2-O2	-5.54	118.92	122.80
2	AB	816	C	N3-C4-N4	5.54	121.88	118.00
2	AB	1045	C	O4'-C1'-C2'	-5.54	100.26	105.80
2	AB	1170	C	C2-N3-C4	5.54	122.67	119.90
2	AB	1214	A	C3'-C2'-C1'	5.54	105.93	101.50
2	AB	1281	G	C3'-C2'-C1'	5.54	105.93	101.50
2	AB	1555	G	C5-C6-N1	5.54	114.27	111.50
2	AB	2642	G	C2-N3-C4	5.54	114.67	111.90
2	AB	2712	C	C5'-C4'-C3'	-5.54	107.14	116.00
35	BA	138	G	C5-C6-N1	5.54	114.27	111.50
35	BA	353	A	C1'-O4'-C4'	-5.54	105.47	109.90
35	BA	534	U	C2-N3-C4	-5.54	123.68	127.00
35	BA	907	A	N9-C4-C5	-5.54	103.59	105.80
37	BC	34	U	C5'-C4'-C3'	-5.54	107.14	116.00
46	BL	102	PHE	CD1-CE1-CZ	-5.54	113.46	120.10
1	AA	8	C	C2-N1-C1'	-5.53	112.71	118.80
1	AA	111	U	O4'-C1'-N1	5.53	112.63	108.20
2	AB	387	U	O4'-C4'-C3'	5.53	110.53	106.10
2	AB	924	G	O4'-C1'-N9	5.53	112.63	108.20
2	AB	965	C	N3-C4-C5	-5.53	119.69	121.90
2	AB	1204	A	O4'-C1'-N9	5.53	112.63	108.20
2	AB	1343	G	C6-C5-N7	-5.53	127.08	130.40
2	AB	1757	A	N1-C6-N6	-5.53	115.28	118.60
2	AB	2072	C	N3-C4-C5	-5.53	119.69	121.90
2	AB	2515	C	N3-C4-C5	-5.53	119.69	121.90
2	AB	2741	A	C5'-C4'-O4'	5.53	115.74	109.10
2	AB	2817	U	N3-C4-O4	5.53	123.27	119.40
3	AC	43	ASP	CB-CG-OD2	-5.53	113.32	118.30
9	AI	48	GLU	OE1-CD-OE2	5.53	129.94	123.30
18	AR	80	VAL	CA-CB-CG1	5.53	119.20	110.90
35	BA	257	G	C2-N3-C4	5.53	114.67	111.90
35	BA	417	G	C5-N7-C8	-5.53	101.53	104.30
35	BA	480	U	N1-C2-N3	5.53	118.22	114.90
35	BA	1142	G	N3-C4-C5	-5.53	125.83	128.60
1	AA	5	U	N3-C2-O2	-5.53	118.33	122.20
2	AB	561	G	P-O5'-C5'	5.53	129.75	120.90
2	AB	1032	A	N3-C4-N9	-5.53	122.97	127.40
2	AB	1114	C	N1-C1'-C2'	-5.53	105.92	112.00
2	AB	1412	U	N3-C4-O4	5.53	123.27	119.40
2	AB	1897	G	C5'-C4'-O4'	5.53	115.74	109.10
2	AB	2063	C	N3-C4-C5	-5.53	119.69	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2338	C	C2-N3-C4	-5.53	117.13	119.90
2	AB	2663	G	C1'-O4'-C4'	-5.53	105.47	109.90
2	AB	2718	G	C5-C6-N1	5.53	114.27	111.50
35	BA	41	G	C5'-C4'-O4'	5.53	115.74	109.10
43	BI	130	GLU	CG-CD-OE1	-5.53	107.24	118.30
2	AB	706	A	N9-C1'-C2'	-5.53	105.92	112.00
2	AB	1210	G	C5-C6-N1	5.53	114.27	111.50
2	AB	1215	G	C2-N3-C4	5.53	114.67	111.90
2	AB	1312	U	O4'-C4'-C3'	5.53	110.53	106.10
2	AB	1572	A	C1'-O4'-C4'	5.53	114.33	109.90
2	AB	1757	A	O4'-C4'-C3'	-5.53	98.47	104.00
2	AB	2553	G	O5'-C5'-C4'	-5.53	101.19	111.70
2	AB	2576	G	N3-C2-N2	-5.53	116.03	119.90
2	AB	2831	G	C5'-C4'-O4'	5.53	115.74	109.10
32	A5	18	PHE	CB-CG-CD2	5.53	124.67	120.80
35	BA	187	G	N9-C4-C5	5.53	107.61	105.40
35	BA	207	C	C4-C5-C6	5.53	120.17	117.40
35	BA	230	G	N7-C8-N9	5.53	115.86	113.10
35	BA	274	A	C5-C6-N6	-5.53	119.28	123.70
35	BA	402	G	C6-C5-N7	5.53	133.72	130.40
35	BA	466	A	N1-C6-N6	5.53	121.92	118.60
35	BA	725	G	N9-C4-C5	-5.53	103.19	105.40
35	BA	881	G	C4'-C3'-C2'	-5.53	97.07	102.60
35	BA	1005	A	C8-N9-C4	-5.53	103.59	105.80
36	BB	5	G	C2-N3-C4	5.53	114.67	111.90
36	BB	43	G	C4'-C3'-C2'	-5.53	97.07	102.60
36	BB	45	U	C5-C6-N1	-5.53	119.93	122.70
37	BC	31	U	N3-C4-O4	-5.53	115.53	119.40
38	BD	58	A	C3'-C2'-C1'	-5.53	97.08	101.50
56	BV	79	TYR	CZ-CE2-CD2	-5.53	114.82	119.80
2	AB	134	G	C5-C6-N1	5.53	114.26	111.50
2	AB	884	U	N1-C1'-C2'	-5.53	105.92	112.00
8	AH	61	TRP	CE2-CD2-CE3	-5.53	112.06	118.70
35	BA	509	A	C2-N3-C4	-5.53	107.83	110.60
35	BA	595	A	C6-C5-N7	5.53	136.17	132.30
35	BA	1346	A	O3'-P-O5'	-5.53	93.50	104.00
2	AB	274	C	C5-C4-N4	-5.53	116.33	120.20
2	AB	455	C	C5-C4-N4	5.53	124.07	120.20
2	AB	786	C	C3'-C2'-C1'	5.53	105.92	101.50
2	AB	912	C	N1-C2-N3	-5.53	115.33	119.20
2	AB	952	G	C8-N9-C4	-5.53	104.19	106.40
2	AB	1551	A	N9-C4-C5	5.53	108.01	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1613	G	C8-N9-C1'	5.53	134.19	127.00
2	AB	2767	C	C5-C6-N1	5.53	123.76	121.00
35	BA	58	C	C5-C4-N4	-5.53	116.33	120.20
35	BA	767	A	C4-C5-C6	5.53	119.76	117.00
35	BA	813	U	C5'-C4'-O4'	5.53	115.73	109.10
35	BA	852	G	C4-C5-N7	-5.53	108.59	110.80
35	BA	1438	G	C5'-C4'-O4'	5.53	115.73	109.10
37	BC	45	G	N3-C2-N2	-5.53	116.03	119.90
38	BD	18	U	C5-C6-N1	5.53	125.46	122.70
45	BK	105	THR	CA-CB-CG2	5.53	120.14	112.40
56	BV	85	ASP	CB-CG-OD1	-5.53	113.33	118.30
2	AB	54	G	C8-N9-C1'	5.53	134.18	127.00
2	AB	60	G	O3'-P-O5'	-5.53	93.50	104.00
2	AB	342	A	N7-C8-N9	5.53	116.56	113.80
2	AB	629	G	N3-C2-N2	-5.53	116.03	119.90
2	AB	1724	G	N3-C4-N9	-5.53	122.68	126.00
2	AB	2344	U	C6-N1-C2	-5.53	117.68	121.00
2	AB	2673	G	C4'-C3'-C2'	-5.53	97.07	102.60
2	AB	2674	G	P-O3'-C3'	5.53	126.33	119.70
35	BA	142	G	C1'-O4'-C4'	-5.53	105.48	109.90
35	BA	224	U	N3-C2-O2	-5.53	118.33	122.20
35	BA	332	G	C3'-C2'-C1'	-5.53	97.08	101.50
35	BA	367	U	N3-C4-C5	5.53	117.92	114.60
35	BA	823	C	C1'-O4'-C4'	5.53	114.32	109.90
35	BA	1084	G	N1-C2-N2	5.53	121.17	116.20
35	BA	1192	C	N1-C2-N3	-5.53	115.33	119.20
35	BA	1264	U	C2'-C3'-O3'	5.53	122.54	113.70
35	BA	1495	U	C5-C6-N1	5.53	125.46	122.70
37	BC	50	U	C5-C6-N1	-5.53	119.94	122.70
1	AA	84	G	C5-N7-C8	-5.52	101.54	104.30
2	AB	1073	A	C5-N7-C8	-5.52	101.14	103.90
2	AB	1536	C	C4'-C3'-C2'	-5.52	97.08	102.60
2	AB	1903	G	N3-C2-N2	5.52	123.77	119.90
2	AB	1909	C	C2'-C3'-O3'	5.52	122.54	113.70
35	BA	215	C	N1-C2-N3	-5.52	115.33	119.20
35	BA	1495	U	N1-C2-O2	5.52	126.67	122.80
37	BC	38	G	O4'-C1'-N9	5.52	112.62	108.20
38	BD	14	A	N3-C4-C5	-5.52	122.93	126.80
38	BD	71	G	C5-C6-N1	5.52	114.26	111.50
2	AB	196	A	C3'-C2'-C1'	5.52	105.92	101.50
2	AB	503	A	C8-N9-C4	-5.52	103.59	105.80
2	AB	623	C	N3-C2-O2	-5.52	118.03	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	791	C	O4'-C4'-C3'	5.52	110.52	106.10
2	AB	1026	G	C5-N7-C8	5.52	107.06	104.30
2	AB	1142	A	C5-C6-N6	-5.52	119.28	123.70
2	AB	1202	G	N1-C6-O6	-5.52	116.59	119.90
2	AB	1427	A	N1-C6-N6	-5.52	115.29	118.60
2	AB	1430	G	O4'-C1'-N9	-5.52	103.78	108.20
2	AB	1559	U	O4'-C1'-N1	5.52	112.62	108.20
2	AB	2242	G	C5-C6-O6	-5.52	125.29	128.60
2	AB	2603	G	C5-C6-N1	5.52	114.26	111.50
17	AQ	108	ASP	CB-CG-OD1	5.52	123.27	118.30
35	BA	41	G	P-O3'-C3'	5.52	126.33	119.70
35	BA	84	U	C2-N3-C4	-5.52	123.69	127.00
35	BA	654	G	C3'-C2'-C1'	-5.52	97.08	101.50
35	BA	950	U	C6-N1-C2	5.52	124.31	121.00
35	BA	1050	G	P-O3'-C3'	5.52	126.33	119.70
35	BA	1142	G	N1-C2-N3	5.52	127.21	123.90
35	BA	1476	A	N9-C4-C5	5.52	108.01	105.80
2	AB	719	C	P-O3'-C3'	5.52	126.33	119.70
2	AB	1358	G	N1-C2-N3	5.52	127.21	123.90
35	BA	1081	A	O4'-C1'-N9	5.52	112.62	108.20
35	BA	1244	G	N3-C2-N2	-5.52	116.03	119.90
1	AA	101	A	C4-C5-C6	5.52	119.76	117.00
2	AB	516	C	C2-N3-C4	-5.52	117.14	119.90
2	AB	734	A	O4'-C1'-N9	5.52	112.62	108.20
2	AB	876	C	C6-N1-C2	5.52	122.51	120.30
2	AB	905	A	O4'-C1'-N9	5.52	112.62	108.20
2	AB	1047	G	O4'-C4'-C3'	5.52	110.52	106.10
2	AB	1233	C	C4'-C3'-C2'	-5.52	97.08	102.60
2	AB	1255	U	N1-C2-N3	-5.52	111.59	114.90
2	AB	1301	A	C4-C5-N7	-5.52	107.94	110.70
2	AB	1358	G	C5'-C4'-O4'	5.52	115.72	109.10
2	AB	1376	C	C5-C6-N1	5.52	123.76	121.00
2	AB	1771	C	C2-N3-C4	5.52	122.66	119.90
2	AB	2357	G	C8-N9-C4	-5.52	104.19	106.40
2	AB	2462	C	C5-C6-N1	5.52	123.76	121.00
2	AB	2700	A	C5-N7-C8	-5.52	101.14	103.90
2	AB	2737	G	N1-C6-O6	-5.52	116.59	119.90
2	AB	2804	U	C5'-C4'-C3'	-5.52	107.17	116.00
14	AN	115	GLU	CA-CB-CG	5.52	125.54	113.40
35	BA	21	G	C5-N7-C8	5.52	107.06	104.30
35	BA	164	G	O4'-C1'-N9	5.52	112.62	108.20
35	BA	317	U	C5-C4-O4	-5.52	122.59	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1319	A	O4'-C1'-N9	5.52	112.62	108.20
35	BA	1526	G	C2-N3-C4	5.52	114.66	111.90
35	BA	1528	U	P-O3'-C3'	5.52	126.32	119.70
38	BD	73	A	N9-C1'-C2'	-5.52	105.93	112.00
2	AB	350	G	N9-C1'-C2'	-5.52	105.93	112.00
2	AB	413	C	C6-N1-C2	-5.52	118.09	120.30
2	AB	761	A	N1-C2-N3	-5.52	126.54	129.30
2	AB	794	A	C6-C5-N7	5.52	136.16	132.30
2	AB	1168	G	N1-C2-N2	5.52	121.17	116.20
2	AB	1169	A	C8-N9-C4	5.52	108.01	105.80
2	AB	1201	U	N3-C2-O2	-5.52	118.34	122.20
2	AB	1381	G	C4-C5-C6	5.52	122.11	118.80
2	AB	1924	C	O4'-C1'-N1	5.52	112.61	108.20
2	AB	2160	C	C2-N3-C4	5.52	122.66	119.90
2	AB	2218	G	C6-C5-N7	-5.52	127.09	130.40
2	AB	2323	G	O5'-C5'-C4'	-5.52	101.22	111.70
2	AB	2336	A	C4'-C3'-C2'	-5.52	97.08	102.60
2	AB	2603	G	C5'-C4'-O4'	5.52	115.72	109.10
35	BA	242	G	N9-C1'-C2'	-5.52	105.93	112.00
35	BA	345	C	N3-C4-C5	-5.52	119.69	121.90
35	BA	464	U	N1-C1'-C2'	5.52	121.17	114.00
35	BA	543	U	C5-C4-O4	-5.52	122.59	125.90
35	BA	830	G	C5-N7-C8	-5.52	101.54	104.30
35	BA	896	C	O4'-C1'-C2'	5.52	112.56	107.60
35	BA	1068	G	C4-N9-C1'	5.52	133.67	126.50
37	BC	37	G	N9-C4-C5	5.52	107.61	105.40
2	AB	2246	G	C6-N1-C2	-5.52	121.79	125.10
2	AB	2316	G	N3-C2-N2	5.52	123.76	119.90
2	AB	2601	C	C5'-C4'-C3'	-5.52	107.17	116.00
12	AL	31	GLU	OE1-CD-OE2	5.52	129.92	123.30
35	BA	435	A	C4-C5-N7	5.52	113.46	110.70
35	BA	700	G	N9-C4-C5	5.52	107.61	105.40
35	BA	1432	G	N3-C4-C5	-5.52	125.84	128.60
1	AA	7	G	N3-C2-N2	-5.51	116.04	119.90
2	AB	352	A	C4'-C3'-C2'	-5.51	97.08	102.60
2	AB	775	G	C5'-C4'-O4'	-5.51	102.48	109.10
2	AB	798	G	N7-C8-N9	5.51	115.86	113.10
2	AB	1091	G	N7-C8-N9	5.51	115.86	113.10
2	AB	1408	G	N1-C6-O6	-5.51	116.59	119.90
2	AB	1461	C	C4'-C3'-C2'	-5.51	97.09	102.60
2	AB	1742	U	O4'-C4'-C3'	5.51	110.51	106.10
2	AB	1954	G	C2-N3-C4	5.51	114.66	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2341	G	C4'-C3'-C2'	-5.51	97.09	102.60
2	AB	2349	G	N1-C6-O6	5.51	123.21	119.90
2	AB	2479	U	N3-C4-C5	5.51	117.91	114.60
2	AB	2686	G	P-O3'-C3'	5.51	126.32	119.70
2	AB	2706	A	C5-N7-C8	-5.51	101.14	103.90
3	AC	184	LYS	N-CA-CB	-5.51	100.67	110.60
16	AP	116	VAL	CA-CB-CG1	5.51	119.17	110.90
27	A0	48	ARG	CD-NE-CZ	5.51	131.32	123.60
35	BA	349	A	C4-C5-C6	-5.51	114.24	117.00
35	BA	610	U	C5-C6-N1	-5.51	119.94	122.70
35	BA	666	G	C4-C5-N7	-5.51	108.59	110.80
35	BA	940	C	C5-C4-N4	-5.51	116.34	120.20
35	BA	1189	U	P-O3'-C3'	5.51	126.32	119.70
36	BB	36	A	N7-C8-N9	5.51	116.56	113.80
50	BP	51	GLN	CA-CB-CG	5.51	125.53	113.40
52	BR	32	THR	CA-CB-CG2	5.51	120.12	112.40
2	AB	287	G	C4'-C3'-C2'	-5.51	97.09	102.60
2	AB	1364	G	C5-C6-O6	5.51	131.91	128.60
2	AB	1610	A	N1-C2-N3	5.51	132.06	129.30
2	AB	2046	G	N9-C1'-C2'	-5.51	105.94	112.00
2	AB	2385	C	P-O5'-C5'	5.51	129.72	120.90
2	AB	2828	G	C5'-C4'-O4'	5.51	115.72	109.10
35	BA	54	C	O5'-C5'-C4'	5.51	122.17	111.70
35	BA	163	C	P-O3'-C3'	5.51	126.32	119.70
54	BT	26	ARG	NE-CZ-NH2	-5.51	117.54	120.30
2	AB	76	C	C4'-C3'-C2'	-5.51	97.09	102.60
2	AB	156	A	N9-C4-C5	-5.51	103.59	105.80
2	AB	492	A	C6-N1-C2	5.51	121.91	118.60
2	AB	595	C	N3-C2-O2	-5.51	118.04	121.90
2	AB	1449	G	C4-C5-C6	-5.51	115.49	118.80
2	AB	1474	U	C5-C6-N1	-5.51	119.94	122.70
2	AB	1527	G	N3-C4-N9	5.51	129.31	126.00
2	AB	1619	G	C5-N7-C8	-5.51	101.54	104.30
2	AB	1927	A	O4'-C1'-N9	5.51	112.61	108.20
2	AB	2235	G	C5'-C4'-O4'	5.51	115.71	109.10
2	AB	2255	G	C6-N1-C2	-5.51	121.79	125.10
2	AB	2311	A	N9-C4-C5	5.51	108.00	105.80
2	AB	2471	A	C5'-C4'-O4'	5.51	115.72	109.10
2	AB	2557	G	C6-N1-C2	-5.51	121.79	125.10
2	AB	2574	G	C2-N3-C4	5.51	114.66	111.90
2	AB	2663	G	C4-C5-N7	-5.51	108.59	110.80
2	AB	2824	C	P-O5'-C5'	5.51	129.72	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	104	G	C5-C6-O6	5.51	131.91	128.60
35	BA	130	A	C8-N9-C4	5.51	108.00	105.80
35	BA	456	A	C2-N3-C4	5.51	113.36	110.60
35	BA	1248	A	C2-N3-C4	5.51	113.36	110.60
35	BA	1382	C	C4'-C3'-C2'	-5.51	97.09	102.60
35	BA	1385	G	P-O3'-C3'	5.51	126.31	119.70
1	AA	35	C	C5'-C4'-O4'	5.51	115.71	109.10
2	AB	399	U	C5'-C4'-C3'	-5.51	107.19	116.00
2	AB	674	G	C5-N7-C8	-5.51	101.55	104.30
2	AB	738	G	N9-C4-C5	-5.51	103.20	105.40
2	AB	1602	U	N3-C2-O2	-5.51	118.34	122.20
2	AB	1691	C	N3-C2-O2	-5.51	118.04	121.90
2	AB	1827	U	N3-C2-O2	-5.51	118.34	122.20
2	AB	2067	G	N3-C4-C5	-5.51	125.85	128.60
2	AB	2543	G	C4-C5-N7	-5.51	108.60	110.80
2	AB	2569	G	N1-C6-O6	5.51	123.21	119.90
2	AB	2628	C	C5-C4-N4	-5.51	116.34	120.20
2	AB	2677	G	C8-N9-C4	-5.51	104.20	106.40
2	AB	2775	G	C5-N7-C8	-5.51	101.55	104.30
2	AB	2785	C	C4'-C3'-C2'	-5.51	97.09	102.60
7	AG	147	ARG	NE-CZ-NH2	-5.51	117.55	120.30
12	AL	56	VAL	CG1-CB-CG2	-5.51	102.08	110.90
35	BA	2	A	N3-C4-N9	5.51	131.81	127.40
35	BA	342	C	N3-C2-O2	-5.51	118.04	121.90
35	BA	692	U	C5-C4-O4	5.51	129.21	125.90
35	BA	899	C	N3-C2-O2	-5.51	118.04	121.90
35	BA	980	C	N3-C4-N4	5.51	121.86	118.00
35	BA	1093	A	N1-C6-N6	-5.51	115.29	118.60
38	BD	7	G	C4'-C3'-O3'	5.51	124.02	113.00
54	BT	64	ARG	NE-CZ-NH1	5.51	123.06	120.30
1	AA	62	C	C5-C4-N4	-5.51	116.34	120.20
2	AB	615	U	N1-C2-N3	5.51	118.20	114.90
2	AB	1899	A	N7-C8-N9	-5.51	111.05	113.80
2	AB	2028	U	C5-C4-O4	5.51	129.21	125.90
2	AB	2813	A	C8-N9-C4	-5.51	103.60	105.80
21	AU	8	ARG	C-N-CA	5.51	135.47	121.70
35	BA	104	G	C2-N3-C4	5.51	114.65	111.90
35	BA	746	A	N9-C1'-C2'	-5.51	105.94	112.00
35	BA	1223	C	N3-C2-O2	5.51	125.75	121.90
35	BA	1225	A	O5'-C5'-C4'	5.51	122.17	111.70
35	BA	1522	U	N3-C4-C5	-5.51	111.30	114.60
38	BD	27	G	C5-N7-C8	-5.51	101.55	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	323	C	C6-N1-C1'	-5.51	114.19	120.80
2	AB	396	G	N7-C8-N9	5.51	115.85	113.10
2	AB	453	A	N1-C2-N3	5.51	132.05	129.30
2	AB	505	A	P-O3'-C3'	5.51	126.31	119.70
2	AB	543	G	P-O3'-C3'	5.51	126.31	119.70
2	AB	661	A	C5-C6-N1	5.51	120.45	117.70
2	AB	1573	G	C2-N3-C4	5.51	114.65	111.90
2	AB	1579	A	O4'-C1'-N9	5.51	112.61	108.20
2	AB	1955	U	N3-C4-O4	5.51	123.25	119.40
2	AB	2040	G	N1-C2-N2	5.51	121.16	116.20
2	AB	2060	A	C3'-C2'-C1'	-5.51	97.09	101.50
2	AB	2271	G	C5'-C4'-O4'	5.51	115.71	109.10
2	AB	2323	G	C1'-O4'-C4'	-5.51	105.50	109.90
2	AB	2510	C	C5-C4-N4	-5.51	116.34	120.20
2	AB	2665	A	C2-N3-C4	5.51	113.35	110.60
35	BA	113	G	N3-C2-N2	-5.51	116.05	119.90
35	BA	211	G	C5-N7-C8	-5.51	101.55	104.30
35	BA	286	C	C2-N3-C4	5.51	122.65	119.90
35	BA	347	G	N7-C8-N9	5.51	115.85	113.10
35	BA	738	C	C2'-C3'-O3'	5.51	122.51	113.70
35	BA	1071	C	C5'-C4'-O4'	5.51	115.71	109.10
35	BA	1232	U	C4-C5-C6	5.51	123.00	119.70
35	BA	1526	G	O3'-P-O5'	-5.51	93.54	104.00
38	BD	46	G	O4'-C1'-N9	-5.51	103.80	108.20
2	AB	804	A	P-O3'-C3'	5.50	126.31	119.70
2	AB	1061	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	1255	U	C5'-C4'-C3'	5.50	124.81	116.00
2	AB	1716	U	C1'-O4'-C4'	5.50	114.30	109.90
2	AB	1949	G	C8-N9-C4	-5.50	104.20	106.40
2	AB	2595	G	N3-C4-C5	-5.50	125.85	128.60
2	AB	2704	C	N3-C4-N4	-5.50	114.15	118.00
54	BT	64	ARG	NE-CZ-NH2	-5.50	117.55	120.30
2	AB	362	A	C2-N3-C4	-5.50	107.85	110.60
2	AB	412	A	N7-C8-N9	-5.50	111.05	113.80
2	AB	476	G	C1'-O4'-C4'	5.50	114.30	109.90
2	AB	493	G	C6-N1-C2	-5.50	121.80	125.10
2	AB	535	G	N1-C6-O6	-5.50	116.60	119.90
2	AB	1094	U	C3'-C2'-C1'	5.50	105.90	101.50
2	AB	1219	U	C2-N3-C4	-5.50	123.70	127.00
2	AB	1755	A	C1'-O4'-C4'	-5.50	105.50	109.90
2	AB	2405	G	C4'-C3'-C2'	-5.50	97.10	102.60
35	BA	120	A	C5'-C4'-O4'	5.50	115.70	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	386	C	O4'-C4'-C3'	-5.50	98.50	104.00
35	BA	756	C	O3'-P-O5'	-5.50	93.54	104.00
35	BA	865	A	C4-C5-N7	5.50	113.45	110.70
35	BA	1041	G	O4'-C1'-C2'	5.50	112.55	107.60
35	BA	1302	C	C1'-O4'-C4'	5.50	114.30	109.90
38	BD	64	G	N9-C4-C5	5.50	107.60	105.40
38	BD	77	A	C6-C5-N7	5.50	136.15	132.30
46	BL	105	ARG	NE-CZ-NH2	-5.50	117.55	120.30
55	BU	7	ARG	NE-CZ-NH1	-5.50	117.55	120.30
2	AB	264	C	O4'-C1'-N1	5.50	112.60	108.20
2	AB	340	A	O4'-C1'-N9	5.50	112.60	108.20
2	AB	364	C	N3-C4-N4	5.50	121.85	118.00
2	AB	830	G	C4'-C3'-C2'	-5.50	97.10	102.60
2	AB	935	C	O4'-C1'-N1	5.50	112.60	108.20
2	AB	1442	U	C3'-C2'-C1'	-5.50	97.10	101.50
2	AB	1840	G	C5'-C4'-C3'	-5.50	107.20	116.00
35	BA	129	A	C2-N3-C4	5.50	113.35	110.60
35	BA	499	A	N1-C2-N3	-5.50	126.55	129.30
35	BA	692	U	C3'-C2'-C1'	5.50	105.90	101.50
35	BA	823	C	P-O3'-C3'	5.50	126.30	119.70
35	BA	900	A	C1'-O4'-C4'	-5.50	105.50	109.90
35	BA	1122	U	C2-N3-C4	-5.50	123.70	127.00
35	BA	1215	G	C6-C5-N7	5.50	133.70	130.40
35	BA	1310	G	C6-C5-N7	-5.50	127.10	130.40
35	BA	1370	G	N1-C6-O6	-5.50	116.60	119.90
35	BA	1444	U	O4'-C4'-C3'	5.50	110.50	106.10
37	BC	32	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	1228	G	C1'-O4'-C4'	5.50	114.30	109.90
2	AB	1712	U	C6-N1-C2	-5.50	117.70	121.00
2	AB	1867	G	C5'-C4'-O4'	5.50	115.70	109.10
2	AB	2247	A	N1-C2-N3	5.50	132.05	129.30
2	AB	2454	G	N9-C1'-C2'	-5.50	105.95	112.00
26	AZ	30	PRO	N-CA-CB	5.50	109.90	103.30
35	BA	566	G	C5-N7-C8	5.50	107.05	104.30
35	BA	598	U	N3-C4-O4	5.50	123.25	119.40
35	BA	1437	A	O4'-C1'-N9	5.50	112.60	108.20
2	AB	30	G	O4'-C1'-N9	5.50	112.60	108.20
2	AB	37	C	N1-C2-O2	5.50	122.20	118.90
2	AB	718	A	C2-N3-C4	-5.50	107.85	110.60
2	AB	760	G	O4'-C1'-C2'	5.50	112.55	107.60
2	AB	854	C	N3-C4-N4	5.50	121.85	118.00
2	AB	945	A	N7-C8-N9	5.50	116.55	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1080	A	N1-C2-N3	5.50	132.05	129.30
2	AB	1157	G	O5'-C5'-C4'	5.50	122.15	111.70
2	AB	1325	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	2304	G	N7-C8-N9	-5.50	110.35	113.10
2	AB	2608	G	C4-C5-C6	5.50	122.10	118.80
2	AB	2701	U	C2'-C3'-O3'	5.50	122.50	113.70
2	AB	2757	A	C5'-C4'-O4'	5.50	115.70	109.10
35	BA	147	G	C6-C5-N7	-5.50	127.10	130.40
35	BA	159	G	C8-N9-C4	-5.50	104.20	106.40
35	BA	305	G	N1-C2-N2	5.50	121.15	116.20
35	BA	378	G	C1'-O4'-C4'	-5.50	105.50	109.90
35	BA	404	G	N3-C4-C5	-5.50	125.85	128.60
35	BA	484	G	N7-C8-N9	-5.50	110.35	113.10
35	BA	490	C	C1'-O4'-C4'	-5.50	105.50	109.90
35	BA	728	A	C6-C5-N7	5.50	136.15	132.30
35	BA	785	G	C5-C6-O6	5.50	131.90	128.60
35	BA	972	C	C2-N1-C1'	-5.50	112.75	118.80
35	BA	1083	U	C2-N3-C4	-5.50	123.70	127.00
35	BA	1501	C	C2-N3-C4	-5.50	117.15	119.90
1	AA	31	C	C2-N1-C1'	-5.50	112.75	118.80
2	AB	146	A	C4'-C3'-C2'	-5.50	97.10	102.60
2	AB	187	G	N9-C4-C5	-5.50	103.20	105.40
2	AB	447	A	C6-N1-C2	-5.50	115.30	118.60
2	AB	469	G	C4-C5-N7	5.50	113.00	110.80
2	AB	1777	U	N1-C2-O2	5.50	126.65	122.80
2	AB	2263	C	N1-C2-O2	5.50	122.20	118.90
2	AB	2693	G	N9-C4-C5	5.50	107.60	105.40
2	AB	2722	G	C5-N7-C8	5.50	107.05	104.30
35	BA	200	G	C6-C5-N7	-5.50	127.10	130.40
35	BA	246	A	C5-C6-N6	5.50	128.10	123.70
35	BA	466	A	C5-C6-N6	-5.50	119.30	123.70
35	BA	517	G	C4-C5-N7	5.50	113.00	110.80
35	BA	647	C	C4-C5-C6	-5.50	114.65	117.40
35	BA	1273	C	C5'-C4'-C3'	-5.50	107.20	116.00
35	BA	1467	C	N3-C4-N4	5.50	121.85	118.00
36	BB	74	C	C5'-C4'-O4'	-5.50	102.50	109.10
2	AB	302	C	N3-C4-N4	-5.50	114.15	118.00
2	AB	1718	G	C5'-C4'-O4'	5.50	115.69	109.10
35	BA	47	C	C4-C5-C6	5.50	120.15	117.40
35	BA	297	G	C5-N7-C8	-5.50	101.55	104.30
35	BA	782	A	C4'-C3'-C2'	-5.50	97.11	102.60
35	BA	1304	G	C4'-C3'-C2'	-5.50	97.11	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1497	G	C1'-O4'-C4'	5.50	114.30	109.90
37	BC	29	G	P-O3'-C3'	5.50	126.29	119.70
2	AB	83	A	N1-C2-N3	-5.49	126.55	129.30
2	AB	302	C	C6-N1-C1'	-5.49	114.21	120.80
2	AB	370	G	N3-C4-N9	-5.49	122.70	126.00
2	AB	1030	C	O5'-P-OP2	-5.49	100.75	105.70
2	AB	1520	U	C5'-C4'-O4'	5.49	115.69	109.10
2	AB	1713	A	N1-C2-N3	-5.49	126.55	129.30
2	AB	1746	A	C8-N9-C4	-5.49	103.60	105.80
2	AB	1784	A	N1-C2-N3	-5.49	126.55	129.30
2	AB	2139	U	C4-C5-C6	5.49	123.00	119.70
2	AB	2434	A	C4-C5-N7	-5.49	107.95	110.70
2	AB	2899	A	C4'-C3'-C2'	-5.49	97.11	102.60
24	AX	66	ASP	CB-CG-OD1	-5.49	113.36	118.30
35	BA	102	G	C4-N9-C1'	-5.49	119.36	126.50
35	BA	112	G	P-O5'-C5'	5.49	129.69	120.90
35	BA	213	G	N7-C8-N9	5.49	115.85	113.10
35	BA	498	A	C8-N9-C4	-5.49	103.60	105.80
35	BA	843	U	C5-C6-N1	-5.49	119.95	122.70
36	BB	3	G	N9-C1'-C2'	-5.49	105.96	112.00
58	BX	61	ARG	NE-CZ-NH1	5.49	123.05	120.30
2	AB	716	A	N1-C2-N3	5.49	132.05	129.30
2	AB	1897	G	N1-C6-O6	5.49	123.19	119.90
2	AB	2077	A	N9-C1'-C2'	-5.49	105.96	112.00
35	BA	947	G	O4'-C1'-N9	5.49	112.59	108.20
36	BB	51	G	C6-N1-C2	-5.49	121.81	125.10
37	BC	52	U	O5'-C5'-C4'	-5.49	101.26	111.70
2	AB	226	A	P-O3'-C3'	5.49	126.29	119.70
2	AB	1293	C	C4-C5-C6	-5.49	114.66	117.40
2	AB	1542	U	C5-C6-N1	5.49	125.44	122.70
2	AB	1793	C	N3-C4-C5	-5.49	119.70	121.90
2	AB	1796	U	C5'-C4'-O4'	5.49	115.69	109.10
2	AB	1862	G	N7-C8-N9	5.49	115.84	113.10
2	AB	1905	C	C6-N1-C2	-5.49	118.10	120.30
2	AB	1937	A	O4'-C1'-N9	5.49	112.59	108.20
2	AB	2093	G	N7-C8-N9	5.49	115.84	113.10
2	AB	2373	G	N3-C2-N2	5.49	123.74	119.90
12	AL	72	LYS	CA-CB-CG	-5.49	101.32	113.40
35	BA	743	A	C5'-C4'-C3'	-5.49	107.22	116.00
35	BA	812	G	C6-C5-N7	-5.49	127.11	130.40
35	BA	994	A	C8-N9-C4	-5.49	103.60	105.80
35	BA	1218	C	C2-N3-C4	5.49	122.64	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1240	U	C5-C6-N1	5.49	125.45	122.70
35	BA	1371	G	N9-C4-C5	-5.49	103.20	105.40
35	BA	1374	A	N1-C6-N6	-5.49	115.31	118.60
38	BD	5	G	C4-C5-N7	5.49	113.00	110.80
2	AB	555	G	C5-C6-N1	5.49	114.24	111.50
2	AB	613	A	N3-C4-C5	-5.49	122.96	126.80
2	AB	639	U	N3-C4-C5	5.49	117.89	114.60
2	AB	986	C	N3-C4-N4	5.49	121.84	118.00
2	AB	1264	A	C4'-C3'-C2'	-5.49	97.11	102.60
2	AB	1298	C	C5-C6-N1	-5.49	118.25	121.00
2	AB	1709	U	C1'-O4'-C4'	5.49	114.29	109.90
2	AB	2001	C	N1-C2-N3	-5.49	115.36	119.20
2	AB	2081	U	P-O3'-C3'	5.49	126.29	119.70
2	AB	2168	G	C1'-O4'-C4'	-5.49	105.51	109.90
2	AB	2277	G	N1-C6-O6	-5.49	116.61	119.90
2	AB	2599	G	C8-N9-C4	5.49	108.59	106.40
2	AB	2758	A	C5-N7-C8	5.49	106.64	103.90
29	A2	25	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
35	BA	149	A	C8-N9-C4	-5.49	103.61	105.80
35	BA	607	A	C4-C5-N7	-5.49	107.95	110.70
35	BA	673	A	C1'-O4'-C4'	5.49	114.29	109.90
35	BA	887	G	C4-C5-N7	5.49	113.00	110.80
35	BA	895	G	N7-C8-N9	5.49	115.84	113.10
36	BB	52	A	O4'-C1'-N9	5.49	112.59	108.20
2	AB	929	U	N3-C2-O2	-5.49	118.36	122.20
2	AB	1116	G	C4-C5-N7	5.49	113.00	110.80
2	AB	1590	A	O4'-C4'-C3'	5.49	110.49	106.10
2	AB	1639	C	C3'-C2'-C1'	5.49	105.89	101.50
2	AB	2202	U	C5-C6-N1	-5.49	119.96	122.70
2	AB	2475	C	C4'-C3'-C2'	-5.49	97.11	102.60
17	AQ	99	TYR	CZ-CE2-CD2	-5.49	114.86	119.80
1	AA	102	G	C4'-C3'-C2'	-5.49	97.11	102.60
2	AB	270	A	N1-C2-N3	5.49	132.04	129.30
2	AB	779	U	N1-C1'-C2'	-5.49	105.97	112.00
2	AB	1354	A	N7-C8-N9	5.49	116.54	113.80
2	AB	1734	G	C2-N3-C4	5.49	114.64	111.90
2	AB	2446	G	O4'-C1'-C2'	-5.49	100.31	105.80
2	AB	2518	A	N9-C1'-C2'	5.49	121.13	114.00
2	AB	2593	U	N3-C2-O2	-5.49	118.36	122.20
2	AB	2709	G	N9-C4-C5	5.49	107.59	105.40
2	AB	2800	A	C8-N9-C4	-5.49	103.61	105.80
9	AI	117	LEU	CB-CG-CD1	-5.49	101.67	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	219	U	C5'-C4'-O4'	5.49	115.68	109.10
35	BA	822	U	N1-C2-O2	-5.49	118.96	122.80
35	BA	1261	A	C5-C6-N1	-5.49	114.96	117.70
40	BF	221	ALA	CB-CA-C	5.49	118.33	110.10
2	AB	383	C	C6-N1-C1'	5.48	127.38	120.80
2	AB	881	G	N3-C4-C5	-5.48	125.86	128.60
2	AB	1823	G	N3-C4-C5	-5.48	125.86	128.60
2	AB	2208	C	N1-C2-O2	5.48	122.19	118.90
35	BA	514	C	N1-C2-N3	5.48	123.04	119.20
35	BA	798	U	C3'-C2'-C1'	-5.48	97.11	101.50
2	AB	86	G	N9-C1'-C2'	-5.48	105.97	112.00
2	AB	283	G	C4-C5-N7	-5.48	108.61	110.80
2	AB	319	G	C4'-C3'-C2'	5.48	108.08	102.60
2	AB	546	U	N3-C4-O4	5.48	123.24	119.40
2	AB	694	U	C5-C4-O4	5.48	129.19	125.90
2	AB	1049	C	C6-N1-C1'	5.48	127.38	120.80
2	AB	1055	G	O4'-C1'-N9	5.48	112.58	108.20
2	AB	1070	A	C8-N9-C4	-5.48	103.61	105.80
2	AB	1687	G	C5-N7-C8	-5.48	101.56	104.30
2	AB	1699	G	N7-C8-N9	5.48	115.84	113.10
2	AB	1866	A	N7-C8-N9	5.48	116.54	113.80
2	AB	2343	U	C5-C6-N1	5.48	125.44	122.70
2	AB	2380	C	C5-C4-N4	-5.48	116.36	120.20
2	AB	2397	G	C5-N7-C8	5.48	107.04	104.30
2	AB	2625	G	C5-N7-C8	-5.48	101.56	104.30
2	AB	2720	U	C2-N3-C4	-5.48	123.71	127.00
8	AH	61	TRP	NE1-CE2-CD2	-5.48	101.82	107.30
19	AS	75	TYR	CD1-CE1-CZ	5.48	124.73	119.80
35	BA	929	G	O4'-C4'-C3'	-5.48	98.52	104.00
35	BA	974	A	C5-N7-C8	-5.48	101.16	103.90
35	BA	1134	G	N9-C1'-C2'	-5.48	105.97	112.00
35	BA	1141	C	N3-C4-C5	5.48	124.09	121.90
35	BA	1353	G	C5'-C4'-O4'	5.48	115.68	109.10
36	BB	25	C	O4'-C1'-N1	5.48	112.59	108.20
50	BP	54	THR	CA-CB-OG1	5.48	120.51	109.00
52	BR	77	TYR	CD1-CE1-CZ	-5.48	114.86	119.80
1	AA	3	C	O4'-C1'-N1	5.48	112.58	108.20
1	AA	11	C	C3'-C2'-C1'	5.48	105.88	101.50
2	AB	53	A	O4'-C1'-N9	5.48	112.58	108.20
2	AB	229	C	N3-C4-N4	5.48	121.84	118.00
2	AB	247	G	O4'-C4'-C3'	5.48	110.48	106.10
2	AB	574	A	C5-C6-N1	5.48	120.44	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	654	A	C5-C6-N1	5.48	120.44	117.70
2	AB	981	A	C1'-O4'-C4'	-5.48	105.52	109.90
2	AB	1461	C	N3-C2-O2	-5.48	118.06	121.90
2	AB	1552	A	C5-C6-N1	5.48	120.44	117.70
2	AB	1673	G	C8-N9-C4	-5.48	104.21	106.40
2	AB	1699	G	C5'-C4'-O4'	5.48	115.68	109.10
2	AB	1778	U	N3-C4-O4	-5.48	115.56	119.40
2	AB	1788	C	C2-N3-C4	5.48	122.64	119.90
2	AB	2436	G	C6-C5-N7	-5.48	127.11	130.40
2	AB	2472	G	C5'-C4'-O4'	5.48	115.68	109.10
2	AB	2706	A	O4'-C1'-N9	5.48	112.58	108.20
2	AB	2749	A	C3'-C2'-C1'	-5.48	97.11	101.50
15	AO	135	VAL	CG1-CB-CG2	-5.48	102.13	110.90
26	AZ	36	ARG	NH1-CZ-NH2	-5.48	113.37	119.40
35	BA	56	U	P-O3'-C3'	5.48	126.28	119.70
35	BA	260	G	C4'-C3'-O3'	-5.48	97.89	109.40
35	BA	373	A	C2'-C3'-O3'	5.48	122.47	113.70
35	BA	799	G	C4'-C3'-C2'	-5.48	97.12	102.60
35	BA	906	A	N1-C2-N3	-5.48	126.56	129.30
35	BA	1272	G	C4'-C3'-C2'	-5.48	97.12	102.60
39	BE	75	ALA	N-CA-CB	-5.48	102.43	110.10
46	BL	117	LEU	CA-CB-CG	5.48	127.91	115.30
2	AB	201	C	C4-C5-C6	-5.48	114.66	117.40
2	AB	219	A	C2-N3-C4	-5.48	107.86	110.60
2	AB	265	A	P-O3'-C3'	5.48	126.28	119.70
2	AB	527	C	C5'-C4'-O4'	5.48	115.67	109.10
2	AB	604	G	N3-C4-N9	5.48	129.29	126.00
2	AB	1452	G	C8-N9-C4	-5.48	104.21	106.40
2	AB	2343	U	O5'-C5'-C4'	5.48	122.11	111.70
2	AB	2598	A	C6-C5-N7	5.48	136.13	132.30
37	BC	44	U	C6-N1-C2	5.48	124.29	121.00
38	BD	30	G	C4-N9-C1'	-5.48	119.38	126.50
38	BD	74	A	N3-C4-N9	5.48	131.78	127.40
2	AB	54	G	N9-C4-C5	5.48	107.59	105.40
2	AB	86	G	C6-N1-C2	-5.48	121.81	125.10
2	AB	289	G	N1-C6-O6	5.48	123.19	119.90
2	AB	606	U	O4'-C1'-N1	5.48	112.58	108.20
2	AB	625	G	O5'-C5'-C4'	5.48	122.11	111.70
2	AB	815	C	C2-N3-C4	5.48	122.64	119.90
2	AB	1405	U	O5'-C5'-C4'	-5.48	101.29	111.70
2	AB	1759	A	C6-N1-C2	5.48	121.89	118.60
2	AB	2852	G	P-O3'-C3'	5.48	126.27	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	AH	143	VAL	CG1-CB-CG2	5.48	119.66	110.90
35	BA	674	G	C4'-C3'-C2'	5.48	108.08	102.60
35	BA	1398	A	N1-C2-N3	-5.48	126.56	129.30
36	BB	60	U	C4-C5-C6	5.48	122.99	119.70
2	AB	162	U	C5'-C4'-C3'	-5.48	107.24	116.00
2	AB	760	G	N1-C2-N2	-5.48	111.27	116.20
2	AB	1062	G	N9-C4-C5	5.48	107.59	105.40
2	AB	1320	C	C6-N1-C2	5.48	122.49	120.30
2	AB	1778	U	O5'-P-OP2	-5.48	100.77	105.70
2	AB	1944	U	C5-C6-N1	-5.48	119.96	122.70
2	AB	2092	U	C4'-C3'-C2'	-5.48	97.12	102.60
2	AB	2273	A	N9-C4-C5	5.48	107.99	105.80
4	AD	237	ARG	NE-CZ-NH2	-5.48	117.56	120.30
35	BA	656	G	O4'-C4'-C3'	-5.48	98.52	104.00
35	BA	1040	U	C4-C5-C6	5.48	122.98	119.70
35	BA	1292	G	C4'-C3'-C2'	-5.48	97.12	102.60
1	AA	98	G	O4'-C1'-N9	5.47	112.58	108.20
2	AB	276	U	C5-C6-N1	-5.47	119.96	122.70
2	AB	805	G	C4-C5-N7	-5.47	108.61	110.80
2	AB	900	A	C4-C5-C6	5.47	119.74	117.00
2	AB	1016	G	N9-C1'-C2'	-5.47	105.98	112.00
2	AB	1524	G	C6-N1-C2	-5.47	121.81	125.10
2	AB	1537	G	N3-C4-C5	-5.47	125.86	128.60
2	AB	1714	U	C5-C4-O4	5.47	129.19	125.90
2	AB	1763	G	N1-C6-O6	5.47	123.18	119.90
2	AB	1968	G	C5-N7-C8	-5.47	101.56	104.30
2	AB	2005	A	N7-C8-N9	5.47	116.54	113.80
2	AB	2362	C	O5'-P-OP2	-5.47	100.77	105.70
28	A1	17	PRO	N-CA-CB	5.47	109.87	103.30
35	BA	1094	G	N1-C6-O6	-5.47	116.62	119.90
35	BA	1383	C	O4'-C1'-N1	5.47	112.58	108.20
1	AA	39	A	O4'-C4'-C3'	5.47	110.48	106.10
2	AB	237	C	N1-C1'-C2'	-5.47	105.98	112.00
2	AB	244	A	C8-N9-C4	-5.47	103.61	105.80
2	AB	344	A	C2-N3-C4	-5.47	107.86	110.60
2	AB	1081	U	N1-C2-N3	5.47	118.18	114.90
2	AB	1112	G	C5-C6-O6	-5.47	125.32	128.60
2	AB	1145	C	C5-C6-N1	5.47	123.74	121.00
2	AB	1431	A	P-O3'-C3'	5.47	126.27	119.70
2	AB	1755	A	C6-C5-N7	5.47	136.13	132.30
2	AB	1893	C	C2-N3-C4	5.47	122.64	119.90
2	AB	1918	A	C6-N1-C2	5.47	121.88	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1973	G	C1'-O4'-C4'	-5.47	105.52	109.90
2	AB	2417	C	C5-C6-N1	5.47	123.74	121.00
2	AB	2494	G	N3-C4-N9	5.47	129.28	126.00
2	AB	2739	U	N3-C4-C5	-5.47	111.32	114.60
2	AB	2902	C	O4'-C1'-N1	5.47	112.58	108.20
9	AI	3	VAL	CA-CB-CG2	5.47	119.11	110.90
21	AU	25	ARG	NH1-CZ-NH2	-5.47	113.38	119.40
35	BA	738	C	C6-N1-C2	5.47	122.49	120.30
35	BA	1230	C	C4-C5-C6	-5.47	114.66	117.40
35	BA	1487	G	C8-N9-C4	-5.47	104.21	106.40
35	BA	1495	U	N1-C2-N3	-5.47	111.62	114.90
37	BC	37	G	C5-C6-O6	-5.47	125.32	128.60
38	BD	25	U	N1-C2-N3	5.47	118.18	114.90
2	AB	324	A	O4'-C1'-N9	5.47	112.58	108.20
2	AB	362	A	C8-N9-C4	-5.47	103.61	105.80
2	AB	767	U	N1-C1'-C2'	-5.47	105.98	112.00
2	AB	1019	U	C4'-C3'-C2'	-5.47	97.13	102.60
2	AB	2889	C	N3-C4-C5	-5.47	119.71	121.90
35	BA	377	G	C5-C6-O6	-5.47	125.32	128.60
35	BA	582	C	C6-N1-C2	5.47	122.49	120.30
50	BP	108	ARG	CD-NE-CZ	5.47	131.26	123.60
1	AA	107	G	O4'-C1'-C2'	5.47	112.52	107.60
2	AB	460	A	C5'-C4'-O4'	5.47	115.66	109.10
2	AB	1216	G	N3-C4-C5	-5.47	125.86	128.60
2	AB	1582	C	C6-N1-C2	-5.47	118.11	120.30
2	AB	1668	A	C2-N3-C4	-5.47	107.86	110.60
2	AB	1679	A	N9-C1'-C2'	-5.47	105.98	112.00
2	AB	1789	A	C4-C5-N7	-5.47	107.97	110.70
2	AB	1926	U	N3-C4-O4	5.47	123.23	119.40
2	AB	1980	G	N3-C4-N9	5.47	129.28	126.00
2	AB	2243	U	C5-C6-N1	5.47	125.43	122.70
2	AB	2398	U	C4-C5-C6	5.47	122.98	119.70
2	AB	2410	G	N3-C2-N2	-5.47	116.07	119.90
2	AB	2648	G	N3-C2-N2	5.47	123.73	119.90
35	BA	240	G	N1-C2-N3	5.47	127.18	123.90
35	BA	308	C	N3-C4-N4	5.47	121.83	118.00
35	BA	630	A	O3'-P-O5'	5.47	114.39	104.00
35	BA	771	G	C8-N9-C4	-5.47	104.21	106.40
35	BA	1060	U	C2-N3-C4	-5.47	123.72	127.00
35	BA	1414	U	C2-N3-C4	-5.47	123.72	127.00
35	BA	1455	G	N3-C2-N2	-5.47	116.07	119.90
37	BC	47	C	C3'-C2'-C1'	5.47	105.88	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	447	A	N1-C2-N3	5.47	132.03	129.30
2	AB	1505	A	OP1-P-OP2	-5.47	111.40	119.60
2	AB	1668	A	O4'-C1'-N9	-5.47	103.83	108.20
2	AB	2744	G	N1-C6-O6	5.47	123.18	119.90
35	BA	511	C	O4'-C1'-C2'	-5.47	100.33	105.80
1	AA	100	G	O4'-C1'-N9	-5.47	103.83	108.20
2	AB	185	G	C1'-O4'-C4'	5.47	114.27	109.90
2	AB	239	C	O4'-C1'-N1	5.47	112.57	108.20
2	AB	418	C	C5-C4-N4	5.47	124.03	120.20
2	AB	513	A	C4-C5-C6	-5.47	114.27	117.00
2	AB	574	A	C3'-C2'-C1'	5.47	105.87	101.50
2	AB	836	G	N9-C4-C5	5.47	107.59	105.40
2	AB	853	C	C5'-C4'-C3'	-5.47	107.25	116.00
2	AB	899	A	C5-C6-N1	-5.47	114.97	117.70
2	AB	1235	G	P-O3'-C3'	5.47	126.26	119.70
2	AB	1250	G	C5-C6-O6	-5.47	125.32	128.60
2	AB	1365	A	N1-C6-N6	5.47	121.88	118.60
2	AB	1675	C	C5-C4-N4	-5.47	116.37	120.20
2	AB	1888	G	C5-C6-O6	5.47	131.88	128.60
2	AB	2217	G	C4-C5-N7	5.47	112.99	110.80
2	AB	2343	U	O4'-C1'-N1	5.47	112.57	108.20
2	AB	2447	G	O4'-C4'-C3'	5.47	110.47	106.10
2	AB	2505	G	N7-C8-N9	5.47	115.83	113.10
19	AS	67	ALA	O-C-N	5.47	131.45	122.70
35	BA	84	U	N3-C2-O2	-5.47	118.37	122.20
35	BA	213	G	O4'-C1'-N9	-5.47	103.83	108.20
35	BA	413	G	P-O3'-C3'	5.47	126.26	119.70
35	BA	1036	A	C5-N7-C8	-5.47	101.17	103.90
35	BA	1214	C	N1-C2-N3	-5.47	115.37	119.20
35	BA	1379	G	N1-C2-N2	5.47	121.12	116.20
35	BA	1430	A	C2-N3-C4	5.47	113.33	110.60
38	BD	19	G	N3-C4-N9	5.47	129.28	126.00
2	AB	114	U	C5'-C4'-O4'	5.46	115.66	109.10
2	AB	178	G	C1'-O4'-C4'	-5.46	105.53	109.90
2	AB	509	C	C3'-C2'-C1'	5.46	105.87	101.50
2	AB	1084	A	C4-C5-N7	-5.46	107.97	110.70
2	AB	1290	C	N1-C2-N3	5.46	123.03	119.20
2	AB	1479	G	C4-C5-C6	5.46	122.08	118.80
2	AB	1531	C	C5-C6-N1	-5.46	118.27	121.00
2	AB	1779	U	C4'-C3'-C2'	-5.46	97.14	102.60
2	AB	1993	U	N3-C2-O2	5.46	126.03	122.20
2	AB	2092	U	C5-C4-O4	-5.46	122.62	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2369	A	C4-C5-N7	-5.46	107.97	110.70
2	AB	2883	A	C2-N3-C4	5.46	113.33	110.60
26	AZ	1	SER	CB-CA-C	5.46	120.48	110.10
35	BA	323	U	C4-C5-C6	-5.46	116.42	119.70
35	BA	450	G	N7-C8-N9	5.46	115.83	113.10
35	BA	610	U	N3-C4-C5	-5.46	111.32	114.60
1	AA	20	G	C6-N1-C2	-5.46	121.82	125.10
2	AB	176	A	P-O3'-C3'	5.46	126.26	119.70
2	AB	767	U	C2-N1-C1'	5.46	124.26	117.70
2	AB	2319	G	N1-C2-N2	-5.46	111.28	116.20
2	AB	2415	G	C1'-O4'-C4'	5.46	114.27	109.90
35	BA	74	A	C5'-C4'-O4'	5.46	115.66	109.10
35	BA	96	U	N1-C1'-C2'	-5.46	105.99	112.00
37	BC	41	A	N1-C6-N6	-5.46	115.32	118.60
1	AA	102	G	N3-C4-N9	-5.46	122.72	126.00
2	AB	538	A	C5-C6-N1	5.46	120.43	117.70
2	AB	573	U	P-O3'-C3'	5.46	126.25	119.70
2	AB	590	A	C5'-C4'-O4'	5.46	115.65	109.10
2	AB	620	G	N1-C2-N3	-5.46	120.62	123.90
2	AB	781	A	C2-N3-C4	5.46	113.33	110.60
2	AB	856	G	C6-C5-N7	-5.46	127.12	130.40
2	AB	1401	G	N1-C6-O6	5.46	123.18	119.90
2	AB	2001	C	N3-C4-N4	5.46	121.82	118.00
2	AB	2034	U	C1'-O4'-C4'	-5.46	105.53	109.90
2	AB	2348	U	C4-C5-C6	5.46	122.98	119.70
2	AB	2475	C	C6-N1-C2	-5.46	118.11	120.30
2	AB	2555	U	P-O3'-C3'	5.46	126.25	119.70
2	AB	2726	A	N7-C8-N9	5.46	116.53	113.80
2	AB	2755	C	C2-N1-C1'	5.46	124.81	118.80
14	AN	55	MET	CG-SD-CE	-5.46	91.46	100.20
35	BA	58	C	N1-C2-O2	-5.46	115.62	118.90
35	BA	86	G	C8-N9-C4	-5.46	104.22	106.40
35	BA	270	A	C6-N1-C2	-5.46	115.32	118.60
35	BA	327	A	C5-C6-N6	-5.46	119.33	123.70
35	BA	628	G	C2-N3-C4	-5.46	109.17	111.90
35	BA	1116	U	C3'-C2'-C1'	5.46	105.87	101.50
35	BA	1149	C	N3-C2-O2	5.46	125.72	121.90
35	BA	1369	C	C4'-C3'-C2'	-5.46	97.14	102.60
35	BA	1422	G	N1-C2-N2	5.46	121.11	116.20
2	AB	624	C	C5-C4-N4	-5.46	116.38	120.20
2	AB	823	C	N1-C2-O2	5.46	122.18	118.90
2	AB	1085	A	C8-N9-C4	-5.46	103.62	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1791	A	C6-N1-C2	5.46	121.88	118.60
2	AB	1796	U	N3-C2-O2	-5.46	118.38	122.20
2	AB	2057	G	N1-C2-N3	5.46	127.18	123.90
2	AB	2463	C	C4'-C3'-C2'	-5.46	97.14	102.60
36	BB	24	G	C5'-C4'-O4'	5.46	115.65	109.10
1	AA	83	G	C3'-C2'-C1'	-5.46	97.13	101.50
2	AB	589	U	N1-C1'-C2'	-5.46	106.00	112.00
2	AB	685	A	C4-C5-C6	-5.46	114.27	117.00
2	AB	807	U	C5-C6-N1	-5.46	119.97	122.70
2	AB	820	A	O4'-C4'-C3'	5.46	110.47	106.10
2	AB	1139	G	O4'-C1'-N9	5.46	112.57	108.20
2	AB	1404	C	O5'-P-OP1	5.46	117.25	110.70
2	AB	1586	A	C4-C5-N7	-5.46	107.97	110.70
2	AB	1680	U	P-O3'-C3'	5.46	126.25	119.70
2	AB	1803	A	C6-N1-C2	5.46	121.88	118.60
2	AB	2375	G	N3-C2-N2	-5.46	116.08	119.90
2	AB	2623	G	C5-N7-C8	-5.46	101.57	104.30
2	AB	2819	G	C5'-C4'-O4'	5.46	115.65	109.10
5	AE	77	ARG	NE-CZ-NH2	-5.46	117.57	120.30
35	BA	88	U	N1-C2-N3	5.46	118.17	114.90
35	BA	383	A	C5-C6-N6	-5.46	119.33	123.70
35	BA	566	G	N3-C2-N2	5.46	123.72	119.90
35	BA	900	A	N7-C8-N9	5.46	116.53	113.80
35	BA	962	C	N1-C2-N3	5.46	123.02	119.20
35	BA	978	A	C1'-O4'-C4'	-5.46	105.53	109.90
35	BA	1219	A	C6-N1-C2	5.46	121.88	118.60
2	AB	23	G	C5-C6-N1	5.46	114.23	111.50
2	AB	160	A	C5-C6-N1	5.46	120.43	117.70
2	AB	221	A	C8-N9-C4	-5.46	103.62	105.80
2	AB	482	A	C5-N7-C8	-5.46	101.17	103.90
2	AB	850	U	C3'-C2'-C1'	5.46	105.87	101.50
2	AB	1055	G	C4-C5-N7	5.46	112.98	110.80
2	AB	1080	A	N1-C6-N6	5.46	121.87	118.60
2	AB	1162	G	C6-N1-C2	-5.46	121.83	125.10
2	AB	1320	C	C5-C6-N1	-5.46	118.27	121.00
2	AB	1607	C	N3-C4-N4	5.46	121.82	118.00
2	AB	1641	A	O4'-C4'-C3'	5.46	110.47	106.10
2	AB	1882	U	C2-N3-C4	-5.46	123.73	127.00
2	AB	1895	C	N1-C2-O2	5.46	122.17	118.90
2	AB	2068	U	C2-N3-C4	-5.46	123.73	127.00
2	AB	2181	U	C2-N1-C1'	5.46	124.25	117.70
2	AB	2633	G	C8-N9-C1'	5.46	134.09	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	AG	31	GLU	N-CA-CB	-5.46	100.78	110.60
35	BA	108	G	N9-C1'-C2'	5.46	121.09	114.00
35	BA	180	U	C1'-O4'-C4'	5.46	114.27	109.90
35	BA	715	A	N1-C6-N6	-5.46	115.33	118.60
35	BA	953	G	O4'-C1'-N9	5.46	112.56	108.20
35	BA	1028	C	C6-N1-C2	5.46	122.48	120.30
35	BA	1081	A	N1-C2-N3	5.46	132.03	129.30
35	BA	1197	A	C4'-C3'-C2'	-5.46	97.14	102.60
35	BA	1274	A	O4'-C1'-N9	5.46	112.56	108.20
36	BB	40	C	P-O3'-C3'	5.46	126.25	119.70
2	AB	105	C	C2-N3-C4	-5.46	117.17	119.90
2	AB	464	U	C5'-C4'-O4'	5.46	115.65	109.10
2	AB	792	A	N1-C2-N3	-5.46	126.57	129.30
2	AB	1187	G	N9-C4-C5	5.46	107.58	105.40
2	AB	1814	G	C2-N3-C4	5.46	114.63	111.90
2	AB	1948	G	C2-N3-C4	-5.46	109.17	111.90
2	AB	2477	U	O4'-C1'-N1	-5.46	103.84	108.20
23	AW	50	ALA	CB-CA-C	5.46	118.28	110.10
35	BA	393	A	C4-C5-C6	-5.46	114.27	117.00
35	BA	450	G	C5'-C4'-O4'	5.46	115.65	109.10
35	BA	473	U	N3-C4-O4	5.46	123.22	119.40
35	BA	580	C	C3'-C2'-C1'	5.46	105.86	101.50
35	BA	674	G	C1'-O4'-C4'	5.46	114.26	109.90
35	BA	1522	U	C5-C6-N1	-5.46	119.97	122.70
48	BN	123	PRO	N-CA-CB	5.46	109.84	103.30
2	AB	388	G	N1-C6-O6	5.45	123.17	119.90
2	AB	446	G	C4-N9-C1'	5.45	133.59	126.50
2	AB	487	C	O3'-P-O5'	-5.45	93.64	104.00
2	AB	489	G	C5-N7-C8	5.45	107.03	104.30
2	AB	590	A	N3-C4-N9	5.45	131.76	127.40
2	AB	708	G	N1-C2-N2	-5.45	111.29	116.20
2	AB	758	C	C5-C4-N4	-5.45	116.38	120.20
2	AB	867	C	C3'-C2'-C1'	-5.45	97.14	101.50
2	AB	1109	C	C4-C5-C6	5.45	120.13	117.40
2	AB	1415	U	N1-C2-N3	5.45	118.17	114.90
2	AB	1805	A	C6-N1-C2	5.45	121.87	118.60
2	AB	1966	A	C5-C6-N1	5.45	120.43	117.70
2	AB	2536	G	O5'-P-OP1	-5.45	100.79	105.70
2	AB	2579	C	N1-C2-O2	5.45	122.17	118.90
7	AG	162	ASP	CB-CG-OD1	5.45	123.21	118.30
35	BA	167	A	O4'-C1'-C2'	-5.45	100.35	105.80
35	BA	475	C	O4'-C1'-N1	5.45	112.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	665	A	N1-C2-N3	-5.45	126.57	129.30
35	BA	904	U	C5'-C4'-O4'	5.45	115.64	109.10
35	BA	1069	C	C6-N1-C2	-5.45	118.12	120.30
35	BA	1292	G	C4-C5-C6	-5.45	115.53	118.80
35	BA	1377	A	C6-C5-N7	5.45	136.12	132.30
35	BA	1470	U	N1-C2-O2	5.45	126.62	122.80
38	BD	24	C	C4-C5-C6	-5.45	114.67	117.40
2	AB	145	C	N3-C4-N4	5.45	121.82	118.00
2	AB	1093	G	C4-C5-N7	5.45	112.98	110.80
2	AB	1514	G	N3-C4-N9	5.45	129.27	126.00
2	AB	1871	A	N3-C4-C5	-5.45	122.98	126.80
2	AB	2206	C	C5'-C4'-C3'	-5.45	107.28	116.00
2	AB	2506	U	P-O3'-C3'	5.45	126.24	119.70
2	AB	2589	A	C2-N3-C4	5.45	113.33	110.60
35	BA	1262	C	C5-C4-N4	-5.45	116.38	120.20
2	AB	95	A	C5-C6-N1	-5.45	114.97	117.70
2	AB	259	G	C8-N9-C4	-5.45	104.22	106.40
2	AB	296	U	N1-C2-N3	5.45	118.17	114.90
2	AB	350	G	C4'-C3'-C2'	-5.45	97.15	102.60
2	AB	874	G	N1-C6-O6	5.45	123.17	119.90
2	AB	1385	A	O4'-C1'-N9	5.45	112.56	108.20
2	AB	1545	A	C4-C5-C6	5.45	119.72	117.00
2	AB	1613	G	C5-N7-C8	-5.45	101.58	104.30
2	AB	2359	C	N3-C2-O2	-5.45	118.08	121.90
35	BA	70	U	N3-C4-O4	5.45	123.22	119.40
35	BA	317	U	N3-C4-O4	5.45	123.22	119.40
35	BA	328	C	C6-N1-C1'	-5.45	114.26	120.80
35	BA	404	G	C8-N9-C4	-5.45	104.22	106.40
35	BA	704	A	N9-C4-C5	5.45	107.98	105.80
35	BA	747	A	P-O5'-C5'	5.45	129.62	120.90
35	BA	1004	A	C2'-C3'-O3'	5.45	122.42	113.70
35	BA	1280	A	C6-N1-C2	-5.45	115.33	118.60
44	BJ	5	VAL	CA-CB-CG1	5.45	119.08	110.90
2	AB	238	C	N1-C1'-C2'	-5.45	106.01	112.00
2	AB	463	G	C5-C6-N1	5.45	114.22	111.50
2	AB	914	G	O4'-C4'-C3'	5.45	110.46	106.10
2	AB	1063	G	C4'-C3'-C2'	-5.45	97.15	102.60
2	AB	1289	C	N3-C2-O2	-5.45	118.09	121.90
2	AB	1365	A	N9-C1'-C2'	-5.45	106.01	112.00
2	AB	1512	C	O4'-C1'-C2'	-5.45	100.35	105.80
2	AB	1620	G	C2-N3-C4	5.45	114.62	111.90
2	AB	2054	A	C2-N3-C4	-5.45	107.88	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2247	A	O4'-C1'-N9	5.45	112.56	108.20
2	AB	2319	G	C6-N1-C2	-5.45	121.83	125.10
2	AB	2677	G	C2-N3-C4	5.45	114.62	111.90
2	AB	2779	U	C5'-C4'-O4'	5.45	115.64	109.10
35	BA	334	C	C5'-C4'-O4'	5.45	115.64	109.10
35	BA	513	C	O4'-C1'-C2'	-5.45	100.35	105.80
35	BA	659	U	C4-C5-C6	5.45	122.97	119.70
35	BA	857	C	P-O3'-C3'	5.45	126.24	119.70
35	BA	1044	A	C4'-C3'-C2'	-5.45	97.15	102.60
2	AB	136	G	C4-N9-C1'	-5.45	119.42	126.50
2	AB	265	A	C8-N9-C4	5.45	107.98	105.80
2	AB	807	U	N1-C1'-C2'	-5.45	106.01	112.00
2	AB	1365	A	O4'-C1'-C2'	5.45	112.50	107.60
2	AB	1490	A	C2-N3-C4	5.45	113.32	110.60
2	AB	1803	A	O4'-C1'-C2'	5.45	112.50	107.60
2	AB	2024	G	O3'-P-O5'	5.45	114.35	104.00
2	AB	2148	G	N7-C8-N9	5.45	115.82	113.10
2	AB	2609	U	C4'-C3'-C2'	-5.45	97.15	102.60
2	AB	2729	G	C5-C6-N1	5.45	114.22	111.50
3	AC	56	ASP	CB-CG-OD2	-5.45	113.40	118.30
35	BA	343	U	C3'-C2'-C1'	-5.45	97.14	101.50
35	BA	379	C	C3'-C2'-C1'	-5.45	97.14	101.50
35	BA	1231	G	C4'-C3'-C2'	-5.45	97.15	102.60
37	BC	45	G	C4'-C3'-C2'	-5.45	97.15	102.60
1	AA	77	U	O4'-C4'-C3'	-5.45	98.55	104.00
2	AB	277	G	C3'-C2'-C1'	-5.45	97.14	101.50
2	AB	369	U	C5'-C4'-O4'	5.45	115.64	109.10
2	AB	797	G	C8-N9-C1'	5.45	134.08	127.00
2	AB	1697	G	C6-N1-C2	-5.45	121.83	125.10
2	AB	2222	C	C6-N1-C2	-5.45	118.12	120.30
2	AB	2305	U	C4'-C3'-C2'	-5.45	97.16	102.60
2	AB	2478	A	P-O5'-C5'	5.45	129.61	120.90
2	AB	2866	U	O4'-C1'-N1	5.45	112.56	108.20
35	BA	313	A	C4'-C3'-C2'	-5.45	97.16	102.60
35	BA	376	G	O4'-C4'-C3'	5.45	110.46	106.10
35	BA	577	G	N3-C4-C5	5.45	131.32	128.60
35	BA	681	A	C4'-C3'-C2'	-5.45	97.16	102.60
35	BA	815	A	O4'-C1'-N9	-5.45	103.84	108.20
35	BA	1013	G	N1-C6-O6	5.45	123.17	119.90
35	BA	1036	A	C5-C6-N1	-5.45	114.98	117.70
36	BB	2	G	C5'-C4'-O4'	5.45	115.64	109.10
2	AB	66	C	C5-C4-N4	5.44	124.01	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	964	C	O5'-P-OP2	-5.44	100.80	105.70
2	AB	1067	A	N3-C4-N9	5.44	131.75	127.40
2	AB	1790	C	O5'-C5'-C4'	-5.44	101.36	111.70
35	BA	477	C	C5-C4-N4	-5.44	116.39	120.20
35	BA	1486	G	C6-C5-N7	-5.44	127.13	130.40
2	AB	83	A	C5-C6-N6	-5.44	119.34	123.70
2	AB	508	A	C6-C5-N7	-5.44	128.49	132.30
2	AB	821	A	C4-C5-N7	-5.44	107.98	110.70
2	AB	990	A	O5'-C5'-C4'	5.44	122.04	111.70
2	AB	1422	G	N9-C1'-C2'	-5.44	106.01	112.00
2	AB	1969	A	C8-N9-C4	-5.44	103.62	105.80
2	AB	2270	A	C5'-C4'-O4'	5.44	115.63	109.10
2	AB	2583	G	N9-C1'-C2'	5.44	121.08	114.00
2	AB	2693	G	N3-C4-C5	-5.44	125.88	128.60
35	BA	135	C	C3'-C2'-C1'	5.44	105.85	101.50
35	BA	414	A	C4'-C3'-C2'	-5.44	97.16	102.60
35	BA	497	G	P-O3'-C3'	5.44	126.23	119.70
35	BA	1014	A	C8-N9-C4	5.44	107.98	105.80
35	BA	1366	C	O4'-C1'-N1	5.44	112.55	108.20
35	BA	1401	G	C1'-O4'-C4'	5.44	114.25	109.90
35	BA	1491	G	O3'-P-O5'	-5.44	93.66	104.00
38	BD	13	C	N1-C1'-C2'	-5.44	106.01	112.00
52	BR	63	ARG	NE-CZ-NH1	5.44	123.02	120.30
2	AB	151	C	C6-N1-C2	-5.44	118.12	120.30
2	AB	472	A	C5-N7-C8	-5.44	101.18	103.90
2	AB	929	U	C2'-C3'-O3'	5.44	122.41	113.70
2	AB	1009	A	C6-C5-N7	5.44	136.11	132.30
2	AB	1122	G	C5-N7-C8	5.44	107.02	104.30
2	AB	1421	G	N3-C4-N9	5.44	129.26	126.00
2	AB	1914	C	O4'-C1'-N1	5.44	112.55	108.20
2	AB	2265	U	N1-C2-N3	5.44	118.16	114.90
2	AB	2268	A	C4-C5-N7	-5.44	107.98	110.70
2	AB	2351	G	C8-N9-C4	-5.44	104.22	106.40
35	BA	90	C	C5-C6-N1	5.44	123.72	121.00
35	BA	120	A	N9-C4-C5	5.44	107.98	105.80
35	BA	122	G	N9-C1'-C2'	-5.44	106.02	112.00
35	BA	918	A	C4-C5-N7	-5.44	107.98	110.70
35	BA	1046	A	N9-C4-C5	5.44	107.98	105.80
35	BA	1202	U	C5-C4-O4	5.44	129.16	125.90
35	BA	1272	G	N3-C4-N9	-5.44	122.74	126.00
35	BA	1400	C	C5'-C4'-O4'	-5.44	102.57	109.10
36	BB	43	G	C4-C5-N7	5.44	112.98	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	76	A	C4-C5-C6	-5.44	114.28	117.00
38	BD	22	A	C4-C5-C6	-5.44	114.28	117.00
47	BM	68	ARG	NE-CZ-NH2	-5.44	117.58	120.30
2	AB	587	C	C2-N3-C4	-5.44	117.18	119.90
2	AB	849	A	P-O5'-C5'	5.44	129.60	120.90
2	AB	1599	U	C5-C4-O4	5.44	129.16	125.90
22	AV	53	VAL	CA-CB-CG2	5.44	119.06	110.90
35	BA	7	A	C4-C5-C6	5.44	119.72	117.00
35	BA	433	G	N1-C2-N2	-5.44	111.30	116.20
35	BA	707	U	N1-C1'-C2'	-5.44	106.02	112.00
35	BA	858	G	N1-C6-O6	5.44	123.16	119.90
35	BA	1536	C	C5-C4-N4	-5.44	116.39	120.20
38	BD	9	G	C8-N9-C1'	5.44	134.07	127.00
2	AB	105	C	C4'-C3'-C2'	-5.44	97.16	102.60
2	AB	183	C	N1-C2-O2	5.44	122.16	118.90
2	AB	833	A	C1'-O4'-C4'	-5.44	105.55	109.90
2	AB	1893	C	O4'-C1'-C2'	-5.44	100.36	105.80
2	AB	1979	U	C5-C6-N1	-5.44	119.98	122.70
2	AB	2721	A	C3'-C2'-C1'	-5.44	97.15	101.50
2	AB	2867	G	N9-C4-C5	-5.44	103.22	105.40
5	AE	75	ALA	N-CA-CB	-5.44	102.49	110.10
35	BA	213	G	C5-N7-C8	-5.44	101.58	104.30
35	BA	440	C	C1'-O4'-C4'	-5.44	105.55	109.90
35	BA	474	G	N9-C4-C5	5.44	107.58	105.40
35	BA	627	G	N9-C4-C5	5.44	107.58	105.40
35	BA	759	A	C6-N1-C2	5.44	121.86	118.60
35	BA	778	G	P-O5'-C5'	5.44	129.60	120.90
35	BA	806	C	N3-C2-O2	-5.44	118.09	121.90
35	BA	906	A	C5-C6-N1	-5.44	114.98	117.70
37	BC	34	U	C3'-C2'-C1'	5.44	105.85	101.50
38	BD	76	C	C5-C6-N1	5.44	123.72	121.00
1	AA	54	G	P-O3'-C3'	5.44	126.22	119.70
2	AB	31	C	C3'-C2'-C1'	-5.44	97.15	101.50
2	AB	751	A	C5-C6-N1	5.44	120.42	117.70
2	AB	1170	C	N1-C1'-C2'	-5.44	106.02	112.00
2	AB	1583	A	C5-C6-N1	5.44	120.42	117.70
2	AB	2484	G	N1-C2-N2	-5.44	111.31	116.20
2	AB	2813	A	O4'-C1'-N9	5.44	112.55	108.20
35	BA	616	G	O3'-P-O5'	5.44	114.33	104.00
35	BA	1300	G	O4'-C1'-N9	-5.44	103.85	108.20
35	BA	1379	G	C8-N9-C4	5.44	108.57	106.40
35	BA	1457	G	C3'-C2'-C1'	-5.44	97.15	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	277	G	N9-C4-C5	-5.43	103.23	105.40
2	AB	295	G	N1-C2-N2	5.43	121.09	116.20
2	AB	322	A	C6-C5-N7	5.43	136.10	132.30
2	AB	349	U	C5-C6-N1	-5.43	119.98	122.70
2	AB	456	C	C2-N3-C4	5.43	122.62	119.90
2	AB	1259	G	O4'-C1'-N9	5.43	112.55	108.20
2	AB	1265	A	C4-C5-C6	5.43	119.72	117.00
2	AB	2302	U	C4'-C3'-O3'	5.43	123.87	113.00
6	AF	79	ARG	NE-CZ-NH1	5.43	123.02	120.30
6	AF	120	VAL	CA-CB-CG1	5.43	119.05	110.90
35	BA	185	U	C2-N3-C4	-5.43	123.74	127.00
35	BA	428	G	N1-C6-O6	-5.43	116.64	119.90
35	BA	1108	G	P-O3'-C3'	5.43	126.22	119.70
35	BA	1481	U	O4'-C4'-C3'	5.43	110.45	106.10
36	BB	14	A	N9-C1'-C2'	-5.43	106.02	112.00
1	AA	102	G	C5-C6-O6	-5.43	125.34	128.60
2	AB	355	U	C5-C4-O4	5.43	129.16	125.90
2	AB	912	C	P-O3'-C3'	5.43	126.22	119.70
2	AB	1037	G	N7-C8-N9	5.43	115.82	113.10
2	AB	1141	U	C6-N1-C1'	5.43	128.81	121.20
2	AB	1275	A	C5'-C4'-O4'	5.43	115.62	109.10
2	AB	1731	G	C4-C5-C6	5.43	122.06	118.80
2	AB	2259	U	N3-C4-O4	5.43	123.20	119.40
14	AN	123	ARG	NE-CZ-NH2	5.43	123.02	120.30
35	BA	393	A	N1-C2-N3	5.43	132.02	129.30
35	BA	505	G	C5'-C4'-C3'	-5.43	107.31	116.00
35	BA	695	A	C2-N3-C4	5.43	113.32	110.60
35	BA	702	A	C1'-O4'-C4'	5.43	114.25	109.90
35	BA	801	U	C5-C6-N1	-5.43	119.98	122.70
35	BA	918	A	C6-N1-C2	-5.43	115.34	118.60
35	BA	1252	A	N3-C4-N9	-5.43	123.06	127.40
35	BA	1314	C	C5'-C4'-O4'	5.43	115.62	109.10
35	BA	1485	U	N3-C2-O2	-5.43	118.40	122.20
37	BC	53	G	C4-C5-N7	-5.43	108.63	110.80
2	AB	389	G	C4-C5-N7	-5.43	108.63	110.80
2	AB	960	A	N9-C4-C5	-5.43	103.63	105.80
2	AB	1088	A	O4'-C1'-N9	5.43	112.55	108.20
2	AB	1201	U	N1-C2-O2	5.43	126.60	122.80
2	AB	1414	C	N1-C2-O2	5.43	122.16	118.90
2	AB	2375	G	C5'-C4'-C3'	-5.43	107.31	116.00
2	AB	2439	A	P-O3'-C3'	5.43	126.22	119.70
35	BA	220	G	C5-N7-C8	5.43	107.02	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1095	U	C5'-C4'-O4'	5.43	115.62	109.10
2	AB	216	A	N9-C4-C5	5.43	107.97	105.80
2	AB	401	A	C6-N1-C2	-5.43	115.34	118.60
2	AB	498	G	C5'-C4'-O4'	5.43	115.61	109.10
2	AB	585	G	N3-C2-N2	5.43	123.70	119.90
2	AB	1010	A	N3-C4-C5	-5.43	123.00	126.80
2	AB	1097	U	C1'-O4'-C4'	5.43	114.24	109.90
2	AB	1140	C	O5'-C5'-C4'	-5.43	101.38	111.70
2	AB	2441	U	C3'-C2'-C1'	5.43	105.84	101.50
2	AB	2799	A	N1-C6-N6	-5.43	115.34	118.60
2	AB	2830	C	OP1-P-O3'	5.43	117.15	105.20
35	BA	89	U	C5-C4-O4	-5.43	122.64	125.90
35	BA	478	A	C5-C6-N6	-5.43	119.36	123.70
35	BA	973	G	C2-N3-C4	5.43	114.61	111.90
35	BA	1187	G	N7-C8-N9	-5.43	110.39	113.10
35	BA	1400	C	P-O3'-C3'	5.43	126.22	119.70
1	AA	65	U	C6-N1-C2	-5.43	117.74	121.00
2	AB	471	A	C4'-C3'-C2'	-5.43	97.17	102.60
2	AB	1092	C	N1-C2-N3	5.43	123.00	119.20
2	AB	2714	G	N3-C4-C5	-5.43	125.89	128.60
2	AB	2758	A	O4'-C1'-N9	5.43	112.54	108.20
35	BA	940	C	O4'-C1'-N1	5.43	112.54	108.20
35	BA	1508	A	C8-N9-C4	-5.43	103.63	105.80
2	AB	29	U	C2'-C3'-O3'	5.43	122.38	113.70
2	AB	315	G	N7-C8-N9	5.43	115.81	113.10
2	AB	942	G	C4-C5-N7	-5.43	108.63	110.80
2	AB	943	A	C5-N7-C8	-5.43	101.19	103.90
2	AB	1066	U	C5'-C4'-O4'	5.43	115.61	109.10
2	AB	1113	U	N1-C1'-C2'	-5.43	106.03	112.00
2	AB	1162	G	C2-N3-C4	5.43	114.61	111.90
2	AB	1186	G	C5-N7-C8	5.43	107.01	104.30
2	AB	1199	U	C5-C4-O4	-5.43	122.64	125.90
2	AB	1278	C	O3'-P-O5'	5.43	114.31	104.00
2	AB	1378	A	C1'-O4'-C4'	-5.43	105.56	109.90
2	AB	1400	U	C4'-C3'-C2'	-5.43	97.17	102.60
2	AB	1910	G	C6-C5-N7	-5.43	127.14	130.40
2	AB	2019	A	C5-C6-N6	5.43	128.04	123.70
2	AB	2582	G	C4-C5-N7	5.43	112.97	110.80
31	A4	38	PHE	CG-CD2-CE2	-5.43	114.83	120.80
35	BA	43	C	C5'-C4'-O4'	5.43	115.61	109.10
35	BA	48	C	N3-C4-N4	5.43	121.80	118.00
35	BA	69	G	N1-C6-O6	5.43	123.16	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	263	A	C5'-C4'-O4'	5.43	115.61	109.10
35	BA	299	G	C3'-C2'-C1'	5.43	105.84	101.50
35	BA	721	G	N1-C2-N2	-5.43	111.32	116.20
35	BA	1315	U	C5-C4-O4	5.43	129.16	125.90
35	BA	1504	G	O4'-C4'-C3'	5.43	110.44	106.10
2	AB	193	U	N1-C2-O2	5.42	126.60	122.80
2	AB	594	U	C2-N3-C4	-5.42	123.75	127.00
2	AB	607	U	O4'-C4'-C3'	5.42	110.44	106.10
2	AB	690	G	C8-N9-C4	-5.42	104.23	106.40
2	AB	707	G	N1-C2-N2	5.42	121.08	116.20
2	AB	923	G	O4'-C1'-N9	5.42	112.54	108.20
2	AB	1706	C	O4'-C1'-N1	5.42	112.54	108.20
2	AB	1750	G	N3-C4-N9	5.42	129.25	126.00
2	AB	2306	C	P-O3'-C3'	5.42	126.21	119.70
2	AB	2526	G	C4-C5-N7	5.42	112.97	110.80
2	AB	2601	C	C1'-O4'-C4'	5.42	114.24	109.90
2	AB	2723	C	C3'-C2'-C1'	5.42	105.84	101.50
2	AB	2828	G	C2-N3-C4	5.42	114.61	111.90
2	AB	2838	G	C8-N9-C4	5.42	108.57	106.40
35	BA	401	C	N3-C4-C5	-5.42	119.73	121.90
35	BA	712	A	N3-C4-N9	-5.42	123.06	127.40
35	BA	861	G	N3-C4-C5	-5.42	125.89	128.60
35	BA	1420	U	C4'-C3'-C2'	-5.42	97.17	102.60
2	AB	571	U	N3-C4-C5	-5.42	111.35	114.60
2	AB	597	G	C6-C5-N7	5.42	133.65	130.40
2	AB	1058	U	C5'-C4'-C3'	-5.42	107.32	116.00
2	AB	1318	U	C6-N1-C2	5.42	124.25	121.00
2	AB	1750	G	N3-C2-N2	-5.42	116.10	119.90
2	AB	2316	G	N1-C2-N2	-5.42	111.32	116.20
2	AB	2418	A	C1'-O4'-C4'	-5.42	105.56	109.90
2	AB	2847	U	N1-C2-N3	5.42	118.15	114.90
35	BA	26	A	O4'-C4'-C3'	5.42	110.44	106.10
35	BA	459	A	C2-N3-C4	5.42	113.31	110.60
35	BA	694	A	C6-C5-N7	5.42	136.10	132.30
35	BA	1526	G	C8-N9-C4	-5.42	104.23	106.40
2	AB	138	U	C2-N3-C4	-5.42	123.75	127.00
2	AB	154	U	N3-C2-O2	-5.42	118.41	122.20
2	AB	476	G	C4'-C3'-C2'	-5.42	97.18	102.60
2	AB	679	C	C5-C6-N1	-5.42	118.29	121.00
2	AB	707	G	C4-C5-N7	-5.42	108.63	110.80
2	AB	987	C	C2-N3-C4	5.42	122.61	119.90
2	AB	1122	G	N3-C4-C5	-5.42	125.89	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1131	G	C5-C6-O6	5.42	131.85	128.60
2	AB	1504	A	C2-N3-C4	-5.42	107.89	110.60
2	AB	1515	A	N3-C4-N9	-5.42	123.06	127.40
2	AB	1931	U	C5-C4-O4	5.42	129.15	125.90
2	AB	1972	G	N3-C4-N9	5.42	129.25	126.00
2	AB	2093	G	N9-C4-C5	5.42	107.57	105.40
2	AB	2210	U	C1'-O4'-C4'	-5.42	105.56	109.90
4	AD	155	ARG	NH1-CZ-NH2	5.42	125.36	119.40
35	BA	20	U	C2-N3-C4	-5.42	123.75	127.00
35	BA	144	G	C3'-C2'-C1'	5.42	105.84	101.50
35	BA	515	G	C6-C5-N7	5.42	133.65	130.40
35	BA	1395	C	N1-C1'-C2'	-5.42	106.04	112.00
36	BB	3	G	N3-C4-N9	5.42	129.25	126.00
38	BD	52	C	N3-C2-O2	-5.42	118.11	121.90
2	AB	40	U	N1-C2-N3	5.42	118.15	114.90
2	AB	400	G	C6-C5-N7	-5.42	127.15	130.40
2	AB	753	A	C4'-C3'-C2'	-5.42	97.18	102.60
2	AB	1832	C	N1-C2-N3	-5.42	115.41	119.20
2	AB	2182	U	C4-C5-C6	5.42	122.95	119.70
35	BA	713	G	C3'-C2'-C1'	5.42	105.84	101.50
2	AB	1	G	C5-C6-O6	-5.42	125.35	128.60
2	AB	320	A	C1'-O4'-C4'	5.42	114.23	109.90
2	AB	356	G	C5-C6-O6	-5.42	125.35	128.60
2	AB	476	G	O3'-P-O5'	-5.42	93.71	104.00
2	AB	797	G	C4-C5-C6	5.42	122.05	118.80
2	AB	999	U	N3-C2-O2	-5.42	118.41	122.20
2	AB	1415	U	O3'-P-O5'	-5.42	93.70	104.00
2	AB	1822	C	C2-N1-C1'	-5.42	112.84	118.80
2	AB	2454	G	C8-N9-C1'	5.42	134.04	127.00
2	AB	2638	G	C3'-C2'-C1'	5.42	105.83	101.50
8	AH	144	ALA	N-CA-CB	-5.42	102.52	110.10
28	A1	44	ARG	NE-CZ-NH2	-5.42	117.59	120.30
35	BA	275	G	P-O3'-C3'	5.42	126.20	119.70
35	BA	565	U	N3-C4-C5	5.42	117.85	114.60
35	BA	722	G	P-O3'-C3'	5.42	126.20	119.70
35	BA	976	G	C5-C6-O6	5.42	131.85	128.60
35	BA	1018	G	N3-C2-N2	-5.42	116.11	119.90
35	BA	1019	A	C4'-C3'-C2'	-5.42	97.18	102.60
2	AB	185	G	N7-C8-N9	5.42	115.81	113.10
2	AB	474	G	C4-C5-N7	-5.42	108.63	110.80
2	AB	579	G	N7-C8-N9	5.42	115.81	113.10
2	AB	847	U	N1-C2-O2	-5.42	119.01	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	857	G	N7-C8-N9	5.42	115.81	113.10
2	AB	860	U	O4'-C1'-N1	5.42	112.53	108.20
2	AB	1046	A	C5-N7-C8	-5.42	101.19	103.90
2	AB	1212	G	N3-C2-N2	5.42	123.69	119.90
2	AB	1372	U	N1-C2-O2	-5.42	119.01	122.80
2	AB	1946	U	C5-C6-N1	-5.42	119.99	122.70
2	AB	2186	G	O5'-P-OP2	-5.42	100.83	105.70
2	AB	2208	C	C5'-C4'-O4'	5.42	115.60	109.10
2	AB	2244	U	C5-C6-N1	-5.42	119.99	122.70
2	AB	2324	U	C3'-C2'-C1'	5.42	105.83	101.50
2	AB	2603	G	C5'-C4'-C3'	-5.42	107.33	116.00
2	AB	2687	U	O4'-C1'-N1	5.42	112.53	108.20
2	AB	2730	C	N3-C4-C5	-5.42	119.73	121.90
2	AB	2754	U	P-O3'-C3'	5.42	126.20	119.70
2	AB	2791	G	C2-N3-C4	5.42	114.61	111.90
35	BA	191	G	C6-N1-C2	-5.42	121.85	125.10
35	BA	621	A	C5-N7-C8	-5.42	101.19	103.90
35	BA	847	G	C8-N9-C1'	5.42	134.04	127.00
35	BA	1286	U	C2-N1-C1'	5.42	124.20	117.70
35	BA	1524	C	O4'-C1'-N1	5.42	112.53	108.20
1	AA	79	G	N9-C1'-C2'	-5.42	106.04	112.00
2	AB	148	U	N1-C2-O2	-5.42	119.01	122.80
2	AB	279	A	C6-N1-C2	-5.42	115.35	118.60
2	AB	289	G	C6-C5-N7	-5.42	127.15	130.40
2	AB	527	C	C4-C5-C6	-5.42	114.69	117.40
2	AB	548	G	C5'-C4'-C3'	-5.42	107.34	116.00
2	AB	974	G	C3'-C2'-C1'	-5.42	97.17	101.50
2	AB	1298	C	O4'-C1'-N1	5.42	112.53	108.20
2	AB	1606	C	N3-C2-O2	-5.42	118.11	121.90
2	AB	1613	G	N9-C4-C5	5.42	107.57	105.40
2	AB	2150	C	N3-C4-C5	5.42	124.07	121.90
35	BA	135	C	N3-C4-N4	5.42	121.79	118.00
35	BA	970	C	C3'-C2'-C1'	5.42	105.83	101.50
35	BA	1347	G	N3-C2-N2	-5.42	116.11	119.90
1	AA	92	C	C2-N3-C4	-5.41	117.19	119.90
2	AB	40	U	C5-C6-N1	-5.41	119.99	122.70
2	AB	310	A	N3-C4-N9	5.41	131.73	127.40
2	AB	641	U	C2-N3-C4	-5.41	123.75	127.00
2	AB	903	C	C5-C4-N4	-5.41	116.41	120.20
2	AB	1056	G	N1-C2-N2	-5.41	111.33	116.20
2	AB	1231	U	C3'-C2'-C1'	5.41	105.83	101.50
2	AB	1288	G	C6-C5-N7	-5.41	127.15	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1787	A	N1-C6-N6	-5.41	115.35	118.60
2	AB	2016	U	O4'-C1'-N1	5.41	112.53	108.20
2	AB	2266	A	N1-C6-N6	-5.41	115.35	118.60
2	AB	2287	A	C4-C5-C6	-5.41	114.29	117.00
35	BA	101	A	N3-C4-C5	-5.41	123.01	126.80
35	BA	187	G	C2'-C3'-O3'	5.41	122.36	113.70
35	BA	231	U	C5'-C4'-C3'	-5.41	107.34	116.00
46	BL	61	ASP	N-CA-CB	-5.41	100.86	110.60
2	AB	792	A	C3'-C2'-C1'	5.41	105.83	101.50
2	AB	2267	A	C5'-C4'-O4'	5.41	115.59	109.10
2	AB	2565	A	C6-C5-N7	-5.41	128.51	132.30
35	BA	689	C	N3-C4-C5	-5.41	119.73	121.90
2	AB	286	U	C5-C6-N1	-5.41	119.99	122.70
2	AB	380	G	C5-C6-N1	-5.41	108.79	111.50
2	AB	464	U	N1-C2-N3	5.41	118.15	114.90
2	AB	583	G	O4'-C1'-C2'	-5.41	100.39	105.80
2	AB	587	C	N1-C1'-C2'	-5.41	106.05	112.00
2	AB	843	G	C4'-C3'-C2'	-5.41	97.19	102.60
2	AB	1215	G	C5'-C4'-O4'	5.41	115.59	109.10
2	AB	1353	A	P-O3'-C3'	5.41	126.19	119.70
2	AB	1642	G	N3-C4-C5	-5.41	125.89	128.60
2	AB	1698	A	N1-C2-N3	-5.41	126.59	129.30
2	AB	1774	C	N3-C4-N4	5.41	121.79	118.00
2	AB	2161	C	N3-C4-N4	5.41	121.79	118.00
2	AB	2278	A	C4-C5-C6	-5.41	114.30	117.00
2	AB	2327	A	O4'-C4'-C3'	5.41	110.43	106.10
2	AB	2407	A	C8-N9-C4	-5.41	103.64	105.80
2	AB	2713	U	O4'-C4'-C3'	5.41	110.43	106.10
3	AC	29	LEU	CB-CG-CD1	5.41	120.20	111.00
6	AF	21	ARG	NH1-CZ-NH2	-5.41	113.45	119.40
35	BA	171	A	C4'-C3'-C2'	-5.41	97.19	102.60
35	BA	458	U	C4'-C3'-O3'	5.41	123.82	113.00
35	BA	724	G	C5'-C4'-C3'	-5.41	107.34	116.00
35	BA	739	C	C4-C5-C6	-5.41	114.69	117.40
35	BA	1004	A	C4-C5-C6	-5.41	114.29	117.00
35	BA	1461	G	N1-C6-O6	-5.41	116.65	119.90
41	BG	75	TYR	CB-CG-CD2	5.41	124.25	121.00
52	BR	68	TYR	CB-CG-CD2	5.41	124.25	121.00
2	AB	356	G	C6-N1-C2	-5.41	121.86	125.10
2	AB	594	U	N1-C2-N3	5.41	118.15	114.90
2	AB	1276	A	P-O3'-C3'	5.41	126.19	119.70
2	AB	1472	C	C6-N1-C2	-5.41	118.14	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1881	C	N3-C2-O2	-5.41	118.11	121.90
2	AB	1885	A	N1-C6-N6	-5.41	115.36	118.60
2	AB	2230	G	P-O3'-C3'	5.41	126.19	119.70
2	AB	2816	G	C2-N3-C4	5.41	114.60	111.90
2	AB	2902	C	C4'-C3'-C2'	-5.41	97.19	102.60
23	AW	85	ARG	NE-CZ-NH2	-5.41	117.60	120.30
35	BA	38	G	O5'-P-OP2	-5.41	100.83	105.70
35	BA	51	A	O3'-P-O5'	-5.41	93.72	104.00
35	BA	102	G	N1-C2-N3	-5.41	120.66	123.90
35	BA	235	C	C5-C6-N1	5.41	123.70	121.00
35	BA	320	A	C5-N7-C8	5.41	106.60	103.90
35	BA	456	A	O4'-C1'-N9	5.41	112.53	108.20
35	BA	470	C	N1-C2-N3	-5.41	115.42	119.20
35	BA	1336	C	C1'-O4'-C4'	-5.41	105.57	109.90
1	AA	27	C	N1-C1'-C2'	-5.41	106.05	112.00
2	AB	1153	C	N1-C2-O2	5.41	122.14	118.90
2	AB	2719	G	C6-C5-N7	-5.41	127.16	130.40
2	AB	2776	A	N9-C4-C5	5.41	107.96	105.80
35	BA	480	U	C3'-C2'-C1'	5.41	105.83	101.50
35	BA	973	G	O5'-C5'-C4'	5.41	121.97	111.70
35	BA	1332	A	C5-C6-N6	5.41	128.03	123.70
35	BA	1334	G	N1-C2-N2	5.41	121.07	116.20
35	BA	1470	U	N3-C2-O2	-5.41	118.42	122.20
43	BI	49	TYR	CG-CD1-CE1	5.41	125.63	121.30
44	BJ	137	ARG	CG-CD-NE	5.41	123.16	111.80
1	AA	51	G	N7-C8-N9	5.41	115.80	113.10
1	AA	115	A	C8-N9-C4	-5.41	103.64	105.80
2	AB	812	C	C2-N3-C4	5.41	122.60	119.90
2	AB	1210	G	C6-N1-C2	-5.41	121.86	125.10
2	AB	1387	A	N9-C1'-C2'	-5.41	106.05	112.00
2	AB	1433	A	C4-C5-C6	-5.41	114.30	117.00
2	AB	2076	U	C1'-O4'-C4'	5.41	114.22	109.90
2	AB	2280	G	N3-C4-N9	5.41	129.24	126.00
2	AB	2828	G	N9-C4-C5	-5.41	103.24	105.40
32	A5	35	ARG	NE-CZ-NH2	5.41	123.00	120.30
35	BA	4	U	C3'-C2'-C1'	5.41	105.83	101.50
35	BA	283	U	O4'-C4'-C3'	5.41	110.42	106.10
35	BA	551	U	C4'-C3'-C2'	-5.41	97.19	102.60
35	BA	558	G	O4'-C4'-C3'	5.41	110.42	106.10
35	BA	738	C	O4'-C1'-N1	5.41	112.52	108.20
35	BA	987	G	N9-C1'-C2'	-5.41	106.05	112.00
35	BA	1036	A	C6-C5-N7	-5.41	128.52	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1465	A	N1-C2-N3	5.41	132.00	129.30
36	BB	3	G	C8-N9-C1'	5.41	134.03	127.00
37	BC	57	C	C6-N1-C2	5.41	122.46	120.30
49	BO	35	ARG	NE-CZ-NH1	5.41	123.00	120.30
2	AB	121	G	C2-N3-C4	5.40	114.60	111.90
2	AB	1022	G	C8-N9-C4	5.40	108.56	106.40
2	AB	1658	C	O4'-C1'-N1	5.40	112.52	108.20
2	AB	2239	G	O4'-C1'-N9	5.40	112.52	108.20
2	AB	2892	G	N3-C4-C5	5.40	131.30	128.60
35	BA	123	U	O4'-C1'-N1	5.40	112.52	108.20
2	AB	143	C	N3-C2-O2	-5.40	118.12	121.90
2	AB	281	C	C6-N1-C1'	5.40	127.28	120.80
2	AB	400	G	P-O3'-C3'	5.40	126.18	119.70
2	AB	443	A	P-O3'-C3'	5.40	126.18	119.70
2	AB	654	A	N3-C4-C5	-5.40	123.02	126.80
2	AB	718	A	C4'-C3'-C2'	-5.40	97.20	102.60
2	AB	844	A	C4'-C3'-C2'	-5.40	97.20	102.60
2	AB	1198	U	N1-C2-N3	5.40	118.14	114.90
2	AB	1203	U	C3'-C2'-C1'	5.40	105.82	101.50
2	AB	1756	G	C2'-C3'-O3'	5.40	122.34	113.70
2	AB	1932	A	C3'-C2'-C1'	-5.40	97.18	101.50
2	AB	2098	U	C2-N3-C4	-5.40	123.76	127.00
2	AB	2308	G	N3-C2-N2	-5.40	116.12	119.90
2	AB	2481	G	C6-N1-C2	5.40	128.34	125.10
2	AB	2543	G	N9-C4-C5	5.40	107.56	105.40
2	AB	2846	G	C8-N9-C1'	5.40	134.02	127.00
4	AD	133	ASN	N-CA-CB	5.40	120.33	110.60
35	BA	487	A	C1'-O4'-C4'	5.40	114.22	109.90
35	BA	497	G	C4'-C3'-O3'	5.40	123.81	113.00
35	BA	1060	U	P-O3'-C3'	5.40	126.18	119.70
2	AB	264	C	C2-N3-C4	5.40	122.60	119.90
2	AB	303	G	O5'-P-OP1	-5.40	100.84	105.70
2	AB	609	A	C4'-C3'-C2'	-5.40	97.20	102.60
2	AB	1177	G	C3'-C2'-C1'	5.40	105.82	101.50
2	AB	1186	G	N3-C4-C5	-5.40	125.90	128.60
2	AB	1265	A	C5-N7-C8	-5.40	101.20	103.90
2	AB	1959	G	O5'-C5'-C4'	5.40	121.96	111.70
2	AB	2425	A	C2'-C3'-O3'	5.40	122.34	113.70
2	AB	2571	U	C2-N3-C4	-5.40	123.76	127.00
2	AB	2688	G	N3-C4-C5	-5.40	125.90	128.60
4	AD	210	ALA	N-CA-CB	-5.40	102.54	110.10
6	AF	96	VAL	CA-CB-CG2	5.40	119.00	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	80	A	N9-C4-C5	5.40	107.96	105.80
35	BA	397	A	C4'-C3'-C2'	-5.40	97.20	102.60
35	BA	539	A	N3-C4-C5	-5.40	123.02	126.80
35	BA	556	C	C5-C4-N4	-5.40	116.42	120.20
35	BA	608	A	C5-N7-C8	5.40	106.60	103.90
35	BA	744	C	C2-N3-C4	5.40	122.60	119.90
37	BC	27	A	C4-C5-N7	5.40	113.40	110.70
38	BD	9	G	N7-C8-N9	-5.40	110.40	113.10
47	BM	52	LEU	CB-CA-C	5.40	120.46	110.20
2	AB	348	A	N1-C6-N6	-5.40	115.36	118.60
2	AB	752	A	O4'-C4'-C3'	5.40	110.42	106.10
2	AB	1655	A	C6-N1-C2	-5.40	115.36	118.60
2	AB	1784	A	N9-C4-C5	-5.40	103.64	105.80
2	AB	1867	G	N3-C4-N9	5.40	129.24	126.00
2	AB	1916	A	N1-C6-N6	5.40	121.84	118.60
2	AB	2018	G	C5-N7-C8	5.40	107.00	104.30
35	BA	725	G	C3'-C2'-C1'	5.40	105.82	101.50
35	BA	916	U	C5'-C4'-C3'	5.40	124.64	116.00
35	BA	940	C	N3-C2-O2	-5.40	118.12	121.90
36	BB	50	G	C2-N3-C4	5.40	114.60	111.90
38	BD	17	C	N1-C2-O2	5.40	122.14	118.90
43	BI	38	ARG	CA-CB-CG	5.40	125.28	113.40
2	AB	362	A	N9-C1'-C2'	-5.40	106.06	112.00
2	AB	441	U	C5'-C4'-O4'	5.40	115.58	109.10
2	AB	503	A	N9-C1'-C2'	-5.40	106.06	112.00
2	AB	561	G	N7-C8-N9	5.40	115.80	113.10
2	AB	938	G	O4'-C1'-N9	5.40	112.52	108.20
2	AB	1000	A	C1'-O4'-C4'	-5.40	105.58	109.90
2	AB	1006	C	N3-C4-C5	5.40	124.06	121.90
2	AB	1191	G	N3-C2-N2	-5.40	116.12	119.90
2	AB	1237	A	C5-C6-N1	5.40	120.40	117.70
2	AB	2240	U	O4'-C1'-N1	5.40	112.52	108.20
2	AB	2281	A	N3-C4-C5	-5.40	123.02	126.80
2	AB	2712	C	O4'-C1'-C2'	-5.40	100.40	105.80
2	AB	2776	A	C8-N9-C4	-5.40	103.64	105.80
2	AB	2780	G	C6-C5-N7	-5.40	127.16	130.40
2	AB	2842	G	N3-C2-N2	5.40	123.68	119.90
2	AB	2843	G	C8-N9-C1'	5.40	134.02	127.00
3	AC	75	VAL	CA-CB-CG1	5.40	119.00	110.90
4	AD	100	ARG	NH1-CZ-NH2	-5.40	113.46	119.40
19	AS	23	TYR	CA-CB-CG	5.40	123.66	113.40
35	BA	599	C	N3-C4-N4	5.40	121.78	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1029	U	N3-C2-O2	-5.40	118.42	122.20
35	BA	1303	C	N1-C2-O2	-5.40	115.66	118.90
35	BA	1497	G	C4-C5-C6	5.40	122.04	118.80
40	BF	153	SER	N-CA-CB	-5.40	102.40	110.50
1	AA	19	C	C4'-C3'-C2'	-5.40	97.20	102.60
1	AA	40	U	O4'-C1'-N1	5.40	112.52	108.20
2	AB	950	G	C8-N9-C1'	5.40	134.01	127.00
2	AB	1273	U	O4'-C1'-C2'	5.40	112.46	107.60
2	AB	1379	U	C3'-C2'-C1'	5.40	105.82	101.50
2	AB	1499	C	N1-C1'-C2'	-5.40	106.06	112.00
2	AB	2378	A	N3-C4-C5	-5.40	123.02	126.80
2	AB	2481	G	C5-C6-N1	-5.40	108.80	111.50
35	BA	387	U	N1-C1'-C2'	-5.40	106.06	112.00
35	BA	1062	U	N1-C2-O2	-5.40	119.02	122.80
35	BA	1102	A	C8-N9-C4	-5.40	103.64	105.80
36	BB	41	C	O4'-C1'-N1	5.40	112.52	108.20
1	AA	34	A	C5'-C4'-C3'	-5.39	107.37	116.00
2	AB	19	A	C4-C5-N7	-5.39	108.00	110.70
2	AB	118	A	N3-C4-C5	-5.39	123.02	126.80
2	AB	299	A	N7-C8-N9	5.39	116.50	113.80
2	AB	304	U	C5-C6-N1	-5.39	120.00	122.70
2	AB	437	U	C3'-C2'-C1'	5.39	105.82	101.50
2	AB	1476	U	C5'-C4'-O4'	5.39	115.57	109.10
2	AB	1547	C	N1-C2-O2	5.39	122.14	118.90
2	AB	1586	A	C6-C5-N7	5.39	136.08	132.30
2	AB	1709	U	C5'-C4'-C3'	-5.39	107.37	116.00
2	AB	2088	A	N3-C4-C5	-5.39	123.02	126.80
2	AB	2277	G	C5-C6-O6	-5.39	125.36	128.60
2	AB	2518	A	N1-C6-N6	-5.39	115.36	118.60
24	AX	94	ALA	N-CA-CB	-5.39	102.55	110.10
35	BA	221	C	C4'-C3'-C2'	-5.39	97.21	102.60
35	BA	560	A	N9-C1'-C2'	-5.39	106.07	112.00
35	BA	721	G	N1-C6-O6	-5.39	116.66	119.90
35	BA	1110	A	C4-C5-C6	-5.39	114.30	117.00
35	BA	1219	A	C5'-C4'-C3'	-5.39	107.37	116.00
35	BA	1506	U	O3'-P-O5'	-5.39	93.75	104.00
2	AB	163	C	O5'-P-OP2	-5.39	100.85	105.70
2	AB	300	A	N9-C1'-C2'	-5.39	106.07	112.00
2	AB	346	A	N1-C2-N3	-5.39	126.60	129.30
2	AB	592	A	C4'-C3'-C2'	5.39	107.99	102.60
2	AB	914	G	C6-C5-N7	-5.39	127.17	130.40
2	AB	967	U	C4-C5-C6	5.39	122.94	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1208	C	N3-C4-N4	5.39	121.78	118.00
2	AB	1431	A	O4'-C1'-N9	5.39	112.51	108.20
2	AB	2114	A	N7-C8-N9	5.39	116.50	113.80
2	AB	2169	A	O4'-C1'-N9	5.39	112.51	108.20
2	AB	2276	G	N3-C4-C5	-5.39	125.90	128.60
2	AB	2364	C	N3-C2-O2	-5.39	118.12	121.90
2	AB	2727	A	O4'-C1'-N9	5.39	112.51	108.20
35	BA	1172	C	N3-C4-C5	-5.39	119.74	121.90
35	BA	1224	U	C5-C4-O4	5.39	129.14	125.90
2	AB	164	C	O4'-C1'-N1	5.39	112.51	108.20
2	AB	397	U	N3-C4-O4	-5.39	115.63	119.40
2	AB	994	C	N3-C4-N4	5.39	121.77	118.00
2	AB	1642	G	N7-C8-N9	5.39	115.80	113.10
2	AB	1830	C	C5-C6-N1	-5.39	118.31	121.00
2	AB	2289	G	C4-C5-N7	-5.39	108.64	110.80
35	BA	434	U	P-O3'-C3'	5.39	126.17	119.70
35	BA	727	G	C5-N7-C8	5.39	107.00	104.30
35	BA	1079	G	N1-C6-O6	-5.39	116.67	119.90
35	BA	1377	A	N1-C6-N6	-5.39	115.36	118.60
37	BC	47	C	N1-C2-N3	-5.39	115.43	119.20
2	AB	699	A	N9-C4-C5	-5.39	103.64	105.80
2	AB	812	C	N1-C2-N3	-5.39	115.43	119.20
2	AB	969	G	C8-N9-C4	-5.39	104.24	106.40
2	AB	1334	G	C1'-O4'-C4'	5.39	114.21	109.90
2	AB	1348	C	N3-C2-O2	-5.39	118.13	121.90
2	AB	1544	A	O4'-C1'-C2'	5.39	112.45	107.60
2	AB	1607	C	C3'-C2'-C1'	5.39	105.81	101.50
2	AB	1864	U	O4'-C4'-C3'	5.39	110.41	106.10
2	AB	2194	U	C4'-C3'-C2'	-5.39	97.21	102.60
2	AB	2221	G	N3-C4-C5	-5.39	125.91	128.60
5	AE	142	VAL	CA-CB-CG2	5.39	118.98	110.90
35	BA	82	G	C4'-C3'-C2'	-5.39	97.21	102.60
35	BA	410	G	O4'-C4'-C3'	5.39	110.41	106.10
35	BA	823	C	O4'-C1'-C2'	-5.39	100.41	105.80
35	BA	852	G	N3-C4-N9	-5.39	122.77	126.00
35	BA	1087	G	C6-N1-C2	-5.39	121.87	125.10
35	BA	1213	A	P-O3'-C3'	5.39	126.17	119.70
36	BB	67	G	C1'-O4'-C4'	-5.39	105.59	109.90
55	BU	69	TYR	CB-CG-CD2	-5.39	117.77	121.00
2	AB	194	G	C5-N7-C8	-5.39	101.61	104.30
2	AB	2645	G	O4'-C1'-N9	5.39	112.51	108.20
6	AF	191	ASP	CB-CG-OD1	-5.39	113.45	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	7	A	O5'-C5'-C4'	-5.39	101.46	111.70
35	BA	329	A	OP2-P-O3'	5.39	117.05	105.20
35	BA	815	A	O4'-C1'-C2'	-5.39	100.41	105.80
35	BA	850	U	N3-C4-C5	-5.39	111.37	114.60
1	AA	84	G	N1-C2-N3	5.39	127.13	123.90
1	AA	105	G	N3-C4-C5	-5.39	125.91	128.60
2	AB	874	G	P-O3'-C3'	5.39	126.16	119.70
2	AB	1481	U	O4'-C1'-N1	5.39	112.51	108.20
2	AB	1540	G	N9-C4-C5	5.39	107.55	105.40
2	AB	1731	G	C5'-C4'-O4'	-5.39	102.64	109.10
2	AB	1991	U	C5-C4-O4	-5.39	122.67	125.90
2	AB	2400	G	C4-C5-N7	5.39	112.95	110.80
2	AB	2505	G	C4'-C3'-C2'	-5.39	97.21	102.60
35	BA	777	A	C5-C6-N6	5.39	128.01	123.70
35	BA	839	C	O4'-C1'-N1	5.39	112.51	108.20
35	BA	844	G	N7-C8-N9	5.39	115.79	113.10
35	BA	1125	U	C2-N3-C4	-5.39	123.77	127.00
36	BB	66	C	C5-C6-N1	5.39	123.69	121.00
46	BL	105	ARG	CD-NE-CZ	5.39	131.14	123.60
52	BR	57	ARG	NE-CZ-NH1	5.39	122.99	120.30
2	AB	303	G	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	497	A	C2-N3-C4	-5.38	107.91	110.60
2	AB	1154	G	C8-N9-C4	-5.38	104.25	106.40
2	AB	1513	U	N1-C2-O2	5.38	126.57	122.80
2	AB	1582	C	N3-C2-O2	-5.38	118.13	121.90
2	AB	1792	G	C4-C5-C6	5.38	122.03	118.80
2	AB	1803	A	O4'-C1'-N9	-5.38	103.89	108.20
2	AB	1852	U	O4'-C1'-N1	-5.38	103.89	108.20
2	AB	2132	U	O4'-C1'-N1	5.38	112.51	108.20
2	AB	2200	C	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	2342	C	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	2382	G	C5-N7-C8	-5.38	101.61	104.30
2	AB	2437	G	N9-C1'-C2'	-5.38	106.08	112.00
2	AB	2643	G	O4'-C4'-C3'	5.38	110.41	106.10
35	BA	44	A	N9-C4-C5	5.38	107.95	105.80
35	BA	414	A	C8-N9-C4	-5.38	103.65	105.80
35	BA	500	G	C5-N7-C8	-5.38	101.61	104.30
35	BA	538	G	C4-C5-C6	5.38	122.03	118.80
35	BA	631	C	N3-C4-C5	-5.38	119.75	121.90
35	BA	743	A	N1-C2-N3	5.38	131.99	129.30
35	BA	1322	C	C3'-C2'-C1'	-5.38	97.19	101.50
38	BD	77	A	O4'-C1'-N9	5.38	112.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	BU	47	ARG	NE-CZ-NH1	5.38	122.99	120.30
2	AB	144	A	O4'-C1'-N9	5.38	112.51	108.20
2	AB	330	A	C2-N3-C4	5.38	113.29	110.60
2	AB	1555	G	C6-C5-N7	5.38	133.63	130.40
2	AB	1716	U	O4'-C1'-N1	5.38	112.51	108.20
2	AB	2462	C	P-O3'-C3'	5.38	126.16	119.70
2	AB	2513	A	C8-N9-C4	-5.38	103.65	105.80
2	AB	2653	U	C5-C4-O4	5.38	129.13	125.90
35	BA	490	C	P-O3'-C3'	5.38	126.16	119.70
35	BA	641	U	C6-N1-C2	-5.38	117.77	121.00
35	BA	700	G	C2-N3-C4	5.38	114.59	111.90
35	BA	829	G	C2'-C3'-O3'	5.38	122.31	113.70
35	BA	957	U	N3-C4-O4	5.38	123.17	119.40
45	BK	70	VAL	CA-CB-CG2	5.38	118.97	110.90
1	AA	113	C	O4'-C1'-C2'	-5.38	100.42	105.80
2	AB	117	G	C6-N1-C2	-5.38	121.87	125.10
2	AB	496	G	C6-N1-C2	-5.38	121.87	125.10
2	AB	717	C	C6-N1-C1'	5.38	127.26	120.80
2	AB	845	A	N1-C2-N3	5.38	131.99	129.30
2	AB	1274	A	N1-C2-N3	-5.38	126.61	129.30
2	AB	1280	G	N7-C8-N9	5.38	115.79	113.10
2	AB	1406	U	N3-C2-O2	-5.38	118.43	122.20
2	AB	1989	G	O3'-P-O5'	-5.38	93.77	104.00
2	AB	2394	C	C5'-C4'-C3'	-5.38	107.39	116.00
2	AB	2420	C	N3-C4-N4	-5.38	114.23	118.00
2	AB	2885	G	O4'-C1'-N9	5.38	112.51	108.20
5	AE	131	ASP	CB-CG-OD2	5.38	123.14	118.30
35	BA	63	C	O5'-P-OP2	-5.38	100.86	105.70
35	BA	129	A	N3-C4-C5	-5.38	123.03	126.80
2	AB	898	C	O3'-P-O5'	-5.38	93.78	104.00
2	AB	945	A	C1'-O4'-C4'	-5.38	105.60	109.90
2	AB	1287	A	O4'-C1'-N9	5.38	112.50	108.20
5	AE	152	PRO	N-CA-CB	5.38	109.76	103.30
35	BA	64	G	N3-C4-C5	-5.38	125.91	128.60
35	BA	754	C	N3-C4-C5	-5.38	119.75	121.90
2	AB	268	C	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	517	C	C5-C4-N4	5.38	123.97	120.20
2	AB	864	G	N3-C4-C5	-5.38	125.91	128.60
2	AB	1200	C	N1-C1'-C2'	-5.38	106.08	112.00
2	AB	1914	C	C2-N1-C1'	-5.38	112.89	118.80
2	AB	2051	A	C2-N3-C4	5.38	113.29	110.60
2	AB	2133	G	C3'-C2'-C1'	5.38	105.80	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2197	U	N3-C2-O2	-5.38	118.44	122.20
2	AB	2247	A	N1-C6-N6	5.38	121.83	118.60
2	AB	2485	G	C4-C5-C6	5.38	122.03	118.80
2	AB	2671	G	C2-N3-C4	5.38	114.59	111.90
2	AB	2869	G	N9-C4-C5	5.38	107.55	105.40
35	BA	145	G	N3-C2-N2	5.38	123.67	119.90
35	BA	225	C	C4-C5-C6	-5.38	114.71	117.40
35	BA	401	C	C5'-C4'-O4'	5.38	115.55	109.10
35	BA	452	A	C5-C6-N6	-5.38	119.40	123.70
35	BA	514	C	C6-N1-C2	-5.38	118.15	120.30
35	BA	517	G	N1-C6-O6	-5.38	116.67	119.90
35	BA	727	G	N9-C1'-C2'	-5.38	106.08	112.00
35	BA	1396	A	C5-C6-N1	-5.38	115.01	117.70
35	BA	1463	U	N3-C4-O4	5.38	123.17	119.40
38	BD	59	A	C3'-C2'-C1'	-5.38	97.20	101.50
2	AB	68	G	N7-C8-N9	5.38	115.79	113.10
2	AB	83	A	N3-C4-N9	5.38	131.70	127.40
2	AB	141	G	P-O5'-C5'	5.38	129.50	120.90
2	AB	318	C	C5-C4-N4	-5.38	116.44	120.20
2	AB	618	G	C5-C6-N1	5.38	114.19	111.50
2	AB	872	U	P-O3'-C3'	5.38	126.15	119.70
2	AB	981	A	C5-C6-N1	5.38	120.39	117.70
2	AB	1021	A	N1-C2-N3	-5.38	126.61	129.30
2	AB	1034	G	C6-C5-N7	-5.38	127.17	130.40
2	AB	1479	G	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	1631	G	N1-C2-N2	-5.38	111.36	116.20
2	AB	1645	G	N3-C2-N2	5.38	123.66	119.90
2	AB	1706	C	C5-C4-N4	5.38	123.96	120.20
2	AB	1730	C	N1-C2-O2	5.38	122.13	118.90
2	AB	2006	C	N3-C4-N4	-5.38	114.24	118.00
2	AB	2355	G	O4'-C4'-C3'	5.38	110.40	106.10
2	AB	2516	A	C4-C5-N7	5.38	113.39	110.70
2	AB	2786	U	C5-C4-O4	-5.38	122.67	125.90
2	AB	2824	C	C2-N3-C4	5.38	122.59	119.90
17	AQ	111	ARG	NH1-CZ-NH2	-5.38	113.49	119.40
35	BA	126	G	N9-C4-C5	5.38	107.55	105.40
35	BA	146	G	C4-C5-C6	5.38	122.03	118.80
35	BA	380	G	C4-C5-N7	-5.38	108.65	110.80
35	BA	453	G	C4'-C3'-C2'	-5.38	97.22	102.60
35	BA	521	G	C8-N9-C4	-5.38	104.25	106.40
35	BA	870	U	O5'-P-OP1	-5.38	100.86	105.70
35	BA	1448	C	C5'-C4'-O4'	5.38	115.55	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	393	C	C6-N1-C2	-5.38	118.15	120.30
2	AB	603	A	P-O3'-C3'	5.38	126.15	119.70
2	AB	640	C	C2-N3-C4	5.38	122.59	119.90
2	AB	702	U	C5'-C4'-O4'	5.38	115.55	109.10
2	AB	834	G	N3-C4-C5	-5.38	125.91	128.60
2	AB	1116	G	O4'-C1'-N9	5.38	112.50	108.20
2	AB	1378	A	O3'-P-O5'	-5.38	93.79	104.00
2	AB	1687	G	C6-C5-N7	-5.38	127.17	130.40
35	BA	1063	C	O4'-C1'-C2'	-5.38	100.42	105.80
38	BD	54	G	C5'-C4'-O4'	5.38	115.55	109.10
1	AA	89	U	C2'-C3'-O3'	5.37	122.30	113.70
2	AB	268	C	O5'-C5'-C4'	-5.37	101.49	111.70
2	AB	712	G	C2-N3-C4	5.37	114.59	111.90
2	AB	831	G	C6-N1-C2	-5.37	121.88	125.10
2	AB	1342	A	C2-N3-C4	-5.37	107.91	110.60
2	AB	1449	G	C5-C6-N1	5.37	114.19	111.50
2	AB	1498	C	N3-C4-C5	-5.37	119.75	121.90
2	AB	1578	U	O4'-C1'-N1	5.37	112.50	108.20
2	AB	1840	G	N3-C2-N2	-5.37	116.14	119.90
2	AB	2726	A	O4'-C1'-C2'	5.37	112.44	107.60
3	AC	105	LYS	N-CA-CB	-5.37	100.93	110.60
14	AN	143	GLU	OE1-CD-OE2	5.37	129.75	123.30
35	BA	649	A	C6-N1-C2	-5.37	115.38	118.60
35	BA	712	A	C1'-O4'-C4'	5.37	114.20	109.90
35	BA	1374	A	C2-N3-C4	-5.37	107.91	110.60
35	BA	1513	A	N9-C1'-C2'	-5.37	106.09	112.00
1	AA	103	U	N1-C2-N3	5.37	118.12	114.90
2	AB	34	U	C6-N1-C2	5.37	124.22	121.00
2	AB	309	A	C5-C6-N6	-5.37	119.40	123.70
2	AB	602	A	N1-C2-N3	5.37	131.99	129.30
2	AB	665	U	N3-C4-O4	5.37	123.16	119.40
2	AB	672	C	O4'-C1'-C2'	5.37	112.43	107.60
2	AB	884	U	C3'-C2'-C1'	5.37	105.80	101.50
2	AB	1609	A	C6-N1-C2	5.37	121.82	118.60
2	AB	1849	G	N3-C2-N2	-5.37	116.14	119.90
2	AB	1907	G	C3'-C2'-C1'	-5.37	97.20	101.50
2	AB	2702	G	C5-C6-O6	-5.37	125.38	128.60
5	AE	128	ARG	NE-CZ-NH1	5.37	122.99	120.30
35	BA	328	C	O4'-C1'-C2'	5.37	112.44	107.60
35	BA	727	G	C4-C5-N7	-5.37	108.65	110.80
35	BA	983	A	N7-C8-N9	-5.37	111.11	113.80
35	BA	1102	A	P-O3'-C3'	5.37	126.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1209	C	C5'-C4'-O4'	5.37	115.55	109.10
58	BX	12	ASP	CB-CG-OD2	-5.37	113.47	118.30
2	AB	585	G	N1-C2-N2	-5.37	111.37	116.20
2	AB	1492	G	C5-C6-N1	5.37	114.19	111.50
35	BA	733	G	N3-C4-C5	-5.37	125.92	128.60
2	AB	119	A	C8-N9-C4	5.37	107.95	105.80
2	AB	1343	G	C5'-C4'-C3'	-5.37	107.41	116.00
2	AB	1615	C	O3'-P-O5'	-5.37	93.80	104.00
2	AB	2158	A	C1'-O4'-C4'	5.37	114.19	109.90
2	AB	2431	U	O4'-C1'-N1	5.37	112.49	108.20
2	AB	2588	G	C4-C5-C6	5.37	122.02	118.80
35	BA	417	G	C5-C6-O6	-5.37	125.38	128.60
35	BA	640	A	C5-C6-N6	-5.37	119.41	123.70
35	BA	818	G	N3-C4-C5	-5.37	125.92	128.60
35	BA	881	G	N9-C4-C5	5.37	107.55	105.40
35	BA	972	C	C4-C5-C6	-5.37	114.72	117.40
35	BA	1000	A	C6-C5-N7	5.37	136.06	132.30
35	BA	1260	G	C6-N1-C2	-5.37	121.88	125.10
2	AB	1322	A	N1-C2-N3	-5.37	126.62	129.30
2	AB	2355	G	C5-C6-N1	5.37	114.18	111.50
35	BA	1186	G	C5'-C4'-O4'	5.37	115.54	109.10
35	BA	1246	A	P-O3'-C3'	5.37	126.14	119.70
1	AA	97	C	C5'-C4'-O4'	5.37	115.54	109.10
2	AB	230	G	C4-C5-N7	-5.37	108.65	110.80
2	AB	274	C	N1-C2-N3	5.37	122.96	119.20
2	AB	356	G	N3-C4-C5	-5.37	125.92	128.60
2	AB	675	A	O4'-C1'-N9	-5.37	103.91	108.20
2	AB	757	G	C3'-C2'-C1'	-5.37	97.21	101.50
2	AB	2175	C	O3'-P-O5'	-5.37	93.81	104.00
9	AI	25	TYR	CD1-CE1-CZ	-5.37	114.97	119.80
35	BA	279	A	OP2-P-O3'	5.37	117.00	105.20
35	BA	480	U	C4'-C3'-C2'	-5.37	97.23	102.60
35	BA	559	A	C5'-C4'-C3'	-5.37	107.41	116.00
35	BA	584	G	C4-C5-C6	5.37	122.02	118.80
35	BA	897	C	C5-C4-N4	5.37	123.96	120.20
35	BA	927	G	N1-C2-N3	-5.37	120.68	123.90
35	BA	1075	U	C5-C6-N1	-5.37	120.02	122.70
35	BA	1442	G	N3-C4-N9	5.37	129.22	126.00
2	AB	197	A	N9-C4-C5	-5.36	103.66	105.80
2	AB	302	C	C4'-C3'-C2'	5.36	107.96	102.60
2	AB	404	A	C5-N7-C8	-5.36	101.22	103.90
2	AB	558	U	N3-C2-O2	-5.36	118.44	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	932	U	N1-C2-O2	5.36	126.56	122.80
2	AB	1203	U	N3-C4-O4	-5.36	115.65	119.40
2	AB	1213	A	C6-C5-N7	5.36	136.06	132.30
2	AB	1398	C	N1-C1'-C2'	5.36	120.97	114.00
2	AB	1836	C	N1-C2-N3	5.36	122.95	119.20
2	AB	2454	G	C6-C5-N7	-5.36	127.18	130.40
2	AB	2861	U	O4'-C1'-C2'	5.36	112.43	107.60
4	AD	139	THR	CA-CB-OG1	5.36	120.26	109.00
35	BA	909	A	C3'-C2'-C1'	5.36	105.79	101.50
35	BA	944	G	C2'-C3'-O3'	5.36	122.28	113.70
35	BA	1106	G	C8-N9-C1'	5.36	133.97	127.00
35	BA	1146	A	N7-C8-N9	-5.36	111.12	113.80
35	BA	1414	U	C3'-C2'-C1'	-5.36	97.21	101.50
36	BB	5	G	N9-C1'-C2'	-5.36	106.10	112.00
1	AA	55	U	C3'-C2'-C1'	5.36	105.79	101.50
2	AB	1938	A	N7-C8-N9	5.36	116.48	113.80
35	BA	805	C	O4'-C1'-C2'	-5.36	100.44	105.80
35	BA	939	G	N7-C8-N9	5.36	115.78	113.10
2	AB	502	A	N9-C4-C5	5.36	107.94	105.80
2	AB	650	C	C4-C5-C6	5.36	120.08	117.40
2	AB	732	C	N3-C4-N4	5.36	121.75	118.00
2	AB	1109	C	C5-C4-N4	-5.36	116.45	120.20
2	AB	1550	C	C6-N1-C2	-5.36	118.16	120.30
2	AB	2166	U	C4-C5-C6	-5.36	116.48	119.70
2	AB	2545	G	O5'-P-OP1	-5.36	100.88	105.70
2	AB	2820	A	C2-N3-C4	5.36	113.28	110.60
23	AW	72	PHE	CB-CG-CD1	5.36	124.55	120.80
35	BA	138	G	N1-C6-O6	-5.36	116.68	119.90
35	BA	581	G	C5'-C4'-C3'	-5.36	107.42	116.00
35	BA	803	G	C5-N7-C8	-5.36	101.62	104.30
35	BA	1274	A	C5-C6-N1	5.36	120.38	117.70
35	BA	1372	U	C3'-C2'-C1'	-5.36	97.21	101.50
2	AB	1048	A	C5'-C4'-O4'	5.36	115.53	109.10
2	AB	1819	A	C5'-C4'-C3'	-5.36	107.43	116.00
2	AB	1921	G	N3-C2-N2	5.36	123.65	119.90
2	AB	2053	G	O4'-C1'-N9	5.36	112.49	108.20
2	AB	2499	C	N1-C2-O2	5.36	122.11	118.90
16	AP	112	TYR	CA-CB-CG	5.36	123.58	113.40
35	BA	420	U	C6-N1-C1'	5.36	128.70	121.20
35	BA	1398	A	C2-N3-C4	5.36	113.28	110.60
38	BD	57	C	C1'-O4'-C4'	-5.36	105.61	109.90
2	AB	209	C	N1-C2-O2	5.36	122.11	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	468	G	N7-C8-N9	5.36	115.78	113.10
2	AB	866	A	C6-C5-N7	5.36	136.05	132.30
2	AB	917	A	C5'-C4'-O4'	5.36	115.53	109.10
2	AB	1150	C	C4'-C3'-C2'	5.36	107.96	102.60
2	AB	1272	A	C5-C6-N1	-5.36	115.02	117.70
2	AB	1292	G	C4'-C3'-C2'	-5.36	97.24	102.60
2	AB	1302	A	C2-N3-C4	5.36	113.28	110.60
2	AB	1433	A	C5'-C4'-O4'	5.36	115.53	109.10
2	AB	1706	C	C5-C6-N1	5.36	123.68	121.00
2	AB	1811	G	O4'-C1'-C2'	5.36	112.42	107.60
2	AB	2299	U	O4'-C1'-N1	5.36	112.49	108.20
2	AB	2358	A	C5-N7-C8	5.36	106.58	103.90
2	AB	2370	G	C2-N3-C4	5.36	114.58	111.90
2	AB	2788	C	C2-N3-C4	-5.36	117.22	119.90
35	BA	52	C	N1-C2-O2	-5.36	115.69	118.90
35	BA	314	C	O4'-C4'-C3'	5.36	110.39	106.10
35	BA	468	A	C2-N3-C4	5.36	113.28	110.60
35	BA	895	G	C8-N9-C4	-5.36	104.26	106.40
35	BA	1262	C	C4-C5-C6	-5.36	114.72	117.40
35	BA	1472	U	N3-C2-O2	-5.36	118.45	122.20
36	BB	1	A	N7-C8-N9	5.36	116.48	113.80
38	BD	9	G	C4-C5-N7	-5.36	108.66	110.80
1	AA	21	G	C5'-C4'-C3'	-5.36	107.43	116.00
2	AB	425	G	C4'-C3'-C2'	-5.36	97.25	102.60
2	AB	523	C	C4-C5-C6	-5.36	114.72	117.40
2	AB	604	G	C8-N9-C4	-5.36	104.26	106.40
2	AB	1146	C	C1'-O4'-C4'	-5.36	105.61	109.90
2	AB	1437	C	C4-C5-C6	5.36	120.08	117.40
2	AB	1906	G	O4'-C1'-N9	5.36	112.48	108.20
2	AB	1970	A	C6-N1-C2	-5.36	115.39	118.60
2	AB	2001	C	C6-N1-C1'	-5.36	114.37	120.80
2	AB	2114	A	N3-C4-N9	-5.36	123.11	127.40
2	AB	2640	G	O5'-P-OP1	5.36	117.13	110.70
35	BA	91	U	C5-C6-N1	-5.36	120.02	122.70
35	BA	223	A	N7-C8-N9	5.36	116.48	113.80
35	BA	297	G	N1-C2-N2	5.36	121.02	116.20
35	BA	753	A	C8-N9-C4	-5.36	103.66	105.80
35	BA	868	C	C6-N1-C2	-5.36	118.16	120.30
36	BB	13	C	C5-C4-N4	-5.36	116.45	120.20
38	BD	42	C	C1'-O4'-C4'	-5.36	105.61	109.90
1	AA	102	G	C2-N3-C4	5.35	114.58	111.90
2	AB	535	G	C5-C6-O6	5.35	131.81	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	675	A	N3-C4-N9	5.35	131.68	127.40
2	AB	1218	G	C5-N7-C8	5.35	106.98	104.30
2	AB	2085	U	N1-C2-N3	5.35	118.11	114.90
2	AB	2231	U	N1-C2-N3	5.35	118.11	114.90
2	AB	2417	C	N3-C2-O2	-5.35	118.15	121.90
35	BA	688	G	C5-C6-O6	-5.35	125.39	128.60
35	BA	789	U	C3'-C2'-C1'	5.35	105.78	101.50
35	BA	1006	G	C5'-C4'-O4'	5.35	115.53	109.10
35	BA	1026	G	C4-C5-C6	5.35	122.01	118.80
36	BB	73	G	C4'-C3'-C2'	-5.35	97.25	102.60
2	AB	52	A	C6-N1-C2	5.35	121.81	118.60
2	AB	240	C	C5-C4-N4	5.35	123.95	120.20
2	AB	1765	U	C5'-C4'-O4'	5.35	115.52	109.10
2	AB	2256	G	C1'-O4'-C4'	5.35	114.18	109.90
2	AB	2306	C	C5-C6-N1	5.35	123.68	121.00
2	AB	2527	C	P-O3'-C3'	5.35	126.12	119.70
2	AB	2570	G	C5'-C4'-O4'	5.35	115.52	109.10
2	AB	2828	G	N9-C1'-C2'	-5.35	106.11	112.00
35	BA	216	U	C4-C5-C6	-5.35	116.49	119.70
35	BA	253	A	N1-C6-N6	5.35	121.81	118.60
35	BA	1170	A	N9-C1'-C2'	-5.35	106.11	112.00
35	BA	1203	C	N1-C2-O2	5.35	122.11	118.90
35	BA	1216	A	N1-C2-N3	5.35	131.98	129.30
35	BA	1329	A	C6-N1-C2	5.35	121.81	118.60
2	AB	376	G	C5-C6-N1	5.35	114.18	111.50
2	AB	1565	C	N1-C2-O2	5.35	122.11	118.90
2	AB	1635	A	N1-C6-N6	-5.35	115.39	118.60
2	AB	1693	U	C5-C6-N1	-5.35	120.03	122.70
2	AB	2230	G	N7-C8-N9	5.35	115.78	113.10
2	AB	2474	U	N3-C2-O2	-5.35	118.45	122.20
2	AB	2763	G	C3'-C2'-C1'	5.35	105.78	101.50
35	BA	868	C	N3-C4-N4	5.35	121.75	118.00
35	BA	1095	U	C4'-C3'-C2'	-5.35	97.25	102.60
35	BA	1169	A	N1-C2-N3	5.35	131.97	129.30
2	AB	40	U	C1'-O4'-C4'	5.35	114.18	109.90
2	AB	298	G	C5-N7-C8	-5.35	101.63	104.30
2	AB	304	U	C3'-C2'-C1'	-5.35	97.22	101.50
2	AB	516	C	N3-C2-O2	-5.35	118.16	121.90
2	AB	902	C	N3-C2-O2	-5.35	118.16	121.90
2	AB	1487	U	C5'-C4'-O4'	5.35	115.52	109.10
2	AB	1570	A	C3'-C2'-C1'	5.35	105.78	101.50
2	AB	1721	G	C6-N1-C2	-5.35	121.89	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1768	C	C5-C6-N1	-5.35	118.33	121.00
2	AB	1784	A	C5'-C4'-C3'	5.35	124.56	116.00
2	AB	2521	C	N1-C2-O2	-5.35	115.69	118.90
7	AG	93	GLU	OE1-CD-OE2	5.35	129.72	123.30
35	BA	42	G	N3-C4-C5	-5.35	125.92	128.60
35	BA	197	A	C4'-C3'-O3'	-5.35	98.17	109.40
35	BA	213	G	N9-C1'-C2'	5.35	120.95	114.00
35	BA	286	C	C4'-C3'-O3'	5.35	123.70	113.00
35	BA	1293	C	N3-C4-N4	5.35	121.74	118.00
36	BB	23	A	O5'-P-OP1	-5.35	100.89	105.70
49	BO	53	ARG	NE-CZ-NH1	5.35	122.97	120.30
2	AB	95	A	C1'-O4'-C4'	-5.35	105.62	109.90
2	AB	119	A	N3-C4-N9	5.35	131.68	127.40
2	AB	268	C	C6-N1-C1'	5.35	127.22	120.80
2	AB	472	A	C6-N1-C2	-5.35	115.39	118.60
2	AB	954	G	O4'-C1'-N9	-5.35	103.92	108.20
2	AB	1178	C	C4-C5-C6	-5.35	114.73	117.40
2	AB	2022	U	N1-C2-N3	5.35	118.11	114.90
2	AB	2098	U	C4'-C3'-C2'	-5.35	97.25	102.60
2	AB	2753	A	O4'-C4'-C3'	5.35	110.38	106.10
4	AD	100	ARG	CG-CD-NE	5.35	123.03	111.80
35	BA	120	A	P-O3'-C3'	5.35	126.12	119.70
35	BA	632	U	O4'-C1'-N1	5.35	112.48	108.20
35	BA	775	G	N9-C4-C5	5.35	107.54	105.40
35	BA	1013	G	C2-N3-C4	-5.35	109.23	111.90
35	BA	1214	C	O4'-C1'-C2'	5.35	112.41	107.60
35	BA	1247	U	O4'-C1'-N1	5.35	112.48	108.20
35	BA	1279	G	N3-C4-C5	-5.35	125.93	128.60
36	BB	27	C	N3-C4-N4	5.35	121.74	118.00
2	AB	65	U	P-O3'-C3'	5.35	126.11	119.70
2	AB	274	C	C2-N3-C4	-5.35	117.23	119.90
2	AB	601	C	C2-N3-C4	5.35	122.57	119.90
2	AB	1216	G	C5-N7-C8	5.35	106.97	104.30
2	AB	2661	G	C5-C6-O6	-5.35	125.39	128.60
2	AB	2724	U	N1-C2-O2	-5.35	119.06	122.80
2	AB	2763	G	C1'-O4'-C4'	-5.35	105.62	109.90
35	BA	373	A	C6-N1-C2	5.35	121.81	118.60
35	BA	1093	A	C6-N1-C2	-5.35	115.39	118.60
54	BT	58	VAL	CA-CB-CG2	5.35	118.92	110.90
2	AB	471	A	O4'-C1'-N9	5.34	112.47	108.20
2	AB	984	A	C5-N7-C8	-5.34	101.23	103.90
2	AB	1040	A	C4-C5-C6	-5.34	114.33	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1983	G	N1-C6-O6	5.34	123.11	119.90
2	AB	2015	A	N9-C4-C5	5.34	107.94	105.80
2	AB	2840	C	C5'-C4'-O4'	5.34	115.51	109.10
2	AB	2892	G	C4-C5-N7	5.34	112.94	110.80
16	AP	1	MET	CA-CB-CG	5.34	122.39	113.30
35	BA	119	A	C4-C5-N7	5.34	113.37	110.70
35	BA	275	G	C5-C6-O6	5.34	131.81	128.60
35	BA	387	U	P-O3'-C3'	5.34	126.11	119.70
35	BA	626	G	C5'-C4'-O4'	5.34	115.51	109.10
35	BA	831	A	N1-C6-N6	-5.34	115.39	118.60
35	BA	979	C	C4'-C3'-C2'	-5.34	97.25	102.60
35	BA	1213	A	C6-N1-C2	-5.34	115.39	118.60
35	BA	1471	U	C2-N3-C4	-5.34	123.79	127.00
45	BK	103	VAL	CA-CB-CG1	5.34	118.92	110.90
2	AB	166	U	O3'-P-O5'	-5.34	93.85	104.00
2	AB	728	G	C8-N9-C4	5.34	108.54	106.40
2	AB	1097	U	P-O3'-C3'	5.34	126.11	119.70
2	AB	1410	G	N3-C4-C5	-5.34	125.93	128.60
2	AB	1450	G	C4-C5-N7	-5.34	108.66	110.80
2	AB	2039	U	C4-C5-C6	5.34	122.91	119.70
2	AB	2593	U	N3-C4-O4	5.34	123.14	119.40
16	AP	102	PHE	CB-CG-CD1	-5.34	117.06	120.80
35	BA	14	U	N3-C4-O4	5.34	123.14	119.40
35	BA	362	G	C8-N9-C4	-5.34	104.26	106.40
35	BA	1084	G	N3-C4-N9	5.34	129.21	126.00
1	AA	65	U	O4'-C1'-N1	5.34	112.47	108.20
2	AB	485	C	O5'-P-OP2	-5.34	100.89	105.70
2	AB	555	G	C3'-C2'-C1'	-5.34	97.23	101.50
2	AB	1765	U	N1-C2-O2	5.34	126.54	122.80
2	AB	1808	A	C4-C5-C6	-5.34	114.33	117.00
2	AB	1991	U	N1-C1'-C2'	-5.34	106.12	112.00
2	AB	2464	G	N3-C4-N9	5.34	129.21	126.00
17	AQ	72	ALA	N-CA-CB	-5.34	102.62	110.10
35	BA	475	C	OP2-P-O3'	5.34	116.95	105.20
35	BA	557	G	C4'-C3'-C2'	-5.34	97.26	102.60
35	BA	778	G	N1-C2-N3	-5.34	120.70	123.90
35	BA	919	A	N3-C4-C5	-5.34	123.06	126.80
35	BA	955	U	O4'-C1'-N1	5.34	112.47	108.20
35	BA	1249	C	C4'-C3'-C2'	-5.34	97.26	102.60
35	BA	1466	C	C3'-C2'-C1'	5.34	105.77	101.50
35	BA	1526	G	C6-N1-C2	5.34	128.31	125.10
36	BB	67	G	C2-N3-C4	5.34	114.57	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	96	G	C5'-C4'-O4'	5.34	115.51	109.10
2	AB	624	C	C5-C6-N1	-5.34	118.33	121.00
2	AB	658	U	N3-C4-C5	5.34	117.80	114.60
2	AB	824	U	N1-C2-O2	5.34	126.54	122.80
2	AB	1217	U	N1-C2-N3	-5.34	111.70	114.90
2	AB	1240	U	O4'-C4'-C3'	-5.34	98.66	104.00
2	AB	1432	G	C6-N1-C2	-5.34	121.90	125.10
2	AB	1662	U	O4'-C1'-N1	5.34	112.47	108.20
2	AB	2008	C	O4'-C1'-N1	5.34	112.47	108.20
2	AB	2140	G	N1-C2-N3	-5.34	120.70	123.90
2	AB	2427	C	C5-C6-N1	-5.34	118.33	121.00
2	AB	2455	G	N1-C2-N3	-5.34	120.70	123.90
2	AB	2754	U	N3-C2-O2	-5.34	118.46	122.20
35	BA	697	U	C6-N1-C2	-5.34	117.80	121.00
35	BA	897	C	C2-N3-C4	5.34	122.57	119.90
35	BA	971	G	C5-C6-O6	-5.34	125.40	128.60
35	BA	1336	C	N3-C4-C5	-5.34	119.76	121.90
35	BA	1382	C	C2-N3-C4	5.34	122.57	119.90
36	BB	58	A	C5-N7-C8	-5.34	101.23	103.90
37	BC	33	A	N9-C4-C5	-5.34	103.66	105.80
37	BC	38	G	N3-C2-N2	-5.34	116.16	119.90
2	AB	1146	C	C5'-C4'-C3'	-5.34	107.46	116.00
2	AB	1970	A	N3-C4-N9	-5.34	123.13	127.40
2	AB	2819	G	N1-C2-N3	5.34	127.10	123.90
35	BA	450	G	C6-C5-N7	-5.34	127.20	130.40
38	BD	50	G	C2-N3-C4	5.34	114.57	111.90
2	AB	312	G	P-O3'-C3'	5.34	126.10	119.70
2	AB	473	G	N1-C2-N2	5.34	121.00	116.20
2	AB	484	C	N1-C2-N3	-5.34	115.47	119.20
2	AB	915	C	C5-C6-N1	5.34	123.67	121.00
2	AB	1000	A	C8-N9-C4	-5.34	103.67	105.80
2	AB	1278	C	C4'-C3'-C2'	-5.34	97.26	102.60
2	AB	1604	C	N1-C2-N3	-5.34	115.47	119.20
2	AB	2277	G	O4'-C1'-N9	5.34	112.47	108.20
2	AB	2616	C	P-O3'-C3'	5.34	126.10	119.70
35	BA	261	U	C1'-O4'-C4'	-5.34	105.63	109.90
35	BA	475	C	C6-N1-C2	-5.34	118.17	120.30
35	BA	650	G	C8-N9-C4	-5.34	104.27	106.40
35	BA	1179	A	C5-C6-N1	-5.34	115.03	117.70
38	BD	59	A	C5-N7-C8	-5.34	101.23	103.90
2	AB	390	U	N1-C2-O2	5.33	126.53	122.80
2	AB	439	A	N9-C1'-C2'	-5.33	106.13	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1963	U	C5-C6-N1	-5.33	120.03	122.70
2	AB	2612	C	C4-C5-C6	-5.33	114.73	117.40
2	AB	2864	G	N1-C6-O6	5.33	123.10	119.90
35	BA	601	G	N3-C2-N2	5.33	123.64	119.90
35	BA	953	G	N3-C4-C5	-5.33	125.93	128.60
35	BA	1264	U	C3'-C2'-C1'	5.33	105.77	101.50
2	AB	62	U	C4-C5-C6	5.33	122.90	119.70
2	AB	209	C	N1-C1'-C2'	-5.33	106.13	112.00
2	AB	286	U	C5'-C4'-C3'	5.33	124.53	116.00
2	AB	420	C	N1-C1'-C2'	-5.33	106.13	112.00
2	AB	712	G	C5-N7-C8	5.33	106.97	104.30
2	AB	734	A	N3-C4-N9	5.33	131.67	127.40
2	AB	1432	G	N1-C2-N2	-5.33	111.40	116.20
2	AB	1547	C	C2-N3-C4	-5.33	117.23	119.90
2	AB	1652	A	O4'-C1'-N9	5.33	112.47	108.20
2	AB	2128	G	N9-C4-C5	-5.33	103.27	105.40
2	AB	2166	U	N3-C4-O4	-5.33	115.67	119.40
20	AT	84	ARG	NE-CZ-NH2	5.33	122.97	120.30
35	BA	72	A	N3-C4-C5	5.33	130.53	126.80
35	BA	167	A	N1-C2-N3	5.33	131.97	129.30
35	BA	316	C	P-O5'-C5'	5.33	129.43	120.90
35	BA	363	A	O4'-C1'-C2'	5.33	112.40	107.60
35	BA	1128	C	C4-C5-C6	-5.33	114.73	117.40
35	BA	1180	A	C4'-C3'-C2'	-5.33	97.27	102.60
35	BA	1311	A	C4-C5-C6	5.33	119.67	117.00
35	BA	1397	C	C3'-C2'-C1'	-5.33	97.23	101.50
35	BA	1455	G	C6-C5-N7	-5.33	127.20	130.40
36	BB	56	C	C3'-C2'-C1'	5.33	105.77	101.50
50	BP	8	ILE	CA-CB-CG2	5.33	121.56	110.90
2	AB	139	U	C5-C6-N1	-5.33	120.03	122.70
2	AB	282	A	N9-C4-C5	5.33	107.93	105.80
2	AB	536	G	C6-N1-C2	-5.33	121.90	125.10
2	AB	691	C	N1-C2-O2	5.33	122.10	118.90
2	AB	763	G	C2'-C3'-O3'	5.33	122.23	113.70
2	AB	1258	U	N3-C4-O4	5.33	123.13	119.40
2	AB	1420	A	N1-C2-N3	-5.33	126.63	129.30
2	AB	1431	A	C6-N1-C2	-5.33	115.40	118.60
2	AB	1457	U	O3'-P-O5'	-5.33	93.87	104.00
2	AB	1746	A	C5-N7-C8	5.33	106.57	103.90
2	AB	1937	A	N1-C6-N6	5.33	121.80	118.60
2	AB	2381	A	C5-C6-N6	-5.33	119.44	123.70
3	AC	217	THR	CA-CB-CG2	5.33	119.86	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1019	A	O4'-C1'-N9	5.33	112.47	108.20
35	BA	1102	A	C5'-C4'-C3'	-5.33	107.47	116.00
35	BA	1531	A	C3'-C2'-C1'	5.33	105.77	101.50
39	BE	221	ARG	CD-NE-CZ	5.33	131.06	123.60
2	AB	19	A	C5-N7-C8	5.33	106.56	103.90
2	AB	1210	G	C4-C5-N7	-5.33	108.67	110.80
2	AB	1776	G	C5-C6-N1	5.33	114.17	111.50
2	AB	2816	G	C4-C5-N7	-5.33	108.67	110.80
35	BA	972	C	O4'-C1'-N1	5.33	112.46	108.20
36	BB	4	G	C3'-C2'-C1'	5.33	105.76	101.50
1	AA	37	C	C6-N1-C2	-5.33	118.17	120.30
1	AA	86	G	C4-C5-N7	-5.33	108.67	110.80
2	AB	75	G	N9-C1'-C2'	-5.33	106.14	112.00
2	AB	215	G	O4'-C4'-C3'	5.33	110.36	106.10
2	AB	289	G	C5'-C4'-O4'	5.33	115.49	109.10
2	AB	388	G	N3-C4-N9	5.33	129.20	126.00
2	AB	668	A	C1'-O4'-C4'	-5.33	105.64	109.90
2	AB	1092	C	C5-C4-N4	-5.33	116.47	120.20
2	AB	1230	A	C4-C5-N7	5.33	113.36	110.70
2	AB	1689	A	N7-C8-N9	-5.33	111.14	113.80
2	AB	1860	G	N9-C4-C5	5.33	107.53	105.40
2	AB	2070	A	O4'-C1'-N9	5.33	112.46	108.20
2	AB	2158	A	C4-C5-C6	5.33	119.67	117.00
2	AB	2539	C	C5-C4-N4	-5.33	116.47	120.20
35	BA	163	C	P-O5'-C5'	5.33	129.43	120.90
35	BA	203	G	C8-N9-C4	-5.33	104.27	106.40
35	BA	370	C	C6-N1-C1'	5.33	127.19	120.80
35	BA	592	G	C5'-C4'-O4'	5.33	115.49	109.10
35	BA	902	G	C4-C5-N7	-5.33	108.67	110.80
35	BA	928	G	O4'-C1'-N9	5.33	112.46	108.20
35	BA	1059	C	C3'-C2'-C1'	5.33	105.76	101.50
36	BB	69	C	N3-C4-C5	5.33	124.03	121.90
38	BD	37	U	C6-N1-C2	-5.33	117.80	121.00
2	AB	1091	G	C5-C6-N1	5.33	114.16	111.50
2	AB	2478	A	C1'-O4'-C4'	-5.33	105.64	109.90
35	BA	112	G	N7-C8-N9	5.33	115.76	113.10
35	BA	363	A	O4'-C4'-C3'	5.33	110.36	106.10
35	BA	505	G	N9-C4-C5	5.33	107.53	105.40
35	BA	1186	G	C5-N7-C8	-5.33	101.64	104.30
1	AA	78	A	O4'-C1'-N9	5.33	112.46	108.20
2	AB	33	C	O4'-C4'-C3'	5.33	110.36	106.10
2	AB	133	U	C4-C5-C6	5.33	122.89	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	249	C	N1-C2-O2	5.33	122.10	118.90
2	AB	544	C	C3'-C2'-C1'	5.33	105.76	101.50
2	AB	1182	G	N1-C6-O6	-5.33	116.70	119.90
2	AB	1495	A	N1-C6-N6	5.33	121.80	118.60
2	AB	1599	U	C2-N3-C4	5.33	130.19	127.00
2	AB	1644	C	O4'-C1'-N1	5.33	112.46	108.20
2	AB	2053	G	C5-C6-O6	-5.33	125.41	128.60
2	AB	2212	A	C4'-C3'-C2'	5.33	107.93	102.60
20	AT	21	ARG	NE-CZ-NH1	-5.33	117.64	120.30
33	A6	1	PRO	CA-N-CD	-5.33	104.05	111.50
35	BA	84	U	C2-N1-C1'	5.33	124.09	117.70
35	BA	359	G	C5-C6-N1	-5.33	108.84	111.50
35	BA	485	U	C4'-C3'-C2'	-5.33	97.27	102.60
35	BA	529	G	O5'-P-OP2	-5.33	100.91	105.70
35	BA	583	A	C5'-C4'-O4'	5.33	115.49	109.10
35	BA	809	G	C2-N3-C4	5.33	114.56	111.90
35	BA	816	A	C1'-O4'-C4'	-5.33	105.64	109.90
35	BA	1011	C	C4'-C3'-C2'	-5.33	97.27	102.60
35	BA	1014	A	C2-N3-C4	5.33	113.26	110.60
35	BA	1506	U	C3'-C2'-C1'	5.33	105.76	101.50
40	BF	108	PRO	N-CD-CG	5.33	111.19	103.20
40	BF	189	HIS	CB-CA-C	5.33	121.05	110.40
2	AB	656	G	N3-C4-C5	-5.32	125.94	128.60
2	AB	935	C	N1-C1'-C2'	-5.32	106.14	112.00
2	AB	998	C	N1-C2-N3	-5.32	115.47	119.20
2	AB	1271	G	N1-C2-N3	-5.32	120.71	123.90
2	AB	1977	A	O3'-P-O5'	-5.32	93.89	104.00
2	AB	2508	G	N3-C2-N2	5.32	123.63	119.90
35	BA	243	A	C4'-C3'-C2'	-5.32	97.28	102.60
35	BA	1087	G	P-O3'-C3'	5.32	126.09	119.70
37	BC	41	A	C6-C5-N7	5.32	136.03	132.30
1	AA	21	G	N1-C6-O6	-5.32	116.71	119.90
2	AB	1010	A	C4-C5-N7	-5.32	108.04	110.70
2	AB	1349	C	O4'-C4'-C3'	5.32	110.36	106.10
2	AB	2665	A	C1'-O4'-C4'	5.32	114.16	109.90
35	BA	165	G	C4'-C3'-C2'	-5.32	97.28	102.60
35	BA	677	U	N3-C4-C5	-5.32	111.41	114.60
35	BA	847	G	N9-C4-C5	5.32	107.53	105.40
35	BA	877	G	N7-C8-N9	5.32	115.76	113.10
35	BA	1449	C	N3-C2-O2	-5.32	118.17	121.90
1	AA	8	C	C2-N3-C4	5.32	122.56	119.90
2	AB	358	U	C5-C4-O4	-5.32	122.71	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	476	G	C5'-C4'-O4'	5.32	115.48	109.10
2	AB	592	A	N1-C2-N3	-5.32	126.64	129.30
2	AB	644	A	C4-C5-N7	-5.32	108.04	110.70
2	AB	803	U	C5-C4-O4	5.32	129.09	125.90
2	AB	1085	A	N7-C8-N9	-5.32	111.14	113.80
2	AB	1357	C	C5'-C4'-O4'	5.32	115.48	109.10
2	AB	1423	G	O4'-C1'-C2'	5.32	112.39	107.60
2	AB	1585	C	N1-C2-N3	-5.32	115.48	119.20
2	AB	1714	U	C5'-C4'-C3'	-5.32	107.49	116.00
2	AB	1774	C	C4'-C3'-C2'	-5.32	97.28	102.60
2	AB	1936	A	N3-C4-C5	-5.32	123.08	126.80
2	AB	2478	A	O5'-P-OP1	5.32	117.09	110.70
2	AB	2510	C	C6-N1-C1'	5.32	127.19	120.80
2	AB	2639	A	O5'-P-OP2	-5.32	100.91	105.70
2	AB	2770	G	N3-C2-N2	5.32	123.62	119.90
2	AB	2868	A	C2-N3-C4	-5.32	107.94	110.60
35	BA	603	U	C1'-O4'-C4'	-5.32	105.64	109.90
35	BA	710	G	N1-C2-N2	5.32	120.99	116.20
35	BA	873	A	C5-N7-C8	-5.32	101.24	103.90
35	BA	1026	G	O5'-P-OP1	5.32	117.08	110.70
35	BA	1190	G	C4-N9-C1'	5.32	133.42	126.50
36	BB	43	G	N9-C4-C5	-5.32	103.27	105.40
36	BB	50	G	C5-N7-C8	-5.32	101.64	104.30
1	AA	92	C	C5'-C4'-C3'	-5.32	107.49	116.00
2	AB	400	G	C4-N9-C1'	-5.32	119.59	126.50
2	AB	590	A	C4-C5-N7	5.32	113.36	110.70
2	AB	1063	G	N1-C2-N3	-5.32	120.71	123.90
2	AB	1140	C	O4'-C4'-C3'	5.32	110.36	106.10
2	AB	2508	G	N3-C4-N9	5.32	129.19	126.00
2	AB	2517	C	N3-C4-C5	-5.32	119.77	121.90
2	AB	2724	U	C4'-C3'-C2'	5.32	107.92	102.60
8	AH	148	ARG	NE-CZ-NH2	-5.32	117.64	120.30
11	AK	30	GLN	N-CA-CB	-5.32	101.03	110.60
35	BA	108	G	C5-N7-C8	-5.32	101.64	104.30
35	BA	1075	U	C4'-C3'-C2'	-5.32	97.28	102.60
35	BA	1278	G	N9-C4-C5	-5.32	103.27	105.40
39	BE	203	ASP	CB-CG-OD2	-5.32	113.51	118.30
2	AB	831	G	C2-N3-C4	5.32	114.56	111.90
2	AB	846	U	C2-N3-C4	5.32	130.19	127.00
2	AB	1045	C	N1-C2-O2	5.32	122.09	118.90
2	AB	1224	U	C3'-C2'-C1'	5.32	105.75	101.50
2	AB	1483	G	C5-C6-N1	5.32	114.16	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1879	C	P-O3'-C3'	5.32	126.08	119.70
2	AB	2286	G	C4-C5-N7	-5.32	108.67	110.80
2	AB	2342	C	C5'-C4'-O4'	5.32	115.48	109.10
2	AB	2396	G	N3-C4-N9	5.32	129.19	126.00
21	AU	95	ARG	NE-CZ-NH1	-5.32	117.64	120.30
35	BA	17	U	C1'-O4'-C4'	-5.32	105.65	109.90
35	BA	661	G	C6-C5-N7	-5.32	127.21	130.40
35	BA	780	A	C5-N7-C8	5.32	106.56	103.90
35	BA	853	C	O4'-C1'-N1	5.32	112.45	108.20
35	BA	1365	G	C8-N9-C4	-5.32	104.27	106.40
35	BA	1377	A	C3'-C2'-C1'	5.32	105.75	101.50
35	BA	1422	G	O4'-C1'-N9	5.32	112.45	108.20
51	BQ	19	TYR	CG-CD1-CE1	-5.32	117.05	121.30
2	AB	838	C	C2-N3-C4	-5.32	117.24	119.90
2	AB	1897	G	C6-N1-C2	-5.32	121.91	125.10
2	AB	2027	G	N3-C2-N2	-5.32	116.18	119.90
2	AB	2487	G	C2-N3-C4	5.32	114.56	111.90
2	AB	2659	G	C4'-C3'-C2'	-5.32	97.28	102.60
2	AB	2752	C	C2-N1-C1'	-5.32	112.95	118.80
2	AB	2858	C	N3-C2-O2	-5.32	118.18	121.90
35	BA	28	A	N1-C2-N3	-5.32	126.64	129.30
35	BA	829	G	C6-C5-N7	5.32	133.59	130.40
35	BA	1204	A	C1'-O4'-C4'	5.32	114.15	109.90
35	BA	1305	G	P-O3'-C3'	5.32	126.08	119.70
35	BA	1389	C	C5'-C4'-O4'	5.32	115.48	109.10
35	BA	1417	G	N1-C2-N3	5.32	127.09	123.90
36	BB	19	G	C6-N1-C2	-5.32	121.91	125.10
36	BB	74	C	O5'-C5'-C4'	5.32	121.80	111.70
46	BL	94	ARG	NE-CZ-NH2	5.32	122.96	120.30
1	AA	44	G	O3'-P-O5'	-5.31	93.90	104.00
2	AB	1192	G	C5-C6-O6	5.31	131.79	128.60
2	AB	1368	G	O5'-P-OP2	-5.31	100.92	105.70
2	AB	1499	C	N3-C4-C5	-5.31	119.77	121.90
2	AB	1630	A	N9-C1'-C2'	-5.31	106.16	112.00
2	AB	1685	C	C3'-C2'-C1'	-5.31	97.25	101.50
2	AB	1834	U	N1-C1'-C2'	-5.31	106.16	112.00
2	AB	2126	A	C6-C5-N7	-5.31	128.58	132.30
35	BA	123	U	C4'-C3'-C2'	-5.31	97.29	102.60
35	BA	521	G	N3-C4-C5	-5.31	125.94	128.60
35	BA	855	U	O4'-C1'-N1	5.31	112.45	108.20
35	BA	1044	A	P-O3'-C3'	5.31	126.08	119.70
35	BA	1368	A	N3-C4-C5	-5.31	123.08	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	69	C	N1-C1'-C2'	-5.31	106.16	112.00
2	AB	418	C	C2-N3-C4	5.31	122.56	119.90
2	AB	599	A	C6-N1-C2	5.31	121.79	118.60
2	AB	605	G	O4'-C1'-N9	5.31	112.45	108.20
2	AB	673	C	C5-C6-N1	-5.31	118.34	121.00
2	AB	1076	C	N3-C4-C5	-5.31	119.78	121.90
2	AB	1819	A	C5-C6-N6	-5.31	119.45	123.70
2	AB	2117	A	N9-C1'-C2'	-5.31	106.16	112.00
2	AB	2261	C	C6-N1-C2	5.31	122.42	120.30
2	AB	2348	U	N3-C2-O2	-5.31	118.48	122.20
35	BA	384	G	O4'-C1'-N9	5.31	112.45	108.20
35	BA	593	U	O4'-C1'-N1	5.31	112.45	108.20
35	BA	725	G	C8-N9-C4	5.31	108.53	106.40
35	BA	828	U	C5-C4-O4	5.31	129.09	125.90
38	BD	1	C	P-O3'-C3'	5.31	126.07	119.70
39	BE	1	ALA	O-C-N	-5.31	114.20	122.70
2	AB	26	G	C4-N9-C1'	5.31	133.40	126.50
2	AB	923	G	C8-N9-C4	-5.31	104.28	106.40
2	AB	1036	G	N1-C2-N3	-5.31	120.71	123.90
2	AB	1321	A	C5'-C4'-O4'	5.31	115.47	109.10
2	AB	1742	U	P-O5'-C5'	5.31	129.40	120.90
2	AB	1980	G	C5'-C4'-O4'	5.31	115.47	109.10
2	AB	2435	A	O4'-C1'-N9	5.31	112.45	108.20
12	AL	136	GLN	CA-CB-CG	5.31	125.08	113.40
35	BA	72	A	C4'-C3'-C2'	-5.31	97.29	102.60
35	BA	338	A	C5-C6-N1	5.31	120.36	117.70
35	BA	836	G	C5-C6-N1	5.31	114.16	111.50
35	BA	1015	G	O4'-C1'-N9	5.31	112.45	108.20
35	BA	1442	G	C4-C5-N7	5.31	112.92	110.80
2	AB	95	A	C5'-C4'-O4'	5.31	115.47	109.10
2	AB	460	A	O4'-C1'-N9	5.31	112.45	108.20
2	AB	547	A	C2-N3-C4	-5.31	107.95	110.60
2	AB	1019	U	N1-C2-O2	-5.31	119.08	122.80
2	AB	1143	A	O4'-C1'-N9	5.31	112.45	108.20
2	AB	1649	G	C6-C5-N7	-5.31	127.21	130.40
2	AB	1839	G	C4-C5-C6	5.31	121.99	118.80
2	AB	1895	C	C2-N1-C1'	-5.31	112.96	118.80
2	AB	2110	G	C8-N9-C1'	5.31	133.90	127.00
2	AB	2799	A	N1-C2-N3	-5.31	126.64	129.30
4	AD	228	ASP	CB-CG-OD1	-5.31	113.52	118.30
35	BA	581	G	C6-N1-C2	-5.31	121.91	125.10
35	BA	666	G	N1-C6-O6	-5.31	116.72	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	713	G	C4'-C3'-C2'	-5.31	97.29	102.60
35	BA	757	U	O4'-C1'-N1	5.31	112.45	108.20
35	BA	912	C	P-O3'-C3'	5.31	126.07	119.70
35	BA	1138	G	N9-C4-C5	-5.31	103.28	105.40
35	BA	1220	G	N1-C2-N2	-5.31	111.42	116.20
35	BA	1392	G	N1-C2-N2	-5.31	111.42	116.20
37	BC	39	U	C5-C6-N1	5.31	125.36	122.70
1	AA	93	C	C4'-C3'-C2'	-5.31	97.29	102.60
2	AB	226	A	C4-C5-C6	-5.31	114.35	117.00
2	AB	257	C	O4'-C1'-N1	5.31	112.44	108.20
2	AB	872	U	C5-C6-N1	5.31	125.35	122.70
2	AB	898	C	N3-C4-C5	-5.31	119.78	121.90
2	AB	1531	C	C6-N1-C2	5.31	122.42	120.30
2	AB	2152	G	C4'-C3'-C2'	-5.31	97.29	102.60
2	AB	2217	G	O3'-P-O5'	-5.31	93.92	104.00
2	AB	2410	G	N1-C2-N2	5.31	120.98	116.20
2	AB	2482	A	C5-N7-C8	5.31	106.55	103.90
2	AB	2562	U	N3-C2-O2	-5.31	118.48	122.20
7	AG	15	LEU	CB-CG-CD2	5.31	120.02	111.00
35	BA	167	A	C5-C6-N1	-5.31	115.05	117.70
35	BA	186	C	N1-C1'-C2'	-5.31	106.16	112.00
35	BA	266	G	N1-C6-O6	5.31	123.08	119.90
35	BA	327	A	C3'-C2'-C1'	5.31	105.75	101.50
35	BA	482	A	P-O3'-C3'	5.31	126.07	119.70
35	BA	571	U	N1-C1'-C2'	-5.31	106.16	112.00
35	BA	974	A	C3'-C2'-C1'	-5.31	97.25	101.50
38	BD	1	C	C3'-C2'-C1'	-5.31	97.25	101.50
38	BD	48	U	N1-C1'-C2'	-5.31	106.16	112.00
52	BR	68	TYR	CB-CG-CD1	-5.31	117.82	121.00
2	AB	924	G	C3'-C2'-C1'	5.31	105.75	101.50
2	AB	1376	C	C2-N3-C4	5.31	122.55	119.90
2	AB	1450	G	N9-C1'-C2'	-5.31	106.16	112.00
2	AB	2515	C	C4-C5-C6	5.31	120.05	117.40
4	AD	143	VAL	CG1-CB-CG2	-5.31	102.41	110.90
15	AO	131	VAL	CB-CA-C	5.31	121.48	111.40
35	BA	348	G	C1'-O4'-C4'	-5.31	105.66	109.90
35	BA	799	G	N3-C4-N9	5.31	129.18	126.00
35	BA	807	A	O4'-C1'-N9	5.31	112.44	108.20
35	BA	1291	U	C5-C6-N1	-5.31	120.05	122.70
35	BA	1458	G	N3-C4-C5	-5.31	125.95	128.60
1	AA	26	C	C4'-C3'-C2'	5.30	107.91	102.60
2	AB	347	A	C6-C5-N7	5.30	136.01	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	505	A	C8-N9-C4	5.30	107.92	105.80
2	AB	760	G	N7-C8-N9	5.30	115.75	113.10
2	AB	861	A	C4-C5-C6	-5.30	114.35	117.00
2	AB	1346	G	C2-N3-C4	5.30	114.55	111.90
2	AB	1815	A	C3'-C2'-C1'	-5.30	97.26	101.50
2	AB	1858	A	C8-N9-C4	5.30	107.92	105.80
2	AB	2008	C	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	2032	G	OP1-P-O3'	5.30	116.87	105.20
2	AB	2329	U	C1'-O4'-C4'	5.30	114.14	109.90
2	AB	2518	A	C5'-C4'-O4'	5.30	115.46	109.10
2	AB	2839	G	C6-N1-C2	5.30	128.28	125.10
2	AB	2845	U	C4'-C3'-C2'	-5.30	97.30	102.60
3	AC	218	MET	CG-SD-CE	5.30	108.69	100.20
35	BA	290	C	C5-C4-N4	5.30	123.91	120.20
35	BA	357	G	C5-C6-O6	-5.30	125.42	128.60
35	BA	596	A	N3-C4-C5	-5.30	123.09	126.80
35	BA	760	G	O4'-C1'-C2'	5.30	112.37	107.60
35	BA	774	G	N1-C2-N3	5.30	127.08	123.90
35	BA	1196	A	C3'-C2'-C1'	5.30	105.74	101.50
35	BA	1296	C	C5'-C4'-O4'	5.30	115.47	109.10
2	AB	347	A	C8-N9-C4	-5.30	103.68	105.80
2	AB	1137	G	N1-C2-N2	5.30	120.97	116.20
2	AB	1717	A	N1-C2-N3	-5.30	126.65	129.30
2	AB	2125	G	C5-N7-C8	5.30	106.95	104.30
2	AB	2854	G	N7-C8-N9	-5.30	110.45	113.10
14	AN	62	PRO	O-C-N	5.30	131.19	122.70
35	BA	347	G	C5'-C4'-O4'	5.30	115.46	109.10
35	BA	670	G	C5-C6-O6	-5.30	125.42	128.60
36	BB	63	C	N3-C2-O2	-5.30	118.19	121.90
38	BD	17	C	C4-C5-C6	-5.30	114.75	117.40
1	AA	35	C	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	301	G	N3-C4-C5	-5.30	125.95	128.60
2	AB	1129	A	C6-N1-C2	-5.30	115.42	118.60
2	AB	1592	C	C6-N1-C2	-5.30	118.18	120.30
2	AB	1666	G	C4-N9-C1'	-5.30	119.61	126.50
2	AB	1837	C	C5-C4-N4	-5.30	116.49	120.20
2	AB	2410	G	O4'-C4'-C3'	5.30	110.34	106.10
2	AB	2505	G	C6-C5-N7	5.30	133.58	130.40
13	AM	56	ASP	CB-CG-OD1	-5.30	113.53	118.30
35	BA	458	U	N1-C2-N3	5.30	118.08	114.90
35	BA	577	G	C6-C5-N7	5.30	133.58	130.40
35	BA	653	U	C5-C4-O4	-5.30	122.72	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1159	U	N3-C4-O4	5.30	123.11	119.40
1	AA	56	G	C5-C6-O6	-5.30	125.42	128.60
2	AB	23	G	P-O5'-C5'	5.30	129.38	120.90
2	AB	156	A	N3-C4-C5	5.30	130.51	126.80
2	AB	422	A	C6-C5-N7	-5.30	128.59	132.30
2	AB	555	G	O4'-C1'-N9	5.30	112.44	108.20
2	AB	606	U	N1-C1'-C2'	-5.30	106.17	112.00
2	AB	664	G	C5-C6-N1	-5.30	108.85	111.50
2	AB	861	A	C5'-C4'-O4'	5.30	115.46	109.10
2	AB	988	A	C1'-O4'-C4'	5.30	114.14	109.90
2	AB	1279	G	C5-C6-N1	5.30	114.15	111.50
2	AB	1308	A	C6-N1-C2	5.30	121.78	118.60
2	AB	1634	A	N3-C4-N9	5.30	131.64	127.40
2	AB	1752	C	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	2048	G	N1-C6-O6	-5.30	116.72	119.90
2	AB	2328	A	O4'-C1'-N9	5.30	112.44	108.20
2	AB	2776	A	N7-C8-N9	5.30	116.45	113.80
26	AZ	71	ARG	NE-CZ-NH1	-5.30	117.65	120.30
30	A3	39	ARG	NE-CZ-NH2	-5.30	117.65	120.30
35	BA	350	G	O4'-C4'-C3'	5.30	110.34	106.10
35	BA	811	C	C4'-C3'-C2'	-5.30	97.30	102.60
35	BA	1193	G	N3-C2-N2	5.30	123.61	119.90
37	BC	15	G	C2-N3-C4	5.30	114.55	111.90
37	BC	47	C	C6-N1-C2	5.30	122.42	120.30
2	AB	126	A	C3'-C2'-C1'	5.30	105.74	101.50
2	AB	992	C	C5'-C4'-O4'	5.30	115.46	109.10
2	AB	1897	G	O4'-C1'-N9	5.30	112.44	108.20
35	BA	762	U	O4'-C1'-N1	5.30	112.44	108.20
1	AA	37	C	O5'-P-OP1	5.30	117.06	110.70
1	AA	41	G	C8-N9-C4	-5.30	104.28	106.40
1	AA	49	C	N1-C2-N3	5.30	122.91	119.20
2	AB	176	A	C5-C6-N6	-5.30	119.46	123.70
2	AB	849	A	C5-C6-N1	5.30	120.35	117.70
2	AB	858	G	C2-N3-C4	5.30	114.55	111.90
2	AB	973	A	C5-N7-C8	5.30	106.55	103.90
2	AB	1112	G	N1-C2-N2	-5.30	111.43	116.20
2	AB	1187	G	C2-N3-C4	5.30	114.55	111.90
2	AB	2214	C	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	2390	U	N1-C2-N3	5.30	118.08	114.90
2	AB	2414	G	N3-C4-N9	-5.30	122.82	126.00
2	AB	2865	U	C5-C6-N1	5.30	125.35	122.70
35	BA	224	U	N1-C2-N3	5.30	118.08	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	286	C	C6-N1-C2	-5.30	118.18	120.30
35	BA	1221	G	N1-C2-N3	-5.30	120.72	123.90
35	BA	1421	G	O3'-P-O5'	5.30	114.06	104.00
2	AB	168	G	O4'-C4'-C3'	5.29	110.34	106.10
2	AB	169	G	C3'-C2'-C1'	-5.29	97.26	101.50
2	AB	1337	G	C3'-C2'-C1'	5.29	105.74	101.50
2	AB	1347	A	O4'-C1'-N9	5.29	112.44	108.20
2	AB	1490	A	O4'-C1'-C2'	-5.29	100.50	105.80
2	AB	1676	A	C6-N1-C2	5.29	121.78	118.60
2	AB	1689	A	N9-C1'-C2'	-5.29	106.18	112.00
2	AB	2375	G	N7-C8-N9	5.29	115.75	113.10
2	AB	2619	C	C5-C4-N4	-5.29	116.49	120.20
35	BA	346	G	C5-C6-O6	-5.29	125.42	128.60
35	BA	1331	G	C8-N9-C4	-5.29	104.28	106.40
2	AB	212	G	N3-C2-N2	5.29	123.61	119.90
2	AB	1142	A	C5-N7-C8	-5.29	101.25	103.90
2	AB	1402	U	N1-C2-N3	5.29	118.08	114.90
2	AB	1946	U	O5'-P-OP2	-5.29	100.94	105.70
2	AB	1992	G	C5-N7-C8	-5.29	101.65	104.30
2	AB	2440	C	N3-C2-O2	-5.29	118.19	121.90
2	AB	2553	G	N3-C4-C5	-5.29	125.95	128.60
2	AB	2735	G	C4-C5-C6	5.29	121.98	118.80
2	AB	2876	G	C5-N7-C8	-5.29	101.65	104.30
35	BA	715	A	C5-C6-N1	5.29	120.35	117.70
35	BA	936	C	C6-N1-C1'	5.29	127.15	120.80
1	AA	5	U	O4'-C1'-N1	5.29	112.43	108.20
2	AB	684	G	N1-C6-O6	5.29	123.08	119.90
2	AB	1202	G	C5'-C4'-O4'	-5.29	102.75	109.10
2	AB	1384	A	C2-N3-C4	5.29	113.25	110.60
2	AB	1641	A	C4-C5-N7	5.29	113.35	110.70
2	AB	1969	A	N9-C1'-C2'	-5.29	106.18	112.00
2	AB	2006	C	C3'-C2'-C1'	5.29	105.73	101.50
2	AB	2250	G	O4'-C4'-C3'	5.29	110.33	106.10
35	BA	114	U	C5-C6-N1	-5.29	120.05	122.70
35	BA	482	A	N9-C4-C5	5.29	107.92	105.80
35	BA	724	G	N1-C2-N3	-5.29	120.72	123.90
35	BA	923	A	C5'-C4'-O4'	5.29	115.45	109.10
38	BD	52	C	N3-C4-C5	-5.29	119.78	121.90
43	BI	115	ASP	CB-CG-OD1	-5.29	113.54	118.30
2	AB	1078	U	C6-N1-C2	-5.29	117.83	121.00
2	AB	1755	A	C5-C6-N6	-5.29	119.47	123.70
2	AB	1811	G	C5-N7-C8	-5.29	101.66	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2234	G	C5-C6-N1	5.29	114.14	111.50
35	BA	283	U	C3'-C2'-C1'	5.29	105.73	101.50
35	BA	286	C	P-O3'-C3'	5.29	126.05	119.70
35	BA	744	C	C4'-C3'-C2'	-5.29	97.31	102.60
35	BA	921	U	O4'-C1'-N1	5.29	112.43	108.20
35	BA	1046	A	C6-N1-C2	5.29	121.77	118.60
35	BA	1049	U	C4'-C3'-C2'	5.29	107.89	102.60
35	BA	1085	U	N3-C4-C5	-5.29	111.43	114.60
35	BA	1108	G	O4'-C1'-C2'	-5.29	100.51	105.80
35	BA	1356	G	N7-C8-N9	5.29	115.75	113.10
38	BD	36	A	C4-C5-C6	-5.29	114.36	117.00
2	AB	139	U	N1-C1'-C2'	5.29	120.87	114.00
2	AB	343	C	O4'-C1'-N1	5.29	112.43	108.20
2	AB	600	G	C5-C6-N1	-5.29	108.86	111.50
2	AB	750	A	C5-C6-N6	-5.29	119.47	123.70
2	AB	995	C	C3'-C2'-C1'	5.29	105.73	101.50
2	AB	1275	A	C4-C5-N7	-5.29	108.06	110.70
2	AB	1277	G	C3'-C2'-C1'	-5.29	97.27	101.50
2	AB	1356	G	N1-C6-O6	-5.29	116.73	119.90
2	AB	1401	G	P-O3'-C3'	5.29	126.05	119.70
2	AB	1822	C	C4'-C3'-C2'	-5.29	97.31	102.60
2	AB	1849	G	C5-C6-O6	-5.29	125.43	128.60
2	AB	2138	G	C5'-C4'-O4'	5.29	115.45	109.10
2	AB	2153	C	O4'-C1'-N1	5.29	112.43	108.20
2	AB	2277	G	C4-C5-C6	-5.29	115.63	118.80
2	AB	2389	G	C5-C6-O6	-5.29	125.43	128.60
2	AB	2684	U	C3'-C2'-C1'	5.29	105.73	101.50
24	AX	19	ARG	NE-CZ-NH2	-5.29	117.66	120.30
35	BA	204	G	N1-C6-O6	-5.29	116.73	119.90
35	BA	517	G	N3-C2-N2	5.29	123.60	119.90
35	BA	821	G	C4'-C3'-C2'	5.29	107.89	102.60
35	BA	1095	U	N3-C2-O2	-5.29	118.50	122.20
35	BA	1489	G	N9-C1'-C2'	-5.29	106.18	112.00
37	BC	17	U	N3-C2-O2	-5.29	118.50	122.20
2	AB	1114	C	N3-C4-C5	5.29	124.02	121.90
2	AB	1508	A	C8-N9-C4	-5.29	103.69	105.80
2	AB	1689	A	N9-C4-C5	-5.29	103.69	105.80
2	AB	1924	C	C5-C4-N4	-5.29	116.50	120.20
2	AB	2475	C	C5'-C4'-C3'	-5.29	107.54	116.00
35	BA	346	G	N1-C6-O6	5.29	123.07	119.90
35	BA	592	G	C4-C5-N7	-5.29	108.69	110.80
35	BA	1404	C	C6-N1-C2	-5.29	118.19	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	69	G	N3-C2-N2	-5.29	116.20	119.90
2	AB	743	A	N3-C4-C5	-5.29	123.10	126.80
2	AB	1259	G	O4'-C1'-C2'	5.29	112.36	107.60
2	AB	1445	G	C8-N9-C4	-5.29	104.29	106.40
2	AB	1664	A	C5-C6-N6	-5.29	119.47	123.70
2	AB	2682	A	N7-C8-N9	-5.29	111.16	113.80
6	AF	21	ARG	CA-CB-CG	-5.29	101.77	113.40
35	BA	42	G	C4-C5-C6	5.29	121.97	118.80
35	BA	588	G	O4'-C1'-N9	5.29	112.43	108.20
35	BA	655	A	C2-N3-C4	5.29	113.24	110.60
35	BA	1016	A	N1-C6-N6	5.29	121.77	118.60
35	BA	1193	G	P-O3'-C3'	5.29	126.04	119.70
35	BA	1216	A	N9-C4-C5	5.29	107.91	105.80
35	BA	1313	U	N1-C1'-C2'	-5.29	106.19	112.00
37	BC	43	U	C5-C4-O4	-5.29	122.73	125.90
37	BC	55	A	O4'-C1'-N9	5.29	112.43	108.20
2	AB	278	A	C4-C5-C6	5.28	119.64	117.00
2	AB	763	G	C4-C5-C6	5.28	121.97	118.80
2	AB	1185	G	C5-N7-C8	5.28	106.94	104.30
2	AB	1487	U	O4'-C1'-N1	5.28	112.43	108.20
2	AB	1505	A	C4'-C3'-C2'	-5.28	97.32	102.60
2	AB	1578	U	P-O3'-C3'	5.28	126.04	119.70
2	AB	2269	G	C4-C5-C6	5.28	121.97	118.80
2	AB	2336	A	C6-C5-N7	5.28	136.00	132.30
2	AB	2376	A	N3-C4-N9	-5.28	123.17	127.40
2	AB	2679	A	C5'-C4'-O4'	5.28	115.44	109.10
2	AB	2840	C	C2-N3-C4	-5.28	117.26	119.90
2	AB	2860	A	O4'-C1'-N9	5.28	112.43	108.20
2	AB	2862	G	C5'-C4'-O4'	-5.28	102.76	109.10
2	AB	2886	A	C4-C5-N7	5.28	113.34	110.70
9	AI	61	VAL	CG1-CB-CG2	-5.28	102.45	110.90
35	BA	214	C	C3'-C2'-C1'	5.28	105.73	101.50
35	BA	221	C	C5'-C4'-O4'	5.28	115.44	109.10
35	BA	315	A	C5-N7-C8	5.28	106.54	103.90
35	BA	755	G	C5'-C4'-C3'	-5.28	107.55	116.00
35	BA	1083	U	O4'-C1'-N1	5.28	112.43	108.20
35	BA	1468	A	C6-N1-C2	5.28	121.77	118.60
38	BD	47	A	C4-C5-C6	5.28	119.64	117.00
43	BI	109	ARG	NE-CZ-NH1	5.28	122.94	120.30
2	AB	503	A	N9-C4-C5	5.28	107.91	105.80
2	AB	1373	A	C6-N1-C2	-5.28	115.43	118.60
2	AB	1573	G	N7-C8-N9	-5.28	110.46	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1948	G	C5'-C4'-O4'	5.28	115.44	109.10
2	AB	2054	A	O4'-C1'-N9	-5.28	103.97	108.20
2	AB	2681	C	C5'-C4'-C3'	-5.28	107.55	116.00
35	BA	980	C	C5-C4-N4	-5.28	116.50	120.20
35	BA	1093	A	P-O5'-C5'	5.28	129.35	120.90
56	BV	21	ALA	O-C-N	5.28	131.15	122.70
1	AA	9	G	N9-C1'-C2'	-5.28	106.19	112.00
2	AB	118	A	C5-C6-N1	-5.28	115.06	117.70
2	AB	127	A	C3'-C2'-C1'	-5.28	97.28	101.50
2	AB	218	A	C4-C5-C6	-5.28	114.36	117.00
2	AB	242	G	O4'-C1'-N9	5.28	112.42	108.20
2	AB	401	A	C5-N7-C8	-5.28	101.26	103.90
2	AB	1114	C	C4'-C3'-C2'	-5.28	97.32	102.60
2	AB	1154	G	N3-C4-C5	-5.28	125.96	128.60
2	AB	1301	A	O4'-C1'-C2'	-5.28	100.52	105.80
2	AB	1402	U	C5'-C4'-O4'	5.28	115.44	109.10
2	AB	1740	G	N1-C2-N2	-5.28	111.45	116.20
2	AB	2290	G	C5'-C4'-C3'	-5.28	107.55	116.00
2	AB	2630	G	C5-N7-C8	-5.28	101.66	104.30
19	AS	49	ARG	NH1-CZ-NH2	5.28	125.21	119.40
35	BA	202	G	N7-C8-N9	-5.28	110.46	113.10
35	BA	408	A	N1-C2-N3	-5.28	126.66	129.30
35	BA	442	G	C6-N1-C2	-5.28	121.93	125.10
35	BA	456	A	N1-C6-N6	-5.28	115.43	118.60
1	AA	72	G	C8-N9-C4	-5.28	104.29	106.40
2	AB	678	C	C4'-C3'-C2'	-5.28	97.32	102.60
2	AB	1575	C	C5-C4-N4	-5.28	116.50	120.20
2	AB	1904	G	C1'-O4'-C4'	-5.28	105.68	109.90
35	BA	247	G	C4-C5-C6	5.28	121.97	118.80
35	BA	533	A	C3'-C2'-C1'	5.28	105.72	101.50
35	BA	631	C	C4-C5-C6	-5.28	114.76	117.40
35	BA	860	A	C4'-C3'-C2'	-5.28	97.32	102.60
35	BA	1515	G	C2-N3-C4	5.28	114.54	111.90
37	BC	50	U	O4'-C1'-N1	5.28	112.42	108.20
2	AB	120	U	N1-C2-N3	5.28	118.07	114.90
2	AB	311	A	O4'-C1'-N9	5.28	112.42	108.20
2	AB	506	G	N1-C2-N3	5.28	127.07	123.90
2	AB	824	U	O4'-C4'-C3'	-5.28	98.72	104.00
2	AB	829	A	C8-N9-C4	5.28	107.91	105.80
2	AB	842	U	C1'-O4'-C4'	-5.28	105.68	109.90
2	AB	1765	U	P-O3'-C3'	5.28	126.03	119.70
35	BA	27	G	C3'-C2'-C1'	5.28	105.72	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	111	G	C5-N7-C8	5.28	106.94	104.30
35	BA	324	G	O4'-C1'-C2'	-5.28	100.52	105.80
35	BA	934	C	N3-C2-O2	-5.28	118.20	121.90
35	BA	1008	U	N1-C2-N3	5.28	118.07	114.90
35	BA	1072	G	N3-C4-C5	-5.28	125.96	128.60
35	BA	1244	G	C1'-O4'-C4'	5.28	114.12	109.90
35	BA	1336	C	O4'-C4'-C3'	5.28	110.32	106.10
35	BA	1520	C	C2-N3-C4	-5.28	117.26	119.90
38	BD	17	C	C1'-O4'-C4'	5.28	114.12	109.90
40	BF	182	ASP	CB-CG-OD1	5.28	123.05	118.30
47	BM	13	PHE	CG-CD1-CE1	-5.28	115.00	120.80
49	BO	108	ASP	CB-CA-C	5.28	120.95	110.40
51	BQ	8	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
2	AB	28	A	C2-N3-C4	5.28	113.24	110.60
2	AB	43	G	N1-C2-N3	5.28	127.06	123.90
2	AB	128	C	N3-C4-C5	-5.28	119.79	121.90
2	AB	526	A	C3'-C2'-C1'	-5.28	97.28	101.50
2	AB	685	A	C3'-C2'-C1'	5.28	105.72	101.50
2	AB	973	A	C2-N3-C4	5.28	113.24	110.60
2	AB	1127	A	N1-C2-N3	-5.28	126.66	129.30
2	AB	1263	U	O4'-C4'-C3'	5.28	110.32	106.10
2	AB	1907	G	N1-C2-N2	5.28	120.95	116.20
2	AB	2276	G	C4'-C3'-C2'	5.28	107.88	102.60
2	AB	2322	A	C4'-C3'-C2'	-5.28	97.32	102.60
2	AB	2332	C	N3-C4-N4	5.28	121.69	118.00
2	AB	2576	G	C8-N9-C4	-5.28	104.29	106.40
2	AB	2609	U	N1-C2-N3	5.28	118.06	114.90
35	BA	233	C	C6-N1-C2	-5.28	118.19	120.30
35	BA	326	G	N7-C8-N9	5.28	115.74	113.10
35	BA	397	A	C5-N7-C8	5.28	106.54	103.90
35	BA	1362	A	C5-C6-N6	5.28	127.92	123.70
35	BA	1431	A	C3'-C2'-C1'	5.28	105.72	101.50
38	BD	54	G	C1'-O4'-C4'	5.28	114.12	109.90
41	BG	75	TYR	CB-CG-CD1	-5.28	117.83	121.00
2	AB	123	G	N7-C8-N9	5.27	115.74	113.10
2	AB	216	A	C5'-C4'-O4'	5.27	115.43	109.10
2	AB	2232	C	N1-C2-O2	5.27	122.06	118.90
35	BA	105	G	C8-N9-C4	-5.27	104.29	106.40
35	BA	301	G	N7-C8-N9	5.27	115.74	113.10
35	BA	508	U	C1'-O4'-C4'	-5.27	105.68	109.90
35	BA	915	A	C2-N3-C4	-5.27	107.96	110.60
35	BA	1036	A	C5'-C4'-O4'	5.27	115.43	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1344	C	C5'-C4'-C3'	-5.27	107.56	116.00
35	BA	1458	G	C6-C5-N7	5.27	133.56	130.40
37	BC	35	G	O4'-C1'-N9	5.27	112.42	108.20
2	AB	312	G	C5-N7-C8	-5.27	101.66	104.30
2	AB	321	U	C5-C4-O4	5.27	129.06	125.90
2	AB	488	G	C5'-C4'-O4'	5.27	115.43	109.10
2	AB	562	U	C4'-C3'-C2'	-5.27	97.33	102.60
2	AB	579	G	C6-C5-N7	-5.27	127.24	130.40
2	AB	1501	G	C1'-O4'-C4'	5.27	114.12	109.90
2	AB	1992	G	N1-C6-O6	-5.27	116.74	119.90
2	AB	2883	A	C5'-C4'-O4'	5.27	115.43	109.10
35	BA	321	A	C6-C5-N7	-5.27	128.61	132.30
35	BA	532	A	C4-C5-N7	-5.27	108.06	110.70
37	BC	40	G	N3-C4-N9	5.27	129.16	126.00
38	BD	70	C	C2-N3-C4	-5.27	117.26	119.90
46	BL	121	ARG	NH1-CZ-NH2	5.27	125.20	119.40
2	AB	662	G	N9-C1'-C2'	-5.27	106.20	112.00
2	AB	861	A	O4'-C1'-N9	5.27	112.42	108.20
2	AB	1147	A	C4'-C3'-C2'	-5.27	97.33	102.60
2	AB	2273	A	N3-C4-C5	-5.27	123.11	126.80
2	AB	2683	C	C4'-C3'-C2'	-5.27	97.33	102.60
35	BA	324	G	C5-C6-O6	5.27	131.76	128.60
35	BA	1451	U	C2-N3-C4	-5.27	123.84	127.00
37	BC	32	U	C5-C4-O4	-5.27	122.74	125.90
1	AA	119	A	C5'-C4'-O4'	5.27	115.42	109.10
2	AB	85	G	C6-C5-N7	-5.27	127.24	130.40
2	AB	634	C	O4'-C1'-N1	5.27	112.42	108.20
2	AB	711	G	O4'-C1'-N9	5.27	112.42	108.20
2	AB	846	U	O3'-P-O5'	-5.27	93.99	104.00
2	AB	921	C	C4'-C3'-C2'	-5.27	97.33	102.60
2	AB	1309	G	C5'-C4'-O4'	-5.27	102.78	109.10
2	AB	1425	G	N3-C4-N9	5.27	129.16	126.00
2	AB	1855	U	N3-C4-C5	-5.27	111.44	114.60
2	AB	2738	A	O4'-C1'-N9	5.27	112.42	108.20
4	AD	259	ASN	CB-CA-C	5.27	120.94	110.40
35	BA	812	G	P-O3'-C3'	5.27	126.02	119.70
35	BA	1134	G	C2-N3-C4	5.27	114.53	111.90
35	BA	1341	U	N3-C2-O2	-5.27	118.51	122.20
38	BD	15	G	P-O3'-C3'	5.27	126.02	119.70
2	AB	840	C	N3-C2-O2	-5.27	118.21	121.90
2	AB	876	C	N1-C2-N3	-5.27	115.51	119.20
2	AB	916	G	C2-N3-C4	5.27	114.53	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1463	C	N1-C2-O2	5.27	122.06	118.90
2	AB	1803	A	C3'-C2'-C1'	-5.27	97.28	101.50
2	AB	2024	G	O5'-P-OP2	-5.27	100.96	105.70
2	AB	2371	G	N1-C2-N3	-5.27	120.74	123.90
35	BA	532	A	C3'-C2'-C1'	-5.27	97.29	101.50
35	BA	641	U	N1-C2-O2	-5.27	119.11	122.80
35	BA	677	U	N3-C2-O2	-5.27	118.51	122.20
35	BA	711	G	C8-N9-C1'	5.27	133.85	127.00
35	BA	1079	G	C6-N1-C2	-5.27	121.94	125.10
35	BA	1353	G	N1-C2-N3	-5.27	120.74	123.90
35	BA	1373	G	C5-C6-O6	5.27	131.76	128.60
35	BA	1387	G	N7-C8-N9	5.27	115.73	113.10
55	BU	63	TYR	CA-CB-CG	5.27	123.41	113.40
58	BX	31	VAL	CA-CB-CG1	5.27	118.80	110.90
2	AB	403	U	C5-C6-N1	-5.27	120.07	122.70
2	AB	472	A	C4-C5-C6	-5.27	114.37	117.00
2	AB	967	U	O4'-C1'-N1	5.27	112.41	108.20
2	AB	1089	A	N3-C4-N9	5.27	131.61	127.40
2	AB	1375	U	N1-C2-O2	5.27	126.49	122.80
2	AB	1590	A	C4'-C3'-C2'	-5.27	97.33	102.60
2	AB	2705	A	C5'-C4'-O4'	5.27	115.42	109.10
1	AA	103	U	C5'-C4'-O4'	5.26	115.42	109.10
2	AB	165	A	N9-C4-C5	5.26	107.91	105.80
2	AB	349	U	C5-C4-O4	-5.26	122.74	125.90
2	AB	534	U	P-O5'-C5'	5.26	129.32	120.90
2	AB	576	U	C4'-C3'-C2'	-5.26	97.34	102.60
2	AB	953	G	C8-N9-C4	-5.26	104.29	106.40
2	AB	970	U	OP2-P-O3'	5.26	116.78	105.20
2	AB	1483	G	N1-C2-N2	-5.26	111.46	116.20
2	AB	1549	A	C5'-C4'-C3'	-5.26	107.58	116.00
2	AB	1622	G	C6-C5-N7	-5.26	127.24	130.40
2	AB	1868	C	N3-C4-N4	5.26	121.69	118.00
2	AB	2280	G	N9-C1'-C2'	-5.26	106.21	112.00
2	AB	2502	G	C5-C6-N1	5.26	114.13	111.50
2	AB	2596	U	C4-C5-C6	5.26	122.86	119.70
2	AB	2736	A	C8-N9-C4	-5.26	103.69	105.80
2	AB	2844	G	C2-N3-C4	5.26	114.53	111.90
2	AB	2853	C	O4'-C1'-N1	5.26	112.41	108.20
15	AO	64	TRP	CG-CD1-NE1	-5.26	104.83	110.10
35	BA	473	U	N3-C2-O2	-5.26	118.52	122.20
35	BA	782	A	O5'-P-OP2	-5.26	100.96	105.70
35	BA	793	U	C1'-O4'-C4'	5.26	114.11	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1001	C	C5-C4-N4	-5.26	116.52	120.20
35	BA	1019	A	O3'-P-O5'	-5.26	94.00	104.00
35	BA	1343	G	OP2-P-O3'	5.26	116.78	105.20
36	BB	63	C	N3-C4-N4	5.26	121.69	118.00
38	BD	57	C	P-O3'-C3'	5.26	126.02	119.70
38	BD	77	A	C4-C5-C6	-5.26	114.37	117.00
53	BS	5	ARG	CD-NE-CZ	5.26	130.97	123.60
1	AA	83	G	C1'-O4'-C4'	-5.26	105.69	109.90
2	AB	410	G	C1'-O4'-C4'	-5.26	105.69	109.90
2	AB	1285	A	O4'-C4'-C3'	5.26	110.31	106.10
2	AB	2085	U	N3-C4-C5	-5.26	111.44	114.60
2	AB	2421	G	C6-N1-C2	-5.26	121.94	125.10
35	BA	825	A	N7-C8-N9	-5.26	111.17	113.80
35	BA	1169	A	O4'-C1'-N9	5.26	112.41	108.20
37	BC	25	U	O4'-C1'-N1	5.26	112.41	108.20
38	BD	73	A	C5'-C4'-C3'	-5.26	107.58	116.00
1	AA	85	G	C5-C6-O6	-5.26	125.44	128.60
2	AB	486	C	C3'-C2'-C1'	-5.26	97.29	101.50
2	AB	637	A	C5-N7-C8	5.26	106.53	103.90
2	AB	825	A	C5-C6-N1	5.26	120.33	117.70
2	AB	1006	C	N1-C2-O2	5.26	122.06	118.90
2	AB	1331	G	C5-C6-N1	5.26	114.13	111.50
2	AB	1490	A	C6-N1-C2	5.26	121.76	118.60
2	AB	1530	G	C3'-C2'-C1'	-5.26	97.29	101.50
2	AB	1579	A	P-O3'-C3'	5.26	126.02	119.70
2	AB	1730	C	C5-C6-N1	5.26	123.63	121.00
2	AB	2268	A	C1'-O4'-C4'	5.26	114.11	109.90
2	AB	2397	G	C8-N9-C4	5.26	108.50	106.40
2	AB	2650	U	C5-C6-N1	5.26	125.33	122.70
2	AB	2812	G	O4'-C1'-N9	5.26	112.41	108.20
2	AB	2878	U	C5-C4-O4	-5.26	122.74	125.90
2	AB	2899	A	N7-C8-N9	5.26	116.43	113.80
35	BA	718	A	C5'-C4'-O4'	5.26	115.42	109.10
35	BA	1050	G	C3'-C2'-C1'	5.26	105.71	101.50
35	BA	1448	C	O3'-P-O5'	5.26	114.00	104.00
35	BA	1452	C	C1'-O4'-C4'	5.26	114.11	109.90
37	BC	21	U	N1-C1'-C2'	-5.26	106.21	112.00
37	BC	29	G	C4'-C3'-O3'	5.26	123.52	113.00
2	AB	335	C	N1-C2-N3	-5.26	115.52	119.20
2	AB	780	G	C4-N9-C1'	-5.26	119.66	126.50
2	AB	921	C	C1'-O4'-C4'	-5.26	105.69	109.90
2	AB	1055	G	C5-C6-N1	5.26	114.13	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1084	A	O4'-C1'-C2'	-5.26	100.54	105.80
2	AB	1247	A	O4'-C1'-C2'	-5.26	100.54	105.80
2	AB	1255	U	P-O3'-C3'	5.26	126.01	119.70
2	AB	1348	C	N3-C4-N4	5.26	121.68	118.00
2	AB	2000	C	N3-C4-C5	-5.26	119.80	121.90
2	AB	2104	C	C3'-C2'-C1'	5.26	105.71	101.50
2	AB	2196	C	C5-C4-N4	-5.26	116.52	120.20
2	AB	2371	G	C2-N3-C4	5.26	114.53	111.90
2	AB	2567	G	C1'-O4'-C4'	-5.26	105.69	109.90
2	AB	2581	G	C8-N9-C4	-5.26	104.30	106.40
2	AB	2701	U	O4'-C1'-N1	5.26	112.41	108.20
2	AB	2785	C	C6-N1-C2	5.26	122.40	120.30
35	BA	86	G	C2-N3-C4	-5.26	109.27	111.90
35	BA	396	C	P-O5'-C5'	5.26	129.32	120.90
35	BA	618	C	C5'-C4'-O4'	5.26	115.41	109.10
35	BA	740	U	C6-N1-C2	-5.26	117.84	121.00
35	BA	820	U	O4'-C1'-C2'	5.26	112.33	107.60
35	BA	1082	A	C5-C6-N6	5.26	127.91	123.70
35	BA	1253	G	C3'-C2'-C1'	-5.26	97.29	101.50
35	BA	1295	U	C5'-C4'-C3'	-5.26	107.58	116.00
38	BD	58	A	N3-C4-C5	5.26	130.48	126.80
38	BD	74	A	N1-C6-N6	5.26	121.75	118.60
2	AB	904	G	N7-C8-N9	5.26	115.73	113.10
2	AB	1060	U	O4'-C4'-C3'	5.26	110.31	106.10
2	AB	1854	A	C8-N9-C1'	5.26	137.16	127.70
2	AB	2570	G	C8-N9-C1'	5.26	133.84	127.00
2	AB	2820	A	C5-C6-N1	5.26	120.33	117.70
35	BA	372	C	C4-C5-C6	5.26	120.03	117.40
35	BA	830	G	N7-C8-N9	5.26	115.73	113.10
35	BA	1260	G	N1-C2-N2	-5.26	111.47	116.20
38	BD	52	C	C2-N1-C1'	-5.26	113.02	118.80
48	BN	9	LYS	O-C-N	-5.26	114.29	122.70
2	AB	335	C	C3'-C2'-C1'	5.26	105.71	101.50
2	AB	397	U	C5-C4-O4	5.26	129.05	125.90
2	AB	434	U	N3-C4-C5	5.26	117.75	114.60
2	AB	631	A	O3'-P-O5'	5.26	113.99	104.00
2	AB	753	A	C5'-C4'-C3'	-5.26	107.59	116.00
2	AB	960	A	N1-C6-N6	-5.26	115.45	118.60
2	AB	987	C	C1'-O4'-C4'	-5.26	105.69	109.90
2	AB	1870	C	O4'-C4'-C3'	5.26	110.31	106.10
2	AB	1980	G	C8-N9-C4	5.26	108.50	106.40
2	AB	2000	C	C5'-C4'-C3'	-5.26	107.59	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2622	U	C5-C4-O4	-5.26	122.75	125.90
22	AV	79	ASP	CB-CG-OD1	-5.26	113.57	118.30
35	BA	253	A	N9-C1'-C2'	-5.26	106.22	112.00
35	BA	476	U	N3-C2-O2	-5.26	118.52	122.20
35	BA	977	A	N3-C4-N9	5.26	131.60	127.40
35	BA	1138	G	C1'-O4'-C4'	-5.26	105.69	109.90
35	BA	1332	A	N1-C2-N3	5.26	131.93	129.30
35	BA	1379	G	N1-C2-N3	-5.26	120.75	123.90
36	BB	66	C	C2-N3-C4	-5.26	117.27	119.90
38	BD	61	U	C5-C6-N1	-5.26	120.07	122.70
2	AB	44	A	C4-C5-N7	5.25	113.33	110.70
2	AB	139	U	N1-C2-N3	5.25	118.05	114.90
2	AB	210	C	C6-N1-C2	5.25	122.40	120.30
2	AB	1445	G	C6-C5-N7	-5.25	127.25	130.40
2	AB	1723	G	C8-N9-C4	-5.25	104.30	106.40
2	AB	1846	G	C5'-C4'-C3'	-5.25	107.59	116.00
2	AB	1871	A	C4-C5-N7	5.25	113.33	110.70
2	AB	2036	C	C5'-C4'-O4'	5.25	115.41	109.10
11	AK	57	VAL	CG1-CB-CG2	-5.25	102.49	110.90
15	AO	112	LEU	CB-CG-CD1	5.25	119.93	111.00
35	BA	238	A	O4'-C1'-N9	-5.25	104.00	108.20
35	BA	1088	G	C5-C6-O6	-5.25	125.45	128.60
35	BA	1287	A	C5-N7-C8	5.25	106.53	103.90
35	BA	1419	G	P-O5'-C5'	5.25	129.31	120.90
35	BA	1438	G	C6-C5-N7	-5.25	127.25	130.40
36	BB	1	A	C5-C6-N1	5.25	120.33	117.70
38	BD	13	C	C5-C6-N1	5.25	123.63	121.00
57	BW	45	ALA	O-C-N	5.25	131.11	122.70
2	AB	15	G	C8-N9-C1'	5.25	133.83	127.00
2	AB	389	G	C6-N1-C2	-5.25	121.95	125.10
2	AB	494	G	C4-N9-C1'	5.25	133.33	126.50
2	AB	575	A	C5-C6-N1	-5.25	115.07	117.70
2	AB	877	A	O4'-C1'-N9	5.25	112.40	108.20
2	AB	1345	C	C3'-C2'-C1'	-5.25	97.30	101.50
2	AB	2095	A	C5'-C4'-O4'	5.25	115.40	109.10
2	AB	2224	G	C4'-C3'-C2'	-5.25	97.35	102.60
2	AB	2357	G	C8-N9-C1'	5.25	133.83	127.00
2	AB	2397	G	C4-C5-C6	5.25	121.95	118.80
2	AB	2517	C	N1-C2-O2	5.25	122.05	118.90
8	AH	167	VAL	CA-CB-CG2	5.25	118.78	110.90
28	A1	10	ARG	NE-CZ-NH1	-5.25	117.67	120.30
35	BA	804	U	N3-C4-O4	-5.25	115.72	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1488	G	C4-C5-C6	5.25	121.95	118.80
1	AA	68	C	C3'-C2'-C1'	5.25	105.70	101.50
2	AB	77	G	N1-C6-O6	-5.25	116.75	119.90
2	AB	408	G	C2-N3-C4	5.25	114.53	111.90
2	AB	531	C	C5-C6-N1	-5.25	118.38	121.00
2	AB	880	G	P-O5'-C5'	5.25	129.30	120.90
2	AB	892	A	N9-C1'-C2'	-5.25	106.22	112.00
2	AB	1049	C	C6-N1-C2	-5.25	118.20	120.30
2	AB	1410	G	C4-C5-C6	5.25	121.95	118.80
2	AB	1787	A	C5'-C4'-O4'	5.25	115.40	109.10
2	AB	2045	C	N1-C1'-C2'	-5.25	106.22	112.00
2	AB	2282	G	N3-C4-C5	-5.25	125.97	128.60
2	AB	2778	A	O3'-P-O5'	-5.25	94.02	104.00
35	BA	135	C	O4'-C4'-C3'	5.25	110.30	106.10
35	BA	298	A	C8-N9-C4	5.25	107.90	105.80
35	BA	763	G	N1-C6-O6	-5.25	116.75	119.90
35	BA	1391	U	O4'-C1'-N1	5.25	112.40	108.20
36	BB	34	C	N3-C4-N4	5.25	121.68	118.00
2	AB	107	G	N7-C8-N9	5.25	115.72	113.10
2	AB	1384	A	O4'-C1'-N9	5.25	112.40	108.20
2	AB	1629	U	C2-N1-C1'	5.25	124.00	117.70
2	AB	1990	C	N3-C4-C5	-5.25	119.80	121.90
2	AB	2326	C	C4'-C3'-C2'	-5.25	97.35	102.60
7	AG	111	ARG	NE-CZ-NH1	-5.25	117.67	120.30
35	BA	320	A	C6-N1-C2	-5.25	115.45	118.60
35	BA	951	G	N7-C8-N9	5.25	115.72	113.10
38	BD	68	C	N1-C2-N3	5.25	122.88	119.20
2	AB	325	G	N1-C2-N3	5.25	127.05	123.90
2	AB	868	U	C4-C5-C6	5.25	122.85	119.70
2	AB	907	G	N9-C1'-C2'	-5.25	106.23	112.00
2	AB	931	U	C6-N1-C2	-5.25	117.85	121.00
2	AB	1401	G	O4'-C1'-N9	5.25	112.40	108.20
2	AB	1510	G	N3-C4-N9	5.25	129.15	126.00
2	AB	1744	A	O5'-P-OP2	-5.25	100.98	105.70
2	AB	1982	U	N3-C4-O4	-5.25	115.73	119.40
2	AB	2687	U	O4'-C1'-C2'	5.25	112.32	107.60
33	A6	21	PHE	CB-CA-C	5.25	120.90	110.40
35	BA	86	G	C4-N9-C1'	-5.25	119.68	126.50
35	BA	375	U	N1-C2-N3	5.25	118.05	114.90
35	BA	799	G	N1-C2-N3	-5.25	120.75	123.90
35	BA	838	G	N9-C4-C5	-5.25	103.30	105.40
35	BA	1014	A	N1-C2-N3	-5.25	126.67	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1375	A	C5'-C4'-O4'	5.25	115.40	109.10
38	BD	46	G	C5-N7-C8	-5.25	101.68	104.30
39	BE	198	VAL	CA-CB-CG2	5.25	118.77	110.90
45	BK	75	GLN	CB-CA-C	5.25	120.90	110.40
46	BL	93	LEU	CB-CG-CD1	5.25	119.92	111.00
2	AB	272	A	C5'-C4'-C3'	-5.25	107.61	116.00
2	AB	453	A	C5'-C4'-C3'	-5.25	107.61	116.00
2	AB	728	G	N7-C8-N9	-5.25	110.48	113.10
2	AB	933	A	C3'-C2'-C1'	-5.25	97.30	101.50
2	AB	1331	G	N1-C6-O6	-5.25	116.75	119.90
2	AB	1413	A	N9-C1'-C2'	-5.25	106.23	112.00
2	AB	1807	G	N3-C2-N2	-5.25	116.23	119.90
2	AB	1907	G	C4-N9-C1'	-5.25	119.68	126.50
2	AB	2360	G	C3'-C2'-C1'	-5.25	97.30	101.50
2	AB	2526	G	O4'-C1'-N9	5.25	112.40	108.20
2	AB	2727	A	N1-C6-N6	5.25	121.75	118.60
2	AB	2842	G	P-O5'-C5'	5.25	129.30	120.90
21	AU	38	TYR	CG-CD1-CE1	-5.25	117.10	121.30
35	BA	202	G	N9-C4-C5	5.25	107.50	105.40
35	BA	645	G	O4'-C4'-C3'	5.25	110.30	106.10
35	BA	739	C	O5'-P-OP1	5.25	117.00	110.70
35	BA	798	U	C5'-C4'-O4'	5.25	115.40	109.10
35	BA	1057	G	N3-C4-N9	-5.25	122.85	126.00
35	BA	1442	G	N3-C4-C5	-5.25	125.98	128.60
51	BQ	41	TRP	CD1-NE1-CE2	5.25	113.72	109.00
2	AB	1587	G	C3'-C2'-C1'	-5.25	97.30	101.50
2	AB	1622	G	N3-C2-N2	-5.25	116.23	119.90
2	AB	2557	G	N3-C2-N2	-5.25	116.23	119.90
2	AB	2886	A	O5'-C5'-C4'	-5.25	101.73	111.70
35	BA	491	G	N1-C6-O6	-5.25	116.75	119.90
35	BA	1426	G	C5-N7-C8	-5.25	101.68	104.30
2	AB	742	A	C5'-C4'-C3'	-5.24	107.61	116.00
2	AB	780	G	N3-C4-N9	5.24	129.15	126.00
2	AB	1483	G	P-O3'-C3'	5.24	125.99	119.70
2	AB	1511	G	C5-C6-O6	5.24	131.75	128.60
2	AB	1611	C	N3-C4-C5	-5.24	119.80	121.90
2	AB	1890	A	C5-N7-C8	-5.24	101.28	103.90
2	AB	1989	G	C3'-C2'-C1'	5.24	105.69	101.50
2	AB	2152	G	N1-C2-N3	-5.24	120.75	123.90
2	AB	2505	G	O4'-C4'-C3'	5.24	110.30	106.10
2	AB	2579	C	N1-C2-N3	-5.24	115.53	119.20
2	AB	2762	C	C4-C5-C6	-5.24	114.78	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	242	HIS	CA-CB-CG	5.24	122.51	113.60
35	BA	46	G	P-O3'-C3'	5.24	125.99	119.70
35	BA	65	A	C5'-C4'-C3'	-5.24	107.61	116.00
35	BA	71	A	C4-C5-N7	-5.24	108.08	110.70
35	BA	337	G	N7-C8-N9	5.24	115.72	113.10
35	BA	871	U	C5-C4-O4	5.24	129.05	125.90
35	BA	1029	U	OP1-P-O3'	5.24	116.74	105.20
35	BA	1272	G	C5-N7-C8	-5.24	101.68	104.30
44	BJ	86	VAL	CG1-CB-CG2	-5.24	102.51	110.90
1	AA	85	G	P-O3'-C3'	5.24	125.99	119.70
2	AB	895	U	C3'-C2'-C1'	5.24	105.69	101.50
2	AB	1149	G	O4'-C4'-C3'	5.24	110.29	106.10
2	AB	1457	U	N1-C2-O2	5.24	126.47	122.80
2	AB	2809	A	C5-C6-N1	-5.24	115.08	117.70
6	AF	129	PRO	N-CD-CG	5.24	111.06	103.20
35	BA	557	G	N1-C2-N3	-5.24	120.75	123.90
35	BA	856	C	C5'-C4'-O4'	-5.24	102.81	109.10
35	BA	1020	G	C4-C5-C6	5.24	121.94	118.80
1	AA	103	U	N1-C1'-C2'	-5.24	106.23	112.00
2	AB	649	G	C4-C5-C6	5.24	121.94	118.80
2	AB	877	A	C4-C5-N7	-5.24	108.08	110.70
2	AB	1894	C	N3-C2-O2	-5.24	118.23	121.90
2	AB	2115	G	C5'-C4'-C3'	-5.24	107.61	116.00
2	AB	2459	A	O4'-C1'-N9	5.24	112.39	108.20
29	A2	49	ARG	NE-CZ-NH2	-5.24	117.68	120.30
35	BA	3	A	C5-C6-N1	5.24	120.32	117.70
35	BA	32	A	C5-C6-N1	5.24	120.32	117.70
35	BA	286	C	N3-C4-C5	-5.24	119.80	121.90
35	BA	301	G	C8-N9-C4	-5.24	104.30	106.40
35	BA	378	G	C5'-C4'-O4'	5.24	115.39	109.10
35	BA	473	U	C5'-C4'-C3'	-5.24	107.62	116.00
35	BA	861	G	C5-N7-C8	5.24	106.92	104.30
35	BA	887	G	N3-C4-C5	-5.24	125.98	128.60
35	BA	1417	G	N3-C2-N2	-5.24	116.23	119.90
35	BA	1494	G	C5'-C4'-O4'	5.24	115.39	109.10
35	BA	1497	G	N3-C4-C5	-5.24	125.98	128.60
36	BB	23	A	C5'-C4'-C3'	-5.24	107.61	116.00
37	BC	25	U	N3-C4-C5	-5.24	111.46	114.60
38	BD	43	G	O4'-C4'-C3'	-5.24	98.76	104.00
1	AA	86	G	C5-N7-C8	5.24	106.92	104.30
2	AB	114	U	C5'-C4'-C3'	-5.24	107.62	116.00
2	AB	135	U	N1-C2-O2	5.24	126.47	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	177	G	N1-C2-N3	-5.24	120.76	123.90
2	AB	630	G	C6-N1-C2	-5.24	121.96	125.10
2	AB	680	C	N3-C2-O2	-5.24	118.23	121.90
2	AB	770	G	C5-C6-N1	5.24	114.12	111.50
2	AB	1489	C	C2-N3-C4	-5.24	117.28	119.90
2	AB	1743	G	C6-N1-C2	5.24	128.24	125.10
2	AB	2001	C	N3-C4-C5	-5.24	119.81	121.90
2	AB	2070	A	N3-C4-N9	-5.24	123.21	127.40
2	AB	2557	G	N9-C4-C5	5.24	107.50	105.40
2	AB	2897	U	O3'-P-O5'	5.24	113.95	104.00
35	BA	162	A	N7-C8-N9	5.24	116.42	113.80
35	BA	277	C	O3'-P-O5'	-5.24	94.05	104.00
35	BA	742	G	C8-N9-C1'	5.24	133.81	127.00
35	BA	744	C	C2-N1-C1'	-5.24	113.04	118.80
35	BA	902	G	C5'-C4'-O4'	5.24	115.39	109.10
35	BA	1127	G	N1-C6-O6	-5.24	116.76	119.90
35	BA	1514	G	C5-C6-N1	5.24	114.12	111.50
2	AB	186	G	N9-C1'-C2'	-5.24	106.24	112.00
2	AB	239	C	O4'-C4'-C3'	5.24	110.29	106.10
2	AB	1325	U	C5-C4-O4	-5.24	122.76	125.90
2	AB	1854	A	C3'-C2'-C1'	-5.24	97.31	101.50
2	AB	2225	A	C6-C5-N7	5.24	135.97	132.30
2	AB	2430	A	P-O5'-C5'	5.24	129.28	120.90
1	AA	9	G	N9-C4-C5	-5.24	103.31	105.40
2	AB	130	C	N1-C2-N3	5.24	122.86	119.20
2	AB	1395	A	O3'-P-O5'	5.24	113.95	104.00
2	AB	1501	G	O4'-C1'-N9	5.24	112.39	108.20
2	AB	1613	G	C3'-C2'-C1'	5.24	105.69	101.50
2	AB	1995	U	N3-C2-O2	-5.24	118.53	122.20
2	AB	2059	A	P-O5'-C5'	5.24	129.28	120.90
2	AB	2118	U	C6-N1-C2	-5.24	117.86	121.00
35	BA	193	C	N3-C2-O2	-5.24	118.23	121.90
35	BA	306	A	N1-C2-N3	-5.24	126.68	129.30
35	BA	481	G	C3'-C2'-C1'	-5.24	97.31	101.50
35	BA	497	G	C2-N3-C4	-5.24	109.28	111.90
35	BA	731	G	C6-N1-C2	-5.24	121.96	125.10
35	BA	820	U	C5'-C4'-O4'	5.24	115.38	109.10
35	BA	1161	C	N3-C2-O2	5.24	125.56	121.90
35	BA	1422	G	O4'-C1'-C2'	-5.24	100.56	105.80
50	BP	72	ILE	CA-CB-CG1	5.24	120.95	111.00
55	BU	63	TYR	CG-CD1-CE1	-5.24	117.11	121.30
2	AB	1474	U	C4-C5-C6	5.23	122.84	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1620	G	C5'-C4'-O4'	5.23	115.38	109.10
2	AB	1643	G	N3-C4-C5	-5.23	125.98	128.60
2	AB	2582	G	C5'-C4'-O4'	5.23	115.38	109.10
35	BA	741	G	C5-C6-O6	-5.23	125.46	128.60
35	BA	965	U	C2-N1-C1'	5.23	123.98	117.70
35	BA	989	U	N1-C2-O2	-5.23	119.14	122.80
38	BD	53	G	N1-C6-O6	5.23	123.04	119.90
1	AA	111	U	N3-C2-O2	-5.23	118.54	122.20
2	AB	492	A	C4-C5-N7	5.23	113.32	110.70
2	AB	987	C	N1-C1'-C2'	-5.23	106.24	112.00
2	AB	1303	G	C4-C5-N7	-5.23	108.71	110.80
2	AB	1495	A	N3-C4-C5	-5.23	123.14	126.80
2	AB	1596	A	N1-C6-N6	-5.23	115.46	118.60
2	AB	1743	G	O4'-C1'-N9	-5.23	104.01	108.20
2	AB	1799	G	N3-C4-C5	5.23	131.22	128.60
2	AB	2124	G	C5-C6-N1	5.23	114.12	111.50
2	AB	2421	G	C2-N3-C4	-5.23	109.28	111.90
2	AB	2509	G	C4-C5-C6	5.23	121.94	118.80
2	AB	2788	C	N3-C2-O2	-5.23	118.24	121.90
35	BA	236	A	N3-C4-N9	5.23	131.59	127.40
35	BA	366	A	C8-N9-C4	5.23	107.89	105.80
35	BA	753	A	C5'-C4'-C3'	-5.23	107.63	116.00
35	BA	1269	A	N3-C4-C5	5.23	130.46	126.80
35	BA	1314	C	O4'-C1'-N1	5.23	112.39	108.20
35	BA	1352	C	C6-N1-C2	-5.23	118.21	120.30
36	BB	28	C	N3-C2-O2	-5.23	118.24	121.90
38	BD	67	C	C4'-C3'-C2'	-5.23	97.37	102.60
2	AB	27	G	C5-C6-O6	-5.23	125.46	128.60
2	AB	834	G	N3-C4-N9	5.23	129.14	126.00
2	AB	2108	A	O4'-C4'-C3'	-5.23	98.77	104.00
2	AB	2235	G	C5'-C4'-C3'	-5.23	107.63	116.00
2	AB	2495	G	C5-C6-N1	5.23	114.12	111.50
2	AB	2543	G	C5-C6-O6	-5.23	125.46	128.60
2	AB	2591	C	N3-C2-O2	-5.23	118.24	121.90
15	AO	108	VAL	CA-CB-CG1	5.23	118.75	110.90
35	BA	657	U	C5'-C4'-C3'	-5.23	107.63	116.00
35	BA	759	A	C5-C6-N6	5.23	127.88	123.70
35	BA	1256	A	C2-N3-C4	5.23	113.22	110.60
35	BA	1349	A	C5'-C4'-C3'	-5.23	107.63	116.00
35	BA	1477	U	C4'-C3'-C2'	-5.23	97.37	102.60
45	BK	102	VAL	CG1-CB-CG2	-5.23	102.53	110.90
18	AR	17	PRO	CA-N-CD	-5.23	104.18	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	56	U	C5-C6-N1	5.23	125.31	122.70
36	BB	41	C	N1-C1'-C2'	-5.23	106.25	112.00
39	BE	89	PHE	CB-CG-CD2	-5.23	117.14	120.80
2	AB	690	G	C5-C6-N1	5.23	114.11	111.50
2	AB	1027	A	N1-C2-N3	-5.23	126.69	129.30
2	AB	1028	A	C4-C5-C6	5.23	119.61	117.00
2	AB	1768	C	C2-N3-C4	-5.23	117.29	119.90
2	AB	1928	A	C1'-O4'-C4'	-5.23	105.72	109.90
2	AB	2172	U	C4-C5-C6	5.23	122.84	119.70
35	BA	606	G	P-O3'-C3'	5.23	125.97	119.70
35	BA	730	G	C2-N3-C4	5.23	114.51	111.90
35	BA	865	A	N7-C8-N9	-5.23	111.19	113.80
2	AB	400	G	C8-N9-C4	5.23	108.49	106.40
2	AB	580	U	N3-C4-O4	5.23	123.06	119.40
2	AB	785	G	C8-N9-C1'	5.23	133.79	127.00
2	AB	1898	U	C2-N3-C4	-5.23	123.86	127.00
2	AB	2422	C	N3-C2-O2	-5.23	118.24	121.90
2	AB	2537	U	C2-N3-C4	-5.23	123.86	127.00
12	AL	96	ARG	CB-CA-C	5.23	120.85	110.40
35	BA	471	U	O5'-C5'-C4'	-5.23	101.77	111.70
35	BA	507	C	C4-C5-C6	-5.23	114.79	117.40
35	BA	512	U	C2-N3-C4	5.23	130.13	127.00
35	BA	695	A	N1-C6-N6	-5.23	115.47	118.60
35	BA	937	A	C4-C5-N7	-5.23	108.09	110.70
2	AB	133	U	C5-C4-O4	-5.22	122.77	125.90
2	AB	466	A	C5-C6-N6	5.22	127.88	123.70
2	AB	1287	A	C8-N9-C4	5.22	107.89	105.80
2	AB	1458	U	N1-C2-O2	5.22	126.46	122.80
2	AB	1615	C	O4'-C1'-N1	5.22	112.38	108.20
2	AB	1716	U	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	1773	A	C2-N3-C4	5.22	113.21	110.60
2	AB	1928	A	N9-C4-C5	-5.22	103.71	105.80
2	AB	2158	A	N3-C4-C5	-5.22	123.14	126.80
2	AB	2882	A	N7-C8-N9	-5.22	111.19	113.80
3	AC	7	ARG	CB-CG-CD	5.22	125.18	111.60
3	AC	123	VAL	CA-CB-CG1	5.22	118.74	110.90
35	BA	86	G	C5-C6-N1	5.22	114.11	111.50
35	BA	206	C	C5'-C4'-O4'	5.22	115.37	109.10
35	BA	324	G	C8-N9-C1'	5.22	133.79	127.00
35	BA	682	G	C5'-C4'-O4'	5.22	115.37	109.10
35	BA	914	A	P-O3'-C3'	5.22	125.97	119.70
35	BA	1163	A	C4-N9-C1'	-5.22	116.90	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	86	G	C6-C5-N7	-5.22	127.27	130.40
2	AB	231	A	N1-C2-N3	-5.22	126.69	129.30
2	AB	293	U	O3'-P-O5'	-5.22	94.08	104.00
2	AB	338	G	C4'-C3'-O3'	5.22	123.44	113.00
2	AB	365	U	C3'-C2'-C1'	-5.22	97.32	101.50
2	AB	375	G	N3-C2-N2	-5.22	116.24	119.90
2	AB	881	G	C3'-C2'-C1'	5.22	105.68	101.50
2	AB	884	U	C2-N3-C4	-5.22	123.87	127.00
2	AB	1396	U	N3-C2-O2	-5.22	118.54	122.20
2	AB	1755	A	C5'-C4'-C3'	-5.22	107.64	116.00
2	AB	1902	C	N3-C4-N4	5.22	121.66	118.00
2	AB	1964	G	N1-C2-N2	-5.22	111.50	116.20
2	AB	1992	G	C2-N3-C4	-5.22	109.29	111.90
2	AB	2399	G	N3-C4-C5	-5.22	125.99	128.60
2	AB	2430	A	C5-C6-N1	5.22	120.31	117.70
2	AB	2432	A	C5-N7-C8	-5.22	101.29	103.90
2	AB	2476	A	C4-C5-N7	-5.22	108.09	110.70
2	AB	2525	G	C2-N3-C4	5.22	114.51	111.90
2	AB	2729	G	C6-N1-C2	-5.22	121.97	125.10
6	AF	153	LEU	CB-CA-C	5.22	120.12	110.20
23	AW	17	ASP	CB-CG-OD2	-5.22	113.60	118.30
25	AY	38	ARG	C-N-CA	5.22	134.76	121.70
35	BA	303	A	C5-C6-N1	-5.22	115.09	117.70
35	BA	356	A	N3-C4-N9	-5.22	123.22	127.40
35	BA	540	G	C4-C5-C6	5.22	121.93	118.80
35	BA	620	C	N3-C2-O2	-5.22	118.24	121.90
35	BA	811	C	C5-C4-N4	-5.22	116.54	120.20
35	BA	1109	C	P-O3'-C3'	5.22	125.97	119.70
35	BA	1246	A	N1-C2-N3	5.22	131.91	129.30
35	BA	1268	G	C8-N9-C4	5.22	108.49	106.40
35	BA	1513	A	O4'-C1'-N9	5.22	112.38	108.20
35	BA	1529	G	C5-C6-O6	-5.22	125.47	128.60
45	BK	76	ARG	NE-CZ-NH2	-5.22	117.69	120.30
2	AB	5	A	C8-N9-C4	-5.22	103.71	105.80
2	AB	143	C	C3'-C2'-C1'	5.22	105.68	101.50
2	AB	1333	G	P-O3'-C3'	5.22	125.97	119.70
2	AB	1460	U	C4-C5-C6	5.22	122.83	119.70
2	AB	2140	G	C6-N1-C2	5.22	128.23	125.10
2	AB	2400	G	C5-N7-C8	-5.22	101.69	104.30
2	AB	2438	U	N3-C4-O4	5.22	123.06	119.40
2	AB	2454	G	C5-C6-N1	5.22	114.11	111.50
35	BA	1275	A	C5-C6-N1	-5.22	115.09	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1430	A	C5'-C4'-C3'	5.22	124.35	116.00
35	BA	1497	G	N3-C4-N9	5.22	129.13	126.00
54	BT	43	LEU	CB-CG-CD2	5.22	119.88	111.00
1	AA	52	A	N1-C2-N3	-5.22	126.69	129.30
2	AB	212	G	C4-C5-C6	-5.22	115.67	118.80
2	AB	1118	C	N3-C2-O2	-5.22	118.25	121.90
2	AB	1203	U	C1'-O4'-C4'	5.22	114.08	109.90
2	AB	1634	A	N1-C6-N6	-5.22	115.47	118.60
2	AB	1645	G	C5-C6-N1	5.22	114.11	111.50
2	AB	1867	G	C6-N1-C2	5.22	128.23	125.10
2	AB	1885	A	C8-N9-C4	-5.22	103.71	105.80
2	AB	2040	G	C8-N9-C4	-5.22	104.31	106.40
2	AB	2141	G	C6-C5-N7	-5.22	127.27	130.40
2	AB	2382	G	N1-C2-N2	5.22	120.90	116.20
2	AB	2830	C	O4'-C1'-N1	5.22	112.38	108.20
3	AC	99	ASP	CA-CB-CG	-5.22	101.92	113.40
17	AQ	28	VAL	CG1-CB-CG2	-5.22	102.55	110.90
35	BA	43	C	N3-C4-C5	-5.22	119.81	121.90
35	BA	103	U	C5-C4-O4	-5.22	122.77	125.90
35	BA	189	A	O4'-C1'-N9	5.22	112.38	108.20
35	BA	255	G	N3-C2-N2	-5.22	116.25	119.90
35	BA	266	G	C5-C6-O6	-5.22	125.47	128.60
35	BA	408	A	N7-C8-N9	5.22	116.41	113.80
35	BA	649	A	C5-C6-N1	5.22	120.31	117.70
35	BA	717	U	C5'-C4'-C3'	-5.22	107.65	116.00
35	BA	1436	U	C5-C6-N1	-5.22	120.09	122.70
1	AA	34	A	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	21	A	N9-C4-C5	5.22	107.89	105.80
2	AB	524	G	N7-C8-N9	5.22	115.71	113.10
2	AB	771	G	N9-C1'-C2'	-5.22	106.26	112.00
2	AB	1074	G	C5'-C4'-C3'	-5.22	107.65	116.00
2	AB	1249	U	O4'-C4'-C3'	5.22	110.28	106.10
2	AB	1266	G	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	1771	C	C5-C6-N1	5.22	123.61	121.00
2	AB	2087	G	C6-N1-C2	-5.22	121.97	125.10
2	AB	2698	U	C6-N1-C2	-5.22	117.87	121.00
35	BA	156	C	C6-N1-C1'	5.22	127.06	120.80
35	BA	234	C	C5-C4-N4	5.22	123.85	120.20
35	BA	646	G	N3-C2-N2	-5.22	116.25	119.90
35	BA	1040	U	C5'-C4'-O4'	5.22	115.36	109.10
35	BA	1327	C	N3-C4-C5	-5.22	119.81	121.90
1	AA	105	G	N7-C8-N9	5.22	115.71	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	161	A	O4'-C4'-C3'	5.22	110.27	106.10
2	AB	284	U	P-O3'-C3'	5.22	125.96	119.70
2	AB	919	U	C5-C6-N1	-5.22	120.09	122.70
2	AB	1724	G	C3'-C2'-C1'	-5.22	97.33	101.50
2	AB	1734	G	C4-C5-N7	5.22	112.89	110.80
2	AB	2341	G	C6-C5-N7	-5.22	127.27	130.40
35	BA	258	G	OP1-P-O3'	5.22	116.68	105.20
35	BA	639	G	N1-C2-N3	5.22	127.03	123.90
36	BB	44	G	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	497	A	O5'-C5'-C4'	-5.21	101.79	111.70
2	AB	569	U	N3-C4-C5	-5.21	111.47	114.60
2	AB	670	A	O4'-C1'-C2'	-5.21	100.58	105.80
2	AB	731	C	C4-C5-C6	5.21	120.01	117.40
2	AB	1936	A	C4-C5-N7	-5.21	108.09	110.70
2	AB	2118	U	P-O3'-C3'	5.21	125.96	119.70
2	AB	2400	G	C6-N1-C2	-5.21	121.97	125.10
12	AL	141	ASP	CB-CG-OD2	5.21	122.99	118.30
35	BA	999	C	C6-N1-C2	-5.21	118.21	120.30
35	BA	1077	G	N7-C8-N9	5.21	115.71	113.10
35	BA	1163	A	C5-C6-N1	5.21	120.31	117.70
35	BA	1370	G	C8-N9-C1'	5.21	133.78	127.00
41	BG	200	VAL	CG1-CB-CG2	-5.21	102.56	110.90
2	AB	184	C	N1-C2-O2	5.21	122.03	118.90
2	AB	507	A	O5'-C5'-C4'	5.21	121.60	111.70
2	AB	1129	A	N1-C6-N6	5.21	121.73	118.60
2	AB	1293	C	P-O3'-C3'	5.21	125.96	119.70
2	AB	2287	A	C5-C6-N1	5.21	120.31	117.70
2	AB	2392	A	N1-C6-N6	-5.21	115.47	118.60
2	AB	2720	U	C6-N1-C2	-5.21	117.87	121.00
35	BA	62	U	N1-C2-O2	5.21	126.45	122.80
35	BA	93	U	C6-N1-C2	-5.21	117.87	121.00
35	BA	832	G	C8-N9-C1'	5.21	133.78	127.00
35	BA	1408	A	C1'-O4'-C4'	-5.21	105.73	109.90
38	BD	63	C	C4'-C3'-C2'	5.21	107.81	102.60
39	BE	68	PHE	O-C-N	-5.21	114.36	122.70
2	AB	85	G	N3-C4-C5	-5.21	126.00	128.60
2	AB	622	G	C8-N9-C4	-5.21	104.32	106.40
2	AB	1030	C	C5-C6-N1	-5.21	118.39	121.00
2	AB	1098	A	C5-C6-N6	-5.21	119.53	123.70
2	AB	1537	G	C5'-C4'-O4'	5.21	115.35	109.10
2	AB	1682	G	O4'-C1'-C2'	5.21	112.29	107.60
2	AB	1759	A	C5'-C4'-O4'	5.21	115.35	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2271	G	C6-C5-N7	5.21	133.53	130.40
2	AB	2903	U	O3'-P-O5'	5.21	113.90	104.00
12	AL	48	VAL	CG1-CB-CG2	-5.21	102.56	110.90
35	BA	636	U	C3'-C2'-C1'	5.21	105.67	101.50
35	BA	755	G	N9-C4-C5	-5.21	103.31	105.40
35	BA	1142	G	C1'-O4'-C4'	5.21	114.07	109.90
35	BA	1473	G	C5'-C4'-C3'	-5.21	107.66	116.00
35	BA	1517	G	O4'-C1'-N9	5.21	112.37	108.20
36	BB	9	A	C2-N3-C4	5.21	113.21	110.60
38	BD	59	A	N7-C8-N9	5.21	116.41	113.80
38	BD	71	G	P-O3'-C3'	5.21	125.95	119.70
2	AB	36	G	O3'-P-O5'	5.21	113.90	104.00
2	AB	528	A	C5-C6-N6	-5.21	119.53	123.70
2	AB	1190	G	C4'-C3'-C2'	-5.21	97.39	102.60
2	AB	2214	C	N3-C4-N4	-5.21	114.35	118.00
2	AB	2271	G	C5-C6-N1	5.21	114.11	111.50
2	AB	2289	G	N9-C1'-C2'	-5.21	106.27	112.00
2	AB	51	G	C5-N7-C8	-5.21	101.70	104.30
2	AB	303	G	N1-C2-N2	5.21	120.89	116.20
2	AB	347	A	C2-N3-C4	-5.21	108.00	110.60
2	AB	365	U	C5-C6-N1	-5.21	120.09	122.70
2	AB	494	G	N3-C2-N2	-5.21	116.25	119.90
2	AB	909	A	N3-C4-C5	-5.21	123.16	126.80
2	AB	1018	U	C4'-C3'-C2'	-5.21	97.39	102.60
2	AB	1102	C	N1-C1'-C2'	-5.21	106.27	112.00
2	AB	1384	A	C4-C5-N7	5.21	113.30	110.70
2	AB	1905	C	C3'-C2'-C1'	5.21	105.67	101.50
2	AB	2309	A	C4-C5-N7	-5.21	108.10	110.70
2	AB	2352	A	P-O3'-C3'	5.21	125.95	119.70
2	AB	2871	U	P-O3'-C3'	5.21	125.95	119.70
35	BA	222	C	N1-C2-N3	-5.21	115.56	119.20
35	BA	345	C	C4'-C3'-C2'	-5.21	97.39	102.60
35	BA	602	A	C5-N7-C8	5.21	106.50	103.90
35	BA	616	G	C5-C6-N1	5.21	114.10	111.50
35	BA	805	C	C2'-C3'-O3'	5.21	122.03	113.70
35	BA	812	G	C4-C5-C6	5.21	121.92	118.80
35	BA	1349	A	N7-C8-N9	5.21	116.40	113.80
40	BF	166	TRP	CH2-CZ2-CE2	5.21	122.61	117.40
1	AA	21	G	N1-C2-N3	5.21	127.02	123.90
1	AA	21	G	C5-C6-O6	5.21	131.72	128.60
1	AA	23	G	C5'-C4'-O4'	5.21	115.35	109.10
1	AA	72	G	O4'-C1'-N9	5.21	112.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	97	C	C5-C6-N1	5.21	123.60	121.00
2	AB	149	A	C8-N9-C4	-5.21	103.72	105.80
2	AB	181	A	C2-N3-C4	5.21	113.20	110.60
2	AB	571	U	C5'-C4'-C3'	-5.21	107.67	116.00
2	AB	685	A	C5-N7-C8	-5.21	101.30	103.90
2	AB	812	C	N3-C4-C5	-5.21	119.82	121.90
2	AB	1056	G	N3-C4-N9	5.21	129.12	126.00
2	AB	1497	U	C6-N1-C1'	-5.21	113.91	121.20
2	AB	1739	A	N9-C4-C5	5.21	107.88	105.80
2	AB	1876	A	C5-N7-C8	-5.21	101.30	103.90
2	AB	1879	C	C5-C4-N4	-5.21	116.56	120.20
2	AB	1970	A	C5-C6-N6	-5.21	119.53	123.70
2	AB	2046	G	N9-C4-C5	5.21	107.48	105.40
2	AB	2442	C	N3-C4-N4	5.21	121.64	118.00
2	AB	2631	G	N3-C2-N2	5.21	123.54	119.90
2	AB	2706	A	N9-C4-C5	-5.21	103.72	105.80
2	AB	2895	G	N3-C4-C5	-5.21	126.00	128.60
3	AC	55	SER	C-N-CA	5.21	134.72	121.70
35	BA	381	C	C4'-C3'-C2'	5.21	107.81	102.60
35	BA	381	C	OP1-P-OP2	5.21	127.41	119.60
35	BA	713	G	N3-C2-N2	-5.21	116.26	119.90
35	BA	735	C	C6-N1-C2	5.21	122.38	120.30
35	BA	913	A	P-O3'-C3'	5.21	125.95	119.70
35	BA	1130	A	O4'-C1'-N9	5.21	112.36	108.20
35	BA	1314	C	C5-C4-N4	-5.21	116.56	120.20
47	BM	58	ASN	CB-CA-C	5.21	120.81	110.40
2	AB	474	G	C4'-C3'-C2'	5.21	107.81	102.60
2	AB	1809	A	N1-C2-N3	-5.21	126.70	129.30
2	AB	2688	G	N1-C6-O6	5.21	123.02	119.90
35	BA	1089	G	OP1-P-O3'	5.21	116.65	105.20
36	BB	68	C	C2-N3-C4	5.21	122.50	119.90
38	BD	37	U	C5-C4-O4	5.21	129.02	125.90
2	AB	394	C	C5-C6-N1	5.20	123.60	121.00
2	AB	523	C	C3'-C2'-C1'	5.20	105.66	101.50
2	AB	606	U	P-O5'-C5'	5.20	129.23	120.90
2	AB	863	A	C6-C5-N7	-5.20	128.66	132.30
2	AB	1291	C	O4'-C1'-N1	5.20	112.36	108.20
2	AB	1415	U	C5-C4-O4	-5.20	122.78	125.90
2	AB	1469	A	C1'-O4'-C4'	5.20	114.06	109.90
2	AB	2066	C	O4'-C1'-C2'	-5.20	100.60	105.80
2	AB	2197	U	C3'-C2'-C1'	-5.20	97.34	101.50
2	AB	2400	G	N1-C2-N3	-5.20	120.78	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2502	G	O4'-C1'-N9	5.20	112.36	108.20
2	AB	2586	U	P-O3'-C3'	5.20	125.94	119.70
2	AB	2709	G	C8-N9-C4	-5.20	104.32	106.40
35	BA	46	G	C8-N9-C1'	5.20	133.76	127.00
35	BA	181	A	O4'-C1'-N9	5.20	112.36	108.20
35	BA	228	A	C3'-C2'-C1'	5.20	105.66	101.50
35	BA	1180	A	C8-N9-C4	-5.20	103.72	105.80
35	BA	1216	A	N3-C4-C5	5.20	130.44	126.80
35	BA	1530	G	N3-C4-N9	-5.20	122.88	126.00
2	AB	540	C	C4-C5-C6	5.20	120.00	117.40
2	AB	1612	C	C5'-C4'-O4'	5.20	115.34	109.10
35	BA	141	G	N9-C1'-C2'	-5.20	106.28	112.00
35	BA	705	G	N3-C4-C5	-5.20	126.00	128.60
38	BD	36	A	O4'-C1'-C2'	-5.20	100.60	105.80
1	AA	33	G	C5-C6-N1	5.20	114.10	111.50
2	AB	23	G	C8-N9-C1'	5.20	133.76	127.00
2	AB	175	G	C4-C5-N7	-5.20	108.72	110.80
2	AB	583	G	N3-C4-C5	-5.20	126.00	128.60
2	AB	743	A	C8-N9-C4	-5.20	103.72	105.80
2	AB	819	A	C4-C5-N7	-5.20	108.10	110.70
2	AB	841	G	C2-N3-C4	5.20	114.50	111.90
2	AB	1155	A	C6-C5-N7	5.20	135.94	132.30
2	AB	1253	A	C5'-C4'-C3'	-5.20	107.68	116.00
2	AB	1256	G	C4'-C3'-C2'	-5.20	97.40	102.60
2	AB	2166	U	C5-C6-N1	5.20	125.30	122.70
2	AB	2613	U	C4'-C3'-C2'	-5.20	97.40	102.60
21	AU	99	ARG	CA-CB-CG	5.20	124.84	113.40
30	A3	16	ARG	NE-CZ-NH2	5.20	122.90	120.30
35	BA	325	A	N3-C4-N9	-5.20	123.24	127.40
35	BA	632	U	N1-C2-O2	5.20	126.44	122.80
35	BA	1234	C	C3'-C2'-C1'	5.20	105.66	101.50
35	BA	1257	A	C4'-C3'-C2'	-5.20	97.40	102.60
35	BA	1384	C	C2-N1-C1'	5.20	124.52	118.80
38	BD	36	A	N9-C4-C5	5.20	107.88	105.80
2	AB	45	G	C4-C5-C6	5.20	121.92	118.80
2	AB	1161	C	C2-N3-C4	5.20	122.50	119.90
2	AB	1296	G	C4-C5-N7	5.20	112.88	110.80
2	AB	1612	C	C3'-C2'-C1'	-5.20	97.34	101.50
2	AB	1763	G	C3'-C2'-C1'	5.20	105.66	101.50
2	AB	1874	C	N1-C1'-C2'	-5.20	106.28	112.00
2	AB	1997	C	C1'-O4'-C4'	-5.20	105.74	109.90
2	AB	2013	A	N1-C6-N6	-5.20	115.48	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2085	U	C4-C5-C6	5.20	122.82	119.70
7	AG	152	ASP	CB-CG-OD2	5.20	122.98	118.30
10	AJ	98	PHE	CD1-CG-CD2	5.20	125.06	118.30
21	AU	45	VAL	CG1-CB-CG2	-5.20	102.58	110.90
29	A2	4	ASP	CB-CG-OD2	-5.20	113.62	118.30
35	BA	474	G	N3-C4-N9	5.20	129.12	126.00
35	BA	797	C	P-O3'-C3'	5.20	125.94	119.70
35	BA	1099	G	C5-N7-C8	-5.20	101.70	104.30
35	BA	1245	C	N1-C1'-C2'	-5.20	106.28	112.00
38	BD	24	C	O4'-C1'-N1	5.20	112.36	108.20
43	BI	77	THR	CA-CB-OG1	5.20	119.92	109.00
47	BM	51	VAL	CA-CB-CG2	5.20	118.70	110.90
2	AB	1418	G	C4'-C3'-C2'	-5.20	97.40	102.60
2	AB	1496	A	P-O3'-C3'	5.20	125.94	119.70
2	AB	1848	A	C5-C6-N6	-5.20	119.54	123.70
2	AB	2768	U	N3-C4-O4	5.20	123.04	119.40
2	AB	2806	C	O4'-C1'-C2'	-5.20	100.60	105.80
35	BA	64	G	N9-C4-C5	5.20	107.48	105.40
35	BA	473	U	N3-C4-C5	-5.20	111.48	114.60
35	BA	579	A	C5-N7-C8	-5.20	101.30	103.90
35	BA	606	G	N3-C2-N2	5.20	123.54	119.90
35	BA	757	U	C5-C4-O4	5.20	129.02	125.90
35	BA	981	U	C3'-C2'-C1'	5.20	105.66	101.50
35	BA	997	U	P-O3'-C3'	5.20	125.94	119.70
1	AA	84	G	C6-C5-N7	-5.20	127.28	130.40
2	AB	26	G	N9-C4-C5	5.20	107.48	105.40
2	AB	27	G	N3-C2-N2	5.20	123.54	119.90
2	AB	435	C	N3-C2-O2	-5.20	118.26	121.90
2	AB	440	C	N3-C4-C5	-5.20	119.82	121.90
2	AB	661	A	C5-N7-C8	5.20	106.50	103.90
2	AB	818	G	C6-C5-N7	5.20	133.52	130.40
2	AB	1253	A	N7-C8-N9	-5.20	111.20	113.80
2	AB	1495	A	O4'-C1'-N9	5.20	112.36	108.20
2	AB	2104	C	P-O3'-C3'	5.20	125.93	119.70
2	AB	2587	A	C8-N9-C4	-5.20	103.72	105.80
7	AG	84	ILE	CB-CA-C	5.20	121.99	111.60
35	BA	249	U	N3-C2-O2	-5.20	118.56	122.20
35	BA	602	A	C5'-C4'-C3'	-5.20	107.69	116.00
35	BA	640	A	C3'-C2'-C1'	-5.20	97.34	101.50
35	BA	943	U	O4'-C4'-C3'	5.20	110.26	106.10
35	BA	1464	U	O4'-C4'-C3'	-5.20	98.80	104.00
36	BB	74	C	N1-C2-N3	-5.20	115.56	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	656	G	C2-N3-C4	5.19	114.50	111.90
2	AB	1089	A	O4'-C4'-C3'	5.19	110.26	106.10
2	AB	1300	G	C5-C6-N1	5.19	114.10	111.50
2	AB	1319	C	O3'-P-O5'	5.19	113.87	104.00
2	AB	2393	U	C5-C4-O4	5.19	129.02	125.90
2	AB	2852	G	C4-C5-N7	5.19	112.88	110.80
35	BA	540	G	C6-N1-C2	-5.19	121.98	125.10
35	BA	613	C	C4-C5-C6	-5.19	114.80	117.40
35	BA	797	C	O4'-C1'-N1	5.19	112.36	108.20
35	BA	932	C	C4'-C3'-C2'	-5.19	97.41	102.60
35	BA	1461	G	C5'-C4'-C3'	-5.19	107.69	116.00
1	AA	50	A	C1'-O4'-C4'	-5.19	105.75	109.90
2	AB	6	A	C5-C6-N1	5.19	120.30	117.70
2	AB	250	G	C6-C5-N7	5.19	133.51	130.40
2	AB	679	C	N3-C2-O2	-5.19	118.27	121.90
2	AB	753	A	C6-C5-N7	5.19	135.93	132.30
2	AB	960	A	C3'-C2'-C1'	-5.19	97.35	101.50
2	AB	1081	U	O5'-C5'-C4'	-5.19	101.84	111.70
2	AB	1114	C	C5'-C4'-C3'	-5.19	107.69	116.00
2	AB	1881	C	C5-C6-N1	5.19	123.60	121.00
2	AB	2345	G	C4-C5-N7	5.19	112.88	110.80
3	AC	166	ASP	CB-CA-C	5.19	120.78	110.40
35	BA	231	U	C5-C6-N1	-5.19	120.10	122.70
35	BA	615	G	C5-N7-C8	-5.19	101.70	104.30
35	BA	790	A	C5'-C4'-O4'	5.19	115.33	109.10
35	BA	816	A	N3-C4-C5	5.19	130.44	126.80
2	AB	489	G	O4'-C1'-N9	5.19	112.35	108.20
2	AB	644	A	O5'-C5'-C4'	5.19	121.56	111.70
2	AB	834	G	C4-C5-C6	5.19	121.91	118.80
2	AB	985	C	C4-C5-C6	5.19	120.00	117.40
2	AB	1139	G	N3-C2-N2	5.19	123.53	119.90
2	AB	1411	U	O4'-C4'-C3'	5.19	110.25	106.10
2	AB	1602	U	N3-C4-O4	-5.19	115.77	119.40
2	AB	1614	A	C1'-O4'-C4'	-5.19	105.75	109.90
2	AB	2065	C	O4'-C1'-N1	5.19	112.35	108.20
2	AB	2383	G	N1-C2-N2	5.19	120.87	116.20
4	AD	95	TYR	CD1-CE1-CZ	5.19	124.47	119.80
25	AY	22	VAL	CA-CB-CG1	5.19	118.69	110.90
35	BA	147	G	C4'-C3'-C2'	-5.19	97.41	102.60
35	BA	242	G	C5-N7-C8	-5.19	101.70	104.30
35	BA	817	C	C5-C4-N4	-5.19	116.57	120.20
35	BA	1104	G	C1'-O4'-C4'	-5.19	105.75	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1131	G	O4'-C1'-N9	5.19	112.35	108.20
35	BA	1417	G	C4'-C3'-C2'	-5.19	97.41	102.60
35	BA	1507	A	C1'-O4'-C4'	-5.19	105.75	109.90
42	BH	116	VAL	CA-CB-CG2	5.19	118.69	110.90
46	BL	42	THR	CA-CB-CG2	-5.19	105.13	112.40
50	BP	41	ASP	N-CA-CB	-5.19	101.26	110.60
2	AB	1723	G	N9-C4-C5	5.19	107.48	105.40
2	AB	2120	G	N7-C8-N9	5.19	115.69	113.10
2	AB	2665	A	C5-C6-N1	5.19	120.30	117.70
35	BA	177	G	C6-N1-C2	-5.19	121.99	125.10
35	BA	1151	A	P-O5'-C5'	5.19	129.20	120.90
35	BA	1296	C	N3-C4-C5	-5.19	119.82	121.90
43	BI	25	TYR	CB-CG-CD1	5.19	124.11	121.00
2	AB	132	G	C8-N9-C4	-5.19	104.33	106.40
2	AB	896	A	O4'-C1'-C2'	-5.19	100.61	105.80
2	AB	1070	A	C4-C5-N7	-5.19	108.11	110.70
2	AB	1153	C	C2-N3-C4	5.19	122.49	119.90
2	AB	1824	G	C4-N9-C1'	-5.19	119.76	126.50
2	AB	2234	G	C5'-C4'-O4'	5.19	115.33	109.10
35	BA	10	A	O4'-C1'-N9	5.19	112.35	108.20
35	BA	189	A	C5-N7-C8	-5.19	101.31	103.90
35	BA	610	U	N1-C2-O2	5.19	126.43	122.80
35	BA	1231	G	C8-N9-C4	-5.19	104.33	106.40
35	BA	1240	U	C5-C4-O4	-5.19	122.79	125.90
35	BA	1240	U	C6-N1-C2	-5.19	117.89	121.00
35	BA	1277	C	C4'-C3'-O3'	5.19	123.38	113.00
2	AB	556	A	O4'-C1'-N9	5.19	112.35	108.20
2	AB	1552	A	C5'-C4'-O4'	5.19	115.32	109.10
2	AB	2452	C	C3'-C2'-C1'	5.19	105.65	101.50
2	AB	2656	U	C6-N1-C2	5.19	124.11	121.00
4	AD	170	TYR	CG-CD1-CE1	-5.19	117.15	121.30
35	BA	563	A	C2'-C3'-O3'	5.19	122.00	113.70
35	BA	898	G	O4'-C4'-C3'	5.19	110.25	106.10
2	AB	44	A	N3-C4-N9	-5.18	123.25	127.40
2	AB	485	C	P-O3'-C3'	5.18	125.92	119.70
2	AB	652	U	N3-C4-C5	-5.18	111.49	114.60
2	AB	766	U	O4'-C1'-N1	5.18	112.35	108.20
2	AB	805	G	N7-C8-N9	5.18	115.69	113.10
2	AB	905	A	C8-N9-C4	-5.18	103.73	105.80
2	AB	1157	G	C4-C5-N7	5.18	112.87	110.80
2	AB	1970	A	N9-C4-C5	5.18	107.87	105.80
2	AB	2145	C	P-O5'-C5'	5.18	129.20	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2485	G	C3'-C2'-C1'	-5.18	97.35	101.50
2	AB	2623	G	N1-C2-N2	5.18	120.86	116.20
35	BA	122	G	C5-C6-O6	5.18	131.71	128.60
35	BA	346	G	N3-C4-N9	5.18	129.11	126.00
35	BA	348	G	N7-C8-N9	5.18	115.69	113.10
35	BA	365	U	N3-C2-O2	-5.18	118.57	122.20
35	BA	484	G	P-O3'-C3'	5.18	125.92	119.70
35	BA	1326	U	C4'-C3'-C2'	5.18	107.78	102.60
2	AB	1485	U	N3-C4-C5	-5.18	111.49	114.60
2	AB	1719	G	C2-N3-C4	5.18	114.49	111.90
2	AB	2234	G	C6-N1-C2	-5.18	121.99	125.10
2	AB	2325	G	C5-C6-O6	-5.18	125.49	128.60
2	AB	2646	C	N1-C2-O2	5.18	122.01	118.90
2	AB	2903	U	C4-C5-C6	5.18	122.81	119.70
9	AI	45	GLU	OE1-CD-OE2	5.18	129.52	123.30
35	BA	366	A	C3'-C2'-C1'	-5.18	97.35	101.50
35	BA	614	C	C6-N1-C1'	-5.18	114.58	120.80
35	BA	682	G	N1-C2-N2	5.18	120.86	116.20
35	BA	716	A	C6-C5-N7	5.18	135.93	132.30
35	BA	865	A	N9-C1'-C2'	-5.18	106.30	112.00
35	BA	1170	A	C4-C5-N7	-5.18	108.11	110.70
36	BB	66	C	N1-C2-N3	5.18	122.83	119.20
2	AB	70	G	C5-C6-O6	-5.18	125.49	128.60
2	AB	228	C	O4'-C1'-N1	5.18	112.34	108.20
2	AB	390	U	O4'-C1'-C2'	-5.18	100.62	105.80
2	AB	497	A	C8-N9-C4	-5.18	103.73	105.80
2	AB	662	G	O5'-C5'-C4'	5.18	121.54	111.70
2	AB	688	U	C6-N1-C2	5.18	124.11	121.00
2	AB	1010	A	OP1-P-O3'	5.18	116.60	105.20
2	AB	1492	G	C1'-O4'-C4'	5.18	114.05	109.90
2	AB	1801	A	C5-N7-C8	-5.18	101.31	103.90
2	AB	2405	G	N1-C6-O6	-5.18	116.79	119.90
35	BA	235	C	O4'-C4'-C3'	-5.18	98.82	104.00
35	BA	1100	C	C5'-C4'-O4'	5.18	115.32	109.10
35	BA	1336	C	C4-C5-C6	-5.18	114.81	117.40
35	BA	1382	C	C3'-C2'-C1'	5.18	105.64	101.50
38	BD	7	G	N3-C4-C5	-5.18	126.01	128.60
39	BE	126	ASP	CB-CG-OD1	5.18	122.96	118.30
1	AA	119	A	C5-C6-N6	-5.18	119.56	123.70
2	AB	36	G	N7-C8-N9	5.18	115.69	113.10
2	AB	49	A	C8-N9-C4	5.18	107.87	105.80
2	AB	255	A	C5'-C4'-O4'	5.18	115.31	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	515	A	N1-C6-N6	-5.18	115.49	118.60
2	AB	518	G	C5'-C4'-O4'	5.18	115.32	109.10
2	AB	727	A	C4-C5-C6	-5.18	114.41	117.00
2	AB	1308	A	C4-C5-C6	-5.18	114.41	117.00
2	AB	1343	G	O3'-P-O5'	5.18	113.84	104.00
2	AB	1543	G	C5-C6-O6	-5.18	125.49	128.60
2	AB	1620	G	N1-C2-N3	-5.18	120.79	123.90
2	AB	1836	C	N1-C2-O2	-5.18	115.79	118.90
2	AB	2425	A	C5'-C4'-O4'	5.18	115.31	109.10
2	AB	2440	C	C4'-C3'-C2'	-5.18	97.42	102.60
2	AB	2544	G	C5'-C4'-O4'	5.18	115.31	109.10
2	AB	2660	A	C5-C6-N6	-5.18	119.56	123.70
2	AB	2787	C	O4'-C4'-C3'	-5.18	98.82	104.00
2	AB	2883	A	C6-N1-C2	-5.18	115.49	118.60
2	AB	2892	G	C8-N9-C4	-5.18	104.33	106.40
8	AH	105	SER	C-N-CA	5.18	134.65	121.70
22	AV	38	ALA	C-N-CA	5.18	134.65	121.70
35	BA	18	C	C2'-C3'-O3'	5.18	121.99	113.70
35	BA	61	G	N7-C8-N9	5.18	115.69	113.10
35	BA	127	G	C5-C6-N1	5.18	114.09	111.50
35	BA	511	C	O4'-C1'-N1	5.18	112.34	108.20
35	BA	995	C	C4'-C3'-O3'	5.18	123.36	113.00
35	BA	1090	U	C4'-C3'-O3'	5.18	123.36	113.00
36	BB	48	U	C3'-C2'-C1'	5.18	105.64	101.50
1	AA	70	C	N1-C2-N3	-5.18	115.58	119.20
2	AB	129	C	O4'-C1'-N1	5.18	112.34	108.20
2	AB	310	A	C5'-C4'-O4'	5.18	115.31	109.10
2	AB	857	G	P-O3'-C3'	5.18	125.91	119.70
2	AB	981	A	P-O3'-C3'	5.18	125.91	119.70
2	AB	1060	U	P-O3'-C3'	5.18	125.91	119.70
2	AB	1096	A	P-O3'-C3'	5.18	125.91	119.70
2	AB	2883	A	N1-C6-N6	-5.18	115.49	118.60
35	BA	299	G	C5-N7-C8	-5.18	101.71	104.30
35	BA	574	A	P-O5'-C5'	5.18	129.19	120.90
35	BA	686	U	C6-N1-C2	5.18	124.11	121.00
35	BA	883	C	C4-C5-C6	5.18	119.99	117.40
1	AA	28	C	N1-C2-O2	5.18	122.01	118.90
2	AB	559	G	O5'-P-OP2	-5.18	101.04	105.70
2	AB	989	G	N3-C2-N2	5.18	123.52	119.90
2	AB	1753	G	C6-C5-N7	-5.18	127.29	130.40
2	AB	1763	G	O4'-C4'-C3'	-5.18	98.82	104.00
2	AB	1806	C	O4'-C1'-C2'	-5.18	100.62	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1868	C	N1-C2-O2	5.18	122.00	118.90
2	AB	2505	G	N3-C2-N2	-5.18	116.28	119.90
2	AB	2623	G	N3-C4-C5	-5.18	126.01	128.60
2	AB	2683	C	C1'-O4'-C4'	-5.18	105.76	109.90
2	AB	2780	G	C5-C6-O6	5.18	131.71	128.60
31	A4	41	VAL	CG1-CB-CG2	5.18	119.18	110.90
35	BA	180	U	O3'-P-O5'	-5.18	94.16	104.00
35	BA	335	C	C1'-O4'-C4'	5.18	114.04	109.90
35	BA	352	C	N3-C2-O2	-5.18	118.28	121.90
35	BA	428	G	N3-C4-C5	5.18	131.19	128.60
35	BA	487	A	C5'-C4'-O4'	5.18	115.31	109.10
35	BA	632	U	O3'-P-O5'	-5.18	94.16	104.00
35	BA	1261	A	C4-C5-N7	-5.18	108.11	110.70
39	BE	197	PHE	CB-CG-CD2	5.18	124.42	120.80
2	AB	326	G	C5'-C4'-C3'	-5.17	107.72	116.00
2	AB	1512	C	N3-C2-O2	-5.17	118.28	121.90
2	AB	1735	A	C5-N7-C8	-5.17	101.31	103.90
2	AB	1789	A	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	1977	A	C2-N3-C4	-5.17	108.01	110.60
2	AB	2163	A	O5'-P-OP2	5.17	116.91	110.70
2	AB	2400	G	C4-C5-C6	-5.17	115.70	118.80
9	AI	25	TYR	CG-CD2-CE2	-5.17	117.16	121.30
12	AL	134	ALA	N-CA-CB	-5.17	102.85	110.10
13	AM	61	VAL	CA-CB-CG2	5.17	118.66	110.90
35	BA	76	G	C5-C6-N1	5.17	114.09	111.50
35	BA	192	A	N1-C6-N6	-5.17	115.50	118.60
35	BA	731	G	N3-C4-N9	5.17	129.10	126.00
35	BA	851	G	N3-C2-N2	5.17	123.52	119.90
44	BJ	155	TRP	NE1-CE2-CD2	-5.17	102.13	107.30
52	BR	48	ASP	CB-CG-OD1	-5.17	113.64	118.30
2	AB	365	U	C2-N3-C4	-5.17	123.90	127.00
2	AB	475	C	N3-C4-N4	-5.17	114.38	118.00
2	AB	715	A	C4-C5-N7	-5.17	108.11	110.70
2	AB	1339	G	C2-N3-C4	5.17	114.49	111.90
2	AB	1389	G	N3-C4-N9	-5.17	122.90	126.00
2	AB	1463	C	C5-C6-N1	5.17	123.59	121.00
2	AB	2595	G	N1-C2-N3	5.17	127.00	123.90
2	AB	2597	G	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	2773	C	N3-C4-C5	5.17	123.97	121.90
2	AB	2869	G	C5-N7-C8	5.17	106.89	104.30
21	AU	34	ASP	CB-CG-OD1	-5.17	113.64	118.30
35	BA	17	U	C5'-C4'-O4'	5.17	115.31	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	17	U	C6-N1-C2	-5.17	117.90	121.00
35	BA	313	A	C4'-C3'-O3'	5.17	123.35	113.00
35	BA	832	G	C5-C6-N1	5.17	114.09	111.50
36	BB	3	G	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	177	G	C6-C5-N7	-5.17	127.30	130.40
2	AB	326	G	N3-C2-N2	-5.17	116.28	119.90
2	AB	348	A	O4'-C1'-C2'	-5.17	100.63	105.80
2	AB	530	G	C5-C6-O6	5.17	131.70	128.60
2	AB	1028	A	C5-N7-C8	-5.17	101.31	103.90
2	AB	1628	G	C8-N9-C1'	5.17	133.72	127.00
2	AB	1685	C	N1-C2-O2	5.17	122.00	118.90
8	AH	15	ASP	CB-CG-OD1	-5.17	113.64	118.30
28	A1	38	GLU	OE1-CD-OE2	5.17	129.50	123.30
35	BA	19	A	C1'-O4'-C4'	-5.17	105.76	109.90
35	BA	58	C	C4-C5-C6	-5.17	114.81	117.40
35	BA	161	A	C5-C6-N6	-5.17	119.56	123.70
35	BA	509	A	P-O5'-C5'	5.17	129.17	120.90
35	BA	727	G	N1-C2-N3	-5.17	120.80	123.90
35	BA	960	U	C3'-C2'-C1'	-5.17	97.36	101.50
35	BA	1490	U	N1-C2-N3	5.17	118.00	114.90
36	BB	4	G	C5-C6-O6	-5.17	125.50	128.60
38	BD	57	C	C6-N1-C1'	5.17	127.01	120.80
52	BR	35	ILE	O-C-N	5.17	130.97	122.70
1	AA	1	U	O4'-C1'-N1	5.17	112.34	108.20
2	AB	117	G	C8-N9-C4	-5.17	104.33	106.40
2	AB	792	A	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	1547	C	C6-N1-C2	5.17	122.37	120.30
2	AB	1664	A	O4'-C1'-C2'	5.17	112.25	107.60
2	AB	2039	U	C3'-C2'-C1'	5.17	105.64	101.50
12	AL	110	PRO	N-CA-CB	5.17	109.50	103.30
35	BA	1204	A	OP1-P-OP2	5.17	127.36	119.60
35	BA	1396	A	O4'-C1'-N9	5.17	112.34	108.20
36	BB	74	C	N3-C4-C5	5.17	123.97	121.90
39	BE	104	LYS	O-C-N	-5.17	114.43	122.70
2	AB	289	G	P-O3'-C3'	5.17	125.90	119.70
2	AB	449	A	O4'-C1'-N9	5.17	112.33	108.20
2	AB	686	U	O4'-C4'-C3'	5.17	110.23	106.10
2	AB	2425	A	C2-N3-C4	5.17	113.18	110.60
35	BA	929	G	N1-C6-O6	-5.17	116.80	119.90
35	BA	934	C	C5'-C4'-O4'	-5.17	102.90	109.10
35	BA	1180	A	O4'-C4'-C3'	5.17	110.23	106.10
35	BA	1206	G	N1-C6-O6	5.17	123.00	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1310	G	C4-C5-C6	5.17	121.90	118.80
35	BA	1514	G	C4'-C3'-C2'	-5.17	97.43	102.60
38	BD	1	C	O4'-C1'-N1	5.17	112.33	108.20
38	BD	27	G	C4-C5-N7	5.17	112.87	110.80
38	BD	34	U	OP2-P-O3'	5.17	116.57	105.20
49	BO	109	ARG	CD-NE-CZ	5.17	130.84	123.60
2	AB	391	A	C5'-C4'-O4'	5.17	115.30	109.10
2	AB	780	G	N3-C2-N2	5.17	123.52	119.90
2	AB	880	G	C3'-C2'-C1'	-5.17	97.37	101.50
2	AB	1188	U	N1-C2-N3	5.17	118.00	114.90
2	AB	1288	G	C1'-O4'-C4'	5.17	114.03	109.90
2	AB	1654	A	N7-C8-N9	5.17	116.38	113.80
2	AB	2059	A	P-O3'-C3'	5.17	125.90	119.70
2	AB	2097	A	C5-C6-N6	-5.17	119.57	123.70
2	AB	2115	G	C4-C5-C6	5.17	121.90	118.80
2	AB	2502	G	C5-C6-O6	-5.17	125.50	128.60
2	AB	2778	A	C5-C6-N1	5.17	120.28	117.70
7	AG	103	ILE	CG1-CB-CG2	-5.17	100.03	111.40
35	BA	581	G	N1-C6-O6	-5.17	116.80	119.90
35	BA	612	C	C5'-C4'-O4'	5.17	115.30	109.10
35	BA	870	U	C6-N1-C2	-5.17	117.90	121.00
35	BA	1157	A	C5-N7-C8	-5.17	101.32	103.90
37	BC	40	G	N7-C8-N9	5.17	115.68	113.10
2	AB	314	C	C5'-C4'-O4'	5.17	115.30	109.10
2	AB	944	C	O4'-C1'-N1	5.17	112.33	108.20
2	AB	2714	G	N1-C6-O6	5.17	123.00	119.90
2	AB	2770	G	C1'-O4'-C4'	5.17	114.03	109.90
35	BA	358	U	N3-C4-C5	-5.17	111.50	114.60
35	BA	374	A	C4-C5-N7	5.17	113.28	110.70
35	BA	649	A	C5-N7-C8	-5.17	101.32	103.90
36	BB	57	G	C4'-C3'-C2'	5.17	107.77	102.60
2	AB	401	A	O4'-C1'-N9	5.16	112.33	108.20
2	AB	1037	G	N1-C6-O6	5.16	123.00	119.90
2	AB	1308	A	C3'-C2'-C1'	5.16	105.63	101.50
2	AB	1336	A	O4'-C4'-C3'	-5.16	98.84	104.00
2	AB	1397	U	N3-C4-O4	5.16	123.01	119.40
2	AB	1889	A	C5-C6-N6	-5.16	119.57	123.70
2	AB	1943	U	C5-C6-N1	-5.16	120.12	122.70
2	AB	2288	A	C5-C6-N1	-5.16	115.12	117.70
35	BA	79	G	O5'-C5'-C4'	-5.16	101.89	111.70
35	BA	122	G	O4'-C1'-C2'	5.16	112.25	107.60
35	BA	492	C	C4'-C3'-C2'	-5.16	97.44	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	943	U	C3'-C2'-C1'	5.16	105.63	101.50
35	BA	959	A	N3-C4-N9	-5.16	123.27	127.40
35	BA	1275	A	N9-C1'-C2'	-5.16	106.32	112.00
35	BA	1325	C	C4-C5-C6	5.16	119.98	117.40
2	AB	185	G	C5-C6-N1	5.16	114.08	111.50
2	AB	337	C	P-O5'-C5'	-5.16	112.64	120.90
2	AB	687	C	N1-C1'-C2'	-5.16	106.32	112.00
2	AB	862	G	O4'-C1'-N9	5.16	112.33	108.20
2	AB	1160	G	C5-N7-C8	-5.16	101.72	104.30
2	AB	1397	U	O4'-C1'-N1	5.16	112.33	108.20
2	AB	1975	G	N1-C6-O6	-5.16	116.80	119.90
35	BA	264	C	O4'-C1'-N1	5.16	112.33	108.20
35	BA	756	C	C5'-C4'-C3'	-5.16	107.74	116.00
35	BA	946	A	O4'-C4'-C3'	5.16	110.23	106.10
35	BA	989	U	O4'-C1'-N1	5.16	112.33	108.20
35	BA	1247	U	C6-N1-C1'	-5.16	113.97	121.20
35	BA	1378	C	C5'-C4'-O4'	5.16	115.30	109.10
53	BS	53	ASP	CB-CA-C	5.16	120.72	110.40
1	AA	52	A	N3-C4-C5	5.16	130.41	126.80
1	AA	62	C	C1'-O4'-C4'	5.16	114.03	109.90
2	AB	214	G	C4-C5-C6	5.16	121.90	118.80
2	AB	850	U	O3'-P-O5'	-5.16	94.19	104.00
2	AB	923	G	N3-C2-N2	5.16	123.51	119.90
2	AB	1283	G	C5'-C4'-O4'	-5.16	102.91	109.10
2	AB	1492	G	N3-C4-C5	-5.16	126.02	128.60
2	AB	1967	C	O4'-C1'-C2'	5.16	112.25	107.60
2	AB	2050	C	N3-C2-O2	5.16	125.51	121.90
2	AB	2172	U	O4'-C4'-C3'	5.16	110.23	106.10
2	AB	2557	G	C1'-O4'-C4'	-5.16	105.77	109.90
2	AB	2607	G	C5-C6-N1	5.16	114.08	111.50
3	AC	193	LEU	CB-CG-CD2	-5.16	102.23	111.00
35	BA	383	A	N1-C6-N6	5.16	121.70	118.60
35	BA	530	G	C6-C5-N7	-5.16	127.30	130.40
35	BA	624	C	C5-C4-N4	-5.16	116.59	120.20
35	BA	738	C	N1-C2-N3	-5.16	115.59	119.20
35	BA	950	U	N1-C2-N3	-5.16	111.80	114.90
35	BA	951	G	O4'-C1'-N9	5.16	112.33	108.20
35	BA	1488	G	C1'-O4'-C4'	-5.16	105.77	109.90
1	AA	8	C	P-O3'-C3'	5.16	125.89	119.70
2	AB	23	G	N3-C4-C5	-5.16	126.02	128.60
2	AB	805	G	O4'-C4'-C3'	5.16	110.23	106.10
2	AB	1638	C	C5-C4-N4	-5.16	116.59	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1725	U	C3'-C2'-C1'	5.16	105.63	101.50
2	AB	1947	C	C4-C5-C6	5.16	119.98	117.40
2	AB	2113	U	N3-C4-O4	5.16	123.01	119.40
2	AB	2119	A	C5-N7-C8	5.16	106.48	103.90
2	AB	2209	G	N9-C4-C5	-5.16	103.34	105.40
2	AB	2718	G	C8-N9-C4	-5.16	104.34	106.40
2	AB	2758	A	C1'-O4'-C4'	-5.16	105.77	109.90
7	AG	76	PHE	CB-CG-CD2	5.16	124.41	120.80
35	BA	461	A	N7-C8-N9	5.16	116.38	113.80
35	BA	992	U	C5'-C4'-O4'	-5.16	102.91	109.10
35	BA	1058	G	N1-C6-O6	5.16	123.00	119.90
35	BA	1439	G	C4-C5-N7	-5.16	108.74	110.80
37	BC	33	A	C2-N3-C4	5.16	113.18	110.60
41	BG	13	ARG	CD-NE-CZ	5.16	130.82	123.60
43	BI	69	GLU	OE1-CD-OE2	5.16	129.49	123.30
2	AB	42	A	N9-C4-C5	-5.16	103.74	105.80
2	AB	369	U	C5'-C4'-C3'	-5.16	107.75	116.00
2	AB	1241	A	C2-N3-C4	5.16	113.18	110.60
2	AB	1778	U	C5-C4-O4	5.16	128.99	125.90
2	AB	2244	U	N1-C2-O2	-5.16	119.19	122.80
35	BA	406	G	N1-C6-O6	-5.16	116.81	119.90
35	BA	1272	G	N7-C8-N9	5.16	115.68	113.10
2	AB	27	G	C6-N1-C2	-5.16	122.01	125.10
2	AB	190	A	C5-N7-C8	-5.16	101.32	103.90
2	AB	261	G	N1-C2-N2	5.16	120.84	116.20
2	AB	391	A	C5-N7-C8	-5.16	101.32	103.90
2	AB	546	U	C6-N1-C1'	-5.16	113.98	121.20
2	AB	1201	U	O3'-P-O5'	-5.16	94.20	104.00
2	AB	1534	U	N3-C4-O4	5.16	123.01	119.40
2	AB	2101	A	C5-C6-N6	-5.16	119.58	123.70
2	AB	2405	G	C4-C5-N7	-5.16	108.74	110.80
2	AB	2406	A	C2-N3-C4	5.16	113.18	110.60
2	AB	2428	G	N7-C8-N9	-5.16	110.52	113.10
2	AB	2490	G	C3'-C2'-C1'	5.16	105.62	101.50
2	AB	2507	C	N3-C4-C5	5.16	123.96	121.90
2	AB	2654	A	P-O3'-C3'	5.16	125.89	119.70
35	BA	52	C	N3-C2-O2	5.16	125.51	121.90
35	BA	129	A	N7-C8-N9	-5.16	111.22	113.80
35	BA	1098	C	C6-N1-C2	-5.16	118.24	120.30
35	BA	1301	U	C6-N1-C2	-5.16	117.91	121.00
35	BA	1493	A	O4'-C4'-C3'	5.16	110.22	106.10
35	BA	1500	A	C5'-C4'-C3'	-5.16	107.75	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	78	U	N1-C2-O2	-5.15	119.19	122.80
2	AB	141	G	C5-C6-O6	5.15	131.69	128.60
2	AB	561	G	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	882	G	N9-C4-C5	5.15	107.46	105.40
2	AB	1640	A	C5-N7-C8	5.15	106.48	103.90
2	AB	1666	G	C5-N7-C8	5.15	106.88	104.30
2	AB	1717	A	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	1764	C	C4-C5-C6	-5.15	114.82	117.40
2	AB	1765	U	O3'-P-O5'	-5.15	94.21	104.00
2	AB	1925	C	N1-C2-O2	5.15	121.99	118.90
2	AB	2680	U	C4-C5-C6	5.15	122.79	119.70
35	BA	800	G	C3'-C2'-C1'	-5.15	97.38	101.50
35	BA	872	A	N3-C4-N9	5.15	131.52	127.40
35	BA	1206	G	C5-C6-O6	-5.15	125.51	128.60
35	BA	1274	A	C2-N3-C4	-5.15	108.02	110.60
38	BD	31	G	N1-C2-N2	-5.15	111.56	116.20
1	AA	88	C	C1'-O4'-C4'	-5.15	105.78	109.90
2	AB	299	A	C4-C5-C6	-5.15	114.42	117.00
2	AB	770	G	N3-C2-N2	-5.15	116.29	119.90
2	AB	832	U	C5-C6-N1	-5.15	120.12	122.70
2	AB	1446	C	C4'-C3'-C2'	-5.15	97.45	102.60
2	AB	1529	G	N1-C6-O6	-5.15	116.81	119.90
2	AB	2258	C	C3'-C2'-C1'	-5.15	97.38	101.50
2	AB	2441	U	P-O3'-C3'	5.15	125.88	119.70
35	BA	155	A	C5-C6-N6	-5.15	119.58	123.70
35	BA	690	G	C8-N9-C4	-5.15	104.34	106.40
35	BA	1413	A	P-O3'-C3'	5.15	125.88	119.70
36	BB	65	C	P-O3'-C3'	5.15	125.88	119.70
41	BG	203	TYR	CB-CG-CD1	5.15	124.09	121.00
42	BH	69	ASN	N-CA-CB	5.15	119.87	110.60
2	AB	138	U	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	265	A	C3'-C2'-C1'	-5.15	97.38	101.50
2	AB	414	C	O4'-C4'-C3'	5.15	110.22	106.10
2	AB	763	G	O4'-C1'-N9	5.15	112.32	108.20
2	AB	1015	U	C4-C5-C6	5.15	122.79	119.70
2	AB	1280	G	C4'-C3'-C2'	-5.15	97.45	102.60
2	AB	1291	C	N1-C2-N3	5.15	122.81	119.20
2	AB	1310	G	C6-N1-C2	-5.15	122.01	125.10
2	AB	1354	A	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	1680	U	O5'-C5'-C4'	-5.15	101.91	111.70
2	AB	1731	G	C6-C5-N7	-5.15	127.31	130.40
2	AB	2170	A	C5-C6-N6	-5.15	119.58	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2395	C	C4'-C3'-C2'	-5.15	97.45	102.60
21	AU	94	ASP	CB-CG-OD1	5.15	122.94	118.30
35	BA	479	U	C4'-C3'-C2'	-5.15	97.45	102.60
35	BA	484	G	O4'-C1'-N9	5.15	112.32	108.20
35	BA	869	G	C5'-C4'-O4'	5.15	115.28	109.10
38	BD	5	G	C6-C5-N7	-5.15	127.31	130.40
1	AA	24	G	N7-C8-N9	5.15	115.67	113.10
1	AA	72	G	C5-C6-N1	5.15	114.08	111.50
1	AA	81	G	C4-C5-C6	5.15	121.89	118.80
2	AB	45	G	C3'-C2'-C1'	5.15	105.62	101.50
2	AB	238	C	OP2-P-O3'	5.15	116.53	105.20
2	AB	396	G	C3'-C2'-C1'	-5.15	97.38	101.50
2	AB	591	U	C4-C5-C6	5.15	122.79	119.70
2	AB	744	U	N1-C1'-C2'	-5.15	106.34	112.00
2	AB	2028	U	O4'-C1'-C2'	-5.15	100.65	105.80
2	AB	2453	A	C3'-C2'-C1'	5.15	105.62	101.50
10	AJ	153	THR	CA-CB-CG2	5.15	119.61	112.40
35	BA	1064	G	C5-C6-N1	5.15	114.08	111.50
35	BA	1086	U	N3-C4-O4	5.15	123.00	119.40
35	BA	1091	U	C5-C6-N1	-5.15	120.12	122.70
35	BA	1263	C	N1-C2-O2	5.15	121.99	118.90
35	BA	1286	U	N3-C2-O2	-5.15	118.60	122.20
35	BA	1464	U	C2-N1-C1'	5.15	123.88	117.70
2	AB	507	A	C4-C5-N7	-5.15	108.13	110.70
2	AB	528	A	O3'-P-O5'	5.15	113.78	104.00
2	AB	778	G	N1-C2-N3	-5.15	120.81	123.90
2	AB	1494	A	N9-C1'-C2'	-5.15	106.34	112.00
2	AB	1533	C	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	1570	A	O4'-C4'-C3'	5.15	110.22	106.10
2	AB	1852	U	N3-C4-C5	-5.15	111.51	114.60
2	AB	2018	G	C5-C6-O6	-5.15	125.51	128.60
2	AB	2723	C	N1-C2-N3	5.15	122.80	119.20
35	BA	9	G	C5-C6-O6	-5.15	125.51	128.60
35	BA	469	C	C2-N3-C4	5.15	122.47	119.90
35	BA	612	C	N3-C4-C5	-5.15	119.84	121.90
35	BA	787	A	C8-N9-C4	-5.15	103.74	105.80
35	BA	914	A	C5-C6-N1	-5.15	115.13	117.70
35	BA	1259	C	C5-C4-N4	5.15	123.80	120.20
35	BA	1358	U	C6-N1-C2	-5.15	117.91	121.00
35	BA	1445	U	P-O3'-C3'	5.15	125.88	119.70
2	AB	325	G	C1'-O4'-C4'	-5.15	105.78	109.90
2	AB	1034	G	C4'-C3'-C2'	-5.15	97.45	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1681	G	O4'-C4'-C3'	5.15	110.22	106.10
2	AB	1772	A	C2-N3-C4	5.15	113.17	110.60
2	AB	2778	A	N1-C2-N3	-5.15	126.73	129.30
2	AB	61	C	N1-C2-N3	5.14	122.80	119.20
2	AB	173	A	O4'-C1'-N9	-5.14	104.08	108.20
2	AB	455	C	N1-C2-N3	-5.14	115.60	119.20
2	AB	953	G	C5-C6-N1	5.14	114.07	111.50
2	AB	1554	U	N3-C4-C5	5.14	117.69	114.60
2	AB	1842	G	C5'-C4'-O4'	5.14	115.28	109.10
2	AB	1875	G	N3-C4-C5	-5.14	126.03	128.60
2	AB	1984	G	O4'-C1'-N9	5.14	112.32	108.20
2	AB	2045	C	N3-C2-O2	-5.14	118.30	121.90
2	AB	2211	A	N1-C2-N3	5.14	131.87	129.30
2	AB	2357	G	N3-C2-N2	-5.14	116.30	119.90
2	AB	2555	U	O4'-C1'-N1	5.14	112.32	108.20
2	AB	2594	C	N3-C4-N4	5.14	121.60	118.00
2	AB	2634	A	N9-C1'-C2'	-5.14	106.34	112.00
35	BA	43	C	P-O3'-C3'	5.14	125.87	119.70
35	BA	535	A	C1'-O4'-C4'	5.14	114.02	109.90
35	BA	795	C	N3-C4-N4	-5.14	114.40	118.00
35	BA	1039	G	C4-C5-N7	-5.14	108.74	110.80
35	BA	1411	C	C4'-C3'-C2'	-5.14	97.46	102.60
37	BC	21	U	O4'-C4'-C3'	5.14	110.22	106.10
2	AB	403	U	C1'-O4'-C4'	-5.14	105.79	109.90
2	AB	541	A	C5-N7-C8	-5.14	101.33	103.90
2	AB	1177	G	C5'-C4'-O4'	5.14	115.27	109.10
2	AB	1334	G	C5-C6-N1	-5.14	108.93	111.50
2	AB	1474	U	C6-N1-C2	5.14	124.08	121.00
2	AB	1503	A	N7-C8-N9	-5.14	111.23	113.80
2	AB	1682	G	C6-N1-C2	-5.14	122.02	125.10
2	AB	1941	C	C4-C5-C6	5.14	119.97	117.40
2	AB	2164	C	OP2-P-O3'	5.14	116.52	105.20
2	AB	2677	G	N9-C4-C5	5.14	107.46	105.40
2	AB	2813	A	C2'-C3'-O3'	5.14	121.93	113.70
35	BA	129	A	P-O5'-C5'	5.14	129.13	120.90
35	BA	290	C	C2-N3-C4	5.14	122.47	119.90
35	BA	476	U	N3-C4-C5	-5.14	111.51	114.60
35	BA	923	A	C8-N9-C4	-5.14	103.74	105.80
35	BA	956	U	C2-N3-C4	-5.14	123.91	127.00
35	BA	1127	G	C8-N9-C4	5.14	108.46	106.40
35	BA	1171	A	O4'-C1'-N9	5.14	112.31	108.20
35	BA	1197	A	C5-N7-C8	-5.14	101.33	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1312	G	N9-C1'-C2'	-5.14	106.34	112.00
38	BD	15	G	C5'-C4'-O4'	5.14	115.27	109.10
2	AB	557	C	C5-C4-N4	5.14	123.80	120.20
2	AB	718	A	C4-C5-C6	-5.14	114.43	117.00
2	AB	1316	U	C6-N1-C2	-5.14	117.92	121.00
2	AB	2056	G	P-O3'-C3'	5.14	125.87	119.70
2	AB	2072	C	O4'-C1'-N1	5.14	112.31	108.20
2	AB	2217	G	N3-C4-C5	-5.14	126.03	128.60
2	AB	2775	G	C1'-O4'-C4'	5.14	114.01	109.90
35	BA	328	C	N3-C4-C5	5.14	123.96	121.90
35	BA	894	G	C6-C5-N7	-5.14	127.32	130.40
35	BA	1283	U	N1-C1'-C2'	-5.14	106.34	112.00
2	AB	189	G	C4'-C3'-C2'	-5.14	97.46	102.60
2	AB	480	A	N9-C1'-C2'	5.14	120.68	114.00
2	AB	636	G	C5-C6-O6	-5.14	125.52	128.60
2	AB	715	A	C1'-O4'-C4'	-5.14	105.79	109.90
2	AB	768	G	N3-C2-N2	-5.14	116.30	119.90
2	AB	1485	U	C4-C5-C6	5.14	122.78	119.70
2	AB	1501	G	N3-C4-N9	5.14	129.08	126.00
2	AB	1522	A	C8-N9-C4	-5.14	103.74	105.80
2	AB	1633	G	C8-N9-C4	-5.14	104.34	106.40
2	AB	1738	G	C4-C5-N7	-5.14	108.74	110.80
2	AB	1847	A	C4-C5-C6	5.14	119.57	117.00
2	AB	1884	G	C8-N9-C4	-5.14	104.34	106.40
2	AB	2282	G	N7-C8-N9	-5.14	110.53	113.10
2	AB	2469	A	C3'-C2'-C1'	-5.14	97.39	101.50
2	AB	2706	A	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	642	A	C5-C6-N1	5.14	120.27	117.70
35	BA	969	A	C5-N7-C8	5.14	106.47	103.90
37	BC	14	G	N3-C2-N2	5.14	123.50	119.90
2	AB	892	A	C5-C6-N1	-5.14	115.13	117.70
2	AB	1010	A	O4'-C1'-N9	5.14	112.31	108.20
2	AB	1843	C	C5'-C4'-O4'	5.14	115.27	109.10
2	AB	2040	G	C4-C5-N7	-5.14	108.75	110.80
2	AB	2375	G	C6-C5-N7	5.14	133.48	130.40
2	AB	2524	G	N9-C4-C5	5.14	107.45	105.40
2	AB	2846	G	C4-N9-C1'	-5.14	119.82	126.50
35	BA	77	A	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	90	C	C5-C4-N4	-5.14	116.60	120.20
35	BA	861	G	N7-C8-N9	-5.14	110.53	113.10
35	BA	1155	A	O4'-C4'-C3'	5.14	110.21	106.10
35	BA	1253	G	C1'-O4'-C4'	-5.14	105.79	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1399	C	C2-N3-C4	-5.14	117.33	119.90
35	BA	1487	G	N9-C4-C5	5.14	107.45	105.40
43	BI	124	ALA	N-CA-CB	-5.14	102.91	110.10
1	AA	10	G	C8-N9-C1'	5.14	133.68	127.00
1	AA	29	A	C5-C6-N6	5.14	127.81	123.70
2	AB	317	G	C2-N3-C4	5.14	114.47	111.90
2	AB	356	G	N1-C2-N3	5.14	126.98	123.90
2	AB	558	U	O4'-C1'-C2'	-5.14	100.66	105.80
2	AB	905	A	C1'-O4'-C4'	5.14	114.01	109.90
2	AB	1138	G	N9-C1'-C2'	-5.14	106.35	112.00
2	AB	1261	C	N3-C4-N4	5.14	121.60	118.00
2	AB	1268	A	C5-C6-N1	5.14	120.27	117.70
2	AB	1333	G	N1-C6-O6	-5.14	116.82	119.90
2	AB	1490	A	N9-C1'-C2'	5.14	120.68	114.00
2	AB	2042	A	C4-C5-C6	-5.14	114.43	117.00
2	AB	2141	G	C5-C6-O6	-5.14	125.52	128.60
2	AB	2223	G	C8-N9-C4	-5.14	104.35	106.40
2	AB	2564	A	P-O5'-C5'	5.14	129.12	120.90
4	AD	202	ARG	NH1-CZ-NH2	-5.14	113.75	119.40
35	BA	493	A	C3'-C2'-C1'	5.14	105.61	101.50
35	BA	1453	G	N1-C2-N2	5.14	120.82	116.20
36	BB	11	U	C5'-C4'-C3'	-5.14	107.78	116.00
38	BD	9	G	N9-C4-C5	5.14	107.45	105.40
43	BI	24	ARG	NE-CZ-NH1	-5.14	117.73	120.30
48	BN	105	ARG	CB-CA-C	5.14	120.67	110.40
58	BX	68	ARG	NE-CZ-NH2	-5.14	117.73	120.30
1	AA	10	G	C5-C6-O6	-5.13	125.52	128.60
2	AB	91	A	C8-N9-C4	5.13	107.85	105.80
2	AB	233	A	C4-C5-C6	-5.13	114.43	117.00
2	AB	273	G	N1-C2-N3	5.13	126.98	123.90
2	AB	593	U	C3'-C2'-C1'	5.13	105.61	101.50
2	AB	1093	G	C3'-C2'-C1'	5.13	105.61	101.50
2	AB	1444	G	C2-N3-C4	5.13	114.47	111.90
2	AB	1511	G	P-O3'-C3'	5.13	125.86	119.70
2	AB	1513	U	O4'-C4'-C3'	5.13	110.21	106.10
2	AB	1641	A	C1'-O4'-C4'	-5.13	105.79	109.90
2	AB	1649	G	C1'-O4'-C4'	-5.13	105.79	109.90
2	AB	1866	A	O4'-C1'-N9	5.13	112.31	108.20
2	AB	2153	C	C5'-C4'-C3'	-5.13	107.78	116.00
2	AB	2778	A	OP2-P-O3'	5.13	116.50	105.20
8	AH	39	ALA	N-CA-CB	-5.13	102.91	110.10
35	BA	164	G	P-O3'-C3'	5.13	125.86	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	221	C	O4'-C1'-C2'	-5.13	100.67	105.80
35	BA	893	C	N1-C1'-C2'	-5.13	106.35	112.00
35	BA	1053	G	C4'-C3'-C2'	-5.13	97.47	102.60
36	BB	66	C	C6-N1-C2	-5.13	118.25	120.30
2	AB	1110	G	C5-C6-O6	-5.13	125.52	128.60
2	AB	1247	A	C5-N7-C8	-5.13	101.33	103.90
2	AB	1614	A	N3-C4-N9	5.13	131.51	127.40
2	AB	1823	G	C8-N9-C1'	5.13	133.67	127.00
2	AB	1918	A	C2-N3-C4	5.13	113.17	110.60
2	AB	1959	G	C5-C6-N1	5.13	114.07	111.50
2	AB	1965	C	C5'-C4'-C3'	-5.13	107.79	116.00
2	AB	2223	G	N9-C1'-C2'	-5.13	106.35	112.00
10	AJ	6	ASP	O-C-N	-5.13	114.49	122.70
35	BA	53	A	C8-N9-C4	-5.13	103.75	105.80
35	BA	143	A	C3'-C2'-C1'	-5.13	97.39	101.50
35	BA	288	A	C3'-C2'-C1'	-5.13	97.39	101.50
35	BA	695	A	C5-N7-C8	-5.13	101.33	103.90
35	BA	1387	G	C8-N9-C1'	5.13	133.67	127.00
1	AA	79	G	C4-C5-C6	5.13	121.88	118.80
2	AB	227	A	N1-C6-N6	-5.13	115.52	118.60
2	AB	258	G	C5-C6-O6	-5.13	125.52	128.60
2	AB	330	A	C8-N9-C4	-5.13	103.75	105.80
2	AB	484	C	C4'-C3'-C2'	-5.13	97.47	102.60
2	AB	786	C	N3-C4-N4	5.13	121.59	118.00
2	AB	950	G	O4'-C1'-N9	5.13	112.31	108.20
2	AB	1219	U	C1'-O4'-C4'	5.13	114.00	109.90
2	AB	1427	A	C5-N7-C8	5.13	106.47	103.90
2	AB	1787	A	C5-C6-N6	-5.13	119.59	123.70
2	AB	1945	G	C8-N9-C4	-5.13	104.35	106.40
2	AB	2143	C	C4-C5-C6	5.13	119.97	117.40
2	AB	2572	A	C3'-C2'-C1'	5.13	105.60	101.50
2	AB	2572	A	C5-N7-C8	5.13	106.47	103.90
35	BA	161	A	C4-C5-C6	-5.13	114.43	117.00
35	BA	396	C	C4-C5-C6	5.13	119.97	117.40
35	BA	497	G	N1-C6-O6	-5.13	116.82	119.90
35	BA	651	C	C5-C6-N1	5.13	123.57	121.00
35	BA	1136	C	C2-N3-C4	-5.13	117.33	119.90
35	BA	1254	A	P-O3'-C3'	5.13	125.86	119.70
35	BA	1288	A	N7-C8-N9	5.13	116.36	113.80
2	AB	206	U	N3-C4-C5	-5.13	111.52	114.60
2	AB	356	G	C3'-C2'-C1'	5.13	105.60	101.50
2	AB	725	G	OP1-P-OP2	-5.13	111.91	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1072	C	O4'-C4'-C3'	-5.13	98.87	104.00
2	AB	1465	G	C5'-C4'-O4'	5.13	115.26	109.10
2	AB	1774	C	O4'-C1'-C2'	-5.13	100.67	105.80
2	AB	1875	G	C6-C5-N7	-5.13	127.32	130.40
2	AB	2309	A	C8-N9-C4	5.13	107.85	105.80
2	AB	2370	G	C5-N7-C8	5.13	106.86	104.30
2	AB	2660	A	O4'-C4'-C3'	5.13	110.20	106.10
35	BA	210	C	C4-C5-C6	-5.13	114.83	117.40
35	BA	353	A	P-O3'-C3'	5.13	125.86	119.70
35	BA	481	G	C5-C6-O6	5.13	131.68	128.60
35	BA	560	A	N1-C2-N3	-5.13	126.73	129.30
35	BA	671	G	C6-C5-N7	5.13	133.48	130.40
35	BA	1354	U	O4'-C1'-N1	5.13	112.30	108.20
35	BA	1395	C	N1-C2-O2	5.13	121.98	118.90
35	BA	1539	C	C2-N3-C4	5.13	122.47	119.90
2	AB	342	A	C5-C6-N6	-5.13	119.60	123.70
2	AB	666	A	C5-N7-C8	5.13	106.47	103.90
2	AB	1036	G	N1-C6-O6	-5.13	116.82	119.90
2	AB	1341	G	C5-N7-C8	-5.13	101.74	104.30
2	AB	1794	A	N3-C4-C5	-5.13	123.21	126.80
2	AB	1805	A	C8-N9-C4	-5.13	103.75	105.80
2	AB	2557	G	C4-C5-C6	5.13	121.88	118.80
2	AB	2869	G	C4-C5-C6	5.13	121.88	118.80
35	BA	25	C	C2-N3-C4	5.13	122.47	119.90
35	BA	152	A	O5'-P-OP1	5.13	116.86	110.70
35	BA	415	A	C4'-C3'-C2'	-5.13	97.47	102.60
35	BA	777	A	N9-C4-C5	5.13	107.85	105.80
35	BA	867	G	N3-C4-N9	5.13	129.08	126.00
35	BA	1147	C	C4-C5-C6	-5.13	114.84	117.40
35	BA	1200	C	C5-C6-N1	-5.13	118.44	121.00
37	BC	42	U	C2'-C3'-O3'	5.13	121.91	113.70
38	BD	61	U	O4'-C1'-N1	5.13	112.30	108.20
45	BK	95	MET	O-C-N	5.13	130.91	122.70
2	AB	149	A	C1'-O4'-C4'	5.13	114.00	109.90
2	AB	378	C	N1-C2-N3	5.13	122.79	119.20
2	AB	536	G	N1-C6-O6	-5.13	116.82	119.90
2	AB	547	A	N1-C2-N3	5.13	131.86	129.30
2	AB	714	U	C5'-C4'-O4'	5.13	115.25	109.10
2	AB	857	G	C5'-C4'-O4'	5.13	115.25	109.10
2	AB	1135	C	P-O3'-C3'	5.13	125.85	119.70
2	AB	1217	U	C5-C6-N1	-5.13	120.14	122.70
2	AB	1261	C	C6-N1-C2	5.13	122.35	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1307	A	C4-C5-C6	-5.13	114.44	117.00
2	AB	1764	C	P-O3'-C3'	5.13	125.85	119.70
2	AB	1836	C	C4-C5-C6	-5.13	114.84	117.40
2	AB	1877	A	O4'-C4'-C3'	5.13	110.20	106.10
2	AB	2046	G	C5-C6-O6	-5.13	125.52	128.60
2	AB	2502	G	C4-C5-C6	5.13	121.88	118.80
2	AB	2672	U	C5-C4-O4	-5.13	122.82	125.90
2	AB	2867	G	N1-C6-O6	-5.13	116.82	119.90
2	AB	2896	C	C6-N1-C2	5.13	122.35	120.30
16	AP	98	LEU	CB-CG-CD1	5.13	119.72	111.00
35	BA	118	U	C6-N1-C2	-5.13	117.92	121.00
35	BA	159	G	N9-C4-C5	5.13	107.45	105.40
35	BA	218	U	O4'-C1'-N1	5.13	112.30	108.20
35	BA	682	G	N1-C2-N3	-5.13	120.82	123.90
35	BA	1260	G	N7-C8-N9	5.13	115.66	113.10
35	BA	1376	U	OP1-P-OP2	-5.13	111.91	119.60
2	AB	604	G	C2-N3-C4	5.12	114.46	111.90
2	AB	914	G	C5-C6-O6	-5.12	125.53	128.60
2	AB	1630	A	C5'-C4'-O4'	5.12	115.25	109.10
2	AB	1713	A	N7-C8-N9	-5.12	111.24	113.80
2	AB	1869	G	C5-N7-C8	5.12	106.86	104.30
2	AB	1881	C	C3'-C2'-C1'	5.12	105.60	101.50
2	AB	2310	C	C5'-C4'-C3'	-5.12	107.80	116.00
2	AB	2358	A	N3-C4-N9	5.12	131.50	127.40
35	BA	1341	U	N3-C4-C5	5.12	117.67	114.60
35	BA	1404	C	C5-C4-N4	-5.12	116.61	120.20
35	BA	1537	U	N3-C2-O2	-5.12	118.61	122.20
2	AB	13	A	C6-C5-N7	5.12	135.89	132.30
2	AB	126	A	C5-C6-N1	-5.12	115.14	117.70
2	AB	143	C	N3-C4-C5	-5.12	119.85	121.90
2	AB	203	A	N9-C4-C5	5.12	107.85	105.80
2	AB	674	G	C8-N9-C4	-5.12	104.35	106.40
2	AB	694	U	N1-C2-O2	5.12	126.39	122.80
2	AB	1053	C	N3-C2-O2	-5.12	118.31	121.90
2	AB	1310	G	N1-C2-N2	5.12	120.81	116.20
2	AB	1532	A	C6-C5-N7	5.12	135.89	132.30
2	AB	1907	G	C5-C6-N1	-5.12	108.94	111.50
2	AB	2220	U	N1-C2-O2	-5.12	119.21	122.80
35	BA	332	G	C5-C6-O6	-5.12	125.53	128.60
35	BA	365	U	C5'-C4'-O4'	5.12	115.25	109.10
48	BN	123	PRO	CA-N-CD	-5.12	104.33	111.50
2	AB	304	U	C1'-O4'-C4'	-5.12	105.80	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	408	G	C5'-C4'-C3'	-5.12	107.81	116.00
2	AB	442	G	O5'-C5'-C4'	-5.12	101.97	111.70
2	AB	498	G	C5-N7-C8	5.12	106.86	104.30
2	AB	529	A	P-O3'-C3'	5.12	125.84	119.70
2	AB	813	U	N1-C2-N3	5.12	117.97	114.90
2	AB	913	U	C6-N1-C2	-5.12	117.93	121.00
2	AB	985	C	P-O5'-C5'	5.12	129.09	120.90
2	AB	1136	G	C4'-C3'-C2'	5.12	107.72	102.60
2	AB	1402	U	C1'-O4'-C4'	5.12	114.00	109.90
2	AB	1635	A	C6-N1-C2	-5.12	115.53	118.60
13	AM	29	HIS	C-N-CA	5.12	134.50	121.70
35	BA	128	G	O3'-P-O5'	-5.12	94.27	104.00
35	BA	815	A	C1'-O4'-C4'	-5.12	105.80	109.90
35	BA	1455	G	O4'-C1'-N9	5.12	112.30	108.20
38	BD	15	G	C1'-O4'-C4'	5.12	114.00	109.90
1	AA	79	G	C5'-C4'-O4'	5.12	115.24	109.10
2	AB	290	U	N3-C2-O2	5.12	125.78	122.20
2	AB	1386	C	C5-C4-N4	-5.12	116.62	120.20
2	AB	2223	G	C5-C6-N1	5.12	114.06	111.50
2	AB	2380	C	C2-N1-C1'	-5.12	113.17	118.80
4	AD	181	ARG	NE-CZ-NH1	5.12	122.86	120.30
35	BA	410	G	C5'-C4'-C3'	-5.12	107.81	116.00
35	BA	923	A	C5-N7-C8	-5.12	101.34	103.90
35	BA	1190	G	N3-C2-N2	-5.12	116.32	119.90
1	AA	24	G	C8-N9-C4	-5.12	104.35	106.40
1	AA	79	G	C6-C5-N7	-5.12	127.33	130.40
2	AB	115	C	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	254	G	N3-C4-C5	-5.12	126.04	128.60
2	AB	634	C	N1-C2-O2	5.12	121.97	118.90
2	AB	776	G	C1'-O4'-C4'	-5.12	105.81	109.90
2	AB	828	U	N3-C4-C5	5.12	117.67	114.60
2	AB	928	A	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	1253	A	C6-N1-C2	5.12	121.67	118.60
2	AB	1554	U	C5-C6-N1	-5.12	120.14	122.70
2	AB	1629	U	C5'-C4'-O4'	5.12	115.24	109.10
2	AB	1643	G	N7-C8-N9	-5.12	110.54	113.10
2	AB	1690	A	P-O3'-C3'	5.12	125.84	119.70
2	AB	1806	C	N3-C4-C5	-5.12	119.85	121.90
2	AB	2285	C	O4'-C1'-N1	5.12	112.30	108.20
2	AB	2479	U	C3'-C2'-C1'	5.12	105.59	101.50
2	AB	2526	G	N1-C6-O6	-5.12	116.83	119.90
2	AB	2763	G	C6-C5-N7	-5.12	127.33	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2791	G	C5-C6-N1	5.12	114.06	111.50
35	BA	233	C	O4'-C1'-C2'	-5.12	100.68	105.80
35	BA	425	G	C4-C5-N7	-5.12	108.75	110.80
35	BA	478	A	C5-C6-N1	5.12	120.26	117.70
35	BA	802	A	C2-N3-C4	5.12	113.16	110.60
35	BA	920	U	C2-N3-C4	-5.12	123.93	127.00
35	BA	968	A	O4'-C1'-N9	5.12	112.30	108.20
37	BC	51	C	C3'-C2'-C1'	5.12	105.59	101.50
38	BD	54	G	N9-C4-C5	5.12	107.45	105.40
41	BG	81	LEU	CB-CG-CD2	5.12	119.70	111.00
47	BM	31	ARG	NH1-CZ-NH2	-5.12	113.77	119.40
2	AB	296	U	C4-C5-C6	5.12	122.77	119.70
2	AB	416	U	C5'-C4'-O4'	5.12	115.24	109.10
2	AB	888	C	O4'-C1'-N1	-5.12	104.11	108.20
2	AB	2289	G	C5'-C4'-O4'	5.12	115.24	109.10
2	AB	2365	G	C5-N7-C8	-5.12	101.74	104.30
2	AB	2422	C	C5-C4-N4	5.12	123.78	120.20
2	AB	2495	G	C6-N1-C2	-5.12	122.03	125.10
35	BA	166	U	N1-C2-N3	5.12	117.97	114.90
35	BA	565	U	O5'-C5'-C4'	5.12	121.42	111.70
35	BA	729	A	C4-C5-C6	-5.12	114.44	117.00
35	BA	941	G	C4-N9-C1'	-5.12	119.85	126.50
35	BA	948	C	C6-N1-C2	5.12	122.35	120.30
35	BA	1139	G	N7-C8-N9	5.12	115.66	113.10
35	BA	1346	A	O4'-C1'-C2'	-5.12	100.68	105.80
2	AB	256	A	O4'-C1'-N9	-5.12	104.11	108.20
2	AB	700	G	O4'-C1'-N9	5.12	112.29	108.20
2	AB	1367	A	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	1517	G	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	1589	U	N3-C4-O4	5.12	122.98	119.40
2	AB	1856	U	C1'-O4'-C4'	5.12	113.99	109.90
2	AB	2216	G	C4-C5-C6	5.12	121.87	118.80
2	AB	2540	C	O4'-C1'-N1	5.12	112.29	108.20
2	AB	2594	C	O4'-C4'-C3'	-5.12	98.89	104.00
6	AF	49	ARG	NE-CZ-NH1	-5.12	117.74	120.30
8	AH	144	ALA	CB-CA-C	5.12	117.77	110.10
35	BA	88	U	C4'-C3'-C2'	5.12	107.72	102.60
35	BA	213	G	N3-C4-C5	-5.12	126.04	128.60
35	BA	225	C	N1-C2-O2	5.12	121.97	118.90
35	BA	386	C	C1'-O4'-C4'	5.12	113.99	109.90
35	BA	483	C	N3-C2-O2	-5.12	118.32	121.90
35	BA	546	A	N3-C4-C5	-5.12	123.22	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	659	U	P-O3'-C3'	5.12	125.84	119.70
35	BA	681	A	P-O3'-C3'	5.12	125.84	119.70
35	BA	1330	U	C5'-C4'-C3'	-5.12	107.82	116.00
38	BD	66	C	C6-N1-C2	5.12	122.35	120.30
1	AA	87	U	C5-C4-O4	-5.11	122.83	125.90
2	AB	90	U	C2-N3-C4	-5.11	123.93	127.00
2	AB	170	U	C4'-C3'-O3'	5.11	123.23	113.00
2	AB	394	C	N3-C4-N4	5.11	121.58	118.00
2	AB	1171	G	C1'-O4'-C4'	-5.11	105.81	109.90
2	AB	1535	A	N7-C8-N9	5.11	116.36	113.80
2	AB	1577	C	N3-C4-C5	-5.11	119.86	121.90
2	AB	1812	U	O4'-C1'-N1	5.11	112.29	108.20
2	AB	1887	C	C2-N1-C1'	-5.11	113.17	118.80
2	AB	1901	A	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	2185	U	C4-C5-C6	-5.11	116.63	119.70
2	AB	2453	A	C5'-C4'-O4'	5.11	115.24	109.10
20	AT	79	ARG	CD-NE-CZ	5.11	130.76	123.60
35	BA	120	A	O4'-C1'-N9	5.11	112.29	108.20
35	BA	638	U	N1-C2-N3	5.11	117.97	114.90
35	BA	908	A	C5-N7-C8	5.11	106.46	103.90
35	BA	1312	G	C5-C6-O6	5.11	131.67	128.60
35	BA	1333	A	N1-C6-N6	5.11	121.67	118.60
39	BE	115	ASP	CB-CG-OD2	-5.11	113.70	118.30
52	BR	26	VAL	CG1-CB-CG2	5.11	119.08	110.90
2	AB	122	G	O4'-C1'-N9	5.11	112.29	108.20
2	AB	1256	G	C8-N9-C1'	5.11	133.65	127.00
2	AB	2138	G	O4'-C1'-C2'	-5.11	100.69	105.80
35	BA	782	A	P-O3'-C3'	5.11	125.83	119.70
35	BA	968	A	C2-N3-C4	-5.11	108.04	110.60
35	BA	1170	A	O4'-C4'-C3'	5.11	110.19	106.10
1	AA	20	G	N1-C2-N3	-5.11	120.83	123.90
2	AB	143	C	N1-C1'-C2'	-5.11	106.38	112.00
2	AB	247	G	C8-N9-C1'	5.11	133.64	127.00
2	AB	254	G	N3-C2-N2	5.11	123.48	119.90
2	AB	797	G	C6-N1-C2	-5.11	122.03	125.10
2	AB	1056	G	N9-C1'-C2'	-5.11	106.38	112.00
2	AB	1264	A	O4'-C1'-N9	5.11	112.29	108.20
2	AB	1446	C	P-O3'-C3'	5.11	125.83	119.70
2	AB	1463	C	C4-C5-C6	-5.11	114.84	117.40
2	AB	1693	U	O4'-C1'-N1	5.11	112.29	108.20
2	AB	1813	G	N1-C2-N2	5.11	120.80	116.20
2	AB	1972	G	P-O3'-C3'	5.11	125.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2402	U	C5-C4-O4	5.11	128.97	125.90
2	AB	2430	A	C1'-O4'-C4'	-5.11	105.81	109.90
35	BA	107	G	N1-C6-O6	-5.11	116.83	119.90
35	BA	239	U	C4-C5-C6	5.11	122.77	119.70
35	BA	447	G	O4'-C1'-N9	5.11	112.29	108.20
35	BA	659	U	N1-C2-N3	5.11	117.97	114.90
35	BA	672	U	N1-C2-O2	-5.11	119.22	122.80
35	BA	809	G	C5'-C4'-O4'	5.11	115.23	109.10
35	BA	1506	U	C4'-C3'-O3'	-5.11	98.67	109.40
37	BC	47	C	C2-N3-C4	5.11	122.45	119.90
38	BD	41	C	C2-N1-C1'	-5.11	113.18	118.80
49	BO	18	SER	CB-CA-C	5.11	119.81	110.10
53	BS	28	ARG	CA-C-O	-5.11	109.37	120.10
2	AB	143	C	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	283	G	N9-C4-C5	5.11	107.44	105.40
2	AB	661	A	C6-N1-C2	-5.11	115.53	118.60
2	AB	1022	G	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	2083	G	OP1-P-OP2	-5.11	111.94	119.60
2	AB	2167	U	N1-C2-N3	-5.11	111.83	114.90
2	AB	2790	U	C5-C4-O4	-5.11	122.83	125.90
4	AD	61	TYR	CB-CG-CD1	-5.11	117.93	121.00
35	BA	196	A	C8-N9-C4	-5.11	103.76	105.80
35	BA	310	G	O5'-P-OP1	-5.11	101.10	105.70
35	BA	448	A	C5'-C4'-C3'	-5.11	107.83	116.00
35	BA	621	A	C4-C5-N7	5.11	113.25	110.70
35	BA	948	C	N1-C2-N3	-5.11	115.62	119.20
35	BA	1199	U	O5'-P-OP2	-5.11	101.10	105.70
35	BA	1295	U	N3-C2-O2	5.11	125.78	122.20
35	BA	1403	C	C5-C6-N1	-5.11	118.44	121.00
44	BJ	22	LEU	CB-CG-CD2	5.11	119.69	111.00
44	BJ	178	ASN	CB-CA-C	5.11	120.62	110.40
2	AB	289	G	C4'-C3'-C2'	-5.11	97.49	102.60
2	AB	484	C	C2-N3-C4	5.11	122.45	119.90
2	AB	515	A	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	912	C	C3'-C2'-C1'	-5.11	97.41	101.50
2	AB	962	G	C6-C5-N7	5.11	133.46	130.40
2	AB	1380	G	O4'-C1'-N9	5.11	112.29	108.20
2	AB	1415	U	N3-C4-C5	-5.11	111.54	114.60
2	AB	1496	A	C5'-C4'-C3'	-5.11	107.83	116.00
2	AB	1751	U	N3-C2-O2	-5.11	118.62	122.20
2	AB	2112	G	N1-C2-N2	5.11	120.80	116.20
7	AG	137	PHE	CB-CG-CD1	-5.11	117.22	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	AP	30	ARG	NE-CZ-NH2	-5.11	117.75	120.30
35	BA	785	G	C6-N1-C2	-5.11	122.04	125.10
35	BA	785	G	N1-C6-O6	-5.11	116.84	119.90
35	BA	1006	G	C6-N1-C2	-5.11	122.03	125.10
35	BA	1026	G	C5-C6-N1	-5.11	108.95	111.50
35	BA	1171	A	N7-C8-N9	-5.11	111.25	113.80
35	BA	1292	G	N1-C2-N2	5.11	120.80	116.20
35	BA	1464	U	C2-N3-C4	-5.11	123.94	127.00
36	BB	47	U	C1'-O4'-C4'	-5.11	105.81	109.90
2	AB	58	G	N7-C8-N9	-5.11	110.55	113.10
2	AB	473	G	C5'-C4'-C3'	-5.11	107.83	116.00
2	AB	1146	C	O3'-P-O5'	-5.11	94.30	104.00
2	AB	1420	A	C8-N9-C4	5.11	107.84	105.80
2	AB	1487	U	N1-C2-N3	-5.11	111.84	114.90
2	AB	1622	G	C1'-O4'-C4'	-5.11	105.81	109.90
2	AB	2066	C	C3'-C2'-C1'	5.11	105.58	101.50
2	AB	2162	G	P-O3'-C3'	5.11	125.83	119.70
2	AB	2349	G	C4-C5-N7	-5.11	108.76	110.80
2	AB	2375	G	N3-C4-C5	-5.11	126.05	128.60
35	BA	35	G	N3-C4-N9	-5.11	122.94	126.00
35	BA	1417	G	C4-C5-C6	5.11	121.86	118.80
2	AB	134	G	O4'-C1'-N9	5.10	112.28	108.20
2	AB	145	C	C4-C5-C6	5.10	119.95	117.40
2	AB	1328	A	C6-N1-C2	-5.10	115.54	118.60
2	AB	1337	G	C8-N9-C4	-5.10	104.36	106.40
2	AB	2021	C	O4'-C4'-C3'	5.10	110.18	106.10
2	AB	2082	A	C5-C6-N1	5.10	120.25	117.70
11	AK	55	PRO	N-CD-CG	5.10	110.86	103.20
16	AP	28	LEU	CB-CG-CD2	5.10	119.68	111.00
35	BA	148	G	N1-C6-O6	5.10	122.96	119.90
35	BA	289	G	O4'-C1'-N9	5.10	112.28	108.20
40	BF	166	TRP	NE1-CE2-CD2	-5.10	102.20	107.30
2	AB	56	A	N3-C4-C5	-5.10	123.23	126.80
2	AB	325	G	C6-N1-C2	-5.10	122.04	125.10
2	AB	509	C	C4-C5-C6	5.10	119.95	117.40
2	AB	719	C	C4-C5-C6	-5.10	114.85	117.40
2	AB	928	A	C6-C5-N7	5.10	135.87	132.30
2	AB	940	G	C4-C5-N7	-5.10	108.76	110.80
2	AB	1128	G	O4'-C1'-N9	5.10	112.28	108.20
2	AB	1452	G	C6-N1-C2	5.10	128.16	125.10
2	AB	1500	G	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	1587	G	C5'-C4'-C3'	-5.10	107.84	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1721	G	C5-N7-C8	-5.10	101.75	104.30
2	AB	1862	G	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	1868	C	C2-N3-C4	5.10	122.45	119.90
2	AB	2040	G	N1-C2-N3	-5.10	120.84	123.90
2	AB	2071	A	N3-C4-C5	-5.10	123.23	126.80
2	AB	2118	U	N3-C4-C5	-5.10	111.54	114.60
2	AB	2240	U	C5'-C4'-O4'	5.10	115.22	109.10
10	AJ	60	ARG	NH1-CZ-NH2	-5.10	113.79	119.40
35	BA	31	G	N7-C8-N9	-5.10	110.55	113.10
35	BA	32	A	N9-C4-C5	5.10	107.84	105.80
35	BA	54	C	C4'-C3'-C2'	-5.10	97.50	102.60
35	BA	444	G	C6-C5-N7	5.10	133.46	130.40
35	BA	729	A	C5'-C4'-O4'	5.10	115.22	109.10
35	BA	1008	U	N3-C4-C5	-5.10	111.54	114.60
35	BA	1486	G	C5'-C4'-O4'	5.10	115.22	109.10
35	BA	1505	G	C4-C5-N7	5.10	112.84	110.80
36	BB	23	A	C2-N3-C4	5.10	113.15	110.60
37	BC	49	U	O5'-P-OP2	-5.10	101.11	105.70
2	AB	267	C	C5'-C4'-O4'	5.10	115.22	109.10
2	AB	453	A	C4'-C3'-O3'	5.10	123.20	113.00
2	AB	662	G	O4'-C1'-N9	5.10	112.28	108.20
2	AB	901	C	C5-C6-N1	5.10	123.55	121.00
2	AB	1171	G	O4'-C1'-N9	5.10	112.28	108.20
2	AB	1377	G	C5-C6-O6	5.10	131.66	128.60
2	AB	1489	C	N3-C4-C5	5.10	123.94	121.90
2	AB	1768	C	P-O3'-C3'	5.10	125.82	119.70
2	AB	1828	G	C5-C6-N1	5.10	114.05	111.50
2	AB	2444	G	C8-N9-C4	-5.10	104.36	106.40
2	AB	2734	A	C5-C6-N6	-5.10	119.62	123.70
35	BA	242	G	N1-C2-N3	5.10	126.96	123.90
35	BA	560	A	C3'-C2'-C1'	-5.10	97.42	101.50
35	BA	1530	G	O4'-C1'-N9	5.10	112.28	108.20
39	BE	6	ARG	CD-NE-CZ	5.10	130.74	123.60
1	AA	77	U	C1'-O4'-C4'	5.10	113.98	109.90
2	AB	303	G	C6-N1-C2	-5.10	122.04	125.10
2	AB	377	G	C6-N1-C2	-5.10	122.04	125.10
2	AB	617	G	N1-C2-N2	5.10	120.79	116.20
2	AB	795	C	O4'-C1'-N1	-5.10	104.12	108.20
2	AB	907	G	C4-C5-C6	5.10	121.86	118.80
2	AB	1107	G	C5-C6-O6	-5.10	125.54	128.60
2	AB	1365	A	C5'-C4'-O4'	5.10	115.22	109.10
2	AB	1456	G	C6-C5-N7	5.10	133.46	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1563	U	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	1802	A	C2-N3-C4	5.10	113.15	110.60
2	AB	1810	A	N1-C6-N6	-5.10	115.54	118.60
2	AB	1878	G	C6-N1-C2	5.10	128.16	125.10
2	AB	2074	U	C5'-C4'-O4'	5.10	115.22	109.10
2	AB	2143	C	O5'-C5'-C4'	5.10	121.39	111.70
2	AB	2153	C	OP2-P-O3'	5.10	116.42	105.20
2	AB	2337	G	C5-N7-C8	-5.10	101.75	104.30
2	AB	2376	A	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	2723	C	C2-N3-C4	-5.10	117.35	119.90
2	AB	2800	A	C5-N7-C8	5.10	106.45	103.90
35	BA	53	A	N7-C8-N9	5.10	116.35	113.80
35	BA	197	A	C6-C5-N7	5.10	135.87	132.30
35	BA	1002	G	C4-C5-N7	-5.10	108.76	110.80
35	BA	1045	C	C3'-C2'-C1'	-5.10	97.42	101.50
35	BA	1443	C	C4-C5-C6	5.10	119.95	117.40
35	BA	1499	A	C2'-C3'-O3'	5.10	121.86	113.70
35	BA	1511	G	P-O3'-C3'	5.10	125.82	119.70
35	BA	1542	A	N3-C4-C5	-5.10	123.23	126.80
37	BC	38	G	N7-C8-N9	5.10	115.65	113.10
37	BC	39	U	C5'-C4'-O4'	5.10	115.22	109.10
44	BJ	162	SER	N-CA-CB	-5.10	102.85	110.50
46	BL	94	ARG	NE-CZ-NH1	-5.10	117.75	120.30
2	AB	334	C	O5'-P-OP2	-5.10	101.11	105.70
2	AB	576	U	C3'-C2'-C1'	5.10	105.58	101.50
2	AB	618	G	N1-C2-N2	5.10	120.79	116.20
2	AB	760	G	C2-N3-C4	-5.10	109.35	111.90
2	AB	784	G	O4'-C4'-C3'	-5.10	98.90	104.00
2	AB	884	U	C5-C4-O4	-5.10	122.84	125.90
2	AB	952	G	N1-C2-N3	5.10	126.96	123.90
2	AB	1086	A	C2-N3-C4	5.10	113.15	110.60
2	AB	1179	G	C3'-C2'-C1'	-5.10	97.42	101.50
2	AB	1285	A	C2-N3-C4	5.10	113.15	110.60
2	AB	1313	U	N3-C2-O2	-5.10	118.63	122.20
2	AB	1374	G	C4-C5-C6	5.10	121.86	118.80
2	AB	1466	U	N3-C4-O4	5.10	122.97	119.40
2	AB	1533	C	N3-C4-C5	-5.10	119.86	121.90
2	AB	1562	U	N3-C2-O2	-5.10	118.63	122.20
2	AB	1983	G	C5-C6-O6	-5.10	125.54	128.60
2	AB	2446	G	O4'-C1'-N9	5.10	112.28	108.20
2	AB	2497	A	N3-C4-C5	-5.10	123.23	126.80
2	AB	2636	C	C5'-C4'-O4'	5.10	115.22	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2726	A	C1'-O4'-C4'	-5.10	105.82	109.90
3	AC	202	THR	N-CA-CB	5.10	119.99	110.30
6	AF	7	ASP	CB-CG-OD2	5.10	122.89	118.30
35	BA	167	A	P-O5'-C5'	5.10	129.06	120.90
35	BA	168	G	N3-C2-N2	5.10	123.47	119.90
35	BA	185	U	C5-C4-O4	-5.10	122.84	125.90
35	BA	798	U	C4'-C3'-C2'	5.10	107.70	102.60
35	BA	1109	C	O4'-C4'-C3'	-5.10	98.90	104.00
35	BA	1118	U	C5-C6-N1	-5.10	120.15	122.70
35	BA	1150	A	C4'-C3'-C2'	-5.10	97.50	102.60
35	BA	1363	A	C5-N7-C8	-5.10	101.35	103.90
35	BA	1540	U	C1'-O4'-C4'	5.10	113.98	109.90
38	BD	43	G	N9-C4-C5	5.10	107.44	105.40
44	BJ	102	TRP	N-CA-CB	-5.10	101.42	110.60
2	AB	714	U	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	1096	A	O3'-P-O5'	-5.10	94.32	104.00
2	AB	1553	A	N9-C1'-C2'	-5.10	106.39	112.00
15	AO	31	PHE	CB-CG-CD1	5.10	124.37	120.80
21	AU	38	TYR	CB-CG-CD2	-5.10	117.94	121.00
35	BA	224	U	C5-C6-N1	-5.10	120.15	122.70
35	BA	276	G	C4'-C3'-C2'	-5.10	97.50	102.60
35	BA	671	G	C2-N3-C4	5.10	114.45	111.90
35	BA	832	G	C6-C5-N7	-5.10	127.34	130.40
35	BA	1507	A	C5'-C4'-O4'	5.10	115.22	109.10
1	AA	21	G	P-O3'-C3'	5.09	125.81	119.70
2	AB	37	C	O4'-C1'-C2'	5.09	112.19	107.60
2	AB	403	U	C3'-C2'-C1'	5.09	105.58	101.50
2	AB	516	C	C4-C5-C6	-5.09	114.85	117.40
2	AB	531	C	P-O3'-C3'	5.09	125.81	119.70
2	AB	534	U	C2-N3-C4	-5.09	123.94	127.00
2	AB	758	C	C2-N1-C1'	-5.09	113.19	118.80
2	AB	1483	G	C4-N9-C1'	-5.09	119.88	126.50
2	AB	1674	G	C5-C6-O6	-5.09	125.54	128.60
2	AB	2035	G	O4'-C1'-N9	5.09	112.28	108.20
2	AB	2621	G	O4'-C4'-C3'	-5.09	98.91	104.00
2	AB	2632	A	C5-C6-N6	-5.09	119.62	123.70
12	AL	86	GLN	O-C-N	5.09	130.85	122.70
35	BA	66	A	C5-C6-N1	5.09	120.25	117.70
35	BA	162	A	C6-N1-C2	-5.09	115.54	118.60
35	BA	302	G	N1-C2-N3	-5.09	120.84	123.90
35	BA	306	A	C3'-C2'-C1'	5.09	105.58	101.50
35	BA	340	U	N1-C2-O2	5.09	126.37	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	94	A	N3-C4-C5	5.09	130.37	126.80
2	AB	1019	U	C5'-C4'-C3'	-5.09	107.85	116.00
2	AB	1898	U	C5-C4-O4	-5.09	122.84	125.90
2	AB	1930	G	O5'-C5'-C4'	-5.09	102.02	111.70
2	AB	2082	A	N9-C4-C5	5.09	107.84	105.80
2	AB	2185	U	N1-C2-N3	-5.09	111.84	114.90
2	AB	2244	U	O4'-C1'-N1	5.09	112.27	108.20
2	AB	2512	C	C2-N3-C4	5.09	122.45	119.90
5	AE	80	TRP	CD1-CG-CD2	5.09	110.38	106.30
35	BA	13	U	O4'-C1'-C2'	-5.09	100.71	105.80
35	BA	168	G	C5-N7-C8	5.09	106.85	104.30
35	BA	431	A	C8-N9-C4	5.09	107.84	105.80
35	BA	923	A	N3-C4-N9	-5.09	123.33	127.40
35	BA	1172	C	N1-C2-O2	5.09	121.96	118.90
35	BA	1496	C	N3-C2-O2	-5.09	118.33	121.90
2	AB	1086	A	C6-N1-C2	-5.09	115.55	118.60
2	AB	1114	C	C3'-C2'-C1'	5.09	105.57	101.50
2	AB	1665	A	N1-C2-N3	-5.09	126.75	129.30
2	AB	1820	U	C5-C6-N1	-5.09	120.15	122.70
2	AB	1822	C	N1-C2-O2	5.09	121.95	118.90
2	AB	2146	C	O4'-C4'-C3'	5.09	110.17	106.10
2	AB	2206	C	C5-C4-N4	-5.09	116.64	120.20
2	AB	2761	A	N3-C4-C5	-5.09	123.24	126.80
2	AB	2768	U	N3-C2-O2	-5.09	118.64	122.20
35	BA	91	U	C4-C5-C6	5.09	122.75	119.70
35	BA	226	G	N1-C2-N2	-5.09	111.62	116.20
35	BA	265	G	C4-C5-C6	-5.09	115.75	118.80
35	BA	315	A	C4-C5-C6	5.09	119.55	117.00
35	BA	411	A	C6-C5-N7	5.09	135.86	132.30
35	BA	810	C	N1-C2-O2	5.09	121.95	118.90
35	BA	1415	G	C4'-C3'-C2'	-5.09	97.51	102.60
38	BD	38	A	N3-C4-N9	5.09	131.47	127.40
38	BD	53	G	C3'-C2'-C1'	-5.09	97.43	101.50
1	AA	44	G	C5-C6-O6	-5.09	125.55	128.60
1	AA	59	A	C5-C6-N1	5.09	120.24	117.70
2	AB	42	A	O4'-C1'-N9	5.09	112.27	108.20
2	AB	364	C	N1-C2-O2	5.09	121.95	118.90
2	AB	425	G	O5'-C5'-C4'	5.09	121.37	111.70
2	AB	505	A	O5'-C5'-C4'	-5.09	102.03	111.70
2	AB	860	U	C3'-C2'-C1'	5.09	105.57	101.50
2	AB	902	C	O3'-P-O5'	-5.09	94.33	104.00
2	AB	928	A	N3-C4-N9	-5.09	123.33	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1509	A	N1-C6-N6	5.09	121.65	118.60
2	AB	1615	C	O4'-C1'-C2'	-5.09	100.71	105.80
2	AB	1735	A	O4'-C4'-C3'	5.09	110.17	106.10
2	AB	1824	G	N7-C8-N9	5.09	115.64	113.10
2	AB	2041	U	N1-C2-N3	5.09	117.95	114.90
2	AB	2187	U	P-O3'-C3'	5.09	125.81	119.70
2	AB	2299	U	C5-C6-N1	-5.09	120.16	122.70
2	AB	2421	G	C5-N7-C8	5.09	106.84	104.30
2	AB	2557	G	N3-C4-C5	-5.09	126.06	128.60
24	AX	19	ARG	O-C-N	5.09	130.84	122.70
29	A2	64	PHE	CB-CG-CD2	-5.09	117.24	120.80
35	BA	65	A	O4'-C4'-C3'	5.09	110.17	106.10
35	BA	67	C	P-O3'-C3'	5.09	125.81	119.70
35	BA	264	C	N1-C2-O2	5.09	121.95	118.90
35	BA	553	A	O4'-C4'-C3'	5.09	110.17	106.10
35	BA	630	A	C3'-C2'-C1'	-5.09	97.43	101.50
35	BA	1073	U	C2-N3-C4	-5.09	123.95	127.00
36	BB	3	G	N9-C4-C5	-5.09	103.36	105.40
2	AB	142	A	C5-N7-C8	5.09	106.44	103.90
2	AB	266	G	C5-C6-O6	-5.09	125.55	128.60
2	AB	1036	G	N9-C4-C5	5.09	107.44	105.40
2	AB	1106	G	C5'-C4'-O4'	5.09	115.20	109.10
2	AB	1237	A	C8-N9-C4	-5.09	103.77	105.80
2	AB	1783	A	N3-C4-C5	-5.09	123.24	126.80
2	AB	2402	U	N1-C2-O2	5.09	126.36	122.80
35	BA	23	C	N3-C4-C5	5.09	123.94	121.90
35	BA	534	U	C3'-C2'-C1'	5.09	105.57	101.50
35	BA	864	A	C5'-C4'-O4'	5.09	115.20	109.10
35	BA	1202	U	O4'-C4'-C3'	5.09	110.17	106.10
35	BA	1310	G	N3-C4-C5	-5.09	126.06	128.60
35	BA	1500	A	N1-C6-N6	-5.09	115.55	118.60
1	AA	120	U	O4'-C1'-N1	5.09	112.27	108.20
2	AB	153	U	O4'-C1'-N1	5.09	112.27	108.20
2	AB	464	U	N3-C4-O4	5.09	122.96	119.40
2	AB	473	G	C3'-C2'-C1'	5.09	105.57	101.50
2	AB	578	G	OP2-P-O3'	5.09	116.39	105.20
2	AB	851	C	C4-C5-C6	5.09	119.94	117.40
2	AB	1316	U	N3-C2-O2	-5.09	118.64	122.20
2	AB	1353	A	C6-C5-N7	5.09	135.86	132.30
2	AB	2055	C	C4-C5-C6	-5.09	114.86	117.40
22	AV	1	MET	CG-SD-CE	5.09	108.34	100.20
35	BA	497	G	N1-C2-N2	-5.09	111.62	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	760	G	C6-N1-C2	-5.09	122.05	125.10
35	BA	772	U	C2'-C3'-O3'	5.09	121.84	113.70
35	BA	868	C	C3'-C2'-C1'	-5.09	97.43	101.50
35	BA	1011	C	C6-N1-C2	5.09	122.33	120.30
35	BA	1240	U	C5'-C4'-O4'	5.09	115.20	109.10
35	BA	1536	C	O4'-C1'-N1	5.09	112.27	108.20
36	BB	4	G	C2-N3-C4	5.09	114.44	111.90
1	AA	35	C	O4'-C1'-N1	5.08	112.27	108.20
2	AB	939	G	N7-C8-N9	-5.08	110.56	113.10
2	AB	1607	C	N1-C2-O2	5.08	121.95	118.90
2	AB	2549	G	N1-C6-O6	-5.08	116.85	119.90
2	AB	2629	U	O4'-C4'-C3'	5.08	110.17	106.10
7	AG	2	LYS	C-N-CA	5.08	134.41	121.70
35	BA	76	G	C5'-C4'-O4'	5.08	115.20	109.10
35	BA	398	U	N3-C4-O4	-5.08	115.84	119.40
35	BA	909	A	N1-C6-N6	-5.08	115.55	118.60
1	AA	47	C	C2-N3-C4	5.08	122.44	119.90
1	AA	61	G	N7-C8-N9	5.08	115.64	113.10
2	AB	45	G	C5-N7-C8	5.08	106.84	104.30
2	AB	248	G	C4'-C3'-C2'	-5.08	97.52	102.60
2	AB	461	C	O4'-C4'-C3'	5.08	110.17	106.10
2	AB	500	G	C5-C6-O6	5.08	131.65	128.60
2	AB	789	A	C5'-C4'-C3'	-5.08	107.87	116.00
2	AB	968	C	O5'-C5'-C4'	-5.08	102.04	111.70
2	AB	1058	U	N1-C2-N3	5.08	117.95	114.90
2	AB	1268	A	C6-N1-C2	-5.08	115.55	118.60
2	AB	2091	C	C4-C5-C6	-5.08	114.86	117.40
2	AB	2406	A	O4'-C4'-C3'	5.08	110.17	106.10
2	AB	2671	G	C4-C5-N7	-5.08	108.77	110.80
21	AU	23	LEU	CB-CG-CD1	5.08	119.64	111.00
35	BA	33	A	C4-C5-N7	-5.08	108.16	110.70
35	BA	323	U	O3'-P-O5'	-5.08	94.34	104.00
35	BA	619	U	N3-C2-O2	-5.08	118.64	122.20
35	BA	978	A	N9-C1'-C2'	-5.08	106.41	112.00
39	BE	91	VAL	CA-CB-CG2	-5.08	103.28	110.90
2	AB	94	A	N9-C1'-C2'	-5.08	106.41	112.00
2	AB	117	G	C4-C5-N7	5.08	112.83	110.80
2	AB	335	C	N1-C2-O2	5.08	121.95	118.90
2	AB	376	G	C5-N7-C8	-5.08	101.76	104.30
2	AB	413	C	N1-C2-O2	5.08	121.95	118.90
2	AB	458	G	C5-C6-N1	-5.08	108.96	111.50
2	AB	808	G	C8-N9-C4	-5.08	104.37	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	974	G	C4'-C3'-C2'	-5.08	97.52	102.60
2	AB	1783	A	N1-C6-N6	-5.08	115.55	118.60
2	AB	2009	A	C4'-C3'-C2'	-5.08	97.52	102.60
2	AB	2517	C	C5-C4-N4	5.08	123.76	120.20
2	AB	2532	G	P-O5'-C5'	5.08	129.03	120.90
35	BA	143	A	N7-C8-N9	5.08	116.34	113.80
35	BA	399	G	N3-C4-N9	5.08	129.05	126.00
35	BA	529	G	C4'-C3'-C2'	-5.08	97.52	102.60
35	BA	1241	G	C5-N7-C8	-5.08	101.76	104.30
37	BC	34	U	O4'-C4'-C3'	5.08	110.17	106.10
2	AB	54	G	C5-C6-O6	5.08	131.65	128.60
2	AB	377	G	C5-C6-O6	-5.08	125.55	128.60
2	AB	707	G	N1-C6-O6	5.08	122.95	119.90
2	AB	1302	A	N1-C2-N3	-5.08	126.76	129.30
2	AB	1676	A	C4-C5-N7	5.08	113.24	110.70
2	AB	1702	G	C3'-C2'-C1'	5.08	105.56	101.50
2	AB	1767	G	C6-C5-N7	-5.08	127.35	130.40
2	AB	2141	G	N9-C1'-C2'	-5.08	106.41	112.00
2	AB	2454	G	C8-N9-C4	-5.08	104.37	106.40
2	AB	2464	G	C2-N3-C4	5.08	114.44	111.90
35	BA	67	C	C1'-O4'-C4'	-5.08	105.84	109.90
35	BA	829	G	C5-N7-C8	5.08	106.84	104.30
35	BA	976	G	C4-C5-N7	5.08	112.83	110.80
38	BD	16	C	C5-C6-N1	5.08	123.54	121.00
38	BD	52	C	C6-N1-C2	-5.08	118.27	120.30
2	AB	88	G	O3'-P-O5'	-5.08	94.35	104.00
2	AB	138	U	O4'-C1'-N1	5.08	112.26	108.20
2	AB	179	C	N1-C1'-C2'	-5.08	106.41	112.00
2	AB	475	C	N1-C2-O2	-5.08	115.85	118.90
2	AB	478	A	N3-C4-C5	-5.08	123.25	126.80
2	AB	819	A	C5-N7-C8	-5.08	101.36	103.90
2	AB	821	A	C3'-C2'-C1'	5.08	105.56	101.50
2	AB	869	G	N7-C8-N9	5.08	115.64	113.10
2	AB	973	A	N1-C2-N3	-5.08	126.76	129.30
2	AB	993	G	N7-C8-N9	5.08	115.64	113.10
2	AB	1678	A	C6-C5-N7	-5.08	128.75	132.30
2	AB	2000	C	C4'-C3'-C2'	-5.08	97.52	102.60
2	AB	2022	U	C4-C5-C6	5.08	122.75	119.70
2	AB	2469	A	O4'-C1'-C2'	5.08	112.17	107.60
2	AB	2484	G	C2'-C3'-O3'	5.08	121.82	113.70
2	AB	2727	A	P-O3'-C3'	5.08	125.80	119.70
2	AB	2770	G	O3'-P-O5'	5.08	113.65	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	104	G	P-O3'-C3'	5.08	125.79	119.70
35	BA	446	G	O4'-C1'-N9	5.08	112.26	108.20
35	BA	493	A	N1-C2-N3	-5.08	126.76	129.30
35	BA	678	U	C1'-O4'-C4'	5.08	113.96	109.90
35	BA	1240	U	O4'-C1'-C2'	-5.08	100.72	105.80
35	BA	1451	U	C3'-C2'-C1'	5.08	105.56	101.50
35	BA	1499	A	C3'-C2'-C1'	-5.08	97.44	101.50
36	BB	73	G	O4'-C1'-C2'	5.08	112.17	107.60
38	BD	7	G	C5-N7-C8	-5.08	101.76	104.30
38	BD	35	C	C4-C5-C6	-5.08	114.86	117.40
1	AA	2	G	P-O3'-C3'	5.08	125.79	119.70
1	AA	41	G	C6-N1-C2	-5.08	122.05	125.10
2	AB	432	A	C4-C5-N7	-5.08	108.16	110.70
2	AB	758	C	O4'-C4'-C3'	-5.08	98.92	104.00
2	AB	1565	C	N3-C2-O2	-5.08	118.35	121.90
2	AB	1579	A	C4-C5-C6	-5.08	114.46	117.00
2	AB	1837	C	N3-C4-N4	5.08	121.55	118.00
2	AB	2355	G	C4'-C3'-C2'	-5.08	97.52	102.60
35	BA	89	U	N3-C4-O4	5.08	122.95	119.40
35	BA	1456	A	C2-N3-C4	-5.08	108.06	110.60
36	BB	10	G	C5-N7-C8	-5.08	101.76	104.30
38	BD	36	A	N3-C4-N9	-5.08	123.34	127.40
49	BO	98	ARG	NE-CZ-NH1	-5.08	117.76	120.30
2	AB	132	G	C4-N9-C1'	-5.08	119.90	126.50
2	AB	407	G	C1'-O4'-C4'	5.08	113.96	109.90
2	AB	445	C	O4'-C4'-C3'	5.08	110.16	106.10
2	AB	489	G	C4-C5-N7	-5.08	108.77	110.80
2	AB	767	U	N3-C4-C5	-5.08	111.56	114.60
2	AB	863	A	C2-N3-C4	-5.08	108.06	110.60
2	AB	883	G	C4-C5-C6	5.08	121.85	118.80
2	AB	888	C	C5-C4-N4	-5.08	116.65	120.20
2	AB	1371	G	N1-C2-N2	-5.08	111.63	116.20
2	AB	1681	G	N7-C8-N9	5.08	115.64	113.10
2	AB	1821	A	C5-C6-N1	5.08	120.24	117.70
2	AB	1846	G	N7-C8-N9	-5.08	110.56	113.10
2	AB	2240	U	O4'-C4'-C3'	-5.08	98.92	104.00
2	AB	2601	C	OP1-P-O3'	5.08	116.36	105.20
2	AB	2601	C	C2-N1-C1'	-5.08	113.22	118.80
2	AB	2754	U	N3-C4-O4	-5.08	115.85	119.40
35	BA	102	G	O4'-C4'-C3'	5.08	110.16	106.10
35	BA	749	A	N9-C1'-C2'	-5.08	106.42	112.00
35	BA	790	A	P-O3'-C3'	5.08	125.79	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	880	C	C5-C4-N4	-5.08	116.65	120.20
41	BG	50	TYR	CZ-CE2-CD2	5.08	124.37	119.80
43	BI	110	ARG	N-CA-CB	-5.08	101.46	110.60
1	AA	37	C	C5-C4-N4	-5.07	116.65	120.20
2	AB	185	G	N3-C2-N2	-5.07	116.35	119.90
2	AB	349	U	N3-C2-O2	-5.07	118.65	122.20
2	AB	486	C	N1-C2-O2	5.07	121.94	118.90
2	AB	744	U	C2-N3-C4	-5.07	123.96	127.00
2	AB	1339	G	C6-N1-C2	5.07	128.14	125.10
2	AB	1437	C	C5'-C4'-C3'	-5.07	107.88	116.00
2	AB	1839	G	N1-C2-N2	-5.07	111.63	116.20
2	AB	1891	G	OP1-P-OP2	5.07	127.21	119.60
2	AB	2095	A	P-O3'-C3'	5.07	125.79	119.70
2	AB	2105	U	C4-C5-C6	-5.07	116.66	119.70
2	AB	2248	C	N1-C2-O2	5.07	121.94	118.90
2	AB	2509	G	O3'-P-O5'	-5.07	94.36	104.00
2	AB	2904	U	C5-C6-N1	-5.07	120.16	122.70
22	AV	69	ARG	CA-CB-CG	5.07	124.56	113.40
35	BA	108	G	C5-C6-N1	5.07	114.04	111.50
35	BA	322	C	O4'-C1'-C2'	5.07	112.17	107.60
35	BA	521	G	C8-N9-C1'	5.07	133.60	127.00
35	BA	546	A	N9-C1'-C2'	-5.07	106.42	112.00
35	BA	557	G	C4-C5-N7	5.07	112.83	110.80
35	BA	1172	C	N3-C2-O2	-5.07	118.35	121.90
35	BA	1505	G	C8-N9-C1'	5.07	133.60	127.00
37	BC	46	C	P-O3'-C3'	5.07	125.79	119.70
2	AB	395	U	N1-C2-N3	5.07	117.94	114.90
2	AB	2599	G	C4-N9-C1'	-5.07	119.91	126.50
2	AB	2651	C	C6-N1-C2	5.07	122.33	120.30
35	BA	227	G	O4'-C1'-N9	5.07	112.26	108.20
35	BA	582	C	C5'-C4'-O4'	5.07	115.19	109.10
35	BA	733	G	C5-C6-N1	5.07	114.04	111.50
35	BA	861	G	C6-C5-N7	5.07	133.44	130.40
35	BA	1154	G	C1'-O4'-C4'	5.07	113.96	109.90
35	BA	1271	A	P-O3'-C3'	5.07	125.79	119.70
2	AB	407	G	O4'-C4'-C3'	-5.07	98.93	104.00
2	AB	417	C	N3-C2-O2	-5.07	118.35	121.90
2	AB	683	U	C4'-C3'-C2'	-5.07	97.53	102.60
2	AB	1116	G	N1-C6-O6	-5.07	116.86	119.90
2	AB	1628	G	N9-C4-C5	5.07	107.43	105.40
2	AB	1672	A	C3'-C2'-C1'	5.07	105.56	101.50
2	AB	1908	C	C5-C6-N1	5.07	123.53	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2559	C	C4'-C3'-C2'	-5.07	97.53	102.60
2	AB	2766	A	C5'-C4'-C3'	-5.07	107.89	116.00
35	BA	208	U	O4'-C1'-N1	5.07	112.26	108.20
35	BA	220	G	P-O3'-C3'	5.07	125.78	119.70
35	BA	233	C	C5'-C4'-O4'	5.07	115.19	109.10
35	BA	373	A	C5'-C4'-O4'	5.07	115.18	109.10
35	BA	507	C	O5'-C5'-C4'	-5.07	102.07	111.70
35	BA	904	U	N3-C2-O2	-5.07	118.65	122.20
35	BA	968	A	N9-C4-C5	-5.07	103.77	105.80
35	BA	1112	C	C4'-C3'-C2'	-5.07	97.53	102.60
35	BA	1244	G	C5'-C4'-O4'	5.07	115.18	109.10
35	BA	1315	U	N3-C4-O4	-5.07	115.85	119.40
39	BE	3	VAL	CA-CB-CG2	5.07	118.50	110.90
46	BL	37	TYR	CG-CD2-CE2	-5.07	117.24	121.30
2	AB	683	U	C2-N1-C1'	-5.07	111.62	117.70
2	AB	716	A	N3-C4-C5	-5.07	123.25	126.80
2	AB	820	A	C6-C5-N7	5.07	135.85	132.30
2	AB	1198	U	N3-C4-C5	5.07	117.64	114.60
2	AB	1372	U	C6-N1-C2	-5.07	117.96	121.00
2	AB	1462	C	C5-C6-N1	5.07	123.53	121.00
2	AB	1520	U	P-O3'-C3'	5.07	125.78	119.70
35	BA	863	U	P-O3'-C3'	5.07	125.78	119.70
35	BA	994	A	O4'-C1'-N9	5.07	112.26	108.20
35	BA	1231	G	N1-C2-N3	-5.07	120.86	123.90
35	BA	1424	U	C1'-O4'-C4'	5.07	113.95	109.90
36	BB	66	C	C5-C4-N4	-5.07	116.65	120.20
58	BX	33	ARG	NH1-CZ-NH2	5.07	124.98	119.40
2	AB	44	A	C2-N3-C4	-5.07	108.07	110.60
2	AB	180	G	C2-N3-C4	5.07	114.43	111.90
2	AB	209	C	O4'-C1'-N1	5.07	112.25	108.20
2	AB	227	A	C5-C6-N1	5.07	120.23	117.70
2	AB	721	A	C2-N3-C4	5.07	113.13	110.60
2	AB	757	G	N9-C4-C5	5.07	107.43	105.40
2	AB	1211	C	N1-C2-O2	5.07	121.94	118.90
2	AB	1346	G	N3-C2-N2	-5.07	116.35	119.90
2	AB	1397	U	N1-C2-N3	-5.07	111.86	114.90
2	AB	1412	U	C6-N1-C2	-5.07	117.96	121.00
2	AB	2247	A	C5'-C4'-C3'	-5.07	107.89	116.00
2	AB	2633	G	C2'-C3'-O3'	5.07	121.81	113.70
2	AB	2823	A	C1'-O4'-C4'	-5.07	105.85	109.90
2	AB	2879	A	C8-N9-C4	-5.07	103.77	105.80
35	BA	609	A	C5'-C4'-C3'	5.07	124.11	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1040	U	N1-C1'-C2'	-5.07	106.43	112.00
35	BA	1044	A	C5'-C4'-C3'	-5.07	107.89	116.00
35	BA	1060	U	C4-C5-C6	5.07	122.74	119.70
35	BA	1507	A	C2-N3-C4	5.07	113.13	110.60
47	BM	68	ARG	NH1-CZ-NH2	5.07	124.97	119.40
1	AA	58	A	C5-C6-N1	5.07	120.23	117.70
2	AB	121	G	C5-C6-N1	5.07	114.03	111.50
2	AB	219	A	N1-C6-N6	5.07	121.64	118.60
2	AB	231	A	C3'-C2'-C1'	-5.07	97.45	101.50
2	AB	412	A	N3-C4-C5	-5.07	123.25	126.80
2	AB	533	G	C3'-C2'-C1'	5.07	105.55	101.50
2	AB	579	G	O4'-C1'-N9	5.07	112.25	108.20
2	AB	642	U	C5-C6-N1	-5.07	120.17	122.70
2	AB	1840	G	C5-C6-O6	-5.07	125.56	128.60
2	AB	2625	G	O4'-C1'-N9	5.07	112.25	108.20
2	AB	2719	G	N9-C4-C5	5.07	107.43	105.40
19	AS	99	VAL	CA-CB-CG2	5.07	118.50	110.90
35	BA	505	G	OP1-P-OP2	5.07	127.20	119.60
35	BA	576	C	O4'-C1'-N1	5.07	112.25	108.20
47	BM	45	ARG	NH1-CZ-NH2	5.07	124.97	119.40
49	BO	36	VAL	CG1-CB-CG2	-5.07	102.80	110.90
1	AA	96	G	N1-C2-N2	5.06	120.76	116.20
2	AB	595	C	P-O5'-C5'	-5.06	112.80	120.90
2	AB	761	A	O4'-C1'-C2'	5.06	112.16	107.60
2	AB	788	A	C1'-O4'-C4'	-5.06	105.85	109.90
2	AB	1354	A	O4'-C1'-N9	-5.06	104.15	108.20
35	BA	873	A	C1'-O4'-C4'	5.06	113.95	109.90
35	BA	1048	G	N7-C8-N9	5.06	115.63	113.10
40	BF	64	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	AA	35	C	O5'-P-OP1	5.06	116.78	110.70
2	AB	69	C	N3-C4-N4	5.06	121.54	118.00
2	AB	545	U	C2-N3-C4	-5.06	123.96	127.00
2	AB	829	A	C6-C5-N7	-5.06	128.76	132.30
2	AB	844	A	C5'-C4'-O4'	5.06	115.17	109.10
2	AB	1028	A	C2-N3-C4	-5.06	108.07	110.60
2	AB	1188	U	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	1346	G	N1-C6-O6	-5.06	116.86	119.90
2	AB	1735	A	N9-C4-C5	5.06	107.83	105.80
2	AB	1840	G	C8-N9-C1'	5.06	133.58	127.00
2	AB	2212	A	O4'-C1'-N9	5.06	112.25	108.20
2	AB	2273	A	C1'-O4'-C4'	5.06	113.95	109.90
2	AB	2694	G	C5'-C4'-C3'	-5.06	107.90	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2848	G	C2-N3-C4	-5.06	109.37	111.90
8	AH	35	THR	O-C-N	5.06	130.80	122.70
15	AO	89	VAL	CA-CB-CG2	5.06	118.49	110.90
35	BA	180	U	C4-C5-C6	5.06	122.74	119.70
35	BA	731	G	C5-C6-N1	5.06	114.03	111.50
35	BA	773	G	C5-C6-O6	-5.06	125.56	128.60
35	BA	1033	G	N3-C4-C5	-5.06	126.07	128.60
35	BA	1045	C	O4'-C1'-N1	5.06	112.25	108.20
35	BA	1161	C	N1-C2-N3	-5.06	115.66	119.20
35	BA	1253	G	C2'-C3'-O3'	5.06	121.80	113.70
35	BA	1345	U	C4-C5-C6	5.06	122.74	119.70
36	BB	52	A	O5'-P-OP2	-5.06	101.14	105.70
2	AB	198	C	N3-C2-O2	-5.06	118.36	121.90
2	AB	304	U	C4-C5-C6	5.06	122.74	119.70
2	AB	389	G	C8-N9-C4	-5.06	104.38	106.40
2	AB	695	G	P-O3'-C3'	5.06	125.77	119.70
2	AB	1024	G	N3-C4-C5	-5.06	126.07	128.60
2	AB	1086	A	N3-C4-C5	-5.06	123.26	126.80
2	AB	2635	A	N7-C8-N9	-5.06	111.27	113.80
2	AB	2690	U	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	2822	G	C5-C6-N1	5.06	114.03	111.50
35	BA	769	G	P-O3'-C3'	5.06	125.77	119.70
35	BA	1181	G	N3-C4-N9	5.06	129.04	126.00
52	BR	57	ARG	NE-CZ-NH2	-5.06	117.77	120.30
2	AB	48	G	O4'-C1'-N9	5.06	112.25	108.20
2	AB	410	G	C6-N1-C2	-5.06	122.06	125.10
2	AB	1187	G	O5'-C5'-C4'	-5.06	102.08	111.70
2	AB	1362	C	C5'-C4'-O4'	5.06	115.17	109.10
2	AB	1414	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	1546	G	C5-C6-N1	5.06	114.03	111.50
2	AB	1791	A	C3'-C2'-C1'	-5.06	97.45	101.50
2	AB	2000	C	C1'-O4'-C4'	5.06	113.95	109.90
2	AB	2099	U	O4'-C1'-N1	5.06	112.25	108.20
2	AB	2609	U	N1-C1'-C2'	5.06	120.58	114.00
2	AB	2752	C	O4'-C4'-C3'	5.06	110.15	106.10
2	AB	2881	U	C5'-C4'-C3'	-5.06	107.91	116.00
35	BA	346	G	C4'-C3'-C2'	-5.06	97.54	102.60
35	BA	627	G	N3-C4-N9	5.06	129.03	126.00
35	BA	1050	G	N1-C2-N3	-5.06	120.86	123.90
35	BA	1118	U	C4'-C3'-C2'	5.06	107.66	102.60
35	BA	1167	A	C6-C5-N7	-5.06	128.76	132.30
35	BA	1393	U	N1-C2-N3	5.06	117.94	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	68	C	C3'-C2'-C1'	5.06	105.55	101.50
42	BH	91	SER	CB-CA-C	5.06	119.72	110.10
51	BQ	37	ASP	CB-CG-OD1	-5.06	113.75	118.30
1	AA	2	G	N1-C6-O6	5.06	122.93	119.90
1	AA	16	G	C5-C6-O6	-5.06	125.57	128.60
1	AA	52	A	N9-C1'-C2'	-5.06	106.44	112.00
2	AB	53	A	O4'-C4'-C3'	-5.06	98.94	104.00
2	AB	186	G	N1-C2-N2	-5.06	111.65	116.20
2	AB	431	U	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	440	C	C6-N1-C1'	5.06	126.87	120.80
2	AB	592	A	C8-N9-C4	-5.06	103.78	105.80
2	AB	1085	A	N9-C1'-C2'	-5.06	106.44	112.00
2	AB	1494	A	C6-N1-C2	-5.06	115.56	118.60
2	AB	1743	G	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	1786	A	O3'-P-O5'	-5.06	94.39	104.00
2	AB	1961	C	N3-C4-N4	5.06	121.54	118.00
2	AB	2307	G	C8-N9-C4	-5.06	104.38	106.40
2	AB	2544	G	O3'-P-O5'	5.06	113.61	104.00
2	AB	2744	G	C4-C5-N7	-5.06	108.78	110.80
2	AB	2816	G	C5'-C4'-O4'	5.06	115.17	109.10
35	BA	77	A	O4'-C1'-N9	5.06	112.25	108.20
35	BA	1089	G	C5-C6-N1	-5.06	108.97	111.50
35	BA	1096	C	P-O3'-C3'	5.06	125.77	119.70
35	BA	1149	C	N1-C2-O2	-5.06	115.87	118.90
35	BA	1221	G	C8-N9-C4	-5.06	104.38	106.40
49	BO	98	ARG	NE-CZ-NH2	-5.06	117.77	120.30
2	AB	384	A	C8-N9-C4	-5.06	103.78	105.80
2	AB	444	C	N3-C4-N4	5.06	121.54	118.00
2	AB	841	G	C5'-C4'-O4'	5.06	115.17	109.10
2	AB	1067	A	O4'-C1'-N9	-5.06	104.16	108.20
2	AB	1726	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	2867	G	C1'-O4'-C4'	-5.06	105.86	109.90
35	BA	674	G	C5-N7-C8	-5.06	101.77	104.30
2	AB	17	G	C2-N3-C4	5.05	114.43	111.90
2	AB	35	G	N7-C8-N9	5.05	115.63	113.10
2	AB	349	U	N1-C2-N3	5.05	117.93	114.90
2	AB	636	G	C4-C5-N7	-5.05	108.78	110.80
2	AB	683	U	O4'-C1'-N1	5.05	112.24	108.20
2	AB	903	C	N3-C4-N4	5.05	121.54	118.00
2	AB	1279	G	N9-C4-C5	-5.05	103.38	105.40
2	AB	1314	C	N3-C2-O2	-5.05	118.36	121.90
2	AB	1423	G	P-O3'-C3'	5.05	125.77	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1515	A	P-O3'-C3'	5.05	125.77	119.70
2	AB	1538	G	C5-C6-O6	-5.05	125.57	128.60
2	AB	1612	C	C5'-C4'-C3'	-5.05	107.91	116.00
2	AB	1766	G	P-O3'-C3'	5.05	125.77	119.70
2	AB	2020	A	C5-C6-N1	-5.05	115.17	117.70
2	AB	2259	U	O4'-C1'-N1	5.05	112.24	108.20
2	AB	2759	G	N9-C1'-C2'	-5.05	106.44	112.00
35	BA	202	G	O4'-C1'-N9	5.05	112.24	108.20
35	BA	463	U	C4'-C3'-C2'	-5.05	97.55	102.60
35	BA	493	A	C4-C5-C6	5.05	119.53	117.00
35	BA	620	C	C2-N3-C4	-5.05	117.37	119.90
35	BA	1048	G	C5-C6-O6	-5.05	125.57	128.60
35	BA	1327	C	C5'-C4'-C3'	-5.05	107.91	116.00
37	BC	57	C	C5-C4-N4	5.05	123.74	120.20
2	AB	104	A	C8-N9-C4	5.05	107.82	105.80
2	AB	820	A	C5-C6-N6	-5.05	119.66	123.70
2	AB	1241	A	C3'-C2'-C1'	5.05	105.54	101.50
2	AB	1857	G	N3-C2-N2	-5.05	116.36	119.90
2	AB	2442	C	C5'-C4'-C3'	-5.05	107.91	116.00
35	BA	149	A	C4-C5-C6	-5.05	114.47	117.00
35	BA	189	A	N9-C4-C5	-5.05	103.78	105.80
35	BA	321	A	O5'-P-OP2	-5.05	101.15	105.70
35	BA	407	U	P-O3'-C3'	5.05	125.76	119.70
35	BA	645	G	C4'-C3'-C2'	-5.05	97.55	102.60
35	BA	682	G	C5-N7-C8	-5.05	101.77	104.30
35	BA	1166	G	C1'-O4'-C4'	5.05	113.94	109.90
35	BA	1447	A	N1-C6-N6	-5.05	115.57	118.60
39	BE	107	ARG	NH1-CZ-NH2	-5.05	113.84	119.40
1	AA	11	C	C4-C5-C6	-5.05	114.88	117.40
1	AA	105	G	N3-C4-N9	5.05	129.03	126.00
2	AB	42	A	N1-C6-N6	-5.05	115.57	118.60
2	AB	101	A	C2-N3-C4	5.05	113.12	110.60
2	AB	495	G	C8-N9-C1'	5.05	133.57	127.00
2	AB	806	C	P-O3'-C3'	5.05	125.76	119.70
2	AB	1401	G	C8-N9-C4	-5.05	104.38	106.40
2	AB	1438	U	N1-C2-O2	5.05	126.34	122.80
2	AB	1669	A	P-O5'-C5'	5.05	128.98	120.90
2	AB	1745	A	N9-C4-C5	-5.05	103.78	105.80
2	AB	2157	G	C5-C6-O6	5.05	131.63	128.60
2	AB	2365	G	C4-C5-N7	-5.05	108.78	110.80
2	AB	2471	A	P-O3'-C3'	5.05	125.76	119.70
2	AB	2748	A	C6-C5-N7	5.05	135.84	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	AQ	94	ARG	NE-CZ-NH1	5.05	122.83	120.30
35	BA	116	A	N1-C6-N6	-5.05	115.57	118.60
35	BA	201	G	C3'-C2'-C1'	-5.05	97.46	101.50
35	BA	671	G	N1-C2-N2	5.05	120.75	116.20
35	BA	1397	C	C2-N3-C4	5.05	122.43	119.90
58	BX	40	PRO	CA-N-CD	-5.05	104.43	111.50
2	AB	822	G	C5'-C4'-O4'	5.05	115.16	109.10
2	AB	833	A	C5-N7-C8	5.05	106.42	103.90
2	AB	1517	G	N1-C2-N2	5.05	120.74	116.20
2	AB	1683	U	N1-C2-O2	5.05	126.33	122.80
2	AB	1884	G	O4'-C4'-C3'	5.05	110.14	106.10
2	AB	1913	A	C3'-C2'-C1'	-5.05	97.46	101.50
2	AB	2570	G	C5-N7-C8	-5.05	101.78	104.30
35	BA	176	C	P-O5'-C5'	5.05	128.98	120.90
35	BA	609	A	C5-N7-C8	-5.05	101.38	103.90
35	BA	1052	U	N1-C2-O2	5.05	126.33	122.80
35	BA	1223	C	C3'-C2'-C1'	5.05	105.54	101.50
35	BA	1365	G	N3-C4-N9	-5.05	122.97	126.00
46	BL	64	ILE	CA-CB-CG1	5.05	120.59	111.00
51	BQ	85	GLU	O-C-N	5.05	130.78	122.70
54	BT	28	VAL	CA-CB-CG1	5.05	118.47	110.90
1	AA	102	G	C3'-C2'-C1'	5.05	105.54	101.50
2	AB	231	A	N7-C8-N9	5.05	116.32	113.80
2	AB	1816	C	O5'-P-OP2	-5.05	101.16	105.70
7	AG	173	ASP	CA-CB-CG	-5.05	102.29	113.40
35	BA	167	A	C4'-C3'-C2'	-5.05	97.55	102.60
35	BA	330	C	C6-N1-C2	-5.05	118.28	120.30
35	BA	399	G	C4-C5-N7	-5.05	108.78	110.80
35	BA	1009	U	N1-C2-N3	5.05	117.93	114.90
38	BD	46	G	P-O3'-C3'	5.05	125.76	119.70
1	AA	65	U	N3-C4-C5	-5.05	111.57	114.60
2	AB	191	A	C3'-C2'-C1'	-5.05	97.46	101.50
2	AB	496	G	C5-C6-O6	-5.05	125.57	128.60
2	AB	969	G	C5-C6-N1	5.05	114.02	111.50
2	AB	1035	U	C5'-C4'-O4'	5.05	115.16	109.10
2	AB	1169	A	N1-C6-N6	5.05	121.63	118.60
2	AB	1292	G	C4-C5-N7	-5.05	108.78	110.80
2	AB	1573	G	O4'-C1'-C2'	5.05	112.14	107.60
2	AB	1936	A	N9-C1'-C2'	5.05	120.56	114.00
2	AB	2095	A	N1-C2-N3	-5.05	126.78	129.30
2	AB	2435	A	P-O3'-C3'	5.05	125.75	119.70
6	AF	181	ILE	CA-CB-CG1	5.05	120.59	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	AI	39	ALA	CB-CA-C	5.05	117.67	110.10
35	BA	489	C	O4'-C1'-N1	5.05	112.24	108.20
35	BA	733	G	O3'-P-O5'	-5.05	94.41	104.00
35	BA	840	C	C4'-C3'-C2'	-5.05	97.55	102.60
36	BB	62	U	C1'-O4'-C4'	5.05	113.94	109.90
2	AB	24	G	C6-N1-C2	-5.04	122.07	125.10
2	AB	298	G	C4-C5-N7	5.04	112.82	110.80
2	AB	1404	C	C5-C4-N4	5.04	123.73	120.20
2	AB	1770	G	C5'-C4'-C3'	-5.04	107.93	116.00
2	AB	2269	G	N1-C6-O6	5.04	122.93	119.90
2	AB	2346	A	N1-C2-N3	-5.04	126.78	129.30
2	AB	2776	A	C5-C6-N1	-5.04	115.18	117.70
35	BA	124	C	C5'-C4'-O4'	5.04	115.15	109.10
35	BA	337	G	N1-C6-O6	-5.04	116.87	119.90
35	BA	984	C	N3-C2-O2	5.04	125.43	121.90
1	AA	51	G	C5'-C4'-C3'	-5.04	107.93	116.00
2	AB	312	G	C6-C5-N7	-5.04	127.37	130.40
2	AB	454	A	C5-C6-N1	5.04	120.22	117.70
2	AB	1274	A	C5-C6-N1	5.04	120.22	117.70
2	AB	1683	U	C3'-C2'-C1'	5.04	105.53	101.50
2	AB	2151	U	C5-C4-O4	5.04	128.93	125.90
2	AB	2450	A	O4'-C4'-C3'	5.04	110.14	106.10
2	AB	2577	A	N9-C1'-C2'	-5.04	106.45	112.00
2	AB	2616	C	N3-C4-N4	-5.04	114.47	118.00
2	AB	2639	A	C5-C6-N1	5.04	120.22	117.70
35	BA	112	G	C5-C6-O6	-5.04	125.57	128.60
35	BA	150	U	C5'-C4'-O4'	5.04	115.15	109.10
35	BA	339	C	N1-C2-O2	5.04	121.93	118.90
35	BA	465	A	C5-C6-N6	5.04	127.73	123.70
35	BA	491	G	O4'-C1'-N9	5.04	112.23	108.20
35	BA	1229	A	N7-C8-N9	-5.04	111.28	113.80
35	BA	1313	U	C2-N3-C4	-5.04	123.97	127.00
35	BA	1486	G	C2-N3-C4	5.04	114.42	111.90
36	BB	30	G	C8-N9-C4	-5.04	104.38	106.40
37	BC	50	U	C6-N1-C2	5.04	124.03	121.00
2	AB	172	A	N9-C1'-C2'	-5.04	106.45	112.00
2	AB	189	G	C5-C6-O6	5.04	131.62	128.60
2	AB	318	C	N3-C4-N4	5.04	121.53	118.00
2	AB	541	A	C4-C5-N7	5.04	113.22	110.70
2	AB	937	C	C4-C5-C6	5.04	119.92	117.40
2	AB	1221	C	C4-C5-C6	-5.04	114.88	117.40
2	AB	1411	U	C2-N3-C4	-5.04	123.98	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1532	A	C4-C5-N7	-5.04	108.18	110.70
2	AB	1759	A	N1-C2-N3	-5.04	126.78	129.30
2	AB	2013	A	C8-N9-C4	-5.04	103.78	105.80
2	AB	2225	A	C3'-C2'-C1'	5.04	105.53	101.50
2	AB	2344	U	C4'-C3'-C2'	-5.04	97.56	102.60
2	AB	2481	G	N9-C1'-C2'	-5.04	106.45	112.00
2	AB	2546	U	N3-C4-O4	5.04	122.93	119.40
35	BA	241	G	C5-C6-N1	-5.04	108.98	111.50
35	BA	341	C	C4'-C3'-C2'	5.04	107.64	102.60
35	BA	351	G	N7-C8-N9	5.04	115.62	113.10
35	BA	993	G	C8-N9-C4	-5.04	104.38	106.40
35	BA	1156	G	C4-C5-C6	5.04	121.83	118.80
35	BA	1394	A	C8-N9-C4	-5.04	103.78	105.80
2	AB	369	U	C6-N1-C1'	-5.04	114.14	121.20
2	AB	520	G	N1-C2-N2	-5.04	111.66	116.20
2	AB	685	A	C6-N1-C2	-5.04	115.58	118.60
2	AB	759	G	N3-C4-N9	5.04	129.02	126.00
2	AB	1111	A	C5'-C4'-C3'	-5.04	107.94	116.00
2	AB	1178	C	C5-C4-N4	-5.04	116.67	120.20
2	AB	1354	A	C3'-C2'-C1'	-5.04	97.47	101.50
2	AB	1886	U	O4'-C1'-N1	5.04	112.23	108.20
2	AB	2374	C	N1-C2-O2	5.04	121.92	118.90
35	BA	1094	G	C4'-C3'-C2'	-5.04	97.56	102.60
36	BB	3	G	C4-N9-C1'	-5.04	119.95	126.50
38	BD	65	G	C5-N7-C8	-5.04	101.78	104.30
1	AA	106	G	N3-C2-N2	5.04	123.43	119.90
2	AB	63	A	C4-C5-C6	-5.04	114.48	117.00
2	AB	330	A	N9-C1'-C2'	5.04	120.55	114.00
2	AB	558	U	P-O3'-C3'	5.04	125.75	119.70
2	AB	610	C	C4-C5-C6	-5.04	114.88	117.40
2	AB	653	U	C5-C6-N1	-5.04	120.18	122.70
2	AB	947	A	P-O3'-C3'	5.04	125.75	119.70
2	AB	1321	A	O4'-C1'-N9	5.04	112.23	108.20
2	AB	1428	C	P-O5'-C5'	5.04	128.96	120.90
2	AB	1716	U	C5'-C4'-O4'	5.04	115.15	109.10
2	AB	2168	G	N3-C2-N2	5.04	123.43	119.90
35	BA	115	G	N1-C6-O6	-5.04	116.88	119.90
35	BA	763	G	C4-C5-N7	5.04	112.81	110.80
35	BA	1029	U	N1-C2-N3	5.04	117.92	114.90
35	BA	1356	G	C8-N9-C1'	5.04	133.55	127.00
35	BA	1503	A	C6-C5-N7	5.04	135.83	132.30
1	AA	72	G	N3-C4-C5	-5.04	126.08	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	124	G	N9-C4-C5	5.04	107.42	105.40
2	AB	1228	G	N1-C2-N2	5.04	120.73	116.20
2	AB	1458	U	C4-C5-C6	5.04	122.72	119.70
2	AB	1560	G	C2-N3-C4	5.04	114.42	111.90
2	AB	1740	G	C1'-O4'-C4'	5.04	113.93	109.90
2	AB	2875	C	C6-N1-C2	5.04	122.31	120.30
35	BA	200	G	C4-C5-C6	5.04	121.82	118.80
35	BA	256	U	N1-C2-N3	5.04	117.92	114.90
35	BA	422	C	C3'-C2'-C1'	-5.04	97.47	101.50
35	BA	425	G	N3-C2-N2	-5.04	116.37	119.90
35	BA	575	G	N3-C4-C5	-5.04	126.08	128.60
35	BA	1511	G	N9-C4-C5	5.04	107.42	105.40
44	BJ	26	VAL	CA-CB-CG2	5.04	118.45	110.90
1	AA	44	G	N9-C1'-C2'	5.04	120.55	114.00
1	AA	93	C	O4'-C1'-N1	5.04	112.23	108.20
2	AB	636	G	P-O3'-C3'	5.04	125.74	119.70
2	AB	647	G	C5'-C4'-O4'	5.04	115.14	109.10
2	AB	836	G	C8-N9-C1'	5.04	133.55	127.00
2	AB	995	C	N1-C2-N3	-5.04	115.68	119.20
2	AB	1050	A	N3-C4-N9	5.04	131.43	127.40
2	AB	1062	G	C3'-C2'-C1'	-5.04	97.47	101.50
2	AB	1160	G	C3'-C2'-C1'	5.04	105.53	101.50
2	AB	1468	U	C5'-C4'-C3'	-5.04	107.94	116.00
2	AB	1668	A	C4-C5-C6	5.04	119.52	117.00
2	AB	1755	A	OP1-P-OP2	-5.04	112.05	119.60
2	AB	1836	C	O5'-C5'-C4'	-5.04	102.13	111.70
2	AB	1873	G	C5-C6-O6	-5.04	125.58	128.60
2	AB	2131	U	N3-C4-O4	5.04	122.92	119.40
2	AB	2623	G	C4'-C3'-C2'	-5.04	97.56	102.60
12	AL	27	ARG	CD-NE-CZ	5.04	130.65	123.60
35	BA	225	C	C5-C6-N1	5.04	123.52	121.00
35	BA	405	U	C2-N1-C1'	5.04	123.74	117.70
35	BA	553	A	C8-N9-C4	-5.04	103.79	105.80
35	BA	584	G	C3'-C2'-C1'	5.04	105.53	101.50
35	BA	840	C	C5-C6-N1	5.04	123.52	121.00
35	BA	969	A	N9-C4-C5	5.04	107.81	105.80
36	BB	39	A	C6-C5-N7	-5.04	128.78	132.30
38	BD	72	C	C6-N1-C1'	5.04	126.84	120.80
1	AA	66	A	O4'-C1'-N9	-5.03	104.17	108.20
2	AB	120	U	C5-C4-O4	-5.03	122.88	125.90
2	AB	293	U	N1-C1'-C2'	5.03	120.54	114.00
2	AB	452	G	N9-C4-C5	5.03	107.41	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	481	G	N3-C4-N9	-5.03	122.98	126.00
2	AB	907	G	N1-C6-O6	-5.03	116.88	119.90
2	AB	1241	A	C4-C5-N7	5.03	113.22	110.70
2	AB	1323	C	N1-C2-O2	5.03	121.92	118.90
2	AB	1381	G	N3-C4-N9	-5.03	122.98	126.00
2	AB	1875	G	N3-C2-N2	-5.03	116.38	119.90
2	AB	1989	G	N9-C1'-C2'	-5.03	106.46	112.00
2	AB	2000	C	OP1-P-O3'	5.03	116.28	105.20
2	AB	2022	U	N3-C2-O2	-5.03	118.68	122.20
2	AB	2228	G	O4'-C1'-N9	5.03	112.23	108.20
2	AB	2338	C	P-O3'-C3'	5.03	125.74	119.70
2	AB	2523	G	C1'-O4'-C4'	-5.03	105.87	109.90
2	AB	2600	A	N1-C2-N3	5.03	131.82	129.30
2	AB	2662	A	N7-C8-N9	5.03	116.32	113.80
2	AB	2736	A	N9-C1'-C2'	-5.03	106.46	112.00
2	AB	2862	G	N7-C8-N9	-5.03	110.58	113.10
35	BA	415	A	C5'-C4'-O4'	5.03	115.14	109.10
35	BA	581	G	N7-C8-N9	5.03	115.62	113.10
35	BA	673	A	N7-C8-N9	-5.03	111.28	113.80
35	BA	1010	U	C5-C6-N1	-5.03	120.18	122.70
35	BA	1225	A	C6-N1-C2	-5.03	115.58	118.60
35	BA	1368	A	C5-C6-N1	5.03	120.22	117.70
35	BA	1377	A	C5'-C4'-C3'	-5.03	107.95	116.00
36	BB	36	A	N9-C4-C5	-5.03	103.79	105.80
38	BD	76	C	C3'-C2'-C1'	5.03	105.53	101.50
2	AB	376	G	N3-C2-N2	-5.03	116.38	119.90
35	BA	678	U	N3-C2-O2	-5.03	118.68	122.20
35	BA	795	C	C5'-C4'-O4'	-5.03	103.06	109.10
35	BA	1521	C	C6-N1-C2	-5.03	118.29	120.30
52	BR	16	ARG	NE-CZ-NH1	5.03	122.82	120.30
1	AA	15	A	N9-C4-C5	5.03	107.81	105.80
2	AB	958	U	N3-C4-O4	5.03	122.92	119.40
2	AB	1273	U	C1'-O4'-C4'	-5.03	105.88	109.90
2	AB	1398	C	OP2-P-O3'	5.03	116.27	105.20
2	AB	2533	U	P-O3'-C3'	5.03	125.74	119.70
35	BA	149	A	C4'-C3'-O3'	5.03	123.06	113.00
35	BA	252	U	C1'-O4'-C4'	-5.03	105.88	109.90
35	BA	495	A	C3'-C2'-C1'	-5.03	97.47	101.50
35	BA	579	A	N1-C6-N6	5.03	121.62	118.60
35	BA	743	A	C3'-C2'-C1'	5.03	105.52	101.50
35	BA	1042	A	N1-C2-N3	-5.03	126.78	129.30
35	BA	1255	G	N3-C4-N9	5.03	129.02	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1441	A	N3-C4-N9	-5.03	123.38	127.40
35	BA	1472	U	C5-C6-N1	-5.03	120.19	122.70
35	BA	1502	A	O5'-P-OP1	5.03	116.74	110.70
47	BM	55	PRO	N-CD-CG	5.03	110.75	103.20
2	AB	108	G	N1-C2-N2	5.03	120.73	116.20
2	AB	342	A	C4-C5-C6	5.03	119.51	117.00
2	AB	838	C	C1'-O4'-C4'	-5.03	105.88	109.90
2	AB	1371	G	C5'-C4'-O4'	5.03	115.14	109.10
2	AB	1688	U	C5'-C4'-O4'	5.03	115.13	109.10
2	AB	2143	C	C5'-C4'-O4'	5.03	115.13	109.10
2	AB	2371	G	N1-C6-O6	-5.03	116.88	119.90
35	BA	32	A	N3-C4-C5	-5.03	123.28	126.80
35	BA	301	G	N1-C2-N3	5.03	126.92	123.90
35	BA	484	G	N1-C2-N3	-5.03	120.88	123.90
35	BA	724	G	N3-C4-N9	5.03	129.02	126.00
35	BA	1037	C	C6-N1-C2	5.03	122.31	120.30
1	AA	87	U	C2-N3-C4	-5.03	123.98	127.00
2	AB	83	A	OP1-P-O3'	5.03	116.26	105.20
2	AB	105	C	C6-N1-C1'	5.03	126.83	120.80
2	AB	368	A	C4-C5-C6	5.03	119.51	117.00
2	AB	374	A	C4-C5-N7	5.03	113.21	110.70
2	AB	466	A	C8-N9-C4	-5.03	103.79	105.80
2	AB	577	G	N9-C4-C5	-5.03	103.39	105.40
2	AB	1035	U	N3-C4-C5	-5.03	111.58	114.60
2	AB	2845	U	C1'-O4'-C4'	-5.03	105.88	109.90
30	A3	25	THR	O-C-N	5.03	130.74	122.70
35	BA	80	A	C2-N3-C4	5.03	113.11	110.60
35	BA	105	G	C5-C6-N1	-5.03	108.99	111.50
35	BA	130	A	C5'-C4'-O4'	5.03	115.13	109.10
35	BA	148	G	C5'-C4'-C3'	-5.03	107.96	116.00
35	BA	242	G	N7-C8-N9	5.03	115.61	113.10
35	BA	266	G	O3'-P-O5'	5.03	113.55	104.00
35	BA	278	G	C6-N1-C2	-5.03	122.08	125.10
35	BA	470	C	C3'-C2'-C1'	5.03	105.52	101.50
35	BA	471	U	C4'-C3'-C2'	-5.03	97.57	102.60
35	BA	528	C	N1-C2-O2	5.03	121.92	118.90
35	BA	570	G	P-O3'-C3'	5.03	125.73	119.70
35	BA	779	C	C5-C4-N4	-5.03	116.68	120.20
35	BA	1116	U	C6-N1-C2	-5.03	117.98	121.00
35	BA	1290	G	P-O3'-C3'	5.03	125.73	119.70
35	BA	1313	U	C4-C5-C6	-5.03	116.68	119.70
35	BA	1438	G	N7-C8-N9	5.03	115.61	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	33	G	C5-C6-O6	-5.03	125.58	128.60
2	AB	152	A	O4'-C1'-N9	5.03	112.22	108.20
2	AB	303	G	C1'-O4'-C4'	-5.03	105.88	109.90
2	AB	436	C	C6-N1-C2	-5.03	118.29	120.30
2	AB	476	G	N9-C1'-C2'	-5.03	106.47	112.00
2	AB	728	G	O4'-C1'-N9	5.03	112.22	108.20
2	AB	1224	U	C5-C6-N1	-5.03	120.19	122.70
2	AB	1700	A	C5-N7-C8	5.03	106.41	103.90
2	AB	1761	C	N3-C4-C5	-5.03	119.89	121.90
2	AB	2096	C	O4'-C4'-C3'	-5.03	98.97	104.00
2	AB	2351	G	N1-C6-O6	-5.03	116.89	119.90
2	AB	2590	A	P-O5'-C5'	5.03	128.94	120.90
2	AB	2654	A	N7-C8-N9	5.03	116.31	113.80
2	AB	2783	U	C2-N3-C4	-5.03	123.98	127.00
2	AB	2869	G	C4'-C3'-C2'	-5.03	97.57	102.60
9	AI	25	TYR	CD1-CG-CD2	5.03	123.43	117.90
14	AN	59	ARG	CD-NE-CZ	5.03	130.63	123.60
23	AW	54	PRO	N-CD-CG	5.03	110.74	103.20
35	BA	274	A	N9-C4-C5	-5.03	103.79	105.80
35	BA	288	A	C8-N9-C4	-5.03	103.79	105.80
35	BA	301	G	C2-N3-C4	-5.03	109.39	111.90
35	BA	356	A	C5-C6-N1	5.03	120.21	117.70
35	BA	376	G	C5'-C4'-C3'	-5.03	107.96	116.00
35	BA	604	G	N7-C8-N9	-5.03	110.59	113.10
35	BA	673	A	O5'-P-OP1	-5.03	101.18	105.70
35	BA	1100	C	N1-C2-O2	5.03	121.92	118.90
35	BA	1173	U	C5-C4-O4	-5.03	122.88	125.90
35	BA	1308	U	N3-C4-C5	-5.03	111.58	114.60
1	AA	13	G	C5'-C4'-C3'	-5.02	107.96	116.00
2	AB	125	A	P-O3'-C3'	5.02	125.73	119.70
2	AB	511	U	O4'-C1'-N1	5.02	112.22	108.20
2	AB	1269	A	N9-C4-C5	5.02	107.81	105.80
2	AB	1871	A	C2-N3-C4	5.02	113.11	110.60
2	AB	2556	C	C1'-O4'-C4'	-5.02	105.88	109.90
35	BA	908	A	C6-N1-C2	5.02	121.61	118.60
1	AA	107	G	C5-C6-O6	-5.02	125.59	128.60
2	AB	78	U	C4'-C3'-C2'	-5.02	97.58	102.60
2	AB	326	G	N1-C6-O6	-5.02	116.89	119.90
2	AB	485	C	C5'-C4'-O4'	5.02	115.13	109.10
2	AB	577	G	C6-C5-N7	-5.02	127.39	130.40
2	AB	669	G	C3'-C2'-C1'	5.02	105.52	101.50
2	AB	765	C	N1-C1'-C2'	-5.02	106.48	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	768	G	N3-C4-N9	-5.02	122.99	126.00
2	AB	771	G	N3-C4-N9	5.02	129.01	126.00
2	AB	1095	A	N1-C2-N3	-5.02	126.79	129.30
2	AB	1291	C	N3-C4-C5	-5.02	119.89	121.90
2	AB	1664	A	N3-C4-C5	-5.02	123.28	126.80
2	AB	1944	U	O4'-C1'-N1	5.02	112.22	108.20
2	AB	2046	G	C8-N9-C4	-5.02	104.39	106.40
2	AB	2140	G	O4'-C4'-C3'	5.02	110.12	106.10
2	AB	2241	A	N3-C4-C5	5.02	130.32	126.80
2	AB	2879	A	O4'-C1'-N9	5.02	112.22	108.20
35	BA	94	G	C8-N9-C1'	5.02	133.53	127.00
35	BA	139	A	N9-C4-C5	-5.02	103.79	105.80
35	BA	347	G	N9-C4-C5	5.02	107.41	105.40
35	BA	499	A	C4-C5-C6	-5.02	114.49	117.00
35	BA	876	C	O4'-C4'-C3'	-5.02	98.98	104.00
35	BA	922	G	P-O3'-C3'	5.02	125.73	119.70
35	BA	952	U	C1'-O4'-C4'	5.02	113.92	109.90
35	BA	1004	A	N9-C1'-C2'	-5.02	106.48	112.00
35	BA	1013	G	C4'-C3'-C2'	-5.02	97.58	102.60
35	BA	1019	A	C5'-C4'-C3'	-5.02	107.96	116.00
35	BA	1174	G	C5-C6-O6	5.02	131.61	128.60
35	BA	1286	U	N1-C2-N3	5.02	117.91	114.90
35	BA	1529	G	C5'-C4'-C3'	-5.02	107.96	116.00
35	BA	1535	C	N3-C4-N4	5.02	121.52	118.00
36	BB	15	A	C5-N7-C8	5.02	106.41	103.90
50	BP	10	ASP	CB-CG-OD2	5.02	122.82	118.30
2	AB	619	G	O4'-C1'-N9	5.02	112.22	108.20
2	AB	878	A	P-O5'-C5'	5.02	128.93	120.90
2	AB	1144	A	P-O3'-C3'	5.02	125.72	119.70
2	AB	1330	C	N3-C4-C5	-5.02	119.89	121.90
2	AB	1633	G	N7-C8-N9	5.02	115.61	113.10
35	BA	17	U	C5'-C4'-C3'	-5.02	107.97	116.00
35	BA	65	A	N9-C1'-C2'	-5.02	106.48	112.00
35	BA	962	C	N3-C4-C5	-5.02	119.89	121.90
35	BA	987	G	P-O3'-C3'	5.02	125.73	119.70
35	BA	1024	G	C1'-O4'-C4'	-5.02	105.88	109.90
2	AB	75	G	P-O5'-C5'	5.02	128.93	120.90
2	AB	445	C	C2-N3-C4	5.02	122.41	119.90
2	AB	492	A	N9-C4-C5	-5.02	103.79	105.80
2	AB	1852	U	N1-C2-O2	5.02	126.31	122.80
2	AB	2730	C	N3-C2-O2	-5.02	118.39	121.90
2	AB	2860	A	C2-N3-C4	5.02	113.11	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	95	C	C6-N1-C1'	-5.02	114.78	120.80
35	BA	701	U	C6-N1-C2	5.02	124.01	121.00
35	BA	818	G	C4-C5-N7	-5.02	108.79	110.80
35	BA	1295	U	C5-C6-N1	5.02	125.21	122.70
35	BA	1301	U	N3-C2-O2	5.02	125.71	122.20
37	BC	58	C	C4-C5-C6	5.02	119.91	117.40
40	BF	75	VAL	CA-CB-CG1	5.02	118.43	110.90
40	BF	117	ASP	CB-CG-OD1	-5.02	113.78	118.30
49	BO	11	ARG	NE-CZ-NH1	-5.02	117.79	120.30
55	BU	2	ARG	CD-NE-CZ	5.02	130.63	123.60
2	AB	194	G	O4'-C1'-N9	5.02	112.21	108.20
2	AB	244	A	N9-C4-C5	5.02	107.81	105.80
2	AB	526	A	C6-N1-C2	5.02	121.61	118.60
2	AB	610	C	P-O5'-C5'	5.02	128.93	120.90
2	AB	795	C	C3'-C2'-C1'	5.02	105.51	101.50
2	AB	1166	G	C4-N9-C1'	-5.02	119.98	126.50
2	AB	1300	G	C5'-C4'-O4'	5.02	115.12	109.10
2	AB	1380	G	P-O3'-C3'	-5.02	113.68	119.70
2	AB	1681	G	C4-N9-C1'	-5.02	119.98	126.50
2	AB	2113	U	C1'-O4'-C4'	-5.02	105.89	109.90
2	AB	2689	U	C5'-C4'-O4'	5.02	115.12	109.10
2	AB	2708	G	C5-C6-O6	-5.02	125.59	128.60
2	AB	2838	G	O4'-C1'-N9	5.02	112.21	108.20
7	AG	135	ILE	C-N-CA	5.02	134.24	121.70
25	AY	63	ASP	CB-CG-OD1	-5.02	113.78	118.30
35	BA	106	C	N1-C2-N3	5.02	122.71	119.20
35	BA	203	G	P-O3'-C3'	5.02	125.72	119.70
35	BA	377	G	C3'-C2'-C1'	-5.02	97.48	101.50
35	BA	425	G	C6-C5-N7	-5.02	127.39	130.40
35	BA	581	G	C6-C5-N7	-5.02	127.39	130.40
35	BA	1127	G	N3-C4-N9	5.02	129.01	126.00
2	AB	297	G	C4-C5-C6	5.02	121.81	118.80
2	AB	603	A	N9-C4-C5	5.02	107.81	105.80
2	AB	1307	A	O4'-C4'-C3'	-5.02	98.98	104.00
2	AB	1571	A	C5-C6-N6	-5.02	119.69	123.70
2	AB	1956	U	C1'-O4'-C4'	-5.02	105.89	109.90
2	AB	2274	A	N3-C4-C5	-5.02	123.29	126.80
2	AB	2693	G	C6-C5-N7	-5.02	127.39	130.40
13	AM	64	ARG	CD-NE-CZ	5.02	130.62	123.60
35	BA	1023	U	N3-C4-O4	5.02	122.91	119.40
35	BA	1037	C	C3'-C2'-C1'	-5.02	97.49	101.50
35	BA	1040	U	C2-N3-C4	-5.02	123.99	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	118	C	P-O3'-C3'	5.01	125.72	119.70
2	AB	423	A	C4-C5-C6	-5.01	114.49	117.00
2	AB	529	A	C5'-C4'-O4'	5.01	115.12	109.10
2	AB	552	U	N3-C4-O4	5.01	122.91	119.40
2	AB	983	A	C4'-C3'-C2'	-5.01	97.58	102.60
2	AB	1248	G	O4'-C4'-C3'	5.01	110.11	106.10
2	AB	1484	U	C5-C6-N1	-5.01	120.19	122.70
2	AB	1578	U	C4-C5-C6	5.01	122.71	119.70
2	AB	1724	G	C5-C6-N1	5.01	114.01	111.50
2	AB	1968	G	N3-C4-C5	-5.01	126.09	128.60
2	AB	1987	A	C4-C5-N7	-5.01	108.19	110.70
2	AB	2218	G	C5-N7-C8	-5.01	101.79	104.30
2	AB	2525	G	N3-C4-C5	-5.01	126.09	128.60
2	AB	2630	G	C5-C6-N1	5.01	114.01	111.50
2	AB	2667	C	O4'-C1'-N1	5.01	112.21	108.20
31	A4	4	ILE	CA-CB-CG1	5.01	120.53	111.00
35	BA	76	G	N7-C8-N9	-5.01	110.59	113.10
35	BA	442	G	C1'-O4'-C4'	5.01	113.91	109.90
35	BA	567	G	C6-C5-N7	-5.01	127.39	130.40
35	BA	596	A	N9-C4-C5	5.01	107.81	105.80
35	BA	617	G	C6-N1-C2	-5.01	122.09	125.10
35	BA	794	A	C4-C5-N7	-5.01	108.19	110.70
35	BA	973	G	N3-C4-N9	5.01	129.01	126.00
35	BA	1148	U	N3-C4-O4	5.01	122.91	119.40
35	BA	1443	C	N1-C1'-C2'	-5.01	106.48	112.00
36	BB	21	A	C5-N7-C8	-5.01	101.39	103.90
38	BD	18	U	C6-N1-C2	-5.01	117.99	121.00
2	AB	617	G	C5'-C4'-O4'	5.01	115.12	109.10
2	AB	792	A	C8-N9-C1'	5.01	136.72	127.70
2	AB	898	C	C5-C6-N1	-5.01	118.49	121.00
2	AB	1060	U	C4'-C3'-C2'	-5.01	97.59	102.60
2	AB	1527	G	N9-C4-C5	-5.01	103.39	105.40
2	AB	1737	G	N1-C2-N3	5.01	126.91	123.90
2	AB	2274	A	OP2-P-O3'	5.01	116.23	105.20
2	AB	2733	A	O4'-C1'-N9	5.01	112.21	108.20
4	AD	29	PHE	CZ-CE2-CD2	5.01	126.12	120.10
7	AG	156	THR	CA-CB-CG2	5.01	119.42	112.40
35	BA	531	U	C5-C6-N1	-5.01	120.19	122.70
35	BA	881	G	C4-C5-N7	-5.01	108.80	110.80
35	BA	1365	G	C5-N7-C8	5.01	106.81	104.30
37	BC	46	C	N3-C4-C5	5.01	123.91	121.90
38	BD	69	C	N1-C2-O2	-5.01	115.89	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	BF	195	ILE	CA-CB-CG1	5.01	120.52	111.00
53	BS	77	GLU	CA-CB-CG	-5.01	102.37	113.40
1	AA	56	G	C5'-C4'-O4'	5.01	115.11	109.10
2	AB	108	G	C5-N7-C8	-5.01	101.79	104.30
2	AB	178	G	N1-C2-N3	-5.01	120.89	123.90
2	AB	657	U	N1-C2-O2	5.01	126.31	122.80
2	AB	1055	G	C5-N7-C8	-5.01	101.79	104.30
2	AB	1211	C	O4'-C1'-C2'	-5.01	100.79	105.80
2	AB	1478	G	C5-C6-N1	5.01	114.00	111.50
2	AB	1601	G	C6-N1-C2	-5.01	122.09	125.10
2	AB	1632	A	C5-N7-C8	5.01	106.41	103.90
2	AB	1793	C	OP2-P-O3'	5.01	116.23	105.20
2	AB	1863	G	C8-N9-C4	-5.01	104.39	106.40
2	AB	2015	A	C4-N9-C1'	-5.01	117.28	126.30
2	AB	2361	G	C5-C6-O6	-5.01	125.59	128.60
2	AB	2361	G	C4'-C3'-C2'	-5.01	97.59	102.60
2	AB	2510	C	C5'-C4'-C3'	-5.01	107.98	116.00
3	AC	207	VAL	CA-CB-CG1	5.01	118.42	110.90
9	AI	97	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
15	AO	70	ASP	CB-CG-OD1	5.01	122.81	118.30
27	A0	63	ALA	N-CA-CB	5.01	117.12	110.10
35	BA	8	A	N1-C6-N6	-5.01	115.59	118.60
35	BA	326	G	P-O3'-C3'	5.01	125.72	119.70
35	BA	672	U	N1-C2-N3	5.01	117.91	114.90
35	BA	1092	A	N7-C8-N9	-5.01	111.30	113.80
35	BA	1206	G	O4'-C1'-C2'	5.01	112.11	107.60
2	AB	30	G	N1-C2-N3	-5.01	120.89	123.90
2	AB	372	G	N3-C4-N9	-5.01	123.00	126.00
2	AB	1068	G	C5-C6-O6	-5.01	125.59	128.60
2	AB	1178	C	N1-C2-N3	-5.01	115.69	119.20
2	AB	1245	G	C4-C5-N7	-5.01	108.80	110.80
2	AB	1759	A	C2-N3-C4	5.01	113.11	110.60
2	AB	2057	G	N9-C4-C5	5.01	107.40	105.40
2	AB	2510	C	C5-C6-N1	5.01	123.50	121.00
2	AB	2841	C	N1-C2-N3	-5.01	115.69	119.20
12	AL	69	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
35	BA	123	U	C5'-C4'-O4'	5.01	115.11	109.10
35	BA	138	G	N7-C8-N9	-5.01	110.59	113.10
35	BA	474	G	N1-C6-O6	5.01	122.91	119.90
35	BA	479	U	N3-C2-O2	-5.01	118.69	122.20
35	BA	643	C	C2-N3-C4	5.01	122.41	119.90
35	BA	767	A	N1-C6-N6	-5.01	115.59	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	830	G	C5-C6-N1	5.01	114.00	111.50
35	BA	1087	G	N3-C2-N2	-5.01	116.39	119.90
36	BB	21	A	C2-N3-C4	5.01	113.11	110.60
40	BF	115	VAL	CG1-CB-CG2	-5.01	102.89	110.90
42	BH	40	ASP	CB-CG-OD2	-5.01	113.79	118.30
2	AB	478	A	N1-C2-N3	-5.01	126.80	129.30
2	AB	1477	A	P-O5'-C5'	5.01	128.91	120.90
2	AB	1944	U	N3-C4-O4	5.01	122.91	119.40
2	AB	2080	A	C5'-C4'-C3'	-5.01	107.99	116.00
2	AB	2111	U	C5'-C4'-C3'	-5.01	107.99	116.00
2	AB	2342	C	N3-C4-N4	5.01	121.51	118.00
35	BA	251	G	N3-C2-N2	5.01	123.41	119.90
35	BA	1389	C	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	20	G	O4'-C1'-N9	5.01	112.20	108.20
2	AB	355	U	C2-N3-C4	5.01	130.00	127.00
2	AB	430	A	C4-C5-C6	-5.01	114.50	117.00
2	AB	510	C	N3-C2-O2	-5.01	118.40	121.90
2	AB	629	G	O4'-C4'-C3'	5.01	110.11	106.10
2	AB	638	G	C5-C6-N1	5.01	114.00	111.50
2	AB	762	U	C5-C6-N1	5.01	125.20	122.70
2	AB	924	G	N1-C6-O6	5.01	122.90	119.90
2	AB	954	G	N1-C2-N2	5.01	120.71	116.20
2	AB	1359	A	C6-C5-N7	-5.01	128.80	132.30
2	AB	1460	U	C6-N1-C2	-5.01	118.00	121.00
2	AB	1889	A	O3'-P-O5'	5.01	113.51	104.00
2	AB	2065	C	C6-N1-C2	5.01	122.30	120.30
2	AB	2152	G	C5'-C4'-O4'	5.01	115.11	109.10
2	AB	2248	C	N1-C2-N3	-5.01	115.70	119.20
2	AB	2474	U	N1-C2-O2	5.01	126.31	122.80
2	AB	2611	C	C2-N3-C4	5.01	122.40	119.90
2	AB	2631	G	N3-C4-N9	5.01	129.00	126.00
2	AB	2668	G	N1-C2-N3	-5.01	120.90	123.90
2	AB	2761	A	C6-N1-C2	5.01	121.60	118.60
2	AB	2873	A	C4'-C3'-C2'	-5.01	97.59	102.60
35	BA	267	C	C5'-C4'-O4'	5.01	115.11	109.10
35	BA	376	G	C1'-O4'-C4'	-5.01	105.89	109.90
35	BA	436	C	N1-C2-O2	-5.01	115.90	118.90
35	BA	499	A	C6-C5-N7	5.01	135.80	132.30
35	BA	769	G	N1-C2-N3	-5.01	120.90	123.90
35	BA	1132	C	P-O3'-C3'	5.01	125.71	119.70
35	BA	1251	A	C8-N9-C4	-5.01	103.80	105.80
35	BA	1420	U	N3-C4-C5	-5.01	111.60	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	BM	91	ASP	CB-CG-OD2	5.01	122.81	118.30
2	AB	1125	G	C1'-O4'-C4'	5.00	113.90	109.90
2	AB	1196	C	P-O3'-C3'	5.00	125.71	119.70
2	AB	1226	A	N3-C4-C5	-5.00	123.30	126.80
2	AB	1535	A	C4-C5-C6	-5.00	114.50	117.00
2	AB	1607	C	C4'-C3'-C2'	-5.00	97.59	102.60
2	AB	2176	A	N7-C8-N9	5.00	116.30	113.80
2	AB	2659	G	N9-C4-C5	-5.00	103.40	105.40
3	AC	165	ASN	O-C-N	-5.00	114.69	122.70
6	AF	61	ARG	CA-CB-CG	5.00	124.41	113.40
7	AG	142	TYR	CA-CB-CG	5.00	122.91	113.40
14	AN	89	VAL	CA-CB-CG1	5.00	118.41	110.90
35	BA	356	A	N9-C1'-C2'	-5.00	106.49	112.00
35	BA	668	G	C5'-C4'-O4'	5.00	115.11	109.10
2	AB	185	G	C6-N1-C2	-5.00	122.10	125.10
2	AB	494	G	C6-N1-C2	-5.00	122.10	125.10
2	AB	777	G	N3-C2-N2	-5.00	116.40	119.90
2	AB	980	A	N3-C4-C5	-5.00	123.30	126.80
2	AB	1016	G	C8-N9-C4	-5.00	104.40	106.40
2	AB	1098	A	N1-C2-N3	-5.00	126.80	129.30
2	AB	1384	A	N3-C4-C5	-5.00	123.30	126.80
2	AB	1633	G	O5'-P-OP2	-5.00	101.20	105.70
2	AB	1869	G	C3'-C2'-C1'	-5.00	97.50	101.50
2	AB	2334	U	O4'-C4'-C3'	-5.00	99.00	104.00
2	AB	2465	C	P-O3'-C3'	5.00	125.70	119.70
2	AB	2614	A	C6-C5-N7	-5.00	128.80	132.30
2	AB	2759	G	C5-C6-N1	5.00	114.00	111.50
2	AB	2838	G	C6-N1-C2	-5.00	122.10	125.10
2	AB	2849	U	O4'-C1'-N1	5.00	112.20	108.20
35	BA	244	U	N3-C4-C5	5.00	117.60	114.60
35	BA	593	U	C5-C4-O4	-5.00	122.90	125.90
35	BA	1136	C	C2-N1-C1'	5.00	124.30	118.80
36	BB	41	C	P-O3'-C3'	5.00	125.70	119.70
57	BW	1	ALA	CB-CA-C	5.00	117.61	110.10
1	AA	88	C	C5'-C4'-C3'	-5.00	108.00	116.00
2	AB	66	C	N3-C2-O2	-5.00	118.40	121.90
2	AB	304	U	O4'-C1'-C2'	5.00	112.10	107.60
2	AB	452	G	N3-C4-C5	-5.00	126.10	128.60
2	AB	1120	G	O4'-C1'-N9	5.00	112.20	108.20
2	AB	1541	C	N3-C4-N4	5.00	121.50	118.00
2	AB	1651	G	P-O3'-C3'	5.00	125.70	119.70
2	AB	1936	A	C5'-C4'-O4'	5.00	115.10	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2160	C	C3'-C2'-C1'	5.00	105.50	101.50
2	AB	2587	A	C3'-C2'-C1'	5.00	105.50	101.50
2	AB	2888	C	N1-C2-N3	-5.00	115.70	119.20
11	AK	14	ALA	N-CA-CB	-5.00	103.10	110.10
35	BA	73	C	C6-N1-C2	5.00	122.30	120.30
35	BA	490	C	C5'-C4'-C3'	-5.00	108.00	116.00
35	BA	658	C	C6-N1-C1'	5.00	126.80	120.80
35	BA	920	U	N3-C2-O2	-5.00	118.70	122.20
35	BA	1011	C	N3-C2-O2	5.00	125.40	121.90
35	BA	1085	U	N3-C4-O4	5.00	122.90	119.40
35	BA	1101	A	C4-C5-N7	5.00	113.20	110.70
35	BA	1289	A	N1-C2-N3	-5.00	126.80	129.30
35	BA	1298	U	O5'-C5'-C4'	5.00	121.20	111.70
35	BA	1505	G	C2-N3-C4	-5.00	109.40	111.90
51	BQ	39	ASP	CB-CA-C	5.00	120.40	110.40

There are no chirality outliers.

All (2936) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
27	A0	10	SER	Mainchain
27	A0	46	VAL	Mainchain
27	A0	47	ARG	Sidechain
27	A0	48	ARG	Sidechain
28	A1	30	ARG	Peptide
29	A2	30	HIS	Peptide
29	A2	64	PHE	Peptide
29	A2	9	TYR	Sidechain
30	A3	37	HIS	Peptide
30	A3	47	TYR	Sidechain
30	A3	9	ARG	Sidechain
31	A4	43	ARG	Sidechain
31	A4	48	TYR	Sidechain
33	A6	29	ARG	Sidechain
33	A6	41	ARG	Sidechain
33	A6	42	HIS	Sidechain
33	A6	6	VAL	Peptide
33	A6	63	TYR	Sidechain
1	AA	103	U	Sidechain
1	AA	106	G	Sidechain
1	AA	107	G	Sidechain
1	AA	110	C	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	111	U	Sidechain
1	AA	112	G	Sidechain
1	AA	115	A	Sidechain
1	AA	116	G	Sidechain
1	AA	117	G	Sidechain
1	AA	119	A	Sidechain
1	AA	12	C	Sidechain
1	AA	120	U	Sidechain
1	AA	14	U	Sidechain
1	AA	15	A	Sidechain
1	AA	17	C	Sidechain
1	AA	18	G	Sidechain
1	AA	2	G	Sidechain
1	AA	21	G	Sidechain
1	AA	22	U	Sidechain
1	AA	23	G	Sidechain
1	AA	24	G	Sidechain
1	AA	26	C	Sidechain
1	AA	27	C	Sidechain
1	AA	28	C	Sidechain
1	AA	29	A	Sidechain
1	AA	30	C	Sidechain
1	AA	31	C	Sidechain
1	AA	32	U	Sidechain
1	AA	33	G	Sidechain
1	AA	35	C	Sidechain
1	AA	37	C	Sidechain
1	AA	38	C	Sidechain
1	AA	39	A	Sidechain
1	AA	41	G	Sidechain
1	AA	43	C	Sidechain
1	AA	44	G	Sidechain
1	AA	46	A	Sidechain
1	AA	50	A	Sidechain
1	AA	51	G	Sidechain
1	AA	55	U	Sidechain
1	AA	6	G	Sidechain
1	AA	61	G	Sidechain
1	AA	62	C	Sidechain
1	AA	63	C	Sidechain
1	AA	64	G	Sidechain
1	AA	65	U	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	67	G	Sidechain
1	AA	68	C	Sidechain
1	AA	69	G	Sidechain
1	AA	7	G	Sidechain
1	AA	70	C	Sidechain
1	AA	72	G	Sidechain
1	AA	73	A	Sidechain
1	AA	74	U	Sidechain
1	AA	78	A	Sidechain
1	AA	79	G	Sidechain
1	AA	81	G	Sidechain
1	AA	82	U	Sidechain
1	AA	84	G	Sidechain
1	AA	86	G	Sidechain
1	AA	87	U	Sidechain
1	AA	88	C	Sidechain
1	AA	89	U	Sidechain
1	AA	9	G	Sidechain
1	AA	93	C	Sidechain
1	AA	95	U	Sidechain
1	AA	96	G	Sidechain
1	AA	98	G	Sidechain
2	AB	1	G	Sidechain
2	AB	10	A	Sidechain
2	AB	100	U	Sidechain
2	AB	1000	A	Sidechain
2	AB	1003	G	Sidechain
2	AB	1004	U	Sidechain
2	AB	1005	C	Sidechain
2	AB	1006	C	Sidechain
2	AB	1009	A	Sidechain
2	AB	101	A	Sidechain
2	AB	1011	G	Sidechain
2	AB	1013	C	Sidechain
2	AB	1014	A	Sidechain
2	AB	1015	U	Sidechain
2	AB	1016	G	Sidechain
2	AB	1019	U	Sidechain
2	AB	1020	A	Sidechain
2	AB	1021	A	Sidechain
2	AB	1023	U	Sidechain
2	AB	1024	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1025	G	Sidechain
2	AB	1026	G	Sidechain
2	AB	1028	A	Sidechain
2	AB	1029	A	Sidechain
2	AB	1030	C	Sidechain
2	AB	1031	G	Sidechain
2	AB	1032	A	Sidechain
2	AB	1034	G	Sidechain
2	AB	1036	G	Sidechain
2	AB	1038	G	Sidechain
2	AB	104	A	Sidechain
2	AB	1042	G	Sidechain
2	AB	1044	C	Sidechain
2	AB	1045	C	Sidechain
2	AB	1047	G	Sidechain
2	AB	1049	C	Sidechain
2	AB	1051	G	Sidechain
2	AB	1052	C	Sidechain
2	AB	1053	C	Sidechain
2	AB	1056	G	Sidechain
2	AB	1059	G	Sidechain
2	AB	106	C	Sidechain
2	AB	1060	U	Sidechain
2	AB	1062	G	Sidechain
2	AB	1063	G	Sidechain
2	AB	1066	U	Sidechain
2	AB	1067	A	Sidechain
2	AB	107	G	Sidechain
2	AB	1070	A	Sidechain
2	AB	1071	G	Sidechain
2	AB	1072	C	Sidechain
2	AB	1076	C	Sidechain
2	AB	1077	A	Sidechain
2	AB	1078	U	Sidechain
2	AB	108	G	Sidechain
2	AB	1084	A	Sidechain
2	AB	1086	A	Sidechain
2	AB	1087	G	Sidechain
2	AB	1091	G	Sidechain
2	AB	1092	C	Sidechain
2	AB	1093	G	Sidechain
2	AB	1094	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1095	A	Sidechain
2	AB	1097	U	Sidechain
2	AB	1098	A	Sidechain
2	AB	1099	G	Sidechain
2	AB	110	G	Sidechain
2	AB	1102	C	Sidechain
2	AB	1104	C	Sidechain
2	AB	1106	G	Sidechain
2	AB	1108	U	Sidechain
2	AB	1110	G	Sidechain
2	AB	1112	G	Sidechain
2	AB	1113	U	Sidechain
2	AB	1118	C	Sidechain
2	AB	112	U	Sidechain
2	AB	1120	G	Sidechain
2	AB	1122	G	Sidechain
2	AB	1123	C	Sidechain
2	AB	1125	G	Sidechain
2	AB	1126	A	Sidechain
2	AB	1127	A	Sidechain
2	AB	1129	A	Sidechain
2	AB	1132	U	Sidechain
2	AB	1133	A	Sidechain
2	AB	1134	A	Sidechain
2	AB	1135	C	Sidechain
2	AB	1137	G	Sidechain
2	AB	1138	G	Sidechain
2	AB	1139	G	Sidechain
2	AB	1140	C	Sidechain
2	AB	1141	U	Sidechain
2	AB	1142	A	Sidechain
2	AB	1145	C	Sidechain
2	AB	1147	A	Sidechain
2	AB	1148	U	Sidechain
2	AB	1151	A	Sidechain
2	AB	1153	C	Sidechain
2	AB	1154	G	Sidechain
2	AB	1156	A	Sidechain
2	AB	1159	U	Sidechain
2	AB	116	C	Sidechain
2	AB	1162	G	Sidechain
2	AB	1165	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1167	C	Sidechain
2	AB	1168	G	Sidechain
2	AB	1169	A	Sidechain
2	AB	117	G	Sidechain
2	AB	1171	G	Sidechain
2	AB	1172	C	Sidechain
2	AB	1173	U	Sidechain
2	AB	1176	U	Sidechain
2	AB	1177	G	Sidechain
2	AB	1178	C	Sidechain
2	AB	1179	G	Sidechain
2	AB	1180	U	Sidechain
2	AB	1181	U	Sidechain
2	AB	1183	U	Sidechain
2	AB	1184	U	Sidechain
2	AB	1185	G	Sidechain
2	AB	1187	G	Sidechain
2	AB	1190	G	Sidechain
2	AB	1192	G	Sidechain
2	AB	1194	A	Sidechain
2	AB	1195	G	Sidechain
2	AB	1196	C	Sidechain
2	AB	1197	G	Sidechain
2	AB	1201	U	Sidechain
2	AB	1202	G	Sidechain
2	AB	1203	U	Sidechain
2	AB	1204	A	Sidechain
2	AB	1205	A	Sidechain
2	AB	1206	G	Sidechain
2	AB	1209	U	Sidechain
2	AB	121	G	Sidechain
2	AB	1210	G	Sidechain
2	AB	1213	A	Sidechain
2	AB	1214	A	Sidechain
2	AB	1215	G	Sidechain
2	AB	1216	G	Sidechain
2	AB	1217	U	Sidechain
2	AB	1218	G	Sidechain
2	AB	1220	G	Sidechain
2	AB	1222	U	Sidechain
2	AB	1223	G	Sidechain
2	AB	1224	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1226	A	Sidechain
2	AB	1228	G	Sidechain
2	AB	1229	C	Sidechain
2	AB	123	G	Sidechain
2	AB	1230	A	Sidechain
2	AB	1231	U	Sidechain
2	AB	1232	G	Sidechain
2	AB	1236	G	Sidechain
2	AB	1238	G	Sidechain
2	AB	124	G	Sidechain
2	AB	1240	U	Sidechain
2	AB	1241	A	Sidechain
2	AB	1242	U	Sidechain
2	AB	1244	A	Sidechain
2	AB	1245	G	Sidechain
2	AB	1246	A	Sidechain
2	AB	1248	G	Sidechain
2	AB	1249	U	Sidechain
2	AB	1253	A	Sidechain
2	AB	1254	A	Sidechain
2	AB	1255	U	Sidechain
2	AB	1256	G	Sidechain
2	AB	1257	C	Sidechain
2	AB	1259	G	Sidechain
2	AB	1262	A	Sidechain
2	AB	1263	U	Sidechain
2	AB	1264	A	Sidechain
2	AB	1265	A	Sidechain
2	AB	1267	U	Sidechain
2	AB	1269	A	Sidechain
2	AB	127	A	Sidechain
2	AB	1270	C	Sidechain
2	AB	1271	G	Sidechain
2	AB	1272	A	Sidechain
2	AB	1273	U	Sidechain
2	AB	1274	A	Sidechain
2	AB	1275	A	Sidechain
2	AB	1276	A	Sidechain
2	AB	1278	C	Sidechain
2	AB	1281	G	Sidechain
2	AB	1284	A	Sidechain
2	AB	1285	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1287	A	Sidechain
2	AB	1289	C	Sidechain
2	AB	129	C	Sidechain
2	AB	1294	U	Sidechain
2	AB	1295	C	Sidechain
2	AB	1296	G	Sidechain
2	AB	130	C	Sidechain
2	AB	1300	G	Sidechain
2	AB	1302	A	Sidechain
2	AB	1306	C	Sidechain
2	AB	1308	A	Sidechain
2	AB	1309	G	Sidechain
2	AB	1312	U	Sidechain
2	AB	1316	U	Sidechain
2	AB	1317	G	Sidechain
2	AB	1319	C	Sidechain
2	AB	1321	A	Sidechain
2	AB	1322	A	Sidechain
2	AB	1323	C	Sidechain
2	AB	1324	G	Sidechain
2	AB	1325	U	Sidechain
2	AB	1327	A	Sidechain
2	AB	1328	A	Sidechain
2	AB	1330	C	Sidechain
2	AB	1332	G	Sidechain
2	AB	1333	G	Sidechain
2	AB	1334	G	Sidechain
2	AB	1339	G	Sidechain
2	AB	134	G	Sidechain
2	AB	1341	G	Sidechain
2	AB	1342	A	Sidechain
2	AB	1346	G	Sidechain
2	AB	1347	A	Sidechain
2	AB	1349	C	Sidechain
2	AB	1351	C	Sidechain
2	AB	1352	U	Sidechain
2	AB	1354	A	Sidechain
2	AB	1355	G	Sidechain
2	AB	1356	G	Sidechain
2	AB	1357	C	Sidechain
2	AB	1358	G	Sidechain
2	AB	136	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1360	G	Sidechain
2	AB	1361	G	Sidechain
2	AB	1363	C	Sidechain
2	AB	1364	G	Sidechain
2	AB	1365	A	Sidechain
2	AB	1367	A	Sidechain
2	AB	1368	G	Sidechain
2	AB	1369	G	Sidechain
2	AB	137	U	Sidechain
2	AB	1370	C	Sidechain
2	AB	1371	G	Sidechain
2	AB	1372	U	Sidechain
2	AB	1376	C	Sidechain
2	AB	1377	G	Sidechain
2	AB	138	U	Sidechain
2	AB	1382	G	Sidechain
2	AB	1383	A	Sidechain
2	AB	1384	A	Sidechain
2	AB	1385	A	Sidechain
2	AB	1386	C	Sidechain
2	AB	1389	G	Sidechain
2	AB	139	U	Sidechain
2	AB	1390	U	Sidechain
2	AB	1391	U	Sidechain
2	AB	1392	A	Sidechain
2	AB	1394	U	Sidechain
2	AB	1395	A	Sidechain
2	AB	1396	U	Sidechain
2	AB	1397	U	Sidechain
2	AB	1399	C	Sidechain
2	AB	1400	U	Sidechain
2	AB	1401	G	Sidechain
2	AB	1402	U	Sidechain
2	AB	1403	A	Sidechain
2	AB	1404	C	Sidechain
2	AB	1405	U	Sidechain
2	AB	1406	U	Sidechain
2	AB	1407	G	Sidechain
2	AB	1409	U	Sidechain
2	AB	141	G	Sidechain
2	AB	1410	G	Sidechain
2	AB	1411	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1412	U	Sidechain
2	AB	1413	A	Sidechain
2	AB	1414	C	Sidechain
2	AB	1415	U	Sidechain
2	AB	1416	G	Sidechain
2	AB	1417	C	Sidechain
2	AB	1418	G	Sidechain
2	AB	142	A	Sidechain
2	AB	1421	G	Sidechain
2	AB	1422	G	Sidechain
2	AB	1424	G	Sidechain
2	AB	1425	G	Sidechain
2	AB	1426	G	Sidechain
2	AB	143	C	Sidechain
2	AB	1433	A	Sidechain
2	AB	1434	A	Sidechain
2	AB	1435	G	Sidechain
2	AB	1436	G	Sidechain
2	AB	1438	U	Sidechain
2	AB	1439	A	Sidechain
2	AB	1440	U	Sidechain
2	AB	1441	G	Sidechain
2	AB	1442	U	Sidechain
2	AB	1443	U	Sidechain
2	AB	1444	G	Sidechain
2	AB	1447	C	Sidechain
2	AB	1448	G	Sidechain
2	AB	1450	G	Sidechain
2	AB	1451	C	Sidechain
2	AB	1452	G	Sidechain
2	AB	1454	C	Sidechain
2	AB	1455	G	Sidechain
2	AB	1458	U	Sidechain
2	AB	1459	G	Sidechain
2	AB	146	A	Sidechain
2	AB	1460	U	Sidechain
2	AB	1464	G	Sidechain
2	AB	1465	G	Sidechain
2	AB	1466	U	Sidechain
2	AB	147	C	Sidechain
2	AB	1470	A	Sidechain
2	AB	1471	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1472	C	Sidechain
2	AB	1473	G	Sidechain
2	AB	1474	U	Sidechain
2	AB	1475	G	Sidechain
2	AB	1477	A	Sidechain
2	AB	1478	G	Sidechain
2	AB	148	U	Sidechain
2	AB	1480	C	Sidechain
2	AB	1481	U	Sidechain
2	AB	1482	G	Sidechain
2	AB	1483	G	Sidechain
2	AB	1484	U	Sidechain
2	AB	1486	U	Sidechain
2	AB	1488	C	Sidechain
2	AB	1489	C	Sidechain
2	AB	1490	A	Sidechain
2	AB	1491	G	Sidechain
2	AB	1494	A	Sidechain
2	AB	1495	A	Sidechain
2	AB	1498	C	Sidechain
2	AB	1499	C	Sidechain
2	AB	15	G	Sidechain
2	AB	1500	G	Sidechain
2	AB	1505	A	Sidechain
2	AB	1508	A	Sidechain
2	AB	1511	G	Sidechain
2	AB	1512	C	Sidechain
2	AB	1513	U	Sidechain
2	AB	1514	G	Sidechain
2	AB	1516	G	Sidechain
2	AB	1517	G	Sidechain
2	AB	1521	G	Sidechain
2	AB	1522	A	Sidechain
2	AB	1523	U	Sidechain
2	AB	1524	G	Sidechain
2	AB	1527	G	Sidechain
2	AB	1531	C	Sidechain
2	AB	1532	A	Sidechain
2	AB	1534	U	Sidechain
2	AB	1536	C	Sidechain
2	AB	1538	G	Sidechain
2	AB	1542	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1543	G	Sidechain
2	AB	1545	A	Sidechain
2	AB	1546	G	Sidechain
2	AB	1548	A	Sidechain
2	AB	1549	A	Sidechain
2	AB	1551	A	Sidechain
2	AB	1552	A	Sidechain
2	AB	1553	A	Sidechain
2	AB	1554	U	Sidechain
2	AB	1556	C	Sidechain
2	AB	1557	C	Sidechain
2	AB	1558	C	Sidechain
2	AB	1559	U	Sidechain
2	AB	1560	G	Sidechain
2	AB	1562	U	Sidechain
2	AB	1563	U	Sidechain
2	AB	1566	A	Sidechain
2	AB	1567	G	Sidechain
2	AB	1568	G	Sidechain
2	AB	1569	A	Sidechain
2	AB	1572	A	Sidechain
2	AB	1573	G	Sidechain
2	AB	1574	C	Sidechain
2	AB	1578	U	Sidechain
2	AB	1579	A	Sidechain
2	AB	158	U	Sidechain
2	AB	1581	G	Sidechain
2	AB	1586	A	Sidechain
2	AB	159	G	Sidechain
2	AB	1591	A	Sidechain
2	AB	1592	C	Sidechain
2	AB	1594	U	Sidechain
2	AB	1596	A	Sidechain
2	AB	1597	A	Sidechain
2	AB	1603	A	Sidechain
2	AB	1604	C	Sidechain
2	AB	1605	C	Sidechain
2	AB	1607	C	Sidechain
2	AB	1608	A	Sidechain
2	AB	1611	C	Sidechain
2	AB	1612	C	Sidechain
2	AB	1613	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1615	C	Sidechain
2	AB	1619	G	Sidechain
2	AB	1622	G	Sidechain
2	AB	1623	G	Sidechain
2	AB	1624	U	Sidechain
2	AB	1625	C	Sidechain
2	AB	1626	A	Sidechain
2	AB	1627	G	Sidechain
2	AB	1629	U	Sidechain
2	AB	1631	G	Sidechain
2	AB	1632	A	Sidechain
2	AB	1633	G	Sidechain
2	AB	1636	U	Sidechain
2	AB	1637	A	Sidechain
2	AB	1638	C	Sidechain
2	AB	1642	G	Sidechain
2	AB	1643	G	Sidechain
2	AB	1644	C	Sidechain
2	AB	1645	G	Sidechain
2	AB	1646	C	Sidechain
2	AB	1648	U	Sidechain
2	AB	1649	G	Sidechain
2	AB	1651	G	Sidechain
2	AB	1653	G	Sidechain
2	AB	1654	A	Sidechain
2	AB	1656	C	Sidechain
2	AB	1657	U	Sidechain
2	AB	1658	C	Sidechain
2	AB	1662	U	Sidechain
2	AB	1664	A	Sidechain
2	AB	1667	G	Sidechain
2	AB	1668	A	Sidechain
2	AB	1671	U	Sidechain
2	AB	1672	A	Sidechain
2	AB	1674	G	Sidechain
2	AB	1675	C	Sidechain
2	AB	1676	A	Sidechain
2	AB	1677	A	Sidechain
2	AB	1680	U	Sidechain
2	AB	1681	G	Sidechain
2	AB	1682	G	Sidechain
2	AB	1683	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1684	G	Sidechain
2	AB	1686	C	Sidechain
2	AB	1687	G	Sidechain
2	AB	1689	A	Sidechain
2	AB	1694	C	Sidechain
2	AB	1695	G	Sidechain
2	AB	1699	G	Sidechain
2	AB	170	U	Sidechain
2	AB	1703	G	Sidechain
2	AB	1704	C	Sidechain
2	AB	1706	C	Sidechain
2	AB	1708	C	Sidechain
2	AB	1709	U	Sidechain
2	AB	171	U	Sidechain
2	AB	1710	G	Sidechain
2	AB	1711	A	Sidechain
2	AB	1714	U	Sidechain
2	AB	1715	G	Sidechain
2	AB	1716	U	Sidechain
2	AB	1717	A	Sidechain
2	AB	1718	G	Sidechain
2	AB	1719	G	Sidechain
2	AB	1720	U	Sidechain
2	AB	1721	G	Sidechain
2	AB	1723	G	Sidechain
2	AB	1726	C	Sidechain
2	AB	1727	C	Sidechain
2	AB	1728	C	Sidechain
2	AB	1729	U	Sidechain
2	AB	1732	C	Sidechain
2	AB	1733	G	Sidechain
2	AB	1734	G	Sidechain
2	AB	1736	U	Sidechain
2	AB	1738	G	Sidechain
2	AB	1739	A	Sidechain
2	AB	1741	C	Sidechain
2	AB	1742	U	Sidechain
2	AB	1743	G	Sidechain
2	AB	1744	A	Sidechain
2	AB	1747	U	Sidechain
2	AB	175	G	Sidechain
2	AB	1750	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1751	U	Sidechain
2	AB	1753	G	Sidechain
2	AB	1754	A	Sidechain
2	AB	1757	A	Sidechain
2	AB	1759	A	Sidechain
2	AB	1761	C	Sidechain
2	AB	1762	A	Sidechain
2	AB	1763	G	Sidechain
2	AB	1765	U	Sidechain
2	AB	1767	G	Sidechain
2	AB	1769	U	Sidechain
2	AB	177	G	Sidechain
2	AB	1772	A	Sidechain
2	AB	1775	U	Sidechain
2	AB	1777	U	Sidechain
2	AB	1778	U	Sidechain
2	AB	1779	U	Sidechain
2	AB	1780	A	Sidechain
2	AB	1782	U	Sidechain
2	AB	1783	A	Sidechain
2	AB	1789	A	Sidechain
2	AB	179	C	Sidechain
2	AB	1792	G	Sidechain
2	AB	1793	C	Sidechain
2	AB	1797	G	Sidechain
2	AB	18	U	Sidechain
2	AB	180	G	Sidechain
2	AB	1802	A	Sidechain
2	AB	1804	C	Sidechain
2	AB	1806	C	Sidechain
2	AB	1807	G	Sidechain
2	AB	181	A	Sidechain
2	AB	1810	A	Sidechain
2	AB	1811	G	Sidechain
2	AB	1813	G	Sidechain
2	AB	1814	G	Sidechain
2	AB	1817	G	Sidechain
2	AB	1821	A	Sidechain
2	AB	1822	C	Sidechain
2	AB	1824	G	Sidechain
2	AB	1825	U	Sidechain
2	AB	1827	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1830	C	Sidechain
2	AB	1831	G	Sidechain
2	AB	1832	C	Sidechain
2	AB	1833	C	Sidechain
2	AB	1837	C	Sidechain
2	AB	1838	C	Sidechain
2	AB	1839	G	Sidechain
2	AB	1840	G	Sidechain
2	AB	1841	U	Sidechain
2	AB	1848	A	Sidechain
2	AB	1849	G	Sidechain
2	AB	185	G	Sidechain
2	AB	1850	G	Sidechain
2	AB	1853	A	Sidechain
2	AB	1855	U	Sidechain
2	AB	1857	G	Sidechain
2	AB	1858	A	Sidechain
2	AB	186	G	Sidechain
2	AB	1862	G	Sidechain
2	AB	1863	G	Sidechain
2	AB	1868	C	Sidechain
2	AB	1869	G	Sidechain
2	AB	187	G	Sidechain
2	AB	1873	G	Sidechain
2	AB	1875	G	Sidechain
2	AB	1877	A	Sidechain
2	AB	1878	G	Sidechain
2	AB	1880	U	Sidechain
2	AB	1882	U	Sidechain
2	AB	1883	U	Sidechain
2	AB	1885	A	Sidechain
2	AB	1886	U	Sidechain
2	AB	189	G	Sidechain
2	AB	1890	A	Sidechain
2	AB	1893	C	Sidechain
2	AB	1895	C	Sidechain
2	AB	1896	G	Sidechain
2	AB	1899	A	Sidechain
2	AB	190	A	Sidechain
2	AB	1904	G	Sidechain
2	AB	1905	C	Sidechain
2	AB	1907	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1908	C	Sidechain
2	AB	1910	G	Sidechain
2	AB	1912	A	Sidechain
2	AB	1913	A	Sidechain
2	AB	1914	C	Sidechain
2	AB	1916	A	Sidechain
2	AB	1918	A	Sidechain
2	AB	1919	A	Sidechain
2	AB	1920	C	Sidechain
2	AB	1921	G	Sidechain
2	AB	1922	G	Sidechain
2	AB	1926	U	Sidechain
2	AB	1927	A	Sidechain
2	AB	1928	A	Sidechain
2	AB	1929	G	Sidechain
2	AB	193	U	Sidechain
2	AB	1930	G	Sidechain
2	AB	1932	A	Sidechain
2	AB	1933	G	Sidechain
2	AB	1934	C	Sidechain
2	AB	1937	A	Sidechain
2	AB	194	G	Sidechain
2	AB	1940	U	Sidechain
2	AB	1942	C	Sidechain
2	AB	1944	U	Sidechain
2	AB	1945	G	Sidechain
2	AB	1946	U	Sidechain
2	AB	1947	C	Sidechain
2	AB	195	A	Sidechain
2	AB	1951	U	Sidechain
2	AB	1954	G	Sidechain
2	AB	1955	U	Sidechain
2	AB	1956	U	Sidechain
2	AB	1957	C	Sidechain
2	AB	1959	G	Sidechain
2	AB	1964	G	Sidechain
2	AB	1966	A	Sidechain
2	AB	1967	C	Sidechain
2	AB	1968	G	Sidechain
2	AB	1969	A	Sidechain
2	AB	1970	A	Sidechain
2	AB	1971	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1972	G	Sidechain
2	AB	1975	G	Sidechain
2	AB	1978	A	Sidechain
2	AB	1979	U	Sidechain
2	AB	1980	G	Sidechain
2	AB	1981	A	Sidechain
2	AB	1982	U	Sidechain
2	AB	1983	G	Sidechain
2	AB	1985	C	Sidechain
2	AB	1988	G	Sidechain
2	AB	1989	G	Sidechain
2	AB	1991	U	Sidechain
2	AB	1992	G	Sidechain
2	AB	1995	U	Sidechain
2	AB	1996	C	Sidechain
2	AB	1997	C	Sidechain
2	AB	1999	C	Sidechain
2	AB	2	G	Sidechain
2	AB	20	C	Sidechain
2	AB	2001	C	Sidechain
2	AB	2002	G	Sidechain
2	AB	2004	G	Sidechain
2	AB	2005	A	Sidechain
2	AB	2007	U	Sidechain
2	AB	2008	C	Sidechain
2	AB	201	C	Sidechain
2	AB	2010	G	Sidechain
2	AB	2014	A	Sidechain
2	AB	2015	A	Sidechain
2	AB	2016	U	Sidechain
2	AB	2019	A	Sidechain
2	AB	2022	U	Sidechain
2	AB	2023	C	Sidechain
2	AB	2026	U	Sidechain
2	AB	2027	G	Sidechain
2	AB	2028	U	Sidechain
2	AB	2029	G	Sidechain
2	AB	2032	G	Sidechain
2	AB	2034	U	Sidechain
2	AB	2035	G	Sidechain
2	AB	2036	C	Sidechain
2	AB	2038	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2039	U	Sidechain
2	AB	204	A	Sidechain
2	AB	2042	A	Sidechain
2	AB	2044	C	Sidechain
2	AB	2046	G	Sidechain
2	AB	2047	C	Sidechain
2	AB	2048	G	Sidechain
2	AB	205	G	Sidechain
2	AB	2050	C	Sidechain
2	AB	2053	G	Sidechain
2	AB	2054	A	Sidechain
2	AB	2055	C	Sidechain
2	AB	2056	G	Sidechain
2	AB	2057	G	Sidechain
2	AB	2059	A	Sidechain
2	AB	206	U	Sidechain
2	AB	2061	G	Sidechain
2	AB	2062	A	Sidechain
2	AB	2063	C	Sidechain
2	AB	2065	C	Sidechain
2	AB	2067	G	Sidechain
2	AB	207	A	Sidechain
2	AB	2070	A	Sidechain
2	AB	2071	A	Sidechain
2	AB	2072	C	Sidechain
2	AB	2075	U	Sidechain
2	AB	208	C	Sidechain
2	AB	2081	U	Sidechain
2	AB	2082	A	Sidechain
2	AB	2083	G	Sidechain
2	AB	2084	C	Sidechain
2	AB	2085	U	Sidechain
2	AB	2087	G	Sidechain
2	AB	2090	A	Sidechain
2	AB	2091	C	Sidechain
2	AB	2092	U	Sidechain
2	AB	2094	A	Sidechain
2	AB	2098	U	Sidechain
2	AB	2100	G	Sidechain
2	AB	2101	A	Sidechain
2	AB	2102	G	Sidechain
2	AB	2103	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2104	C	Sidechain
2	AB	2105	U	Sidechain
2	AB	2107	G	Sidechain
2	AB	2108	A	Sidechain
2	AB	2109	U	Sidechain
2	AB	211	C	Sidechain
2	AB	2111	U	Sidechain
2	AB	2112	G	Sidechain
2	AB	2114	A	Sidechain
2	AB	2115	G	Sidechain
2	AB	2116	G	Sidechain
2	AB	2118	U	Sidechain
2	AB	212	G	Sidechain
2	AB	2120	G	Sidechain
2	AB	2121	G	Sidechain
2	AB	2125	G	Sidechain
2	AB	2126	A	Sidechain
2	AB	2128	G	Sidechain
2	AB	2131	U	Sidechain
2	AB	2138	G	Sidechain
2	AB	214	G	Sidechain
2	AB	2141	G	Sidechain
2	AB	2143	C	Sidechain
2	AB	2144	G	Sidechain
2	AB	2147	A	Sidechain
2	AB	2149	U	Sidechain
2	AB	2150	C	Sidechain
2	AB	2152	G	Sidechain
2	AB	2153	C	Sidechain
2	AB	2155	U	Sidechain
2	AB	2156	G	Sidechain
2	AB	2157	G	Sidechain
2	AB	2159	G	Sidechain
2	AB	2161	C	Sidechain
2	AB	2162	G	Sidechain
2	AB	2163	A	Sidechain
2	AB	2164	C	Sidechain
2	AB	217	A	Sidechain
2	AB	2170	A	Sidechain
2	AB	2171	A	Sidechain
2	AB	2172	U	Sidechain
2	AB	2173	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2179	C	Sidechain
2	AB	2181	U	Sidechain
2	AB	2184	A	Sidechain
2	AB	2185	U	Sidechain
2	AB	2187	U	Sidechain
2	AB	2188	U	Sidechain
2	AB	2189	U	Sidechain
2	AB	219	A	Sidechain
2	AB	2190	G	Sidechain
2	AB	2191	A	Sidechain
2	AB	2193	G	Sidechain
2	AB	2194	U	Sidechain
2	AB	2196	C	Sidechain
2	AB	2197	U	Sidechain
2	AB	2198	A	Sidechain
2	AB	220	G	Sidechain
2	AB	2200	C	Sidechain
2	AB	2204	G	Sidechain
2	AB	2207	C	Sidechain
2	AB	2208	C	Sidechain
2	AB	2209	G	Sidechain
2	AB	221	A	Sidechain
2	AB	2211	A	Sidechain
2	AB	2212	A	Sidechain
2	AB	2213	U	Sidechain
2	AB	2214	C	Sidechain
2	AB	2216	G	Sidechain
2	AB	2217	G	Sidechain
2	AB	2218	G	Sidechain
2	AB	2220	U	Sidechain
2	AB	2221	G	Sidechain
2	AB	2223	G	Sidechain
2	AB	2224	G	Sidechain
2	AB	2227	A	Sidechain
2	AB	2228	G	Sidechain
2	AB	223	A	Sidechain
2	AB	2230	G	Sidechain
2	AB	2231	U	Sidechain
2	AB	2233	U	Sidechain
2	AB	2236	U	Sidechain
2	AB	2237	G	Sidechain
2	AB	2239	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2241	A	Sidechain
2	AB	2243	U	Sidechain
2	AB	2246	G	Sidechain
2	AB	2247	A	Sidechain
2	AB	2250	G	Sidechain
2	AB	2252	G	Sidechain
2	AB	2253	G	Sidechain
2	AB	2255	G	Sidechain
2	AB	2256	G	Sidechain
2	AB	2258	C	Sidechain
2	AB	2259	U	Sidechain
2	AB	226	A	Sidechain
2	AB	2260	C	Sidechain
2	AB	2261	C	Sidechain
2	AB	2265	U	Sidechain
2	AB	227	A	Sidechain
2	AB	2271	G	Sidechain
2	AB	2273	A	Sidechain
2	AB	2274	A	Sidechain
2	AB	2277	G	Sidechain
2	AB	2278	A	Sidechain
2	AB	2279	G	Sidechain
2	AB	228	C	Sidechain
2	AB	2280	G	Sidechain
2	AB	2283	C	Sidechain
2	AB	2287	A	Sidechain
2	AB	2288	A	Sidechain
2	AB	2289	G	Sidechain
2	AB	2293	G	Sidechain
2	AB	2294	G	Sidechain
2	AB	2297	A	Sidechain
2	AB	2299	U	Sidechain
2	AB	23	G	Sidechain
2	AB	230	G	Sidechain
2	AB	2303	G	Sidechain
2	AB	2304	G	Sidechain
2	AB	2305	U	Sidechain
2	AB	2306	C	Sidechain
2	AB	2307	G	Sidechain
2	AB	2308	G	Sidechain
2	AB	2315	G	Sidechain
2	AB	2316	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2318	G	Sidechain
2	AB	232	G	Sidechain
2	AB	2320	U	Sidechain
2	AB	2323	G	Sidechain
2	AB	2325	G	Sidechain
2	AB	2326	C	Sidechain
2	AB	2327	A	Sidechain
2	AB	2331	G	Sidechain
2	AB	2333	A	Sidechain
2	AB	2335	A	Sidechain
2	AB	2337	G	Sidechain
2	AB	2338	C	Sidechain
2	AB	2341	G	Sidechain
2	AB	2344	U	Sidechain
2	AB	2345	G	Sidechain
2	AB	2349	G	Sidechain
2	AB	235	U	Sidechain
2	AB	2350	C	Sidechain
2	AB	2352	A	Sidechain
2	AB	2353	G	Sidechain
2	AB	2354	C	Sidechain
2	AB	2358	A	Sidechain
2	AB	236	C	Sidechain
2	AB	2360	G	Sidechain
2	AB	2363	G	Sidechain
2	AB	2364	C	Sidechain
2	AB	2365	G	Sidechain
2	AB	2367	G	Sidechain
2	AB	237	C	Sidechain
2	AB	2370	G	Sidechain
2	AB	2373	G	Sidechain
2	AB	2374	C	Sidechain
2	AB	2375	G	Sidechain
2	AB	2376	A	Sidechain
2	AB	2377	A	Sidechain
2	AB	2378	A	Sidechain
2	AB	238	C	Sidechain
2	AB	2382	G	Sidechain
2	AB	2383	G	Sidechain
2	AB	2384	U	Sidechain
2	AB	2385	C	Sidechain
2	AB	2387	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2388	A	Sidechain
2	AB	2389	G	Sidechain
2	AB	239	C	Sidechain
2	AB	2391	G	Sidechain
2	AB	2393	U	Sidechain
2	AB	2395	C	Sidechain
2	AB	2397	G	Sidechain
2	AB	2400	G	Sidechain
2	AB	2401	U	Sidechain
2	AB	2404	U	Sidechain
2	AB	2405	G	Sidechain
2	AB	2409	G	Sidechain
2	AB	2410	G	Sidechain
2	AB	2411	A	Sidechain
2	AB	2412	A	Sidechain
2	AB	2414	G	Sidechain
2	AB	2415	G	Sidechain
2	AB	2417	C	Sidechain
2	AB	242	G	Sidechain
2	AB	2420	C	Sidechain
2	AB	2421	G	Sidechain
2	AB	2423	U	Sidechain
2	AB	2424	C	Sidechain
2	AB	2425	A	Sidechain
2	AB	2428	G	Sidechain
2	AB	2429	G	Sidechain
2	AB	243	U	Sidechain
2	AB	2431	U	Sidechain
2	AB	2433	A	Sidechain
2	AB	2434	A	Sidechain
2	AB	2436	G	Sidechain
2	AB	2437	G	Sidechain
2	AB	2438	U	Sidechain
2	AB	2439	A	Sidechain
2	AB	2440	C	Sidechain
2	AB	2441	U	Sidechain
2	AB	2444	G	Sidechain
2	AB	2447	G	Sidechain
2	AB	245	G	Sidechain
2	AB	2451	A	Sidechain
2	AB	2452	C	Sidechain
2	AB	2453	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2455	G	Sidechain
2	AB	2456	C	Sidechain
2	AB	2458	G	Sidechain
2	AB	2461	A	Sidechain
2	AB	2466	C	Sidechain
2	AB	2467	C	Sidechain
2	AB	2469	A	Sidechain
2	AB	2472	G	Sidechain
2	AB	2473	U	Sidechain
2	AB	2474	U	Sidechain
2	AB	2475	C	Sidechain
2	AB	2477	U	Sidechain
2	AB	2478	A	Sidechain
2	AB	2479	U	Sidechain
2	AB	248	G	Sidechain
2	AB	2481	G	Sidechain
2	AB	2484	G	Sidechain
2	AB	2485	G	Sidechain
2	AB	2486	C	Sidechain
2	AB	2487	G	Sidechain
2	AB	2488	G	Sidechain
2	AB	249	C	Sidechain
2	AB	2490	G	Sidechain
2	AB	2491	U	Sidechain
2	AB	2492	U	Sidechain
2	AB	2493	U	Sidechain
2	AB	2494	G	Sidechain
2	AB	2495	G	Sidechain
2	AB	2496	C	Sidechain
2	AB	2497	A	Sidechain
2	AB	2500	U	Sidechain
2	AB	2502	G	Sidechain
2	AB	2505	G	Sidechain
2	AB	2506	U	Sidechain
2	AB	2507	C	Sidechain
2	AB	2508	G	Sidechain
2	AB	2509	G	Sidechain
2	AB	2511	U	Sidechain
2	AB	2512	C	Sidechain
2	AB	2516	A	Sidechain
2	AB	2517	C	Sidechain
2	AB	2518	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2519	U	Sidechain
2	AB	2521	C	Sidechain
2	AB	2522	U	Sidechain
2	AB	2523	G	Sidechain
2	AB	2524	G	Sidechain
2	AB	2525	G	Sidechain
2	AB	2526	G	Sidechain
2	AB	2528	U	Sidechain
2	AB	2529	G	Sidechain
2	AB	2538	C	Sidechain
2	AB	2543	G	Sidechain
2	AB	2544	G	Sidechain
2	AB	2545	G	Sidechain
2	AB	2546	U	Sidechain
2	AB	2548	U	Sidechain
2	AB	2549	G	Sidechain
2	AB	255	A	Sidechain
2	AB	2553	G	Sidechain
2	AB	2554	U	Sidechain
2	AB	2555	U	Sidechain
2	AB	2556	C	Sidechain
2	AB	2557	G	Sidechain
2	AB	2558	C	Sidechain
2	AB	256	A	Sidechain
2	AB	2561	U	Sidechain
2	AB	2563	U	Sidechain
2	AB	2564	A	Sidechain
2	AB	2568	U	Sidechain
2	AB	2569	G	Sidechain
2	AB	2570	G	Sidechain
2	AB	2573	C	Sidechain
2	AB	2576	G	Sidechain
2	AB	2577	A	Sidechain
2	AB	2578	G	Sidechain
2	AB	2579	C	Sidechain
2	AB	258	G	Sidechain
2	AB	2581	G	Sidechain
2	AB	2582	G	Sidechain
2	AB	2583	G	Sidechain
2	AB	2585	U	Sidechain
2	AB	2586	U	Sidechain
2	AB	2588	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	259	G	Sidechain
2	AB	2590	A	Sidechain
2	AB	2591	C	Sidechain
2	AB	2592	G	Sidechain
2	AB	2593	U	Sidechain
2	AB	2595	G	Sidechain
2	AB	2596	U	Sidechain
2	AB	2597	G	Sidechain
2	AB	2598	A	Sidechain
2	AB	2599	G	Sidechain
2	AB	26	G	Sidechain
2	AB	260	G	Sidechain
2	AB	2602	A	Sidechain
2	AB	2606	C	Sidechain
2	AB	2607	G	Sidechain
2	AB	2610	C	Sidechain
2	AB	2613	U	Sidechain
2	AB	2614	A	Sidechain
2	AB	2616	C	Sidechain
2	AB	2617	U	Sidechain
2	AB	262	A	Sidechain
2	AB	2621	G	Sidechain
2	AB	2622	U	Sidechain
2	AB	2624	G	Sidechain
2	AB	2625	G	Sidechain
2	AB	2626	C	Sidechain
2	AB	2628	C	Sidechain
2	AB	2629	U	Sidechain
2	AB	263	G	Sidechain
2	AB	2631	G	Sidechain
2	AB	2633	G	Sidechain
2	AB	2634	A	Sidechain
2	AB	2636	C	Sidechain
2	AB	2638	G	Sidechain
2	AB	264	C	Sidechain
2	AB	2640	G	Sidechain
2	AB	2641	G	Sidechain
2	AB	2642	G	Sidechain
2	AB	2645	G	Sidechain
2	AB	2649	C	Sidechain
2	AB	2650	U	Sidechain
2	AB	2652	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2653	U	Sidechain
2	AB	2655	G	Sidechain
2	AB	2656	U	Sidechain
2	AB	2657	A	Sidechain
2	AB	2659	G	Sidechain
2	AB	266	G	Sidechain
2	AB	2660	A	Sidechain
2	AB	2661	G	Sidechain
2	AB	2662	A	Sidechain
2	AB	2663	G	Sidechain
2	AB	2664	G	Sidechain
2	AB	2665	A	Sidechain
2	AB	2667	C	Sidechain
2	AB	2668	G	Sidechain
2	AB	2669	G	Sidechain
2	AB	267	C	Sidechain
2	AB	2670	A	Sidechain
2	AB	2673	G	Sidechain
2	AB	2674	G	Sidechain
2	AB	2675	A	Sidechain
2	AB	2676	C	Sidechain
2	AB	2677	G	Sidechain
2	AB	268	C	Sidechain
2	AB	2681	C	Sidechain
2	AB	2684	U	Sidechain
2	AB	2685	G	Sidechain
2	AB	2688	G	Sidechain
2	AB	2689	U	Sidechain
2	AB	2690	U	Sidechain
2	AB	2692	G	Sidechain
2	AB	2694	G	Sidechain
2	AB	2695	U	Sidechain
2	AB	2696	U	Sidechain
2	AB	2697	G	Sidechain
2	AB	2699	C	Sidechain
2	AB	27	G	Sidechain
2	AB	2702	G	Sidechain
2	AB	2703	C	Sidechain
2	AB	2706	A	Sidechain
2	AB	2707	U	Sidechain
2	AB	2708	G	Sidechain
2	AB	271	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2712	C	Sidechain
2	AB	2714	G	Sidechain
2	AB	2716	C	Sidechain
2	AB	2717	C	Sidechain
2	AB	2719	G	Sidechain
2	AB	2720	U	Sidechain
2	AB	2722	G	Sidechain
2	AB	2723	C	Sidechain
2	AB	2724	U	Sidechain
2	AB	2725	A	Sidechain
2	AB	2726	A	Sidechain
2	AB	2727	A	Sidechain
2	AB	273	G	Sidechain
2	AB	2731	G	Sidechain
2	AB	2732	G	Sidechain
2	AB	2733	A	Sidechain
2	AB	2735	G	Sidechain
2	AB	2737	G	Sidechain
2	AB	2739	U	Sidechain
2	AB	274	C	Sidechain
2	AB	2740	A	Sidechain
2	AB	2742	G	Sidechain
2	AB	2743	U	Sidechain
2	AB	2744	G	Sidechain
2	AB	2746	U	Sidechain
2	AB	2748	A	Sidechain
2	AB	2751	G	Sidechain
2	AB	2753	A	Sidechain
2	AB	2754	U	Sidechain
2	AB	2756	U	Sidechain
2	AB	2757	A	Sidechain
2	AB	2759	G	Sidechain
2	AB	276	U	Sidechain
2	AB	2760	C	Sidechain
2	AB	2763	G	Sidechain
2	AB	2764	A	Sidechain
2	AB	2766	A	Sidechain
2	AB	2767	C	Sidechain
2	AB	2768	U	Sidechain
2	AB	2769	U	Sidechain
2	AB	277	G	Sidechain
2	AB	2770	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2773	C	Sidechain
2	AB	2774	C	Sidechain
2	AB	2775	G	Sidechain
2	AB	2776	A	Sidechain
2	AB	2777	G	Sidechain
2	AB	2780	G	Sidechain
2	AB	2781	A	Sidechain
2	AB	2782	G	Sidechain
2	AB	2783	U	Sidechain
2	AB	2784	U	Sidechain
2	AB	2785	C	Sidechain
2	AB	2786	U	Sidechain
2	AB	2788	C	Sidechain
2	AB	2791	G	Sidechain
2	AB	2795	C	Sidechain
2	AB	2797	U	Sidechain
2	AB	2798	U	Sidechain
2	AB	28	A	Sidechain
2	AB	2801	G	Sidechain
2	AB	2802	G	Sidechain
2	AB	2803	G	Sidechain
2	AB	2805	C	Sidechain
2	AB	2806	C	Sidechain
2	AB	2808	G	Sidechain
2	AB	281	C	Sidechain
2	AB	2810	A	Sidechain
2	AB	2811	G	Sidechain
2	AB	2813	A	Sidechain
2	AB	2816	G	Sidechain
2	AB	2818	U	Sidechain
2	AB	2819	G	Sidechain
2	AB	282	A	Sidechain
2	AB	2820	A	Sidechain
2	AB	2824	C	Sidechain
2	AB	2825	G	Sidechain
2	AB	2828	G	Sidechain
2	AB	283	G	Sidechain
2	AB	2831	G	Sidechain
2	AB	2832	U	Sidechain
2	AB	2833	U	Sidechain
2	AB	2835	A	Sidechain
2	AB	2836	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2838	G	Sidechain
2	AB	2839	G	Sidechain
2	AB	2841	C	Sidechain
2	AB	2844	G	Sidechain
2	AB	2845	U	Sidechain
2	AB	2847	U	Sidechain
2	AB	2848	G	Sidechain
2	AB	2850	A	Sidechain
2	AB	2852	G	Sidechain
2	AB	2854	G	Sidechain
2	AB	2855	C	Sidechain
2	AB	2856	A	Sidechain
2	AB	2857	G	Sidechain
2	AB	2858	C	Sidechain
2	AB	2859	G	Sidechain
2	AB	2860	A	Sidechain
2	AB	2863	C	Sidechain
2	AB	2865	U	Sidechain
2	AB	2866	U	Sidechain
2	AB	2867	G	Sidechain
2	AB	2868	A	Sidechain
2	AB	2869	G	Sidechain
2	AB	2871	U	Sidechain
2	AB	2872	A	Sidechain
2	AB	288	U	Sidechain
2	AB	2881	U	Sidechain
2	AB	2885	G	Sidechain
2	AB	2888	C	Sidechain
2	AB	289	G	Sidechain
2	AB	2891	U	Sidechain
2	AB	2894	G	Sidechain
2	AB	2895	G	Sidechain
2	AB	2897	U	Sidechain
2	AB	2899	A	Sidechain
2	AB	29	U	Sidechain
2	AB	2901	C	Sidechain
2	AB	291	G	Sidechain
2	AB	292	U	Sidechain
2	AB	293	U	Sidechain
2	AB	298	G	Sidechain
2	AB	299	A	Sidechain
2	AB	30	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	301	G	Sidechain
2	AB	302	C	Sidechain
2	AB	303	G	Sidechain
2	AB	304	U	Sidechain
2	AB	305	C	Sidechain
2	AB	307	G	Sidechain
2	AB	308	G	Sidechain
2	AB	31	C	Sidechain
2	AB	311	A	Sidechain
2	AB	312	G	Sidechain
2	AB	313	G	Sidechain
2	AB	315	G	Sidechain
2	AB	316	C	Sidechain
2	AB	317	G	Sidechain
2	AB	318	C	Sidechain
2	AB	320	A	Sidechain
2	AB	321	U	Sidechain
2	AB	322	A	Sidechain
2	AB	323	C	Sidechain
2	AB	324	A	Sidechain
2	AB	325	G	Sidechain
2	AB	326	G	Sidechain
2	AB	327	G	Sidechain
2	AB	329	G	Sidechain
2	AB	330	A	Sidechain
2	AB	331	C	Sidechain
2	AB	333	G	Sidechain
2	AB	335	C	Sidechain
2	AB	336	C	Sidechain
2	AB	338	G	Sidechain
2	AB	34	U	Sidechain
2	AB	341	C	Sidechain
2	AB	343	C	Sidechain
2	AB	344	A	Sidechain
2	AB	345	A	Sidechain
2	AB	348	A	Sidechain
2	AB	349	U	Sidechain
2	AB	353	C	Sidechain
2	AB	355	U	Sidechain
2	AB	357	C	Sidechain
2	AB	358	U	Sidechain
2	AB	36	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	360	U	Sidechain
2	AB	361	G	Sidechain
2	AB	364	C	Sidechain
2	AB	366	C	Sidechain
2	AB	367	G	Sidechain
2	AB	370	G	Sidechain
2	AB	371	A	Sidechain
2	AB	372	G	Sidechain
2	AB	373	U	Sidechain
2	AB	374	A	Sidechain
2	AB	377	G	Sidechain
2	AB	379	G	Sidechain
2	AB	380	G	Sidechain
2	AB	381	G	Sidechain
2	AB	383	C	Sidechain
2	AB	384	A	Sidechain
2	AB	385	C	Sidechain
2	AB	386	G	Sidechain
2	AB	387	U	Sidechain
2	AB	388	G	Sidechain
2	AB	389	G	Sidechain
2	AB	391	A	Sidechain
2	AB	392	U	Sidechain
2	AB	394	C	Sidechain
2	AB	395	U	Sidechain
2	AB	396	G	Sidechain
2	AB	398	C	Sidechain
2	AB	399	U	Sidechain
2	AB	400	G	Sidechain
2	AB	401	A	Sidechain
2	AB	402	A	Sidechain
2	AB	405	U	Sidechain
2	AB	406	G	Sidechain
2	AB	407	G	Sidechain
2	AB	408	G	Sidechain
2	AB	41	C	Sidechain
2	AB	410	G	Sidechain
2	AB	411	G	Sidechain
2	AB	412	A	Sidechain
2	AB	414	C	Sidechain
2	AB	415	A	Sidechain
2	AB	417	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	419	U	Sidechain
2	AB	423	A	Sidechain
2	AB	424	G	Sidechain
2	AB	427	U	Sidechain
2	AB	428	A	Sidechain
2	AB	43	G	Sidechain
2	AB	430	A	Sidechain
2	AB	432	A	Sidechain
2	AB	433	C	Sidechain
2	AB	434	U	Sidechain
2	AB	436	C	Sidechain
2	AB	438	G	Sidechain
2	AB	439	A	Sidechain
2	AB	443	A	Sidechain
2	AB	444	C	Sidechain
2	AB	445	C	Sidechain
2	AB	446	G	Sidechain
2	AB	450	G	Sidechain
2	AB	451	U	Sidechain
2	AB	452	G	Sidechain
2	AB	453	A	Sidechain
2	AB	454	A	Sidechain
2	AB	457	A	Sidechain
2	AB	458	G	Sidechain
2	AB	464	U	Sidechain
2	AB	466	A	Sidechain
2	AB	468	G	Sidechain
2	AB	469	G	Sidechain
2	AB	470	A	Sidechain
2	AB	472	A	Sidechain
2	AB	473	G	Sidechain
2	AB	475	C	Sidechain
2	AB	476	G	Sidechain
2	AB	477	A	Sidechain
2	AB	480	A	Sidechain
2	AB	481	G	Sidechain
2	AB	483	A	Sidechain
2	AB	487	C	Sidechain
2	AB	488	G	Sidechain
2	AB	489	G	Sidechain
2	AB	493	G	Sidechain
2	AB	496	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	497	A	Sidechain
2	AB	498	G	Sidechain
2	AB	499	U	Sidechain
2	AB	50	U	Sidechain
2	AB	500	G	Sidechain
2	AB	501	A	Sidechain
2	AB	502	A	Sidechain
2	AB	503	A	Sidechain
2	AB	507	A	Sidechain
2	AB	508	A	Sidechain
2	AB	510	C	Sidechain
2	AB	512	G	Sidechain
2	AB	513	A	Sidechain
2	AB	514	A	Sidechain
2	AB	516	C	Sidechain
2	AB	518	G	Sidechain
2	AB	52	A	Sidechain
2	AB	520	G	Sidechain
2	AB	522	A	Sidechain
2	AB	524	G	Sidechain
2	AB	527	C	Sidechain
2	AB	528	A	Sidechain
2	AB	529	A	Sidechain
2	AB	532	A	Sidechain
2	AB	533	G	Sidechain
2	AB	535	G	Sidechain
2	AB	536	G	Sidechain
2	AB	537	G	Sidechain
2	AB	54	G	Sidechain
2	AB	544	C	Sidechain
2	AB	545	U	Sidechain
2	AB	547	A	Sidechain
2	AB	549	G	Sidechain
2	AB	551	G	Sidechain
2	AB	554	U	Sidechain
2	AB	555	G	Sidechain
2	AB	558	U	Sidechain
2	AB	559	G	Sidechain
2	AB	561	G	Sidechain
2	AB	562	U	Sidechain
2	AB	563	A	Sidechain
2	AB	565	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	567	U	Sidechain
2	AB	568	U	Sidechain
2	AB	570	G	Sidechain
2	AB	573	U	Sidechain
2	AB	575	A	Sidechain
2	AB	577	G	Sidechain
2	AB	579	G	Sidechain
2	AB	580	U	Sidechain
2	AB	581	C	Sidechain
2	AB	583	G	Sidechain
2	AB	584	C	Sidechain
2	AB	586	A	Sidechain
2	AB	587	C	Sidechain
2	AB	588	U	Sidechain
2	AB	591	U	Sidechain
2	AB	593	U	Sidechain
2	AB	595	C	Sidechain
2	AB	596	U	Sidechain
2	AB	597	G	Sidechain
2	AB	599	A	Sidechain
2	AB	601	C	Sidechain
2	AB	602	A	Sidechain
2	AB	604	G	Sidechain
2	AB	605	G	Sidechain
2	AB	606	U	Sidechain
2	AB	607	U	Sidechain
2	AB	608	A	Sidechain
2	AB	610	C	Sidechain
2	AB	612	G	Sidechain
2	AB	613	A	Sidechain
2	AB	615	U	Sidechain
2	AB	617	G	Sidechain
2	AB	618	G	Sidechain
2	AB	619	G	Sidechain
2	AB	62	U	Sidechain
2	AB	620	G	Sidechain
2	AB	622	G	Sidechain
2	AB	624	C	Sidechain
2	AB	625	G	Sidechain
2	AB	626	A	Sidechain
2	AB	627	A	Sidechain
2	AB	628	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	629	G	Sidechain
2	AB	63	A	Sidechain
2	AB	630	G	Sidechain
2	AB	631	A	Sidechain
2	AB	636	G	Sidechain
2	AB	637	A	Sidechain
2	AB	639	U	Sidechain
2	AB	64	A	Sidechain
2	AB	641	U	Sidechain
2	AB	644	A	Sidechain
2	AB	646	U	Sidechain
2	AB	647	G	Sidechain
2	AB	648	G	Sidechain
2	AB	649	G	Sidechain
2	AB	65	U	Sidechain
2	AB	652	U	Sidechain
2	AB	654	A	Sidechain
2	AB	656	G	Sidechain
2	AB	658	U	Sidechain
2	AB	659	G	Sidechain
2	AB	661	A	Sidechain
2	AB	662	G	Sidechain
2	AB	663	G	Sidechain
2	AB	665	U	Sidechain
2	AB	666	A	Sidechain
2	AB	667	U	Sidechain
2	AB	668	A	Sidechain
2	AB	67	U	Sidechain
2	AB	671	C	Sidechain
2	AB	672	C	Sidechain
2	AB	673	C	Sidechain
2	AB	674	G	Sidechain
2	AB	676	A	Sidechain
2	AB	677	A	Sidechain
2	AB	678	C	Sidechain
2	AB	679	C	Sidechain
2	AB	680	C	Sidechain
2	AB	682	G	Sidechain
2	AB	684	G	Sidechain
2	AB	685	A	Sidechain
2	AB	686	U	Sidechain
2	AB	687	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	688	U	Sidechain
2	AB	69	C	Sidechain
2	AB	690	G	Sidechain
2	AB	693	A	Sidechain
2	AB	695	G	Sidechain
2	AB	696	G	Sidechain
2	AB	698	C	Sidechain
2	AB	7	G	Sidechain
2	AB	70	G	Sidechain
2	AB	701	G	Sidechain
2	AB	707	G	Sidechain
2	AB	709	U	Sidechain
2	AB	71	A	Sidechain
2	AB	710	U	Sidechain
2	AB	711	G	Sidechain
2	AB	712	G	Sidechain
2	AB	713	G	Sidechain
2	AB	714	U	Sidechain
2	AB	716	A	Sidechain
2	AB	721	A	Sidechain
2	AB	724	U	Sidechain
2	AB	727	A	Sidechain
2	AB	728	G	Sidechain
2	AB	73	A	Sidechain
2	AB	730	A	Sidechain
2	AB	733	G	Sidechain
2	AB	736	C	Sidechain
2	AB	737	C	Sidechain
2	AB	738	G	Sidechain
2	AB	739	A	Sidechain
2	AB	74	A	Sidechain
2	AB	740	C	Sidechain
2	AB	741	U	Sidechain
2	AB	742	A	Sidechain
2	AB	744	U	Sidechain
2	AB	748	G	Sidechain
2	AB	75	G	Sidechain
2	AB	750	A	Sidechain
2	AB	752	A	Sidechain
2	AB	753	A	Sidechain
2	AB	755	U	Sidechain
2	AB	756	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	758	C	Sidechain
2	AB	76	C	Sidechain
2	AB	760	G	Sidechain
2	AB	761	A	Sidechain
2	AB	762	U	Sidechain
2	AB	763	G	Sidechain
2	AB	764	A	Sidechain
2	AB	765	C	Sidechain
2	AB	766	U	Sidechain
2	AB	767	U	Sidechain
2	AB	77	G	Sidechain
2	AB	770	G	Sidechain
2	AB	771	G	Sidechain
2	AB	772	C	Sidechain
2	AB	773	U	Sidechain
2	AB	774	G	Sidechain
2	AB	776	G	Sidechain
2	AB	778	G	Sidechain
2	AB	779	U	Sidechain
2	AB	78	U	Sidechain
2	AB	780	G	Sidechain
2	AB	783	A	Sidechain
2	AB	784	G	Sidechain
2	AB	785	G	Sidechain
2	AB	787	C	Sidechain
2	AB	789	A	Sidechain
2	AB	791	C	Sidechain
2	AB	793	A	Sidechain
2	AB	794	A	Sidechain
2	AB	795	C	Sidechain
2	AB	797	G	Sidechain
2	AB	798	G	Sidechain
2	AB	80	G	Sidechain
2	AB	800	A	Sidechain
2	AB	801	G	Sidechain
2	AB	802	A	Sidechain
2	AB	803	U	Sidechain
2	AB	804	A	Sidechain
2	AB	805	G	Sidechain
2	AB	808	G	Sidechain
2	AB	81	G	Sidechain
2	AB	811	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	812	C	Sidechain
2	AB	813	U	Sidechain
2	AB	814	C	Sidechain
2	AB	815	C	Sidechain
2	AB	816	C	Sidechain
2	AB	818	G	Sidechain
2	AB	819	A	Sidechain
2	AB	82	U	Sidechain
2	AB	820	A	Sidechain
2	AB	823	C	Sidechain
2	AB	827	U	Sidechain
2	AB	828	U	Sidechain
2	AB	829	A	Sidechain
2	AB	83	A	Sidechain
2	AB	830	G	Sidechain
2	AB	831	G	Sidechain
2	AB	832	U	Sidechain
2	AB	834	G	Sidechain
2	AB	836	G	Sidechain
2	AB	837	C	Sidechain
2	AB	838	C	Sidechain
2	AB	839	U	Sidechain
2	AB	84	A	Sidechain
2	AB	842	U	Sidechain
2	AB	843	G	Sidechain
2	AB	846	U	Sidechain
2	AB	847	U	Sidechain
2	AB	848	C	Sidechain
2	AB	85	G	Sidechain
2	AB	850	U	Sidechain
2	AB	851	C	Sidechain
2	AB	855	G	Sidechain
2	AB	856	G	Sidechain
2	AB	857	G	Sidechain
2	AB	858	G	Sidechain
2	AB	86	G	Sidechain
2	AB	862	G	Sidechain
2	AB	864	G	Sidechain
2	AB	867	C	Sidechain
2	AB	868	U	Sidechain
2	AB	870	U	Sidechain
2	AB	874	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	877	A	Sidechain
2	AB	88	G	Sidechain
2	AB	881	G	Sidechain
2	AB	882	G	Sidechain
2	AB	883	G	Sidechain
2	AB	884	U	Sidechain
2	AB	885	C	Sidechain
2	AB	887	U	Sidechain
2	AB	890	C	Sidechain
2	AB	894	U	Sidechain
2	AB	896	A	Sidechain
2	AB	899	A	Sidechain
2	AB	9	G	Sidechain
2	AB	90	U	Sidechain
2	AB	900	A	Sidechain
2	AB	902	C	Sidechain
2	AB	903	C	Sidechain
2	AB	904	G	Sidechain
2	AB	906	U	Sidechain
2	AB	907	G	Sidechain
2	AB	909	A	Sidechain
2	AB	91	A	Sidechain
2	AB	910	A	Sidechain
2	AB	912	C	Sidechain
2	AB	913	U	Sidechain
2	AB	915	C	Sidechain
2	AB	918	A	Sidechain
2	AB	919	U	Sidechain
2	AB	921	C	Sidechain
2	AB	922	C	Sidechain
2	AB	923	G	Sidechain
2	AB	924	G	Sidechain
2	AB	925	A	Sidechain
2	AB	926	G	Sidechain
2	AB	927	A	Sidechain
2	AB	931	U	Sidechain
2	AB	936	A	Sidechain
2	AB	938	G	Sidechain
2	AB	939	G	Sidechain
2	AB	94	A	Sidechain
2	AB	940	G	Sidechain
2	AB	942	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	945	A	Sidechain
2	AB	946	C	Sidechain
2	AB	947	A	Sidechain
2	AB	948	C	Sidechain
2	AB	949	G	Sidechain
2	AB	951	C	Sidechain
2	AB	953	G	Sidechain
2	AB	956	G	Sidechain
2	AB	958	U	Sidechain
2	AB	959	A	Sidechain
2	AB	96	C	Sidechain
2	AB	960	A	Sidechain
2	AB	961	C	Sidechain
2	AB	962	G	Sidechain
2	AB	965	C	Sidechain
2	AB	968	C	Sidechain
2	AB	97	C	Sidechain
2	AB	971	G	Sidechain
2	AB	972	A	Sidechain
2	AB	973	A	Sidechain
2	AB	974	G	Sidechain
2	AB	976	G	Sidechain
2	AB	977	G	Sidechain
2	AB	978	G	Sidechain
2	AB	98	G	Sidechain
2	AB	980	A	Sidechain
2	AB	983	A	Sidechain
2	AB	984	A	Sidechain
2	AB	985	C	Sidechain
2	AB	988	A	Sidechain
2	AB	989	G	Sidechain
2	AB	99	U	Sidechain
2	AB	994	C	Sidechain
2	AB	997	G	Sidechain
2	AB	998	C	Sidechain
2	AB	999	U	Sidechain
3	AC	21	TYR	Sidechain
3	AC	78	PHE	Sidechain
4	AD	101	ARG	Peptide
4	AD	13	ARG	Sidechain
4	AD	144	GLU	Mainchain
4	AD	176	ARG	Sidechain

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Mol	Chain	Res	Type	Group
4	AD	211	ARG	Sidechain
4	AD	232	GLY	Peptide
4	AD	29	PHE	Sidechain
4	AD	52	HIS	Peptide
4	AD	62	ARG	Sidechain
4	AD	82	TYR	Sidechain
4	AD	95	TYR	Sidechain
5	AE	113	SER	Peptide
5	AE	124	ARG	Sidechain
5	AE	128	ARG	Sidechain
5	AE	136	ASN	Mainchain
5	AE	179	ARG	Sidechain
5	AE	32	ASN	Mainchain
5	AE	33	ARG	Sidechain
5	AE	40	LEU	Peptide
5	AE	59	ARG	Sidechain
5	AE	77	ARG	Sidechain
5	AE	90	PHE	Peptide
6	AF	101	TYR	Sidechain
6	AF	70	SER	Peptide
6	AF	85	PHE	Sidechain
7	AG	102	LEU	Peptide
7	AG	111	ARG	Sidechain
7	AG	113	PHE	Sidechain
7	AG	137	PHE	Peptide
7	AG	142	TYR	Sidechain
7	AG	149	ARG	Peptide
7	AG	177	ARG	Sidechain
7	AG	82	TYR	Sidechain
8	AH	156	TYR	Sidechain
8	AH	167	VAL	Mainchain,Peptide
8	AH	93	TYR	Mainchain
8	AH	94	ARG	Sidechain
9	AI	123	ARG	Sidechain
9	AI	47	PHE	Sidechain
9	AI	97	ARG	Sidechain
10	AJ	112	PHE	Sidechain
10	AJ	61	ARG	Sidechain
10	AJ	79	THR	Peptide
11	AK	133	ARG	Sidechain
11	AK	61	TYR	Sidechain
12	AL	34	ARG	Sidechain

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Mol	Chain	Res	Type	Group
12	AL	44	TYR	Sidechain
12	AL	74	TYR	Sidechain
12	AL	83	GLY	Peptide
13	AM	32	TYR	Sidechain
13	AM	4	GLU	Peptide
13	AM	49	ARG	Sidechain
13	AM	76	VAL	Peptide
13	AM	79	PHE	Sidechain
14	AN	45	GLY	Peptide
14	AN	64	PHE	Sidechain
14	AN	66	PHE	Mainchain
14	AN	78	ARG	Sidechain
15	AO	103	TYR	Sidechain
15	AO	55	ARG	Sidechain
15	AO	91	TYR	Sidechain
16	AP	118	ARG	Sidechain
16	AP	122	ALA	Mainchain
16	AP	123	GLU	Peptide
16	AP	2	ARG	Sidechain
16	AP	4	ARG	Sidechain
16	AP	63	ARG	Sidechain
16	AP	71	ARG	Sidechain
16	AP	96	ARG	Sidechain
17	AQ	33	ARG	Sidechain
17	AQ	64	TYR	Sidechain
18	AR	20	ARG	Sidechain
18	AR	61	ARG	Sidechain
18	AR	76	HIS	Sidechain
18	AR	87	ARG	Sidechain
18	AR	96	LEU	Mainchain,Peptide
18	AR	98	TYR	Sidechain
19	AS	31	TYR	Sidechain
19	AS	32	ARG	Sidechain
19	AS	44	TYR	Sidechain
19	AS	69	ARG	Sidechain
19	AS	75	TYR	Sidechain
20	AT	5	PHE	Sidechain
20	AT	53	PHE	Sidechain
20	AT	77	PHE	Sidechain
20	AT	83	TYR	Sidechain
20	AT	84	ARG	Sidechain
21	AU	38	TYR	Sidechain

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Mol	Chain	Res	Type	Group
21	AU	8	ARG	Sidechain
22	AV	55	VAL	Mainchain
23	AW	93	ARG	Sidechain
24	AX	9	ARG	Sidechain
25	AY	13	ARG	Peptide
25	AY	14	ASP	Mainchain
25	AY	16	GLU	Peptide
25	AY	17	ALA	Peptide
25	AY	19	ARG	Peptide
25	AY	24	ARG	Sidechain
25	AY	54	ARG	Sidechain
26	AZ	10	ARG	Sidechain
26	AZ	56	ARG	Sidechain
35	BA	10	A	Sidechain
35	BA	100	G	Sidechain
35	BA	1000	A	Sidechain
35	BA	1002	G	Sidechain
35	BA	1003	G	Sidechain
35	BA	1006	G	Sidechain
35	BA	1009	U	Sidechain
35	BA	101	A	Sidechain
35	BA	1012	A	Sidechain
35	BA	1013	G	Sidechain
35	BA	1015	G	Sidechain
35	BA	1016	A	Sidechain
35	BA	1017	U	Sidechain
35	BA	1018	G	Sidechain
35	BA	1019	A	Sidechain
35	BA	102	G	Sidechain
35	BA	1020	G	Sidechain
35	BA	1021	A	Sidechain
35	BA	1022	A	Sidechain
35	BA	1023	U	Sidechain
35	BA	1024	G	Sidechain
35	BA	1025	U	Sidechain
35	BA	1026	G	Sidechain
35	BA	103	U	Sidechain
35	BA	1030	U	Sidechain
35	BA	1032	G	Sidechain
35	BA	1033	G	Sidechain
35	BA	1034	G	Sidechain
35	BA	1036	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1037	C	Sidechain
35	BA	1039	G	Sidechain
35	BA	1040	U	Sidechain
35	BA	1041	G	Sidechain
35	BA	1043	G	Sidechain
35	BA	1044	A	Sidechain
35	BA	1045	C	Sidechain
35	BA	1046	A	Sidechain
35	BA	1048	G	Sidechain
35	BA	1050	G	Sidechain
35	BA	1051	C	Sidechain
35	BA	1053	G	Sidechain
35	BA	1054	C	Sidechain
35	BA	1056	U	Sidechain
35	BA	1057	G	Sidechain
35	BA	1058	G	Sidechain
35	BA	1059	C	Sidechain
35	BA	1061	G	Sidechain
35	BA	1062	U	Sidechain
35	BA	1063	C	Sidechain
35	BA	1064	G	Sidechain
35	BA	1065	U	Sidechain
35	BA	1067	A	Sidechain
35	BA	1068	G	Sidechain
35	BA	107	G	Sidechain
35	BA	1070	U	Sidechain
35	BA	1071	C	Sidechain
35	BA	1072	G	Sidechain
35	BA	1073	U	Sidechain
35	BA	1074	G	Sidechain
35	BA	1075	U	Sidechain
35	BA	1076	U	Sidechain
35	BA	1077	G	Sidechain
35	BA	1078	U	Sidechain
35	BA	1079	G	Sidechain
35	BA	108	G	Sidechain
35	BA	1080	A	Sidechain
35	BA	1082	A	Sidechain
35	BA	1084	G	Sidechain
35	BA	1085	U	Sidechain
35	BA	1088	G	Sidechain
35	BA	109	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1090	U	Sidechain
35	BA	1093	A	Sidechain
35	BA	1094	G	Sidechain
35	BA	1095	U	Sidechain
35	BA	1096	C	Sidechain
35	BA	1098	C	Sidechain
35	BA	1099	G	Sidechain
35	BA	110	C	Sidechain
35	BA	1101	A	Sidechain
35	BA	1104	G	Sidechain
35	BA	1106	G	Sidechain
35	BA	111	G	Sidechain
35	BA	1112	C	Sidechain
35	BA	1113	C	Sidechain
35	BA	1114	C	Sidechain
35	BA	1115	U	Sidechain
35	BA	1116	U	Sidechain
35	BA	1119	C	Sidechain
35	BA	112	G	Sidechain
35	BA	1124	G	Sidechain
35	BA	1126	U	Sidechain
35	BA	1127	G	Sidechain
35	BA	1128	C	Sidechain
35	BA	113	G	Sidechain
35	BA	1132	C	Sidechain
35	BA	1133	G	Sidechain
35	BA	1135	U	Sidechain
35	BA	1136	C	Sidechain
35	BA	1137	C	Sidechain
35	BA	1138	G	Sidechain
35	BA	114	U	Sidechain
35	BA	1142	G	Sidechain
35	BA	1144	G	Sidechain
35	BA	1146	A	Sidechain
35	BA	1147	C	Sidechain
35	BA	1150	A	Sidechain
35	BA	1151	A	Sidechain
35	BA	1159	U	Sidechain
35	BA	1161	C	Sidechain
35	BA	1162	C	Sidechain
35	BA	1163	A	Sidechain
35	BA	1164	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1165	U	Sidechain
35	BA	1166	G	Sidechain
35	BA	1167	A	Sidechain
35	BA	1168	U	Sidechain
35	BA	1169	A	Sidechain
35	BA	1170	A	Sidechain
35	BA	1171	A	Sidechain
35	BA	1173	U	Sidechain
35	BA	1174	G	Sidechain
35	BA	1175	G	Sidechain
35	BA	1176	A	Sidechain
35	BA	1177	G	Sidechain
35	BA	1178	G	Sidechain
35	BA	1181	G	Sidechain
35	BA	1182	G	Sidechain
35	BA	1183	U	Sidechain
35	BA	1184	G	Sidechain
35	BA	1185	G	Sidechain
35	BA	1186	G	Sidechain
35	BA	1187	G	Sidechain
35	BA	1188	A	Sidechain
35	BA	1189	U	Sidechain
35	BA	1190	G	Sidechain
35	BA	1193	G	Sidechain
35	BA	1196	A	Sidechain
35	BA	1198	G	Sidechain
35	BA	120	A	Sidechain
35	BA	1201	A	Sidechain
35	BA	1202	U	Sidechain
35	BA	1203	C	Sidechain
35	BA	1204	A	Sidechain
35	BA	1211	U	Sidechain
35	BA	1213	A	Sidechain
35	BA	1214	C	Sidechain
35	BA	1216	A	Sidechain
35	BA	1219	A	Sidechain
35	BA	122	G	Sidechain
35	BA	1220	G	Sidechain
35	BA	1221	G	Sidechain
35	BA	1222	G	Sidechain
35	BA	1225	A	Sidechain
35	BA	1226	C	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1228	C	Sidechain
35	BA	123	U	Sidechain
35	BA	1230	C	Sidechain
35	BA	1232	U	Sidechain
35	BA	1233	G	Sidechain
35	BA	1235	U	Sidechain
35	BA	1237	C	Sidechain
35	BA	1238	A	Sidechain
35	BA	1239	A	Sidechain
35	BA	1240	U	Sidechain
35	BA	1241	G	Sidechain
35	BA	1242	G	Sidechain
35	BA	1244	G	Sidechain
35	BA	1246	A	Sidechain
35	BA	1247	U	Sidechain
35	BA	125	U	Sidechain
35	BA	1250	A	Sidechain
35	BA	1251	A	Sidechain
35	BA	1253	G	Sidechain
35	BA	1254	A	Sidechain
35	BA	1255	G	Sidechain
35	BA	1257	A	Sidechain
35	BA	126	G	Sidechain
35	BA	1260	G	Sidechain
35	BA	1261	A	Sidechain
35	BA	1263	C	Sidechain
35	BA	1264	U	Sidechain
35	BA	1267	C	Sidechain
35	BA	1268	G	Sidechain
35	BA	1269	A	Sidechain
35	BA	127	G	Sidechain
35	BA	1270	G	Sidechain
35	BA	1276	G	Sidechain
35	BA	1277	C	Sidechain
35	BA	1278	G	Sidechain
35	BA	1282	C	Sidechain
35	BA	1285	A	Sidechain
35	BA	1286	U	Sidechain
35	BA	1287	A	Sidechain
35	BA	1289	A	Sidechain
35	BA	129	A	Sidechain
35	BA	1291	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1292	G	Sidechain
35	BA	1295	U	Sidechain
35	BA	1296	C	Sidechain
35	BA	1297	G	Sidechain
35	BA	1298	U	Sidechain
35	BA	1299	A	Sidechain
35	BA	130	A	Sidechain
35	BA	1301	U	Sidechain
35	BA	1302	C	Sidechain
35	BA	1304	G	Sidechain
35	BA	1305	G	Sidechain
35	BA	1306	A	Sidechain
35	BA	1308	U	Sidechain
35	BA	1311	A	Sidechain
35	BA	1312	G	Sidechain
35	BA	1313	U	Sidechain
35	BA	1315	U	Sidechain
35	BA	1316	G	Sidechain
35	BA	1317	C	Sidechain
35	BA	1321	U	Sidechain
35	BA	1322	C	Sidechain
35	BA	1323	G	Sidechain
35	BA	1324	A	Sidechain
35	BA	1325	C	Sidechain
35	BA	1329	A	Sidechain
35	BA	1330	U	Sidechain
35	BA	1333	A	Sidechain
35	BA	1334	G	Sidechain
35	BA	1337	G	Sidechain
35	BA	1339	A	Sidechain
35	BA	134	G	Sidechain
35	BA	1340	A	Sidechain
35	BA	1345	U	Sidechain
35	BA	1346	A	Sidechain
35	BA	1349	A	Sidechain
35	BA	1351	U	Sidechain
35	BA	1352	C	Sidechain
35	BA	1353	G	Sidechain
35	BA	1354	U	Sidechain
35	BA	1355	G	Sidechain
35	BA	1356	G	Sidechain
35	BA	1357	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1358	U	Sidechain
35	BA	136	C	Sidechain
35	BA	1364	U	Sidechain
35	BA	1366	C	Sidechain
35	BA	137	U	Sidechain
35	BA	1370	G	Sidechain
35	BA	1371	G	Sidechain
35	BA	1372	U	Sidechain
35	BA	1373	G	Sidechain
35	BA	1375	A	Sidechain
35	BA	1378	C	Sidechain
35	BA	1379	G	Sidechain
35	BA	138	G	Sidechain
35	BA	1380	U	Sidechain
35	BA	1382	C	Sidechain
35	BA	1383	C	Sidechain
35	BA	1385	G	Sidechain
35	BA	1387	G	Sidechain
35	BA	1388	C	Sidechain
35	BA	1392	G	Sidechain
35	BA	1393	U	Sidechain
35	BA	1394	A	Sidechain
35	BA	1397	C	Sidechain
35	BA	1398	A	Sidechain
35	BA	14	U	Sidechain
35	BA	140	U	Sidechain
35	BA	1400	C	Sidechain
35	BA	1403	C	Sidechain
35	BA	1404	C	Sidechain
35	BA	1409	C	Sidechain
35	BA	1410	A	Sidechain
35	BA	1413	A	Sidechain
35	BA	1414	U	Sidechain
35	BA	1415	G	Sidechain
35	BA	1416	G	Sidechain
35	BA	1417	G	Sidechain
35	BA	1419	G	Sidechain
35	BA	142	G	Sidechain
35	BA	1421	G	Sidechain
35	BA	1422	G	Sidechain
35	BA	1424	U	Sidechain
35	BA	1425	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1426	G	Sidechain
35	BA	1427	C	Sidechain
35	BA	1428	A	Sidechain
35	BA	143	A	Sidechain
35	BA	1430	A	Sidechain
35	BA	1431	A	Sidechain
35	BA	1432	G	Sidechain
35	BA	1435	G	Sidechain
35	BA	1436	U	Sidechain
35	BA	144	G	Sidechain
35	BA	1440	U	Sidechain
35	BA	1441	A	Sidechain
35	BA	1443	C	Sidechain
35	BA	1444	U	Sidechain
35	BA	1445	U	Sidechain
35	BA	1446	A	Sidechain
35	BA	1447	A	Sidechain
35	BA	1448	C	Sidechain
35	BA	1449	C	Sidechain
35	BA	1451	U	Sidechain
35	BA	1454	G	Sidechain
35	BA	1455	G	Sidechain
35	BA	1457	G	Sidechain
35	BA	146	G	Sidechain
35	BA	1460	C	Sidechain
35	BA	1463	U	Sidechain
35	BA	1464	U	Sidechain
35	BA	1467	C	Sidechain
35	BA	1469	C	Sidechain
35	BA	147	G	Sidechain
35	BA	1470	U	Sidechain
35	BA	1471	U	Sidechain
35	BA	1473	G	Sidechain
35	BA	1474	U	Sidechain
35	BA	1476	A	Sidechain
35	BA	1477	U	Sidechain
35	BA	1478	U	Sidechain
35	BA	1479	C	Sidechain
35	BA	1480	A	Sidechain
35	BA	1482	G	Sidechain
35	BA	1483	A	Sidechain
35	BA	1485	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1486	G	Sidechain
35	BA	1488	G	Sidechain
35	BA	1489	G	Sidechain
35	BA	1491	G	Sidechain
35	BA	1492	A	Sidechain
35	BA	1494	G	Sidechain
35	BA	15	G	Sidechain
35	BA	1503	A	Sidechain
35	BA	1504	G	Sidechain
35	BA	1506	U	Sidechain
35	BA	1507	A	Sidechain
35	BA	1509	C	Sidechain
35	BA	151	A	Sidechain
35	BA	1511	G	Sidechain
35	BA	1512	U	Sidechain
35	BA	1513	A	Sidechain
35	BA	1514	G	Sidechain
35	BA	1515	G	Sidechain
35	BA	1517	G	Sidechain
35	BA	152	A	Sidechain
35	BA	1525	G	Sidechain
35	BA	1527	U	Sidechain
35	BA	1528	U	Sidechain
35	BA	1529	G	Sidechain
35	BA	1530	G	Sidechain
35	BA	1533	C	Sidechain
35	BA	1534	A	Sidechain
35	BA	1536	C	Sidechain
35	BA	1537	U	Sidechain
35	BA	1538	C	Sidechain
35	BA	1541	U	Sidechain
35	BA	1542	A	Sidechain
35	BA	155	A	Sidechain
35	BA	156	C	Sidechain
35	BA	157	U	Sidechain
35	BA	158	G	Sidechain
35	BA	162	A	Sidechain
35	BA	163	C	Sidechain
35	BA	164	G	Sidechain
35	BA	165	G	Sidechain
35	BA	166	U	Sidechain
35	BA	168	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	169	C	Sidechain
35	BA	17	U	Sidechain
35	BA	170	U	Sidechain
35	BA	171	A	Sidechain
35	BA	172	A	Sidechain
35	BA	173	U	Sidechain
35	BA	174	A	Sidechain
35	BA	178	C	Sidechain
35	BA	179	A	Sidechain
35	BA	180	U	Sidechain
35	BA	181	A	Sidechain
35	BA	183	C	Sidechain
35	BA	184	G	Sidechain
35	BA	187	G	Sidechain
35	BA	188	C	Sidechain
35	BA	191	G	Sidechain
35	BA	192	A	Sidechain
35	BA	195	A	Sidechain
35	BA	196	A	Sidechain
35	BA	199	A	Sidechain
35	BA	2	A	Sidechain
35	BA	200	G	Sidechain
35	BA	201	G	Sidechain
35	BA	202	G	Sidechain
35	BA	203	G	Sidechain
35	BA	204	G	Sidechain
35	BA	205	A	Sidechain
35	BA	206	C	Sidechain
35	BA	208	U	Sidechain
35	BA	209	U	Sidechain
35	BA	21	G	Sidechain
35	BA	212	G	Sidechain
35	BA	213	G	Sidechain
35	BA	214	C	Sidechain
35	BA	220	G	Sidechain
35	BA	222	C	Sidechain
35	BA	225	C	Sidechain
35	BA	228	A	Sidechain
35	BA	229	U	Sidechain
35	BA	23	C	Sidechain
35	BA	230	G	Sidechain
35	BA	231	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	232	G	Sidechain
35	BA	233	C	Sidechain
35	BA	234	C	Sidechain
35	BA	236	A	Sidechain
35	BA	237	G	Sidechain
35	BA	239	U	Sidechain
35	BA	24	U	Sidechain
35	BA	240	G	Sidechain
35	BA	241	G	Sidechain
35	BA	242	G	Sidechain
35	BA	247	G	Sidechain
35	BA	248	C	Sidechain
35	BA	249	U	Sidechain
35	BA	25	C	Sidechain
35	BA	250	A	Sidechain
35	BA	251	G	Sidechain
35	BA	252	U	Sidechain
35	BA	253	A	Sidechain
35	BA	254	G	Sidechain
35	BA	255	G	Sidechain
35	BA	256	U	Sidechain
35	BA	257	G	Sidechain
35	BA	258	G	Sidechain
35	BA	26	A	Sidechain
35	BA	261	U	Sidechain
35	BA	263	A	Sidechain
35	BA	268	U	Sidechain
35	BA	269	C	Sidechain
35	BA	27	G	Sidechain
35	BA	272	C	Sidechain
35	BA	274	A	Sidechain
35	BA	275	G	Sidechain
35	BA	278	G	Sidechain
35	BA	28	A	Sidechain
35	BA	281	G	Sidechain
35	BA	283	U	Sidechain
35	BA	284	C	Sidechain
35	BA	285	C	Sidechain
35	BA	287	U	Sidechain
35	BA	29	U	Sidechain
35	BA	290	C	Sidechain
35	BA	291	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	293	G	Sidechain
35	BA	294	U	Sidechain
35	BA	297	G	Sidechain
35	BA	298	A	Sidechain
35	BA	299	G	Sidechain
35	BA	3	A	Sidechain
35	BA	30	U	Sidechain
35	BA	303	A	Sidechain
35	BA	31	G	Sidechain
35	BA	311	C	Sidechain
35	BA	315	A	Sidechain
35	BA	322	C	Sidechain
35	BA	323	U	Sidechain
35	BA	325	A	Sidechain
35	BA	328	C	Sidechain
35	BA	33	A	Sidechain
35	BA	330	C	Sidechain
35	BA	331	G	Sidechain
35	BA	332	G	Sidechain
35	BA	335	C	Sidechain
35	BA	337	G	Sidechain
35	BA	342	C	Sidechain
35	BA	343	U	Sidechain
35	BA	347	G	Sidechain
35	BA	348	G	Sidechain
35	BA	35	G	Sidechain
35	BA	351	G	Sidechain
35	BA	354	G	Sidechain
35	BA	355	C	Sidechain
35	BA	356	A	Sidechain
35	BA	358	U	Sidechain
35	BA	359	G	Sidechain
35	BA	36	C	Sidechain
35	BA	360	G	Sidechain
35	BA	362	G	Sidechain
35	BA	364	A	Sidechain
35	BA	365	U	Sidechain
35	BA	366	A	Sidechain
35	BA	367	U	Sidechain
35	BA	368	U	Sidechain
35	BA	369	G	Sidechain
35	BA	37	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	372	C	Sidechain
35	BA	374	A	Sidechain
35	BA	377	G	Sidechain
35	BA	379	C	Sidechain
35	BA	38	G	Sidechain
35	BA	380	G	Sidechain
35	BA	381	C	Sidechain
35	BA	384	G	Sidechain
35	BA	385	C	Sidechain
35	BA	386	C	Sidechain
35	BA	388	G	Sidechain
35	BA	389	A	Sidechain
35	BA	391	G	Sidechain
35	BA	392	C	Sidechain
35	BA	393	A	Sidechain
35	BA	394	G	Sidechain
35	BA	398	U	Sidechain
35	BA	399	G	Sidechain
35	BA	402	G	Sidechain
35	BA	403	C	Sidechain
35	BA	405	U	Sidechain
35	BA	406	G	Sidechain
35	BA	408	A	Sidechain
35	BA	409	U	Sidechain
35	BA	410	G	Sidechain
35	BA	411	A	Sidechain
35	BA	412	A	Sidechain
35	BA	413	G	Sidechain
35	BA	416	G	Sidechain
35	BA	417	G	Sidechain
35	BA	418	C	Sidechain
35	BA	42	G	Sidechain
35	BA	420	U	Sidechain
35	BA	423	G	Sidechain
35	BA	426	U	Sidechain
35	BA	428	G	Sidechain
35	BA	431	A	Sidechain
35	BA	434	U	Sidechain
35	BA	435	A	Sidechain
35	BA	437	U	Sidechain
35	BA	438	U	Sidechain
35	BA	439	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	44	A	Sidechain
35	BA	441	A	Sidechain
35	BA	442	G	Sidechain
35	BA	443	C	Sidechain
35	BA	444	G	Sidechain
35	BA	445	G	Sidechain
35	BA	446	G	Sidechain
35	BA	447	G	Sidechain
35	BA	448	A	Sidechain
35	BA	449	G	Sidechain
35	BA	450	G	Sidechain
35	BA	451	A	Sidechain
35	BA	452	A	Sidechain
35	BA	457	G	Sidechain
35	BA	458	U	Sidechain
35	BA	459	A	Sidechain
35	BA	460	A	Sidechain
35	BA	461	A	Sidechain
35	BA	463	U	Sidechain
35	BA	464	U	Sidechain
35	BA	465	A	Sidechain
35	BA	469	C	Sidechain
35	BA	47	C	Sidechain
35	BA	470	C	Sidechain
35	BA	471	U	Sidechain
35	BA	472	U	Sidechain
35	BA	474	G	Sidechain
35	BA	475	C	Sidechain
35	BA	477	C	Sidechain
35	BA	478	A	Sidechain
35	BA	482	A	Sidechain
35	BA	484	G	Sidechain
35	BA	488	C	Sidechain
35	BA	491	G	Sidechain
35	BA	493	A	Sidechain
35	BA	494	G	Sidechain
35	BA	495	A	Sidechain
35	BA	496	A	Sidechain
35	BA	497	G	Sidechain
35	BA	498	A	Sidechain
35	BA	499	A	Sidechain
35	BA	500	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	501	C	Sidechain
35	BA	504	C	Sidechain
35	BA	505	G	Sidechain
35	BA	506	G	Sidechain
35	BA	509	A	Sidechain
35	BA	51	A	Sidechain
35	BA	510	A	Sidechain
35	BA	511	C	Sidechain
35	BA	515	G	Sidechain
35	BA	517	G	Sidechain
35	BA	519	C	Sidechain
35	BA	522	C	Sidechain
35	BA	523	A	Sidechain
35	BA	524	G	Sidechain
35	BA	525	C	Sidechain
35	BA	529	G	Sidechain
35	BA	53	A	Sidechain
35	BA	530	G	Sidechain
35	BA	533	A	Sidechain
35	BA	534	U	Sidechain
35	BA	535	A	Sidechain
35	BA	536	C	Sidechain
35	BA	539	A	Sidechain
35	BA	54	C	Sidechain
35	BA	541	G	Sidechain
35	BA	542	G	Sidechain
35	BA	545	C	Sidechain
35	BA	546	A	Sidechain
35	BA	55	A	Sidechain
35	BA	550	G	Sidechain
35	BA	551	U	Sidechain
35	BA	552	U	Sidechain
35	BA	554	A	Sidechain
35	BA	556	C	Sidechain
35	BA	557	G	Sidechain
35	BA	558	G	Sidechain
35	BA	559	A	Sidechain
35	BA	560	A	Sidechain
35	BA	561	U	Sidechain
35	BA	562	U	Sidechain
35	BA	563	A	Sidechain
35	BA	564	C	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	566	G	Sidechain
35	BA	567	G	Sidechain
35	BA	568	G	Sidechain
35	BA	57	G	Sidechain
35	BA	571	U	Sidechain
35	BA	572	A	Sidechain
35	BA	574	A	Sidechain
35	BA	575	G	Sidechain
35	BA	576	C	Sidechain
35	BA	577	G	Sidechain
35	BA	578	C	Sidechain
35	BA	579	A	Sidechain
35	BA	58	C	Sidechain
35	BA	582	C	Sidechain
35	BA	584	G	Sidechain
35	BA	587	G	Sidechain
35	BA	588	G	Sidechain
35	BA	589	U	Sidechain
35	BA	590	U	Sidechain
35	BA	592	G	Sidechain
35	BA	593	U	Sidechain
35	BA	594	U	Sidechain
35	BA	595	A	Sidechain
35	BA	599	C	Sidechain
35	BA	60	A	Sidechain
35	BA	601	G	Sidechain
35	BA	602	A	Sidechain
35	BA	603	U	Sidechain
35	BA	604	G	Sidechain
35	BA	606	G	Sidechain
35	BA	607	A	Sidechain
35	BA	61	G	Sidechain
35	BA	610	U	Sidechain
35	BA	614	C	Sidechain
35	BA	616	G	Sidechain
35	BA	618	C	Sidechain
35	BA	619	U	Sidechain
35	BA	620	C	Sidechain
35	BA	621	A	Sidechain
35	BA	622	A	Sidechain
35	BA	623	C	Sidechain
35	BA	625	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	627	G	Sidechain
35	BA	628	G	Sidechain
35	BA	629	A	Sidechain
35	BA	63	C	Sidechain
35	BA	630	A	Sidechain
35	BA	633	G	Sidechain
35	BA	635	A	Sidechain
35	BA	637	C	Sidechain
35	BA	639	G	Sidechain
35	BA	64	G	Sidechain
35	BA	641	U	Sidechain
35	BA	642	A	Sidechain
35	BA	643	C	Sidechain
35	BA	644	U	Sidechain
35	BA	645	G	Sidechain
35	BA	646	G	Sidechain
35	BA	648	A	Sidechain
35	BA	649	A	Sidechain
35	BA	650	G	Sidechain
35	BA	655	A	Sidechain
35	BA	656	G	Sidechain
35	BA	657	U	Sidechain
35	BA	661	G	Sidechain
35	BA	662	U	Sidechain
35	BA	667	G	Sidechain
35	BA	670	G	Sidechain
35	BA	673	A	Sidechain
35	BA	674	G	Sidechain
35	BA	675	A	Sidechain
35	BA	676	A	Sidechain
35	BA	677	U	Sidechain
35	BA	678	U	Sidechain
35	BA	679	C	Sidechain
35	BA	680	C	Sidechain
35	BA	681	A	Sidechain
35	BA	682	G	Sidechain
35	BA	683	G	Sidechain
35	BA	684	U	Sidechain
35	BA	686	U	Sidechain
35	BA	687	A	Sidechain
35	BA	688	G	Sidechain
35	BA	689	C	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	690	G	Sidechain
35	BA	691	G	Sidechain
35	BA	692	U	Sidechain
35	BA	693	G	Sidechain
35	BA	695	A	Sidechain
35	BA	697	U	Sidechain
35	BA	7	A	Sidechain
35	BA	70	U	Sidechain
35	BA	700	G	Sidechain
35	BA	702	A	Sidechain
35	BA	703	G	Sidechain
35	BA	705	G	Sidechain
35	BA	711	G	Sidechain
35	BA	713	G	Sidechain
35	BA	714	G	Sidechain
35	BA	715	A	Sidechain
35	BA	72	A	Sidechain
35	BA	720	C	Sidechain
35	BA	721	G	Sidechain
35	BA	722	G	Sidechain
35	BA	723	U	Sidechain
35	BA	724	G	Sidechain
35	BA	727	G	Sidechain
35	BA	728	A	Sidechain
35	BA	731	G	Sidechain
35	BA	732	C	Sidechain
35	BA	733	G	Sidechain
35	BA	734	G	Sidechain
35	BA	735	C	Sidechain
35	BA	736	C	Sidechain
35	BA	737	C	Sidechain
35	BA	738	C	Sidechain
35	BA	74	A	Sidechain
35	BA	740	U	Sidechain
35	BA	742	G	Sidechain
35	BA	744	C	Sidechain
35	BA	745	G	Sidechain
35	BA	748	G	Sidechain
35	BA	749	A	Sidechain
35	BA	750	C	Sidechain
35	BA	751	U	Sidechain
35	BA	754	C	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	755	G	Sidechain
35	BA	761	G	Sidechain
35	BA	762	U	Sidechain
35	BA	764	C	Sidechain
35	BA	765	G	Sidechain
35	BA	768	A	Sidechain
35	BA	77	A	Sidechain
35	BA	772	U	Sidechain
35	BA	775	G	Sidechain
35	BA	776	G	Sidechain
35	BA	778	G	Sidechain
35	BA	779	C	Sidechain
35	BA	78	A	Sidechain
35	BA	781	A	Sidechain
35	BA	782	A	Sidechain
35	BA	783	C	Sidechain
35	BA	785	G	Sidechain
35	BA	787	A	Sidechain
35	BA	788	U	Sidechain
35	BA	790	A	Sidechain
35	BA	791	G	Sidechain
35	BA	794	A	Sidechain
35	BA	796	C	Sidechain
35	BA	797	C	Sidechain
35	BA	798	U	Sidechain
35	BA	8	A	Sidechain
35	BA	80	A	Sidechain
35	BA	800	G	Sidechain
35	BA	802	A	Sidechain
35	BA	803	G	Sidechain
35	BA	806	C	Sidechain
35	BA	809	G	Sidechain
35	BA	810	C	Sidechain
35	BA	812	G	Sidechain
35	BA	814	A	Sidechain
35	BA	815	A	Sidechain
35	BA	816	A	Sidechain
35	BA	817	C	Sidechain
35	BA	82	G	Sidechain
35	BA	820	U	Sidechain
35	BA	821	G	Sidechain
35	BA	822	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	823	C	Sidechain
35	BA	824	G	Sidechain
35	BA	827	U	Sidechain
35	BA	829	G	Sidechain
35	BA	83	C	Sidechain
35	BA	830	G	Sidechain
35	BA	831	A	Sidechain
35	BA	832	G	Sidechain
35	BA	833	G	Sidechain
35	BA	836	G	Sidechain
35	BA	837	U	Sidechain
35	BA	838	G	Sidechain
35	BA	839	C	Sidechain
35	BA	84	U	Sidechain
35	BA	841	C	Sidechain
35	BA	844	G	Sidechain
35	BA	845	A	Sidechain
35	BA	847	G	Sidechain
35	BA	849	G	Sidechain
35	BA	850	U	Sidechain
35	BA	852	G	Sidechain
35	BA	853	C	Sidechain
35	BA	854	U	Sidechain
35	BA	856	C	Sidechain
35	BA	857	C	Sidechain
35	BA	86	G	Sidechain
35	BA	860	A	Sidechain
35	BA	862	C	Sidechain
35	BA	864	A	Sidechain
35	BA	865	A	Sidechain
35	BA	867	G	Sidechain
35	BA	868	C	Sidechain
35	BA	869	G	Sidechain
35	BA	87	C	Sidechain
35	BA	871	U	Sidechain
35	BA	872	A	Sidechain
35	BA	873	A	Sidechain
35	BA	874	G	Sidechain
35	BA	875	U	Sidechain
35	BA	878	A	Sidechain
35	BA	879	C	Sidechain
35	BA	88	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	880	C	Sidechain
35	BA	881	G	Sidechain
35	BA	882	C	Sidechain
35	BA	884	U	Sidechain
35	BA	885	G	Sidechain
35	BA	886	G	Sidechain
35	BA	887	G	Sidechain
35	BA	888	G	Sidechain
35	BA	889	A	Sidechain
35	BA	89	U	Sidechain
35	BA	890	G	Sidechain
35	BA	892	A	Sidechain
35	BA	893	C	Sidechain
35	BA	894	G	Sidechain
35	BA	898	G	Sidechain
35	BA	899	C	Sidechain
35	BA	900	A	Sidechain
35	BA	901	A	Sidechain
35	BA	902	G	Sidechain
35	BA	903	G	Sidechain
35	BA	905	U	Sidechain
35	BA	906	A	Sidechain
35	BA	907	A	Sidechain
35	BA	909	A	Sidechain
35	BA	91	U	Sidechain
35	BA	910	C	Sidechain
35	BA	914	A	Sidechain
35	BA	916	U	Sidechain
35	BA	919	A	Sidechain
35	BA	921	U	Sidechain
35	BA	922	G	Sidechain
35	BA	924	C	Sidechain
35	BA	925	G	Sidechain
35	BA	926	G	Sidechain
35	BA	927	G	Sidechain
35	BA	928	G	Sidechain
35	BA	93	U	Sidechain
35	BA	930	C	Sidechain
35	BA	932	C	Sidechain
35	BA	937	A	Sidechain
35	BA	938	A	Sidechain
35	BA	939	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	94	G	Sidechain
35	BA	942	G	Sidechain
35	BA	943	U	Sidechain
35	BA	944	G	Sidechain
35	BA	945	G	Sidechain
35	BA	946	A	Sidechain
35	BA	949	A	Sidechain
35	BA	95	C	Sidechain
35	BA	950	U	Sidechain
35	BA	951	G	Sidechain
35	BA	953	G	Sidechain
35	BA	955	U	Sidechain
35	BA	956	U	Sidechain
35	BA	957	U	Sidechain
35	BA	960	U	Sidechain
35	BA	963	G	Sidechain
35	BA	968	A	Sidechain
35	BA	969	A	Sidechain
35	BA	972	C	Sidechain
35	BA	973	G	Sidechain
35	BA	974	A	Sidechain
35	BA	975	A	Sidechain
35	BA	976	G	Sidechain
35	BA	977	A	Sidechain
35	BA	978	A	Sidechain
35	BA	979	C	Sidechain
35	BA	980	C	Sidechain
35	BA	982	U	Sidechain
35	BA	983	A	Sidechain
35	BA	984	C	Sidechain
35	BA	985	C	Sidechain
35	BA	988	G	Sidechain
35	BA	989	U	Sidechain
35	BA	99	C	Sidechain
35	BA	990	C	Sidechain
35	BA	991	U	Sidechain
35	BA	992	U	Sidechain
35	BA	993	G	Sidechain
35	BA	994	A	Sidechain
35	BA	995	C	Sidechain
35	BA	998	C	Sidechain
36	BB	1	A	Sidechain

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Mol	Chain	Res	Type	Group
36	BB	10	G	Sidechain
36	BB	12	U	Sidechain
36	BB	18	G	Sidechain
36	BB	2	G	Sidechain
36	BB	21	A	Sidechain
36	BB	22	G	Sidechain
36	BB	23	A	Sidechain
36	BB	26	A	Sidechain
36	BB	29	G	Sidechain
36	BB	3	G	Sidechain
36	BB	31	U	Sidechain
36	BB	33	U	Sidechain
36	BB	35	C	Sidechain
36	BB	38	A	Sidechain
36	BB	39	A	Sidechain
36	BB	40	C	Sidechain
36	BB	41	C	Sidechain
36	BB	43	G	Sidechain
36	BB	45	U	Sidechain
36	BB	47	U	Sidechain
36	BB	49	G	Sidechain
36	BB	50	G	Sidechain
36	BB	51	G	Sidechain
36	BB	52	A	Sidechain
36	BB	53	G	Sidechain
36	BB	56	C	Sidechain
36	BB	57	G	Sidechain
36	BB	58	A	Sidechain
36	BB	59	G	Sidechain
36	BB	60	U	Sidechain
36	BB	61	C	Sidechain
36	BB	62	U	Sidechain
36	BB	67	G	Sidechain
36	BB	70	C	Sidechain
36	BB	72	U	Sidechain
36	BB	73	G	Sidechain
37	BC	16	A	Sidechain
37	BC	17	U	Sidechain
37	BC	18	A	Sidechain
37	BC	20	G	Sidechain
37	BC	21	U	Sidechain
37	BC	22	G	Sidechain

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Mol	Chain	Res	Type	Group
37	BC	23	C	Sidechain
37	BC	27	A	Sidechain
37	BC	28	U	Sidechain
37	BC	30	U	Sidechain
37	BC	31	U	Sidechain
37	BC	33	A	Sidechain
37	BC	34	U	Sidechain
37	BC	35	G	Sidechain
37	BC	38	G	Sidechain
37	BC	39	U	Sidechain
37	BC	40	G	Sidechain
37	BC	41	A	Sidechain
37	BC	42	U	Sidechain
37	BC	47	C	Sidechain
37	BC	48	C	Sidechain
37	BC	50	U	Sidechain
37	BC	52	U	Sidechain
37	BC	53	G	Sidechain
37	BC	54	U	Sidechain
37	BC	56	G	Sidechain
37	BC	57	C	Sidechain
37	BC	59	A	Sidechain
38	BD	1	C	Sidechain
38	BD	11	A	Sidechain
38	BD	12	G	Sidechain
38	BD	14	A	Sidechain
38	BD	15	G	Sidechain
38	BD	17	C	Sidechain
38	BD	18	U	Sidechain
38	BD	19	G	Sidechain
38	BD	20	G	Sidechain
38	BD	23	G	Sidechain
38	BD	25	U	Sidechain
38	BD	26	C	Sidechain
38	BD	27	G	Sidechain
38	BD	30	G	Sidechain
38	BD	31	G	Sidechain
38	BD	34	U	Sidechain
38	BD	35	C	Sidechain
38	BD	38	A	Sidechain
38	BD	39	A	Sidechain
38	BD	4	G	Sidechain

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Mol	Chain	Res	Type	Group
38	BD	40	C	Sidechain
38	BD	41	C	Sidechain
38	BD	42	C	Sidechain
38	BD	44	A	Sidechain
38	BD	46	G	Sidechain
38	BD	47	A	Sidechain
38	BD	48	U	Sidechain
38	BD	5	G	Sidechain
38	BD	50	G	Sidechain
38	BD	53	G	Sidechain
38	BD	54	G	Sidechain
38	BD	57	C	Sidechain
38	BD	58	A	Sidechain
38	BD	60	A	Sidechain
38	BD	63	C	Sidechain
38	BD	64	G	Sidechain
38	BD	67	C	Sidechain
38	BD	68	C	Sidechain
38	BD	70	C	Sidechain
38	BD	71	G	Sidechain
38	BD	72	C	Sidechain
38	BD	73	A	Sidechain
38	BD	74	A	Sidechain
38	BD	75	C	Sidechain
38	BD	9	G	Sidechain
39	BE	112	ARG	Sidechain
39	BE	197	PHE	Sidechain
39	BE	198	VAL	Peptide
39	BE	34	ARG	Sidechain
40	BF	135	ARG	Sidechain
40	BF	167	TYR	Sidechain
40	BF	17	TRP	Mainchain
40	BF	179	ALA	Peptide
40	BF	28	PHE	Sidechain
40	BF	39	ARG	Sidechain
40	BF	53	ARG	Sidechain
41	BG	12	ARG	Sidechain
41	BG	93	LEU	Mainchain
42	BH	137	ARG	Sidechain
42	BH	6	GLN	Peptide
42	BH	82	HIS	Sidechain
43	BI	111	GLU	Peptide

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Mol	Chain	Res	Type	Group
43	BI	25	TYR	Sidechain
43	BI	4	TYR	Sidechain
43	BI	64	VAL	Peptide
43	BI	94	HIS	Sidechain
44	BJ	118	ARG	Sidechain
44	BJ	153	TYR	Sidechain
44	BJ	176	TYR	Mainchain
44	BJ	69	ARG	Sidechain
44	BJ	78	ARG	Sidechain
44	BJ	94	ARG	Sidechain
45	BK	100	ILE	Peptide
45	BK	44	PHE	Peptide
45	BK	70	VAL	Mainchain
45	BK	79	ARG	Peptide
46	BL	102	PHE	Peptide
46	BL	126	PHE	Peptide
46	BL	6	TYR	Sidechain
46	BL	94	ARG	Sidechain
47	BM	62	ARG	Sidechain
47	BM	68	ARG	Sidechain
48	BN	104	PHE	Sidechain
48	BN	68	ARG	Sidechain
48	BN	76	TYR	Sidechain
49	BO	10	PRO	Mainchain
49	BO	113	ARG	Sidechain
49	BO	120	ARG	Sidechain
49	BO	30	ARG	Sidechain
49	BO	37	TYR	Peptide
49	BO	41	PRO	Peptide
49	BO	52	CYS	Peptide
49	BO	55	ARG	Sidechain
50	BP	40	GLU	Mainchain
50	BP	89	ARG	Sidechain
51	BQ	14	ALA	Mainchain
51	BQ	23	ARG	Sidechain
51	BQ	69	PRO	Mainchain
52	BR	83	ARG	Sidechain
53	BS	31	ARG	Sidechain
53	BS	32	PHE	Sidechain
53	BS	51	ARG	Sidechain
53	BS	77	GLU	Mainchain
54	BT	5	ARG	Sidechain

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Mol	Chain	Res	Type	Group
55	BU	10	CYS	Peptide
55	BU	3	TYR	Sidechain
55	BU	31	TYR	Sidechain
55	BU	4	PHE	Sidechain
55	BU	69	TYR	Peptide
56	BV	5	LYS	Peptide
56	BV	79	TYR	Sidechain
56	BV	82	HIS	Mainchain,Peptide
57	BW	24	ARG	Sidechain
57	BW	35	TYR	Sidechain
58	BX	37	TYR	Sidechain
58	BX	68	ARG	Sidechain
58	BX	69	LEU	Peptide

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	2566	0	1294	0	0
2	AB	62351	0	31238	0	0
3	AC	1733	0	1824	0	0
4	AD	2092	0	2170	0	0
5	AE	1565	0	1616	0	0
6	AF	1552	0	1619	0	0
7	AG	1420	0	1460	0	0
8	AH	1323	0	1374	0	0
9	AI	1111	0	1148	0	0
10	AJ	1233	0	1283	0	0
11	AK	1032	0	1088	0	0
12	AL	1129	0	1162	0	0
13	AM	947	0	1023	0	0
14	AN	1053	0	1129	0	0
15	AO	1074	0	1157	0	0
16	AP	1008	0	1045	0	0
17	AQ	900	0	935	0	0
18	AR	917	0	965	0	0
19	AS	947	0	1022	0	0
20	AT	816	0	839	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	AU	857	0	922	0	0
22	AV	787	0	846	0	0
23	AW	789	0	847	0	0
24	AX	753	0	780	0	0
25	AY	634	0	656	0	0
26	AZ	625	0	655	0	0
27	A0	509	0	543	0	0
28	A1	449	0	491	0	0
29	A2	549	0	552	0	0
30	A3	444	0	461	0	0
31	A4	441	0	485	0	0
32	A5	377	0	418	0	0
33	A6	504	0	574	0	0
34	A7	302	0	343	0	0
35	BA	33089	0	16604	0	0
36	BB	1627	0	845	0	0
37	BC	993	0	499	0	0
38	BD	1641	0	841	0	0
39	BE	1872	0	1885	0	0
40	BF	1822	0	1913	0	0
41	BG	1643	0	1710	0	0
42	BH	1225	0	1273	0	0
43	BI	1101	0	1050	0	0
44	BJ	1400	0	1449	0	0
45	BK	979	0	1034	0	0
46	BL	1036	0	1084	0	0
47	BM	825	0	865	0	0
48	BN	965	0	997	0	0
49	BO	955	0	1019	0	0
50	BP	910	0	981	0	0
51	BQ	805	0	847	0	0
52	BR	716	0	742	0	0
53	BS	649	0	666	0	0
54	BT	672	0	716	0	0
55	BU	626	0	651	0	0
56	BV	727	0	768	0	0
57	BW	670	0	722	0	0
58	BX	590	0	631	0	0
59	AB	10	0	10	0	0
60	BB	14	0	9	0	0
All	All	152351	0	103775	0	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including

hydrogen atoms). Clashscore could not be calculated for this entry.

There are no clashes within the asymmetric unit.

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	AC	232/234 (99%)	214 (92%)	12 (5%)	6 (3%)	7	45
4	AD	270/272 (99%)	237 (88%)	24 (9%)	9 (3%)	5	40
5	AE	207/209 (99%)	171 (83%)	28 (14%)	8 (4%)	4	36
6	AF	199/201 (99%)	172 (86%)	18 (9%)	9 (4%)	3	33
7	AG	176/178 (99%)	151 (86%)	16 (9%)	9 (5%)	2	30
8	AH	174/176 (99%)	158 (91%)	13 (8%)	3 (2%)	11	55
9	AI	147/149 (99%)	131 (89%)	10 (7%)	6 (4%)	3	35
10	AJ	162/164 (99%)	156 (96%)	5 (3%)	1 (1%)	30	74
11	AK	139/141 (99%)	135 (97%)	4 (3%)	0	100	100
12	AL	140/142 (99%)	119 (85%)	16 (11%)	5 (4%)	4	38
13	AM	121/123 (98%)	107 (88%)	9 (7%)	5 (4%)	3	35
14	AN	142/144 (99%)	127 (89%)	12 (8%)	3 (2%)	9	50
15	AO	134/136 (98%)	123 (92%)	8 (6%)	3 (2%)	8	49
16	AP	125/127 (98%)	114 (91%)	10 (8%)	1 (1%)	24	69
17	AQ	115/117 (98%)	110 (96%)	5 (4%)	0	100	100
18	AR	112/114 (98%)	97 (87%)	13 (12%)	2 (2%)	11	53
19	AS	115/117 (98%)	107 (93%)	4 (4%)	4 (4%)	4	39
20	AT	101/103 (98%)	91 (90%)	8 (8%)	2 (2%)	9	51
21	AU	108/110 (98%)	100 (93%)	5 (5%)	3 (3%)	6	44
22	AV	98/100 (98%)	75 (76%)	20 (20%)	3 (3%)	5	42

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
23	AW	101/103 (98%)	89 (88%)	10 (10%)	2 (2%)	9	51
24	AX	92/94 (98%)	87 (95%)	4 (4%)	1 (1%)	17	63
25	AY	82/84 (98%)	63 (77%)	17 (21%)	2 (2%)	7	47
26	AZ	75/77 (97%)	66 (88%)	7 (9%)	2 (3%)	6	45
27	A0	61/63 (97%)	56 (92%)	4 (7%)	1 (2%)	12	56
28	A1	56/58 (97%)	54 (96%)	2 (4%)	0	100	100
29	A2	68/70 (97%)	64 (94%)	3 (4%)	1 (2%)	13	57
30	A3	54/56 (96%)	47 (87%)	4 (7%)	3 (6%)	2	28
31	A4	52/54 (96%)	49 (94%)	1 (2%)	2 (4%)	4	37
32	A5	44/46 (96%)	39 (89%)	3 (7%)	2 (4%)	3	33
33	A6	62/64 (97%)	59 (95%)	2 (3%)	1 (2%)	12	56
34	A7	36/38 (95%)	29 (81%)	5 (14%)	2 (6%)	2	28
39	BE	238/240 (99%)	220 (92%)	12 (5%)	6 (2%)	7	46
40	BF	230/232 (99%)	217 (94%)	8 (4%)	5 (2%)	8	49
41	BG	203/205 (99%)	189 (93%)	11 (5%)	3 (2%)	13	57
42	BH	164/166 (99%)	149 (91%)	13 (8%)	2 (1%)	16	61
43	BI	133/135 (98%)	123 (92%)	9 (7%)	1 (1%)	24	69
44	BJ	176/178 (99%)	164 (93%)	9 (5%)	3 (2%)	11	55
45	BK	127/129 (98%)	119 (94%)	7 (6%)	1 (1%)	24	69
46	BL	127/129 (98%)	115 (91%)	9 (7%)	3 (2%)	7	47
47	BM	101/103 (98%)	90 (89%)	6 (6%)	5 (5%)	3	31
48	BN	126/128 (98%)	112 (89%)	11 (9%)	3 (2%)	7	47
49	BO	121/123 (98%)	107 (88%)	12 (10%)	2 (2%)	11	55
50	BP	115/117 (98%)	110 (96%)	3 (3%)	2 (2%)	11	55
51	BQ	98/100 (98%)	84 (86%)	9 (9%)	5 (5%)	2	30
52	BR	86/88 (98%)	81 (94%)	4 (5%)	1 (1%)	16	61
53	BS	80/82 (98%)	77 (96%)	3 (4%)	0	100	100
54	BT	81/83 (98%)	72 (89%)	8 (10%)	1 (1%)	16	61
55	BU	72/74 (97%)	62 (86%)	7 (10%)	3 (4%)	3	34
56	BV	89/91 (98%)	82 (92%)	6 (7%)	1 (1%)	17	63
57	BW	84/86 (98%)	79 (94%)	4 (5%)	1 (1%)	16	61

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
58	BX	68/70 (97%)	61 (90%)	4 (6%)	3 (4%)	3	33
All	All	6319/6423 (98%)	5710 (90%)	457 (7%)	152 (2%)	12	47

All (152) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	AC	217	THR
4	AD	94	LEU
6	AF	62	GLN
6	AF	188	MET
7	AG	136	ILE
9	AI	3	VAL
18	AR	25	VAL
19	AS	88	GLU
21	AU	41	LYS
21	AU	65	ASP
22	AV	39	THR
22	AV	86	THR
23	AW	97	SER
34	A7	6	SER
41	BG	47	LEU
42	BH	77	ASN
47	BM	57	VAL
47	BM	62	ARG
48	BN	52	ARG
51	BQ	2	LYS
55	BU	11	ARG
4	AD	35	LYS
4	AD	64	VAL
4	AD	140	VAL
4	AD	142	ASN
6	AF	79	ARG
7	AG	148	VAL
9	AI	113	SER
12	AL	14	ASP
12	AL	81	ILE
13	AM	71	ARG
14	AN	19	LEU
16	AP	107	ASN
19	AS	87	VAL
21	AU	89	ALA
22	AV	9	LYS

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Mol	Chain	Res	Type
23	AW	74	ALA
26	AZ	18	SER
29	A2	43	PHE
31	A4	35	LEU
31	A4	52	LYS
39	BE	22	TRP
40	BF	14	VAL
40	BF	163	ARG
47	BM	42	LEU
47	BM	74	VAL
51	BQ	61	ASN
51	BQ	70	HIS
58	BX	3	ILE
3	AC	159	GLY
4	AD	37	SER
5	AE	119	ALA
5	AE	162	ALA
5	AE	173	GLN
6	AF	44	ARG
6	AF	68	ALA
6	AF	78	TRP
6	AF	96	VAL
7	AG	132	ARG
9	AI	27	ARG
9	AI	122	LEU
12	AL	13	ARG
13	AM	6	THR
14	AN	36	LYS
14	AN	117	THR
15	AO	36	VAL
19	AS	5	ARG
20	AT	91	GLN
24	AX	71	LYS
26	AZ	27	ARG
30	A3	2	VAL
34	A7	16	ILE
39	BE	17	HIS
40	BF	179	ALA
44	BJ	13	PRO
45	BK	80	PRO
46	BL	106	ASP
46	BL	122	ARG

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Mol	Chain	Res	Type
46	BL	128	LYS
49	BO	23	LEU
51	BQ	32	ASP
52	BR	87	ARG
54	BT	81	ALA
55	BU	5	ARG
56	BV	11	ASP
58	BX	9	GLU
3	AC	55	SER
3	AC	206	GLY
4	AD	123	ILE
8	AH	61	TRP
10	AJ	33	THR
12	AL	65	THR
13	AM	17	ARG
13	AM	46	ALA
25	AY	36	ILE
25	AY	52	CYS
39	BE	94	ARG
39	BE	205	ALA
42	BH	26	GLY
44	BJ	2	ARG
44	BJ	84	TYR
48	BN	13	LYS
48	BN	118	ASN
57	BW	67	HIS
58	BX	24	LYS
3	AC	73	VAL
4	AD	204	LEU
5	AE	109	VAL
5	AE	113	SER
5	AE	168	GLU
5	AE	170	VAL
6	AF	183	PHE
7	AG	66	ILE
7	AG	145	VAL
8	AH	9	VAL
8	AH	94	ARG
9	AI	93	SER
15	AO	43	ALA
19	AS	105	PHE
32	A5	7	PRO

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Mol	Chain	Res	Type
40	BF	3	LYS
40	BF	145	ALA
41	BG	27	ILE
43	BI	54	LEU
47	BM	75	ASP
55	BU	18	GLN
6	AF	46	GLN
7	AG	103	ILE
12	AL	79	GLY
15	AO	106	ASP
20	AT	101	ILE
30	A3	48	TYR
50	BP	22	TYR
51	BQ	62	ARG
5	AE	152	PRO
39	BE	13	VAL
39	BE	123	GLY
41	BG	37	PRO
49	BO	43	LYS
7	AG	88	VAL
18	AR	32	VAL
50	BP	6	ILE
7	AG	84	ILE
4	AD	40	GLY
7	AG	38	GLY
13	AM	93	GLN
27	A0	46	VAL
30	A3	54	ILE
32	A5	44	VAL
33	A6	31	ILE
3	AC	81	GLY
9	AI	13	GLY

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	AC	181/181 (100%)	177 (98%)	4 (2%)	60	83
4	AD	217/217 (100%)	212 (98%)	5 (2%)	58	83
5	AE	164/164 (100%)	148 (90%)	16 (10%)	10	39
6	AF	165/165 (100%)	156 (94%)	9 (6%)	27	63
7	AG	149/149 (100%)	140 (94%)	9 (6%)	24	60
8	AH	137/137 (100%)	125 (91%)	12 (9%)	12	45
9	AI	114/114 (100%)	107 (94%)	7 (6%)	23	60
10	AJ	122/122 (100%)	111 (91%)	11 (9%)	12	44
11	AK	109/109 (100%)	104 (95%)	5 (5%)	33	68
12	AL	116/116 (100%)	104 (90%)	12 (10%)	9	37
13	AM	104/104 (100%)	96 (92%)	8 (8%)	16	52
14	AN	103/103 (100%)	98 (95%)	5 (5%)	31	67
15	AO	109/109 (100%)	106 (97%)	3 (3%)	51	78
16	AP	103/103 (100%)	100 (97%)	3 (3%)	50	78
17	AQ	87/87 (100%)	81 (93%)	6 (7%)	19	56
18	AR	99/99 (100%)	91 (92%)	8 (8%)	15	50
19	AS	89/89 (100%)	87 (98%)	2 (2%)	60	83
20	AT	84/84 (100%)	77 (92%)	7 (8%)	14	49
21	AU	93/93 (100%)	87 (94%)	6 (6%)	21	58
22	AV	84/84 (100%)	80 (95%)	4 (5%)	31	67
23	AW	84/84 (100%)	79 (94%)	5 (6%)	24	60
24	AX	78/78 (100%)	74 (95%)	4 (5%)	29	66
25	AY	62/62 (100%)	60 (97%)	2 (3%)	46	76
26	AZ	67/67 (100%)	61 (91%)	6 (9%)	12	44
27	A0	55/55 (100%)	52 (94%)	3 (6%)	27	63
28	A1	48/48 (100%)	46 (96%)	2 (4%)	36	70
29	A2	62/62 (100%)	56 (90%)	6 (10%)	10	40
30	A3	47/47 (100%)	45 (96%)	2 (4%)	35	70
31	A4	48/48 (100%)	44 (92%)	4 (8%)	14	49
32	A5	38/38 (100%)	34 (90%)	4 (10%)	8	36
33	A6	51/51 (100%)	50 (98%)	1 (2%)	63	85
34	A7	34/34 (100%)	33 (97%)	1 (3%)	50	78

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
39	BE	198/198 (100%)	187 (94%)	11 (6%)	26	62
40	BF	189/189 (100%)	176 (93%)	13 (7%)	19	56
41	BG	172/172 (100%)	165 (96%)	7 (4%)	37	71
42	BH	125/125 (100%)	120 (96%)	5 (4%)	38	71
43	BI	116/116 (100%)	109 (94%)	7 (6%)	24	60
44	BJ	146/146 (100%)	138 (94%)	8 (6%)	27	63
45	BK	104/104 (100%)	93 (89%)	11 (11%)	8	36
46	BL	106/106 (100%)	99 (93%)	7 (7%)	21	57
47	BM	90/90 (100%)	87 (97%)	3 (3%)	45	76
48	BN	98/98 (100%)	93 (95%)	5 (5%)	29	66
49	BO	103/103 (100%)	96 (93%)	7 (7%)	20	57
50	BP	95/95 (100%)	90 (95%)	5 (5%)	28	64
51	BQ	83/83 (100%)	81 (98%)	2 (2%)	57	82
52	BR	76/76 (100%)	74 (97%)	2 (3%)	54	80
53	BS	65/65 (100%)	64 (98%)	1 (2%)	72	88
54	BT	77/77 (100%)	72 (94%)	5 (6%)	21	58
55	BU	64/64 (100%)	61 (95%)	3 (5%)	32	68
56	BV	78/78 (100%)	73 (94%)	5 (6%)	22	58
57	BW	65/65 (100%)	63 (97%)	2 (3%)	47	77
58	BX	60/60 (100%)	56 (93%)	4 (7%)	20	57
All	All	5213/5213 (100%)	4918 (94%)	295 (6%)	30	62

All (295) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	AC	21	TYR
3	AC	127	LEU
3	AC	131	LEU
3	AC	136	LEU
4	AD	100	ARG
4	AD	164	VAL
4	AD	172	THR
4	AD	198	GLU
4	AD	268	ARG
5	AE	4	LEU

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Mol	Chain	Res	Type
5	AE	33	ARG
5	AE	36	GLN
5	AE	40	LEU
5	AE	59	ARG
5	AE	74	GLU
5	AE	89	GLU
5	AE	99	GLU
5	AE	112	THR
5	AE	113	SER
5	AE	142	VAL
5	AE	149	ASN
5	AE	151	THR
5	AE	164	GLN
5	AE	201	LEU
5	AE	208	LYS
6	AF	9	GLN
6	AF	46	GLN
6	AF	69	ARG
6	AF	105	LEU
6	AF	123	LYS
6	AF	127	GLU
6	AF	152	GLU
6	AF	165	HIS
6	AF	188	MET
7	AG	5	ASP
7	AG	12	VAL
7	AG	25	MET
7	AG	71	LYS
7	AG	91	ARG
7	AG	93	GLU
7	AG	131	VAL
7	AG	147	ARG
7	AG	151	LEU
8	AH	2	ARG
8	AH	28	LYS
8	AH	31	GLU
8	AH	34	ARG
8	AH	63	GLN
8	AH	87	GLN
8	AH	109	SER
8	AH	121	THR
8	AH	156	TYR

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Mol	Chain	Res	Type
8	AH	171	LYS
8	AH	172	GLU
8	AH	174	LYS
9	AI	7	ASP
9	AI	45	GLU
9	AI	87	GLU
9	AI	91	PHE
9	AI	112	LYS
9	AI	125	THR
9	AI	132	PHE
10	AJ	29	SER
10	AJ	32	VAL
10	AJ	37	MET
10	AJ	58	LEU
10	AJ	69	GLU
10	AJ	72	LYS
10	AJ	80	LEU
10	AJ	86	GLU
10	AJ	96	LYS
10	AJ	107	VAL
10	AJ	133	GLU
11	AK	9	LYS
11	AK	56	VAL
11	AK	115	ASP
11	AK	116	MET
11	AK	129	GLU
12	AL	10	THR
12	AL	15	TRP
12	AL	39	LYS
12	AL	48	VAL
12	AL	62	VAL
12	AL	75	TYR
12	AL	80	HIS
12	AL	96	ARG
12	AL	102	GLU
12	AL	123	LYS
12	AL	130	HIS
12	AL	136	GLN
13	AM	8	LEU
13	AM	10	VAL
13	AM	29	HIS
13	AM	39	ILE

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Mol	Chain	Res	Type
13	AM	49	ARG
13	AM	89	ASN
13	AM	90	ASN
13	AM	114	LYS
14	AN	1	MET
14	AN	6	LEU
14	AN	41	ARG
14	AN	126	ARG
14	AN	142	ILE
15	AO	51	ARG
15	AO	68	PHE
15	AO	108	VAL
16	AP	9	GLN
16	AP	106	ASP
16	AP	120	GLU
17	AQ	40	ILE
17	AQ	43	ASN
17	AQ	56	LYS
17	AQ	63	LYS
17	AQ	95	SER
17	AQ	117	PHE
18	AR	14	GLN
18	AR	27	VAL
18	AR	55	HIS
18	AR	67	GLU
18	AR	93	LYS
18	AR	98	TYR
18	AR	101	GLU
18	AR	112	ARG
19	AS	5	ARG
19	AS	90	ASP
20	AT	1	MET
20	AT	10	LYS
20	AT	12	HIS
20	AT	21	ARG
20	AT	22	LEU
20	AT	79	ARG
20	AT	80	ARG
21	AU	1	MET
21	AU	4	ILE
21	AU	65	ASP
21	AU	70	LYS

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Mol	Chain	Res	Type
21	AU	82	MET
21	AU	102	HIS
22	AV	9	LYS
22	AV	31	VAL
22	AV	58	VAL
22	AV	72	GLN
23	AW	33	VAL
23	AW	53	GLN
23	AW	93	ARG
23	AW	94	PHE
23	AW	99	SER
24	AX	11	GLU
24	AX	29	ILE
24	AX	53	LYS
24	AX	70	ILE
25	AY	59	PHE
25	AY	65	LYS
26	AZ	7	THR
26	AZ	24	THR
26	AZ	32	LEU
26	AZ	58	ILE
26	AZ	73	ARG
26	AZ	76	LYS
27	A0	11	VAL
27	A0	26	PHE
27	A0	59	GLU
28	A1	20	LYS
28	A1	33	HIS
29	A2	18	CYS
29	A2	24	ILE
29	A2	25	ARG
29	A2	49	ARG
29	A2	59	ARG
29	A2	62	LYS
30	A3	11	LYS
30	A3	27	LEU
31	A4	4	ILE
31	A4	11	VAL
31	A4	27	ARG
31	A4	45	HIS
32	A5	7	PRO
32	A5	10	LEU

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Mol	Chain	Res	Type
32	A5	41	ARG
32	A5	44	VAL
33	A6	44	ARG
34	A7	2	LYS
39	BE	6	ARG
39	BE	20	ARG
39	BE	22	TRP
39	BE	38	HIS
39	BE	63	LYS
39	BE	71	THR
39	BE	77	GLU
39	BE	108	GLN
39	BE	191	ASP
39	BE	202	ASN
39	BE	227	ASP
40	BF	13	ILE
40	BF	25	THR
40	BF	46	LEU
40	BF	48	LYS
40	BF	106	ARG
40	BF	107	LYS
40	BF	109	GLU
40	BF	151	GLU
40	BF	166	TRP
40	BF	171	ARG
40	BF	195	ILE
40	BF	214	GLU
40	BF	224	LYS
41	BG	8	LEU
41	BG	25	ARG
41	BG	43	ARG
41	BG	55	ARG
41	BG	98	ASP
41	BG	127	ARG
41	BG	187	ARG
42	BH	54	GLU
42	BH	67	ARG
42	BH	125	LYS
42	BH	127	TYR
42	BH	150	GLU
43	BI	1	MET
43	BI	9	MET

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Mol	Chain	Res	Type
43	BI	39	LEU
43	BI	75	GLU
43	BI	86	ARG
43	BI	102	MET
43	BI	129	SER
44	BJ	9	ARG
44	BJ	10	LYS
44	BJ	31	VAL
44	BJ	78	ARG
44	BJ	82	SER
44	BJ	130	LYS
44	BJ	145	GLU
44	BJ	170	LYS
45	BK	11	THR
45	BK	26	MET
45	BK	47	ASP
45	BK	49	LYS
45	BK	55	LYS
45	BK	60	LEU
45	BK	65	PHE
45	BK	76	ARG
45	BK	80	PRO
45	BK	112	ASP
45	BK	113	ARG
46	BL	4	GLN
46	BL	13	SER
46	BL	21	LYS
46	BL	58	GLU
46	BL	88	GLU
46	BL	90	ASP
46	BL	105	ARG
47	BM	5	ARG
47	BM	24	GLU
47	BM	102	LEU
48	BN	31	VAL
48	BN	36	ARG
48	BN	88	PRO
48	BN	105	ARG
48	BN	126	ARG
49	BO	28	GLN
49	BO	49	ARG
49	BO	69	GLU

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Mol	Chain	Res	Type
49	BO	75	GLU
49	BO	87	LYS
49	BO	113	ARG
49	BO	122	LYS
50	BP	19	THR
50	BP	54	THR
50	BP	57	ASP
50	BP	82	LEU
50	BP	85	TYR
51	BQ	37	ASP
51	BQ	45	LEU
52	BR	41	HIS
52	BR	50	HIS
53	BS	47	GLU
54	BT	8	GLN
54	BT	14	ASP
54	BT	37	ILE
54	BT	49	ASN
54	BT	68	LYS
55	BU	12	PHE
55	BU	47	ARG
55	BU	56	ARG
56	BV	4	LEU
56	BV	28	LYS
56	BV	56	HIS
56	BV	80	ARG
56	BV	82	HIS
57	BW	15	LYS
57	BW	67	HIS
58	BX	7	GLU
58	BX	20	ARG
58	BX	61	ARG
58	BX	62	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	119/120 (99%)	17 (14%)	10 (8%)

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	AB	2898/2904 (99%)	529 (18%)	183 (6%)
35	BA	1538/1542 (99%)	299 (19%)	117 (7%)
36	BB	74/76 (97%)	25 (33%)	5 (6%)
37	BC	46/47 (97%)	16 (34%)	7 (15%)
38	BD	77/77 (100%)	14 (18%)	2 (2%)
All	All	4752/4766 (99%)	900 (18%)	324 (6%)

All (900) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	13	G
1	AA	14	U
1	AA	25	U
1	AA	26	C
1	AA	35	C
1	AA	41	G
1	AA	42	C
1	AA	44	G
1	AA	51	G
1	AA	58	A
1	AA	66	A
1	AA	67	G
1	AA	73	A
1	AA	88	C
1	AA	90	C
1	AA	99	A
2	AB	13	A
2	AB	14	A
2	AB	18	U
2	AB	30	G
2	AB	35	G
2	AB	42	A
2	AB	45	G
2	AB	46	G
2	AB	49	A
2	AB	50	U
2	AB	71	A
2	AB	72	U
2	AB	74	A
2	AB	75	G
2	AB	91	A

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Mol	Chain	Res	Type
2	AB	92	U
2	AB	95	A
2	AB	101	A
2	AB	102	U
2	AB	103	A
2	AB	115	C
2	AB	119	A
2	AB	120	U
2	AB	125	A
2	AB	126	A
2	AB	128	C
2	AB	140	C
2	AB	141	G
2	AB	194	G
2	AB	196	A
2	AB	197	A
2	AB	199	A
2	AB	204	A
2	AB	205	G
2	AB	215	G
2	AB	216	A
2	AB	218	A
2	AB	222	A
2	AB	224	U
2	AB	225	C
2	AB	232	G
2	AB	242	G
2	AB	243	U
2	AB	248	G
2	AB	250	G
2	AB	255	A
2	AB	265	A
2	AB	266	G
2	AB	267	C
2	AB	271	G
2	AB	277	G
2	AB	295	G
2	AB	330	A
2	AB	332	A
2	AB	333	G
2	AB	338	G
2	AB	368	A

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Mol	Chain	Res	Type
2	AB	371	A
2	AB	372	G
2	AB	386	G
2	AB	388	G
2	AB	389	G
2	AB	390	U
2	AB	391	A
2	AB	396	G
2	AB	403	U
2	AB	405	U
2	AB	406	G
2	AB	411	G
2	AB	418	C
2	AB	424	G
2	AB	428	A
2	AB	429	A
2	AB	431	U
2	AB	436	C
2	AB	447	A
2	AB	451	U
2	AB	452	G
2	AB	454	A
2	AB	456	C
2	AB	472	A
2	AB	479	A
2	AB	480	A
2	AB	481	G
2	AB	484	C
2	AB	489	G
2	AB	490	C
2	AB	504	A
2	AB	505	A
2	AB	508	A
2	AB	509	C
2	AB	527	C
2	AB	531	C
2	AB	532	A
2	AB	545	U
2	AB	546	U
2	AB	547	A
2	AB	550	C
2	AB	562	U

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Mol	Chain	Res	Type
2	AB	563	A
2	AB	573	U
2	AB	574	A
2	AB	575	A
2	AB	603	A
2	AB	604	G
2	AB	612	G
2	AB	613	A
2	AB	615	U
2	AB	620	G
2	AB	621	A
2	AB	635	C
2	AB	637	A
2	AB	643	A
2	AB	644	A
2	AB	645	C
2	AB	654	A
2	AB	671	C
2	AB	675	A
2	AB	686	U
2	AB	696	G
2	AB	718	A
2	AB	719	C
2	AB	728	G
2	AB	730	A
2	AB	732	C
2	AB	736	C
2	AB	747	5MU
2	AB	751	A
2	AB	752	A
2	AB	753	A
2	AB	758	C
2	AB	763	G
2	AB	764	A
2	AB	775	G
2	AB	776	G
2	AB	777	G
2	AB	782	A
2	AB	784	G
2	AB	786	C
2	AB	789	A
2	AB	793	A

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Mol	Chain	Res	Type
2	AB	805	G
2	AB	812	C
2	AB	846	U
2	AB	847	U
2	AB	848	C
2	AB	859	G
2	AB	870	U
2	AB	888	C
2	AB	889	C
2	AB	894	U
2	AB	896	A
2	AB	897	C
2	AB	901	C
2	AB	910	A
2	AB	911	A
2	AB	915	C
2	AB	925	A
2	AB	932	U
2	AB	933	A
2	AB	938	G
2	AB	941	A
2	AB	945	A
2	AB	946	C
2	AB	961	C
2	AB	973	A
2	AB	974	G
2	AB	982	C
2	AB	985	C
2	AB	986	C
2	AB	990	A
2	AB	995	C
2	AB	996	A
2	AB	1002	G
2	AB	1003	G
2	AB	1005	C
2	AB	1008	A
2	AB	1010	A
2	AB	1013	C
2	AB	1020	A
2	AB	1022	G
2	AB	1025	G
2	AB	1026	G

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Mol	Chain	Res	Type
2	AB	1034	G
2	AB	1044	C
2	AB	1048	A
2	AB	1060	U
2	AB	1061	U
2	AB	1062	G
2	AB	1069	A
2	AB	1070	A
2	AB	1073	A
2	AB	1079	C
2	AB	1081	U
2	AB	1083	U
2	AB	1084	A
2	AB	1087	G
2	AB	1094	U
2	AB	1096	A
2	AB	1097	U
2	AB	1098	A
2	AB	1104	C
2	AB	1109	C
2	AB	1110	G
2	AB	1112	G
2	AB	1123	C
2	AB	1128	G
2	AB	1129	A
2	AB	1130	U
2	AB	1132	U
2	AB	1135	C
2	AB	1136	G
2	AB	1143	A
2	AB	1156	A
2	AB	1157	G
2	AB	1158	C
2	AB	1173	U
2	AB	1177	G
2	AB	1184	U
2	AB	1204	A
2	AB	1211	C
2	AB	1236	G
2	AB	1237	A
2	AB	1238	G
2	AB	1239	G

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Mol	Chain	Res	Type
2	AB	1241	A
2	AB	1253	A
2	AB	1254	A
2	AB	1255	U
2	AB	1256	G
2	AB	1266	G
2	AB	1272	A
2	AB	1274	A
2	AB	1275	A
2	AB	1283	G
2	AB	1284	A
2	AB	1300	G
2	AB	1301	A
2	AB	1302	A
2	AB	1303	G
2	AB	1307	A
2	AB	1308	A
2	AB	1318	U
2	AB	1321	A
2	AB	1322	A
2	AB	1323	C
2	AB	1329	U
2	AB	1341	G
2	AB	1349	C
2	AB	1354	A
2	AB	1362	C
2	AB	1363	C
2	AB	1365	A
2	AB	1368	G
2	AB	1378	A
2	AB	1379	U
2	AB	1384	A
2	AB	1385	A
2	AB	1386	C
2	AB	1392	A
2	AB	1395	A
2	AB	1396	U
2	AB	1416	G
2	AB	1417	C
2	AB	1420	A
2	AB	1421	G
2	AB	1453	A

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Mol	Chain	Res	Type
2	AB	1459	G
2	AB	1460	U
2	AB	1461	C
2	AB	1482	G
2	AB	1493	C
2	AB	1514	G
2	AB	1522	A
2	AB	1523	U
2	AB	1524	G
2	AB	1552	A
2	AB	1558	C
2	AB	1565	C
2	AB	1566	A
2	AB	1567	G
2	AB	1578	U
2	AB	1584	U
2	AB	1585	C
2	AB	1608	A
2	AB	1612	C
2	AB	1616	A
2	AB	1617	C
2	AB	1635	A
2	AB	1636	U
2	AB	1646	C
2	AB	1648	U
2	AB	1669	A
2	AB	1670	C
2	AB	1674	G
2	AB	1676	A
2	AB	1677	A
2	AB	1694	C
2	AB	1699	G
2	AB	1700	A
2	AB	1713	A
2	AB	1714	U
2	AB	1715	G
2	AB	1724	G
2	AB	1730	C
2	AB	1737	G
2	AB	1758	U
2	AB	1762	A
2	AB	1763	G

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Mol	Chain	Res	Type
2	AB	1764	C
2	AB	1773	A
2	AB	1780	A
2	AB	1781	U
2	AB	1783	A
2	AB	1786	A
2	AB	1787	A
2	AB	1799	G
2	AB	1800	C
2	AB	1808	A
2	AB	1809	A
2	AB	1815	A
2	AB	1816	C
2	AB	1825	U
2	AB	1830	C
2	AB	1831	G
2	AB	1833	C
2	AB	1851	U
2	AB	1873	G
2	AB	1900	A
2	AB	1912	A
2	AB	1913	A
2	AB	1914	C
2	AB	1928	A
2	AB	1930	G
2	AB	1937	A
2	AB	1941	C
2	AB	1952	A
2	AB	1953	A
2	AB	1954	G
2	AB	1955	U
2	AB	1963	U
2	AB	1964	G
2	AB	1965	C
2	AB	1967	C
2	AB	1968	G
2	AB	1970	A
2	AB	1971	U
2	AB	1972	G
2	AB	1982	U
2	AB	1993	U
2	AB	1996	C

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Mol	Chain	Res	Type
2	AB	1997	C
2	AB	2004	G
2	AB	2012	G
2	AB	2020	A
2	AB	2021	C
2	AB	2023	C
2	AB	2031	A
2	AB	2032	G
2	AB	2034	U
2	AB	2040	G
2	AB	2043	C
2	AB	2048	G
2	AB	2055	C
2	AB	2056	G
2	AB	2059	A
2	AB	2061	G
2	AB	2062	A
2	AB	2069	7MG
2	AB	2077	A
2	AB	2093	G
2	AB	2095	A
2	AB	2107	G
2	AB	2111	U
2	AB	2112	G
2	AB	2113	U
2	AB	2118	U
2	AB	2119	A
2	AB	2127	G
2	AB	2128	G
2	AB	2130	U
2	AB	2132	U
2	AB	2134	A
2	AB	2137	U
2	AB	2143	C
2	AB	2145	C
2	AB	2147	A
2	AB	2148	G
2	AB	2154	A
2	AB	2158	A
2	AB	2163	A
2	AB	2165	C
2	AB	2198	A

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Mol	Chain	Res	Type
2	AB	2199	A
2	AB	2203	U
2	AB	2204	G
2	AB	2211	A
2	AB	2212	A
2	AB	2214	C
2	AB	2215	C
2	AB	2224	G
2	AB	2225	A
2	AB	2237	G
2	AB	2238	G
2	AB	2239	G
2	AB	2246	G
2	AB	2249	U
2	AB	2250	G
2	AB	2253	G
2	AB	2266	A
2	AB	2267	A
2	AB	2282	G
2	AB	2283	C
2	AB	2287	A
2	AB	2288	A
2	AB	2305	U
2	AB	2306	C
2	AB	2309	A
2	AB	2311	A
2	AB	2312	U
2	AB	2321	U
2	AB	2322	A
2	AB	2325	G
2	AB	2335	A
2	AB	2336	A
2	AB	2337	G
2	AB	2340	A
2	AB	2345	G
2	AB	2346	A
2	AB	2347	C
2	AB	2350	C
2	AB	2354	C
2	AB	2383	G
2	AB	2385	C
2	AB	2389	G

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Mol	Chain	Res	Type
2	AB	2390	U
2	AB	2402	U
2	AB	2406	A
2	AB	2407	A
2	AB	2411	A
2	AB	2426	A
2	AB	2427	C
2	AB	2428	G
2	AB	2429	G
2	AB	2432	A
2	AB	2433	A
2	AB	2435	A
2	AB	2441	U
2	AB	2450	A
2	AB	2472	G
2	AB	2474	U
2	AB	2476	A
2	AB	2478	A
2	AB	2486	C
2	AB	2491	U
2	AB	2493	U
2	AB	2494	G
2	AB	2502	G
2	AB	2504	PSU
2	AB	2505	G
2	AB	2515	C
2	AB	2516	A
2	AB	2518	A
2	AB	2519	U
2	AB	2530	A
2	AB	2547	A
2	AB	2566	A
2	AB	2567	G
2	AB	2572	A
2	AB	2573	C
2	AB	2580	PSU
2	AB	2581	G
2	AB	2586	U
2	AB	2587	A
2	AB	2588	G
2	AB	2599	G
2	AB	2603	G

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Mol	Chain	Res	Type
2	AB	2608	G
2	AB	2609	U
2	AB	2611	C
2	AB	2613	U
2	AB	2616	C
2	AB	2628	C
2	AB	2629	U
2	AB	2639	A
2	AB	2650	U
2	AB	2654	A
2	AB	2655	G
2	AB	2656	U
2	AB	2664	G
2	AB	2685	G
2	AB	2689	U
2	AB	2690	U
2	AB	2714	G
2	AB	2737	G
2	AB	2739	U
2	AB	2742	G
2	AB	2744	G
2	AB	2757	A
2	AB	2765	A
2	AB	2766	A
2	AB	2769	U
2	AB	2771	C
2	AB	2774	C
2	AB	2777	G
2	AB	2778	A
2	AB	2779	U
2	AB	2780	G
2	AB	2782	G
2	AB	2791	G
2	AB	2800	A
2	AB	2807	U
2	AB	2825	G
2	AB	2832	U
2	AB	2833	U
2	AB	2842	G
2	AB	2849	U
2	AB	2861	U
2	AB	2864	G

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Mol	Chain	Res	Type
2	AB	2867	G
2	AB	2868	A
2	AB	2880	C
2	AB	2883	A
2	AB	2885	G
2	AB	2886	A
2	AB	2889	C
2	AB	2893	A
2	AB	2895	G
2	AB	2903	U
35	BA	4	U
35	BA	6	G
35	BA	7	A
35	BA	8	A
35	BA	9	G
35	BA	31	G
35	BA	32	A
35	BA	36	C
35	BA	48	C
35	BA	52	C
35	BA	53	A
35	BA	54	C
35	BA	60	A
35	BA	61	G
35	BA	65	A
35	BA	66	A
35	BA	83	C
35	BA	98	A
35	BA	108	G
35	BA	120	A
35	BA	121	U
35	BA	122	G
35	BA	123	U
35	BA	129	A
35	BA	131	A
35	BA	153	C
35	BA	164	G
35	BA	166	U
35	BA	171	A
35	BA	174	A
35	BA	182	A
35	BA	184	G

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Mol	Chain	Res	Type
35	BA	188	C
35	BA	189	A
35	BA	197	A
35	BA	204	G
35	BA	209	U
35	BA	211	G
35	BA	212	G
35	BA	225	C
35	BA	228	A
35	BA	229	U
35	BA	240	G
35	BA	244	U
35	BA	245	U
35	BA	247	G
35	BA	250	A
35	BA	251	G
35	BA	252	U
35	BA	262	A
35	BA	266	G
35	BA	267	C
35	BA	272	C
35	BA	280	C
35	BA	282	A
35	BA	289	G
35	BA	293	G
35	BA	306	A
35	BA	307	C
35	BA	308	C
35	BA	316	C
35	BA	317	U
35	BA	319	G
35	BA	326	G
35	BA	328	C
35	BA	329	A
35	BA	344	A
35	BA	352	C
35	BA	353	A
35	BA	354	G
35	BA	365	U
35	BA	367	U
35	BA	372	C
35	BA	373	A

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Mol	Chain	Res	Type
35	BA	374	A
35	BA	381	C
35	BA	382	A
35	BA	384	G
35	BA	389	A
35	BA	390	U
35	BA	392	C
35	BA	395	C
35	BA	398	U
35	BA	406	G
35	BA	411	A
35	BA	412	A
35	BA	415	A
35	BA	429	U
35	BA	444	G
35	BA	463	U
35	BA	464	U
35	BA	466	A
35	BA	467	U
35	BA	468	A
35	BA	479	U
35	BA	481	G
35	BA	485	U
35	BA	486	U
35	BA	496	A
35	BA	497	G
35	BA	498	A
35	BA	505	G
35	BA	508	U
35	BA	510	A
35	BA	518	C
35	BA	527	7MG
35	BA	528	C
35	BA	532	A
35	BA	533	A
35	BA	534	U
35	BA	535	A
35	BA	547	A
35	BA	552	U
35	BA	553	A
35	BA	566	G
35	BA	572	A

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Mol	Chain	Res	Type
35	BA	573	A
35	BA	575	G
35	BA	576	C
35	BA	577	G
35	BA	578	C
35	BA	583	A
35	BA	615	G
35	BA	620	C
35	BA	631	C
35	BA	632	U
35	BA	633	G
35	BA	636	U
35	BA	642	A
35	BA	650	G
35	BA	653	U
35	BA	654	G
35	BA	687	A
35	BA	688	G
35	BA	702	A
35	BA	718	A
35	BA	721	G
35	BA	724	G
35	BA	755	G
35	BA	760	G
35	BA	765	G
35	BA	766	A
35	BA	777	A
35	BA	783	C
35	BA	790	A
35	BA	791	G
35	BA	793	U
35	BA	794	A
35	BA	805	C
35	BA	810	C
35	BA	812	G
35	BA	817	C
35	BA	820	U
35	BA	821	G
35	BA	828	U
35	BA	829	G
35	BA	841	C
35	BA	842	U

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Mol	Chain	Res	Type
35	BA	843	U
35	BA	845	A
35	BA	846	G
35	BA	870	U
35	BA	871	U
35	BA	873	A
35	BA	874	G
35	BA	876	C
35	BA	890	G
35	BA	899	C
35	BA	900	A
35	BA	910	C
35	BA	914	A
35	BA	926	G
35	BA	927	G
35	BA	933	G
35	BA	935	A
35	BA	938	A
35	BA	939	G
35	BA	945	G
35	BA	960	U
35	BA	961	U
35	BA	962	C
35	BA	966	2MG
35	BA	968	A
35	BA	969	A
35	BA	970	C
35	BA	971	G
35	BA	973	G
35	BA	974	A
35	BA	975	A
35	BA	978	A
35	BA	980	C
35	BA	982	U
35	BA	983	A
35	BA	992	U
35	BA	993	G
35	BA	994	A
35	BA	995	C
35	BA	1004	A
35	BA	1006	G
35	BA	1015	G

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Mol	Chain	Res	Type
35	BA	1026	G
35	BA	1028	C
35	BA	1030	U
35	BA	1031	C
35	BA	1050	G
35	BA	1055	A
35	BA	1064	G
35	BA	1065	U
35	BA	1081	A
35	BA	1092	A
35	BA	1093	A
35	BA	1094	G
35	BA	1095	U
35	BA	1101	A
35	BA	1118	U
35	BA	1135	U
35	BA	1137	C
35	BA	1143	G
35	BA	1149	C
35	BA	1152	A
35	BA	1154	G
35	BA	1159	U
35	BA	1168	U
35	BA	1169	A
35	BA	1181	G
35	BA	1183	U
35	BA	1184	G
35	BA	1190	G
35	BA	1196	A
35	BA	1197	A
35	BA	1198	G
35	BA	1200	C
35	BA	1201	A
35	BA	1202	U
35	BA	1208	C
35	BA	1212	U
35	BA	1214	C
35	BA	1215	G
35	BA	1226	C
35	BA	1227	A
35	BA	1228	C
35	BA	1238	A

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Mol	Chain	Res	Type
35	BA	1239	A
35	BA	1240	U
35	BA	1241	G
35	BA	1250	A
35	BA	1253	G
35	BA	1254	A
35	BA	1256	A
35	BA	1257	A
35	BA	1258	G
35	BA	1264	U
35	BA	1267	C
35	BA	1268	G
35	BA	1270	G
35	BA	1280	A
35	BA	1290	G
35	BA	1300	G
35	BA	1301	U
35	BA	1303	C
35	BA	1305	G
35	BA	1315	U
35	BA	1317	C
35	BA	1319	A
35	BA	1322	C
35	BA	1340	A
35	BA	1345	U
35	BA	1346	A
35	BA	1347	G
35	BA	1348	U
35	BA	1360	A
35	BA	1362	A
35	BA	1363	A
35	BA	1364	U
35	BA	1365	G
35	BA	1368	A
35	BA	1378	C
35	BA	1400	C
35	BA	1401	G
35	BA	1431	A
35	BA	1432	G
35	BA	1437	A
35	BA	1446	A
35	BA	1448	C

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Mol	Chain	Res	Type
35	BA	1454	G
35	BA	1490	U
35	BA	1492	A
35	BA	1493	A
35	BA	1494	G
35	BA	1502	A
35	BA	1503	A
35	BA	1506	U
35	BA	1507	A
35	BA	1529	G
35	BA	1530	G
35	BA	1536	C
35	BA	1537	U
35	BA	1539	C
35	BA	1540	U
36	BB	8	4SU
36	BB	9	A
36	BB	10	G
36	BB	11	U
36	BB	17	H2U
36	BB	20	H2U
36	BB	21	A
36	BB	23	A
36	BB	24	G
36	BB	34	C
36	BB	35	C
36	BB	36	A
36	BB	46	7MG
36	BB	47	U
36	BB	48	U
36	BB	49	G
36	BB	58	A
36	BB	59	G
36	BB	60	U
36	BB	61	C
36	BB	65	C
36	BB	73	G
36	BB	74	C
36	BB	75	C
36	BB	76	A
37	BC	17	U
37	BC	18	A

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Mol	Chain	Res	Type
37	BC	21	U
37	BC	23	C
37	BC	26	U
37	BC	27	A
37	BC	30	U
37	BC	33	A
37	BC	34	U
37	BC	40	G
37	BC	44	U
37	BC	47	C
37	BC	48	C
37	BC	53	G
37	BC	54	U
37	BC	56	G
38	BD	8	4SU
38	BD	9	G
38	BD	10	G
38	BD	18	U
38	BD	19	G
38	BD	20	G
38	BD	22	A
38	BD	38	A
38	BD	48	U
38	BD	49	C
38	BD	50	G
38	BD	75	C
38	BD	76	C
38	BD	77	A

All (324) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	25	U
1	AA	34	A
1	AA	35	C
1	AA	36	C
1	AA	41	G
1	AA	44	G
1	AA	57	A
1	AA	66	A
1	AA	87	U
1	AA	106	G

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Mol	Chain	Res	Type
2	AB	12	U
2	AB	13	A
2	AB	29	U
2	AB	34	U
2	AB	48	G
2	AB	49	A
2	AB	63	A
2	AB	69	C
2	AB	71	A
2	AB	72	U
2	AB	91	A
2	AB	94	A
2	AB	96	C
2	AB	114	U
2	AB	125	A
2	AB	139	U
2	AB	140	C
2	AB	172	A
2	AB	196	A
2	AB	199	A
2	AB	205	G
2	AB	228	C
2	AB	231	A
2	AB	241	A
2	AB	242	G
2	AB	265	A
2	AB	332	A
2	AB	387	U
2	AB	389	G
2	AB	390	U
2	AB	428	A
2	AB	445	C
2	AB	453	A
2	AB	463	G
2	AB	476	G
2	AB	479	A
2	AB	505	A
2	AB	534	U
2	AB	544	C
2	AB	561	G
2	AB	570	G
2	AB	573	U

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Mol	Chain	Res	Type
2	AB	575	A
2	AB	603	A
2	AB	611	C
2	AB	620	G
2	AB	625	G
2	AB	628	G
2	AB	643	A
2	AB	645	C
2	AB	680	C
2	AB	689	A
2	AB	776	G
2	AB	789	A
2	AB	847	U
2	AB	870	U
2	AB	900	A
2	AB	912	C
2	AB	945	A
2	AB	983	A
2	AB	990	A
2	AB	1012	U
2	AB	1033	U
2	AB	1035	U
2	AB	1040	A
2	AB	1049	C
2	AB	1061	U
2	AB	1068	G
2	AB	1069	A
2	AB	1083	U
2	AB	1095	A
2	AB	1128	G
2	AB	1129	A
2	AB	1133	A
2	AB	1134	A
2	AB	1135	C
2	AB	1142	A
2	AB	1157	G
2	AB	1200	C
2	AB	1210	G
2	AB	1239	G
2	AB	1254	A
2	AB	1284	A
2	AB	1288	G

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Mol	Chain	Res	Type
2	AB	1300	G
2	AB	1321	A
2	AB	1323	C
2	AB	1329	U
2	AB	1386	C
2	AB	1391	U
2	AB	1395	A
2	AB	1416	G
2	AB	1451	C
2	AB	1460	U
2	AB	1476	U
2	AB	1494	A
2	AB	1566	A
2	AB	1567	G
2	AB	1582	C
2	AB	1608	A
2	AB	1616	A
2	AB	1634	A
2	AB	1675	C
2	AB	1693	U
2	AB	1697	G
2	AB	1699	G
2	AB	1715	G
2	AB	1723	G
2	AB	1734	G
2	AB	1778	U
2	AB	1786	A
2	AB	1799	G
2	AB	1806	C
2	AB	1807	G
2	AB	1832	C
2	AB	1888	G
2	AB	1912	A
2	AB	1913	A
2	AB	1927	A
2	AB	1939	5MU
2	AB	1940	U
2	AB	1953	A
2	AB	1955	U
2	AB	1966	A
2	AB	2019	A
2	AB	2058	A

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Mol	Chain	Res	Type
2	AB	2061	G
2	AB	2068	U
2	AB	2079	U
2	AB	2106	U
2	AB	2112	G
2	AB	2118	U
2	AB	2162	G
2	AB	2213	U
2	AB	2223	G
2	AB	2225	A
2	AB	2236	U
2	AB	2238	G
2	AB	2249	U
2	AB	2253	G
2	AB	2263	C
2	AB	2268	A
2	AB	2282	G
2	AB	2287	A
2	AB	2311	A
2	AB	2321	U
2	AB	2336	A
2	AB	2374	C
2	AB	2385	C
2	AB	2406	A
2	AB	2425	A
2	AB	2427	C
2	AB	2432	A
2	AB	2434	A
2	AB	2440	C
2	AB	2515	C
2	AB	2518	A
2	AB	2550	G
2	AB	2554	U
2	AB	2571	U
2	AB	2580	PSU
2	AB	2587	A
2	AB	2608	G
2	AB	2613	U
2	AB	2616	C
2	AB	2628	C
2	AB	2629	U
2	AB	2649	C

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Mol	Chain	Res	Type
2	AB	2655	G
2	AB	2663	G
2	AB	2705	A
2	AB	2756	U
2	AB	2758	A
2	AB	2765	A
2	AB	2771	C
2	AB	2777	G
2	AB	2802	G
2	AB	2806	C
2	AB	2835	A
2	AB	2842	G
2	AB	2861	U
2	AB	2867	G
2	AB	2879	A
35	BA	7	A
35	BA	31	G
35	BA	39	G
35	BA	51	A
35	BA	84	U
35	BA	97	G
35	BA	101	A
35	BA	122	G
35	BA	128	G
35	BA	129	A
35	BA	164	G
35	BA	173	U
35	BA	178	C
35	BA	181	A
35	BA	187	G
35	BA	188	C
35	BA	204	G
35	BA	206	C
35	BA	224	U
35	BA	239	U
35	BA	243	A
35	BA	244	U
35	BA	249	U
35	BA	251	G
35	BA	272	C
35	BA	279	A
35	BA	281	G

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Mol	Chain	Res	Type
35	BA	288	A
35	BA	306	A
35	BA	307	C
35	BA	328	C
35	BA	366	A
35	BA	372	C
35	BA	381	C
35	BA	410	G
35	BA	429	U
35	BA	466	A
35	BA	485	U
35	BA	497	G
35	BA	524	G
35	BA	533	A
35	BA	552	U
35	BA	562	U
35	BA	578	C
35	BA	582	C
35	BA	622	A
35	BA	631	C
35	BA	632	U
35	BA	633	G
35	BA	653	U
35	BA	681	A
35	BA	700	G
35	BA	717	U
35	BA	744	C
35	BA	764	C
35	BA	765	G
35	BA	782	A
35	BA	793	U
35	BA	815	A
35	BA	840	C
35	BA	842	U
35	BA	845	A
35	BA	870	U
35	BA	897	C
35	BA	899	C
35	BA	926	G
35	BA	931	C
35	BA	937	A
35	BA	944	G

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Mol	Chain	Res	Type
35	BA	960	U
35	BA	968	A
35	BA	969	A
35	BA	970	C
35	BA	974	A
35	BA	977	A
35	BA	982	U
35	BA	992	U
35	BA	993	G
35	BA	1014	A
35	BA	1028	C
35	BA	1029	U
35	BA	1030	U
35	BA	1092	A
35	BA	1108	G
35	BA	1129	C
35	BA	1143	G
35	BA	1159	U
35	BA	1167	A
35	BA	1183	U
35	BA	1196	A
35	BA	1201	A
35	BA	1213	A
35	BA	1214	C
35	BA	1226	C
35	BA	1239	A
35	BA	1240	U
35	BA	1253	G
35	BA	1258	G
35	BA	1267	C
35	BA	1289	A
35	BA	1302	C
35	BA	1310	G
35	BA	1318	A
35	BA	1323	G
35	BA	1329	A
35	BA	1346	A
35	BA	1347	G
35	BA	1362	A
35	BA	1364	U
35	BA	1404	C
35	BA	1491	G

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Mol	Chain	Res	Type
35	BA	1492	A
35	BA	1502	A
35	BA	1509	C
35	BA	1513	A
35	BA	1525	G
35	BA	1529	G
36	BB	9	A
36	BB	34	C
36	BB	38	A
36	BB	58	A
36	BB	59	G
37	BC	22	G
37	BC	29	G
37	BC	39	U
37	BC	43	U
37	BC	52	U
37	BC	53	G
37	BC	55	A
38	BD	1	C
38	BD	75	C

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

49 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	6MZ	AB	1618	2	17,25,26	1.38	2 (11%)	15,36,39	1.37	2 (13%)
2	2MG	AB	1835	2	18,26,27	1.93	4 (22%)	21,38,41	3.39	5 (23%)
2	PSU	AB	1911	2	15,21,22	1.86	5 (33%)	16,30,33	3.90	6 (37%)
2	3TD	AB	1915	2	15,22,23	1.85	5 (33%)	17,32,35	2.28	5 (29%)
2	PSU	AB	1917	2	15,21,22	2.07	4 (26%)	16,30,33	3.70	6 (37%)
2	5MU	AB	1939	2	13,22,23	1.96	4 (30%)	16,32,35	3.95	5 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	5MC	AB	1962	2	14,22,23	2.13	3 (21%)	17,32,35	2.28	4 (23%)
2	6MZ	AB	2030	2	17,25,26	1.35	3 (17%)	15,36,39	2.40	4 (26%)
2	7MG	AB	2069	2	20,26,27	2.78	8 (40%)	23,39,42	2.95	7 (30%)
2	OMG	AB	2251	2	18,26,27	1.64	3 (16%)	21,38,41	2.90	8 (38%)
2	2MG	AB	2445	2	18,26,27	2.04	8 (44%)	21,38,41	3.09	8 (38%)
2	H2U	AB	2449	2	17,21,22	1.47	3 (17%)	23,30,33	1.46	4 (17%)
2	PSU	AB	2457	2	15,21,22	2.40	6 (40%)	16,30,33	4.51	5 (31%)
2	OMC	AB	2498	2	15,22,23	1.37	1 (6%)	20,31,34	1.67	4 (20%)
2	2MA	AB	2503	2	17,25,26	1.23	1 (5%)	18,37,40	2.54	4 (22%)
2	PSU	AB	2504	2	15,21,22	2.06	5 (33%)	16,30,33	3.94	5 (31%)
2	OMU	AB	2552	2	14,22,23	2.03	4 (28%)	19,31,34	2.52	6 (31%)
2	CH	AB	2575	2	14,21,22	1.28	1 (7%)	18,30,33	1.74	3 (16%)
2	PSU	AB	2580	2	15,21,22	2.05	5 (33%)	16,30,33	4.71	7 (43%)
2	PSU	AB	2605	2	15,21,22	1.85	4 (26%)	16,30,33	3.98	3 (18%)
2	1MG	AB	745	2	17,26,27	1.77	5 (29%)	19,39,42	1.73	7 (36%)
2	PSU	AB	746	2	15,21,22	1.77	2 (13%)	16,30,33	4.33	3 (18%)
2	5MU	AB	747	2	13,22,23	2.10	4 (30%)	16,32,35	4.22	5 (31%)
2	PSU	AB	955	2	15,21,22	2.07	4 (26%)	16,30,33	4.80	5 (31%)
35	2MG	BA	1207	35	18,26,27	1.87	7 (38%)	21,38,41	2.74	8 (38%)
35	4OC	BA	1402	35	15,23,24	1.77	4 (26%)	21,32,35	3.17	6 (28%)
35	5MC	BA	1407	35	14,22,23	1.71	4 (28%)	17,32,35	1.75	4 (23%)
35	UR3	BA	1498	35	13,22,23	1.88	2 (15%)	18,32,35	1.67	3 (16%)
35	2MG	BA	1516	35	18,26,27	1.80	4 (22%)	21,38,41	2.58	8 (38%)
35	MA6	BA	1518	35	18,26,27	1.39	2 (11%)	15,38,41	1.87	4 (26%)
35	MA6	BA	1519	35	18,26,27	1.42	4 (22%)	15,38,41	1.68	2 (13%)
35	PSU	BA	516	35	15,21,22	2.48	5 (33%)	16,30,33	4.07	8 (50%)
35	7MG	BA	527	35	20,26,27	3.04	5 (25%)	23,39,42	2.34	3 (13%)
35	2MG	BA	966	35	18,26,27	2.15	6 (33%)	21,38,41	3.11	6 (28%)
35	5MC	BA	967	35	14,22,23	1.61	2 (14%)	17,32,35	1.22	2 (11%)
36	H2U	BB	16	36	17,21,22	1.40	3 (17%)	23,30,33	1.44	6 (26%)
36	H2U	BB	17	36	17,21,22	1.37	4 (23%)	23,30,33	2.23	9 (39%)
36	H2U	BB	20	36	17,21,22	1.93	6 (35%)	23,30,33	1.90	6 (26%)
36	OMC	BB	32	36	15,22,23	1.58	3 (20%)	20,31,34	1.94	6 (30%)
36	MIA	BB	37	36	22,31,32	1.85	5 (22%)	26,44,47	1.96	5 (19%)
36	7MG	BB	46	36	20,26,27	3.18	6 (30%)	23,39,42	2.85	7 (30%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
36	5MU	BB	54	36	13,22,23	1.89	3 (23%)	16,32,35	4.41	2 (12%)
36	PSU	BB	55	36	15,21,22	1.95	6 (40%)	16,30,33	4.90	8 (50%)
36	4SU	BB	8	36	12,21,22	2.46	2 (16%)	15,30,33	1.43	4 (26%)
38	H2U	BD	21	38	17,21,22	1.12	1 (5%)	23,30,33	1.81	5 (21%)
38	OMC	BD	33	38	15,22,23	1.56	3 (20%)	20,31,34	1.70	5 (25%)
38	5MU	BD	55	38	13,22,23	1.88	4 (30%)	16,32,35	4.54	4 (25%)
38	PSU	BD	56	38	15,21,22	2.38	4 (26%)	16,30,33	3.45	6 (37%)
38	4SU	BD	8	38	12,21,22	1.45	1 (8%)	15,30,33	1.78	2 (13%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	6MZ	AB	1618	2	-	0/5/27/28	0/3/3/3
2	2MG	AB	1835	2	-	0/5/27/28	0/3/3/3
2	PSU	AB	1911	2	-	0/7/25/26	0/2/2/2
2	3TD	AB	1915	2	-	0/7/25/26	0/2/2/2
2	PSU	AB	1917	2	-	0/7/25/26	0/2/2/2
2	5MU	AB	1939	2	-	0/3/25/26	0/2/2/2
2	5MC	AB	1962	2	-	0/3/25/26	0/2/2/2
2	6MZ	AB	2030	2	-	0/5/27/28	0/3/3/3
2	7MG	AB	2069	2	-	0/7/37/38	0/3/3/3
2	OMG	AB	2251	2	-	0/5/27/28	0/3/3/3
2	2MG	AB	2445	2	-	0/5/27/28	0/3/3/3
2	H2U	AB	2449	2	-	0/7/38/39	0/2/2/2
2	PSU	AB	2457	2	-	0/7/25/26	0/2/2/2
2	OMC	AB	2498	2	-	0/5/27/28	0/2/2/2
2	2MA	AB	2503	2	-	0/3/25/26	0/3/3/3
2	PSU	AB	2504	2	-	0/7/25/26	0/2/2/2
2	OMU	AB	2552	2	-	0/5/27/28	0/2/2/2
2	CH	AB	2575	2	-	0/3/25/26	0/2/2/2
2	PSU	AB	2580	2	-	0/7/25/26	0/2/2/2
2	PSU	AB	2605	2	-	0/7/25/26	0/2/2/2
2	1MG	AB	745	2	-	0/3/25/26	0/3/3/3
2	PSU	AB	746	2	-	0/7/25/26	0/2/2/2
2	5MU	AB	747	2	-	0/3/25/26	0/2/2/2
2	PSU	AB	955	2	-	0/7/25/26	0/2/2/2
35	2MG	BA	1207	35	-	0/5/27/28	0/3/3/3
35	4OC	BA	1402	35	-	0/7/29/30	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	5MC	BA	1407	35	-	0/3/25/26	0/2/2/2
35	UR3	BA	1498	35	-	0/3/25/26	0/2/2/2
35	2MG	BA	1516	35	-	0/5/27/28	0/3/3/3
35	MA6	BA	1518	35	-	0/7/29/30	0/3/3/3
35	MA6	BA	1519	35	-	0/7/29/30	0/3/3/3
35	PSU	BA	516	35	-	0/7/25/26	0/2/2/2
35	7MG	BA	527	35	-	0/7/37/38	0/3/3/3
35	2MG	BA	966	35	-	0/5/27/28	0/3/3/3
35	5MC	BA	967	35	-	0/3/25/26	0/2/2/2
36	H2U	BB	16	36	-	0/7/38/39	0/2/2/2
36	H2U	BB	17	36	-	0/7/38/39	0/2/2/2
36	H2U	BB	20	36	-	0/7/38/39	0/2/2/2
36	OMC	BB	32	36	-	0/5/27/28	0/2/2/2
36	MIA	BB	37	36	-	0/11/33/34	0/3/3/3
36	7MG	BB	46	36	-	0/7/37/38	0/3/3/3
36	5MU	BB	54	36	-	0/3/25/26	0/2/2/2
36	PSU	BB	55	36	-	0/7/25/26	0/2/2/2
36	4SU	BB	8	36	-	0/3/25/26	0/2/2/2
38	H2U	BD	21	38	-	0/7/38/39	0/2/2/2
38	OMC	BD	33	38	-	0/5/27/28	0/2/2/2
38	5MU	BD	55	38	-	0/3/25/26	0/2/2/2
38	PSU	BD	56	38	-	0/7/25/26	0/2/2/2
38	4SU	BD	8	38	-	0/3/25/26	0/2/2/2

All (190) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	46	7MG	C8-N9	-11.38	1.29	1.45
35	BA	527	7MG	C8-N9	-9.08	1.32	1.45
2	AB	2069	7MG	C8-N9	-8.91	1.32	1.45
35	BA	516	PSU	C5-C1'	-7.24	1.45	1.52
2	AB	2580	PSU	O4'-C1'	-4.87	1.36	1.44
2	AB	1917	PSU	C6-C5	-4.64	1.31	1.38
2	AB	2457	PSU	C2'-C1'	-4.41	1.49	1.53
2	AB	2504	PSU	C5-C1'	-3.92	1.48	1.52
35	BA	1407	5MC	O2'-C2'	-3.91	1.33	1.43
2	AB	2605	PSU	C5-C1'	-3.86	1.48	1.52
2	AB	2445	2MG	C8-N7	-3.83	1.27	1.34
2	AB	745	1MG	C8-N7	-3.68	1.27	1.34
36	BB	55	PSU	O4'-C4'	-3.53	1.36	1.45
38	BD	56	PSU	C5-C1'	-3.44	1.49	1.52
2	AB	2605	PSU	C6-C5	-3.32	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	BD	55	5MU	O4'-C1'	-3.27	1.36	1.41
35	BA	1516	2MG	C4-N3	-3.26	1.30	1.35
2	AB	2251	OMG	O3'-C3'	-3.24	1.35	1.43
35	BA	516	PSU	C2'-C1'	-3.20	1.50	1.53
35	BA	1402	4OC	C6-C5	-3.17	1.31	1.38
36	BB	20	H2U	C4-N3	-3.06	1.32	1.37
2	AB	2069	7MG	C8-N7	-3.04	1.29	1.43
38	BD	33	OMC	O4'-C4'	-3.04	1.38	1.45
35	BA	1207	2MG	C8-N7	-3.02	1.28	1.34
38	BD	8	4SU	C3'-C4'	-2.98	1.45	1.53
2	AB	1911	PSU	O3'-C3'	-2.92	1.36	1.43
2	AB	2605	PSU	C2'-C1'	-2.92	1.51	1.53
2	AB	747	5MU	O2'-C2'	-2.90	1.36	1.43
35	BA	966	2MG	O2'-C2'	-2.90	1.36	1.43
2	AB	2504	PSU	C2'-C1'	-2.89	1.51	1.53
38	BD	21	H2U	C4-N3	-2.88	1.33	1.37
36	BB	16	H2U	O4'-C4'	-2.84	1.38	1.45
35	BA	1519	MA6	C8-N7	-2.84	1.29	1.34
2	AB	1962	5MC	O2'-C2'	-2.83	1.36	1.43
35	BA	1516	2MG	O4'-C4'	-2.80	1.38	1.45
2	AB	2445	2MG	O4'-C4'	-2.78	1.38	1.45
2	AB	2449	H2U	O4'-C4'	-2.75	1.38	1.45
36	BB	55	PSU	C2'-C1'	-2.75	1.51	1.53
2	AB	2069	7MG	O3'-C3'	-2.71	1.36	1.43
2	AB	2457	PSU	O4'-C1'	-2.68	1.40	1.44
35	BA	1518	MA6	C4-N3	-2.66	1.31	1.35
36	BB	37	MIA	C13-C14	-2.56	1.32	1.51
36	BB	32	OMC	O4'-C4'	-2.52	1.39	1.45
2	AB	1939	5MU	O4'-C4'	-2.52	1.39	1.45
2	AB	1915	3TD	C6-C5	-2.52	1.34	1.38
2	AB	2457	PSU	O4'-C4'	-2.51	1.39	1.45
38	BD	55	5MU	O4'-C4'	-2.51	1.39	1.45
2	AB	2251	OMG	O4'-C4'	-2.51	1.39	1.45
35	BA	1207	2MG	C2'-C1'	-2.49	1.49	1.53
2	AB	1917	PSU	O2'-C2'	-2.47	1.37	1.43
35	BA	967	5MC	O3'-C3'	-2.47	1.37	1.43
35	BA	966	2MG	C8-N7	-2.40	1.30	1.34
2	AB	745	1MG	C4-N3	-2.38	1.32	1.35
38	BD	56	PSU	O4-C4	-2.36	1.18	1.24
36	BB	17	H2U	O4'-C4'	-2.34	1.39	1.45
36	BB	17	H2U	O2'-C2'	-2.33	1.37	1.43
36	BB	17	H2U	C6-C5	-2.32	1.48	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	54	5MU	O4'-C4'	-2.32	1.39	1.45
35	BA	1519	MA6	C2-N1	-2.31	1.29	1.33
35	BA	1407	5MC	C6-C5	-2.31	1.33	1.40
35	BA	1498	UR3	O4'-C1'	-2.29	1.38	1.41
36	BB	20	H2U	O4-C4	-2.29	1.18	1.23
2	AB	746	PSU	O4'-C4'	-2.26	1.39	1.45
35	BA	1519	MA6	C2'-C1'	-2.23	1.50	1.53
35	BA	1519	MA6	C5-C4	-2.21	1.35	1.40
35	BA	1207	2MG	C3'-C4'	-2.21	1.47	1.53
2	AB	2580	PSU	O4-C4	-2.17	1.19	1.24
36	BB	55	PSU	O4'-C1'	-2.11	1.41	1.44
35	BA	516	PSU	C6-C5	-2.10	1.35	1.38
2	AB	2504	PSU	O4'-C1'	-2.06	1.41	1.44
35	BA	1516	2MG	C8-N7	-2.05	1.30	1.34
35	BA	516	PSU	O3'-C3'	-2.04	1.38	1.43
2	AB	2030	6MZ	O2'-C2'	-2.04	1.38	1.43
36	BB	20	H2U	O4'-C4'	-2.02	1.40	1.45
2	AB	2605	PSU	O4'-C4'	-2.02	1.40	1.45
2	AB	2552	OMU	C3'-C4'	-2.01	1.47	1.53
36	BB	46	7MG	C8-N7	-2.01	1.34	1.43
2	AB	2552	OMU	O4'-C1'	2.02	1.44	1.41
36	BB	55	PSU	C5-C1'	2.03	1.54	1.52
2	AB	2457	PSU	C6-N1	2.03	1.38	1.34
2	AB	1911	PSU	C5'-C4'	2.04	1.58	1.51
36	BB	16	H2U	O2-C2	2.05	1.27	1.23
2	AB	2030	6MZ	C2-N3	2.06	1.35	1.32
2	AB	2069	7MG	C2-N1	2.07	1.39	1.35
2	AB	2575	CH	C6-N1	2.08	1.38	1.35
2	AB	1915	3TD	C2'-C1'	2.09	1.55	1.53
2	AB	2030	6MZ	C5'-C4'	2.12	1.58	1.51
2	AB	955	PSU	C2-N1	2.13	1.42	1.38
2	AB	2445	2MG	C6-C5	2.18	1.45	1.41
36	BB	55	PSU	C5'-C4'	2.21	1.58	1.51
2	AB	2069	7MG	C4-N3	2.21	1.37	1.34
36	BB	20	H2U	C3'-C4'	2.25	1.59	1.53
2	AB	1618	6MZ	C3'-C4'	2.29	1.59	1.53
2	AB	1835	2MG	C8-N7	2.31	1.39	1.34
36	BB	17	H2U	C5-C4	2.33	1.55	1.50
2	AB	1618	6MZ	C6-N6	2.35	1.39	1.35
2	AB	2445	2MG	C2-N2	2.35	1.37	1.34
38	BD	33	OMC	C5-C4	2.36	1.46	1.41
36	BB	8	4SU	O4'-C1'	2.37	1.44	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2445	2MG	CM2-N2	2.38	1.49	1.45
36	BB	37	MIA	C11-S10	2.38	1.88	1.79
2	AB	2580	PSU	C2-N1	2.42	1.43	1.38
2	AB	1915	3TD	C5'-C4'	2.42	1.59	1.51
2	AB	2449	H2U	C6-C5	2.42	1.56	1.52
35	BA	1207	2MG	C5'-C4'	2.45	1.59	1.51
35	BA	1407	5MC	C5-C4	2.46	1.45	1.41
2	AB	2445	2MG	C6-N1	2.46	1.37	1.33
2	AB	955	PSU	C6-N1	2.47	1.39	1.34
2	AB	1962	5MC	CM5-C5	2.47	1.55	1.51
38	BD	56	PSU	C2-N1	2.48	1.43	1.38
2	AB	2457	PSU	C5-C1'	2.48	1.54	1.52
35	BA	1518	MA6	O3'-C3'	2.51	1.48	1.43
36	BB	16	H2U	C5-C4	2.51	1.56	1.50
35	BA	1207	2MG	C2-N2	2.53	1.37	1.34
35	BA	1402	4OC	C6-N1	2.54	1.39	1.35
36	BB	46	7MG	C4-N3	2.54	1.37	1.34
2	AB	2580	PSU	C6-N1	2.57	1.39	1.34
2	AB	1939	5MU	C5M-C5	2.59	1.55	1.51
35	BA	1402	4OC	CM4-N4	2.64	1.50	1.45
2	AB	747	5MU	O4'-C1'	2.67	1.45	1.41
36	BB	20	H2U	C6-C5	2.70	1.57	1.52
36	BB	46	7MG	CM7-N7	2.71	1.50	1.46
35	BA	1402	4OC	O4'-C1'	2.72	1.45	1.41
35	BA	1207	2MG	C6-N1	2.73	1.38	1.33
2	AB	745	1MG	O4'-C1'	2.81	1.45	1.41
2	AB	1917	PSU	C5-C1'	2.84	1.54	1.52
2	AB	745	1MG	C2-N3	2.85	1.38	1.34
36	BB	37	MIA	C2-N3	2.87	1.38	1.34
36	BB	54	5MU	C4-N3	2.88	1.38	1.33
38	BD	55	5MU	C5M-C5	2.88	1.56	1.51
35	BA	516	PSU	C6-N1	2.89	1.40	1.34
38	BD	33	OMC	C6-N1	2.93	1.39	1.35
2	AB	745	1MG	O2'-C2'	2.97	1.49	1.43
35	BA	1407	5MC	O4'-C1'	2.98	1.45	1.41
2	AB	1939	5MU	O4'-C1'	2.99	1.45	1.41
2	AB	2069	7MG	O4'-C1'	3.02	1.49	1.42
35	BA	527	7MG	C2-N1	3.04	1.41	1.35
2	AB	2445	2MG	C4-N3	3.05	1.40	1.35
2	AB	1911	PSU	C4-N3	3.07	1.38	1.33
38	BD	55	5MU	C4-N3	3.12	1.38	1.33
2	AB	2504	PSU	C2-N3	3.14	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2580	PSU	C4-N3	3.18	1.38	1.33
2	AB	2445	2MG	C2-N1	3.22	1.45	1.34
2	AB	1911	PSU	C2-N1	3.22	1.44	1.38
2	AB	1835	2MG	O4'-C1'	3.23	1.45	1.41
35	BA	966	2MG	C2-N1	3.26	1.46	1.34
35	BA	1207	2MG	C2-N1	3.27	1.46	1.34
36	BB	32	OMC	C6-N1	3.29	1.40	1.35
2	AB	1911	PSU	C2'-C1'	3.30	1.56	1.53
36	BB	46	7MG	C1'-N9	3.30	1.51	1.44
2	AB	2498	OMC	O4'-C1'	3.40	1.46	1.41
35	BA	966	2MG	O4'-C1'	3.42	1.46	1.41
2	AB	2069	7MG	C6-C5	3.43	1.46	1.41
2	AB	2552	OMU	C6-N1	3.43	1.40	1.35
2	AB	747	5MU	C4-N3	3.46	1.39	1.33
2	AB	1915	3TD	C6-N1	3.47	1.41	1.34
2	AB	2504	PSU	C4-N3	3.54	1.39	1.33
2	AB	2503	2MA	C6-N6	3.56	1.35	1.29
2	AB	1915	3TD	C10-N3	3.59	1.55	1.47
36	BB	37	MIA	O4'-C1'	3.70	1.46	1.41
2	AB	2449	H2U	C5-C4	3.73	1.59	1.50
36	BB	55	PSU	C6-N1	3.73	1.42	1.34
35	BA	967	5MC	O4'-C1'	3.77	1.46	1.41
36	BB	32	OMC	O4'-C1'	3.84	1.46	1.41
36	BB	20	H2U	C5-C4	3.86	1.59	1.50
2	AB	1835	2MG	C2-N2	4.02	1.38	1.34
2	AB	1917	PSU	C4-N3	4.02	1.40	1.33
35	BA	966	2MG	C6-N1	4.14	1.40	1.33
35	BA	527	7MG	C1'-N9	4.14	1.53	1.44
2	AB	1939	5MU	C4-N3	4.16	1.40	1.33
2	AB	2251	OMG	C6-N1	4.22	1.40	1.33
2	AB	747	5MU	C2'-C1'	4.28	1.60	1.53
2	AB	2069	7MG	C6-N1	4.33	1.40	1.33
2	AB	955	PSU	C5-C1'	4.45	1.56	1.52
35	BA	966	2MG	CM2-N2	4.50	1.53	1.45
35	BA	1516	2MG	C6-N1	4.54	1.41	1.33
2	AB	955	PSU	C4-N3	4.58	1.41	1.33
36	BB	54	5MU	O4'-C1'	4.66	1.47	1.41
35	BA	527	7MG	C4-N3	4.84	1.40	1.34
2	AB	2552	OMU	C4-N3	5.01	1.42	1.33
36	BB	46	7MG	C6-N1	5.06	1.42	1.33
36	BB	37	MIA	C2-S10	5.08	1.80	1.75
2	AB	746	PSU	C4-N3	5.27	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1835	2MG	C6-N1	5.30	1.42	1.33
2	AB	2457	PSU	C4-N3	5.43	1.42	1.33
35	BA	1498	UR3	C4-N3	5.53	1.46	1.38
35	BA	527	7MG	C6-N1	5.89	1.43	1.33
38	BD	56	PSU	C4-N3	6.35	1.44	1.33
2	AB	1962	5MC	O4'-C1'	6.39	1.50	1.41
36	BB	8	4SU	C6-N1	7.77	1.45	1.35

All (250) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	54	5MU	C5-C4-N3	-12.78	114.62	125.35
2	AB	747	5MU	C5-C4-N3	-12.21	115.10	125.35
38	BD	55	5MU	C5-C4-N3	-11.55	115.65	125.35
2	AB	1939	5MU	C5-C4-N3	-10.71	116.36	125.35
2	AB	1835	2MG	C5-C6-N1	-9.78	110.73	123.52
2	AB	2251	OMG	C5-C6-N1	-9.17	111.54	123.52
35	BA	966	2MG	C5-C6-N1	-9.05	111.69	123.52
2	AB	2503	2MA	C2-N3-C4	-8.95	110.97	115.29
2	AB	2069	7MG	C5-C6-N1	-8.71	110.42	123.39
36	BB	46	7MG	C5-C6-N1	-8.65	110.51	123.39
2	AB	955	PSU	C3'-C2'-C1'	-8.51	91.61	101.71
35	BA	527	7MG	C5-C6-N1	-8.03	111.44	123.39
2	AB	2445	2MG	C5-C6-N1	-7.80	113.32	123.52
35	BA	1207	2MG	C5-C6-N1	-7.80	113.33	123.52
2	AB	955	PSU	C4'-O4'-C1'	-5.77	103.60	109.54
2	AB	2030	6MZ	C1'-N9-C4	-5.67	120.48	126.81
2	AB	1835	2MG	C1'-N9-C4	-5.48	120.69	126.81
38	BD	8	4SU	C5-C4-N3	-5.34	117.90	123.56
2	AB	2445	2MG	C1'-N9-C4	-5.18	121.03	126.81
35	BA	1516	2MG	C5-C6-N1	-5.04	116.93	123.52
2	AB	746	PSU	C3'-C2'-C1'	-4.69	96.14	101.71
2	AB	1915	3TD	C5-C1'-C2'	-4.54	107.72	115.44
38	BD	33	OMC	C6-C5-C4	-4.42	115.70	117.44
36	BB	55	PSU	C4'-O4'-C1'	-4.35	105.06	109.54
2	AB	2504	PSU	O2'-C2'-C1'	-4.30	102.58	111.93
35	BA	516	PSU	C4-C5-C1'	-4.23	114.09	121.22
38	BD	55	5MU	C2'-C3'-C4'	-4.19	94.06	102.64
36	BB	17	H2U	C5-C6-N1	-4.11	106.26	110.76
2	AB	2498	OMC	C6-C5-C4	-4.06	115.84	117.44
36	BB	55	PSU	C5-C6-N1	-4.02	118.78	124.38
2	AB	1915	3TD	C5-C4-N3	-4.00	115.38	118.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	17	H2U	C2'-C3'-C4'	-4.00	94.45	102.64
2	AB	2580	PSU	C5-C6-N1	-3.96	118.86	124.38
2	AB	1911	PSU	C5-C6-N1	-3.92	118.92	124.38
35	BA	1518	MA6	C1'-N9-C4	-3.79	122.57	126.81
2	AB	1835	2MG	N3-C2-N1	-3.74	120.59	126.19
36	BB	32	OMC	O4'-C4'-C3'	-3.73	97.59	105.16
35	BA	1516	2MG	N2-C2-N1	-3.72	112.62	116.94
2	AB	955	PSU	C5-C6-N1	-3.69	119.23	124.38
36	BB	32	OMC	C3'-C2'-C1'	-3.61	95.73	102.63
36	BB	20	H2U	C3'-C2'-C1'	-3.49	94.41	101.44
35	BA	1519	MA6	N3-C2-N1	-3.49	126.13	128.87
38	BD	56	PSU	C5-C6-N1	-3.47	119.54	124.38
38	BD	21	H2U	C6-N1-C2	-3.42	116.87	122.16
2	AB	2580	PSU	C5-C1'-C2'	-3.37	109.70	115.44
2	AB	2605	PSU	O2'-C2'-C1'	-3.34	104.66	111.93
2	AB	1915	3TD	C5-C6-N1	-3.32	119.75	124.38
2	AB	2445	2MG	C4'-O4'-C1'	-3.31	106.13	109.64
2	AB	1911	PSU	C3'-C2'-C1'	-3.28	97.83	101.71
2	AB	2498	OMC	C5-C4-N4	-3.22	116.03	121.19
2	AB	2504	PSU	O4'-C1'-C2'	-3.20	101.23	104.69
2	AB	2580	PSU	C2'-C3'-C4'	-3.19	96.11	102.64
38	BD	56	PSU	O2'-C2'-C1'	-3.05	105.30	111.93
2	AB	2552	OMU	C5-C4-N3	-3.01	115.89	123.28
2	AB	1962	5MC	CM5-C5-C6	-2.98	112.57	118.63
36	BB	55	PSU	C5'-C4'-C3'	-2.96	103.77	115.20
35	BA	966	2MG	N3-C2-N1	-2.89	121.86	126.19
2	AB	1939	5MU	O3'-C3'-C4'	-2.89	102.38	111.01
2	AB	2251	OMG	N3-C2-N1	-2.88	123.64	127.56
38	BD	33	OMC	C5-C4-N3	-2.87	118.15	121.79
2	AB	2030	6MZ	C4'-O4'-C1'	-2.86	106.61	109.64
2	AB	745	1MG	C5-C6-N1	-2.83	114.64	118.35
35	BA	516	PSU	O4'-C1'-C2'	-2.81	101.65	104.69
36	BB	17	H2U	C5-C4-N3	-2.77	113.70	116.62
35	BA	516	PSU	C5-C6-N1	-2.77	120.52	124.38
2	AB	2445	2MG	N3-C2-N1	-2.75	122.08	126.19
2	AB	747	5MU	O2'-C2'-C1'	-2.72	103.10	111.61
2	AB	746	PSU	C5-C6-N1	-2.72	120.59	124.38
2	AB	1618	6MZ	N3-C2-N1	-2.71	126.74	128.87
2	AB	1917	PSU	C5-C1'-C2'	-2.71	110.83	115.44
2	AB	2449	H2U	O3'-C3'-C2'	-2.70	103.11	111.86
2	AB	2069	7MG	N1-C2-N3	-2.70	121.10	125.51
2	AB	2069	7MG	N3-C4-N9	-2.66	123.54	126.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1911	PSU	C4'-O4'-C1'	-2.65	106.82	109.54
2	AB	2457	PSU	C5-C6-N1	-2.64	120.70	124.38
2	AB	2457	PSU	O4'-C4'-C3'	-2.63	99.82	105.16
36	BB	20	H2U	C5-C6-N1	-2.58	107.94	110.76
35	BA	1516	2MG	C6-C5-C4	-2.57	117.92	120.86
36	BB	16	H2U	C2'-C3'-C4'	-2.54	97.44	102.64
2	AB	2069	7MG	O2'-C2'-C1'	-2.53	101.19	109.98
36	BB	46	7MG	C2'-C3'-C4'	-2.53	97.46	102.64
35	BA	1407	5MC	O4'-C4'-C3'	-2.52	100.06	105.16
36	BB	17	H2U	C6-N1-C2	-2.47	118.34	122.16
35	BA	1207	2MG	N3-C2-N1	-2.46	122.51	126.19
35	BA	1498	UR3	O3'-C3'-C2'	-2.45	103.93	111.86
2	AB	2251	OMG	C1'-N9-C4	-2.44	124.08	126.81
2	AB	2030	6MZ	N3-C2-N1	-2.42	126.97	128.87
2	AB	2580	PSU	O2'-C2'-C1'	-2.42	106.67	111.93
2	AB	745	1MG	C2'-C3'-C4'	-2.41	97.71	102.64
36	BB	16	H2U	C5-C6-N1	-2.36	108.18	110.76
36	BB	16	H2U	C5-C4-N3	-2.36	114.13	116.62
2	AB	2575	CH	C6-N1-C2	-2.36	117.49	121.33
2	AB	1917	PSU	C5-C6-N1	-2.34	121.12	124.38
2	AB	1917	PSU	O2'-C2'-C1'	-2.32	106.88	111.93
35	BA	1402	4OC	C2'-C1'-N1	-2.30	106.91	113.48
2	AB	1917	PSU	C4'-O4'-C1'	-2.29	107.18	109.54
38	BD	21	H2U	C2'-C3'-C4'	-2.29	97.96	102.64
38	BD	33	OMC	C6-N1-C2	-2.23	117.69	121.33
35	BA	1402	4OC	C6-N1-C2	-2.23	117.70	121.33
2	AB	2498	OMC	C6-N1-C2	-2.20	117.74	121.33
2	AB	2457	PSU	C5-C1'-C2'	-2.19	111.71	115.44
2	AB	2445	2MG	N2-C2-N1	-2.17	114.42	116.94
38	BD	56	PSU	C4-C5-C1'	-2.15	117.59	121.22
2	AB	1915	3TD	O3'-C3'-C4'	-2.13	104.65	111.01
2	AB	2251	OMG	N2-C2-N1	-2.12	113.71	117.20
36	BB	16	H2U	C6-N1-C2	-2.12	118.89	122.16
35	BA	1207	2MG	O2'-C2'-C3'	-2.10	105.06	111.86
2	AB	2449	H2U	N3-C2-N1	-2.10	114.70	116.64
36	BB	55	PSU	C2'-C3'-C4'	-2.08	98.39	102.64
35	BA	1516	2MG	N3-C2-N1	-2.07	123.08	126.19
2	AB	2552	OMU	O3'-C3'-C4'	-2.05	104.88	111.01
2	AB	745	1MG	C2'-C1'-N9	-2.03	108.02	113.47
36	BB	16	H2U	C6-C5-C4	-2.03	105.05	115.77
2	AB	2503	2MA	CM2-C2-N1	-2.03	113.73	117.20
38	BD	8	4SU	C5'-C4'-C3'	-2.03	107.34	115.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BB	32	OMC	O3'-C3'-C4'	-2.02	104.96	111.01
38	BD	56	PSU	C5-C1'-C2'	-2.02	112.00	115.44
36	BB	46	7MG	O3'-C3'-C4'	2.00	116.99	111.01
2	AB	2552	OMU	O4'-C4'-C3'	2.03	109.28	105.16
36	BB	17	H2U	O4'-C4'-C3'	2.04	109.29	105.16
2	AB	745	1MG	N2-C2-N1	2.04	120.66	118.26
2	AB	2575	CH	O4'-C4'-C5'	2.04	116.60	109.29
2	AB	1939	5MU	O4'-C1'-N1	2.05	112.00	108.10
35	BA	1207	2MG	O4'-C1'-N9	2.09	112.05	108.11
2	AB	2251	OMG	O4'-C1'-N9	2.09	112.06	108.11
36	BB	20	H2U	O5'-C5'-C4'	2.10	116.64	109.09
2	AB	2449	H2U	O4-C4-N3	2.12	123.77	120.46
35	BA	1407	5MC	C5-C4-N3	2.12	124.86	121.26
35	BA	1518	MA6	C4'-O4'-C1'	2.13	111.90	109.64
2	AB	2503	2MA	O5'-C5'-C4'	2.13	116.74	109.09
2	AB	1962	5MC	O4'-C4'-C3'	2.14	109.50	105.16
2	AB	745	1MG	O4'-C4'-C3'	2.14	109.51	105.16
2	AB	2552	OMU	CM2-O2'-C2'	2.15	120.60	114.58
35	BA	1402	4OC	C2-N3-C4	2.15	118.17	115.43
2	AB	2251	OMG	N2-C2-N3	2.15	121.76	117.72
2	AB	1939	5MU	C2'-C3'-C4'	2.16	107.05	102.64
36	BB	46	7MG	C8-N9-C1'	2.17	128.95	122.43
2	AB	2498	OMC	O4'-C4'-C5'	2.19	117.12	109.29
36	BB	55	PSU	O3'-C3'-C2'	2.19	118.95	111.86
36	BB	8	4SU	O3'-C3'-C2'	2.21	118.98	111.86
36	BB	32	OMC	C4'-O4'-C1'	2.22	112.00	109.64
36	BB	8	4SU	O5'-C5'-C4'	2.23	117.08	109.09
36	BB	37	MIA	C12-N6-C6	2.24	126.05	123.46
2	AB	2069	7MG	C8-N9-C1'	2.25	129.17	122.43
38	BD	33	OMC	O4'-C1'-N1	2.26	112.39	108.10
36	BB	46	7MG	O3'-C3'-C2'	2.27	119.18	111.86
35	BA	1516	2MG	O4'-C1'-N9	2.27	112.39	108.11
36	BB	20	H2U	O4-C4-N3	2.28	124.03	120.46
35	BA	966	2MG	C4'-O4'-C1'	2.30	112.08	109.64
35	BA	1407	5MC	O4'-C1'-N1	2.30	112.48	108.10
38	BD	21	H2U	C1'-N1-C2	2.34	121.47	118.19
38	BD	56	PSU	O4'-C1'-C2'	2.38	107.26	104.69
2	AB	1911	PSU	O3'-C3'-C2'	2.41	119.65	111.86
36	BB	55	PSU	O3'-C3'-C4'	2.41	118.22	111.01
2	AB	745	1MG	O3'-C3'-C4'	2.42	118.22	111.01
36	BB	8	4SU	C2'-C1'-N1	2.42	119.96	113.46
35	BA	527	7MG	C2'-C3'-C4'	2.43	107.60	102.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	55	5MU	O2'-C2'-C1'	2.44	119.25	111.61
36	BB	17	H2U	O3'-C3'-C2'	2.46	119.82	111.86
35	BA	516	PSU	C5'-C4'-C3'	2.47	124.77	115.20
36	BB	46	7MG	N2-C2-N3	2.48	121.30	117.20
35	BA	516	PSU	O2'-C2'-C1'	2.50	117.37	111.93
35	BA	1516	2MG	C6-N1-C2	2.59	118.96	115.24
36	BB	8	4SU	O4'-C4'-C5'	2.61	118.63	109.29
36	BB	16	H2U	O3'-C3'-C4'	2.62	118.83	111.01
36	BB	37	MIA	C2-N1-C6	2.64	120.39	113.13
36	BB	37	MIA	O5'-C5'-C4'	2.72	118.86	109.09
38	BD	33	OMC	N4-C4-N3	2.73	121.26	116.50
36	BB	17	H2U	O4-C4-N3	2.76	124.77	120.46
2	AB	2251	OMG	C4'-O4'-C1'	2.77	112.58	109.64
2	AB	745	1MG	O4'-C1'-N9	2.78	113.36	108.11
35	BA	1498	UR3	C4'-O4'-C1'	2.83	112.64	109.64
36	BB	32	OMC	CM2-O2'-C2'	2.85	122.56	114.58
35	BA	1207	2MG	O3'-C3'-C2'	2.85	121.06	111.86
35	BA	967	5MC	CM5-C5-C4	2.95	124.58	121.47
35	BA	967	5MC	O4'-C1'-N1	2.98	113.76	108.10
35	BA	516	PSU	C3'-C2'-C1'	3.05	105.33	101.71
35	BA	1518	MA6	O4'-C1'-N9	3.06	113.88	108.11
2	AB	2503	2MA	O4'-C1'-N9	3.07	113.90	108.11
2	AB	1911	PSU	O4'-C1'-C2'	3.10	108.04	104.69
2	AB	2069	7MG	N2-C2-N1	3.19	122.46	117.20
2	AB	1618	6MZ	C4'-O4'-C1'	3.19	113.03	109.64
36	BB	37	MIA	C2'-C3'-C4'	3.20	109.19	102.64
2	AB	2552	OMU	O4'-C1'-N1	3.23	114.25	108.10
35	BA	516	PSU	C4'-O4'-C1'	3.26	112.90	109.54
2	AB	2445	2MG	CM2-N2-C2	3.28	126.73	123.03
35	BA	1518	MA6	C2-N1-C6	3.31	119.45	111.64
2	AB	747	5MU	O3'-C3'-C2'	3.37	122.74	111.86
36	BB	20	H2U	O4'-C1'-C2'	3.40	114.30	106.61
36	BB	32	OMC	O4'-C1'-N1	3.50	114.75	108.10
35	BA	1207	2MG	N2-C2-N3	3.57	121.08	116.94
35	BA	1498	UR3	O4'-C1'-N1	3.58	114.91	108.10
2	AB	2580	PSU	O4'-C4'-C3'	3.63	112.52	105.16
2	AB	2605	PSU	C4'-O4'-C1'	3.74	113.40	109.54
2	AB	747	5MU	C5M-C5-C4	3.76	124.14	119.97
36	BB	17	H2U	C1'-N1-C2	3.84	123.57	118.19
38	BD	21	H2U	C4-N3-C2	3.97	129.37	125.77
2	AB	2449	H2U	C4-N3-C2	3.99	129.39	125.77
35	BA	966	2MG	N2-C2-N3	4.22	121.84	116.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1407	5MC	CM5-C5-C4	4.26	125.97	121.47
35	BA	1516	2MG	C4'-O4'-C1'	4.31	114.21	109.64
38	BD	21	H2U	C5-C6-N1	4.31	115.48	110.76
35	BA	1207	2MG	CM2-N2-C2	4.36	127.94	123.03
36	BB	17	H2U	C3'-C2'-C1'	4.46	110.41	101.44
35	BA	1519	MA6	C2-N1-C6	4.48	122.21	111.64
2	AB	2575	CH	C6-C5-C4	4.52	119.20	117.44
36	BB	20	H2U	C4-N3-C2	4.56	129.90	125.77
2	AB	1962	5MC	O4'-C1'-N1	4.78	117.19	108.10
35	BA	1402	4OC	CM4-N4-C4	4.91	127.01	122.87
2	AB	1915	3TD	O4'-C1'-C2'	4.92	110.01	104.69
2	AB	2504	PSU	C3'-C2'-C1'	4.94	107.57	101.71
2	AB	2030	6MZ	O4'-C1'-N9	5.37	118.26	108.11
2	AB	2445	2MG	N2-C2-N3	5.43	123.25	116.94
35	BA	1207	2MG	C6-N1-C2	5.44	123.03	115.24
35	BA	1402	4OC	O4'-C1'-N1	5.52	118.59	108.10
2	AB	2457	PSU	C4'-O4'-C1'	5.56	115.28	109.54
2	AB	1835	2MG	N2-C2-N3	5.65	123.51	116.94
35	BA	966	2MG	C6-N1-C2	5.78	123.52	115.24
2	AB	2504	PSU	C4'-O4'-C1'	5.81	115.53	109.54
35	BA	527	7MG	C6-N1-C2	5.88	122.78	115.88
2	AB	1917	PSU	O4'-C1'-C2'	5.99	111.17	104.69
2	AB	1962	5MC	CM5-C5-C4	6.01	127.82	121.47
2	AB	2445	2MG	C6-N1-C2	6.10	123.97	115.24
36	BB	55	PSU	O4'-C1'-C2'	6.29	111.49	104.69
35	BA	1516	2MG	N2-C2-N3	6.31	124.27	116.94
36	BB	37	MIA	C11-S10-C2	6.35	106.79	102.31
35	BA	966	2MG	CM2-N2-C2	6.72	130.59	123.03
2	AB	2251	OMG	C6-N1-C2	6.92	123.99	115.88
2	AB	1835	2MG	C6-N1-C2	7.37	125.80	115.24
36	BB	46	7MG	C6-N1-C2	8.07	125.34	115.88
2	AB	955	PSU	O4'-C1'-C2'	8.10	113.45	104.69
2	AB	2069	7MG	C6-N1-C2	8.53	125.88	115.88
2	AB	2552	OMU	C4-N3-C2	8.62	123.29	114.21
2	AB	747	5MU	C4-N3-C2	9.53	123.11	115.16
2	AB	2580	PSU	C3'-C2'-C1'	10.08	113.66	101.71
2	AB	1939	5MU	C4-N3-C2	10.25	123.71	115.16
35	BA	1402	4OC	C6-C5-C4	11.28	121.86	117.42
36	BB	54	5MU	C4-N3-C2	11.68	124.90	115.16
38	BD	56	PSU	C4-N3-C2	11.98	125.16	115.16
2	AB	1917	PSU	C4-N3-C2	12.19	125.33	115.16
2	AB	2504	PSU	C4-N3-C2	12.31	125.43	115.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	BD	55	5MU	C4-N3-C2	12.47	125.56	115.16
2	AB	1911	PSU	C4-N3-C2	13.30	126.25	115.16
2	AB	955	PSU	C4-N3-C2	13.35	126.30	115.16
2	AB	2580	PSU	C4-N3-C2	13.79	126.66	115.16
35	BA	516	PSU	C4-N3-C2	13.86	126.72	115.16
2	AB	2605	PSU	C4-N3-C2	14.73	127.45	115.16
2	AB	746	PSU	C4-N3-C2	16.07	128.57	115.16
2	AB	2457	PSU	C4-N3-C2	16.30	128.76	115.16
36	BB	55	PSU	C4-N3-C2	16.54	128.96	115.16

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

2 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
59	FME	AB	3001	60	8,9,10	1.81	3 (37%)	5,9,11	2.29	2 (40%)
60	TRP	BB	101	59,36	12,15,16	1.39	1 (8%)	9,20,22	1.89	2 (22%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	FME	AB	3001	60	-	1/6/9/11	0/0/0/0
60	TRP	BB	101	59,36	-	0/3/6/8	0/2/2/2

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	AB	3001	FME	CA-N	-4.05	1.40	1.46
59	AB	3001	FME	CB-CA	2.05	1.57	1.53
59	AB	3001	FME	O-C	2.06	1.29	1.19
60	BB	101	TRP	CD1-NE1	2.37	1.41	1.36

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
60	BB	101	TRP	CB-CG-CD1	-4.76	122.09	127.97
59	AB	3001	FME	O-C-CA	-4.35	113.79	125.69
59	AB	3001	FME	CG-CB-CA	2.05	119.22	113.07
60	BB	101	TRP	CZ2-CE2-NE1	2.35	137.38	130.78

There are no chirality outliers.

All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
59	AB	3001	FME	O1-CN-N-CA

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.