



wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 01:49 PM BST

PDB ID : 3J2H
EMDB ID: : EMD-5510
Title : Dissecting the in vivo assembly of the 30S ribosomal subunit reveals the role of RimM
Authors : Guo, Q.; Goto, S.; Chen, Y.; Muto, A.; Himeno, H.; Deng, H.; Lei, J.; Gao, N.
Deposited on : 2012-09-28
Resolution : 18.80 Å(reported)
Based on PDB ID : 3OFA

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 : unknown
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

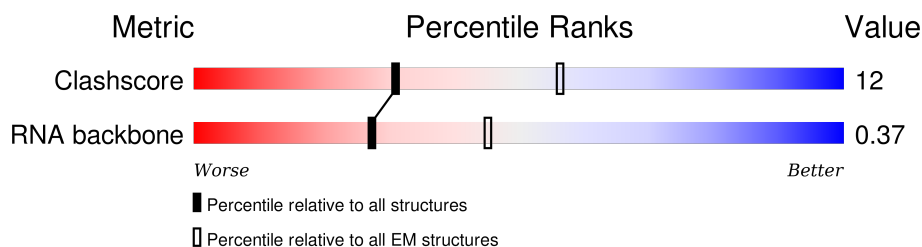
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 18.80 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)
Clashscore	114402	924
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	N	1533	

2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 49446 atoms, of which 16554 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.

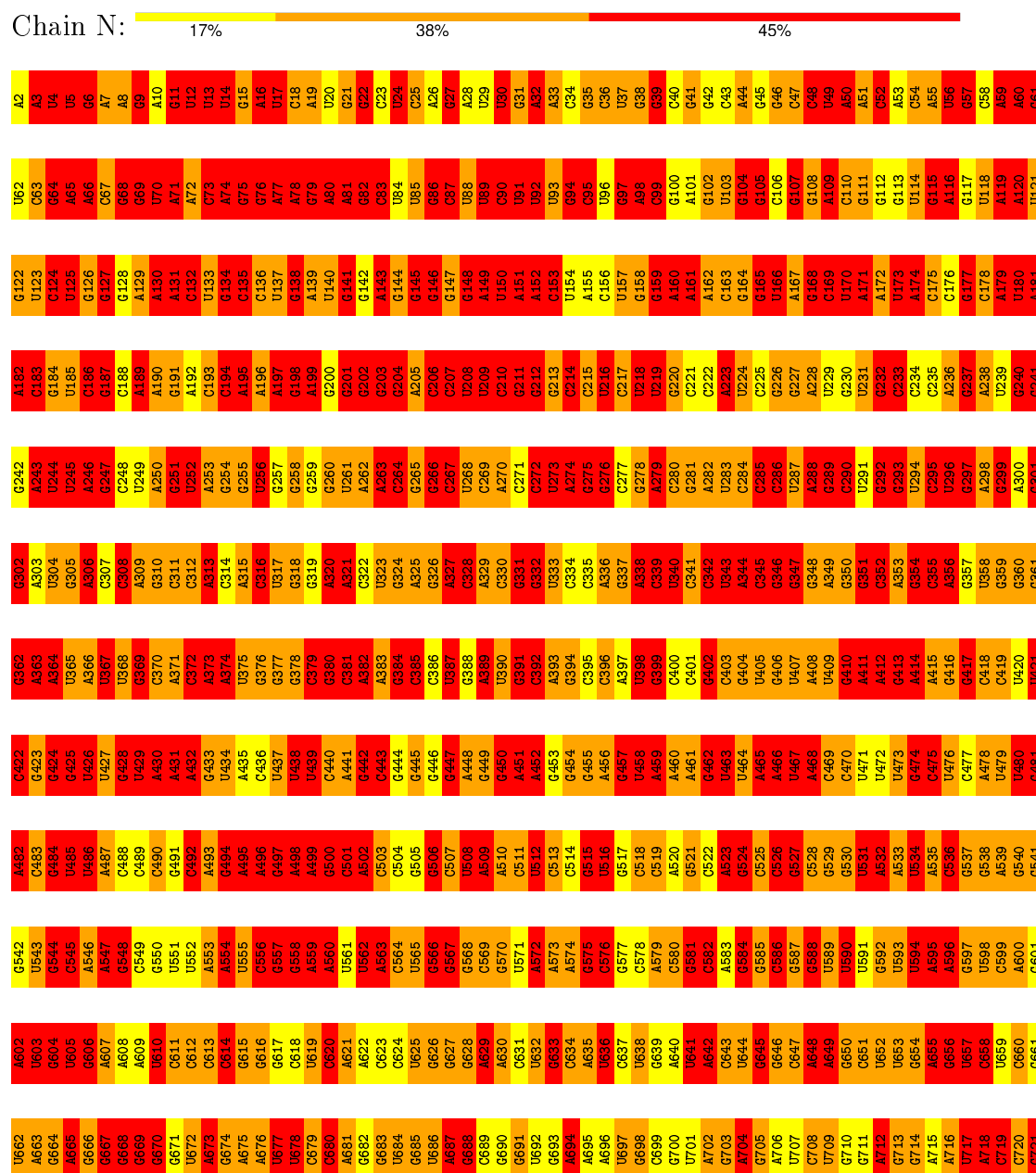
- Molecule 1 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	N	1533	Total	C	H	N	O	P	0	0
			49446	14671	16554	6036	10653	1532		

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: 16S rRNA



A1502	G1442	C1382	G1322	C1262	U1202	G1142	A1082	A1022	C982	G902	U842	A782	G722
A1503	C1443	C1383	G1323	C1263	C1203	G1143	U1083	U1023	G963	G903	U843	C782	U723
G1504	U1444	C1384	A1324	C1264	G1204	G1144	U1084	G1024	A964	U904	U844	A784	G724
G1505	U1445	G1385	C1325	C1265	U1205	A1145	U1085	U1025	U965	U905	A845	G785	G725
A1506	A1446	G1386	U1326	C1266	G1206	C1146	U1086	G1026	G966	A906	G846	G786	G726
A1507	A1447	G1387	C1327	C1267	G1207	C1147	G1087	G1027	G967	A907	G847	A787	G727
A1508	C1448	C1388	C1328	C1268	C1208	U1148	G1088	C1028	A968	A908	C848	U788	A728
C1509	C1449	C1389	A1329	A1269	C1209	C1149	G1089	U1029	A969	A909	C849	U789	A729
U1510	U1450	U1390	U1330	G1270	C1210	A1150	U1090	U1030	C970	C910	U850	A790	G730
G1511	U1451	G1391	G1331	A1271	U1211	A1151	U1091	C1031	G971	U911	G851	G791	C731
A1512	C1452	G1392	A1332	C1272	U1212	A1152	A1092	G1032	C972	C912	G852	A792	C732
A1513	G1453	U1393	A1333	C1273	C1213	G1153	A1093	G1033	G973	A913	C853	U793	G733
G1514	G1454	G1394	C1334	A1274	C1214	G1154	G1094	G1034	A974	A914	U854	G794	G734
G1515	G1455	C1395	U1335	A1275	G1215	A1155	U1095	A1035	A975	A915	U855	C795	C735
G1516	A1456	A1396	G1336	G1276	C1216	G1156	C1096	A1036	A976	U916	C856	C796	C736
G1517	G1457	C1397	G1337	C1277	A1217	A1157	C1097	C1037	A977	G917	C857	C797	C737
A1518	G1458	A1398	G1338	G1278	C1218	C1158	G1098	C1038	A978	A918	C858	U798	C738
A1519	G1459	C1399	A1339	G1279	C1219	U1159	G1099	G1039	A979	A919	C859	G799	C739
C1520	C1460	C1400	A1340	A1280	G1220	G1160	C1100	U1040	C980	U920	A860	G800	U740
C1521	G1461	G1401	U1341	C1281	G1221	C1161	A1101	G1041	U981	U921	G861	U801	G741
U1522	C1462	C1402	G1342	C1282	G1222	C1162	A1102	A1042	U982	G922	C862	A802	G742
G1523	U1463	C1403	G1343	U1283	C1223	A1163	C1103	G1043	A983	A923	U863	G803	A743
C1524	U1464	G1404	C1344	C1284	U1224	G1164	G1104	A1044	C984	C924	A864	U804	C744
G1525	A1465	G1405	U1345	A1285	C1225	U1165	A1105	C1045	C985	G925	A865	C805	G745
G1526	U1466	U1406	A1346	U1286	C1226	G1166	U1106	A1046	U986	G926	C866	C806	A746
U1527	C1467	C1407	G1347	A1287	A1227	A1167	C1107	G1047	C987	G927	G867	A807	A747
U1528	A1468	A1408	U1348	A1288	C1228	U1168	C1108	G1048	C988	G928	C868	G808	G748
G1529	C1469	G1409	A1349	A1289	A1229	A1169	C1109	U1049	U989	G929	C869	G809	A749
G1530	A1470	A1410	A1350	G1290	C1230	A1170	A1110	G1050	C990	C930	U870	C810	C750
A1531	U1471	C1411	U1351	C1291	G1231	A1171	A1111	C1051	U991	C931	U871	C811	U751
C1532	U1472	C1412	C1352	G1292	U1232	C1172	C1112	U1052	U992	C932	A872	G812	G752
C1533	C1473	A1413	G1353	C1293	G1233	U1173	C1113	G1053	C993	C933	A873	U813	A753
A1534	U1474	U1414	U1354	G1294	C1234	G1174	C1114	C1054	A994	C940	G874	A814	C754
	G1475	G1415	G1355	U1295	U1235	G1175	U1115	A1055	C995	A935	U875	A815	G755
	A1476	G1416	G1356	C1296	A1236	A1176	U1116	U1056	A996	C936	C876	A816	C756
	U1477	G1417	A1357	G1297	C1237	G1177	A1117	G1057	U997	A937	G877	C817	U757
	U1478	A1418	U1358	U1298	A1238	G1178	U1118	G1058	C998	A938	A878	G818	C758
	C1479	G1419	C1359	A1299	A1239	A1179	C1119	C1059	C999	C939	C879	A819	A759
	A1480	U1420	A1360	G1300	U1240	A1180	C1120	U1060	A1000	C940	C880	U820	G760
	U1481	G1421	G1361	U1301	G1241	G1181	U1121	G1061	C1001	G941	G881	G821	G761
	G1482	G1422	A1362	C1302	G1242	U1182	U1122	U1062	G1002	G942	C882	U822	U762
	A1483	G1423	A1363	C1303	C1243	U1183	U1123	C1063	G1003	U943	C883	C823	G763
	G1484	U1424	U1364	G1304	G1244	G1184	G1124	G1064	A1004	G944	U884	G824	C764
	U1485	U1425	G1365	G1305	C1245	G1185	U1125	U1065	A1005	G945	C885	A825	G765
	G1486	G1426	C1366	A1306	A1246	G1186	U1126	C1066	G1006	A946	G886	C826	A766
	G1487	C1427	C1367	U1307	U1247	G1187	G1127	A1067	U1007	G947	G887	U827	A767
	G1488	A1428	A1368	U1308	A1248	A1188	C1128	G1068	U1008	C948	G888	U828	A768
	G1489	A1429	C1369	G1309	C1249	U1189	C1129	C1069	U1009	A949	A889	G829	G769
	U1490	A1430	G1370	G1310	A1250	G1190	A1130	U1070	U1010	U950	G890	G830	C770
	G1491	A1431	G1371	A1311	A1251	A1191	G1131	C1071	C1011	G951	U891	A831	G771
	A1492	G1432	U1372	G1312	A1252	C1192	C1132	G1072	A1012	U952	A892	G832	U772
	A1493	A1433	G1373	C1313	G1253	G1193	G1133	U1073	C993	G953	C893	G833	G773
	G1494	A1434	A1374	C1314	A1254	U1194	G1134	G1074	A1014	G954	G894	U834	G774
	U1495	G1435	A1375	U1315	G1255	C1195	U1135	U1075	G895	U955	G895	U835	G775
	C1496	U1436	U1376	G1316	A1256	A1196	C1136	U1076	A1016	U956	C896	G836	G776
	G1497	A1437	G1377	C1317	A1257	A1197	C1137	G1077	U1017	U957	C897	U837	A777
	U1498	C1438	C1378	A1318	G1258	G1198	G1138	U1078	G1018	A958	G898	G838	G778
	A1499	G1439	G1379	A1319	C1259	U1199	G1139	G1079	A1019	A959	C899	C839	C779
	U1500	U1440	U1380	C1320	G1260	U1200	C1140	A1080	U1020	A960	A900	C840	A780
	C1501	A1441	U1381	U1321	A1261	A1201	C1141	A1081	A1021	U961	A901	C841	A781

4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	11474	Depositor
Resolution determination method	FSC at 0.5 cut-off	Depositor
CTF correction method	Weiner filter	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3800	Depositor
Magnification	59000	Depositor
Image detector	FEI Eagle 4k*4k CCD	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	N	3.47	5192/36831 (14.1%)	3.99	9508/57458 (16.5%)

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	N	0	978

All (5192) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	815	A	N7-C5	-18.92	1.27	1.39
1	N	435	A	N7-C5	-18.59	1.28	1.39
1	N	572	A	N7-C5	-18.24	1.28	1.39
1	N	367	U	C2-N3	17.85	1.50	1.37
1	N	202	G	N7-C5	16.97	1.49	1.39
1	N	974	A	N7-C5	-16.66	1.29	1.39
1	N	1236	A	N9-C4	-16.47	1.27	1.37
1	N	819	A	C6-N6	16.10	1.46	1.33
1	N	108	G	C8-N7	15.54	1.40	1.30
1	N	419	C	N3-C4	15.28	1.44	1.33
1	N	1322	C	N1-C6	-15.22	1.28	1.37
1	N	1039	G	C2-N3	15.22	1.45	1.32
1	N	545	C	C4-C5	15.19	1.55	1.43
1	N	377	G	N7-C5	-15.14	1.30	1.39
1	N	111	G	N7-C5	-15.10	1.30	1.39
1	N	781	A	N7-C5	-15.00	1.30	1.39
1	N	1515	G	C2-N3	14.94	1.44	1.32
1	N	155	A	N9-C4	-14.86	1.28	1.37
1	N	1349	A	N9-C4	-14.80	1.28	1.37
1	N	122	G	N7-C5	-14.70	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	961	U	C2-N3	14.66	1.48	1.37
1	N	64	G	C6-N1	14.65	1.49	1.39
1	N	130	A	N9-C4	-14.56	1.29	1.37
1	N	873	A	N3-C4	-14.49	1.26	1.34
1	N	669	G	P-O5'	-14.44	1.45	1.59
1	N	760	G	N7-C5	-14.44	1.30	1.39
1	N	206	C	N1-C6	14.42	1.45	1.37
1	N	77	A	N7-C5	-14.38	1.30	1.39
1	N	1241	G	N7-C5	-14.37	1.30	1.39
1	N	265	G	C6-N1	14.37	1.49	1.39
1	N	768	A	C8-N7	-14.34	1.21	1.31
1	N	1064	G	C2-N3	14.30	1.44	1.32
1	N	1094	G	C6-N1	14.28	1.49	1.39
1	N	1029	U	C2-N3	14.24	1.47	1.37
1	N	989	U	N3-C4	14.19	1.51	1.38
1	N	980	C	N3-C4	14.12	1.43	1.33
1	N	1057	G	N7-C5	-14.11	1.30	1.39
1	N	383	A	N7-C5	-14.10	1.30	1.39
1	N	637	C	N3-C4	14.03	1.43	1.33
1	N	1374	A	N7-C5	-13.97	1.30	1.39
1	N	1294	G	N7-C5	-13.96	1.30	1.39
1	N	340	U	C2-N3	13.96	1.47	1.37
1	N	948	C	N3-C4	13.96	1.43	1.33
1	N	232	G	C6-N1	13.95	1.49	1.39
1	N	164	G	C8-N7	-13.92	1.22	1.30
1	N	1026	G	N9-C4	13.87	1.49	1.38
1	N	1319	A	N7-C5	-13.86	1.30	1.39
1	N	303	A	C6-N1	13.82	1.45	1.35
1	N	909	A	N7-C5	-13.77	1.30	1.39
1	N	767	A	N9-C4	13.73	1.46	1.37
1	N	736	C	N1-C6	13.72	1.45	1.37
1	N	54	C	N1-C6	13.69	1.45	1.37
1	N	257	G	C6-N1	13.67	1.49	1.39
1	N	1006	G	N9-C4	-13.56	1.27	1.38
1	N	465	A	N7-C5	-13.52	1.31	1.39
1	N	216	U	C2-N3	13.46	1.47	1.37
1	N	87	C	N1-C6	13.44	1.45	1.37
1	N	1137	C	N1-C6	13.41	1.45	1.37
1	N	372	C	N1-C6	13.38	1.45	1.37
1	N	1508	A	C5-C4	13.36	1.48	1.38
1	N	1091	U	C2-N3	13.32	1.47	1.37
1	N	495	A	N7-C5	-13.30	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	688	G	N7-C5	-13.27	1.31	1.39
1	N	892	A	N3-C4	-13.27	1.26	1.34
1	N	404	G	C2'-C1'	-13.26	1.38	1.53
1	N	1138	G	N7-C5	-13.21	1.31	1.39
1	N	46	G	C6-N1	13.15	1.48	1.39
1	N	918	A	C5-C4	13.15	1.48	1.38
1	N	1054	C	N3-C4	13.13	1.43	1.33
1	N	204	G	N9-C8	13.08	1.47	1.37
1	N	329	A	N7-C5	-13.08	1.31	1.39
1	N	102	G	N7-C5	-13.02	1.31	1.39
1	N	1387	G	N1-C2	12.95	1.48	1.37
1	N	474	G	N7-C5	-12.90	1.31	1.39
1	N	994	A	N7-C5	-12.90	1.31	1.39
1	N	359	G	N7-C5	-12.84	1.31	1.39
1	N	1169	A	C8-N7	-12.83	1.22	1.31
1	N	114	U	C2-N3	12.80	1.46	1.37
1	N	786	G	C8-N7	12.76	1.38	1.30
1	N	159	G	N1-C2	12.65	1.47	1.37
1	N	148	G	N7-C5	-12.62	1.31	1.39
1	N	1384	C	N3-C4	12.62	1.42	1.33
1	N	1180	A	N7-C5	-12.60	1.31	1.39
1	N	31	G	C6-N1	12.55	1.48	1.39
1	N	1079	G	N7-C5	-12.54	1.31	1.39
1	N	1205	U	P-O5'	-12.49	1.47	1.59
1	N	482	A	N7-C5	-12.49	1.31	1.39
1	N	1149	C	N1-C6	12.46	1.44	1.37
1	N	50	A	N3-C4	-12.45	1.27	1.34
1	N	400	C	N1-C2	-12.38	1.27	1.40
1	N	919	A	N7-C5	-12.36	1.31	1.39
1	N	1194	U	C2-N3	12.36	1.46	1.37
1	N	573	A	N7-C5	-12.35	1.31	1.39
1	N	628	G	N7-C5	-12.34	1.31	1.39
1	N	566	G	C2-N3	12.33	1.42	1.32
1	N	663	A	N7-C5	-12.32	1.31	1.39
1	N	979	C	N1-C6	12.31	1.44	1.37
1	N	1362	A	C6-N6	12.30	1.43	1.33
1	N	1275	A	N7-C5	-12.28	1.31	1.39
1	N	1221	G	C5-C4	12.25	1.47	1.38
1	N	1408	A	N3-C4	12.23	1.42	1.34
1	N	1104	G	N7-C5	-12.21	1.31	1.39
1	N	251	G	C2-N3	12.19	1.42	1.32
1	N	414	A	N3-C4	12.17	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	647	C	N3-C4	12.17	1.42	1.33
1	N	688	G	C5-C4	12.14	1.46	1.38
1	N	918	A	N7-C5	-12.13	1.31	1.39
1	N	994	A	C6-N6	12.13	1.43	1.33
1	N	946	A	N3-C4	-12.12	1.27	1.34
1	N	742	G	C6-N1	12.11	1.48	1.39
1	N	1464	U	C2-N3	12.10	1.46	1.37
1	N	279	A	N9-C4	12.09	1.45	1.37
1	N	1413	A	N7-C5	-12.09	1.31	1.39
1	N	594	U	C2-N3	12.09	1.46	1.37
1	N	353	A	C2'-C1'	-12.09	1.40	1.53
1	N	604	G	N1-C2	12.09	1.47	1.37
1	N	885	G	P-O5'	-12.08	1.47	1.59
1	N	248	C	N1-C6	12.07	1.44	1.37
1	N	968	A	C6-N6	12.03	1.43	1.33
1	N	1101	A	C6-N6	12.02	1.43	1.33
1	N	412	A	N7-C5	-12.01	1.32	1.39
1	N	364	A	N7-C5	-12.01	1.32	1.39
1	N	885	G	N9-C4	-11.99	1.28	1.38
1	N	520	A	C5-C4	11.98	1.47	1.38
1	N	802	A	C6-N1	11.98	1.44	1.35
1	N	966	G	N7-C5	11.97	1.46	1.39
1	N	342	C	N1-C6	11.97	1.44	1.37
1	N	1176	A	N7-C5	-11.95	1.32	1.39
1	N	261	U	C2-N3	11.95	1.46	1.37
1	N	862	C	N1-C6	11.93	1.44	1.37
1	N	1532	U	C2-N3	11.92	1.46	1.37
1	N	1502	A	N7-C5	-11.85	1.32	1.39
1	N	518	C	C2-N3	11.85	1.45	1.35
1	N	596	A	N7-C5	-11.82	1.32	1.39
1	N	1099	G	C2-N3	11.80	1.42	1.32
1	N	1468	A	N7-C5	-11.80	1.32	1.39
1	N	1123	U	C2-N3	11.79	1.46	1.37
1	N	1385	G	N7-C5	-11.79	1.32	1.39
1	N	191	G	N7-C5	-11.76	1.32	1.39
1	N	19	A	N9-C8	11.75	1.47	1.37
1	N	570	G	N9-C8	-11.75	1.29	1.37
1	N	1305	G	C6-N1	11.74	1.47	1.39
1	N	306	A	N3-C4	-11.74	1.27	1.34
1	N	671	G	N9-C8	-11.74	1.29	1.37
1	N	1035	A	C6-N6	11.71	1.43	1.33
1	N	587	G	N9-C8	11.70	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	615	G	C2-N3	11.70	1.42	1.32
1	N	32	A	N3-C4	11.69	1.41	1.34
1	N	349	A	N3-C4	-11.69	1.27	1.34
1	N	1523	G	C8-N7	-11.66	1.24	1.30
1	N	1510	C	N1-C6	11.65	1.44	1.37
1	N	351	G	C5-C6	-11.62	1.30	1.42
1	N	698	G	C2-N3	11.62	1.42	1.32
1	N	799	G	C2-N3	11.62	1.42	1.32
1	N	183	C	N3-C4	11.62	1.42	1.33
1	N	1093	A	C6-N1	11.61	1.43	1.35
1	N	443	C	N1-C6	11.55	1.44	1.37
1	N	964	A	N3-C4	-11.54	1.27	1.34
1	N	691	G	N9-C8	11.53	1.46	1.37
1	N	1401	G	N1-C2	11.53	1.47	1.37
1	N	511	C	C2'-C1'	-11.53	1.40	1.53
1	N	1518	A	C6-N6	11.50	1.43	1.33
1	N	404	G	C2-N3	11.49	1.42	1.32
1	N	250	A	N9-C4	-11.48	1.30	1.37
1	N	484	G	N7-C5	-11.47	1.32	1.39
1	N	1255	G	N1-C2	11.46	1.47	1.37
1	N	51	A	N7-C5	-11.45	1.32	1.39
1	N	1334	G	N1-C2	11.43	1.46	1.37
1	N	529	G	N7-C5	-11.42	1.32	1.39
1	N	864	A	P-O5'	-11.41	1.48	1.59
1	N	1255	G	C6-N1	11.39	1.47	1.39
1	N	1449	C	N1-C6	11.38	1.44	1.37
1	N	1428	A	N3-C4	-11.37	1.28	1.34
1	N	921	U	C2-N3	11.36	1.45	1.37
1	N	1503	A	N7-C5	-11.35	1.32	1.39
1	N	1246	A	N7-C5	-11.35	1.32	1.39
1	N	657	U	C2-N3	11.34	1.45	1.37
1	N	713	G	N1-C2	11.29	1.46	1.37
1	N	667	G	N9-C8	11.27	1.45	1.37
1	N	1521	C	N3-C4	11.27	1.41	1.33
1	N	779	C	C4-N4	11.27	1.44	1.33
1	N	404	G	N7-C5	-11.26	1.32	1.39
1	N	1382	C	N1-C6	11.25	1.43	1.37
1	N	1520	C	N3-C4	11.25	1.41	1.33
1	N	847	G	N3-C4	-11.24	1.27	1.35
1	N	565	U	C4-C5	-11.21	1.33	1.43
1	N	512	U	C2-N3	11.21	1.45	1.37
1	N	306	A	N7-C5	-11.19	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1069	C	N1-C6	11.19	1.43	1.37
1	N	1125	U	C2-N3	11.19	1.45	1.37
1	N	633	G	C8-N7	-11.17	1.24	1.30
1	N	305	G	C5-C4	-11.16	1.30	1.38
1	N	1233	G	N7-C5	-11.15	1.32	1.39
1	N	1181	G	N7-C5	-11.14	1.32	1.39
1	N	548	G	N7-C5	-11.14	1.32	1.39
1	N	150	U	N1-C6	11.13	1.48	1.38
1	N	647	C	P-O5'	-11.12	1.48	1.59
1	N	177	G	N3-C4	11.12	1.43	1.35
1	N	1046	A	C6-N6	11.11	1.42	1.33
1	N	1204	A	C6-N1	11.10	1.43	1.35
1	N	484	G	N9-C4	-11.09	1.29	1.38
1	N	1200	C	C4'-C3'	11.07	1.65	1.53
1	N	1106	G	C6-N1	11.04	1.47	1.39
1	N	557	G	C6-N1	11.04	1.47	1.39
1	N	62	U	C2-N3	11.03	1.45	1.37
1	N	644	U	C4-C5	11.03	1.53	1.43
1	N	1417	G	C2-N3	11.03	1.41	1.32
1	N	900	A	N9-C4	-11.03	1.31	1.37
1	N	729	A	N9-C4	11.02	1.44	1.37
1	N	171	A	N7-C5	-11.00	1.32	1.39
1	N	1397	C	N3-C4	10.99	1.41	1.33
1	N	654	G	C6-N1	10.98	1.47	1.39
1	N	1524	C	N3-C4	10.98	1.41	1.33
1	N	1516	G	C2-N3	10.96	1.41	1.32
1	N	1134	G	C6-N1	10.96	1.47	1.39
1	N	656	G	C6-N1	10.95	1.47	1.39
1	N	994	A	N9-C8	10.95	1.46	1.37
1	N	983	A	C6-N6	10.95	1.42	1.33
1	N	246	A	C6-N1	10.95	1.43	1.35
1	N	474	G	C8-N7	-10.94	1.24	1.30
1	N	882	C	N1-C6	10.94	1.43	1.37
1	N	1296	C	N1-C6	10.93	1.43	1.37
1	N	1410	A	N7-C5	-10.92	1.32	1.39
1	N	1374	A	C6-N6	10.91	1.42	1.33
1	N	211	G	N7-C5	-10.91	1.32	1.39
1	N	613	C	N3-C4	10.91	1.41	1.33
1	N	204	G	C8-N7	-10.90	1.24	1.30
1	N	699	C	C4-C5	10.89	1.51	1.43
1	N	380	G	N7-C5	-10.88	1.32	1.39
1	N	1375	A	C8-N7	-10.88	1.24	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1243	C	N3-C4	10.87	1.41	1.33
1	N	1107	C	N3-C4	10.87	1.41	1.33
1	N	1465	A	N3-C4	-10.86	1.28	1.34
1	N	1415	G	C8-N7	10.86	1.37	1.30
1	N	1421	G	C6-N1	10.85	1.47	1.39
1	N	1191	A	C8-N7	-10.85	1.24	1.31
1	N	1143	G	N1-C2	10.85	1.46	1.37
1	N	816	A	N7-C5	-10.85	1.32	1.39
1	N	1393	U	C2-N3	10.84	1.45	1.37
1	N	1428	A	N7-C5	-10.83	1.32	1.39
1	N	1002	G	N3-C4	-10.83	1.27	1.35
1	N	573	A	N9-C4	10.83	1.44	1.37
1	N	909	A	N9-C4	-10.82	1.31	1.37
1	N	1444	U	C2'-C1'	-10.81	1.41	1.53
1	N	754	C	C4-N4	10.80	1.43	1.33
1	N	55	A	C6-N1	10.80	1.43	1.35
1	N	905	U	C2-N3	10.79	1.45	1.37
1	N	116	A	C6-N1	10.78	1.43	1.35
1	N	1363	A	N7-C5	-10.78	1.32	1.39
1	N	139	A	C6-N6	10.77	1.42	1.33
1	N	646	G	N7-C5	-10.77	1.32	1.39
1	N	365	U	C2-N3	10.77	1.45	1.37
1	N	747	A	C2'-C1'	-10.77	1.41	1.53
1	N	927	G	C6-N1	10.76	1.47	1.39
1	N	225	C	N3-C4	10.76	1.41	1.33
1	N	281	G	C6-N1	10.74	1.47	1.39
1	N	1032	G	C2-N3	10.72	1.41	1.32
1	N	1386	G	N1-C2	10.71	1.46	1.37
1	N	78	A	N7-C5	-10.70	1.32	1.39
1	N	1293	C	N1-C6	10.70	1.43	1.37
1	N	1051	C	N3-C4	10.69	1.41	1.33
1	N	21	G	N7-C5	-10.68	1.32	1.39
1	N	286	C	N1-C6	10.68	1.43	1.37
1	N	97	G	N1-C2	10.67	1.46	1.37
1	N	810	C	N1-C6	10.67	1.43	1.37
1	N	606	G	C6-N1	10.67	1.47	1.39
1	N	948	C	N1-C6	10.66	1.43	1.37
1	N	1112	C	N3-C4	10.66	1.41	1.33
1	N	325	A	N7-C5	-10.66	1.32	1.39
1	N	224	U	C2-N3	10.65	1.45	1.37
1	N	1061	G	C5-C4	10.65	1.45	1.38
1	N	306	A	N9-C4	10.63	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	812	G	C8-N7	-10.62	1.24	1.30
1	N	743	A	C6-N1	10.62	1.43	1.35
1	N	276	G	N1-C2	10.62	1.46	1.37
1	N	329	A	C6-N6	10.62	1.42	1.33
1	N	755	G	C6-N1	10.60	1.47	1.39
1	N	401	C	N3-C4	10.59	1.41	1.33
1	N	635	A	C6-N6	10.59	1.42	1.33
1	N	831	A	N9-C4	-10.59	1.31	1.37
1	N	661	G	C6-N1	10.57	1.47	1.39
1	N	1182	G	C6-N1	10.57	1.47	1.39
1	N	854	U	C2-N3	10.55	1.45	1.37
1	N	582	C	P-O5'	-10.55	1.49	1.59
1	N	1294	G	C2-N3	10.53	1.41	1.32
1	N	1473	G	N7-C5	-10.53	1.32	1.39
1	N	151	A	N7-C5	-10.53	1.32	1.39
1	N	232	G	N9-C4	-10.52	1.29	1.38
1	N	477	C	N1-C6	10.52	1.43	1.37
1	N	1524	C	N1-C6	10.52	1.43	1.37
1	N	764	C	C4-N4	10.51	1.43	1.33
1	N	108	G	N7-C5	-10.51	1.32	1.39
1	N	1153	G	N7-C5	-10.51	1.32	1.39
1	N	1457	G	C2-N2	10.51	1.45	1.34
1	N	331	G	C2-N3	10.50	1.41	1.32
1	N	1223	C	C3'-C2'	10.50	1.64	1.52
1	N	147	G	C6-N1	10.50	1.46	1.39
1	N	926	G	N1-C2	10.50	1.46	1.37
1	N	1305	G	N3-C4	10.50	1.42	1.35
1	N	1255	G	N9-C4	-10.49	1.29	1.38
1	N	30	U	C2-N3	10.49	1.45	1.37
1	N	771	G	N7-C5	-10.48	1.32	1.39
1	N	802	A	N3-C4	-10.48	1.28	1.34
1	N	934	C	N1-C6	-10.48	1.30	1.37
1	N	944	G	C6-N1	10.46	1.46	1.39
1	N	1214	C	N3-C4	10.46	1.41	1.33
1	N	1467	C	N1-C6	10.46	1.43	1.37
1	N	949	A	N7-C5	-10.46	1.32	1.39
1	N	1461	G	C6-N1	10.46	1.46	1.39
1	N	776	G	P-O5'	-10.43	1.49	1.59
1	N	769	G	C6-N1	10.43	1.46	1.39
1	N	547	A	C2'-C1'	-10.42	1.41	1.53
1	N	527	G	C6-N1	10.41	1.46	1.39
1	N	258	G	P-O5'	-10.41	1.49	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1032	G	N7-C5	-10.41	1.33	1.39
1	N	384	G	N1-C2	10.41	1.46	1.37
1	N	721	G	N7-C5	-10.40	1.33	1.39
1	N	1033	G	C2-N3	10.40	1.41	1.32
1	N	856	C	C4-N4	10.40	1.43	1.33
1	N	1339	A	N7-C5	-10.40	1.33	1.39
1	N	1413	A	N3-C4	-10.40	1.28	1.34
1	N	950	U	C2-N3	10.39	1.45	1.37
1	N	107	G	N7-C5	-10.39	1.33	1.39
1	N	957	U	P-O5'	-10.38	1.49	1.59
1	N	761	G	C6-N1	10.36	1.46	1.39
1	N	38	G	C6-N1	10.35	1.46	1.39
1	N	91	U	C4'-C3'	10.34	1.64	1.53
1	N	182	A	C6-N1	10.34	1.42	1.35
1	N	197	A	C5-C4	-10.33	1.31	1.38
1	N	386	C	N1-C6	10.32	1.43	1.37
1	N	760	G	N3-C4	-10.32	1.28	1.35
1	N	131	A	C6-N6	10.31	1.42	1.33
1	N	1254	A	C8-N7	-10.30	1.24	1.31
1	N	741	G	C5-C4	10.30	1.45	1.38
1	N	270	A	C6-N6	10.29	1.42	1.33
1	N	742	G	N3-C4	-10.29	1.28	1.35
1	N	1136	C	N1-C6	10.27	1.43	1.37
1	N	884	U	N3-C4	10.26	1.47	1.38
1	N	2	A	N9-C4	-10.25	1.31	1.37
1	N	523	A	N7-C5	10.25	1.45	1.39
1	N	729	A	N7-C5	-10.25	1.33	1.39
1	N	1327	C	N1-C6	10.25	1.43	1.37
1	N	732	C	C4-N4	10.24	1.43	1.33
1	N	1517	G	N7-C5	-10.24	1.33	1.39
1	N	371	A	N7-C5	-10.24	1.33	1.39
1	N	849	G	N1-C2	10.22	1.46	1.37
1	N	1339	A	N9-C8	-10.22	1.29	1.37
1	N	162	A	N9-C8	-10.21	1.29	1.37
1	N	164	G	N7-C5	-10.20	1.33	1.39
1	N	1263	C	N1-C6	10.20	1.43	1.37
1	N	405	U	C4-C5	10.20	1.52	1.43
1	N	983	A	N3-C4	10.20	1.41	1.34
1	N	145	G	N1-C2	10.19	1.46	1.37
1	N	1469	C	C4-C5	10.19	1.51	1.43
1	N	1097	C	N3-C4	10.18	1.41	1.33
1	N	1425	U	C2'-C1'	-10.17	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	451	A	N7-C5	-10.16	1.33	1.39
1	N	700	G	C8-N7	-10.16	1.24	1.30
1	N	687	A	C6-N6	10.16	1.42	1.33
1	N	885	G	N1-C2	10.15	1.45	1.37
1	N	1355	G	C5'-C4'	10.15	1.63	1.51
1	N	2	A	N9-C8	10.15	1.45	1.37
1	N	1305	G	C8-N7	10.14	1.37	1.30
1	N	42	G	C5-C4	-10.12	1.31	1.38
1	N	1274	A	C6-N6	10.11	1.42	1.33
1	N	1378	C	N3-C4	10.11	1.41	1.33
1	N	1169	A	N3-C4	-10.11	1.28	1.34
1	N	227	G	N7-C5	-10.10	1.33	1.39
1	N	597	G	N7-C5	10.10	1.45	1.39
1	N	999	C	N3-C4	10.10	1.41	1.33
1	N	245	U	C2-N3	10.09	1.44	1.37
1	N	755	G	N7-C5	-10.07	1.33	1.39
1	N	1421	G	N1-C2	10.07	1.45	1.37
1	N	361	G	C2'-C1'	-10.06	1.42	1.53
1	N	1531	A	N7-C5	-10.06	1.33	1.39
1	N	947	G	C2-N3	10.06	1.40	1.32
1	N	1430	A	P-O5'	-10.05	1.49	1.59
1	N	339	C	N3-C4	10.04	1.41	1.33
1	N	537	G	N7-C5	-10.04	1.33	1.39
1	N	568	G	C6-N1	10.04	1.46	1.39
1	N	1274	A	N9-C4	10.04	1.43	1.37
1	N	242	G	C5-C6	-10.04	1.32	1.42
1	N	246	A	C6-N6	10.03	1.42	1.33
1	N	896	C	C4-N4	10.03	1.43	1.33
1	N	1266	G	C2'-C1'	-10.03	1.42	1.53
1	N	1108	G	N9-C4	-10.02	1.29	1.38
1	N	919	A	C2'-C1'	-10.02	1.42	1.53
1	N	18	C	C5'-C4'	10.01	1.63	1.51
1	N	256	U	C2-N3	10.01	1.44	1.37
1	N	202	G	C8-N7	-10.01	1.25	1.30
1	N	886	G	N7-C5	-10.01	1.33	1.39
1	N	27	G	C2-N3	10.00	1.40	1.32
1	N	1057	G	N1-C2	10.00	1.45	1.37
1	N	600	A	N3-C4	-9.99	1.28	1.34
1	N	326	G	C6-N1	-9.99	1.32	1.39
1	N	1287	A	C2'-C1'	-9.99	1.42	1.53
1	N	49	U	C5'-C4'	9.98	1.63	1.51
1	N	1478	U	N3-C4	9.98	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	650	G	N9-C8	9.98	1.44	1.37
1	N	348	G	O3'-P	-9.98	1.49	1.61
1	N	434	U	C2-N3	9.98	1.44	1.37
1	N	440	C	N3-C4	9.97	1.41	1.33
1	N	318	G	C2-N3	9.97	1.40	1.32
1	N	301	G	C6-N1	9.96	1.46	1.39
1	N	338	A	C8-N7	-9.96	1.24	1.31
1	N	676	A	C5-C4	-9.96	1.31	1.38
1	N	1096	C	C2-N3	9.96	1.43	1.35
1	N	524	G	C6-N1	9.96	1.46	1.39
1	N	1356	G	C5-C6	-9.95	1.32	1.42
1	N	642	A	N7-C5	-9.94	1.33	1.39
1	N	641	U	C2-N3	9.93	1.44	1.37
1	N	1196	A	C6-N6	9.92	1.41	1.33
1	N	645	G	N7-C5	-9.91	1.33	1.39
1	N	779	C	N1-C6	9.91	1.43	1.37
1	N	203	G	C2-N3	9.91	1.40	1.32
1	N	1384	C	C2-N3	9.91	1.43	1.35
1	N	1418	A	C8-N7	-9.90	1.24	1.31
1	N	176	C	N1-C6	9.89	1.43	1.37
1	N	356	A	C6-N1	9.88	1.42	1.35
1	N	1083	U	C2-N3	9.88	1.44	1.37
1	N	1174	G	O3'-P	-9.88	1.49	1.61
1	N	1348	U	C2-N3	9.88	1.44	1.37
1	N	1110	A	N3-C4	-9.88	1.28	1.34
1	N	230	G	N9-C4	9.87	1.45	1.38
1	N	1251	A	C6-N1	9.87	1.42	1.35
1	N	1225	A	C5-C4	9.86	1.45	1.38
1	N	199	A	N9-C4	-9.86	1.31	1.37
1	N	959	A	N7-C5	-9.86	1.33	1.39
1	N	277	C	N3-C4	9.86	1.40	1.33
1	N	753	A	N7-C5	-9.86	1.33	1.39
1	N	1480	A	C6-N6	9.86	1.41	1.33
1	N	47	C	N3-C4	9.85	1.40	1.33
1	N	1088	G	C2-N3	9.84	1.40	1.32
1	N	773	G	C6-N1	9.84	1.46	1.39
1	N	852	G	C2-N3	9.84	1.40	1.32
1	N	1063	C	N1-C6	9.83	1.43	1.37
1	N	643	C	C4'-C3'	-9.82	1.42	1.53
1	N	338	A	C6-N6	9.82	1.41	1.33
1	N	808	C	N3-C4	9.82	1.40	1.33
1	N	1311	A	C5-C4	9.82	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	515	G	N9-C8	-9.81	1.30	1.37
1	N	1022	A	N9-C4	9.81	1.43	1.37
1	N	1377	A	N9-C4	-9.80	1.31	1.37
1	N	16	A	C6-N6	9.80	1.41	1.33
1	N	22	G	N3-C4	-9.79	1.28	1.35
1	N	111	G	N1-C2	9.79	1.45	1.37
1	N	1164	G	C2-N3	9.78	1.40	1.32
1	N	212	G	N1-C2	9.78	1.45	1.37
1	N	1185	G	C6-N1	9.78	1.46	1.39
1	N	929	G	C2-N2	9.78	1.44	1.34
1	N	940	C	N1-C6	9.77	1.43	1.37
1	N	1155	A	C5-C4	9.76	1.45	1.38
1	N	1171	A	N7-C5	-9.76	1.33	1.39
1	N	174	A	C6-N1	9.76	1.42	1.35
1	N	1053	G	C2-N3	9.76	1.40	1.32
1	N	566	G	C6-N1	9.76	1.46	1.39
1	N	1405	G	N3-C4	-9.76	1.28	1.35
1	N	357	G	C2-N3	9.76	1.40	1.32
1	N	1437	A	C6-N6	9.74	1.41	1.33
1	N	45	G	C6-N1	9.74	1.46	1.39
1	N	537	G	P-O5'	-9.74	1.50	1.59
1	N	992	U	C2-N3	9.74	1.44	1.37
1	N	1133	G	C8-N7	-9.73	1.25	1.30
1	N	1145	A	C5'-C4'	9.73	1.63	1.51
1	N	1273	C	N1-C6	9.73	1.43	1.37
1	N	1438	G	C6-N1	9.73	1.46	1.39
1	N	838	G	C8-N7	-9.73	1.25	1.30
1	N	1104	G	C6-N1	9.73	1.46	1.39
1	N	742	G	N9-C8	9.72	1.44	1.37
1	N	475	C	O3'-P	-9.72	1.49	1.61
1	N	1362	A	N9-C4	9.72	1.43	1.37
1	N	698	G	N3-C4	-9.72	1.28	1.35
1	N	413	G	N7-C5	-9.71	1.33	1.39
1	N	1015	G	N7-C5	-9.71	1.33	1.39
1	N	1411	C	C2'-C1'	-9.71	1.42	1.53
1	N	1488	G	C6-N1	9.71	1.46	1.39
1	N	1130	A	N9-C4	-9.71	1.32	1.37
1	N	1373	G	N3-C4	9.70	1.42	1.35
1	N	16	A	N3-C4	-9.70	1.29	1.34
1	N	1012	A	N9-C4	9.70	1.43	1.37
1	N	1274	A	N7-C5	-9.69	1.33	1.39
1	N	77	A	C8-N7	-9.69	1.24	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	9	G	C5-C6	-9.68	1.32	1.42
1	N	264	C	P-O5'	-9.68	1.50	1.59
1	N	1379	G	C6-N1	9.68	1.46	1.39
1	N	329	A	N9-C4	9.67	1.43	1.37
1	N	1018	G	N7-C5	-9.67	1.33	1.39
1	N	1352	C	N1-C6	9.67	1.43	1.37
1	N	895	G	N3-C4	-9.67	1.28	1.35
1	N	20	U	N1-C6	9.67	1.46	1.38
1	N	1360	A	C6-N6	9.66	1.41	1.33
1	N	523	A	C6-N6	9.66	1.41	1.33
1	N	655	A	C6-N6	9.66	1.41	1.33
1	N	1241	G	C8-N7	-9.66	1.25	1.30
1	N	635	A	N7-C5	-9.65	1.33	1.39
1	N	1299	A	N9-C4	9.65	1.43	1.37
1	N	616	G	N7-C5	-9.64	1.33	1.39
1	N	782	A	C8-N7	-9.63	1.24	1.31
1	N	902	G	N9-C4	-9.63	1.30	1.38
1	N	1191	A	C6-N1	9.63	1.42	1.35
1	N	414	A	C8-N7	-9.62	1.24	1.31
1	N	237	G	C2-N3	9.62	1.40	1.32
1	N	520	A	C6-N6	9.62	1.41	1.33
1	N	1454	G	C6-N1	9.61	1.46	1.39
1	N	1312	G	N1-C2	9.60	1.45	1.37
1	N	570	G	C6-N1	9.60	1.46	1.39
1	N	1359	C	N3-C4	9.60	1.40	1.33
1	N	186	C	N3-C4	9.59	1.40	1.33
1	N	942	G	C2-N2	9.59	1.44	1.34
1	N	1275	A	N9-C4	-9.59	1.32	1.37
1	N	867	G	C8-N7	-9.58	1.25	1.30
1	N	389	A	N7-C5	-9.57	1.33	1.39
1	N	1328	C	C4-C5	-9.57	1.35	1.43
1	N	863	U	P-O5'	-9.57	1.50	1.59
1	N	1249	C	N1-C6	9.57	1.42	1.37
1	N	721	G	N1-C2	9.56	1.45	1.37
1	N	769	G	C5-C4	9.56	1.45	1.38
1	N	211	G	C8-N7	-9.55	1.25	1.30
1	N	325	A	C6-N1	-9.55	1.28	1.35
1	N	1379	G	N9-C4	-9.55	1.30	1.38
1	N	659	U	C2-N3	9.54	1.44	1.37
1	N	499	A	N3-C4	-9.54	1.29	1.34
1	N	90	C	C4'-C3'	9.54	1.63	1.53
1	N	1305	G	N9-C4	-9.54	1.30	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	975	A	N7-C5	-9.54	1.33	1.39
1	N	226	G	C8-N7	-9.53	1.25	1.30
1	N	879	C	C2'-C1'	-9.53	1.42	1.53
1	N	326	G	C2-N3	9.53	1.40	1.32
1	N	447	G	N3-C4	9.53	1.42	1.35
1	N	165	G	N7-C5	-9.52	1.33	1.39
1	N	1245	C	N3-C4	9.52	1.40	1.33
1	N	426	U	C2-N3	9.52	1.44	1.37
1	N	968	A	C3'-C2'	9.52	1.63	1.52
1	N	1004	A	C5-C4	9.52	1.45	1.38
1	N	1458	G	P-O5'	-9.52	1.50	1.59
1	N	694	A	N9-C4	-9.51	1.32	1.37
1	N	981	U	C4-C5	-9.51	1.34	1.43
1	N	1020	G	N1-C2	9.50	1.45	1.37
1	N	738	C	C4-N4	9.50	1.42	1.33
1	N	191	G	P-O5'	-9.50	1.50	1.59
1	N	677	U	N3-C4	9.50	1.47	1.38
1	N	711	G	N9-C4	-9.50	1.30	1.38
1	N	505	G	C5-C4	-9.49	1.31	1.38
1	N	449	G	N3-C4	9.49	1.42	1.35
1	N	1432	G	N9-C4	-9.49	1.30	1.38
1	N	1171	A	C8-N7	-9.48	1.25	1.31
1	N	1160	G	N7-C5	-9.47	1.33	1.39
1	N	581	G	N7-C5	9.47	1.45	1.39
1	N	330	C	C3'-C2'	9.47	1.63	1.52
1	N	547	A	C6-N6	9.47	1.41	1.33
1	N	559	A	C2'-C1'	-9.47	1.43	1.53
1	N	1356	G	N9-C4	-9.46	1.30	1.38
1	N	343	U	C4-C5	9.46	1.52	1.43
1	N	954	G	N7-C5	-9.45	1.33	1.39
1	N	499	A	N9-C4	9.45	1.43	1.37
1	N	1433	A	P-O5'	-9.45	1.50	1.59
1	N	216	U	C4'-O4'	9.45	1.57	1.45
1	N	68	G	N9-C4	-9.44	1.30	1.38
1	N	74	A	C6-N6	9.44	1.41	1.33
1	N	412	A	C6-N1	9.44	1.42	1.35
1	N	600	A	N1-C2	9.43	1.42	1.34
1	N	829	G	C8-N7	-9.42	1.25	1.30
1	N	959	A	N9-C4	9.42	1.43	1.37
1	N	504	C	N1-C6	9.41	1.42	1.37
1	N	1331	G	C2-N3	9.41	1.40	1.32
1	N	640	A	N7-C5	-9.41	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	204	G	P-O5'	-9.40	1.50	1.59
1	N	1494	G	N1-C2	9.40	1.45	1.37
1	N	235	C	N3-C4	9.40	1.40	1.33
1	N	595	A	C6-N6	9.40	1.41	1.33
1	N	289	G	C2-N2	9.40	1.44	1.34
1	N	183	C	C2-N3	9.39	1.43	1.35
1	N	453	G	C8-N7	-9.39	1.25	1.30
1	N	17	U	C2-N3	9.39	1.44	1.37
1	N	80	A	P-O5'	9.38	1.69	1.59
1	N	104	G	C6-N1	9.38	1.46	1.39
1	N	874	G	N1-C2	9.37	1.45	1.37
1	N	1274	A	C4'-C3'	9.37	1.63	1.53
1	N	577	G	N7-C5	-9.37	1.33	1.39
1	N	1005	A	N3-C4	9.36	1.40	1.34
1	N	683	G	C6-N1	9.36	1.46	1.39
1	N	179	A	N7-C5	-9.36	1.33	1.39
1	N	517	G	C2-N3	9.35	1.40	1.32
1	N	1223	C	C4-C5	-9.35	1.35	1.43
1	N	1130	A	O3'-P	-9.35	1.50	1.61
1	N	1346	A	C4'-C3'	9.35	1.63	1.53
1	N	626	G	C8-N7	-9.34	1.25	1.30
1	N	845	A	N7-C5	-9.34	1.33	1.39
1	N	997	U	C5-C6	9.34	1.42	1.34
1	N	1193	G	N7-C5	-9.34	1.33	1.39
1	N	1434	A	C6-N6	9.34	1.41	1.33
1	N	831	A	C6-N6	9.33	1.41	1.33
1	N	177	G	N7-C5	-9.32	1.33	1.39
1	N	1006	G	N7-C5	-9.31	1.33	1.39
1	N	1206	G	N7-C5	-9.31	1.33	1.39
1	N	1255	G	C8-N7	-9.30	1.25	1.30
1	N	1148	U	C2-N3	9.30	1.44	1.37
1	N	174	A	N9-C4	9.29	1.43	1.37
1	N	1011	C	N1-C6	9.29	1.42	1.37
1	N	313	A	N7-C5	-9.28	1.33	1.39
1	N	1256	A	N7-C5	-9.28	1.33	1.39
1	N	144	G	C6-N1	9.27	1.46	1.39
1	N	1218	C	N1-C6	9.27	1.42	1.37
1	N	201	G	N9-C4	-9.27	1.30	1.38
1	N	675	A	N3-C4	-9.26	1.29	1.34
1	N	97	G	N7-C5	-9.25	1.33	1.39
1	N	1010	U	C4-C5	-9.25	1.35	1.43
1	N	1447	A	N7-C5	-9.24	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1513	A	N3-C4	-9.24	1.29	1.34
1	N	611	C	N1-C6	9.24	1.42	1.37
1	N	84	U	C2-N3	9.22	1.44	1.37
1	N	626	G	C2-N3	9.22	1.40	1.32
1	N	1482	G	P-O5'	-9.22	1.50	1.59
1	N	1047	G	N7-C5	-9.22	1.33	1.39
1	N	1179	A	C6-N6	9.21	1.41	1.33
1	N	137	U	N3-C4	9.21	1.46	1.38
1	N	1118	U	P-O5'	-9.21	1.50	1.59
1	N	189	A	C6-N6	9.20	1.41	1.33
1	N	281	G	C2-N3	9.20	1.40	1.32
1	N	688	G	C2-N3	9.19	1.40	1.32
1	N	6	G	N1-C2	9.19	1.45	1.37
1	N	711	G	C2-N3	9.19	1.40	1.32
1	N	1454	G	N7-C5	-9.19	1.33	1.39
1	N	108	G	C2-N3	9.19	1.40	1.32
1	N	144	G	N9-C8	-9.19	1.31	1.37
1	N	808	C	C4-N4	9.19	1.42	1.33
1	N	896	C	N3-C4	9.19	1.40	1.33
1	N	1504	G	N9-C8	-9.19	1.31	1.37
1	N	457	G	N9-C8	9.18	1.44	1.37
1	N	684	U	C2'-C1'	-9.18	1.43	1.53
1	N	1248	A	C6-N6	9.18	1.41	1.33
1	N	65	A	C2'-C1'	-9.18	1.43	1.53
1	N	991	U	C2-N3	9.18	1.44	1.37
1	N	800	G	C5'-C4'	9.18	1.62	1.51
1	N	50	A	C6-N1	9.17	1.42	1.35
1	N	807	A	C2'-C1'	-9.17	1.43	1.53
1	N	629	A	C2'-C1'	-9.17	1.43	1.53
1	N	1055	A	C5-C6	-9.17	1.32	1.41
1	N	1106	G	N7-C5	-9.16	1.33	1.39
1	N	1311	A	C6-N1	9.16	1.42	1.35
1	N	269	C	C2-N3	9.16	1.43	1.35
1	N	1285	A	N9-C4	-9.16	1.32	1.37
1	N	392	C	N1-C6	9.15	1.42	1.37
1	N	960	U	C2'-C1'	-9.15	1.43	1.53
1	N	422	C	C4-C5	9.14	1.50	1.43
1	N	435	A	C6-N1	9.14	1.42	1.35
1	N	990	C	C4-C5	-9.14	1.35	1.43
1	N	1099	G	N1-C2	9.14	1.45	1.37
1	N	491	G	C2-N3	9.13	1.40	1.32
1	N	1193	G	N3-C4	9.13	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	129	A	C6-N6	9.13	1.41	1.33
1	N	482	A	C6-N6	9.13	1.41	1.33
1	N	634	C	N1-C6	9.12	1.42	1.37
1	N	533	A	N7-C5	-9.12	1.33	1.39
1	N	954	G	N9-C8	-9.12	1.31	1.37
1	N	198	G	N7-C5	-9.12	1.33	1.39
1	N	894	G	C2-N3	9.12	1.40	1.32
1	N	113	G	C5-C4	9.11	1.44	1.38
1	N	170	U	C2-N3	9.11	1.44	1.37
1	N	770	C	N1-C6	9.11	1.42	1.37
1	N	318	G	N3-C4	-9.11	1.29	1.35
1	N	1142	G	C2-N3	9.11	1.40	1.32
1	N	699	C	C4'-C3'	9.11	1.63	1.53
1	N	1221	G	C2-N3	9.11	1.40	1.32
1	N	513	C	C5-C6	9.10	1.41	1.34
1	N	1308	U	C2'-C1'	-9.10	1.43	1.53
1	N	185	U	P-O5'	-9.09	1.50	1.59
1	N	1145	A	N3-C4	-9.09	1.29	1.34
1	N	493	A	C5-C4	9.08	1.45	1.38
1	N	916	U	C2-N3	9.08	1.44	1.37
1	N	235	C	C2-N3	9.08	1.43	1.35
1	N	701	U	P-O5'	9.08	1.68	1.59
1	N	1514	G	N1-C2	9.08	1.45	1.37
1	N	728	A	N9-C4	-9.08	1.32	1.37
1	N	1284	C	N1-C6	9.07	1.42	1.37
1	N	377	G	C8-N7	-9.07	1.25	1.30
1	N	314	C	N1-C6	9.07	1.42	1.37
1	N	1035	A	C5-C4	9.07	1.45	1.38
1	N	835	U	C2-N3	9.06	1.44	1.37
1	N	892	A	N9-C4	9.05	1.43	1.37
1	N	59	A	C6-N1	9.04	1.41	1.35
1	N	609	A	N9-C8	9.04	1.45	1.37
1	N	704	A	N7-C5	-9.04	1.33	1.39
1	N	953	G	C2-N3	9.04	1.40	1.32
1	N	199	A	N7-C5	-9.04	1.33	1.39
1	N	251	G	C2'-C1'	-9.04	1.43	1.53
1	N	514	C	C4-N4	-9.04	1.25	1.33
1	N	671	G	N7-C5	-9.03	1.33	1.39
1	N	1134	G	N1-C2	9.03	1.45	1.37
1	N	537	G	C6-O6	9.03	1.32	1.24
1	N	1515	G	C5-C6	-9.03	1.33	1.42
1	N	1376	U	C2-N3	9.02	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	963	G	C2'-C1'	-9.02	1.43	1.53
1	N	1289	A	C6-N1	9.02	1.41	1.35
1	N	1460	C	N1-C6	9.02	1.42	1.37
1	N	947	G	N3-C4	9.01	1.41	1.35
1	N	807	A	C6-N6	9.01	1.41	1.33
1	N	190	A	N7-C5	-9.01	1.33	1.39
1	N	705	G	N9-C8	9.01	1.44	1.37
1	N	1405	G	N1-C2	9.01	1.45	1.37
1	N	1326	U	C2'-C1'	-9.01	1.43	1.53
1	N	213	G	C5-C6	-9.00	1.33	1.42
1	N	254	G	C8-N7	-9.00	1.25	1.30
1	N	523	A	N9-C8	-9.00	1.30	1.37
1	N	1123	U	N3-C4	9.00	1.46	1.38
1	N	1206	G	C8-N7	-9.00	1.25	1.30
1	N	148	G	C5'-C4'	9.00	1.62	1.51
1	N	404	G	C8-N7	-8.99	1.25	1.30
1	N	603	U	N3-C4	8.99	1.46	1.38
1	N	512	U	C4'-C3'	8.99	1.63	1.53
1	N	1285	A	C6-N1	8.99	1.41	1.35
1	N	85	U	C2-N3	8.98	1.44	1.37
1	N	406	G	C8-N7	-8.98	1.25	1.30
1	N	1374	A	C5-C6	8.98	1.49	1.41
1	N	1508	A	N7-C5	-8.98	1.33	1.39
1	N	975	A	C2'-C1'	-8.97	1.43	1.53
1	N	1305	G	C2'-C1'	-8.97	1.43	1.53
1	N	168	G	C5-C4	8.97	1.44	1.38
1	N	190	A	N9-C4	8.96	1.43	1.37
1	N	1267	C	N3-C4	8.96	1.40	1.33
1	N	117	G	N1-C2	8.96	1.45	1.37
1	N	1416	G	N7-C5	-8.96	1.33	1.39
1	N	566	G	N3-C4	8.95	1.41	1.35
1	N	264	C	C4-N4	8.95	1.42	1.33
1	N	509	A	N3-C4	8.95	1.40	1.34
1	N	1317	C	N3-C4	8.95	1.40	1.33
1	N	1300	G	N3-C4	-8.94	1.29	1.35
1	N	140	U	N3-C4	8.94	1.46	1.38
1	N	812	G	C2-N3	8.93	1.39	1.32
1	N	951	G	C2'-C1'	-8.93	1.43	1.53
1	N	242	G	C2-N3	-8.93	1.25	1.32
1	N	974	A	C2'-C1'	-8.93	1.43	1.53
1	N	1043	G	C6-N1	8.93	1.45	1.39
1	N	353	A	C6-N1	8.92	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	326	G	C2'-C1'	-8.92	1.43	1.53
1	N	129	A	N7-C5	-8.91	1.33	1.39
1	N	1482	G	N7-C5	-8.91	1.33	1.39
1	N	829	G	C2'-C1'	-8.91	1.43	1.53
1	N	763	G	C2-N3	8.91	1.39	1.32
1	N	1508	A	N9-C8	8.91	1.44	1.37
1	N	821	G	N7-C5	-8.91	1.33	1.39
1	N	156	C	O3'-P	-8.90	1.50	1.61
1	N	128	G	C5-C4	8.90	1.44	1.38
1	N	1200	C	N1-C6	8.90	1.42	1.37
1	N	1421	G	C3'-C2'	8.90	1.62	1.52
1	N	118	U	N1-C2	8.90	1.46	1.38
1	N	614	C	C4-N4	8.90	1.42	1.33
1	N	791	G	C2-N3	8.89	1.39	1.32
1	N	1467	C	N3-C4	8.89	1.40	1.33
1	N	1501	C	C5-C6	8.89	1.41	1.34
1	N	131	A	C4'-C3'	8.88	1.62	1.53
1	N	395	C	C2-N3	8.88	1.42	1.35
1	N	491	G	N9-C4	-8.88	1.30	1.38
1	N	1241	G	C3'-C2'	8.88	1.62	1.52
1	N	1378	C	C4-C5	-8.88	1.35	1.43
1	N	72	A	N9-C8	-8.88	1.30	1.37
1	N	1323	G	C5-C6	-8.87	1.33	1.42
1	N	1515	G	C5-C4	8.87	1.44	1.38
1	N	1528	U	C3'-O3'	8.87	1.54	1.42
1	N	1423	G	C2'-C1'	8.87	1.63	1.53
1	N	274	A	N7-C5	-8.86	1.33	1.39
1	N	614	C	N3-C4	8.86	1.40	1.33
1	N	971	G	C3'-C2'	8.86	1.62	1.52
1	N	1488	G	N7-C5	-8.86	1.33	1.39
1	N	192	A	C5-C4	8.86	1.45	1.38
1	N	666	G	N9-C8	-8.85	1.31	1.37
1	N	237	G	C6-N1	8.85	1.45	1.39
1	N	775	G	P-O5'	-8.85	1.50	1.59
1	N	871	U	C5'-C4'	8.85	1.61	1.51
1	N	980	C	C4-C5	8.84	1.50	1.43
1	N	1000	A	N9-C4	8.84	1.43	1.37
1	N	1411	C	N3-C4	8.84	1.40	1.33
1	N	140	U	C2-N3	8.83	1.44	1.37
1	N	323	U	N3-C4	8.83	1.46	1.38
1	N	620	C	C4-N4	8.83	1.41	1.33
1	N	1376	U	P-O5'	-8.83	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1063	C	C4-N4	8.83	1.41	1.33
1	N	19	A	C6-N6	8.83	1.41	1.33
1	N	415	A	P-O5'	-8.82	1.50	1.59
1	N	1446	A	P-O5'	8.82	1.68	1.59
1	N	739	C	C4-N4	8.82	1.41	1.33
1	N	1400	C	N3-C4	8.82	1.40	1.33
1	N	220	G	N1-C2	8.82	1.44	1.37
1	N	408	A	C6-N1	8.81	1.41	1.35
1	N	1151	A	C5'-C4'	8.81	1.61	1.51
1	N	1290	G	C5-C4	8.81	1.44	1.38
1	N	565	U	N3-C4	8.81	1.46	1.38
1	N	687	A	N7-C5	-8.81	1.33	1.39
1	N	705	G	C8-N7	-8.81	1.25	1.30
1	N	1335	U	O3'-P	-8.81	1.50	1.61
1	N	183	C	N1-C6	8.80	1.42	1.37
1	N	530	G	C2'-C1'	8.80	1.63	1.53
1	N	1351	U	C4-C5	8.80	1.51	1.43
1	N	247	G	N7-C5	-8.80	1.33	1.39
1	N	459	A	N7-C5	-8.79	1.33	1.39
1	N	512	U	N3-C4	8.79	1.46	1.38
1	N	1269	A	C6-N6	8.80	1.41	1.33
1	N	515	G	C2-N3	8.79	1.39	1.32
1	N	250	A	C6-N6	8.79	1.41	1.33
1	N	678	U	C2-N3	8.79	1.44	1.37
1	N	400	C	N3-C4	8.79	1.40	1.33
1	N	1447	A	N9-C8	8.79	1.44	1.37
1	N	1475	G	C6-N1	8.78	1.45	1.39
1	N	554	A	C6-N1	8.78	1.41	1.35
1	N	941	G	N9-C8	-8.77	1.31	1.37
1	N	174	A	N7-C5	-8.77	1.33	1.39
1	N	449	G	C6-N1	8.76	1.45	1.39
1	N	331	G	C5'-C4'	8.76	1.61	1.51
1	N	43	C	C5'-C4'	8.76	1.61	1.51
1	N	1309	G	C6-N1	8.76	1.45	1.39
1	N	433	G	C5-C4	8.76	1.44	1.38
1	N	1139	G	N7-C5	8.76	1.44	1.39
1	N	458	U	N3-C4	8.75	1.46	1.38
1	N	1089	G	C6-N1	8.75	1.45	1.39
1	N	1347	G	O3'-P	-8.75	1.50	1.61
1	N	619	U	C2-N3	8.75	1.43	1.37
1	N	1207	G	C5-C4	-8.75	1.32	1.38
1	N	131	A	C6-N1	8.74	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	392	C	C2'-C1'	-8.74	1.43	1.53
1	N	1150	A	C6-N1	8.74	1.41	1.35
1	N	258	G	C2-N2	8.74	1.43	1.34
1	N	1170	A	N7-C5	-8.73	1.34	1.39
1	N	651	C	N3-C4	8.73	1.40	1.33
1	N	1346	A	C5-C4	8.73	1.44	1.38
1	N	1165	U	C2-N3	8.73	1.43	1.37
1	N	1396	A	C6-N1	8.72	1.41	1.35
1	N	663	A	N9-C4	8.72	1.43	1.37
1	N	698	G	N7-C5	-8.72	1.34	1.39
1	N	695	A	N7-C5	-8.71	1.34	1.39
1	N	716	A	C6-N6	8.71	1.41	1.33
1	N	50	A	C5-C4	8.71	1.44	1.38
1	N	164	G	C2'-C1'	-8.71	1.43	1.53
1	N	952	U	N3-C4	8.71	1.46	1.38
1	N	340	U	P-O5'	-8.71	1.51	1.59
1	N	1447	A	C6-N1	8.71	1.41	1.35
1	N	193	C	N1-C6	8.71	1.42	1.37
1	N	1174	G	C5-C4	-8.71	1.32	1.38
1	N	1254	A	C6-N6	8.70	1.41	1.33
1	N	144	G	C2-N3	8.70	1.39	1.32
1	N	945	G	P-O5'	-8.69	1.51	1.59
1	N	969	A	N9-C8	-8.69	1.30	1.37
1	N	1418	A	N9-C8	-8.69	1.30	1.37
1	N	1399	C	N3-C4	8.69	1.40	1.33
1	N	74	A	C5'-C4'	8.68	1.61	1.51
1	N	1427	C	N1-C6	-8.68	1.31	1.37
1	N	442	G	C6-N1	8.68	1.45	1.39
1	N	433	G	C5-C6	-8.67	1.33	1.42
1	N	1371	G	N7-C5	-8.67	1.34	1.39
1	N	565	U	C2'-C1'	-8.67	1.43	1.53
1	N	759	A	C6-N1	8.67	1.41	1.35
1	N	790	A	N7-C5	-8.66	1.34	1.39
1	N	46	G	N9-C8	8.65	1.44	1.37
1	N	68	G	C6-N1	8.65	1.45	1.39
1	N	498	A	C5'-C4'	8.65	1.61	1.51
1	N	761	G	N9-C8	8.65	1.44	1.37
1	N	698	G	C6-N1	8.64	1.45	1.39
1	N	1195	C	N3-C4	8.64	1.40	1.33
1	N	1205	U	C1'-N1	8.64	1.61	1.48
1	N	910	C	C4-N4	8.64	1.41	1.33
1	N	4	U	C3'-C2'	8.64	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	753	A	C5-C6	-8.64	1.33	1.41
1	N	909	A	C4'-C3'	8.63	1.62	1.53
1	N	551	U	C2'-C1'	-8.63	1.43	1.53
1	N	846	G	C5'-C4'	8.63	1.61	1.51
1	N	1132	C	C5'-C4'	8.63	1.61	1.51
1	N	898	G	C6-N1	8.62	1.45	1.39
1	N	1036	A	C6-N6	8.62	1.40	1.33
1	N	830	G	N9-C4	-8.62	1.31	1.38
1	N	352	C	C5'-C4'	8.62	1.61	1.51
1	N	878	A	P-O5'	-8.62	1.51	1.59
1	N	1040	U	C2-N3	8.62	1.43	1.37
1	N	1279	G	N7-C5	-8.62	1.34	1.39
1	N	1475	G	N7-C5	-8.62	1.34	1.39
1	N	578	C	C4'-O4'	8.62	1.56	1.45
1	N	840	C	N3-C4	8.61	1.40	1.33
1	N	466	A	N9-C4	8.61	1.43	1.37
1	N	444	G	N7-C5	-8.61	1.34	1.39
1	N	447	G	C5-C4	-8.60	1.32	1.38
1	N	1050	G	C2-N3	8.60	1.39	1.32
1	N	1370	G	C2-N2	8.60	1.43	1.34
1	N	558	G	C2'-C1'	-8.60	1.43	1.53
1	N	836	G	N1-C2	8.59	1.44	1.37
1	N	530	G	N1-C2	8.59	1.44	1.37
1	N	482	A	N9-C8	-8.59	1.30	1.37
1	N	1227	A	O3'-P	-8.59	1.50	1.61
1	N	41	G	C2-N3	8.58	1.39	1.32
1	N	948	C	C4-N4	8.58	1.41	1.33
1	N	1134	G	N3-C4	-8.58	1.29	1.35
1	N	62	U	P-O5'	-8.58	1.51	1.59
1	N	922	G	C5-C4	8.58	1.44	1.38
1	N	162	A	C2-N3	-8.57	1.25	1.33
1	N	1334	G	N7-C5	-8.57	1.34	1.39
1	N	910	C	C4'-C3'	-8.57	1.43	1.53
1	N	786	G	N7-C5	8.57	1.44	1.39
1	N	1025	U	N1-C6	8.57	1.45	1.38
1	N	1446	A	C5-C4	8.56	1.44	1.38
1	N	290	C	N1-C6	8.56	1.42	1.37
1	N	298	A	N9-C4	-8.56	1.32	1.37
1	N	1361	G	C2-N3	8.56	1.39	1.32
1	N	376	G	N9-C8	-8.56	1.31	1.37
1	N	695	A	N9-C4	8.55	1.43	1.37
1	N	923	A	C6-N1	8.55	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1109	C	C4-C5	8.55	1.49	1.43
1	N	799	G	N1-C2	8.55	1.44	1.37
1	N	1401	G	C2-N3	8.55	1.39	1.32
1	N	1228	C	C4'-C3'	8.55	1.62	1.53
1	N	249	U	C4-O4	-8.54	1.16	1.23
1	N	1350	A	C2'-C1'	-8.54	1.44	1.53
1	N	649	A	N9-C4	-8.54	1.32	1.37
1	N	1304	G	C2-N3	8.54	1.39	1.32
1	N	777	A	N9-C8	-8.54	1.30	1.37
1	N	1053	G	N9-C4	-8.54	1.31	1.38
1	N	319	G	C8-N7	-8.53	1.25	1.30
1	N	572	A	C5-C4	8.53	1.44	1.38
1	N	1392	G	C5-C6	-8.53	1.33	1.42
1	N	1498	U	C4-C5	8.53	1.51	1.43
1	N	651	C	C2-N3	-8.53	1.28	1.35
1	N	919	A	O3'-P	-8.53	1.50	1.61
1	N	979	C	N3-C4	8.53	1.40	1.33
1	N	1081	A	N3-C4	-8.53	1.29	1.34
1	N	980	C	C2-N3	8.53	1.42	1.35
1	N	775	G	C6-N1	8.52	1.45	1.39
1	N	614	C	N1-C6	8.52	1.42	1.37
1	N	1442	G	C2-N2	8.52	1.43	1.34
1	N	127	G	C6-N1	8.52	1.45	1.39
1	N	157	U	C2-N3	8.52	1.43	1.37
1	N	470	C	C4-N4	8.51	1.41	1.33
1	N	1489	G	N9-C8	-8.51	1.31	1.37
1	N	873	A	N9-C8	-8.50	1.30	1.37
1	N	941	G	N3-C4	-8.50	1.29	1.35
1	N	964	A	N7-C5	-8.50	1.34	1.39
1	N	116	A	C6-N6	8.49	1.40	1.33
1	N	578	C	N1-C6	8.49	1.42	1.37
1	N	844	G	C2-N2	8.49	1.43	1.34
1	N	10	A	N3-C4	8.49	1.40	1.34
1	N	1212	U	N3-C4	8.49	1.46	1.38
1	N	1111	A	N7-C5	8.48	1.44	1.39
1	N	210	C	C4-N4	8.48	1.41	1.33
1	N	48	C	N3-C4	8.48	1.39	1.33
1	N	126	G	O3'-P	-8.48	1.50	1.61
1	N	212	G	C8-N7	8.48	1.36	1.30
1	N	1068	G	C5-C4	-8.48	1.32	1.38
1	N	680	C	P-O5'	-8.47	1.51	1.59
1	N	19	A	C6-N1	8.47	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	380	G	N3-C4	8.47	1.41	1.35
1	N	1500	A	C4'-C3'	8.47	1.62	1.53
1	N	604	G	N3-C4	-8.47	1.29	1.35
1	N	942	G	C8-N7	-8.47	1.25	1.30
1	N	404	G	N9-C8	8.47	1.43	1.37
1	N	378	G	C4'-C3'	-8.46	1.43	1.53
1	N	657	U	P-O5'	-8.46	1.51	1.59
1	N	821	G	C2-N3	8.46	1.39	1.32
1	N	1261	A	C8-N7	-8.46	1.25	1.31
1	N	1499	A	C5'-C4'	8.46	1.61	1.51
1	N	794	A	N3-C4	-8.46	1.29	1.34
1	N	621	A	N7-C5	-8.46	1.34	1.39
1	N	1079	G	N3-C4	8.45	1.41	1.35
1	N	1163	A	C5'-C4'	8.45	1.61	1.51
1	N	755	G	O3'-P	-8.45	1.51	1.61
1	N	1014	A	N3-C4	8.45	1.40	1.34
1	N	293	G	N7-C5	-8.45	1.34	1.39
1	N	338	A	C6-N1	8.44	1.41	1.35
1	N	913	A	C2'-C1'	-8.45	1.44	1.53
1	N	718	A	C6-N6	8.44	1.40	1.33
1	N	1323	G	C4'-O4'	8.44	1.56	1.45
1	N	879	C	C2-N3	8.44	1.42	1.35
1	N	670	G	N3-C4	-8.44	1.29	1.35
1	N	1511	G	C2-N2	8.44	1.43	1.34
1	N	1325	C	N1-C6	-8.43	1.32	1.37
1	N	875	U	C2-N3	8.43	1.43	1.37
1	N	980	C	C4-N4	8.43	1.41	1.33
1	N	444	G	N1-C2	8.43	1.44	1.37
1	N	324	G	C2-N2	8.42	1.43	1.34
1	N	265	G	N9-C8	8.42	1.43	1.37
1	N	395	C	N3-C4	8.42	1.39	1.33
1	N	818	G	N1-C2	8.41	1.44	1.37
1	N	1531	A	N9-C8	8.41	1.44	1.37
1	N	181	A	N3-C4	-8.41	1.29	1.34
1	N	433	G	C2-N2	8.41	1.43	1.34
1	N	1035	A	P-O5'	-8.41	1.51	1.59
1	N	1310	G	P-O5'	8.41	1.68	1.59
1	N	858	G	N7-C5	-8.41	1.34	1.39
1	N	608	A	P-O5'	-8.41	1.51	1.59
1	N	815	A	C6-N6	8.41	1.40	1.33
1	N	1105	A	N9-C4	-8.41	1.32	1.37
1	N	488	C	P-O5'	-8.40	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	673	A	N3-C4	-8.40	1.29	1.34
1	N	1275	A	C6-N6	8.40	1.40	1.33
1	N	541	G	N7-C5	-8.39	1.34	1.39
1	N	474	G	N1-C2	8.39	1.44	1.37
1	N	376	G	C8-N7	8.39	1.35	1.30
1	N	1056	U	N1-C2	-8.38	1.31	1.38
1	N	1307	U	C2-N3	8.38	1.43	1.37
1	N	993	G	N7-C5	-8.38	1.34	1.39
1	N	95	C	C4-N4	8.38	1.41	1.33
1	N	411	A	N9-C8	-8.38	1.31	1.37
1	N	425	G	C6-N1	8.38	1.45	1.39
1	N	1479	C	C4'-C3'	8.37	1.62	1.53
1	N	542	G	N1-C2	8.37	1.44	1.37
1	N	1146	A	C2'-C1'	-8.37	1.44	1.53
1	N	333	U	C2-N3	8.36	1.43	1.37
1	N	521	G	N7-C5	-8.36	1.34	1.39
1	N	806	C	C2'-C1'	-8.36	1.44	1.53
1	N	889	A	C6-N6	8.36	1.40	1.33
1	N	777	A	N9-C4	8.35	1.42	1.37
1	N	508	U	N1-C2	8.34	1.46	1.38
1	N	1456	A	N7-C5	-8.34	1.34	1.39
1	N	28	A	N3-C4	-8.34	1.29	1.34
1	N	369	G	N1-C2	8.34	1.44	1.37
1	N	583	A	C6-N1	8.34	1.41	1.35
1	N	132	C	C4-C5	8.33	1.49	1.43
1	N	504	C	O3'-P	-8.33	1.51	1.61
1	N	768	A	C6-N6	-8.33	1.27	1.33
1	N	1252	A	N3-C4	-8.33	1.29	1.34
1	N	1404	C	C4-C5	8.33	1.49	1.43
1	N	259	G	N9-C8	-8.32	1.32	1.37
1	N	548	G	C2-N3	8.32	1.39	1.32
1	N	130	A	N3-C4	-8.32	1.29	1.34
1	N	347	G	N9-C8	8.32	1.43	1.37
1	N	1249	C	N3-C4	8.32	1.39	1.33
1	N	592	G	N9-C8	-8.32	1.32	1.37
1	N	1470	U	N3-C4	8.32	1.46	1.38
1	N	55	A	N9-C4	-8.32	1.32	1.37
1	N	1385	G	C2-N3	8.32	1.39	1.32
1	N	147	G	N1-C2	8.31	1.44	1.37
1	N	634	C	C4-C5	-8.31	1.36	1.43
1	N	663	A	C6-N1	8.31	1.41	1.35
1	N	337	G	N7-C5	-8.31	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	819	A	N3-C4	-8.31	1.29	1.34
1	N	599	C	P-O5'	-8.31	1.51	1.59
1	N	426	U	P-O5'	-8.30	1.51	1.59
1	N	572	A	N3-C4	-8.30	1.29	1.34
1	N	1203	C	C4-N4	8.30	1.41	1.33
1	N	1358	U	C2-N3	8.30	1.43	1.37
1	N	1008	U	N1-C2	-8.29	1.31	1.38
1	N	115	G	N1-C2	8.29	1.44	1.37
1	N	1243	C	P-O5'	-8.29	1.51	1.59
1	N	1331	G	O3'-P	-8.29	1.51	1.61
1	N	195	A	N9-C4	8.28	1.42	1.37
1	N	1020	G	C2-N2	8.28	1.42	1.34
1	N	1415	G	N1-C2	8.28	1.44	1.37
1	N	1044	A	N7-C5	-8.28	1.34	1.39
1	N	1405	G	C6-N1	8.28	1.45	1.39
1	N	115	G	C4'-C3'	8.27	1.62	1.53
1	N	222	C	N1-C6	8.27	1.42	1.37
1	N	523	A	C6-N1	8.27	1.41	1.35
1	N	771	G	C6-N1	8.27	1.45	1.39
1	N	808	C	C2-N3	8.27	1.42	1.35
1	N	460	A	N9-C4	8.27	1.42	1.37
1	N	755	G	N1-C2	8.27	1.44	1.37
1	N	575	G	C6-N1	8.27	1.45	1.39
1	N	287	U	P-O5'	-8.26	1.51	1.59
1	N	696	A	N9-C4	8.26	1.42	1.37
1	N	251	G	N3-C4	-8.26	1.29	1.35
1	N	1105	A	N7-C5	-8.25	1.34	1.39
1	N	1374	A	O4'-C1'	8.25	1.52	1.41
1	N	1485	U	P-O5'	-8.25	1.51	1.59
1	N	139	A	N9-C8	8.25	1.44	1.37
1	N	601	G	C5'-C4'	8.25	1.61	1.51
1	N	235	C	P-O5'	-8.25	1.51	1.59
1	N	860	A	N9-C8	8.25	1.44	1.37
1	N	211	G	N9-C4	-8.25	1.31	1.38
1	N	513	C	O3'-P	-8.25	1.51	1.61
1	N	1031	C	N1-C2	8.25	1.48	1.40
1	N	983	A	C4'-C3'	8.24	1.62	1.53
1	N	114	U	P-O5'	-8.24	1.51	1.59
1	N	145	G	C8-N7	8.24	1.35	1.30
1	N	318	G	C6-N1	8.24	1.45	1.39
1	N	984	C	C5'-C4'	8.24	1.61	1.51
1	N	953	G	C2-N2	8.24	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	826	C	C2-N3	8.23	1.42	1.35
1	N	447	G	C8-N7	8.23	1.35	1.30
1	N	674	G	N1-C2	8.23	1.44	1.37
1	N	859	G	N9-C4	-8.23	1.31	1.38
1	N	199	A	C6-N6	8.22	1.40	1.33
1	N	719	C	N3-C4	8.22	1.39	1.33
1	N	158	G	C2-N3	8.22	1.39	1.32
1	N	795	C	P-O5'	-8.22	1.51	1.59
1	N	858	G	C6-N1	8.22	1.45	1.39
1	N	330	C	O3'-P	-8.22	1.51	1.61
1	N	69	G	N9-C8	8.22	1.43	1.37
1	N	200	G	C2'-C1'	-8.21	1.44	1.53
1	N	900	A	N7-C5	-8.21	1.34	1.39
1	N	1074	G	C2-N3	8.22	1.39	1.32
1	N	1094	G	C4'-O4'	-8.21	1.34	1.45
1	N	796	C	C2'-C1'	8.21	1.62	1.53
1	N	220	G	O4'-C1'	8.21	1.52	1.41
1	N	882	C	P-O5'	-8.21	1.51	1.59
1	N	1434	A	P-O5'	-8.21	1.51	1.59
1	N	907	A	C8-N7	-8.21	1.25	1.31
1	N	1531	A	C6-N6	8.21	1.40	1.33
1	N	95	C	N1-C6	8.21	1.42	1.37
1	N	748	G	C5-C6	-8.21	1.34	1.42
1	N	41	G	C2-N2	8.20	1.42	1.34
1	N	303	A	C5-C4	8.19	1.44	1.38
1	N	133	U	N3-C4	8.19	1.45	1.38
1	N	1063	C	N3-C4	8.19	1.39	1.33
1	N	1270	G	N1-C2	8.19	1.44	1.37
1	N	1354	U	C2-N3	8.19	1.43	1.37
1	N	350	G	C1'-N9	8.19	1.61	1.48
1	N	490	C	C4-C5	8.18	1.49	1.43
1	N	844	G	C2-N3	8.18	1.39	1.32
1	N	942	G	N7-C5	-8.18	1.34	1.39
1	N	958	A	C6-N6	8.18	1.40	1.33
1	N	597	G	N1-C2	8.18	1.44	1.37
1	N	931	C	N3-C4	8.18	1.39	1.33
1	N	136	C	C4-N4	8.18	1.41	1.33
1	N	383	A	C5-C4	8.18	1.44	1.38
1	N	941	G	C2-N3	8.18	1.39	1.32
1	N	964	A	C4'-C3'	8.18	1.62	1.53
1	N	1377	A	C2'-C1'	-8.18	1.44	1.53
1	N	745	G	N1-C2	8.17	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	811	C	O3'-P	-8.17	1.51	1.61
1	N	812	G	C5-C4	8.17	1.44	1.38
1	N	1432	G	O3'-P	-8.17	1.51	1.61
1	N	920	U	C5'-C4'	8.17	1.61	1.51
1	N	341	C	C2-N3	8.17	1.42	1.35
1	N	426	U	O3'-P	-8.17	1.51	1.61
1	N	1387	G	N7-C5	8.17	1.44	1.39
1	N	79	G	C1'-N9	8.16	1.60	1.48
1	N	791	G	C4'-C3'	-8.16	1.44	1.53
1	N	828	U	C2-N3	8.16	1.43	1.37
1	N	1026	G	N1-C2	8.16	1.44	1.37
1	N	1219	A	C6-N1	8.16	1.41	1.35
1	N	1245	C	C4-N4	8.16	1.41	1.33
1	N	1304	G	P-O5'	-8.16	1.51	1.59
1	N	146	G	C6-N1	8.15	1.45	1.39
1	N	1021	A	C6-N6	8.15	1.40	1.33
1	N	963	G	N7-C5	-8.15	1.34	1.39
1	N	1130	A	C4'-C3'	8.14	1.62	1.53
1	N	1042	A	C5-C4	8.14	1.44	1.38
1	N	1037	C	N3-C4	8.14	1.39	1.33
1	N	164	G	C2-N3	8.14	1.39	1.32
1	N	1082	A	C6-N1	8.14	1.41	1.35
1	N	1195	C	C5-C6	-8.14	1.27	1.34
1	N	1450	U	P-O5'	-8.13	1.51	1.59
1	N	801	U	C2-N3	8.13	1.43	1.37
1	N	873	A	C6-N6	8.13	1.40	1.33
1	N	144	G	N7-C5	-8.13	1.34	1.39
1	N	291	U	C2-N3	8.13	1.43	1.37
1	N	879	C	C4-N4	8.13	1.41	1.33
1	N	398	U	C4-C5	-8.12	1.36	1.43
1	N	452	A	N7-C5	-8.12	1.34	1.39
1	N	668	G	N9-C4	-8.12	1.31	1.38
1	N	1201	A	C2-N3	-8.12	1.26	1.33
1	N	1290	G	N3-C4	-8.12	1.29	1.35
1	N	92	U	C2-N3	8.11	1.43	1.37
1	N	217	C	N1-C6	8.11	1.42	1.37
1	N	230	G	C2'-C1'	-8.11	1.44	1.53
1	N	1163	A	C5-C4	8.11	1.44	1.38
1	N	1356	G	C2-N3	8.11	1.39	1.32
1	N	1029	U	C5'-C4'	8.11	1.61	1.51
1	N	1493	A	N3-C4	8.11	1.39	1.34
1	N	679	C	C2'-C1'	-8.10	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1290	G	N9-C8	8.10	1.43	1.37
1	N	1525	G	C8-N7	8.10	1.35	1.30
1	N	542	G	C2'-C1'	-8.10	1.44	1.53
1	N	1155	A	C6-N6	8.10	1.40	1.33
1	N	483	C	C2'-C1'	-8.09	1.44	1.53
1	N	493	A	C6-N1	8.09	1.41	1.35
1	N	838	G	C2-N3	8.09	1.39	1.32
1	N	631	C	N3-C4	8.09	1.39	1.33
1	N	1178	G	C2-N3	8.09	1.39	1.32
1	N	836	G	C4'-C3'	8.09	1.62	1.53
1	N	1482	G	C2-N3	8.09	1.39	1.32
1	N	213	G	O3'-P	-8.08	1.51	1.61
1	N	304	U	C2-N3	8.08	1.43	1.37
1	N	436	C	P-O5'	-8.08	1.51	1.59
1	N	1067	A	C6-N6	8.08	1.40	1.33
1	N	889	A	C5-C6	8.08	1.48	1.41
1	N	1107	C	C5'-C4'	8.08	1.61	1.51
1	N	1055	A	O3'-P	-8.08	1.51	1.61
1	N	1214	C	C4-N4	8.07	1.41	1.33
1	N	204	G	N9-C4	8.07	1.44	1.38
1	N	1462	C	N1-C6	8.07	1.42	1.37
1	N	48	C	O3'-P	-8.06	1.51	1.61
1	N	79	G	C5'-C4'	8.06	1.61	1.51
1	N	499	A	P-O5'	-8.06	1.51	1.59
1	N	712	A	C6-N6	8.06	1.40	1.33
1	N	1009	U	N3-C4	8.06	1.45	1.38
1	N	91	U	C2-N3	8.06	1.43	1.37
1	N	373	A	C2'-C1'	-8.06	1.44	1.53
1	N	492	C	N1-C6	8.06	1.42	1.37
1	N	1020	G	N7-C5	-8.06	1.34	1.39
1	N	789	U	C2'-C1'	8.06	1.62	1.53
1	N	138	G	N1-C2	8.06	1.44	1.37
1	N	1332	A	N3-C4	-8.06	1.30	1.34
1	N	733	G	C2-N2	8.05	1.42	1.34
1	N	902	G	C8-N7	-8.05	1.26	1.30
1	N	451	A	O3'-P	-8.05	1.51	1.61
1	N	1493	A	C6-N6	8.05	1.40	1.33
1	N	926	G	C6-N1	8.05	1.45	1.39
1	N	61	G	C5-C4	-8.04	1.32	1.38
1	N	711	G	C5-C4	-8.04	1.32	1.38
1	N	940	C	C4'-C3'	-8.04	1.44	1.53
1	N	969	A	N7-C5	-8.04	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1457	G	C8-N7	8.04	1.35	1.30
1	N	422	C	N3-C4	8.04	1.39	1.33
1	N	262	A	C2'-C1'	-8.04	1.44	1.53
1	N	1480	A	N7-C5	-8.04	1.34	1.39
1	N	21	G	C2-N2	8.03	1.42	1.34
1	N	146	G	C2-N3	8.03	1.39	1.32
1	N	669	G	C5-C4	8.03	1.44	1.38
1	N	555	U	C4'-C3'	8.03	1.61	1.53
1	N	1502	A	C5'-C4'	8.03	1.60	1.51
1	N	521	G	C6-N1	8.03	1.45	1.39
1	N	831	A	C5-C6	-8.03	1.33	1.41
1	N	90	C	N1-C6	8.02	1.42	1.37
1	N	46	G	C5-C6	-8.02	1.34	1.42
1	N	385	C	C4-N4	8.02	1.41	1.33
1	N	413	G	C2-N3	8.02	1.39	1.32
1	N	708	C	N1-C6	-8.02	1.32	1.37
1	N	995	C	N1-C6	8.02	1.42	1.37
1	N	8	A	N7-C5	-8.02	1.34	1.39
1	N	164	G	N9-C8	8.02	1.43	1.37
1	N	297	G	N9-C8	8.02	1.43	1.37
1	N	464	U	C5'-C4'	8.02	1.60	1.51
1	N	1151	A	C6-N1	8.02	1.41	1.35
1	N	1377	A	N9-C8	8.02	1.44	1.37
1	N	1530	G	N1-C2	8.02	1.44	1.37
1	N	1163	A	O4'-C1'	8.01	1.52	1.41
1	N	331	G	N1-C2	8.01	1.44	1.37
1	N	1329	A	C6-N6	8.01	1.40	1.33
1	N	1337	G	P-O5'	-8.01	1.51	1.59
1	N	107	G	N1-C2	8.00	1.44	1.37
1	N	1130	A	N3-C4	8.00	1.39	1.34
1	N	1373	G	C8-N7	-8.00	1.26	1.30
1	N	195	A	C6-N1	8.00	1.41	1.35
1	N	487	A	N3-C4	8.00	1.39	1.34
1	N	654	G	C8-N7	-8.00	1.26	1.30
1	N	197	A	P-O5'	-8.00	1.51	1.59
1	N	547	A	N9-C4	8.00	1.42	1.37
1	N	1258	G	N7-C5	-7.99	1.34	1.39
1	N	1325	C	C5'-C4'	7.99	1.60	1.51
1	N	105	G	C5-C4	7.98	1.44	1.38
1	N	677	U	C2-N3	-7.98	1.32	1.37
1	N	1451	U	C2-N3	7.98	1.43	1.37
1	N	1173	U	O3'-P	-7.98	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	149	A	N9-C8	7.97	1.44	1.37
1	N	615	G	N1-C2	7.97	1.44	1.37
1	N	140	U	N1-C6	-7.97	1.30	1.38
1	N	378	G	C6-N1	7.97	1.45	1.39
1	N	1324	A	C3'-C2'	7.97	1.61	1.52
1	N	962	C	N3-C4	7.97	1.39	1.33
1	N	945	G	C8-N7	-7.96	1.26	1.30
1	N	1067	A	C6-N1	7.96	1.41	1.35
1	N	924	C	C2-N3	7.96	1.42	1.35
1	N	990	C	N3-C4	7.96	1.39	1.33
1	N	795	C	C4-N4	7.96	1.41	1.33
1	N	68	G	N9-C8	-7.96	1.32	1.37
1	N	442	G	N7-C5	-7.96	1.34	1.39
1	N	46	G	C2-N3	7.96	1.39	1.32
1	N	1518	A	C5'-C4'	7.95	1.60	1.51
1	N	724	G	N1-C2	7.95	1.44	1.37
1	N	1007	U	N3-C4	7.95	1.45	1.38
1	N	1506	U	N1-C2	7.95	1.45	1.38
1	N	872	A	C4'-C3'	7.94	1.61	1.53
1	N	1252	A	C6-N1	7.94	1.41	1.35
1	N	163	C	C2-N3	7.94	1.42	1.35
1	N	1372	U	C2-N3	7.94	1.43	1.37
1	N	1204	A	C8-N7	-7.94	1.25	1.31
1	N	1397	C	N1-C6	7.94	1.42	1.37
1	N	79	G	C5-C6	-7.93	1.34	1.42
1	N	145	G	N7-C5	-7.93	1.34	1.39
1	N	835	U	C3'-C2'	7.93	1.61	1.52
1	N	769	G	P-O5'	7.93	1.67	1.59
1	N	750	C	C3'-O3'	7.93	1.53	1.42
1	N	152	A	N3-C4	-7.93	1.30	1.34
1	N	19	A	N1-C2	7.92	1.41	1.34
1	N	595	A	N7-C5	-7.92	1.34	1.39
1	N	969	A	C6-N6	7.92	1.40	1.33
1	N	1381	U	C4'-C3'	7.92	1.61	1.53
1	N	645	G	P-O5'	-7.92	1.51	1.59
1	N	1326	U	N3-C4	7.92	1.45	1.38
1	N	495	A	C2'-C1'	-7.91	1.44	1.53
1	N	196	A	N9-C4	-7.91	1.33	1.37
1	N	601	G	N7-C5	-7.91	1.34	1.39
1	N	977	A	C6-N6	7.91	1.40	1.33
1	N	652	U	C4-C5	7.91	1.50	1.43
1	N	109	A	N9-C4	-7.91	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	220	G	N9-C8	-7.91	1.32	1.37
1	N	586	C	C5-C6	-7.91	1.28	1.34
1	N	727	G	P-O5'	-7.90	1.51	1.59
1	N	975	A	O3'-P	-7.90	1.51	1.61
1	N	1121	U	N1-C6	7.90	1.45	1.38
1	N	1248	A	P-O5'	-7.90	1.51	1.59
1	N	544	G	C1'-N9	7.90	1.60	1.48
1	N	928	G	P-O5'	-7.90	1.51	1.59
1	N	566	G	C4'-C3'	7.89	1.61	1.53
1	N	1108	G	C5'-C4'	7.89	1.60	1.51
1	N	532	A	C6-N1	7.89	1.41	1.35
1	N	418	C	N1-C6	-7.89	1.32	1.37
1	N	227	G	C5-C4	7.88	1.43	1.38
1	N	324	G	O3'-P	-7.88	1.51	1.61
1	N	449	G	N9-C8	7.88	1.43	1.37
1	N	1256	A	N1-C2	7.88	1.41	1.34
1	N	881	G	C5-C4	7.88	1.43	1.38
1	N	1503	A	C6-N6	7.88	1.40	1.33
1	N	1041	G	C2-N3	7.88	1.39	1.32
1	N	270	A	C5'-C4'	7.87	1.60	1.51
1	N	1246	A	C6-N1	7.87	1.41	1.35
1	N	1297	G	C2-N3	7.87	1.39	1.32
1	N	869	G	C2-N3	7.87	1.39	1.32
1	N	1078	U	C2-N3	7.87	1.43	1.37
1	N	73	C	N3-C4	7.87	1.39	1.33
1	N	548	G	N1-C2	7.87	1.44	1.37
1	N	1069	C	N3-C4	7.87	1.39	1.33
1	N	722	G	C8-N7	-7.87	1.26	1.30
1	N	1024	G	N9-C4	-7.87	1.31	1.38
1	N	251	G	N1-C2	7.86	1.44	1.37
1	N	988	G	N3-C4	-7.86	1.29	1.35
1	N	1087	G	C5-C6	-7.86	1.34	1.42
1	N	1124	G	C4'-O4'	-7.86	1.35	1.45
1	N	1144	G	C6-N1	7.86	1.45	1.39
1	N	1264	U	N1-C6	7.86	1.45	1.38
1	N	116	A	N3-C4	7.86	1.39	1.34
1	N	192	A	C6-N6	7.86	1.40	1.33
1	N	1114	C	C2'-C1'	7.86	1.61	1.53
1	N	1517	G	N1-C2	7.86	1.44	1.37
1	N	1002	G	N1-C2	7.85	1.44	1.37
1	N	751	U	N1-C2	-7.85	1.31	1.38
1	N	777	A	C2-N3	7.85	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	858	G	C2-N2	7.85	1.42	1.34
1	N	301	G	C8-N7	-7.84	1.26	1.30
1	N	1497	G	N9-C8	-7.84	1.32	1.37
1	N	260	G	C2-N2	7.84	1.42	1.34
1	N	220	G	P-O5'	-7.84	1.51	1.59
1	N	262	A	C6-N1	7.84	1.41	1.35
1	N	390	U	N1-C2	-7.83	1.31	1.38
1	N	1101	A	C2'-C1'	-7.83	1.44	1.53
1	N	417	G	N7-C5	-7.83	1.34	1.39
1	N	712	A	C2-N3	-7.83	1.26	1.33
1	N	1315	U	C2-N3	7.83	1.43	1.37
1	N	1361	G	N9-C4	7.83	1.44	1.38
1	N	32	A	P-O5'	-7.83	1.51	1.59
1	N	1234	C	P-O5'	-7.83	1.51	1.59
1	N	121	U	C2-N3	7.82	1.43	1.37
1	N	791	G	N9-C8	7.82	1.43	1.37
1	N	1209	C	C5-C6	-7.82	1.28	1.34
1	N	322	C	P-O5'	-7.82	1.51	1.59
1	N	1501	C	C4-N4	7.81	1.41	1.33
1	N	288	A	C3'-C2'	-7.81	1.44	1.52
1	N	204	G	C5-C4	7.81	1.43	1.38
1	N	1523	G	C5-C6	-7.81	1.34	1.42
1	N	121	U	N1-C6	7.80	1.45	1.38
1	N	675	A	C6-N1	7.80	1.41	1.35
1	N	1533	C	P-O5'	-7.80	1.51	1.59
1	N	439	U	C5-C6	-7.80	1.27	1.34
1	N	321	A	O3'-P	-7.80	1.51	1.61
1	N	418	C	O3'-P	-7.80	1.51	1.61
1	N	1377	A	C6-N6	7.80	1.40	1.33
1	N	236	A	C5-C6	-7.79	1.34	1.41
1	N	1172	C	C3'-C2'	-7.79	1.44	1.52
1	N	486	U	C2-N3	7.79	1.43	1.37
1	N	179	A	N3-C4	-7.79	1.30	1.34
1	N	745	G	C6-N1	7.79	1.45	1.39
1	N	1096	C	C4-N4	7.79	1.41	1.33
1	N	473	U	C2-N3	7.78	1.43	1.37
1	N	489	C	C2-N3	7.78	1.42	1.35
1	N	1142	G	N1-C2	7.78	1.44	1.37
1	N	82	G	P-O5'	-7.78	1.51	1.59
1	N	141	G	C5'-C4'	7.78	1.60	1.51
1	N	771	G	C2'-C1'	-7.78	1.44	1.53
1	N	1042	A	C6-N6	7.77	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1395	C	C4-N4	7.77	1.41	1.33
1	N	1016	A	C2'-C1'	-7.77	1.44	1.53
1	N	108	G	C4'-O4'	-7.77	1.35	1.45
1	N	288	A	C2'-C1'	-7.77	1.44	1.53
1	N	1380	U	N3-C4	7.77	1.45	1.38
1	N	1033	G	N9-C4	7.76	1.44	1.38
1	N	1359	C	C4-C5	7.76	1.49	1.43
1	N	471	U	C4'-O4'	7.76	1.55	1.45
1	N	898	G	N7-C5	-7.76	1.34	1.39
1	N	1012	A	C6-N6	7.76	1.40	1.33
1	N	1048	G	N1-C2	7.76	1.44	1.37
1	N	1504	G	C5-C4	-7.76	1.32	1.38
1	N	240	G	N7-C5	-7.76	1.34	1.39
1	N	1072	G	C5-C4	-7.75	1.32	1.38
1	N	1503	A	C4'-C3'	7.75	1.61	1.53
1	N	63	C	N1-C6	7.75	1.41	1.37
1	N	166	U	C2-N3	7.75	1.43	1.37
1	N	451	A	C6-N6	7.75	1.40	1.33
1	N	1346	A	N9-C8	-7.75	1.31	1.37
1	N	239	U	C2-N3	7.75	1.43	1.37
1	N	529	G	C6-N1	7.75	1.45	1.39
1	N	595	A	C4'-C3'	-7.75	1.44	1.53
1	N	1514	G	N3-C4	-7.75	1.30	1.35
1	N	259	G	C2-N2	7.75	1.42	1.34
1	N	602	A	C8-N7	-7.74	1.26	1.31
1	N	231	U	C2-N3	7.74	1.43	1.37
1	N	703	G	N1-C2	7.74	1.44	1.37
1	N	828	U	C4-C5	7.74	1.50	1.43
1	N	1406	U	C2-N3	7.74	1.43	1.37
1	N	1493	A	C6-N1	7.74	1.41	1.35
1	N	776	G	N9-C4	-7.74	1.31	1.38
1	N	853	C	N3-C4	7.73	1.39	1.33
1	N	628	G	C2'-C1'	-7.73	1.44	1.53
1	N	1240	U	C5'-C4'	7.73	1.60	1.51
1	N	255	G	C2'-C1'	-7.73	1.44	1.53
1	N	894	G	N7-C5	-7.73	1.34	1.39
1	N	307	C	C1'-N1	7.72	1.60	1.48
1	N	608	A	O4'-C1'	7.72	1.51	1.41
1	N	738	C	N3-C4	7.72	1.39	1.33
1	N	508	U	C2-N3	7.72	1.43	1.37
1	N	640	A	C5-C4	7.72	1.44	1.38
1	N	874	G	P-O5'	-7.72	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1119	C	P-O5'	7.72	1.67	1.59
1	N	830	G	C2-N2	7.72	1.42	1.34
1	N	1069	C	C3'-C2'	-7.72	1.44	1.52
1	N	875	U	O3'-P	-7.71	1.51	1.61
1	N	984	C	C2-N3	7.71	1.42	1.35
1	N	67	C	N1-C6	7.71	1.41	1.37
1	N	585	G	N7-C5	-7.71	1.34	1.39
1	N	1399	C	N1-C6	7.71	1.41	1.37
1	N	556	C	C2-N3	7.71	1.42	1.35
1	N	383	A	C2-N3	7.71	1.40	1.33
1	N	1419	G	N1-C2	7.71	1.44	1.37
1	N	599	C	C4-N4	7.71	1.40	1.33
1	N	126	G	N3-C4	7.70	1.40	1.35
1	N	620	C	P-O5'	-7.70	1.52	1.59
1	N	70	U	C3'-C2'	7.70	1.61	1.52
1	N	462	G	C2'-C1'	7.70	1.61	1.53
1	N	630	A	C6-N1	7.70	1.41	1.35
1	N	317	U	C2'-C1'	-7.70	1.44	1.53
1	N	627	G	N7-C5	-7.70	1.34	1.39
1	N	250	A	C4'-C3'	7.70	1.61	1.53
1	N	619	U	P-O5'	-7.70	1.52	1.59
1	N	1268	G	N7-C5	-7.70	1.34	1.39
1	N	213	G	N9-C8	-7.70	1.32	1.37
1	N	198	G	C5'-C4'	7.69	1.60	1.51
1	N	94	G	N7-C5	-7.69	1.34	1.39
1	N	714	G	N3-C4	-7.69	1.30	1.35
1	N	1008	U	C2-N3	7.69	1.43	1.37
1	N	1155	A	C8-N7	-7.69	1.26	1.31
1	N	1296	C	C4-N4	7.69	1.40	1.33
1	N	1134	G	N7-C5	-7.69	1.34	1.39
1	N	1070	U	O3'-P	-7.69	1.51	1.61
1	N	522	C	N1-C6	7.68	1.41	1.37
1	N	132	C	N1-C6	-7.68	1.32	1.37
1	N	710	G	N9-C4	-7.68	1.31	1.38
1	N	648	A	O3'-P	-7.68	1.51	1.61
1	N	1467	C	C4-C5	7.68	1.49	1.43
1	N	167	A	C6-N1	7.67	1.41	1.35
1	N	585	G	C2-N3	-7.67	1.26	1.32
1	N	1051	C	C2-N3	7.67	1.41	1.35
1	N	1374	A	N9-C8	-7.67	1.31	1.37
1	N	180	U	N3-C4	7.67	1.45	1.38
1	N	338	A	N7-C5	-7.67	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	698	G	N9-C8	-7.67	1.32	1.37
1	N	1496	C	N1-C2	-7.67	1.32	1.40
1	N	336	A	N3-C4	-7.67	1.30	1.34
1	N	1462	C	N3-C4	7.67	1.39	1.33
1	N	673	A	N9-C4	-7.66	1.33	1.37
1	N	55	A	N7-C5	-7.66	1.34	1.39
1	N	815	A	N3-C4	7.66	1.39	1.34
1	N	1514	G	C2'-C1'	-7.66	1.45	1.53
1	N	832	G	N7-C5	-7.66	1.34	1.39
1	N	537	G	N9-C8	-7.65	1.32	1.37
1	N	394	G	N7-C5	-7.65	1.34	1.39
1	N	387	U	C1'-N1	7.65	1.60	1.48
1	N	764	C	N3-C4	7.65	1.39	1.33
1	N	1205	U	N1-C6	-7.65	1.31	1.38
1	N	1175	G	C6-N1	7.64	1.44	1.39
1	N	1087	G	N9-C8	-7.63	1.32	1.37
1	N	1162	C	C4-N4	7.63	1.40	1.33
1	N	355	C	C4-C5	-7.63	1.36	1.43
1	N	515	G	N7-C5	-7.63	1.34	1.39
1	N	243	A	C8-N7	-7.63	1.26	1.31
1	N	558	G	C4'-C3'	-7.63	1.44	1.53
1	N	616	G	N3-C4	7.63	1.40	1.35
1	N	423	G	P-O5'	-7.62	1.52	1.59
1	N	1231	G	C5-C4	7.62	1.43	1.38
1	N	932	C	C4-N4	7.62	1.40	1.33
1	N	1198	G	C5-C6	-7.62	1.34	1.42
1	N	408	A	N7-C5	-7.62	1.34	1.39
1	N	778	G	C4'-C3'	-7.62	1.44	1.53
1	N	563	A	C8-N7	-7.62	1.26	1.31
1	N	130	A	C4'-C3'	7.61	1.61	1.53
1	N	431	A	N7-C5	-7.61	1.34	1.39
1	N	706	A	C6-N1	7.61	1.40	1.35
1	N	1187	G	N7-C5	-7.61	1.34	1.39
1	N	1251	A	C6-N6	7.61	1.40	1.33
1	N	1461	G	N7-C5	-7.61	1.34	1.39
1	N	1499	A	N7-C5	-7.61	1.34	1.39
1	N	370	C	C5-C6	-7.60	1.28	1.34
1	N	1030	U	N3-C4	7.60	1.45	1.38
1	N	626	G	N1-C2	7.60	1.43	1.37
1	N	750	C	C1'-N1	7.60	1.60	1.48
1	N	296	U	C2-N3	7.60	1.43	1.37
1	N	1243	C	C1'-N1	7.60	1.60	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1247	U	C4-C5	7.60	1.50	1.43
1	N	895	G	N9-C4	-7.59	1.31	1.38
1	N	104	G	C2-N3	7.59	1.38	1.32
1	N	648	A	C8-N7	-7.59	1.26	1.31
1	N	988	G	C2-N3	7.59	1.38	1.32
1	N	36	C	C4-N4	7.59	1.40	1.33
1	N	639	G	C6-N1	7.59	1.44	1.39
1	N	938	A	C8-N7	-7.59	1.26	1.31
1	N	1007	U	C3'-C2'	7.58	1.61	1.52
1	N	1528	U	C5'-C4'	7.58	1.60	1.51
1	N	1222	G	C2-N3	7.58	1.38	1.32
1	N	301	G	C2'-C1'	-7.58	1.45	1.53
1	N	849	G	C2-N2	7.58	1.42	1.34
1	N	248	C	N1-C2	7.58	1.47	1.40
1	N	1161	C	C4-N4	7.58	1.40	1.33
1	N	1197	A	N1-C2	7.58	1.41	1.34
1	N	362	G	C8-N7	7.57	1.35	1.30
1	N	591	U	N3-C4	7.57	1.45	1.38
1	N	186	C	N1-C6	7.57	1.41	1.37
1	N	669	G	C2-N3	7.57	1.38	1.32
1	N	294	U	N3-C4	7.57	1.45	1.38
1	N	747	A	C3'-C2'	7.57	1.61	1.52
1	N	803	G	C2-N3	7.57	1.38	1.32
1	N	1061	G	C4'-C3'	-7.57	1.44	1.53
1	N	360	G	C2-N2	7.57	1.42	1.34
1	N	1121	U	P-O5'	-7.57	1.52	1.59
1	N	1262	C	N1-C2	7.57	1.47	1.40
1	N	813	U	C2-N3	7.57	1.43	1.37
1	N	1479	C	C5'-C4'	7.57	1.60	1.51
1	N	1240	U	C4'-C3'	7.56	1.61	1.53
1	N	1515	G	O4'-C1'	7.56	1.51	1.41
1	N	748	G	N3-C4	7.56	1.40	1.35
1	N	1164	G	P-O5'	-7.56	1.52	1.59
1	N	1297	G	C2'-O2'	-7.56	1.31	1.41
1	N	446	G	N7-C5	-7.56	1.34	1.39
1	N	1502	A	C4'-O4'	-7.56	1.35	1.45
1	N	935	A	N3-C4	-7.56	1.30	1.34
1	N	1505	G	C2-N3	7.56	1.38	1.32
1	N	95	C	C2-N3	7.55	1.41	1.35
1	N	116	A	C2'-C1'	-7.55	1.45	1.53
1	N	1529	G	N1-C2	7.55	1.43	1.37
1	N	92	U	C4-C5	7.55	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	313	A	C5-C4	7.55	1.44	1.38
1	N	1110	A	N9-C4	-7.55	1.33	1.37
1	N	1164	G	C8-N7	-7.55	1.26	1.30
1	N	1273	C	C2-N3	7.55	1.41	1.35
1	N	925	G	O3'-P	-7.55	1.52	1.61
1	N	962	C	C4-N4	7.55	1.40	1.33
1	N	1200	C	N1-C2	-7.55	1.32	1.40
1	N	929	G	N1-C2	7.55	1.43	1.37
1	N	782	A	N7-C5	-7.55	1.34	1.39
1	N	953	G	N9-C4	7.54	1.44	1.38
1	N	1028	C	C4-N4	7.54	1.40	1.33
1	N	1363	A	C6-N1	7.54	1.40	1.35
1	N	500	G	C2'-C1'	-7.54	1.45	1.53
1	N	566	G	P-O5'	-7.54	1.52	1.59
1	N	1511	G	N1-C2	7.54	1.43	1.37
1	N	126	G	N9-C4	7.54	1.44	1.38
1	N	497	G	N1-C2	7.54	1.43	1.37
1	N	1290	G	C3'-C2'	7.54	1.61	1.52
1	N	885	G	C2-N3	7.53	1.38	1.32
1	N	937	A	C5-C6	7.53	1.47	1.41
1	N	970	C	C1'-N1	7.53	1.60	1.48
1	N	233	C	N1-C6	7.53	1.41	1.37
1	N	1359	C	O4'-C1'	-7.53	1.31	1.41
1	N	1403	C	C4-C5	7.53	1.49	1.43
1	N	231	U	C4-C5	7.52	1.50	1.43
1	N	992	U	O3'-P	-7.52	1.52	1.61
1	N	346	G	N7-C5	-7.52	1.34	1.39
1	N	1392	G	C6-N1	7.52	1.44	1.39
1	N	1415	G	C6-N1	7.52	1.44	1.39
1	N	997	U	P-O5'	-7.52	1.52	1.59
1	N	617	G	N1-C2	7.51	1.43	1.37
1	N	151	A	N1-C2	7.51	1.41	1.34
1	N	185	U	C2-N3	7.51	1.43	1.37
1	N	671	G	C2'-C1'	-7.51	1.45	1.53
1	N	548	G	C8-N7	-7.51	1.26	1.30
1	N	651	C	C4-N4	7.51	1.40	1.33
1	N	1214	C	C3'-C2'	7.50	1.61	1.52
1	N	1476	A	N3-C4	7.50	1.39	1.34
1	N	281	G	C5-C6	-7.50	1.34	1.42
1	N	605	U	O3'-P	-7.50	1.52	1.61
1	N	907	A	N7-C5	-7.50	1.34	1.39
1	N	832	G	C5-C6	-7.50	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1310	G	O3'-P	-7.50	1.52	1.61
1	N	98	A	C5-C6	7.50	1.47	1.41
1	N	895	G	N1-C2	7.50	1.43	1.37
1	N	1409	C	C5-C6	7.50	1.40	1.34
1	N	1097	C	C5'-C4'	7.50	1.60	1.51
1	N	711	G	C2-N2	7.50	1.42	1.34
1	N	821	G	C5-C6	-7.50	1.34	1.42
1	N	94	G	C6-N1	7.49	1.44	1.39
1	N	779	C	N3-C4	7.49	1.39	1.33
1	N	213	G	C2-N3	7.49	1.38	1.32
1	N	734	G	C2-N3	7.49	1.38	1.32
1	N	1224	U	C2-N3	7.49	1.43	1.37
1	N	1356	G	C6-N1	7.49	1.44	1.39
1	N	859	G	C2-N3	7.49	1.38	1.32
1	N	1213	A	C4'-C3'	7.49	1.61	1.53
1	N	1326	U	C2-N3	7.49	1.43	1.37
1	N	1487	G	O3'-P	-7.49	1.52	1.61
1	N	69	G	C2-N3	7.48	1.38	1.32
1	N	753	A	O4'-C1'	-7.48	1.31	1.41
1	N	881	G	N7-C5	-7.48	1.34	1.39
1	N	322	C	C4'-C3'	-7.48	1.45	1.53
1	N	368	U	C2-N3	7.48	1.43	1.37
1	N	3	A	N3-C4	-7.48	1.30	1.34
1	N	793	U	P-O5'	-7.48	1.52	1.59
1	N	885	G	C2'-C1'	-7.48	1.45	1.53
1	N	142	G	C2-N2	7.48	1.42	1.34
1	N	80	A	C6-N1	7.47	1.40	1.35
1	N	542	G	N3-C4	-7.47	1.30	1.35
1	N	569	C	C4'-C3'	-7.47	1.45	1.53
1	N	1456	A	C5-C4	-7.47	1.33	1.38
1	N	257	G	N9-C4	-7.47	1.31	1.38
1	N	689	C	N1-C6	7.47	1.41	1.37
1	N	1497	G	C2'-C1'	-7.47	1.45	1.53
1	N	727	G	C6-N1	7.46	1.44	1.39
1	N	921	U	N1-C6	7.46	1.44	1.38
1	N	1064	G	C5-C4	7.46	1.43	1.38
1	N	84	U	C3'-C2'	7.46	1.61	1.52
1	N	930	C	N3-C4	7.46	1.39	1.33
1	N	1044	A	N9-C4	7.46	1.42	1.37
1	N	254	G	N7-C5	-7.46	1.34	1.39
1	N	337	G	N1-C2	7.46	1.43	1.37
1	N	458	U	N1-C6	7.46	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	529	G	C2-N3	7.46	1.38	1.32
1	N	1513	A	N7-C5	-7.46	1.34	1.39
1	N	1519	A	N7-C5	7.46	1.43	1.39
1	N	1285	A	C6-N6	-7.45	1.27	1.33
1	N	654	G	C5'-C4'	7.45	1.60	1.51
1	N	1394	A	C6-N6	7.45	1.40	1.33
1	N	674	G	P-O5'	-7.45	1.52	1.59
1	N	1038	C	C2-N3	7.45	1.41	1.35
1	N	352	C	C2-N3	7.44	1.41	1.35
1	N	239	U	C4-C5	-7.44	1.36	1.43
1	N	307	C	N3-C4	7.44	1.39	1.33
1	N	1021	A	C5-C6	-7.44	1.34	1.41
1	N	1130	A	C8-N7	-7.44	1.26	1.31
1	N	1333	A	C8-N7	-7.44	1.26	1.31
1	N	1495	U	N3-C4	7.44	1.45	1.38
1	N	141	G	C6-N1	7.44	1.44	1.39
1	N	214	C	C4'-C3'	7.43	1.61	1.53
1	N	198	G	C2'-C1'	-7.43	1.45	1.53
1	N	156	C	C4-N4	7.43	1.40	1.33
1	N	12	U	N3-C4	7.42	1.45	1.38
1	N	388	G	C2-N3	7.42	1.38	1.32
1	N	1337	G	C6-N1	7.42	1.44	1.39
1	N	666	G	C2-N3	7.42	1.38	1.32
1	N	308	C	C4-N4	7.42	1.40	1.33
1	N	1207	G	N1-C2	7.42	1.43	1.37
1	N	303	A	N9-C8	7.41	1.43	1.37
1	N	1251	A	N3-C4	7.41	1.39	1.34
1	N	477	C	N3-C4	7.41	1.39	1.33
1	N	168	G	N3-C4	-7.41	1.30	1.35
1	N	171	A	C5'-C4'	7.41	1.60	1.51
1	N	884	U	C4-C5	7.41	1.50	1.43
1	N	309	A	N7-C5	-7.41	1.34	1.39
1	N	1389	C	P-O5'	-7.41	1.52	1.59
1	N	1278	G	N7-C5	-7.41	1.34	1.39
1	N	814	A	N3-C4	-7.41	1.30	1.34
1	N	454	G	N9-C8	7.40	1.43	1.37
1	N	43	C	C5-C6	7.40	1.40	1.34
1	N	223	A	C5-C4	7.40	1.44	1.38
1	N	98	A	N9-C4	7.40	1.42	1.37
1	N	203	G	C5-C4	7.40	1.43	1.38
1	N	355	C	N3-C4	7.40	1.39	1.33
1	N	299	G	C3'-C2'	7.40	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1241	G	C2-N2	7.40	1.42	1.34
1	N	223	A	N7-C5	-7.40	1.34	1.39
1	N	445	G	C8-N7	7.40	1.35	1.30
1	N	689	C	N3-C4	7.40	1.39	1.33
1	N	807	A	N1-C2	7.40	1.41	1.34
1	N	898	G	N1-C2	7.39	1.43	1.37
1	N	1456	A	C6-N1	7.39	1.40	1.35
1	N	1394	A	N7-C5	-7.39	1.34	1.39
1	N	968	A	C5'-C4'	7.39	1.60	1.51
1	N	290	C	C5'-C4'	-7.39	1.42	1.51
1	N	689	C	C2-N3	7.39	1.41	1.35
1	N	68	G	N7-C5	-7.38	1.34	1.39
1	N	73	C	N1-C6	7.38	1.41	1.37
1	N	463	U	C4-O4	-7.38	1.17	1.23
1	N	1018	G	N1-C2	7.38	1.43	1.37
1	N	1058	G	N9-C4	-7.38	1.32	1.38
1	N	172	A	C6-N6	7.38	1.39	1.33
1	N	245	U	C4-C5	7.38	1.50	1.43
1	N	893	C	C4'-C3'	-7.38	1.45	1.53
1	N	1043	G	C8-N7	-7.38	1.26	1.30
1	N	15	G	C2-N3	7.37	1.38	1.32
1	N	453	G	C6-N1	7.37	1.44	1.39
1	N	1026	G	C5-C4	7.37	1.43	1.38
1	N	183	C	C4'-C3'	-7.37	1.45	1.53
1	N	735	C	N1-C2	-7.37	1.32	1.40
1	N	668	G	C5-C6	-7.36	1.34	1.42
1	N	878	A	N9-C4	-7.36	1.33	1.37
1	N	1056	U	C2-N3	7.36	1.43	1.37
1	N	415	A	C6-N6	7.36	1.39	1.33
1	N	1115	U	C2-N3	-7.36	1.32	1.37
1	N	1465	A	C2-N3	7.36	1.40	1.33
1	N	834	U	C5'-C4'	7.36	1.60	1.51
1	N	932	C	C4-C5	-7.36	1.37	1.43
1	N	38	G	N3-C4	-7.36	1.30	1.35
1	N	462	G	C2-N2	7.36	1.42	1.34
1	N	690	G	N3-C4	7.36	1.40	1.35
1	N	965	U	C2'-C1'	-7.36	1.45	1.53
1	N	1438	G	N9-C8	7.36	1.43	1.37
1	N	1491	G	C5'-C4'	7.36	1.60	1.51
1	N	876	C	N3-C4	7.35	1.39	1.33
1	N	928	G	N9-C4	7.35	1.43	1.38
1	N	574	A	C3'-C2'	7.35	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	607	A	P-O5'	-7.35	1.52	1.59
1	N	799	G	C5-C6	-7.35	1.34	1.42
1	N	120	A	C6-N6	7.35	1.39	1.33
1	N	697	U	C2'-C1'	-7.35	1.45	1.53
1	N	601	G	C2-N3	7.35	1.38	1.32
1	N	936	C	C4-N4	7.35	1.40	1.33
1	N	762	U	N1-C2	-7.34	1.31	1.38
1	N	1149	C	C4-C5	-7.34	1.37	1.43
1	N	1347	G	C6-N1	7.34	1.44	1.39
1	N	264	C	N3-C4	7.34	1.39	1.33
1	N	1355	G	C5-C6	-7.34	1.35	1.42
1	N	241	G	C6-N1	7.34	1.44	1.39
1	N	550	G	O4'-C1'	7.34	1.51	1.41
1	N	672	U	N1-C6	7.34	1.44	1.38
1	N	798	U	C4'-C3'	-7.34	1.45	1.53
1	N	1534	A	C6-N1	7.34	1.40	1.35
1	N	1135	U	C2-N3	7.34	1.42	1.37
1	N	1456	A	C6-N6	7.34	1.39	1.33
1	N	6	G	N9-C4	7.34	1.43	1.38
1	N	1244	G	C6-N1	7.34	1.44	1.39
1	N	939	G	C6-N1	7.33	1.44	1.39
1	N	722	G	N3-C4	-7.33	1.30	1.35
1	N	1181	G	N1-C2	7.33	1.43	1.37
1	N	660	C	P-O5'	-7.33	1.52	1.59
1	N	963	G	C2-N3	7.33	1.38	1.32
1	N	169	C	C2'-C1'	-7.33	1.45	1.53
1	N	252	U	N1-C6	7.33	1.44	1.38
1	N	688	G	N1-C2	7.33	1.43	1.37
1	N	701	U	N1-C2	7.33	1.45	1.38
1	N	759	A	N7-C5	-7.32	1.34	1.39
1	N	1306	A	N3-C4	-7.32	1.30	1.34
1	N	1404	C	P-O5'	-7.32	1.52	1.59
1	N	1354	U	N1-C2	7.32	1.45	1.38
1	N	1525	G	N3-C4	-7.32	1.30	1.35
1	N	292	G	N9-C8	7.32	1.43	1.37
1	N	750	C	C2-N3	7.32	1.41	1.35
1	N	156	C	N3-C4	7.32	1.39	1.33
1	N	299	G	C2-N3	7.31	1.38	1.32
1	N	506	G	C2'-C1'	-7.31	1.45	1.53
1	N	1312	G	N9-C4	-7.31	1.32	1.38
1	N	503	C	O4'-C1'	7.31	1.51	1.41
1	N	774	G	N1-C2	7.31	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1221	G	C5'-C4'	7.31	1.60	1.51
1	N	322	C	C1'-N1	7.31	1.59	1.48
1	N	701	U	O3'-P	-7.31	1.52	1.61
1	N	93	U	P-O5'	-7.30	1.52	1.59
1	N	107	G	C3'-C2'	-7.30	1.44	1.52
1	N	172	A	N7-C5	-7.30	1.34	1.39
1	N	488	C	C4-N4	7.30	1.40	1.33
1	N	633	G	N1-C2	7.30	1.43	1.37
1	N	1340	A	C6-N1	7.30	1.40	1.35
1	N	1163	A	N9-C8	7.30	1.43	1.37
1	N	1427	C	C2-N3	7.30	1.41	1.35
1	N	1478	U	C3'-C2'	7.30	1.60	1.52
1	N	767	A	P-O5'	-7.30	1.52	1.59
1	N	817	C	N3-C4	7.29	1.39	1.33
1	N	1022	A	N9-C8	7.29	1.43	1.37
1	N	1004	A	C6-N6	7.29	1.39	1.33
1	N	320	A	N9-C4	-7.29	1.33	1.37
1	N	333	U	N3-C4	7.28	1.45	1.38
1	N	1423	G	N9-C4	-7.28	1.32	1.38
1	N	197	A	C6-N1	7.28	1.40	1.35
1	N	811	C	N1-C6	7.28	1.41	1.37
1	N	1197	A	N9-C4	-7.28	1.33	1.37
1	N	343	U	O3'-P	-7.27	1.52	1.61
1	N	672	U	O3'-P	-7.27	1.52	1.61
1	N	814	A	C3'-O3'	-7.27	1.31	1.42
1	N	978	A	N7-C5	-7.27	1.34	1.39
1	N	1330	U	N1-C6	7.27	1.44	1.38
1	N	134	G	N7-C5	-7.26	1.34	1.39
1	N	211	G	C2'-C1'	-7.26	1.45	1.53
1	N	1340	A	C5-C4	7.26	1.43	1.38
1	N	11	G	C4'-C3'	7.26	1.61	1.53
1	N	1458	G	C2'-C1'	7.26	1.61	1.53
1	N	488	C	N1-C2	7.26	1.47	1.40
1	N	1197	A	N7-C5	-7.26	1.34	1.39
1	N	710	G	N7-C5	-7.26	1.34	1.39
1	N	1392	G	N9-C4	7.26	1.43	1.38
1	N	1018	G	C5-C4	7.25	1.43	1.38
1	N	920	U	C2-N3	7.25	1.42	1.37
1	N	949	A	C5-C6	-7.25	1.34	1.41
1	N	189	A	C6-N1	7.25	1.40	1.35
1	N	1371	G	C2'-C1'	-7.25	1.45	1.53
1	N	220	G	C2-N3	7.25	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	155	A	N7-C5	-7.24	1.34	1.39
1	N	881	G	N1-C2	7.24	1.43	1.37
1	N	266	G	C6-O6	-7.24	1.17	1.24
1	N	581	G	N9-C8	7.24	1.43	1.37
1	N	706	A	P-O5'	-7.24	1.52	1.59
1	N	643	C	C2-N3	7.24	1.41	1.35
1	N	1199	U	P-O5'	-7.24	1.52	1.59
1	N	213	G	N1-C2	7.23	1.43	1.37
1	N	451	A	C2'-C1'	-7.23	1.45	1.53
1	N	648	A	C6-N1	7.23	1.40	1.35
1	N	896	C	P-O5'	-7.23	1.52	1.59
1	N	1144	G	C8-N7	-7.23	1.26	1.30
1	N	215	C	P-O5'	-7.23	1.52	1.59
1	N	530	G	N7-C5	-7.23	1.34	1.39
1	N	739	C	C3'-C2'	-7.23	1.44	1.52
1	N	7	A	C4'-C3'	7.23	1.61	1.53
1	N	855	U	N1-C6	7.23	1.44	1.38
1	N	241	G	P-O5'	-7.23	1.52	1.59
1	N	1305	G	C4'-C3'	7.23	1.61	1.53
1	N	105	G	C8-N7	-7.22	1.26	1.30
1	N	430	A	N9-C8	-7.22	1.31	1.37
1	N	645	G	C5-C6	-7.22	1.35	1.42
1	N	1123	U	C1'-N1	7.22	1.59	1.48
1	N	443	C	C4-N4	7.22	1.40	1.33
1	N	765	G	C5-C4	7.22	1.43	1.38
1	N	265	G	C5-C6	-7.22	1.35	1.42
1	N	513	C	N1-C6	7.22	1.41	1.37
1	N	1032	G	N1-C2	7.22	1.43	1.37
1	N	1196	A	N7-C5	-7.22	1.34	1.39
1	N	236	A	N9-C4	-7.21	1.33	1.37
1	N	1476	A	C2'-C1'	-7.21	1.45	1.53
1	N	320	A	C8-N7	-7.21	1.26	1.31
1	N	1110	A	C5-C4	7.21	1.43	1.38
1	N	1267	C	C2-N3	7.21	1.41	1.35
1	N	389	A	N3-C4	-7.21	1.30	1.34
1	N	516	U	C2'-C1'	-7.21	1.45	1.53
1	N	890	G	P-O5'	-7.21	1.52	1.59
1	N	1373	G	N9-C8	7.21	1.42	1.37
1	N	445	G	N9-C8	7.21	1.42	1.37
1	N	175	C	C5'-C4'	7.21	1.59	1.51
1	N	101	A	C3'-C2'	7.20	1.60	1.52
1	N	354	G	C1'-N9	7.20	1.59	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1152	A	C6-N1	7.20	1.40	1.35
1	N	700	G	C5'-C4'	7.20	1.59	1.51
1	N	36	C	N1-C6	-7.20	1.32	1.37
1	N	903	G	C5-C4	-7.20	1.33	1.38
1	N	1024	G	C6-N1	7.20	1.44	1.39
1	N	859	G	N9-C8	7.19	1.42	1.37
1	N	617	G	N3-C4	-7.19	1.30	1.35
1	N	804	U	C5-C6	7.19	1.40	1.34
1	N	174	A	C2'-C1'	-7.19	1.45	1.53
1	N	1096	C	C4'-C3'	-7.19	1.45	1.53
1	N	1267	C	C5'-C4'	7.19	1.59	1.51
1	N	1458	G	C2-N3	7.19	1.38	1.32
1	N	1317	C	N1-C6	7.19	1.41	1.37
1	N	112	G	C3'-C2'	-7.18	1.44	1.52
1	N	956	U	N3-C4	7.18	1.45	1.38
1	N	11	G	C2-N3	7.18	1.38	1.32
1	N	113	G	P-O5'	-7.18	1.52	1.59
1	N	127	G	N9-C8	7.18	1.42	1.37
1	N	347	G	C2'-C1'	-7.18	1.45	1.53
1	N	660	C	C5-C6	7.18	1.40	1.34
1	N	9	G	P-O5'	-7.17	1.52	1.59
1	N	1308	U	N1-C2	7.17	1.45	1.38
1	N	86	G	N7-C5	-7.17	1.34	1.39
1	N	906	A	C6-N1	7.17	1.40	1.35
1	N	1489	G	C5'-C4'	7.17	1.59	1.51
1	N	194	C	P-O5'	-7.17	1.52	1.59
1	N	543	U	C2-N3	7.17	1.42	1.37
1	N	677	U	P-O5'	-7.17	1.52	1.59
1	N	1415	G	N9-C8	7.17	1.42	1.37
1	N	474	G	C2-N3	7.17	1.38	1.32
1	N	688	G	C5-C6	-7.17	1.35	1.42
1	N	394	G	N3-C4	7.16	1.40	1.35
1	N	440	C	N1-C6	-7.16	1.32	1.37
1	N	1168	U	C2'-C1'	7.16	1.61	1.53
1	N	1188	A	C6-N1	7.16	1.40	1.35
1	N	1114	C	P-O5'	-7.16	1.52	1.59
1	N	1233	G	C6-N1	7.16	1.44	1.39
1	N	598	U	C2-N3	7.15	1.42	1.37
1	N	1184	G	C5'-C4'	7.15	1.59	1.51
1	N	621	A	C5'-C4'	7.15	1.59	1.51
1	N	1495	U	C5'-C4'	7.15	1.59	1.51
1	N	1211	U	C2-N3	7.15	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	120	A	N3-C4	7.15	1.39	1.34
1	N	361	G	N7-C5	-7.15	1.34	1.39
1	N	1387	G	N3-C4	-7.15	1.30	1.35
1	N	232	G	P-O5'	-7.14	1.52	1.59
1	N	1161	C	N1-C6	7.14	1.41	1.37
1	N	1492	A	N9-C4	7.14	1.42	1.37
1	N	341	C	C3'-C2'	7.14	1.60	1.52
1	N	574	A	C6-N6	7.14	1.39	1.33
1	N	1269	A	O3'-P	-7.14	1.52	1.61
1	N	84	U	N3-C4	7.14	1.44	1.38
1	N	572	A	C6-N1	7.14	1.40	1.35
1	N	1206	G	C5-C6	-7.14	1.35	1.42
1	N	257	G	N7-C5	-7.13	1.34	1.39
1	N	411	A	C3'-C2'	7.13	1.60	1.52
1	N	524	G	N7-C5	-7.13	1.34	1.39
1	N	1178	G	C6-N1	7.13	1.44	1.39
1	N	55	A	P-O5'	-7.13	1.52	1.59
1	N	825	A	C6-N1	7.13	1.40	1.35
1	N	362	G	N3-C4	7.13	1.40	1.35
1	N	470	C	N3-C4	7.13	1.39	1.33
1	N	1180	A	N1-C2	7.13	1.40	1.34
1	N	1087	G	N7-C5	-7.12	1.34	1.39
1	N	363	A	N9-C4	7.12	1.42	1.37
1	N	709	U	C2-N3	7.12	1.42	1.37
1	N	1521	C	C4'-C3'	-7.12	1.45	1.53
1	N	976	G	C5-C4	-7.12	1.33	1.38
1	N	1173	U	P-O5'	-7.12	1.52	1.59
1	N	1507	A	P-O5'	-7.12	1.52	1.59
1	N	746	A	C6-N6	7.12	1.39	1.33
1	N	810	C	C4-N4	7.12	1.40	1.33
1	N	309	A	C5-C6	-7.11	1.34	1.41
1	N	1133	G	C5-C4	-7.11	1.33	1.38
1	N	268	U	O3'-P	-7.11	1.52	1.61
1	N	289	G	C2'-C1'	-7.11	1.45	1.53
1	N	1164	G	N9-C4	-7.11	1.32	1.38
1	N	711	G	C8-N7	-7.11	1.26	1.30
1	N	33	A	C6-N6	7.11	1.39	1.33
1	N	988	G	N9-C4	-7.11	1.32	1.38
1	N	209	U	C4-O4	-7.11	1.18	1.23
1	N	1279	G	N3-C4	-7.11	1.30	1.35
1	N	411	A	C2'-C1'	-7.10	1.45	1.53
1	N	983	A	N7-C5	-7.10	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1487	G	N7-C5	-7.10	1.34	1.39
1	N	1499	A	C4'-C3'	7.10	1.60	1.53
1	N	20	U	C5'-C4'	7.10	1.59	1.51
1	N	241	G	C5-C4	7.10	1.43	1.38
1	N	344	A	N9-C4	-7.10	1.33	1.37
1	N	774	G	C3'-C2'	-7.10	1.45	1.52
1	N	299	G	C5'-C4'	7.10	1.59	1.51
1	N	847	G	C2-N3	7.10	1.38	1.32
1	N	80	A	N9-C4	7.09	1.42	1.37
1	N	1026	G	P-O5'	-7.09	1.52	1.59
1	N	1088	G	C5-C4	7.09	1.43	1.38
1	N	1222	G	N7-C5	7.09	1.43	1.39
1	N	1087	G	P-O5'	-7.09	1.52	1.59
1	N	548	G	P-O5'	-7.09	1.52	1.59
1	N	906	A	N7-C5	-7.09	1.34	1.39
1	N	60	A	C2-N3	7.09	1.40	1.33
1	N	1500	A	N3-C4	-7.09	1.30	1.34
1	N	637	C	O4'-C1'	7.09	1.50	1.41
1	N	418	C	P-O5'	-7.08	1.52	1.59
1	N	1338	G	C2-N2	7.08	1.41	1.34
1	N	227	G	C6-N1	7.08	1.44	1.39
1	N	377	G	C6-O6	-7.08	1.17	1.24
1	N	416	G	C6-N1	7.08	1.44	1.39
1	N	87	C	C3'-C2'	7.08	1.60	1.52
1	N	1484	C	N1-C6	7.08	1.41	1.37
1	N	373	A	P-O5'	7.08	1.66	1.59
1	N	384	G	C2'-C1'	-7.08	1.45	1.53
1	N	1130	A	N9-C8	-7.08	1.32	1.37
1	N	95	C	C5-C6	-7.07	1.28	1.34
1	N	161	A	C5-C4	7.07	1.43	1.38
1	N	1402	C	N3-C4	7.07	1.38	1.33
1	N	584	G	C5'-C4'	7.07	1.59	1.51
1	N	1060	U	N3-C4	7.07	1.44	1.38
1	N	176	C	C5'-C4'	7.07	1.59	1.51
1	N	319	G	C5-C4	7.06	1.43	1.38
1	N	1097	C	C4-N4	7.06	1.40	1.33
1	N	331	G	C5-C6	-7.06	1.35	1.42
1	N	101	A	N7-C5	-7.06	1.35	1.39
1	N	551	U	C4-C5	7.06	1.50	1.43
1	N	1417	G	C5-C4	7.06	1.43	1.38
1	N	539	A	N7-C5	-7.06	1.35	1.39
1	N	1092	A	O3'-P	-7.06	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	273	U	O5'-C5'	-7.05	1.31	1.42
1	N	281	G	O3'-P	-7.05	1.52	1.61
1	N	936	C	N3-C4	-7.05	1.29	1.33
1	N	1166	G	C2'-C1'	-7.05	1.45	1.53
1	N	113	G	N1-C2	7.05	1.43	1.37
1	N	1082	A	P-O5'	-7.05	1.52	1.59
1	N	54	C	C4-N4	7.05	1.40	1.33
1	N	1061	G	C5-C6	-7.04	1.35	1.42
1	N	106	C	C3'-C2'	-7.04	1.45	1.52
1	N	303	A	N3-C4	-7.04	1.30	1.34
1	N	983	A	C5-C4	7.04	1.43	1.38
1	N	789	U	C5-C6	-7.04	1.27	1.34
1	N	1442	G	N9-C8	7.04	1.42	1.37
1	N	42	G	N9-C8	-7.04	1.32	1.37
1	N	558	G	N7-C5	-7.04	1.35	1.39
1	N	946	A	N7-C5	-7.04	1.35	1.39
1	N	1238	A	C5-C6	7.04	1.47	1.41
1	N	369	G	C5-C4	7.04	1.43	1.38
1	N	1190	G	N3-C4	-7.04	1.30	1.35
1	N	90	C	C4-N4	7.04	1.40	1.33
1	N	212	G	O3'-P	-7.04	1.52	1.61
1	N	461	A	C5'-C4'	7.04	1.59	1.51
1	N	1300	G	C6-N1	7.04	1.44	1.39
1	N	1422	G	C2-N2	7.04	1.41	1.34
1	N	381	C	O4'-C1'	7.03	1.50	1.41
1	N	1008	U	C2'-C1'	-7.03	1.45	1.53
1	N	627	G	N9-C8	7.03	1.42	1.37
1	N	760	G	C2-N3	7.03	1.38	1.32
1	N	1003	G	C4'-C3'	7.03	1.60	1.53
1	N	1444	U	N3-C4	7.03	1.44	1.38
1	N	540	G	C2-N3	7.03	1.38	1.32
1	N	713	G	C4'-C3'	7.03	1.60	1.53
1	N	864	A	C2'-C1'	-7.03	1.45	1.53
1	N	1079	G	C4'-C3'	7.03	1.60	1.53
1	N	1334	G	N9-C4	-7.03	1.32	1.38
1	N	521	G	C2-N3	7.02	1.38	1.32
1	N	763	G	N9-C4	-7.02	1.32	1.38
1	N	1271	A	C6-N6	7.02	1.39	1.33
1	N	122	G	N1-C2	7.02	1.43	1.37
1	N	528	C	P-O5'	-7.02	1.52	1.59
1	N	768	A	C6-N1	7.02	1.40	1.35
1	N	1072	G	N9-C4	-7.02	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1164	G	N1-C2	7.02	1.43	1.37
1	N	152	A	N7-C5	-7.02	1.35	1.39
1	N	200	G	C5-C4	7.02	1.43	1.38
1	N	1075	U	C1'-N1	7.02	1.59	1.48
1	N	642	A	C8-N7	-7.02	1.26	1.31
1	N	760	G	C5-C4	7.02	1.43	1.38
1	N	86	G	C2-N3	7.02	1.38	1.32
1	N	1180	A	C5-C6	7.02	1.47	1.41
1	N	1226	C	N3-C4	7.02	1.38	1.33
1	N	1036	A	N1-C2	7.01	1.40	1.34
1	N	283	U	C5-C6	-7.01	1.27	1.34
1	N	746	A	N7-C5	-7.01	1.35	1.39
1	N	1475	G	N9-C8	-7.01	1.32	1.37
1	N	376	G	C3'-C2'	-7.01	1.45	1.52
1	N	899	C	C2'-C1'	-7.01	1.45	1.53
1	N	1261	A	C6-N1	7.01	1.40	1.35
1	N	1360	A	O4'-C1'	7.00	1.50	1.41
1	N	687	A	O4'-C1'	-7.00	1.32	1.41
1	N	49	U	C1'-N1	7.00	1.59	1.48
1	N	941	G	C5'-C4'	7.00	1.59	1.51
1	N	96	U	O3'-P	-7.00	1.52	1.61
1	N	484	G	C8-N7	-7.00	1.26	1.30
1	N	1039	G	C5-C4	7.00	1.43	1.38
1	N	1088	G	P-O5'	-7.00	1.52	1.59
1	N	948	C	C4'-C3'	-7.00	1.45	1.53
1	N	1368	A	C6-N6	7.00	1.39	1.33
1	N	1479	C	O4'-C1'	7.00	1.50	1.41
1	N	115	G	C3'-O3'	7.00	1.51	1.42
1	N	1250	A	N3-C4	-7.00	1.30	1.34
1	N	883	C	C5-C6	6.99	1.40	1.34
1	N	510	A	N7-C5	-6.99	1.35	1.39
1	N	999	C	C4'-C3'	6.99	1.60	1.53
1	N	1081	A	C4'-C3'	-6.99	1.45	1.53
1	N	115	G	P-O5'	-6.99	1.52	1.59
1	N	551	U	O3'-P	-6.99	1.52	1.61
1	N	700	G	N3-C4	-6.99	1.30	1.35
1	N	1087	G	C1'-N9	6.99	1.59	1.48
1	N	1170	A	P-O5'	6.99	1.66	1.59
1	N	37	U	C2'-C1'	-6.99	1.45	1.53
1	N	334	C	C2-N3	-6.99	1.30	1.35
1	N	965	U	C2-N3	6.98	1.42	1.37
1	N	525	C	C2'-C1'	-6.98	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	168	G	C6-N1	6.98	1.44	1.39
1	N	273	U	C5'-C4'	6.98	1.59	1.51
1	N	1136	C	C4'-C3'	6.98	1.60	1.53
1	N	250	A	N3-C4	6.97	1.39	1.34
1	N	411	A	N7-C5	6.97	1.43	1.39
1	N	1231	G	C5-C6	-6.97	1.35	1.42
1	N	704	A	C6-N6	6.97	1.39	1.33
1	N	1230	C	N1-C6	6.97	1.41	1.37
1	N	1230	C	C5'-C4'	6.97	1.59	1.51
1	N	729	A	N9-C8	-6.97	1.32	1.37
1	N	275	G	C8-N7	-6.97	1.26	1.30
1	N	637	C	N1-C6	6.97	1.41	1.37
1	N	229	U	C2'-C1'	6.97	1.61	1.53
1	N	987	G	N9-C8	6.97	1.42	1.37
1	N	1415	G	C2-N3	6.97	1.38	1.32
1	N	266	G	N3-C4	-6.96	1.30	1.35
1	N	1131	G	C6-N1	6.96	1.44	1.39
1	N	1443	C	C2-N3	6.96	1.41	1.35
1	N	185	U	C4-O4	6.96	1.29	1.23
1	N	901	A	N7-C5	-6.96	1.35	1.39
1	N	761	G	C2-N3	6.96	1.38	1.32
1	N	1028	C	N3-C4	6.96	1.38	1.33
1	N	584	G	C2-N3	6.96	1.38	1.32
1	N	1367	C	C5-C6	6.96	1.40	1.34
1	N	192	A	P-O5'	-6.96	1.52	1.59
1	N	1262	C	C4-C5	-6.96	1.37	1.43
1	N	895	G	C5-C6	-6.95	1.35	1.42
1	N	293	G	C2-N3	6.95	1.38	1.32
1	N	671	G	N3-C4	-6.95	1.30	1.35
1	N	597	G	C5-C4	6.95	1.43	1.38
1	N	1203	C	C2'-C1'	-6.95	1.45	1.53
1	N	295	C	N1-C6	6.95	1.41	1.37
1	N	713	G	C2-N2	6.95	1.41	1.34
1	N	1294	G	N9-C4	-6.95	1.32	1.38
1	N	581	G	N1-C2	6.94	1.43	1.37
1	N	209	U	C2'-C1'	-6.94	1.45	1.53
1	N	1213	A	C5-C4	6.94	1.43	1.38
1	N	1380	U	C2-N3	6.94	1.42	1.37
1	N	601	G	C3'-C2'	6.94	1.60	1.52
1	N	636	U	C2-O2	6.94	1.28	1.22
1	N	1331	G	C8-N7	-6.94	1.26	1.30
1	N	103	U	N3-C4	6.94	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	159	G	C8-N7	6.94	1.35	1.30
1	N	569	C	P-O5'	-6.94	1.52	1.59
1	N	1267	C	C1'-N1	6.94	1.59	1.48
1	N	1524	C	C3'-C2'	-6.94	1.45	1.52
1	N	691	G	C2-N3	6.93	1.38	1.32
1	N	150	U	C2-N3	6.93	1.42	1.37
1	N	1080	A	C6-N6	6.93	1.39	1.33
1	N	1447	A	C6-N6	6.93	1.39	1.33
1	N	1135	U	C4-C5	6.93	1.49	1.43
1	N	164	G	O3'-P	-6.93	1.52	1.61
1	N	765	G	N1-C2	6.93	1.43	1.37
1	N	1030	U	C3'-C2'	6.93	1.60	1.52
1	N	568	G	C1'-N9	6.93	1.59	1.48
1	N	675	A	C5-C4	6.92	1.43	1.38
1	N	597	G	C2-N3	6.92	1.38	1.32
1	N	127	G	C2-N2	6.92	1.41	1.34
1	N	918	A	C6-N1	6.92	1.40	1.35
1	N	247	G	C8-N7	6.92	1.35	1.30
1	N	928	G	C2-N3	6.92	1.38	1.32
1	N	1461	G	N1-C2	6.92	1.43	1.37
1	N	122	G	O4'-C1'	6.92	1.50	1.41
1	N	748	G	C2'-C1'	6.92	1.60	1.53
1	N	1029	U	C2'-C1'	6.92	1.60	1.53
1	N	92	U	C3'-C2'	6.91	1.60	1.52
1	N	1101	A	C5-C4	6.91	1.43	1.38
1	N	1167	A	O3'-P	-6.91	1.52	1.61
1	N	437	U	C2-N3	-6.91	1.32	1.37
1	N	688	G	N9-C4	-6.91	1.32	1.38
1	N	1025	U	C4'-C3'	-6.91	1.45	1.53
1	N	1267	C	N1-C6	6.91	1.41	1.37
1	N	1347	G	C1'-N9	-6.91	1.37	1.46
1	N	535	A	N9-C4	6.91	1.42	1.37
1	N	1034	G	C2-N3	6.91	1.38	1.32
1	N	551	U	C1'-N1	6.91	1.59	1.48
1	N	141	G	N9-C4	-6.91	1.32	1.38
1	N	265	G	N7-C5	-6.91	1.35	1.39
1	N	382	A	C8-N7	6.91	1.36	1.31
1	N	712	A	N7-C5	-6.91	1.35	1.39
1	N	768	A	C5-C4	-6.91	1.33	1.38
1	N	881	G	C2-N3	6.91	1.38	1.32
1	N	60	A	P-O5'	-6.90	1.52	1.59
1	N	413	G	N3-C4	-6.90	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	700	G	P-O5'	-6.90	1.52	1.59
1	N	955	U	C4-C5	-6.90	1.37	1.43
1	N	986	U	C3'-C2'	-6.90	1.45	1.52
1	N	1049	U	N1-C2	6.90	1.44	1.38
1	N	1521	C	C4-N4	6.90	1.40	1.33
1	N	131	A	P-O5'	-6.90	1.52	1.59
1	N	487	A	N7-C5	-6.90	1.35	1.39
1	N	535	A	C6-N1	6.90	1.40	1.35
1	N	4	U	C4-C5	6.90	1.49	1.43
1	N	315	A	C6-N1	6.89	1.40	1.35
1	N	748	G	C6-N1	6.89	1.44	1.39
1	N	761	G	C4'-C3'	-6.89	1.45	1.53
1	N	777	A	C3'-C2'	-6.89	1.45	1.52
1	N	1202	U	N3-C4	6.89	1.44	1.38
1	N	1184	G	C4'-C3'	6.89	1.60	1.53
1	N	96	U	P-O5'	-6.89	1.52	1.59
1	N	303	A	P-O5'	-6.89	1.52	1.59
1	N	527	G	C2'-C1'	-6.89	1.45	1.53
1	N	1110	A	N7-C5	-6.89	1.35	1.39
1	N	1423	G	P-O5'	-6.89	1.52	1.59
1	N	1158	C	C4-N4	6.89	1.40	1.33
1	N	627	G	N3-C4	-6.88	1.30	1.35
1	N	1332	A	C8-N7	-6.88	1.26	1.31
1	N	645	G	C5-C4	-6.88	1.33	1.38
1	N	660	C	C4'-O4'	6.88	1.54	1.45
1	N	746	A	N1-C2	6.88	1.40	1.34
1	N	950	U	C1'-N1	6.88	1.59	1.48
1	N	1284	C	C4'-O4'	6.88	1.54	1.45
1	N	1312	G	C3'-C2'	-6.88	1.45	1.52
1	N	324	G	C4'-O4'	6.88	1.54	1.45
1	N	39	G	C3'-C2'	6.88	1.60	1.52
1	N	455	G	N9-C4	-6.88	1.32	1.38
1	N	1088	G	C5'-C4'	6.88	1.59	1.51
1	N	681	A	C8-N7	-6.88	1.26	1.31
1	N	1287	A	N9-C4	6.88	1.42	1.37
1	N	1092	A	N9-C8	-6.87	1.32	1.37
1	N	1002	G	N7-C5	-6.87	1.35	1.39
1	N	1501	C	C4'-C3'	6.87	1.60	1.53
1	N	191	G	C2-N3	6.86	1.38	1.32
1	N	242	G	C3'-C2'	6.86	1.60	1.52
1	N	1259	C	C4'-O4'	6.86	1.54	1.45
1	N	1332	A	C4'-C3'	-6.86	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	475	C	P-O5'	-6.86	1.52	1.59
1	N	1054	C	O3'-P	-6.86	1.52	1.61
1	N	1160	G	C4'-C3'	6.86	1.60	1.53
1	N	1436	U	O3'-P	-6.86	1.52	1.61
1	N	669	G	N9-C8	6.86	1.42	1.37
1	N	1135	U	O4'-C1'	6.86	1.50	1.41
1	N	1462	C	N1-C2	-6.86	1.33	1.40
1	N	1426	G	C8-N7	6.85	1.35	1.30
1	N	314	C	P-O5'	-6.85	1.52	1.59
1	N	1499	A	C6-N6	6.85	1.39	1.33
1	N	22	G	N9-C4	-6.85	1.32	1.38
1	N	350	G	C5'-C4'	-6.85	1.43	1.51
1	N	668	G	C5-C4	6.85	1.43	1.38
1	N	1498	U	N3-C4	6.85	1.44	1.38
1	N	149	A	C6-N6	6.85	1.39	1.33
1	N	263	A	C2'-C1'	-6.85	1.45	1.53
1	N	616	G	P-O5'	-6.85	1.52	1.59
1	N	141	G	N3-C4	-6.84	1.30	1.35
1	N	898	G	N3-C4	-6.84	1.30	1.35
1	N	479	U	C5'-C4'	6.84	1.59	1.51
1	N	1071	C	C2-N3	6.84	1.41	1.35
1	N	1481	U	C1'-N1	6.84	1.59	1.48
1	N	377	G	C2-N3	6.84	1.38	1.32
1	N	488	C	C3'-O3'	6.84	1.51	1.42
1	N	1029	U	N3-C4	6.83	1.44	1.38
1	N	1312	G	C6-N1	6.83	1.44	1.39
1	N	1106	G	N1-C2	6.83	1.43	1.37
1	N	549	C	C4-N4	6.83	1.40	1.33
1	N	179	A	N9-C4	-6.83	1.33	1.37
1	N	373	A	N7-C5	-6.83	1.35	1.39
1	N	1453	G	N3-C4	6.83	1.40	1.35
1	N	117	G	C6-N1	6.83	1.44	1.39
1	N	988	G	N9-C8	-6.83	1.33	1.37
1	N	1413	A	C6-N1	6.83	1.40	1.35
1	N	237	G	N9-C4	-6.82	1.32	1.38
1	N	1327	C	C4'-O4'	6.82	1.54	1.45
1	N	213	G	N7-C5	-6.82	1.35	1.39
1	N	893	C	C5-C6	-6.82	1.28	1.34
1	N	1178	G	C8-N7	6.82	1.35	1.30
1	N	646	G	N3-C4	-6.82	1.30	1.35
1	N	1473	G	C4'-O4'	6.82	1.54	1.45
1	N	449	G	N9-C4	6.82	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	602	A	N3-C4	-6.82	1.30	1.34
1	N	706	A	C5-C4	6.82	1.43	1.38
1	N	1529	G	C3'-C2'	-6.82	1.45	1.52
1	N	240	G	C2-N3	6.82	1.38	1.32
1	N	590	U	C2-N3	6.82	1.42	1.37
1	N	1502	A	N3-C4	-6.82	1.30	1.34
1	N	47	C	C1'-N1	6.81	1.58	1.48
1	N	649	A	N9-C8	6.81	1.43	1.37
1	N	580	C	C5'-C4'	6.81	1.59	1.51
1	N	619	U	O4'-C1'	6.81	1.50	1.41
1	N	704	A	N1-C2	-6.81	1.28	1.34
1	N	878	A	C2'-C1'	-6.81	1.45	1.53
1	N	162	A	C4'-C3'	6.81	1.60	1.53
1	N	539	A	C6-N1	6.81	1.40	1.35
1	N	1181	G	N9-C4	-6.81	1.32	1.38
1	N	436	C	N3-C4	6.81	1.38	1.33
1	N	945	G	C5-C6	-6.81	1.35	1.42
1	N	954	G	C6-N1	6.81	1.44	1.39
1	N	1168	U	N1-C2	6.81	1.44	1.38
1	N	406	G	N1-C2	6.80	1.43	1.37
1	N	832	G	O3'-P	6.80	1.69	1.61
1	N	836	G	P-O5'	-6.80	1.52	1.59
1	N	1208	C	N1-C2	-6.80	1.33	1.40
1	N	303	A	N9-C4	6.80	1.42	1.37
1	N	381	C	C4-C5	6.80	1.48	1.43
1	N	497	G	C2-N3	6.80	1.38	1.32
1	N	538	G	N9-C8	-6.80	1.33	1.37
1	N	1420	U	C5'-C4'	6.80	1.59	1.51
1	N	194	C	O4'-C1'	-6.80	1.32	1.41
1	N	740	U	C4-C5	-6.80	1.37	1.43
1	N	771	G	N3-C4	-6.80	1.30	1.35
1	N	261	U	C5'-C4'	6.79	1.59	1.51
1	N	797	C	C4'-O4'	-6.79	1.36	1.45
1	N	915	A	N3-C4	-6.79	1.30	1.34
1	N	1014	A	P-O5'	-6.79	1.52	1.59
1	N	1022	A	N7-C5	-6.79	1.35	1.39
1	N	903	G	C2'-C1'	-6.79	1.45	1.53
1	N	141	G	C2-N3	6.79	1.38	1.32
1	N	323	U	C1'-N1	6.79	1.58	1.48
1	N	324	G	C2'-C1'	-6.79	1.45	1.53
1	N	571	U	C2-N3	6.79	1.42	1.37
1	N	846	G	C6-N1	6.79	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1109	C	C2-N3	6.79	1.41	1.35
1	N	1242	G	N7-C5	-6.79	1.35	1.39
1	N	1259	C	C1'-N1	6.79	1.58	1.48
1	N	1462	C	C4-C5	-6.79	1.37	1.43
1	N	575	G	N9-C8	6.79	1.42	1.37
1	N	1417	G	N1-C2	6.79	1.43	1.37
1	N	41	G	C5-C6	-6.79	1.35	1.42
1	N	789	U	C2-N3	6.79	1.42	1.37
1	N	1026	G	C2-N3	6.79	1.38	1.32
1	N	623	C	C5-C6	-6.78	1.28	1.34
1	N	1300	G	C5'-C4'	6.78	1.59	1.51
1	N	3	A	C2-N3	6.78	1.39	1.33
1	N	824	G	N1-C2	6.78	1.43	1.37
1	N	1374	A	C6-N1	6.78	1.40	1.35
1	N	495	A	C5-C4	6.78	1.43	1.38
1	N	1392	G	C2'-C1'	-6.78	1.45	1.53
1	N	39	G	N7-C5	-6.78	1.35	1.39
1	N	402	G	N9-C4	-6.78	1.32	1.38
1	N	1304	G	C3'-O3'	6.78	1.51	1.42
1	N	1442	G	C2-N3	6.78	1.38	1.32
1	N	9	G	O3'-P	-6.78	1.53	1.61
1	N	52	C	N3-C4	6.78	1.38	1.33
1	N	206	C	N3-C4	6.78	1.38	1.33
1	N	326	G	N1-C2	6.78	1.43	1.37
1	N	1483	A	C5-C4	6.78	1.43	1.38
1	N	39	G	C2-N2	6.77	1.41	1.34
1	N	435	A	C6-N6	6.77	1.39	1.33
1	N	564	C	C4-N4	6.77	1.40	1.33
1	N	763	G	C5-C6	-6.77	1.35	1.42
1	N	1093	A	N9-C4	6.77	1.42	1.37
1	N	324	G	P-O5'	-6.77	1.52	1.59
1	N	1370	G	C2-N3	6.77	1.38	1.32
1	N	765	G	C2'-C1'	-6.77	1.46	1.53
1	N	649	A	C6-N6	6.77	1.39	1.33
1	N	970	C	C4'-C3'	6.77	1.60	1.53
1	N	222	C	P-O5'	-6.76	1.52	1.59
1	N	623	C	N3-C4	6.76	1.38	1.33
1	N	162	A	C5-C4	6.76	1.43	1.38
1	N	704	A	C2'-C1'	-6.76	1.46	1.53
1	N	1242	G	N1-C2	6.76	1.43	1.37
1	N	457	G	C2-N2	6.76	1.41	1.34
1	N	939	G	N7-C5	-6.76	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1256	A	C2'-C1'	-6.76	1.46	1.53
1	N	428	G	N7-C5	-6.76	1.35	1.39
1	N	804	U	O3'-P	-6.76	1.53	1.61
1	N	944	G	C5'-C4'	6.76	1.59	1.51
1	N	183	C	C4-N4	6.75	1.40	1.33
1	N	229	U	C4-O4	6.75	1.29	1.23
1	N	749	A	C6-N1	6.75	1.40	1.35
1	N	945	G	C3'-C2'	6.75	1.60	1.52
1	N	872	A	C6-N6	6.75	1.39	1.33
1	N	6	G	C5'-C4'	6.75	1.59	1.51
1	N	995	C	C4'-C3'	6.75	1.60	1.53
1	N	45	G	C2-N3	6.75	1.38	1.32
1	N	559	A	C8-N7	-6.75	1.26	1.31
1	N	1331	G	C4'-C3'	6.75	1.60	1.53
1	N	102	G	N3-C4	-6.74	1.30	1.35
1	N	119	A	N7-C5	-6.74	1.35	1.39
1	N	196	A	N7-C5	-6.74	1.35	1.39
1	N	252	U	C3'-O3'	6.74	1.51	1.42
1	N	683	G	P-O5'	-6.74	1.53	1.59
1	N	158	G	N1-C2	6.74	1.43	1.37
1	N	1162	C	C4'-C3'	6.74	1.60	1.53
1	N	1179	A	N3-C4	-6.74	1.30	1.34
1	N	394	G	N9-C8	-6.74	1.33	1.37
1	N	543	U	C4-C5	-6.74	1.37	1.43
1	N	661	G	C2-N3	6.74	1.38	1.32
1	N	1073	U	C2-N3	6.74	1.42	1.37
1	N	744	C	C2-N3	-6.74	1.30	1.35
1	N	1033	G	N9-C8	-6.74	1.33	1.37
1	N	780	A	N1-C2	6.74	1.40	1.34
1	N	517	G	P-O5'	-6.73	1.53	1.59
1	N	428	G	C2-N3	6.73	1.38	1.32
1	N	555	U	P-O5'	-6.73	1.53	1.59
1	N	629	A	N9-C4	6.73	1.41	1.37
1	N	727	G	O3'-P	6.73	1.69	1.61
1	N	1468	A	C6-N6	6.73	1.39	1.33
1	N	297	G	C5-C4	6.73	1.43	1.38
1	N	764	C	N1-C6	6.73	1.41	1.37
1	N	1108	G	N7-C5	-6.72	1.35	1.39
1	N	423	G	N9-C8	6.72	1.42	1.37
1	N	514	C	C1'-N1	6.72	1.58	1.48
1	N	849	G	C2-N3	6.72	1.38	1.32
1	N	1347	G	C8-N7	6.72	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	420	U	N1-C6	6.72	1.44	1.38
1	N	30	U	C3'-O3'	6.72	1.51	1.42
1	N	137	U	C5'-C4'	6.72	1.59	1.51
1	N	969	A	N3-C4	-6.72	1.30	1.34
1	N	1079	G	O4'-C1'	6.72	1.50	1.41
1	N	1486	G	C4'-C3'	6.72	1.60	1.53
1	N	157	U	N1-C2	-6.72	1.32	1.38
1	N	316	C	N3-C4	6.72	1.38	1.33
1	N	337	G	C2-N3	6.72	1.38	1.32
1	N	1457	G	C6-N1	6.72	1.44	1.39
1	N	1475	G	O3'-P	-6.72	1.53	1.61
1	N	496	A	C6-N6	6.71	1.39	1.33
1	N	1203	C	C4'-O4'	6.71	1.54	1.45
1	N	714	G	C2'-C1'	-6.71	1.46	1.53
1	N	780	A	N9-C8	6.71	1.43	1.37
1	N	781	A	N3-C4	6.71	1.38	1.34
1	N	1481	U	C4'-O4'	-6.71	1.36	1.45
1	N	82	G	C8-N7	6.71	1.34	1.30
1	N	1272	G	C6-N1	6.71	1.44	1.39
1	N	1328	C	C5-C6	6.71	1.39	1.34
1	N	98	A	C6-N6	6.70	1.39	1.33
1	N	689	C	C4-N4	6.70	1.40	1.33
1	N	727	G	N1-C2	-6.70	1.32	1.37
1	N	394	G	C8-N7	6.70	1.34	1.30
1	N	572	A	C4'-O4'	-6.70	1.36	1.45
1	N	680	C	C4-N4	6.70	1.40	1.33
1	N	687	A	C5-C4	-6.70	1.34	1.38
1	N	1269	A	C5-C4	6.70	1.43	1.38
1	N	638	U	N3-C4	6.70	1.44	1.38
1	N	1439	G	C2-N3	6.70	1.38	1.32
1	N	247	G	C6-N1	6.70	1.44	1.39
1	N	621	A	C2'-C1'	-6.70	1.46	1.53
1	N	130	A	C6-N1	6.70	1.40	1.35
1	N	383	A	C8-N7	-6.69	1.26	1.31
1	N	874	G	O3'-P	-6.69	1.53	1.61
1	N	1280	A	N9-C4	6.69	1.41	1.37
1	N	554	A	N3-C4	-6.69	1.30	1.34
1	N	623	C	C4-C5	-6.69	1.37	1.43
1	N	1280	A	N7-C5	-6.69	1.35	1.39
1	N	1104	G	N9-C4	-6.69	1.32	1.38
1	N	1454	G	N3-C4	6.69	1.40	1.35
1	N	576	C	N1-C6	6.68	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1378	C	C4-N4	6.68	1.40	1.33
1	N	464	U	N3-C4	6.68	1.44	1.38
1	N	528	C	N3-C4	6.68	1.38	1.33
1	N	709	U	N3-C4	6.68	1.44	1.38
1	N	491	G	C5-C6	-6.68	1.35	1.42
1	N	32	A	O4'-C1'	-6.67	1.32	1.41
1	N	400	C	C5'-C4'	6.67	1.59	1.51
1	N	1256	A	N9-C8	-6.67	1.32	1.37
1	N	1265	C	C5'-C4'	6.67	1.59	1.51
1	N	3	A	C5-C4	6.67	1.43	1.38
1	N	587	G	N7-C5	-6.67	1.35	1.39
1	N	738	C	C4-C5	6.67	1.48	1.43
1	N	129	A	C3'-C2'	6.67	1.60	1.52
1	N	132	C	N3-C4	6.67	1.38	1.33
1	N	741	G	C5'-C4'	6.67	1.59	1.51
1	N	1448	C	C4-C5	6.67	1.48	1.43
1	N	521	G	C2-N2	6.67	1.41	1.34
1	N	707	U	N3-C4	6.67	1.44	1.38
1	N	202	G	C5-C4	-6.67	1.33	1.38
1	N	374	A	C6-N1	6.67	1.40	1.35
1	N	107	G	C5-C4	6.66	1.43	1.38
1	N	1250	A	C1'-N9	-6.66	1.37	1.46
1	N	1284	C	C2-N3	6.66	1.41	1.35
1	N	748	G	C2-N3	6.66	1.38	1.32
1	N	1153	G	C2'-C1'	-6.66	1.46	1.53
1	N	1520	C	C5'-C4'	6.66	1.59	1.51
1	N	563	A	N7-C5	-6.66	1.35	1.39
1	N	720	C	C2-N3	6.66	1.41	1.35
1	N	985	C	P-O5'	-6.66	1.53	1.59
1	N	1508	A	C8-N7	-6.66	1.26	1.31
1	N	128	G	O4'-C1'	6.65	1.50	1.41
1	N	741	G	C8-N7	6.65	1.34	1.30
1	N	1239	A	C8-N7	6.65	1.36	1.31
1	N	1190	G	P-O5'	-6.65	1.53	1.59
1	N	1069	C	C4-C5	6.65	1.48	1.43
1	N	1399	C	O3'-P	-6.65	1.53	1.61
1	N	26	A	C6-N6	6.65	1.39	1.33
1	N	129	A	C2'-C1'	-6.65	1.46	1.53
1	N	1236	A	O3'-P	-6.65	1.53	1.61
1	N	199	A	P-O5'	-6.65	1.53	1.59
1	N	1353	G	N1-C2	6.65	1.43	1.37
1	N	300	A	C6-N6	6.64	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	740	U	C2-N3	6.64	1.42	1.37
1	N	77	A	N3-C4	-6.64	1.30	1.34
1	N	1091	U	C2'-C1'	-6.64	1.46	1.53
1	N	1140	C	C1'-N1	6.64	1.58	1.48
1	N	1418	A	N7-C5	-6.64	1.35	1.39
1	N	1330	U	C4'-C3'	-6.64	1.45	1.53
1	N	46	G	N1-C2	6.64	1.43	1.37
1	N	447	G	N1-C2	6.64	1.43	1.37
1	N	388	G	N1-C2	6.63	1.43	1.37
1	N	696	A	N3-C4	-6.63	1.30	1.34
1	N	1256	A	N3-C4	6.63	1.38	1.34
1	N	1424	U	C1'-N1	6.63	1.58	1.48
1	N	417	G	C5-C4	-6.63	1.33	1.38
1	N	938	A	C6-N6	6.63	1.39	1.33
1	N	1229	A	N7-C5	-6.63	1.35	1.39
1	N	1434	A	N9-C8	-6.63	1.32	1.37
1	N	98	A	N1-C2	-6.63	1.28	1.34
1	N	127	G	C8-N7	6.63	1.34	1.30
1	N	387	U	C4'-C3'	-6.63	1.45	1.53
1	N	867	G	C2'-C1'	-6.63	1.46	1.53
1	N	90	C	C4'-O4'	-6.63	1.36	1.45
1	N	445	G	N1-C2	6.63	1.43	1.37
1	N	1410	A	C6-N6	6.63	1.39	1.33
1	N	265	G	C5'-C4'	-6.63	1.43	1.51
1	N	708	C	N3-C4	6.63	1.38	1.33
1	N	718	A	N3-C4	-6.63	1.30	1.34
1	N	812	G	P-O5'	-6.63	1.53	1.59
1	N	911	U	C2-N3	6.63	1.42	1.37
1	N	642	A	C6-N1	6.62	1.40	1.35
1	N	743	A	O3'-P	-6.62	1.53	1.61
1	N	822	U	P-O5'	-6.62	1.53	1.59
1	N	431	A	P-O5'	-6.62	1.53	1.59
1	N	563	A	C2'-C1'	6.62	1.60	1.53
1	N	1241	G	C5'-C4'	6.62	1.59	1.51
1	N	630	A	C4'-C3'	-6.62	1.45	1.53
1	N	678	U	C4-C5	-6.62	1.37	1.43
1	N	254	G	N3-C4	-6.62	1.30	1.35
1	N	606	G	C2-N2	-6.62	1.27	1.34
1	N	913	A	O3'-P	-6.62	1.53	1.61
1	N	1252	A	N9-C4	6.61	1.41	1.37
1	N	1392	G	P-O5'	-6.61	1.53	1.59
1	N	179	A	C1'-N9	6.61	1.58	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	328	C	N1-C6	6.61	1.41	1.37
1	N	908	A	C4'-O4'	-6.61	1.36	1.45
1	N	576	C	P-O5'	-6.61	1.53	1.59
1	N	1383	C	C3'-O3'	6.61	1.51	1.42
1	N	348	G	N1-C2	6.61	1.43	1.37
1	N	399	G	C2-N3	6.61	1.38	1.32
1	N	1092	A	N7-C5	-6.61	1.35	1.39
1	N	1353	G	C3'-O3'	6.61	1.51	1.42
1	N	741	G	C2-N2	6.60	1.41	1.34
1	N	972	C	N3-C4	6.60	1.38	1.33
1	N	256	U	P-O5'	-6.60	1.53	1.59
1	N	322	C	C5-C6	-6.60	1.29	1.34
1	N	575	G	N7-C5	6.60	1.43	1.39
1	N	747	A	N7-C5	-6.60	1.35	1.39
1	N	1492	A	N7-C5	-6.60	1.35	1.39
1	N	1299	A	C6-N1	6.60	1.40	1.35
1	N	1048	G	C6-N1	6.59	1.44	1.39
1	N	922	G	N1-C2	6.59	1.43	1.37
1	N	1521	C	C1'-N1	6.59	1.58	1.48
1	N	376	G	N7-C5	-6.59	1.35	1.39
1	N	544	G	C2-N3	6.59	1.38	1.32
1	N	637	C	P-O5'	6.59	1.66	1.59
1	N	1365	G	C5'-C4'	6.59	1.59	1.51
1	N	219	U	C2-N3	6.59	1.42	1.37
1	N	676	A	C4'-O4'	6.59	1.54	1.45
1	N	891	U	C4-C5	6.59	1.49	1.43
1	N	1082	A	C8-N7	-6.59	1.26	1.31
1	N	446	G	O3'-P	-6.59	1.53	1.61
1	N	120	A	N9-C8	6.58	1.43	1.37
1	N	1206	G	C2'-C1'	-6.58	1.46	1.53
1	N	562	U	N1-C6	6.58	1.43	1.38
1	N	841	C	C4-C5	6.58	1.48	1.43
1	N	896	C	C5'-C4'	6.58	1.59	1.51
1	N	1006	G	C2-N2	6.58	1.41	1.34
1	N	1529	G	C2-N3	6.58	1.38	1.32
1	N	191	G	C2'-C1'	-6.58	1.46	1.53
1	N	608	A	N3-C4	-6.58	1.30	1.34
1	N	29	U	C4-C5	6.58	1.49	1.43
1	N	373	A	C6-N1	6.58	1.40	1.35
1	N	576	C	C1'-N1	6.58	1.58	1.48
1	N	205	A	C2'-C1'	-6.58	1.46	1.53
1	N	315	A	P-O5'	6.58	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1386	G	C3'-O3'	6.57	1.51	1.42
1	N	530	G	C6-N1	6.57	1.44	1.39
1	N	1371	G	O4'-C1'	6.57	1.50	1.41
1	N	680	C	C2-N3	6.57	1.41	1.35
1	N	740	U	C2'-C1'	-6.57	1.46	1.53
1	N	1052	U	C2-N3	6.57	1.42	1.37
1	N	347	G	C4'-C3'	6.57	1.60	1.53
1	N	852	G	N7-C5	-6.57	1.35	1.39
1	N	1028	C	C2-N3	6.56	1.41	1.35
1	N	600	A	O3'-P	-6.56	1.53	1.61
1	N	634	C	N3-C4	6.56	1.38	1.33
1	N	847	G	C5-C6	-6.56	1.35	1.42
1	N	957	U	C4-C5	6.56	1.49	1.43
1	N	1310	G	C4'-C3'	6.56	1.60	1.53
1	N	335	C	O3'-P	-6.56	1.53	1.61
1	N	974	A	N3-C4	-6.56	1.30	1.34
1	N	390	U	C2-N3	6.56	1.42	1.37
1	N	657	U	N1-C6	6.55	1.43	1.38
1	N	673	A	C5'-C4'	6.55	1.59	1.51
1	N	597	G	C2'-C1'	-6.55	1.46	1.53
1	N	169	C	N3-C4	6.55	1.38	1.33
1	N	831	A	C2-N3	-6.55	1.27	1.33
1	N	639	G	C5'-C4'	6.55	1.59	1.51
1	N	1254	A	O4'-C1'	6.55	1.50	1.41
1	N	480	U	N1-C2	-6.55	1.32	1.38
1	N	502	A	C5-C4	6.55	1.43	1.38
1	N	553	A	C8-N7	-6.55	1.26	1.31
1	N	719	C	C5'-C4'	6.55	1.59	1.51
1	N	1185	G	O4'-C1'	6.54	1.50	1.41
1	N	1209	C	N3-C4	6.54	1.38	1.33
1	N	971	G	C2-N3	6.54	1.38	1.32
1	N	460	A	P-O5'	-6.54	1.53	1.59
1	N	1134	G	C6-O6	-6.54	1.18	1.24
1	N	391	G	O3'-P	-6.54	1.53	1.61
1	N	582	C	C4-N4	6.54	1.39	1.33
1	N	616	G	C5-C6	-6.54	1.35	1.42
1	N	1316	G	C8-N7	-6.54	1.27	1.30
1	N	79	G	C2-N3	6.54	1.38	1.32
1	N	171	A	C2-N3	6.54	1.39	1.33
1	N	191	G	C4'-O4'	6.54	1.54	1.45
1	N	402	G	N1-C2	6.54	1.43	1.37
1	N	884	U	C4-O4	-6.54	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1124	G	C2-N3	6.54	1.38	1.32
1	N	146	G	C1'-N9	6.53	1.58	1.48
1	N	260	G	N7-C5	-6.53	1.35	1.39
1	N	412	A	P-O5'	6.53	1.66	1.59
1	N	1035	A	C5-C6	-6.53	1.35	1.41
1	N	1323	G	C6-N1	6.53	1.44	1.39
1	N	1463	U	C2-N3	6.53	1.42	1.37
1	N	45	G	N1-C2	6.53	1.43	1.37
1	N	475	C	N1-C2	6.53	1.46	1.40
1	N	1017	U	C4-C5	6.53	1.49	1.43
1	N	1513	A	C6-N6	6.53	1.39	1.33
1	N	865	A	C6-N1	-6.53	1.30	1.35
1	N	1425	U	C3'-C2'	6.53	1.60	1.52
1	N	1492	A	C6-N1	6.53	1.40	1.35
1	N	1168	U	C5'-C4'	6.53	1.59	1.51
1	N	943	U	N1-C6	6.52	1.43	1.38
1	N	1356	G	P-O5'	-6.52	1.53	1.59
1	N	631	C	C4-N4	6.52	1.39	1.33
1	N	714	G	C2-N3	6.52	1.38	1.32
1	N	807	A	C4'-O4'	6.52	1.54	1.45
1	N	301	G	C5-C6	-6.52	1.35	1.42
1	N	747	A	C8-N7	-6.52	1.26	1.31
1	N	844	G	C8-N7	6.52	1.34	1.30
1	N	1453	G	N7-C5	6.52	1.43	1.39
1	N	927	G	O3'-P	-6.52	1.53	1.61
1	N	175	C	N1-C6	6.51	1.41	1.37
1	N	391	G	C2'-C1'	6.51	1.60	1.53
1	N	1021	A	N9-C8	-6.51	1.32	1.37
1	N	1400	C	C4-C5	-6.51	1.37	1.43
1	N	1510	C	P-O5'	-6.51	1.53	1.59
1	N	508	U	P-O5'	6.51	1.66	1.59
1	N	815	A	N9-C4	6.51	1.41	1.37
1	N	785	G	N1-C2	6.51	1.43	1.37
1	N	1177	G	C2-N2	6.51	1.41	1.34
1	N	107	G	C5'-C4'	6.51	1.59	1.51
1	N	275	G	N9-C4	-6.51	1.32	1.38
1	N	1501	C	C1'-N1	6.51	1.58	1.48
1	N	411	A	C8-N7	-6.51	1.26	1.31
1	N	1104	G	C2'-C1'	-6.50	1.46	1.53
1	N	29	U	N1-C2	6.50	1.44	1.38
1	N	803	G	C6-N1	6.50	1.44	1.39
1	N	105	G	C4'-O4'	-6.50	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	240	G	N3-C4	6.50	1.40	1.35
1	N	302	G	C8-N7	-6.50	1.27	1.30
1	N	318	G	C8-N7	-6.50	1.27	1.30
1	N	852	G	C8-N7	6.50	1.34	1.30
1	N	291	U	C3'-C2'	6.50	1.60	1.52
1	N	725	G	N9-C8	-6.50	1.33	1.37
1	N	1220	G	O3'-P	6.50	1.69	1.61
1	N	85	U	C4'-O4'	-6.49	1.37	1.45
1	N	317	U	O4'-C1'	6.49	1.50	1.41
1	N	1075	U	P-O5'	-6.49	1.53	1.59
1	N	716	A	N3-C4	-6.49	1.30	1.34
1	N	150	U	C3'-C2'	6.49	1.60	1.52
1	N	467	U	N3-C4	6.49	1.44	1.38
1	N	1070	U	O4'-C1'	6.49	1.50	1.41
1	N	155	A	N3-C4	-6.49	1.30	1.34
1	N	425	G	C5-C4	6.49	1.42	1.38
1	N	426	U	C4-O4	-6.49	1.18	1.23
1	N	973	G	C6-N1	6.49	1.44	1.39
1	N	623	C	N1-C6	6.49	1.41	1.37
1	N	717	U	C5'-C4'	6.49	1.59	1.51
1	N	1453	G	C8-N7	6.48	1.34	1.30
1	N	253	A	C6-N1	6.48	1.40	1.35
1	N	652	U	N3-C4	6.48	1.44	1.38
1	N	1186	G	O4'-C1'	-6.48	1.33	1.41
1	N	494	G	N1-C2	6.48	1.43	1.37
1	N	502	A	C8-N7	-6.48	1.27	1.31
1	N	784	A	C8-N7	6.48	1.36	1.31
1	N	1079	G	C5-C4	-6.48	1.33	1.38
1	N	1220	G	N7-C5	-6.48	1.35	1.39
1	N	38	G	C2-N3	6.48	1.38	1.32
1	N	1124	G	C5'-C4'	6.48	1.59	1.51
1	N	1522	U	N1-C2	6.48	1.44	1.38
1	N	597	G	N9-C4	6.47	1.43	1.38
1	N	761	G	N7-C5	-6.47	1.35	1.39
1	N	1296	C	O4'-C1'	-6.47	1.33	1.41
1	N	1425	U	N3-C4	6.47	1.44	1.38
1	N	498	A	C5-C4	6.47	1.43	1.38
1	N	507	C	C2-N3	6.47	1.41	1.35
1	N	577	G	C4'-C3'	6.47	1.60	1.53
1	N	1017	U	C2-N3	6.47	1.42	1.37
1	N	483	C	O3'-P	-6.47	1.53	1.61
1	N	640	A	C5-C6	-6.47	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	514	C	N3-C4	6.47	1.38	1.33
1	N	881	G	C6-O6	-6.47	1.18	1.24
1	N	1327	C	C2'-C1'	6.47	1.60	1.53
1	N	1400	C	C2'-C1'	-6.47	1.46	1.53
1	N	1456	A	N3-C4	-6.47	1.30	1.34
1	N	346	G	C2-N3	6.46	1.38	1.32
1	N	451	A	C8-N7	-6.46	1.27	1.31
1	N	1124	G	C5-C4	6.46	1.42	1.38
1	N	1336	C	C2'-C1'	-6.46	1.46	1.53
1	N	1317	C	C5'-C4'	-6.46	1.43	1.51
1	N	417	G	C5'-C4'	6.46	1.59	1.51
1	N	706	A	C5-C6	-6.46	1.35	1.41
1	N	707	U	C2-N3	6.46	1.42	1.37
1	N	938	A	C3'-C2'	6.46	1.60	1.52
1	N	874	G	N7-C5	-6.46	1.35	1.39
1	N	1523	G	N9-C4	-6.46	1.32	1.38
1	N	702	A	C5'-C4'	6.46	1.59	1.51
1	N	162	A	P-O5'	-6.45	1.53	1.59
1	N	1223	C	N1-C6	6.45	1.41	1.37
1	N	1483	A	C3'-C2'	-6.45	1.45	1.52
1	N	771	G	N1-C2	6.45	1.43	1.37
1	N	1145	A	N9-C4	-6.45	1.33	1.37
1	N	559	A	N9-C8	6.45	1.43	1.37
1	N	721	G	C5'-C4'	6.45	1.59	1.51
1	N	1416	G	C2-N2	6.45	1.41	1.34
1	N	1423	G	N7-C5	-6.45	1.35	1.39
1	N	827	U	C2'-C1'	-6.45	1.46	1.53
1	N	1387	G	N9-C4	6.45	1.43	1.38
1	N	1517	G	C2-N3	6.44	1.38	1.32
1	N	664	G	N7-C5	-6.44	1.35	1.39
1	N	349	A	N7-C5	-6.44	1.35	1.39
1	N	351	G	N3-C4	6.44	1.40	1.35
1	N	1374	A	C2-N3	6.44	1.39	1.33
1	N	481	G	C4'-C3'	6.44	1.60	1.53
1	N	794	A	C2'-C1'	-6.44	1.46	1.53
1	N	1506	U	C2-N3	6.44	1.42	1.37
1	N	459	A	O4'-C1'	6.43	1.50	1.41
1	N	715	A	C5-C4	6.43	1.43	1.38
1	N	1213	A	N9-C8	6.43	1.42	1.37
1	N	1300	G	C2-N2	6.43	1.41	1.34
1	N	864	A	N7-C5	-6.43	1.35	1.39
1	N	996	A	N7-C5	-6.43	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1228	C	N3-C4	6.43	1.38	1.33
1	N	1273	C	N3-C4	6.43	1.38	1.33
1	N	389	A	C5-C4	6.43	1.43	1.38
1	N	406	G	C5-C6	-6.43	1.35	1.42
1	N	408	A	C6-N6	6.43	1.39	1.33
1	N	512	U	P-O5'	-6.43	1.53	1.59
1	N	576	C	O3'-P	-6.43	1.53	1.61
1	N	927	G	N9-C8	-6.43	1.33	1.37
1	N	287	U	N3-C4	6.43	1.44	1.38
1	N	630	A	C6-N6	6.43	1.39	1.33
1	N	763	G	N3-C4	-6.43	1.30	1.35
1	N	1109	C	O3'-P	-6.43	1.53	1.61
1	N	1361	G	C2'-C1'	-6.43	1.46	1.53
1	N	531	U	C2'-C1'	6.42	1.60	1.53
1	N	553	A	N1-C2	6.42	1.40	1.34
1	N	1122	U	C3'-O3'	6.42	1.51	1.42
1	N	1159	U	N1-C6	6.42	1.43	1.38
1	N	75	G	N1-C2	6.42	1.42	1.37
1	N	714	G	C3'-O3'	6.42	1.51	1.42
1	N	259	G	N1-C2	6.42	1.42	1.37
1	N	457	G	O3'-P	-6.42	1.53	1.61
1	N	538	G	C2-N3	6.42	1.37	1.32
1	N	31	G	N3-C4	-6.42	1.30	1.35
1	N	208	U	C4'-O4'	-6.42	1.37	1.45
1	N	731	G	C2-N3	6.42	1.37	1.32
1	N	1468	A	N9-C4	-6.42	1.34	1.37
1	N	404	G	N1-C2	6.41	1.42	1.37
1	N	449	G	C3'-C2'	6.41	1.60	1.52
1	N	706	A	C8-N7	-6.41	1.27	1.31
1	N	834	U	C2-N3	6.41	1.42	1.37
1	N	351	G	C2-N3	6.41	1.37	1.32
1	N	265	G	O3'-P	-6.41	1.53	1.61
1	N	1428	A	P-O5'	-6.41	1.53	1.59
1	N	1496	C	C1'-N1	6.41	1.58	1.48
1	N	295	C	C4-N4	6.41	1.39	1.33
1	N	513	C	C4-N4	6.41	1.39	1.33
1	N	1372	U	C2'-C1'	-6.41	1.46	1.53
1	N	810	C	C2-O2	-6.40	1.18	1.24
1	N	1272	G	N7-C5	-6.40	1.35	1.39
1	N	1298	U	C4'-C3'	6.40	1.60	1.53
1	N	410	G	N9-C8	6.40	1.42	1.37
1	N	1262	C	C3'-C2'	6.40	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	617	G	C5-C4	6.39	1.42	1.38
1	N	254	G	C5'-C4'	6.39	1.59	1.51
1	N	484	G	N1-C2	6.39	1.42	1.37
1	N	734	G	C2'-C1'	-6.39	1.46	1.53
1	N	919	A	N3-C4	-6.39	1.31	1.34
1	N	1193	G	O3'-P	-6.39	1.53	1.61
1	N	191	G	N1-C2	6.39	1.42	1.37
1	N	216	U	N1-C2	-6.39	1.32	1.38
1	N	346	G	O4'-C1'	6.39	1.50	1.41
1	N	6	G	N7-C5	-6.38	1.35	1.39
1	N	491	G	C8-N7	-6.38	1.27	1.30
1	N	445	G	C6-N1	6.38	1.44	1.39
1	N	89	U	P-O5'	-6.38	1.53	1.59
1	N	376	G	C5-C6	-6.38	1.35	1.42
1	N	811	C	P-O5'	-6.38	1.53	1.59
1	N	111	G	O3'-P	-6.38	1.53	1.61
1	N	190	A	C5-C4	6.38	1.43	1.38
1	N	585	G	P-O5'	-6.38	1.53	1.59
1	N	857	C	C4-C5	6.38	1.48	1.43
1	N	991	U	N3-C4	6.38	1.44	1.38
1	N	525	C	C4-C5	6.38	1.48	1.43
1	N	879	C	N3-C4	6.38	1.38	1.33
1	N	1143	G	C4'-O4'	-6.38	1.37	1.45
1	N	1176	A	C6-N6	6.38	1.39	1.33
1	N	408	A	C8-N7	-6.38	1.27	1.31
1	N	1274	A	C5-C6	6.38	1.46	1.41
1	N	934	C	C4-C5	6.37	1.48	1.43
1	N	108	G	N9-C8	-6.37	1.33	1.37
1	N	760	G	C4'-O4'	-6.37	1.37	1.45
1	N	931	C	P-O5'	6.37	1.66	1.59
1	N	1276	G	C8-N7	-6.37	1.27	1.30
1	N	719	C	C4-N4	6.37	1.39	1.33
1	N	1359	C	C4-N4	6.37	1.39	1.33
1	N	1386	G	N9-C8	6.37	1.42	1.37
1	N	165	G	N9-C8	-6.36	1.33	1.37
1	N	218	U	C2-N3	6.36	1.42	1.37
1	N	327	A	C2-N3	6.36	1.39	1.33
1	N	428	G	N9-C8	6.36	1.42	1.37
1	N	465	A	C8-N7	6.36	1.36	1.31
1	N	952	U	C4'-C3'	6.36	1.60	1.53
1	N	1278	G	C8-N7	-6.36	1.27	1.30
1	N	911	U	P-O5'	-6.36	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1144	G	P-O5'	-6.36	1.53	1.59
1	N	274	A	C8-N7	-6.36	1.27	1.31
1	N	577	G	C1'-N9	6.36	1.58	1.48
1	N	1055	A	N7-C5	-6.36	1.35	1.39
1	N	1170	A	N9-C8	-6.36	1.32	1.37
1	N	760	G	C2-N2	6.35	1.41	1.34
1	N	831	A	C6-N1	6.35	1.40	1.35
1	N	1279	G	C5-C6	-6.35	1.35	1.42
1	N	781	A	C5-C4	6.35	1.43	1.38
1	N	937	A	C6-N1	6.35	1.40	1.35
1	N	31	G	C5-C4	-6.35	1.33	1.38
1	N	313	A	N1-C2	6.35	1.40	1.34
1	N	1179	A	C5-C6	6.35	1.46	1.41
1	N	769	G	O3'-P	-6.35	1.53	1.61
1	N	162	A	C2'-C1'	6.35	1.60	1.53
1	N	205	A	P-O5'	6.34	1.66	1.59
1	N	1024	G	C2'-C1'	-6.34	1.46	1.53
1	N	231	U	C5'-C4'	6.34	1.58	1.51
1	N	822	U	N3-C4	6.34	1.44	1.38
1	N	349	A	C5-C4	6.34	1.43	1.38
1	N	387	U	N1-C2	-6.34	1.32	1.38
1	N	490	C	N3-C4	6.34	1.38	1.33
1	N	1364	U	C1'-N1	6.34	1.58	1.48
1	N	152	A	N9-C8	6.34	1.42	1.37
1	N	776	G	N9-C8	6.34	1.42	1.37
1	N	346	G	C2'-C1'	-6.33	1.46	1.53
1	N	1101	A	N7-C5	-6.33	1.35	1.39
1	N	1458	G	C4'-O4'	-6.33	1.37	1.45
1	N	1021	A	N1-C2	6.33	1.40	1.34
1	N	1379	G	C2'-C1'	-6.33	1.46	1.53
1	N	369	G	C8-N7	6.33	1.34	1.30
1	N	1005	A	N9-C4	-6.33	1.34	1.37
1	N	52	C	C4-N4	6.33	1.39	1.33
1	N	1203	C	N1-C6	-6.33	1.33	1.37
1	N	720	C	C5'-C4'	-6.33	1.43	1.51
1	N	498	A	N3-C4	-6.33	1.31	1.34
1	N	775	G	C3'-C2'	6.33	1.59	1.52
1	N	1355	G	C5-C4	-6.33	1.33	1.38
1	N	1193	G	N9-C8	-6.32	1.33	1.37
1	N	1440	U	N3-C4	6.32	1.44	1.38
1	N	66	A	C5-C4	6.32	1.43	1.38
1	N	865	A	C2'-C1'	-6.32	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	309	A	C6-N6	-6.32	1.28	1.33
1	N	326	G	O3'-P	-6.32	1.53	1.61
1	N	801	U	C5'-C4'	6.32	1.58	1.51
1	N	379	C	P-O5'	-6.32	1.53	1.59
1	N	46	G	C5-C4	6.32	1.42	1.38
1	N	1021	A	C8-N7	-6.32	1.27	1.31
1	N	1105	A	O3'-P	-6.32	1.53	1.61
1	N	325	A	C2'-C1'	-6.32	1.46	1.53
1	N	1036	A	C5-C4	6.32	1.43	1.38
1	N	73	C	C4-N4	6.31	1.39	1.33
1	N	1097	C	C2'-C1'	-6.31	1.46	1.53
1	N	1459	G	N1-C2	6.31	1.42	1.37
1	N	1503	A	N3-C4	6.31	1.38	1.34
1	N	838	G	C5-C4	6.31	1.42	1.38
1	N	1509	C	C4'-C3'	6.31	1.60	1.53
1	N	1072	G	C8-N7	-6.31	1.27	1.30
1	N	1069	C	C3'-O3'	-6.31	1.33	1.42
1	N	1505	G	C2'-O2'	-6.31	1.33	1.41
1	N	1028	C	C5'-C4'	6.30	1.58	1.51
1	N	1185	G	C5-C6	6.30	1.48	1.42
1	N	67	C	C2-N3	6.30	1.40	1.35
1	N	91	U	C2'-C1'	-6.30	1.46	1.53
1	N	172	A	O3'-P	-6.30	1.53	1.61
1	N	410	G	C6-N1	6.30	1.44	1.39
1	N	1286	U	C3'-C2'	-6.30	1.45	1.52
1	N	1294	G	C5-C4	6.30	1.42	1.38
1	N	479	U	C2-N3	6.30	1.42	1.37
1	N	814	A	C5-C4	6.30	1.43	1.38
1	N	579	A	C2'-C1'	-6.30	1.46	1.53
1	N	1061	G	N1-C2	6.30	1.42	1.37
1	N	1338	G	C5-C6	-6.30	1.36	1.42
1	N	1292	G	N3-C4	-6.29	1.31	1.35
1	N	426	U	N3-C4	6.29	1.44	1.38
1	N	1031	C	N3-C4	6.29	1.38	1.33
1	N	1245	C	C4'-O4'	6.29	1.53	1.45
1	N	1394	A	C2'-C1'	-6.29	1.46	1.53
1	N	41	G	N9-C8	6.29	1.42	1.37
1	N	270	A	N7-C5	-6.29	1.35	1.39
1	N	1173	U	N3-C4	6.29	1.44	1.38
1	N	1190	G	C5-C4	6.29	1.42	1.38
1	N	13	U	C3'-C2'	6.29	1.59	1.52
1	N	1118	U	C2-N3	6.29	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	685	G	N7-C5	-6.29	1.35	1.39
1	N	239	U	C4-O4	-6.29	1.18	1.23
1	N	265	G	C2-N3	6.29	1.37	1.32
1	N	431	A	N1-C2	6.28	1.40	1.34
1	N	897	C	C1'-N1	6.28	1.58	1.48
1	N	926	G	N7-C5	-6.28	1.35	1.39
1	N	751	U	O4'-C1'	-6.28	1.33	1.41
1	N	1479	C	P-O5'	-6.28	1.53	1.59
1	N	356	A	N3-C4	6.28	1.38	1.34
1	N	737	C	N3-C4	6.28	1.38	1.33
1	N	1330	U	P-O5'	6.28	1.66	1.59
1	N	212	G	N7-C5	-6.28	1.35	1.39
1	N	1282	C	C4-N4	6.28	1.39	1.33
1	N	182	A	P-O5'	-6.27	1.53	1.59
1	N	525	C	C1'-N1	6.27	1.58	1.48
1	N	885	G	C4'-C3'	6.27	1.60	1.53
1	N	364	A	C5-C6	-6.27	1.35	1.41
1	N	634	C	C1'-N1	6.27	1.58	1.48
1	N	1220	G	C3'-C2'	6.27	1.59	1.52
1	N	1398	A	C5'-C4'	6.27	1.58	1.51
1	N	53	A	N1-C2	-6.27	1.28	1.34
1	N	135	C	C1'-N1	6.27	1.58	1.48
1	N	624	C	N3-C4	6.27	1.38	1.33
1	N	681	A	N9-C8	-6.27	1.32	1.37
1	N	851	G	P-O5'	-6.27	1.53	1.59
1	N	961	U	O3'-P	-6.27	1.53	1.61
1	N	1044	A	C6-N1	-6.27	1.31	1.35
1	N	374	A	C3'-O3'	6.27	1.50	1.42
1	N	414	A	C6-N6	-6.27	1.28	1.33
1	N	518	C	N3-C4	6.27	1.38	1.33
1	N	641	U	N1-C2	-6.27	1.32	1.38
1	N	1393	U	C4-O4	-6.27	1.18	1.23
1	N	1397	C	P-O5'	-6.27	1.53	1.59
1	N	1398	A	C4'-O4'	-6.27	1.37	1.45
1	N	1504	G	N1-C2	6.27	1.42	1.37
1	N	27	G	C8-N7	6.26	1.34	1.30
1	N	498	A	C2'-C1'	-6.26	1.46	1.53
1	N	559	A	N7-C5	-6.26	1.35	1.39
1	N	783	C	C4-N4	6.26	1.39	1.33
1	N	1064	G	C2'-C1'	-6.26	1.46	1.53
1	N	108	G	C2-N2	6.26	1.40	1.34
1	N	374	A	N7-C5	-6.26	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1105	A	O4'-C1'	6.26	1.49	1.41
1	N	308	C	C2'-C1'	-6.26	1.46	1.53
1	N	709	U	C2-O2	6.26	1.27	1.22
1	N	1421	G	C2-N2	6.26	1.40	1.34
1	N	94	G	N1-C2	6.26	1.42	1.37
1	N	232	G	N3-C4	-6.26	1.31	1.35
1	N	1457	G	P-O5'	6.26	1.66	1.59
1	N	493	A	N9-C4	-6.26	1.34	1.37
1	N	750	C	C4'-C3'	-6.26	1.46	1.53
1	N	871	U	C1'-N1	6.26	1.58	1.48
1	N	1138	G	N9-C8	-6.26	1.33	1.37
1	N	272	C	N1-C6	6.25	1.41	1.37
1	N	862	C	N3-C4	6.25	1.38	1.33
1	N	926	G	O3'-P	-6.25	1.53	1.61
1	N	211	G	N1-C2	6.25	1.42	1.37
1	N	969	A	C2'-C1'	-6.25	1.46	1.53
1	N	1362	A	N9-C8	6.25	1.42	1.37
1	N	488	C	C2'-O2'	-6.25	1.33	1.41
1	N	745	G	C2-N3	6.25	1.37	1.32
1	N	1253	G	N3-C4	6.25	1.39	1.35
1	N	332	G	C2-N2	6.24	1.40	1.34
1	N	1258	G	C1'-N9	6.24	1.58	1.48
1	N	346	G	C3'-C2'	6.24	1.59	1.52
1	N	429	U	C4'-C3'	6.24	1.60	1.53
1	N	812	G	N9-C4	6.24	1.43	1.38
1	N	812	G	N7-C5	-6.24	1.35	1.39
1	N	1196	A	C6-N1	6.24	1.40	1.35
1	N	178	C	C2'-C1'	-6.24	1.46	1.53
1	N	613	C	C4'-C3'	-6.24	1.46	1.53
1	N	1204	A	N9-C8	6.24	1.42	1.37
1	N	702	A	N9-C8	6.24	1.42	1.37
1	N	1131	G	N3-C4	6.24	1.39	1.35
1	N	754	C	C3'-C2'	6.23	1.59	1.52
1	N	993	G	C6-N1	6.23	1.44	1.39
1	N	1453	G	N1-C2	6.23	1.42	1.37
1	N	1531	A	P-O5'	-6.23	1.53	1.59
1	N	1092	A	C2-N3	-6.23	1.27	1.33
1	N	1237	C	O3'-P	-6.23	1.53	1.61
1	N	1313	U	C2-N3	6.23	1.42	1.37
1	N	665	A	N3-C4	-6.23	1.31	1.34
1	N	876	C	O3'-P	-6.23	1.53	1.61
1	N	890	G	N7-C5	6.23	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	168	G	O4'-C1'	6.23	1.49	1.41
1	N	505	G	C5'-C4'	6.22	1.58	1.51
1	N	1044	A	C4'-C3'	6.22	1.59	1.53
1	N	29	U	C2-N3	6.22	1.42	1.37
1	N	223	A	N9-C4	-6.22	1.34	1.37
1	N	733	G	N7-C5	-6.22	1.35	1.39
1	N	1232	U	C2-N3	6.22	1.42	1.37
1	N	452	A	C6-N1	6.22	1.40	1.35
1	N	560	A	N9-C4	-6.22	1.34	1.37
1	N	826	C	N1-C6	6.22	1.40	1.37
1	N	1235	U	C4-O4	6.22	1.28	1.23
1	N	1276	G	C3'-O3'	6.22	1.50	1.42
1	N	196	A	C6-N1	6.22	1.40	1.35
1	N	899	C	N1-C6	6.22	1.40	1.37
1	N	1098	C	C3'-C2'	6.22	1.59	1.52
1	N	1169	A	C5'-C4'	6.22	1.58	1.51
1	N	381	C	N3-C4	6.22	1.38	1.33
1	N	626	G	C3'-C2'	6.22	1.59	1.52
1	N	943	U	C2'-C1'	-6.22	1.46	1.53
1	N	1083	U	C4-C5	6.22	1.49	1.43
1	N	1293	C	N3-C4	6.22	1.38	1.33
1	N	320	A	C3'-O3'	6.21	1.50	1.42
1	N	731	G	C5-C4	6.21	1.42	1.38
1	N	945	G	C4'-O4'	-6.21	1.37	1.45
1	N	314	C	C2-N3	6.21	1.40	1.35
1	N	380	G	N9-C4	-6.21	1.32	1.38
1	N	1478	U	C2'-C1'	-6.21	1.46	1.53
1	N	1526	G	N9-C4	-6.21	1.32	1.38
1	N	695	A	C6-N6	6.21	1.39	1.33
1	N	373	A	C5-C4	6.21	1.43	1.38
1	N	563	A	C6-N1	6.21	1.39	1.35
1	N	1021	A	C4'-C3'	6.21	1.59	1.53
1	N	278	G	N9-C8	6.21	1.42	1.37
1	N	570	G	C5'-C4'	6.21	1.58	1.51
1	N	900	A	C2'-C1'	-6.21	1.46	1.53
1	N	777	A	O4'-C1'	6.21	1.49	1.41
1	N	346	G	C8-N7	-6.20	1.27	1.30
1	N	1073	U	C2'-C1'	6.20	1.60	1.53
1	N	44	A	C6-N1	6.20	1.39	1.35
1	N	778	G	C6-N1	6.20	1.43	1.39
1	N	1433	A	C1'-N9	6.20	1.58	1.48
1	N	328	C	O4'-C1'	-6.20	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	588	G	C2-N2	6.20	1.40	1.34
1	N	878	A	N1-C2	6.20	1.40	1.34
1	N	1292	G	P-O5'	-6.20	1.53	1.59
1	N	1309	G	C2'-C1'	6.20	1.60	1.53
1	N	337	G	C8-N7	6.20	1.34	1.30
1	N	101	A	N3-C4	6.20	1.38	1.34
1	N	715	A	N9-C4	6.20	1.41	1.37
1	N	738	C	C2'-C1'	-6.19	1.46	1.53
1	N	891	U	N3-C4	6.19	1.44	1.38
1	N	317	U	C1'-N1	6.19	1.58	1.48
1	N	362	G	P-O5'	-6.19	1.53	1.59
1	N	1522	U	P-O5'	6.19	1.66	1.59
1	N	503	C	C5'-C4'	6.19	1.58	1.51
1	N	577	G	C8-N7	-6.19	1.27	1.30
1	N	644	U	O4'-C1'	6.19	1.49	1.41
1	N	833	G	N1-C2	6.19	1.42	1.37
1	N	1181	G	C5-C6	-6.19	1.36	1.42
1	N	1196	A	C8-N7	-6.19	1.27	1.31
1	N	440	C	C3'-C2'	-6.19	1.46	1.52
1	N	1139	G	N9-C4	-6.19	1.33	1.38
1	N	5	U	C4'-O4'	6.18	1.53	1.45
1	N	144	G	C6-O6	-6.18	1.18	1.24
1	N	240	G	N9-C4	-6.18	1.33	1.38
1	N	281	G	C5-C4	6.18	1.42	1.38
1	N	1193	G	C5'-C4'	6.18	1.58	1.51
1	N	1196	A	N1-C2	6.18	1.40	1.34
1	N	1489	G	P-O5'	6.18	1.66	1.59
1	N	2	A	C6-N6	6.18	1.38	1.33
1	N	121	U	C5-C6	6.18	1.39	1.34
1	N	830	G	C5-C4	-6.18	1.34	1.38
1	N	731	G	P-O5'	-6.18	1.53	1.59
1	N	1302	C	N1-C6	6.18	1.40	1.37
1	N	142	G	C2'-C1'	-6.18	1.46	1.53
1	N	1147	C	O3'-P	-6.18	1.53	1.61
1	N	674	G	C6-N1	6.18	1.43	1.39
1	N	263	A	N9-C4	6.17	1.41	1.37
1	N	533	A	C6-N1	6.17	1.39	1.35
1	N	1468	A	C4'-C3'	-6.17	1.46	1.53
1	N	1125	U	C2'-C1'	-6.17	1.46	1.53
1	N	13	U	N1-C2	6.17	1.44	1.38
1	N	73	C	C5'-C4'	6.17	1.58	1.51
1	N	560	A	C2'-C1'	-6.17	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	727	G	N9-C4	6.17	1.42	1.38
1	N	1412	C	N1-C6	6.17	1.40	1.37
1	N	574	A	C8-N7	6.17	1.35	1.31
1	N	1167	A	C4'-C3'	6.17	1.59	1.53
1	N	79	G	C3'-C2'	6.16	1.59	1.52
1	N	90	C	C3'-C2'	6.16	1.59	1.52
1	N	582	C	C2-N3	6.16	1.40	1.35
1	N	819	A	N9-C8	6.16	1.42	1.37
1	N	1256	A	C8-N7	-6.16	1.27	1.31
1	N	1469	C	N1-C6	-6.16	1.33	1.37
1	N	232	G	C8-N7	-6.16	1.27	1.30
1	N	423	G	N1-C2	6.16	1.42	1.37
1	N	1042	A	N1-C2	6.16	1.39	1.34
1	N	421	U	P-O5'	6.16	1.66	1.59
1	N	435	A	N3-C4	-6.16	1.31	1.34
1	N	462	G	N7-C5	-6.16	1.35	1.39
1	N	813	U	C1'-N1	6.16	1.57	1.48
1	N	471	U	C2-N3	6.16	1.42	1.37
1	N	361	G	N9-C8	6.16	1.42	1.37
1	N	493	A	C5-C6	-6.16	1.35	1.41
1	N	1269	A	N7-C5	6.16	1.43	1.39
1	N	1409	C	N3-C4	6.16	1.38	1.33
1	N	21	G	C8-N7	-6.15	1.27	1.30
1	N	123	U	C2'-C1'	-6.15	1.46	1.53
1	N	679	C	P-O5'	-6.15	1.53	1.59
1	N	369	G	C3'-O3'	6.15	1.50	1.42
1	N	658	C	N3-C4	6.15	1.38	1.33
1	N	177	G	N1-C2	6.15	1.42	1.37
1	N	198	G	N3-C4	-6.15	1.31	1.35
1	N	537	G	C2-N3	6.15	1.37	1.32
1	N	1145	A	N7-C5	-6.15	1.35	1.39
1	N	735	C	C5-C6	6.15	1.39	1.34
1	N	640	A	C6-N6	-6.14	1.29	1.33
1	N	874	G	C4'-O4'	6.14	1.53	1.45
1	N	205	A	C6-N6	6.14	1.38	1.33
1	N	737	C	C2-N3	6.14	1.40	1.35
1	N	1264	U	C2'-C1'	-6.14	1.46	1.53
1	N	1395	C	C5-C6	6.14	1.39	1.34
1	N	666	G	C5-C6	-6.14	1.36	1.42
1	N	1355	G	C2'-C1'	-6.14	1.46	1.53
1	N	1519	A	N9-C4	6.14	1.41	1.37
1	N	198	G	O4'-C1'	-6.14	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	406	G	N3-C4	-6.14	1.31	1.35
1	N	407	U	P-O5'	-6.14	1.53	1.59
1	N	1342	C	C4-C5	6.14	1.47	1.43
1	N	211	G	C2-N2	6.14	1.40	1.34
1	N	724	G	N7-C5	-6.14	1.35	1.39
1	N	650	G	C5-C6	-6.14	1.36	1.42
1	N	668	G	C8-N7	-6.14	1.27	1.30
1	N	302	G	C2'-O2'	-6.13	1.33	1.41
1	N	737	C	C2'-C1'	-6.13	1.46	1.53
1	N	1077	G	C5-C4	6.13	1.42	1.38
1	N	1132	C	P-O5'	-6.13	1.53	1.59
1	N	1384	C	N1-C6	6.13	1.40	1.37
1	N	1438	G	C2-N2	6.13	1.40	1.34
1	N	97	G	C2-N3	6.13	1.37	1.32
1	N	661	G	N1-C2	6.13	1.42	1.37
1	N	1366	C	C1'-N1	6.13	1.57	1.48
1	N	664	G	N3-C4	-6.13	1.31	1.35
1	N	1023	U	C1'-N1	6.13	1.57	1.48
1	N	1058	G	C5-C6	-6.13	1.36	1.42
1	N	1408	A	N9-C8	-6.13	1.32	1.37
1	N	274	A	P-O5'	-6.13	1.53	1.59
1	N	1252	A	C5'-C4'	6.13	1.58	1.51
1	N	57	G	C2-N3	6.13	1.37	1.32
1	N	226	G	N1-C2	6.13	1.42	1.37
1	N	576	C	N3-C4	6.13	1.38	1.33
1	N	818	G	C4'-C3'	6.13	1.59	1.53
1	N	403	C	C4-N4	6.13	1.39	1.33
1	N	989	U	C5'-C4'	6.13	1.58	1.51
1	N	795	C	O5'-C5'	-6.12	1.33	1.42
1	N	466	A	C8-N7	-6.12	1.27	1.31
1	N	770	C	C3'-O3'	6.12	1.50	1.42
1	N	802	A	C6-N6	6.12	1.38	1.33
1	N	553	A	N9-C4	6.12	1.41	1.37
1	N	41	G	C5-C4	-6.12	1.34	1.38
1	N	947	G	O3'-P	-6.12	1.53	1.61
1	N	1099	G	O4'-C1'	6.12	1.49	1.41
1	N	1138	G	C1'-N9	6.12	1.57	1.48
1	N	1189	U	C2'-C1'	-6.12	1.46	1.53
1	N	468	A	C4'-O4'	-6.12	1.37	1.45
1	N	666	G	C5'-C4'	6.12	1.58	1.51
1	N	949	A	C5-C4	6.12	1.43	1.38
1	N	259	G	C5'-C4'	6.12	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	298	A	C4'-C3'	6.12	1.59	1.53
1	N	1306	A	C6-N6	6.12	1.38	1.33
1	N	1344	C	N1-C6	-6.12	1.33	1.37
1	N	1231	G	N1-C2	6.11	1.42	1.37
1	N	1342	C	C3'-C2'	6.11	1.59	1.52
1	N	848	C	C4-N4	6.11	1.39	1.33
1	N	866	C	C5'-C4'	-6.11	1.44	1.51
1	N	98	A	C5-C4	-6.11	1.34	1.38
1	N	844	G	N9-C8	-6.11	1.33	1.37
1	N	588	G	C5-C4	6.11	1.42	1.38
1	N	1012	A	P-O5'	6.11	1.65	1.59
1	N	1264	U	C4'-O4'	6.11	1.53	1.45
1	N	90	C	C4-C5	6.11	1.47	1.43
1	N	1456	A	C5'-C4'	-6.11	1.44	1.51
1	N	1514	G	C2'-O2'	-6.11	1.33	1.41
1	N	387	U	C2-N3	6.10	1.42	1.37
1	N	492	C	O4'-C1'	6.10	1.49	1.41
1	N	743	A	N9-C8	6.10	1.42	1.37
1	N	1090	U	C4-C5	-6.10	1.38	1.43
1	N	1121	U	N3-C4	6.10	1.44	1.38
1	N	712	A	C6-N1	-6.10	1.31	1.35
1	N	50	A	N9-C8	6.10	1.42	1.37
1	N	97	G	C2'-C1'	-6.10	1.46	1.53
1	N	182	A	O4'-C1'	6.10	1.49	1.41
1	N	367	U	N1-C2	-6.10	1.33	1.38
1	N	527	G	C2-N3	6.10	1.37	1.32
1	N	85	U	C4'-C3'	6.10	1.59	1.53
1	N	773	G	C2-N3	6.10	1.37	1.32
1	N	682	G	P-O5'	-6.09	1.53	1.59
1	N	179	A	N1-C2	6.09	1.39	1.34
1	N	185	U	C1'-N1	6.09	1.57	1.48
1	N	375	U	C2-N3	6.09	1.42	1.37
1	N	442	G	C6-O6	-6.09	1.18	1.24
1	N	282	A	C8-N7	-6.09	1.27	1.31
1	N	448	A	C3'-C2'	6.09	1.59	1.52
1	N	748	G	C2'-O2'	-6.09	1.33	1.41
1	N	1081	A	N9-C8	6.09	1.42	1.37
1	N	1102	A	N3-C4	-6.09	1.31	1.34
1	N	1360	A	O3'-P	6.09	1.68	1.61
1	N	105	G	N3-C4	-6.09	1.31	1.35
1	N	373	A	O3'-P	-6.09	1.53	1.61
1	N	409	U	N1-C2	-6.09	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1095	U	N1-C6	6.09	1.43	1.38
1	N	1112	C	P-O5'	-6.09	1.53	1.59
1	N	109	A	C2-N3	-6.09	1.28	1.33
1	N	609	A	N3-C4	-6.09	1.31	1.34
1	N	894	G	N9-C4	6.09	1.42	1.38
1	N	1320	C	C4'-O4'	-6.09	1.37	1.45
1	N	791	G	C8-N7	6.08	1.34	1.30
1	N	30	U	C5-C6	6.08	1.39	1.34
1	N	962	C	C1'-N1	6.08	1.57	1.48
1	N	1263	C	P-O5'	-6.08	1.53	1.59
1	N	1304	G	C2'-C1'	-6.08	1.46	1.53
1	N	1418	A	C6-N1	6.08	1.39	1.35
1	N	1444	U	C2-N3	6.08	1.42	1.37
1	N	40	C	P-O5'	-6.08	1.53	1.59
1	N	457	G	C2-N3	6.08	1.37	1.32
1	N	621	A	C2-N3	6.08	1.39	1.33
1	N	919	A	C5-C4	6.08	1.43	1.38
1	N	107	G	N3-C4	-6.08	1.31	1.35
1	N	883	C	C4-C5	-6.08	1.38	1.43
1	N	1473	G	N9-C4	-6.08	1.33	1.38
1	N	431	A	C2'-C1'	-6.08	1.46	1.53
1	N	1363	A	C5'-C4'	6.08	1.58	1.51
1	N	172	A	N9-C4	-6.08	1.34	1.37
1	N	241	G	N9-C4	-6.08	1.33	1.38
1	N	282	A	N9-C4	6.08	1.41	1.37
1	N	289	G	P-O5'	6.08	1.65	1.59
1	N	573	A	O3'-P	6.08	1.68	1.61
1	N	1288	A	O4'-C1'	-6.07	1.33	1.41
1	N	731	G	N9-C8	6.07	1.42	1.37
1	N	680	C	N3-C4	6.07	1.38	1.33
1	N	1426	G	C6-O6	-6.07	1.18	1.24
1	N	1006	G	C1'-N9	6.07	1.57	1.48
1	N	1210	C	P-O5'	-6.07	1.53	1.59
1	N	665	A	C8-N7	-6.07	1.27	1.31
1	N	835	U	C5-C6	6.07	1.39	1.34
1	N	903	G	N3-C4	-6.07	1.31	1.35
1	N	1032	G	C6-N1	6.07	1.43	1.39
1	N	1466	C	C2-N3	6.07	1.40	1.35
1	N	702	A	C6-N6	6.07	1.38	1.33
1	N	1004	A	C4'-C3'	6.07	1.59	1.53
1	N	324	G	C8-N7	6.06	1.34	1.30
1	N	680	C	C4'-C3'	6.06	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	375	U	P-O5'	-6.06	1.53	1.59
1	N	1513	A	C5-C6	-6.06	1.35	1.41
1	N	667	G	P-O5'	-6.06	1.53	1.59
1	N	321	A	C4'-C3'	-6.06	1.46	1.53
1	N	1068	G	N1-C2	6.06	1.42	1.37
1	N	1305	G	O3'-P	-6.06	1.53	1.61
1	N	243	A	N7-C5	-6.06	1.35	1.39
1	N	704	A	C6-N1	6.06	1.39	1.35
1	N	140	U	O3'-P	-6.06	1.53	1.61
1	N	259	G	P-O5'	-6.06	1.53	1.59
1	N	64	G	C2-N3	6.05	1.37	1.32
1	N	305	G	P-O5'	-6.05	1.53	1.59
1	N	480	U	N1-C6	6.05	1.43	1.38
1	N	577	G	P-O5'	6.05	1.65	1.59
1	N	984	C	C4-N4	6.05	1.39	1.33
1	N	1175	G	C5-C6	-6.05	1.36	1.42
1	N	1403	C	P-O5'	-6.05	1.53	1.59
1	N	496	A	N3-C4	-6.05	1.31	1.34
1	N	801	U	C2'-C1'	-6.05	1.46	1.53
1	N	819	A	C3'-O3'	6.05	1.50	1.42
1	N	207	C	O4'-C1'	6.05	1.49	1.41
1	N	302	G	C2-N2	6.05	1.40	1.34
1	N	1356	G	N7-C5	-6.05	1.35	1.39
1	N	1516	G	C2'-C1'	6.05	1.60	1.53
1	N	1368	A	N9-C4	-6.05	1.34	1.37
1	N	1260	G	C6-O6	-6.05	1.18	1.24
1	N	705	G	C2-N2	6.05	1.40	1.34
1	N	992	U	P-O5'	6.05	1.65	1.59
1	N	1038	C	C4-C5	-6.05	1.38	1.43
1	N	1090	U	P-O5'	-6.05	1.53	1.59
1	N	1107	C	C4-N4	6.05	1.39	1.33
1	N	1436	U	N1-C6	-6.05	1.32	1.38
1	N	1214	C	N1-C6	-6.04	1.33	1.37
1	N	649	A	C8-N7	-6.04	1.27	1.31
1	N	1509	C	C1'-N1	6.04	1.57	1.48
1	N	2	A	N3-C4	6.04	1.38	1.34
1	N	538	G	N3-C4	-6.04	1.31	1.35
1	N	776	G	O3'-P	-6.04	1.53	1.61
1	N	630	A	C3'-O3'	6.04	1.50	1.42
1	N	813	U	C4-C5	-6.04	1.38	1.43
1	N	83	C	C4'-O4'	6.04	1.53	1.45
1	N	655	A	N9-C8	6.04	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	728	A	N7-C5	-6.04	1.35	1.39
1	N	996	A	N9-C4	6.04	1.41	1.37
1	N	1279	G	N9-C8	-6.04	1.33	1.37
1	N	1447	A	N9-C4	-6.04	1.34	1.37
1	N	986	U	C2-N3	6.04	1.42	1.37
1	N	1276	G	C5-C4	6.04	1.42	1.38
1	N	358	U	C4-O4	6.04	1.28	1.23
1	N	393	A	N9-C4	6.04	1.41	1.37
1	N	756	C	C1'-N1	6.04	1.57	1.48
1	N	1041	G	C3'-O3'	6.04	1.50	1.42
1	N	252	U	C1'-N1	6.03	1.57	1.48
1	N	684	U	C2-N3	6.03	1.42	1.37
1	N	10	A	N9-C4	6.03	1.41	1.37
1	N	81	A	C2'-C1'	-6.03	1.46	1.53
1	N	118	U	C3'-O3'	6.03	1.50	1.42
1	N	285	C	C4-N4	6.03	1.39	1.33
1	N	1279	G	C2-N2	6.03	1.40	1.34
1	N	1222	G	N1-C2	6.03	1.42	1.37
1	N	224	U	C2'-C1'	-6.03	1.46	1.53
1	N	570	G	C6-O6	-6.03	1.18	1.24
1	N	776	G	C2-N3	6.02	1.37	1.32
1	N	824	G	N9-C4	-6.02	1.33	1.38
1	N	1000	A	O4'-C1'	-6.02	1.33	1.41
1	N	378	G	O3'-P	-6.02	1.53	1.61
1	N	733	G	C2'-C1'	-6.02	1.46	1.53
1	N	1005	A	O3'-P	6.02	1.68	1.61
1	N	1050	G	O4'-C1'	-6.02	1.33	1.41
1	N	1210	C	N3-C4	6.02	1.38	1.33
1	N	1226	C	C2-N3	6.02	1.40	1.35
1	N	345	C	C4'-C3'	6.02	1.59	1.53
1	N	63	C	C2'-C1'	6.02	1.59	1.53
1	N	202	G	N9-C4	-6.02	1.33	1.38
1	N	952	U	C3'-C2'	-6.02	1.46	1.52
1	N	1510	C	O3'-P	-6.02	1.53	1.61
1	N	205	A	N3-C4	-6.02	1.31	1.34
1	N	553	A	C6-N1	6.02	1.39	1.35
1	N	1246	A	C4'-C3'	6.02	1.59	1.53
1	N	219	U	C1'-N1	6.02	1.57	1.48
1	N	849	G	O3'-P	-6.02	1.53	1.61
1	N	1236	A	C6-N6	6.02	1.38	1.33
1	N	1291	U	C4'-O4'	6.02	1.53	1.45
1	N	1511	G	C8-N7	6.02	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	120	A	C6-N1	6.01	1.39	1.35
1	N	228	A	N9-C4	-6.01	1.34	1.37
1	N	7	A	N9-C8	-6.01	1.32	1.37
1	N	103	U	O4'-C1'	6.01	1.49	1.41
1	N	50	A	C5-C6	-6.01	1.35	1.41
1	N	89	U	C3'-O3'	6.01	1.50	1.42
1	N	1452	C	C2-O2	-6.01	1.19	1.24
1	N	459	A	N9-C4	-6.01	1.34	1.37
1	N	519	C	N1-C6	6.01	1.40	1.37
1	N	683	G	C1'-N9	6.01	1.57	1.48
1	N	1398	A	N3-C4	-6.01	1.31	1.34
1	N	1449	C	C2-N3	6.01	1.40	1.35
1	N	42	G	C4'-C3'	6.01	1.59	1.53
1	N	147	G	O3'-P	-6.01	1.53	1.61
1	N	324	G	N3-C4	6.01	1.39	1.35
1	N	1026	G	N3-C4	6.01	1.39	1.35
1	N	1198	G	C2-N3	6.01	1.37	1.32
1	N	1339	A	O3'-P	-6.01	1.53	1.61
1	N	461	A	C4'-O4'	6.00	1.53	1.45
1	N	902	G	C2-N3	6.00	1.37	1.32
1	N	180	U	C4-C5	6.00	1.49	1.43
1	N	445	G	O3'-P	-6.00	1.53	1.61
1	N	1147	C	N1-C6	6.00	1.40	1.37
1	N	547	A	P-O5'	-6.00	1.53	1.59
1	N	682	G	O4'-C1'	6.00	1.49	1.41
1	N	428	G	C5-C4	6.00	1.42	1.38
1	N	627	G	C6-N1	6.00	1.43	1.39
1	N	899	C	N3-C4	-6.00	1.29	1.33
1	N	1084	G	N7-C5	-6.00	1.35	1.39
1	N	1150	A	N3-C4	-6.00	1.31	1.34
1	N	1186	G	C8-N7	-6.00	1.27	1.30
1	N	66	A	N9-C8	6.00	1.42	1.37
1	N	132	C	C2-N3	-6.00	1.30	1.35
1	N	141	G	C5-C6	-6.00	1.36	1.42
1	N	149	A	N7-C5	6.00	1.42	1.39
1	N	206	C	C4-N4	6.00	1.39	1.33
1	N	719	C	C2'-C1'	-6.00	1.46	1.53
1	N	406	G	C2-N2	5.99	1.40	1.34
1	N	1367	C	N1-C6	5.99	1.40	1.37
1	N	359	G	O3'-P	-5.99	1.53	1.61
1	N	104	G	C8-N7	5.99	1.34	1.30
1	N	996	A	C6-N6	5.99	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1018	G	C6-N1	5.99	1.43	1.39
1	N	500	G	N7-C5	-5.99	1.35	1.39
1	N	619	U	C2'-C1'	5.99	1.59	1.53
1	N	795	C	C2-N3	5.99	1.40	1.35
1	N	1067	A	C5'-C4'	5.99	1.58	1.51
1	N	1165	U	C5'-C4'	5.99	1.58	1.51
1	N	894	G	C6-N1	5.99	1.43	1.39
1	N	1353	G	C6-N1	5.99	1.43	1.39
1	N	298	A	N1-C2	5.99	1.39	1.34
1	N	541	G	C2'-C1'	-5.99	1.46	1.53
1	N	571	U	P-O5'	-5.98	1.53	1.59
1	N	1177	G	N1-C2	5.98	1.42	1.37
1	N	382	A	C4'-C3'	5.98	1.59	1.53
1	N	440	C	C5-C6	5.98	1.39	1.34
1	N	971	G	C8-N7	-5.98	1.27	1.30
1	N	1153	G	C5-C6	-5.98	1.36	1.42
1	N	1265	C	N1-C6	5.98	1.40	1.37
1	N	1413	A	C5-C4	5.98	1.43	1.38
1	N	229	U	C4'-C3'	5.98	1.59	1.53
1	N	739	C	P-O5'	-5.98	1.53	1.59
1	N	1003	G	C5-C4	5.98	1.42	1.38
1	N	680	C	C1'-N1	5.98	1.57	1.48
1	N	465	A	C6-N1	-5.98	1.31	1.35
1	N	1426	G	C5-C4	-5.98	1.34	1.38
1	N	501	C	C2-N3	5.98	1.40	1.35
1	N	1334	G	C6-N1	-5.98	1.35	1.39
1	N	266	G	N7-C5	-5.97	1.35	1.39
1	N	700	G	C2-N3	5.97	1.37	1.32
1	N	773	G	C5-C4	5.97	1.42	1.38
1	N	1134	G	C5-C6	-5.97	1.36	1.42
1	N	1353	G	N9-C4	5.97	1.42	1.38
1	N	772	U	C3'-O3'	-5.97	1.33	1.42
1	N	1500	A	O3'-P	-5.97	1.53	1.61
1	N	1184	G	C5-C4	5.97	1.42	1.38
1	N	1362	A	O4'-C1'	-5.97	1.33	1.41
1	N	30	U	C4-O4	5.97	1.28	1.23
1	N	332	G	C2'-C1'	-5.97	1.46	1.53
1	N	413	G	O3'-P	-5.97	1.53	1.61
1	N	1057	G	C5-C6	-5.97	1.36	1.42
1	N	1236	A	P-O5'	-5.97	1.53	1.59
1	N	993	G	N3-C4	-5.96	1.31	1.35
1	N	49	U	C4'-C3'	5.96	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	414	A	N7-C5	-5.96	1.35	1.39
1	N	605	U	C5'-C4'	5.96	1.58	1.51
1	N	983	A	C5-C6	5.96	1.46	1.41
1	N	1518	A	C2'-C1'	-5.96	1.46	1.53
1	N	136	C	C2'-C1'	-5.96	1.46	1.53
1	N	311	C	N3-C4	5.96	1.38	1.33
1	N	85	U	C2'-C1'	-5.96	1.46	1.53
1	N	942	G	N3-C4	-5.96	1.31	1.35
1	N	1087	G	C2-N3	5.96	1.37	1.32
1	N	1320	C	C2-N3	-5.96	1.30	1.35
1	N	400	C	O4'-C1'	5.96	1.49	1.41
1	N	506	G	C2-N3	5.96	1.37	1.32
1	N	890	G	O3'-P	-5.96	1.54	1.61
1	N	448	A	C2'-C1'	-5.95	1.46	1.53
1	N	554	A	N9-C4	5.95	1.41	1.37
1	N	888	G	C5-C4	5.95	1.42	1.38
1	N	209	U	C1'-N1	5.95	1.57	1.48
1	N	627	G	C4'-C3'	5.95	1.59	1.53
1	N	734	G	N1-C2	5.95	1.42	1.37
1	N	762	U	P-O5'	-5.95	1.53	1.59
1	N	1418	A	O3'-P	-5.95	1.54	1.61
1	N	673	A	C2'-C1'	-5.95	1.46	1.53
1	N	902	G	C2-N2	-5.95	1.28	1.34
1	N	421	U	C2-N3	5.95	1.42	1.37
1	N	586	C	C2-N3	5.95	1.40	1.35
1	N	593	U	C5'-C4'	5.95	1.58	1.51
1	N	1064	G	C5'-C4'	5.95	1.58	1.51
1	N	1080	A	N7-C5	-5.95	1.35	1.39
1	N	165	G	P-O5'	5.95	1.65	1.59
1	N	419	C	C2'-C1'	-5.95	1.46	1.53
1	N	450	G	C4'-C3'	-5.95	1.46	1.52
1	N	754	C	P-O5'	-5.95	1.53	1.59
1	N	887	G	N9-C4	-5.95	1.33	1.38
1	N	1408	A	C5-C6	-5.95	1.35	1.41
1	N	1007	U	C1'-N1	5.94	1.57	1.48
1	N	20	U	C4-C5	-5.94	1.38	1.43
1	N	609	A	C6-N6	5.94	1.38	1.33
1	N	1446	A	N9-C8	5.94	1.42	1.37
1	N	490	C	C4-N4	5.94	1.39	1.33
1	N	73	C	C3'-C2'	5.94	1.59	1.52
1	N	126	G	C5-C4	-5.94	1.34	1.38
1	N	726	C	N1-C2	5.94	1.46	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	753	A	N9-C8	-5.94	1.32	1.37
1	N	1088	G	C2-N2	5.94	1.40	1.34
1	N	916	U	C2'-C1'	-5.94	1.46	1.53
1	N	146	G	C5-C4	5.93	1.42	1.38
1	N	472	U	C2-N3	5.93	1.42	1.37
1	N	965	U	N3-C4	5.93	1.43	1.38
1	N	243	A	C5'-C4'	5.93	1.58	1.51
1	N	252	U	C2-N3	5.93	1.42	1.37
1	N	284	C	P-O5'	-5.93	1.53	1.59
1	N	289	G	N9-C8	5.93	1.42	1.37
1	N	516	U	C4-O4	5.93	1.28	1.23
1	N	595	A	C8-N7	-5.93	1.27	1.31
1	N	634	C	C5'-C4'	5.93	1.58	1.51
1	N	944	G	C4'-O4'	-5.93	1.37	1.45
1	N	1077	G	N9-C4	5.93	1.42	1.38
1	N	1254	A	N9-C8	-5.93	1.33	1.37
1	N	755	G	C2'-C1'	-5.93	1.46	1.53
1	N	1107	C	C4'-C3'	-5.93	1.46	1.52
1	N	1300	G	C3'-C2'	5.93	1.59	1.52
1	N	295	C	C4'-C3'	-5.92	1.46	1.52
1	N	601	G	N9-C4	-5.92	1.33	1.38
1	N	985	C	N3-C4	5.92	1.38	1.33
1	N	1092	A	C5'-C4'	5.92	1.58	1.51
1	N	1338	G	N9-C8	-5.92	1.33	1.37
1	N	1388	C	C5'-C4'	5.92	1.58	1.51
1	N	1445	U	N3-C4	5.92	1.43	1.38
1	N	1457	G	N9-C4	5.92	1.42	1.38
1	N	1520	C	C2-N3	5.92	1.40	1.35
1	N	550	G	N9-C4	5.92	1.42	1.38
1	N	733	G	C5-C4	-5.92	1.34	1.38
1	N	1311	A	C8-N7	5.92	1.35	1.31
1	N	1312	G	O3'-P	-5.92	1.54	1.61
1	N	424	G	C2-N3	5.92	1.37	1.32
1	N	601	G	C1'-N9	5.92	1.57	1.48
1	N	835	U	N1-C6	5.92	1.43	1.38
1	N	1213	A	C5'-C4'	5.92	1.58	1.51
1	N	76	G	N9-C8	-5.92	1.33	1.37
1	N	455	G	O3'-P	-5.92	1.54	1.61
1	N	846	G	N1-C2	5.92	1.42	1.37
1	N	113	G	O5'-C5'	5.92	1.53	1.44
1	N	955	U	C2'-C1'	-5.92	1.46	1.53
1	N	1399	C	P-O5'	-5.92	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	798	U	C5-C6	-5.92	1.28	1.34
1	N	903	G	N9-C4	-5.92	1.33	1.38
1	N	1144	G	N9-C4	-5.92	1.33	1.38
1	N	60	A	N9-C4	-5.91	1.34	1.37
1	N	292	G	C2-N3	5.91	1.37	1.32
1	N	616	G	C2-N3	5.91	1.37	1.32
1	N	670	G	C5-C4	5.91	1.42	1.38
1	N	1066	C	C4'-O4'	5.91	1.53	1.45
1	N	638	U	C2'-C1'	-5.91	1.46	1.53
1	N	875	U	C2'-C1'	-5.91	1.46	1.53
1	N	1495	U	C1'-N1	5.91	1.57	1.48
1	N	243	A	C4'-C3'	5.91	1.59	1.53
1	N	739	C	C5'-C4'	5.91	1.58	1.51
1	N	1108	G	P-O5'	-5.91	1.53	1.59
1	N	1407	C	O4'-C1'	5.91	1.49	1.41
1	N	668	G	C4'-O4'	5.91	1.53	1.45
1	N	706	A	N9-C4	5.91	1.41	1.37
1	N	946	A	C8-N7	-5.91	1.27	1.31
1	N	5	U	N3-C4	5.90	1.43	1.38
1	N	829	G	C3'-O3'	5.90	1.50	1.42
1	N	1088	G	N9-C8	5.90	1.42	1.37
1	N	1232	U	C3'-C2'	-5.90	1.46	1.52
1	N	100	G	C2-N3	5.90	1.37	1.32
1	N	702	A	P-O5'	5.90	1.65	1.59
1	N	1279	G	N9-C4	-5.90	1.33	1.38
1	N	300	A	N7-C5	-5.90	1.35	1.39
1	N	302	G	C6-N1	5.89	1.43	1.39
1	N	814	A	C6-N6	5.89	1.38	1.33
1	N	1001	C	O3'-P	-5.89	1.54	1.61
1	N	572	A	C3'-C2'	5.89	1.59	1.52
1	N	887	G	N1-C2	5.89	1.42	1.37
1	N	1016	A	C5-C4	-5.89	1.34	1.38
1	N	1373	G	N7-C5	5.89	1.42	1.39
1	N	1377	A	N7-C5	-5.89	1.35	1.39
1	N	1422	G	N1-C2	5.89	1.42	1.37
1	N	382	A	C5-C6	-5.89	1.35	1.41
1	N	1048	G	N7-C5	-5.89	1.35	1.39
1	N	1318	A	C4'-C3'	5.89	1.59	1.53
1	N	179	A	C8-N7	-5.88	1.27	1.31
1	N	349	A	C6-N1	5.88	1.39	1.35
1	N	463	U	O3'-P	-5.88	1.54	1.61
1	N	1065	U	C5'-C4'	5.88	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	134	G	C2-N3	5.88	1.37	1.32
1	N	107	G	P-O5'	5.88	1.65	1.59
1	N	456	A	C1'-N9	5.88	1.57	1.48
1	N	647	C	C2'-O2'	-5.88	1.34	1.41
1	N	832	G	N3-C4	5.88	1.39	1.35
1	N	843	U	C5'-C4'	5.88	1.58	1.51
1	N	726	C	C5'-C4'	5.88	1.58	1.51
1	N	1109	C	C4-N4	5.88	1.39	1.33
1	N	1289	A	C4'-C3'	5.88	1.59	1.53
1	N	86	G	N9-C8	5.87	1.42	1.37
1	N	796	C	N3-C4	5.87	1.38	1.33
1	N	1035	A	C5'-C4'	5.87	1.58	1.51
1	N	1192	C	P-O5'	-5.87	1.53	1.59
1	N	674	G	N9-C4	-5.87	1.33	1.38
1	N	702	A	C1'-N9	5.87	1.57	1.48
1	N	1183	U	O4'-C1'	5.87	1.49	1.41
1	N	1339	A	P-O5'	-5.87	1.53	1.59
1	N	1441	A	C2'-C1'	-5.87	1.46	1.53
1	N	115	G	C2'-C1'	5.87	1.59	1.53
1	N	368	U	C3'-C2'	-5.87	1.46	1.52
1	N	806	C	C5'-C4'	5.87	1.58	1.51
1	N	819	A	C5-C4	-5.87	1.34	1.38
1	N	306	A	C5-C4	5.87	1.42	1.38
1	N	769	G	N1-C2	5.87	1.42	1.37
1	N	1329	A	N9-C8	-5.87	1.33	1.37
1	N	1021	A	C3'-O3'	5.87	1.50	1.42
1	N	1232	U	O4'-C1'	5.87	1.49	1.41
1	N	301	G	P-O5'	-5.87	1.53	1.59
1	N	362	G	C6-N1	5.87	1.43	1.39
1	N	520	A	O3'-P	-5.87	1.54	1.61
1	N	945	G	N3-C4	-5.87	1.31	1.35
1	N	202	G	C2-N3	5.86	1.37	1.32
1	N	804	U	C2'-C1'	-5.86	1.47	1.53
1	N	1184	G	N9-C4	-5.86	1.33	1.38
1	N	902	G	N1-C2	5.86	1.42	1.37
1	N	976	G	C3'-C2'	-5.86	1.46	1.52
1	N	1017	U	O4'-C1'	-5.86	1.34	1.41
1	N	1244	G	N7-C5	-5.86	1.35	1.39
1	N	155	A	P-O5'	-5.86	1.53	1.59
1	N	699	C	N1-C6	5.86	1.40	1.37
1	N	968	A	N9-C4	5.86	1.41	1.37
1	N	1378	C	C1'-N1	5.86	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	605	U	C4'-O4'	-5.86	1.38	1.45
1	N	967	C	C2-N3	5.86	1.40	1.35
1	N	1091	U	C5'-C4'	5.86	1.58	1.51
1	N	1104	G	C8-N7	-5.86	1.27	1.30
1	N	1238	A	N9-C8	5.86	1.42	1.37
1	N	1518	A	C5-C4	5.86	1.42	1.38
1	N	221	C	C4-N4	5.85	1.39	1.33
1	N	1278	G	P-O5'	5.85	1.65	1.59
1	N	810	C	P-O5'	-5.85	1.53	1.59
1	N	819	A	C2'-C1'	-5.85	1.47	1.53
1	N	947	G	N7-C5	5.85	1.42	1.39
1	N	963	G	N1-C2	5.85	1.42	1.37
1	N	1289	A	C3'-O3'	5.85	1.50	1.42
1	N	297	G	C8-N7	5.85	1.34	1.30
1	N	450	G	N9-C4	-5.85	1.33	1.38
1	N	1299	A	C2'-C1'	-5.85	1.47	1.53
1	N	1449	C	C2'-C1'	-5.85	1.47	1.53
1	N	621	A	N9-C8	5.85	1.42	1.37
1	N	1111	A	C6-N6	5.85	1.38	1.33
1	N	1186	G	C6-N1	5.85	1.43	1.39
1	N	723	U	N3-C4	5.85	1.43	1.38
1	N	704	A	C5'-C4'	5.84	1.58	1.51
1	N	942	G	C3'-O3'	5.84	1.50	1.42
1	N	463	U	N1-C6	5.84	1.43	1.38
1	N	1101	A	N3-C4	-5.84	1.31	1.34
1	N	81	A	N9-C8	-5.84	1.33	1.37
1	N	1022	A	C1'-N9	5.84	1.57	1.48
1	N	1356	G	N9-C8	5.84	1.42	1.37
1	N	268	U	C2-N3	5.84	1.41	1.37
1	N	852	G	C3'-O3'	5.84	1.50	1.42
1	N	347	G	N1-C2	5.84	1.42	1.37
1	N	41	G	N9-C4	5.84	1.42	1.38
1	N	63	C	O3'-P	-5.84	1.54	1.61
1	N	540	G	N3-C4	-5.84	1.31	1.35
1	N	945	G	C2-N3	5.84	1.37	1.32
1	N	590	U	N3-C4	5.83	1.43	1.38
1	N	126	G	N1-C2	5.83	1.42	1.37
1	N	428	G	C2-N2	5.83	1.40	1.34
1	N	693	G	N9-C8	5.83	1.42	1.37
1	N	992	U	C4'-C3'	5.83	1.59	1.53
1	N	134	G	C4'-O4'	5.83	1.53	1.45
1	N	1079	G	C6-N1	5.83	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	992	U	C4-C5	5.83	1.48	1.43
1	N	1320	C	C5-C6	5.83	1.39	1.34
1	N	662	U	N3-C4	5.83	1.43	1.38
1	N	1492	A	O3'-P	-5.83	1.54	1.61
1	N	301	G	N3-C4	5.83	1.39	1.35
1	N	734	G	N9-C4	-5.83	1.33	1.38
1	N	936	C	C2-N3	5.83	1.40	1.35
1	N	621	A	P-O5'	5.82	1.65	1.59
1	N	1284	C	C5-C6	5.82	1.39	1.34
1	N	796	C	N1-C6	5.82	1.40	1.37
1	N	1105	A	C6-N6	5.82	1.38	1.33
1	N	290	C	N1-C2	-5.82	1.34	1.40
1	N	471	U	P-O5'	-5.82	1.53	1.59
1	N	1046	A	C2'-C1'	-5.82	1.47	1.53
1	N	673	A	C4'-O4'	-5.82	1.38	1.45
1	N	833	G	N7-C5	-5.82	1.35	1.39
1	N	1087	G	C6-N1	5.82	1.43	1.39
1	N	161	A	C6-N6	5.82	1.38	1.33
1	N	349	A	C6-N6	5.82	1.38	1.33
1	N	778	G	C5-C6	-5.82	1.36	1.42
1	N	899	C	C4-N4	-5.82	1.28	1.33
1	N	1271	A	C3'-C2'	5.82	1.59	1.52
1	N	387	U	C2'-C1'	-5.81	1.47	1.53
1	N	159	G	C5-C4	5.81	1.42	1.38
1	N	656	G	C3'-O3'	5.81	1.50	1.42
1	N	730	G	C6-N1	-5.81	1.35	1.39
1	N	765	G	C8-N7	-5.81	1.27	1.30
1	N	628	G	C5'-C4'	5.81	1.58	1.51
1	N	86	G	C6-N1	5.81	1.43	1.39
1	N	815	A	O5'-C5'	-5.81	1.33	1.42
1	N	901	A	O4'-C1'	5.81	1.49	1.41
1	N	1491	G	O3'-P	-5.81	1.54	1.61
1	N	362	G	C2'-C1'	-5.81	1.47	1.53
1	N	1027	C	C4'-O4'	-5.81	1.38	1.45
1	N	1082	A	N7-C5	-5.81	1.35	1.39
1	N	1238	A	N7-C5	-5.81	1.35	1.39
1	N	268	U	C3'-C2'	5.81	1.59	1.52
1	N	508	U	C4-C5	5.81	1.48	1.43
1	N	994	A	C3'-C2'	-5.81	1.46	1.52
1	N	128	G	C2'-C1'	-5.80	1.47	1.53
1	N	333	U	C5'-C4'	5.80	1.58	1.51
1	N	822	U	C2-N3	5.80	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1015	G	C6-N1	5.80	1.43	1.39
1	N	1127	G	C2'-C1'	-5.80	1.47	1.53
1	N	1264	U	C1'-N1	5.80	1.57	1.48
1	N	36	C	C5'-C4'	5.80	1.58	1.51
1	N	265	G	C2-N2	5.80	1.40	1.34
1	N	1427	C	N1-C2	5.80	1.46	1.40
1	N	273	U	C3'-C2'	5.80	1.59	1.52
1	N	595	A	C6-N1	5.80	1.39	1.35
1	N	602	A	N9-C8	5.80	1.42	1.37
1	N	1492	A	C4'-C3'	-5.80	1.46	1.52
1	N	335	C	P-O5'	-5.80	1.53	1.59
1	N	366	A	N7-C5	-5.80	1.35	1.39
1	N	907	A	C5-C6	-5.80	1.35	1.41
1	N	1233	G	C2-N3	5.80	1.37	1.32
1	N	255	G	C8-N7	-5.80	1.27	1.30
1	N	477	C	C3'-O3'	5.80	1.50	1.42
1	N	238	A	N1-C2	5.80	1.39	1.34
1	N	979	C	C5-C6	5.80	1.39	1.34
1	N	1189	U	O4'-C1'	5.80	1.49	1.41
1	N	1284	C	C2'-C1'	-5.80	1.47	1.53
1	N	628	G	O5'-C5'	-5.79	1.33	1.42
1	N	1046	A	P-O5'	5.79	1.65	1.59
1	N	1073	U	O3'-P	-5.79	1.54	1.61
1	N	353	A	N7-C5	-5.79	1.35	1.39
1	N	435	A	N9-C4	5.79	1.41	1.37
1	N	798	U	C5'-C4'	5.79	1.58	1.51
1	N	911	U	C4'-O4'	5.79	1.53	1.45
1	N	1203	C	C2-N3	5.79	1.40	1.35
1	N	1220	G	N9-C4	-5.79	1.33	1.38
1	N	1345	U	C2-N3	5.79	1.41	1.37
1	N	1128	C	C1'-N1	5.79	1.57	1.48
1	N	1406	U	C3'-O3'	5.79	1.50	1.42
1	N	1096	C	C4-C5	-5.79	1.38	1.43
1	N	26	A	C5-C4	5.79	1.42	1.38
1	N	776	G	C2'-C1'	5.79	1.59	1.53
1	N	1360	A	P-O5'	-5.79	1.53	1.59
1	N	82	G	C5-C4	5.79	1.42	1.38
1	N	1164	G	C4'-O4'	5.79	1.53	1.45
1	N	7	A	C6-N6	5.79	1.38	1.33
1	N	8	A	C5-C4	5.79	1.42	1.38
1	N	110	C	N1-C6	5.79	1.40	1.37
1	N	867	G	C2-N3	5.79	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1435	G	C5-C4	5.79	1.42	1.38
1	N	274	A	O4'-C1'	-5.78	1.34	1.41
1	N	658	C	C4-N4	5.78	1.39	1.33
1	N	905	U	C4'-O4'	5.78	1.53	1.45
1	N	97	G	O3'-P	-5.78	1.54	1.61
1	N	211	G	P-O5'	-5.78	1.53	1.59
1	N	1043	G	N3-C4	-5.78	1.31	1.35
1	N	1533	C	N3-C4	5.78	1.38	1.33
1	N	233	C	C2'-C1'	-5.78	1.47	1.53
1	N	757	U	N1-C2	-5.78	1.33	1.38
1	N	1165	U	P-O5'	-5.78	1.53	1.59
1	N	866	C	N3-C4	5.78	1.38	1.33
1	N	1034	G	P-O5'	5.78	1.65	1.59
1	N	745	G	C8-N7	-5.77	1.27	1.30
1	N	1446	A	N3-C4	-5.77	1.31	1.34
1	N	334	C	O4'-C1'	5.77	1.49	1.41
1	N	651	C	C2'-C1'	-5.77	1.47	1.53
1	N	1204	A	N9-C4	-5.77	1.34	1.37
1	N	1422	G	C5-C6	-5.77	1.36	1.42
1	N	298	A	C6-N1	5.77	1.39	1.35
1	N	1150	A	N9-C4	5.77	1.41	1.37
1	N	1177	G	C2'-C1'	-5.77	1.47	1.53
1	N	1269	A	C5'-C4'	5.77	1.58	1.51
1	N	1408	A	C6-N6	5.77	1.38	1.33
1	N	1130	A	C5'-C4'	5.77	1.58	1.51
1	N	1360	A	N3-C4	-5.76	1.31	1.34
1	N	19	A	C4'-C3'	-5.76	1.46	1.52
1	N	264	C	N1-C6	-5.76	1.33	1.37
1	N	1068	G	N7-C5	-5.76	1.35	1.39
1	N	1322	C	P-O5'	-5.76	1.53	1.59
1	N	1477	U	O3'-P	5.76	1.68	1.61
1	N	27	G	N1-C2	5.76	1.42	1.37
1	N	225	C	O3'-P	-5.76	1.54	1.61
1	N	273	U	P-O5'	-5.76	1.53	1.59
1	N	587	G	C1'-N9	5.76	1.57	1.48
1	N	856	C	C2-N3	5.76	1.40	1.35
1	N	319	G	N7-C5	-5.76	1.35	1.39
1	N	901	A	N9-C8	5.76	1.42	1.37
1	N	1370	G	C6-N1	5.76	1.43	1.39
1	N	944	G	C2-N3	5.75	1.37	1.32
1	N	76	G	C2-N3	5.75	1.37	1.32
1	N	207	C	C2-N3	5.75	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	445	G	N7-C5	-5.75	1.35	1.39
1	N	718	A	C5-C4	-5.75	1.34	1.38
1	N	1064	G	N9-C8	5.75	1.41	1.37
1	N	1106	G	O3'-P	-5.75	1.54	1.61
1	N	629	A	N7-C5	-5.75	1.35	1.39
1	N	943	U	C1'-N1	5.75	1.57	1.48
1	N	958	A	C3'-O3'	5.75	1.50	1.42
1	N	1290	G	P-O5'	-5.75	1.54	1.59
1	N	82	G	C5'-C4'	5.75	1.58	1.51
1	N	1189	U	C4-C5	-5.75	1.38	1.43
1	N	755	G	C2-N2	5.75	1.40	1.34
1	N	372	C	C5'-C4'	5.75	1.58	1.51
1	N	1353	G	C8-N7	5.75	1.34	1.30
1	N	102	G	C8-N7	-5.74	1.27	1.30
1	N	1091	U	C4-C5	-5.74	1.38	1.43
1	N	1109	C	N3-C4	5.74	1.38	1.33
1	N	1170	A	C2-N3	5.74	1.38	1.33
1	N	273	U	C1'-N1	5.74	1.57	1.48
1	N	79	G	C6-N1	5.74	1.43	1.39
1	N	629	A	C5-C4	5.74	1.42	1.38
1	N	1087	G	C8-N7	-5.74	1.27	1.30
1	N	1103	C	C2-N3	5.74	1.40	1.35
1	N	713	G	N7-C5	-5.73	1.35	1.39
1	N	873	A	N1-C2	5.73	1.39	1.34
1	N	44	A	N1-C2	-5.73	1.29	1.34
1	N	567	G	C8-N7	-5.73	1.27	1.30
1	N	1255	G	C2-N2	-5.73	1.28	1.34
1	N	361	G	N9-C4	5.73	1.42	1.38
1	N	771	G	N9-C4	5.73	1.42	1.38
1	N	1166	G	C5-C4	-5.73	1.34	1.38
1	N	1379	G	C5-C4	5.73	1.42	1.38
1	N	1515	G	N7-C5	5.73	1.42	1.39
1	N	292	G	C5-C4	-5.73	1.34	1.38
1	N	665	A	N9-C4	5.73	1.41	1.37
1	N	970	C	C2-N3	-5.73	1.31	1.35
1	N	8	A	N3-C4	-5.72	1.31	1.34
1	N	167	A	P-O5'	5.72	1.65	1.59
1	N	604	G	C5-C4	5.72	1.42	1.38
1	N	143	A	O3'-P	-5.72	1.54	1.61
1	N	1151	A	C4'-O4'	5.72	1.52	1.45
1	N	1449	C	N1-C2	-5.72	1.34	1.40
1	N	272	C	C5'-C4'	5.72	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	892	A	N7-C5	-5.72	1.35	1.39
1	N	1304	G	C5'-C4'	5.72	1.58	1.51
1	N	662	U	P-O5'	-5.72	1.54	1.59
1	N	1158	C	C5'-C4'	5.72	1.58	1.51
1	N	1499	A	C5-C4	-5.72	1.34	1.38
1	N	1208	C	C2'-C1'	5.72	1.59	1.53
1	N	1217	C	C2-N3	5.72	1.40	1.35
1	N	357	G	N1-C2	5.71	1.42	1.37
1	N	368	U	O4'-C1'	5.71	1.49	1.41
1	N	428	G	C2'-C1'	-5.71	1.47	1.53
1	N	578	C	C2'-C1'	-5.71	1.47	1.53
1	N	597	G	C5-C6	-5.71	1.36	1.42
1	N	628	G	C5-C4	5.71	1.42	1.38
1	N	638	U	C2-N3	5.71	1.41	1.37
1	N	731	G	N3-C4	-5.71	1.31	1.35
1	N	1148	U	O3'-P	-5.71	1.54	1.61
1	N	402	G	O3'-P	-5.71	1.54	1.61
1	N	241	G	C2-N3	5.71	1.37	1.32
1	N	353	A	N3-C4	-5.71	1.31	1.34
1	N	626	G	C2-N2	5.71	1.40	1.34
1	N	1190	G	C8-N7	5.71	1.34	1.30
1	N	1310	G	C2-N2	5.71	1.40	1.34
1	N	220	G	C6-N1	5.71	1.43	1.39
1	N	217	C	N3-C4	5.71	1.38	1.33
1	N	229	U	C2-N3	5.71	1.41	1.37
1	N	800	G	C6-O6	-5.71	1.19	1.24
1	N	919	A	C3'-C2'	-5.71	1.46	1.52
1	N	1158	C	N1-C6	5.71	1.40	1.37
1	N	1497	G	C5-C4	-5.71	1.34	1.38
1	N	314	C	N3-C4	5.71	1.38	1.33
1	N	436	C	C2'-C1'	-5.70	1.47	1.53
1	N	1075	U	C4-C5	5.70	1.48	1.43
1	N	1354	U	C5-C6	5.70	1.39	1.34
1	N	509	A	C5-C6	5.70	1.46	1.41
1	N	583	A	N7-C5	-5.70	1.35	1.39
1	N	1048	G	C2'-C1'	-5.70	1.47	1.53
1	N	1404	C	C4-N4	5.70	1.39	1.33
1	N	1441	A	C6-N6	5.70	1.38	1.33
1	N	380	G	C5-C4	-5.70	1.34	1.38
1	N	947	G	C8-N7	5.70	1.34	1.30
1	N	1170	A	C5-C4	5.70	1.42	1.38
1	N	1374	A	P-O5'	-5.70	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	54	C	C1'-N1	5.70	1.57	1.48
1	N	640	A	C5'-C4'	5.70	1.58	1.51
1	N	735	C	C4'-C3'	5.70	1.59	1.53
1	N	614	C	O3'-P	-5.70	1.54	1.61
1	N	538	G	O4'-C1'	5.70	1.49	1.41
1	N	951	G	O4'-C1'	5.70	1.49	1.41
1	N	1378	C	C2-N3	5.70	1.40	1.35
1	N	586	C	C4-C5	5.69	1.47	1.43
1	N	1375	A	P-O5'	-5.69	1.54	1.59
1	N	219	U	C5'-C4'	5.69	1.58	1.51
1	N	668	G	C6-N1	5.69	1.43	1.39
1	N	839	C	C2-O2	5.69	1.29	1.24
1	N	1291	U	O4'-C1'	5.69	1.49	1.41
1	N	1288	A	N7-C5	-5.69	1.35	1.39
1	N	161	A	C8-N7	-5.69	1.27	1.31
1	N	255	G	C5-C4	-5.69	1.34	1.38
1	N	274	A	N3-C4	5.69	1.38	1.34
1	N	819	A	C6-N1	5.69	1.39	1.35
1	N	1073	U	C5'-C4'	5.69	1.58	1.51
1	N	1325	C	C5-C6	5.69	1.38	1.34
1	N	650	G	C8-N7	-5.69	1.27	1.30
1	N	1239	A	C5'-C4'	5.69	1.58	1.51
1	N	38	G	C8-N7	-5.68	1.27	1.30
1	N	315	A	N9-C4	-5.68	1.34	1.37
1	N	509	A	O4'-C1'	5.68	1.49	1.41
1	N	700	G	C5-C4	5.68	1.42	1.38
1	N	1185	G	C2-N2	5.68	1.40	1.34
1	N	1262	C	C2-N3	5.68	1.40	1.35
1	N	439	U	C2'-C1'	-5.68	1.47	1.53
1	N	733	G	C3'-O3'	5.68	1.50	1.42
1	N	893	C	C4-C5	5.68	1.47	1.43
1	N	929	G	C8-N7	5.68	1.34	1.30
1	N	1359	C	N1-C2	5.68	1.45	1.40
1	N	1526	G	P-O5'	-5.68	1.54	1.59
1	N	9	G	N3-C4	5.68	1.39	1.35
1	N	456	A	N9-C4	-5.68	1.34	1.37
1	N	916	U	C4'-O4'	5.68	1.52	1.45
1	N	1335	U	N3-C4	5.68	1.43	1.38
1	N	1179	A	C5'-C4'	5.68	1.58	1.51
1	N	177	G	C3'-C2'	-5.67	1.46	1.52
1	N	249	U	C4'-C3'	5.67	1.59	1.53
1	N	572	A	N9-C4	5.67	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1154	G	N9-C8	5.67	1.41	1.37
1	N	1164	G	N7-C5	-5.67	1.35	1.39
1	N	1386	G	N9-C4	-5.67	1.33	1.38
1	N	1526	G	C4'-C3'	5.67	1.59	1.53
1	N	274	A	N9-C4	-5.67	1.34	1.37
1	N	554	A	N9-C8	-5.67	1.33	1.37
1	N	174	A	C3'-O3'	5.67	1.50	1.42
1	N	364	A	C6-N1	5.67	1.39	1.35
1	N	546	A	C8-N7	-5.67	1.27	1.31
1	N	693	G	N7-C5	5.67	1.42	1.39
1	N	1292	G	N9-C4	-5.67	1.33	1.38
1	N	158	G	C6-N1	5.67	1.43	1.39
1	N	242	G	C2'-C1'	-5.67	1.47	1.53
1	N	1007	U	C5'-C4'	5.67	1.58	1.51
1	N	1070	U	C5'-C4'	5.67	1.58	1.51
1	N	1455	G	C6-N1	5.67	1.43	1.39
1	N	654	G	C2-N2	5.67	1.40	1.34
1	N	1229	A	P-O5'	-5.67	1.54	1.59
1	N	1451	U	C5'-C4'	5.67	1.58	1.51
1	N	11	G	C6-N1	5.66	1.43	1.39
1	N	128	G	O3'-P	-5.66	1.54	1.61
1	N	1025	U	N3-C4	5.66	1.43	1.38
1	N	266	G	P-O5'	-5.66	1.54	1.59
1	N	639	G	N9-C8	-5.66	1.33	1.37
1	N	51	A	C5'-C4'	5.66	1.58	1.51
1	N	119	A	P-O5'	-5.66	1.54	1.59
1	N	495	A	C8-N7	-5.66	1.27	1.31
1	N	690	G	N1-C2	5.66	1.42	1.37
1	N	821	G	C2'-O2'	5.66	1.49	1.41
1	N	1279	G	C2-N3	5.66	1.37	1.32
1	N	248	C	O4'-C1'	5.66	1.49	1.41
1	N	1001	C	C4'-O4'	-5.66	1.38	1.45
1	N	220	G	C8-N7	-5.66	1.27	1.30
1	N	453	G	C2-N2	5.66	1.40	1.34
1	N	610	U	C5'-C4'	5.66	1.58	1.51
1	N	1019	A	C3'-C2'	-5.66	1.46	1.52
1	N	564	C	O3'-P	-5.65	1.54	1.61
1	N	1234	C	C2-N3	5.65	1.40	1.35
1	N	1437	A	N3-C4	-5.65	1.31	1.34
1	N	567	G	P-O5'	-5.65	1.54	1.59
1	N	898	G	C2'-C1'	-5.65	1.47	1.53
1	N	278	G	N7-C5	-5.65	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	771	G	O3'-P	-5.65	1.54	1.61
1	N	949	A	C4'-C3'	5.65	1.59	1.53
1	N	1074	G	C4'-C3'	-5.65	1.46	1.52
1	N	1195	C	P-O5'	5.65	1.65	1.59
1	N	1472	U	C4'-C3'	5.65	1.59	1.53
1	N	1530	G	C2'-C1'	-5.65	1.47	1.53
1	N	87	C	O4'-C1'	5.65	1.49	1.41
1	N	305	G	C6-N1	5.65	1.43	1.39
1	N	437	U	C5-C6	5.65	1.39	1.34
1	N	779	C	C5'-C4'	5.65	1.58	1.51
1	N	1189	U	N1-C6	5.65	1.43	1.38
1	N	1227	A	N7-C5	-5.65	1.35	1.39
1	N	109	A	N7-C5	-5.65	1.35	1.39
1	N	302	G	P-O5'	-5.65	1.54	1.59
1	N	347	G	C5'-C4'	5.65	1.58	1.51
1	N	895	G	C2-N2	5.65	1.40	1.34
1	N	1483	A	C5'-C4'	5.65	1.58	1.51
1	N	1332	A	P-O5'	-5.65	1.54	1.59
1	N	332	G	N9-C8	5.64	1.41	1.37
1	N	474	G	P-O5'	-5.64	1.54	1.59
1	N	1405	G	C2'-C1'	-5.64	1.47	1.53
1	N	378	G	C5'-C4'	5.64	1.58	1.51
1	N	520	A	C6-N1	5.64	1.39	1.35
1	N	674	G	C4'-C3'	5.64	1.59	1.53
1	N	766	A	O4'-C1'	5.64	1.49	1.41
1	N	769	G	C3'-O3'	5.64	1.50	1.42
1	N	1234	C	O4'-C1'	5.64	1.49	1.41
1	N	1396	A	C4'-O4'	-5.64	1.38	1.45
1	N	307	C	N1-C2	5.64	1.45	1.40
1	N	307	C	C2-N3	5.64	1.40	1.35
1	N	556	C	C4-N4	5.64	1.39	1.33
1	N	766	A	N7-C5	-5.64	1.35	1.39
1	N	954	G	C5'-C4'	5.64	1.58	1.51
1	N	1440	U	N1-C2	-5.64	1.33	1.38
1	N	160	A	N9-C4	-5.63	1.34	1.37
1	N	1165	U	N1-C2	5.63	1.43	1.38
1	N	1292	G	N1-C2	5.63	1.42	1.37
1	N	1350	A	C5-C6	5.63	1.46	1.41
1	N	916	U	N3-C4	5.63	1.43	1.38
1	N	980	C	C4'-C3'	-5.63	1.47	1.52
1	N	248	C	C2'-C1'	-5.63	1.47	1.53
1	N	409	U	C4-C5	-5.63	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	837	U	C5'-C4'	5.63	1.58	1.51
1	N	1009	U	C4'-C3'	5.63	1.59	1.53
1	N	1343	G	N1-C2	5.63	1.42	1.37
1	N	1429	A	C5-C6	5.63	1.46	1.41
1	N	1508	A	C2-N3	5.63	1.38	1.33
1	N	316	C	C5'-C4'	5.63	1.58	1.51
1	N	1403	C	N1-C6	5.62	1.40	1.37
1	N	95	C	C2'-C1'	-5.62	1.47	1.53
1	N	328	C	C4-N4	5.62	1.39	1.33
1	N	1432	G	C5-C6	-5.62	1.36	1.42
1	N	483	C	C5'-C4'	5.62	1.58	1.51
1	N	522	C	P-O5'	-5.62	1.54	1.59
1	N	840	C	C4-N4	5.62	1.39	1.33
1	N	1431	A	N9-C8	-5.62	1.33	1.37
1	N	118	U	C2-N3	5.62	1.41	1.37
1	N	181	A	C2'-C1'	-5.62	1.47	1.53
1	N	624	C	C4'-C3'	5.62	1.59	1.53
1	N	1125	U	C1'-N1	5.62	1.57	1.48
1	N	1163	A	C8-N7	-5.62	1.27	1.31
1	N	1225	A	C3'-C2'	5.62	1.59	1.52
1	N	1353	G	N3-C4	5.62	1.39	1.35
1	N	297	G	O3'-P	-5.61	1.54	1.61
1	N	815	A	N9-C8	-5.61	1.33	1.37
1	N	1459	G	N3-C4	-5.61	1.31	1.35
1	N	595	A	N3-C4	-5.61	1.31	1.34
1	N	226	G	C5-C4	5.61	1.42	1.38
1	N	472	U	N3-C4	-5.61	1.33	1.38
1	N	1504	G	C2'-C1'	-5.61	1.47	1.53
1	N	800	G	N3-C4	-5.61	1.31	1.35
1	N	966	G	C2-N2	5.61	1.40	1.34
1	N	780	A	C4'-O4'	5.61	1.52	1.45
1	N	872	A	C5'-C4'	5.61	1.58	1.51
1	N	1057	G	C2-N3	5.61	1.37	1.32
1	N	1322	C	N3-C4	-5.61	1.30	1.33
1	N	1479	C	N3-C4	5.61	1.37	1.33
1	N	6	G	C8-N7	-5.61	1.27	1.30
1	N	901	A	C8-N7	-5.61	1.27	1.31
1	N	933	G	C1'-N9	5.61	1.57	1.48
1	N	1128	C	N1-C6	5.61	1.40	1.37
1	N	1314	C	C4-C5	-5.61	1.38	1.43
1	N	1441	A	N9-C4	5.61	1.41	1.37
1	N	1483	A	N7-C5	-5.61	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	296	U	N1-C6	5.60	1.43	1.38
1	N	337	G	C4'-C3'	-5.60	1.47	1.52
1	N	372	C	O3'-P	-5.60	1.54	1.61
1	N	526	C	C4-C5	5.60	1.47	1.43
1	N	861	G	C8-N7	5.60	1.34	1.30
1	N	100	G	N1-C2	5.60	1.42	1.37
1	N	563	A	C5-C4	5.60	1.42	1.38
1	N	953	G	C5'-C4'	5.60	1.58	1.51
1	N	1230	C	O4'-C1'	5.60	1.49	1.41
1	N	117	G	N7-C5	-5.60	1.35	1.39
1	N	1117	A	C6-N1	-5.60	1.31	1.35
1	N	685	G	C2-N3	5.60	1.37	1.32
1	N	1264	U	O3'-P	-5.60	1.54	1.61
1	N	36	C	N3-C4	5.60	1.37	1.33
1	N	93	U	N1-C6	-5.60	1.32	1.38
1	N	253	A	N9-C4	-5.60	1.34	1.37
1	N	644	U	N1-C6	5.60	1.43	1.38
1	N	985	C	C5'-C4'	5.60	1.58	1.51
1	N	1391	U	C2-N3	-5.60	1.33	1.37
1	N	1082	A	C5-C4	5.60	1.42	1.38
1	N	1141	C	O3'-P	-5.60	1.54	1.61
1	N	1219	A	C4'-C3'	-5.60	1.47	1.52
1	N	1483	A	C2-N3	5.60	1.38	1.33
1	N	94	G	C6-O6	-5.59	1.19	1.24
1	N	437	U	C5'-C4'	5.59	1.58	1.51
1	N	557	G	C5-C6	-5.59	1.36	1.42
1	N	630	A	N3-C4	-5.59	1.31	1.34
1	N	692	U	N1-C2	5.59	1.43	1.38
1	N	1183	U	C2'-C1'	-5.59	1.47	1.53
1	N	41	G	N3-C4	-5.59	1.31	1.35
1	N	532	A	C5-C4	5.59	1.42	1.38
1	N	1316	G	N3-C4	5.59	1.39	1.35
1	N	1225	A	C5'-C4'	5.59	1.58	1.51
1	N	1303	C	C4-C5	5.59	1.47	1.43
1	N	1334	G	N9-C8	-5.59	1.33	1.37
1	N	1498	U	C2-N3	-5.59	1.33	1.37
1	N	269	C	C4-C5	5.59	1.47	1.43
1	N	380	G	P-O5'	-5.59	1.54	1.59
1	N	713	G	C2-N3	5.59	1.37	1.32
1	N	184	G	O5'-C5'	-5.59	1.33	1.42
1	N	833	G	P-O5'	-5.59	1.54	1.59
1	N	904	U	C3'-O3'	5.59	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1373	G	N1-C2	5.59	1.42	1.37
1	N	1527	U	N3-C4	5.59	1.43	1.38
1	N	889	A	N9-C4	5.58	1.41	1.37
1	N	1469	C	N1-C2	5.58	1.45	1.40
1	N	977	A	C6-N1	5.58	1.39	1.35
1	N	1013	G	N1-C2	5.58	1.42	1.37
1	N	1267	C	C3'-C2'	-5.58	1.46	1.52
1	N	1304	G	N7-C5	-5.58	1.35	1.39
1	N	1353	G	N7-C5	-5.58	1.35	1.39
1	N	1424	U	C4'-C3'	5.58	1.59	1.53
1	N	1463	U	C1'-N1	5.58	1.57	1.48
1	N	743	A	C6-N6	5.58	1.38	1.33
1	N	1073	U	P-O5'	-5.58	1.54	1.59
1	N	1151	A	C5-C4	5.58	1.42	1.38
1	N	1443	C	P-O5'	-5.58	1.54	1.59
1	N	186	C	C3'-O3'	5.58	1.50	1.42
1	N	753	A	C6-N6	5.58	1.38	1.33
1	N	814	A	N9-C4	-5.58	1.34	1.37
1	N	24	U	C1'-N1	5.58	1.57	1.48
1	N	539	A	C8-N7	-5.58	1.27	1.31
1	N	1071	C	C1'-N1	5.58	1.57	1.48
1	N	330	C	C1'-N1	5.58	1.57	1.48
1	N	1124	G	N9-C4	-5.58	1.33	1.38
1	N	1165	U	C2'-C1'	-5.58	1.47	1.53
1	N	1410	A	N3-C4	5.58	1.38	1.34
1	N	104	G	C5'-C4'	5.57	1.58	1.51
1	N	540	G	C2-N2	5.57	1.40	1.34
1	N	994	A	N1-C2	-5.57	1.29	1.34
1	N	1018	G	C4'-O4'	5.57	1.52	1.45
1	N	1080	A	C5-C6	-5.57	1.36	1.41
1	N	1130	A	C5-C4	-5.57	1.34	1.38
1	N	1484	C	C2'-C1'	5.57	1.59	1.53
1	N	19	A	P-O5'	5.57	1.65	1.59
1	N	207	C	C4'-C3'	-5.57	1.47	1.52
1	N	1146	A	N3-C4	-5.57	1.31	1.34
1	N	1279	G	C5'-C4'	5.57	1.58	1.51
1	N	191	G	N3-C4	5.57	1.39	1.35
1	N	1028	C	C2'-C1'	-5.57	1.47	1.53
1	N	1177	G	C2-N3	5.57	1.37	1.32
1	N	1458	G	C5-C4	-5.57	1.34	1.38
1	N	293	G	C8-N7	-5.57	1.27	1.30
1	N	136	C	N1-C6	5.57	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1136	C	N3-C4	5.57	1.37	1.33
1	N	1172	C	C3'-O3'	5.57	1.50	1.42
1	N	1505	G	O5'-C5'	5.57	1.53	1.44
1	N	329	A	C3'-C2'	5.57	1.59	1.52
1	N	465	A	C5'-C4'	5.57	1.58	1.51
1	N	1331	G	N1-C2	5.57	1.42	1.37
1	N	432	A	P-O5'	-5.56	1.54	1.59
1	N	575	G	P-O5'	5.56	1.65	1.59
1	N	20	U	C2'-C1'	-5.56	1.47	1.53
1	N	832	G	C6-N1	5.56	1.43	1.39
1	N	1001	C	C5'-C4'	5.56	1.58	1.51
1	N	338	A	C5-C6	-5.56	1.36	1.41
1	N	905	U	C2'-O2'	-5.56	1.34	1.41
1	N	225	C	P-O5'	-5.56	1.54	1.59
1	N	906	A	C5-C4	5.56	1.42	1.38
1	N	914	A	C2'-C1'	-5.56	1.47	1.53
1	N	200	G	O3'-P	-5.56	1.54	1.61
1	N	495	A	C5'-C4'	5.56	1.58	1.51
1	N	1023	U	C5-C6	5.56	1.39	1.34
1	N	1484	C	O5'-C5'	-5.56	1.33	1.42
1	N	1530	G	N3-C4	-5.56	1.31	1.35
1	N	424	G	C2'-C1'	-5.56	1.47	1.53
1	N	1005	A	C1'-N9	5.56	1.57	1.48
1	N	1131	G	C5-C6	-5.56	1.36	1.42
1	N	377	G	N9-C4	-5.55	1.33	1.38
1	N	481	G	N7-C5	-5.55	1.35	1.39
1	N	670	G	C2'-C1'	-5.55	1.47	1.53
1	N	1191	A	C6-N6	5.55	1.38	1.33
1	N	1392	G	N1-C2	5.55	1.42	1.37
1	N	340	U	C5-C6	5.55	1.39	1.34
1	N	334	C	C2'-C1'	-5.55	1.47	1.53
1	N	363	A	O3'-P	-5.55	1.54	1.61
1	N	1392	G	N9-C8	-5.55	1.33	1.37
1	N	2	A	C8-N7	-5.55	1.27	1.31
1	N	711	G	O3'-P	-5.55	1.54	1.61
1	N	923	A	C6-N6	5.55	1.38	1.33
1	N	608	A	C5-C4	5.55	1.42	1.38
1	N	905	U	N1-C2	-5.55	1.33	1.38
1	N	1451	U	N3-C4	5.55	1.43	1.38
1	N	363	A	N9-C8	5.55	1.42	1.37
1	N	754	C	C4'-C3'	5.55	1.59	1.53
1	N	767	A	N7-C5	-5.55	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	823	C	N1-C6	5.55	1.40	1.37
1	N	1030	U	C2-N3	5.55	1.41	1.37
1	N	1102	A	C8-N7	-5.55	1.27	1.31
1	N	1352	C	C5-C6	-5.55	1.29	1.34
1	N	684	U	C1'-N1	5.54	1.57	1.48
1	N	94	G	P-O5'	5.54	1.65	1.59
1	N	270	A	N9-C4	-5.54	1.34	1.37
1	N	340	U	C4-O4	5.54	1.28	1.23
1	N	1066	C	O4'-C1'	5.54	1.48	1.41
1	N	1178	G	N7-C5	-5.54	1.35	1.39
1	N	383	A	C6-N1	5.54	1.39	1.35
1	N	1005	A	C2-N3	5.54	1.38	1.33
1	N	1343	G	N9-C4	-5.54	1.33	1.38
1	N	1460	C	C4'-O4'	-5.54	1.38	1.45
1	N	922	G	C4'-C3'	-5.54	1.47	1.52
1	N	336	A	N7-C5	-5.54	1.35	1.39
1	N	1072	G	N7-C5	-5.54	1.35	1.39
1	N	500	G	N1-C2	5.53	1.42	1.37
1	N	1500	A	C6-N6	5.53	1.38	1.33
1	N	878	A	N3-C4	5.53	1.38	1.34
1	N	579	A	N1-C2	5.53	1.39	1.34
1	N	588	G	P-O5'	-5.53	1.54	1.59
1	N	1394	A	C5-C4	-5.53	1.34	1.38
1	N	519	C	N3-C4	5.53	1.37	1.33
1	N	998	C	C3'-C2'	5.53	1.59	1.52
1	N	324	G	N9-C8	-5.53	1.33	1.37
1	N	1402	C	C5-C6	5.53	1.38	1.34
1	N	47	C	C4-N4	5.52	1.39	1.33
1	N	716	A	N9-C4	5.52	1.41	1.37
1	N	1210	C	C2-N3	-5.52	1.31	1.35
1	N	90	C	C5-C6	-5.52	1.29	1.34
1	N	280	C	N1-C6	5.52	1.40	1.37
1	N	423	G	C5-C4	5.52	1.42	1.38
1	N	1033	G	N7-C5	5.52	1.42	1.39
1	N	1389	C	C5-C6	-5.52	1.29	1.34
1	N	203	G	C2'-C1'	-5.52	1.47	1.53
1	N	534	U	N1-C2	5.52	1.43	1.38
1	N	672	U	C5-C6	5.52	1.39	1.34
1	N	1329	A	N3-C4	-5.52	1.31	1.34
1	N	637	C	C5'-C4'	5.52	1.57	1.51
1	N	724	G	C2-N3	5.52	1.37	1.32
1	N	1435	G	N9-C8	5.52	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1126	U	C5'-C4'	5.52	1.57	1.51
1	N	664	G	C6-N1	5.51	1.43	1.39
1	N	668	G	N1-C2	5.51	1.42	1.37
1	N	830	G	C8-N7	-5.51	1.27	1.30
1	N	1059	C	C1'-N1	5.51	1.57	1.48
1	N	1152	A	C4'-C3'	5.51	1.59	1.53
1	N	1367	C	C4-N4	5.51	1.39	1.33
1	N	1411	C	C4-C5	5.51	1.47	1.43
1	N	630	A	C2-N3	5.51	1.38	1.33
1	N	1335	U	O4'-C1'	-5.51	1.34	1.41
1	N	1448	C	N3-C4	5.51	1.37	1.33
1	N	428	G	C4'-C3'	5.51	1.59	1.53
1	N	902	G	P-O5'	-5.51	1.54	1.59
1	N	1073	U	C4'-O4'	-5.51	1.38	1.45
1	N	1103	C	C2'-C1'	-5.51	1.47	1.53
1	N	390	U	C5-C6	-5.51	1.29	1.34
1	N	1001	C	P-O5'	-5.51	1.54	1.59
1	N	1511	G	N9-C8	5.51	1.41	1.37
1	N	489	C	N1-C2	-5.51	1.34	1.40
1	N	813	U	C4'-O4'	-5.51	1.38	1.45
1	N	894	G	P-O5'	-5.51	1.54	1.59
1	N	1166	G	N9-C4	-5.51	1.33	1.38
1	N	89	U	C4-C5	5.51	1.48	1.43
1	N	184	G	C4'-C3'	5.51	1.59	1.53
1	N	877	G	P-O5'	-5.51	1.54	1.59
1	N	506	G	N1-C2	5.50	1.42	1.37
1	N	571	U	C4'-C3'	5.50	1.59	1.53
1	N	11	G	C5'-C4'	5.50	1.57	1.51
1	N	100	G	C3'-O3'	5.50	1.49	1.42
1	N	216	U	C4-C5	-5.50	1.38	1.43
1	N	551	U	C2-N3	5.50	1.41	1.37
1	N	1175	G	C5-C4	-5.50	1.34	1.38
1	N	263	A	C8-N7	-5.50	1.27	1.31
1	N	750	C	N1-C6	5.50	1.40	1.37
1	N	797	C	N1-C6	5.50	1.40	1.37
1	N	967	C	C4'-C3'	5.50	1.59	1.53
1	N	1421	G	C5-C4	5.50	1.42	1.38
1	N	167	A	C6-N6	5.50	1.38	1.33
1	N	1508	A	C6-N6	5.50	1.38	1.33
1	N	460	A	C8-N7	5.50	1.35	1.31
1	N	953	G	C2'-C1'	5.50	1.59	1.53
1	N	184	G	C2-N2	-5.50	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	489	C	C3'-O3'	-5.50	1.34	1.42
1	N	1103	C	N3-C4	5.50	1.37	1.33
1	N	65	A	C6-N6	5.50	1.38	1.33
1	N	314	C	C2'-C1'	-5.50	1.47	1.53
1	N	1025	U	C1'-N1	5.50	1.56	1.48
1	N	1180	A	N9-C4	-5.50	1.34	1.37
1	N	374	A	N9-C4	-5.49	1.34	1.37
1	N	427	U	N3-C4	5.49	1.43	1.38
1	N	480	U	C3'-C2'	5.49	1.58	1.52
1	N	1424	U	N1-C2	5.49	1.43	1.38
1	N	1439	G	N3-C4	-5.49	1.31	1.35
1	N	1528	U	O5'-C5'	5.49	1.53	1.44
1	N	1003	G	N9-C8	-5.49	1.34	1.37
1	N	254	G	P-O5'	-5.49	1.54	1.59
1	N	44	A	C4'-C3'	5.49	1.59	1.53
1	N	198	G	C5-C4	5.49	1.42	1.38
1	N	409	U	O3'-P	-5.49	1.54	1.61
1	N	557	G	C5-C4	5.49	1.42	1.38
1	N	1030	U	C4'-C3'	5.49	1.59	1.53
1	N	1049	U	N3-C4	5.49	1.43	1.38
1	N	379	C	C4'-C3'	5.49	1.59	1.53
1	N	176	C	O5'-C5'	-5.49	1.34	1.42
1	N	699	C	N3-C4	5.49	1.37	1.33
1	N	1061	G	P-O5'	-5.49	1.54	1.59
1	N	102	G	N9-C4	-5.48	1.33	1.38
1	N	304	U	N1-C6	-5.48	1.33	1.38
1	N	84	U	N1-C2	5.48	1.43	1.38
1	N	544	G	N9-C4	-5.48	1.33	1.38
1	N	560	A	N7-C5	5.48	1.42	1.39
1	N	943	U	C4'-C3'	5.48	1.59	1.53
1	N	872	A	C5-C4	-5.48	1.34	1.38
1	N	932	C	C5-C6	5.48	1.38	1.34
1	N	1497	G	N3-C4	5.48	1.39	1.35
1	N	10	A	C4'-C3'	-5.48	1.47	1.52
1	N	147	G	O4'-C1'	5.48	1.48	1.41
1	N	1406	U	N3-C4	5.48	1.43	1.38
1	N	414	A	C2-N3	5.47	1.38	1.33
1	N	625	U	C3'-O3'	5.47	1.49	1.42
1	N	928	G	C5'-C4'	5.47	1.57	1.51
1	N	978	A	P-O5'	-5.47	1.54	1.59
1	N	1157	A	C8-N7	-5.47	1.27	1.31
1	N	110	C	P-O5'	5.47	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	399	G	N1-C2	5.47	1.42	1.37
1	N	792	A	N9-C8	5.47	1.42	1.37
1	N	78	A	C5'-C4'	5.47	1.57	1.51
1	N	1097	C	C4'-C3'	5.47	1.59	1.53
1	N	1280	A	C5-C6	-5.47	1.36	1.41
1	N	64	G	N3-C4	-5.47	1.31	1.35
1	N	679	C	C4-N4	5.47	1.38	1.33
1	N	1068	G	N9-C8	5.47	1.41	1.37
1	N	762	U	C3'-C2'	5.47	1.58	1.52
1	N	749	A	N3-C4	5.46	1.38	1.34
1	N	1419	G	C5-C4	-5.46	1.34	1.38
1	N	123	U	C2-N3	5.46	1.41	1.37
1	N	134	G	C6-N1	5.46	1.43	1.39
1	N	681	A	C6-N6	5.46	1.38	1.33
1	N	1237	C	C2-N3	5.46	1.40	1.35
1	N	1416	G	N1-C2	5.46	1.42	1.37
1	N	227	G	C3'-O3'	5.46	1.49	1.42
1	N	250	A	C6-N1	5.46	1.39	1.35
1	N	731	G	C6-N1	5.46	1.43	1.39
1	N	1029	U	C4'-O4'	5.46	1.52	1.45
1	N	1287	A	C4'-C3'	5.46	1.59	1.53
1	N	276	G	C8-N7	-5.46	1.27	1.30
1	N	337	G	C5-C4	-5.46	1.34	1.38
1	N	807	A	C5'-C4'	5.46	1.57	1.51
1	N	1099	G	N9-C8	5.46	1.41	1.37
1	N	449	G	C5-C4	-5.46	1.34	1.38
1	N	870	U	N1-C6	5.46	1.42	1.38
1	N	876	C	C4-N4	5.46	1.38	1.33
1	N	919	A	N9-C4	-5.46	1.34	1.37
1	N	1196	A	O3'-P	-5.46	1.54	1.61
1	N	67	C	C1'-N1	5.46	1.56	1.48
1	N	350	G	C2'-C1'	-5.46	1.47	1.53
1	N	651	C	P-O5'	-5.46	1.54	1.59
1	N	672	U	C5'-C4'	5.46	1.57	1.51
1	N	920	U	N3-C4	5.46	1.43	1.38
1	N	970	C	N1-C6	5.46	1.40	1.37
1	N	1534	A	C6-N6	5.46	1.38	1.33
1	N	43	C	N1-C2	-5.46	1.34	1.40
1	N	386	C	P-O5'	-5.46	1.54	1.59
1	N	1192	C	C2-N3	5.46	1.40	1.35
1	N	461	A	C8-N7	-5.45	1.27	1.31
1	N	592	G	C5'-C4'	5.45	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	672	U	C4'-C3'	5.45	1.59	1.53
1	N	1382	C	C2'-O2'	-5.45	1.34	1.41
1	N	966	G	C4'-C3'	-5.45	1.47	1.52
1	N	244	U	C4'-C3'	5.45	1.59	1.53
1	N	496	A	N9-C8	-5.45	1.33	1.37
1	N	635	A	C5-C6	5.45	1.46	1.41
1	N	1004	A	N7-C5	-5.45	1.35	1.39
1	N	1376	U	C5'-C4'	5.45	1.57	1.51
1	N	1476	A	C6-N6	5.45	1.38	1.33
1	N	100	G	C6-O6	-5.45	1.19	1.24
1	N	625	U	O3'-P	-5.45	1.54	1.61
1	N	701	U	C4'-C3'	5.45	1.59	1.53
1	N	1006	G	C5-C6	5.45	1.47	1.42
1	N	1010	U	C2'-C1'	-5.45	1.47	1.53
1	N	2	A	O4'-C1'	5.45	1.48	1.41
1	N	30	U	N1-C6	5.45	1.42	1.38
1	N	1263	C	C3'-C2'	-5.45	1.46	1.52
1	N	450	G	C2-N3	5.44	1.37	1.32
1	N	205	A	C5'-C4'	5.44	1.57	1.51
1	N	224	U	N3-C4	5.44	1.43	1.38
1	N	717	U	O4'-C1'	5.44	1.48	1.41
1	N	1480	A	N1-C2	5.44	1.39	1.34
1	N	1106	G	O5'-C5'	5.44	1.53	1.44
1	N	1500	A	C3'-O3'	5.44	1.49	1.42
1	N	143	A	N7-C5	-5.44	1.35	1.39
1	N	404	G	N3-C4	-5.44	1.31	1.35
1	N	434	U	C4-C5	5.44	1.48	1.43
1	N	613	C	C4'-O4'	5.44	1.52	1.45
1	N	745	G	C5-C4	5.44	1.42	1.38
1	N	809	G	C5-C6	-5.44	1.36	1.42
1	N	870	U	P-O5'	-5.44	1.54	1.59
1	N	1320	C	N3-C4	5.44	1.37	1.33
1	N	1423	G	C5-C4	5.44	1.42	1.38
1	N	1487	G	C6-N1	5.44	1.43	1.39
1	N	200	G	C3'-O3'	-5.44	1.34	1.42
1	N	457	G	C5-C4	5.44	1.42	1.38
1	N	187	G	C3'-C2'	-5.43	1.46	1.52
1	N	189	A	C3'-C2'	5.43	1.58	1.52
1	N	1029	U	C4'-C3'	-5.43	1.47	1.52
1	N	1049	U	N1-C6	5.43	1.42	1.38
1	N	45	G	N9-C8	-5.43	1.34	1.37
1	N	68	G	P-O5'	-5.43	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	403	C	N3-C4	5.43	1.37	1.33
1	N	1533	C	N1-C6	-5.43	1.33	1.37
1	N	601	G	N1-C2	5.43	1.42	1.37
1	N	1333	A	C6-N1	5.43	1.39	1.35
1	N	1407	C	C4-N4	5.43	1.38	1.33
1	N	1426	G	N7-C5	-5.43	1.35	1.39
1	N	195	A	C2-N3	-5.43	1.28	1.33
1	N	284	C	N3-C4	5.43	1.37	1.33
1	N	1090	U	C2-N3	5.43	1.41	1.37
1	N	250	A	O3'-P	-5.43	1.54	1.61
1	N	1095	U	C2-O2	5.43	1.27	1.22
1	N	1172	C	N3-C4	5.43	1.37	1.33
1	N	1309	G	O4'-C1'	5.43	1.48	1.41
1	N	154	U	C2-O2	5.42	1.27	1.22
1	N	362	G	N9-C8	-5.42	1.34	1.37
1	N	365	U	P-O5'	-5.42	1.54	1.59
1	N	671	G	C2-N3	5.42	1.37	1.32
1	N	999	C	C2-N3	5.42	1.40	1.35
1	N	1155	A	C5'-C4'	-5.42	1.44	1.51
1	N	1321	U	O3'-P	-5.42	1.54	1.61
1	N	1334	G	N3-C4	-5.42	1.31	1.35
1	N	1369	C	C5'-C4'	5.42	1.57	1.51
1	N	1378	C	O4'-C1'	5.42	1.48	1.41
1	N	134	G	O3'-P	5.42	1.67	1.61
1	N	588	G	N1-C2	5.42	1.42	1.37
1	N	26	A	C4'-C3'	5.42	1.59	1.53
1	N	76	G	C5-C4	5.42	1.42	1.38
1	N	149	A	C5-C4	5.42	1.42	1.38
1	N	412	A	N1-C2	5.42	1.39	1.34
1	N	860	A	C8-N7	5.42	1.35	1.31
1	N	545	C	C2-N3	-5.42	1.31	1.35
1	N	994	A	C2-N3	5.42	1.38	1.33
1	N	1269	A	C6-N1	5.42	1.39	1.35
1	N	28	A	C8-N7	-5.42	1.27	1.31
1	N	605	U	C4-C5	5.42	1.48	1.43
1	N	734	G	C6-N1	5.42	1.43	1.39
1	N	1241	G	N3-C4	-5.42	1.31	1.35
1	N	1299	A	N7-C5	-5.42	1.35	1.39
1	N	1391	U	P-O5'	-5.42	1.54	1.59
1	N	1490	U	C1'-N1	5.42	1.56	1.48
1	N	400	C	C4-N4	5.42	1.38	1.33
1	N	840	C	O3'-P	-5.42	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	691	G	P-O5'	-5.42	1.54	1.59
1	N	820	U	C3'-C2'	5.42	1.58	1.52
1	N	1185	G	N9-C8	-5.42	1.34	1.37
1	N	128	G	N3-C4	5.41	1.39	1.35
1	N	523	A	C5'-C4'	5.41	1.57	1.51
1	N	202	G	N3-C4	-5.41	1.31	1.35
1	N	1116	U	N1-C2	5.41	1.43	1.38
1	N	378	G	C2'-C1'	-5.41	1.47	1.53
1	N	382	A	N3-C4	-5.41	1.31	1.34
1	N	585	G	N1-C2	5.41	1.42	1.37
1	N	679	C	C2-N3	5.41	1.40	1.35
1	N	1221	G	C6-N1	5.41	1.43	1.39
1	N	538	G	C5-C6	-5.41	1.36	1.42
1	N	753	A	C8-N7	-5.41	1.27	1.31
1	N	1154	G	C2-N3	5.41	1.37	1.32
1	N	1255	G	C5'-C4'	5.41	1.57	1.51
1	N	1290	G	N9-C4	5.41	1.42	1.38
1	N	119	A	C5'-C4'	5.41	1.57	1.51
1	N	464	U	O3'-P	-5.41	1.54	1.61
1	N	670	G	N7-C5	-5.41	1.36	1.39
1	N	72	A	N1-C2	-5.41	1.29	1.34
1	N	613	C	C2'-C1'	-5.41	1.47	1.53
1	N	741	G	C2-N3	5.41	1.37	1.32
1	N	1465	A	C4'-O4'	5.41	1.52	1.45
1	N	669	G	C2'-C1'	-5.40	1.47	1.53
1	N	1482	G	C8-N7	-5.40	1.27	1.30
1	N	675	A	N7-C5	-5.40	1.36	1.39
1	N	1038	C	O3'-P	-5.40	1.54	1.61
1	N	48	C	C5'-C4'	5.40	1.57	1.51
1	N	433	G	N1-C2	5.40	1.42	1.37
1	N	966	G	N1-C2	5.40	1.42	1.37
1	N	855	U	C5-C6	-5.40	1.29	1.34
1	N	1274	A	C4'-O4'	5.40	1.52	1.45
1	N	674	G	O4'-C1'	5.40	1.48	1.41
1	N	921	U	C5'-C4'	5.40	1.57	1.51
1	N	959	A	C2'-O2'	5.40	1.48	1.41
1	N	1160	G	N1-C2	5.40	1.42	1.37
1	N	1404	C	C2-N3	5.40	1.40	1.35
1	N	1526	G	C2-N3	5.40	1.37	1.32
1	N	568	G	C4'-O4'	5.39	1.52	1.45
1	N	696	A	O4'-C1'	5.39	1.48	1.41
1	N	978	A	C4'-C3'	5.39	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1177	G	O3'-P	-5.39	1.54	1.61
1	N	1357	A	N3-C4	5.39	1.38	1.34
1	N	389	A	C2-N3	5.39	1.38	1.33
1	N	584	G	N9-C8	5.39	1.41	1.37
1	N	855	U	C2'-C1'	5.39	1.59	1.53
1	N	1188	A	N3-C4	-5.39	1.31	1.34
1	N	624	C	P-O5'	-5.39	1.54	1.59
1	N	1218	C	C4-N4	5.39	1.38	1.33
1	N	1151	A	C2'-C1'	-5.39	1.47	1.53
1	N	1207	G	N9-C4	-5.39	1.33	1.38
1	N	16	A	N7-C5	-5.39	1.36	1.39
1	N	599	C	C2-N3	-5.39	1.31	1.35
1	N	1281	C	C4-N4	5.39	1.38	1.33
1	N	208	U	N3-C4	5.39	1.43	1.38
1	N	360	G	C5-C4	5.39	1.42	1.38
1	N	416	G	C5-C4	5.39	1.42	1.38
1	N	754	C	C2'-O2'	-5.39	1.34	1.41
1	N	848	C	C2-O2	5.39	1.29	1.24
1	N	1160	G	C5'-C4'	5.39	1.57	1.51
1	N	1240	U	C4'-O4'	5.39	1.52	1.45
1	N	1298	U	C1'-N1	5.39	1.56	1.48
1	N	1489	G	C2-N3	5.39	1.37	1.32
1	N	27	G	C2-N2	5.38	1.40	1.34
1	N	135	C	C3'-O3'	5.38	1.49	1.42
1	N	430	A	C6-N6	5.38	1.38	1.33
1	N	482	A	C6-N1	5.38	1.39	1.35
1	N	1388	C	C2-O2	5.38	1.29	1.24
1	N	351	G	C2-N2	5.38	1.40	1.34
1	N	1242	G	C2'-C1'	-5.38	1.47	1.53
1	N	357	G	O4'-C1'	5.38	1.48	1.41
1	N	1480	A	C8-N7	-5.38	1.27	1.31
1	N	1525	G	N1-C2	5.38	1.42	1.37
1	N	496	A	C3'-C2'	5.38	1.58	1.52
1	N	1231	G	O3'-P	-5.38	1.54	1.61
1	N	1107	C	C1'-N1	5.38	1.56	1.48
1	N	1479	C	C4-N4	5.38	1.38	1.33
1	N	105	G	O3'-P	5.38	1.67	1.61
1	N	298	A	C3'-O3'	5.38	1.49	1.42
1	N	470	C	N1-C6	5.38	1.40	1.37
1	N	517	G	N3-C4	-5.38	1.31	1.35
1	N	706	A	N7-C5	-5.38	1.36	1.39
1	N	1359	C	C2-O2	5.38	1.29	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1512	U	C2-O2	5.38	1.27	1.22
1	N	1107	C	C4-C5	-5.38	1.38	1.43
1	N	82	G	N9-C4	5.37	1.42	1.38
1	N	102	G	C6-N1	-5.37	1.35	1.39
1	N	169	C	C4-C5	5.37	1.47	1.43
1	N	824	G	C8-N7	-5.37	1.27	1.30
1	N	1205	U	C4'-O4'	5.37	1.52	1.45
1	N	114	U	C4'-C3'	5.37	1.59	1.53
1	N	220	G	N7-C5	-5.37	1.36	1.39
1	N	460	A	N3-C4	5.37	1.38	1.34
1	N	586	C	N1-C6	-5.37	1.33	1.37
1	N	1060	U	C4'-O4'	5.37	1.52	1.45
1	N	1260	G	C2-N2	5.37	1.40	1.34
1	N	1516	G	C5'-C4'	5.37	1.57	1.51
1	N	462	G	N1-C2	5.37	1.42	1.37
1	N	1278	G	N9-C8	-5.37	1.34	1.37
1	N	270	A	N3-C4	-5.37	1.31	1.34
1	N	455	G	N1-C2	5.37	1.42	1.37
1	N	27	G	N9-C4	5.37	1.42	1.38
1	N	675	A	N9-C8	5.37	1.42	1.37
1	N	658	C	C3'-C2'	-5.37	1.46	1.52
1	N	700	G	C4'-C3'	5.37	1.59	1.53
1	N	969	A	N9-C4	5.37	1.41	1.37
1	N	1305	G	N1-C2	5.37	1.42	1.37
1	N	561	U	N3-C4	5.36	1.43	1.38
1	N	1223	C	C1'-N1	5.36	1.56	1.48
1	N	207	C	N1-C6	5.36	1.40	1.37
1	N	203	G	O3'-P	5.36	1.67	1.61
1	N	544	G	N7-C5	-5.36	1.36	1.39
1	N	825	A	C5-C4	5.36	1.42	1.38
1	N	1099	G	C8-N7	5.36	1.34	1.30
1	N	1126	U	N1-C6	5.36	1.42	1.38
1	N	1403	C	N1-C2	5.36	1.45	1.40
1	N	168	G	P-O5'	-5.36	1.54	1.59
1	N	313	A	C2'-C1'	-5.36	1.47	1.53
1	N	388	G	N7-C5	-5.36	1.36	1.39
1	N	402	G	N9-C8	5.36	1.41	1.37
1	N	800	G	O3'-P	-5.36	1.54	1.61
1	N	1120	C	C4'-C3'	5.36	1.59	1.53
1	N	1443	C	N1-C6	5.36	1.40	1.37
1	N	8	A	N9-C4	5.36	1.41	1.37
1	N	467	U	C4'-C3'	5.36	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	836	G	N9-C8	5.36	1.41	1.37
1	N	1242	G	C1'-N9	5.36	1.56	1.48
1	N	1502	A	C2'-C1'	-5.36	1.47	1.53
1	N	560	A	C3'-C2'	-5.35	1.46	1.52
1	N	41	G	C8-N7	5.35	1.34	1.30
1	N	135	C	C4-N4	5.35	1.38	1.33
1	N	544	G	N1-C2	5.35	1.42	1.37
1	N	616	G	C8-N7	-5.35	1.27	1.30
1	N	754	C	C4-C5	5.35	1.47	1.43
1	N	1260	G	C2-N3	5.35	1.37	1.32
1	N	1414	U	N3-C4	5.35	1.43	1.38
1	N	1186	G	C5-C6	5.35	1.47	1.42
1	N	292	G	C8-N7	-5.35	1.27	1.30
1	N	746	A	N3-C4	-5.35	1.31	1.34
1	N	1318	A	C2'-C1'	-5.35	1.47	1.53
1	N	667	G	N7-C5	-5.35	1.36	1.39
1	N	1326	U	P-O5'	-5.35	1.54	1.59
1	N	1342	C	N3-C4	5.35	1.37	1.33
1	N	1463	U	C3'-C2'	-5.35	1.46	1.52
1	N	1457	G	N1-C2	5.35	1.42	1.37
1	N	1458	G	C5'-C4'	5.35	1.57	1.51
1	N	433	G	N7-C5	-5.34	1.36	1.39
1	N	710	G	N1-C2	5.34	1.42	1.37
1	N	736	C	C4-C5	-5.34	1.38	1.43
1	N	938	A	N1-C2	5.34	1.39	1.34
1	N	1037	C	N1-C6	5.34	1.40	1.37
1	N	1336	C	N1-C6	-5.34	1.33	1.37
1	N	1362	A	N3-C4	5.34	1.38	1.34
1	N	727	G	C2-N3	5.34	1.37	1.32
1	N	427	U	C3'-O3'	5.34	1.49	1.42
1	N	579	A	C5'-C4'	5.34	1.57	1.51
1	N	613	C	C3'-C2'	5.34	1.58	1.52
1	N	967	C	N1-C2	5.34	1.45	1.40
1	N	1305	G	C2-N2	5.34	1.39	1.34
1	N	1355	G	N3-C4	-5.34	1.31	1.35
1	N	1530	G	C6-N1	5.34	1.43	1.39
1	N	1239	A	N9-C4	-5.34	1.34	1.37
1	N	1362	A	C1'-N9	5.34	1.56	1.48
1	N	1530	G	C5'-C4'	5.34	1.57	1.51
1	N	86	G	P-O5'	-5.33	1.54	1.59
1	N	129	A	C5-C4	5.33	1.42	1.38
1	N	308	C	O4'-C1'	5.33	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	923	A	C5-C4	5.33	1.42	1.38
1	N	1182	G	N3-C4	-5.33	1.31	1.35
1	N	618	C	C4-N4	5.33	1.38	1.33
1	N	785	G	N3-C4	-5.33	1.31	1.35
1	N	918	A	C6-N6	5.33	1.38	1.33
1	N	1105	A	C1'-N9	5.33	1.56	1.48
1	N	1484	C	C3'-C2'	5.33	1.58	1.52
1	N	1001	C	N1-C2	-5.33	1.34	1.40
1	N	1223	C	C2-N3	5.33	1.40	1.35
1	N	1283	U	C4-O4	-5.33	1.19	1.23
1	N	1287	A	P-O5'	-5.33	1.54	1.59
1	N	403	C	C4'-O4'	-5.33	1.38	1.45
1	N	928	G	C3'-C2'	5.33	1.58	1.52
1	N	540	G	C2'-C1'	-5.33	1.47	1.53
1	N	819	A	N1-C2	-5.33	1.29	1.34
1	N	1138	G	O4'-C1'	-5.33	1.34	1.41
1	N	528	C	C4'-O4'	5.32	1.52	1.45
1	N	1016	A	N3-C4	-5.32	1.31	1.34
1	N	1206	G	C4'-O4'	-5.32	1.38	1.45
1	N	1159	U	C2'-C1'	-5.32	1.47	1.53
1	N	1512	U	C2'-C1'	-5.32	1.47	1.53
1	N	109	A	C5'-C4'	5.32	1.57	1.51
1	N	314	C	C4-N4	5.32	1.38	1.33
1	N	861	G	C6-N1	5.32	1.43	1.39
1	N	1120	C	C1'-N1	5.32	1.56	1.48
1	N	1133	G	C3'-O3'	5.32	1.49	1.42
1	N	1098	C	N3-C4	5.32	1.37	1.33
1	N	22	G	C3'-O3'	5.32	1.49	1.42
1	N	1427	C	C2-O2	-5.32	1.19	1.24
1	N	88	U	C5-C6	-5.32	1.29	1.34
1	N	1081	A	C6-N6	5.32	1.38	1.33
1	N	651	C	C4'-O4'	-5.31	1.38	1.45
1	N	729	A	C5-C4	5.31	1.42	1.38
1	N	865	A	N7-C5	-5.31	1.36	1.39
1	N	26	A	C3'-C2'	-5.31	1.47	1.52
1	N	811	C	N3-C4	5.31	1.37	1.33
1	N	1044	A	C5-C4	5.31	1.42	1.38
1	N	1201	A	N1-C2	5.31	1.39	1.34
1	N	1504	G	C5-C6	-5.31	1.37	1.42
1	N	57	G	P-OP1	5.31	1.57	1.49
1	N	196	A	C8-N7	5.31	1.35	1.31
1	N	206	C	C5-C6	-5.31	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	353	A	N9-C8	5.31	1.42	1.37
1	N	408	A	N9-C8	5.31	1.42	1.37
1	N	504	C	N3-C4	5.31	1.37	1.33
1	N	1102	A	N7-C5	-5.31	1.36	1.39
1	N	1440	U	C1'-N1	5.31	1.56	1.48
1	N	1530	G	N7-C5	-5.31	1.36	1.39
1	N	44	A	C5-C4	5.31	1.42	1.38
1	N	283	U	O3'-P	-5.31	1.54	1.61
1	N	344	A	N7-C5	-5.31	1.36	1.39
1	N	722	G	N9-C8	-5.31	1.34	1.37
1	N	763	G	C5-C4	5.31	1.42	1.38
1	N	1159	U	C4-O4	-5.31	1.19	1.23
1	N	1324	A	C5-C6	-5.31	1.36	1.41
1	N	836	G	N9-C4	-5.31	1.33	1.38
1	N	23	C	C4-C5	5.30	1.47	1.43
1	N	126	G	C2-N2	5.30	1.39	1.34
1	N	490	C	C5-C6	-5.30	1.30	1.34
1	N	1010	U	C3'-C2'	-5.30	1.47	1.52
1	N	444	G	P-O5'	-5.30	1.54	1.59
1	N	56	U	C1'-N1	5.30	1.56	1.48
1	N	139	A	C3'-O3'	5.30	1.49	1.42
1	N	223	A	N9-C8	-5.30	1.33	1.37
1	N	269	C	N3-C4	5.30	1.37	1.33
1	N	500	G	P-O5'	-5.30	1.54	1.59
1	N	751	U	C4-C5	-5.30	1.38	1.43
1	N	1042	A	C3'-O3'	5.30	1.49	1.42
1	N	1286	U	O4'-C1'	5.30	1.48	1.41
1	N	1300	G	N7-C5	-5.30	1.36	1.39
1	N	376	G	N3-C4	5.30	1.39	1.35
1	N	544	G	N9-C8	-5.30	1.34	1.37
1	N	708	C	C3'-C2'	-5.30	1.47	1.52
1	N	811	C	C1'-N1	5.30	1.56	1.48
1	N	897	C	N1-C6	5.30	1.40	1.37
1	N	1082	A	C3'-C2'	5.30	1.58	1.52
1	N	1322	C	C2'-C1'	5.30	1.59	1.53
1	N	554	A	C5-C4	5.30	1.42	1.38
1	N	1023	U	N3-C4	5.30	1.43	1.38
1	N	640	A	C6-N1	5.30	1.39	1.35
1	N	1419	G	C6-N1	5.30	1.43	1.39
1	N	1423	G	N1-C2	5.29	1.42	1.37
1	N	202	G	O3'-P	-5.29	1.54	1.61
1	N	296	U	C1'-N1	5.29	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	448	A	C6-N1	5.29	1.39	1.35
1	N	558	G	C2-N3	5.29	1.36	1.32
1	N	630	A	C3'-C2'	5.29	1.58	1.52
1	N	792	A	N9-C4	-5.29	1.34	1.37
1	N	1182	G	O3'-P	-5.29	1.54	1.61
1	N	1393	U	O3'-P	-5.29	1.54	1.61
1	N	731	G	N9-C4	-5.29	1.33	1.38
1	N	1382	C	N3-C4	5.29	1.37	1.33
1	N	567	G	N1-C2	5.29	1.42	1.37
1	N	1302	C	C2-N3	5.29	1.40	1.35
1	N	166	U	C3'-C2'	5.29	1.58	1.52
1	N	918	A	N1-C2	5.29	1.39	1.34
1	N	1080	A	C5-C4	5.29	1.42	1.38
1	N	1090	U	N3-C4	5.29	1.43	1.38
1	N	118	U	N3-C4	5.29	1.43	1.38
1	N	135	C	C2'-C1'	5.29	1.59	1.53
1	N	351	G	N9-C4	-5.29	1.33	1.38
1	N	411	A	C5'-C4'	5.28	1.57	1.51
1	N	524	G	N1-C2	5.28	1.42	1.37
1	N	650	G	C5-C4	5.28	1.42	1.38
1	N	1074	G	C5'-C4'	5.28	1.57	1.51
1	N	171	A	C6-N6	5.28	1.38	1.33
1	N	589	U	C2-N3	5.28	1.41	1.37
1	N	785	G	C1'-N9	5.28	1.56	1.48
1	N	1486	G	N3-C4	-5.28	1.31	1.35
1	N	999	C	C5'-C4'	5.28	1.57	1.51
1	N	1175	G	C2-N3	5.28	1.36	1.32
1	N	1502	A	C8-N7	5.28	1.35	1.31
1	N	628	G	C3'-O3'	5.28	1.49	1.42
1	N	1187	G	N9-C8	5.28	1.41	1.37
1	N	1224	U	C4'-C3'	5.28	1.58	1.53
1	N	6	G	C5-C4	5.28	1.42	1.38
1	N	61	G	N1-C2	5.28	1.42	1.37
1	N	89	U	C2'-C1'	-5.28	1.47	1.53
1	N	104	G	C2'-C1'	-5.28	1.47	1.53
1	N	704	A	N9-C4	-5.28	1.34	1.37
1	N	716	A	C4'-C3'	5.28	1.58	1.53
1	N	125	U	C2-N3	5.27	1.41	1.37
1	N	126	G	P-O5'	-5.27	1.54	1.59
1	N	357	G	C6-N1	5.27	1.43	1.39
1	N	632	U	C2-N3	5.27	1.41	1.37
1	N	766	A	N9-C8	-5.27	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	880	C	C4'-C3'	-5.27	1.47	1.52
1	N	335	C	N3-C4	5.27	1.37	1.33
1	N	609	A	C3'-C2'	5.27	1.58	1.52
1	N	1222	G	C3'-C2'	5.27	1.58	1.52
1	N	1245	C	C5'-C4'	5.27	1.57	1.51
1	N	1320	C	P-O5'	-5.27	1.54	1.59
1	N	1507	A	C4'-O4'	5.27	1.52	1.45
1	N	324	G	C5'-C4'	-5.27	1.45	1.51
1	N	615	G	C5-C6	-5.27	1.37	1.42
1	N	1202	U	C3'-O3'	5.27	1.49	1.42
1	N	1364	U	C2-O2	5.27	1.27	1.22
1	N	270	A	C2'-C1'	-5.27	1.47	1.53
1	N	726	C	N3-C4	5.27	1.37	1.33
1	N	1225	A	N9-C4	5.27	1.41	1.37
1	N	1291	U	N1-C6	-5.27	1.33	1.38
1	N	1328	C	N3-C4	5.27	1.37	1.33
1	N	1370	G	O3'-P	-5.27	1.54	1.61
1	N	548	G	C6-O6	-5.27	1.19	1.24
1	N	560	A	C8-N7	-5.27	1.27	1.31
1	N	1297	G	C2'-C1'	-5.27	1.47	1.53
1	N	299	G	N9-C4	5.27	1.42	1.38
1	N	692	U	C2'-O2'	-5.27	1.34	1.41
1	N	193	C	C5'-C4'	5.26	1.57	1.51
1	N	631	C	C2-N3	5.26	1.40	1.35
1	N	1306	A	C2-N3	5.26	1.38	1.33
1	N	180	U	O3'-P	-5.26	1.54	1.61
1	N	276	G	P-O5'	5.26	1.65	1.59
1	N	395	C	C4-N4	5.26	1.38	1.33
1	N	411	A	C5-C4	-5.26	1.35	1.38
1	N	1074	G	C4'-O4'	-5.26	1.38	1.45
1	N	1384	C	C4-N4	5.26	1.38	1.33
1	N	40	C	C4-C5	5.26	1.47	1.43
1	N	392	C	C2'-O2'	5.26	1.48	1.41
1	N	712	A	C5'-C4'	5.26	1.57	1.51
1	N	814	A	C5-C6	-5.26	1.36	1.41
1	N	898	G	C6-O6	-5.26	1.19	1.24
1	N	808	C	C2'-C1'	-5.26	1.47	1.53
1	N	1469	C	C2'-C1'	-5.26	1.47	1.53
1	N	1529	G	N3-C4	-5.26	1.31	1.35
1	N	65	A	C5-C4	5.26	1.42	1.38
1	N	115	G	C6-N1	5.26	1.43	1.39
1	N	1447	A	O3'-P	-5.26	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	23	C	N3-C4	5.25	1.37	1.33
1	N	377	G	P-O5'	-5.25	1.54	1.59
1	N	1005	A	C6-N6	5.25	1.38	1.33
1	N	244	U	C1'-N1	5.25	1.56	1.48
1	N	245	U	C5'-C4'	5.25	1.57	1.51
1	N	682	G	C3'-C2'	5.25	1.58	1.52
1	N	1304	G	C5-C4	-5.25	1.34	1.38
1	N	171	A	P-O5'	-5.25	1.54	1.59
1	N	218	U	P-O5'	-5.25	1.54	1.59
1	N	816	A	O4'-C1'	5.25	1.48	1.41
1	N	34	C	N3-C4	5.25	1.37	1.33
1	N	204	G	N7-C5	5.25	1.42	1.39
1	N	613	C	C4-N4	5.25	1.38	1.33
1	N	905	U	C1'-N1	5.25	1.56	1.48
1	N	1008	U	C5'-C4'	5.25	1.57	1.51
1	N	197	A	C2-N3	-5.25	1.28	1.33
1	N	682	G	N7-C5	-5.25	1.36	1.39
1	N	823	C	C5-C6	-5.25	1.30	1.34
1	N	1128	C	C4-N4	5.25	1.38	1.33
1	N	1405	G	C5-C6	5.25	1.47	1.42
1	N	331	G	C8-N7	-5.25	1.27	1.30
1	N	427	U	O4'-C1'	5.25	1.48	1.41
1	N	434	U	C1'-N1	5.25	1.56	1.48
1	N	513	C	N3-C4	5.25	1.37	1.33
1	N	773	G	C2'-C1'	-5.25	1.47	1.53
1	N	1031	C	N1-C6	-5.25	1.34	1.37
1	N	1151	A	C3'-C2'	5.25	1.58	1.52
1	N	1530	G	C4'-O4'	5.25	1.52	1.45
1	N	1289	A	C6-N6	5.25	1.38	1.33
1	N	235	C	C4-N4	5.24	1.38	1.33
1	N	516	U	C3'-O3'	-5.24	1.34	1.42
1	N	1511	G	O3'-P	-5.24	1.54	1.61
1	N	496	A	C8-N7	-5.24	1.27	1.31
1	N	311	C	N1-C6	-5.24	1.34	1.37
1	N	803	G	C2'-C1'	-5.24	1.47	1.53
1	N	1478	U	N1-C2	-5.24	1.33	1.38
1	N	1509	C	C2-N3	5.24	1.40	1.35
1	N	19	A	C8-N7	-5.24	1.27	1.31
1	N	124	C	N1-C2	5.24	1.45	1.40
1	N	401	C	C4-C5	-5.24	1.38	1.43
1	N	445	G	C5-C6	-5.24	1.37	1.42
1	N	500	G	C6-N1	5.24	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	525	C	C3'-C2'	5.24	1.58	1.52
1	N	1494	G	C5'-C4'	5.24	1.57	1.51
1	N	446	G	C2'-C1'	-5.24	1.47	1.53
1	N	1478	U	C2-N3	5.24	1.41	1.37
1	N	664	G	N9-C4	-5.24	1.33	1.38
1	N	1401	G	C5'-C4'	5.24	1.57	1.51
1	N	82	G	C2'-C1'	-5.23	1.47	1.53
1	N	860	A	C5-C6	-5.23	1.36	1.41
1	N	873	A	C3'-O3'	5.23	1.49	1.42
1	N	1028	C	C2-O2	5.23	1.29	1.24
1	N	1075	U	C2-N3	5.23	1.41	1.37
1	N	1328	C	N1-C6	5.23	1.40	1.37
1	N	78	A	N3-C4	5.23	1.38	1.34
1	N	925	G	N7-C5	-5.23	1.36	1.39
1	N	926	G	N9-C4	-5.23	1.33	1.38
1	N	1196	A	N9-C4	-5.23	1.34	1.37
1	N	467	U	C3'-C2'	5.23	1.58	1.52
1	N	1270	G	C5-C6	5.23	1.47	1.42
1	N	444	G	O4'-C1'	-5.23	1.34	1.41
1	N	546	A	O4'-C1'	-5.23	1.34	1.41
1	N	819	A	N7-C5	-5.23	1.36	1.39
1	N	902	G	O4'-C1'	5.23	1.48	1.41
1	N	141	G	C5-C4	-5.22	1.34	1.38
1	N	290	C	N3-C4	5.22	1.37	1.33
1	N	435	A	C2-N3	5.22	1.38	1.33
1	N	868	C	C4'-C3'	-5.22	1.47	1.52
1	N	1103	C	C4-N4	5.22	1.38	1.33
1	N	1200	C	C2'-C1'	-5.22	1.47	1.53
1	N	1232	U	P-O5'	-5.22	1.54	1.59
1	N	1324	A	P-O5'	-5.22	1.54	1.59
1	N	151	A	N9-C8	-5.22	1.33	1.37
1	N	417	G	C2-N2	5.22	1.39	1.34
1	N	921	U	P-O5'	-5.22	1.54	1.59
1	N	1021	A	N3-C4	-5.22	1.31	1.34
1	N	1131	G	C2'-C1'	-5.22	1.47	1.53
1	N	1484	C	C4-C5	5.22	1.47	1.43
1	N	1437	A	C5-C6	5.22	1.45	1.41
1	N	721	G	N9-C4	5.22	1.42	1.38
1	N	829	G	N1-C2	5.22	1.42	1.37
1	N	1147	C	C2'-O2'	-5.22	1.34	1.41
1	N	1181	G	C4'-O4'	5.22	1.52	1.45
1	N	1234	C	C3'-C2'	5.22	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1326	U	O3'-P	-5.22	1.54	1.61
1	N	49	U	C4-C5	-5.22	1.38	1.43
1	N	1084	G	C6-N1	5.22	1.43	1.39
1	N	1511	G	N9-C4	-5.22	1.33	1.38
1	N	33	A	C2'-C1'	-5.22	1.47	1.53
1	N	208	U	C1'-N1	5.22	1.56	1.48
1	N	1082	A	C5-C6	-5.22	1.36	1.41
1	N	1248	A	C2-N3	5.22	1.38	1.33
1	N	1437	A	C5'-C4'	5.22	1.57	1.51
1	N	1483	A	C6-N6	5.22	1.38	1.33
1	N	930	C	O3'-P	-5.21	1.54	1.61
1	N	1086	U	C4'-C3'	5.21	1.58	1.53
1	N	1113	C	C4'-O4'	5.21	1.52	1.45
1	N	1197	A	O3'-P	-5.21	1.54	1.61
1	N	1237	C	P-O5'	-5.21	1.54	1.59
1	N	1251	A	C8-N7	-5.21	1.27	1.31
1	N	159	G	N9-C4	-5.21	1.33	1.38
1	N	236	A	C5'-C4'	5.21	1.57	1.51
1	N	731	G	C2'-O2'	5.21	1.48	1.41
1	N	998	C	N3-C4	5.21	1.37	1.33
1	N	392	C	C3'-C2'	5.21	1.58	1.52
1	N	24	U	C4-C5	5.21	1.48	1.43
1	N	788	U	C4'-C3'	5.21	1.58	1.53
1	N	1146	A	C4'-O4'	-5.21	1.38	1.45
1	N	44	A	C4'-O4'	-5.21	1.38	1.45
1	N	875	U	N3-C4	5.21	1.43	1.38
1	N	966	G	C2'-C1'	-5.21	1.47	1.53
1	N	1321	U	C4-C5	-5.21	1.38	1.43
1	N	376	G	C6-N1	5.20	1.43	1.39
1	N	661	G	C5-C6	-5.20	1.37	1.42
1	N	701	U	C4-C5	5.20	1.48	1.43
1	N	847	G	C5-C4	5.20	1.42	1.38
1	N	895	G	C3'-O3'	5.20	1.49	1.42
1	N	1505	G	C5'-C4'	5.20	1.57	1.51
1	N	705	G	C5'-C4'	5.20	1.57	1.51
1	N	807	A	N9-C4	-5.20	1.34	1.37
1	N	1262	C	C5'-C4'	5.20	1.57	1.51
1	N	266	G	C4'-O4'	-5.20	1.38	1.45
1	N	1166	G	N7-C5	-5.20	1.36	1.39
1	N	1132	C	N1-C2	-5.20	1.34	1.40
1	N	282	A	C3'-C2'	5.20	1.58	1.52
1	N	531	U	C5-C6	5.20	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	652	U	C4'-O4'	5.20	1.52	1.45
1	N	1285	A	O4'-C1'	5.20	1.48	1.41
1	N	39	G	N9-C4	-5.20	1.33	1.38
1	N	738	C	N1-C6	5.20	1.40	1.37
1	N	894	G	C2-N2	5.20	1.39	1.34
1	N	1232	U	N3-C4	5.20	1.43	1.38
1	N	406	G	P-O5'	-5.19	1.54	1.59
1	N	1154	G	P-O5'	-5.19	1.54	1.59
1	N	1304	G	N9-C8	-5.19	1.34	1.37
1	N	335	C	N1-C6	-5.19	1.34	1.37
1	N	455	G	C3'-C2'	5.19	1.58	1.52
1	N	1049	U	C2'-C1'	-5.19	1.47	1.53
1	N	1183	U	N1-C2	5.19	1.43	1.38
1	N	1197	A	C3'-O3'	5.19	1.49	1.42
1	N	1420	U	N3-C4	5.19	1.43	1.38
1	N	82	G	N3-C4	-5.19	1.31	1.35
1	N	402	G	C5-C4	-5.19	1.34	1.38
1	N	1098	C	O3'-P	-5.19	1.54	1.61
1	N	37	U	N3-C4	5.19	1.43	1.38
1	N	130	A	P-O5'	-5.19	1.54	1.59
1	N	401	C	P-O5'	-5.19	1.54	1.59
1	N	562	U	N3-C4	5.19	1.43	1.38
1	N	1298	U	C5'-C4'	5.19	1.57	1.51
1	N	812	G	P-OP2	-5.19	1.40	1.49
1	N	1318	A	C5-C4	5.19	1.42	1.38
1	N	114	U	C5'-C4'	5.18	1.57	1.51
1	N	281	G	N9-C4	-5.18	1.33	1.38
1	N	670	G	C3'-C2'	5.18	1.58	1.52
1	N	1528	U	C2'-C1'	-5.18	1.47	1.53
1	N	69	G	C3'-C2'	5.18	1.58	1.52
1	N	416	G	C2-N3	5.18	1.36	1.32
1	N	441	A	N1-C2	-5.18	1.29	1.34
1	N	906	A	N1-C2	5.18	1.39	1.34
1	N	935	A	N9-C4	5.18	1.41	1.37
1	N	1236	A	C5-C4	5.18	1.42	1.38
1	N	1405	G	C4'-C3'	5.18	1.58	1.53
1	N	1527	U	C3'-C2'	5.18	1.58	1.52
1	N	623	C	C1'-N1	5.18	1.56	1.48
1	N	463	U	C4'-C3'	5.18	1.58	1.53
1	N	769	G	C2-N2	5.18	1.39	1.34
1	N	864	A	N1-C2	-5.18	1.29	1.34
1	N	883	C	C1'-N1	5.18	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	178	C	C4-C5	-5.18	1.38	1.43
1	N	1218	C	P-O5'	-5.18	1.54	1.59
1	N	199	A	N3-C4	-5.17	1.31	1.34
1	N	458	U	O3'-P	-5.17	1.54	1.61
1	N	1017	U	C5'-C4'	5.17	1.57	1.51
1	N	447	G	N9-C4	-5.17	1.33	1.38
1	N	1040	U	O3'-P	-5.17	1.54	1.61
1	N	674	G	O5'-C5'	-5.17	1.34	1.42
1	N	70	U	C4-C5	-5.17	1.38	1.43
1	N	275	G	C2-N2	5.17	1.39	1.34
1	N	953	G	O3'-P	-5.17	1.54	1.61
1	N	1023	U	N1-C2	-5.17	1.33	1.38
1	N	1255	G	N3-C4	-5.17	1.31	1.35
1	N	165	G	C2-N3	5.17	1.36	1.32
1	N	300	A	C8-N7	-5.17	1.27	1.31
1	N	922	G	O3'-P	-5.17	1.54	1.61
1	N	944	G	N1-C2	5.17	1.41	1.37
1	N	1431	A	C4'-C3'	-5.17	1.47	1.52
1	N	259	G	O4'-C1'	-5.17	1.34	1.41
1	N	279	A	N1-C2	-5.17	1.29	1.34
1	N	1324	A	N3-C4	-5.17	1.31	1.34
1	N	312	C	C1'-N1	5.17	1.56	1.48
1	N	946	A	N9-C8	5.17	1.41	1.37
1	N	232	G	N7-C5	5.16	1.42	1.39
1	N	339	C	C3'-C2'	-5.16	1.47	1.52
1	N	1138	G	C5-C6	-5.16	1.37	1.42
1	N	43	C	C4-N4	5.16	1.38	1.33
1	N	72	A	C5-C6	-5.16	1.36	1.41
1	N	330	C	N1-C2	-5.16	1.34	1.40
1	N	532	A	N7-C5	-5.16	1.36	1.39
1	N	706	A	C2-N3	5.16	1.38	1.33
1	N	769	G	O4'-C1'	-5.16	1.34	1.41
1	N	866	C	C5-C6	-5.16	1.30	1.34
1	N	217	C	O4'-C1'	5.16	1.48	1.41
1	N	469	C	C3'-C2'	-5.16	1.47	1.52
1	N	1336	C	C5'-C4'	5.16	1.57	1.51
1	N	51	A	N3-C4	-5.16	1.31	1.34
1	N	1244	G	C2-N2	5.16	1.39	1.34
1	N	181	A	N7-C5	-5.16	1.36	1.39
1	N	570	G	C2-N2	5.16	1.39	1.34
1	N	1222	G	C5-C4	5.16	1.42	1.38
1	N	1141	C	C2-N3	5.15	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1181	G	C2-N3	-5.15	1.28	1.32
1	N	1311	A	C5'-C4'	-5.15	1.45	1.51
1	N	1450	U	O3'-P	-5.15	1.54	1.61
1	N	31	G	N7-C5	5.15	1.42	1.39
1	N	747	A	N3-C4	5.15	1.38	1.34
1	N	803	G	N9-C8	-5.15	1.34	1.37
1	N	808	C	P-O5'	-5.15	1.54	1.59
1	N	1094	G	N3-C4	5.15	1.39	1.35
1	N	1194	U	N1-C2	5.15	1.43	1.38
1	N	1238	A	N3-C4	5.15	1.38	1.34
1	N	1358	U	N3-C4	5.15	1.43	1.38
1	N	298	A	O3'-P	-5.15	1.54	1.61
1	N	388	G	C5'-C4'	5.15	1.57	1.51
1	N	558	G	C2-N2	5.15	1.39	1.34
1	N	1188	A	N1-C2	5.15	1.39	1.34
1	N	181	A	C4'-O4'	-5.15	1.38	1.45
1	N	710	G	C4'-O4'	5.15	1.52	1.45
1	N	1099	G	C2'-C1'	-5.15	1.47	1.53
1	N	179	A	C6-N1	5.14	1.39	1.35
1	N	897	C	C2-N3	5.14	1.39	1.35
1	N	978	A	N9-C8	5.14	1.41	1.37
1	N	1531	A	C6-N1	5.14	1.39	1.35
1	N	370	C	O3'-P	-5.14	1.54	1.61
1	N	561	U	O4'-C1'	-5.14	1.34	1.41
1	N	977	A	N9-C8	5.14	1.41	1.37
1	N	1182	G	C5-C4	-5.14	1.34	1.38
1	N	147	G	N9-C4	-5.14	1.33	1.38
1	N	309	A	C8-N7	-5.14	1.27	1.31
1	N	374	A	C2'-C1'	5.14	1.59	1.53
1	N	971	G	N9-C4	-5.14	1.33	1.38
1	N	1244	G	N1-C2	5.14	1.41	1.37
1	N	60	A	N7-C5	-5.14	1.36	1.39
1	N	1295	U	C5'-C4'	5.14	1.57	1.51
1	N	931	C	C3'-C2'	5.14	1.58	1.52
1	N	1090	U	O3'-P	-5.14	1.54	1.61
1	N	55	A	C3'-C2'	5.14	1.58	1.52
1	N	444	G	C5'-C4'	5.13	1.57	1.51
1	N	449	G	N1-C2	5.13	1.41	1.37
1	N	487	A	C5'-C4'	5.13	1.57	1.51
1	N	725	G	C2-N2	5.13	1.39	1.34
1	N	1441	A	C5'-C4'	5.13	1.57	1.51
1	N	1266	G	C2-N3	-5.13	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	49	U	N3-C4	5.13	1.43	1.38
1	N	128	G	N7-C5	-5.13	1.36	1.39
1	N	1494	G	C2-N3	5.13	1.36	1.32
1	N	880	C	N1-C6	5.13	1.40	1.37
1	N	1187	G	O4'-C1'	5.13	1.48	1.41
1	N	302	G	O3'-P	5.13	1.67	1.61
1	N	1022	A	C6-N6	5.13	1.38	1.33
1	N	1111	A	C8-N7	-5.13	1.27	1.31
1	N	1241	G	P-O5'	-5.13	1.54	1.59
1	N	145	G	C6-N1	5.13	1.43	1.39
1	N	656	G	P-O5'	-5.13	1.54	1.59
1	N	850	U	N1-C6	5.13	1.42	1.38
1	N	1024	G	C8-N7	5.13	1.34	1.30
1	N	1316	G	C2-N2	-5.13	1.29	1.34
1	N	888	G	C6-N1	5.12	1.43	1.39
1	N	93	U	N1-C2	-5.12	1.33	1.38
1	N	443	C	N3-C4	-5.12	1.30	1.33
1	N	528	C	C2-N3	5.12	1.39	1.35
1	N	925	G	N9-C8	5.12	1.41	1.37
1	N	1250	A	C2-N3	5.12	1.38	1.33
1	N	165	G	O4'-C1'	5.12	1.48	1.41
1	N	1172	C	C1'-N1	5.12	1.56	1.48
1	N	1200	C	C4-N4	5.12	1.38	1.33
1	N	1207	G	C6-N1	5.12	1.43	1.39
1	N	1303	C	N3-C4	-5.12	1.30	1.33
1	N	1447	A	C3'-C2'	-5.12	1.47	1.52
1	N	114	U	C4'-O4'	-5.12	1.38	1.45
1	N	483	C	N3-C4	5.12	1.37	1.33
1	N	1101	A	N9-C8	-5.12	1.33	1.37
1	N	851	G	N1-C2	5.12	1.41	1.37
1	N	1102	A	C5-C6	5.12	1.45	1.41
1	N	1132	C	N1-C6	-5.12	1.34	1.37
1	N	1433	A	N3-C4	-5.12	1.31	1.34
1	N	1188	A	O4'-C1'	-5.12	1.34	1.41
1	N	1315	U	C4-C5	5.12	1.48	1.43
1	N	254	G	C3'-C2'	-5.12	1.47	1.52
1	N	413	G	C6-N1	5.12	1.43	1.39
1	N	444	G	C5-C4	5.12	1.42	1.38
1	N	466	A	C5-C4	-5.12	1.35	1.38
1	N	664	G	C5-C4	5.12	1.42	1.38
1	N	772	U	C4-C5	5.12	1.48	1.43
1	N	179	A	N9-C8	5.11	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1333	A	P-O5'	-5.11	1.54	1.59
1	N	1360	A	C6-N1	5.11	1.39	1.35
1	N	1419	G	C5-C6	-5.11	1.37	1.42
1	N	1493	A	C2-N3	5.11	1.38	1.33
1	N	239	U	N1-C2	-5.11	1.33	1.38
1	N	330	C	N3-C4	5.11	1.37	1.33
1	N	694	A	N9-C8	5.11	1.41	1.37
1	N	867	G	C4'-C3'	-5.11	1.47	1.52
1	N	93	U	O4'-C1'	5.11	1.48	1.41
1	N	1014	A	N9-C8	-5.11	1.33	1.37
1	N	649	A	C5'-C4'	5.11	1.57	1.51
1	N	1525	G	C2-N3	5.11	1.36	1.32
1	N	603	U	C4-C5	5.11	1.48	1.43
1	N	912	C	C2-N3	5.11	1.39	1.35
1	N	1194	U	C4'-C3'	5.11	1.58	1.53
1	N	1492	A	C3'-C2'	-5.11	1.47	1.52
1	N	1521	C	N1-C6	5.11	1.40	1.37
1	N	228	A	C2'-C1'	-5.11	1.47	1.53
1	N	302	G	N1-C2	5.11	1.41	1.37
1	N	311	C	C2-N3	5.11	1.39	1.35
1	N	478	A	C5-C4	5.11	1.42	1.38
1	N	805	C	C5-C6	5.11	1.38	1.34
1	N	928	G	N7-C5	-5.11	1.36	1.39
1	N	1126	U	C2'-C1'	-5.10	1.47	1.53
1	N	1205	U	N1-C2	-5.10	1.33	1.38
1	N	192	A	N7-C5	-5.10	1.36	1.39
1	N	519	C	C2'-C1'	-5.10	1.47	1.53
1	N	816	A	P-O5'	-5.10	1.54	1.59
1	N	907	A	C6-N6	5.10	1.38	1.33
1	N	1399	C	C4-C5	5.10	1.47	1.43
1	N	780	A	C5-C6	-5.10	1.36	1.41
1	N	39	G	C2'-C1'	-5.10	1.47	1.53
1	N	253	A	N9-C8	-5.10	1.33	1.37
1	N	295	C	C2'-C1'	-5.10	1.47	1.53
1	N	685	G	N1-C2	5.10	1.41	1.37
1	N	874	G	C5'-C4'	5.10	1.57	1.51
1	N	923	A	C4'-C3'	-5.10	1.47	1.52
1	N	1042	A	N7-C5	-5.10	1.36	1.39
1	N	1089	G	N3-C4	5.10	1.39	1.35
1	N	40	C	C4-N4	5.10	1.38	1.33
1	N	120	A	C4'-C3'	5.10	1.58	1.53
1	N	365	U	C4-C5	5.10	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	506	G	P-O5'	-5.10	1.54	1.59
1	N	529	G	C3'-C2'	5.10	1.58	1.52
1	N	557	G	N9-C4	5.10	1.42	1.38
1	N	558	G	O3'-P	-5.10	1.55	1.61
1	N	937	A	C8-N7	-5.10	1.27	1.31
1	N	1197	A	C8-N7	-5.10	1.27	1.31
1	N	1331	G	P-O5'	-5.10	1.54	1.59
1	N	583	A	O3'-P	-5.10	1.55	1.61
1	N	1140	C	C2'-C1'	-5.10	1.47	1.53
1	N	87	C	C5'-C4'	5.09	1.57	1.51
1	N	694	A	C6-N1	-5.09	1.31	1.35
1	N	974	A	C4'-C3'	5.09	1.58	1.53
1	N	1026	G	N9-C8	5.09	1.41	1.37
1	N	279	A	C8-N7	5.09	1.35	1.31
1	N	527	G	C5-C4	-5.09	1.34	1.38
1	N	823	C	C4-N4	5.09	1.38	1.33
1	N	1200	C	N3-C4	5.09	1.37	1.33
1	N	173	U	C2-N3	5.09	1.41	1.37
1	N	998	C	C4'-C3'	5.09	1.58	1.53
1	N	119	A	C2'-O2'	5.09	1.48	1.41
1	N	306	A	C5-C6	5.09	1.45	1.41
1	N	351	G	N9-C8	-5.09	1.34	1.37
1	N	392	C	O4'-C1'	5.09	1.48	1.41
1	N	560	A	P-O5'	5.09	1.64	1.59
1	N	807	A	C8-N7	-5.09	1.27	1.31
1	N	955	U	C1'-N1	5.09	1.56	1.48
1	N	266	G	C8-N7	5.08	1.34	1.30
1	N	291	U	C5'-C4'	5.08	1.57	1.51
1	N	222	C	C2'-C1'	-5.08	1.47	1.53
1	N	423	G	C5'-C4'	5.08	1.57	1.51
1	N	555	U	C3'-C2'	5.08	1.58	1.52
1	N	604	G	C5'-C4'	5.08	1.57	1.51
1	N	241	G	N1-C2	5.08	1.41	1.37
1	N	1096	C	N3-C4	5.08	1.37	1.33
1	N	1397	C	C4'-C3'	5.08	1.58	1.53
1	N	73	C	P-O5'	5.08	1.64	1.59
1	N	1465	A	N7-C5	-5.08	1.36	1.39
1	N	414	A	C6-N1	-5.08	1.31	1.35
1	N	877	G	C2-N3	5.08	1.36	1.32
1	N	951	G	N9-C4	-5.08	1.33	1.38
1	N	1145	A	C6-N1	5.08	1.39	1.35
1	N	1176	A	P-O5'	-5.08	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1192	C	C4'-C3'	-5.08	1.47	1.52
1	N	675	A	O3'-P	-5.08	1.55	1.61
1	N	819	A	C2-N3	5.08	1.38	1.33
1	N	63	C	C5'-C4'	5.08	1.57	1.51
1	N	675	A	C8-N7	-5.08	1.27	1.31
1	N	759	A	C6-N6	5.08	1.38	1.33
1	N	1222	G	C5-C6	-5.08	1.37	1.42
1	N	1264	U	O4'-C1'	5.08	1.48	1.41
1	N	1413	A	C5'-C4'	5.08	1.57	1.51
1	N	274	A	C1'-N9	5.07	1.56	1.48
1	N	685	G	C8-N7	5.07	1.33	1.30
1	N	1279	G	C3'-C2'	-5.07	1.47	1.52
1	N	1327	C	C2-N3	-5.07	1.31	1.35
1	N	67	C	C4'-O4'	5.07	1.52	1.45
1	N	328	C	C2'-C1'	-5.07	1.47	1.53
1	N	598	U	N3-C4	5.07	1.43	1.38
1	N	688	G	P-O5'	-5.07	1.54	1.59
1	N	857	C	C2-N3	-5.07	1.31	1.35
1	N	1024	G	C4'-C3'	5.07	1.58	1.53
1	N	1027	C	O3'-P	-5.07	1.55	1.61
1	N	1420	U	N1-C6	5.07	1.42	1.38
1	N	1512	U	C2-N3	5.07	1.41	1.37
1	N	1487	G	C2-N3	5.07	1.36	1.32
1	N	500	G	C4'-C3'	-5.07	1.47	1.52
1	N	598	U	C2-O2	5.07	1.26	1.22
1	N	777	A	C6-N6	5.07	1.38	1.33
1	N	902	G	N7-C5	-5.07	1.36	1.39
1	N	913	A	N9-C4	-5.07	1.34	1.37
1	N	1084	G	C2-N3	5.07	1.36	1.32
1	N	700	G	C6-N1	-5.07	1.36	1.39
1	N	776	G	C4'-O4'	-5.07	1.39	1.45
1	N	786	G	C3'-O3'	5.07	1.49	1.42
1	N	1182	G	C5'-C4'	5.07	1.57	1.51
1	N	1227	A	C6-N1	5.07	1.39	1.35
1	N	1503	A	C6-N1	5.07	1.39	1.35
1	N	624	C	C3'-O3'	-5.06	1.35	1.42
1	N	863	U	C5'-C4'	-5.06	1.45	1.51
1	N	1255	G	C4'-C3'	-5.06	1.47	1.52
1	N	715	A	C3'-C2'	-5.06	1.47	1.52
1	N	130	A	C5-C6	-5.06	1.36	1.41
1	N	406	G	C5'-C4'	5.06	1.57	1.51
1	N	540	G	P-O5'	-5.06	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	781	A	C8-N7	-5.06	1.28	1.31
1	N	846	G	N9-C8	-5.06	1.34	1.37
1	N	1092	A	C5-C4	5.06	1.42	1.38
1	N	64	G	C3'-C2'	5.06	1.58	1.52
1	N	116	A	C5'-C4'	5.06	1.57	1.51
1	N	122	G	C3'-O3'	5.06	1.49	1.42
1	N	836	G	C5-C4	-5.06	1.34	1.38
1	N	70	U	O4'-C1'	5.06	1.48	1.41
1	N	603	U	C5'-C4'	5.06	1.57	1.51
1	N	1519	A	C6-N6	5.06	1.38	1.33
1	N	9	G	N9-C4	-5.05	1.33	1.38
1	N	525	C	P-O5'	5.05	1.64	1.59
1	N	816	A	N3-C4	-5.05	1.31	1.34
1	N	1012	A	C8-N7	5.05	1.35	1.31
1	N	1039	G	N9-C8	5.05	1.41	1.37
1	N	1069	C	P-O5'	-5.05	1.54	1.59
1	N	1359	C	C3'-C2'	-5.05	1.47	1.52
1	N	285	C	N3-C4	5.05	1.37	1.33
1	N	297	G	N3-C4	5.05	1.39	1.35
1	N	1280	A	O4'-C1'	5.05	1.48	1.41
1	N	612	C	N1-C6	-5.05	1.34	1.37
1	N	940	C	C1'-N1	5.05	1.56	1.48
1	N	1114	C	C3'-O3'	5.05	1.49	1.42
1	N	427	U	C2'-C1'	-5.05	1.47	1.53
1	N	580	C	C3'-C2'	-5.05	1.47	1.52
1	N	738	C	C2-N3	5.05	1.39	1.35
1	N	756	C	C3'-O3'	5.05	1.49	1.42
1	N	834	U	C2-O2	-5.05	1.17	1.22
1	N	942	G	C5-C6	5.05	1.47	1.42
1	N	1425	U	C4'-C3'	5.05	1.58	1.53
1	N	1484	C	C1'-N1	5.05	1.56	1.48
1	N	398	U	C3'-C2'	5.05	1.58	1.52
1	N	749	A	C8-N7	-5.05	1.28	1.31
1	N	1239	A	N7-C5	5.05	1.42	1.39
1	N	1435	G	C2'-C1'	-5.05	1.47	1.53
1	N	687	A	O3'-P	-5.05	1.55	1.61
1	N	733	G	N9-C8	-5.05	1.34	1.37
1	N	765	G	P-O5'	-5.05	1.54	1.59
1	N	908	A	N7-C5	-5.05	1.36	1.39
1	N	1144	G	C2'-C1'	-5.05	1.47	1.53
1	N	1357	A	C4'-C3'	-5.05	1.47	1.52
1	N	1524	C	C5-C6	5.05	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	103	U	C5'-C4'	5.04	1.57	1.51
1	N	76	G	N7-C5	-5.04	1.36	1.39
1	N	237	G	C8-N7	5.04	1.33	1.30
1	N	419	C	C4-C5	5.04	1.47	1.43
1	N	618	C	C5'-C4'	5.04	1.57	1.51
1	N	676	A	N7-C5	-5.04	1.36	1.39
1	N	1363	A	C6-N6	5.04	1.38	1.33
1	N	18	C	C2-N3	5.04	1.39	1.35
1	N	278	G	C2'-C1'	-5.04	1.47	1.53
1	N	607	A	N9-C8	5.04	1.41	1.37
1	N	718	A	C2-N3	5.04	1.38	1.33
1	N	783	C	C4'-O4'	5.04	1.52	1.45
1	N	887	G	C4'-C3'	5.04	1.58	1.53
1	N	1266	G	O3'-P	-5.04	1.55	1.61
1	N	1414	U	C1'-N1	5.04	1.56	1.48
1	N	1421	G	C5'-C4'	5.04	1.57	1.51
1	N	35	G	C4'-O4'	-5.04	1.39	1.45
1	N	197	A	N9-C8	-5.04	1.33	1.37
1	N	300	A	C5-C6	-5.04	1.36	1.41
1	N	1118	U	N1-C2	5.04	1.43	1.38
1	N	1202	U	C3'-C2'	5.04	1.58	1.52
1	N	1421	G	C5-C6	-5.04	1.37	1.42
1	N	1507	A	N3-C4	-5.04	1.31	1.34
1	N	503	C	N1-C2	5.03	1.45	1.40
1	N	1058	G	P-O5'	-5.03	1.54	1.59
1	N	904	U	C2'-C1'	-5.03	1.47	1.53
1	N	917	G	N9-C8	5.03	1.41	1.37
1	N	1417	G	N3-C4	-5.03	1.31	1.35
1	N	1443	C	C4-N4	5.03	1.38	1.33
1	N	1104	G	C4'-C3'	5.03	1.58	1.53
1	N	1199	U	C5-C6	5.03	1.38	1.34
1	N	1274	A	N3-C4	5.03	1.37	1.34
1	N	371	A	N9-C8	5.03	1.41	1.37
1	N	989	U	C2-N3	5.03	1.41	1.37
1	N	1050	G	C3'-C2'	-5.03	1.47	1.52
1	N	1152	A	N3-C4	5.03	1.37	1.34
1	N	473	U	N1-C2	5.03	1.43	1.38
1	N	582	C	C1'-N1	5.03	1.56	1.48
1	N	1329	A	P-O5'	-5.03	1.54	1.59
1	N	1416	G	C4'-O4'	5.03	1.52	1.45
1	N	258	G	N3-C4	-5.03	1.31	1.35
1	N	744	C	O3'-P	-5.03	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	925	G	N3-C4	-5.03	1.31	1.35
1	N	1357	A	C5-C4	-5.03	1.35	1.38
1	N	38	G	N1-C2	5.02	1.41	1.37
1	N	194	C	C4-N4	-5.02	1.29	1.33
1	N	452	A	N9-C8	-5.02	1.33	1.37
1	N	694	A	C5-C4	5.02	1.42	1.38
1	N	253	A	C8-N7	-5.02	1.28	1.31
1	N	1118	U	C4-C5	5.02	1.48	1.43
1	N	158	G	P-O5'	5.02	1.64	1.59
1	N	269	C	C2'-C1'	-5.02	1.47	1.53
1	N	451	A	C3'-O3'	5.02	1.49	1.42
1	N	527	G	N7-C5	5.02	1.42	1.39
1	N	862	C	C2'-C1'	-5.02	1.47	1.53
1	N	1321	U	C2-N3	5.02	1.41	1.37
1	N	179	A	C3'-O3'	5.02	1.49	1.42
1	N	457	G	O4'-C1'	5.02	1.48	1.41
1	N	1435	G	C1'-N9	5.02	1.56	1.48
1	N	52	C	N1-C2	5.01	1.45	1.40
1	N	200	G	C2-N2	5.01	1.39	1.34
1	N	541	G	C8-N7	5.01	1.33	1.30
1	N	1218	C	C3'-C2'	-5.01	1.47	1.52
1	N	1467	C	C1'-N1	5.01	1.56	1.48
1	N	209	U	C4'-C3'	-5.01	1.47	1.52
1	N	643	C	N1-C6	-5.01	1.34	1.37
1	N	1321	U	P-O5'	-5.01	1.54	1.59
1	N	501	C	N1-C6	-5.01	1.34	1.37
1	N	1501	C	C2-N3	5.01	1.39	1.35
1	N	428	G	C6-N1	-5.01	1.36	1.39
1	N	597	G	C8-N7	5.01	1.33	1.30
1	N	797	C	C2-O2	-5.01	1.20	1.24
1	N	854	U	N3-C4	5.01	1.43	1.38
1	N	906	A	N9-C8	-5.01	1.33	1.37
1	N	1039	G	C6-N1	-5.01	1.36	1.39
1	N	1314	C	N3-C4	5.01	1.37	1.33
1	N	77	A	P-O5'	5.00	1.64	1.59
1	N	315	A	N1-C2	-5.00	1.29	1.34
1	N	434	U	C5'-C4'	5.00	1.57	1.51
1	N	926	G	C1'-N9	5.00	1.56	1.48
1	N	991	U	C3'-C2'	-5.00	1.47	1.52
1	N	215	C	C2'-C1'	-5.00	1.47	1.53
1	N	229	U	C4'-O4'	-5.00	1.39	1.45
1	N	744	C	C4-C5	5.00	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1496	C	C4-C5	5.00	1.47	1.43
1	N	54	C	C3'-C2'	-5.00	1.47	1.52
1	N	288	A	C5-C6	-5.00	1.36	1.41
1	N	608	A	O3'-P	-5.00	1.55	1.61
1	N	725	G	C4'-O4'	5.00	1.52	1.45
1	N	1274	A	C6-N1	5.00	1.39	1.35

All (9508) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	567	G	C5-C6-O6	-27.97	111.82	128.60
1	N	184	G	N1-C6-O6	26.91	136.04	119.90
1	N	184	G	C5-C6-O6	-26.87	112.48	128.60
1	N	567	G	N1-C6-O6	25.95	135.47	119.90
1	N	713	G	N1-C6-O6	24.64	134.69	119.90
1	N	190	A	N1-C6-N6	24.55	133.33	118.60
1	N	378	G	N1-C6-O6	24.38	134.53	119.90
1	N	1215	G	N1-C6-O6	24.33	134.50	119.90
1	N	80	A	N1-C6-N6	24.28	133.17	118.60
1	N	1252	A	N1-C6-N6	24.00	133.00	118.60
1	N	453	G	N1-C6-O6	23.95	134.27	119.90
1	N	781	A	N1-C6-N6	23.88	132.93	118.60
1	N	478	A	N1-C6-N6	23.80	132.88	118.60
1	N	743	A	N1-C6-N6	23.74	132.85	118.60
1	N	250	A	N1-C6-N6	23.72	132.83	118.60
1	N	532	A	N1-C6-N6	23.54	132.72	118.60
1	N	1043	G	N1-C6-O6	23.39	133.93	119.90
1	N	1526	G	C5-C6-O6	-23.30	114.62	128.60
1	N	164	G	C5-C6-O6	-23.14	114.72	128.60
1	N	303	A	N1-C6-N6	23.09	132.45	118.60
1	N	1242	G	C5-C6-O6	-22.93	114.84	128.60
1	N	851	G	C5-C6-O6	-22.83	114.90	128.60
1	N	1399	C	P-O3'-C3'	22.58	146.79	119.70
1	N	702	A	N1-C6-N6	22.34	132.00	118.60
1	N	809	G	N1-C6-O6	22.28	133.27	119.90
1	N	579	A	N1-C6-N6	22.12	131.87	118.60
1	N	31	G	N1-C6-O6	22.05	133.13	119.90
1	N	1374	A	N1-C6-N6	22.02	131.81	118.60
1	N	1530	G	N1-C6-O6	21.99	133.10	119.90
1	N	851	G	N1-C6-O6	21.96	133.07	119.90
1	N	1157	A	N1-C6-N6	21.87	131.72	118.60
1	N	1343	G	N1-C6-O6	21.81	132.99	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	606	G	N1-C6-O6	21.80	132.98	119.90
1	N	832	G	N1-C6-O6	21.79	132.98	119.90
1	N	800	G	N1-C6-O6	21.68	132.91	119.90
1	N	927	G	N1-C6-O6	21.58	132.85	119.90
1	N	768	A	N1-C6-N6	21.56	131.54	118.60
1	N	10	A	N1-C6-N6	21.47	131.48	118.60
1	N	1500	A	N1-C6-N6	21.46	131.48	118.60
1	N	94	G	P-O3'-C3'	21.41	145.39	119.70
1	N	482	A	N1-C6-N6	21.38	131.43	118.60
1	N	836	G	N1-C6-O6	21.34	132.71	119.90
1	N	47	C	P-O3'-C3'	21.30	145.25	119.70
1	N	545	C	N3-C4-C5	-21.28	113.39	121.90
1	N	668	G	N1-C6-O6	21.23	132.64	119.90
1	N	487	A	N1-C6-N6	21.14	131.29	118.60
1	N	1215	G	C5-C6-O6	-21.11	115.94	128.60
1	N	1043	G	C5-C6-O6	-21.07	115.96	128.60
1	N	1362	A	P-O3'-C3'	21.02	144.92	119.70
1	N	1507	A	N1-C6-N6	20.96	131.18	118.60
1	N	832	G	C5-C6-O6	-20.86	116.09	128.60
1	N	1526	G	N1-C6-O6	20.82	132.39	119.90
1	N	1087	G	C5-C6-O6	-20.76	116.15	128.60
1	N	241	G	N1-C6-O6	20.74	132.34	119.90
1	N	1377	A	N1-C6-N6	20.64	130.98	118.60
1	N	518	C	N3-C4-C5	-20.58	113.67	121.90
1	N	1145	A	N1-C6-N6	20.54	130.92	118.60
1	N	1316	G	N1-C6-O6	20.48	132.19	119.90
1	N	1249	C	C6-N1-C2	-20.46	112.11	120.30
1	N	892	A	N1-C6-N6	20.46	130.88	118.60
1	N	1020	G	N1-C6-O6	20.36	132.11	119.90
1	N	1242	G	N1-C6-O6	20.33	132.10	119.90
1	N	630	A	N1-C6-N6	20.31	130.78	118.60
1	N	649	A	N1-C6-N6	20.23	130.74	118.60
1	N	1143	G	N1-C6-O6	19.94	131.86	119.90
1	N	141	G	C5-C6-O6	-19.93	116.64	128.60
1	N	996	A	N1-C6-N6	19.93	130.56	118.60
1	N	953	G	N1-C6-O6	19.75	131.75	119.90
1	N	633	G	C5-C6-O6	-19.72	116.77	128.60
1	N	1433	A	N1-C6-N6	19.70	130.42	118.60
1	N	1036	A	N1-C6-N6	19.69	130.41	118.60
1	N	247	G	C5-C6-O6	-19.68	116.79	128.60
1	N	98	A	N1-C6-N6	19.61	130.37	118.60
1	N	913	A	P-O3'-C3'	19.57	143.19	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1502	A	N1-C6-N6	19.56	130.34	118.60
1	N	661	G	N1-C6-O6	19.48	131.59	119.90
1	N	800	G	C5-C6-O6	-19.43	116.94	128.60
1	N	39	G	N1-C6-O6	19.42	131.55	119.90
1	N	324	G	C5-C6-O6	-19.40	116.96	128.60
1	N	716	A	N1-C6-N6	19.39	130.23	118.60
1	N	303	A	C5-C6-N1	-19.30	108.05	117.70
1	N	858	G	N1-C6-O6	19.29	131.47	119.90
1	N	1039	G	C5-C6-O6	-19.28	117.03	128.60
1	N	1338	G	N1-C6-O6	19.24	131.44	119.90
1	N	879	C	N3-C4-N4	19.24	131.47	118.00
1	N	1525	G	N1-C6-O6	19.23	131.44	119.90
1	N	1233	G	C5-C6-O6	-19.22	117.07	128.60
1	N	573	A	N1-C6-N6	19.18	130.11	118.60
1	N	1418	A	N1-C6-N6	19.11	130.07	118.60
1	N	65	A	N1-C6-N6	19.06	130.04	118.60
1	N	969	A	N1-C6-N6	19.05	130.03	118.60
1	N	1252	A	O4'-C1'-N9	18.95	123.36	108.20
1	N	460	A	N1-C6-N6	18.87	129.92	118.60
1	N	1143	G	C5-C6-O6	-18.87	117.28	128.60
1	N	791	G	C5-C6-O6	-18.82	117.31	128.60
1	N	560	A	N1-C6-N6	18.79	129.88	118.60
1	N	872	A	N1-C6-N6	18.75	129.85	118.60
1	N	515	G	N1-C6-O6	18.74	131.15	119.90
1	N	116	A	N1-C6-N6	18.73	129.84	118.60
1	N	247	G	N1-C6-O6	18.71	131.13	119.90
1	N	164	G	N1-C6-O6	18.71	131.13	119.90
1	N	673	A	N1-C6-N6	18.66	129.79	118.60
1	N	1270	G	N1-C6-O6	18.64	131.09	119.90
1	N	424	G	C5-C6-O6	-18.61	117.43	128.60
1	N	102	G	C5-C6-O6	-18.59	117.45	128.60
1	N	1437	A	N1-C6-N6	18.57	129.74	118.60
1	N	457	G	N1-C6-O6	18.54	131.02	119.90
1	N	1370	G	N1-C6-O6	18.51	131.01	119.90
1	N	1331	G	C5-C6-O6	-18.50	117.50	128.60
1	N	1150	A	N1-C6-N6	18.44	129.66	118.60
1	N	484	G	P-O3'-C3'	18.42	141.80	119.70
1	N	262	A	N1-C6-N6	18.41	129.64	118.60
1	N	676	A	N1-C6-N6	18.39	129.63	118.60
1	N	1176	A	N1-C6-N6	18.37	129.62	118.60
1	N	47	C	N3-C4-C5	-18.30	114.58	121.90
1	N	393	A	N1-C6-N6	18.29	129.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	324	G	N1-C6-O6	18.28	130.87	119.90
1	N	953	G	C5-C6-O6	-18.26	117.64	128.60
1	N	706	A	N1-C6-N6	18.26	129.56	118.60
1	N	511	C	P-O3'-C3'	18.21	141.56	119.70
1	N	1392	G	N1-C6-O6	18.21	130.83	119.90
1	N	144	G	N1-C6-O6	18.20	130.82	119.90
1	N	376	G	N1-C6-O6	18.19	130.81	119.90
1	N	1021	A	N1-C6-N6	18.18	129.51	118.60
1	N	26	A	N1-C6-N6	18.13	129.48	118.60
1	N	1064	G	N1-C6-O6	18.13	130.78	119.90
1	N	839	C	N3-C4-C5	-18.12	114.65	121.90
1	N	1174	G	C5-C6-O6	-18.08	117.75	128.60
1	N	279	A	N1-C6-N6	18.08	129.45	118.60
1	N	1244	G	N1-C6-O6	18.07	130.74	119.90
1	N	175	C	N3-C4-C5	-18.07	114.67	121.90
1	N	321	A	N1-C6-N6	18.06	129.44	118.60
1	N	161	A	C5-C6-N1	-18.00	108.70	117.70
1	N	320	A	N1-C6-N6	17.90	129.34	118.60
1	N	825	A	N1-C6-N6	17.90	129.34	118.60
1	N	1442	G	N1-C6-O6	17.87	130.62	119.90
1	N	28	A	N1-C6-N6	17.87	129.32	118.60
1	N	713	G	C5-C6-O6	-17.86	117.88	128.60
1	N	792	A	N1-C6-N6	17.84	129.31	118.60
1	N	1432	G	P-O3'-C3'	17.84	141.11	119.70
1	N	175	C	C2-N3-C4	17.82	128.81	119.90
1	N	39	G	C5-C6-O6	-17.78	117.93	128.60
1	N	729	A	N1-C6-N6	17.70	129.22	118.60
1	N	115	G	N1-C6-O6	17.69	130.52	119.90
1	N	1324	A	N1-C6-N6	17.69	129.21	118.60
1	N	1018	G	N1-C6-O6	17.67	130.50	119.90
1	N	991	U	P-O3'-C3'	17.62	140.85	119.70
1	N	55	A	N1-C6-N6	17.59	129.15	118.60
1	N	1277	C	O4'-C1'-N1	17.55	122.24	108.20
1	N	983	A	N1-C6-N6	17.54	129.12	118.60
1	N	141	G	N1-C6-O6	17.52	130.41	119.90
1	N	927	G	C5-C6-O6	-17.52	118.09	128.60
1	N	592	G	N1-C6-O6	17.49	130.39	119.90
1	N	1074	G	N1-C6-O6	17.44	130.36	119.90
1	N	608	A	N1-C6-N6	17.44	129.06	118.60
1	N	1442	G	C5-C6-O6	-17.43	118.14	128.60
1	N	1139	G	N1-C6-O6	17.43	130.36	119.90
1	N	959	A	N1-C6-N6	17.43	129.06	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1169	A	N1-C6-N6	17.41	129.04	118.60
1	N	670	G	C5-C6-O6	-17.38	118.17	128.60
1	N	982	U	P-O3'-C3'	17.38	140.55	119.70
1	N	1130	A	N1-C6-N6	17.38	129.03	118.60
1	N	816	A	N1-C6-N6	17.32	128.99	118.60
1	N	1392	G	C5-C6-O6	-17.29	118.23	128.60
1	N	937	A	N1-C6-N6	17.27	128.96	118.60
1	N	330	C	N3-C4-C5	-17.27	114.99	121.90
1	N	985	C	O4'-C1'-N1	17.26	122.01	108.20
1	N	1501	C	C2-N3-C4	17.24	128.52	119.90
1	N	491	G	C5-C6-O6	-17.22	118.27	128.60
1	N	74	A	N1-C6-N6	17.20	128.92	118.60
1	N	1151	A	N1-C6-N6	17.20	128.92	118.60
1	N	119	A	P-O3'-C3'	17.18	140.32	119.70
1	N	790	A	N1-C6-N6	17.17	128.90	118.60
1	N	572	A	N1-C6-N6	17.17	128.90	118.60
1	N	616	G	C5-C6-O6	-17.16	118.30	128.60
1	N	523	A	N1-C6-N6	17.14	128.88	118.60
1	N	241	G	C5-C6-O6	-17.10	118.34	128.60
1	N	715	A	N1-C6-N6	17.02	128.81	118.60
1	N	196	A	N1-C6-N6	16.96	128.78	118.60
1	N	378	G	C5-C6-O6	-16.95	118.43	128.60
1	N	528	C	O4'-C1'-N1	16.95	121.76	108.20
1	N	253	A	N1-C6-N6	16.94	128.77	118.60
1	N	9	G	N1-C6-O6	16.90	130.04	119.90
1	N	491	G	N1-C6-O6	16.89	130.04	119.90
1	N	438	U	P-O3'-C3'	16.89	139.97	119.70
1	N	1505	G	N9-C4-C5	-16.89	98.64	105.40
1	N	82	G	N1-C6-O6	16.88	130.03	119.90
1	N	1248	A	P-O5'-C5'	16.88	147.91	120.90
1	N	1020	G	C5-C6-O6	-16.88	118.47	128.60
1	N	1087	G	N1-C6-O6	16.87	130.02	119.90
1	N	1505	G	C8-N9-C4	16.87	113.15	106.40
1	N	369	G	C5-C6-O6	-16.86	118.48	128.60
1	N	563	A	N1-C6-N6	16.86	128.72	118.60
1	N	160	A	N1-C6-N6	16.84	128.70	118.60
1	N	864	A	N1-C6-N6	16.84	128.70	118.60
1	N	708	C	N3-C4-C5	-16.82	115.17	121.90
1	N	1110	A	N1-C6-N6	16.80	128.68	118.60
1	N	1316	G	C5-C6-O6	-16.79	118.52	128.60
1	N	893	C	O4'-C1'-N1	16.77	121.62	108.20
1	N	243	A	P-O3'-C3'	16.77	139.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	38	G	N1-C6-O6	16.76	129.96	119.90
1	N	1331	G	P-O3'-C3'	16.75	139.80	119.70
1	N	93	U	O4'-C1'-N1	16.71	121.57	108.20
1	N	88	U	P-O3'-C3'	16.70	139.74	119.70
1	N	1415	G	N1-C6-O6	16.69	129.91	119.90
1	N	499	A	N1-C6-N6	16.64	128.58	118.60
1	N	1081	A	N1-C6-N6	16.63	128.58	118.60
1	N	722	G	C5-C6-O6	-16.63	118.62	128.60
1	N	1094	G	N1-C6-O6	16.60	129.86	119.90
1	N	1093	A	N1-C6-N6	16.58	128.55	118.60
1	N	945	G	N1-C6-O6	16.58	129.85	119.90
1	N	457	G	C5-C6-O6	-16.57	118.66	128.60
1	N	363	A	N1-C6-N6	16.55	128.53	118.60
1	N	873	A	N1-C6-N6	16.55	128.53	118.60
1	N	138	G	N1-C6-O6	16.54	129.83	119.90
1	N	1242	G	P-O5'-C5'	16.53	147.35	120.90
1	N	1258	G	C5-C6-O6	-16.51	118.70	128.60
1	N	1337	G	N1-C6-O6	16.50	129.80	119.90
1	N	232	G	C8-N9-C4	16.49	113.00	106.40
1	N	980	C	N3-C4-C5	-16.48	115.31	121.90
1	N	1530	G	C5-C6-O6	-16.47	118.72	128.60
1	N	721	G	P-O3'-C3'	16.46	139.45	119.70
1	N	883	C	C2-N3-C4	16.45	128.13	119.90
1	N	1261	A	N1-C6-N6	16.45	128.47	118.60
1	N	1531	A	P-O5'-C5'	16.40	147.14	120.90
1	N	1508	A	N1-C6-N6	16.35	128.41	118.60
1	N	260	G	C5-C6-O6	-16.34	118.80	128.60
1	N	1059	C	N3-C4-C5	-16.31	115.38	121.90
1	N	27	G	C5-C6-O6	-16.29	118.83	128.60
1	N	694	A	N1-C6-N6	16.28	128.37	118.60
1	N	621	A	N1-C6-N6	16.25	128.35	118.60
1	N	535	A	P-O3'-C3'	16.23	139.18	119.70
1	N	1197	A	N1-C6-N6	16.18	128.31	118.60
1	N	1501	C	N3-C4-C5	-16.17	115.43	121.90
1	N	258	G	N1-C6-O6	16.16	129.59	119.90
1	N	1249	C	N3-C4-C5	-16.15	115.44	121.90
1	N	122	G	N1-C6-O6	16.14	129.58	119.90
1	N	505	G	N1-C6-O6	16.13	129.58	119.90
1	N	799	G	C5-C6-O6	-16.12	118.93	128.60
1	N	933	G	C5-C6-O6	-16.11	118.94	128.60
1	N	923	A	N1-C6-N6	16.08	128.25	118.60
1	N	1236	A	N1-C6-N6	16.06	128.23	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	263	A	N1-C6-N6	16.01	128.21	118.60
1	N	1268	G	N1-C6-O6	15.98	129.49	119.90
1	N	812	G	P-O3'-C3'	15.97	138.86	119.70
1	N	1167	A	N1-C6-N6	15.96	128.17	118.60
1	N	228	A	N1-C6-N6	15.95	128.17	118.60
1	N	496	A	N1-C6-N6	15.95	128.17	118.60
1	N	232	G	N1-C6-O6	15.93	129.46	119.90
1	N	246	A	N1-C6-N6	15.93	128.16	118.60
1	N	566	G	P-O3'-C3'	15.92	138.80	119.70
1	N	1476	A	N1-C6-N6	15.90	128.14	118.60
1	N	1357	A	C5-C6-N1	-15.89	109.75	117.70
1	N	223	A	N1-C6-N6	15.89	128.13	118.60
1	N	1244	G	C5-C6-O6	-15.87	119.08	128.60
1	N	1177	G	N1-C6-O6	15.82	129.39	119.90
1	N	791	G	N1-C6-O6	15.82	129.39	119.90
1	N	1418	A	C5-C6-N1	-15.80	109.80	117.70
1	N	355	C	N3-C4-C5	-15.75	115.60	121.90
1	N	451	A	O4'-C1'-N9	15.75	120.80	108.20
1	N	894	G	N1-C6-O6	15.75	129.35	119.90
1	N	44	A	N1-C6-N6	15.74	128.04	118.60
1	N	93	U	P-O5'-C5'	15.74	146.08	120.90
1	N	857	C	C6-N1-C2	-15.74	114.01	120.30
1	N	1044	A	N1-C6-N6	15.72	128.03	118.60
1	N	87	C	C6-N1-C2	-15.69	114.03	120.30
1	N	1356	G	N1-C2-N3	-15.68	114.49	123.90
1	N	15	G	N1-C6-O6	15.66	129.29	119.90
1	N	1233	G	N1-C6-O6	15.66	129.29	119.90
1	N	553	A	N1-C6-N6	15.64	127.99	118.60
1	N	418	C	N3-C4-C5	-15.60	115.66	121.90
1	N	885	G	N9-C4-C5	15.59	111.64	105.40
1	N	1375	A	N1-C6-N6	15.59	127.95	118.60
1	N	1370	G	C5-C6-O6	-15.59	119.25	128.60
1	N	502	A	N1-C6-N6	15.59	127.95	118.60
1	N	1042	A	N1-C6-N6	15.58	127.95	118.60
1	N	1391	U	O4'-C1'-N1	15.55	120.64	108.20
1	N	1344	C	N3-C4-N4	15.54	128.88	118.00
1	N	31	G	C5-C6-O6	-15.53	119.28	128.60
1	N	274	A	C2-N3-C4	-15.53	102.83	110.60
1	N	1155	A	N1-C6-N6	15.52	127.91	118.60
1	N	742	G	N1-C6-O6	15.52	129.21	119.90
1	N	1024	G	N1-C6-O6	15.50	129.20	119.90
1	N	450	G	N1-C6-O6	15.47	129.18	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	130	A	N1-C6-N6	15.46	127.88	118.60
1	N	1439	G	C5-C6-O6	-15.46	119.33	128.60
1	N	561	U	C5-C6-N1	15.45	130.42	122.70
1	N	220	G	N1-C6-O6	15.44	129.16	119.90
1	N	1329	A	N1-C6-N6	15.43	127.86	118.60
1	N	1276	G	N1-C6-O6	15.42	129.15	119.90
1	N	661	G	C5-C6-O6	-15.40	119.36	128.60
1	N	236	A	N1-C6-N6	15.40	127.84	118.60
1	N	453	G	C5-C6-O6	-15.39	119.37	128.60
1	N	913	A	N1-C6-N6	15.37	127.82	118.60
1	N	106	C	N3-C4-C5	-15.36	115.75	121.90
1	N	1206	G	C5-C6-O6	-15.36	119.39	128.60
1	N	362	G	C5-C6-O6	-15.35	119.39	128.60
1	N	1285	A	P-O3'-C3'	15.33	138.10	119.70
1	N	1182	G	N1-C6-O6	15.30	129.08	119.90
1	N	1193	G	N1-C6-O6	15.30	129.08	119.90
1	N	1201	A	P-O3'-C3'	15.30	138.07	119.70
1	N	847	G	N9-C4-C5	-15.28	99.29	105.40
1	N	1227	A	C5-C6-N1	-15.28	110.06	117.70
1	N	718	A	N1-C6-N6	15.26	127.76	118.60
1	N	1287	A	N1-C6-N6	15.26	127.76	118.60
1	N	205	A	N1-C6-N6	15.25	127.75	118.60
1	N	1416	G	N1-C6-O6	15.25	129.05	119.90
1	N	115	G	C5-C6-O6	-15.24	119.46	128.60
1	N	112	G	C5-C6-O6	-15.23	119.46	128.60
1	N	270	A	N1-C6-N6	15.23	127.74	118.60
1	N	1426	G	N1-C6-O6	15.22	129.03	119.90
1	N	1419	G	C5-C6-O6	-15.21	119.47	128.60
1	N	694	A	O4'-C1'-N9	15.20	120.36	108.20
1	N	1492	A	N1-C6-N6	15.20	127.72	118.60
1	N	195	A	C5-N7-C8	15.19	111.50	103.90
1	N	1419	G	N1-C6-O6	15.19	129.01	119.90
1	N	127	G	N1-C6-O6	15.18	129.01	119.90
1	N	112	G	N1-C6-O6	15.17	129.00	119.90
1	N	411	A	N1-C6-N6	15.17	127.70	118.60
1	N	907	A	N1-C6-N6	15.16	127.69	118.60
1	N	1282	C	C5-C4-N4	-15.14	109.60	120.20
1	N	1491	G	C5-C6-O6	-15.14	119.52	128.60
1	N	858	G	C5-C6-O6	-15.14	119.52	128.60
1	N	1088	G	P-O5'-C5'	15.13	145.11	120.90
1	N	704	A	N1-C6-N6	15.10	127.66	118.60
1	N	575	G	N1-C6-O6	15.09	128.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1396	A	N1-C6-N6	15.07	127.64	118.60
1	N	1317	C	N3-C4-C5	-15.07	115.87	121.90
1	N	795	C	P-O5'-C5'	15.07	145.00	120.90
1	N	1033	G	N1-C6-O6	15.06	128.94	119.90
1	N	424	G	N1-C6-O6	15.06	128.93	119.90
1	N	498	A	N1-C6-N6	15.05	127.63	118.60
1	N	1000	A	N1-C6-N6	15.04	127.62	118.60
1	N	73	C	C6-N1-C2	-15.03	114.29	120.30
1	N	1417	G	C5-C6-O6	-15.03	119.58	128.60
1	N	1343	G	C5-C6-O6	-15.03	119.58	128.60
1	N	1426	G	C5-C6-O6	-15.03	119.58	128.60
1	N	316	C	C5'-C4'-C3'	-15.02	91.97	116.00
1	N	403	C	N3-C4-C5	-15.02	115.89	121.90
1	N	940	C	N3-C4-N4	15.02	128.51	118.00
1	N	1157	A	C5-C6-N6	-15.01	111.69	123.70
1	N	1045	C	N3-C4-C5	-15.01	115.90	121.90
1	N	344	A	P-O3'-C3'	15.01	137.71	119.70
1	N	1039	G	N1-C6-O6	15.00	128.90	119.90
1	N	663	A	O4'-C1'-N9	15.00	120.20	108.20
1	N	933	G	N1-C6-O6	15.00	128.90	119.90
1	N	629	A	C5-C6-N1	-14.95	110.23	117.70
1	N	126	G	P-O3'-C3'	14.94	137.63	119.70
1	N	915	A	N1-C6-N6	14.94	127.56	118.60
1	N	456	A	C4-C5-C6	14.93	124.47	117.00
1	N	535	A	N1-C6-N6	14.92	127.55	118.60
1	N	809	G	C5-C6-O6	-14.92	119.65	128.60
1	N	1064	G	C5-C6-O6	-14.90	119.66	128.60
1	N	1296	C	C6-N1-C2	-14.89	114.34	120.30
1	N	1456	A	N1-C6-N6	14.88	127.53	118.60
1	N	626	G	N1-C6-O6	14.88	128.83	119.90
1	N	1021	A	C4-C5-C6	14.87	124.44	117.00
1	N	1416	G	C5-C6-O6	-14.87	119.68	128.60
1	N	1518	A	N1-C6-N6	14.84	127.50	118.60
1	N	94	G	N1-C6-O6	14.78	128.77	119.90
1	N	681	A	N1-C6-N6	14.78	127.47	118.60
1	N	50	A	N1-C6-N6	14.78	127.47	118.60
1	N	559	A	C4-C5-C6	14.78	124.39	117.00
1	N	753	A	N1-C6-N6	14.77	127.46	118.60
1	N	559	A	C5-C6-N1	-14.76	110.32	117.70
1	N	979	C	O4'-C1'-N1	14.75	120.00	108.20
1	N	647	C	O4'-C1'-N1	14.75	120.00	108.20
1	N	51	A	P-O3'-C3'	14.72	137.37	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1431	A	N1-C6-N6	14.72	127.43	118.60
1	N	1268	G	C5-C6-O6	-14.71	119.77	128.60
1	N	650	G	N1-C6-O6	14.71	128.72	119.90
1	N	510	A	N1-C6-N6	14.69	127.41	118.60
1	N	633	G	N1-C6-O6	14.69	128.71	119.90
1	N	1216	A	N1-C6-N6	14.68	127.41	118.60
1	N	1127	G	N1-C6-O6	14.67	128.70	119.90
1	N	1355	G	C5-C6-O6	-14.66	119.80	128.60
1	N	1435	G	C5-C6-O6	-14.66	119.80	128.60
1	N	286	C	C6-N1-C2	-14.66	114.44	120.30
1	N	685	G	N1-C6-O6	14.65	128.69	119.90
1	N	1405	G	N1-C6-O6	14.65	128.69	119.90
1	N	616	G	N1-C6-O6	14.64	128.69	119.90
1	N	606	G	C5-C6-O6	-14.64	119.82	128.60
1	N	928	G	P-O3'-C3'	14.63	137.25	119.70
1	N	807	A	N1-C6-N6	14.61	127.37	118.60
1	N	532	A	P-O3'-C3'	14.60	137.22	119.70
1	N	1337	G	C5-C6-O6	-14.60	119.84	128.60
1	N	829	G	N1-C6-O6	14.58	128.65	119.90
1	N	1374	A	O4'-C1'-N9	14.58	119.86	108.20
1	N	926	G	N1-C6-O6	14.58	128.65	119.90
1	N	1429	A	N1-C6-N6	14.57	127.34	118.60
1	N	1504	G	N1-C6-O6	14.57	128.64	119.90
1	N	1434	A	N1-C6-N6	14.56	127.34	118.60
1	N	1251	A	N1-C6-N6	14.55	127.33	118.60
1	N	1152	A	N1-C6-N6	14.54	127.32	118.60
1	N	786	G	C5-C6-O6	-14.53	119.88	128.60
1	N	1333	A	C4-C5-C6	14.52	124.26	117.00
1	N	2	A	N1-C6-N6	14.52	127.31	118.60
1	N	1131	G	C5-C6-O6	-14.52	119.89	128.60
1	N	1408	A	N1-C6-N6	14.52	127.31	118.60
1	N	1491	G	N1-C6-O6	14.51	128.61	119.90
1	N	815	A	C5-N7-C8	14.50	111.15	103.90
1	N	1170	A	C5-C6-N1	-14.49	110.45	117.70
1	N	172	A	P-O3'-C3'	14.49	137.08	119.70
1	N	206	C	N3-C4-N4	14.49	128.14	118.00
1	N	1357	A	C6-N1-C2	14.47	127.28	118.60
1	N	246	A	C4-C5-C6	14.45	124.23	117.00
1	N	611	C	C6-N1-C2	-14.44	114.52	120.30
1	N	1394	A	N1-C6-N6	14.44	127.26	118.60
1	N	482	A	C5-C6-N1	-14.42	110.49	117.70
1	N	338	A	N1-C6-N6	14.42	127.25	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	728	A	N1-C6-N6	14.41	127.25	118.60
1	N	198	G	O4'-C1'-N9	14.40	119.72	108.20
1	N	662	U	O4'-C1'-N1	14.40	119.72	108.20
1	N	547	A	P-O3'-C3'	14.39	136.97	119.70
1	N	1228	C	O4'-C1'-N1	14.39	119.71	108.20
1	N	372	C	P-O3'-C3'	14.38	136.95	119.70
1	N	71	A	N1-C6-N6	14.37	127.22	118.60
1	N	867	G	C5-C6-O6	-14.37	119.98	128.60
1	N	169	C	O4'-C1'-N1	14.37	119.69	108.20
1	N	1136	C	C6-N1-C2	-14.37	114.55	120.30
1	N	655	A	N1-C6-N6	14.36	127.21	118.60
1	N	1213	A	N1-C6-N6	14.35	127.21	118.60
1	N	26	A	C5-C6-N6	-14.35	112.22	123.70
1	N	111	G	N1-C6-O6	14.34	128.50	119.90
1	N	529	G	N1-C6-O6	14.33	128.50	119.90
1	N	1227	A	N1-C6-N6	14.33	127.20	118.60
1	N	210	C	P-O3'-C3'	14.30	136.86	119.70
1	N	1433	A	C5-C6-N1	-14.28	110.56	117.70
1	N	104	G	N1-C6-O6	14.26	128.46	119.90
1	N	696	A	N1-C6-N6	14.24	127.14	118.60
1	N	388	G	C5-C6-O6	-14.22	120.07	128.60
1	N	623	C	C5-C4-N4	-14.21	110.25	120.20
1	N	950	U	P-O5'-C5'	14.21	143.63	120.90
1	N	264	C	P-O5'-C5'	14.20	143.62	120.90
1	N	1494	G	O4'-C1'-N9	14.20	119.56	108.20
1	N	1262	C	O4'-C1'-N1	14.20	119.56	108.20
1	N	1279	G	N1-C6-O6	14.20	128.42	119.90
1	N	802	A	C5-C6-N1	-14.19	110.61	117.70
1	N	895	G	C8-N9-C4	14.18	112.07	106.40
1	N	1278	G	N1-C6-O6	14.18	128.41	119.90
1	N	811	C	N3-C4-C5	-14.18	116.23	121.90
1	N	722	G	N1-C6-O6	14.17	128.40	119.90
1	N	191	G	N1-C6-O6	14.16	128.40	119.90
1	N	506	G	N1-C6-O6	14.15	128.39	119.90
1	N	1206	G	N1-C6-O6	14.14	128.39	119.90
1	N	559	A	P-O3'-C3'	14.14	136.67	119.70
1	N	797	C	O4'-C1'-N1	14.13	119.50	108.20
1	N	292	G	O4'-C1'-N9	14.12	119.50	108.20
1	N	1252	A	C5-C6-N6	-14.11	112.41	123.70
1	N	573	A	C5-C6-N6	-14.10	112.42	123.70
1	N	680	C	N3-C4-C5	-14.10	116.26	121.90
1	N	57	G	N1-C6-O6	14.09	128.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	780	A	N1-C6-N6	14.08	127.05	118.60
1	N	389	A	N1-C6-N6	14.06	127.04	118.60
1	N	175	C	N3-C4-N4	14.06	127.84	118.00
1	N	814	A	C5-C6-N6	-14.06	112.45	123.70
1	N	815	A	N1-C6-N6	14.05	127.03	118.60
1	N	454	G	N1-C6-O6	14.05	128.33	119.90
1	N	1446	A	N1-C6-N6	14.04	127.03	118.60
1	N	759	A	N1-C6-N6	14.04	127.02	118.60
1	N	843	U	O4'-C1'-N1	14.04	119.43	108.20
1	N	519	C	O4'-C1'-N1	14.02	119.42	108.20
1	N	836	G	C5-C6-O6	-14.01	120.19	128.60
1	N	1318	A	N1-C6-N6	14.01	127.00	118.60
1	N	1288	A	N1-C6-N6	14.00	127.00	118.60
1	N	1292	G	N1-C6-O6	14.00	128.30	119.90
1	N	612	C	N3-C4-N4	13.99	127.79	118.00
1	N	1269	A	N1-C6-N6	13.99	126.99	118.60
1	N	1238	A	N1-C6-N6	13.97	126.98	118.60
1	N	47	C	C4-C5-C6	13.97	124.38	117.40
1	N	1349	A	N1-C6-N6	13.96	126.98	118.60
1	N	897	C	O4'-C1'-N1	13.95	119.36	108.20
1	N	1026	G	N1-C6-O6	13.95	128.27	119.90
1	N	1074	G	C5-C6-O6	-13.94	120.23	128.60
1	N	234	C	O4'-C1'-N1	13.94	119.35	108.20
1	N	1409	C	N3-C4-N4	13.93	127.75	118.00
1	N	656	G	C5-C6-O6	-13.93	120.25	128.60
1	N	1102	A	N1-C6-N6	13.92	126.95	118.60
1	N	382	A	N1-C6-N6	13.91	126.95	118.60
1	N	327	A	P-O3'-C3'	13.91	136.39	119.70
1	N	817	C	P-O3'-C3'	13.90	136.38	119.70
1	N	1143	G	O4'-C1'-N9	13.89	119.31	108.20
1	N	1054	C	N3-C4-C5	-13.89	116.35	121.90
1	N	1483	A	O4'-C1'-N9	13.88	119.31	108.20
1	N	3	A	N1-C6-N6	13.87	126.92	118.60
1	N	718	A	C4-C5-C6	13.86	123.93	117.00
1	N	1283	U	O4'-C1'-N1	13.86	119.29	108.20
1	N	840	C	N3-C4-C5	-13.86	116.36	121.90
1	N	1282	C	N3-C4-N4	13.85	127.70	118.00
1	N	72	A	N1-C6-N6	13.84	126.91	118.60
1	N	298	A	N1-C6-N6	13.84	126.90	118.60
1	N	1357	A	N1-C2-N3	-13.84	122.38	129.30
1	N	306	A	N1-C6-N6	13.83	126.90	118.60
1	N	102	G	N1-C6-O6	13.82	128.19	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	274	A	N1-C6-N6	13.81	126.89	118.60
1	N	109	A	P-O3'-C3'	13.80	136.26	119.70
1	N	708	C	C2-N3-C4	13.80	126.80	119.90
1	N	714	G	O4'-C1'-N9	13.79	119.23	108.20
1	N	1386	G	N1-C6-O6	13.78	128.16	119.90
1	N	547	A	N1-C6-N6	13.77	126.86	118.60
1	N	656	G	N1-C6-O6	13.77	128.16	119.90
1	N	1012	A	N1-C6-N6	13.77	126.86	118.60
1	N	423	G	C5-C6-O6	-13.76	120.34	128.60
1	N	695	A	C8-N9-C4	-13.76	100.30	105.80
1	N	559	A	N1-C6-N6	13.75	126.85	118.60
1	N	808	C	N3-C4-C5	-13.75	116.40	121.90
1	N	1170	A	C4-C5-C6	13.75	123.87	117.00
1	N	22	G	N1-C6-O6	13.75	128.15	119.90
1	N	1160	G	N7-C8-N9	-13.75	106.23	113.10
1	N	206	C	C5-C4-N4	-13.74	110.58	120.20
1	N	1174	G	N1-C6-O6	13.74	128.14	119.90
1	N	1239	A	O4'-C1'-N9	13.73	119.19	108.20
1	N	412	A	N1-C6-N6	13.71	126.83	118.60
1	N	532	A	C5-C6-N6	-13.70	112.74	123.70
1	N	1290	G	N1-C6-O6	13.70	128.12	119.90
1	N	1509	C	N3-C4-N4	13.69	127.58	118.00
1	N	308	C	C6-N1-C2	-13.69	114.83	120.30
1	N	190	A	C5-C6-N6	-13.68	112.75	123.70
1	N	864	A	P-O3'-C3'	13.68	136.12	119.70
1	N	605	U	P-O3'-C3'	13.67	136.11	119.70
1	N	890	G	C5-C6-O6	-13.67	120.40	128.60
1	N	1252	A	C8-N9-C4	-13.66	100.33	105.80
1	N	400	C	O4'-C1'-N1	13.65	119.12	108.20
1	N	840	C	O4'-C1'-N1	13.65	119.12	108.20
1	N	1173	U	P-O5'-C5'	13.65	142.74	120.90
1	N	40	C	C5-C4-N4	-13.65	110.65	120.20
1	N	1395	C	O4'-C1'-N1	13.64	119.11	108.20
1	N	611	C	N3-C4-C5	-13.63	116.45	121.90
1	N	1511	G	N1-C6-O6	13.62	128.07	119.90
1	N	860	A	P-O3'-C3'	13.62	136.04	119.70
1	N	380	G	N9-C4-C5	13.61	110.85	105.40
1	N	122	G	C5-C6-O6	-13.61	120.43	128.60
1	N	1331	G	N1-C6-O6	13.61	128.07	119.90
1	N	591	U	O4'-C1'-N1	13.60	119.08	108.20
1	N	585	G	N1-C6-O6	13.60	128.06	119.90
1	N	1102	A	O4'-C1'-N9	13.59	119.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1457	G	N1-C6-O6	13.59	128.06	119.90
1	N	893	C	C5-C4-N4	-13.59	110.69	120.20
1	N	388	G	N1-C6-O6	13.57	128.04	119.90
1	N	699	C	O4'-C1'-N1	13.57	119.06	108.20
1	N	705	G	N1-C6-O6	13.57	128.04	119.90
1	N	149	A	N1-C6-N6	13.56	126.74	118.60
1	N	1464	U	O4'-C1'-N1	13.56	119.05	108.20
1	N	360	G	C5-C6-O6	-13.55	120.47	128.60
1	N	1422	G	N1-C6-O6	13.55	128.03	119.90
1	N	1100	C	O4'-C1'-N1	13.54	119.03	108.20
1	N	383	A	N1-C6-N6	13.53	126.72	118.60
1	N	1467	C	N3-C4-N4	13.53	127.47	118.00
1	N	738	C	C6-N1-C2	-13.53	114.89	120.30
1	N	1038	C	O4'-C1'-N1	13.52	119.02	108.20
1	N	690	G	P-O5'-C5'	13.50	142.51	120.90
1	N	892	A	C5-C6-N6	-13.49	112.91	123.70
1	N	895	G	P-O5'-C5'	13.48	142.47	120.90
1	N	58	C	O4'-C1'-N1	13.47	118.98	108.20
1	N	719	C	O4'-C1'-N1	13.47	118.98	108.20
1	N	971	G	C4-C5-N7	13.47	116.19	110.80
1	N	1243	C	P-O5'-C5'	13.46	142.44	120.90
1	N	626	G	C5-C6-O6	-13.46	120.52	128.60
1	N	1323	G	O4'-C1'-N9	13.46	118.97	108.20
1	N	579	A	C5-C6-N6	-13.45	112.94	123.70
1	N	1353	G	N1-C6-O6	13.44	127.97	119.90
1	N	342	C	O4'-C1'-N1	13.43	118.94	108.20
1	N	1037	C	C5-C6-N1	13.43	127.71	121.00
1	N	870	U	C5-C6-N1	-13.42	115.99	122.70
1	N	596	A	N1-C6-N6	13.42	126.65	118.60
1	N	1383	C	C6-N1-C2	-13.42	114.93	120.30
1	N	447	G	N1-C6-O6	13.41	127.95	119.90
1	N	558	G	C5-C6-O6	-13.40	120.56	128.60
1	N	1517	G	N1-C6-O6	13.40	127.94	119.90
1	N	847	G	N1-C6-O6	13.39	127.94	119.90
1	N	515	G	C5-C6-O6	-13.39	120.57	128.60
1	N	642	A	C5-N7-C8	13.38	110.59	103.90
1	N	1032	G	C5-C6-O6	-13.37	120.58	128.60
1	N	226	G	N1-C6-O6	13.35	127.91	119.90
1	N	867	G	N1-C6-O6	13.35	127.91	119.90
1	N	641	U	P-O3'-C3'	13.34	135.71	119.70
1	N	802	A	C4-C5-C6	13.34	123.67	117.00
1	N	181	A	C5-C6-N1	-13.33	111.03	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	906	A	N1-C6-N6	13.33	126.60	118.60
1	N	592	G	C5-C6-O6	-13.32	120.61	128.60
1	N	1131	G	N1-C6-O6	13.31	127.89	119.90
1	N	648	A	C5-C6-N1	-13.31	111.04	117.70
1	N	1139	G	C5-C6-O6	-13.31	120.61	128.60
1	N	931	C	N3-C4-C5	-13.30	116.58	121.90
1	N	1055	A	C4-C5-C6	13.29	123.64	117.00
1	N	1185	G	N1-C6-O6	13.28	127.87	119.90
1	N	1530	G	P-O3'-C3'	13.28	135.64	119.70
1	N	232	G	C5-C6-O6	-13.26	120.64	128.60
1	N	226	G	C5-C6-O6	-13.25	120.65	128.60
1	N	676	A	C4-C5-C6	13.25	123.63	117.00
1	N	566	G	C5-C6-O6	-13.25	120.65	128.60
1	N	276	G	N1-C6-O6	13.24	127.84	119.90
1	N	1178	G	N9-C4-C5	13.24	110.70	105.40
1	N	57	G	C2-N3-C4	-13.23	105.28	111.90
1	N	396	C	C5-C4-N4	-13.23	110.94	120.20
1	N	1040	U	P-O5'-C5'	13.22	142.06	120.90
1	N	366	A	C8-N9-C4	-13.22	100.51	105.80
1	N	413	G	P-O3'-C3'	13.22	135.56	119.70
1	N	987	G	C5-C6-O6	-13.21	120.67	128.60
1	N	1456	A	C5-C6-N1	-13.22	111.09	117.70
1	N	1260	G	N3-C2-N2	13.21	129.15	119.90
1	N	814	A	N1-C6-N6	13.21	126.53	118.60
1	N	1533	C	N3-C4-C5	-13.21	116.62	121.90
1	N	986	U	O4'-C1'-N1	13.19	118.75	108.20
1	N	695	A	N1-C6-N6	13.18	126.51	118.60
1	N	38	G	C5-C6-O6	-13.17	120.70	128.60
1	N	372	C	O4'-C1'-N1	13.16	118.73	108.20
1	N	1031	C	N3-C4-C5	-13.16	116.64	121.90
1	N	376	G	C5-C6-O6	-13.15	120.71	128.60
1	N	828	U	C5-C6-N1	13.15	129.28	122.70
1	N	668	G	C5-C6-O6	-13.15	120.71	128.60
1	N	789	U	C4-C5-C6	13.14	127.59	119.70
1	N	1182	G	C5-C6-O6	-13.13	120.72	128.60
1	N	140	U	C5-C6-N1	13.12	129.26	122.70
1	N	937	A	O4'-C1'-N9	13.10	118.68	108.20
1	N	362	G	N1-C6-O6	13.10	127.76	119.90
1	N	213	G	N1-C6-O6	13.08	127.75	119.90
1	N	524	G	C5-C6-O6	-13.08	120.75	128.60
1	N	1225	A	N1-C6-N6	13.08	126.45	118.60
1	N	521	G	N3-C2-N2	13.06	129.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1141	C	O4'-C1'-N1	13.06	118.65	108.20
1	N	1226	C	P-O3'-C3'	13.05	135.37	119.70
1	N	386	C	O4'-C1'-N1	13.05	118.64	108.20
1	N	80	A	C5-C6-N6	-13.04	113.26	123.70
1	N	1026	G	C5-C6-O6	-13.04	120.77	128.60
1	N	1081	A	C8-N9-C4	-13.04	100.58	105.80
1	N	66	A	N1-C6-N6	13.03	126.42	118.60
1	N	756	C	O4'-C1'-N1	13.03	118.62	108.20
1	N	1349	A	C5-C6-N1	-13.02	111.19	117.70
1	N	1349	A	C4-C5-C6	13.02	123.51	117.00
1	N	194	C	N3-C4-N4	13.00	127.10	118.00
1	N	128	G	N1-C6-O6	12.99	127.69	119.90
1	N	1389	C	N3-C4-C5	-12.98	116.71	121.90
1	N	237	G	C6-C5-N7	-12.98	122.61	130.40
1	N	1455	G	N1-C6-O6	12.97	127.69	119.90
1	N	793	U	O4'-C1'-N1	12.97	118.58	108.20
1	N	918	A	O4'-C1'-N9	12.97	118.58	108.20
1	N	1278	G	P-O3'-C3'	12.97	135.27	119.70
1	N	509	A	N1-C6-N6	12.96	126.38	118.60
1	N	1256	A	C4-C5-C6	12.95	123.47	117.00
1	N	1170	A	C6-C5-N7	-12.94	123.24	132.30
1	N	503	C	O4'-C1'-N1	12.94	118.55	108.20
1	N	768	A	C5-C6-N6	-12.94	113.35	123.70
1	N	406	G	C2-N3-C4	12.93	118.37	111.90
1	N	77	A	N1-C6-N6	12.93	126.36	118.60
1	N	510	A	C8-N9-C4	-12.92	100.63	105.80
1	N	894	G	C5-C6-O6	-12.92	120.85	128.60
1	N	162	A	C5-C6-N1	-12.91	111.24	117.70
1	N	1263	C	P-O5'-C5'	12.91	141.55	120.90
1	N	117	G	N3-C2-N2	12.90	128.93	119.90
1	N	1332	A	C8-N9-C4	-12.90	100.64	105.80
1	N	526	C	N3-C4-N4	12.90	127.03	118.00
1	N	199	A	C6-N1-C2	12.90	126.34	118.60
1	N	746	A	N1-C6-N6	12.90	126.34	118.60
1	N	1336	C	O4'-C1'-N1	12.90	118.52	108.20
1	N	386	C	C5-C6-N1	12.89	127.45	121.00
1	N	1101	A	C5-N7-C8	12.89	110.34	103.90
1	N	1337	G	P-O3'-C3'	-12.89	104.23	119.70
1	N	1438	G	C5-C6-N1	-12.89	105.06	111.50
1	N	484	G	N1-C6-O6	12.87	127.62	119.90
1	N	9	G	N9-C4-C5	12.87	110.55	105.40
1	N	191	G	C5-C6-O6	-12.87	120.88	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1374	A	C5-C6-N6	-12.87	113.41	123.70
1	N	505	G	C5-C6-O6	-12.86	120.88	128.60
1	N	1209	C	O4'-C1'-N1	12.86	118.49	108.20
1	N	413	G	C5-C6-O6	-12.86	120.89	128.60
1	N	830	G	N1-C6-O6	12.85	127.61	119.90
1	N	704	A	O4'-C1'-N9	12.84	118.47	108.20
1	N	1046	A	N1-C6-N6	12.83	126.30	118.60
1	N	669	G	N1-C6-O6	12.82	127.59	119.90
1	N	1263	C	O4'-C1'-N1	12.82	118.46	108.20
1	N	477	C	O4'-C1'-N1	12.82	118.45	108.20
1	N	266	G	C5-C6-O6	-12.81	120.92	128.60
1	N	129	A	N1-C6-N6	12.80	126.28	118.60
1	N	493	A	N1-C6-N6	12.80	126.28	118.60
1	N	1390	U	O4'-C1'-N1	12.80	118.44	108.20
1	N	105	G	N7-C8-N9	12.80	119.50	113.10
1	N	336	A	N1-C6-N6	12.79	126.28	118.60
1	N	879	C	N3-C4-C5	-12.79	116.78	121.90
1	N	1037	C	C6-N1-C2	-12.79	115.18	120.30
1	N	1105	A	N1-C6-N6	12.79	126.27	118.60
1	N	1202	U	O4'-C1'-N1	12.78	118.42	108.20
1	N	829	G	C8-N9-C4	-12.78	101.29	106.40
1	N	232	G	O4'-C1'-N9	12.77	118.42	108.20
1	N	316	C	C2-N3-C4	-12.76	113.52	119.90
1	N	1357	A	N9-C4-C5	12.76	110.90	105.80
1	N	380	G	C8-N9-C4	-12.75	101.30	106.40
1	N	311	C	O4'-C1'-N1	12.74	118.39	108.20
1	N	1326	U	O4'-C1'-N1	12.74	118.39	108.20
1	N	26	A	O4'-C1'-N9	12.74	118.39	108.20
1	N	694	A	N9-C4-C5	12.73	110.89	105.80
1	N	454	G	C5-C6-O6	-12.73	120.96	128.60
1	N	76	G	N9-C4-C5	-12.71	100.31	105.40
1	N	165	G	C5-C6-O6	-12.71	120.97	128.60
1	N	1517	G	C5-C6-O6	-12.71	120.97	128.60
1	N	739	C	O4'-C1'-N1	12.70	118.36	108.20
1	N	937	A	C5-C6-N1	-12.69	111.36	117.70
1	N	1082	A	C8-N9-C4	-12.69	100.72	105.80
1	N	1422	G	C5-C6-O6	-12.68	120.99	128.60
1	N	1278	G	C5-C6-O6	-12.67	121.00	128.60
1	N	718	A	C6-C5-N7	-12.67	123.43	132.30
1	N	1287	A	C4-C5-C6	12.66	123.33	117.00
1	N	7	A	N1-C6-N6	12.66	126.20	118.60
1	N	1272	G	N1-C6-O6	12.66	127.50	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	199	A	N1-C2-N3	-12.65	122.97	129.30
1	N	355	C	O4'-C1'-N1	12.65	118.32	108.20
1	N	1520	C	O4'-C1'-N1	12.65	118.32	108.20
1	N	529	G	C5-C6-O6	-12.65	121.01	128.60
1	N	1534	A	N1-C6-N6	12.64	126.19	118.60
1	N	880	C	N3-C4-N4	12.64	126.85	118.00
1	N	1213	A	C4-C5-C6	12.64	123.32	117.00
1	N	543	U	C5-C6-N1	12.63	129.02	122.70
1	N	73	C	O4'-C1'-N1	12.63	118.30	108.20
1	N	987	G	O4'-C1'-N9	12.63	118.30	108.20
1	N	1033	G	C5-C6-O6	-12.62	121.03	128.60
1	N	1272	G	C5-C6-O6	-12.62	121.03	128.60
1	N	429	U	O4'-C1'-N1	12.62	118.29	108.20
1	N	211	G	N1-C6-O6	12.62	127.47	119.90
1	N	1448	C	O4'-C1'-N1	12.61	118.29	108.20
1	N	1241	G	C8-N9-C4	-12.61	101.36	106.40
1	N	487	A	C2-N3-C4	-12.60	104.30	110.60
1	N	120	A	O4'-C1'-N9	12.59	118.27	108.20
1	N	1399	C	O4'-C1'-N1	12.59	118.27	108.20
1	N	683	G	N1-C6-O6	12.59	127.45	119.90
1	N	58	C	N3-C4-C5	-12.58	116.87	121.90
1	N	186	C	N3-C4-N4	12.58	126.80	118.00
1	N	932	C	C6-N1-C2	-12.58	115.27	120.30
1	N	518	C	C4-C5-C6	12.57	123.69	117.40
1	N	894	G	N3-C2-N2	12.57	128.70	119.90
1	N	1136	C	C5-C6-N1	12.57	127.28	121.00
1	N	881	G	C5-C6-O6	-12.56	121.06	128.60
1	N	413	G	N1-C6-O6	12.56	127.44	119.90
1	N	764	C	O4'-C1'-N1	12.54	118.24	108.20
1	N	879	C	C5-C4-N4	-12.53	111.43	120.20
1	N	512	U	N1-C2-N3	-12.53	107.38	114.90
1	N	189	A	C5-C6-N1	-12.52	111.44	117.70
1	N	57	G	C5-C6-O6	-12.51	121.09	128.60
1	N	59	A	N1-C6-N6	12.51	126.11	118.60
1	N	623	C	N3-C4-N4	12.51	126.76	118.00
1	N	744	C	N3-C4-C5	-12.51	116.90	121.90
1	N	350	G	N1-C6-O6	12.50	127.40	119.90
1	N	1216	A	N1-C2-N3	12.50	135.55	129.30
1	N	557	G	P-O3'-C3'	12.50	134.70	119.70
1	N	297	G	N1-C6-O6	12.50	127.40	119.90
1	N	742	G	C5-C6-O6	-12.49	121.10	128.60
1	N	1279	G	C5-C6-O6	-12.49	121.11	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1032	G	O4'-C1'-N9	12.49	118.19	108.20
1	N	632	U	O4'-C1'-N1	12.48	118.19	108.20
1	N	27	G	N1-C6-O6	12.48	127.39	119.90
1	N	1415	G	C5-C6-O6	-12.48	121.11	128.60
1	N	1305	G	O4'-C1'-N9	12.47	118.18	108.20
1	N	1439	G	N1-C6-O6	12.47	127.38	119.90
1	N	104	G	C5-C6-O6	-12.45	121.13	128.60
1	N	1055	A	N1-C6-N6	12.45	126.07	118.60
1	N	1238	A	N1-C2-N3	12.45	135.53	129.30
1	N	259	G	N1-C6-O6	12.44	127.36	119.90
1	N	509	A	C5-C6-N6	-12.44	113.75	123.70
1	N	810	C	O4'-C1'-N1	12.44	118.15	108.20
1	N	161	A	C4-C5-C6	12.43	123.22	117.00
1	N	1045	C	O4'-C1'-N1	12.43	118.14	108.20
1	N	278	G	N1-C6-O6	12.43	127.36	119.90
1	N	1413	A	N1-C6-N6	12.42	126.05	118.60
1	N	685	G	N3-C2-N2	12.42	128.59	119.90
1	N	1187	G	O4'-C1'-N9	12.41	118.13	108.20
1	N	812	G	C5-C6-O6	-12.41	121.15	128.60
1	N	259	G	C5-C6-O6	-12.41	121.15	128.60
1	N	1181	G	N9-C4-C5	-12.41	100.44	105.40
1	N	1319	A	C8-N9-C4	-12.41	100.84	105.80
1	N	1522	U	O4'-C1'-N1	12.40	118.12	108.20
1	N	581	G	C5-C6-O6	-12.40	121.16	128.60
1	N	1106	G	C8-N9-C4	-12.40	101.44	106.40
1	N	1150	A	C5-C6-N6	-12.39	113.79	123.70
1	N	1042	A	C5-C6-N1	-12.39	111.50	117.70
1	N	1101	A	P-O3'-C3'	12.39	134.57	119.70
1	N	1507	A	C5-C6-N1	-12.39	111.51	117.70
1	N	1245	C	C6-N1-C2	-12.38	115.35	120.30
1	N	241	G	N3-C2-N2	12.38	128.56	119.90
1	N	204	G	N1-C6-O6	12.37	127.32	119.90
1	N	212	G	P-O3'-C3'	12.37	134.54	119.70
1	N	195	A	C4-C5-N7	-12.37	104.52	110.70
1	N	527	G	N1-C6-O6	12.36	127.32	119.90
1	N	929	G	N1-C6-O6	12.36	127.32	119.90
1	N	431	A	N1-C6-N6	12.36	126.01	118.60
1	N	415	A	C2-N3-C4	12.36	116.78	110.60
1	N	1101	A	N1-C6-N6	12.35	126.01	118.60
1	N	1094	G	P-O3'-C3'	12.34	134.51	119.70
1	N	1455	G	C5-C6-O6	-12.33	121.20	128.60
1	N	1145	A	C5-C6-N1	-12.32	111.54	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	683	G	C5-C6-O6	-12.32	121.21	128.60
1	N	1338	G	C5-C6-O6	-12.32	121.21	128.60
1	N	1438	G	N1-C6-O6	12.32	127.29	119.90
1	N	1534	A	O4'-C1'-N9	12.31	118.05	108.20
1	N	135	C	N3-C4-N4	12.31	126.62	118.00
1	N	1523	G	C5-C6-O6	-12.31	121.22	128.60
1	N	1187	G	N1-C6-O6	12.30	127.28	119.90
1	N	1015	G	O4'-C1'-N9	12.30	118.04	108.20
1	N	1258	G	N1-C6-O6	12.29	127.28	119.90
1	N	1468	A	N1-C6-N6	12.29	125.98	118.60
1	N	558	G	N1-C6-O6	12.29	127.27	119.90
1	N	736	C	O4'-C1'-N1	12.28	118.03	108.20
1	N	1305	G	N1-C6-O6	12.28	127.27	119.90
1	N	917	G	C5-C6-O6	-12.28	121.23	128.60
1	N	236	A	C5-C6-N6	-12.28	113.88	123.70
1	N	702	A	C5-C6-N6	-12.27	113.88	123.70
1	N	354	G	N1-C6-O6	12.27	127.26	119.90
1	N	406	G	N1-C2-N3	-12.27	116.54	123.90
1	N	1167	A	C5-C6-N6	-12.27	113.89	123.70
1	N	1417	G	N1-C6-O6	12.27	127.26	119.90
1	N	1399	C	N3-C4-N4	12.26	126.58	118.00
1	N	881	G	N1-C6-O6	12.26	127.25	119.90
1	N	528	C	N3-C4-C5	-12.25	117.00	121.90
1	N	1449	C	C5-C4-N4	-12.25	111.63	120.20
1	N	105	G	C8-N9-C4	-12.24	101.50	106.40
1	N	940	C	C5-C4-N4	-12.24	111.63	120.20
1	N	1130	A	C4-C5-C6	12.24	123.12	117.00
1	N	1265	C	O4'-C1'-N1	12.24	117.99	108.20
1	N	614	C	N3-C4-N4	12.23	126.56	118.00
1	N	595	A	N1-C6-N6	12.23	125.94	118.60
1	N	764	C	N3-C4-N4	12.23	126.56	118.00
1	N	530	G	P-O3'-C3'	12.23	134.38	119.70
1	N	776	G	P-O5'-C5'	12.23	140.46	120.90
1	N	330	C	C2-N3-C4	12.22	126.01	119.90
1	N	1346	A	C8-N9-C4	12.22	110.69	105.80
1	N	1241	G	P-O5'-C5'	12.22	140.46	120.90
1	N	1369	C	O4'-C1'-N1	12.22	117.98	108.20
1	N	500	G	O4'-C1'-N9	12.22	117.98	108.20
1	N	1178	G	C8-N9-C4	-12.22	101.51	106.40
1	N	508	U	P-O3'-C3'	12.22	134.36	119.70
1	N	199	A	C5-C6-N1	-12.21	111.60	117.70
1	N	652	U	O4'-C1'-N1	12.21	117.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1423	G	N1-C6-O6	12.21	127.22	119.90
1	N	1292	G	C5-C6-O6	-12.20	121.28	128.60
1	N	599	C	C6-N1-C2	-12.20	115.42	120.30
1	N	1452	C	N3-C4-N4	12.19	126.54	118.00
1	N	212	G	N7-C8-N9	-12.19	107.00	113.10
1	N	969	A	C5-C6-N6	-12.19	113.95	123.70
1	N	1090	U	O4'-C1'-N1	12.18	117.95	108.20
1	N	386	C	C2-N3-C4	12.18	125.99	119.90
1	N	265	G	C5-C6-O6	-12.17	121.30	128.60
1	N	777	A	O4'-C1'-N9	12.17	117.94	108.20
1	N	1050	G	O4'-C1'-N9	12.17	117.94	108.20
1	N	60	A	P-O3'-C3'	12.17	134.30	119.70
1	N	98	A	C5-C6-N6	-12.17	113.97	123.70
1	N	1245	C	O4'-C1'-N1	12.16	117.93	108.20
1	N	847	G	C5-C6-O6	-12.16	121.30	128.60
1	N	973	G	N1-C6-O6	12.16	127.20	119.90
1	N	1276	G	C5-C6-O6	-12.16	121.31	128.60
1	N	888	G	N1-C6-O6	12.15	127.19	119.90
1	N	614	C	C6-N1-C2	-12.15	115.44	120.30
1	N	1184	G	C5-C6-O6	-12.15	121.31	128.60
1	N	546	A	C4-C5-C6	12.13	123.07	117.00
1	N	839	C	C2-N3-C4	12.13	125.97	119.90
1	N	1245	C	N3-C4-C5	-12.12	117.05	121.90
1	N	213	G	C4-C5-C6	12.12	126.07	118.80
1	N	1004	A	N1-C6-N6	12.11	125.87	118.60
1	N	1408	A	C4-C5-C6	12.11	123.06	117.00
1	N	981	U	O4'-C1'-N1	12.11	117.89	108.20
1	N	549	C	C5-C4-N4	-12.11	111.72	120.20
1	N	575	G	C5-C6-O6	-12.11	121.34	128.60
1	N	1431	A	C2-N3-C4	-12.11	104.55	110.60
1	N	729	A	O4'-C1'-N9	12.11	117.88	108.20
1	N	266	G	P-O3'-C3'	12.10	134.22	119.70
1	N	1049	U	O4'-C1'-N1	12.10	117.88	108.20
1	N	949	A	N1-C6-N6	12.09	125.85	118.60
1	N	983	A	C5-C6-N6	-12.09	114.03	123.70
1	N	422	C	N3-C4-C5	-12.08	117.07	121.90
1	N	1299	A	N1-C6-N6	12.08	125.85	118.60
1	N	1484	C	C5-C6-N1	12.08	127.04	121.00
1	N	1089	G	N1-C6-O6	12.07	127.14	119.90
1	N	729	A	C5-C6-N6	-12.07	114.04	123.70
1	N	1386	G	C5-C6-O6	-12.07	121.36	128.60
1	N	716	A	C5-C6-N6	-12.06	114.05	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	41	G	N1-C2-N3	-12.05	116.67	123.90
1	N	922	G	N1-C6-O6	12.05	127.13	119.90
1	N	1067	A	N1-C6-N6	12.04	125.82	118.60
1	N	250	A	C5-C6-N1	-12.04	111.68	117.70
1	N	1383	C	N3-C4-C5	-12.04	117.08	121.90
1	N	667	G	C8-N9-C4	-12.04	101.59	106.40
1	N	545	C	N3-C4-N4	12.03	126.42	118.00
1	N	195	A	C4-C5-C6	12.03	123.01	117.00
1	N	783	C	C5-C4-N4	-12.03	111.78	120.20
1	N	369	G	N1-C6-O6	12.02	127.11	119.90
1	N	353	A	N1-C6-N6	12.02	125.81	118.60
1	N	1325	C	N3-C4-C5	-12.02	117.09	121.90
1	N	494	G	C5-C6-O6	-12.02	121.39	128.60
1	N	1092	A	C2-N3-C4	12.02	116.61	110.60
1	N	490	C	N3-C4-N4	12.01	126.41	118.00
1	N	178	C	C5-C4-N4	-12.01	111.79	120.20
1	N	353	A	C4-C5-C6	12.00	123.00	117.00
1	N	1319	A	P-O3'-C3'	12.00	134.10	119.70
1	N	1031	C	C2-N3-C4	12.00	125.90	119.90
1	N	1080	A	N1-C2-N3	11.99	135.30	129.30
1	N	674	G	C5-C6-O6	-11.98	121.41	128.60
1	N	73	C	N3-C4-C5	-11.98	117.11	121.90
1	N	449	G	C5-C6-O6	-11.97	121.42	128.60
1	N	936	C	O4'-C1'-N1	11.97	117.78	108.20
1	N	1357	A	C4-C5-C6	11.96	122.98	117.00
1	N	117	G	N1-C6-O6	11.95	127.07	119.90
1	N	1104	G	O4'-C1'-N9	11.95	117.76	108.20
1	N	1380	U	O4'-C1'-N1	11.95	117.76	108.20
1	N	51	A	N1-C6-N6	11.94	125.77	118.60
1	N	971	G	C5-C6-O6	-11.94	121.44	128.60
1	N	305	G	P-O3'-C3'	11.93	134.01	119.70
1	N	511	C	C6-N1-C2	11.93	125.07	120.30
1	N	393	A	C5-C6-N6	-11.93	114.16	123.70
1	N	184	G	P-O5'-C5'	11.93	139.98	120.90
1	N	499	A	P-O3'-C3'	11.92	134.01	119.70
1	N	108	G	C5-C6-O6	-11.92	121.45	128.60
1	N	843	U	C2-N1-C1'	11.92	132.00	117.70
1	N	329	A	N1-C6-N6	11.91	125.75	118.60
1	N	176	C	C6-N1-C2	-11.90	115.54	120.30
1	N	946	A	C5-C6-N1	-11.90	111.75	117.70
1	N	1456	A	C4-C5-C6	11.90	122.95	117.00
1	N	1273	C	O4'-C1'-N1	11.89	117.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	909	A	N1-C6-N6	11.89	125.73	118.60
1	N	1145	A	C4-C5-C6	11.88	122.94	117.00
1	N	1521	C	N3-C4-N4	11.88	126.31	118.00
1	N	107	G	N1-C6-O6	11.87	127.02	119.90
1	N	608	A	O4'-C1'-N9	11.87	117.69	108.20
1	N	262	A	O4'-C1'-N9	11.86	117.69	108.20
1	N	313	A	N1-C6-N6	11.87	125.72	118.60
1	N	1254	A	N9-C4-C5	-11.87	101.05	105.80
1	N	1519	A	C4-C5-C6	11.87	122.93	117.00
1	N	811	C	C2-N3-C4	11.85	125.83	119.90
1	N	910	C	C2-N3-C4	11.85	125.82	119.90
1	N	1327	C	N3-C4-N4	11.85	126.29	118.00
1	N	63	C	P-O3'-C3'	11.84	133.91	119.70
1	N	954	G	C4-C5-N7	11.84	115.54	110.80
1	N	1176	A	C4-C5-C6	11.84	122.92	117.00
1	N	1475	G	N1-C6-O6	11.84	127.00	119.90
1	N	317	U	P-O5'-C5'	11.84	139.84	120.90
1	N	520	A	N1-C6-N6	11.84	125.70	118.60
1	N	169	C	C6-N1-C2	-11.84	115.56	120.30
1	N	1397	C	N3-C4-C5	-11.84	117.17	121.90
1	N	829	G	C5-C6-O6	-11.84	121.50	128.60
1	N	68	G	N3-C2-N2	11.83	128.18	119.90
1	N	270	A	C5-C6-N1	-11.83	111.79	117.70
1	N	1523	G	C8-N9-C4	11.83	111.13	106.40
1	N	769	G	N1-C6-O6	11.82	126.99	119.90
1	N	819	A	C5-C6-N1	-11.82	111.79	117.70
1	N	390	U	O4'-C1'-N1	11.81	117.65	108.20
1	N	671	G	N1-C6-O6	11.81	126.98	119.90
1	N	938	A	N1-C6-N6	11.81	125.68	118.60
1	N	131	A	O4'-C1'-N9	11.80	117.64	108.20
1	N	15	G	C5-C6-O6	-11.80	121.52	128.60
1	N	213	G	C5-C6-O6	-11.80	121.52	128.60
1	N	1525	G	C5-C6-N1	-11.79	105.61	111.50
1	N	435	A	C8-N9-C4	-11.78	101.09	105.80
1	N	94	G	C5-C6-O6	-11.78	121.53	128.60
1	N	860	A	C2-N3-C4	-11.77	104.72	110.60
1	N	1398	A	N1-C6-N6	11.77	125.66	118.60
1	N	343	U	O4'-C1'-N1	11.76	117.61	108.20
1	N	1062	U	O4'-C1'-N1	11.76	117.61	108.20
1	N	1094	G	C5-C6-O6	-11.76	121.55	128.60
1	N	885	G	C5-C6-N1	-11.76	105.62	111.50
1	N	633	G	P-O5'-C5'	11.75	139.71	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1339	A	O4'-C1'-N9	11.75	117.60	108.20
1	N	1356	G	N1-C6-O6	11.73	126.94	119.90
1	N	1014	A	N1-C6-N6	11.73	125.64	118.60
1	N	431	A	C4-C5-C6	11.72	122.86	117.00
1	N	452	A	C5-N7-C8	11.72	109.76	103.90
1	N	1128	C	O4'-C1'-N1	11.72	117.58	108.20
1	N	360	G	N1-C6-O6	11.72	126.93	119.90
1	N	1092	A	N3-C4-N9	11.72	136.77	127.40
1	N	563	A	C5-C6-N1	-11.71	111.84	117.70
1	N	40	C	N3-C4-N4	11.71	126.19	118.00
1	N	385	C	C5-C4-N4	-11.71	112.00	120.20
1	N	1186	G	N1-C6-O6	11.71	126.92	119.90
1	N	1396	A	C5-C6-N1	-11.71	111.85	117.70
1	N	282	A	N1-C6-N6	11.70	125.62	118.60
1	N	1039	G	N3-C2-N2	11.71	128.09	119.90
1	N	1373	G	N9-C4-C5	-11.70	100.72	105.40
1	N	155	A	C5-C6-N1	-11.70	111.85	117.70
1	N	1201	A	N1-C6-N6	11.70	125.62	118.60
1	N	811	C	O4'-C1'-N1	11.69	117.55	108.20
1	N	168	G	N1-C6-O6	11.69	126.91	119.90
1	N	211	G	C5-C6-O6	-11.69	121.58	128.60
1	N	839	C	C4-C5-C6	11.69	123.25	117.40
1	N	1218	C	O4'-C1'-N1	11.69	117.55	108.20
1	N	963	G	P-O3'-C3'	-11.69	105.68	119.70
1	N	749	A	N1-C6-N6	11.68	125.61	118.60
1	N	1270	G	C5-C6-O6	-11.68	121.59	128.60
1	N	783	C	N3-C4-N4	11.68	126.18	118.00
1	N	1061	G	P-O5'-C5'	11.68	139.58	120.90
1	N	589	U	O4'-C1'-N1	11.67	117.54	108.20
1	N	618	C	O4'-C1'-N1	11.67	117.54	108.20
1	N	1370	G	O4'-C1'-N9	11.67	117.54	108.20
1	N	57	G	C4-C5-N7	11.67	115.47	110.80
1	N	760	G	N3-C2-N2	11.67	128.07	119.90
1	N	848	C	C6-N1-C2	-11.67	115.63	120.30
1	N	53	A	P-O5'-C5'	11.66	139.56	120.90
1	N	293	G	N9-C4-C5	-11.66	100.73	105.40
1	N	566	G	N1-C6-O6	11.66	126.90	119.90
1	N	65	A	C5-C6-N1	-11.66	111.87	117.70
1	N	548	G	C6-C5-N7	-11.66	123.40	130.40
1	N	651	C	N3-C4-N4	11.66	126.16	118.00
1	N	260	G	N1-C6-O6	11.65	126.89	119.90
1	N	78	A	C6-C5-N7	-11.64	124.15	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1053	G	C5-C6-O6	-11.64	121.62	128.60
1	N	856	C	O4'-C1'-N1	11.63	117.51	108.20
1	N	194	C	O4'-C1'-N1	11.63	117.50	108.20
1	N	633	G	O4'-C1'-N9	11.63	117.50	108.20
1	N	840	C	N3-C4-N4	11.63	126.14	118.00
1	N	55	A	C5-C6-N1	-11.63	111.89	117.70
1	N	1063	C	N3-C4-C5	-11.62	117.25	121.90
1	N	1309	G	N1-C6-O6	11.62	126.88	119.90
1	N	885	G	N1-C6-O6	11.62	126.87	119.90
1	N	575	G	P-O3'-C3'	11.62	133.64	119.70
1	N	1101	A	C4-C5-N7	-11.61	104.89	110.70
1	N	477	C	P-O5'-C5'	11.60	139.47	120.90
1	N	630	A	C5-C6-N6	-11.60	114.42	123.70
1	N	883	C	N3-C4-C5	-11.60	117.26	121.90
1	N	625	U	O4'-C1'-N1	11.60	117.48	108.20
1	N	145	G	N7-C8-N9	-11.60	107.30	113.10
1	N	440	C	C6-N1-C2	-11.60	115.66	120.30
1	N	1082	A	N1-C6-N6	11.60	125.56	118.60
1	N	169	C	C5-C6-N1	11.60	126.80	121.00
1	N	1320	C	N3-C4-N4	11.59	126.11	118.00
1	N	127	G	N9-C4-C5	11.58	110.03	105.40
1	N	946	A	O4'-C1'-N9	11.57	117.46	108.20
1	N	490	C	N3-C4-C5	-11.57	117.27	121.90
1	N	956	U	C5-C6-N1	11.57	128.49	122.70
1	N	197	A	P-O5'-C5'	11.57	139.41	120.90
1	N	1018	G	C5-C6-O6	-11.57	121.66	128.60
1	N	1176	A	C5-C6-N1	-11.57	111.92	117.70
1	N	16	A	N9-C4-C5	-11.57	101.17	105.80
1	N	172	A	C5-C6-N1	-11.57	111.92	117.70
1	N	41	G	C5-C6-O6	-11.56	121.66	128.60
1	N	1141	C	N3-C4-C5	-11.56	117.28	121.90
1	N	1449	C	O4'-C1'-N1	11.56	117.45	108.20
1	N	838	G	N7-C8-N9	11.55	118.88	113.10
1	N	1514	G	O4'-C1'-N9	11.55	117.44	108.20
1	N	908	A	N1-C6-N6	11.55	125.53	118.60
1	N	443	C	O4'-C1'-N1	11.54	117.44	108.20
1	N	989	U	N3-C4-O4	11.54	127.48	119.40
1	N	1019	A	N1-C6-N6	11.54	125.52	118.60
1	N	1418	A	C4-C5-C6	11.54	122.77	117.00
1	N	301	G	C5-C6-O6	-11.54	121.68	128.60
1	N	261	U	O4'-C1'-N1	11.53	117.43	108.20
1	N	461	A	N1-C6-N6	11.53	125.52	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1494	G	C5-C6-O6	-11.53	121.68	128.60
1	N	144	G	N3-C2-N2	11.53	127.97	119.90
1	N	611	C	C2-N3-C4	11.53	125.66	119.90
1	N	970	C	N3-C4-C5	-11.53	117.29	121.90
1	N	420	U	O4'-C1'-N1	11.51	117.41	108.20
1	N	431	A	O4'-C1'-N9	11.51	117.41	108.20
1	N	861	G	P-O3'-C3'	11.51	133.51	119.70
1	N	1132	C	O4'-C1'-N1	11.51	117.41	108.20
1	N	1349	A	N9-C4-C5	11.50	110.40	105.80
1	N	404	G	N3-C2-N2	11.50	127.95	119.90
1	N	528	C	N3-C4-N4	11.50	126.05	118.00
1	N	781	A	C5-C6-N1	-11.49	111.95	117.70
1	N	588	G	N1-C6-O6	11.49	126.79	119.90
1	N	717	U	C5-C6-N1	11.49	128.44	122.70
1	N	460	A	C8-N9-C4	-11.48	101.21	105.80
1	N	1521	C	C5-C4-N4	-11.48	112.16	120.20
1	N	1057	G	N1-C6-O6	11.48	126.79	119.90
1	N	994	A	N1-C6-N6	11.48	125.49	118.60
1	N	1197	A	N1-C2-N3	-11.47	123.56	129.30
1	N	1528	U	O4'-C1'-N1	11.47	117.38	108.20
1	N	1388	C	O4'-C1'-N1	11.47	117.38	108.20
1	N	160	A	C5-C6-N6	-11.46	114.53	123.70
1	N	503	C	N3-C4-N4	11.47	126.03	118.00
1	N	265	G	N1-C6-O6	11.46	126.78	119.90
1	N	182	A	N1-C6-N6	11.46	125.47	118.60
1	N	400	C	N3-C4-C5	-11.46	117.32	121.90
1	N	537	G	N1-C6-O6	11.46	126.77	119.90
1	N	128	G	C5-C6-O6	-11.45	121.73	128.60
1	N	352	C	N3-C4-N4	11.45	126.02	118.00
1	N	46	G	C6-C5-N7	-11.45	123.53	130.40
1	N	1237	C	C6-N1-C2	-11.45	115.72	120.30
1	N	840	C	C2-N1-C1'	11.45	131.39	118.80
1	N	57	G	N3-C4-C5	11.44	134.32	128.60
1	N	303	A	C4-C5-C6	11.43	122.72	117.00
1	N	1509	C	N3-C4-C5	-11.42	117.33	121.90
1	N	581	G	N1-C6-O6	11.40	126.74	119.90
1	N	1297	G	N1-C6-O6	11.40	126.74	119.90
1	N	546	A	C5-C6-N1	-11.39	112.00	117.70
1	N	70	U	O4'-C1'-N1	11.38	117.31	108.20
1	N	888	G	C5-C6-O6	-11.38	121.77	128.60
1	N	215	C	O4'-C1'-N1	11.38	117.30	108.20
1	N	445	G	C5-C6-O6	-11.38	121.77	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	819	A	C4-C5-C6	11.37	122.69	117.00
1	N	799	G	N1-C2-N3	-11.37	117.08	123.90
1	N	1339	A	N1-C6-N6	11.37	125.42	118.60
1	N	1006	G	N1-C6-O6	11.37	126.72	119.90
1	N	1523	G	N3-C4-N9	11.37	132.82	126.00
1	N	817	C	N3-C4-N4	11.36	125.95	118.00
1	N	1037	C	N3-C4-N4	11.36	125.95	118.00
1	N	338	A	C5-N7-C8	11.36	109.58	103.90
1	N	1332	A	N7-C8-N9	11.36	119.48	113.80
1	N	455	G	O4'-C1'-N9	11.35	117.28	108.20
1	N	41	G	O4'-C1'-N9	11.35	117.28	108.20
1	N	1114	C	P-O5'-C5'	11.35	139.06	120.90
1	N	903	G	C5-C6-O6	-11.35	121.79	128.60
1	N	949	A	N9-C4-C5	-11.35	101.26	105.80
1	N	69	G	N1-C6-O6	11.34	126.70	119.90
1	N	281	G	N1-C6-O6	11.34	126.70	119.90
1	N	386	C	C4-C5-C6	-11.34	111.73	117.40
1	N	670	G	N1-C6-O6	11.34	126.70	119.90
1	N	36	C	N3-C4-N4	11.33	125.93	118.00
1	N	910	C	N3-C4-N4	11.33	125.93	118.00
1	N	365	U	N3-C4-O4	11.33	127.33	119.40
1	N	1400	C	C5-C6-N1	11.33	126.67	121.00
1	N	243	A	C4-C5-C6	11.33	122.66	117.00
1	N	253	A	C5-C6-N1	-11.32	112.04	117.70
1	N	962	C	O4'-C1'-N1	11.32	117.26	108.20
1	N	1457	G	C5-C6-O6	-11.31	121.81	128.60
1	N	157	U	O4'-C1'-N1	11.31	117.25	108.20
1	N	988	G	O4'-C1'-N9	11.31	117.25	108.20
1	N	1456	A	N9-C4-C5	11.31	110.32	105.80
1	N	348	G	C5-C6-O6	-11.31	121.81	128.60
1	N	478	A	C5-C6-N1	-11.31	112.05	117.70
1	N	1435	G	O4'-C1'-N9	11.30	117.24	108.20
1	N	1508	A	C5-C6-N6	-11.30	114.66	123.70
1	N	116	A	O4'-C1'-N9	11.30	117.24	108.20
1	N	465	A	N1-C6-N6	11.29	125.38	118.60
1	N	1063	C	O4'-C1'-N1	11.29	117.24	108.20
1	N	1529	G	N9-C4-C5	11.29	109.92	105.40
1	N	129	A	N1-C2-N3	11.29	134.95	129.30
1	N	314	C	C4'-C3'-C2'	-11.29	91.31	102.60
1	N	654	G	N1-C6-O6	11.29	126.67	119.90
1	N	1478	U	C5-C6-N1	11.29	128.35	122.70
1	N	353	A	C5-C6-N1	-11.29	112.06	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	21	G	C5-C6-O6	-11.28	121.83	128.60
1	N	546	A	N1-C6-N6	11.28	125.37	118.60
1	N	1083	U	O4'-C1'-N1	11.28	117.22	108.20
1	N	273	U	P-O5'-C5'	11.27	138.94	120.90
1	N	781	A	C5-C6-N6	-11.27	114.68	123.70
1	N	1274	A	C8-N9-C4	-11.27	101.29	105.80
1	N	781	A	C5-N7-C8	11.27	109.53	103.90
1	N	972	C	O4'-C1'-N1	11.27	117.21	108.20
1	N	1114	C	N3-C4-N4	11.27	125.89	118.00
1	N	1223	C	N3-C4-C5	-11.26	117.39	121.90
1	N	45	G	N1-C6-O6	11.26	126.66	119.90
1	N	685	G	C5-C6-O6	-11.26	121.84	128.60
1	N	802	A	O4'-C1'-N9	11.26	117.20	108.20
1	N	996	A	C5-C6-N6	-11.26	114.70	123.70
1	N	1073	U	O4'-C1'-N1	11.25	117.20	108.20
1	N	1499	A	N1-C6-N6	11.25	125.35	118.60
1	N	1045	C	N3-C4-N4	11.25	125.88	118.00
1	N	731	G	N1-C6-O6	11.25	126.65	119.90
1	N	899	C	C2-N3-C4	11.25	125.52	119.90
1	N	1010	U	O4'-C1'-N1	11.24	117.20	108.20
1	N	1229	A	N1-C6-N6	11.24	125.34	118.60
1	N	637	C	N3-C4-C5	-11.24	117.41	121.90
1	N	1460	C	O4'-C1'-N1	11.23	117.19	108.20
1	N	292	G	N1-C2-N3	-11.23	117.16	123.90
1	N	1377	A	C5-C6-N6	-11.23	114.72	123.70
1	N	79	G	N9-C4-C5	-11.23	100.91	105.40
1	N	1251	A	O4'-C1'-N9	11.23	117.18	108.20
1	N	1423	G	C5-C6-O6	-11.23	121.86	128.60
1	N	1058	G	N1-C6-O6	11.22	126.63	119.90
1	N	1421	G	O4'-C1'-N9	11.22	117.18	108.20
1	N	127	G	N3-C4-N9	-11.22	119.27	126.00
1	N	171	A	C2-N3-C4	-11.22	104.99	110.60
1	N	829	G	C4-C5-C6	11.22	125.53	118.80
1	N	1336	C	P-O3'-C3'	11.22	133.16	119.70
1	N	1493	A	C5-C6-N1	-11.22	112.09	117.70
1	N	282	A	C4-C5-C6	11.21	122.61	117.00
1	N	449	G	C1'-O4'-C4'	11.21	118.87	109.90
1	N	501	C	C5-C6-N1	11.21	126.61	121.00
1	N	1496	C	N3-C4-C5	-11.21	117.42	121.90
1	N	87	C	N3-C4-C5	-11.21	117.42	121.90
1	N	877	G	C5-C6-O6	-11.21	121.88	128.60
1	N	304	U	O4'-C1'-N1	11.20	117.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	527	G	N1-C2-N3	-11.20	117.18	123.90
1	N	806	C	O4'-C1'-N1	11.20	117.16	108.20
1	N	227	G	C5-C6-N1	-11.19	105.90	111.50
1	N	820	U	N1-C2-O2	-11.19	114.97	122.80
1	N	731	G	C5-C6-O6	-11.19	121.89	128.60
1	N	202	G	N1-C6-O6	11.19	126.61	119.90
1	N	616	G	C8-N9-C4	-11.19	101.92	106.40
1	N	439	U	O4'-C1'-N1	11.18	117.15	108.20
1	N	495	A	P-O3'-C3'	11.18	133.12	119.70
1	N	738	C	N3-C4-C5	-11.18	117.43	121.90
1	N	1250	A	C4-C5-N7	-11.18	105.11	110.70
1	N	235	C	C5-C6-N1	11.18	126.59	121.00
1	N	553	A	C4-C5-N7	-11.17	105.12	110.70
1	N	1353	G	C5-C6-O6	-11.17	121.90	128.60
1	N	197	A	O4'-C1'-N9	11.16	117.13	108.20
1	N	670	G	N9-C4-C5	-11.15	100.94	105.40
1	N	57	G	C6-C5-N7	-11.15	123.71	130.40
1	N	556	C	N3-C4-N4	11.15	125.80	118.00
1	N	600	A	C8-N9-C4	11.14	110.26	105.80
1	N	839	C	O4'-C1'-N1	11.13	117.11	108.20
1	N	220	G	C5-C6-N1	-11.13	105.94	111.50
1	N	706	A	C5-C6-N6	-11.12	114.80	123.70
1	N	966	G	P-O3'-C3'	11.12	133.05	119.70
1	N	686	U	P-O3'-C3'	11.12	133.05	119.70
1	N	560	A	C5-C6-N1	-11.12	112.14	117.70
1	N	1111	A	N1-C6-N6	11.12	125.27	118.60
1	N	1451	U	O4'-C1'-N1	11.12	117.09	108.20
1	N	1269	A	O4'-C1'-N9	11.11	117.08	108.20
1	N	839	C	N3-C4-N4	11.10	125.77	118.00
1	N	887	G	C5-C6-O6	-11.10	121.94	128.60
1	N	276	G	N1-C2-N3	-11.09	117.24	123.90
1	N	766	A	O4'-C1'-N9	11.09	117.07	108.20
1	N	1306	A	C8-N9-C4	-11.09	101.36	105.80
1	N	284	C	O4'-C1'-N1	11.09	117.07	108.20
1	N	779	C	N3-C4-N4	11.09	125.76	118.00
1	N	1282	C	O4'-C1'-N1	11.09	117.07	108.20
1	N	1039	G	N7-C8-N9	11.08	118.64	113.10
1	N	144	G	C5-C6-O6	-11.08	121.95	128.60
1	N	44	A	C8-N9-C4	-11.07	101.37	105.80
1	N	414	A	C4-C5-C6	11.07	122.53	117.00
1	N	352	C	O4'-C1'-N1	11.06	117.05	108.20
1	N	290	C	N3-C4-C5	-11.06	117.47	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1373	G	C8-N9-C4	11.06	110.83	106.40
1	N	946	A	C4-C5-C6	11.06	122.53	117.00
1	N	640	A	C5-C6-N6	-11.05	114.86	123.70
1	N	669	G	P-O5'-C5'	11.05	138.58	120.90
1	N	136	C	C6-N1-C2	-11.05	115.88	120.30
1	N	810	C	N3-C4-N4	11.04	125.73	118.00
1	N	743	A	C5-C6-N1	-11.04	112.18	117.70
1	N	1136	C	C2-N1-C1'	11.04	130.94	118.80
1	N	1494	G	N1-C6-O6	11.04	126.52	119.90
1	N	703	G	C6-C5-N7	-11.04	123.78	130.40
1	N	1239	A	N9-C4-C5	11.03	110.21	105.80
1	N	396	C	C5-C6-N1	11.03	126.52	121.00
1	N	712	A	N1-C6-N6	11.03	125.22	118.60
1	N	536	C	C6-N1-C2	-11.03	115.89	120.30
1	N	648	A	C4-C5-C6	11.03	122.51	117.00
1	N	917	G	N1-C6-O6	11.03	126.52	119.90
1	N	1289	A	N1-C6-N6	11.03	125.22	118.60
1	N	116	A	C4-C5-C6	11.03	122.51	117.00
1	N	217	C	O4'-C1'-N1	11.02	117.02	108.20
1	N	374	A	C5-C6-N1	-11.02	112.19	117.70
1	N	1409	C	N3-C4-C5	-11.02	117.49	121.90
1	N	383	A	C8-N9-C4	-11.02	101.39	105.80
1	N	752	G	P-O3'-C3'	11.02	132.92	119.70
1	N	337	G	N7-C8-N9	-11.01	107.59	113.10
1	N	397	A	N1-C6-N6	11.01	125.21	118.60
1	N	494	G	N9-C4-C5	-11.01	101.00	105.40
1	N	743	A	C5-C6-N6	-11.01	114.89	123.70
1	N	556	C	O4'-C1'-N1	11.00	117.00	108.20
1	N	1356	G	C6-N1-C2	11.00	131.70	125.10
1	N	1490	U	O4'-C1'-N1	11.00	117.00	108.20
1	N	975	A	N1-C6-N6	10.99	125.19	118.60
1	N	1147	C	N3-C4-N4	10.99	125.69	118.00
1	N	1248	A	C5-C6-N1	-10.99	112.21	117.70
1	N	10	A	C5-C6-N6	-10.97	114.92	123.70
1	N	66	A	P-O3'-C3'	10.97	132.87	119.70
1	N	1030	U	C2-N1-C1'	10.97	130.87	117.70
1	N	339	C	O4'-C1'-N1	10.97	116.97	108.20
1	N	1510	C	C6-N1-C2	-10.96	115.92	120.30
1	N	1454	G	C5-C6-N1	-10.96	106.02	111.50
1	N	222	C	N3-C4-N4	10.96	125.67	118.00
1	N	908	A	C5-C6-N1	-10.95	112.22	117.70
1	N	1158	C	N3-C4-N4	10.95	125.67	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	329	A	C4-C5-C6	10.95	122.47	117.00
1	N	351	G	C5-C6-O6	-10.94	122.03	128.60
1	N	557	G	C5-C6-O6	-10.94	122.03	128.60
1	N	611	C	C5-C6-N1	10.94	126.47	121.00
1	N	95	C	C5-C6-N1	10.94	126.47	121.00
1	N	1089	G	C5-C6-N1	-10.93	106.03	111.50
1	N	8	A	N1-C6-N6	10.93	125.16	118.60
1	N	503	C	N3-C4-C5	-10.93	117.53	121.90
1	N	941	G	C5-C6-O6	-10.93	122.04	128.60
1	N	181	A	N1-C6-N6	10.92	125.15	118.60
1	N	451	A	C5-N7-C8	10.92	109.36	103.90
1	N	894	G	C8-N9-C4	-10.92	102.03	106.40
1	N	727	G	N1-C6-O6	10.92	126.45	119.90
1	N	251	G	C5-C6-O6	-10.92	122.05	128.60
1	N	1111	A	C5-C6-N1	-10.92	112.24	117.70
1	N	1364	U	O4'-C1'-N1	10.92	116.93	108.20
1	N	505	G	C6-C5-N7	-10.91	123.85	130.40
1	N	674	G	N1-C6-O6	10.91	126.45	119.90
1	N	310	G	N9-C4-C5	-10.91	101.03	105.40
1	N	515	G	P-O5'-C5'	10.91	138.36	120.90
1	N	240	G	C2-N3-C4	-10.91	106.45	111.90
1	N	1176	A	C8-N9-C4	-10.91	101.44	105.80
1	N	448	A	C4-C5-C6	10.90	122.45	117.00
1	N	1201	A	C5-C6-N1	-10.90	112.25	117.70
1	N	526	C	C5-C6-N1	10.90	126.45	121.00
1	N	849	G	C5-C6-O6	-10.90	122.06	128.60
1	N	22	G	C6-C5-N7	-10.90	123.86	130.40
1	N	1110	A	C5-C6-N6	-10.90	114.98	123.70
1	N	171	A	C4-C5-C6	10.90	122.45	117.00
1	N	426	U	P-O3'-C3'	10.89	132.77	119.70
1	N	54	C	C2-N3-C4	10.89	125.35	119.90
1	N	130	A	C5-C6-N1	-10.89	112.25	117.70
1	N	922	G	C5-C6-O6	-10.89	122.06	128.60
1	N	276	G	N3-C2-N2	10.89	127.52	119.90
1	N	171	A	N1-C6-N6	10.89	125.13	118.60
1	N	213	G	C6-C5-N7	-10.88	123.87	130.40
1	N	1510	C	N3-C4-N4	10.88	125.62	118.00
1	N	770	C	C6-N1-C2	-10.88	115.95	120.30
1	N	487	A	C5-C6-N6	-10.88	115.00	123.70
1	N	747	A	C8-N9-C4	-10.88	101.45	105.80
1	N	107	G	C6-C5-N7	-10.88	123.87	130.40
1	N	747	A	O4'-C1'-N9	10.88	116.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	785	G	N1-C6-O6	10.88	126.43	119.90
1	N	1140	C	N3-C4-C5	-10.88	117.55	121.90
1	N	1448	C	P-O3'-C3'	10.88	132.75	119.70
1	N	667	G	N1-C6-O6	10.88	126.43	119.90
1	N	1181	G	C4-C5-N7	10.88	115.15	110.80
1	N	1026	G	C8-N9-C4	-10.87	102.05	106.40
1	N	1355	G	N1-C6-O6	10.86	126.42	119.90
1	N	719	C	C6-N1-C2	-10.86	115.96	120.30
1	N	1158	C	N3-C4-C5	-10.86	117.56	121.90
1	N	1450	U	O4'-C1'-N1	10.86	116.89	108.20
1	N	1168	U	P-O3'-C3'	10.86	132.73	119.70
1	N	1352	C	O4'-C1'-N1	10.85	116.88	108.20
1	N	22	G	C5-C6-N1	-10.85	106.08	111.50
1	N	270	A	C4-C5-C6	10.85	122.42	117.00
1	N	650	G	C5-C6-O6	-10.85	122.09	128.60
1	N	880	C	N3-C4-C5	-10.85	117.56	121.90
1	N	895	G	N1-C6-O6	10.85	126.41	119.90
1	N	135	C	C5-C4-N4	-10.84	112.61	120.20
1	N	411	A	C5-C6-N6	-10.84	115.03	123.70
1	N	295	C	C6-N1-C2	-10.84	115.96	120.30
1	N	117	G	C5-C6-O6	-10.84	122.10	128.60
1	N	1531	A	N1-C6-N6	10.84	125.10	118.60
1	N	21	G	N1-C6-O6	10.83	126.40	119.90
1	N	76	G	N3-C4-N9	10.83	132.50	126.00
1	N	81	A	O4'-C1'-N9	10.83	116.86	108.20
1	N	555	U	P-O3'-C3'	10.83	132.69	119.70
1	N	450	G	O4'-C1'-N9	10.83	116.86	108.20
1	N	674	G	O4'-C1'-N9	10.83	116.86	108.20
1	N	9	G	C5-C6-O6	-10.82	122.11	128.60
1	N	1195	C	O4'-C1'-N1	10.82	116.86	108.20
1	N	1436	U	O4'-C1'-N1	10.82	116.86	108.20
1	N	276	G	C5-C6-O6	-10.82	122.11	128.60
1	N	1384	C	C5-C6-N1	10.81	126.41	121.00
1	N	522	C	N3-C4-C5	-10.81	117.58	121.90
1	N	478	A	C5-C6-N6	-10.81	115.06	123.70
1	N	569	C	O4'-C1'-N1	10.81	116.84	108.20
1	N	1118	U	C5'-C4'-O4'	-10.81	96.13	109.10
1	N	1203	C	N3-C4-C5	-10.80	117.58	121.90
1	N	210	C	N3-C4-C5	-10.80	117.58	121.90
1	N	46	G	N1-C6-O6	10.80	126.38	119.90
1	N	182	A	C5-C6-N1	-10.79	112.30	117.70
1	N	486	U	C2-N3-C4	-10.79	120.52	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1236	A	N7-C8-N9	-10.79	108.40	113.80
1	N	1442	G	O4'-C1'-N9	10.79	116.83	108.20
1	N	767	A	O4'-C1'-N9	10.79	116.83	108.20
1	N	872	A	C5-C6-N6	-10.79	115.07	123.70
1	N	138	G	C5-C6-O6	-10.78	122.13	128.60
1	N	416	G	C5-C6-O6	-10.78	122.13	128.60
1	N	1255	G	N1-C6-O6	10.78	126.37	119.90
1	N	348	G	N1-C6-O6	10.78	126.37	119.90
1	N	403	C	C4-C5-C6	10.78	122.79	117.40
1	N	645	G	C5-C6-O6	-10.78	122.13	128.60
1	N	1206	G	N9-C4-C5	-10.78	101.09	105.40
1	N	199	A	N1-C6-N6	10.77	125.06	118.60
1	N	948	C	N3-C4-N4	10.76	125.53	118.00
1	N	918	A	C2-N3-C4	-10.76	105.22	110.60
1	N	980	C	C5'-C4'-O4'	10.75	122.00	109.10
1	N	512	U	N3-C2-O2	10.75	129.73	122.20
1	N	1211	U	O4'-C1'-N1	10.75	116.80	108.20
1	N	1367	C	N3-C4-C5	-10.75	117.60	121.90
1	N	167	A	N1-C6-N6	10.75	125.05	118.60
1	N	386	C	C2-N1-C1'	10.75	130.62	118.80
1	N	586	C	N3-C4-C5	-10.74	117.60	121.90
1	N	9	G	C4-C5-N7	-10.74	106.50	110.80
1	N	1338	G	C4-C5-N7	-10.74	106.50	110.80
1	N	1460	C	N3-C4-N4	10.74	125.52	118.00
1	N	561	U	C6-N1-C2	-10.73	114.56	121.00
1	N	315	A	N9-C4-C5	10.73	110.09	105.80
1	N	1525	G	C5-C6-O6	-10.73	122.16	128.60
1	N	607	A	N9-C4-C5	-10.72	101.51	105.80
1	N	1049	U	P-O3'-C3'	10.72	132.57	119.70
1	N	1216	A	C2-N3-C4	-10.72	105.24	110.60
1	N	1498	U	O4'-C1'-N1	10.72	116.78	108.20
1	N	1340	A	N1-C6-N6	10.72	125.03	118.60
1	N	176	C	P-O5'-C5'	10.72	138.05	120.90
1	N	758	C	O4'-C1'-N1	10.71	116.77	108.20
1	N	467	U	O4'-C1'-N1	10.71	116.77	108.20
1	N	176	C	C5-C6-N1	10.71	126.36	121.00
1	N	281	G	C5-C6-O6	-10.71	122.17	128.60
1	N	1004	A	C5-C6-N6	-10.71	115.13	123.70
1	N	1447	A	N1-C6-N6	10.71	125.02	118.60
1	N	1500	A	C5-C6-N1	-10.71	112.35	117.70
1	N	405	U	N3-C4-O4	10.71	126.89	119.40
1	N	903	G	N1-C6-O6	10.71	126.32	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	615	G	O4'-C1'-N9	10.70	116.76	108.20
1	N	1066	C	O4'-C1'-N1	10.70	116.76	108.20
1	N	251	G	C6-C5-N7	-10.70	123.98	130.40
1	N	362	G	N3-C2-N2	10.70	127.39	119.90
1	N	583	A	O4'-C1'-N9	10.69	116.75	108.20
1	N	415	A	N3-C4-C5	-10.69	119.31	126.80
1	N	713	G	N1-C2-N3	-10.69	117.48	123.90
1	N	841	C	O4'-C1'-N1	10.69	116.75	108.20
1	N	1219	A	N1-C6-N6	10.69	125.01	118.60
1	N	112	G	C8-N9-C4	-10.68	102.13	106.40
1	N	1322	C	C6-N1-C2	-10.68	116.03	120.30
1	N	351	G	N1-C6-O6	10.67	126.30	119.90
1	N	391	G	C5-C6-O6	-10.67	122.20	128.60
1	N	619	U	O4'-C1'-N1	10.67	116.73	108.20
1	N	526	C	C5-C4-N4	-10.67	112.73	120.20
1	N	694	A	C5-C6-N6	-10.67	115.17	123.70
1	N	1036	A	C5-C6-N6	-10.66	115.17	123.70
1	N	1109	C	C6-N1-C2	10.66	124.56	120.30
1	N	115	G	P-O3'-C3'	10.66	132.49	119.70
1	N	813	U	O4'-C1'-N1	10.66	116.73	108.20
1	N	1058	G	C6-N1-C2	10.66	131.50	125.10
1	N	418	C	N3-C4-N4	10.66	125.46	118.00
1	N	840	C	C6-N1-C2	-10.66	116.04	120.30
1	N	973	G	C5-C6-O6	-10.65	122.21	128.60
1	N	1411	C	N3-C4-C5	-10.65	117.64	121.90
1	N	1170	A	N1-C6-N6	10.64	124.99	118.60
1	N	656	G	O4'-C1'-N9	10.64	116.71	108.20
1	N	700	G	N3-C2-N2	10.64	127.35	119.90
1	N	902	G	N1-C6-O6	10.64	126.28	119.90
1	N	316	C	O4'-C1'-N1	10.63	116.71	108.20
1	N	1387	G	N1-C6-O6	10.63	126.28	119.90
1	N	1498	U	P-O3'-C3'	10.63	132.46	119.70
1	N	1447	A	P-O3'-C3'	10.63	132.46	119.70
1	N	271	C	C5-C4-N4	-10.63	112.76	120.20
1	N	1392	G	N7-C8-N9	10.62	118.41	113.10
1	N	880	C	O4'-C1'-N1	10.62	116.70	108.20
1	N	899	C	O4'-C1'-N1	10.62	116.70	108.20
1	N	1502	A	C5-C6-N1	-10.62	112.39	117.70
1	N	906	A	C5-C6-N6	-10.62	115.21	123.70
1	N	615	G	C6-C5-N7	-10.62	124.03	130.40
1	N	1281	C	C6-N1-C2	-10.62	116.05	120.30
1	N	1011	C	N3-C4-N4	10.61	125.43	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	258	G	C5-C6-O6	-10.61	122.24	128.60
1	N	938	A	C5-C6-N6	-10.61	115.22	123.70
1	N	667	G	C5-C6-O6	-10.60	122.24	128.60
1	N	871	U	P-O3'-C3'	10.60	132.43	119.70
1	N	1511	G	C5-C6-O6	-10.60	122.24	128.60
1	N	320	A	C5-C6-N6	-10.60	115.22	123.70
1	N	1096	C	O4'-C1'-N1	10.60	116.68	108.20
1	N	127	G	C8-N9-C4	-10.59	102.17	106.40
1	N	195	A	C5-C6-N1	-10.59	112.41	117.70
1	N	648	A	N1-C6-N6	10.59	124.95	118.60
1	N	536	C	N3-C4-N4	10.58	125.41	118.00
1	N	266	G	N1-C6-O6	10.58	126.25	119.90
1	N	889	A	P-O3'-C3'	10.58	132.40	119.70
1	N	646	G	N9-C4-C5	-10.58	101.17	105.40
1	N	1175	G	C6-N1-C2	-10.58	118.75	125.10
1	N	895	G	O4'-C1'-N9	10.57	116.66	108.20
1	N	565	U	O4'-C1'-N1	10.57	116.65	108.20
1	N	640	A	C8-N9-C4	-10.56	101.57	105.80
1	N	314	C	O4'-C1'-N1	10.56	116.65	108.20
1	N	1427	C	N3-C4-C5	-10.55	117.68	121.90
1	N	1469	C	N3-C4-C5	-10.55	117.68	121.90
1	N	575	G	C5-N7-C8	-10.55	99.03	104.30
1	N	1363	A	N1-C6-N6	10.54	124.93	118.60
1	N	186	C	O4'-C1'-N1	10.54	116.63	108.20
1	N	1432	G	N1-C2-N3	-10.54	117.58	123.90
1	N	653	U	O4'-C1'-N1	10.54	116.63	108.20
1	N	290	C	N3-C4-N4	10.54	125.38	118.00
1	N	339	C	N3-C4-N4	10.54	125.38	118.00
1	N	1249	C	N3-C4-N4	10.53	125.37	118.00
1	N	1155	A	C5-C6-N1	-10.53	112.44	117.70
1	N	423	G	O4'-C1'-N9	10.52	116.62	108.20
1	N	72	A	C8-N9-C4	10.51	110.00	105.80
1	N	863	U	O4'-C1'-N1	10.51	116.61	108.20
1	N	1320	C	O4'-C1'-N1	10.51	116.61	108.20
1	N	333	U	O4'-C1'-N1	10.50	116.60	108.20
1	N	1018	G	C5-N7-C8	10.50	109.55	104.30
1	N	1236	A	C8-N9-C4	10.49	110.00	105.80
1	N	997	U	O4'-C1'-N1	10.49	116.59	108.20
1	N	1317	C	C2-N3-C4	10.49	125.14	119.90
1	N	82	G	C6-C5-N7	-10.49	124.11	130.40
1	N	1482	G	P-O5'-C5'	10.49	137.68	120.90
1	N	1138	G	C8-N9-C4	-10.48	102.21	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1239	A	C4-C5-C6	10.48	122.24	117.00
1	N	908	A	C4-C5-C6	10.47	122.24	117.00
1	N	1484	C	C6-N1-C2	-10.47	116.11	120.30
1	N	1363	A	C5-C6-N1	-10.47	112.47	117.70
1	N	1509	C	O4'-C1'-N1	10.47	116.57	108.20
1	N	723	U	P-O3'-C3'	-10.47	107.14	119.70
1	N	1312	G	N1-C6-O6	10.46	126.18	119.90
1	N	545	C	O4'-C1'-N1	10.46	116.57	108.20
1	N	19	A	C8-N9-C4	-10.46	101.62	105.80
1	N	312	C	C2-N3-C4	10.46	125.13	119.90
1	N	1461	G	N1-C2-N3	-10.46	117.63	123.90
1	N	385	C	O4'-C1'-N1	10.45	116.56	108.20
1	N	849	G	N1-C6-O6	10.45	126.17	119.90
1	N	1420	U	C5-C4-O4	-10.45	119.63	125.90
1	N	601	G	C5-C6-O6	-10.44	122.33	128.60
1	N	842	U	N1-C2-O2	-10.44	115.49	122.80
1	N	498	A	C5-C6-N1	-10.44	112.48	117.70
1	N	1048	G	N1-C6-O6	10.44	126.17	119.90
1	N	723	U	C2-N3-C4	-10.44	120.74	127.00
1	N	775	G	C6-C5-N7	-10.44	124.14	130.40
1	N	73	C	O4'-C1'-C2'	-10.44	95.36	105.80
1	N	572	A	C5-C6-N6	-10.44	115.35	123.70
1	N	651	C	N3-C4-C5	-10.43	117.73	121.90
1	N	36	C	C5-C4-N4	-10.43	112.90	120.20
1	N	928	G	C6-C5-N7	-10.43	124.14	130.40
1	N	1435	G	N1-C6-O6	10.43	126.16	119.90
1	N	210	C	N3-C4-N4	10.42	125.29	118.00
1	N	204	G	C5-C6-N1	-10.41	106.29	111.50
1	N	325	A	N1-C6-N6	10.41	124.85	118.60
1	N	574	A	N3-C4-C5	-10.41	119.51	126.80
1	N	918	A	C5-C6-N1	-10.41	112.49	117.70
1	N	63	C	C6-N1-C2	-10.41	116.14	120.30
1	N	1207	G	O4'-C1'-N9	10.41	116.53	108.20
1	N	731	G	O4'-C1'-N9	10.41	116.53	108.20
1	N	761	G	N1-C6-O6	10.41	126.14	119.90
1	N	948	C	O4'-C1'-N1	10.41	116.53	108.20
1	N	1071	C	O4'-C1'-N1	10.41	116.53	108.20
1	N	1412	C	C2-N3-C4	10.40	125.10	119.90
1	N	455	G	N1-C6-O6	10.40	126.14	119.90
1	N	649	A	C4-C5-C6	10.40	122.20	117.00
1	N	1165	U	C6-N1-C2	-10.40	114.76	121.00
1	N	493	A	C5-C6-N6	-10.39	115.39	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	928	G	C8-N9-C4	-10.39	102.24	106.40
1	N	237	G	N1-C2-N3	-10.39	117.67	123.90
1	N	569	C	N3-C4-C5	-10.39	117.74	121.90
1	N	197	A	P-O3'-C3'	10.38	132.16	119.70
1	N	959	A	P-O3'-C3'	10.39	132.16	119.70
1	N	1154	G	N1-C2-N3	-10.39	117.67	123.90
1	N	1335	U	N3-C4-O4	10.39	126.67	119.40
1	N	582	C	N3-C4-C5	-10.38	117.75	121.90
1	N	223	A	C5-C6-N1	-10.38	112.51	117.70
1	N	830	G	C5-C6-O6	-10.38	122.37	128.60
1	N	926	G	C5-C6-O6	-10.38	122.38	128.60
1	N	449	G	N1-C6-O6	10.37	126.12	119.90
1	N	1113	C	O4'-C1'-N1	10.36	116.49	108.20
1	N	608	A	C5-C6-N6	-10.36	115.41	123.70
1	N	52	C	O4'-C1'-N1	10.36	116.49	108.20
1	N	779	C	C6-N1-C2	-10.36	116.16	120.30
1	N	1471	U	O4'-C1'-N1	10.36	116.49	108.20
1	N	775	G	O4'-C1'-N9	10.36	116.49	108.20
1	N	199	A	O4'-C1'-N9	10.36	116.49	108.20
1	N	331	G	N1-C6-O6	10.36	126.11	119.90
1	N	1119	C	N3-C4-N4	10.36	125.25	118.00
1	N	1037	C	O4'-C1'-N1	10.35	116.48	108.20
1	N	102	G	N1-C2-N3	-10.35	117.69	123.90
1	N	162	A	N1-C6-N6	10.35	124.81	118.60
1	N	327	A	N1-C6-N6	10.35	124.81	118.60
1	N	1060	U	C5-C4-O4	-10.35	119.69	125.90
1	N	455	G	C5-C6-O6	-10.34	122.39	128.60
1	N	398	U	C6-N1-C2	-10.34	114.80	121.00
1	N	448	A	N1-C6-N6	10.34	124.80	118.60
1	N	500	G	N1-C6-O6	10.34	126.10	119.90
1	N	586	C	N3-C4-N4	10.34	125.23	118.00
1	N	1220	G	C5-N7-C8	-10.34	99.13	104.30
1	N	1053	G	N1-C2-N3	-10.33	117.70	123.90
1	N	150	U	O4'-C1'-N1	10.33	116.46	108.20
1	N	1137	C	O4'-C1'-N1	10.33	116.46	108.20
1	N	1255	G	C5-C6-O6	-10.33	122.40	128.60
1	N	677	U	O4'-C1'-N1	10.32	116.46	108.20
1	N	1361	G	N1-C6-O6	10.32	126.09	119.90
1	N	82	G	C5-C6-O6	-10.32	122.41	128.60
1	N	1106	G	C2-N3-C4	10.32	117.06	111.90
1	N	1515	G	P-O3'-C3'	-10.32	107.32	119.70
1	N	945	G	C5-C6-N1	-10.32	106.34	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1160	G	N9-C4-C5	-10.31	101.27	105.40
1	N	538	G	C5-C6-O6	-10.31	122.41	128.60
1	N	777	A	C4-C5-C6	10.31	122.16	117.00
1	N	807	A	C4-C5-C6	10.31	122.16	117.00
1	N	321	A	C6-C5-N7	-10.31	125.08	132.30
1	N	817	C	N3-C4-C5	-10.30	117.78	121.90
1	N	933	G	O4'-C1'-N9	10.30	116.44	108.20
1	N	349	A	N1-C6-N6	10.30	124.78	118.60
1	N	539	A	C6-C5-N7	-10.30	125.09	132.30
1	N	355	C	N3-C4-N4	10.30	125.21	118.00
1	N	819	A	N1-C6-N6	10.29	124.78	118.60
1	N	1125	U	O4'-C1'-N1	10.29	116.43	108.20
1	N	453	G	C5-C6-N1	-10.29	106.36	111.50
1	N	629	A	N1-C6-N6	10.29	124.77	118.60
1	N	250	A	C5-C6-N6	-10.29	115.47	123.70
1	N	132	C	P-O3'-C3'	-10.29	107.35	119.70
1	N	308	C	C5-C6-N1	10.29	126.14	121.00
1	N	1507	A	P-O5'-C5'	10.29	137.36	120.90
1	N	614	C	O4'-C1'-N1	10.29	116.43	108.20
1	N	1373	G	N1-C6-O6	10.29	126.07	119.90
1	N	1413	A	O4'-C1'-N9	10.29	116.43	108.20
1	N	231	U	C5-C4-O4	-10.28	119.73	125.90
1	N	643	C	N3-C4-N4	10.28	125.20	118.00
1	N	747	A	N1-C2-N3	-10.28	124.16	129.30
1	N	931	C	C2-N3-C4	10.28	125.04	119.90
1	N	1227	A	O4'-C1'-N9	10.28	116.42	108.20
1	N	497	G	C5-C6-O6	-10.27	122.44	128.60
1	N	459	A	N1-C6-N6	10.27	124.76	118.60
1	N	923	A	P-O3'-C3'	10.27	132.03	119.70
1	N	1303	C	N3-C4-C5	-10.27	117.79	121.90
1	N	360	G	N3-C2-N2	10.27	127.09	119.90
1	N	1312	G	C8-N9-C4	10.27	110.51	106.40
1	N	1266	G	O4'-C1'-N9	10.27	116.41	108.20
1	N	1334	G	N1-C6-O6	10.27	126.06	119.90
1	N	1515	G	N1-C6-O6	10.26	126.06	119.90
1	N	1362	A	N1-C6-N6	10.26	124.75	118.60
1	N	1312	G	C5-C6-O6	-10.25	122.45	128.60
1	N	280	C	C4-C5-C6	10.25	122.53	117.40
1	N	718	A	C2-N3-C4	10.25	115.72	110.60
1	N	165	G	N1-C6-O6	10.25	126.05	119.90
1	N	548	G	C4-C5-C6	10.25	124.95	118.80
1	N	174	A	N1-C6-N6	10.24	124.75	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	649	A	C5-C6-N6	-10.24	115.50	123.70
1	N	1480	A	N1-C6-N6	10.24	124.74	118.60
1	N	83	C	N3-C4-C5	-10.24	117.81	121.90
1	N	193	C	O4'-C1'-N1	10.23	116.39	108.20
1	N	1274	A	P-O3'-C3'	-10.23	107.42	119.70
1	N	1153	G	C8-N9-C4	-10.23	102.31	106.40
1	N	1207	G	N1-C6-O6	10.23	126.04	119.90
1	N	977	A	N1-C6-N6	10.23	124.74	118.60
1	N	542	G	O4'-C1'-N9	10.23	116.38	108.20
1	N	1308	U	O4'-C1'-N1	10.23	116.38	108.20
1	N	1120	C	O4'-C1'-N1	10.22	116.38	108.20
1	N	694	A	N1-C2-N3	10.22	134.41	129.30
1	N	923	A	C5-C6-N1	-10.22	112.59	117.70
1	N	1147	C	C5-C4-N4	-10.22	113.05	120.20
1	N	901	A	C4-C5-C6	10.22	122.11	117.00
1	N	373	A	O4'-C1'-N9	10.21	116.37	108.20
1	N	481	G	O4'-C4'-C3'	-10.21	93.79	104.00
1	N	1493	A	C6-N1-C2	10.21	124.73	118.60
1	N	450	G	C5-C6-O6	-10.21	122.48	128.60
1	N	570	G	C8-N9-C4	10.21	110.48	106.40
1	N	1397	C	O4'-C1'-N1	10.20	116.36	108.20
1	N	456	A	C5-C6-N1	-10.20	112.60	117.70
1	N	68	G	N1-C6-O6	10.19	126.02	119.90
1	N	340	U	O4'-C1'-N1	10.19	116.35	108.20
1	N	634	C	N3-C4-N4	10.19	125.13	118.00
1	N	1444	U	C3'-C2'-C1'	10.19	109.65	101.50
1	N	352	C	C5-C4-N4	-10.19	113.07	120.20
1	N	1058	G	N1-C2-N3	-10.19	117.79	123.90
1	N	1181	G	C5-C6-O6	-10.19	122.49	128.60
1	N	1405	G	C5-C6-N1	-10.19	106.41	111.50
1	N	51	A	C8-N9-C4	-10.18	101.73	105.80
1	N	100	G	C8-N9-C4	-10.18	102.33	106.40
1	N	763	G	O4'-C1'-N9	10.18	116.34	108.20
1	N	1283	U	C2-N3-C4	-10.18	120.89	127.00
1	N	597	G	N1-C2-N3	-10.17	117.80	123.90
1	N	909	A	N9-C4-C5	10.17	109.87	105.80
1	N	553	A	C5-N7-C8	10.17	108.99	103.90
1	N	1297	G	C5-C6-O6	-10.17	122.50	128.60
1	N	799	G	N1-C6-O6	10.17	126.00	119.90
1	N	293	G	O4'-C1'-N9	10.17	116.33	108.20
1	N	509	A	P-O3'-C3'	10.17	131.90	119.70
1	N	1086	U	O4'-C1'-N1	10.17	116.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1241	G	N7-C8-N9	10.17	118.18	113.10
1	N	478	A	C4-C5-N7	-10.16	105.62	110.70
1	N	796	C	O4'-C1'-N1	10.16	116.33	108.20
1	N	1383	C	C5-C6-N1	10.16	126.08	121.00
1	N	15	G	C6-C5-N7	-10.16	124.30	130.40
1	N	652	U	P-O3'-C3'	10.16	131.89	119.70
1	N	203	G	N1-C2-N3	-10.16	117.81	123.90
1	N	869	G	N1-C6-O6	10.16	126.00	119.90
1	N	1344	C	C5-C4-N4	-10.16	113.09	120.20
1	N	1184	G	N1-C6-O6	10.16	125.99	119.90
1	N	1379	G	C5-N7-C8	-10.16	99.22	104.30
1	N	168	G	C8-N9-C4	10.15	110.46	106.40
1	N	487	A	N1-C2-N3	10.15	134.37	129.30
1	N	796	C	N3-C4-C5	-10.14	117.84	121.90
1	N	1227	A	C4-C5-C6	10.14	122.07	117.00
1	N	1344	C	O4'-C1'-N1	10.14	116.31	108.20
1	N	1104	G	N1-C6-O6	10.14	125.98	119.90
1	N	1160	G	C8-N9-C4	10.14	110.45	106.40
1	N	1180	A	C4-C5-C6	10.14	122.07	117.00
1	N	96	U	O4'-C1'-N1	10.14	116.31	108.20
1	N	537	G	C5-C6-O6	-10.13	122.52	128.60
1	N	776	G	C5-C6-N1	-10.13	106.43	111.50
1	N	1381	U	C5-C4-O4	-10.13	119.82	125.90
1	N	572	A	C8-N9-C4	-10.13	101.75	105.80
1	N	614	C	C5-C6-N1	10.13	126.07	121.00
1	N	929	G	C8-N9-C4	-10.13	102.35	106.40
1	N	1370	G	N1-C2-N3	-10.13	117.82	123.90
1	N	46	G	N1-C2-N3	-10.13	117.82	123.90
1	N	92	U	O4'-C1'-N1	10.13	116.30	108.20
1	N	296	U	N3-C2-O2	10.13	129.29	122.20
1	N	494	G	C4-C5-N7	10.13	114.85	110.80
1	N	593	U	O4'-C1'-N1	10.12	116.30	108.20
1	N	1092	A	O4'-C1'-N9	10.12	116.30	108.20
1	N	1294	G	O4'-C1'-N9	10.12	116.30	108.20
1	N	11	G	C5-N7-C8	10.12	109.36	104.30
1	N	1204	A	C5-C6-N1	-10.12	112.64	117.70
1	N	207	C	P-O3'-C3'	10.12	131.84	119.70
1	N	401	C	N3-C4-C5	-10.12	117.85	121.90
1	N	1412	C	O4'-C1'-N1	10.12	116.29	108.20
1	N	1057	G	C5-C6-O6	-10.11	122.53	128.60
1	N	1281	C	C5-C6-N1	10.11	126.05	121.00
1	N	536	C	N3-C4-C5	-10.10	117.86	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	559	A	C6-C5-N7	-10.10	125.23	132.30
1	N	1261	A	C5-C6-N6	-10.10	115.62	123.70
1	N	445	G	O4'-C1'-N9	10.10	116.28	108.20
1	N	776	G	C2-N3-C4	-10.10	106.85	111.90
1	N	353	A	C6-C5-N7	-10.10	125.23	132.30
1	N	8	A	O4'-C1'-N9	10.09	116.28	108.20
1	N	447	G	C5-C6-O6	-10.09	122.54	128.60
1	N	896	C	N3-C4-N4	10.09	125.07	118.00
1	N	592	G	C8-N9-C4	10.09	110.44	106.40
1	N	1068	G	O4'-C1'-N9	10.09	116.27	108.20
1	N	640	A	N1-C6-N6	10.09	124.66	118.60
1	N	1309	G	C5-C6-O6	-10.09	122.55	128.60
1	N	1403	C	P-O5'-C5'	10.09	137.04	120.90
1	N	1513	A	O4'-C1'-N9	10.09	116.27	108.20
1	N	28	A	C5-C6-N1	-10.08	112.66	117.70
1	N	64	G	C5-C6-N1	-10.08	106.46	111.50
1	N	1008	U	C2-N3-C4	-10.08	120.95	127.00
1	N	1277	C	N3-C4-C5	-10.08	117.87	121.90
1	N	1306	A	N9-C4-C5	10.08	109.83	105.80
1	N	45	G	C5-C6-O6	-10.07	122.56	128.60
1	N	467	U	C2-N1-C1'	10.07	129.78	117.70
1	N	531	U	O4'-C1'-N1	10.07	116.25	108.20
1	N	471	U	O4'-C1'-N1	10.06	116.25	108.20
1	N	740	U	O4'-C1'-N1	10.06	116.25	108.20
1	N	1178	G	N3-C4-C5	-10.06	123.57	128.60
1	N	1450	U	C5-C4-O4	-10.06	119.86	125.90
1	N	734	G	N1-C6-O6	10.06	125.94	119.90
1	N	980	C	O4'-C1'-N1	10.06	116.25	108.20
1	N	1166	G	O4'-C1'-N9	10.06	116.25	108.20
1	N	655	A	O4'-C1'-N9	10.06	116.25	108.20
1	N	252	U	O4'-C1'-N1	10.05	116.24	108.20
1	N	708	C	C6-N1-C2	10.05	124.32	120.30
1	N	246	A	C5-C6-N1	-10.05	112.67	117.70
1	N	1385	G	N9-C4-C5	-10.05	101.38	105.40
1	N	1464	U	P-O3'-C3'	10.05	131.76	119.70
1	N	346	G	C5-C6-O6	-10.05	122.57	128.60
1	N	368	U	O4'-C1'-N1	10.05	116.24	108.20
1	N	946	A	C5-N7-C8	10.05	108.92	103.90
1	N	1144	G	P-O3'-C3'	10.05	131.76	119.70
1	N	1437	A	C5-C6-N6	-10.04	115.67	123.70
1	N	611	C	N3-C4-N4	10.04	125.03	118.00
1	N	780	A	O4'-C1'-N9	10.04	116.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	326	G	N1-C6-O6	10.04	125.92	119.90
1	N	534	U	C5-C6-N1	10.03	127.72	122.70
1	N	1254	A	N1-C6-N6	10.03	124.62	118.60
1	N	646	G	C5-C6-O6	-10.03	122.58	128.60
1	N	1017	U	O4'-C1'-N1	10.03	116.22	108.20
1	N	273	U	O4'-C1'-N1	10.03	116.22	108.20
1	N	792	A	C5-C6-N6	-10.03	115.68	123.70
1	N	600	A	N1-C6-N6	10.02	124.61	118.60
1	N	707	U	O4'-C1'-N1	10.02	116.22	108.20
1	N	645	G	N1-C2-N3	-10.02	117.89	123.90
1	N	958	A	O4'-C1'-N9	10.02	116.22	108.20
1	N	1357	A	N1-C6-N6	10.02	124.61	118.60
1	N	910	C	O4'-C1'-N1	10.02	116.21	108.20
1	N	232	G	C2-N3-C4	10.02	116.91	111.90
1	N	1344	C	N3-C4-C5	-10.02	117.89	121.90
1	N	768	A	C4-C5-C6	10.01	122.01	117.00
1	N	815	A	C4-C5-C6	10.01	122.00	117.00
1	N	1385	G	C6-C5-N7	-10.01	124.39	130.40
1	N	556	C	C2-N3-C4	10.01	124.90	119.90
1	N	1464	U	C2-N3-C4	-10.01	121.00	127.00
1	N	251	G	C4-C5-N7	10.00	114.80	110.80
1	N	756	C	P-O3'-C3'	-10.00	107.70	119.70
1	N	1047	G	C5-C6-N1	-10.00	106.50	111.50
1	N	1040	U	C5-C4-O4	9.99	131.90	125.90
1	N	859	G	N9-C4-C5	9.99	109.40	105.40
1	N	1007	U	P-O3'-C3'	9.99	131.69	119.70
1	N	1504	G	C5-C6-O6	-9.99	122.61	128.60
1	N	319	G	N3-C4-N9	9.98	131.99	126.00
1	N	527	G	C5-C6-O6	-9.98	122.61	128.60
1	N	1163	A	N1-C6-N6	9.98	124.59	118.60
1	N	1315	U	O4'-C1'-N1	9.98	116.19	108.20
1	N	1414	U	O4'-C1'-N1	9.98	116.19	108.20
1	N	220	G	N3-C2-N2	9.98	126.89	119.90
1	N	521	G	C5-N7-C8	9.98	109.29	104.30
1	N	536	C	C4-C5-C6	9.97	122.38	117.40
1	N	1375	A	C5-C6-N1	-9.97	112.72	117.70
1	N	1440	U	O4'-C1'-N1	9.97	116.17	108.20
1	N	32	A	N1-C6-N6	9.96	124.58	118.60
1	N	299	G	N9-C4-C5	-9.96	101.42	105.40
1	N	1058	G	P-O5'-C5'	9.96	136.84	120.90
1	N	1224	U	O4'-C1'-N1	9.96	116.17	108.20
1	N	1084	G	N1-C6-O6	9.96	125.87	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	499	A	C5-C6-N6	-9.95	115.74	123.70
1	N	1310	G	P-O3'-C3'	9.95	131.64	119.70
1	N	257	G	N1-C6-O6	9.95	125.87	119.90
1	N	741	G	O4'-C1'-N9	9.95	116.16	108.20
1	N	195	A	O4'-C1'-N9	9.94	116.15	108.20
1	N	539	A	N7-C8-N9	9.94	118.77	113.80
1	N	620	C	O4'-C1'-N1	9.94	116.15	108.20
1	N	1256	A	N1-C6-N6	9.94	124.56	118.60
1	N	1260	G	N1-C2-N3	-9.94	117.94	123.90
1	N	1133	G	N1-C6-O6	9.93	125.86	119.90
1	N	267	C	N3-C4-N4	9.93	124.95	118.00
1	N	1459	G	C5-C6-N1	-9.93	106.53	111.50
1	N	836	G	C5-C6-N1	-9.93	106.53	111.50
1	N	61	G	O4'-C1'-N9	9.93	116.14	108.20
1	N	501	C	C6-N1-C2	-9.93	116.33	120.30
1	N	1018	G	C5-C6-N1	-9.93	106.54	111.50
1	N	22	G	O4'-C1'-N9	9.93	116.14	108.20
1	N	1248	A	C4-C5-C6	9.93	121.96	117.00
1	N	985	C	P-O5'-C5'	9.93	136.78	120.90
1	N	1031	C	N3-C4-N4	9.93	124.95	118.00
1	N	907	A	C5-N7-C8	9.92	108.86	103.90
1	N	9	G	C6-N1-C2	9.92	131.05	125.10
1	N	237	G	C5-C6-O6	-9.91	122.65	128.60
1	N	69	G	N1-C2-N3	-9.91	117.95	123.90
1	N	229	U	O4'-C1'-N1	9.91	116.13	108.20
1	N	416	G	N1-C6-O6	9.91	125.84	119.90
1	N	519	C	C5-C6-N1	9.91	125.95	121.00
1	N	629	A	C4-C5-C6	9.90	121.95	117.00
1	N	106	C	P-O3'-C3'	9.90	131.58	119.70
1	N	143	A	C6-C5-N7	-9.90	125.37	132.30
1	N	1170	A	C2-N3-C4	-9.90	105.65	110.60
1	N	1333	A	N1-C6-N6	9.90	124.54	118.60
1	N	396	C	N3-C4-N4	9.89	124.92	118.00
1	N	485	U	C2-N3-C4	9.89	132.94	127.00
1	N	144	G	C5-N7-C8	9.89	109.25	104.30
1	N	48	C	N3-C4-C5	-9.89	117.94	121.90
1	N	73	C	C6-N1-C1'	9.89	132.67	120.80
1	N	642	A	N7-C8-N9	-9.89	108.86	113.80
1	N	983	A	O4'-C1'-N9	9.88	116.11	108.20
1	N	166	U	O4'-C1'-N1	9.88	116.11	108.20
1	N	271	C	N3-C4-N4	9.88	124.92	118.00
1	N	1462	C	O4'-C1'-N1	9.88	116.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	988	G	C8-N9-C4	9.88	110.35	106.40
1	N	95	C	O4'-C1'-N1	9.87	116.10	108.20
1	N	344	A	N1-C6-N6	9.87	124.52	118.60
1	N	560	A	C4-C5-N7	-9.87	105.76	110.70
1	N	1297	G	C8-N9-C4	-9.87	102.45	106.40
1	N	449	G	O4'-C1'-N9	9.87	116.09	108.20
1	N	914	A	O4'-C1'-N9	9.87	116.09	108.20
1	N	1180	A	N1-C6-N6	9.87	124.52	118.60
1	N	1500	A	C4-C5-C6	9.87	121.93	117.00
1	N	759	A	C5-C6-N6	-9.87	115.81	123.70
1	N	298	A	C5-C6-N6	-9.86	115.81	123.70
1	N	44	A	C5-C6-N1	-9.86	112.77	117.70
1	N	921	U	O4'-C1'-N1	9.86	116.09	108.20
1	N	73	C	C2-N1-C1'	-9.86	107.96	118.80
1	N	905	U	O4'-C1'-N1	9.86	116.08	108.20
1	N	947	G	C4-C5-C6	9.86	124.71	118.80
1	N	597	G	C4-C5-N7	-9.85	106.86	110.80
1	N	676	A	N7-C8-N9	-9.85	108.87	113.80
1	N	1239	A	N1-C6-N6	9.85	124.51	118.60
1	N	1499	A	N1-C2-N3	9.85	134.23	129.30
1	N	781	A	C4-C5-C6	9.85	121.92	117.00
1	N	885	G	C8-N9-C4	-9.85	102.46	106.40
1	N	16	A	C4-C5-N7	9.85	115.62	110.70
1	N	831	A	C2-N3-C4	-9.85	105.68	110.60
1	N	1106	G	N1-C6-O6	9.85	125.81	119.90
1	N	1406	U	C5-C6-N1	9.85	127.62	122.70
1	N	668	G	C5-C6-N1	-9.84	106.58	111.50
1	N	692	U	N3-C2-O2	9.84	129.09	122.20
1	N	762	U	C2-N3-C4	-9.84	121.09	127.00
1	N	1213	A	N3-C4-C5	-9.84	119.91	126.80
1	N	265	G	P-O3'-C3'	9.84	131.51	119.70
1	N	494	G	C2-N3-C4	-9.84	106.98	111.90
1	N	588	G	O4'-C1'-N9	9.84	116.07	108.20
1	N	774	G	O4'-C1'-N9	9.84	116.07	108.20
1	N	877	G	O4'-C1'-N9	9.84	116.07	108.20
1	N	675	A	O4'-C1'-N9	9.84	116.07	108.20
1	N	909	A	C4-C5-C6	9.84	121.92	117.00
1	N	79	G	C5-C6-O6	-9.83	122.70	128.60
1	N	10	A	C4-C5-C6	9.83	121.92	117.00
1	N	711	G	O4'-C1'-N9	9.83	116.06	108.20
1	N	181	A	P-O3'-C3'	9.83	131.49	119.70
1	N	486	U	C5'-C4'-C3'	-9.83	100.28	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	177	G	O4'-C1'-N9	9.82	116.06	108.20
1	N	1408	A	C8-N9-C4	-9.82	101.87	105.80
1	N	828	U	O4'-C1'-N1	9.82	116.06	108.20
1	N	118	U	N3-C4-O4	9.82	126.27	119.40
1	N	1500	A	C5-C6-N6	-9.82	115.84	123.70
1	N	1515	G	C4-C5-C6	9.82	124.69	118.80
1	N	941	G	C5-C6-N1	9.82	116.41	111.50
1	N	1454	G	N9-C4-C5	9.82	109.33	105.40
1	N	7	A	C5-C6-N1	-9.81	112.79	117.70
1	N	852	G	C5-C6-O6	-9.81	122.71	128.60
1	N	524	G	N1-C6-O6	9.81	125.79	119.90
1	N	985	C	N3-C4-N4	9.81	124.87	118.00
1	N	1101	A	C5-C6-N1	-9.81	112.79	117.70
1	N	380	G	C8-N9-C1'	9.80	139.74	127.00
1	N	645	G	O4'-C1'-N9	9.80	116.04	108.20
1	N	1523	G	N9-C4-C5	-9.80	101.48	105.40
1	N	308	C	O4'-C1'-N1	9.80	116.04	108.20
1	N	619	U	N3-C4-O4	9.80	126.26	119.40
1	N	768	A	C8-N9-C4	-9.80	101.88	105.80
1	N	1040	U	P-O3'-C3'	9.80	131.46	119.70
1	N	1287	A	C5-C6-N1	-9.80	112.80	117.70
1	N	1181	G	N1-C6-O6	9.80	125.78	119.90
1	N	1359	C	C5-C6-N1	9.80	125.90	121.00
1	N	212	G	C5-N7-C8	9.79	109.20	104.30
1	N	1203	C	P-O5'-C5'	9.79	136.56	120.90
1	N	516	U	O4'-C1'-N1	9.79	116.03	108.20
1	N	83	C	O4'-C1'-N1	9.79	116.03	108.20
1	N	1108	G	C5-C6-O6	-9.79	122.73	128.60
1	N	275	G	O4'-C1'-N9	9.79	116.03	108.20
1	N	551	U	C5-C6-N1	9.79	127.59	122.70
1	N	1427	C	O4'-C1'-N1	9.79	116.03	108.20
1	N	31	G	C6-C5-N7	-9.78	124.53	130.40
1	N	711	G	N1-C6-O6	9.78	125.77	119.90
1	N	179	A	N9-C4-C5	-9.78	101.89	105.80
1	N	848	C	P-O3'-C3'	9.78	131.43	119.70
1	N	1092	A	N1-C6-N6	9.78	124.47	118.60
1	N	952	U	O4'-C1'-N1	9.77	116.02	108.20
1	N	997	U	C5-C6-N1	-9.77	117.81	122.70
1	N	1227	A	C5'-C4'-C3'	-9.77	100.36	116.00
1	N	1069	C	O4'-C1'-N1	9.77	116.02	108.20
1	N	1429	A	C5-C6-N6	-9.77	115.88	123.70
1	N	533	A	N1-C2-N3	9.77	134.18	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	573	A	O4'-C1'-N9	9.77	116.02	108.20
1	N	860	A	N7-C8-N9	-9.77	108.92	113.80
1	N	644	U	C5-C4-O4	-9.76	120.04	125.90
1	N	673	A	C5-C6-N6	-9.76	115.89	123.70
1	N	899	C	N1-C2-O2	9.76	124.76	118.90
1	N	918	A	N9-C4-C5	-9.76	101.90	105.80
1	N	1206	G	C6-C5-N7	-9.76	124.54	130.40
1	N	893	C	N3-C4-N4	9.76	124.83	118.00
1	N	520	A	C5-C6-N1	-9.76	112.82	117.70
1	N	536	C	O4'-C1'-N1	9.76	116.00	108.20
1	N	802	A	P-O3'-C3'	9.76	131.41	119.70
1	N	924	C	N1-C2-N3	-9.76	112.37	119.20
1	N	842	U	C2-N1-C1'	9.75	129.40	117.70
1	N	168	G	C5-C6-N1	-9.75	106.62	111.50
1	N	7	A	P-O3'-C3'	9.74	131.39	119.70
1	N	601	G	N1-C6-O6	9.74	125.75	119.90
1	N	1236	A	C5-C6-N6	-9.74	115.91	123.70
1	N	526	C	O4'-C1'-N1	9.74	115.99	108.20
1	N	267	C	N3-C4-C5	-9.74	118.00	121.90
1	N	843	U	C6-N1-C1'	-9.74	107.57	121.20
1	N	1005	A	N9-C4-C5	9.74	109.69	105.80
1	N	702	A	O4'-C1'-N9	9.73	115.99	108.20
1	N	272	C	O4'-C1'-N1	9.73	115.99	108.20
1	N	1165	U	O4'-C1'-N1	9.73	115.99	108.20
1	N	493	A	N7-C8-N9	9.73	118.67	113.80
1	N	1052	U	N3-C4-O4	9.73	126.21	119.40
1	N	94	G	N1-C2-N3	-9.73	118.06	123.90
1	N	194	C	C5-C4-N4	-9.73	113.39	120.20
1	N	791	G	C4-C5-N7	9.73	114.69	110.80
1	N	419	C	C6-N1-C2	-9.72	116.41	120.30
1	N	1037	C	C2-N1-C1'	9.72	129.50	118.80
1	N	1496	C	N3-C4-N4	9.72	124.81	118.00
1	N	470	C	N3-C4-C5	-9.72	118.01	121.90
1	N	1140	C	O4'-C1'-N1	9.72	115.97	108.20
1	N	736	C	C5-C4-N4	-9.72	113.40	120.20
1	N	76	G	O4'-C1'-N9	9.71	115.97	108.20
1	N	240	G	N1-C6-O6	9.71	125.73	119.90
1	N	319	G	N9-C4-C5	-9.71	101.51	105.40
1	N	228	A	C6-C5-N7	-9.71	125.50	132.30
1	N	1129	C	N3-C4-C5	-9.71	118.02	121.90
1	N	1311	A	N1-C6-N6	9.71	124.43	118.60
1	N	195	A	N7-C8-N9	-9.71	108.95	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	823	C	O4'-C1'-N1	9.71	115.97	108.20
1	N	141	G	C8-N9-C4	9.71	110.28	106.40
1	N	825	A	C5-C6-N6	-9.70	115.94	123.70
1	N	1409	C	C2-N3-C4	9.70	124.75	119.90
1	N	349	A	C5-N7-C8	9.70	108.75	103.90
1	N	993	G	C5-C6-N1	-9.70	106.65	111.50
1	N	345	C	O4'-C1'-N1	9.70	115.96	108.20
1	N	466	A	N1-C6-N6	9.70	124.42	118.60
1	N	441	A	N1-C6-N6	9.69	124.42	118.60
1	N	980	C	C5-C4-N4	9.69	126.98	120.20
1	N	1299	A	C5-C6-N6	-9.69	115.95	123.70
1	N	928	G	O4'-C1'-N9	9.68	115.95	108.20
1	N	168	G	C6-C5-N7	-9.68	124.59	130.40
1	N	201	G	N1-C6-O6	9.68	125.71	119.90
1	N	1181	G	C8-N9-C4	9.68	110.27	106.40
1	N	885	G	C4-C5-C6	9.68	124.61	118.80
1	N	1306	A	N1-C6-N6	9.68	124.41	118.60
1	N	199	A	P-O5'-C5'	9.67	136.38	120.90
1	N	1077	G	N9-C4-C5	-9.67	101.53	105.40
1	N	585	G	C5-C6-O6	-9.67	122.80	128.60
1	N	89	U	N1-C2-N3	-9.67	109.10	114.90
1	N	575	G	N1-C2-N3	-9.66	118.10	123.90
1	N	844	G	N1-C2-N3	-9.66	118.10	123.90
1	N	1119	C	P-O5'-C5'	-9.66	105.44	120.90
1	N	251	G	N1-C6-O6	9.66	125.70	119.90
1	N	694	A	C4-C5-N7	-9.66	105.87	110.70
1	N	231	U	O4'-C1'-N1	9.65	115.92	108.20
1	N	774	G	N1-C2-N3	-9.65	118.11	123.90
1	N	919	A	C5-C6-N1	-9.65	112.87	117.70
1	N	971	G	C5-N7-C8	-9.65	99.47	104.30
1	N	673	A	O4'-C1'-N9	9.65	115.92	108.20
1	N	144	G	C4-C5-C6	9.65	124.59	118.80
1	N	445	G	N1-C6-O6	9.65	125.69	119.90
1	N	650	G	N3-C2-N2	9.64	126.65	119.90
1	N	513	C	P-O3'-C3'	9.64	131.27	119.70
1	N	1223	C	C2-N3-C4	9.64	124.72	119.90
1	N	322	C	O4'-C1'-N1	9.64	115.91	108.20
1	N	1204	A	C5-N7-C8	9.64	108.72	103.90
1	N	338	A	O4'-C1'-N9	9.64	115.91	108.20
1	N	954	G	C5-N7-C8	-9.64	99.48	104.30
1	N	1450	U	N3-C4-O4	9.64	126.14	119.40
1	N	1022	A	N1-C6-N6	9.63	124.38	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1115	U	C2-N3-C4	9.63	132.78	127.00
1	N	496	A	C5-C6-N1	-9.63	112.88	117.70
1	N	90	C	P-O3'-C3'	9.63	131.26	119.70
1	N	789	U	N3-C4-C5	-9.63	108.82	114.60
1	N	800	G	P-O5'-C5'	9.62	136.30	120.90
1	N	1177	G	O4'-C1'-N9	9.62	115.90	108.20
1	N	107	G	C5-C6-O6	-9.62	122.83	128.60
1	N	954	G	N9-C4-C5	-9.62	101.55	105.40
1	N	1354	U	N3-C2-O2	9.62	128.94	122.20
1	N	1321	U	P-O5'-C5'	9.62	136.29	120.90
1	N	19	A	C4-C5-C6	9.62	121.81	117.00
1	N	243	A	O4'-C1'-N9	9.62	115.89	108.20
1	N	346	G	N1-C6-O6	9.61	125.67	119.90
1	N	9	G	P-O5'-C5'	9.61	136.28	120.90
1	N	39	G	O4'-C1'-N9	9.61	115.89	108.20
1	N	812	G	N9-C4-C5	-9.61	101.56	105.40
1	N	130	A	C4-C5-C6	9.61	121.81	117.00
1	N	262	A	C5-C6-N1	-9.61	112.89	117.70
1	N	695	A	N9-C4-C5	9.61	109.64	105.80
1	N	975	A	N1-C2-N3	9.61	134.10	129.30
1	N	1406	U	N3-C4-O4	9.61	126.13	119.40
1	N	1523	G	N1-C6-O6	9.61	125.67	119.90
1	N	234	C	N3-C4-C5	-9.60	118.06	121.90
1	N	111	G	N1-C2-N3	-9.60	118.14	123.90
1	N	1016	A	C5-C6-N1	-9.60	112.90	117.70
1	N	1020	G	C8-N9-C4	-9.60	102.56	106.40
1	N	288	A	N1-C2-N3	9.59	134.09	129.30
1	N	302	G	C4-C5-N7	-9.59	106.97	110.80
1	N	186	C	C5-C4-N4	-9.58	113.49	120.20
1	N	242	G	N1-C6-O6	9.58	125.65	119.90
1	N	519	C	N3-C4-C5	-9.58	118.07	121.90
1	N	1343	G	C5-C6-N1	-9.58	106.71	111.50
1	N	1459	G	C4-C5-C6	9.58	124.55	118.80
1	N	794	A	C5'-C4'-C3'	-9.58	100.67	116.00
1	N	1098	C	N3-C4-C5	-9.58	118.07	121.90
1	N	676	A	C5-C6-N1	-9.58	112.91	117.70
1	N	755	G	C2-N3-C4	9.57	116.69	111.90
1	N	977	A	N9-C4-C5	9.57	109.63	105.80
1	N	1017	U	N3-C4-C5	-9.57	108.86	114.60
1	N	1282	C	C2-N1-C1'	9.57	129.33	118.80
1	N	1318	A	C5-C6-N6	-9.57	116.04	123.70
1	N	1465	A	O4'-C1'-N9	9.57	115.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	898	G	C5-C6-N1	-9.56	106.72	111.50
1	N	910	C	N3-C4-C5	-9.56	118.07	121.90
1	N	1312	G	C5'-C4'-C3'	-9.56	100.70	116.00
1	N	54	C	N3-C4-C5	-9.56	118.08	121.90
1	N	277	C	N3-C4-N4	9.56	124.69	118.00
1	N	563	A	C4-C5-C6	9.56	121.78	117.00
1	N	754	C	N3-C4-C5	-9.56	118.08	121.90
1	N	1200	C	O4'-C1'-N1	9.56	115.85	108.20
1	N	625	U	C5-C6-N1	9.56	127.48	122.70
1	N	1339	A	P-O3'-C3'	9.56	131.17	119.70
1	N	838	G	N1-C6-O6	9.55	125.63	119.90
1	N	355	C	C2-N3-C4	9.55	124.67	119.90
1	N	984	C	N3-C4-C5	-9.55	118.08	121.90
1	N	78	A	C1'-O4'-C4'	9.54	117.53	109.90
1	N	195	A	N9-C4-C5	9.54	109.62	105.80
1	N	461	A	C4-C5-C6	9.54	121.77	117.00
1	N	1021	A	C5-C6-N1	-9.54	112.93	117.70
1	N	1092	A	N3-C4-C5	-9.54	120.12	126.80
1	N	1292	G	O4'-C1'-N9	9.54	115.83	108.20
1	N	512	U	O4'-C1'-N1	9.54	115.83	108.20
1	N	1472	U	O4'-C1'-N1	9.54	115.83	108.20
1	N	1042	A	C4-C5-C6	9.54	121.77	117.00
1	N	832	G	N7-C8-N9	-9.53	108.33	113.10
1	N	978	A	C5-N7-C8	9.53	108.67	103.90
1	N	315	A	C4-C5-N7	-9.53	105.94	110.70
1	N	393	A	C4-C5-N7	-9.52	105.94	110.70
1	N	507	C	O4'-C1'-N1	9.52	115.81	108.20
1	N	1165	U	N1-C2-O2	-9.52	116.14	122.80
1	N	153	C	P-O5'-C5'	9.51	136.12	120.90
1	N	812	G	N3-C4-N9	9.51	131.71	126.00
1	N	1102	A	C6-C5-N7	-9.51	125.64	132.30
1	N	140	U	P-O3'-C3'	9.51	131.11	119.70
1	N	427	U	C5-C6-N1	9.51	127.45	122.70
1	N	558	G	O4'-C1'-N9	9.51	115.81	108.20
1	N	954	G	N3-C4-C5	9.51	133.35	128.60
1	N	808	C	O4'-C1'-N1	9.51	115.81	108.20
1	N	604	G	N1-C6-O6	9.51	125.60	119.90
1	N	638	U	N1-C2-N3	-9.51	109.20	114.90
1	N	832	G	C2-N3-C4	-9.50	107.15	111.90
1	N	1418	A	P-O5'-C5'	9.50	136.10	120.90
1	N	171	A	N1-C2-N3	9.50	134.05	129.30
1	N	1204	A	N7-C8-N9	-9.50	109.05	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	676	A	O4'-C1'-N9	9.49	115.80	108.20
1	N	1507	A	C5-C6-N6	-9.49	116.10	123.70
1	N	152	A	C5-C6-N1	-9.49	112.95	117.70
1	N	460	A	C4-C5-C6	9.49	121.75	117.00
1	N	539	A	C5-C6-N1	-9.49	112.95	117.70
1	N	1058	G	C6-C5-N7	-9.49	124.70	130.40
1	N	464	U	P-O3'-C3'	9.49	131.08	119.70
1	N	866	C	O4'-C1'-N1	9.49	115.79	108.20
1	N	1338	G	C4-C5-C6	9.49	124.49	118.80
1	N	573	A	C5-N7-C8	9.48	108.64	103.90
1	N	1016	A	N1-C6-N6	9.48	124.29	118.60
1	N	417	G	N1-C6-O6	9.48	125.59	119.90
1	N	553	A	C5-C6-N6	-9.48	116.11	123.70
1	N	795	C	O4'-C1'-N1	9.48	115.78	108.20
1	N	234	C	N3-C4-N4	9.48	124.63	118.00
1	N	1210	C	N3-C4-C5	-9.48	118.11	121.90
1	N	702	A	N7-C8-N9	-9.47	109.06	113.80
1	N	1108	G	N1-C6-O6	9.47	125.58	119.90
1	N	142	G	C5-C6-O6	-9.47	122.92	128.60
1	N	612	C	C6-N1-C2	-9.47	116.51	120.30
1	N	738	C	O4'-C1'-N1	9.47	115.77	108.20
1	N	284	C	N3-C4-C5	-9.46	118.11	121.90
1	N	496	A	C4-C5-C6	9.46	121.73	117.00
1	N	1174	G	C4-C5-N7	9.46	114.58	110.80
1	N	645	G	N1-C6-O6	9.46	125.58	119.90
1	N	451	A	P-O3'-C3'	9.46	131.05	119.70
1	N	715	A	C5-C6-N1	-9.45	112.97	117.70
1	N	816	A	C4-C5-C6	9.45	121.73	117.00
1	N	786	G	O4'-C1'-N9	9.45	115.76	108.20
1	N	380	G	O4'-C1'-N9	9.45	115.76	108.20
1	N	780	A	C5-C6-N6	-9.45	116.14	123.70
1	N	453	G	C6-C5-N7	-9.45	124.73	130.40
1	N	1000	A	P-O5'-C5'	9.45	136.01	120.90
1	N	706	A	O4'-C1'-N9	9.44	115.75	108.20
1	N	888	G	N3-C4-C5	-9.44	123.88	128.60
1	N	307	C	C6-N1-C2	-9.44	116.53	120.30
1	N	871	U	O4'-C4'-C3'	-9.44	94.56	104.00
1	N	16	A	O4'-C1'-N9	9.44	115.75	108.20
1	N	651	C	O4'-C1'-N1	9.44	115.75	108.20
1	N	344	A	C4-C5-C6	9.43	121.72	117.00
1	N	1519	A	N1-C6-N6	9.43	124.26	118.60
1	N	274	A	C5-C6-N1	-9.43	112.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	459	A	N7-C8-N9	-9.43	109.09	113.80
1	N	1404	C	O4'-C1'-N1	9.43	115.74	108.20
1	N	1047	G	C4-C5-N7	9.43	114.57	110.80
1	N	1422	G	N3-C2-N2	9.43	126.50	119.90
1	N	1501	C	N1-C2-N3	-9.43	112.60	119.20
1	N	371	A	N1-C6-N6	9.42	124.25	118.60
1	N	614	C	N3-C4-C5	-9.42	118.13	121.90
1	N	1039	G	C8-N9-C4	-9.42	102.63	106.40
1	N	622	A	O4'-C1'-N9	9.42	115.74	108.20
1	N	1169	A	C5-C6-N1	-9.42	112.99	117.70
1	N	1475	G	C5-C6-O6	-9.42	122.95	128.60
1	N	1155	A	C4-C5-C6	9.42	121.71	117.00
1	N	1394	A	C5-N7-C8	9.42	108.61	103.90
1	N	1523	G	N3-C2-N2	9.41	126.49	119.90
1	N	332	G	C8-N9-C4	-9.41	102.64	106.40
1	N	120	A	N1-C6-N6	9.40	124.24	118.60
1	N	1432	G	N9-C4-C5	9.40	109.16	105.40
1	N	334	C	O4'-C1'-N1	9.40	115.72	108.20
1	N	1507	A	C4-C5-N7	-9.40	106.00	110.70
1	N	742	G	O4'-C1'-N9	9.40	115.72	108.20
1	N	777	A	N1-C6-N6	9.40	124.24	118.60
1	N	1154	G	N3-C2-N2	9.40	126.48	119.90
1	N	286	C	O4'-C1'-N1	9.39	115.72	108.20
1	N	31	G	C4-C5-C6	9.39	124.44	118.80
1	N	502	A	C5-C6-N6	-9.39	116.19	123.70
1	N	619	U	C5-C6-N1	9.39	127.39	122.70
1	N	808	C	C4-C5-C6	9.39	122.10	117.40
1	N	1303	C	O4'-C1'-N1	9.39	115.71	108.20
1	N	551	U	N3-C2-O2	9.39	128.77	122.20
1	N	1346	A	C5-C6-N1	-9.39	113.01	117.70
1	N	1402	C	O4'-C1'-N1	9.38	115.71	108.20
1	N	460	A	P-O5'-C5'	9.38	135.91	120.90
1	N	810	C	N3-C4-C5	-9.38	118.15	121.90
1	N	1320	C	N3-C4-C5	-9.38	118.15	121.90
1	N	222	C	O4'-C1'-N1	9.38	115.70	108.20
1	N	321	A	C5-C6-N6	-9.38	116.20	123.70
1	N	712	A	C8-N9-C4	-9.38	102.05	105.80
1	N	893	C	C2-N3-C4	-9.38	115.21	119.90
1	N	934	C	P-O3'-C3'	9.38	130.95	119.70
1	N	1334	G	C5-C6-O6	-9.38	122.97	128.60
1	N	212	G	P-O5'-C5'	9.37	135.90	120.90
1	N	456	A	N1-C6-N6	9.37	124.22	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1346	A	P-O3'-C3'	9.38	130.95	119.70
1	N	1263	C	C4-C5-C6	9.37	122.09	117.40
1	N	233	C	O4'-C1'-N1	9.37	115.70	108.20
1	N	317	U	C5'-C4'-O4'	9.37	120.34	109.10
1	N	281	G	P-O3'-C3'	9.37	130.94	119.70
1	N	79	G	N3-C2-N2	9.36	126.45	119.90
1	N	613	C	N3-C4-C5	-9.36	118.16	121.90
1	N	197	A	C5'-C4'-C3'	9.36	130.98	116.00
1	N	144	G	C5-C6-N1	-9.36	106.82	111.50
1	N	310	G	C4-C5-N7	9.36	114.54	110.80
1	N	423	G	N1-C6-O6	9.36	125.51	119.90
1	N	864	A	C5-C6-N1	-9.36	113.02	117.70
1	N	181	A	C4'-C3'-C2'	-9.35	93.25	102.60
1	N	1349	A	O4'-C1'-N9	9.35	115.68	108.20
1	N	726	C	O4'-C1'-N1	9.35	115.68	108.20
1	N	957	U	P-O5'-C5'	9.35	135.86	120.90
1	N	58	C	C2-N3-C4	9.35	124.57	119.90
1	N	495	A	C8-N9-C4	-9.35	102.06	105.80
1	N	846	G	C5-C6-O6	-9.35	122.99	128.60
1	N	530	G	C8-N9-C4	-9.35	102.66	106.40
1	N	549	C	O4'-C1'-N1	9.34	115.67	108.20
1	N	639	G	N1-C6-O6	9.34	125.50	119.90
1	N	691	G	C8-N9-C4	-9.34	102.66	106.40
1	N	1066	C	C3'-C2'-C1'	9.34	108.97	101.50
1	N	1122	U	O4'-C1'-N1	9.34	115.67	108.20
1	N	1438	G	C6-C5-N7	-9.34	124.80	130.40
1	N	1474	U	C5-C4-O4	9.34	131.50	125.90
1	N	1386	G	N7-C8-N9	-9.34	108.43	113.10
1	N	89	U	O4'-C1'-N1	9.34	115.67	108.20
1	N	175	C	O4'-C1'-N1	9.34	115.67	108.20
1	N	263	A	O4'-C1'-N9	9.33	115.67	108.20
1	N	531	U	P-O3'-C3'	9.33	130.90	119.70
1	N	1523	G	N1-C2-N3	-9.33	118.30	123.90
1	N	773	G	N1-C6-O6	9.33	125.50	119.90
1	N	1068	G	N3-C4-N9	-9.33	120.40	126.00
1	N	447	G	N7-C8-N9	-9.33	108.44	113.10
1	N	924	C	C2-N3-C4	9.33	124.56	119.90
1	N	1187	G	C5-C6-O6	-9.33	123.00	128.60
1	N	59	A	C5-C6-N1	-9.32	113.04	117.70
1	N	300	A	C4-C5-C6	9.32	121.66	117.00
1	N	396	C	C6-N1-C2	-9.32	116.57	120.30
1	N	881	G	O4'-C1'-N9	9.32	115.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1399	C	C5-C4-N4	-9.32	113.67	120.20
1	N	1401	G	C5-C6-O6	-9.32	123.00	128.60
1	N	66	A	N9-C4-C5	9.32	109.53	105.80
1	N	191	G	N7-C8-N9	-9.32	108.44	113.10
1	N	42	G	O4'-C1'-N9	9.32	115.65	108.20
1	N	162	A	C4-C5-N7	-9.32	106.04	110.70
1	N	308	C	C2-N3-C4	9.32	124.56	119.90
1	N	450	G	N3-C4-C5	9.32	133.26	128.60
1	N	1225	A	C8-N9-C4	-9.32	102.07	105.80
1	N	1293	C	C4'-C3'-C2'	-9.32	93.28	102.60
1	N	1191	A	O4'-C1'-N9	9.31	115.65	108.20
1	N	60	A	C4-C5-C6	9.31	121.66	117.00
1	N	285	C	P-O5'-C5'	9.31	135.80	120.90
1	N	1105	A	C6-N1-C2	9.31	124.19	118.60
1	N	1206	G	P-O5'-C5'	9.31	135.79	120.90
1	N	389	A	O4'-C1'-N9	9.30	115.64	108.20
1	N	452	A	C2-N3-C4	-9.30	105.95	110.60
1	N	799	G	N3-C2-N2	9.30	126.41	119.90
1	N	845	A	C2-N3-C4	-9.30	105.95	110.60
1	N	1223	C	C6-N1-C2	-9.30	116.58	120.30
1	N	111	G	C5-C6-O6	-9.30	123.02	128.60
1	N	3	A	C4-C5-C6	9.30	121.65	117.00
1	N	422	C	O4'-C1'-N1	9.30	115.64	108.20
1	N	699	C	N3-C4-N4	9.30	124.51	118.00
1	N	773	G	C5-C6-O6	-9.30	123.02	128.60
1	N	446	G	C4-C5-N7	9.30	114.52	110.80
1	N	1324	A	C5-C6-N6	-9.29	116.27	123.70
1	N	19	A	C5-C6-N1	-9.29	113.05	117.70
1	N	857	C	N3-C4-N4	9.29	124.50	118.00
1	N	1102	A	C4-C5-C6	9.29	121.65	117.00
1	N	605	U	C1'-O4'-C4'	9.29	117.33	109.90
1	N	1096	C	P-O5'-C5'	9.29	135.76	120.90
1	N	265	G	O4'-C1'-N9	9.29	115.63	108.20
1	N	1318	A	P-O5'-C5'	9.28	135.75	120.90
1	N	1319	A	N1-C6-N6	9.28	124.17	118.60
1	N	658	C	C6-N1-C2	-9.28	116.59	120.30
1	N	1230	C	N1-C2-O2	-9.28	113.33	118.90
1	N	1467	C	C5-C4-N4	-9.28	113.70	120.20
1	N	827	U	O4'-C1'-N1	9.28	115.62	108.20
1	N	1012	A	C8-N9-C4	-9.28	102.09	105.80
1	N	1003	G	P-O3'-C3'	9.27	130.83	119.70
1	N	1534	A	N9-C4-C5	9.27	109.51	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	274	A	O4'-C1'-N9	9.27	115.61	108.20
1	N	488	C	O4'-C1'-N1	9.27	115.61	108.20
1	N	1081	A	N9-C4-C5	9.27	109.51	105.80
1	N	1289	A	P-O3'-C3'	-9.27	108.58	119.70
1	N	715	A	C5-N7-C8	9.27	108.53	103.90
1	N	75	G	O4'-C1'-N9	9.27	115.61	108.20
1	N	681	A	C5-C6-N6	-9.27	116.29	123.70
1	N	587	G	N1-C6-O6	9.26	125.46	119.90
1	N	642	A	C4-C5-C6	9.26	121.63	117.00
1	N	718	A	P-O3'-C3'	9.26	130.82	119.70
1	N	774	G	N3-C2-N2	9.26	126.38	119.90
1	N	1247	U	O4'-C1'-N1	9.26	115.61	108.20
1	N	786	G	C5-N7-C8	-9.26	99.67	104.30
1	N	1118	U	N3-C4-C5	-9.25	109.05	114.60
1	N	1298	U	C5'-C4'-O4'	9.25	120.20	109.10
1	N	896	C	O4'-C1'-N1	9.25	115.60	108.20
1	N	275	G	C5-C6-N1	-9.25	106.88	111.50
1	N	497	G	N1-C6-O6	9.25	125.45	119.90
1	N	1119	C	N3-C4-C5	-9.25	118.20	121.90
1	N	1261	A	C8-N9-C4	9.25	109.50	105.80
1	N	354	G	C5-C6-N1	-9.24	106.88	111.50
1	N	1037	C	O4'-C4'-C3'	-9.24	94.76	104.00
1	N	1339	A	C5-C6-N6	-9.24	116.31	123.70
1	N	1534	A	C4-C5-C6	9.24	121.62	117.00
1	N	1063	C	C2-N3-C4	9.24	124.52	119.90
1	N	1428	A	O4'-C1'-N9	9.24	115.59	108.20
1	N	1333	A	N3-C4-C5	-9.24	120.33	126.80
1	N	1105	A	C5-C6-N1	-9.23	113.08	117.70
1	N	854	U	O4'-C1'-N1	9.23	115.59	108.20
1	N	79	G	C8-N9-C4	9.23	110.09	106.40
1	N	186	C	P-O3'-C3'	-9.23	108.63	119.70
1	N	871	U	O4'-C1'-N1	9.23	115.58	108.20
1	N	82	G	C4-C5-N7	9.22	114.49	110.80
1	N	301	G	N1-C6-O6	9.22	125.44	119.90
1	N	554	A	O4'-C1'-N9	9.22	115.58	108.20
1	N	920	U	O4'-C1'-N1	9.22	115.58	108.20
1	N	192	A	P-O5'-C5'	9.22	135.65	120.90
1	N	1128	C	N3-C4-C5	-9.22	118.21	121.90
1	N	1261	A	N7-C8-N9	-9.22	109.19	113.80
1	N	900	A	N1-C6-N6	9.22	124.13	118.60
1	N	974	A	N1-C2-N3	9.22	133.91	129.30
1	N	1175	G	C6-C5-N7	-9.22	124.87	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	47	C	N3-C4-N4	9.21	124.45	118.00
1	N	192	A	N1-C6-N6	9.21	124.13	118.60
1	N	254	G	C5-N7-C8	9.21	108.91	104.30
1	N	477	C	C2-N3-C4	9.21	124.51	119.90
1	N	1044	A	C5-C6-N6	-9.21	116.33	123.70
1	N	1378	C	C4-C5-C6	9.21	122.01	117.40
1	N	888	G	C4-C5-N7	-9.21	107.11	110.80
1	N	926	G	P-O3'-C3'	9.21	130.75	119.70
1	N	1114	C	C5-C4-N4	-9.21	113.75	120.20
1	N	144	G	C4-C5-N7	-9.21	107.12	110.80
1	N	1490	U	N3-C2-O2	9.21	128.65	122.20
1	N	696	A	C4-C5-C6	9.21	121.60	117.00
1	N	954	G	N7-C8-N9	9.21	117.70	113.10
1	N	1282	C	C6-N1-C2	-9.21	116.62	120.30
1	N	95	C	C2-N1-C1'	9.21	128.93	118.80
1	N	279	A	C5-C6-N6	-9.21	116.33	123.70
1	N	1078	U	O4'-C1'-N1	9.21	115.56	108.20
1	N	394	G	N1-C2-N3	-9.20	118.38	123.90
1	N	857	C	O4'-C1'-N1	9.21	115.56	108.20
1	N	1510	C	O4'-C1'-N1	9.20	115.56	108.20
1	N	560	A	C4-C5-C6	9.20	121.60	117.00
1	N	27	G	O4'-C1'-N9	9.20	115.56	108.20
1	N	393	A	C5-N7-C8	9.20	108.50	103.90
1	N	713	G	C5-C6-N1	-9.20	106.90	111.50
1	N	877	G	N1-C6-O6	9.20	125.42	119.90
1	N	1389	C	O4'-C1'-N1	9.20	115.56	108.20
1	N	1433	A	O3'-P-O5'	-9.20	86.52	104.00
1	N	984	C	O4'-C1'-N1	9.20	115.56	108.20
1	N	1020	G	N1-C2-N3	-9.20	118.38	123.90
1	N	360	G	C2-N3-C4	9.19	116.50	111.90
1	N	1199	U	O4'-C1'-N1	9.19	115.55	108.20
1	N	222	C	C2-N3-C4	9.19	124.50	119.90
1	N	1149	C	C5-C4-N4	-9.19	113.77	120.20
1	N	1296	C	N3-C4-C5	-9.19	118.22	121.90
1	N	1501	C	C6-N1-C2	9.19	123.98	120.30
1	N	146	G	N3-C4-C5	9.19	133.19	128.60
1	N	762	U	C1'-O4'-C4'	9.19	117.25	109.90
1	N	87	C	N1-C2-O2	-9.19	113.39	118.90
1	N	155	A	C4-C5-C6	9.19	121.59	117.00
1	N	743	A	C4-C5-C6	9.19	121.59	117.00
1	N	1329	A	C5-C6-N1	-9.19	113.11	117.70
1	N	201	G	O4'-C1'-N9	9.19	115.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	721	G	N3-C2-N2	9.18	126.33	119.90
1	N	1082	A	O5'-P-OP2	-9.18	97.44	105.70
1	N	1460	C	C5-C4-N4	-9.18	113.77	120.20
1	N	127	G	C5-C6-O6	-9.18	123.09	128.60
1	N	1024	G	C5-C6-O6	-9.18	123.09	128.60
1	N	1389	C	N1-C2-O2	-9.18	113.39	118.90
1	N	344	A	N3-C4-C5	-9.18	120.38	126.80
1	N	926	G	O4'-C1'-N9	9.18	115.54	108.20
1	N	1200	C	C6-N1-C1'	-9.18	109.79	120.80
1	N	830	G	N3-C4-C5	-9.17	124.01	128.60
1	N	869	G	N1-C2-N3	-9.17	118.40	123.90
1	N	246	A	N7-C8-N9	-9.17	109.22	113.80
1	N	951	G	N3-C2-N2	9.17	126.32	119.90
1	N	685	G	C6-C5-N7	-9.17	124.90	130.40
1	N	819	A	C6-C5-N7	-9.16	125.89	132.30
1	N	1235	U	O4'-C1'-N1	9.16	115.53	108.20
1	N	1241	G	C5'-C4'-C3'	-9.16	101.34	116.00
1	N	1130	A	C5-C6-N1	-9.16	113.12	117.70
1	N	54	C	N3-C4-N4	9.16	124.41	118.00
1	N	1384	C	O4'-C1'-N1	9.16	115.53	108.20
1	N	859	G	N3-C2-N2	9.15	126.31	119.90
1	N	445	G	C6-C5-N7	-9.15	124.91	130.40
1	N	1111	A	O4'-C1'-N9	9.15	115.52	108.20
1	N	1333	A	C5-C6-N1	-9.15	113.12	117.70
1	N	245	U	O4'-C1'-N1	9.15	115.52	108.20
1	N	835	U	O4'-C1'-N1	9.15	115.52	108.20
1	N	926	G	N1-C2-N3	-9.15	118.41	123.90
1	N	250	A	C4-C5-C6	9.15	121.57	117.00
1	N	687	A	N1-C6-N6	9.15	124.09	118.60
1	N	892	A	C8-N9-C4	-9.15	102.14	105.80
1	N	1261	A	N1-C2-N3	-9.15	124.73	129.30
1	N	1364	U	C2-N1-C1'	9.15	128.68	117.70
1	N	189	A	N1-C6-N6	9.14	124.09	118.60
1	N	841	C	N3-C4-C5	-9.14	118.24	121.90
1	N	862	C	N3-C4-N4	9.14	124.40	118.00
1	N	283	U	C5-C4-O4	-9.14	120.42	125.90
1	N	574	A	C2-N3-C4	9.14	115.17	110.60
1	N	805	C	P-O5'-C5'	9.13	135.51	120.90
1	N	1268	G	P-O3'-C3'	9.13	130.66	119.70
1	N	1327	C	C2-N3-C4	9.13	124.47	119.90
1	N	1405	G	O4'-C1'-N9	9.13	115.50	108.20
1	N	117	G	P-O5'-C5'	9.13	135.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	89	U	C2-N3-C4	9.12	132.47	127.00
1	N	1189	U	O4'-C1'-N1	9.13	115.50	108.20
1	N	527	G	N3-C2-N2	9.12	126.29	119.90
1	N	1193	G	C2-N3-C4	-9.12	107.34	111.90
1	N	1462	C	C6-N1-C2	9.12	123.95	120.30
1	N	261	U	C5-C4-O4	-9.12	120.43	125.90
1	N	887	G	O4'-C1'-N9	9.12	115.49	108.20
1	N	1510	C	C5-C4-N4	-9.12	113.82	120.20
1	N	346	G	C6-C5-N7	-9.12	124.93	130.40
1	N	670	G	O4'-C1'-N9	9.12	115.49	108.20
1	N	962	C	N3-C4-C5	-9.12	118.25	121.90
1	N	830	G	C2-N3-C4	9.11	116.46	111.90
1	N	177	G	N3-C2-N2	9.11	126.28	119.90
1	N	612	C	N3-C4-C5	-9.11	118.25	121.90
1	N	519	C	C6-N1-C2	-9.11	116.66	120.30
1	N	114	U	O4'-C1'-N1	9.11	115.49	108.20
1	N	135	C	O4'-C1'-N1	9.11	115.49	108.20
1	N	763	G	C8-N9-C4	-9.11	102.76	106.40
1	N	730	G	C8-N9-C4	-9.11	102.76	106.40
1	N	805	C	C6-N1-C2	-9.10	116.66	120.30
1	N	1233	G	C8-N9-C4	-9.10	102.76	106.40
1	N	784	A	N1-C6-N6	9.10	124.06	118.60
1	N	120	A	O4'-C1'-C2'	-9.10	96.70	105.80
1	N	171	A	C8-N9-C4	-9.10	102.16	105.80
1	N	82	G	N9-C4-C5	-9.09	101.76	105.40
1	N	354	G	C6-C5-N7	-9.09	124.94	130.40
1	N	1284	C	C5-C6-N1	-9.09	116.45	121.00
1	N	148	G	P-O5'-C5'	9.09	135.44	120.90
1	N	74	A	C5-C6-N6	-9.09	116.43	123.70
1	N	395	C	C5-C6-N1	9.09	125.54	121.00
1	N	1350	A	N1-C6-N6	9.09	124.05	118.60
1	N	1411	C	N3-C2-O2	-9.08	115.54	121.90
1	N	60	A	C5-C6-N1	-9.08	113.16	117.70
1	N	235	C	N3-C4-C5	-9.08	118.27	121.90
1	N	596	A	C5-C6-N6	-9.08	116.43	123.70
1	N	1231	G	O4'-C1'-N9	9.08	115.47	108.20
1	N	1046	A	C1'-O4'-C4'	-9.08	102.63	109.90
1	N	1102	A	P-O5'-C5'	9.08	135.43	120.90
1	N	548	G	C5-C6-N1	-9.08	106.96	111.50
1	N	1505	G	N7-C8-N9	-9.08	108.56	113.10
1	N	1019	A	C5-C6-N1	-9.08	113.16	117.70
1	N	1086	U	C5'-C4'-C3'	-9.08	101.48	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	974	A	N1-C6-N6	9.07	124.05	118.60
1	N	757	U	N3-C4-C5	-9.07	109.16	114.60
1	N	842	U	P-O5'-C5'	9.07	135.41	120.90
1	N	1054	C	N3-C4-N4	9.07	124.35	118.00
1	N	1449	C	N3-C4-N4	9.07	124.35	118.00
1	N	1458	G	C6-C5-N7	-9.07	124.96	130.40
1	N	205	A	C4-C5-C6	9.07	121.53	117.00
1	N	888	G	C5-N7-C8	9.07	108.83	104.30
1	N	942	G	C5-C6-N1	-9.07	106.97	111.50
1	N	1002	G	N1-C6-O6	9.07	125.34	119.90
1	N	796	C	C6-N1-C1'	-9.06	109.92	120.80
1	N	230	G	C8-N9-C4	-9.06	102.78	106.40
1	N	666	G	N1-C2-N3	-9.06	118.46	123.90
1	N	22	G	C4-C5-C6	9.05	124.23	118.80
1	N	1021	A	C2-N3-C4	-9.05	106.07	110.60
1	N	494	G	O4'-C1'-N9	9.05	115.44	108.20
1	N	971	G	N1-C6-O6	9.05	125.33	119.90
1	N	1137	C	C5'-C4'-C3'	-9.05	101.52	116.00
1	N	1280	A	N1-C6-N6	9.05	124.03	118.60
1	N	51	A	C4-C5-C6	9.05	121.52	117.00
1	N	80	A	C5-C6-N1	-9.05	113.17	117.70
1	N	829	G	C6-C5-N7	-9.05	124.97	130.40
1	N	987	G	N1-C6-O6	9.05	125.33	119.90
1	N	1421	G	N1-C6-O6	9.05	125.33	119.90
1	N	505	G	C8-N9-C4	-9.04	102.78	106.40
1	N	1443	C	O4'-C1'-N1	9.04	115.43	108.20
1	N	296	U	N1-C2-O2	-9.04	116.47	122.80
1	N	289	G	N1-C6-O6	9.04	125.32	119.90
1	N	1229	A	C6-C5-N7	-9.04	125.97	132.30
1	N	460	A	C5-C6-N1	-9.04	113.18	117.70
1	N	874	G	N1-C6-O6	9.03	125.32	119.90
1	N	1152	A	C5-C6-N1	-9.03	113.18	117.70
1	N	357	G	C4-C5-C6	9.03	124.22	118.80
1	N	1161	C	C6-N1-C2	-9.03	116.69	120.30
1	N	50	A	P-O5'-C5'	9.03	135.35	120.90
1	N	388	G	C5'-C4'-C3'	-9.03	101.56	116.00
1	N	420	U	N3-C4-O4	9.03	125.72	119.40
1	N	893	C	C6-N1-C2	-9.03	116.69	120.30
1	N	283	U	N3-C2-O2	9.03	128.52	122.20
1	N	660	C	C2-N3-C4	9.03	124.41	119.90
1	N	1351	U	O4'-C1'-N1	9.02	115.42	108.20
1	N	1465	A	C8-N9-C4	-9.02	102.19	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	806	C	C6-N1-C2	-9.02	116.69	120.30
1	N	66	A	C4-C5-C6	9.02	121.51	117.00
1	N	374	A	O4'-C1'-N9	9.02	115.41	108.20
1	N	1329	A	N1-C2-N3	-9.02	124.79	129.30
1	N	1377	A	O4'-C1'-N9	9.02	115.41	108.20
1	N	1403	C	N3-C4-N4	9.02	124.31	118.00
1	N	1410	A	C2-N3-C4	-9.02	106.09	110.60
1	N	236	A	C8-N9-C4	9.01	109.41	105.80
1	N	137	U	C5-C6-N1	9.01	127.20	122.70
1	N	168	G	N3-C2-N2	9.01	126.21	119.90
1	N	348	G	O4'-C1'-N9	9.01	115.41	108.20
1	N	398	U	O4'-C1'-N1	9.01	115.41	108.20
1	N	1149	C	N3-C4-N4	9.01	124.31	118.00
1	N	1372	U	O4'-C1'-N1	9.01	115.41	108.20
1	N	1081	A	C5-C6-N6	-9.01	116.50	123.70
1	N	1193	G	C5-C6-N1	-9.01	107.00	111.50
1	N	336	A	C5-C6-N6	-9.00	116.50	123.70
1	N	124	C	C6-N1-C2	-9.00	116.70	120.30
1	N	640	A	N7-C8-N9	9.00	118.30	113.80
1	N	749	A	C5-C6-N1	-9.00	113.20	117.70
1	N	1408	A	N7-C8-N9	9.00	118.30	113.80
1	N	775	G	P-O5'-C5'	9.00	135.30	120.90
1	N	1207	G	N1-C2-N3	-9.00	118.50	123.90
1	N	1322	C	N3-C4-C5	-9.00	118.30	121.90
1	N	1275	A	O4'-C1'-N9	9.00	115.40	108.20
1	N	255	G	C6-C5-N7	-9.00	125.00	130.40
1	N	760	G	N1-C2-N3	-9.00	118.50	123.90
1	N	746	A	C5-C6-N6	-8.99	116.50	123.70
1	N	95	C	C6-N1-C2	-8.99	116.70	120.30
1	N	898	G	C6-C5-N7	-8.99	125.00	130.40
1	N	1109	C	O4'-C1'-N1	8.99	115.39	108.20
1	N	1284	C	O4'-C1'-N1	8.99	115.40	108.20
1	N	568	G	N1-C6-O6	8.99	125.29	119.90
1	N	823	C	N3-C4-N4	8.99	124.29	118.00
1	N	1118	U	C4-C5-C6	8.99	125.09	119.70
1	N	306	A	C8-N9-C4	-8.99	102.20	105.80
1	N	1167	A	O4'-C1'-N9	8.99	115.39	108.20
1	N	455	G	N1-C2-N3	-8.98	118.51	123.90
1	N	498	A	O4'-C1'-N9	8.98	115.39	108.20
1	N	382	A	C5-C6-N6	-8.98	116.51	123.70
1	N	1316	G	P-O3'-C3'	8.98	130.48	119.70
1	N	50	A	C5-C6-N1	-8.98	113.21	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	721	G	C4-C5-N7	8.98	114.39	110.80
1	N	1381	U	N3-C4-O4	8.98	125.69	119.40
1	N	1383	C	O4'-C1'-N1	8.98	115.39	108.20
1	N	397	A	C5-C6-N6	-8.98	116.52	123.70
1	N	667	G	N9-C4-C5	8.98	108.99	105.40
1	N	1139	G	N1-C2-N3	-8.98	118.51	123.90
1	N	494	G	N1-C6-O6	8.97	125.28	119.90
1	N	562	U	C2-N3-C4	-8.97	121.62	127.00
1	N	102	G	N3-C2-N2	8.97	126.18	119.90
1	N	299	G	O4'-C1'-N9	8.97	115.38	108.20
1	N	357	G	N1-C6-O6	8.97	125.28	119.90
1	N	1185	G	C5-C6-O6	-8.97	123.22	128.60
1	N	1370	G	N3-C2-N2	8.97	126.18	119.90
1	N	671	G	C5-C6-O6	-8.97	123.22	128.60
1	N	849	G	O4'-C1'-N9	8.97	115.37	108.20
1	N	1060	U	P-O3'-C3'	-8.97	108.94	119.70
1	N	901	A	N1-C2-N3	8.96	133.78	129.30
1	N	1051	C	O4'-C1'-N1	8.96	115.37	108.20
1	N	1163	A	C5-C6-N1	-8.96	113.22	117.70
1	N	151	A	O4'-C1'-N9	8.96	115.37	108.20
1	N	533	A	C4-C5-C6	8.96	121.48	117.00
1	N	748	G	C6-C5-N7	-8.96	125.03	130.40
1	N	787	A	N1-C6-N6	8.96	123.98	118.60
1	N	866	C	P-O5'-C5'	8.96	135.23	120.90
1	N	1459	G	C4-C5-N7	-8.96	107.22	110.80
1	N	1332	A	N1-C6-N6	8.96	123.97	118.60
1	N	1441	A	N1-C6-N6	8.96	123.97	118.60
1	N	87	C	O4'-C1'-N1	8.95	115.36	108.20
1	N	706	A	C5-N7-C8	8.95	108.38	103.90
1	N	86	G	C5-C6-O6	-8.95	123.23	128.60
1	N	415	A	C4-C5-C6	8.95	121.47	117.00
1	N	212	G	C8-N9-C4	8.95	109.98	106.40
1	N	512	U	C5-C6-N1	8.95	127.17	122.70
1	N	1221	G	N9-C4-C5	-8.95	101.82	105.40
1	N	1223	C	O4'-C1'-N1	8.95	115.36	108.20
1	N	11	G	C4-C5-N7	-8.94	107.22	110.80
1	N	307	C	C5-C6-N1	8.94	125.47	121.00
1	N	876	C	N3-C4-C5	-8.94	118.32	121.90
1	N	1531	A	C6-C5-N7	-8.95	126.04	132.30
1	N	817	C	O4'-C1'-N1	8.94	115.35	108.20
1	N	402	G	N3-C4-N9	-8.94	120.64	126.00
1	N	456	A	N9-C4-C5	8.94	109.38	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	861	G	N9-C4-C5	8.93	108.97	105.40
1	N	949	A	C6-N1-C2	8.93	123.96	118.60
1	N	958	A	P-O5'-C5'	8.93	135.19	120.90
1	N	112	G	O4'-C1'-N9	8.93	115.34	108.20
1	N	612	C	C5-C4-N4	-8.93	113.95	120.20
1	N	1489	G	N1-C6-O6	8.93	125.26	119.90
1	N	130	A	C4'-C3'-C2'	-8.93	93.67	102.60
1	N	313	A	C5-C6-N6	-8.93	116.56	123.70
1	N	191	G	C5-N7-C8	8.93	108.76	104.30
1	N	510	A	C5-C6-N6	-8.93	116.56	123.70
1	N	785	G	C5-C6-O6	-8.93	123.24	128.60
1	N	1072	G	O4'-C1'-N9	8.93	115.34	108.20
1	N	374	A	N1-C6-N6	8.92	123.95	118.60
1	N	487	A	C5-C6-N1	-8.92	113.24	117.70
1	N	85	U	C2-N1-C1'	8.92	128.40	117.70
1	N	323	U	P-O5'-C5'	8.92	135.17	120.90
1	N	559	A	C6-N1-C2	8.92	123.95	118.60
1	N	902	G	N1-C2-N3	-8.92	118.55	123.90
1	N	1088	G	N1-C6-O6	8.92	125.25	119.90
1	N	378	G	C5-C6-N1	-8.92	107.04	111.50
1	N	1282	C	C5-C6-N1	8.91	125.46	121.00
1	N	485	U	O4'-C1'-N1	8.91	115.33	108.20
1	N	486	U	P-O5'-C5'	-8.91	106.64	120.90
1	N	958	A	C4-C5-C6	8.91	121.45	117.00
1	N	1098	C	O4'-C1'-N1	8.91	115.33	108.20
1	N	1168	U	C4-C5-C6	8.91	125.05	119.70
1	N	1055	A	C5-N7-C8	8.91	108.35	103.90
1	N	1183	U	C6-N1-C2	-8.91	115.66	121.00
1	N	521	G	N1-C2-N3	-8.90	118.56	123.90
1	N	1016	A	C4-C5-C6	8.90	121.45	117.00
1	N	646	G	N1-C6-O6	8.90	125.24	119.90
1	N	1389	C	C6-N1-C2	-8.90	116.74	120.30
1	N	452	A	N1-C6-N6	8.90	123.94	118.60
1	N	704	A	N9-C4-C5	8.90	109.36	105.80
1	N	232	G	N7-C8-N9	-8.90	108.65	113.10
1	N	503	C	C6-N1-C2	-8.90	116.74	120.30
1	N	584	G	N7-C8-N9	-8.90	108.65	113.10
1	N	553	A	C4-C5-C6	8.90	121.45	117.00
1	N	1053	G	N1-C6-O6	8.90	125.24	119.90
1	N	1238	A	C2-N3-C4	-8.90	106.15	110.60
1	N	9	G	N1-C2-N3	-8.90	118.56	123.90
1	N	1037	C	C5-C4-N4	-8.90	113.97	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1396	A	C4-C5-C6	8.90	121.45	117.00
1	N	336	A	N7-C8-N9	-8.89	109.35	113.80
1	N	152	A	N1-C6-N6	8.89	123.93	118.60
1	N	404	G	N1-C2-N3	-8.89	118.57	123.90
1	N	1082	A	N7-C8-N9	8.88	118.24	113.80
1	N	1469	C	N3-C4-N4	8.88	124.22	118.00
1	N	192	A	N3-C4-C5	-8.88	120.59	126.80
1	N	398	U	C2-N1-C1'	8.88	128.35	117.70
1	N	1045	C	C2-N3-C4	8.88	124.34	119.90
1	N	219	U	O4'-C1'-N1	8.88	115.30	108.20
1	N	690	G	O4'-C1'-N9	8.88	115.30	108.20
1	N	953	G	N1-C2-N3	-8.88	118.58	123.90
1	N	1010	U	N1-C2-O2	8.87	129.01	122.80
1	N	1492	A	O4'-C1'-N9	8.87	115.30	108.20
1	N	1524	C	N3-C4-N4	8.87	124.21	118.00
1	N	241	G	C4-C5-N7	-8.87	107.25	110.80
1	N	433	G	N1-C6-O6	8.87	125.22	119.90
1	N	166	U	C5'-C4'-C3'	-8.87	101.81	116.00
1	N	175	C	N1-C2-N3	-8.87	112.99	119.20
1	N	539	A	C4-C5-C6	8.87	121.43	117.00
1	N	257	G	C5-C6-N1	-8.87	107.07	111.50
1	N	1069	C	N3-C4-C5	-8.87	118.35	121.90
1	N	193	C	N3-C4-C5	-8.86	118.35	121.90
1	N	218	U	P-O5'-C5'	8.86	135.08	120.90
1	N	1108	G	P-O3'-C3'	8.86	130.34	119.70
1	N	202	G	C5-C6-O6	-8.86	123.28	128.60
1	N	426	U	C2-N3-C4	-8.86	121.69	127.00
1	N	1313	U	O4'-C1'-N1	8.86	115.29	108.20
1	N	1504	G	C4-C5-C6	8.86	124.11	118.80
1	N	452	A	C5-C6-N1	-8.86	113.27	117.70
1	N	948	C	C5-C6-N1	8.85	125.43	121.00
1	N	1385	G	N1-C6-O6	8.85	125.21	119.90
1	N	65	A	C4-C5-C6	8.85	121.42	117.00
1	N	329	A	O4'-C1'-N9	8.85	115.28	108.20
1	N	86	G	N1-C6-O6	8.85	125.21	119.90
1	N	178	C	N3-C4-N4	8.85	124.19	118.00
1	N	1352	C	C2-N1-C1'	8.85	128.53	118.80
1	N	833	G	C4-N9-C1'	8.84	138.00	126.50
1	N	160	A	O4'-C1'-N9	8.84	115.27	108.20
1	N	153	C	N3-C4-N4	8.84	124.19	118.00
1	N	898	G	N9-C4-C5	-8.84	101.86	105.40
1	N	1301	U	N3-C4-O4	8.84	125.59	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	163	C	O4'-C1'-N1	8.84	115.27	108.20
1	N	809	G	C5-C6-N1	-8.84	107.08	111.50
1	N	885	G	N3-C4-N9	-8.84	120.70	126.00
1	N	760	G	C8-N9-C4	-8.83	102.87	106.40
1	N	809	G	N9-C4-C5	8.83	108.93	105.40
1	N	264	C	O4'-C1'-N1	8.83	115.26	108.20
1	N	480	U	O4'-C1'-N1	8.83	115.26	108.20
1	N	145	G	C8-N9-C4	8.83	109.93	106.40
1	N	1441	A	O4'-C1'-N9	8.83	115.26	108.20
1	N	964	A	N1-C6-N6	8.83	123.90	118.60
1	N	776	G	C4-C5-N7	-8.82	107.27	110.80
1	N	862	C	C2-N3-C4	8.82	124.31	119.90
1	N	1249	C	P-O5'-C5'	-8.82	106.78	120.90
1	N	1352	C	C6-N1-C1'	-8.82	110.21	120.80
1	N	1408	A	C5-C6-N6	-8.82	116.64	123.70
1	N	497	G	C8-N9-C4	-8.82	102.87	106.40
1	N	918	A	N1-C6-N6	8.82	123.89	118.60
1	N	935	A	C5-C6-N1	-8.82	113.29	117.70
1	N	986	U	C5-C4-O4	-8.82	120.61	125.90
1	N	1532	U	O4'-C1'-N1	8.82	115.25	108.20
1	N	506	G	C5-C6-N1	-8.81	107.09	111.50
1	N	778	G	O4'-C1'-N9	8.81	115.25	108.20
1	N	930	C	N3-C4-C5	-8.81	118.37	121.90
1	N	928	G	C4-C5-N7	8.81	114.33	110.80
1	N	237	G	N1-C6-O6	8.81	125.19	119.90
1	N	303	A	C6-C5-N7	-8.81	126.13	132.30
1	N	664	G	N1-C6-O6	8.81	125.19	119.90
1	N	977	A	C8-N9-C4	-8.81	102.28	105.80
1	N	478	A	N9-C4-C5	8.81	109.32	105.80
1	N	1149	C	N3-C2-O2	8.81	128.07	121.90
1	N	1024	G	O4'-C1'-N9	8.81	115.25	108.20
1	N	1124	G	O4'-C1'-N9	8.80	115.24	108.20
1	N	241	G	N1-C2-N3	-8.80	118.62	123.90
1	N	762	U	N1-C2-N3	8.80	120.18	114.90
1	N	1216	A	C5-C6-N6	-8.80	116.66	123.70
1	N	70	U	N1-C2-N3	-8.79	109.62	114.90
1	N	329	A	C5-N7-C8	8.80	108.30	103.90
1	N	739	C	N3-C4-C5	-8.80	118.38	121.90
1	N	825	A	C4'-C3'-C2'	-8.79	93.81	102.60
1	N	1129	C	C5-C6-N1	8.79	125.40	121.00
1	N	148	G	N9-C4-C5	-8.79	101.88	105.40
1	N	1257	A	N9-C4-C5	8.79	109.32	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	852	G	N3-C2-N2	8.79	126.05	119.90
1	N	995	C	C5-C4-N4	-8.79	114.05	120.20
1	N	1192	C	C6-N1-C2	-8.79	116.78	120.30
1	N	1208	C	P-O5'-C5'	8.79	134.96	120.90
1	N	1398	A	C5-C6-N1	-8.79	113.31	117.70
1	N	1401	G	N9-C4-C5	8.79	108.92	105.40
1	N	459	A	C8-N9-C4	8.79	109.31	105.80
1	N	1260	G	N7-C8-N9	8.78	117.49	113.10
1	N	1057	G	C6-C5-N7	-8.78	125.13	130.40
1	N	1291	U	N3-C4-O4	8.78	125.55	119.40
1	N	486	U	O4'-C1'-N1	8.78	115.22	108.20
1	N	102	G	C8-N9-C4	-8.78	102.89	106.40
1	N	535	A	N9-C4-C5	8.78	109.31	105.80
1	N	726	C	N3-C4-N4	8.77	124.14	118.00
1	N	989	U	N3-C4-C5	-8.77	109.34	114.60
1	N	1050	G	N1-C2-N3	-8.77	118.64	123.90
1	N	1403	C	C6-N1-C2	-8.77	116.79	120.30
1	N	1009	U	C2-N3-C4	-8.77	121.74	127.00
1	N	1434	A	C4-C5-C6	8.77	121.38	117.00
1	N	1063	C	C6-N1-C2	-8.77	116.79	120.30
1	N	636	U	N3-C2-O2	8.76	128.33	122.20
1	N	1338	G	C5-C6-N1	-8.76	107.12	111.50
1	N	794	A	N1-C2-N3	8.76	133.68	129.30
1	N	535	A	C5-C6-N6	-8.76	116.70	123.70
1	N	1196	A	C4-C5-C6	8.75	121.38	117.00
1	N	1002	G	O4'-C1'-N9	8.75	115.20	108.20
1	N	21	G	O4'-C1'-N9	8.75	115.20	108.20
1	N	60	A	C4-C5-N7	-8.75	106.33	110.70
1	N	400	C	N3-C4-N4	8.75	124.12	118.00
1	N	607	A	C6-C5-N7	-8.75	126.18	132.30
1	N	929	G	C5-C6-N1	-8.74	107.13	111.50
1	N	922	G	O4'-C1'-N9	8.74	115.19	108.20
1	N	1121	U	N3-C4-O4	8.74	125.52	119.40
1	N	491	G	C5-N7-C8	-8.74	99.93	104.30
1	N	1367	C	C2-N3-C4	8.74	124.27	119.90
1	N	208	U	O4'-C1'-N1	8.74	115.19	108.20
1	N	233	C	C6-N1-C2	-8.74	116.81	120.30
1	N	33	A	C8-N9-C4	-8.73	102.31	105.80
1	N	1035	A	C2-N3-C4	-8.73	106.23	110.60
1	N	1030	U	C2-N3-C4	-8.73	121.76	127.00
1	N	1076	U	O4'-C1'-N1	8.73	115.19	108.20
1	N	1197	A	C5-C6-N6	-8.73	116.72	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1270	G	C5-C6-N1	-8.73	107.14	111.50
1	N	389	A	C6-C5-N7	-8.73	126.19	132.30
1	N	1151	A	C5-C6-N1	-8.73	113.34	117.70
1	N	76	G	C8-N9-C4	8.72	109.89	106.40
1	N	901	A	C5-N7-C8	8.72	108.26	103.90
1	N	926	G	N7-C8-N9	-8.72	108.74	113.10
1	N	94	G	P-O5'-C5'	-8.72	106.94	120.90
1	N	1269	A	C5-C6-N1	-8.72	113.34	117.70
1	N	1454	G	N3-C4-N9	-8.72	120.77	126.00
1	N	926	G	C5-N7-C8	8.72	108.66	104.30
1	N	282	A	C5-C6-N1	-8.72	113.34	117.70
1	N	606	G	C5-C6-N1	-8.72	107.14	111.50
1	N	854	U	P-O3'-C3'	-8.72	109.24	119.70
1	N	1177	G	C5-C6-O6	-8.72	123.37	128.60
1	N	274	A	N1-C2-N3	8.71	133.66	129.30
1	N	939	G	N3-C4-C5	8.71	132.96	128.60
1	N	1423	G	P-O3'-C3'	-8.71	109.24	119.70
1	N	764	C	C5-C4-N4	-8.71	114.10	120.20
1	N	895	G	C5-C6-O6	-8.71	123.38	128.60
1	N	711	G	C5-C6-N1	-8.71	107.15	111.50
1	N	220	G	N1-C2-N3	-8.70	118.68	123.90
1	N	895	G	N9-C4-C5	-8.70	101.92	105.40
1	N	386	C	C6-N1-C2	-8.70	116.82	120.30
1	N	17	U	O4'-C1'-N1	8.70	115.16	108.20
1	N	489	C	N3-C4-N4	8.70	124.09	118.00
1	N	116	A	C5-C6-N1	-8.69	113.35	117.70
1	N	466	A	C5-C6-N6	-8.70	116.74	123.70
1	N	822	U	P-O5'-C5'	8.70	134.81	120.90
1	N	1177	G	C5-C6-N1	-8.70	107.15	111.50
1	N	1373	G	C6-N1-C2	8.69	130.32	125.10
1	N	1487	G	C5-C6-O6	-8.69	123.38	128.60
1	N	82	G	C5-C6-N1	-8.69	107.15	111.50
1	N	1214	C	N3-C4-C5	-8.69	118.42	121.90
1	N	1039	G	C5-N7-C8	-8.69	99.95	104.30
1	N	1154	G	C2-N3-C4	8.69	116.24	111.90
1	N	313	A	C8-N9-C4	-8.69	102.33	105.80
1	N	2	A	C5-C6-N6	-8.68	116.75	123.70
1	N	1250	A	C5-N7-C8	8.68	108.24	103.90
1	N	448	A	C5-C6-N1	-8.68	113.36	117.70
1	N	74	A	C4-C5-C6	8.68	121.34	117.00
1	N	832	G	C6-C5-N7	-8.68	125.19	130.40
1	N	790	A	C5-C6-N6	-8.68	116.76	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	909	A	C5-N7-C8	8.68	108.24	103.90
1	N	1171	A	P-O3'-C3'	8.68	130.11	119.70
1	N	703	G	C4-C5-C6	8.67	124.00	118.80
1	N	411	A	O4'-C1'-N9	8.67	115.14	108.20
1	N	833	G	O4'-C1'-N9	8.67	115.14	108.20
1	N	588	G	N7-C8-N9	8.67	117.44	113.10
1	N	1041	G	O4'-C4'-C3'	-8.67	95.33	104.00
1	N	1432	G	C2-N3-C4	8.67	116.23	111.90
1	N	1050	G	C5-C6-O6	-8.67	123.40	128.60
1	N	1505	G	N3-C4-N9	8.67	131.20	126.00
1	N	453	G	C4-C5-C6	8.66	124.00	118.80
1	N	769	G	C5-C6-N1	-8.66	107.17	111.50
1	N	1327	C	N3-C4-C5	-8.66	118.44	121.90
1	N	116	A	C5-C6-N6	-8.66	116.77	123.70
1	N	737	C	N3-C4-C5	-8.66	118.44	121.90
1	N	1224	U	C6-N1-C1'	-8.66	109.08	121.20
1	N	169	C	N1-C2-O2	-8.66	113.71	118.90
1	N	452	A	C4-C5-N7	-8.66	106.37	110.70
1	N	365	U	C5-C4-O4	-8.65	120.71	125.90
1	N	1482	G	N1-C6-O6	8.65	125.09	119.90
1	N	1362	A	O4'-C1'-N9	8.65	115.12	108.20
1	N	72	A	C4-C5-C6	8.65	121.32	117.00
1	N	109	A	N1-C6-N6	8.65	123.79	118.60
1	N	992	U	C5'-C4'-C3'	8.65	129.84	116.00
1	N	998	C	N3-C4-N4	8.65	124.05	118.00
1	N	654	G	C5-C6-O6	-8.65	123.41	128.60
1	N	1527	U	C2-N3-C4	-8.65	121.81	127.00
1	N	878	A	P-O5'-C5'	8.64	134.73	120.90
1	N	1363	A	P-O5'-C5'	8.64	134.73	120.90
1	N	1387	G	C8-N9-C4	-8.64	102.94	106.40
1	N	1192	C	N3-C4-C5	-8.64	118.44	121.90
1	N	1447	A	C8-N9-C4	-8.64	102.34	105.80
1	N	592	G	N9-C4-C5	-8.64	101.94	105.40
1	N	1053	G	P-O3'-C3'	8.64	130.06	119.70
1	N	491	G	N3-C2-N2	8.63	125.94	119.90
1	N	937	A	C8-N9-C4	8.64	109.25	105.80
1	N	1134	G	C8-N9-C4	-8.63	102.95	106.40
1	N	1332	A	O4'-C1'-N9	8.63	115.11	108.20
1	N	1444	U	N3-C2-O2	8.63	128.24	122.20
1	N	1122	U	C5-C4-O4	-8.63	120.72	125.90
1	N	501	C	O4'-C1'-N1	8.63	115.10	108.20
1	N	846	G	N9-C4-C5	-8.63	101.95	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	902	G	P-O5'-C5'	8.63	134.71	120.90
1	N	953	G	C6-N1-C2	8.63	130.28	125.10
1	N	767	A	N1-C6-N6	8.63	123.78	118.60
1	N	1468	A	C6-C5-N7	-8.63	126.26	132.30
1	N	220	G	C4-C5-N7	-8.62	107.35	110.80
1	N	410	G	P-O3'-C3'	8.63	130.05	119.70
1	N	612	C	O4'-C1'-N1	8.62	115.10	108.20
1	N	973	G	O4'-C1'-N9	8.62	115.10	108.20
1	N	1320	C	C2-N3-C4	8.62	124.21	119.90
1	N	210	C	N3-C2-O2	8.62	127.93	121.90
1	N	395	C	O4'-C1'-N1	8.62	115.09	108.20
1	N	1490	U	N1-C2-O2	-8.62	116.77	122.80
1	N	1118	U	O4'-C1'-N1	8.61	115.09	108.20
1	N	141	G	N3-C4-C5	8.61	132.90	128.60
1	N	293	G	C4-C5-N7	8.61	114.24	110.80
1	N	517	G	C5-C6-N1	-8.61	107.20	111.50
1	N	788	U	N3-C4-O4	8.61	125.42	119.40
1	N	250	A	O4'-C1'-N9	8.61	115.08	108.20
1	N	97	G	O4'-C1'-N9	8.60	115.08	108.20
1	N	402	G	N9-C4-C5	8.60	108.84	105.40
1	N	975	A	C5-C6-N6	-8.60	116.82	123.70
1	N	1251	A	C4-C5-C6	8.60	121.30	117.00
1	N	979	C	C5'-C4'-C3'	-8.60	102.24	116.00
1	N	1152	A	C8-N9-C4	-8.60	102.36	105.80
1	N	451	A	C5-C6-N1	-8.60	113.40	117.70
1	N	711	G	C4-C5-C6	8.60	123.96	118.80
1	N	1431	A	C8-N9-C4	8.60	109.24	105.80
1	N	203	G	N3-C2-N2	8.60	125.92	119.90
1	N	954	G	N1-C6-O6	8.60	125.06	119.90
1	N	1042	A	C5-N7-C8	8.60	108.20	103.90
1	N	1345	U	N3-C4-C5	-8.60	109.44	114.60
1	N	300	A	N1-C6-N6	8.59	123.76	118.60
1	N	815	A	N3-C4-C5	-8.59	120.78	126.80
1	N	79	G	O4'-C1'-N9	8.59	115.07	108.20
1	N	478	A	C4-C5-C6	8.59	121.29	117.00
1	N	575	G	C4-C5-N7	8.59	114.24	110.80
1	N	815	A	C5-C6-N6	-8.59	116.83	123.70
1	N	228	A	C5-C6-N6	-8.59	116.83	123.70
1	N	1077	G	N1-C2-N3	-8.59	118.75	123.90
1	N	1452	C	C5-C4-N4	-8.59	114.19	120.20
1	N	1383	C	N3-C4-N4	8.58	124.01	118.00
1	N	1514	G	N1-C6-O6	8.58	125.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	258	G	C5-C6-N1	-8.58	107.21	111.50
1	N	983	A	N1-C2-N3	8.58	133.59	129.30
1	N	1187	G	N1-C2-N3	-8.58	118.75	123.90
1	N	517	G	N1-C6-O6	8.58	125.05	119.90
1	N	758	C	C5-C4-N4	-8.58	114.19	120.20
1	N	887	G	C8-N9-C4	8.58	109.83	106.40
1	N	908	A	C6-C5-N7	-8.58	126.30	132.30
1	N	197	A	C6-N1-C2	-8.57	113.45	118.60
1	N	1138	G	N1-C6-O6	8.57	125.04	119.90
1	N	417	G	C5-C6-O6	-8.57	123.46	128.60
1	N	447	G	N3-C4-N9	-8.57	120.86	126.00
1	N	1096	C	N1-C2-N3	-8.57	113.20	119.20
1	N	607	A	N1-C2-N3	8.57	133.59	129.30
1	N	977	A	C5-C6-N1	-8.57	113.42	117.70
1	N	277	C	O4'-C1'-N1	8.57	115.06	108.20
1	N	1080	A	P-O3'-C3'	8.57	129.98	119.70
1	N	1129	C	C2-N3-C4	8.57	124.18	119.90
1	N	1253	G	O4'-C1'-N9	8.57	115.05	108.20
1	N	757	U	N3-C4-O4	8.56	125.39	119.40
1	N	70	U	P-O3'-C3'	8.56	129.98	119.70
1	N	1388	C	C6-N1-C2	-8.56	116.88	120.30
1	N	818	G	P-O3'-C3'	8.56	129.97	119.70
1	N	1275	A	N1-C6-N6	8.56	123.74	118.60
1	N	170	U	O4'-C1'-N1	8.56	115.05	108.20
1	N	1092	A	C8-N9-C4	8.56	109.22	105.80
1	N	255	G	C4-C5-C6	8.56	123.93	118.80
1	N	410	G	N3-C2-N2	8.56	125.89	119.90
1	N	432	A	N1-C6-N6	8.56	123.73	118.60
1	N	453	G	C8-N9-C4	-8.56	102.98	106.40
1	N	575	G	C6-C5-N7	-8.56	125.27	130.40
1	N	288	A	C6-N1-C2	-8.56	113.47	118.60
1	N	384	G	N1-C6-O6	8.55	125.03	119.90
1	N	523	A	C5-C6-N1	-8.55	113.42	117.70
1	N	33	A	N1-C6-N6	8.55	123.73	118.60
1	N	603	U	O4'-C1'-N1	8.55	115.04	108.20
1	N	723	U	C1'-O4'-C4'	-8.55	103.06	109.90
1	N	761	G	N1-C2-N3	-8.55	118.77	123.90
1	N	1134	G	C4-C5-C6	8.55	123.93	118.80
1	N	1500	A	O4'-C1'-N9	8.55	115.04	108.20
1	N	168	G	O4'-C1'-N9	8.55	115.04	108.20
1	N	772	U	O4'-C1'-N1	8.55	115.04	108.20
1	N	387	U	N3-C4-O4	8.54	125.38	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1357	A	C8-N9-C4	-8.55	102.38	105.80
1	N	106	C	C6-N1-C2	-8.54	116.88	120.30
1	N	909	A	C4-C5-N7	-8.54	106.43	110.70
1	N	1390	U	C6-N1-C2	-8.54	115.87	121.00
1	N	216	U	O4'-C1'-N1	8.54	115.03	108.20
1	N	280	C	N3-C4-C5	-8.53	118.49	121.90
1	N	1068	G	C5-C6-O6	-8.54	123.48	128.60
1	N	617	G	N1-C6-O6	8.53	125.02	119.90
1	N	1112	C	N3-C4-N4	8.53	123.97	118.00
1	N	1153	G	N1-C6-O6	8.53	125.02	119.90
1	N	1379	G	N1-C2-N3	-8.53	118.78	123.90
1	N	753	A	C5-C6-N6	-8.53	116.88	123.70
1	N	849	G	N1-C2-N3	-8.53	118.78	123.90
1	N	49	U	P-O5'-C5'	8.53	134.54	120.90
1	N	82	G	N3-C2-N2	8.52	125.86	119.90
1	N	629	A	C6-N1-C2	8.52	123.71	118.60
1	N	631	C	N3-C4-C5	-8.52	118.49	121.90
1	N	786	G	N3-C2-N2	8.52	125.86	119.90
1	N	1398	A	P-O3'-C3'	-8.52	109.47	119.70
1	N	1481	U	C2-N3-C4	8.52	132.11	127.00
1	N	243	A	C5-N7-C8	8.52	108.16	103.90
1	N	344	A	C2-N3-C4	8.52	114.86	110.60
1	N	468	A	C5-C6-N6	-8.52	116.88	123.70
1	N	629	A	C6-C5-N7	-8.52	126.34	132.30
1	N	1117	A	N1-C6-N6	8.52	123.71	118.60
1	N	1251	A	C5-C6-N1	-8.52	113.44	117.70
1	N	771	G	C6-C5-N7	-8.52	125.29	130.40
1	N	1002	G	C8-N9-C4	-8.52	102.99	106.40
1	N	1197	A	C2-N3-C4	8.52	114.86	110.60
1	N	1286	U	N3-C2-O2	-8.51	116.24	122.20
1	N	366	A	C4-C5-C6	8.51	121.25	117.00
1	N	1136	C	O4'-C1'-N1	8.51	115.01	108.20
1	N	198	G	C5'-C4'-C3'	-8.51	102.39	116.00
1	N	460	A	C5-C6-N6	-8.50	116.90	123.70
1	N	874	G	C5-C6-O6	-8.50	123.50	128.60
1	N	1095	U	C4-C5-C6	-8.50	114.60	119.70
1	N	543	U	O4'-C1'-N1	8.50	115.00	108.20
1	N	718	A	N3-C4-C5	-8.50	120.85	126.80
1	N	1220	G	N7-C8-N9	8.50	117.35	113.10
1	N	236	A	O4'-C1'-N9	8.49	115.00	108.20
1	N	492	C	O4'-C1'-N1	8.49	115.00	108.20
1	N	779	C	O4'-C1'-N1	8.49	114.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	265	G	N3-C2-N2	8.49	125.84	119.90
1	N	744	C	N3-C4-N4	8.49	123.94	118.00
1	N	494	G	C8-N9-C4	8.48	109.79	106.40
1	N	88	U	C4-C5-C6	8.48	124.79	119.70
1	N	179	A	P-O5'-C5'	8.48	134.47	120.90
1	N	11	G	C4'-C3'-C2'	-8.48	94.12	102.60
1	N	448	A	N9-C4-C5	8.48	109.19	105.80
1	N	1114	C	C2-N3-C4	8.48	124.14	119.90
1	N	632	U	P-O3'-C3'	8.48	129.87	119.70
1	N	634	C	C5-C4-N4	-8.48	114.27	120.20
1	N	222	C	C5-C4-N4	-8.48	114.27	120.20
1	N	513	C	P-O5'-C5'	8.47	134.46	120.90
1	N	728	A	C2-N3-C4	-8.47	106.36	110.60
1	N	776	G	P-O3'-C3'	8.47	129.87	119.70
1	N	1155	A	O4'-C1'-N9	8.47	114.98	108.20
1	N	1229	A	C4-C5-C6	8.47	121.24	117.00
1	N	1365	G	C6-C5-N7	-8.47	125.32	130.40
1	N	751	U	C5-C4-O4	-8.47	120.82	125.90
1	N	1507	A	C4-C5-C6	8.47	121.24	117.00
1	N	268	U	O4'-C1'-N1	8.47	114.97	108.20
1	N	338	A	C5-C6-N6	-8.47	116.93	123.70
1	N	494	G	N3-C4-C5	8.47	132.84	128.60
1	N	532	A	C4-C5-C6	8.47	121.23	117.00
1	N	212	G	O4'-C1'-N9	8.46	114.97	108.20
1	N	730	G	N1-C6-O6	8.46	124.98	119.90
1	N	860	A	C5-C6-N1	-8.46	113.47	117.70
1	N	943	U	C2-N1-C1'	8.46	127.85	117.70
1	N	1010	U	N1-C2-N3	-8.46	109.83	114.90
1	N	1148	U	O4'-C1'-N1	8.45	114.96	108.20
1	N	1245	C	N3-C4-N4	8.45	123.92	118.00
1	N	1358	U	O4'-C1'-N1	8.45	114.96	108.20
1	N	341	C	O4'-C1'-N1	8.45	114.96	108.20
1	N	1048	G	N3-C2-N2	8.45	125.82	119.90
1	N	1484	C	C4-C5-C6	-8.45	113.17	117.40
1	N	1222	G	N3-C2-N2	8.45	125.81	119.90
1	N	32	A	C5-C6-N1	-8.45	113.48	117.70
1	N	1291	U	N3-C4-C5	-8.45	109.53	114.60
1	N	747	A	C6-N1-C2	8.45	123.67	118.60
1	N	1311	A	C5-C6-N1	-8.44	113.48	117.70
1	N	76	G	C6-C5-N7	-8.44	125.33	130.40
1	N	718	A	N3-C4-N9	8.44	134.15	127.40
1	N	823	C	N3-C4-C5	-8.44	118.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	900	A	C2-N3-C4	-8.44	106.38	110.60
1	N	1217	C	C6-N1-C2	-8.44	116.92	120.30
1	N	1505	G	C5-C6-O6	-8.44	123.54	128.60
1	N	162	A	C4-C5-C6	8.44	121.22	117.00
1	N	922	G	N3-C4-C5	8.44	132.82	128.60
1	N	20	U	O4'-C1'-N1	8.44	114.95	108.20
1	N	357	G	N1-C2-N3	-8.43	118.84	123.90
1	N	445	G	C4-C5-N7	8.43	114.17	110.80
1	N	1030	U	C6-N1-C1'	-8.43	109.39	121.20
1	N	582	C	N1-C2-N3	-8.43	113.30	119.20
1	N	752	G	O4'-C1'-N9	8.43	114.94	108.20
1	N	465	A	C8-N9-C4	-8.43	102.43	105.80
1	N	853	C	N3-C4-C5	-8.43	118.53	121.90
1	N	538	G	N1-C6-O6	8.43	124.96	119.90
1	N	1373	G	C4-N9-C1'	-8.43	115.54	126.50
1	N	909	A	C8-N9-C4	-8.43	102.43	105.80
1	N	1043	G	N1-C2-N3	-8.43	118.84	123.90
1	N	1331	G	O4'-C1'-N9	8.42	114.94	108.20
1	N	845	A	N1-C2-N3	8.42	133.51	129.30
1	N	999	C	N3-C4-C5	-8.42	118.53	121.90
1	N	62	U	O4'-C1'-N1	8.42	114.94	108.20
1	N	429	U	P-O3'-C3'	8.42	129.81	119.70
1	N	1063	C	N3-C4-N4	8.42	123.89	118.00
1	N	235	C	O4'-C1'-N1	8.41	114.93	108.20
1	N	791	G	C6-C5-N7	-8.41	125.35	130.40
1	N	909	A	C4'-C3'-C2'	-8.41	94.19	102.60
1	N	1469	C	O4'-C1'-N1	8.41	114.93	108.20
1	N	602	A	O4'-C1'-N9	8.41	114.93	108.20
1	N	64	G	C6-C5-N7	-8.40	125.36	130.40
1	N	547	A	C5-C6-N6	-8.40	116.98	123.70
1	N	1127	G	C5-C6-O6	-8.40	123.56	128.60
1	N	383	A	P-O3'-C3'	8.40	129.78	119.70
1	N	88	U	N3-C4-C5	-8.40	109.56	114.60
1	N	604	G	N1-C2-N3	-8.40	118.86	123.90
1	N	786	G	C2-N3-C4	8.40	116.10	111.90
1	N	835	U	N3-C2-O2	8.40	128.08	122.20
1	N	605	U	C5-C6-N1	8.40	126.90	122.70
1	N	1114	C	O4'-C1'-N1	8.40	114.92	108.20
1	N	1171	A	N1-C6-N6	8.40	123.64	118.60
1	N	1174	G	C6-N1-C2	-8.40	120.06	125.10
1	N	1241	G	C5-C6-O6	-8.39	123.56	128.60
1	N	1152	A	C4-C5-C6	8.39	121.20	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	143	A	C4-C5-C6	8.39	121.20	117.00
1	N	251	G	P-O3'-C3'	8.39	129.77	119.70
1	N	651	C	C2-N1-C1'	8.39	128.03	118.80
1	N	954	G	C5-C6-O6	-8.39	123.57	128.60
1	N	1310	G	N1-C6-O6	8.39	124.93	119.90
1	N	337	G	N1-C2-N3	-8.38	118.87	123.90
1	N	1122	U	N3-C4-O4	8.38	125.27	119.40
1	N	1236	A	P-O3'-C3'	8.38	129.76	119.70
1	N	138	G	C5-C6-N1	-8.38	107.31	111.50
1	N	577	G	C5-C6-N1	-8.38	107.31	111.50
1	N	900	A	N7-C8-N9	-8.38	109.61	113.80
1	N	1029	U	C2-N3-C4	-8.38	121.97	127.00
1	N	1288	A	C8-N9-C4	-8.38	102.45	105.80
1	N	1409	C	C5-C4-N4	-8.38	114.34	120.20
1	N	914	A	N1-C6-N6	8.38	123.62	118.60
1	N	1093	A	C5-C6-N1	-8.37	113.52	117.70
1	N	54	C	O4'-C1'-N1	8.37	114.89	108.20
1	N	1057	G	C5-N7-C8	8.37	108.48	104.30
1	N	1359	C	P-O5'-C5'	-8.37	107.51	120.90
1	N	518	C	N3-C4-N4	8.37	123.86	118.00
1	N	621	A	C6-C5-N7	-8.37	126.44	132.30
1	N	1466	C	O4'-C1'-N1	8.37	114.89	108.20
1	N	6	G	N1-C2-N3	-8.36	118.88	123.90
1	N	108	G	N1-C6-O6	8.36	124.92	119.90
1	N	846	G	C5'-C4'-C3'	-8.36	102.62	116.00
1	N	1492	A	C5-C6-N6	-8.36	117.01	123.70
1	N	1501	C	N3-C4-N4	8.36	123.85	118.00
1	N	855	U	C5-C4-O4	-8.36	120.89	125.90
1	N	859	G	N1-C2-N3	-8.36	118.88	123.90
1	N	442	G	N7-C8-N9	-8.36	108.92	113.10
1	N	1068	G	C8-N9-C4	-8.36	103.06	106.40
1	N	1299	A	P-O5'-C5'	8.36	134.27	120.90
1	N	453	G	C2-N3-C4	8.35	116.08	111.90
1	N	883	C	N3-C4-N4	8.35	123.85	118.00
1	N	1515	G	O4'-C1'-N9	8.35	114.88	108.20
1	N	1056	U	N3-C4-O4	8.35	125.25	119.40
1	N	660	C	N3-C4-N4	8.35	123.84	118.00
1	N	1080	A	C2-N3-C4	-8.35	106.43	110.60
1	N	187	G	N1-C6-O6	8.35	124.91	119.90
1	N	1099	G	N1-C2-N3	-8.35	118.89	123.90
1	N	874	G	C6-C5-N7	-8.35	125.39	130.40
1	N	94	G	N3-C2-N2	8.34	125.74	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	308	C	N3-C4-C5	-8.34	118.56	121.90
1	N	794	A	O4'-C1'-N9	8.34	114.88	108.20
1	N	696	A	C3'-C2'-C1'	-8.34	94.83	101.50
1	N	774	G	C4-C5-N7	-8.34	107.46	110.80
1	N	1000	A	C5-C6-N6	-8.34	117.03	123.70
1	N	1258	G	O4'-C1'-N9	8.34	114.87	108.20
1	N	196	A	C5-C6-N6	-8.34	117.03	123.70
1	N	97	G	C8-N9-C4	-8.33	103.07	106.40
1	N	925	G	N1-C2-N3	-8.33	118.90	123.90
1	N	1016	A	C6-C5-N7	-8.33	126.47	132.30
1	N	1246	A	C8-N9-C4	-8.33	102.47	105.80
1	N	361	G	N1-C6-O6	8.33	124.90	119.90
1	N	771	G	N9-C4-C5	-8.33	102.07	105.40
1	N	1378	C	C6-N1-C1'	-8.33	110.80	120.80
1	N	159	G	N1-C6-O6	8.33	124.90	119.90
1	N	462	G	N1-C6-O6	8.33	124.90	119.90
1	N	239	U	O4'-C1'-N1	8.33	114.86	108.20
1	N	510	A	N9-C4-C5	8.33	109.13	105.80
1	N	511	C	N3-C4-N4	8.33	123.83	118.00
1	N	126	G	N1-C2-N3	-8.32	118.91	123.90
1	N	159	G	N1-C2-N3	-8.32	118.91	123.90
1	N	732	C	O4'-C1'-N1	8.32	114.86	108.20
1	N	947	G	N9-C4-C5	8.32	108.73	105.40
1	N	78	A	N1-C6-N6	8.32	123.59	118.60
1	N	202	G	O4'-C1'-N9	8.32	114.85	108.20
1	N	433	G	N1-C2-N3	-8.32	118.91	123.90
1	N	580	C	N3-C2-O2	8.32	127.72	121.90
1	N	1308	U	C5-C4-O4	-8.32	120.91	125.90
1	N	1323	G	C5-C6-O6	-8.32	123.61	128.60
1	N	1220	G	C5-C6-O6	-8.31	123.61	128.60
1	N	27	G	N1-C2-N3	-8.31	118.91	123.90
1	N	959	A	C5-C6-N1	-8.31	113.55	117.70
1	N	1031	C	P-O5'-C5'	8.31	134.20	120.90
1	N	55	A	C4-C5-C6	8.31	121.15	117.00
1	N	606	G	N3-C2-N2	8.31	125.72	119.90
1	N	404	G	C6-C5-N7	-8.31	125.42	130.40
1	N	1032	G	N1-C6-O6	8.31	124.88	119.90
1	N	148	G	C6-C5-N7	-8.30	125.42	130.40
1	N	562	U	O4'-C1'-N1	8.30	114.84	108.20
1	N	51	A	N9-C4-C5	8.30	109.12	105.80
1	N	778	G	C6-C5-N7	-8.30	125.42	130.40
1	N	829	G	N3-C4-C5	-8.30	124.45	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1156	G	O4'-C1'-N9	8.30	114.84	108.20
1	N	1229	A	C5-C6-N1	-8.30	113.55	117.70
1	N	1428	A	C5-C6-N1	-8.30	113.55	117.70
1	N	1469	C	P-O5'-C5'	-8.30	107.62	120.90
1	N	161	A	N1-C6-N6	8.30	123.58	118.60
1	N	897	C	C6-N1-C2	-8.30	116.98	120.30
1	N	945	G	C5-C6-O6	-8.30	123.62	128.60
1	N	258	G	C6-N1-C2	8.29	130.08	125.10
1	N	663	A	C8-N9-C4	-8.29	102.48	105.80
1	N	948	C	C5-C4-N4	-8.29	114.39	120.20
1	N	958	A	C5-C6-N1	-8.30	113.55	117.70
1	N	6	G	N9-C4-C5	-8.29	102.08	105.40
1	N	606	G	N7-C8-N9	8.29	117.25	113.10
1	N	844	G	C5-C6-O6	-8.29	123.62	128.60
1	N	821	G	N1-C2-N3	-8.29	118.93	123.90
1	N	1328	C	C6-N1-C2	-8.29	116.98	120.30
1	N	718	A	C5-C6-N6	-8.29	117.07	123.70
1	N	41	G	C8-N9-C4	-8.28	103.09	106.40
1	N	546	A	P-O5'-C5'	-8.28	107.65	120.90
1	N	1371	G	N1-C2-N3	-8.28	118.93	123.90
1	N	1497	G	C5-C6-O6	8.28	133.57	128.60
1	N	769	G	C6-C5-N7	-8.28	125.43	130.40
1	N	1327	C	C6-N1-C2	-8.28	116.99	120.30
1	N	164	G	C5-N7-C8	8.28	108.44	104.30
1	N	668	G	C4-C5-C6	8.28	123.77	118.80
1	N	1003	G	O4'-C1'-N9	8.28	114.82	108.20
1	N	1346	A	N9-C4-C5	-8.28	102.49	105.80
1	N	286	C	N3-C4-C5	-8.28	118.59	121.90
1	N	381	C	N3-C4-C5	-8.27	118.59	121.90
1	N	649	A	C5-C6-N1	-8.27	113.56	117.70
1	N	1236	A	C4-C5-C6	8.27	121.14	117.00
1	N	1240	U	N3-C4-O4	8.27	125.19	119.40
1	N	1382	C	C2-N3-C4	8.27	124.04	119.90
1	N	1515	G	C5-C6-O6	-8.27	123.64	128.60
1	N	363	A	C5-C6-N1	-8.27	113.57	117.70
1	N	783	C	C6-N1-C2	-8.27	116.99	120.30
1	N	177	G	C6-C5-N7	-8.27	125.44	130.40
1	N	267	C	C5'-C4'-O4'	-8.27	99.18	109.10
1	N	1057	G	C4-C5-C6	8.27	123.76	118.80
1	N	944	G	N1-C2-N3	-8.26	118.94	123.90
1	N	1133	G	O4'-C1'-N9	8.26	114.81	108.20
1	N	1324	A	C8-N9-C4	-8.26	102.50	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1401	G	N1-C6-O6	8.26	124.86	119.90
1	N	246	A	C5-N7-C8	8.26	108.03	103.90
1	N	582	C	P-O5'-C5'	8.26	134.12	120.90
1	N	1138	G	C5'-C4'-O4'	8.26	119.01	109.10
1	N	285	C	O4'-C1'-N1	8.26	114.81	108.20
1	N	963	G	N1-C2-N3	-8.26	118.94	123.90
1	N	1408	A	N9-C4-C5	8.26	109.10	105.80
1	N	1531	A	O4'-C1'-N9	8.26	114.81	108.20
1	N	519	C	C5'-C4'-C3'	-8.26	102.79	116.00
1	N	743	A	C6-C5-N7	-8.26	126.52	132.30
1	N	267	C	O4'-C1'-N1	8.25	114.80	108.20
1	N	344	A	N3-C4-N9	8.25	134.00	127.40
1	N	898	G	O4'-C1'-N9	8.25	114.80	108.20
1	N	42	G	N1-C2-N3	-8.25	118.95	123.90
1	N	834	U	O4'-C1'-N1	8.25	114.80	108.20
1	N	1263	C	N3-C4-C5	-8.25	118.60	121.90
1	N	251	G	N9-C4-C5	-8.25	102.10	105.40
1	N	1406	U	C5-C4-O4	-8.25	120.95	125.90
1	N	1504	G	C6-C5-N7	-8.25	125.45	130.40
1	N	422	C	N3-C4-N4	8.24	123.77	118.00
1	N	684	U	N3-C4-O4	8.24	125.17	119.40
1	N	847	G	C4-C5-N7	8.24	114.10	110.80
1	N	859	G	C4'-C3'-C2'	-8.24	94.36	102.60
1	N	615	G	C4-C5-N7	8.24	114.10	110.80
1	N	1042	A	C2-N3-C4	-8.24	106.48	110.60
1	N	1134	G	N1-C6-O6	8.24	124.84	119.90
1	N	1400	C	C6-N1-C2	-8.24	117.00	120.30
1	N	628	G	C8-N9-C4	-8.24	103.11	106.40
1	N	747	A	N1-C6-N6	8.24	123.54	118.60
1	N	758	C	N3-C4-N4	8.24	123.77	118.00
1	N	10	A	C5-C6-N1	-8.23	113.58	117.70
1	N	947	G	N3-C4-C5	-8.23	124.48	128.60
1	N	1478	U	O4'-C1'-N1	8.23	114.79	108.20
1	N	84	U	C2-N1-C1'	8.23	127.58	117.70
1	N	511	C	N3-C4-C5	-8.23	118.61	121.90
1	N	728	A	O4'-C1'-N9	8.23	114.78	108.20
1	N	535	A	C8-N9-C4	-8.23	102.51	105.80
1	N	1459	G	N1-C6-O6	8.23	124.84	119.90
1	N	382	A	N1-C2-N3	8.23	133.41	129.30
1	N	386	C	C6-N1-C1'	-8.23	110.93	120.80
1	N	777	A	O4'-C4'-C3'	-8.23	95.77	104.00
1	N	514	C	C6-N1-C2	-8.22	117.01	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	708	C	N1-C2-N3	-8.22	113.44	119.20
1	N	896	C	C2-N3-C4	-8.22	115.79	119.90
1	N	1044	A	C5-N7-C8	8.22	108.01	103.90
1	N	1515	G	C6-C5-N7	-8.22	125.47	130.40
1	N	635	A	N1-C6-N6	8.22	123.53	118.60
1	N	762	U	O4'-C1'-N1	8.22	114.78	108.20
1	N	269	C	C2-N3-C4	-8.22	115.79	119.90
1	N	956	U	P-O3'-C3'	-8.22	109.84	119.70
1	N	1366	C	O4'-C1'-N1	8.22	114.77	108.20
1	N	209	U	C1'-O4'-C4'	-8.21	103.33	109.90
1	N	1374	A	C4-C5-C6	8.21	121.11	117.00
1	N	1385	G	N3-C4-N9	8.21	130.93	126.00
1	N	195	A	P-O5'-C5'	8.21	134.04	120.90
1	N	520	A	O4'-C1'-N9	8.21	114.77	108.20
1	N	367	U	C5'-C4'-C3'	-8.21	102.86	116.00
1	N	60	A	C5-N7-C8	8.21	108.00	103.90
1	N	245	U	P-O3'-C3'	8.21	129.55	119.70
1	N	331	G	C5-C6-O6	-8.21	123.67	128.60
1	N	495	A	N7-C8-N9	8.21	117.90	113.80
1	N	669	G	C4-C5-N7	-8.21	107.52	110.80
1	N	738	C	N3-C4-N4	8.21	123.74	118.00
1	N	924	C	O4'-C1'-N1	8.20	114.76	108.20
1	N	244	U	O4'-C1'-N1	8.20	114.76	108.20
1	N	393	A	P-O3'-C3'	-8.20	109.86	119.70
1	N	65	A	C2-N3-C4	-8.20	106.50	110.60
1	N	719	C	N3-C4-N4	8.20	123.74	118.00
1	N	1262	C	C4-C5-C6	8.20	121.50	117.40
1	N	503	C	N1-C2-O2	-8.20	113.98	118.90
1	N	134	G	N3-C2-N2	8.20	125.64	119.90
1	N	212	G	N1-C2-N2	8.20	123.58	116.20
1	N	468	A	P-O5'-C5'	8.19	134.01	120.90
1	N	711	G	C6-C5-N7	-8.19	125.48	130.40
1	N	274	A	C1'-O4'-C4'	8.19	116.45	109.90
1	N	258	G	O4'-C1'-N9	8.19	114.75	108.20
1	N	475	C	N3-C4-N4	8.19	123.73	118.00
1	N	1002	G	N9-C1'-C2'	-8.19	102.99	112.00
1	N	1033	G	N9-C4-C5	-8.19	102.12	105.40
1	N	1077	G	C6-N1-C2	8.19	130.01	125.10
1	N	1171	A	C6-C5-N7	-8.19	126.57	132.30
1	N	15	G	C4-C5-C6	8.19	123.71	118.80
1	N	55	A	C6-C5-N7	-8.19	126.57	132.30
1	N	1160	G	C5-N7-C8	8.19	108.39	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	92	U	N3-C4-O4	8.18	125.13	119.40
1	N	348	G	C8-N9-C4	-8.18	103.13	106.40
1	N	96	U	C3'-C2'-C1'	8.18	108.05	101.50
1	N	198	G	N1-C6-O6	8.18	124.81	119.90
1	N	326	G	N3-C4-C5	-8.18	124.51	128.60
1	N	505	G	N1-C2-N3	-8.18	118.99	123.90
1	N	225	C	P-O5'-C5'	8.18	133.99	120.90
1	N	539	A	N1-C6-N6	8.18	123.51	118.60
1	N	843	U	P-O3'-C3'	-8.18	109.89	119.70
1	N	896	C	C5'-C4'-C3'	-8.18	102.91	116.00
1	N	1028	C	O4'-C1'-N1	8.18	114.74	108.20
1	N	383	A	C5-C6-N1	-8.18	113.61	117.70
1	N	1011	C	N3-C4-C5	-8.18	118.63	121.90
1	N	1300	G	C5-N7-C8	8.18	108.39	104.30
1	N	437	U	O4'-C1'-N1	8.18	114.74	108.20
1	N	564	C	P-O3'-C3'	8.18	129.51	119.70
1	N	601	G	P-O5'-C5'	8.18	133.98	120.90
1	N	277	C	C5-C4-N4	-8.17	114.48	120.20
1	N	303	A	O4'-C1'-N9	8.17	114.74	108.20
1	N	1079	G	C5-C6-O6	-8.17	123.70	128.60
1	N	271	C	O4'-C1'-N1	8.17	114.74	108.20
1	N	401	C	O4'-C1'-N1	8.17	114.74	108.20
1	N	637	C	N3-C4-N4	8.17	123.72	118.00
1	N	1003	G	N1-C6-O6	8.17	124.80	119.90
1	N	1239	A	O4'-C1'-C2'	-8.17	97.63	105.80
1	N	687	A	C5-N7-C8	8.16	107.98	103.90
1	N	721	G	C8-N9-C4	-8.16	103.13	106.40
1	N	273	U	C1'-O4'-C4'	8.16	116.43	109.90
1	N	1463	U	O4'-C1'-N1	8.16	114.73	108.20
1	N	1488	G	C4'-C3'-C2'	-8.16	94.44	102.60
1	N	7	A	O4'-C1'-N9	8.16	114.73	108.20
1	N	109	A	C5-C6-N6	-8.16	117.17	123.70
1	N	468	A	C6-N1-C2	-8.16	113.70	118.60
1	N	548	G	C2-N3-C4	-8.16	107.82	111.90
1	N	777	A	C2-N3-C4	-8.16	106.52	110.60
1	N	1089	G	C8-N9-C4	-8.16	103.14	106.40
1	N	213	G	N3-C4-N9	8.16	130.89	126.00
1	N	1311	A	N1-C2-N3	8.16	133.38	129.30
1	N	341	C	C6-N1-C2	-8.15	117.04	120.30
1	N	518	C	C2-N1-C1'	8.15	127.77	118.80
1	N	607	A	C2-N3-C4	-8.15	106.52	110.60
1	N	756	C	N3-C4-C5	-8.15	118.64	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	69	G	C5-C6-O6	-8.15	123.71	128.60
1	N	253	A	C4'-C3'-C2'	-8.15	94.45	102.60
1	N	1428	A	N1-C6-N6	8.15	123.49	118.60
1	N	1233	G	N9-C4-C5	8.14	108.66	105.40
1	N	1367	C	O4'-C1'-N1	8.14	114.71	108.20
1	N	171	A	C5-C6-N1	-8.14	113.63	117.70
1	N	672	U	O4'-C1'-N1	8.14	114.71	108.20
1	N	676	A	C6-C5-N7	-8.14	126.60	132.30
1	N	602	A	N1-C6-N6	8.14	123.48	118.60
1	N	1519	A	O4'-C1'-N9	8.14	114.71	108.20
1	N	80	A	P-O3'-C3'	-8.13	109.94	119.70
1	N	563	A	C4-C5-N7	-8.13	106.63	110.70
1	N	1020	G	C6-N1-C2	8.13	129.98	125.10
1	N	1239	A	N3-C4-C5	-8.14	121.11	126.80
1	N	1255	G	O4'-C1'-N9	8.13	114.71	108.20
1	N	1151	A	C4-C5-C6	8.13	121.07	117.00
1	N	31	G	C5-C6-N1	-8.13	107.44	111.50
1	N	300	A	C5-C6-N1	-8.13	113.64	117.70
1	N	975	A	C2-N3-C4	-8.13	106.53	110.60
1	N	773	G	N3-C4-C5	8.13	132.66	128.60
1	N	816	A	C5-C6-N1	-8.13	113.64	117.70
1	N	1316	G	N3-C2-N2	8.13	125.59	119.90
1	N	122	G	N1-C2-N3	-8.13	119.02	123.90
1	N	165	G	O4'-C1'-N9	8.12	114.70	108.20
1	N	1068	G	N1-C6-O6	8.12	124.78	119.90
1	N	842	U	C6-N1-C1'	-8.12	109.83	121.20
1	N	248	C	C6-N1-C2	-8.12	117.05	120.30
1	N	329	A	C6-C5-N7	-8.12	126.62	132.30
1	N	78	A	N9-C4-C5	-8.12	102.55	105.80
1	N	680	C	O4'-C1'-N1	8.12	114.69	108.20
1	N	1125	U	P-O3'-C3'	8.12	129.44	119.70
1	N	1139	G	P-O3'-C3'	8.12	129.44	119.70
1	N	1140	C	N3-C4-N4	8.12	123.68	118.00
1	N	802	A	C6-C5-N7	-8.11	126.62	132.30
1	N	1533	C	C6-N1-C2	8.11	123.55	120.30
1	N	42	G	N3-C2-N2	8.11	125.58	119.90
1	N	294	U	O4'-C1'-N1	8.11	114.69	108.20
1	N	452	A	N1-C2-N3	8.11	133.36	129.30
1	N	885	G	C4-C5-N7	-8.11	107.56	110.80
1	N	1246	A	O4'-C1'-N9	8.11	114.69	108.20
1	N	1254	A	C8-N9-C4	8.11	109.05	105.80
1	N	1468	A	C5-C6-N1	-8.11	113.64	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1055	A	O4'-C1'-N9	8.11	114.69	108.20
1	N	638	U	N3-C4-C5	-8.11	109.74	114.60
1	N	951	G	C5-C6-N1	-8.11	107.45	111.50
1	N	1031	C	O4'-C1'-N1	8.11	114.68	108.20
1	N	173	U	P-O3'-C3'	8.10	129.42	119.70
1	N	890	G	O4'-C1'-C2'	-8.10	97.70	105.80
1	N	1502	A	C5-C6-N6	-8.10	117.22	123.70
1	N	1239	A	C4-C5-N7	-8.10	106.65	110.70
1	N	1433	A	C2-N3-C4	-8.10	106.55	110.60
1	N	313	A	C4'-C3'-C2'	-8.10	94.50	102.60
1	N	1450	U	N3-C2-O2	8.10	127.87	122.20
1	N	532	A	C4-C5-N7	-8.09	106.65	110.70
1	N	1123	U	C5-C6-N1	8.09	126.75	122.70
1	N	388	G	C6-C5-N7	-8.09	125.55	130.40
1	N	460	A	N9-C4-C5	8.09	109.04	105.80
1	N	1234	C	O4'-C1'-N1	8.09	114.67	108.20
1	N	43	C	N3-C4-N4	8.09	123.66	118.00
1	N	1206	G	N3-C4-N9	8.09	130.85	126.00
1	N	126	G	O4'-C1'-N9	8.09	114.67	108.20
1	N	874	G	O4'-C1'-N9	8.08	114.67	108.20
1	N	5	U	C6-N1-C2	-8.08	116.15	121.00
1	N	1153	G	O4'-C1'-N9	8.08	114.66	108.20
1	N	1322	C	C2-N1-C1'	8.08	127.69	118.80
1	N	347	G	N1-C6-O6	8.08	124.75	119.90
1	N	360	G	N3-C4-C5	-8.08	124.56	128.60
1	N	449	G	C6-C5-N7	-8.08	125.55	130.40
1	N	200	G	N1-C6-O6	8.07	124.74	119.90
1	N	629	A	C4'-C3'-C2'	-8.07	94.53	102.60
1	N	700	G	N1-C2-N3	-8.07	119.06	123.90
1	N	846	G	N1-C6-O6	8.07	124.75	119.90
1	N	809	G	C4-C5-C6	8.07	123.64	118.80
1	N	147	G	N3-C4-C5	8.07	132.63	128.60
1	N	198	G	N3-C2-N2	8.07	125.55	119.90
1	N	1199	U	N3-C4-O4	8.07	125.05	119.40
1	N	1451	U	C2-N1-C1'	8.07	127.38	117.70
1	N	610	U	C2-N3-C4	-8.06	122.16	127.00
1	N	1497	G	N1-C6-O6	-8.06	115.06	119.90
1	N	1035	A	N1-C6-N6	8.06	123.44	118.60
1	N	1085	U	P-O3'-C3'	-8.06	110.02	119.70
1	N	1249	C	C4-C5-C6	8.06	121.43	117.40
1	N	1356	G	C5-C6-O6	-8.06	123.76	128.60
1	N	678	U	C2-N3-C4	-8.06	122.16	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1165	U	N3-C4-O4	8.06	125.04	119.40
1	N	396	C	N1-C2-O2	-8.06	114.06	118.90
1	N	1345	U	C4-C5-C6	8.06	124.54	119.70
1	N	1050	G	N1-C6-O6	8.06	124.73	119.90
1	N	709	U	P-O5'-C5'	8.06	133.79	120.90
1	N	918	A	N1-C2-N3	8.06	133.33	129.30
1	N	1111	A	C6-N1-C2	8.06	123.43	118.60
1	N	1480	A	C5-C6-N6	-8.06	117.25	123.70
1	N	350	G	C5-C6-O6	-8.05	123.77	128.60
1	N	326	G	C5-C6-O6	-8.05	123.77	128.60
1	N	694	A	C8-N9-C4	-8.05	102.58	105.80
1	N	994	A	P-O3'-C3'	-8.05	110.04	119.70
1	N	474	G	N9-C4-C5	-8.05	102.18	105.40
1	N	1345	U	C5-C6-N1	-8.05	118.67	122.70
1	N	1505	G	N3-C2-N2	8.05	125.53	119.90
1	N	586	C	O4'-C1'-N1	8.05	114.64	108.20
1	N	993	G	N1-C6-O6	8.05	124.73	119.90
1	N	1188	A	N1-C6-N6	8.05	123.43	118.60
1	N	153	C	N3-C4-C5	-8.05	118.68	121.90
1	N	890	G	C1'-O4'-C4'	-8.05	103.46	109.90
1	N	332	G	N1-C6-O6	8.04	124.73	119.90
1	N	389	A	N9-C4-C5	-8.04	102.58	105.80
1	N	779	C	P-O3'-C3'	8.04	129.35	119.70
1	N	1366	C	N1-C2-O2	-8.04	114.07	118.90
1	N	1012	A	C5-C6-N6	-8.04	117.27	123.70
1	N	1098	C	C2-N3-C4	8.04	123.92	119.90
1	N	1231	G	N1-C6-O6	8.04	124.73	119.90
1	N	1362	A	C5-C6-N6	-8.04	117.27	123.70
1	N	705	G	C5-C6-N1	-8.04	107.48	111.50
1	N	240	G	C4-C5-C6	8.04	123.62	118.80
1	N	878	A	N1-C6-N6	8.03	123.42	118.60
1	N	904	U	C5'-C4'-C3'	8.03	128.85	116.00
1	N	909	A	P-O5'-C5'	8.03	133.75	120.90
1	N	1061	G	N1-C6-O6	8.03	124.72	119.90
1	N	1244	G	N3-C2-N2	8.03	125.52	119.90
1	N	1248	A	O4'-C1'-N9	8.03	114.62	108.20
1	N	1340	A	C4-C5-C6	8.03	121.02	117.00
1	N	1408	A	P-O3'-C3'	8.03	129.34	119.70
1	N	616	G	N3-C4-C5	-8.03	124.59	128.60
1	N	778	G	N9-C4-C5	-8.02	102.19	105.40
1	N	1238	A	C5-C6-N1	-8.02	113.69	117.70
1	N	1387	G	C5-C6-O6	-8.02	123.79	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	385	C	N3-C4-N4	8.02	123.61	118.00
1	N	557	G	N1-C6-O6	8.02	124.71	119.90
1	N	1174	G	N9-C4-C5	-8.02	102.19	105.40
1	N	871	U	C1'-O4'-C4'	8.02	116.31	109.90
1	N	1241	G	N9-C4-C5	-8.01	102.19	105.40
1	N	719	C	N3-C4-C5	-8.01	118.69	121.90
1	N	915	A	C5-C6-N6	-8.01	117.29	123.70
1	N	1214	C	C5-C6-N1	8.01	125.01	121.00
1	N	9	G	C8-N9-C4	-8.01	103.20	106.40
1	N	485	U	N1-C2-N3	-8.01	110.09	114.90
1	N	517	G	C4-N9-C1'	8.01	136.91	126.50
1	N	1090	U	N3-C4-C5	8.01	119.41	114.60
1	N	1235	U	N3-C4-O4	8.01	125.01	119.40
1	N	1290	G	C5-C6-O6	-8.01	123.79	128.60
1	N	433	G	C5-C6-O6	-8.01	123.80	128.60
1	N	723	U	O4'-C1'-N1	8.01	114.61	108.20
1	N	1284	C	C5-C4-N4	-8.01	114.60	120.20
1	N	190	A	N9-C4-C5	-8.00	102.60	105.80
1	N	554	A	N1-C6-N6	8.00	123.40	118.60
1	N	994	A	C6-C5-N7	-8.00	126.70	132.30
1	N	903	G	N3-C4-C5	8.00	132.60	128.60
1	N	208	U	N3-C4-C5	-8.00	109.80	114.60
1	N	729	A	C5-N7-C8	8.00	107.90	103.90
1	N	818	G	O4'-C1'-N9	8.00	114.60	108.20
1	N	1136	C	C2-N3-C4	8.00	123.90	119.90
1	N	1176	A	C5-C6-N6	-8.00	117.30	123.70
1	N	1077	G	N1-C6-O6	8.00	124.70	119.90
1	N	358	U	O4'-C1'-N1	8.00	114.60	108.20
1	N	1058	G	C4-C5-C6	7.99	123.60	118.80
1	N	1303	C	N3-C4-N4	7.99	123.60	118.00
1	N	1520	C	N3-C4-C5	-7.99	118.70	121.90
1	N	496	A	C8-N9-C4	7.99	109.00	105.80
1	N	660	C	C5-C4-N4	-7.99	114.61	120.20
1	N	715	A	C4-C5-C6	7.99	121.00	117.00
1	N	743	A	N1-C2-N3	7.99	133.29	129.30
1	N	765	G	P-O3'-C3'	-7.99	110.11	119.70
1	N	924	C	N3-C2-O2	7.99	127.49	121.90
1	N	1509	C	C5-C4-N4	-7.99	114.61	120.20
1	N	1533	C	C6-N1-C1'	-7.99	111.21	120.80
1	N	1047	G	C6-C5-N7	-7.99	125.61	130.40
1	N	1219	A	C5-C6-N6	-7.99	117.31	123.70
1	N	1091	U	C5-C4-O4	-7.99	121.11	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	380	G	N3-C4-C5	-7.98	124.61	128.60
1	N	526	C	C4-C5-C6	-7.98	113.41	117.40
1	N	669	G	O4'-C1'-N9	7.98	114.58	108.20
1	N	532	A	C8-N9-C4	-7.98	102.61	105.80
1	N	638	U	C6-N1-C2	7.98	125.79	121.00
1	N	725	G	C4-C5-N7	-7.98	107.61	110.80
1	N	1084	G	C5-C6-O6	-7.98	123.81	128.60
1	N	1407	C	N1-C2-O2	-7.98	114.11	118.90
1	N	419	C	C5-C6-N1	7.97	124.99	121.00
1	N	526	C	C6-N1-C2	-7.97	117.11	120.30
1	N	624	C	O4'-C1'-N1	7.97	114.58	108.20
1	N	161	A	C6-N1-C2	7.97	123.38	118.60
1	N	221	C	N3-C4-C5	-7.97	118.71	121.90
1	N	25	C	C2-N3-C4	7.97	123.89	119.90
1	N	574	A	N1-C6-N6	7.97	123.38	118.60
1	N	349	A	C5-C6-N1	-7.97	113.72	117.70
1	N	1213	A	C5-C6-N1	-7.97	113.72	117.70
1	N	1224	U	C2-N1-C1'	7.97	127.26	117.70
1	N	878	A	C4-C5-C6	7.97	120.98	117.00
1	N	903	G	C8-N9-C4	7.97	109.59	106.40
1	N	1263	C	C5-C6-N1	-7.97	117.02	121.00
1	N	676	A	C5-C6-N6	-7.97	117.33	123.70
1	N	905	U	P-O5'-C5'	7.97	133.65	120.90
1	N	1041	G	N9-C1'-C2'	-7.97	103.24	112.00
1	N	216	U	C5-C6-N1	7.96	126.68	122.70
1	N	1297	G	O5'-P-OP1	-7.96	98.53	105.70
1	N	96	U	P-O3'-C3'	7.96	129.25	119.70
1	N	146	G	C2-N3-C4	-7.96	107.92	111.90
1	N	172	A	C4-C5-C6	7.96	120.98	117.00
1	N	634	C	C6-N1-C2	-7.96	117.12	120.30
1	N	892	A	O4'-C1'-N9	7.96	114.56	108.20
1	N	913	A	C5-C6-N6	-7.96	117.33	123.70
1	N	1002	G	C5-C6-O6	-7.96	123.83	128.60
1	N	722	G	N7-C8-N9	7.96	117.08	113.10
1	N	440	C	C2-N1-C1'	-7.95	110.05	118.80
1	N	1117	A	N9-C1'-C2'	7.95	124.34	114.00
1	N	78	A	C4-C5-C6	7.95	120.98	117.00
1	N	853	C	N3-C4-N4	7.95	123.56	118.00
1	N	1188	A	C5-C6-N1	-7.95	113.72	117.70
1	N	1502	A	P-O3'-C3'	7.95	129.24	119.70
1	N	302	G	C6-N1-C2	-7.95	120.33	125.10
1	N	676	A	C5-N7-C8	7.95	107.87	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	706	A	C4-C5-C6	7.95	120.97	117.00
1	N	951	G	C6-C5-N7	-7.95	125.63	130.40
1	N	1325	C	C2-N3-C4	7.95	123.87	119.90
1	N	142	G	P-O3'-C3'	7.95	129.24	119.70
1	N	263	A	C5-C6-N6	-7.95	117.34	123.70
1	N	747	A	C4-C5-C6	7.95	120.97	117.00
1	N	1247	U	P-O3'-C3'	-7.95	110.16	119.70
1	N	1283	U	C6-N1-C2	-7.95	116.23	121.00
1	N	849	G	C4-C5-N7	7.94	113.98	110.80
1	N	1257	A	N1-C6-N6	7.94	123.36	118.60
1	N	190	A	C5-C6-N1	-7.94	113.73	117.70
1	N	421	U	C5-C4-O4	-7.94	121.14	125.90
1	N	574	A	C4-C5-C6	7.94	120.97	117.00
1	N	934	C	C5-C4-N4	-7.94	114.64	120.20
1	N	1104	G	C6-C5-N7	-7.94	125.64	130.40
1	N	1059	C	N3-C4-N4	7.94	123.56	118.00
1	N	1130	A	C5-C6-N6	-7.94	117.35	123.70
1	N	699	C	C5-C4-N4	-7.94	114.64	120.20
1	N	1441	A	C8-N9-C4	-7.94	102.62	105.80
1	N	9	G	C4-C5-C6	7.93	123.56	118.80
1	N	112	G	P-O3'-C3'	-7.93	110.18	119.70
1	N	1042	A	P-O5'-C5'	7.93	133.59	120.90
1	N	1202	U	C5-C4-O4	7.93	130.66	125.90
1	N	41	G	C2-N3-C4	7.93	115.86	111.90
1	N	241	G	C2-N3-C4	7.93	115.86	111.90
1	N	1529	G	C4-C5-N7	-7.93	107.63	110.80
1	N	1046	A	N7-C8-N9	-7.93	109.84	113.80
1	N	679	C	N3-C4-C5	-7.93	118.73	121.90
1	N	1226	C	C5-C6-N1	7.93	124.96	121.00
1	N	86	G	N7-C8-N9	-7.92	109.14	113.10
1	N	1461	G	C6-C5-N7	-7.92	125.65	130.40
1	N	65	A	C5-C6-N6	-7.92	117.36	123.70
1	N	152	A	C4-C5-C6	7.92	120.96	117.00
1	N	1098	C	N3-C4-N4	7.92	123.55	118.00
1	N	428	G	P-O3'-C3'	7.92	129.21	119.70
1	N	873	A	C5-C6-N6	-7.92	117.36	123.70
1	N	1088	G	C5-C6-O6	-7.92	123.85	128.60
1	N	1306	A	O4'-C1'-N9	7.92	114.54	108.20
1	N	412	A	O4'-C1'-N9	7.92	114.54	108.20
1	N	704	A	C5-C6-N1	-7.92	113.74	117.70
1	N	205	A	C5-C6-N6	-7.92	117.36	123.70
1	N	816	A	C5-C6-N6	-7.92	117.36	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1138	G	N7-C8-N9	7.92	117.06	113.10
1	N	1337	G	C2-N3-C4	7.92	115.86	111.90
1	N	174	A	C6-C5-N7	-7.92	126.76	132.30
1	N	1082	A	C4-C5-C6	7.92	120.96	117.00
1	N	1329	A	C6-N1-C2	7.92	123.35	118.60
1	N	144	G	N1-C2-N2	-7.91	109.08	116.20
1	N	1012	A	N9-C4-C5	7.91	108.97	105.80
1	N	392	C	O4'-C1'-N1	7.91	114.53	108.20
1	N	489	C	N3-C4-C5	-7.91	118.74	121.90
1	N	302	G	N9-C4-C5	7.91	108.56	105.40
1	N	517	G	C2-N3-C4	-7.91	107.95	111.90
1	N	889	A	N1-C2-N3	7.91	133.25	129.30
1	N	1092	A	N9-C4-C5	-7.91	102.64	105.80
1	N	1391	U	N3-C4-C5	-7.91	109.86	114.60
1	N	1024	G	C5-N7-C8	-7.91	100.35	104.30
1	N	1378	C	O4'-C1'-N1	7.91	114.53	108.20
1	N	1042	A	N9-C4-C5	-7.91	102.64	105.80
1	N	540	G	C5-C6-N1	-7.90	107.55	111.50
1	N	600	A	C4-C5-C6	7.90	120.95	117.00
1	N	113	G	N9-C4-C5	-7.90	102.24	105.40
1	N	833	G	C8-N9-C1'	-7.90	116.73	127.00
1	N	1120	C	N3-C4-C5	-7.90	118.74	121.90
1	N	16	A	N1-C6-N6	7.90	123.34	118.60
1	N	90	C	N3-C4-N4	7.90	123.53	118.00
1	N	745	G	N1-C2-N3	-7.90	119.16	123.90
1	N	1241	G	N1-C6-O6	7.90	124.64	119.90
1	N	380	G	N1-C6-O6	7.90	124.64	119.90
1	N	420	U	C2-N1-C1'	7.90	127.18	117.70
1	N	775	G	C4'-C3'-C2'	-7.90	94.70	102.60
1	N	1126	U	O4'-C1'-N1	7.90	114.52	108.20
1	N	1446	A	C5-C6-N6	-7.90	117.38	123.70
1	N	812	G	N1-C6-O6	7.90	124.64	119.90
1	N	1489	G	O4'-C1'-N9	7.90	114.52	108.20
1	N	146	G	N9-C4-C5	-7.89	102.24	105.40
1	N	608	A	N1-C2-N3	7.89	133.25	129.30
1	N	363	A	C6-C5-N7	-7.89	126.78	132.30
1	N	530	G	C3'-C2'-C1'	-7.89	95.19	101.50
1	N	828	U	N3-C2-O2	7.89	127.72	122.20
1	N	20	U	N3-C2-O2	7.89	127.72	122.20
1	N	180	U	P-O5'-C5'	7.89	133.53	120.90
1	N	470	C	O4'-C1'-N1	7.89	114.51	108.20
1	N	577	G	N1-C6-O6	7.89	124.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	824	G	O4'-C1'-N9	7.89	114.51	108.20
1	N	1266	G	N1-C6-O6	7.89	124.63	119.90
1	N	1080	A	C4-C5-C6	7.89	120.94	117.00
1	N	487	A	C4-C5-C6	7.89	120.94	117.00
1	N	698	G	N9-C4-C5	-7.89	102.25	105.40
1	N	977	A	C4-C5-C6	7.89	120.94	117.00
1	N	312	C	N3-C4-N4	7.88	123.52	118.00
1	N	459	A	O4'-C1'-N9	7.88	114.50	108.20
1	N	786	G	C5-C6-N1	7.88	115.44	111.50
1	N	1417	G	N3-C2-N2	7.88	125.42	119.90
1	N	262	A	C5-C6-N6	-7.88	117.40	123.70
1	N	359	G	N3-C4-C5	7.88	132.54	128.60
1	N	943	U	O4'-C4'-C3'	-7.88	96.12	104.00
1	N	959	A	C5-C6-N6	-7.88	117.40	123.70
1	N	1177	G	C6-C5-N7	-7.88	125.67	130.40
1	N	1274	A	N1-C6-N6	7.88	123.33	118.60
1	N	1300	G	C5-C6-O6	-7.88	123.87	128.60
1	N	161	A	O4'-C1'-N9	7.88	114.50	108.20
1	N	265	G	C8-N9-C4	-7.88	103.25	106.40
1	N	988	G	N1-C6-O6	7.88	124.63	119.90
1	N	1432	G	O4'-C1'-N9	7.88	114.50	108.20
1	N	162	A	N7-C8-N9	7.88	117.74	113.80
1	N	1198	G	C5-C6-O6	-7.88	123.88	128.60
1	N	1515	G	N7-C8-N9	7.87	117.04	113.10
1	N	735	C	N3-C4-N4	7.87	123.51	118.00
1	N	824	G	C6-C5-N7	-7.87	125.68	130.40
1	N	44	A	C4-C5-C6	7.87	120.94	117.00
1	N	497	G	N3-C2-N2	7.87	125.41	119.90
1	N	1337	G	N3-C4-N9	7.87	130.72	126.00
1	N	1342	C	O4'-C1'-N1	7.87	114.50	108.20
1	N	569	C	N3-C4-N4	7.87	123.51	118.00
1	N	1485	U	P-O5'-C5'	7.87	133.49	120.90
1	N	139	A	N9-C4-C5	-7.87	102.65	105.80
1	N	1365	G	C4'-C3'-C2'	-7.86	94.74	102.60
1	N	1511	G	C3'-C2'-C1'	7.86	107.79	101.50
1	N	511	C	O4'-C1'-N1	7.86	114.49	108.20
1	N	1387	G	N3-C4-N9	-7.86	121.28	126.00
1	N	1483	A	O4'-C4'-C3'	-7.86	96.14	104.00
1	N	702	A	C5-N7-C8	7.86	107.83	103.90
1	N	663	A	N1-C6-N6	7.86	123.31	118.60
1	N	710	G	C5'-C4'-O4'	7.86	118.53	109.10
1	N	885	G	O4'-C1'-N9	7.86	114.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	995	C	N3-C4-N4	7.86	123.50	118.00
1	N	84	U	C6-N1-C1'	-7.85	110.21	121.20
1	N	110	C	N1-C2-O2	7.85	123.61	118.90
1	N	245	U	C2-N3-C4	-7.85	122.29	127.00
1	N	1278	G	O4'-C1'-N9	7.85	114.48	108.20
1	N	65	A	P-O3'-C3'	7.85	129.12	119.70
1	N	3	A	O4'-C1'-N9	7.85	114.48	108.20
1	N	396	C	O4'-C1'-N1	7.85	114.48	108.20
1	N	946	A	N7-C8-N9	-7.85	109.88	113.80
1	N	969	A	P-O3'-C3'	-7.85	110.28	119.70
1	N	363	A	C8-N9-C4	-7.85	102.66	105.80
1	N	2	A	C5-N7-C8	7.84	107.82	103.90
1	N	392	C	C2-N3-C4	7.84	123.82	119.90
1	N	1193	G	C5-C6-O6	-7.84	123.89	128.60
1	N	1225	A	C4-C5-N7	-7.84	106.78	110.70
1	N	544	G	O4'-C1'-N9	7.84	114.47	108.20
1	N	1139	G	N3-C2-N2	7.84	125.39	119.90
1	N	1151	A	C5-C6-N6	-7.84	117.42	123.70
1	N	382	A	C2-N3-C4	-7.84	106.68	110.60
1	N	695	A	C5-C6-N6	-7.84	117.43	123.70
1	N	834	U	P-O5'-C5'	7.84	133.45	120.90
1	N	280	C	C1'-O4'-C4'	-7.84	103.63	109.90
1	N	666	G	C5'-C4'-C3'	7.84	128.54	116.00
1	N	1354	U	N3-C4-C5	-7.84	109.90	114.60
1	N	1508	A	C8-N9-C4	-7.84	102.66	105.80
1	N	1518	A	C5-C6-N1	-7.84	113.78	117.70
1	N	661	G	C4-C5-C6	7.84	123.50	118.80
1	N	964	A	C3'-C2'-C1'	-7.84	95.23	101.50
1	N	1128	C	C2-N1-C1'	7.84	127.42	118.80
1	N	1411	C	O4'-C1'-N1	7.84	114.47	108.20
1	N	168	G	N9-C4-C5	-7.83	102.27	105.40
1	N	523	A	C8-N9-C4	7.83	108.93	105.80
1	N	282	A	N3-C4-C5	-7.83	121.32	126.80
1	N	680	C	C6-N1-C2	-7.83	117.17	120.30
1	N	1438	G	O4'-C1'-N9	7.83	114.47	108.20
1	N	328	C	C6-N1-C2	-7.83	117.17	120.30
1	N	859	G	C5-C6-O6	-7.83	123.90	128.60
1	N	541	G	N1-C6-O6	7.83	124.60	119.90
1	N	275	G	N3-C2-N2	7.83	125.38	119.90
1	N	700	G	N1-C6-O6	7.83	124.60	119.90
1	N	720	C	N3-C4-C5	-7.83	118.77	121.90
1	N	405	U	N3-C4-C5	-7.83	109.90	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	773	G	N3-C4-N9	-7.83	121.30	126.00
1	N	943	U	C1'-O4'-C4'	7.83	116.16	109.90
1	N	1445	U	O4'-C1'-N1	7.83	114.46	108.20
1	N	1446	A	C5'-C4'-O4'	7.83	118.49	109.10
1	N	996	A	C4'-C3'-C2'	-7.83	94.78	102.60
1	N	1021	A	C5-C6-N6	-7.83	117.44	123.70
1	N	1054	C	O4'-C1'-N1	7.83	114.46	108.20
1	N	1363	A	C4-C5-C6	7.83	120.91	117.00
1	N	822	U	O4'-C1'-N1	7.82	114.46	108.20
1	N	184	G	N3-C2-N2	7.82	125.37	119.90
1	N	326	G	C4-C5-C6	7.82	123.49	118.80
1	N	440	C	C2-N3-C4	-7.82	115.99	119.90
1	N	1140	C	C2-N3-C4	7.82	123.81	119.90
1	N	1508	A	N1-C2-N3	7.82	133.21	129.30
1	N	78	A	N3-C4-N9	7.82	133.65	127.40
1	N	1060	U	O4'-C1'-N1	7.82	114.45	108.20
1	N	1328	C	C4-C5-C6	7.82	121.31	117.40
1	N	595	A	N9-C4-C5	-7.82	102.67	105.80
1	N	695	A	C4-C5-C6	7.82	120.91	117.00
1	N	943	U	C6-N1-C2	-7.82	116.31	121.00
1	N	621	A	C5-C6-N6	-7.81	117.45	123.70
1	N	930	C	O4'-C1'-N1	7.81	114.45	108.20
1	N	640	A	C2-N3-C4	7.81	114.51	110.60
1	N	896	C	C5-C4-N4	-7.81	114.73	120.20
1	N	1467	C	N3-C4-C5	-7.81	118.78	121.90
1	N	919	A	C6-N1-C2	7.81	123.29	118.60
1	N	344	A	C4'-C3'-C2'	7.81	110.41	102.60
1	N	478	A	C5-N7-C8	7.81	107.81	103.90
1	N	1169	A	C4-C5-C6	7.81	120.90	117.00
1	N	120	A	C4'-C3'-C2'	-7.81	94.79	102.60
1	N	436	C	O4'-C1'-N1	7.81	114.45	108.20
1	N	549	C	N3-C4-N4	7.81	123.46	118.00
1	N	625	U	C4-C5-C6	-7.81	115.02	119.70
1	N	1218	C	C5-C4-N4	-7.81	114.73	120.20
1	N	971	G	C6-C5-N7	-7.80	125.72	130.40
1	N	494	G	C6-C5-N7	-7.80	125.72	130.40
1	N	36	C	O4'-C1'-N1	7.80	114.44	108.20
1	N	431	A	N9-C4-C5	7.80	108.92	105.80
1	N	450	G	N3-C2-N2	7.80	125.36	119.90
1	N	480	U	C2-N3-C4	-7.80	122.32	127.00
1	N	649	A	C6-C5-N7	-7.80	126.84	132.30
1	N	981	U	C4-C5-C6	7.80	124.38	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	344	A	O4'-C1'-N9	7.80	114.44	108.20
1	N	258	G	N1-C2-N3	-7.80	119.22	123.90
1	N	628	G	N7-C8-N9	7.80	117.00	113.10
1	N	1171	A	C4-C5-C6	7.80	120.90	117.00
1	N	152	A	C5-N7-C8	7.80	107.80	103.90
1	N	175	C	P-O3'-C3'	-7.80	110.34	119.70
1	N	227	G	C4-C5-C6	7.80	123.48	118.80
1	N	452	A	C4-C5-C6	7.80	120.90	117.00
1	N	767	A	C8-N9-C4	-7.80	102.68	105.80
1	N	1134	G	C6-C5-N7	-7.80	125.72	130.40
1	N	1461	G	N9-C1'-C2'	-7.80	103.42	112.00
1	N	766	A	N1-C6-N6	7.79	123.28	118.60
1	N	119	A	O4'-C1'-N9	7.79	114.44	108.20
1	N	488	C	C6-N1-C2	-7.79	117.18	120.30
1	N	528	C	C2-N1-C1'	7.79	127.37	118.80
1	N	899	C	N3-C4-C5	-7.79	118.78	121.90
1	N	51	A	C5-C6-N1	-7.79	113.80	117.70
1	N	328	C	N3-C4-C5	-7.79	118.78	121.90
1	N	1285	A	O4'-C1'-N9	7.79	114.43	108.20
1	N	1342	C	N3-C4-N4	7.79	123.45	118.00
1	N	1484	C	C5-C4-N4	-7.79	114.75	120.20
1	N	302	G	O4'-C1'-N9	7.79	114.43	108.20
1	N	993	G	N3-C2-N2	7.79	125.35	119.90
1	N	491	G	C6-C5-N7	-7.79	125.73	130.40
1	N	821	G	C6-C5-N7	-7.79	125.73	130.40
1	N	1302	C	N1-C2-O2	-7.79	114.23	118.90
1	N	278	G	C5-C6-N1	-7.79	107.61	111.50
1	N	384	G	C5-C6-O6	-7.79	123.93	128.60
1	N	568	G	C6-C5-N7	-7.79	125.73	130.40
1	N	748	G	C1'-O4'-C4'	7.78	116.13	109.90
1	N	204	G	C3'-C2'-C1'	-7.78	95.28	101.50
1	N	467	U	C6-N1-C1'	-7.78	110.31	121.20
1	N	280	C	C3'-C2'-C1'	-7.78	95.28	101.50
1	N	663	A	C5-N7-C8	7.78	107.79	103.90
1	N	521	G	N7-C8-N9	-7.78	109.21	113.10
1	N	1209	C	C5-C6-N1	7.78	124.89	121.00
1	N	428	G	N1-C6-O6	7.78	124.57	119.90
1	N	453	G	N1-C2-N3	-7.78	119.23	123.90
1	N	890	G	C4'-C3'-C2'	-7.78	94.82	102.60
1	N	1220	G	O4'-C1'-N9	7.78	114.42	108.20
1	N	596	A	C8-N9-C4	-7.78	102.69	105.80
1	N	836	G	N3-C4-N9	-7.78	121.33	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1058	G	C5-C6-N1	-7.78	107.61	111.50
1	N	1518	A	C4-C5-C6	7.78	120.89	117.00
1	N	841	C	C5'-C4'-O4'	7.77	118.43	109.10
1	N	1324	A	N9-C4-C5	7.77	108.91	105.80
1	N	1019	A	C2-N3-C4	-7.77	106.71	110.60
1	N	1145	A	C5-C6-N6	-7.77	117.48	123.70
1	N	465	A	P-O3'-C3'	7.77	129.02	119.70
1	N	882	C	C2-N3-C4	7.77	123.78	119.90
1	N	1310	G	C5-C6-O6	-7.77	123.94	128.60
1	N	1350	A	O4'-C4'-C3'	-7.77	96.23	104.00
1	N	726	C	C5-C4-N4	-7.77	114.76	120.20
1	N	735	C	C5-C4-N4	-7.77	114.76	120.20
1	N	821	G	P-O3'-C3'	-7.77	110.38	119.70
1	N	1020	G	N7-C8-N9	7.77	116.98	113.10
1	N	1492	A	C8-N9-C4	-7.77	102.69	105.80
1	N	1024	G	C5-C6-N1	-7.76	107.62	111.50
1	N	1068	G	C6-C5-N7	-7.76	125.74	130.40
1	N	1333	A	O4'-C1'-N9	7.76	114.41	108.20
1	N	798	U	P-O3'-C3'	7.76	129.01	119.70
1	N	948	C	C6-N1-C2	-7.76	117.20	120.30
1	N	588	G	C5-C6-O6	-7.76	123.95	128.60
1	N	815	A	C4-C5-N7	-7.76	106.82	110.70
1	N	108	G	C4-N9-C1'	7.75	136.58	126.50
1	N	463	U	O4'-C1'-N1	7.75	114.40	108.20
1	N	559	A	C5-N7-C8	7.75	107.78	103.90
1	N	78	A	C4-C5-N7	7.75	114.58	110.70
1	N	938	A	N9-C4-C5	-7.75	102.70	105.80
1	N	1261	A	C2-N3-C4	7.75	114.48	110.60
1	N	7	A	C4-C5-C6	7.75	120.88	117.00
1	N	183	C	P-O3'-C3'	7.75	129.00	119.70
1	N	1415	G	N7-C8-N9	-7.75	109.22	113.10
1	N	229	U	N3-C4-C5	-7.75	109.95	114.60
1	N	1371	G	O4'-C1'-N9	7.75	114.40	108.20
1	N	425	G	P-O3'-C3'	-7.75	110.40	119.70
1	N	1394	A	C4-C5-C6	7.75	120.87	117.00
1	N	602	A	C6-C5-N7	-7.74	126.88	132.30
1	N	941	G	C8-N9-C4	7.74	109.50	106.40
1	N	72	A	C5-C6-N1	-7.74	113.83	117.70
1	N	1021	A	N7-C8-N9	7.74	117.67	113.80
1	N	65	A	N1-C2-N3	7.74	133.17	129.30
1	N	921	U	C6-N1-C2	-7.74	116.36	121.00
1	N	984	C	N3-C4-N4	7.74	123.41	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	213	G	N3-C4-C5	-7.73	124.73	128.60
1	N	1198	G	C4-C5-N7	-7.73	107.71	110.80
1	N	416	G	P-O5'-C5'	7.73	133.27	120.90
1	N	447	G	P-O5'-C5'	7.73	133.27	120.90
1	N	594	U	O4'-C1'-N1	7.73	114.39	108.20
1	N	127	G	P-O5'-C5'	7.73	133.27	120.90
1	N	243	A	N1-C2-N3	7.73	133.16	129.30
1	N	1295	U	O4'-C1'-N1	7.73	114.38	108.20
1	N	60	A	O4'-C1'-N9	7.72	114.38	108.20
1	N	994	A	C4-C5-C6	7.72	120.86	117.00
1	N	607	A	C4-C5-N7	7.72	114.56	110.70
1	N	942	G	N1-C2-N3	-7.72	119.27	123.90
1	N	1410	A	N1-C6-N6	7.72	123.23	118.60
1	N	23	C	O4'-C1'-N1	7.72	114.38	108.20
1	N	1011	C	C2-N3-C4	7.72	123.76	119.90
1	N	1311	A	P-O3'-C3'	-7.72	110.44	119.70
1	N	883	C	N3-C2-O2	7.72	127.30	121.90
1	N	139	A	C8-N9-C4	7.72	108.89	105.80
1	N	406	G	O4'-C1'-N9	7.72	114.37	108.20
1	N	395	C	N3-C4-N4	7.71	123.40	118.00
1	N	1361	G	C6-N1-C2	7.71	129.73	125.10
1	N	1507	A	O4'-C1'-N9	7.71	114.37	108.20
1	N	797	C	P-O5'-C5'	-7.71	108.56	120.90
1	N	1085	U	N3-C4-C5	-7.71	109.97	114.60
1	N	1120	C	N3-C4-N4	7.70	123.39	118.00
1	N	1425	U	C4'-C3'-C2'	-7.70	94.90	102.60
1	N	1525	G	P-O5'-C5'	7.70	133.22	120.90
1	N	196	A	C5-C6-N1	-7.70	113.85	117.70
1	N	299	G	P-O5'-C5'	7.70	133.22	120.90
1	N	602	A	C4-C5-C6	7.70	120.85	117.00
1	N	1030	U	C5'-C4'-O4'	7.70	118.34	109.10
1	N	132	C	C5-C6-N1	7.70	124.85	121.00
1	N	450	G	C2-N3-C4	-7.70	108.05	111.90
1	N	1052	U	C5-C4-O4	-7.70	121.28	125.90
1	N	1534	A	C5-N7-C8	7.70	107.75	103.90
1	N	283	U	P-O5'-C5'	7.70	133.22	120.90
1	N	476	U	C5-C4-O4	7.70	130.52	125.90
1	N	803	G	C4-C5-N7	-7.70	107.72	110.80
1	N	840	C	P-O3'-C3'	7.70	128.94	119.70
1	N	1252	A	C4-C5-C6	7.70	120.85	117.00
1	N	1315	U	P-O5'-C5'	7.70	133.21	120.90
1	N	220	G	C1'-O4'-C4'	-7.69	103.74	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	347	G	C5-C6-O6	-7.69	123.98	128.60
1	N	24	U	C5-C4-O4	-7.69	121.28	125.90
1	N	810	C	C2-N3-C4	7.69	123.75	119.90
1	N	1322	C	N3-C2-O2	-7.69	116.52	121.90
1	N	185	U	O4'-C1'-N1	7.69	114.35	108.20
1	N	253	A	O4'-C1'-N9	7.69	114.35	108.20
1	N	807	A	C5-C6-N1	-7.69	113.85	117.70
1	N	1230	C	O4'-C1'-N1	7.69	114.35	108.20
1	N	266	G	C2-N3-C4	7.68	115.74	111.90
1	N	337	G	C6-C5-N7	-7.68	125.79	130.40
1	N	967	C	N1-C2-O2	-7.68	114.29	118.90
1	N	1179	A	C5-N7-C8	7.68	107.74	103.90
1	N	1446	A	C8-N9-C4	-7.68	102.73	105.80
1	N	316	C	C6-N1-C2	-7.68	117.23	120.30
1	N	776	G	C4-C5-C6	7.68	123.41	118.80
1	N	610	U	C6-N1-C2	-7.68	116.39	121.00
1	N	626	G	N9-C4-C5	-7.68	102.33	105.40
1	N	896	C	C5-C6-N1	-7.68	117.16	121.00
1	N	1361	G	C8-N9-C4	-7.68	103.33	106.40
1	N	650	G	P-O5'-C5'	-7.68	108.62	120.90
1	N	1145	A	N7-C8-N9	-7.68	109.96	113.80
1	N	1481	U	C5-C6-N1	7.68	126.54	122.70
1	N	1483	A	N9-C4-C5	-7.68	102.73	105.80
1	N	668	G	C2-N3-C4	-7.67	108.06	111.90
1	N	770	C	O4'-C4'-C3'	-7.67	96.33	104.00
1	N	602	A	C5-C6-N1	-7.67	113.86	117.70
1	N	549	C	C2-N3-C4	-7.67	116.06	119.90
1	N	1052	U	O4'-C1'-N1	7.67	114.34	108.20
1	N	903	G	P-O3'-C3'	7.67	128.90	119.70
1	N	1424	U	C4'-C3'-C2'	-7.67	94.93	102.60
1	N	169	C	N3-C4-C5	-7.67	118.83	121.90
1	N	347	G	C8-N9-C4	-7.67	103.33	106.40
1	N	392	C	C4-C5-C6	-7.67	113.57	117.40
1	N	560	A	N9-C4-C5	7.67	108.87	105.80
1	N	1156	G	N1-C6-O6	7.67	124.50	119.90
1	N	1195	C	N3-C4-C5	-7.67	118.83	121.90
1	N	1314	C	N1-C2-N3	-7.67	113.83	119.20
1	N	1476	A	C5-C6-N6	-7.67	117.56	123.70
1	N	282	A	C5-N7-C8	7.67	107.73	103.90
1	N	315	A	O4'-C1'-N9	7.67	114.33	108.20
1	N	669	G	C5-C6-N1	-7.67	107.67	111.50
1	N	1074	G	N9-C4-C5	7.67	108.47	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1399	C	N3-C4-C5	-7.67	118.83	121.90
1	N	326	G	C6-C5-N7	-7.67	125.80	130.40
1	N	245	U	C6-N1-C1'	-7.66	110.47	121.20
1	N	230	G	O4'-C1'-N9	7.66	114.33	108.20
1	N	369	G	O4'-C1'-N9	7.66	114.33	108.20
1	N	591	U	P-O5'-C5'	7.66	133.16	120.90
1	N	985	C	C6-N1-C2	7.66	123.36	120.30
1	N	1063	C	P-O3'-C3'	-7.66	110.51	119.70
1	N	1360	A	O4'-C1'-N9	7.66	114.33	108.20
1	N	514	C	O4'-C1'-N1	7.66	114.33	108.20
1	N	200	G	C5-C6-O6	-7.66	124.01	128.60
1	N	267	C	C1'-O4'-C4'	7.66	116.02	109.90
1	N	321	A	N1-C2-N3	7.66	133.13	129.30
1	N	760	G	C4-C5-N7	7.66	113.86	110.80
1	N	396	C	C4-C5-C6	-7.65	113.57	117.40
1	N	652	U	C2-N1-C1'	-7.65	108.52	117.70
1	N	1085	U	C6-N1-C2	-7.65	116.41	121.00
1	N	37	U	N1-C2-N3	-7.65	110.31	114.90
1	N	1435	G	C4-C5-N7	7.65	113.86	110.80
1	N	1534	A	C4-C5-N7	-7.65	106.87	110.70
1	N	581	G	C8-N9-C4	7.65	109.46	106.40
1	N	753	A	P-O5'-C5'	-7.65	108.66	120.90
1	N	1060	U	N3-C4-O4	7.65	124.75	119.40
1	N	1454	G	O4'-C1'-N9	7.65	114.32	108.20
1	N	1456	A	P-O3'-C3'	7.65	128.88	119.70
1	N	94	G	C8-N9-C4	-7.65	103.34	106.40
1	N	703	G	N3-C4-N9	7.65	130.59	126.00
1	N	1008	U	N1-C2-N3	7.65	119.49	114.90
1	N	446	G	C5-C6-O6	-7.64	124.01	128.60
1	N	1153	G	C5-C6-O6	-7.64	124.02	128.60
1	N	1046	A	N9-C1'-C2'	-7.64	103.59	112.00
1	N	337	G	N1-C6-O6	7.64	124.48	119.90
1	N	533	A	C2-N3-C4	-7.64	106.78	110.60
1	N	830	G	N1-C2-N3	-7.64	119.32	123.90
1	N	1533	C	C1'-O4'-C4'	-7.64	103.79	109.90
1	N	617	G	C5-N7-C8	-7.64	100.48	104.30
1	N	1162	C	N3-C4-C5	-7.64	118.84	121.90
1	N	1163	A	C4-C5-C6	7.64	120.82	117.00
1	N	1372	U	C5-C4-O4	7.64	130.48	125.90
1	N	484	G	C6-C5-N7	-7.63	125.82	130.40
1	N	1414	U	C5-C4-O4	-7.63	121.32	125.90
1	N	1428	A	C8-N9-C4	-7.63	102.75	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	525	C	C5-C4-N4	-7.63	114.86	120.20
1	N	1186	G	C8-N9-C4	-7.63	103.35	106.40
1	N	1417	G	N1-C2-N3	-7.63	119.32	123.90
1	N	1343	G	C6-N1-C2	7.63	129.68	125.10
1	N	500	G	C5-C6-O6	-7.63	124.02	128.60
1	N	1299	A	O4'-C1'-N9	7.63	114.30	108.20
1	N	4	U	N3-C4-C5	-7.62	110.03	114.60
1	N	127	G	C6-C5-N7	-7.62	125.83	130.40
1	N	1047	G	N9-C4-C5	-7.62	102.35	105.40
1	N	392	C	N1-C2-N3	-7.62	113.86	119.20
1	N	1368	A	N9-C4-C5	7.62	108.85	105.80
1	N	64	G	C4-C5-C6	7.62	123.37	118.80
1	N	174	A	O4'-C1'-N9	7.62	114.30	108.20
1	N	1098	C	N1-C2-O2	7.62	123.47	118.90
1	N	1461	G	N1-C6-O6	7.62	124.47	119.90
1	N	1503	A	O4'-C1'-N9	7.62	114.29	108.20
1	N	62	U	N1-C2-O2	-7.62	117.47	122.80
1	N	490	C	O4'-C1'-N1	7.62	114.29	108.20
1	N	269	C	N3-C4-N4	7.61	123.33	118.00
1	N	1201	A	C4-C5-C6	7.61	120.81	117.00
1	N	325	A	C5-C6-N6	-7.61	117.61	123.70
1	N	1441	A	N9-C4-C5	7.61	108.84	105.80
1	N	725	G	N1-C6-O6	7.61	124.47	119.90
1	N	221	C	O4'-C1'-N1	7.61	114.29	108.20
1	N	269	C	C5-C4-N4	-7.61	114.87	120.20
1	N	742	G	C6-C5-N7	-7.61	125.83	130.40
1	N	8	A	C5-N7-C8	7.61	107.70	103.90
1	N	40	C	C6-N1-C2	-7.61	117.26	120.30
1	N	183	C	C6-N1-C2	-7.61	117.26	120.30
1	N	790	A	C5-C6-N1	-7.61	113.90	117.70
1	N	890	G	N1-C6-O6	7.61	124.47	119.90
1	N	203	G	O4'-C1'-N9	7.61	114.28	108.20
1	N	329	A	C5-C6-N1	-7.61	113.90	117.70
1	N	1121	U	C5-C4-O4	-7.61	121.34	125.90
1	N	1240	U	C5-C6-N1	7.61	126.50	122.70
1	N	1368	A	O4'-C1'-N9	7.61	114.28	108.20
1	N	246	A	C4-C5-N7	-7.60	106.90	110.70
1	N	1230	C	C6-N1-C2	-7.60	117.26	120.30
1	N	626	G	C6-C5-N7	-7.60	125.84	130.40
1	N	442	G	N1-C6-O6	7.60	124.46	119.90
1	N	523	A	C5-C6-N6	-7.60	117.62	123.70
1	N	1354	U	N1-C2-N3	-7.60	110.34	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	365	U	N3-C2-O2	7.59	127.52	122.20
1	N	515	G	O4'-C1'-N9	7.59	114.28	108.20
1	N	704	A	C4-C5-C6	7.59	120.80	117.00
1	N	1261	A	O4'-C1'-N9	7.59	114.28	108.20
1	N	127	G	C5-C6-N1	-7.59	107.70	111.50
1	N	118	U	N3-C4-C5	-7.59	110.05	114.60
1	N	1433	A	C6-N1-C2	7.59	123.15	118.60
1	N	339	C	C5-C4-N4	-7.59	114.89	120.20
1	N	357	G	C5-C6-N1	-7.59	107.71	111.50
1	N	886	G	C5-C6-O6	-7.59	124.05	128.60
1	N	1166	G	C8-N9-C4	-7.59	103.36	106.40
1	N	869	G	C5-C6-O6	-7.59	124.05	128.60
1	N	993	G	C5-N7-C8	7.59	108.09	104.30
1	N	1087	G	O4'-C1'-N9	7.59	114.27	108.20
1	N	480	U	C1'-O4'-C4'	-7.59	103.83	109.90
1	N	786	G	N1-C6-O6	7.59	124.45	119.90
1	N	1093	A	C5-C6-N6	-7.59	117.63	123.70
1	N	223	A	O4'-C1'-N9	7.58	114.27	108.20
1	N	332	G	C5-C6-O6	-7.58	124.05	128.60
1	N	909	A	C5-C6-N1	-7.58	113.91	117.70
1	N	1055	A	N7-C8-N9	-7.58	110.01	113.80
1	N	1305	G	C5-C6-O6	-7.58	124.05	128.60
1	N	765	G	N3-C2-N2	7.58	125.21	119.90
1	N	50	A	N9-C1'-C2'	7.58	123.85	114.00
1	N	645	G	N1-C2-N2	7.58	123.02	116.20
1	N	777	A	C6-C5-N7	-7.58	127.00	132.30
1	N	838	G	C8-N9-C4	-7.58	103.37	106.40
1	N	1046	A	C5-N7-C8	7.58	107.69	103.90
1	N	1397	C	C6-N1-C2	7.58	123.33	120.30
1	N	316	C	C5-C4-N4	-7.58	114.90	120.20
1	N	1294	G	N1-C2-N3	-7.58	119.36	123.90
1	N	1304	G	C5-C6-O6	-7.58	124.06	128.60
1	N	1138	G	O4'-C1'-N9	7.57	114.26	108.20
1	N	1207	G	C5-C6-O6	-7.57	124.06	128.60
1	N	1312	G	O4'-C1'-N9	7.57	114.26	108.20
1	N	1466	C	C6-N1-C2	-7.57	117.27	120.30
1	N	746	A	C5-N7-C8	7.57	107.69	103.90
1	N	940	C	P-O5'-C5'	7.57	133.01	120.90
1	N	960	U	C2-N3-C4	-7.57	122.46	127.00
1	N	1287	A	C5-N7-C8	7.57	107.69	103.90
1	N	119	A	C1'-O4'-C4'	7.57	115.95	109.90
1	N	275	G	C4-C5-C6	7.57	123.34	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1390	U	N1-C2-N3	7.57	119.44	114.90
1	N	637	C	C5'-C4'-O4'	7.57	118.18	109.10
1	N	1188	A	O4'-C1'-N9	7.57	114.25	108.20
1	N	407	U	P-O5'-C5'	7.57	133.00	120.90
1	N	430	A	O4'-C1'-N9	7.57	114.25	108.20
1	N	1170	A	O4'-C1'-N9	7.57	114.25	108.20
1	N	1252	A	P-O3'-C3'	-7.57	110.62	119.70
1	N	1400	C	P-O3'-C3'	7.57	128.78	119.70
1	N	975	A	P-O3'-C3'	7.56	128.78	119.70
1	N	1041	G	C2-N3-C4	-7.56	108.12	111.90
1	N	713	G	C4-C5-C6	7.56	123.34	118.80
1	N	1511	G	N7-C8-N9	-7.56	109.32	113.10
1	N	213	G	N3-C2-N2	7.56	125.19	119.90
1	N	120	A	C5-C6-N6	-7.56	117.65	123.70
1	N	305	G	N1-C2-N3	-7.56	119.36	123.90
1	N	410	G	O4'-C1'-N9	7.56	114.25	108.20
1	N	44	A	N7-C8-N9	7.55	117.58	113.80
1	N	575	G	N1-C2-N2	7.55	123.00	116.20
1	N	738	C	P-O5'-C5'	7.55	132.99	120.90
1	N	926	G	C8-N9-C1'	-7.55	117.18	127.00
1	N	144	G	O4'-C1'-N9	7.55	114.24	108.20
1	N	511	C	N1-C2-N3	-7.55	113.91	119.20
1	N	980	C	C5-C6-N1	7.55	124.78	121.00
1	N	1044	A	P-O3'-C3'	7.55	128.76	119.70
1	N	1288	A	C4-C5-C6	7.55	120.78	117.00
1	N	1100	C	C1'-O4'-C4'	7.55	115.94	109.90
1	N	41	G	N1-C6-O6	7.55	124.43	119.90
1	N	297	G	N9-C4-C5	7.55	108.42	105.40
1	N	475	C	O4'-C1'-N1	7.55	114.24	108.20
1	N	1401	G	C8-N9-C4	-7.55	103.38	106.40
1	N	376	G	C2-N3-C4	-7.54	108.13	111.90
1	N	652	U	C2-N3-C4	-7.54	122.47	127.00
1	N	564	C	C6-N1-C2	-7.54	117.28	120.30
1	N	1220	G	C4-C5-N7	7.54	113.82	110.80
1	N	1434	A	O4'-C1'-N9	7.54	114.23	108.20
1	N	402	G	C8-N9-C4	-7.54	103.38	106.40
1	N	696	A	C5-C6-N1	-7.54	113.93	117.70
1	N	913	A	O4'-C1'-N9	7.54	114.23	108.20
1	N	1039	G	C4-C5-N7	7.54	113.82	110.80
1	N	944	G	C4'-C3'-C2'	-7.54	95.06	102.60
1	N	1079	G	N1-C6-O6	7.54	124.42	119.90
1	N	674	G	C4-C5-N7	-7.54	107.78	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1127	G	C5-C6-N1	-7.54	107.73	111.50
1	N	710	G	N9-C4-C5	7.54	108.42	105.40
1	N	720	C	N3-C4-N4	7.54	123.27	118.00
1	N	808	C	C5-C4-N4	7.54	125.47	120.20
1	N	826	C	C5-C4-N4	-7.54	114.92	120.20
1	N	868	C	N3-C4-N4	7.53	123.27	118.00
1	N	150	U	C6-N1-C2	-7.53	116.48	121.00
1	N	636	U	P-O5'-C5'	-7.53	108.85	120.90
1	N	1232	U	O4'-C1'-N1	7.53	114.23	108.20
1	N	87	C	C3'-C2'-C1'	7.53	107.52	101.50
1	N	140	U	P-O5'-C5'	7.53	132.95	120.90
1	N	292	G	C4-C5-N7	7.53	113.81	110.80
1	N	1356	G	P-O5'-C5'	7.53	132.95	120.90
1	N	573	A	C8-N9-C4	-7.53	102.79	105.80
1	N	242	G	C5-C6-O6	-7.53	124.08	128.60
1	N	312	C	N1-C2-N3	-7.53	113.93	119.20
1	N	979	C	C6-N1-C2	-7.53	117.29	120.30
1	N	1293	C	C4-C5-C6	7.53	121.16	117.40
1	N	110	C	C2-N3-C4	7.53	123.66	119.90
1	N	310	G	N1-C6-O6	7.53	124.42	119.90
1	N	380	G	C4-C5-C6	7.53	123.31	118.80
1	N	385	C	C2-N3-C4	-7.53	116.14	119.90
1	N	184	G	N1-C2-N3	-7.52	119.39	123.90
1	N	272	C	C6-N1-C2	-7.52	117.29	120.30
1	N	972	C	N3-C4-N4	7.52	123.27	118.00
1	N	1066	C	C5-C4-N4	-7.52	114.93	120.20
1	N	477	C	N1-C2-N3	-7.52	113.94	119.20
1	N	1452	C	C4-C5-C6	7.52	121.16	117.40
1	N	518	C	C6-N1-C1'	-7.52	111.78	120.80
1	N	848	C	C5-C4-N4	-7.52	114.94	120.20
1	N	554	A	N1-C2-N3	7.52	133.06	129.30
1	N	1302	C	O4'-C1'-N1	7.51	114.21	108.20
1	N	1332	A	C6-N1-C2	-7.51	114.09	118.60
1	N	581	G	P-O3'-C3'	-7.51	110.68	119.70
1	N	1234	C	N3-C4-C5	-7.51	118.89	121.90
1	N	873	A	N7-C8-N9	7.51	117.56	113.80
1	N	937	A	N7-C8-N9	-7.51	110.04	113.80
1	N	220	G	C4-C5-C6	7.51	123.31	118.80
1	N	1254	A	C4-C5-C6	7.51	120.75	117.00
1	N	203	G	C8-N9-C4	-7.51	103.40	106.40
1	N	483	C	O4'-C1'-N1	7.51	114.21	108.20
1	N	659	U	C5-C4-O4	-7.51	121.40	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	802	A	N1-C2-N3	7.50	133.05	129.30
1	N	728	A	C5-C6-N1	-7.50	113.95	117.70
1	N	178	C	O4'-C1'-N1	7.50	114.20	108.20
1	N	459	A	C5-C6-N6	-7.50	117.70	123.70
1	N	548	G	N1-C6-O6	7.50	124.40	119.90
1	N	640	A	N3-C4-C5	-7.50	121.55	126.80
1	N	1237	C	N3-C4-C5	-7.50	118.90	121.90
1	N	226	G	C3'-C2'-C1'	-7.50	95.50	101.50
1	N	357	G	C5-N7-C8	7.50	108.05	104.30
1	N	610	U	O4'-C1'-N1	7.50	114.20	108.20
1	N	32	A	C4-C5-C6	7.50	120.75	117.00
1	N	45	G	N1-C2-N3	-7.50	119.40	123.90
1	N	297	G	C5-C6-O6	-7.49	124.10	128.60
1	N	967	C	N3-C4-N4	7.49	123.25	118.00
1	N	1374	A	C5-C6-N1	-7.49	113.95	117.70
1	N	1048	G	C5-C6-O6	-7.49	124.11	128.60
1	N	45	G	C8-N9-C4	7.49	109.40	106.40
1	N	141	G	O4'-C1'-N9	7.49	114.19	108.20
1	N	896	C	C6-N1-C1'	-7.49	111.81	120.80
1	N	597	G	N1-C6-O6	7.49	124.39	119.90
1	N	805	C	N3-C4-C5	-7.49	118.90	121.90
1	N	914	A	N7-C8-N9	-7.49	110.06	113.80
1	N	1349	A	C4-C5-N7	-7.49	106.95	110.70
1	N	993	G	N1-C2-N3	-7.49	119.41	123.90
1	N	131	A	C6-N1-C2	-7.49	114.11	118.60
1	N	201	G	C8-N9-C4	7.49	109.39	106.40
1	N	442	G	N3-C4-C5	7.49	132.34	128.60
1	N	750	C	P-O3'-C3'	-7.49	110.72	119.70
1	N	1061	G	C2-N3-C4	-7.49	108.16	111.90
1	N	1094	G	C8-N9-C1'	7.49	136.73	127.00
1	N	1052	U	N1-C2-N3	-7.48	110.41	114.90
1	N	779	C	N3-C4-C5	-7.48	118.91	121.90
1	N	196	A	C4-C5-C6	7.48	120.74	117.00
1	N	360	G	N3-C4-N9	7.48	130.49	126.00
1	N	1467	C	O4'-C1'-N1	7.48	114.18	108.20
1	N	1380	U	C5-C4-O4	7.47	130.38	125.90
1	N	424	G	O4'-C1'-N9	7.47	114.18	108.20
1	N	275	G	C8-N9-C4	-7.47	103.41	106.40
1	N	1241	G	C5-N7-C8	-7.47	100.56	104.30
1	N	1264	U	C6-N1-C2	-7.47	116.52	121.00
1	N	703	G	N3-C4-C5	-7.47	124.87	128.60
1	N	788	U	O4'-C1'-N1	7.47	114.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	154	U	O4'-C1'-N1	7.47	114.17	108.20
1	N	159	G	N9-C4-C5	7.46	108.39	105.40
1	N	1074	G	C8-N9-C4	-7.46	103.41	106.40
1	N	187	G	O4'-C1'-N9	7.46	114.17	108.20
1	N	687	A	N7-C8-N9	-7.46	110.07	113.80
1	N	949	A	C8-N9-C4	7.46	108.78	105.80
1	N	960	U	C1'-O4'-C4'	-7.46	103.93	109.90
1	N	1241	G	O4'-C1'-N9	7.46	114.17	108.20
1	N	1487	G	N1-C6-O6	7.46	124.38	119.90
1	N	1300	G	N1-C6-O6	7.46	124.38	119.90
1	N	50	A	C4-C5-C6	7.46	120.73	117.00
1	N	892	A	C5-C6-N1	-7.46	113.97	117.70
1	N	932	C	N3-C4-N4	7.46	123.22	118.00
1	N	1288	A	C5-C6-N1	-7.46	113.97	117.70
1	N	106	C	C4-C5-C6	7.46	121.13	117.40
1	N	374	A	C4-C5-C6	7.46	120.73	117.00
1	N	528	C	C6-N1-C1'	-7.46	111.85	120.80
1	N	562	U	P-O3'-C3'	7.46	128.65	119.70
1	N	1407	C	P-O3'-C3'	7.46	128.65	119.70
1	N	132	C	C4-C5-C6	-7.45	113.67	117.40
1	N	139	A	N7-C8-N9	-7.45	110.07	113.80
1	N	272	C	N3-C4-N4	7.45	123.22	118.00
1	N	331	G	N1-C2-N3	-7.45	119.43	123.90
1	N	693	G	P-O3'-C3'	7.45	128.64	119.70
1	N	357	G	N7-C8-N9	-7.45	109.37	113.10
1	N	342	C	C1'-O4'-C4'	7.45	115.86	109.90
1	N	567	G	C4-C5-N7	-7.45	107.82	110.80
1	N	774	G	N1-C6-O6	7.45	124.37	119.90
1	N	238	A	N7-C8-N9	7.45	117.52	113.80
1	N	316	C	N3-C4-N4	7.45	123.21	118.00
1	N	876	C	N3-C4-N4	7.45	123.21	118.00
1	N	953	G	N3-C2-N2	7.45	125.11	119.90
1	N	1431	A	C5-C6-N6	-7.45	117.74	123.70
1	N	600	A	C6-C5-N7	-7.44	127.09	132.30
1	N	817	C	C5-C6-N1	7.44	124.72	121.00
1	N	939	G	C2-N3-C4	-7.44	108.18	111.90
1	N	958	A	N1-C6-N6	7.44	123.07	118.60
1	N	1124	G	N1-C6-O6	7.44	124.37	119.90
1	N	1333	A	C4-C5-N7	-7.44	106.98	110.70
1	N	1491	G	O4'-C1'-N9	7.44	114.15	108.20
1	N	1171	A	C5-C6-N1	-7.44	113.98	117.70
1	N	1364	U	C4-C5-C6	-7.44	115.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	601	G	C4'-C3'-C2'	-7.44	95.16	102.60
1	N	1496	C	N1-C2-O2	-7.44	114.44	118.90
1	N	491	G	N7-C8-N9	7.43	116.82	113.10
1	N	1122	U	C3'-C2'-C1'	7.43	107.45	101.50
1	N	1180	A	C5-C6-N1	-7.43	113.98	117.70
1	N	622	A	C4-C5-C6	7.43	120.72	117.00
1	N	1176	A	O4'-C1'-N9	7.43	114.15	108.20
1	N	1358	U	C4'-C3'-C2'	7.43	110.03	102.60
1	N	1433	A	C6-C5-N7	-7.43	127.10	132.30
1	N	856	C	N3-C4-N4	7.43	123.20	118.00
1	N	1227	A	C6-N1-C2	7.43	123.06	118.60
1	N	289	G	C5'-C4'-C3'	-7.43	104.11	116.00
1	N	352	C	C4'-C3'-C2'	-7.43	95.17	102.60
1	N	873	A	N9-C4-C5	-7.43	102.83	105.80
1	N	1525	G	N1-C2-N3	-7.43	119.44	123.90
1	N	1448	C	C5-C6-N1	7.43	124.71	121.00
1	N	809	G	C8-N9-C4	-7.43	103.43	106.40
1	N	878	A	O4'-C1'-N9	7.43	114.14	108.20
1	N	927	G	C5-N7-C8	-7.43	100.59	104.30
1	N	1277	C	C4'-C3'-C2'	-7.43	95.17	102.60
1	N	46	G	C5-C6-O6	-7.42	124.15	128.60
1	N	576	C	O4'-C1'-N1	7.42	114.14	108.20
1	N	657	U	O4'-C1'-N1	7.42	114.14	108.20
1	N	1181	G	O4'-C1'-N9	7.42	114.14	108.20
1	N	1355	G	N9-C4-C5	7.42	108.37	105.40
1	N	1358	U	C5-C6-N1	7.42	126.41	122.70
1	N	1482	G	C3'-C2'-C1'	-7.42	95.56	101.50
1	N	212	G	C4-C5-C6	7.42	123.25	118.80
1	N	574	A	C6-C5-N7	-7.42	127.10	132.30
1	N	595	A	C6-C5-N7	-7.42	127.10	132.30
1	N	764	C	N3-C4-C5	-7.42	118.93	121.90
1	N	59	A	O4'-C1'-N9	7.42	114.14	108.20
1	N	387	U	C6-N1-C2	-7.42	116.55	121.00
1	N	403	C	P-O3'-C3'	-7.42	110.80	119.70
1	N	845	A	N1-C6-N6	7.42	123.05	118.60
1	N	1261	A	N9-C4-C5	-7.42	102.83	105.80
1	N	185	U	C2-N3-C4	-7.42	122.55	127.00
1	N	610	U	P-O3'-C3'	7.42	128.60	119.70
1	N	708	C	O4'-C1'-N1	7.42	114.13	108.20
1	N	1458	G	C5-C6-N1	-7.42	107.79	111.50
1	N	22	G	N7-C8-N9	-7.42	109.39	113.10
1	N	65	A	C1'-O4'-C4'	-7.42	103.97	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1007	U	C6-N1-C2	-7.42	116.55	121.00
1	N	478	A	C6-N1-C2	7.41	123.05	118.60
1	N	790	A	C2-N3-C4	-7.41	106.89	110.60
1	N	1444	U	O4'-C1'-N1	7.41	114.13	108.20
1	N	472	U	C4'-C3'-C2'	-7.41	95.19	102.60
1	N	570	G	O4'-C1'-N9	7.41	114.13	108.20
1	N	852	G	N7-C8-N9	-7.41	109.39	113.10
1	N	998	C	O4'-C1'-N1	7.41	114.13	108.20
1	N	1183	U	N1-C2-O2	-7.41	117.61	122.80
1	N	1375	A	O4'-C1'-N9	7.41	114.13	108.20
1	N	1434	A	C4-C5-N7	-7.41	107.00	110.70
1	N	96	U	C5-C4-O4	-7.41	121.45	125.90
1	N	406	G	C5-C6-O6	-7.41	124.16	128.60
1	N	772	U	C6-N1-C2	-7.41	116.56	121.00
1	N	307	C	C5-C4-N4	-7.41	115.02	120.20
1	N	705	G	C5-C6-O6	-7.41	124.16	128.60
1	N	708	C	N1-C2-O2	7.41	123.34	118.90
1	N	1191	A	C5-N7-C8	7.41	107.60	103.90
1	N	1197	A	C4-C5-C6	7.41	120.70	117.00
1	N	1251	A	N9-C1'-C2'	-7.41	103.85	112.00
1	N	849	G	C5'-C4'-C3'	-7.40	104.16	116.00
1	N	899	C	N1-C2-N3	-7.40	114.02	119.20
1	N	1394	A	N7-C8-N9	-7.40	110.10	113.80
1	N	1483	A	C6-C5-N7	-7.40	127.12	132.30
1	N	1178	G	N1-C6-O6	7.40	124.34	119.90
1	N	517	G	C8-N9-C1'	-7.40	117.38	127.00
1	N	787	A	C5'-C4'-C3'	7.40	127.83	116.00
1	N	167	A	C5-C6-N1	-7.39	114.00	117.70
1	N	256	U	O4'-C1'-N1	7.39	114.11	108.20
1	N	363	A	C5-C6-N6	-7.39	117.78	123.70
1	N	749	A	N1-C2-N3	7.39	133.00	129.30
1	N	1007	U	C5-C4-O4	7.39	130.34	125.90
1	N	1337	G	N3-C2-N2	7.39	125.07	119.90
1	N	951	G	N1-C6-O6	7.39	124.33	119.90
1	N	1338	G	C6-N1-C2	7.39	129.53	125.10
1	N	253	A	C6-C5-N7	-7.39	127.13	132.30
1	N	697	U	N1-C2-O2	-7.39	117.63	122.80
1	N	1165	U	C5-C4-O4	-7.39	121.47	125.90
1	N	1496	C	O4'-C1'-N1	7.39	114.11	108.20
1	N	851	G	N9-C4-C5	-7.38	102.45	105.40
1	N	1350	A	C5-C6-N1	-7.38	114.01	117.70
1	N	604	G	C6-C5-N7	-7.38	125.97	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1220	G	N1-C6-O6	7.38	124.33	119.90
1	N	1338	G	N9-C4-C5	7.38	108.35	105.40
1	N	1431	A	N1-C2-N3	7.38	132.99	129.30
1	N	1023	U	O4'-C1'-N1	7.38	114.10	108.20
1	N	1232	U	C2-N3-C4	-7.38	122.57	127.00
1	N	93	U	P-O3'-C3'	-7.38	110.85	119.70
1	N	522	C	O4'-C1'-N1	7.38	114.10	108.20
1	N	1204	A	N1-C2-N3	-7.38	125.61	129.30
1	N	1381	U	P-O3'-C3'	7.38	128.55	119.70
1	N	386	C	N1-C2-N3	-7.37	114.04	119.20
1	N	556	C	C5-C4-N4	-7.37	115.04	120.20
1	N	967	C	C5-C4-N4	-7.37	115.04	120.20
1	N	1356	G	C2-N3-C4	7.37	115.59	111.90
1	N	1440	U	N3-C4-O4	7.37	124.56	119.40
1	N	5	U	C1'-O4'-C4'	-7.37	104.00	109.90
1	N	1385	G	N1-C2-N3	-7.37	119.48	123.90
1	N	1280	A	C5-C6-N6	-7.37	117.80	123.70
1	N	747	A	N7-C8-N9	7.37	117.48	113.80
1	N	1530	G	N3-C4-C5	7.37	132.28	128.60
1	N	366	A	N9-C4-C5	7.37	108.75	105.80
1	N	813	U	C1'-O4'-C4'	7.37	115.79	109.90
1	N	233	C	C5-C6-N1	7.36	124.68	121.00
1	N	1066	C	C2-N3-C4	-7.36	116.22	119.90
1	N	248	C	N3-C4-N4	7.36	123.15	118.00
1	N	976	G	N1-C6-O6	7.36	124.32	119.90
1	N	394	G	O4'-C1'-N9	7.36	114.09	108.20
1	N	559	A	N1-C2-N3	-7.36	125.62	129.30
1	N	856	C	O4'-C4'-C3'	-7.36	96.64	104.00
1	N	1217	C	N3-C4-C5	-7.36	118.96	121.90
1	N	479	U	O4'-C1'-N1	7.36	114.09	108.20
1	N	994	A	C8-N9-C4	-7.36	102.86	105.80
1	N	1323	G	N1-C2-N3	-7.36	119.48	123.90
1	N	71	A	C5-C6-N6	-7.36	117.81	123.70
1	N	143	A	N3-C4-C5	-7.36	121.65	126.80
1	N	248	C	C5-C4-N4	-7.36	115.05	120.20
1	N	556	C	N1-C2-N3	-7.36	114.05	119.20
1	N	775	G	N1-C6-O6	7.36	124.31	119.90
1	N	894	G	N1-C2-N2	-7.36	109.58	116.20
1	N	1287	A	N3-C4-C5	-7.36	121.65	126.80
1	N	200	G	P-O3'-C3'	7.36	128.53	119.70
1	N	1161	C	O4'-C1'-N1	7.36	114.08	108.20
1	N	1303	C	C1'-O4'-C4'	7.36	115.78	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1383	C	C2-N1-C1'	7.36	126.89	118.80
1	N	68	G	N1-C2-N2	-7.35	109.58	116.20
1	N	919	A	N1-C2-N3	-7.35	125.62	129.30
1	N	1189	U	O4'-C4'-C3'	-7.35	96.65	104.00
1	N	1380	U	P-O3'-C3'	7.35	128.53	119.70
1	N	297	G	N3-C4-N9	-7.35	121.59	126.00
1	N	155	A	O4'-C1'-N9	7.35	114.08	108.20
1	N	1089	G	C6-N1-C2	7.35	129.51	125.10
1	N	1139	G	N3-C4-C5	-7.35	124.92	128.60
1	N	1170	A	N1-C2-N3	7.35	132.97	129.30
1	N	104	G	N3-C4-N9	-7.35	121.59	126.00
1	N	750	C	C5-C4-N4	-7.35	115.06	120.20
1	N	898	G	C5-C6-O6	7.35	133.01	128.60
1	N	1371	G	C8-N9-C4	-7.35	103.46	106.40
1	N	811	C	C5'-C4'-O4'	7.34	117.91	109.10
1	N	1326	U	C5-C6-N1	7.34	126.37	122.70
1	N	19	A	N1-C6-N6	7.34	123.00	118.60
1	N	604	G	C5-C6-N1	-7.34	107.83	111.50
1	N	434	U	N1-C2-N3	-7.34	110.50	114.90
1	N	704	A	C5-N7-C8	7.34	107.57	103.90
1	N	1484	C	C2-N1-C1'	7.34	126.87	118.80
1	N	764	C	C2-N3-C4	7.33	123.57	119.90
1	N	1047	G	N1-C6-O6	7.33	124.30	119.90
1	N	1294	G	C6-N1-C2	7.33	129.50	125.10
1	N	1400	C	O4'-C1'-N1	7.33	114.07	108.20
1	N	580	C	C2-N3-C4	7.33	123.57	119.90
1	N	222	C	N1-C1'-C2'	-7.33	103.94	112.00
1	N	351	G	C4-C5-C6	7.33	123.20	118.80
1	N	1166	G	N3-C4-C5	-7.33	124.94	128.60
1	N	450	G	C5-C6-N1	-7.33	107.84	111.50
1	N	528	C	C2-N3-C4	7.33	123.56	119.90
1	N	879	C	C4-C5-C6	7.33	121.06	117.40
1	N	1260	G	C5-N7-C8	-7.33	100.64	104.30
1	N	469	C	C5-C4-N4	-7.32	115.07	120.20
1	N	549	C	C3'-C2'-C1'	7.32	107.36	101.50
1	N	882	C	C5-C4-N4	-7.32	115.07	120.20
1	N	1006	G	C5-C6-O6	-7.32	124.21	128.60
1	N	1513	A	C8-N9-C4	-7.32	102.87	105.80
1	N	204	G	P-O5'-C5'	7.32	132.62	120.90
1	N	856	C	C5-C6-N1	7.32	124.66	121.00
1	N	702	A	C5-C6-N1	-7.32	114.04	117.70
1	N	1533	C	C5-C4-N4	7.32	125.32	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	522	C	C2-N3-C4	7.32	123.56	119.90
1	N	709	U	C6-N1-C2	-7.32	116.61	121.00
1	N	1181	G	N3-C4-C5	7.32	132.26	128.60
1	N	861	G	O4'-C1'-N9	7.32	114.05	108.20
1	N	1003	G	C5-C6-N1	-7.32	107.84	111.50
1	N	295	C	N3-C4-N4	7.31	123.12	118.00
1	N	1195	C	N3-C4-N4	7.31	123.12	118.00
1	N	1287	A	C6-C5-N7	-7.31	127.18	132.30
1	N	331	G	C6-C5-N7	-7.31	126.01	130.40
1	N	719	C	C5-C6-N1	7.31	124.66	121.00
1	N	1002	G	N7-C8-N9	7.31	116.76	113.10
1	N	1511	G	C6-C5-N7	-7.31	126.01	130.40
1	N	199	A	C4-C5-C6	7.31	120.66	117.00
1	N	475	C	N3-C2-O2	7.31	127.02	121.90
1	N	597	G	C4-C5-C6	7.31	123.19	118.80
1	N	838	G	C5-C6-O6	-7.31	124.22	128.60
1	N	380	G	C5-C6-O6	-7.31	124.22	128.60
1	N	734	G	C8-N9-C4	7.30	109.32	106.40
1	N	1493	A	N1-C2-N3	-7.30	125.65	129.30
1	N	9	G	C5-C6-N1	-7.30	107.85	111.50
1	N	274	A	P-O3'-C3'	7.30	128.46	119.70
1	N	557	G	O3'-P-O5'	-7.30	90.12	104.00
1	N	204	G	C6-C5-N7	-7.30	126.02	130.40
1	N	224	U	C4'-C3'-C2'	-7.30	95.30	102.60
1	N	774	G	N3-C4-C5	-7.30	124.95	128.60
1	N	1327	C	C5-C4-N4	-7.30	115.09	120.20
1	N	1394	A	C5-C6-N6	-7.30	117.86	123.70
1	N	1066	C	C5'-C4'-C3'	-7.30	104.32	116.00
1	N	1226	C	O4'-C1'-N1	7.30	114.04	108.20
1	N	1293	C	N3-C4-C5	-7.30	118.98	121.90
1	N	104	G	P-O5'-C5'	7.30	132.58	120.90
1	N	294	U	N1-C2-O2	-7.29	117.69	122.80
1	N	231	U	N3-C4-O4	7.29	124.51	119.40
1	N	321	A	C5-C6-N1	-7.29	114.05	117.70
1	N	929	G	C4-C5-C6	7.29	123.18	118.80
1	N	311	C	C5-C6-N1	7.29	124.65	121.00
1	N	425	G	N1-C6-O6	7.29	124.28	119.90
1	N	932	C	O4'-C1'-N1	7.29	114.03	108.20
1	N	1391	U	N3-C4-O4	7.29	124.50	119.40
1	N	1396	A	C1'-O4'-C4'	7.29	115.73	109.90
1	N	141	G	N7-C8-N9	-7.29	109.45	113.10
1	N	196	A	N7-C8-N9	-7.29	110.16	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	2	A	N7-C8-N9	-7.29	110.16	113.80
1	N	1346	A	C6-N1-C2	7.29	122.97	118.60
1	N	99	C	N3-C4-C5	-7.28	118.99	121.90
1	N	485	U	N3-C4-C5	-7.28	110.23	114.60
1	N	870	U	C6-N1-C2	7.28	125.37	121.00
1	N	1222	G	C5-C6-N1	7.28	115.14	111.50
1	N	275	G	N9-C4-C5	7.28	108.31	105.40
1	N	861	G	C4'-C3'-C2'	-7.28	95.32	102.60
1	N	666	G	C4-C5-C6	7.28	123.17	118.80
1	N	969	A	C4-C5-C6	7.28	120.64	117.00
1	N	1169	A	N7-C8-N9	7.28	117.44	113.80
1	N	362	G	N1-C2-N3	-7.28	119.53	123.90
1	N	1281	C	C5'-C4'-O4'	7.28	117.83	109.10
1	N	1425	U	C3'-C2'-C1'	7.28	107.32	101.50
1	N	888	G	C1'-O4'-C4'	-7.28	104.08	109.90
1	N	427	U	N3-C2-O2	7.27	127.29	122.20
1	N	366	A	N1-C6-N6	7.27	122.96	118.60
1	N	383	A	C6-N1-C2	7.27	122.96	118.60
1	N	49	U	O4'-C1'-N1	7.27	114.02	108.20
1	N	276	G	N7-C8-N9	7.27	116.73	113.10
1	N	926	G	C4-C5-N7	-7.27	107.89	110.80
1	N	100	G	N9-C4-C5	7.27	108.31	105.40
1	N	1022	A	C5-C6-N6	-7.27	117.89	123.70
1	N	1310	G	N7-C8-N9	7.27	116.73	113.10
1	N	1355	G	C6-N1-C2	-7.27	120.74	125.10
1	N	283	U	OP1-P-OP2	-7.26	108.70	119.60
1	N	455	G	C8-N9-C4	7.26	109.31	106.40
1	N	560	A	C5-C6-N6	-7.26	117.89	123.70
1	N	545	C	C2-N3-C4	7.26	123.53	119.90
1	N	882	C	N3-C4-N4	7.26	123.08	118.00
1	N	1249	C	C3'-C2'-C1'	7.26	107.31	101.50
1	N	1493	A	N1-C6-N6	7.26	122.96	118.60
1	N	325	A	C5-N7-C8	7.26	107.53	103.90
1	N	463	U	N3-C2-O2	7.26	127.28	122.20
1	N	911	U	C2-N3-C4	-7.26	122.64	127.00
1	N	947	G	C6-C5-N7	-7.26	126.04	130.40
1	N	1137	C	C6-N1-C2	-7.26	117.39	120.30
1	N	1306	A	C5-C6-N6	-7.26	117.89	123.70
1	N	219	U	C4-C5-C6	-7.26	115.34	119.70
1	N	369	G	O4'-C1'-C2'	-7.26	98.54	105.80
1	N	996	A	C5-N7-C8	7.26	107.53	103.90
1	N	1347	G	N3-C4-C5	-7.26	124.97	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	907	A	C5-C6-N1	-7.25	114.07	117.70
1	N	641	U	C5-C6-N1	7.25	126.33	122.70
1	N	658	C	P-O3'-C3'	-7.25	111.00	119.70
1	N	1090	U	C4-C5-C6	-7.25	115.35	119.70
1	N	1101	A	C4-C5-C6	7.25	120.63	117.00
1	N	1112	C	O4'-C1'-N1	7.25	114.00	108.20
1	N	1482	G	C5-C6-O6	-7.25	124.25	128.60
1	N	886	G	N9-C4-C5	-7.25	102.50	105.40
1	N	1169	A	C5-C6-N6	-7.25	117.90	123.70
1	N	402	G	N1-C2-N3	-7.25	119.55	123.90
1	N	734	G	C4'-C3'-C2'	-7.25	95.35	102.60
1	N	89	U	C1'-O4'-C4'	7.25	115.70	109.90
1	N	491	G	C4-C5-C6	7.25	123.15	118.80
1	N	630	A	C4-C5-C6	7.25	120.62	117.00
1	N	900	A	C8-N9-C4	7.25	108.70	105.80
1	N	1148	U	C3'-C2'-C1'	-7.25	95.70	101.50
1	N	1502	A	N7-C8-N9	-7.25	110.18	113.80
1	N	1007	U	N1-C2-O2	-7.25	117.73	122.80
1	N	1434	A	C5-C6-N6	-7.25	117.90	123.70
1	N	591	U	C4'-C3'-C2'	-7.24	95.36	102.60
1	N	796	C	C2-N3-C4	7.24	123.52	119.90
1	N	1254	A	C6-C5-N7	-7.24	127.23	132.30
1	N	1370	G	C2-N3-C4	7.24	115.52	111.90
1	N	431	A	C8-N9-C4	-7.24	102.90	105.80
1	N	1017	U	N3-C4-O4	7.24	124.47	119.40
1	N	1394	A	C5'-C4'-O4'	7.24	117.79	109.10
1	N	969	A	P-O5'-C5'	-7.24	109.32	120.90
1	N	1174	G	C4'-C3'-C2'	-7.24	95.36	102.60
1	N	506	G	O4'-C1'-N9	7.24	113.99	108.20
1	N	704	A	C4-C5-N7	-7.24	107.08	110.70
1	N	1261	A	N3-C4-N9	7.24	133.19	127.40
1	N	459	A	C5-N7-C8	7.24	107.52	103.90
1	N	536	C	N1-C2-N3	7.24	124.27	119.20
1	N	1242	G	N1-C2-N3	-7.24	119.56	123.90
1	N	1452	C	N3-C4-C5	-7.24	119.01	121.90
1	N	142	G	O4'-C1'-N9	7.23	113.99	108.20
1	N	427	U	C4-C5-C6	-7.23	115.36	119.70
1	N	572	A	P-O3'-C3'	7.23	128.38	119.70
1	N	946	A	C4'-C3'-C2'	7.23	109.83	102.60
1	N	1276	G	C5-C6-N1	-7.23	107.88	111.50
1	N	387	U	C5-C6-N1	7.23	126.32	122.70
1	N	433	G	C6-N1-C2	7.23	129.44	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	517	G	C5'-C4'-O4'	7.23	117.78	109.10
1	N	696	A	C8-N9-C4	-7.23	102.91	105.80
1	N	212	G	O4'-C4'-C3'	-7.23	96.77	104.00
1	N	1473	G	O4'-C1'-N9	7.23	113.98	108.20
1	N	1520	C	N3-C4-N4	7.23	123.06	118.00
1	N	136	C	N3-C4-C5	-7.23	119.01	121.90
1	N	244	U	C5'-C4'-O4'	7.23	117.77	109.10
1	N	992	U	C5-C6-N1	7.23	126.31	122.70
1	N	1484	C	N3-C4-N4	7.22	123.06	118.00
1	N	120	A	C5'-C4'-C3'	7.22	127.56	116.00
1	N	755	G	N3-C4-N9	7.22	130.33	126.00
1	N	1037	C	C4-C5-C6	-7.22	113.79	117.40
1	N	1261	A	C4-C5-C6	7.22	120.61	117.00
1	N	89	U	C6-N1-C2	7.22	125.33	121.00
1	N	1166	G	N9-C4-C5	7.22	108.29	105.40
1	N	1238	A	N9-C4-C5	7.22	108.69	105.80
1	N	1525	G	O4'-C1'-N9	7.22	113.98	108.20
1	N	1293	C	C5-C6-N1	-7.22	117.39	121.00
1	N	5	U	C5-C6-N1	7.22	126.31	122.70
1	N	90	C	C5-C4-N4	-7.22	115.15	120.20
1	N	205	A	O4'-C1'-N9	7.22	113.97	108.20
1	N	621	A	C5-C6-N1	-7.22	114.09	117.70
1	N	1361	G	C5-C6-N1	-7.22	107.89	111.50
1	N	1444	U	N1-C2-O2	-7.22	117.75	122.80
1	N	146	G	C3'-C2'-C1'	-7.21	95.73	101.50
1	N	408	A	C6-C5-N7	-7.21	127.25	132.30
1	N	1133	G	N1-C2-N3	-7.21	119.57	123.90
1	N	1476	A	C5-C6-N1	-7.21	114.09	117.70
1	N	1105	A	N1-C2-N3	-7.21	125.69	129.30
1	N	1364	U	N1-C2-O2	-7.21	117.75	122.80
1	N	515	G	C5-C6-N1	-7.21	107.89	111.50
1	N	556	C	N3-C4-C5	-7.21	119.02	121.90
1	N	1286	U	N1-C2-O2	7.21	127.85	122.80
1	N	1396	A	C5'-C4'-C3'	-7.21	104.46	116.00
1	N	609	A	C8-N9-C4	-7.21	102.92	105.80
1	N	586	C	C4-C5-C6	7.21	121.00	117.40
1	N	1173	U	C3'-C2'-C1'	-7.21	95.73	101.50
1	N	1252	A	C5-C6-N1	-7.21	114.10	117.70
1	N	1473	G	N1-C2-N3	-7.21	119.58	123.90
1	N	1269	A	C1'-O4'-C4'	7.21	115.66	109.90
1	N	1410	A	P-O3'-C3'	7.21	128.35	119.70
1	N	190	A	C5-N7-C8	7.20	107.50	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	961	U	O4'-C1'-N1	7.20	113.96	108.20
1	N	18	C	O4'-C1'-N1	7.20	113.96	108.20
1	N	85	U	C5-C4-O4	-7.20	121.58	125.90
1	N	626	G	OP1-P-OP2	-7.20	108.80	119.60
1	N	862	C	C2'-C3'-O3'	7.20	125.34	109.50
1	N	909	A	N3-C4-C5	-7.20	121.76	126.80
1	N	951	G	C4-C5-C6	7.20	123.12	118.80
1	N	565	U	N3-C2-O2	7.20	127.24	122.20
1	N	854	U	N1-C2-N3	-7.20	110.58	114.90
1	N	1249	C	C2-N1-C1'	7.20	126.72	118.80
1	N	248	C	C2-N3-C4	7.20	123.50	119.90
1	N	267	C	P-O3'-C3'	7.19	128.33	119.70
1	N	575	G	C2-N3-C4	7.19	115.50	111.90
1	N	356	A	C1'-O4'-C4'	-7.19	104.15	109.90
1	N	873	A	C5-C6-N1	-7.19	114.10	117.70
1	N	9	G	O4'-C1'-N9	7.19	113.95	108.20
1	N	659	U	C5-C6-N1	7.19	126.30	122.70
1	N	716	A	C4-C5-C6	7.19	120.59	117.00
1	N	201	G	N7-C8-N9	-7.19	109.51	113.10
1	N	227	G	C6-C5-N7	-7.19	126.09	130.40
1	N	1436	U	P-O3'-C3'	7.19	128.32	119.70
1	N	167	A	C2-N3-C4	-7.19	107.01	110.60
1	N	1237	C	O4'-C1'-N1	7.18	113.95	108.20
1	N	446	G	C6-C5-N7	-7.18	126.09	130.40
1	N	227	G	N9-C1'-C2'	-7.18	104.10	112.00
1	N	578	C	P-O5'-C5'	7.18	132.39	120.90
1	N	1119	C	O4'-C1'-N1	7.18	113.94	108.20
1	N	99	C	N3-C4-N4	7.18	123.02	118.00
1	N	221	C	C4'-C3'-C2'	-7.18	95.42	102.60
1	N	250	A	N7-C8-N9	-7.18	110.21	113.80
1	N	320	A	N1-C2-N3	7.18	132.89	129.30
1	N	507	C	C3'-C2'-C1'	-7.18	95.76	101.50
1	N	988	G	C4-C5-N7	-7.18	107.93	110.80
1	N	139	A	C4-C5-N7	7.17	114.29	110.70
1	N	551	U	N1-C2-N3	-7.17	110.59	114.90
1	N	784	A	N9-C4-C5	7.17	108.67	105.80
1	N	804	U	O4'-C1'-N1	7.17	113.94	108.20
1	N	704	A	N1-C2-N3	7.17	132.89	129.30
1	N	1069	C	C5-C6-N1	7.17	124.59	121.00
1	N	1190	G	O4'-C1'-N9	7.17	113.94	108.20
1	N	319	G	C5-C6-O6	-7.17	124.30	128.60
1	N	523	A	C4-C5-C6	7.17	120.58	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	100	G	N1-C6-O6	7.17	124.20	119.90
1	N	219	U	N3-C4-C5	7.17	118.90	114.60
1	N	373	A	P-O5'-C5'	-7.17	109.43	120.90
1	N	808	C	C6-N1-C2	7.17	123.17	120.30
1	N	1347	G	N1-C6-O6	7.17	124.20	119.90
1	N	1250	A	O4'-C1'-N9	7.17	113.93	108.20
1	N	161	A	C5'-C4'-C3'	7.16	127.46	116.00
1	N	391	G	O4'-C1'-N9	7.16	113.93	108.20
1	N	730	G	N9-C4-C5	7.16	108.27	105.40
1	N	1096	C	C6-N1-C2	7.16	123.17	120.30
1	N	1428	A	C6-C5-N7	-7.16	127.29	132.30
1	N	710	G	C8-N9-C4	-7.16	103.53	106.40
1	N	831	A	N1-C2-N3	7.16	132.88	129.30
1	N	901	A	N1-C6-N6	7.16	122.90	118.60
1	N	1289	A	C8-N9-C4	-7.16	102.94	105.80
1	N	228	A	C4-C5-C6	7.16	120.58	117.00
1	N	926	G	C8-N9-C4	7.16	109.26	106.40
1	N	876	C	O4'-C1'-N1	7.16	113.92	108.20
1	N	451	A	N7-C8-N9	-7.16	110.22	113.80
1	N	481	G	C6-C5-N7	-7.16	126.11	130.40
1	N	1248	A	C5-N7-C8	7.16	107.48	103.90
1	N	1262	C	P-O3'-C3'	-7.16	111.11	119.70
1	N	28	A	C5-C6-N6	-7.15	117.98	123.70
1	N	161	A	N7-C8-N9	7.15	117.38	113.80
1	N	220	G	C5'-C4'-O4'	7.15	117.68	109.10
1	N	840	C	C6-N1-C1'	-7.15	112.22	120.80
1	N	1031	C	P-O3'-C3'	-7.15	111.12	119.70
1	N	1225	A	C5-C6-N1	-7.15	114.12	117.70
1	N	220	G	C5-C6-O6	-7.15	124.31	128.60
1	N	861	G	C8-N9-C4	-7.15	103.54	106.40
1	N	179	A	N1-C6-N6	7.15	122.89	118.60
1	N	901	A	C8-N9-C4	-7.15	102.94	105.80
1	N	413	G	C8-N9-C1'	-7.15	117.71	127.00
1	N	781	A	C4-C5-N7	-7.15	107.13	110.70
1	N	1317	C	N3-C4-N4	7.15	123.00	118.00
1	N	1325	C	O4'-C1'-N1	7.15	113.92	108.20
1	N	97	G	C4-C5-N7	-7.14	107.94	110.80
1	N	248	C	P-O3'-C3'	-7.14	111.13	119.70
1	N	534	U	O4'-C4'-C3'	-7.14	96.86	104.00
1	N	1132	C	N3-C4-N4	7.14	123.00	118.00
1	N	1169	A	C8-N9-C4	-7.14	102.94	105.80
1	N	1297	G	N7-C8-N9	7.14	116.67	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	708	C	N3-C4-N4	7.14	123.00	118.00
1	N	774	G	C2-N3-C4	7.14	115.47	111.90
1	N	840	C	C5-C6-N1	7.14	124.57	121.00
1	N	864	A	O4'-C1'-N9	7.14	113.91	108.20
1	N	1193	G	C4-C5-C6	7.14	123.09	118.80
1	N	1277	C	N3-C4-N4	7.14	123.00	118.00
1	N	1316	G	C3'-C2'-C1'	-7.14	95.79	101.50
1	N	1183	U	N1-C2-N3	7.14	119.19	114.90
1	N	1459	G	O4'-C1'-N9	7.14	113.91	108.20
1	N	421	U	N3-C4-O4	7.14	124.40	119.40
1	N	523	A	C5-N7-C8	-7.14	100.33	103.90
1	N	988	G	C5-C6-O6	-7.14	124.32	128.60
1	N	1446	A	C3'-C2'-C1'	-7.14	95.79	101.50
1	N	37	U	C5-C4-O4	-7.14	121.62	125.90
1	N	10	A	OP1-P-OP2	-7.14	108.89	119.60
1	N	715	A	P-O3'-C3'	7.14	128.26	119.70
1	N	1082	A	N9-C4-C5	7.13	108.65	105.80
1	N	8	A	C5-C6-N1	-7.13	114.13	117.70
1	N	633	G	C6-N1-C2	-7.13	120.82	125.10
1	N	1024	G	C6-C5-N7	-7.13	126.12	130.40
1	N	1096	C	N3-C4-N4	7.13	122.99	118.00
1	N	1099	G	C5-C6-O6	-7.13	124.32	128.60
1	N	506	G	C5-C6-O6	-7.13	124.32	128.60
1	N	484	G	C5-C6-N1	-7.13	107.94	111.50
1	N	659	U	C3'-C2'-C1'	-7.13	95.80	101.50
1	N	366	A	N7-C8-N9	7.13	117.36	113.80
1	N	799	G	C5-C6-N1	7.13	115.06	111.50
1	N	1116	U	C5-C4-O4	7.13	130.18	125.90
1	N	1133	G	C5-C6-O6	-7.13	124.32	128.60
1	N	123	U	O4'-C1'-N1	7.12	113.90	108.20
1	N	1276	G	C2-N3-C4	-7.12	108.34	111.90
1	N	1348	U	C5'-C4'-O4'	-7.12	100.55	109.10
1	N	1408	A	N3-C4-C5	-7.12	121.81	126.80
1	N	337	G	C4-C5-C6	7.12	123.07	118.80
1	N	821	G	C6-N1-C2	7.12	129.38	125.10
1	N	1127	G	P-O3'-C3'	-7.12	111.15	119.70
1	N	1274	A	O4'-C1'-N9	7.12	113.90	108.20
1	N	781	A	C2-N3-C4	-7.12	107.04	110.60
1	N	1312	G	N1-C2-N3	-7.12	119.63	123.90
1	N	68	G	C5-C6-O6	-7.12	124.33	128.60
1	N	1446	A	C5'-C4'-C3'	-7.12	104.61	116.00
1	N	1514	G	P-O3'-C3'	7.12	128.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	262	A	C3'-C2'-C1'	7.12	107.19	101.50
1	N	449	G	C4-C5-N7	7.12	113.65	110.80
1	N	451	A	N9-C4-C5	-7.12	102.95	105.80
1	N	542	G	C8-N9-C4	7.12	109.25	106.40
1	N	187	G	N1-C2-N3	-7.11	119.63	123.90
1	N	210	C	N1-C2-O2	-7.11	114.63	118.90
1	N	763	G	N7-C8-N9	7.11	116.66	113.10
1	N	96	U	C5-C6-N1	7.11	126.26	122.70
1	N	296	U	C6-N1-C2	-7.11	116.73	121.00
1	N	447	G	C6-C5-N7	-7.11	126.13	130.40
1	N	990	C	N3-C4-C5	-7.11	119.06	121.90
1	N	74	A	P-O3'-C3'	7.11	128.23	119.70
1	N	770	C	N3-C4-N4	7.11	122.97	118.00
1	N	858	G	O4'-C1'-C2'	-7.11	98.69	105.80
1	N	1110	A	P-O3'-C3'	7.11	128.23	119.70
1	N	1451	U	N3-C4-O4	7.11	124.38	119.40
1	N	32	A	C6-N1-C2	7.11	122.86	118.60
1	N	442	G	N1-C2-N2	7.11	122.59	116.20
1	N	1228	C	N3-C4-N4	7.11	122.97	118.00
1	N	825	A	C8-N9-C4	-7.10	102.96	105.80
1	N	73	C	C5-C6-N1	7.10	124.55	121.00
1	N	736	C	C4'-C3'-C2'	-7.10	95.50	102.60
1	N	896	C	C5'-C4'-O4'	7.10	117.62	109.10
1	N	1247	U	C6-N1-C2	7.10	125.26	121.00
1	N	136	C	N3-C4-N4	7.10	122.97	118.00
1	N	672	U	C5'-C4'-C3'	-7.10	104.64	116.00
1	N	688	G	O4'-C1'-N9	7.10	113.88	108.20
1	N	853	C	O4'-C1'-N1	7.10	113.88	108.20
1	N	1156	G	C5'-C4'-O4'	-7.10	100.58	109.10
1	N	131	A	C4-C5-C6	7.10	120.55	117.00
1	N	332	G	C6-C5-N7	-7.10	126.14	130.40
1	N	387	U	C5-C4-O4	-7.10	121.64	125.90
1	N	539	A	C5-N7-C8	-7.10	100.35	103.90
1	N	1167	A	P-O3'-C3'	-7.10	111.18	119.70
1	N	1021	A	C6-C5-N7	-7.10	127.33	132.30
1	N	117	G	N1-C2-N2	-7.09	109.82	116.20
1	N	260	G	N3-C2-N2	7.09	124.87	119.90
1	N	1020	G	N3-C2-N2	7.09	124.87	119.90
1	N	1373	G	C5-C6-N1	-7.09	107.95	111.50
1	N	99	C	C2-N3-C4	7.09	123.45	119.90
1	N	511	C	C5-C6-N1	-7.09	117.45	121.00
1	N	1213	A	N9-C4-C5	7.09	108.64	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1228	C	C6-N1-C1'	-7.09	112.29	120.80
1	N	181	A	C4-C5-C6	7.09	120.55	117.00
1	N	211	G	O4'-C1'-N9	7.09	113.87	108.20
1	N	462	G	O4'-C1'-N9	7.09	113.87	108.20
1	N	1373	G	N7-C8-N9	-7.09	109.56	113.10
1	N	1406	U	C6-N1-C2	-7.09	116.75	121.00
1	N	99	C	N1-C2-N3	-7.09	114.24	119.20
1	N	580	C	N3-C4-C5	-7.09	119.06	121.90
1	N	1118	U	C2-N3-C4	7.09	131.25	127.00
1	N	1489	G	C5-C6-N1	-7.09	107.96	111.50
1	N	511	C	P-O5'-C5'	-7.09	109.56	120.90
1	N	1458	G	P-O5'-C5'	7.09	132.24	120.90
1	N	619	U	N3-C4-C5	-7.08	110.35	114.60
1	N	835	U	N1-C2-O2	-7.08	117.84	122.80
1	N	72	A	C2-N3-C4	-7.08	107.06	110.60
1	N	1171	A	O4'-C1'-N9	7.08	113.86	108.20
1	N	292	G	C6-C5-N7	-7.08	126.15	130.40
1	N	812	G	O3'-P-O5'	-7.08	90.55	104.00
1	N	207	C	O4'-C1'-C2'	-7.08	98.72	105.80
1	N	1024	G	C2-N3-C4	7.08	115.44	111.90
1	N	1435	G	C5-N7-C8	-7.08	100.76	104.30
1	N	22	G	N3-C4-C5	-7.07	125.06	128.60
1	N	530	G	N7-C8-N9	7.07	116.64	113.10
1	N	700	G	N3-C4-N9	7.07	130.24	126.00
1	N	911	U	N1-C2-O2	-7.07	117.85	122.80
1	N	1324	A	O4'-C1'-N9	7.07	113.86	108.20
1	N	170	U	O5'-P-OP2	7.07	119.18	110.70
1	N	525	C	N3-C4-N4	7.07	122.95	118.00
1	N	610	U	N1-C2-N3	7.07	119.14	114.90
1	N	1222	G	C4-C5-N7	-7.07	107.97	110.80
1	N	1379	G	O4'-C1'-N9	7.07	113.86	108.20
1	N	10	A	C3'-C2'-C1'	-7.07	95.84	101.50
1	N	97	G	P-O5'-C5'	7.07	132.21	120.90
1	N	854	U	C4'-C3'-C2'	-7.07	95.53	102.60
1	N	1307	U	O4'-C1'-N1	7.07	113.86	108.20
1	N	228	A	C5-N7-C8	-7.07	100.37	103.90
1	N	574	A	N3-C4-N9	7.07	133.05	127.40
1	N	579	A	C6-C5-N7	-7.07	127.35	132.30
1	N	655	A	C5-C6-N6	-7.07	118.05	123.70
1	N	959	A	C4-C5-C6	7.07	120.53	117.00
1	N	330	C	O4'-C1'-N1	7.07	113.85	108.20
1	N	462	G	C2-N3-C4	7.07	115.43	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	495	A	O4'-C1'-N9	7.07	113.85	108.20
1	N	836	G	C6-C5-N7	-7.07	126.16	130.40
1	N	1392	G	C8-N9-C4	-7.07	103.57	106.40
1	N	1443	C	N3-C4-N4	7.07	122.95	118.00
1	N	50	A	O4'-C1'-N9	7.06	113.85	108.20
1	N	186	C	C6-N1-C2	7.06	123.13	120.30
1	N	534	U	C2-N1-C1'	7.06	126.18	117.70
1	N	669	G	C5-C6-O6	-7.06	124.36	128.60
1	N	173	U	N1-C1'-C2'	7.06	123.18	114.00
1	N	613	C	N3-C4-N4	7.06	122.94	118.00
1	N	635	A	C5-C6-N1	-7.06	114.17	117.70
1	N	652	U	C5'-C4'-C3'	-7.06	104.70	116.00
1	N	938	A	C2-N3-C4	-7.06	107.07	110.60
1	N	1210	C	N1-C2-O2	7.06	123.14	118.90
1	N	538	G	N3-C2-N2	7.06	124.84	119.90
1	N	599	C	N1-C2-O2	-7.06	114.66	118.90
1	N	1312	G	C6-C5-N7	-7.06	126.16	130.40
1	N	890	G	C6-N1-C2	-7.06	120.86	125.10
1	N	346	G	C5'-C4'-C3'	-7.06	104.71	116.00
1	N	849	G	C5-N7-C8	-7.06	100.77	104.30
1	N	1021	A	C8-N9-C4	-7.06	102.98	105.80
1	N	1176	A	C5-N7-C8	7.06	107.43	103.90
1	N	138	G	O4'-C1'-N9	7.06	113.84	108.20
1	N	1204	A	C4-C5-C6	7.06	120.53	117.00
1	N	381	C	O4'-C1'-N1	7.05	113.84	108.20
1	N	24	U	C4-C5-C6	-7.05	115.47	119.70
1	N	389	A	C5-C6-N6	-7.05	118.06	123.70
1	N	985	C	C5-C4-N4	-7.05	115.26	120.20
1	N	581	G	C5-N7-C8	-7.05	100.78	104.30
1	N	750	C	C2-N3-C4	-7.05	116.37	119.90
1	N	1199	U	C3'-C2'-C1'	7.05	107.14	101.50
1	N	1332	A	C5'-C4'-O4'	-7.05	100.64	109.10
1	N	66	A	C5-C6-N6	-7.05	118.06	123.70
1	N	363	A	C4-C5-N7	7.05	114.22	110.70
1	N	208	U	P-O3'-C3'	7.05	128.16	119.70
1	N	398	U	N1-C2-O2	-7.05	117.87	122.80
1	N	957	U	C2-N1-C1'	-7.05	109.24	117.70
1	N	427	U	N1-C2-O2	-7.05	117.87	122.80
1	N	591	U	C3'-C2'-C1'	7.05	107.14	101.50
1	N	740	U	N1-C2-N3	-7.05	110.67	114.90
1	N	829	G	C5-C6-N1	-7.05	107.98	111.50
1	N	1055	A	C5-C6-N1	-7.05	114.18	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1147	C	C2-N3-C4	7.05	123.42	119.90
1	N	208	U	P-O5'-C5'	-7.04	109.63	120.90
1	N	354	G	C6-N1-C2	7.04	129.33	125.10
1	N	934	C	C6-N1-C1'	-7.04	112.35	120.80
1	N	1178	G	C5-C6-N1	-7.04	107.98	111.50
1	N	481	G	N3-C4-C5	-7.04	125.08	128.60
1	N	537	G	C8-N9-C4	7.04	109.22	106.40
1	N	1289	A	C5-C6-N1	-7.04	114.18	117.70
1	N	1115	U	P-O5'-C5'	7.04	132.16	120.90
1	N	243	A	C2-N3-C4	-7.04	107.08	110.60
1	N	687	A	C4-C5-C6	7.04	120.52	117.00
1	N	943	U	N1-C2-N3	7.04	119.12	114.90
1	N	956	U	N3-C4-C5	-7.04	110.38	114.60
1	N	1270	G	C6-N1-C2	7.04	129.32	125.10
1	N	1515	G	N9-C1'-C2'	-7.04	104.26	112.00
1	N	99	C	O4'-C1'-N1	7.03	113.83	108.20
1	N	279	A	C5-C6-N1	-7.03	114.18	117.70
1	N	730	G	P-O3'-C3'	7.03	128.14	119.70
1	N	1103	C	C6-N1-C2	7.03	123.11	120.30
1	N	1116	U	N1-C2-N3	-7.03	110.68	114.90
1	N	763	G	C5'-C4'-C3'	-7.03	104.75	116.00
1	N	919	A	O4'-C1'-N9	7.03	113.83	108.20
1	N	1036	A	C5-C6-N1	-7.03	114.18	117.70
1	N	272	C	P-O3'-C3'	7.03	128.14	119.70
1	N	712	A	C5-C6-N6	-7.03	118.08	123.70
1	N	752	G	C2'-C3'-O3'	7.03	124.97	109.50
1	N	1346	A	N1-C6-N6	7.03	122.82	118.60
1	N	1067	A	C5-C6-N6	-7.03	118.08	123.70
1	N	482	A	C5-C6-N6	-7.03	118.08	123.70
1	N	591	U	P-O3'-C3'	-7.03	111.27	119.70
1	N	701	U	O4'-C1'-N1	7.03	113.82	108.20
1	N	1340	A	C6-C5-N7	-7.03	127.38	132.30
1	N	1345	U	C1'-O4'-C4'	-7.03	104.28	109.90
1	N	826	C	N3-C4-C5	7.02	124.71	121.90
1	N	1005	A	C4-C5-C6	7.02	120.51	117.00
1	N	428	G	C5'-C4'-O4'	-7.02	100.67	109.10
1	N	1527	U	O4'-C1'-N1	7.02	113.82	108.20
1	N	521	G	C4-C5-N7	-7.02	107.99	110.80
1	N	642	A	C5-C6-N1	-7.02	114.19	117.70
1	N	913	A	C6-C5-N7	-7.02	127.39	132.30
1	N	940	C	O4'-C1'-N1	7.02	113.82	108.20
1	N	23	C	P-O5'-C5'	7.02	132.13	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1107	C	C4-C5-C6	7.02	120.91	117.40
1	N	1342	C	N3-C4-C5	-7.02	119.09	121.90
1	N	121	U	C6-N1-C2	-7.02	116.79	121.00
1	N	136	C	C2-N3-C4	7.02	123.41	119.90
1	N	238	A	P-O3'-C3'	-7.02	111.28	119.70
1	N	574	A	C5-C6-N6	-7.02	118.09	123.70
1	N	681	A	C4-C5-C6	7.02	120.51	117.00
1	N	148	G	C4-C5-N7	7.02	113.61	110.80
1	N	495	A	C4-C5-C6	7.01	120.51	117.00
1	N	966	G	O4'-C1'-N9	7.01	113.81	108.20
1	N	518	C	C2-N3-C4	7.01	123.41	119.90
1	N	541	G	O4'-C1'-N9	7.01	113.81	108.20
1	N	83	C	N3-C4-N4	7.01	122.91	118.00
1	N	685	G	C4-C5-N7	7.01	113.61	110.80
1	N	878	A	C5-C6-N6	-7.01	118.09	123.70
1	N	1185	G	O4'-C4'-C3'	-7.01	96.99	104.00
1	N	925	G	C4-C5-N7	7.01	113.60	110.80
1	N	10	A	N3-C4-C5	-7.01	121.90	126.80
1	N	58	C	C6-N1-C2	-7.01	117.50	120.30
1	N	377	G	N9-C1'-C2'	-7.01	104.29	112.00
1	N	383	A	C4-C5-C6	7.01	120.50	117.00
1	N	500	G	N3-C2-N2	7.01	124.80	119.90
1	N	686	U	C3'-C2'-C1'	-7.01	95.89	101.50
1	N	1521	C	O4'-C1'-N1	7.01	113.81	108.20
1	N	1458	G	C5'-C4'-O4'	7.00	117.51	109.10
1	N	96	U	O5'-C5'-C4'	-7.00	98.39	111.70
1	N	179	A	C6-C5-N7	-7.00	127.40	132.30
1	N	660	C	C4'-C3'-C2'	-7.00	95.60	102.60
1	N	730	G	O4'-C1'-N9	7.00	113.80	108.20
1	N	1497	G	C4-C5-N7	-7.00	108.00	110.80
1	N	256	U	N3-C2-O2	7.00	127.10	122.20
1	N	1521	C	C6-N1-C2	-7.00	117.50	120.30
1	N	128	G	C4-C5-N7	-7.00	108.00	110.80
1	N	238	A	C4'-C3'-C2'	-7.00	95.60	102.60
1	N	545	C	C6-N1-C2	-7.00	117.50	120.30
1	N	1419	G	N1-C2-N3	-7.00	119.70	123.90
1	N	261	U	C2-N3-C4	-7.00	122.80	127.00
1	N	952	U	C6-N1-C1'	-7.00	111.41	121.20
1	N	1175	G	C5-C6-O6	-7.00	124.40	128.60
1	N	1222	G	C5-C6-O6	-7.00	124.40	128.60
1	N	1369	C	N3-C4-N4	7.00	122.90	118.00
1	N	886	G	N3-C4-N9	7.00	130.20	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1022	A	C8-N9-C4	-7.00	103.00	105.80
1	N	1448	C	C4-C5-C6	-7.00	113.90	117.40
1	N	160	A	C6-C5-N7	-6.99	127.41	132.30
1	N	435	A	C5-N7-C8	6.99	107.40	103.90
1	N	614	C	C5-C4-N4	-6.99	115.30	120.20
1	N	957	U	C5'-C4'-C3'	6.99	127.19	116.00
1	N	1249	C	N1-C2-O2	-6.99	114.70	118.90
1	N	1517	G	C8-N9-C4	-6.99	103.60	106.40
1	N	140	U	C2'-C3'-O3'	6.99	124.89	113.70
1	N	220	G	C8-N9-C4	-6.99	103.60	106.40
1	N	362	G	N3-C4-C5	-6.99	125.11	128.60
1	N	1204	A	O4'-C1'-N9	6.99	113.79	108.20
1	N	370	C	O4'-C1'-N1	6.99	113.79	108.20
1	N	427	U	O4'-C1'-N1	6.99	113.79	108.20
1	N	664	G	O4'-C1'-N9	6.99	113.79	108.20
1	N	969	A	O4'-C1'-N9	6.99	113.79	108.20
1	N	1018	G	N3-C4-C5	-6.99	125.11	128.60
1	N	1461	G	C2-N3-C4	6.99	115.39	111.90
1	N	1146	A	C5'-C4'-C3'	6.99	127.18	116.00
1	N	206	C	O4'-C1'-N1	6.99	113.79	108.20
1	N	568	G	O4'-C1'-N9	6.99	113.79	108.20
1	N	655	A	C4-C5-C6	6.99	120.49	117.00
1	N	721	G	N1-C2-N3	-6.99	119.71	123.90
1	N	821	G	N1-C6-O6	6.99	124.09	119.90
1	N	872	A	C5-C6-N1	-6.99	114.21	117.70
1	N	1055	A	C4-C5-N7	-6.99	107.21	110.70
1	N	705	G	N3-C2-N2	6.98	124.79	119.90
1	N	1206	G	C4-C5-N7	6.98	113.59	110.80
1	N	1296	C	N3-C4-N4	6.98	122.89	118.00
1	N	287	U	C5-C6-N1	6.98	126.19	122.70
1	N	62	U	N3-C2-O2	6.98	127.08	122.20
1	N	807	A	C8-N9-C4	-6.98	103.01	105.80
1	N	923	A	N1-C2-N3	-6.98	125.81	129.30
1	N	412	A	C5-C6-N1	-6.98	114.21	117.70
1	N	769	G	C4'-C3'-C2'	-6.98	95.62	102.60
1	N	72	A	C4-C5-N7	-6.98	107.21	110.70
1	N	1099	G	N3-C2-N2	6.98	124.78	119.90
1	N	1210	C	C2-N3-C4	6.98	123.39	119.90
1	N	204	G	C4-C5-C6	6.97	122.98	118.80
1	N	885	G	N1-C2-N3	-6.97	119.72	123.90
1	N	1072	G	P-O3'-C3'	6.97	128.07	119.70
1	N	1239	A	P-O3'-C3'	6.97	128.07	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	666	G	C8-N9-C4	6.97	109.19	106.40
1	N	971	G	N9-C4-C5	-6.97	102.61	105.40
1	N	459	A	C5'-C4'-C3'	-6.97	104.85	116.00
1	N	481	G	C8-N9-C4	-6.97	103.61	106.40
1	N	495	A	N1-C6-N6	6.96	122.78	118.60
1	N	941	G	N9-C4-C5	-6.96	102.61	105.40
1	N	11	G	C3'-C2'-C1'	6.96	107.07	101.50
1	N	528	C	C3'-C2'-C1'	-6.96	95.93	101.50
1	N	1200	C	C3'-C2'-C1'	6.96	107.07	101.50
1	N	1437	A	C5-C6-N1	-6.96	114.22	117.70
1	N	1472	U	C4-C5-C6	6.96	123.88	119.70
1	N	469	C	N1-C2-O2	-6.96	114.72	118.90
1	N	692	U	N1-C2-O2	-6.96	117.93	122.80
1	N	847	G	C6-C5-N7	-6.96	126.22	130.40
1	N	926	G	C2-N3-C4	6.96	115.38	111.90
1	N	779	C	C5-C4-N4	-6.96	115.33	120.20
1	N	223	A	C2-N3-C4	-6.96	107.12	110.60
1	N	300	A	C5-N7-C8	6.96	107.38	103.90
1	N	756	C	N3-C4-N4	6.96	122.87	118.00
1	N	302	G	P-O3'-C3'	-6.96	111.35	119.70
1	N	537	G	C6-C5-N7	-6.96	126.23	130.40
1	N	540	G	C4-C5-N7	-6.96	108.02	110.80
1	N	371	A	C5-N7-C8	6.96	107.38	103.90
1	N	1511	G	N3-C2-N2	6.95	124.77	119.90
1	N	576	C	C5'-C4'-O4'	6.95	117.44	109.10
1	N	1018	G	N1-C2-N3	-6.95	119.73	123.90
1	N	1021	A	O4'-C1'-N9	6.95	113.76	108.20
1	N	934	C	O4'-C1'-N1	6.95	113.76	108.20
1	N	996	A	C5-C6-N1	-6.95	114.22	117.70
1	N	1504	G	P-O3'-C3'	6.95	128.04	119.70
1	N	354	G	C4-C5-C6	6.95	122.97	118.80
1	N	534	U	P-O5'-C5'	6.95	132.02	120.90
1	N	612	C	N1-C2-N3	-6.95	114.34	119.20
1	N	944	G	P-O3'-C3'	-6.95	111.36	119.70
1	N	1134	G	N9-C4-C5	6.95	108.18	105.40
1	N	1164	G	N3-C4-N9	-6.95	121.83	126.00
1	N	369	G	C6-N1-C2	-6.95	120.93	125.10
1	N	804	U	N1-C2-N3	6.95	119.07	114.90
1	N	670	G	C5-C6-N1	6.94	114.97	111.50
1	N	907	A	C5-C6-N6	-6.94	118.14	123.70
1	N	595	A	C5-C6-N1	-6.94	114.23	117.70
1	N	923	A	N9-C4-C5	-6.94	103.02	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1275	A	C5-C6-N1	-6.94	114.23	117.70
1	N	1389	C	N3-C2-O2	6.94	126.76	121.90
1	N	61	G	N1-C2-N3	-6.94	119.74	123.90
1	N	821	G	C8-N9-C4	-6.94	103.62	106.40
1	N	1413	A	C5-C6-N6	-6.94	118.15	123.70
1	N	256	U	P-O5'-C5'	6.94	132.00	120.90
1	N	192	A	C2-N3-C4	6.94	114.07	110.60
1	N	237	G	O4'-C1'-N9	6.94	113.75	108.20
1	N	1501	C	N3-C2-O2	6.94	126.76	121.90
1	N	140	U	N3-C4-O4	6.94	124.25	119.40
1	N	484	G	C5-C6-O6	-6.94	124.44	128.60
1	N	1091	U	P-O3'-C3'	6.94	128.02	119.70
1	N	72	A	C4'-C3'-C2'	-6.93	95.67	102.60
1	N	1337	G	O4'-C1'-N9	6.93	113.75	108.20
1	N	10	A	C8-N9-C4	-6.93	103.03	105.80
1	N	788	U	C5-C4-O4	-6.93	121.74	125.90
1	N	1464	U	C5-C6-N1	6.93	126.17	122.70
1	N	859	G	N1-C6-O6	6.93	124.06	119.90
1	N	1407	C	N1-C1'-C2'	-6.93	104.38	112.00
1	N	243	A	C5-C6-N1	-6.93	114.24	117.70
1	N	299	G	C4-C5-N7	6.93	113.57	110.80
1	N	401	C	C4-C5-C6	6.93	120.86	117.40
1	N	448	A	O4'-C1'-N9	6.93	113.74	108.20
1	N	720	C	C4'-C3'-C2'	-6.93	95.67	102.60
1	N	1186	G	C5-C6-N1	-6.93	108.03	111.50
1	N	580	C	P-O5'-C5'	6.93	131.98	120.90
1	N	70	U	C5-C4-O4	-6.93	121.74	125.90
1	N	139	A	P-O5'-C5'	6.93	131.98	120.90
1	N	289	G	C6-C5-N7	-6.93	126.24	130.40
1	N	1035	A	C3'-C2'-C1'	-6.93	95.96	101.50
1	N	1431	A	C4-C5-C6	6.92	120.46	117.00
1	N	17	U	C5-C4-O4	-6.92	121.75	125.90
1	N	344	A	P-O5'-C5'	6.92	131.98	120.90
1	N	444	G	N1-C2-N3	-6.92	119.75	123.90
1	N	456	A	C4-C5-N7	-6.92	107.24	110.70
1	N	512	U	C2-N3-C4	6.92	131.15	127.00
1	N	294	U	N1-C2-N3	6.92	119.05	114.90
1	N	524	G	C6-N1-C2	-6.92	120.95	125.10
1	N	537	G	N3-C2-N2	6.92	124.75	119.90
1	N	744	C	C6-N1-C2	-6.92	117.53	120.30
1	N	1335	U	N3-C4-C5	-6.92	110.45	114.60
1	N	94	G	N3-C4-C5	-6.92	125.14	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	270	A	C6-C5-N7	-6.92	127.46	132.30
1	N	357	G	N3-C2-N2	6.92	124.74	119.90
1	N	398	U	C5-C4-O4	6.92	130.05	125.90
1	N	1361	G	C2-N3-C4	-6.92	108.44	111.90
1	N	966	G	C2-N3-C4	6.92	115.36	111.90
1	N	1056	U	C5-C6-N1	6.92	126.16	122.70
1	N	1494	G	P-O5'-C5'	6.92	131.97	120.90
1	N	94	G	N9-C4-C5	6.92	108.17	105.40
1	N	127	G	N1-C2-N3	-6.92	119.75	123.90
1	N	488	C	C2-N3-C4	6.92	123.36	119.90
1	N	772	U	C2-N3-C4	-6.92	122.85	127.00
1	N	542	G	C4'-C3'-C2'	-6.92	95.69	102.60
1	N	934	C	N3-C4-N4	6.92	122.84	118.00
1	N	548	G	C8-N9-C4	-6.91	103.63	106.40
1	N	514	C	C5-C4-N4	-6.91	115.36	120.20
1	N	633	G	C2-N3-C4	6.91	115.36	111.90
1	N	25	C	N3-C4-C5	-6.91	119.14	121.90
1	N	98	A	C5'-C4'-C3'	-6.91	104.94	116.00
1	N	140	U	C1'-O4'-C4'	6.91	115.43	109.90
1	N	253	A	C5-C6-N6	-6.91	118.17	123.70
1	N	978	A	N7-C8-N9	-6.91	110.35	113.80
1	N	1062	U	C2-N3-C4	6.91	131.15	127.00
1	N	1290	G	C5-C6-N1	-6.91	108.05	111.50
1	N	1347	G	O4'-C1'-N9	6.91	113.73	108.20
1	N	902	G	C6-N1-C2	6.91	129.24	125.10
1	N	926	G	C4-C5-C6	6.91	122.94	118.80
1	N	963	G	C8-N9-C4	-6.91	103.64	106.40
1	N	1102	A	C8-N9-C4	-6.91	103.04	105.80
1	N	1497	G	C8-N9-C4	6.91	109.16	106.40
1	N	803	G	N1-C2-N3	-6.91	119.76	123.90
1	N	885	G	C1'-O4'-C4'	6.91	115.42	109.90
1	N	1421	G	C5-C6-O6	-6.91	124.46	128.60
1	N	1531	A	C4-C5-C6	6.91	120.45	117.00
1	N	79	G	C5-C6-N1	6.90	114.95	111.50
1	N	1080	A	N1-C6-N6	6.90	122.74	118.60
1	N	1138	G	C5-C6-O6	-6.90	124.46	128.60
1	N	367	U	C5-C4-O4	-6.90	121.76	125.90
1	N	514	C	C5-C6-N1	6.90	124.45	121.00
1	N	618	C	C2-N3-C4	6.90	123.35	119.90
1	N	1307	U	N3-C4-O4	6.90	124.23	119.40
1	N	351	G	C8-N9-C4	6.90	109.16	106.40
1	N	756	C	C4-C5-C6	6.90	120.85	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	979	C	C5-C6-N1	6.90	124.45	121.00
1	N	1314	C	P-O3'-C3'	-6.90	111.42	119.70
1	N	1461	G	N1-C2-N2	6.90	122.41	116.20
1	N	128	G	N3-C4-C5	-6.90	125.15	128.60
1	N	651	C	C6-N1-C1'	-6.90	112.52	120.80
1	N	754	C	N3-C4-N4	6.90	122.83	118.00
1	N	914	A	C5'-C4'-C3'	-6.90	104.96	116.00
1	N	928	G	N7-C8-N9	6.90	116.55	113.10
1	N	318	G	N1-C2-N3	-6.90	119.76	123.90
1	N	616	G	N1-C2-N3	-6.90	119.76	123.90
1	N	617	G	C6-C5-N7	-6.90	126.26	130.40
1	N	848	C	C5-C6-N1	6.90	124.45	121.00
1	N	913	A	C4-C5-N7	6.90	114.15	110.70
1	N	1476	A	N1-C2-N3	6.90	132.75	129.30
1	N	581	G	N9-C4-C5	-6.89	102.64	105.40
1	N	916	U	C5'-C4'-O4'	6.89	117.37	109.10
1	N	1202	U	C5-C6-N1	6.89	126.15	122.70
1	N	22	G	N9-C4-C5	6.89	108.16	105.40
1	N	666	G	N7-C8-N9	-6.89	109.65	113.10
1	N	724	G	N1-C2-N3	-6.89	119.76	123.90
1	N	778	G	N3-C2-N2	6.89	124.72	119.90
1	N	61	G	C8-N9-C4	-6.89	103.64	106.40
1	N	216	U	C4'-C3'-C2'	-6.89	95.71	102.60
1	N	469	C	N3-C4-N4	6.89	122.82	118.00
1	N	530	G	C5'-C4'-O4'	6.89	117.37	109.10
1	N	929	G	C6-C5-N7	-6.89	126.27	130.40
1	N	1102	A	N7-C8-N9	6.89	117.25	113.80
1	N	1186	G	N9-C1'-C2'	-6.89	104.42	112.00
1	N	1276	G	P-O3'-C3'	-6.89	111.43	119.70
1	N	1418	A	C4-C5-N7	-6.89	107.26	110.70
1	N	541	G	C5-C6-O6	-6.89	124.47	128.60
1	N	715	A	C5-C6-N6	-6.89	118.19	123.70
1	N	1507	A	C5-N7-C8	6.89	107.34	103.90
1	N	86	G	C5-N7-C8	6.89	107.74	104.30
1	N	824	G	C4-C5-C6	6.89	122.93	118.80
1	N	970	C	C2-N1-C1'	6.89	126.37	118.80
1	N	41	G	N1-C2-N2	6.88	122.40	116.20
1	N	52	C	C5'-C4'-O4'	-6.88	100.84	109.10
1	N	459	A	C5'-C4'-O4'	6.88	117.36	109.10
1	N	6	G	N3-C4-N9	6.88	130.13	126.00
1	N	43	C	C5-C4-N4	-6.88	115.38	120.20
1	N	760	G	N7-C8-N9	6.88	116.54	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	468	A	O4'-C1'-N9	6.88	113.70	108.20
1	N	886	G	C4-C5-N7	6.88	113.55	110.80
1	N	1068	G	N3-C2-N2	6.88	124.72	119.90
1	N	1319	A	C5-C6-N6	-6.88	118.19	123.70
1	N	192	A	C4-C5-N7	-6.88	107.26	110.70
1	N	518	C	O4'-C1'-N1	6.88	113.70	108.20
1	N	1354	U	C2-N1-C1'	-6.88	109.44	117.70
1	N	47	C	C3'-C2'-C1'	6.88	107.00	101.50
1	N	494	G	C5'-C4'-O4'	6.88	117.36	109.10
1	N	16	A	C6-C5-N7	-6.88	127.49	132.30
1	N	1057	G	C2-N3-C4	-6.88	108.46	111.90
1	N	1213	A	C6-C5-N7	-6.88	127.49	132.30
1	N	698	G	C6-C5-N7	-6.88	126.28	130.40
1	N	1392	G	C6-C5-N7	-6.88	126.28	130.40
1	N	322	C	N1-C2-O2	6.87	123.02	118.90
1	N	916	U	C5-C6-N1	6.87	126.14	122.70
1	N	1129	C	N3-C4-N4	6.87	122.81	118.00
1	N	1259	C	C2-N3-C4	6.87	123.34	119.90
1	N	1265	C	N3-C4-C5	-6.87	119.15	121.90
1	N	1075	U	N3-C2-O2	6.87	127.01	122.20
1	N	963	G	C4'-C3'-C2'	-6.87	95.73	102.60
1	N	1086	U	O5'-C5'-C4'	6.87	124.75	111.70
1	N	359	G	C5-C6-O6	-6.87	124.48	128.60
1	N	1005	A	C4-C5-N7	-6.87	107.27	110.70
1	N	280	C	N3-C4-N4	6.87	122.81	118.00
1	N	890	G	C4-N9-C1'	-6.87	117.58	126.50
1	N	1115	U	P-O3'-C3'	-6.86	111.47	119.70
1	N	1170	A	C5'-C4'-C3'	6.86	126.98	116.00
1	N	1235	U	N3-C4-C5	-6.86	110.48	114.60
1	N	60	A	N9-C4-C5	6.86	108.55	105.80
1	N	837	U	O4'-C1'-N1	6.86	113.69	108.20
1	N	1492	A	N7-C8-N9	6.86	117.23	113.80
1	N	168	G	N1-C2-N2	-6.86	110.03	116.20
1	N	266	G	N1-C2-N3	-6.86	119.79	123.90
1	N	771	G	P-O5'-C5'	6.86	131.87	120.90
1	N	1386	G	N3-C4-C5	6.86	132.03	128.60
1	N	402	G	C5-C6-O6	-6.86	124.49	128.60
1	N	738	C	C5-C6-N1	6.86	124.43	121.00
1	N	1128	C	C6-N1-C2	-6.86	117.56	120.30
1	N	530	G	C6-N1-C2	-6.85	120.99	125.10
1	N	753	A	N1-C2-N3	-6.85	125.87	129.30
1	N	860	A	C6-C5-N7	-6.85	127.50	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	109	A	O5'-P-OP2	-6.85	99.53	105.70
1	N	713	G	N3-C2-N2	6.85	124.70	119.90
1	N	927	G	N7-C8-N9	6.85	116.53	113.10
1	N	91	U	C4-C5-C6	6.85	123.81	119.70
1	N	157	U	N3-C2-O2	6.85	127.00	122.20
1	N	1069	C	C6-N1-C2	-6.85	117.56	120.30
1	N	1123	U	N3-C4-O4	6.85	124.19	119.40
1	N	1257	A	C8-N9-C4	-6.85	103.06	105.80
1	N	299	G	C5-C6-O6	-6.85	124.49	128.60
1	N	569	C	P-O5'-C5'	6.85	131.86	120.90
1	N	616	G	N9-C4-C5	6.85	108.14	105.40
1	N	945	G	O4'-C1'-N9	6.85	113.68	108.20
1	N	778	G	N1-C6-O6	6.84	124.01	119.90
1	N	670	G	C4-C5-C6	-6.84	114.69	118.80
1	N	1132	C	P-O5'-C5'	6.84	131.85	120.90
1	N	1397	C	C4-C5-C6	6.84	120.82	117.40
1	N	41	G	C4-C5-N7	6.84	113.53	110.80
1	N	644	U	N3-C4-O4	6.84	124.19	119.40
1	N	410	G	C6-C5-N7	-6.84	126.30	130.40
1	N	1377	A	C5-C6-N1	-6.84	114.28	117.70
1	N	533	A	N1-C6-N6	6.83	122.70	118.60
1	N	1214	C	P-O3'-C3'	-6.83	111.50	119.70
1	N	49	U	C5'-C4'-C3'	-6.83	105.07	116.00
1	N	431	A	C5-C6-N1	-6.83	114.28	117.70
1	N	188	C	N3-C4-C5	-6.83	119.17	121.90
1	N	1053	G	C5-N7-C8	-6.83	100.88	104.30
1	N	1178	G	C4-C5-C6	6.83	122.90	118.80
1	N	1400	C	C4-C5-C6	-6.83	113.98	117.40
1	N	314	C	C5-C4-N4	-6.83	115.42	120.20
1	N	1376	U	O4'-C1'-N1	6.83	113.66	108.20
1	N	537	G	O4'-C1'-N9	6.83	113.66	108.20
1	N	673	A	C5-C6-N1	-6.83	114.29	117.70
1	N	943	U	N3-C2-O2	-6.83	117.42	122.20
1	N	44	A	C4-C5-N7	-6.83	107.29	110.70
1	N	807	A	C5-C6-N6	-6.83	118.24	123.70
1	N	1475	G	OP1-P-OP2	-6.83	109.36	119.60
1	N	310	G	C5-C6-O6	-6.82	124.51	128.60
1	N	1379	G	C2-N3-C4	6.82	115.31	111.90
1	N	391	G	N1-C6-O6	6.82	123.99	119.90
1	N	1131	G	N9-C4-C5	-6.82	102.67	105.40
1	N	1232	U	C5-C4-O4	-6.82	121.81	125.90
1	N	15	G	O4'-C1'-N9	6.82	113.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	913	A	N1-C2-N3	-6.82	125.89	129.30
1	N	85	U	N3-C4-O4	6.82	124.17	119.40
1	N	3	A	C5-C6-N6	-6.82	118.25	123.70
1	N	582	C	N1-C2-O2	6.82	122.99	118.90
1	N	1018	G	C4-C5-C6	6.82	122.89	118.80
1	N	1039	G	N1-C2-N2	-6.82	110.06	116.20
1	N	1525	G	C6-N1-C2	6.82	129.19	125.10
1	N	575	G	C4-N9-C1'	-6.82	117.64	126.50
1	N	57	G	N9-C4-C5	-6.81	102.67	105.40
1	N	454	G	C6-C5-N7	-6.81	126.31	130.40
1	N	929	G	O4'-C1'-N9	6.81	113.65	108.20
1	N	1002	G	P-O3'-C3'	-6.81	111.52	119.70
1	N	1332	A	C5-N7-C8	-6.81	100.49	103.90
1	N	1463	U	C6-N1-C2	-6.81	116.91	121.00
1	N	19	A	N9-C4-C5	6.81	108.53	105.80
1	N	803	G	P-O5'-C5'	6.81	131.80	120.90
1	N	486	U	N1-C2-N3	6.81	118.99	114.90
1	N	437	U	C4-C5-C6	-6.81	115.61	119.70
1	N	527	G	O4'-C1'-N9	6.81	113.65	108.20
1	N	857	C	C5-C4-N4	-6.81	115.43	120.20
1	N	968	A	N7-C8-N9	-6.81	110.39	113.80
1	N	1396	A	N7-C8-N9	-6.81	110.39	113.80
1	N	253	A	P-O3'-C3'	-6.81	111.53	119.70
1	N	540	G	C4-C5-C6	6.81	122.89	118.80
1	N	580	C	O4'-C1'-N1	6.81	113.65	108.20
1	N	1092	A	C5-C6-N1	-6.81	114.30	117.70
1	N	359	G	N3-C4-N9	-6.81	121.92	126.00
1	N	147	G	OP1-P-OP2	-6.80	109.39	119.60
1	N	480	U	C6-N1-C2	-6.80	116.92	121.00
1	N	1255	G	N3-C4-C5	6.80	132.00	128.60
1	N	1261	A	C5-N7-C8	6.80	107.30	103.90
1	N	159	G	N3-C2-N2	6.80	124.66	119.90
1	N	340	U	N1-C2-N3	-6.80	110.82	114.90
1	N	183	C	O4'-C1'-N1	6.80	113.64	108.20
1	N	527	G	C2-N3-C4	6.80	115.30	111.90
1	N	656	G	C6-N1-C2	-6.80	121.02	125.10
1	N	982	U	C5-C4-O4	-6.80	121.82	125.90
1	N	1325	C	P-O3'-C3'	-6.80	111.54	119.70
1	N	1356	G	C6-C5-N7	-6.80	126.32	130.40
1	N	1462	C	C4'-C3'-C2'	-6.80	95.80	102.60
1	N	1463	U	N1-C2-O2	-6.80	118.04	122.80
1	N	1489	G	C4'-C3'-C2'	-6.80	95.80	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	531	U	C1'-O4'-C4'	-6.80	104.46	109.90
1	N	647	C	C6-N1-C1'	-6.80	112.64	120.80
1	N	725	G	N3-C2-N2	-6.80	115.14	119.90
1	N	1451	U	C6-N1-C2	-6.80	116.92	121.00
1	N	1502	A	C5-N7-C8	6.80	107.30	103.90
1	N	256	U	N1-C2-O2	-6.80	118.04	122.80
1	N	200	G	O4'-C4'-C3'	-6.80	97.20	104.00
1	N	403	C	C3'-C2'-C1'	-6.80	96.06	101.50
1	N	465	A	P-O5'-C5'	6.80	131.77	120.90
1	N	654	G	N3-C2-N2	6.80	124.66	119.90
1	N	1466	C	N3-C2-O2	-6.80	117.14	121.90
1	N	35	G	O4'-C1'-N9	6.79	113.64	108.20
1	N	202	G	N3-C4-N9	-6.79	121.92	126.00
1	N	870	U	P-O3'-C3'	-6.79	111.55	119.70
1	N	1178	G	C5-C6-O6	-6.79	124.52	128.60
1	N	102	G	C4-C5-C6	-6.79	114.72	118.80
1	N	408	A	O4'-C1'-N9	6.79	113.63	108.20
1	N	1081	A	C4-C5-C6	6.79	120.40	117.00
1	N	1346	A	O4'-C1'-N9	6.79	113.63	108.20
1	N	141	G	C5'-C4'-O4'	6.79	117.25	109.10
1	N	539	A	C2-N3-C4	-6.79	107.20	110.60
1	N	33	A	N9-C4-C5	6.79	108.52	105.80
1	N	600	A	C5-C6-N1	-6.79	114.31	117.70
1	N	613	C	C2-N1-C1'	6.79	126.27	118.80
1	N	1305	G	C6-C5-N7	-6.79	126.33	130.40
1	N	46	G	C4-C5-C6	6.79	122.87	118.80
1	N	415	A	N3-C4-N9	6.79	132.83	127.40
1	N	864	A	C5-C6-N6	-6.78	118.27	123.70
1	N	1173	U	N3-C2-O2	6.78	126.95	122.20
1	N	1134	G	N3-C4-N9	-6.78	121.93	126.00
1	N	116	A	C6-C5-N7	-6.78	127.55	132.30
1	N	185	U	C5-C6-N1	6.78	126.09	122.70
1	N	766	A	C5'-C4'-C3'	-6.78	105.15	116.00
1	N	49	U	P-O3'-C3'	-6.78	111.56	119.70
1	N	566	G	C4-C5-N7	6.78	113.51	110.80
1	N	801	U	C2-N3-C4	-6.78	122.93	127.00
1	N	765	G	N9-C4-C5	-6.78	102.69	105.40
1	N	932	C	C2-N3-C4	6.78	123.29	119.90
1	N	1304	G	N1-C6-O6	6.78	123.97	119.90
1	N	67	C	C4'-C3'-C2'	-6.78	95.82	102.60
1	N	1211	U	C5-C4-O4	6.78	129.97	125.90
1	N	114	U	C4'-C3'-C2'	-6.77	95.83	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1503	A	P-O3'-C3'	6.77	127.83	119.70
1	N	121	U	P-O3'-C3'	-6.77	111.57	119.70
1	N	187	G	C5-C6-O6	-6.77	124.54	128.60
1	N	188	C	O4'-C1'-N1	6.77	113.62	108.20
1	N	253	A	C4-C5-C6	6.77	120.39	117.00
1	N	458	U	C6-N1-C2	-6.77	116.94	121.00
1	N	763	G	C4'-C3'-C2'	-6.77	95.83	102.60
1	N	797	C	C6-N1-C2	-6.77	117.59	120.30
1	N	1481	U	C1'-O4'-C4'	6.77	115.32	109.90
1	N	776	G	C5-N7-C8	6.77	107.69	104.30
1	N	812	G	C2-N3-C4	6.77	115.28	111.90
1	N	1085	U	C2-N1-C1'	6.77	125.83	117.70
1	N	1227	A	C5'-C4'-O4'	6.77	117.22	109.10
1	N	1514	G	C5-C6-O6	-6.77	124.54	128.60
1	N	243	A	C6-C5-N7	-6.77	127.56	132.30
1	N	510	A	O4'-C1'-N9	6.77	113.61	108.20
1	N	324	G	P-O5'-C5'	6.77	131.73	120.90
1	N	498	A	C4-C5-N7	-6.77	107.32	110.70
1	N	919	A	C1'-O4'-C4'	-6.77	104.49	109.90
1	N	923	A	O4'-C1'-N9	6.77	113.61	108.20
1	N	1353	G	O4'-C1'-N9	6.77	113.61	108.20
1	N	643	C	N3-C4-C5	-6.76	119.19	121.90
1	N	1311	A	C4-C5-C6	6.76	120.38	117.00
1	N	511	C	C2-N3-C4	6.76	123.28	119.90
1	N	945	G	C6-N1-C2	6.76	129.16	125.10
1	N	1145	A	C5-N7-C8	6.76	107.28	103.90
1	N	1149	C	C1'-O4'-C4'	6.76	115.31	109.90
1	N	412	A	C5-N7-C8	6.76	107.28	103.90
1	N	220	G	N7-C8-N9	6.76	116.48	113.10
1	N	537	G	C4'-C3'-C2'	-6.76	95.84	102.60
1	N	1494	G	C6-C5-N7	-6.76	126.35	130.40
1	N	101	A	C5'-C4'-O4'	6.75	117.21	109.10
1	N	689	C	O4'-C1'-N1	6.75	113.60	108.20
1	N	1507	A	C6-N1-C2	6.75	122.65	118.60
1	N	504	C	N3-C4-C5	-6.75	119.20	121.90
1	N	800	G	O4'-C1'-N9	6.75	113.60	108.20
1	N	155	A	N1-C6-N6	6.75	122.65	118.60
1	N	926	G	C5-C6-N1	-6.75	108.12	111.50
1	N	995	C	O4'-C1'-N1	6.75	113.60	108.20
1	N	10	A	C6-C5-N7	-6.75	127.58	132.30
1	N	740	U	N1-C2-O2	6.75	127.52	122.80
1	N	954	G	C6-C5-N7	-6.75	126.35	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1410	A	O4'-C1'-N9	6.75	113.60	108.20
1	N	67	C	P-O3'-C3'	6.75	127.80	119.70
1	N	356	A	C6-C5-N7	-6.75	127.58	132.30
1	N	263	A	C5-C6-N1	-6.74	114.33	117.70
1	N	448	A	C8-N9-C4	-6.74	103.10	105.80
1	N	1030	U	C5-C6-N1	6.74	126.07	122.70
1	N	1324	A	C5-C6-N1	-6.74	114.33	117.70
1	N	522	C	N3-C4-N4	6.74	122.72	118.00
1	N	752	G	C5-C6-N1	-6.74	108.13	111.50
1	N	777	A	C5-C6-N6	-6.74	118.31	123.70
1	N	830	G	C6-C5-N7	-6.74	126.36	130.40
1	N	1059	C	C6-N1-C2	-6.74	117.60	120.30
1	N	1524	C	N3-C4-C5	-6.74	119.20	121.90
1	N	34	C	O4'-C4'-C3'	-6.74	97.26	104.00
1	N	42	G	C2-N3-C4	6.74	115.27	111.90
1	N	609	A	O4'-C1'-N9	6.74	113.59	108.20
1	N	629	A	O4'-C1'-N9	6.74	113.59	108.20
1	N	793	U	P-O3'-C3'	6.74	127.78	119.70
1	N	1216	A	O4'-C1'-N9	6.74	113.59	108.20
1	N	299	G	N1-C2-N2	-6.73	110.14	116.20
1	N	329	A	C1'-O4'-C4'	6.73	115.29	109.90
1	N	834	U	C4-C5-C6	6.73	123.74	119.70
1	N	1007	U	N3-C4-C5	-6.73	110.56	114.60
1	N	1081	A	O4'-C1'-N9	6.73	113.59	108.20
1	N	540	G	O4'-C1'-N9	6.73	113.58	108.20
1	N	1369	C	N3-C2-O2	-6.73	117.19	121.90
1	N	330	C	C6-N1-C1'	-6.73	112.72	120.80
1	N	574	A	C5'-C4'-C3'	6.73	126.77	116.00
1	N	673	A	C2-N3-C4	-6.73	107.23	110.60
1	N	758	C	C4'-C3'-C2'	-6.73	95.87	102.60
1	N	444	G	N1-C6-O6	6.73	123.94	119.90
1	N	449	G	N1-C2-N3	-6.73	119.86	123.90
1	N	580	C	N3-C4-N4	6.73	122.71	118.00
1	N	856	C	C2-N1-C1'	6.73	126.20	118.80
1	N	559	A	O4'-C1'-C2'	6.73	113.65	107.60
1	N	659	U	C6-N1-C2	-6.73	116.96	121.00
1	N	665	A	O4'-C1'-N9	6.73	113.58	108.20
1	N	1239	A	C5-C6-N1	-6.73	114.34	117.70
1	N	1396	A	C3'-C2'-C1'	6.73	106.88	101.50
1	N	154	U	C4'-C3'-C2'	-6.72	95.88	102.60
1	N	283	U	N1-C2-N3	-6.72	110.87	114.90
1	N	444	G	C2-N3-C4	6.72	115.26	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	615	G	C2-N3-C4	-6.72	108.54	111.90
1	N	259	G	N9-C4-C5	-6.72	102.71	105.40
1	N	458	U	O4'-C1'-C2'	-6.72	99.08	105.80
1	N	514	C	C2-N1-C1'	6.72	126.19	118.80
1	N	547	A	C5'-C4'-O4'	6.72	117.17	109.10
1	N	828	U	C2-N3-C4	6.72	131.03	127.00
1	N	1089	G	O4'-C1'-N9	6.72	113.58	108.20
1	N	444	G	C5-C6-O6	-6.72	124.57	128.60
1	N	691	G	O4'-C1'-N9	6.72	113.58	108.20
1	N	962	C	C6-N1-C2	-6.72	117.61	120.30
1	N	997	U	N3-C4-C5	-6.72	110.57	114.60
1	N	404	G	C8-N9-C4	-6.72	103.71	106.40
1	N	1059	C	C4-C5-C6	6.72	120.76	117.40
1	N	71	A	C6-C5-N7	-6.72	127.60	132.30
1	N	328	C	N3-C4-N4	6.72	122.70	118.00
1	N	1186	G	O4'-C1'-N9	6.72	113.57	108.20
1	N	944	G	P-O5'-C5'	-6.71	110.16	120.90
1	N	996	A	P-O3'-C3'	-6.71	111.64	119.70
1	N	1087	G	P-O5'-C5'	6.71	131.64	120.90
1	N	1347	G	C5'-C4'-O4'	6.71	117.16	109.10
1	N	1386	G	C4'-C3'-C2'	-6.71	95.89	102.60
1	N	1410	A	C5-C6-N6	-6.71	118.33	123.70
1	N	572	A	O4'-C4'-C3'	6.71	111.47	106.10
1	N	657	U	C6-N1-C2	-6.71	116.97	121.00
1	N	803	G	C2-N3-C4	6.71	115.26	111.90
1	N	7	A	C4-C5-N7	-6.71	107.34	110.70
1	N	152	A	O4'-C1'-N9	6.71	113.57	108.20
1	N	656	G	C6-C5-N7	-6.71	126.37	130.40
1	N	1058	G	N3-C2-N2	6.71	124.60	119.90
1	N	204	G	C8-N9-C4	-6.71	103.72	106.40
1	N	532	A	C5-C6-N1	-6.71	114.34	117.70
1	N	600	A	N9-C4-C5	-6.71	103.12	105.80
1	N	531	U	C5'-C4'-C3'	6.71	126.73	116.00
1	N	734	G	C5-C6-O6	-6.71	124.58	128.60
1	N	351	G	O4'-C1'-N9	6.70	113.56	108.20
1	N	916	U	P-O5'-C5'	6.70	131.62	120.90
1	N	1162	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	105	G	C5-C6-N1	-6.70	108.15	111.50
1	N	1175	G	O4'-C1'-N9	6.70	113.56	108.20
1	N	1350	A	O4'-C1'-N9	6.70	113.56	108.20
1	N	1050	G	C2-N3-C4	6.70	115.25	111.90
1	N	357	G	O4'-C1'-N9	6.70	113.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1012	A	P-O5'-C5'	-6.70	110.19	120.90
1	N	1294	G	N3-C2-N2	6.70	124.59	119.90
1	N	749	A	C4'-C3'-C2'	-6.70	95.90	102.60
1	N	1530	G	C5-C6-N1	-6.70	108.15	111.50
1	N	7	A	N9-C1'-C2'	-6.69	104.64	112.00
1	N	821	G	O4'-C1'-N9	6.69	113.56	108.20
1	N	1529	G	C8-N9-C4	-6.69	103.72	106.40
1	N	184	G	O4'-C1'-N9	6.69	113.55	108.20
1	N	306	A	C5-C6-N6	-6.69	118.35	123.70
1	N	353	A	OP1-P-O3'	6.69	119.92	105.20
1	N	890	G	C5-C6-N1	6.69	114.85	111.50
1	N	1187	G	C6-N1-C2	6.69	129.11	125.10
1	N	1472	U	C5'-C4'-C3'	6.69	126.70	116.00
1	N	207	C	C1'-O4'-C4'	6.69	115.25	109.90
1	N	296	U	C5-C4-O4	-6.69	121.89	125.90
1	N	1454	G	C6-N1-C2	6.69	129.11	125.10
1	N	41	G	C6-C5-N7	-6.69	126.39	130.40
1	N	870	U	O4'-C1'-N1	6.69	113.55	108.20
1	N	323	U	N1-C2-N3	-6.68	110.89	114.90
1	N	945	G	C2-N3-C4	-6.68	108.56	111.90
1	N	1079	G	N7-C8-N9	-6.68	109.76	113.10
1	N	527	G	C8-N9-C4	6.68	109.07	106.40
1	N	774	G	N9-C4-C5	6.68	108.07	105.40
1	N	776	G	O4'-C1'-N9	6.68	113.54	108.20
1	N	916	U	O4'-C4'-C3'	-6.68	97.32	104.00
1	N	1337	G	C6-C5-N7	-6.68	126.39	130.40
1	N	352	C	N1-C2-N3	-6.68	114.53	119.20
1	N	487	A	O4'-C1'-N9	6.68	113.54	108.20
1	N	543	U	C6-N1-C2	-6.68	116.99	121.00
1	N	1450	U	P-O3'-C3'	6.68	127.71	119.70
1	N	149	A	C5-C6-N1	-6.67	114.36	117.70
1	N	288	A	C5-C6-N6	-6.67	118.36	123.70
1	N	655	A	C6-C5-N7	-6.67	127.63	132.30
1	N	880	C	C5-C4-N4	-6.67	115.53	120.20
1	N	1376	U	C1'-O4'-C4'	6.67	115.24	109.90
1	N	1404	C	N1-C2-O2	-6.67	114.89	118.90
1	N	686	U	C2'-C3'-O3'	6.67	124.38	113.70
1	N	154	U	N3-C4-O4	6.67	124.07	119.40
1	N	388	G	C4-C5-C6	6.67	122.80	118.80
1	N	872	A	C4-C5-C6	6.67	120.34	117.00
1	N	926	G	C5'-C4'-C3'	6.67	126.68	116.00
1	N	1391	U	C4-C5-C6	6.67	123.70	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	158	G	N9-C1'-C2'	-6.67	104.66	112.00
1	N	1115	U	N1-C2-N3	-6.67	110.90	114.90
1	N	60	A	N1-C6-N6	6.67	122.60	118.60
1	N	475	C	C5-C4-N4	-6.67	115.53	120.20
1	N	482	A	C6-N1-C2	6.67	122.60	118.60
1	N	739	C	N3-C4-N4	6.67	122.67	118.00
1	N	932	C	N3-C4-C5	-6.67	119.23	121.90
1	N	1433	A	O4'-C1'-N9	6.67	113.53	108.20
1	N	1497	G	O4'-C1'-N9	6.67	113.53	108.20
1	N	212	G	N1-C6-O6	6.67	123.90	119.90
1	N	797	C	P-O3'-C3'	6.67	127.70	119.70
1	N	872	A	N7-C8-N9	-6.67	110.47	113.80
1	N	1201	A	N1-C2-N3	6.67	132.63	129.30
1	N	825	A	C4-C5-C6	6.67	120.33	117.00
1	N	1302	C	C5-C4-N4	6.66	124.86	120.20
1	N	1363	A	N1-C2-N3	6.66	132.63	129.30
1	N	1475	G	N3-C2-N2	6.66	124.56	119.90
1	N	1529	G	N3-C2-N2	6.66	124.56	119.90
1	N	810	C	C6-N1-C2	-6.66	117.64	120.30
1	N	865	A	O4'-C1'-N9	6.66	113.53	108.20
1	N	322	C	N3-C4-N4	6.66	122.66	118.00
1	N	532	A	N9-C4-C5	6.66	108.46	105.80
1	N	585	G	O4'-C1'-N9	6.66	113.53	108.20
1	N	868	C	O4'-C1'-N1	6.66	113.53	108.20
1	N	1062	U	P-O3'-C3'	6.66	127.69	119.70
1	N	1221	G	N1-C6-O6	6.66	123.89	119.90
1	N	891	U	C4'-C3'-C2'	-6.66	95.94	102.60
1	N	1243	C	O4'-C1'-N1	6.66	113.52	108.20
1	N	77	A	C5-C6-N6	-6.65	118.38	123.70
1	N	1064	G	C6-N1-C2	6.65	129.09	125.10
1	N	1164	G	N1-C2-N3	-6.65	119.91	123.90
1	N	401	C	N3-C4-N4	6.65	122.66	118.00
1	N	636	U	N3-C4-O4	6.65	124.06	119.40
1	N	1282	C	C4-C5-C6	-6.65	114.07	117.40
1	N	973	G	N9-C4-C5	6.65	108.06	105.40
1	N	1534	A	C5-C6-N1	-6.65	114.38	117.70
1	N	327	A	C5-C6-N6	-6.65	118.38	123.70
1	N	593	U	C5-C6-N1	6.65	126.02	122.70
1	N	935	A	C4-C5-C6	6.65	120.32	117.00
1	N	1245	C	C5-C6-N1	6.65	124.32	121.00
1	N	442	G	C8-N9-C4	6.65	109.06	106.40
1	N	907	A	C6-N1-C2	6.65	122.59	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	297	G	C8-N9-C4	-6.64	103.74	106.40
1	N	1328	C	N3-C4-C5	-6.64	119.24	121.90
1	N	523	A	N9-C4-C5	-6.64	103.14	105.80
1	N	1473	G	N7-C8-N9	-6.64	109.78	113.10
1	N	127	G	C6-N1-C2	6.64	129.09	125.10
1	N	273	U	C5'-C4'-C3'	-6.64	105.38	116.00
1	N	1502	A	C4'-C3'-C2'	6.64	109.24	102.60
1	N	62	U	O3'-P-O5'	-6.64	91.39	104.00
1	N	600	A	O4'-C1'-N9	6.64	113.51	108.20
1	N	984	C	P-O5'-C5'	6.64	131.52	120.90
1	N	1251	A	C5-C6-N6	-6.64	118.39	123.70
1	N	1385	G	C4-C5-C6	6.64	122.78	118.80
1	N	302	G	N3-C4-N9	-6.64	122.02	126.00
1	N	774	G	C6-N1-C2	6.64	129.08	125.10
1	N	1215	G	O4'-C1'-N9	6.64	113.51	108.20
1	N	1246	A	C4-C5-C6	6.64	120.32	117.00
1	N	315	A	P-O3'-C3'	6.63	127.66	119.70
1	N	730	G	C5-C6-N1	-6.63	108.18	111.50
1	N	39	G	C3'-C2'-C1'	-6.63	96.19	101.50
1	N	335	C	O4'-C1'-N1	6.63	113.51	108.20
1	N	829	G	N9-C4-C5	6.63	108.05	105.40
1	N	1182	G	N3-C4-C5	6.63	131.92	128.60
1	N	349	A	C4-C5-N7	-6.63	107.38	110.70
1	N	480	U	C5-C6-N1	-6.63	119.39	122.70
1	N	639	G	N7-C8-N9	6.63	116.42	113.10
1	N	752	G	N1-C6-O6	6.63	123.88	119.90
1	N	467	U	C5'-C4'-C3'	6.63	126.60	116.00
1	N	1230	C	N3-C2-O2	6.63	126.54	121.90
1	N	1254	A	C5-C6-N6	-6.63	118.40	123.70
1	N	388	G	OP1-P-OP2	-6.62	109.66	119.60
1	N	985	C	C6-N1-C1'	-6.62	112.85	120.80
1	N	350	G	O4'-C1'-N9	6.62	113.50	108.20
1	N	389	A	N3-C4-N9	6.62	132.70	127.40
1	N	36	C	C6-N1-C2	-6.62	117.65	120.30
1	N	108	G	C8-N9-C1'	-6.62	118.39	127.00
1	N	508	U	N3-C4-C5	-6.62	110.63	114.60
1	N	567	G	N3-C2-N2	6.62	124.53	119.90
1	N	1012	A	C4-C5-C6	6.62	120.31	117.00
1	N	207	C	C6-N1-C1'	-6.62	112.86	120.80
1	N	964	A	N7-C8-N9	-6.62	110.49	113.80
1	N	1473	G	O4'-C4'-C3'	-6.62	97.38	104.00
1	N	307	C	O4'-C1'-N1	6.62	113.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	991	U	C2-N3-C4	-6.62	123.03	127.00
1	N	202	G	N3-C4-C5	6.62	131.91	128.60
1	N	26	A	N3-C4-C5	-6.62	122.17	126.80
1	N	575	G	C6-N1-C2	6.62	129.07	125.10
1	N	590	U	C4-C5-C6	6.62	123.67	119.70
1	N	437	U	N1-C2-O2	-6.61	118.17	122.80
1	N	981	U	C2-N3-C4	-6.61	123.03	127.00
1	N	1174	G	N7-C8-N9	-6.61	109.79	113.10
1	N	832	G	C8-N9-C4	6.61	109.05	106.40
1	N	1525	G	C4-C5-C6	6.61	122.77	118.80
1	N	53	A	N9-C1'-C2'	-6.61	104.73	112.00
1	N	631	C	P-O3'-C3'	6.61	127.63	119.70
1	N	757	U	O4'-C1'-N1	6.61	113.49	108.20
1	N	784	A	O4'-C4'-C3'	-6.61	97.39	104.00
1	N	827	U	N3-C2-O2	6.61	126.83	122.20
1	N	140	U	N1-C2-O2	-6.61	118.17	122.80
1	N	207	C	C5'-C4'-C3'	6.61	126.57	116.00
1	N	794	A	P-O3'-C3'	-6.61	111.77	119.70
1	N	1114	C	O4'-C1'-C2'	-6.61	99.19	105.80
1	N	273	U	C2-N3-C4	-6.61	123.04	127.00
1	N	1248	A	C4-C5-N7	-6.61	107.40	110.70
1	N	816	A	C5-N7-C8	6.60	107.20	103.90
1	N	1079	G	N3-C2-N2	6.60	124.52	119.90
1	N	585	G	C1'-O4'-C4'	6.60	115.18	109.90
1	N	815	A	C2-N3-C4	6.60	113.90	110.60
1	N	872	A	O4'-C1'-N9	6.60	113.48	108.20
1	N	890	G	C8-N9-C1'	6.60	135.58	127.00
1	N	1079	G	N3-C4-N9	6.60	129.96	126.00
1	N	577	G	C6-N1-C2	6.60	129.06	125.10
1	N	880	C	C2-N3-C4	6.60	123.20	119.90
1	N	1184	G	N3-C2-N2	6.60	124.52	119.90
1	N	1080	A	C5-C6-N1	-6.60	114.40	117.70
1	N	817	C	C5'-C4'-O4'	6.60	117.02	109.10
1	N	761	G	C5-C6-O6	-6.59	124.64	128.60
1	N	1252	A	N9-C1'-C2'	-6.59	104.75	112.00
1	N	1469	C	C6-N1-C2	6.59	122.94	120.30
1	N	71	A	C2-N3-C4	-6.59	107.30	110.60
1	N	103	U	P-O3'-C3'	-6.59	111.79	119.70
1	N	523	A	N7-C8-N9	6.59	117.10	113.80
1	N	1149	C	N1-C2-N3	-6.59	114.58	119.20
1	N	1347	G	C5-C6-O6	-6.59	124.64	128.60
1	N	1533	C	P-O5'-C5'	6.59	131.45	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	184	G	C4-C5-N7	-6.59	108.16	110.80
1	N	276	G	C8-N9-C4	-6.59	103.76	106.40
1	N	669	G	C5-N7-C8	6.59	107.59	104.30
1	N	774	G	P-O5'-C5'	6.59	131.45	120.90
1	N	1236	A	C5-N7-C8	6.59	107.20	103.90
1	N	615	G	O4'-C1'-C2'	-6.59	99.21	105.80
1	N	1236	A	N1-C2-N3	6.59	132.59	129.30
1	N	790	A	C4-C5-C6	6.59	120.29	117.00
1	N	1106	G	C5-C6-N1	-6.59	108.21	111.50
1	N	1230	C	N3-C4-C5	-6.59	119.27	121.90
1	N	143	A	O4'-C1'-N9	6.58	113.47	108.20
1	N	743	A	C2-N3-C4	-6.58	107.31	110.60
1	N	670	G	C2-N3-C4	6.58	115.19	111.90
1	N	737	C	N3-C4-N4	6.58	122.61	118.00
1	N	1158	C	C2-N1-C1'	6.58	126.04	118.80
1	N	1205	U	C5-C4-O4	6.58	129.85	125.90
1	N	160	A	C5'-C4'-O4'	6.58	117.00	109.10
1	N	622	A	N9-C1'-C2'	-6.58	104.76	112.00
1	N	1159	U	N3-C2-O2	6.58	126.81	122.20
1	N	925	G	O4'-C1'-N9	6.58	113.46	108.20
1	N	332	G	O4'-C1'-N9	6.58	113.46	108.20
1	N	643	C	C5-C4-N4	-6.58	115.59	120.20
1	N	749	A	C2-N3-C4	-6.58	107.31	110.60
1	N	1374	A	N7-C8-N9	-6.58	110.51	113.80
1	N	790	A	O4'-C1'-N9	6.58	113.46	108.20
1	N	814	A	N7-C8-N9	-6.58	110.51	113.80
1	N	1228	C	C2-N1-C1'	6.58	126.03	118.80
1	N	1394	A	C1'-O4'-C4'	6.58	115.16	109.90
1	N	367	U	P-O3'-C3'	-6.57	111.81	119.70
1	N	762	U	P-O3'-C3'	6.57	127.59	119.70
1	N	1088	G	O4'-C1'-N9	6.57	113.46	108.20
1	N	1346	A	N3-C4-N9	6.57	132.66	127.40
1	N	451	A	C2-N3-C4	-6.57	107.31	110.60
1	N	1493	A	O4'-C1'-N9	6.57	113.46	108.20
1	N	490	C	C6-N1-C2	-6.57	117.67	120.30
1	N	1186	G	C5-C6-O6	-6.57	124.66	128.60
1	N	229	U	N3-C4-O4	6.57	124.00	119.40
1	N	642	A	N1-C2-N3	-6.57	126.02	129.30
1	N	802	A	C1'-O4'-C4'	6.56	115.15	109.90
1	N	432	A	N9-C4-C5	-6.56	103.17	105.80
1	N	1491	G	N3-C2-N2	-6.56	115.31	119.90
1	N	576	C	N3-C4-N4	6.56	122.59	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	728	A	C5-C6-N6	-6.56	118.45	123.70
1	N	1095	U	N3-C4-C5	6.56	118.54	114.60
1	N	349	A	C4-C5-C6	6.56	120.28	117.00
1	N	724	G	O4'-C1'-N9	6.56	113.45	108.20
1	N	1090	U	C1'-O4'-C4'	-6.56	104.65	109.90
1	N	1124	G	N3-C2-N2	6.56	124.49	119.90
1	N	114	U	C5-C6-N1	6.56	125.98	122.70
1	N	484	G	C4-C5-C6	6.56	122.73	118.80
1	N	1102	A	C5-C6-N6	-6.56	118.45	123.70
1	N	1521	C	C2-N1-C1'	6.56	126.01	118.80
1	N	281	G	O4'-C1'-N9	6.56	113.44	108.20
1	N	590	U	C1'-O4'-C4'	6.56	115.14	109.90
1	N	1168	U	C4'-C3'-C2'	-6.56	96.04	102.60
1	N	1483	A	N1-C6-N6	6.56	122.53	118.60
1	N	712	A	N9-C4-C5	6.55	108.42	105.80
1	N	976	G	C5-C6-O6	-6.55	124.67	128.60
1	N	1115	U	N3-C4-C5	-6.55	110.67	114.60
1	N	519	C	C2-N1-C1'	6.55	126.01	118.80
1	N	645	G	C2-N3-C4	6.55	115.18	111.90
1	N	1308	U	C5-C6-N1	6.55	125.98	122.70
1	N	1387	G	N7-C8-N9	6.55	116.38	113.10
1	N	1446	A	N9-C4-C5	6.55	108.42	105.80
1	N	326	G	N3-C4-N9	6.55	129.93	126.00
1	N	886	G	N1-C6-O6	6.55	123.83	119.90
1	N	941	G	C6-N1-C2	-6.55	121.17	125.10
1	N	995	C	P-O3'-C3'	-6.55	111.84	119.70
1	N	1049	U	C5-C4-O4	-6.55	121.97	125.90
1	N	1230	C	N3-C4-N4	6.55	122.59	118.00
1	N	677	U	C2-N3-C4	6.55	130.93	127.00
1	N	1177	G	C2-N3-C4	-6.55	108.62	111.90
1	N	1280	A	O4'-C1'-N9	6.55	113.44	108.20
1	N	1429	A	C5-N7-C8	6.55	107.17	103.90
1	N	1453	G	C8-N9-C1'	-6.55	118.49	127.00
1	N	29	U	O4'-C1'-N1	6.55	113.44	108.20
1	N	540	G	N1-C6-O6	6.55	123.83	119.90
1	N	183	C	N3-C4-N4	6.55	122.58	118.00
1	N	849	G	N3-C2-N2	6.54	124.48	119.90
1	N	871	U	N3-C4-O4	6.54	123.98	119.40
1	N	1224	U	N1-C2-N3	-6.54	110.97	114.90
1	N	1346	A	O5'-P-OP2	6.54	118.55	110.70
1	N	1377	A	O3'-P-O5'	-6.54	91.56	104.00
1	N	292	G	N1-C6-O6	6.54	123.83	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	318	G	N3-C2-N2	6.54	124.48	119.90
1	N	809	G	O4'-C1'-N9	6.54	113.44	108.20
1	N	96	U	C2-N1-C1'	6.54	125.55	117.70
1	N	103	U	N3-C2-O2	6.54	126.78	122.20
1	N	166	U	N3-C4-C5	-6.54	110.67	114.60
1	N	232	G	N9-C4-C5	-6.54	102.78	105.40
1	N	665	A	N9-C4-C5	-6.54	103.18	105.80
1	N	868	C	N3-C4-C5	-6.54	119.28	121.90
1	N	1036	A	P-O3'-C3'	6.54	127.55	119.70
1	N	1422	G	N1-C2-N2	-6.54	110.31	116.20
1	N	307	C	N3-C4-N4	6.54	122.58	118.00
1	N	508	U	N1-C2-N3	-6.54	110.98	114.90
1	N	921	U	P-O5'-C5'	6.54	131.37	120.90
1	N	116	A	N1-C2-N3	6.54	132.57	129.30
1	N	125	U	N1-C2-N3	-6.54	110.98	114.90
1	N	1056	U	N1-C2-O2	-6.54	118.22	122.80
1	N	1403	C	C5-C6-N1	6.54	124.27	121.00
1	N	1430	A	N1-C6-N6	6.54	122.52	118.60
1	N	23	C	N3-C4-N4	6.54	122.58	118.00
1	N	141	G	C5'-C4'-C3'	-6.54	105.54	116.00
1	N	299	G	N3-C2-N2	6.54	124.48	119.90
1	N	223	A	OP1-P-OP2	-6.54	109.80	119.60
1	N	415	A	C6-C5-N7	-6.54	127.72	132.30
1	N	502	A	C5-N7-C8	6.54	107.17	103.90
1	N	559	A	C1'-O4'-C4'	-6.54	104.67	109.90
1	N	974	A	C2-N3-C4	-6.54	107.33	110.60
1	N	770	C	C2-N1-C1'	6.53	125.99	118.80
1	N	1200	C	C2-N1-C1'	6.53	125.99	118.80
1	N	1335	U	C2-N3-C4	6.53	130.92	127.00
1	N	178	C	C3'-C2'-C1'	-6.53	96.28	101.50
1	N	782	A	N1-C6-N6	-6.53	114.68	118.60
1	N	1449	C	C4-C5-C6	-6.53	114.13	117.40
1	N	19	A	C4'-C3'-C2'	-6.53	96.07	102.60
1	N	805	C	N1-C2-O2	-6.53	114.98	118.90
1	N	963	G	N1-C6-O6	-6.53	115.98	119.90
1	N	1524	C	O4'-C1'-N1	6.53	113.42	108.20
1	N	388	G	C6-N1-C2	-6.53	121.18	125.10
1	N	462	G	C5-C6-O6	-6.53	124.68	128.60
1	N	465	A	C4-C5-N7	6.53	113.97	110.70
1	N	548	G	C4-N9-C1'	6.53	134.99	126.50
1	N	593	U	C4-C5-C6	-6.53	115.78	119.70
1	N	820	U	N1-C2-N3	6.53	118.82	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1199	U	C5-C4-O4	-6.53	121.98	125.90
1	N	151	A	C4-C5-C6	6.53	120.26	117.00
1	N	495	A	N3-C4-C5	-6.53	122.23	126.80
1	N	539	A	N9-C4-C5	-6.53	103.19	105.80
1	N	816	A	C8-N9-C4	-6.53	103.19	105.80
1	N	1364	U	C5-C4-O4	6.53	129.82	125.90
1	N	25	C	O4'-C1'-N1	6.53	113.42	108.20
1	N	58	C	C5'-C4'-C3'	-6.53	105.56	116.00
1	N	1041	G	P-O3'-C3'	-6.53	111.87	119.70
1	N	325	A	O4'-C1'-N9	6.52	113.42	108.20
1	N	619	U	P-O5'-C5'	6.52	131.34	120.90
1	N	709	U	C2-N1-C1'	-6.52	109.87	117.70
1	N	727	G	C5-C6-O6	-6.52	124.69	128.60
1	N	879	C	C3'-C2'-C1'	6.52	106.72	101.50
1	N	1071	C	C5-C4-N4	-6.52	115.63	120.20
1	N	685	G	N1-C2-N3	-6.52	119.99	123.90
1	N	1189	U	C2-N1-C1'	6.52	125.53	117.70
1	N	1121	U	O4'-C1'-N1	6.52	113.42	108.20
1	N	1403	C	C2-N3-C4	6.52	123.16	119.90
1	N	132	C	N3-C4-C5	-6.52	119.29	121.90
1	N	317	U	C5-C6-N1	6.52	125.96	122.70
1	N	470	C	C4-C5-C6	6.52	120.66	117.40
1	N	1129	C	N1-C2-O2	6.52	122.81	118.90
1	N	426	U	P-O5'-C5'	6.51	131.32	120.90
1	N	465	A	C6-C5-N7	-6.51	127.74	132.30
1	N	509	A	N1-C2-N3	6.51	132.56	129.30
1	N	869	G	N3-C2-N2	6.51	124.46	119.90
1	N	884	U	O4'-C1'-N1	6.51	113.41	108.20
1	N	1064	G	N1-C2-N3	-6.51	119.99	123.90
1	N	373	A	C4-C5-C6	6.51	120.26	117.00
1	N	558	G	P-O3'-C3'	6.51	127.52	119.70
1	N	822	U	N3-C4-O4	6.51	123.96	119.40
1	N	1384	C	C6-N1-C2	-6.51	117.69	120.30
1	N	237	G	N3-C2-N2	6.51	124.46	119.90
1	N	667	G	N3-C4-N9	-6.51	122.09	126.00
1	N	1107	C	P-O3'-C3'	-6.51	111.89	119.70
1	N	474	G	O4'-C1'-N9	6.51	113.41	108.20
1	N	1164	G	N3-C4-C5	6.51	131.85	128.60
1	N	1180	A	O4'-C1'-N9	6.51	113.41	108.20
1	N	1201	A	N9-C4-C5	6.51	108.40	105.80
1	N	1487	G	C4-C5-N7	-6.51	108.20	110.80
1	N	204	G	C2-N3-C4	-6.51	108.65	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	845	A	C4-C5-C6	6.51	120.25	117.00
1	N	129	A	C4-C5-C6	6.51	120.25	117.00
1	N	143	A	N3-C4-N9	6.51	132.61	127.40
1	N	1343	G	N3-C2-N2	6.51	124.45	119.90
1	N	520	A	N9-C4-C5	-6.50	103.20	105.80
1	N	1131	G	C5'-C4'-O4'	6.50	116.91	109.10
1	N	1387	G	N9-C1'-C2'	-6.50	104.84	112.00
1	N	163	C	C6-N1-C2	-6.50	117.70	120.30
1	N	494	G	C8-N9-C1'	-6.50	118.55	127.00
1	N	617	G	O5'-C5'-C4'	-6.50	99.34	111.70
1	N	1430	A	C5-C6-N6	-6.50	118.50	123.70
1	N	1494	G	C5'-C4'-C3'	6.50	126.41	116.00
1	N	172	A	C2'-C3'-O3'	6.50	124.10	113.70
1	N	201	G	P-O3'-C3'	6.50	127.50	119.70
1	N	347	G	N1-C2-N3	-6.50	120.00	123.90
1	N	1077	G	C4-C5-N7	6.50	113.40	110.80
1	N	1393	U	O4'-C1'-N1	6.50	113.40	108.20
1	N	421	U	N1-C2-O2	-6.50	118.25	122.80
1	N	1109	C	N1-C2-N3	-6.50	114.65	119.20
1	N	1160	G	N9-C1'-C2'	-6.50	104.85	112.00
1	N	135	C	P-O3'-C3'	-6.50	111.90	119.70
1	N	725	G	C2-N3-C4	-6.50	108.65	111.90
1	N	1256	A	C5-N7-C8	6.50	107.15	103.90
1	N	1389	C	C4-C5-C6	6.50	120.65	117.40
1	N	142	G	N1-C6-O6	6.50	123.80	119.90
1	N	443	C	C5-C4-N4	-6.50	115.65	120.20
1	N	958	A	C6-C5-N7	-6.50	127.75	132.30
1	N	996	A	C1'-O4'-C4'	-6.50	104.70	109.90
1	N	1416	G	C6-C5-N7	-6.50	126.50	130.40
1	N	1418	A	P-O3'-C3'	6.50	127.50	119.70
1	N	650	G	C5'-C4'-O4'	6.50	116.89	109.10
1	N	1476	A	C4-C5-C6	6.50	120.25	117.00
1	N	516	U	C4-C5-C6	-6.49	115.80	119.70
1	N	677	U	N3-C4-C5	-6.49	110.70	114.60
1	N	862	C	C5-C4-N4	-6.49	115.66	120.20
1	N	1408	A	C4-C5-N7	-6.49	107.45	110.70
1	N	497	G	N1-C2-N3	-6.49	120.00	123.90
1	N	518	C	N1-C2-O2	6.49	122.80	118.90
1	N	811	C	C2-N1-C1'	6.49	125.94	118.80
1	N	1283	U	N1-C2-N3	6.49	118.79	114.90
1	N	113	G	C4'-C3'-C2'	-6.49	96.11	102.60
1	N	192	A	C4-C5-C6	6.49	120.24	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	220	G	C6-N1-C2	6.49	128.99	125.10
1	N	404	G	N1-C6-O6	6.49	123.79	119.90
1	N	516	U	C4'-C3'-C2'	-6.49	96.11	102.60
1	N	863	U	C4'-C3'-C2'	-6.49	96.11	102.60
1	N	357	G	O4'-C1'-C2'	-6.49	99.31	105.80
1	N	1064	G	C5-N7-C8	6.49	107.54	104.30
1	N	1093	A	C4-C5-C6	6.49	120.24	117.00
1	N	1239	A	N1-C2-N3	6.49	132.54	129.30
1	N	263	A	C8-N9-C4	-6.48	103.21	105.80
1	N	278	G	C5-C6-O6	-6.48	124.71	128.60
1	N	395	C	N3-C4-C5	-6.48	119.31	121.90
1	N	487	A	C6-C5-N7	-6.48	127.76	132.30
1	N	1165	U	P-O5'-C5'	6.48	131.27	120.90
1	N	1495	U	N3-C2-O2	6.48	126.74	122.20
1	N	158	G	N3-C2-N2	6.48	124.44	119.90
1	N	525	C	O4'-C1'-N1	6.48	113.39	108.20
1	N	621	A	C8-N9-C4	-6.48	103.21	105.80
1	N	1254	A	P-O5'-C5'	6.48	131.27	120.90
1	N	1372	U	C6-N1-C2	-6.48	117.11	121.00
1	N	33	A	C4-C5-N7	-6.48	107.46	110.70
1	N	297	G	C5-C6-N1	-6.48	108.26	111.50
1	N	100	G	N3-C2-N2	6.48	124.43	119.90
1	N	1059	C	C2-N3-C4	6.48	123.14	119.90
1	N	468	A	N1-C6-N6	6.48	122.48	118.60
1	N	1384	C	N3-C2-O2	6.48	126.43	121.90
1	N	146	G	C4-C5-N7	6.47	113.39	110.80
1	N	1072	G	N1-C6-O6	6.47	123.78	119.90
1	N	1323	G	P-O3'-C3'	-6.47	111.93	119.70
1	N	72	A	N1-C2-N3	6.47	132.54	129.30
1	N	250	A	C2-N3-C4	-6.47	107.36	110.60
1	N	630	A	C4'-C3'-C2'	-6.47	96.13	102.60
1	N	709	U	N3-C4-O4	6.47	123.93	119.40
1	N	768	A	N9-C4-C5	6.47	108.39	105.80
1	N	1405	G	C5-C6-O6	-6.47	124.72	128.60
1	N	1119	C	C4-C5-C6	6.47	120.64	117.40
1	N	228	A	N1-C2-N3	-6.47	126.07	129.30
1	N	778	G	C4'-C3'-C2'	-6.47	96.13	102.60
1	N	844	G	N1-C6-O6	6.47	123.78	119.90
1	N	936	C	C5'-C4'-O4'	6.47	116.86	109.10
1	N	1243	C	C5'-C4'-O4'	6.47	116.86	109.10
1	N	55	A	C5-C6-N6	-6.46	118.53	123.70
1	N	1431	A	C5-C6-N1	-6.46	114.47	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	377	G	C6-C5-N7	-6.46	126.52	130.40
1	N	828	U	C2-N1-C1'	6.46	125.46	117.70
1	N	762	U	C5'-C4'-O4'	6.46	116.85	109.10
1	N	171	A	O4'-C1'-N9	6.46	113.37	108.20
1	N	124	C	C5-C6-N1	6.46	124.23	121.00
1	N	296	U	N3-C4-O4	6.46	123.92	119.40
1	N	391	G	C5-N7-C8	-6.46	101.07	104.30
1	N	579	A	P-O3'-C3'	-6.46	111.95	119.70
1	N	798	U	C5'-C4'-C3'	6.46	126.33	116.00
1	N	8	A	C8-N9-C4	-6.46	103.22	105.80
1	N	613	C	N3-C2-O2	6.46	126.42	121.90
1	N	630	A	C6-C5-N7	-6.46	127.78	132.30
1	N	75	G	C5'-C4'-O4'	6.45	116.84	109.10
1	N	812	G	C5'-C4'-O4'	6.45	116.84	109.10
1	N	945	G	N3-C4-C5	6.45	131.83	128.60
1	N	94	G	C1'-O4'-C4'	-6.45	104.74	109.90
1	N	363	A	O4'-C1'-N9	6.45	113.36	108.20
1	N	64	G	N3-C4-C5	6.45	131.83	128.60
1	N	126	G	C4'-C3'-C2'	-6.45	96.15	102.60
1	N	172	A	N1-C6-N6	6.45	122.47	118.60
1	N	255	G	N1-C6-O6	6.45	123.77	119.90
1	N	1241	G	C4-N9-C1'	6.45	134.88	126.50
1	N	1378	C	C5-C6-N1	-6.45	117.78	121.00
1	N	17	U	N1-C2-N3	-6.45	111.03	114.90
1	N	489	C	N1-C2-O2	6.45	122.77	118.90
1	N	1147	C	P-O5'-C5'	6.45	131.22	120.90
1	N	1379	G	N7-C8-N9	6.45	116.32	113.10
1	N	174	A	N9-C4-C5	-6.45	103.22	105.80
1	N	601	G	O4'-C1'-C2'	-6.45	99.36	105.80
1	N	675	A	C3'-C2'-C1'	-6.45	96.34	101.50
1	N	789	U	O4'-C1'-N1	6.45	113.36	108.20
1	N	1166	G	C4-C5-C6	6.45	122.67	118.80
1	N	192	A	C8-N9-C4	-6.44	103.22	105.80
1	N	239	U	C4-C5-C6	6.44	123.57	119.70
1	N	189	A	C3'-C2'-C1'	-6.44	96.35	101.50
1	N	216	U	C6-N1-C2	-6.44	117.13	121.00
1	N	419	C	N3-C4-C5	-6.44	119.32	121.90
1	N	903	G	N9-C4-C5	-6.44	102.82	105.40
1	N	1532	U	C1'-O4'-C4'	6.44	115.06	109.90
1	N	213	G	C5'-C4'-O4'	6.44	116.83	109.10
1	N	1275	A	N9-C4-C5	-6.44	103.22	105.80
1	N	670	G	C8-N9-C4	6.44	108.98	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1227	A	C6-C5-N7	-6.44	127.79	132.30
1	N	44	A	C5-C6-N6	-6.44	118.55	123.70
1	N	199	A	C4-C5-N7	-6.44	107.48	110.70
1	N	245	U	P-O5'-C5'	-6.44	110.60	120.90
1	N	307	C	C2-N1-C1'	6.44	125.88	118.80
1	N	374	A	C5'-C4'-O4'	-6.44	101.38	109.10
1	N	881	G	N9-C4-C5	-6.44	102.83	105.40
1	N	1038	C	N1-C2-N3	-6.44	114.69	119.20
1	N	1135	U	O4'-C1'-N1	6.44	113.35	108.20
1	N	1414	U	P-O3'-C3'	6.44	127.42	119.70
1	N	1372	U	C5-C6-N1	6.43	125.92	122.70
1	N	1499	A	C8-N9-C4	-6.43	103.23	105.80
1	N	554	A	N9-C4-C5	-6.43	103.23	105.80
1	N	616	G	C4-C5-N7	-6.43	108.23	110.80
1	N	704	A	C8-N9-C4	-6.43	103.23	105.80
1	N	750	C	C5-C6-N1	-6.43	117.78	121.00
1	N	1351	U	N3-C4-O4	6.43	123.90	119.40
1	N	96	U	O4'-C1'-C2'	-6.43	99.37	105.80
1	N	290	C	O4'-C1'-N1	6.43	113.34	108.20
1	N	1307	U	C3'-C2'-C1'	-6.43	96.36	101.50
1	N	1454	G	C5-C6-O6	6.43	132.46	128.60
1	N	813	U	C5-C4-O4	-6.43	122.04	125.90
1	N	1448	C	C5'-C4'-C3'	6.43	126.29	116.00
1	N	56	U	O4'-C1'-N1	6.43	113.34	108.20
1	N	67	C	O4'-C1'-N1	6.43	113.34	108.20
1	N	203	G	C6-C5-N7	6.43	134.26	130.40
1	N	302	G	C4-N9-C1'	-6.43	118.15	126.50
1	N	413	G	C4-N9-C1'	6.43	134.85	126.50
1	N	753	A	C5'-C4'-C3'	-6.43	105.72	116.00
1	N	1153	G	N7-C8-N9	6.43	116.31	113.10
1	N	87	C	P-O5'-C5'	-6.42	110.62	120.90
1	N	102	G	C5'-C4'-O4'	6.42	116.81	109.10
1	N	194	C	P-O3'-C3'	6.42	127.41	119.70
1	N	451	A	C3'-C2'-C1'	6.42	106.64	101.50
1	N	828	U	C6-N1-C2	-6.42	117.15	121.00
1	N	856	C	N3-C4-C5	-6.42	119.33	121.90
1	N	1134	G	C5-C6-N1	-6.42	108.29	111.50
1	N	1179	A	C4-C5-N7	-6.42	107.49	110.70
1	N	1201	A	C1'-O4'-C4'	6.42	115.04	109.90
1	N	1372	U	C2-N3-C4	-6.42	123.14	127.00
1	N	1438	G	C3'-C2'-C1'	6.42	106.64	101.50
1	N	584	G	C2-N3-C4	-6.42	108.69	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	680	C	N3-C4-N4	6.42	122.50	118.00
1	N	1132	C	C5-C6-N1	6.42	124.21	121.00
1	N	1259	C	O4'-C1'-N1	6.42	113.34	108.20
1	N	186	C	C3'-C2'-C1'	6.42	106.64	101.50
1	N	251	G	P-O5'-C5'	6.42	131.17	120.90
1	N	1017	U	C6-N1-C2	-6.42	117.15	121.00
1	N	1335	U	P-O3'-C3'	6.42	127.41	119.70
1	N	299	G	C1'-O4'-C4'	6.42	115.04	109.90
1	N	223	A	C6-N1-C2	6.42	122.45	118.60
1	N	786	G	N1-C2-N3	-6.42	120.05	123.90
1	N	1186	G	C5'-C4'-C3'	6.42	126.27	116.00
1	N	1337	G	N3-C4-C5	-6.42	125.39	128.60
1	N	111	G	C8-N9-C4	-6.42	103.83	106.40
1	N	830	G	C4-C5-C6	6.42	122.65	118.80
1	N	273	U	C5-C6-N1	-6.41	119.49	122.70
1	N	362	G	O4'-C1'-N9	6.41	113.33	108.20
1	N	431	A	C4-C5-N7	-6.41	107.49	110.70
1	N	792	A	C5-C6-N1	-6.41	114.49	117.70
1	N	841	C	C4-C5-C6	6.41	120.61	117.40
1	N	1519	A	C5-C6-N1	-6.41	114.49	117.70
1	N	373	A	N1-C6-N6	6.41	122.45	118.60
1	N	628	G	C5'-C4'-O4'	6.41	116.79	109.10
1	N	825	A	C5-C6-N1	-6.41	114.49	117.70
1	N	1486	G	C2-N3-C4	6.41	115.11	111.90
1	N	658	C	N3-C4-N4	6.41	122.49	118.00
1	N	747	A	C5-C6-N1	-6.41	114.50	117.70
1	N	815	A	O4'-C1'-N9	6.41	113.33	108.20
1	N	1253	G	N1-C6-O6	-6.41	116.05	119.90
1	N	580	C	N1-C2-N3	-6.41	114.71	119.20
1	N	807	A	O4'-C4'-C3'	-6.41	97.59	104.00
1	N	869	G	C8-N9-C4	-6.41	103.84	106.40
1	N	1109	C	N3-C4-C5	-6.41	119.34	121.90
1	N	1240	U	C6-N1-C2	-6.41	117.15	121.00
1	N	743	A	C5-N7-C8	6.41	107.10	103.90
1	N	44	A	N9-C4-C5	6.41	108.36	105.80
1	N	1157	A	C6-N1-C2	6.41	122.44	118.60
1	N	1407	C	C5-C6-N1	6.41	124.20	121.00
1	N	464	U	C3'-C2'-C1'	6.40	106.62	101.50
1	N	1158	C	C2-N3-C4	6.40	123.10	119.90
1	N	550	G	C6-N1-C2	6.40	128.94	125.10
1	N	824	G	N9-C1'-C2'	-6.40	104.96	112.00
1	N	899	C	C6-N1-C1'	-6.40	113.12	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1108	G	N3-C4-N9	-6.40	122.16	126.00
1	N	1193	G	O4'-C1'-N9	6.40	113.32	108.20
1	N	1216	A	C1'-O4'-C4'	6.40	115.02	109.90
1	N	369	G	C3'-C2'-C1'	6.40	106.62	101.50
1	N	587	G	N9-C1'-C2'	-6.40	104.96	112.00
1	N	1165	U	N3-C2-O2	6.40	126.68	122.20
1	N	1406	U	P-O3'-C3'	-6.40	112.02	119.70
1	N	942	G	C6-N1-C2	6.40	128.94	125.10
1	N	1411	C	N3-C4-N4	6.40	122.48	118.00
1	N	137	U	N3-C4-O4	6.40	123.88	119.40
1	N	1432	G	O4'-C1'-C2'	-6.40	99.40	105.80
1	N	771	G	O4'-C4'-C3'	-6.40	97.60	104.00
1	N	858	G	O4'-C1'-N9	6.40	113.32	108.20
1	N	376	G	N3-C2-N2	6.39	124.38	119.90
1	N	446	G	C6-N1-C2	-6.39	121.26	125.10
1	N	704	A	C5-C6-N6	-6.39	118.58	123.70
1	N	838	G	C4-C5-C6	6.39	122.64	118.80
1	N	389	A	C4-C5-C6	6.39	120.20	117.00
1	N	543	U	C2-N1-C1'	6.39	125.37	117.70
1	N	1493	A	C4-C5-C6	6.39	120.20	117.00
1	N	1152	A	C5-C6-N6	-6.39	118.59	123.70
1	N	1175	G	C4-C5-C6	6.39	122.63	118.80
1	N	1505	G	C4-C5-N7	6.39	113.36	110.80
1	N	496	A	N7-C8-N9	-6.39	110.61	113.80
1	N	549	C	N3-C4-C5	6.39	124.45	121.90
1	N	119	A	P-O5'-C5'	-6.39	110.68	120.90
1	N	1222	G	C4-N9-C1'	-6.39	118.20	126.50
1	N	140	U	O4'-C1'-N1	6.38	113.31	108.20
1	N	992	U	O4'-C1'-N1	6.38	113.31	108.20
1	N	597	G	C6-N1-C2	6.38	128.93	125.10
1	N	945	G	C4-C5-C6	6.38	122.63	118.80
1	N	994	A	C5-C6-N1	-6.38	114.51	117.70
1	N	426	U	O5'-C5'-C4'	-6.38	99.58	111.70
1	N	382	A	C3'-C2'-C1'	6.38	106.60	101.50
1	N	221	C	C2-N3-C4	6.38	123.09	119.90
1	N	371	A	C3'-C2'-C1'	-6.38	96.40	101.50
1	N	505	G	C4-C5-C6	6.38	122.63	118.80
1	N	621	A	C2-N3-C4	-6.38	107.41	110.60
1	N	1038	C	C6-N1-C1'	-6.38	113.15	120.80
1	N	1042	A	O5'-C5'-C4'	-6.38	99.58	111.70
1	N	1225	A	C5-N7-C8	6.38	107.09	103.90
1	N	1330	U	C4-C5-C6	-6.38	115.87	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	21	G	N9-C4-C5	-6.38	102.85	105.40
1	N	265	G	N1-C2-N3	-6.38	120.07	123.90
1	N	1342	C	C4-C5-C6	6.38	120.59	117.40
1	N	1143	G	N1-C2-N3	-6.38	120.08	123.90
1	N	509	A	C6-N1-C2	-6.37	114.78	118.60
1	N	658	C	N3-C4-C5	-6.37	119.35	121.90
1	N	949	A	C4'-C3'-C2'	-6.37	96.23	102.60
1	N	990	C	N3-C4-N4	6.37	122.46	118.00
1	N	1218	C	C1'-O4'-C4'	6.37	115.00	109.90
1	N	408	A	C8-N9-C4	-6.37	103.25	105.80
1	N	575	G	C8-N9-C1'	6.37	135.28	127.00
1	N	714	G	N1-C6-O6	6.37	123.72	119.90
1	N	1320	C	C5-C4-N4	-6.37	115.74	120.20
1	N	380	G	C6-C5-N7	-6.37	126.58	130.40
1	N	501	C	C5'-C4'-O4'	6.37	116.74	109.10
1	N	779	C	N1-C2-O2	-6.37	115.08	118.90
1	N	738	C	C4'-C3'-C2'	-6.37	96.23	102.60
1	N	900	A	C5-C6-N6	-6.37	118.61	123.70
1	N	668	G	C6-C5-N7	-6.37	126.58	130.40
1	N	891	U	N3-C4-C5	-6.37	110.78	114.60
1	N	937	A	C5-N7-C8	6.37	107.08	103.90
1	N	1365	G	C4-C5-C6	6.37	122.62	118.80
1	N	159	G	C4-C5-N7	-6.36	108.25	110.80
1	N	201	G	C5-C6-N1	-6.36	108.32	111.50
1	N	299	G	C4-N9-C1'	-6.36	118.23	126.50
1	N	681	A	P-O3'-C3'	6.36	127.34	119.70
1	N	1056	U	C5-C4-O4	-6.36	122.08	125.90
1	N	1262	C	C2-N3-C4	6.36	123.08	119.90
1	N	1350	A	C4-C5-C6	6.36	120.18	117.00
1	N	694	A	C5'-C4'-C3'	6.36	126.18	116.00
1	N	959	A	C6-C5-N7	-6.36	127.85	132.30
1	N	566	G	C5'-C4'-C3'	-6.36	105.83	116.00
1	N	1338	G	N3-C2-N2	6.36	124.35	119.90
1	N	1407	C	N3-C2-O2	6.36	126.35	121.90
1	N	64	G	N3-C4-N9	-6.36	122.19	126.00
1	N	865	A	C4-C5-C6	6.36	120.18	117.00
1	N	1095	U	C5-C6-N1	6.36	125.88	122.70
1	N	423	G	N3-C2-N2	6.36	124.35	119.90
1	N	700	G	C2-N3-C4	6.36	115.08	111.90
1	N	1220	G	C6-C5-N7	-6.36	126.59	130.40
1	N	1296	C	O4'-C1'-C2'	6.36	113.32	107.60
1	N	1029	U	C5-C4-O4	-6.36	122.09	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1114	C	N1-C2-N3	-6.36	114.75	119.20
1	N	1364	U	N3-C2-O2	6.35	126.65	122.20
1	N	483	C	C5-C4-N4	-6.35	115.75	120.20
1	N	807	A	N7-C8-N9	6.35	116.98	113.80
1	N	1432	G	N3-C2-N2	6.35	124.35	119.90
1	N	1457	G	C6-C5-N7	-6.35	126.59	130.40
1	N	1462	C	C2-N3-C4	6.35	123.08	119.90
1	N	1225	A	C4-C5-C6	6.35	120.18	117.00
1	N	214	C	N3-C4-N4	6.35	122.44	118.00
1	N	655	A	C5-C6-N1	-6.35	114.53	117.70
1	N	1254	A	N3-C4-N9	6.35	132.48	127.40
1	N	1271	A	C6-C5-N7	-6.35	127.86	132.30
1	N	1434	A	C5-C6-N1	-6.35	114.53	117.70
1	N	120	A	N1-C2-N3	6.35	132.47	129.30
1	N	147	G	N3-C4-N9	-6.35	122.19	126.00
1	N	455	G	C2-N3-C4	6.35	115.07	111.90
1	N	654	G	O4'-C1'-N9	6.35	113.28	108.20
1	N	779	C	C4-C5-C6	6.35	120.57	117.40
1	N	344	A	C5-C6-N1	-6.34	114.53	117.70
1	N	1189	U	N3-C2-O2	6.34	126.64	122.20
1	N	831	A	N1-C6-N6	6.34	122.41	118.60
1	N	923	A	C5-C6-N6	-6.34	118.63	123.70
1	N	1370	G	C6-N1-C2	6.34	128.91	125.10
1	N	2	A	N1-C2-N3	6.34	132.47	129.30
1	N	391	G	C6-N1-C2	-6.34	121.30	125.10
1	N	410	G	N1-C6-O6	6.34	123.70	119.90
1	N	435	A	C4-C5-C6	6.34	120.17	117.00
1	N	907	A	OP1-P-OP2	-6.34	110.09	119.60
1	N	1357	A	C4-C5-N7	-6.34	107.53	110.70
1	N	414	A	N3-C4-C5	-6.34	122.36	126.80
1	N	517	G	O4'-C1'-N9	6.34	113.27	108.20
1	N	997	U	N1-C1'-C2'	-6.34	105.03	112.00
1	N	131	A	C6-C5-N7	-6.34	127.86	132.30
1	N	491	G	P-O5'-C5'	-6.34	110.76	120.90
1	N	340	U	O5'-C5'-C4'	-6.34	99.66	111.70
1	N	354	G	N3-C2-N2	6.34	124.33	119.90
1	N	872	A	P-O3'-C3'	6.34	127.30	119.70
1	N	1124	G	C5-C6-N1	-6.34	108.33	111.50
1	N	1205	U	O4'-C1'-N1	6.34	113.27	108.20
1	N	1417	G	N7-C8-N9	6.34	116.27	113.10
1	N	1316	G	C5-C6-N1	-6.33	108.33	111.50
1	N	77	A	C8-N9-C4	-6.33	103.27	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	126	G	N7-C8-N9	-6.33	109.93	113.10
1	N	246	A	P-O5'-C5'	6.33	131.03	120.90
1	N	246	A	C4'-C3'-C2'	6.33	108.93	102.60
1	N	754	C	C2-N3-C4	6.33	123.07	119.90
1	N	1136	C	C5'-C4'-O4'	6.33	116.70	109.10
1	N	1224	U	P-O3'-C3'	6.33	127.30	119.70
1	N	223	A	C4-C5-C6	6.33	120.17	117.00
1	N	373	A	C5-C6-N1	-6.33	114.53	117.70
1	N	543	U	C1'-O4'-C4'	6.33	114.97	109.90
1	N	788	U	P-O3'-C3'	-6.33	112.10	119.70
1	N	850	U	C4'-C3'-C2'	-6.33	96.27	102.60
1	N	777	A	N1-C2-N3	6.33	132.47	129.30
1	N	1180	A	C6-C5-N7	-6.33	127.87	132.30
1	N	949	A	N1-C2-N3	-6.33	126.14	129.30
1	N	64	G	C2-N3-C4	-6.33	108.74	111.90
1	N	110	C	O4'-C4'-C3'	-6.33	97.67	104.00
1	N	393	A	N9-C4-C5	6.33	108.33	105.80
1	N	3	A	C8-N9-C4	-6.32	103.27	105.80
1	N	171	A	C5'-C4'-C3'	-6.32	105.88	116.00
1	N	995	C	N1-C1'-C2'	-6.32	105.04	112.00
1	N	1106	G	N7-C8-N9	6.32	116.26	113.10
1	N	391	G	N3-C2-N2	6.32	124.33	119.90
1	N	174	A	C5-C6-N6	-6.32	118.64	123.70
1	N	1231	G	N7-C8-N9	6.32	116.26	113.10
1	N	189	A	O4'-C1'-N9	6.32	113.25	108.20
1	N	1035	A	C5-C6-N1	-6.32	114.54	117.70
1	N	1244	G	N9-C1'-C2'	-6.32	105.05	112.00
1	N	1514	G	N7-C8-N9	-6.32	109.94	113.10
1	N	22	G	C2-N3-C4	6.32	115.06	111.90
1	N	910	C	C5-C4-N4	-6.32	115.78	120.20
1	N	1092	A	C4-C5-C6	6.32	120.16	117.00
1	N	461	A	C5-C6-N1	-6.32	114.54	117.70
1	N	945	G	P-O5'-C5'	6.32	131.01	120.90
1	N	1479	C	C6-N1-C2	-6.32	117.77	120.30
1	N	1321	U	O4'-C1'-N1	6.31	113.25	108.20
1	N	1372	U	N3-C4-O4	-6.31	114.98	119.40
1	N	282	A	N3-C4-N9	6.31	132.45	127.40
1	N	392	C	N3-C2-O2	6.31	126.32	121.90
1	N	1145	A	N9-C4-C5	6.31	108.33	105.80
1	N	1305	G	C8-N9-C4	6.31	108.92	106.40
1	N	152	A	C5'-C4'-C3'	6.31	126.10	116.00
1	N	434	U	N3-C4-C5	-6.31	110.81	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1404	C	N3-C2-O2	6.31	126.32	121.90
1	N	371	A	C4-C5-C6	6.31	120.15	117.00
1	N	1449	C	P-O5'-C5'	-6.31	110.81	120.90
1	N	346	G	P-O5'-C5'	-6.31	110.81	120.90
1	N	450	G	N3-C4-N9	-6.31	122.22	126.00
1	N	1137	C	C5'-C4'-O4'	6.31	116.67	109.10
1	N	607	A	P-O5'-C5'	6.30	130.99	120.90
1	N	865	A	N1-C6-N6	6.30	122.38	118.60
1	N	966	G	C4-C5-N7	-6.30	108.28	110.80
1	N	1223	C	N1-C2-O2	6.30	122.68	118.90
1	N	1023	U	C5-C4-O4	6.30	129.68	125.90
1	N	212	G	C4'-C3'-C2'	-6.30	96.30	102.60
1	N	584	G	O4'-C1'-N9	6.30	113.24	108.20
1	N	1037	C	C5'-C4'-C3'	6.30	126.08	116.00
1	N	1208	C	C4-C5-C6	-6.30	114.25	117.40
1	N	282	A	C4-C5-N7	-6.30	107.55	110.70
1	N	287	U	N3-C4-C5	-6.30	110.82	114.60
1	N	1019	A	P-O3'-C3'	-6.30	112.14	119.70
1	N	642	A	N1-C6-N6	6.30	122.38	118.60
1	N	814	A	C5-C6-N1	6.30	120.85	117.70
1	N	665	A	P-O3'-C3'	-6.30	112.14	119.70
1	N	27	G	C3'-C2'-C1'	-6.29	96.46	101.50
1	N	182	A	C4-C5-C6	6.29	120.15	117.00
1	N	994	A	C5-N7-C8	6.29	107.05	103.90
1	N	332	G	N9-C1'-C2'	-6.29	105.08	112.00
1	N	735	C	O4'-C1'-N1	6.29	113.23	108.20
1	N	1064	G	N7-C8-N9	-6.29	109.95	113.10
1	N	1348	U	C5-C6-N1	6.29	125.85	122.70
1	N	107	G	C4-C5-C6	6.29	122.58	118.80
1	N	131	A	N1-C6-N6	6.29	122.38	118.60
1	N	307	C	C5'-C4'-O4'	-6.29	101.55	109.10
1	N	574	A	P-O3'-C3'	6.29	127.25	119.70
1	N	903	G	N7-C8-N9	-6.29	109.95	113.10
1	N	1450	U	C1'-O4'-C4'	6.29	114.93	109.90
1	N	1517	G	C6-C5-N7	-6.29	126.62	130.40
1	N	323	U	N3-C4-C5	-6.29	110.83	114.60
1	N	1035	A	N1-C2-N3	6.29	132.44	129.30
1	N	1267	C	P-O3'-C3'	6.29	127.25	119.70
1	N	1430	A	P-O5'-C5'	6.29	130.96	120.90
1	N	652	U	C5-C4-O4	6.29	129.67	125.90
1	N	776	G	C5-C6-O6	6.29	132.37	128.60
1	N	255	G	O4'-C4'-C3'	-6.29	97.72	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	765	G	C8-N9-C4	6.29	108.91	106.40
1	N	903	G	C4-C5-N7	6.29	113.31	110.80
1	N	971	G	C1'-O4'-C4'	6.29	114.93	109.90
1	N	849	G	C6-C5-N7	-6.28	126.63	130.40
1	N	921	U	P-O3'-C3'	6.28	127.24	119.70
1	N	962	C	P-O3'-C3'	-6.28	112.16	119.70
1	N	122	G	C8-N9-C4	-6.28	103.89	106.40
1	N	276	G	C6-N1-C2	6.28	128.87	125.10
1	N	677	U	P-O3'-C3'	6.28	127.24	119.70
1	N	801	U	C5'-C4'-O4'	6.28	116.64	109.10
1	N	176	C	O4'-C1'-N1	6.28	113.22	108.20
1	N	592	G	O4'-C1'-N9	6.28	113.22	108.20
1	N	422	C	C5'-C4'-O4'	6.28	116.63	109.10
1	N	791	G	P-O3'-C3'	6.28	127.23	119.70
1	N	1069	C	C2-N3-C4	6.28	123.04	119.90
1	N	354	G	N1-C2-N3	-6.28	120.14	123.90
1	N	404	G	C5'-C4'-O4'	6.28	116.63	109.10
1	N	1284	C	P-O5'-C5'	6.28	130.94	120.90
1	N	1425	U	P-O3'-C3'	-6.28	112.17	119.70
1	N	939	G	O4'-C1'-N9	6.27	113.22	108.20
1	N	1059	C	O4'-C1'-N1	6.27	113.22	108.20
1	N	66	A	N3-C4-C5	-6.27	122.41	126.80
1	N	315	A	C4-C5-C6	6.27	120.14	117.00
1	N	720	C	C3'-C2'-C1'	6.27	106.52	101.50
1	N	902	G	C5-C6-O6	-6.27	124.84	128.60
1	N	1048	G	O4'-C1'-N9	6.27	113.22	108.20
1	N	1079	G	C2-N3-C4	6.27	115.04	111.90
1	N	276	G	N3-C4-N9	-6.27	122.24	126.00
1	N	92	U	C5-C4-O4	-6.27	122.14	125.90
1	N	666	G	C4-C5-N7	-6.27	108.29	110.80
1	N	1257	A	C5-C6-N6	-6.27	118.68	123.70
1	N	1262	C	N1-C2-N3	-6.27	114.81	119.20
1	N	1350	A	N1-C2-N3	6.27	132.44	129.30
1	N	167	A	O4'-C1'-N9	6.27	113.21	108.20
1	N	449	G	C3'-C2'-C1'	6.27	106.51	101.50
1	N	497	G	N3-C4-N9	-6.27	122.24	126.00
1	N	639	G	N1-C2-N3	-6.27	120.14	123.90
1	N	57	G	N3-C2-N2	-6.27	115.51	119.90
1	N	617	G	C5-C6-N1	-6.27	108.37	111.50
1	N	61	G	C6-C5-N7	-6.26	126.64	130.40
1	N	249	U	O4'-C1'-N1	6.26	113.21	108.20
1	N	315	A	N1-C2-N3	6.26	132.43	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	501	C	OP1-P-OP2	-6.26	110.20	119.60
1	N	750	C	N3-C2-O2	6.26	126.29	121.90
1	N	827	U	N3-C4-O4	6.26	123.78	119.40
1	N	997	U	C4-C5-C6	6.26	123.46	119.70
1	N	1279	G	N1-C2-N3	-6.26	120.14	123.90
1	N	1364	U	C6-N1-C1'	-6.26	112.43	121.20
1	N	542	G	N3-C2-N2	6.26	124.28	119.90
1	N	1077	G	O4'-C1'-N9	6.26	113.21	108.20
1	N	1252	A	N9-C4-C5	6.26	108.31	105.80
1	N	1396	A	N1-C2-N3	6.26	132.43	129.30
1	N	13	U	C5-C4-O4	-6.26	122.14	125.90
1	N	405	U	C5-C4-O4	-6.26	122.14	125.90
1	N	572	A	N7-C8-N9	6.26	116.93	113.80
1	N	587	G	P-O3'-C3'	6.26	127.22	119.70
1	N	1286	U	P-O3'-C3'	-6.26	112.19	119.70
1	N	1396	A	C5-N7-C8	6.26	107.03	103.90
1	N	171	A	N7-C8-N9	6.26	116.93	113.80
1	N	376	G	C4'-C3'-C2'	-6.26	96.34	102.60
1	N	974	A	C5-N7-C8	6.26	107.03	103.90
1	N	990	C	P-O3'-C3'	-6.26	112.19	119.70
1	N	1065	U	P-O3'-C3'	-6.26	112.19	119.70
1	N	1390	U	N3-C2-O2	-6.26	117.82	122.20
1	N	11	G	N7-C8-N9	-6.26	109.97	113.10
1	N	147	G	C5-N7-C8	-6.26	101.17	104.30
1	N	423	G	N1-C2-N2	-6.26	110.57	116.20
1	N	673	A	C8-N9-C4	6.26	108.30	105.80
1	N	736	C	N3-C4-C5	6.26	124.40	121.90
1	N	768	A	O4'-C1'-N9	6.26	113.21	108.20
1	N	1332	A	C5-C6-N6	-6.26	118.69	123.70
1	N	523	A	P-O3'-C3'	6.26	127.21	119.70
1	N	907	A	C1'-O4'-C4'	6.26	114.91	109.90
1	N	1119	C	C6-N1-C2	-6.26	117.80	120.30
1	N	1056	U	O4'-C1'-N1	6.25	113.20	108.20
1	N	1450	U	N1-C2-O2	-6.25	118.42	122.80
1	N	338	A	N7-C8-N9	-6.25	110.67	113.80
1	N	468	A	P-O3'-C3'	6.25	127.20	119.70
1	N	620	C	C2-N1-C1'	6.25	125.68	118.80
1	N	949	A	C5-C6-N1	-6.25	114.57	117.70
1	N	741	G	N1-C6-O6	6.25	123.65	119.90
1	N	866	C	N3-C4-C5	-6.25	119.40	121.90
1	N	1006	G	C5-C6-N1	-6.25	108.38	111.50
1	N	240	G	C4-C5-N7	-6.25	108.30	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	528	C	O4'-C1'-C2'	-6.25	99.55	105.80
1	N	676	A	C3'-C2'-C1'	6.25	106.50	101.50
1	N	1045	C	C6-N1-C2	-6.25	117.80	120.30
1	N	1106	G	N1-C2-N3	-6.25	120.15	123.90
1	N	1322	C	C5-C6-N1	6.25	124.12	121.00
1	N	1489	G	C2-N3-C4	-6.25	108.78	111.90
1	N	530	G	O4'-C1'-N9	6.25	113.20	108.20
1	N	676	A	N1-C2-N3	6.25	132.42	129.30
1	N	716	A	C5-N7-C8	6.25	107.02	103.90
1	N	1187	G	C8-N9-C1'	-6.25	118.88	127.00
1	N	1518	A	C5-C6-N6	-6.25	118.70	123.70
1	N	493	A	P-O3'-C3'	6.25	127.19	119.70
1	N	1044	A	N7-C8-N9	-6.25	110.68	113.80
1	N	1176	A	C2-N3-C4	-6.25	107.48	110.60
1	N	1400	C	C5-C4-N4	-6.25	115.83	120.20
1	N	533	A	C3'-C2'-C1'	-6.24	96.50	101.50
1	N	1138	G	C6-C5-N7	-6.24	126.65	130.40
1	N	1284	C	C4-C5-C6	6.24	120.52	117.40
1	N	1506	U	P-O5'-C5'	-6.24	110.91	120.90
1	N	320	A	C4-C5-C6	6.24	120.12	117.00
1	N	878	A	N3-C4-C5	-6.24	122.43	126.80
1	N	1401	G	C4-C5-N7	-6.24	108.30	110.80
1	N	888	G	O4'-C1'-C2'	6.24	113.22	107.60
1	N	1062	U	P-O5'-C5'	6.24	130.88	120.90
1	N	1288	A	C6-C5-N7	-6.24	127.93	132.30
1	N	857	C	C2'-C3'-O3'	6.24	123.68	113.70
1	N	1423	G	P-O5'-C5'	6.24	130.88	120.90
1	N	109	A	O4'-C1'-N9	6.24	113.19	108.20
1	N	679	C	O4'-C1'-N1	6.24	113.19	108.20
1	N	237	G	C2-N3-C4	6.23	115.02	111.90
1	N	563	A	C5-N7-C8	6.23	107.02	103.90
1	N	1043	G	P-O5'-C5'	6.23	130.87	120.90
1	N	1272	G	N3-C4-N9	-6.23	122.26	126.00
1	N	85	U	C4-C5-C6	6.23	123.44	119.70
1	N	174	A	C4-C5-N7	6.23	113.82	110.70
1	N	279	A	C8-N9-C4	-6.23	103.31	105.80
1	N	452	A	C1'-O4'-C4'	-6.23	104.92	109.90
1	N	1030	U	O4'-C1'-N1	6.23	113.19	108.20
1	N	1089	G	C4'-C3'-C2'	-6.23	96.37	102.60
1	N	249	U	P-O3'-C3'	-6.23	112.22	119.70
1	N	582	C	C6-N1-C2	-6.23	117.81	120.30
1	N	1102	A	C5-C6-N1	-6.23	114.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1290	G	C8-N9-C1'	-6.23	118.90	127.00
1	N	1356	G	N3-C2-N2	6.23	124.26	119.90
1	N	1396	A	O4'-C1'-N9	6.23	113.18	108.20
1	N	1519	A	N3-C4-C5	-6.23	122.44	126.80
1	N	94	G	C8-N9-C1'	6.23	135.10	127.00
1	N	224	U	C2-N3-C4	-6.23	123.26	127.00
1	N	763	G	N1-C2-N3	-6.23	120.16	123.90
1	N	157	U	C2-N3-C4	-6.23	123.26	127.00
1	N	913	A	C5-N7-C8	-6.23	100.79	103.90
1	N	2	A	N9-C4-C5	6.22	108.29	105.80
1	N	413	G	O4'-C1'-N9	6.22	113.18	108.20
1	N	659	U	O4'-C1'-N1	6.22	113.18	108.20
1	N	72	A	N7-C8-N9	-6.22	110.69	113.80
1	N	87	C	O4'-C4'-C3'	6.22	111.08	106.10
1	N	674	G	P-O5'-C5'	6.22	130.86	120.90
1	N	788	U	N1-C2-O2	-6.22	118.44	122.80
1	N	878	A	C2-N3-C4	6.22	113.71	110.60
1	N	894	G	C4-C5-C6	6.22	122.53	118.80
1	N	944	G	O4'-C1'-N9	6.22	113.18	108.20
1	N	1013	G	C5-C6-O6	-6.22	124.87	128.60
1	N	136	C	O5'-C5'-C4'	-6.22	99.88	111.70
1	N	425	G	C8-N9-C4	-6.22	103.91	106.40
1	N	505	G	C2-N3-C4	6.22	115.01	111.90
1	N	1437	A	C6-C5-N7	-6.22	127.94	132.30
1	N	440	C	C2'-C3'-O3'	6.22	123.65	113.70
1	N	1223	C	P-O3'-C3'	6.22	127.16	119.70
1	N	1347	G	C2-N3-C4	6.22	115.01	111.90
1	N	85	U	O4'-C1'-N1	6.22	113.17	108.20
1	N	104	G	C5'-C4'-O4'	6.22	116.56	109.10
1	N	144	G	C2-N3-C4	-6.22	108.79	111.90
1	N	240	G	N9-C1'-C2'	-6.22	105.16	112.00
1	N	924	C	P-O5'-C5'	6.22	130.85	120.90
1	N	384	G	C5-N7-C8	-6.22	101.19	104.30
1	N	742	G	C2-N3-C4	6.22	115.01	111.90
1	N	1129	C	P-O3'-C3'	6.22	127.16	119.70
1	N	1143	G	C6-C5-N7	-6.22	126.67	130.40
1	N	1154	G	N7-C8-N9	-6.22	109.99	113.10
1	N	249	U	N3-C4-O4	6.21	123.75	119.40
1	N	805	C	O4'-C1'-N1	6.21	113.17	108.20
1	N	1096	C	C5-C4-N4	-6.21	115.85	120.20
1	N	1130	A	C6-C5-N7	-6.21	127.95	132.30
1	N	1160	G	N3-C2-N2	6.21	124.25	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1401	G	C4-C5-C6	6.21	122.53	118.80
1	N	143	A	N1-C2-N3	6.21	132.41	129.30
1	N	815	A	C8-N9-C4	-6.21	103.31	105.80
1	N	1112	C	C5-C4-N4	-6.21	115.85	120.20
1	N	1457	G	C8-N9-C4	-6.21	103.92	106.40
1	N	57	G	C5-N7-C8	-6.21	101.19	104.30
1	N	107	G	N9-C4-C5	-6.21	102.92	105.40
1	N	374	A	N9-C4-C5	6.21	108.28	105.80
1	N	1067	A	C5'-C4'-C3'	-6.21	106.06	116.00
1	N	396	C	C2-N3-C4	-6.21	116.80	119.90
1	N	1174	G	N3-C4-C5	6.21	131.71	128.60
1	N	378	G	N7-C8-N9	-6.21	110.00	113.10
1	N	536	C	C2-N3-C4	-6.21	116.80	119.90
1	N	1278	G	C4'-C3'-C2'	-6.21	96.39	102.60
1	N	1333	A	P-O3'-C3'	-6.21	112.25	119.70
1	N	1416	G	N1-C2-N3	-6.21	120.17	123.90
1	N	9	G	N3-C4-C5	-6.21	125.50	128.60
1	N	149	A	C5-C6-N6	-6.21	118.73	123.70
1	N	294	U	C6-N1-C2	-6.21	117.28	121.00
1	N	710	G	C5-C6-O6	-6.21	124.88	128.60
1	N	1048	G	P-O3'-C3'	-6.21	112.25	119.70
1	N	1323	G	N1-C6-O6	6.21	123.62	119.90
1	N	1382	C	N3-C4-N4	6.21	122.34	118.00
1	N	1463	U	N3-C4-O4	6.21	123.75	119.40
1	N	1303	C	C4'-C3'-C2'	6.21	108.81	102.60
1	N	234	C	C2-N1-C1'	6.20	125.62	118.80
1	N	461	A	C4-N9-C1'	6.20	137.47	126.30
1	N	515	G	C6-C5-N7	-6.20	126.68	130.40
1	N	871	U	C5-C4-O4	-6.20	122.18	125.90
1	N	1457	G	C5'-C4'-O4'	6.20	116.54	109.10
1	N	38	G	O4'-C1'-N9	6.20	113.16	108.20
1	N	1347	G	C4'-C3'-C2'	-6.20	96.40	102.60
1	N	842	U	N1-C2-N3	6.20	118.62	114.90
1	N	1014	A	C5-C6-N6	-6.20	118.74	123.70
1	N	1107	C	N3-C4-C5	-6.20	119.42	121.90
1	N	1378	C	C4'-C3'-C2'	6.20	108.80	102.60
1	N	1415	G	N3-C4-N9	-6.20	122.28	126.00
1	N	224	U	O4'-C1'-N1	6.20	113.16	108.20
1	N	807	A	N3-C4-C5	-6.20	122.46	126.80
1	N	874	G	C4-C5-C6	6.20	122.52	118.80
1	N	686	U	C1'-O4'-C4'	-6.20	104.94	109.90
1	N	179	A	C4-C5-N7	6.20	113.80	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	828	U	C4-C5-C6	-6.20	115.98	119.70
1	N	1257	A	C4-C5-N7	-6.20	107.60	110.70
1	N	24	U	N3-C4-O4	6.19	123.73	119.40
1	N	72	A	O4'-C1'-N9	6.19	113.15	108.20
1	N	678	U	C6-N1-C2	-6.19	117.28	121.00
1	N	1100	C	C5'-C4'-O4'	6.19	116.53	109.10
1	N	1199	U	N3-C2-O2	6.19	126.53	122.20
1	N	1453	G	O4'-C1'-N9	6.19	113.15	108.20
1	N	274	A	C5-C6-N6	-6.19	118.75	123.70
1	N	609	A	N1-C6-N6	6.19	122.31	118.60
1	N	730	G	N3-C2-N2	6.19	124.23	119.90
1	N	822	U	OP1-P-OP2	-6.19	110.31	119.60
1	N	1000	A	C3'-C2'-C1'	-6.19	96.55	101.50
1	N	1140	C	N1-C2-N3	-6.19	114.87	119.20
1	N	1385	G	C5-C6-N1	-6.19	108.41	111.50
1	N	736	C	C6-N1-C1'	-6.19	113.37	120.80
1	N	70	U	N3-C2-O2	6.19	126.53	122.20
1	N	219	U	C2-N1-C1'	-6.19	110.28	117.70
1	N	356	A	N1-C6-N6	6.19	122.31	118.60
1	N	858	G	C4'-C3'-C2'	-6.19	96.41	102.60
1	N	376	G	C5-C6-N1	-6.18	108.41	111.50
1	N	424	G	N3-C4-N9	6.18	129.71	126.00
1	N	833	G	P-O3'-C3'	-6.18	112.28	119.70
1	N	902	G	C5-C6-N1	-6.18	108.41	111.50
1	N	1013	G	O4'-C1'-N9	6.18	113.15	108.20
1	N	1237	C	N3-C4-N4	6.18	122.33	118.00
1	N	1271	A	C4-C5-C6	6.18	120.09	117.00
1	N	336	A	C5-N7-C8	6.18	106.99	103.90
1	N	967	C	P-O3'-C3'	6.18	127.12	119.70
1	N	1422	G	C5-N7-C8	6.18	107.39	104.30
1	N	1306	A	N7-C8-N9	6.18	116.89	113.80
1	N	23	C	C5-C4-N4	-6.18	115.87	120.20
1	N	1105	A	C2-N3-C4	-6.18	107.51	110.60
1	N	1256	A	C5-C6-N1	-6.18	114.61	117.70
1	N	143	A	C8-N9-C4	-6.18	103.33	105.80
1	N	457	G	O4'-C1'-N9	6.18	113.14	108.20
1	N	572	A	C1'-O4'-C4'	-6.18	104.96	109.90
1	N	590	U	N3-C4-C5	-6.18	110.89	114.60
1	N	605	U	N3-C4-O4	6.18	123.72	119.40
1	N	1011	C	N3-C2-O2	6.18	126.22	121.90
1	N	1191	A	C4-C5-C6	6.18	120.09	117.00
1	N	191	G	O4'-C1'-N9	6.17	113.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	306	A	C5-C6-N1	-6.17	114.61	117.70
1	N	1419	G	C4-C5-N7	6.17	113.27	110.80
1	N	1430	A	O4'-C1'-N9	6.17	113.14	108.20
1	N	568	G	C5-C6-N1	-6.17	108.41	111.50
1	N	1054	C	C5'-C4'-C3'	-6.17	106.12	116.00
1	N	1202	U	N3-C4-O4	-6.17	115.08	119.40
1	N	100	G	C5-C6-O6	-6.17	124.90	128.60
1	N	228	A	C4-C5-N7	6.17	113.79	110.70
1	N	527	G	C4-C5-N7	-6.17	108.33	110.80
1	N	763	G	N3-C4-C5	-6.17	125.51	128.60
1	N	971	G	N7-C8-N9	6.17	116.19	113.10
1	N	1376	U	P-O3'-C3'	-6.17	112.30	119.70
1	N	1514	G	N3-C4-N9	-6.17	122.30	126.00
1	N	38	G	C6-C5-N7	-6.17	126.70	130.40
1	N	643	C	O4'-C1'-N1	6.17	113.14	108.20
1	N	685	G	O4'-C1'-N9	6.17	113.14	108.20
1	N	700	G	N7-C8-N9	6.17	116.19	113.10
1	N	755	G	C6-C5-N7	-6.17	126.70	130.40
1	N	364	A	C8-N9-C4	-6.17	103.33	105.80
1	N	1105	A	C4'-C3'-C2'	6.17	108.77	102.60
1	N	283	U	O4'-C1'-N1	6.17	113.13	108.20
1	N	343	U	C5-C4-O4	-6.17	122.20	125.90
1	N	762	U	C2-N1-C1'	-6.17	110.30	117.70
1	N	1241	G	P-O3'-C3'	-6.17	112.30	119.70
1	N	664	G	C5-C6-N1	-6.16	108.42	111.50
1	N	1104	G	C4-C5-C6	6.16	122.50	118.80
1	N	1149	C	C2-N3-C4	6.16	122.98	119.90
1	N	1459	G	N3-C4-C5	-6.16	125.52	128.60
1	N	382	A	C4'-C3'-C2'	-6.16	96.44	102.60
1	N	495	A	C5-C6-N1	-6.16	114.62	117.70
1	N	974	A	C5-C6-N1	-6.16	114.62	117.70
1	N	809	G	C6-N1-C2	6.16	128.79	125.10
1	N	1067	A	C5'-C4'-O4'	6.16	116.49	109.10
1	N	1384	C	N3-C4-C5	-6.16	119.44	121.90
1	N	241	G	P-O5'-C5'	6.16	130.75	120.90
1	N	203	G	C1'-O4'-C4'	-6.16	104.98	109.90
1	N	535	A	C4-C5-C6	6.16	120.08	117.00
1	N	626	G	C4-C5-C6	6.16	122.49	118.80
1	N	814	A	C6-N1-C2	-6.16	114.91	118.60
1	N	1525	G	C6-C5-N7	-6.16	126.71	130.40
1	N	1075	U	N1-C2-O2	-6.15	118.49	122.80
1	N	420	U	N1-C2-O2	-6.15	118.49	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	582	C	C4'-C3'-C2'	-6.15	96.45	102.60
1	N	606	G	O4'-C1'-N9	6.15	113.12	108.20
1	N	1392	G	N9-C4-C5	-6.15	102.94	105.40
1	N	210	C	C5'-C4'-C3'	-6.15	106.16	116.00
1	N	686	U	O4'-C1'-N1	6.15	113.12	108.20
1	N	693	G	N1-C6-O6	6.15	123.59	119.90
1	N	726	C	C2-N3-C4	6.15	122.97	119.90
1	N	852	G	N1-C2-N2	-6.15	110.66	116.20
1	N	999	C	C4'-C3'-C2'	-6.15	96.45	102.60
1	N	249	U	O3'-P-O5'	-6.15	92.32	104.00
1	N	587	G	N3-C2-N2	6.15	124.20	119.90
1	N	76	G	N3-C4-C5	-6.15	125.53	128.60
1	N	389	A	C5-C6-N1	-6.15	114.63	117.70
1	N	669	G	C8-N9-C4	-6.15	103.94	106.40
1	N	1140	C	N3-C2-O2	6.15	126.20	121.90
1	N	1248	A	N1-C6-N6	6.15	122.29	118.60
1	N	276	G	C5-N7-C8	-6.15	101.23	104.30
1	N	1002	G	N3-C4-C5	6.15	131.67	128.60
1	N	1133	G	P-O3'-C3'	-6.15	112.32	119.70
1	N	1285	A	N9-C4-C5	6.15	108.26	105.80
1	N	1309	G	C8-N9-C4	6.15	108.86	106.40
1	N	228	A	C5-C6-N1	-6.14	114.63	117.70
1	N	417	G	C8-N9-C4	-6.14	103.94	106.40
1	N	773	G	C4-N9-C1'	-6.14	118.51	126.50
1	N	796	C	N3-C4-N4	6.14	122.30	118.00
1	N	1110	A	C5-N7-C8	6.14	106.97	103.90
1	N	1266	G	C5-C6-N1	-6.14	108.43	111.50
1	N	1050	G	C5'-C4'-C3'	-6.14	106.17	116.00
1	N	1142	G	N3-C2-N2	6.14	124.20	119.90
1	N	1265	C	N3-C4-N4	6.14	122.30	118.00
1	N	1441	A	C5-C6-N1	-6.14	114.63	117.70
1	N	458	U	C5-C6-N1	6.14	125.77	122.70
1	N	835	U	C4'-C3'-C2'	-6.14	96.46	102.60
1	N	28	A	O4'-C4'-C3'	-6.14	97.86	104.00
1	N	111	G	C6-N1-C2	6.14	128.78	125.10
1	N	433	G	C8-N9-C4	-6.14	103.94	106.40
1	N	1156	G	C5-C6-O6	-6.14	124.92	128.60
1	N	1259	C	N1-C2-N3	-6.14	114.90	119.20
1	N	324	G	N3-C4-C5	-6.14	125.53	128.60
1	N	438	U	N1-C2-O2	-6.14	118.50	122.80
1	N	472	U	C3'-C2'-C1'	6.14	106.41	101.50
1	N	551	U	C4-C5-C6	-6.14	116.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	2	A	C4-C5-C6	6.14	120.07	117.00
1	N	145	G	N1-C2-N3	-6.14	120.22	123.90
1	N	1275	A	C4-C5-N7	6.14	113.77	110.70
1	N	21	G	N1-C2-N3	-6.13	120.22	123.90
1	N	184	G	O4'-C4'-C3'	-6.13	97.87	104.00
1	N	191	G	N9-C4-C5	-6.13	102.95	105.40
1	N	379	C	C5-C4-N4	-6.13	115.91	120.20
1	N	480	U	N1-C2-N3	6.13	118.58	114.90
1	N	619	U	C2-N3-C4	6.13	130.68	127.00
1	N	666	G	C5-C6-O6	6.13	132.28	128.60
1	N	1383	C	C2-N3-C4	6.13	122.97	119.90
1	N	105	G	C5-C6-O6	6.13	132.28	128.60
1	N	211	G	P-O3'-C3'	6.13	127.06	119.70
1	N	576	C	C5-C4-N4	-6.13	115.91	120.20
1	N	963	G	C4-N9-C1'	6.13	134.47	126.50
1	N	1046	A	C4'-C3'-C2'	-6.13	96.47	102.60
1	N	113	G	C5-C6-N1	-6.13	108.44	111.50
1	N	454	G	N3-C2-N2	6.13	124.19	119.90
1	N	513	C	C5-C4-N4	-6.13	115.91	120.20
1	N	646	G	N1-C2-N3	-6.13	120.22	123.90
1	N	1314	C	C2-N3-C4	6.13	122.97	119.90
1	N	1392	G	C4-C5-N7	6.13	113.25	110.80
1	N	1470	U	O4'-C1'-N1	6.13	113.11	108.20
1	N	145	G	C5-N7-C8	6.13	107.36	104.30
1	N	66	A	C4-C5-N7	-6.13	107.64	110.70
1	N	106	C	N1-C2-O2	-6.13	115.22	118.90
1	N	847	G	C8-N9-C4	6.13	108.85	106.40
1	N	887	G	N1-C6-O6	6.13	123.58	119.90
1	N	1081	A	C5-C6-N1	-6.13	114.64	117.70
1	N	1082	A	N1-C2-N3	6.13	132.36	129.30
1	N	1189	U	N3-C4-O4	6.13	123.69	119.40
1	N	15	G	N3-C4-N9	6.13	129.68	126.00
1	N	694	A	C4-C5-C6	6.13	120.06	117.00
1	N	767	A	P-O5'-C5'	6.13	130.70	120.90
1	N	1050	G	N3-C2-N2	6.13	124.19	119.90
1	N	1091	U	O4'-C1'-N1	6.13	113.10	108.20
1	N	1277	C	C2-N3-C4	6.13	122.96	119.90
1	N	1333	A	N3-C4-N9	6.13	132.30	127.40
1	N	1061	G	C4-C5-C6	6.12	122.47	118.80
1	N	1139	G	C4-C5-C6	6.12	122.47	118.80
1	N	1146	A	C8-N9-C4	-6.12	103.35	105.80
1	N	74	A	C5-C6-N1	-6.12	114.64	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	869	G	OP1-P-OP2	-6.12	110.41	119.60
1	N	1046	A	C5-C6-N6	-6.12	118.80	123.70
1	N	52	C	N3-C4-N4	6.12	122.28	118.00
1	N	129	A	O4'-C1'-N9	6.12	113.10	108.20
1	N	448	A	C4-C5-N7	-6.12	107.64	110.70
1	N	1447	A	C1'-O4'-C4'	-6.12	105.00	109.90
1	N	1460	C	P-O5'-C5'	6.12	130.69	120.90
1	N	1082	A	C5-C6-N1	-6.12	114.64	117.70
1	N	1084	G	O4'-C1'-N9	6.12	113.10	108.20
1	N	348	G	N7-C8-N9	6.12	116.16	113.10
1	N	580	C	C6-N1-C2	6.12	122.75	120.30
1	N	936	C	C5-C4-N4	-6.12	115.92	120.20
1	N	360	G	N1-C2-N3	-6.12	120.23	123.90
1	N	782	A	O4'-C1'-N9	6.12	113.09	108.20
1	N	1154	G	N1-C6-O6	6.12	123.57	119.90
1	N	1531	A	C5-C6-N1	-6.12	114.64	117.70
1	N	419	C	O4'-C1'-N1	6.11	113.09	108.20
1	N	605	U	N3-C4-C5	-6.11	110.93	114.60
1	N	1218	C	N1-C2-O2	-6.11	115.23	118.90
1	N	297	G	C4-C5-C6	6.11	122.47	118.80
1	N	559	A	N7-C8-N9	-6.11	110.75	113.80
1	N	969	A	C5-N7-C8	6.11	106.96	103.90
1	N	1279	G	O4'-C1'-N9	6.11	113.09	108.20
1	N	295	C	N3-C4-C5	-6.11	119.46	121.90
1	N	1375	A	C2-N3-C4	-6.11	107.55	110.60
1	N	532	A	C4-N9-C1'	6.11	137.29	126.30
1	N	13	U	C1'-O4'-C4'	-6.11	105.02	109.90
1	N	348	G	N9-C4-C5	6.11	107.84	105.40
1	N	610	U	N1-C2-O2	-6.11	118.53	122.80
1	N	784	A	C5-C6-N6	-6.11	118.82	123.70
1	N	929	G	N9-C1'-C2'	-6.11	105.28	112.00
1	N	1403	C	N3-C4-C5	-6.10	119.46	121.90
1	N	1485	U	O4'-C1'-N1	6.10	113.08	108.20
1	N	178	C	C5-C6-N1	6.10	124.05	121.00
1	N	317	U	OP1-P-OP2	-6.10	110.45	119.60
1	N	335	C	C6-N1-C2	6.10	122.74	120.30
1	N	656	G	P-O5'-C5'	6.10	130.66	120.90
1	N	716	A	P-O3'-C3'	-6.10	112.38	119.70
1	N	1204	A	N1-C6-N6	6.10	122.26	118.60
1	N	357	G	C6-C5-N7	-6.10	126.74	130.40
1	N	371	A	O4'-C1'-N9	6.10	113.08	108.20
1	N	54	C	C2-N1-C1'	6.10	125.51	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	58	C	C4'-C3'-C2'	-6.10	96.50	102.60
1	N	266	G	N7-C8-N9	-6.10	110.05	113.10
1	N	572	A	C2'-C3'-O3'	6.10	123.46	113.70
1	N	712	A	O4'-C1'-N9	6.10	113.08	108.20
1	N	951	G	O4'-C1'-N9	6.10	113.08	108.20
1	N	177	G	C8-N9-C1'	-6.10	119.07	127.00
1	N	666	G	C5-N7-C8	6.10	107.35	104.30
1	N	901	A	N9-C4-C5	6.10	108.24	105.80
1	N	1267	C	O4'-C1'-N1	6.10	113.08	108.20
1	N	1456	A	C4-C5-N7	-6.10	107.65	110.70
1	N	129	A	C5-C6-N1	-6.10	114.65	117.70
1	N	134	G	C3'-C2'-C1'	-6.10	96.62	101.50
1	N	267	C	C3'-C2'-C1'	6.10	106.38	101.50
1	N	274	A	C3'-C2'-C1'	6.10	106.38	101.50
1	N	544	G	N1-C2-N3	-6.10	120.24	123.90
1	N	1306	A	C4-C5-C6	6.10	120.05	117.00
1	N	199	A	C5-N7-C8	6.09	106.95	103.90
1	N	408	A	P-O3'-C5'	-6.09	111.15	120.90
1	N	432	A	N1-C2-N3	-6.09	126.25	129.30
1	N	510	A	P-O3'-C3'	6.09	127.01	119.70
1	N	867	G	C3'-C2'-C1'	6.09	106.38	101.50
1	N	1371	G	C6-N1-C2	6.09	128.76	125.10
1	N	1502	A	C3'-C2'-C1'	-6.09	96.62	101.50
1	N	432	A	C5-C6-N6	-6.09	118.83	123.70
1	N	1009	U	N3-C2-O2	6.09	126.47	122.20
1	N	675	A	N9-C4-C5	-6.09	103.36	105.80
1	N	885	G	N3-C2-N2	6.09	124.16	119.90
1	N	1154	G	O4'-C1'-N9	6.09	113.07	108.20
1	N	1440	U	N3-C4-C5	-6.09	110.95	114.60
1	N	361	G	O4'-C1'-N9	6.09	113.07	108.20
1	N	759	A	C4'-C3'-C2'	-6.09	96.51	102.60
1	N	1112	C	C5'-C4'-C3'	6.09	125.74	116.00
1	N	1336	C	O4'-C1'-C2'	-6.09	99.71	105.80
1	N	309	A	C4-C5-C6	6.09	120.04	117.00
1	N	542	G	N9-C4-C5	-6.09	102.97	105.40
1	N	697	U	O4'-C1'-N1	6.09	113.07	108.20
1	N	1068	G	N9-C4-C5	6.09	107.83	105.40
1	N	1147	C	P-O3'-C3'	6.09	127.00	119.70
1	N	501	C	N3-C4-N4	6.08	122.26	118.00
1	N	66	A	C8-N9-C4	-6.08	103.37	105.80
1	N	417	G	N3-C2-N2	6.08	124.16	119.90
1	N	696	A	C5-C6-N6	-6.08	118.83	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1011	C	C5-C4-N4	-6.08	115.94	120.20
1	N	12	U	C3'-C2'-C1'	6.08	106.36	101.50
1	N	896	C	P-O5'-C5'	6.08	130.63	120.90
1	N	1032	G	C5-C6-N1	6.08	114.54	111.50
1	N	97	G	N1-C6-O6	6.08	123.55	119.90
1	N	210	C	C2-N3-C4	6.08	122.94	119.90
1	N	383	A	N1-C2-N3	-6.08	126.26	129.30
1	N	809	G	N1-C2-N3	-6.08	120.25	123.90
1	N	915	A	C4'-C3'-C2'	-6.08	96.52	102.60
1	N	47	C	C5'-C4'-O4'	-6.08	101.81	109.10
1	N	871	U	O4'-C1'-C2'	-6.08	99.72	105.80
1	N	111	G	C5-C6-N1	-6.08	108.46	111.50
1	N	653	U	C5-C4-O4	-6.08	122.25	125.90
1	N	1208	C	OP1-P-OP2	-6.08	110.49	119.60
1	N	1110	A	C4-C5-N7	-6.07	107.66	110.70
1	N	1274	A	C5-C6-N6	-6.07	118.84	123.70
1	N	1305	G	C3'-C2'-C1'	6.07	106.36	101.50
1	N	1394	A	C5'-C4'-C3'	-6.07	106.28	116.00
1	N	271	C	P-O5'-C5'	6.07	130.62	120.90
1	N	844	G	C2-N3-C4	6.07	114.94	111.90
1	N	118	U	C4-C5-C6	6.07	123.34	119.70
1	N	158	G	C5-C6-N1	-6.07	108.47	111.50
1	N	331	G	N3-C2-N2	6.07	124.15	119.90
1	N	801	U	C5-C6-N1	-6.07	119.67	122.70
1	N	1094	G	C5-C6-N1	-6.07	108.47	111.50
1	N	1174	G	C8-N9-C4	6.07	108.83	106.40
1	N	1051	C	N3-C4-C5	-6.07	119.47	121.90
1	N	1380	U	C6-N1-C2	6.07	124.64	121.00
1	N	597	G	P-O3'-C3'	-6.07	112.42	119.70
1	N	799	G	O4'-C1'-N9	6.07	113.05	108.20
1	N	986	U	C4'-C3'-C2'	-6.07	96.53	102.60
1	N	1332	A	C2-N3-C4	6.07	113.63	110.60
1	N	1360	A	N1-C6-N6	6.07	122.24	118.60
1	N	190	A	N1-C2-N3	6.07	132.33	129.30
1	N	193	C	C4-C5-C6	6.07	120.43	117.40
1	N	420	U	N3-C4-C5	-6.07	110.96	114.60
1	N	992	U	N1-C2-O2	-6.07	118.56	122.80
1	N	1206	G	P-O3'-C3'	-6.07	112.42	119.70
1	N	1512	U	P-O3'-C3'	6.07	126.98	119.70
1	N	100	G	C5'-C4'-O4'	6.06	116.38	109.10
1	N	690	G	N1-C6-O6	6.06	123.54	119.90
1	N	1077	G	C5-C6-N1	-6.06	108.47	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1260	G	C8-N9-C4	-6.06	103.97	106.40
1	N	805	C	N3-C4-N4	6.06	122.24	118.00
1	N	1142	G	C4-C5-C6	6.06	122.44	118.80
1	N	190	A	C1'-O4'-C4'	-6.06	105.05	109.90
1	N	210	C	O3'-P-O5'	-6.06	92.49	104.00
1	N	383	A	C5-C6-N6	-6.06	118.85	123.70
1	N	751	U	N3-C4-O4	6.06	123.64	119.40
1	N	172	A	C4'-C3'-C2'	6.06	108.66	102.60
1	N	648	A	C5-N7-C8	6.06	106.93	103.90
1	N	798	U	O4'-C1'-N1	6.06	113.05	108.20
1	N	951	G	C6-N1-C2	6.06	128.73	125.10
1	N	972	C	N1-C1'-C2'	-6.06	105.34	112.00
1	N	1415	G	N3-C2-N2	6.06	124.14	119.90
1	N	76	G	N3-C2-N2	6.06	124.14	119.90
1	N	59	A	N1-C2-N3	6.05	132.33	129.30
1	N	94	G	C2-N3-C4	6.05	114.93	111.90
1	N	311	C	N3-C4-N4	6.05	122.24	118.00
1	N	453	G	N3-C4-C5	-6.05	125.57	128.60
1	N	512	U	P-O3'-C3'	6.05	126.97	119.70
1	N	424	G	C6-N1-C2	-6.05	121.47	125.10
1	N	1101	A	C2'-C3'-O3'	6.05	123.38	113.70
1	N	498	A	C4-C5-C6	6.05	120.03	117.00
1	N	782	A	C5-C6-N6	6.05	128.54	123.70
1	N	810	C	C5-C4-N4	-6.05	115.97	120.20
1	N	937	A	C4-C5-C6	6.05	120.02	117.00
1	N	214	C	C5-C4-N4	-6.05	115.97	120.20
1	N	386	C	N1-C2-O2	6.05	122.53	118.90
1	N	456	A	N3-C4-C5	-6.05	122.57	126.80
1	N	689	C	C5-C4-N4	-6.05	115.97	120.20
1	N	791	G	N3-C2-N2	6.05	124.13	119.90
1	N	943	U	C4'-C3'-C2'	6.05	108.65	102.60
1	N	1076	U	N3-C4-O4	6.05	123.63	119.40
1	N	1080	A	C5-N7-C8	6.05	106.92	103.90
1	N	1085	U	C2-N3-C4	6.05	130.63	127.00
1	N	1213	A	C5-C6-N6	-6.05	118.86	123.70
1	N	1280	A	C8-N9-C4	-6.05	103.38	105.80
1	N	1355	G	N3-C4-N9	-6.05	122.37	126.00
1	N	225	C	O4'-C1'-N1	6.04	113.04	108.20
1	N	777	A	C5'-C4'-O4'	6.04	116.35	109.10
1	N	127	G	O4'-C1'-N9	6.04	113.03	108.20
1	N	392	C	C6-N1-C1'	-6.04	113.55	120.80
1	N	419	C	N1-C2-O2	-6.04	115.27	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1211	U	N3-C4-C5	-6.04	110.97	114.60
1	N	14	U	O4'-C1'-N1	6.04	113.03	108.20
1	N	215	C	C4'-C3'-C2'	-6.04	96.56	102.60
1	N	233	C	C2-N1-C1'	6.04	125.45	118.80
1	N	665	A	N1-C6-N6	-6.04	114.97	118.60
1	N	857	C	C4-C5-C6	-6.04	114.38	117.40
1	N	920	U	N3-C4-O4	6.04	123.63	119.40
1	N	968	A	C5-N7-C8	6.04	106.92	103.90
1	N	1032	G	C1'-O4'-C4'	-6.04	105.07	109.90
1	N	1009	U	N1-C2-O2	-6.04	118.57	122.80
1	N	1258	G	N9-C4-C5	-6.04	102.98	105.40
1	N	118	U	C1'-O4'-C4'	6.04	114.73	109.90
1	N	361	G	C5-C6-O6	-6.04	124.98	128.60
1	N	534	U	C5'-C4'-O4'	6.04	116.35	109.10
1	N	770	C	C5-C4-N4	-6.04	115.97	120.20
1	N	1138	G	C4'-C3'-C2'	-6.04	96.56	102.60
1	N	1146	A	C4-C5-C6	6.04	120.02	117.00
1	N	1291	U	P-O3'-C3'	-6.04	112.45	119.70
1	N	233	C	N3-C4-N4	6.04	122.23	118.00
1	N	529	G	C6-C5-N7	-6.04	126.78	130.40
1	N	1031	C	N1-C2-N3	-6.04	114.97	119.20
1	N	1282	C	C6-N1-C1'	-6.04	113.56	120.80
1	N	378	G	N9-C1'-C2'	-6.04	105.36	112.00
1	N	617	G	C4-C5-N7	6.04	113.21	110.80
1	N	1087	G	C1'-O4'-C4'	6.04	114.73	109.90
1	N	1160	G	N3-C4-N9	6.04	129.62	126.00
1	N	1176	A	C6-C5-N7	-6.04	128.08	132.30
1	N	47	C	C5-C6-N1	-6.03	117.98	121.00
1	N	1223	C	C5'-C4'-O4'	6.03	116.34	109.10
1	N	1260	G	C6-C5-N7	-6.03	126.78	130.40
1	N	227	G	N1-C6-O6	6.03	123.52	119.90
1	N	274	A	C6-C5-N7	-6.03	128.08	132.30
1	N	652	U	N3-C4-O4	-6.03	115.18	119.40
1	N	513	C	O4'-C1'-N1	6.03	113.02	108.20
1	N	636	U	N1-C2-O2	-6.03	118.58	122.80
1	N	993	G	C2-N3-C4	6.03	114.92	111.90
1	N	1041	G	N1-C6-O6	6.03	123.52	119.90
1	N	314	C	N3-C4-N4	6.03	122.22	118.00
1	N	412	A	C5-C6-N6	-6.03	118.88	123.70
1	N	667	G	C5-N7-C8	6.03	107.31	104.30
1	N	754	C	C1'-O4'-C4'	6.03	114.72	109.90
1	N	1171	A	N3-C4-N9	6.03	132.22	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1385	G	C4-N9-C1'	-6.03	118.66	126.50
1	N	648	A	C6-N1-C2	6.03	122.22	118.60
1	N	717	U	O4'-C1'-N1	6.03	113.02	108.20
1	N	1122	U	N1-C2-N3	6.03	118.52	114.90
1	N	67	C	N1-C2-O2	-6.02	115.28	118.90
1	N	140	U	C6-N1-C2	-6.02	117.39	121.00
1	N	378	G	O4'-C1'-N9	6.02	113.02	108.20
1	N	409	U	O4'-C1'-N1	6.02	113.02	108.20
1	N	1193	G	C6-C5-N7	-6.02	126.79	130.40
1	N	613	C	C6-N1-C1'	-6.02	113.57	120.80
1	N	711	G	P-O3'-C3'	6.02	126.93	119.70
1	N	986	U	N3-C4-O4	6.02	123.61	119.40
1	N	248	C	O4'-C1'-N1	6.02	113.02	108.20
1	N	384	G	N7-C8-N9	6.02	116.11	113.10
1	N	391	G	C4-N9-C1'	-6.02	118.67	126.50
1	N	861	G	N9-C1'-C2'	-6.02	105.38	112.00
1	N	1026	G	C2-N3-C4	-6.02	108.89	111.90
1	N	1396	A	C4-N9-C1'	-6.02	115.47	126.30
1	N	1491	G	O5'-C5'-C4'	-6.02	100.26	111.70
1	N	86	G	C3'-C2'-C1'	-6.02	96.69	101.50
1	N	305	G	C2-N3-C4	6.02	114.91	111.90
1	N	339	C	N3-C4-C5	-6.02	119.49	121.90
1	N	766	A	O3'-P-O5'	-6.02	92.57	104.00
1	N	1189	U	C6-N1-C2	-6.02	117.39	121.00
1	N	1356	G	C4-C5-C6	6.02	122.41	118.80
1	N	408	A	N1-C6-N6	6.02	122.21	118.60
1	N	1530	G	N3-C4-N9	-6.02	122.39	126.00
1	N	641	U	C2'-C3'-O3'	6.01	123.33	113.70
1	N	833	G	C5-C6-O6	-6.01	124.99	128.60
1	N	515	G	C4-C5-C6	6.01	122.41	118.80
1	N	1135	U	C3'-C2'-C1'	6.01	106.31	101.50
1	N	1378	C	C2'-C3'-O3'	6.01	123.32	113.70
1	N	1469	C	O5'-C5'-C4'	6.01	123.12	111.70
1	N	255	G	C5-C6-N1	-6.01	108.50	111.50
1	N	667	G	C1'-O4'-C4'	-6.01	105.09	109.90
1	N	1312	G	C5-C6-N1	-6.01	108.50	111.50
1	N	1526	G	N3-C2-N2	6.01	124.11	119.90
1	N	1113	C	C6-N1-C2	-6.01	117.90	120.30
1	N	1317	C	O4'-C1'-N1	6.01	113.01	108.20
1	N	430	A	N1-C6-N6	6.01	122.20	118.60
1	N	954	G	C2-N3-C4	-6.01	108.90	111.90
1	N	1310	G	P-O5'-C5'	-6.01	111.29	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1424	U	N3-C2-O2	6.01	126.41	122.20
1	N	514	C	N3-C4-N4	6.00	122.20	118.00
1	N	831	A	C5-C6-N1	-6.00	114.70	117.70
1	N	852	G	N1-C6-O6	6.00	123.50	119.90
1	N	1078	U	C4'-C3'-C2'	6.00	108.60	102.60
1	N	1150	A	P-O3'-C3'	6.00	126.90	119.70
1	N	76	G	N1-C2-N3	-6.00	120.30	123.90
1	N	296	U	C2-N3-C4	-6.00	123.40	127.00
1	N	421	U	C5-C6-N1	6.00	125.70	122.70
1	N	661	G	C8-N9-C4	-6.00	104.00	106.40
1	N	687	A	C5-C6-N1	-6.00	114.70	117.70
1	N	721	G	C6-C5-N7	-6.00	126.80	130.40
1	N	864	A	C4-C5-C6	6.00	120.00	117.00
1	N	1177	G	C6-N1-C2	6.00	128.70	125.10
1	N	298	A	C2'-C3'-O3'	6.00	123.30	113.70
1	N	630	A	C5-C6-N1	-6.00	114.70	117.70
1	N	1082	A	C4-C5-N7	-6.00	107.70	110.70
1	N	130	A	N1-C2-N3	-6.00	126.30	129.30
1	N	497	G	C3'-C2'-C1'	6.00	106.30	101.50
1	N	1051	C	P-O3'-C3'	-6.00	112.50	119.70
1	N	1355	G	O4'-C1'-N9	6.00	113.00	108.20
1	N	465	A	C5-C6-N6	-6.00	118.90	123.70
1	N	574	A	C4'-C3'-C2'	-6.00	96.60	102.60
1	N	689	C	N3-C4-N4	6.00	122.20	118.00
1	N	833	G	N1-C6-O6	6.00	123.50	119.90
1	N	932	C	P-O3'-C3'	6.00	126.89	119.70
1	N	945	G	C5-N7-C8	6.00	107.30	104.30
1	N	1250	A	N9-C4-C5	6.00	108.20	105.80
1	N	1401	G	N3-C4-N9	-5.99	122.40	126.00
1	N	62	U	N3-C4-O4	5.99	123.59	119.40
1	N	16	A	C5'-C4'-O4'	-5.99	101.91	109.10
1	N	24	U	C5-C6-N1	5.99	125.69	122.70
1	N	814	A	P-O3'-C3'	5.99	126.89	119.70
1	N	1048	G	N1-C2-N2	-5.99	110.81	116.20
1	N	1081	A	N7-C8-N9	5.99	116.80	113.80
1	N	1192	C	O4'-C1'-N1	5.99	112.99	108.20
1	N	1269	A	C5-C6-N6	-5.99	118.91	123.70
1	N	1297	G	N3-C4-C5	-5.99	125.60	128.60
1	N	1353	G	C3'-C2'-C1'	5.99	106.29	101.50
1	N	1386	G	N3-C4-N9	-5.99	122.41	126.00
1	N	123	U	C5'-C4'-C3'	5.99	125.58	116.00
1	N	135	C	N1-C2-O2	5.99	122.49	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	137	U	C2-N3-C4	-5.99	123.41	127.00
1	N	468	A	OP1-P-OP2	-5.99	110.62	119.60
1	N	1073	U	C1'-O4'-C4'	5.99	114.69	109.90
1	N	760	G	P-O5'-C5'	5.99	130.48	120.90
1	N	861	G	C5-C6-O6	-5.99	125.01	128.60
1	N	899	C	N3-C4-N4	5.99	122.19	118.00
1	N	998	C	C5-C4-N4	-5.99	116.01	120.20
1	N	1213	A	O4'-C1'-N9	5.99	112.99	108.20
1	N	1071	C	C4'-C3'-C2'	-5.98	96.62	102.60
1	N	1374	A	C5-N7-C8	5.98	106.89	103.90
1	N	1396	A	N9-C4-C5	5.98	108.19	105.80
1	N	1415	G	O4'-C1'-N9	5.98	112.99	108.20
1	N	412	A	N7-C8-N9	-5.98	110.81	113.80
1	N	538	G	O4'-C1'-N9	5.98	112.99	108.20
1	N	551	U	C4'-C3'-C2'	-5.98	96.62	102.60
1	N	783	C	C5'-C4'-O4'	5.98	116.28	109.10
1	N	194	C	N3-C4-C5	-5.98	119.51	121.90
1	N	272	C	C5-C4-N4	-5.98	116.01	120.20
1	N	442	G	C5-C6-N1	-5.98	108.51	111.50
1	N	1021	A	P-O5'-C5'	5.98	130.47	120.90
1	N	1261	A	C5'-C4'-O4'	5.98	116.28	109.10
1	N	1314	C	N3-C2-O2	5.98	126.09	121.90
1	N	1473	G	C1'-O4'-C4'	5.98	114.69	109.90
1	N	1479	C	O4'-C1'-N1	5.98	112.98	108.20
1	N	129	A	C5-C6-N6	-5.98	118.92	123.70
1	N	257	G	N3-C2-N2	5.98	124.08	119.90
1	N	855	U	O4'-C1'-N1	5.98	112.98	108.20
1	N	1350	A	C6-C5-N7	-5.98	128.12	132.30
1	N	347	G	C1'-O4'-C4'	5.98	114.68	109.90
1	N	759	A	N9-C4-C5	-5.98	103.41	105.80
1	N	1203	C	N3-C4-N4	5.98	122.18	118.00
1	N	1447	A	C5-C6-N6	-5.98	118.92	123.70
1	N	81	A	C4-C5-N7	-5.98	107.71	110.70
1	N	337	G	C5-N7-C8	5.98	107.29	104.30
1	N	459	A	C4-C5-C6	5.98	119.99	117.00
1	N	216	U	C5-C4-O4	-5.97	122.31	125.90
1	N	361	G	C4-C5-N7	5.97	113.19	110.80
1	N	1434	A	C4-N9-C1'	5.97	137.05	126.30
1	N	380	G	C4'-C3'-C2'	-5.97	96.63	102.60
1	N	510	A	C2-N3-C4	5.97	113.59	110.60
1	N	653	U	C3'-C2'-C1'	-5.97	96.72	101.50
1	N	912	C	P-O3'-C3'	5.97	126.87	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1144	G	N3-C2-N2	5.97	124.08	119.90
1	N	1479	C	C5-C6-N1	5.97	123.99	121.00
1	N	675	A	N1-C2-N3	-5.97	126.31	129.30
1	N	908	A	C4'-C3'-C2'	-5.97	96.63	102.60
1	N	337	G	P-O5'-C5'	-5.97	111.35	120.90
1	N	575	G	N7-C8-N9	5.97	116.08	113.10
1	N	690	G	C8-N9-C4	-5.97	104.01	106.40
1	N	703	G	C5-C6-N1	-5.97	108.52	111.50
1	N	1127	G	C6-C5-N7	-5.97	126.82	130.40
1	N	318	G	N9-C1'-C2'	-5.97	105.44	112.00
1	N	715	A	N9-C1'-C2'	-5.97	105.44	112.00
1	N	1160	G	C4-N9-C1'	-5.97	118.74	126.50
1	N	1288	A	C5-C6-N6	-5.97	118.92	123.70
1	N	16	A	C5-C6-N6	-5.97	118.93	123.70
1	N	145	G	O4'-C1'-N9	5.97	112.97	108.20
1	N	824	G	N1-C2-N2	5.97	121.57	116.20
1	N	1043	G	C2-N3-C4	5.97	114.88	111.90
1	N	1160	G	C3'-C2'-C1'	5.97	106.27	101.50
1	N	1348	U	O4'-C1'-N1	5.97	112.97	108.20
1	N	1401	G	C4-N9-C1'	5.97	134.26	126.50
1	N	563	A	C5'-C4'-O4'	-5.96	101.94	109.10
1	N	1473	G	N3-C4-N9	-5.96	122.42	126.00
1	N	1415	G	N9-C4-C5	5.96	107.78	105.40
1	N	179	A	C2'-C3'-O3'	5.96	123.24	113.70
1	N	218	U	C2-N3-C4	5.96	130.58	127.00
1	N	498	A	C4'-C3'-C2'	5.96	108.56	102.60
1	N	846	G	O4'-C1'-N9	5.96	112.97	108.20
1	N	885	G	C6-N1-C2	5.96	128.68	125.10
1	N	1071	C	C5-C6-N1	5.96	123.98	121.00
1	N	1157	A	N9-C1'-C2'	5.96	121.75	114.00
1	N	1185	G	C2-N3-C4	5.96	114.88	111.90
1	N	1224	U	N3-C4-C5	-5.96	111.02	114.60
1	N	592	G	C1'-O4'-C4'	5.96	114.67	109.90
1	N	981	U	C1'-O4'-C4'	5.96	114.67	109.90
1	N	597	G	N3-C4-C5	-5.96	125.62	128.60
1	N	778	G	C4-C5-C6	5.96	122.38	118.80
1	N	1090	U	C2-N1-C1'	5.96	124.85	117.70
1	N	1144	G	O4'-C1'-N9	5.96	112.97	108.20
1	N	95	C	P-O5'-C5'	-5.96	111.37	120.90
1	N	264	C	N3-C4-N4	5.96	122.17	118.00
1	N	265	G	C6-C5-N7	-5.96	126.83	130.40
1	N	778	G	C3'-C2'-C1'	5.96	106.27	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1195	C	OP1-P-OP2	-5.96	110.67	119.60
1	N	178	C	C6-N1-C2	-5.96	117.92	120.30
1	N	1036	A	O4'-C1'-N9	5.96	112.96	108.20
1	N	1387	G	N3-C4-C5	5.96	131.58	128.60
1	N	1456	A	C5-N7-C8	5.96	106.88	103.90
1	N	112	G	N9-C4-C5	5.95	107.78	105.40
1	N	344	A	C6-C5-N7	-5.95	128.13	132.30
1	N	391	G	C4-C5-N7	5.95	113.18	110.80
1	N	449	G	P-O5'-C5'	5.95	130.43	120.90
1	N	1354	U	C2-N3-C4	5.95	130.57	127.00
1	N	719	C	C2-N1-C1'	5.95	125.35	118.80
1	N	1363	A	C2-N3-C4	-5.95	107.62	110.60
1	N	206	C	C5-C6-N1	5.95	123.97	121.00
1	N	322	C	OP1-P-OP2	-5.95	110.67	119.60
1	N	369	G	O4'-C4'-C3'	-5.95	98.05	104.00
1	N	496	A	C5-C6-N6	-5.95	118.94	123.70
1	N	740	U	C2-N1-C1'	-5.95	110.56	117.70
1	N	855	U	N3-C4-O4	5.95	123.57	119.40
1	N	1079	G	C6-C5-N7	-5.95	126.83	130.40
1	N	1090	U	C6-N1-C1'	-5.95	112.87	121.20
1	N	1311	A	C5'-C4'-O4'	5.95	116.24	109.10
1	N	1384	C	O4'-C4'-C3'	-5.95	98.05	104.00
1	N	405	U	C1'-O4'-C4'	-5.95	105.14	109.90
1	N	682	G	C2-N3-C4	5.95	114.87	111.90
1	N	698	G	C4-C5-C6	5.95	122.37	118.80
1	N	1047	G	C2-N3-C4	-5.95	108.93	111.90
1	N	1143	G	N3-C4-N9	-5.95	122.43	126.00
1	N	288	A	C2-N3-C4	-5.95	107.63	110.60
1	N	350	G	C5-C6-N1	-5.95	108.53	111.50
1	N	1066	C	N3-C4-C5	5.95	124.28	121.90
1	N	1170	A	O4'-C1'-C2'	-5.95	99.85	105.80
1	N	1211	U	O5'-P-OP2	-5.95	100.35	105.70
1	N	1218	C	N3-C4-N4	5.95	122.16	118.00
1	N	1259	C	P-O5'-C5'	5.95	130.41	120.90
1	N	453	G	N3-C2-N2	5.94	124.06	119.90
1	N	615	G	N1-C6-O6	5.94	123.47	119.90
1	N	1001	C	N1-C2-O2	-5.94	115.33	118.90
1	N	1305	G	C5-C6-N1	-5.94	108.53	111.50
1	N	1371	G	C2-N3-C4	5.94	114.87	111.90
1	N	33	A	C5'-C4'-C3'	5.94	125.51	116.00
1	N	742	G	C4-C5-C6	5.94	122.36	118.80
1	N	1324	A	C4-C5-C6	5.94	119.97	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	753	A	C4-C5-C6	5.94	119.97	117.00
1	N	1340	A	C5-C6-N6	-5.94	118.95	123.70
1	N	1371	G	N3-C2-N2	5.94	124.06	119.90
1	N	1375	A	C5-N7-C8	5.94	106.87	103.90
1	N	1530	G	C5'-C4'-O4'	5.94	116.22	109.10
1	N	105	G	C4-C5-N7	-5.94	108.43	110.80
1	N	287	U	N3-C4-O4	5.94	123.56	119.40
1	N	151	A	N1-C2-N3	5.93	132.27	129.30
1	N	153	C	O4'-C1'-N1	5.93	112.95	108.20
1	N	196	A	O3'-P-O5'	-5.93	92.73	104.00
1	N	238	A	C6-N1-C2	-5.93	115.04	118.60
1	N	575	G	O4'-C1'-N9	5.93	112.95	108.20
1	N	651	C	P-O3'-C3'	-5.93	112.58	119.70
1	N	725	G	C5-C6-N1	-5.93	108.53	111.50
1	N	1504	G	C5-C6-N1	-5.93	108.53	111.50
1	N	122	G	C4-C5-C6	5.93	122.36	118.80
1	N	203	G	C3'-C2'-C1'	-5.93	96.75	101.50
1	N	254	G	N9-C4-C5	-5.93	103.03	105.40
1	N	484	G	N1-C2-N3	-5.93	120.34	123.90
1	N	500	G	N1-C2-N3	-5.93	120.34	123.90
1	N	1168	U	C5'-C4'-C3'	5.93	125.49	116.00
1	N	1363	A	C3'-C2'-C1'	-5.93	96.75	101.50
1	N	53	A	C4'-C3'-C2'	-5.93	96.67	102.60
1	N	145	G	N9-C1'-C2'	-5.93	105.48	112.00
1	N	239	U	N3-C2-O2	5.93	126.35	122.20
1	N	482	A	C4-C5-C6	5.93	119.96	117.00
1	N	544	G	C5-N7-C8	-5.93	101.33	104.30
1	N	932	C	C2-N1-C1'	5.93	125.32	118.80
1	N	1020	G	C5'-C4'-C3'	-5.93	106.51	116.00
1	N	1295	U	C5-C4-O4	-5.93	122.34	125.90
1	N	1376	U	C5-C4-O4	-5.93	122.34	125.90
1	N	164	G	C8-N9-C4	-5.93	104.03	106.40
1	N	414	A	C4-C5-N7	-5.93	107.74	110.70
1	N	69	G	N3-C2-N2	5.93	124.05	119.90
1	N	212	G	N3-C2-N2	-5.93	115.75	119.90
1	N	492	C	N3-C2-O2	5.93	126.05	121.90
1	N	578	C	O4'-C1'-N1	5.93	112.94	108.20
1	N	911	U	O4'-C1'-N1	5.93	112.94	108.20
1	N	973	G	C8-N9-C4	-5.93	104.03	106.40
1	N	193	C	C5-C6-N1	-5.92	118.04	121.00
1	N	359	G	N7-C8-N9	-5.92	110.14	113.10
1	N	606	G	C8-N9-C4	-5.92	104.03	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	828	U	N3-C4-C5	-5.92	111.05	114.60
1	N	863	U	C2-N1-C1'	5.92	124.81	117.70
1	N	918	A	N3-C4-C5	5.92	130.95	126.80
1	N	1144	G	C5-C6-N1	-5.92	108.54	111.50
1	N	1357	A	N3-C4-N9	-5.92	122.66	127.40
1	N	319	G	O4'-C1'-N9	5.92	112.94	108.20
1	N	863	U	C6-N1-C1'	-5.92	112.91	121.20
1	N	1414	U	OP1-P-OP2	-5.92	110.72	119.60
1	N	256	U	C5'-C4'-O4'	5.92	116.21	109.10
1	N	788	U	C3'-C2'-C1'	5.92	106.24	101.50
1	N	1195	C	P-O3'-C3'	5.92	126.81	119.70
1	N	1328	C	O4'-C1'-N1	5.92	112.94	108.20
1	N	1497	G	N1-C2-N3	-5.92	120.35	123.90
1	N	359	G	O4'-C1'-N9	5.92	112.94	108.20
1	N	649	A	C3'-C2'-C1'	-5.92	96.76	101.50
1	N	666	G	C5-C6-N1	-5.92	108.54	111.50
1	N	854	U	C6-N1-C2	5.92	124.55	121.00
1	N	622	A	N9-C4-C5	5.92	108.17	105.80
1	N	939	G	N3-C4-N9	-5.92	122.45	126.00
1	N	1297	G	C6-C5-N7	-5.92	126.85	130.40
1	N	103	U	C5-C6-N1	5.92	125.66	122.70
1	N	176	C	C4-C5-C6	-5.92	114.44	117.40
1	N	744	C	P-O3'-C3'	5.92	126.80	119.70
1	N	893	C	N3-C4-C5	5.92	124.27	121.90
1	N	1152	A	C5'-C4'-C3'	-5.92	106.53	116.00
1	N	82	G	N3-C4-N9	5.91	129.55	126.00
1	N	257	G	C4'-C3'-C2'	-5.91	96.69	102.60
1	N	923	A	N3-C4-N9	5.91	132.13	127.40
1	N	938	A	C6-N1-C2	-5.91	115.05	118.60
1	N	1026	G	C4'-C3'-C2'	-5.91	96.69	102.60
1	N	1146	A	N1-C6-N6	5.91	122.15	118.60
1	N	1255	G	N1-C2-N3	-5.91	120.35	123.90
1	N	533	A	C4-C5-N7	-5.91	107.74	110.70
1	N	629	A	N9-C4-C5	-5.91	103.44	105.80
1	N	656	G	P-O3'-C3'	-5.91	112.61	119.70
1	N	739	C	C6-N1-C1'	-5.91	113.71	120.80
1	N	1015	G	C6-C5-N7	-5.91	126.85	130.40
1	N	1140	C	C4-C5-C6	5.91	120.36	117.40
1	N	1456	A	C5'-C4'-C3'	-5.91	106.54	116.00
1	N	54	C	P-O3'-C3'	-5.91	112.61	119.70
1	N	425	G	C2-N3-C4	5.91	114.85	111.90
1	N	1113	C	C5'-C4'-C3'	-5.91	106.55	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1136	C	N3-C4-N4	5.91	122.14	118.00
1	N	401	C	N1-C2-O2	5.91	122.44	118.90
1	N	765	G	N3-C4-N9	5.91	129.54	126.00
1	N	1008	U	N1-C2-O2	-5.91	118.67	122.80
1	N	279	A	C5'-C4'-C3'	5.91	125.45	116.00
1	N	713	G	C6-N1-C2	5.91	128.64	125.10
1	N	769	G	C4-C5-C6	5.91	122.34	118.80
1	N	740	U	P-O3'-C3'	-5.90	112.62	119.70
1	N	1242	G	C4-C5-N7	5.90	113.16	110.80
1	N	1515	G	C8-N9-C4	-5.90	104.04	106.40
1	N	145	G	N9-C4-C5	-5.90	103.04	105.40
1	N	317	U	C6-N1-C2	-5.90	117.46	121.00
1	N	589	U	C5-C6-N1	5.90	125.65	122.70
1	N	748	G	O4'-C1'-N9	5.90	112.92	108.20
1	N	793	U	C1'-O4'-C4'	5.90	114.62	109.90
1	N	836	G	N3-C4-C5	5.90	131.55	128.60
1	N	856	C	C6-N1-C2	-5.90	117.94	120.30
1	N	1319	A	N9-C4-C5	5.90	108.16	105.80
1	N	1454	G	C8-N9-C4	-5.90	104.04	106.40
1	N	1499	A	C5-C6-N6	-5.90	118.98	123.70
1	N	281	G	C6-C5-N7	-5.90	126.86	130.40
1	N	648	A	P-O5'-C5'	5.90	130.34	120.90
1	N	892	A	C4'-C3'-C2'	-5.90	96.70	102.60
1	N	613	C	C5-C6-N1	5.90	123.95	121.00
1	N	814	A	P-O5'-C5'	-5.90	111.46	120.90
1	N	883	C	O5'-C5'-C4'	-5.90	100.49	111.70
1	N	60	A	N3-C4-C5	-5.90	122.67	126.80
1	N	120	A	N7-C8-N9	-5.90	110.85	113.80
1	N	122	G	C6-C5-N7	-5.90	126.86	130.40
1	N	689	C	C1'-O4'-C4'	5.90	114.62	109.90
1	N	855	U	C5'-C4'-O4'	5.90	116.18	109.10
1	N	888	G	N3-C4-N9	5.90	129.54	126.00
1	N	1094	G	C8-N9-C4	-5.90	104.04	106.40
1	N	19	A	C5-N7-C8	5.90	106.85	103.90
1	N	89	U	C3'-C2'-C1'	5.90	106.22	101.50
1	N	203	G	C6-N1-C2	5.90	128.64	125.10
1	N	993	G	C6-N1-C2	5.90	128.64	125.10
1	N	1161	C	N3-C4-C5	-5.90	119.54	121.90
1	N	1291	U	C4-C5-C6	5.90	123.24	119.70
1	N	1412	C	N3-C4-C5	-5.90	119.54	121.90
1	N	239	U	P-O3'-C3'	5.89	126.77	119.70
1	N	402	G	C5'-C4'-O4'	5.89	116.17	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	406	G	C5-C6-N1	5.89	114.45	111.50
1	N	498	A	C5-C6-N6	-5.89	118.98	123.70
1	N	1256	A	C4-C5-N7	-5.89	107.75	110.70
1	N	1258	G	N3-C4-N9	5.89	129.54	126.00
1	N	1303	C	C2-N3-C4	5.89	122.85	119.90
1	N	1351	U	P-O3'-C3'	5.89	126.77	119.70
1	N	1534	A	C5'-C4'-C3'	-5.89	106.57	116.00
1	N	1257	A	C3'-C2'-C1'	-5.89	96.78	101.50
1	N	656	G	N3-C2-N2	5.89	124.02	119.90
1	N	809	G	C4-C5-N7	-5.89	108.44	110.80
1	N	1345	U	O4'-C1'-N1	5.89	112.91	108.20
1	N	171	A	C6-C5-N7	-5.89	128.18	132.30
1	N	637	C	C5-C6-N1	5.89	123.94	121.00
1	N	654	G	C4-C5-C6	5.89	122.33	118.80
1	N	1433	A	C5-C6-N6	-5.89	118.99	123.70
1	N	1451	U	C5-C6-N1	5.89	125.64	122.70
1	N	1459	G	P-O5'-C5'	5.89	130.32	120.90
1	N	39	G	N1-C2-N3	-5.89	120.37	123.90
1	N	724	G	N1-C6-O6	5.89	123.43	119.90
1	N	1176	A	N9-C4-C5	5.89	108.16	105.80
1	N	1501	C	O4'-C1'-N1	5.89	112.91	108.20
1	N	74	A	N7-C8-N9	-5.89	110.86	113.80
1	N	139	A	O4'-C1'-N9	5.89	112.91	108.20
1	N	406	G	P-O5'-C5'	5.89	130.32	120.90
1	N	503	C	C5-C4-N4	-5.89	116.08	120.20
1	N	670	G	N3-C4-N9	5.89	129.53	126.00
1	N	1218	C	O4'-C4'-C3'	-5.89	98.11	104.00
1	N	1249	C	P-O3'-C3'	5.89	126.76	119.70
1	N	503	C	C4-C5-C6	5.88	120.34	117.40
1	N	633	G	C5-C6-N1	5.88	114.44	111.50
1	N	1250	A	P-O5'-C5'	5.88	130.32	120.90
1	N	97	G	C4-N9-C1'	5.88	134.15	126.50
1	N	334	C	C2-N1-C1'	5.88	125.27	118.80
1	N	372	C	O4'-C1'-C2'	-5.88	99.92	105.80
1	N	815	A	N3-C4-N9	5.88	132.11	127.40
1	N	1353	G	P-O3'-C3'	-5.88	112.64	119.70
1	N	65	A	O4'-C1'-N9	5.88	112.91	108.20
1	N	651	C	C5-C4-N4	-5.88	116.08	120.20
1	N	929	G	N9-C4-C5	5.88	107.75	105.40
1	N	1206	G	O4'-C1'-N9	5.88	112.91	108.20
1	N	1270	G	N3-C2-N2	5.88	124.02	119.90
1	N	1348	U	C6-N1-C2	-5.88	117.47	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	402	G	N1-C6-O6	5.88	123.43	119.90
1	N	1301	U	N3-C4-C5	-5.88	111.07	114.60
1	N	317	U	C5'-C4'-C3'	-5.88	106.60	116.00
1	N	358	U	C5-C4-O4	5.88	129.43	125.90
1	N	639	G	C5-C6-O6	-5.88	125.07	128.60
1	N	776	G	N9-C4-C5	5.88	107.75	105.40
1	N	802	A	C5-C6-N6	5.88	128.40	123.70
1	N	1458	G	C4-C5-C6	5.88	122.33	118.80
1	N	1528	U	C5'-C4'-O4'	5.88	116.15	109.10
1	N	3	A	C5-C6-N1	-5.88	114.76	117.70
1	N	104	G	N3-C4-C5	5.88	131.54	128.60
1	N	130	A	C6-C5-N7	-5.88	128.19	132.30
1	N	583	A	C3'-C2'-C1'	-5.88	96.80	101.50
1	N	792	A	C5'-C4'-O4'	5.88	116.15	109.10
1	N	907	A	C4-C5-N7	-5.88	107.76	110.70
1	N	134	G	C6-C5-N7	-5.88	126.88	130.40
1	N	168	G	C4-C5-C6	5.88	122.33	118.80
1	N	1362	A	C2'-C3'-O3'	5.88	123.10	113.70
1	N	1466	C	P-O3'-C3'	5.88	126.75	119.70
1	N	38	G	C2-N3-C4	5.87	114.84	111.90
1	N	384	G	N9-C4-C5	-5.87	103.05	105.40
1	N	546	A	C4-C5-N7	-5.87	107.76	110.70
1	N	1222	G	N1-C2-N2	-5.87	110.91	116.20
1	N	1248	A	C6-N1-C2	5.87	122.12	118.60
1	N	1443	C	N3-C4-C5	-5.87	119.55	121.90
1	N	1523	G	N3-C4-C5	-5.87	125.66	128.60
1	N	139	A	C2-N3-C4	-5.87	107.66	110.60
1	N	229	U	P-O5'-C5'	5.87	130.29	120.90
1	N	720	C	C4-C5-C6	5.87	120.34	117.40
1	N	979	C	C5-C4-N4	-5.87	116.09	120.20
1	N	1292	G	N3-C4-C5	5.87	131.54	128.60
1	N	69	G	C6-N1-C2	5.87	128.62	125.10
1	N	436	C	N3-C2-O2	-5.87	117.79	121.90
1	N	698	G	N1-C6-O6	5.87	123.42	119.90
1	N	1136	C	N3-C4-C5	-5.87	119.55	121.90
1	N	1411	C	N1-C2-N3	5.87	123.31	119.20
1	N	206	C	C2-N1-C1'	5.87	125.25	118.80
1	N	394	G	C4'-C3'-C2'	-5.87	96.73	102.60
1	N	544	G	N1-C2-N2	5.87	121.48	116.20
1	N	693	G	N3-C4-N9	-5.87	122.48	126.00
1	N	1318	A	O4'-C1'-N9	5.87	112.89	108.20
1	N	1343	G	C4-C5-N7	-5.87	108.45	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1501	C	P-O3'-C3'	5.87	126.74	119.70
1	N	446	G	O4'-C1'-N9	5.87	112.89	108.20
1	N	1123	U	C5-C4-O4	-5.87	122.38	125.90
1	N	1254	A	O4'-C1'-N9	5.87	112.89	108.20
1	N	1304	G	C6-C5-N7	-5.87	126.88	130.40
1	N	1361	G	N3-C4-C5	5.87	131.53	128.60
1	N	337	G	N3-C4-C5	-5.87	125.67	128.60
1	N	457	G	C5-N7-C8	5.87	107.23	104.30
1	N	508	U	C2-N3-C4	-5.87	123.48	127.00
1	N	619	U	C6-N1-C2	-5.87	117.48	121.00
1	N	842	U	C2-N3-C4	-5.87	123.48	127.00
1	N	1187	G	C3'-C2'-C1'	-5.87	96.81	101.50
1	N	1230	C	C1'-O4'-C4'	-5.87	105.21	109.90
1	N	1329	A	C5-C6-N6	-5.87	119.01	123.70
1	N	1440	U	N1-C2-O2	-5.87	118.69	122.80
1	N	513	C	C4-C5-C6	-5.86	114.47	117.40
1	N	1087	G	P-O3'-C3'	-5.86	112.67	119.70
1	N	1307	U	C5-C4-O4	-5.86	122.38	125.90
1	N	1053	G	C5'-C4'-O4'	-5.86	102.07	109.10
1	N	1075	U	O4'-C1'-N1	5.86	112.89	108.20
1	N	1101	A	O4'-C1'-N9	5.86	112.89	108.20
1	N	1117	A	C6-C5-N7	-5.86	128.20	132.30
1	N	1494	G	N3-C2-N2	5.86	124.00	119.90
1	N	459	A	C8-N9-C1'	-5.86	117.15	127.70
1	N	1068	G	N1-C2-N2	-5.86	110.93	116.20
1	N	274	A	C4-C5-C6	5.86	119.93	117.00
1	N	655	A	C8-N9-C4	-5.86	103.46	105.80
1	N	881	G	C5'-C4'-C3'	5.86	125.37	116.00
1	N	342	C	N1-C2-O2	5.86	122.41	118.90
1	N	432	A	P-O3'-C3'	5.86	126.73	119.70
1	N	436	C	N1-C2-O2	5.86	122.41	118.90
1	N	522	C	C3'-C2'-C1'	5.86	106.18	101.50
1	N	729	A	P-O5'-C5'	5.86	130.27	120.90
1	N	947	G	C4-C5-N7	-5.86	108.46	110.80
1	N	543	U	C3'-C2'-C1'	5.85	106.18	101.50
1	N	739	C	N1-C2-N3	-5.85	115.10	119.20
1	N	1231	G	C5-C6-O6	-5.85	125.09	128.60
1	N	1277	C	C6-N1-C2	-5.85	117.96	120.30
1	N	370	C	C5'-C4'-O4'	5.85	116.12	109.10
1	N	380	G	C4-N9-C1'	-5.85	118.89	126.50
1	N	497	G	C5'-C4'-O4'	-5.85	102.08	109.10
1	N	858	G	P-O5'-C5'	5.85	130.26	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	896	C	C6-N1-C2	-5.85	117.96	120.30
1	N	985	C	N3-C4-C5	-5.85	119.56	121.90
1	N	1172	C	O4'-C1'-N1	5.85	112.88	108.20
1	N	505	G	C4-C5-N7	5.85	113.14	110.80
1	N	586	C	N1-C2-O2	-5.85	115.39	118.90
1	N	962	C	N3-C4-N4	5.85	122.09	118.00
1	N	1163	A	C8-N9-C4	-5.85	103.46	105.80
1	N	1268	G	C8-N9-C4	-5.85	104.06	106.40
1	N	172	A	P-O5'-C5'	5.85	130.26	120.90
1	N	715	A	C4-C5-N7	-5.85	107.78	110.70
1	N	1260	G	C6-N1-C2	5.85	128.61	125.10
1	N	1281	C	N3-C2-O2	-5.85	117.81	121.90
1	N	1510	C	C2-N1-C1'	5.85	125.23	118.80
1	N	216	U	N3-C4-O4	5.85	123.49	119.40
1	N	315	A	C5-C6-N1	-5.85	114.78	117.70
1	N	1385	G	C6-N1-C2	5.85	128.61	125.10
1	N	1450	U	C5'-C4'-O4'	5.85	116.12	109.10
1	N	1459	G	C4'-C3'-C2'	-5.85	96.75	102.60
1	N	541	G	C4'-C3'-C2'	-5.84	96.76	102.60
1	N	942	G	N3-C2-N2	5.84	123.99	119.90
1	N	1233	G	N3-C4-N9	-5.84	122.49	126.00
1	N	293	G	N3-C2-N2	5.84	123.99	119.90
1	N	329	A	C8-N9-C4	-5.84	103.46	105.80
1	N	424	G	N3-C4-C5	-5.84	125.68	128.60
1	N	979	C	N3-C4-N4	5.84	122.09	118.00
1	N	3	A	N3-C4-C5	-5.84	122.71	126.80
1	N	203	G	C5-C6-O6	-5.84	125.09	128.60
1	N	247	G	N3-C4-C5	5.84	131.52	128.60
1	N	129	A	C3'-C2'-C1'	5.84	106.17	101.50
1	N	559	A	O5'-C5'-C4'	-5.84	100.61	111.70
1	N	605	U	C3'-C2'-C1'	5.84	106.17	101.50
1	N	1361	G	N1-C2-N3	-5.84	120.40	123.90
1	N	1478	U	N3-C4-O4	5.84	123.49	119.40
1	N	98	A	O4'-C1'-N9	5.84	112.87	108.20
1	N	516	U	OP1-P-OP2	-5.84	110.84	119.60
1	N	654	G	N1-C2-N2	-5.84	110.95	116.20
1	N	711	G	N1-C2-N3	-5.84	120.40	123.90
1	N	126	G	C5-N7-C8	5.83	107.22	104.30
1	N	788	U	O5'-C5'-C4'	5.83	122.79	111.70
1	N	860	A	C4'-C3'-C2'	-5.83	96.77	102.60
1	N	419	C	N3-C4-N4	5.83	122.08	118.00
1	N	755	G	N3-C4-C5	-5.83	125.68	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	240	G	O4'-C1'-N9	5.83	112.87	108.20
1	N	1068	G	C4-C5-N7	5.83	113.13	110.80
1	N	1425	U	N3-C4-O4	5.83	123.48	119.40
1	N	233	C	C4-C5-C6	-5.83	114.48	117.40
1	N	684	U	N3-C4-C5	-5.83	111.10	114.60
1	N	937	A	C2-N3-C4	-5.83	107.69	110.60
1	N	1196	A	N3-C4-N9	5.83	132.06	127.40
1	N	1475	G	N7-C8-N9	5.83	116.02	113.10
1	N	1487	G	C8-N9-C4	-5.83	104.07	106.40
1	N	1488	G	C5-C6-O6	-5.83	125.10	128.60
1	N	87	C	C5-C6-N1	5.83	123.91	121.00
1	N	927	G	C4'-C3'-C2'	-5.83	96.77	102.60
1	N	1261	A	C6-C5-N7	-5.83	128.22	132.30
1	N	103	U	N3-C4-C5	-5.83	111.10	114.60
1	N	474	G	N9-C1'-C2'	-5.83	105.59	112.00
1	N	1333	A	C2-N3-C4	5.83	113.51	110.60
1	N	53	A	N1-C6-N6	5.83	122.09	118.60
1	N	1238	A	C5-C6-N6	-5.83	119.04	123.70
1	N	97	G	C5-N7-C8	5.82	107.21	104.30
1	N	397	A	N1-C2-N3	5.82	132.21	129.30
1	N	622	A	C4-C5-N7	-5.82	107.79	110.70
1	N	750	C	N3-C4-C5	5.82	124.23	121.90
1	N	771	G	C4-C5-N7	5.82	113.13	110.80
1	N	839	C	C4'-C3'-C2'	-5.82	96.78	102.60
1	N	1503	A	C4-C5-C6	5.82	119.91	117.00
1	N	19	A	C4-N9-C1'	5.82	136.78	126.30
1	N	114	U	P-O5'-C5'	5.82	130.21	120.90
1	N	149	A	N1-C2-N3	5.82	132.21	129.30
1	N	833	G	N1-C2-N3	-5.82	120.41	123.90
1	N	1272	G	O4'-C1'-N9	5.82	112.86	108.20
1	N	119	A	C4-C5-C6	5.82	119.91	117.00
1	N	144	G	N3-C4-N9	-5.82	122.51	126.00
1	N	532	A	C5-N7-C8	5.82	106.81	103.90
1	N	554	A	C5-C6-N6	-5.82	119.05	123.70
1	N	1273	C	N3-C4-N4	5.82	122.07	118.00
1	N	1531	A	C2-N3-C4	5.82	113.51	110.60
1	N	134	G	C4'-C3'-C2'	-5.82	96.78	102.60
1	N	1064	G	C6-C5-N7	-5.82	126.91	130.40
1	N	1104	G	C5-C6-O6	-5.82	125.11	128.60
1	N	639	G	C6-C5-N7	-5.81	126.91	130.40
1	N	59	A	C2-N3-C4	-5.81	107.69	110.60
1	N	169	C	C2-N1-C1'	5.81	125.19	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	600	A	N7-C8-N9	-5.81	110.89	113.80
1	N	1003	G	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	1390	U	C4-C5-C6	5.81	123.19	119.70
1	N	1458	G	C1'-O4'-C4'	5.81	114.55	109.90
1	N	171	A	P-O3'-C3'	-5.81	112.73	119.70
1	N	353	A	P-O3'-C3'	5.81	126.67	119.70
1	N	434	U	N3-C4-O4	5.81	123.47	119.40
1	N	472	U	C6-N1-C2	-5.81	117.51	121.00
1	N	241	G	C5'-C4'-C3'	5.81	125.30	116.00
1	N	292	G	C5-C6-O6	-5.81	125.11	128.60
1	N	791	G	O4'-C1'-N9	5.81	112.85	108.20
1	N	934	C	C5-C6-N1	5.81	123.91	121.00
1	N	936	C	C2-N3-C4	-5.81	117.00	119.90
1	N	1513	A	N1-C2-N3	-5.81	126.39	129.30
1	N	34	C	O4'-C1'-N1	5.81	112.85	108.20
1	N	160	A	C1'-O4'-C4'	5.81	114.55	109.90
1	N	1449	C	N1-C2-O2	-5.81	115.42	118.90
1	N	435	A	C5-C6-N1	-5.81	114.80	117.70
1	N	676	A	N9-C4-C5	5.81	108.12	105.80
1	N	712	A	C1'-O4'-C4'	5.81	114.55	109.90
1	N	1004	A	C3'-C2'-C1'	5.81	106.14	101.50
1	N	1258	G	P-O3'-C3'	5.81	126.67	119.70
1	N	592	G	C5-C6-N1	-5.80	108.60	111.50
1	N	766	A	C5-C6-N6	-5.80	119.06	123.70
1	N	836	G	N3-C2-N2	5.80	123.96	119.90
1	N	1028	C	N3-C2-O2	5.80	125.96	121.90
1	N	1110	A	O4'-C1'-N9	5.80	112.84	108.20
1	N	524	G	C2-N3-C4	5.80	114.80	111.90
1	N	818	G	C6-C5-N7	-5.80	126.92	130.40
1	N	1382	C	O4'-C1'-N1	5.80	112.84	108.20
1	N	51	A	C4-C5-N7	-5.80	107.80	110.70
1	N	137	U	O4'-C1'-N1	5.80	112.84	108.20
1	N	355	C	C4-C5-C6	5.80	120.30	117.40
1	N	709	U	C5-C6-N1	5.80	125.60	122.70
1	N	966	G	N1-C2-N3	-5.80	120.42	123.90
1	N	1287	A	C5-C6-N6	-5.80	119.06	123.70
1	N	591	U	C5-C6-N1	5.80	125.60	122.70
1	N	624	C	C6-N1-C2	-5.80	117.98	120.30
1	N	655	A	P-O5'-C5'	5.80	130.18	120.90
1	N	834	U	C5-C6-N1	-5.80	119.80	122.70
1	N	865	A	C8-N9-C4	-5.80	103.48	105.80
1	N	1094	G	C4-N9-C1'	-5.80	118.96	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	22	G	C3'-C2'-C1'	-5.80	96.86	101.50
1	N	610	U	C3'-C2'-C1'	5.80	106.14	101.50
1	N	734	G	O4'-C1'-N9	5.80	112.84	108.20
1	N	829	G	N7-C8-N9	5.80	116.00	113.10
1	N	1474	U	N3-C4-O4	-5.80	115.34	119.40
1	N	334	C	C4-C5-C6	5.79	120.30	117.40
1	N	67	C	C6-N1-C2	-5.79	117.98	120.30
1	N	463	U	C2-N1-C1'	5.79	124.65	117.70
1	N	636	U	C5'-C4'-C3'	5.79	125.27	116.00
1	N	911	U	OP1-P-OP2	-5.79	110.91	119.60
1	N	948	C	N3-C2-O2	-5.79	117.84	121.90
1	N	1431	A	O4'-C1'-N9	5.79	112.83	108.20
1	N	81	A	N3-C4-C5	-5.79	122.75	126.80
1	N	732	C	P-O3'-C3'	5.79	126.65	119.70
1	N	929	G	C5-C6-O6	-5.79	125.13	128.60
1	N	1246	A	C5-C6-N1	-5.79	114.80	117.70
1	N	1446	A	N3-C4-C5	-5.79	122.75	126.80
1	N	839	C	C5-C6-N1	-5.79	118.11	121.00
1	N	616	G	C8-N9-C1'	5.79	134.53	127.00
1	N	793	U	C5-C4-O4	-5.79	122.43	125.90
1	N	1389	C	N1-C1'-C2'	-5.79	105.63	112.00
1	N	297	G	O4'-C1'-N9	5.79	112.83	108.20
1	N	1237	C	N3-C2-O2	-5.79	117.85	121.90
1	N	1428	A	C2-N3-C4	-5.79	107.71	110.60
1	N	48	C	O4'-C4'-C3'	-5.79	98.22	104.00
1	N	389	A	P-O3'-C3'	5.79	126.64	119.70
1	N	1416	G	P-O3'-C3'	-5.79	112.76	119.70
1	N	1153	G	C8-N9-C1'	5.78	134.52	127.00
1	N	1306	A	N1-C2-N3	5.78	132.19	129.30
1	N	1396	A	C8-N9-C1'	5.78	138.11	127.70
1	N	188	C	N3-C4-N4	5.78	122.05	118.00
1	N	1187	G	OP1-P-OP2	-5.78	110.93	119.60
1	N	513	C	C2-N3-C4	5.78	122.79	119.90
1	N	877	G	N1-C2-N3	-5.78	120.43	123.90
1	N	1308	U	P-O3'-C3'	5.78	126.64	119.70
1	N	463	U	C6-N1-C1'	-5.78	113.11	121.20
1	N	1049	U	C5-C6-N1	5.78	125.59	122.70
1	N	1128	C	C6-N1-C1'	-5.78	113.87	120.80
1	N	372	C	C2-N1-C1'	5.78	125.16	118.80
1	N	597	G	O4'-C1'-N9	5.78	112.82	108.20
1	N	702	A	C4-C5-C6	5.78	119.89	117.00
1	N	750	C	O4'-C1'-N1	5.78	112.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	858	G	P-O3'-C3'	5.78	126.63	119.70
1	N	894	G	C5-N7-C8	5.78	107.19	104.30
1	N	1488	G	N9-C1'-C2'	-5.78	105.65	112.00
1	N	294	U	C5-C6-N1	5.78	125.59	122.70
1	N	564	C	C5'-C4'-C3'	-5.78	106.76	116.00
1	N	789	U	C5-C4-O4	5.78	129.37	125.90
1	N	1089	G	N7-C8-N9	5.78	115.99	113.10
1	N	1365	G	O4'-C1'-N9	5.78	112.82	108.20
1	N	1328	C	P-O3'-C3'	-5.77	112.77	119.70
1	N	17	U	C6-N1-C2	5.77	124.46	121.00
1	N	48	C	O4'-C1'-N1	5.77	112.82	108.20
1	N	393	A	C6-C5-N7	5.77	136.34	132.30
1	N	550	G	N9-C4-C5	-5.77	103.09	105.40
1	N	696	A	C6-C5-N7	-5.77	128.26	132.30
1	N	698	G	C5-C6-N1	-5.77	108.61	111.50
1	N	699	C	C3'-C2'-C1'	-5.77	96.88	101.50
1	N	837	U	C4'-C3'-C2'	-5.77	96.83	102.60
1	N	945	G	P-O3'-C3'	-5.77	112.78	119.70
1	N	327	A	C5'-C4'-O4'	5.77	116.02	109.10
1	N	715	A	C6-N1-C2	5.77	122.06	118.60
1	N	1009	U	P-O3'-C3'	-5.77	112.78	119.70
1	N	1279	G	P-O3'-C3'	-5.77	112.78	119.70
1	N	1534	A	N7-C8-N9	-5.77	110.92	113.80
1	N	1198	G	N1-C6-O6	5.77	123.36	119.90
1	N	78	A	C3'-C2'-C1'	5.77	106.11	101.50
1	N	553	A	C1'-O4'-C4'	5.77	114.51	109.90
1	N	709	U	C6-N1-C1'	5.77	129.27	121.20
1	N	188	C	C4'-C3'-C2'	-5.76	96.84	102.60
1	N	257	G	C2-N3-C4	5.76	114.78	111.90
1	N	510	A	N7-C8-N9	5.76	116.68	113.80
1	N	566	G	N3-C2-N2	5.76	123.94	119.90
1	N	798	U	C5-C6-N1	5.76	125.58	122.70
1	N	182	A	O4'-C1'-N9	5.76	112.81	108.20
1	N	690	G	N3-C2-N2	5.76	123.93	119.90
1	N	1142	G	C5-N7-C8	5.76	107.18	104.30
1	N	206	C	C6-N1-C2	-5.76	118.00	120.30
1	N	365	U	N1-C2-O2	-5.76	118.77	122.80
1	N	1375	A	C5-C6-N6	-5.76	119.09	123.70
1	N	1394	A	O4'-C1'-N9	5.76	112.81	108.20
1	N	1411	C	C4-C5-C6	5.76	120.28	117.40
1	N	391	G	C3'-C2'-C1'	5.76	106.11	101.50
1	N	457	G	N3-C4-C5	-5.76	125.72	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1029	U	C4-C5-C6	5.76	123.16	119.70
1	N	121	U	O4'-C1'-N1	5.76	112.81	108.20
1	N	877	G	N3-C2-N2	5.76	123.93	119.90
1	N	4	U	OP1-P-OP2	-5.76	110.96	119.60
1	N	37	U	O4'-C1'-N1	5.76	112.81	108.20
1	N	269	C	N3-C2-O2	-5.76	117.87	121.90
1	N	305	G	N1-C6-O6	5.76	123.35	119.90
1	N	372	C	C5-C4-N4	-5.76	116.17	120.20
1	N	488	C	C1'-O4'-C4'	5.76	114.51	109.90
1	N	934	C	C3'-C2'-C1'	5.76	106.11	101.50
1	N	1086	U	C5-C4-O4	5.76	129.35	125.90
1	N	1148	U	C5-C6-N1	5.76	125.58	122.70
1	N	1191	A	C6-N1-C2	-5.76	115.15	118.60
1	N	72	A	C3'-C2'-C1'	5.75	106.10	101.50
1	N	1201	A	C2-N3-C4	-5.75	107.72	110.60
1	N	28	A	C4-C5-C6	5.75	119.88	117.00
1	N	782	A	C3'-C2'-C1'	-5.75	96.90	101.50
1	N	1039	G	C6-C5-N7	-5.75	126.95	130.40
1	N	1162	C	N3-C4-N4	5.75	122.03	118.00
1	N	1193	G	N1-C2-N2	-5.75	111.02	116.20
1	N	1194	U	C5-C6-N1	5.75	125.58	122.70
1	N	155	A	N9-C4-C5	5.75	108.10	105.80
1	N	425	G	P-O5'-C5'	5.75	130.10	120.90
1	N	1349	A	N7-C8-N9	-5.75	110.92	113.80
1	N	1515	G	O4'-C4'-C3'	-5.75	98.25	104.00
1	N	625	U	C2-N3-C4	5.75	130.45	127.00
1	N	1092	A	C4'-C3'-C2'	5.75	108.35	102.60
1	N	1130	A	O4'-C1'-N9	5.75	112.80	108.20
1	N	1173	U	O4'-C1'-N1	5.75	112.80	108.20
1	N	1243	C	C3'-C2'-C1'	-5.75	96.90	101.50
1	N	1454	G	C5'-C4'-C3'	-5.75	106.81	116.00
1	N	1523	G	C6-C5-N7	-5.75	126.95	130.40
1	N	35	G	N1-C2-N3	-5.75	120.45	123.90
1	N	517	G	C4-C5-C6	5.74	122.25	118.80
1	N	877	G	C8-N9-C4	5.74	108.70	106.40
1	N	947	G	P-O5'-C5'	-5.74	111.71	120.90
1	N	1309	G	N9-C4-C5	-5.74	103.10	105.40
1	N	102	G	C2-N3-C4	5.74	114.77	111.90
1	N	799	G	N9-C4-C5	-5.74	103.10	105.40
1	N	1002	G	N3-C4-N9	-5.74	122.56	126.00
1	N	151	A	OP1-P-OP2	-5.74	110.99	119.60
1	N	404	G	C1'-O4'-C4'	-5.74	105.31	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	428	G	C6-N1-C2	5.74	128.54	125.10
1	N	722	G	C4-N9-C1'	5.74	133.96	126.50
1	N	729	A	O5'-C5'-C4'	-5.74	100.79	111.70
1	N	736	C	N3-C4-N4	5.74	122.02	118.00
1	N	907	A	O4'-C4'-C3'	-5.74	98.26	104.00
1	N	937	A	C5-C6-N6	-5.74	119.11	123.70
1	N	1143	G	N3-C4-C5	5.74	131.47	128.60
1	N	1230	C	C4-C5-C6	5.74	120.27	117.40
1	N	262	A	P-O5'-C5'	-5.74	111.72	120.90
1	N	345	C	N3-C4-C5	-5.74	119.61	121.90
1	N	428	G	N3-C4-C5	-5.74	125.73	128.60
1	N	765	G	P-O5'-C5'	5.74	130.08	120.90
1	N	884	U	C5-C4-O4	-5.74	122.46	125.90
1	N	1087	G	C5-N7-C8	5.74	107.17	104.30
1	N	1263	C	C6-N1-C2	5.74	122.59	120.30
1	N	1432	G	C2'-C3'-O3'	5.74	122.88	113.70
1	N	507	C	N1-C2-O2	-5.74	115.46	118.90
1	N	1464	U	C5-C4-O4	-5.74	122.46	125.90
1	N	753	A	C6-N1-C2	5.74	122.04	118.60
1	N	1183	U	O4'-C1'-N1	5.74	112.79	108.20
1	N	456	A	C6-C5-N7	-5.73	128.29	132.30
1	N	721	G	C2-N3-C4	5.73	114.77	111.90
1	N	50	A	C5-C6-N6	-5.73	119.11	123.70
1	N	1485	U	N1-C2-O2	-5.73	118.79	122.80
1	N	1205	U	O4'-C1'-C2'	-5.73	100.07	105.80
1	N	1380	U	N1-C2-O2	5.73	126.81	122.80
1	N	705	G	C4'-C3'-C2'	-5.73	96.87	102.60
1	N	347	G	C4-C5-N7	5.73	113.09	110.80
1	N	411	A	O4'-C1'-C2'	5.73	112.75	107.60
1	N	474	G	N3-C2-N2	5.73	123.91	119.90
1	N	548	G	O5'-C5'-C4'	-5.73	100.82	111.70
1	N	558	G	N3-C2-N2	5.73	123.91	119.90
1	N	778	G	N1-C2-N3	-5.73	120.46	123.90
1	N	923	A	C4-C5-C6	5.73	119.86	117.00
1	N	622	A	C8-N9-C4	-5.73	103.51	105.80
1	N	655	A	P-O3'-C3'	-5.73	112.83	119.70
1	N	1189	U	C5-C4-O4	-5.73	122.46	125.90
1	N	1217	C	O4'-C1'-N1	5.73	112.78	108.20
1	N	577	G	C6-C5-N7	-5.72	126.97	130.40
1	N	825	A	N7-C8-N9	5.72	116.66	113.80
1	N	861	G	N3-C4-C5	-5.72	125.74	128.60
1	N	1084	G	C5-N7-C8	5.72	107.16	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1196	A	C2-N3-C4	5.72	113.46	110.60
1	N	1418	A	C5-N7-C8	5.72	106.76	103.90
1	N	1443	C	C4-C5-C6	5.72	120.26	117.40
1	N	537	G	N1-C2-N3	-5.72	120.47	123.90
1	N	748	G	C5-N7-C8	-5.72	101.44	104.30
1	N	900	A	C6-C5-N7	-5.72	128.29	132.30
1	N	1166	G	P-O3'-C3'	5.72	126.57	119.70
1	N	1181	G	C4-C5-C6	-5.72	115.37	118.80
1	N	1440	U	C5'-C4'-O4'	5.72	115.97	109.10
1	N	220	G	C8-N9-C1'	-5.72	119.56	127.00
1	N	254	G	O5'-C5'-C4'	-5.72	100.83	111.70
1	N	418	C	P-O5'-C5'	5.72	130.05	120.90
1	N	705	G	C6-N1-C2	5.72	128.53	125.10
1	N	1368	A	C4-C5-N7	-5.72	107.84	110.70
1	N	294	U	P-O5'-C5'	5.72	130.05	120.90
1	N	454	G	C8-N9-C4	-5.72	104.11	106.40
1	N	644	U	C6-N1-C2	5.72	124.43	121.00
1	N	1410	A	N3-C4-N9	-5.72	122.82	127.40
1	N	33	A	C5-N7-C8	5.72	106.76	103.90
1	N	476	U	C5-C6-N1	5.72	125.56	122.70
1	N	543	U	P-O3'-C3'	5.72	126.56	119.70
1	N	617	G	N7-C8-N9	5.72	115.96	113.10
1	N	913	A	C5-C6-N1	-5.72	114.84	117.70
1	N	1439	G	N9-C4-C5	-5.72	103.11	105.40
1	N	46	G	N3-C4-N9	5.71	129.43	126.00
1	N	440	C	C5-C6-N1	5.71	123.86	121.00
1	N	682	G	O4'-C1'-N9	5.71	112.77	108.20
1	N	957	U	N3-C4-C5	-5.71	111.17	114.60
1	N	79	G	N7-C8-N9	-5.71	110.24	113.10
1	N	127	G	C4-N9-C1'	5.71	133.93	126.50
1	N	366	A	N9-C1'-C2'	-5.71	105.72	112.00
1	N	503	C	C1'-O4'-C4'	5.71	114.47	109.90
1	N	836	G	C4-C5-C6	5.71	122.23	118.80
1	N	39	G	C5'-C4'-C3'	-5.71	106.86	116.00
1	N	334	C	N1-C2-O2	-5.71	115.47	118.90
1	N	486	U	C5-C4-O4	-5.71	122.47	125.90
1	N	499	A	C5-C6-N1	-5.71	114.84	117.70
1	N	1009	U	C6-N1-C2	-5.71	117.57	121.00
1	N	1100	C	O4'-C1'-C2'	-5.71	100.09	105.80
1	N	1345	U	C6-N1-C2	5.71	124.43	121.00
1	N	1524	C	C6-N1-C2	5.71	122.58	120.30
1	N	414	A	C8-N9-C4	-5.71	103.52	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1468	A	N1-C2-N3	5.71	132.16	129.30
1	N	191	G	N3-C4-N9	5.71	129.43	126.00
1	N	198	G	C5-C6-O6	-5.71	125.17	128.60
1	N	403	C	C6-N1-C2	-5.71	118.02	120.30
1	N	569	C	C4-C5-C6	5.71	120.25	117.40
1	N	662	U	C6-N1-C2	5.71	124.42	121.00
1	N	455	G	C6-C5-N7	-5.71	126.98	130.40
1	N	1411	C	C2-N3-C4	-5.71	117.05	119.90
1	N	334	C	C6-N1-C1'	-5.71	113.95	120.80
1	N	497	G	O4'-C1'-N9	5.71	112.76	108.20
1	N	700	G	N3-C4-C5	-5.71	125.75	128.60
1	N	904	U	O4'-C1'-N1	5.71	112.76	108.20
1	N	1154	G	C6-N1-C2	5.71	128.52	125.10
1	N	1159	U	C2-N3-C4	5.71	130.42	127.00
1	N	1106	G	N9-C1'-C2'	-5.70	105.73	112.00
1	N	625	U	N3-C2-O2	5.70	126.19	122.20
1	N	776	G	N3-C4-N9	-5.70	122.58	126.00
1	N	1394	A	C5-C6-N1	-5.70	114.85	117.70
1	N	64	G	C3'-C2'-C1'	5.70	106.06	101.50
1	N	332	G	C4-N9-C1'	5.70	133.91	126.50
1	N	1312	G	C2-N3-C4	5.70	114.75	111.90
1	N	245	U	C5-C4-O4	-5.70	122.48	125.90
1	N	266	G	C5-N7-C8	5.70	107.15	104.30
1	N	370	C	N3-C4-N4	5.70	121.99	118.00
1	N	615	G	N3-C4-C5	5.70	131.45	128.60
1	N	1290	G	C5-N7-C8	5.70	107.15	104.30
1	N	127	G	N3-C2-N2	5.70	123.89	119.90
1	N	1090	U	C4'-C3'-C2'	-5.70	96.90	102.60
1	N	331	G	C4'-C3'-C2'	5.70	108.30	102.60
1	N	477	C	C5-C6-N1	-5.70	118.15	121.00
1	N	658	C	C5-C6-N1	5.70	123.85	121.00
1	N	925	G	P-O3'-C3'	5.70	126.53	119.70
1	N	1220	G	N9-C4-C5	-5.70	103.12	105.40
1	N	542	G	C5-C6-O6	-5.69	125.18	128.60
1	N	1211	U	N1-C2-N3	-5.69	111.48	114.90
1	N	1388	C	C5-C4-N4	-5.69	116.21	120.20
1	N	212	G	O5'-C5'-C4'	-5.69	100.89	111.70
1	N	755	G	N1-C6-O6	5.69	123.32	119.90
1	N	778	G	N3-C4-N9	5.69	129.42	126.00
1	N	1073	U	O4'-C1'-C2'	-5.69	100.11	105.80
1	N	1118	U	C1'-O4'-C4'	-5.69	105.35	109.90
1	N	91	U	N3-C4-C5	-5.69	111.19	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	190	A	O4'-C1'-N9	5.69	112.75	108.20
1	N	230	G	P-O3'-C3'	5.69	126.53	119.70
1	N	538	G	P-O3'-C3'	-5.69	112.87	119.70
1	N	680	C	C4-C5-C6	5.69	120.25	117.40
1	N	801	U	C5-C4-O4	5.69	129.31	125.90
1	N	821	G	C4-C5-C6	5.69	122.21	118.80
1	N	1166	G	P-O5'-C5'	5.69	130.01	120.90
1	N	1190	G	P-O3'-C3'	-5.69	112.87	119.70
1	N	1046	A	P-O5'-C5'	-5.69	111.80	120.90
1	N	1099	G	N7-C8-N9	-5.69	110.26	113.10
1	N	1296	C	C2-N3-C4	5.69	122.75	119.90
1	N	271	C	C2-N1-C1'	5.69	125.06	118.80
1	N	638	U	C2-N3-C4	5.69	130.41	127.00
1	N	724	G	N3-C2-N2	5.69	123.88	119.90
1	N	936	C	N1-C2-O2	-5.69	115.49	118.90
1	N	993	G	N9-C1'-C2'	5.69	121.39	114.00
1	N	1158	C	C6-N1-C1'	-5.69	113.98	120.80
1	N	1501	C	C4-C5-C6	5.69	120.24	117.40
1	N	183	C	C5-C6-N1	5.69	123.84	121.00
1	N	461	A	C6-C5-N7	-5.69	128.32	132.30
1	N	1397	C	C5-C4-N4	5.69	124.18	120.20
1	N	148	G	C5-C6-O6	-5.68	125.19	128.60
1	N	339	C	O5'-C5'-C4'	-5.68	100.90	111.70
1	N	461	A	N3-C4-C5	-5.68	122.82	126.80
1	N	1317	C	N1-C2-N3	-5.68	115.22	119.20
1	N	1182	G	N3-C4-N9	-5.68	122.59	126.00
1	N	1221	G	C5-C6-O6	-5.68	125.19	128.60
1	N	294	U	N3-C4-C5	-5.68	111.19	114.60
1	N	312	C	N3-C4-C5	-5.68	119.63	121.90
1	N	474	G	N1-C2-N3	-5.68	120.49	123.90
1	N	713	G	C2-N3-C4	5.68	114.74	111.90
1	N	846	G	N3-C2-N2	5.68	123.88	119.90
1	N	271	C	C5'-C4'-O4'	5.68	115.91	109.10
1	N	305	G	N3-C2-N2	5.68	123.88	119.90
1	N	319	G	C8-N9-C1'	-5.68	119.62	127.00
1	N	889	A	N1-C6-N6	5.68	122.01	118.60
1	N	892	A	C5'-C4'-C3'	5.68	125.08	116.00
1	N	29	U	N3-C2-O2	5.68	126.17	122.20
1	N	180	U	O4'-C1'-N1	5.68	112.74	108.20
1	N	597	G	N3-C2-N2	5.68	123.87	119.90
1	N	1068	G	C6-N1-C2	-5.68	121.69	125.10
1	N	91	U	C3'-C2'-C1'	5.67	106.04	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	202	G	C1'-O4'-C4'	5.67	114.44	109.90
1	N	246	A	C5-C6-N6	-5.67	119.16	123.70
1	N	268	U	C5'-C4'-C3'	5.67	125.08	116.00
1	N	433	G	P-O3'-C3'	-5.67	112.89	119.70
1	N	884	U	P-O5'-C5'	5.67	129.98	120.90
1	N	893	C	N1-C2-N3	5.67	123.17	119.20
1	N	941	G	O4'-C1'-N9	5.67	112.74	108.20
1	N	1330	U	P-O3'-C3'	-5.67	112.89	119.70
1	N	341	C	C2-N1-C1'	5.67	125.04	118.80
1	N	481	G	C2-N3-C4	5.67	114.74	111.90
1	N	1510	C	C5-C6-N1	5.67	123.84	121.00
1	N	563	A	C5-C6-N6	-5.67	119.16	123.70
1	N	572	A	N9-C4-C5	-5.67	103.53	105.80
1	N	1292	G	N3-C4-N9	-5.67	122.60	126.00
1	N	1403	C	C5-C4-N4	-5.67	116.23	120.20
1	N	1046	A	C5-C6-N1	-5.67	114.86	117.70
1	N	225	C	N3-C4-C5	-5.67	119.63	121.90
1	N	596	A	P-O5'-C5'	5.67	129.97	120.90
1	N	861	G	C6-N1-C2	-5.67	121.70	125.10
1	N	1484	C	O4'-C1'-N1	5.67	112.73	108.20
1	N	311	C	N3-C4-C5	-5.67	119.63	121.90
1	N	670	G	C4-N9-C1'	-5.67	119.14	126.50
1	N	1265	C	C2-N3-C4	5.67	122.73	119.90
1	N	1401	G	N1-C2-N3	-5.67	120.50	123.90
1	N	1461	G	O4'-C1'-N9	5.67	112.73	108.20
1	N	1101	A	C6-N1-C2	5.67	122.00	118.60
1	N	473	U	N3-C2-O2	5.66	126.16	122.20
1	N	555	U	C5-C4-O4	-5.66	122.50	125.90
1	N	645	G	C4'-C3'-C2'	-5.66	96.94	102.60
1	N	916	U	N1-C2-N3	-5.66	111.50	114.90
1	N	1061	G	C6-C5-N7	-5.66	127.00	130.40
1	N	347	G	O4'-C4'-C3'	-5.66	98.34	104.00
1	N	650	G	C5-N7-C8	5.66	107.13	104.30
1	N	870	U	N3-C4-O4	-5.66	115.44	119.40
1	N	942	G	C5-N7-C8	5.66	107.13	104.30
1	N	1018	G	C4-C5-N7	-5.66	108.54	110.80
1	N	39	G	N9-C4-C5	-5.66	103.14	105.40
1	N	43	C	P-O5'-C5'	5.66	129.95	120.90
1	N	172	A	C2-N3-C4	-5.66	107.77	110.60
1	N	730	G	C4-C5-C6	5.66	122.19	118.80
1	N	797	C	C1'-O4'-C4'	5.66	114.43	109.90
1	N	889	A	N7-C8-N9	5.66	116.63	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1148	U	C2-N3-C4	-5.66	123.61	127.00
1	N	975	A	C6-N1-C2	-5.66	115.21	118.60
1	N	1333	A	C6-C5-N7	-5.66	128.34	132.30
1	N	339	C	P-O5'-C5'	5.66	129.95	120.90
1	N	348	G	P-O3'-C3'	5.66	126.49	119.70
1	N	418	C	C5-C6-N1	5.66	123.83	121.00
1	N	519	C	C2-N3-C4	5.66	122.73	119.90
1	N	789	U	O5'-C5'-C4'	-5.65	100.96	111.70
1	N	1079	G	N1-C2-N3	-5.65	120.51	123.90
1	N	1159	U	C3'-C2'-C1'	-5.65	96.98	101.50
1	N	1446	A	C4-C5-N7	-5.65	107.87	110.70
1	N	309	A	P-O3'-C3'	-5.65	112.92	119.70
1	N	1026	G	C3'-C2'-C1'	5.65	106.02	101.50
1	N	1074	G	N1-C2-N3	-5.65	120.51	123.90
1	N	1452	C	O4'-C1'-N1	5.65	112.72	108.20
1	N	107	G	C5'-C4'-O4'	5.65	115.88	109.10
1	N	127	G	C5'-C4'-O4'	5.65	115.88	109.10
1	N	431	A	C5-C6-N6	-5.65	119.18	123.70
1	N	535	A	C2'-C3'-O3'	5.65	122.74	113.70
1	N	1175	G	C1'-O4'-C4'	-5.65	105.38	109.90
1	N	219	U	C1'-O4'-C4'	5.65	114.42	109.90
1	N	69	G	O4'-C1'-N9	5.65	112.72	108.20
1	N	209	U	O4'-C1'-N1	5.65	112.72	108.20
1	N	255	G	O4'-C1'-N9	5.65	112.72	108.20
1	N	345	C	N3-C4-N4	5.65	121.95	118.00
1	N	520	A	N1-C2-N3	5.65	132.12	129.30
1	N	1306	A	C5'-C4'-O4'	5.65	115.88	109.10
1	N	1345	U	C5'-C4'-O4'	5.65	115.88	109.10
1	N	1399	C	C5-C6-N1	-5.65	118.18	121.00
1	N	1466	C	C2-N3-C4	-5.65	117.08	119.90
1	N	369	G	C5-N7-C8	-5.64	101.48	104.30
1	N	394	G	C2-N3-C4	5.64	114.72	111.90
1	N	553	A	N9-C4-C5	5.64	108.06	105.80
1	N	972	C	C5-C4-N4	-5.64	116.25	120.20
1	N	1174	G	C5'-C4'-O4'	5.64	115.87	109.10
1	N	257	G	N9-C4-C5	5.64	107.66	105.40
1	N	360	G	N9-C4-C5	-5.64	103.14	105.40
1	N	491	G	C5'-C4'-O4'	5.64	115.87	109.10
1	N	685	G	N1-C2-N2	-5.64	111.12	116.20
1	N	714	G	N3-C4-N9	-5.64	122.61	126.00
1	N	848	C	N3-C4-N4	5.64	121.95	118.00
1	N	1023	U	N3-C4-C5	-5.64	111.22	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1247	U	C4'-C3'-C2'	-5.64	96.96	102.60
1	N	1357	A	P-O3'-C3'	5.64	126.47	119.70
1	N	1502	A	O4'-C1'-N9	5.64	112.72	108.20
1	N	806	C	O4'-C4'-C3'	-5.64	98.36	104.00
1	N	1321	U	C2-N3-C4	5.64	130.38	127.00
1	N	205	A	C5-C6-N1	-5.64	114.88	117.70
1	N	381	C	P-O3'-C3'	5.64	126.47	119.70
1	N	847	G	N3-C4-C5	5.64	131.42	128.60
1	N	1274	A	N3-C4-C5	-5.64	122.85	126.80
1	N	3	A	C4-C5-N7	-5.64	107.88	110.70
1	N	382	A	O4'-C1'-N9	5.64	112.71	108.20
1	N	429	U	C5-C6-N1	-5.64	119.88	122.70
1	N	940	C	O4'-C4'-C3'	-5.64	98.36	104.00
1	N	1019	A	C1'-O4'-C4'	-5.64	105.39	109.90
1	N	1270	G	P-O5'-C5'	5.64	129.92	120.90
1	N	1305	G	O3'-P-O5'	-5.64	93.29	104.00
1	N	1438	G	C4-C5-N7	5.64	113.06	110.80
1	N	168	G	C3'-C2'-C1'	-5.64	96.99	101.50
1	N	509	A	P-O5'-C5'	-5.64	111.88	120.90
1	N	648	A	O4'-C1'-N9	5.64	112.71	108.20
1	N	713	G	C6-C5-N7	-5.64	127.02	130.40
1	N	1483	A	C3'-C2'-C1'	-5.64	96.99	101.50
1	N	158	G	P-O5'-C5'	-5.63	111.88	120.90
1	N	198	G	C3'-C2'-C1'	5.63	106.01	101.50
1	N	330	C	C5-C4-N4	5.63	124.14	120.20
1	N	368	U	C5'-C4'-C3'	-5.63	106.98	116.00
1	N	705	G	C1'-O4'-C4'	-5.63	105.39	109.90
1	N	1324	A	C4-C5-N7	-5.63	107.88	110.70
1	N	1342	C	C4'-C3'-C2'	-5.63	96.97	102.60
1	N	414	A	C5-C6-N1	-5.63	114.88	117.70
1	N	470	C	C5-C6-N1	-5.63	118.18	121.00
1	N	1376	U	N1-C2-O2	-5.63	118.86	122.80
1	N	632	U	C3'-C2'-C1'	5.63	106.00	101.50
1	N	1001	C	C5-C6-N1	5.63	123.82	121.00
1	N	1005	A	N3-C4-C5	-5.63	122.86	126.80
1	N	1277	C	O4'-C1'-C2'	-5.63	100.17	105.80
1	N	51	A	C5'-C4'-O4'	-5.63	102.34	109.10
1	N	323	U	C2-N3-C4	5.63	130.38	127.00
1	N	542	G	N1-C6-O6	5.63	123.28	119.90
1	N	750	C	N1-C2-O2	-5.63	115.52	118.90
1	N	1098	C	N1-C2-N3	-5.63	115.26	119.20
1	N	595	A	C4-C5-N7	5.63	113.51	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	604	G	C4-C5-C6	5.63	122.18	118.80
1	N	730	G	C5'-C4'-O4'	5.63	115.86	109.10
1	N	15	G	C5-C6-N1	-5.63	108.69	111.50
1	N	162	A	N3-C4-C5	-5.63	122.86	126.80
1	N	841	C	N3-C2-O2	-5.63	117.96	121.90
1	N	1142	G	N1-C2-N3	-5.63	120.52	123.90
1	N	1212	U	P-O3'-C3'	-5.63	112.95	119.70
1	N	1531	A	N7-C8-N9	-5.63	110.99	113.80
1	N	817	C	C5-C4-N4	-5.62	116.26	120.20
1	N	99	C	O3'-P-O5'	-5.62	93.32	104.00
1	N	246	A	P-O3'-C3'	5.62	126.45	119.70
1	N	724	G	C5'-C4'-C3'	-5.62	107.00	116.00
1	N	895	G	N7-C8-N9	-5.62	110.29	113.10
1	N	1093	A	N9-C4-C5	-5.62	103.55	105.80
1	N	562	U	N1-C2-N3	5.62	118.27	114.90
1	N	661	G	N1-C2-N3	-5.62	120.53	123.90
1	N	1012	A	C4-C5-N7	-5.62	107.89	110.70
1	N	1387	G	O4'-C1'-C2'	5.62	112.66	107.60
1	N	33	A	P-O3'-C3'	5.62	126.44	119.70
1	N	582	C	C2-N3-C4	5.62	122.71	119.90
1	N	1093	A	C6-C5-N7	-5.62	128.37	132.30
1	N	164	G	N3-C2-N2	5.62	123.83	119.90
1	N	242	G	C4'-C3'-C2'	-5.62	96.98	102.60
1	N	948	C	C4-C5-C6	-5.62	114.59	117.40
1	N	989	U	C4-C5-C6	5.62	123.07	119.70
1	N	1009	U	C3'-C2'-C1'	5.62	106.00	101.50
1	N	1420	U	O4'-C1'-N1	5.62	112.69	108.20
1	N	568	G	P-O5'-C5'	-5.62	111.91	120.90
1	N	1497	G	N3-C2-N2	5.62	123.83	119.90
1	N	85	U	C6-N1-C1'	-5.61	113.34	121.20
1	N	868	C	P-O3'-C3'	5.61	126.44	119.70
1	N	1131	G	O5'-C5'-C4'	-5.61	101.04	111.70
1	N	1533	C	C4-C5-C6	5.61	120.21	117.40
1	N	436	C	C1'-O4'-C4'	-5.61	105.41	109.90
1	N	456	A	C5-N7-C8	5.61	106.70	103.90
1	N	568	G	P-O3'-C3'	-5.61	112.97	119.70
1	N	1480	A	C2-N3-C4	-5.61	107.79	110.60
1	N	61	G	C5'-C4'-O4'	-5.61	102.37	109.10
1	N	154	U	N1-C2-O2	-5.61	118.87	122.80
1	N	466	A	C6-N1-C2	-5.61	115.23	118.60
1	N	598	U	O4'-C1'-N1	5.61	112.69	108.20
1	N	313	A	C4-C5-C6	5.61	119.80	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	528	C	C5'-C4'-O4'	5.61	115.83	109.10
1	N	955	U	N1-C2-N3	-5.61	111.53	114.90
1	N	1209	C	O5'-P-OP1	-5.61	100.65	105.70
1	N	1228	C	C2-N3-C4	-5.61	117.10	119.90
1	N	1481	U	N3-C4-C5	-5.61	111.24	114.60
1	N	143	A	N1-C6-N6	5.61	121.96	118.60
1	N	159	G	C5-C6-O6	-5.61	125.24	128.60
1	N	282	A	P-O5'-C5'	-5.61	111.93	120.90
1	N	480	U	C6-N1-C1'	-5.61	113.35	121.20
1	N	1487	G	O4'-C1'-N9	5.61	112.68	108.20
1	N	852	G	C6-N1-C2	-5.60	121.74	125.10
1	N	1356	G	N1-C2-N2	5.60	121.24	116.20
1	N	571	U	N3-C4-C5	-5.60	111.24	114.60
1	N	770	C	O4'-C1'-N1	5.60	112.68	108.20
1	N	1003	G	N3-C4-N9	5.60	129.36	126.00
1	N	1179	A	C5-C6-N1	-5.60	114.90	117.70
1	N	1301	U	C5-C4-O4	-5.60	122.54	125.90
1	N	1311	A	O5'-P-OP2	-5.60	100.66	105.70
1	N	1383	C	P-O3'-C3'	-5.60	112.98	119.70
1	N	1491	G	C6-C5-N7	-5.60	127.04	130.40
1	N	819	A	N1-C2-N3	-5.60	126.50	129.30
1	N	260	G	C5-C6-N1	5.60	114.30	111.50
1	N	898	G	C4-C5-N7	5.60	113.04	110.80
1	N	1009	U	C5-C4-O4	-5.60	122.54	125.90
1	N	1104	G	C8-N9-C4	-5.60	104.16	106.40
1	N	1390	U	C2-N3-C4	-5.60	123.64	127.00
1	N	1446	A	C4-C5-C6	5.60	119.80	117.00
1	N	140	U	C2-N3-C4	-5.60	123.64	127.00
1	N	361	G	C1'-O4'-C4'	5.60	114.38	109.90
1	N	375	U	O4'-C1'-N1	5.60	112.68	108.20
1	N	412	A	P-O3'-C3'	5.60	126.42	119.70
1	N	557	G	C1'-O4'-C4'	5.60	114.38	109.90
1	N	291	U	O4'-C1'-N1	5.60	112.68	108.20
1	N	1320	C	N3-C2-O2	5.60	125.82	121.90
1	N	1397	C	C5-C6-N1	-5.60	118.20	121.00
1	N	132	C	O4'-C1'-N1	5.59	112.67	108.20
1	N	557	G	N9-C1'-C2'	-5.59	105.85	112.00
1	N	567	G	C5-N7-C8	5.59	107.10	104.30
1	N	1025	U	P-O5'-C5'	5.59	129.85	120.90
1	N	1107	C	C3'-C2'-C1'	-5.59	97.03	101.50
1	N	196	A	C6-C5-N7	-5.59	128.38	132.30
1	N	240	G	C5-C6-N1	-5.59	108.70	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	510	A	N3-C4-C5	-5.59	122.89	126.80
1	N	862	C	N1-C2-N3	-5.59	115.29	119.20
1	N	872	A	C2-N3-C4	5.59	113.39	110.60
1	N	165	G	C1'-O4'-C4'	-5.59	105.43	109.90
1	N	241	G	N3-C4-C5	-5.59	125.81	128.60
1	N	450	G	O5'-C5'-C4'	-5.59	101.08	111.70
1	N	492	C	C2-N1-C1'	5.59	124.95	118.80
1	N	973	G	N3-C4-N9	-5.59	122.65	126.00
1	N	1070	U	N1-C2-O2	-5.59	118.89	122.80
1	N	1150	A	C5-N7-C8	5.59	106.69	103.90
1	N	1445	U	N1-C2-N3	-5.59	111.55	114.90
1	N	99	C	N1-C2-O2	5.59	122.25	118.90
1	N	103	U	O4'-C1'-N1	5.59	112.67	108.20
1	N	308	C	C4-C5-C6	-5.59	114.61	117.40
1	N	358	U	C5'-C4'-O4'	5.59	115.81	109.10
1	N	1109	C	N3-C4-N4	5.59	121.91	118.00
1	N	72	A	C5-C6-N6	-5.59	119.23	123.70
1	N	89	U	N3-C4-C5	-5.59	111.25	114.60
1	N	175	C	N3-C2-O2	5.59	125.81	121.90
1	N	275	G	N7-C8-N9	5.59	115.89	113.10
1	N	330	C	C2-N1-C1'	5.59	124.94	118.80
1	N	494	G	C3'-C2'-C1'	5.59	105.97	101.50
1	N	883	C	O4'-C1'-N1	5.59	112.67	108.20
1	N	1018	G	N3-C4-N9	5.59	129.35	126.00
1	N	1035	A	N9-C1'-C2'	-5.59	105.85	112.00
1	N	515	G	N3-C2-N2	5.58	123.81	119.90
1	N	635	A	O4'-C4'-C3'	-5.58	98.42	104.00
1	N	661	G	C6-C5-N7	-5.58	127.05	130.40
1	N	1345	U	O3'-P-O5'	-5.58	93.39	104.00
1	N	8	A	C4-C5-N7	-5.58	107.91	110.70
1	N	592	G	O4'-C4'-C3'	-5.58	98.42	104.00
1	N	894	G	C5'-C4'-O4'	5.58	115.80	109.10
1	N	356	A	OP1-P-OP2	-5.58	111.23	119.60
1	N	490	C	C5-C4-N4	-5.58	116.29	120.20
1	N	601	G	N7-C8-N9	-5.58	110.31	113.10
1	N	1057	G	N7-C8-N9	-5.58	110.31	113.10
1	N	140	U	C5-C4-O4	-5.58	122.55	125.90
1	N	287	U	C4'-C3'-C2'	-5.58	97.02	102.60
1	N	635	A	C6-N1-C2	5.58	121.95	118.60
1	N	362	G	C2-N3-C4	5.58	114.69	111.90
1	N	1227	A	C8-N9-C4	-5.58	103.57	105.80
1	N	1323	G	N1-C2-N2	5.58	121.22	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1323	G	O4'-C4'-C3'	-5.58	98.42	104.00
1	N	1456	A	C1'-O4'-C4'	-5.58	105.44	109.90
1	N	459	A	OP1-P-OP2	-5.58	111.23	119.60
1	N	652	U	C3'-C2'-C1'	5.58	105.96	101.50
1	N	1328	C	N3-C4-N4	5.58	121.90	118.00
1	N	350	G	C8-N9-C4	5.58	108.63	106.40
1	N	451	A	C4-C5-C6	5.58	119.79	117.00
1	N	857	C	C5-C6-N1	5.58	123.79	121.00
1	N	980	C	C2-N3-C4	5.58	122.69	119.90
1	N	1362	A	C8-N9-C4	-5.58	103.57	105.80
1	N	1376	U	O4'-C4'-C3'	-5.58	98.42	104.00
1	N	1395	C	N3-C2-O2	5.58	125.80	121.90
1	N	1438	G	C4-C5-C6	5.58	122.15	118.80
1	N	1238	A	C4-C5-C6	5.57	119.79	117.00
1	N	1411	C	C6-N1-C2	-5.57	118.07	120.30
1	N	314	C	C1'-O4'-C4'	-5.57	105.44	109.90
1	N	356	A	C5-C6-N1	-5.57	114.91	117.70
1	N	379	C	O4'-C1'-N1	5.57	112.66	108.20
1	N	801	U	C1'-O4'-C4'	5.57	114.36	109.90
1	N	177	G	C4-N9-C1'	5.57	133.74	126.50
1	N	278	G	N3-C2-N2	5.57	123.80	119.90
1	N	297	G	N1-C2-N2	-5.57	111.19	116.20
1	N	366	A	C4'-C3'-C2'	5.57	108.17	102.60
1	N	447	G	C4'-C3'-C2'	-5.57	97.03	102.60
1	N	811	C	C4'-C3'-C2'	-5.57	97.03	102.60
1	N	886	G	O4'-C1'-N9	5.57	112.66	108.20
1	N	1271	A	N9-C4-C5	-5.57	103.57	105.80
1	N	161	A	C6-C5-N7	-5.57	128.40	132.30
1	N	283	U	N3-C4-O4	5.57	123.30	119.40
1	N	640	A	C5-C6-N1	5.57	120.48	117.70
1	N	704	A	N3-C4-C5	-5.57	122.90	126.80
1	N	633	G	N3-C4-N9	5.57	129.34	126.00
1	N	1145	A	C5'-C4'-C3'	5.57	124.91	116.00
1	N	1259	C	N3-C4-C5	-5.57	119.67	121.90
1	N	1351	U	N3-C4-C5	-5.57	111.26	114.60
1	N	76	G	N1-C6-O6	5.57	123.24	119.90
1	N	88	U	O4'-C1'-N1	5.57	112.65	108.20
1	N	374	A	N7-C8-N9	-5.57	111.02	113.80
1	N	527	G	N7-C8-N9	-5.57	110.32	113.10
1	N	567	G	P-O5'-C5'	5.57	129.80	120.90
1	N	1077	G	N3-C2-N2	5.57	123.80	119.90
1	N	1086	U	C4'-C3'-C2'	-5.57	97.03	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1207	G	C5'-C4'-O4'	5.57	115.78	109.10
1	N	124	C	C1'-O4'-C4'	-5.56	105.45	109.90
1	N	1189	U	N1-C2-O2	-5.56	118.91	122.80
1	N	167	A	C3'-C2'-C1'	-5.56	97.05	101.50
1	N	425	G	C8-N9-C1'	5.56	134.23	127.00
1	N	440	C	C1'-O4'-C4'	5.56	114.35	109.90
1	N	587	G	O4'-C1'-N9	5.56	112.65	108.20
1	N	637	C	P-O3'-C3'	5.56	126.38	119.70
1	N	1247	U	C5-C6-N1	-5.56	119.92	122.70
1	N	1283	U	N1-C2-O2	-5.56	118.91	122.80
1	N	1300	G	C6-N1-C2	-5.56	121.76	125.10
1	N	1386	G	C6-N1-C2	-5.56	121.76	125.10
1	N	78	A	O4'-C1'-C2'	-5.56	100.24	105.80
1	N	1259	C	C6-N1-C1'	-5.56	114.13	120.80
1	N	251	G	C4'-C3'-C2'	-5.56	97.04	102.60
1	N	528	C	C5-C4-N4	-5.56	116.31	120.20
1	N	635	A	C5'-C4'-O4'	5.56	115.77	109.10
1	N	646	G	C4-C5-N7	5.56	113.02	110.80
1	N	1037	C	N3-C2-O2	-5.56	118.01	121.90
1	N	1446	A	C1'-O4'-C4'	5.56	114.35	109.90
1	N	1474	U	O4'-C1'-N1	5.56	112.65	108.20
1	N	301	G	P-O3'-C3'	-5.56	113.03	119.70
1	N	1416	G	C8-N9-C1'	5.56	134.22	127.00
1	N	312	C	P-O3'-C3'	-5.56	113.03	119.70
1	N	470	C	C4'-C3'-C2'	-5.56	97.04	102.60
1	N	1340	A	N3-C4-C5	-5.56	122.91	126.80
1	N	159	G	P-O5'-C5'	-5.55	112.01	120.90
1	N	186	C	N3-C4-C5	-5.55	119.68	121.90
1	N	289	G	C5-C6-N1	-5.55	108.72	111.50
1	N	940	C	N1-C2-O2	-5.55	115.57	118.90
1	N	945	G	C8-N9-C4	5.55	108.62	106.40
1	N	622	A	N1-C2-N3	5.55	132.08	129.30
1	N	728	A	C6-C5-N7	-5.55	128.41	132.30
1	N	907	A	C8-N9-C4	-5.55	103.58	105.80
1	N	1115	U	C3'-C2'-C1'	5.55	105.94	101.50
1	N	1428	A	N3-C4-C5	5.55	130.69	126.80
1	N	1487	G	C5-N7-C8	5.55	107.08	104.30
1	N	283	U	C5'-C4'-O4'	5.55	115.76	109.10
1	N	418	C	C2-N3-C4	5.55	122.68	119.90
1	N	818	G	C5'-C4'-O4'	5.55	115.76	109.10
1	N	829	G	N3-C2-N2	5.55	123.79	119.90
1	N	1231	G	C2-N3-C4	-5.55	109.12	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	473	U	N1-C2-N3	-5.55	111.57	114.90
1	N	513	C	N3-C4-N4	5.55	121.89	118.00
1	N	1259	C	C1'-O4'-C4'	-5.55	105.46	109.90
1	N	1327	C	O4'-C1'-N1	5.55	112.64	108.20
1	N	138	G	C6-C5-N7	-5.55	127.07	130.40
1	N	824	G	C5-C6-N1	-5.55	108.73	111.50
1	N	9	G	N3-C2-N2	5.55	123.78	119.90
1	N	183	C	C5-C4-N4	-5.55	116.32	120.20
1	N	320	A	C2-N3-C4	-5.55	107.83	110.60
1	N	539	A	C4-C5-N7	5.55	113.47	110.70
1	N	596	A	C5-N7-C8	5.55	106.67	103.90
1	N	648	A	C4-C5-N7	-5.55	107.93	110.70
1	N	689	C	C4'-C3'-C2'	5.55	108.15	102.60
1	N	832	G	C3'-C2'-C1'	-5.55	97.06	101.50
1	N	1012	A	N3-C4-C5	-5.54	122.92	126.80
1	N	1441	A	C4-C5-N7	-5.54	107.93	110.70
1	N	108	G	C6-C5-N7	-5.54	127.07	130.40
1	N	639	G	C2-N3-C4	5.54	114.67	111.90
1	N	783	C	O4'-C1'-N1	5.54	112.63	108.20
1	N	828	U	C5'-C4'-C3'	5.54	124.87	116.00
1	N	849	G	N7-C8-N9	5.54	115.87	113.10
1	N	982	U	C5-C6-N1	5.54	125.47	122.70
1	N	1312	G	O4'-C1'-C2'	-5.54	100.26	105.80
1	N	239	U	N1-C2-O2	-5.54	118.92	122.80
1	N	1019	A	C6-N1-C2	5.54	121.92	118.60
1	N	120	A	N9-C4-C5	5.54	108.02	105.80
1	N	673	A	C4'-C3'-C2'	-5.54	97.06	102.60
1	N	1018	G	N7-C8-N9	-5.54	110.33	113.10
1	N	1332	A	N1-C2-N3	5.54	132.07	129.30
1	N	597	G	C5-C6-N1	-5.54	108.73	111.50
1	N	689	C	C5'-C4'-O4'	5.54	115.75	109.10
1	N	1154	G	N3-C4-C5	-5.54	125.83	128.60
1	N	1197	A	O4'-C1'-C2'	-5.54	100.26	105.80
1	N	1223	C	C2-N1-C1'	5.54	124.89	118.80
1	N	1225	A	N7-C8-N9	5.54	116.57	113.80
1	N	1300	G	N7-C8-N9	-5.54	110.33	113.10
1	N	1340	A	N3-C4-N9	5.54	131.83	127.40
1	N	407	U	N3-C2-O2	-5.54	118.32	122.20
1	N	508	U	N3-C4-O4	5.54	123.28	119.40
1	N	695	A	P-O3'-C3'	5.54	126.34	119.70
1	N	1055	A	C2-N3-C4	-5.54	107.83	110.60
1	N	1077	G	C8-N9-C4	5.54	108.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1435	G	P-O3'-C3'	5.54	126.34	119.70
1	N	95	C	C6-N1-C1'	-5.54	114.16	120.80
1	N	300	A	C6-C5-N7	-5.54	128.43	132.30
1	N	302	G	C8-N9-C1'	5.54	134.19	127.00
1	N	737	C	C5'-C4'-O4'	5.54	115.74	109.10
1	N	895	G	P-O3'-C3'	-5.54	113.06	119.70
1	N	1355	G	C4'-C3'-C2'	-5.54	97.06	102.60
1	N	197	A	N9-C4-C5	5.53	108.01	105.80
1	N	800	G	C4'-C3'-C2'	5.53	108.13	102.60
1	N	898	G	OP1-P-OP2	-5.53	111.30	119.60
1	N	1290	G	C4-N9-C1'	5.53	133.69	126.50
1	N	1296	C	N1-C2-O2	-5.53	115.58	118.90
1	N	1311	A	C2-N3-C4	-5.53	107.83	110.60
1	N	1377	A	N9-C1'-C2'	-5.53	105.92	112.00
1	N	630	A	O4'-C1'-N9	5.53	112.62	108.20
1	N	1190	G	C8-N9-C4	-5.53	104.19	106.40
1	N	1197	A	C5-C6-N1	-5.53	114.94	117.70
1	N	1280	A	P-O5'-C5'	-5.53	112.05	120.90
1	N	1287	A	O5'-P-OP1	5.53	117.34	110.70
1	N	1497	G	C5'-C4'-O4'	5.53	115.74	109.10
1	N	15	G	N9-C4-C5	-5.53	103.19	105.40
1	N	271	C	N1-C2-O2	-5.53	115.58	118.90
1	N	877	G	N7-C8-N9	-5.53	110.33	113.10
1	N	1132	C	C5-C4-N4	-5.53	116.33	120.20
1	N	9	G	O4'-C1'-C2'	-5.53	100.27	105.80
1	N	201	G	C4-C5-C6	5.53	122.12	118.80
1	N	435	A	O4'-C1'-N9	5.53	112.62	108.20
1	N	444	G	N3-C4-N9	5.53	129.32	126.00
1	N	528	C	N1-C2-N3	-5.53	115.33	119.20
1	N	541	G	OP1-P-OP2	-5.53	111.31	119.60
1	N	704	A	O4'-C4'-C3'	-5.53	98.47	104.00
1	N	705	G	OP1-P-OP2	-5.53	111.31	119.60
1	N	850	U	O4'-C1'-N1	5.53	112.62	108.20
1	N	924	C	C3'-C2'-C1'	-5.53	97.08	101.50
1	N	1167	A	C8-N9-C4	-5.53	103.59	105.80
1	N	180	U	OP1-P-OP2	-5.53	111.31	119.60
1	N	220	G	N9-C1'-C2'	-5.53	105.92	112.00
1	N	443	C	O4'-C4'-C3'	-5.52	98.48	104.00
1	N	1464	U	C6-N1-C2	-5.52	117.69	121.00
1	N	40	C	O4'-C1'-N1	5.52	112.62	108.20
1	N	187	G	C4-N9-C1'	-5.52	119.32	126.50
1	N	233	C	C5-C4-N4	-5.52	116.33	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	939	G	N7-C8-N9	-5.52	110.34	113.10
1	N	1228	C	C4-C5-C6	5.52	120.16	117.40
1	N	1373	G	P-O5'-C5'	-5.52	112.06	120.90
1	N	1384	C	N3-C4-N4	5.52	121.87	118.00
1	N	1410	A	N3-C4-C5	5.52	130.66	126.80
1	N	420	U	C6-N1-C2	-5.52	117.69	121.00
1	N	1040	U	N3-C4-O4	-5.52	115.53	119.40
1	N	1458	G	N1-C6-O6	5.52	123.21	119.90
1	N	165	G	N3-C4-N9	-5.52	122.69	126.00
1	N	303	A	N1-C2-N3	5.52	132.06	129.30
1	N	631	C	C6-N1-C2	5.52	122.51	120.30
1	N	753	A	O4'-C1'-N9	5.52	112.62	108.20
1	N	991	U	N1-C1'-C2'	-5.52	105.93	112.00
1	N	1236	A	O4'-C1'-N9	5.52	112.61	108.20
1	N	328	C	C4-C5-C6	5.52	120.16	117.40
1	N	1125	U	O3'-P-O5'	5.52	114.48	104.00
1	N	1310	G	C8-N9-C4	-5.52	104.19	106.40
1	N	778	G	C5-C6-N1	-5.52	108.74	111.50
1	N	1008	U	N3-C4-O4	-5.52	115.54	119.40
1	N	1018	G	O4'-C1'-N9	5.52	112.61	108.20
1	N	1084	G	C6-C5-N7	-5.52	127.09	130.40
1	N	61	G	N1-C6-O6	5.51	123.21	119.90
1	N	115	G	C4-C5-C6	5.51	122.11	118.80
1	N	753	A	C5'-C4'-O4'	5.51	115.72	109.10
1	N	219	U	C5-C4-O4	-5.51	122.59	125.90
1	N	376	G	C3'-C2'-C1'	5.51	105.91	101.50
1	N	85	U	O4'-C1'-C2'	5.51	112.56	107.60
1	N	348	G	C2-N3-C4	5.51	114.66	111.90
1	N	700	G	C6-N1-C2	5.51	128.41	125.10
1	N	945	G	N1-C2-N3	-5.51	120.59	123.90
1	N	1165	U	C2-N1-C1'	5.51	124.31	117.70
1	N	1326	U	N1-C2-N3	-5.51	111.59	114.90
1	N	419	C	C2-N3-C4	-5.51	117.15	119.90
1	N	441	A	O4'-C1'-N9	5.51	112.61	108.20
1	N	548	G	N3-C2-N2	5.51	123.76	119.90
1	N	566	G	C5-N7-C8	-5.51	101.55	104.30
1	N	775	G	O4'-C1'-C2'	-5.51	100.29	105.80
1	N	849	G	C1'-O4'-C4'	-5.51	105.49	109.90
1	N	1446	A	O4'-C1'-N9	5.51	112.61	108.20
1	N	780	A	C3'-C2'-C1'	5.51	105.91	101.50
1	N	1378	C	N3-C4-N4	5.51	121.86	118.00
1	N	110	C	OP1-P-OP2	-5.51	111.34	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	278	G	C6-N1-C2	5.51	128.40	125.10
1	N	378	G	N3-C2-N2	5.51	123.75	119.90
1	N	389	A	C4-C5-N7	5.51	113.45	110.70
1	N	858	G	C5-C6-N1	-5.51	108.75	111.50
1	N	1190	G	OP1-P-OP2	-5.51	111.34	119.60
1	N	1395	C	C3'-C2'-C1'	5.51	105.91	101.50
1	N	1451	U	C5-C4-O4	-5.51	122.60	125.90
1	N	582	C	N3-C4-N4	5.50	121.85	118.00
1	N	584	G	C8-N9-C1'	-5.50	119.84	127.00
1	N	669	G	O4'-C4'-C3'	-5.50	98.50	104.00
1	N	741	G	C4-C5-N7	-5.50	108.60	110.80
1	N	417	G	C5-N7-C8	5.50	107.05	104.30
1	N	431	A	C6-C5-N7	-5.50	128.45	132.30
1	N	871	U	C2-N3-C4	-5.50	123.70	127.00
1	N	1460	C	C2-N3-C4	5.50	122.65	119.90
1	N	105	G	P-O5'-C5'	5.50	129.70	120.90
1	N	290	C	P-O3'-C3'	-5.50	113.10	119.70
1	N	302	G	N3-C2-N2	-5.50	116.05	119.90
1	N	349	A	N7-C8-N9	-5.50	111.05	113.80
1	N	484	G	C4'-C3'-C2'	5.50	108.10	102.60
1	N	533	A	C5-N7-C8	5.50	106.65	103.90
1	N	579	A	C8-N9-C4	-5.50	103.60	105.80
1	N	884	U	N3-C4-O4	5.50	123.25	119.40
1	N	1449	C	C2-N1-C1'	5.50	124.85	118.80
1	N	1473	G	C6-N1-C2	5.50	128.40	125.10
1	N	506	G	C6-N1-C2	5.50	128.40	125.10
1	N	859	G	C8-N9-C4	-5.50	104.20	106.40
1	N	1374	A	C8-N9-C1'	-5.50	117.80	127.70
1	N	188	C	C5'-C4'-O4'	-5.50	102.50	109.10
1	N	278	G	C5-N7-C8	5.50	107.05	104.30
1	N	560	A	C6-N1-C2	5.50	121.90	118.60
1	N	719	C	P-O5'-C5'	5.50	129.70	120.90
1	N	866	C	N1-C2-N3	-5.50	115.35	119.20
1	N	21	G	C4-N9-C1'	5.50	133.64	126.50
1	N	33	A	C5-C6-N1	-5.50	114.95	117.70
1	N	251	G	N1-C2-N3	-5.50	120.60	123.90
1	N	1331	G	C4'-C3'-C2'	-5.50	97.10	102.60
1	N	1392	G	P-O5'-C5'	5.50	129.70	120.90
1	N	520	A	N3-C4-N9	5.50	131.80	127.40
1	N	746	A	O4'-C1'-N9	5.50	112.60	108.20
1	N	1509	C	N1-C2-O2	5.50	122.20	118.90
1	N	250	A	C8-N9-C1'	-5.49	117.81	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	468	A	C5-C6-N1	5.49	120.45	117.70
1	N	616	G	P-O3'-C3'	-5.49	113.11	119.70
1	N	750	C	C2-N1-C1'	-5.49	112.76	118.80
1	N	100	G	N7-C8-N9	5.49	115.85	113.10
1	N	115	G	C1'-O4'-C4'	5.49	114.29	109.90
1	N	300	A	N9-C4-C5	5.49	108.00	105.80
1	N	323	U	O5'-C5'-C4'	-5.49	101.27	111.70
1	N	734	G	C3'-C2'-C1'	5.49	105.89	101.50
1	N	865	A	C6-C5-N7	-5.49	128.46	132.30
1	N	159	G	C5'-C4'-O4'	-5.49	102.51	109.10
1	N	1363	A	C6-C5-N7	-5.49	128.46	132.30
1	N	309	A	OP1-P-OP2	-5.49	111.37	119.60
1	N	342	C	N3-C4-N4	5.49	121.84	118.00
1	N	919	A	O4'-C1'-C2'	5.49	112.54	107.60
1	N	942	G	C5'-C4'-C3'	5.49	124.78	116.00
1	N	1186	G	N3-C2-N2	5.49	123.74	119.90
1	N	171	A	C4-N9-C1'	5.49	136.18	126.30
1	N	376	G	C6-C5-N7	-5.49	127.11	130.40
1	N	1409	C	C5-C6-N1	5.49	123.74	121.00
1	N	1496	C	C3'-C2'-C1'	5.49	105.89	101.50
1	N	71	A	C4-C5-N7	5.49	113.44	110.70
1	N	97	G	N1-C2-N3	-5.49	120.61	123.90
1	N	213	G	O4'-C1'-N9	5.49	112.59	108.20
1	N	310	G	C5'-C4'-C3'	-5.49	107.22	116.00
1	N	322	C	C2-N1-C1'	5.49	124.83	118.80
1	N	375	U	C4'-C3'-C2'	-5.49	97.11	102.60
1	N	765	G	C6-C5-N7	-5.48	127.11	130.40
1	N	1020	G	C5-C6-N1	-5.48	108.76	111.50
1	N	1218	C	O4'-C1'-C2'	-5.48	100.32	105.80
1	N	528	C	C1'-O4'-C4'	-5.48	105.51	109.90
1	N	554	A	C2-N3-C4	-5.48	107.86	110.60
1	N	568	G	C4'-C3'-C2'	-5.48	97.12	102.60
1	N	754	C	P-O3'-C3'	5.48	126.28	119.70
1	N	71	A	C5-C6-N1	-5.48	114.96	117.70
1	N	176	C	C2-N3-C4	5.48	122.64	119.90
1	N	250	A	C8-N9-C4	5.48	107.99	105.80
1	N	303	A	N9-C4-C5	-5.48	103.61	105.80
1	N	324	G	O4'-C1'-N9	5.48	112.58	108.20
1	N	566	G	N1-C2-N3	-5.48	120.61	123.90
1	N	1048	G	N3-C4-C5	5.48	131.34	128.60
1	N	1153	G	C4-C5-N7	5.48	112.99	110.80
1	N	1312	G	C4-C5-C6	5.48	122.09	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1399	C	C6-N1-C2	5.48	122.49	120.30
1	N	164	G	O4'-C4'-C3'	-5.48	98.52	104.00
1	N	238	A	C5-C6-N6	-5.48	119.32	123.70
1	N	432	A	O4'-C1'-N9	5.48	112.58	108.20
1	N	746	A	C4-C5-N7	-5.48	107.96	110.70
1	N	906	A	C4'-C3'-C2'	-5.48	97.12	102.60
1	N	114	U	C6-N1-C2	-5.48	117.71	121.00
1	N	493	A	C5-N7-C8	-5.48	101.16	103.90
1	N	1071	C	N3-C4-N4	5.48	121.83	118.00
1	N	1116	U	P-O3'-C3'	-5.48	113.13	119.70
1	N	485	U	C6-N1-C1'	-5.47	113.54	121.20
1	N	901	A	N3-C4-C5	-5.47	122.97	126.80
1	N	922	G	C6-N1-C2	5.47	128.38	125.10
1	N	1475	G	N3-C4-C5	5.47	131.34	128.60
1	N	212	G	C4-C5-N7	-5.47	108.61	110.80
1	N	272	C	N3-C2-O2	5.47	125.73	121.90
1	N	297	G	C4-N9-C1'	-5.47	119.39	126.50
1	N	442	G	O4'-C1'-N9	5.47	112.58	108.20
1	N	1027	C	C4-C5-C6	5.47	120.14	117.40
1	N	1270	G	N1-C2-N3	-5.47	120.62	123.90
1	N	1388	C	N3-C4-N4	5.47	121.83	118.00
1	N	429	U	C2-N3-C4	-5.47	123.72	127.00
1	N	534	U	C6-N1-C2	-5.47	117.72	121.00
1	N	987	G	C6-N1-C2	-5.47	121.82	125.10
1	N	1296	C	O4'-C1'-N1	5.47	112.58	108.20
1	N	1332	A	C6-C5-N7	-5.47	128.47	132.30
1	N	1523	G	O4'-C1'-C2'	5.47	112.52	107.60
1	N	410	G	C4-C5-C6	5.47	122.08	118.80
1	N	520	A	P-O5'-C5'	5.47	129.65	120.90
1	N	1223	C	C4-C5-C6	5.47	120.14	117.40
1	N	30	U	P-O3'-C3'	5.47	126.26	119.70
1	N	844	G	N3-C2-N2	5.47	123.73	119.90
1	N	306	A	C5-N7-C8	5.47	106.63	103.90
1	N	1274	A	OP2-P-O3'	5.47	117.23	105.20
1	N	147	G	C4-C5-N7	5.46	112.99	110.80
1	N	187	G	P-O3'-C3'	5.46	126.26	119.70
1	N	355	C	N3-C2-O2	5.46	125.73	121.90
1	N	952	U	C2-N1-C1'	5.46	124.26	117.70
1	N	1514	G	N3-C4-C5	5.46	131.33	128.60
1	N	37	U	C4-C5-C6	-5.46	116.42	119.70
1	N	634	C	C2-N3-C4	5.46	122.63	119.90
1	N	901	A	C5-C6-N1	-5.46	114.97	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	993	G	C4-C5-C6	5.46	122.08	118.80
1	N	1064	G	O4'-C1'-N9	5.46	112.57	108.20
1	N	1092	A	C6-C5-N7	-5.46	128.48	132.30
1	N	1528	U	N1-C2-N3	-5.46	111.62	114.90
1	N	184	G	C6-C5-N7	5.46	133.68	130.40
1	N	582	C	P-O3'-C3'	-5.46	113.15	119.70
1	N	667	G	C4-C5-N7	-5.46	108.62	110.80
1	N	695	A	C5-N7-C8	5.46	106.63	103.90
1	N	1330	U	O4'-C1'-N1	5.46	112.57	108.20
1	N	1484	C	C5'-C4'-O4'	5.46	115.65	109.10
1	N	1518	A	C4-C5-N7	-5.46	107.97	110.70
1	N	559	A	C4'-C3'-C2'	5.46	108.06	102.60
1	N	664	G	P-O3'-C3'	5.46	126.25	119.70
1	N	1156	G	C5'-C4'-C3'	5.46	124.73	116.00
1	N	1476	A	C5'-C4'-O4'	5.46	115.65	109.10
1	N	1534	A	C5-C6-N6	-5.46	119.33	123.70
1	N	1302	C	N1-C1'-C2'	5.46	121.09	114.00
1	N	128	G	O4'-C1'-N9	5.46	112.56	108.20
1	N	736	C	C3'-C2'-C1'	5.46	105.86	101.50
1	N	995	C	C2-N3-C4	5.46	122.63	119.90
1	N	310	G	C5-N7-C8	-5.45	101.57	104.30
1	N	393	A	O4'-C4'-C3'	-5.45	98.55	104.00
1	N	495	A	N3-C4-N9	5.45	131.76	127.40
1	N	879	C	P-O3'-C3'	-5.45	113.16	119.70
1	N	888	G	N7-C8-N9	-5.45	110.37	113.10
1	N	1469	C	N1-C2-O2	5.45	122.17	118.90
1	N	1379	G	C4-C5-N7	5.45	112.98	110.80
1	N	48	C	C2-N3-C4	5.45	122.62	119.90
1	N	223	A	C5-C6-N6	-5.45	119.34	123.70
1	N	406	G	C3'-C2'-C1'	5.45	105.86	101.50
1	N	434	U	C4-C5-C6	5.45	122.97	119.70
1	N	945	G	N7-C8-N9	-5.45	110.38	113.10
1	N	1320	C	N1-C2-O2	-5.45	115.63	118.90
1	N	212	G	N1-C2-N3	-5.45	120.63	123.90
1	N	440	C	P-O3'-C3'	5.45	126.24	119.70
1	N	604	G	C5'-C4'-O4'	5.45	115.64	109.10
1	N	968	A	C4'-C3'-C2'	-5.45	97.15	102.60
1	N	1004	A	C4'-C3'-C2'	-5.45	97.15	102.60
1	N	1343	G	C4-C5-C6	5.45	122.07	118.80
1	N	53	A	P-O3'-C3'	-5.45	113.16	119.70
1	N	811	C	N3-C4-N4	5.45	121.81	118.00
1	N	1139	G	C6-C5-N7	-5.45	127.13	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	795	C	N3-C4-N4	5.45	121.81	118.00
1	N	1135	U	C5-C6-N1	5.45	125.42	122.70
1	N	1228	C	C5-C4-N4	-5.45	116.39	120.20
1	N	1408	A	C6-C5-N7	-5.45	128.49	132.30
1	N	774	G	C5-N7-C8	5.44	107.02	104.30
1	N	900	A	O4'-C1'-N9	5.44	112.56	108.20
1	N	396	C	C5'-C4'-C3'	-5.44	107.29	116.00
1	N	429	U	C4'-C3'-C2'	-5.44	97.16	102.60
1	N	490	C	C5-C6-N1	5.44	123.72	121.00
1	N	528	C	N3-C2-O2	5.44	125.71	121.90
1	N	1046	A	P-O3'-C3'	-5.44	113.17	119.70
1	N	1252	A	C6-C5-N7	-5.44	128.49	132.30
1	N	1327	C	P-O5'-C5'	5.44	129.61	120.90
1	N	1446	A	O4'-C4'-C3'	-5.44	98.56	104.00
1	N	636	U	O4'-C1'-N1	5.44	112.55	108.20
1	N	1139	G	N9-C4-C5	5.44	107.58	105.40
1	N	259	G	C8-N9-C4	5.44	108.58	106.40
1	N	667	G	P-O3'-C3'	-5.44	113.17	119.70
1	N	794	A	N1-C6-N6	5.44	121.86	118.60
1	N	622	A	N1-C6-N6	5.44	121.86	118.60
1	N	416	G	O5'-C5'-C4'	-5.44	101.37	111.70
1	N	425	G	N7-C8-N9	5.44	115.82	113.10
1	N	875	U	C5-C4-O4	5.44	129.16	125.90
1	N	1181	G	C2-N3-C4	-5.44	109.18	111.90
1	N	1236	A	C1'-O4'-C4'	5.44	114.25	109.90
1	N	486	U	N3-C2-O2	-5.43	118.39	122.20
1	N	727	G	C4'-C3'-C2'	-5.43	97.17	102.60
1	N	869	G	C2-N3-C4	5.43	114.62	111.90
1	N	983	A	N3-C4-N9	5.43	131.75	127.40
1	N	1021	A	N1-C2-N3	5.43	132.02	129.30
1	N	1278	G	C5'-C4'-C3'	-5.43	107.31	116.00
1	N	229	U	C2-N3-C4	5.43	130.26	127.00
1	N	370	C	C1'-O4'-C4'	5.43	114.25	109.90
1	N	491	G	N1-C2-N2	-5.43	111.31	116.20
1	N	807	A	C6-C5-N7	-5.43	128.50	132.30
1	N	1016	A	C3'-C2'-C1'	5.43	105.84	101.50
1	N	1182	G	N7-C8-N9	-5.43	110.38	113.10
1	N	1192	C	N3-C4-N4	5.43	121.80	118.00
1	N	264	C	P-O3'-C3'	5.43	126.22	119.70
1	N	776	G	N7-C8-N9	-5.43	110.38	113.10
1	N	1318	A	C2-N3-C4	5.43	113.32	110.60
1	N	1459	G	C5-N7-C8	5.43	107.02	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1489	G	C1'-O4'-C4'	-5.43	105.56	109.90
1	N	818	G	OP1-P-OP2	-5.43	111.46	119.60
1	N	1145	A	C6-C5-N7	-5.43	128.50	132.30
1	N	236	A	N9-C4-C5	-5.43	103.63	105.80
1	N	319	G	N3-C2-N2	5.43	123.70	119.90
1	N	765	G	N1-C6-O6	5.43	123.16	119.90
1	N	1061	G	O4'-C1'-N9	5.43	112.54	108.20
1	N	126	G	C1'-O4'-C4'	-5.43	105.56	109.90
1	N	134	G	N1-C2-N3	-5.43	120.64	123.90
1	N	155	A	C6-N1-C2	5.43	121.86	118.60
1	N	155	A	P-O5'-C5'	5.43	129.58	120.90
1	N	201	G	C6-C5-N7	-5.43	127.14	130.40
1	N	216	U	P-O3'-C3'	5.43	126.21	119.70
1	N	293	G	N9-C1'-C2'	-5.43	106.03	112.00
1	N	412	A	O4'-C1'-C2'	-5.43	100.37	105.80
1	N	503	C	N3-C2-O2	5.43	125.70	121.90
1	N	566	G	N3-C4-C5	5.43	131.31	128.60
1	N	577	G	C5'-C4'-O4'	-5.43	102.59	109.10
1	N	883	C	N1-C2-N3	-5.43	115.40	119.20
1	N	1252	A	N7-C8-N9	5.43	116.51	113.80
1	N	447	G	N1-C2-N3	-5.42	120.64	123.90
1	N	926	G	C4-N9-C1'	5.42	133.55	126.50
1	N	980	C	O4'-C4'-C3'	-5.42	98.58	104.00
1	N	1064	G	C4-C5-C6	5.42	122.05	118.80
1	N	1190	G	C4-N9-C1'	5.42	133.55	126.50
1	N	1192	C	C1'-O4'-C4'	-5.42	105.56	109.90
1	N	15	G	C5'-C4'-C3'	-5.42	107.32	116.00
1	N	99	C	C2-N1-C1'	-5.42	112.83	118.80
1	N	145	G	C4-N9-C1'	-5.42	119.45	126.50
1	N	555	U	N3-C4-O4	5.42	123.20	119.40
1	N	1111	A	N1-C2-N3	-5.42	126.59	129.30
1	N	1331	G	C5'-C4'-O4'	5.42	115.61	109.10
1	N	246	A	C6-C5-N7	-5.42	128.50	132.30
1	N	325	A	N7-C8-N9	-5.42	111.09	113.80
1	N	617	G	N1-C2-N3	-5.42	120.65	123.90
1	N	1377	A	C4'-C3'-C2'	-5.42	97.18	102.60
1	N	1476	A	O5'-P-OP2	5.42	117.21	110.70
1	N	1531	A	C4-C5-N7	5.42	113.41	110.70
1	N	137	U	C5-C4-O4	-5.42	122.65	125.90
1	N	555	U	C4'-C3'-C2'	-5.42	97.18	102.60
1	N	701	U	C2-N1-C1'	-5.42	111.20	117.70
1	N	1124	G	N1-C2-N2	-5.42	111.32	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1171	A	N9-C4-C5	-5.42	103.63	105.80
1	N	1405	G	N1-C2-N3	-5.42	120.65	123.90
1	N	1522	U	P-O3'-C3'	-5.42	113.20	119.70
1	N	234	C	C6-N1-C1'	-5.42	114.30	120.80
1	N	382	A	N7-C8-N9	-5.42	111.09	113.80
1	N	998	C	C2-N3-C4	5.42	122.61	119.90
1	N	998	C	N3-C4-C5	-5.42	119.73	121.90
1	N	1104	G	C5-C6-N1	-5.42	108.79	111.50
1	N	1507	A	N1-C2-N3	-5.42	126.59	129.30
1	N	1525	G	N3-C2-N2	5.42	123.69	119.90
1	N	16	A	C8-N9-C4	5.41	107.97	105.80
1	N	445	G	C2-N3-C4	5.41	114.61	111.90
1	N	957	U	C6-N1-C1'	5.41	128.78	121.20
1	N	1096	C	C4-C5-C6	5.41	120.11	117.40
1	N	1283	U	P-O3'-C3'	-5.41	113.20	119.70
1	N	1482	G	C5-N7-C8	5.41	107.01	104.30
1	N	68	G	N1-C2-N3	-5.41	120.65	123.90
1	N	223	A	C5'-C4'-C3'	-5.41	107.34	116.00
1	N	407	U	N3-C4-O4	5.41	123.19	119.40
1	N	489	C	N3-C2-O2	-5.41	118.11	121.90
1	N	492	C	OP2-P-O3'	5.41	117.11	105.20
1	N	581	G	C4-C5-N7	5.41	112.96	110.80
1	N	1337	G	N1-C2-N3	-5.41	120.65	123.90
1	N	1449	C	C6-N1-C1'	-5.41	114.31	120.80
1	N	10	A	C6-N1-C2	5.41	121.84	118.60
1	N	15	G	C8-N9-C1'	-5.41	119.97	127.00
1	N	434	U	C1'-O4'-C4'	5.41	114.23	109.90
1	N	910	C	C5-C6-N1	5.41	123.70	121.00
1	N	1205	U	N3-C4-C5	-5.41	111.35	114.60
1	N	1216	A	C6-N1-C2	-5.41	115.36	118.60
1	N	1252	A	C4'-C3'-C2'	-5.41	97.19	102.60
1	N	254	G	N1-C2-N3	-5.41	120.66	123.90
1	N	756	C	C5-C6-N1	-5.41	118.30	121.00
1	N	820	U	N3-C4-C5	-5.41	111.36	114.60
1	N	169	C	OP1-P-O3'	5.41	117.09	105.20
1	N	973	G	P-O5'-C5'	5.41	129.55	120.90
1	N	1186	G	O5'-P-OP2	5.41	117.19	110.70
1	N	1013	G	C2-N3-C4	5.40	114.60	111.90
1	N	303	A	C6-N1-C2	5.40	121.84	118.60
1	N	392	C	C6-N1-C2	5.40	122.46	120.30
1	N	581	G	O4'-C1'-N9	5.40	112.52	108.20
1	N	874	G	N3-C4-C5	-5.40	125.90	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	989	U	P-O3'-C3'	-5.40	113.22	119.70
1	N	1456	A	C8-N9-C4	-5.40	103.64	105.80
1	N	1529	G	C4-C5-C6	5.40	122.04	118.80
1	N	134	G	O4'-C4'-C3'	-5.40	98.60	104.00
1	N	327	A	O4'-C1'-N9	5.40	112.52	108.20
1	N	492	C	C6-N1-C1'	-5.40	114.32	120.80
1	N	1123	U	C4-C5-C6	-5.40	116.46	119.70
1	N	1452	C	P-O5'-C5'	5.40	129.54	120.90
1	N	606	G	C6-N1-C2	5.40	128.34	125.10
1	N	894	G	C3'-C2'-C1'	-5.40	97.18	101.50
1	N	1157	A	C5-C6-N1	-5.40	115.00	117.70
1	N	5	U	C2-N3-C4	-5.40	123.76	127.00
1	N	40	C	N1-C2-N3	5.40	122.98	119.20
1	N	165	G	C2-N3-C4	-5.40	109.20	111.90
1	N	198	G	O4'-C1'-C2'	5.40	112.46	107.60
1	N	413	G	C6-C5-N7	-5.40	127.16	130.40
1	N	450	G	C4-C5-N7	5.40	112.96	110.80
1	N	499	A	C3'-C2'-C1'	5.40	105.82	101.50
1	N	1297	G	C4-C5-C6	5.40	122.04	118.80
1	N	478	A	O4'-C1'-N9	5.40	112.52	108.20
1	N	229	U	C4'-C3'-C2'	-5.39	97.20	102.60
1	N	379	C	OP1-P-OP2	-5.39	111.51	119.60
1	N	781	A	N7-C8-N9	-5.39	111.10	113.80
1	N	830	G	N9-C4-C5	5.39	107.56	105.40
1	N	866	C	N3-C4-N4	5.39	121.78	118.00
1	N	909	A	N1-C2-N3	5.39	132.00	129.30
1	N	1118	U	N1-C2-O2	5.39	126.58	122.80
1	N	1177	G	C4-C5-C6	5.39	122.04	118.80
1	N	1177	G	P-O5'-C5'	5.39	129.53	120.90
1	N	1451	U	P-O5'-C5'	-5.39	112.27	120.90
1	N	115	G	C4'-C3'-C2'	5.39	107.99	102.60
1	N	231	U	OP1-P-OP2	-5.39	111.51	119.60
1	N	428	G	O4'-C1'-N9	5.39	112.51	108.20
1	N	557	G	C5-N7-C8	5.39	107.00	104.30
1	N	736	C	C2-N1-C1'	5.39	124.73	118.80
1	N	811	C	C6-N1-C2	-5.39	118.14	120.30
1	N	831	A	C3'-C2'-C1'	-5.39	97.19	101.50
1	N	1356	G	C5-C6-N1	-5.39	108.80	111.50
1	N	257	G	C6-C5-N7	-5.39	127.17	130.40
1	N	607	A	O4'-C1'-N9	5.39	112.51	108.20
1	N	665	A	P-O5'-C5'	-5.39	112.27	120.90
1	N	3	A	P-O3'-C3'	-5.39	113.23	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	43	C	C3'-C2'-C1'	5.39	105.81	101.50
1	N	245	U	C1'-O4'-C4'	5.39	114.21	109.90
1	N	424	G	C4-C5-C6	5.39	122.03	118.80
1	N	515	G	C2-N3-C4	-5.39	109.20	111.90
1	N	1062	U	C1'-O4'-C4'	5.39	114.21	109.90
1	N	1182	G	C5'-C4'-O4'	5.39	115.57	109.10
1	N	1183	U	P-O3'-C3'	-5.39	113.23	119.70
1	N	301	G	C4-N9-C1'	5.39	133.50	126.50
1	N	72	A	C5-N7-C8	5.39	106.59	103.90
1	N	710	G	N1-C6-O6	5.39	123.13	119.90
1	N	761	G	C2-N3-C4	5.39	114.59	111.90
1	N	1034	G	N1-C2-N3	-5.39	120.67	123.90
1	N	1207	G	O4'-C1'-C2'	-5.39	100.41	105.80
1	N	1340	A	N7-C8-N9	5.39	116.49	113.80
1	N	1518	A	O4'-C1'-N9	5.39	112.51	108.20
1	N	240	G	C5-C6-O6	-5.38	125.37	128.60
1	N	313	A	P-O3'-C3'	-5.38	113.24	119.70
1	N	718	A	C5-C6-N1	-5.38	115.01	117.70
1	N	1419	G	O4'-C4'-C3'	5.38	110.41	106.10
1	N	1152	A	N9-C4-C5	5.38	107.95	105.80
1	N	383	A	C5'-C4'-O4'	5.38	115.56	109.10
1	N	383	A	C4-N9-C1'	5.38	135.99	126.30
1	N	542	G	P-O5'-C5'	5.38	129.51	120.90
1	N	679	C	C2-N3-C4	5.38	122.59	119.90
1	N	775	G	C4-C5-C6	5.38	122.03	118.80
1	N	1278	G	N1-C2-N3	-5.38	120.67	123.90
1	N	1462	C	N3-C4-C5	-5.38	119.75	121.90
1	N	611	C	C5-C4-N4	-5.38	116.43	120.20
1	N	618	C	C3'-C2'-C1'	-5.38	97.20	101.50
1	N	622	A	C2-N3-C4	-5.38	107.91	110.60
1	N	1145	A	C2'-C3'-O3'	5.38	122.31	113.70
1	N	1502	A	C4-C5-C6	5.38	119.69	117.00
1	N	6	G	N3-C2-N2	5.38	123.67	119.90
1	N	51	A	C4'-C3'-C2'	5.38	107.98	102.60
1	N	1271	A	N3-C4-N9	5.38	131.70	127.40
1	N	100	G	N3-C4-N9	-5.38	122.77	126.00
1	N	1225	A	C5-C6-N6	-5.38	119.40	123.70
1	N	1368	A	C4'-C3'-C2'	-5.38	97.22	102.60
1	N	125	U	N3-C4-C5	-5.38	111.38	114.60
1	N	112	G	N7-C8-N9	5.37	115.79	113.10
1	N	248	C	C1'-O4'-C4'	-5.37	105.60	109.90
1	N	256	U	O4'-C4'-C3'	-5.37	98.63	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	297	G	C8-N9-C1'	5.37	133.98	127.00
1	N	387	U	P-O3'-C3'	5.37	126.15	119.70
1	N	768	A	C1'-O4'-C4'	5.37	114.20	109.90
1	N	1179	A	C4-C5-C6	5.37	119.69	117.00
1	N	1268	G	N3-C2-N2	5.37	123.66	119.90
1	N	115	G	C6-C5-N7	-5.37	127.18	130.40
1	N	1217	C	C6-N1-C1'	5.37	127.25	120.80
1	N	1330	U	N3-C2-O2	5.37	125.96	122.20
1	N	407	U	C6-N1-C2	-5.37	117.78	121.00
1	N	1376	U	P-O5'-C5'	5.37	129.49	120.90
1	N	244	U	C3'-C2'-C1'	5.37	105.80	101.50
1	N	312	C	C5-C6-N1	5.37	123.69	121.00
1	N	498	A	N1-C2-N3	5.37	131.98	129.30
1	N	645	G	P-O3'-C3'	-5.37	113.26	119.70
1	N	789	U	C6-N1-C2	-5.37	117.78	121.00
1	N	815	A	C1'-O4'-C4'	-5.37	105.61	109.90
1	N	915	A	O4'-C1'-N9	5.37	112.50	108.20
1	N	1152	A	N7-C8-N9	5.37	116.48	113.80
1	N	1403	C	C5'-C4'-O4'	5.37	115.54	109.10
1	N	75	G	C5-N7-C8	-5.37	101.62	104.30
1	N	1293	C	C5'-C4'-C3'	-5.37	107.41	116.00
1	N	358	U	C3'-C2'-C1'	-5.37	97.21	101.50
1	N	738	C	N1-C2-O2	-5.37	115.68	118.90
1	N	752	G	N7-C8-N9	-5.37	110.42	113.10
1	N	886	G	C6-C5-N7	-5.37	127.18	130.40
1	N	365	U	N3-C4-C5	-5.36	111.38	114.60
1	N	496	A	C5-N7-C8	5.36	106.58	103.90
1	N	1433	A	N3-C4-C5	5.36	130.56	126.80
1	N	81	A	N7-C8-N9	5.36	116.48	113.80
1	N	512	U	N3-C4-O4	5.36	123.15	119.40
1	N	607	A	C8-N9-C4	5.36	107.94	105.80
1	N	1389	C	C4'-C3'-C2'	-5.36	97.24	102.60
1	N	1441	A	C5-N7-C8	5.36	106.58	103.90
1	N	46	G	N9-C4-C5	-5.36	103.26	105.40
1	N	1061	G	C5-C6-O6	-5.36	125.38	128.60
1	N	1303	C	P-O5'-C5'	5.36	129.48	120.90
1	N	303	A	C5-C6-N6	-5.36	119.41	123.70
1	N	197	A	N1-C6-N6	5.36	121.81	118.60
1	N	359	G	N1-C6-O6	5.36	123.11	119.90
1	N	485	U	N3-C2-O2	5.36	125.95	122.20
1	N	931	C	C5-C4-N4	5.36	123.95	120.20
1	N	1081	A	C3'-C2'-C1'	-5.36	97.21	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1404	C	C4'-C3'-C2'	-5.36	97.24	102.60
1	N	319	G	C5'-C4'-C3'	-5.36	107.43	116.00
1	N	327	A	N1-C2-N3	-5.36	126.62	129.30
1	N	707	U	N3-C2-O2	-5.36	118.45	122.20
1	N	707	U	N1-C2-O2	5.36	126.55	122.80
1	N	717	U	C3'-C2'-C1'	5.36	105.78	101.50
1	N	941	G	N3-C4-N9	5.36	129.21	126.00
1	N	967	C	N3-C2-O2	5.36	125.65	121.90
1	N	1329	A	C4'-C3'-C2'	-5.36	97.24	102.60
1	N	21	G	P-O3'-C3'	-5.35	113.28	119.70
1	N	126	G	N1-C2-N2	5.35	121.02	116.20
1	N	576	C	C1'-O4'-C4'	-5.35	105.62	109.90
1	N	681	A	N7-C8-N9	5.35	116.48	113.80
1	N	1042	A	C8-N9-C4	5.35	107.94	105.80
1	N	1146	A	O5'-C5'-C4'	-5.35	101.53	111.70
1	N	513	C	C6-N1-C1'	-5.35	114.38	120.80
1	N	812	G	C5-C6-N1	5.35	114.18	111.50
1	N	920	U	C5-C6-N1	5.35	125.38	122.70
1	N	1432	G	N3-C4-N9	-5.35	122.79	126.00
1	N	280	C	P-O3'-C3'	5.35	126.12	119.70
1	N	342	C	C5-C4-N4	-5.35	116.45	120.20
1	N	953	G	P-O3'-C3'	5.35	126.12	119.70
1	N	1071	C	N1-C2-N3	-5.35	115.45	119.20
1	N	82	G	C6-N1-C2	5.35	128.31	125.10
1	N	119	A	N1-C2-N3	5.35	131.97	129.30
1	N	143	A	C4-C5-N7	5.35	113.38	110.70
1	N	187	G	C6-N1-C2	5.35	128.31	125.10
1	N	481	G	C4-C5-C6	5.35	122.01	118.80
1	N	588	G	C6-C5-N7	-5.35	127.19	130.40
1	N	1026	G	C5-N7-C8	5.35	106.97	104.30
1	N	1159	U	C2-N1-C1'	5.35	124.12	117.70
1	N	1284	C	C2-N3-C4	-5.35	117.22	119.90
1	N	1398	A	C4'-C3'-C2'	-5.35	97.25	102.60
1	N	19	A	C6-C5-N7	-5.35	128.56	132.30
1	N	39	G	N3-C2-N2	5.35	123.64	119.90
1	N	165	G	N7-C8-N9	5.35	115.77	113.10
1	N	176	C	C2-N1-C1'	5.35	124.68	118.80
1	N	1190	G	C4-C5-C6	5.35	122.01	118.80
1	N	1462	C	C2'-C3'-O3'	5.35	122.25	113.70
1	N	14	U	N3-C4-C5	-5.35	111.39	114.60
1	N	87	C	C4-C5-C6	5.35	120.07	117.40
1	N	427	U	C5'-C4'-O4'	-5.35	102.69	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1455	G	N3-C2-N2	5.35	123.64	119.90
1	N	117	G	OP1-P-O3'	5.34	116.96	105.20
1	N	250	A	C6-N1-C2	5.34	121.81	118.60
1	N	504	C	N3-C4-N4	5.34	121.74	118.00
1	N	552	U	O4'-C1'-N1	5.34	112.48	108.20
1	N	774	G	C5-C6-N1	-5.34	108.83	111.50
1	N	1017	U	C2-N1-C1'	5.34	124.11	117.70
1	N	1255	G	N9-C4-C5	-5.34	103.26	105.40
1	N	1286	U	O4'-C1'-N1	5.34	112.48	108.20
1	N	376	G	C4-C5-C6	5.34	122.01	118.80
1	N	1443	C	C6-N1-C1'	-5.34	114.39	120.80
1	N	355	C	C6-N1-C2	-5.34	118.16	120.30
1	N	423	G	C1'-O4'-C4'	-5.34	105.63	109.90
1	N	759	A	C1'-O4'-C4'	-5.34	105.63	109.90
1	N	639	G	N3-C2-N2	5.34	123.64	119.90
1	N	1041	G	C5'-C4'-O4'	5.34	115.51	109.10
1	N	967	C	C3'-C2'-C1'	-5.34	97.23	101.50
1	N	1075	U	C5'-C4'-O4'	5.34	115.51	109.10
1	N	1340	A	N9-C4-C5	-5.34	103.67	105.80
1	N	1519	A	C4'-C3'-C2'	-5.34	97.26	102.60
1	N	406	G	P-O3'-C3'	-5.34	113.30	119.70
1	N	609	A	C2'-C3'-O3'	5.34	122.24	113.70
1	N	949	A	C5-C6-N6	-5.34	119.43	123.70
1	N	1201	A	C8-N9-C4	-5.34	103.67	105.80
1	N	1408	A	N1-C2-N3	5.34	131.97	129.30
1	N	588	G	N9-C4-C5	-5.33	103.27	105.40
1	N	1385	G	N7-C8-N9	-5.33	110.43	113.10
1	N	1446	A	C8-N9-C1'	5.33	137.30	127.70
1	N	31	G	O5'-P-OP2	-5.33	100.90	105.70
1	N	76	G	C5-C6-O6	-5.33	125.40	128.60
1	N	275	G	C4-C5-N7	-5.33	108.67	110.80
1	N	497	G	N9-C4-C5	5.33	107.53	105.40
1	N	1053	G	C4'-C3'-C2'	-5.33	97.27	102.60
1	N	1489	G	C4-C5-C6	5.33	122.00	118.80
1	N	77	A	O4'-C1'-N9	5.33	112.46	108.20
1	N	93	U	N3-C4-O4	5.33	123.13	119.40
1	N	222	C	N3-C4-C5	-5.33	119.77	121.90
1	N	348	G	C2'-C3'-O3'	5.33	122.23	113.70
1	N	670	G	N9-C1'-C2'	-5.33	106.14	112.00
1	N	776	G	C2'-C3'-O3'	5.33	122.23	113.70
1	N	421	U	C5'-C4'-O4'	5.33	115.49	109.10
1	N	1429	A	C4-C5-N7	-5.33	108.03	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	69	G	N3-C4-N9	-5.33	122.80	126.00
1	N	493	A	OP1-P-OP2	-5.33	111.61	119.60
1	N	1093	A	C8-N9-C4	5.33	107.93	105.80
1	N	1271	A	C5'-C4'-O4'	-5.33	102.71	109.10
1	N	29	U	P-O5'-C5'	5.33	129.42	120.90
1	N	113	G	O4'-C1'-N9	5.33	112.46	108.20
1	N	287	U	O5'-C5'-C4'	-5.33	101.58	111.70
1	N	337	G	C4'-C3'-C2'	-5.33	97.28	102.60
1	N	437	U	N3-C4-C5	5.33	117.80	114.60
1	N	588	G	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	823	C	C4-C5-C6	5.33	120.06	117.40
1	N	961	U	C5-C4-O4	-5.33	122.70	125.90
1	N	76	G	C4-C5-C6	5.32	121.99	118.80
1	N	167	A	N3-C4-C5	5.32	130.53	126.80
1	N	238	A	N1-C6-N6	5.32	121.80	118.60
1	N	266	G	OP1-P-OP2	-5.32	111.61	119.60
1	N	296	U	C5-C6-N1	5.32	125.36	122.70
1	N	348	G	C5-N7-C8	-5.32	101.64	104.30
1	N	359	G	C2-N3-C4	-5.32	109.24	111.90
1	N	1027	C	O4'-C1'-N1	5.32	112.46	108.20
1	N	1136	C	C6-N1-C1'	-5.32	114.41	120.80
1	N	1249	C	O3'-P-O5'	5.32	114.11	104.00
1	N	270	A	C2-N3-C4	5.32	113.26	110.60
1	N	1533	C	P-O3'-C3'	-5.32	113.31	119.70
1	N	311	C	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	476	U	O4'-C1'-N1	5.32	112.46	108.20
1	N	532	A	C3'-C2'-C1'	-5.32	97.24	101.50
1	N	806	C	N3-C4-C5	-5.32	119.77	121.90
1	N	342	C	C3'-C2'-C1'	5.32	105.75	101.50
1	N	725	G	O4'-C1'-N9	5.32	112.45	108.20
1	N	1240	U	OP1-P-OP2	-5.32	111.62	119.60
1	N	460	A	C6-C5-N7	-5.32	128.58	132.30
1	N	757	U	C6-N1-C2	-5.32	117.81	121.00
1	N	966	G	P-O5'-C5'	-5.32	112.39	120.90
1	N	1426	G	N3-C2-N2	5.32	123.62	119.90
1	N	195	A	C2'-C3'-O3'	5.32	122.20	113.70
1	N	631	C	C6-N1-C1'	-5.32	114.42	120.80
1	N	1347	G	C6-C5-N7	-5.32	127.21	130.40
1	N	342	C	N1-C2-N3	-5.31	115.48	119.20
1	N	1057	G	C8-N9-C4	-5.31	104.28	106.40
1	N	1208	C	C1'-O4'-C4'	-5.31	105.65	109.90
1	N	1517	G	OP2-P-O3'	5.31	116.89	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	139	A	C1'-O4'-C4'	-5.31	105.65	109.90
1	N	483	C	N3-C4-N4	5.31	121.72	118.00
1	N	705	G	C6-C5-N7	-5.31	127.21	130.40
1	N	1252	A	O4'-C1'-C2'	-5.31	100.49	105.80
1	N	373	A	C6-C5-N7	-5.31	128.58	132.30
1	N	495	A	C8-N9-C1'	5.31	137.26	127.70
1	N	1068	G	C5'-C4'-C3'	-5.31	107.51	116.00
1	N	1454	G	N7-C8-N9	-5.31	110.44	113.10
1	N	232	G	N3-C4-N9	5.31	129.18	126.00
1	N	483	C	N1-C2-O2	5.31	122.08	118.90
1	N	840	C	N1-C2-O2	-5.31	115.72	118.90
1	N	928	G	N3-C4-N9	5.31	129.18	126.00
1	N	1097	C	O4'-C4'-C3'	-5.31	98.69	104.00
1	N	1419	G	C5'-C4'-C3'	-5.31	107.51	116.00
1	N	1516	G	C5-N7-C8	5.31	106.95	104.30
1	N	204	G	C6-N1-C2	5.31	128.28	125.10
1	N	838	G	C4-C5-N7	-5.31	108.68	110.80
1	N	1449	C	N3-C4-C5	5.31	124.02	121.90
1	N	343	U	P-O3'-C3'	5.30	126.07	119.70
1	N	700	G	C5-C6-O6	-5.30	125.42	128.60
1	N	724	G	P-O5'-C5'	-5.30	112.41	120.90
1	N	1299	A	N9-C4-C5	-5.30	103.68	105.80
1	N	538	G	C6-C5-N7	-5.30	127.22	130.40
1	N	1239	A	C5'-C4'-C3'	5.30	124.48	116.00
1	N	1270	G	C5-N7-C8	5.30	106.95	104.30
1	N	1480	A	C4-C5-C6	5.30	119.65	117.00
1	N	1487	G	C1'-O4'-C4'	5.30	114.14	109.90
1	N	423	G	N9-C4-C5	-5.30	103.28	105.40
1	N	527	G	C8-N9-C1'	-5.30	120.11	127.00
1	N	551	U	N3-C4-O4	5.30	123.11	119.40
1	N	631	C	O4'-C1'-N1	5.30	112.44	108.20
1	N	711	G	N3-C2-N2	5.30	123.61	119.90
1	N	761	G	O4'-C1'-N9	5.30	112.44	108.20
1	N	1206	G	C5'-C4'-O4'	5.30	115.46	109.10
1	N	211	G	C8-N9-C1'	-5.30	120.11	127.00
1	N	295	C	O4'-C1'-N1	5.30	112.44	108.20
1	N	517	G	C5'-C4'-C3'	-5.30	107.52	116.00
1	N	1415	G	C5-C6-N1	-5.30	108.85	111.50
1	N	1491	G	C8-N9-C4	5.30	108.52	106.40
1	N	1530	G	C4'-C3'-C2'	5.30	107.90	102.60
1	N	121	U	C3'-C2'-C1'	-5.30	97.26	101.50
1	N	214	C	C6-N1-C1'	-5.30	114.44	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	800	G	N7-C8-N9	5.30	115.75	113.10
1	N	44	A	N3-C4-C5	-5.30	123.09	126.80
1	N	65	A	C8-N9-C4	5.30	107.92	105.80
1	N	161	A	C1'-O4'-C4'	5.30	114.14	109.90
1	N	730	G	C6-N1-C2	5.30	128.28	125.10
1	N	1044	A	N9-C4-C5	-5.30	103.68	105.80
1	N	1196	A	N1-C2-N3	-5.30	126.65	129.30
1	N	1325	C	C5-C6-N1	5.30	123.65	121.00
1	N	1522	U	C6-N1-C2	-5.30	117.82	121.00
1	N	1523	G	C1'-O4'-C4'	-5.30	105.66	109.90
1	N	379	C	C2-N3-C4	-5.29	117.25	119.90
1	N	398	U	N3-C2-O2	5.29	125.91	122.20
1	N	500	G	C6-C5-N7	-5.29	127.22	130.40
1	N	535	A	C4-C5-N7	-5.29	108.05	110.70
1	N	1106	G	C5-C6-O6	-5.29	125.42	128.60
1	N	236	A	N7-C8-N9	-5.29	111.15	113.80
1	N	584	G	C8-N9-C4	5.29	108.52	106.40
1	N	807	A	P-O5'-C5'	-5.29	112.43	120.90
1	N	980	C	N3-C2-O2	5.29	125.61	121.90
1	N	1327	C	OP1-P-OP2	-5.29	111.66	119.60
1	N	1519	A	O4'-C1'-C2'	-5.29	100.51	105.80
1	N	6	G	C4-N9-C1'	5.29	133.38	126.50
1	N	315	A	C5-N7-C8	5.29	106.55	103.90
1	N	727	G	C5-C6-N1	-5.29	108.86	111.50
1	N	979	C	C4-C5-C6	-5.29	114.75	117.40
1	N	1214	C	N3-C4-N4	5.29	121.70	118.00
1	N	628	G	C5-C6-O6	-5.29	125.43	128.60
1	N	156	C	C2-N3-C4	-5.29	117.25	119.90
1	N	189	A	C4-C5-C6	5.29	119.64	117.00
1	N	279	A	C4'-C3'-C2'	5.29	107.89	102.60
1	N	562	U	C6-N1-C2	-5.29	117.83	121.00
1	N	587	G	C5-C6-N1	-5.29	108.86	111.50
1	N	672	U	C5-C4-O4	-5.29	122.73	125.90
1	N	832	G	P-O5'-C5'	-5.29	112.44	120.90
1	N	832	G	C6-N1-C2	-5.29	121.93	125.10
1	N	1185	G	N1-C2-N3	-5.29	120.73	123.90
1	N	1256	A	C8-N9-C4	-5.29	103.69	105.80
1	N	1371	G	N7-C8-N9	5.29	115.75	113.10
1	N	1477	U	O4'-C1'-N1	5.29	112.43	108.20
1	N	672	U	C1'-O4'-C4'	-5.29	105.67	109.90
1	N	848	C	O4'-C1'-N1	5.29	112.43	108.20
1	N	11	G	P-O5'-C5'	5.29	129.36	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	303	A	C5-N7-C8	5.29	106.54	103.90
1	N	639	G	C5'-C4'-C3'	-5.29	107.54	116.00
1	N	869	G	C6-N1-C2	5.29	128.27	125.10
1	N	1439	G	N3-C4-N9	5.29	129.17	126.00
1	N	1469	C	C2-N3-C4	5.29	122.54	119.90
1	N	547	A	C6-C5-N7	-5.28	128.60	132.30
1	N	352	C	N1-C2-O2	5.28	122.07	118.90
1	N	524	G	C8-N9-C4	-5.28	104.29	106.40
1	N	744	C	C5'-C4'-O4'	5.28	115.44	109.10
1	N	1288	A	C5'-C4'-C3'	5.28	124.45	116.00
1	N	198	G	OP1-P-OP2	-5.28	111.68	119.60
1	N	769	G	N9-C4-C5	-5.28	103.29	105.40
1	N	1147	C	N1-C2-N3	-5.28	115.50	119.20
1	N	1186	G	N7-C8-N9	5.28	115.74	113.10
1	N	1283	U	C4'-C3'-C2'	5.28	107.88	102.60
1	N	1472	U	N1-C2-O2	-5.28	119.10	122.80
1	N	990	C	C4-C5-C6	5.28	120.04	117.40
1	N	293	G	C6-C5-N7	-5.28	127.23	130.40
1	N	807	A	C2-N3-C4	5.28	113.24	110.60
1	N	948	C	C6-N1-C1'	-5.28	114.47	120.80
1	N	1072	G	C4-C5-C6	5.28	121.97	118.80
1	N	1288	A	P-O3'-C3'	-5.28	113.37	119.70
1	N	1368	A	C6-N1-C2	-5.28	115.43	118.60
1	N	26	A	C5-N7-C8	5.28	106.54	103.90
1	N	477	C	C6-N1-C2	5.28	122.41	120.30
1	N	724	G	N3-C4-C5	5.28	131.24	128.60
1	N	838	G	C2-N3-C4	-5.28	109.26	111.90
1	N	1024	G	C4-C5-C6	5.28	121.97	118.80
1	N	1153	G	C6-C5-N7	-5.28	127.23	130.40
1	N	1187	G	C4-N9-C1'	5.28	133.36	126.50
1	N	1500	A	C5'-C4'-C3'	5.27	124.44	116.00
1	N	106	C	O4'-C1'-N1	5.27	112.42	108.20
1	N	111	G	C5-N7-C8	5.27	106.94	104.30
1	N	795	C	N3-C4-C5	-5.27	119.79	121.90
1	N	1222	G	C6-N1-C2	-5.27	121.94	125.10
1	N	1303	C	N1-C2-O2	5.27	122.06	118.90
1	N	1417	G	C4-N9-C1'	5.27	133.35	126.50
1	N	34	C	C5-C6-N1	5.27	123.64	121.00
1	N	167	A	C5'-C4'-O4'	5.27	115.42	109.10
1	N	185	U	C2'-C3'-O3'	5.27	122.13	113.70
1	N	477	C	N3-C4-N4	5.27	121.69	118.00
1	N	628	G	C4'-C3'-C2'	-5.27	97.33	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	174	A	N3-C4-N9	5.27	131.62	127.40
1	N	669	G	N9-C4-C5	5.27	107.51	105.40
1	N	1157	A	C5'-C4'-O4'	5.27	115.42	109.10
1	N	1197	A	C3'-C2'-C1'	5.27	105.72	101.50
1	N	1391	U	P-O5'-C5'	5.27	129.33	120.90
1	N	211	G	C4'-C3'-C2'	5.27	107.87	102.60
1	N	443	C	N3-C4-N4	5.27	121.69	118.00
1	N	1092	A	C1'-O4'-C4'	-5.27	105.69	109.90
1	N	1234	C	C5'-C4'-O4'	5.27	115.42	109.10
1	N	1338	G	N1-C2-N3	-5.27	120.74	123.90
1	N	1420	U	N3-C4-O4	5.27	123.09	119.40
1	N	239	U	N1-C1'-C2'	-5.27	106.21	112.00
1	N	839	C	C1'-O4'-C4'	-5.27	105.69	109.90
1	N	913	A	C1'-O4'-C4'	5.27	114.11	109.90
1	N	1269	A	N7-C8-N9	5.27	116.43	113.80
1	N	109	A	N1-C2-N3	5.26	131.93	129.30
1	N	395	C	C6-N1-C2	-5.26	118.19	120.30
1	N	1528	U	N3-C4-O4	5.26	123.08	119.40
1	N	760	G	C2-N3-C4	5.26	114.53	111.90
1	N	862	C	N3-C4-C5	-5.26	119.80	121.90
1	N	910	C	OP2-P-O3'	5.26	116.78	105.20
1	N	1386	G	C2-N3-C4	-5.26	109.27	111.90
1	N	1533	C	C2-N1-C1'	5.26	124.59	118.80
1	N	385	C	N3-C2-O2	-5.26	118.22	121.90
1	N	506	G	N1-C2-N3	-5.26	120.75	123.90
1	N	1207	G	C4-C5-N7	5.26	112.90	110.80
1	N	1233	G	C4'-C3'-C2'	-5.26	97.34	102.60
1	N	1323	G	C3'-C2'-C1'	5.26	105.71	101.50
1	N	1361	G	C1'-O4'-C4'	-5.26	105.69	109.90
1	N	1365	G	C2-N3-C4	-5.26	109.27	111.90
1	N	1404	C	C4-C5-C6	-5.26	114.77	117.40
1	N	733	G	C5-C6-O6	-5.26	125.44	128.60
1	N	768	A	C4-C5-N7	-5.26	108.07	110.70
1	N	1302	C	N3-C2-O2	5.26	125.58	121.90
1	N	178	C	N3-C4-C5	5.26	124.00	121.90
1	N	288	A	C5-C6-N1	5.26	120.33	117.70
1	N	640	A	N9-C4-C5	5.26	107.90	105.80
1	N	675	A	C2-N3-C4	5.26	113.23	110.60
1	N	810	C	C5-C6-N1	5.26	123.63	121.00
1	N	925	G	C2-N3-C4	5.26	114.53	111.90
1	N	1488	G	P-O3'-C3'	-5.26	113.39	119.70
1	N	514	C	P-O3'-C3'	-5.25	113.39	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	729	A	N3-C4-N9	5.25	131.60	127.40
1	N	747	A	C4'-C3'-C2'	-5.25	97.34	102.60
1	N	1198	G	N9-C4-C5	5.25	107.50	105.40
1	N	15	G	N3-C2-N2	5.25	123.58	119.90
1	N	65	A	O5'-P-OP2	-5.25	100.97	105.70
1	N	636	U	C5-C4-O4	-5.25	122.75	125.90
1	N	1163	A	C6-C5-N7	-5.25	128.62	132.30
1	N	1447	A	O4'-C1'-C2'	5.25	112.33	107.60
1	N	682	G	C3'-C2'-C1'	-5.25	97.30	101.50
1	N	928	G	C4-N9-C1'	5.25	133.33	126.50
1	N	931	C	N1-C2-N3	-5.25	115.52	119.20
1	N	1336	C	C2-N3-C4	-5.25	117.28	119.90
1	N	1402	C	N1-C1'-C2'	-5.25	106.22	112.00
1	N	187	G	N3-C4-C5	-5.25	125.97	128.60
1	N	1485	U	C5-C4-O4	-5.25	122.75	125.90
1	N	343	U	N3-C4-O4	5.25	123.07	119.40
1	N	1359	C	N3-C4-N4	5.25	121.67	118.00
1	N	432	A	N3-C4-N9	5.25	131.60	127.40
1	N	535	A	C5'-C4'-O4'	5.25	115.40	109.10
1	N	539	A	C4'-C3'-C2'	-5.25	97.35	102.60
1	N	577	G	P-O5'-C5'	-5.25	112.50	120.90
1	N	869	G	C4-C5-C6	5.25	121.95	118.80
1	N	935	A	C4-C5-N7	-5.25	108.08	110.70
1	N	1427	C	C5-C6-N1	5.25	123.62	121.00
1	N	1318	A	N3-C4-C5	-5.25	123.13	126.80
1	N	1425	U	C2-N3-C4	5.25	130.15	127.00
1	N	117	G	O3'-P-O5'	-5.24	94.04	104.00
1	N	373	A	OP1-P-OP2	-5.24	111.73	119.60
1	N	396	C	OP1-P-OP2	-5.24	111.73	119.60
1	N	1168	U	C5-C6-N1	-5.24	120.08	122.70
1	N	302	G	C3'-C2'-C1'	-5.24	97.31	101.50
1	N	1386	G	C3'-C2'-C1'	-5.24	97.31	101.50
1	N	36	C	N3-C2-O2	-5.24	118.23	121.90
1	N	158	G	N1-C2-N3	-5.24	120.76	123.90
1	N	165	G	C4'-C3'-C2'	-5.24	97.36	102.60
1	N	184	G	N9-C4-C5	5.24	107.50	105.40
1	N	274	A	P-O5'-C5'	5.24	129.29	120.90
1	N	745	G	O4'-C1'-N9	5.24	112.39	108.20
1	N	1079	G	O5'-P-OP2	-5.24	100.98	105.70
1	N	1212	U	N1-C1'-C2'	5.24	120.81	114.00
1	N	1260	G	C5-C6-N1	-5.24	108.88	111.50
1	N	1271	A	O4'-C1'-N9	5.24	112.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1358	U	C5-C4-O4	5.24	129.04	125.90
1	N	89	U	N3-C2-O2	5.24	125.87	122.20
1	N	306	A	C4-C5-C6	5.24	119.62	117.00
1	N	366	A	C6-C5-N7	-5.24	128.63	132.30
1	N	453	G	O4'-C1'-N9	5.24	112.39	108.20
1	N	687	A	O4'-C1'-N9	5.24	112.39	108.20
1	N	726	C	C5'-C4'-C3'	-5.24	107.62	116.00
1	N	1439	G	C2-N3-C4	5.24	114.52	111.90
1	N	192	A	C5-C6-N6	-5.24	119.51	123.70
1	N	55	A	P-O5'-C5'	5.24	129.28	120.90
1	N	474	G	N3-C4-C5	5.24	131.22	128.60
1	N	722	G	O4'-C1'-N9	5.24	112.39	108.20
1	N	827	U	N1-C2-O2	-5.24	119.14	122.80
1	N	1289	A	C4-C5-C6	5.24	119.62	117.00
1	N	1402	C	C6-N1-C2	5.24	122.39	120.30
1	N	1422	G	C4-C5-C6	5.24	121.94	118.80
1	N	1428	A	C4-C5-N7	5.24	113.32	110.70
1	N	1526	G	P-O5'-C5'	5.24	129.28	120.90
1	N	161	A	N1-C2-N3	5.23	131.92	129.30
1	N	534	U	C6-N1-C1'	-5.23	113.87	121.20
1	N	621	A	C4-C5-N7	5.23	113.32	110.70
1	N	1191	A	C3'-C2'-C1'	5.23	105.69	101.50
1	N	1501	C	C3'-C2'-C1'	5.23	105.69	101.50
1	N	455	G	C5'-C4'-O4'	5.23	115.38	109.10
1	N	481	G	P-O3'-C3'	-5.23	113.42	119.70
1	N	579	A	C5-C6-N1	-5.23	115.08	117.70
1	N	972	C	P-O5'-C5'	-5.23	112.53	120.90
1	N	152	A	C8-N9-C4	-5.23	103.71	105.80
1	N	339	C	O5'-P-OP2	5.23	116.98	110.70
1	N	506	G	C4-C5-C6	5.23	121.94	118.80
1	N	1039	G	OP1-P-OP2	-5.23	111.75	119.60
1	N	1119	C	C5-C4-N4	-5.23	116.54	120.20
1	N	1155	A	C5-C6-N6	-5.23	119.52	123.70
1	N	1181	G	N7-C8-N9	-5.23	110.48	113.10
1	N	1198	G	C3'-C2'-C1'	-5.23	97.32	101.50
1	N	313	A	N7-C8-N9	5.23	116.41	113.80
1	N	318	G	P-O3'-C3'	-5.23	113.42	119.70
1	N	401	C	N1-C1'-C2'	-5.23	106.25	112.00
1	N	816	A	C6-C5-N7	-5.23	128.64	132.30
1	N	330	C	C4-C5-C6	5.23	120.01	117.40
1	N	418	C	C6-N1-C2	-5.23	118.21	120.30
1	N	120	A	C5-N7-C8	5.22	106.51	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	214	C	O4'-C1'-N1	5.22	112.38	108.20
1	N	372	C	OP1-P-OP2	-5.22	111.76	119.60
1	N	566	G	C3'-C2'-C1'	5.22	105.68	101.50
1	N	819	A	N7-C8-N9	-5.22	111.19	113.80
1	N	821	G	N3-C2-N2	5.22	123.56	119.90
1	N	855	U	C6-N1-C1'	-5.22	113.89	121.20
1	N	1462	C	C6-N1-C1'	-5.22	114.53	120.80
1	N	166	U	P-O3'-C3'	5.22	125.97	119.70
1	N	418	C	O5'-C5'-C4'	-5.22	101.78	111.70
1	N	729	A	C5'-C4'-C3'	5.22	124.36	116.00
1	N	914	A	C5-C6-N6	-5.22	119.52	123.70
1	N	947	G	C8-N9-C4	-5.22	104.31	106.40
1	N	973	G	C4'-C3'-C2'	-5.22	97.38	102.60
1	N	974	A	C8-N9-C4	-5.22	103.71	105.80
1	N	1307	U	N1-C2-N3	-5.22	111.77	114.90
1	N	1373	G	C5-N7-C8	5.22	106.91	104.30
1	N	1419	G	C5-N7-C8	-5.22	101.69	104.30
1	N	325	A	C4-N9-C1'	-5.22	116.90	126.30
1	N	922	G	C2-N3-C4	-5.22	109.29	111.90
1	N	1000	A	C5-N7-C8	5.22	106.51	103.90
1	N	186	C	C2'-C3'-O3'	5.22	122.05	113.70
1	N	667	G	N1-C2-N3	5.22	127.03	123.90
1	N	1318	A	C1'-O4'-C4'	5.22	114.08	109.90
1	N	1480	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	198	G	C6-N1-C2	5.22	128.23	125.10
1	N	1519	A	C5-N7-C8	5.22	106.51	103.90
1	N	77	A	C5-N7-C8	5.22	106.51	103.90
1	N	427	U	C5-C4-O4	-5.22	122.77	125.90
1	N	434	U	N3-C2-O2	5.22	125.85	122.20
1	N	607	A	N1-C6-N6	5.22	121.73	118.60
1	N	725	G	N1-C2-N2	5.22	120.89	116.20
1	N	774	G	C8-N9-C4	-5.22	104.31	106.40
1	N	1410	A	C4-C5-C6	-5.22	114.39	117.00
1	N	29	U	C5-C6-N1	-5.21	120.09	122.70
1	N	219	U	C2'-C3'-O3'	5.21	122.04	113.70
1	N	315	A	N1-C6-N6	5.21	121.73	118.60
1	N	566	G	C6-C5-N7	-5.21	127.27	130.40
1	N	624	C	O5'-P-OP2	5.21	116.96	110.70
1	N	654	G	P-O3'-C3'	-5.21	113.44	119.70
1	N	1111	A	C8-N9-C1'	-5.21	118.31	127.70
1	N	1171	A	C5'-C4'-O4'	5.21	115.36	109.10
1	N	1398	A	C3'-C2'-C1'	5.21	105.67	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1421	G	N9-C4-C5	-5.21	103.31	105.40
1	N	825	A	N9-C1'-C2'	-5.21	106.27	112.00
1	N	108	G	C8-N9-C4	-5.21	104.32	106.40
1	N	559	A	O4'-C1'-N9	5.21	112.37	108.20
1	N	1021	A	C4-C5-N7	-5.21	108.09	110.70
1	N	1416	G	C4-N9-C1'	-5.21	119.73	126.50
1	N	1487	G	N1-C2-N3	-5.21	120.77	123.90
1	N	1054	C	C4-C5-C6	5.21	120.00	117.40
1	N	1454	G	C5-N7-C8	5.21	106.91	104.30
1	N	93	U	C4'-C3'-C2'	-5.21	97.39	102.60
1	N	191	G	C6-C5-N7	-5.21	127.28	130.40
1	N	232	G	C5'-C4'-O4'	5.21	115.35	109.10
1	N	348	G	N1-C2-N3	-5.21	120.77	123.90
1	N	890	G	C3'-C2'-C1'	-5.21	97.33	101.50
1	N	1476	A	C2-N3-C4	-5.21	108.00	110.60
1	N	71	A	C3'-C2'-C1'	5.21	105.67	101.50
1	N	262	A	N9-C4-C5	-5.21	103.72	105.80
1	N	296	U	C2-N1-C1'	5.21	123.95	117.70
1	N	381	C	C6-N1-C2	-5.21	118.22	120.30
1	N	590	U	C5-C6-N1	-5.21	120.10	122.70
1	N	701	U	C2'-C3'-O3'	5.21	122.03	113.70
1	N	845	A	P-O3'-C3'	5.21	125.95	119.70
1	N	901	A	C4-C5-N7	-5.21	108.10	110.70
1	N	1009	U	N3-C4-O4	5.21	123.04	119.40
1	N	756	C	C4'-C3'-C2'	-5.21	97.39	102.60
1	N	66	A	C5-N7-C8	5.20	106.50	103.90
1	N	768	A	C5-C6-N1	-5.20	115.10	117.70
1	N	937	A	C5'-C4'-C3'	5.20	124.33	116.00
1	N	976	G	C6-C5-N7	-5.20	127.28	130.40
1	N	1255	G	C8-N9-C4	5.20	108.48	106.40
1	N	1258	G	C6-C5-N7	-5.20	127.28	130.40
1	N	1485	U	N1-C2-N3	5.20	118.02	114.90
1	N	376	G	N1-C2-N2	-5.20	111.52	116.20
1	N	829	G	C2-N3-C4	5.20	114.50	111.90
1	N	1249	C	C5'-C4'-C3'	-5.20	107.68	116.00
1	N	1301	U	N3-C2-O2	5.20	125.84	122.20
1	N	1362	A	C4-C5-N7	5.20	113.30	110.70
1	N	654	G	C6-C5-N7	-5.20	127.28	130.40
1	N	659	U	P-O3'-C3'	-5.20	113.46	119.70
1	N	1323	G	C1'-O4'-C4'	5.20	114.06	109.90
1	N	1424	U	P-O5'-C5'	5.20	129.22	120.90
1	N	810	C	OP1-P-O3'	5.20	116.64	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1159	U	C6-N1-C1'	-5.20	113.92	121.20
1	N	1293	C	P-O5'-C5'	-5.20	112.58	120.90
1	N	1324	A	P-O5'-C5'	5.20	129.22	120.90
1	N	192	A	N7-C8-N9	5.20	116.40	113.80
1	N	1235	U	C2-N3-C4	5.20	130.12	127.00
1	N	1262	C	C1'-O4'-C4'	5.20	114.06	109.90
1	N	1374	A	O4'-C4'-C3'	-5.20	98.80	104.00
1	N	1505	G	C5'-C4'-C3'	-5.20	107.69	116.00
1	N	77	A	C5-C6-N1	-5.19	115.10	117.70
1	N	970	C	C6-N1-C2	-5.19	118.22	120.30
1	N	121	U	N3-C2-O2	-5.19	118.56	122.20
1	N	187	G	O5'-P-OP1	5.19	116.93	110.70
1	N	993	G	O3'-P-O5'	-5.19	94.13	104.00
1	N	1074	G	C4-C5-C6	5.19	121.92	118.80
1	N	1414	U	C5'-C4'-O4'	5.19	115.33	109.10
1	N	69	G	N9-C1'-C2'	5.19	120.75	114.00
1	N	763	G	C4-C5-C6	5.19	121.91	118.80
1	N	822	U	O5'-C5'-C4'	-5.19	101.84	111.70
1	N	1023	U	C5'-C4'-O4'	5.19	115.33	109.10
1	N	1027	C	C5'-C4'-O4'	5.19	115.33	109.10
1	N	1211	U	C2-N3-C4	5.19	130.11	127.00
1	N	1365	G	N9-C4-C5	-5.19	103.32	105.40
1	N	94	G	OP1-P-OP2	-5.19	111.82	119.60
1	N	438	U	O4'-C1'-N1	5.19	112.35	108.20
1	N	614	C	P-O5'-C5'	-5.19	112.60	120.90
1	N	727	G	N3-C2-N2	-5.19	116.27	119.90
1	N	283	U	C5'-C4'-C3'	-5.19	107.70	116.00
1	N	674	G	N9-C4-C5	5.19	107.47	105.40
1	N	929	G	N7-C8-N9	5.19	115.69	113.10
1	N	1029	U	N3-C4-O4	5.19	123.03	119.40
1	N	1038	C	N3-C4-N4	5.19	121.63	118.00
1	N	1289	A	N9-C4-C5	5.19	107.88	105.80
1	N	1532	U	C3'-C2'-C1'	5.19	105.65	101.50
1	N	1345	U	N1-C2-N3	-5.19	111.79	114.90
1	N	57	G	N3-C4-N9	-5.18	122.89	126.00
1	N	454	G	C5'-C4'-C3'	-5.18	107.70	116.00
1	N	820	U	C6-N1-C2	-5.18	117.89	121.00
1	N	1148	U	N3-C4-O4	5.18	123.03	119.40
1	N	1276	G	N9-C4-C5	-5.18	103.33	105.40
1	N	1457	G	C6-N1-C2	-5.18	121.99	125.10
1	N	1483	A	C4-C5-C6	5.18	119.59	117.00
1	N	1501	C	C2-N1-C1'	-5.18	113.10	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	727	G	C5-N7-C8	5.18	106.89	104.30
1	N	748	G	C4-C5-C6	5.18	121.91	118.80
1	N	1140	C	P-O3'-C3'	5.18	125.92	119.70
1	N	1234	C	C4-C5-C6	5.18	119.99	117.40
1	N	1511	G	N1-C2-N3	-5.18	120.79	123.90
1	N	865	A	C2'-C3'-O3'	5.18	121.99	113.70
1	N	231	U	C2-N3-C4	-5.18	123.89	127.00
1	N	423	G	C6-N1-C2	-5.18	121.99	125.10
1	N	514	C	C6-N1-C1'	-5.18	114.58	120.80
1	N	780	A	C6-C5-N7	-5.18	128.68	132.30
1	N	1185	G	C5-C6-N1	-5.18	108.91	111.50
1	N	119	A	C6-N1-C2	-5.18	115.49	118.60
1	N	766	A	C1'-O4'-C4'	-5.18	105.76	109.90
1	N	1072	G	C5-C6-N1	-5.18	108.91	111.50
1	N	1090	U	C5-C6-N1	5.18	125.29	122.70
1	N	1133	G	C6-C5-N7	-5.18	127.29	130.40
1	N	1524	C	C5-C4-N4	-5.18	116.58	120.20
1	N	351	G	N7-C8-N9	-5.18	110.51	113.10
1	N	367	U	O4'-C1'-N1	5.18	112.34	108.20
1	N	454	G	N1-C2-N2	-5.18	111.54	116.20
1	N	1364	U	C5-C6-N1	5.18	125.29	122.70
1	N	1508	A	C5-N7-C8	5.18	106.49	103.90
1	N	554	A	C4'-C3'-C2'	-5.17	97.42	102.60
1	N	634	C	C5-C6-N1	5.17	123.59	121.00
1	N	1280	A	C3'-C2'-C1'	5.17	105.64	101.50
1	N	1281	C	N3-C4-N4	5.17	121.62	118.00
1	N	1341	U	C3'-C2'-C1'	5.17	105.64	101.50
1	N	269	C	N1-C2-O2	5.17	122.00	118.90
1	N	365	U	O4'-C1'-N1	5.17	112.34	108.20
1	N	378	G	N1-C2-N3	-5.17	120.80	123.90
1	N	1117	A	N7-C8-N9	5.17	116.39	113.80
1	N	1291	U	O4'-C1'-N1	5.17	112.34	108.20
1	N	1340	A	O4'-C1'-N9	5.17	112.34	108.20
1	N	1425	U	C2-N1-C1'	-5.17	111.50	117.70
1	N	1166	G	C4-N9-C1'	5.17	133.22	126.50
1	N	320	A	C5'-C4'-O4'	5.17	115.30	109.10
1	N	449	G	C4-N9-C1'	5.17	133.22	126.50
1	N	810	C	P-O5'-C5'	5.17	129.17	120.90
1	N	1092	A	P-O3'-C3'	5.17	125.90	119.70
1	N	1134	G	C6-N1-C2	-5.17	122.00	125.10
1	N	1172	C	C6-N1-C2	5.17	122.37	120.30
1	N	1191	A	N7-C8-N9	-5.17	111.22	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1530	G	N7-C8-N9	5.17	115.68	113.10
1	N	104	G	N7-C8-N9	-5.17	110.52	113.10
1	N	291	U	C4'-C3'-C2'	-5.17	97.43	102.60
1	N	348	G	N3-C4-N9	-5.17	122.90	126.00
1	N	537	G	N9-C4-C5	-5.17	103.33	105.40
1	N	643	C	C4-C5-C6	5.17	119.98	117.40
1	N	767	A	C5-C6-N6	-5.17	119.57	123.70
1	N	37	U	N3-C4-O4	5.17	123.02	119.40
1	N	77	A	N9-C4-C5	-5.17	103.73	105.80
1	N	90	C	C5'-C4'-C3'	5.17	124.26	116.00
1	N	199	A	N7-C8-N9	-5.17	111.22	113.80
1	N	286	C	C2-N3-C4	5.17	122.48	119.90
1	N	393	A	O4'-C1'-N9	5.17	112.33	108.20
1	N	564	C	C5-C6-N1	5.17	123.58	121.00
1	N	1313	U	P-O3'-C3'	-5.17	113.50	119.70
1	N	323	U	C5-C6-N1	5.16	125.28	122.70
1	N	326	G	C5'-C4'-O4'	5.16	115.30	109.10
1	N	449	G	N3-C2-N2	5.16	123.51	119.90
1	N	1187	G	N9-C4-C5	-5.16	103.33	105.40
1	N	1239	A	O3'-P-O5'	5.16	113.81	104.00
1	N	153	C	P-O3'-C3'	-5.16	113.50	119.70
1	N	438	U	N3-C4-C5	-5.16	111.50	114.60
1	N	595	A	C5-C6-N6	-5.16	119.57	123.70
1	N	1075	U	O3'-P-O5'	-5.16	94.19	104.00
1	N	1369	C	C5-C4-N4	-5.16	116.59	120.20
1	N	85	U	P-O3'-C3'	-5.16	113.51	119.70
1	N	122	G	N9-C4-C5	5.16	107.46	105.40
1	N	695	A	C2-N3-C4	5.16	113.18	110.60
1	N	1278	G	OP1-P-OP2	-5.16	111.86	119.60
1	N	843	U	N3-C4-C5	-5.16	111.50	114.60
1	N	1000	A	N7-C8-N9	-5.16	111.22	113.80
1	N	219	U	N3-C2-O2	5.16	125.81	122.20
1	N	357	G	P-O5'-C5'	5.16	129.15	120.90
1	N	273	U	P-O3'-C3'	-5.16	113.52	119.70
1	N	727	G	C1'-O4'-C4'	-5.16	105.78	109.90
1	N	1141	C	N3-C4-N4	5.16	121.61	118.00
1	N	1343	G	C2-N3-C4	-5.16	109.32	111.90
1	N	1405	G	C2-N3-C4	5.16	114.48	111.90
1	N	142	G	C4-N9-C1'	5.15	133.20	126.50
1	N	325	A	N3-C4-N9	5.15	131.52	127.40
1	N	823	C	N1-C2-O2	5.15	121.99	118.90
1	N	977	A	N3-C4-C5	-5.15	123.19	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1187	G	C2-N3-C4	5.15	114.48	111.90
1	N	1238	A	C8-N9-C4	-5.15	103.74	105.80
1	N	21	G	C4-C5-N7	5.15	112.86	110.80
1	N	173	U	N1-C2-O2	-5.15	119.19	122.80
1	N	215	C	C1'-O4'-C4'	-5.15	105.78	109.90
1	N	284	C	O5'-C5'-C4'	-5.15	101.91	111.70
1	N	524	G	N9-C4-C5	5.15	107.46	105.40
1	N	612	C	C3'-C2'-C1'	5.15	105.62	101.50
1	N	1297	G	C5'-C4'-O4'	5.15	115.28	109.10
1	N	1426	G	O4'-C1'-N9	5.15	112.32	108.20
1	N	164	G	C5-C6-N1	5.15	114.07	111.50
1	N	453	G	C6-N1-C2	5.15	128.19	125.10
1	N	747	A	N9-C1'-C2'	-5.15	106.34	112.00
1	N	571	U	C3'-C2'-C1'	5.15	105.62	101.50
1	N	759	A	N7-C8-N9	-5.15	111.23	113.80
1	N	867	G	O4'-C1'-N9	5.15	112.32	108.20
1	N	1033	G	N3-C2-N2	5.15	123.50	119.90
1	N	1109	C	N1-C1'-C2'	-5.15	106.34	112.00
1	N	1348	U	N3-C4-O4	5.15	123.00	119.40
1	N	1432	G	C8-N9-C4	-5.15	104.34	106.40
1	N	199	A	P-O3'-C3'	-5.15	113.53	119.70
1	N	466	A	C4-C5-C6	5.15	119.57	117.00
1	N	637	C	C2-N3-C4	5.15	122.47	119.90
1	N	885	G	O4'-C4'-C3'	-5.15	98.85	104.00
1	N	1178	G	C4-N9-C1'	5.15	133.19	126.50
1	N	200	G	C8-N9-C1'	-5.14	120.31	127.00
1	N	972	C	C6-N1-C2	-5.14	118.24	120.30
1	N	1080	A	C4-C5-N7	-5.14	108.13	110.70
1	N	1529	G	C4'-C3'-C2'	-5.14	97.45	102.60
1	N	71	A	C1'-O4'-C4'	5.14	114.01	109.90
1	N	678	U	C5-C6-N1	5.14	125.27	122.70
1	N	1161	C	C3'-C2'-C1'	5.14	105.61	101.50
1	N	1223	C	C6-N1-C1'	-5.14	114.63	120.80
1	N	1281	C	N3-C4-C5	-5.14	119.84	121.90
1	N	1287	A	O4'-C1'-N9	5.14	112.31	108.20
1	N	1509	C	C2-N3-C4	5.14	122.47	119.90
1	N	1458	G	N1-C2-N2	5.14	120.83	116.20
1	N	120	A	N9-C1'-C2'	5.14	120.68	114.00
1	N	173	U	O3'-P-O5'	5.14	113.77	104.00
1	N	319	G	C4-N9-C1'	5.14	133.18	126.50
1	N	577	G	C5'-C4'-C3'	5.14	124.22	116.00
1	N	1036	A	C4-C5-C6	5.14	119.57	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1211	U	N1-C2-O2	5.14	126.40	122.80
1	N	1379	G	N1-C6-O6	5.14	122.98	119.90
1	N	1456	A	N7-C8-N9	-5.14	111.23	113.80
1	N	1489	G	C4-C5-N7	-5.14	108.74	110.80
1	N	153	C	C6-N1-C2	-5.14	118.25	120.30
1	N	179	A	C8-N9-C4	5.14	107.86	105.80
1	N	191	G	N1-C2-N3	-5.14	120.82	123.90
1	N	280	C	C5-C6-N1	-5.14	118.43	121.00
1	N	299	G	C8-N9-C1'	5.14	133.68	127.00
1	N	540	G	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	830	G	O4'-C1'-N9	5.14	112.31	108.20
1	N	860	A	C8-N9-C4	5.14	107.85	105.80
1	N	1460	C	C6-N1-C2	-5.14	118.25	120.30
1	N	1513	A	N1-C6-N6	5.14	121.68	118.60
1	N	138	G	C5'-C4'-C3'	5.13	124.21	116.00
1	N	160	A	C4-C5-C6	5.13	119.57	117.00
1	N	224	U	C3'-C2'-C1'	5.13	105.61	101.50
1	N	289	G	C5-C6-O6	-5.13	125.52	128.60
1	N	298	A	N1-C2-N3	5.13	131.87	129.30
1	N	313	A	N3-C4-C5	-5.13	123.21	126.80
1	N	679	C	C6-N1-C2	5.13	122.35	120.30
1	N	746	A	N7-C8-N9	-5.13	111.23	113.80
1	N	778	G	C8-N9-C1'	-5.13	120.33	127.00
1	N	1039	G	O4'-C1'-N9	5.13	112.31	108.20
1	N	1507	A	C1'-O4'-C4'	5.13	114.01	109.90
1	N	521	G	C2-N3-C4	5.13	114.47	111.90
1	N	857	C	N3-C4-C5	-5.13	119.85	121.90
1	N	1499	A	C6-N1-C2	-5.13	115.52	118.60
1	N	432	A	P-O5'-C5'	5.13	129.11	120.90
1	N	747	A	N3-C4-C5	-5.13	123.21	126.80
1	N	847	G	O4'-C1'-N9	5.13	112.30	108.20
1	N	1003	G	N9-C4-C5	-5.13	103.35	105.40
1	N	1133	G	N3-C2-N2	5.13	123.49	119.90
1	N	1335	U	C5-C4-O4	-5.13	122.82	125.90
1	N	1467	C	C5'-C4'-C3'	5.13	124.21	116.00
1	N	237	G	C4-C5-C6	5.13	121.88	118.80
1	N	318	G	C2-N3-C4	5.13	114.47	111.90
1	N	1211	U	C5'-C4'-O4'	5.13	115.26	109.10
1	N	617	G	N9-C4-C5	-5.13	103.35	105.40
1	N	653	U	N3-C4-O4	5.13	122.99	119.40
1	N	753	A	C5-C6-N1	-5.13	115.14	117.70
1	N	986	U	P-O5'-C5'	5.13	129.10	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1430	A	C3'-C2'-C1'	5.13	105.60	101.50
1	N	7	A	OP1-P-OP2	-5.13	111.91	119.60
1	N	118	U	C6-N1-C2	-5.13	117.92	121.00
1	N	398	U	C1'-O4'-C4'	5.13	114.00	109.90
1	N	1316	G	C4-C5-N7	-5.13	108.75	110.80
1	N	462	G	N1-C2-N3	-5.12	120.83	123.90
1	N	563	A	C8-N9-C4	-5.12	103.75	105.80
1	N	1244	G	N1-C2-N3	-5.12	120.83	123.90
1	N	192	A	P-O3'-C3'	5.12	125.85	119.70
1	N	230	G	C5-N7-C8	5.12	106.86	104.30
1	N	598	U	P-O5'-C5'	5.12	129.10	120.90
1	N	915	A	C5-C6-N1	-5.12	115.14	117.70
1	N	1147	C	O4'-C1'-N1	5.12	112.30	108.20
1	N	1533	C	N1-C2-N3	-5.12	115.61	119.20
1	N	217	C	C5-C6-N1	5.12	123.56	121.00
1	N	246	A	N9-C4-C5	5.12	107.85	105.80
1	N	587	G	C5-N7-C8	5.12	106.86	104.30
1	N	940	C	N3-C4-C5	-5.12	119.85	121.90
1	N	1453	G	C5'-C4'-C3'	-5.12	107.81	116.00
1	N	174	A	C6-N1-C2	-5.12	115.53	118.60
1	N	581	G	C4'-C3'-C2'	-5.12	97.48	102.60
1	N	734	G	N7-C8-N9	-5.12	110.54	113.10
1	N	1039	G	C5-C6-N1	5.12	114.06	111.50
1	N	1128	C	N3-C4-N4	5.12	121.58	118.00
1	N	1144	G	C4-C5-C6	5.12	121.87	118.80
1	N	1145	A	C2-N3-C4	5.12	113.16	110.60
1	N	92	U	C5'-C4'-C3'	-5.12	107.81	116.00
1	N	315	A	P-O5'-C5'	5.12	129.09	120.90
1	N	369	G	C5-C6-N1	5.12	114.06	111.50
1	N	1296	C	C2-N1-C1'	5.12	124.43	118.80
1	N	787	A	C3'-C2'-C1'	-5.12	97.41	101.50
1	N	1388	C	N3-C2-O2	-5.12	118.32	121.90
1	N	120	A	P-O3'-C3'	5.12	125.84	119.70
1	N	592	G	N9-C1'-C2'	-5.12	106.37	112.00
1	N	628	G	O4'-C1'-N9	5.12	112.29	108.20
1	N	1145	A	N3-C4-C5	-5.12	123.22	126.80
1	N	1275	A	N9-C1'-C2'	-5.12	106.37	112.00
1	N	143	A	C6-N1-C2	-5.11	115.53	118.60
1	N	161	A	C4-C5-N7	-5.11	108.14	110.70
1	N	370	C	C5-C4-N4	-5.11	116.62	120.20
1	N	554	A	N7-C8-N9	5.11	116.36	113.80
1	N	599	C	P-O3'-C3'	-5.11	113.56	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	660	C	C3'-C2'-C1'	5.11	105.59	101.50
1	N	801	U	OP1-P-OP2	-5.11	111.93	119.60
1	N	1079	G	N9-C4-C5	-5.11	103.36	105.40
1	N	26	A	N3-C4-N9	5.11	131.49	127.40
1	N	218	U	N3-C4-C5	-5.11	111.53	114.60
1	N	356	A	C5-N7-C8	-5.11	101.34	103.90
1	N	851	G	P-O5'-C5'	5.11	129.08	120.90
1	N	255	G	C8-N9-C4	-5.11	104.36	106.40
1	N	322	C	N3-C4-C5	-5.11	119.86	121.90
1	N	342	C	C2-N3-C4	5.11	122.46	119.90
1	N	342	C	C4-C5-C6	-5.11	114.84	117.40
1	N	361	G	N7-C8-N9	-5.11	110.55	113.10
1	N	801	U	C4-C5-C6	5.11	122.77	119.70
1	N	878	A	N9-C4-C5	5.11	107.84	105.80
1	N	1191	A	C8-N9-C4	5.11	107.84	105.80
1	N	572	A	C4-N9-C1'	5.11	135.50	126.30
1	N	297	G	C2-N3-C4	-5.11	109.35	111.90
1	N	620	C	C6-N1-C1'	-5.11	114.67	120.80
1	N	1254	A	N9-C1'-C2'	-5.11	106.38	112.00
1	N	1523	G	C2-N3-C4	5.11	114.45	111.90
1	N	46	G	O3'-P-O5'	-5.11	94.30	104.00
1	N	1186	G	C4'-C3'-C2'	-5.11	97.50	102.60
1	N	21	G	P-O5'-C5'	5.10	129.07	120.90
1	N	408	A	C4-C5-C6	5.10	119.55	117.00
1	N	1238	A	O4'-C1'-N9	5.10	112.28	108.20
1	N	187	G	C8-N9-C1'	5.10	133.63	127.00
1	N	226	G	N3-C4-C5	5.10	131.15	128.60
1	N	381	C	N1-C2-O2	-5.10	115.84	118.90
1	N	901	A	C6-N1-C2	-5.10	115.54	118.60
1	N	1081	A	C5'-C4'-C3'	-5.10	107.84	116.00
1	N	1371	G	N1-C6-O6	5.10	122.96	119.90
1	N	110	C	C6-N1-C1'	-5.10	114.68	120.80
1	N	181	A	C8-N9-C4	-5.10	103.76	105.80
1	N	270	A	N3-C4-C5	-5.10	123.23	126.80
1	N	842	U	N3-C4-O4	-5.10	115.83	119.40
1	N	1035	A	C5'-C4'-C3'	-5.10	107.84	116.00
1	N	1365	G	C5-C6-N1	-5.10	108.95	111.50
1	N	48	C	N3-C2-O2	5.10	125.47	121.90
1	N	98	A	C5'-C4'-O4'	5.10	115.22	109.10
1	N	290	C	C6-N1-C2	-5.10	118.26	120.30
1	N	358	U	C6-N1-C2	-5.10	117.94	121.00
1	N	410	G	C5-C6-N1	-5.10	108.95	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	564	C	N3-C4-N4	5.10	121.57	118.00
1	N	855	U	N1-C1'-C2'	-5.10	106.39	112.00
1	N	1093	A	N7-C8-N9	-5.10	111.25	113.80
1	N	1405	G	N3-C4-N9	-5.10	122.94	126.00
1	N	1453	G	C4-N9-C1'	5.10	133.13	126.50
1	N	150	U	C4-C5-C6	-5.10	116.64	119.70
1	N	278	G	N7-C8-N9	-5.10	110.55	113.10
1	N	605	U	C6-N1-C2	-5.10	117.94	121.00
1	N	1188	A	C4-C5-C6	5.10	119.55	117.00
1	N	1485	U	C6-N1-C2	-5.10	117.94	121.00
1	N	1523	G	C4-N9-C1'	-5.10	119.87	126.50
1	N	1529	G	C2-N3-C4	5.10	114.45	111.90
1	N	319	G	N1-C6-O6	5.10	122.96	119.90
1	N	736	C	N3-C2-O2	5.10	125.47	121.90
1	N	1268	G	C4-C5-N7	5.10	112.84	110.80
1	N	1338	G	C5-N7-C8	5.10	106.85	104.30
1	N	204	G	C5'-C4'-C3'	5.09	124.15	116.00
1	N	298	A	C6-N1-C2	-5.09	115.54	118.60
1	N	605	U	C4-C5-C6	-5.09	116.64	119.70
1	N	855	U	C4-C5-C6	-5.09	116.64	119.70
1	N	919	A	N1-C6-N6	5.09	121.66	118.60
1	N	1127	G	C2-N3-C4	-5.09	109.35	111.90
1	N	1264	U	C2-N3-C4	5.09	130.06	127.00
1	N	1360	A	C5-N7-C8	5.09	106.45	103.90
1	N	304	U	C5-C6-N1	5.09	125.25	122.70
1	N	485	U	C2-N1-C1'	5.09	123.81	117.70
1	N	627	G	N1-C2-N3	-5.09	120.84	123.90
1	N	1511	G	O5'-C5'-C4'	-5.09	102.02	111.70
1	N	164	G	C4-N9-C1'	5.09	133.12	126.50
1	N	184	G	C1'-O4'-C4'	5.09	113.97	109.90
1	N	408	A	C5-C6-N1	-5.09	115.15	117.70
1	N	415	A	N9-C4-C5	5.09	107.84	105.80
1	N	881	G	N1-C2-N3	-5.09	120.84	123.90
1	N	1114	C	N3-C2-O2	5.09	125.46	121.90
1	N	1313	U	N3-C2-O2	5.09	125.76	122.20
1	N	95	C	C4'-C3'-C2'	5.09	107.69	102.60
1	N	122	G	C5-N7-C8	5.09	106.84	104.30
1	N	678	U	O4'-C1'-N1	5.09	112.27	108.20
1	N	704	A	O5'-P-OP2	-5.09	101.12	105.70
1	N	1011	C	C4'-C3'-C2'	-5.09	97.51	102.60
1	N	1095	U	O4'-C1'-N1	5.09	112.27	108.20
1	N	1111	A	N9-C4-C5	-5.09	103.76	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1132	C	C4-C5-C6	-5.09	114.86	117.40
1	N	69	G	C6-C5-N7	-5.09	127.35	130.40
1	N	461	A	C8-N9-C1'	-5.09	118.54	127.70
1	N	1427	C	C1'-O4'-C4'	5.09	113.97	109.90
1	N	2	A	O4'-C1'-N9	5.09	112.27	108.20
1	N	130	A	C2-N3-C4	5.09	113.14	110.60
1	N	151	A	O4'-C4'-C3'	-5.09	98.91	104.00
1	N	464	U	O4'-C1'-N1	5.09	112.27	108.20
1	N	748	G	C4-C5-N7	5.09	112.83	110.80
1	N	957	U	C3'-C2'-C1'	5.09	105.57	101.50
1	N	1057	G	N3-C2-N2	5.09	123.46	119.90
1	N	1190	G	C5'-C4'-O4'	5.09	115.20	109.10
1	N	1269	A	O3'-P-O5'	-5.09	94.33	104.00
1	N	1363	A	C5-N7-C8	5.09	106.44	103.90
1	N	960	U	O4'-C1'-N1	5.08	112.27	108.20
1	N	1245	C	P-O5'-C5'	5.08	129.04	120.90
1	N	1109	C	C2-N3-C4	5.08	122.44	119.90
1	N	1272	G	N1-C2-N3	5.08	126.95	123.90
1	N	1408	A	O4'-C1'-N9	5.08	112.27	108.20
1	N	1495	U	O4'-C1'-N1	5.08	112.27	108.20
1	N	117	G	C8-N9-C4	-5.08	104.37	106.40
1	N	128	G	C1'-O4'-C4'	-5.08	105.84	109.90
1	N	265	G	C4-C5-N7	5.08	112.83	110.80
1	N	458	U	C2-N1-C1'	5.08	123.80	117.70
1	N	539	A	N1-C2-N3	5.08	131.84	129.30
1	N	681	A	O4'-C1'-N9	5.08	112.27	108.20
1	N	787	A	C5-C6-N6	-5.08	119.64	123.70
1	N	1082	A	C5-C6-N6	-5.08	119.64	123.70
1	N	1072	G	N9-C4-C5	5.08	107.43	105.40
1	N	155	A	P-O3'-C3'	-5.08	113.61	119.70
1	N	261	U	N3-C4-O4	5.08	122.95	119.40
1	N	399	G	O4'-C1'-N9	5.08	112.26	108.20
1	N	946	A	N9-C1'-C2'	-5.08	106.41	112.00
1	N	1175	G	N1-C2-N3	5.08	126.95	123.90
1	N	322	C	C4-C5-C6	5.08	119.94	117.40
1	N	539	A	O4'-C1'-N9	5.08	112.26	108.20
1	N	636	U	C2'-C3'-O3'	5.08	121.82	113.70
1	N	1285	A	C5-C6-N1	-5.08	115.16	117.70
1	N	139	A	O3'-P-O5'	-5.08	94.36	104.00
1	N	147	G	N1-C2-N3	-5.08	120.86	123.90
1	N	536	C	N1-C2-O2	-5.08	115.86	118.90
1	N	721	G	O4'-C1'-N9	5.08	112.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	761	G	N1-C2-N2	5.08	120.77	116.20
1	N	854	U	O5'-C5'-C4'	-5.08	102.06	111.70
1	N	1207	G	P-O3'-C3'	-5.08	113.61	119.70
1	N	1526	G	C5-N7-C8	-5.08	101.76	104.30
1	N	210	C	O4'-C1'-N1	5.07	112.26	108.20
1	N	312	C	N3-C2-O2	5.07	125.45	121.90
1	N	966	G	C4-C5-C6	5.07	121.84	118.80
1	N	1103	C	N1-C2-N3	-5.07	115.65	119.20
1	N	1424	U	N3-C4-O4	5.07	122.95	119.40
1	N	1432	G	N1-C6-O6	5.07	122.94	119.90
1	N	184	G	C2-N3-C4	5.07	114.44	111.90
1	N	372	C	C6-N1-C1'	-5.07	114.71	120.80
1	N	420	U	N3-C2-O2	5.07	125.75	122.20
1	N	617	G	C6-N1-C2	5.07	128.14	125.10
1	N	626	G	C1'-O4'-C4'	5.07	113.96	109.90
1	N	970	C	N3-C2-O2	-5.07	118.35	121.90
1	N	1401	G	C4'-C3'-C2'	-5.07	97.53	102.60
1	N	2	A	C2-N3-C4	-5.07	108.06	110.60
1	N	145	G	C6-C5-N7	-5.07	127.36	130.40
1	N	279	A	P-O3'-C3'	-5.07	113.62	119.70
1	N	322	C	C6-N1-C1'	-5.07	114.72	120.80
1	N	363	A	C6-N1-C2	5.07	121.64	118.60
1	N	867	G	N9-C4-C5	-5.07	103.37	105.40
1	N	993	G	C6-C5-N7	-5.07	127.36	130.40
1	N	281	G	C4-C5-C6	5.07	121.84	118.80
1	N	447	G	O4'-C1'-C2'	-5.07	100.73	105.80
1	N	747	A	C2-N3-C4	5.07	113.14	110.60
1	N	1035	A	P-O5'-C5'	5.07	129.01	120.90
1	N	1193	G	N9-C1'-C2'	-5.07	106.42	112.00
1	N	1374	A	C2-N3-C4	5.07	113.13	110.60
1	N	337	G	C5-C6-O6	-5.07	125.56	128.60
1	N	724	G	C4'-C3'-C2'	5.07	107.67	102.60
1	N	1058	G	P-O3'-C3'	-5.07	113.62	119.70
1	N	1366	C	P-O5'-C5'	5.07	129.01	120.90
1	N	1402	C	C3'-C2'-C1'	5.07	105.55	101.50
1	N	1519	A	C6-C5-N7	-5.07	128.75	132.30
1	N	19	A	C3'-C2'-C1'	5.07	105.55	101.50
1	N	84	U	P-O5'-C5'	-5.07	112.79	120.90
1	N	211	G	C2-N3-C4	-5.07	109.37	111.90
1	N	494	G	C5'-C4'-C3'	-5.07	107.89	116.00
1	N	989	U	O4'-C1'-N1	5.07	112.25	108.20
1	N	1078	U	N1-C2-N3	-5.07	111.86	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1102	A	N3-C4-N9	5.07	131.45	127.40
1	N	1196	A	N3-C4-C5	-5.07	123.25	126.80
1	N	1459	G	N3-C2-N2	5.07	123.44	119.90
1	N	1487	G	O4'-C4'-C3'	-5.06	98.94	104.00
1	N	498	A	O4'-C1'-C2'	5.06	112.16	107.60
1	N	564	C	N1-C2-O2	-5.06	115.86	118.90
1	N	600	A	N1-C2-N3	-5.06	126.77	129.30
1	N	629	A	C1'-O4'-C4'	-5.06	105.85	109.90
1	N	1109	C	P-O3'-C3'	5.06	125.78	119.70
1	N	192	A	N9-C4-C5	5.06	107.83	105.80
1	N	423	G	C4-C5-N7	5.06	112.83	110.80
1	N	493	A	O5'-C5'-C4'	-5.06	102.08	111.70
1	N	864	A	C6-N1-C2	5.06	121.64	118.60
1	N	1269	A	O4'-C4'-C3'	-5.06	98.94	104.00
1	N	76	G	C2-N3-C4	5.06	114.43	111.90
1	N	107	G	C5-C6-N1	-5.06	108.97	111.50
1	N	257	G	C3'-C2'-C1'	-5.06	97.45	101.50
1	N	804	U	N1-C2-O2	-5.06	119.26	122.80
1	N	1131	G	C4-C5-N7	5.06	112.82	110.80
1	N	1393	U	P-O3'-C3'	5.06	125.77	119.70
1	N	88	U	C5-C4-O4	5.06	128.93	125.90
1	N	442	G	N3-C2-N2	-5.06	116.36	119.90
1	N	1344	C	N1-C2-O2	5.06	121.94	118.90
1	N	1366	C	OP2-P-O3'	5.06	116.33	105.20
1	N	1426	G	C5'-C4'-C3'	5.06	124.09	116.00
1	N	1460	C	N1-C2-N3	-5.06	115.66	119.20
1	N	683	G	C4-C5-N7	-5.06	108.78	110.80
1	N	26	A	C4-C5-N7	-5.05	108.17	110.70
1	N	261	U	P-O5'-C5'	5.05	128.99	120.90
1	N	361	G	C2'-C3'-O3'	5.05	121.79	113.70
1	N	669	G	C6-N1-C2	5.05	128.13	125.10
1	N	789	U	P-O5'-C5'	5.05	128.99	120.90
1	N	898	G	C4-N9-C1'	-5.05	119.93	126.50
1	N	1256	A	C6-C5-N7	-5.05	128.76	132.30
1	N	1274	A	C2-N3-C4	5.05	113.13	110.60
1	N	1292	G	N3-C2-N2	5.05	123.44	119.90
1	N	449	G	O5'-P-OP2	-5.05	101.15	105.70
1	N	1202	U	C4-C5-C6	-5.05	116.67	119.70
1	N	1218	C	OP1-P-OP2	-5.05	112.02	119.60
1	N	1419	G	N3-C4-C5	5.05	131.13	128.60
1	N	1523	G	N7-C8-N9	-5.05	110.57	113.10
1	N	1529	G	O4'-C1'-N9	5.05	112.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	348	G	P-O5'-C5'	-5.05	112.82	120.90
1	N	956	U	O4'-C1'-N1	5.05	112.24	108.20
1	N	1049	U	C3'-C2'-C1'	5.05	105.54	101.50
1	N	1302	C	N3-C4-N4	-5.05	114.46	118.00
1	N	108	G	C5'-C4'-O4'	5.05	115.16	109.10
1	N	120	A	C4-C5-N7	-5.05	108.18	110.70
1	N	447	G	C8-N9-C4	5.05	108.42	106.40
1	N	501	C	N3-C4-C5	-5.05	119.88	121.90
1	N	672	U	C6-N1-C2	-5.05	117.97	121.00
1	N	767	A	C5-N7-C8	5.05	106.42	103.90
1	N	1190	G	C6-C5-N7	-5.05	127.37	130.40
1	N	1269	A	C5'-C4'-C3'	5.05	124.08	116.00
1	N	1503	A	N1-C6-N6	5.05	121.63	118.60
1	N	711	G	O4'-C4'-C3'	-5.05	98.95	104.00
1	N	182	A	C2-N3-C4	-5.05	108.08	110.60
1	N	442	G	N1-C2-N3	-5.05	120.87	123.90
1	N	650	G	C6-C5-N7	-5.05	127.37	130.40
1	N	884	U	C5'-C4'-C3'	5.05	124.07	116.00
1	N	1373	G	C8-N9-C1'	5.05	133.56	127.00
1	N	313	A	O4'-C1'-N9	5.04	112.24	108.20
1	N	426	U	N1-C2-N3	5.04	117.93	114.90
1	N	547	A	O3'-P-O5'	5.04	113.59	104.00
1	N	1010	U	N1-C1'-C2'	-5.04	106.45	112.00
1	N	1012	A	N1-C2-N3	-5.04	126.78	129.30
1	N	1129	C	O4'-C1'-N1	5.04	112.24	108.20
1	N	172	A	C6-C5-N7	-5.04	128.77	132.30
1	N	369	G	C1'-O4'-C4'	5.04	113.94	109.90
1	N	585	G	P-O5'-C5'	-5.04	112.83	120.90
1	N	773	G	O4'-C1'-N9	5.04	112.23	108.20
1	N	988	G	N7-C8-N9	-5.04	110.58	113.10
1	N	1016	A	O4'-C1'-N9	5.04	112.23	108.20
1	N	1385	G	C4-C5-N7	5.04	112.82	110.80
1	N	1447	A	N9-C4-C5	5.04	107.82	105.80
1	N	208	U	C1'-O4'-C4'	5.04	113.93	109.90
1	N	615	G	N1-C2-N3	-5.04	120.88	123.90
1	N	882	C	C3'-C2'-C1'	-5.04	97.47	101.50
1	N	947	G	C2'-C3'-O3'	5.04	121.77	113.70
1	N	84	U	N1-C2-O2	5.04	126.33	122.80
1	N	281	G	C8-N9-C4	-5.04	104.38	106.40
1	N	505	G	N9-C4-C5	5.04	107.42	105.40
1	N	566	G	O4'-C1'-N9	5.04	112.23	108.20
1	N	759	A	N1-C2-N3	5.04	131.82	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	951	G	C3'-C2'-C1'	5.04	105.53	101.50
1	N	1235	U	O3'-P-O5'	-5.04	94.42	104.00
1	N	1280	A	C4'-C3'-C2'	5.04	107.64	102.60
1	N	1373	G	N3-C4-N9	5.04	129.02	126.00
1	N	253	A	O5'-C5'-C4'	-5.04	102.13	111.70
1	N	618	C	OP1-P-O3'	5.04	116.28	105.20
1	N	997	U	O5'-C5'-C4'	-5.04	102.13	111.70
1	N	5	U	OP1-P-OP2	-5.04	112.04	119.60
1	N	809	G	N7-C8-N9	5.04	115.62	113.10
1	N	1331	G	N3-C4-N9	5.04	129.02	126.00
1	N	28	A	C6-C5-N7	-5.04	128.78	132.30
1	N	327	A	OP1-P-OP2	-5.04	112.05	119.60
1	N	420	U	C4-C5-C6	5.04	122.72	119.70
1	N	511	C	C5'-C4'-O4'	5.04	115.14	109.10
1	N	821	G	OP1-P-O3'	5.04	116.28	105.20
1	N	928	G	OP1-P-OP2	-5.04	112.05	119.60
1	N	1181	G	N3-C2-N2	5.04	123.42	119.90
1	N	1190	G	C5'-C4'-C3'	-5.04	107.94	116.00
1	N	1222	G	C4'-C3'-C2'	-5.04	97.56	102.60
1	N	1389	C	C5-C6-N1	5.04	123.52	121.00
1	N	1432	G	C6-N1-C2	5.04	128.12	125.10
1	N	104	G	C3'-C2'-C1'	-5.03	97.47	101.50
1	N	151	A	N9-C4-C5	-5.03	103.79	105.80
1	N	397	A	C2-N3-C4	-5.03	108.08	110.60
1	N	446	G	N1-C6-O6	5.03	122.92	119.90
1	N	475	C	P-O5'-C5'	5.03	128.95	120.90
1	N	549	C	C6-N1-C2	5.03	122.31	120.30
1	N	628	G	N1-C6-O6	5.03	122.92	119.90
1	N	674	G	N3-C4-N9	-5.03	122.98	126.00
1	N	790	A	C5-N7-C8	5.03	106.42	103.90
1	N	1215	G	C3'-C2'-C1'	5.03	105.53	101.50
1	N	1415	G	C8-N9-C1'	-5.03	120.45	127.00
1	N	1439	G	N7-C8-N9	-5.03	110.58	113.10
1	N	134	G	C8-N9-C4	-5.03	104.39	106.40
1	N	137	U	N1-C2-O2	-5.03	119.28	122.80
1	N	144	G	C4'-C3'-C2'	-5.03	97.57	102.60
1	N	245	U	C2-N1-C1'	5.03	123.74	117.70
1	N	411	A	N1-C2-N3	-5.03	126.78	129.30
1	N	436	C	C2-N3-C4	-5.03	117.38	119.90
1	N	1206	G	C4-C5-C6	5.03	121.82	118.80
1	N	194	C	C3'-C2'-C1'	5.03	105.52	101.50
1	N	1049	U	N3-C4-O4	5.03	122.92	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1207	G	N3-C4-N9	-5.03	122.98	126.00
1	N	1420	U	C5'-C4'-O4'	5.03	115.14	109.10
1	N	841	C	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	1003	G	N1-C2-N3	-5.03	120.88	123.90
1	N	1150	A	C6-N1-C2	-5.03	115.58	118.60
1	N	1331	G	C5'-C4'-C3'	-5.03	107.95	116.00
1	N	1415	G	P-O5'-C5'	-5.03	112.85	120.90
1	N	32	A	N1-C2-N3	-5.03	126.79	129.30
1	N	263	A	C1'-O4'-C4'	-5.03	105.88	109.90
1	N	275	G	C6-C5-N7	-5.03	127.38	130.40
1	N	757	U	C6-N1-C1'	-5.03	114.16	121.20
1	N	1017	U	C5-C6-N1	5.03	125.21	122.70
1	N	1105	A	P-O3'-C3'	5.03	125.73	119.70
1	N	176	C	OP1-P-O3'	5.03	116.26	105.20
1	N	377	G	O4'-C1'-N9	5.03	112.22	108.20
1	N	476	U	N3-C4-O4	-5.03	115.88	119.40
1	N	898	G	C8-N9-C4	5.03	108.41	106.40
1	N	1175	G	C5-C6-N1	5.03	114.01	111.50
1	N	1479	C	N3-C4-N4	5.03	121.52	118.00
1	N	1502	A	C2'-C3'-O3'	5.03	121.74	113.70
1	N	186	C	C5-C6-N1	-5.02	118.49	121.00
1	N	424	G	C1'-O4'-C4'	5.02	113.92	109.90
1	N	720	C	N1-C1'-C2'	5.02	120.53	114.00
1	N	952	U	N3-C4-O4	5.02	122.92	119.40
1	N	990	C	C5'-C4'-O4'	5.02	115.13	109.10
1	N	1334	G	O4'-C1'-N9	5.02	112.22	108.20
1	N	1418	A	C6-N1-C2	5.02	121.61	118.60
1	N	98	A	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	181	A	C3'-C2'-C1'	5.02	105.52	101.50
1	N	546	A	P-O3'-C3'	-5.02	113.67	119.70
1	N	860	A	N1-C6-N6	5.02	121.61	118.60
1	N	861	G	OP1-P-OP2	-5.02	112.07	119.60
1	N	868	C	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	875	U	C5'-C4'-O4'	5.02	115.13	109.10
1	N	1117	A	C8-N9-C4	-5.02	103.79	105.80
1	N	1294	G	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	792	A	P-O3'-C3'	-5.02	113.67	119.70
1	N	841	C	C2-N1-C1'	5.02	124.32	118.80
1	N	991	U	O5'-P-OP2	5.02	116.73	110.70
1	N	1304	G	O3'-P-O5'	-5.02	94.46	104.00
1	N	1392	G	C5-N7-C8	-5.02	101.79	104.30
1	N	110	C	C5'-C4'-C3'	5.02	124.03	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	460	A	N7-C8-N9	5.02	116.31	113.80
1	N	814	A	OP2-P-O3'	5.02	116.24	105.20
1	N	15	G	C4-N9-C1'	5.02	133.02	126.50
1	N	25	C	N1-C2-O2	5.02	121.91	118.90
1	N	37	U	C5'-C4'-C3'	5.02	124.03	116.00
1	N	70	U	C2'-C3'-O3'	5.02	121.73	113.70
1	N	217	C	P-O5'-C5'	-5.02	112.87	120.90
1	N	533	A	P-O3'-C3'	5.02	125.72	119.70
1	N	547	A	C3'-C2'-C1'	5.02	105.52	101.50
1	N	666	G	C6-N1-C2	5.02	128.11	125.10
1	N	731	G	N3-C4-N9	-5.02	122.99	126.00
1	N	1056	U	C2'-C3'-O3'	5.02	121.73	113.70
1	N	482	A	C5-N7-C8	5.02	106.41	103.90
1	N	991	U	C4'-C3'-C2'	5.02	107.62	102.60
1	N	56	U	C2-N3-C4	-5.01	123.99	127.00
1	N	895	G	N1-C2-N3	-5.01	120.89	123.90
1	N	1063	C	P-O5'-C5'	-5.01	112.88	120.90
1	N	1309	G	N7-C8-N9	-5.01	110.59	113.10
1	N	1338	G	O4'-C1'-N9	5.01	112.21	108.20
1	N	254	G	O4'-C1'-N9	5.01	112.21	108.20
1	N	1168	U	O4'-C1'-N1	5.01	112.21	108.20
1	N	1300	G	C4'-C3'-C2'	-5.01	97.59	102.60
1	N	92	U	C6-N1-C2	5.01	124.01	121.00
1	N	130	A	C5-C6-N6	-5.01	119.69	123.70
1	N	335	C	C6-N1-C1'	-5.01	114.78	120.80
1	N	971	G	N3-C4-C5	5.01	131.11	128.60
1	N	1041	G	C5-C6-N1	-5.01	108.99	111.50
1	N	1345	U	N3-C4-O4	5.01	122.91	119.40
1	N	1434	A	C8-N9-C4	-5.01	103.80	105.80
1	N	25	C	N3-C4-N4	5.01	121.51	118.00
1	N	26	A	N9-C1'-C2'	-5.01	106.49	112.00
1	N	168	G	C5'-C4'-O4'	5.01	115.11	109.10
1	N	255	G	N3-C4-C5	-5.01	126.09	128.60
1	N	912	C	OP1-P-OP2	-5.01	112.09	119.60
1	N	1071	C	C2-N1-C1'	5.01	124.31	118.80
1	N	1077	G	C6-C5-N7	-5.01	127.39	130.40
1	N	1488	G	C6-C5-N7	-5.01	127.39	130.40
1	N	299	G	C5'-C4'-O4'	-5.01	103.09	109.10
1	N	100	G	C4-N9-C1'	5.01	133.01	126.50
1	N	237	G	C1'-O4'-C4'	5.01	113.90	109.90
1	N	541	G	C2-N3-C4	-5.01	109.40	111.90
1	N	542	G	N1-C2-N3	-5.01	120.90	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	613	C	N1-C2-O2	-5.01	115.90	118.90
1	N	902	G	C5'-C4'-C3'	-5.01	107.99	116.00
1	N	1245	C	O4'-C4'-C3'	-5.01	98.99	104.00
1	N	450	G	N1-C2-N3	-5.00	120.90	123.90
1	N	645	G	O5'-C5'-C4'	-5.00	102.19	111.70
1	N	841	C	N1-C2-N3	5.00	122.70	119.20
1	N	141	G	C4-N9-C1'	-5.00	120.00	126.50
1	N	195	A	N3-C4-C5	-5.00	123.30	126.80
1	N	228	A	C5'-C4'-O4'	5.00	115.10	109.10
1	N	434	U	O5'-C5'-C4'	-5.00	102.19	111.70
1	N	573	A	P-O5'-C5'	-5.00	112.89	120.90
1	N	629	A	N3-C4-N9	5.00	131.40	127.40
1	N	646	G	N3-C4-N9	5.00	129.00	126.00
1	N	703	G	N1-C6-O6	5.00	122.90	119.90
1	N	795	C	P-O3'-C3'	-5.00	113.70	119.70
1	N	7	A	C2-N3-C4	-5.00	108.10	110.60
1	N	197	A	C5-C6-N6	-5.00	119.70	123.70
1	N	405	U	N3-C2-O2	-5.00	118.70	122.20
1	N	635	A	C2-N3-C4	-5.00	108.10	110.60
1	N	739	C	P-O3'-C3'	-5.00	113.70	119.70
1	N	904	U	N3-C2-O2	-5.00	118.70	122.20
1	N	1034	G	N3-C4-N9	-5.00	123.00	126.00
1	N	1037	C	N3-C4-C5	-5.00	119.90	121.90
1	N	1055	A	C5-C6-N6	-5.00	119.70	123.70
1	N	1489	G	P-O5'-C5'	-5.00	112.90	120.90
1	N	1528	U	C6-N1-C2	5.00	124.00	121.00

There are no chirality outliers.

All (978) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	N	1003	G	Sidechain
1	N	1005	A	Sidechain
1	N	1006	G	Sidechain
1	N	1007	U	Sidechain
1	N	1009	U	Sidechain
1	N	1010	U	Sidechain
1	N	1011	C	Sidechain
1	N	1012	A	Sidechain
1	N	1014	A	Sidechain
1	N	1015	G	Sidechain
1	N	1017	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1018	G	Sidechain
1	N	1019	A	Sidechain
1	N	1021	A	Sidechain
1	N	1023	U	Sidechain
1	N	1026	G	Sidechain
1	N	1027	C	Sidechain
1	N	1030	U	Sidechain
1	N	1031	C	Sidechain
1	N	1032	G	Sidechain
1	N	1033	G	Sidechain
1	N	1035	A	Sidechain
1	N	1039	G	Sidechain
1	N	104	G	Sidechain
1	N	1040	U	Sidechain
1	N	1041	G	Sidechain
1	N	1044	A	Sidechain
1	N	1045	C	Sidechain
1	N	1047	G	Sidechain
1	N	1048	G	Sidechain
1	N	1049	U	Sidechain
1	N	105	G	Sidechain
1	N	1050	G	Sidechain
1	N	1051	C	Sidechain
1	N	1053	G	Sidechain
1	N	1055	A	Sidechain
1	N	1056	U	Sidechain
1	N	1057	G	Sidechain
1	N	1059	C	Sidechain
1	N	1060	U	Sidechain
1	N	1062	U	Sidechain
1	N	1065	U	Sidechain
1	N	1066	C	Sidechain
1	N	1067	A	Sidechain
1	N	1068	G	Sidechain
1	N	107	G	Sidechain
1	N	1070	U	Sidechain
1	N	1071	C	Sidechain
1	N	1072	G	Sidechain
1	N	1073	U	Sidechain
1	N	1075	U	Sidechain
1	N	1076	U	Sidechain
1	N	1077	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1080	A	Sidechain
1	N	1083	U	Sidechain
1	N	1084	G	Sidechain
1	N	1085	U	Sidechain
1	N	1088	G	Sidechain
1	N	109	A	Sidechain
1	N	1095	U	Sidechain
1	N	1096	C	Sidechain
1	N	1098	C	Sidechain
1	N	1099	G	Sidechain
1	N	11	G	Sidechain
1	N	1101	A	Sidechain
1	N	1102	A	Sidechain
1	N	1104	G	Sidechain
1	N	1105	A	Sidechain
1	N	1106	G	Sidechain
1	N	1108	G	Sidechain
1	N	111	G	Sidechain
1	N	1115	U	Sidechain
1	N	1116	U	Sidechain
1	N	1117	A	Sidechain
1	N	1120	C	Sidechain
1	N	1121	U	Sidechain
1	N	1123	U	Sidechain
1	N	1124	G	Sidechain
1	N	1126	U	Sidechain
1	N	1129	C	Sidechain
1	N	1130	A	Sidechain
1	N	1131	G	Sidechain
1	N	1132	C	Sidechain
1	N	1133	G	Sidechain
1	N	1138	G	Sidechain
1	N	1139	G	Sidechain
1	N	114	U	Sidechain
1	N	1140	C	Sidechain
1	N	1142	G	Sidechain
1	N	1143	G	Sidechain
1	N	1144	G	Sidechain
1	N	1147	C	Sidechain
1	N	1148	U	Sidechain
1	N	1149	C	Sidechain
1	N	115	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1150	A	Sidechain
1	N	1151	A	Sidechain
1	N	1153	G	Sidechain
1	N	1154	G	Sidechain
1	N	1156	G	Sidechain
1	N	1157	A	Sidechain
1	N	1158	C	Sidechain
1	N	1159	U	Sidechain
1	N	116	A	Sidechain
1	N	1160	G	Sidechain
1	N	1161	C	Sidechain
1	N	1164	G	Sidechain
1	N	1165	U	Sidechain
1	N	1166	G	Sidechain
1	N	1168	U	Sidechain
1	N	1170	A	Sidechain
1	N	1174	G	Sidechain
1	N	1177	G	Sidechain
1	N	1178	G	Sidechain
1	N	1179	A	Sidechain
1	N	1180	A	Sidechain
1	N	1181	G	Sidechain
1	N	1182	G	Sidechain
1	N	1185	G	Sidechain
1	N	1186	G	Sidechain
1	N	1188	A	Sidechain
1	N	1189	U	Sidechain
1	N	119	A	Sidechain
1	N	1191	A	Sidechain
1	N	1192	C	Sidechain
1	N	1193	G	Sidechain
1	N	1196	A	Sidechain
1	N	1197	A	Sidechain
1	N	1198	G	Sidechain
1	N	12	U	Sidechain
1	N	120	A	Sidechain
1	N	1200	C	Sidechain
1	N	1201	A	Sidechain
1	N	1204	A	Sidechain
1	N	1205	U	Sidechain
1	N	1207	G	Sidechain
1	N	1208	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	121	U	Sidechain
1	N	1211	U	Sidechain
1	N	1214	C	Sidechain
1	N	1215	G	Sidechain
1	N	1216	A	Sidechain
1	N	1217	C	Sidechain
1	N	1219	A	Sidechain
1	N	1220	G	Sidechain
1	N	1221	G	Sidechain
1	N	1222	G	Sidechain
1	N	1223	C	Sidechain
1	N	1224	U	Sidechain
1	N	1225	A	Sidechain
1	N	1226	C	Sidechain
1	N	1227	A	Sidechain
1	N	123	U	Sidechain
1	N	1235	U	Sidechain
1	N	1236	A	Sidechain
1	N	1237	C	Sidechain
1	N	1238	A	Sidechain
1	N	1239	A	Sidechain
1	N	124	C	Sidechain
1	N	1240	U	Sidechain
1	N	1241	G	Sidechain
1	N	1243	C	Sidechain
1	N	1245	C	Sidechain
1	N	1246	A	Sidechain
1	N	1248	A	Sidechain
1	N	1249	C	Sidechain
1	N	125	U	Sidechain
1	N	1250	A	Sidechain
1	N	1251	A	Sidechain
1	N	1256	A	Sidechain
1	N	1259	C	Sidechain
1	N	1260	G	Sidechain
1	N	1261	A	Sidechain
1	N	1265	C	Sidechain
1	N	1267	C	Sidechain
1	N	1269	A	Sidechain
1	N	127	G	Sidechain
1	N	1270	G	Sidechain
1	N	1273	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1274	A	Sidechain
1	N	1275	A	Sidechain
1	N	1276	G	Sidechain
1	N	1278	G	Sidechain
1	N	1279	G	Sidechain
1	N	1281	C	Sidechain
1	N	1282	C	Sidechain
1	N	1283	U	Sidechain
1	N	1285	A	Sidechain
1	N	1287	A	Sidechain
1	N	1288	A	Sidechain
1	N	1289	A	Sidechain
1	N	1292	G	Sidechain
1	N	1295	U	Sidechain
1	N	1296	C	Sidechain
1	N	1297	G	Sidechain
1	N	1298	U	Sidechain
1	N	13	U	Sidechain
1	N	130	A	Sidechain
1	N	1300	G	Sidechain
1	N	1302	C	Sidechain
1	N	1305	G	Sidechain
1	N	1306	A	Sidechain
1	N	1308	U	Sidechain
1	N	1309	G	Sidechain
1	N	131	A	Sidechain
1	N	1310	G	Sidechain
1	N	1311	A	Sidechain
1	N	1312	G	Sidechain
1	N	1313	U	Sidechain
1	N	1314	C	Sidechain
1	N	1315	U	Sidechain
1	N	1316	G	Sidechain
1	N	1317	C	Sidechain
1	N	1318	A	Sidechain
1	N	1319	A	Sidechain
1	N	132	C	Sidechain
1	N	1321	U	Sidechain
1	N	1322	C	Sidechain
1	N	1323	G	Sidechain
1	N	1325	C	Sidechain
1	N	1327	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1329	A	Sidechain
1	N	133	U	Sidechain
1	N	1330	U	Sidechain
1	N	1331	G	Sidechain
1	N	1333	A	Sidechain
1	N	1334	G	Sidechain
1	N	1337	G	Sidechain
1	N	1338	G	Sidechain
1	N	134	G	Sidechain
1	N	1340	A	Sidechain
1	N	1343	G	Sidechain
1	N	1344	C	Sidechain
1	N	1345	U	Sidechain
1	N	1346	A	Sidechain
1	N	1347	G	Sidechain
1	N	1348	U	Sidechain
1	N	1349	A	Sidechain
1	N	135	C	Sidechain
1	N	1351	U	Sidechain
1	N	1353	G	Sidechain
1	N	1354	U	Sidechain
1	N	1357	A	Sidechain
1	N	1358	U	Sidechain
1	N	1362	A	Sidechain
1	N	1364	U	Sidechain
1	N	1365	G	Sidechain
1	N	137	U	Sidechain
1	N	1372	U	Sidechain
1	N	1373	G	Sidechain
1	N	1374	A	Sidechain
1	N	1375	A	Sidechain
1	N	1376	U	Sidechain
1	N	1377	A	Sidechain
1	N	1378	C	Sidechain
1	N	1379	G	Sidechain
1	N	138	G	Sidechain
1	N	1380	U	Sidechain
1	N	1383	C	Sidechain
1	N	1385	G	Sidechain
1	N	1386	G	Sidechain
1	N	1387	G	Sidechain
1	N	1388	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1389	C	Sidechain
1	N	139	A	Sidechain
1	N	1391	U	Sidechain
1	N	1392	G	Sidechain
1	N	1393	U	Sidechain
1	N	1395	C	Sidechain
1	N	1399	C	Sidechain
1	N	14	U	Sidechain
1	N	140	U	Sidechain
1	N	1400	C	Sidechain
1	N	1402	C	Sidechain
1	N	1403	C	Sidechain
1	N	1405	G	Sidechain
1	N	1409	C	Sidechain
1	N	141	G	Sidechain
1	N	1410	A	Sidechain
1	N	1411	C	Sidechain
1	N	1417	G	Sidechain
1	N	1419	G	Sidechain
1	N	1421	G	Sidechain
1	N	1422	G	Sidechain
1	N	1424	U	Sidechain
1	N	1426	G	Sidechain
1	N	1427	C	Sidechain
1	N	1429	A	Sidechain
1	N	143	A	Sidechain
1	N	1430	A	Sidechain
1	N	1431	A	Sidechain
1	N	1432	G	Sidechain
1	N	1433	A	Sidechain
1	N	1434	A	Sidechain
1	N	1435	G	Sidechain
1	N	1436	U	Sidechain
1	N	1437	A	Sidechain
1	N	1438	G	Sidechain
1	N	1439	G	Sidechain
1	N	144	G	Sidechain
1	N	1440	U	Sidechain
1	N	1442	G	Sidechain
1	N	1443	C	Sidechain
1	N	1445	U	Sidechain
1	N	1447	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	145	G	Sidechain
1	N	1450	U	Sidechain
1	N	1454	G	Sidechain
1	N	1455	G	Sidechain
1	N	1457	G	Sidechain
1	N	1458	G	Sidechain
1	N	1459	G	Sidechain
1	N	146	G	Sidechain
1	N	1460	C	Sidechain
1	N	1461	G	Sidechain
1	N	1462	C	Sidechain
1	N	1463	U	Sidechain
1	N	1464	U	Sidechain
1	N	1465	A	Sidechain
1	N	1468	A	Sidechain
1	N	1469	C	Sidechain
1	N	147	G	Sidechain
1	N	1471	U	Sidechain
1	N	1472	U	Sidechain
1	N	1473	G	Sidechain
1	N	1474	U	Sidechain
1	N	148	G	Sidechain
1	N	1481	U	Sidechain
1	N	1483	A	Sidechain
1	N	1485	U	Sidechain
1	N	1487	G	Sidechain
1	N	149	A	Sidechain
1	N	1490	U	Sidechain
1	N	1491	G	Sidechain
1	N	1494	G	Sidechain
1	N	1496	C	Sidechain
1	N	1497	G	Sidechain
1	N	1498	U	Sidechain
1	N	15	G	Sidechain
1	N	150	U	Sidechain
1	N	1500	A	Sidechain
1	N	1502	A	Sidechain
1	N	1503	A	Sidechain
1	N	1504	G	Sidechain
1	N	1505	G	Sidechain
1	N	1508	A	Sidechain
1	N	1509	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	151	A	Sidechain
1	N	1511	G	Sidechain
1	N	1512	U	Sidechain
1	N	1514	G	Sidechain
1	N	1515	G	Sidechain
1	N	1516	G	Sidechain
1	N	1517	G	Sidechain
1	N	1518	A	Sidechain
1	N	152	A	Sidechain
1	N	1523	G	Sidechain
1	N	1524	C	Sidechain
1	N	1526	G	Sidechain
1	N	1528	U	Sidechain
1	N	153	C	Sidechain
1	N	1531	A	Sidechain
1	N	1532	U	Sidechain
1	N	1533	C	Sidechain
1	N	157	U	Sidechain
1	N	158	G	Sidechain
1	N	159	G	Sidechain
1	N	16	A	Sidechain
1	N	160	A	Sidechain
1	N	161	A	Sidechain
1	N	162	A	Sidechain
1	N	165	G	Sidechain
1	N	166	U	Sidechain
1	N	168	G	Sidechain
1	N	169	C	Sidechain
1	N	17	U	Sidechain
1	N	170	U	Sidechain
1	N	171	A	Sidechain
1	N	173	U	Sidechain
1	N	174	A	Sidechain
1	N	175	C	Sidechain
1	N	177	G	Sidechain
1	N	179	A	Sidechain
1	N	18	C	Sidechain
1	N	180	U	Sidechain
1	N	181	A	Sidechain
1	N	182	A	Sidechain
1	N	183	C	Sidechain
1	N	184	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	185	U	Sidechain
1	N	186	C	Sidechain
1	N	187	G	Sidechain
1	N	189	A	Sidechain
1	N	190	A	Sidechain
1	N	191	G	Sidechain
1	N	193	C	Sidechain
1	N	194	C	Sidechain
1	N	195	A	Sidechain
1	N	196	A	Sidechain
1	N	197	A	Sidechain
1	N	199	A	Sidechain
1	N	201	G	Sidechain
1	N	202	G	Sidechain
1	N	203	G	Sidechain
1	N	204	G	Sidechain
1	N	206	C	Sidechain
1	N	207	C	Sidechain
1	N	208	U	Sidechain
1	N	209	U	Sidechain
1	N	21	G	Sidechain
1	N	210	C	Sidechain
1	N	214	C	Sidechain
1	N	216	U	Sidechain
1	N	218	U	Sidechain
1	N	219	U	Sidechain
1	N	22	G	Sidechain
1	N	220	G	Sidechain
1	N	223	A	Sidechain
1	N	226	G	Sidechain
1	N	227	G	Sidechain
1	N	231	U	Sidechain
1	N	233	C	Sidechain
1	N	237	G	Sidechain
1	N	24	U	Sidechain
1	N	240	G	Sidechain
1	N	241	G	Sidechain
1	N	243	A	Sidechain
1	N	244	U	Sidechain
1	N	245	U	Sidechain
1	N	246	A	Sidechain
1	N	247	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	250	A	Sidechain
1	N	251	G	Sidechain
1	N	252	U	Sidechain
1	N	253	A	Sidechain
1	N	255	G	Sidechain
1	N	256	U	Sidechain
1	N	260	G	Sidechain
1	N	261	U	Sidechain
1	N	262	A	Sidechain
1	N	263	A	Sidechain
1	N	264	C	Sidechain
1	N	265	G	Sidechain
1	N	267	C	Sidechain
1	N	269	C	Sidechain
1	N	27	G	Sidechain
1	N	272	C	Sidechain
1	N	273	U	Sidechain
1	N	274	A	Sidechain
1	N	275	G	Sidechain
1	N	276	G	Sidechain
1	N	278	G	Sidechain
1	N	279	A	Sidechain
1	N	280	C	Sidechain
1	N	283	U	Sidechain
1	N	284	C	Sidechain
1	N	286	C	Sidechain
1	N	287	U	Sidechain
1	N	288	A	Sidechain
1	N	289	G	Sidechain
1	N	290	C	Sidechain
1	N	292	G	Sidechain
1	N	293	G	Sidechain
1	N	294	U	Sidechain
1	N	295	C	Sidechain
1	N	296	U	Sidechain
1	N	297	G	Sidechain
1	N	298	A	Sidechain
1	N	299	G	Sidechain
1	N	3	A	Sidechain
1	N	30	U	Sidechain
1	N	301	G	Sidechain
1	N	302	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	304	U	Sidechain
1	N	308	C	Sidechain
1	N	309	A	Sidechain
1	N	312	C	Sidechain
1	N	313	A	Sidechain
1	N	315	A	Sidechain
1	N	316	C	Sidechain
1	N	317	U	Sidechain
1	N	318	G	Sidechain
1	N	32	A	Sidechain
1	N	320	A	Sidechain
1	N	321	A	Sidechain
1	N	323	U	Sidechain
1	N	324	G	Sidechain
1	N	327	A	Sidechain
1	N	328	C	Sidechain
1	N	33	A	Sidechain
1	N	331	G	Sidechain
1	N	332	G	Sidechain
1	N	333	U	Sidechain
1	N	336	A	Sidechain
1	N	337	G	Sidechain
1	N	338	A	Sidechain
1	N	339	C	Sidechain
1	N	340	U	Sidechain
1	N	341	C	Sidechain
1	N	342	C	Sidechain
1	N	343	U	Sidechain
1	N	344	A	Sidechain
1	N	345	C	Sidechain
1	N	347	G	Sidechain
1	N	35	G	Sidechain
1	N	352	C	Sidechain
1	N	354	G	Sidechain
1	N	355	C	Sidechain
1	N	356	A	Sidechain
1	N	359	G	Sidechain
1	N	36	C	Sidechain
1	N	360	G	Sidechain
1	N	361	G	Sidechain
1	N	362	G	Sidechain
1	N	363	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	364	A	Sidechain
1	N	365	U	Sidechain
1	N	367	U	Sidechain
1	N	369	G	Sidechain
1	N	37	U	Sidechain
1	N	370	C	Sidechain
1	N	371	A	Sidechain
1	N	372	C	Sidechain
1	N	374	A	Sidechain
1	N	375	U	Sidechain
1	N	376	G	Sidechain
1	N	377	G	Sidechain
1	N	378	G	Sidechain
1	N	379	C	Sidechain
1	N	38	G	Sidechain
1	N	380	G	Sidechain
1	N	381	C	Sidechain
1	N	382	A	Sidechain
1	N	383	A	Sidechain
1	N	384	G	Sidechain
1	N	385	C	Sidechain
1	N	387	U	Sidechain
1	N	389	A	Sidechain
1	N	39	G	Sidechain
1	N	391	G	Sidechain
1	N	392	C	Sidechain
1	N	393	A	Sidechain
1	N	394	G	Sidechain
1	N	396	C	Sidechain
1	N	398	U	Sidechain
1	N	399	G	Sidechain
1	N	4	U	Sidechain
1	N	402	G	Sidechain
1	N	404	G	Sidechain
1	N	405	U	Sidechain
1	N	407	U	Sidechain
1	N	408	A	Sidechain
1	N	409	U	Sidechain
1	N	41	G	Sidechain
1	N	410	G	Sidechain
1	N	411	A	Sidechain
1	N	412	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	413	G	Sidechain
1	N	414	A	Sidechain
1	N	415	A	Sidechain
1	N	416	G	Sidechain
1	N	417	G	Sidechain
1	N	419	C	Sidechain
1	N	421	U	Sidechain
1	N	422	C	Sidechain
1	N	424	G	Sidechain
1	N	425	G	Sidechain
1	N	426	U	Sidechain
1	N	427	U	Sidechain
1	N	428	G	Sidechain
1	N	429	U	Sidechain
1	N	430	A	Sidechain
1	N	432	A	Sidechain
1	N	433	G	Sidechain
1	N	434	U	Sidechain
1	N	437	U	Sidechain
1	N	439	U	Sidechain
1	N	440	C	Sidechain
1	N	442	G	Sidechain
1	N	443	C	Sidechain
1	N	445	G	Sidechain
1	N	447	G	Sidechain
1	N	448	A	Sidechain
1	N	449	G	Sidechain
1	N	450	G	Sidechain
1	N	451	A	Sidechain
1	N	452	A	Sidechain
1	N	454	G	Sidechain
1	N	455	G	Sidechain
1	N	457	G	Sidechain
1	N	458	U	Sidechain
1	N	46	G	Sidechain
1	N	462	G	Sidechain
1	N	463	U	Sidechain
1	N	464	U	Sidechain
1	N	465	A	Sidechain
1	N	466	A	Sidechain
1	N	470	C	Sidechain
1	N	473	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	474	G	Sidechain
1	N	475	C	Sidechain
1	N	478	A	Sidechain
1	N	479	U	Sidechain
1	N	480	U	Sidechain
1	N	481	G	Sidechain
1	N	482	A	Sidechain
1	N	486	U	Sidechain
1	N	487	A	Sidechain
1	N	492	C	Sidechain
1	N	493	A	Sidechain
1	N	494	G	Sidechain
1	N	496	A	Sidechain
1	N	497	G	Sidechain
1	N	498	A	Sidechain
1	N	499	A	Sidechain
1	N	5	U	Sidechain
1	N	50	A	Sidechain
1	N	500	G	Sidechain
1	N	501	C	Sidechain
1	N	502	A	Sidechain
1	N	503	C	Sidechain
1	N	506	G	Sidechain
1	N	508	U	Sidechain
1	N	509	A	Sidechain
1	N	510	A	Sidechain
1	N	515	G	Sidechain
1	N	516	U	Sidechain
1	N	519	C	Sidechain
1	N	52	C	Sidechain
1	N	521	G	Sidechain
1	N	523	A	Sidechain
1	N	524	G	Sidechain
1	N	526	C	Sidechain
1	N	527	G	Sidechain
1	N	528	C	Sidechain
1	N	529	G	Sidechain
1	N	530	G	Sidechain
1	N	531	U	Sidechain
1	N	532	A	Sidechain
1	N	534	U	Sidechain
1	N	536	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	537	G	Sidechain
1	N	538	G	Sidechain
1	N	540	G	Sidechain
1	N	541	G	Sidechain
1	N	543	U	Sidechain
1	N	544	G	Sidechain
1	N	545	C	Sidechain
1	N	546	A	Sidechain
1	N	547	A	Sidechain
1	N	548	G	Sidechain
1	N	553	A	Sidechain
1	N	554	A	Sidechain
1	N	556	C	Sidechain
1	N	557	G	Sidechain
1	N	558	G	Sidechain
1	N	559	A	Sidechain
1	N	56	U	Sidechain
1	N	560	A	Sidechain
1	N	562	U	Sidechain
1	N	563	A	Sidechain
1	N	565	U	Sidechain
1	N	566	G	Sidechain
1	N	567	G	Sidechain
1	N	568	G	Sidechain
1	N	569	C	Sidechain
1	N	57	G	Sidechain
1	N	570	G	Sidechain
1	N	572	A	Sidechain
1	N	575	G	Sidechain
1	N	576	C	Sidechain
1	N	581	G	Sidechain
1	N	582	C	Sidechain
1	N	584	G	Sidechain
1	N	586	C	Sidechain
1	N	587	G	Sidechain
1	N	588	G	Sidechain
1	N	59	A	Sidechain
1	N	590	U	Sidechain
1	N	594	U	Sidechain
1	N	595	A	Sidechain
1	N	598	U	Sidechain
1	N	599	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	6	G	Sidechain
1	N	60	A	Sidechain
1	N	600	A	Sidechain
1	N	602	A	Sidechain
1	N	603	U	Sidechain
1	N	605	U	Sidechain
1	N	606	G	Sidechain
1	N	610	U	Sidechain
1	N	611	C	Sidechain
1	N	612	C	Sidechain
1	N	614	C	Sidechain
1	N	615	G	Sidechain
1	N	616	G	Sidechain
1	N	619	U	Sidechain
1	N	620	C	Sidechain
1	N	621	A	Sidechain
1	N	625	U	Sidechain
1	N	629	A	Sidechain
1	N	63	C	Sidechain
1	N	630	A	Sidechain
1	N	633	G	Sidechain
1	N	634	C	Sidechain
1	N	636	U	Sidechain
1	N	638	U	Sidechain
1	N	64	G	Sidechain
1	N	641	U	Sidechain
1	N	642	A	Sidechain
1	N	645	G	Sidechain
1	N	646	G	Sidechain
1	N	647	C	Sidechain
1	N	648	A	Sidechain
1	N	649	A	Sidechain
1	N	65	A	Sidechain
1	N	650	G	Sidechain
1	N	651	C	Sidechain
1	N	652	U	Sidechain
1	N	653	U	Sidechain
1	N	654	G	Sidechain
1	N	655	A	Sidechain
1	N	656	G	Sidechain
1	N	657	U	Sidechain
1	N	658	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	66	A	Sidechain
1	N	660	C	Sidechain
1	N	662	U	Sidechain
1	N	667	G	Sidechain
1	N	668	G	Sidechain
1	N	669	G	Sidechain
1	N	670	G	Sidechain
1	N	673	A	Sidechain
1	N	674	G	Sidechain
1	N	676	A	Sidechain
1	N	677	U	Sidechain
1	N	678	U	Sidechain
1	N	68	G	Sidechain
1	N	680	C	Sidechain
1	N	681	A	Sidechain
1	N	683	G	Sidechain
1	N	684	U	Sidechain
1	N	685	G	Sidechain
1	N	687	A	Sidechain
1	N	688	G	Sidechain
1	N	69	G	Sidechain
1	N	691	G	Sidechain
1	N	694	A	Sidechain
1	N	697	U	Sidechain
1	N	698	G	Sidechain
1	N	70	U	Sidechain
1	N	704	A	Sidechain
1	N	705	G	Sidechain
1	N	708	C	Sidechain
1	N	709	U	Sidechain
1	N	71	A	Sidechain
1	N	712	A	Sidechain
1	N	713	G	Sidechain
1	N	714	G	Sidechain
1	N	717	U	Sidechain
1	N	718	A	Sidechain
1	N	719	C	Sidechain
1	N	721	G	Sidechain
1	N	723	U	Sidechain
1	N	724	G	Sidechain
1	N	728	A	Sidechain
1	N	73	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	730	G	Sidechain
1	N	732	C	Sidechain
1	N	733	G	Sidechain
1	N	735	C	Sidechain
1	N	737	C	Sidechain
1	N	738	C	Sidechain
1	N	739	C	Sidechain
1	N	74	A	Sidechain
1	N	740	U	Sidechain
1	N	741	G	Sidechain
1	N	742	G	Sidechain
1	N	743	A	Sidechain
1	N	744	C	Sidechain
1	N	745	G	Sidechain
1	N	748	G	Sidechain
1	N	749	A	Sidechain
1	N	75	G	Sidechain
1	N	750	C	Sidechain
1	N	751	U	Sidechain
1	N	753	A	Sidechain
1	N	755	G	Sidechain
1	N	757	U	Sidechain
1	N	759	A	Sidechain
1	N	76	G	Sidechain
1	N	760	G	Sidechain
1	N	761	G	Sidechain
1	N	762	U	Sidechain
1	N	763	G	Sidechain
1	N	764	C	Sidechain
1	N	765	G	Sidechain
1	N	766	A	Sidechain
1	N	767	A	Sidechain
1	N	768	A	Sidechain
1	N	769	G	Sidechain
1	N	77	A	Sidechain
1	N	771	G	Sidechain
1	N	772	U	Sidechain
1	N	773	G	Sidechain
1	N	774	G	Sidechain
1	N	775	G	Sidechain
1	N	776	G	Sidechain
1	N	777	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	778	G	Sidechain
1	N	779	C	Sidechain
1	N	78	A	Sidechain
1	N	780	A	Sidechain
1	N	781	A	Sidechain
1	N	782	A	Sidechain
1	N	783	C	Sidechain
1	N	784	A	Sidechain
1	N	785	G	Sidechain
1	N	786	G	Sidechain
1	N	788	U	Sidechain
1	N	789	U	Sidechain
1	N	79	G	Sidechain
1	N	790	A	Sidechain
1	N	791	G	Sidechain
1	N	793	U	Sidechain
1	N	794	A	Sidechain
1	N	795	C	Sidechain
1	N	796	C	Sidechain
1	N	797	C	Sidechain
1	N	798	U	Sidechain
1	N	799	G	Sidechain
1	N	80	A	Sidechain
1	N	800	G	Sidechain
1	N	801	U	Sidechain
1	N	802	A	Sidechain
1	N	804	U	Sidechain
1	N	805	C	Sidechain
1	N	806	C	Sidechain
1	N	807	A	Sidechain
1	N	808	C	Sidechain
1	N	809	G	Sidechain
1	N	81	A	Sidechain
1	N	810	C	Sidechain
1	N	811	C	Sidechain
1	N	812	G	Sidechain
1	N	816	A	Sidechain
1	N	817	C	Sidechain
1	N	818	G	Sidechain
1	N	819	A	Sidechain
1	N	82	G	Sidechain
1	N	820	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	821	G	Sidechain
1	N	822	U	Sidechain
1	N	823	C	Sidechain
1	N	828	U	Sidechain
1	N	829	G	Sidechain
1	N	83	C	Sidechain
1	N	830	G	Sidechain
1	N	831	A	Sidechain
1	N	832	G	Sidechain
1	N	835	U	Sidechain
1	N	838	G	Sidechain
1	N	839	C	Sidechain
1	N	842	U	Sidechain
1	N	843	U	Sidechain
1	N	845	A	Sidechain
1	N	847	G	Sidechain
1	N	848	C	Sidechain
1	N	851	G	Sidechain
1	N	855	U	Sidechain
1	N	856	C	Sidechain
1	N	857	C	Sidechain
1	N	858	G	Sidechain
1	N	859	G	Sidechain
1	N	86	G	Sidechain
1	N	860	A	Sidechain
1	N	861	G	Sidechain
1	N	862	C	Sidechain
1	N	864	A	Sidechain
1	N	865	A	Sidechain
1	N	866	C	Sidechain
1	N	868	C	Sidechain
1	N	869	G	Sidechain
1	N	87	C	Sidechain
1	N	870	U	Sidechain
1	N	871	U	Sidechain
1	N	872	A	Sidechain
1	N	873	A	Sidechain
1	N	874	G	Sidechain
1	N	876	C	Sidechain
1	N	877	G	Sidechain
1	N	879	C	Sidechain
1	N	881	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	885	G	Sidechain
1	N	887	G	Sidechain
1	N	888	G	Sidechain
1	N	889	A	Sidechain
1	N	89	U	Sidechain
1	N	890	G	Sidechain
1	N	891	U	Sidechain
1	N	893	C	Sidechain
1	N	894	G	Sidechain
1	N	895	G	Sidechain
1	N	896	C	Sidechain
1	N	899	C	Sidechain
1	N	9	G	Sidechain
1	N	900	A	Sidechain
1	N	901	A	Sidechain
1	N	902	G	Sidechain
1	N	903	G	Sidechain
1	N	904	U	Sidechain
1	N	905	U	Sidechain
1	N	906	A	Sidechain
1	N	907	A	Sidechain
1	N	908	A	Sidechain
1	N	909	A	Sidechain
1	N	91	U	Sidechain
1	N	915	A	Sidechain
1	N	917	G	Sidechain
1	N	918	A	Sidechain
1	N	919	A	Sidechain
1	N	921	U	Sidechain
1	N	923	A	Sidechain
1	N	926	G	Sidechain
1	N	927	G	Sidechain
1	N	928	G	Sidechain
1	N	929	G	Sidechain
1	N	93	U	Sidechain
1	N	930	C	Sidechain
1	N	932	C	Sidechain
1	N	933	G	Sidechain
1	N	934	C	Sidechain
1	N	937	A	Sidechain
1	N	938	A	Sidechain
1	N	939	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	94	G	Sidechain
1	N	941	G	Sidechain
1	N	942	G	Sidechain
1	N	944	G	Sidechain
1	N	945	G	Sidechain
1	N	946	A	Sidechain
1	N	947	G	Sidechain
1	N	948	C	Sidechain
1	N	949	A	Sidechain
1	N	951	G	Sidechain
1	N	952	U	Sidechain
1	N	953	G	Sidechain
1	N	954	G	Sidechain
1	N	958	A	Sidechain
1	N	961	U	Sidechain
1	N	962	C	Sidechain
1	N	963	G	Sidechain
1	N	964	A	Sidechain
1	N	966	G	Sidechain
1	N	967	C	Sidechain
1	N	969	A	Sidechain
1	N	97	G	Sidechain
1	N	970	C	Sidechain
1	N	973	G	Sidechain
1	N	974	A	Sidechain
1	N	976	G	Sidechain
1	N	978	A	Sidechain
1	N	979	C	Sidechain
1	N	98	A	Sidechain
1	N	981	U	Sidechain
1	N	982	U	Sidechain
1	N	984	C	Sidechain
1	N	985	C	Sidechain
1	N	986	U	Sidechain
1	N	987	G	Sidechain
1	N	988	G	Sidechain
1	N	989	U	Sidechain
1	N	99	C	Sidechain
1	N	991	U	Sidechain
1	N	995	C	Sidechain
1	N	997	U	Sidechain
1	N	998	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	999	C	Sidechain

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	N	32892	16554	16521	571	0
All	All	32892	16554	16521	571	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 12.

All (571) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:32:A:H4'	1:N:48:C:H42	1.50	0.75
1:N:594:U:C4	1:N:595:A:C6	2.74	0.75
1:N:338:A:H61	1:N:351:G:H1	1.36	0.73
1:N:116:A:H61	1:N:313:A:H1'	1.53	0.73
1:N:197:A:H2	1:N:198:G:C4	2.08	0.70
1:N:688:G:C8	1:N:688:G:H5''	2.27	0.69
1:N:67:C:H2'	1:N:68:G:C8	2.27	0.68
1:N:203:G:H22	1:N:206:C:H41	1.42	0.68
1:N:272:C:C4	1:N:273:U:C4	2.82	0.68
1:N:169:C:C4	1:N:170:U:C4	2.82	0.67
1:N:1483:A:C8	1:N:1484:C:C6	2.82	0.67
1:N:776:G:H4'	1:N:777:A:C8	2.31	0.66
1:N:198:G:H2'	1:N:199:A:C8	2.31	0.66
1:N:1239:A:C5	1:N:1241:G:C2	2.84	0.66
1:N:668:G:C6	1:N:669:G:C6	2.85	0.65
1:N:1127:G:H22	1:N:1145:A:H2	1.45	0.64
1:N:79:G:H2'	1:N:80:A:C8	2.31	0.64
1:N:1240:U:C2	1:N:1240:U:OP1	2.50	0.63
1:N:1011:C:C2	1:N:1019:A:C2	2.86	0.63
1:N:80:A:C4	1:N:81:A:H1'	2.34	0.63
1:N:120:A:C2	1:N:122:G:C6	2.86	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:39:G:C2	1:N:498:A:H2	2.17	0.62
1:N:1038:C:H2'	1:N:1039:G:C8	2.35	0.62
1:N:779:C:H2'	1:N:780:A:C8	2.35	0.62
1:N:1066:C:H6	1:N:1066:C:H5''	1.66	0.61
1:N:501:C:H2'	1:N:502:A:C8	2.36	0.61
1:N:301:G:C6	1:N:302:G:C5	2.89	0.61
1:N:669:G:C6	1:N:670:G:C6	2.88	0.61
1:N:832:G:C6	1:N:855:U:C2	2.88	0.61
1:N:50:A:H1'	1:N:52:C:C6	2.35	0.61
1:N:780:A:C2	1:N:801:U:C5	2.88	0.60
1:N:91:U:C5	1:N:92:U:C2	2.89	0.60
1:N:39:G:H1'	1:N:497:G:H21	1.66	0.60
1:N:515:G:C5	1:N:516:U:C5	2.90	0.60
1:N:438:U:C4	1:N:494:G:C8	2.90	0.60
1:N:1507:A:C2	1:N:1531:A:C2	2.90	0.59
1:N:197:A:C2	1:N:198:G:C4	2.90	0.59
1:N:424:G:C6	1:N:425:G:C6	2.90	0.59
1:N:1066:C:C6	1:N:1066:C:H5''	2.38	0.59
1:N:1423:G:C5	1:N:1424:U:C4	2.91	0.59
1:N:1266:G:H21	1:N:1269:A:H8	1.51	0.59
1:N:1058:G:C6	1:N:1059:C:N3	2.71	0.58
1:N:1244:G:C6	1:N:1294:G:C6	2.91	0.58
1:N:596:A:H61	1:N:644:U:H3	1.50	0.58
1:N:1341:U:C5	1:N:1342:C:C5	2.91	0.58
1:N:78:A:C6	1:N:79:G:C6	2.92	0.57
1:N:295:C:C4	1:N:296:U:C4	2.92	0.57
1:N:1332:A:H3'	1:N:1333:A:H8	1.70	0.57
1:N:273:U:C4	1:N:274:A:C6	2.93	0.57
1:N:1319:A:H4'	1:N:1320:C:OP1	2.04	0.57
1:N:644:U:H2'	1:N:645:G:C8	2.40	0.57
1:N:50:A:C2	1:N:52:C:N3	2.73	0.57
1:N:961:U:H2'	1:N:962:C:C6	2.40	0.56
1:N:232:G:C5	1:N:233:C:C5	2.93	0.56
1:N:673:A:H61	1:N:717:U:H3	1.53	0.56
1:N:860:A:N6	1:N:861:G:C2	2.74	0.56
1:N:1375:A:H3'	1:N:1376:U:H6	1.68	0.56
1:N:1058:G:C6	1:N:1059:C:C4	2.94	0.56
1:N:524:G:C2	1:N:525:C:C2	2.93	0.56
1:N:1104:G:C6	1:N:1105:A:C6	2.93	0.56
1:N:1225:A:H2'	1:N:1226:C:C5	2.41	0.56
1:N:1240:U:H6	1:N:1241:G:H5'	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1186:G:C2	1:N:1187:G:H1'	2.40	0.56
1:N:512:U:H3	1:N:539:A:H61	1.52	0.56
1:N:73:C:C6	1:N:73:C:H5''	2.42	0.55
1:N:1394:A:H3'	1:N:1395:C:H5'	1.86	0.55
1:N:672:U:H2'	1:N:673:A:C8	2.41	0.55
1:N:724:G:H8	1:N:724:G:H5''	1.72	0.55
1:N:218:U:C5	1:N:219:U:C4	2.95	0.55
1:N:410:G:H2'	1:N:429:U:C4	2.41	0.55
1:N:1037:C:H2'	1:N:1038:C:C6	2.42	0.55
1:N:1423:G:C6	1:N:1424:U:C4	2.95	0.55
1:N:980:C:H3'	1:N:981:U:H6	1.72	0.55
1:N:655:A:C4	1:N:656:G:C8	2.94	0.55
1:N:1315:U:H2'	1:N:1316:G:C8	2.42	0.55
1:N:495:A:H1'	1:N:496:A:C5	2.42	0.54
1:N:724:G:H5''	1:N:724:G:C8	2.43	0.54
1:N:904:U:C4	1:N:905:U:C4	2.95	0.54
1:N:1301:U:H2'	1:N:1303:C:C5	2.42	0.54
1:N:872:A:C5	1:N:874:G:C8	2.95	0.54
1:N:1090:U:H2'	1:N:1091:U:C6	2.43	0.54
1:N:1282:C:H2'	1:N:1283:U:C6	2.42	0.54
1:N:657:U:H2'	1:N:658:C:C6	2.42	0.54
1:N:1309:G:C6	1:N:1310:G:C6	2.95	0.54
1:N:59:A:C2	1:N:354:G:C5	2.96	0.54
1:N:1250:A:H2'	1:N:1251:A:C8	2.42	0.54
1:N:811:C:H2'	1:N:812:G:H5'	1.89	0.54
1:N:1366:C:C4	1:N:1367:C:C4	2.95	0.54
1:N:64:G:H2'	1:N:99:C:H41	1.71	0.54
1:N:442:G:H1	1:N:492:C:H42	1.56	0.54
1:N:1261:A:H61	1:N:1274:A:H2'	1.73	0.54
1:N:558:G:H2'	1:N:559:A:C2	2.43	0.54
1:N:858:G:H1	1:N:869:G:H2'	1.72	0.54
1:N:413:G:C8	1:N:426:U:OP2	2.61	0.54
1:N:738:C:C4	1:N:739:C:C4	2.96	0.53
1:N:80:A:C5	1:N:81:A:H1'	2.43	0.53
1:N:602:A:C2	1:N:603:U:C2	2.96	0.53
1:N:803:G:C6	1:N:804:U:C4	2.96	0.53
1:N:821:G:C6	1:N:822:U:C4	2.97	0.53
1:N:955:U:C2	1:N:956:U:C5	2.97	0.53
1:N:107:G:H5''	1:N:134:G:H21	1.72	0.53
1:N:1144:G:H21	1:N:1146:A:H62	1.55	0.53
1:N:1219:A:C6	1:N:1220:G:C6	2.97	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:94:G:H4'	1:N:95:C:H5''	1.90	0.53
1:N:749:A:C2	1:N:750:C:C2	2.97	0.53
1:N:1365:G:C6	1:N:1366:C:C4	2.96	0.53
1:N:1482:G:H3'	1:N:1482:G:C8	2.44	0.53
1:N:936:C:H1'	1:N:1382:C:H42	1.74	0.53
1:N:105:G:H21	1:N:380:G:H5'	1.74	0.53
1:N:39:G:C4	1:N:498:A:C2	2.97	0.52
1:N:354:G:C6	1:N:355:C:C4	2.97	0.52
1:N:11:G:C6	1:N:12:U:C4	2.98	0.52
1:N:466:A:H2'	1:N:467:U:C2	2.45	0.52
1:N:500:G:C6	1:N:501:C:C4	2.98	0.52
1:N:988:G:HO2'	1:N:1016:A:H2	1.58	0.52
1:N:165:G:C4	1:N:166:U:C6	2.98	0.52
1:N:792:A:H5'	1:N:1518:A:H61	1.75	0.52
1:N:933:G:C2	1:N:1385:G:C2	2.98	0.51
1:N:39:G:C2	1:N:498:A:C2	2.98	0.51
1:N:595:A:H4'	1:N:596:A:H5'	1.91	0.51
1:N:1266:G:N2	1:N:1268:G:H3'	2.25	0.51
1:N:1041:G:C6	1:N:1042:A:C6	2.98	0.51
1:N:882:C:N3	1:N:883:C:C5	2.79	0.51
1:N:456:A:C2	1:N:457:G:C5	2.99	0.51
1:N:592:G:C6	1:N:648:A:C6	2.98	0.51
1:N:1249:C:H3'	1:N:1250:A:H5''	1.93	0.51
1:N:1255:G:H2'	1:N:1279:G:H1	1.76	0.51
1:N:512:U:H2'	1:N:513:C:C6	2.45	0.51
1:N:1349:A:N1	1:N:1374:A:H1'	2.26	0.51
1:N:109:A:C8	1:N:327:A:O4'	2.64	0.51
1:N:1130:A:C5	1:N:1131:G:C4	2.98	0.51
1:N:1014:A:C5	1:N:1015:G:C6	2.99	0.51
1:N:141:G:C6	1:N:223:A:C6	2.99	0.51
1:N:207:C:H2'	1:N:208:U:C2	2.45	0.51
1:N:197:A:C2	1:N:198:G:N9	2.79	0.50
1:N:68:G:C4	1:N:69:G:H1'	2.45	0.50
1:N:803:G:C5	1:N:804:U:C5	2.99	0.50
1:N:627:G:C6	1:N:628:G:C6	2.99	0.50
1:N:172:A:C6	1:N:174:A:H1'	2.45	0.50
1:N:209:U:C4	1:N:211:G:N1	2.79	0.50
1:N:1439:G:C5	1:N:1440:U:C6	3.00	0.50
1:N:19:A:C2	1:N:917:G:C5	2.99	0.50
1:N:292:G:C5	1:N:293:G:H1'	2.47	0.50
1:N:243:A:C2	1:N:282:A:N6	2.79	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:626:G:H2'	1:N:627:G:C8	2.47	0.50
1:N:890:G:H22	1:N:906:A:H3'	1.75	0.50
1:N:74:A:H5'	1:N:90:C:H5'	1.92	0.50
1:N:1024:G:C6	1:N:1025:U:C5	2.99	0.50
1:N:1501:C:H3'	1:N:1504:G:C8	2.46	0.50
1:N:102:G:C6	1:N:103:U:C4	3.00	0.50
1:N:903:G:C4	1:N:904:U:C5	2.99	0.50
1:N:256:U:H3	1:N:270:A:H61	1.59	0.50
1:N:1377:A:HO2'	1:N:1378:C:H5	1.60	0.50
1:N:920:U:H2'	1:N:921:U:C6	2.47	0.50
1:N:168:G:C6	1:N:169:C:C5	2.99	0.49
1:N:803:G:C2	1:N:804:U:C2	2.99	0.49
1:N:928:G:H2'	1:N:929:G:C8	2.47	0.49
1:N:687:A:C2	1:N:704:A:C6	2.99	0.49
1:N:64:G:C2	1:N:69:G:C6	3.00	0.49
1:N:1268:G:H21	1:N:1326:U:H1'	1.77	0.49
1:N:141:G:N1	1:N:223:A:C5	2.80	0.49
1:N:372:C:H4'	1:N:373:A:OP1	2.11	0.49
1:N:596:A:N6	1:N:644:U:H3	2.11	0.49
1:N:928:G:H1	1:N:1390:U:H3	1.60	0.49
1:N:1434:A:C5	1:N:1435:G:C5	3.00	0.49
1:N:925:G:H2'	1:N:927:G:C8	2.48	0.49
1:N:1256:A:C2	1:N:1258:G:C6	3.01	0.49
1:N:339:C:C4	1:N:340:U:C4	3.00	0.49
1:N:589:U:H2'	1:N:590:U:C6	2.47	0.49
1:N:1239:A:C2	1:N:1241:G:C6	3.00	0.49
1:N:1496:C:H2'	1:N:1497:G:C8	2.48	0.49
1:N:1433:A:H1'	1:N:1468:A:C2	2.48	0.49
1:N:760:G:C6	1:N:761:G:C4	3.01	0.49
1:N:1129:C:H1'	1:N:1146:A:H61	1.77	0.49
1:N:1231:G:C6	1:N:1232:U:N3	2.80	0.49
1:N:595:A:C2	1:N:596:A:N6	2.81	0.49
1:N:775:G:C6	1:N:776:G:C6	3.01	0.49
1:N:61:G:H21	1:N:379:C:H4'	1.78	0.49
1:N:1060:U:H3	1:N:1197:A:H61	1.59	0.49
1:N:882:C:C2	1:N:883:C:C5	3.01	0.48
1:N:991:U:O2'	1:N:993:G:C8	2.65	0.48
1:N:1316:G:C2	1:N:1319:A:C8	3.02	0.48
1:N:411:A:C4	1:N:429:U:C5	3.02	0.48
1:N:458:U:H2'	1:N:459:A:C8	2.48	0.48
1:N:381:C:C5	1:N:382:A:C5	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1502:A:H5'	1:N:1504:G:N7	2.28	0.48
1:N:603:U:H2'	1:N:604:G:C8	2.48	0.48
1:N:500:G:C5	1:N:501:C:C4	3.02	0.48
1:N:1315:U:C4	1:N:1316:G:C6	3.02	0.48
1:N:104:G:C6	1:N:105:G:C5	3.01	0.48
1:N:442:G:C5	1:N:443:C:C5	3.01	0.48
1:N:613:C:H2'	1:N:614:C:O4'	2.13	0.48
1:N:1500:A:C6	1:N:1501:C:C4	3.02	0.48
1:N:65:A:H4'	1:N:66:A:H5'	1.95	0.48
1:N:982:U:H5'	1:N:983:A:C8	2.49	0.48
1:N:1148:U:N3	1:N:1149:C:C2	2.82	0.48
1:N:981:U:C2	1:N:982:U:C5	3.02	0.48
1:N:146:G:C2	1:N:177:G:C8	3.02	0.47
1:N:1095:U:C4	1:N:1096:C:C4	3.02	0.47
1:N:665:A:C8	1:N:733:G:C2	3.02	0.47
1:N:1302:C:C3'	1:N:1303:C:C5'	2.91	0.47
1:N:1055:A:C6	1:N:1206:G:C5	3.02	0.47
1:N:236:A:N1	1:N:237:G:C5	2.82	0.47
1:N:425:G:C6	1:N:426:U:N3	2.82	0.47
1:N:296:U:H2'	1:N:297:G:C8	2.50	0.47
1:N:232:G:C6	1:N:233:C:C5	3.02	0.47
1:N:582:C:N3	1:N:760:G:C6	2.83	0.47
1:N:368:U:H3'	1:N:369:G:C5'	2.44	0.47
1:N:961:U:C2	1:N:983:A:C2	3.02	0.47
1:N:499:A:C2	1:N:547:A:C2	3.03	0.47
1:N:124:C:C2	1:N:238:A:C2	3.02	0.47
1:N:852:G:C6	1:N:853:C:N3	2.83	0.47
1:N:1283:U:H2'	1:N:1284:C:C6	2.50	0.47
1:N:866:C:C4	1:N:873:A:H2	2.33	0.47
1:N:120:A:C2	1:N:122:G:N1	2.83	0.47
1:N:1072:G:C6	1:N:1073:U:N3	2.83	0.47
1:N:557:G:C2	1:N:558:G:C2	3.03	0.47
1:N:1025:U:H2'	1:N:1031:C:C5	2.50	0.47
1:N:1357:A:C4	1:N:1358:U:C2	3.02	0.47
1:N:49:U:C2	1:N:362:G:H1'	2.50	0.47
1:N:585:G:C5	1:N:586:C:C4	3.02	0.47
1:N:585:G:C6	1:N:586:C:N3	2.82	0.47
1:N:1244:G:C6	1:N:1245:C:C4	3.03	0.47
1:N:1287:A:H2'	1:N:1288:A:C8	2.50	0.47
1:N:1215:G:H2'	1:N:1216:A:H5'	1.96	0.47
1:N:782:A:C6	1:N:783:C:C2	3.03	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:98:A:C5	1:N:99:C:C4	3.03	0.47
1:N:1239:A:H4'	1:N:1240:U:OP1	2.15	0.47
1:N:1261:A:H61	1:N:1274:A:C2'	2.28	0.47
1:N:1170:A:C5	1:N:1171:A:C4	3.03	0.47
1:N:130:A:C8	1:N:264:C:H1'	2.49	0.47
1:N:1072:G:C2	1:N:1104:G:C2	3.03	0.46
1:N:1234:C:C4	1:N:1235:U:C5	3.03	0.46
1:N:810:C:H2'	1:N:811:C:H5'	1.97	0.46
1:N:474:G:C6	1:N:475:C:N3	2.83	0.46
1:N:17:U:H1'	1:N:1080:A:C2	2.51	0.46
1:N:788:U:H2'	1:N:789:U:C6	2.50	0.46
1:N:240:G:C6	1:N:241:G:C5	3.03	0.46
1:N:669:G:C6	1:N:670:G:C5	3.03	0.46
1:N:669:G:H2'	1:N:670:G:O4'	2.15	0.46
1:N:1072:G:C5	1:N:1073:U:C4	3.03	0.46
1:N:512:U:H3	1:N:539:A:N6	2.13	0.46
1:N:604:G:C6	1:N:605:U:N3	2.83	0.46
1:N:373:A:C2	1:N:374:A:C4	3.04	0.46
1:N:585:G:C6	1:N:586:C:C4	3.03	0.46
1:N:754:C:O2	1:N:754:C:H5''	2.15	0.46
1:N:1123:U:H3	1:N:1150:A:H61	1.63	0.46
1:N:946:A:C2	1:N:1236:A:C2	3.03	0.46
1:N:1302:C:H3'	1:N:1303:C:C5'	2.45	0.46
1:N:171:A:C5	1:N:172:A:C6	3.03	0.46
1:N:917:G:C2	1:N:918:A:C4	3.02	0.46
1:N:635:A:C6	1:N:636:U:N3	2.83	0.46
1:N:830:G:N1	1:N:857:C:C2	2.84	0.46
1:N:939:G:N3	1:N:1375:A:C2	2.84	0.46
1:N:1048:G:H1'	1:N:1215:G:H4'	1.98	0.46
1:N:1159:U:H6	1:N:1161:C:H41	1.64	0.46
1:N:218:U:C6	1:N:219:U:C4	3.03	0.46
1:N:160:A:C2	1:N:346:G:N1	2.83	0.46
1:N:145:G:C2	1:N:178:C:C2	3.04	0.46
1:N:596:A:C2	1:N:597:G:C8	3.03	0.46
1:N:1058:G:C5	1:N:1059:C:C4	3.03	0.46
1:N:1385:G:C6	1:N:1386:G:C6	3.04	0.46
1:N:151:A:C6	1:N:171:A:C6	3.04	0.46
1:N:217:C:H4'	1:N:463:U:C5	2.50	0.46
1:N:285:C:H2'	1:N:286:C:C6	2.51	0.46
1:N:507:C:H3'	1:N:508:U:H5''	1.98	0.46
1:N:525:C:H2'	1:N:526:C:C6	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:506:G:C5	1:N:507:C:C4	3.04	0.46
1:N:64:G:H2'	1:N:99:C:N4	2.30	0.46
1:N:832:G:C5	1:N:855:U:C2	3.04	0.46
1:N:855:U:C4	1:N:856:C:C4	3.04	0.46
1:N:982:U:H4'	1:N:983:A:O5'	2.16	0.46
1:N:1504:G:H4'	1:N:1505:G:C4	2.51	0.46
1:N:893:C:H1'	1:N:1416:G:H21	1.80	0.46
1:N:68:G:C5	1:N:69:G:H1'	2.51	0.45
1:N:979:C:C5	1:N:980:C:C6	3.04	0.45
1:N:1104:G:C6	1:N:1105:A:C5	3.04	0.45
1:N:134:G:C5	1:N:325:A:N6	2.84	0.45
1:N:1095:U:N3	1:N:1096:C:C2	2.84	0.45
1:N:1415:G:C2	1:N:1416:G:C5	3.04	0.45
1:N:668:G:N1	1:N:739:C:C2	2.85	0.45
1:N:70:U:C5	1:N:94:G:H2'	2.51	0.45
1:N:584:G:C6	1:N:585:G:C6	3.04	0.45
1:N:272:C:H2'	1:N:273:U:O4'	2.16	0.45
1:N:1294:G:C5	1:N:1295:U:C5	3.05	0.45
1:N:134:G:C8	1:N:325:A:N7	2.84	0.45
1:N:246:A:H4'	1:N:247:G:OP1	2.16	0.45
1:N:827:U:H2'	1:N:870:U:O4	2.15	0.45
1:N:832:G:C5	1:N:855:U:N3	2.84	0.45
1:N:673:A:N6	1:N:717:U:H3	2.14	0.45
1:N:859:G:C6	1:N:860:A:C6	3.04	0.45
1:N:1117:A:C2	1:N:1184:G:C5	3.05	0.45
1:N:1348:U:C5	1:N:1373:G:N2	2.84	0.45
1:N:417:G:C5	1:N:418:C:C4	3.05	0.45
1:N:1299:A:C2	1:N:1301:U:N3	2.84	0.45
1:N:293:G:N2	1:N:306:A:C2	2.79	0.45
1:N:1182:G:H4'	1:N:1184:G:H5''	1.99	0.45
1:N:913:A:N3	1:N:914:A:C8	2.85	0.45
1:N:1022:A:H5'	1:N:1022:A:C8	2.52	0.45
1:N:78:A:C5	1:N:79:G:C6	3.04	0.45
1:N:458:U:O2	1:N:475:C:O2	2.34	0.45
1:N:1075:U:H2'	1:N:1076:U:O4'	2.16	0.45
1:N:1113:C:C5	1:N:1114:C:C5	3.05	0.45
1:N:1129:C:C1'	1:N:1146:A:H61	2.30	0.45
1:N:438:U:C5	1:N:494:G:C8	3.04	0.45
1:N:985:C:H2'	1:N:986:U:O4'	2.17	0.45
1:N:355:C:H2'	1:N:356:A:C8	2.52	0.45
1:N:1264:U:H2'	1:N:1265:C:O4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:679:C:H2'	1:N:680:C:O4'	2.16	0.45
1:N:807:A:C2	1:N:808:C:C2	3.05	0.45
1:N:718:A:H3'	1:N:719:C:C6	2.52	0.45
1:N:1102:A:C2	1:N:1103:C:C2	3.05	0.45
1:N:668:G:C4	1:N:669:G:C8	3.05	0.45
1:N:830:G:C6	1:N:831:A:C6	3.04	0.45
1:N:105:G:N2	1:N:380:G:H5'	2.31	0.45
1:N:217:C:H4'	1:N:463:U:H5	1.82	0.45
1:N:1416:G:C6	1:N:1417:G:C4	3.04	0.45
1:N:118:U:H2'	1:N:288:A:H61	1.81	0.45
1:N:98:A:C6	1:N:99:C:C4	3.05	0.45
1:N:856:C:H2'	1:N:857:C:C6	2.52	0.45
1:N:750:C:N3	1:N:751:U:C4	2.85	0.45
1:N:11:G:C6	1:N:12:U:N3	2.84	0.45
1:N:150:U:O2	1:N:151:A:C8	2.70	0.45
1:N:373:A:H2'	1:N:374:A:C8	2.52	0.45
1:N:1350:A:N1	1:N:1373:G:C2	2.85	0.45
1:N:1436:U:H2'	1:N:1437:A:C8	2.52	0.45
1:N:776:G:H21	1:N:779:C:H42	1.65	0.44
1:N:57:G:C6	1:N:356:A:N1	2.85	0.44
1:N:1100:C:H1'	1:N:1102:A:H4'	1.99	0.44
1:N:544:G:C6	1:N:545:C:C4	3.05	0.44
1:N:1400:C:H3'	1:N:1401:G:H5'	1.99	0.44
1:N:1423:G:C6	1:N:1424:U:N3	2.85	0.44
1:N:1500:A:C5	1:N:1501:C:C5	3.05	0.44
1:N:109:A:C5	1:N:326:G:C6	3.05	0.44
1:N:134:G:C8	1:N:325:A:C5	3.06	0.44
1:N:368:U:C3'	1:N:369:G:H5'	2.47	0.44
1:N:368:U:H3'	1:N:369:G:H5'	1.99	0.44
1:N:1321:U:H2'	1:N:1322:C:H2'	1.99	0.44
1:N:795:C:C5	1:N:796:C:C4	3.05	0.44
1:N:349:A:N1	1:N:350:G:C6	2.85	0.44
1:N:1483:A:C8	1:N:1484:C:C5	3.04	0.44
1:N:1343:G:C8	1:N:1344:C:C5	3.05	0.44
1:N:677:U:C4	1:N:678:U:C4	3.05	0.44
1:N:44:A:C2	1:N:399:G:C5	3.05	0.44
1:N:1069:C:C5	1:N:1094:G:C6	3.06	0.44
1:N:593:U:H2'	1:N:594:U:C6	2.52	0.44
1:N:1294:G:C6	1:N:1295:U:C4	3.06	0.44
1:N:980:C:H3'	1:N:981:U:C6	2.51	0.44
1:N:1345:U:H4'	1:N:1346:A:C8	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:232:G:C6	1:N:233:C:C4	3.05	0.44
1:N:1225:A:H2'	1:N:1226:C:C6	2.53	0.44
1:N:411:A:C5	1:N:429:U:C5	3.05	0.44
1:N:781:A:C8	1:N:782:A:C8	3.05	0.44
1:N:16:A:H2'	1:N:17:U:H5'	1.99	0.44
1:N:908:A:H2'	1:N:909:A:C8	2.53	0.44
1:N:181:A:C6	1:N:194:C:H2'	2.53	0.44
1:N:938:A:C6	1:N:939:G:C5	3.05	0.44
1:N:457:G:N2	1:N:476:U:H1'	2.32	0.44
1:N:482:A:C5	1:N:483:C:C2	3.05	0.44
1:N:289:G:C5	1:N:290:C:C5	3.05	0.44
1:N:1287:A:C2	1:N:1288:A:C2	3.06	0.44
1:N:342:C:C4	1:N:343:U:C4	3.06	0.44
1:N:71:A:H61	1:N:99:C:H1'	1.83	0.44
1:N:1244:G:C6	1:N:1245:C:N3	2.85	0.44
1:N:1218:C:H2'	1:N:1219:A:C8	2.53	0.44
1:N:1375:A:H3'	1:N:1376:U:C6	2.50	0.44
1:N:465:A:C6	1:N:466:A:C6	3.05	0.44
1:N:171:A:C2	1:N:172:A:C2	3.06	0.44
1:N:172:A:C8	1:N:174:A:C8	3.05	0.44
1:N:1122:U:H2'	1:N:1123:U:C6	2.53	0.43
1:N:152:A:C6	1:N:153:C:H1'	2.53	0.43
1:N:1438:G:C4	1:N:1464:U:O2	2.70	0.43
1:N:946:A:H2'	1:N:947:G:C8	2.53	0.43
1:N:1177:G:C6	1:N:1178:G:C2	3.06	0.43
1:N:955:U:C2	1:N:956:U:C6	3.07	0.43
1:N:1095:U:H2'	1:N:1096:C:O4'	2.18	0.43
1:N:1283:U:H2'	1:N:1284:C:H6	1.83	0.43
1:N:1047:G:C2	1:N:1213:A:C2	3.06	0.43
1:N:894:G:C6	1:N:895:G:C6	3.07	0.43
1:N:642:A:C5	1:N:643:C:C5	3.07	0.43
1:N:76:G:N3	1:N:76:G:H2'	2.33	0.43
1:N:558:G:C8	1:N:559:A:H2'	2.53	0.43
1:N:802:A:H3'	1:N:803:G:C8	2.54	0.43
1:N:223:A:C6	1:N:224:U:N3	2.86	0.43
1:N:403:C:H41	1:N:547:A:H5''	1.84	0.43
1:N:1357:A:N1	1:N:1363:A:C6	2.87	0.43
1:N:181:A:H4'	1:N:182:A:O5'	2.19	0.43
1:N:402:G:H1'	1:N:620:C:H42	1.82	0.43
1:N:776:G:H4'	1:N:777:A:H8	1.77	0.43
1:N:872:A:N7	1:N:874:G:C8	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1261:A:N1	1:N:1274:A:C2	2.86	0.43
1:N:575:G:C5	1:N:821:G:C8	3.06	0.43
1:N:447:G:C5	1:N:485:U:C6	3.07	0.43
1:N:236:A:C2	1:N:237:G:C5	3.06	0.43
1:N:1262:C:H2'	1:N:1263:C:H5'	2.00	0.43
1:N:1129:C:N3	1:N:1144:G:C6	2.87	0.43
1:N:1295:U:C4	1:N:1296:C:C4	3.07	0.43
1:N:865:A:O2'	1:N:866:C:H5'	2.18	0.43
1:N:585:G:C2	1:N:586:C:C2	3.07	0.43
1:N:1047:G:C2	1:N:1213:A:H2	2.37	0.43
1:N:677:U:C5	1:N:678:U:C5	3.07	0.43
1:N:678:U:H3	1:N:712:A:H61	1.65	0.43
1:N:1239:A:C4	1:N:1241:G:C5	3.07	0.43
1:N:1058:G:C5	1:N:1059:C:C5	3.06	0.43
1:N:1502:A:C8	1:N:1505:G:N2	2.87	0.43
1:N:1069:C:N4	1:N:1107:C:H42	2.17	0.43
1:N:64:G:N2	1:N:69:G:C5	2.87	0.43
1:N:424:G:C5	1:N:425:G:C5	3.06	0.43
1:N:59:A:H1'	1:N:354:G:C2	2.54	0.43
1:N:858:G:N3	1:N:858:G:H2'	2.33	0.43
1:N:119:A:C8	1:N:240:G:O6	2.72	0.42
1:N:664:G:H22	1:N:741:G:H1	1.67	0.42
1:N:1409:C:N3	1:N:1410:A:C5	2.87	0.42
1:N:64:G:C5	1:N:99:C:C2	3.07	0.42
1:N:59:A:C2	1:N:331:G:C5	3.07	0.42
1:N:1468:A:H2'	1:N:1469:C:H5'	2.01	0.42
1:N:1047:G:H1	1:N:1210:C:H42	1.67	0.42
1:N:1164:G:H2'	1:N:1165:U:C6	2.54	0.42
1:N:186:C:N3	1:N:187:G:C5	2.87	0.42
1:N:1032:G:C6	1:N:1033:G:H1'	2.53	0.42
1:N:813:U:H5'	1:N:904:U:H4'	2.01	0.42
1:N:675:A:C2	1:N:716:A:H2	2.37	0.42
1:N:1456:A:C8	1:N:1457:G:C8	3.08	0.42
1:N:756:C:C4	1:N:757:U:C4	3.08	0.42
1:N:201:G:N2	1:N:468:A:H62	2.17	0.42
1:N:669:G:C5	1:N:670:G:C5	3.07	0.42
1:N:736:C:H2'	1:N:737:C:C6	2.54	0.42
1:N:1067:A:OP2	1:N:1092:A:C8	2.73	0.42
1:N:978:A:C4	1:N:1319:A:C2	3.08	0.42
1:N:1353:G:C2	1:N:1370:G:C2	3.07	0.42
1:N:811:C:C2'	1:N:812:G:H5'	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:648:A:H2'	1:N:649:A:C8	2.54	0.42
1:N:1356:G:H2'	1:N:1357:A:C8	2.55	0.42
1:N:585:G:H2'	1:N:586:C:C6	2.54	0.42
1:N:580:C:H3'	1:N:581:G:H8	1.84	0.42
1:N:1052:U:O2	1:N:1207:G:C2	2.73	0.42
1:N:338:A:C8	1:N:339:C:C5	3.08	0.42
1:N:1144:G:C6	1:N:1145:A:C5	3.07	0.42
1:N:1244:G:C5	1:N:1294:G:N1	2.87	0.42
1:N:1500:A:C6	1:N:1501:C:C5	3.08	0.42
1:N:1343:G:C5	1:N:1344:C:C4	3.07	0.42
1:N:1523:G:C6	1:N:1524:C:C4	3.07	0.42
1:N:198:G:C6	1:N:199:A:C6	3.08	0.42
1:N:1254:A:C2	1:N:1284:C:C2	3.08	0.42
1:N:465:A:H2'	1:N:466:A:C8	2.55	0.42
1:N:1074:G:C6	1:N:1075:U:N3	2.87	0.42
1:N:977:A:H1'	1:N:1223:C:C4	2.55	0.42
1:N:76:G:C6	1:N:77:A:C5	3.08	0.42
1:N:1511:G:C6	1:N:1525:G:C6	3.07	0.42
1:N:24:U:H2'	1:N:25:C:C6	2.55	0.42
1:N:215:C:C4	1:N:216:U:C2	3.07	0.42
1:N:66:A:C4	1:N:67:C:C5	3.08	0.42
1:N:1244:G:N1	1:N:1245:C:C2	2.88	0.42
1:N:1251:A:C2	1:N:1370:G:H4'	2.54	0.42
1:N:482:A:C6	1:N:483:C:C2	3.07	0.42
1:N:668:G:C5	1:N:669:G:C5	3.08	0.42
1:N:81:A:C8	1:N:83:C:C2	3.08	0.42
1:N:955:U:N3	1:N:956:U:C5	2.87	0.42
1:N:55:A:C5	1:N:56:U:C6	3.07	0.42
1:N:958:A:C2	1:N:959:A:C2	3.07	0.42
1:N:301:G:C6	1:N:302:G:C6	3.08	0.42
1:N:102:G:C5	1:N:103:U:C5	3.08	0.42
1:N:665:A:H5'	1:N:733:G:H21	1.84	0.42
1:N:263:A:C2	1:N:264:C:C5	3.08	0.42
1:N:148:G:N2	1:N:149:A:H1'	2.35	0.42
1:N:211:G:N2	1:N:213:G:C8	2.88	0.42
1:N:998:C:C4	1:N:999:C:C4	3.07	0.42
1:N:1072:G:C2	1:N:1073:U:C2	3.08	0.41
1:N:346:G:N2	1:N:347:G:C6	2.89	0.41
1:N:1113:C:C6	1:N:1114:C:H5	2.38	0.41
1:N:908:A:C2	1:N:909:A:C4	3.07	0.41
1:N:321:A:N7	1:N:328:C:H1'	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1239:A:N3	1:N:1241:G:C6	2.88	0.41
1:N:213:G:C8	1:N:214:C:C5	3.09	0.41
1:N:320:A:H4'	1:N:1435:G:H21	1.85	0.41
1:N:866:C:N3	1:N:873:A:H2	2.18	0.41
1:N:1343:G:C5	1:N:1344:C:C5	3.08	0.41
1:N:1086:U:H3'	1:N:1087:G:C5'	2.50	0.41
1:N:554:A:H2'	1:N:555:U:C6	2.55	0.41
1:N:922:G:H2'	1:N:923:A:C8	2.55	0.41
1:N:171:A:H2'	1:N:172:A:C8	2.54	0.41
1:N:1083:U:OP1	1:N:1086:U:C2	2.73	0.41
1:N:179:A:C5	1:N:180:U:C4	3.08	0.41
1:N:204:G:C8	1:N:204:G:H3'	2.55	0.41
1:N:136:C:C2	1:N:228:A:C2	3.09	0.41
1:N:1129:C:C5	1:N:1139:G:C8	3.08	0.41
1:N:1129:C:C6	1:N:1139:G:C8	3.08	0.41
1:N:1066:C:H3'	1:N:1067:A:C8	2.56	0.41
1:N:980:C:H4'	1:N:1219:A:OP2	2.20	0.41
1:N:465:A:C2	1:N:466:A:C4	3.08	0.41
1:N:761:G:C6	1:N:762:U:C4	3.08	0.41
1:N:342:C:C5	1:N:343:U:C4	3.08	0.41
1:N:763:G:C5	1:N:764:C:C4	3.08	0.41
1:N:668:G:N2	1:N:739:C:H1'	2.35	0.41
1:N:737:C:H2'	1:N:738:C:O4'	2.20	0.41
1:N:496:A:C2	1:N:497:G:C5	3.09	0.41
1:N:811:C:H2'	1:N:812:G:C5'	2.51	0.41
1:N:325:A:N6	1:N:326:G:C2	2.88	0.41
1:N:1213:A:H2'	1:N:1215:G:C8	2.55	0.41
1:N:635:A:C2	1:N:636:U:C2	3.08	0.41
1:N:460:A:C2	1:N:462:G:C8	3.09	0.41
1:N:387:U:H2'	1:N:389:A:C8	2.56	0.41
1:N:1068:G:C6	1:N:1108:G:C6	3.09	0.41
1:N:1366:C:H2'	1:N:1367:C:C6	2.55	0.41
1:N:109:A:C5	1:N:326:G:C5	3.08	0.41
1:N:1255:G:C6	1:N:1279:G:C5	3.09	0.41
1:N:1130:A:C6	1:N:1131:G:C4	3.08	0.41
1:N:1060:U:H3	1:N:1197:A:N6	2.18	0.41
1:N:852:G:C6	1:N:853:C:C4	3.08	0.41
1:N:893:C:C2	1:N:894:G:C8	3.09	0.41
1:N:54:C:H5'	1:N:351:G:N7	2.36	0.41
1:N:788:U:H2'	1:N:789:U:H6	1.85	0.41
1:N:588:G:C6	1:N:753:A:C8	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:384:G:C6	1:N:385:C:C4	3.09	0.41
1:N:125:U:H2'	1:N:126:G:O4'	2.21	0.41
1:N:1317:C:C5	1:N:1318:A:C6	3.09	0.41
1:N:1255:G:C4	1:N:1279:G:C6	3.09	0.41
1:N:852:G:C5	1:N:853:C:C4	3.08	0.41
1:N:934:C:C2	1:N:1344:C:C4	3.09	0.41
1:N:310:G:C6	1:N:311:C:C5	3.09	0.41
1:N:340:U:H1'	1:N:350:G:H22	1.85	0.41
1:N:723:U:H3	1:N:832:G:N2	2.19	0.41
1:N:986:U:H3	1:N:1219:A:H61	1.69	0.41
1:N:373:A:C2	1:N:482:A:N6	2.89	0.41
1:N:160:A:H2'	1:N:161:A:C8	2.56	0.41
1:N:1075:U:C4	1:N:1076:U:C4	3.09	0.41
1:N:679:C:C4	1:N:680:C:C4	3.09	0.41
1:N:1223:C:H5''	1:N:1224:U:H3'	2.02	0.41
1:N:1345:U:H4'	1:N:1346:A:H8	1.86	0.41
1:N:1157:A:C4	1:N:1181:G:C6	3.09	0.41
1:N:562:U:H4'	1:N:563:A:C4	2.56	0.41
1:N:316:C:O2	1:N:316:C:H2'	2.21	0.41
1:N:666:G:C2	1:N:667:G:C8	3.09	0.41
1:N:596:A:C6	1:N:645:G:N1	2.88	0.41
1:N:64:G:C4	1:N:99:C:C4	3.09	0.41
1:N:904:U:C2	1:N:905:U:C6	3.09	0.41
1:N:575:G:H2'	1:N:821:G:OP2	2.21	0.41
1:N:1093:A:C2	1:N:1110:A:C2	3.10	0.41
1:N:606:G:N2	1:N:633:G:C6	2.89	0.41
1:N:98:A:H2'	1:N:99:C:O4'	2.21	0.40
1:N:1394:A:C6	1:N:1501:C:H4'	2.56	0.40
1:N:1434:A:C6	1:N:1435:G:C6	3.09	0.40
1:N:347:G:C6	1:N:348:G:C4	3.09	0.40
1:N:447:G:H3'	1:N:447:G:C8	2.56	0.40
1:N:1012:A:C6	1:N:1018:G:C6	3.09	0.40
1:N:54:C:O2	1:N:358:U:C2	2.74	0.40
1:N:1124:G:C2	1:N:1127:G:N2	2.90	0.40
1:N:297:G:H22	1:N:299:G:H3'	1.86	0.40
1:N:903:G:C5	1:N:904:U:C4	3.09	0.40
1:N:483:C:H5	1:N:484:G:HO2'	1.69	0.40
1:N:675:A:C2	1:N:716:A:C2	3.09	0.40
1:N:363:A:C6	1:N:364:A:C6	3.10	0.40
1:N:663:A:H2	1:N:742:G:H22	1.69	0.40
1:N:786:G:C6	1:N:797:C:N3	2.89	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1230:C:H2'	1:N:1231:G:C8	2.56	0.40
1:N:1224:U:H5	1:N:1322:C:C4	2.39	0.40
1:N:1224:U:H5	1:N:1322:C:C5	2.39	0.40
1:N:431:A:C6	1:N:432:A:C4	3.10	0.40
1:N:202:G:C4	1:N:203:G:C8	3.10	0.40
1:N:1129:C:C2	1:N:1144:G:C2	3.09	0.40
1:N:500:G:C5	1:N:501:C:C5	3.09	0.40
1:N:985:C:C4	1:N:986:U:C4	3.09	0.40
1:N:1402:C:O2	1:N:1500:A:N1	2.54	0.40
1:N:1481:U:C4	1:N:1482:G:C6	3.09	0.40
1:N:236:A:C6	1:N:237:G:C5	3.10	0.40
1:N:959:A:H2	1:N:1221:G:N3	2.19	0.40
1:N:1156:G:H1'	1:N:1179:A:H61	1.86	0.40
1:N:254:G:OP2	1:N:266:G:H3'	2.22	0.40
1:N:203:G:O6	1:N:212:G:C6	2.74	0.40
1:N:769:G:OP1	1:N:802:A:C2	2.74	0.40
1:N:1099:G:C4	1:N:1102:A:OP1	2.75	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

There are no protein molecules in this entry.

5.3.2 Protein sidechains [i](#)

There are no protein molecules in this entry.

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	N	1532/1533 (99%)	449 (29%)	152 (9%)

All (449) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	N	3	A

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Mol	Chain	Res	Type
1	N	4	U
1	N	5	U
1	N	6	G
1	N	7	A
1	N	8	A
1	N	9	G
1	N	13	U
1	N	14	U
1	N	22	G
1	N	27	G
1	N	31	G
1	N	32	A
1	N	39	G
1	N	47	C
1	N	48	C
1	N	49	U
1	N	50	A
1	N	51	A
1	N	52	C
1	N	60	A
1	N	61	G
1	N	65	A
1	N	66	A
1	N	70	U
1	N	71	A
1	N	72	A
1	N	73	C
1	N	74	A
1	N	75	G
1	N	76	G
1	N	77	A
1	N	79	G
1	N	81	A
1	N	82	G
1	N	83	C
1	N	85	U
1	N	86	G
1	N	87	C
1	N	88	U
1	N	89	U
1	N	90	C
1	N	91	U

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Mol	Chain	Res	Type
1	N	92	U
1	N	94	G
1	N	95	C
1	N	97	G
1	N	107	G
1	N	108	G
1	N	109	A
1	N	110	C
1	N	115	G
1	N	116	A
1	N	119	A
1	N	120	A
1	N	127	G
1	N	130	A
1	N	131	A
1	N	132	C
1	N	134	G
1	N	135	C
1	N	138	G
1	N	141	G
1	N	143	A
1	N	159	G
1	N	160	A
1	N	161	A
1	N	163	C
1	N	164	G
1	N	173	U
1	N	174	A
1	N	177	G
1	N	181	A
1	N	182	A
1	N	183	C
1	N	189	A
1	N	195	A
1	N	197	A
1	N	198	G
1	N	199	A
1	N	202	G
1	N	205	A
1	N	207	C
1	N	208	U
1	N	209	U

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Mol	Chain	Res	Type
1	N	210	C
1	N	211	G
1	N	212	G
1	N	214	C
1	N	219	U
1	N	232	G
1	N	240	G
1	N	243	A
1	N	244	U
1	N	245	U
1	N	247	G
1	N	251	G
1	N	252	U
1	N	258	G
1	N	266	G
1	N	267	C
1	N	268	U
1	N	273	U
1	N	274	A
1	N	275	G
1	N	276	G
1	N	279	A
1	N	281	G
1	N	285	C
1	N	289	G
1	N	305	G
1	N	306	A
1	N	308	C
1	N	316	C
1	N	321	A
1	N	328	C
1	N	329	A
1	N	330	C
1	N	331	G
1	N	332	G
1	N	344	A
1	N	345	C
1	N	346	G
1	N	347	G
1	N	351	G
1	N	352	C
1	N	353	A

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Mol	Chain	Res	Type
1	N	354	G
1	N	363	A
1	N	366	A
1	N	367	U
1	N	369	G
1	N	373	A
1	N	374	A
1	N	384	G
1	N	390	U
1	N	391	G
1	N	392	C
1	N	398	U
1	N	406	G
1	N	411	A
1	N	412	A
1	N	413	G
1	N	414	A
1	N	421	U
1	N	422	C
1	N	423	G
1	N	424	G
1	N	428	G
1	N	429	U
1	N	430	A
1	N	431	A
1	N	439	U
1	N	441	A
1	N	451	A
1	N	452	A
1	N	458	U
1	N	459	A
1	N	461	A
1	N	462	G
1	N	463	U
1	N	466	A
1	N	467	U
1	N	468	A
1	N	469	C
1	N	481	G
1	N	482	A
1	N	484	G
1	N	485	U

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Mol	Chain	Res	Type
1	N	486	U
1	N	496	A
1	N	497	G
1	N	498	A
1	N	499	A
1	N	500	G
1	N	508	U
1	N	509	A
1	N	511	C
1	N	512	U
1	N	518	C
1	N	523	A
1	N	527	G
1	N	531	U
1	N	532	A
1	N	533	A
1	N	534	U
1	N	536	C
1	N	548	G
1	N	556	C
1	N	559	A
1	N	560	A
1	N	562	U
1	N	563	A
1	N	564	C
1	N	566	G
1	N	567	G
1	N	572	A
1	N	573	A
1	N	574	A
1	N	575	G
1	N	576	C
1	N	579	A
1	N	588	G
1	N	595	A
1	N	596	A
1	N	604	G
1	N	606	G
1	N	607	A
1	N	610	U
1	N	629	A
1	N	632	U

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Mol	Chain	Res	Type
1	N	633	G
1	N	642	A
1	N	649	A
1	N	665	A
1	N	694	A
1	N	702	A
1	N	703	G
1	N	718	A
1	N	719	C
1	N	720	C
1	N	721	G
1	N	722	G
1	N	723	U
1	N	724	G
1	N	731	G
1	N	748	G
1	N	753	A
1	N	754	C
1	N	755	G
1	N	767	A
1	N	776	G
1	N	777	A
1	N	787	A
1	N	788	U
1	N	792	A
1	N	793	U
1	N	794	A
1	N	802	A
1	N	812	G
1	N	813	U
1	N	815	A
1	N	816	A
1	N	817	C
1	N	818	G
1	N	819	A
1	N	828	U
1	N	829	G
1	N	832	G
1	N	843	U
1	N	844	G
1	N	846	G
1	N	855	U

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Mol	Chain	Res	Type
1	N	861	G
1	N	871	U
1	N	874	G
1	N	884	U
1	N	885	G
1	N	889	A
1	N	890	G
1	N	914	A
1	N	926	G
1	N	927	G
1	N	929	G
1	N	932	C
1	N	934	C
1	N	935	A
1	N	936	C
1	N	942	G
1	N	944	G
1	N	960	U
1	N	961	U
1	N	965	U
1	N	967	C
1	N	968	A
1	N	969	A
1	N	970	C
1	N	971	G
1	N	972	C
1	N	974	A
1	N	975	A
1	N	976	G
1	N	977	A
1	N	982	U
1	N	983	A
1	N	992	U
1	N	993	G
1	N	994	A
1	N	1003	G
1	N	1004	A
1	N	1008	U
1	N	1017	U
1	N	1018	G
1	N	1022	A
1	N	1028	C

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Mol	Chain	Res	Type
1	N	1029	U
1	N	1030	U
1	N	1031	C
1	N	1032	G
1	N	1034	G
1	N	1036	A
1	N	1050	G
1	N	1052	U
1	N	1053	G
1	N	1054	C
1	N	1055	A
1	N	1063	C
1	N	1064	G
1	N	1065	U
1	N	1066	C
1	N	1067	A
1	N	1085	U
1	N	1086	U
1	N	1087	G
1	N	1088	G
1	N	1091	U
1	N	1092	A
1	N	1094	G
1	N	1095	U
1	N	1100	C
1	N	1101	A
1	N	1102	A
1	N	1104	G
1	N	1111	A
1	N	1113	C
1	N	1124	G
1	N	1125	U
1	N	1126	U
1	N	1127	G
1	N	1129	C
1	N	1130	A
1	N	1133	G
1	N	1135	U
1	N	1137	C
1	N	1138	G
1	N	1139	G
1	N	1140	C

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Mol	Chain	Res	Type
1	N	1141	C
1	N	1144	G
1	N	1145	A
1	N	1151	A
1	N	1152	A
1	N	1158	C
1	N	1159	U
1	N	1160	G
1	N	1161	C
1	N	1167	A
1	N	1168	U
1	N	1169	A
1	N	1181	G
1	N	1182	G
1	N	1188	A
1	N	1190	G
1	N	1191	A
1	N	1192	C
1	N	1193	G
1	N	1196	A
1	N	1197	A
1	N	1198	G
1	N	1200	C
1	N	1201	A
1	N	1202	U
1	N	1211	U
1	N	1213	A
1	N	1223	C
1	N	1224	U
1	N	1225	A
1	N	1226	C
1	N	1227	A
1	N	1228	C
1	N	1238	A
1	N	1239	A
1	N	1240	U
1	N	1241	G
1	N	1250	A
1	N	1252	A
1	N	1256	A
1	N	1275	A
1	N	1278	G

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Mol	Chain	Res	Type
1	N	1279	G
1	N	1280	A
1	N	1281	C
1	N	1282	C
1	N	1283	U
1	N	1286	U
1	N	1287	A
1	N	1293	C
1	N	1297	G
1	N	1298	U
1	N	1299	A
1	N	1303	C
1	N	1305	G
1	N	1308	U
1	N	1315	U
1	N	1316	G
1	N	1320	C
1	N	1322	C
1	N	1323	G
1	N	1332	A
1	N	1336	C
1	N	1337	G
1	N	1338	G
1	N	1339	A
1	N	1346	A
1	N	1348	U
1	N	1353	G
1	N	1358	U
1	N	1359	C
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1365	G
1	N	1371	G
1	N	1380	U
1	N	1381	U
1	N	1392	G
1	N	1394	A
1	N	1396	A
1	N	1397	C
1	N	1399	C
1	N	1400	C

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Mol	Chain	Res	Type
1	N	1401	G
1	N	1406	U
1	N	1433	A
1	N	1441	A
1	N	1446	A
1	N	1448	C
1	N	1452	C
1	N	1453	G
1	N	1454	G
1	N	1469	C
1	N	1470	U
1	N	1492	A
1	N	1494	G
1	N	1497	G
1	N	1498	U
1	N	1499	A
1	N	1502	A
1	N	1503	A
1	N	1505	G
1	N	1506	U
1	N	1507	A
1	N	1517	G
1	N	1529	G
1	N	1530	G
1	N	1531	A
1	N	1532	U
1	N	1533	C
1	N	1534	A

All (152) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	N	5	U
1	N	7	A
1	N	13	U
1	N	30	U
1	N	47	C
1	N	51	A
1	N	60	A
1	N	65	A
1	N	70	U
1	N	71	A

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Mol	Chain	Res	Type
1	N	73	C
1	N	75	G
1	N	81	A
1	N	87	C
1	N	94	G
1	N	95	C
1	N	109	A
1	N	115	G
1	N	119	A
1	N	120	A
1	N	129	A
1	N	130	A
1	N	131	A
1	N	167	A
1	N	168	G
1	N	181	A
1	N	197	A
1	N	198	G
1	N	204	G
1	N	210	C
1	N	243	A
1	N	244	U
1	N	246	A
1	N	251	G
1	N	266	G
1	N	267	C
1	N	274	A
1	N	275	G
1	N	279	A
1	N	305	G
1	N	327	A
1	N	331	G
1	N	344	A
1	N	346	G
1	N	351	G
1	N	366	A
1	N	372	C
1	N	391	G
1	N	421	U
1	N	428	G
1	N	429	U
1	N	438	U

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Mol	Chain	Res	Type
1	N	450	G
1	N	451	A
1	N	467	U
1	N	480	U
1	N	481	G
1	N	484	G
1	N	485	U
1	N	490	C
1	N	495	A
1	N	496	A
1	N	499	A
1	N	500	G
1	N	508	U
1	N	511	C
1	N	531	U
1	N	532	A
1	N	535	A
1	N	547	A
1	N	559	A
1	N	563	A
1	N	566	G
1	N	572	A
1	N	575	G
1	N	576	C
1	N	641	U
1	N	686	U
1	N	717	U
1	N	721	G
1	N	723	U
1	N	733	G
1	N	752	G
1	N	754	C
1	N	776	G
1	N	777	A
1	N	811	C
1	N	817	C
1	N	862	C
1	N	870	U
1	N	884	U
1	N	913	A
1	N	934	C
1	N	941	G

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Mol	Chain	Res	Type
1	N	960	U
1	N	974	A
1	N	976	G
1	N	982	U
1	N	991	U
1	N	1041	G
1	N	1049	U
1	N	1053	G
1	N	1064	G
1	N	1066	C
1	N	1078	U
1	N	1085	U
1	N	1087	G
1	N	1092	A
1	N	1094	G
1	N	1101	A
1	N	1129	C
1	N	1151	A
1	N	1167	A
1	N	1168	U
1	N	1185	G
1	N	1189	U
1	N	1191	A
1	N	1197	A
1	N	1201	A
1	N	1224	U
1	N	1228	C
1	N	1239	A
1	N	1250	A
1	N	1263	C
1	N	1280	A
1	N	1282	C
1	N	1285	A
1	N	1299	A
1	N	1302	C
1	N	1303	C
1	N	1319	A
1	N	1331	G
1	N	1335	U
1	N	1336	C
1	N	1345	U
1	N	1348	U

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Mol	Chain	Res	Type
1	N	1358	U
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1380	U
1	N	1396	A
1	N	1399	C
1	N	1432	G
1	N	1440	U
1	N	1453	G
1	N	1498	U
1	N	1502	A
1	N	1506	U
1	N	1530	G
1	N	1532	U
1	N	1533	C

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

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.