



Full wwPDB EM Validation Report ⓘ

Dec 12, 2022 – 01:21 PM EST

PDB ID : 3J2E
EMDB ID : EMD-5507
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 : 15.30 Å (reported)
Based on initial model : 3OFA

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

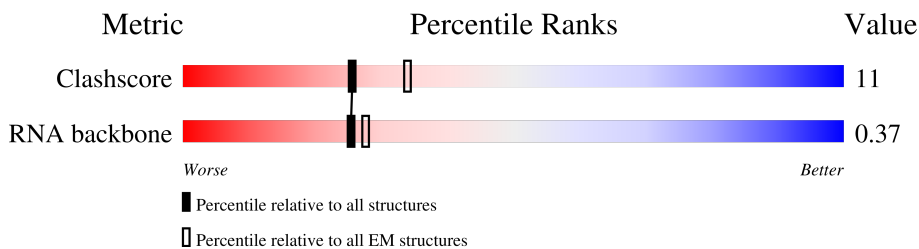
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 15.30 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	158937	4297
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	N	1533	<div> <div>6%</div> <div>16%</div> <div>38%</div> <div>46%</div> </div>

2 Entry composition

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.

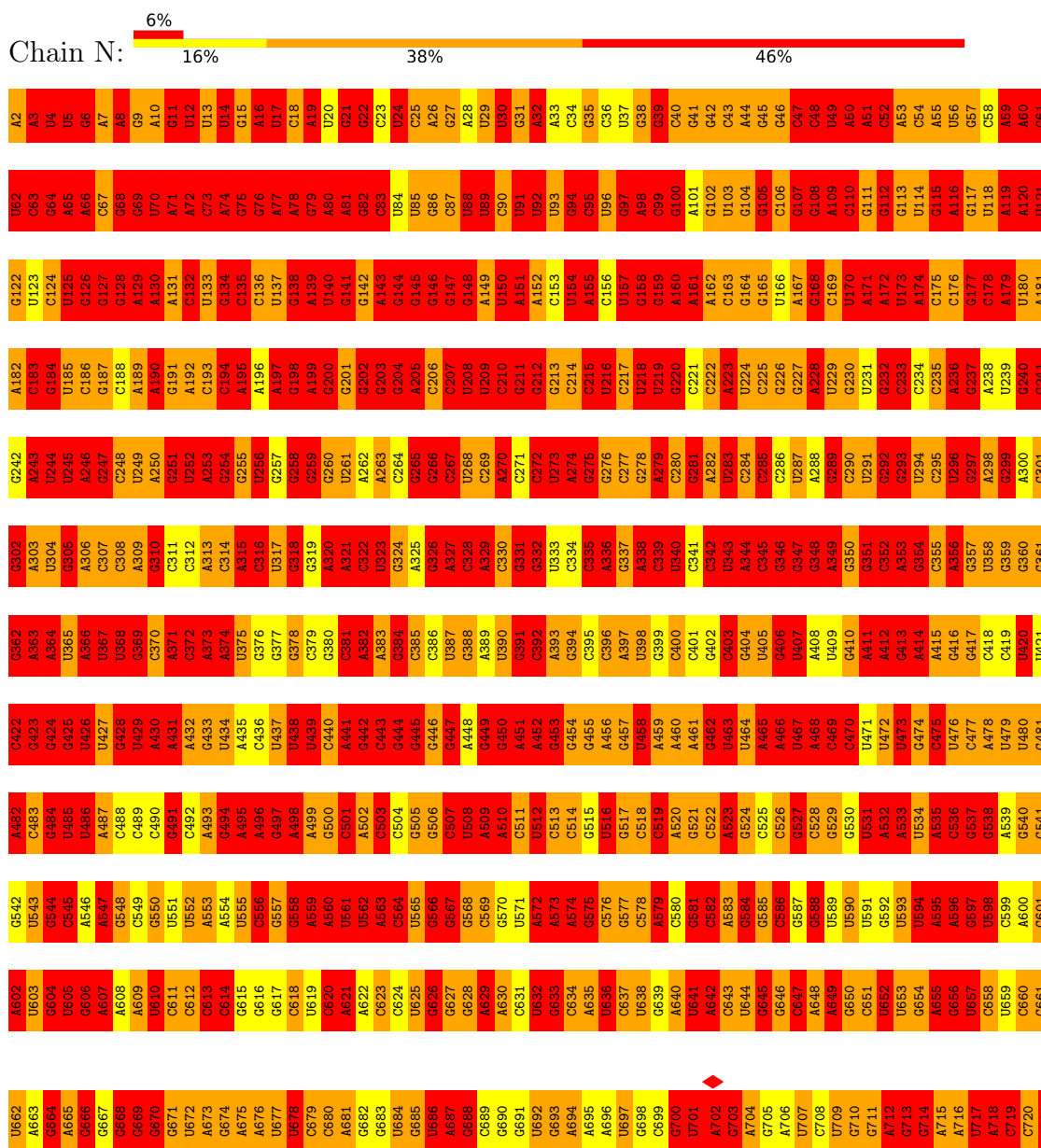
- Molecule 1 is a RNA chain called 16S rRNA.

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, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. 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. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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	G1142	A1082	A1022	C962	G902	U842	A782	G722
A1503	G1443	C1383	G1143	U1083	U1023	G963	G903	U843	C783	U723
G1504	G1444	A1324	G1144	G1084	G1024	A964	U904	G844	C784	G724
G1505	U1444	U1264	A1145	U1085	U1025	U965	U905	A845	G785	G725
U1506	U1445	U1327	G1265	U1086	G1026	G966	A906	G846	G786	G726
U1507	G1387	G1267	C1147	U1087	U1027	C967	A907	G847	G787	G727
A1508	C1328	C1267	U1148	G1088	C1027	A968	A908	C848	U788	A728
C1509	A1329	G1268	C1149	U1089	G1028	A969	A909	G849	U789	A729
C1510	G1331	A1269	A1150	U1090	C1028	U969	C910	U850	A790	G730
G1511	G1331	G1270	A1151	U1091	U1029	C970	U911	G851	G791	G731
U1512	A1332	A1271	A1152	A1092	U1029	C971	C912	G852	A792	G732
U1513	G1333	G1272	G1153	A1093	U1030	C972	A913	C853	U793	G733
A1514	G1334	C1273	A1213	G1094	C1031	G973	A914	U854	A794	G734
G1515	U1335	C1273	A1155	U1095	G1032	A974	A915	U855	C795	C735
G1516	G1336	A1274	G1156	C1096	G1033	A975	U916	C856	C796	C736
G1517	C1337	A1275	A1157	C1097	G1034	G976	G917	C857	C797	C737
A1518	G1338	G1276	U1158	C1098	A1035	A977	A918	G858	U798	C738
A1519	A1339	C1277	C1159	G1099	A1035	A978	A919	G859	G799	C739
G1520	C1340	G1278	U1160	C1100	A1036	C979	U920	A860	G800	U740
C1521	U1341	G1279	C1161	A1101	C1037	C980	U921	C861	U801	G741
G1522	C1342	A1280	C1162	A1102	U1038	U981	G922	C862	A802	G742
C1523	G1343	C1281	A1163	C1103	G1039	U982	A923	U863	G803	A743
C1524	C1344	U1283	G1164	G1104	U1040	A983	C924	A864	U804	C744
G1525	U1345	U1284	U1165	A1105	G1041	C984	G925	A865	C805	G745
G1526	A1346	A1285	G1166	G1106	A1042	C985	G926	C866	C806	G746
U1527	G1347	U1286	A1167	C1107	G1043	U986	G927	C867	A807	A747
U1528	U1348	A1287	U1168	G1108	A1044	G987	G928	C868	C808	G748
G1529	A1349	A1288	A1169	C1109	C1045	G988	G929	G869	G809	A749
A1530	A1350	A1289	A1170	A1110	U1046	U989	C930	U870	C810	C750
A1531	U1351	G1290	A1171	C1230	A1046	C990	C931	U871	U751	C751
C1532	G1352	U1291	C1172	C1112	G1047	U991	C932	A872	G812	G752
C1533	C1353	U1292	U1173	C1113	G1048	U992	C933	A873	U813	A753
A1534	U1354	C1293	G1174	C1114	U1049	G993	C934	G874	A814	G754
U1470	A1413	C1294	G1175	U1115	G1050	A994	A935	U875	A815	G755
U1471	G1355	U1295	A1176	U1116	C1081	C995	C936	C876	A816	C756
G1472	A1357	U1296	G1177	A1117	U1052	A996	A937	G877	C817	U757
G1473	G1358	G1297	G1178	U1118	G1053	U997	A938	A878	G818	C758
U1474	C1359	U1298	A1179	C1119	C1054	C998	C939	C879	A819	A759
U1475	A1360	U1299	U1180	C1120	A1055	C999	C940	C880	U820	G760
G1476	G1361	G1300	G1181	U1121	U1056	A1000	G941	G881	G821	G761
U1477	A1362	U1301	U1182	U1122	G1057	C1001	G942	C882	U822	U762
U1478	A1363	C1302	U1183	U1123	G1058	G1002	U943	C883	C823	G763
U1479	U1364	C1303	G1184	G1124	C1059	G1003	G944	U884	G824	C764
C1472	G1365	G1304	G1185	U1125	U1060	A1004	G945	G885	A825	G765
G1423	C1366	G1305	G1186	U1126	G1061	A1005	G946	C886	C826	A766
U1424	C1367	A1306	G1187	G1127	U1062	G1006	C947	G887	U827	A767
U1425	A1368	U1307	U1188	C1128	G1064	G1007	C948	G888	U828	A768
G1426	C1369	U1308	U1189	C1129	U1065	U1007	A949	A889	G829	G769
G1427	G1370	G1309	U1190	A1130	C1066	U1008	G950	G890	G830	C770
A1483	U1371	G1310	A1191	G1131	G1067	U1009	G951	U891	A831	G771
C1428	U1372	A1311	C1192	C1132	A1068	U1010	U952	A892	C832	U772
A1429	G1373	G1312	G1193	G1133	C1069	U1010	G953	C893	G833	G773
A1430	A1374	U1313	U1194	C1134	C1069	C1011	G954	G894	U834	G774
A1431	A1375	C1314	C1195	U1135	U1070	A1012	U955	G895	U835	G775
G1432	U1376	U1315	A1196	C1136	G1071	G1013	U956	C896	G836	G776
G1433	A1377	G1316	A1197	C1137	G1072	A1014	U957	C897	U837	A777
G1489	C1378	C1317	G1198	G1138	U1073	G1015	A958	C898	G838	G778
U1490	G1379	A1318	U1199	C1139	G1074	A1016	A959	C899	C839	C779
G1491	U1380	A1319	C1200	G1140	U1075	U1017	U960	A900	A780	A781
A1492	U1381	C1320	A1201	C1141	G1076	G1018	U961	A901	C841	
A1493	A1437	U1321			U1078	G1019				
G1494	G1438				A1080	G1020				
U1495	G1439				A1081	A1021				
G1496	U1440									
G1497	U1441									
U1498										
A1499										
A1500										
C1501										

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	29012	Depositor
Resolution determination method	FSC 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 x 4k)	Depositor
Maximum map value	3.830	Depositor
Minimum map value	-6.331	Depositor
Average map value	-4.159	Depositor
Map value standard deviation	0.542	Depositor
Recommended contour level	-2.5	Depositor
Map size (\AA)	375.0, 375.0, 375.0	wwPDB
Map dimensions	125, 125, 125	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	3, 3, 3	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	$\# Z > 5$	RMSZ	$\# Z > 5$
1	N	3.49	5336/36831 (14.5%)	3.98	9479/57458 (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	1016

All (5336) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	119	A	N7-C5	-20.91	1.26	1.39
1	N	1181	G	N7-C5	-19.67	1.27	1.39
1	N	1155	A	N7-C5	-19.13	1.27	1.39
1	N	262	A	N7-C5	-18.91	1.27	1.39
1	N	663	A	N7-C5	-18.43	1.28	1.39
1	N	706	A	N7-C5	-18.22	1.28	1.39
1	N	1518	A	N7-C5	-18.14	1.28	1.39
1	N	1441	A	N7-C5	-17.63	1.28	1.39
1	N	176	C	N1-C6	17.62	1.47	1.37
1	N	993	G	N7-C5	-17.24	1.28	1.39
1	N	366	A	N7-C5	-17.23	1.28	1.39
1	N	707	U	C2-N3	16.95	1.49	1.37
1	N	268	U	C2-N3	16.69	1.49	1.37
1	N	36	C	N3-C4	16.65	1.45	1.33
1	N	1532	U	C2-N3	16.57	1.49	1.37
1	N	336	A	N9-C8	16.45	1.50	1.37
1	N	1102	A	N7-C5	-16.16	1.29	1.39
1	N	1466	C	N1-C6	16.04	1.46	1.37
1	N	1188	A	N9-C4	15.89	1.47	1.37
1	N	1033	G	C6-N1	15.80	1.50	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	691	G	C2-N3	15.76	1.45	1.32
1	N	753	A	N3-C4	-15.76	1.25	1.34
1	N	547	A	N9-C4	-15.72	1.28	1.37
1	N	505	G	N7-C5	-15.64	1.29	1.39
1	N	67	C	N1-C6	15.54	1.46	1.37
1	N	838	G	N7-C5	-15.48	1.29	1.39
1	N	576	C	C4-C5	15.47	1.55	1.43
1	N	767	A	N7-C5	-15.27	1.30	1.39
1	N	1249	C	N1-C6	15.09	1.46	1.37
1	N	1080	A	N7-C5	-15.06	1.30	1.39
1	N	1357	A	N7-C5	-14.97	1.30	1.39
1	N	563	A	N7-C5	-14.88	1.30	1.39
1	N	132	C	N3-C4	14.85	1.44	1.33
1	N	378	G	N7-C5	-14.84	1.30	1.39
1	N	642	A	N9-C4	14.67	1.46	1.37
1	N	687	A	N3-C4	-14.45	1.26	1.34
1	N	227	G	N9-C8	14.37	1.48	1.37
1	N	915	A	N9-C4	-14.36	1.29	1.37
1	N	1194	U	C2-N3	14.33	1.47	1.37
1	N	558	G	C6-N1	14.30	1.49	1.39
1	N	576	C	N1-C6	14.28	1.45	1.37
1	N	663	A	N3-C4	-14.18	1.26	1.34
1	N	118	U	C2-N3	14.14	1.47	1.37
1	N	129	A	N7-C5	-14.09	1.30	1.39
1	N	824	G	N9-C4	-14.08	1.26	1.38
1	N	588	G	N7-C5	-14.06	1.30	1.39
1	N	1417	G	N7-C5	-14.01	1.30	1.39
1	N	1427	C	N1-C6	13.95	1.45	1.37
1	N	709	U	C2-N3	13.95	1.47	1.37
1	N	451	A	N3-C4	-13.80	1.26	1.34
1	N	1229	A	C6-N6	13.78	1.45	1.33
1	N	1180	A	N7-C5	-13.72	1.31	1.39
1	N	1019	A	N7-C5	-13.71	1.31	1.39
1	N	182	A	N9-C4	-13.71	1.29	1.37
1	N	694	A	N7-C5	-13.68	1.31	1.39
1	N	347	G	C6-N1	13.59	1.49	1.39
1	N	166	U	P-O5'	-13.58	1.46	1.59
1	N	1508	A	N3-C4	-13.58	1.26	1.34
1	N	199	A	N7-C5	-13.55	1.31	1.39
1	N	1468	A	C8-N7	-13.53	1.22	1.31
1	N	696	A	N3-C4	-13.50	1.26	1.34
1	N	540	G	C6-N1	13.41	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1197	A	C6-N6	13.38	1.44	1.33
1	N	471	U	N3-C4	13.38	1.50	1.38
1	N	1143	G	C6-N1	13.38	1.49	1.39
1	N	977	A	N7-C5	-13.36	1.31	1.39
1	N	1236	A	N9-C4	-13.35	1.29	1.37
1	N	1342	C	N3-C4	13.31	1.43	1.33
1	N	718	A	N7-C5	-13.27	1.31	1.39
1	N	1290	G	N7-C5	-13.26	1.31	1.39
1	N	1018	G	C8-N7	-13.15	1.23	1.30
1	N	670	G	C6-N1	13.12	1.48	1.39
1	N	584	G	C2-N3	13.11	1.43	1.32
1	N	1080	A	C6-N6	13.02	1.44	1.33
1	N	306	A	N7-C5	-12.94	1.31	1.39
1	N	866	C	N3-C4	12.94	1.43	1.33
1	N	703	G	N3-C4	-12.92	1.26	1.35
1	N	207	C	N1-C6	12.89	1.44	1.37
1	N	43	C	N1-C6	12.88	1.44	1.37
1	N	342	C	N1-C6	12.87	1.44	1.37
1	N	928	G	C6-N1	12.86	1.48	1.39
1	N	1215	G	C5-C4	12.86	1.47	1.38
1	N	22	G	C8-N7	-12.85	1.23	1.30
1	N	48	C	N3-C4	12.83	1.43	1.33
1	N	577	G	C6-N1	12.79	1.48	1.39
1	N	553	A	N7-C5	-12.78	1.31	1.39
1	N	104	G	N7-C5	-12.74	1.31	1.39
1	N	1275	A	N7-C5	-12.73	1.31	1.39
1	N	210	C	N1-C6	12.70	1.44	1.37
1	N	725	G	C2-N3	12.69	1.43	1.32
1	N	78	A	N7-C5	-12.69	1.31	1.39
1	N	1365	G	N7-C5	-12.65	1.31	1.39
1	N	152	A	C6-N6	12.65	1.44	1.33
1	N	587	G	N1-C2	12.63	1.47	1.37
1	N	1265	C	N3-C4	12.62	1.42	1.33
1	N	1191	A	N9-C4	12.57	1.45	1.37
1	N	901	A	C5-C4	12.56	1.47	1.38
1	N	948	C	N1-C6	12.54	1.44	1.37
1	N	963	G	C2-N3	12.52	1.42	1.32
1	N	1433	A	N3-C4	-12.49	1.27	1.34
1	N	274	A	P-O5'	-12.48	1.47	1.59
1	N	1311	A	N9-C4	-12.43	1.30	1.37
1	N	49	U	N1-C6	12.43	1.49	1.38
1	N	856	C	C2'-C1'	-12.41	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	356	A	N7-C5	-12.41	1.31	1.39
1	N	495	A	N3-C4	-12.40	1.27	1.34
1	N	1431	A	N7-C5	-12.36	1.31	1.39
1	N	375	U	C2-N3	12.35	1.46	1.37
1	N	117	G	C8-N7	-12.35	1.23	1.30
1	N	1392	G	C8-N7	-12.35	1.23	1.30
1	N	1385	G	N3-C4	-12.30	1.26	1.35
1	N	898	G	N9-C4	-12.29	1.28	1.38
1	N	818	G	C6-N1	12.28	1.48	1.39
1	N	453	G	C2-N3	12.27	1.42	1.32
1	N	1507	A	N7-C5	12.27	1.46	1.39
1	N	993	G	C8-N7	-12.24	1.23	1.30
1	N	262	A	C6-N1	12.22	1.44	1.35
1	N	574	A	C4'-C3'	12.22	1.66	1.53
1	N	1304	G	N1-C2	12.20	1.47	1.37
1	N	738	C	N1-C6	12.18	1.44	1.37
1	N	1316	G	N7-C5	-12.18	1.31	1.39
1	N	411	A	N7-C5	-12.18	1.31	1.39
1	N	1204	A	N9-C4	-12.18	1.30	1.37
1	N	1424	U	C2-N3	12.18	1.46	1.37
1	N	1489	G	N7-C5	-12.16	1.31	1.39
1	N	496	A	N7-C5	-12.15	1.31	1.39
1	N	1236	A	C6-N6	12.15	1.43	1.33
1	N	1499	A	C6-N6	12.13	1.43	1.33
1	N	269	C	N3-C4	12.12	1.42	1.33
1	N	767	A	P-O5'	-12.12	1.47	1.59
1	N	329	A	N7-C5	-12.09	1.31	1.39
1	N	939	G	C6-N1	12.07	1.48	1.39
1	N	65	A	N9-C4	-12.04	1.30	1.37
1	N	1213	A	N7-C5	-12.03	1.32	1.39
1	N	1253	G	N7-C5	-11.99	1.32	1.39
1	N	969	A	N7-C5	-11.99	1.32	1.39
1	N	665	A	N7-C5	-11.95	1.32	1.39
1	N	1104	G	N1-C2	11.95	1.47	1.37
1	N	327	A	C5-C4	-11.93	1.30	1.38
1	N	1246	A	C8-N7	-11.89	1.23	1.31
1	N	322	C	N1-C6	11.89	1.44	1.37
1	N	424	G	N7-C5	-11.89	1.32	1.39
1	N	1453	G	C8-N7	11.87	1.38	1.30
1	N	1090	U	C2-N3	11.86	1.46	1.37
1	N	560	A	N7-C5	-11.85	1.32	1.39
1	N	865	A	C6-N1	11.84	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	201	G	N9-C4	-11.84	1.28	1.38
1	N	1246	A	N7-C5	-11.84	1.32	1.39
1	N	309	A	C6-N1	11.83	1.43	1.35
1	N	234	C	N1-C6	11.83	1.44	1.37
1	N	108	G	N7-C5	-11.81	1.32	1.39
1	N	247	G	N3-C4	11.80	1.43	1.35
1	N	482	A	C8-N7	-11.78	1.23	1.31
1	N	332	G	P-O5'	-11.78	1.48	1.59
1	N	490	C	N1-C6	11.78	1.44	1.37
1	N	851	G	N7-C5	-11.77	1.32	1.39
1	N	348	G	C2-N3	11.76	1.42	1.32
1	N	1138	G	N3-C4	-11.74	1.27	1.35
1	N	533	A	N7-C5	-11.74	1.32	1.39
1	N	1430	A	N9-C4	-11.74	1.30	1.37
1	N	193	C	N3-C4	11.66	1.42	1.33
1	N	94	G	C6-N1	11.65	1.47	1.39
1	N	911	U	C2-N3	11.62	1.45	1.37
1	N	1044	A	N9-C8	-11.61	1.28	1.37
1	N	812	G	N7-C5	-11.59	1.32	1.39
1	N	1483	A	N9-C4	11.59	1.44	1.37
1	N	1244	G	N3-C4	-11.58	1.27	1.35
1	N	749	A	C6-N6	11.57	1.43	1.33
1	N	1465	A	C5-C4	11.53	1.46	1.38
1	N	893	C	N1-C6	11.53	1.44	1.37
1	N	524	G	C6-N1	11.52	1.47	1.39
1	N	1522	U	N1-C6	11.52	1.48	1.38
1	N	1109	C	C2-N3	11.51	1.45	1.35
1	N	595	A	N3-C4	-11.50	1.27	1.34
1	N	266	G	C2'-C1'	-11.50	1.40	1.53
1	N	738	C	P-O5'	-11.49	1.48	1.59
1	N	1034	G	N7-C5	-11.48	1.32	1.39
1	N	90	C	N3-C4	11.45	1.42	1.33
1	N	42	G	N3-C4	-11.45	1.27	1.35
1	N	433	G	C8-N7	-11.45	1.24	1.30
1	N	539	A	N3-C4	-11.44	1.27	1.34
1	N	951	G	N3-C4	-11.44	1.27	1.35
1	N	1379	G	N7-C5	-11.43	1.32	1.39
1	N	200	G	C8-N7	-11.43	1.24	1.30
1	N	39	G	C4'-C3'	11.43	1.65	1.53
1	N	760	G	C8-N7	-11.43	1.24	1.30
1	N	42	G	P-O5'	-11.41	1.48	1.59
1	N	892	A	N7-C5	-11.41	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1494	G	C6-N1	11.38	1.47	1.39
1	N	786	G	C2-N3	11.37	1.41	1.32
1	N	1027	C	N3-C4	11.37	1.42	1.33
1	N	321	A	C6-N1	11.34	1.43	1.35
1	N	293	G	C6-N1	11.32	1.47	1.39
1	N	1224	U	C2-N3	11.31	1.45	1.37
1	N	941	G	C2-N3	11.31	1.41	1.32
1	N	524	G	C2-N3	11.30	1.41	1.32
1	N	495	A	C6-N6	11.30	1.43	1.33
1	N	260	G	C2-N3	11.29	1.41	1.32
1	N	172	A	P-O5'	-11.28	1.48	1.59
1	N	804	U	C5'-C4'	11.28	1.64	1.51
1	N	1248	A	C6-N6	11.27	1.43	1.33
1	N	628	G	N7-C5	-11.25	1.32	1.39
1	N	162	A	N7-C5	-11.25	1.32	1.39
1	N	1077	G	N3-C4	-11.25	1.27	1.35
1	N	6	G	N7-C5	-11.23	1.32	1.39
1	N	303	A	N7-C5	-11.22	1.32	1.39
1	N	215	C	C4-N4	11.20	1.44	1.33
1	N	241	G	C2-N3	11.20	1.41	1.32
1	N	878	A	N3-C4	11.20	1.41	1.34
1	N	80	A	N7-C5	-11.19	1.32	1.39
1	N	539	A	C8-N7	-11.19	1.23	1.31
1	N	1511	G	C6-N1	11.19	1.47	1.39
1	N	1058	G	N7-C5	-11.18	1.32	1.39
1	N	308	C	C4-C5	11.16	1.51	1.43
1	N	222	C	N3-C4	11.15	1.41	1.33
1	N	1457	G	N7-C5	-11.15	1.32	1.39
1	N	270	A	C8-N7	-11.13	1.23	1.31
1	N	581	G	P-O5'	-11.13	1.48	1.59
1	N	1201	A	C6-N6	11.13	1.42	1.33
1	N	520	A	N7-C5	-11.12	1.32	1.39
1	N	265	G	C6-N1	11.10	1.47	1.39
1	N	1313	U	C2-N3	11.10	1.45	1.37
1	N	882	C	N3-C4	11.09	1.41	1.33
1	N	641	U	O3'-P	-11.07	1.47	1.61
1	N	881	G	C6-N1	11.06	1.47	1.39
1	N	1229	A	N7-C5	-11.05	1.32	1.39
1	N	983	A	N3-C4	-11.03	1.28	1.34
1	N	1105	A	N7-C5	-11.03	1.32	1.39
1	N	895	G	N9-C4	-11.03	1.29	1.38
1	N	159	G	C5-C4	11.02	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	937	A	N7-C5	-11.00	1.32	1.39
1	N	745	G	C2-N3	10.99	1.41	1.32
1	N	752	G	N7-C5	-10.99	1.32	1.39
1	N	616	G	C6-N1	10.98	1.47	1.39
1	N	1191	A	N3-C4	10.98	1.41	1.34
1	N	1163	A	N7-C5	-10.97	1.32	1.39
1	N	996	A	N7-C5	-10.97	1.32	1.39
1	N	1468	A	N9-C4	-10.96	1.31	1.37
1	N	766	A	C6-N1	10.95	1.43	1.35
1	N	1181	G	C2'-C1'	-10.95	1.41	1.53
1	N	292	G	C5-C6	-10.95	1.31	1.42
1	N	219	U	C2-N3	10.94	1.45	1.37
1	N	381	C	C4-N4	10.94	1.43	1.33
1	N	575	G	N7-C5	-10.93	1.32	1.39
1	N	165	G	N3-C4	-10.93	1.27	1.35
1	N	997	U	C2-N3	10.93	1.45	1.37
1	N	1510	C	C2'-C1'	-10.92	1.41	1.53
1	N	789	U	C2-N3	10.91	1.45	1.37
1	N	1174	G	N3-C4	-10.91	1.27	1.35
1	N	1042	A	N9-C4	-10.90	1.31	1.37
1	N	1243	C	N3-C4	10.87	1.41	1.33
1	N	284	C	P-O5'	-10.86	1.48	1.59
1	N	1350	A	N9-C4	10.85	1.44	1.37
1	N	470	C	N1-C6	10.85	1.43	1.37
1	N	742	G	C6-N1	10.85	1.47	1.39
1	N	147	G	N9-C8	-10.84	1.30	1.37
1	N	955	U	C2-N3	10.84	1.45	1.37
1	N	247	G	C6-N1	10.83	1.47	1.39
1	N	106	C	N1-C6	10.83	1.43	1.37
1	N	1106	G	N7-C5	-10.83	1.32	1.39
1	N	1191	A	O3'-P	-10.82	1.48	1.61
1	N	1521	C	N1-C6	10.82	1.43	1.37
1	N	900	A	N7-C5	-10.81	1.32	1.39
1	N	1242	G	N7-C5	-10.81	1.32	1.39
1	N	1221	G	N1-C2	10.81	1.46	1.37
1	N	138	G	N7-C5	-10.80	1.32	1.39
1	N	923	A	N7-C5	-10.80	1.32	1.39
1	N	1081	A	N3-C4	-10.77	1.28	1.34
1	N	825	A	N9-C4	10.76	1.44	1.37
1	N	944	G	N9-C4	-10.76	1.29	1.38
1	N	1399	C	C4-C5	10.74	1.51	1.43
1	N	588	G	N1-C2	10.73	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1181	G	C5-C6	-10.73	1.31	1.42
1	N	918	A	C6-N6	10.72	1.42	1.33
1	N	51	A	C5-C4	10.72	1.46	1.38
1	N	295	C	N3-C4	10.71	1.41	1.33
1	N	860	A	N9-C4	-10.71	1.31	1.37
1	N	1246	A	C6-N6	10.70	1.42	1.33
1	N	354	G	N9-C8	10.69	1.45	1.37
1	N	105	G	N9-C4	-10.68	1.29	1.38
1	N	1428	A	P-O5'	-10.67	1.49	1.59
1	N	654	G	C6-N1	10.64	1.47	1.39
1	N	250	A	C5-C4	10.64	1.46	1.38
1	N	1012	A	C6-N6	10.63	1.42	1.33
1	N	1012	A	N3-C4	-10.63	1.28	1.34
1	N	130	A	N9-C4	-10.62	1.31	1.37
1	N	1127	G	N7-C5	-10.62	1.32	1.39
1	N	1310	G	C6-N1	10.61	1.47	1.39
1	N	568	G	N3-C4	-10.61	1.28	1.35
1	N	727	G	C2-N3	10.60	1.41	1.32
1	N	922	G	C8-N7	10.60	1.37	1.30
1	N	1177	G	N7-C5	-10.57	1.32	1.39
1	N	257	G	N1-C2	10.57	1.46	1.37
1	N	413	G	C2-N3	10.56	1.41	1.32
1	N	438	U	O3'-P	-10.56	1.48	1.61
1	N	452	A	N9-C8	-10.56	1.29	1.37
1	N	1059	C	N1-C6	10.54	1.43	1.37
1	N	582	C	N3-C4	10.54	1.41	1.33
1	N	69	G	N1-C2	10.53	1.46	1.37
1	N	197	A	C6-N6	10.51	1.42	1.33
1	N	211	G	N1-C2	10.51	1.46	1.37
1	N	595	A	C4'-C3'	10.50	1.64	1.53
1	N	1429	A	N7-C5	-10.49	1.32	1.39
1	N	1247	U	N3-C4	10.49	1.47	1.38
1	N	346	G	C5-C4	10.48	1.45	1.38
1	N	1426	G	C6-N1	10.48	1.46	1.39
1	N	1053	G	N1-C2	10.48	1.46	1.37
1	N	302	G	N1-C2	10.48	1.46	1.37
1	N	740	U	C2-N3	10.46	1.45	1.37
1	N	451	A	C6-N6	10.46	1.42	1.33
1	N	570	G	C8-N7	-10.45	1.24	1.30
1	N	1067	A	C6-N1	10.44	1.42	1.35
1	N	831	A	C6-N6	10.44	1.42	1.33
1	N	902	G	C2'-C1'	-10.43	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1459	G	C2-N3	10.43	1.41	1.32
1	N	710	G	N7-C5	-10.42	1.32	1.39
1	N	1165	U	C2-N3	10.42	1.45	1.37
1	N	1183	U	N1-C6	10.41	1.47	1.38
1	N	988	G	N1-C2	10.40	1.46	1.37
1	N	1394	A	C6-N6	10.39	1.42	1.33
1	N	552	U	C2-N3	10.38	1.45	1.37
1	N	1526	G	C8-N7	-10.37	1.24	1.30
1	N	1047	G	C8-N7	-10.36	1.24	1.30
1	N	1134	G	N9-C4	-10.36	1.29	1.38
1	N	1230	C	P-O5'	-10.35	1.49	1.59
1	N	298	A	N9-C8	10.34	1.46	1.37
1	N	506	G	C2-N3	10.32	1.41	1.32
1	N	221	C	N1-C6	10.31	1.43	1.37
1	N	478	A	P-O5'	-10.31	1.49	1.59
1	N	1418	A	N9-C4	10.31	1.44	1.37
1	N	534	U	O3'-P	-10.31	1.48	1.61
1	N	503	C	C4-N4	10.30	1.43	1.33
1	N	993	G	C2-N3	10.30	1.41	1.32
1	N	1181	G	N9-C4	-10.30	1.29	1.38
1	N	101	A	N9-C4	-10.30	1.31	1.37
1	N	271	C	N1-C6	10.29	1.43	1.37
1	N	1117	A	P-O5'	-10.29	1.49	1.59
1	N	393	A	C5-C4	10.28	1.46	1.38
1	N	1134	G	N1-C2	10.28	1.46	1.37
1	N	1377	A	N7-C5	-10.28	1.33	1.39
1	N	806	C	N3-C4	10.28	1.41	1.33
1	N	1323	G	C2'-C1'	-10.28	1.42	1.53
1	N	515	G	N9-C8	-10.27	1.30	1.37
1	N	760	G	C5-C4	-10.26	1.31	1.38
1	N	661	G	C2-N3	10.26	1.41	1.32
1	N	1473	G	O4'-C1'	10.25	1.54	1.41
1	N	15	G	N7-C5	-10.24	1.33	1.39
1	N	325	A	N7-C5	-10.24	1.33	1.39
1	N	646	G	N9-C4	-10.24	1.29	1.38
1	N	1104	G	C5'-C4'	10.24	1.63	1.51
1	N	951	G	C6-N1	10.22	1.46	1.39
1	N	62	U	N1-C2	-10.22	1.29	1.38
1	N	1279	G	C4'-C3'	10.22	1.64	1.53
1	N	240	G	C5-C4	-10.22	1.31	1.38
1	N	1381	U	N1-C2	10.21	1.47	1.38
1	N	267	C	O3'-P	-10.21	1.48	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	324	G	C2'-C1'	-10.21	1.42	1.53
1	N	351	G	N7-C5	-10.21	1.33	1.39
1	N	369	G	N9-C8	10.20	1.45	1.37
1	N	971	G	N7-C5	10.20	1.45	1.39
1	N	810	C	N1-C6	10.20	1.43	1.37
1	N	73	C	N3-C4	10.19	1.41	1.33
1	N	684	U	N3-C4	10.19	1.47	1.38
1	N	1309	G	C8-N7	-10.19	1.24	1.30
1	N	1335	U	P-O5'	-10.19	1.49	1.59
1	N	131	A	C5-C4	-10.18	1.31	1.38
1	N	79	G	N7-C5	-10.17	1.33	1.39
1	N	53	A	C6-N6	10.16	1.42	1.33
1	N	1216	A	C6-N6	10.16	1.42	1.33
1	N	389	A	C6-N1	10.15	1.42	1.35
1	N	430	A	N7-C5	10.15	1.45	1.39
1	N	460	A	N7-C5	-10.15	1.33	1.39
1	N	1396	A	N9-C4	-10.13	1.31	1.37
1	N	1181	G	N3-C4	-10.12	1.28	1.35
1	N	441	A	N7-C5	-10.12	1.33	1.39
1	N	1024	G	C8-N7	-10.12	1.24	1.30
1	N	772	U	N3-C4	10.12	1.47	1.38
1	N	1144	G	C5-C4	10.12	1.45	1.38
1	N	1477	U	C2-N3	10.12	1.44	1.37
1	N	1181	G	C2-N3	10.11	1.40	1.32
1	N	1502	A	C2'-C1'	-10.11	1.42	1.53
1	N	547	A	N7-C5	-10.11	1.33	1.39
1	N	1344	C	N3-C4	10.10	1.41	1.33
1	N	1402	C	N1-C6	10.09	1.43	1.37
1	N	1439	G	N7-C5	-10.08	1.33	1.39
1	N	1103	C	C5-C6	10.08	1.42	1.34
1	N	516	U	C5'-C4'	10.07	1.63	1.51
1	N	613	C	C2-N3	10.07	1.43	1.35
1	N	694	A	C6-N6	10.07	1.42	1.33
1	N	708	C	N3-C4	10.07	1.41	1.33
1	N	762	U	O3'-P	-10.06	1.49	1.61
1	N	254	G	P-O5'	-10.05	1.49	1.59
1	N	596	A	C8-N7	-10.05	1.24	1.31
1	N	734	G	C6-N1	10.05	1.46	1.39
1	N	710	G	C6-N1	10.04	1.46	1.39
1	N	1088	G	N1-C2	10.04	1.45	1.37
1	N	717	U	C2-N3	10.04	1.44	1.37
1	N	1030	U	C2-N3	10.03	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1434	A	C5-C4	10.04	1.45	1.38
1	N	263	A	N7-C5	10.03	1.45	1.39
1	N	82	G	N7-C5	-10.02	1.33	1.39
1	N	337	G	N3-C4	10.02	1.42	1.35
1	N	584	G	N3-C4	-10.02	1.28	1.35
1	N	1462	C	N1-C6	10.01	1.43	1.37
1	N	156	C	N1-C6	10.00	1.43	1.37
1	N	890	G	P-O5'	-10.00	1.49	1.59
1	N	776	G	P-O5'	-9.99	1.49	1.59
1	N	966	G	P-O5'	9.99	1.69	1.59
1	N	1139	G	N1-C2	9.99	1.45	1.37
1	N	651	C	N1-C6	9.99	1.43	1.37
1	N	1032	G	C2-N3	9.99	1.40	1.32
1	N	462	G	C6-N1	9.98	1.46	1.39
1	N	1082	A	C6-N1	9.98	1.42	1.35
1	N	346	G	N3-C4	-9.97	1.28	1.35
1	N	1448	C	C4-N4	9.97	1.43	1.33
1	N	179	A	C8-N7	-9.97	1.24	1.31
1	N	1099	G	C2'-C1'	-9.96	1.42	1.53
1	N	908	A	N9-C8	9.96	1.45	1.37
1	N	197	A	N7-C5	-9.95	1.33	1.39
1	N	678	U	C2-N3	9.95	1.44	1.37
1	N	32	A	O3'-P	-9.94	1.49	1.61
1	N	991	U	C5-C6	9.94	1.43	1.34
1	N	1400	C	N3-C4	9.94	1.41	1.33
1	N	413	G	C8-N7	-9.93	1.25	1.30
1	N	584	G	N9-C4	-9.93	1.30	1.38
1	N	478	A	N7-C5	-9.92	1.33	1.39
1	N	1141	C	C4-N4	9.91	1.42	1.33
1	N	889	A	N3-C4	9.91	1.40	1.34
1	N	1465	A	N3-C4	9.91	1.40	1.34
1	N	189	A	N7-C5	-9.90	1.33	1.39
1	N	675	A	C8-N7	-9.90	1.24	1.31
1	N	1513	A	C6-N1	9.90	1.42	1.35
1	N	556	C	C2-N3	9.90	1.43	1.35
1	N	1143	G	N7-C5	-9.90	1.33	1.39
1	N	1064	G	N1-C2	9.89	1.45	1.37
1	N	1255	G	N9-C4	-9.89	1.30	1.38
1	N	790	A	N9-C8	-9.88	1.29	1.37
1	N	1482	G	P-O5'	-9.87	1.49	1.59
1	N	241	G	C6-N1	9.87	1.46	1.39
1	N	814	A	N7-C5	-9.87	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1130	A	N7-C5	-9.87	1.33	1.39
1	N	632	U	C2-N3	9.87	1.44	1.37
1	N	1028	C	N3-C4	9.87	1.40	1.33
1	N	1014	A	N9-C4	9.86	1.43	1.37
1	N	971	G	N1-C2	9.86	1.45	1.37
1	N	357	G	N9-C4	9.85	1.45	1.38
1	N	981	U	C2-N3	9.85	1.44	1.37
1	N	372	C	N3-C4	9.85	1.40	1.33
1	N	79	G	N1-C2	9.84	1.45	1.37
1	N	839	C	C5'-C4'	9.84	1.63	1.51
1	N	361	G	C2'-C1'	9.83	1.64	1.53
1	N	617	G	N1-C2	9.83	1.45	1.37
1	N	1191	A	C5'-C4'	9.83	1.63	1.51
1	N	771	G	N1-C2	9.83	1.45	1.37
1	N	10	A	C5-C4	9.82	1.45	1.38
1	N	951	G	N1-C2	9.82	1.45	1.37
1	N	1192	C	N3-C4	9.81	1.40	1.33
1	N	1340	A	C8-N7	-9.80	1.24	1.31
1	N	900	A	C6-N6	9.79	1.41	1.33
1	N	1404	C	O4'-C1'	9.79	1.54	1.41
1	N	357	G	C2-N3	9.79	1.40	1.32
1	N	958	A	N3-C4	9.79	1.40	1.34
1	N	423	G	C5-C4	9.78	1.45	1.38
1	N	213	G	C2-N3	9.78	1.40	1.32
1	N	890	G	C2'-C1'	-9.78	1.42	1.53
1	N	198	G	N9-C4	-9.77	1.30	1.38
1	N	663	A	C5-C4	9.75	1.45	1.38
1	N	687	A	N9-C4	-9.75	1.32	1.37
1	N	1343	G	N9-C8	-9.75	1.31	1.37
1	N	205	A	C6-N6	9.74	1.41	1.33
1	N	16	A	C5-C6	9.74	1.49	1.41
1	N	288	A	C6-N6	9.73	1.41	1.33
1	N	1309	G	N7-C5	-9.73	1.33	1.39
1	N	543	U	C2-N3	9.72	1.44	1.37
1	N	1051	C	C5-C6	9.72	1.42	1.34
1	N	559	A	C6-N1	9.72	1.42	1.35
1	N	334	C	C4-N4	9.72	1.42	1.33
1	N	832	G	N7-C5	-9.71	1.33	1.39
1	N	194	C	N3-C4	9.71	1.40	1.33
1	N	1143	G	N9-C4	-9.70	1.30	1.38
1	N	68	G	N3-C4	-9.70	1.28	1.35
1	N	245	U	C5'-C4'	9.70	1.62	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	965	U	C2-N3	9.69	1.44	1.37
1	N	1472	U	O4'-C1'	9.69	1.54	1.41
1	N	103	U	N1-C2	-9.69	1.29	1.38
1	N	517	G	C8-N7	-9.69	1.25	1.30
1	N	1110	A	C6-N6	9.68	1.41	1.33
1	N	1323	G	C8-N7	-9.68	1.25	1.30
1	N	1333	A	N7-C5	-9.68	1.33	1.39
1	N	1304	G	C2-N3	9.67	1.40	1.32
1	N	1388	C	C4'-C3'	9.67	1.63	1.53
1	N	436	C	C4-N4	9.66	1.42	1.33
1	N	778	G	N7-C5	-9.66	1.33	1.39
1	N	373	A	C2'-C1'	-9.65	1.42	1.53
1	N	629	A	C5'-C4'	9.65	1.62	1.51
1	N	1037	C	C4-N4	9.65	1.42	1.33
1	N	62	U	O3'-P	-9.65	1.49	1.61
1	N	926	G	N7-C5	-9.64	1.33	1.39
1	N	1324	A	N7-C5	-9.64	1.33	1.39
1	N	952	U	C5'-C4'	9.64	1.62	1.51
1	N	231	U	C4-C5	9.63	1.52	1.43
1	N	206	C	C2-N3	9.63	1.43	1.35
1	N	254	G	C2-N3	9.63	1.40	1.32
1	N	829	G	C5'-C4'	9.62	1.62	1.51
1	N	727	G	C6-N1	9.62	1.46	1.39
1	N	100	G	N7-C5	-9.62	1.33	1.39
1	N	238	A	C6-N1	9.62	1.42	1.35
1	N	717	U	P-O5'	-9.62	1.50	1.59
1	N	1272	G	N7-C5	9.62	1.45	1.39
1	N	785	G	N9-C8	9.61	1.44	1.37
1	N	879	C	N1-C6	-9.61	1.31	1.37
1	N	992	U	C2-N3	9.61	1.44	1.37
1	N	1495	U	C2-N3	9.61	1.44	1.37
1	N	1451	U	C2-N3	9.60	1.44	1.37
1	N	1278	G	N9-C8	-9.60	1.31	1.37
1	N	1297	G	C2-N2	9.60	1.44	1.34
1	N	1204	A	N7-C5	-9.59	1.33	1.39
1	N	584	G	P-O5'	-9.59	1.50	1.59
1	N	21	G	N7-C5	-9.58	1.33	1.39
1	N	473	U	N1-C6	9.58	1.46	1.38
1	N	1126	U	N3-C4	9.57	1.47	1.38
1	N	667	G	N7-C5	-9.57	1.33	1.39
1	N	784	A	C6-N1	9.57	1.42	1.35
1	N	177	G	C6-N1	9.56	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	255	G	N7-C5	-9.56	1.33	1.39
1	N	296	U	C2-N3	9.56	1.44	1.37
1	N	1441	A	N3-C4	-9.55	1.29	1.34
1	N	1460	C	N3-C4	9.55	1.40	1.33
1	N	624	C	N3-C4	9.55	1.40	1.33
1	N	322	C	N3-C4	9.54	1.40	1.33
1	N	732	C	N1-C6	9.54	1.42	1.37
1	N	142	G	C2'-C1'	-9.54	1.42	1.53
1	N	1409	C	C4-N4	9.54	1.42	1.33
1	N	642	A	C6-N1	9.53	1.42	1.35
1	N	905	U	C2'-C1'	9.53	1.63	1.53
1	N	315	A	C5'-C4'	9.52	1.62	1.51
1	N	577	G	N7-C5	-9.52	1.33	1.39
1	N	1282	C	N3-C4	9.52	1.40	1.33
1	N	412	A	C5-C4	9.50	1.45	1.38
1	N	631	C	C4-N4	9.50	1.42	1.33
1	N	785	G	N1-C2	9.50	1.45	1.37
1	N	1316	G	N9-C4	-9.50	1.30	1.38
1	N	278	G	N3-C4	9.49	1.42	1.35
1	N	302	G	N7-C5	9.49	1.45	1.39
1	N	1055	A	C5-C4	9.49	1.45	1.38
1	N	34	C	C4-C5	9.49	1.50	1.43
1	N	116	A	C6-N6	9.49	1.41	1.33
1	N	27	G	N9-C4	-9.48	1.30	1.38
1	N	319	G	N1-C2	9.48	1.45	1.37
1	N	849	G	N7-C5	-9.48	1.33	1.39
1	N	409	U	P-O5'	-9.48	1.50	1.59
1	N	1467	C	N1-C6	9.48	1.42	1.37
1	N	183	C	N3-C4	9.47	1.40	1.33
1	N	444	G	N3-C4	9.47	1.42	1.35
1	N	816	A	C5-C4	-9.47	1.32	1.38
1	N	27	G	N3-C4	-9.45	1.28	1.35
1	N	162	A	N9-C8	-9.46	1.30	1.37
1	N	923	A	C6-N1	9.45	1.42	1.35
1	N	351	G	N9-C4	-9.44	1.30	1.38
1	N	1150	A	P-O5'	-9.44	1.50	1.59
1	N	305	G	C6-N1	9.43	1.46	1.39
1	N	944	G	N9-C8	-9.43	1.31	1.37
1	N	501	C	C2-N3	9.42	1.43	1.35
1	N	169	C	P-O5'	-9.41	1.50	1.59
1	N	1203	C	N1-C6	9.41	1.42	1.37
1	N	1304	G	N9-C4	9.41	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	100	G	C5-C4	9.41	1.45	1.38
1	N	462	G	N3-C4	-9.41	1.28	1.35
1	N	501	C	C4-C5	9.41	1.50	1.43
1	N	1398	A	C6-N1	9.40	1.42	1.35
1	N	199	A	C3'-C2'	9.40	1.63	1.52
1	N	202	G	C8-N7	9.39	1.36	1.30
1	N	632	U	C5'-C4'	9.39	1.62	1.51
1	N	243	A	N7-C5	-9.38	1.33	1.39
1	N	1071	C	N1-C6	9.38	1.42	1.37
1	N	1525	G	N3-C4	-9.38	1.28	1.35
1	N	47	C	C4-C5	9.38	1.50	1.43
1	N	1172	C	P-O5'	-9.38	1.50	1.59
1	N	1340	A	N9-C4	9.37	1.43	1.37
1	N	280	C	C2-N3	9.37	1.43	1.35
1	N	615	G	C2-N3	9.36	1.40	1.32
1	N	127	G	C2'-C1'	-9.36	1.43	1.53
1	N	282	A	C8-N7	-9.36	1.25	1.31
1	N	441	A	N9-C4	-9.36	1.32	1.37
1	N	93	U	C5'-C4'	9.36	1.62	1.51
1	N	151	A	N7-C5	-9.36	1.33	1.39
1	N	344	A	C4'-C3'	9.35	1.63	1.53
1	N	989	U	N3-C4	9.35	1.46	1.38
1	N	537	G	N9-C4	-9.35	1.30	1.38
1	N	454	G	N9-C8	9.35	1.44	1.37
1	N	1365	G	N1-C2	9.34	1.45	1.37
1	N	19	A	N7-C5	-9.33	1.33	1.39
1	N	769	G	C2-N3	9.33	1.40	1.32
1	N	1388	C	C4-N4	9.33	1.42	1.33
1	N	1494	G	C8-N7	-9.33	1.25	1.30
1	N	791	G	N1-C2	9.33	1.45	1.37
1	N	417	G	N9-C4	-9.32	1.30	1.38
1	N	922	G	O3'-P	-9.32	1.50	1.61
1	N	1131	G	C2-N3	9.32	1.40	1.32
1	N	66	A	C6-N6	9.32	1.41	1.33
1	N	742	G	C2-N3	9.30	1.40	1.32
1	N	216	U	C2-N3	9.29	1.44	1.37
1	N	836	G	C8-N7	-9.29	1.25	1.30
1	N	1299	A	C2'-C1'	-9.29	1.43	1.53
1	N	1509	C	O3'-P	-9.29	1.50	1.61
1	N	1519	A	N7-C5	-9.29	1.33	1.39
1	N	657	U	C2-N3	9.29	1.44	1.37
1	N	1020	G	C2-N3	9.28	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1370	G	C6-N1	9.28	1.46	1.39
1	N	323	U	N3-C4	9.28	1.46	1.38
1	N	37	U	N1-C2	-9.27	1.30	1.38
1	N	139	A	C6-N6	9.27	1.41	1.33
1	N	1527	U	C2-N3	9.27	1.44	1.37
1	N	313	A	C5-C4	9.26	1.45	1.38
1	N	685	G	C2-N2	-9.26	1.25	1.34
1	N	725	G	N3-C4	-9.26	1.28	1.35
1	N	730	G	C3'-C2'	-9.26	1.42	1.52
1	N	895	G	P-O5'	-9.26	1.50	1.59
1	N	1392	G	N7-C5	-9.26	1.33	1.39
1	N	1438	G	N9-C4	-9.25	1.30	1.38
1	N	408	A	C6-N6	9.25	1.41	1.33
1	N	409	U	C2-N3	9.25	1.44	1.37
1	N	1321	U	N3-C4	9.25	1.46	1.38
1	N	1423	G	C2-N3	9.25	1.40	1.32
1	N	46	G	C2-N2	9.24	1.43	1.34
1	N	756	C	N1-C6	9.24	1.42	1.37
1	N	146	G	C6-N1	9.24	1.46	1.39
1	N	450	G	N9-C4	-9.24	1.30	1.38
1	N	902	G	N3-C4	9.23	1.42	1.35
1	N	1405	G	N9-C4	-9.22	1.30	1.38
1	N	1480	A	C5-C6	9.22	1.49	1.41
1	N	143	A	N9-C4	9.22	1.43	1.37
1	N	637	C	N3-C4	9.22	1.40	1.33
1	N	332	G	C6-N1	9.21	1.46	1.39
1	N	670	G	P-O5'	-9.21	1.50	1.59
1	N	1246	A	N3-C4	9.21	1.40	1.34
1	N	1068	G	C6-N1	9.20	1.46	1.39
1	N	1157	A	N3-C4	-9.20	1.29	1.34
1	N	951	G	C2-N3	9.19	1.40	1.32
1	N	484	G	N1-C2	9.19	1.45	1.37
1	N	1079	G	C5-C4	9.18	1.44	1.38
1	N	755	G	N1-C2	9.18	1.45	1.37
1	N	986	U	P-O5'	-9.18	1.50	1.59
1	N	1244	G	N7-C5	-9.18	1.33	1.39
1	N	771	G	N7-C5	-9.18	1.33	1.39
1	N	537	G	C5-C4	9.17	1.44	1.38
1	N	1044	A	C6-N1	9.17	1.42	1.35
1	N	35	G	C6-N1	9.17	1.46	1.39
1	N	246	A	C2-N3	9.17	1.41	1.33
1	N	461	A	C6-N1	9.17	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	562	U	C4-O4	9.17	1.30	1.23
1	N	1217	C	N1-C6	-9.17	1.31	1.37
1	N	693	G	C5-C6	-9.16	1.33	1.42
1	N	1084	G	N7-C5	-9.16	1.33	1.39
1	N	297	G	O3'-P	-9.16	1.50	1.61
1	N	844	G	N7-C5	-9.16	1.33	1.39
1	N	946	A	N7-C5	-9.16	1.33	1.39
1	N	1120	C	N3-C4	9.16	1.40	1.33
1	N	652	U	C2'-C1'	-9.16	1.43	1.53
1	N	1015	G	N1-C2	9.16	1.45	1.37
1	N	1140	C	P-O5'	-9.16	1.50	1.59
1	N	414	A	N7-C5	-9.15	1.33	1.39
1	N	916	U	N3-C4	9.15	1.46	1.38
1	N	1201	A	N7-C5	-9.15	1.33	1.39
1	N	497	G	N1-C2	9.14	1.45	1.37
1	N	680	C	C4-C5	9.14	1.50	1.43
1	N	1219	A	C5-C6	-9.14	1.32	1.41
1	N	144	G	C2-N3	9.13	1.40	1.32
1	N	161	A	C6-N6	9.13	1.41	1.33
1	N	1139	G	N9-C4	-9.13	1.30	1.38
1	N	757	U	N3-C4	9.13	1.46	1.38
1	N	1317	C	N1-C6	9.13	1.42	1.37
1	N	468	A	C8-N7	9.13	1.38	1.31
1	N	1511	G	N1-C2	9.12	1.45	1.37
1	N	1064	G	C6-N1	9.11	1.46	1.39
1	N	158	G	C2-N3	9.11	1.40	1.32
1	N	739	C	N1-C6	9.11	1.42	1.37
1	N	1109	C	N3-C4	9.11	1.40	1.33
1	N	1124	G	C8-N7	9.11	1.36	1.30
1	N	3	A	N9-C4	-9.10	1.32	1.37
1	N	350	G	N9-C8	9.10	1.44	1.37
1	N	652	U	N1-C2	9.10	1.46	1.38
1	N	1146	A	N3-C4	-9.10	1.29	1.34
1	N	1036	A	C5'-C4'	9.10	1.62	1.51
1	N	172	A	C8-N7	-9.10	1.25	1.31
1	N	818	G	C2-N3	9.09	1.40	1.32
1	N	889	A	C4'-C3'	9.09	1.63	1.53
1	N	575	G	N1-C2	9.09	1.45	1.37
1	N	938	A	N7-C5	-9.08	1.33	1.39
1	N	637	C	C5'-C4'	9.08	1.62	1.51
1	N	876	C	N1-C6	9.08	1.42	1.37
1	N	942	G	C2-N3	9.07	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1002	G	N1-C2	9.07	1.45	1.37
1	N	944	G	P-O5'	-9.07	1.50	1.59
1	N	1279	G	N7-C5	-9.07	1.33	1.39
1	N	720	C	N3-C4	9.07	1.40	1.33
1	N	6	G	C2-N3	9.06	1.40	1.32
1	N	1215	G	C2-N3	9.06	1.40	1.32
1	N	31	G	C5-C4	-9.06	1.32	1.38
1	N	667	G	C6-N1	9.05	1.45	1.39
1	N	703	G	C8-N7	9.05	1.36	1.30
1	N	80	A	O3'-P	9.05	1.72	1.61
1	N	889	A	O3'-P	-9.05	1.50	1.61
1	N	1196	A	N9-C4	9.05	1.43	1.37
1	N	473	U	C2'-C1'	9.05	1.63	1.53
1	N	62	U	N3-C4	9.04	1.46	1.38
1	N	68	G	C8-N7	-9.04	1.25	1.30
1	N	331	G	C8-N7	-9.04	1.25	1.30
1	N	858	G	C5-C6	-9.04	1.33	1.42
1	N	1186	G	N3-C4	-9.04	1.29	1.35
1	N	165	G	N1-C2	9.04	1.45	1.37
1	N	609	A	N9-C4	9.03	1.43	1.37
1	N	1417	G	C2-N3	9.03	1.40	1.32
1	N	668	G	N9-C4	-9.02	1.30	1.38
1	N	656	G	N9-C8	9.02	1.44	1.37
1	N	532	A	N3-C4	9.02	1.40	1.34
1	N	275	G	N7-C5	-9.01	1.33	1.39
1	N	19	A	C5-C4	9.01	1.45	1.38
1	N	242	G	N1-C2	9.01	1.45	1.37
1	N	245	U	C4-C5	9.00	1.51	1.43
1	N	24	U	C4-C5	9.00	1.51	1.43
1	N	1464	U	N1-C6	8.99	1.46	1.38
1	N	1076	U	C2-N3	8.99	1.44	1.37
1	N	1077	G	N7-C5	-8.99	1.33	1.39
1	N	1468	A	N1-C2	-8.99	1.26	1.34
1	N	593	U	P-O5'	-8.99	1.50	1.59
1	N	941	G	P-O5'	-8.99	1.50	1.59
1	N	1438	G	C8-N7	-8.98	1.25	1.30
1	N	856	C	C3'-C2'	8.97	1.62	1.52
1	N	462	G	C5'-C4'	8.97	1.62	1.51
1	N	852	G	N9-C4	-8.96	1.30	1.38
1	N	896	C	N3-C4	8.96	1.40	1.33
1	N	1454	G	C6-N1	8.96	1.45	1.39
1	N	845	A	C6-N6	8.96	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	548	G	N9-C8	8.96	1.44	1.37
1	N	412	A	N9-C4	8.95	1.43	1.37
1	N	693	G	P-O5'	-8.95	1.50	1.59
1	N	1285	A	C6-N1	8.95	1.41	1.35
1	N	958	A	C2'-C1'	-8.94	1.43	1.53
1	N	1170	A	C8-N7	-8.94	1.25	1.31
1	N	493	A	N7-C5	-8.94	1.33	1.39
1	N	1037	C	N3-C4	8.94	1.40	1.33
1	N	1331	G	C5-C4	8.94	1.44	1.38
1	N	1513	A	C5-C4	8.93	1.45	1.38
1	N	238	A	C2'-C1'	-8.93	1.43	1.53
1	N	645	G	C5'-C4'	8.93	1.62	1.51
1	N	951	G	O4'-C1'	8.92	1.53	1.41
1	N	375	U	C4-C5	8.92	1.51	1.43
1	N	244	U	C3'-C2'	8.91	1.62	1.52
1	N	337	G	N7-C5	-8.91	1.33	1.39
1	N	573	A	C5-C4	8.91	1.45	1.38
1	N	1411	C	N3-C4	8.91	1.40	1.33
1	N	1266	G	N9-C8	8.91	1.44	1.37
1	N	817	C	C4-N4	8.91	1.42	1.33
1	N	432	A	N9-C4	-8.90	1.32	1.37
1	N	1182	G	C5-C4	-8.90	1.32	1.38
1	N	1145	A	N7-C5	-8.90	1.33	1.39
1	N	881	G	C2-N3	8.90	1.39	1.32
1	N	130	A	N3-C4	-8.89	1.29	1.34
1	N	447	G	N7-C5	-8.89	1.33	1.39
1	N	510	A	C6-N6	8.89	1.41	1.33
1	N	1163	A	N3-C4	-8.89	1.29	1.34
1	N	488	C	C2-N3	8.89	1.42	1.35
1	N	1328	C	N1-C6	8.89	1.42	1.37
1	N	1333	A	P-O5'	-8.89	1.50	1.59
1	N	1427	C	C4'-C3'	8.88	1.62	1.53
1	N	174	A	C8-N7	-8.88	1.25	1.31
1	N	1275	A	C6-N6	8.88	1.41	1.33
1	N	635	A	C6-N6	8.87	1.41	1.33
1	N	1254	A	C6-N6	8.87	1.41	1.33
1	N	65	A	N7-C5	-8.87	1.33	1.39
1	N	559	A	N3-C4	8.86	1.40	1.34
1	N	782	A	N9-C4	8.86	1.43	1.37
1	N	573	A	N3-C4	-8.85	1.29	1.34
1	N	99	C	N1-C6	8.85	1.42	1.37
1	N	1427	C	N3-C4	8.85	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	574	A	C8-N7	8.85	1.37	1.31
1	N	452	A	N7-C5	-8.84	1.33	1.39
1	N	1095	U	C2'-C1'	-8.84	1.43	1.53
1	N	763	G	C2-N3	-8.84	1.25	1.32
1	N	1092	A	N7-C5	-8.84	1.33	1.39
1	N	446	G	C2-N3	8.83	1.39	1.32
1	N	220	G	P-O5'	-8.83	1.50	1.59
1	N	694	A	N9-C4	-8.82	1.32	1.37
1	N	373	A	N9-C8	8.82	1.44	1.37
1	N	94	G	N3-C4	-8.82	1.29	1.35
1	N	1364	U	C3'-C2'	8.82	1.62	1.52
1	N	1365	G	C8-N7	-8.82	1.25	1.30
1	N	1205	U	N1-C2	-8.81	1.30	1.38
1	N	1337	G	C5-C4	8.81	1.44	1.38
1	N	445	G	C2-N3	8.81	1.39	1.32
1	N	422	C	N3-C4	8.81	1.40	1.33
1	N	565	U	C2-N3	8.81	1.44	1.37
1	N	644	U	N3-C4	8.81	1.46	1.38
1	N	1481	U	C2-N3	8.81	1.44	1.37
1	N	240	G	N1-C2	8.80	1.44	1.37
1	N	706	A	C6-N6	8.80	1.41	1.33
1	N	874	G	C2'-C1'	-8.80	1.43	1.53
1	N	17	U	C5'-C4'	8.80	1.61	1.51
1	N	815	A	N7-C5	-8.79	1.33	1.39
1	N	487	A	N7-C5	-8.79	1.33	1.39
1	N	142	G	N9-C8	8.78	1.44	1.37
1	N	855	U	C5'-C4'	8.78	1.61	1.51
1	N	1317	C	C4-C5	-8.78	1.35	1.43
1	N	1487	G	N1-C2	8.78	1.44	1.37
1	N	1291	U	C2'-C1'	8.78	1.63	1.53
1	N	225	C	N1-C6	8.78	1.42	1.37
1	N	234	C	C4'-O4'	-8.78	1.34	1.45
1	N	1092	A	C6-N6	8.77	1.41	1.33
1	N	753	A	C5'-C4'	8.77	1.61	1.51
1	N	995	C	C4-C5	8.76	1.50	1.43
1	N	1290	G	C8-N7	-8.76	1.25	1.30
1	N	595	A	N7-C5	-8.76	1.33	1.39
1	N	339	C	N3-C4	8.76	1.40	1.33
1	N	253	A	N9-C4	-8.75	1.32	1.37
1	N	715	A	N9-C4	-8.75	1.32	1.37
1	N	906	A	C5'-C4'	8.75	1.61	1.51
1	N	996	A	C5-C4	8.75	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	149	A	C8-N7	-8.75	1.25	1.31
1	N	1318	A	C5-C4	8.75	1.44	1.38
1	N	932	C	C4-N4	8.74	1.41	1.33
1	N	1525	G	C8-N7	-8.74	1.25	1.30
1	N	429	U	N3-C4	8.74	1.46	1.38
1	N	628	G	C2-N3	8.74	1.39	1.32
1	N	1233	G	C6-N1	8.74	1.45	1.39
1	N	884	U	C2-N3	8.73	1.43	1.37
1	N	1150	A	C6-N1	8.73	1.41	1.35
1	N	907	A	N3-C4	-8.73	1.29	1.34
1	N	1109	C	C4-N4	8.72	1.41	1.33
1	N	315	A	C2'-C1'	-8.72	1.43	1.53
1	N	600	A	N7-C5	-8.72	1.34	1.39
1	N	511	C	C4-N4	8.72	1.41	1.33
1	N	977	A	C5-C4	8.72	1.44	1.38
1	N	324	G	O3'-P	-8.72	1.50	1.61
1	N	1269	A	C1'-N9	8.72	1.61	1.48
1	N	1523	G	N9-C4	-8.72	1.30	1.38
1	N	1534	A	N9-C4	8.71	1.43	1.37
1	N	221	C	P-O5'	-8.71	1.51	1.59
1	N	168	G	N1-C2	8.70	1.44	1.37
1	N	1213	A	N3-C4	8.70	1.40	1.34
1	N	733	G	C2'-C1'	-8.69	1.43	1.53
1	N	396	C	P-O5'	-8.69	1.51	1.59
1	N	802	A	N7-C5	-8.69	1.34	1.39
1	N	1214	C	C4-N4	8.69	1.41	1.33
1	N	787	A	C8-N7	-8.69	1.25	1.31
1	N	448	A	O3'-P	-8.68	1.50	1.61
1	N	984	C	N1-C6	8.68	1.42	1.37
1	N	1030	U	N1-C2	8.68	1.46	1.38
1	N	424	G	P-O5'	-8.68	1.51	1.59
1	N	646	G	N3-C4	-8.68	1.29	1.35
1	N	682	G	O4'-C1'	8.68	1.52	1.41
1	N	606	G	C2'-C1'	-8.68	1.43	1.53
1	N	988	G	C6-N1	8.67	1.45	1.39
1	N	1180	A	N9-C4	8.67	1.43	1.37
1	N	1371	G	N7-C5	-8.67	1.34	1.39
1	N	870	U	C4-O4	-8.66	1.16	1.23
1	N	1002	G	N7-C5	-8.66	1.34	1.39
1	N	803	G	P-O5'	8.66	1.68	1.59
1	N	45	G	N1-C2	8.66	1.44	1.37
1	N	1263	C	P-O5'	-8.66	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	499	A	C5-C4	8.65	1.44	1.38
1	N	784	A	C5-C4	8.65	1.44	1.38
1	N	1294	G	N9-C8	8.65	1.44	1.37
1	N	1394	A	C6-N1	8.65	1.41	1.35
1	N	453	G	N7-C5	-8.65	1.34	1.39
1	N	444	G	C6-N1	8.64	1.45	1.39
1	N	1484	C	N3-C4	8.64	1.40	1.33
1	N	350	G	N1-C2	8.64	1.44	1.37
1	N	669	G	C6-N1	8.64	1.45	1.39
1	N	625	U	C2-N3	8.64	1.43	1.37
1	N	772	U	C5'-C4'	8.64	1.61	1.51
1	N	177	G	N7-C5	-8.63	1.34	1.39
1	N	929	G	N1-C2	8.63	1.44	1.37
1	N	372	C	P-O5'	-8.63	1.51	1.59
1	N	1225	A	C6-N1	8.63	1.41	1.35
1	N	138	G	C8-N7	8.62	1.36	1.30
1	N	432	A	N7-C5	-8.62	1.34	1.39
1	N	1061	G	C6-N1	8.62	1.45	1.39
1	N	1461	G	N7-C5	-8.62	1.34	1.39
1	N	1414	U	C2-N3	8.62	1.43	1.37
1	N	36	C	C4-N4	8.62	1.41	1.33
1	N	600	A	C6-N1	8.62	1.41	1.35
1	N	1437	A	C6-N1	8.62	1.41	1.35
1	N	46	G	C2-N3	8.61	1.39	1.32
1	N	587	G	N7-C5	8.61	1.44	1.39
1	N	1519	A	C6-N1	8.61	1.41	1.35
1	N	907	A	N7-C5	-8.61	1.34	1.39
1	N	1210	C	N1-C6	-8.61	1.31	1.37
1	N	910	C	C4'-C3'	-8.61	1.43	1.53
1	N	324	G	C5'-C4'	8.61	1.61	1.51
1	N	205	A	N7-C5	-8.60	1.34	1.39
1	N	355	C	N3-C4	8.59	1.40	1.33
1	N	1336	C	C4'-C3'	8.59	1.62	1.53
1	N	1460	C	N1-C6	8.59	1.42	1.37
1	N	1006	G	C5-C6	-8.59	1.33	1.42
1	N	584	G	C5-C4	8.59	1.44	1.38
1	N	947	G	N3-C4	8.59	1.41	1.35
1	N	1288	A	P-O5'	-8.59	1.51	1.59
1	N	280	C	P-O5'	-8.58	1.51	1.59
1	N	902	G	N9-C4	-8.58	1.31	1.38
1	N	742	G	N3-C4	-8.58	1.29	1.35
1	N	113	G	C2'-C1'	-8.57	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	141	G	C8-N7	-8.57	1.25	1.30
1	N	1522	U	C2-N3	8.57	1.43	1.37
1	N	474	G	N7-C5	8.57	1.44	1.39
1	N	515	G	N7-C5	-8.57	1.34	1.39
1	N	662	U	C2-N3	8.57	1.43	1.37
1	N	969	A	C2-N3	8.57	1.41	1.33
1	N	999	C	N1-C6	-8.56	1.32	1.37
1	N	600	A	P-O5'	-8.56	1.51	1.59
1	N	1152	A	N7-C5	-8.56	1.34	1.39
1	N	502	A	N9-C8	8.55	1.44	1.37
1	N	627	G	N3-C4	-8.55	1.29	1.35
1	N	1091	U	C5'-C4'	8.55	1.61	1.51
1	N	1252	A	C2'-C1'	-8.55	1.44	1.53
1	N	318	G	C2-N3	8.55	1.39	1.32
1	N	1047	G	N7-C5	-8.55	1.34	1.39
1	N	1048	G	C8-N7	-8.55	1.25	1.30
1	N	797	C	C4-N4	8.54	1.41	1.33
1	N	892	A	N9-C4	-8.54	1.32	1.37
1	N	184	G	O4'-C1'	8.54	1.52	1.41
1	N	832	G	C6-N1	8.53	1.45	1.39
1	N	211	G	N9-C8	8.53	1.43	1.37
1	N	378	G	N1-C2	8.53	1.44	1.37
1	N	1093	A	C5-C4	8.53	1.44	1.38
1	N	1127	G	C2'-C1'	-8.53	1.44	1.53
1	N	597	G	C2-N3	8.53	1.39	1.32
1	N	799	G	C2-N3	8.53	1.39	1.32
1	N	812	G	C2-N3	8.53	1.39	1.32
1	N	705	G	N1-C2	8.53	1.44	1.37
1	N	363	A	N7-C5	-8.52	1.34	1.39
1	N	443	C	O4'-C1'	8.52	1.52	1.41
1	N	840	C	N3-C4	8.52	1.40	1.33
1	N	846	G	N9-C4	8.52	1.44	1.38
1	N	906	A	N9-C4	-8.52	1.32	1.37
1	N	1170	A	N7-C5	-8.52	1.34	1.39
1	N	1171	A	N9-C4	-8.52	1.32	1.37
1	N	86	G	N9-C8	8.52	1.43	1.37
1	N	339	C	N1-C6	8.51	1.42	1.37
1	N	827	U	N3-C4	8.51	1.46	1.38
1	N	294	U	C3'-C2'	-8.51	1.43	1.52
1	N	513	C	P-O5'	-8.51	1.51	1.59
1	N	1292	G	N1-C2	8.50	1.44	1.37
1	N	711	G	N9-C4	-8.50	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	825	A	C6-N6	8.50	1.40	1.33
1	N	1048	G	N7-C5	8.50	1.44	1.39
1	N	1442	G	C8-N7	-8.50	1.25	1.30
1	N	1213	A	N9-C4	-8.50	1.32	1.37
1	N	1428	A	C6-N1	8.50	1.41	1.35
1	N	1413	A	N9-C4	-8.49	1.32	1.37
1	N	716	A	C6-N6	8.49	1.40	1.33
1	N	981	U	C5'-C4'	8.49	1.61	1.51
1	N	111	G	N7-C5	-8.49	1.34	1.39
1	N	135	C	C4-N4	8.49	1.41	1.33
1	N	1304	G	N3-C4	-8.49	1.29	1.35
1	N	178	C	C2-O2	8.49	1.32	1.24
1	N	1269	A	N7-C5	-8.49	1.34	1.39
1	N	406	G	C4'-C3'	8.49	1.62	1.53
1	N	389	A	N3-C4	-8.49	1.29	1.34
1	N	1006	G	N3-C4	-8.48	1.29	1.35
1	N	661	G	N7-C5	8.48	1.44	1.39
1	N	27	G	C2-N3	8.48	1.39	1.32
1	N	1514	G	N9-C4	-8.48	1.31	1.38
1	N	95	C	N3-C4	8.48	1.39	1.33
1	N	376	G	C2-N3	8.48	1.39	1.32
1	N	396	C	N3-C4	8.48	1.39	1.33
1	N	830	G	N7-C5	-8.48	1.34	1.39
1	N	366	A	C2'-C1'	-8.47	1.44	1.53
1	N	1015	G	C8-N7	8.47	1.36	1.30
1	N	129	A	N9-C4	-8.47	1.32	1.37
1	N	304	U	C2-N3	8.47	1.43	1.37
1	N	725	G	C3'-C2'	8.46	1.62	1.52
1	N	693	G	N9-C4	8.46	1.44	1.38
1	N	1156	G	N7-C5	-8.46	1.34	1.39
1	N	324	G	N1-C2	8.46	1.44	1.37
1	N	381	C	N1-C6	8.46	1.42	1.37
1	N	865	A	P-O5'	8.46	1.68	1.59
1	N	1227	A	C5-C4	8.46	1.44	1.38
1	N	949	A	N7-C5	-8.45	1.34	1.39
1	N	853	C	N3-C4	8.45	1.39	1.33
1	N	971	G	P-O5'	-8.45	1.51	1.59
1	N	742	G	C2-N2	8.44	1.43	1.34
1	N	1513	A	C5-C6	8.44	1.48	1.41
1	N	146	G	C2-N3	8.44	1.39	1.32
1	N	312	C	N1-C6	8.44	1.42	1.37
1	N	529	G	C2-N3	8.43	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	724	G	N7-C5	8.42	1.44	1.39
1	N	801	U	C2-N3	8.42	1.43	1.37
1	N	376	G	N9-C4	-8.42	1.31	1.38
1	N	951	G	C5-C4	8.42	1.44	1.38
1	N	1505	G	C2'-C1'	-8.42	1.44	1.53
1	N	1518	A	P-O5'	-8.42	1.51	1.59
1	N	117	G	C2-N3	8.41	1.39	1.32
1	N	1319	A	N7-C5	-8.41	1.34	1.39
1	N	32	A	N3-C4	-8.41	1.29	1.34
1	N	1347	G	N7-C5	-8.41	1.34	1.39
1	N	3	A	C6-N6	8.41	1.40	1.33
1	N	530	G	N1-C2	8.41	1.44	1.37
1	N	750	C	P-O5'	-8.40	1.51	1.59
1	N	819	A	C6-N6	8.40	1.40	1.33
1	N	3	A	N7-C5	-8.40	1.34	1.39
1	N	1024	G	N1-C2	8.40	1.44	1.37
1	N	681	A	C6-N1	8.39	1.41	1.35
1	N	25	C	N3-C4	8.39	1.39	1.33
1	N	1514	G	C2-N2	8.39	1.43	1.34
1	N	393	A	C6-N1	8.39	1.41	1.35
1	N	953	G	C6-N1	8.39	1.45	1.39
1	N	229	U	P-O5'	-8.38	1.51	1.59
1	N	35	G	C5-C6	-8.38	1.33	1.42
1	N	664	G	N7-C5	-8.38	1.34	1.39
1	N	1437	A	N9-C4	-8.38	1.32	1.37
1	N	215	C	C2'-C1'	-8.37	1.44	1.53
1	N	459	A	N7-C5	-8.37	1.34	1.39
1	N	1053	G	C8-N7	8.37	1.35	1.30
1	N	1348	U	N3-C4	8.37	1.46	1.38
1	N	1294	G	N1-C2	8.37	1.44	1.37
1	N	584	G	N9-C8	8.36	1.43	1.37
1	N	716	A	N7-C5	-8.36	1.34	1.39
1	N	965	U	N3-C4	8.36	1.46	1.38
1	N	717	U	N3-C4	8.35	1.46	1.38
1	N	1530	G	N1-C2	8.35	1.44	1.37
1	N	142	G	C4'-C3'	8.35	1.62	1.53
1	N	859	G	C8-N7	-8.35	1.25	1.30
1	N	158	G	C6-N1	8.34	1.45	1.39
1	N	289	G	C8-N7	-8.34	1.25	1.30
1	N	500	G	N9-C8	8.34	1.43	1.37
1	N	539	A	N9-C4	-8.34	1.32	1.37
1	N	606	G	C4'-C3'	8.34	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	478	A	C8-N7	-8.33	1.25	1.31
1	N	716	A	C5-C4	8.33	1.44	1.38
1	N	926	G	C8-N7	-8.33	1.25	1.30
1	N	320	A	N9-C4	8.32	1.42	1.37
1	N	1105	A	C5-C4	8.32	1.44	1.38
1	N	204	G	N7-C5	-8.32	1.34	1.39
1	N	456	A	C6-N6	8.32	1.40	1.33
1	N	128	G	N1-C2	8.31	1.44	1.37
1	N	1193	G	C8-N7	-8.31	1.25	1.30
1	N	1186	G	N1-C2	8.31	1.44	1.37
1	N	544	G	N7-C5	-8.31	1.34	1.39
1	N	1290	G	P-O5'	8.31	1.68	1.59
1	N	249	U	C2'-C1'	-8.31	1.44	1.53
1	N	251	G	P-O5'	-8.31	1.51	1.59
1	N	492	C	N3-C4	8.31	1.39	1.33
1	N	595	A	C5-C4	8.30	1.44	1.38
1	N	1189	U	N3-C4	8.30	1.46	1.38
1	N	1340	A	C3'-C2'	8.30	1.62	1.52
1	N	553	A	N9-C8	-8.29	1.31	1.37
1	N	1199	U	C5'-C4'	8.29	1.61	1.51
1	N	1371	G	C2'-C1'	-8.29	1.44	1.53
1	N	964	A	N7-C5	8.29	1.44	1.39
1	N	250	A	C6-N6	8.29	1.40	1.33
1	N	1339	A	N3-C4	-8.29	1.29	1.34
1	N	694	A	N3-C4	-8.29	1.29	1.34
1	N	1336	C	C4-N4	8.29	1.41	1.33
1	N	177	G	C4'-C3'	8.28	1.62	1.53
1	N	164	G	N7-C5	-8.28	1.34	1.39
1	N	225	C	C3'-C2'	8.27	1.62	1.52
1	N	749	A	N3-C4	-8.27	1.29	1.34
1	N	660	C	N3-C4	8.27	1.39	1.33
1	N	899	C	N3-C4	8.27	1.39	1.33
1	N	47	C	C5-C6	8.27	1.41	1.34
1	N	178	C	N3-C4	8.27	1.39	1.33
1	N	573	A	N9-C8	8.27	1.44	1.37
1	N	946	A	C6-N1	8.27	1.41	1.35
1	N	909	A	C5-C4	8.27	1.44	1.38
1	N	1107	C	N1-C6	8.27	1.42	1.37
1	N	1367	C	C4-C5	8.27	1.49	1.43
1	N	1445	U	N3-C4	8.27	1.45	1.38
1	N	1446	A	C5-C4	8.27	1.44	1.38
1	N	219	U	P-O5'	-8.26	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	684	U	P-O5'	-8.26	1.51	1.59
1	N	893	C	C2-N3	8.26	1.42	1.35
1	N	350	G	C6-O6	-8.26	1.16	1.24
1	N	340	U	C2-N3	8.25	1.43	1.37
1	N	860	A	N7-C5	-8.25	1.34	1.39
1	N	1123	U	C5-C6	-8.25	1.26	1.34
1	N	900	A	C5'-C4'	8.25	1.61	1.51
1	N	1447	A	N7-C5	-8.25	1.34	1.39
1	N	974	A	C8-N7	-8.24	1.25	1.31
1	N	1075	U	C2'-C1'	-8.24	1.44	1.53
1	N	1453	G	N3-C4	-8.24	1.29	1.35
1	N	451	A	N7-C5	-8.24	1.34	1.39
1	N	75	G	N1-C2	8.23	1.44	1.37
1	N	1386	G	C6-N1	8.23	1.45	1.39
1	N	1459	G	N1-C2	8.23	1.44	1.37
1	N	894	G	C5'-C4'	8.23	1.61	1.51
1	N	62	U	C5'-C4'	8.23	1.61	1.51
1	N	1412	C	C4'-C3'	8.23	1.62	1.53
1	N	374	A	C6-N1	8.23	1.41	1.35
1	N	712	A	C5-C4	8.23	1.44	1.38
1	N	946	A	P-O5'	-8.23	1.51	1.59
1	N	103	U	C3'-C2'	-8.22	1.43	1.52
1	N	1065	U	N3-C4	8.22	1.45	1.38
1	N	748	G	N7-C5	-8.22	1.34	1.39
1	N	975	A	C6-N6	8.22	1.40	1.33
1	N	186	C	C4'-C3'	-8.21	1.44	1.53
1	N	380	G	P-O5'	-8.21	1.51	1.59
1	N	835	U	C2-N3	8.21	1.43	1.37
1	N	963	G	N9-C8	8.21	1.43	1.37
1	N	976	G	N3-C4	8.21	1.41	1.35
1	N	1006	G	C2'-C1'	-8.21	1.44	1.53
1	N	866	C	C5-C6	-8.21	1.27	1.34
1	N	1018	G	N9-C4	-8.20	1.31	1.38
1	N	1121	U	C4'-O4'	8.20	1.56	1.45
1	N	934	C	N3-C4	8.19	1.39	1.33
1	N	399	G	N3-C4	-8.19	1.29	1.35
1	N	1254	A	C6-N1	8.19	1.41	1.35
1	N	1437	A	C8-N7	-8.19	1.25	1.31
1	N	192	A	N7-C5	-8.18	1.34	1.39
1	N	1067	A	O3'-P	-8.18	1.51	1.61
1	N	278	G	C5-C4	-8.18	1.32	1.38
1	N	794	A	C6-N1	8.18	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	917	G	N1-C2	8.18	1.44	1.37
1	N	96	U	N1-C2	8.17	1.46	1.38
1	N	972	C	N3-C4	8.17	1.39	1.33
1	N	538	G	N1-C2	8.17	1.44	1.37
1	N	1369	C	P-O5'	-8.17	1.51	1.59
1	N	191	G	C5'-C4'	8.17	1.61	1.51
1	N	1061	G	N1-C2	8.16	1.44	1.37
1	N	17	U	C4-C5	8.16	1.50	1.43
1	N	452	A	C8-N7	-8.16	1.25	1.31
1	N	424	G	C2'-C1'	-8.14	1.44	1.53
1	N	963	G	C2-N2	8.14	1.42	1.34
1	N	634	C	O3'-P	-8.14	1.51	1.61
1	N	1072	G	N7-C5	-8.14	1.34	1.39
1	N	927	G	C2-N2	8.14	1.42	1.34
1	N	432	A	C5-C6	8.13	1.48	1.41
1	N	567	G	N1-C2	8.13	1.44	1.37
1	N	837	U	C4-C5	8.13	1.50	1.43
1	N	928	G	N7-C5	-8.13	1.34	1.39
1	N	984	C	C5'-C4'	8.13	1.61	1.51
1	N	1011	C	N1-C6	8.13	1.42	1.37
1	N	764	C	N1-C2	-8.13	1.32	1.40
1	N	240	G	C6-N1	8.13	1.45	1.39
1	N	226	G	C6-N1	8.13	1.45	1.39
1	N	1408	A	C2-N3	8.12	1.40	1.33
1	N	701	U	C1'-N1	8.12	1.60	1.48
1	N	835	U	P-O5'	-8.12	1.51	1.59
1	N	806	C	C4-C5	8.12	1.49	1.43
1	N	406	G	P-O5'	-8.11	1.51	1.59
1	N	983	A	C6-N6	8.11	1.40	1.33
1	N	1253	G	N9-C8	8.11	1.43	1.37
1	N	1453	G	C5-C4	8.11	1.44	1.38
1	N	786	G	N3-C4	-8.11	1.29	1.35
1	N	1312	G	C6-N1	8.11	1.45	1.39
1	N	1043	G	C6-N1	8.11	1.45	1.39
1	N	244	U	N3-C4	8.10	1.45	1.38
1	N	263	A	C6-N6	8.10	1.40	1.33
1	N	857	C	C3'-O3'	8.10	1.53	1.42
1	N	1442	G	N7-C5	-8.10	1.34	1.39
1	N	154	U	N3-C4	8.10	1.45	1.38
1	N	347	G	C2'-C1'	-8.10	1.44	1.53
1	N	1023	U	C2-N3	8.10	1.43	1.37
1	N	279	A	N3-C4	8.10	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	704	A	C6-N6	8.10	1.40	1.33
1	N	952	U	N3-C4	8.09	1.45	1.38
1	N	734	G	C2-N3	8.09	1.39	1.32
1	N	604	G	C5-C4	8.09	1.44	1.38
1	N	1276	G	C6-N1	8.09	1.45	1.39
1	N	270	A	N1-C2	8.09	1.41	1.34
1	N	801	U	C4-C5	8.09	1.50	1.43
1	N	450	G	N7-C5	-8.08	1.34	1.39
1	N	297	G	C5-C4	8.08	1.44	1.38
1	N	510	A	C5-C4	-8.07	1.33	1.38
1	N	1042	A	C8-N7	-8.07	1.25	1.31
1	N	338	A	C6-N6	8.07	1.40	1.33
1	N	749	A	C3'-C2'	8.07	1.61	1.52
1	N	751	U	C2-N3	8.07	1.43	1.37
1	N	382	A	N9-C4	-8.06	1.33	1.37
1	N	1500	A	C5-C6	-8.05	1.33	1.41
1	N	350	G	C6-N1	8.05	1.45	1.39
1	N	464	U	O3'-P	-8.05	1.51	1.61
1	N	722	G	C2-N3	8.05	1.39	1.32
1	N	575	G	C6-N1	-8.05	1.33	1.39
1	N	520	A	C2'-C1'	-8.04	1.44	1.53
1	N	548	G	C2-N3	8.04	1.39	1.32
1	N	447	G	C6-N1	8.04	1.45	1.39
1	N	96	U	N3-C4	8.04	1.45	1.38
1	N	397	A	C6-N6	8.04	1.40	1.33
1	N	482	A	C6-N6	8.04	1.40	1.33
1	N	229	U	C5'-C4'	8.04	1.60	1.51
1	N	521	G	N7-C5	-8.04	1.34	1.39
1	N	878	A	N7-C5	-8.04	1.34	1.39
1	N	946	A	C2'-C1'	-8.03	1.44	1.53
1	N	1264	U	C2-N3	8.04	1.43	1.37
1	N	191	G	C2'-C1'	-8.03	1.44	1.53
1	N	689	C	C4-C5	8.03	1.49	1.43
1	N	1520	C	C4'-C3'	-8.03	1.44	1.53
1	N	91	U	C2'-C1'	-8.03	1.44	1.53
1	N	118	U	C4'-C3'	8.03	1.61	1.53
1	N	562	U	P-O5'	8.03	1.67	1.59
1	N	133	U	C4-C5	8.02	1.50	1.43
1	N	1261	A	C2'-C1'	-8.02	1.44	1.53
1	N	1371	G	C8-N7	-8.02	1.26	1.30
1	N	586	C	C4-N4	8.02	1.41	1.33
1	N	1130	A	N3-C4	-8.02	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	346	G	C6-N1	8.02	1.45	1.39
1	N	731	G	C6-O6	-8.01	1.17	1.24
1	N	382	A	C2-N3	8.01	1.40	1.33
1	N	850	U	C2-N3	8.01	1.43	1.37
1	N	1009	U	C2-N3	8.01	1.43	1.37
1	N	1114	C	C4-N4	8.01	1.41	1.33
1	N	1062	U	N1-C6	8.01	1.45	1.38
1	N	1244	G	O3'-P	-8.01	1.51	1.61
1	N	259	G	N7-C5	-8.01	1.34	1.39
1	N	836	G	C6-N1	8.00	1.45	1.39
1	N	503	C	N1-C6	8.00	1.42	1.37
1	N	1041	G	N9-C8	8.00	1.43	1.37
1	N	1085	U	C3'-C2'	8.00	1.61	1.52
1	N	1437	A	N7-C5	-8.00	1.34	1.39
1	N	609	A	C2'-C1'	-8.00	1.44	1.53
1	N	725	G	N9-C8	8.00	1.43	1.37
1	N	270	A	N9-C8	7.99	1.44	1.37
1	N	348	G	C6-N1	7.99	1.45	1.39
1	N	109	A	C4'-C3'	7.99	1.61	1.53
1	N	371	A	N9-C8	7.99	1.44	1.37
1	N	344	A	C6-N1	7.99	1.41	1.35
1	N	1156	G	N9-C4	-7.98	1.31	1.38
1	N	1119	C	P-O5'	7.98	1.67	1.59
1	N	1405	G	N3-C4	-7.98	1.29	1.35
1	N	120	A	C4'-C3'	7.98	1.61	1.53
1	N	1526	G	N1-C2	7.98	1.44	1.37
1	N	35	G	C2-N3	7.97	1.39	1.32
1	N	513	C	N3-C4	7.97	1.39	1.33
1	N	107	G	C2-N3	7.97	1.39	1.32
1	N	1413	A	C4'-C3'	7.97	1.61	1.53
1	N	338	A	N9-C4	-7.96	1.33	1.37
1	N	331	G	N3-C4	-7.96	1.29	1.35
1	N	237	G	N1-C2	7.95	1.44	1.37
1	N	570	G	C2-N3	7.95	1.39	1.32
1	N	648	A	P-O5'	-7.94	1.51	1.59
1	N	702	A	N9-C4	7.94	1.42	1.37
1	N	416	G	C2-N3	7.93	1.39	1.32
1	N	828	U	P-O5'	-7.93	1.51	1.59
1	N	1175	G	N1-C2	7.93	1.44	1.37
1	N	1409	C	C2'-C1'	-7.93	1.44	1.53
1	N	807	A	O3'-P	-7.93	1.51	1.61
1	N	1299	A	N3-C4	7.93	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	514	C	O3'-P	7.93	1.70	1.61
1	N	1074	G	N1-C2	7.93	1.44	1.37
1	N	1174	G	N9-C4	-7.93	1.31	1.38
1	N	238	A	N9-C4	7.92	1.42	1.37
1	N	1408	A	N9-C4	-7.92	1.33	1.37
1	N	526	C	N3-C4	7.92	1.39	1.33
1	N	146	G	N9-C4	-7.92	1.31	1.38
1	N	535	A	C8-N7	-7.92	1.26	1.31
1	N	886	G	N7-C5	-7.92	1.34	1.39
1	N	201	G	N1-C2	7.92	1.44	1.37
1	N	465	A	C8-N7	-7.92	1.26	1.31
1	N	529	G	C5-C4	7.92	1.43	1.38
1	N	1118	U	C4-C5	7.92	1.50	1.43
1	N	435	A	C6-N6	7.91	1.40	1.33
1	N	729	A	P-O5'	-7.91	1.51	1.59
1	N	562	U	O3'-P	-7.91	1.51	1.61
1	N	665	A	N1-C2	7.91	1.41	1.34
1	N	852	G	N7-C5	-7.91	1.34	1.39
1	N	283	U	P-O5'	-7.91	1.51	1.59
1	N	293	G	N9-C4	-7.91	1.31	1.38
1	N	1345	U	C2'-C1'	-7.90	1.44	1.53
1	N	1500	A	C6-N6	7.90	1.40	1.33
1	N	1516	G	N7-C5	-7.90	1.34	1.39
1	N	1294	G	C5'-C4'	7.90	1.60	1.51
1	N	1409	C	N3-C4	7.90	1.39	1.33
1	N	411	A	N9-C4	-7.89	1.33	1.37
1	N	1464	U	N1-C2	-7.89	1.31	1.38
1	N	370	C	N3-C4	7.89	1.39	1.33
1	N	728	A	N7-C5	-7.89	1.34	1.39
1	N	69	G	C8-N7	-7.89	1.26	1.30
1	N	823	C	C2-N3	-7.89	1.29	1.35
1	N	1082	A	C5-C4	7.89	1.44	1.38
1	N	270	A	C6-N1	7.89	1.41	1.35
1	N	423	G	C5-C6	-7.89	1.34	1.42
1	N	457	G	N1-C2	7.88	1.44	1.37
1	N	1244	G	C2-N2	7.88	1.42	1.34
1	N	72	A	N9-C4	-7.88	1.33	1.37
1	N	105	G	C5-C4	7.88	1.43	1.38
1	N	607	A	C6-N1	7.87	1.41	1.35
1	N	202	G	P-O5'	-7.87	1.51	1.59
1	N	412	A	N7-C5	-7.87	1.34	1.39
1	N	1155	A	C6-N1	7.87	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1244	G	N9-C4	-7.87	1.31	1.38
1	N	744	C	O3'-P	-7.87	1.51	1.61
1	N	90	C	C2'-C1'	-7.87	1.44	1.53
1	N	316	C	O3'-P	-7.86	1.51	1.61
1	N	890	G	C5-C4	-7.86	1.32	1.38
1	N	902	G	N1-C2	7.86	1.44	1.37
1	N	648	A	N3-C4	-7.86	1.30	1.34
1	N	790	A	N7-C5	-7.86	1.34	1.39
1	N	532	A	N9-C4	-7.86	1.33	1.37
1	N	1357	A	C2'-C1'	-7.85	1.44	1.53
1	N	745	G	N9-C8	7.85	1.43	1.37
1	N	1186	G	C2-N3	7.85	1.39	1.32
1	N	1364	U	C2-N3	7.85	1.43	1.37
1	N	906	A	C6-N6	7.85	1.40	1.33
1	N	1279	G	C6-N1	7.85	1.45	1.39
1	N	421	U	C5'-C4'	7.85	1.60	1.51
1	N	1390	U	N1-C2	7.85	1.45	1.38
1	N	1398	A	P-O5'	-7.85	1.51	1.59
1	N	49	U	C2-N3	7.85	1.43	1.37
1	N	506	G	N7-C5	-7.84	1.34	1.39
1	N	791	G	P-O5'	-7.84	1.51	1.59
1	N	215	C	N1-C6	-7.84	1.32	1.37
1	N	565	U	N1-C2	-7.84	1.31	1.38
1	N	118	U	C4-C5	-7.84	1.36	1.43
1	N	825	A	C6-N1	7.84	1.41	1.35
1	N	498	A	N9-C4	-7.83	1.33	1.37
1	N	821	G	N7-C5	-7.83	1.34	1.39
1	N	81	A	O4'-C1'	-7.83	1.31	1.41
1	N	1247	U	O4'-C1'	7.83	1.51	1.41
1	N	108	G	C6-N1	7.83	1.45	1.39
1	N	1334	G	C8-N7	-7.83	1.26	1.30
1	N	242	G	C8-N7	7.83	1.35	1.30
1	N	231	U	C5-C6	7.82	1.41	1.34
1	N	533	A	N9-C4	7.82	1.42	1.37
1	N	1244	G	C4'-C3'	-7.82	1.44	1.53
1	N	362	G	C5-C4	7.82	1.43	1.38
1	N	827	U	C2-N3	7.81	1.43	1.37
1	N	999	C	N3-C4	7.81	1.39	1.33
1	N	984	C	P-O5'	-7.81	1.51	1.59
1	N	1140	C	C4'-O4'	7.81	1.55	1.45
1	N	1452	C	C5'-C4'	7.81	1.60	1.51
1	N	18	C	C5'-C4'	7.81	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	384	G	C4'-C3'	-7.81	1.44	1.53
1	N	780	A	N7-C5	-7.81	1.34	1.39
1	N	1361	G	C2-N3	7.81	1.39	1.32
1	N	121	U	C3'-C2'	-7.80	1.44	1.52
1	N	1266	G	N9-C4	-7.80	1.31	1.38
1	N	1248	A	N3-C4	-7.80	1.30	1.34
1	N	427	U	N3-C4	7.80	1.45	1.38
1	N	538	G	C2-N3	7.80	1.39	1.32
1	N	1394	A	N9-C8	7.80	1.44	1.37
1	N	222	C	C2-N3	-7.79	1.29	1.35
1	N	1428	A	C8-N7	7.79	1.37	1.31
1	N	1124	G	C5-C4	7.79	1.43	1.38
1	N	328	C	C4-N4	7.78	1.41	1.33
1	N	382	A	C3'-C2'	-7.78	1.44	1.52
1	N	1335	U	N3-C4	7.78	1.45	1.38
1	N	255	G	O3'-P	-7.78	1.51	1.61
1	N	384	G	C5-C4	7.78	1.43	1.38
1	N	1033	G	C2-N3	7.78	1.39	1.32
1	N	1040	U	C4'-C3'	-7.78	1.44	1.53
1	N	1349	A	N9-C8	7.78	1.44	1.37
1	N	1029	U	C5'-C4'	7.78	1.60	1.51
1	N	1332	A	N7-C5	-7.78	1.34	1.39
1	N	913	A	C3'-C2'	7.78	1.61	1.52
1	N	1352	C	C5'-C4'	7.77	1.60	1.51
1	N	162	A	C2'-C1'	-7.77	1.44	1.53
1	N	176	C	C2-N3	7.77	1.42	1.35
1	N	902	G	N9-C8	7.77	1.43	1.37
1	N	1263	C	C4-C5	7.77	1.49	1.43
1	N	226	G	C2-N3	7.77	1.39	1.32
1	N	847	G	C6-N1	7.77	1.45	1.39
1	N	638	U	N1-C2	7.77	1.45	1.38
1	N	489	C	O3'-P	-7.76	1.51	1.61
1	N	201	G	N9-C8	7.76	1.43	1.37
1	N	837	U	O4'-C1'	7.76	1.51	1.41
1	N	1121	U	C2-N3	7.76	1.43	1.37
1	N	1012	A	N9-C4	-7.75	1.33	1.37
1	N	243	A	N9-C8	7.75	1.44	1.37
1	N	344	A	N9-C4	7.75	1.42	1.37
1	N	599	C	C4'-C3'	7.75	1.61	1.53
1	N	918	A	C8-N7	-7.75	1.26	1.31
1	N	808	C	C2'-C1'	-7.75	1.44	1.53
1	N	1031	C	N1-C6	7.75	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1394	A	C8-N7	-7.75	1.26	1.31
1	N	64	G	N7-C5	-7.75	1.34	1.39
1	N	778	G	C8-N7	-7.75	1.26	1.30
1	N	1479	C	N1-C2	7.75	1.47	1.40
1	N	66	A	N7-C5	-7.74	1.34	1.39
1	N	1377	A	C8-N7	7.74	1.36	1.31
1	N	211	G	N9-C4	-7.74	1.31	1.38
1	N	509	A	C3'-O3'	-7.74	1.31	1.42
1	N	566	G	N7-C5	-7.74	1.34	1.39
1	N	76	G	P-O5'	-7.74	1.52	1.59
1	N	97	G	C2-N3	7.74	1.39	1.32
1	N	808	C	C1'-N1	7.73	1.60	1.48
1	N	650	G	N7-C5	7.73	1.43	1.39
1	N	785	G	C8-N7	-7.73	1.26	1.30
1	N	851	G	C2-N3	7.73	1.39	1.32
1	N	83	C	C4-C5	7.73	1.49	1.43
1	N	590	U	P-O5'	-7.73	1.52	1.59
1	N	1296	C	N3-C4	7.73	1.39	1.33
1	N	412	A	C6-N1	7.73	1.41	1.35
1	N	326	G	N7-C5	-7.72	1.34	1.39
1	N	781	A	N7-C5	-7.72	1.34	1.39
1	N	1175	G	C2-N2	7.72	1.42	1.34
1	N	2	A	C6-N1	7.72	1.41	1.35
1	N	1078	U	N3-C4	7.72	1.45	1.38
1	N	1482	G	O3'-P	-7.72	1.51	1.61
1	N	343	U	C3'-C2'	-7.71	1.44	1.52
1	N	353	A	C6-N6	7.71	1.40	1.33
1	N	1168	U	N1-C2	7.71	1.45	1.38
1	N	1439	G	C2-N3	7.71	1.39	1.32
1	N	1494	G	C2-N3	7.71	1.39	1.32
1	N	954	G	C2-N3	7.70	1.39	1.32
1	N	301	G	C4'-C3'	-7.70	1.44	1.53
1	N	1198	G	N1-C2	7.70	1.44	1.37
1	N	1219	A	C6-N1	7.70	1.41	1.35
1	N	852	G	C5-C6	-7.70	1.34	1.42
1	N	138	G	C5-C4	7.70	1.43	1.38
1	N	17	U	C2-O2	7.69	1.29	1.22
1	N	894	G	N9-C4	7.69	1.44	1.38
1	N	149	A	N9-C8	7.69	1.44	1.37
1	N	287	U	C2-N3	7.69	1.43	1.37
1	N	93	U	C2-N3	7.69	1.43	1.37
1	N	919	A	N7-C5	-7.69	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	554	A	N7-C5	-7.68	1.34	1.39
1	N	1318	A	C3'-O3'	-7.68	1.31	1.42
1	N	596	A	P-O5'	-7.68	1.52	1.59
1	N	1237	C	C4'-C3'	-7.68	1.44	1.53
1	N	1266	G	C6-N1	7.68	1.45	1.39
1	N	1320	C	C3'-C2'	7.68	1.61	1.52
1	N	866	C	C5'-C4'	7.68	1.60	1.51
1	N	1488	G	N3-C4	-7.68	1.30	1.35
1	N	812	G	C2-N2	7.68	1.42	1.34
1	N	1237	C	C2-N3	7.68	1.41	1.35
1	N	1332	A	C2'-C1'	-7.68	1.45	1.53
1	N	1337	G	N1-C2	7.68	1.43	1.37
1	N	1459	G	N7-C5	7.68	1.43	1.39
1	N	458	U	N3-C4	7.67	1.45	1.38
1	N	601	G	C2'-C1'	-7.67	1.45	1.53
1	N	1099	G	C6-N1	7.67	1.45	1.39
1	N	688	G	N7-C5	-7.67	1.34	1.39
1	N	1099	G	P-O5'	-7.67	1.52	1.59
1	N	299	G	N1-C2	-7.67	1.31	1.37
1	N	163	C	N1-C6	7.66	1.41	1.37
1	N	424	G	N3-C4	7.66	1.40	1.35
1	N	1163	A	C6-N6	7.66	1.40	1.33
1	N	741	G	C5'-C4'	7.66	1.60	1.51
1	N	1406	U	C5'-C4'	7.66	1.60	1.51
1	N	1398	A	N7-C5	-7.65	1.34	1.39
1	N	1438	G	N1-C2	7.65	1.43	1.37
1	N	97	G	N1-C2	7.65	1.43	1.37
1	N	187	G	N7-C5	-7.65	1.34	1.39
1	N	781	A	C3'-C2'	7.65	1.61	1.52
1	N	558	G	C5-C4	7.65	1.43	1.38
1	N	747	A	C6-N6	7.65	1.40	1.33
1	N	156	C	C4-N4	7.65	1.40	1.33
1	N	1041	G	C2'-C1'	-7.64	1.45	1.53
1	N	208	U	C3'-C2'	7.64	1.61	1.52
1	N	848	C	P-O5'	-7.64	1.52	1.59
1	N	1157	A	C6-N1	7.64	1.41	1.35
1	N	518	C	C3'-C2'	7.64	1.61	1.52
1	N	733	G	N3-C4	-7.64	1.30	1.35
1	N	828	U	N1-C6	7.64	1.44	1.38
1	N	1422	G	C6-N1	7.64	1.44	1.39
1	N	1204	A	N3-C4	-7.64	1.30	1.34
1	N	392	C	C5'-C4'	7.64	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	844	G	N1-C2	7.64	1.43	1.37
1	N	81	A	C6-N1	7.63	1.40	1.35
1	N	1007	U	C1'-N1	7.63	1.60	1.48
1	N	1022	A	N9-C8	-7.63	1.31	1.37
1	N	529	G	N7-C5	-7.63	1.34	1.39
1	N	751	U	C5-C6	-7.63	1.27	1.34
1	N	509	A	C6-N6	7.63	1.40	1.33
1	N	8	A	C8-N7	7.62	1.36	1.31
1	N	581	G	N7-C5	-7.62	1.34	1.39
1	N	1420	U	C2'-C1'	7.62	1.61	1.53
1	N	1270	G	C2-N3	7.62	1.38	1.32
1	N	400	C	C4-N4	7.62	1.40	1.33
1	N	1476	A	C6-N6	7.62	1.40	1.33
1	N	730	G	C5-C6	-7.62	1.34	1.42
1	N	147	G	C5-C4	-7.61	1.33	1.38
1	N	413	G	C2'-C1'	-7.61	1.45	1.53
1	N	572	A	N1-C2	-7.61	1.27	1.34
1	N	926	G	C5'-C4'	7.61	1.60	1.51
1	N	886	G	N9-C4	-7.61	1.31	1.38
1	N	85	U	C2-N3	7.61	1.43	1.37
1	N	213	G	N9-C8	-7.61	1.32	1.37
1	N	1364	U	C4'-C3'	7.61	1.61	1.53
1	N	459	A	N3-C4	-7.61	1.30	1.34
1	N	1496	C	N3-C4	7.61	1.39	1.33
1	N	1139	G	O3'-P	-7.60	1.52	1.61
1	N	1410	A	C6-N6	7.60	1.40	1.33
1	N	278	G	C2'-C1'	-7.60	1.45	1.53
1	N	643	C	C2-N3	7.60	1.41	1.35
1	N	977	A	C4'-C3'	7.60	1.61	1.53
1	N	801	U	C2'-C1'	-7.60	1.45	1.53
1	N	279	A	N9-C8	7.59	1.43	1.37
1	N	674	G	C6-N1	7.59	1.44	1.39
1	N	1113	C	N3-C4	7.59	1.39	1.33
1	N	185	U	C2-N3	7.59	1.43	1.37
1	N	838	G	C4'-C3'	7.59	1.61	1.53
1	N	1355	G	C3'-C2'	7.59	1.61	1.52
1	N	143	A	C6-N6	7.59	1.40	1.33
1	N	406	G	C8-N7	-7.59	1.26	1.30
1	N	462	G	C8-N7	-7.59	1.26	1.30
1	N	1235	U	P-O5'	-7.59	1.52	1.59
1	N	60	A	N7-C5	-7.58	1.34	1.39
1	N	199	A	C6-N1	7.58	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	224	U	N3-C4	7.58	1.45	1.38
1	N	1116	U	P-O5'	-7.58	1.52	1.59
1	N	1474	U	C2'-C1'	-7.58	1.45	1.53
1	N	1386	G	N9-C8	7.58	1.43	1.37
1	N	251	G	C8-N7	-7.58	1.26	1.30
1	N	543	U	P-O5'	-7.58	1.52	1.59
1	N	1336	C	C5'-C4'	7.58	1.60	1.51
1	N	212	G	C2'-C1'	-7.58	1.45	1.53
1	N	865	A	C5-C4	7.58	1.44	1.38
1	N	557	G	C5'-C4'	7.58	1.60	1.51
1	N	695	A	C3'-C2'	-7.58	1.44	1.52
1	N	958	A	C6-N6	7.58	1.40	1.33
1	N	44	A	N3-C4	-7.57	1.30	1.34
1	N	86	G	C5-C6	-7.57	1.34	1.42
1	N	200	G	C2-N3	7.57	1.38	1.32
1	N	448	A	C6-N6	7.57	1.40	1.33
1	N	910	C	C4-N4	7.57	1.40	1.33
1	N	1462	C	C5'-C4'	7.57	1.60	1.51
1	N	112	G	C6-N1	-7.57	1.34	1.39
1	N	386	C	N3-C4	7.57	1.39	1.33
1	N	89	U	C5-C6	7.57	1.41	1.34
1	N	829	G	C6-N1	7.57	1.44	1.39
1	N	994	A	N9-C8	7.57	1.43	1.37
1	N	1337	G	C2'-C1'	-7.56	1.45	1.53
1	N	1338	G	C6-N1	7.56	1.44	1.39
1	N	969	A	C6-N1	7.56	1.40	1.35
1	N	283	U	N3-C4	7.56	1.45	1.38
1	N	354	G	N1-C2	7.56	1.43	1.37
1	N	1221	G	C6-N1	7.55	1.44	1.39
1	N	647	C	C5'-C4'	7.55	1.60	1.51
1	N	922	G	N7-C5	7.55	1.43	1.39
1	N	66	A	C5'-C4'	7.55	1.60	1.51
1	N	555	U	C2-N3	7.55	1.43	1.37
1	N	188	C	C4-C5	7.55	1.49	1.43
1	N	1362	A	O3'-P	-7.55	1.52	1.61
1	N	1490	U	N1-C2	7.54	1.45	1.38
1	N	1160	G	N9-C8	-7.54	1.32	1.37
1	N	648	A	N7-C5	-7.54	1.34	1.39
1	N	743	A	N9-C8	7.54	1.43	1.37
1	N	540	G	N3-C4	7.54	1.40	1.35
1	N	210	C	N3-C4	7.54	1.39	1.33
1	N	287	U	N1-C6	7.54	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	822	U	C2-N3	7.54	1.43	1.37
1	N	1181	G	N1-C2	7.54	1.43	1.37
1	N	860	A	C2'-C1'	-7.53	1.45	1.53
1	N	1371	G	N1-C2	7.53	1.43	1.37
1	N	1060	U	C4-C5	7.53	1.50	1.43
1	N	1151	A	C5'-C4'	7.53	1.60	1.51
1	N	1360	A	N9-C8	7.53	1.43	1.37
1	N	473	U	C5'-C4'	7.53	1.60	1.51
1	N	193	C	P-O5'	-7.52	1.52	1.59
1	N	806	C	C1'-N1	7.52	1.60	1.48
1	N	1421	G	C2-N2	7.52	1.42	1.34
1	N	456	A	N7-C5	-7.52	1.34	1.39
1	N	847	G	C3'-C2'	-7.52	1.44	1.52
1	N	1180	A	C8-N7	-7.52	1.26	1.31
1	N	1457	G	C5-C6	-7.52	1.34	1.42
1	N	1152	A	C2'-C1'	-7.51	1.45	1.53
1	N	1178	G	O3'-P	-7.51	1.52	1.61
1	N	1471	U	C2-N3	7.51	1.43	1.37
1	N	79	G	C8-N7	-7.51	1.26	1.30
1	N	1107	C	C1'-N1	7.51	1.60	1.48
1	N	983	A	N7-C5	-7.50	1.34	1.39
1	N	1374	A	O4'-C1'	7.50	1.51	1.41
1	N	153	C	C2'-C1'	-7.50	1.45	1.53
1	N	61	G	C2-N3	7.50	1.38	1.32
1	N	389	A	C2-N3	7.50	1.40	1.33
1	N	1207	G	N3-C4	7.50	1.40	1.35
1	N	1214	C	C5'-C4'	7.50	1.60	1.51
1	N	1434	A	C6-N6	7.50	1.40	1.33
1	N	389	A	N7-C5	-7.50	1.34	1.39
1	N	916	U	C4'-C3'	7.50	1.61	1.53
1	N	1001	C	P-O5'	-7.50	1.52	1.59
1	N	220	G	C2-N3	7.50	1.38	1.32
1	N	847	G	N3-C4	7.49	1.40	1.35
1	N	967	C	N1-C6	-7.49	1.32	1.37
1	N	987	G	C8-N7	7.49	1.35	1.30
1	N	1298	U	C2-N3	7.49	1.43	1.37
1	N	926	G	N1-C2	7.49	1.43	1.37
1	N	311	C	C4-N4	7.49	1.40	1.33
1	N	920	U	C5'-C4'	7.49	1.60	1.51
1	N	380	G	C3'-C2'	-7.48	1.44	1.52
1	N	1336	C	C2-N3	7.48	1.41	1.35
1	N	312	C	N3-C4	7.48	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	615	G	C8-N7	-7.48	1.26	1.30
1	N	656	G	C1'-N9	7.48	1.59	1.48
1	N	531	U	C2-N3	7.48	1.43	1.37
1	N	836	G	N9-C8	7.47	1.43	1.37
1	N	1469	C	O4'-C1'	-7.47	1.31	1.41
1	N	31	G	N1-C2	7.47	1.43	1.37
1	N	460	A	C4'-O4'	7.47	1.55	1.45
1	N	246	A	C2'-C1'	-7.47	1.45	1.53
1	N	905	U	O3'-P	-7.47	1.52	1.61
1	N	195	A	N9-C4	-7.47	1.33	1.37
1	N	393	A	P-O5'	-7.47	1.52	1.59
1	N	568	G	N9-C8	7.47	1.43	1.37
1	N	1153	G	C2-N3	7.47	1.38	1.32
1	N	1270	G	C6-N1	7.47	1.44	1.39
1	N	319	G	N7-C5	-7.46	1.34	1.39
1	N	392	C	O4'-C1'	7.46	1.51	1.41
1	N	435	A	O3'-P	-7.46	1.52	1.61
1	N	924	C	P-O5'	-7.46	1.52	1.59
1	N	979	C	N3-C4	7.46	1.39	1.33
1	N	318	G	C8-N7	-7.46	1.26	1.30
1	N	204	G	N9-C4	-7.46	1.31	1.38
1	N	548	G	C6-N1	7.46	1.44	1.39
1	N	725	G	C5-C4	7.46	1.43	1.38
1	N	1273	C	C4-N4	7.46	1.40	1.33
1	N	887	G	C8-N7	7.46	1.35	1.30
1	N	975	A	C6-N1	7.46	1.40	1.35
1	N	1096	C	C4-C5	7.46	1.49	1.43
1	N	719	C	C2-O2	7.46	1.31	1.24
1	N	729	A	N9-C4	7.46	1.42	1.37
1	N	1157	A	N9-C4	-7.46	1.33	1.37
1	N	168	G	N7-C5	7.45	1.43	1.39
1	N	616	G	C2'-C1'	-7.45	1.45	1.53
1	N	736	C	N3-C4	7.45	1.39	1.33
1	N	962	C	C4-N4	7.45	1.40	1.33
1	N	949	A	N9-C4	7.45	1.42	1.37
1	N	345	C	N3-C4	7.45	1.39	1.33
1	N	673	A	C6-N1	7.45	1.40	1.35
1	N	130	A	C3'-O3'	7.44	1.52	1.42
1	N	1117	A	N9-C4	-7.44	1.33	1.37
1	N	1531	A	O3'-P	-7.44	1.52	1.61
1	N	1524	C	C4-N4	7.43	1.40	1.33
1	N	387	U	O3'-P	-7.43	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1408	A	O3'-P	-7.43	1.52	1.61
1	N	1534	A	C6-N6	7.43	1.39	1.33
1	N	507	C	N3-C4	7.43	1.39	1.33
1	N	728	A	P-O5'	7.43	1.67	1.59
1	N	1193	G	C5-C4	7.43	1.43	1.38
1	N	143	A	N3-C4	7.43	1.39	1.34
1	N	222	C	C4'-C3'	7.43	1.61	1.53
1	N	446	G	P-O5'	-7.43	1.52	1.59
1	N	1057	G	N7-C5	7.43	1.43	1.39
1	N	1476	A	N3-C4	-7.43	1.30	1.34
1	N	482	A	C5'-C4'	7.42	1.60	1.51
1	N	637	C	C2-N3	7.42	1.41	1.35
1	N	1416	G	N1-C2	7.42	1.43	1.37
1	N	1149	C	N3-C4	7.42	1.39	1.33
1	N	1192	C	C3'-C2'	-7.42	1.44	1.52
1	N	721	G	C5'-C4'	7.42	1.60	1.51
1	N	1153	G	C2'-C1'	-7.42	1.45	1.53
1	N	357	G	C6-N1	7.42	1.44	1.39
1	N	729	A	C6-N6	7.42	1.39	1.33
1	N	744	C	C2-N3	7.42	1.41	1.35
1	N	800	G	C5-C4	7.42	1.43	1.38
1	N	847	G	N9-C8	-7.42	1.32	1.37
1	N	890	G	N9-C4	-7.42	1.32	1.38
1	N	1211	U	C5'-C4'	7.42	1.60	1.51
1	N	614	C	N1-C6	7.41	1.41	1.37
1	N	1145	A	N9-C4	-7.41	1.33	1.37
1	N	120	A	O4'-C1'	-7.41	1.32	1.41
1	N	341	C	C4-N4	7.41	1.40	1.33
1	N	71	A	N7-C5	-7.41	1.34	1.39
1	N	482	A	N3-C4	7.41	1.39	1.34
1	N	817	C	C2'-C1'	-7.41	1.45	1.53
1	N	849	G	C5-C4	7.41	1.43	1.38
1	N	924	C	O3'-P	-7.41	1.52	1.61
1	N	1252	A	C5-C4	7.41	1.44	1.38
1	N	694	A	O3'-P	-7.40	1.52	1.61
1	N	102	G	N7-C5	-7.40	1.34	1.39
1	N	1474	U	C2-N3	7.40	1.43	1.37
1	N	59	A	C5'-C4'	7.40	1.60	1.51
1	N	960	U	N3-C4	7.40	1.45	1.38
1	N	973	G	C5-C4	-7.40	1.33	1.38
1	N	1143	G	C8-N7	-7.40	1.26	1.30
1	N	1292	G	C2-N3	7.40	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	19	A	N3-C4	7.39	1.39	1.34
1	N	772	U	C1'-N1	7.39	1.59	1.48
1	N	1491	G	N7-C5	-7.39	1.34	1.39
1	N	142	G	C6-N1	7.39	1.44	1.39
1	N	1228	C	N3-C4	7.39	1.39	1.33
1	N	991	U	C1'-N1	7.39	1.59	1.48
1	N	390	U	C5'-C4'	7.38	1.60	1.51
1	N	1384	C	N1-C6	7.38	1.41	1.37
1	N	670	G	N7-C5	-7.38	1.34	1.39
1	N	604	G	C5'-C4'	7.38	1.60	1.51
1	N	1054	C	C4-N4	7.38	1.40	1.33
1	N	1043	G	C3'-C2'	7.38	1.61	1.52
1	N	1340	A	N3-C4	-7.38	1.30	1.34
1	N	1508	A	N9-C8	7.38	1.43	1.37
1	N	129	A	C6-N6	7.38	1.39	1.33
1	N	511	C	C5'-C4'	7.38	1.60	1.51
1	N	63	C	C5-C6	7.38	1.40	1.34
1	N	305	G	C5-C4	-7.38	1.33	1.38
1	N	625	U	N1-C2	7.37	1.45	1.38
1	N	261	U	C4'-C3'	7.37	1.61	1.53
1	N	393	A	C5'-C4'	7.37	1.60	1.51
1	N	81	A	N3-C4	-7.37	1.30	1.34
1	N	524	G	C5-C4	7.37	1.43	1.38
1	N	712	A	C4'-C3'	7.37	1.61	1.53
1	N	838	G	C2-N3	7.36	1.38	1.32
1	N	1440	U	C4'-C3'	7.36	1.61	1.53
1	N	1519	A	C6-N6	7.36	1.39	1.33
1	N	971	G	C6-O6	-7.36	1.17	1.24
1	N	229	U	C2-N3	7.36	1.43	1.37
1	N	1018	G	C3'-C2'	-7.35	1.44	1.52
1	N	1126	U	N1-C2	7.35	1.45	1.38
1	N	97	G	O3'-P	-7.35	1.52	1.61
1	N	187	G	C2-N3	7.34	1.38	1.32
1	N	942	G	C2-N2	7.34	1.41	1.34
1	N	1126	U	C2-N3	7.34	1.42	1.37
1	N	313	A	N9-C8	7.34	1.43	1.37
1	N	9	G	C5-C4	7.34	1.43	1.38
1	N	808	C	C4-C5	7.34	1.48	1.43
1	N	1312	G	C2-N3	7.34	1.38	1.32
1	N	1434	A	C2'-C1'	-7.34	1.45	1.53
1	N	508	U	N1-C2	7.33	1.45	1.38
1	N	1042	A	P-O5'	-7.33	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	124	C	O3'-P	-7.33	1.52	1.61
1	N	274	A	N9-C8	-7.33	1.31	1.37
1	N	663	A	C6-N1	7.33	1.40	1.35
1	N	705	G	C2-N3	7.33	1.38	1.32
1	N	1127	G	N9-C4	-7.33	1.32	1.38
1	N	515	G	P-O5'	-7.33	1.52	1.59
1	N	620	C	C3'-C2'	-7.33	1.44	1.52
1	N	985	C	C4-N4	7.33	1.40	1.33
1	N	927	G	C8-N7	7.33	1.35	1.30
1	N	1129	C	P-O5'	-7.33	1.52	1.59
1	N	51	A	O3'-P	-7.32	1.52	1.61
1	N	426	U	N3-C4	7.32	1.45	1.38
1	N	945	G	C2-N3	7.32	1.38	1.32
1	N	1269	A	C5'-C4'	7.32	1.60	1.51
1	N	1457	G	C6-N1	7.32	1.44	1.39
1	N	62	U	C5-C6	7.32	1.40	1.34
1	N	468	A	C6-N1	7.32	1.40	1.35
1	N	932	C	N1-C6	7.32	1.41	1.37
1	N	127	G	N1-C2	7.32	1.43	1.37
1	N	313	A	C6-N6	7.32	1.39	1.33
1	N	1222	G	N1-C2	7.31	1.43	1.37
1	N	159	G	C2'-C1'	-7.31	1.45	1.53
1	N	693	G	C3'-C2'	-7.31	1.44	1.52
1	N	941	G	C5-C4	7.31	1.43	1.38
1	N	1526	G	C6-N1	7.31	1.44	1.39
1	N	1480	A	C6-N1	7.31	1.40	1.35
1	N	361	G	N9-C4	-7.31	1.32	1.38
1	N	1507	A	C6-N6	7.30	1.39	1.33
1	N	9	G	N9-C4	-7.30	1.32	1.38
1	N	469	C	N1-C6	7.30	1.41	1.37
1	N	584	G	N7-C5	-7.30	1.34	1.39
1	N	1231	G	N7-C5	-7.30	1.34	1.39
1	N	1361	G	N1-C2	7.30	1.43	1.37
1	N	175	C	C4'-C3'	7.30	1.61	1.53
1	N	331	G	N1-C2	7.30	1.43	1.37
1	N	791	G	N9-C4	7.30	1.43	1.38
1	N	815	A	C6-N6	7.30	1.39	1.33
1	N	129	A	C4'-C3'	-7.30	1.45	1.53
1	N	338	A	C5-C4	7.30	1.43	1.38
1	N	1339	A	P-O5'	-7.30	1.52	1.59
1	N	1343	G	N7-C5	-7.30	1.34	1.39
1	N	808	C	O3'-P	-7.30	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	311	C	N1-C6	7.29	1.41	1.37
1	N	722	G	C8-N7	-7.29	1.26	1.30
1	N	1050	G	C8-N7	7.29	1.35	1.30
1	N	328	C	C4-C5	7.29	1.48	1.43
1	N	158	G	C5'-C4'	7.29	1.60	1.51
1	N	604	G	C6-N1	7.28	1.44	1.39
1	N	1147	C	N3-C4	7.28	1.39	1.33
1	N	332	G	C5-C4	7.28	1.43	1.38
1	N	947	G	N9-C8	7.28	1.43	1.37
1	N	397	A	N9-C4	7.28	1.42	1.37
1	N	506	G	C8-N7	-7.28	1.26	1.30
1	N	537	G	C5-C6	-7.28	1.35	1.42
1	N	629	A	C2'-C1'	-7.28	1.45	1.53
1	N	1271	A	N9-C4	7.28	1.42	1.37
1	N	1498	U	C4-O4	7.28	1.29	1.23
1	N	138	G	N9-C8	-7.28	1.32	1.37
1	N	146	G	C5-C4	7.28	1.43	1.38
1	N	397	A	C8-N7	7.28	1.36	1.31
1	N	755	G	C2-N3	7.28	1.38	1.32
1	N	969	A	C3'-C2'	7.27	1.60	1.52
1	N	1425	U	N3-C4	7.27	1.45	1.38
1	N	36	C	C4'-C3'	7.27	1.61	1.53
1	N	79	G	C2-N2	7.27	1.41	1.34
1	N	893	C	N3-C4	7.27	1.39	1.33
1	N	88	U	C4-O4	7.27	1.29	1.23
1	N	623	C	N1-C6	7.27	1.41	1.37
1	N	105	G	C2-N3	7.27	1.38	1.32
1	N	430	A	C3'-C2'	7.27	1.60	1.52
1	N	563	A	C2-N3	7.27	1.40	1.33
1	N	1285	A	C3'-C2'	-7.27	1.44	1.52
1	N	1332	A	N3-C4	-7.27	1.30	1.34
1	N	179	A	N9-C8	7.27	1.43	1.37
1	N	258	G	C8-N7	-7.27	1.26	1.30
1	N	494	G	C2-N3	7.27	1.38	1.32
1	N	337	G	C2'-C1'	-7.26	1.45	1.53
1	N	1480	A	C4'-C3'	7.26	1.61	1.53
1	N	292	G	P-O5'	-7.26	1.52	1.59
1	N	1378	C	P-O5'	-7.26	1.52	1.59
1	N	1475	G	C2-N2	7.26	1.41	1.34
1	N	307	C	C4-C5	7.26	1.48	1.43
1	N	507	C	C2-N3	-7.26	1.29	1.35
1	N	664	G	C5'-C4'	-7.26	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	48	C	C4'-C3'	-7.26	1.45	1.53
1	N	1524	C	N1-C6	7.26	1.41	1.37
1	N	26	A	C6-N1	7.26	1.40	1.35
1	N	133	U	C2'-C1'	7.26	1.61	1.53
1	N	867	G	C2-N3	7.26	1.38	1.32
1	N	903	G	C3'-C2'	-7.26	1.44	1.52
1	N	1345	U	N1-C2	-7.26	1.32	1.38
1	N	1136	C	C4-N4	7.25	1.40	1.33
1	N	642	A	N7-C5	-7.25	1.34	1.39
1	N	1476	A	C6-N1	7.25	1.40	1.35
1	N	226	G	N9-C8	-7.25	1.32	1.37
1	N	403	C	N3-C4	7.25	1.39	1.33
1	N	1230	C	N1-C6	7.25	1.41	1.37
1	N	1519	A	N9-C8	7.24	1.43	1.37
1	N	381	C	C2-N3	7.24	1.41	1.35
1	N	714	G	N1-C2	7.24	1.43	1.37
1	N	814	A	N9-C8	-7.24	1.31	1.37
1	N	1353	G	C6-N1	7.24	1.44	1.39
1	N	1429	A	O3'-P	-7.24	1.52	1.61
1	N	32	A	N9-C4	-7.24	1.33	1.37
1	N	1338	G	C2'-C1'	7.24	1.61	1.53
1	N	487	A	C6-N1	7.24	1.40	1.35
1	N	641	U	N1-C6	7.24	1.44	1.38
1	N	759	A	C6-N6	7.24	1.39	1.33
1	N	453	G	C2'-C1'	-7.24	1.45	1.53
1	N	498	A	C8-N7	-7.23	1.26	1.31
1	N	610	U	C4'-C3'	-7.23	1.45	1.53
1	N	196	A	N3-C4	-7.23	1.30	1.34
1	N	269	C	C4-C5	-7.23	1.37	1.43
1	N	410	G	C6-N1	7.23	1.44	1.39
1	N	801	U	N3-C4	7.23	1.45	1.38
1	N	668	G	P-O5'	-7.23	1.52	1.59
1	N	780	A	C6-N6	7.23	1.39	1.33
1	N	894	G	C2-N2	7.23	1.41	1.34
1	N	1329	A	C5-C4	7.23	1.43	1.38
1	N	576	C	C4-N4	7.23	1.40	1.33
1	N	960	U	C2-N3	7.23	1.42	1.37
1	N	1018	G	C6-N1	7.23	1.44	1.39
1	N	450	G	C2'-C1'	7.22	1.61	1.53
1	N	770	C	C4-N4	7.22	1.40	1.33
1	N	820	U	C4-O4	7.22	1.29	1.23
1	N	655	A	C4'-O4'	-7.22	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	273	U	P-O5'	-7.22	1.52	1.59
1	N	897	C	C4-N4	7.22	1.40	1.33
1	N	1519	A	C5-C6	7.22	1.47	1.41
1	N	354	G	C3'-O3'	7.21	1.52	1.42
1	N	648	A	C6-N1	7.21	1.40	1.35
1	N	175	C	C5'-C4'	7.21	1.60	1.51
1	N	1483	A	O3'-P	-7.21	1.52	1.61
1	N	816	A	C8-N7	-7.21	1.26	1.31
1	N	1093	A	C6-N1	7.21	1.40	1.35
1	N	1195	C	O4'-C1'	7.21	1.51	1.41
1	N	184	G	C2-N3	7.21	1.38	1.32
1	N	351	G	C6-N1	7.21	1.44	1.39
1	N	724	G	C5-C6	-7.21	1.35	1.42
1	N	1347	G	C6-N1	7.21	1.44	1.39
1	N	574	A	C6-N6	7.21	1.39	1.33
1	N	1305	G	C8-N7	7.21	1.35	1.30
1	N	293	G	O3'-P	-7.21	1.52	1.61
1	N	223	A	C2-N3	7.20	1.40	1.33
1	N	598	U	N1-C6	7.20	1.44	1.38
1	N	1182	G	O3'-P	-7.20	1.52	1.61
1	N	1110	A	C8-N7	-7.20	1.26	1.31
1	N	1420	U	N3-C4	7.20	1.45	1.38
1	N	1163	A	C6-N1	7.20	1.40	1.35
1	N	1242	G	N3-C4	7.19	1.40	1.35
1	N	129	A	P-O5'	-7.19	1.52	1.59
1	N	191	G	C6-N1	7.19	1.44	1.39
1	N	14	U	O3'-P	-7.19	1.52	1.61
1	N	1099	G	C2-N3	7.18	1.38	1.32
1	N	148	G	N7-C5	-7.18	1.34	1.39
1	N	161	A	C3'-O3'	7.18	1.52	1.42
1	N	450	G	N3-C4	-7.18	1.30	1.35
1	N	613	C	C4-N4	7.18	1.40	1.33
1	N	1162	C	C5'-C4'	7.18	1.59	1.51
1	N	1495	U	C4-C5	-7.18	1.37	1.43
1	N	575	G	C5'-C4'	7.18	1.59	1.51
1	N	1089	G	C2'-C1'	-7.18	1.45	1.53
1	N	1502	A	C5-C4	7.18	1.43	1.38
1	N	1218	C	C2'-C1'	-7.18	1.45	1.53
1	N	65	A	O3'-P	-7.18	1.52	1.61
1	N	82	G	N3-C4	7.17	1.40	1.35
1	N	1229	A	N3-C4	7.17	1.39	1.34
1	N	1480	A	N3-C4	-7.17	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	381	C	O3'-P	-7.17	1.52	1.61
1	N	781	A	C6-N6	7.17	1.39	1.33
1	N	938	A	C2'-C1'	-7.17	1.45	1.53
1	N	351	G	C3'-C2'	7.17	1.60	1.52
1	N	964	A	C6-N6	7.17	1.39	1.33
1	N	578	C	N1-C6	7.17	1.41	1.37
1	N	191	G	N1-C2	7.17	1.43	1.37
1	N	899	C	C2'-C1'	-7.17	1.45	1.53
1	N	1251	A	N7-C5	-7.17	1.34	1.39
1	N	427	U	C5-C6	7.16	1.40	1.34
1	N	521	G	N3-C4	7.16	1.40	1.35
1	N	931	C	N1-C6	7.16	1.41	1.37
1	N	1186	G	C8-N7	7.16	1.35	1.30
1	N	1458	G	C2-N2	7.16	1.41	1.34
1	N	189	A	C5'-C4'	7.15	1.59	1.51
1	N	709	U	P-O5'	-7.15	1.52	1.59
1	N	213	G	C5-C6	-7.15	1.35	1.42
1	N	749	A	N1-C2	7.15	1.40	1.34
1	N	1204	A	P-O5'	7.15	1.67	1.59
1	N	1270	G	C5'-C4'	7.15	1.59	1.51
1	N	1279	G	N1-C2	7.15	1.43	1.37
1	N	451	A	C4'-C3'	7.15	1.61	1.53
1	N	829	G	P-O5'	-7.15	1.52	1.59
1	N	1259	C	N3-C4	7.15	1.39	1.33
1	N	403	C	C4-C5	7.15	1.48	1.43
1	N	631	C	N3-C4	7.15	1.39	1.33
1	N	360	G	N9-C8	7.14	1.42	1.37
1	N	596	A	N7-C5	-7.14	1.34	1.39
1	N	1514	G	C6-N1	7.14	1.44	1.39
1	N	975	A	P-O5'	-7.14	1.52	1.59
1	N	1215	G	N9-C8	7.14	1.42	1.37
1	N	1283	U	N3-C4	7.14	1.44	1.38
1	N	274	A	N7-C5	-7.14	1.34	1.39
1	N	1201	A	O4'-C1'	7.14	1.50	1.41
1	N	143	A	N9-C8	-7.14	1.32	1.37
1	N	954	G	N9-C4	-7.14	1.32	1.38
1	N	40	C	O3'-P	7.13	1.69	1.61
1	N	588	G	P-O5'	-7.13	1.52	1.59
1	N	1105	A	C5'-C4'	7.13	1.59	1.51
1	N	1190	G	C2-N3	7.13	1.38	1.32
1	N	31	G	C8-N7	-7.13	1.26	1.30
1	N	138	G	N1-C2	7.13	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	87	C	N1-C6	7.13	1.41	1.37
1	N	214	C	N3-C4	7.13	1.39	1.33
1	N	700	G	N9-C4	-7.13	1.32	1.38
1	N	794	A	N7-C5	-7.13	1.34	1.39
1	N	951	G	C2-N2	7.12	1.41	1.34
1	N	972	C	O4'-C1'	-7.12	1.32	1.41
1	N	100	G	C3'-C2'	7.12	1.60	1.52
1	N	906	A	N7-C5	-7.12	1.34	1.39
1	N	1000	A	C4'-C3'	-7.12	1.45	1.53
1	N	1392	G	N1-C2	7.12	1.43	1.37
1	N	376	G	C6-N1	7.12	1.44	1.39
1	N	427	U	N1-C2	-7.12	1.32	1.38
1	N	936	C	N3-C4	7.12	1.39	1.33
1	N	1421	G	N9-C8	7.12	1.42	1.37
1	N	1473	G	C3'-O3'	7.12	1.52	1.42
1	N	1004	A	C6-N1	7.12	1.40	1.35
1	N	1500	A	C2-N3	7.12	1.40	1.33
1	N	11	G	C2-N3	7.12	1.38	1.32
1	N	1175	G	N9-C8	7.12	1.42	1.37
1	N	1371	G	C5-C4	7.11	1.43	1.38
1	N	633	G	C6-N1	7.11	1.44	1.39
1	N	555	U	C1'-N1	7.11	1.59	1.48
1	N	198	G	C5'-C4'	7.11	1.59	1.51
1	N	862	C	N3-C4	7.11	1.39	1.33
1	N	895	G	C5-C6	-7.11	1.35	1.42
1	N	943	U	N1-C2	7.10	1.45	1.38
1	N	168	G	C5-C6	-7.10	1.35	1.42
1	N	715	A	C1'-N9	7.10	1.59	1.48
1	N	953	G	C2-N3	7.10	1.38	1.32
1	N	530	G	C6-N1	7.10	1.44	1.39
1	N	1019	A	N9-C4	-7.10	1.33	1.37
1	N	198	G	C6-N1	7.09	1.44	1.39
1	N	597	G	N7-C5	-7.09	1.34	1.39
1	N	948	C	C2-N3	-7.09	1.30	1.35
1	N	389	A	C6-N6	7.09	1.39	1.33
1	N	629	A	N7-C5	-7.09	1.34	1.39
1	N	1264	U	N3-C4	7.09	1.44	1.38
1	N	234	C	C4'-C3'	7.08	1.60	1.53
1	N	438	U	C2-N3	7.08	1.42	1.37
1	N	859	G	N7-C5	-7.08	1.34	1.39
1	N	68	G	C2'-C1'	-7.08	1.45	1.53
1	N	423	G	C2'-C1'	-7.08	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1408	A	N7-C5	-7.08	1.35	1.39
1	N	1455	G	C5-C4	7.08	1.43	1.38
1	N	803	G	C2-N2	7.08	1.41	1.34
1	N	1228	C	P-O5'	7.08	1.66	1.59
1	N	1408	A	C6-N6	7.08	1.39	1.33
1	N	1457	G	N3-C4	7.08	1.40	1.35
1	N	82	G	C2-N3	7.08	1.38	1.32
1	N	32	A	P-O5'	-7.07	1.52	1.59
1	N	665	A	C2'-C1'	-7.07	1.45	1.53
1	N	1308	U	C5'-C4'	7.07	1.59	1.51
1	N	371	A	C5-C6	7.07	1.47	1.41
1	N	536	C	N1-C6	-7.07	1.32	1.37
1	N	1018	G	N9-C8	7.07	1.42	1.37
1	N	1228	C	C1'-N1	7.07	1.59	1.48
1	N	1321	U	N1-C2	7.07	1.45	1.38
1	N	195	A	C2'-C1'	7.07	1.61	1.53
1	N	702	A	N9-C8	-7.07	1.32	1.37
1	N	841	C	C4-N4	7.07	1.40	1.33
1	N	1090	U	N3-C4	7.07	1.44	1.38
1	N	1246	A	N9-C4	-7.07	1.33	1.37
1	N	41	G	C4'-C3'	-7.06	1.45	1.53
1	N	1196	A	P-O5'	-7.06	1.52	1.59
1	N	1357	A	N9-C4	-7.06	1.33	1.37
1	N	258	G	N9-C4	-7.06	1.32	1.38
1	N	643	C	C4-N4	7.06	1.40	1.33
1	N	1505	G	N7-C5	7.06	1.43	1.39
1	N	996	A	N1-C2	7.06	1.40	1.34
1	N	68	G	C2-N2	7.06	1.41	1.34
1	N	499	A	N7-C5	-7.06	1.35	1.39
1	N	687	A	C6-N1	7.06	1.40	1.35
1	N	1221	G	C5-C4	7.06	1.43	1.38
1	N	983	A	C5-C4	7.05	1.43	1.38
1	N	1043	G	O3'-P	-7.05	1.52	1.61
1	N	1101	A	C5-C4	7.05	1.43	1.38
1	N	336	A	C6-N1	7.05	1.40	1.35
1	N	1374	A	N1-C2	7.05	1.40	1.34
1	N	329	A	C2-N3	7.05	1.39	1.33
1	N	1374	A	C6-N1	7.05	1.40	1.35
1	N	197	A	N9-C4	-7.05	1.33	1.37
1	N	247	G	N9-C8	7.05	1.42	1.37
1	N	774	G	N7-C5	-7.05	1.35	1.39
1	N	559	A	O3'-P	-7.04	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	584	G	C6-N1	7.04	1.44	1.39
1	N	1013	G	C6-N1	7.04	1.44	1.39
1	N	1381	U	C4'-O4'	7.04	1.54	1.45
1	N	594	U	C3'-C2'	7.04	1.60	1.52
1	N	557	G	C2-N3	7.04	1.38	1.32
1	N	995	C	N1-C2	7.04	1.47	1.40
1	N	1037	C	C4-C5	-7.04	1.37	1.43
1	N	451	A	C8-N7	-7.04	1.26	1.31
1	N	604	G	N1-C2	7.03	1.43	1.37
1	N	802	A	C5-C4	7.03	1.43	1.38
1	N	75	G	N9-C8	7.03	1.42	1.37
1	N	1131	G	N7-C5	-7.03	1.35	1.39
1	N	1391	U	N1-C2	-7.03	1.32	1.38
1	N	33	A	N7-C5	-7.03	1.35	1.39
1	N	207	C	C5'-C4'	7.03	1.59	1.51
1	N	756	C	N3-C4	7.03	1.38	1.33
1	N	1100	C	C2-N3	7.03	1.41	1.35
1	N	195	A	C2-N3	-7.02	1.27	1.33
1	N	171	A	C5'-C4'	7.02	1.59	1.51
1	N	259	G	N9-C8	7.02	1.42	1.37
1	N	360	G	C8-N7	-7.02	1.26	1.30
1	N	1370	G	C8-N7	7.02	1.35	1.30
1	N	816	A	N3-C4	7.02	1.39	1.34
1	N	934	C	C4'-C3'	7.02	1.60	1.53
1	N	963	G	N7-C5	-7.02	1.35	1.39
1	N	1156	G	C2-N3	7.02	1.38	1.32
1	N	1300	G	O4'-C1'	-7.02	1.32	1.41
1	N	1385	G	C3'-C2'	7.02	1.60	1.52
1	N	472	U	C2-N3	7.01	1.42	1.37
1	N	400	C	C3'-C2'	-7.01	1.45	1.52
1	N	621	A	C6-N6	7.01	1.39	1.33
1	N	1312	G	N3-C4	7.01	1.40	1.35
1	N	206	C	C3'-O3'	7.01	1.51	1.42
1	N	584	G	C8-N7	-7.01	1.26	1.30
1	N	1448	C	O3'-P	-7.01	1.52	1.61
1	N	61	G	C4'-C3'	-7.01	1.45	1.53
1	N	131	A	C6-N1	7.01	1.40	1.35
1	N	553	A	C3'-C2'	7.01	1.60	1.52
1	N	866	C	C4'-C3'	-7.01	1.45	1.53
1	N	985	C	C1'-N1	7.01	1.59	1.48
1	N	557	G	C2-N2	7.00	1.41	1.34
1	N	773	G	N1-C2	7.00	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	907	A	C6-N1	7.00	1.40	1.35
1	N	311	C	C3'-C2'	-7.00	1.45	1.52
1	N	343	U	N1-C2	7.00	1.44	1.38
1	N	416	G	C5-C4	-7.00	1.33	1.38
1	N	441	A	C6-N1	7.00	1.40	1.35
1	N	1362	A	C6-N1	-7.00	1.30	1.35
1	N	1404	C	N3-C4	7.00	1.38	1.33
1	N	1117	A	C6-N1	7.00	1.40	1.35
1	N	739	C	N3-C4	7.00	1.38	1.33
1	N	1024	G	N9-C8	-7.00	1.32	1.37
1	N	1186	G	N7-C5	-7.00	1.35	1.39
1	N	1344	C	N1-C6	-7.00	1.32	1.37
1	N	535	A	N7-C5	-6.99	1.35	1.39
1	N	406	G	N1-C2	6.99	1.43	1.37
1	N	664	G	C6-N1	6.99	1.44	1.39
1	N	1434	A	C5-C6	-6.99	1.34	1.41
1	N	1128	C	P-O5'	-6.99	1.52	1.59
1	N	655	A	C6-N6	6.98	1.39	1.33
1	N	283	U	C4'-C3'	-6.98	1.45	1.53
1	N	559	A	C4'-C3'	6.98	1.60	1.53
1	N	1072	G	C2-N2	6.98	1.41	1.34
1	N	925	G	C2-N3	6.98	1.38	1.32
1	N	983	A	N1-C2	-6.97	1.28	1.34
1	N	1297	G	C2-N3	6.97	1.38	1.32
1	N	458	U	C4'-C3'	6.97	1.60	1.53
1	N	908	A	C6-N6	6.97	1.39	1.33
1	N	1189	U	N1-C2	6.97	1.44	1.38
1	N	44	A	C6-N6	6.97	1.39	1.33
1	N	1431	A	C5-C4	6.97	1.43	1.38
1	N	466	A	C2-N3	6.96	1.39	1.33
1	N	898	G	N3-C4	6.96	1.40	1.35
1	N	326	G	N1-C2	6.96	1.43	1.37
1	N	1209	C	C2-N3	-6.96	1.30	1.35
1	N	661	G	N9-C8	-6.96	1.32	1.37
1	N	1262	C	O3'-P	6.96	1.69	1.61
1	N	181	A	N7-C5	6.96	1.43	1.39
1	N	990	C	C4-N4	6.96	1.40	1.33
1	N	929	G	N7-C5	-6.96	1.35	1.39
1	N	1279	G	C5'-C4'	6.95	1.59	1.51
1	N	1446	A	O3'-P	-6.95	1.52	1.61
1	N	1469	C	C5-C6	6.95	1.40	1.34
1	N	956	U	C2'-C1'	6.95	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1480	A	C2'-C1'	-6.95	1.45	1.53
1	N	10	A	P-O5'	-6.95	1.52	1.59
1	N	262	A	N9-C4	-6.95	1.33	1.37
1	N	1278	G	N1-C2	6.95	1.43	1.37
1	N	1394	A	N9-C4	-6.95	1.33	1.37
1	N	544	G	N9-C4	-6.95	1.32	1.38
1	N	1403	C	C5-C6	-6.95	1.28	1.34
1	N	302	G	C2-N3	6.94	1.38	1.32
1	N	747	A	C6-N1	6.94	1.40	1.35
1	N	1148	U	O4'-C1'	6.94	1.50	1.41
1	N	1196	A	N9-C8	-6.94	1.32	1.37
1	N	127	G	N3-C4	-6.94	1.30	1.35
1	N	217	C	N1-C6	6.94	1.41	1.37
1	N	415	A	N9-C4	6.94	1.42	1.37
1	N	914	A	C2'-C1'	-6.94	1.45	1.53
1	N	825	A	C1'-N9	-6.94	1.37	1.46
1	N	88	U	C2-N3	6.94	1.42	1.37
1	N	617	G	C5-C4	6.94	1.43	1.38
1	N	330	C	C4-N4	6.93	1.40	1.33
1	N	478	A	N9-C4	-6.93	1.33	1.37
1	N	1412	C	C2'-C1'	6.93	1.60	1.53
1	N	809	G	C5-C4	-6.93	1.33	1.38
1	N	960	U	O3'-P	-6.93	1.52	1.61
1	N	1395	C	P-O5'	6.93	1.66	1.59
1	N	53	A	C3'-O3'	6.93	1.51	1.42
1	N	190	A	C6-N1	6.93	1.40	1.35
1	N	594	U	C5'-C4'	6.93	1.59	1.51
1	N	1153	G	C5-C4	6.93	1.43	1.38
1	N	1327	C	N1-C6	-6.93	1.32	1.37
1	N	76	G	C2-N3	6.92	1.38	1.32
1	N	417	G	C8-N7	-6.92	1.26	1.30
1	N	1145	A	N9-C8	6.92	1.43	1.37
1	N	1206	G	C5-C4	6.92	1.43	1.38
1	N	1491	G	N1-C2	6.92	1.43	1.37
1	N	1173	U	C2'-C1'	-6.92	1.45	1.53
1	N	1289	A	N7-C5	-6.92	1.35	1.39
1	N	401	C	C5'-C4'	6.92	1.59	1.51
1	N	1142	G	C3'-O3'	6.92	1.51	1.42
1	N	1281	C	P-O5'	6.92	1.66	1.59
1	N	506	G	C2'-C1'	-6.92	1.45	1.53
1	N	1413	A	C2-N3	-6.92	1.27	1.33
1	N	546	A	C6-N6	6.92	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1432	G	P-O5'	-6.91	1.52	1.59
1	N	171	A	C5-C4	6.91	1.43	1.38
1	N	507	C	N1-C6	-6.91	1.33	1.37
1	N	1024	G	C4'-C3'	6.91	1.60	1.53
1	N	577	G	C5'-C4'	6.91	1.59	1.51
1	N	747	A	C5'-C4'	6.91	1.59	1.51
1	N	1482	G	N7-C5	-6.91	1.35	1.39
1	N	170	U	C2-N3	6.90	1.42	1.37
1	N	223	A	N9-C4	-6.90	1.33	1.37
1	N	254	G	C4'-O4'	6.90	1.54	1.45
1	N	581	G	C3'-C2'	6.89	1.60	1.52
1	N	1324	A	N9-C8	-6.89	1.32	1.37
1	N	1520	C	N1-C6	6.89	1.41	1.37
1	N	167	A	N7-C5	6.89	1.43	1.39
1	N	180	U	O3'-P	-6.89	1.52	1.61
1	N	775	G	N1-C2	6.89	1.43	1.37
1	N	805	C	C4-N4	6.89	1.40	1.33
1	N	1070	U	N1-C6	-6.89	1.31	1.38
1	N	521	G	C6-N1	6.88	1.44	1.39
1	N	784	A	P-O5'	-6.88	1.52	1.59
1	N	173	U	C4-C5	6.88	1.49	1.43
1	N	404	G	N1-C2	6.88	1.43	1.37
1	N	981	U	N3-C4	6.88	1.44	1.38
1	N	454	G	N7-C5	-6.88	1.35	1.39
1	N	627	G	C4'-O4'	-6.88	1.36	1.45
1	N	667	G	C2-N3	6.88	1.38	1.32
1	N	1163	A	O4'-C1'	6.88	1.50	1.41
1	N	1511	G	C5-C6	-6.88	1.35	1.42
1	N	890	G	N7-C5	-6.88	1.35	1.39
1	N	305	G	P-O5'	-6.88	1.52	1.59
1	N	310	G	N9-C4	-6.88	1.32	1.38
1	N	399	G	C8-N7	6.88	1.35	1.30
1	N	318	G	C3'-C2'	-6.87	1.45	1.52
1	N	1039	G	C6-N1	6.87	1.44	1.39
1	N	1099	G	N9-C4	-6.87	1.32	1.38
1	N	1164	G	P-O5'	-6.87	1.52	1.59
1	N	1238	A	C3'-C2'	6.87	1.60	1.52
1	N	614	C	C4-N4	6.87	1.40	1.33
1	N	776	G	N9-C4	-6.87	1.32	1.38
1	N	1244	G	N1-C2	6.87	1.43	1.37
1	N	1227	A	N9-C8	6.86	1.43	1.37
1	N	1272	G	C2-N3	-6.86	1.27	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1393	U	C4'-C3'	-6.86	1.45	1.53
1	N	1033	G	C8-N7	6.86	1.35	1.30
1	N	111	G	C4'-C3'	6.86	1.60	1.53
1	N	1297	G	P-O5'	-6.86	1.52	1.59
1	N	845	A	C5'-C4'	6.86	1.59	1.51
1	N	382	A	P-O5'	6.86	1.66	1.59
1	N	483	C	O4'-C1'	6.86	1.50	1.41
1	N	888	G	C8-N7	6.86	1.35	1.30
1	N	1083	U	C3'-C2'	-6.86	1.45	1.52
1	N	1278	G	C2-N2	6.86	1.41	1.34
1	N	1312	G	N9-C4	-6.86	1.32	1.38
1	N	1331	G	N3-C4	-6.86	1.30	1.35
1	N	38	G	C2-N2	6.86	1.41	1.34
1	N	168	G	C8-N7	-6.86	1.26	1.30
1	N	331	G	C4'-C3'	6.86	1.60	1.53
1	N	566	G	C8-N7	-6.86	1.26	1.30
1	N	654	G	O3'-P	-6.86	1.52	1.61
1	N	997	U	P-O5'	-6.86	1.52	1.59
1	N	245	U	C1'-N1	6.85	1.59	1.48
1	N	1455	G	N1-C2	6.85	1.43	1.37
1	N	1513	A	N3-C4	-6.85	1.30	1.34
1	N	423	G	C5'-C4'	6.85	1.59	1.51
1	N	528	C	C2'-C1'	-6.85	1.45	1.53
1	N	547	A	C6-N6	6.85	1.39	1.33
1	N	765	G	N1-C2	6.85	1.43	1.37
1	N	1366	C	P-O5'	-6.85	1.52	1.59
1	N	380	G	N9-C8	6.85	1.42	1.37
1	N	1201	A	C5-C4	6.85	1.43	1.38
1	N	976	G	N7-C5	-6.85	1.35	1.39
1	N	32	A	N1-C2	-6.84	1.28	1.34
1	N	380	G	C8-N7	6.84	1.35	1.30
1	N	443	C	N3-C4	6.84	1.38	1.33
1	N	515	G	C5'-C4'	6.84	1.59	1.51
1	N	1182	G	N9-C4	-6.84	1.32	1.38
1	N	480	U	O3'-P	-6.84	1.52	1.61
1	N	165	G	N7-C5	-6.83	1.35	1.39
1	N	363	A	O4'-C1'	6.83	1.50	1.41
1	N	209	U	N1-C2	6.83	1.44	1.38
1	N	896	C	C5'-C4'	6.83	1.59	1.51
1	N	127	G	C6-N1	6.83	1.44	1.39
1	N	1304	G	C6-N1	6.83	1.44	1.39
1	N	492	C	N1-C6	-6.83	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	729	A	N7-C5	-6.83	1.35	1.39
1	N	1267	C	C2'-C1'	-6.83	1.45	1.53
1	N	1344	C	P-O5'	-6.83	1.52	1.59
1	N	928	G	C8-N7	-6.82	1.26	1.30
1	N	1222	G	N9-C8	6.82	1.42	1.37
1	N	476	U	P-O5'	-6.82	1.52	1.59
1	N	1194	U	C4'-O4'	6.82	1.54	1.45
1	N	1346	A	N7-C5	-6.82	1.35	1.39
1	N	347	G	C4'-O4'	6.82	1.54	1.45
1	N	699	C	P-O5'	-6.81	1.52	1.59
1	N	343	U	C5'-C4'	6.81	1.59	1.51
1	N	426	U	C1'-N1	6.81	1.58	1.48
1	N	799	G	C8-N7	6.81	1.35	1.30
1	N	1040	U	O3'-P	-6.81	1.52	1.61
1	N	585	G	N3-C4	-6.80	1.30	1.35
1	N	709	U	C2'-C1'	-6.80	1.45	1.53
1	N	991	U	C4-C5	-6.80	1.37	1.43
1	N	1101	A	C6-N6	6.80	1.39	1.33
1	N	9	G	N9-C8	6.80	1.42	1.37
1	N	868	C	O3'-P	-6.80	1.52	1.61
1	N	1485	U	N1-C2	6.79	1.44	1.38
1	N	899	C	N1-C2	-6.79	1.33	1.40
1	N	1426	G	C5-C4	-6.79	1.33	1.38
1	N	151	A	C1'-N9	6.79	1.58	1.48
1	N	457	G	N9-C4	6.79	1.43	1.38
1	N	458	U	C2-N3	6.79	1.42	1.37
1	N	1385	G	C5-C6	-6.79	1.35	1.42
1	N	1496	C	C2-N3	6.79	1.41	1.35
1	N	41	G	N3-C4	6.79	1.40	1.35
1	N	1373	G	C2'-C1'	-6.79	1.45	1.53
1	N	435	A	C5-C6	-6.78	1.34	1.41
1	N	761	G	C2-N2	6.78	1.41	1.34
1	N	180	U	C2'-C1'	6.78	1.60	1.53
1	N	299	G	C2-N3	6.78	1.38	1.32
1	N	550	G	N9-C4	6.78	1.43	1.38
1	N	1385	G	C2'-C1'	-6.78	1.45	1.53
1	N	310	G	N1-C2	6.78	1.43	1.37
1	N	330	C	C2-N3	-6.78	1.30	1.35
1	N	481	G	C5'-C4'	6.78	1.59	1.51
1	N	1274	A	N3-C4	-6.78	1.30	1.34
1	N	1301	U	C4-O4	6.78	1.29	1.23
1	N	179	A	P-O5'	-6.78	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1233	G	C2-N3	6.78	1.38	1.32
1	N	68	G	N7-C5	-6.77	1.35	1.39
1	N	693	G	C5-C4	6.77	1.43	1.38
1	N	1221	G	N9-C8	6.77	1.42	1.37
1	N	1454	G	C2-N3	6.77	1.38	1.32
1	N	127	G	C5-C4	6.77	1.43	1.38
1	N	302	G	C3'-C2'	-6.77	1.45	1.52
1	N	725	G	C2'-C1'	-6.77	1.46	1.53
1	N	730	G	C2-N3	6.77	1.38	1.32
1	N	1152	A	N3-C4	-6.77	1.30	1.34
1	N	1343	G	C5-C6	-6.77	1.35	1.42
1	N	417	G	N1-C2	6.77	1.43	1.37
1	N	1427	C	C5'-C4'	6.77	1.59	1.51
1	N	8	A	C2-N3	6.77	1.39	1.33
1	N	86	G	C2-N2	6.77	1.41	1.34
1	N	382	A	C5-C4	6.77	1.43	1.38
1	N	789	U	O3'-P	-6.76	1.53	1.61
1	N	1184	G	C2-N3	6.76	1.38	1.32
1	N	1330	U	P-O5'	-6.76	1.52	1.59
1	N	362	G	N9-C8	6.76	1.42	1.37
1	N	890	G	N1-C2	6.76	1.43	1.37
1	N	284	C	C2-N3	6.76	1.41	1.35
1	N	388	G	C2'-C1'	-6.76	1.46	1.53
1	N	393	A	N3-C4	6.76	1.39	1.34
1	N	953	G	N7-C5	-6.76	1.35	1.39
1	N	1036	A	N7-C5	-6.76	1.35	1.39
1	N	12	U	N3-C4	6.76	1.44	1.38
1	N	1034	G	C2-N2	6.76	1.41	1.34
1	N	64	G	N9-C8	-6.75	1.33	1.37
1	N	145	G	C6-N1	6.75	1.44	1.39
1	N	1258	G	N3-C4	-6.75	1.30	1.35
1	N	2	A	C4'-C3'	-6.75	1.45	1.53
1	N	31	G	C2-N3	6.75	1.38	1.32
1	N	1178	G	N9-C4	-6.75	1.32	1.38
1	N	439	U	P-O5'	-6.75	1.52	1.59
1	N	999	C	O3'-P	-6.75	1.53	1.61
1	N	1528	U	C2'-C1'	-6.75	1.46	1.53
1	N	228	A	N9-C4	6.75	1.41	1.37
1	N	772	U	C4-O4	6.75	1.29	1.23
1	N	1288	A	C6-N6	6.75	1.39	1.33
1	N	1449	C	C3'-C2'	6.75	1.60	1.52
1	N	947	G	C5-C4	-6.74	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1385	G	C8-N7	-6.74	1.26	1.30
1	N	230	G	C2-N3	6.74	1.38	1.32
1	N	372	C	C3'-C2'	6.74	1.60	1.52
1	N	539	A	C6-N6	6.74	1.39	1.33
1	N	852	G	N1-C2	6.74	1.43	1.37
1	N	726	C	C5-C6	6.74	1.39	1.34
1	N	1144	G	O3'-P	-6.74	1.53	1.61
1	N	1271	A	C6-N1	6.74	1.40	1.35
1	N	172	A	C6-N6	6.74	1.39	1.33
1	N	288	A	C6-N1	6.74	1.40	1.35
1	N	583	A	N3-C4	-6.74	1.30	1.34
1	N	871	U	C1'-N1	6.74	1.58	1.48
1	N	1022	A	C8-N7	6.74	1.36	1.31
1	N	195	A	N9-C8	-6.73	1.32	1.37
1	N	192	A	C3'-C2'	-6.73	1.45	1.52
1	N	288	A	C5-C4	-6.73	1.34	1.38
1	N	1367	C	O3'-P	-6.73	1.53	1.61
1	N	1420	U	C5'-C4'	6.73	1.59	1.51
1	N	1405	G	N7-C5	-6.73	1.35	1.39
1	N	455	G	N9-C8	6.73	1.42	1.37
1	N	1250	A	C6-N1	6.73	1.40	1.35
1	N	336	A	N9-C4	-6.73	1.33	1.37
1	N	708	C	C3'-C2'	6.73	1.60	1.52
1	N	770	C	C2'-C1'	-6.73	1.46	1.53
1	N	311	C	N3-C4	6.72	1.38	1.33
1	N	1084	G	N9-C8	-6.72	1.33	1.37
1	N	1118	U	P-O5'	-6.72	1.53	1.59
1	N	1360	A	N7-C5	-6.72	1.35	1.39
1	N	57	G	O3'-P	-6.72	1.53	1.61
1	N	797	C	N3-C4	6.72	1.38	1.33
1	N	1338	G	N7-C5	6.72	1.43	1.39
1	N	1250	A	C8-N7	6.72	1.36	1.31
1	N	298	A	N7-C5	-6.72	1.35	1.39
1	N	1027	C	C4-C5	-6.72	1.37	1.43
1	N	1252	A	N9-C4	-6.72	1.33	1.37
1	N	816	A	C2'-C1'	-6.71	1.46	1.53
1	N	1454	G	C2-N2	6.71	1.41	1.34
1	N	1461	G	C6-N1	6.71	1.44	1.39
1	N	415	A	P-O5'	-6.71	1.53	1.59
1	N	570	G	N9-C8	6.71	1.42	1.37
1	N	1261	A	N7-C5	-6.71	1.35	1.39
1	N	1202	U	N3-C4	6.71	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1208	C	C3'-C2'	6.71	1.60	1.52
1	N	1313	U	C5'-C4'	6.71	1.59	1.51
1	N	88	U	C3'-C2'	6.71	1.60	1.52
1	N	88	U	N1-C6	6.71	1.44	1.38
1	N	544	G	C6-N1	6.71	1.44	1.39
1	N	64	G	N3-C4	-6.70	1.30	1.35
1	N	1164	G	O3'-P	-6.70	1.53	1.61
1	N	1405	G	C5-C4	6.70	1.43	1.38
1	N	1464	U	C2-O2	6.70	1.28	1.22
1	N	1492	A	C5-C4	6.70	1.43	1.38
1	N	274	A	C6-N6	6.70	1.39	1.33
1	N	988	G	N7-C5	-6.70	1.35	1.39
1	N	1280	A	C6-N6	6.70	1.39	1.33
1	N	649	A	C8-N7	-6.70	1.26	1.31
1	N	676	A	C5-C6	-6.70	1.35	1.41
1	N	144	G	C2-N2	6.70	1.41	1.34
1	N	342	C	C4-N4	6.70	1.40	1.33
1	N	368	U	N3-C4	6.70	1.44	1.38
1	N	1341	U	C2-N3	6.70	1.42	1.37
1	N	1483	A	N7-C5	-6.70	1.35	1.39
1	N	187	G	N9-C4	-6.69	1.32	1.38
1	N	285	C	C5'-C4'	6.69	1.59	1.51
1	N	1069	C	C2-N3	6.69	1.41	1.35
1	N	1099	G	C8-N7	-6.69	1.26	1.30
1	N	1375	A	C6-N6	6.69	1.39	1.33
1	N	1110	A	N3-C4	-6.69	1.30	1.34
1	N	1429	A	P-O5'	-6.69	1.53	1.59
1	N	246	A	C6-N6	6.69	1.39	1.33
1	N	1416	G	C5-C4	-6.69	1.33	1.38
1	N	292	G	C2-N3	6.69	1.38	1.32
1	N	1085	U	C4'-O4'	-6.69	1.36	1.45
1	N	596	A	C5-C4	-6.69	1.34	1.38
1	N	573	A	C4'-C3'	6.69	1.60	1.53
1	N	1169	A	C4'-O4'	6.69	1.54	1.45
1	N	53	A	N7-C5	-6.68	1.35	1.39
1	N	79	G	N9-C8	6.68	1.42	1.37
1	N	113	G	C2-N3	6.68	1.38	1.32
1	N	295	C	C4-N4	6.68	1.40	1.33
1	N	350	G	N9-C4	-6.68	1.32	1.38
1	N	517	G	N1-C2	6.68	1.43	1.37
1	N	601	G	C5-C6	-6.68	1.35	1.42
1	N	1449	C	N3-C4	6.68	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	944	G	C2-N3	6.68	1.38	1.32
1	N	257	G	N3-C4	-6.68	1.30	1.35
1	N	453	G	C4'-O4'	-6.68	1.36	1.45
1	N	1071	C	C1'-N1	6.68	1.58	1.48
1	N	259	G	C6-N1	6.67	1.44	1.39
1	N	668	G	C3'-C2'	-6.67	1.45	1.52
1	N	940	C	C4-C5	6.67	1.48	1.43
1	N	1256	A	C8-N7	-6.67	1.26	1.31
1	N	304	U	N1-C2	6.67	1.44	1.38
1	N	66	A	C6-N1	6.67	1.40	1.35
1	N	863	U	C4'-C3'	-6.67	1.45	1.53
1	N	1061	G	C3'-C2'	6.67	1.60	1.52
1	N	1167	A	N9-C4	6.67	1.41	1.37
1	N	1348	U	C4'-C3'	6.67	1.60	1.53
1	N	1091	U	N1-C2	6.67	1.44	1.38
1	N	1004	A	N7-C5	6.67	1.43	1.39
1	N	67	C	C3'-C2'	-6.67	1.45	1.52
1	N	162	A	C6-N1	6.67	1.40	1.35
1	N	677	U	C2'-C1'	6.67	1.60	1.53
1	N	1290	G	C2-N3	6.67	1.38	1.32
1	N	1300	G	N7-C5	-6.67	1.35	1.39
1	N	306	A	N9-C4	6.66	1.41	1.37
1	N	899	C	O4'-C1'	6.66	1.50	1.41
1	N	1116	U	C2'-C1'	-6.66	1.46	1.53
1	N	1146	A	C6-N6	-6.66	1.28	1.33
1	N	505	G	C2'-C1'	-6.66	1.46	1.53
1	N	679	C	P-O5'	-6.66	1.53	1.59
1	N	417	G	C5-C4	-6.66	1.33	1.38
1	N	1240	U	C1'-N1	6.66	1.58	1.48
1	N	1108	G	N1-C2	6.65	1.43	1.37
1	N	1174	G	N7-C5	-6.65	1.35	1.39
1	N	187	G	N1-C2	6.65	1.43	1.37
1	N	1195	C	C3'-C2'	6.65	1.60	1.52
1	N	159	G	C8-N7	-6.65	1.26	1.30
1	N	724	G	C5-C4	-6.65	1.33	1.38
1	N	1184	G	N9-C4	-6.65	1.32	1.38
1	N	472	U	P-O5'	-6.65	1.53	1.59
1	N	808	C	N3-C4	6.65	1.38	1.33
1	N	1358	U	N1-C2	-6.65	1.32	1.38
1	N	43	C	N3-C4	6.65	1.38	1.33
1	N	1007	U	N3-C4	6.65	1.44	1.38
1	N	1310	G	C2-N3	6.65	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	356	A	C6-N6	6.64	1.39	1.33
1	N	220	G	C5-C6	-6.64	1.35	1.42
1	N	1284	C	C3'-C2'	6.64	1.60	1.52
1	N	1507	A	N9-C4	6.64	1.41	1.37
1	N	11	G	C2-N2	6.64	1.41	1.34
1	N	386	C	N1-C6	6.64	1.41	1.37
1	N	1172	C	C4-N4	6.64	1.40	1.33
1	N	1475	G	N9-C4	-6.64	1.32	1.38
1	N	1025	U	C5'-C4'	6.64	1.59	1.51
1	N	896	C	C4-N4	6.64	1.40	1.33
1	N	954	G	C8-N7	6.64	1.34	1.30
1	N	255	G	P-O5'	-6.63	1.53	1.59
1	N	810	C	C4-N4	6.63	1.40	1.33
1	N	116	A	C6-N1	6.63	1.40	1.35
1	N	116	A	N1-C2	6.63	1.40	1.34
1	N	689	C	C5'-C4'	6.63	1.59	1.51
1	N	802	A	P-O5'	-6.63	1.53	1.59
1	N	1122	U	N1-C6	-6.62	1.31	1.38
1	N	273	U	O3'-P	-6.62	1.53	1.61
1	N	831	A	N9-C4	-6.62	1.33	1.37
1	N	1483	A	C4'-O4'	6.62	1.54	1.45
1	N	1433	A	C6-N1	-6.62	1.30	1.35
1	N	122	G	C5-C6	-6.62	1.35	1.42
1	N	277	C	C4'-C3'	-6.62	1.45	1.53
1	N	545	C	C4-N4	6.62	1.40	1.33
1	N	845	A	P-O5'	-6.62	1.53	1.59
1	N	889	A	C5'-C4'	6.62	1.59	1.51
1	N	233	C	C2-O2	-6.62	1.18	1.24
1	N	1269	A	O3'-P	-6.62	1.53	1.61
1	N	94	G	C8-N7	6.61	1.34	1.30
1	N	945	G	C6-N1	6.61	1.44	1.39
1	N	350	G	N3-C4	-6.61	1.30	1.35
1	N	1277	C	P-O5'	-6.61	1.53	1.59
1	N	382	A	N7-C5	-6.61	1.35	1.39
1	N	688	G	N9-C8	6.61	1.42	1.37
1	N	94	G	C4'-C3'	-6.61	1.45	1.53
1	N	196	A	N7-C5	-6.61	1.35	1.39
1	N	608	A	N7-C5	-6.61	1.35	1.39
1	N	846	G	N7-C5	-6.61	1.35	1.39
1	N	459	A	C2'-C1'	-6.60	1.46	1.53
1	N	572	A	N9-C4	6.60	1.41	1.37
1	N	70	U	C2-N3	6.60	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1221	G	C2-N2	6.60	1.41	1.34
1	N	319	G	N9-C4	-6.60	1.32	1.38
1	N	385	C	N3-C4	6.60	1.38	1.33
1	N	1186	G	O3'-P	-6.60	1.53	1.61
1	N	211	G	C6-N1	6.60	1.44	1.39
1	N	376	G	P-O5'	-6.60	1.53	1.59
1	N	829	G	N1-C2	6.60	1.43	1.37
1	N	1241	G	C2-N3	6.60	1.38	1.32
1	N	1127	G	C6-N1	6.59	1.44	1.39
1	N	347	G	C5-C4	6.59	1.43	1.38
1	N	1503	A	C6-N6	6.59	1.39	1.33
1	N	735	C	C4-C5	6.59	1.48	1.43
1	N	784	A	N9-C4	-6.59	1.33	1.37
1	N	1096	C	N3-C4	6.59	1.38	1.33
1	N	1259	C	C4-N4	6.59	1.39	1.33
1	N	1389	C	N1-C6	6.59	1.41	1.37
1	N	264	C	P-O5'	-6.59	1.53	1.59
1	N	1091	U	O3'-P	-6.59	1.53	1.61
1	N	1138	G	C5'-C4'	6.59	1.59	1.51
1	N	1515	G	C6-N1	6.59	1.44	1.39
1	N	247	G	C2-N3	6.59	1.38	1.32
1	N	105	G	N1-C2	6.59	1.43	1.37
1	N	249	U	C4-C5	-6.59	1.37	1.43
1	N	482	A	N7-C5	-6.59	1.35	1.39
1	N	742	G	N7-C5	-6.59	1.35	1.39
1	N	537	G	C6-N1	6.58	1.44	1.39
1	N	1064	G	C2'-C1'	-6.58	1.46	1.53
1	N	327	A	N9-C8	-6.58	1.32	1.37
1	N	632	U	N3-C4	6.58	1.44	1.38
1	N	39	G	N7-C5	-6.58	1.35	1.39
1	N	1091	U	N3-C4	6.58	1.44	1.38
1	N	181	A	N9-C8	-6.58	1.32	1.37
1	N	564	C	O3'-P	-6.58	1.53	1.61
1	N	650	G	N1-C2	6.58	1.43	1.37
1	N	807	A	N7-C5	-6.58	1.35	1.39
1	N	199	A	N9-C4	-6.58	1.33	1.37
1	N	303	A	C6-N1	6.58	1.40	1.35
1	N	313	A	C8-N7	6.58	1.36	1.31
1	N	800	G	C2'-C1'	-6.58	1.46	1.53
1	N	1058	G	C2'-C1'	-6.58	1.46	1.53
1	N	1103	C	N1-C6	6.58	1.41	1.37
1	N	81	A	N9-C8	-6.57	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1057	G	N3-C4	-6.57	1.30	1.35
1	N	1491	G	C6-N1	6.57	1.44	1.39
1	N	559	A	N9-C4	-6.57	1.33	1.37
1	N	900	A	C5-C4	6.57	1.43	1.38
1	N	1507	A	C6-N1	6.57	1.40	1.35
1	N	1071	C	C3'-C2'	6.57	1.60	1.52
1	N	1411	C	C2-N3	6.57	1.41	1.35
1	N	605	U	C3'-C2'	6.57	1.60	1.52
1	N	1073	U	C2-N3	6.57	1.42	1.37
1	N	1269	A	C3'-C2'	-6.57	1.45	1.52
1	N	309	A	N9-C4	-6.56	1.33	1.37
1	N	423	G	N7-C5	6.56	1.43	1.39
1	N	86	G	O3'-P	-6.56	1.53	1.61
1	N	255	G	N1-C2	6.56	1.43	1.37
1	N	98	A	C6-N1	6.56	1.40	1.35
1	N	332	G	C2-N3	6.56	1.38	1.32
1	N	493	A	N1-C2	6.56	1.40	1.34
1	N	678	U	C4-O4	6.56	1.28	1.23
1	N	680	C	C4-N4	6.56	1.39	1.33
1	N	1279	G	N9-C4	-6.56	1.32	1.38
1	N	992	U	C4'-C3'	6.56	1.60	1.53
1	N	1309	G	C2-N3	6.56	1.38	1.32
1	N	721	G	C6-N1	6.56	1.44	1.39
1	N	1526	G	C2-N3	6.56	1.38	1.32
1	N	1204	A	N9-C8	6.55	1.43	1.37
1	N	121	U	N3-C4	6.55	1.44	1.38
1	N	968	A	C4'-C3'	6.55	1.60	1.53
1	N	318	G	C6-N1	-6.55	1.34	1.39
1	N	318	G	N3-C4	6.55	1.40	1.35
1	N	592	G	N7-C5	-6.55	1.35	1.39
1	N	701	U	N3-C4	6.55	1.44	1.38
1	N	608	A	N9-C8	-6.55	1.32	1.37
1	N	913	A	C4'-C3'	6.55	1.60	1.53
1	N	1003	G	C2'-C1'	-6.55	1.46	1.53
1	N	1301	U	C2-N3	6.55	1.42	1.37
1	N	599	C	O3'-P	6.55	1.69	1.61
1	N	1057	G	P-O5'	-6.55	1.53	1.59
1	N	1246	A	N1-C2	6.54	1.40	1.34
1	N	388	G	C6-N1	6.54	1.44	1.39
1	N	702	A	O4'-C1'	6.54	1.50	1.41
1	N	868	C	P-O5'	-6.54	1.53	1.59
1	N	1370	G	N1-C2	6.54	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	704	A	C6-N1	6.54	1.40	1.35
1	N	820	U	N3-C4	-6.54	1.32	1.38
1	N	292	G	C8-N7	-6.54	1.27	1.30
1	N	970	C	N1-C6	-6.54	1.33	1.37
1	N	702	A	C4'-C3'	6.53	1.60	1.53
1	N	745	G	C5'-C4'	6.53	1.59	1.51
1	N	1501	C	C4-N4	6.53	1.39	1.33
1	N	424	G	C2-N3	6.53	1.38	1.32
1	N	67	C	N3-C4	6.53	1.38	1.33
1	N	191	G	C1'-N9	6.53	1.58	1.48
1	N	1274	A	C6-N6	6.53	1.39	1.33
1	N	773	G	P-O5'	-6.53	1.53	1.59
1	N	1228	C	C4-C5	-6.53	1.37	1.43
1	N	888	G	C6-N1	6.53	1.44	1.39
1	N	1403	C	N3-C4	6.53	1.38	1.33
1	N	134	G	C2'-C1'	-6.53	1.46	1.53
1	N	385	C	P-O5'	-6.53	1.53	1.59
1	N	499	A	N3-C4	-6.53	1.30	1.34
1	N	1277	C	C4-N4	6.53	1.39	1.33
1	N	333	U	C1'-N1	6.52	1.58	1.48
1	N	1024	G	C4'-O4'	6.52	1.54	1.45
1	N	195	A	N7-C5	-6.52	1.35	1.39
1	N	346	G	C3'-C2'	6.52	1.60	1.52
1	N	463	U	N1-C6	6.52	1.43	1.38
1	N	744	C	C4-N4	6.52	1.39	1.33
1	N	365	U	C5-C6	-6.52	1.28	1.34
1	N	451	A	C5-C6	6.52	1.47	1.41
1	N	1044	A	N7-C5	-6.52	1.35	1.39
1	N	3	A	P-O5'	-6.52	1.53	1.59
1	N	444	G	O3'-P	-6.52	1.53	1.61
1	N	498	A	O3'-P	-6.52	1.53	1.61
1	N	693	G	C2-N3	6.52	1.38	1.32
1	N	733	G	C5'-C4'	6.52	1.59	1.51
1	N	35	G	P-O5'	-6.51	1.53	1.59
1	N	447	G	N1-C2	6.51	1.43	1.37
1	N	1421	G	N3-C4	6.51	1.40	1.35
1	N	503	C	C2'-C1'	-6.51	1.46	1.53
1	N	749	A	C2'-C1'	-6.51	1.46	1.53
1	N	876	C	N1-C2	-6.51	1.33	1.40
1	N	1074	G	C5'-C4'	6.51	1.59	1.51
1	N	1088	G	P-O5'	-6.51	1.53	1.59
1	N	1169	A	C5-C6	6.51	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1244	G	C8-N7	-6.51	1.27	1.30
1	N	1505	G	C5'-C4'	6.51	1.59	1.51
1	N	430	A	O4'-C1'	6.51	1.50	1.41
1	N	932	C	C2'-C1'	-6.51	1.46	1.53
1	N	579	A	N7-C5	-6.50	1.35	1.39
1	N	1157	A	C8-N7	-6.50	1.26	1.31
1	N	787	A	N3-C4	6.50	1.38	1.34
1	N	1197	A	N9-C4	-6.50	1.33	1.37
1	N	379	C	N3-C4	6.50	1.38	1.33
1	N	465	A	N7-C5	-6.50	1.35	1.39
1	N	1080	A	C8-N7	6.50	1.36	1.31
1	N	1413	A	N7-C5	-6.50	1.35	1.39
1	N	301	G	N3-C4	-6.50	1.30	1.35
1	N	432	A	C8-N7	-6.50	1.27	1.31
1	N	826	C	N1-C2	-6.50	1.33	1.40
1	N	1079	G	N9-C8	6.50	1.42	1.37
1	N	204	G	C2-N2	6.50	1.41	1.34
1	N	621	A	C8-N7	-6.50	1.27	1.31
1	N	787	A	N9-C4	-6.50	1.33	1.37
1	N	1518	A	C6-N6	6.50	1.39	1.33
1	N	579	A	C5'-C4'	6.49	1.59	1.51
1	N	1030	U	N3-C4	6.49	1.44	1.38
1	N	849	G	N9-C8	6.49	1.42	1.37
1	N	49	U	C2'-C1'	-6.49	1.46	1.53
1	N	618	C	N1-C6	-6.49	1.33	1.37
1	N	865	A	N7-C5	-6.48	1.35	1.39
1	N	1129	C	N1-C2	-6.48	1.33	1.40
1	N	1143	G	N3-C4	-6.48	1.30	1.35
1	N	92	U	C4-C5	6.48	1.49	1.43
1	N	491	G	C5-C4	-6.48	1.33	1.38
1	N	586	C	N3-C4	6.48	1.38	1.33
1	N	107	G	C5-C4	6.48	1.42	1.38
1	N	116	A	P-O5'	-6.48	1.53	1.59
1	N	450	G	C5-C4	6.48	1.42	1.38
1	N	980	C	P-O5'	-6.48	1.53	1.59
1	N	362	G	C6-N1	6.48	1.44	1.39
1	N	519	C	O3'-P	-6.48	1.53	1.61
1	N	538	G	C5'-C4'	6.48	1.59	1.51
1	N	1422	G	C4'-C3'	6.47	1.60	1.53
1	N	266	G	C5-C4	-6.47	1.33	1.38
1	N	771	G	N9-C4	-6.47	1.32	1.38
1	N	167	A	C5-C4	6.47	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	402	G	N3-C4	-6.47	1.30	1.35
1	N	1193	G	N3-C4	-6.47	1.30	1.35
1	N	77	A	C4'-O4'	-6.47	1.37	1.45
1	N	623	C	C5'-C4'	6.47	1.59	1.51
1	N	892	A	N9-C8	6.47	1.43	1.37
1	N	1085	U	O3'-P	-6.47	1.53	1.61
1	N	1114	C	C4-C5	-6.47	1.37	1.43
1	N	1008	U	N1-C6	6.47	1.43	1.38
1	N	475	C	C5-C6	-6.47	1.29	1.34
1	N	522	C	C4-C5	6.47	1.48	1.43
1	N	1153	G	C3'-C2'	6.47	1.60	1.52
1	N	1181	G	C5-C4	-6.47	1.33	1.38
1	N	1241	G	C8-N7	-6.47	1.27	1.30
1	N	1408	A	C5-C4	6.47	1.43	1.38
1	N	529	G	O3'-P	-6.46	1.53	1.61
1	N	922	G	C6-N1	6.46	1.44	1.39
1	N	1353	G	C8-N7	-6.46	1.27	1.30
1	N	1426	G	N3-C4	-6.46	1.30	1.35
1	N	195	A	P-O5'	-6.46	1.53	1.59
1	N	799	G	C5-C4	-6.46	1.33	1.38
1	N	411	A	C4'-O4'	6.46	1.53	1.45
1	N	1357	A	C6-N6	6.46	1.39	1.33
1	N	951	G	N7-C5	-6.46	1.35	1.39
1	N	1488	G	N1-C2	6.46	1.43	1.37
1	N	423	G	P-O5'	-6.46	1.53	1.59
1	N	1227	A	C2-N3	-6.46	1.27	1.33
1	N	1371	G	N3-C4	6.46	1.40	1.35
1	N	640	A	C5-C4	6.46	1.43	1.38
1	N	816	A	N1-C2	-6.46	1.28	1.34
1	N	189	A	C4'-C3'	6.46	1.60	1.53
1	N	580	C	C4-C5	6.46	1.48	1.43
1	N	71	A	C5-C4	6.45	1.43	1.38
1	N	204	G	C8-N7	-6.45	1.27	1.30
1	N	347	G	C5-C6	-6.45	1.35	1.42
1	N	441	A	C5'-C4'	6.45	1.59	1.51
1	N	732	C	N3-C4	6.45	1.38	1.33
1	N	758	C	N3-C4	6.45	1.38	1.33
1	N	1310	G	N1-C2	6.45	1.43	1.37
1	N	120	A	O3'-P	-6.45	1.53	1.61
1	N	535	A	C5-C4	6.45	1.43	1.38
1	N	731	G	N3-C4	6.45	1.40	1.35
1	N	995	C	C2'-C1'	-6.45	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1106	G	C6-N1	6.45	1.44	1.39
1	N	1136	C	N1-C6	6.45	1.41	1.37
1	N	410	G	C2-N2	6.44	1.41	1.34
1	N	425	G	N1-C2	6.44	1.43	1.37
1	N	442	G	C6-N1	6.44	1.44	1.39
1	N	485	U	C2-N3	6.44	1.42	1.37
1	N	893	C	C1'-N1	6.44	1.58	1.48
1	N	1469	C	C5'-C4'	-6.44	1.43	1.51
1	N	252	U	N3-C4	6.44	1.44	1.38
1	N	484	G	C8-N7	-6.44	1.27	1.30
1	N	809	G	C2-N2	6.44	1.41	1.34
1	N	1111	A	N3-C4	-6.44	1.30	1.34
1	N	563	A	P-O5'	-6.44	1.53	1.59
1	N	842	U	C4-C5	6.44	1.49	1.43
1	N	1295	U	P-O5'	-6.44	1.53	1.59
1	N	1409	C	C4-C5	-6.44	1.37	1.43
1	N	1232	U	N3-C4	6.43	1.44	1.38
1	N	759	A	C5-C4	-6.43	1.34	1.38
1	N	913	A	N9-C8	6.43	1.42	1.37
1	N	1106	G	C8-N7	-6.43	1.27	1.30
1	N	145	G	C2'-C1'	-6.43	1.46	1.53
1	N	836	G	C3'-C2'	-6.43	1.45	1.52
1	N	1287	A	C5'-C4'	6.43	1.59	1.51
1	N	1296	C	O3'-P	-6.43	1.53	1.61
1	N	1476	A	O3'-P	-6.43	1.53	1.61
1	N	491	G	C2'-C1'	6.43	1.60	1.53
1	N	1257	A	N7-C5	-6.43	1.35	1.39
1	N	40	C	C2'-C1'	-6.43	1.46	1.53
1	N	264	C	N1-C6	6.43	1.41	1.37
1	N	464	U	O4'-C1'	6.43	1.50	1.41
1	N	1080	A	N3-C4	-6.43	1.30	1.34
1	N	1271	A	N7-C5	-6.43	1.35	1.39
1	N	1302	C	O3'-P	-6.43	1.53	1.61
1	N	559	A	N9-C8	-6.42	1.32	1.37
1	N	537	G	N7-C5	-6.42	1.35	1.39
1	N	615	G	N7-C5	6.42	1.43	1.39
1	N	1216	A	N7-C5	-6.42	1.35	1.39
1	N	684	U	C3'-C2'	6.42	1.60	1.52
1	N	469	C	C5'-C4'	6.42	1.59	1.51
1	N	1035	A	C5-C6	-6.42	1.35	1.41
1	N	480	U	C4-O4	6.41	1.28	1.23
1	N	901	A	C6-N6	6.41	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	415	A	C6-N6	6.41	1.39	1.33
1	N	475	C	N1-C2	-6.41	1.33	1.40
1	N	993	G	P-O5'	-6.41	1.53	1.59
1	N	397	A	N7-C5	-6.41	1.35	1.39
1	N	684	U	C3'-O3'	6.41	1.51	1.42
1	N	749	A	N7-C5	-6.41	1.35	1.39
1	N	936	C	C1'-N1	6.41	1.58	1.48
1	N	434	U	P-O5'	-6.41	1.53	1.59
1	N	583	A	N1-C2	6.41	1.40	1.34
1	N	244	U	P-O5'	-6.41	1.53	1.59
1	N	632	U	N1-C2	-6.41	1.32	1.38
1	N	331	G	C5-C4	6.40	1.42	1.38
1	N	1122	U	C4'-C3'	-6.40	1.46	1.53
1	N	83	C	O3'-P	-6.40	1.53	1.61
1	N	1210	C	C5-C6	6.40	1.39	1.34
1	N	1300	G	C5'-C4'	6.40	1.59	1.51
1	N	346	G	N9-C4	-6.40	1.32	1.38
1	N	1255	G	C3'-C2'	6.40	1.59	1.52
1	N	542	G	C8-N7	-6.40	1.27	1.30
1	N	622	A	C2'-C1'	-6.40	1.46	1.53
1	N	983	A	P-O5'	-6.40	1.53	1.59
1	N	1072	G	C4'-C3'	6.40	1.60	1.53
1	N	130	A	N7-C5	-6.40	1.35	1.39
1	N	158	G	C5-C6	-6.40	1.35	1.42
1	N	489	C	N1-C6	6.40	1.41	1.37
1	N	1395	C	N3-C4	6.40	1.38	1.33
1	N	182	A	N7-C5	-6.39	1.35	1.39
1	N	581	G	C2-N2	-6.39	1.28	1.34
1	N	111	G	N1-C2	6.39	1.42	1.37
1	N	239	U	C5'-C4'	6.39	1.59	1.51
1	N	246	A	C4'-C3'	6.39	1.60	1.53
1	N	1049	U	N1-C6	6.39	1.43	1.38
1	N	501	C	C3'-O3'	-6.39	1.33	1.42
1	N	1290	G	C6-N1	6.39	1.44	1.39
1	N	249	U	N3-C4	6.39	1.44	1.38
1	N	659	U	C2-N3	6.39	1.42	1.37
1	N	1342	C	C2-O2	6.39	1.30	1.24
1	N	485	U	C3'-O3'	6.38	1.51	1.42
1	N	1357	A	C5-C4	6.38	1.43	1.38
1	N	1037	C	O3'-P	-6.38	1.53	1.61
1	N	46	G	C5-C4	-6.38	1.33	1.38
1	N	554	A	C4'-C3'	-6.38	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	646	G	C5-C6	-6.38	1.35	1.42
1	N	757	U	C2-N3	6.38	1.42	1.37
1	N	1292	G	P-O5'	-6.38	1.53	1.59
1	N	105	G	P-O5'	-6.38	1.53	1.59
1	N	341	C	C4-C5	-6.38	1.37	1.43
1	N	339	C	C2-O2	-6.38	1.18	1.24
1	N	497	G	C2-N3	6.38	1.37	1.32
1	N	1355	G	C2'-C1'	-6.38	1.46	1.53
1	N	1376	U	C2-N3	6.38	1.42	1.37
1	N	882	C	C1'-N1	6.38	1.58	1.48
1	N	1229	A	C2'-C1'	-6.38	1.46	1.53
1	N	1167	A	C6-N6	6.37	1.39	1.33
1	N	1412	C	O3'-P	-6.37	1.53	1.61
1	N	1015	G	C5'-C4'	6.37	1.58	1.51
1	N	1272	G	N3-C4	-6.37	1.30	1.35
1	N	1132	C	P-O5'	-6.37	1.53	1.59
1	N	58	C	N1-C2	-6.37	1.33	1.40
1	N	817	C	C4'-C3'	6.37	1.60	1.53
1	N	1252	A	C6-N1	6.37	1.40	1.35
1	N	1401	G	C6-N1	6.37	1.44	1.39
1	N	777	A	N3-C4	-6.37	1.31	1.34
1	N	169	C	C5'-C4'	6.37	1.58	1.51
1	N	785	G	C4'-C3'	-6.37	1.46	1.53
1	N	1329	A	C2-N3	6.37	1.39	1.33
1	N	1466	C	C5'-C4'	6.37	1.58	1.51
1	N	1513	A	N9-C8	6.37	1.42	1.37
1	N	697	U	C1'-N1	6.36	1.58	1.48
1	N	1245	C	C4'-C3'	-6.36	1.46	1.53
1	N	1429	A	C6-N6	6.36	1.39	1.33
1	N	50	A	C4'-C3'	6.36	1.60	1.53
1	N	778	G	C5-C4	6.36	1.42	1.38
1	N	1463	U	C5'-C4'	6.36	1.58	1.51
1	N	137	U	C1'-N1	6.36	1.58	1.48
1	N	1528	U	C4-O4	-6.36	1.18	1.23
1	N	419	C	C2-N3	6.36	1.40	1.35
1	N	1035	A	C4'-O4'	6.36	1.53	1.45
1	N	1431	A	C2-N3	-6.36	1.27	1.33
1	N	1506	U	N1-C6	6.36	1.43	1.38
1	N	530	G	P-O5'	-6.36	1.53	1.59
1	N	780	A	C2-N3	6.35	1.39	1.33
1	N	1368	A	C2'-C1'	-6.35	1.46	1.53
1	N	550	G	C2-N3	6.35	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	581	G	C6-N1	-6.35	1.35	1.39
1	N	1112	C	N1-C6	6.35	1.41	1.37
1	N	1241	G	N9-C4	-6.35	1.32	1.38
1	N	1327	C	O4'-C1'	6.35	1.50	1.41
1	N	1315	U	C2-N3	6.35	1.42	1.37
1	N	349	A	C8-N7	-6.35	1.27	1.31
1	N	433	G	C4'-O4'	-6.35	1.37	1.45
1	N	457	G	N9-C8	-6.35	1.33	1.37
1	N	875	U	C4-C5	6.35	1.49	1.43
1	N	1201	A	C6-N1	6.35	1.40	1.35
1	N	788	U	C2'-C1'	-6.34	1.46	1.53
1	N	183	C	N1-C6	6.34	1.41	1.37
1	N	508	U	C2-N3	6.34	1.42	1.37
1	N	879	C	N3-C4	6.34	1.38	1.33
1	N	1139	G	N7-C5	6.34	1.43	1.39
1	N	1167	A	N3-C4	6.34	1.38	1.34
1	N	56	U	C4'-C3'	-6.34	1.46	1.53
1	N	431	A	C6-N6	6.34	1.39	1.33
1	N	1084	G	C2-N2	6.34	1.40	1.34
1	N	1248	A	C8-N7	6.34	1.35	1.31
1	N	35	G	C8-N7	-6.34	1.27	1.30
1	N	1207	G	C2-N3	6.34	1.37	1.32
1	N	1298	U	C5'-C4'	6.34	1.58	1.51
1	N	71	A	C4'-C3'	6.34	1.60	1.53
1	N	91	U	C4'-C3'	6.34	1.60	1.53
1	N	303	A	C5-C4	6.34	1.43	1.38
1	N	514	C	C1'-N1	6.34	1.58	1.48
1	N	820	U	C2'-C1'	-6.34	1.46	1.53
1	N	22	G	O3'-P	-6.33	1.53	1.61
1	N	541	G	N9-C8	6.33	1.42	1.37
1	N	822	U	N1-C2	6.33	1.44	1.38
1	N	1347	G	O3'-P	-6.33	1.53	1.61
1	N	1351	U	N3-C4	6.33	1.44	1.38
1	N	233	C	C3'-O3'	-6.33	1.33	1.42
1	N	939	G	N9-C8	6.33	1.42	1.37
1	N	1270	G	C2-N2	6.33	1.40	1.34
1	N	284	C	C3'-C2'	6.33	1.59	1.52
1	N	785	G	C5-C6	-6.33	1.36	1.42
1	N	1490	U	N3-C4	6.33	1.44	1.38
1	N	538	G	N3-C4	-6.33	1.31	1.35
1	N	1035	A	C3'-C2'	6.33	1.59	1.52
1	N	97	G	C5-C6	-6.33	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	182	A	O4'-C1'	6.33	1.49	1.41
1	N	252	U	C4'-O4'	-6.33	1.37	1.45
1	N	337	G	N9-C8	6.33	1.42	1.37
1	N	125	U	N1-C6	6.32	1.43	1.38
1	N	24	U	C4'-O4'	6.32	1.53	1.45
1	N	712	A	N7-C5	-6.32	1.35	1.39
1	N	1112	C	C2-O2	6.32	1.30	1.24
1	N	1198	G	N9-C8	6.32	1.42	1.37
1	N	734	G	O4'-C1'	-6.32	1.33	1.41
1	N	9	G	N7-C5	-6.32	1.35	1.39
1	N	91	U	N1-C6	6.32	1.43	1.38
1	N	1089	G	C5'-C4'	6.32	1.58	1.51
1	N	47	C	C2-N3	6.32	1.40	1.35
1	N	994	A	C5-C4	6.32	1.43	1.38
1	N	141	G	C5-C6	-6.31	1.36	1.42
1	N	547	A	C8-N7	-6.31	1.27	1.31
1	N	920	U	C3'-O3'	6.31	1.50	1.42
1	N	1128	C	C1'-N1	6.31	1.58	1.48
1	N	888	G	C2-N3	6.31	1.37	1.32
1	N	1066	C	N3-C4	6.31	1.38	1.33
1	N	180	U	C4-C5	-6.31	1.37	1.43
1	N	211	G	N3-C4	-6.31	1.31	1.35
1	N	162	A	C5-C6	6.31	1.46	1.41
1	N	866	C	N1-C6	6.31	1.41	1.37
1	N	1305	G	C2-N3	6.31	1.37	1.32
1	N	1377	A	O3'-P	-6.31	1.53	1.61
1	N	530	G	C2-N2	6.31	1.40	1.34
1	N	119	A	N9-C8	-6.30	1.32	1.37
1	N	466	A	N7-C5	-6.30	1.35	1.39
1	N	964	A	C5'-C4'	6.30	1.58	1.51
1	N	1110	A	C5'-C4'	6.30	1.58	1.51
1	N	1509	C	C2'-C1'	-6.30	1.46	1.53
1	N	165	G	C2'-C1'	-6.30	1.46	1.53
1	N	1056	U	N3-C4	6.30	1.44	1.38
1	N	101	A	N3-C4	6.30	1.38	1.34
1	N	810	C	P-O5'	-6.30	1.53	1.59
1	N	1265	C	C4-N4	6.30	1.39	1.33
1	N	31	G	N9-C4	6.30	1.43	1.38
1	N	44	A	C8-N7	-6.30	1.27	1.31
1	N	464	U	C2-N3	6.30	1.42	1.37
1	N	1196	A	N3-C4	-6.30	1.31	1.34
1	N	1047	G	C5-C4	6.30	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	320	A	N3-C4	-6.30	1.31	1.34
1	N	839	C	C4'-O4'	-6.30	1.37	1.45
1	N	1112	C	O4'-C1'	6.30	1.49	1.41
1	N	1263	C	C4-N4	6.30	1.39	1.33
1	N	1315	U	C4'-C3'	6.30	1.60	1.53
1	N	300	A	C4'-C3'	-6.29	1.46	1.53
1	N	961	U	C4-C5	6.29	1.49	1.43
1	N	348	G	N7-C5	6.29	1.43	1.39
1	N	336	A	C4'-O4'	-6.29	1.37	1.45
1	N	1288	A	C4'-O4'	6.29	1.53	1.45
1	N	1015	G	C5-C4	-6.29	1.33	1.38
1	N	1503	A	C4'-C3'	6.29	1.60	1.53
1	N	1303	C	C4-N4	6.29	1.39	1.33
1	N	1498	U	C4-C5	6.29	1.49	1.43
1	N	74	A	C6-N1	6.29	1.40	1.35
1	N	192	A	N3-C4	-6.29	1.31	1.34
1	N	753	A	C6-N6	6.29	1.39	1.33
1	N	1310	G	C4'-O4'	-6.29	1.37	1.45
1	N	1365	G	C5'-C4'	6.29	1.58	1.51
1	N	1289	A	N9-C4	6.28	1.41	1.37
1	N	1346	A	C6-N1	6.28	1.40	1.35
1	N	1462	C	C4-N4	6.28	1.39	1.33
1	N	1009	U	C3'-C2'	6.28	1.59	1.52
1	N	1520	C	C1'-N1	6.28	1.58	1.48
1	N	495	A	N9-C4	6.28	1.41	1.37
1	N	622	A	C2-N3	6.28	1.39	1.33
1	N	895	G	N1-C2	6.28	1.42	1.37
1	N	461	A	N7-C5	-6.28	1.35	1.39
1	N	780	A	C8-N7	-6.28	1.27	1.31
1	N	873	A	C2-N3	6.28	1.39	1.33
1	N	1250	A	C2-N3	-6.28	1.27	1.33
1	N	1141	C	N1-C2	-6.27	1.33	1.40
1	N	98	A	C5-C6	6.27	1.46	1.41
1	N	222	C	C4-C5	-6.27	1.38	1.43
1	N	238	A	C3'-C2'	6.27	1.59	1.52
1	N	5	U	N3-C4	6.27	1.44	1.38
1	N	390	U	O4'-C1'	6.27	1.49	1.41
1	N	718	A	N3-C4	-6.27	1.31	1.34
1	N	1210	C	C4-N4	6.27	1.39	1.33
1	N	87	C	C5-C6	-6.27	1.29	1.34
1	N	137	U	C2-N3	-6.27	1.33	1.37
1	N	253	A	N9-C8	-6.27	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1354	U	C4-C5	6.27	1.49	1.43
1	N	579	A	C6-N1	6.26	1.40	1.35
1	N	1440	U	C2-N3	6.26	1.42	1.37
1	N	79	G	C6-N1	6.26	1.44	1.39
1	N	598	U	C2-N3	6.26	1.42	1.37
1	N	937	A	O4'-C1'	-6.26	1.33	1.41
1	N	1097	C	C5'-C4'	6.26	1.58	1.51
1	N	597	G	C3'-C2'	-6.26	1.45	1.52
1	N	724	G	C2'-C1'	-6.26	1.46	1.53
1	N	812	G	N3-C4	-6.26	1.31	1.35
1	N	966	G	N9-C4	6.26	1.43	1.38
1	N	1378	C	C4-N4	6.26	1.39	1.33
1	N	1043	G	P-O5'	-6.26	1.53	1.59
1	N	1161	C	N1-C6	-6.26	1.33	1.37
1	N	726	C	N3-C4	6.25	1.38	1.33
1	N	1500	A	C6-N1	6.25	1.40	1.35
1	N	936	C	N1-C6	6.25	1.41	1.37
1	N	955	U	C1'-N1	6.25	1.58	1.48
1	N	959	A	C6-N6	6.25	1.39	1.33
1	N	984	C	C4-N4	6.25	1.39	1.33
1	N	1084	G	C3'-C2'	-6.25	1.45	1.52
1	N	1182	G	N9-C8	-6.25	1.33	1.37
1	N	487	A	O3'-P	-6.25	1.53	1.61
1	N	531	U	P-O5'	-6.25	1.53	1.59
1	N	542	G	C2'-C1'	-6.25	1.46	1.53
1	N	972	C	C2-N3	-6.25	1.30	1.35
1	N	1530	G	C4'-C3'	6.25	1.60	1.53
1	N	879	C	C4-N4	6.25	1.39	1.33
1	N	1053	G	N3-C4	-6.25	1.31	1.35
1	N	1122	U	C5-C6	6.25	1.39	1.34
1	N	1124	G	N7-C5	-6.25	1.35	1.39
1	N	1351	U	C2-N3	6.25	1.42	1.37
1	N	1429	A	C4'-O4'	-6.25	1.37	1.45
1	N	136	C	N1-C6	-6.25	1.33	1.37
1	N	975	A	N1-C2	-6.25	1.28	1.34
1	N	470	C	P-O5'	-6.24	1.53	1.59
1	N	570	G	C5-C4	-6.24	1.33	1.38
1	N	606	G	N7-C5	-6.24	1.35	1.39
1	N	864	A	C5-C6	-6.24	1.35	1.41
1	N	471	U	P-O5'	-6.24	1.53	1.59
1	N	1365	G	C5-C4	-6.24	1.33	1.38
1	N	68	G	C4'-C3'	6.24	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	546	A	N3-C4	-6.24	1.31	1.34
1	N	792	A	C6-N6	6.24	1.39	1.33
1	N	210	C	C1'-N1	6.24	1.58	1.48
1	N	606	G	C2-N3	6.24	1.37	1.32
1	N	915	A	C6-N1	6.24	1.40	1.35
1	N	1268	G	C8-N7	-6.24	1.27	1.30
1	N	1340	A	C6-N6	-6.24	1.28	1.33
1	N	1518	A	C5'-C4'	6.24	1.58	1.51
1	N	1475	G	P-O5'	6.23	1.66	1.59
1	N	141	G	C6-N1	6.23	1.44	1.39
1	N	832	G	C2-N3	-6.23	1.27	1.32
1	N	199	A	C6-N6	6.23	1.39	1.33
1	N	286	C	C2'-C1'	-6.23	1.46	1.53
1	N	292	G	C4'-C3'	6.23	1.60	1.53
1	N	581	G	N9-C4	-6.23	1.32	1.38
1	N	936	C	C2'-C1'	-6.23	1.46	1.53
1	N	1038	C	O4'-C1'	6.23	1.49	1.41
1	N	1435	G	N7-C5	6.23	1.43	1.39
1	N	1438	G	P-O5'	-6.23	1.53	1.59
1	N	569	C	C4-C5	-6.23	1.38	1.43
1	N	281	G	N9-C8	6.23	1.42	1.37
1	N	1313	U	N3-C4	6.23	1.44	1.38
1	N	1173	U	C2-N3	6.23	1.42	1.37
1	N	416	G	O3'-P	-6.22	1.53	1.61
1	N	341	C	C4'-O4'	6.22	1.53	1.45
1	N	491	G	N1-C2	6.22	1.42	1.37
1	N	695	A	C6-N6	6.22	1.39	1.33
1	N	369	G	N1-C2	6.22	1.42	1.37
1	N	1088	G	C5-C4	6.22	1.42	1.38
1	N	289	G	N7-C5	-6.22	1.35	1.39
1	N	405	U	C4'-C3'	6.22	1.59	1.53
1	N	467	U	P-O5'	-6.22	1.53	1.59
1	N	580	C	C5-C6	-6.22	1.29	1.34
1	N	1433	A	N7-C5	-6.22	1.35	1.39
1	N	66	A	N3-C4	-6.21	1.31	1.34
1	N	78	A	C5-C4	6.21	1.43	1.38
1	N	544	G	N9-C8	6.21	1.42	1.37
1	N	613	C	C1'-N1	6.21	1.58	1.48
1	N	813	U	O3'-P	-6.21	1.53	1.61
1	N	45	G	C4'-C3'	6.21	1.59	1.53
1	N	347	G	N3-C4	-6.21	1.31	1.35
1	N	861	G	C2-N3	6.21	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1310	G	C8-N7	-6.21	1.27	1.30
1	N	1433	A	C6-N6	6.21	1.39	1.33
1	N	5	U	C1'-N1	6.21	1.58	1.48
1	N	451	A	C4'-O4'	6.21	1.53	1.45
1	N	571	U	P-O5'	-6.21	1.53	1.59
1	N	658	C	C4-C5	6.21	1.48	1.43
1	N	938	A	N9-C4	6.21	1.41	1.37
1	N	1282	C	N1-C6	6.21	1.40	1.37
1	N	238	A	N1-C2	-6.21	1.28	1.34
1	N	878	A	C6-N1	6.21	1.39	1.35
1	N	1240	U	C2-N3	6.21	1.42	1.37
1	N	404	G	N9-C4	-6.21	1.32	1.38
1	N	498	A	C2'-C1'	-6.20	1.46	1.53
1	N	767	A	O3'-P	-6.20	1.53	1.61
1	N	1268	G	C3'-C2'	-6.20	1.46	1.52
1	N	1134	G	P-O5'	-6.20	1.53	1.59
1	N	347	G	P-O5'	-6.20	1.53	1.59
1	N	761	G	C8-N7	-6.20	1.27	1.30
1	N	959	A	C5'-C4'	6.20	1.58	1.51
1	N	313	A	N9-C4	6.20	1.41	1.37
1	N	762	U	P-O5'	-6.20	1.53	1.59
1	N	652	U	C2-N3	6.20	1.42	1.37
1	N	644	U	C3'-O3'	6.20	1.50	1.42
1	N	1002	G	C2-N3	6.20	1.37	1.32
1	N	1094	G	O3'-P	-6.20	1.53	1.61
1	N	1176	A	N9-C8	6.20	1.42	1.37
1	N	1403	C	C4-N4	6.20	1.39	1.33
1	N	450	G	P-O5'	-6.19	1.53	1.59
1	N	63	C	C4-C5	-6.19	1.38	1.43
1	N	415	A	C6-N1	6.19	1.39	1.35
1	N	1353	G	C5-C6	-6.19	1.36	1.42
1	N	1505	G	C2-N2	6.19	1.40	1.34
1	N	411	A	C5-C4	-6.19	1.34	1.38
1	N	1384	C	O4'-C1'	6.19	1.49	1.41
1	N	130	A	C5-C6	-6.19	1.35	1.41
1	N	337	G	C4'-C3'	-6.19	1.46	1.53
1	N	762	U	N3-C4	6.19	1.44	1.38
1	N	1272	G	C5-C4	6.19	1.42	1.38
1	N	1430	A	C6-N1	6.19	1.39	1.35
1	N	566	G	P-O5'	-6.18	1.53	1.59
1	N	351	G	O3'-P	-6.18	1.53	1.61
1	N	485	U	C3'-C2'	6.18	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1204	A	C5-C4	6.18	1.43	1.38
1	N	1433	A	P-O5'	-6.18	1.53	1.59
1	N	93	U	C4-C5	-6.18	1.38	1.43
1	N	102	G	O3'-P	-6.18	1.53	1.61
1	N	334	C	N3-C4	6.18	1.38	1.33
1	N	1018	G	C2-N3	6.18	1.37	1.32
1	N	71	A	C6-N1	6.18	1.39	1.35
1	N	152	A	O3'-P	-6.17	1.53	1.61
1	N	487	A	C5-C4	6.17	1.43	1.38
1	N	518	C	N1-C6	6.17	1.40	1.37
1	N	42	G	C6-N1	6.17	1.43	1.39
1	N	1049	U	N3-C4	6.17	1.44	1.38
1	N	32	A	C2'-C1'	-6.17	1.46	1.53
1	N	83	C	N3-C4	6.17	1.38	1.33
1	N	566	G	C2-N3	6.17	1.37	1.32
1	N	28	A	C6-N1	6.17	1.39	1.35
1	N	304	U	N3-C4	6.17	1.44	1.38
1	N	1241	G	C3'-O3'	6.17	1.50	1.42
1	N	133	U	N3-C4	-6.17	1.32	1.38
1	N	316	C	P-O5'	-6.17	1.53	1.59
1	N	445	G	C2'-C1'	6.17	1.60	1.53
1	N	777	A	O4'-C1'	6.17	1.49	1.41
1	N	1492	A	O3'-P	-6.17	1.53	1.61
1	N	1507	A	C5'-C4'	6.17	1.58	1.51
1	N	438	U	C4-C5	6.17	1.49	1.43
1	N	1529	G	C2'-C1'	-6.17	1.46	1.53
1	N	59	A	C5-C4	6.16	1.43	1.38
1	N	91	U	C1'-N1	6.16	1.57	1.48
1	N	760	G	N9-C8	-6.16	1.33	1.37
1	N	890	G	O3'-P	-6.16	1.53	1.61
1	N	1219	A	N9-C4	6.16	1.41	1.37
1	N	1386	G	N3-C4	6.16	1.39	1.35
1	N	248	C	N3-C4	6.16	1.38	1.33
1	N	500	G	N9-C4	6.16	1.42	1.38
1	N	512	U	C2'-C1'	-6.16	1.46	1.53
1	N	118	U	P-O5'	-6.16	1.53	1.59
1	N	999	C	C4-C5	6.16	1.47	1.43
1	N	1490	U	C2-N3	6.16	1.42	1.37
1	N	1081	A	N7-C5	-6.16	1.35	1.39
1	N	1274	A	C1'-N9	6.16	1.57	1.48
1	N	221	C	C2-N3	6.16	1.40	1.35
1	N	273	U	N1-C6	6.16	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	635	A	C5-C4	6.16	1.43	1.38
1	N	676	A	C5'-C4'	6.16	1.58	1.51
1	N	794	A	N3-C4	-6.16	1.31	1.34
1	N	1477	U	O4'-C1'	6.15	1.49	1.41
1	N	49	U	C3'-C2'	6.15	1.59	1.52
1	N	232	G	C5'-C4'	6.15	1.58	1.51
1	N	1297	G	C2'-C1'	-6.15	1.46	1.53
1	N	1337	G	N7-C5	-6.15	1.35	1.39
1	N	538	G	C1'-N9	6.15	1.57	1.48
1	N	722	G	C6-N1	6.15	1.43	1.39
1	N	1048	G	C2-N3	6.15	1.37	1.32
1	N	731	G	N9-C4	-6.15	1.33	1.38
1	N	782	A	C2'-C1'	-6.15	1.46	1.53
1	N	331	G	C2'-C1'	-6.15	1.46	1.53
1	N	1150	A	C2'-C1'	6.15	1.60	1.53
1	N	1363	A	P-O5'	-6.15	1.53	1.59
1	N	1069	C	O3'-P	-6.15	1.53	1.61
1	N	966	G	N9-C8	6.14	1.42	1.37
1	N	1511	G	C2-N2	-6.14	1.28	1.34
1	N	445	G	C5-C6	-6.14	1.36	1.42
1	N	888	G	P-O5'	-6.14	1.53	1.59
1	N	1447	A	P-O5'	-6.14	1.53	1.59
1	N	1458	G	N9-C8	6.14	1.42	1.37
1	N	33	A	N9-C8	-6.14	1.32	1.37
1	N	874	G	C5-C4	6.14	1.42	1.38
1	N	883	C	P-O5'	-6.14	1.53	1.59
1	N	910	C	P-O5'	-6.14	1.53	1.59
1	N	1012	A	C8-N7	-6.14	1.27	1.31
1	N	7	A	N9-C8	-6.14	1.32	1.37
1	N	1277	C	C2-O2	-6.14	1.19	1.24
1	N	263	A	P-O5'	-6.13	1.53	1.59
1	N	327	A	C8-N7	-6.13	1.27	1.31
1	N	843	U	C2-N3	6.13	1.42	1.37
1	N	852	G	C8-N7	-6.13	1.27	1.30
1	N	1236	A	C6-N1	6.13	1.39	1.35
1	N	198	G	N7-C5	-6.13	1.35	1.39
1	N	1036	A	C5-C4	6.13	1.43	1.38
1	N	1477	U	N1-C6	6.13	1.43	1.38
1	N	100	G	N1-C2	6.13	1.42	1.37
1	N	637	C	P-O5'	6.13	1.65	1.59
1	N	938	A	C5-C4	-6.13	1.34	1.38
1	N	1409	C	C1'-N1	6.13	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	414	A	C1'-N9	6.13	1.57	1.48
1	N	1295	U	N1-C6	6.13	1.43	1.38
1	N	79	G	C2'-C1'	-6.13	1.46	1.53
1	N	149	A	N9-C4	6.13	1.41	1.37
1	N	314	C	C5'-C4'	6.13	1.58	1.51
1	N	410	G	N7-C5	-6.13	1.35	1.39
1	N	621	A	N9-C4	-6.13	1.34	1.37
1	N	686	U	C1'-N1	6.13	1.57	1.48
1	N	1002	G	O3'-P	-6.13	1.53	1.61
1	N	1095	U	C4'-C3'	6.13	1.59	1.53
1	N	1473	G	C6-O6	6.13	1.29	1.24
1	N	59	A	N1-C2	6.12	1.39	1.34
1	N	1422	G	N7-C5	-6.12	1.35	1.39
1	N	38	G	O3'-P	-6.12	1.53	1.61
1	N	935	A	N9-C8	6.12	1.42	1.37
1	N	1382	C	C4-C5	-6.12	1.38	1.43
1	N	235	C	C4-N4	6.12	1.39	1.33
1	N	1002	G	C8-N7	-6.12	1.27	1.30
1	N	610	U	C2-N3	6.12	1.42	1.37
1	N	1166	G	C2-N3	6.12	1.37	1.32
1	N	1273	C	C4-C5	6.12	1.47	1.43
1	N	561	U	C5'-C4'	6.12	1.58	1.51
1	N	1225	A	C8-N7	-6.12	1.27	1.31
1	N	1281	C	C4-N4	6.12	1.39	1.33
1	N	1486	G	N1-C2	6.12	1.42	1.37
1	N	276	G	C8-N7	6.12	1.34	1.30
1	N	343	U	N3-C4	6.12	1.44	1.38
1	N	505	G	O4'-C1'	6.12	1.49	1.41
1	N	682	G	C6-N1	-6.12	1.35	1.39
1	N	16	A	N9-C4	-6.11	1.34	1.37
1	N	992	U	N3-C4	6.11	1.44	1.38
1	N	370	C	C5-C6	6.11	1.39	1.34
1	N	919	A	N9-C8	6.11	1.42	1.37
1	N	618	C	C1'-N1	6.11	1.57	1.48
1	N	947	G	N9-C4	6.11	1.42	1.38
1	N	1530	G	N9-C4	6.11	1.42	1.38
1	N	301	G	C2-N2	6.11	1.40	1.34
1	N	512	U	C2-N3	6.11	1.42	1.37
1	N	1356	G	C5'-C4'	6.11	1.58	1.51
1	N	1530	G	N3-C4	-6.11	1.31	1.35
1	N	3	A	C8-N7	6.11	1.35	1.31
1	N	535	A	C6-N1	6.11	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	636	U	P-O5'	-6.11	1.53	1.59
1	N	100	G	C2-N3	6.11	1.37	1.32
1	N	153	C	C5-C6	-6.11	1.29	1.34
1	N	590	U	O4'-C1'	6.11	1.49	1.41
1	N	729	A	C5-C4	6.11	1.43	1.38
1	N	21	G	N9-C8	-6.10	1.33	1.37
1	N	864	A	C6-N6	6.10	1.38	1.33
1	N	1067	A	N7-C5	-6.10	1.35	1.39
1	N	1475	G	N3-C4	-6.10	1.31	1.35
1	N	1530	G	C2-N3	6.10	1.37	1.32
1	N	1029	U	C2-N3	6.10	1.42	1.37
1	N	1101	A	N7-C5	-6.10	1.35	1.39
1	N	768	A	C5'-C4'	6.10	1.58	1.51
1	N	1051	C	N3-C4	6.10	1.38	1.33
1	N	1206	G	C5-C6	-6.10	1.36	1.42
1	N	530	G	C3'-C2'	-6.10	1.46	1.52
1	N	1287	A	P-O5'	6.10	1.65	1.59
1	N	1407	C	P-O5'	-6.10	1.53	1.59
1	N	1225	A	C6-N6	6.10	1.38	1.33
1	N	161	A	O4'-C1'	6.09	1.49	1.41
1	N	948	C	N3-C4	6.09	1.38	1.33
1	N	1459	G	C5-C4	-6.09	1.34	1.38
1	N	792	A	C8-N7	-6.09	1.27	1.31
1	N	1486	G	N9-C4	-6.09	1.33	1.38
1	N	220	G	C4'-O4'	6.09	1.53	1.45
1	N	428	G	C5-C4	6.09	1.42	1.38
1	N	1296	C	C4'-C3'	6.09	1.59	1.53
1	N	1331	G	N1-C2	6.09	1.42	1.37
1	N	1407	C	C4-N4	6.09	1.39	1.33
1	N	521	G	C2'-C1'	-6.09	1.46	1.53
1	N	84	U	C2-N3	6.09	1.42	1.37
1	N	451	A	P-O5'	6.09	1.65	1.59
1	N	846	G	P-O5'	-6.09	1.53	1.59
1	N	1388	C	P-O5'	6.09	1.65	1.59
1	N	650	G	N9-C4	-6.08	1.33	1.38
1	N	1164	G	N1-C2	6.08	1.42	1.37
1	N	1309	G	C6-N1	6.08	1.43	1.39
1	N	407	U	N1-C6	6.08	1.43	1.38
1	N	461	A	C5-C6	-6.08	1.35	1.41
1	N	780	A	C6-N1	6.08	1.39	1.35
1	N	500	G	P-O5'	-6.08	1.53	1.59
1	N	234	C	C4-N4	6.08	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	942	G	C3'-C2'	-6.08	1.46	1.52
1	N	214	C	C4-N4	6.07	1.39	1.33
1	N	756	C	C2'-C1'	-6.07	1.46	1.53
1	N	758	C	N1-C6	6.07	1.40	1.37
1	N	777	A	C6-N1	6.07	1.39	1.35
1	N	1108	G	P-O5'	-6.07	1.53	1.59
1	N	1349	A	C2'-C1'	-6.07	1.46	1.53
1	N	394	G	N9-C8	6.07	1.42	1.37
1	N	477	C	C4-N4	6.07	1.39	1.33
1	N	201	G	C5-C4	6.07	1.42	1.38
1	N	743	A	N7-C5	-6.07	1.35	1.39
1	N	982	U	C5'-C4'	6.07	1.58	1.51
1	N	1414	U	C4-C5	6.07	1.49	1.43
1	N	262	A	O3'-P	-6.07	1.53	1.61
1	N	289	G	C2-N3	6.07	1.37	1.32
1	N	403	C	C2-N3	6.07	1.40	1.35
1	N	798	U	C4'-O4'	-6.07	1.37	1.45
1	N	862	C	C4'-C3'	6.07	1.59	1.53
1	N	966	G	C2-N2	6.07	1.40	1.34
1	N	1170	A	C5-C6	-6.07	1.35	1.41
1	N	364	A	N3-C4	-6.07	1.31	1.34
1	N	1294	G	C5-C4	6.07	1.42	1.38
1	N	1217	C	C2'-C1'	-6.06	1.46	1.53
1	N	572	A	C5-C6	6.06	1.46	1.41
1	N	1210	C	O3'-P	-6.06	1.53	1.61
1	N	726	C	O3'-P	-6.06	1.53	1.61
1	N	1083	U	C2'-O2'	6.06	1.49	1.41
1	N	1180	A	C6-N6	6.06	1.38	1.33
1	N	320	A	C6-N1	6.05	1.39	1.35
1	N	489	C	N3-C4	6.05	1.38	1.33
1	N	1059	C	C4-C5	6.05	1.47	1.43
1	N	956	U	C2-N3	6.05	1.42	1.37
1	N	1375	A	N3-C4	-6.05	1.31	1.34
1	N	1384	C	O3'-P	-6.05	1.53	1.61
1	N	458	U	N1-C6	6.05	1.43	1.38
1	N	651	C	C2'-C1'	6.05	1.60	1.53
1	N	907	A	C6-N6	6.05	1.38	1.33
1	N	1088	G	C5'-C4'	6.05	1.58	1.51
1	N	961	U	P-O5'	-6.05	1.53	1.59
1	N	1356	G	O3'-P	-6.05	1.53	1.61
1	N	773	G	C2-N3	6.04	1.37	1.32
1	N	942	G	C8-N7	6.04	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1127	G	C5-C4	-6.04	1.34	1.38
1	N	1143	G	C4'-O4'	6.04	1.53	1.45
1	N	1408	A	P-O5'	-6.04	1.53	1.59
1	N	126	G	C6-N1	6.04	1.43	1.39
1	N	278	G	N1-C2	6.04	1.42	1.37
1	N	1065	U	C4-O4	-6.04	1.18	1.23
1	N	554	A	P-O5'	6.04	1.65	1.59
1	N	690	G	N9-C4	6.04	1.42	1.38
1	N	1089	G	N1-C2	6.04	1.42	1.37
1	N	1458	G	C6-N1	6.04	1.43	1.39
1	N	306	A	C3'-O3'	6.04	1.50	1.42
1	N	530	G	C5-C4	6.04	1.42	1.38
1	N	768	A	N9-C4	6.04	1.41	1.37
1	N	519	C	N1-C6	6.04	1.40	1.37
1	N	668	G	C8-N7	-6.03	1.27	1.30
1	N	1083	U	O4'-C1'	-6.03	1.33	1.41
1	N	1374	A	C8-N7	6.03	1.35	1.31
1	N	869	G	C2-N3	6.03	1.37	1.32
1	N	945	G	N7-C5	-6.03	1.35	1.39
1	N	988	G	P-O5'	-6.03	1.53	1.59
1	N	1402	C	O4'-C1'	6.03	1.49	1.41
1	N	288	A	C3'-O3'	6.03	1.50	1.42
1	N	134	G	C2-N3	6.03	1.37	1.32
1	N	291	U	C4-O4	-6.03	1.18	1.23
1	N	359	G	C6-O6	-6.03	1.18	1.24
1	N	782	A	C5'-C4'	6.03	1.58	1.51
1	N	885	G	C2-N3	6.03	1.37	1.32
1	N	1032	G	C5-C4	6.03	1.42	1.38
1	N	1322	C	C5-C6	-6.03	1.29	1.34
1	N	1171	A	C3'-C2'	-6.02	1.46	1.52
1	N	501	C	N3-C4	6.02	1.38	1.33
1	N	772	U	P-O5'	-6.02	1.53	1.59
1	N	1172	C	N3-C4	6.02	1.38	1.33
1	N	388	G	C2-N3	6.02	1.37	1.32
1	N	1285	A	C2'-C1'	-6.02	1.46	1.53
1	N	338	A	C2'-C1'	-6.02	1.46	1.53
1	N	688	G	N3-C4	6.02	1.39	1.35
1	N	505	G	P-O5'	-6.02	1.53	1.59
1	N	382	A	O4'-C1'	-6.02	1.33	1.41
1	N	151	A	C3'-O3'	6.01	1.50	1.42
1	N	416	G	P-O5'	-6.01	1.53	1.59
1	N	892	A	C2'-C1'	-6.01	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1317	C	N3-C4	6.01	1.38	1.33
1	N	1192	C	C4'-C3'	6.01	1.59	1.53
1	N	1338	G	N1-C2	6.01	1.42	1.37
1	N	555	U	C5-C6	-6.01	1.28	1.34
1	N	766	A	P-O5'	-6.01	1.53	1.59
1	N	38	G	C6-N1	6.01	1.43	1.39
1	N	377	G	N9-C4	-6.01	1.33	1.38
1	N	1179	A	N3-C4	-6.01	1.31	1.34
1	N	1352	C	C2-O2	6.01	1.29	1.24
1	N	1363	A	C5'-C4'	6.01	1.58	1.51
1	N	109	A	N1-C2	-6.01	1.28	1.34
1	N	391	G	N1-C2	6.01	1.42	1.37
1	N	459	A	C8-N7	-6.01	1.27	1.31
1	N	276	G	C5'-C4'	-6.00	1.44	1.51
1	N	314	C	C2-N3	6.00	1.40	1.35
1	N	327	A	C6-N1	6.00	1.39	1.35
1	N	472	U	N3-C4	6.00	1.43	1.38
1	N	764	C	P-O5'	-6.00	1.53	1.59
1	N	1447	A	C2-N3	6.00	1.39	1.33
1	N	146	G	N7-C5	-6.00	1.35	1.39
1	N	683	G	C5-C4	6.00	1.42	1.38
1	N	752	G	C2'-C1'	-6.00	1.46	1.53
1	N	754	C	C4'-O4'	-6.00	1.37	1.45
1	N	902	G	C5-C4	6.00	1.42	1.38
1	N	1487	G	C5-C6	-6.00	1.36	1.42
1	N	64	G	C4'-C3'	6.00	1.59	1.53
1	N	320	A	N7-C5	-6.00	1.35	1.39
1	N	354	G	O3'-P	-6.00	1.53	1.61
1	N	479	U	N3-C4	6.00	1.43	1.38
1	N	800	G	N3-C4	6.00	1.39	1.35
1	N	831	A	C5-C4	6.00	1.43	1.38
1	N	77	A	C5'-C4'	6.00	1.58	1.51
1	N	1047	G	O4'-C1'	6.00	1.49	1.41
1	N	1291	U	P-O5'	-6.00	1.53	1.59
1	N	651	C	N1-C2	-6.00	1.34	1.40
1	N	1340	A	C5'-C4'	6.00	1.58	1.51
1	N	511	C	C2'-C1'	-6.00	1.46	1.53
1	N	782	A	N1-C2	-6.00	1.28	1.34
1	N	104	G	C2-N2	6.00	1.40	1.34
1	N	119	A	O4'-C1'	-6.00	1.33	1.41
1	N	1047	G	C4'-O4'	-6.00	1.37	1.45
1	N	1366	C	C2'-C1'	-6.00	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	13	U	O3'-P	-5.99	1.53	1.61
1	N	199	A	C2'-C1'	-5.99	1.46	1.53
1	N	1102	A	C8-N7	-5.99	1.27	1.31
1	N	1148	U	N3-C4	5.99	1.43	1.38
1	N	1367	C	N1-C6	5.99	1.40	1.37
1	N	1506	U	N3-C4	5.99	1.43	1.38
1	N	309	A	C3'-C2'	5.99	1.59	1.52
1	N	485	U	C2'-C1'	-5.99	1.46	1.53
1	N	889	A	N7-C5	-5.99	1.35	1.39
1	N	1534	A	C3'-C2'	5.99	1.59	1.52
1	N	651	C	C5'-C4'	5.99	1.58	1.51
1	N	891	U	C2-N3	5.99	1.42	1.37
1	N	342	C	N3-C4	5.99	1.38	1.33
1	N	389	A	N9-C4	-5.99	1.34	1.37
1	N	681	A	N7-C5	-5.99	1.35	1.39
1	N	918	A	C6-N1	5.99	1.39	1.35
1	N	791	G	O3'-P	-5.98	1.53	1.61
1	N	1266	G	N7-C5	-5.98	1.35	1.39
1	N	288	A	C2'-C1'	-5.98	1.46	1.53
1	N	350	G	C2-N2	5.98	1.40	1.34
1	N	562	U	C5-C6	5.98	1.39	1.34
1	N	1016	A	C6-N1	5.98	1.39	1.35
1	N	315	A	N9-C4	-5.98	1.34	1.37
1	N	423	G	N1-C2	5.98	1.42	1.37
1	N	961	U	N3-C4	5.98	1.43	1.38
1	N	1016	A	N9-C8	-5.98	1.32	1.37
1	N	373	A	N1-C2	-5.98	1.28	1.34
1	N	104	G	C2-N3	5.98	1.37	1.32
1	N	760	G	C4'-C3'	-5.98	1.46	1.52
1	N	1181	G	C4'-C3'	5.98	1.59	1.53
1	N	818	G	O3'-P	-5.98	1.53	1.61
1	N	386	C	P-O5'	-5.97	1.53	1.59
1	N	649	A	C2-N3	5.97	1.39	1.33
1	N	821	G	N1-C2	5.97	1.42	1.37
1	N	881	G	C8-N7	5.97	1.34	1.30
1	N	964	A	C2'-C1'	-5.97	1.46	1.53
1	N	219	U	C2'-C1'	-5.97	1.46	1.53
1	N	188	C	C2'-C1'	-5.97	1.46	1.53
1	N	169	C	C1'-N1	5.97	1.57	1.48
1	N	743	A	C1'-N9	-5.97	1.38	1.46
1	N	811	C	C5-C6	5.97	1.39	1.34
1	N	1135	U	C2-N3	5.97	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1187	G	N9-C4	5.97	1.42	1.38
1	N	99	C	N1-C2	-5.97	1.34	1.40
1	N	1285	A	C8-N7	-5.97	1.27	1.31
1	N	180	U	P-O5'	-5.97	1.53	1.59
1	N	362	G	N1-C2	5.97	1.42	1.37
1	N	478	A	C2'-C1'	-5.97	1.46	1.53
1	N	649	A	N9-C4	-5.97	1.34	1.37
1	N	931	C	C2'-C1'	-5.97	1.46	1.53
1	N	942	G	N7-C5	-5.97	1.35	1.39
1	N	1233	G	N7-C5	-5.97	1.35	1.39
1	N	447	G	C8-N7	5.96	1.34	1.30
1	N	1196	A	C6-N6	5.96	1.38	1.33
1	N	493	A	C5-C4	5.96	1.43	1.38
1	N	646	G	P-O5'	5.96	1.65	1.59
1	N	874	G	N7-C5	-5.96	1.35	1.39
1	N	971	G	C2'-C1'	-5.96	1.46	1.53
1	N	1479	C	C5'-C4'	5.96	1.58	1.51
1	N	408	A	C5-C6	-5.96	1.35	1.41
1	N	17	U	N1-C6	-5.96	1.32	1.38
1	N	193	C	C4'-C3'	-5.96	1.46	1.52
1	N	241	G	N9-C8	5.96	1.42	1.37
1	N	381	C	C4-C5	5.96	1.47	1.43
1	N	447	G	N9-C4	-5.96	1.33	1.38
1	N	1202	U	C2-N3	5.96	1.42	1.37
1	N	1267	C	C4-C5	-5.96	1.38	1.43
1	N	68	G	N1-C2	5.96	1.42	1.37
1	N	1345	U	N1-C6	5.96	1.43	1.38
1	N	1357	A	P-O5'	-5.96	1.53	1.59
1	N	1019	A	C8-N7	5.95	1.35	1.31
1	N	929	G	C2'-C1'	-5.95	1.46	1.53
1	N	1009	U	C2'-C1'	5.95	1.59	1.53
1	N	1428	A	N3-C4	5.95	1.38	1.34
1	N	483	C	N1-C6	5.95	1.40	1.37
1	N	160	A	C6-N1	5.95	1.39	1.35
1	N	595	A	C6-N6	5.95	1.38	1.33
1	N	773	G	N9-C8	-5.95	1.33	1.37
1	N	923	A	N9-C8	-5.95	1.32	1.37
1	N	1154	G	C2-N2	5.95	1.40	1.34
1	N	652	U	P-O5'	-5.95	1.53	1.59
1	N	1040	U	P-O5'	-5.95	1.53	1.59
1	N	336	A	C5-C4	5.95	1.43	1.38
1	N	399	G	O3'-P	-5.95	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	399	G	C6-N1	5.95	1.43	1.39
1	N	717	U	C2-O2	5.95	1.27	1.22
1	N	937	A	N9-C4	5.95	1.41	1.37
1	N	1497	G	C4'-C3'	-5.95	1.46	1.52
1	N	104	G	C1'-N9	5.94	1.57	1.48
1	N	613	C	P-O5'	-5.94	1.53	1.59
1	N	1062	U	C2-N3	5.94	1.42	1.37
1	N	266	G	C6-N1	5.94	1.43	1.39
1	N	1012	A	P-O5'	-5.94	1.53	1.59
1	N	1258	G	C6-N1	5.94	1.43	1.39
1	N	247	G	C4'-C3'	5.94	1.59	1.53
1	N	1106	G	C5-C6	-5.94	1.36	1.42
1	N	18	C	N1-C6	5.94	1.40	1.37
1	N	383	A	C6-N1	5.94	1.39	1.35
1	N	567	G	C2'-C1'	-5.94	1.46	1.53
1	N	699	C	N3-C4	5.94	1.38	1.33
1	N	879	C	O4'-C1'	5.94	1.49	1.41
1	N	1468	A	N3-C4	5.94	1.38	1.34
1	N	1474	U	O4'-C1'	5.94	1.49	1.41
1	N	768	A	N7-C5	-5.93	1.35	1.39
1	N	1268	G	C5'-C4'	5.93	1.58	1.51
1	N	1366	C	C4-N4	5.93	1.39	1.33
1	N	389	A	C5-C4	5.93	1.43	1.38
1	N	834	U	C2-N3	5.93	1.42	1.37
1	N	756	C	O4'-C1'	5.93	1.49	1.41
1	N	1067	A	C8-N7	-5.93	1.27	1.31
1	N	41	G	C3'-C2'	5.93	1.59	1.52
1	N	168	G	C2-N3	5.93	1.37	1.32
1	N	1346	A	C2'-C1'	-5.93	1.46	1.53
1	N	120	A	N9-C4	5.93	1.41	1.37
1	N	873	A	C5'-C4'	5.93	1.58	1.51
1	N	54	C	O4'-C1'	5.92	1.49	1.41
1	N	239	U	P-O5'	-5.92	1.53	1.59
1	N	1072	G	N1-C2	5.92	1.42	1.37
1	N	49	U	C4'-C3'	5.92	1.59	1.53
1	N	139	A	N7-C5	5.92	1.42	1.39
1	N	628	G	N1-C2	5.92	1.42	1.37
1	N	1099	G	C2-N2	5.92	1.40	1.34
1	N	1177	G	N3-C4	-5.92	1.31	1.35
1	N	1410	A	C2'-C1'	5.92	1.59	1.53
1	N	11	G	C4'-C3'	-5.92	1.46	1.52
1	N	43	C	C4'-C3'	-5.92	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	65	A	O4'-C1'	-5.92	1.33	1.41
1	N	580	C	N1-C6	5.92	1.40	1.37
1	N	650	G	C5-C4	-5.92	1.34	1.38
1	N	1093	A	C8-N7	5.92	1.35	1.31
1	N	343	U	C4-O4	-5.92	1.19	1.23
1	N	460	A	N3-C4	-5.92	1.31	1.34
1	N	970	C	C4-C5	5.92	1.47	1.43
1	N	1414	U	C5-C6	5.92	1.39	1.34
1	N	697	U	C2-N3	5.91	1.41	1.37
1	N	1208	C	C4-N4	-5.91	1.28	1.33
1	N	1367	C	N3-C4	5.91	1.38	1.33
1	N	339	C	C4-N4	5.91	1.39	1.33
1	N	777	A	N9-C8	-5.91	1.33	1.37
1	N	1431	A	P-O5'	-5.91	1.53	1.59
1	N	1465	A	O4'-C1'	5.91	1.49	1.41
1	N	220	G	N7-C5	-5.91	1.35	1.39
1	N	269	C	C4'-C3'	5.91	1.59	1.53
1	N	838	G	C5-C6	-5.91	1.36	1.42
1	N	1144	G	N3-C4	5.91	1.39	1.35
1	N	1290	G	N1-C2	5.91	1.42	1.37
1	N	1353	G	N7-C5	5.91	1.42	1.39
1	N	963	G	C6-N1	-5.91	1.35	1.39
1	N	1237	C	C2'-C1'	5.91	1.59	1.53
1	N	1426	G	C2-N3	5.91	1.37	1.32
1	N	484	G	C2'-C1'	-5.91	1.46	1.53
1	N	1119	C	C4-N4	5.91	1.39	1.33
1	N	152	A	N7-C5	-5.91	1.35	1.39
1	N	347	G	C2-N3	5.91	1.37	1.32
1	N	416	G	C6-N1	-5.91	1.35	1.39
1	N	711	G	O3'-P	-5.91	1.54	1.61
1	N	985	C	P-O5'	-5.91	1.53	1.59
1	N	1098	C	C3'-O3'	5.91	1.50	1.42
1	N	366	A	O4'-C1'	5.90	1.49	1.41
1	N	597	G	C6-O6	-5.90	1.18	1.24
1	N	759	A	P-O5'	-5.90	1.53	1.59
1	N	241	G	C5'-C4'	5.90	1.58	1.51
1	N	656	G	C8-N7	5.90	1.34	1.30
1	N	1524	C	O3'-P	-5.90	1.54	1.61
1	N	946	A	C6-N6	5.90	1.38	1.33
1	N	16	A	C6-N6	5.90	1.38	1.33
1	N	1212	U	N1-C6	5.90	1.43	1.38
1	N	251	G	C5-C6	-5.90	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	569	C	O4'-C1'	5.89	1.49	1.41
1	N	1008	U	C3'-C2'	-5.89	1.46	1.52
1	N	257	G	C5-C4	5.89	1.42	1.38
1	N	1306	A	N9-C4	5.89	1.41	1.37
1	N	586	C	N1-C6	5.89	1.40	1.37
1	N	831	A	C5-C6	-5.89	1.35	1.41
1	N	1021	A	N9-C4	-5.89	1.34	1.37
1	N	422	C	P-O5'	-5.89	1.53	1.59
1	N	1077	G	C5'-C4'	5.89	1.58	1.51
1	N	1323	G	N1-C2	5.89	1.42	1.37
1	N	49	U	C3'-O3'	5.88	1.50	1.42
1	N	155	A	P-O5'	-5.88	1.53	1.59
1	N	201	G	C6-N1	5.88	1.43	1.39
1	N	622	A	C5-C6	5.88	1.46	1.41
1	N	674	G	N9-C8	5.88	1.42	1.37
1	N	1009	U	C4'-O4'	5.88	1.53	1.45
1	N	635	A	C4'-O4'	-5.88	1.38	1.45
1	N	1488	G	N9-C4	-5.88	1.33	1.38
1	N	210	C	C4'-O4'	5.88	1.53	1.45
1	N	215	C	C2-N3	5.88	1.40	1.35
1	N	319	G	C5-C4	5.88	1.42	1.38
1	N	746	A	C2'-C1'	-5.88	1.46	1.53
1	N	10	A	C2'-O2'	-5.88	1.34	1.41
1	N	649	A	C6-N6	5.88	1.38	1.33
1	N	604	G	N7-C5	-5.88	1.35	1.39
1	N	1255	G	P-O5'	-5.88	1.53	1.59
1	N	517	G	C4'-C3'	-5.88	1.46	1.52
1	N	541	G	C4'-C3'	-5.88	1.46	1.52
1	N	133	U	C2-N3	5.88	1.41	1.37
1	N	774	G	C3'-C2'	5.88	1.59	1.52
1	N	234	C	C4-C5	-5.87	1.38	1.43
1	N	408	A	C3'-C2'	-5.87	1.46	1.52
1	N	531	U	N1-C6	5.87	1.43	1.38
1	N	532	A	C5'-C4'	5.87	1.58	1.51
1	N	926	G	C4'-C3'	5.87	1.59	1.53
1	N	1219	A	N7-C5	5.87	1.42	1.39
1	N	1334	G	N3-C4	-5.87	1.31	1.35
1	N	1370	G	N7-C5	5.87	1.42	1.39
1	N	922	G	C2-N2	5.87	1.40	1.34
1	N	1337	G	P-O5'	5.87	1.65	1.59
1	N	1067	A	C2'-C1'	-5.87	1.46	1.53
1	N	420	U	O5'-C5'	5.87	1.53	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	465	A	C2'-C1'	-5.87	1.46	1.53
1	N	791	G	C2-N3	5.87	1.37	1.32
1	N	979	C	C5'-C4'	5.87	1.58	1.51
1	N	520	A	C8-N7	-5.87	1.27	1.31
1	N	848	C	C2-N3	5.87	1.40	1.35
1	N	1529	G	C2-N3	5.87	1.37	1.32
1	N	65	A	C6-N6	5.87	1.38	1.33
1	N	371	A	C6-N6	-5.87	1.29	1.33
1	N	857	C	N1-C6	5.87	1.40	1.37
1	N	925	G	C5-C6	-5.87	1.36	1.42
1	N	925	G	N7-C5	-5.87	1.35	1.39
1	N	553	A	C2-N3	5.86	1.38	1.33
1	N	1225	A	C2-N3	-5.86	1.28	1.33
1	N	1456	A	C8-N7	-5.86	1.27	1.31
1	N	589	U	C1'-N1	5.86	1.57	1.48
1	N	83	C	N1-C2	5.86	1.46	1.40
1	N	151	A	N1-C2	5.86	1.39	1.34
1	N	455	G	P-O5'	-5.86	1.53	1.59
1	N	410	G	N9-C4	-5.86	1.33	1.38
1	N	1117	A	O3'-P	-5.86	1.54	1.61
1	N	125	U	C2-N3	5.86	1.41	1.37
1	N	509	A	C2'-C1'	-5.86	1.47	1.53
1	N	788	U	C5'-C4'	5.86	1.58	1.51
1	N	1414	U	C2'-C1'	-5.86	1.47	1.53
1	N	1458	G	C4'-O4'	-5.86	1.38	1.45
1	N	990	C	N1-C6	5.86	1.40	1.37
1	N	1419	G	C3'-O3'	5.85	1.50	1.42
1	N	177	G	C1'-N9	-5.85	1.38	1.46
1	N	307	C	N1-C2	-5.85	1.34	1.40
1	N	768	A	C4'-O4'	-5.85	1.38	1.45
1	N	827	U	N1-C6	-5.85	1.32	1.38
1	N	1073	U	C4-C5	5.85	1.48	1.43
1	N	1145	A	C5-C4	5.85	1.42	1.38
1	N	1426	G	O3'-P	5.85	1.68	1.61
1	N	587	G	N9-C8	5.85	1.42	1.37
1	N	831	A	C2'-C1'	-5.85	1.47	1.53
1	N	857	C	C4-N4	5.85	1.39	1.33
1	N	735	C	C4-N4	5.85	1.39	1.33
1	N	806	C	C4-N4	5.85	1.39	1.33
1	N	834	U	C2-O2	5.85	1.27	1.22
1	N	192	A	C6-N1	5.85	1.39	1.35
1	N	952	U	C4-C5	5.85	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	100	G	C8-N7	5.84	1.34	1.30
1	N	108	G	C8-N7	-5.84	1.27	1.30
1	N	674	G	N3-C4	-5.84	1.31	1.35
1	N	673	A	C3'-O3'	5.84	1.50	1.42
1	N	1426	G	N9-C8	-5.84	1.33	1.37
1	N	425	G	C2-N3	5.84	1.37	1.32
1	N	1435	G	C8-N7	-5.84	1.27	1.30
1	N	1472	U	P-O5'	-5.84	1.53	1.59
1	N	1213	A	C5-C4	-5.84	1.34	1.38
1	N	1294	G	O3'-P	5.84	1.68	1.61
1	N	82	G	C8-N7	-5.84	1.27	1.30
1	N	698	G	N3-C4	-5.84	1.31	1.35
1	N	1068	G	C2'-C1'	-5.84	1.47	1.53
1	N	289	G	C6-N1	5.84	1.43	1.39
1	N	474	G	C5'-C4'	5.84	1.58	1.51
1	N	661	G	P-O5'	-5.84	1.53	1.59
1	N	1268	G	N7-C5	-5.84	1.35	1.39
1	N	1473	G	N3-C4	-5.84	1.31	1.35
1	N	131	A	P-O5'	-5.83	1.53	1.59
1	N	1423	G	C2'-O2'	-5.83	1.34	1.41
1	N	151	A	C6-N6	5.83	1.38	1.33
1	N	353	A	C5-C6	-5.83	1.35	1.41
1	N	502	A	N1-C2	5.83	1.39	1.34
1	N	1261	A	C8-N7	5.83	1.35	1.31
1	N	273	U	C4'-O4'	-5.83	1.38	1.45
1	N	326	G	C2-N3	5.83	1.37	1.32
1	N	401	C	C4'-O4'	5.83	1.53	1.45
1	N	468	A	N9-C8	-5.83	1.33	1.37
1	N	717	U	O3'-P	-5.83	1.54	1.61
1	N	1045	C	N1-C6	5.83	1.40	1.37
1	N	320	A	C6-N6	5.83	1.38	1.33
1	N	86	G	N7-C5	-5.83	1.35	1.39
1	N	327	A	N7-C5	-5.83	1.35	1.39
1	N	1446	A	C6-N1	5.83	1.39	1.35
1	N	1282	C	C5'-C4'	5.83	1.58	1.51
1	N	282	A	C4'-O4'	-5.83	1.38	1.45
1	N	802	A	C6-N6	5.83	1.38	1.33
1	N	851	G	C6-N1	-5.83	1.35	1.39
1	N	1120	C	C4-N4	5.83	1.39	1.33
1	N	476	U	C2-N3	5.82	1.41	1.37
1	N	750	C	C1'-N1	5.82	1.57	1.48
1	N	833	G	C2-N3	5.82	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1087	G	C8-N7	5.82	1.34	1.30
1	N	1531	A	C6-N6	5.82	1.38	1.33
1	N	269	C	C3'-C2'	-5.82	1.46	1.52
1	N	407	U	C3'-C2'	5.82	1.59	1.52
1	N	923	A	C5-C4	-5.82	1.34	1.38
1	N	148	G	C8-N7	-5.82	1.27	1.30
1	N	1000	A	N7-C5	-5.82	1.35	1.39
1	N	1178	G	C6-N1	5.82	1.43	1.39
1	N	1454	G	N3-C4	5.82	1.39	1.35
1	N	1266	G	O3'-P	-5.82	1.54	1.61
1	N	1439	G	O3'-P	-5.82	1.54	1.61
1	N	324	G	N3-C4	-5.82	1.31	1.35
1	N	520	A	C6-N1	5.82	1.39	1.35
1	N	542	G	C4'-C3'	5.82	1.59	1.53
1	N	1374	A	N7-C5	-5.82	1.35	1.39
1	N	791	G	N9-C8	5.81	1.42	1.37
1	N	833	G	C2'-C1'	-5.81	1.47	1.53
1	N	1097	C	C4-C5	-5.81	1.38	1.43
1	N	1114	C	C3'-O3'	5.81	1.50	1.42
1	N	1347	G	N1-C2	5.81	1.42	1.37
1	N	210	C	C4-N4	5.81	1.39	1.33
1	N	968	A	C5-C6	-5.81	1.35	1.41
1	N	211	G	C1'-N9	5.81	1.57	1.48
1	N	344	A	C5'-C4'	5.81	1.58	1.51
1	N	584	G	C5'-C4'	5.81	1.58	1.51
1	N	620	C	C4'-C3'	5.81	1.59	1.53
1	N	747	A	N3-C4	-5.81	1.31	1.34
1	N	184	G	C4'-C3'	5.81	1.59	1.53
1	N	413	G	C4'-O4'	-5.81	1.38	1.45
1	N	468	A	N9-C4	-5.81	1.34	1.37
1	N	647	C	C5-C6	5.81	1.39	1.34
1	N	711	G	O4'-C1'	-5.81	1.34	1.41
1	N	812	G	C8-N7	-5.81	1.27	1.30
1	N	977	A	C6-N1	5.81	1.39	1.35
1	N	1194	U	N1-C2	5.81	1.43	1.38
1	N	1225	A	C3'-C2'	5.81	1.59	1.52
1	N	1342	C	C4-C5	5.81	1.47	1.43
1	N	374	A	N7-C5	-5.80	1.35	1.39
1	N	533	A	N9-C8	-5.80	1.33	1.37
1	N	660	C	C5-C6	-5.80	1.29	1.34
1	N	1453	G	N7-C5	-5.80	1.35	1.39
1	N	138	G	C2'-C1'	-5.80	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	605	U	N3-C4	5.80	1.43	1.38
1	N	765	G	P-O5'	-5.80	1.53	1.59
1	N	1373	G	N9-C4	-5.80	1.33	1.38
1	N	236	A	N9-C4	-5.80	1.34	1.37
1	N	362	G	N7-C5	-5.80	1.35	1.39
1	N	471	U	C5'-C4'	5.80	1.58	1.51
1	N	572	A	N7-C5	-5.80	1.35	1.39
1	N	683	G	C3'-C2'	-5.80	1.46	1.52
1	N	1238	A	N9-C8	5.80	1.42	1.37
1	N	121	U	N1-C2	5.80	1.43	1.38
1	N	334	C	C2'-C1'	-5.80	1.47	1.53
1	N	359	G	N1-C2	5.80	1.42	1.37
1	N	632	U	C1'-N1	5.80	1.57	1.48
1	N	1074	G	N9-C8	-5.80	1.33	1.37
1	N	1177	G	O3'-P	-5.80	1.54	1.61
1	N	1388	C	O3'-P	-5.80	1.54	1.61
1	N	254	G	O4'-C1'	5.80	1.49	1.41
1	N	727	G	C5'-C4'	5.80	1.58	1.51
1	N	695	A	C2-N3	5.80	1.38	1.33
1	N	1045	C	P-O5'	-5.80	1.53	1.59
1	N	1175	G	C4'-C3'	5.80	1.59	1.53
1	N	1211	U	O3'-P	-5.80	1.54	1.61
1	N	1279	G	N3-C4	-5.80	1.31	1.35
1	N	675	A	C6-N1	5.79	1.39	1.35
1	N	103	U	C2'-C1'	-5.79	1.47	1.53
1	N	633	G	N9-C8	5.79	1.42	1.37
1	N	1057	G	C2'-C1'	5.79	1.59	1.53
1	N	1443	C	N3-C4	5.79	1.38	1.33
1	N	1176	A	C5-C4	-5.79	1.34	1.38
1	N	1472	U	N3-C4	5.79	1.43	1.38
1	N	325	A	C4'-C3'	-5.79	1.46	1.52
1	N	896	C	P-O5'	-5.79	1.53	1.59
1	N	767	A	N9-C4	-5.79	1.34	1.37
1	N	877	G	C2'-C1'	-5.79	1.47	1.53
1	N	987	G	P-O5'	-5.79	1.53	1.59
1	N	266	G	C8-N7	5.79	1.34	1.30
1	N	1344	C	C2'-C1'	5.79	1.59	1.53
1	N	129	A	O4'-C1'	-5.79	1.34	1.41
1	N	1480	A	C3'-C2'	-5.78	1.46	1.52
1	N	904	U	O4'-C1'	5.78	1.49	1.41
1	N	286	C	C1'-N1	5.78	1.57	1.48
1	N	545	C	C2'-C1'	-5.78	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	886	G	C3'-O3'	5.78	1.50	1.42
1	N	849	G	C2-N2	5.78	1.40	1.34
1	N	977	A	N1-C2	5.78	1.39	1.34
1	N	1093	A	C6-N6	5.78	1.38	1.33
1	N	1247	U	C4'-C3'	-5.78	1.46	1.52
1	N	2	A	C2'-C1'	-5.78	1.47	1.53
1	N	211	G	C4'-O4'	5.78	1.53	1.45
1	N	254	G	C6-N1	5.78	1.43	1.39
1	N	457	G	C6-N1	5.78	1.43	1.39
1	N	505	G	O3'-P	-5.78	1.54	1.61
1	N	557	G	N3-C4	5.78	1.39	1.35
1	N	1104	G	O4'-C1'	-5.78	1.34	1.41
1	N	1233	G	N9-C8	5.78	1.41	1.37
1	N	59	A	C2'-C1'	5.77	1.59	1.53
1	N	220	G	C5'-C4'	5.77	1.58	1.51
1	N	921	U	N3-C4	-5.77	1.33	1.38
1	N	1153	G	N1-C2	5.77	1.42	1.37
1	N	130	A	C6-N6	5.77	1.38	1.33
1	N	201	G	C8-N7	-5.77	1.27	1.30
1	N	1521	C	C5'-C4'	5.77	1.58	1.51
1	N	95	C	O5'-C5'	5.77	1.53	1.44
1	N	388	G	N1-C2	5.77	1.42	1.37
1	N	981	U	C4'-C3'	5.77	1.59	1.53
1	N	815	A	O3'-P	-5.77	1.54	1.61
1	N	462	G	O3'-P	-5.76	1.54	1.61
1	N	613	C	N1-C6	-5.76	1.33	1.37
1	N	22	G	N1-C2	5.76	1.42	1.37
1	N	1373	G	N9-C8	5.76	1.41	1.37
1	N	73	C	C4-N4	5.76	1.39	1.33
1	N	289	G	C5-C6	-5.76	1.36	1.42
1	N	337	G	C6-N1	5.76	1.43	1.39
1	N	406	G	C2'-O2'	-5.76	1.34	1.41
1	N	675	A	N9-C4	-5.76	1.34	1.37
1	N	730	G	C2'-C1'	-5.76	1.47	1.53
1	N	424	G	C6-N1	5.76	1.43	1.39
1	N	840	C	C1'-N1	5.76	1.57	1.48
1	N	1108	G	C5-C4	5.76	1.42	1.38
1	N	1227	A	C6-N6	5.76	1.38	1.33
1	N	90	C	C4-N4	5.76	1.39	1.33
1	N	783	C	C4'-C3'	-5.76	1.46	1.52
1	N	1006	G	N7-C5	-5.76	1.35	1.39
1	N	1303	C	C3'-O3'	5.76	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1398	A	N9-C4	5.76	1.41	1.37
1	N	353	A	N1-C2	5.75	1.39	1.34
1	N	928	G	N1-C2	5.75	1.42	1.37
1	N	90	C	O3'-P	-5.75	1.54	1.61
1	N	1057	G	C1'-N9	-5.75	1.38	1.46
1	N	1075	U	N3-C4	5.75	1.43	1.38
1	N	84	U	N1-C2	5.75	1.43	1.38
1	N	596	A	N9-C8	-5.75	1.33	1.37
1	N	761	G	N9-C4	-5.75	1.33	1.38
1	N	784	A	C2'-C1'	-5.75	1.47	1.53
1	N	950	U	C5'-C4'	5.75	1.58	1.51
1	N	21	G	C5-C4	5.75	1.42	1.38
1	N	194	C	C3'-C2'	5.75	1.59	1.52
1	N	498	A	C3'-O3'	5.75	1.50	1.42
1	N	617	G	C2'-C1'	-5.75	1.47	1.53
1	N	861	G	O4'-C1'	5.75	1.49	1.41
1	N	514	C	N1-C6	-5.75	1.33	1.37
1	N	413	G	C5'-C4'	5.74	1.58	1.51
1	N	868	C	C3'-O3'	5.74	1.50	1.42
1	N	960	U	C4'-C3'	5.74	1.59	1.53
1	N	1072	G	C2-N3	5.74	1.37	1.32
1	N	1520	C	C5'-C4'	5.74	1.58	1.51
1	N	341	C	N1-C6	-5.74	1.33	1.37
1	N	495	A	O3'-P	-5.74	1.54	1.61
1	N	1188	A	N3-C4	-5.74	1.31	1.34
1	N	1197	A	C5'-C4'	5.74	1.58	1.51
1	N	1343	G	C5-C4	5.74	1.42	1.38
1	N	75	G	P-O5'	5.74	1.65	1.59
1	N	1107	C	C4-N4	5.74	1.39	1.33
1	N	1360	A	N3-C4	-5.74	1.31	1.34
1	N	930	C	N1-C6	5.74	1.40	1.37
1	N	1356	G	C8-N7	5.74	1.34	1.30
1	N	1374	A	O3'-P	-5.73	1.54	1.61
1	N	1479	C	C4'-C3'	5.73	1.59	1.53
1	N	454	G	N1-C2	5.73	1.42	1.37
1	N	466	A	C6-N1	-5.73	1.31	1.35
1	N	575	G	C5-C4	-5.73	1.34	1.38
1	N	1529	G	C1'-N9	5.73	1.57	1.48
1	N	518	C	C2-N3	5.73	1.40	1.35
1	N	719	C	N3-C4	5.73	1.38	1.33
1	N	1528	U	C2-O2	5.73	1.27	1.22
1	N	567	G	O3'-P	-5.73	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	357	G	C5-C4	5.73	1.42	1.38
1	N	1503	A	C5-C6	5.73	1.46	1.41
1	N	38	G	C5-C4	-5.73	1.34	1.38
1	N	405	U	P-O5'	-5.73	1.54	1.59
1	N	1069	C	O5'-C5'	-5.73	1.33	1.42
1	N	281	G	C5-C4	-5.72	1.34	1.38
1	N	474	G	C2-N2	5.72	1.40	1.34
1	N	551	U	P-O5'	-5.72	1.54	1.59
1	N	765	G	C5-C4	5.72	1.42	1.38
1	N	958	A	C4'-O4'	-5.72	1.38	1.45
1	N	1007	U	C5-C6	-5.72	1.28	1.34
1	N	1225	A	C2'-C1'	5.72	1.59	1.53
1	N	1240	U	C5'-C4'	5.72	1.58	1.51
1	N	83	C	C4'-C3'	5.72	1.59	1.53
1	N	395	C	C1'-N1	5.72	1.57	1.48
1	N	1496	C	P-O5'	-5.72	1.54	1.59
1	N	2	A	C4'-O4'	-5.72	1.38	1.45
1	N	529	G	C6-O6	-5.72	1.19	1.24
1	N	700	G	P-O5'	-5.72	1.54	1.59
1	N	865	A	C2-N3	-5.72	1.28	1.33
1	N	1088	G	C2'-C1'	-5.72	1.47	1.53
1	N	598	U	C4-C5	5.72	1.48	1.43
1	N	1239	A	N3-C4	5.72	1.38	1.34
1	N	285	C	C4-N4	5.72	1.39	1.33
1	N	745	G	C6-N1	5.72	1.43	1.39
1	N	863	U	C2-N3	5.72	1.41	1.37
1	N	901	A	P-O5'	-5.71	1.54	1.59
1	N	1282	C	C3'-C2'	5.71	1.59	1.52
1	N	1457	G	C5'-C4'	5.71	1.58	1.51
1	N	648	A	C4'-O4'	-5.71	1.38	1.45
1	N	663	A	C2-N3	5.71	1.38	1.33
1	N	113	G	P-O5'	5.71	1.65	1.59
1	N	278	G	C2-N3	5.71	1.37	1.32
1	N	645	G	C3'-C2'	-5.71	1.46	1.52
1	N	1196	A	N7-C5	5.71	1.42	1.39
1	N	1489	G	N9-C8	-5.71	1.33	1.37
1	N	60	A	C2-N3	-5.71	1.28	1.33
1	N	63	C	C2-N3	5.71	1.40	1.35
1	N	402	G	C2'-C1'	-5.71	1.47	1.53
1	N	688	G	N9-C4	-5.71	1.33	1.38
1	N	734	G	N3-C4	5.71	1.39	1.35
1	N	884	U	C2'-C1'	-5.71	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	3	A	C2'-C1'	-5.71	1.47	1.53
1	N	232	G	C8-N7	-5.71	1.27	1.30
1	N	348	G	N3-C4	-5.71	1.31	1.35
1	N	933	G	C6-O6	-5.71	1.19	1.24
1	N	181	A	C6-N6	5.70	1.38	1.33
1	N	366	A	C3'-O3'	-5.70	1.34	1.42
1	N	937	A	C5'-C4'	5.70	1.58	1.51
1	N	1316	G	C4'-C3'	5.70	1.59	1.53
1	N	57	G	C2-N2	5.70	1.40	1.34
1	N	958	A	N9-C4	-5.70	1.34	1.37
1	N	1446	A	N9-C8	5.70	1.42	1.37
1	N	1460	C	C3'-C2'	5.70	1.59	1.52
1	N	784	A	N1-C2	-5.70	1.29	1.34
1	N	788	U	C4-C5	5.70	1.48	1.43
1	N	1089	G	C2-N3	5.70	1.37	1.32
1	N	1460	C	C5-C6	-5.70	1.29	1.34
1	N	462	G	N7-C5	-5.70	1.35	1.39
1	N	237	G	C5'-C4'	5.69	1.58	1.51
1	N	483	C	C4-N4	5.69	1.39	1.33
1	N	1186	G	C6-N1	5.69	1.43	1.39
1	N	1533	C	N3-C4	5.69	1.38	1.33
1	N	191	G	N9-C4	-5.69	1.33	1.38
1	N	1203	C	C1'-N1	5.69	1.57	1.48
1	N	1338	G	N3-C4	-5.69	1.31	1.35
1	N	8	A	C3'-O3'	5.69	1.50	1.42
1	N	200	G	C2-N2	5.69	1.40	1.34
1	N	1155	A	C8-N7	-5.69	1.27	1.31
1	N	1190	G	N9-C4	5.69	1.42	1.38
1	N	1210	C	C4'-C3'	5.69	1.59	1.53
1	N	122	G	C2-N2	-5.69	1.28	1.34
1	N	514	C	C5'-C4'	5.69	1.58	1.51
1	N	1094	G	P-O5'	-5.69	1.54	1.59
1	N	222	C	C4-N4	5.69	1.39	1.33
1	N	305	G	O4'-C1'	-5.69	1.34	1.41
1	N	479	U	C4-O4	-5.69	1.19	1.23
1	N	603	U	C3'-C2'	5.69	1.59	1.52
1	N	48	C	C2-O2	-5.68	1.19	1.24
1	N	74	A	C5-C6	-5.68	1.35	1.41
1	N	230	G	C2-N2	5.68	1.40	1.34
1	N	246	A	N9-C8	5.68	1.42	1.37
1	N	409	U	N1-C2	5.68	1.43	1.38
1	N	501	C	N1-C6	5.68	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	610	U	N1-C2	-5.68	1.33	1.38
1	N	674	G	C5'-C4'	-5.68	1.44	1.51
1	N	732	C	N1-C2	-5.68	1.34	1.40
1	N	1085	U	C2-N3	5.68	1.41	1.37
1	N	1509	C	C3'-O3'	5.68	1.50	1.42
1	N	202	G	N1-C2	5.68	1.42	1.37
1	N	233	C	N3-C4	5.68	1.38	1.33
1	N	257	G	C5'-C4'	5.68	1.58	1.51
1	N	833	G	N7-C5	-5.68	1.35	1.39
1	N	37	U	N1-C6	5.68	1.43	1.38
1	N	492	C	C1'-N1	5.68	1.57	1.48
1	N	688	G	C8-N7	-5.68	1.27	1.30
1	N	890	G	C8-N7	-5.68	1.27	1.30
1	N	147	G	C8-N7	-5.68	1.27	1.30
1	N	607	A	O4'-C1'	5.68	1.49	1.41
1	N	936	C	C5'-C4'	5.68	1.58	1.51
1	N	1087	G	N7-C5	5.68	1.42	1.39
1	N	1164	G	N7-C5	-5.68	1.35	1.39
1	N	1485	U	C4-C5	5.68	1.48	1.43
1	N	33	A	C5-C4	-5.67	1.34	1.38
1	N	1180	A	N9-C8	5.67	1.42	1.37
1	N	1483	A	C4'-C3'	5.67	1.59	1.53
1	N	590	U	N3-C4	5.67	1.43	1.38
1	N	1404	C	C2-O2	-5.67	1.19	1.24
1	N	1426	G	N9-C4	5.67	1.42	1.38
1	N	1000	A	C5-C4	5.67	1.42	1.38
1	N	22	G	N9-C8	-5.67	1.33	1.37
1	N	802	A	O3'-P	-5.67	1.54	1.61
1	N	844	G	N9-C4	-5.67	1.33	1.38
1	N	976	G	C2'-C1'	-5.67	1.47	1.53
1	N	1031	C	N3-C4	5.67	1.38	1.33
1	N	1146	A	N9-C8	5.67	1.42	1.37
1	N	439	U	O4'-C1'	5.67	1.49	1.41
1	N	709	U	C1'-N1	5.67	1.57	1.48
1	N	973	G	C4'-O4'	5.67	1.52	1.45
1	N	1212	U	P-O5'	-5.67	1.54	1.59
1	N	1274	A	P-O5'	-5.67	1.54	1.59
1	N	1291	U	C5-C6	-5.67	1.29	1.34
1	N	46	G	N1-C2	5.67	1.42	1.37
1	N	1454	G	C2'-C1'	-5.67	1.47	1.53
1	N	45	G	O4'-C1'	-5.66	1.34	1.41
1	N	190	A	C2-N3	-5.66	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	348	G	O4'-C1'	-5.66	1.34	1.41
1	N	353	A	O3'-P	-5.66	1.54	1.61
1	N	1383	C	N1-C6	5.66	1.40	1.37
1	N	204	G	C2-N3	5.66	1.37	1.32
1	N	231	U	C2-O2	5.66	1.27	1.22
1	N	1064	G	C3'-O3'	5.66	1.50	1.42
1	N	1308	U	C2-N3	5.66	1.41	1.37
1	N	30	U	C3'-C2'	5.66	1.59	1.52
1	N	1003	G	C4'-C3'	-5.66	1.46	1.52
1	N	1053	G	C2-N2	5.66	1.40	1.34
1	N	1160	G	C5-C4	-5.66	1.34	1.38
1	N	1303	C	C2'-C1'	-5.66	1.47	1.53
1	N	350	G	C5-C4	-5.66	1.34	1.38
1	N	268	U	C2-O2	5.66	1.27	1.22
1	N	272	C	C5'-C4'	-5.66	1.44	1.51
1	N	1080	A	C2-N3	5.66	1.38	1.33
1	N	1224	U	C2'-C1'	-5.66	1.47	1.53
1	N	1300	G	C3'-C2'	-5.66	1.46	1.52
1	N	1026	G	N9-C8	5.65	1.41	1.37
1	N	1083	U	N1-C6	5.65	1.43	1.38
1	N	79	G	C5-C4	5.65	1.42	1.38
1	N	759	A	C4'-C3'	5.65	1.59	1.53
1	N	791	G	C5-C4	5.65	1.42	1.38
1	N	1022	A	C3'-O3'	5.65	1.50	1.42
1	N	1057	G	C3'-O3'	5.65	1.50	1.42
1	N	271	C	O4'-C1'	5.65	1.49	1.41
1	N	338	A	O3'-P	-5.65	1.54	1.61
1	N	701	U	C5'-C4'	5.65	1.58	1.51
1	N	253	A	N7-C5	-5.65	1.35	1.39
1	N	409	U	C3'-C2'	-5.65	1.46	1.52
1	N	1078	U	N1-C6	5.65	1.43	1.38
1	N	1237	C	C4-N4	5.65	1.39	1.33
1	N	1367	C	C3'-C2'	-5.65	1.46	1.52
1	N	13	U	C2-N3	5.65	1.41	1.37
1	N	355	C	C4'-O4'	-5.65	1.38	1.45
1	N	673	A	C5'-C4'	5.64	1.58	1.51
1	N	677	U	C4'-C3'	5.64	1.59	1.53
1	N	897	C	C2'-C1'	5.64	1.59	1.53
1	N	66	A	C5-C4	5.64	1.42	1.38
1	N	856	C	C1'-N1	5.64	1.57	1.48
1	N	886	G	C8-N7	5.64	1.34	1.30
1	N	896	C	C3'-C2'	-5.64	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	64	G	C3'-C2'	-5.64	1.46	1.52
1	N	306	A	C4'-O4'	5.64	1.52	1.45
1	N	790	A	O3'-P	-5.64	1.54	1.61
1	N	1174	G	C2-N3	5.64	1.37	1.32
1	N	1198	G	C6-N1	5.64	1.43	1.39
1	N	1227	A	N3-C4	-5.64	1.31	1.34
1	N	1266	G	C2'-C1'	-5.64	1.47	1.53
1	N	212	G	N9-C4	-5.63	1.33	1.38
1	N	221	C	C5-C6	5.63	1.38	1.34
1	N	324	G	C8-N7	-5.63	1.27	1.30
1	N	798	U	O3'-P	-5.63	1.54	1.61
1	N	1098	C	N3-C4	5.63	1.37	1.33
1	N	127	G	C2-N3	5.63	1.37	1.32
1	N	362	G	O3'-P	-5.63	1.54	1.61
1	N	1293	C	C2-O2	-5.63	1.19	1.24
1	N	128	G	C4'-O4'	5.63	1.52	1.45
1	N	355	C	C2-N3	5.63	1.40	1.35
1	N	945	G	C5'-C4'	5.63	1.58	1.51
1	N	1113	C	C5'-C4'	5.63	1.58	1.51
1	N	1328	C	C4-C5	5.63	1.47	1.43
1	N	10	A	C8-N7	-5.63	1.27	1.31
1	N	1184	G	N1-C2	5.63	1.42	1.37
1	N	1207	G	P-O5'	-5.63	1.54	1.59
1	N	256	U	N3-C4	5.62	1.43	1.38
1	N	809	G	C8-N7	5.62	1.34	1.30
1	N	851	G	C2-N2	5.62	1.40	1.34
1	N	642	A	C3'-C2'	5.62	1.59	1.52
1	N	1200	C	C4'-C3'	5.62	1.59	1.53
1	N	1498	U	O3'-P	-5.62	1.54	1.61
1	N	88	U	P-O5'	-5.62	1.54	1.59
1	N	141	G	N1-C2	5.62	1.42	1.37
1	N	710	G	C5-C6	-5.62	1.36	1.42
1	N	779	C	P-O5'	-5.62	1.54	1.59
1	N	1239	A	N9-C8	5.62	1.42	1.37
1	N	1247	U	P-O5'	-5.62	1.54	1.59
1	N	1105	A	C4'-O4'	5.62	1.52	1.45
1	N	525	C	C3'-O3'	5.62	1.50	1.42
1	N	1371	G	C4'-C3'	5.62	1.59	1.53
1	N	428	G	C6-N1	-5.61	1.35	1.39
1	N	1302	C	N1-C2	5.61	1.45	1.40
1	N	26	A	C5-C6	5.61	1.46	1.41
1	N	289	G	P-O5'	-5.61	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	538	G	C6-N1	5.61	1.43	1.39
1	N	672	U	N3-C4	5.61	1.43	1.38
1	N	825	A	N9-C8	-5.61	1.33	1.37
1	N	1361	G	C5-C4	5.61	1.42	1.38
1	N	1369	C	C4-N4	5.61	1.39	1.33
1	N	1399	C	C4-N4	-5.61	1.28	1.33
1	N	814	A	C4'-C3'	5.61	1.59	1.53
1	N	1207	G	C2-N2	5.61	1.40	1.34
1	N	1215	G	N9-C4	-5.61	1.33	1.38
1	N	1243	C	C4'-C3'	5.61	1.59	1.53
1	N	1513	A	C1'-N9	-5.61	1.39	1.46
1	N	71	A	C4'-O4'	-5.61	1.38	1.45
1	N	130	A	C6-N1	-5.61	1.31	1.35
1	N	617	G	N3-C4	-5.61	1.31	1.35
1	N	889	A	C3'-C2'	5.61	1.59	1.52
1	N	1227	A	C5'-C4'	-5.61	1.44	1.51
1	N	9	G	C8-N7	-5.60	1.27	1.30
1	N	879	C	C4-C5	-5.60	1.38	1.43
1	N	1379	G	N9-C4	-5.60	1.33	1.38
1	N	1430	A	N7-C5	5.60	1.42	1.39
1	N	571	U	C2-N3	5.60	1.41	1.37
1	N	588	G	N9-C8	5.60	1.41	1.37
1	N	1118	U	C2'-C1'	-5.60	1.47	1.53
1	N	910	C	C5'-C4'	5.60	1.58	1.51
1	N	517	G	C2-N3	5.60	1.37	1.32
1	N	1217	C	C5-C6	5.60	1.38	1.34
1	N	1437	A	O4'-C1'	5.60	1.49	1.41
1	N	285	C	N1-C6	5.60	1.40	1.37
1	N	325	A	C6-N1	5.60	1.39	1.35
1	N	1511	G	C4'-O4'	5.60	1.52	1.45
1	N	215	C	O4'-C1'	5.60	1.49	1.41
1	N	103	U	C2-O2	5.59	1.27	1.22
1	N	917	G	C8-N7	-5.59	1.27	1.30
1	N	1413	A	N9-C8	-5.59	1.33	1.37
1	N	1323	G	C2-N3	5.59	1.37	1.32
1	N	105	G	O4'-C1'	5.59	1.49	1.41
1	N	622	A	C6-N1	5.59	1.39	1.35
1	N	769	G	N7-C5	-5.59	1.35	1.39
1	N	880	C	P-O5'	-5.59	1.54	1.59
1	N	1488	G	C8-N7	5.59	1.34	1.30
1	N	157	U	C4-O4	5.59	1.28	1.23
1	N	587	G	N3-C4	5.59	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	634	C	C2-O2	5.59	1.29	1.24
1	N	933	G	N1-C2	5.59	1.42	1.37
1	N	1023	U	C4'-C3'	5.59	1.59	1.53
1	N	796	C	C4'-O4'	-5.59	1.38	1.45
1	N	223	A	C6-N1	-5.59	1.31	1.35
1	N	1106	G	C2-N2	5.59	1.40	1.34
1	N	1160	G	C4'-O4'	5.59	1.52	1.45
1	N	884	U	C4-C5	-5.58	1.38	1.43
1	N	17	U	N3-C4	5.58	1.43	1.38
1	N	94	G	C2-N3	5.58	1.37	1.32
1	N	140	U	C2'-C1'	5.58	1.59	1.53
1	N	554	A	C6-N6	5.58	1.38	1.33
1	N	217	C	N3-C4	5.58	1.37	1.33
1	N	292	G	C2'-C1'	-5.58	1.47	1.53
1	N	318	G	C5-C4	5.58	1.42	1.38
1	N	675	A	C5-C6	-5.58	1.36	1.41
1	N	206	C	C1'-N1	5.58	1.57	1.48
1	N	859	G	N9-C4	-5.58	1.33	1.38
1	N	1521	C	C1'-N1	5.58	1.57	1.48
1	N	155	A	C6-N1	5.58	1.39	1.35
1	N	416	G	C8-N7	-5.58	1.27	1.30
1	N	483	C	O3'-P	-5.58	1.54	1.61
1	N	847	G	N7-C5	-5.58	1.35	1.39
1	N	1061	G	N3-C4	-5.58	1.31	1.35
1	N	1228	C	C2'-C1'	-5.58	1.47	1.53
1	N	1434	A	C4'-C3'	-5.58	1.47	1.52
1	N	171	A	N9-C8	5.58	1.42	1.37
1	N	365	U	C5'-C4'	5.58	1.58	1.51
1	N	770	C	C2-N3	5.58	1.40	1.35
1	N	847	G	C5-C4	5.58	1.42	1.38
1	N	969	A	C5-C4	5.58	1.42	1.38
1	N	1103	C	C3'-O3'	-5.58	1.34	1.42
1	N	1497	G	C2'-C1'	-5.58	1.47	1.53
1	N	288	A	N7-C5	5.57	1.42	1.39
1	N	102	G	C3'-C2'	-5.57	1.46	1.52
1	N	602	A	C2'-O2'	5.57	1.48	1.41
1	N	1124	G	C2'-C1'	-5.57	1.47	1.53
1	N	1053	G	C6-N1	5.57	1.43	1.39
1	N	1415	G	C5-C4	5.57	1.42	1.38
1	N	375	U	N3-C4	5.57	1.43	1.38
1	N	570	G	N1-C2	5.57	1.42	1.37
1	N	638	U	C2-N3	5.57	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	818	G	N1-C2	5.57	1.42	1.37
1	N	20	U	N1-C2	-5.57	1.33	1.38
1	N	96	U	C4'-C3'	-5.57	1.47	1.52
1	N	892	A	N3-C4	-5.57	1.31	1.34
1	N	1147	C	C2-N3	5.57	1.40	1.35
1	N	120	A	N3-C4	5.56	1.38	1.34
1	N	233	C	C3'-C2'	-5.56	1.46	1.52
1	N	42	G	C4'-C3'	5.56	1.59	1.53
1	N	174	A	C5'-C4'	5.56	1.58	1.51
1	N	209	U	C4-C5	-5.56	1.38	1.43
1	N	1302	C	C4'-C3'	5.56	1.59	1.53
1	N	1319	A	N9-C4	-5.56	1.34	1.37
1	N	1369	C	C5'-C4'	5.56	1.58	1.51
1	N	1516	G	N3-C4	5.56	1.39	1.35
1	N	413	G	C6-O6	-5.56	1.19	1.24
1	N	1124	G	O4'-C1'	-5.56	1.34	1.41
1	N	607	A	P-O5'	-5.56	1.54	1.59
1	N	771	G	C2-N3	5.56	1.37	1.32
1	N	1341	U	C4-O4	-5.56	1.19	1.23
1	N	37	U	O3'-P	-5.56	1.54	1.61
1	N	48	C	C5'-C4'	5.56	1.58	1.51
1	N	57	G	C2-N3	5.56	1.37	1.32
1	N	268	U	O3'-P	-5.56	1.54	1.61
1	N	349	A	N3-C4	-5.56	1.31	1.34
1	N	750	C	C5'-C4'	5.56	1.58	1.51
1	N	822	U	P-O5'	-5.56	1.54	1.59
1	N	1325	C	N3-C4	5.56	1.37	1.33
1	N	211	G	C4'-C3'	-5.55	1.47	1.52
1	N	332	G	O4'-C1'	5.55	1.48	1.41
1	N	353	A	N9-C4	-5.55	1.34	1.37
1	N	697	U	P-O5'	-5.55	1.54	1.59
1	N	791	G	N7-C5	5.55	1.42	1.39
1	N	1186	G	N9-C8	-5.55	1.33	1.37
1	N	1451	U	N1-C2	5.55	1.43	1.38
1	N	1462	C	O3'-P	-5.55	1.54	1.61
1	N	991	U	C2-O2	5.55	1.27	1.22
1	N	1145	A	N3-C4	-5.55	1.31	1.34
1	N	301	G	C3'-C2'	5.55	1.59	1.52
1	N	618	C	C4-C5	5.55	1.47	1.43
1	N	13	U	C1'-N1	5.55	1.57	1.48
1	N	142	G	N1-C2	5.55	1.42	1.37
1	N	1140	C	C2-N3	5.55	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	532	A	C5-C6	5.55	1.46	1.41
1	N	561	U	C1'-N1	5.55	1.57	1.48
1	N	1394	A	N7-C5	-5.55	1.35	1.39
1	N	154	U	C2-N3	5.55	1.41	1.37
1	N	736	C	C4-N4	5.55	1.39	1.33
1	N	957	U	N3-C4	5.55	1.43	1.38
1	N	1196	A	C2'-O2'	-5.55	1.34	1.41
1	N	1218	C	P-O5'	-5.54	1.54	1.59
1	N	1370	G	O3'-P	-5.54	1.54	1.61
1	N	11	G	N3-C4	5.54	1.39	1.35
1	N	314	C	C4-C5	5.54	1.47	1.43
1	N	541	G	P-O5'	-5.54	1.54	1.59
1	N	949	A	N3-C4	-5.54	1.31	1.34
1	N	1043	G	N3-C4	5.54	1.39	1.35
1	N	1327	C	N1-C2	-5.54	1.34	1.40
1	N	1501	C	C5-C6	5.54	1.38	1.34
1	N	500	G	N7-C5	-5.54	1.35	1.39
1	N	702	A	C6-N1	5.54	1.39	1.35
1	N	1305	G	C3'-C2'	-5.54	1.46	1.52
1	N	412	A	C6-N6	5.54	1.38	1.33
1	N	461	A	C5-C4	5.54	1.42	1.38
1	N	499	A	C5'-C4'	5.54	1.57	1.51
1	N	575	G	C2-N2	-5.54	1.29	1.34
1	N	219	U	N1-C2	-5.54	1.33	1.38
1	N	1529	G	O3'-P	-5.54	1.54	1.61
1	N	277	C	C2'-C1'	-5.54	1.47	1.53
1	N	427	U	O3'-P	-5.54	1.54	1.61
1	N	691	G	C2'-C1'	-5.53	1.47	1.53
1	N	852	G	P-O5'	-5.53	1.54	1.59
1	N	925	G	C5-C4	5.53	1.42	1.38
1	N	1120	C	P-O5'	-5.53	1.54	1.59
1	N	1518	A	C5-C4	-5.53	1.34	1.38
1	N	760	G	C2-N3	5.53	1.37	1.32
1	N	778	G	C6-N1	5.53	1.43	1.39
1	N	1087	G	C5-C6	-5.53	1.36	1.42
1	N	540	G	C4'-O4'	-5.53	1.38	1.45
1	N	651	C	C4-N4	5.53	1.39	1.33
1	N	834	U	O4'-C1'	5.53	1.48	1.41
1	N	46	G	C6-O6	-5.53	1.19	1.24
1	N	1039	G	C4'-O4'	-5.53	1.38	1.45
1	N	1053	G	N9-C8	-5.53	1.33	1.37
1	N	259	G	C2'-C1'	-5.53	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	395	C	C4-N4	5.53	1.39	1.33
1	N	925	G	N1-C2	5.53	1.42	1.37
1	N	1257	A	C5-C4	5.53	1.42	1.38
1	N	1437	A	C5-C4	-5.53	1.34	1.38
1	N	1463	U	C2-N3	5.53	1.41	1.37
1	N	411	A	C6-N6	5.52	1.38	1.33
1	N	1087	G	C2-N2	5.52	1.40	1.34
1	N	272	C	O3'-P	5.52	1.67	1.61
1	N	642	A	O4'-C1'	5.52	1.48	1.41
1	N	989	U	O3'-P	-5.52	1.54	1.61
1	N	1032	G	N9-C8	5.52	1.41	1.37
1	N	1104	G	N9-C8	-5.52	1.33	1.37
1	N	1106	G	N9-C4	5.52	1.42	1.38
1	N	1347	G	C5-C6	-5.52	1.36	1.42
1	N	1025	U	C2-N3	5.52	1.41	1.37
1	N	1275	A	C8-N7	-5.52	1.27	1.31
1	N	1392	G	C5'-C4'	5.52	1.57	1.51
1	N	573	A	C8-N7	5.52	1.35	1.31
1	N	648	A	C2'-C1'	-5.52	1.47	1.53
1	N	671	G	N3-C4	-5.52	1.31	1.35
1	N	867	G	C4'-O4'	5.52	1.52	1.45
1	N	1064	G	C4'-C3'	5.52	1.59	1.53
1	N	1262	C	C2-O2	5.52	1.29	1.24
1	N	1413	A	C4'-O4'	5.52	1.52	1.45
1	N	120	A	C3'-C2'	5.52	1.59	1.52
1	N	228	A	P-O5'	-5.51	1.54	1.59
1	N	269	C	C2'-C1'	-5.51	1.47	1.53
1	N	682	G	O3'-P	-5.51	1.54	1.61
1	N	719	C	C4'-O4'	5.51	1.52	1.45
1	N	791	G	C4'-C3'	5.51	1.59	1.53
1	N	1268	G	N3-C4	-5.51	1.31	1.35
1	N	1385	G	N9-C4	5.51	1.42	1.38
1	N	128	G	C1'-N9	5.51	1.57	1.48
1	N	952	U	C4-O4	-5.51	1.19	1.23
1	N	1526	G	C4'-C3'	5.51	1.59	1.53
1	N	419	C	C1'-N1	5.51	1.57	1.48
1	N	452	A	N1-C2	-5.51	1.29	1.34
1	N	637	C	O4'-C1'	5.51	1.48	1.41
1	N	1161	C	C4'-O4'	5.51	1.52	1.45
1	N	1377	A	C5-C6	5.51	1.46	1.41
1	N	271	C	C2-N3	5.51	1.40	1.35
1	N	321	A	C2'-C1'	-5.51	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1474	U	C4-O4	5.51	1.28	1.23
1	N	387	U	N3-C4	5.51	1.43	1.38
1	N	973	G	N1-C2	5.51	1.42	1.37
1	N	1035	A	C6-N6	5.51	1.38	1.33
1	N	1151	A	N1-C2	5.51	1.39	1.34
1	N	178	C	C4'-C3'	5.51	1.59	1.53
1	N	184	G	C8-N7	-5.51	1.27	1.30
1	N	445	G	C6-N1	5.51	1.43	1.39
1	N	543	U	N3-C4	5.51	1.43	1.38
1	N	1000	A	C6-N6	5.51	1.38	1.33
1	N	1444	U	N3-C4	5.51	1.43	1.38
1	N	1473	G	C5-C6	-5.51	1.36	1.42
1	N	1496	C	O5'-C5'	-5.51	1.34	1.42
1	N	142	G	P-O5'	-5.50	1.54	1.59
1	N	643	C	N1-C6	5.50	1.40	1.37
1	N	28	A	N7-C5	-5.50	1.35	1.39
1	N	281	G	O3'-P	-5.50	1.54	1.61
1	N	363	A	C4'-O4'	5.50	1.52	1.45
1	N	700	G	N1-C2	5.50	1.42	1.37
1	N	718	A	C6-N1	-5.50	1.31	1.35
1	N	975	A	C4'-C3'	5.50	1.59	1.53
1	N	663	A	N9-C8	-5.50	1.33	1.37
1	N	1396	A	C2'-C1'	-5.50	1.47	1.53
1	N	1415	G	C2'-C1'	-5.50	1.47	1.53
1	N	838	G	P-O5'	-5.50	1.54	1.59
1	N	1160	G	O3'-P	-5.50	1.54	1.61
1	N	1172	C	C5'-C4'	5.50	1.57	1.51
1	N	1329	A	C5'-C4'	5.50	1.57	1.51
1	N	283	U	C5'-C4'	5.50	1.57	1.51
1	N	718	A	P-O5'	-5.50	1.54	1.59
1	N	1088	G	N3-C4	-5.50	1.31	1.35
1	N	1232	U	N1-C2	5.50	1.43	1.38
1	N	906	A	C5-C4	5.50	1.42	1.38
1	N	987	G	C1'-N9	5.50	1.56	1.48
1	N	1302	C	N3-C4	5.50	1.37	1.33
1	N	1424	U	C3'-C2'	5.50	1.58	1.52
1	N	1452	C	N3-C4	5.50	1.37	1.33
1	N	769	G	N1-C2	5.49	1.42	1.37
1	N	75	G	C2-N3	5.49	1.37	1.32
1	N	475	C	C5'-C4'	5.49	1.57	1.51
1	N	191	G	C8-N7	-5.49	1.27	1.30
1	N	656	G	C4'-O4'	5.49	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	266	G	C4'-O4'	-5.49	1.38	1.45
1	N	493	A	N9-C4	-5.49	1.34	1.37
1	N	550	G	C5'-C4'	-5.49	1.44	1.51
1	N	977	A	C2-N3	5.49	1.38	1.33
1	N	1004	A	N3-C4	5.49	1.38	1.34
1	N	278	G	O3'-P	-5.49	1.54	1.61
1	N	1372	U	N1-C2	5.49	1.43	1.38
1	N	481	G	C3'-O3'	5.49	1.49	1.42
1	N	979	C	P-O5'	-5.49	1.54	1.59
1	N	1071	C	C2'-C1'	-5.49	1.47	1.53
1	N	1227	A	O4'-C1'	5.49	1.48	1.41
1	N	1419	G	C2-N2	5.49	1.40	1.34
1	N	462	G	N9-C4	-5.48	1.33	1.38
1	N	766	A	C8-N7	-5.48	1.27	1.31
1	N	1377	A	C4'-O4'	-5.48	1.38	1.45
1	N	1438	G	C6-O6	5.48	1.29	1.24
1	N	558	G	N7-C5	-5.48	1.35	1.39
1	N	675	A	N7-C5	-5.48	1.35	1.39
1	N	739	C	O4'-C1'	5.48	1.48	1.41
1	N	1125	U	C4-C5	5.48	1.48	1.43
1	N	1363	A	C3'-O3'	5.48	1.49	1.42
1	N	311	C	C2-N3	5.48	1.40	1.35
1	N	393	A	C4'-C3'	-5.48	1.47	1.52
1	N	722	G	N1-C2	5.48	1.42	1.37
1	N	364	A	C3'-C2'	5.48	1.58	1.52
1	N	367	U	C4'-C3'	-5.48	1.47	1.52
1	N	461	A	N3-C4	5.48	1.38	1.34
1	N	638	U	C5'-C4'	5.48	1.57	1.51
1	N	973	G	O3'-P	-5.48	1.54	1.61
1	N	134	G	C6-N1	5.48	1.43	1.39
1	N	442	G	C5'-C4'	5.48	1.57	1.51
1	N	490	C	C4'-C3'	5.48	1.59	1.53
1	N	540	G	C2-N3	5.48	1.37	1.32
1	N	1136	C	C4'-O4'	-5.48	1.38	1.45
1	N	715	A	C6-N6	5.47	1.38	1.33
1	N	1375	A	N1-C2	-5.47	1.29	1.34
1	N	804	U	C4-C5	5.47	1.48	1.43
1	N	1225	A	C2'-O2'	-5.47	1.34	1.41
1	N	1267	C	N3-C4	5.47	1.37	1.33
1	N	642	A	C6-N6	-5.47	1.29	1.33
1	N	152	A	C5'-C4'	-5.47	1.44	1.51
1	N	280	C	O4'-C1'	5.47	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1311	A	N3-C4	-5.47	1.31	1.34
1	N	702	A	N1-C2	-5.47	1.29	1.34
1	N	493	A	N9-C8	-5.47	1.33	1.37
1	N	695	A	N7-C5	5.47	1.42	1.39
1	N	774	G	C5-C4	5.47	1.42	1.38
1	N	1124	G	C5'-C4'	5.47	1.57	1.51
1	N	1246	A	C2'-C1'	-5.47	1.47	1.53
1	N	45	G	O3'-P	-5.46	1.54	1.61
1	N	699	C	N1-C6	-5.46	1.33	1.37
1	N	1165	U	C3'-C2'	5.46	1.58	1.52
1	N	1342	C	C4'-C3'	5.46	1.59	1.53
1	N	176	C	C2-O2	5.46	1.29	1.24
1	N	579	A	P-O5'	5.46	1.65	1.59
1	N	859	G	P-O5'	-5.46	1.54	1.59
1	N	873	A	N9-C4	-5.46	1.34	1.37
1	N	1102	A	N9-C4	-5.46	1.34	1.37
1	N	126	G	C2-N3	5.46	1.37	1.32
1	N	853	C	N1-C6	-5.46	1.33	1.37
1	N	1133	G	N9-C8	5.46	1.41	1.37
1	N	1270	G	C3'-O3'	5.46	1.49	1.42
1	N	1529	G	C6-O6	5.46	1.29	1.24
1	N	1207	G	C8-N7	5.46	1.34	1.30
1	N	1307	U	C2-N3	5.46	1.41	1.37
1	N	937	A	N9-C8	5.46	1.42	1.37
1	N	1016	A	C2'-O2'	5.46	1.48	1.41
1	N	1245	C	C5-C6	-5.46	1.29	1.34
1	N	1498	U	C2-N3	5.46	1.41	1.37
1	N	116	A	C8-N7	-5.45	1.27	1.31
1	N	122	G	C6-N1	5.45	1.43	1.39
1	N	205	A	N3-C4	-5.45	1.31	1.34
1	N	250	A	N7-C5	-5.45	1.35	1.39
1	N	397	A	N1-C2	-5.45	1.29	1.34
1	N	571	U	C4-O4	-5.45	1.19	1.23
1	N	1255	G	N1-C2	5.45	1.42	1.37
1	N	1364	U	P-O5'	-5.45	1.54	1.59
1	N	90	C	C2-N3	5.45	1.40	1.35
1	N	1262	C	P-O5'	-5.45	1.54	1.59
1	N	408	A	C8-N7	-5.45	1.27	1.31
1	N	74	A	N7-C5	-5.45	1.35	1.39
1	N	74	A	N9-C8	-5.45	1.33	1.37
1	N	254	G	C5-C4	5.45	1.42	1.38
1	N	275	G	C4'-C3'	5.45	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	436	C	C2'-C1'	-5.45	1.47	1.53
1	N	555	U	O3'-P	-5.45	1.54	1.61
1	N	813	U	C3'-C2'	-5.45	1.46	1.52
1	N	1067	A	C5'-C4'	5.45	1.57	1.51
1	N	1077	G	N1-C2	5.45	1.42	1.37
1	N	731	G	C6-N1	5.45	1.43	1.39
1	N	122	G	N3-C4	5.45	1.39	1.35
1	N	148	G	C2-N3	5.45	1.37	1.32
1	N	152	A	C5-C4	-5.45	1.34	1.38
1	N	218	U	O3'-P	-5.45	1.54	1.61
1	N	783	C	C5'-C4'	5.45	1.57	1.51
1	N	982	U	N1-C6	5.45	1.42	1.38
1	N	1449	C	C5'-C4'	5.45	1.57	1.51
1	N	1078	U	C2'-C1'	-5.44	1.47	1.53
1	N	1348	U	C2'-C1'	-5.44	1.47	1.53
1	N	1350	A	C6-N1	5.44	1.39	1.35
1	N	1086	U	C2-N3	5.44	1.41	1.37
1	N	1530	G	C3'-C2'	5.44	1.58	1.52
1	N	132	C	C3'-O3'	5.44	1.49	1.42
1	N	1034	G	N1-C2	5.44	1.42	1.37
1	N	1272	G	C5'-C4'	5.44	1.57	1.51
1	N	1342	C	O5'-C5'	-5.44	1.34	1.42
1	N	81	A	C6-N6	5.43	1.38	1.33
1	N	178	C	C2-N3	5.43	1.40	1.35
1	N	207	C	C4'-O4'	-5.43	1.38	1.45
1	N	435	A	N9-C8	-5.43	1.33	1.37
1	N	689	C	N1-C6	5.43	1.40	1.37
1	N	1504	G	C2-N3	5.43	1.37	1.32
1	N	832	G	N9-C4	-5.43	1.33	1.38
1	N	1163	A	C2-N3	5.43	1.38	1.33
1	N	1167	A	C4'-C3'	5.43	1.59	1.53
1	N	1191	A	C8-N7	5.43	1.35	1.31
1	N	206	C	C4'-O4'	5.43	1.52	1.45
1	N	61	G	N7-C5	-5.43	1.35	1.39
1	N	1104	G	N7-C5	-5.43	1.35	1.39
1	N	1190	G	N7-C5	-5.43	1.35	1.39
1	N	1036	A	C2'-O2'	5.43	1.48	1.41
1	N	21	G	C6-N1	5.43	1.43	1.39
1	N	370	C	C4'-C3'	-5.43	1.47	1.52
1	N	639	G	C5'-C4'	5.43	1.57	1.51
1	N	847	G	C4'-O4'	-5.43	1.38	1.45
1	N	50	A	C1'-N9	5.42	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1396	A	C6-N1	5.42	1.39	1.35
1	N	33	A	C5'-C4'	5.42	1.57	1.51
1	N	102	G	C2-N2	-5.42	1.29	1.34
1	N	711	G	C5'-C4'	5.42	1.57	1.51
1	N	782	A	C4'-C3'	5.42	1.59	1.53
1	N	814	A	N9-C4	5.42	1.41	1.37
1	N	1197	A	C1'-N9	5.42	1.56	1.48
1	N	1426	G	P-O5'	-5.42	1.54	1.59
1	N	1245	C	O3'-P	5.42	1.67	1.61
1	N	80	A	C6-N6	5.42	1.38	1.33
1	N	266	G	N9-C8	-5.42	1.34	1.37
1	N	537	G	N9-C8	5.42	1.41	1.37
1	N	636	U	C3'-C2'	-5.42	1.46	1.52
1	N	1016	A	C8-N7	5.42	1.35	1.31
1	N	1068	G	P-O5'	-5.42	1.54	1.59
1	N	1122	U	C1'-N1	5.42	1.56	1.48
1	N	1404	C	C5-C6	-5.42	1.30	1.34
1	N	1453	G	N9-C4	5.42	1.42	1.38
1	N	244	U	C4-C5	-5.42	1.38	1.43
1	N	763	G	C5-C4	5.42	1.42	1.38
1	N	1101	A	C6-N1	5.42	1.39	1.35
1	N	417	G	O4'-C1'	5.42	1.48	1.41
1	N	1355	G	C2-N2	5.42	1.40	1.34
1	N	1510	C	O3'-P	-5.42	1.54	1.61
1	N	865	A	C5'-C4'	5.41	1.57	1.51
1	N	985	C	N3-C4	5.41	1.37	1.33
1	N	1084	G	C2-N3	5.41	1.37	1.32
1	N	1105	A	C6-N1	5.41	1.39	1.35
1	N	196	A	C5-C6	-5.41	1.36	1.41
1	N	1122	U	C4'-O4'	-5.41	1.38	1.45
1	N	1204	A	C2'-C1'	-5.41	1.47	1.53
1	N	40	C	C4-N4	5.41	1.38	1.33
1	N	86	G	C6-N1	5.41	1.43	1.39
1	N	354	G	P-O5'	-5.41	1.54	1.59
1	N	1314	C	C1'-N1	5.41	1.56	1.48
1	N	27	G	C2-N2	5.41	1.40	1.34
1	N	1401	G	C8-N7	-5.41	1.27	1.30
1	N	486	U	C5-C6	5.41	1.39	1.34
1	N	601	G	N9-C4	-5.41	1.33	1.38
1	N	1016	A	C5'-C4'	5.41	1.57	1.51
1	N	1057	G	C5'-C4'	5.41	1.57	1.51
1	N	1298	U	N3-C4	5.41	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1343	G	C5'-C4'	5.41	1.57	1.51
1	N	1349	A	N9-C4	-5.41	1.34	1.37
1	N	1533	C	C2-N3	-5.41	1.31	1.35
1	N	260	G	N7-C5	5.40	1.42	1.39
1	N	90	C	C4'-O4'	-5.40	1.38	1.45
1	N	956	U	C3'-O3'	5.40	1.49	1.42
1	N	1090	U	C5'-C4'	5.40	1.57	1.51
1	N	1401	G	N1-C2	5.40	1.42	1.37
1	N	746	A	C8-N7	-5.40	1.27	1.31
1	N	1350	A	C2'-O2'	-5.40	1.34	1.41
1	N	437	U	O4'-C1'	-5.40	1.34	1.41
1	N	598	U	C2'-C1'	-5.40	1.47	1.53
1	N	601	G	C5-C4	5.40	1.42	1.38
1	N	78	A	N9-C8	-5.40	1.33	1.37
1	N	160	A	O4'-C1'	5.40	1.48	1.41
1	N	1152	A	C6-N6	5.40	1.38	1.33
1	N	1378	C	N1-C2	5.40	1.45	1.40
1	N	1241	G	N3-C4	5.40	1.39	1.35
1	N	1331	G	C4'-O4'	5.40	1.52	1.45
1	N	70	U	N3-C4	5.39	1.43	1.38
1	N	322	C	C1'-N1	5.39	1.56	1.48
1	N	360	G	C6-O6	5.39	1.29	1.24
1	N	475	C	C4'-O4'	-5.39	1.38	1.45
1	N	635	A	C2'-C1'	-5.39	1.47	1.53
1	N	1358	U	O3'-P	-5.39	1.54	1.61
1	N	177	G	C2-N3	5.39	1.37	1.32
1	N	474	G	C2-N3	5.39	1.37	1.32
1	N	1179	A	N9-C4	5.39	1.41	1.37
1	N	1288	A	O3'-P	5.39	1.67	1.61
1	N	1511	G	C5-C4	-5.39	1.34	1.38
1	N	12	U	C5'-C4'	5.39	1.57	1.51
1	N	810	C	C4-C5	-5.39	1.38	1.43
1	N	1095	U	N3-C4	5.39	1.43	1.38
1	N	907	A	N9-C4	-5.39	1.34	1.37
1	N	1327	C	C3'-O3'	5.39	1.49	1.42
1	N	981	U	P-O5'	5.39	1.65	1.59
1	N	1005	A	N9-C8	-5.39	1.33	1.37
1	N	313	A	N3-C4	-5.39	1.31	1.34
1	N	447	G	O4'-C1'	5.39	1.48	1.41
1	N	1012	A	C6-N1	5.39	1.39	1.35
1	N	1191	A	P-O5'	-5.39	1.54	1.59
1	N	650	G	C5'-C4'	5.38	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	682	G	C5-C4	5.38	1.42	1.38
1	N	778	G	C5-C6	-5.38	1.36	1.42
1	N	941	G	C5'-C4'	5.38	1.57	1.51
1	N	982	U	C2-N3	5.38	1.41	1.37
1	N	1433	A	N9-C4	5.38	1.41	1.37
1	N	548	G	O4'-C1'	-5.38	1.34	1.41
1	N	693	G	C5'-C4'	5.38	1.57	1.51
1	N	915	A	N7-C5	-5.38	1.36	1.39
1	N	1373	G	N1-C2	5.38	1.42	1.37
1	N	1467	C	C5-C6	-5.38	1.30	1.34
1	N	75	G	C5-C4	5.38	1.42	1.38
1	N	134	G	C5-C4	5.38	1.42	1.38
1	N	479	U	O4'-C1'	5.38	1.48	1.41
1	N	984	C	C4-C5	5.38	1.47	1.43
1	N	1168	U	C2-N3	5.38	1.41	1.37
1	N	1483	A	N9-C8	-5.38	1.33	1.37
1	N	781	A	C2'-C1'	-5.38	1.47	1.53
1	N	1092	A	N9-C8	5.38	1.42	1.37
1	N	1322	C	C1'-N1	5.38	1.56	1.48
1	N	1397	C	C5-C6	5.38	1.38	1.34
1	N	1429	A	N1-C2	-5.38	1.29	1.34
1	N	1293	C	N3-C4	5.38	1.37	1.33
1	N	1530	G	N9-C8	-5.38	1.34	1.37
1	N	505	G	N9-C8	-5.37	1.34	1.37
1	N	718	A	C5'-C4'	5.37	1.57	1.51
1	N	754	C	C2'-C1'	-5.37	1.47	1.53
1	N	459	A	N1-C2	-5.37	1.29	1.34
1	N	473	U	C1'-N1	5.37	1.56	1.48
1	N	435	A	N7-C5	-5.37	1.36	1.39
1	N	1428	A	O5'-C5'	-5.37	1.34	1.42
1	N	71	A	N9-C4	5.37	1.41	1.37
1	N	334	C	C5-C6	5.37	1.38	1.34
1	N	985	C	O3'-P	-5.37	1.54	1.61
1	N	992	U	O3'-P	-5.37	1.54	1.61
1	N	1267	C	C4'-C3'	-5.37	1.47	1.52
1	N	1293	C	N1-C2	-5.37	1.34	1.40
1	N	1444	U	O4'-C1'	5.37	1.48	1.41
1	N	855	U	N3-C4	5.37	1.43	1.38
1	N	1134	G	C5'-C4'	-5.37	1.45	1.51
1	N	40	C	C4-C5	5.37	1.47	1.43
1	N	1399	C	C4'-C3'	5.37	1.59	1.53
1	N	1413	A	P-O5'	5.37	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	261	U	C5'-C4'	5.36	1.57	1.51
1	N	560	A	N1-C2	5.36	1.39	1.34
1	N	624	C	P-O5'	-5.36	1.54	1.59
1	N	733	G	C5-C6	-5.36	1.36	1.42
1	N	1424	U	N1-C2	-5.36	1.33	1.38
1	N	61	G	C4'-O4'	5.36	1.52	1.45
1	N	731	G	N1-C2	5.36	1.42	1.37
1	N	787	A	P-O5'	-5.36	1.54	1.59
1	N	1492	A	C6-N1	5.36	1.39	1.35
1	N	210	C	C4-C5	5.36	1.47	1.43
1	N	549	C	C4'-O4'	5.36	1.52	1.45
1	N	744	C	N3-C4	5.36	1.37	1.33
1	N	767	A	N3-C4	-5.36	1.31	1.34
1	N	1172	C	C4-C5	-5.36	1.38	1.43
1	N	726	C	C4'-C3'	5.36	1.59	1.53
1	N	1205	U	C1'-N1	5.36	1.56	1.48
1	N	329	A	C3'-C2'	5.36	1.58	1.52
1	N	1211	U	C2-N3	5.36	1.41	1.37
1	N	232	G	O3'-P	-5.36	1.54	1.61
1	N	394	G	C6-O6	-5.36	1.19	1.24
1	N	515	G	N3-C4	5.36	1.39	1.35
1	N	582	C	C4-C5	-5.36	1.38	1.43
1	N	602	A	C2-N3	5.36	1.38	1.33
1	N	673	A	C6-N6	5.36	1.38	1.33
1	N	871	U	N3-C4	5.36	1.43	1.38
1	N	994	A	N9-C4	5.36	1.41	1.37
1	N	1261	A	C5-C4	5.36	1.42	1.38
1	N	1337	G	C2-N3	5.36	1.37	1.32
1	N	1360	A	N9-C4	5.36	1.41	1.37
1	N	1483	A	C6-N6	5.36	1.38	1.33
1	N	1363	A	N9-C4	-5.35	1.34	1.37
1	N	307	C	N1-C6	5.35	1.40	1.37
1	N	450	G	C2-N2	5.35	1.40	1.34
1	N	727	G	C2'-C1'	-5.35	1.47	1.53
1	N	768	A	C2'-C1'	-5.35	1.47	1.53
1	N	1043	G	C2-N3	5.35	1.37	1.32
1	N	1148	U	C1'-N1	5.35	1.56	1.48
1	N	666	G	C8-N7	-5.35	1.27	1.30
1	N	691	G	C5-C4	5.35	1.42	1.38
1	N	1406	U	O4'-C1'	5.35	1.48	1.41
1	N	105	G	N7-C5	-5.35	1.36	1.39
1	N	168	G	P-O5'	-5.35	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	573	A	O3'-P	-5.35	1.54	1.61
1	N	1084	G	C5-C4	-5.35	1.34	1.38
1	N	1466	C	C4'-O4'	5.35	1.52	1.45
1	N	72	A	N3-C4	5.35	1.38	1.34
1	N	418	C	C2-N3	-5.35	1.31	1.35
1	N	1376	U	O3'-P	-5.35	1.54	1.61
1	N	1499	A	C6-N1	5.35	1.39	1.35
1	N	1133	G	N1-C2	5.35	1.42	1.37
1	N	1367	C	C5'-C4'	5.35	1.57	1.51
1	N	1460	C	C4-N4	5.35	1.38	1.33
1	N	269	C	C2-N3	-5.34	1.31	1.35
1	N	1046	A	C2'-C1'	-5.34	1.47	1.53
1	N	1280	A	C6-N1	5.34	1.39	1.35
1	N	1416	G	N3-C4	-5.34	1.31	1.35
1	N	178	C	C4-C5	-5.34	1.38	1.43
1	N	322	C	C3'-C2'	5.34	1.58	1.52
1	N	516	U	C2'-C1'	-5.34	1.47	1.53
1	N	733	G	C6-N1	5.34	1.43	1.39
1	N	943	U	C3'-C2'	-5.34	1.46	1.52
1	N	373	A	N3-C4	-5.34	1.31	1.34
1	N	383	A	N1-C2	-5.34	1.29	1.34
1	N	609	A	C5-C4	5.34	1.42	1.38
1	N	865	A	N9-C4	-5.34	1.34	1.37
1	N	929	G	C2-N3	-5.34	1.28	1.32
1	N	1057	G	C2-N3	5.34	1.37	1.32
1	N	21	G	C3'-O3'	5.34	1.49	1.42
1	N	267	C	O4'-C1'	-5.34	1.34	1.41
1	N	724	G	N9-C4	5.34	1.42	1.38
1	N	781	A	P-O5'	-5.34	1.54	1.59
1	N	1019	A	C5-C4	5.34	1.42	1.38
1	N	201	G	C1'-N9	5.33	1.56	1.48
1	N	698	G	C3'-C2'	5.33	1.58	1.52
1	N	1288	A	C4'-C3'	5.33	1.59	1.53
1	N	510	A	N1-C2	5.33	1.39	1.34
1	N	622	A	N7-C5	-5.33	1.36	1.39
1	N	1276	G	C5-C6	-5.33	1.37	1.42
1	N	1499	A	N1-C2	5.33	1.39	1.34
1	N	847	G	N1-C2	5.33	1.42	1.37
1	N	1183	U	C4'-C3'	5.33	1.59	1.53
1	N	502	A	C2'-C1'	-5.33	1.47	1.53
1	N	1187	G	C5-C4	5.33	1.42	1.38
1	N	164	G	N9-C8	5.33	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	332	G	C8-N7	-5.33	1.27	1.30
1	N	1530	G	P-O5'	5.33	1.65	1.59
1	N	103	U	C1'-N1	5.33	1.56	1.48
1	N	823	C	C4-C5	5.33	1.47	1.43
1	N	1036	A	N9-C4	-5.33	1.34	1.37
1	N	1179	A	C6-N6	5.33	1.38	1.33
1	N	23	C	O4'-C1'	5.33	1.48	1.41
1	N	34	C	O3'-P	-5.33	1.54	1.61
1	N	486	U	C2-N3	5.33	1.41	1.37
1	N	614	C	N3-C4	5.33	1.37	1.33
1	N	616	G	N7-C5	-5.33	1.36	1.39
1	N	1123	U	P-O5'	-5.33	1.54	1.59
1	N	1324	A	C5'-C4'	5.33	1.57	1.51
1	N	181	A	C8-N7	5.32	1.35	1.31
1	N	421	U	C4-C5	5.32	1.48	1.43
1	N	682	G	C5-C6	-5.32	1.37	1.42
1	N	151	A	C5'-C4'	5.32	1.57	1.51
1	N	1315	U	N3-C4	5.32	1.43	1.38
1	N	1430	A	N3-C4	5.32	1.38	1.34
1	N	637	C	N1-C2	-5.32	1.34	1.40
1	N	655	A	C6-N1	-5.32	1.31	1.35
1	N	698	G	N9-C8	5.32	1.41	1.37
1	N	858	G	C6-N1	5.32	1.43	1.39
1	N	1141	C	O3'-P	-5.32	1.54	1.61
1	N	1331	G	C3'-C2'	5.32	1.58	1.52
1	N	1390	U	C2-N3	5.32	1.41	1.37
1	N	719	C	C5'-C4'	5.32	1.57	1.51
1	N	734	G	C1'-N9	5.32	1.56	1.48
1	N	914	A	C6-N1	5.32	1.39	1.35
1	N	189	A	C2-N3	5.32	1.38	1.33
1	N	34	C	C5-C6	5.32	1.38	1.34
1	N	854	U	C2'-C1'	-5.32	1.47	1.53
1	N	1050	G	N9-C4	-5.32	1.33	1.38
1	N	1246	A	C3'-O3'	5.32	1.49	1.42
1	N	883	C	N3-C4	5.31	1.37	1.33
1	N	1156	G	C6-N1	5.31	1.43	1.39
1	N	383	A	C3'-C2'	-5.31	1.47	1.52
1	N	408	A	C6-N1	-5.31	1.31	1.35
1	N	965	U	C2-O2	5.31	1.27	1.22
1	N	22	G	C5'-C4'	5.31	1.57	1.51
1	N	351	G	N3-C4	-5.31	1.31	1.35
1	N	354	G	C4'-C3'	-5.31	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	375	U	O3'-P	-5.31	1.54	1.61
1	N	382	A	N3-C4	5.31	1.38	1.34
1	N	195	A	C6-N1	5.31	1.39	1.35
1	N	254	G	N9-C8	-5.31	1.34	1.37
1	N	354	G	C5'-C4'	-5.31	1.45	1.51
1	N	650	G	C3'-C2'	-5.31	1.47	1.52
1	N	1420	U	C4-O4	-5.31	1.19	1.23
1	N	64	G	N1-C2	5.31	1.42	1.37
1	N	383	A	C5'-C4'	5.31	1.57	1.51
1	N	972	C	P-O5'	-5.31	1.54	1.59
1	N	526	C	C5'-C4'	5.30	1.57	1.51
1	N	1005	A	C8-N7	-5.30	1.27	1.31
1	N	1050	G	N3-C4	5.30	1.39	1.35
1	N	1088	G	C2-N2	5.30	1.39	1.34
1	N	1215	G	C8-N7	-5.30	1.27	1.30
1	N	1201	A	C4'-C3'	5.30	1.58	1.53
1	N	1249	C	P-O5'	-5.30	1.54	1.59
1	N	1446	A	C4'-C3'	5.30	1.58	1.53
1	N	147	G	O4'-C1'	5.30	1.48	1.41
1	N	332	G	C2-N2	5.30	1.39	1.34
1	N	413	G	C5-C4	5.30	1.42	1.38
1	N	565	U	N3-C4	5.30	1.43	1.38
1	N	720	C	N1-C6	-5.30	1.33	1.37
1	N	1482	G	C2-N3	5.30	1.36	1.32
1	N	575	G	P-O5'	5.30	1.65	1.59
1	N	118	U	N3-C4	5.30	1.43	1.38
1	N	202	G	O4'-C1'	-5.30	1.34	1.41
1	N	413	G	O3'-P	-5.30	1.54	1.61
1	N	1238	A	C1'-N9	5.30	1.56	1.48
1	N	1382	C	C4'-O4'	-5.29	1.38	1.45
1	N	253	A	P-O5'	-5.29	1.54	1.59
1	N	353	A	C8-N7	5.29	1.35	1.31
1	N	369	G	C6-N1	5.29	1.43	1.39
1	N	431	A	N7-C5	-5.29	1.36	1.39
1	N	1013	G	P-O5'	-5.29	1.54	1.59
1	N	1382	C	C5'-C4'	5.29	1.57	1.51
1	N	1508	A	C6-N6	5.29	1.38	1.33
1	N	41	G	N7-C5	-5.29	1.36	1.39
1	N	49	U	O3'-P	-5.29	1.54	1.61
1	N	611	C	C2-N3	5.29	1.40	1.35
1	N	1054	C	C2-N3	5.29	1.40	1.35
1	N	1267	C	C1'-N1	5.29	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1290	G	C2'-C1'	-5.29	1.47	1.53
1	N	802	A	N1-C2	-5.29	1.29	1.34
1	N	956	U	P-O5'	-5.29	1.54	1.59
1	N	196	A	N9-C4	-5.29	1.34	1.37
1	N	318	G	N9-C8	-5.29	1.34	1.37
1	N	454	G	C2-N3	5.29	1.36	1.32
1	N	760	G	N7-C5	-5.29	1.36	1.39
1	N	1010	U	C2'-C1'	-5.29	1.47	1.53
1	N	698	G	C2-N3	5.29	1.36	1.32
1	N	610	U	C4-O4	-5.29	1.19	1.23
1	N	615	G	P-O5'	-5.29	1.54	1.59
1	N	816	A	C2-N3	5.29	1.38	1.33
1	N	887	G	P-O5'	-5.29	1.54	1.59
1	N	980	C	C2-O2	-5.29	1.19	1.24
1	N	1390	U	N1-C6	-5.29	1.33	1.38
1	N	278	G	C5'-C4'	5.28	1.57	1.51
1	N	594	U	N1-C6	-5.28	1.33	1.38
1	N	630	A	C6-N1	5.28	1.39	1.35
1	N	840	C	C5'-C4'	5.28	1.57	1.51
1	N	974	A	P-O5'	-5.28	1.54	1.59
1	N	1005	A	N9-C4	5.28	1.41	1.37
1	N	297	G	C6-N1	5.28	1.43	1.39
1	N	1171	A	C2'-C1'	-5.28	1.47	1.53
1	N	1280	A	C5'-C4'	5.28	1.57	1.51
1	N	882	C	N1-C2	-5.28	1.34	1.40
1	N	1167	A	P-O5'	-5.28	1.54	1.59
1	N	1465	A	C2'-C1'	-5.28	1.47	1.53
1	N	1182	G	C4'-O4'	-5.28	1.38	1.45
1	N	1200	C	C2'-C1'	-5.28	1.47	1.53
1	N	59	A	N7-C5	-5.28	1.36	1.39
1	N	459	A	C6-N1	5.28	1.39	1.35
1	N	596	A	C5'-C4'	5.28	1.57	1.51
1	N	665	A	N3-C4	5.28	1.38	1.34
1	N	1104	G	C5-C4	5.28	1.42	1.38
1	N	1105	A	C5-C6	-5.28	1.36	1.41
1	N	1329	A	C6-N6	5.28	1.38	1.33
1	N	1047	G	C2'-C1'	-5.27	1.47	1.53
1	N	1534	A	C8-N7	5.27	1.35	1.31
1	N	1291	U	C2-N3	5.27	1.41	1.37
1	N	2	A	N7-C5	5.27	1.42	1.39
1	N	431	A	C5'-C4'	5.27	1.57	1.51
1	N	648	A	N9-C8	5.27	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	830	G	C6-N1	5.27	1.43	1.39
1	N	335	C	P-O5'	5.27	1.65	1.59
1	N	996	A	C3'-C2'	5.27	1.58	1.52
1	N	1141	C	C2'-O2'	5.27	1.48	1.41
1	N	1506	U	C3'-O3'	5.27	1.49	1.42
1	N	387	U	C1'-N1	5.27	1.56	1.48
1	N	417	G	C2-N2	5.27	1.39	1.34
1	N	635	A	N9-C4	-5.27	1.34	1.37
1	N	756	C	C4'-C3'	-5.27	1.47	1.52
1	N	1309	G	N9-C4	-5.27	1.33	1.38
1	N	260	G	C4'-C3'	5.26	1.58	1.53
1	N	260	G	N9-C8	5.26	1.41	1.37
1	N	703	G	C6-N1	5.26	1.43	1.39
1	N	957	U	C2-N3	5.26	1.41	1.37
1	N	1366	C	N3-C4	5.26	1.37	1.33
1	N	207	C	P-O5'	-5.26	1.54	1.59
1	N	795	C	C2-N3	5.26	1.40	1.35
1	N	919	A	C4'-C3'	5.26	1.58	1.53
1	N	1072	G	C6-N1	5.26	1.43	1.39
1	N	576	C	C2-N3	5.26	1.40	1.35
1	N	861	G	C5-C6	-5.26	1.37	1.42
1	N	1350	A	C5'-C4'	5.26	1.57	1.51
1	N	1351	U	N1-C2	-5.26	1.33	1.38
1	N	93	U	C2-O2	5.26	1.27	1.22
1	N	104	G	C4'-C3'	5.26	1.58	1.53
1	N	256	U	P-O5'	-5.26	1.54	1.59
1	N	360	G	P-O5'	-5.26	1.54	1.59
1	N	428	G	C4'-C3'	5.26	1.58	1.53
1	N	509	A	N3-C4	5.26	1.38	1.34
1	N	530	G	N3-C4	-5.26	1.31	1.35
1	N	1008	U	C4'-C3'	5.26	1.58	1.53
1	N	1497	G	C5-C6	5.26	1.47	1.42
1	N	391	G	N7-C5	5.26	1.42	1.39
1	N	397	A	C2-N3	5.26	1.38	1.33
1	N	832	G	N1-C2	5.26	1.42	1.37
1	N	969	A	C3'-O3'	5.26	1.49	1.42
1	N	1218	C	O4'-C1'	5.26	1.48	1.41
1	N	57	G	C6-O6	-5.26	1.19	1.24
1	N	104	G	C3'-O3'	5.26	1.49	1.42
1	N	589	U	C4-O4	-5.26	1.19	1.23
1	N	729	A	C2-N3	5.26	1.38	1.33
1	N	1176	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	700	G	C3'-C2'	-5.25	1.47	1.52
1	N	1079	G	C6-N1	5.25	1.43	1.39
1	N	1158	C	N3-C4	5.25	1.37	1.33
1	N	1193	G	C2-N3	5.25	1.36	1.32
1	N	1317	C	C5'-C4'	5.25	1.57	1.51
1	N	225	C	P-O5'	-5.25	1.54	1.59
1	N	666	G	C6-N1	5.25	1.43	1.39
1	N	1318	A	C5'-C4'	5.25	1.57	1.51
1	N	42	G	N9-C4	-5.25	1.33	1.38
1	N	274	A	N9-C4	-5.25	1.34	1.37
1	N	322	C	C2-N3	5.25	1.40	1.35
1	N	871	U	C2-O2	5.25	1.27	1.22
1	N	1105	A	C2'-C1'	-5.25	1.47	1.53
1	N	1431	A	C6-N6	5.25	1.38	1.33
1	N	1434	A	C5'-C4'	5.25	1.57	1.51
1	N	509	A	N9-C8	-5.25	1.33	1.37
1	N	692	U	C5'-C4'	-5.25	1.45	1.51
1	N	346	G	P-O5'	-5.25	1.54	1.59
1	N	603	U	C2'-C1'	5.25	1.59	1.53
1	N	649	A	N9-C8	-5.25	1.33	1.37
1	N	935	A	C4'-C3'	5.25	1.58	1.53
1	N	983	A	C6-N1	5.25	1.39	1.35
1	N	1051	C	C5'-C4'	5.25	1.57	1.51
1	N	1147	C	C1'-N1	5.25	1.56	1.48
1	N	1189	U	P-O5'	-5.25	1.54	1.59
1	N	1418	A	N3-C4	-5.25	1.31	1.34
1	N	16	A	C8-N7	-5.25	1.27	1.31
1	N	524	G	C2-N2	5.25	1.39	1.34
1	N	1087	G	P-O5'	-5.25	1.54	1.59
1	N	1207	G	C6-N1	5.25	1.43	1.39
1	N	137	U	P-O5'	-5.24	1.54	1.59
1	N	169	C	C2-N3	5.24	1.40	1.35
1	N	385	C	C1'-N1	5.24	1.56	1.48
1	N	667	G	N3-C4	-5.24	1.31	1.35
1	N	756	C	C4-N4	5.24	1.38	1.33
1	N	1207	G	N9-C8	5.24	1.41	1.37
1	N	1231	G	N1-C2	5.24	1.42	1.37
1	N	1399	C	P-O5'	-5.24	1.54	1.59
1	N	1262	C	C4-C5	-5.24	1.38	1.43
1	N	1365	G	C2-N3	5.24	1.36	1.32
1	N	154	U	C4'-O4'	5.24	1.52	1.45
1	N	219	U	C5'-C4'	5.24	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	441	A	C6-N6	5.24	1.38	1.33
1	N	525	C	C1'-N1	5.24	1.56	1.48
1	N	705	G	C8-N7	5.24	1.34	1.30
1	N	1223	C	N1-C6	-5.24	1.34	1.37
1	N	1446	A	C6-N6	5.24	1.38	1.33
1	N	3	A	C4'-C3'	-5.24	1.47	1.52
1	N	241	G	N9-C4	-5.24	1.33	1.38
1	N	635	A	C8-N7	-5.24	1.27	1.31
1	N	1216	A	C2'-C1'	-5.24	1.47	1.53
1	N	1239	A	C4'-C3'	5.24	1.58	1.53
1	N	591	U	P-O5'	-5.24	1.54	1.59
1	N	660	C	C4'-O4'	5.24	1.52	1.45
1	N	1077	G	C5-C4	5.24	1.42	1.38
1	N	49	U	C5-C6	-5.24	1.29	1.34
1	N	455	G	N3-C4	-5.24	1.31	1.35
1	N	492	C	C2-N3	5.24	1.40	1.35
1	N	611	C	P-O5'	5.24	1.65	1.59
1	N	661	G	C6-N1	5.24	1.43	1.39
1	N	1006	G	N9-C4	-5.24	1.33	1.38
1	N	1007	U	C2-N3	5.24	1.41	1.37
1	N	99	C	C4-N4	5.23	1.38	1.33
1	N	351	G	C2-N2	5.23	1.39	1.34
1	N	699	C	C4-N4	5.23	1.38	1.33
1	N	819	A	O3'-P	-5.23	1.54	1.61
1	N	1006	G	C2-N2	5.23	1.39	1.34
1	N	1334	G	N9-C4	-5.23	1.33	1.38
1	N	8	A	N9-C8	-5.23	1.33	1.37
1	N	332	G	N1-C2	5.23	1.42	1.37
1	N	572	A	N3-C4	5.23	1.38	1.34
1	N	1039	G	C8-N7	5.23	1.34	1.30
1	N	1442	G	C2'-C1'	-5.23	1.47	1.53
1	N	1516	G	C8-N7	5.23	1.34	1.30
1	N	773	G	C5-C4	-5.23	1.34	1.38
1	N	205	A	O4'-C1'	5.23	1.48	1.41
1	N	314	C	N3-C4	5.23	1.37	1.33
1	N	947	G	C8-N7	-5.23	1.27	1.30
1	N	1258	G	C3'-C2'	-5.23	1.47	1.52
1	N	1424	U	C5'-C4'	5.23	1.57	1.51
1	N	364	A	C4'-C3'	5.23	1.58	1.53
1	N	594	U	C2-N3	5.23	1.41	1.37
1	N	300	A	C6-N6	5.22	1.38	1.33
1	N	938	A	C8-N7	-5.22	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1495	U	C3'-C2'	5.22	1.58	1.52
1	N	1530	G	C2-N2	5.22	1.39	1.34
1	N	167	A	N3-C4	-5.22	1.31	1.34
1	N	277	C	O4'-C1'	5.22	1.48	1.41
1	N	305	G	C2-N3	5.22	1.36	1.32
1	N	833	G	P-O5'	-5.22	1.54	1.59
1	N	844	G	N3-C4	5.22	1.39	1.35
1	N	1441	A	N9-C8	5.22	1.42	1.37
1	N	1112	C	C4-N4	5.22	1.38	1.33
1	N	1159	U	N1-C6	-5.22	1.33	1.38
1	N	874	G	C6-N1	5.22	1.43	1.39
1	N	998	C	C3'-O3'	5.22	1.49	1.42
1	N	415	A	N7-C5	-5.22	1.36	1.39
1	N	758	C	C4-N4	5.22	1.38	1.33
1	N	105	G	C5'-C4'	5.22	1.57	1.51
1	N	463	U	N3-C4	5.22	1.43	1.38
1	N	646	G	C4'-O4'	-5.22	1.38	1.45
1	N	724	G	C3'-C2'	-5.22	1.47	1.52
1	N	1034	G	C2-N3	5.22	1.36	1.32
1	N	1076	U	O4'-C1'	-5.22	1.34	1.41
1	N	82	G	C3'-C2'	5.21	1.58	1.52
1	N	839	C	O4'-C1'	5.21	1.48	1.41
1	N	910	C	N1-C2	-5.21	1.34	1.40
1	N	948	C	P-O5'	-5.21	1.54	1.59
1	N	1085	U	C5'-C4'	5.21	1.57	1.51
1	N	1447	A	C4'-O4'	5.21	1.52	1.45
1	N	1471	U	N3-C4	5.21	1.43	1.38
1	N	1371	G	P-O5'	-5.21	1.54	1.59
1	N	888	G	N1-C2	-5.21	1.33	1.37
1	N	1001	C	C3'-C2'	5.21	1.58	1.52
1	N	279	A	C3'-O3'	5.21	1.49	1.42
1	N	455	G	N1-C2	5.21	1.42	1.37
1	N	482	A	C6-N1	-5.21	1.31	1.35
1	N	679	C	C4'-O4'	5.21	1.52	1.45
1	N	44	A	N9-C8	-5.21	1.33	1.37
1	N	553	A	C6-N1	5.21	1.39	1.35
1	N	818	G	C3'-C2'	-5.21	1.47	1.52
1	N	1303	C	C3'-C2'	5.21	1.58	1.52
1	N	1346	A	N9-C8	-5.21	1.33	1.37
1	N	915	A	O5'-C5'	5.21	1.52	1.44
1	N	202	G	C5-C6	-5.20	1.37	1.42
1	N	394	G	N7-C5	-5.20	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	556	C	C3'-C2'	5.20	1.58	1.52
1	N	678	U	P-O5'	-5.20	1.54	1.59
1	N	430	A	C4'-C3'	5.20	1.58	1.53
1	N	445	G	C6-O6	5.20	1.28	1.24
1	N	474	G	N1-C2	5.20	1.42	1.37
1	N	901	A	N3-C4	-5.20	1.31	1.34
1	N	953	G	O3'-P	-5.20	1.54	1.61
1	N	1516	G	C5'-C4'	5.20	1.57	1.51
1	N	269	C	C2-O2	-5.20	1.19	1.24
1	N	377	G	C5-C4	5.20	1.42	1.38
1	N	573	A	C2'-C1'	-5.20	1.47	1.53
1	N	861	G	C2-N2	-5.20	1.29	1.34
1	N	917	G	C5'-C4'	5.20	1.57	1.51
1	N	1124	G	N1-C2	5.20	1.42	1.37
1	N	1222	G	C6-N1	-5.20	1.35	1.39
1	N	86	G	C3'-C2'	-5.20	1.47	1.52
1	N	597	G	N1-C2	5.20	1.42	1.37
1	N	137	U	C2'-C1'	-5.20	1.47	1.53
1	N	905	U	C5'-C4'	5.20	1.57	1.51
1	N	1278	G	P-O5'	-5.20	1.54	1.59
1	N	482	A	C4'-C3'	-5.19	1.47	1.52
1	N	3	A	N9-C8	-5.19	1.33	1.37
1	N	125	U	C4-O4	5.19	1.27	1.23
1	N	613	C	N3-C4	5.19	1.37	1.33
1	N	966	G	C6-O6	-5.19	1.19	1.24
1	N	317	U	O3'-P	-5.19	1.54	1.61
1	N	414	A	N9-C4	5.19	1.41	1.37
1	N	535	A	P-O5'	-5.19	1.54	1.59
1	N	664	G	C8-N7	-5.19	1.27	1.30
1	N	778	G	C4'-O4'	5.19	1.52	1.45
1	N	821	G	C6-N1	5.19	1.43	1.39
1	N	1060	U	C4'-C3'	5.19	1.58	1.53
1	N	1166	G	C6-N1	5.19	1.43	1.39
1	N	1462	C	C2'-C1'	-5.19	1.47	1.53
1	N	1528	U	C5'-C4'	5.19	1.57	1.51
1	N	740	U	C4-C5	5.19	1.48	1.43
1	N	209	U	C3'-C2'	5.19	1.58	1.52
1	N	1238	A	N9-C4	-5.19	1.34	1.37
1	N	1473	G	C2'-C1'	-5.19	1.47	1.53
1	N	95	C	P-O5'	5.18	1.65	1.59
1	N	282	A	C5'-C4'	5.18	1.57	1.51
1	N	611	C	C2-O2	5.18	1.29	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	882	C	C2'-C1'	-5.18	1.47	1.53
1	N	72	A	C8-N7	5.18	1.35	1.31
1	N	87	C	C4-C5	-5.18	1.38	1.43
1	N	136	C	C2-N3	-5.18	1.31	1.35
1	N	1375	A	C8-N7	-5.18	1.27	1.31
1	N	115	G	C6-N1	5.18	1.43	1.39
1	N	1055	A	C6-N1	-5.18	1.31	1.35
1	N	1276	G	C8-N7	5.18	1.34	1.30
1	N	551	U	C4'-O4'	5.18	1.52	1.45
1	N	1368	A	C5-C6	-5.18	1.36	1.41
1	N	593	U	N1-C2	-5.18	1.33	1.38
1	N	1259	C	P-O5'	-5.18	1.54	1.59
1	N	1347	G	C2'-C1'	-5.18	1.47	1.53
1	N	1432	G	C6-N1	5.18	1.43	1.39
1	N	61	G	C6-N1	5.17	1.43	1.39
1	N	1418	A	C5'-C4'	5.17	1.57	1.51
1	N	431	A	C2'-C1'	-5.17	1.47	1.53
1	N	938	A	N1-C2	5.17	1.39	1.34
1	N	85	U	C2'-C1'	-5.17	1.47	1.53
1	N	200	G	N7-C5	-5.17	1.36	1.39
1	N	858	G	C5'-C4'	5.17	1.57	1.51
1	N	663	A	C4'-O4'	5.17	1.52	1.45
1	N	668	G	N1-C2	5.17	1.41	1.37
1	N	912	C	C2-N3	-5.17	1.31	1.35
1	N	995	C	N3-C4	5.17	1.37	1.33
1	N	57	G	C5-C4	-5.17	1.34	1.38
1	N	139	A	P-O5'	-5.17	1.54	1.59
1	N	430	A	N9-C4	5.17	1.41	1.37
1	N	730	G	C6-O6	5.17	1.28	1.24
1	N	747	A	P-O5'	-5.17	1.54	1.59
1	N	1486	G	C5-C4	-5.17	1.34	1.38
1	N	839	C	C2-N3	5.17	1.39	1.35
1	N	933	G	N9-C4	-5.17	1.33	1.38
1	N	994	A	C6-N6	5.17	1.38	1.33
1	N	1028	C	N1-C2	-5.17	1.34	1.40
1	N	234	C	C2'-O2'	-5.17	1.34	1.41
1	N	645	G	C5-C6	-5.17	1.37	1.42
1	N	333	U	N3-C4	5.16	1.43	1.38
1	N	377	G	C1'-N9	5.16	1.56	1.48
1	N	389	A	C5-C6	-5.16	1.36	1.41
1	N	1040	U	C2-N3	5.16	1.41	1.37
1	N	1168	U	O3'-P	-5.16	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1431	A	N1-C2	5.16	1.39	1.34
1	N	656	G	O4'-C1'	-5.16	1.34	1.41
1	N	761	G	C6-N1	5.16	1.43	1.39
1	N	878	A	N9-C8	-5.16	1.33	1.37
1	N	912	C	C5-C6	5.16	1.38	1.34
1	N	1010	U	O3'-P	-5.16	1.54	1.61
1	N	1186	G	C6-O6	-5.16	1.19	1.24
1	N	1293	C	C5'-C4'	5.16	1.57	1.51
1	N	357	G	N9-C8	5.16	1.41	1.37
1	N	504	C	O3'-P	-5.16	1.54	1.61
1	N	619	U	C2-O2	5.16	1.26	1.22
1	N	990	C	C3'-C2'	5.16	1.58	1.52
1	N	1226	C	C2-N3	-5.16	1.31	1.35
1	N	1322	C	C2-N3	5.16	1.39	1.35
1	N	1428	A	C2'-C1'	-5.16	1.47	1.53
1	N	1520	C	N3-C4	5.16	1.37	1.33
1	N	123	U	C4'-C3'	-5.16	1.47	1.52
1	N	839	C	C4-N4	5.16	1.38	1.33
1	N	1021	A	C5-C4	5.16	1.42	1.38
1	N	198	G	C2-N3	5.15	1.36	1.32
1	N	887	G	N9-C4	-5.15	1.33	1.38
1	N	955	U	P-O5'	5.15	1.65	1.59
1	N	53	A	N9-C8	-5.15	1.33	1.37
1	N	179	A	N7-C5	-5.15	1.36	1.39
1	N	615	G	C2-N2	5.15	1.39	1.34
1	N	673	A	N9-C4	-5.15	1.34	1.37
1	N	1524	C	N3-C4	5.15	1.37	1.33
1	N	90	C	O4'-C1'	-5.15	1.34	1.41
1	N	1184	G	N7-C5	-5.15	1.36	1.39
1	N	1310	G	N7-C5	-5.15	1.36	1.39
1	N	1367	C	P-O5'	-5.15	1.54	1.59
1	N	1399	C	N3-C4	5.15	1.37	1.33
1	N	753	A	C8-N7	5.15	1.35	1.31
1	N	7	A	C6-N1	5.15	1.39	1.35
1	N	209	U	C5'-C4'	5.15	1.57	1.51
1	N	218	U	N1-C6	5.15	1.42	1.38
1	N	359	G	C5-C6	-5.15	1.37	1.42
1	N	418	C	N3-C4	5.15	1.37	1.33
1	N	570	G	C2'-C1'	-5.15	1.47	1.53
1	N	527	G	C5-C4	5.15	1.42	1.38
1	N	708	C	C2-N3	5.15	1.39	1.35
1	N	64	G	C6-N1	5.14	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	509	A	C4'-C3'	5.14	1.58	1.53
1	N	543	U	O3'-P	-5.14	1.54	1.61
1	N	711	G	C2-N3	5.14	1.36	1.32
1	N	833	G	C3'-O3'	5.14	1.49	1.42
1	N	1097	C	O3'-P	5.14	1.67	1.61
1	N	1501	C	C4'-C3'	-5.14	1.47	1.52
1	N	22	G	C2'-O2'	-5.14	1.34	1.41
1	N	402	G	C2'-O2'	-5.14	1.34	1.41
1	N	680	C	N3-C4	5.14	1.37	1.33
1	N	1419	G	C8-N7	5.14	1.34	1.30
1	N	221	C	N1-C2	-5.14	1.35	1.40
1	N	234	C	P-O5'	-5.14	1.54	1.59
1	N	674	G	N1-C2	5.14	1.41	1.37
1	N	245	U	N1-C2	-5.14	1.33	1.38
1	N	706	A	C6-N1	5.14	1.39	1.35
1	N	882	C	C5-C6	-5.14	1.30	1.34
1	N	668	G	O4'-C1'	-5.14	1.34	1.41
1	N	894	G	N9-C8	-5.14	1.34	1.37
1	N	920	U	C2-N3	5.14	1.41	1.37
1	N	1345	U	O3'-P	-5.14	1.54	1.61
1	N	1415	G	C2-N2	5.14	1.39	1.34
1	N	4	U	N3-C4	5.13	1.43	1.38
1	N	91	U	C3'-O3'	5.13	1.49	1.42
1	N	289	G	C5'-C4'	5.13	1.57	1.51
1	N	361	G	C2-N2	5.13	1.39	1.34
1	N	448	A	C8-N7	-5.13	1.27	1.31
1	N	488	C	P-O5'	-5.13	1.54	1.59
1	N	663	A	C4'-C3'	5.13	1.58	1.53
1	N	733	G	O3'-P	-5.13	1.54	1.61
1	N	944	G	N1-C2	5.13	1.41	1.37
1	N	1101	A	C4'-C3'	-5.13	1.47	1.52
1	N	1121	U	N3-C4	5.13	1.43	1.38
1	N	1267	C	C5-C6	5.13	1.38	1.34
1	N	1375	A	C2-N3	5.13	1.38	1.33
1	N	401	C	N3-C4	5.13	1.37	1.33
1	N	165	G	P-O5'	-5.13	1.54	1.59
1	N	176	C	C5'-C4'	5.13	1.57	1.51
1	N	552	U	P-O5'	-5.13	1.54	1.59
1	N	720	C	O4'-C1'	5.13	1.48	1.41
1	N	1077	G	C8-N7	5.13	1.34	1.30
1	N	1284	C	C4'-O4'	-5.13	1.38	1.45
1	N	885	G	N9-C4	-5.13	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1398	A	C5-C4	5.13	1.42	1.38
1	N	69	G	C4'-C3'	-5.13	1.47	1.52
1	N	272	C	C4-N4	5.13	1.38	1.33
1	N	251	G	N7-C5	5.13	1.42	1.39
1	N	277	C	C5'-C4'	5.13	1.57	1.51
1	N	324	G	C2-N2	5.13	1.39	1.34
1	N	380	G	O3'-P	5.13	1.67	1.61
1	N	517	G	C5-C4	5.13	1.42	1.38
1	N	590	U	C4-C5	5.13	1.48	1.43
1	N	757	U	C1'-N1	5.13	1.56	1.48
1	N	954	G	C5'-C4'	5.13	1.57	1.51
1	N	380	G	C6-N1	5.12	1.43	1.39
1	N	408	A	O3'-P	-5.12	1.55	1.61
1	N	725	G	N1-C2	5.12	1.41	1.37
1	N	1153	G	C4'-O4'	5.12	1.52	1.45
1	N	160	A	C5-C4	5.12	1.42	1.38
1	N	293	G	C2'-C1'	-5.12	1.47	1.53
1	N	566	G	C2'-C1'	-5.12	1.47	1.53
1	N	590	U	C2-N3	5.12	1.41	1.37
1	N	363	A	N1-C2	5.12	1.39	1.34
1	N	777	A	C5-C4	5.12	1.42	1.38
1	N	1305	G	C6-N1	5.12	1.43	1.39
1	N	160	A	N7-C5	-5.12	1.36	1.39
1	N	539	A	C2'-C1'	-5.12	1.47	1.53
1	N	734	G	C4'-C3'	-5.12	1.47	1.52
1	N	1066	C	O3'-P	-5.12	1.55	1.61
1	N	771	G	N3-C4	5.12	1.39	1.35
1	N	1089	G	N7-C5	5.12	1.42	1.39
1	N	1097	C	N1-C6	5.12	1.40	1.37
1	N	304	U	P-O5'	-5.12	1.54	1.59
1	N	563	A	C6-N6	5.12	1.38	1.33
1	N	589	U	C5'-C4'	5.12	1.57	1.51
1	N	724	G	C4'-C3'	-5.12	1.47	1.52
1	N	1449	C	P-O5'	-5.12	1.54	1.59
1	N	359	G	C2-N2	5.12	1.39	1.34
1	N	577	G	N3-C4	-5.12	1.31	1.35
1	N	841	C	N3-C4	5.12	1.37	1.33
1	N	1457	G	C2-N3	5.12	1.36	1.32
1	N	53	A	C6-N1	5.11	1.39	1.35
1	N	463	U	C5-C6	-5.11	1.29	1.34
1	N	475	C	C2'-C1'	5.11	1.58	1.53
1	N	509	A	N9-C4	5.11	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1051	C	C4-N4	5.11	1.38	1.33
1	N	1289	A	C4'-C3'	5.11	1.58	1.53
1	N	25	C	P-O5'	5.11	1.64	1.59
1	N	221	C	C4-N4	5.11	1.38	1.33
1	N	733	G	C3'-C2'	5.11	1.58	1.52
1	N	982	U	O4'-C1'	-5.11	1.35	1.41
1	N	593	U	C4'-O4'	-5.11	1.39	1.45
1	N	716	A	C5-C6	-5.11	1.36	1.41
1	N	1405	G	C4'-C3'	5.11	1.58	1.53
1	N	1519	A	C3'-C2'	-5.11	1.47	1.52
1	N	1519	A	C8-N7	5.11	1.35	1.31
1	N	638	U	C3'-C2'	5.11	1.58	1.52
1	N	1262	C	C3'-O3'	5.11	1.49	1.42
1	N	1285	A	O3'-P	-5.11	1.55	1.61
1	N	76	G	C5-C6	-5.11	1.37	1.42
1	N	156	C	C4'-C3'	5.11	1.58	1.53
1	N	634	C	C4-N4	5.11	1.38	1.33
1	N	1117	A	C2-N3	5.11	1.38	1.33
1	N	1132	C	C2-O2	5.11	1.29	1.24
1	N	15	G	P-O5'	-5.11	1.54	1.59
1	N	167	A	C4'-C3'	-5.10	1.47	1.52
1	N	66	A	C3'-O3'	-5.10	1.35	1.42
1	N	394	G	N3-C4	-5.10	1.31	1.35
1	N	526	C	C2-N3	5.10	1.39	1.35
1	N	1109	C	C2'-C1'	-5.10	1.47	1.53
1	N	1489	G	O4'-C1'	-5.10	1.35	1.41
1	N	1493	A	C2-N3	5.10	1.38	1.33
1	N	289	G	C3'-C2'	5.10	1.58	1.52
1	N	543	U	C3'-C2'	-5.10	1.47	1.52
1	N	1082	A	N7-C5	-5.10	1.36	1.39
1	N	1195	C	O3'-P	-5.10	1.55	1.61
1	N	498	A	N3-C4	-5.10	1.31	1.34
1	N	1268	G	C6-O6	5.10	1.28	1.24
1	N	145	G	C5-C4	-5.10	1.34	1.38
1	N	404	G	C4'-C3'	-5.10	1.47	1.52
1	N	887	G	C5'-C4'	5.10	1.57	1.51
1	N	1066	C	C2-N3	5.10	1.39	1.35
1	N	665	A	N9-C4	-5.10	1.34	1.37
1	N	243	A	C5'-C4'	5.09	1.57	1.51
1	N	678	U	C2-O2	5.09	1.26	1.22
1	N	976	G	C2-N3	5.09	1.36	1.32
1	N	1324	A	C5-C4	5.09	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	858	G	C4'-C3'	-5.09	1.47	1.52
1	N	979	C	O4'-C1'	-5.09	1.35	1.41
1	N	1523	G	C2-N3	5.09	1.36	1.32
1	N	51	A	C3'-O3'	5.09	1.49	1.42
1	N	449	G	C6-N1	5.09	1.43	1.39
1	N	777	A	C5'-C4'	5.09	1.57	1.51
1	N	870	U	C4-C5	5.09	1.48	1.43
1	N	974	A	C5'-C4'	5.09	1.57	1.51
1	N	999	C	C4'-C3'	-5.09	1.47	1.52
1	N	1162	C	P-O5'	-5.09	1.54	1.59
1	N	404	G	N9-C8	5.09	1.41	1.37
1	N	658	C	C5'-C4'	5.09	1.57	1.51
1	N	668	G	C5-C6	-5.09	1.37	1.42
1	N	1418	A	N9-C8	-5.09	1.33	1.37
1	N	151	A	N3-C4	-5.09	1.31	1.34
1	N	260	G	C5-C6	-5.09	1.37	1.42
1	N	314	C	C4'-C3'	5.09	1.58	1.53
1	N	751	U	C4-C5	-5.09	1.39	1.43
1	N	917	G	N9-C4	5.09	1.42	1.38
1	N	1284	C	P-O5'	-5.09	1.54	1.59
1	N	1376	U	C5'-C4'	5.09	1.57	1.51
1	N	11	G	C5-C6	-5.08	1.37	1.42
1	N	1080	A	C5-C6	-5.08	1.36	1.41
1	N	1410	A	C3'-O3'	-5.08	1.35	1.42
1	N	549	C	C4'-C3'	-5.08	1.47	1.52
1	N	594	U	N3-C4	5.08	1.43	1.38
1	N	714	G	C5'-C4'	5.08	1.57	1.51
1	N	786	G	C8-N7	-5.08	1.27	1.30
1	N	925	G	C6-N1	5.08	1.43	1.39
1	N	1148	U	C2-N3	5.08	1.41	1.37
1	N	1378	C	N3-C4	5.08	1.37	1.33
1	N	1276	G	C1'-N9	5.08	1.56	1.48
1	N	364	A	C5'-C4'	5.08	1.57	1.51
1	N	606	G	O3'-P	-5.08	1.55	1.61
1	N	979	C	C2-O2	-5.08	1.19	1.24
1	N	1447	A	C5-C4	5.08	1.42	1.38
1	N	1455	G	C8-N7	-5.08	1.27	1.30
1	N	573	A	C2-N3	5.08	1.38	1.33
1	N	574	A	C3'-O3'	-5.08	1.35	1.42
1	N	1281	C	N1-C6	5.08	1.40	1.37
1	N	1305	G	O4'-C1'	5.08	1.48	1.41
1	N	455	G	O4'-C1'	-5.08	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	574	A	C2'-C1'	-5.08	1.47	1.53
1	N	710	G	C4'-C3'	-5.08	1.47	1.52
1	N	945	G	C2'-C1'	-5.08	1.47	1.53
1	N	517	G	N3-C4	-5.07	1.31	1.35
1	N	676	A	C2'-O2'	-5.07	1.35	1.41
1	N	796	C	C2-N3	5.07	1.39	1.35
1	N	1191	A	C6-N6	5.07	1.38	1.33
1	N	1062	U	C4-C5	5.07	1.48	1.43
1	N	1240	U	C4'-C3'	5.07	1.58	1.53
1	N	102	G	C5-C4	-5.07	1.34	1.38
1	N	128	G	C5-C6	-5.07	1.37	1.42
1	N	349	A	C5-C4	5.07	1.42	1.38
1	N	478	A	O3'-P	-5.07	1.55	1.61
1	N	795	C	C4'-O4'	5.07	1.52	1.45
1	N	1419	G	C4'-C3'	5.07	1.58	1.53
1	N	783	C	C1'-N1	5.07	1.56	1.48
1	N	1221	G	C3'-C2'	5.07	1.58	1.52
1	N	1491	G	P-O5'	-5.07	1.54	1.59
1	N	1222	G	C2-N3	5.07	1.36	1.32
1	N	258	G	O4'-C1'	5.06	1.48	1.41
1	N	537	G	O3'-P	5.06	1.67	1.61
1	N	1062	U	O3'-P	-5.06	1.55	1.61
1	N	105	G	O3'-P	-5.06	1.55	1.61
1	N	271	C	N3-C4	5.06	1.37	1.33
1	N	503	C	C1'-N1	5.06	1.56	1.48
1	N	726	C	C4-C5	-5.06	1.38	1.43
1	N	1348	U	C5'-C4'	5.06	1.57	1.51
1	N	1134	G	C2-N2	5.06	1.39	1.34
1	N	239	U	O4'-C1'	-5.06	1.35	1.41
1	N	541	G	N7-C5	-5.06	1.36	1.39
1	N	638	U	C2'-C1'	-5.06	1.47	1.53
1	N	1507	A	C2'-C1'	-5.06	1.47	1.53
1	N	602	A	C6-N6	5.06	1.38	1.33
1	N	1054	C	C4'-C3'	5.06	1.58	1.53
1	N	322	C	C3'-O3'	5.05	1.49	1.42
1	N	460	A	O3'-P	-5.05	1.55	1.61
1	N	626	G	N7-C5	-5.05	1.36	1.39
1	N	1410	A	C6-N1	5.05	1.39	1.35
1	N	545	C	P-O5'	5.05	1.64	1.59
1	N	792	A	C2'-C1'	-5.05	1.47	1.53
1	N	1150	A	C5-C6	5.05	1.45	1.41
1	N	335	C	O3'-P	5.05	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1276	G	C2-N2	5.05	1.39	1.34
1	N	1337	G	C3'-C2'	5.05	1.58	1.52
1	N	397	A	O3'-P	-5.05	1.55	1.61
1	N	507	C	C2'-C1'	-5.05	1.47	1.53
1	N	639	G	P-O5'	5.05	1.64	1.59
1	N	1141	C	C5-C6	-5.05	1.30	1.34
1	N	1349	A	C8-N7	-5.05	1.28	1.31
1	N	6	G	C4'-C3'	-5.05	1.47	1.52
1	N	368	U	O3'-P	-5.05	1.55	1.61
1	N	450	G	C4'-C3'	5.05	1.58	1.53
1	N	565	U	C4'-O4'	5.05	1.52	1.45
1	N	1086	U	C5-C6	5.05	1.38	1.34
1	N	1201	A	N1-C2	5.05	1.38	1.34
1	N	1264	U	C3'-O3'	-5.05	1.35	1.42
1	N	1306	A	N7-C5	-5.05	1.36	1.39
1	N	186	C	C1'-N1	5.04	1.56	1.48
1	N	777	A	N1-C2	5.04	1.38	1.34
1	N	1249	C	C4-N4	5.04	1.38	1.33
1	N	961	U	C2'-C1'	-5.04	1.47	1.53
1	N	1092	A	C5'-C4'	5.04	1.57	1.51
1	N	1322	C	C4-N4	5.04	1.38	1.33
1	N	1426	G	C8-N7	-5.04	1.27	1.30
1	N	1461	G	N3-C4	-5.04	1.31	1.35
1	N	569	C	C2'-C1'	5.04	1.58	1.53
1	N	1499	A	C5-C4	-5.04	1.35	1.38
1	N	63	C	C5'-C4'	5.04	1.57	1.51
1	N	72	A	N9-C8	-5.04	1.33	1.37
1	N	835	U	C3'-C2'	5.04	1.58	1.52
1	N	1024	G	C2'-C1'	-5.04	1.47	1.53
1	N	400	C	C2'-C1'	-5.04	1.47	1.53
1	N	659	U	O3'-P	-5.04	1.55	1.61
1	N	1268	G	C4'-C3'	5.04	1.58	1.53
1	N	408	A	C2-N3	5.03	1.38	1.33
1	N	1131	G	C6-N1	5.03	1.43	1.39
1	N	380	G	N7-C5	5.03	1.42	1.39
1	N	919	A	C5-C4	5.03	1.42	1.38
1	N	1504	G	O3'-P	-5.03	1.55	1.61
1	N	63	C	O3'-P	-5.03	1.55	1.61
1	N	1113	C	O3'-P	-5.03	1.55	1.61
1	N	140	U	P-O5'	-5.03	1.54	1.59
1	N	244	U	N1-C2	5.02	1.43	1.38
1	N	433	G	C2-N2	5.02	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	718	A	C1'-N9	5.02	1.56	1.48
1	N	257	G	C6-N1	-5.02	1.36	1.39
1	N	475	C	C3'-C2'	5.02	1.58	1.52
1	N	475	C	N3-C4	5.02	1.37	1.33
1	N	901	A	N9-C8	5.02	1.41	1.37
1	N	1305	G	C5-C4	-5.02	1.34	1.38
1	N	1379	G	C8-N7	5.02	1.33	1.30
1	N	1449	C	C4'-C3'	5.02	1.58	1.53
1	N	177	G	C3'-O3'	5.02	1.49	1.42
1	N	1355	G	N7-C5	-5.02	1.36	1.39
1	N	1421	G	N1-C2	5.02	1.41	1.37
1	N	368	U	P-O5'	-5.02	1.54	1.59
1	N	411	A	C4'-C3'	5.02	1.58	1.53
1	N	602	A	N7-C5	-5.02	1.36	1.39
1	N	668	G	C2-N3	5.02	1.36	1.32
1	N	910	C	O5'-C5'	-5.02	1.34	1.42
1	N	1059	C	C4-N4	5.02	1.38	1.33
1	N	1098	C	C5'-C4'	5.02	1.57	1.51
1	N	1202	U	C3'-C2'	5.02	1.58	1.52
1	N	1523	G	C8-N7	5.02	1.33	1.30
1	N	232	G	C2'-C1'	-5.02	1.47	1.53
1	N	232	G	N7-C5	5.02	1.42	1.39
1	N	384	G	C2'-C1'	-5.02	1.47	1.53
1	N	410	G	N1-C2	5.02	1.41	1.37
1	N	512	U	N3-C4	5.02	1.43	1.38
1	N	639	G	C2-N3	5.02	1.36	1.32
1	N	1053	G	C4'-O4'	-5.02	1.39	1.45
1	N	1071	C	N3-C4	5.02	1.37	1.33
1	N	196	A	O4'-C1'	5.01	1.48	1.41
1	N	378	G	C5-C4	5.01	1.41	1.38
1	N	477	C	N3-C4	5.01	1.37	1.33
1	N	623	C	P-O5'	5.01	1.64	1.59
1	N	645	G	C1'-N9	5.01	1.56	1.48
1	N	934	C	C4-N4	5.01	1.38	1.33
1	N	1064	G	N9-C4	5.01	1.42	1.38
1	N	1077	G	C4'-C3'	5.01	1.58	1.53
1	N	1081	A	C6-N6	5.01	1.38	1.33
1	N	537	G	C2'-C1'	-5.01	1.47	1.53
1	N	887	G	C4'-C3'	5.01	1.58	1.53
1	N	1100	C	C4'-C3'	5.01	1.58	1.53
1	N	37	U	C2-N3	5.01	1.41	1.37
1	N	268	U	N1-C2	-5.01	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	466	A	N3-C4	5.01	1.37	1.34
1	N	1021	A	C5'-C4'	5.01	1.57	1.51
1	N	1347	G	C4'-C3'	5.01	1.58	1.53
1	N	710	G	C5'-C4'	5.01	1.57	1.51
1	N	962	C	C5'-C4'	5.01	1.57	1.51
1	N	1416	G	C8-N7	5.01	1.33	1.30
1	N	1509	C	C5'-C4'	5.01	1.57	1.51
1	N	120	A	N7-C5	-5.00	1.36	1.39
1	N	394	G	C6-N1	5.00	1.43	1.39
1	N	1216	A	C5-C6	5.00	1.45	1.41
1	N	1511	G	C8-N7	-5.00	1.27	1.30
1	N	92	U	C2-N3	5.00	1.41	1.37
1	N	602	A	N1-C2	5.00	1.38	1.34
1	N	662	U	C2-O2	5.00	1.26	1.22
1	N	916	U	C2'-C1'	-5.00	1.47	1.53
1	N	1334	G	N1-C2	5.00	1.41	1.37
1	N	168	G	C6-O6	5.00	1.28	1.24
1	N	775	G	C5'-C4'	-5.00	1.45	1.51
1	N	1020	G	C5-C6	-5.00	1.37	1.42
1	N	1042	A	C5-C4	5.00	1.42	1.38
1	N	1128	C	N1-C6	-5.00	1.34	1.37
1	N	1151	A	N7-C5	-5.00	1.36	1.39
1	N	1317	C	O3'-P	-5.00	1.55	1.61
1	N	1489	G	C5-C6	-5.00	1.37	1.42

All (9479) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1362	A	P-O3'-C3'	28.51	153.91	119.70
1	N	1309	G	N1-C6-O6	27.84	136.60	119.90
1	N	780	A	N1-C6-N6	27.41	135.04	118.60
1	N	790	A	N1-C6-N6	26.54	134.52	118.60
1	N	309	A	N1-C6-N6	25.21	133.72	118.60
1	N	693	G	C5-C6-O6	-25.00	113.60	128.60
1	N	1379	G	N1-C6-O6	24.68	134.71	119.90
1	N	1048	G	N1-C6-O6	24.67	134.70	119.90
1	N	1169	A	N1-C6-N6	24.47	133.28	118.60
1	N	449	G	N1-C6-O6	24.46	134.58	119.90
1	N	181	A	P-O3'-C3'	24.44	149.02	119.70
1	N	968	A	N1-C6-N6	24.28	133.17	118.60
1	N	799	G	C5-C6-O6	-24.20	114.08	128.60
1	N	1290	G	N1-C6-O6	24.04	134.32	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	223	A	N1-C6-N6	23.95	132.97	118.60
1	N	627	G	N1-C6-O6	23.91	134.25	119.90
1	N	1153	G	N1-C6-O6	23.90	134.24	119.90
1	N	116	A	N1-C6-N6	23.83	132.90	118.60
1	N	712	A	N1-C6-N6	23.81	132.88	118.60
1	N	484	G	C5-C6-O6	-23.77	114.34	128.60
1	N	1236	A	N1-C6-N6	23.64	132.79	118.60
1	N	1309	G	C5-C6-O6	-23.44	114.54	128.60
1	N	547	A	P-O3'-C3'	23.13	147.46	119.70
1	N	94	G	P-O3'-C3'	22.93	147.21	119.70
1	N	468	A	N1-C6-N6	22.91	132.35	118.60
1	N	425	G	C5-C6-O6	-22.85	114.89	128.60
1	N	63	C	C6-N1-C2	-22.70	111.22	120.30
1	N	546	A	N1-C6-N6	22.66	132.20	118.60
1	N	605	U	P-O3'-C3'	22.63	146.85	119.70
1	N	570	G	N1-C6-O6	22.45	133.37	119.90
1	N	1529	G	N1-C6-O6	22.41	133.34	119.90
1	N	929	G	C5-C6-O6	-22.19	115.28	128.60
1	N	1033	G	C5-C6-O6	-22.03	115.38	128.60
1	N	288	A	N1-C6-N6	22.02	131.81	118.60
1	N	883	C	N3-C4-C5	-21.96	113.12	121.90
1	N	41	G	C5-C6-O6	-21.90	115.46	128.60
1	N	609	A	N1-C6-N6	21.87	131.72	118.60
1	N	1047	G	N1-C6-O6	21.85	133.01	119.90
1	N	369	G	C5-C6-O6	-21.72	115.57	128.60
1	N	1398	A	N1-C6-N6	21.60	131.56	118.60
1	N	595	A	N1-C6-N6	21.57	131.54	118.60
1	N	1033	G	N1-C6-O6	21.45	132.77	119.90
1	N	199	A	N1-C6-N6	21.35	131.41	118.60
1	N	182	A	N1-C6-N6	21.34	131.41	118.60
1	N	1185	G	N1-C6-O6	21.29	132.67	119.90
1	N	141	G	C5-C6-O6	-21.28	115.83	128.60
1	N	929	G	N1-C6-O6	21.25	132.65	119.90
1	N	77	A	N1-C6-N6	21.24	131.34	118.60
1	N	484	G	N1-C6-O6	21.18	132.61	119.90
1	N	1047	G	C5-C6-O6	-21.13	115.92	128.60
1	N	240	G	N1-C6-O6	21.08	132.55	119.90
1	N	1290	G	C5-C6-O6	-21.03	115.98	128.60
1	N	410	G	N1-C6-O6	21.00	132.50	119.90
1	N	704	A	N1-C6-N6	20.97	131.18	118.60
1	N	559	A	N1-C6-N6	20.95	131.17	118.60
1	N	702	A	N1-C6-N6	20.84	131.10	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	297	G	N1-C6-O6	20.83	132.40	119.90
1	N	785	G	N1-C6-O6	20.82	132.39	119.90
1	N	1379	G	C5-C6-O6	-20.80	116.12	128.60
1	N	673	A	N1-C6-N6	20.77	131.06	118.60
1	N	356	A	N1-C6-N6	20.76	131.05	118.60
1	N	922	G	N1-C6-O6	20.73	132.34	119.90
1	N	130	A	N1-C6-N6	20.64	130.98	118.60
1	N	302	G	N1-C6-O6	20.61	132.26	119.90
1	N	190	A	N1-C6-N6	20.46	130.88	118.60
1	N	1250	A	N1-C6-N6	20.33	130.80	118.60
1	N	857	C	C6-N1-C2	-20.31	112.18	120.30
1	N	1150	A	N1-C6-N6	20.30	130.78	118.60
1	N	951	G	N1-C6-O6	20.28	132.07	119.90
1	N	141	G	N1-C6-O6	20.18	132.01	119.90
1	N	1179	A	N1-C6-N6	20.14	130.68	118.60
1	N	1248	A	N1-C6-N6	20.08	130.65	118.60
1	N	346	G	N1-C6-O6	20.06	131.93	119.90
1	N	447	G	N1-C6-O6	19.90	131.84	119.90
1	N	172	A	P-O3'-C3'	19.82	143.49	119.70
1	N	627	G	C5-C6-O6	-19.81	116.71	128.60
1	N	47	C	P-O3'-C3'	19.80	143.46	119.70
1	N	800	G	N1-C6-O6	19.75	131.75	119.90
1	N	1164	G	N1-C6-O6	19.71	131.72	119.90
1	N	338	A	N1-C6-N6	19.70	130.42	118.60
1	N	714	G	N1-C6-O6	19.64	131.68	119.90
1	N	450	G	N1-C6-O6	19.60	131.66	119.90
1	N	484	G	P-O3'-C3'	19.54	143.14	119.70
1	N	886	G	N1-C6-O6	19.51	131.60	119.90
1	N	716	A	N1-C6-N6	19.48	130.29	118.60
1	N	492	C	C6-N1-C2	19.41	128.06	120.30
1	N	1046	A	N1-C6-N6	19.35	130.21	118.60
1	N	1370	G	N1-C6-O6	19.33	131.50	119.90
1	N	41	G	N1-C6-O6	19.30	131.48	119.90
1	N	1036	A	N1-C6-N6	19.25	130.15	118.60
1	N	859	G	C5-C6-O6	-19.16	117.11	128.60
1	N	630	A	N1-C6-N6	19.06	130.04	118.60
1	N	621	A	N1-C6-N6	19.05	130.03	118.60
1	N	810	C	C6-N1-C2	-19.04	112.69	120.30
1	N	1399	C	P-O3'-C3'	19.04	142.55	119.70
1	N	354	G	N1-C6-O6	19.02	131.31	119.90
1	N	812	G	P-O3'-C3'	19.00	142.50	119.70
1	N	175	C	N3-C4-C5	-18.98	114.31	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1035	A	N1-C6-N6	18.97	129.98	118.60
1	N	776	G	P-O5'-C5'	18.90	151.15	120.90
1	N	1418	A	N1-C6-N6	18.85	129.91	118.60
1	N	1245	C	C6-N1-C2	-18.77	112.79	120.30
1	N	71	A	N1-C6-N6	18.76	129.86	118.60
1	N	1304	G	C5-C6-O6	-18.71	117.38	128.60
1	N	1164	G	C5-C6-O6	-18.69	117.39	128.60
1	N	8	A	N1-C6-N6	18.65	129.79	118.60
1	N	494	G	C5-C6-O6	-18.64	117.42	128.60
1	N	1218	C	N3-C4-C5	-18.59	114.47	121.90
1	N	109	A	N1-C6-N6	18.57	129.74	118.60
1	N	449	G	C5-C6-O6	-18.55	117.47	128.60
1	N	373	A	N1-C6-N6	18.54	129.72	118.60
1	N	226	G	N1-C6-O6	18.54	131.02	119.90
1	N	1421	G	N1-C6-O6	18.53	131.02	119.90
1	N	300	A	N1-C6-N6	18.49	129.69	118.60
1	N	1447	A	N1-C6-N6	18.43	129.66	118.60
1	N	791	G	C5-C6-O6	-18.41	117.55	128.60
1	N	1101	A	P-O3'-C3'	18.36	141.74	119.70
1	N	926	G	N1-C6-O6	18.30	130.88	119.90
1	N	28	A	N1-C6-N6	18.29	129.58	118.60
1	N	1048	G	C5-C6-O6	-18.27	117.64	128.60
1	N	792	A	N1-C6-N6	18.22	129.53	118.60
1	N	966	G	N1-C6-O6	18.22	130.83	119.90
1	N	251	G	C5-C6-O6	-18.21	117.67	128.60
1	N	1184	G	N1-C6-O6	18.17	130.80	119.90
1	N	1185	G	C5-C6-O6	-18.16	117.70	128.60
1	N	210	C	P-O3'-C3'	18.13	141.45	119.70
1	N	1526	G	N1-C6-O6	18.08	130.75	119.90
1	N	894	G	N1-C6-O6	18.06	130.74	119.90
1	N	1350	A	N1-C6-N6	18.01	129.41	118.60
1	N	1334	G	N1-C6-O6	17.99	130.69	119.90
1	N	1304	G	N1-C6-O6	17.98	130.69	119.90
1	N	104	G	C5-C6-O6	-17.98	117.81	128.60
1	N	693	G	N1-C6-O6	17.97	130.69	119.90
1	N	1433	A	C2-N3-C4	-17.96	101.62	110.60
1	N	1171	A	N1-C6-N6	17.94	129.37	118.60
1	N	1246	A	N1-C6-N6	17.93	129.36	118.60
1	N	983	A	N1-C6-N6	17.87	129.32	118.60
1	N	200	G	C5-C6-O6	-17.79	117.92	128.60
1	N	511	C	P-O3'-C3'	17.79	141.05	119.70
1	N	559	A	P-O3'-C3'	17.79	141.04	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1042	A	N1-C6-N6	17.77	129.26	118.60
1	N	1004	A	N1-C6-N6	17.75	129.25	118.60
1	N	144	G	C5-C6-O6	-17.72	117.97	128.60
1	N	243	A	P-O3'-C3'	17.72	140.97	119.70
1	N	1380	U	P-O3'-C3'	17.70	140.94	119.70
1	N	865	A	N1-C6-N6	17.67	129.20	118.60
1	N	1530	G	P-O3'-C3'	17.66	140.89	119.70
1	N	1500	A	C4-C5-C6	17.64	125.82	117.00
1	N	1217	C	N3-C4-C5	-17.61	114.86	121.90
1	N	369	G	N1-C6-O6	17.60	130.46	119.90
1	N	1363	A	N1-C6-N6	17.57	129.14	118.60
1	N	941	G	N1-C6-O6	17.57	130.44	119.90
1	N	901	A	N1-C6-N6	17.56	129.14	118.60
1	N	1465	A	N1-C6-N6	17.56	129.13	118.60
1	N	214	C	N3-C4-C5	-17.55	114.88	121.90
1	N	385	C	N3-C4-N4	17.53	130.27	118.00
1	N	776	G	N1-C6-O6	17.53	130.42	119.90
1	N	144	G	N1-C6-O6	17.49	130.39	119.90
1	N	1168	U	P-O3'-C3'	17.49	140.68	119.70
1	N	791	G	N1-C6-O6	17.48	130.39	119.90
1	N	1074	G	N1-C6-O6	17.47	130.38	119.90
1	N	1507	A	C4-C5-C6	17.47	125.74	117.00
1	N	572	A	N1-C6-N6	17.46	129.08	118.60
1	N	346	G	C5-C6-O6	-17.43	118.14	128.60
1	N	550	G	C5-C6-O6	-17.43	118.14	128.60
1	N	669	G	N1-C6-O6	17.43	130.36	119.90
1	N	79	G	C5-C6-O6	-17.42	118.15	128.60
1	N	438	U	P-O3'-C3'	17.42	140.60	119.70
1	N	765	G	N1-C6-O6	17.40	130.34	119.90
1	N	301	G	N1-C6-O6	17.38	130.33	119.90
1	N	668	G	N1-C6-O6	17.36	130.31	119.90
1	N	1133	G	N1-C6-O6	17.36	130.31	119.90
1	N	148	G	N1-C6-O6	17.35	130.31	119.90
1	N	1003	G	N1-C6-O6	17.32	130.29	119.90
1	N	457	G	N1-C6-O6	17.32	130.29	119.90
1	N	724	G	N1-C6-O6	17.31	130.29	119.90
1	N	1378	C	C6-N1-C2	-17.31	113.38	120.30
1	N	581	G	C5-C6-O6	-17.27	118.24	128.60
1	N	293	G	N1-C6-O6	17.27	130.26	119.90
1	N	240	G	C5-C6-O6	-17.25	118.25	128.60
1	N	177	G	C8-N9-C4	-17.23	99.51	106.40
1	N	230	G	N1-C6-O6	17.17	130.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	913	A	N1-C6-N6	17.13	128.88	118.60
1	N	198	G	O4'-C1'-N9	17.12	121.90	108.20
1	N	354	G	C5-C6-O6	-17.11	118.33	128.60
1	N	336	A	N1-C6-N6	17.10	128.86	118.60
1	N	1516	G	N1-C6-O6	16.99	130.09	119.90
1	N	1139	G	N1-C6-O6	16.96	130.08	119.90
1	N	318	G	C5-C6-O6	-16.95	118.43	128.60
1	N	1364	U	O4'-C1'-N1	16.94	121.75	108.20
1	N	412	A	N1-C6-N6	16.93	128.76	118.60
1	N	1426	G	N1-C6-O6	16.93	130.06	119.90
1	N	1196	A	N1-C6-N6	16.91	128.75	118.60
1	N	934	C	N3-C4-C5	-16.89	115.15	121.90
1	N	1455	G	N1-C6-O6	16.88	130.03	119.90
1	N	550	G	N1-C6-O6	16.84	130.01	119.90
1	N	1143	G	N1-C6-O6	16.82	129.99	119.90
1	N	321	A	N1-C6-N6	16.79	128.68	118.60
1	N	633	G	N1-C6-O6	16.78	129.97	119.90
1	N	392	C	N3-C4-C5	-16.77	115.19	121.90
1	N	1500	A	N1-C6-N6	16.77	128.66	118.60
1	N	1041	G	C5-C6-O6	-16.73	118.56	128.60
1	N	775	G	C5-C6-O6	-16.73	118.56	128.60
1	N	1153	G	C5-C6-N1	-16.71	103.15	111.50
1	N	982	U	P-O3'-C3'	16.70	139.74	119.70
1	N	941	G	C5-C6-O6	-16.69	118.59	128.60
1	N	465	A	N1-C6-N6	16.65	128.59	118.60
1	N	104	G	N1-C6-O6	16.64	129.88	119.90
1	N	200	G	N1-C6-O6	16.63	129.88	119.90
1	N	1020	G	N1-C6-O6	16.63	129.88	119.90
1	N	628	G	C8-N9-C4	-16.59	99.77	106.40
1	N	951	G	C5-C6-O6	-16.58	118.65	128.60
1	N	1431	A	N1-C6-N6	16.57	128.54	118.60
1	N	381	C	C6-N1-C2	-16.55	113.68	120.30
1	N	425	G	N1-C6-O6	16.53	129.82	119.90
1	N	800	G	C5-C6-O6	-16.52	118.69	128.60
1	N	65	A	N1-C6-N6	16.48	128.49	118.60
1	N	230	G	C5-C6-O6	-16.48	118.72	128.60
1	N	972	C	O4'-C1'-N1	16.45	121.36	108.20
1	N	7	A	N1-C6-N6	16.44	128.46	118.60
1	N	859	G	N1-C6-O6	16.44	129.76	119.90
1	N	832	G	C6-N1-C2	-16.43	115.24	125.10
1	N	205	A	N1-C6-N6	16.43	128.46	118.60
1	N	1433	A	C5-C6-N1	-16.43	109.48	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	297	G	C5-C6-N1	-16.42	103.29	111.50
1	N	670	G	N1-C6-O6	16.41	129.75	119.90
1	N	660	C	N3-C4-C5	-16.39	115.34	121.90
1	N	1490	U	O4'-C1'-N1	16.39	121.31	108.20
1	N	360	G	C5-C6-O6	-16.37	118.78	128.60
1	N	79	G	N1-C6-O6	16.36	129.71	119.90
1	N	213	G	C5-C6-O6	-16.34	118.80	128.60
1	N	902	G	N1-C6-O6	16.32	129.69	119.90
1	N	1439	G	C5-C6-O6	-16.30	118.82	128.60
1	N	376	G	C5-C6-O6	-16.28	118.83	128.60
1	N	251	G	N1-C6-O6	16.23	129.64	119.90
1	N	385	C	C5-C4-N4	-16.20	108.86	120.20
1	N	160	A	N1-C6-N6	16.20	128.32	118.60
1	N	1476	A	N1-C6-N6	16.16	128.29	118.60
1	N	1155	A	N1-C6-N6	16.15	128.29	118.60
1	N	743	A	C8-N9-C4	-16.15	99.34	105.80
1	N	799	G	N1-C6-O6	16.09	129.56	119.90
1	N	423	G	N1-C6-O6	16.07	129.54	119.90
1	N	937	A	N1-C6-N6	16.06	128.24	118.60
1	N	753	A	N1-C6-N6	16.05	128.23	118.60
1	N	583	A	N1-C6-N6	16.01	128.21	118.60
1	N	1320	C	N3-C4-C5	-16.00	115.50	121.90
1	N	633	G	C5-C6-O6	-16.00	119.00	128.60
1	N	1432	G	N1-C6-O6	15.98	129.49	119.90
1	N	493	A	N1-C6-N6	15.97	128.19	118.60
1	N	905	U	O4'-C1'-N1	15.97	120.98	108.20
1	N	532	A	P-O3'-C3'	15.96	138.85	119.70
1	N	1426	G	C5-C6-O6	-15.95	119.03	128.60
1	N	581	G	N1-C6-O6	15.95	129.47	119.90
1	N	732	C	C2-N3-C4	15.92	127.86	119.90
1	N	1225	A	N1-C6-N6	15.90	128.14	118.60
1	N	1129	C	O4'-C1'-N1	15.89	120.91	108.20
1	N	815	A	N1-C6-N6	15.89	128.13	118.60
1	N	260	G	C5-C6-O6	-15.88	119.07	128.60
1	N	560	A	P-O3'-C3'	15.86	138.74	119.70
1	N	238	A	N1-C6-N6	15.86	128.12	118.60
1	N	1181	G	N1-C2-N3	-15.85	114.39	123.90
1	N	1529	G	C5-C6-O6	-15.85	119.09	128.60
1	N	1313	U	O4'-C1'-N1	15.82	120.86	108.20
1	N	1417	G	N1-C6-O6	15.82	129.39	119.90
1	N	1273	C	N3-C4-N4	15.79	129.06	118.00
1	N	353	A	N1-C6-N6	15.79	128.07	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	308	C	N3-C4-C5	-15.76	115.59	121.90
1	N	935	A	N1-C6-N6	15.74	128.04	118.60
1	N	1275	A	N1-C6-N6	15.74	128.04	118.60
1	N	1193	G	N1-C6-O6	15.73	129.34	119.90
1	N	265	G	P-O3'-C3'	15.73	138.57	119.70
1	N	977	A	N1-C6-N6	15.71	128.03	118.60
1	N	667	G	N1-C6-O6	15.71	129.32	119.90
1	N	1197	A	C4-C5-C6	15.70	124.85	117.00
1	N	1013	G	N1-C6-O6	15.70	129.32	119.90
1	N	66	A	N1-C6-N6	15.69	128.01	118.60
1	N	499	A	N1-C6-N6	15.67	128.00	118.60
1	N	918	A	N1-C6-N6	15.64	127.98	118.60
1	N	775	G	N1-C6-O6	15.62	129.28	119.90
1	N	673	A	C4-C5-C6	15.61	124.80	117.00
1	N	600	A	N1-C6-N6	15.60	127.96	118.60
1	N	1438	G	N1-C6-O6	15.58	129.25	119.90
1	N	228	A	N1-C6-N6	15.56	127.94	118.60
1	N	260	G	N1-C6-O6	15.56	129.23	119.90
1	N	416	G	N1-C6-O6	15.54	129.22	119.90
1	N	275	G	N1-C6-O6	15.52	129.21	119.90
1	N	459	A	N1-C6-N6	15.52	127.91	118.60
1	N	1130	A	N1-C6-N6	15.51	127.91	118.60
1	N	895	G	N1-C6-O6	15.51	129.21	119.90
1	N	817	C	P-O3'-C3'	15.50	138.30	119.70
1	N	366	A	N1-C6-N6	15.50	127.90	118.60
1	N	74	A	N1-C6-N6	15.48	127.89	118.60
1	N	15	G	C4-C5-N7	15.47	116.99	110.80
1	N	94	G	N1-C6-O6	15.46	129.18	119.90
1	N	192	A	N1-C6-N6	15.46	127.88	118.60
1	N	1201	A	P-O3'-C3'	15.46	138.26	119.70
1	N	1358	U	P-O3'-C3'	15.46	138.25	119.70
1	N	1020	G	C5-C6-O6	-15.43	119.34	128.60
1	N	293	G	C5-C6-O6	-15.42	119.35	128.60
1	N	966	G	C5-C6-O6	-15.40	119.36	128.60
1	N	308	C	C2-N3-C4	15.39	127.60	119.90
1	N	541	G	C5-C6-O6	-15.39	119.36	128.60
1	N	900	A	N1-C2-N3	15.35	136.98	129.30
1	N	93	U	O4'-C1'-N1	15.32	120.45	108.20
1	N	1432	G	P-O3'-C3'	15.31	138.08	119.70
1	N	1437	A	C8-N9-C4	-15.31	99.68	105.80
1	N	991	U	P-O3'-C3'	15.30	138.06	119.70
1	N	1202	U	O4'-C1'-N1	15.28	120.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	494	G	N1-C6-O6	15.27	129.06	119.90
1	N	586	C	N3-C4-C5	-15.26	115.80	121.90
1	N	938	A	N1-C6-N6	15.24	127.74	118.60
1	N	1338	G	P-O3'-C3'	15.23	137.98	119.70
1	N	860	A	N1-C6-N6	15.23	127.74	118.60
1	N	432	A	N1-C6-N6	15.22	127.73	118.60
1	N	1252	A	N1-C6-N6	15.21	127.72	118.60
1	N	303	A	N1-C6-N6	15.20	127.72	118.60
1	N	668	G	C5-C6-O6	-15.19	119.48	128.60
1	N	1442	G	C5-C6-O6	-15.19	119.48	128.60
1	N	327	A	P-O3'-C3'	15.19	137.92	119.70
1	N	1501	C	O4'-C1'-N1	15.16	120.33	108.20
1	N	195	A	N9-C4-C5	15.15	111.86	105.80
1	N	752	G	N1-C6-O6	15.15	128.99	119.90
1	N	616	G	N1-C6-O6	15.14	128.98	119.90
1	N	1355	G	N1-C6-O6	15.13	128.98	119.90
1	N	389	A	N1-C6-N6	15.13	127.68	118.60
1	N	714	G	C5-C6-O6	-15.12	119.53	128.60
1	N	318	G	N1-C6-O6	15.12	128.97	119.90
1	N	1184	G	C5-C6-O6	-15.11	119.54	128.60
1	N	829	G	N1-C6-O6	15.10	128.96	119.90
1	N	1050	G	C5-C6-O6	-15.10	119.54	128.60
1	N	61	G	N1-C6-O6	15.10	128.96	119.90
1	N	913	A	P-O3'-C3'	15.06	137.77	119.70
1	N	384	G	N1-C6-O6	15.03	128.92	119.90
1	N	523	A	N1-C6-N6	15.03	127.62	118.60
1	N	1219	A	C4-C5-C6	15.01	124.51	117.00
1	N	749	A	C4-C5-C6	15.00	124.50	117.00
1	N	288	A	C5-C6-N6	-15.00	111.70	123.70
1	N	39	G	C5-C6-O6	-14.98	119.61	128.60
1	N	639	G	N1-C6-O6	14.98	128.89	119.90
1	N	1453	G	N1-C6-O6	14.98	128.89	119.90
1	N	790	A	C5-C6-N6	-14.97	111.72	123.70
1	N	1096	C	N3-C4-C5	-14.96	115.92	121.90
1	N	81	A	O4'-C1'-N9	14.95	120.16	108.20
1	N	1334	G	C5-C6-O6	-14.95	119.63	128.60
1	N	1124	G	N1-C6-O6	14.93	128.86	119.90
1	N	723	U	O4'-C1'-N1	14.93	120.14	108.20
1	N	32	A	N1-C6-N6	14.92	127.55	118.60
1	N	922	G	C5-C6-O6	-14.92	119.65	128.60
1	N	396	C	N3-C4-C5	-14.90	115.94	121.90
1	N	1353	G	C5-C6-O6	-14.89	119.67	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1206	G	N1-C6-O6	14.89	128.83	119.90
1	N	3	A	N1-C6-N6	14.89	127.53	118.60
1	N	447	G	C5-C6-O6	-14.88	119.67	128.60
1	N	80	A	N1-C6-N6	14.86	127.52	118.60
1	N	773	G	N1-C2-N3	-14.86	114.98	123.90
1	N	1484	C	N3-C4-C5	-14.84	115.97	121.90
1	N	195	A	N1-C2-N3	14.80	136.70	129.30
1	N	254	G	N1-C6-O6	14.80	128.78	119.90
1	N	522	C	O4'-C1'-N1	14.79	120.03	108.20
1	N	1417	G	C5-C6-O6	-14.79	119.73	128.60
1	N	1437	A	N9-C4-C5	14.77	111.71	105.80
1	N	1097	C	O4'-C1'-N1	14.76	120.01	108.20
1	N	1274	A	N1-C6-N6	14.76	127.45	118.60
1	N	555	U	P-O3'-C3'	14.75	137.40	119.70
1	N	327	A	N1-C6-N6	14.75	127.45	118.60
1	N	266	G	P-O3'-C3'	14.73	137.38	119.70
1	N	1326	U	N3-C2-O2	14.73	132.51	122.20
1	N	1384	C	N3-C4-N4	14.73	128.31	118.00
1	N	715	A	O4'-C1'-N9	14.72	119.98	108.20
1	N	604	G	C5-C6-N1	-14.72	104.14	111.50
1	N	1197	A	N1-C6-N6	14.72	127.43	118.60
1	N	1287	A	N1-C6-N6	14.71	127.42	118.60
1	N	453	G	C5-C6-O6	-14.68	119.79	128.60
1	N	116	A	C5-C6-N6	-14.68	111.96	123.70
1	N	448	A	C4-C5-C6	14.66	124.33	117.00
1	N	732	C	N3-C4-C5	-14.65	116.04	121.90
1	N	1031	C	N3-C4-N4	14.61	128.23	118.00
1	N	1439	G	N1-C6-O6	14.59	128.66	119.90
1	N	666	G	N1-C6-O6	14.59	128.65	119.90
1	N	968	A	C5-C6-N1	-14.56	110.42	117.70
1	N	1403	C	O4'-C1'-N1	14.56	119.84	108.20
1	N	539	A	N1-C6-N6	14.55	127.33	118.60
1	N	688	G	N1-C6-O6	14.54	128.62	119.90
1	N	1161	C	N3-C4-N4	14.53	128.17	118.00
1	N	168	G	C8-N9-C4	14.52	112.21	106.40
1	N	667	G	C5-C6-O6	-14.52	119.89	128.60
1	N	926	G	P-O3'-C3'	14.52	137.12	119.70
1	N	1336	C	O4'-C1'-N1	14.51	119.81	108.20
1	N	1428	A	N1-C6-N6	14.50	127.30	118.60
1	N	1166	G	N1-C6-O6	14.49	128.59	119.90
1	N	1455	G	C5-C6-O6	-14.49	119.91	128.60
1	N	974	A	C5-C6-N1	-14.48	110.46	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	438	U	O4'-C1'-N1	14.48	119.78	108.20
1	N	802	A	N1-C6-N6	14.47	127.28	118.60
1	N	1133	G	C5-C6-O6	-14.46	119.92	128.60
1	N	814	A	N1-C6-N6	14.45	127.27	118.60
1	N	1225	A	C5-C6-N1	-14.44	110.48	117.70
1	N	975	A	N1-C6-N6	14.43	127.26	118.60
1	N	435	A	N1-C6-N6	14.43	127.26	118.60
1	N	92	U	O4'-C1'-N1	14.43	119.74	108.20
1	N	1413	A	N1-C6-N6	14.42	127.25	118.60
1	N	226	G	C6-C5-N7	-14.41	121.75	130.40
1	N	539	A	C5-C6-N1	-14.40	110.50	117.70
1	N	295	C	O4'-C1'-N1	14.39	119.71	108.20
1	N	180	U	C5-C4-O4	-14.38	117.27	125.90
1	N	724	G	C5-C6-O6	-14.36	119.98	128.60
1	N	410	G	C5-C6-O6	-14.36	119.98	128.60
1	N	907	A	N1-C6-N6	14.36	127.22	118.60
1	N	1423	G	N1-C6-O6	14.36	128.51	119.90
1	N	1319	A	P-O3'-C3'	14.35	136.92	119.70
1	N	1423	G	C5-C6-O6	-14.34	119.99	128.60
1	N	376	G	N1-C6-O6	14.34	128.50	119.90
1	N	1480	A	N1-C6-N6	14.34	127.20	118.60
1	N	455	G	N1-C6-O6	14.33	128.50	119.90
1	N	713	G	N7-C8-N9	14.33	120.26	113.10
1	N	749	A	C6-C5-N7	-14.33	122.27	132.30
1	N	61	G	C5-C6-O6	-14.32	120.01	128.60
1	N	1128	C	N3-C4-C5	-14.31	116.18	121.90
1	N	1032	G	N1-C6-O6	14.30	128.48	119.90
1	N	1503	A	C5-C6-N1	-14.30	110.55	117.70
1	N	1121	U	O4'-C1'-N1	14.29	119.63	108.20
1	N	832	G	C5-C6-O6	-14.27	120.04	128.60
1	N	1034	G	N1-C6-O6	14.26	128.46	119.90
1	N	1236	A	C5-C6-N6	-14.26	112.29	123.70
1	N	765	G	C5-C6-O6	-14.26	120.05	128.60
1	N	1435	G	N3-C2-N2	14.24	129.87	119.90
1	N	1508	A	N1-C6-N6	14.23	127.14	118.60
1	N	509	A	N1-C6-N6	14.23	127.14	118.60
1	N	431	A	C4-C5-C6	14.21	124.11	117.00
1	N	949	A	N1-C6-N6	14.21	127.12	118.60
1	N	1064	G	O4'-C1'-N9	14.21	119.57	108.20
1	N	263	A	O4'-C1'-N9	14.20	119.56	108.20
1	N	1348	U	O4'-C1'-N1	14.18	119.54	108.20
1	N	979	C	N3-C4-N4	14.16	127.91	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1034	G	C5-C6-O6	-14.14	120.11	128.60
1	N	1141	C	N3-C4-C5	-14.14	116.24	121.90
1	N	829	G	C5-C6-O6	-14.13	120.12	128.60
1	N	187	G	N1-C6-O6	14.11	128.37	119.90
1	N	1306	A	N1-C6-N6	14.11	127.07	118.60
1	N	962	C	N3-C4-N4	14.11	127.88	118.00
1	N	1072	G	N1-C6-O6	14.11	128.36	119.90
1	N	529	G	N1-C6-O6	14.09	128.35	119.90
1	N	324	G	N1-C6-O6	14.09	128.35	119.90
1	N	371	A	N1-C6-N6	14.09	127.05	118.60
1	N	606	G	C5-C6-N1	-14.08	104.46	111.50
1	N	1274	A	O4'-C1'-N9	14.08	119.46	108.20
1	N	601	G	N1-C6-O6	14.08	128.35	119.90
1	N	1371	G	N1-C6-O6	14.07	128.34	119.90
1	N	1265	C	N3-C4-C5	-14.05	116.28	121.90
1	N	795	C	N3-C4-C5	-14.04	116.29	121.90
1	N	285	C	O4'-C1'-N1	14.02	119.42	108.20
1	N	535	A	P-O3'-C3'	14.02	136.53	119.70
1	N	364	A	N1-C6-N6	14.01	127.01	118.60
1	N	683	G	C5-C6-O6	-14.01	120.19	128.60
1	N	1360	A	N1-C6-N6	14.00	127.00	118.60
1	N	1125	U	P-O3'-C3'	13.99	136.49	119.70
1	N	994	A	N1-C6-N6	13.98	126.99	118.60
1	N	184	G	P-O5'-C5'	13.98	143.27	120.90
1	N	1005	A	N1-C6-N6	13.98	126.99	118.60
1	N	194	C	N3-C4-N4	13.97	127.78	118.00
1	N	35	G	C5-C6-O6	-13.94	120.23	128.60
1	N	60	A	P-O3'-C3'	13.94	136.43	119.70
1	N	223	A	C5-C6-N6	-13.94	112.55	123.70
1	N	77	A	C5-C6-N6	-13.94	112.55	123.70
1	N	120	A	O4'-C1'-N9	13.93	119.34	108.20
1	N	1138	G	N1-C6-O6	13.92	128.25	119.90
1	N	626	G	C8-N9-C4	-13.91	100.83	106.40
1	N	756	C	O4'-C1'-N1	13.91	119.33	108.20
1	N	891	U	O4'-C1'-N1	13.91	119.33	108.20
1	N	722	G	N1-C6-O6	13.90	128.24	119.90
1	N	694	A	N1-C6-N6	13.90	126.94	118.60
1	N	175	C	C6-N1-C2	-13.90	114.74	120.30
1	N	380	G	N9-C4-C5	13.89	110.96	105.40
1	N	168	G	C5-C6-O6	-13.89	120.27	128.60
1	N	704	A	O4'-C1'-N9	13.89	119.31	108.20
1	N	1150	A	O4'-C1'-N9	13.88	119.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	691	G	C5-C6-O6	-13.85	120.29	128.60
1	N	255	G	N1-C6-O6	13.84	128.21	119.90
1	N	996	A	C8-N9-C4	-13.84	100.26	105.80
1	N	496	A	C5-N7-C8	13.83	110.81	103.90
1	N	457	G	C5-C6-O6	-13.82	120.31	128.60
1	N	908	A	N1-C6-N6	13.81	126.89	118.60
1	N	847	G	C5-C6-O6	-13.81	120.31	128.60
1	N	538	G	N1-C6-O6	13.81	128.19	119.90
1	N	705	G	N1-C6-O6	13.81	128.19	119.90
1	N	31	G	C5-C6-O6	-13.80	120.32	128.60
1	N	613	C	N3-C4-N4	13.80	127.66	118.00
1	N	861	G	C5-C6-O6	-13.79	120.32	128.60
1	N	16	A	N1-C6-N6	13.78	126.87	118.60
1	N	877	G	C5-C6-O6	-13.78	120.33	128.60
1	N	547	A	N1-C2-N3	13.78	136.19	129.30
1	N	785	G	C5-C6-O6	-13.77	120.33	128.60
1	N	263	A	N1-C6-N6	13.76	126.86	118.60
1	N	1331	G	P-O3'-C3'	13.76	136.21	119.70
1	N	1265	C	O4'-C1'-N1	13.76	119.20	108.20
1	N	1114	C	C4-C5-C6	13.74	124.27	117.40
1	N	1263	C	N3-C4-C5	-13.74	116.40	121.90
1	N	1254	A	C2-N3-C4	13.74	117.47	110.60
1	N	1454	G	N1-C6-O6	13.72	128.13	119.90
1	N	378	G	C5-C6-O6	-13.71	120.38	128.60
1	N	575	G	P-O3'-C3'	13.71	136.15	119.70
1	N	629	A	N1-C6-N6	13.70	126.82	118.60
1	N	780	A	C5-C6-N1	-13.69	110.85	117.70
1	N	764	C	N3-C4-N4	13.69	127.58	118.00
1	N	1240	U	N3-C2-O2	13.69	131.78	122.20
1	N	784	A	N1-C6-N6	13.67	126.80	118.60
1	N	1093	A	C4-C5-C6	13.66	123.83	117.00
1	N	302	G	C5-C6-O6	-13.66	120.40	128.60
1	N	468	A	C5-C6-N6	-13.66	112.78	123.70
1	N	1124	G	C5-C6-O6	-13.65	120.41	128.60
1	N	504	C	O4'-C1'-N1	13.64	119.11	108.20
1	N	515	G	N1-C6-O6	13.63	128.08	119.90
1	N	384	G	C5-C6-O6	-13.63	120.42	128.60
1	N	1285	A	P-O3'-C3'	13.63	136.05	119.70
1	N	568	G	N1-C6-O6	13.62	128.07	119.90
1	N	1432	G	C5-C6-O6	-13.62	120.43	128.60
1	N	1114	C	N3-C4-C5	-13.62	116.45	121.90
1	N	1084	G	N3-C2-N2	13.61	129.43	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1459	G	N1-C6-O6	13.61	128.07	119.90
1	N	176	C	O4'-C1'-N1	13.61	119.09	108.20
1	N	1482	G	C6-C5-N7	-13.60	122.24	130.40
1	N	1386	G	C5-C6-O6	-13.59	120.44	128.60
1	N	438	U	C5-C6-N1	13.59	129.49	122.70
1	N	683	G	N1-C6-O6	13.57	128.04	119.90
1	N	1161	C	C5-C4-N4	-13.56	110.70	120.20
1	N	666	G	C5-C6-O6	-13.56	120.46	128.60
1	N	1120	C	N3-C4-C5	-13.56	116.47	121.90
1	N	1327	C	N3-C4-N4	13.56	127.49	118.00
1	N	778	G	C2-N3-C4	-13.55	105.12	111.90
1	N	1340	A	N1-C6-N6	13.55	126.73	118.60
1	N	847	G	N1-C6-O6	13.54	128.03	119.90
1	N	681	A	N1-C6-N6	13.54	126.72	118.60
1	N	53	A	N1-C6-N6	13.54	126.72	118.60
1	N	415	A	N1-C6-N6	13.54	126.72	118.60
1	N	794	A	O4'-C1'-N9	13.54	119.03	108.20
1	N	115	G	P-O3'-C3'	13.52	135.92	119.70
1	N	1320	C	C6-N1-C2	-13.52	114.89	120.30
1	N	702	A	C5-C6-N6	-13.51	112.89	123.70
1	N	276	G	N1-C6-O6	13.50	128.00	119.90
1	N	95	C	O4'-C1'-N1	13.50	119.00	108.20
1	N	203	G	O4'-C1'-N9	13.49	119.00	108.20
1	N	1152	A	N1-C6-N6	13.49	126.70	118.60
1	N	1384	C	C5-C4-N4	-13.49	110.76	120.20
1	N	194	C	N3-C4-C5	-13.49	116.50	121.90
1	N	134	G	N1-C6-O6	13.48	127.99	119.90
1	N	1401	G	C5-C6-O6	-13.48	120.51	128.60
1	N	1374	A	O4'-C1'-N9	13.45	118.96	108.20
1	N	73	C	O4'-C1'-N1	13.44	118.95	108.20
1	N	1241	G	N1-C6-O6	13.44	127.96	119.90
1	N	1419	G	N1-C6-O6	13.43	127.96	119.90
1	N	453	G	N1-C6-O6	13.42	127.95	119.90
1	N	515	G	C5-C6-O6	-13.42	120.55	128.60
1	N	120	A	P-O3'-C3'	13.41	135.79	119.70
1	N	126	G	O4'-C1'-N9	13.40	118.92	108.20
1	N	1222	G	N1-C6-O6	13.39	127.94	119.90
1	N	1037	C	O4'-C1'-N1	13.39	118.91	108.20
1	N	234	C	C6-N1-C2	-13.38	114.95	120.30
1	N	896	C	O4'-C1'-N1	13.38	118.91	108.20
1	N	1273	C	C5-C4-N4	-13.38	110.83	120.20
1	N	641	U	P-O3'-C3'	13.38	135.75	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	94	G	C5-C6-O6	-13.36	120.59	128.60
1	N	556	C	C6-N1-C2	-13.35	114.96	120.30
1	N	1025	U	N1-C2-N3	-13.35	106.89	114.90
1	N	1482	G	C4-C5-C6	13.34	126.80	118.80
1	N	170	U	C5-C4-O4	-13.33	117.90	125.90
1	N	1433	A	N1-C6-N6	13.33	126.60	118.60
1	N	1482	G	C8-N9-C4	-13.32	101.07	106.40
1	N	1502	A	N1-C6-N6	13.32	126.59	118.60
1	N	527	G	C5-C6-O6	-13.32	120.61	128.60
1	N	648	A	N1-C6-N6	13.31	126.59	118.60
1	N	1333	A	C2-N3-C4	13.31	117.26	110.60
1	N	1442	G	N1-C6-O6	13.31	127.89	119.90
1	N	403	C	N3-C4-C5	-13.31	116.58	121.90
1	N	1172	C	O4'-C1'-N1	13.29	118.83	108.20
1	N	894	G	C8-N9-C4	-13.29	101.08	106.40
1	N	639	G	C5-C6-O6	-13.28	120.63	128.60
1	N	902	G	C5-C6-O6	-13.28	120.63	128.60
1	N	531	U	O4'-C1'-N1	13.28	118.83	108.20
1	N	732	C	N3-C4-N4	13.28	127.29	118.00
1	N	570	G	C5-C6-O6	-13.27	120.64	128.60
1	N	967	C	N3-C4-C5	-13.26	116.59	121.90
1	N	1327	C	C6-N1-C2	-13.26	115.00	120.30
1	N	937	A	C5-C6-N1	-13.26	111.07	117.70
1	N	112	G	N1-C6-O6	13.25	127.85	119.90
1	N	588	G	C5-N7-C8	13.24	110.92	104.30
1	N	690	G	C5-C6-O6	-13.23	120.66	128.60
1	N	1201	A	N1-C6-N6	13.23	126.53	118.60
1	N	1458	G	N1-C6-O6	13.22	127.83	119.90
1	N	1039	G	N1-C6-O6	13.21	127.83	119.90
1	N	706	A	N1-C6-N6	13.20	126.52	118.60
1	N	885	G	N1-C6-O6	13.21	127.82	119.90
1	N	691	G	N1-C6-O6	13.20	127.82	119.90
1	N	1024	G	N7-C8-N9	13.20	119.70	113.10
1	N	1140	C	C6-N1-C2	-13.19	115.02	120.30
1	N	15	G	C6-C5-N7	-13.18	122.50	130.40
1	N	1287	A	C5-C6-N1	-13.17	111.11	117.70
1	N	151	A	C4-C5-C6	13.17	123.58	117.00
1	N	509	A	P-O3'-C3'	13.15	135.48	119.70
1	N	779	C	N3-C4-N4	13.15	127.21	118.00
1	N	815	A	P-O3'-C3'	13.14	135.47	119.70
1	N	962	C	N3-C4-C5	-13.14	116.64	121.90
1	N	39	G	C4-C5-N7	13.14	116.06	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	38	G	C2-N3-C4	13.13	118.47	111.90
1	N	1123	U	O4'-C1'-N1	13.13	118.70	108.20
1	N	496	A	N1-C6-N6	13.09	126.46	118.60
1	N	934	C	P-O3'-C3'	13.09	135.41	119.70
1	N	368	U	O4'-C1'-N1	13.09	118.67	108.20
1	N	838	G	C5-C6-O6	-13.08	120.75	128.60
1	N	508	U	C6-N1-C2	-13.07	113.16	121.00
1	N	777	A	N1-C6-N6	13.07	126.44	118.60
1	N	58	C	N3-C4-C5	-13.06	116.67	121.90
1	N	274	A	P-O3'-C3'	13.06	135.37	119.70
1	N	374	A	O4'-C1'-N9	13.05	118.64	108.20
1	N	505	G	C5-C6-O6	-13.05	120.77	128.60
1	N	579	A	N1-C6-N6	13.06	126.43	118.60
1	N	316	C	N3-C4-N4	13.04	127.13	118.00
1	N	873	A	C2-N3-C4	-13.03	104.08	110.60
1	N	1428	A	C5-C6-N1	-13.03	111.19	117.70
1	N	1422	G	N1-C6-O6	13.03	127.72	119.90
1	N	1100	C	C6-N1-C2	-13.02	115.09	120.30
1	N	1531	A	N1-C6-N6	13.01	126.41	118.60
1	N	195	A	C4-C5-N7	-13.01	104.20	110.70
1	N	1036	A	C5-C6-N6	-13.01	113.29	123.70
1	N	1243	C	N3-C4-C5	-13.00	116.70	121.90
1	N	827	U	C5-C6-N1	13.00	129.20	122.70
1	N	596	A	N1-C6-N6	12.99	126.40	118.60
1	N	134	G	C4-C5-N7	-12.98	105.61	110.80
1	N	1258	G	N1-C6-O6	12.98	127.69	119.90
1	N	634	C	N3-C4-N4	12.98	127.08	118.00
1	N	1505	G	C5-C6-O6	-12.97	120.82	128.60
1	N	918	A	C5-C6-N1	-12.97	111.21	117.70
1	N	47	C	O4'-C1'-N1	12.96	118.56	108.20
1	N	233	C	O4'-C1'-N1	12.95	118.56	108.20
1	N	143	A	O4'-C1'-N9	12.94	118.55	108.20
1	N	53	A	C5-C6-N1	-12.93	111.23	117.70
1	N	645	G	N1-C6-O6	12.93	127.66	119.90
1	N	467	U	O4'-C1'-N1	12.92	118.54	108.20
1	N	661	G	O4'-C1'-N9	12.92	118.54	108.20
1	N	1517	G	N1-C6-O6	12.92	127.65	119.90
1	N	1296	C	N3-C4-C5	-12.92	116.73	121.90
1	N	85	U	O4'-C1'-N1	12.91	118.53	108.20
1	N	761	G	C5-C6-O6	-12.91	120.85	128.60
1	N	894	G	C5-C6-O6	-12.90	120.86	128.60
1	N	315	A	P-O5'-C5'	12.90	141.53	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1120	C	O4'-C1'-N1	12.89	118.51	108.20
1	N	1248	A	C5-C6-N6	-12.89	113.39	123.70
1	N	1265	C	N3-C4-N4	12.89	127.02	118.00
1	N	119	A	C5-N7-C8	12.89	110.34	103.90
1	N	1255	G	N1-C6-O6	12.88	127.63	119.90
1	N	1374	A	C4-C5-C6	12.88	123.44	117.00
1	N	566	G	P-O3'-C3'	12.88	135.16	119.70
1	N	1144	G	P-O3'-C3'	12.87	135.14	119.70
1	N	713	G	C5-N7-C8	-12.86	97.87	104.30
1	N	1206	G	N7-C8-N9	12.86	119.53	113.10
1	N	130	A	C5-C6-N6	-12.83	113.44	123.70
1	N	261	U	O4'-C1'-N1	12.83	118.46	108.20
1	N	45	G	O4'-C1'-N9	12.82	118.46	108.20
1	N	1000	A	N1-C6-N6	12.82	126.29	118.60
1	N	508	U	P-O3'-C3'	12.82	135.08	119.70
1	N	1113	C	N3-C4-C5	-12.82	116.77	121.90
1	N	1375	A	N1-C6-N6	12.82	126.29	118.60
1	N	39	G	N1-C6-O6	12.81	127.59	119.90
1	N	527	G	N1-C6-O6	12.81	127.59	119.90
1	N	676	A	N1-C6-N6	12.81	126.29	118.60
1	N	1120	C	C2-N3-C4	12.81	126.30	119.90
1	N	99	C	C6-N1-C2	-12.80	115.18	120.30
1	N	705	G	C5-C6-O6	-12.80	120.92	128.60
1	N	39	G	N9-C4-C5	-12.80	100.28	105.40
1	N	984	C	O4'-C1'-N1	12.79	118.43	108.20
1	N	109	A	P-O3'-C3'	12.79	135.05	119.70
1	N	1093	A	C5-C6-N1	-12.79	111.31	117.70
1	N	1213	A	N1-C6-N6	12.79	126.27	118.60
1	N	1251	A	N1-C6-N6	12.78	126.27	118.60
1	N	710	G	N1-C6-O6	12.78	127.57	119.90
1	N	1139	G	P-O3'-C3'	12.78	135.03	119.70
1	N	502	A	N1-C6-N6	12.77	126.26	118.60
1	N	380	G	C8-N9-C1'	12.77	143.59	127.00
1	N	1522	U	O4'-C1'-N1	12.77	118.41	108.20
1	N	573	A	N1-C6-N6	12.76	126.26	118.60
1	N	1217	C	N3-C4-N4	12.76	126.94	118.00
1	N	833	G	C5-C6-O6	-12.76	120.94	128.60
1	N	1502	A	C5-C6-N1	-12.75	111.32	117.70
1	N	1359	C	C6-N1-C2	-12.75	115.20	120.30
1	N	84	U	O4'-C1'-N1	12.73	118.38	108.20
1	N	1047	G	N9-C4-C5	-12.72	100.31	105.40
1	N	1442	G	C8-N9-C4	-12.72	101.31	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	537	G	C5-C6-O6	-12.72	120.97	128.60
1	N	538	G	N1-C2-N3	-12.71	116.27	123.90
1	N	1179	A	C5-C6-N6	-12.70	113.54	123.70
1	N	1263	C	N3-C4-N4	12.69	126.89	118.00
1	N	274	A	N1-C6-N6	12.69	126.21	118.60
1	N	635	A	N1-C6-N6	12.69	126.21	118.60
1	N	1356	G	N1-C6-O6	12.69	127.51	119.90
1	N	145	G	N1-C6-O6	12.69	127.51	119.90
1	N	1499	A	C4-C5-C6	12.69	123.34	117.00
1	N	546	A	O4'-C1'-N9	12.68	118.34	108.20
1	N	792	A	P-O3'-C3'	12.68	134.91	119.70
1	N	1367	C	N3-C4-C5	-12.68	116.83	121.90
1	N	237	G	N1-C6-O6	12.67	127.50	119.90
1	N	1099	G	N1-C6-O6	12.67	127.50	119.90
1	N	1517	G	C5-C6-O6	-12.67	121.00	128.60
1	N	206	C	O4'-C1'-N1	12.67	118.34	108.20
1	N	334	C	O4'-C1'-N1	12.66	118.33	108.20
1	N	1340	A	C5-C6-N1	-12.65	111.38	117.70
1	N	78	A	N1-C6-N6	12.65	126.19	118.60
1	N	110	C	N3-C4-C5	-12.65	116.84	121.90
1	N	1074	G	C5-C6-O6	-12.65	121.01	128.60
1	N	148	G	C5-C6-O6	-12.64	121.01	128.60
1	N	780	A	C4-C5-C6	12.64	123.32	117.00
1	N	831	A	C4-C5-C6	12.64	123.32	117.00
1	N	1304	G	C2-N3-C4	12.64	118.22	111.90
1	N	1207	G	N7-C8-N9	-12.63	106.78	113.10
1	N	931	C	O4'-C1'-N1	12.62	118.30	108.20
1	N	1316	G	P-O3'-C3'	12.62	134.85	119.70
1	N	510	A	C5-C6-N1	-12.61	111.39	117.70
1	N	601	G	C5-C6-O6	-12.61	121.03	128.60
1	N	1239	A	N1-C6-N6	12.61	126.17	118.60
1	N	793	U	P-O3'-C3'	12.61	134.83	119.70
1	N	1232	U	O4'-C1'-N1	12.61	118.29	108.20
1	N	1265	C	C5-C6-N1	12.61	127.31	121.00
1	N	900	A	C2-N3-C4	-12.61	104.30	110.60
1	N	1409	C	N3-C4-C5	-12.60	116.86	121.90
1	N	695	A	N1-C6-N6	12.60	126.16	118.60
1	N	31	G	N1-C6-O6	12.59	127.46	119.90
1	N	1452	C	N3-C4-N4	12.59	126.81	118.00
1	N	554	A	N1-C6-N6	12.58	126.15	118.60
1	N	363	A	N1-C6-N6	12.58	126.15	118.60
1	N	1227	A	N1-C6-N6	12.57	126.14	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	21	G	C8-N9-C4	-12.57	101.37	106.40
1	N	752	G	O4'-C1'-N9	12.57	118.26	108.20
1	N	1518	A	C8-N9-C4	-12.57	100.77	105.80
1	N	263	A	C5-C6-N1	-12.57	111.42	117.70
1	N	1068	G	C5-C6-O6	-12.57	121.06	128.60
1	N	1350	A	C4-C5-C6	12.56	123.28	117.00
1	N	743	A	N9-C4-C5	12.55	110.82	105.80
1	N	71	A	C5-C6-N1	-12.54	111.43	117.70
1	N	1393	U	O4'-C1'-N1	12.53	118.23	108.20
1	N	797	C	N3-C4-C5	-12.53	116.89	121.90
1	N	531	U	C5-C4-O4	-12.53	118.39	125.90
1	N	566	G	N1-C6-O6	12.53	127.42	119.90
1	N	604	G	N1-C6-O6	12.52	127.41	119.90
1	N	970	C	N3-C4-C5	-12.52	116.89	121.90
1	N	393	A	C4-C5-C6	12.52	123.26	117.00
1	N	1216	A	O4'-C1'-N9	12.51	118.21	108.20
1	N	174	A	C4-C5-C6	12.51	123.25	117.00
1	N	414	A	N1-C2-N3	-12.51	123.05	129.30
1	N	806	C	N3-C4-C5	-12.51	116.90	121.90
1	N	1486	G	C5-C6-O6	-12.51	121.10	128.60
1	N	226	G	C4-C5-C6	12.50	126.30	118.80
1	N	174	A	C5-N7-C8	12.50	110.15	103.90
1	N	553	A	N1-C6-N6	12.50	126.10	118.60
1	N	818	G	N1-C2-N3	-12.50	116.40	123.90
1	N	670	G	C5-C6-N1	-12.49	105.25	111.50
1	N	933	G	C5-C6-O6	-12.49	121.11	128.60
1	N	422	C	P-O3'-C3'	12.49	134.68	119.70
1	N	766	A	N1-C6-N6	12.49	126.09	118.60
1	N	1386	G	N1-C6-O6	12.49	127.39	119.90
1	N	1292	G	N1-C6-O6	12.47	127.38	119.90
1	N	1026	G	N1-C6-O6	12.47	127.38	119.90
1	N	1470	U	O4'-C1'-N1	12.47	118.17	108.20
1	N	1495	U	O4'-C1'-N1	12.47	118.18	108.20
1	N	1400	C	C6-N1-C2	12.47	125.29	120.30
1	N	1013	G	C5-C6-O6	-12.46	121.12	128.60
1	N	1238	A	N1-C6-N6	12.44	126.07	118.60
1	N	900	A	N1-C6-N6	12.44	126.06	118.60
1	N	1524	C	O4'-C1'-N1	12.44	118.15	108.20
1	N	694	A	C4-C5-C6	12.44	123.22	117.00
1	N	1249	C	C6-N1-C2	-12.44	115.32	120.30
1	N	1209	C	N3-C4-N4	12.44	126.70	118.00
1	N	1466	C	C6-N1-C2	-12.43	115.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1244	G	O4'-C1'-N9	12.43	118.14	108.20
1	N	1068	G	N1-C6-O6	12.43	127.36	119.90
1	N	226	G	C5-C6-N1	-12.42	105.29	111.50
1	N	655	A	N1-C6-N6	12.42	126.05	118.60
1	N	761	G	N1-C6-O6	12.42	127.35	119.90
1	N	649	A	C4-C5-C6	12.42	123.21	117.00
1	N	566	G	N3-C2-N2	12.41	128.59	119.90
1	N	1402	C	O4'-C1'-N1	12.41	118.13	108.20
1	N	706	A	C8-N9-C4	-12.41	100.84	105.80
1	N	225	C	N3-C4-N4	12.40	126.68	118.00
1	N	275	G	C5-C6-O6	-12.40	121.16	128.60
1	N	1098	C	O4'-C1'-N1	12.40	118.12	108.20
1	N	1374	A	C6-C5-N7	-12.40	123.62	132.30
1	N	688	G	N3-C4-C5	-12.39	122.41	128.60
1	N	262	A	N1-C6-N6	12.39	126.03	118.60
1	N	880	C	O4'-C1'-N1	12.38	118.11	108.20
1	N	725	G	N1-C6-O6	12.37	127.32	119.90
1	N	825	A	C4-C5-C6	12.36	123.18	117.00
1	N	1519	A	C8-N9-C4	-12.36	100.86	105.80
1	N	825	A	N1-C6-N6	12.36	126.02	118.60
1	N	275	G	C4-C5-N7	12.35	115.74	110.80
1	N	1032	G	C5-C6-O6	-12.35	121.19	128.60
1	N	164	G	N1-C6-O6	12.35	127.31	119.90
1	N	673	A	C5-C6-N1	-12.35	111.53	117.70
1	N	753	A	N1-C2-N3	12.35	135.47	129.30
1	N	776	G	C5-C6-O6	-12.35	121.19	128.60
1	N	1120	C	C5-C6-N1	12.35	127.17	121.00
1	N	1241	G	C6-C5-N7	-12.35	122.99	130.40
1	N	1180	A	N1-C6-N6	12.33	126.00	118.60
1	N	1493	A	C4-C5-C6	12.33	123.16	117.00
1	N	747	A	N1-C6-N6	12.32	125.99	118.60
1	N	595	A	C5-C6-N6	-12.31	113.85	123.70
1	N	1081	A	N1-C6-N6	12.31	125.99	118.60
1	N	1362	A	N1-C6-N6	12.31	125.99	118.60
1	N	1398	A	C5-C6-N1	-12.31	111.55	117.70
1	N	852	G	N1-C2-N3	-12.30	116.52	123.90
1	N	1005	A	C4-C5-C6	12.30	123.15	117.00
1	N	83	C	N3-C4-C5	-12.29	116.98	121.90
1	N	940	C	N3-C4-C5	-12.29	116.98	121.90
1	N	373	A	C5-C6-N6	-12.29	113.87	123.70
1	N	775	G	O4'-C1'-N9	12.29	118.03	108.20
1	N	324	G	C5-C6-O6	-12.29	121.23	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	576	C	N3-C4-C5	-12.29	116.98	121.90
1	N	690	G	N1-C6-O6	12.29	127.27	119.90
1	N	688	G	C6-C5-N7	-12.28	123.03	130.40
1	N	1185	G	N9-C4-C5	12.28	110.31	105.40
1	N	1244	G	N1-C6-O6	12.28	127.27	119.90
1	N	878	A	N1-C6-N6	12.28	125.97	118.60
1	N	1459	G	C5-C6-O6	-12.28	121.23	128.60
1	N	1139	G	C5-C6-O6	-12.28	121.23	128.60
1	N	895	G	P-O5'-C5'	12.27	140.54	120.90
1	N	1199	U	N1-C2-O2	-12.27	114.21	122.80
1	N	1031	C	N3-C4-C5	-12.27	116.99	121.90
1	N	383	A	N1-C6-N6	12.27	125.96	118.60
1	N	835	U	O4'-C1'-N1	12.26	118.01	108.20
1	N	306	A	N1-C2-N3	12.26	135.43	129.30
1	N	235	C	O4'-C1'-N1	12.26	118.01	108.20
1	N	657	U	C5-C4-O4	-12.24	118.55	125.90
1	N	1041	G	N1-C6-O6	12.24	127.25	119.90
1	N	1422	G	C5-C6-N1	-12.24	105.38	111.50
1	N	885	G	C6-C5-N7	-12.24	123.06	130.40
1	N	689	C	C5-C6-N1	12.23	127.11	121.00
1	N	1074	G	C2-N3-C4	12.23	118.01	111.90
1	N	510	A	N1-C6-N6	12.23	125.94	118.60
1	N	751	U	C5-C6-N1	12.22	128.81	122.70
1	N	1094	G	P-O3'-C3'	12.22	134.37	119.70
1	N	329	A	N1-C6-N6	12.22	125.93	118.60
1	N	968	A	C4-C5-C6	12.22	123.11	117.00
1	N	802	A	P-O3'-C3'	12.21	134.35	119.70
1	N	1468	A	N1-C6-N6	12.21	125.93	118.60
1	N	309	A	C5-C6-N1	-12.21	111.60	117.70
1	N	914	A	N1-C6-N6	12.21	125.92	118.60
1	N	818	G	N1-C6-O6	12.20	127.22	119.90
1	N	780	A	C5-C6-N6	-12.20	113.94	123.70
1	N	940	C	O4'-C1'-N1	12.20	117.96	108.20
1	N	33	A	C5-C6-N1	-12.19	111.60	117.70
1	N	1239	A	N1-C2-N3	12.19	135.40	129.30
1	N	1344	C	O4'-C1'-N1	12.19	117.95	108.20
1	N	1496	C	O4'-C1'-N1	12.19	117.95	108.20
1	N	255	G	C5-C6-O6	-12.17	121.30	128.60
1	N	519	C	C2-N3-C4	12.17	125.98	119.90
1	N	1355	G	C5-C6-O6	-12.17	121.30	128.60
1	N	344	A	N1-C6-N6	12.16	125.90	118.60
1	N	526	C	O4'-C1'-N1	12.16	117.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	948	C	N3-C4-C5	-12.16	117.04	121.90
1	N	1006	G	N3-C2-N2	12.16	128.41	119.90
1	N	592	G	C5-C6-O6	-12.15	121.31	128.60
1	N	1276	G	N1-C6-O6	12.15	127.19	119.90
1	N	469	C	N3-C4-N4	12.15	126.51	118.00
1	N	1349	A	N1-C6-N6	12.15	125.89	118.60
1	N	529	G	C5-C6-O6	-12.15	121.31	128.60
1	N	886	G	C5-C6-N1	-12.13	105.43	111.50
1	N	117	G	N7-C8-N9	12.13	119.16	113.10
1	N	879	C	O4'-C1'-N1	12.12	117.90	108.20
1	N	1102	A	C5-C6-N1	-12.12	111.64	117.70
1	N	510	A	N7-C8-N9	-12.12	107.74	113.80
1	N	1250	A	C5-C6-N1	-12.12	111.64	117.70
1	N	207	C	N3-C4-N4	12.11	126.48	118.00
1	N	536	C	O4'-C1'-N1	12.11	117.89	108.20
1	N	746	A	O4'-C1'-N9	12.11	117.89	108.20
1	N	1353	G	N1-C6-O6	12.11	127.17	119.90
1	N	220	G	N3-C2-N2	12.11	128.38	119.90
1	N	316	C	C5'-C4'-C3'	-12.10	96.64	116.00
1	N	1186	G	C5-C6-O6	-12.10	121.34	128.60
1	N	1396	A	C4-C5-C6	12.10	123.05	117.00
1	N	1152	A	O4'-C1'-N9	12.08	117.87	108.20
1	N	1101	A	N1-C2-N3	12.08	135.34	129.30
1	N	1024	G	C5-C6-O6	-12.08	121.35	128.60
1	N	51	A	N1-C6-N6	12.07	125.84	118.60
1	N	498	A	O4'-C1'-N9	12.07	117.86	108.20
1	N	1350	A	C5-C6-N1	-12.07	111.67	117.70
1	N	1245	C	C5-C6-N1	12.06	127.03	121.00
1	N	773	G	N3-C2-N2	12.04	128.33	119.90
1	N	606	G	N1-C6-O6	12.04	127.13	119.90
1	N	519	C	N3-C4-C5	-12.04	117.08	121.90
1	N	1482	G	C5-C6-N1	-12.04	105.48	111.50
1	N	1012	A	N1-C6-N6	12.04	125.82	118.60
1	N	699	C	O4'-C1'-N1	12.04	117.83	108.20
1	N	831	A	N1-C6-N6	12.03	125.82	118.60
1	N	202	G	N1-C6-O6	12.03	127.11	119.90
1	N	1093	A	N1-C6-N6	12.03	125.82	118.60
1	N	290	C	N3-C4-C5	-12.02	117.09	121.90
1	N	278	G	C5-C6-O6	-12.02	121.39	128.60
1	N	963	G	C8-N9-C4	-12.02	101.59	106.40
1	N	81	A	N1-C6-N6	12.01	125.81	118.60
1	N	495	A	O4'-C1'-N9	12.01	117.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1264	U	O4'-C1'-N1	12.01	117.81	108.20
1	N	15	G	N9-C4-C5	-12.00	100.60	105.40
1	N	1382	C	N3-C4-N4	12.00	126.40	118.00
1	N	1498	U	P-O3'-C3'	12.00	134.10	119.70
1	N	1170	A	C4-C5-C6	12.00	123.00	117.00
1	N	281	G	P-O3'-C3'	11.99	134.09	119.70
1	N	423	G	O4'-C1'-N9	11.98	117.79	108.20
1	N	1385	G	C5-C6-O6	-11.98	121.41	128.60
1	N	1087	G	O4'-C1'-N9	11.98	117.78	108.20
1	N	237	G	C5-C6-O6	-11.97	121.42	128.60
1	N	127	G	C8-N9-C4	11.97	111.19	106.40
1	N	1371	G	C5-C6-O6	-11.97	121.42	128.60
1	N	128	G	C5-C6-O6	-11.96	121.42	128.60
1	N	278	G	O4'-C1'-N9	11.96	117.77	108.20
1	N	701	U	N3-C2-O2	11.96	130.57	122.20
1	N	1365	G	O4'-C1'-N9	11.96	117.77	108.20
1	N	132	C	C5-C6-N1	11.96	126.98	121.00
1	N	248	C	N3-C4-C5	-11.96	117.12	121.90
1	N	431	A	N1-C6-N6	11.96	125.77	118.60
1	N	1323	G	C5-C6-O6	-11.95	121.43	128.60
1	N	93	U	P-O5'-C5'	11.95	140.02	120.90
1	N	1482	G	N1-C6-O6	11.95	127.07	119.90
1	N	843	U	O4'-C1'-N1	11.95	117.76	108.20
1	N	573	A	C5-C6-N1	-11.94	111.73	117.70
1	N	1174	G	C5-C6-O6	-11.94	121.44	128.60
1	N	1519	A	C4-C5-C6	11.94	122.97	117.00
1	N	711	G	N1-C6-O6	11.93	127.06	119.90
1	N	382	A	N1-C6-N6	11.93	125.76	118.60
1	N	1088	G	P-O5'-C5'	11.93	139.99	120.90
1	N	385	C	O4'-C1'-N1	11.92	117.74	108.20
1	N	609	A	C5-C6-N6	-11.92	114.16	123.70
1	N	1299	A	N1-C6-N6	11.91	125.75	118.60
1	N	792	A	C5-C6-N1	-11.90	111.75	117.70
1	N	488	C	N3-C4-C5	-11.90	117.14	121.90
1	N	763	G	C8-N9-C4	11.90	111.16	106.40
1	N	1143	G	C6-C5-N7	-11.89	123.26	130.40
1	N	119	A	P-O3'-C3'	11.89	133.97	119.70
1	N	588	G	N7-C8-N9	-11.88	107.16	113.10
1	N	254	G	C5-C6-O6	-11.88	121.47	128.60
1	N	17	U	O4'-C1'-N1	11.87	117.70	108.20
1	N	411	A	N1-C6-N6	11.87	125.72	118.60
1	N	738	C	O4'-C1'-N1	11.86	117.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1141	C	N3-C4-N4	11.86	126.30	118.00
1	N	1288	A	C4-C5-C6	11.85	122.92	117.00
1	N	1488	G	O4'-C1'-N9	11.84	117.67	108.20
1	N	476	U	O4'-C1'-N1	11.83	117.67	108.20
1	N	410	G	N3-C2-N2	11.83	128.18	119.90
1	N	712	A	C5-C6-N6	-11.82	114.24	123.70
1	N	947	G	N1-C6-O6	11.82	126.99	119.90
1	N	319	G	C5-C6-O6	-11.82	121.51	128.60
1	N	286	C	C5-C6-N1	11.81	126.91	121.00
1	N	302	G	O4'-C1'-N9	11.81	117.65	108.20
1	N	470	C	C6-N1-C2	-11.81	115.58	120.30
1	N	1428	A	O4'-C1'-N9	11.80	117.64	108.20
1	N	115	G	C5-C6-O6	-11.80	121.52	128.60
1	N	1433	A	N9-C4-C5	-11.80	101.08	105.80
1	N	1257	A	N1-C6-N6	11.79	125.67	118.60
1	N	559	A	N1-C2-N3	11.78	135.19	129.30
1	N	299	G	O4'-C1'-N9	11.78	117.62	108.20
1	N	179	A	N1-C6-N6	11.78	125.67	118.60
1	N	1030	U	O4'-C1'-N1	11.78	117.62	108.20
1	N	1215	G	N1-C6-O6	11.78	126.97	119.90
1	N	1501	C	N3-C4-C5	-11.77	117.19	121.90
1	N	749	A	N1-C6-N6	11.77	125.66	118.60
1	N	211	G	C5-C6-N1	-11.77	105.62	111.50
1	N	778	G	N1-C6-O6	11.77	126.96	119.90
1	N	827	U	O4'-C1'-N1	11.76	117.61	108.20
1	N	1101	A	N1-C6-N6	11.76	125.66	118.60
1	N	1246	A	C4-C5-C6	11.76	122.88	117.00
1	N	795	C	C4-C5-C6	11.76	123.28	117.40
1	N	374	A	N1-C6-N6	11.76	125.65	118.60
1	N	386	C	O4'-C1'-N1	11.76	117.61	108.20
1	N	443	C	O4'-C1'-N1	11.75	117.60	108.20
1	N	403	C	O4'-C1'-N1	11.75	117.60	108.20
1	N	1429	A	N1-C6-N6	11.75	125.65	118.60
1	N	664	G	N1-C6-O6	11.75	126.95	119.90
1	N	752	G	C5-C6-O6	-11.75	121.55	128.60
1	N	541	G	N1-C6-O6	11.74	126.95	119.90
1	N	1109	C	C6-N1-C2	-11.74	115.60	120.30
1	N	1091	U	O4'-C1'-N1	11.74	117.59	108.20
1	N	973	G	C5-C6-O6	-11.73	121.56	128.60
1	N	405	U	O4'-C1'-N1	11.72	117.58	108.20
1	N	749	A	O4'-C1'-N9	11.72	117.58	108.20
1	N	968	A	C2-N3-C4	-11.72	104.74	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	821	G	N1-C6-O6	11.72	126.93	119.90
1	N	970	C	N3-C4-N4	11.71	126.20	118.00
1	N	470	C	N3-C4-N4	11.71	126.20	118.00
1	N	93	U	P-O3'-C3'	-11.71	105.65	119.70
1	N	1479	C	C6-N1-C2	-11.70	115.62	120.30
1	N	886	G	C6-C5-N7	-11.70	123.38	130.40
1	N	812	G	N1-C6-O6	11.69	126.91	119.90
1	N	652	U	C3'-C2'-C1'	11.69	110.85	101.50
1	N	71	A	C5-N7-C8	11.69	109.74	103.90
1	N	1113	C	C6-N1-C2	-11.69	115.62	120.30
1	N	1519	A	C5-C6-N1	-11.69	111.86	117.70
1	N	309	A	C5-C6-N6	-11.69	114.35	123.70
1	N	763	G	N9-C4-C5	-11.69	100.72	105.40
1	N	397	A	N1-C6-N6	11.68	125.61	118.60
1	N	630	A	C5-C6-N6	-11.68	114.36	123.70
1	N	197	A	P-O3'-C3'	11.68	133.71	119.70
1	N	906	A	O4'-C1'-N9	11.68	117.54	108.20
1	N	1134	G	N1-C6-O6	11.68	126.91	119.90
1	N	1028	C	O4'-C1'-N1	11.68	117.54	108.20
1	N	1344	C	N3-C4-C5	-11.68	117.23	121.90
1	N	391	G	O4'-C1'-N9	11.67	117.54	108.20
1	N	295	C	N3-C4-C5	-11.67	117.23	121.90
1	N	1331	G	C4-C5-C6	11.67	125.80	118.80
1	N	647	C	N3-C4-N4	11.66	126.16	118.00
1	N	675	A	N1-C6-N6	11.66	125.60	118.60
1	N	963	G	C5-C6-O6	-11.66	121.61	128.60
1	N	549	C	N3-C4-C5	-11.66	117.24	121.90
1	N	934	C	N3-C4-N4	11.65	126.16	118.00
1	N	959	A	C8-N9-C4	11.65	110.46	105.80
1	N	1263	C	N1-C2-O2	-11.65	111.91	118.90
1	N	1401	G	N1-C6-O6	11.65	126.89	119.90
1	N	736	C	N3-C4-N4	11.64	126.15	118.00
1	N	107	G	C4-C5-N7	-11.64	106.14	110.80
1	N	95	C	P-O5'-C5'	-11.63	102.29	120.90
1	N	423	G	C5-C6-O6	-11.62	121.62	128.60
1	N	213	G	N1-C6-O6	11.62	126.87	119.90
1	N	832	G	N1-C6-O6	11.62	126.87	119.90
1	N	1514	G	O4'-C1'-N9	11.62	117.50	108.20
1	N	339	C	O4'-C1'-N1	11.62	117.49	108.20
1	N	286	C	N3-C4-N4	11.62	126.13	118.00
1	N	425	G	O4'-C1'-N9	11.62	117.49	108.20
1	N	546	A	C5-C6-N6	-11.61	114.41	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	959	A	N1-C6-N6	11.62	125.57	118.60
1	N	242	G	N1-C6-O6	11.61	126.86	119.90
1	N	450	G	C5-C6-O6	-11.60	121.64	128.60
1	N	1504	G	C8-N9-C4	11.60	111.04	106.40
1	N	1225	A	C4-C5-C6	11.59	122.80	117.00
1	N	419	C	C5-C4-N4	-11.59	112.09	120.20
1	N	1338	G	C2-N3-C4	11.59	117.69	111.90
1	N	1405	G	N1-C6-O6	11.58	126.85	119.90
1	N	775	G	N9-C4-C5	11.58	110.03	105.40
1	N	1169	A	C5-C6-N6	-11.58	114.44	123.70
1	N	410	G	C6-C5-N7	-11.57	123.46	130.40
1	N	935	A	O4'-C1'-N9	11.55	117.44	108.20
1	N	899	C	O4'-C1'-N1	11.54	117.43	108.20
1	N	980	C	O4'-C1'-N1	11.54	117.43	108.20
1	N	276	G	C6-N1-C2	11.54	132.02	125.10
1	N	1187	G	C5-C6-O6	-11.53	121.68	128.60
1	N	488	C	N3-C4-N4	11.53	126.07	118.00
1	N	547	A	N1-C6-N6	11.53	125.52	118.60
1	N	713	G	C4-C5-N7	11.53	115.41	110.80
1	N	64	G	N3-C4-C5	11.52	134.36	128.60
1	N	297	G	C6-N1-C2	11.52	132.01	125.10
1	N	492	C	N3-C4-N4	11.52	126.06	118.00
1	N	705	G	O4'-C1'-N9	11.52	117.42	108.20
1	N	593	U	C5-C6-N1	11.52	128.46	122.70
1	N	1265	C	C2-N3-C4	11.51	125.65	119.90
1	N	1458	G	C5-C6-O6	-11.50	121.70	128.60
1	N	823	C	O4'-C1'-N1	11.50	117.40	108.20
1	N	1188	A	N1-C6-N6	11.49	125.50	118.60
1	N	1336	C	P-O3'-C3'	11.49	133.49	119.70
1	N	145	G	C5-C6-O6	-11.49	121.71	128.60
1	N	647	C	O4'-C1'-N1	11.49	117.39	108.20
1	N	69	G	N1-C6-O6	11.48	126.79	119.90
1	N	785	G	O4'-C1'-N9	11.48	117.38	108.20
1	N	316	C	C6-N1-C2	-11.48	115.71	120.30
1	N	394	G	N1-C6-O6	11.47	126.78	119.90
1	N	1352	C	N3-C4-N4	11.47	126.03	118.00
1	N	1428	A	C4-C5-C6	11.47	122.73	117.00
1	N	233	C	C2-N1-C1'	11.47	131.42	118.80
1	N	1271	A	N1-C6-N6	11.47	125.48	118.60
1	N	178	C	N3-C4-C5	-11.47	117.31	121.90
1	N	844	G	N3-C2-N2	11.47	127.93	119.90
1	N	393	A	C5-C6-N1	-11.46	111.97	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1293	C	N3-C4-N4	11.46	126.02	118.00
1	N	1366	C	N3-C4-N4	11.46	126.02	118.00
1	N	132	C	C6-N1-C2	-11.46	115.72	120.30
1	N	1452	C	O4'-C1'-N1	11.46	117.37	108.20
1	N	597	G	O4'-C1'-N9	11.45	117.36	108.20
1	N	272	C	N3-C4-N4	11.44	126.01	118.00
1	N	1072	G	C5-C6-O6	-11.44	121.74	128.60
1	N	802	A	C4-C5-C6	11.43	122.72	117.00
1	N	400	C	N3-C4-C5	-11.43	117.33	121.90
1	N	220	G	O4'-C1'-N9	11.43	117.34	108.20
1	N	1099	G	N1-C2-N3	-11.43	117.04	123.90
1	N	614	C	O4'-C1'-N1	11.42	117.33	108.20
1	N	1026	G	C5-C6-O6	-11.42	121.75	128.60
1	N	27	G	C5-C6-O6	-11.41	121.75	128.60
1	N	478	A	C8-N9-C4	-11.41	101.23	105.80
1	N	1370	G	C5-C6-N1	-11.41	105.80	111.50
1	N	704	A	C5-C6-N1	-11.40	112.00	117.70
1	N	320	A	N1-C6-N6	11.40	125.44	118.60
1	N	926	G	C5-C6-N1	-11.40	105.80	111.50
1	N	919	A	C4-C5-C6	11.40	122.70	117.00
1	N	837	U	O4'-C1'-N1	11.39	117.31	108.20
1	N	1193	G	N9-C4-C5	-11.39	100.84	105.40
1	N	1448	C	O4'-C1'-N1	11.39	117.31	108.20
1	N	949	A	C5-C6-N6	-11.38	114.59	123.70
1	N	1305	G	C4-C5-N7	11.38	115.35	110.80
1	N	802	A	O4'-C1'-N9	11.37	117.30	108.20
1	N	59	A	N1-C6-N6	11.37	125.42	118.60
1	N	1182	G	N1-C6-O6	11.37	126.72	119.90
1	N	1526	G	C5-C6-O6	-11.37	121.78	128.60
1	N	979	C	N3-C4-C5	-11.37	117.35	121.90
1	N	306	A	N1-C6-N6	11.36	125.42	118.60
1	N	777	A	C4-C5-C6	11.36	122.68	117.00
1	N	805	C	C6-N1-C2	-11.36	115.76	120.30
1	N	596	A	C5-C6-N6	-11.35	114.62	123.70
1	N	710	G	C5-C6-O6	-11.35	121.79	128.60
1	N	428	G	P-O3'-C3'	11.35	133.32	119.70
1	N	1448	C	C6-N1-C1'	-11.35	107.18	120.80
1	N	299	G	N1-C6-O6	11.35	126.71	119.90
1	N	492	C	N3-C4-C5	-11.34	117.36	121.90
1	N	1396	A	N1-C6-N6	11.34	125.40	118.60
1	N	1514	G	N1-C6-O6	11.34	126.70	119.90
1	N	76	G	N9-C4-C5	-11.34	100.86	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1066	C	O4'-C1'-N1	11.34	117.27	108.20
1	N	210	C	O4'-C1'-N1	11.31	117.25	108.20
1	N	375	U	C5-C6-N1	11.31	128.35	122.70
1	N	513	C	O4'-C1'-N1	11.30	117.24	108.20
1	N	983	A	C5-C6-N1	-11.30	112.05	117.70
1	N	416	G	C5-C6-O6	-11.30	121.82	128.60
1	N	1284	C	C2-N3-C4	11.30	125.55	119.90
1	N	948	C	N3-C4-N4	11.29	125.91	118.00
1	N	299	G	C5-C6-O6	-11.29	121.83	128.60
1	N	1457	G	C5-C6-O6	-11.27	121.83	128.60
1	N	189	A	N1-C6-N6	11.27	125.36	118.60
1	N	1220	G	N1-C2-N2	11.27	126.34	116.20
1	N	380	G	O4'-C1'-N9	11.27	117.21	108.20
1	N	419	C	O4'-C1'-N1	11.27	117.21	108.20
1	N	563	A	N1-C6-N6	11.26	125.36	118.60
1	N	499	A	C5-C6-N6	-11.26	114.69	123.70
1	N	164	G	C5-C6-O6	-11.26	121.85	128.60
1	N	521	G	N3-C4-C5	-11.26	122.97	128.60
1	N	779	C	O4'-C1'-N1	11.25	117.20	108.20
1	N	1505	G	N1-C6-O6	11.25	126.65	119.90
1	N	532	A	N1-C2-N3	11.25	134.92	129.30
1	N	640	A	N1-C6-N6	11.25	125.35	118.60
1	N	67	C	O4'-C1'-N1	11.25	117.20	108.20
1	N	1130	A	C5-C6-N6	-11.24	114.70	123.70
1	N	403	C	C2-N3-C4	11.24	125.52	119.90
1	N	1169	A	C5-C6-N1	-11.24	112.08	117.70
1	N	1084	G	N1-C2-N3	-11.23	117.16	123.90
1	N	241	G	N1-C6-O6	11.23	126.64	119.90
1	N	1242	G	P-O5'-C5'	11.23	138.87	120.90
1	N	336	A	C8-N9-C4	-11.23	101.31	105.80
1	N	1240	U	C6-N1-C2	-11.22	114.27	121.00
1	N	1281	C	O4'-C1'-N1	11.22	117.18	108.20
1	N	585	G	O4'-C1'-N9	11.22	117.18	108.20
1	N	347	G	N1-C6-O6	11.22	126.63	119.90
1	N	270	A	N1-C6-N6	11.22	125.33	118.60
1	N	674	G	O4'-C1'-N9	11.21	117.17	108.20
1	N	570	G	C6-C5-N7	-11.21	123.67	130.40
1	N	808	C	O4'-C1'-N1	11.21	117.16	108.20
1	N	925	G	N1-C6-O6	11.20	126.62	119.90
1	N	1459	G	N1-C2-N3	-11.20	117.18	123.90
1	N	461	A	N1-C6-N6	11.20	125.32	118.60
1	N	804	U	O4'-C1'-N1	11.19	117.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	125	U	O4'-C1'-N1	11.18	117.15	108.20
1	N	443	C	N3-C4-C5	-11.18	117.43	121.90
1	N	559	A	C5-C6-N6	-11.18	114.76	123.70
1	N	304	U	O4'-C1'-N1	11.18	117.14	108.20
1	N	861	G	N1-C6-O6	11.18	126.61	119.90
1	N	548	G	N1-C6-O6	11.17	126.61	119.90
1	N	1354	U	C5-C6-N1	11.17	128.29	122.70
1	N	1499	A	N1-C6-N6	11.17	125.30	118.60
1	N	207	C	C6-N1-C2	-11.16	115.84	120.30
1	N	522	C	C6-N1-C2	11.16	124.76	120.30
1	N	489	C	N3-C4-N4	11.16	125.81	118.00
1	N	174	A	C5-C6-N1	-11.15	112.12	117.70
1	N	1327	C	C5-C4-N4	-11.15	112.39	120.20
1	N	895	G	N1-C2-N3	-11.15	117.21	123.90
1	N	207	C	C5-C4-N4	-11.15	112.40	120.20
1	N	199	A	C5-C6-N1	-11.14	112.13	117.70
1	N	19	A	N1-C2-N3	11.14	134.87	129.30
1	N	1491	G	C5-C6-O6	-11.14	121.92	128.60
1	N	230	G	N9-C4-C5	11.13	109.85	105.40
1	N	414	A	P-O5'-C5'	11.13	138.71	120.90
1	N	1272	G	N1-C6-O6	11.13	126.58	119.90
1	N	1003	G	N1-C2-N3	-11.13	117.22	123.90
1	N	520	A	N1-C6-N6	11.12	125.27	118.60
1	N	1446	A	N1-C2-N3	11.12	134.86	129.30
1	N	107	G	C5-N7-C8	11.12	109.86	104.30
1	N	570	G	C5-C6-N1	-11.12	105.94	111.50
1	N	1198	G	C5-C6-O6	-11.12	121.93	128.60
1	N	1500	A	C6-C5-N7	-11.11	124.52	132.30
1	N	1243	C	N3-C4-N4	11.11	125.78	118.00
1	N	408	A	N9-C4-C5	11.11	110.24	105.80
1	N	653	U	O4'-C1'-N1	11.11	117.08	108.20
1	N	1519	A	C6-C5-N7	-11.11	124.53	132.30
1	N	1380	U	O4'-C1'-N1	11.10	117.08	108.20
1	N	388	G	N1-C6-O6	11.10	126.56	119.90
1	N	591	U	C5-C4-O4	-11.10	119.24	125.90
1	N	87	C	C6-N1-C2	-11.10	115.86	120.30
1	N	1276	G	C5-C6-O6	-11.10	121.94	128.60
1	N	700	G	C6-C5-N7	-11.10	123.74	130.40
1	N	918	A	C4-C5-C6	11.10	122.55	117.00
1	N	761	G	C5-N7-C8	-11.09	98.75	104.30
1	N	882	C	C2-N3-C4	-11.09	114.35	119.90
1	N	833	G	N1-C6-O6	11.09	126.55	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	894	G	N7-C8-N9	11.08	118.64	113.10
1	N	965	U	O4'-C1'-N1	11.08	117.06	108.20
1	N	311	C	C5-C6-N1	11.08	126.54	121.00
1	N	633	G	P-O5'-C5'	11.07	138.62	120.90
1	N	729	A	C5-C6-N1	-11.07	112.16	117.70
1	N	872	A	O4'-C1'-N9	11.07	117.06	108.20
1	N	1016	A	N1-C2-N3	-11.07	123.77	129.30
1	N	960	U	N1-C2-O2	-11.07	115.05	122.80
1	N	676	A	C4-C5-C6	11.06	122.53	117.00
1	N	1226	C	P-O3'-C3'	11.06	132.98	119.70
1	N	1532	U	C5-C6-N1	11.06	128.23	122.70
1	N	592	G	N1-C6-O6	11.06	126.54	119.90
1	N	691	G	O4'-C1'-N9	11.06	117.05	108.20
1	N	1253	G	O4'-C1'-N9	11.06	117.05	108.20
1	N	1293	C	C5-C6-N1	11.05	126.53	121.00
1	N	414	A	C5-N7-C8	11.05	109.43	103.90
1	N	1323	G	N1-C6-O6	11.05	126.53	119.90
1	N	456	A	C8-N9-C4	-11.04	101.38	105.80
1	N	596	A	P-O5'-C5'	11.04	138.57	120.90
1	N	1218	C	O4'-C1'-N1	11.04	117.03	108.20
1	N	1289	A	C4-C5-C6	11.04	122.52	117.00
1	N	1061	G	C8-N9-C4	-11.04	101.98	106.40
1	N	1220	G	N1-C6-O6	11.04	126.52	119.90
1	N	1304	G	N1-C2-N3	-11.03	117.28	123.90
1	N	305	G	N1-C6-O6	11.02	126.51	119.90
1	N	895	G	C5-C6-O6	-11.02	121.99	128.60
1	N	968	A	C8-N9-C4	-11.02	101.39	105.80
1	N	1319	A	N1-C6-N6	11.02	125.21	118.60
1	N	225	C	N3-C4-C5	-11.02	117.49	121.90
1	N	1051	C	O4'-C1'-N1	11.02	117.01	108.20
1	N	1246	A	C4-C5-N7	-11.02	105.19	110.70
1	N	87	C	N3-C4-C5	-11.01	117.50	121.90
1	N	168	G	N9-C4-C5	-11.01	101.00	105.40
1	N	412	A	P-O3'-C3'	11.01	132.91	119.70
1	N	290	C	N3-C4-N4	11.00	125.70	118.00
1	N	888	G	N1-C6-O6	11.00	126.50	119.90
1	N	1474	U	N1-C2-O2	-11.00	115.10	122.80
1	N	467	U	C2-N1-C1'	10.99	130.89	117.70
1	N	1185	G	C8-N9-C4	-10.99	102.00	106.40
1	N	482	A	N1-C6-N6	10.99	125.19	118.60
1	N	256	U	P-O5'-C5'	10.98	138.47	120.90
1	N	451	A	N9-C4-C5	-10.98	101.41	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	754	C	N3-C4-C5	-10.98	117.51	121.90
1	N	967	C	O4'-C1'-N1	10.98	116.98	108.20
1	N	101	A	N1-C6-N6	10.98	125.19	118.60
1	N	986	U	O4'-C1'-N1	10.97	116.98	108.20
1	N	1019	A	N1-C6-N6	10.97	125.18	118.60
1	N	71	A	C8-N9-C4	10.96	110.19	105.80
1	N	1486	G	N1-C6-O6	10.96	126.48	119.90
1	N	309	A	C4-C5-C6	10.96	122.48	117.00
1	N	1015	G	N9-C4-C5	10.96	109.78	105.40
1	N	157	U	O4'-C1'-N1	10.96	116.97	108.20
1	N	1437	A	C2-N3-C4	10.96	116.08	110.60
1	N	1529	G	P-O3'-C3'	10.96	132.85	119.70
1	N	1533	C	C6-N1-C2	-10.96	115.92	120.30
1	N	1003	G	N3-C2-N2	10.96	127.57	119.90
1	N	1099	G	C5-C6-N1	-10.96	106.02	111.50
1	N	436	C	O4'-C1'-N1	10.95	116.96	108.20
1	N	1089	G	C5-C6-O6	-10.95	122.03	128.60
1	N	1003	G	C6-N1-C2	10.95	131.67	125.10
1	N	1138	G	C5-C6-O6	-10.94	122.03	128.60
1	N	128	G	N1-C6-O6	10.94	126.47	119.90
1	N	190	A	C5-C6-N1	-10.94	112.23	117.70
1	N	1008	U	C5-C4-O4	-10.94	119.34	125.90
1	N	1063	C	C6-N1-C2	-10.94	115.92	120.30
1	N	1239	A	O4'-C1'-N9	10.94	116.95	108.20
1	N	147	G	C2-N3-C4	10.93	117.37	111.90
1	N	194	C	O4'-C1'-N1	10.93	116.95	108.20
1	N	464	U	P-O3'-C3'	10.93	132.82	119.70
1	N	1140	C	N3-C4-N4	10.93	125.65	118.00
1	N	859	G	N9-C4-C5	-10.93	101.03	105.40
1	N	324	G	P-O3'-C3'	10.92	132.81	119.70
1	N	1127	G	C4-C5-N7	10.92	115.17	110.80
1	N	1171	A	C5-C6-N6	-10.92	114.97	123.70
1	N	1438	G	C5-C6-O6	-10.91	122.05	128.60
1	N	670	G	O4'-C1'-N9	10.91	116.93	108.20
1	N	1417	G	N3-C2-N2	10.91	127.53	119.90
1	N	508	U	C5-C6-N1	10.90	128.15	122.70
1	N	1063	C	N3-C4-N4	10.90	125.63	118.00
1	N	843	U	C5-C4-O4	-10.90	119.36	125.90
1	N	127	G	N9-C4-C5	-10.89	101.04	105.40
1	N	959	A	N9-C4-C5	-10.89	101.44	105.80
1	N	227	G	C5-C6-O6	-10.89	122.07	128.60
1	N	620	C	N3-C4-N4	10.89	125.62	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1331	G	N1-C6-O6	10.89	126.43	119.90
1	N	815	A	C5-C6-N1	-10.88	112.26	117.70
1	N	1479	C	N3-C4-N4	10.88	125.62	118.00
1	N	681	A	C5-C6-N6	-10.88	115.00	123.70
1	N	597	G	C5-C6-O6	-10.87	122.08	128.60
1	N	883	C	C4-C5-C6	10.87	122.83	117.40
1	N	1110	A	N1-C6-N6	10.86	125.12	118.60
1	N	1421	G	C5-C6-O6	-10.86	122.08	128.60
1	N	802	A	C5-C6-N1	-10.86	112.27	117.70
1	N	80	A	C4-C5-C6	10.86	122.43	117.00
1	N	736	C	N3-C4-C5	-10.85	117.56	121.90
1	N	1361	G	N1-C6-O6	10.85	126.41	119.90
1	N	1500	A	C5-C6-N1	-10.85	112.27	117.70
1	N	168	G	N1-C6-O6	10.85	126.41	119.90
1	N	6	G	N1-C6-O6	10.85	126.41	119.90
1	N	1344	C	N3-C4-N4	10.85	125.59	118.00
1	N	1534	A	N1-C6-N6	10.85	125.11	118.60
1	N	141	G	O4'-C1'-N9	10.84	116.87	108.20
1	N	660	C	O4'-C1'-N1	10.84	116.87	108.20
1	N	910	C	P-O5'-C5'	10.84	138.24	120.90
1	N	348	G	N1-C2-N3	-10.83	117.40	123.90
1	N	479	U	N1-C2-N3	10.83	121.40	114.90
1	N	532	A	C8-N9-C4	10.82	110.13	105.80
1	N	856	C	O4'-C1'-N1	10.82	116.86	108.20
1	N	215	C	O4'-C1'-N1	10.82	116.86	108.20
1	N	1467	C	C6-N1-C2	-10.82	115.97	120.30
1	N	1239	A	C2-N3-C4	-10.81	105.19	110.60
1	N	917	G	O4'-C1'-N9	10.81	116.85	108.20
1	N	621	A	C5-C6-N1	-10.81	112.30	117.70
1	N	1207	G	N1-C6-O6	10.80	126.38	119.90
1	N	1008	U	N3-C4-O4	10.80	126.96	119.40
1	N	1173	U	P-O5'-C5'	10.79	138.17	120.90
1	N	735	C	O4'-C1'-N1	10.79	116.83	108.20
1	N	143	A	N1-C6-N6	10.79	125.07	118.60
1	N	325	A	O4'-C1'-N9	10.78	116.83	108.20
1	N	369	G	C8-N9-C4	-10.78	102.09	106.40
1	N	1109	C	O4'-C1'-N1	10.78	116.82	108.20
1	N	246	A	N7-C8-N9	-10.77	108.42	113.80
1	N	577	G	C5-C6-O6	-10.77	122.14	128.60
1	N	88	U	P-O3'-C3'	10.77	132.62	119.70
1	N	1274	A	C5-N7-C8	10.77	109.28	103.90
1	N	23	C	N3-C4-C5	-10.77	117.59	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1361	G	N3-C2-N2	10.77	127.44	119.90
1	N	1349	A	O4'-C1'-N9	10.76	116.81	108.20
1	N	39	G	O4'-C1'-N9	10.76	116.81	108.20
1	N	471	U	O4'-C1'-N1	10.76	116.81	108.20
1	N	966	G	C8-N9-C4	-10.76	102.10	106.40
1	N	408	A	C8-N9-C4	-10.75	101.50	105.80
1	N	853	C	O4'-C1'-N1	10.75	116.80	108.20
1	N	1364	U	C6-N1-C1'	-10.75	106.15	121.20
1	N	485	U	O4'-C1'-N1	10.75	116.80	108.20
1	N	162	A	P-O3'-C3'	10.74	132.59	119.70
1	N	178	C	O4'-C1'-N1	10.74	116.79	108.20
1	N	1255	G	N3-C2-N2	10.74	127.42	119.90
1	N	914	A	O4'-C1'-N9	10.74	116.79	108.20
1	N	73	C	C6-N1-C1'	10.73	133.68	120.80
1	N	130	A	C2-N3-C4	-10.73	105.23	110.60
1	N	549	C	O4'-C1'-N1	10.73	116.79	108.20
1	N	1275	A	C5-C6-N6	-10.73	115.11	123.70
1	N	361	G	N1-C6-O6	10.73	126.34	119.90
1	N	637	C	N3-C4-N4	10.73	125.51	118.00
1	N	8	A	C5-C6-N6	-10.72	115.12	123.70
1	N	1195	C	C2-N3-C4	10.72	125.26	119.90
1	N	1167	A	O4'-C1'-N9	10.72	116.78	108.20
1	N	1446	A	N1-C6-N6	10.72	125.03	118.60
1	N	72	A	N1-C6-N6	10.72	125.03	118.60
1	N	1279	G	C6-C5-N7	-10.72	123.97	130.40
1	N	1069	C	O4'-C1'-N1	10.72	116.77	108.20
1	N	336	A	N9-C4-C5	10.71	110.08	105.80
1	N	966	G	C2-N3-C4	10.71	117.25	111.90
1	N	928	G	N1-C6-O6	10.71	126.33	119.90
1	N	53	A	C4-C5-C6	10.70	122.35	117.00
1	N	1166	G	C8-N9-C4	-10.71	102.12	106.40
1	N	175	C	N1-C2-O2	-10.70	112.48	118.90
1	N	1108	G	P-O3'-C3'	10.70	132.54	119.70
1	N	1324	A	C8-N9-C4	10.70	110.08	105.80
1	N	500	G	O4'-C1'-N9	10.70	116.76	108.20
1	N	775	G	C8-N9-C4	-10.69	102.12	106.40
1	N	881	G	C5-C6-O6	-10.69	122.18	128.60
1	N	909	A	O4'-C1'-N9	10.69	116.75	108.20
1	N	139	A	N1-C6-N6	10.69	125.01	118.60
1	N	1029	U	C6-N1-C2	10.69	127.41	121.00
1	N	651	C	O4'-C1'-N1	10.69	116.75	108.20
1	N	864	A	P-O3'-C3'	10.68	132.52	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1053	G	P-O3'-C3'	10.68	132.52	119.70
1	N	48	C	N3-C4-N4	10.68	125.47	118.00
1	N	861	G	O4'-C1'-N9	10.68	116.74	108.20
1	N	1305	G	O4'-C1'-N9	10.67	116.74	108.20
1	N	347	G	O4'-C1'-N9	10.67	116.74	108.20
1	N	528	C	N1-C2-O2	10.67	125.30	118.90
1	N	1491	G	N1-C6-O6	10.67	126.30	119.90
1	N	1188	A	C5-C6-N1	-10.66	112.37	117.70
1	N	1223	C	O4'-C1'-N1	10.66	116.73	108.20
1	N	729	A	N1-C6-N6	10.66	125.00	118.60
1	N	631	C	N3-C4-C5	-10.66	117.64	121.90
1	N	660	C	N3-C4-N4	10.66	125.46	118.00
1	N	939	G	N1-C6-O6	10.66	126.30	119.90
1	N	1418	A	C5-C6-N6	-10.65	115.18	123.70
1	N	298	A	O4'-C1'-N9	10.65	116.72	108.20
1	N	1193	G	C5-C6-O6	-10.65	122.21	128.60
1	N	1278	G	P-O3'-C3'	10.65	132.48	119.70
1	N	448	A	C5-C6-N1	-10.65	112.38	117.70
1	N	1493	A	N1-C6-N6	10.65	124.99	118.60
1	N	611	C	N3-C4-N4	10.65	125.45	118.00
1	N	1053	G	C8-N9-C4	10.65	110.66	106.40
1	N	1106	G	C8-N9-C4	-10.65	102.14	106.40
1	N	83	C	O4'-C1'-N1	10.64	116.72	108.20
1	N	1043	G	C5-C6-O6	-10.64	122.21	128.60
1	N	99	C	N3-C4-C5	-10.64	117.64	121.90
1	N	1105	A	N1-C6-N6	10.63	124.98	118.60
1	N	117	G	C8-N9-C4	-10.63	102.15	106.40
1	N	201	G	C5-C6-N1	-10.63	106.18	111.50
1	N	559	A	C2-N3-C4	-10.63	105.28	110.60
1	N	122	G	C5-C6-O6	-10.63	122.22	128.60
1	N	1074	G	N3-C4-C5	-10.63	123.28	128.60
1	N	351	G	N1-C6-O6	10.62	126.28	119.90
1	N	33	A	C4-C5-C6	10.62	122.31	117.00
1	N	1110	A	N1-C2-N3	10.62	134.61	129.30
1	N	214	C	C4-C5-C6	10.62	122.71	117.40
1	N	311	C	O4'-C1'-N1	10.62	116.69	108.20
1	N	613	C	O4'-C1'-N1	10.61	116.69	108.20
1	N	1446	A	C8-N9-C4	-10.62	101.55	105.80
1	N	277	C	C5-C6-N1	10.61	126.31	121.00
1	N	1353	G	N1-C2-N3	-10.61	117.53	123.90
1	N	1197	A	C6-C5-N7	-10.61	124.87	132.30
1	N	1338	G	C5-C6-O6	-10.61	122.23	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1429	A	C3'-C2'-C1'	-10.61	93.01	101.50
1	N	372	C	P-O3'-C3'	10.61	132.43	119.70
1	N	151	A	C5-N7-C8	10.60	109.20	103.90
1	N	300	A	O4'-C1'-N9	10.60	116.68	108.20
1	N	1183	U	N1-C2-O2	-10.60	115.38	122.80
1	N	1187	G	N1-C6-O6	10.60	126.26	119.90
1	N	82	G	C6-C5-N7	-10.60	124.04	130.40
1	N	393	A	N1-C6-N6	10.60	124.96	118.60
1	N	455	G	C5-C6-O6	-10.60	122.24	128.60
1	N	52	C	N3-C4-C5	-10.60	117.66	121.90
1	N	1049	U	P-O3'-C3'	10.60	132.41	119.70
1	N	1195	C	N3-C4-C5	-10.60	117.66	121.90
1	N	129	A	N1-C6-N6	10.59	124.96	118.60
1	N	869	G	N3-C2-N2	10.59	127.32	119.90
1	N	1324	A	N9-C4-C5	-10.59	101.56	105.80
1	N	177	G	O4'-C1'-N9	10.58	116.67	108.20
1	N	26	A	C6-N1-C2	-10.58	112.25	118.60
1	N	211	G	O4'-C1'-N9	10.58	116.66	108.20
1	N	928	G	N1-C2-N3	-10.58	117.55	123.90
1	N	392	C	C2-N3-C4	10.58	125.19	119.90
1	N	438	U	C5-C4-O4	10.57	132.24	125.90
1	N	945	G	N1-C6-O6	10.57	126.24	119.90
1	N	613	C	C5-C4-N4	-10.57	112.80	120.20
1	N	860	A	C5-C6-N1	-10.57	112.42	117.70
1	N	1175	G	C5-C6-O6	-10.57	122.26	128.60
1	N	1207	G	C5-C6-O6	-10.57	122.26	128.60
1	N	1268	G	N1-C6-O6	10.57	126.24	119.90
1	N	987	G	N1-C6-O6	10.56	126.24	119.90
1	N	233	C	C6-N1-C2	-10.56	116.08	120.30
1	N	1058	G	N1-C6-O6	10.56	126.24	119.90
1	N	1149	C	N3-C4-C5	-10.56	117.67	121.90
1	N	71	A	C2-N3-C4	-10.56	105.32	110.60
1	N	1231	G	N3-C2-N2	10.56	127.29	119.90
1	N	197	A	O4'-C1'-N9	10.55	116.64	108.20
1	N	825	A	C5-C6-N1	-10.55	112.42	117.70
1	N	900	A	O4'-C1'-N9	10.55	116.64	108.20
1	N	30	U	P-O3'-C3'	10.55	132.36	119.70
1	N	1282	C	C1'-O4'-C4'	10.54	118.34	109.90
1	N	645	G	C5-C6-O6	-10.54	122.28	128.60
1	N	1362	A	O4'-C1'-N9	10.54	116.63	108.20
1	N	915	A	O4'-C1'-N9	10.54	116.63	108.20
1	N	328	C	O4'-C1'-N1	10.54	116.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	857	C	O4'-C1'-N1	10.53	116.62	108.20
1	N	131	A	C4-C5-C6	10.53	122.27	117.00
1	N	111	G	C6-C5-N7	-10.53	124.08	130.40
1	N	522	C	C5-C4-N4	-10.52	112.83	120.20
1	N	624	C	C6-N1-C2	-10.52	116.09	120.30
1	N	894	G	C5-C6-N1	-10.52	106.24	111.50
1	N	567	G	C8-N9-C4	-10.52	102.19	106.40
1	N	23	C	O4'-C1'-N1	10.52	116.61	108.20
1	N	608	A	N1-C6-N6	10.51	124.91	118.60
1	N	1532	U	O4'-C1'-N1	10.51	116.61	108.20
1	N	1140	C	C5-C6-N1	10.51	126.25	121.00
1	N	36	C	O4'-C1'-N1	10.51	116.60	108.20
1	N	602	A	C4-C5-C6	10.51	122.25	117.00
1	N	531	U	C1'-O4'-C4'	-10.50	101.50	109.90
1	N	1113	C	N3-C4-N4	10.50	125.35	118.00
1	N	872	A	N1-C6-N6	10.50	124.90	118.60
1	N	1373	G	O4'-C1'-N9	10.50	116.60	108.20
1	N	1374	A	C5-C6-N1	-10.50	112.45	117.70
1	N	105	G	N1-C6-O6	10.50	126.20	119.90
1	N	448	A	C5-N7-C8	10.50	109.15	103.90
1	N	1287	A	C4-C5-C6	10.50	122.25	117.00
1	N	289	G	C5-C6-O6	-10.49	122.31	128.60
1	N	225	C	C6-N1-C2	-10.49	116.10	120.30
1	N	880	C	N3-C4-C5	-10.49	117.70	121.90
1	N	926	G	C5-C6-O6	-10.49	122.31	128.60
1	N	1176	A	C5-C6-N1	-10.49	112.46	117.70
1	N	929	G	O4'-C1'-N9	10.49	116.59	108.20
1	N	988	G	N1-C6-O6	10.48	126.19	119.90
1	N	1197	A	C5-C6-N1	-10.48	112.46	117.70
1	N	470	C	O4'-C1'-N1	10.48	116.59	108.20
1	N	778	G	N3-C4-C5	10.48	133.84	128.60
1	N	64	G	C5-C6-N1	-10.47	106.26	111.50
1	N	698	G	N1-C6-O6	10.47	126.18	119.90
1	N	32	A	N1-C2-N3	10.47	134.53	129.30
1	N	27	G	N1-C6-O6	10.46	126.18	119.90
1	N	163	C	O4'-C1'-N1	10.46	116.57	108.20
1	N	395	C	O4'-C1'-N1	10.46	116.57	108.20
1	N	1080	A	N7-C8-N9	-10.46	108.57	113.80
1	N	538	G	C5-C6-O6	-10.46	122.33	128.60
1	N	1024	G	N1-C6-O6	10.45	126.17	119.90
1	N	1246	A	C5-N7-C8	10.45	109.12	103.90
1	N	188	C	N3-C4-N4	10.45	125.31	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	362	G	O4'-C1'-N9	10.45	116.56	108.20
1	N	76	G	N1-C2-N3	-10.45	117.63	123.90
1	N	1100	C	C5-C6-N1	10.44	126.22	121.00
1	N	866	C	N3-C4-C5	-10.44	117.73	121.90
1	N	1151	A	C6-N1-C2	-10.43	112.34	118.60
1	N	920	U	O4'-C1'-N1	10.43	116.54	108.20
1	N	916	U	C5-C6-N1	10.43	127.91	122.70
1	N	1092	A	N1-C6-N6	10.43	124.86	118.60
1	N	1285	A	C5-N7-C8	10.43	109.11	103.90
1	N	1105	A	C8-N9-C4	-10.43	101.63	105.80
1	N	241	G	N1-C2-N3	-10.42	117.65	123.90
1	N	356	A	C8-N9-C4	-10.42	101.63	105.80
1	N	1018	G	C5-C6-O6	-10.42	122.35	128.60
1	N	1392	G	O4'-C1'-N9	10.42	116.54	108.20
1	N	1003	G	C5-C6-N1	-10.42	106.29	111.50
1	N	184	G	C5-C6-O6	-10.42	122.35	128.60
1	N	1304	G	N3-C2-N2	10.42	127.19	119.90
1	N	789	U	O4'-C1'-N1	10.42	116.53	108.20
1	N	729	A	C6-C5-N7	-10.41	125.01	132.30
1	N	1020	G	C6-C5-N7	-10.41	124.15	130.40
1	N	381	C	O4'-C1'-N1	10.41	116.53	108.20
1	N	447	G	C4-C5-N7	10.40	114.96	110.80
1	N	152	A	N1-C6-N6	10.40	124.84	118.60
1	N	681	A	C2-N3-C4	10.40	115.80	110.60
1	N	1444	U	O4'-C1'-N1	10.40	116.52	108.20
1	N	203	G	C5-C6-O6	-10.40	122.36	128.60
1	N	1280	A	C4-C5-C6	10.40	122.20	117.00
1	N	1150	A	C5-C6-N6	-10.39	115.38	123.70
1	N	1254	A	N3-C4-N9	10.39	135.72	127.40
1	N	899	C	C6-N1-C1'	-10.39	108.33	120.80
1	N	300	A	C5-C6-N6	-10.39	115.39	123.70
1	N	1055	A	N1-C6-N6	10.39	124.83	118.60
1	N	319	G	N1-C6-O6	10.39	126.13	119.90
1	N	1163	A	C5-C6-N1	-10.39	112.51	117.70
1	N	626	G	N7-C8-N9	10.38	118.29	113.10
1	N	732	C	O4'-C1'-N1	10.38	116.51	108.20
1	N	895	G	O4'-C1'-N9	10.38	116.50	108.20
1	N	69	G	C6-C5-N7	-10.38	124.17	130.40
1	N	840	C	C5-C6-N1	10.38	126.19	121.00
1	N	742	G	N9-C4-C5	-10.37	101.25	105.40
1	N	1102	A	C5-N7-C8	10.38	109.09	103.90
1	N	1151	A	O4'-C1'-N9	10.37	116.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	114	U	O4'-C1'-N1	10.37	116.50	108.20
1	N	217	C	O4'-C1'-N1	10.37	116.50	108.20
1	N	257	G	N1-C6-O6	10.37	126.12	119.90
1	N	1422	G	C6-C5-N7	-10.37	124.18	130.40
1	N	1377	A	N1-C6-N6	10.37	124.82	118.60
1	N	1507	A	N1-C6-N6	10.37	124.82	118.60
1	N	1050	G	O4'-C1'-N9	10.36	116.49	108.20
1	N	1200	C	N3-C4-C5	-10.37	117.75	121.90
1	N	182	A	C4-C5-C6	10.36	122.18	117.00
1	N	1074	G	N1-C2-N3	-10.36	117.69	123.90
1	N	301	G	O4'-C1'-N9	10.35	116.48	108.20
1	N	1191	A	N1-C2-N3	10.35	134.48	129.30
1	N	1335	U	C1'-O4'-C4'	-10.34	101.63	109.90
1	N	607	A	N1-C6-N6	10.34	124.80	118.60
1	N	374	A	N9-C4-C5	10.34	109.93	105.80
1	N	988	G	N1-C2-N3	-10.34	117.70	123.90
1	N	256	U	O4'-C1'-N1	10.33	116.47	108.20
1	N	1235	U	N1-C1'-C2'	-10.33	100.57	114.00
1	N	1109	C	C5-C6-N1	10.33	126.16	121.00
1	N	175	C	O4'-C1'-N1	10.32	116.45	108.20
1	N	1423	G	P-O3'-C3'	-10.32	107.32	119.70
1	N	1483	A	C5-N7-C8	10.32	109.06	103.90
1	N	1326	U	N1-C2-O2	-10.31	115.58	122.80
1	N	904	U	C5-C6-N1	10.31	127.86	122.70
1	N	957	U	C5-C6-N1	10.31	127.85	122.70
1	N	1483	A	O4'-C1'-N9	10.30	116.44	108.20
1	N	275	G	C6-C5-N7	-10.30	124.22	130.40
1	N	174	A	N1-C6-N6	10.30	124.78	118.60
1	N	1462	C	O4'-C1'-N1	10.30	116.44	108.20
1	N	597	G	N1-C6-O6	10.29	126.08	119.90
1	N	757	U	O4'-C1'-N1	10.29	116.44	108.20
1	N	554	A	C5-C6-N1	-10.29	112.55	117.70
1	N	873	A	N1-C2-N3	10.29	134.45	129.30
1	N	1196	A	C5-C6-N1	-10.29	112.56	117.70
1	N	326	G	N3-C2-N2	10.29	127.10	119.90
1	N	990	C	O4'-C1'-N1	10.29	116.43	108.20
1	N	366	A	C5-N7-C8	10.28	109.04	103.90
1	N	562	U	C5-C4-O4	-10.28	119.73	125.90
1	N	120	A	N1-C6-N6	10.28	124.77	118.60
1	N	656	G	O4'-C1'-N9	10.28	116.42	108.20
1	N	32	A	C4-C5-C6	10.26	122.13	117.00
1	N	356	A	C5-C6-N6	-10.26	115.49	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1517	G	N9-C4-C5	-10.26	101.30	105.40
1	N	734	G	N1-C2-N3	-10.26	117.75	123.90
1	N	894	G	N3-C2-N2	10.26	127.08	119.90
1	N	1166	G	C5-C6-N1	-10.26	106.37	111.50
1	N	1233	G	C6-C5-N7	-10.26	124.25	130.40
1	N	1152	A	N9-C4-C5	-10.25	101.70	105.80
1	N	78	A	P-O3'-C3'	10.25	132.00	119.70
1	N	420	U	P-O5'-C5'	-10.25	104.50	120.90
1	N	1209	C	O4'-C1'-N1	10.25	116.40	108.20
1	N	818	G	C2-N3-C4	10.24	117.02	111.90
1	N	738	C	N3-C4-C5	-10.24	117.80	121.90
1	N	919	A	C5-C6-N1	-10.24	112.58	117.70
1	N	1331	G	C5-C6-N1	-10.24	106.38	111.50
1	N	1293	C	C5-C4-N4	-10.24	113.03	120.20
1	N	887	G	C4-C5-N7	10.24	114.89	110.80
1	N	416	G	C6-C5-N7	-10.23	124.26	130.40
1	N	287	U	C5-C6-N1	10.23	127.81	122.70
1	N	680	C	N3-C4-C5	-10.23	117.81	121.90
1	N	985	C	C5-C4-N4	-10.23	113.04	120.20
1	N	356	A	C5-C6-N1	-10.22	112.59	117.70
1	N	960	U	N3-C2-O2	10.22	129.35	122.20
1	N	1264	U	C5-C6-N1	10.22	127.81	122.70
1	N	1341	U	O4'-C1'-N1	10.22	116.37	108.20
1	N	396	C	O4'-C1'-N1	10.21	116.37	108.20
1	N	424	G	O4'-C1'-N9	10.21	116.37	108.20
1	N	7	A	C2-N3-C4	-10.21	105.49	110.60
1	N	722	G	C8-N9-C4	-10.21	102.31	106.40
1	N	301	G	C5-C6-O6	-10.21	122.47	128.60
1	N	1245	C	O4'-C1'-N1	10.20	116.36	108.20
1	N	814	A	P-O3'-C3'	10.20	131.94	119.70
1	N	1221	G	N1-C6-O6	10.20	126.02	119.90
1	N	1176	A	N7-C8-N9	-10.19	108.70	113.80
1	N	1216	A	C5-C6-N1	-10.19	112.60	117.70
1	N	46	G	C5-C6-O6	-10.19	122.49	128.60
1	N	761	G	C4-C5-N7	10.19	114.87	110.80
1	N	1087	G	N1-C6-O6	10.19	126.01	119.90
1	N	378	G	N1-C6-O6	10.18	126.01	119.90
1	N	23	C	P-O5'-C5'	10.18	137.18	120.90
1	N	829	G	C2-N3-C4	10.18	116.99	111.90
1	N	121	U	C5-C6-N1	10.18	127.79	122.70
1	N	75	G	N1-C6-O6	10.18	126.00	119.90
1	N	64	G	C2-N3-C4	-10.16	106.82	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	182	A	C5-C6-N1	-10.16	112.62	117.70
1	N	496	A	O4'-C1'-N9	10.16	116.33	108.20
1	N	797	C	C2-N1-C1'	-10.16	107.62	118.80
1	N	839	C	O4'-C1'-N1	10.16	116.33	108.20
1	N	995	C	C5-C4-N4	-10.16	113.09	120.20
1	N	1125	U	O4'-C1'-N1	10.16	116.33	108.20
1	N	236	A	N1-C6-N6	10.16	124.69	118.60
1	N	1359	C	C5-C4-N4	-10.16	113.09	120.20
1	N	971	G	C8-N9-C4	10.15	110.46	106.40
1	N	1382	C	O4'-C1'-N1	10.15	116.32	108.20
1	N	73	C	C2-N1-C1'	-10.15	107.63	118.80
1	N	983	A	N1-C2-N3	10.15	134.38	129.30
1	N	337	G	C2-N3-C4	-10.14	106.83	111.90
1	N	713	G	C8-N9-C4	-10.14	102.34	106.40
1	N	1503	A	C4-C5-C6	10.14	122.07	117.00
1	N	318	G	O4'-C1'-N9	10.14	116.31	108.20
1	N	450	G	C8-N9-C4	10.14	110.45	106.40
1	N	958	A	N1-C6-N6	10.14	124.68	118.60
1	N	988	G	N3-C2-N2	10.14	127.00	119.90
1	N	1255	G	C5-C6-O6	-10.14	122.52	128.60
1	N	1517	G	C4-C5-N7	10.14	114.86	110.80
1	N	530	G	P-O3'-C3'	10.14	131.86	119.70
1	N	649	A	N1-C6-N6	10.14	124.68	118.60
1	N	1198	G	O4'-C1'-N9	10.13	116.31	108.20
1	N	1108	G	C5-C6-O6	-10.13	122.52	128.60
1	N	824	G	N1-C6-O6	10.13	125.98	119.90
1	N	105	G	P-O5'-C5'	10.12	137.10	120.90
1	N	1046	A	C5-C6-N6	-10.12	115.60	123.70
1	N	750	C	N3-C4-N4	10.12	125.08	118.00
1	N	1103	C	O4'-C1'-N1	10.12	116.30	108.20
1	N	65	A	N7-C8-N9	-10.12	108.74	113.80
1	N	515	G	O4'-C1'-N9	10.12	116.29	108.20
1	N	811	C	O4'-C1'-N1	10.12	116.29	108.20
1	N	1010	U	C5-C6-N1	10.12	127.76	122.70
1	N	1422	G	C4-C5-C6	10.12	124.87	118.80
1	N	517	G	N7-C8-N9	10.11	118.16	113.10
1	N	712	A	C5-C6-N1	-10.11	112.64	117.70
1	N	131	A	N1-C6-N6	10.11	124.67	118.60
1	N	970	C	C6-N1-C1'	-10.11	108.67	120.80
1	N	58	C	O4'-C1'-N1	10.10	116.28	108.20
1	N	888	G	O4'-C1'-N9	10.10	116.28	108.20
1	N	1342	C	O4'-C1'-N1	10.10	116.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	560	A	C8-N9-C4	-10.10	101.76	105.80
1	N	933	G	O4'-C1'-N9	10.10	116.28	108.20
1	N	1315	U	P-O5'-C5'	10.10	137.06	120.90
1	N	713	G	C6-C5-N7	-10.10	124.34	130.40
1	N	935	A	C5-C6-N6	-10.10	115.62	123.70
1	N	1503	A	N1-C6-N6	10.10	124.66	118.60
1	N	316	C	N3-C4-C5	-10.09	117.86	121.90
1	N	405	U	C5-C6-N1	10.09	127.75	122.70
1	N	191	G	N1-C6-O6	10.09	125.95	119.90
1	N	307	C	O4'-C1'-N1	10.09	116.27	108.20
1	N	118	U	C4-C5-C6	10.08	125.75	119.70
1	N	496	A	C4-C5-N7	-10.08	105.66	110.70
1	N	92	U	C5-C6-N1	10.08	127.74	122.70
1	N	300	A	C4-C5-C6	10.08	122.04	117.00
1	N	450	G	C5-C6-N1	-10.07	106.46	111.50
1	N	1403	C	C4-C5-C6	10.07	122.44	117.40
1	N	1043	G	N3-C2-N2	10.06	126.94	119.90
1	N	380	G	C8-N9-C4	-10.06	102.38	106.40
1	N	1251	A	C5-C6-N6	-10.06	115.65	123.70
1	N	110	C	C2-N3-C4	10.06	124.93	119.90
1	N	713	G	N3-C2-N2	10.06	126.94	119.90
1	N	807	A	O4'-C1'-N9	10.06	116.24	108.20
1	N	1157	A	N9-C4-C5	-10.06	101.78	105.80
1	N	1457	G	N1-C6-O6	10.05	125.93	119.90
1	N	1323	G	O4'-C1'-N9	10.05	116.24	108.20
1	N	297	G	N3-C2-N2	10.05	126.94	119.90
1	N	400	C	O4'-C1'-N1	10.05	116.24	108.20
1	N	1072	G	O4'-C1'-N9	10.05	116.24	108.20
1	N	688	G	C4-C5-C6	10.05	124.83	118.80
1	N	702	A	C4-C5-N7	-10.05	105.68	110.70
1	N	909	A	N1-C6-N6	10.05	124.63	118.60
1	N	521	G	C6-C5-N7	-10.05	124.37	130.40
1	N	875	U	C5-C6-N1	-10.05	117.68	122.70
1	N	973	G	N1-C6-O6	10.04	125.93	119.90
1	N	470	C	C5-C4-N4	-10.04	113.17	120.20
1	N	522	C	N3-C4-N4	10.04	125.03	118.00
1	N	413	G	N1-C6-O6	10.04	125.92	119.90
1	N	769	G	P-O5'-C5'	10.04	136.97	120.90
1	N	676	A	O4'-C1'-N9	10.04	116.23	108.20
1	N	939	G	C5-C6-O6	-10.04	122.58	128.60
1	N	1397	C	C2-N3-C4	10.04	124.92	119.90
1	N	1472	U	O4'-C1'-N1	10.04	116.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	734	G	N3-C2-N2	10.04	126.92	119.90
1	N	7	A	C5-C6-N6	-10.03	115.67	123.70
1	N	257	G	C5-C6-O6	-10.03	122.58	128.60
1	N	560	A	N1-C6-N6	10.03	124.62	118.60
1	N	1224	U	P-O3'-C3'	10.03	131.74	119.70
1	N	381	C	C5-C6-N1	10.02	126.01	121.00
1	N	384	G	O4'-C1'-N9	10.02	116.22	108.20
1	N	1409	C	C4-C5-C6	10.02	122.41	117.40
1	N	841	C	O4'-C1'-N1	10.02	116.22	108.20
1	N	487	A	N1-C6-N6	10.02	124.61	118.60
1	N	967	C	C4-C5-C6	10.02	122.41	117.40
1	N	1483	A	N9-C4-C5	-10.02	101.79	105.80
1	N	722	G	C4-C5-N7	-10.01	106.80	110.80
1	N	1342	C	C6-N1-C2	-10.01	116.30	120.30
1	N	582	C	P-O5'-C5'	10.01	136.91	120.90
1	N	1310	G	C5-C6-N1	-10.01	106.50	111.50
1	N	764	C	O4'-C1'-N1	10.01	116.20	108.20
1	N	182	A	C5-C6-N6	-10.01	115.70	123.70
1	N	897	C	O4'-C1'-N1	10.01	116.20	108.20
1	N	1456	A	O4'-C1'-N9	10.01	116.21	108.20
1	N	1376	U	C5-C6-N1	10.01	127.70	122.70
1	N	249	U	O4'-C1'-N1	10.00	116.20	108.20
1	N	461	A	C8-N9-C4	-10.00	101.80	105.80
1	N	83	C	C6-N1-C2	-10.00	116.30	120.30
1	N	400	C	C4-C5-C6	10.00	122.40	117.40
1	N	417	G	N1-C6-O6	9.99	125.89	119.90
1	N	913	A	C5-C6-N1	-9.99	112.70	117.70
1	N	1202	U	N3-C4-C5	-9.99	108.60	114.60
1	N	1241	G	C5-C6-O6	-9.99	122.61	128.60
1	N	1244	G	C5-C6-O6	-9.98	122.61	128.60
1	N	628	G	O4'-C1'-N9	9.98	116.18	108.20
1	N	144	G	C2-N3-C4	-9.98	106.91	111.90
1	N	374	A	C5-C6-N1	-9.98	112.71	117.70
1	N	948	C	C2-N3-C4	9.98	124.89	119.90
1	N	982	U	N3-C4-C5	-9.98	108.61	114.60
1	N	1153	G	C5-C6-O6	-9.98	122.61	128.60
1	N	1153	G	C6-N1-C2	9.97	131.08	125.10
1	N	1218	C	N3-C4-N4	9.97	124.98	118.00
1	N	1447	A	C5-C6-N6	-9.97	115.72	123.70
1	N	170	U	O4'-C1'-N1	9.97	116.18	108.20
1	N	423	G	C1'-O4'-C4'	-9.97	101.92	109.90
1	N	879	C	N3-C4-C5	-9.97	117.91	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1309	G	C8-N9-C4	-9.97	102.41	106.40
1	N	350	G	C5-C6-O6	-9.97	122.62	128.60
1	N	1128	C	N3-C4-N4	9.96	124.97	118.00
1	N	160	A	C2-N3-C4	-9.96	105.62	110.60
1	N	155	A	C5-C6-N1	-9.96	112.72	117.70
1	N	263	A	C6-N1-C2	9.95	124.57	118.60
1	N	512	U	O4'-C1'-N1	9.95	116.16	108.20
1	N	1417	G	O4'-C1'-N9	9.95	116.16	108.20
1	N	869	G	C5-C6-O6	-9.95	122.63	128.60
1	N	1484	C	O4'-C1'-N1	9.95	116.16	108.20
1	N	315	A	O4'-C1'-N9	9.94	116.16	108.20
1	N	386	C	N3-C4-C5	-9.94	117.92	121.90
1	N	549	C	C4-C5-C6	9.94	122.37	117.40
1	N	558	G	N1-C6-O6	9.94	125.86	119.90
1	N	875	U	O4'-C1'-N1	9.94	116.15	108.20
1	N	891	U	N1-C2-N3	-9.94	108.94	114.90
1	N	710	G	O4'-C1'-N9	9.94	116.15	108.20
1	N	1360	A	C5-C6-N6	-9.94	115.75	123.70
1	N	113	G	N3-C2-N2	9.93	126.85	119.90
1	N	1075	U	N1-C2-N3	-9.93	108.94	114.90
1	N	1341	U	C5-C6-N1	9.93	127.67	122.70
1	N	370	C	N3-C4-N4	9.93	124.95	118.00
1	N	1000	A	N7-C8-N9	9.93	118.76	113.80
1	N	1256	A	C2-N3-C4	-9.93	105.64	110.60
1	N	624	C	C5-C6-N1	9.92	125.96	121.00
1	N	1081	A	C5'-C4'-C3'	-9.92	100.12	116.00
1	N	183	C	C6-N1-C2	-9.92	116.33	120.30
1	N	857	C	C5-C6-N1	9.92	125.96	121.00
1	N	114	U	C5-C6-N1	9.92	127.66	122.70
1	N	48	C	N3-C4-C5	-9.92	117.93	121.90
1	N	332	G	N1-C6-O6	9.92	125.85	119.90
1	N	686	U	O4'-C1'-C2'	-9.92	95.88	105.80
1	N	910	C	N3-C4-N4	9.91	124.94	118.00
1	N	1075	U	C2-N3-C4	9.91	132.95	127.00
1	N	1256	A	N1-C6-N6	9.91	124.55	118.60
1	N	556	C	C5-C6-N1	9.91	125.95	121.00
1	N	1144	G	N1-C6-O6	9.91	125.84	119.90
1	N	1231	G	O4'-C1'-N9	9.91	116.12	108.20
1	N	350	G	N1-C6-O6	9.90	125.84	119.90
1	N	374	A	C2-N3-C4	9.90	115.55	110.60
1	N	1102	A	C4-C5-C6	9.90	121.95	117.00
1	N	403	C	C5-C6-N1	9.90	125.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	485	U	N3-C2-O2	9.89	129.12	122.20
1	N	1382	C	C6-N1-C2	-9.89	116.34	120.30
1	N	1370	G	C5-C6-O6	-9.89	122.67	128.60
1	N	1517	G	C6-C5-N7	-9.88	124.47	130.40
1	N	46	G	N1-C6-O6	9.88	125.83	119.90
1	N	974	A	N1-C6-N6	9.88	124.53	118.60
1	N	116	A	O4'-C1'-N9	9.87	116.10	108.20
1	N	668	G	N1-C2-N2	9.87	125.08	116.20
1	N	716	A	C6-N1-C2	9.87	124.52	118.60
1	N	854	U	O4'-C1'-N1	9.87	116.10	108.20
1	N	337	G	C5-C6-O6	-9.87	122.68	128.60
1	N	768	A	C8-N9-C4	-9.87	101.85	105.80
1	N	878	A	C5-C6-N6	-9.87	115.81	123.70
1	N	1134	G	C5-C6-O6	-9.86	122.68	128.60
1	N	811	C	N3-C4-N4	9.86	124.90	118.00
1	N	87	C	O4'-C1'-N1	9.86	116.09	108.20
1	N	1139	G	C8-N9-C4	9.86	110.34	106.40
1	N	1476	A	N9-C4-C5	9.86	109.74	105.80
1	N	954	G	C5-C6-N1	-9.86	106.57	111.50
1	N	962	C	C6-N1-C2	-9.86	116.36	120.30
1	N	21	G	N7-C8-N9	9.85	118.03	113.10
1	N	76	G	C4-C5-N7	9.85	114.74	110.80
1	N	536	C	N3-C4-N4	9.85	124.89	118.00
1	N	812	G	C6-C5-N7	-9.85	124.49	130.40
1	N	946	A	C3'-C2'-C1'	9.85	109.38	101.50
1	N	424	G	P-O5'-C5'	9.85	136.65	120.90
1	N	970	C	C2-N1-C1'	9.84	129.63	118.80
1	N	106	C	O4'-C1'-N1	9.84	116.07	108.20
1	N	202	G	C6-C5-N7	-9.84	124.50	130.40
1	N	506	G	N1-C6-O6	9.84	125.80	119.90
1	N	1326	U	C5-C6-N1	9.84	127.62	122.70
1	N	57	G	N1-C6-O6	9.84	125.80	119.90
1	N	921	U	O4'-C1'-N1	9.84	116.07	108.20
1	N	988	G	C5-C6-N1	-9.83	106.58	111.50
1	N	1170	A	N1-C6-N6	9.83	124.50	118.60
1	N	1222	G	N9-C4-C5	9.83	109.33	105.40
1	N	413	G	C4-C5-N7	-9.83	106.87	110.80
1	N	988	G	O4'-C1'-N9	9.83	116.06	108.20
1	N	760	G	C6-C5-N7	-9.83	124.50	130.40
1	N	222	C	C4'-C3'-C2'	-9.82	92.78	102.60
1	N	450	G	C6-N1-C2	9.82	131.00	125.10
1	N	1161	C	N1-C2-O2	9.82	124.79	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	28	A	C5-N7-C8	9.82	108.81	103.90
1	N	639	G	O4'-C1'-N9	9.82	116.06	108.20
1	N	1013	G	N1-C2-N3	-9.82	118.01	123.90
1	N	338	A	O4'-C1'-N9	9.82	116.05	108.20
1	N	1347	G	O4'-C1'-N9	9.82	116.05	108.20
1	N	1110	A	P-O3'-C3'	9.81	131.47	119.70
1	N	1246	A	C5-C6-N6	-9.81	115.85	123.70
1	N	134	G	C5-N7-C8	9.81	109.20	104.30
1	N	1046	A	C8-N9-C4	-9.81	101.88	105.80
1	N	276	G	C5-C6-N1	-9.81	106.60	111.50
1	N	790	A	P-O3'-C3'	9.81	131.47	119.70
1	N	366	A	C4'-C3'-C2'	9.80	112.40	102.60
1	N	540	G	O4'-C1'-N9	9.80	116.04	108.20
1	N	1507	A	C5-C6-N1	-9.80	112.80	117.70
1	N	1492	A	C5-C6-N1	-9.80	112.80	117.70
1	N	335	C	C2-N1-C1'	9.80	129.58	118.80
1	N	572	A	C5-C6-N1	-9.80	112.80	117.70
1	N	611	C	N3-C4-C5	-9.80	117.98	121.90
1	N	1318	A	C5-C6-N1	-9.79	112.80	117.70
1	N	1025	U	C6-N1-C2	9.79	126.88	121.00
1	N	903	G	P-O3'-C3'	9.79	131.45	119.70
1	N	187	G	C5-C6-N1	-9.79	106.61	111.50
1	N	27	G	N3-C2-N2	9.79	126.75	119.90
1	N	1190	G	N1-C6-O6	9.78	125.77	119.90
1	N	64	G	N1-C6-O6	9.78	125.77	119.90
1	N	618	C	O4'-C1'-N1	9.78	116.02	108.20
1	N	1126	U	C5-C6-N1	9.78	127.59	122.70
1	N	335	C	N3-C4-N4	9.78	124.84	118.00
1	N	1201	A	N9-C4-C5	-9.78	101.89	105.80
1	N	11	G	N1-C6-O6	9.78	125.77	119.90
1	N	721	G	P-O3'-C3'	9.78	131.43	119.70
1	N	1047	G	N3-C4-N9	9.78	131.87	126.00
1	N	1328	C	N3-C4-C5	-9.77	117.99	121.90
1	N	1516	G	C5-C6-O6	-9.77	122.74	128.60
1	N	169	C	O4'-C1'-N1	9.76	116.01	108.20
1	N	131	A	N7-C8-N9	-9.76	108.92	113.80
1	N	186	C	N3-C4-N4	9.76	124.83	118.00
1	N	989	U	O4'-C1'-N1	9.76	116.01	108.20
1	N	266	G	C5-C6-N1	-9.76	106.62	111.50
1	N	658	C	O4'-C1'-N1	9.76	116.00	108.20
1	N	808	C	N3-C4-N4	9.76	124.83	118.00
1	N	1042	A	C5-C6-N6	-9.76	115.89	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1300	G	N1-C6-O6	9.76	125.75	119.90
1	N	1320	C	O4'-C1'-N1	9.76	116.00	108.20
1	N	567	G	O4'-C1'-N9	9.75	116.00	108.20
1	N	605	U	O4'-C1'-N1	9.75	116.00	108.20
1	N	380	G	N3-C4-N9	-9.74	120.15	126.00
1	N	768	A	N1-C6-N6	9.74	124.45	118.60
1	N	672	U	O4'-C1'-N1	9.74	115.99	108.20
1	N	71	A	N7-C8-N9	-9.74	108.93	113.80
1	N	564	C	C6-N1-C2	-9.74	116.41	120.30
1	N	168	G	N1-C2-N3	-9.73	118.06	123.90
1	N	514	C	C5-C6-N1	9.73	125.87	121.00
1	N	538	G	C2-N3-C4	9.73	116.77	111.90
1	N	673	A	C6-C5-N7	-9.73	125.49	132.30
1	N	1077	G	N1-C6-O6	9.73	125.74	119.90
1	N	10	A	C4-C5-C6	9.73	121.86	117.00
1	N	563	A	C5-C6-N6	-9.73	115.92	123.70
1	N	1360	A	C8-N9-C4	-9.73	101.91	105.80
1	N	1245	C	N3-C4-N4	9.72	124.81	118.00
1	N	486	U	P-O5'-C5'	-9.72	105.35	120.90
1	N	543	U	O4'-C1'-N1	9.72	115.98	108.20
1	N	956	U	O4'-C1'-N1	9.72	115.97	108.20
1	N	1057	G	C5-N7-C8	-9.72	99.44	104.30
1	N	258	G	C5-C6-O6	-9.72	122.77	128.60
1	N	641	U	N1-C2-O2	-9.71	116.00	122.80
1	N	652	U	P-O3'-C3'	9.71	131.36	119.70
1	N	708	C	N3-C4-N4	9.71	124.80	118.00
1	N	243	A	N1-C6-N6	9.71	124.43	118.60
1	N	488	C	C5-C6-N1	9.71	125.86	121.00
1	N	625	U	O4'-C1'-N1	9.71	115.97	108.20
1	N	1024	G	N3-C2-N2	9.71	126.70	119.90
1	N	1295	U	O4'-C1'-N1	9.71	115.97	108.20
1	N	1220	G	N3-C2-N2	-9.71	113.10	119.90
1	N	1367	C	N3-C4-N4	9.71	124.79	118.00
1	N	734	G	N9-C4-C5	-9.70	101.52	105.40
1	N	562	U	P-O3'-C3'	9.70	131.34	119.70
1	N	1227	A	C5-C6-N1	-9.70	112.85	117.70
1	N	1240	U	N1-C2-N3	-9.70	109.08	114.90
1	N	622	A	C4-C5-C6	9.70	121.85	117.00
1	N	764	C	C5-C4-N4	-9.70	113.41	120.20
1	N	1355	G	N3-C4-C5	-9.70	123.75	128.60
1	N	1039	G	C5-C6-O6	-9.69	122.78	128.60
1	N	1035	A	O4'-C1'-N9	9.69	115.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	151	A	C5-C6-N1	-9.69	112.86	117.70
1	N	825	A	C5-N7-C8	9.69	108.74	103.90
1	N	1423	G	N3-C2-N2	9.69	126.68	119.90
1	N	1292	G	C5-C6-O6	-9.69	122.79	128.60
1	N	938	A	C5-C6-N6	-9.69	115.95	123.70
1	N	1023	U	O4'-C1'-N1	9.69	115.95	108.20
1	N	1280	A	N1-C6-N6	9.68	124.41	118.60
1	N	1453	G	C5-C6-O6	-9.68	122.79	128.60
1	N	1435	G	O4'-C1'-N9	9.67	115.94	108.20
1	N	94	G	N9-C4-C5	9.67	109.27	105.40
1	N	109	A	C5-C6-N6	-9.67	115.97	123.70
1	N	784	A	C4-C5-N7	-9.66	105.87	110.70
1	N	1502	A	C4-C5-N7	-9.66	105.87	110.70
1	N	865	A	N1-C2-N3	9.66	134.13	129.30
1	N	227	G	N1-C6-O6	9.66	125.69	119.90
1	N	532	A	N1-C6-N6	9.66	124.40	118.60
1	N	1120	C	N3-C4-N4	9.66	124.76	118.00
1	N	1473	G	N3-C4-C5	9.65	133.43	128.60
1	N	61	G	N3-C4-N9	-9.65	120.21	126.00
1	N	568	G	C5-C6-O6	-9.65	122.81	128.60
1	N	840	C	C2-N1-C1'	9.65	129.41	118.80
1	N	1057	G	C5-C6-O6	-9.65	122.81	128.60
1	N	1140	C	N3-C4-C5	-9.65	118.04	121.90
1	N	474	G	C4-C5-C6	9.64	124.59	118.80
1	N	1421	G	C5-C6-N1	-9.64	106.68	111.50
1	N	559	A	C4'-C3'-C2'	9.64	112.24	102.60
1	N	1169	A	C6-C5-N7	-9.64	125.55	132.30
1	N	1292	G	P-O3'-C3'	-9.64	108.13	119.70
1	N	374	A	C1'-O4'-C4'	9.64	117.61	109.90
1	N	675	A	C5-C6-N6	-9.64	115.99	123.70
1	N	865	A	C5-C6-N1	-9.64	112.88	117.70
1	N	926	G	O4'-C1'-N9	9.64	115.91	108.20
1	N	1456	A	N1-C6-N6	9.64	124.38	118.60
1	N	387	U	P-O3'-C3'	9.63	131.26	119.70
1	N	1465	A	C5-C6-N6	-9.63	115.99	123.70
1	N	532	A	N7-C8-N9	-9.63	108.98	113.80
1	N	604	G	C6-N1-C2	9.63	130.88	125.10
1	N	808	C	N3-C4-C5	-9.63	118.05	121.90
1	N	1066	C	C6-N1-C2	9.63	124.15	120.30
1	N	1143	G	C5-C6-N1	-9.63	106.69	111.50
1	N	1425	U	N1-C2-O2	-9.63	116.06	122.80
1	N	159	G	N7-C8-N9	9.63	117.91	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	229	U	N1-C2-N3	-9.63	109.12	114.90
1	N	799	G	C5-C6-N1	9.63	116.31	111.50
1	N	1160	G	P-O3'-C3'	9.63	131.25	119.70
1	N	1385	G	N1-C6-O6	9.63	125.68	119.90
1	N	1466	C	N3-C4-C5	-9.63	118.05	121.90
1	N	380	G	C4-N9-C1'	-9.63	113.98	126.50
1	N	593	U	N3-C4-O4	9.63	126.14	119.40
1	N	1153	G	N3-C4-N9	-9.63	120.22	126.00
1	N	172	A	C5-C6-N1	-9.63	112.89	117.70
1	N	97	G	C5-C6-O6	-9.62	122.83	128.60
1	N	492	C	N1-C2-N3	-9.62	112.46	119.20
1	N	258	G	N1-C6-O6	9.62	125.67	119.90
1	N	41	G	N3-C2-N2	9.62	126.63	119.90
1	N	1213	A	N7-C8-N9	-9.62	108.99	113.80
1	N	773	G	C4-N9-C1'	-9.62	114.00	126.50
1	N	691	G	N3-C4-C5	-9.61	123.80	128.60
1	N	1412	C	O4'-C1'-N1	9.61	115.89	108.20
1	N	883	C	C2-N3-C4	9.61	124.70	119.90
1	N	946	A	O4'-C1'-N9	9.61	115.89	108.20
1	N	1045	C	O4'-C1'-N1	9.60	115.88	108.20
1	N	1181	G	N7-C8-N9	-9.60	108.30	113.10
1	N	1213	A	C1'-O4'-C4'	9.60	117.58	109.90
1	N	1421	G	C6-N1-C2	9.60	130.86	125.10
1	N	1454	G	C5-C6-O6	-9.60	122.84	128.60
1	N	505	G	N1-C6-O6	9.60	125.66	119.90
1	N	1209	C	N3-C4-C5	-9.60	118.06	121.90
1	N	647	C	C5-C4-N4	-9.59	113.48	120.20
1	N	305	G	N7-C8-N9	-9.59	108.31	113.10
1	N	552	U	O4'-C1'-N1	9.59	115.87	108.20
1	N	831	A	C5-C6-N1	-9.59	112.91	117.70
1	N	335	C	N3-C4-C5	-9.59	118.07	121.90
1	N	661	G	N1-C6-O6	9.59	125.65	119.90
1	N	785	G	C5-C6-N1	-9.59	106.71	111.50
1	N	1155	A	C5-N7-C8	9.59	108.69	103.90
1	N	211	G	N1-C6-O6	9.58	125.65	119.90
1	N	1330	U	N3-C4-C5	-9.58	108.85	114.60
1	N	1006	G	N1-C2-N3	-9.58	118.15	123.90
1	N	110	C	N3-C4-N4	9.58	124.70	118.00
1	N	1218	C	C2-N3-C4	9.58	124.69	119.90
1	N	657	U	O4'-C1'-N1	9.57	115.86	108.20
1	N	275	G	N9-C4-C5	-9.57	101.57	105.40
1	N	1153	G	C4-C5-C6	9.57	124.54	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1408	A	N1-C6-N6	9.57	124.34	118.60
1	N	220	G	N1-C2-N3	-9.56	118.16	123.90
1	N	1022	A	N1-C6-N6	9.56	124.34	118.60
1	N	1024	G	C8-N9-C4	-9.56	102.57	106.40
1	N	1147	C	C6-N1-C2	-9.56	116.47	120.30
1	N	1194	U	C2-N3-C4	-9.56	121.26	127.00
1	N	780	A	C6-C5-N7	-9.56	125.61	132.30
1	N	669	G	C5-C6-N1	-9.56	106.72	111.50
1	N	699	C	N3-C4-C5	-9.56	118.08	121.90
1	N	341	C	N3-C4-N4	9.55	124.69	118.00
1	N	716	A	C5-C6-N1	-9.55	112.92	117.70
1	N	790	A	C5-C6-N1	-9.55	112.92	117.70
1	N	28	A	N7-C8-N9	-9.55	109.02	113.80
1	N	193	C	C6-N1-C2	-9.55	116.48	120.30
1	N	815	A	C5-N7-C8	9.55	108.67	103.90
1	N	1127	G	C6-N1-C2	-9.55	119.37	125.10
1	N	1166	G	P-O5'-C5'	9.55	136.18	120.90
1	N	852	G	N3-C2-N2	9.54	126.58	119.90
1	N	1321	U	O4'-C1'-N1	9.54	115.83	108.20
1	N	360	G	N1-C6-O6	9.54	125.62	119.90
1	N	393	A	C4-C5-N7	-9.54	105.93	110.70
1	N	530	G	N1-C6-O6	9.54	125.62	119.90
1	N	580	C	O4'-C1'-N1	9.54	115.83	108.20
1	N	940	C	P-O5'-C5'	9.54	136.16	120.90
1	N	1153	G	O4'-C1'-N9	9.54	115.83	108.20
1	N	1202	U	C4-C5-C6	9.54	125.42	119.70
1	N	623	C	N3-C4-C5	-9.54	118.08	121.90
1	N	262	A	C6-C5-N7	-9.54	125.62	132.30
1	N	1277	C	N3-C4-N4	9.54	124.67	118.00
1	N	588	G	P-O5'-C5'	9.53	136.15	120.90
1	N	963	G	N1-C6-O6	9.53	125.62	119.90
1	N	1112	C	N3-C4-C5	-9.53	118.09	121.90
1	N	19	A	C8-N9-C4	-9.53	101.99	105.80
1	N	329	A	C5-N7-C8	9.53	108.67	103.90
1	N	42	G	N1-C6-O6	9.53	125.62	119.90
1	N	94	G	N3-C4-N9	-9.53	120.28	126.00
1	N	853	C	C5-C4-N4	-9.53	113.53	120.20
1	N	1089	G	N1-C6-O6	9.53	125.62	119.90
1	N	1207	G	O4'-C1'-N9	9.53	115.82	108.20
1	N	219	U	N1-C2-O2	-9.53	116.13	122.80
1	N	238	A	O4'-C1'-N9	9.53	115.82	108.20
1	N	674	G	N1-C6-O6	9.53	125.62	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	903	G	N1-C6-O6	9.53	125.61	119.90
1	N	1087	G	N9-C4-C5	9.53	109.21	105.40
1	N	1144	G	C6-N1-C2	9.53	130.82	125.10
1	N	227	G	C4-C5-N7	9.52	114.61	110.80
1	N	1419	G	C6-C5-N7	-9.52	124.69	130.40
1	N	1392	G	C6-C5-N7	-9.52	124.69	130.40
1	N	123	U	O4'-C1'-N1	9.52	115.81	108.20
1	N	985	C	C5-C6-N1	9.52	125.76	121.00
1	N	215	C	N3-C4-C5	-9.51	118.09	121.90
1	N	475	C	O4'-C1'-N1	9.51	115.81	108.20
1	N	479	U	C2-N3-C4	-9.51	121.30	127.00
1	N	998	C	O4'-C1'-N1	9.51	115.81	108.20
1	N	276	G	N1-C2-N3	-9.51	118.20	123.90
1	N	366	A	C5-C6-N6	-9.50	116.10	123.70
1	N	495	A	P-O3'-C3'	9.50	131.10	119.70
1	N	561	U	C5-C4-O4	9.50	131.60	125.90
1	N	1241	G	P-O5'-C5'	9.50	136.10	120.90
1	N	985	C	C4-C5-C6	-9.50	112.65	117.40
1	N	995	C	C5-C6-N1	9.50	125.75	121.00
1	N	207	C	P-O3'-C3'	9.50	131.10	119.70
1	N	571	U	C5-C6-N1	9.50	127.45	122.70
1	N	1385	G	C5-N7-C8	9.50	109.05	104.30
1	N	177	G	N7-C8-N9	9.49	117.85	113.10
1	N	243	A	C8-N9-C4	-9.49	102.00	105.80
1	N	651	C	C4-C5-C6	-9.49	112.66	117.40
1	N	738	C	N3-C4-N4	9.49	124.64	118.00
1	N	993	G	N1-C6-O6	9.48	125.59	119.90
1	N	1021	A	P-O5'-C5'	9.48	136.07	120.90
1	N	1194	U	O4'-C1'-N1	9.48	115.79	108.20
1	N	1055	A	C4-C5-N7	-9.48	105.96	110.70
1	N	563	A	C1'-O4'-C4'	9.48	117.48	109.90
1	N	806	C	C5-C6-N1	9.48	125.74	121.00
1	N	201	G	N1-C6-O6	9.48	125.59	119.90
1	N	205	A	C5-C6-N6	-9.48	116.12	123.70
1	N	1217	C	C2-N3-C4	9.48	124.64	119.90
1	N	128	G	N3-C2-N2	9.47	126.53	119.90
1	N	650	G	N1-C2-N3	-9.47	118.22	123.90
1	N	253	A	C5-N7-C8	-9.47	99.16	103.90
1	N	1073	U	C6-N1-C2	-9.47	115.32	121.00
1	N	1186	G	N1-C6-O6	9.47	125.58	119.90
1	N	573	A	P-O3'-C3'	9.47	131.06	119.70
1	N	272	C	C5-C4-N4	-9.47	113.57	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	36	C	C5-C6-N1	9.47	125.73	121.00
1	N	332	G	N7-C8-N9	9.46	117.83	113.10
1	N	719	C	O4'-C1'-N1	9.46	115.77	108.20
1	N	964	A	C5-C6-N1	-9.46	112.97	117.70
1	N	285	C	C6-N1-C2	-9.46	116.52	120.30
1	N	669	G	C5-C6-O6	-9.46	122.92	128.60
1	N	1364	U	N1-C2-N3	-9.46	109.22	114.90
1	N	1220	G	O4'-C1'-N9	9.46	115.77	108.20
1	N	437	U	O4'-C1'-N1	9.45	115.76	108.20
1	N	579	A	O4'-C1'-N9	9.45	115.76	108.20
1	N	1533	C	N3-C4-N4	9.45	124.61	118.00
1	N	28	A	C5-C6-N1	-9.45	112.98	117.70
1	N	1228	C	P-O3'-C3'	9.45	131.03	119.70
1	N	1324	A	N1-C6-N6	9.45	124.27	118.60
1	N	372	C	C6-N1-C2	9.44	124.08	120.30
1	N	122	G	N1-C6-O6	9.44	125.56	119.90
1	N	734	G	C8-N9-C4	9.44	110.17	106.40
1	N	860	A	C6-N1-C2	9.44	124.26	118.60
1	N	353	A	C5-C6-N6	-9.44	116.15	123.70
1	N	1312	G	P-O5'-C5'	-9.44	105.80	120.90
1	N	1391	U	N3-C4-O4	9.44	126.00	119.40
1	N	1412	C	C5-C4-N4	-9.44	113.59	120.20
1	N	1080	A	N1-C2-N3	-9.43	124.58	129.30
1	N	4	U	C5-C4-O4	9.43	131.56	125.90
1	N	208	U	O4'-C1'-N1	9.43	115.74	108.20
1	N	324	G	N7-C8-N9	9.43	117.81	113.10
1	N	591	U	C4-C5-C6	-9.43	114.04	119.70
1	N	924	C	P-O3'-C3'	9.43	131.01	119.70
1	N	1061	G	N7-C8-N9	9.43	117.81	113.10
1	N	1127	G	C5-C6-N1	9.43	116.21	111.50
1	N	1127	G	C5-C6-O6	-9.43	122.94	128.60
1	N	1441	A	C6-C5-N7	-9.43	125.70	132.30
1	N	616	G	C5-C6-O6	-9.42	122.95	128.60
1	N	747	A	O4'-C1'-N9	9.42	115.74	108.20
1	N	925	G	C5-C6-O6	-9.42	122.95	128.60
1	N	72	A	C5-C6-N6	-9.42	116.17	123.70
1	N	336	A	C5-C6-N1	-9.42	112.99	117.70
1	N	557	G	P-O3'-C3'	9.42	131.00	119.70
1	N	883	C	N3-C4-N4	9.41	124.59	118.00
1	N	137	U	N3-C4-O4	9.41	125.99	119.40
1	N	187	G	C3'-C2'-C1'	-9.41	93.97	101.50
1	N	1312	G	N1-C6-O6	9.41	125.54	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1516	G	C6-C5-N7	-9.41	124.76	130.40
1	N	1154	G	N1-C6-O6	9.40	125.54	119.90
1	N	1130	A	O4'-C1'-N9	9.40	115.72	108.20
1	N	447	G	C6-C5-N7	-9.40	124.76	130.40
1	N	495	A	C4-C5-C6	9.40	121.70	117.00
1	N	886	G	C5-C6-O6	-9.40	122.96	128.60
1	N	374	A	C5-N7-C8	9.39	108.60	103.90
1	N	1221	G	C5-C6-N1	-9.39	106.81	111.50
1	N	503	C	O4'-C1'-N1	9.39	115.71	108.20
1	N	995	C	C4-C5-C6	-9.39	112.70	117.40
1	N	1223	C	N3-C4-N4	9.39	124.57	118.00
1	N	1102	A	N1-C6-N6	9.39	124.23	118.60
1	N	1412	C	N3-C4-N4	9.38	124.57	118.00
1	N	772	U	O4'-C4'-C3'	-9.38	94.62	104.00
1	N	968	A	C5-C6-N6	-9.38	116.20	123.70
1	N	1163	A	N1-C6-N6	9.38	124.23	118.60
1	N	806	C	O4'-C1'-N1	9.38	115.70	108.20
1	N	112	G	C5-C6-O6	-9.37	122.98	128.60
1	N	314	C	C4'-C3'-C2'	-9.37	93.23	102.60
1	N	46	G	C8-N9-C4	9.36	110.15	106.40
1	N	1206	G	C8-N9-C4	-9.37	102.65	106.40
1	N	1464	U	O4'-C1'-N1	9.36	115.69	108.20
1	N	284	C	N3-C4-N4	9.36	124.55	118.00
1	N	535	A	N9-C4-C5	-9.36	102.06	105.80
1	N	925	G	N1-C2-N3	-9.36	118.28	123.90
1	N	1344	C	C6-N1-C2	9.36	124.04	120.30
1	N	226	G	C5-C6-O6	-9.36	122.99	128.60
1	N	910	C	N3-C4-C5	-9.36	118.16	121.90
1	N	469	C	C5-C4-N4	-9.35	113.65	120.20
1	N	788	U	O4'-C1'-N1	9.35	115.68	108.20
1	N	177	G	N9-C4-C5	9.35	109.14	105.40
1	N	628	G	C4-N9-C1'	9.35	138.65	126.50
1	N	97	G	N1-C6-O6	9.35	125.51	119.90
1	N	224	U	O4'-C1'-N1	9.35	115.68	108.20
1	N	901	A	C4-C5-N7	-9.35	106.03	110.70
1	N	1041	G	P-O3'-C3'	-9.35	108.48	119.70
1	N	80	A	C5-C6-N6	-9.34	116.22	123.70
1	N	1147	C	N3-C4-C5	-9.34	118.16	121.90
1	N	153	C	C5-C6-N1	9.34	125.67	121.00
1	N	852	G	C5-C6-N1	-9.34	106.83	111.50
1	N	1365	G	C6-N1-C2	-9.34	119.50	125.10
1	N	465	A	C5-C6-N1	-9.34	113.03	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1179	A	C4-C5-C6	9.34	121.67	117.00
1	N	672	U	C4-C5-C6	-9.34	114.10	119.70
1	N	1339	A	N1-C6-N6	9.34	124.20	118.60
1	N	802	A	C8-N9-C4	-9.34	102.07	105.80
1	N	1014	A	N1-C6-N6	9.34	124.20	118.60
1	N	533	A	C4-C5-C6	9.33	121.67	117.00
1	N	632	U	C2-N3-C4	-9.33	121.40	127.00
1	N	1368	A	C4-C5-C6	9.33	121.67	117.00
1	N	514	C	C5-C4-N4	-9.33	113.67	120.20
1	N	1476	A	C4-C5-N7	-9.33	106.04	110.70
1	N	1078	U	C5-C6-N1	-9.33	118.04	122.70
1	N	705	G	N9-C4-C5	9.32	109.13	105.40
1	N	110	C	O4'-C1'-N1	9.32	115.66	108.20
1	N	265	G	N1-C6-O6	9.32	125.49	119.90
1	N	1255	G	N1-C2-N2	-9.32	107.81	116.20
1	N	922	G	O4'-C1'-N9	9.32	115.65	108.20
1	N	514	C	N3-C4-N4	9.31	124.52	118.00
1	N	1114	C	O4'-C1'-N1	9.31	115.65	108.20
1	N	1455	G	C4-C5-N7	-9.31	107.07	110.80
1	N	684	U	O4'-C1'-N1	9.31	115.65	108.20
1	N	1385	G	O4'-C1'-N9	9.31	115.65	108.20
1	N	221	C	N3-C4-C5	-9.31	118.17	121.90
1	N	10	A	N7-C8-N9	9.31	118.45	113.80
1	N	121	U	O4'-C1'-N1	9.31	115.65	108.20
1	N	249	U	N1-C2-N3	-9.31	109.31	114.90
1	N	779	C	C5-C4-N4	-9.31	113.68	120.20
1	N	840	C	N1-C2-O2	9.31	124.49	118.90
1	N	686	U	P-O3'-C3'	9.31	130.87	119.70
1	N	124	C	O4'-C1'-N1	9.31	115.64	108.20
1	N	947	G	C8-N9-C4	-9.31	102.68	106.40
1	N	222	C	O4'-C1'-N1	9.30	115.64	108.20
1	N	10	A	P-O5'-C5'	9.30	135.78	120.90
1	N	729	A	C4-C5-C6	9.30	121.65	117.00
1	N	1147	C	C5-C6-N1	9.30	125.65	121.00
1	N	981	U	C2-N3-C4	-9.29	121.42	127.00
1	N	1434	A	N1-C6-N6	9.29	124.17	118.60
1	N	1502	A	C4-C5-C6	9.29	121.65	117.00
1	N	16	A	N1-C2-N3	9.29	133.94	129.30
1	N	755	G	N1-C6-O6	9.29	125.47	119.90
1	N	246	A	C5-N7-C8	9.29	108.54	103.90
1	N	1025	U	C5-C6-N1	-9.29	118.06	122.70
1	N	1234	C	O4'-C1'-N1	9.28	115.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	284	C	C5-C4-N4	-9.28	113.70	120.20
1	N	1511	G	N1-C6-O6	9.28	125.47	119.90
1	N	585	G	N1-C6-O6	9.28	125.47	119.90
1	N	547	A	C4-C5-C6	9.28	121.64	117.00
1	N	278	G	N1-C6-O6	9.27	125.46	119.90
1	N	294	U	C5-C6-N1	9.27	127.34	122.70
1	N	1490	U	P-O5'-C5'	9.27	135.74	120.90
1	N	1533	C	C2-N1-C1'	9.27	129.00	118.80
1	N	428	G	N1-C6-O6	9.27	125.46	119.90
1	N	1285	A	C2-N3-C4	9.27	115.23	110.60
1	N	539	A	C4-C5-C6	9.27	121.63	117.00
1	N	894	G	N3-C4-C5	-9.27	123.97	128.60
1	N	1331	G	C5'-C4'-C3'	-9.27	101.17	116.00
1	N	1128	C	P-O5'-C5'	9.27	135.72	120.90
1	N	1271	A	C8-N9-C4	-9.27	102.09	105.80
1	N	635	A	N7-C8-N9	9.26	118.43	113.80
1	N	1048	G	N3-C2-N2	9.26	126.38	119.90
1	N	1132	C	N3-C4-C5	-9.26	118.19	121.90
1	N	211	G	N3-C4-C5	9.26	133.23	128.60
1	N	284	C	C5-C6-N1	9.26	125.63	121.00
1	N	847	G	N7-C8-N9	9.26	117.73	113.10
1	N	1238	A	C5-C6-N1	-9.26	113.07	117.70
1	N	71	A	O4'-C1'-N9	9.25	115.60	108.20
1	N	1003	G	P-O3'-C3'	9.25	130.80	119.70
1	N	1448	C	N1-C2-O2	9.25	124.45	118.90
1	N	241	G	C5-C6-O6	-9.25	123.05	128.60
1	N	634	C	C5-C4-N4	-9.25	113.73	120.20
1	N	628	G	N3-C2-N2	9.24	126.37	119.90
1	N	848	C	C6-N1-C2	-9.24	116.60	120.30
1	N	276	G	N9-C4-C5	9.24	109.10	105.40
1	N	485	U	N1-C2-N3	-9.24	109.36	114.90
1	N	1337	G	N3-C2-N2	9.24	126.37	119.90
1	N	1513	A	N9-C4-C5	-9.24	102.11	105.80
1	N	436	C	N3-C4-N4	9.23	124.46	118.00
1	N	521	G	C4-C5-C6	9.23	124.34	118.80
1	N	1220	G	C5-C6-O6	-9.23	123.06	128.60
1	N	147	G	N1-C2-N3	-9.23	118.36	123.90
1	N	451	A	N3-C4-C5	9.23	133.26	126.80
1	N	1091	U	C5-C6-N1	9.23	127.31	122.70
1	N	799	G	C4-C5-N7	9.23	114.49	110.80
1	N	1175	G	N1-C6-O6	9.23	125.44	119.90
1	N	1399	C	O4'-C1'-N1	9.23	115.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1333	A	N3-C4-C5	-9.23	120.34	126.80
1	N	1032	G	C2-N3-C4	-9.22	107.29	111.90
1	N	1395	C	P-O3'-C3'	9.22	130.77	119.70
1	N	201	G	C4-C5-C6	9.22	124.33	118.80
1	N	335	C	C6-N1-C2	-9.22	116.61	120.30
1	N	1086	U	N3-C2-O2	-9.22	115.75	122.20
1	N	1494	G	C5-C6-O6	-9.21	123.07	128.60
1	N	155	A	N1-C6-N6	9.21	124.13	118.60
1	N	1144	G	N7-C8-N9	9.21	117.71	113.10
1	N	49	U	O4'-C1'-N1	9.21	115.57	108.20
1	N	1077	G	O4'-C1'-N9	9.21	115.57	108.20
1	N	815	A	C4-C5-C6	9.21	121.60	117.00
1	N	830	G	N1-C6-O6	9.20	125.42	119.90
1	N	1491	G	C5-N7-C8	9.20	108.90	104.30
1	N	399	G	C8-N9-C4	9.20	110.08	106.40
1	N	195	A	C5-C6-N1	-9.20	113.10	117.70
1	N	1359	C	N3-C4-N4	9.20	124.44	118.00
1	N	1521	C	C6-N1-C2	-9.20	116.62	120.30
1	N	330	C	N3-C4-C5	-9.20	118.22	121.90
1	N	532	A	C4-C5-N7	-9.20	106.10	110.70
1	N	852	G	C6-N1-C2	9.19	130.62	125.10
1	N	246	A	C6-C5-N7	-9.19	125.86	132.30
1	N	954	G	C8-N9-C4	9.19	110.08	106.40
1	N	1304	G	C5-N7-C8	9.19	108.90	104.30
1	N	321	A	C5-C6-N6	-9.19	116.35	123.70
1	N	665	A	N1-C6-N6	9.19	124.11	118.60
1	N	836	G	N1-C2-N3	-9.19	118.39	123.90
1	N	926	G	C8-N9-C4	-9.19	102.72	106.40
1	N	767	A	N1-C6-N6	9.19	124.11	118.60
1	N	338	A	C5-C6-N6	-9.19	116.35	123.70
1	N	474	G	N1-C6-O6	9.19	125.41	119.90
1	N	1177	G	C4-C5-N7	9.18	114.47	110.80
1	N	1367	C	O4'-C1'-N1	9.18	115.55	108.20
1	N	1004	A	C5-C6-N6	-9.18	116.35	123.70
1	N	576	C	N3-C4-N4	9.18	124.43	118.00
1	N	89	U	C5-C4-O4	-9.18	120.39	125.90
1	N	1101	A	O4'-C1'-N9	9.17	115.53	108.20
1	N	923	A	N1-C6-N6	9.16	124.10	118.60
1	N	1208	C	P-O5'-C5'	9.16	135.56	120.90
1	N	65	A	C5-N7-C8	9.16	108.48	103.90
1	N	481	G	N3-C2-N2	9.16	126.31	119.90
1	N	1534	A	C8-N9-C4	-9.16	102.14	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	64	G	N7-C8-N9	9.16	117.68	113.10
1	N	414	A	N1-C6-N6	9.16	124.09	118.60
1	N	544	G	N7-C8-N9	-9.16	108.52	113.10
1	N	894	G	C6-C5-N7	-9.16	124.91	130.40
1	N	1441	A	O4'-C1'-N9	9.16	115.53	108.20
1	N	994	A	C8-N9-C4	-9.15	102.14	105.80
1	N	1410	A	O4'-C1'-N9	9.15	115.52	108.20
1	N	806	C	N3-C4-N4	9.15	124.40	118.00
1	N	391	G	C8-N9-C4	9.15	110.06	106.40
1	N	783	C	C5-C4-N4	-9.15	113.80	120.20
1	N	1023	U	C2-N1-C1'	9.15	128.68	117.70
1	N	1187	G	C8-N9-C4	-9.14	102.74	106.40
1	N	202	G	N9-C4-C5	9.14	109.06	105.40
1	N	437	U	N3-C2-O2	9.14	128.60	122.20
1	N	780	A	O4'-C1'-N9	9.14	115.51	108.20
1	N	1257	A	N1-C2-N3	9.14	133.87	129.30
1	N	65	A	C4-C5-C6	9.14	121.57	117.00
1	N	867	G	C4-C5-C6	9.14	124.28	118.80
1	N	143	A	C5-C6-N6	-9.13	116.39	123.70
1	N	280	C	N3-C4-C5	-9.13	118.25	121.90
1	N	688	G	C5-C6-O6	-9.13	123.12	128.60
1	N	1219	A	C5-C6-N1	-9.13	113.13	117.70
1	N	201	G	P-O3'-C3'	9.13	130.66	119.70
1	N	356	A	C4-C5-C6	9.13	121.56	117.00
1	N	397	A	P-O3'-C3'	9.13	130.65	119.70
1	N	649	A	C6-C5-N7	-9.13	125.91	132.30
1	N	893	C	C6-N1-C2	-9.13	116.65	120.30
1	N	1143	G	C5-C6-O6	-9.13	123.12	128.60
1	N	1169	A	C4-C5-C6	9.13	121.56	117.00
1	N	1278	G	N1-C6-O6	9.13	125.38	119.90
1	N	1511	G	N1-C2-N3	-9.13	118.42	123.90
1	N	252	U	N3-C2-O2	9.13	128.59	122.20
1	N	950	U	C5-C6-N1	9.12	127.26	122.70
1	N	192	A	C5-C6-N6	-9.12	116.40	123.70
1	N	408	A	C4-C5-N7	-9.12	106.14	110.70
1	N	1508	A	C5-C6-N1	-9.12	113.14	117.70
1	N	161	A	O4'-C1'-N9	9.12	115.49	108.20
1	N	966	G	P-O3'-C3'	9.11	130.64	119.70
1	N	1390	U	C5-C6-N1	9.11	127.26	122.70
1	N	1515	G	C4-C5-N7	-9.11	107.15	110.80
1	N	236	A	C5-C6-N1	-9.11	113.14	117.70
1	N	253	A	N7-C8-N9	9.11	118.36	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	400	C	C1'-O4'-C4'	-9.11	102.61	109.90
1	N	616	G	O4'-C1'-N9	9.11	115.49	108.20
1	N	898	G	O4'-C1'-N9	9.11	115.49	108.20
1	N	701	U	N1-C2-N3	-9.11	109.43	114.90
1	N	1299	A	C5-C6-N6	-9.11	116.41	123.70
1	N	1526	G	C5-C6-N1	-9.11	106.94	111.50
1	N	1370	G	O4'-C1'-N9	9.11	115.49	108.20
1	N	45	G	N1-C6-O6	9.10	125.36	119.90
1	N	130	A	N3-C4-N9	-9.10	120.12	127.40
1	N	320	A	C5-C6-N1	-9.10	113.15	117.70
1	N	692	U	N3-C4-C5	-9.10	109.14	114.60
1	N	1024	G	O4'-C1'-N9	9.10	115.48	108.20
1	N	301	G	C5-C6-N1	-9.10	106.95	111.50
1	N	1300	G	P-O3'-C3'	9.09	130.61	119.70
1	N	977	A	C4-C5-C6	9.09	121.55	117.00
1	N	631	C	O4'-C1'-N1	9.09	115.47	108.20
1	N	402	G	N1-C6-O6	9.09	125.35	119.90
1	N	404	G	C5-C6-O6	-9.09	123.15	128.60
1	N	1025	U	C2-N3-C4	9.09	132.45	127.00
1	N	1197	A	N3-C4-C5	-9.09	120.44	126.80
1	N	1404	C	N3-C4-N4	9.08	124.36	118.00
1	N	583	A	C5-C6-N1	-9.08	113.16	117.70
1	N	782	A	N9-C4-C5	-9.08	102.17	105.80
1	N	659	U	C5-C4-O4	-9.08	120.45	125.90
1	N	1494	G	N1-C6-O6	9.08	125.35	119.90
1	N	46	G	N7-C8-N9	-9.08	108.56	113.10
1	N	441	A	N1-C6-N6	9.08	124.05	118.60
1	N	725	G	C5-C6-O6	-9.08	123.15	128.60
1	N	1082	A	C5'-C4'-C3'	-9.07	101.48	116.00
1	N	1393	U	N3-C4-O4	9.07	125.75	119.40
1	N	846	G	C8-N9-C4	-9.07	102.77	106.40
1	N	199	A	C5-C6-N6	-9.07	116.44	123.70
1	N	325	A	C2-N3-C4	9.07	115.14	110.60
1	N	903	G	C5-C6-N1	-9.07	106.97	111.50
1	N	877	G	N1-C6-O6	9.06	125.34	119.90
1	N	1427	C	O4'-C1'-N1	9.06	115.45	108.20
1	N	121	U	C6-N1-C2	-9.06	115.56	121.00
1	N	828	U	C5-C4-O4	-9.06	120.46	125.90
1	N	541	G	O4'-C1'-N9	9.06	115.45	108.20
1	N	974	A	C4-C5-C6	9.06	121.53	117.00
1	N	1145	A	N1-C6-N6	9.06	124.03	118.60
1	N	1268	G	N9-C4-C5	-9.06	101.78	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1270	G	N1-C6-O6	9.06	125.33	119.90
1	N	1157	A	C5-C6-N1	-9.06	113.17	117.70
1	N	294	U	O4'-C1'-N1	9.05	115.44	108.20
1	N	607	A	P-O5'-C5'	9.05	135.37	120.90
1	N	1151	A	N1-C2-N3	9.04	133.82	129.30
1	N	1251	A	O4'-C1'-N9	9.04	115.43	108.20
1	N	1324	A	C2-N3-C4	-9.04	106.08	110.60
1	N	1340	A	O4'-C1'-N9	9.04	115.43	108.20
1	N	770	C	O4'-C1'-N1	9.04	115.43	108.20
1	N	849	G	N1-C6-O6	9.04	125.32	119.90
1	N	1130	A	N7-C8-N9	-9.04	109.28	113.80
1	N	1516	G	N3-C2-N2	9.04	126.23	119.90
1	N	298	A	N1-C6-N6	9.04	124.02	118.60
1	N	734	G	N1-C6-O6	9.04	125.32	119.90
1	N	219	U	C2-N3-C4	-9.03	121.58	127.00
1	N	916	U	C6-N1-C2	-9.03	115.58	121.00
1	N	1005	A	C5-C6-N1	-9.03	113.18	117.70
1	N	1369	C	O4'-C1'-N1	9.03	115.43	108.20
1	N	851	G	N9-C4-C5	-9.03	101.79	105.40
1	N	886	G	N7-C8-N9	-9.03	108.58	113.10
1	N	1177	G	N1-C6-O6	9.03	125.31	119.90
1	N	1431	A	C5-C6-N6	-9.03	116.48	123.70
1	N	1492	A	C4-C5-C6	9.03	121.51	117.00
1	N	1153	G	C2-N3-C4	-9.02	107.39	111.90
1	N	1357	A	N1-C6-N6	9.02	124.01	118.60
1	N	1368	A	P-O3'-C3'	-9.02	108.88	119.70
1	N	1268	G	C5-C6-O6	-9.01	123.19	128.60
1	N	1392	G	N1-C2-N3	-9.01	118.49	123.90
1	N	344	A	C5-N7-C8	9.01	108.40	103.90
1	N	354	G	C4-C5-N7	9.01	114.40	110.80
1	N	451	A	N1-C6-N6	9.01	124.00	118.60
1	N	452	A	C5-N7-C8	9.00	108.40	103.90
1	N	618	C	N3-C4-N4	9.00	124.30	118.00
1	N	863	U	O4'-C1'-N1	9.00	115.40	108.20
1	N	1157	A	C6-C5-N7	-9.00	126.00	132.30
1	N	1410	A	P-O3'-C3'	9.00	130.50	119.70
1	N	188	C	O4'-C1'-N1	9.00	115.40	108.20
1	N	160	A	N1-C2-N3	9.00	133.80	129.30
1	N	313	A	O4'-C1'-N9	9.00	115.40	108.20
1	N	337	G	N1-C6-O6	9.00	125.30	119.90
1	N	93	U	C5-C4-O4	-8.99	120.50	125.90
1	N	185	U	N3-C4-C5	-8.99	109.20	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	985	C	N3-C4-N4	8.99	124.30	118.00
1	N	135	C	N3-C4-C5	-8.99	118.30	121.90
1	N	312	C	O4'-C1'-N1	8.99	115.39	108.20
1	N	1513	A	O4'-C1'-N9	8.99	115.39	108.20
1	N	1436	U	O4'-C1'-N1	8.99	115.39	108.20
1	N	798	U	O4'-C1'-N1	8.98	115.39	108.20
1	N	1185	G	N3-C4-N9	-8.98	120.61	126.00
1	N	1454	G	O4'-C1'-N9	8.98	115.39	108.20
1	N	594	U	N3-C4-O4	8.98	125.68	119.40
1	N	1023	U	C6-N1-C2	-8.98	115.61	121.00
1	N	1050	G	N1-C6-O6	8.98	125.28	119.90
1	N	1073	U	C5-C6-N1	8.98	127.19	122.70
1	N	1142	G	N1-C6-O6	8.98	125.29	119.90
1	N	356	A	O4'-C1'-N9	8.97	115.38	108.20
1	N	1180	A	C6-C5-N7	-8.97	126.02	132.30
1	N	1473	G	N1-C6-O6	8.97	125.28	119.90
1	N	126	G	N9-C4-C5	8.97	108.99	105.40
1	N	479	U	C6-N1-C2	-8.97	115.62	121.00
1	N	1504	G	N9-C4-C5	-8.97	101.81	105.40
1	N	713	G	N1-C6-O6	8.96	125.28	119.90
1	N	777	A	N1-C2-N3	8.97	133.78	129.30
1	N	785	G	C6-C5-N7	-8.96	125.02	130.40
1	N	801	U	P-O3'-C3'	8.96	130.46	119.70
1	N	711	G	C5-C6-O6	-8.96	123.22	128.60
1	N	1174	G	N1-C6-O6	8.96	125.28	119.90
1	N	1467	C	N3-C4-C5	-8.96	118.31	121.90
1	N	532	A	C4-C5-C6	8.96	121.48	117.00
1	N	781	A	O4'-C1'-N9	8.96	115.37	108.20
1	N	1169	A	O4'-C1'-N9	8.96	115.37	108.20
1	N	1450	U	O4'-C1'-N1	8.96	115.37	108.20
1	N	305	G	C5-C6-O6	-8.96	123.22	128.60
1	N	350	G	N3-C4-N9	-8.96	120.62	126.00
1	N	945	G	C2-N3-C4	-8.96	107.42	111.90
1	N	531	U	P-O5'-C5'	8.96	135.23	120.90
1	N	601	G	C4-C5-N7	-8.95	107.22	110.80
1	N	124	C	N3-C4-C5	-8.95	118.32	121.90
1	N	338	A	C5-C6-N1	-8.95	113.23	117.70
1	N	1363	A	C5-C6-N1	-8.94	113.23	117.70
1	N	35	G	N1-C6-O6	8.94	125.27	119.90
1	N	1229	A	N1-C6-N6	8.94	123.97	118.60
1	N	491	G	P-O5'-C5'	-8.94	106.59	120.90
1	N	1476	A	C5-C6-N6	-8.94	116.55	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	300	A	N9-C4-C5	8.94	109.38	105.80
1	N	513	C	N3-C4-N4	8.94	124.26	118.00
1	N	511	C	N3-C4-N4	8.94	124.26	118.00
1	N	382	A	C5-C6-N6	-8.94	116.55	123.70
1	N	744	C	C5-C4-N4	-8.94	113.94	120.20
1	N	1074	G	N3-C4-N9	8.94	131.36	126.00
1	N	1271	A	O4'-C1'-N9	8.93	115.35	108.20
1	N	572	A	C5-C6-N6	-8.93	116.56	123.70
1	N	1474	U	N3-C2-O2	8.93	128.45	122.20
1	N	1089	G	C8-N9-C4	-8.93	102.83	106.40
1	N	246	A	C4-C5-C6	8.92	121.46	117.00
1	N	318	G	C4-C5-N7	-8.92	107.23	110.80
1	N	422	C	O4'-C1'-N1	8.92	115.34	108.20
1	N	718	A	C4-C5-C6	8.92	121.46	117.00
1	N	901	A	C5-C6-N6	-8.92	116.56	123.70
1	N	1035	A	C5-C6-N1	-8.92	113.24	117.70
1	N	688	G	C5-C6-N1	-8.92	107.04	111.50
1	N	736	C	O4'-C1'-N1	8.92	115.33	108.20
1	N	794	A	N1-C6-N6	8.92	123.95	118.60
1	N	155	A	N7-C8-N9	-8.92	109.34	113.80
1	N	467	U	C6-N1-C1'	-8.92	108.72	121.20
1	N	722	G	C5-C6-N1	-8.92	107.04	111.50
1	N	528	C	O4'-C1'-N1	8.91	115.33	108.20
1	N	1331	G	N3-C4-C5	-8.91	124.14	128.60
1	N	1377	A	C5-C6-N6	-8.91	116.57	123.70
1	N	1411	C	O4'-C1'-N1	8.91	115.33	108.20
1	N	52	C	C6-N1-C2	-8.91	116.73	120.30
1	N	786	G	C8-N9-C4	-8.91	102.83	106.40
1	N	725	G	C4-C5-C6	8.91	124.15	118.80
1	N	689	C	C4-C5-C6	-8.91	112.95	117.40
1	N	308	C	O4'-C1'-N1	8.90	115.32	108.20
1	N	122	G	N1-C2-N3	-8.90	118.56	123.90
1	N	455	G	C8-N9-C4	-8.90	102.84	106.40
1	N	193	C	N3-C4-C5	-8.90	118.34	121.90
1	N	1180	A	C5-C6-N1	-8.90	113.25	117.70
1	N	532	A	C5-N7-C8	8.90	108.35	103.90
1	N	936	C	O4'-C1'-N1	8.90	115.32	108.20
1	N	1492	A	N1-C2-N3	8.90	133.75	129.30
1	N	716	A	C5'-C4'-O4'	8.90	119.78	109.10
1	N	746	A	N1-C2-N3	-8.90	124.85	129.30
1	N	934	C	C2-N3-C4	8.90	124.35	119.90
1	N	190	A	C5-C6-N6	-8.90	116.58	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1091	U	C6-N1-C2	-8.90	115.66	121.00
1	N	461	A	C5-C6-N6	-8.89	116.58	123.70
1	N	880	C	N3-C4-N4	8.89	124.23	118.00
1	N	1296	C	O4'-C1'-N1	8.89	115.31	108.20
1	N	1306	A	C4-C5-C6	8.89	121.45	117.00
1	N	1128	C	C2-N3-C4	8.89	124.35	119.90
1	N	1039	G	C8-N9-C4	-8.89	102.84	106.40
1	N	591	U	C5-C6-N1	8.89	127.14	122.70
1	N	850	U	C5-C6-N1	8.89	127.14	122.70
1	N	881	G	N1-C6-O6	8.88	125.23	119.90
1	N	1491	G	N7-C8-N9	-8.88	108.66	113.10
1	N	1382	C	N3-C4-C5	-8.88	118.35	121.90
1	N	66	A	C5-N7-C8	8.88	108.34	103.90
1	N	1211	U	O4'-C1'-N1	8.87	115.30	108.20
1	N	1252	A	C5-C6-N6	-8.87	116.60	123.70
1	N	1434	A	N7-C8-N9	8.87	118.24	113.80
1	N	98	A	O4'-C1'-N9	8.87	115.30	108.20
1	N	53	A	O4'-C1'-N9	8.87	115.30	108.20
1	N	566	G	C5-C6-O6	-8.87	123.28	128.60
1	N	654	G	N1-C6-O6	8.87	125.22	119.90
1	N	422	C	N3-C4-C5	-8.87	118.35	121.90
1	N	1165	U	O4'-C1'-N1	8.87	115.30	108.20
1	N	1202	U	N3-C4-O4	8.87	125.61	119.40
1	N	1254	A	N3-C4-C5	-8.87	120.59	126.80
1	N	1374	A	C2-N3-C4	8.87	115.03	110.60
1	N	990	C	N3-C4-N4	8.86	124.20	118.00
1	N	1041	G	C4-C5-N7	8.87	114.35	110.80
1	N	1099	G	O4'-C1'-N9	8.86	115.29	108.20
1	N	1479	C	O4'-C1'-N1	8.87	115.29	108.20
1	N	448	A	N1-C6-N6	8.86	123.92	118.60
1	N	494	G	C4-C5-N7	8.86	114.34	110.80
1	N	640	A	N1-C2-N3	8.86	133.73	129.30
1	N	1405	G	O4'-C1'-N9	8.86	115.29	108.20
1	N	662	U	O4'-C1'-N1	8.86	115.29	108.20
1	N	882	C	O4'-C1'-N1	8.86	115.29	108.20
1	N	1082	A	C4-C5-N7	-8.86	106.27	110.70
1	N	459	A	C5'-C4'-C3'	-8.86	101.83	116.00
1	N	570	G	C4-C5-C6	8.86	124.11	118.80
1	N	11	G	C5-C6-O6	-8.86	123.29	128.60
1	N	444	G	N1-C6-O6	8.86	125.21	119.90
1	N	262	A	C5-C6-N1	-8.85	113.27	117.70
1	N	912	C	O4'-C1'-N1	8.85	115.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	119	A	C4-C5-C6	8.85	121.42	117.00
1	N	57	G	C5-C6-O6	-8.85	123.29	128.60
1	N	651	C	C5-C4-N4	-8.84	114.01	120.20
1	N	404	G	N7-C8-N9	-8.84	108.68	113.10
1	N	531	U	N3-C4-O4	8.84	125.59	119.40
1	N	1232	U	N3-C2-O2	8.84	128.39	122.20
1	N	1290	G	C5-N7-C8	8.84	108.72	104.30
1	N	183	C	N3-C4-N4	8.84	124.19	118.00
1	N	252	U	C1'-O4'-C4'	8.84	116.97	109.90
1	N	274	A	C5-C6-N1	-8.83	113.28	117.70
1	N	676	A	N7-C8-N9	8.83	118.22	113.80
1	N	1416	G	C4-C5-C6	8.83	124.10	118.80
1	N	706	A	C4-C5-C6	8.83	121.42	117.00
1	N	1199	U	O4'-C1'-N1	8.83	115.27	108.20
1	N	82	G	N1-C6-O6	8.83	125.20	119.90
1	N	201	G	C4-C5-N7	-8.83	107.27	110.80
1	N	781	A	C5-C6-N1	-8.83	113.29	117.70
1	N	1464	U	C5-C4-O4	-8.83	120.60	125.90
1	N	475	C	N3-C4-N4	8.82	124.18	118.00
1	N	236	A	N9-C4-C5	8.82	109.33	105.80
1	N	364	A	C5-C6-N6	-8.82	116.64	123.70
1	N	838	G	N1-C6-O6	8.82	125.19	119.90
1	N	1353	G	C2-N3-C4	8.82	116.31	111.90
1	N	530	G	C5-C6-O6	-8.82	123.31	128.60
1	N	1481	U	C5-C4-O4	-8.82	120.61	125.90
1	N	531	U	C4-C5-C6	-8.81	114.41	119.70
1	N	314	C	O4'-C1'-N1	8.81	115.25	108.20
1	N	454	G	N1-C2-N3	-8.81	118.61	123.90
1	N	1331	G	C6-C5-N7	-8.81	125.11	130.40
1	N	457	G	N9-C4-C5	-8.81	101.88	105.40
1	N	1396	A	C5-C6-N1	-8.81	113.30	117.70
1	N	565	U	N3-C4-O4	8.80	125.56	119.40
1	N	976	G	N1-C6-O6	8.80	125.18	119.90
1	N	493	A	C5-C6-N6	-8.80	116.66	123.70
1	N	270	A	P-O5'-C5'	8.80	134.97	120.90
1	N	818	G	C5-C6-O6	-8.79	123.32	128.60
1	N	390	U	O4'-C1'-N1	8.79	115.23	108.20
1	N	741	G	O4'-C1'-N9	8.79	115.23	108.20
1	N	1122	U	O4'-C1'-N1	8.79	115.23	108.20
1	N	66	A	C4-C5-C6	8.78	121.39	117.00
1	N	66	A	P-O3'-C3'	8.78	130.24	119.70
1	N	257	G	N7-C8-N9	8.78	117.49	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	396	C	C4-C5-C6	8.78	121.79	117.40
1	N	682	G	C5-C6-O6	-8.78	123.33	128.60
1	N	919	A	N1-C6-N6	8.78	123.87	118.60
1	N	930	C	N3-C4-N4	8.78	124.15	118.00
1	N	964	A	N1-C6-N6	8.78	123.87	118.60
1	N	837	U	C5-C6-N1	8.78	127.09	122.70
1	N	979	C	C5-C4-N4	-8.78	114.06	120.20
1	N	1512	U	O4'-C1'-N1	8.78	115.22	108.20
1	N	808	C	C6-N1-C2	-8.78	116.79	120.30
1	N	1429	A	C5-C6-N1	-8.77	113.31	117.70
1	N	686	U	O4'-C1'-N1	8.77	115.22	108.20
1	N	1325	C	O4'-C1'-N1	8.77	115.22	108.20
1	N	621	A	C4-C5-C6	8.77	121.39	117.00
1	N	1314	C	N3-C4-C5	-8.77	118.39	121.90
1	N	1401	G	O4'-C1'-N9	8.77	115.22	108.20
1	N	107	G	N7-C8-N9	-8.77	108.72	113.10
1	N	1442	G	N7-C8-N9	8.77	117.48	113.10
1	N	709	U	O4'-C1'-N1	8.76	115.21	108.20
1	N	190	A	N1-C2-N3	8.76	133.68	129.30
1	N	558	G	C8-N9-C4	-8.76	102.89	106.40
1	N	717	U	N3-C4-C5	-8.76	109.34	114.60
1	N	314	C	C6-N1-C2	-8.76	116.80	120.30
1	N	374	A	P-O3'-C3'	-8.76	109.19	119.70
1	N	581	G	O4'-C1'-N9	8.76	115.21	108.20
1	N	724	G	N1-C2-N3	-8.76	118.64	123.90
1	N	840	C	O4'-C1'-N1	8.76	115.21	108.20
1	N	499	A	C4-C5-C6	8.76	121.38	117.00
1	N	1416	G	C6-C5-N7	-8.76	125.15	130.40
1	N	1182	G	C5-C6-N1	-8.76	107.12	111.50
1	N	523	A	O4'-C1'-N9	8.75	115.20	108.20
1	N	1249	C	P-O3'-C3'	8.75	130.20	119.70
1	N	937	A	C4-C5-C6	8.75	121.38	117.00
1	N	1375	A	C5-C6-N6	-8.75	116.70	123.70
1	N	1366	C	O4'-C1'-N1	8.75	115.20	108.20
1	N	266	G	N1-C6-O6	8.74	125.14	119.90
1	N	704	A	C5-C6-N6	-8.74	116.71	123.70
1	N	884	U	N3-C4-C5	8.74	119.84	114.60
1	N	773	G	C8-N9-C4	8.74	109.89	106.40
1	N	1000	A	O4'-C1'-N9	8.74	115.19	108.20
1	N	198	G	C6-N1-C2	8.74	130.34	125.10
1	N	345	C	P-O3'-C3'	8.74	130.18	119.70
1	N	1009	U	N3-C2-O2	8.74	128.32	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1419	G	C5-C6-O6	-8.74	123.36	128.60
1	N	1496	C	C5-C6-N1	8.74	125.37	121.00
1	N	623	C	N3-C4-N4	8.73	124.11	118.00
1	N	711	G	N1-C2-N3	-8.73	118.66	123.90
1	N	763	G	O4'-C1'-N9	8.73	115.19	108.20
1	N	1370	G	N1-C2-N3	-8.73	118.66	123.90
1	N	784	A	O4'-C1'-N9	8.73	115.18	108.20
1	N	126	G	C4-C5-N7	-8.73	107.31	110.80
1	N	142	G	C8-N9-C4	-8.73	102.91	106.40
1	N	575	G	O4'-C1'-N9	8.73	115.18	108.20
1	N	1042	A	C4-C5-N7	-8.73	106.34	110.70
1	N	1332	A	P-O5'-C5'	-8.73	106.94	120.90
1	N	1514	G	C5-C6-O6	-8.73	123.36	128.60
1	N	1151	A	N1-C6-N6	8.72	123.83	118.60
1	N	620	C	C5-C4-N4	-8.72	114.09	120.20
1	N	65	A	C4-C5-N7	-8.72	106.34	110.70
1	N	316	C	C2-N3-C4	8.72	124.26	119.90
1	N	479	U	O4'-C1'-N1	8.72	115.17	108.20
1	N	798	U	C5'-C4'-C3'	8.72	129.95	116.00
1	N	943	U	C5-C6-N1	8.72	127.06	122.70
1	N	366	A	C8-N9-C4	-8.71	102.31	105.80
1	N	695	A	C4-C5-C6	8.71	121.36	117.00
1	N	1048	G	C5-C6-N1	-8.71	107.14	111.50
1	N	109	A	C1'-O4'-C4'	8.71	116.87	109.90
1	N	11	G	P-O3'-C3'	-8.71	109.25	119.70
1	N	694	A	C6-C5-N7	-8.71	126.20	132.30
1	N	1466	C	C4-C5-C6	8.71	121.76	117.40
1	N	922	G	C4-C5-C6	8.71	124.03	118.80
1	N	1477	U	N1-C2-N3	-8.71	109.67	114.90
1	N	1238	A	C4-C5-C6	8.71	121.35	117.00
1	N	409	U	O4'-C1'-N1	8.70	115.16	108.20
1	N	656	G	C4'-C3'-C2'	-8.70	93.90	102.60
1	N	254	G	O4'-C1'-N9	8.70	115.16	108.20
1	N	292	G	N1-C2-N3	-8.70	118.68	123.90
1	N	472	U	N3-C4-O4	8.70	125.49	119.40
1	N	646	G	C4-C5-N7	8.70	114.28	110.80
1	N	753	A	C5-C6-N1	-8.70	113.35	117.70
1	N	1023	U	C5-C4-O4	-8.70	120.68	125.90
1	N	510	A	C8-N9-C4	8.70	109.28	105.80
1	N	563	A	C5'-C4'-O4'	-8.70	98.66	109.10
1	N	749	A	C5-C6-N1	-8.70	113.35	117.70
1	N	1462	C	C2-N3-C4	8.70	124.25	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	16	A	C5-C6-N1	-8.70	113.35	117.70
1	N	204	G	C4-C5-N7	-8.70	107.32	110.80
1	N	477	C	O4'-C1'-N1	8.70	115.16	108.20
1	N	859	G	O4'-C1'-N9	8.70	115.16	108.20
1	N	996	A	N9-C4-C5	8.70	109.28	105.80
1	N	1300	G	C4'-C3'-C2'	-8.70	93.90	102.60
1	N	860	A	O4'-C1'-N9	8.69	115.16	108.20
1	N	1229	A	O4'-C1'-N9	8.69	115.15	108.20
1	N	343	U	O4'-C1'-N1	8.69	115.15	108.20
1	N	71	A	C4-C5-C6	8.69	121.34	117.00
1	N	609	A	C5-C6-N1	-8.69	113.36	117.70
1	N	1035	A	C5-C6-N6	-8.69	116.75	123.70
1	N	596	A	O4'-C1'-N9	8.69	115.15	108.20
1	N	833	G	N3-C2-N2	8.69	125.98	119.90
1	N	1206	G	C5-C6-N1	-8.69	107.16	111.50
1	N	680	C	O4'-C1'-N1	8.68	115.15	108.20
1	N	876	C	O4'-C1'-N1	8.68	115.15	108.20
1	N	926	G	C5-N7-C8	8.68	108.64	104.30
1	N	211	G	C4'-C3'-C2'	8.68	111.28	102.60
1	N	564	C	C5-C4-N4	8.68	126.27	120.20
1	N	602	A	O4'-C1'-N9	8.68	115.14	108.20
1	N	943	U	C6-N1-C2	-8.68	115.80	121.00
1	N	71	A	N9-C4-C5	-8.67	102.33	105.80
1	N	75	G	C5-C6-O6	-8.67	123.39	128.60
1	N	257	G	C8-N9-C4	-8.67	102.93	106.40
1	N	1516	G	C5-C6-N1	-8.67	107.16	111.50
1	N	716	A	C5-C6-N6	-8.67	116.76	123.70
1	N	1293	C	C4-C5-C6	-8.67	113.06	117.40
1	N	606	G	C2-N3-C4	-8.67	107.56	111.90
1	N	419	C	N3-C4-N4	8.67	124.07	118.00
1	N	489	C	N3-C4-C5	-8.67	118.43	121.90
1	N	830	G	N1-C2-N3	-8.67	118.70	123.90
1	N	1433	A	N3-C4-C5	8.67	132.87	126.80
1	N	1507	A	C6-C5-N7	-8.67	126.23	132.30
1	N	209	U	N1-C2-N3	-8.66	109.70	114.90
1	N	1184	G	N3-C2-N2	8.66	125.96	119.90
1	N	1424	U	C4'-C3'-C2'	-8.66	93.94	102.60
1	N	668	G	N1-C2-N3	-8.66	118.70	123.90
1	N	886	G	C4-C5-C6	8.66	124.00	118.80
1	N	877	G	N3-C2-N2	8.65	125.96	119.90
1	N	26	A	N1-C2-N3	8.65	133.63	129.30
1	N	432	A	C5-C6-N6	-8.65	116.78	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	731	G	O4'-C1'-N9	8.65	115.12	108.20
1	N	1151	A	C4-C5-C6	8.65	121.33	117.00
1	N	631	C	P-O3'-C3'	8.65	130.08	119.70
1	N	776	G	C5-N7-C8	-8.65	99.97	104.30
1	N	35	G	N1-C2-N3	-8.65	118.71	123.90
1	N	599	C	C5-C6-N1	8.65	125.32	121.00
1	N	835	U	C2-N3-C4	-8.65	121.81	127.00
1	N	983	A	C8-N9-C4	-8.65	102.34	105.80
1	N	1509	C	O4'-C1'-N1	8.65	115.12	108.20
1	N	623	C	C2-N3-C4	8.65	124.22	119.90
1	N	1068	G	C4-C5-N7	-8.65	107.34	110.80
1	N	1118	U	O4'-C1'-N1	8.65	115.12	108.20
1	N	1395	C	O4'-C4'-C3'	-8.65	95.35	104.00
1	N	669	G	O4'-C1'-N9	8.64	115.12	108.20
1	N	1003	G	C5-C6-O6	-8.64	123.42	128.60
1	N	1307	U	P-O3'-C3'	-8.64	109.33	119.70
1	N	348	G	C5-N7-C8	-8.64	99.98	104.30
1	N	1180	A	C8-N9-C4	-8.64	102.34	105.80
1	N	482	A	C4-C5-C6	8.64	121.32	117.00
1	N	916	U	O4'-C1'-N1	8.64	115.11	108.20
1	N	1064	G	N1-C6-O6	8.64	125.08	119.90
1	N	626	G	C5-C6-O6	-8.63	123.42	128.60
1	N	918	A	N7-C8-N9	8.63	118.12	113.80
1	N	1096	C	O4'-C1'-N1	8.64	115.11	108.20
1	N	1206	G	C6-C5-N7	-8.63	125.22	130.40
1	N	101	A	N3-C4-C5	-8.63	120.76	126.80
1	N	721	G	N1-C6-O6	8.63	125.08	119.90
1	N	1099	G	C2-N3-C4	8.63	116.22	111.90
1	N	1350	A	O4'-C1'-N9	8.63	115.11	108.20
1	N	134	G	C5-C6-O6	-8.63	123.42	128.60
1	N	521	G	C8-N9-C4	-8.62	102.95	106.40
1	N	1201	A	C5-C6-N1	-8.62	113.39	117.70
1	N	1437	A	N1-C6-N6	8.62	123.78	118.60
1	N	466	A	C4-C5-C6	8.62	121.31	117.00
1	N	975	A	C5-C6-N6	-8.62	116.80	123.70
1	N	63	C	P-O3'-C3'	8.62	130.04	119.70
1	N	411	A	P-O5'-C5'	8.62	134.69	120.90
1	N	136	C	N3-C4-N4	8.62	124.03	118.00
1	N	1086	U	C5'-C4'-C3'	-8.62	102.21	116.00
1	N	1507	A	P-O5'-C5'	8.62	134.69	120.90
1	N	101	A	C5-C6-N6	-8.61	116.81	123.70
1	N	546	A	C5-C6-N1	-8.61	113.39	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	823	C	N3-C4-C5	-8.61	118.46	121.90
1	N	273	U	P-O5'-C5'	8.61	134.67	120.90
1	N	753	A	O4'-C1'-N9	8.61	115.09	108.20
1	N	1018	G	C2-N3-C4	8.61	116.20	111.90
1	N	89	U	P-O3'-C3'	8.61	130.03	119.70
1	N	150	U	O4'-C1'-N1	8.61	115.08	108.20
1	N	68	G	N1-C6-O6	8.60	125.06	119.90
1	N	1378	C	C5-C6-N1	8.60	125.30	121.00
1	N	431	A	C5-C6-N1	-8.60	113.40	117.70
1	N	616	G	N9-C4-C5	8.60	108.84	105.40
1	N	1051	C	N3-C4-N4	8.60	124.02	118.00
1	N	1229	A	N1-C2-N3	8.60	133.60	129.30
1	N	547	A	C4-C5-N7	-8.59	106.40	110.70
1	N	1512	U	C3'-C2'-C1'	8.59	108.37	101.50
1	N	97	G	N1-C2-N3	-8.59	118.75	123.90
1	N	1426	G	O4'-C1'-N9	8.59	115.07	108.20
1	N	1452	C	N3-C4-C5	-8.59	118.46	121.90
1	N	308	C	N3-C4-N4	8.59	124.01	118.00
1	N	507	C	N3-C4-N4	8.59	124.01	118.00
1	N	964	A	C4-C5-C6	8.59	121.29	117.00
1	N	199	A	C1'-O4'-C4'	8.59	116.77	109.90
1	N	38	G	O4'-C1'-N9	8.59	115.07	108.20
1	N	160	A	C5-C6-N6	-8.58	116.83	123.70
1	N	295	C	N3-C4-N4	8.58	124.01	118.00
1	N	1030	U	N3-C2-O2	8.58	128.21	122.20
1	N	1119	C	O4'-C1'-N1	8.58	115.07	108.20
1	N	1311	A	N1-C6-N6	8.58	123.75	118.60
1	N	1493	A	C5-C6-N1	-8.58	113.41	117.70
1	N	1131	G	N7-C8-N9	-8.58	108.81	113.10
1	N	1258	G	O4'-C1'-N9	8.58	115.06	108.20
1	N	669	G	C4-C5-C6	8.57	123.94	118.80
1	N	554	A	O4'-C1'-N9	8.57	115.06	108.20
1	N	752	G	P-O3'-C3'	8.57	129.98	119.70
1	N	1222	G	N3-C2-N2	8.57	125.90	119.90
1	N	258	G	C8-N9-C4	-8.57	102.97	106.40
1	N	826	C	C4'-C3'-C2'	-8.56	94.03	102.60
1	N	888	G	C5-C6-O6	-8.56	123.46	128.60
1	N	1300	G	C5-C6-O6	-8.56	123.46	128.60
1	N	555	U	P-O5'-C5'	8.56	134.59	120.90
1	N	855	U	O4'-C1'-N1	8.56	115.05	108.20
1	N	1222	G	C5-C6-O6	-8.56	123.47	128.60
1	N	1398	A	C5-C6-N6	-8.56	116.86	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	286	C	C6-N1-C2	-8.55	116.88	120.30
1	N	776	G	N3-C2-N2	8.55	125.89	119.90
1	N	5	U	N1-C2-O2	-8.55	116.81	122.80
1	N	515	G	N7-C8-N9	8.55	117.38	113.10
1	N	612	C	N3-C4-C5	-8.55	118.48	121.90
1	N	635	A	C5-C6-N6	-8.55	116.86	123.70
1	N	1005	A	C4-C5-N7	-8.55	106.42	110.70
1	N	1319	A	C5-N7-C8	8.55	108.17	103.90
1	N	1363	A	C5-C6-N6	-8.55	116.86	123.70
1	N	508	U	O4'-C1'-N1	8.55	115.04	108.20
1	N	836	G	N1-C6-O6	8.55	125.03	119.90
1	N	1162	C	O4'-C1'-N1	8.55	115.04	108.20
1	N	1053	G	P-O5'-C5'	8.55	134.57	120.90
1	N	773	G	N3-C4-C5	8.54	132.87	128.60
1	N	87	C	C2-N3-C4	8.54	124.17	119.90
1	N	664	G	C5-C6-N1	-8.54	107.23	111.50
1	N	995	C	N3-C4-N4	8.54	123.98	118.00
1	N	1426	G	N3-C4-C5	8.54	132.87	128.60
1	N	868	C	C6-N1-C2	-8.54	116.89	120.30
1	N	1363	A	C5'-C4'-C3'	-8.54	102.34	116.00
1	N	216	U	N3-C4-O4	8.54	125.37	119.40
1	N	650	G	C5-N7-C8	-8.53	100.03	104.30
1	N	1318	A	N1-C6-N6	8.53	123.72	118.60
1	N	131	A	C5-N7-C8	8.53	108.17	103.90
1	N	176	C	P-O5'-C5'	8.53	134.54	120.90
1	N	458	U	N3-C2-O2	8.53	128.17	122.20
1	N	576	C	C2-N3-C4	8.53	124.16	119.90
1	N	415	A	C6-C5-N7	-8.53	126.33	132.30
1	N	792	A	C4-C5-C6	8.52	121.26	117.00
1	N	131	A	O4'-C1'-N9	8.52	115.02	108.20
1	N	1210	C	C2-N3-C4	8.52	124.16	119.90
1	N	66	A	C5-C6-N1	-8.52	113.44	117.70
1	N	931	C	N3-C4-C5	-8.52	118.49	121.90
1	N	1273	C	O4'-C1'-N1	8.52	115.01	108.20
1	N	777	A	O4'-C1'-N9	8.51	115.01	108.20
1	N	1033	G	N7-C8-N9	-8.51	108.84	113.10
1	N	216	U	O4'-C1'-N1	8.51	115.01	108.20
1	N	826	C	O4'-C1'-N1	8.51	115.01	108.20
1	N	167	A	N1-C6-N6	8.51	123.70	118.60
1	N	586	C	N3-C4-N4	8.51	123.95	118.00
1	N	829	G	N3-C2-N2	8.51	125.86	119.90
1	N	1142	G	N1-C2-N3	-8.51	118.80	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	380	G	N1-C6-O6	8.50	125.00	119.90
1	N	404	G	N1-C2-N3	-8.50	118.80	123.90
1	N	430	A	N1-C6-N6	8.50	123.70	118.60
1	N	802	A	C4-C5-N7	-8.50	106.45	110.70
1	N	135	C	O4'-C1'-N1	8.50	115.00	108.20
1	N	387	U	N3-C4-O4	8.50	125.35	119.40
1	N	72	A	N1-C2-N3	-8.49	125.05	129.30
1	N	1471	U	O4'-C1'-N1	8.49	115.00	108.20
1	N	1361	G	C5-C6-N1	-8.49	107.25	111.50
1	N	923	A	C6-C5-N7	-8.49	126.36	132.30
1	N	1025	U	N1-C2-O2	8.49	128.74	122.80
1	N	1302	C	C3'-C2'-C1'	8.49	108.29	101.50
1	N	1338	G	N1-C6-O6	8.49	124.99	119.90
1	N	1046	A	O4'-C1'-N9	8.49	114.99	108.20
1	N	1413	A	C5-C6-N1	-8.49	113.46	117.70
1	N	1440	U	O4'-C4'-C3'	-8.49	95.51	104.00
1	N	435	A	C5-C6-N6	-8.48	116.91	123.70
1	N	1171	A	C5'-C4'-O4'	8.48	119.28	109.10
1	N	654	G	C5-C6-N1	-8.48	107.26	111.50
1	N	34	C	O4'-C1'-N1	8.48	114.99	108.20
1	N	989	U	C5-C6-N1	8.48	126.94	122.70
1	N	1524	C	C6-N1-C1'	-8.48	110.62	120.80
1	N	940	C	C6-N1-C2	-8.48	116.91	120.30
1	N	1507	A	N3-C4-C5	-8.48	120.86	126.80
1	N	818	G	C3'-C2'-C1'	-8.48	94.72	101.50
1	N	1132	C	N3-C4-N4	8.48	123.93	118.00
1	N	1337	G	P-O3'-C3'	-8.48	109.53	119.70
1	N	355	C	N3-C4-C5	-8.47	118.51	121.90
1	N	1099	G	C6-N1-C2	8.47	130.19	125.10
1	N	198	G	N1-C6-O6	8.47	124.98	119.90
1	N	280	C	C6-N1-C2	-8.47	116.91	120.30
1	N	620	C	N1-C2-O2	8.47	123.98	118.90
1	N	894	G	C4-C5-C6	8.47	123.88	118.80
1	N	218	U	O4'-C1'-N1	8.46	114.97	108.20
1	N	587	G	P-O3'-C3'	8.46	129.86	119.70
1	N	1366	C	N3-C4-C5	-8.46	118.51	121.90
1	N	119	A	O4'-C1'-N9	8.46	114.97	108.20
1	N	905	U	P-O5'-C5'	8.46	134.44	120.90
1	N	277	C	O4'-C1'-N1	8.46	114.97	108.20
1	N	1090	U	N3-C2-O2	8.46	128.12	122.20
1	N	663	A	N1-C6-N6	8.46	123.68	118.60
1	N	852	G	N1-C6-O6	8.46	124.97	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1384	C	O4'-C1'-N1	8.46	114.96	108.20
1	N	500	G	C5-N7-C8	8.45	108.53	104.30
1	N	58	C	C6-N1-C2	-8.45	116.92	120.30
1	N	281	G	N1-C2-N3	-8.45	118.83	123.90
1	N	296	U	P-O3'-C3'	-8.45	109.56	119.70
1	N	742	G	N1-C6-O6	8.45	124.97	119.90
1	N	778	G	C5-N7-C8	8.45	108.53	104.30
1	N	410	G	C5-C6-N1	-8.45	107.28	111.50
1	N	64	G	N3-C4-N9	-8.44	120.93	126.00
1	N	642	A	C8-N9-C4	-8.45	102.42	105.80
1	N	713	G	C5-C6-O6	-8.44	123.53	128.60
1	N	1072	G	N1-C2-N3	-8.44	118.83	123.90
1	N	481	G	C5-C6-N1	-8.44	107.28	111.50
1	N	548	G	C4-C5-C6	8.44	123.86	118.80
1	N	1297	G	C8-N9-C4	-8.44	103.02	106.40
1	N	65	A	C5-C6-N6	-8.44	116.95	123.70
1	N	953	G	C5-C6-O6	-8.44	123.54	128.60
1	N	505	G	C5-N7-C8	8.43	108.52	104.30
1	N	1369	C	N3-C4-N4	8.43	123.90	118.00
1	N	1395	C	N3-C4-N4	8.43	123.90	118.00
1	N	240	G	C6-C5-N7	-8.43	125.34	130.40
1	N	723	U	N1-C2-N3	-8.43	109.84	114.90
1	N	1067	A	N1-C6-N6	8.43	123.66	118.60
1	N	521	G	N3-C4-N9	8.43	131.06	126.00
1	N	665	A	C4-C5-C6	8.43	121.22	117.00
1	N	1241	G	C5-C6-N1	-8.43	107.28	111.50
1	N	36	C	N3-C4-N4	8.43	123.90	118.00
1	N	127	G	N1-C2-N3	-8.43	118.84	123.90
1	N	244	U	O4'-C1'-N1	8.43	114.94	108.20
1	N	417	G	C6-C5-N7	-8.43	125.34	130.40
1	N	588	G	O4'-C1'-N9	8.43	114.94	108.20
1	N	977	A	C5-C6-N1	-8.43	113.48	117.70
1	N	1045	C	C5-C4-N4	-8.43	114.30	120.20
1	N	416	G	N1-C2-N3	-8.42	118.85	123.90
1	N	848	C	O4'-C1'-N1	8.42	114.94	108.20
1	N	1074	G	C4-C5-C6	8.42	123.85	118.80
1	N	166	U	C6-N1-C2	-8.42	115.95	121.00
1	N	33	A	O4'-C1'-N9	8.42	114.93	108.20
1	N	479	U	C5-C6-N1	8.42	126.91	122.70
1	N	932	C	C6-N1-C2	-8.42	116.93	120.30
1	N	1087	G	P-O5'-C5'	8.42	134.37	120.90
1	N	1168	U	C5'-C4'-C3'	8.41	129.46	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	46	G	N3-C4-C5	8.41	132.81	128.60
1	N	533	A	C5'-C4'-O4'	8.41	119.19	109.10
1	N	185	U	O4'-C1'-N1	8.41	114.93	108.20
1	N	598	U	O4'-C1'-N1	8.41	114.93	108.20
1	N	361	G	C5-C6-O6	-8.41	123.56	128.60
1	N	901	A	C5-N7-C8	8.41	108.10	103.90
1	N	1257	A	C6-N1-C2	-8.41	113.56	118.60
1	N	1347	G	C6-C5-N7	-8.40	125.36	130.40
1	N	1043	G	P-O3'-C3'	8.40	129.78	119.70
1	N	1403	C	N3-C4-C5	-8.40	118.54	121.90
1	N	191	G	C8-N9-C4	8.40	109.76	106.40
1	N	247	G	O4'-C1'-N9	8.40	114.92	108.20
1	N	429	U	O4'-C1'-N1	8.40	114.92	108.20
1	N	1061	G	C5-N7-C8	-8.40	100.10	104.30
1	N	1334	G	N3-C2-N2	8.40	125.78	119.90
1	N	535	A	N1-C2-N3	8.40	133.50	129.30
1	N	804	U	C2-N1-C1'	-8.39	107.63	117.70
1	N	460	A	N1-C6-N6	8.39	123.64	118.60
1	N	473	U	P-O5'-C5'	8.39	134.32	120.90
1	N	531	U	N3-C2-O2	8.39	128.07	122.20
1	N	459	A	C6-C5-N7	-8.39	126.43	132.30
1	N	567	G	N1-C6-O6	8.39	124.93	119.90
1	N	661	G	N1-C2-N3	-8.38	118.87	123.90
1	N	909	A	N1-C2-N3	8.38	133.49	129.30
1	N	1526	G	P-O3'-C3'	-8.38	109.64	119.70
1	N	1117	A	P-O5'-C5'	8.38	134.31	120.90
1	N	1136	C	N3-C4-C5	-8.38	118.55	121.90
1	N	578	C	N3-C4-C5	-8.38	118.55	121.90
1	N	1249	C	C5'-C4'-C3'	-8.38	102.59	116.00
1	N	41	G	N1-C2-N3	-8.38	118.87	123.90
1	N	205	A	C4-C5-C6	8.38	121.19	117.00
1	N	404	G	C5-N7-C8	8.38	108.49	104.30
1	N	694	A	C5'-C4'-C3'	8.38	129.41	116.00
1	N	722	G	C4-C5-C6	8.38	123.83	118.80
1	N	773	G	C5-C6-O6	-8.38	123.57	128.60
1	N	582	C	O4'-C1'-N1	8.38	114.90	108.20
1	N	900	A	C5-N7-C8	8.38	108.09	103.90
1	N	1277	C	O4'-C1'-N1	8.38	114.90	108.20
1	N	78	A	C5-C6-N6	-8.37	117.00	123.70
1	N	178	C	N3-C4-N4	8.37	123.86	118.00
1	N	942	G	N1-C6-O6	8.37	124.92	119.90
1	N	302	G	C5-C6-N1	-8.37	107.31	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1274	A	N7-C8-N9	-8.37	109.61	113.80
1	N	1034	G	C6-C5-N7	-8.37	125.38	130.40
1	N	43	C	N3-C4-N4	8.37	123.86	118.00
1	N	511	C	C5-C4-N4	-8.37	114.34	120.20
1	N	750	C	C5-C4-N4	-8.37	114.34	120.20
1	N	1021	A	N1-C6-N6	8.37	123.62	118.60
1	N	1356	G	C5-C6-O6	-8.37	123.58	128.60
1	N	394	G	C5-C6-N1	-8.37	107.32	111.50
1	N	1235	U	O4'-C1'-N1	8.37	114.89	108.20
1	N	922	G	C6-C5-N7	-8.36	125.38	130.40
1	N	1066	C	C5-C4-N4	-8.37	114.34	120.20
1	N	994	A	C4-C5-C6	8.36	121.18	117.00
1	N	120	A	C5-C6-N6	-8.36	117.01	123.70
1	N	725	G	C6-C5-N7	-8.36	125.39	130.40
1	N	26	A	O4'-C1'-N9	8.36	114.89	108.20
1	N	514	C	O4'-C1'-N1	8.36	114.89	108.20
1	N	672	U	P-O3'-C3'	-8.36	109.67	119.70
1	N	674	G	N3-C2-N2	8.35	125.75	119.90
1	N	406	G	C5-C6-O6	-8.35	123.59	128.60
1	N	1524	C	C1'-O4'-C4'	-8.35	103.22	109.90
1	N	1082	A	N1-C6-N6	8.34	123.61	118.60
1	N	1322	C	N3-C4-N4	8.34	123.84	118.00
1	N	1489	G	N1-C6-O6	8.34	124.90	119.90
1	N	76	G	C8-N9-C4	8.34	109.74	106.40
1	N	674	G	C5-C6-O6	-8.34	123.60	128.60
1	N	895	G	C6-N1-C2	8.34	130.10	125.10
1	N	51	A	N9-C4-C5	-8.34	102.47	105.80
1	N	606	G	C4-C5-C6	8.34	123.80	118.80
1	N	618	C	N3-C4-C5	-8.34	118.57	121.90
1	N	108	G	C8-N9-C4	-8.33	103.07	106.40
1	N	411	A	N9-C4-C5	8.33	109.13	105.80
1	N	1109	C	P-O3'-C3'	8.33	129.70	119.70
1	N	1446	A	O4'-C1'-N9	8.33	114.87	108.20
1	N	202	G	C4-C5-C6	8.33	123.80	118.80
1	N	273	U	O3'-P-O5'	-8.33	88.17	104.00
1	N	314	C	C5-C6-N1	8.33	125.17	121.00
1	N	1347	G	P-O3'-C3'	8.33	129.69	119.70
1	N	1421	G	C6-C5-N7	-8.33	125.40	130.40
1	N	765	G	O4'-C1'-N9	8.33	114.86	108.20
1	N	1002	G	P-O3'-C3'	-8.33	109.71	119.70
1	N	872	A	C5-C6-N1	-8.32	113.54	117.70
1	N	886	G	C8-N9-C4	8.32	109.73	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1265	C	C6-N1-C2	-8.32	116.97	120.30
1	N	105	G	C5-C6-N1	-8.32	107.34	111.50
1	N	111	G	N3-C4-C5	-8.32	124.44	128.60
1	N	703	G	C2-N3-C4	8.32	116.06	111.90
1	N	1192	C	O4'-C1'-N1	8.32	114.86	108.20
1	N	994	A	C5-N7-C8	8.32	108.06	103.90
1	N	1442	G	P-O5'-C5'	8.32	134.21	120.90
1	N	600	A	C5-C6-N1	-8.32	113.54	117.70
1	N	1392	G	N9-C4-C5	-8.32	102.07	105.40
1	N	815	A	O4'-C1'-N9	8.31	114.85	108.20
1	N	250	A	N1-C6-N6	8.31	123.59	118.60
1	N	769	G	C6-C5-N7	-8.31	125.41	130.40
1	N	1162	C	N3-C4-N4	8.31	123.82	118.00
1	N	267	C	O4'-C1'-N1	8.31	114.85	108.20
1	N	560	A	N9-C4-C5	8.31	109.12	105.80
1	N	1343	G	C6-N1-C2	8.31	130.08	125.10
1	N	502	A	C5-C6-N6	-8.31	117.06	123.70
1	N	533	A	P-O3'-C3'	8.31	129.67	119.70
1	N	650	G	N1-C6-O6	8.31	124.88	119.90
1	N	6	G	C5-C6-O6	-8.30	123.62	128.60
1	N	975	A	C8-N9-C4	8.30	109.12	105.80
1	N	664	G	C6-C5-N7	-8.30	125.42	130.40
1	N	607	A	C2-N3-C4	-8.30	106.45	110.60
1	N	648	A	P-O5'-C5'	8.29	134.17	120.90
1	N	724	G	P-O5'-C5'	-8.30	107.63	120.90
1	N	901	A	C8-N9-C4	-8.30	102.48	105.80
1	N	839	C	N3-C4-N4	8.29	123.81	118.00
1	N	812	G	C5'-C4'-O4'	8.29	119.05	109.10
1	N	844	G	C6-C5-N7	-8.29	125.43	130.40
1	N	976	G	O4'-C1'-N9	8.29	114.83	108.20
1	N	1255	G	N9-C4-C5	-8.29	102.09	105.40
1	N	447	G	O4'-C1'-N9	8.28	114.83	108.20
1	N	866	C	N1-C2-N3	-8.28	113.40	119.20
1	N	1155	A	C5-C6-N6	-8.29	117.07	123.70
1	N	1017	U	N1-C2-N3	-8.28	109.93	114.90
1	N	1136	C	C2-N3-C4	8.28	124.04	119.90
1	N	981	U	O4'-C1'-N1	8.27	114.82	108.20
1	N	314	C	C1'-O4'-C4'	-8.27	103.28	109.90
1	N	348	G	O4'-C1'-N9	8.27	114.81	108.20
1	N	60	A	C3'-C2'-C1'	8.26	108.11	101.50
1	N	945	G	C5-C6-O6	-8.26	123.64	128.60
1	N	1503	A	C6-N1-C2	8.26	123.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	22	G	C5-C6-N1	-8.26	107.37	111.50
1	N	1363	A	C4-C5-C6	8.26	121.13	117.00
1	N	488	C	C6-N1-C2	-8.26	117.00	120.30
1	N	739	C	P-O5'-C5'	8.26	134.11	120.90
1	N	32	A	N3-C4-C5	-8.26	121.02	126.80
1	N	335	C	O4'-C1'-N1	8.26	114.81	108.20
1	N	723	U	O4'-C4'-C3'	-8.25	95.75	104.00
1	N	206	C	C6-N1-C1'	-8.25	110.90	120.80
1	N	1417	G	C8-N9-C1'	-8.25	116.27	127.00
1	N	904	U	C6-N1-C2	-8.25	116.05	121.00
1	N	1371	G	O4'-C1'-N9	8.25	114.80	108.20
1	N	621	A	C5-C6-N6	-8.25	117.10	123.70
1	N	874	G	C8-N9-C4	-8.25	103.10	106.40
1	N	1063	C	C5-C4-N4	-8.25	114.43	120.20
1	N	1507	A	O4'-C1'-N9	8.25	114.80	108.20
1	N	316	C	C5-C6-N1	8.24	125.12	121.00
1	N	412	A	C5-C6-N6	-8.24	117.11	123.70
1	N	739	C	C6-N1-C2	-8.24	117.00	120.30
1	N	953	G	O4'-C1'-N9	8.24	114.80	108.20
1	N	372	C	C5-C4-N4	-8.24	114.43	120.20
1	N	1236	A	P-O3'-C3'	8.24	129.59	119.70
1	N	1278	G	C5-C6-O6	-8.24	123.66	128.60
1	N	334	C	N3-C4-C5	8.24	125.20	121.90
1	N	670	G	C8-N9-C1'	8.24	137.71	127.00
1	N	93	U	N3-C2-O2	8.24	127.97	122.20
1	N	698	G	C5-C6-O6	-8.24	123.66	128.60
1	N	1385	G	N3-C2-N2	8.24	125.67	119.90
1	N	947	G	C5-C6-O6	-8.23	123.66	128.60
1	N	101	A	C4-C5-C6	8.23	121.12	117.00
1	N	441	A	C5-C6-N1	-8.23	113.58	117.70
1	N	1046	A	P-O5'-C5'	-8.23	107.73	120.90
1	N	1135	U	O4'-C1'-N1	8.23	114.78	108.20
1	N	1241	G	N9-C4-C5	-8.23	102.11	105.40
1	N	242	G	C6-C5-N7	-8.23	125.46	130.40
1	N	1095	U	C2-N3-C4	8.23	131.94	127.00
1	N	710	G	P-O3'-C3'	8.22	129.57	119.70
1	N	1216	A	P-O3'-C3'	8.22	129.57	119.70
1	N	151	A	O4'-C1'-N9	8.22	114.78	108.20
1	N	975	A	N9-C4-C5	-8.22	102.51	105.80
1	N	1518	A	N1-C6-N6	8.22	123.53	118.60
1	N	35	G	C4-C5-N7	-8.22	107.51	110.80
1	N	369	G	C3'-C2'-C1'	8.22	108.08	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	585	G	N1-C2-N3	-8.22	118.97	123.90
1	N	102	G	N1-C6-O6	8.22	124.83	119.90
1	N	412	A	O4'-C1'-N9	8.22	114.77	108.20
1	N	660	C	C6-N1-C2	-8.22	117.01	120.30
1	N	852	G	C4-C5-C6	8.22	123.73	118.80
1	N	1024	G	N1-C2-N2	-8.22	108.80	116.20
1	N	1247	U	O4'-C1'-N1	8.22	114.78	108.20
1	N	1488	G	C8-N9-C1'	8.22	137.68	127.00
1	N	397	A	C5-C6-N6	-8.22	117.13	123.70
1	N	1387	G	C5-C6-O6	-8.22	123.67	128.60
1	N	1074	G	C6-C5-N7	-8.21	125.47	130.40
1	N	1280	A	C5-C6-N1	-8.21	113.59	117.70
1	N	187	G	N3-C4-N9	-8.21	121.08	126.00
1	N	1044	A	C4-C5-N7	-8.21	106.59	110.70
1	N	1222	G	C5-N7-C8	8.21	108.40	104.30
1	N	762	U	C4'-C3'-C2'	-8.20	94.40	102.60
1	N	1460	C	O4'-C1'-N1	8.20	114.76	108.20
1	N	127	G	N1-C6-O6	8.20	124.82	119.90
1	N	318	G	C8-N9-C4	-8.20	103.12	106.40
1	N	389	A	C5-C6-N6	-8.20	117.14	123.70
1	N	861	G	N9-C4-C5	8.20	108.68	105.40
1	N	914	A	C6-C5-N7	-8.20	126.56	132.30
1	N	1378	C	P-O5'-C5'	8.20	134.02	120.90
1	N	17	U	C5'-C4'-C3'	8.19	129.11	116.00
1	N	702	A	N9-C4-C5	8.19	109.08	105.80
1	N	220	G	C6-C5-N7	-8.19	125.48	130.40
1	N	466	A	C6-C5-N7	-8.19	126.56	132.30
1	N	250	A	N3-C4-C5	-8.19	121.07	126.80
1	N	594	U	C4-C5-C6	8.19	124.61	119.70
1	N	1009	U	O4'-C1'-N1	8.19	114.75	108.20
1	N	246	A	P-O3'-C3'	8.19	129.52	119.70
1	N	1479	C	C5-C4-N4	-8.19	114.47	120.20
1	N	247	G	C2-N3-C4	-8.18	107.81	111.90
1	N	345	C	N3-C4-C5	-8.18	118.63	121.90
1	N	1263	C	O4'-C1'-N1	8.18	114.75	108.20
1	N	1215	G	C5-C6-O6	-8.18	123.69	128.60
1	N	906	A	C2-N3-C4	-8.18	106.51	110.60
1	N	1067	A	C8-N9-C4	-8.18	102.53	105.80
1	N	572	A	N9-C4-C5	-8.18	102.53	105.80
1	N	1313	U	N3-C2-O2	8.18	127.92	122.20
1	N	388	G	C5-C6-N1	-8.17	107.41	111.50
1	N	122	G	C2-N3-C4	8.17	115.98	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	543	U	C2-N3-C4	-8.17	122.10	127.00
1	N	815	A	N9-C4-C5	8.17	109.07	105.80
1	N	1111	A	N1-C6-N6	8.17	123.50	118.60
1	N	914	A	C5-C6-N6	-8.17	117.17	123.70
1	N	1410	A	N7-C8-N9	-8.17	109.72	113.80
1	N	408	A	C4-C5-C6	8.17	121.08	117.00
1	N	731	G	N1-C2-N3	-8.17	119.00	123.90
1	N	1018	G	N3-C2-N2	8.17	125.62	119.90
1	N	1095	U	O4'-C1'-N1	8.17	114.73	108.20
1	N	236	A	O4'-C1'-N9	8.16	114.73	108.20
1	N	294	U	C5-C4-O4	-8.16	121.00	125.90
1	N	523	A	C5-C6-N6	-8.16	117.17	123.70
1	N	572	A	N1-C2-N3	8.16	133.38	129.30
1	N	1336	C	C1'-O4'-C4'	-8.16	103.37	109.90
1	N	1488	G	C5-N7-C8	-8.16	100.22	104.30
1	N	1096	C	P-O5'-C5'	8.16	133.96	120.90
1	N	317	U	C5'-C4'-C3'	-8.16	102.95	116.00
1	N	270	A	C5-C6-N1	-8.16	113.62	117.70
1	N	847	G	N3-C2-N2	8.16	125.61	119.90
1	N	300	A	N1-C2-N3	8.16	133.38	129.30
1	N	926	G	C4-C5-N7	-8.16	107.54	110.80
1	N	707	U	O4'-C1'-N1	8.15	114.72	108.20
1	N	954	G	C6-C5-N7	-8.15	125.51	130.40
1	N	374	A	C4-C5-C6	8.15	121.08	117.00
1	N	784	A	C5-C6-N1	-8.15	113.62	117.70
1	N	1038	C	P-O3'-C3'	8.15	129.49	119.70
1	N	303	A	C5-C6-N1	-8.15	113.62	117.70
1	N	919	A	C6-C5-N7	-8.15	126.59	132.30
1	N	966	G	N1-C2-N3	-8.15	119.01	123.90
1	N	1000	A	C5-N7-C8	-8.15	99.83	103.90
1	N	1147	C	N3-C4-N4	8.15	123.70	118.00
1	N	129	A	C8-N9-C4	-8.15	102.54	105.80
1	N	1059	C	C2-N3-C4	8.15	123.97	119.90
1	N	1238	A	N1-C2-N3	8.15	133.37	129.30
1	N	1187	G	N7-C8-N9	8.14	117.17	113.10
1	N	723	U	C4'-C3'-C2'	-8.14	94.46	102.60
1	N	596	A	N9-C4-C5	-8.14	102.54	105.80
1	N	858	G	C5-C6-O6	-8.14	123.72	128.60
1	N	49	U	P-O3'-C3'	-8.14	109.93	119.70
1	N	1198	G	N1-C6-O6	8.14	124.78	119.90
1	N	1226	C	O4'-C1'-N1	8.14	114.71	108.20
1	N	714	G	N1-C2-N3	-8.14	119.02	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1363	A	P-O5'-C5'	8.14	133.92	120.90
1	N	403	C	N3-C2-O2	8.14	127.59	121.90
1	N	829	G	C8-N9-C4	-8.13	103.15	106.40
1	N	1355	G	O4'-C1'-N9	8.13	114.71	108.20
1	N	90	C	C5'-C4'-C3'	8.13	129.01	116.00
1	N	444	G	O4'-C1'-N9	8.13	114.71	108.20
1	N	1376	U	C6-N1-C2	-8.13	116.12	121.00
1	N	1395	C	C5-C4-N4	-8.13	114.51	120.20
1	N	1492	A	C4-C5-N7	-8.13	106.63	110.70
1	N	260	G	P-O3'-C3'	8.13	129.46	119.70
1	N	781	A	C4-C5-C6	8.13	121.06	117.00
1	N	180	U	N3-C4-O4	8.13	125.09	119.40
1	N	382	A	P-O3'-C3'	8.12	129.45	119.70
1	N	459	A	C5-C6-N6	-8.13	117.20	123.70
1	N	928	G	C5-C6-O6	-8.13	123.72	128.60
1	N	1083	U	O4'-C1'-N1	8.13	114.70	108.20
1	N	840	C	C2-N3-C4	8.12	123.96	119.90
1	N	848	C	C4-C5-C6	8.12	121.46	117.40
1	N	889	A	P-O5'-C5'	-8.12	107.91	120.90
1	N	1015	G	O4'-C1'-N9	8.12	114.70	108.20
1	N	1162	C	C6-N1-C2	-8.12	117.05	120.30
1	N	1208	C	O4'-C1'-N1	8.12	114.70	108.20
1	N	1476	A	C4-C5-C6	8.12	121.06	117.00
1	N	1493	A	P-O3'-C3'	8.12	129.45	119.70
1	N	542	G	C5-C6-O6	-8.12	123.73	128.60
1	N	782	A	N3-C4-N9	8.12	133.90	127.40
1	N	805	C	O4'-C1'-N1	8.12	114.69	108.20
1	N	937	A	C5-N7-C8	8.12	107.96	103.90
1	N	160	A	O4'-C1'-N9	8.12	114.69	108.20
1	N	908	A	C4-C5-C6	8.12	121.06	117.00
1	N	1257	A	C5-C6-N6	-8.12	117.21	123.70
1	N	1004	A	C5-C6-N1	-8.11	113.64	117.70
1	N	1206	G	C4-C5-C6	8.12	123.67	118.80
1	N	1303	C	N3-C4-N4	8.12	123.68	118.00
1	N	1470	U	C2-N3-C4	8.11	131.87	127.00
1	N	196	A	C4-C5-C6	8.11	121.06	117.00
1	N	900	A	C5-C6-N6	-8.11	117.21	123.70
1	N	1141	C	O4'-C1'-N1	8.11	114.69	108.20
1	N	591	U	P-O5'-C5'	8.11	133.87	120.90
1	N	693	G	C5-C6-N1	8.11	115.56	111.50
1	N	1043	G	N1-C6-O6	8.11	124.77	119.90
1	N	142	G	O4'-C1'-N9	8.11	114.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1012	A	C4-C5-C6	8.11	121.05	117.00
1	N	331	G	C2-N3-C4	8.11	115.95	111.90
1	N	21	G	N9-C4-C5	8.10	108.64	105.40
1	N	291	U	C5-C4-O4	8.10	130.76	125.90
1	N	421	U	O4'-C1'-N1	8.10	114.68	108.20
1	N	269	C	N3-C4-N4	8.10	123.67	118.00
1	N	678	U	C5-C4-O4	-8.10	121.04	125.90
1	N	283	U	P-O3'-C3'	-8.10	109.98	119.70
1	N	1514	G	N9-C1'-C2'	-8.10	103.09	112.00
1	N	579	A	C5-C6-N6	-8.10	117.22	123.70
1	N	983	A	N7-C8-N9	8.10	117.85	113.80
1	N	344	A	C5-C6-N6	-8.09	117.23	123.70
1	N	391	G	N9-C4-C5	-8.09	102.16	105.40
1	N	628	G	N9-C4-C5	8.09	108.64	105.40
1	N	1480	A	C5-C6-N6	-8.09	117.23	123.70
1	N	778	G	C5-C6-O6	-8.09	123.75	128.60
1	N	134	G	C4-C5-C6	8.09	123.65	118.80
1	N	1391	U	O4'-C1'-N1	8.09	114.67	108.20
1	N	974	A	P-O5'-C5'	8.09	133.84	120.90
1	N	949	A	C8-N9-C4	-8.08	102.57	105.80
1	N	1086	U	O5'-C5'-C4'	8.08	127.06	111.70
1	N	1175	G	N3-C2-N2	8.08	125.56	119.90
1	N	196	A	C6-C5-N7	-8.08	126.64	132.30
1	N	411	A	C5-C6-N6	-8.08	117.23	123.70
1	N	754	C	P-O3'-C3'	8.08	129.40	119.70
1	N	10	A	N3-C4-C5	-8.08	121.15	126.80
1	N	348	G	N9-C4-C5	-8.08	102.17	105.40
1	N	845	A	C6-C5-N7	-8.08	126.64	132.30
1	N	645	G	N9-C4-C5	-8.08	102.17	105.40
1	N	821	G	C5-C6-O6	-8.08	123.75	128.60
1	N	1513	A	C5-C6-N1	-8.08	113.66	117.70
1	N	616	G	P-O3'-C3'	-8.07	110.01	119.70
1	N	925	G	O4'-C1'-N9	8.07	114.66	108.20
1	N	1306	A	C5-C6-N6	-8.07	117.24	123.70
1	N	243	A	C5-C6-N1	-8.07	113.66	117.70
1	N	969	A	C4-C5-C6	8.07	121.04	117.00
1	N	492	C	C2-N3-C4	8.07	123.94	119.90
1	N	651	C	P-O5'-C5'	8.07	133.81	120.90
1	N	996	A	C4-C5-C6	8.07	121.03	117.00
1	N	1100	C	N3-C4-C5	-8.07	118.67	121.90
1	N	155	A	C8-N9-C4	8.07	109.03	105.80
1	N	404	G	C2-N3-C4	8.07	115.93	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	263	A	N1-C2-N3	-8.07	125.27	129.30
1	N	600	A	C4-C5-C6	8.07	121.03	117.00
1	N	1452	C	C5-C4-N4	-8.07	114.55	120.20
1	N	415	A	O4'-C1'-N9	8.06	114.65	108.20
1	N	1166	G	N9-C4-C5	8.06	108.63	105.40
1	N	860	A	C4-C5-C6	8.06	121.03	117.00
1	N	674	G	N7-C8-N9	-8.06	109.07	113.10
1	N	1002	G	N9-C4-C5	-8.06	102.17	105.40
1	N	250	A	N9-C4-C5	-8.06	102.58	105.80
1	N	1284	C	N3-C4-C5	-8.06	118.68	121.90
1	N	1414	U	O4'-C1'-N1	8.06	114.65	108.20
1	N	9	G	C5-C6-N1	-8.06	107.47	111.50
1	N	697	U	N3-C2-O2	8.06	127.84	122.20
1	N	1333	A	O4'-C1'-N9	8.06	114.65	108.20
1	N	525	C	N3-C4-C5	-8.06	118.68	121.90
1	N	576	C	C1'-O4'-C4'	-8.06	103.45	109.90
1	N	797	C	C4-C5-C6	8.05	121.43	117.40
1	N	812	G	C5-C6-O6	-8.06	123.77	128.60
1	N	332	G	C5-C6-O6	-8.05	123.77	128.60
1	N	234	C	N3-C4-N4	8.05	123.64	118.00
1	N	1150	A	C5-C6-N1	-8.05	113.67	117.70
1	N	1258	G	C5-C6-O6	-8.05	123.77	128.60
1	N	184	G	C5-C6-N1	8.05	115.52	111.50
1	N	267	C	C6-N1-C2	-8.05	117.08	120.30
1	N	666	G	C8-N9-C4	8.05	109.62	106.40
1	N	32	A	C5-C6-N6	-8.04	117.27	123.70
1	N	420	U	O4'-C1'-N1	8.04	114.63	108.20
1	N	494	G	C6-C5-N7	-8.04	125.58	130.40
1	N	521	G	C2-N3-C4	8.04	115.92	111.90
1	N	107	G	N3-C4-C5	-8.03	124.58	128.60
1	N	582	C	N3-C4-C5	-8.03	118.69	121.90
1	N	1523	G	C4-N9-C1'	-8.03	116.06	126.50
1	N	181	A	N9-C4-C5	8.03	109.01	105.80
1	N	314	C	N3-C4-C5	-8.03	118.69	121.90
1	N	1180	A	C4-C5-C6	8.03	121.01	117.00
1	N	1513	A	N1-C6-N6	8.03	123.42	118.60
1	N	386	C	C2-N3-C4	8.03	123.91	119.90
1	N	393	A	C5-N7-C8	8.02	107.91	103.90
1	N	1220	G	N1-C2-N3	-8.02	119.09	123.90
1	N	1320	C	C5-C6-N1	8.02	125.01	121.00
1	N	409	U	P-O5'-C5'	8.02	133.73	120.90
1	N	63	C	N3-C4-C5	-8.01	118.69	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	338	A	C6-N1-C2	8.01	123.41	118.60
1	N	721	G	C5-C6-O6	-8.01	123.79	128.60
1	N	129	A	N9-C4-C5	8.01	109.00	105.80
1	N	1039	G	N1-C2-N3	-8.01	119.09	123.90
1	N	232	G	O4'-C1'-N9	8.01	114.61	108.20
1	N	867	G	N1-C6-O6	8.01	124.70	119.90
1	N	760	G	N1-C2-N3	-8.01	119.10	123.90
1	N	1243	C	C6-N1-C2	-8.01	117.10	120.30
1	N	1377	A	N1-C2-N3	8.01	133.30	129.30
1	N	376	G	C8-N9-C4	8.00	109.60	106.40
1	N	1233	G	C6-N1-C2	-8.00	120.30	125.10
1	N	1464	U	N3-C4-O4	8.00	125.00	119.40
1	N	976	G	C5-C6-O6	-8.00	123.80	128.60
1	N	731	G	C5-C6-O6	-8.00	123.80	128.60
1	N	923	A	C5-C6-N1	-8.00	113.70	117.70
1	N	1431	A	C2-N3-C4	8.00	114.60	110.60
1	N	80	A	C5-N7-C8	7.99	107.90	103.90
1	N	234	C	C2-N1-C1'	7.99	127.59	118.80
1	N	629	A	O4'-C1'-N9	7.99	114.59	108.20
1	N	1082	A	C8-N9-C4	-7.99	102.60	105.80
1	N	1515	G	N9-C4-C5	7.99	108.60	105.40
1	N	799	G	O4'-C1'-N9	7.99	114.59	108.20
1	N	1216	A	C5'-C4'-C3'	7.99	128.79	116.00
1	N	1318	A	C6-N1-C2	7.99	123.39	118.60
1	N	289	G	C2-N3-C4	7.99	115.89	111.90
1	N	985	C	O4'-C1'-N1	7.99	114.59	108.20
1	N	1246	A	O4'-C1'-N9	7.99	114.59	108.20
1	N	1436	U	C6-N1-C2	-7.99	116.21	121.00
1	N	163	C	N3-C4-N4	7.99	123.59	118.00
1	N	289	G	N1-C2-N3	-7.99	119.11	123.90
1	N	683	G	N1-C2-N3	-7.98	119.11	123.90
1	N	1387	G	N3-C2-N2	7.98	125.49	119.90
1	N	262	A	C4-C5-C6	7.98	120.99	117.00
1	N	883	C	O4'-C1'-N1	7.98	114.58	108.20
1	N	581	G	C8-N9-C4	-7.98	103.21	106.40
1	N	243	A	C6-N1-C2	7.98	123.39	118.60
1	N	681	A	O4'-C1'-N9	7.98	114.58	108.20
1	N	758	C	C2-N3-C4	7.98	123.89	119.90
1	N	1440	U	N3-C4-O4	7.98	124.99	119.40
1	N	347	G	C6-C5-N7	-7.98	125.61	130.40
1	N	586	C	C4-C5-C6	7.98	121.39	117.40
1	N	916	U	P-O3'-C3'	-7.98	110.13	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1255	G	C5-N7-C8	-7.98	100.31	104.30
1	N	1167	A	C4-C5-C6	7.97	120.99	117.00
1	N	26	A	N3-C4-C5	-7.97	121.22	126.80
1	N	680	C	C2-N3-C4	7.97	123.89	119.90
1	N	331	G	N3-C2-N2	7.97	125.48	119.90
1	N	119	A	O3'-P-O5'	7.97	119.14	104.00
1	N	201	G	N9-C4-C5	7.97	108.59	105.40
1	N	323	U	P-O5'-C5'	7.97	133.65	120.90
1	N	267	C	C5'-C4'-O4'	-7.96	99.54	109.10
1	N	936	C	C5-C4-N4	-7.96	114.62	120.20
1	N	890	G	C4'-C3'-C2'	-7.96	94.64	102.60
1	N	164	G	C6-C5-N7	-7.96	125.62	130.40
1	N	745	G	C8-N9-C4	-7.96	103.22	106.40
1	N	1206	G	C5-C6-O6	-7.96	123.82	128.60
1	N	551	U	O4'-C1'-N1	7.96	114.57	108.20
1	N	915	A	N1-C6-N6	7.96	123.38	118.60
1	N	1474	U	C4-C5-C6	7.96	124.47	119.70
1	N	186	C	C2-N3-C4	7.96	123.88	119.90
1	N	261	U	N3-C2-O2	7.96	127.77	122.20
1	N	670	G	C5-C6-O6	-7.96	123.83	128.60
1	N	960	U	C1'-O4'-C4'	-7.96	103.54	109.90
1	N	165	G	N1-C6-O6	7.95	124.67	119.90
1	N	1051	C	N3-C2-O2	7.95	127.47	121.90
1	N	1375	A	O4'-C1'-N9	7.95	114.56	108.20
1	N	211	G	N7-C8-N9	-7.95	109.12	113.10
1	N	640	A	O4'-C1'-N9	7.95	114.56	108.20
1	N	1093	A	N3-C4-C5	-7.95	121.23	126.80
1	N	1016	A	C2-N3-C4	7.95	114.57	110.60
1	N	170	U	N3-C4-O4	7.95	124.96	119.40
1	N	499	A	P-O3'-C3'	7.94	129.23	119.70
1	N	643	C	C6-N1-C2	-7.94	117.12	120.30
1	N	796	C	C6-N1-C1'	-7.94	111.27	120.80
1	N	999	C	N3-C4-C5	-7.94	118.72	121.90
1	N	1516	G	O4'-C1'-N9	7.94	114.55	108.20
1	N	374	A	C4-C5-N7	-7.94	106.73	110.70
1	N	988	G	C6-C5-N7	-7.94	125.64	130.40
1	N	59	A	O4'-C1'-N9	7.94	114.55	108.20
1	N	321	A	N9-C4-C5	-7.94	102.62	105.80
1	N	688	G	C8-N9-C4	-7.94	103.22	106.40
1	N	1117	A	C4-C5-C6	7.94	120.97	117.00
1	N	902	G	C6-N1-C2	7.94	129.86	125.10
1	N	212	G	N1-C6-O6	7.93	124.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	737	C	N3-C4-N4	7.93	123.55	118.00
1	N	906	A	C5-C6-N1	-7.93	113.73	117.70
1	N	1061	G	C6-C5-N7	-7.93	125.64	130.40
1	N	1529	G	C5-C6-N1	-7.93	107.53	111.50
1	N	967	C	C6-N1-C2	7.93	123.47	120.30
1	N	971	G	C5-C6-O6	-7.93	123.84	128.60
1	N	871	U	P-O3'-C3'	7.93	129.22	119.70
1	N	131	A	C2-N3-C4	7.93	114.56	110.60
1	N	780	A	C2-N3-C4	-7.93	106.64	110.60
1	N	1062	U	P-O3'-C3'	7.93	129.21	119.70
1	N	790	A	C4-C5-N7	-7.92	106.74	110.70
1	N	1292	G	P-O5'-C5'	7.92	133.58	120.90
1	N	1407	C	O4'-C1'-N1	7.92	114.54	108.20
1	N	1499	A	C5-C6-N1	-7.92	113.74	117.70
1	N	12	U	N3-C4-O4	7.92	124.95	119.40
1	N	1170	A	C5-N7-C8	7.92	107.86	103.90
1	N	1225	A	N1-C2-N3	7.92	133.26	129.30
1	N	45	G	N1-C2-N3	-7.92	119.15	123.90
1	N	73	C	C6-N1-C2	-7.92	117.13	120.30
1	N	704	A	C2-N3-C4	-7.92	106.64	110.60
1	N	1344	C	C4-C5-C6	7.92	121.36	117.40
1	N	1274	A	C5-C6-N6	-7.92	117.36	123.70
1	N	1455	G	N3-C2-N2	7.92	125.44	119.90
1	N	389	A	C4-C5-C6	7.92	120.96	117.00
1	N	1108	G	C4-C5-N7	7.92	113.97	110.80
1	N	1293	C	O4'-C1'-N1	7.91	114.53	108.20
1	N	810	C	O4'-C1'-N1	7.91	114.53	108.20
1	N	869	G	N1-C6-O6	7.91	124.65	119.90
1	N	567	G	P-O5'-C5'	7.91	133.56	120.90
1	N	692	U	C2-N3-C4	7.91	131.75	127.00
1	N	889	A	P-O3'-C3'	7.91	129.19	119.70
1	N	77	A	C8-N9-C4	7.91	108.96	105.80
1	N	414	A	C6-N1-C2	7.91	123.34	118.60
1	N	589	U	O4'-C1'-N1	7.91	114.53	108.20
1	N	961	U	N3-C4-O4	7.91	124.94	119.40
1	N	81	A	C5-C6-N6	-7.91	117.37	123.70
1	N	89	U	O4'-C1'-C2'	-7.91	97.89	105.80
1	N	1273	C	N3-C4-C5	-7.91	118.74	121.90
1	N	422	C	N3-C4-N4	7.91	123.53	118.00
1	N	431	A	C6-C5-N7	-7.91	126.77	132.30
1	N	580	C	N3-C4-C5	-7.91	118.74	121.90
1	N	1195	C	O4'-C1'-N1	7.91	114.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1262	C	C6-N1-C2	-7.91	117.14	120.30
1	N	1272	G	C5-C6-N1	-7.91	107.55	111.50
1	N	940	C	N3-C4-N4	7.90	123.53	118.00
1	N	1396	A	C4-C5-N7	-7.90	106.75	110.70
1	N	694	A	O4'-C1'-N9	7.90	114.52	108.20
1	N	1185	G	C4-C5-N7	-7.90	107.64	110.80
1	N	537	G	O4'-C1'-N9	7.90	114.52	108.20
1	N	117	G	C5'-C4'-O4'	7.90	118.58	109.10
1	N	645	G	N3-C4-N9	7.90	130.74	126.00
1	N	873	A	C4-C5-C6	7.90	120.95	117.00
1	N	873	A	C5-C6-N1	-7.90	113.75	117.70
1	N	937	A	C6-N1-C2	7.90	123.34	118.60
1	N	859	G	N1-C2-N3	-7.90	119.16	123.90
1	N	1508	A	C4-C5-C6	7.90	120.95	117.00
1	N	412	A	C5-C6-N1	-7.89	113.75	117.70
1	N	678	U	N3-C4-O4	7.89	124.93	119.40
1	N	718	A	C5-C6-N1	-7.89	113.75	117.70
1	N	1305	G	N1-C6-O6	7.89	124.64	119.90
1	N	1352	C	N3-C4-C5	-7.89	118.74	121.90
1	N	273	U	C6-N1-C2	-7.89	116.27	121.00
1	N	667	G	C5-N7-C8	7.89	108.24	104.30
1	N	990	C	C4'-C3'-C2'	-7.89	94.71	102.60
1	N	1477	U	N3-C2-O2	7.89	127.72	122.20
1	N	177	G	C2-N3-C4	7.89	115.84	111.90
1	N	19	A	N1-C6-N6	7.88	123.33	118.60
1	N	185	U	N3-C4-O4	7.88	124.92	119.40
1	N	227	G	N3-C2-N2	7.88	125.42	119.90
1	N	544	G	C5-N7-C8	7.88	108.24	104.30
1	N	1493	A	C5-N7-C8	7.88	107.84	103.90
1	N	578	C	C6-N1-C2	-7.88	117.15	120.30
1	N	786	G	C4-C5-C6	7.88	123.53	118.80
1	N	1482	G	P-O5'-C5'	7.88	133.51	120.90
1	N	327	A	C5-N7-C8	7.88	107.84	103.90
1	N	713	G	C2-N3-C4	7.88	115.84	111.90
1	N	789	U	P-O5'-C5'	7.88	133.50	120.90
1	N	180	U	P-O5'-C5'	7.88	133.50	120.90
1	N	650	G	C5-C6-O6	-7.87	123.88	128.60
1	N	1099	G	C4-C5-C6	7.87	123.52	118.80
1	N	723	U	N3-C2-O2	7.87	127.71	122.20
1	N	673	A	C5-C6-N6	-7.87	117.40	123.70
1	N	525	C	O4'-C1'-N1	7.87	114.50	108.20
1	N	919	A	P-O5'-C5'	-7.87	108.31	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1046	A	N9-C4-C5	7.87	108.95	105.80
1	N	211	G	N3-C4-N9	-7.87	121.28	126.00
1	N	594	U	O4'-C1'-N1	7.87	114.49	108.20
1	N	704	A	C4-C5-C6	7.87	120.93	117.00
1	N	834	U	P-O5'-C5'	7.86	133.48	120.90
1	N	1032	G	O4'-C1'-N9	7.86	114.49	108.20
1	N	558	G	N3-C4-C5	-7.86	124.67	128.60
1	N	1195	C	N3-C4-N4	7.86	123.50	118.00
1	N	1308	U	O4'-C1'-N1	7.86	114.49	108.20
1	N	810	C	C5-C6-N1	7.86	124.93	121.00
1	N	1372	U	O4'-C1'-N1	7.86	114.49	108.20
1	N	63	C	N3-C4-N4	7.86	123.50	118.00
1	N	331	G	C4-C5-N7	-7.86	107.66	110.80
1	N	604	G	O4'-C1'-N9	7.86	114.49	108.20
1	N	601	G	N1-C2-N2	7.86	123.27	116.20
1	N	815	A	C4-C5-N7	-7.86	106.77	110.70
1	N	1408	A	C5-C6-N6	-7.86	117.42	123.70
1	N	1472	U	O4'-C1'-C2'	-7.86	97.94	105.80
1	N	1409	C	O4'-C1'-N1	7.85	114.48	108.20
1	N	906	A	N1-C6-N6	7.85	123.31	118.60
1	N	1248	A	C4-C5-C6	7.85	120.92	117.00
1	N	1430	A	C8-N9-C4	7.85	108.94	105.80
1	N	113	G	N1-C6-O6	7.85	124.61	119.90
1	N	327	A	C4-C5-C6	7.85	120.92	117.00
1	N	498	A	C4-C5-N7	-7.85	106.78	110.70
1	N	659	U	N3-C4-O4	7.85	124.89	119.40
1	N	1240	U	N3-C4-C5	-7.85	109.89	114.60
1	N	172	A	N1-C6-N6	7.85	123.31	118.60
1	N	907	A	O4'-C1'-N9	7.84	114.47	108.20
1	N	346	G	N7-C8-N9	7.84	117.02	113.10
1	N	1508	A	N7-C8-N9	-7.84	109.88	113.80
1	N	28	A	C5-C6-N6	-7.84	117.43	123.70
1	N	195	A	C4-C5-C6	7.84	120.92	117.00
1	N	765	G	N3-C2-N2	7.84	125.39	119.90
1	N	813	U	O4'-C1'-N1	7.84	114.47	108.20
1	N	316	C	O4'-C1'-N1	7.84	114.47	108.20
1	N	651	C	C5-C6-N1	7.84	124.92	121.00
1	N	1253	G	P-O5'-C5'	7.84	133.44	120.90
1	N	643	C	C5-C6-N1	7.83	124.92	121.00
1	N	179	A	P-O5'-C5'	7.83	133.43	120.90
1	N	604	G	N3-C4-C5	7.83	132.52	128.60
1	N	1078	U	N1-C2-O2	7.83	128.28	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	378	G	C4-C5-N7	7.83	113.93	110.80
1	N	486	U	C5'-C4'-C3'	-7.83	103.47	116.00
1	N	955	U	O4'-C1'-N1	7.83	114.46	108.20
1	N	1056	U	O4'-C1'-N1	7.83	114.46	108.20
1	N	538	G	O4'-C1'-N9	7.83	114.46	108.20
1	N	52	C	O4'-C1'-N1	7.83	114.46	108.20
1	N	1057	G	N7-C8-N9	7.83	117.01	113.10
1	N	428	G	C6-N1-C2	7.82	129.79	125.10
1	N	1277	C	C5-C4-N4	-7.82	114.72	120.20
1	N	25	C	O4'-C1'-N1	7.82	114.46	108.20
1	N	436	C	N3-C4-C5	-7.82	118.77	121.90
1	N	1024	G	C3'-C2'-C1'	7.82	107.75	101.50
1	N	1254	A	O4'-C1'-N9	7.82	114.45	108.20
1	N	38	G	C5-C6-O6	-7.81	123.91	128.60
1	N	1250	A	C5-C6-N6	-7.81	117.45	123.70
1	N	894	G	N1-C2-N3	-7.81	119.21	123.90
1	N	445	G	C5-C6-O6	-7.81	123.92	128.60
1	N	810	C	N3-C4-N4	7.81	123.47	118.00
1	N	968	A	O4'-C1'-N9	7.81	114.45	108.20
1	N	1355	G	C2-N3-C4	7.81	115.80	111.90
1	N	212	G	P-O3'-C3'	7.80	129.06	119.70
1	N	297	G	P-O3'-C3'	7.80	129.06	119.70
1	N	54	C	C6-N1-C2	-7.80	117.18	120.30
1	N	392	C	C2-N1-C1'	7.80	127.38	118.80
1	N	755	G	C5-C6-O6	-7.80	123.92	128.60
1	N	61	G	O4'-C1'-N9	7.80	114.44	108.20
1	N	91	U	C5-C4-O4	7.80	130.58	125.90
1	N	896	C	C5-C6-N1	7.80	124.90	121.00
1	N	1300	G	O4'-C1'-N9	7.80	114.44	108.20
1	N	1467	C	O4'-C1'-N1	7.80	114.44	108.20
1	N	527	G	O4'-C1'-N9	7.80	114.44	108.20
1	N	1039	G	N3-C4-N9	-7.80	121.32	126.00
1	N	1224	U	O4'-C1'-N1	7.79	114.44	108.20
1	N	1246	A	C8-N9-C4	-7.79	102.68	105.80
1	N	533	A	C2-N3-C4	7.79	114.50	110.60
1	N	533	A	C5-C6-N1	-7.79	113.81	117.70
1	N	733	G	N3-C4-C5	7.79	132.50	128.60
1	N	818	G	O4'-C1'-N9	7.79	114.43	108.20
1	N	861	G	C4-C5-N7	-7.79	107.68	110.80
1	N	1058	G	N3-C2-N2	7.79	125.35	119.90
1	N	1087	G	C5-C6-O6	-7.79	123.93	128.60
1	N	1061	G	O4'-C1'-N9	7.79	114.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	194	C	C2-N3-C4	7.79	123.79	119.90
1	N	811	C	C5-C4-N4	-7.79	114.75	120.20
1	N	93	U	C3'-C2'-C1'	-7.78	95.27	101.50
1	N	210	C	N3-C4-C5	-7.78	118.79	121.90
1	N	1108	G	N1-C6-O6	7.78	124.57	119.90
1	N	1146	A	C8-N9-C4	-7.78	102.69	105.80
1	N	73	C	P-O5'-C5'	-7.78	108.45	120.90
1	N	448	A	O4'-C1'-N9	7.78	114.42	108.20
1	N	531	U	N1-C2-N3	-7.78	110.23	114.90
1	N	537	G	N1-C6-O6	7.78	124.57	119.90
1	N	1016	A	C8-N9-C4	7.78	108.91	105.80
1	N	1310	G	C3'-C2'-C1'	-7.78	95.28	101.50
1	N	1418	A	P-O5'-C5'	7.78	133.35	120.90
1	N	365	U	N3-C4-O4	7.78	124.84	119.40
1	N	449	G	C5-C6-N1	-7.78	107.61	111.50
1	N	814	A	C5'-C4'-C3'	-7.78	103.56	116.00
1	N	1337	G	C5-N7-C8	7.78	108.19	104.30
1	N	375	U	O4'-C1'-N1	7.77	114.42	108.20
1	N	1443	C	N1-C2-O2	7.77	123.56	118.90
1	N	1207	G	N1-C2-N3	-7.77	119.24	123.90
1	N	1418	A	C5-N7-C8	7.77	107.79	103.90
1	N	1219	A	N3-C4-C5	-7.77	121.36	126.80
1	N	208	U	P-O3'-C3'	7.77	129.02	119.70
1	N	930	C	O4'-C1'-N1	7.77	114.42	108.20
1	N	1080	A	P-O5'-C5'	-7.77	108.47	120.90
1	N	1470	U	N3-C2-O2	7.77	127.64	122.20
1	N	327	A	C5-C6-N6	-7.77	117.49	123.70
1	N	1339	A	C4-C5-C6	7.77	120.88	117.00
1	N	276	G	N3-C2-N2	7.76	125.33	119.90
1	N	1024	G	P-O5'-C5'	7.76	133.32	120.90
1	N	1065	U	C2-N3-C4	-7.76	122.34	127.00
1	N	1256	A	N9-C4-C5	-7.76	102.69	105.80
1	N	593	U	C5-C4-O4	-7.76	121.24	125.90
1	N	853	C	C2-N3-C4	-7.76	116.02	119.90
1	N	923	A	C4-C5-C6	7.76	120.88	117.00
1	N	1342	C	P-O3'-C3'	-7.76	110.39	119.70
1	N	1433	A	P-O3'-C3'	7.76	129.01	119.70
1	N	1031	C	C5-C4-N4	-7.76	114.77	120.20
1	N	213	G	N7-C8-N9	7.76	116.98	113.10
1	N	31	G	C4-C5-N7	7.76	113.90	110.80
1	N	208	U	C5-C6-N1	-7.76	118.82	122.70
1	N	758	C	N3-C4-C5	-7.76	118.80	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	918	A	O4'-C1'-N9	7.76	114.41	108.20
1	N	950	U	P-O5'-C5'	7.75	133.31	120.90
1	N	126	G	N3-C4-N9	-7.75	121.35	126.00
1	N	468	A	C4-C5-C6	7.75	120.88	117.00
1	N	510	A	C2-N3-C4	-7.75	106.72	110.60
1	N	769	G	C2-N3-C4	-7.75	108.02	111.90
1	N	953	G	C6-C5-N7	-7.75	125.75	130.40
1	N	507	C	O4'-C1'-N1	7.75	114.40	108.20
1	N	132	C	O4'-C1'-N1	7.75	114.40	108.20
1	N	331	G	C8-N9-C4	-7.75	103.30	106.40
1	N	14	U	N3-C4-O4	7.75	124.82	119.40
1	N	158	G	C6-C5-N7	-7.75	125.75	130.40
1	N	1089	G	N7-C8-N9	7.75	116.97	113.10
1	N	309	A	C6-C5-N7	-7.74	126.88	132.30
1	N	459	A	C5'-C4'-O4'	7.74	118.39	109.10
1	N	650	G	C6-C5-N7	-7.74	125.75	130.40
1	N	836	G	C2-N3-C4	7.74	115.77	111.90
1	N	297	G	C4-N9-C1'	-7.74	116.44	126.50
1	N	326	G	N1-C2-N3	-7.74	119.26	123.90
1	N	816	A	C4-C5-C6	7.74	120.87	117.00
1	N	1492	A	N9-C4-C5	7.74	108.90	105.80
1	N	238	A	C5-C6-N6	-7.74	117.51	123.70
1	N	902	G	N1-C2-N3	-7.74	119.26	123.90
1	N	702	A	C4-C5-C6	7.74	120.87	117.00
1	N	799	G	C8-N9-C4	7.74	109.49	106.40
1	N	1449	C	N1-C2-O2	7.74	123.54	118.90
1	N	431	A	N3-C4-C5	-7.73	121.39	126.80
1	N	1317	C	O4'-C1'-N1	7.73	114.39	108.20
1	N	1439	G	C6-C5-N7	-7.73	125.76	130.40
1	N	626	G	N1-C6-O6	7.73	124.54	119.90
1	N	337	G	N9-C4-C5	-7.73	102.31	105.40
1	N	1231	G	N1-C2-N3	-7.73	119.26	123.90
1	N	80	A	P-O3'-C3'	-7.73	110.43	119.70
1	N	138	G	O4'-C1'-N9	7.73	114.38	108.20
1	N	169	C	C3'-C2'-C1'	-7.73	95.32	101.50
1	N	945	G	C8-N9-C4	-7.73	103.31	106.40
1	N	1038	C	C5-C4-N4	-7.73	114.79	120.20
1	N	1042	A	P-O5'-C5'	7.73	133.26	120.90
1	N	1502	A	C5-N7-C8	7.73	107.76	103.90
1	N	112	G	C6-N1-C2	7.72	129.74	125.10
1	N	163	C	C5-C4-N4	-7.72	114.79	120.20
1	N	540	G	C5-C6-O6	-7.72	123.97	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	113	G	C5-C6-O6	-7.72	123.97	128.60
1	N	606	G	C6-C5-N7	-7.72	125.77	130.40
1	N	1015	G	C4-C5-C6	7.72	123.43	118.80
1	N	1403	C	C6-N1-C2	-7.72	117.21	120.30
1	N	82	G	C5-C6-O6	-7.72	123.97	128.60
1	N	440	C	N3-C4-N4	7.72	123.40	118.00
1	N	629	A	C4'-C3'-C2'	-7.72	94.88	102.60
1	N	566	G	N1-C2-N3	-7.72	119.27	123.90
1	N	1263	C	C6-N1-C2	-7.72	117.21	120.30
1	N	1312	G	C5'-C4'-C3'	-7.72	103.65	116.00
1	N	95	C	C5'-C4'-C3'	-7.71	103.66	116.00
1	N	1016	A	C5-C6-N1	-7.71	113.84	117.70
1	N	1066	C	N3-C4-N4	7.71	123.40	118.00
1	N	1247	U	P-O3'-C3'	-7.71	110.44	119.70
1	N	1312	G	C4-C5-C6	7.71	123.43	118.80
1	N	2	A	O4'-C1'-N9	7.71	114.37	108.20
1	N	1340	A	C4-C5-C6	7.71	120.86	117.00
1	N	498	A	N1-C6-N6	7.71	123.22	118.60
1	N	561	U	O4'-C1'-N1	7.71	114.36	108.20
1	N	1153	G	C8-N9-C4	-7.71	103.32	106.40
1	N	801	U	C2-N3-C4	-7.70	122.38	127.00
1	N	1417	G	N9-C4-C5	-7.70	102.32	105.40
1	N	236	A	C4-C5-C6	7.70	120.85	117.00
1	N	1222	G	C4-C5-N7	-7.70	107.72	110.80
1	N	209	U	O4'-C1'-N1	7.70	114.36	108.20
1	N	286	C	C5-C4-N4	-7.70	114.81	120.20
1	N	539	A	C6-C5-N7	-7.70	126.91	132.30
1	N	665	A	C6-C5-N7	-7.70	126.91	132.30
1	N	524	G	C6-C5-N7	-7.70	125.78	130.40
1	N	628	G	C5-C6-O6	-7.70	123.98	128.60
1	N	1422	G	O4'-C1'-N9	7.70	114.36	108.20
1	N	650	G	C5'-C4'-O4'	7.69	118.33	109.10
1	N	230	G	P-O3'-C3'	-7.69	110.47	119.70
1	N	689	C	N1-C2-O2	7.69	123.52	118.90
1	N	365	U	N3-C2-O2	7.69	127.58	122.20
1	N	509	A	C5-C6-N1	-7.69	113.85	117.70
1	N	44	A	N7-C8-N9	7.69	117.64	113.80
1	N	721	G	C2-N3-C4	7.69	115.75	111.90
1	N	1241	G	O4'-C1'-N9	7.69	114.35	108.20
1	N	466	A	N1-C6-N6	7.69	123.21	118.60
1	N	1504	G	N1-C6-O6	7.69	124.51	119.90
1	N	893	C	O4'-C1'-N1	7.68	114.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	728	A	N1-C6-N6	7.68	123.21	118.60
1	N	1382	C	C5-C4-N4	-7.68	114.82	120.20
1	N	1523	G	C8-N9-C1'	7.68	136.99	127.00
1	N	435	A	C6-C5-N7	-7.68	126.92	132.30
1	N	705	G	C4-C5-C6	7.68	123.41	118.80
1	N	50	A	O4'-C1'-N9	7.68	114.34	108.20
1	N	953	G	N1-C6-O6	7.68	124.51	119.90
1	N	1405	G	C5-C6-O6	-7.68	123.99	128.60
1	N	1377	A	C6-N1-C2	-7.68	113.99	118.60
1	N	99	C	N3-C4-N4	7.67	123.37	118.00
1	N	787	A	P-O5'-C5'	7.67	133.18	120.90
1	N	797	C	C6-N1-C1'	7.67	130.01	120.80
1	N	805	C	N3-C4-C5	-7.67	118.83	121.90
1	N	1215	G	C6-N1-C2	7.67	129.71	125.10
1	N	1014	A	C5-N7-C8	7.67	107.74	103.90
1	N	760	G	O4'-C1'-N9	7.67	114.34	108.20
1	N	873	A	N1-C6-N6	7.67	123.20	118.60
1	N	1203	C	C4-C5-C6	7.67	121.24	117.40
1	N	489	C	O4'-C4'-C3'	-7.67	96.33	104.00
1	N	1191	A	C6-N1-C2	-7.67	114.00	118.60
1	N	233	C	C6-N1-C1'	-7.67	111.60	120.80
1	N	1433	A	C6-N1-C2	7.67	123.20	118.60
1	N	31	G	C8-N9-C4	-7.67	103.33	106.40
1	N	840	C	C6-N1-C1'	-7.67	111.60	120.80
1	N	1153	G	N9-C4-C5	7.67	108.47	105.40
1	N	743	A	C4-C5-C6	7.67	120.83	117.00
1	N	901	A	C5-C6-N1	-7.67	113.87	117.70
1	N	1092	A	O4'-C1'-N9	7.66	114.33	108.20
1	N	1018	G	N1-C6-O6	7.66	124.50	119.90
1	N	524	G	C8-N9-C1'	-7.66	117.04	127.00
1	N	1040	U	C5-C6-N1	7.66	126.53	122.70
1	N	1096	C	N3-C4-N4	7.66	123.36	118.00
1	N	13	U	P-O3'-C3'	7.66	128.89	119.70
1	N	261	U	C5-C4-O4	-7.66	121.31	125.90
1	N	505	G	P-O3'-C3'	7.66	128.89	119.70
1	N	610	U	C2-N1-C1'	-7.66	108.51	117.70
1	N	1337	G	C4-C5-N7	-7.66	107.74	110.80
1	N	5	U	N3-C4-O4	7.65	124.76	119.40
1	N	270	A	N9-C4-C5	-7.65	102.74	105.80
1	N	363	A	C2-N3-C4	-7.65	106.77	110.60
1	N	865	A	C5-C6-N6	-7.65	117.58	123.70
1	N	695	A	C5-C6-N6	-7.65	117.58	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1119	C	C2-N3-C4	7.65	123.72	119.90
1	N	1150	A	N9-C4-C5	-7.65	102.74	105.80
1	N	142	G	C4-N9-C1'	7.65	136.44	126.50
1	N	968	A	N9-C4-C5	7.65	108.86	105.80
1	N	23	C	C2-N3-C4	7.65	123.72	119.90
1	N	989	U	N3-C4-C5	-7.65	110.01	114.60
1	N	1288	A	C5-C6-N1	-7.65	113.88	117.70
1	N	1327	C	O4'-C1'-N1	7.65	114.32	108.20
1	N	1390	U	P-O3'-C3'	7.65	128.88	119.70
1	N	1034	G	O4'-C1'-N9	7.64	114.32	108.20
1	N	657	U	C2-N3-C4	-7.64	122.41	127.00
1	N	810	C	N1-C1'-C2'	-7.64	103.59	112.00
1	N	601	G	O4'-C1'-N9	7.64	114.31	108.20
1	N	1006	G	C2-N3-C4	7.64	115.72	111.90
1	N	1413	A	C4-C5-N7	-7.64	106.88	110.70
1	N	1484	C	C1'-O4'-C4'	7.64	116.01	109.90
1	N	157	U	P-O5'-C5'	7.63	133.12	120.90
1	N	1157	A	C8-N9-C4	7.63	108.85	105.80
1	N	1310	G	N1-C6-O6	7.63	124.48	119.90
1	N	111	G	C2-N3-C4	7.63	115.72	111.90
1	N	182	A	O4'-C1'-N9	7.63	114.31	108.20
1	N	318	G	N7-C8-N9	7.63	116.92	113.10
1	N	939	G	C4-C5-N7	7.63	113.85	110.80
1	N	242	G	C4-C5-N7	7.63	113.85	110.80
1	N	682	G	O4'-C1'-N9	7.63	114.31	108.20
1	N	1111	A	C5-C6-N6	-7.63	117.59	123.70
1	N	471	U	C2-N3-C4	-7.63	122.42	127.00
1	N	1029	U	N1-C2-O2	7.63	128.14	122.80
1	N	436	C	C2-N3-C4	7.62	123.71	119.90
1	N	637	C	N3-C4-C5	-7.62	118.85	121.90
1	N	1159	U	O4'-C1'-C2'	-7.62	98.18	105.80
1	N	1395	C	C6-N1-C2	-7.62	117.25	120.30
1	N	22	G	N1-C6-O6	7.62	124.47	119.90
1	N	800	G	C6-N1-C2	7.62	129.67	125.10
1	N	937	A	C6-C5-N7	-7.62	126.97	132.30
1	N	826	C	N1-C2-N3	7.62	124.53	119.20
1	N	1035	A	C8-N9-C4	7.62	108.85	105.80
1	N	1039	G	C6-N1-C2	7.62	129.67	125.10
1	N	1343	G	P-O3'-C3'	-7.62	110.56	119.70
1	N	1055	A	C5-N7-C8	7.61	107.71	103.90
1	N	75	G	C4'-C3'-C2'	-7.61	94.99	102.60
1	N	159	G	O4'-C1'-N9	7.61	114.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	173	U	P-O3'-C3'	7.61	128.83	119.70
1	N	217	C	C5-C4-N4	-7.61	114.87	120.20
1	N	618	C	C6-N1-C2	7.61	123.34	120.30
1	N	645	G	O4'-C1'-N9	7.61	114.29	108.20
1	N	1415	G	N1-C6-O6	7.61	124.47	119.90
1	N	558	G	N7-C8-N9	7.61	116.91	113.10
1	N	1330	U	O4'-C1'-N1	7.61	114.29	108.20
1	N	229	U	N1-C2-O2	7.61	128.12	122.80
1	N	658	C	N3-C4-C5	-7.61	118.86	121.90
1	N	1028	C	N3-C4-C5	-7.61	118.86	121.90
1	N	698	G	C6-C5-N7	-7.60	125.84	130.40
1	N	286	C	N3-C4-C5	-7.60	118.86	121.90
1	N	1269	A	O4'-C1'-N9	7.60	114.28	108.20
1	N	344	A	P-O3'-C3'	7.60	128.82	119.70
1	N	893	C	C5-C6-N1	7.60	124.80	121.00
1	N	402	G	O4'-C1'-N9	7.60	114.28	108.20
1	N	884	U	C5-C6-N1	7.60	126.50	122.70
1	N	298	A	P-O3'-C3'	7.60	128.82	119.70
1	N	480	U	O4'-C4'-C3'	-7.60	96.40	104.00
1	N	685	G	O4'-C1'-N9	7.60	114.28	108.20
1	N	722	G	C4'-C3'-C2'	7.60	110.20	102.60
1	N	1210	C	N3-C4-C5	-7.60	118.86	121.90
1	N	206	C	N3-C4-N4	7.59	123.32	118.00
1	N	696	A	C3'-C2'-C1'	-7.59	95.42	101.50
1	N	1321	U	C4-C5-C6	7.59	124.26	119.70
1	N	1370	G	C6-N1-C2	7.59	129.66	125.10
1	N	363	A	C5-C6-N1	-7.59	113.91	117.70
1	N	745	G	N1-C6-O6	7.59	124.45	119.90
1	N	336	A	C6-N1-C2	7.59	123.15	118.60
1	N	1174	G	C5-N7-C8	-7.59	100.50	104.30
1	N	1054	C	C1'-O4'-C4'	7.59	115.97	109.90
1	N	372	C	N3-C4-N4	7.59	123.31	118.00
1	N	497	G	C5-C6-O6	-7.59	124.05	128.60
1	N	1216	A	N1-C6-N6	7.59	123.15	118.60
1	N	1282	C	N3-C4-C5	-7.59	118.87	121.90
1	N	15	G	C5-C6-O6	-7.58	124.05	128.60
1	N	787	A	C5-C6-N1	-7.58	113.91	117.70
1	N	524	G	N9-C4-C5	-7.58	102.37	105.40
1	N	1035	A	N9-C4-C5	-7.58	102.77	105.80
1	N	1217	C	C6-N1-C2	-7.58	117.27	120.30
1	N	540	G	N1-C6-O6	7.58	124.45	119.90
1	N	937	A	O4'-C1'-N9	7.58	114.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1269	A	N1-C6-N6	7.58	123.15	118.60
1	N	930	C	C5-C4-N4	-7.58	114.90	120.20
1	N	27	G	C8-N9-C4	7.58	109.43	106.40
1	N	158	G	O4'-C1'-N9	7.58	114.26	108.20
1	N	146	G	N1-C6-O6	7.57	124.44	119.90
1	N	237	G	C8-N9-C4	7.57	109.43	106.40
1	N	1308	U	C5-C6-N1	-7.57	118.91	122.70
1	N	723	U	P-O3'-C3'	-7.57	110.61	119.70
1	N	1350	A	C8-N9-C4	-7.57	102.77	105.80
1	N	738	C	C4-C5-C6	7.57	121.19	117.40
1	N	1280	A	C3'-C2'-C1'	7.57	107.56	101.50
1	N	613	C	N1-C2-N3	-7.57	113.90	119.20
1	N	872	A	C4-C5-C6	7.57	120.78	117.00
1	N	1219	A	C5-N7-C8	7.57	107.68	103.90
1	N	703	G	C4-C5-N7	7.57	113.83	110.80
1	N	874	G	C4-C5-N7	-7.57	107.77	110.80
1	N	1511	G	C5-C6-O6	-7.57	124.06	128.60
1	N	70	U	O4'-C1'-N1	7.56	114.25	108.20
1	N	425	G	C5-C6-N1	7.56	115.28	111.50
1	N	1154	G	C2-N3-C4	7.56	115.68	111.90
1	N	641	U	N3-C2-O2	7.56	127.49	122.20
1	N	1533	C	N3-C4-C5	-7.56	118.88	121.90
1	N	194	C	N1-C2-O2	7.56	123.44	118.90
1	N	510	A	N3-C4-C5	7.56	132.09	126.80
1	N	1275	A	C4'-C3'-C2'	-7.56	95.04	102.60
1	N	817	C	N3-C4-N4	7.56	123.29	118.00
1	N	1163	A	C8-N9-C4	-7.56	102.78	105.80
1	N	787	A	N1-C6-N6	7.56	123.13	118.60
1	N	913	A	C6-N1-C2	7.56	123.13	118.60
1	N	933	G	C5-N7-C8	-7.56	100.52	104.30
1	N	1405	G	O4'-C4'-C3'	-7.56	96.44	104.00
1	N	1422	G	C5-N7-C8	7.55	108.08	104.30
1	N	334	C	C4-C5-C6	-7.55	113.62	117.40
1	N	1452	C	C5'-C4'-O4'	7.55	118.16	109.10
1	N	1525	G	N1-C6-O6	7.55	124.43	119.90
1	N	423	G	N3-C2-N2	7.55	125.19	119.90
1	N	685	G	C5-C6-N1	-7.55	107.72	111.50
1	N	1367	C	C2-N3-C4	7.55	123.67	119.90
1	N	1477	U	O4'-C1'-N1	7.55	114.24	108.20
1	N	233	C	C5-C6-N1	7.55	124.78	121.00
1	N	478	A	C5-C6-N1	-7.55	113.92	117.70
1	N	890	G	O4'-C1'-C2'	-7.55	98.25	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	175	C	C2-N3-C4	7.55	123.67	119.90
1	N	979	C	C2-N3-C4	7.55	123.67	119.90
1	N	72	A	C1'-O4'-C4'	7.55	115.94	109.90
1	N	947	G	O4'-C1'-N9	7.55	114.24	108.20
1	N	974	A	O4'-C1'-N9	7.55	114.24	108.20
1	N	1518	A	C5'-C4'-C3'	7.55	128.07	116.00
1	N	1534	A	O4'-C1'-N9	7.55	114.24	108.20
1	N	552	U	C2-N3-C4	-7.54	122.47	127.00
1	N	1422	G	N7-C8-N9	-7.54	109.33	113.10
1	N	593	U	O4'-C1'-N1	7.54	114.23	108.20
1	N	662	U	N3-C4-O4	7.54	124.68	119.40
1	N	1154	G	C5-C6-O6	-7.54	124.08	128.60
1	N	1215	G	C6-C5-N7	-7.54	125.88	130.40
1	N	1249	C	C5-C4-N4	-7.54	114.92	120.20
1	N	691	G	N3-C4-N9	7.54	130.52	126.00
1	N	105	G	N1-C2-N3	-7.54	119.38	123.90
1	N	499	A	N1-C2-N3	7.54	133.07	129.30
1	N	1064	G	C4-C5-C6	7.54	123.32	118.80
1	N	1271	A	C4-C5-C6	7.54	120.77	117.00
1	N	601	G	C8-N9-C1'	7.54	136.79	127.00
1	N	944	G	O4'-C1'-N9	7.54	114.23	108.20
1	N	1040	U	P-O3'-C3'	7.54	128.74	119.70
1	N	1129	C	C4-C5-C6	-7.54	113.63	117.40
1	N	447	G	N9-C1'-C2'	-7.53	103.71	112.00
1	N	433	G	C2-N3-C4	-7.53	108.13	111.90
1	N	1052	U	N3-C2-O2	7.53	127.47	122.20
1	N	1469	C	C6-N1-C2	-7.53	117.29	120.30
1	N	702	A	P-O3'-C3'	7.53	128.74	119.70
1	N	1026	G	C4-C5-N7	7.53	113.81	110.80
1	N	1110	A	C2-N3-C4	-7.53	106.83	110.60
1	N	1417	G	C4-N9-C1'	7.53	136.29	126.50
1	N	849	G	C8-N9-C4	-7.53	103.39	106.40
1	N	1383	C	O4'-C1'-N1	7.53	114.22	108.20
1	N	351	G	C5-C6-O6	-7.53	124.08	128.60
1	N	289	G	N1-C6-O6	7.53	124.42	119.90
1	N	571	U	C6-N1-C2	-7.53	116.48	121.00
1	N	1237	C	N3-C4-N4	7.53	123.27	118.00
1	N	1441	A	C4-C5-N7	7.52	114.46	110.70
1	N	183	C	C5-C4-N4	-7.52	114.93	120.20
1	N	480	U	C2-N3-C4	-7.52	122.49	127.00
1	N	827	U	P-O3'-C3'	7.52	128.73	119.70
1	N	1096	C	C2-N3-C4	7.52	123.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1351	U	N3-C4-C5	-7.52	110.09	114.60
1	N	1492	A	C8-N9-C4	-7.52	102.79	105.80
1	N	869	G	N1-C2-N3	-7.52	119.39	123.90
1	N	1087	G	C4-C5-N7	-7.52	107.79	110.80
1	N	1410	A	N1-C6-N6	7.52	123.11	118.60
1	N	316	C	C5-C4-N4	-7.52	114.94	120.20
1	N	322	C	C5'-C4'-O4'	7.52	118.12	109.10
1	N	605	U	N3-C4-C5	-7.52	110.09	114.60
1	N	790	A	O4'-C1'-N9	7.52	114.22	108.20
1	N	1230	C	P-O5'-C5'	7.52	132.93	120.90
1	N	1468	A	N3-C4-C5	-7.52	121.54	126.80
1	N	976	G	C8-N9-C4	-7.51	103.39	106.40
1	N	1138	G	O4'-C1'-N9	7.51	114.21	108.20
1	N	446	G	N1-C2-N3	-7.51	119.39	123.90
1	N	719	C	N3-C4-N4	7.51	123.26	118.00
1	N	1065	U	P-O5'-C5'	7.51	132.92	120.90
1	N	1272	G	O4'-C1'-N9	7.51	114.21	108.20
1	N	128	G	O4'-C1'-N9	7.51	114.21	108.20
1	N	547	A	C2-N3-C4	-7.51	106.85	110.60
1	N	586	C	O4'-C1'-N1	7.50	114.20	108.20
1	N	896	C	C2-N3-C4	-7.50	116.15	119.90
1	N	303	A	C4-C5-N7	-7.50	106.95	110.70
1	N	307	C	N3-C4-C5	-7.50	118.90	121.90
1	N	311	C	C6-N1-C2	-7.50	117.30	120.30
1	N	930	C	C3'-C2'-C1'	-7.50	95.50	101.50
1	N	1029	U	O4'-C1'-N1	7.50	114.20	108.20
1	N	1466	C	O4'-C1'-N1	7.50	114.20	108.20
1	N	96	U	N1-C2-O2	-7.50	117.55	122.80
1	N	284	C	C4-C5-C6	-7.50	113.65	117.40
1	N	670	G	N1-C2-N3	-7.50	119.40	123.90
1	N	773	G	N1-C6-O6	7.50	124.40	119.90
1	N	1241	G	C4-C5-C6	7.50	123.30	118.80
1	N	198	G	C5'-C4'-C3'	-7.50	104.01	116.00
1	N	656	G	N7-C8-N9	-7.50	109.35	113.10
1	N	1024	G	C2-N3-C4	-7.50	108.15	111.90
1	N	803	G	C8-N9-C4	-7.49	103.40	106.40
1	N	243	A	O4'-C1'-N9	7.49	114.19	108.20
1	N	637	C	O4'-C1'-N1	7.49	114.19	108.20
1	N	415	A	C5-C6-N6	-7.49	117.71	123.70
1	N	1020	G	N1-C2-N3	-7.49	119.41	123.90
1	N	1210	C	O4'-C1'-N1	7.49	114.19	108.20
1	N	1426	G	N9-C4-C5	-7.49	102.40	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	823	C	N3-C4-N4	7.49	123.24	118.00
1	N	890	G	C1'-O4'-C4'	-7.49	103.91	109.90
1	N	1309	G	O4'-C1'-N9	7.48	114.19	108.20
1	N	206	C	C2-N1-C1'	7.48	127.03	118.80
1	N	404	G	C4-C5-N7	-7.48	107.81	110.80
1	N	428	G	N9-C4-C5	-7.48	102.41	105.40
1	N	730	G	C5-C6-N1	7.48	115.24	111.50
1	N	885	G	N1-C2-N3	-7.48	119.41	123.90
1	N	383	A	C5-C6-N6	-7.48	117.72	123.70
1	N	563	A	N1-C2-N3	-7.48	125.56	129.30
1	N	1470	U	N1-C2-O2	-7.48	117.56	122.80
1	N	742	G	C5-C6-O6	-7.48	124.11	128.60
1	N	917	G	N1-C6-O6	7.48	124.39	119.90
1	N	1424	U	O4'-C1'-N1	7.48	114.18	108.20
1	N	155	A	C2-N3-C4	-7.48	106.86	110.60
1	N	1029	U	P-O3'-C3'	-7.48	110.73	119.70
1	N	1154	G	N1-C2-N3	-7.48	119.41	123.90
1	N	724	G	O4'-C1'-N9	7.48	114.18	108.20
1	N	867	G	C6-C5-N7	-7.47	125.92	130.40
1	N	1119	C	N3-C4-C5	-7.47	118.91	121.90
1	N	1416	G	N1-C6-O6	7.47	124.38	119.90
1	N	647	C	O5'-C5'-C4'	-7.47	97.51	111.70
1	N	76	G	C6-C5-N7	-7.47	125.92	130.40
1	N	445	G	O4'-C1'-N9	7.47	114.18	108.20
1	N	558	G	C4-C5-C6	7.47	123.28	118.80
1	N	708	C	C5-C4-N4	-7.47	114.97	120.20
1	N	220	G	C5'-C4'-O4'	7.46	118.06	109.10
1	N	400	C	C2-N3-C4	7.46	123.63	119.90
1	N	1174	G	C4-C5-N7	7.46	113.78	110.80
1	N	1136	C	C6-N1-C1'	-7.46	111.85	120.80
1	N	1396	A	N9-C4-C5	7.46	108.78	105.80
1	N	1409	C	N3-C4-N4	7.46	123.22	118.00
1	N	1487	G	O4'-C1'-N9	7.46	114.17	108.20
1	N	644	U	O4'-C1'-N1	7.46	114.17	108.20
1	N	234	C	C5-C6-N1	7.46	124.73	121.00
1	N	355	C	C4'-C3'-C2'	-7.46	95.14	102.60
1	N	613	C	C5-C6-N1	7.46	124.73	121.00
1	N	321	A	C5-C6-N1	-7.46	113.97	117.70
1	N	1417	G	C6-C5-N7	-7.46	125.93	130.40
1	N	98	A	N1-C6-N6	7.45	123.07	118.60
1	N	847	G	C5-N7-C8	-7.45	100.57	104.30
1	N	1287	A	N7-C8-N9	-7.45	110.08	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	971	G	N9-C4-C5	-7.45	102.42	105.40
1	N	1205	U	C5-C4-O4	-7.45	121.43	125.90
1	N	1271	A	C5-C6-N1	-7.45	113.98	117.70
1	N	283	U	C6-N1-C2	7.45	125.47	121.00
1	N	646	G	C5-C6-O6	-7.45	124.13	128.60
1	N	664	G	O4'-C1'-N9	7.45	114.16	108.20
1	N	1270	G	C5-C6-N1	-7.45	107.78	111.50
1	N	948	C	C6-N1-C2	-7.44	117.32	120.30
1	N	899	C	C6-N1-C2	7.44	123.28	120.30
1	N	1157	A	N1-C6-N6	7.44	123.06	118.60
1	N	1519	A	N9-C4-C5	7.44	108.78	105.80
1	N	69	G	C5-C6-O6	-7.44	124.14	128.60
1	N	879	C	N3-C4-N4	7.44	123.21	118.00
1	N	553	A	C5-C6-N6	-7.44	117.75	123.70
1	N	212	G	P-O5'-C5'	7.44	132.80	120.90
1	N	706	A	N9-C4-C5	7.44	108.78	105.80
1	N	809	G	N3-C2-N2	7.43	125.11	119.90
1	N	844	G	O4'-C1'-N9	7.43	114.15	108.20
1	N	1141	C	C4-C5-C6	7.43	121.12	117.40
1	N	790	A	C5-N7-C8	7.43	107.62	103.90
1	N	1084	G	C2-N3-C4	7.43	115.62	111.90
1	N	1435	G	N1-C2-N2	-7.43	109.51	116.20
1	N	1454	G	C6-C5-N7	-7.43	125.94	130.40
1	N	622	A	C6-C5-N7	-7.43	127.10	132.30
1	N	809	G	N1-C2-N3	-7.43	119.44	123.90
1	N	659	U	O4'-C1'-N1	7.43	114.14	108.20
1	N	58	C	N3-C4-N4	7.43	123.20	118.00
1	N	334	C	C5-C4-N4	-7.43	115.00	120.20
1	N	691	G	C6-C5-N7	-7.43	125.94	130.40
1	N	1369	C	C5-C4-N4	-7.43	115.00	120.20
1	N	786	G	N7-C8-N9	7.42	116.81	113.10
1	N	1205	U	O4'-C1'-N1	7.42	114.14	108.20
1	N	175	C	C2-N1-C1'	7.42	126.96	118.80
1	N	201	G	O4'-C1'-N9	7.42	114.14	108.20
1	N	613	C	N3-C4-C5	-7.42	118.93	121.90
1	N	629	A	C4-C5-C6	7.42	120.71	117.00
1	N	1299	A	O4'-C1'-N9	7.42	114.14	108.20
1	N	1355	G	C6-C5-N7	-7.42	125.95	130.40
1	N	351	G	N7-C8-N9	-7.42	109.39	113.10
1	N	636	U	C1'-O4'-C4'	-7.42	103.97	109.90
1	N	1421	G	N3-C2-N2	7.42	125.09	119.90
1	N	1233	G	C4-C5-C6	7.42	123.25	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	527	G	N7-C8-N9	7.42	116.81	113.10
1	N	606	G	O4'-C1'-N9	7.42	114.13	108.20
1	N	617	G	C5-N7-C8	-7.41	100.59	104.30
1	N	694	A	C5-C6-N1	-7.41	113.99	117.70
1	N	841	C	C5-C6-N1	7.41	124.71	121.00
1	N	273	U	C5'-C4'-C3'	-7.41	104.14	116.00
1	N	856	C	C4'-C3'-C2'	-7.41	95.19	102.60
1	N	78	A	N3-C4-N9	7.41	133.33	127.40
1	N	291	U	C5'-C4'-O4'	7.41	117.99	109.10
1	N	480	U	N3-C2-O2	-7.41	117.01	122.20
1	N	602	A	N9-C4-C5	7.41	108.76	105.80
1	N	764	C	N3-C4-C5	-7.41	118.94	121.90
1	N	1053	G	N1-C2-N3	-7.41	119.45	123.90
1	N	1129	C	C5-C6-N1	7.41	124.70	121.00
1	N	1160	G	C5-C6-O6	-7.41	124.15	128.60
1	N	896	C	C4-C5-C6	-7.41	113.70	117.40
1	N	1252	A	O4'-C1'-N9	7.41	114.12	108.20
1	N	1442	G	N3-C2-N2	7.41	125.08	119.90
1	N	456	A	C1'-O4'-C4'	7.40	115.82	109.90
1	N	36	C	N3-C4-C5	-7.40	118.94	121.90
1	N	568	G	O4'-C1'-N9	7.40	114.12	108.20
1	N	860	A	N1-C2-N3	-7.40	125.60	129.30
1	N	1203	C	O4'-C1'-N1	7.40	114.12	108.20
1	N	84	U	P-O5'-C5'	-7.40	109.06	120.90
1	N	258	G	O4'-C1'-N9	7.40	114.12	108.20
1	N	1252	A	C4-C5-N7	-7.40	107.00	110.70
1	N	1253	G	C5'-C4'-O4'	7.40	117.98	109.10
1	N	113	G	C8-N9-C4	-7.40	103.44	106.40
1	N	225	C	C2-N3-C4	7.40	123.60	119.90
1	N	479	U	N1-C2-O2	-7.40	117.62	122.80
1	N	39	G	C5-N7-C8	-7.40	100.60	104.30
1	N	398	U	O4'-C1'-N1	7.40	114.12	108.20
1	N	1289	A	C5-C6-N1	-7.40	114.00	117.70
1	N	1385	G	N1-C2-N3	-7.40	119.46	123.90
1	N	1392	G	N1-C6-O6	7.40	124.34	119.90
1	N	1518	A	C1'-O4'-C4'	7.40	115.82	109.90
1	N	199	A	O4'-C4'-C3'	-7.39	96.61	104.00
1	N	508	U	N3-C2-O2	-7.39	117.02	122.20
1	N	515	G	C8-N9-C4	-7.39	103.44	106.40
1	N	717	U	O4'-C1'-N1	7.39	114.11	108.20
1	N	1372	U	C2-N3-C4	-7.39	122.56	127.00
1	N	1520	C	N3-C4-N4	7.39	123.17	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	243	A	N1-C2-N3	-7.39	125.61	129.30
1	N	447	G	C5-C6-N1	-7.39	107.81	111.50
1	N	1183	U	C5-C4-O4	7.39	130.33	125.90
1	N	253	A	N1-C2-N3	7.39	132.99	129.30
1	N	302	G	C4-N9-C1'	-7.39	116.90	126.50
1	N	445	G	O4'-C1'-C2'	-7.39	98.41	105.80
1	N	750	C	C6-N1-C2	-7.39	117.34	120.30
1	N	1031	C	C4-C5-C6	7.39	121.09	117.40
1	N	241	G	N1-C2-N2	7.38	122.85	116.20
1	N	484	G	N3-C4-C5	7.38	132.29	128.60
1	N	1143	G	O4'-C1'-N9	7.38	114.11	108.20
1	N	1529	G	N3-C2-N2	-7.38	114.73	119.90
1	N	323	U	N3-C2-O2	-7.38	117.03	122.20
1	N	629	A	C3'-C2'-C1'	7.38	107.41	101.50
1	N	869	G	O4'-C1'-N9	7.38	114.11	108.20
1	N	1156	G	N3-C2-N2	7.38	125.07	119.90
1	N	760	G	C4-C5-C6	7.38	123.23	118.80
1	N	903	G	C3'-C2'-C1'	-7.38	95.59	101.50
1	N	143	A	N3-C4-N9	7.38	133.30	127.40
1	N	1027	C	O4'-C1'-N1	7.38	114.10	108.20
1	N	1155	A	C5-C6-N1	-7.38	114.01	117.70
1	N	1273	C	C4'-C3'-C2'	-7.38	95.22	102.60
1	N	395	C	C5-C4-N4	-7.38	115.04	120.20
1	N	697	U	P-O3'-C3'	-7.38	110.85	119.70
1	N	833	G	N1-C2-N3	-7.37	119.48	123.90
1	N	1207	G	C8-N9-C4	7.37	109.35	106.40
1	N	1246	A	N1-C2-N3	7.37	132.99	129.30
1	N	68	G	N3-C2-N2	7.37	125.06	119.90
1	N	849	G	O4'-C1'-N9	7.37	114.10	108.20
1	N	976	G	N1-C2-N3	-7.37	119.48	123.90
1	N	216	U	C5-C4-O4	-7.37	121.48	125.90
1	N	246	A	C6-N1-C2	-7.37	114.18	118.60
1	N	963	G	N1-C2-N3	-7.37	119.48	123.90
1	N	1488	G	C6-C5-N7	-7.37	125.98	130.40
1	N	271	C	O4'-C1'-N1	7.37	114.09	108.20
1	N	1285	A	C4-C5-N7	-7.37	107.02	110.70
1	N	60	A	O4'-C1'-N9	7.36	114.09	108.20
1	N	321	A	C6-C5-N7	-7.36	127.14	132.30
1	N	559	A	C5-C6-N1	-7.36	114.02	117.70
1	N	1105	A	C5-C6-N6	-7.36	117.81	123.70
1	N	1167	A	C8-N9-C4	-7.36	102.85	105.80
1	N	259	G	N1-C6-O6	7.36	124.32	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	796	C	N3-C4-N4	7.36	123.15	118.00
1	N	945	G	C3'-C2'-C1'	7.36	107.39	101.50
1	N	1314	C	O4'-C1'-N1	7.36	114.09	108.20
1	N	361	G	P-O3'-C3'	7.36	128.53	119.70
1	N	1167	A	N9-C4-C5	7.36	108.74	105.80
1	N	417	G	C5-C6-O6	-7.36	124.19	128.60
1	N	616	G	C5-C6-N1	-7.36	107.82	111.50
1	N	734	G	C6-N1-C2	7.36	129.51	125.10
1	N	1027	C	N1-C2-O2	7.36	123.31	118.90
1	N	790	A	C6-N1-C2	7.36	123.01	118.60
1	N	1005	A	O4'-C1'-N9	7.36	114.08	108.20
1	N	1239	A	O4'-C1'-C2'	-7.36	98.44	105.80
1	N	1311	A	P-O3'-C3'	-7.36	110.87	119.70
1	N	95	C	C4'-C3'-C2'	7.35	109.95	102.60
1	N	773	G	N9-C4-C5	-7.35	102.46	105.40
1	N	939	G	N9-C4-C5	-7.35	102.46	105.40
1	N	425	G	C8-N9-C4	7.35	109.34	106.40
1	N	962	C	C5-C4-N4	-7.35	115.06	120.20
1	N	1404	C	C6-N1-C2	7.35	123.24	120.30
1	N	1446	A	C6-N1-C2	-7.35	114.19	118.60
1	N	9	G	C5'-C4'-O4'	7.35	117.92	109.10
1	N	108	G	N3-C2-N2	7.35	125.04	119.90
1	N	360	G	C5-C6-N1	7.35	115.17	111.50
1	N	1441	A	C8-N9-C4	-7.35	102.86	105.80
1	N	992	U	C5'-C4'-C3'	7.34	127.75	116.00
1	N	140	U	C5-C6-N1	7.34	126.37	122.70
1	N	906	A	N9-C1'-C2'	-7.34	103.92	112.00
1	N	211	G	P-O3'-C3'	7.34	128.51	119.70
1	N	620	C	O4'-C1'-N1	7.34	114.07	108.20
1	N	478	A	C4-C5-C6	7.34	120.67	117.00
1	N	746	A	C5-N7-C8	7.34	107.57	103.90
1	N	750	C	C4-C5-C6	-7.34	113.73	117.40
1	N	74	A	C5-C6-N6	-7.33	117.83	123.70
1	N	92	U	N3-C4-O4	7.33	124.53	119.40
1	N	1322	C	N3-C4-C5	-7.33	118.97	121.90
1	N	238	A	C4-C5-C6	7.33	120.67	117.00
1	N	1032	G	N9-C4-C5	-7.33	102.47	105.40
1	N	1255	G	C8-N9-C4	7.33	109.33	106.40
1	N	51	A	C5-C6-N1	-7.33	114.03	117.70
1	N	155	A	P-O5'-C5'	7.33	132.63	120.90
1	N	214	C	C5-C4-N4	7.33	125.33	120.20
1	N	404	G	N1-C6-O6	7.33	124.30	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	482	A	C5-N7-C8	7.33	107.56	103.90
1	N	864	A	O4'-C1'-N9	7.33	114.06	108.20
1	N	945	G	C4'-C3'-C2'	-7.33	95.27	102.60
1	N	1211	U	C5-C6-N1	7.33	126.37	122.70
1	N	1253	G	N9-C4-C5	-7.33	102.47	105.40
1	N	1305	G	C6-C5-N7	-7.33	126.00	130.40
1	N	1434	A	C8-N9-C4	-7.33	102.87	105.80
1	N	601	G	N7-C8-N9	7.33	116.77	113.10
1	N	777	A	C6-C5-N7	-7.33	127.17	132.30
1	N	1153	G	O4'-C4'-C3'	-7.33	96.67	104.00
1	N	1408	A	C4-C5-C6	7.33	120.67	117.00
1	N	325	A	N1-C6-N6	7.33	123.00	118.60
1	N	820	U	O4'-C1'-N1	7.33	114.06	108.20
1	N	895	G	C5'-C4'-C3'	-7.33	104.27	116.00
1	N	367	U	O4'-C1'-N1	7.33	114.06	108.20
1	N	1254	A	N1-C6-N6	7.33	123.00	118.60
1	N	1530	G	O4'-C1'-N9	7.33	114.06	108.20
1	N	24	U	O4'-C1'-N1	7.33	114.06	108.20
1	N	339	C	C5'-C4'-O4'	7.33	117.89	109.10
1	N	1053	G	N1-C6-O6	7.33	124.30	119.90
1	N	443	C	N3-C4-N4	7.32	123.13	118.00
1	N	459	A	C4-C5-C6	7.32	120.66	117.00
1	N	1318	A	N1-C2-N3	-7.32	125.64	129.30
1	N	1465	A	C4-C5-N7	-7.32	107.04	110.70
1	N	1068	G	C6-N1-C2	-7.32	120.71	125.10
1	N	1157	A	N1-C2-N3	7.32	132.96	129.30
1	N	103	U	N3-C4-O4	7.32	124.52	119.40
1	N	521	G	C5-C6-O6	7.32	132.99	128.60
1	N	797	C	O4'-C1'-N1	7.32	114.06	108.20
1	N	877	G	P-O3'-C3'	-7.32	110.92	119.70
1	N	1301	U	C5'-C4'-O4'	7.32	117.88	109.10
1	N	1364	U	C5-C6-N1	-7.32	119.04	122.70
1	N	982	U	N3-C4-O4	7.32	124.52	119.40
1	N	1030	U	N3-C4-O4	7.32	124.52	119.40
1	N	12	U	O4'-C1'-N1	7.31	114.05	108.20
1	N	737	C	N3-C4-C5	-7.31	118.97	121.90
1	N	229	U	O4'-C1'-N1	7.31	114.05	108.20
1	N	247	G	C5-C6-O6	-7.31	124.21	128.60
1	N	379	C	N3-C4-C5	-7.31	118.97	121.90
1	N	425	G	P-O5'-C5'	7.31	132.60	120.90
1	N	613	C	C2-N3-C4	7.31	123.56	119.90
1	N	694	A	C3'-C2'-C1'	-7.31	95.65	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1095	U	N3-C4-O4	7.31	124.52	119.40
1	N	118	U	N1-C2-O2	-7.31	117.69	122.80
1	N	913	A	N1-C2-N3	-7.31	125.65	129.30
1	N	994	A	O4'-C1'-N9	7.31	114.05	108.20
1	N	1287	A	C2-N3-C4	-7.31	106.95	110.60
1	N	1533	C	C6-N1-C1'	-7.31	112.03	120.80
1	N	305	G	P-O3'-C3'	7.30	128.46	119.70
1	N	484	G	C8-N9-C4	7.30	109.32	106.40
1	N	777	A	C5-C6-N1	-7.30	114.05	117.70
1	N	984	C	N3-C4-N4	7.30	123.11	118.00
1	N	1048	G	C6-N1-C2	7.30	129.48	125.10
1	N	1288	A	C6-C5-N7	-7.30	127.19	132.30
1	N	2	A	N1-C2-N3	7.30	132.95	129.30
1	N	24	U	N3-C4-C5	-7.30	110.22	114.60
1	N	456	A	P-O5'-C5'	-7.30	109.22	120.90
1	N	558	G	C5-C6-N1	-7.30	107.85	111.50
1	N	1397	C	C5'-C4'-C3'	-7.30	104.32	116.00
1	N	86	G	P-O3'-C3'	7.30	128.46	119.70
1	N	516	U	C4-C5-C6	-7.30	115.32	119.70
1	N	346	G	O4'-C1'-N9	7.30	114.04	108.20
1	N	680	C	C2-N1-C1'	-7.30	110.77	118.80
1	N	1324	A	C5-C6-N1	-7.30	114.05	117.70
1	N	6	G	O4'-C1'-N9	7.30	114.04	108.20
1	N	396	C	C2-N3-C4	7.30	123.55	119.90
1	N	774	G	O4'-C1'-N9	7.30	114.04	108.20
1	N	988	G	C4-C5-C6	7.30	123.18	118.80
1	N	1092	A	C5-C6-N6	-7.30	117.86	123.70
1	N	1117	A	C6-C5-N7	-7.30	127.19	132.30
1	N	498	A	C5-C6-N1	-7.29	114.05	117.70
1	N	264	C	P-O5'-C5'	7.29	132.57	120.90
1	N	309	A	C4'-C3'-C2'	-7.29	95.31	102.60
1	N	1050	G	C5-C6-N1	7.29	115.15	111.50
1	N	1275	A	C5'-C4'-C3'	-7.29	104.33	116.00
1	N	228	A	C5-C6-N1	-7.29	114.05	117.70
1	N	462	G	N1-C6-O6	7.29	124.28	119.90
1	N	1020	G	O4'-C1'-N9	7.29	114.03	108.20
1	N	1253	G	C4-C5-N7	7.29	113.72	110.80
1	N	137	U	C3'-C2'-C1'	-7.29	95.67	101.50
1	N	660	C	C2-N3-C4	7.29	123.55	119.90
1	N	960	U	N3-C4-O4	7.29	124.50	119.40
1	N	1033	G	C8-N9-C4	7.29	109.32	106.40
1	N	151	A	C4-C5-N7	-7.29	107.06	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	532	A	N3-C4-C5	-7.29	121.70	126.80
1	N	1421	G	C4-C5-N7	7.29	113.72	110.80
1	N	1463	U	C3'-C2'-C1'	-7.29	95.67	101.50
1	N	859	G	O4'-C4'-C3'	-7.29	96.71	104.00
1	N	1181	G	C6-C5-N7	-7.29	126.03	130.40
1	N	1284	C	O4'-C1'-N1	7.29	114.03	108.20
1	N	1469	C	P-O5'-C5'	-7.29	109.24	120.90
1	N	152	A	C5-C6-N6	-7.28	117.87	123.70
1	N	977	A	C5-C6-N6	-7.28	117.87	123.70
1	N	1515	G	P-O3'-C3'	-7.28	110.96	119.70
1	N	20	U	O4'-C1'-N1	7.28	114.03	108.20
1	N	414	A	C2-N3-C4	7.28	114.24	110.60
1	N	617	G	O4'-C1'-N9	7.28	114.03	108.20
1	N	885	G	C5-C6-N1	-7.28	107.86	111.50
1	N	1046	A	C4-C5-C6	7.28	120.64	117.00
1	N	1059	C	O4'-C1'-N1	7.28	114.03	108.20
1	N	1202	U	C5'-C4'-C3'	7.28	127.65	116.00
1	N	1465	A	C5-N7-C8	7.28	107.54	103.90
1	N	302	G	C6-C5-N7	-7.28	126.03	130.40
1	N	954	G	C6-N1-C2	7.28	129.47	125.10
1	N	1327	C	N1-C2-N3	7.28	124.30	119.20
1	N	337	G	O4'-C1'-N9	7.28	114.02	108.20
1	N	382	A	O4'-C1'-N9	7.28	114.02	108.20
1	N	712	A	O4'-C1'-N9	7.28	114.02	108.20
1	N	880	C	C2-N3-C4	7.28	123.54	119.90
1	N	1488	G	C4-N9-C1'	-7.28	117.04	126.50
1	N	21	G	C4-C5-N7	-7.28	107.89	110.80
1	N	125	U	C2-N1-C1'	7.28	126.43	117.70
1	N	1376	U	C4-C5-C6	-7.28	115.33	119.70
1	N	1404	C	O4'-C1'-N1	7.28	114.02	108.20
1	N	550	G	C2-N3-C4	-7.27	108.26	111.90
1	N	785	G	O4'-C1'-C2'	-7.27	98.53	105.80
1	N	202	G	P-O3'-C3'	7.27	128.43	119.70
1	N	1225	A	C1'-O4'-C4'	7.27	115.72	109.90
1	N	414	A	C4-C5-C6	7.27	120.64	117.00
1	N	1188	A	C5-N7-C8	7.27	107.54	103.90
1	N	435	A	N9-C4-C5	-7.27	102.89	105.80
1	N	860	A	C3'-C2'-C1'	7.27	107.32	101.50
1	N	679	C	P-O5'-C5'	7.27	132.53	120.90
1	N	922	G	N9-C4-C5	7.27	108.31	105.40
1	N	1301	U	N3-C2-O2	7.27	127.29	122.20
1	N	746	A	N1-C6-N6	7.27	122.96	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	450	G	N7-C8-N9	-7.26	109.47	113.10
1	N	953	G	P-O5'-C5'	7.26	132.52	120.90
1	N	187	G	C8-N9-C1'	7.26	136.44	127.00
1	N	982	U	C1'-O4'-C4'	7.26	115.71	109.90
1	N	1444	U	C3'-C2'-C1'	7.26	107.31	101.50
1	N	733	G	N9-C4-C5	-7.26	102.50	105.40
1	N	21	G	C5-C6-O6	-7.25	124.25	128.60
1	N	173	U	N3-C4-O4	7.25	124.48	119.40
1	N	959	A	C6-C5-N7	-7.25	127.22	132.30
1	N	740	U	O4'-C4'-C3'	-7.25	96.75	104.00
1	N	1275	A	C5-N7-C8	7.25	107.53	103.90
1	N	119	A	N7-C8-N9	-7.25	110.17	113.80
1	N	539	A	P-O5'-C5'	7.25	132.50	120.90
1	N	899	C	O5'-P-OP1	7.25	119.40	110.70
1	N	911	U	C4'-C3'-C2'	-7.25	95.35	102.60
1	N	1063	C	O4'-C1'-N1	7.25	114.00	108.20
1	N	1119	C	C5-C6-N1	7.25	124.63	121.00
1	N	1176	A	N9-C4-C5	7.25	108.70	105.80
1	N	48	C	P-O3'-C3'	7.25	128.40	119.70
1	N	1093	A	N9-C4-C5	7.25	108.70	105.80
1	N	177	G	N3-C2-N2	7.25	124.97	119.90
1	N	234	C	N3-C2-O2	-7.25	116.83	121.90
1	N	252	U	C4-C5-C6	-7.25	115.35	119.70
1	N	1001	C	N3-C4-N4	7.25	123.07	118.00
1	N	183	C	P-O3'-C3'	7.24	128.39	119.70
1	N	503	C	N3-C4-N4	7.24	123.07	118.00
1	N	588	G	N1-C2-N3	-7.24	119.55	123.90
1	N	686	U	N3-C2-O2	7.24	127.27	122.20
1	N	1017	U	N3-C4-O4	7.24	124.47	119.40
1	N	1415	G	C4-C5-N7	-7.24	107.90	110.80
1	N	1242	G	N3-C2-N2	7.24	124.97	119.90
1	N	1325	C	C5-C4-N4	-7.24	115.13	120.20
1	N	391	G	P-O3'-C3'	7.24	128.39	119.70
1	N	1106	G	C5-C6-N1	-7.24	107.88	111.50
1	N	1256	A	O4'-C1'-N9	7.24	113.99	108.20
1	N	985	C	P-O5'-C5'	7.24	132.48	120.90
1	N	716	A	C5-N7-C8	7.24	107.52	103.90
1	N	1193	G	C2-N3-C4	-7.24	108.28	111.90
1	N	333	U	O4'-C1'-N1	7.24	113.99	108.20
1	N	191	G	N3-C4-C5	7.23	132.22	128.60
1	N	88	U	N1-C2-N3	-7.23	110.56	114.90
1	N	136	C	O4'-C1'-N1	7.23	113.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1015	G	N3-C4-N9	-7.23	121.66	126.00
1	N	1196	A	C5-C6-N6	-7.23	117.91	123.70
1	N	1237	C	P-O3'-C3'	7.23	128.38	119.70
1	N	417	G	C8-N9-C4	7.23	109.29	106.40
1	N	794	A	C5-N7-C8	7.23	107.52	103.90
1	N	1213	A	N1-C2-N3	-7.23	125.69	129.30
1	N	1352	C	C2-N3-C4	7.23	123.52	119.90
1	N	219	U	N1-C2-N3	7.23	119.24	114.90
1	N	52	C	N1-C2-O2	-7.23	114.56	118.90
1	N	356	A	C6-C5-N7	-7.23	127.24	132.30
1	N	848	C	N3-C4-C5	-7.23	119.01	121.90
1	N	1176	A	C4-C5-C6	7.23	120.61	117.00
1	N	454	G	C4-C5-N7	7.23	113.69	110.80
1	N	1174	G	O4'-C1'-N9	7.23	113.98	108.20
1	N	1466	C	C2-N1-C1'	7.23	126.75	118.80
1	N	342	C	O4'-C1'-N1	7.22	113.98	108.20
1	N	869	G	C5'-C4'-O4'	7.22	117.77	109.10
1	N	955	U	C5-C6-N1	7.22	126.31	122.70
1	N	1143	G	C5-N7-C8	-7.22	100.69	104.30
1	N	1209	C	C5-C4-N4	-7.22	115.14	120.20
1	N	751	U	N3-C2-O2	7.22	127.25	122.20
1	N	897	C	N3-C4-N4	7.22	123.05	118.00
1	N	79	G	P-O3'-C3'	7.22	128.36	119.70
1	N	392	C	O4'-C1'-N1	7.22	113.97	108.20
1	N	1275	A	N1-C2-N3	-7.22	125.69	129.30
1	N	452	A	O4'-C1'-N9	7.22	113.97	108.20
1	N	149	A	C5-C6-N6	-7.21	117.93	123.70
1	N	988	G	C2-N3-C4	7.21	115.51	111.90
1	N	1277	C	P-O3'-C3'	-7.21	111.04	119.70
1	N	1306	A	C6-C5-N7	-7.21	127.25	132.30
1	N	148	G	C6-C5-N7	-7.21	126.07	130.40
1	N	1158	C	O4'-C1'-N1	7.21	113.97	108.20
1	N	175	C	C4-C5-C6	7.21	121.00	117.40
1	N	754	C	C2-N1-C1'	7.21	126.73	118.80
1	N	189	A	C4'-C3'-C2'	-7.21	95.39	102.60
1	N	1339	A	O4'-C1'-N9	7.21	113.97	108.20
1	N	682	G	N1-C6-O6	7.21	124.22	119.90
1	N	710	G	C4-C5-N7	7.21	113.68	110.80
1	N	818	G	N1-C2-N2	7.21	122.68	116.20
1	N	2	A	N1-C6-N6	7.20	122.92	118.60
1	N	44	A	N9-C4-C5	-7.20	102.92	105.80
1	N	1204	A	N1-C6-N6	7.20	122.92	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	569	C	O4'-C1'-N1	7.20	113.96	108.20
1	N	1374	A	N1-C6-N6	7.20	122.92	118.60
1	N	1457	G	C6-C5-N7	-7.20	126.08	130.40
1	N	94	G	P-O5'-C5'	-7.20	109.38	120.90
1	N	1394	A	N7-C8-N9	-7.20	110.20	113.80
1	N	93	U	N1-C2-O2	-7.20	117.76	122.80
1	N	188	C	C5-C4-N4	-7.20	115.16	120.20
1	N	326	G	C5-C6-O6	-7.20	124.28	128.60
1	N	691	G	C4-C5-C6	7.19	123.12	118.80
1	N	916	U	N3-C4-O4	7.19	124.44	119.40
1	N	1292	G	C6-C5-N7	-7.19	126.08	130.40
1	N	214	C	C4'-C3'-C2'	-7.19	95.41	102.60
1	N	1191	A	C4-C5-C6	7.19	120.60	117.00
1	N	1242	G	N1-C2-N3	-7.19	119.58	123.90
1	N	444	G	N7-C8-N9	-7.19	109.50	113.10
1	N	483	C	O4'-C1'-N1	7.19	113.95	108.20
1	N	1053	G	C5'-C4'-C3'	-7.19	104.49	116.00
1	N	1443	C	C5-C6-N1	7.19	124.59	121.00
1	N	1511	G	P-O3'-C3'	-7.19	111.07	119.70
1	N	714	G	O4'-C1'-N9	7.19	113.95	108.20
1	N	19	A	C5'-C4'-O4'	7.18	117.72	109.10
1	N	406	G	N1-C6-O6	7.18	124.21	119.90
1	N	971	G	C6-C5-N7	-7.18	126.09	130.40
1	N	1361	G	C8-N9-C4	-7.18	103.53	106.40
1	N	352	C	P-O3'-C3'	7.18	128.32	119.70
1	N	1215	G	N7-C8-N9	7.18	116.69	113.10
1	N	1399	C	N3-C4-C5	-7.18	119.03	121.90
1	N	257	G	C4'-C3'-C2'	-7.18	95.42	102.60
1	N	902	G	O4'-C4'-C3'	-7.18	96.82	104.00
1	N	1063	C	C5-C6-N1	7.18	124.59	121.00
1	N	520	A	C8-N9-C4	-7.18	102.93	105.80
1	N	598	U	N1-C2-N3	-7.18	110.59	114.90
1	N	709	U	P-O5'-C5'	7.18	132.38	120.90
1	N	951	G	N3-C4-C5	7.18	132.19	128.60
1	N	26	A	C4-C5-C6	7.18	120.59	117.00
1	N	297	G	C5-C6-O6	-7.18	124.30	128.60
1	N	234	C	O4'-C1'-N1	7.17	113.94	108.20
1	N	936	C	N3-C4-N4	7.17	123.02	118.00
1	N	1009	U	N1-C2-N3	-7.17	110.60	114.90
1	N	1143	G	N7-C8-N9	7.17	116.69	113.10
1	N	1190	G	C5-C6-O6	-7.17	124.30	128.60
1	N	1449	C	O4'-C1'-N1	7.17	113.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	716	A	C4-C5-N7	-7.17	107.11	110.70
1	N	919	A	C5-N7-C8	7.17	107.48	103.90
1	N	508	U	C1'-O4'-C4'	7.17	115.64	109.90
1	N	661	G	C4-C5-N7	-7.17	107.93	110.80
1	N	846	G	N1-C6-O6	7.17	124.20	119.90
1	N	1463	U	O4'-C1'-N1	7.17	113.93	108.20
1	N	140	U	P-O3'-C3'	7.17	128.30	119.70
1	N	259	G	C4-C5-N7	7.17	113.67	110.80
1	N	486	U	O4'-C1'-N1	7.17	113.93	108.20
1	N	787	A	C6-N1-C2	7.17	122.90	118.60
1	N	890	G	C8-N9-C4	-7.17	103.53	106.40
1	N	1396	A	N3-C4-C5	-7.17	121.78	126.80
1	N	1440	U	C4'-C3'-C2'	-7.17	95.43	102.60
1	N	74	A	C2-N3-C4	-7.17	107.02	110.60
1	N	203	G	C5-C6-N1	7.17	115.08	111.50
1	N	90	C	P-O5'-C5'	7.16	132.36	120.90
1	N	513	C	P-O5'-C5'	7.16	132.36	120.90
1	N	687	A	C5-C6-N1	-7.16	114.12	117.70
1	N	793	U	O4'-C1'-N1	7.16	113.93	108.20
1	N	806	C	P-O3'-C3'	-7.16	111.11	119.70
1	N	1322	C	P-O3'-C3'	7.16	128.30	119.70
1	N	1063	C	C1'-O4'-C4'	7.16	115.63	109.90
1	N	363	A	O4'-C1'-N9	7.16	113.93	108.20
1	N	448	A	N7-C8-N9	-7.16	110.22	113.80
1	N	696	A	N1-C6-N6	7.16	122.90	118.60
1	N	807	A	N1-C6-N6	7.16	122.90	118.60
1	N	916	U	N1-C2-O2	-7.16	117.79	122.80
1	N	1256	A	C5-C6-N1	-7.16	114.12	117.70
1	N	151	A	N1-C6-N6	7.16	122.90	118.60
1	N	181	A	C4'-C3'-C2'	-7.16	95.44	102.60
1	N	788	U	C3'-C2'-C1'	7.16	107.23	101.50
1	N	1213	A	C5-N7-C8	7.16	107.48	103.90
1	N	973	G	N1-C2-N3	-7.16	119.61	123.90
1	N	1121	U	N3-C4-O4	7.16	124.41	119.40
1	N	1252	A	C4'-C3'-C2'	-7.16	95.44	102.60
1	N	1419	G	C4-C5-N7	7.16	113.66	110.80
1	N	234	C	C4'-C3'-C2'	-7.15	95.45	102.60
1	N	67	C	P-O3'-C3'	7.15	128.28	119.70
1	N	342	C	N3-C4-N4	7.15	123.01	118.00
1	N	482	A	O4'-C1'-N9	7.15	113.92	108.20
1	N	560	A	O4'-C1'-N9	7.15	113.92	108.20
1	N	574	A	N7-C8-N9	-7.15	110.22	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	197	A	N1-C2-N3	7.15	132.88	129.30
1	N	455	G	N1-C2-N3	-7.15	119.61	123.90
1	N	885	G	C5-C6-O6	-7.15	124.31	128.60
1	N	928	G	O4'-C1'-N9	7.15	113.92	108.20
1	N	1145	A	C5-C6-N1	-7.15	114.12	117.70
1	N	35	G	N1-C2-N2	7.15	122.63	116.20
1	N	890	G	C5-C6-O6	-7.15	124.31	128.60
1	N	1329	A	C5-C6-N1	-7.15	114.13	117.70
1	N	74	A	C5-C6-N1	-7.14	114.13	117.70
1	N	1185	G	O4'-C1'-N9	7.14	113.92	108.20
1	N	1394	A	P-O5'-C5'	7.14	132.33	120.90
1	N	1457	G	OP1-P-OP2	-7.14	108.88	119.60
1	N	71	A	C5-C6-N6	-7.14	117.99	123.70
1	N	454	G	N7-C8-N9	-7.14	109.53	113.10
1	N	1359	C	C5-C6-N1	7.14	124.57	121.00
1	N	54	C	O4'-C1'-C2'	-7.14	98.66	105.80
1	N	1037	C	N3-C4-N4	7.14	123.00	118.00
1	N	1130	A	C5-N7-C8	7.14	107.47	103.90
1	N	1153	G	P-O3'-C3'	-7.14	111.13	119.70
1	N	1155	A	C4-C5-C6	7.14	120.57	117.00
1	N	1316	G	N1-C6-O6	7.14	124.18	119.90
1	N	1342	C	C4-C5-C6	-7.14	113.83	117.40
1	N	139	A	O4'-C1'-N9	7.14	113.91	108.20
1	N	1175	G	N1-C2-N3	-7.14	119.62	123.90
1	N	1192	C	C5-C4-N4	-7.14	115.20	120.20
1	N	1380	U	C6-N1-C2	-7.14	116.72	121.00
1	N	265	G	N1-C2-N3	-7.13	119.62	123.90
1	N	591	U	O4'-C1'-N1	7.13	113.91	108.20
1	N	1127	G	C4-C5-C6	-7.13	114.52	118.80
1	N	1338	G	N3-C2-N2	7.13	124.89	119.90
1	N	1358	U	N3-C4-O4	7.13	124.39	119.40
1	N	195	A	C5-N7-C8	7.13	107.47	103.90
1	N	315	A	N1-C2-N3	7.13	132.87	129.30
1	N	901	A	C1'-O4'-C4'	-7.13	104.19	109.90
1	N	474	G	C6-C5-N7	-7.13	126.12	130.40
1	N	1352	C	C5-C4-N4	-7.13	115.21	120.20
1	N	3	A	C5-C6-N6	-7.13	118.00	123.70
1	N	109	A	C5-C6-N1	-7.13	114.14	117.70
1	N	128	G	C5-N7-C8	7.13	107.86	104.30
1	N	903	G	C6-C5-N7	-7.13	126.12	130.40
1	N	1268	G	C8-N9-C4	7.13	109.25	106.40
1	N	246	A	N1-C2-N3	7.13	132.86	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	537	G	N9-C1'-C2'	-7.13	104.16	112.00
1	N	867	G	C5-C6-O6	-7.13	124.32	128.60
1	N	1075	U	N3-C4-O4	7.13	124.39	119.40
1	N	1289	A	N3-C4-C5	-7.13	121.81	126.80
1	N	559	A	C8-N9-C4	7.12	108.65	105.80
1	N	993	G	C4'-C3'-C2'	-7.12	95.48	102.60
1	N	1205	U	N3-C4-O4	7.12	124.39	119.40
1	N	21	G	O4'-C1'-N9	7.12	113.90	108.20
1	N	228	A	C5-C6-N6	-7.12	118.00	123.70
1	N	272	C	C1'-O4'-C4'	7.12	115.60	109.90
1	N	526	C	N3-C4-C5	-7.12	119.05	121.90
1	N	821	G	C6-C5-N7	-7.12	126.13	130.40
1	N	1117	A	C5-C6-N1	-7.12	114.14	117.70
1	N	1305	G	C5-C6-O6	-7.12	124.33	128.60
1	N	413	G	C5-N7-C8	7.12	107.86	104.30
1	N	136	C	N3-C4-C5	-7.12	119.05	121.90
1	N	1044	A	C4-C5-C6	7.12	120.56	117.00
1	N	1050	G	C4-C5-N7	7.12	113.65	110.80
1	N	1456	A	C5-C6-N6	-7.12	118.01	123.70
1	N	466	A	N3-C4-N9	7.12	133.09	127.40
1	N	1167	A	C5-C6-N1	-7.12	114.14	117.70
1	N	94	G	C4-C5-N7	-7.12	107.95	110.80
1	N	120	A	C3'-C2'-C1'	-7.12	95.81	101.50
1	N	230	G	C4-C5-N7	-7.12	107.95	110.80
1	N	277	C	C4-C5-C6	-7.12	113.84	117.40
1	N	966	G	N7-C8-N9	7.12	116.66	113.10
1	N	1394	A	C5-N7-C8	7.12	107.46	103.90
1	N	67	C	C5-C4-N4	-7.11	115.22	120.20
1	N	690	G	N3-C2-N2	7.11	124.88	119.90
1	N	1078	U	C6-N1-C2	7.11	125.27	121.00
1	N	307	C	N3-C4-N4	7.11	122.98	118.00
1	N	4	U	C5'-C4'-O4'	7.11	117.63	109.10
1	N	91	U	O4'-C1'-N1	7.11	113.89	108.20
1	N	558	G	C4-C5-N7	-7.11	107.96	110.80
1	N	620	C	C2-N3-C4	7.11	123.45	119.90
1	N	1436	U	C5-C4-O4	-7.11	121.63	125.90
1	N	211	G	C8-N9-C1'	-7.11	117.76	127.00
1	N	8	A	C4-C5-C6	7.11	120.55	117.00
1	N	31	G	C6-C5-N7	-7.11	126.14	130.40
1	N	54	C	O4'-C1'-N1	7.11	113.89	108.20
1	N	92	U	C5-C4-O4	-7.11	121.64	125.90
1	N	1480	A	C6-N1-C2	-7.11	114.33	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	186	C	C5-C4-N4	-7.11	115.23	120.20
1	N	220	G	C4-C5-C6	7.11	123.06	118.80
1	N	814	A	C5-C6-N6	-7.11	118.02	123.70
1	N	564	C	N3-C4-N4	-7.10	113.03	118.00
1	N	738	C	C6-N1-C2	-7.10	117.46	120.30
1	N	1114	C	C5-C6-N1	-7.10	117.45	121.00
1	N	1239	A	C5-C6-N1	-7.10	114.15	117.70
1	N	1446	A	N9-C4-C5	7.10	108.64	105.80
1	N	15	G	N1-C6-O6	7.10	124.16	119.90
1	N	161	A	P-O5'-C5'	7.10	132.26	120.90
1	N	949	A	O4'-C1'-N9	7.10	113.88	108.20
1	N	77	A	N9-C4-C5	-7.10	102.96	105.80
1	N	336	A	C5-C6-N6	-7.10	118.02	123.70
1	N	822	U	C6-N1-C2	-7.10	116.74	121.00
1	N	374	A	C5'-C4'-C3'	7.10	127.35	116.00
1	N	784	A	N3-C4-C5	-7.10	121.83	126.80
1	N	70	U	P-O3'-C3'	7.09	128.21	119.70
1	N	654	G	N7-C8-N9	-7.09	109.55	113.10
1	N	942	G	C5-C6-O6	-7.09	124.34	128.60
1	N	501	C	C5-C4-N4	-7.09	115.23	120.20
1	N	61	G	O4'-C4'-C3'	-7.09	96.91	104.00
1	N	220	G	C8-N9-C1'	-7.09	117.78	127.00
1	N	743	A	C2-N3-C4	7.09	114.14	110.60
1	N	1167	A	N1-C6-N6	7.09	122.86	118.60
1	N	1382	C	C4-C5-C6	7.09	120.95	117.40
1	N	232	G	C2-N3-C4	7.09	115.44	111.90
1	N	332	G	O4'-C1'-N9	7.09	113.87	108.20
1	N	759	A	N1-C6-N6	7.09	122.85	118.60
1	N	1288	A	O4'-C1'-N9	7.09	113.87	108.20
1	N	836	G	P-O3'-C3'	7.09	128.20	119.70
1	N	916	U	C2-N1-C1'	7.09	126.20	117.70
1	N	97	G	N1-C2-N2	7.08	122.58	116.20
1	N	645	G	C6-C5-N7	-7.08	126.15	130.40
1	N	1058	G	C5-C6-O6	-7.08	124.35	128.60
1	N	1223	C	C5-C4-N4	-7.08	115.24	120.20
1	N	288	A	C4-C5-C6	7.08	120.54	117.00
1	N	301	G	C6-C5-N7	-7.08	126.15	130.40
1	N	558	G	C4-N9-C1'	7.08	135.71	126.50
1	N	1134	G	N3-C4-N9	-7.08	121.75	126.00
1	N	353	A	P-O3'-C3'	7.08	128.20	119.70
1	N	806	C	C6-N1-C2	-7.08	117.47	120.30
1	N	712	A	C6-N1-C2	7.08	122.85	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	843	U	C2-N1-C1'	7.08	126.19	117.70
1	N	942	G	N3-C2-N2	7.08	124.86	119.90
1	N	1118	U	N1-C2-O2	-7.08	117.85	122.80
1	N	1392	G	C5-C6-N1	-7.08	107.96	111.50
1	N	1532	U	C6-N1-C2	-7.08	116.75	121.00
1	N	285	C	C5-C6-N1	7.08	124.54	121.00
1	N	1263	C	P-O5'-C5'	7.08	132.22	120.90
1	N	86	G	N7-C8-N9	-7.07	109.56	113.10
1	N	182	A	N3-C4-C5	-7.07	121.85	126.80
1	N	223	A	C5-C6-N1	-7.07	114.16	117.70
1	N	287	U	C6-N1-C2	-7.07	116.76	121.00
1	N	415	A	N9-C4-C5	-7.07	102.97	105.80
1	N	849	G	C5'-C4'-C3'	-7.07	104.68	116.00
1	N	936	C	C6-N1-C2	7.07	123.13	120.30
1	N	1132	C	P-O3'-C3'	7.07	128.19	119.70
1	N	154	U	C5-C4-O4	-7.07	121.66	125.90
1	N	281	G	C3'-C2'-C1'	7.07	107.16	101.50
1	N	1078	U	C4-C5-C6	7.07	123.94	119.70
1	N	1191	A	C4'-C3'-C2'	7.07	109.67	102.60
1	N	1307	U	O4'-C1'-N1	7.07	113.86	108.20
1	N	743	A	N3-C4-C5	-7.07	121.85	126.80
1	N	1176	A	P-O3'-C3'	7.07	128.18	119.70
1	N	342	C	C1'-O4'-C4'	7.07	115.55	109.90
1	N	433	G	N3-C4-C5	7.07	132.13	128.60
1	N	982	U	C4-C5-C6	7.07	123.94	119.70
1	N	1288	A	P-O5'-C5'	7.07	132.21	120.90
1	N	106	C	C5-C4-N4	-7.06	115.25	120.20
1	N	131	A	N1-C2-N3	-7.06	125.77	129.30
1	N	336	A	C4-C5-N7	-7.06	107.17	110.70
1	N	989	U	N3-C2-O2	7.06	127.14	122.20
1	N	1357	A	O4'-C1'-N9	7.06	113.85	108.20
1	N	321	A	C4-C5-C6	7.06	120.53	117.00
1	N	460	A	N1-C2-N3	7.06	132.83	129.30
1	N	1486	G	C6-C5-N7	-7.06	126.16	130.40
1	N	1398	A	C8-N9-C4	-7.06	102.98	105.80
1	N	997	U	O4'-C1'-N1	7.06	113.84	108.20
1	N	1492	A	C2-N3-C4	-7.06	107.07	110.60
1	N	601	G	C8-N9-C4	-7.06	103.58	106.40
1	N	542	G	N1-C6-O6	7.05	124.13	119.90
1	N	656	G	C3'-C2'-C1'	7.05	107.14	101.50
1	N	987	G	C8-N9-C4	-7.05	103.58	106.40
1	N	385	C	C2-N3-C4	-7.05	116.38	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	799	G	N7-C8-N9	-7.05	109.57	113.10
1	N	1233	G	N1-C6-O6	7.05	124.13	119.90
1	N	1400	C	C4-C5-C6	7.05	120.93	117.40
1	N	352	C	N3-C4-N4	7.05	122.93	118.00
1	N	440	C	O4'-C1'-N1	7.05	113.84	108.20
1	N	728	A	C5-C6-N1	-7.05	114.18	117.70
1	N	303	A	C4-C5-C6	7.05	120.52	117.00
1	N	414	A	C5-C6-N1	-7.05	114.18	117.70
1	N	1176	A	N1-C6-N6	7.05	122.83	118.60
1	N	1252	A	C8-N9-C4	7.05	108.62	105.80
1	N	1523	G	C4-C5-C6	7.05	123.03	118.80
1	N	402	G	C6-C5-N7	-7.04	126.17	130.40
1	N	1265	C	N1-C2-O2	7.04	123.13	118.90
1	N	324	G	O4'-C1'-N9	7.04	113.83	108.20
1	N	496	A	P-O5'-C5'	7.04	132.17	120.90
1	N	599	C	C6-N1-C2	-7.04	117.48	120.30
1	N	629	A	C5-C6-N1	-7.04	114.18	117.70
1	N	786	G	N1-C2-N3	-7.04	119.67	123.90
1	N	567	G	C5-C6-N1	-7.04	107.98	111.50
1	N	134	G	C5-C6-N1	-7.04	107.98	111.50
1	N	1053	G	C5-C6-N1	-7.04	107.98	111.50
1	N	1361	G	C3'-C2'-C1'	-7.04	95.87	101.50
1	N	664	G	N1-C2-N3	-7.04	119.68	123.90
1	N	73	C	C5-C6-N1	7.04	124.52	121.00
1	N	168	G	N3-C2-N2	7.04	124.83	119.90
1	N	651	C	C1'-O4'-C4'	7.04	115.53	109.90
1	N	1191	A	P-O5'-C5'	7.04	132.16	120.90
1	N	1266	G	O4'-C1'-N9	7.04	113.83	108.20
1	N	140	U	P-O5'-C5'	7.03	132.15	120.90
1	N	400	C	C5-C6-N1	-7.03	117.48	121.00
1	N	754	C	C4-C5-C6	7.03	120.92	117.40
1	N	406	G	C3'-C2'-C1'	7.03	107.12	101.50
1	N	1046	A	C5-C6-N1	-7.03	114.19	117.70
1	N	245	U	N1-C2-N3	7.03	119.12	114.90
1	N	515	G	C6-C5-N7	-7.03	126.18	130.40
1	N	824	G	C5-C6-O6	-7.03	124.38	128.60
1	N	879	C	O5'-P-OP2	-7.03	99.37	105.70
1	N	1490	U	N3-C4-C5	-7.03	110.38	114.60
1	N	531	U	C5-C6-N1	7.03	126.21	122.70
1	N	1260	G	C4-C5-N7	7.03	113.61	110.80
1	N	435	A	C4-C5-C6	7.03	120.51	117.00
1	N	1212	U	C2-N3-C4	7.02	131.22	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1223	C	C4-C5-C6	7.02	120.91	117.40
1	N	803	G	C4-C5-N7	7.02	113.61	110.80
1	N	1351	U	O4'-C1'-N1	7.02	113.82	108.20
1	N	431	A	O4'-C1'-N9	7.02	113.82	108.20
1	N	559	A	O4'-C1'-N9	7.02	113.81	108.20
1	N	357	G	N9-C4-C5	-7.02	102.59	105.40
1	N	468	A	P-O3'-C3'	7.02	128.12	119.70
1	N	771	G	C5-C6-N1	-7.02	107.99	111.50
1	N	882	C	N1-C2-N3	7.02	124.11	119.20
1	N	1163	A	C1'-O4'-C4'	-7.02	104.29	109.90
1	N	1339	A	C2-N3-C4	7.02	114.11	110.60
1	N	120	A	C5-N7-C8	7.02	107.41	103.90
1	N	102	G	N3-C4-N9	-7.01	121.79	126.00
1	N	310	G	C6-C5-N7	-7.01	126.19	130.40
1	N	427	U	C1'-O4'-C4'	7.01	115.51	109.90
1	N	1257	A	C4-C5-C6	7.01	120.51	117.00
1	N	1355	G	C4-C5-C6	7.01	123.01	118.80
1	N	1438	G	N1-C2-N3	-7.01	119.69	123.90
1	N	445	G	N3-C4-N9	-7.01	121.79	126.00
1	N	508	U	C5'-C4'-C3'	-7.01	104.78	116.00
1	N	974	A	C6-N1-C2	7.01	122.81	118.60
1	N	7	A	N7-C8-N9	7.01	117.31	113.80
1	N	314	C	C5-C4-N4	7.01	125.11	120.20
1	N	252	U	O4'-C1'-N1	7.01	113.81	108.20
1	N	761	G	N9-C4-C5	-7.01	102.60	105.40
1	N	900	A	N7-C8-N9	-7.01	110.30	113.80
1	N	988	G	C3'-C2'-C1'	7.01	107.11	101.50
1	N	653	U	N1-C2-O2	7.00	127.70	122.80
1	N	717	U	C4'-C3'-C2'	7.00	109.60	102.60
1	N	894	G	O4'-C1'-N9	7.00	113.80	108.20
1	N	950	U	C6-N1-C2	-7.00	116.80	121.00
1	N	1283	U	O4'-C1'-N1	7.00	113.80	108.20
1	N	1487	G	C5-C6-O6	-7.00	124.40	128.60
1	N	1233	G	C5-C6-O6	-7.00	124.40	128.60
1	N	248	C	N3-C4-N4	7.00	122.90	118.00
1	N	539	A	N9-C4-C5	-7.00	103.00	105.80
1	N	1185	G	O4'-C4'-C3'	-7.00	97.00	104.00
1	N	1188	A	P-O5'-C5'	7.00	132.10	120.90
1	N	1437	A	C5-C6-N6	-7.00	118.10	123.70
1	N	779	C	N3-C4-C5	-7.00	119.10	121.90
1	N	948	C	P-O3'-C3'	-7.00	111.30	119.70
1	N	241	G	O4'-C1'-N9	7.00	113.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	747	A	C5-C6-N6	-6.99	118.11	123.70
1	N	57	G	C6-C5-N7	-6.99	126.20	130.40
1	N	497	G	N3-C2-N2	6.99	124.79	119.90
1	N	524	G	O4'-C1'-N9	6.99	113.79	108.20
1	N	1127	G	C5-N7-C8	-6.99	100.80	104.30
1	N	211	G	C2-N3-C4	-6.99	108.41	111.90
1	N	359	G	P-O3'-C3'	-6.99	111.31	119.70
1	N	1290	G	C4-N9-C1'	6.99	135.59	126.50
1	N	814	A	C5-C6-N1	-6.99	114.20	117.70
1	N	1470	U	C5-C6-N1	6.99	126.19	122.70
1	N	313	A	C8-N9-C4	-6.99	103.00	105.80
1	N	465	A	P-O3'-C3'	6.98	128.08	119.70
1	N	768	A	C1'-O4'-C4'	6.98	115.49	109.90
1	N	831	A	C6-C5-N7	-6.98	127.41	132.30
1	N	922	G	C5-C6-N1	-6.98	108.01	111.50
1	N	1012	A	C5-C6-N1	-6.98	114.21	117.70
1	N	306	A	C4-C5-C6	6.98	120.49	117.00
1	N	336	A	C5-N7-C8	6.98	107.39	103.90
1	N	851	G	P-O3'-C3'	-6.98	111.32	119.70
1	N	1095	U	N3-C4-C5	-6.98	110.41	114.60
1	N	1487	G	N1-C2-N3	-6.98	119.71	123.90
1	N	330	C	C4-C5-C6	6.98	120.89	117.40
1	N	933	G	C4-C5-N7	6.98	113.59	110.80
1	N	959	A	P-O3'-C3'	6.98	128.08	119.70
1	N	1082	A	C5-C6-N1	-6.98	114.21	117.70
1	N	1255	G	O4'-C1'-N9	6.98	113.78	108.20
1	N	1523	G	C6-C5-N7	-6.98	126.21	130.40
1	N	446	G	C4'-C3'-C2'	-6.98	95.62	102.60
1	N	1334	G	N1-C2-N3	-6.98	119.71	123.90
1	N	259	G	C6-C5-N7	-6.98	126.21	130.40
1	N	351	G	P-O3'-C3'	6.98	128.07	119.70
1	N	1002	G	N1-C2-N3	-6.98	119.71	123.90
1	N	1082	A	C5-N7-C8	6.98	107.39	103.90
1	N	1144	G	C5-C6-N1	-6.98	108.01	111.50
1	N	1342	C	C5-C4-N4	-6.98	115.31	120.20
1	N	1413	A	C5-C6-N6	-6.98	118.12	123.70
1	N	1472	U	P-O3'-C3'	6.98	128.07	119.70
1	N	1098	C	N3-C4-C5	-6.98	119.11	121.90
1	N	53	A	P-O5'-C5'	6.97	132.06	120.90
1	N	969	A	C8-N9-C4	-6.97	103.01	105.80
1	N	1004	A	C4-C5-C6	6.97	120.49	117.00
1	N	1171	A	C4-C5-C6	6.97	120.49	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	177	G	N3-C4-C5	-6.97	125.11	128.60
1	N	548	G	C5-N7-C8	6.97	107.79	104.30
1	N	634	C	P-O5'-C5'	6.97	132.06	120.90
1	N	413	G	C8-N9-C4	-6.97	103.61	106.40
1	N	1091	U	P-O3'-C3'	6.97	128.06	119.70
1	N	1276	G	C6-C5-N7	-6.97	126.22	130.40
1	N	1342	C	N3-C4-N4	6.97	122.88	118.00
1	N	197	A	P-O5'-C5'	6.97	132.05	120.90
1	N	607	A	N1-C2-N3	6.97	132.78	129.30
1	N	786	G	N1-C6-O6	6.97	124.08	119.90
1	N	31	G	O4'-C1'-N9	6.97	113.78	108.20
1	N	1223	C	N3-C4-C5	-6.97	119.11	121.90
1	N	1510	C	N3-C4-C5	-6.97	119.11	121.90
1	N	10	A	C8-N9-C4	-6.97	103.01	105.80
1	N	440	C	P-O5'-C5'	6.97	132.04	120.90
1	N	536	C	N3-C4-C5	-6.97	119.11	121.90
1	N	843	U	C6-N1-C1'	-6.97	111.45	121.20
1	N	1102	A	O4'-C1'-N9	6.97	113.77	108.20
1	N	509	A	OP1-P-OP2	-6.96	109.16	119.60
1	N	890	G	N9-C4-C5	6.96	108.19	105.40
1	N	660	C	C6-N1-C1'	-6.96	112.44	120.80
1	N	1331	G	C8-N9-C4	-6.96	103.61	106.40
1	N	60	A	C8-N9-C4	-6.96	103.02	105.80
1	N	321	A	C3'-C2'-C1'	6.96	107.07	101.50
1	N	444	G	C6-C5-N7	-6.96	126.22	130.40
1	N	490	C	O4'-C1'-N1	6.96	113.77	108.20
1	N	596	A	N3-C4-N9	6.96	132.97	127.40
1	N	710	G	C6-C5-N7	-6.96	126.22	130.40
1	N	1525	G	N9-C4-C5	-6.96	102.62	105.40
1	N	54	C	N1-C2-O2	-6.96	114.73	118.90
1	N	532	A	O4'-C1'-N9	6.96	113.77	108.20
1	N	706	A	C6-C5-N7	-6.96	127.43	132.30
1	N	1163	A	C4-C5-C6	6.96	120.48	117.00
1	N	1406	U	C5-C4-O4	-6.96	121.73	125.90
1	N	1305	G	N7-C8-N9	-6.96	109.62	113.10
1	N	1511	G	C4-C5-C6	6.96	122.97	118.80
1	N	324	G	C5-N7-C8	-6.95	100.82	104.30
1	N	965	U	N3-C4-C5	-6.95	110.43	114.60
1	N	663	A	C5-C6-N6	-6.95	118.14	123.70
1	N	1312	G	C5-C6-N1	-6.95	108.03	111.50
1	N	113	G	N7-C8-N9	6.95	116.57	113.10
1	N	513	C	N3-C4-C5	-6.95	119.12	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1035	A	C2-N3-C4	-6.95	107.12	110.60
1	N	1310	G	C2-N3-C4	-6.95	108.43	111.90
1	N	387	U	O4'-C1'-N1	6.95	113.76	108.20
1	N	153	C	O4'-C1'-N1	6.95	113.76	108.20
1	N	215	C	P-O5'-C5'	6.95	132.01	120.90
1	N	344	A	C3'-C2'-C1'	6.95	107.06	101.50
1	N	76	G	N3-C2-N2	6.94	124.76	119.90
1	N	502	A	C5-N7-C8	6.94	107.37	103.90
1	N	1120	C	N1-C2-N3	-6.94	114.34	119.20
1	N	240	G	N1-C2-N3	-6.94	119.73	123.90
1	N	654	G	C8-N9-C4	6.94	109.18	106.40
1	N	353	A	C2-N3-C4	-6.94	107.13	110.60
1	N	505	G	C5'-C4'-O4'	6.94	117.43	109.10
1	N	1433	A	C1'-O4'-C4'	6.94	115.45	109.90
1	N	167	A	O4'-C1'-N9	6.94	113.75	108.20
1	N	200	G	P-O3'-C3'	6.94	128.03	119.70
1	N	608	A	C2-N3-C4	6.94	114.07	110.60
1	N	175	C	N3-C4-N4	6.93	122.86	118.00
1	N	330	C	C2-N3-C4	6.93	123.37	119.90
1	N	335	C	C5-C6-N1	6.93	124.47	121.00
1	N	524	G	C4-N9-C1'	6.93	135.51	126.50
1	N	664	G	C4-C5-C6	6.93	122.96	118.80
1	N	817	C	C5-C4-N4	-6.93	115.35	120.20
1	N	1160	G	C3'-C2'-C1'	6.93	107.05	101.50
1	N	1245	C	C5-C4-N4	-6.93	115.35	120.20
1	N	1280	A	N9-C4-C5	6.93	108.57	105.80
1	N	1328	C	O4'-C1'-N1	6.93	113.75	108.20
1	N	475	C	C5-C4-N4	-6.93	115.35	120.20
1	N	670	G	C4-N9-C1'	-6.93	117.49	126.50
1	N	944	G	P-O5'-C5'	6.93	131.99	120.90
1	N	113	G	P-O5'-C5'	6.93	131.99	120.90
1	N	363	A	C4-C5-N7	6.93	114.16	110.70
1	N	1016	A	C6-N1-C2	6.93	122.76	118.60
1	N	1128	C	C5-C6-N1	6.93	124.46	121.00
1	N	668	G	N7-C8-N9	6.93	116.56	113.10
1	N	1070	U	O4'-C1'-N1	6.93	113.74	108.20
1	N	194	C	C4'-C3'-C2'	-6.92	95.68	102.60
1	N	645	G	C8-N9-C4	6.92	109.17	106.40
1	N	783	C	N3-C4-N4	6.92	122.85	118.00
1	N	1118	U	C5'-C4'-O4'	-6.92	100.79	109.10
1	N	174	A	C4-C5-N7	-6.92	107.24	110.70
1	N	428	G	C5'-C4'-C3'	6.92	127.07	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	784	A	C4-C5-C6	6.92	120.46	117.00
1	N	38	G	C4'-C3'-C2'	-6.92	95.68	102.60
1	N	731	G	N3-C2-N2	6.92	124.74	119.90
1	N	469	C	C2-N3-C4	6.92	123.36	119.90
1	N	715	A	C4-C5-C6	6.92	120.46	117.00
1	N	1533	C	C5'-C4'-C3'	6.92	127.07	116.00
1	N	28	A	C3'-C2'-C1'	-6.92	95.97	101.50
1	N	202	G	C8-N9-C1'	6.92	135.99	127.00
1	N	1026	G	O4'-C1'-N9	6.92	113.73	108.20
1	N	1114	C	P-O3'-C3'	-6.92	111.40	119.70
1	N	1364	U	N3-C2-O2	6.92	127.04	122.20
1	N	482	A	N3-C4-C5	-6.92	121.96	126.80
1	N	1437	A	O4'-C1'-N9	6.92	113.73	108.20
1	N	1438	G	C5-C6-N1	-6.92	108.04	111.50
1	N	126	G	N3-C2-N2	6.91	124.74	119.90
1	N	371	A	C5-C6-N6	-6.91	118.17	123.70
1	N	490	C	C4'-C3'-C2'	-6.91	95.69	102.60
1	N	591	U	P-O3'-C3'	-6.91	111.40	119.70
1	N	1005	A	C8-N9-C4	-6.91	103.03	105.80
1	N	1499	A	C6-C5-N7	-6.91	127.46	132.30
1	N	1173	U	N3-C2-O2	6.91	127.04	122.20
1	N	451	A	P-O3'-C3'	6.91	127.99	119.70
1	N	649	A	C5-C6-N1	-6.91	114.25	117.70
1	N	718	A	P-O3'-C3'	6.91	127.99	119.70
1	N	1157	A	C5-N7-C8	-6.91	100.44	103.90
1	N	1479	C	C2-N1-C1'	6.91	126.40	118.80
1	N	474	G	C5-C6-N1	-6.91	108.05	111.50
1	N	508	U	C2-N3-C4	-6.91	122.86	127.00
1	N	993	G	C5-C6-O6	-6.91	124.45	128.60
1	N	1504	G	C5-C6-O6	-6.91	124.45	128.60
1	N	373	A	O4'-C1'-N9	6.91	113.73	108.20
1	N	739	C	N3-C4-C5	-6.91	119.14	121.90
1	N	50	A	P-O5'-C5'	6.91	131.95	120.90
1	N	180	U	O4'-C1'-N1	6.91	113.72	108.20
1	N	990	C	C5-C4-N4	-6.91	115.37	120.20
1	N	1190	G	C8-N9-C4	-6.91	103.64	106.40
1	N	135	C	N3-C4-N4	6.90	122.83	118.00
1	N	230	G	C8-N9-C4	-6.90	103.64	106.40
1	N	342	C	C2-N3-C4	6.90	123.35	119.90
1	N	739	C	O4'-C1'-N1	6.90	113.72	108.20
1	N	1106	G	C2-N3-C4	-6.90	108.45	111.90
1	N	126	G	C6-C5-N7	6.90	134.54	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	817	C	O4'-C1'-N1	6.90	113.72	108.20
1	N	1482	G	N7-C8-N9	6.90	116.55	113.10
1	N	127	G	N9-C1'-C2'	-6.90	104.41	112.00
1	N	1473	G	C5-N7-C8	-6.90	100.85	104.30
1	N	1499	A	O4'-C1'-N9	6.90	113.72	108.20
1	N	512	U	C5-C6-N1	6.90	126.15	122.70
1	N	1494	G	N9-C4-C5	-6.90	102.64	105.40
1	N	35	G	C2-N3-C4	6.89	115.35	111.90
1	N	98	A	P-O5'-C5'	6.89	131.93	120.90
1	N	907	A	C5-C6-N6	-6.89	118.19	123.70
1	N	335	C	C6-N1-C1'	-6.89	112.53	120.80
1	N	587	G	C1'-O4'-C4'	6.89	115.41	109.90
1	N	793	U	C5-C6-N1	-6.89	119.25	122.70
1	N	743	A	N1-C6-N6	6.89	122.73	118.60
1	N	801	U	C5'-C4'-C3'	6.89	127.03	116.00
1	N	240	G	N7-C8-N9	-6.89	109.66	113.10
1	N	858	G	C6-C5-N7	-6.89	126.27	130.40
1	N	68	G	C5-C6-O6	-6.89	124.47	128.60
1	N	76	G	N3-C4-N9	6.89	130.13	126.00
1	N	224	U	N3-C4-O4	6.89	124.22	119.40
1	N	250	A	C5-C6-N6	-6.89	118.19	123.70
1	N	608	A	C5-C6-N6	-6.89	118.19	123.70
1	N	761	G	N7-C8-N9	6.89	116.54	113.10
1	N	1018	G	C6-C5-N7	-6.89	126.27	130.40
1	N	1353	G	N7-C8-N9	6.89	116.54	113.10
1	N	1510	C	C2-N3-C4	6.89	123.34	119.90
1	N	199	A	P-O3'-C3'	-6.88	111.44	119.70
1	N	312	C	N3-C4-N4	6.88	122.82	118.00
1	N	1057	G	N1-C6-O6	6.88	124.03	119.90
1	N	348	G	C4-C5-N7	6.88	113.55	110.80
1	N	505	G	C4-C5-N7	-6.88	108.05	110.80
1	N	476	U	C2-N1-C1'	6.88	125.96	117.70
1	N	553	A	N1-C2-N3	6.88	132.74	129.30
1	N	692	U	C5-C6-N1	6.88	126.14	122.70
1	N	1011	C	N1-C2-N3	-6.88	114.38	119.20
1	N	1048	G	O4'-C1'-N9	6.88	113.70	108.20
1	N	1382	C	C2-N1-C1'	6.88	126.37	118.80
1	N	1449	C	N3-C4-N4	6.88	122.82	118.00
1	N	215	C	N1-C2-O2	6.88	123.03	118.90
1	N	449	G	O4'-C1'-N9	6.88	113.70	108.20
1	N	787	A	C2-N3-C4	-6.88	107.16	110.60
1	N	945	G	N3-C4-N9	-6.88	121.87	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1063	C	P-O3'-C3'	-6.88	111.44	119.70
1	N	164	G	C4-C5-N7	6.88	113.55	110.80
1	N	411	A	O4'-C1'-N9	6.88	113.70	108.20
1	N	411	A	O5'-C5'-C4'	6.88	124.76	111.70
1	N	756	C	N3-C2-O2	6.88	126.71	121.90
1	N	1361	G	C4-C5-C6	6.88	122.92	118.80
1	N	643	C	N3-C4-C5	-6.87	119.15	121.90
1	N	1170	A	C6-C5-N7	-6.87	127.49	132.30
1	N	1038	C	N3-C4-N4	6.87	122.81	118.00
1	N	1180	A	O4'-C1'-N9	6.87	113.70	108.20
1	N	1430	A	C4-C5-C6	6.87	120.44	117.00
1	N	29	U	O4'-C1'-N1	6.87	113.70	108.20
1	N	210	C	N3-C4-N4	6.87	122.81	118.00
1	N	409	U	C6-N1-C2	-6.87	116.88	121.00
1	N	1383	C	C6-N1-C2	-6.87	117.55	120.30
1	N	491	G	N1-C2-N3	-6.87	119.78	123.90
1	N	777	A	N9-C1'-C2'	-6.87	104.44	112.00
1	N	803	G	N7-C8-N9	6.87	116.53	113.10
1	N	1033	G	N3-C4-C5	6.87	132.03	128.60
1	N	156	C	C2-N3-C4	6.87	123.33	119.90
1	N	303	A	C5-N7-C8	6.87	107.33	103.90
1	N	877	G	C4'-C3'-C2'	-6.87	95.73	102.60
1	N	1090	U	O4'-C1'-N1	6.87	113.69	108.20
1	N	1530	G	C5-C6-O6	-6.87	124.48	128.60
1	N	994	A	C5-C6-N1	-6.86	114.27	117.70
1	N	1287	A	C5-N7-C8	6.86	107.33	103.90
1	N	567	G	P-O3'-C3'	6.86	127.93	119.70
1	N	1068	G	O4'-C1'-N9	6.86	113.69	108.20
1	N	3	A	C5-C6-N1	-6.86	114.27	117.70
1	N	198	G	C3'-C2'-C1'	6.86	106.99	101.50
1	N	634	C	N3-C4-C5	-6.86	119.16	121.90
1	N	926	G	N3-C4-N9	-6.86	121.88	126.00
1	N	1155	A	N7-C8-N9	-6.86	110.37	113.80
1	N	1229	A	C5-C6-N1	-6.86	114.27	117.70
1	N	388	G	C8-N9-C4	-6.86	103.66	106.40
1	N	689	C	C5-C4-N4	-6.86	115.40	120.20
1	N	1147	C	C2-N1-C1'	6.86	126.34	118.80
1	N	1433	A	C6-C5-N7	-6.86	127.50	132.30
1	N	848	C	P-O3'-C3'	6.86	127.93	119.70
1	N	1516	G	C6-N1-C2	6.86	129.21	125.10
1	N	810	C	C4'-C3'-C2'	-6.85	95.75	102.60
1	N	805	C	C5-C6-N1	6.85	124.43	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	963	G	C6-C5-N7	-6.85	126.29	130.40
1	N	977	A	C8-N9-C4	-6.85	103.06	105.80
1	N	1335	U	C5-C6-N1	6.85	126.13	122.70
1	N	168	G	N9-C1'-C2'	-6.85	104.46	112.00
1	N	1343	G	C5-C6-N1	-6.85	108.07	111.50
1	N	1433	A	O3'-P-O5'	-6.85	90.98	104.00
1	N	546	A	C4-C5-C6	6.85	120.42	117.00
1	N	717	U	C4-C5-C6	6.85	123.81	119.70
1	N	1434	A	C4-C5-C6	6.85	120.42	117.00
1	N	159	G	N1-C6-O6	6.85	124.01	119.90
1	N	523	A	N1-C2-N3	6.85	132.72	129.30
1	N	1136	C	C2-N1-C1'	6.85	126.33	118.80
1	N	1253	G	N7-C8-N9	-6.85	109.68	113.10
1	N	1197	A	N9-C4-C5	6.85	108.54	105.80
1	N	1258	G	N7-C8-N9	6.85	116.52	113.10
1	N	1509	C	C5-C4-N4	-6.85	115.41	120.20
1	N	30	U	N3-C4-C5	-6.84	110.49	114.60
1	N	170	U	C2-N3-C4	-6.84	122.89	127.00
1	N	587	G	C4'-C3'-C2'	-6.84	95.76	102.60
1	N	875	U	N3-C4-O4	6.84	124.19	119.40
1	N	554	A	C6-C5-N7	-6.84	127.51	132.30
1	N	769	G	N1-C6-O6	6.84	124.00	119.90
1	N	866	C	N3-C4-N4	6.84	122.79	118.00
1	N	1078	U	P-O3'-C3'	6.84	127.91	119.70
1	N	1108	G	N3-C2-N2	6.84	124.69	119.90
1	N	1454	G	C8-N9-C4	-6.84	103.66	106.40
1	N	202	G	N3-C4-C5	-6.84	125.18	128.60
1	N	222	C	P-O3'-C3'	-6.84	111.49	119.70
1	N	255	G	C8-N9-C4	-6.84	103.67	106.40
1	N	507	C	C6-N1-C2	6.84	123.04	120.30
1	N	721	G	C8-N9-C4	6.84	109.14	106.40
1	N	917	G	C6-C5-N7	-6.84	126.30	130.40
1	N	1172	C	C4-C5-C6	6.84	120.82	117.40
1	N	351	G	C6-C5-N7	-6.84	126.30	130.40
1	N	476	U	N3-C4-C5	-6.84	110.50	114.60
1	N	993	G	O4'-C1'-N9	6.84	113.67	108.20
1	N	1143	G	C4-C5-C6	6.84	122.90	118.80
1	N	1343	G	C4-N9-C1'	6.84	135.39	126.50
1	N	32	A	C6-N1-C2	-6.83	114.50	118.60
1	N	583	A	C5-C6-N6	-6.83	118.23	123.70
1	N	1101	A	C5-C6-N1	-6.83	114.28	117.70
1	N	802	A	N9-C4-C5	6.83	108.53	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	885	G	C4-C5-N7	6.83	113.53	110.80
1	N	927	G	C4-C5-N7	6.83	113.53	110.80
1	N	558	G	O4'-C1'-N9	6.83	113.67	108.20
1	N	42	G	C3'-C2'-C1'	-6.83	96.04	101.50
1	N	330	C	O4'-C1'-N1	6.83	113.66	108.20
1	N	122	G	N3-C4-C5	-6.83	125.19	128.60
1	N	721	G	N3-C4-N9	6.83	130.10	126.00
1	N	1459	G	N1-C2-N2	6.83	122.35	116.20
1	N	521	G	C5-C6-N1	-6.83	108.09	111.50
1	N	302	G	C4-C5-C6	6.83	122.90	118.80
1	N	567	G	C5-C6-O6	-6.83	124.50	128.60
1	N	825	A	N7-C8-N9	-6.83	110.39	113.80
1	N	1121	U	C6-N1-C2	-6.83	116.90	121.00
1	N	1200	C	C2-N3-C4	6.83	123.31	119.90
1	N	20	U	C6-N1-C2	6.82	125.09	121.00
1	N	149	A	N3-C4-N9	6.82	132.86	127.40
1	N	437	U	N1-C2-O2	-6.82	118.02	122.80
1	N	509	A	C4-C5-C6	6.82	120.41	117.00
1	N	785	G	N3-C4-C5	6.82	132.01	128.60
1	N	858	G	C8-N9-C1'	-6.82	118.13	127.00
1	N	1354	U	N3-C4-O4	6.82	124.18	119.40
1	N	688	G	N3-C4-N9	6.82	130.09	126.00
1	N	1229	A	C2-N3-C4	-6.82	107.19	110.60
1	N	306	A	C6-N1-C2	-6.82	114.51	118.60
1	N	775	G	C6-N1-C2	-6.82	121.01	125.10
1	N	914	A	C4-C5-N7	6.82	114.11	110.70
1	N	1032	G	C6-C5-N7	-6.82	126.31	130.40
1	N	1055	A	O4'-C1'-N9	6.82	113.66	108.20
1	N	1206	G	C5-N7-C8	-6.82	100.89	104.30
1	N	1296	C	N3-C4-N4	6.82	122.77	118.00
1	N	531	U	C5'-C4'-O4'	6.82	117.28	109.10
1	N	1214	C	C6-N1-C2	-6.82	117.57	120.30
1	N	220	G	C5-C6-N1	-6.82	108.09	111.50
1	N	223	A	N1-C2-N3	-6.82	125.89	129.30
1	N	465	A	C5-C6-N6	-6.82	118.25	123.70
1	N	844	G	C4-C5-N7	6.82	113.53	110.80
1	N	1444	U	C5-C6-N1	6.82	126.11	122.70
1	N	759	A	C5-C6-N6	-6.82	118.25	123.70
1	N	763	G	N1-C6-O6	6.82	123.99	119.90
1	N	771	G	C6-N1-C2	6.82	129.19	125.10
1	N	865	A	C4-C5-C6	6.82	120.41	117.00
1	N	1103	C	C2-N1-C1'	6.82	126.30	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	71	A	N1-C2-N3	6.81	132.71	129.30
1	N	1170	A	N3-C4-C5	-6.81	122.03	126.80
1	N	374	A	N7-C8-N9	-6.81	110.39	113.80
1	N	954	G	C4-C5-C6	6.81	122.89	118.80
1	N	1487	G	N1-C6-O6	6.81	123.99	119.90
1	N	710	G	N1-C2-N3	-6.81	119.81	123.90
1	N	1025	U	N3-C4-O4	6.81	124.17	119.40
1	N	1241	G	C4-C5-N7	6.81	113.52	110.80
1	N	1333	A	N3-C4-N9	6.81	132.85	127.40
1	N	1366	C	P-O5'-C5'	6.81	131.80	120.90
1	N	1395	C	O4'-C1'-N1	6.81	113.65	108.20
1	N	60	A	N1-C2-N3	6.81	132.70	129.30
1	N	489	C	C1'-O4'-C4'	6.81	115.35	109.90
1	N	616	G	C4-C5-C6	6.81	122.88	118.80
1	N	722	G	N7-C8-N9	6.81	116.50	113.10
1	N	959	A	C4-C5-C6	6.81	120.40	117.00
1	N	1458	G	C8-N9-C4	-6.81	103.68	106.40
1	N	445	G	N3-C4-C5	6.80	132.00	128.60
1	N	476	U	C1'-O4'-C4'	6.80	115.34	109.90
1	N	495	A	C4'-C3'-C2'	6.80	109.40	102.60
1	N	950	U	O4'-C1'-N1	6.80	113.64	108.20
1	N	447	G	C5-N7-C8	-6.80	100.90	104.30
1	N	452	A	N1-C2-N3	6.80	132.70	129.30
1	N	1117	A	N1-C6-N6	6.80	122.68	118.60
1	N	271	C	P-O5'-C5'	6.80	131.78	120.90
1	N	1054	C	C2-N1-C1'	6.80	126.28	118.80
1	N	22	G	P-O3'-C3'	6.80	127.86	119.70
1	N	244	U	OP1-P-OP2	-6.80	109.40	119.60
1	N	1152	A	C5-C6-N1	-6.80	114.30	117.70
1	N	1254	A	C5-C6-N6	-6.80	118.26	123.70
1	N	1434	A	C1'-O4'-C4'	6.80	115.34	109.90
1	N	1465	A	O4'-C1'-N9	6.80	113.64	108.20
1	N	600	A	C5-C6-N6	-6.80	118.26	123.70
1	N	1000	A	C8-N9-C4	-6.80	103.08	105.80
1	N	1110	A	C5-C6-N1	-6.80	114.30	117.70
1	N	1127	G	O4'-C4'-C3'	-6.80	97.20	104.00
1	N	1169	A	C6-N1-C2	6.80	122.68	118.60
1	N	609	A	C4-C5-C6	6.80	120.40	117.00
1	N	132	C	N3-C4-C5	-6.79	119.18	121.90
1	N	601	G	N3-C2-N2	-6.79	115.14	119.90
1	N	994	A	C5-C6-N6	-6.79	118.26	123.70
1	N	1366	C	C5-C4-N4	-6.79	115.44	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	206	C	C5-C4-N4	-6.79	115.44	120.20
1	N	397	A	N3-C4-N9	6.79	132.84	127.40
1	N	644	U	P-O3'-C3'	-6.79	111.55	119.70
1	N	302	G	C8-N9-C1'	6.79	135.83	127.00
1	N	161	A	C5'-C4'-C3'	6.79	126.86	116.00
1	N	198	G	N1-C2-N3	-6.79	119.83	123.90
1	N	676	A	C5-C6-N6	-6.79	118.27	123.70
1	N	560	A	C5-C6-N1	-6.79	114.31	117.70
1	N	1260	G	C5'-C4'-C3'	-6.79	105.14	116.00
1	N	1350	A	C4-C5-N7	-6.79	107.31	110.70
1	N	404	G	N3-C2-N2	6.79	124.65	119.90
1	N	578	C	O5'-P-OP2	6.79	118.84	110.70
1	N	742	G	O4'-C1'-N9	6.79	113.63	108.20
1	N	615	G	C5'-C4'-C3'	-6.78	105.15	116.00
1	N	809	G	C4-C5-N7	6.78	113.51	110.80
1	N	1058	G	C5-N7-C8	6.78	107.69	104.30
1	N	1350	A	C5-N7-C8	6.78	107.29	103.90
1	N	187	G	O4'-C1'-N9	6.78	113.63	108.20
1	N	178	C	C5'-C4'-O4'	6.78	117.24	109.10
1	N	365	U	C5-C4-O4	-6.78	121.83	125.90
1	N	506	G	C4-C5-C6	6.78	122.87	118.80
1	N	627	G	N3-C4-C5	6.78	131.99	128.60
1	N	782	A	O4'-C1'-N9	6.78	113.62	108.20
1	N	884	U	P-O3'-C3'	6.78	127.84	119.70
1	N	174	A	O4'-C4'-C3'	-6.78	97.22	104.00
1	N	297	G	N1-C2-N2	-6.78	110.10	116.20
1	N	387	U	C5-C4-O4	-6.78	121.83	125.90
1	N	437	U	C5-C6-N1	6.78	126.09	122.70
1	N	495	A	C5-C6-N1	-6.78	114.31	117.70
1	N	917	G	C4-N9-C1'	6.78	135.31	126.50
1	N	1066	C	C6-N1-C1'	-6.78	112.67	120.80
1	N	1363	A	C6-C5-N7	-6.78	127.56	132.30
1	N	1401	G	N3-C2-N2	6.78	124.64	119.90
1	N	252	U	P-O3'-C3'	-6.78	111.57	119.70
1	N	318	G	C2-N3-C4	-6.78	108.51	111.90
1	N	324	G	C6-C5-N7	-6.78	126.33	130.40
1	N	961	U	N1-C2-N3	6.78	118.97	114.90
1	N	1156	G	O4'-C1'-N9	6.78	113.62	108.20
1	N	1330	U	C4-C5-C6	6.77	123.76	119.70
1	N	79	G	C6-N1-C2	-6.77	121.04	125.10
1	N	242	G	C5-C6-O6	-6.77	124.54	128.60
1	N	548	G	C5-C6-N1	-6.77	108.11	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	577	G	P-O3'-C3'	-6.77	111.57	119.70
1	N	640	A	C5-C6-N6	-6.77	118.28	123.70
1	N	1014	A	N7-C8-N9	-6.77	110.41	113.80
1	N	227	G	C6-C5-N7	-6.77	126.34	130.40
1	N	345	C	P-O5'-C5'	6.77	131.73	120.90
1	N	753	A	C2-N3-C4	-6.77	107.22	110.60
1	N	1004	A	C5-N7-C8	-6.77	100.52	103.90
1	N	1453	G	O4'-C1'-N9	6.77	113.61	108.20
1	N	202	G	C5-C6-O6	-6.76	124.54	128.60
1	N	668	G	C4-C5-N7	-6.76	108.09	110.80
1	N	856	C	C6-N1-C2	-6.76	117.59	120.30
1	N	1448	C	C6-N1-C2	6.76	123.01	120.30
1	N	614	C	N3-C4-N4	6.76	122.73	118.00
1	N	956	U	C5-C4-O4	-6.76	121.84	125.90
1	N	1339	A	C4'-C3'-C2'	6.76	109.36	102.60
1	N	155	A	C5-N7-C8	6.76	107.28	103.90
1	N	1017	U	N3-C2-O2	6.76	126.93	122.20
1	N	1404	C	C5-C4-N4	-6.76	115.47	120.20
1	N	99	C	P-O3'-C3'	6.76	127.81	119.70
1	N	134	G	P-O5'-C5'	6.76	131.72	120.90
1	N	376	G	N3-C2-N2	6.76	124.63	119.90
1	N	1338	G	O4'-C1'-N9	6.76	113.61	108.20
1	N	16	A	O4'-C1'-N9	6.76	113.61	108.20
1	N	352	C	C3'-C2'-C1'	6.76	106.91	101.50
1	N	733	G	C2-N3-C4	-6.76	108.52	111.90
1	N	935	A	N9-C4-C5	6.76	108.50	105.80
1	N	967	C	C5-C6-N1	-6.76	117.62	121.00
1	N	1316	G	C5-C6-O6	-6.76	124.55	128.60
1	N	188	C	N3-C4-C5	-6.76	119.20	121.90
1	N	253	A	C6-N1-C2	-6.76	114.55	118.60
1	N	1495	U	C2-N1-C1'	6.76	125.81	117.70
1	N	516	U	O4'-C1'-N1	6.75	113.60	108.20
1	N	649	A	O4'-C1'-N9	6.75	113.60	108.20
1	N	907	A	C5-C6-N1	-6.75	114.32	117.70
1	N	1214	C	C2-N1-C1'	6.75	126.23	118.80
1	N	1409	C	C2-N3-C4	6.75	123.28	119.90
1	N	168	G	N3-C4-N9	6.75	130.05	126.00
1	N	392	C	C6-N1-C2	-6.75	117.60	120.30
1	N	370	C	N3-C4-C5	-6.75	119.20	121.90
1	N	1310	G	C6-C5-N7	-6.75	126.35	130.40
1	N	1448	C	C2-N1-C1'	6.75	126.22	118.80
1	N	1126	U	P-O5'-C5'	-6.75	110.11	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1437	A	C5'-C4'-C3'	6.75	126.79	116.00
1	N	1529	G	C2-N3-C4	-6.75	108.53	111.90
1	N	1025	U	O4'-C1'-N1	6.75	113.60	108.20
1	N	345	C	C2-N3-C4	6.74	123.27	119.90
1	N	1065	U	N3-C2-O2	-6.74	117.48	122.20
1	N	1213	A	O4'-C1'-N9	6.74	113.59	108.20
1	N	11	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	253	A	N1-C6-N6	6.74	122.64	118.60
1	N	118	U	P-O3'-C3'	-6.74	111.61	119.70
1	N	371	A	C5'-C4'-O4'	6.74	117.19	109.10
1	N	1051	C	N3-C4-C5	-6.74	119.20	121.90
1	N	1080	A	N1-C6-N6	6.74	122.64	118.60
1	N	1417	G	C4-C5-N7	6.74	113.50	110.80
1	N	378	G	N9-C4-C5	-6.74	102.70	105.40
1	N	1115	U	C6-N1-C2	-6.74	116.96	121.00
1	N	945	G	C4-C5-C6	6.74	122.84	118.80
1	N	1075	U	O4'-C1'-N1	6.74	113.59	108.20
1	N	1243	C	C5-C6-N1	6.74	124.37	121.00
1	N	590	U	O4'-C1'-N1	6.73	113.59	108.20
1	N	187	G	C4-N9-C1'	-6.73	117.75	126.50
1	N	713	G	N3-C4-N9	6.73	130.04	126.00
1	N	725	G	C1'-O4'-C4'	6.73	115.29	109.90
1	N	933	G	N1-C6-O6	6.73	123.94	119.90
1	N	996	A	C5-C6-N1	-6.73	114.33	117.70
1	N	72	A	C5-N7-C8	-6.73	100.53	103.90
1	N	423	G	C6-C5-N7	-6.73	126.36	130.40
1	N	1448	C	P-O5'-C5'	-6.73	110.13	120.90
1	N	1477	U	C3'-C2'-C1'	-6.73	96.11	101.50
1	N	1235	U	C2-N3-C4	6.73	131.04	127.00
1	N	807	A	C6-N1-C2	-6.73	114.56	118.60
1	N	1166	G	C6-N1-C2	6.73	129.14	125.10
1	N	1223	C	C2-N1-C1'	6.73	126.20	118.80
1	N	1511	G	N7-C8-N9	-6.73	109.74	113.10
1	N	1528	U	N1-C2-N3	-6.73	110.86	114.90
1	N	609	A	C8-N9-C4	-6.73	103.11	105.80
1	N	912	C	C2-N3-C4	6.72	123.26	119.90
1	N	1071	C	C2-N3-C4	6.72	123.26	119.90
1	N	199	A	P-O5'-C5'	6.72	131.66	120.90
1	N	570	G	O4'-C1'-N9	6.72	113.58	108.20
1	N	597	G	C6-C5-N7	-6.72	126.37	130.40
1	N	19	A	N7-C8-N9	6.72	117.16	113.80
1	N	298	A	C5-N7-C8	6.72	107.26	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1284	C	N3-C4-N4	6.72	122.70	118.00
1	N	1442	G	N1-C2-N2	-6.72	110.15	116.20
1	N	908	A	C5-C6-N6	-6.72	118.33	123.70
1	N	265	G	C5-C6-N1	-6.72	108.14	111.50
1	N	289	G	N3-C2-N2	6.72	124.60	119.90
1	N	1274	A	C5-C6-N1	-6.72	114.34	117.70
1	N	50	A	C3'-C2'-C1'	-6.71	96.13	101.50
1	N	1018	G	N1-C2-N3	-6.71	119.87	123.90
1	N	1482	G	N9-C4-C5	6.71	108.09	105.40
1	N	186	C	N1-C2-N3	-6.71	114.50	119.20
1	N	423	G	C4-C5-C6	6.71	122.83	118.80
1	N	1200	C	C5'-C4'-O4'	-6.71	101.05	109.10
1	N	750	C	C1'-O4'-C4'	6.71	115.27	109.90
1	N	1086	U	C5-C4-O4	-6.71	121.87	125.90
1	N	322	C	C4-C5-C6	-6.71	114.05	117.40
1	N	557	G	N9-C4-C5	6.71	108.08	105.40
1	N	1222	G	N1-C2-N3	-6.71	119.87	123.90
1	N	214	C	O4'-C4'-C3'	-6.71	97.29	104.00
1	N	232	G	C4-C5-C6	-6.71	114.78	118.80
1	N	428	G	C5-C6-N1	-6.71	108.15	111.50
1	N	1498	U	C5'-C4'-C3'	-6.71	105.27	116.00
1	N	247	G	C4'-C3'-C2'	-6.71	95.89	102.60
1	N	581	G	N9-C4-C5	6.71	108.08	105.40
1	N	676	A	N1-C2-N3	6.71	132.65	129.30
1	N	722	G	N9-C4-C5	6.71	108.08	105.40
1	N	867	G	N3-C4-C5	-6.71	125.25	128.60
1	N	1022	A	P-O3'-C3'	-6.71	111.65	119.70
1	N	238	A	C5-C6-N1	-6.71	114.35	117.70
1	N	468	A	C2-N3-C4	6.71	113.95	110.60
1	N	490	C	P-O3'-C3'	-6.71	111.65	119.70
1	N	639	G	C2-N3-C4	-6.71	108.55	111.90
1	N	108	G	N1-C2-N3	-6.70	119.88	123.90
1	N	118	U	C2-N3-C4	-6.70	122.98	127.00
1	N	301	G	C5-N7-C8	-6.70	100.95	104.30
1	N	399	G	C4'-C3'-C2'	-6.70	95.90	102.60
1	N	401	C	N3-C4-C5	-6.70	119.22	121.90
1	N	416	G	C6-N1-C2	6.70	129.12	125.10
1	N	506	G	C1'-O4'-C4'	-6.70	104.54	109.90
1	N	1277	C	C6-N1-C2	-6.70	117.62	120.30
1	N	1285	A	N7-C8-N9	-6.70	110.45	113.80
1	N	118	U	N3-C4-O4	6.70	124.09	119.40
1	N	881	G	C6-N1-C2	-6.70	121.08	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	948	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	1394	A	N1-C6-N6	6.70	122.62	118.60
1	N	21	G	P-O5'-C5'	6.70	131.62	120.90
1	N	351	G	C8-N9-C1'	-6.70	118.29	127.00
1	N	750	C	P-O5'-C5'	6.70	131.62	120.90
1	N	773	G	C8-N9-C1'	6.70	135.71	127.00
1	N	871	U	N3-C2-O2	6.70	126.89	122.20
1	N	998	C	P-O3'-C3'	-6.70	111.66	119.70
1	N	1450	U	C5-C4-O4	6.70	129.92	125.90
1	N	1502	A	C6-N1-C2	6.70	122.62	118.60
1	N	31	G	N3-C4-C5	6.70	131.95	128.60
1	N	171	A	C4-N9-C1'	6.70	138.35	126.30
1	N	369	G	C2-N3-C4	6.70	115.25	111.90
1	N	572	A	O4'-C1'-N9	6.70	113.56	108.20
1	N	689	C	N3-C4-N4	6.70	122.69	118.00
1	N	1063	C	N1-C2-O2	-6.70	114.88	118.90
1	N	82	G	C4-C5-N7	6.70	113.48	110.80
1	N	532	A	C6-N1-C2	-6.70	114.58	118.60
1	N	1039	G	C4'-C3'-C2'	-6.70	95.90	102.60
1	N	1047	G	C4-C5-N7	6.70	113.48	110.80
1	N	1142	G	N3-C2-N2	6.70	124.59	119.90
1	N	1219	A	C6-C5-N7	-6.70	127.61	132.30
1	N	1429	A	N7-C8-N9	-6.70	110.45	113.80
1	N	93	U	C5-C6-N1	6.69	126.05	122.70
1	N	115	G	O4'-C1'-N9	6.69	113.55	108.20
1	N	296	U	O4'-C1'-N1	6.69	113.55	108.20
1	N	830	G	N3-C2-N2	6.69	124.58	119.90
1	N	320	A	C8-N9-C4	-6.69	103.12	105.80
1	N	489	C	P-O3'-C3'	6.69	127.73	119.70
1	N	1049	U	C1'-O4'-C4'	-6.69	104.55	109.90
1	N	1077	G	C6-C5-N7	-6.69	126.39	130.40
1	N	254	G	N3-C4-C5	6.69	131.94	128.60
1	N	1489	G	O4'-C1'-N9	6.69	113.55	108.20
1	N	369	G	O4'-C1'-C2'	-6.69	99.11	105.80
1	N	387	U	C1'-O4'-C4'	6.69	115.25	109.90
1	N	910	C	C2-N3-C4	6.69	123.24	119.90
1	N	1041	G	N3-C2-N2	6.69	124.58	119.90
1	N	104	G	C6-C5-N7	-6.69	126.39	130.40
1	N	191	G	C5-C6-O6	-6.68	124.59	128.60
1	N	458	U	C5-C6-N1	6.68	126.04	122.70
1	N	721	G	N3-C4-C5	-6.68	125.26	128.60
1	N	481	G	O4'-C1'-N9	6.68	113.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	750	C	O4'-C1'-N1	6.68	113.54	108.20
1	N	933	G	C5-C6-N1	6.68	114.84	111.50
1	N	954	G	C2-N3-C4	-6.68	108.56	111.90
1	N	1221	G	C4-C5-C6	6.68	122.81	118.80
1	N	303	A	C8-N9-C4	-6.68	103.13	105.80
1	N	359	G	C4'-C3'-C2'	-6.68	95.92	102.60
1	N	932	C	N3-C4-C5	-6.68	119.23	121.90
1	N	1333	A	C4'-C3'-C2'	-6.68	95.92	102.60
1	N	86	G	N3-C2-N2	6.67	124.57	119.90
1	N	809	G	C8-N9-C4	6.67	109.07	106.40
1	N	823	C	O5'-C5'-C4'	-6.67	99.02	111.70
1	N	927	G	N1-C2-N3	-6.67	119.89	123.90
1	N	1203	C	N3-C4-N4	6.67	122.67	118.00
1	N	42	G	O4'-C1'-N9	6.67	113.54	108.20
1	N	375	U	C3'-C2'-C1'	-6.67	96.16	101.50
1	N	583	A	C4-C5-C6	6.67	120.34	117.00
1	N	650	G	N3-C2-N2	6.67	124.57	119.90
1	N	1124	G	N9-C4-C5	-6.67	102.73	105.40
1	N	1214	C	O4'-C1'-N1	6.67	113.54	108.20
1	N	196	A	C5'-C4'-C3'	6.67	126.67	116.00
1	N	845	A	O4'-C1'-N9	6.67	113.53	108.20
1	N	963	G	C4-N9-C1'	6.67	135.17	126.50
1	N	222	C	N3-C4-C5	-6.67	119.23	121.90
1	N	603	U	C5-C6-N1	6.67	126.03	122.70
1	N	695	A	P-O3'-C3'	6.67	127.70	119.70
1	N	1015	G	C8-N9-C4	-6.67	103.73	106.40
1	N	87	C	C5'-C4'-C3'	-6.67	105.34	116.00
1	N	173	U	P-O5'-C5'	-6.67	110.23	120.90
1	N	360	G	C8-N9-C4	-6.67	103.73	106.40
1	N	1255	G	N3-C4-C5	6.67	131.93	128.60
1	N	1511	G	C6-C5-N7	-6.67	126.40	130.40
1	N	429	U	P-O3'-C3'	6.66	127.70	119.70
1	N	646	G	C5-N7-C8	-6.66	100.97	104.30
1	N	661	G	C5-C6-O6	-6.66	124.60	128.60
1	N	1081	A	C8-N9-C4	-6.66	103.14	105.80
1	N	1534	A	N9-C4-C5	6.66	108.47	105.80
1	N	617	G	N7-C8-N9	6.66	116.43	113.10
1	N	1192	C	C2-N3-C4	-6.66	116.57	119.90
1	N	341	C	N3-C4-C5	-6.66	119.24	121.90
1	N	1047	G	C6-C5-N7	-6.66	126.40	130.40
1	N	1159	U	O4'-C1'-N1	6.66	113.53	108.20
1	N	1271	A	N9-C4-C5	6.66	108.46	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1490	U	C4-C5-C6	6.66	123.70	119.70
1	N	31	G	N7-C8-N9	6.66	116.43	113.10
1	N	157	U	N1-C2-O2	6.66	127.46	122.80
1	N	913	A	C5-C6-N6	-6.66	118.37	123.70
1	N	987	G	N9-C4-C5	6.66	108.06	105.40
1	N	1037	C	N3-C4-C5	-6.66	119.24	121.90
1	N	105	G	O4'-C1'-N9	6.66	113.53	108.20
1	N	148	G	C2-N3-C4	-6.66	108.57	111.90
1	N	678	U	P-O3'-C3'	-6.66	111.71	119.70
1	N	810	C	P-O3'-C3'	-6.66	111.71	119.70
1	N	703	G	C5-N7-C8	-6.65	100.97	104.30
1	N	842	U	P-O3'-C3'	6.65	127.69	119.70
1	N	1339	A	N9-C4-C5	6.65	108.46	105.80
1	N	1492	A	N1-C6-N6	6.65	122.59	118.60
1	N	377	G	C6-C5-N7	-6.65	126.41	130.40
1	N	504	C	C3'-C2'-C1'	-6.65	96.18	101.50
1	N	584	G	O4'-C1'-N9	6.65	113.52	108.20
1	N	693	G	C4-N9-C1'	-6.65	117.85	126.50
1	N	720	C	C1'-O4'-C4'	-6.65	104.58	109.90
1	N	851	G	P-O5'-C5'	6.65	131.54	120.90
1	N	1134	G	N9-C4-C5	6.65	108.06	105.40
1	N	690	G	C2-N3-C4	6.65	115.22	111.90
1	N	1354	U	C4'-C3'-C2'	-6.65	95.95	102.60
1	N	1207	G	C5-N7-C8	6.65	107.62	104.30
1	N	1346	A	P-O3'-C3'	6.65	127.68	119.70
1	N	40	C	O4'-C1'-N1	6.65	113.52	108.20
1	N	539	A	O4'-C1'-N9	6.65	113.52	108.20
1	N	663	A	O4'-C1'-N9	6.65	113.52	108.20
1	N	1193	G	P-O3'-C3'	6.65	127.68	119.70
1	N	1199	U	N3-C2-O2	6.65	126.85	122.20
1	N	1223	C	P-O3'-C3'	6.65	127.68	119.70
1	N	331	G	O4'-C4'-C3'	-6.65	97.35	104.00
1	N	292	G	C5-C6-O6	-6.64	124.61	128.60
1	N	427	U	N1-C2-O2	6.64	127.45	122.80
1	N	569	C	C4'-C3'-C2'	6.64	109.24	102.60
1	N	892	A	C6-N1-C2	-6.64	114.61	118.60
1	N	1348	U	C1'-O4'-C4'	6.64	115.21	109.90
1	N	1366	C	C4-C5-C6	6.64	120.72	117.40
1	N	158	G	N1-C6-O6	6.64	123.88	119.90
1	N	181	A	C4-C5-N7	-6.64	107.38	110.70
1	N	309	A	O4'-C1'-N9	6.64	113.51	108.20
1	N	971	G	N1-C6-O6	6.64	123.88	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1520	C	C5-C4-N4	-6.64	115.55	120.20
1	N	1005	A	C5-N7-C8	6.64	107.22	103.90
1	N	636	U	O4'-C1'-N1	6.64	113.51	108.20
1	N	716	A	O4'-C1'-N9	6.64	113.51	108.20
1	N	795	C	O4'-C1'-N1	6.64	113.51	108.20
1	N	1170	A	N3-C4-N9	6.64	132.71	127.40
1	N	814	A	C4-C5-C6	6.63	120.32	117.00
1	N	1021	A	C4-C5-C6	6.63	120.32	117.00
1	N	1307	U	C1'-O4'-C4'	6.63	115.21	109.90
1	N	1100	C	C5-C4-N4	6.63	124.84	120.20
1	N	380	G	C4-C5-N7	-6.63	108.15	110.80
1	N	1370	G	N3-C2-N2	6.63	124.54	119.90
1	N	145	G	N9-C4-C5	6.63	108.05	105.40
1	N	1333	A	N1-C2-N3	-6.63	125.98	129.30
1	N	546	A	C6-C5-N7	-6.63	127.66	132.30
1	N	661	G	C6-N1-C2	6.63	129.08	125.10
1	N	1157	A	C4-C5-C6	6.63	120.31	117.00
1	N	173	U	N3-C4-C5	-6.63	110.62	114.60
1	N	276	G	N3-C4-N9	-6.63	122.03	126.00
1	N	733	G	P-O3'-C3'	6.63	127.65	119.70
1	N	448	A	C4-C5-N7	-6.62	107.39	110.70
1	N	1225	A	C6-C5-N7	-6.62	127.66	132.30
1	N	122	G	C5'-C4'-C3'	-6.62	105.40	116.00
1	N	208	U	OP1-P-OP2	-6.62	109.67	119.60
1	N	281	G	C2-N3-C4	6.62	115.21	111.90
1	N	519	C	O4'-C1'-N1	6.62	113.50	108.20
1	N	1034	G	C1'-O4'-C4'	-6.62	104.60	109.90
1	N	111	G	N1-C6-O6	6.62	123.87	119.90
1	N	514	C	C4-C5-C6	-6.62	114.09	117.40
1	N	581	G	N3-C4-C5	-6.62	125.29	128.60
1	N	616	G	C5-N7-C8	6.62	107.61	104.30
1	N	997	U	C6-N1-C2	-6.62	117.03	121.00
1	N	1375	A	N1-C2-N3	-6.62	125.99	129.30
1	N	1387	G	N1-C6-O6	6.62	123.87	119.90
1	N	1484	C	C4-C5-C6	6.62	120.71	117.40
1	N	99	C	O4'-C1'-N1	6.62	113.50	108.20
1	N	270	A	O4'-C1'-N9	6.62	113.50	108.20
1	N	1216	A	C4-C5-C6	6.62	120.31	117.00
1	N	368	U	C5-C4-O4	-6.62	121.93	125.90
1	N	1509	C	N3-C4-N4	6.62	122.63	118.00
1	N	762	U	N1-C2-O2	-6.62	118.17	122.80
1	N	1248	A	O4'-C1'-N9	6.62	113.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	470	C	C4'-C3'-C2'	-6.62	95.98	102.60
1	N	909	A	C4-C5-C6	6.61	120.31	117.00
1	N	972	C	C6-N1-C2	-6.61	117.65	120.30
1	N	1030	U	N1-C2-N3	-6.61	110.93	114.90
1	N	94	G	C8-N9-C4	-6.61	103.76	106.40
1	N	156	C	N3-C4-N4	6.61	122.63	118.00
1	N	251	G	N3-C4-N9	6.61	129.97	126.00
1	N	1183	U	O4'-C1'-N1	6.61	113.49	108.20
1	N	33	A	C6-C5-N7	-6.61	127.67	132.30
1	N	572	A	N3-C4-N9	6.61	132.69	127.40
1	N	1004	A	N7-C8-N9	6.61	117.10	113.80
1	N	108	G	C2-N3-C4	6.60	115.20	111.90
1	N	558	G	C2-N3-C4	6.60	115.20	111.90
1	N	1027	C	N1-C2-N3	-6.60	114.58	119.20
1	N	652	U	O4'-C1'-N1	6.60	113.48	108.20
1	N	771	G	N1-C2-N3	-6.60	119.94	123.90
1	N	783	C	C6-N1-C2	-6.60	117.66	120.30
1	N	1392	G	C4-C5-N7	6.60	113.44	110.80
1	N	1286	U	C5-C4-O4	6.60	129.86	125.90
1	N	1368	A	N3-C4-N9	6.60	132.68	127.40
1	N	815	A	C6-N1-C2	6.60	122.56	118.60
1	N	999	C	N3-C4-N4	6.60	122.62	118.00
1	N	1185	G	P-O3'-C3'	-6.60	111.78	119.70
1	N	1210	C	C5-C6-N1	6.60	124.30	121.00
1	N	238	A	C5'-C4'-C3'	-6.60	105.44	116.00
1	N	641	U	O4'-C1'-N1	6.60	113.48	108.20
1	N	675	A	P-O3'-C3'	6.60	127.62	119.70
1	N	901	A	C4-C5-C6	6.60	120.30	117.00
1	N	307	C	N3-C2-O2	-6.60	117.28	121.90
1	N	641	U	O3'-P-O5'	-6.60	91.47	104.00
1	N	978	A	C4-C5-C6	6.60	120.30	117.00
1	N	1053	G	C2-N3-C4	6.60	115.20	111.90
1	N	51	A	C8-N9-C4	6.59	108.44	105.80
1	N	374	A	N1-C2-N3	-6.59	126.00	129.30
1	N	734	G	C6-C5-N7	-6.59	126.44	130.40
1	N	753	A	C5-C6-N6	-6.59	118.42	123.70
1	N	1453	G	C5-C6-N1	-6.59	108.20	111.50
1	N	62	U	O4'-C1'-N1	6.59	113.47	108.20
1	N	909	A	O5'-P-OP2	6.59	118.61	110.70
1	N	48	C	O4'-C1'-N1	6.59	113.47	108.20
1	N	369	G	C4'-C3'-C2'	-6.59	96.01	102.60
1	N	959	A	C5-C6-N6	-6.59	118.43	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1342	C	C2-N3-C4	-6.59	116.60	119.90
1	N	301	G	N7-C8-N9	6.59	116.39	113.10
1	N	509	A	N3-C4-C5	-6.59	122.19	126.80
1	N	352	C	C5-C6-N1	6.59	124.29	121.00
1	N	840	C	N3-C4-N4	6.59	122.61	118.00
1	N	48	C	C4-C5-C6	6.59	120.69	117.40
1	N	364	A	O4'-C1'-N9	6.59	113.47	108.20
1	N	1237	C	N1-C2-O2	-6.58	114.95	118.90
1	N	28	A	C8-N9-C4	6.58	108.43	105.80
1	N	191	G	C4-N9-C1'	-6.58	117.94	126.50
1	N	391	G	N3-C4-C5	6.58	131.89	128.60
1	N	611	C	O4'-C1'-N1	6.58	113.47	108.20
1	N	1209	C	C2-N3-C4	6.58	123.19	119.90
1	N	1347	G	C4-C5-C6	6.58	122.75	118.80
1	N	66	A	C4'-C3'-C2'	-6.58	96.02	102.60
1	N	937	A	N3-C4-N9	6.58	132.66	127.40
1	N	458	U	N1-C2-O2	-6.58	118.19	122.80
1	N	361	G	N1-C2-N3	-6.58	119.95	123.90
1	N	744	C	N3-C4-N4	6.58	122.60	118.00
1	N	832	G	N3-C4-C5	-6.58	125.31	128.60
1	N	1396	A	O4'-C1'-N9	6.58	113.46	108.20
1	N	489	C	C4-C5-C6	6.58	120.69	117.40
1	N	743	A	O4'-C1'-N9	6.58	113.46	108.20
1	N	46	G	N1-C2-N3	-6.57	119.96	123.90
1	N	1239	A	N9-C1'-C2'	-6.57	104.77	112.00
1	N	1456	A	N7-C8-N9	6.57	117.09	113.80
1	N	1174	G	N9-C4-C5	-6.57	102.77	105.40
1	N	153	C	P-O5'-C5'	6.57	131.41	120.90
1	N	908	A	C6-C5-N7	-6.57	127.70	132.30
1	N	1203	C	OP1-P-O3'	6.57	119.66	105.20
1	N	676	A	C8-N9-C4	-6.57	103.17	105.80
1	N	601	G	N9-C4-C5	6.57	108.03	105.40
1	N	720	C	N3-C4-N4	6.57	122.60	118.00
1	N	1142	G	O4'-C1'-N9	6.57	113.45	108.20
1	N	963	G	C4'-C3'-C2'	-6.57	96.03	102.60
1	N	87	C	C3'-C2'-C1'	6.56	106.75	101.50
1	N	1149	C	C2-N3-C4	6.56	123.18	119.90
1	N	45	G	C5-C6-O6	-6.56	124.66	128.60
1	N	996	A	N1-C6-N6	6.56	122.54	118.60
1	N	481	G	C4'-C3'-C2'	-6.56	96.04	102.60
1	N	1218	C	C4-C5-C6	6.56	120.68	117.40
1	N	133	U	C5-C4-O4	-6.56	121.97	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	575	G	C3'-C2'-C1'	6.56	106.75	101.50
1	N	1208	C	P-O3'-C3'	-6.56	111.83	119.70
1	N	392	C	N3-C4-N4	6.56	122.59	118.00
1	N	631	C	O4'-C4'-C3'	6.56	111.35	106.10
1	N	719	C	C6-N1-C2	-6.56	117.68	120.30
1	N	731	G	P-O3'-C3'	-6.56	111.83	119.70
1	N	187	G	C6-N1-C2	6.56	129.03	125.10
1	N	1305	G	C8-N9-C4	6.56	109.02	106.40
1	N	145	G	C8-N9-C4	-6.55	103.78	106.40
1	N	646	G	N9-C4-C5	-6.55	102.78	105.40
1	N	928	G	C2-N3-C4	6.55	115.18	111.90
1	N	1178	G	C5-C6-O6	-6.55	124.67	128.60
1	N	1194	U	N3-C4-C5	6.55	118.53	114.60
1	N	1246	A	N9-C4-C5	6.55	108.42	105.80
1	N	205	A	N3-C4-C5	-6.55	122.21	126.80
1	N	841	C	C2-N3-C4	6.55	123.17	119.90
1	N	860	A	C4'-C3'-C2'	-6.55	96.05	102.60
1	N	409	U	P-O3'-C3'	6.55	127.56	119.70
1	N	547	A	N9-C4-C5	6.55	108.42	105.80
1	N	609	A	N7-C8-N9	6.55	117.07	113.80
1	N	891	U	N1-C2-O2	6.55	127.38	122.80
1	N	521	G	O4'-C1'-N9	6.54	113.44	108.20
1	N	84	U	C5-C4-O4	-6.54	121.97	125.90
1	N	115	G	C6-N1-C2	-6.54	121.17	125.10
1	N	595	A	C5'-C4'-O4'	6.54	116.95	109.10
1	N	661	G	N3-C2-N2	6.54	124.48	119.90
1	N	802	A	N1-C2-N3	6.54	132.57	129.30
1	N	956	U	C1'-O4'-C4'	6.54	115.14	109.90
1	N	264	C	C4'-C3'-C2'	-6.54	96.06	102.60
1	N	369	G	O4'-C1'-N9	6.54	113.43	108.20
1	N	981	U	C4-C5-C6	6.54	123.62	119.70
1	N	1092	A	C4-C5-C6	6.54	120.27	117.00
1	N	1355	G	C8-N9-C1'	6.54	135.50	127.00
1	N	186	C	O4'-C1'-N1	6.54	113.43	108.20
1	N	326	G	P-O5'-C5'	-6.54	110.44	120.90
1	N	493	A	P-O3'-C3'	6.54	127.55	119.70
1	N	778	G	N9-C4-C5	-6.54	102.78	105.40
1	N	1166	G	O4'-C1'-N9	6.54	113.43	108.20
1	N	1341	U	N1-C2-O2	-6.54	118.22	122.80
1	N	196	A	N1-C6-N6	6.54	122.52	118.60
1	N	861	G	C5'-C4'-O4'	6.54	116.94	109.10
1	N	922	G	C5-N7-C8	-6.54	101.03	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1131	G	C2-N3-C4	6.54	115.17	111.90
1	N	1244	G	C2-N3-C4	6.54	115.17	111.90
1	N	450	G	N3-C4-C5	6.54	131.87	128.60
1	N	855	U	C5'-C4'-O4'	6.54	116.94	109.10
1	N	890	G	C8-N9-C1'	6.54	135.50	127.00
1	N	1042	A	C2-N3-C4	-6.54	107.33	110.60
1	N	141	G	C4-C5-N7	-6.53	108.19	110.80
1	N	234	C	C5-C4-N4	-6.53	115.63	120.20
1	N	557	G	C4-C5-C6	6.53	122.72	118.80
1	N	1365	G	C5-C6-N1	6.53	114.77	111.50
1	N	1379	G	N7-C8-N9	-6.53	109.83	113.10
1	N	1480	A	C2-N3-C4	6.53	113.86	110.60
1	N	65	A	C5-C6-N1	-6.53	114.44	117.70
1	N	523	A	P-O3'-C3'	6.53	127.53	119.70
1	N	895	G	N3-C2-N2	6.53	124.47	119.90
1	N	1001	C	N3-C4-C5	-6.53	119.29	121.90
1	N	8	A	C5-C6-N1	-6.53	114.44	117.70
1	N	306	A	O5'-P-OP2	-6.53	99.83	105.70
1	N	352	C	C5-C4-N4	-6.53	115.63	120.20
1	N	489	C	C5-C4-N4	-6.53	115.63	120.20
1	N	1004	A	N9-C4-C5	6.53	108.41	105.80
1	N	26	A	C2-N3-C4	6.52	113.86	110.60
1	N	316	C	C5'-C4'-O4'	6.52	116.93	109.10
1	N	637	C	C5-C4-N4	-6.52	115.63	120.20
1	N	734	G	N7-C8-N9	-6.52	109.84	113.10
1	N	774	G	O4'-C4'-C3'	-6.52	97.48	104.00
1	N	891	U	C6-N1-C2	6.52	124.91	121.00
1	N	919	A	N1-C2-N3	6.52	132.56	129.30
1	N	1472	U	C2-N1-C1'	-6.52	109.87	117.70
1	N	1373	G	O5'-P-OP2	6.52	118.53	110.70
1	N	1531	A	C4-C5-C6	6.52	120.26	117.00
1	N	451	A	C4-C5-C6	-6.52	113.74	117.00
1	N	575	G	N7-C8-N9	-6.52	109.84	113.10
1	N	949	A	C5-N7-C8	6.52	107.16	103.90
1	N	1368	A	N3-C4-C5	-6.52	122.24	126.80
1	N	1501	C	C5-C6-N1	-6.52	117.74	121.00
1	N	403	C	N3-C4-N4	6.52	122.56	118.00
1	N	510	A	N9-C4-C5	-6.52	103.19	105.80
1	N	627	G	N3-C2-N2	6.52	124.46	119.90
1	N	895	G	C5-C6-N1	-6.52	108.24	111.50
1	N	1415	G	N3-C4-C5	-6.52	125.34	128.60
1	N	939	G	P-O5'-C5'	-6.52	110.47	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	137	U	C5-C4-O4	-6.51	121.99	125.90
1	N	1162	C	C5-C4-N4	-6.51	115.64	120.20
1	N	1352	C	N3-C2-O2	6.51	126.46	121.90
1	N	358	U	C3'-C2'-C1'	-6.51	96.29	101.50
1	N	1126	U	N1-C2-O2	6.51	127.36	122.80
1	N	1341	U	C6-N1-C2	-6.51	117.09	121.00
1	N	115	G	N1-C6-O6	6.51	123.81	119.90
1	N	1050	G	C5'-C4'-C3'	-6.51	105.58	116.00
1	N	117	G	C5-C6-O6	-6.51	124.69	128.60
1	N	643	C	N3-C4-N4	6.51	122.56	118.00
1	N	69	G	N7-C8-N9	6.51	116.35	113.10
1	N	329	A	O5'-C5'-C4'	-6.51	99.33	111.70
1	N	367	U	C5'-C4'-C3'	-6.51	105.59	116.00
1	N	686	U	C2'-C3'-O3'	6.51	124.11	113.70
1	N	1285	A	C6-C5-N7	6.51	136.86	132.30
1	N	548	G	C5-C6-O6	-6.51	124.70	128.60
1	N	778	G	O4'-C1'-N9	6.51	113.41	108.20
1	N	1050	G	C5-N7-C8	-6.51	101.05	104.30
1	N	1296	C	P-O3'-C3'	6.51	127.51	119.70
1	N	1329	A	C4'-C3'-C2'	-6.51	96.09	102.60
1	N	1501	C	O4'-C4'-C3'	-6.51	97.49	104.00
1	N	807	A	N1-C2-N3	6.50	132.55	129.30
1	N	907	A	O4'-C1'-C2'	-6.50	99.30	105.80
1	N	1040	U	C6-N1-C2	-6.50	117.10	121.00
1	N	1041	G	N9-C4-C5	-6.50	102.80	105.40
1	N	196	A	P-O3'-C3'	-6.50	111.90	119.70
1	N	587	G	O4'-C1'-N9	6.50	113.40	108.20
1	N	7	A	N1-C2-N3	6.50	132.55	129.30
1	N	891	U	C5-C6-N1	-6.50	119.45	122.70
1	N	1474	U	P-O5'-C5'	6.50	131.30	120.90
1	N	430	A	N1-C2-N3	-6.50	126.05	129.30
1	N	770	C	C5'-C4'-C3'	6.50	126.40	116.00
1	N	953	G	C5'-C4'-O4'	6.50	116.90	109.10
1	N	967	C	C6-N1-C1'	-6.50	113.00	120.80
1	N	1241	G	C5'-C4'-C3'	-6.50	105.60	116.00
1	N	1402	C	C5-C6-N1	-6.50	117.75	121.00
1	N	1502	A	O4'-C1'-N9	6.50	113.40	108.20
1	N	9	G	N1-C6-O6	6.50	123.80	119.90
1	N	22	G	C6-N1-C2	6.50	129.00	125.10
1	N	480	U	C5-C6-N1	-6.50	119.45	122.70
1	N	700	G	P-O5'-C5'	6.49	131.29	120.90
1	N	1017	U	N3-C4-C5	-6.49	110.70	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1517	G	C2-N3-C4	-6.49	108.65	111.90
1	N	822	U	C4'-C3'-C2'	-6.49	96.11	102.60
1	N	1519	A	N1-C6-N6	6.49	122.50	118.60
1	N	168	G	O5'-C5'-C4'	-6.49	99.37	111.70
1	N	195	A	C8-N9-C4	-6.49	103.20	105.80
1	N	223	A	C6-N1-C2	6.49	122.49	118.60
1	N	465	A	C2-N3-C4	-6.49	107.35	110.60
1	N	989	U	C5-C4-O4	6.49	129.79	125.90
1	N	1420	U	C5-C6-N1	6.49	125.94	122.70
1	N	411	A	C4-C5-C6	6.49	120.25	117.00
1	N	427	U	O4'-C1'-N1	6.49	113.39	108.20
1	N	613	C	C6-N1-C2	6.49	122.89	120.30
1	N	1011	C	C2-N3-C4	6.49	123.14	119.90
1	N	1114	C	N3-C4-N4	6.49	122.54	118.00
1	N	1425	U	C6-N1-C2	-6.49	117.11	121.00
1	N	1461	G	C4'-C3'-C2'	-6.49	96.11	102.60
1	N	1060	U	N1-C2-O2	-6.48	118.26	122.80
1	N	1310	G	N3-C4-C5	6.48	131.84	128.60
1	N	785	G	C4-C5-N7	6.48	113.39	110.80
1	N	1022	A	C8-N9-C4	6.48	108.39	105.80
1	N	1073	U	N3-C2-O2	-6.48	117.66	122.20
1	N	143	A	N3-C4-C5	-6.48	122.26	126.80
1	N	339	C	P-O5'-C5'	6.48	131.27	120.90
1	N	722	G	C5-C6-O6	-6.48	124.71	128.60
1	N	818	G	C8-N9-C4	-6.48	103.81	106.40
1	N	968	A	C6-C5-N7	-6.48	127.76	132.30
1	N	1026	G	C6-C5-N7	-6.48	126.51	130.40
1	N	56	U	C5-C4-O4	-6.48	122.01	125.90
1	N	351	G	C8-N9-C4	6.48	108.99	106.40
1	N	38	G	N3-C4-C5	-6.48	125.36	128.60
1	N	223	A	C4-C5-C6	6.48	120.24	117.00
1	N	767	A	C5-C6-N1	-6.48	114.46	117.70
1	N	798	U	N3-C2-O2	-6.48	117.67	122.20
1	N	397	A	N3-C4-C5	-6.48	122.27	126.80
1	N	89	U	N3-C4-O4	6.47	123.93	119.40
1	N	106	C	C5'-C4'-C3'	-6.47	105.64	116.00
1	N	338	A	O4'-C4'-C3'	-6.47	97.53	104.00
1	N	599	C	N3-C4-C5	-6.47	119.31	121.90
1	N	807	A	O4'-C4'-C3'	-6.47	97.53	104.00
1	N	846	G	N7-C8-N9	6.47	116.34	113.10
1	N	1226	C	C4-C5-C6	-6.47	114.16	117.40
1	N	1467	C	C5-C6-N1	6.47	124.24	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	14	U	N3-C4-C5	-6.47	110.72	114.60
1	N	440	C	N3-C4-C5	-6.47	119.31	121.90
1	N	1175	G	O4'-C4'-C3'	-6.47	97.53	104.00
1	N	1411	C	C5-C6-N1	6.47	124.24	121.00
1	N	1354	U	C6-N1-C2	-6.47	117.12	121.00
1	N	149	A	C5-C6-N1	6.47	120.94	117.70
1	N	731	G	N1-C6-O6	6.47	123.78	119.90
1	N	1067	A	C5-C6-N1	-6.47	114.47	117.70
1	N	1284	C	N1-C2-N3	-6.47	114.67	119.20
1	N	146	G	C4-C5-N7	-6.47	108.21	110.80
1	N	1531	A	C4-N9-C1'	6.47	137.94	126.30
1	N	726	C	C1'-O4'-C4'	-6.47	104.73	109.90
1	N	159	G	C4-C5-N7	-6.46	108.21	110.80
1	N	670	G	C6-N1-C2	6.46	128.98	125.10
1	N	272	C	O4'-C1'-N1	6.46	113.37	108.20
1	N	357	G	N3-C4-C5	6.46	131.83	128.60
1	N	165	G	N3-C4-C5	6.46	131.83	128.60
1	N	593	U	C6-N1-C2	-6.46	117.12	121.00
1	N	808	C	C1'-O4'-C4'	6.46	115.07	109.90
1	N	1018	G	N3-C4-C5	-6.46	125.37	128.60
1	N	1323	G	C4'-C3'-C2'	-6.46	96.14	102.60
1	N	1327	C	C2-N3-C4	-6.46	116.67	119.90
1	N	1431	A	N1-C2-N3	-6.46	126.07	129.30
1	N	33	A	N1-C6-N6	6.46	122.47	118.60
1	N	128	G	N3-C4-N9	-6.46	122.12	126.00
1	N	637	C	C5'-C4'-O4'	6.46	116.85	109.10
1	N	829	G	N1-C2-N3	-6.46	120.02	123.90
1	N	832	G	C6-C5-N7	-6.46	126.53	130.40
1	N	1214	C	C5-C6-N1	6.46	124.23	121.00
1	N	1457	G	C4-C5-C6	6.46	122.67	118.80
1	N	197	A	C5'-C4'-C3'	6.46	126.33	116.00
1	N	813	U	N3-C4-O4	6.46	123.92	119.40
1	N	669	G	C4-C5-N7	-6.46	108.22	110.80
1	N	1010	U	P-O5'-C5'	6.46	131.23	120.90
1	N	750	C	C5-C6-N1	6.45	124.23	121.00
1	N	1238	A	O4'-C1'-N9	6.45	113.36	108.20
1	N	194	C	C5-C4-N4	-6.45	115.68	120.20
1	N	1091	U	C2-N1-C1'	6.45	125.44	117.70
1	N	1457	G	C6-N1-C2	-6.45	121.23	125.10
1	N	66	A	C5-C6-N6	-6.45	118.54	123.70
1	N	94	G	C3'-C2'-C1'	6.45	106.66	101.50
1	N	204	G	C5-N7-C8	6.45	107.53	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	297	G	C4-C5-C6	6.45	122.67	118.80
1	N	500	G	C5-C6-O6	-6.45	124.73	128.60
1	N	1045	C	C1'-O4'-C4'	6.45	115.06	109.90
1	N	1250	A	P-O5'-C5'	6.45	131.22	120.90
1	N	170	U	C5-C6-N1	6.45	125.92	122.70
1	N	250	A	P-O5'-C5'	6.45	131.22	120.90
1	N	580	C	C6-N1-C2	-6.45	117.72	120.30
1	N	719	C	O4'-C4'-C3'	-6.45	97.55	104.00
1	N	960	U	O4'-C1'-N1	6.45	113.36	108.20
1	N	416	G	C4-C5-N7	6.45	113.38	110.80
1	N	533	A	N3-C4-C5	-6.45	122.29	126.80
1	N	572	A	C4-C5-C6	6.45	120.22	117.00
1	N	1061	G	C4'-C3'-C2'	-6.45	96.16	102.60
1	N	1140	C	C3'-C2'-C1'	6.45	106.66	101.50
1	N	167	A	C5-C6-N6	-6.44	118.55	123.70
1	N	648	A	C4'-C3'-C2'	-6.44	96.16	102.60
1	N	651	C	N3-C4-N4	6.44	122.51	118.00
1	N	772	U	C6-N1-C2	-6.44	117.13	121.00
1	N	858	G	C3'-C2'-C1'	-6.44	96.35	101.50
1	N	1065	U	C4-C5-C6	6.44	123.56	119.70
1	N	1157	A	O4'-C4'-C3'	6.44	111.25	106.10
1	N	1450	U	N3-C4-C5	-6.44	110.73	114.60
1	N	983	A	C5-C6-N6	-6.44	118.55	123.70
1	N	1294	G	N1-C2-N3	-6.44	120.03	123.90
1	N	1374	A	N3-C4-C5	-6.44	122.29	126.80
1	N	1424	U	C5'-C4'-C3'	-6.44	105.69	116.00
1	N	343	U	C4'-C3'-C2'	-6.44	96.16	102.60
1	N	1131	G	C5'-C4'-O4'	6.44	116.82	109.10
1	N	1160	G	N9-C4-C5	-6.44	102.83	105.40
1	N	1213	A	C5-C6-N6	-6.44	118.55	123.70
1	N	908	A	N3-C4-C5	-6.44	122.30	126.80
1	N	959	A	N3-C4-N9	6.44	132.55	127.40
1	N	1183	U	N3-C2-O2	6.44	126.70	122.20
1	N	181	A	O4'-C1'-N9	6.43	113.35	108.20
1	N	329	A	C2-N3-C4	-6.43	107.38	110.60
1	N	605	U	C6-N1-C1'	-6.43	112.19	121.20
1	N	679	C	N3-C2-O2	6.43	126.41	121.90
1	N	866	C	P-O3'-C3'	6.43	127.42	119.70
1	N	1206	G	C5'-C4'-O4'	6.43	116.82	109.10
1	N	1362	A	C4-C5-C6	6.43	120.22	117.00
1	N	104	G	C5-N7-C8	6.43	107.52	104.30
1	N	594	U	N3-C4-C5	-6.43	110.74	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	613	C	P-O3'-C3'	-6.43	111.98	119.70
1	N	1051	C	C2-N3-C4	6.43	123.12	119.90
1	N	1331	G	N7-C8-N9	6.43	116.32	113.10
1	N	1389	C	O4'-C1'-N1	6.43	113.35	108.20
1	N	584	G	C6-C5-N7	-6.43	126.54	130.40
1	N	917	G	C8-N9-C4	-6.43	103.83	106.40
1	N	1459	G	C6-C5-N7	-6.43	126.54	130.40
1	N	43	C	C6-N1-C2	-6.43	117.73	120.30
1	N	179	A	C5-N7-C8	6.43	107.11	103.90
1	N	511	C	C1'-O4'-C4'	-6.43	104.76	109.90
1	N	959	A	N7-C8-N9	-6.43	110.58	113.80
1	N	1010	U	N3-C4-O4	6.43	123.90	119.40
1	N	1276	G	N3-C2-N2	6.43	124.40	119.90
1	N	40	C	N3-C2-O2	-6.43	117.40	121.90
1	N	376	G	O4'-C1'-N9	6.43	113.34	108.20
1	N	812	G	C4-C5-C6	6.43	122.66	118.80
1	N	1177	G	C6-C5-N7	-6.43	126.54	130.40
1	N	1470	U	C6-N1-C2	-6.43	117.14	121.00
1	N	67	C	N3-C4-N4	6.42	122.50	118.00
1	N	416	G	C5-C6-N1	-6.42	108.29	111.50
1	N	772	U	P-O5'-C5'	6.42	131.18	120.90
1	N	653	U	N3-C4-C5	-6.42	110.75	114.60
1	N	669	G	C5-N7-C8	6.42	107.51	104.30
1	N	1064	G	C4-C5-N7	-6.42	108.23	110.80
1	N	1385	G	N9-C4-C5	-6.42	102.83	105.40
1	N	93	U	O4'-C4'-C3'	-6.42	97.58	104.00
1	N	221	C	C4'-C3'-C2'	-6.42	96.18	102.60
1	N	529	G	O4'-C1'-N9	6.42	113.34	108.20
1	N	971	G	C3'-C2'-C1'	6.42	106.64	101.50
1	N	357	G	O4'-C1'-N9	6.42	113.33	108.20
1	N	655	A	C8-N9-C4	-6.42	103.23	105.80
1	N	484	G	O4'-C1'-N9	6.42	113.33	108.20
1	N	511	C	C2-N3-C4	6.42	123.11	119.90
1	N	928	G	N3-C2-N2	6.42	124.39	119.90
1	N	1007	U	P-O3'-C3'	6.42	127.40	119.70
1	N	1236	A	O4'-C1'-N9	6.42	113.33	108.20
1	N	1425	U	N3-C2-O2	6.42	126.69	122.20
1	N	368	U	N3-C4-O4	6.42	123.89	119.40
1	N	389	A	C2-N3-C4	-6.42	107.39	110.60
1	N	729	A	P-O5'-C5'	6.42	131.16	120.90
1	N	1212	U	C1'-O4'-C4'	6.42	115.03	109.90
1	N	477	C	N3-C4-C5	-6.41	119.33	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	665	A	O4'-C1'-N9	6.41	113.33	108.20
1	N	978	A	C6-C5-N7	-6.41	127.81	132.30
1	N	1425	U	C5-C6-N1	6.41	125.91	122.70
1	N	304	U	C2-N1-C1'	6.41	125.39	117.70
1	N	831	A	N9-C4-C5	6.41	108.36	105.80
1	N	246	A	C2-N3-C4	-6.41	107.39	110.60
1	N	254	G	C2-N3-C4	-6.41	108.69	111.90
1	N	573	A	C4-C5-C6	6.41	120.20	117.00
1	N	1112	C	N1-C2-O2	-6.41	115.05	118.90
1	N	221	C	C6-N1-C2	-6.41	117.74	120.30
1	N	812	G	N3-C4-N9	6.41	129.84	126.00
1	N	347	G	P-O5'-C5'	6.41	131.15	120.90
1	N	350	G	P-O3'-C3'	-6.41	112.01	119.70
1	N	374	A	C4-N9-C1'	-6.41	114.77	126.30
1	N	936	C	C4-C5-C6	-6.41	114.20	117.40
1	N	1274	A	C4-C5-C6	6.41	120.20	117.00
1	N	593	U	P-O5'-C5'	6.41	131.15	120.90
1	N	616	G	C4-C5-N7	-6.41	108.24	110.80
1	N	1089	G	C4-C5-N7	-6.41	108.24	110.80
1	N	1445	U	C2-N1-C1'	-6.41	110.01	117.70
1	N	655	A	C5-C6-N6	-6.40	118.58	123.70
1	N	28	A	C4-C5-C6	6.40	120.20	117.00
1	N	238	A	C8-N9-C4	-6.40	103.24	105.80
1	N	246	A	C2'-C3'-O3'	6.40	123.94	113.70
1	N	315	A	N7-C8-N9	-6.40	110.60	113.80
1	N	625	U	C5-C6-N1	6.40	125.90	122.70
1	N	766	A	C5-C6-N6	-6.40	118.58	123.70
1	N	795	C	C1'-O4'-C4'	6.40	115.02	109.90
1	N	884	U	C2-N3-C4	-6.40	123.16	127.00
1	N	1319	A	C4-C5-C6	6.40	120.20	117.00
1	N	1181	G	N1-C2-N2	6.40	121.96	116.20
1	N	963	G	C4-C5-N7	6.40	113.36	110.80
1	N	1503	A	C6-C5-N7	-6.40	127.82	132.30
1	N	1531	A	C8-N9-C1'	-6.40	116.18	127.70
1	N	1465	A	N3-C4-C5	-6.40	122.32	126.80
1	N	455	G	N9-C4-C5	6.39	107.96	105.40
1	N	410	G	P-O3'-C3'	6.39	127.37	119.70
1	N	822	U	P-O5'-C5'	6.39	131.13	120.90
1	N	848	C	C3'-C2'-C1'	6.39	106.61	101.50
1	N	1075	U	N1-C2-O2	6.39	127.28	122.80
1	N	415	A	C4-C5-N7	6.39	113.89	110.70
1	N	492	C	C6-N1-C1'	-6.39	113.13	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	740	U	C2-N1-C1'	-6.39	110.03	117.70
1	N	105	G	C6-N1-C2	6.39	128.93	125.10
1	N	147	G	N1-C2-N2	6.39	121.95	116.20
1	N	1132	C	C4'-C3'-C2'	-6.39	96.21	102.60
1	N	1338	G	C6-N1-C2	-6.39	121.27	125.10
1	N	910	C	O4'-C1'-N1	6.39	113.31	108.20
1	N	1364	U	P-O5'-C5'	-6.39	110.68	120.90
1	N	1282	C	O4'-C1'-N1	6.38	113.31	108.20
1	N	217	C	N3-C4-N4	6.38	122.47	118.00
1	N	385	C	C6-N1-C2	-6.38	117.75	120.30
1	N	411	A	C3'-C2'-C1'	6.38	106.61	101.50
1	N	467	U	C5'-C4'-C3'	6.38	126.21	116.00
1	N	750	C	O5'-C5'-C4'	-6.38	99.57	111.70
1	N	251	G	O5'-C5'-C4'	-6.38	99.57	111.70
1	N	776	G	C5-C6-N1	-6.38	108.31	111.50
1	N	841	C	C2-N1-C1'	6.38	125.82	118.80
1	N	1320	C	C1'-O4'-C4'	6.38	115.00	109.90
1	N	274	A	C6-N1-C2	6.38	122.43	118.60
1	N	875	U	C5-C4-O4	-6.38	122.07	125.90
1	N	1001	C	C6-N1-C2	-6.38	117.75	120.30
1	N	1258	G	C5-C6-N1	-6.38	108.31	111.50
1	N	1356	G	C2-N3-C4	-6.38	108.71	111.90
1	N	26	A	N1-C6-N6	6.38	122.43	118.60
1	N	241	G	C8-N9-C4	-6.38	103.85	106.40
1	N	1180	A	C5-N7-C8	6.38	107.09	103.90
1	N	1289	A	N1-C2-N3	6.38	132.49	129.30
1	N	1389	C	C6-N1-C2	-6.38	117.75	120.30
1	N	849	G	N3-C4-C5	-6.37	125.41	128.60
1	N	63	C	C5'-C4'-C3'	-6.37	105.81	116.00
1	N	612	C	C2-N3-C4	6.37	123.09	119.90
1	N	696	A	N1-C2-N3	6.37	132.49	129.30
1	N	981	U	P-O5'-C5'	-6.37	110.71	120.90
1	N	657	U	N3-C4-C5	6.37	118.42	114.60
1	N	703	G	N1-C2-N3	-6.37	120.08	123.90
1	N	1163	A	C6-C5-N7	-6.37	127.84	132.30
1	N	171	A	N1-C6-N6	6.37	122.42	118.60
1	N	323	U	N1-C2-O2	6.37	127.26	122.80
1	N	344	A	C6-N1-C2	-6.37	114.78	118.60
1	N	347	G	C5-C6-O6	-6.37	124.78	128.60
1	N	553	A	C2-N3-C4	-6.37	107.42	110.60
1	N	637	C	N1-C1'-C2'	-6.37	104.99	112.00
1	N	706	A	C5-C6-N6	-6.37	118.61	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	918	A	C8-N9-C4	-6.37	103.25	105.80
1	N	578	C	N1-C1'-C2'	-6.37	105.00	112.00
1	N	1504	G	N3-C4-C5	6.37	131.78	128.60
1	N	242	G	O4'-C1'-N9	6.37	113.29	108.20
1	N	374	A	N3-C4-C5	-6.37	122.34	126.80
1	N	456	A	O3'-P-O5'	-6.37	91.90	104.00
1	N	78	A	N9-C4-C5	-6.36	103.25	105.80
1	N	729	A	C8-N9-C4	-6.36	103.25	105.80
1	N	842	U	C2-N1-C1'	6.36	125.34	117.70
1	N	953	G	C8-N9-C4	-6.36	103.85	106.40
1	N	578	C	O4'-C1'-N1	6.36	113.29	108.20
1	N	1398	A	O4'-C1'-N9	6.36	113.29	108.20
1	N	798	U	N1-C2-N3	6.36	118.72	114.90
1	N	62	U	C4-C5-C6	-6.36	115.88	119.70
1	N	1340	A	C6-C5-N7	-6.36	127.85	132.30
1	N	252	U	N1-C2-N3	-6.36	111.09	114.90
1	N	687	A	C2-N3-C4	6.36	113.78	110.60
1	N	691	G	N3-C2-N2	6.36	124.35	119.90
1	N	888	G	N1-C2-N3	-6.36	120.09	123.90
1	N	944	G	C5-N7-C8	-6.36	101.12	104.30
1	N	1158	C	P-O3'-C3'	6.36	127.33	119.70
1	N	1343	G	N1-C6-O6	6.36	123.71	119.90
1	N	208	U	C1'-O4'-C4'	6.35	114.98	109.90
1	N	580	C	C5-C6-N1	6.35	124.18	121.00
1	N	768	A	N7-C8-N9	6.35	116.98	113.80
1	N	295	C	C2-N1-C1'	6.35	125.79	118.80
1	N	885	G	C4-C5-C6	6.35	122.61	118.80
1	N	890	G	C6-C5-N7	-6.35	126.59	130.40
1	N	61	G	N3-C4-C5	6.35	131.78	128.60
1	N	496	A	C5-C6-N6	-6.35	118.62	123.70
1	N	1149	C	O4'-C1'-N1	6.35	113.28	108.20
1	N	424	G	C6-C5-N7	-6.35	126.59	130.40
1	N	731	G	C5-N7-C8	-6.35	101.13	104.30
1	N	915	A	C3'-C2'-C1'	-6.35	96.42	101.50
1	N	1189	U	N3-C2-O2	6.35	126.64	122.20
1	N	14	U	O4'-C1'-N1	6.34	113.28	108.20
1	N	932	C	O4'-C1'-N1	6.34	113.27	108.20
1	N	629	A	C5'-C4'-C3'	-6.34	105.85	116.00
1	N	648	A	C8-N9-C4	-6.34	103.26	105.80
1	N	769	G	C5-C6-N1	-6.34	108.33	111.50
1	N	775	G	C4-N9-C1'	6.34	134.75	126.50
1	N	1406	U	N3-C4-O4	6.34	123.84	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1416	G	C1'-O4'-C4'	-6.34	104.83	109.90
1	N	159	G	C5-C6-O6	-6.34	124.80	128.60
1	N	726	C	P-O3'-C3'	-6.34	112.09	119.70
1	N	448	A	N3-C4-C5	-6.34	122.36	126.80
1	N	749	A	C8-N9-C4	-6.34	103.27	105.80
1	N	1491	G	N1-C2-N2	6.34	121.90	116.20
1	N	1517	G	C5'-C4'-O4'	-6.34	101.50	109.10
1	N	321	A	C8-N9-C4	6.34	108.33	105.80
1	N	321	A	N3-C4-N9	6.34	132.47	127.40
1	N	500	G	C1'-O4'-C4'	6.34	114.97	109.90
1	N	956	U	C5-C6-N1	6.34	125.87	122.70
1	N	1317	C	N1-C2-N3	-6.34	114.77	119.20
1	N	28	A	O4'-C1'-N9	6.33	113.27	108.20
1	N	808	C	C5'-C4'-O4'	6.33	116.70	109.10
1	N	881	G	O4'-C1'-N9	6.33	113.27	108.20
1	N	197	A	N1-C6-N6	6.33	122.40	118.60
1	N	672	U	P-O5'-C5'	6.33	131.03	120.90
1	N	1311	A	C5-N7-C8	-6.33	100.73	103.90
1	N	77	A	N3-C4-N9	6.33	132.47	127.40
1	N	410	G	O4'-C1'-N9	6.33	113.27	108.20
1	N	521	G	O5'-C5'-C4'	-6.33	99.67	111.70
1	N	1028	C	N3-C4-N4	6.33	122.43	118.00
1	N	1474	U	N3-C4-C5	-6.33	110.80	114.60
1	N	1481	U	N3-C2-O2	6.33	126.63	122.20
1	N	1497	G	N3-C4-N9	-6.33	122.20	126.00
1	N	1139	G	C5-C6-N1	-6.33	108.33	111.50
1	N	1336	C	C6-N1-C2	-6.33	117.77	120.30
1	N	1413	A	N9-C4-C5	6.33	108.33	105.80
1	N	225	C	C5-C4-N4	-6.33	115.77	120.20
1	N	241	G	N3-C4-N9	-6.33	122.20	126.00
1	N	360	G	C4-C5-C6	-6.33	115.00	118.80
1	N	411	A	C8-N9-C4	-6.33	103.27	105.80
1	N	427	U	N3-C2-O2	-6.33	117.77	122.20
1	N	514	C	N3-C2-O2	6.33	126.33	121.90
1	N	610	U	P-O5'-C5'	-6.33	110.77	120.90
1	N	1244	G	N1-C2-N3	-6.33	120.10	123.90
1	N	700	G	C8-N9-C4	6.33	108.93	106.40
1	N	869	G	C8-N9-C1'	6.33	135.22	127.00
1	N	1476	A	C5-C6-N1	-6.33	114.54	117.70
1	N	120	A	C4'-C3'-C2'	-6.33	96.28	102.60
1	N	669	G	P-O5'-C5'	6.33	131.02	120.90
1	N	823	C	C2-N3-C4	6.33	123.06	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1261	A	O5'-P-OP2	-6.33	100.01	105.70
1	N	1366	C	C5-C6-N1	-6.33	117.84	121.00
1	N	1478	U	C4-C5-C6	-6.33	115.91	119.70
1	N	1044	A	N7-C8-N9	6.32	116.96	113.80
1	N	154	U	O4'-C1'-N1	6.32	113.26	108.20
1	N	1355	G	N3-C4-N9	6.32	129.79	126.00
1	N	641	U	C6-N1-C2	-6.32	117.21	121.00
1	N	859	G	C5'-C4'-O4'	6.32	116.68	109.10
1	N	1188	A	O4'-C1'-N9	6.32	113.26	108.20
1	N	1432	G	C2'-C3'-O3'	6.32	123.81	113.70
1	N	1440	U	O4'-C1'-N1	6.32	113.26	108.20
1	N	450	G	N3-C2-N2	6.32	124.32	119.90
1	N	277	C	C3'-C2'-C1'	6.32	106.56	101.50
1	N	338	A	C1'-O4'-C4'	6.32	114.95	109.90
1	N	350	G	N3-C4-C5	6.32	131.76	128.60
1	N	752	G	N9-C4-C5	-6.32	102.87	105.40
1	N	808	C	O4'-C4'-C3'	-6.32	97.68	104.00
1	N	1394	A	O4'-C1'-N9	6.32	113.25	108.20
1	N	26	A	N7-C8-N9	-6.32	110.64	113.80
1	N	303	A	C5-C6-N6	-6.32	118.65	123.70
1	N	648	A	C5-C6-N6	-6.32	118.65	123.70
1	N	1002	G	N1-C6-O6	6.32	123.69	119.90
1	N	1047	G	N7-C8-N9	6.32	116.26	113.10
1	N	1186	G	C6-N1-C2	-6.32	121.31	125.10
1	N	1192	C	N3-C4-N4	6.32	122.42	118.00
1	N	1445	U	N3-C4-O4	6.32	123.82	119.40
1	N	1506	U	C5'-C4'-C3'	6.32	126.10	116.00
1	N	171	A	O4'-C1'-N9	6.31	113.25	108.20
1	N	989	U	C4'-C3'-C2'	-6.31	96.29	102.60
1	N	1296	C	C2-N3-C4	6.31	123.06	119.90
1	N	202	G	C5-C6-N1	-6.31	108.34	111.50
1	N	680	C	C6-N1-C2	6.31	122.83	120.30
1	N	896	C	P-O3'-C3'	6.31	127.28	119.70
1	N	1097	C	N3-C4-N4	6.31	122.42	118.00
1	N	1437	A	C4-C5-N7	-6.31	107.54	110.70
1	N	1460	C	C5-C4-N4	-6.31	115.78	120.20
1	N	83	C	N3-C4-N4	6.31	122.42	118.00
1	N	326	G	C5'-C4'-O4'	6.31	116.67	109.10
1	N	466	A	N9-C4-C5	-6.31	103.28	105.80
1	N	1113	C	C5-C6-N1	6.31	124.15	121.00
1	N	1312	G	P-O3'-C3'	-6.31	112.13	119.70
1	N	1315	U	C5'-C4'-C3'	-6.31	105.90	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1014	A	C4-C5-C6	6.31	120.15	117.00
1	N	6	G	C6-C5-N7	-6.31	126.62	130.40
1	N	1452	C	C2-N3-C4	6.31	123.05	119.90
1	N	371	A	C5-C6-N1	-6.30	114.55	117.70
1	N	620	C	C6-N1-C2	-6.30	117.78	120.30
1	N	834	U	O4'-C1'-N1	6.30	113.24	108.20
1	N	887	G	N3-C4-C5	6.30	131.75	128.60
1	N	915	A	C4'-C3'-C2'	-6.30	96.30	102.60
1	N	1093	A	C4-C5-N7	-6.30	107.55	110.70
1	N	1278	G	N3-C2-N2	6.30	124.31	119.90
1	N	77	A	C3'-C2'-C1'	6.30	106.54	101.50
1	N	804	U	N1-C2-N3	6.30	118.68	114.90
1	N	1212	U	N1-C2-N3	-6.30	111.12	114.90
1	N	177	G	C4'-C3'-C2'	-6.30	96.30	102.60
1	N	506	G	P-O3'-C3'	6.30	127.26	119.70
1	N	682	G	OP1-P-OP2	-6.30	110.15	119.60
1	N	1321	U	C5-C4-O4	6.30	129.68	125.90
1	N	1417	G	P-O5'-C5'	6.30	130.98	120.90
1	N	370	C	C5-C4-N4	-6.30	115.79	120.20
1	N	612	C	N3-C4-N4	6.30	122.41	118.00
1	N	1289	A	N1-C6-N6	6.30	122.38	118.60
1	N	1324	A	C6-C5-N7	-6.30	127.89	132.30
1	N	1363	A	O4'-C1'-N9	6.30	113.24	108.20
1	N	1378	C	N3-C2-O2	-6.30	117.49	121.90
1	N	1439	G	N3-C2-N2	6.30	124.31	119.90
1	N	39	G	N3-C4-C5	6.30	131.75	128.60
1	N	120	A	C1'-O4'-C4'	-6.30	104.86	109.90
1	N	795	C	N3-C4-N4	6.30	122.41	118.00
1	N	332	G	N1-C2-N3	-6.30	120.12	123.90
1	N	898	G	N9-C4-C5	6.30	107.92	105.40
1	N	950	U	N1-C2-O2	-6.30	118.39	122.80
1	N	1413	A	C2-N3-C4	6.30	113.75	110.60
1	N	1429	A	C6-N1-C2	6.30	122.38	118.60
1	N	156	C	C5-C4-N4	-6.29	115.80	120.20
1	N	726	C	O4'-C1'-N1	6.29	113.23	108.20
1	N	1053	G	N7-C8-N9	-6.29	109.95	113.10
1	N	69	G	C4-C5-C6	6.29	122.58	118.80
1	N	284	C	C3'-C2'-C1'	-6.29	96.47	101.50
1	N	451	A	C5'-C4'-O4'	6.29	116.65	109.10
1	N	6	G	C8-N9-C4	-6.29	103.88	106.40
1	N	142	G	O4'-C4'-C3'	-6.29	97.71	104.00
1	N	391	G	C4-C5-C6	-6.29	115.03	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1285	A	C1'-O4'-C4'	6.29	114.93	109.90
1	N	1300	G	C8-N9-C4	-6.29	103.88	106.40
1	N	478	A	C6-C5-N7	-6.29	127.90	132.30
1	N	915	A	C8-N9-C4	6.29	108.31	105.80
1	N	1140	C	O4'-C1'-N1	6.29	113.23	108.20
1	N	1423	G	C4'-C3'-C2'	-6.29	96.31	102.60
1	N	1449	C	C6-N1-C2	6.29	122.82	120.30
1	N	1492	A	C1'-O4'-C4'	-6.29	104.87	109.90
1	N	693	G	N9-C4-C5	-6.29	102.89	105.40
1	N	908	A	C5-C6-N1	-6.29	114.56	117.70
1	N	1493	A	C4-C5-N7	-6.29	107.56	110.70
1	N	168	G	C8-N9-C1'	-6.28	118.83	127.00
1	N	9	G	P-O5'-C5'	6.28	130.95	120.90
1	N	1126	U	C5'-C4'-O4'	6.28	116.64	109.10
1	N	1402	C	C4-C5-C6	6.28	120.54	117.40
1	N	44	A	C6-N1-C2	-6.28	114.83	118.60
1	N	792	A	C5-C6-N6	-6.28	118.68	123.70
1	N	866	C	O4'-C1'-N1	6.28	113.22	108.20
1	N	500	G	N9-C4-C5	-6.28	102.89	105.40
1	N	874	G	O4'-C1'-N9	6.28	113.22	108.20
1	N	987	G	C5-C6-O6	-6.28	124.83	128.60
1	N	274	A	C4-C5-C6	6.28	120.14	117.00
1	N	554	A	C6-N1-C2	6.28	122.36	118.60
1	N	595	A	O4'-C1'-C2'	-6.28	99.53	105.80
1	N	1408	A	P-O5'-C5'	6.28	130.94	120.90
1	N	741	G	N3-C2-N2	6.27	124.29	119.90
1	N	1239	A	C5'-C4'-O4'	6.27	116.63	109.10
1	N	181	A	C5-C6-N6	-6.27	118.68	123.70
1	N	329	A	C4-C5-C6	6.27	120.14	117.00
1	N	343	U	P-O5'-C5'	6.27	130.94	120.90
1	N	509	A	C5-C6-N6	-6.27	118.68	123.70
1	N	552	U	C4'-C3'-C2'	-6.27	96.33	102.60
1	N	1177	G	C5-C6-O6	-6.27	124.84	128.60
1	N	1249	C	C5'-C4'-O4'	6.27	116.63	109.10
1	N	1391	U	N3-C4-C5	-6.27	110.84	114.60
1	N	226	G	N3-C4-N9	6.27	129.76	126.00
1	N	228	A	C2-N3-C4	-6.27	107.46	110.60
1	N	671	G	C2-N3-C4	6.27	115.04	111.90
1	N	1133	G	C6-C5-N7	-6.27	126.64	130.40
1	N	785	G	C2-N3-C4	-6.27	108.77	111.90
1	N	810	C	C5-C4-N4	-6.27	115.81	120.20
1	N	863	U	C6-N1-C2	-6.27	117.24	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1506	U	C2-N3-C4	6.27	130.76	127.00
1	N	829	G	N3-C4-C5	-6.27	125.47	128.60
1	N	1000	A	C2-N3-C4	-6.27	107.47	110.60
1	N	1223	C	C6-N1-C2	-6.27	117.79	120.30
1	N	1311	A	N1-C2-N3	-6.27	126.17	129.30
1	N	1329	A	N1-C6-N6	6.27	122.36	118.60
1	N	1336	C	C5-C6-N1	6.27	124.13	121.00
1	N	569	C	N3-C2-O2	6.27	126.29	121.90
1	N	478	A	N7-C8-N9	6.26	116.93	113.80
1	N	718	A	C6-C5-N7	-6.26	127.92	132.30
1	N	772	U	C1'-O4'-C4'	6.26	114.91	109.90
1	N	924	C	C5-C4-N4	-6.26	115.81	120.20
1	N	1260	G	N3-C4-C5	6.26	131.73	128.60
1	N	77	A	C6-C5-N7	-6.26	127.92	132.30
1	N	174	A	N7-C8-N9	-6.26	110.67	113.80
1	N	1019	A	C5-C6-N1	-6.26	114.57	117.70
1	N	794	A	C6-N1-C2	-6.26	114.84	118.60
1	N	929	G	P-O5'-C5'	6.26	130.91	120.90
1	N	1295	U	C2-N3-C4	6.26	130.76	127.00
1	N	251	G	C8-N9-C4	6.26	108.90	106.40
1	N	818	G	C4-C5-N7	-6.26	108.30	110.80
1	N	927	G	N1-C2-N2	6.26	121.83	116.20
1	N	485	U	P-O3'-C3'	6.26	127.21	119.70
1	N	1400	C	C5-C6-N1	-6.26	117.87	121.00
1	N	492	C	P-O3'-C3'	6.25	127.20	119.70
1	N	1061	G	N3-C2-N2	6.25	124.28	119.90
1	N	1104	G	N1-C2-N3	-6.25	120.15	123.90
1	N	58	C	C5-C6-N1	6.25	124.13	121.00
1	N	525	C	C6-N1-C2	-6.25	117.80	120.30
1	N	624	C	O4'-C1'-N1	6.25	113.20	108.20
1	N	1182	G	N9-C4-C5	6.25	107.90	105.40
1	N	1237	C	O4'-C1'-N1	6.25	113.20	108.20
1	N	1531	A	C5-C6-N1	-6.25	114.58	117.70
1	N	134	G	C3'-C2'-C1'	-6.25	96.50	101.50
1	N	310	G	N1-C6-O6	6.25	123.65	119.90
1	N	438	U	C2-N3-C4	6.25	130.75	127.00
1	N	543	U	C5-C6-N1	6.25	125.82	122.70
1	N	921	U	C6-N1-C2	-6.25	117.25	121.00
1	N	927	G	N9-C4-C5	-6.25	102.90	105.40
1	N	1081	A	C5-C6-N1	-6.25	114.58	117.70
1	N	603	U	O4'-C1'-N1	6.25	113.20	108.20
1	N	1255	G	C4-C5-N7	6.25	113.30	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	855	U	N1-C2-O2	6.24	127.17	122.80
1	N	1364	U	C2-N1-C1'	6.24	125.19	117.70
1	N	421	U	C2-N3-C4	6.24	130.75	127.00
1	N	510	A	C6-C5-N7	-6.24	127.93	132.30
1	N	677	U	P-O5'-C5'	6.24	130.88	120.90
1	N	955	U	N3-C4-O4	6.24	123.77	119.40
1	N	993	G	N9-C4-C5	-6.24	102.90	105.40
1	N	1457	G	C8-N9-C4	-6.24	103.90	106.40
1	N	256	U	C5-C6-N1	6.24	125.82	122.70
1	N	528	C	N3-C2-O2	-6.24	117.53	121.90
1	N	637	C	P-O3'-C3'	6.24	127.19	119.70
1	N	776	G	C1'-O4'-C4'	-6.24	104.91	109.90
1	N	1069	C	C6-N1-C2	6.24	122.80	120.30
1	N	1072	G	N7-C8-N9	-6.24	109.98	113.10
1	N	1291	U	O4'-C1'-N1	6.24	113.19	108.20
1	N	395	C	N3-C4-N4	6.24	122.37	118.00
1	N	1242	G	O4'-C1'-N9	6.24	113.19	108.20
1	N	258	G	N7-C8-N9	6.24	116.22	113.10
1	N	331	G	P-O5'-C5'	6.24	130.88	120.90
1	N	469	C	P-O3'-C3'	6.24	127.18	119.70
1	N	595	A	C5-C6-N1	-6.24	114.58	117.70
1	N	693	G	C5-N7-C8	6.24	107.42	104.30
1	N	830	G	C5-C6-O6	-6.24	124.86	128.60
1	N	988	G	P-O5'-C5'	6.24	130.88	120.90
1	N	1061	G	N9-C4-C5	6.24	107.89	105.40
1	N	1416	G	N1-C2-N3	-6.24	120.16	123.90
1	N	1477	U	C2-N3-C4	6.24	130.74	127.00
1	N	702	A	C8-N9-C4	-6.23	103.31	105.80
1	N	1303	C	C2-N3-C4	6.23	123.02	119.90
1	N	276	G	OP1-P-OP2	-6.23	110.25	119.60
1	N	605	U	C2-N1-C1'	6.23	125.18	117.70
1	N	1036	A	N3-C4-C5	-6.23	122.44	126.80
1	N	1277	C	C5-C6-N1	6.23	124.12	121.00
1	N	1305	G	N3-C2-N2	6.23	124.26	119.90
1	N	311	C	C4'-C3'-C2'	-6.23	96.37	102.60
1	N	152	A	N7-C8-N9	-6.23	110.69	113.80
1	N	206	C	C5'-C4'-O4'	6.23	116.57	109.10
1	N	323	U	C1'-O4'-C4'	6.23	114.88	109.90
1	N	520	A	C5-C6-N6	-6.23	118.72	123.70
1	N	1022	A	C5-C6-N6	-6.23	118.72	123.70
1	N	1131	G	C6-C5-N7	-6.23	126.66	130.40
1	N	265	G	N3-C2-N2	6.23	124.26	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	683	G	C6-N1-C2	6.23	128.84	125.10
1	N	952	U	N3-C4-O4	6.22	123.76	119.40
1	N	1282	C	P-O5'-C5'	6.22	130.86	120.90
1	N	1430	A	N1-C6-N6	6.22	122.33	118.60
1	N	252	U	C5-C6-N1	6.22	125.81	122.70
1	N	115	G	C5-C6-N1	6.22	114.61	111.50
1	N	499	A	C6-N1-C2	-6.22	114.87	118.60
1	N	516	U	C5-C6-N1	6.22	125.81	122.70
1	N	1173	U	O4'-C1'-N1	6.22	113.18	108.20
1	N	1244	G	C8-N9-C4	-6.22	103.91	106.40
1	N	1288	A	N9-C4-C5	6.22	108.29	105.80
1	N	1364	U	C6-N1-C2	6.22	124.73	121.00
1	N	1534	A	N3-C4-C5	-6.22	122.45	126.80
1	N	938	A	C5-N7-C8	6.22	107.01	103.90
1	N	173	U	C4-C5-C6	6.22	123.43	119.70
1	N	887	G	C5-N7-C8	-6.22	101.19	104.30
1	N	401	C	O4'-C1'-N1	6.21	113.17	108.20
1	N	553	A	C6-C5-N7	-6.21	127.95	132.30
1	N	1496	C	C1'-O4'-C4'	6.21	114.87	109.90
1	N	1519	A	N3-C4-C5	-6.21	122.45	126.80
1	N	1086	U	C2-N3-C4	-6.21	123.27	127.00
1	N	1385	G	N7-C8-N9	-6.21	109.99	113.10
1	N	293	G	O4'-C1'-N9	6.21	113.17	108.20
1	N	803	G	C5-N7-C8	-6.21	101.19	104.30
1	N	877	G	N1-C2-N2	-6.21	110.61	116.20
1	N	950	U	N1-C1'-C2'	-6.21	105.17	112.00
1	N	1086	U	O4'-C1'-N1	6.21	113.17	108.20
1	N	229	U	C6-N1-C2	6.21	124.73	121.00
1	N	586	C	C6-N1-C2	-6.21	117.82	120.30
1	N	741	G	N3-C4-N9	-6.21	122.27	126.00
1	N	814	A	C1'-O4'-C4'	-6.21	104.93	109.90
1	N	1092	A	N3-C4-C5	-6.21	122.45	126.80
1	N	576	C	O4'-C1'-N1	6.21	113.17	108.20
1	N	889	A	N1-C6-N6	6.21	122.33	118.60
1	N	1016	A	C4-C5-C6	6.21	120.10	117.00
1	N	1467	C	C2-N3-C4	6.21	123.00	119.90
1	N	1469	C	C5'-C4'-C3'	-6.21	106.07	116.00
1	N	204	G	N3-C4-C5	-6.21	125.50	128.60
1	N	886	G	C5'-C4'-O4'	6.21	116.55	109.10
1	N	1082	A	N9-C4-C5	6.21	108.28	105.80
1	N	1516	G	C4'-C3'-C2'	-6.21	96.39	102.60
1	N	1534	A	C4-C5-C6	6.21	120.10	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	290	C	C5-C4-N4	-6.21	115.86	120.20
1	N	441	A	C6-C5-N7	-6.21	127.96	132.30
1	N	582	C	O5'-C5'-C4'	-6.20	99.91	111.70
1	N	867	G	C4'-C3'-C2'	-6.20	96.40	102.60
1	N	935	A	N3-C4-N9	-6.20	122.44	127.40
1	N	1107	C	N3-C4-N4	6.20	122.34	118.00
1	N	1191	A	N3-C4-C5	-6.20	122.46	126.80
1	N	1222	G	N3-C4-N9	-6.20	122.28	126.00
1	N	1361	G	C5'-C4'-C3'	6.20	125.93	116.00
1	N	730	G	C5-C6-O6	-6.20	124.88	128.60
1	N	330	C	N3-C4-N4	6.20	122.34	118.00
1	N	410	G	N1-C2-N2	-6.20	110.62	116.20
1	N	1349	A	P-O3'-C3'	-6.20	112.26	119.70
1	N	39	G	C4-C5-C6	-6.20	115.08	118.80
1	N	257	G	P-O3'-C3'	-6.20	112.26	119.70
1	N	621	A	C4-C5-N7	-6.20	107.60	110.70
1	N	741	G	C4'-C3'-C2'	-6.20	96.40	102.60
1	N	759	A	C4'-C3'-C2'	-6.20	96.40	102.60
1	N	1190	G	C2-N3-C4	-6.20	108.80	111.90
1	N	1446	A	C5-C6-N6	-6.20	118.74	123.70
1	N	1262	C	C2-N3-C4	6.20	123.00	119.90
1	N	496	A	C1'-O4'-C4'	6.20	114.86	109.90
1	N	686	U	C1'-O4'-C4'	-6.20	104.94	109.90
1	N	1071	C	O4'-C1'-N1	6.20	113.16	108.20
1	N	1319	A	C4-C5-N7	-6.20	107.60	110.70
1	N	1388	C	C3'-C2'-C1'	6.20	106.46	101.50
1	N	553	A	C5-N7-C8	-6.19	100.80	103.90
1	N	1005	A	N3-C4-C5	-6.19	122.47	126.80
1	N	1097	C	N3-C2-O2	6.19	126.23	121.90
1	N	1331	G	N3-C2-N2	6.19	124.23	119.90
1	N	1449	C	N1-C2-N3	-6.19	114.86	119.20
1	N	623	C	N1-C2-O2	6.19	122.61	118.90
1	N	811	C	OP1-P-OP2	-6.19	110.31	119.60
1	N	837	U	C4-C5-C6	-6.19	115.99	119.70
1	N	1343	G	C8-N9-C1'	-6.19	118.95	127.00
1	N	285	C	P-O5'-C5'	6.19	130.80	120.90
1	N	665	A	P-O3'-C3'	-6.19	112.27	119.70
1	N	1007	U	C2-N3-C4	-6.19	123.29	127.00
1	N	1082	A	C4-C5-C6	6.19	120.09	117.00
1	N	1101	A	C4'-C3'-C2'	6.19	108.79	102.60
1	N	1034	G	C4-C5-N7	6.19	113.28	110.80
1	N	1083	U	C2-N1-C1'	-6.19	110.27	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	758	C	N3-C4-N4	6.19	122.33	118.00
1	N	777	A	O4'-C4'-C3'	-6.19	97.81	104.00
1	N	1137	C	O4'-C1'-N1	6.19	113.15	108.20
1	N	1487	G	C6-C5-N7	-6.19	126.69	130.40
1	N	281	G	C6-C5-N7	-6.18	126.69	130.40
1	N	376	G	C5'-C4'-O4'	6.18	116.52	109.10
1	N	604	G	C2-N3-C4	-6.18	108.81	111.90
1	N	850	U	N3-C4-C5	-6.18	110.89	114.60
1	N	1011	C	N1-C2-O2	6.18	122.61	118.90
1	N	1282	C	C2-N1-C1'	6.18	125.60	118.80
1	N	164	G	C4'-C3'-C2'	-6.18	96.42	102.60
1	N	447	G	C4'-C3'-C2'	-6.18	96.42	102.60
1	N	814	A	N7-C8-N9	6.18	116.89	113.80
1	N	1327	C	C5-C6-N1	6.18	124.09	121.00
1	N	1153	G	C4-C5-N7	-6.18	108.33	110.80
1	N	1447	A	C4-C5-C6	6.18	120.09	117.00
1	N	527	G	C8-N9-C4	-6.18	103.93	106.40
1	N	912	C	C4-C5-C6	-6.18	114.31	117.40
1	N	266	G	C4-C5-C6	6.18	122.51	118.80
1	N	316	C	N1-C2-O2	6.18	122.61	118.90
1	N	631	C	C2-N3-C4	6.18	122.99	119.90
1	N	1129	C	O4'-C1'-C2'	6.18	113.16	107.60
1	N	160	A	C5-C6-N1	-6.18	114.61	117.70
1	N	167	A	C3'-C2'-C1'	-6.18	96.56	101.50
1	N	663	A	C8-N9-C4	-6.18	103.33	105.80
1	N	693	G	P-O3'-C3'	6.18	127.11	119.70
1	N	747	A	C4-C5-C6	6.18	120.09	117.00
1	N	917	G	C5-C6-O6	-6.18	124.89	128.60
1	N	1137	C	C6-N1-C2	-6.18	117.83	120.30
1	N	717	U	C5'-C4'-O4'	6.17	116.51	109.10
1	N	1039	G	O4'-C1'-N9	6.17	113.14	108.20
1	N	1064	G	C5-C6-O6	-6.17	124.89	128.60
1	N	1272	G	C8-N9-C4	6.17	108.87	106.40
1	N	1333	A	OP2-P-O3'	6.17	118.78	105.20
1	N	369	G	C8-N9-C1'	6.17	135.03	127.00
1	N	1126	U	O4'-C1'-N1	6.17	113.14	108.20
1	N	1495	U	P-O3'-C3'	-6.17	112.29	119.70
1	N	186	C	N3-C2-O2	6.17	126.22	121.90
1	N	232	G	N1-C6-O6	-6.17	116.20	119.90
1	N	255	G	C6-C5-N7	-6.17	126.70	130.40
1	N	665	A	C5'-C4'-O4'	-6.17	101.69	109.10
1	N	132	C	C2-N3-C4	-6.17	116.81	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	429	U	C3'-C2'-C1'	-6.17	96.56	101.50
1	N	926	G	C4-C5-C6	6.17	122.50	118.80
1	N	945	G	C6-C5-N7	-6.17	126.70	130.40
1	N	207	C	C2-N1-C1'	6.17	125.58	118.80
1	N	877	G	C5-N7-C8	-6.17	101.22	104.30
1	N	915	A	N7-C8-N9	-6.17	110.72	113.80
1	N	1487	G	C8-N9-C1'	6.17	135.02	127.00
1	N	1510	C	N3-C4-N4	6.17	122.32	118.00
1	N	622	A	N3-C4-C5	-6.17	122.48	126.80
1	N	804	U	N3-C2-O2	-6.17	117.88	122.20
1	N	1013	G	N9-C1'-C2'	-6.17	105.22	112.00
1	N	1036	A	N9-C1'-C2'	-6.17	105.22	112.00
1	N	1201	A	C6-C5-N7	-6.17	127.98	132.30
1	N	313	A	N3-C4-C5	-6.16	122.48	126.80
1	N	1099	G	C4-C5-N7	-6.16	108.33	110.80
1	N	428	G	C1'-O4'-C4'	6.16	114.83	109.90
1	N	536	C	C5-C4-N4	-6.16	115.89	120.20
1	N	552	U	P-O3'-C3'	-6.16	112.31	119.70
1	N	1074	G	N3-C2-N2	6.16	124.21	119.90
1	N	1447	A	C5-C6-N1	-6.16	114.62	117.70
1	N	131	A	P-O3'-C3'	6.16	127.09	119.70
1	N	434	U	C5-C6-N1	6.16	125.78	122.70
1	N	488	C	C1'-O4'-C4'	-6.16	104.97	109.90
1	N	753	A	N9-C4-C5	6.16	108.26	105.80
1	N	789	U	N1-C2-N3	-6.16	111.20	114.90
1	N	1222	G	N7-C8-N9	-6.16	110.02	113.10
1	N	398	U	C6-N1-C2	-6.16	117.31	121.00
1	N	594	U	C2-N1-C1'	6.16	125.09	117.70
1	N	193	C	O5'-C5'-C4'	-6.16	100.00	111.70
1	N	1166	G	C4-C5-C6	6.16	122.49	118.80
1	N	1313	U	C2'-C3'-O3'	6.16	123.55	113.70
1	N	139	A	C5-N7-C8	6.15	106.98	103.90
1	N	273	U	C1'-O4'-C4'	6.15	114.82	109.90
1	N	349	A	C4-C5-C6	6.15	120.08	117.00
1	N	35	G	C8-N9-C4	-6.15	103.94	106.40
1	N	289	G	C5-N7-C8	6.15	107.38	104.30
1	N	549	C	N3-C4-N4	6.15	122.31	118.00
1	N	572	A	C8-N9-C1'	-6.15	116.63	127.70
1	N	678	U	O4'-C1'-N1	6.15	113.12	108.20
1	N	446	G	O5'-C5'-C4'	-6.15	100.02	111.70
1	N	210	C	C5-C6-N1	-6.15	117.93	121.00
1	N	1152	A	C5-C6-N6	-6.15	118.78	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	187	G	N9-C4-C5	6.14	107.86	105.40
1	N	208	U	N3-C4-O4	6.14	123.70	119.40
1	N	212	G	C5-C6-N1	-6.14	108.43	111.50
1	N	336	A	C1'-O4'-C4'	6.14	114.81	109.90
1	N	374	A	C8-N9-C1'	6.14	138.76	127.70
1	N	1053	G	O4'-C1'-N9	6.14	113.12	108.20
1	N	588	G	N1-C2-N2	6.14	121.73	116.20
1	N	782	A	C6-C5-N7	-6.14	128.00	132.30
1	N	853	C	N3-C4-N4	6.14	122.30	118.00
1	N	1150	A	N3-C4-N9	6.14	132.31	127.40
1	N	1203	C	N3-C4-C5	-6.14	119.44	121.90
1	N	1293	C	C5'-C4'-O4'	6.14	116.47	109.10
1	N	216	U	P-O3'-C3'	6.14	127.07	119.70
1	N	273	U	N1-C1'-C2'	6.14	121.98	114.00
1	N	1012	A	C8-N9-C4	-6.14	103.34	105.80
1	N	779	C	P-O3'-C3'	6.14	127.07	119.70
1	N	1058	G	P-O5'-C5'	6.14	130.72	120.90
1	N	1526	G	C6-C5-N7	-6.14	126.72	130.40
1	N	108	G	C5-C6-O6	-6.14	124.92	128.60
1	N	154	U	C4'-C3'-C2'	-6.14	96.46	102.60
1	N	836	G	C5-C6-N1	-6.14	108.43	111.50
1	N	1531	A	C6-C5-N7	-6.14	128.00	132.30
1	N	680	C	P-O5'-C5'	6.14	130.72	120.90
1	N	792	A	C6-N1-C2	6.14	122.28	118.60
1	N	1222	G	C8-N9-C4	-6.14	103.94	106.40
1	N	1434	A	C4-C5-N7	-6.14	107.63	110.70
1	N	653	U	C5'-C4'-C3'	6.13	125.82	116.00
1	N	780	A	OP1-P-OP2	-6.13	110.40	119.60
1	N	915	A	C2-N3-C4	-6.13	107.53	110.60
1	N	920	U	N1-C2-N3	-6.13	111.22	114.90
1	N	1210	C	N1-C2-N3	-6.13	114.91	119.20
1	N	1078	U	OP1-P-OP2	-6.13	110.40	119.60
1	N	102	G	C5-C6-O6	-6.13	124.92	128.60
1	N	923	A	C2-N3-C4	6.13	113.67	110.60
1	N	1473	G	O4'-C1'-N9	6.13	113.11	108.20
1	N	1480	A	N1-C2-N3	6.13	132.37	129.30
1	N	1523	G	N3-C4-C5	-6.13	125.53	128.60
1	N	305	G	N3-C4-C5	6.13	131.66	128.60
1	N	969	A	N1-C2-N3	6.13	132.37	129.30
1	N	224	U	C5-C4-O4	-6.13	122.22	125.90
1	N	888	G	P-O3'-C3'	6.13	127.05	119.70
1	N	1289	A	C8-N9-C4	-6.13	103.35	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1290	G	C8-N9-C4	-6.13	103.95	106.40
1	N	462	G	N1-C2-N3	-6.12	120.22	123.90
1	N	656	G	C5-C6-O6	-6.12	124.92	128.60
1	N	1202	U	C5-C6-N1	-6.12	119.64	122.70
1	N	38	G	N1-C2-N3	-6.12	120.23	123.90
1	N	70	U	C2'-C3'-O3'	6.12	123.50	113.70
1	N	254	G	C4-N9-C1'	-6.12	118.54	126.50
1	N	271	C	C5-C4-N4	-6.12	115.91	120.20
1	N	665	A	C2-N3-C4	-6.12	107.54	110.60
1	N	1166	G	C5-C6-O6	-6.12	124.93	128.60
1	N	1332	A	O4'-C1'-N9	6.12	113.10	108.20
1	N	1370	G	C2-N3-C4	6.12	114.96	111.90
1	N	472	U	O4'-C1'-N1	6.12	113.10	108.20
1	N	747	A	N1-C2-N3	-6.12	126.24	129.30
1	N	1093	A	C6-C5-N7	-6.12	128.01	132.30
1	N	1481	U	N3-C4-O4	6.12	123.68	119.40
1	N	570	G	C3'-C2'-C1'	6.12	106.40	101.50
1	N	591	U	N3-C4-C5	6.12	118.27	114.60
1	N	185	U	O5'-C5'-C4'	-6.12	100.08	111.70
1	N	1166	G	O3'-P-O5'	-6.12	92.38	104.00
1	N	1349	A	C5-C6-N6	-6.12	118.81	123.70
1	N	770	C	N3-C4-C5	-6.12	119.45	121.90
1	N	235	C	N3-C4-N4	6.11	122.28	118.00
1	N	452	A	C5-C6-N1	-6.11	114.64	117.70
1	N	521	G	C4'-C3'-C2'	-6.11	96.49	102.60
1	N	670	G	C6-C5-N7	-6.11	126.73	130.40
1	N	874	G	N9-C4-C5	6.11	107.84	105.40
1	N	933	G	C6-N1-C2	-6.11	121.43	125.10
1	N	1028	C	N1-C2-O2	-6.11	115.23	118.90
1	N	604	G	N3-C4-N9	-6.11	122.33	126.00
1	N	1345	U	C2-N3-C4	6.11	130.67	127.00
1	N	1412	C	C4'-C3'-C2'	-6.11	96.49	102.60
1	N	205	A	C2-N3-C4	6.11	113.66	110.60
1	N	247	G	N3-C4-N9	-6.11	122.33	126.00
1	N	259	G	C5-C6-N1	-6.11	108.44	111.50
1	N	296	U	C6-N1-C1'	-6.11	112.64	121.20
1	N	329	A	C5-C6-N1	-6.11	114.64	117.70
1	N	736	C	C4-C5-C6	6.11	120.45	117.40
1	N	945	G	O4'-C4'-C3'	-6.11	97.89	104.00
1	N	190	A	C2-N3-C4	-6.11	107.55	110.60
1	N	266	G	C6-C5-N7	-6.11	126.74	130.40
1	N	679	C	O4'-C1'-N1	6.11	113.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	937	A	N7-C8-N9	-6.11	110.75	113.80
1	N	1145	A	O5'-P-OP2	-6.11	100.20	105.70
1	N	127	G	O4'-C4'-C3'	-6.10	97.90	104.00
1	N	308	C	C5-C6-N1	6.10	124.05	121.00
1	N	101	A	C6-C5-N7	-6.10	128.03	132.30
1	N	150	U	N1-C2-N3	-6.10	111.24	114.90
1	N	766	A	C6-C5-N7	-6.10	128.03	132.30
1	N	811	C	N3-C4-C5	-6.10	119.46	121.90
1	N	831	A	N3-C4-C5	-6.10	122.53	126.80
1	N	845	A	N1-C6-N6	6.10	122.26	118.60
1	N	349	A	N1-C2-N3	6.10	132.35	129.30
1	N	465	A	C4'-C3'-C2'	-6.10	96.50	102.60
1	N	668	G	P-O5'-C5'	6.10	130.66	120.90
1	N	1193	G	C5-C6-N1	-6.10	108.45	111.50
1	N	1265	C	C5-C4-N4	-6.10	115.93	120.20
1	N	292	G	C4-C5-C6	6.10	122.46	118.80
1	N	545	C	N1-C2-N3	-6.10	114.93	119.20
1	N	562	U	N3-C4-O4	6.10	123.67	119.40
1	N	1138	G	P-O3'-C3'	6.10	127.02	119.70
1	N	1423	G	N9-C4-C5	-6.10	102.96	105.40
1	N	329	A	C5'-C4'-C3'	-6.10	106.25	116.00
1	N	575	G	C1'-O4'-C4'	6.10	114.78	109.90
1	N	197	A	C5-C6-N6	-6.09	118.82	123.70
1	N	728	A	C2-N3-C4	-6.09	107.55	110.60
1	N	1274	A	C3'-C2'-C1'	-6.09	96.62	101.50
1	N	1284	C	C3'-C2'-C1'	-6.09	96.62	101.50
1	N	1300	G	C6-C5-N7	-6.09	126.74	130.40
1	N	215	C	C2-N1-C1'	6.09	125.50	118.80
1	N	1102	A	C6-N1-C2	6.09	122.26	118.60
1	N	65	A	N9-C4-C5	6.09	108.24	105.80
1	N	86	G	C5-N7-C8	6.09	107.35	104.30
1	N	262	A	O4'-C1'-N9	6.09	113.07	108.20
1	N	388	G	C4-C5-C6	6.09	122.45	118.80
1	N	872	A	C2-N3-C4	-6.09	107.56	110.60
1	N	1026	G	OP2-P-O3'	6.09	118.60	105.20
1	N	80	A	C8-N9-C4	-6.09	103.36	105.80
1	N	320	A	C4-C5-C6	6.09	120.04	117.00
1	N	857	C	C4-C5-C6	-6.09	114.36	117.40
1	N	45	G	C6-C5-N7	-6.09	126.75	130.40
1	N	179	A	C5-C6-N6	-6.09	118.83	123.70
1	N	226	G	N3-C2-N2	6.09	124.16	119.90
1	N	812	G	N3-C4-C5	-6.09	125.56	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1292	G	N9-C1'-C2'	-6.09	105.30	112.00
1	N	1514	G	C5'-C4'-C3'	6.08	125.74	116.00
1	N	204	G	P-O5'-C5'	6.08	130.63	120.90
1	N	360	G	C3'-C2'-C1'	6.08	106.37	101.50
1	N	518	C	C6-N1-C1'	-6.08	113.50	120.80
1	N	532	A	C3'-C2'-C1'	-6.08	96.63	101.50
1	N	831	A	O4'-C1'-N9	6.08	113.07	108.20
1	N	1057	G	C6-N1-C2	-6.08	121.45	125.10
1	N	1194	U	C1'-O4'-C4'	-6.08	105.03	109.90
1	N	1309	G	C5-C6-N1	-6.08	108.46	111.50
1	N	1339	A	C4-C5-N7	-6.08	107.66	110.70
1	N	1374	A	N1-C2-N3	-6.08	126.26	129.30
1	N	126	G	C8-N9-C4	-6.08	103.97	106.40
1	N	500	G	N1-C6-O6	6.08	123.55	119.90
1	N	879	C	C5-C6-N1	6.08	124.04	121.00
1	N	1529	G	N1-C2-N2	6.08	121.67	116.20
1	N	318	G	P-O5'-C5'	-6.08	111.17	120.90
1	N	521	G	N3-C2-N2	6.08	124.16	119.90
1	N	616	G	C4'-C3'-C2'	-6.08	96.52	102.60
1	N	694	A	O4'-C4'-C3'	-6.08	97.92	104.00
1	N	1176	A	C5-N7-C8	6.08	106.94	103.90
1	N	1278	G	C2-N3-C4	6.08	114.94	111.90
1	N	154	U	C4-C5-C6	-6.08	116.06	119.70
1	N	524	G	P-O3'-C3'	6.08	126.99	119.70
1	N	673	A	N1-C2-N3	6.08	132.34	129.30
1	N	753	A	C4-C5-C6	6.08	120.04	117.00
1	N	656	G	OP2-P-O3'	6.07	118.56	105.20
1	N	818	G	P-O3'-C3'	6.07	126.99	119.70
1	N	894	G	C3'-C2'-C1'	-6.07	96.64	101.50
1	N	1152	A	C6-C5-N7	-6.07	128.05	132.30
1	N	298	A	C8-N9-C4	-6.07	103.37	105.80
1	N	1077	G	C5-C6-O6	-6.07	124.96	128.60
1	N	1446	A	N3-C4-C5	-6.07	122.55	126.80
1	N	273	U	N3-C2-O2	6.07	126.45	122.20
1	N	1468	A	P-O3'-C3'	6.07	126.98	119.70
1	N	724	G	N3-C2-N2	6.07	124.15	119.90
1	N	1106	G	N7-C8-N9	6.07	116.14	113.10
1	N	322	C	N1-C2-O2	6.07	122.54	118.90
1	N	495	A	C5-N7-C8	6.07	106.93	103.90
1	N	514	C	C6-N1-C2	-6.07	117.87	120.30
1	N	827	U	C4'-C3'-C2'	-6.07	96.53	102.60
1	N	1407	C	C5-C4-N4	-6.07	115.95	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1431	A	P-O3'-C3'	6.07	126.98	119.70
1	N	536	C	C5-C6-N1	-6.07	117.97	121.00
1	N	1315	U	O4'-C1'-N1	6.07	113.05	108.20
1	N	574	A	C5-C6-N6	-6.06	118.85	123.70
1	N	1291	U	C4-C5-C6	6.06	123.34	119.70
1	N	102	G	C5'-C4'-O4'	6.06	116.37	109.10
1	N	259	G	N3-C4-C5	6.06	131.63	128.60
1	N	858	G	N1-C6-O6	6.06	123.54	119.90
1	N	1417	G	N3-C4-N9	6.06	129.64	126.00
1	N	105	G	P-O3'-C3'	6.06	126.97	119.70
1	N	449	G	P-O3'-C3'	-6.06	112.43	119.70
1	N	479	U	C2-N1-C1'	6.06	124.97	117.70
1	N	1129	C	OP1-P-OP2	-6.06	110.51	119.60
1	N	1263	C	N1-C2-N3	6.06	123.44	119.20
1	N	500	G	N3-C2-N2	-6.06	115.66	119.90
1	N	263	A	C4-C5-C6	6.06	120.03	117.00
1	N	195	A	O4'-C1'-N9	6.05	113.04	108.20
1	N	438	U	N1-C2-O2	6.05	127.04	122.80
1	N	497	G	N9-C4-C5	-6.05	102.98	105.40
1	N	784	A	C5-N7-C8	6.05	106.93	103.90
1	N	918	A	C6-C5-N7	-6.05	128.06	132.30
1	N	126	G	N1-C2-N3	-6.05	120.27	123.90
1	N	627	G	N9-C4-C5	-6.05	102.98	105.40
1	N	915	A	C4-C5-C6	6.05	120.03	117.00
1	N	971	G	C6-N1-C2	-6.05	121.47	125.10
1	N	1168	U	O4'-C1'-N1	6.05	113.04	108.20
1	N	224	U	C2-N3-C4	-6.05	123.37	127.00
1	N	560	A	C4-C5-C6	6.05	120.03	117.00
1	N	648	A	C5-C6-N1	-6.05	114.67	117.70
1	N	1508	A	C5-N7-C8	6.05	106.93	103.90
1	N	1512	U	C5-C6-N1	-6.05	119.67	122.70
1	N	456	A	C5-C6-N6	-6.05	118.86	123.70
1	N	920	U	C5-C4-O4	-6.05	122.27	125.90
1	N	1161	C	C6-N1-C2	6.05	122.72	120.30
1	N	1226	C	C5-C6-N1	6.05	124.03	121.00
1	N	1321	U	P-O5'-C5'	6.05	130.58	120.90
1	N	455	G	N3-C2-N2	6.05	124.13	119.90
1	N	759	A	O5'-C5'-C4'	-6.05	100.21	111.70
1	N	1289	A	O4'-C1'-N9	6.05	113.04	108.20
1	N	1495	U	N1-C2-O2	6.05	127.03	122.80
1	N	187	G	C5-C6-O6	-6.04	124.97	128.60
1	N	107	G	C8-N9-C4	6.04	108.82	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1203	C	N3-C2-O2	6.04	126.13	121.90
1	N	1433	A	O4'-C1'-N9	6.04	113.03	108.20
1	N	441	A	C4-C5-C6	6.04	120.02	117.00
1	N	254	G	C8-N9-C1'	6.04	134.85	127.00
1	N	528	C	C6-N1-C2	6.04	122.72	120.30
1	N	1003	G	C6-C5-N7	-6.04	126.78	130.40
1	N	1115	U	O4'-C1'-N1	6.04	113.03	108.20
1	N	1278	G	O4'-C1'-N9	6.04	113.03	108.20
1	N	69	G	N9-C4-C5	-6.04	102.98	105.40
1	N	416	G	N3-C2-N2	6.04	124.13	119.90
1	N	471	U	C5-C6-N1	6.04	125.72	122.70
1	N	646	G	N3-C4-C5	6.04	131.62	128.60
1	N	776	G	N1-C2-N3	-6.04	120.28	123.90
1	N	1059	C	N3-C2-O2	6.04	126.13	121.90
1	N	1214	C	P-O3'-C3'	-6.04	112.45	119.70
1	N	1236	A	C1'-O4'-C4'	6.04	114.73	109.90
1	N	1227	A	C4-N9-C1'	6.04	137.17	126.30
1	N	26	A	N3-C4-N9	6.04	132.23	127.40
1	N	248	C	O5'-P-OP2	-6.04	100.27	105.70
1	N	741	G	N3-C4-C5	6.04	131.62	128.60
1	N	64	G	C5-N7-C8	-6.03	101.28	104.30
1	N	325	A	C4-C5-C6	6.03	120.02	117.00
1	N	349	A	C2-N3-C4	-6.03	107.58	110.60
1	N	499	A	N3-C4-C5	-6.03	122.58	126.80
1	N	638	U	C5-C6-N1	6.03	125.72	122.70
1	N	839	C	C5-C4-N4	-6.03	115.98	120.20
1	N	840	C	N3-C4-C5	-6.03	119.49	121.90
1	N	1350	A	C5-C6-N6	-6.03	118.87	123.70
1	N	73	C	O4'-C1'-C2'	-6.03	99.77	105.80
1	N	498	A	C5-N7-C8	6.03	106.92	103.90
1	N	751	U	C4'-C3'-C2'	-6.03	96.57	102.60
1	N	228	A	C8-N9-C4	-6.03	103.39	105.80
1	N	233	C	N3-C2-O2	-6.03	117.68	121.90
1	N	334	C	O5'-C5'-C4'	-6.03	100.25	111.70
1	N	643	C	C5'-C4'-O4'	6.03	116.33	109.10
1	N	1368	A	C4'-C3'-C2'	-6.03	96.57	102.60
1	N	5	U	N3-C2-O2	6.03	126.42	122.20
1	N	171	A	C4-C5-C6	6.03	120.01	117.00
1	N	255	G	C4-C5-C6	6.03	122.42	118.80
1	N	1129	C	N1-C2-O2	-6.03	115.28	118.90
1	N	1530	G	N9-C4-C5	-6.03	102.99	105.40
1	N	481	G	C5-C6-O6	6.03	132.22	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1474	U	C3'-C2'-C1'	6.03	106.32	101.50
1	N	566	G	C4'-C3'-C2'	6.02	108.62	102.60
1	N	1219	A	N1-C6-N6	6.02	122.22	118.60
1	N	1526	G	C4-C5-C6	6.02	122.41	118.80
1	N	221	C	C4-C5-C6	6.02	120.41	117.40
1	N	224	U	C4'-C3'-C2'	-6.02	96.58	102.60
1	N	610	U	C6-N1-C2	6.02	124.61	121.00
1	N	636	U	N3-C2-O2	6.02	126.42	122.20
1	N	932	C	C5'-C4'-C3'	-6.02	106.36	116.00
1	N	748	G	C6-C5-N7	-6.02	126.79	130.40
1	N	130	A	C4-C5-C6	-6.02	113.99	117.00
1	N	148	G	N9-C4-C5	-6.02	102.99	105.40
1	N	542	G	N1-C2-N3	-6.02	120.29	123.90
1	N	558	G	N3-C2-N2	6.02	124.11	119.90
1	N	813	U	C4'-C3'-C2'	6.02	108.62	102.60
1	N	1213	A	C4-C5-C6	6.02	120.01	117.00
1	N	5	U	C6-N1-C2	-6.02	117.39	121.00
1	N	81	A	C2-N3-C4	6.02	113.61	110.60
1	N	191	G	C5-C6-N1	-6.02	108.49	111.50
1	N	635	A	C3'-C2'-C1'	-6.02	96.69	101.50
1	N	778	G	C5'-C4'-O4'	6.02	116.32	109.10
1	N	1038	C	O4'-C1'-N1	6.02	113.02	108.20
1	N	1182	G	C5-C6-O6	-6.02	124.99	128.60
1	N	501	C	C2-N3-C4	-6.02	116.89	119.90
1	N	586	C	C2'-C3'-O3'	6.02	123.33	113.70
1	N	603	U	C4'-C3'-C2'	-6.02	96.58	102.60
1	N	719	C	N1-C1'-C2'	-6.02	105.38	112.00
1	N	804	U	P-O3'-C3'	-6.02	112.48	119.70
1	N	1082	A	O4'-C1'-N9	6.02	113.01	108.20
1	N	32	A	C6-C5-N7	-6.01	128.09	132.30
1	N	153	C	N1-C2-N3	-6.01	114.99	119.20
1	N	171	A	C6-C5-N7	-6.01	128.09	132.30
1	N	386	C	C5'-C4'-C3'	-6.01	106.38	116.00
1	N	1112	C	C4-C5-C6	6.01	120.41	117.40
1	N	1519	A	O4'-C4'-C3'	-6.01	97.99	104.00
1	N	509	A	C6-N1-C2	6.01	122.21	118.60
1	N	711	G	C4'-C3'-C2'	-6.01	96.59	102.60
1	N	1074	G	C5-C6-N1	-6.01	108.49	111.50
1	N	1332	A	C2-N3-C4	6.01	113.61	110.60
1	N	1468	A	N3-C4-N9	6.01	132.21	127.40
1	N	64	G	C3'-C2'-C1'	6.01	106.31	101.50
1	N	107	G	C5-C6-O6	6.01	132.21	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	702	A	N3-C4-C5	-6.01	122.59	126.80
1	N	1092	A	C6-C5-N7	-6.01	128.09	132.30
1	N	702	A	O4'-C1'-N9	6.01	113.01	108.20
1	N	938	A	P-O3'-C3'	-6.01	112.49	119.70
1	N	1301	U	C5-C6-N1	6.01	125.70	122.70
1	N	903	G	O4'-C1'-N9	6.01	113.00	108.20
1	N	904	U	O4'-C1'-N1	6.01	113.00	108.20
1	N	1101	A	N9-C4-C5	-6.00	103.40	105.80
1	N	300	A	C5-C6-N1	-6.00	114.70	117.70
1	N	627	G	C3'-C2'-C1'	-6.00	96.70	101.50
1	N	1513	A	N1-C2-N3	6.00	132.30	129.30
1	N	162	A	N1-C6-N6	6.00	122.20	118.60
1	N	960	U	C5-C4-O4	-6.00	122.30	125.90
1	N	1175	G	O4'-C1'-N9	6.00	113.00	108.20
1	N	1392	G	N3-C2-N2	6.00	124.10	119.90
1	N	154	U	P-O3'-C3'	-6.00	112.50	119.70
1	N	72	A	C8-N9-C4	6.00	108.20	105.80
1	N	1361	G	C6-N1-C2	6.00	128.70	125.10
1	N	468	A	N9-C4-C5	6.00	108.20	105.80
1	N	966	G	C6-N1-C2	6.00	128.70	125.10
1	N	1266	G	N3-C4-N9	-6.00	122.40	126.00
1	N	1297	G	C5-C6-O6	-6.00	125.00	128.60
1	N	1440	U	C5-C6-N1	-6.00	119.70	122.70
1	N	1483	A	N1-C2-N3	6.00	132.30	129.30
1	N	57	G	C4-C5-N7	6.00	113.20	110.80
1	N	1042	A	C5-C6-N1	-6.00	114.70	117.70
1	N	558	G	P-O3'-C3'	5.99	126.89	119.70
1	N	669	G	O5'-C5'-C4'	-5.99	100.31	111.70
1	N	742	G	C8-N9-C4	5.99	108.80	106.40
1	N	774	G	C3'-C2'-C1'	5.99	106.29	101.50
1	N	1000	A	C5-C6-N1	-5.99	114.70	117.70
1	N	1486	G	N7-C8-N9	-5.99	110.10	113.10
1	N	53	A	C6-C5-N7	-5.99	128.10	132.30
1	N	580	C	N3-C4-N4	5.99	122.19	118.00
1	N	989	U	C2-N1-C1'	5.99	124.89	117.70
1	N	1367	C	P-O5'-C5'	5.99	130.49	120.90
1	N	1434	A	C5-C6-N1	-5.99	114.70	117.70
1	N	350	G	N7-C8-N9	-5.99	110.11	113.10
1	N	693	G	N3-C2-N2	5.99	124.09	119.90
1	N	998	C	C6-N1-C1'	-5.99	113.61	120.80
1	N	1348	U	N3-C4-C5	-5.99	111.01	114.60
1	N	169	C	C6-N1-C2	-5.99	117.90	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	354	G	C6-C5-N7	-5.99	126.81	130.40
1	N	563	A	C8-N9-C4	-5.99	103.41	105.80
1	N	736	C	C2-N3-C4	5.99	122.89	119.90
1	N	1151	A	C5-C6-N6	-5.99	118.91	123.70
1	N	43	C	C5-C4-N4	-5.99	116.01	120.20
1	N	158	G	C1'-O4'-C4'	5.99	114.69	109.90
1	N	191	G	N9-C4-C5	-5.99	103.01	105.40
1	N	221	C	O4'-C1'-N1	5.99	112.99	108.20
1	N	671	G	P-O3'-C3'	-5.99	112.52	119.70
1	N	784	A	C2-N3-C4	5.99	113.59	110.60
1	N	854	U	C6-N1-C2	5.99	124.59	121.00
1	N	919	A	O4'-C1'-N9	5.99	112.99	108.20
1	N	1000	A	C5-C6-N6	-5.99	118.91	123.70
1	N	1258	G	C6-C5-N7	-5.99	126.81	130.40
1	N	449	G	C1'-O4'-C4'	5.98	114.69	109.90
1	N	961	U	C6-N1-C2	-5.98	117.41	121.00
1	N	166	U	C5-C6-N1	5.98	125.69	122.70
1	N	269	C	N3-C4-C5	-5.98	119.51	121.90
1	N	702	A	C5-N7-C8	5.98	106.89	103.90
1	N	283	U	C5-C4-O4	-5.98	122.31	125.90
1	N	572	A	C6-C5-N7	-5.98	128.11	132.30
1	N	636	U	C4'-C3'-C2'	-5.98	96.62	102.60
1	N	1016	A	N7-C8-N9	-5.98	110.81	113.80
1	N	1057	G	N3-C4-N9	5.98	129.59	126.00
1	N	1246	A	C5-C6-N1	-5.98	114.71	117.70
1	N	729	A	O4'-C1'-N9	5.98	112.98	108.20
1	N	1340	A	C5'-C4'-C3'	-5.98	106.43	116.00
1	N	724	G	C6-C5-N7	-5.98	126.81	130.40
1	N	1233	G	N7-C8-N9	-5.98	110.11	113.10
1	N	1028	C	N3-C2-O2	5.98	126.08	121.90
1	N	1427	C	N3-C2-O2	5.98	126.08	121.90
1	N	346	G	C5'-C4'-C3'	-5.97	106.44	116.00
1	N	744	C	C5-C6-N1	5.97	123.99	121.00
1	N	1069	C	C4-C5-C6	5.97	120.39	117.40
1	N	1400	C	N1-C2-N3	-5.97	115.02	119.20
1	N	1470	U	C5-C4-O4	5.97	129.49	125.90
1	N	1059	C	C6-N1-C2	5.97	122.69	120.30
1	N	1183	U	P-O3'-C3'	-5.97	112.53	119.70
1	N	903	G	C4'-C3'-C2'	5.97	108.57	102.60
1	N	1446	A	C4-C5-N7	-5.97	107.71	110.70
1	N	482	A	C4-C5-N7	-5.97	107.72	110.70
1	N	602	A	N1-C6-N6	5.97	122.18	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	662	U	C5-C4-O4	-5.97	122.32	125.90
1	N	891	U	P-O3'-C3'	-5.97	112.54	119.70
1	N	1157	A	C4-C5-N7	5.97	113.69	110.70
1	N	1189	U	O5'-P-OP2	-5.97	100.33	105.70
1	N	1258	G	C8-N9-C4	-5.97	104.01	106.40
1	N	507	C	C3'-C2'-C1'	-5.97	96.73	101.50
1	N	213	G	C5-N7-C8	-5.96	101.32	104.30
1	N	1351	U	O4'-C4'-C3'	-5.96	98.04	104.00
1	N	1506	U	C1'-O4'-C4'	5.96	114.67	109.90
1	N	297	G	C5-N7-C8	5.96	107.28	104.30
1	N	1039	G	N7-C8-N9	5.96	116.08	113.10
1	N	1144	G	P-O5'-C5'	5.96	130.44	120.90
1	N	228	A	C4-C5-C6	5.96	119.98	117.00
1	N	829	G	P-O3'-C3'	-5.96	112.55	119.70
1	N	873	A	O5'-C5'-C4'	5.96	123.03	111.70
1	N	902	G	P-O5'-C5'	5.96	130.44	120.90
1	N	1010	U	C4-C5-C6	-5.96	116.12	119.70
1	N	1081	A	N1-C2-N3	5.96	132.28	129.30
1	N	1345	U	O5'-P-OP1	5.96	117.85	110.70
1	N	144	G	C4'-C3'-C2'	-5.96	96.64	102.60
1	N	565	U	N3-C4-C5	-5.96	111.02	114.60
1	N	599	C	C6-N1-C1'	5.96	127.95	120.80
1	N	769	G	C4-C5-C6	5.96	122.38	118.80
1	N	819	A	N7-C8-N9	5.96	116.78	113.80
1	N	1143	G	N9-C4-C5	-5.96	103.02	105.40
1	N	1223	C	C6-N1-C1'	-5.96	113.65	120.80
1	N	1305	G	N3-C4-C5	5.96	131.58	128.60
1	N	1351	U	C5'-C4'-O4'	5.96	116.25	109.10
1	N	805	C	P-O5'-C5'	5.96	130.43	120.90
1	N	852	G	C6-C5-N7	-5.96	126.83	130.40
1	N	1013	G	C6-N1-C2	5.96	128.68	125.10
1	N	299	G	C8-N9-C4	-5.96	104.02	106.40
1	N	409	U	N1-C2-O2	-5.96	118.63	122.80
1	N	1048	G	C6-C5-N7	-5.96	126.83	130.40
1	N	1108	G	N7-C8-N9	5.96	116.08	113.10
1	N	1279	G	N1-C2-N3	-5.96	120.33	123.90
1	N	1376	U	O4'-C1'-N1	5.96	112.96	108.20
1	N	701	U	C5-C6-N1	5.95	125.68	122.70
1	N	918	A	P-O5'-C5'	5.95	130.43	120.90
1	N	1015	G	C5-C6-N1	-5.95	108.52	111.50
1	N	1202	U	C6-N1-C2	5.95	124.57	121.00
1	N	675	A	C8-N9-C4	-5.95	103.42	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	746	A	C2-N3-C4	5.95	113.58	110.60
1	N	801	U	C4'-C3'-C2'	-5.95	96.65	102.60
1	N	1336	C	N3-C4-N4	5.95	122.17	118.00
1	N	1160	G	N1-C6-O6	5.95	123.47	119.90
1	N	1326	U	P-O3'-C3'	-5.95	112.56	119.70
1	N	133	U	N1-C2-N3	-5.95	111.33	114.90
1	N	268	U	P-O3'-C3'	5.95	126.84	119.70
1	N	1240	U	O4'-C1'-C2'	-5.95	99.85	105.80
1	N	1279	G	O4'-C1'-N9	5.95	112.96	108.20
1	N	1326	U	C2-N3-C4	5.95	130.57	127.00
1	N	1433	A	N1-C2-N3	5.95	132.27	129.30
1	N	572	A	C5-N7-C8	5.95	106.87	103.90
1	N	791	G	C5'-C4'-O4'	5.95	116.24	109.10
1	N	854	U	C5-C4-O4	-5.95	122.33	125.90
1	N	295	C	C6-N1-C1'	-5.95	113.66	120.80
1	N	672	U	C5'-C4'-O4'	5.95	116.23	109.10
1	N	1092	A	C8-N9-C4	-5.95	103.42	105.80
1	N	146	G	C5-C6-O6	-5.94	125.03	128.60
1	N	242	G	C5-C6-N1	-5.94	108.53	111.50
1	N	341	C	C5-C4-N4	-5.94	116.04	120.20
1	N	401	C	C6-N1-C2	-5.94	117.92	120.30
1	N	1498	U	O4'-C1'-N1	5.94	112.95	108.20
1	N	119	A	C4-C5-N7	-5.94	107.73	110.70
1	N	340	U	P-O5'-C5'	5.94	130.41	120.90
1	N	584	G	N9-C4-C5	-5.94	103.02	105.40
1	N	1233	G	O4'-C1'-N9	5.94	112.95	108.20
1	N	54	C	N3-C2-O2	5.94	126.06	121.90
1	N	877	G	C6-N1-C2	-5.94	121.54	125.10
1	N	79	G	C5-N7-C8	5.94	107.27	104.30
1	N	79	G	N9-C4-C5	-5.94	103.03	105.40
1	N	178	C	C5-C6-N1	5.94	123.97	121.00
1	N	705	G	C8-N9-C4	-5.94	104.03	106.40
1	N	1087	G	C4-C5-C6	5.94	122.36	118.80
1	N	1517	G	N1-C2-N2	-5.94	110.86	116.20
1	N	389	A	C5-C6-N1	-5.94	114.73	117.70
1	N	1023	U	N3-C4-O4	5.94	123.56	119.40
1	N	151	A	N3-C4-C5	-5.93	122.65	126.80
1	N	598	U	P-O5'-C5'	5.93	130.40	120.90
1	N	629	A	C5-C6-N6	-5.93	118.95	123.70
1	N	1438	G	C4'-C3'-C2'	-5.93	96.67	102.60
1	N	450	G	C2'-C3'-O3'	5.93	123.19	113.70
1	N	542	G	P-O3'-C3'	-5.93	112.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1031	C	C2-N3-C4	5.93	122.87	119.90
1	N	1261	A	C5'-C4'-C3'	5.93	125.49	116.00
1	N	166	U	N1-C2-O2	-5.93	118.65	122.80
1	N	376	G	C6-C5-N7	-5.93	126.84	130.40
1	N	986	U	C6-N1-C2	-5.93	117.44	121.00
1	N	14	U	C3'-C2'-C1'	5.93	106.24	101.50
1	N	617	G	N1-C6-O6	5.93	123.46	119.90
1	N	651	C	N3-C2-O2	5.93	126.05	121.90
1	N	1000	A	C6-C5-N7	-5.93	128.15	132.30
1	N	1322	C	N1-C2-N3	-5.93	115.05	119.20
1	N	1351	U	C1'-O4'-C4'	5.93	114.64	109.90
1	N	693	G	N3-C4-N9	5.93	129.56	126.00
1	N	1431	A	O4'-C1'-N9	5.93	112.94	108.20
1	N	30	U	O4'-C1'-C2'	5.93	112.93	107.60
1	N	651	C	C2-N1-C1'	5.93	125.32	118.80
1	N	679	C	N3-C4-N4	5.93	122.15	118.00
1	N	1131	G	N1-C2-N3	-5.93	120.34	123.90
1	N	1143	G	C4-C5-N7	5.93	113.17	110.80
1	N	1490	U	C5'-C4'-O4'	5.93	116.21	109.10
1	N	895	G	C4'-C3'-C2'	-5.92	96.67	102.60
1	N	961	U	C5-C6-N1	5.92	125.66	122.70
1	N	1302	C	C6-N1-C2	-5.92	117.93	120.30
1	N	1368	A	C6-C5-N7	-5.92	128.15	132.30
1	N	218	U	N3-C4-O4	5.92	123.55	119.40
1	N	1443	C	C6-N1-C2	-5.92	117.93	120.30
1	N	136	C	C4'-C3'-C2'	-5.92	96.68	102.60
1	N	534	U	O4'-C1'-N1	5.92	112.94	108.20
1	N	565	U	P-O5'-C5'	-5.92	111.43	120.90
1	N	1007	U	C6-N1-C2	-5.92	117.45	121.00
1	N	1061	G	C4-C5-C6	5.92	122.35	118.80
1	N	1170	A	C5'-C4'-C3'	5.92	125.47	116.00
1	N	1290	G	N3-C2-N2	-5.92	115.75	119.90
1	N	135	C	P-O3'-C3'	-5.92	112.60	119.70
1	N	370	C	O3'-P-O5'	-5.92	92.75	104.00
1	N	466	A	C8-N9-C4	5.92	108.17	105.80
1	N	646	G	N1-C2-N3	-5.92	120.35	123.90
1	N	1219	A	C4'-C3'-C2'	-5.92	96.68	102.60
1	N	1403	C	C2-N1-C1'	5.92	125.31	118.80
1	N	187	G	C4-C5-C6	5.92	122.35	118.80
1	N	300	A	N3-C4-C5	-5.92	122.66	126.80
1	N	704	A	C6-C5-N7	-5.92	128.16	132.30
1	N	1309	G	N9-C1'-C2'	-5.92	105.49	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	154	U	N3-C2-O2	5.92	126.34	122.20
1	N	730	G	C6-N1-C2	-5.92	121.55	125.10
1	N	934	C	C3'-C2'-C1'	5.92	106.23	101.50
1	N	1274	A	C4-C5-N7	-5.92	107.74	110.70
1	N	1269	A	C5'-C4'-C3'	5.91	125.46	116.00
1	N	1353	G	O4'-C1'-N9	5.91	112.93	108.20
1	N	651	C	N1-C2-O2	-5.91	115.35	118.90
1	N	1444	U	C2-N1-C1'	5.91	124.80	117.70
1	N	763	G	N3-C4-C5	5.91	131.56	128.60
1	N	771	G	O3'-P-O5'	-5.91	92.77	104.00
1	N	915	A	N1-C2-N3	5.91	132.25	129.30
1	N	1247	U	C6-N1-C2	5.91	124.55	121.00
1	N	1494	G	P-O5'-C5'	5.91	130.36	120.90
1	N	116	A	C5-C6-N1	-5.91	114.75	117.70
1	N	358	U	P-O5'-C5'	5.91	130.35	120.90
1	N	888	G	N3-C2-N2	5.91	124.04	119.90
1	N	1515	G	C5'-C4'-C3'	5.91	125.45	116.00
1	N	1014	A	O4'-C1'-N9	5.91	112.92	108.20
1	N	1044	A	N9-C4-C5	5.91	108.16	105.80
1	N	1524	C	N3-C4-C5	-5.91	119.54	121.90
1	N	147	G	C5-C6-O6	-5.91	125.06	128.60
1	N	549	C	C5-C6-N1	-5.91	118.05	121.00
1	N	786	G	C6-C5-N7	-5.91	126.86	130.40
1	N	1085	U	C5-C4-O4	5.91	129.44	125.90
1	N	1128	C	C6-N1-C2	-5.91	117.94	120.30
1	N	1252	A	P-O3'-C3'	-5.91	112.61	119.70
1	N	1462	C	N3-C4-N4	5.91	122.13	118.00
1	N	59	A	C4-C5-N7	-5.90	107.75	110.70
1	N	89	U	O4'-C1'-N1	5.90	112.92	108.20
1	N	232	G	N1-C2-N3	-5.90	120.36	123.90
1	N	671	G	O4'-C1'-N9	5.90	112.92	108.20
1	N	925	G	C6-N1-C2	5.90	128.64	125.10
1	N	1003	G	C2-N3-C4	5.90	114.85	111.90
1	N	1011	C	P-O3'-C3'	-5.90	112.62	119.70
1	N	142	G	C5-C6-O6	-5.90	125.06	128.60
1	N	226	G	N3-C4-C5	-5.90	125.65	128.60
1	N	499	A	N3-C4-N9	5.90	132.12	127.40
1	N	698	G	C4-C5-C6	5.90	122.34	118.80
1	N	760	G	C8-N9-C4	-5.90	104.04	106.40
1	N	773	G	N7-C8-N9	-5.90	110.15	113.10
1	N	1146	A	C5'-C4'-C3'	5.90	125.44	116.00
1	N	254	G	O5'-C5'-C4'	-5.90	100.50	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	828	U	C5'-C4'-C3'	5.90	125.44	116.00
1	N	891	U	C4-C5-C6	5.90	123.24	119.70
1	N	1230	C	C2-N3-C4	5.90	122.85	119.90
1	N	1407	C	P-O5'-C5'	5.90	130.34	120.90
1	N	1162	C	C2-N1-C1'	5.90	125.29	118.80
1	N	40	C	C2-N3-C4	-5.89	116.95	119.90
1	N	982	U	P-O5'-C5'	5.89	130.33	120.90
1	N	209	U	N3-C2-O2	5.89	126.33	122.20
1	N	449	G	N3-C2-N2	5.89	124.02	119.90
1	N	1108	G	N9-C4-C5	-5.89	103.04	105.40
1	N	336	A	C2-N3-C4	5.89	113.55	110.60
1	N	1533	C	O4'-C1'-C2'	-5.89	99.91	105.80
1	N	16	A	C2-N3-C4	-5.89	107.66	110.60
1	N	207	C	C1'-O4'-C4'	5.89	114.61	109.90
1	N	687	A	N1-C2-N3	-5.89	126.36	129.30
1	N	715	A	C8-N9-C4	5.89	108.16	105.80
1	N	1046	A	N1-C2-N3	-5.89	126.36	129.30
1	N	1227	A	C8-N9-C1'	-5.89	117.10	127.70
1	N	838	G	C8-N9-C4	-5.89	104.05	106.40
1	N	846	G	C6-C5-N7	-5.89	126.87	130.40
1	N	1400	C	N3-C4-C5	-5.89	119.55	121.90
1	N	65	A	C8-N9-C4	5.88	108.15	105.80
1	N	168	G	C3'-C2'-C1'	-5.88	96.79	101.50
1	N	225	C	P-O5'-C5'	5.88	130.31	120.90
1	N	390	U	C2-N3-C4	5.88	130.53	127.00
1	N	537	G	C5-C6-N1	5.88	114.44	111.50
1	N	594	U	P-O3'-C3'	5.88	126.76	119.70
1	N	1098	C	C3'-C2'-C1'	5.88	106.21	101.50
1	N	578	C	N3-C4-N4	5.88	122.12	118.00
1	N	1533	C	C5-C4-N4	-5.88	116.08	120.20
1	N	63	C	C3'-C2'-C1'	5.88	106.20	101.50
1	N	240	G	C4-C5-C6	5.88	122.33	118.80
1	N	347	G	N3-C2-N2	5.88	124.02	119.90
1	N	386	C	N3-C4-N4	5.88	122.12	118.00
1	N	679	C	C2-N3-C4	5.88	122.84	119.90
1	N	824	G	C5'-C4'-O4'	5.88	116.16	109.10
1	N	836	G	N3-C2-N2	5.88	124.02	119.90
1	N	1272	G	N3-C2-N2	-5.88	115.78	119.90
1	N	1310	G	C4-C5-C6	5.88	122.33	118.80
1	N	51	A	P-O3'-C3'	5.88	126.76	119.70
1	N	498	A	N1-C2-N3	5.88	132.24	129.30
1	N	724	G	N9-C1'-C2'	-5.88	105.53	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1343	G	N7-C8-N9	5.88	116.04	113.10
1	N	1501	C	C4-C5-C6	5.88	120.34	117.40
1	N	690	G	P-O5'-C5'	5.88	130.30	120.90
1	N	694	A	C5-C6-N6	-5.88	119.00	123.70
1	N	729	A	C1'-O4'-C4'	-5.88	105.20	109.90
1	N	1005	A	C5-C6-N6	-5.88	119.00	123.70
1	N	1234	C	C2-N1-C1'	5.88	125.27	118.80
1	N	304	U	C5-C6-N1	5.88	125.64	122.70
1	N	340	U	O4'-C1'-N1	5.88	112.90	108.20
1	N	704	A	N9-C4-C5	-5.88	103.45	105.80
1	N	716	A	C3'-C2'-C1'	5.88	106.20	101.50
1	N	837	U	N3-C4-O4	5.88	123.51	119.40
1	N	899	C	C2-N3-C4	-5.88	116.96	119.90
1	N	1241	G	O4'-C4'-C3'	5.88	110.80	106.10
1	N	1372	U	C5-C4-O4	-5.88	122.37	125.90
1	N	1531	A	P-O5'-C5'	5.88	130.30	120.90
1	N	23	C	C4-C5-C6	5.88	120.34	117.40
1	N	146	G	C4-C5-C6	5.88	122.33	118.80
1	N	380	G	C5-C6-N1	-5.88	108.56	111.50
1	N	94	G	N1-C2-N3	-5.87	120.38	123.90
1	N	346	G	P-O3'-C3'	5.87	126.75	119.70
1	N	682	G	N3-C4-C5	-5.87	125.66	128.60
1	N	1243	C	O4'-C1'-N1	5.87	112.90	108.20
1	N	1475	G	P-O5'-C5'	-5.87	111.50	120.90
1	N	75	G	C1'-O4'-C4'	-5.87	105.20	109.90
1	N	191	G	C4'-C3'-C2'	-5.87	96.73	102.60
1	N	987	G	C3'-C2'-C1'	-5.87	96.80	101.50
1	N	1136	C	O4'-C1'-N1	5.87	112.90	108.20
1	N	1179	A	C4-C5-N7	-5.87	107.76	110.70
1	N	29	U	N3-C2-O2	5.87	126.31	122.20
1	N	704	A	N7-C8-N9	-5.87	110.87	113.80
1	N	822	U	C5-C6-N1	5.87	125.63	122.70
1	N	1054	C	P-O3'-C3'	-5.87	112.66	119.70
1	N	1491	G	P-O5'-C5'	5.87	130.29	120.90
1	N	1061	G	N1-C6-O6	5.87	123.42	119.90
1	N	241	G	C6-N1-C2	5.87	128.62	125.10
1	N	1334	G	C6-C5-N7	-5.87	126.88	130.40
1	N	591	U	N3-C2-O2	5.86	126.30	122.20
1	N	347	G	C5-C6-N1	-5.86	108.57	111.50
1	N	973	G	C4-C5-N7	5.86	113.14	110.80
1	N	1202	U	C4'-C3'-C2'	-5.86	96.74	102.60
1	N	505	G	O4'-C4'-C3'	-5.86	98.14	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1340	A	C8-N9-C4	-5.86	103.46	105.80
1	N	1215	G	N3-C4-N9	5.86	129.51	126.00
1	N	1222	G	C5-C6-N1	-5.86	108.57	111.50
1	N	264	C	O4'-C1'-N1	5.86	112.89	108.20
1	N	614	C	C1'-O4'-C4'	5.86	114.59	109.90
1	N	827	U	C6-N1-C2	-5.86	117.49	121.00
1	N	1217	C	C5'-C4'-O4'	5.86	116.13	109.10
1	N	1329	A	C4-C5-C6	5.86	119.93	117.00
1	N	1531	A	C5-C6-N6	-5.86	119.01	123.70
1	N	82	G	C8-N9-C4	-5.86	104.06	106.40
1	N	351	G	C2-N3-C4	5.86	114.83	111.90
1	N	753	A	P-O3'-C3'	5.86	126.73	119.70
1	N	826	C	N3-C2-O2	-5.86	117.80	121.90
1	N	874	G	N1-C2-N3	5.86	127.41	123.90
1	N	983	A	C4-C5-C6	5.86	119.93	117.00
1	N	1048	G	C4-C5-C6	5.86	122.31	118.80
1	N	276	G	C5-C6-O6	-5.85	125.09	128.60
1	N	419	C	C2-N3-C4	-5.85	116.97	119.90
1	N	493	A	C2-N3-C4	-5.85	107.67	110.60
1	N	879	C	C2-N3-C4	5.85	122.83	119.90
1	N	1042	A	O4'-C4'-C3'	-5.85	98.15	104.00
1	N	272	C	C5-C6-N1	5.85	123.93	121.00
1	N	535	A	P-O5'-C5'	5.85	130.26	120.90
1	N	597	G	N3-C2-N2	5.85	124.00	119.90
1	N	784	A	N9-C4-C5	5.85	108.14	105.80
1	N	1030	U	N3-C4-C5	-5.85	111.09	114.60
1	N	1166	G	N7-C8-N9	5.85	116.03	113.10
1	N	1434	A	C2'-C3'-O3'	5.85	123.06	113.70
1	N	1088	G	N1-C2-N3	-5.85	120.39	123.90
1	N	185	U	C5'-C4'-O4'	5.85	116.12	109.10
1	N	874	G	C6-N1-C2	-5.85	121.59	125.10
1	N	945	G	N1-C2-N2	-5.85	110.94	116.20
1	N	1047	G	P-O3'-C3'	5.85	126.72	119.70
1	N	1122	U	N1-C2-O2	-5.85	118.71	122.80
1	N	880	C	C6-N1-C2	-5.85	117.96	120.30
1	N	359	G	C5-C6-O6	-5.85	125.09	128.60
1	N	756	C	O4'-C4'-C3'	-5.85	98.15	104.00
1	N	857	C	C2'-C3'-O3'	5.85	123.05	113.70
1	N	1159	U	C5-C4-O4	-5.85	122.39	125.90
1	N	1418	A	C5'-C4'-C3'	5.85	125.35	116.00
1	N	122	G	N3-C2-N2	5.84	123.99	119.90
1	N	197	A	N7-C8-N9	-5.84	110.88	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	283	U	N1-C2-N3	-5.84	111.39	114.90
1	N	441	A	C5'-C4'-O4'	5.84	116.11	109.10
1	N	599	C	N3-C4-N4	5.84	122.09	118.00
1	N	835	U	OP1-P-OP2	-5.84	110.83	119.60
1	N	950	U	C2-N1-C1'	5.84	124.71	117.70
1	N	1046	A	C4'-C3'-C2'	-5.84	96.76	102.60
1	N	415	A	N9-C1'-C2'	-5.84	105.57	112.00
1	N	1326	U	C6-N1-C2	-5.84	117.49	121.00
1	N	1485	U	P-O5'-C5'	5.84	130.25	120.90
1	N	453	G	C6-C5-N7	-5.84	126.89	130.40
1	N	601	G	C4-C5-C6	5.84	122.31	118.80
1	N	822	U	P-O3'-C3'	5.84	126.71	119.70
1	N	863	U	N1-C2-O2	-5.84	118.71	122.80
1	N	1260	G	N9-C4-C5	-5.84	103.06	105.40
1	N	496	A	C5-C6-N1	-5.84	114.78	117.70
1	N	611	C	C5-C4-N4	-5.84	116.11	120.20
1	N	1096	C	C6-N1-C2	5.84	122.64	120.30
1	N	1433	A	P-O5'-C5'	5.84	130.24	120.90
1	N	1006	G	O4'-C4'-C3'	-5.84	98.16	104.00
1	N	428	G	C4'-C3'-C2'	5.84	108.44	102.60
1	N	553	A	N7-C8-N9	5.84	116.72	113.80
1	N	1489	G	O4'-C4'-C3'	-5.84	98.16	104.00
1	N	816	A	C5-C6-N1	-5.83	114.78	117.70
1	N	929	G	C5-N7-C8	5.83	107.22	104.30
1	N	1115	U	N3-C4-C5	-5.83	111.10	114.60
1	N	109	A	OP1-P-OP2	-5.83	110.85	119.60
1	N	392	C	C5-C6-N1	5.83	123.92	121.00
1	N	481	G	N1-C2-N2	-5.83	110.95	116.20
1	N	583	A	C4-C5-N7	-5.83	107.78	110.70
1	N	1035	A	C5-N7-C8	5.83	106.82	103.90
1	N	1200	C	N3-C4-N4	5.83	122.08	118.00
1	N	62	U	N3-C4-O4	5.83	123.48	119.40
1	N	817	C	C5'-C4'-O4'	5.83	116.10	109.10
1	N	939	G	O4'-C1'-N9	5.83	112.86	108.20
1	N	1032	G	C8-N9-C1'	-5.83	119.42	127.00
1	N	799	G	N3-C4-C5	5.83	131.51	128.60
1	N	1142	G	C6-N1-C2	5.83	128.60	125.10
1	N	1203	C	C5-C6-N1	-5.83	118.08	121.00
1	N	1353	G	N3-C2-N2	5.83	123.98	119.90
1	N	1369	C	P-O3'-C3'	-5.83	112.70	119.70
1	N	1397	C	N3-C4-C5	-5.83	119.57	121.90
1	N	162	A	C5-N7-C8	5.83	106.81	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	966	G	N3-C4-C5	-5.83	125.69	128.60
1	N	288	A	C6-C5-N7	-5.83	128.22	132.30
1	N	424	G	C8-N9-C4	-5.83	104.07	106.40
1	N	596	A	C8-N9-C4	5.83	108.13	105.80
1	N	1526	G	C4'-C3'-C2'	-5.83	96.77	102.60
1	N	204	G	C5'-C4'-C3'	5.83	125.32	116.00
1	N	498	A	P-O3'-C3'	-5.83	112.71	119.70
1	N	745	G	O4'-C1'-N9	5.83	112.86	108.20
1	N	1025	U	P-O5'-C5'	5.83	130.22	120.90
1	N	162	A	C4-C5-N7	-5.82	107.79	110.70
1	N	484	G	N9-C4-C5	-5.82	103.07	105.40
1	N	523	A	P-O5'-C5'	5.82	130.22	120.90
1	N	799	G	N3-C2-N2	5.82	123.98	119.90
1	N	1233	G	N3-C4-C5	-5.82	125.69	128.60
1	N	59	A	C5-C6-N1	-5.82	114.79	117.70
1	N	1425	U	C2-N3-C4	-5.82	123.51	127.00
1	N	231	U	C4-C5-C6	-5.82	116.21	119.70
1	N	352	C	C2-N1-C1'	5.82	125.20	118.80
1	N	781	A	C8-N9-C4	-5.82	103.47	105.80
1	N	904	U	C4-C5-C6	-5.82	116.21	119.70
1	N	926	G	N9-C4-C5	5.82	107.73	105.40
1	N	1238	A	C6-C5-N7	-5.82	128.23	132.30
1	N	1360	A	C6-N1-C2	-5.82	115.11	118.60
1	N	1500	A	O4'-C1'-N9	5.82	112.86	108.20
1	N	42	G	N3-C4-N9	-5.82	122.51	126.00
1	N	601	G	C4'-C3'-C2'	-5.82	96.78	102.60
1	N	968	A	N7-C8-N9	5.82	116.71	113.80
1	N	201	G	C3'-C2'-C1'	5.82	106.15	101.50
1	N	633	G	N1-C2-N3	-5.82	120.41	123.90
1	N	644	U	P-O5'-C5'	5.82	130.20	120.90
1	N	1007	U	O4'-C1'-N1	5.82	112.85	108.20
1	N	1431	A	C5-C6-N1	-5.82	114.79	117.70
1	N	264	C	OP1-P-O3'	5.81	117.99	105.20
1	N	391	G	N1-C2-N3	-5.81	120.41	123.90
1	N	515	G	N3-C4-N9	5.81	129.49	126.00
1	N	776	G	C6-N1-C2	5.81	128.59	125.10
1	N	1159	U	O3'-P-O5'	-5.81	92.95	104.00
1	N	1337	G	C8-N9-C4	-5.81	104.08	106.40
1	N	468	A	C5-C6-N1	-5.81	114.79	117.70
1	N	530	G	C2-N3-C4	5.81	114.81	111.90
1	N	1169	A	N3-C4-N9	5.81	132.05	127.40
1	N	1445	U	O4'-C1'-N1	5.81	112.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1519	A	N1-C2-N3	5.81	132.21	129.30
1	N	477	C	C2-N1-C1'	5.81	125.19	118.80
1	N	1139	G	O3'-P-O5'	-5.81	92.96	104.00
1	N	1277	C	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	211	G	C6-C5-N7	-5.81	126.91	130.40
1	N	307	C	C5'-C4'-C3'	5.81	125.29	116.00
1	N	349	A	C5-C6-N1	-5.81	114.80	117.70
1	N	567	G	N9-C1'-C2'	-5.81	105.61	112.00
1	N	645	G	C4-N9-C1'	-5.81	118.95	126.50
1	N	664	G	N3-C2-N2	5.81	123.97	119.90
1	N	927	G	C5-C6-N1	5.81	114.41	111.50
1	N	996	A	N7-C8-N9	5.81	116.70	113.80
1	N	1039	G	C5-N7-C8	-5.81	101.39	104.30
1	N	1163	A	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	1182	G	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	259	G	N7-C8-N9	-5.81	110.20	113.10
1	N	410	G	C4-C5-C6	5.81	122.28	118.80
1	N	1136	C	N1-C2-N3	-5.81	115.14	119.20
1	N	8	A	C4-C5-N7	-5.81	107.80	110.70
1	N	547	A	C5-C6-N6	-5.81	119.06	123.70
1	N	746	A	N9-C1'-C2'	-5.80	105.62	112.00
1	N	1057	G	C6-C5-N7	-5.80	126.92	130.40
1	N	1095	U	N1-C2-N3	-5.80	111.42	114.90
1	N	1297	G	N1-C6-O6	5.80	123.38	119.90
1	N	1468	A	C5-N7-C8	5.80	106.80	103.90
1	N	342	C	N3-C4-C5	-5.80	119.58	121.90
1	N	451	A	C2-N3-C4	-5.80	107.70	110.60
1	N	477	C	C6-N1-C1'	-5.80	113.84	120.80
1	N	1226	C	C5-C4-N4	-5.80	116.14	120.20
1	N	1311	A	C4'-C3'-C2'	-5.80	96.80	102.60
1	N	355	C	N3-C2-O2	5.80	125.96	121.90
1	N	809	G	C6-C5-N7	-5.80	126.92	130.40
1	N	842	U	C6-N1-C1'	-5.80	113.08	121.20
1	N	1234	C	N3-C4-C5	-5.80	119.58	121.90
1	N	65	A	O4'-C1'-N9	5.80	112.84	108.20
1	N	473	U	N3-C4-C5	-5.80	111.12	114.60
1	N	690	G	N1-C2-N3	-5.80	120.42	123.90
1	N	865	A	C8-N9-C4	-5.80	103.48	105.80
1	N	1381	U	C5-C4-O4	-5.80	122.42	125.90
1	N	1500	A	C5-C6-N6	-5.80	119.06	123.70
1	N	381	C	P-O3'-C3'	5.80	126.66	119.70
1	N	638	U	O4'-C1'-N1	5.80	112.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	998	C	C2-N1-C1'	5.80	125.18	118.80
1	N	825	A	C6-C5-N7	-5.80	128.24	132.30
1	N	1178	G	O4'-C1'-N9	5.80	112.84	108.20
1	N	1283	U	N3-C4-C5	-5.80	111.12	114.60
1	N	775	G	C4-C5-N7	-5.79	108.48	110.80
1	N	1338	G	OP1-P-OP2	-5.79	110.91	119.60
1	N	1362	A	C5-C6-N6	-5.79	119.06	123.70
1	N	1421	G	N1-C2-N3	-5.79	120.42	123.90
1	N	942	G	N9-C4-C5	-5.79	103.08	105.40
1	N	1009	U	C2-N3-C4	5.79	130.48	127.00
1	N	1106	G	P-O5'-C5'	-5.79	111.63	120.90
1	N	1485	U	C5-C4-O4	-5.79	122.42	125.90
1	N	20	U	N3-C4-C5	5.79	118.08	114.60
1	N	507	C	N3-C4-C5	-5.79	119.58	121.90
1	N	1128	C	N3-C2-O2	5.79	125.95	121.90
1	N	1468	A	C5-C6-N6	-5.79	119.07	123.70
1	N	1479	C	C5-C6-N1	5.79	123.90	121.00
1	N	322	C	N1-C1'-C2'	5.79	121.53	114.00
1	N	78	A	P-O5'-C5'	5.79	130.16	120.90
1	N	122	G	C6-C5-N7	-5.79	126.93	130.40
1	N	277	C	N3-C2-O2	5.79	125.95	121.90
1	N	320	A	C5'-C4'-O4'	5.79	116.05	109.10
1	N	871	U	C1'-O4'-C4'	5.79	114.53	109.90
1	N	924	C	P-O5'-C5'	5.79	130.16	120.90
1	N	1186	G	N9-C1'-C2'	-5.79	105.63	112.00
1	N	361	G	N9-C4-C5	5.79	107.72	105.40
1	N	36	C	P-O5'-C5'	5.79	130.16	120.90
1	N	448	A	C6-C5-N7	-5.79	128.25	132.30
1	N	886	G	O4'-C1'-N9	5.79	112.83	108.20
1	N	1012	A	N9-C4-C5	5.79	108.11	105.80
1	N	1196	A	C4-C5-N7	-5.79	107.81	110.70
1	N	1240	U	P-O3'-C3'	5.79	126.64	119.70
1	N	890	G	N3-C2-N2	5.78	123.95	119.90
1	N	1106	G	C8-N9-C1'	5.78	134.52	127.00
1	N	1182	G	C4-C5-N7	-5.78	108.49	110.80
1	N	16	A	O3'-P-O5'	5.78	114.98	104.00
1	N	33	A	C8-N9-C4	-5.78	103.49	105.80
1	N	197	A	C8-N9-C4	5.78	108.11	105.80
1	N	1466	C	N3-C4-N4	5.78	122.05	118.00
1	N	164	G	N3-C2-N2	5.78	123.95	119.90
1	N	178	C	C2-N3-C4	5.78	122.79	119.90
1	N	1336	C	N3-C4-C5	-5.78	119.59	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1422	G	C1'-O4'-C4'	5.78	114.52	109.90
1	N	157	U	C5-C4-O4	-5.78	122.43	125.90
1	N	501	C	C5-C6-N1	5.78	123.89	121.00
1	N	621	A	C1'-O4'-C4'	5.78	114.52	109.90
1	N	745	G	N3-C4-N9	-5.78	122.53	126.00
1	N	934	C	C5-C6-N1	5.78	123.89	121.00
1	N	956	U	C6-N1-C2	-5.78	117.53	121.00
1	N	1075	U	C5-C4-O4	-5.78	122.43	125.90
1	N	1272	G	N1-C2-N3	5.78	127.37	123.90
1	N	187	G	N1-C2-N3	-5.78	120.43	123.90
1	N	852	G	O4'-C1'-N9	5.78	112.82	108.20
1	N	925	G	N9-C4-C5	-5.78	103.09	105.40
1	N	1012	A	N3-C4-C5	-5.78	122.76	126.80
1	N	58	C	C5'-C4'-C3'	-5.77	106.76	116.00
1	N	1227	A	C4'-C3'-C2'	5.77	108.37	102.60
1	N	94	G	C2-N3-C4	5.77	114.79	111.90
1	N	391	G	C4-N9-C1'	-5.77	119.00	126.50
1	N	690	G	O4'-C1'-N9	5.77	112.82	108.20
1	N	777	A	N7-C8-N9	5.77	116.69	113.80
1	N	1148	U	O4'-C1'-N1	5.77	112.82	108.20
1	N	1418	A	C5-C6-N1	-5.77	114.81	117.70
1	N	87	C	C4-C5-C6	5.77	120.28	117.40
1	N	348	G	C6-C5-N7	-5.77	126.94	130.40
1	N	55	A	N1-C6-N6	5.77	122.06	118.60
1	N	721	G	N1-C2-N3	-5.77	120.44	123.90
1	N	811	C	C2-N3-C4	5.77	122.78	119.90
1	N	1219	A	C4-C5-N7	-5.77	107.81	110.70
1	N	1243	C	N1-C2-O2	-5.77	115.44	118.90
1	N	1325	C	N3-C4-N4	5.77	122.04	118.00
1	N	115	G	N3-C2-N2	5.77	123.94	119.90
1	N	1250	A	O4'-C1'-N9	5.77	112.81	108.20
1	N	1273	C	C3'-C2'-C1'	5.77	106.11	101.50
1	N	286	C	C4'-C3'-C2'	-5.77	96.83	102.60
1	N	557	G	O4'-C1'-N9	5.77	112.81	108.20
1	N	706	A	C5-C6-N1	-5.77	114.82	117.70
1	N	860	A	C2'-C3'-O3'	5.77	122.93	113.70
1	N	872	A	C6-C5-N7	-5.77	128.26	132.30
1	N	1292	G	N1-C2-N3	-5.77	120.44	123.90
1	N	10	A	P-O3'-C3'	-5.76	112.78	119.70
1	N	51	A	C4'-C3'-C2'	5.76	108.36	102.60
1	N	77	A	C4-C5-C6	5.76	119.88	117.00
1	N	173	U	O3'-P-O5'	5.76	114.95	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	266	G	C2'-C3'-O3'	5.76	122.92	113.70
1	N	499	A	C3'-C2'-C1'	5.76	106.11	101.50
1	N	651	C	C6-N1-C1'	-5.76	113.88	120.80
1	N	777	A	C6-N1-C2	-5.76	115.14	118.60
1	N	1279	G	C5-C6-N1	-5.76	108.62	111.50
1	N	1312	G	C4'-C3'-C2'	-5.76	96.83	102.60
1	N	1345	U	N3-C4-O4	5.76	123.44	119.40
1	N	459	A	C5-C6-N1	-5.76	114.82	117.70
1	N	1041	G	O4'-C4'-C3'	-5.76	98.24	104.00
1	N	1132	C	C2-N3-C4	5.76	122.78	119.90
1	N	1254	A	C6-C5-N7	-5.76	128.27	132.30
1	N	371	A	C8-N9-C4	-5.76	103.50	105.80
1	N	466	A	C1'-O4'-C4'	5.76	114.51	109.90
1	N	539	A	C6-N1-C2	5.76	122.06	118.60
1	N	762	U	C3'-C2'-C1'	5.76	106.11	101.50
1	N	959	A	C5-C6-N1	-5.76	114.82	117.70
1	N	965	U	N3-C4-O4	5.76	123.43	119.40
1	N	980	C	N3-C2-O2	-5.76	117.87	121.90
1	N	1390	U	N3-C4-O4	5.76	123.43	119.40
1	N	952	U	O4'-C1'-N1	5.76	112.81	108.20
1	N	1085	U	C2'-C3'-O3'	5.76	122.91	113.70
1	N	1196	A	C1'-O4'-C4'	5.76	114.51	109.90
1	N	1439	G	N1-C2-N3	-5.76	120.44	123.90
1	N	149	A	N9-C4-C5	-5.76	103.50	105.80
1	N	262	A	C8-N9-C4	-5.76	103.50	105.80
1	N	506	G	C5-C6-O6	-5.76	125.15	128.60
1	N	910	C	C6-N1-C2	5.76	122.60	120.30
1	N	1368	A	N9-C1'-C2'	-5.76	105.67	112.00
1	N	146	G	C5'-C4'-O4'	5.75	116.01	109.10
1	N	501	C	O4'-C1'-N1	5.75	112.80	108.20
1	N	518	C	C5-C6-N1	-5.75	118.12	121.00
1	N	766	A	P-O3'-C3'	-5.75	112.80	119.70
1	N	1000	A	C4-C5-N7	5.75	113.58	110.70
1	N	61	G	C2-N3-C4	-5.75	109.02	111.90
1	N	370	C	C2'-C3'-O3'	5.75	122.90	113.70
1	N	462	G	O4'-C1'-N9	5.75	112.80	108.20
1	N	464	U	C4'-C3'-C2'	5.75	108.35	102.60
1	N	1137	C	N3-C4-C5	-5.75	119.60	121.90
1	N	1111	A	C6-N1-C2	-5.75	115.15	118.60
1	N	1116	U	C3'-C2'-C1'	5.75	106.10	101.50
1	N	50	A	C4-N9-C1'	5.75	136.65	126.30
1	N	329	A	C8-N9-C4	-5.75	103.50	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	544	G	N1-C6-O6	5.75	123.35	119.90
1	N	711	G	C6-N1-C2	5.75	128.55	125.10
1	N	817	C	P-O5'-C5'	5.75	130.10	120.90
1	N	1360	A	C6-C5-N7	-5.75	128.28	132.30
1	N	195	A	N3-C4-C5	-5.75	122.78	126.80
1	N	488	C	C2-N3-C4	5.75	122.77	119.90
1	N	763	G	C5-C6-O6	-5.75	125.15	128.60
1	N	970	C	C2-N3-C4	5.75	122.77	119.90
1	N	103	U	N3-C4-C5	-5.75	111.15	114.60
1	N	1204	A	C5-C6-N6	-5.75	119.10	123.70
1	N	1407	C	P-O3'-C3'	-5.75	112.81	119.70
1	N	122	G	C8-N9-C4	-5.74	104.10	106.40
1	N	177	G	C3'-C2'-C1'	-5.74	96.91	101.50
1	N	961	U	C4'-C3'-C2'	-5.74	96.86	102.60
1	N	978	A	C5-C6-N1	-5.74	114.83	117.70
1	N	1095	U	N3-C2-O2	5.74	126.22	122.20
1	N	1102	A	C4-C5-N7	-5.74	107.83	110.70
1	N	1190	G	N3-C2-N2	5.74	123.92	119.90
1	N	864	A	N1-C2-N3	-5.74	126.43	129.30
1	N	1272	G	C2-N3-C4	-5.74	109.03	111.90
1	N	1418	A	N7-C8-N9	-5.74	110.93	113.80
1	N	562	U	O4'-C1'-N1	5.74	112.79	108.20
1	N	796	C	C6-N1-C2	-5.74	118.00	120.30
1	N	861	G	N3-C4-C5	-5.74	125.73	128.60
1	N	1166	G	C4-C5-N7	-5.74	108.50	110.80
1	N	1196	A	O4'-C1'-N9	5.74	112.79	108.20
1	N	1226	C	C5'-C4'-C3'	-5.74	106.82	116.00
1	N	1462	C	P-O3'-C3'	5.74	126.59	119.70
1	N	243	A	C3'-C2'-C1'	5.74	106.09	101.50
1	N	705	G	P-O5'-C5'	5.74	130.08	120.90
1	N	970	C	C1'-O4'-C4'	-5.74	105.31	109.90
1	N	1011	C	C5-C4-N4	-5.74	116.18	120.20
1	N	1253	G	N1-C6-O6	5.74	123.34	119.90
1	N	1415	G	C2-N3-C4	5.74	114.77	111.90
1	N	158	G	C4-C5-C6	5.74	122.24	118.80
1	N	173	U	N1-C2-N3	5.74	118.34	114.90
1	N	304	U	C6-N1-C2	-5.74	117.56	121.00
1	N	327	A	N7-C8-N9	-5.74	110.93	113.80
1	N	479	U	C1'-O4'-C4'	-5.73	105.31	109.90
1	N	1347	G	C4'-C3'-C2'	-5.73	96.87	102.60
1	N	1527	U	C6-N1-C2	-5.73	117.56	121.00
1	N	375	U	C5'-C4'-O4'	5.73	115.98	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	504	C	C2-N3-C4	5.73	122.77	119.90
1	N	1008	U	O4'-C1'-N1	5.73	112.79	108.20
1	N	1293	C	O4'-C4'-C3'	-5.73	98.27	104.00
1	N	127	G	C5-C6-O6	-5.73	125.16	128.60
1	N	468	A	N3-C4-C5	-5.73	122.79	126.80
1	N	599	C	P-O3'-C3'	-5.73	112.82	119.70
1	N	769	G	C6-N1-C2	5.73	128.54	125.10
1	N	853	C	C6-N1-C2	5.73	122.59	120.30
1	N	1023	U	C5'-C4'-O4'	5.73	115.98	109.10
1	N	1135	U	P-O3'-C3'	5.73	126.58	119.70
1	N	458	U	C2-N1-C1'	5.73	124.58	117.70
1	N	1214	C	N3-C4-N4	5.73	122.01	118.00
1	N	10	A	C5-C6-N1	-5.73	114.84	117.70
1	N	72	A	C4-C5-C6	-5.73	114.14	117.00
1	N	378	G	N3-C4-C5	5.73	131.46	128.60
1	N	628	G	N7-C8-N9	5.73	115.96	113.10
1	N	746	A	P-O3'-C3'	-5.73	112.83	119.70
1	N	882	C	C4'-C3'-C2'	-5.73	96.87	102.60
1	N	543	U	P-O5'-C5'	5.73	130.06	120.90
1	N	1108	G	P-O5'-C5'	-5.73	111.74	120.90
1	N	220	G	N9-C4-C5	-5.72	103.11	105.40
1	N	426	U	O5'-C5'-C4'	-5.72	100.82	111.70
1	N	620	C	O4'-C4'-C3'	-5.72	98.28	104.00
1	N	984	C	C5-C4-N4	-5.72	116.19	120.20
1	N	1251	A	N9-C1'-C2'	-5.72	105.70	112.00
1	N	1420	U	C5-C4-O4	-5.72	122.47	125.90
1	N	1504	G	N1-C2-N3	-5.72	120.47	123.90
1	N	613	C	P-O5'-C5'	5.72	130.06	120.90
1	N	761	G	O4'-C1'-N9	5.72	112.78	108.20
1	N	826	C	C6-N1-C2	-5.72	118.01	120.30
1	N	1382	C	C3'-C2'-C1'	-5.72	96.92	101.50
1	N	515	G	C4-N9-C1'	5.72	133.94	126.50
1	N	403	C	O4'-C4'-C3'	-5.72	98.28	104.00
1	N	1085	U	C5'-C4'-O4'	-5.72	102.24	109.10
1	N	1216	A	C5-N7-C8	5.72	106.76	103.90
1	N	1262	C	N3-C4-C5	-5.72	119.61	121.90
1	N	345	C	N1-C2-N3	-5.72	115.20	119.20
1	N	364	A	C4'-C3'-C2'	-5.72	96.88	102.60
1	N	521	G	N1-C2-N3	-5.72	120.47	123.90
1	N	1061	G	N3-C4-N9	-5.72	122.57	126.00
1	N	1385	G	P-O5'-C5'	5.72	130.05	120.90
1	N	1424	U	P-O5'-C5'	5.72	130.04	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	366	A	O4'-C1'-N9	5.71	112.77	108.20
1	N	445	G	C1'-O4'-C4'	5.71	114.47	109.90
1	N	646	G	N1-C6-O6	5.71	123.33	119.90
1	N	1344	C	C2-N1-C1'	-5.71	112.52	118.80
1	N	94	G	C5'-C4'-C3'	-5.71	106.86	116.00
1	N	114	U	C6-N1-C2	-5.71	117.57	121.00
1	N	971	G	N3-C2-N2	5.71	123.90	119.90
1	N	1103	C	C6-N1-C1'	-5.71	113.95	120.80
1	N	1526	G	N9-C4-C5	-5.71	103.12	105.40
1	N	657	U	C4'-C3'-C2'	-5.71	96.89	102.60
1	N	740	U	P-O3'-C3'	-5.71	112.85	119.70
1	N	771	G	C5'-C4'-C3'	5.71	125.14	116.00
1	N	1264	U	C6-N1-C2	-5.71	117.57	121.00
1	N	326	G	N9-C1'-C2'	-5.71	105.72	112.00
1	N	379	C	C4'-C3'-C2'	-5.71	96.89	102.60
1	N	566	G	C6-N1-C2	5.71	128.53	125.10
1	N	840	C	N1-C2-N3	-5.71	115.20	119.20
1	N	955	U	C2-N1-C1'	5.71	124.55	117.70
1	N	1503	A	N3-C4-C5	-5.71	122.80	126.80
1	N	13	U	C4-C5-C6	5.71	123.12	119.70
1	N	99	C	O3'-P-O5'	-5.71	93.16	104.00
1	N	245	U	O4'-C1'-N1	5.71	112.77	108.20
1	N	746	A	N7-C8-N9	-5.71	110.95	113.80
1	N	854	U	N1-C2-N3	-5.71	111.48	114.90
1	N	1055	A	C5-C6-N1	-5.71	114.85	117.70
1	N	1332	A	N3-C4-C5	-5.71	122.81	126.80
1	N	1364	U	OP1-P-O3'	5.71	117.75	105.20
1	N	292	G	N3-C4-C5	-5.71	125.75	128.60
1	N	1210	C	C4-C5-C6	-5.71	114.55	117.40
1	N	1293	C	N1-C2-N3	-5.71	115.21	119.20
1	N	1483	A	N7-C8-N9	-5.71	110.95	113.80
1	N	491	G	N3-C2-N2	5.70	123.89	119.90
1	N	945	G	O4'-C1'-N9	5.70	112.76	108.20
1	N	1416	G	N3-C2-N2	5.70	123.89	119.90
1	N	11	G	C4'-C3'-C2'	5.70	108.30	102.60
1	N	156	C	O3'-P-O5'	-5.70	93.17	104.00
1	N	1015	G	N9-C1'-C2'	-5.70	105.73	112.00
1	N	905	U	C5'-C4'-C3'	-5.70	106.88	116.00
1	N	1449	C	C5-C4-N4	-5.70	116.21	120.20
1	N	102	G	C8-N9-C4	-5.70	104.12	106.40
1	N	413	G	C5-C6-O6	-5.70	125.18	128.60
1	N	481	G	C6-N1-C2	5.70	128.52	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1275	A	C5'-C4'-O4'	5.70	115.94	109.10
1	N	1387	G	P-O5'-C5'	5.70	130.02	120.90
1	N	355	C	O4'-C1'-N1	5.70	112.76	108.20
1	N	503	C	C5-C4-N4	-5.70	116.21	120.20
1	N	281	G	C4-C5-N7	5.70	113.08	110.80
1	N	379	C	C2-N3-C4	5.70	122.75	119.90
1	N	379	C	C3'-C2'-C1'	5.70	106.06	101.50
1	N	379	C	N3-C2-O2	5.70	125.89	121.90
1	N	838	G	C5'-C4'-O4'	5.70	115.94	109.10
1	N	869	G	C1'-O4'-C4'	-5.70	105.34	109.90
1	N	1145	A	C2'-C3'-O3'	5.70	122.81	113.70
1	N	1224	U	N3-C4-O4	5.70	123.39	119.40
1	N	1378	C	C5-C4-N4	-5.70	116.21	120.20
1	N	100	G	C2-N3-C4	-5.69	109.05	111.90
1	N	198	G	C8-N9-C4	5.69	108.68	106.40
1	N	277	C	N1-C1'-C2'	-5.69	105.74	112.00
1	N	304	U	O5'-P-OP2	-5.69	100.58	105.70
1	N	329	A	N7-C8-N9	-5.69	110.95	113.80
1	N	535	A	C2'-C3'-O3'	5.69	122.81	113.70
1	N	989	U	O4'-C1'-C2'	-5.69	100.11	105.80
1	N	508	U	OP2-P-O3'	5.69	117.72	105.20
1	N	727	G	C6-C5-N7	-5.69	126.99	130.40
1	N	1291	U	C5-C6-N1	-5.69	119.86	122.70
1	N	189	A	P-O3'-C3'	-5.69	112.87	119.70
1	N	685	G	C4-C5-C6	5.69	122.21	118.80
1	N	1432	G	C5'-C4'-C3'	5.69	125.10	116.00
1	N	1468	A	C6-C5-N7	-5.69	128.32	132.30
1	N	312	C	C6-N1-C2	5.69	122.58	120.30
1	N	388	G	N1-C2-N3	-5.69	120.49	123.90
1	N	606	G	C6-N1-C2	5.69	128.51	125.10
1	N	674	G	C8-N9-C4	5.69	108.67	106.40
1	N	903	G	C6-N1-C2	5.69	128.51	125.10
1	N	1041	G	C4'-C3'-C2'	-5.69	96.91	102.60
1	N	1079	G	P-O5'-C5'	5.69	130.00	120.90
1	N	1140	C	C5-C4-N4	-5.69	116.22	120.20
1	N	1145	A	O4'-C1'-C2'	5.69	112.72	107.60
1	N	1503	A	O4'-C1'-N9	5.69	112.75	108.20
1	N	548	G	C6-C5-N7	-5.68	126.99	130.40
1	N	772	U	C5-C6-N1	5.68	125.54	122.70
1	N	1014	A	C5-C6-N1	-5.68	114.86	117.70
1	N	1068	G	C4-C5-C6	5.68	122.21	118.80
1	N	1319	A	N7-C8-N9	-5.68	110.96	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	440	C	N1-C2-N3	-5.68	115.22	119.20
1	N	520	A	C5'-C4'-C3'	5.68	125.09	116.00
1	N	584	G	P-O5'-C5'	5.68	129.99	120.90
1	N	1045	C	N3-C4-N4	5.68	121.98	118.00
1	N	1292	G	O4'-C1'-N9	5.68	112.75	108.20
1	N	1335	U	P-O3'-C3'	5.68	126.52	119.70
1	N	1353	G	C6-C5-N7	5.68	133.81	130.40
1	N	1437	A	N1-C2-N3	-5.68	126.46	129.30
1	N	1445	U	C5-C6-N1	5.68	125.54	122.70
1	N	857	C	C3'-C2'-C1'	-5.68	96.96	101.50
1	N	1156	G	N1-C6-O6	5.68	123.31	119.90
1	N	16	A	C5-C6-N6	-5.68	119.16	123.70
1	N	912	C	N3-C2-O2	5.68	125.88	121.90
1	N	1023	U	C5-C6-N1	5.68	125.54	122.70
1	N	970	C	C5-C4-N4	-5.68	116.22	120.20
1	N	1265	C	P-O5'-C5'	5.68	129.98	120.90
1	N	255	G	O4'-C4'-C3'	-5.68	98.32	104.00
1	N	408	A	C2-N3-C4	-5.68	107.76	110.60
1	N	1359	C	C3'-C2'-C1'	-5.68	96.96	101.50
1	N	1408	A	N1-C2-N3	5.68	132.14	129.30
1	N	1522	U	C5-C4-O4	-5.68	122.49	125.90
1	N	75	G	P-O5'-C5'	-5.67	111.82	120.90
1	N	128	G	N7-C8-N9	-5.67	110.26	113.10
1	N	247	G	C5-N7-C8	5.67	107.14	104.30
1	N	917	G	N7-C8-N9	5.67	115.94	113.10
1	N	1043	G	O5'-C5'-C4'	-5.67	100.92	111.70
1	N	1264	U	N3-C2-O2	-5.67	118.23	122.20
1	N	1359	C	C1'-O4'-C4'	-5.67	105.36	109.90
1	N	1173	U	O5'-C5'-C4'	-5.67	100.92	111.70
1	N	108	G	O4'-C1'-N9	5.67	112.74	108.20
1	N	171	A	C8-N9-C1'	-5.67	117.49	127.70
1	N	179	A	C4-C5-C6	5.67	119.84	117.00
1	N	250	A	C2-N3-C4	5.67	113.44	110.60
1	N	533	A	C5-N7-C8	5.67	106.74	103.90
1	N	759	A	C6-N1-C2	-5.67	115.20	118.60
1	N	926	G	C6-N1-C2	5.67	128.50	125.10
1	N	1069	C	C5-C6-N1	-5.67	118.16	121.00
1	N	1319	A	OP1-P-O3'	5.67	117.68	105.20
1	N	260	G	C4-C5-C6	5.67	122.20	118.80
1	N	1322	C	C2-N3-C4	5.67	122.73	119.90
1	N	1393	U	C5-C4-O4	-5.67	122.50	125.90
1	N	368	U	C4'-C3'-C2'	-5.67	96.93	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	501	C	C4-C5-C6	-5.67	114.57	117.40
1	N	585	G	C2-N3-C4	5.67	114.73	111.90
1	N	1041	G	O4'-C1'-N9	5.67	112.73	108.20
1	N	1324	A	N1-C2-N3	5.67	132.13	129.30
1	N	116	A	C4-C5-C6	5.67	119.83	117.00
1	N	187	G	P-O5'-C5'	-5.67	111.83	120.90
1	N	413	G	C4-C5-C6	5.67	122.20	118.80
1	N	551	U	C6-N1-C2	5.67	124.40	121.00
1	N	583	A	N3-C4-N9	-5.67	122.87	127.40
1	N	775	G	N3-C4-C5	-5.67	125.77	128.60
1	N	849	G	P-O5'-C5'	-5.67	111.83	120.90
1	N	1114	C	C2-N3-C4	5.67	122.73	119.90
1	N	1283	U	C5-C6-N1	5.67	125.53	122.70
1	N	1373	G	C2-N3-C4	-5.67	109.07	111.90
1	N	241	G	N9-C4-C5	5.67	107.67	105.40
1	N	326	G	OP1-P-OP2	-5.67	111.10	119.60
1	N	577	G	C2-N3-C4	5.67	114.73	111.90
1	N	734	G	O4'-C1'-N9	5.67	112.73	108.20
1	N	981	U	N3-C4-O4	5.67	123.36	119.40
1	N	148	G	C5-C6-N1	-5.66	108.67	111.50
1	N	302	G	N3-C4-N9	-5.66	122.60	126.00
1	N	392	C	C6-N1-C1'	-5.66	114.00	120.80
1	N	981	U	C3'-C2'-C1'	-5.66	96.97	101.50
1	N	293	G	P-O5'-C5'	5.66	129.96	120.90
1	N	871	U	C4-C5-C6	-5.66	116.30	119.70
1	N	897	C	C3'-C2'-C1'	-5.66	96.97	101.50
1	N	1393	U	P-O5'-C5'	-5.66	111.84	120.90
1	N	109	A	C6-N1-C2	5.66	122.00	118.60
1	N	326	G	C8-N9-C4	-5.66	104.14	106.40
1	N	344	A	N1-C2-N3	5.66	132.13	129.30
1	N	347	G	N1-C2-N3	-5.66	120.50	123.90
1	N	675	A	C4-C5-C6	5.66	119.83	117.00
1	N	1127	G	N9-C4-C5	-5.66	103.14	105.40
1	N	354	G	C6-N1-C2	5.66	128.50	125.10
1	N	463	U	O4'-C1'-N1	5.66	112.73	108.20
1	N	1069	C	N1-C2-O2	5.66	122.30	118.90
1	N	1215	G	N1-C2-N3	-5.66	120.50	123.90
1	N	1265	C	C1'-O4'-C4'	5.66	114.43	109.90
1	N	1339	A	C5-C6-N1	-5.66	114.87	117.70
1	N	1401	G	C2-N3-C4	5.66	114.73	111.90
1	N	114	U	P-O5'-C5'	5.66	129.95	120.90
1	N	992	U	C4'-C3'-C2'	-5.66	96.94	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1319	A	O4'-C1'-N9	5.66	112.72	108.20
1	N	2	A	C4-C5-C6	5.66	119.83	117.00
1	N	110	C	C2-N1-C1'	5.66	125.02	118.80
1	N	1230	C	C5-C4-N4	-5.66	116.24	120.20
1	N	1390	U	N3-C2-O2	5.66	126.16	122.20
1	N	1489	G	N3-C2-N2	5.66	123.86	119.90
1	N	564	C	C3'-C2'-C1'	5.65	106.02	101.50
1	N	1031	C	P-O5'-C5'	5.65	129.95	120.90
1	N	1076	U	C2-N1-C1'	-5.65	110.92	117.70
1	N	1365	G	N7-C8-N9	-5.65	110.27	113.10
1	N	307	C	C2-N1-C1'	5.65	125.02	118.80
1	N	399	G	N1-C2-N3	-5.65	120.51	123.90
1	N	1007	U	N3-C4-O4	5.65	123.36	119.40
1	N	1338	G	N3-C4-C5	-5.65	125.77	128.60
1	N	1465	A	C5-C6-N1	-5.65	114.87	117.70
1	N	991	U	C5-C4-O4	-5.65	122.51	125.90
1	N	1283	U	P-O5'-C5'	5.65	129.94	120.90
1	N	1423	G	C4-C5-N7	5.65	113.06	110.80
1	N	1458	G	OP1-P-OP2	-5.65	111.12	119.60
1	N	547	A	O4'-C1'-N9	5.65	112.72	108.20
1	N	180	U	C3'-C2'-C1'	-5.65	96.98	101.50
1	N	193	C	C5-C6-N1	5.65	123.82	121.00
1	N	282	A	C5-N7-C8	5.65	106.72	103.90
1	N	1447	A	O4'-C1'-N9	5.65	112.72	108.20
1	N	80	A	C6-C5-N7	-5.65	128.35	132.30
1	N	1419	G	C5-C6-N1	-5.65	108.68	111.50
1	N	101	A	C5'-C4'-O4'	5.64	115.87	109.10
1	N	676	A	C6-C5-N7	-5.64	128.35	132.30
1	N	888	G	C6-N1-C2	5.64	128.49	125.10
1	N	908	A	C8-N9-C4	-5.64	103.54	105.80
1	N	967	C	P-O3'-C3'	5.64	126.47	119.70
1	N	1513	A	P-O5'-C5'	-5.64	111.87	120.90
1	N	707	U	N3-C2-O2	5.64	126.15	122.20
1	N	928	G	P-O3'-C3'	-5.64	112.93	119.70
1	N	1321	U	N3-C4-C5	-5.64	111.22	114.60
1	N	1420	U	P-O3'-C3'	-5.64	112.93	119.70
1	N	20	U	P-O5'-C5'	5.64	129.92	120.90
1	N	248	C	C2-N3-C4	5.64	122.72	119.90
1	N	325	A	N3-C4-C5	-5.64	122.85	126.80
1	N	538	G	N7-C8-N9	5.64	115.92	113.10
1	N	760	G	C5'-C4'-O4'	5.64	115.87	109.10
1	N	641	U	C2'-C3'-O3'	5.64	122.72	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	657	U	O5'-P-OP2	-5.64	100.63	105.70
1	N	781	A	N1-C6-N6	5.64	121.98	118.60
1	N	1124	G	C4-C5-N7	5.64	113.06	110.80
1	N	302	G	N9-C4-C5	5.64	107.66	105.40
1	N	306	A	C8-N9-C4	-5.64	103.55	105.80
1	N	683	G	C1'-O4'-C4'	-5.64	105.39	109.90
1	N	1048	G	N7-C8-N9	5.64	115.92	113.10
1	N	168	G	O4'-C1'-N9	5.63	112.71	108.20
1	N	482	A	C5-C6-N6	-5.63	119.19	123.70
1	N	487	A	C5-C6-N6	-5.63	119.19	123.70
1	N	526	C	N3-C4-N4	5.63	121.94	118.00
1	N	1296	C	O4'-C1'-C2'	5.63	112.67	107.60
1	N	1374	A	N3-C4-N9	5.63	131.91	127.40
1	N	1486	G	C4-C5-C6	5.63	122.18	118.80
1	N	130	A	N3-C4-C5	5.63	130.74	126.80
1	N	58	C	N1-C1'-C2'	-5.63	105.81	112.00
1	N	414	A	C8-N9-C4	-5.63	103.55	105.80
1	N	736	C	C5-C4-N4	-5.63	116.26	120.20
1	N	1044	A	C8-N9-C4	-5.63	103.55	105.80
1	N	886	G	P-O5'-C5'	5.63	129.91	120.90
1	N	1303	C	N1-C2-O2	-5.63	115.52	118.90
1	N	190	A	C5-N7-C8	5.63	106.71	103.90
1	N	1181	G	C2'-C3'-O3'	5.63	122.71	113.70
1	N	1319	A	C5-C6-N1	-5.63	114.89	117.70
1	N	276	G	C8-N9-C4	-5.63	104.15	106.40
1	N	407	U	P-O5'-C5'	5.63	129.90	120.90
1	N	878	A	N1-C2-N3	5.63	132.11	129.30
1	N	1211	U	C3'-C2'-C1'	-5.63	97.00	101.50
1	N	1308	U	C2-N3-C4	-5.63	123.62	127.00
1	N	153	C	O4'-C4'-C3'	-5.62	98.38	104.00
1	N	1017	U	P-O3'-C3'	5.62	126.45	119.70
1	N	1171	A	C6-C5-N7	-5.62	128.36	132.30
1	N	138	G	C8-N9-C4	5.62	108.65	106.40
1	N	191	G	N1-C2-N3	-5.62	120.53	123.90
1	N	203	G	C4'-C3'-C2'	-5.62	96.98	102.60
1	N	234	C	OP1-P-OP2	-5.62	111.16	119.60
1	N	265	G	C6-N1-C2	5.62	128.47	125.10
1	N	287	U	C4-C5-C6	-5.62	116.33	119.70
1	N	7	A	C3'-C2'-C1'	5.62	106.00	101.50
1	N	345	C	C5-C6-N1	5.62	123.81	121.00
1	N	402	G	C2-N3-C4	5.62	114.71	111.90
1	N	425	G	N7-C8-N9	-5.62	110.29	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	604	G	N1-C2-N3	-5.62	120.53	123.90
1	N	712	A	OP1-P-OP2	-5.62	111.17	119.60
1	N	713	G	N3-C4-C5	-5.62	125.79	128.60
1	N	778	G	N3-C4-N9	-5.62	122.63	126.00
1	N	815	A	C3'-C2'-C1'	5.62	106.00	101.50
1	N	901	A	N9-C4-C5	5.62	108.05	105.80
1	N	1094	G	P-O5'-C5'	5.62	129.90	120.90
1	N	1245	C	C2-N1-C1'	5.62	124.98	118.80
1	N	1524	C	C5-C6-N1	-5.62	118.19	121.00
1	N	431	A	C5'-C4'-O4'	5.62	115.84	109.10
1	N	704	A	C8-N9-C4	5.62	108.05	105.80
1	N	1234	C	P-O5'-C5'	5.62	129.89	120.90
1	N	1236	A	C5-C6-N1	-5.62	114.89	117.70
1	N	1054	C	C6-N1-C1'	-5.62	114.06	120.80
1	N	1112	C	C2-N3-C4	5.62	122.71	119.90
1	N	1157	A	N3-C4-N9	5.62	131.90	127.40
1	N	1332	A	C8-N9-C4	-5.62	103.55	105.80
1	N	1459	G	N9-C4-C5	5.62	107.65	105.40
1	N	1491	G	N3-C2-N2	-5.62	115.97	119.90
1	N	220	G	P-O3'-C3'	5.62	126.44	119.70
1	N	240	G	C2-N3-C4	5.62	114.71	111.90
1	N	496	A	C4'-C3'-C2'	5.62	108.22	102.60
1	N	639	G	C5'-C4'-C3'	-5.62	107.01	116.00
1	N	723	U	C5'-C4'-O4'	5.62	115.84	109.10
1	N	1473	G	N9-C4-C5	-5.62	103.15	105.40
1	N	296	U	N3-C2-O2	5.62	126.13	122.20
1	N	438	U	C1'-O4'-C4'	-5.62	105.41	109.90
1	N	446	G	N7-C8-N9	5.62	115.91	113.10
1	N	596	A	C6-N1-C2	-5.62	115.23	118.60
1	N	650	G	C2-N3-C4	5.62	114.71	111.90
1	N	1105	A	C5-N7-C8	5.62	106.71	103.90
1	N	401	C	N3-C4-N4	5.61	121.93	118.00
1	N	568	G	C8-N9-C4	-5.61	104.15	106.40
1	N	699	C	C6-N1-C2	5.61	122.55	120.30
1	N	1337	G	C5'-C4'-O4'	-5.61	102.36	109.10
1	N	134	G	N9-C4-C5	5.61	107.64	105.40
1	N	430	A	C2-N3-C4	5.61	113.41	110.60
1	N	924	C	O4'-C1'-C2'	-5.61	100.19	105.80
1	N	1488	G	C6-N1-C2	-5.61	121.73	125.10
1	N	473	U	C2-N3-C4	5.61	130.37	127.00
1	N	974	A	C4'-C3'-C2'	5.61	108.21	102.60
1	N	1031	C	C6-N1-C1'	-5.61	114.07	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1155	A	C6-C5-N7	-5.61	128.37	132.30
1	N	155	A	N9-C4-C5	-5.61	103.56	105.80
1	N	293	G	N3-C2-N2	5.61	123.83	119.90
1	N	363	A	N9-C4-C5	-5.61	103.56	105.80
1	N	391	G	C5-C6-O6	-5.61	125.23	128.60
1	N	763	G	C2-N3-C4	-5.61	109.10	111.90
1	N	1249	C	O4'-C1'-N1	5.61	112.69	108.20
1	N	1498	U	C4'-C3'-C2'	5.61	108.21	102.60
1	N	1517	G	C3'-C2'-C1'	-5.61	97.01	101.50
1	N	1521	C	C5-C4-N4	-5.61	116.28	120.20
1	N	44	A	C5-C6-N6	-5.61	119.22	123.70
1	N	274	A	P-O5'-C5'	5.61	129.87	120.90
1	N	619	U	P-O5'-C5'	5.61	129.87	120.90
1	N	860	A	P-O3'-C3'	5.61	126.42	119.70
1	N	898	G	N1-C2-N3	-5.61	120.54	123.90
1	N	1013	G	C8-N9-C4	5.61	108.64	106.40
1	N	1221	G	C6-C5-N7	-5.61	127.04	130.40
1	N	1397	C	C6-N1-C2	-5.61	118.06	120.30
1	N	1441	A	N1-C2-N3	5.61	132.10	129.30
1	N	1334	G	C5-N7-C8	-5.60	101.50	104.30
1	N	1508	A	C5-C6-N6	-5.60	119.22	123.70
1	N	107	G	C6-N1-C2	5.60	128.46	125.10
1	N	414	A	N3-C4-C5	-5.60	122.88	126.80
1	N	696	A	O4'-C1'-N9	5.60	112.68	108.20
1	N	1019	A	C6-C5-N7	-5.60	128.38	132.30
1	N	1022	A	C4-N9-C1'	-5.60	116.22	126.30
1	N	1151	A	C5-N7-C8	5.60	106.70	103.90
1	N	1280	A	N3-C4-C5	-5.60	122.88	126.80
1	N	240	G	N9-C4-C5	-5.60	103.16	105.40
1	N	364	A	N1-C2-N3	-5.60	126.50	129.30
1	N	910	C	C5-C4-N4	-5.60	116.28	120.20
1	N	1530	G	N3-C2-N2	5.60	123.82	119.90
1	N	69	G	N3-C4-N9	5.60	129.36	126.00
1	N	250	A	N3-C4-N9	5.60	131.88	127.40
1	N	579	A	N1-C2-N3	5.60	132.10	129.30
1	N	652	U	C5'-C4'-C3'	-5.60	107.04	116.00
1	N	755	G	C4-C5-C6	5.60	122.16	118.80
1	N	1060	U	O4'-C1'-N1	5.60	112.68	108.20
1	N	261	U	N3-C4-C5	5.60	117.96	114.60
1	N	312	C	C2-N3-C4	5.60	122.70	119.90
1	N	326	G	C6-C5-N7	-5.60	127.04	130.40
1	N	770	C	P-O5'-C5'	-5.60	111.94	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	931	C	N3-C2-O2	5.60	125.82	121.90
1	N	991	U	O4'-C1'-N1	5.60	112.68	108.20
1	N	1135	U	N3-C4-O4	5.60	123.32	119.40
1	N	1235	U	C5-C6-N1	-5.60	119.90	122.70
1	N	1434	A	C3'-C2'-C1'	5.60	105.98	101.50
1	N	1514	G	P-O5'-C5'	-5.60	111.94	120.90
1	N	774	G	C5'-C4'-O4'	5.60	115.81	109.10
1	N	1087	G	C3'-C2'-C1'	5.60	105.98	101.50
1	N	41	G	C2-N3-C4	5.59	114.70	111.90
1	N	44	A	C4'-C3'-C2'	-5.59	97.00	102.60
1	N	148	G	C5'-C4'-O4'	5.59	115.81	109.10
1	N	1181	G	C1'-O4'-C4'	5.59	114.38	109.90
1	N	182	A	N9-C4-C5	5.59	108.04	105.80
1	N	229	U	P-O5'-C5'	5.59	129.85	120.90
1	N	4	U	N3-C4-C5	-5.59	111.25	114.60
1	N	426	U	P-O3'-C3'	5.59	126.41	119.70
1	N	452	A	C2-N3-C4	-5.59	107.80	110.60
1	N	902	G	C8-N9-C4	5.59	108.64	106.40
1	N	902	G	N7-C8-N9	-5.59	110.31	113.10
1	N	991	U	C3'-C2'-C1'	5.59	105.97	101.50
1	N	1096	C	C6-N1-C1'	-5.59	114.09	120.80
1	N	1188	A	C8-N9-C4	-5.59	103.56	105.80
1	N	206	C	N1-C2-N3	-5.59	115.29	119.20
1	N	411	A	P-O3'-C3'	-5.59	112.99	119.70
1	N	1502	A	C2'-C3'-O3'	5.59	122.64	113.70
1	N	339	C	C2-N3-C4	-5.59	117.11	119.90
1	N	1280	A	O4'-C1'-N9	5.59	112.67	108.20
1	N	8	A	N9-C4-C5	5.59	108.03	105.80
1	N	298	A	C4-C5-C6	5.59	119.79	117.00
1	N	391	G	C4-C5-N7	5.59	113.03	110.80
1	N	770	C	C6-N1-C1'	-5.59	114.09	120.80
1	N	849	G	N3-C2-N2	5.59	123.81	119.90
1	N	925	G	C3'-C2'-C1'	5.59	105.97	101.50
1	N	1454	G	C5-C6-N1	-5.59	108.71	111.50
1	N	282	A	C1'-O4'-C4'	5.58	114.37	109.90
1	N	293	G	C8-N9-C4	5.58	108.63	106.40
1	N	579	A	C8-N9-C4	-5.58	103.57	105.80
1	N	111	G	C5-C6-O6	-5.58	125.25	128.60
1	N	216	U	C5-C6-N1	5.58	125.49	122.70
1	N	256	U	O5'-C5'-C4'	-5.58	101.09	111.70
1	N	818	G	C6-N1-C2	5.58	128.45	125.10
1	N	919	A	C4'-C3'-C2'	-5.58	97.02	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1177	G	C8-N9-C4	-5.58	104.17	106.40
1	N	1235	U	C4'-C3'-C2'	-5.58	97.02	102.60
1	N	1355	G	N1-C2-N2	5.58	121.22	116.20
1	N	7	A	C5'-C4'-O4'	5.58	115.80	109.10
1	N	170	U	C4-C5-C6	-5.58	116.35	119.70
1	N	279	A	C4-C5-C6	5.58	119.79	117.00
1	N	580	C	N1-C2-O2	5.58	122.25	118.90
1	N	868	C	C2-N3-C4	-5.58	117.11	119.90
1	N	993	G	N1-C2-N3	-5.58	120.55	123.90
1	N	1074	G	N7-C8-N9	5.58	115.89	113.10
1	N	779	C	C6-N1-C2	-5.58	118.07	120.30
1	N	1378	C	N1-C2-O2	5.58	122.25	118.90
1	N	1428	A	P-O5'-C5'	5.58	129.83	120.90
1	N	490	C	O5'-P-OP2	5.58	117.39	110.70
1	N	547	A	C5'-C4'-O4'	5.58	115.79	109.10
1	N	626	G	C5'-C4'-O4'	-5.58	102.41	109.10
1	N	1308	U	N1-C2-O2	-5.58	118.89	122.80
1	N	247	G	C1'-O4'-C4'	5.58	114.36	109.90
1	N	747	A	C6-C5-N7	-5.58	128.40	132.30
1	N	753	A	C6-N1-C2	-5.58	115.25	118.60
1	N	959	A	C4'-C3'-C2'	5.58	108.18	102.60
1	N	88	U	C5-C4-O4	-5.58	122.55	125.90
1	N	529	G	C5'-C4'-O4'	5.58	115.79	109.10
1	N	539	A	OP2-P-O3'	5.58	117.47	105.20
1	N	572	A	C2-N3-C4	-5.58	107.81	110.60
1	N	697	U	N1-C2-O2	-5.58	118.90	122.80
1	N	1029	U	P-O5'-C5'	5.58	129.82	120.90
1	N	1141	C	C2-N3-C4	5.58	122.69	119.90
1	N	242	G	C5-N7-C8	-5.57	101.51	104.30
1	N	958	A	C4-C5-C6	5.57	119.79	117.00
1	N	432	A	C5-C6-N1	-5.57	114.91	117.70
1	N	89	U	C5'-C4'-O4'	5.57	115.78	109.10
1	N	210	C	C6-N1-C1'	-5.57	114.12	120.80
1	N	720	C	N3-C4-C5	-5.57	119.67	121.90
1	N	1257	A	C8-N9-C4	-5.57	103.57	105.80
1	N	20	U	N1-C2-N3	-5.57	111.56	114.90
1	N	156	C	N1-C2-N3	-5.57	115.30	119.20
1	N	195	A	C6-N1-C2	-5.57	115.26	118.60
1	N	253	A	C8-N9-C4	-5.57	103.57	105.80
1	N	263	A	N9-C4-C5	5.57	108.03	105.80
1	N	300	A	C4-C5-N7	-5.57	107.92	110.70
1	N	402	G	C5-C6-O6	-5.57	125.26	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	974	A	N1-C2-N3	-5.57	126.52	129.30
1	N	1236	A	C5'-C4'-O4'	5.57	115.78	109.10
1	N	172	A	P-O5'-C5'	5.57	129.80	120.90
1	N	239	U	N1-C2-N3	5.57	118.24	114.90
1	N	505	G	O4'-C1'-N9	5.57	112.65	108.20
1	N	566	G	OP1-P-OP2	-5.57	111.25	119.60
1	N	617	G	C5-C6-O6	-5.57	125.26	128.60
1	N	784	A	C5-C6-N6	-5.57	119.25	123.70
1	N	1107	C	C5-C4-N4	-5.57	116.30	120.20
1	N	1166	G	N3-C4-N9	-5.57	122.66	126.00
1	N	1332	A	C6-N1-C2	-5.57	115.26	118.60
1	N	1482	G	O5'-C5'-C4'	-5.57	101.12	111.70
1	N	202	G	N3-C2-N2	5.56	123.79	119.90
1	N	378	G	C3'-C2'-C1'	5.56	105.95	101.50
1	N	793	U	P-O5'-C5'	-5.56	112.00	120.90
1	N	800	G	P-O5'-C5'	5.56	129.80	120.90
1	N	1518	A	P-O3'-C3'	5.56	126.38	119.70
1	N	207	C	C5'-C4'-C3'	5.56	124.90	116.00
1	N	222	C	N3-C4-N4	5.56	121.89	118.00
1	N	351	G	N1-C2-N3	-5.56	120.56	123.90
1	N	492	C	O4'-C1'-C2'	-5.56	100.24	105.80
1	N	73	C	N1-C2-O2	5.56	122.23	118.90
1	N	897	C	N3-C4-C5	-5.56	119.68	121.90
1	N	211	G	C4-C5-C6	5.56	122.14	118.80
1	N	433	G	C4'-C3'-C2'	-5.56	97.04	102.60
1	N	873	A	C3'-C2'-C1'	5.56	105.94	101.50
1	N	1081	A	C5-C6-N6	-5.56	119.25	123.70
1	N	1142	G	C5-C6-N1	-5.56	108.72	111.50
1	N	1163	A	OP2-P-O3'	5.56	117.43	105.20
1	N	1239	A	P-O3'-C3'	5.56	126.37	119.70
1	N	1450	U	C2-N1-C1'	5.56	124.37	117.70
1	N	1508	A	N1-C2-N3	5.56	132.08	129.30
1	N	150	U	C4-C5-C6	-5.56	116.37	119.70
1	N	353	A	C8-N9-C4	5.56	108.02	105.80
1	N	397	A	C4-C5-C6	5.56	119.78	117.00
1	N	1155	A	C4-N9-C1'	5.56	136.30	126.30
1	N	1448	C	C5-C6-N1	-5.56	118.22	121.00
1	N	442	G	C6-N1-C2	-5.55	121.77	125.10
1	N	520	A	P-O5'-C5'	5.55	129.79	120.90
1	N	572	A	C3'-C2'-C1'	5.55	105.94	101.50
1	N	645	G	C4-C5-N7	5.55	113.02	110.80
1	N	707	U	P-O5'-C5'	5.55	129.79	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1238	A	N7-C8-N9	-5.55	111.02	113.80
1	N	1454	G	C4-C5-N7	5.55	113.02	110.80
1	N	731	G	C4-C5-N7	5.55	113.02	110.80
1	N	750	C	C5'-C4'-O4'	5.55	115.76	109.10
1	N	965	U	C5'-C4'-C3'	-5.55	107.12	116.00
1	N	1231	G	OP1-P-OP2	-5.55	111.27	119.60
1	N	47	C	O5'-C5'-C4'	-5.55	101.15	111.70
1	N	926	G	O4'-C4'-C3'	-5.55	98.45	104.00
1	N	1386	G	P-O3'-C3'	-5.55	113.04	119.70
1	N	1500	A	C2-N3-C4	-5.55	107.83	110.60
1	N	13	U	O4'-C1'-N1	5.55	112.64	108.20
1	N	243	A	C1'-O4'-C4'	5.55	114.34	109.90
1	N	299	G	N1-C2-N2	-5.55	111.20	116.20
1	N	341	C	C4'-C3'-C2'	-5.55	97.05	102.60
1	N	444	G	C5-C6-O6	-5.55	125.27	128.60
1	N	760	G	N7-C8-N9	5.55	115.88	113.10
1	N	887	G	C6-C5-N7	-5.55	127.07	130.40
1	N	1036	A	O4'-C1'-N9	5.55	112.64	108.20
1	N	1169	A	O4'-C4'-C3'	-5.55	98.45	104.00
1	N	1435	G	C4-N9-C1'	-5.55	119.28	126.50
1	N	154	U	N1-C2-N3	-5.55	111.57	114.90
1	N	129	A	C5-C6-N6	-5.55	119.26	123.70
1	N	165	G	P-O5'-C5'	5.55	129.78	120.90
1	N	294	U	N3-C4-O4	5.55	123.28	119.40
1	N	353	A	O4'-C1'-N9	5.55	112.64	108.20
1	N	478	A	O4'-C1'-N9	5.55	112.64	108.20
1	N	894	G	C5'-C4'-O4'	5.55	115.75	109.10
1	N	1282	C	P-O3'-C3'	-5.55	113.04	119.70
1	N	1298	U	C5'-C4'-C3'	-5.55	107.13	116.00
1	N	1417	G	N1-C2-N2	-5.55	111.21	116.20
1	N	1435	G	N1-C2-N3	-5.55	120.57	123.90
1	N	725	G	O4'-C1'-N9	5.54	112.64	108.20
1	N	1115	U	N1-C2-O2	-5.54	118.92	122.80
1	N	739	C	N1-C2-N3	-5.54	115.32	119.20
1	N	898	G	O3'-P-O5'	-5.54	93.47	104.00
1	N	938	A	C4-C5-C6	5.54	119.77	117.00
1	N	1013	G	C2-N3-C4	5.54	114.67	111.90
1	N	1497	G	N7-C8-N9	-5.54	110.33	113.10
1	N	95	C	N1-C2-N3	-5.54	115.32	119.20
1	N	574	A	C5'-C4'-O4'	5.54	115.75	109.10
1	N	575	G	N1-C2-N2	5.54	121.19	116.20
1	N	836	G	C6-N1-C2	5.54	128.43	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1109	C	C2-N3-C4	-5.54	117.13	119.90
1	N	163	C	O5'-P-OP2	-5.54	100.72	105.70
1	N	232	G	C4-N9-C1'	-5.54	119.30	126.50
1	N	281	G	N1-C6-O6	-5.54	116.58	119.90
1	N	442	G	C6-C5-N7	-5.54	127.08	130.40
1	N	972	C	N1-C2-O2	-5.54	115.58	118.90
1	N	357	G	C3'-C2'-C1'	-5.54	97.07	101.50
1	N	1305	G	N1-C2-N3	-5.54	120.58	123.90
1	N	696	A	C5-C6-N1	-5.54	114.93	117.70
1	N	916	U	N3-C2-O2	5.54	126.08	122.20
1	N	1164	G	O4'-C4'-C3'	-5.54	98.46	104.00
1	N	1466	C	C2-N3-C4	5.54	122.67	119.90
1	N	27	G	N1-C2-N2	-5.53	111.22	116.20
1	N	217	C	N3-C2-O2	5.53	125.77	121.90
1	N	541	G	C4-C5-C6	-5.53	115.48	118.80
1	N	714	G	C5-C6-N1	-5.53	108.73	111.50
1	N	980	C	N1-C2-O2	5.53	122.22	118.90
1	N	1105	A	N7-C8-N9	5.53	116.57	113.80
1	N	1484	C	P-O5'-C5'	5.53	129.75	120.90
1	N	154	U	N3-C4-O4	5.53	123.27	119.40
1	N	440	C	N1-C2-O2	5.53	122.22	118.90
1	N	480	U	OP2-P-O3'	5.53	117.37	105.20
1	N	718	A	OP2-P-O3'	5.53	117.37	105.20
1	N	898	G	N3-C2-N2	5.53	123.77	119.90
1	N	1448	C	N3-C4-N4	5.53	121.87	118.00
1	N	233	C	O4'-C4'-C3'	-5.53	98.47	104.00
1	N	445	G	C5'-C4'-O4'	5.53	115.74	109.10
1	N	445	G	N1-C6-O6	5.53	123.22	119.90
1	N	773	G	C6-N1-C2	5.53	128.42	125.10
1	N	1486	G	C6-N1-C2	-5.53	121.78	125.10
1	N	129	A	C5-N7-C8	5.53	106.67	103.90
1	N	580	C	C2-N3-C4	5.53	122.66	119.90
1	N	635	A	C5'-C4'-O4'	5.53	115.73	109.10
1	N	821	G	OP1-P-OP2	-5.53	111.31	119.60
1	N	863	U	N3-C2-O2	5.53	126.07	122.20
1	N	1150	A	C4'-C3'-C2'	5.53	108.13	102.60
1	N	76	G	C6-N1-C2	5.53	128.42	125.10
1	N	543	U	C2-N1-C1'	5.53	124.33	117.70
1	N	544	G	O4'-C1'-N9	5.53	112.62	108.20
1	N	682	G	N3-C4-N9	5.53	129.32	126.00
1	N	794	A	C4-C5-N7	-5.53	107.94	110.70
1	N	921	U	P-O5'-C5'	5.53	129.74	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1269	A	N7-C8-N9	-5.53	111.04	113.80
1	N	1318	A	N9-C4-C5	-5.53	103.59	105.80
1	N	1402	C	O4'-C4'-C3'	-5.53	98.47	104.00
1	N	81	A	C4-C5-C6	5.53	119.76	117.00
1	N	204	G	O4'-C4'-C3'	-5.53	98.47	104.00
1	N	432	A	C4'-C3'-C2'	-5.53	97.07	102.60
1	N	851	G	C4-C5-N7	5.53	113.01	110.80
1	N	556	C	O4'-C1'-N1	5.52	112.62	108.20
1	N	472	U	C5-C4-O4	-5.52	122.59	125.90
1	N	492	C	N3-C2-O2	5.52	125.77	121.90
1	N	800	G	C3'-C2'-C1'	5.52	105.92	101.50
1	N	315	A	P-O3'-C3'	5.52	126.33	119.70
1	N	440	C	C6-N1-C2	5.52	122.51	120.30
1	N	858	G	C6-N1-C2	-5.52	121.79	125.10
1	N	111	G	C4-C5-C6	5.52	122.11	118.80
1	N	137	U	N1-C2-O2	-5.52	118.94	122.80
1	N	339	C	C5-C4-N4	-5.52	116.34	120.20
1	N	537	G	N1-C2-N3	-5.52	120.59	123.90
1	N	1027	C	O4'-C1'-C2'	-5.52	100.28	105.80
1	N	1144	G	C8-N9-C4	-5.52	104.19	106.40
1	N	216	U	C5'-C4'-C3'	5.52	124.83	116.00
1	N	331	G	C4'-C3'-C2'	5.52	108.12	102.60
1	N	465	A	C4-C5-C6	5.52	119.76	117.00
1	N	777	A	C5'-C4'-O4'	5.52	115.72	109.10
1	N	887	G	C5'-C4'-O4'	5.52	115.72	109.10
1	N	1088	G	N1-C6-O6	5.52	123.21	119.90
1	N	1153	G	C6-C5-N7	-5.52	127.09	130.40
1	N	29	U	N1-C2-N3	-5.52	111.59	114.90
1	N	805	C	OP1-P-OP2	-5.52	111.33	119.60
1	N	844	G	N1-C2-N2	-5.52	111.23	116.20
1	N	1254	A	C4-C5-C6	5.52	119.76	117.00
1	N	105	G	N3-C4-N9	-5.51	122.69	126.00
1	N	265	G	N9-C4-C5	-5.51	103.19	105.40
1	N	306	A	C5-C6-N6	-5.51	119.29	123.70
1	N	780	A	P-O5'-C5'	5.51	129.72	120.90
1	N	1303	C	C5-C4-N4	-5.51	116.34	120.20
1	N	1473	G	C3'-C2'-C1'	5.51	105.91	101.50
1	N	173	U	N3-C2-O2	-5.51	118.34	122.20
1	N	246	A	N1-C6-N6	5.51	121.91	118.60
1	N	544	G	C2-N3-C4	5.51	114.66	111.90
1	N	90	C	N3-C4-C5	-5.51	119.69	121.90
1	N	769	G	O4'-C1'-N9	5.51	112.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	414	A	N7-C8-N9	-5.51	111.05	113.80
1	N	740	U	N1-C2-O2	-5.51	118.94	122.80
1	N	1088	G	P-O3'-C3'	-5.51	113.09	119.70
1	N	1249	C	N3-C4-N4	5.51	121.86	118.00
1	N	1408	A	N7-C8-N9	5.51	116.56	113.80
1	N	348	G	C6-N1-C2	5.51	128.41	125.10
1	N	754	C	N3-C4-N4	5.51	121.85	118.00
1	N	810	C	C2-N1-C1'	5.51	124.86	118.80
1	N	851	G	C5'-C4'-C3'	-5.51	107.19	116.00
1	N	1190	G	C4'-C3'-C2'	5.51	108.11	102.60
1	N	1415	G	N1-C2-N3	-5.51	120.60	123.90
1	N	31	G	C5'-C4'-O4'	5.50	115.71	109.10
1	N	280	C	P-O3'-C3'	5.50	126.31	119.70
1	N	1356	G	C6-C5-N7	-5.50	127.10	130.40
1	N	184	G	O4'-C1'-N9	5.50	112.60	108.20
1	N	426	U	C2-N1-C1'	-5.50	111.09	117.70
1	N	916	U	O4'-C4'-C3'	-5.50	98.50	104.00
1	N	1007	U	C5'-C4'-C3'	-5.50	107.19	116.00
1	N	1025	U	C3'-C2'-C1'	5.50	105.90	101.50
1	N	1468	A	C5-C6-N1	-5.50	114.95	117.70
1	N	17	U	C2-N3-C4	-5.50	123.70	127.00
1	N	76	G	C8-N9-C1'	-5.50	119.85	127.00
1	N	110	C	C6-N1-C1'	-5.50	114.20	120.80
1	N	416	G	N3-C4-N9	5.50	129.30	126.00
1	N	562	U	C4-C5-C6	-5.50	116.40	119.70
1	N	640	A	C4-C5-C6	5.50	119.75	117.00
1	N	915	A	P-O3'-C3'	-5.50	113.10	119.70
1	N	753	A	P-O5'-C5'	-5.50	112.10	120.90
1	N	1256	A	C6-C5-N7	-5.50	128.45	132.30
1	N	1362	A	C5-C6-N1	-5.50	114.95	117.70
1	N	37	U	C3'-C2'-C1'	5.50	105.90	101.50
1	N	516	U	O4'-C4'-C3'	-5.50	98.50	104.00
1	N	552	U	N1-C2-O2	-5.50	118.95	122.80
1	N	1374	A	C8-N9-C1'	-5.50	117.80	127.70
1	N	64	G	O4'-C1'-N9	5.50	112.60	108.20
1	N	148	G	P-O3'-C3'	-5.50	113.10	119.70
1	N	275	G	OP1-P-OP2	-5.50	111.35	119.60
1	N	598	U	C2-N3-C4	5.50	130.30	127.00
1	N	600	A	P-O5'-C5'	5.50	129.69	120.90
1	N	1297	G	O4'-C1'-N9	5.50	112.60	108.20
1	N	166	U	O4'-C1'-N1	5.50	112.60	108.20
1	N	334	C	P-O5'-C5'	5.49	129.69	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	456	A	O4'-C1'-N9	5.49	112.59	108.20
1	N	513	C	C5-C4-N4	-5.49	116.35	120.20
1	N	645	G	N7-C8-N9	-5.49	110.35	113.10
1	N	665	A	C5-C6-N1	-5.49	114.95	117.70
1	N	807	A	OP1-P-OP2	-5.49	111.36	119.60
1	N	885	G	C6-N1-C2	5.49	128.40	125.10
1	N	1025	U	C5-C4-O4	-5.49	122.60	125.90
1	N	46	G	N9-C4-C5	-5.49	103.20	105.40
1	N	423	G	C5-C6-N1	-5.49	108.75	111.50
1	N	465	A	O4'-C1'-N9	5.49	112.59	108.20
1	N	575	G	N3-C4-C5	5.49	131.35	128.60
1	N	588	G	C2-N3-C4	5.49	114.65	111.90
1	N	243	A	N9-C4-C5	5.49	108.00	105.80
1	N	601	G	N3-C4-C5	-5.49	125.85	128.60
1	N	794	A	N1-C2-N3	5.49	132.04	129.30
1	N	853	C	N3-C4-C5	5.49	124.10	121.90
1	N	855	U	P-O5'-C5'	-5.49	112.11	120.90
1	N	931	C	C2-N3-C4	5.49	122.64	119.90
1	N	1239	A	C5-C6-N6	-5.49	119.31	123.70
1	N	113	G	O4'-C1'-N9	5.49	112.59	108.20
1	N	122	G	C4-C5-C6	5.49	122.09	118.80
1	N	607	A	C5-C6-N1	-5.49	114.96	117.70
1	N	752	G	C8-N9-C1'	5.49	134.13	127.00
1	N	850	U	O4'-C1'-N1	5.49	112.59	108.20
1	N	969	A	O4'-C1'-N9	5.49	112.59	108.20
1	N	1339	A	P-O5'-C5'	5.49	129.68	120.90
1	N	1440	U	C5-C4-O4	-5.49	122.61	125.90
1	N	149	A	C6-N1-C2	-5.49	115.31	118.60
1	N	215	C	C4-C5-C6	5.49	120.14	117.40
1	N	698	G	C1'-O4'-C4'	5.49	114.29	109.90
1	N	1093	A	C5-N7-C8	5.49	106.64	103.90
1	N	1396	A	C2-N3-C4	5.49	113.34	110.60
1	N	331	G	N3-C4-C5	-5.49	125.86	128.60
1	N	348	G	N1-C6-O6	5.49	123.19	119.90
1	N	382	A	N1-C2-N3	-5.49	126.56	129.30
1	N	545	C	P-O3'-C3'	5.49	126.28	119.70
1	N	205	A	N3-C4-N9	5.48	131.79	127.40
1	N	81	A	C6-N1-C2	-5.48	115.31	118.60
1	N	85	U	C2-N3-C4	5.48	130.29	127.00
1	N	532	A	N3-C4-N9	5.48	131.78	127.40
1	N	620	C	P-O5'-C5'	-5.48	112.13	120.90
1	N	851	G	O4'-C1'-N9	5.48	112.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1354	U	N3-C4-C5	-5.48	111.31	114.60
1	N	144	G	N3-C2-N2	-5.48	116.06	119.90
1	N	176	C	N1-C2-N3	-5.48	115.36	119.20
1	N	309	A	C8-N9-C4	-5.48	103.61	105.80
1	N	512	U	C5-C4-O4	-5.48	122.61	125.90
1	N	558	G	C5-C6-O6	-5.48	125.31	128.60
1	N	751	U	N1-C2-N3	-5.48	111.61	114.90
1	N	1020	G	C4-C5-N7	5.48	112.99	110.80
1	N	1420	U	O4'-C1'-N1	5.48	112.58	108.20
1	N	1473	G	C5-C6-N1	-5.48	108.76	111.50
1	N	449	G	N1-C2-N3	-5.48	120.61	123.90
1	N	700	G	O4'-C1'-N9	5.48	112.58	108.20
1	N	62	U	C5-C4-O4	-5.48	122.61	125.90
1	N	523	A	C4-C5-C6	5.48	119.74	117.00
1	N	579	A	P-O5'-C5'	5.48	129.66	120.90
1	N	783	C	O4'-C1'-N1	5.48	112.58	108.20
1	N	1119	C	N1-C1'-C2'	-5.48	105.97	112.00
1	N	1291	U	C6-N1-C2	5.48	124.29	121.00
1	N	1301	U	O4'-C1'-N1	5.48	112.58	108.20
1	N	1495	U	P-O5'-C5'	5.48	129.66	120.90
1	N	641	U	C3'-C2'-C1'	5.48	105.88	101.50
1	N	130	A	N9-C1'-C2'	5.47	121.12	114.00
1	N	675	A	N3-C4-C5	-5.47	122.97	126.80
1	N	825	A	C2-N3-C4	-5.47	107.86	110.60
1	N	1007	U	C3'-C2'-C1'	5.47	105.88	101.50
1	N	1248	A	N9-C4-C5	5.47	107.99	105.80
1	N	1333	A	C5-C6-N6	-5.47	119.32	123.70
1	N	492	C	C5-C4-N4	-5.47	116.37	120.20
1	N	895	G	C3'-C2'-C1'	-5.47	97.12	101.50
1	N	963	G	P-O3'-C3'	-5.47	113.13	119.70
1	N	1462	C	N3-C2-O2	5.47	125.73	121.90
1	N	1473	G	N1-C2-N2	5.47	121.13	116.20
1	N	452	A	C8-N9-C4	5.47	107.99	105.80
1	N	914	A	C5'-C4'-C3'	-5.47	107.25	116.00
1	N	580	C	N3-C2-O2	-5.47	118.07	121.90
1	N	581	G	N7-C8-N9	5.47	115.83	113.10
1	N	1035	A	C6-N1-C2	5.47	121.88	118.60
1	N	1271	A	C6-C5-N7	-5.47	128.47	132.30
1	N	1278	G	P-O5'-C5'	-5.47	112.15	120.90
1	N	909	A	O5'-C5'-C4'	-5.47	101.31	111.70
1	N	937	A	N9-C4-C5	-5.47	103.61	105.80
1	N	815	A	N7-C8-N9	-5.47	111.07	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	818	G	OP1-P-OP2	-5.47	111.40	119.60
1	N	1029	U	C3'-C2'-C1'	-5.47	97.13	101.50
1	N	1236	A	P-O5'-C5'	5.47	129.65	120.90
1	N	750	C	N1-C2-O2	-5.46	115.62	118.90
1	N	845	A	C4-C5-N7	5.46	113.43	110.70
1	N	870	U	N1-C2-N3	-5.46	111.62	114.90
1	N	1147	C	C1'-O4'-C4'	5.46	114.27	109.90
1	N	1223	C	C3'-C2'-C1'	5.46	105.87	101.50
1	N	1234	C	C2-N3-C4	5.46	122.63	119.90
1	N	1388	C	P-O5'-C5'	-5.46	112.16	120.90
1	N	1482	G	N9-C1'-C2'	-5.46	105.99	112.00
1	N	206	C	P-O5'-C5'	5.46	129.64	120.90
1	N	681	A	N7-C8-N9	-5.46	111.07	113.80
1	N	1013	G	N9-C4-C5	-5.46	103.22	105.40
1	N	1193	G	N1-C2-N2	-5.46	111.28	116.20
1	N	1436	U	N3-C4-O4	5.46	123.22	119.40
1	N	1476	A	O4'-C1'-N9	5.46	112.57	108.20
1	N	1308	U	C5'-C4'-C3'	-5.46	107.26	116.00
1	N	1389	C	P-O3'-C3'	5.46	126.25	119.70
1	N	172	A	C5-N7-C8	5.46	106.63	103.90
1	N	176	C	C1'-O4'-C4'	-5.46	105.53	109.90
1	N	189	A	C5-C6-N6	-5.46	119.33	123.70
1	N	303	A	O4'-C1'-N9	5.46	112.57	108.20
1	N	404	G	C8-N9-C4	5.46	108.58	106.40
1	N	450	G	O4'-C1'-N9	5.46	112.57	108.20
1	N	630	A	O5'-C5'-C4'	-5.46	101.33	111.70
1	N	1521	C	N3-C4-N4	5.46	121.82	118.00
1	N	258	G	C5-N7-C8	-5.46	101.57	104.30
1	N	364	A	C2-N3-C4	5.46	113.33	110.60
1	N	902	G	N3-C2-N2	5.46	123.72	119.90
1	N	1034	G	N3-C2-N2	5.46	123.72	119.90
1	N	1390	U	C6-N1-C2	-5.46	117.73	121.00
1	N	269	C	C5-C4-N4	-5.46	116.38	120.20
1	N	407	U	O4'-C1'-N1	5.46	112.56	108.20
1	N	877	G	C4-C5-N7	5.46	112.98	110.80
1	N	884	U	C5-C4-O4	-5.46	122.63	125.90
1	N	1295	U	C5-C4-O4	-5.46	122.63	125.90
1	N	12	U	C5-C4-O4	-5.45	122.63	125.90
1	N	44	A	O4'-C1'-N9	5.45	112.56	108.20
1	N	237	G	N9-C4-C5	-5.45	103.22	105.40
1	N	400	C	C6-N1-C2	5.45	122.48	120.30
1	N	441	A	C6-N1-C2	5.45	121.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	546	A	N9-C4-C5	-5.45	103.62	105.80
1	N	616	G	N1-C2-N3	-5.45	120.63	123.90
1	N	809	G	C4'-C3'-C2'	-5.45	97.15	102.60
1	N	1303	C	P-O3'-C3'	-5.45	113.16	119.70
1	N	679	C	N3-C4-C5	-5.45	119.72	121.90
1	N	1398	A	C6-C5-N7	-5.45	128.48	132.30
1	N	402	G	C1'-O4'-C4'	5.45	114.26	109.90
1	N	1469	C	C5'-C4'-O4'	-5.45	102.56	109.10
1	N	15	G	P-O3'-C3'	-5.45	113.16	119.70
1	N	46	G	C4-C5-N7	5.45	112.98	110.80
1	N	361	G	N3-C2-N2	5.45	123.71	119.90
1	N	567	G	C8-N9-C1'	5.45	134.08	127.00
1	N	575	G	C4-C5-N7	5.45	112.98	110.80
1	N	865	A	O4'-C4'-C3'	-5.45	98.55	104.00
1	N	119	A	N3-C4-C5	-5.45	122.99	126.80
1	N	230	G	C4'-C3'-C2'	-5.45	97.15	102.60
1	N	457	G	N3-C2-N2	5.45	123.71	119.90
1	N	497	G	C5-C6-N1	5.45	114.22	111.50
1	N	507	C	C5-C4-N4	-5.45	116.39	120.20
1	N	1254	A	N9-C4-C5	-5.45	103.62	105.80
1	N	293	G	N1-C2-N3	-5.45	120.63	123.90
1	N	299	G	C8-N9-C1'	5.45	134.08	127.00
1	N	331	G	C5-N7-C8	5.45	107.02	104.30
1	N	945	G	N3-C2-N2	5.45	123.71	119.90
1	N	995	C	O4'-C1'-N1	5.45	112.56	108.20
1	N	1116	U	O4'-C1'-N1	5.45	112.56	108.20
1	N	1152	A	C1'-O4'-C4'	5.45	114.26	109.90
1	N	494	G	O4'-C1'-N9	5.44	112.56	108.20
1	N	584	G	C5-C6-N1	-5.44	108.78	111.50
1	N	658	C	C6-N1-C2	5.44	122.48	120.30
1	N	849	G	C5-C6-O6	-5.44	125.33	128.60
1	N	1261	A	C5-C6-N1	-5.44	114.98	117.70
1	N	223	A	O4'-C1'-N9	5.44	112.55	108.20
1	N	240	G	N9-C1'-C2'	-5.44	106.01	112.00
1	N	241	G	C3'-C2'-C1'	-5.44	97.15	101.50
1	N	267	C	P-O3'-C3'	5.44	126.23	119.70
1	N	500	G	N7-C8-N9	-5.44	110.38	113.10
1	N	502	A	N1-C2-N3	-5.44	126.58	129.30
1	N	642	A	N1-C6-N6	5.44	121.87	118.60
1	N	904	U	C2-N3-C4	5.44	130.27	127.00
1	N	976	G	N7-C8-N9	5.44	115.82	113.10
1	N	1097	C	C6-N1-C2	-5.44	118.12	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	211	G	C8-N9-C4	5.44	108.58	106.40
1	N	249	U	C6-N1-C2	5.44	124.26	121.00
1	N	497	G	O4'-C1'-N9	5.44	112.55	108.20
1	N	578	C	C4-C5-C6	5.44	120.12	117.40
1	N	1417	G	N1-C2-N3	-5.44	120.64	123.90
1	N	416	G	C4-C5-C6	5.44	122.06	118.80
1	N	423	G	N9-C4-C5	-5.44	103.22	105.40
1	N	728	A	C3'-C2'-C1'	-5.44	97.15	101.50
1	N	1517	G	C5'-C4'-C3'	5.44	124.70	116.00
1	N	411	A	C6-C5-N7	-5.44	128.49	132.30
1	N	523	A	C2-N3-C4	-5.44	107.88	110.60
1	N	578	C	C1'-O4'-C4'	-5.44	105.55	109.90
1	N	810	C	C2-N3-C4	5.44	122.62	119.90
1	N	996	A	C4'-C3'-C2'	-5.44	97.16	102.60
1	N	1414	U	C5'-C4'-C3'	5.44	124.70	116.00
1	N	510	A	C4'-C3'-C2'	5.44	108.04	102.60
1	N	685	G	N1-C6-O6	5.44	123.16	119.90
1	N	1127	G	N3-C4-C5	5.44	131.32	128.60
1	N	1419	G	O5'-C5'-C4'	5.44	122.03	111.70
1	N	633	G	C4-C5-N7	5.43	112.97	110.80
1	N	642	A	C5-N7-C8	5.43	106.62	103.90
1	N	886	G	N3-C4-N9	5.43	129.26	126.00
1	N	194	C	C5'-C4'-C3'	-5.43	107.31	116.00
1	N	232	G	N9-C1'-C2'	-5.43	106.02	112.00
1	N	989	U	C2-N3-C4	5.43	130.26	127.00
1	N	1155	A	C8-N9-C1'	-5.43	117.92	127.70
1	N	312	C	N1-C2-O2	5.43	122.16	118.90
1	N	1353	G	C5'-C4'-C3'	-5.43	107.31	116.00
1	N	308	C	N1-C2-O2	5.43	122.16	118.90
1	N	569	C	C5-C6-N1	-5.43	118.29	121.00
1	N	624	C	N3-C4-C5	-5.43	119.73	121.90
1	N	637	C	O5'-C5'-C4'	-5.43	101.39	111.70
1	N	729	A	C6-N1-C2	5.43	121.86	118.60
1	N	828	U	N3-C2-O2	5.43	126.00	122.20
1	N	1127	G	OP1-P-OP2	-5.43	111.46	119.60
1	N	1239	A	O3'-P-O5'	5.43	114.31	104.00
1	N	1264	U	O5'-C5'-C4'	-5.43	101.39	111.70
1	N	94	G	OP1-P-OP2	-5.43	111.46	119.60
1	N	446	G	C6-C5-N7	-5.43	127.14	130.40
1	N	533	A	N1-C6-N6	5.43	121.86	118.60
1	N	951	G	C4'-C3'-C2'	-5.43	97.17	102.60
1	N	1341	U	C4-C5-C6	-5.43	116.44	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	210	C	C6-N1-C2	5.42	122.47	120.30
1	N	383	A	N3-C4-C5	-5.42	123.00	126.80
1	N	438	U	C4'-C3'-C2'	5.42	108.02	102.60
1	N	637	C	C5-C6-N1	5.42	123.71	121.00
1	N	1172	C	C2-N3-C4	-5.42	117.19	119.90
1	N	1487	G	C4-N9-C1'	-5.42	119.45	126.50
1	N	533	A	C6-C5-N7	-5.42	128.50	132.30
1	N	1174	G	C5'-C4'-O4'	5.42	115.61	109.10
1	N	1315	U	C5-C4-O4	-5.42	122.65	125.90
1	N	322	C	C5'-C4'-C3'	-5.42	107.33	116.00
1	N	421	U	N3-C4-O4	5.42	123.19	119.40
1	N	449	G	C8-N9-C4	-5.42	104.23	106.40
1	N	668	G	N3-C2-N2	-5.42	116.11	119.90
1	N	683	G	N1-C2-N2	5.42	121.08	116.20
1	N	811	C	N1-C2-O2	5.42	122.15	118.90
1	N	1348	U	O4'-C4'-C3'	-5.42	98.58	104.00
1	N	135	C	C6-N1-C1'	-5.42	114.30	120.80
1	N	139	A	O3'-P-O5'	-5.42	93.70	104.00
1	N	198	G	P-O5'-C5'	5.42	129.57	120.90
1	N	425	G	C6-N1-C2	-5.42	121.85	125.10
1	N	1317	C	C2-N3-C4	5.42	122.61	119.90
1	N	1362	A	C6-C5-N7	-5.42	128.51	132.30
1	N	337	G	C6-C5-N7	-5.42	127.15	130.40
1	N	422	C	C2-N3-C4	5.42	122.61	119.90
1	N	689	C	P-O5'-C5'	5.42	129.57	120.90
1	N	716	A	C4-C5-C6	5.42	119.71	117.00
1	N	1033	G	C4'-C3'-C2'	-5.42	97.18	102.60
1	N	1293	C	C2-N3-C4	5.42	122.61	119.90
1	N	283	U	N3-C4-O4	5.42	123.19	119.40
1	N	583	A	P-O3'-C3'	-5.42	113.20	119.70
1	N	727	G	N3-C2-N2	5.42	123.69	119.90
1	N	737	C	O4'-C1'-N1	5.42	112.53	108.20
1	N	1408	A	C6-N1-C2	-5.42	115.35	118.60
1	N	399	G	N9-C4-C5	-5.42	103.23	105.40
1	N	1112	C	N3-C2-O2	5.42	125.69	121.90
1	N	1534	A	C5-C6-N6	-5.42	119.37	123.70
1	N	32	A	N9-C4-C5	5.41	107.97	105.80
1	N	648	A	C2-N3-C4	-5.41	107.89	110.60
1	N	1507	A	C4-C5-N7	-5.41	107.99	110.70
1	N	7	A	P-O5'-C5'	-5.41	112.24	120.90
1	N	552	U	N1-C1'-C2'	-5.41	106.05	112.00
1	N	580	C	P-O5'-C5'	5.41	129.56	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	976	G	C6-N1-C2	5.41	128.35	125.10
1	N	1422	G	C5'-C4'-C3'	-5.41	107.34	116.00
1	N	246	A	C8-N9-C4	5.41	107.96	105.80
1	N	538	G	C6-N1-C2	5.41	128.35	125.10
1	N	578	C	OP1-P-OP2	-5.41	111.48	119.60
1	N	1489	G	C5'-C4'-C3'	5.41	124.66	116.00
1	N	99	C	C4'-C3'-C2'	-5.41	97.19	102.60
1	N	245	U	C5-C6-N1	5.41	125.40	122.70
1	N	1182	G	P-O3'-C3'	5.41	126.19	119.70
1	N	1192	C	P-O3'-C3'	5.41	126.19	119.70
1	N	1203	C	N1-C2-O2	-5.41	115.66	118.90
1	N	1446	A	C2'-C3'-O3'	5.41	122.36	113.70
1	N	809	G	C5-N7-C8	-5.41	101.60	104.30
1	N	1068	G	N3-C2-N2	-5.41	116.11	119.90
1	N	1230	C	N1-C2-O2	5.41	122.14	118.90
1	N	1428	A	C6-N1-C2	5.41	121.84	118.60
1	N	5	U	C5-C6-N1	5.41	125.40	122.70
1	N	700	G	N7-C8-N9	-5.41	110.40	113.10
1	N	1033	G	N9-C4-C5	-5.41	103.24	105.40
1	N	1202	U	N1-C2-N3	-5.41	111.66	114.90
1	N	1324	A	C4-C5-C6	5.41	119.70	117.00
1	N	334	C	C3'-C2'-C1'	-5.40	97.18	101.50
1	N	350	G	C6-N1-C2	-5.40	121.86	125.10
1	N	544	G	N1-C2-N3	-5.40	120.66	123.90
1	N	894	G	C2-N3-C4	5.40	114.60	111.90
1	N	920	U	N3-C4-O4	5.40	123.18	119.40
1	N	1142	G	C4-N9-C1'	5.40	133.52	126.50
1	N	1323	G	C5'-C4'-O4'	-5.40	102.62	109.10
1	N	42	G	N9-C1'-C2'	-5.40	106.06	112.00
1	N	179	A	O4'-C1'-N9	5.40	112.52	108.20
1	N	203	G	N3-C4-C5	-5.40	125.90	128.60
1	N	342	C	O4'-C1'-C2'	-5.40	100.40	105.80
1	N	594	U	C5'-C4'-O4'	5.40	115.58	109.10
1	N	713	G	C5'-C4'-C3'	-5.40	107.36	116.00
1	N	242	G	C8-N9-C4	5.40	108.56	106.40
1	N	471	U	N1-C2-N3	5.40	118.14	114.90
1	N	77	A	O4'-C1'-N9	5.40	112.52	108.20
1	N	151	A	N7-C8-N9	-5.40	111.10	113.80
1	N	251	G	C4'-C3'-C2'	-5.40	97.20	102.60
1	N	540	G	C1'-O4'-C4'	5.40	114.22	109.90
1	N	542	G	C4'-C3'-C2'	-5.40	97.20	102.60
1	N	825	A	O4'-C1'-N9	5.40	112.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	861	G	OP2-P-O3'	5.40	117.07	105.20
1	N	962	C	C4-C5-C6	5.40	120.10	117.40
1	N	1153	G	N3-C4-C5	5.40	131.30	128.60
1	N	1274	A	P-O5'-C5'	5.40	129.53	120.90
1	N	1398	A	C2-N3-C4	-5.40	107.90	110.60
1	N	170	U	OP1-P-OP2	-5.40	111.51	119.60
1	N	1085	U	N3-C4-C5	-5.40	111.36	114.60
1	N	405	U	N1-C2-O2	5.39	126.58	122.80
1	N	539	A	C8-N9-C4	5.39	107.96	105.80
1	N	544	G	N9-C4-C5	5.39	107.56	105.40
1	N	832	G	N3-C4-N9	5.39	129.24	126.00
1	N	1272	G	N9-C4-C5	-5.39	103.24	105.40
1	N	1305	G	N9-C4-C5	-5.39	103.24	105.40
1	N	1510	C	O4'-C1'-N1	5.39	112.52	108.20
1	N	383	A	C4-C5-C6	5.39	119.70	117.00
1	N	571	U	O4'-C1'-N1	5.39	112.52	108.20
1	N	659	U	C3'-C2'-C1'	-5.39	97.19	101.50
1	N	829	G	N7-C8-N9	5.39	115.80	113.10
1	N	999	C	O4'-C1'-N1	5.39	112.51	108.20
1	N	1050	G	C8-N9-C4	5.39	108.56	106.40
1	N	1163	A	P-O3'-C3'	-5.39	113.23	119.70
1	N	1117	A	C3'-C2'-C1'	5.39	105.81	101.50
1	N	406	G	C4'-C3'-C2'	-5.39	97.21	102.60
1	N	877	G	C5-C6-N1	5.39	114.19	111.50
1	N	915	A	C5-C6-N1	-5.39	115.00	117.70
1	N	1090	U	C4'-C3'-C2'	-5.39	97.21	102.60
1	N	1185	G	C5'-C4'-C3'	5.39	124.62	116.00
1	N	1210	C	OP1-P-O3'	5.39	117.06	105.20
1	N	1213	A	C2-N3-C4	5.39	113.30	110.60
1	N	381	C	N3-C4-N4	5.39	121.77	118.00
1	N	491	G	O4'-C1'-C2'	-5.39	100.41	105.80
1	N	623	C	OP1-P-OP2	-5.39	111.52	119.60
1	N	987	G	C5-C6-N1	-5.39	108.81	111.50
1	N	88	U	N3-C4-O4	5.39	123.17	119.40
1	N	128	G	N3-C4-C5	5.39	131.29	128.60
1	N	230	G	N9-C1'-C2'	-5.39	106.08	112.00
1	N	329	A	C5-C6-N6	-5.39	119.39	123.70
1	N	589	U	C1'-O4'-C4'	-5.39	105.59	109.90
1	N	815	A	N3-C4-C5	-5.39	123.03	126.80
1	N	928	G	C5-N7-C8	5.39	106.99	104.30
1	N	1002	G	C5-C6-O6	-5.39	125.37	128.60
1	N	25	C	C5-C6-N1	5.38	123.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	228	A	C5'-C4'-O4'	5.38	115.56	109.10
1	N	239	U	O4'-C1'-N1	5.38	112.51	108.20
1	N	386	C	N1-C2-O2	5.38	122.13	118.90
1	N	390	U	N3-C4-C5	-5.38	111.37	114.60
1	N	533	A	C5'-C4'-C3'	-5.38	107.39	116.00
1	N	582	C	N3-C4-N4	5.38	121.77	118.00
1	N	1190	G	O4'-C1'-N9	5.38	112.51	108.20
1	N	1228	C	O5'-P-OP2	5.38	117.16	110.70
1	N	1311	A	C5-C6-N1	-5.38	115.01	117.70
1	N	117	G	C6-C5-N7	-5.38	127.17	130.40
1	N	947	G	C5-C6-N1	-5.38	108.81	111.50
1	N	1196	A	O3'-P-O5'	-5.38	93.77	104.00
1	N	1254	A	N1-C2-N3	-5.38	126.61	129.30
1	N	1245	C	N3-C4-C5	-5.38	119.75	121.90
1	N	1517	G	N3-C4-N9	5.38	129.23	126.00
1	N	116	A	C8-N9-C4	-5.38	103.65	105.80
1	N	1001	C	C5-C6-N1	5.38	123.69	121.00
1	N	1031	C	C2-N1-C1'	5.38	124.72	118.80
1	N	1171	A	N7-C8-N9	5.38	116.49	113.80
1	N	1448	C	C3'-C2'-C1'	5.38	105.80	101.50
1	N	603	U	N3-C2-O2	5.38	125.97	122.20
1	N	774	G	C8-N9-C4	-5.38	104.25	106.40
1	N	934	C	C5'-C4'-C3'	-5.38	107.39	116.00
1	N	1010	U	C5'-C4'-C3'	5.38	124.61	116.00
1	N	482	A	P-O5'-C5'	-5.38	112.30	120.90
1	N	874	G	P-O5'-C5'	5.38	129.50	120.90
1	N	947	G	N3-C2-N2	5.38	123.66	119.90
1	N	983	A	C4-N9-C1'	5.38	135.97	126.30
1	N	1082	A	N3-C4-C5	-5.38	123.04	126.80
1	N	1496	C	N1-C2-N3	-5.38	115.44	119.20
1	N	134	G	O4'-C4'-C3'	-5.37	98.63	104.00
1	N	151	A	C4'-C3'-C2'	-5.37	97.23	102.60
1	N	152	A	C5'-C4'-C3'	5.37	124.60	116.00
1	N	227	G	C1'-O4'-C4'	5.37	114.20	109.90
1	N	403	C	N1-C2-N3	-5.37	115.44	119.20
1	N	688	G	O4'-C1'-N9	5.37	112.50	108.20
1	N	956	U	O4'-C1'-C2'	-5.37	100.43	105.80
1	N	1423	G	C6-C5-N7	-5.37	127.18	130.40
1	N	1485	U	N3-C4-C5	5.37	117.82	114.60
1	N	1491	G	O4'-C4'-C3'	-5.37	98.63	104.00
1	N	73	C	N3-C4-N4	5.37	121.76	118.00
1	N	224	U	N1-C2-O2	-5.37	119.04	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	475	C	C1'-O4'-C4'	5.37	114.20	109.90
1	N	583	A	N9-C4-C5	5.37	107.95	105.80
1	N	747	A	C5-C6-N1	-5.37	115.01	117.70
1	N	894	G	N9-C4-C5	5.37	107.55	105.40
1	N	1096	C	N3-C2-O2	5.37	125.66	121.90
1	N	1202	U	N3-C2-O2	5.37	125.96	122.20
1	N	353	A	C4'-C3'-C2'	-5.37	97.23	102.60
1	N	525	C	N3-C4-N4	5.37	121.76	118.00
1	N	237	G	N3-C4-C5	5.37	131.28	128.60
1	N	391	G	N1-C2-N2	5.37	121.03	116.20
1	N	487	A	C5-C6-N1	-5.37	115.02	117.70
1	N	966	G	N3-C2-N2	5.37	123.66	119.90
1	N	1081	A	C2-N3-C4	-5.37	107.92	110.60
1	N	1242	G	C6-N1-C2	5.37	128.32	125.10
1	N	1352	C	O5'-P-OP1	5.37	117.14	110.70
1	N	1358	U	C2'-C3'-O3'	5.37	122.29	113.70
1	N	16	A	C5'-C4'-O4'	-5.37	102.66	109.10
1	N	354	G	N1-C2-N3	-5.37	120.68	123.90
1	N	355	C	N1-C2-N3	-5.37	115.44	119.20
1	N	1367	C	N1-C1'-C2'	-5.37	106.10	112.00
1	N	54	C	C2-N3-C4	5.37	122.58	119.90
1	N	137	U	C5-C6-N1	-5.37	120.02	122.70
1	N	291	U	N3-C2-O2	5.37	125.96	122.20
1	N	1137	C	O4'-C4'-C3'	-5.37	98.63	104.00
1	N	176	C	C5-C4-N4	-5.36	116.45	120.20
1	N	198	G	N3-C4-C5	5.36	131.28	128.60
1	N	655	A	C4-N9-C1'	5.36	135.95	126.30
1	N	801	U	C3'-C2'-C1'	5.36	105.79	101.50
1	N	1077	G	N9-C1'-C2'	-5.36	106.10	112.00
1	N	1332	A	C4-C5-C6	5.36	119.68	117.00
1	N	78	A	C5'-C4'-C3'	5.36	124.58	116.00
1	N	283	U	C5'-C4'-O4'	5.36	115.53	109.10
1	N	529	G	N3-C4-N9	5.36	129.22	126.00
1	N	933	G	C3'-C2'-C1'	5.36	105.79	101.50
1	N	983	A	O4'-C1'-N9	5.36	112.49	108.20
1	N	1218	C	N1-C2-O2	-5.36	115.68	118.90
1	N	209	U	C5'-C4'-O4'	5.36	115.53	109.10
1	N	387	U	OP1-P-O3'	5.36	116.99	105.20
1	N	885	G	C5-N7-C8	-5.36	101.62	104.30
1	N	1181	G	N3-C2-N2	5.36	123.65	119.90
1	N	1320	C	N3-C4-N4	5.36	121.75	118.00
1	N	1213	A	C5-C6-N1	-5.36	115.02	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1354	U	C6-N1-C1'	5.36	128.70	121.20
1	N	83	C	C5'-C4'-C3'	-5.36	107.43	116.00
1	N	904	U	C5'-C4'-C3'	5.36	124.57	116.00
1	N	1084	G	C6-C5-N7	-5.36	127.19	130.40
1	N	1162	C	C6-N1-C1'	-5.36	114.37	120.80
1	N	1170	A	C5-C6-N6	-5.36	119.42	123.70
1	N	1237	C	C5-C4-N4	-5.36	116.45	120.20
1	N	1518	A	C5-C6-N6	-5.36	119.42	123.70
1	N	247	G	C8-N9-C4	-5.35	104.26	106.40
1	N	642	A	N1-C2-N3	5.35	131.98	129.30
1	N	68	G	O4'-C4'-C3'	-5.35	98.65	104.00
1	N	416	G	C5'-C4'-C3'	5.35	124.56	116.00
1	N	499	A	C1'-O4'-C4'	5.35	114.18	109.90
1	N	527	G	C4'-C3'-C2'	-5.35	97.25	102.60
1	N	585	G	C5-C6-N1	-5.35	108.82	111.50
1	N	930	C	C5-C6-N1	-5.35	118.32	121.00
1	N	315	A	C6-N1-C2	-5.35	115.39	118.60
1	N	794	A	C5'-C4'-C3'	-5.35	107.44	116.00
1	N	817	C	C5'-C4'-C3'	5.35	124.56	116.00
1	N	48	C	C5-C4-N4	-5.35	116.46	120.20
1	N	64	G	P-O5'-C5'	5.35	129.46	120.90
1	N	104	G	N7-C8-N9	-5.35	110.42	113.10
1	N	169	C	O4'-C4'-C3'	-5.35	98.65	104.00
1	N	240	G	C8-N9-C4	5.35	108.54	106.40
1	N	476	U	C5-C4-O4	5.35	129.11	125.90
1	N	725	G	C5-N7-C8	5.35	106.97	104.30
1	N	1118	U	C5'-C4'-C3'	5.35	124.56	116.00
1	N	1258	G	C4-C5-C6	5.35	122.01	118.80
1	N	669	G	C6-C5-N7	-5.35	127.19	130.40
1	N	1012	A	C4-C5-N7	-5.35	108.03	110.70
1	N	120	A	N7-C8-N9	-5.35	111.13	113.80
1	N	258	G	C5'-C4'-C3'	-5.34	107.45	116.00
1	N	363	A	C6-C5-N7	-5.34	128.56	132.30
1	N	1196	A	O4'-C4'-C3'	-5.34	98.66	104.00
1	N	1399	C	N3-C4-N4	5.34	121.74	118.00
1	N	1529	G	C6-N1-C2	5.34	128.31	125.10
1	N	198	G	C5-C6-N1	-5.34	108.83	111.50
1	N	700	G	C5-C6-N1	-5.34	108.83	111.50
1	N	967	C	C2-N3-C4	5.34	122.57	119.90
1	N	1015	G	C6-C5-N7	-5.34	127.19	130.40
1	N	1203	C	C5'-C4'-O4'	5.34	115.51	109.10
1	N	4	U	N3-C2-O2	5.34	125.94	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	230	G	O4'-C1'-N9	5.34	112.47	108.20
1	N	296	U	C2-N1-C1'	5.34	124.11	117.70
1	N	438	U	C4'-C3'-O3'	-5.34	98.18	109.40
1	N	947	G	C5'-C4'-C3'	5.34	124.55	116.00
1	N	306	A	C5-N7-C8	5.34	106.57	103.90
1	N	106	C	C6-N1-C2	-5.34	118.17	120.30
1	N	234	C	C1'-O4'-C4'	5.34	114.17	109.90
1	N	599	C	O4'-C1'-N1	5.34	112.47	108.20
1	N	1012	A	C2-N3-C4	5.34	113.27	110.60
1	N	1410	A	C5'-C4'-O4'	-5.34	102.69	109.10
1	N	1432	G	N1-C2-N2	-5.34	111.40	116.20
1	N	202	G	N1-C2-N3	-5.34	120.70	123.90
1	N	217	C	N1-C2-O2	-5.34	115.70	118.90
1	N	319	G	N9-C4-C5	-5.34	103.27	105.40
1	N	444	G	P-O5'-C5'	5.34	129.44	120.90
1	N	511	C	N1-C2-N3	-5.34	115.46	119.20
1	N	777	A	C5-C6-N6	-5.34	119.43	123.70
1	N	1041	G	C5'-C4'-O4'	5.34	115.50	109.10
1	N	1211	U	C5'-C4'-O4'	5.34	115.50	109.10
1	N	311	C	C2-N3-C4	5.33	122.57	119.90
1	N	434	U	C4-C5-C6	-5.33	116.50	119.70
1	N	113	G	C8-N9-C1'	5.33	133.93	127.00
1	N	223	A	P-O3'-C3'	-5.33	113.30	119.70
1	N	368	U	C1'-O4'-C4'	-5.33	105.63	109.90
1	N	383	A	P-O3'-C3'	5.33	126.10	119.70
1	N	601	G	C4-N9-C1'	-5.33	119.57	126.50
1	N	797	C	N3-C4-N4	5.33	121.73	118.00
1	N	961	U	O4'-C1'-N1	5.33	112.47	108.20
1	N	1042	A	O3'-P-O5'	-5.33	93.86	104.00
1	N	1337	G	C5-C6-N1	-5.33	108.83	111.50
1	N	1361	G	C4-C5-N7	-5.33	108.67	110.80
1	N	1374	A	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	178	C	O5'-C5'-C4'	-5.33	101.57	111.70
1	N	473	U	O4'-C1'-C2'	-5.33	100.47	105.80
1	N	498	A	N3-C4-C5	-5.33	123.07	126.80
1	N	567	G	N9-C4-C5	5.33	107.53	105.40
1	N	582	C	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	816	A	C1'-O4'-C4'	5.33	114.17	109.90
1	N	67	C	C6-N1-C1'	-5.33	114.40	120.80
1	N	158	G	N3-C2-N2	5.33	123.63	119.90
1	N	518	C	C5'-C4'-O4'	5.33	115.50	109.10
1	N	1458	G	C6-C5-N7	-5.33	127.20	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	517	G	C5'-C4'-C3'	-5.33	107.47	116.00
1	N	721	G	C5'-C4'-O4'	5.33	115.50	109.10
1	N	819	A	O4'-C1'-N9	5.33	112.46	108.20
1	N	841	C	N3-C4-C5	-5.33	119.77	121.90
1	N	966	G	O4'-C1'-N9	5.33	112.46	108.20
1	N	1094	G	C5'-C4'-C3'	-5.33	107.47	116.00
1	N	1462	C	C5-C4-N4	-5.33	116.47	120.20
1	N	79	G	C6-C5-N7	-5.33	127.20	130.40
1	N	429	U	N3-C4-C5	-5.33	111.40	114.60
1	N	549	C	N1-C2-O2	-5.33	115.70	118.90
1	N	85	U	N1-C2-N3	-5.33	111.70	114.90
1	N	202	G	C8-N9-C4	-5.33	104.27	106.40
1	N	466	A	N7-C8-N9	-5.33	111.14	113.80
1	N	529	G	C8-N9-C1'	5.33	133.92	127.00
1	N	566	G	C8-N9-C4	-5.33	104.27	106.40
1	N	592	G	N1-C2-N2	5.33	120.99	116.20
1	N	614	C	C2-N3-C4	5.33	122.56	119.90
1	N	621	A	C5-N7-C8	5.33	106.56	103.90
1	N	635	A	C5-N7-C8	-5.33	101.24	103.90
1	N	925	G	O3'-P-O5'	-5.33	93.88	104.00
1	N	1054	C	N3-C4-N4	5.33	121.73	118.00
1	N	1137	C	C5'-C4'-C3'	-5.33	107.48	116.00
1	N	95	C	C6-N1-C2	5.32	122.43	120.30
1	N	116	A	N7-C8-N9	5.32	116.46	113.80
1	N	766	A	O3'-P-O5'	-5.32	93.89	104.00
1	N	884	U	C1'-O4'-C4'	-5.32	105.64	109.90
1	N	1095	U	P-O3'-C3'	-5.32	113.31	119.70
1	N	140	U	C2'-C3'-O3'	5.32	122.21	113.70
1	N	506	G	C4-C5-N7	-5.32	108.67	110.80
1	N	541	G	C8-N9-C4	-5.32	104.27	106.40
1	N	671	G	N3-C4-C5	-5.32	125.94	128.60
1	N	1245	C	C6-N1-C1'	-5.32	114.42	120.80
1	N	241	G	O5'-C5'-C4'	-5.32	101.59	111.70
1	N	1253	G	C5-C6-O6	-5.32	125.41	128.60
1	N	110	C	O4'-C4'-C3'	-5.32	98.68	104.00
1	N	138	G	N9-C4-C5	-5.32	103.27	105.40
1	N	301	G	C4-N9-C1'	5.32	133.41	126.50
1	N	586	C	C2-N3-C4	5.32	122.56	119.90
1	N	618	C	C5-C6-N1	-5.32	118.34	121.00
1	N	1108	G	N3-C4-C5	5.32	131.26	128.60
1	N	1184	G	P-O5'-C5'	5.32	129.41	120.90
1	N	30	U	C2-N3-C4	5.32	130.19	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	287	U	C2'-C3'-O3'	5.32	122.20	113.70
1	N	1303	C	C5'-C4'-O4'	-5.32	102.72	109.10
1	N	1495	U	C6-N1-C1'	-5.32	113.76	121.20
1	N	1533	C	N1-C2-O2	-5.32	115.71	118.90
1	N	433	G	C5-N7-C8	5.31	106.96	104.30
1	N	127	G	C6-C5-N7	-5.31	127.21	130.40
1	N	1067	A	O3'-P-O5'	-5.31	93.91	104.00
1	N	1161	C	C2-N3-C4	5.31	122.56	119.90
1	N	337	G	P-O3'-C3'	-5.31	113.33	119.70
1	N	431	A	C5-C6-N6	-5.31	119.45	123.70
1	N	18	C	C5-C4-N4	-5.31	116.48	120.20
1	N	425	G	P-O3'-C3'	-5.31	113.33	119.70
1	N	430	A	C4-C5-C6	5.31	119.66	117.00
1	N	636	U	N1-C2-O2	-5.31	119.08	122.80
1	N	899	C	C5-C6-N1	-5.31	118.34	121.00
1	N	1140	C	O4'-C1'-C2'	-5.31	100.49	105.80
1	N	1221	G	N9-C1'-C2'	-5.31	106.16	112.00
1	N	1224	U	C5-C4-O4	-5.31	122.72	125.90
1	N	280	C	C5-C6-N1	5.31	123.65	121.00
1	N	352	C	C6-N1-C2	-5.31	118.18	120.30
1	N	438	U	N3-C4-O4	-5.31	115.68	119.40
1	N	538	G	N1-C2-N2	5.31	120.98	116.20
1	N	768	A	C5-C6-N6	-5.31	119.45	123.70
1	N	1147	C	O4'-C1'-N1	5.31	112.44	108.20
1	N	244	U	C1'-O4'-C4'	5.31	114.14	109.90
1	N	270	A	C2-N3-C4	-5.31	107.95	110.60
1	N	822	U	C2'-C3'-O3'	5.31	122.19	113.70
1	N	1186	G	O4'-C1'-N9	5.31	112.44	108.20
1	N	196	A	P-O5'-C5'	-5.30	112.41	120.90
1	N	317	U	C5-C4-O4	-5.30	122.72	125.90
1	N	649	A	C4'-C3'-C2'	-5.30	97.30	102.60
1	N	1191	A	C5-N7-C8	5.30	106.55	103.90
1	N	1362	A	C3'-C2'-C1'	5.30	105.74	101.50
1	N	1515	G	N1-C2-N3	-5.30	120.72	123.90
1	N	298	A	N3-C4-C5	-5.30	123.09	126.80
1	N	74	A	C3'-C2'-C1'	5.30	105.74	101.50
1	N	119	A	N1-C2-N3	-5.30	126.65	129.30
1	N	213	G	C5-C6-N1	5.30	114.15	111.50
1	N	275	G	N1-C2-N3	-5.30	120.72	123.90
1	N	824	G	OP1-P-OP2	-5.30	111.65	119.60
1	N	993	G	C5-N7-C8	5.30	106.95	104.30
1	N	36	C	N1-C2-O2	-5.30	115.72	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	42	G	C5-C6-N1	-5.30	108.85	111.50
1	N	544	G	C4-C5-N7	-5.30	108.68	110.80
1	N	740	U	C2-N3-C4	-5.30	123.82	127.00
1	N	761	G	C6-C5-N7	-5.30	127.22	130.40
1	N	1040	U	O5'-P-OP2	5.30	117.06	110.70
1	N	489	C	N3-C2-O2	5.30	125.61	121.90
1	N	506	G	C5-N7-C8	5.30	106.95	104.30
1	N	1262	C	O4'-C1'-N1	5.30	112.44	108.20
1	N	1469	C	N1-C2-O2	-5.30	115.72	118.90
1	N	202	G	C4-N9-C1'	-5.30	119.62	126.50
1	N	377	G	C5-N7-C8	-5.30	101.65	104.30
1	N	769	G	O5'-C5'-C4'	-5.30	101.64	111.70
1	N	830	G	C6-N1-C2	5.30	128.28	125.10
1	N	1043	G	N1-C2-N3	-5.30	120.72	123.90
1	N	1071	C	N1-C2-N3	-5.30	115.49	119.20
1	N	1365	G	C6-C5-N7	-5.30	127.22	130.40
1	N	14	U	N1-C2-O2	5.29	126.50	122.80
1	N	87	C	C5-C6-N1	5.29	123.65	121.00
1	N	251	G	N3-C4-C5	-5.29	125.95	128.60
1	N	432	A	P-O5'-C5'	5.29	129.37	120.90
1	N	815	A	O4'-C4'-C3'	-5.29	98.71	104.00
1	N	856	C	N3-C4-N4	5.29	121.70	118.00
1	N	888	G	O5'-C5'-C4'	-5.29	101.65	111.70
1	N	927	G	C2-N3-C4	5.29	114.55	111.90
1	N	1260	G	N3-C2-N2	5.29	123.61	119.90
1	N	369	G	N9-C4-C5	5.29	107.52	105.40
1	N	748	G	C2-N3-C4	5.29	114.55	111.90
1	N	1085	U	P-O3'-C3'	-5.29	113.35	119.70
1	N	1170	A	O4'-C1'-N9	5.29	112.43	108.20
1	N	527	G	N1-C2-N2	5.29	120.96	116.20
1	N	910	C	N3-C2-O2	5.29	125.60	121.90
1	N	1387	G	O4'-C1'-N9	5.29	112.43	108.20
1	N	444	G	C5-N7-C8	5.29	106.94	104.30
1	N	1287	A	C4-C5-N7	-5.29	108.06	110.70
1	N	157	U	C4-C5-C6	-5.29	116.53	119.70
1	N	250	A	C5'-C4'-C3'	5.29	124.46	116.00
1	N	254	G	P-O3'-C3'	5.29	126.04	119.70
1	N	358	U	C5-C6-N1	5.29	125.34	122.70
1	N	456	A	C5-C6-N1	5.29	120.34	117.70
1	N	599	C	C2-N3-C4	5.29	122.54	119.90
1	N	725	G	N7-C8-N9	-5.29	110.46	113.10
1	N	728	A	C4-C5-C6	5.29	119.64	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	747	A	N9-C1'-C2'	-5.29	106.19	112.00
1	N	101	A	N1-C2-N3	5.28	131.94	129.30
1	N	668	G	C5-C6-N1	-5.28	108.86	111.50
1	N	874	G	C6-C5-N7	-5.28	127.23	130.40
1	N	1001	C	P-O5'-C5'	-5.28	112.44	120.90
1	N	1011	C	N3-C4-N4	5.28	121.70	118.00
1	N	1132	C	C3'-C2'-C1'	5.28	105.73	101.50
1	N	1215	G	N9-C4-C5	-5.28	103.29	105.40
1	N	1346	A	P-O5'-C5'	5.28	129.35	120.90
1	N	1386	G	O4'-C1'-N9	5.28	112.43	108.20
1	N	421	U	N1-C2-N3	-5.28	111.73	114.90
1	N	705	G	C4'-C3'-C2'	-5.28	97.32	102.60
1	N	1146	A	C5-C6-N1	-5.28	115.06	117.70
1	N	199	A	N1-C2-N3	-5.28	126.66	129.30
1	N	327	A	C5-C6-N1	-5.28	115.06	117.70
1	N	383	A	O4'-C1'-N9	5.28	112.42	108.20
1	N	530	G	O4'-C1'-N9	5.28	112.42	108.20
1	N	869	G	C5'-C4'-C3'	-5.28	107.55	116.00
1	N	1086	U	N1-C2-N3	5.28	118.07	114.90
1	N	1208	C	C4'-C3'-C2'	-5.28	97.32	102.60
1	N	1233	G	N3-C4-N9	5.28	129.17	126.00
1	N	1375	A	O5'-C5'-C4'	-5.28	101.67	111.70
1	N	1415	G	C6-N1-C2	5.28	128.27	125.10
1	N	572	A	C4-N9-C1'	5.28	135.80	126.30
1	N	775	G	N7-C8-N9	5.28	115.74	113.10
1	N	1080	A	C5-N7-C8	5.28	106.54	103.90
1	N	1323	G	P-O3'-C3'	-5.28	113.36	119.70
1	N	1363	A	O5'-P-OP2	5.28	117.03	110.70
1	N	510	A	C5-N7-C8	5.28	106.54	103.90
1	N	544	G	C5'-C4'-C3'	-5.28	107.56	116.00
1	N	1356	G	C5-C6-N1	-5.28	108.86	111.50
1	N	228	A	P-O5'-C5'	5.28	129.34	120.90
1	N	385	C	C4-C5-C6	5.28	120.04	117.40
1	N	393	A	N3-C4-C5	-5.28	123.11	126.80
1	N	449	G	C4-N9-C1'	5.28	133.36	126.50
1	N	474	G	C4-C5-N7	-5.28	108.69	110.80
1	N	644	U	C5'-C4'-O4'	5.28	115.43	109.10
1	N	1180	A	N9-C4-C5	-5.28	103.69	105.80
1	N	1267	C	O4'-C1'-N1	5.28	112.42	108.20
1	N	248	C	O4'-C1'-N1	5.27	112.42	108.20
1	N	303	A	N1-C2-N3	5.27	131.94	129.30
1	N	1097	C	C5-C4-N4	-5.27	116.51	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1259	C	P-O5'-C5'	5.27	129.34	120.90
1	N	1403	C	N3-C2-O2	-5.27	118.21	121.90
1	N	70	U	C5'-C4'-C3'	-5.27	107.56	116.00
1	N	128	G	N1-C2-N2	-5.27	111.45	116.20
1	N	172	A	C4-C5-C6	5.27	119.64	117.00
1	N	376	G	C5-N7-C8	-5.27	101.66	104.30
1	N	415	A	C4-C5-C6	5.27	119.64	117.00
1	N	691	G	P-O3'-C3'	5.27	126.03	119.70
1	N	1374	A	C4-N9-C1'	5.27	135.79	126.30
1	N	1423	G	N1-C2-N2	-5.27	111.45	116.20
1	N	78	A	O4'-C1'-N9	5.27	112.42	108.20
1	N	1052	U	N1-C2-N3	-5.27	111.74	114.90
1	N	1104	G	C5'-C4'-C3'	5.27	124.43	116.00
1	N	1160	G	C6-C5-N7	-5.27	127.24	130.40
1	N	1172	C	C5'-C4'-O4'	5.27	115.43	109.10
1	N	30	U	N3-C4-O4	5.27	123.09	119.40
1	N	42	G	C5-C6-O6	-5.27	125.44	128.60
1	N	668	G	C3'-C2'-C1'	5.27	105.72	101.50
1	N	676	A	C2-N3-C4	-5.27	107.97	110.60
1	N	1060	U	O4'-C4'-C3'	-5.27	98.73	104.00
1	N	1269	A	N3-C4-N9	-5.27	123.18	127.40
1	N	1379	G	C5-C6-N1	-5.27	108.86	111.50
1	N	1508	A	C4'-C3'-C2'	-5.27	97.33	102.60
1	N	189	A	C6-N1-C2	5.27	121.76	118.60
1	N	237	G	O4'-C1'-N9	5.27	112.41	108.20
1	N	407	U	C2-N3-C4	-5.27	123.84	127.00
1	N	413	G	C5-C6-N1	-5.27	108.87	111.50
1	N	436	C	C5-C4-N4	-5.27	116.51	120.20
1	N	536	C	C5'-C4'-O4'	-5.27	102.78	109.10
1	N	696	A	O4'-C4'-C3'	-5.27	98.73	104.00
1	N	958	A	C5-C6-N1	-5.27	115.07	117.70
1	N	1036	A	O3'-P-O5'	-5.27	93.99	104.00
1	N	1046	A	C6-N1-C2	5.27	121.76	118.60
1	N	1051	C	N1-C1'-C2'	-5.27	106.21	112.00
1	N	1155	A	P-O5'-C5'	5.27	129.33	120.90
1	N	1455	G	P-O3'-C3'	5.27	126.02	119.70
1	N	125	U	C4'-C3'-C2'	-5.27	97.33	102.60
1	N	288	A	O4'-C1'-N9	5.27	112.41	108.20
1	N	1145	A	C6-C5-N7	-5.27	128.61	132.30
1	N	1344	C	N1-C2-O2	5.27	122.06	118.90
1	N	324	G	C8-N9-C4	-5.26	104.30	106.40
1	N	679	C	C5'-C4'-O4'	5.26	115.42	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	885	G	P-O3'-C3'	5.26	126.02	119.70
1	N	952	U	C2-N3-C4	-5.26	123.84	127.00
1	N	996	A	P-O5'-C5'	5.26	129.32	120.90
1	N	1087	G	C4'-C3'-C2'	-5.26	97.33	102.60
1	N	1263	C	C4-C5-C6	5.26	120.03	117.40
1	N	1507	A	N3-C4-N9	5.26	131.61	127.40
1	N	131	A	C5-C6-N1	-5.26	115.07	117.70
1	N	528	C	C4'-C3'-C2'	-5.26	97.34	102.60
1	N	926	G	C2-N3-C4	-5.26	109.27	111.90
1	N	1156	G	C5-C6-N1	-5.26	108.87	111.50
1	N	1258	G	C4-N9-C1'	5.26	133.34	126.50
1	N	1448	C	P-O3'-C3'	5.26	126.02	119.70
1	N	204	G	C8-N9-C1'	5.26	133.84	127.00
1	N	262	A	N1-C2-N3	5.26	131.93	129.30
1	N	325	A	C8-N9-C1'	5.26	137.17	127.70
1	N	393	A	C1'-O4'-C4'	-5.26	105.69	109.90
1	N	551	U	C5-C4-O4	-5.26	122.74	125.90
1	N	704	A	C3'-C2'-C1'	-5.26	97.29	101.50
1	N	775	G	C4-C5-C6	5.26	121.96	118.80
1	N	859	G	N9-C1'-C2'	-5.26	106.21	112.00
1	N	929	G	N1-C2-N3	-5.26	120.74	123.90
1	N	982	U	O4'-C4'-C3'	-5.26	98.74	104.00
1	N	1312	G	C6-C5-N7	-5.26	127.25	130.40
1	N	117	G	C4-C5-C6	5.26	121.95	118.80
1	N	430	A	O4'-C1'-N9	5.26	112.41	108.20
1	N	522	C	C5-C6-N1	-5.26	118.37	121.00
1	N	767	A	N1-C2-N3	5.26	131.93	129.30
1	N	859	G	C4'-C3'-C2'	-5.26	97.34	102.60
1	N	1183	U	C6-N1-C2	-5.26	117.84	121.00
1	N	1260	G	C5-C6-O6	-5.26	125.44	128.60
1	N	32	A	C5-C6-N1	-5.26	115.07	117.70
1	N	125	U	N3-C2-O2	5.26	125.88	122.20
1	N	710	G	C2-N3-C4	5.26	114.53	111.90
1	N	1045	C	O4'-C1'-C2'	-5.26	100.54	105.80
1	N	1077	G	C4'-C3'-C2'	-5.26	97.34	102.60
1	N	1155	A	C4'-C3'-C2'	-5.26	97.34	102.60
1	N	1208	C	OP2-P-O3'	5.26	116.76	105.20
1	N	97	G	O4'-C1'-N9	5.25	112.40	108.20
1	N	813	U	O3'-P-O5'	-5.25	94.02	104.00
1	N	129	A	P-O5'-C5'	5.25	129.31	120.90
1	N	289	G	C8-N9-C4	-5.25	104.30	106.40
1	N	760	G	C5-C6-N1	-5.25	108.87	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1014	A	C8-N9-C4	5.25	107.90	105.80
1	N	131	A	C4-C5-N7	-5.25	108.08	110.70
1	N	975	A	C3'-C2'-C1'	-5.25	97.30	101.50
1	N	1430	A	C5-C6-N1	-5.25	115.07	117.70
1	N	1433	A	C4-C5-N7	5.25	113.33	110.70
1	N	373	A	N7-C8-N9	-5.25	111.17	113.80
1	N	577	G	C5'-C4'-O4'	-5.25	102.80	109.10
1	N	252	U	N1-C2-O2	-5.25	119.13	122.80
1	N	320	A	P-O5'-C5'	-5.25	112.50	120.90
1	N	322	C	C3'-C2'-C1'	5.25	105.70	101.50
1	N	336	A	N1-C2-N3	-5.25	126.68	129.30
1	N	418	C	C4'-C3'-C2'	-5.25	97.35	102.60
1	N	845	A	N1-C2-N3	-5.25	126.68	129.30
1	N	930	C	C4-C5-C6	5.25	120.02	117.40
1	N	1343	G	N9-C4-C5	-5.25	103.30	105.40
1	N	1408	A	O4'-C1'-N9	5.25	112.40	108.20
1	N	104	G	C1'-O4'-C4'	-5.25	105.70	109.90
1	N	317	U	N1-C2-N3	-5.25	111.75	114.90
1	N	549	C	C3'-C2'-C1'	5.25	105.70	101.50
1	N	666	G	N9-C4-C5	-5.25	103.30	105.40
1	N	803	G	C6-C5-N7	-5.25	127.25	130.40
1	N	863	U	N3-C4-C5	-5.25	111.45	114.60
1	N	884	U	C3'-C2'-C1'	-5.25	97.30	101.50
1	N	890	G	C3'-C2'-C1'	-5.25	97.30	101.50
1	N	1036	A	P-O3'-C3'	5.25	126.00	119.70
1	N	1290	G	C8-N9-C1'	-5.25	120.18	127.00
1	N	243	A	C6-C5-N7	-5.25	128.63	132.30
1	N	668	G	C6-N1-C2	5.25	128.25	125.10
1	N	921	U	C2-N3-C4	-5.25	123.85	127.00
1	N	16	A	N9-C4-C5	-5.24	103.70	105.80
1	N	218	U	C5-C4-O4	-5.24	122.75	125.90
1	N	919	A	N3-C4-C5	-5.24	123.13	126.80
1	N	1361	G	N1-C2-N3	-5.24	120.75	123.90
1	N	1386	G	O5'-P-OP2	-5.24	100.98	105.70
1	N	1404	C	C4'-C3'-C2'	5.24	107.84	102.60
1	N	26	A	C3'-C2'-C1'	-5.24	97.31	101.50
1	N	520	A	P-O3'-C3'	-5.24	113.41	119.70
1	N	708	C	N3-C4-C5	-5.24	119.80	121.90
1	N	1318	A	N3-C4-N9	5.24	131.59	127.40
1	N	67	C	C5-C6-N1	-5.24	118.38	121.00
1	N	151	A	N9-C4-C5	5.24	107.90	105.80
1	N	283	U	C5'-C4'-C3'	-5.24	107.62	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	621	A	C5'-C4'-C3'	5.24	124.39	116.00
1	N	622	A	C2-N3-C4	5.24	113.22	110.60
1	N	85	U	N3-C4-C5	-5.24	111.46	114.60
1	N	165	G	P-O3'-C3'	-5.24	113.41	119.70
1	N	230	G	N3-C4-C5	-5.24	125.98	128.60
1	N	277	C	C6-N1-C2	-5.24	118.20	120.30
1	N	278	G	N7-C8-N9	-5.24	110.48	113.10
1	N	294	U	C6-N1-C2	-5.24	117.86	121.00
1	N	543	U	N1-C2-O2	-5.24	119.13	122.80
1	N	628	G	N1-C6-O6	5.24	123.04	119.90
1	N	634	C	C4'-C3'-C2'	5.24	107.84	102.60
1	N	939	G	C5'-C4'-C3'	-5.24	107.62	116.00
1	N	1010	U	C6-N1-C2	-5.24	117.86	121.00
1	N	1049	U	C5-C6-N1	-5.24	120.08	122.70
1	N	1058	G	C3'-C2'-C1'	-5.24	97.31	101.50
1	N	1126	U	N1-C2-N3	-5.24	111.76	114.90
1	N	1165	U	C4-C5-C6	5.24	122.84	119.70
1	N	1212	U	O4'-C1'-C2'	-5.24	100.56	105.80
1	N	1485	U	C2-N3-C4	-5.24	123.86	127.00
1	N	171	A	C5'-C4'-C3'	-5.24	107.62	116.00
1	N	281	G	O3'-P-O5'	-5.24	94.05	104.00
1	N	864	A	C5-N7-C8	5.24	106.52	103.90
1	N	476	U	P-O5'-C5'	5.24	129.28	120.90
1	N	596	A	C6-C5-N7	-5.24	128.64	132.30
1	N	814	A	C6-C5-N7	-5.24	128.64	132.30
1	N	857	C	N1-C2-O2	-5.24	115.76	118.90
1	N	1035	A	N7-C8-N9	-5.24	111.18	113.80
1	N	1411	C	N3-C4-C5	-5.24	119.81	121.90
1	N	222	C	C2-N3-C4	5.23	122.52	119.90
1	N	1199	U	P-O5'-C5'	5.23	129.28	120.90
1	N	1504	G	O4'-C1'-C2'	-5.23	100.57	105.80
1	N	215	C	C6-N1-C1'	-5.23	114.52	120.80
1	N	337	G	N7-C8-N9	-5.23	110.48	113.10
1	N	353	A	C6-C5-N7	-5.23	128.64	132.30
1	N	660	C	C5-C6-N1	5.23	123.62	121.00
1	N	1240	U	N1-C2-O2	-5.23	119.14	122.80
1	N	139	A	C5-C6-N1	-5.23	115.08	117.70
1	N	362	G	N3-C2-N2	5.23	123.56	119.90
1	N	415	A	N7-C8-N9	-5.23	111.19	113.80
1	N	536	C	C4-C5-C6	5.23	120.02	117.40
1	N	791	G	C2-N3-C4	-5.23	109.28	111.90
1	N	794	A	C5-C6-N6	-5.23	119.52	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	853	C	P-O3'-C3'	-5.23	113.42	119.70
1	N	988	G	C5'-C4'-O4'	5.23	115.38	109.10
1	N	1148	U	C4'-C3'-C2'	-5.23	97.37	102.60
1	N	1416	G	N7-C8-N9	-5.23	110.48	113.10
1	N	924	C	O4'-C1'-N1	5.23	112.38	108.20
1	N	1456	A	C5'-C4'-O4'	5.23	115.38	109.10
1	N	1495	U	C5'-C4'-C3'	-5.23	107.63	116.00
1	N	1532	U	C4'-C3'-C2'	-5.23	97.37	102.60
1	N	271	C	N3-C4-N4	5.23	121.66	118.00
1	N	366	A	N7-C8-N9	-5.23	111.19	113.80
1	N	393	A	P-O3'-C3'	-5.23	113.43	119.70
1	N	886	G	C6-N1-C2	5.23	128.24	125.10
1	N	886	G	N3-C2-N2	5.23	123.56	119.90
1	N	1060	U	N1-C2-N3	5.23	118.04	114.90
1	N	1310	G	C8-N9-C4	-5.23	104.31	106.40
1	N	1368	A	C5'-C4'-O4'	5.23	115.37	109.10
1	N	587	G	N1-C6-O6	5.23	123.04	119.90
1	N	1411	C	P-O3'-C3'	-5.23	113.43	119.70
1	N	1414	U	C3'-C2'-C1'	5.23	105.68	101.50
1	N	13	U	N3-C4-C5	-5.22	111.47	114.60
1	N	289	G	O4'-C1'-N9	5.22	112.38	108.20
1	N	585	G	C6-N1-C2	5.22	128.24	125.10
1	N	608	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	615	G	N1-C2-N3	-5.22	120.77	123.90
1	N	926	G	C4-N9-C1'	5.22	133.29	126.50
1	N	998	C	C4-C5-C6	5.22	120.01	117.40
1	N	125	U	C5-C4-O4	-5.22	122.77	125.90
1	N	267	C	N1-C1'-C2'	-5.22	106.25	112.00
1	N	462	G	O4'-C4'-C3'	-5.22	98.78	104.00
1	N	518	C	N1-C2-N3	-5.22	115.54	119.20
1	N	18	C	C3'-C2'-C1'	-5.22	97.32	101.50
1	N	196	A	N7-C8-N9	-5.22	111.19	113.80
1	N	394	G	C8-N9-C4	-5.22	104.31	106.40
1	N	933	G	C4'-C3'-C2'	-5.22	97.38	102.60
1	N	220	G	C4'-C3'-C2'	-5.22	97.38	102.60
1	N	294	U	C4-C5-C6	-5.22	116.57	119.70
1	N	417	G	C8-N9-C1'	-5.22	120.22	127.00
1	N	765	G	N1-C2-N2	-5.22	111.50	116.20
1	N	828	U	N3-C4-O4	5.22	123.05	119.40
1	N	913	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	1055	A	C5'-C4'-O4'	-5.22	102.84	109.10
1	N	1205	U	C2-N3-C4	-5.22	123.87	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1297	G	N9-C4-C5	5.22	107.49	105.40
1	N	214	C	C2-N3-C4	5.22	122.51	119.90
1	N	835	U	C6-N1-C2	-5.22	117.87	121.00
1	N	1521	C	N1-C2-O2	-5.22	115.77	118.90
1	N	313	A	C6-C5-N7	-5.22	128.65	132.30
1	N	781	A	N9-C1'-C2'	-5.22	106.26	112.00
1	N	55	A	C5-C6-N1	-5.21	115.09	117.70
1	N	186	C	N3-C4-C5	-5.21	119.81	121.90
1	N	767	A	C2-N3-C4	-5.21	107.99	110.60
1	N	782	A	C5-C6-N1	-5.21	115.09	117.70
1	N	797	C	O4'-C4'-C3'	5.21	110.27	106.10
1	N	1202	U	O4'-C4'-C3'	-5.21	98.78	104.00
1	N	260	G	C6-C5-N7	-5.21	127.27	130.40
1	N	1193	G	C6-C5-N7	-5.21	127.27	130.40
1	N	132	C	P-O3'-C3'	-5.21	113.45	119.70
1	N	142	G	C1'-O4'-C4'	5.21	114.07	109.90
1	N	363	A	N3-C4-C5	5.21	130.45	126.80
1	N	1101	A	C6-C5-N7	-5.21	128.65	132.30
1	N	1278	G	N1-C2-N3	-5.21	120.77	123.90
1	N	1461	G	N3-C2-N2	5.21	123.55	119.90
1	N	143	A	C4-C5-C6	5.21	119.61	117.00
1	N	204	G	C3'-C2'-C1'	-5.21	97.33	101.50
1	N	205	A	C5-N7-C8	5.21	106.50	103.90
1	N	592	G	O4'-C1'-N9	5.21	112.37	108.20
1	N	1165	U	N1-C2-O2	-5.21	119.15	122.80
1	N	69	G	C5-C6-N1	-5.21	108.90	111.50
1	N	183	C	O4'-C1'-N1	5.21	112.37	108.20
1	N	286	C	C5'-C4'-C3'	-5.21	107.67	116.00
1	N	547	A	C6-N1-C2	-5.21	115.47	118.60
1	N	739	C	N1-C1'-C2'	5.21	120.77	114.00
1	N	1206	G	O5'-C5'-C4'	-5.21	101.80	111.70
1	N	1441	A	C4-C5-C6	5.21	119.60	117.00
1	N	1487	G	N1-C2-N2	5.21	120.89	116.20
1	N	130	A	C5-C6-N1	-5.21	115.10	117.70
1	N	230	G	C5'-C4'-C3'	-5.21	107.67	116.00
1	N	672	U	C6-N1-C2	5.21	124.12	121.00
1	N	920	U	N3-C2-O2	5.21	125.84	122.20
1	N	1031	C	C3'-C2'-C1'	5.21	105.67	101.50
1	N	1080	A	OP1-P-OP2	-5.21	111.79	119.60
1	N	1244	G	N9-C1'-C2'	-5.21	106.27	112.00
1	N	1250	A	C6-C5-N7	-5.21	128.66	132.30
1	N	1344	C	C5-C4-N4	-5.21	116.56	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1495	U	N1-C2-N3	-5.21	111.78	114.90
1	N	50	A	C8-N9-C1'	-5.20	118.33	127.70
1	N	746	A	O4'-C4'-C3'	-5.20	98.80	104.00
1	N	757	U	N1-C2-N3	-5.20	111.78	114.90
1	N	767	A	C5-N7-C8	5.20	106.50	103.90
1	N	926	G	C5'-C4'-C3'	5.20	124.32	116.00
1	N	1176	A	N9-C1'-C2'	5.20	120.76	114.00
1	N	1213	A	P-O3'-C3'	-5.20	113.45	119.70
1	N	1340	A	C2-N3-C4	-5.20	108.00	110.60
1	N	1443	C	C2-N1-C1'	5.20	124.52	118.80
1	N	1485	U	P-O3'-C3'	-5.20	113.46	119.70
1	N	1524	C	C6-N1-C2	-5.20	118.22	120.30
1	N	86	G	C6-C5-N7	-5.20	127.28	130.40
1	N	331	G	C5'-C4'-C3'	5.20	124.32	116.00
1	N	446	G	C5'-C4'-O4'	5.20	115.34	109.10
1	N	662	U	C2-N3-C4	-5.20	123.88	127.00
1	N	809	G	O4'-C1'-N9	5.20	112.36	108.20
1	N	855	U	N1-C2-N3	-5.20	111.78	114.90
1	N	1448	C	N1-C2-N3	-5.20	115.56	119.20
1	N	108	G	C4-C5-N7	5.20	112.88	110.80
1	N	146	G	O4'-C1'-N9	5.20	112.36	108.20
1	N	373	A	C3'-C2'-C1'	5.20	105.66	101.50
1	N	971	G	N3-C4-N9	5.20	129.12	126.00
1	N	1519	A	C3'-C2'-C1'	-5.20	97.34	101.50
1	N	479	U	C3'-C2'-C1'	-5.20	97.34	101.50
1	N	486	U	OP2-P-O3'	5.20	116.64	105.20
1	N	970	C	O4'-C1'-N1	5.20	112.36	108.20
1	N	1049	U	C2-N3-C4	-5.20	123.88	127.00
1	N	1371	G	N9-C4-C5	-5.20	103.32	105.40
1	N	1443	C	N3-C4-N4	5.20	121.64	118.00
1	N	602	A	C5-N7-C8	5.20	106.50	103.90
1	N	1505	G	N3-C4-C5	5.20	131.20	128.60
1	N	125	U	C6-N1-C1'	-5.20	113.93	121.20
1	N	138	G	O4'-C4'-C3'	-5.20	98.80	104.00
1	N	606	G	O4'-C4'-C3'	-5.20	98.80	104.00
1	N	1053	G	N3-C2-N2	5.20	123.54	119.90
1	N	159	G	OP1-P-OP2	-5.19	111.81	119.60
1	N	371	A	O4'-C1'-N9	5.19	112.36	108.20
1	N	1185	G	C4'-C3'-C2'	-5.19	97.41	102.60
1	N	1295	U	N1-C2-O2	5.19	126.44	122.80
1	N	3	A	N3-C4-C5	-5.19	123.17	126.80
1	N	219	U	C4'-C3'-C2'	-5.19	97.41	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	469	C	N3-C4-C5	-5.19	119.82	121.90
1	N	638	U	C6-N1-C2	-5.19	117.89	121.00
1	N	815	A	C5-C6-N6	-5.19	119.55	123.70
1	N	861	G	C4-C5-C6	5.19	121.92	118.80
1	N	302	G	C2-N3-C4	-5.19	109.31	111.90
1	N	328	C	C2'-C3'-O3'	5.19	122.00	113.70
1	N	452	A	N9-C4-C5	-5.19	103.72	105.80
1	N	634	C	O4'-C1'-N1	5.19	112.35	108.20
1	N	802	A	C5-N7-C8	5.19	106.50	103.90
1	N	1298	U	C4'-C3'-C2'	-5.19	97.41	102.60
1	N	1326	U	N3-C4-C5	-5.19	111.48	114.60
1	N	394	G	C6-C5-N7	-5.19	127.29	130.40
1	N	1108	G	C5-N7-C8	-5.19	101.71	104.30
1	N	1179	A	O4'-C1'-N9	5.19	112.35	108.20
1	N	1052	U	C6-N1-C2	5.19	124.11	121.00
1	N	210	C	C2-N3-C4	5.18	122.49	119.90
1	N	447	G	C2-N3-C4	5.18	114.49	111.90
1	N	538	G	C8-N9-C4	-5.18	104.33	106.40
1	N	1017	U	C2-N3-C4	5.18	130.11	127.00
1	N	1047	G	OP1-P-OP2	-5.18	111.82	119.60
1	N	1173	U	C3'-C2'-C1'	-5.18	97.35	101.50
1	N	272	C	C3'-C2'-C1'	5.18	105.65	101.50
1	N	493	A	C5-C6-N1	-5.18	115.11	117.70
1	N	756	C	N1-C2-N3	-5.18	115.57	119.20
1	N	938	A	C6-C5-N7	-5.18	128.67	132.30
1	N	1057	G	N3-C4-C5	-5.18	126.01	128.60
1	N	1159	U	C1'-O4'-C4'	5.18	114.05	109.90
1	N	1206	G	C6-N1-C2	5.18	128.21	125.10
1	N	1501	C	N1-C2-O2	-5.18	115.79	118.90
1	N	1113	C	N1-C2-O2	-5.18	115.79	118.90
1	N	1504	G	C5'-C4'-C3'	5.18	124.29	116.00
1	N	25	C	C4-C5-C6	-5.18	114.81	117.40
1	N	258	G	C5'-C4'-O4'	5.18	115.31	109.10
1	N	339	C	C3'-C2'-C1'	-5.18	97.36	101.50
1	N	446	G	N3-C4-C5	-5.18	126.01	128.60
1	N	535	A	C2-N3-C4	-5.18	108.01	110.60
1	N	555	U	N1-C2-O2	-5.18	119.17	122.80
1	N	577	G	C4-C5-N7	5.18	112.87	110.80
1	N	609	A	N9-C1'-C2'	5.18	120.73	114.00
1	N	704	A	C5-N7-C8	5.18	106.49	103.90
1	N	1506	U	N1-C2-O2	5.18	126.43	122.80
1	N	678	U	C6-N1-C2	-5.18	117.89	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	458	U	O5'-P-OP1	-5.17	101.04	105.70
1	N	752	G	C4-N9-C1'	-5.17	119.77	126.50
1	N	1003	G	C4-C5-C6	5.17	121.91	118.80
1	N	1204	A	C2-N3-C4	-5.17	108.01	110.60
1	N	1530	G	O5'-C5'-C4'	5.17	121.53	111.70
1	N	176	C	N1-C2-O2	5.17	122.00	118.90
1	N	253	A	C5-C6-N6	-5.17	119.56	123.70
1	N	1056	U	N3-C2-O2	5.17	125.82	122.20
1	N	1359	C	O4'-C1'-N1	5.17	112.34	108.20
1	N	1498	U	N3-C4-C5	-5.17	111.50	114.60
1	N	183	C	C5'-C4'-O4'	5.17	115.31	109.10
1	N	493	A	N9-C4-C5	-5.17	103.73	105.80
1	N	563	A	C3'-C2'-C1'	5.17	105.64	101.50
1	N	967	C	N3-C4-N4	5.17	121.62	118.00
1	N	1169	A	N3-C4-C5	-5.17	123.18	126.80
1	N	1277	C	C1'-O4'-C4'	5.17	114.04	109.90
1	N	537	G	OP2-P-O3'	5.17	116.57	105.20
1	N	792	A	C5'-C4'-C3'	-5.17	107.73	116.00
1	N	1319	A	C5-C6-N6	-5.17	119.57	123.70
1	N	573	A	C2-N3-C4	-5.17	108.02	110.60
1	N	1282	C	N3-C4-N4	5.17	121.62	118.00
1	N	518	C	C2-N1-C1'	5.17	124.48	118.80
1	N	1041	G	C5-C6-N1	5.17	114.08	111.50
1	N	1436	U	P-O3'-C3'	5.17	125.90	119.70
1	N	255	G	O5'-C5'-C4'	-5.16	101.89	111.70
1	N	684	U	C1'-O4'-C4'	5.16	114.03	109.90
1	N	687	A	N1-C6-N6	5.16	121.70	118.60
1	N	878	A	P-O5'-C5'	5.16	129.16	120.90
1	N	50	A	C8-N9-C4	-5.16	103.73	105.80
1	N	381	C	C5-C4-N4	-5.16	116.59	120.20
1	N	564	C	C2-N3-C4	-5.16	117.32	119.90
1	N	584	G	N1-C2-N3	-5.16	120.80	123.90
1	N	252	U	C5-C4-O4	-5.16	122.80	125.90
1	N	401	C	O4'-C4'-C3'	-5.16	98.84	104.00
1	N	1279	G	C4-C5-C6	5.16	121.90	118.80
1	N	1528	U	N3-C4-O4	5.16	123.01	119.40
1	N	72	A	P-O3'-C3'	-5.16	113.51	119.70
1	N	526	C	P-O3'-C3'	5.16	125.89	119.70
1	N	941	G	O4'-C1'-N9	5.16	112.33	108.20
1	N	1096	C	O4'-C4'-C3'	-5.16	98.84	104.00
1	N	1102	A	N7-C8-N9	-5.16	111.22	113.80
1	N	1218	C	N1-C1'-C2'	-5.16	106.33	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1428	A	C6-C5-N7	-5.16	128.69	132.30
1	N	427	U	C6-N1-C2	5.16	124.09	121.00
1	N	836	G	C3'-C2'-C1'	-5.16	97.38	101.50
1	N	1077	G	N3-C4-C5	5.16	131.18	128.60
1	N	1147	C	O5'-C5'-C4'	-5.16	101.90	111.70
1	N	154	U	C5-C6-N1	5.16	125.28	122.70
1	N	311	C	N3-C2-O2	5.16	125.51	121.90
1	N	348	G	C8-N9-C4	5.16	108.46	106.40
1	N	542	G	N9-C4-C5	-5.16	103.34	105.40
1	N	649	A	OP2-P-O3'	5.16	116.54	105.20
1	N	663	A	N7-C8-N9	5.16	116.38	113.80
1	N	1102	A	P-O5'-C5'	5.16	129.15	120.90
1	N	1496	C	N3-C4-N4	5.16	121.61	118.00
1	N	292	G	C4-C5-N7	-5.15	108.74	110.80
1	N	703	G	N9-C4-C5	-5.15	103.34	105.40
1	N	889	A	C6-N1-C2	5.15	121.69	118.60
1	N	914	A	N9-C4-C5	-5.15	103.74	105.80
1	N	17	U	C5'-C4'-O4'	-5.15	102.92	109.10
1	N	101	A	N3-C4-N9	5.15	131.52	127.40
1	N	388	G	C5-C6-O6	-5.15	125.51	128.60
1	N	602	A	C6-C5-N7	-5.15	128.69	132.30
1	N	1074	G	C6-N1-C2	5.15	128.19	125.10
1	N	1370	G	C4-C5-C6	5.15	121.89	118.80
1	N	1495	U	C4'-C3'-C2'	-5.15	97.45	102.60
1	N	554	A	C4-C5-C6	5.15	119.58	117.00
1	N	625	U	N1-C1'-C2'	-5.15	106.34	112.00
1	N	1151	A	N9-C4-C5	5.15	107.86	105.80
1	N	1358	U	O4'-C1'-N1	5.15	112.32	108.20
1	N	322	C	N1-C2-N3	-5.15	115.60	119.20
1	N	439	U	C5-C6-N1	5.15	125.27	122.70
1	N	611	C	C5-C6-N1	5.15	123.57	121.00
1	N	653	U	N3-C2-O2	-5.15	118.60	122.20
1	N	887	G	C4'-C3'-C2'	-5.15	97.45	102.60
1	N	1264	U	C3'-C2'-C1'	-5.15	97.38	101.50
1	N	247	G	C6-N1-C2	-5.15	122.01	125.10
1	N	323	U	O4'-C1'-N1	5.14	112.32	108.20
1	N	457	G	C5'-C4'-O4'	5.14	115.27	109.10
1	N	712	A	C4-C5-C6	5.14	119.57	117.00
1	N	955	U	O4'-C1'-C2'	-5.14	100.66	105.80
1	N	50	A	C2-N3-C4	-5.14	108.03	110.60
1	N	134	G	O4'-C1'-N9	5.14	112.31	108.20
1	N	220	G	N3-C4-N9	5.14	129.09	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	363	A	C1'-O4'-C4'	-5.14	105.78	109.90
1	N	1046	A	N9-C1'-C2'	-5.14	106.34	112.00
1	N	1091	U	C5'-C4'-O4'	5.14	115.27	109.10
1	N	1191	A	N9-C4-C5	5.14	107.86	105.80
1	N	1164	G	C8-N9-C4	-5.14	104.34	106.40
1	N	1248	A	C6-C5-N7	-5.14	128.70	132.30
1	N	54	C	C5-C6-N1	5.14	123.57	121.00
1	N	232	G	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	318	G	P-O3'-C3'	-5.14	113.53	119.70
1	N	533	A	N3-C4-N9	5.14	131.51	127.40
1	N	849	G	N9-C1'-C2'	-5.14	106.35	112.00
1	N	1386	G	N3-C2-N2	5.14	123.50	119.90
1	N	1397	C	N3-C4-N4	5.14	121.60	118.00
1	N	1459	G	P-O3'-C3'	-5.14	113.53	119.70
1	N	237	G	N1-C2-N3	-5.14	120.82	123.90
1	N	310	G	C3'-C2'-C1'	-5.14	97.39	101.50
1	N	771	G	C4-C5-C6	5.14	121.88	118.80
1	N	790	A	C8-N9-C4	5.14	107.86	105.80
1	N	1416	G	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	1420	U	N3-C4-O4	5.14	123.00	119.40
1	N	1532	U	P-O5'-C5'	-5.14	112.68	120.90
1	N	94	G	O4'-C1'-N9	5.14	112.31	108.20
1	N	142	G	C8-N9-C1'	-5.14	120.32	127.00
1	N	254	G	C1'-O4'-C4'	-5.14	105.79	109.90
1	N	336	A	C4-C5-C6	5.14	119.57	117.00
1	N	568	G	C1'-O4'-C4'	5.14	114.01	109.90
1	N	702	A	C4-N9-C1'	5.14	135.55	126.30
1	N	1023	U	C2-N3-C4	-5.14	123.92	127.00
1	N	1496	C	C2-N3-C4	5.14	122.47	119.90
1	N	1534	A	C2-N3-C4	5.14	113.17	110.60
1	N	490	C	C2-N3-C4	5.13	122.47	119.90
1	N	693	G	C8-N9-C1'	5.13	133.67	127.00
1	N	866	C	C2-N3-C4	5.13	122.47	119.90
1	N	887	G	C5'-C4'-C3'	-5.13	107.79	116.00
1	N	1171	A	C5-N7-C8	-5.13	101.33	103.90
1	N	525	C	C4-C5-C6	5.13	119.97	117.40
1	N	749	A	N3-C4-C5	-5.13	123.21	126.80
1	N	909	A	C2-N3-C4	-5.13	108.03	110.60
1	N	105	G	N3-C2-N2	5.13	123.49	119.90
1	N	149	A	C6-C5-N7	-5.13	128.71	132.30
1	N	572	A	N7-C8-N9	-5.13	111.23	113.80
1	N	745	G	C5-C6-N1	-5.13	108.93	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1102	A	C8-N9-C4	-5.13	103.75	105.80
1	N	1199	U	P-O3'-C3'	5.13	125.86	119.70
1	N	1262	C	C5-C6-N1	5.13	123.57	121.00
1	N	1354	U	P-O5'-C5'	5.13	129.11	120.90
1	N	1513	A	C1'-O4'-C4'	-5.13	105.80	109.90
1	N	261	U	N1-C2-N3	-5.13	111.82	114.90
1	N	424	G	C1'-O4'-C4'	5.13	114.00	109.90
1	N	485	U	C6-N1-C1'	-5.13	114.02	121.20
1	N	844	G	N1-C2-N3	-5.13	120.82	123.90
1	N	1218	C	N3-C2-O2	5.13	125.49	121.90
1	N	11	G	C5'-C4'-O4'	5.13	115.25	109.10
1	N	118	U	O4'-C1'-N1	5.13	112.30	108.20
1	N	159	G	C8-N9-C1'	5.13	133.67	127.00
1	N	762	U	N3-C2-O2	5.13	125.79	122.20
1	N	994	A	C4-C5-N7	-5.13	108.14	110.70
1	N	1355	G	N1-C2-N3	-5.13	120.82	123.90
1	N	1414	U	P-O3'-C3'	5.13	125.85	119.70
1	N	321	A	O4'-C1'-N9	5.13	112.30	108.20
1	N	497	G	C4-C5-N7	5.13	112.85	110.80
1	N	667	G	O4'-C1'-N9	5.13	112.30	108.20
1	N	1044	A	N1-C2-N3	5.13	131.86	129.30
1	N	1083	U	C5-C4-O4	-5.13	122.82	125.90
1	N	1151	A	C5'-C4'-C3'	-5.13	107.80	116.00
1	N	1407	C	N3-C4-N4	5.13	121.59	118.00
1	N	1466	C	N1-C2-O2	-5.13	115.82	118.90
1	N	243	A	C4-C5-C6	5.12	119.56	117.00
1	N	270	A	C6-C5-N7	-5.12	128.71	132.30
1	N	759	A	P-O5'-C5'	5.12	129.10	120.90
1	N	929	G	C2-N3-C4	5.12	114.46	111.90
1	N	1221	G	N1-C2-N3	-5.12	120.83	123.90
1	N	143	A	N9-C4-C5	-5.12	103.75	105.80
1	N	279	A	C8-N9-C4	-5.12	103.75	105.80
1	N	795	C	O4'-C4'-C3'	-5.12	98.88	104.00
1	N	1241	G	C2-N3-C4	-5.12	109.34	111.90
1	N	1295	U	N1-C2-N3	-5.12	111.83	114.90
1	N	644	U	O4'-C4'-C3'	-5.12	98.88	104.00
1	N	762	U	C2-N1-C1'	-5.12	111.56	117.70
1	N	830	G	C2-N3-C4	5.12	114.46	111.90
1	N	1088	G	C5-C6-O6	-5.12	125.53	128.60
1	N	1361	G	N1-C2-N2	-5.12	111.59	116.20
1	N	446	G	C8-N9-C1'	5.12	133.66	127.00
1	N	687	A	C4-C5-C6	5.12	119.56	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1232	U	N1-C2-N3	-5.12	111.83	114.90
1	N	94	G	C1'-O4'-C4'	-5.12	105.81	109.90
1	N	102	G	N3-C4-C5	5.12	131.16	128.60
1	N	658	C	C2-N3-C4	5.12	122.46	119.90
1	N	702	A	N1-C2-N3	5.12	131.86	129.30
1	N	762	U	C2-N3-C4	-5.12	123.93	127.00
1	N	775	G	O4'-C1'-C2'	-5.12	100.68	105.80
1	N	96	U	C2-N1-C1'	5.12	123.84	117.70
1	N	44	A	O5'-P-OP2	5.12	116.84	110.70
1	N	271	C	C5'-C4'-O4'	5.12	115.24	109.10
1	N	457	G	N3-C4-C5	5.12	131.16	128.60
1	N	512	U	C2-N3-C4	-5.12	123.93	127.00
1	N	577	G	N9-C4-C5	-5.12	103.35	105.40
1	N	1196	A	C2-N3-C4	-5.12	108.04	110.60
1	N	125	U	N1-C2-N3	-5.11	111.83	114.90
1	N	183	C	N1-C2-N3	5.11	122.78	119.20
1	N	496	A	C5'-C4'-C3'	-5.11	107.82	116.00
1	N	786	G	C5-C6-N1	-5.11	108.94	111.50
1	N	1167	A	C5'-C4'-C3'	-5.11	107.82	116.00
1	N	1275	A	N7-C8-N9	-5.11	111.24	113.80
1	N	1427	C	C5-C4-N4	-5.11	116.62	120.20
1	N	242	G	N3-C4-C5	5.11	131.16	128.60
1	N	370	C	N3-C2-O2	5.11	125.48	121.90
1	N	427	U	P-O5'-C5'	-5.11	112.72	120.90
1	N	545	C	C6-N1-C2	5.11	122.34	120.30
1	N	939	G	C6-C5-N7	-5.11	127.33	130.40
1	N	18	C	N3-C4-N4	5.11	121.58	118.00
1	N	521	G	C6-N1-C2	5.11	128.17	125.10
1	N	855	U	C6-N1-C1'	-5.11	114.05	121.20
1	N	1400	C	O4'-C1'-N1	5.11	112.29	108.20
1	N	1482	G	C6-N1-C2	5.11	128.17	125.10
1	N	158	G	N1-C2-N3	-5.11	120.83	123.90
1	N	184	G	C5-N7-C8	5.11	106.85	104.30
1	N	837	U	C3'-C2'-C1'	-5.11	97.41	101.50
1	N	76	G	C5'-C4'-C3'	-5.11	107.83	116.00
1	N	427	U	C2-N1-C1'	-5.11	111.57	117.70
1	N	973	G	N9-C4-C5	-5.11	103.36	105.40
1	N	1197	A	O4'-C1'-N9	5.11	112.28	108.20
1	N	1297	G	N7-C8-N9	5.11	115.65	113.10
1	N	82	G	C4-C5-C6	5.11	121.86	118.80
1	N	175	C	N1-C2-N3	5.11	122.77	119.20
1	N	195	A	C6-C5-N7	-5.11	128.73	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	454	G	N9-C4-C5	-5.11	103.36	105.40
1	N	587	G	C4-C5-C6	5.11	121.86	118.80
1	N	612	C	N1-C2-O2	5.11	121.96	118.90
1	N	785	G	C4'-C3'-C2'	-5.11	97.49	102.60
1	N	856	C	C5-C4-N4	-5.11	116.63	120.20
1	N	44	A	N1-C2-N3	5.10	131.85	129.30
1	N	135	C	C3'-C2'-C1'	5.10	105.58	101.50
1	N	1212	U	N3-C2-O2	5.10	125.77	122.20
1	N	176	C	C2-N3-C4	5.10	122.45	119.90
1	N	386	C	N1-C2-N3	-5.10	115.63	119.20
1	N	859	G	C6-N1-C2	5.10	128.16	125.10
1	N	1186	G	C6-C5-N7	-5.10	127.34	130.40
1	N	75	G	C5'-C4'-C3'	-5.10	107.84	116.00
1	N	1380	U	O3'-P-O5'	-5.10	94.31	104.00
1	N	179	A	C3'-C2'-C1'	-5.10	97.42	101.50
1	N	247	G	OP1-P-O3'	5.10	116.42	105.20
1	N	1033	G	C6-N1-C2	-5.10	122.04	125.10
1	N	577	G	N1-C6-O6	5.10	122.96	119.90
1	N	675	A	C6-C5-N7	-5.10	128.73	132.30
1	N	734	G	C5-C6-N1	-5.10	108.95	111.50
1	N	869	G	N1-C2-N2	-5.10	111.61	116.20
1	N	953	G	C4-C5-C6	5.10	121.86	118.80
1	N	1350	A	P-O5'-C5'	5.10	129.06	120.90
1	N	1524	C	C2-N1-C1'	5.10	124.41	118.80
1	N	220	G	C3'-C2'-C1'	5.10	105.58	101.50
1	N	43	C	N3-C4-C5	-5.09	119.86	121.90
1	N	56	U	C2-N3-C4	-5.09	123.94	127.00
1	N	335	C	O3'-P-O5'	-5.09	94.32	104.00
1	N	502	A	N7-C8-N9	-5.09	111.25	113.80
1	N	824	G	P-O5'-C5'	5.09	129.05	120.90
1	N	880	C	N1-C2-O2	-5.09	115.84	118.90
1	N	949	A	P-O3'-C3'	-5.09	113.59	119.70
1	N	1106	G	O4'-C1'-N9	5.09	112.28	108.20
1	N	1306	A	C1'-O4'-C4'	5.09	113.98	109.90
1	N	1403	C	C2-N3-C4	-5.09	117.35	119.90
1	N	124	C	C6-N1-C2	-5.09	118.26	120.30
1	N	211	G	C4-N9-C1'	5.09	133.12	126.50
1	N	414	A	C4-C5-N7	-5.09	108.15	110.70
1	N	187	G	C4-C5-N7	-5.09	108.76	110.80
1	N	330	C	P-O3'-C3'	-5.09	113.59	119.70
1	N	341	C	P-O5'-C5'	5.09	129.05	120.90
1	N	663	A	C4'-C3'-C2'	-5.09	97.51	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	816	A	C6-C5-N7	-5.09	128.74	132.30
1	N	891	U	N3-C4-C5	-5.09	111.55	114.60
1	N	954	G	N7-C8-N9	-5.09	110.56	113.10
1	N	1228	C	C6-N1-C2	-5.09	118.26	120.30
1	N	64	G	C6-C5-N7	-5.09	127.35	130.40
1	N	272	C	C4-C5-C6	-5.09	114.86	117.40
1	N	374	A	N9-C1'-C2'	-5.09	106.40	112.00
1	N	446	G	C5-N7-C8	-5.09	101.75	104.30
1	N	732	C	C5-C4-N4	-5.09	116.64	120.20
1	N	1098	C	P-O3'-C3'	-5.09	113.59	119.70
1	N	457	G	O4'-C1'-N9	5.09	112.27	108.20
1	N	974	A	C4-C5-N7	-5.09	108.16	110.70
1	N	1053	G	N9-C4-C5	-5.09	103.36	105.40
1	N	109	A	C3'-C2'-C1'	5.09	105.57	101.50
1	N	513	C	C2-N1-C1'	5.09	124.40	118.80
1	N	673	A	C2-N3-C4	-5.09	108.06	110.60
1	N	826	C	C3'-C2'-C1'	5.09	105.57	101.50
1	N	982	U	O4'-C1'-N1	5.09	112.27	108.20
1	N	1457	G	N3-C4-C5	-5.09	126.06	128.60
1	N	1473	G	N7-C8-N9	5.09	115.64	113.10
1	N	310	G	C2-N3-C4	-5.08	109.36	111.90
1	N	369	G	P-O3'-C3'	-5.08	113.60	119.70
1	N	113	G	N1-C2-N3	-5.08	120.85	123.90
1	N	577	G	C6-N1-C2	-5.08	122.05	125.10
1	N	738	C	C2-N1-C1'	5.08	124.39	118.80
1	N	875	U	P-O3'-C3'	-5.08	113.60	119.70
1	N	1528	U	O4'-C1'-N1	5.08	112.27	108.20
1	N	144	G	N3-C4-C5	5.08	131.14	128.60
1	N	346	G	C5-N7-C8	-5.08	101.76	104.30
1	N	530	G	C4-C5-N7	-5.08	108.77	110.80
1	N	1001	C	N1-C2-O2	-5.08	115.85	118.90
1	N	44	A	N1-C6-N6	5.08	121.65	118.60
1	N	417	G	C4-C5-C6	5.08	121.85	118.80
1	N	768	A	C5'-C4'-O4'	5.08	115.19	109.10
1	N	77	A	C5-C6-N1	-5.08	115.16	117.70
1	N	309	A	N9-C4-C5	5.08	107.83	105.80
1	N	763	G	C4-C5-C6	-5.08	115.75	118.80
1	N	812	G	C2-N3-C4	5.08	114.44	111.90
1	N	965	U	C4-C5-C6	5.08	122.75	119.70
1	N	357	G	C2-N3-C4	-5.08	109.36	111.90
1	N	567	G	N7-C8-N9	5.08	115.64	113.10
1	N	1415	G	C5-C6-O6	-5.08	125.55	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	334	C	C2-N3-C4	-5.08	117.36	119.90
1	N	632	U	N3-C2-O2	-5.08	118.65	122.20
1	N	723	U	C6-N1-C2	5.08	124.05	121.00
1	N	1391	U	N1-C2-N3	5.08	117.94	114.90
1	N	1503	A	C8-N9-C4	-5.08	103.77	105.80
1	N	1515	G	O4'-C4'-C3'	-5.08	98.92	104.00
1	N	118	U	P-O5'-C5'	5.07	129.02	120.90
1	N	233	C	N3-C4-N4	5.07	121.55	118.00
1	N	557	G	C8-N9-C4	-5.07	104.37	106.40
1	N	956	U	N1-C2-N3	5.07	117.94	114.90
1	N	1248	A	C8-N9-C4	-5.07	103.77	105.80
1	N	1530	G	C1'-O4'-C4'	-5.07	105.84	109.90
1	N	676	A	C1'-O4'-C4'	5.07	113.96	109.90
1	N	1391	U	C5-C4-O4	-5.07	122.86	125.90
1	N	340	U	P-O3'-C3'	5.07	125.78	119.70
1	N	478	A	N1-C6-N6	5.07	121.64	118.60
1	N	496	A	N1-C2-N3	-5.07	126.77	129.30
1	N	907	A	N7-C8-N9	-5.07	111.27	113.80
1	N	1099	G	C6-C5-N7	-5.07	127.36	130.40
1	N	317	U	N3-C4-O4	5.07	122.95	119.40
1	N	100	G	N9-C4-C5	-5.07	103.37	105.40
1	N	177	G	C4-C5-C6	5.07	121.84	118.80
1	N	180	U	N3-C4-C5	5.07	117.64	114.60
1	N	214	C	O4'-C1'-N1	5.07	112.25	108.20
1	N	471	U	N1-C2-O2	-5.07	119.25	122.80
1	N	578	C	C4'-C3'-C2'	-5.07	97.53	102.60
1	N	589	U	P-O5'-C5'	5.07	129.01	120.90
1	N	776	G	P-O3'-C3'	5.07	125.78	119.70
1	N	961	U	N1-C2-O2	-5.07	119.25	122.80
1	N	1098	C	C5-C6-N1	5.07	123.53	121.00
1	N	1204	A	N7-C8-N9	-5.07	111.27	113.80
1	N	1404	C	P-O3'-C3'	5.07	125.78	119.70
1	N	1418	A	C4-C5-C6	5.07	119.53	117.00
1	N	1422	G	N3-C4-C5	-5.07	126.07	128.60
1	N	557	G	C6-C5-N7	-5.07	127.36	130.40
1	N	880	C	OP1-P-OP2	-5.07	112.00	119.60
1	N	457	G	C3'-C2'-C1'	5.06	105.55	101.50
1	N	457	G	N1-C2-N3	-5.06	120.86	123.90
1	N	1349	A	C5-C6-N1	-5.06	115.17	117.70
1	N	894	G	O5'-C5'-C4'	-5.06	102.08	111.70
1	N	976	G	C5'-C4'-O4'	5.06	115.18	109.10
1	N	285	C	N3-C2-O2	-5.06	118.36	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1435	G	N1-C6-O6	5.06	122.94	119.90
1	N	83	C	C4-C5-C6	5.06	119.93	117.40
1	N	94	G	O5'-P-OP1	-5.06	101.15	105.70
1	N	196	A	O4'-C1'-N9	5.06	112.25	108.20
1	N	692	U	C6-N1-C2	-5.06	117.97	121.00
1	N	781	A	C6-C5-N7	-5.06	128.76	132.30
1	N	1262	C	N3-C4-N4	5.06	121.54	118.00
1	N	1377	A	C4'-C3'-C2'	-5.06	97.54	102.60
1	N	1380	U	P-O5'-C5'	-5.06	112.81	120.90
1	N	160	A	C5'-C4'-O4'	5.06	115.17	109.10
1	N	691	G	N9-C1'-C2'	-5.06	106.44	112.00
1	N	847	G	O4'-C1'-N9	5.06	112.25	108.20
1	N	989	U	N1-C2-O2	-5.06	119.26	122.80
1	N	998	C	N3-C4-N4	5.06	121.54	118.00
1	N	31	G	C5-N7-C8	-5.06	101.77	104.30
1	N	491	G	N1-C6-O6	5.06	122.93	119.90
1	N	860	A	C5-C6-N6	-5.06	119.66	123.70
1	N	1378	C	C2-N3-C4	-5.06	117.37	119.90
1	N	655	A	C5-C6-N1	-5.05	115.17	117.70
1	N	655	A	N7-C8-N9	5.05	116.33	113.80
1	N	742	G	C4-C5-N7	5.05	112.82	110.80
1	N	787	A	O4'-C1'-N9	5.05	112.24	108.20
1	N	853	C	C6-N1-C1'	-5.05	114.73	120.80
1	N	1152	A	C3'-C2'-C1'	5.05	105.54	101.50
1	N	1241	G	C8-N9-C1'	-5.05	120.43	127.00
1	N	1489	G	C4'-C3'-C2'	-5.05	97.55	102.60
1	N	496	A	C6-N1-C2	5.05	121.63	118.60
1	N	900	A	C6-N1-C2	-5.05	115.57	118.60
1	N	1334	G	O4'-C1'-N9	5.05	112.24	108.20
1	N	56	U	N1-C2-N3	5.05	117.93	114.90
1	N	549	C	P-O5'-C5'	5.05	128.98	120.90
1	N	677	U	C1'-O4'-C4'	5.05	113.94	109.90
1	N	1200	C	N1-C2-N3	-5.05	115.66	119.20
1	N	1266	G	C5'-C4'-C3'	5.05	124.08	116.00
1	N	1365	G	N9-C4-C5	-5.05	103.38	105.40
1	N	1461	G	C4-N9-C1'	-5.05	119.93	126.50
1	N	1509	C	C3'-C2'-C1'	5.05	105.54	101.50
1	N	260	G	C4-N9-C1'	-5.05	119.94	126.50
1	N	580	C	P-O3'-C3'	5.05	125.76	119.70
1	N	1040	U	N1-C1'-C2'	-5.05	106.44	112.00
1	N	1047	G	O4'-C1'-N9	5.05	112.24	108.20
1	N	1140	C	C2-N1-C1'	5.05	124.35	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1269	A	C5-N7-C8	5.05	106.42	103.90
1	N	1372	U	O4'-C4'-C3'	-5.05	98.95	104.00
1	N	148	G	C4-C5-C6	5.05	121.83	118.80
1	N	1109	C	C2-N1-C1'	5.05	124.35	118.80
1	N	1416	G	C5-C6-N1	-5.05	108.98	111.50
1	N	62	U	N3-C2-O2	-5.05	118.67	122.20
1	N	141	G	C5-N7-C8	5.05	106.82	104.30
1	N	394	G	P-O3'-C3'	-5.05	113.64	119.70
1	N	455	G	C5-C6-N1	-5.05	108.98	111.50
1	N	812	G	OP1-P-O3'	5.05	116.30	105.20
1	N	856	C	C5-C6-N1	5.05	123.52	121.00
1	N	916	U	N3-C4-C5	-5.05	111.57	114.60
1	N	1039	G	C8-N9-C1'	5.05	133.56	127.00
1	N	1241	G	P-O3'-C3'	-5.05	113.64	119.70
1	N	202	G	C5-N7-C8	-5.04	101.78	104.30
1	N	627	G	C5-C6-N1	-5.04	108.98	111.50
1	N	178	C	N1-C2-N3	-5.04	115.67	119.20
1	N	230	G	C4-C5-C6	5.04	121.83	118.80
1	N	328	C	N3-C4-C5	-5.04	119.88	121.90
1	N	523	A	C5-C6-N1	-5.04	115.18	117.70
1	N	903	G	N7-C8-N9	-5.04	110.58	113.10
1	N	909	A	OP1-P-OP2	-5.04	112.03	119.60
1	N	1056	U	P-O3'-C3'	-5.04	113.65	119.70
1	N	1392	G	C4-C5-C6	5.04	121.83	118.80
1	N	1394	A	C5'-C4'-C3'	-5.04	107.93	116.00
1	N	1511	G	C8-N9-C4	5.04	108.42	106.40
1	N	401	C	C5-C6-N1	5.04	123.52	121.00
1	N	629	A	C6-C5-N7	-5.04	128.77	132.30
1	N	1424	U	C2-N3-C4	-5.04	123.98	127.00
1	N	331	G	N7-C8-N9	5.04	115.62	113.10
1	N	775	G	C3'-C2'-C1'	5.04	105.53	101.50
1	N	1376	U	C5-C4-O4	-5.04	122.88	125.90
1	N	440	C	C2'-C3'-O3'	5.04	121.76	113.70
1	N	1035	A	C4-C5-C6	5.04	119.52	117.00
1	N	107	G	C4-C5-C6	5.04	121.82	118.80
1	N	262	A	C4-C5-N7	5.04	113.22	110.70
1	N	290	C	C6-N1-C2	-5.04	118.29	120.30
1	N	338	A	P-O5'-C5'	5.04	128.96	120.90
1	N	451	A	C5-C6-N6	-5.04	119.67	123.70
1	N	485	U	C6-N1-C2	5.04	124.02	121.00
1	N	722	G	C4-N9-C1'	5.04	133.05	126.50
1	N	133	U	N3-C4-O4	5.03	122.92	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	197	A	C6-N1-C2	-5.03	115.58	118.60
1	N	1230	C	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	1237	C	C5-C6-N1	5.03	123.52	121.00
1	N	317	U	C5'-C4'-O4'	5.03	115.14	109.10
1	N	306	A	C6-C5-N7	-5.03	128.78	132.30
1	N	471	U	P-O5'-C5'	5.03	128.95	120.90
1	N	673	A	C4'-C3'-C2'	-5.03	97.57	102.60
1	N	885	G	O4'-C1'-N9	5.03	112.22	108.20
1	N	1099	G	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	51	A	C6-N1-C2	5.03	121.62	118.60
1	N	309	A	C6-N1-C2	5.03	121.62	118.60
1	N	476	U	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	535	A	O4'-C1'-N9	5.03	112.22	108.20
1	N	1160	G	C6-N1-C2	-5.03	122.08	125.10
1	N	320	A	C6-C5-N7	-5.03	128.78	132.30
1	N	408	A	N1-C2-N3	5.03	131.81	129.30
1	N	522	C	C6-N1-C1'	-5.03	114.77	120.80
1	N	637	C	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	1297	G	C2-N3-C4	5.03	114.41	111.90
1	N	1432	G	C5'-C4'-O4'	-5.03	103.07	109.10
1	N	594	U	C6-N1-C1'	-5.03	114.16	121.20
1	N	669	G	O4'-C1'-C2'	-5.03	100.77	105.80
1	N	746	A	C5-C6-N6	-5.03	119.68	123.70
1	N	848	C	N3-C4-N4	5.03	121.52	118.00
1	N	869	G	C4-N9-C1'	-5.03	119.97	126.50
1	N	1029	U	C5-C6-N1	-5.03	120.19	122.70
1	N	1138	G	C5'-C4'-O4'	5.03	115.13	109.10
1	N	45	G	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	55	A	C8-N9-C4	-5.02	103.79	105.80
1	N	298	A	N7-C8-N9	-5.02	111.29	113.80
1	N	561	U	N3-C4-C5	-5.02	111.59	114.60
1	N	1526	G	C2-N3-C4	-5.02	109.39	111.90
1	N	141	G	N1-C2-N3	-5.02	120.89	123.90
1	N	1011	C	O4'-C1'-N1	5.02	112.22	108.20
1	N	1017	U	C4-C5-C6	5.02	122.71	119.70
1	N	71	A	C6-C5-N7	-5.02	128.79	132.30
1	N	423	G	C8-N9-C1'	-5.02	120.47	127.00
1	N	567	G	C2-N3-C4	5.02	114.41	111.90
1	N	719	C	C5-C4-N4	-5.02	116.69	120.20
1	N	758	C	N1-C2-N3	-5.02	115.69	119.20
1	N	803	G	C4-N9-C1'	5.02	133.02	126.50
1	N	871	U	C5-C4-O4	-5.02	122.89	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	940	C	C4-C5-C6	5.02	119.91	117.40
1	N	1042	A	C1'-O4'-C4'	5.02	113.92	109.90
1	N	1067	A	O4'-C1'-N9	5.02	112.22	108.20
1	N	1110	A	O4'-C1'-N9	5.02	112.22	108.20
1	N	1473	G	C2-N3-C4	-5.02	109.39	111.90
1	N	301	G	C6-N1-C2	5.02	128.11	125.10
1	N	328	C	C1'-O4'-C4'	-5.02	105.89	109.90
1	N	331	G	C5'-C4'-O4'	-5.02	103.08	109.10
1	N	943	U	C3'-C2'-C1'	5.02	105.51	101.50
1	N	55	A	C3'-C2'-C1'	-5.02	97.49	101.50
1	N	152	A	O3'-P-O5'	-5.02	94.47	104.00
1	N	572	A	P-O3'-C3'	5.02	125.72	119.70
1	N	738	C	N3-C2-O2	-5.02	118.39	121.90
1	N	1108	G	C5'-C4'-O4'	5.01	115.12	109.10
1	N	1183	U	C5-C6-N1	-5.01	120.19	122.70
1	N	544	G	C4'-C3'-C2'	-5.01	97.59	102.60
1	N	837	U	P-O3'-C3'	-5.01	113.68	119.70
1	N	975	A	C5-C6-N1	-5.01	115.19	117.70
1	N	1221	G	C6-N1-C2	5.01	128.11	125.10
1	N	1247	U	C2-N3-C4	-5.01	123.99	127.00
1	N	92	U	C6-N1-C2	-5.01	117.99	121.00
1	N	130	A	O5'-C5'-C4'	5.01	121.22	111.70
1	N	890	G	C6-N1-C2	-5.01	122.09	125.10
1	N	1244	G	N7-C8-N9	5.01	115.61	113.10
1	N	1380	U	N3-C4-C5	-5.01	111.59	114.60
1	N	166	U	O4'-C1'-C2'	-5.01	100.79	105.80
1	N	512	U	N3-C4-O4	5.01	122.91	119.40
1	N	635	A	N1-C2-N3	5.01	131.80	129.30
1	N	788	U	OP1-P-OP2	-5.01	112.08	119.60
1	N	1127	G	P-O5'-C5'	5.01	128.92	120.90
1	N	1216	A	N9-C1'-C2'	-5.01	106.49	112.00
1	N	138	G	C5'-C4'-C3'	5.01	124.01	116.00
1	N	574	A	C4-C5-C6	-5.01	114.50	117.00
1	N	153	C	C2-N3-C4	5.01	122.40	119.90
1	N	208	U	C4-C5-C6	5.01	122.70	119.70
1	N	261	U	P-O5'-C5'	5.01	128.91	120.90
1	N	610	U	C1'-O4'-C4'	-5.01	105.89	109.90
1	N	763	G	C1'-O4'-C4'	-5.01	105.89	109.90
1	N	1087	G	C8-N9-C4	-5.01	104.40	106.40
1	N	1337	G	N1-C6-O6	5.01	122.90	119.90
1	N	1504	G	C1'-O4'-C4'	5.01	113.91	109.90
1	N	97	G	P-O5'-C5'	5.00	128.91	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	153	C	OP1-P-O3'	5.00	116.21	105.20
1	N	438	U	C6-N1-C2	-5.00	118.00	121.00
1	N	628	G	N1-C2-N2	-5.00	111.69	116.20
1	N	117	G	N1-C6-O6	5.00	122.90	119.90
1	N	227	G	O4'-C1'-N9	5.00	112.20	108.20
1	N	414	A	N9-C4-C5	5.00	107.80	105.80
1	N	473	U	C3'-C2'-C1'	5.00	105.50	101.50
1	N	774	G	C1'-O4'-C4'	5.00	113.90	109.90
1	N	317	U	N3-C2-O2	5.00	125.70	122.20
1	N	507	C	O4'-C4'-C3'	-5.00	99.00	104.00
1	N	631	C	C6-N1-C1'	-5.00	114.80	120.80
1	N	741	G	N1-C2-N3	-5.00	120.90	123.90
1	N	786	G	C4'-C3'-C2'	-5.00	97.60	102.60
1	N	1058	G	N1-C2-N3	-5.00	120.90	123.90
1	N	1424	U	C6-N1-C1'	-5.00	114.20	121.20

There are no chirality outliers.

All (1016) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	N	10	A	Sidechain
1	N	100	G	Sidechain
1	N	1000	A	Sidechain
1	N	1002	G	Sidechain
1	N	1005	A	Sidechain
1	N	1006	G	Sidechain
1	N	1007	U	Sidechain
1	N	1010	U	Sidechain
1	N	1011	C	Sidechain
1	N	1012	A	Sidechain
1	N	1013	G	Sidechain
1	N	1014	A	Sidechain
1	N	1017	U	Sidechain
1	N	1018	G	Sidechain
1	N	1019	A	Sidechain
1	N	102	G	Sidechain
1	N	1020	G	Sidechain
1	N	1023	U	Sidechain
1	N	1024	G	Sidechain
1	N	1025	U	Sidechain
1	N	1026	G	Sidechain
1	N	1028	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	103	U	Sidechain
1	N	1030	U	Sidechain
1	N	1031	C	Sidechain
1	N	1033	G	Sidechain
1	N	1034	G	Sidechain
1	N	1035	A	Sidechain
1	N	1039	G	Sidechain
1	N	104	G	Sidechain
1	N	1041	G	Sidechain
1	N	1042	A	Sidechain
1	N	1043	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	1051	C	Sidechain
1	N	1052	U	Sidechain
1	N	1053	G	Sidechain
1	N	1055	A	Sidechain
1	N	1056	U	Sidechain
1	N	1057	G	Sidechain
1	N	1058	G	Sidechain
1	N	1060	U	Sidechain
1	N	1064	G	Sidechain
1	N	1065	U	Sidechain
1	N	1068	G	Sidechain
1	N	1069	C	Sidechain
1	N	107	G	Sidechain
1	N	1070	U	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
1	N	1079	G	Sidechain
1	N	108	G	Sidechain
1	N	1081	A	Sidechain
1	N	1083	U	Sidechain
1	N	1084	G	Sidechain
1	N	1085	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1087	G	Sidechain
1	N	1088	G	Sidechain
1	N	1089	G	Sidechain
1	N	109	A	Sidechain
1	N	1091	U	Sidechain
1	N	1094	G	Sidechain
1	N	1095	U	Sidechain
1	N	1096	C	Sidechain
1	N	1098	C	Sidechain
1	N	11	G	Sidechain
1	N	110	C	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	1109	C	Sidechain
1	N	111	G	Sidechain
1	N	1110	A	Sidechain
1	N	1112	C	Sidechain
1	N	1113	C	Sidechain
1	N	1115	U	Sidechain
1	N	1116	U	Sidechain
1	N	1117	A	Sidechain
1	N	112	G	Sidechain
1	N	1121	U	Sidechain
1	N	1122	U	Sidechain
1	N	1124	G	Sidechain
1	N	1125	U	Sidechain
1	N	1127	G	Sidechain
1	N	1128	C	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	1135	U	Sidechain
1	N	1136	C	Sidechain
1	N	1138	G	Sidechain
1	N	1139	G	Sidechain
1	N	114	U	Sidechain
1	N	1141	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1142	G	Sidechain
1	N	1143	G	Sidechain
1	N	1144	G	Sidechain
1	N	1145	A	Sidechain
1	N	1148	U	Sidechain
1	N	1149	C	Sidechain
1	N	115	G	Sidechain
1	N	1150	A	Sidechain
1	N	1153	G	Sidechain
1	N	1154	G	Sidechain
1	N	1155	A	Sidechain
1	N	1156	G	Sidechain
1	N	1157	A	Sidechain
1	N	1159	U	Sidechain
1	N	116	A	Sidechain
1	N	1160	G	Sidechain
1	N	1164	G	Sidechain
1	N	1166	G	Sidechain
1	N	1167	A	Sidechain
1	N	1168	U	Sidechain
1	N	1169	A	Sidechain
1	N	1170	A	Sidechain
1	N	1172	C	Sidechain
1	N	1173	U	Sidechain
1	N	1174	G	Sidechain
1	N	1175	G	Sidechain
1	N	1176	A	Sidechain
1	N	1177	G	Sidechain
1	N	1178	G	Sidechain
1	N	1180	A	Sidechain
1	N	1181	G	Sidechain
1	N	1182	G	Sidechain
1	N	1183	U	Sidechain
1	N	1185	G	Sidechain
1	N	1186	G	Sidechain
1	N	1187	G	Sidechain
1	N	1188	A	Sidechain
1	N	119	A	Sidechain
1	N	1190	G	Sidechain
1	N	1192	C	Sidechain
1	N	1194	U	Sidechain
1	N	1196	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1197	A	Sidechain
1	N	12	U	Sidechain
1	N	1200	C	Sidechain
1	N	1201	A	Sidechain
1	N	1202	U	Sidechain
1	N	1204	A	Sidechain
1	N	1205	U	Sidechain
1	N	1206	G	Sidechain
1	N	1207	G	Sidechain
1	N	121	U	Sidechain
1	N	1210	C	Sidechain
1	N	1211	U	Sidechain
1	N	1214	C	Sidechain
1	N	1215	G	Sidechain
1	N	1217	C	Sidechain
1	N	1219	A	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	1228	C	Sidechain
1	N	1229	A	Sidechain
1	N	1230	C	Sidechain
1	N	1232	U	Sidechain
1	N	1234	C	Sidechain
1	N	1236	A	Sidechain
1	N	1239	A	Sidechain
1	N	124	C	Sidechain
1	N	1240	U	Sidechain
1	N	1241	G	Sidechain
1	N	1242	G	Sidechain
1	N	1243	C	Sidechain
1	N	1244	G	Sidechain
1	N	1245	C	Sidechain
1	N	1247	U	Sidechain
1	N	1249	C	Sidechain
1	N	125	U	Sidechain
1	N	1250	A	Sidechain
1	N	1253	G	Sidechain
1	N	1254	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1255	G	Sidechain
1	N	1256	A	Sidechain
1	N	1257	A	Sidechain
1	N	1258	G	Sidechain
1	N	1259	C	Sidechain
1	N	126	G	Sidechain
1	N	1260	G	Sidechain
1	N	1261	A	Sidechain
1	N	1265	C	Sidechain
1	N	1267	C	Sidechain
1	N	1268	G	Sidechain
1	N	1269	A	Sidechain
1	N	127	G	Sidechain
1	N	1270	G	Sidechain
1	N	1271	A	Sidechain
1	N	1272	G	Sidechain
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	128	G	Sidechain
1	N	1280	A	Sidechain
1	N	1281	C	Sidechain
1	N	1283	U	Sidechain
1	N	1284	C	Sidechain
1	N	1287	A	Sidechain
1	N	1289	A	Sidechain
1	N	129	A	Sidechain
1	N	1290	G	Sidechain
1	N	1291	U	Sidechain
1	N	1292	G	Sidechain
1	N	1293	C	Sidechain
1	N	1298	U	Sidechain
1	N	130	A	Sidechain
1	N	1300	G	Sidechain
1	N	1301	U	Sidechain
1	N	1302	C	Sidechain
1	N	1304	G	Sidechain
1	N	1305	G	Sidechain
1	N	1309	G	Sidechain
1	N	1312	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1315	U	Sidechain
1	N	1316	G	Sidechain
1	N	1318	A	Sidechain
1	N	132	C	Sidechain
1	N	1321	U	Sidechain
1	N	1323	G	Sidechain
1	N	1324	A	Sidechain
1	N	1326	U	Sidechain
1	N	1327	C	Sidechain
1	N	1328	C	Sidechain
1	N	133	U	Sidechain
1	N	1330	U	Sidechain
1	N	1331	G	Sidechain
1	N	1333	A	Sidechain
1	N	1337	G	Sidechain
1	N	134	G	Sidechain
1	N	1340	A	Sidechain
1	N	1341	U	Sidechain
1	N	1342	C	Sidechain
1	N	1343	G	Sidechain
1	N	1345	U	Sidechain
1	N	1346	A	Sidechain
1	N	1348	U	Sidechain
1	N	1349	A	Sidechain
1	N	1350	A	Sidechain
1	N	1351	U	Sidechain
1	N	1356	G	Sidechain
1	N	1357	A	Sidechain
1	N	1360	A	Sidechain
1	N	1361	G	Sidechain
1	N	1362	A	Sidechain
1	N	1364	U	Sidechain
1	N	1365	G	Sidechain
1	N	1366	C	Sidechain
1	N	137	U	Sidechain
1	N	1371	G	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	1378	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	138	G	Sidechain
1	N	1381	U	Sidechain
1	N	1382	C	Sidechain
1	N	1383	C	Sidechain
1	N	1385	G	Sidechain
1	N	1386	G	Sidechain
1	N	1389	C	Sidechain
1	N	139	A	Sidechain
1	N	1392	G	Sidechain
1	N	1394	A	Sidechain
1	N	1395	C	Sidechain
1	N	1398	A	Sidechain
1	N	14	U	Sidechain
1	N	140	U	Sidechain
1	N	1400	C	Sidechain
1	N	1401	G	Sidechain
1	N	1402	C	Sidechain
1	N	1405	G	Sidechain
1	N	1406	U	Sidechain
1	N	141	G	Sidechain
1	N	1410	A	Sidechain
1	N	1413	A	Sidechain
1	N	1414	U	Sidechain
1	N	1416	G	Sidechain
1	N	1417	G	Sidechain
1	N	1419	G	Sidechain
1	N	1420	U	Sidechain
1	N	1421	G	Sidechain
1	N	1422	G	Sidechain
1	N	1423	G	Sidechain
1	N	1424	U	Sidechain
1	N	1427	C	Sidechain
1	N	1428	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	1439	G	Sidechain
1	N	144	G	Sidechain
1	N	1440	U	Sidechain
1	N	1447	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1448	C	Sidechain
1	N	145	G	Sidechain
1	N	1450	U	Sidechain
1	N	1451	U	Sidechain
1	N	1453	G	Sidechain
1	N	1454	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	1464	U	Sidechain
1	N	1466	C	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	1478	U	Sidechain
1	N	1479	C	Sidechain
1	N	148	G	Sidechain
1	N	1480	A	Sidechain
1	N	1481	U	Sidechain
1	N	1483	A	Sidechain
1	N	1485	U	Sidechain
1	N	1486	G	Sidechain
1	N	1487	G	Sidechain
1	N	1488	G	Sidechain
1	N	1489	G	Sidechain
1	N	149	A	Sidechain
1	N	1490	U	Sidechain
1	N	1492	A	Sidechain
1	N	1494	G	Sidechain
1	N	1495	U	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

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Mol	Chain	Res	Type	Group
1	N	1503	A	Sidechain
1	N	1504	G	Sidechain
1	N	1505	G	Sidechain
1	N	1508	A	Sidechain
1	N	151	A	Sidechain
1	N	1512	U	Sidechain
1	N	1513	A	Sidechain
1	N	1515	G	Sidechain
1	N	1516	G	Sidechain
1	N	152	A	Sidechain
1	N	1522	U	Sidechain
1	N	1523	G	Sidechain
1	N	1524	C	Sidechain
1	N	1527	U	Sidechain
1	N	1528	U	Sidechain
1	N	1529	G	Sidechain
1	N	1531	A	Sidechain
1	N	1532	U	Sidechain
1	N	1533	C	Sidechain
1	N	154	U	Sidechain
1	N	155	A	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	17	U	Sidechain
1	N	170	U	Sidechain
1	N	171	A	Sidechain
1	N	172	A	Sidechain
1	N	173	U	Sidechain
1	N	175	C	Sidechain
1	N	176	C	Sidechain
1	N	177	G	Sidechain
1	N	178	C	Sidechain
1	N	179	A	Sidechain
1	N	183	C	Sidechain
1	N	184	G	Sidechain
1	N	185	U	Sidechain
1	N	19	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	190	A	Sidechain
1	N	191	G	Sidechain
1	N	192	A	Sidechain
1	N	193	C	Sidechain
1	N	194	C	Sidechain
1	N	195	A	Sidechain
1	N	197	A	Sidechain
1	N	199	A	Sidechain
1	N	2	A	Sidechain
1	N	200	G	Sidechain
1	N	201	G	Sidechain
1	N	202	G	Sidechain
1	N	203	G	Sidechain
1	N	204	G	Sidechain
1	N	205	A	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	211	G	Sidechain
1	N	212	G	Sidechain
1	N	213	G	Sidechain
1	N	215	C	Sidechain
1	N	216	U	Sidechain
1	N	217	C	Sidechain
1	N	218	U	Sidechain
1	N	220	G	Sidechain
1	N	223	A	Sidechain
1	N	224	U	Sidechain
1	N	225	C	Sidechain
1	N	226	G	Sidechain
1	N	227	G	Sidechain
1	N	228	A	Sidechain
1	N	229	U	Sidechain
1	N	230	G	Sidechain
1	N	232	G	Sidechain
1	N	233	C	Sidechain
1	N	235	C	Sidechain
1	N	236	A	Sidechain
1	N	237	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	24	U	Sidechain
1	N	241	G	Sidechain
1	N	244	U	Sidechain
1	N	245	U	Sidechain
1	N	246	A	Sidechain
1	N	247	G	Sidechain
1	N	248	C	Sidechain
1	N	249	U	Sidechain
1	N	250	A	Sidechain
1	N	251	G	Sidechain
1	N	252	U	Sidechain
1	N	253	A	Sidechain
1	N	254	G	Sidechain
1	N	255	G	Sidechain
1	N	256	U	Sidechain
1	N	258	G	Sidechain
1	N	259	G	Sidechain
1	N	26	A	Sidechain
1	N	263	A	Sidechain
1	N	265	G	Sidechain
1	N	266	G	Sidechain
1	N	267	C	Sidechain
1	N	268	U	Sidechain
1	N	269	C	Sidechain
1	N	27	G	Sidechain
1	N	270	A	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	277	C	Sidechain
1	N	278	G	Sidechain
1	N	279	A	Sidechain
1	N	281	G	Sidechain
1	N	283	U	Sidechain
1	N	285	C	Sidechain
1	N	287	U	Sidechain
1	N	289	G	Sidechain
1	N	29	U	Sidechain
1	N	292	G	Sidechain
1	N	293	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	294	U	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	302	G	Sidechain
1	N	303	A	Sidechain
1	N	304	U	Sidechain
1	N	305	G	Sidechain
1	N	307	C	Sidechain
1	N	310	G	Sidechain
1	N	314	C	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	322	C	Sidechain
1	N	323	U	Sidechain
1	N	324	G	Sidechain
1	N	326	G	Sidechain
1	N	328	C	Sidechain
1	N	332	G	Sidechain
1	N	335	C	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	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	348	G	Sidechain
1	N	349	A	Sidechain
1	N	35	G	Sidechain
1	N	352	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	353	A	Sidechain
1	N	354	G	Sidechain
1	N	356	A	Sidechain
1	N	357	G	Sidechain
1	N	358	U	Sidechain
1	N	359	G	Sidechain
1	N	360	G	Sidechain
1	N	361	G	Sidechain
1	N	362	G	Sidechain
1	N	363	A	Sidechain
1	N	364	A	Sidechain
1	N	366	A	Sidechain
1	N	367	U	Sidechain
1	N	368	U	Sidechain
1	N	369	G	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	378	G	Sidechain
1	N	38	G	Sidechain
1	N	381	C	Sidechain
1	N	382	A	Sidechain
1	N	384	G	Sidechain
1	N	385	C	Sidechain
1	N	387	U	Sidechain
1	N	388	G	Sidechain
1	N	39	G	Sidechain
1	N	391	G	Sidechain
1	N	392	C	Sidechain
1	N	394	G	Sidechain
1	N	396	C	Sidechain
1	N	397	A	Sidechain
1	N	398	U	Sidechain
1	N	4	U	Sidechain
1	N	40	C	Sidechain
1	N	400	C	Sidechain
1	N	403	C	Sidechain
1	N	404	G	Sidechain
1	N	406	G	Sidechain
1	N	407	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	41	G	Sidechain
1	N	410	G	Sidechain
1	N	411	A	Sidechain
1	N	412	A	Sidechain
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	42	G	Sidechain
1	N	420	U	Sidechain
1	N	423	G	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	43	C	Sidechain
1	N	430	A	Sidechain
1	N	431	A	Sidechain
1	N	432	A	Sidechain
1	N	433	G	Sidechain
1	N	434	U	Sidechain
1	N	437	U	Sidechain
1	N	44	A	Sidechain
1	N	441	A	Sidechain
1	N	442	G	Sidechain
1	N	443	C	Sidechain
1	N	444	G	Sidechain
1	N	445	G	Sidechain
1	N	446	G	Sidechain
1	N	447	G	Sidechain
1	N	449	G	Sidechain
1	N	45	G	Sidechain
1	N	450	G	Sidechain
1	N	451	A	Sidechain
1	N	452	A	Sidechain
1	N	453	G	Sidechain
1	N	454	G	Sidechain
1	N	455	G	Sidechain
1	N	456	A	Sidechain
1	N	457	G	Sidechain

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Mol	Chain	Res	Type	Group
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	468	A	Sidechain
1	N	469	C	Sidechain
1	N	47	C	Sidechain
1	N	470	C	Sidechain
1	N	472	U	Sidechain
1	N	473	U	Sidechain
1	N	475	C	Sidechain
1	N	477	C	Sidechain
1	N	478	A	Sidechain
1	N	479	U	Sidechain
1	N	48	C	Sidechain
1	N	480	U	Sidechain
1	N	482	A	Sidechain
1	N	484	G	Sidechain
1	N	485	U	Sidechain
1	N	486	U	Sidechain
1	N	487	A	Sidechain
1	N	49	U	Sidechain
1	N	491	G	Sidechain
1	N	494	G	Sidechain
1	N	495	A	Sidechain
1	N	496	A	Sidechain
1	N	497	G	Sidechain
1	N	498	A	Sidechain
1	N	50	A	Sidechain
1	N	501	C	Sidechain
1	N	503	C	Sidechain
1	N	505	G	Sidechain
1	N	507	C	Sidechain
1	N	508	U	Sidechain
1	N	509	A	Sidechain
1	N	51	A	Sidechain
1	N	510	A	Sidechain
1	N	512	U	Sidechain
1	N	514	C	Sidechain
1	N	516	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	517	G	Sidechain
1	N	519	C	Sidechain
1	N	52	C	Sidechain
1	N	521	G	Sidechain
1	N	522	C	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	53	A	Sidechain
1	N	531	U	Sidechain
1	N	532	A	Sidechain
1	N	536	C	Sidechain
1	N	538	G	Sidechain
1	N	54	C	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	547	A	Sidechain
1	N	55	A	Sidechain
1	N	550	G	Sidechain
1	N	552	U	Sidechain
1	N	553	A	Sidechain
1	N	555	U	Sidechain
1	N	556	C	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	564	C	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	572	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	573	A	Sidechain
1	N	574	A	Sidechain
1	N	575	G	Sidechain
1	N	577	G	Sidechain
1	N	578	C	Sidechain
1	N	581	G	Sidechain
1	N	582	C	Sidechain
1	N	583	A	Sidechain
1	N	584	G	Sidechain
1	N	586	C	Sidechain
1	N	588	G	Sidechain
1	N	59	A	Sidechain
1	N	590	U	Sidechain
1	N	593	U	Sidechain
1	N	594	U	Sidechain
1	N	595	A	Sidechain
1	N	596	A	Sidechain
1	N	597	G	Sidechain
1	N	598	U	Sidechain
1	N	6	G	Sidechain
1	N	60	A	Sidechain
1	N	601	G	Sidechain
1	N	602	A	Sidechain
1	N	604	G	Sidechain
1	N	605	U	Sidechain
1	N	606	G	Sidechain
1	N	607	A	Sidechain
1	N	609	A	Sidechain
1	N	61	G	Sidechain
1	N	610	U	Sidechain
1	N	611	C	Sidechain
1	N	612	C	Sidechain
1	N	613	C	Sidechain
1	N	614	C	Sidechain
1	N	618	C	Sidechain
1	N	62	U	Sidechain
1	N	620	C	Sidechain
1	N	621	A	Sidechain
1	N	623	C	Sidechain
1	N	626	G	Sidechain
1	N	629	A	Sidechain
1	N	63	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	630	A	Sidechain
1	N	632	U	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	643	C	Sidechain
1	N	645	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	652	U	Sidechain
1	N	654	G	Sidechain
1	N	655	A	Sidechain
1	N	656	G	Sidechain
1	N	657	U	Sidechain
1	N	660	C	Sidechain
1	N	662	U	Sidechain
1	N	664	G	Sidechain
1	N	666	G	Sidechain
1	N	668	G	Sidechain
1	N	669	G	Sidechain
1	N	670	G	Sidechain
1	N	671	G	Sidechain
1	N	672	U	Sidechain
1	N	674	G	Sidechain
1	N	675	A	Sidechain
1	N	678	U	Sidechain
1	N	679	C	Sidechain
1	N	68	G	Sidechain
1	N	680	C	Sidechain
1	N	681	A	Sidechain
1	N	684	U	Sidechain
1	N	685	G	Sidechain
1	N	686	U	Sidechain
1	N	687	A	Sidechain
1	N	688	G	Sidechain
1	N	69	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	692	U	Sidechain
1	N	693	G	Sidechain
1	N	697	U	Sidechain
1	N	700	G	Sidechain
1	N	701	U	Sidechain
1	N	702	A	Sidechain
1	N	707	U	Sidechain
1	N	709	U	Sidechain
1	N	71	A	Sidechain
1	N	710	G	Sidechain
1	N	712	A	Sidechain
1	N	713	G	Sidechain
1	N	714	G	Sidechain
1	N	715	A	Sidechain
1	N	717	U	Sidechain
1	N	718	A	Sidechain
1	N	719	C	Sidechain
1	N	72	A	Sidechain
1	N	721	G	Sidechain
1	N	722	G	Sidechain
1	N	723	U	Sidechain
1	N	727	G	Sidechain
1	N	728	A	Sidechain
1	N	73	C	Sidechain
1	N	731	G	Sidechain
1	N	733	G	Sidechain
1	N	734	G	Sidechain
1	N	735	C	Sidechain
1	N	736	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	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	752	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	753	A	Sidechain
1	N	754	C	Sidechain
1	N	757	U	Sidechain
1	N	759	A	Sidechain
1	N	76	G	Sidechain
1	N	761	G	Sidechain
1	N	762	U	Sidechain
1	N	763	G	Sidechain
1	N	767	A	Sidechain
1	N	768	A	Sidechain
1	N	769	G	Sidechain
1	N	77	A	Sidechain
1	N	770	C	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
1	N	778	G	Sidechain
1	N	78	A	Sidechain
1	N	780	A	Sidechain
1	N	781	A	Sidechain
1	N	782	A	Sidechain
1	N	785	G	Sidechain
1	N	786	G	Sidechain
1	N	787	A	Sidechain
1	N	79	G	Sidechain
1	N	791	G	Sidechain
1	N	792	A	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	8	A	Sidechain
1	N	80	A	Sidechain
1	N	800	G	Sidechain
1	N	801	U	Sidechain
1	N	803	G	Sidechain
1	N	804	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	805	C	Sidechain
1	N	806	C	Sidechain
1	N	807	A	Sidechain
1	N	808	C	Sidechain
1	N	81	A	Sidechain
1	N	811	C	Sidechain
1	N	812	G	Sidechain
1	N	814	A	Sidechain
1	N	815	A	Sidechain
1	N	817	C	Sidechain
1	N	818	G	Sidechain
1	N	82	G	Sidechain
1	N	820	U	Sidechain
1	N	822	U	Sidechain
1	N	823	C	Sidechain
1	N	824	G	Sidechain
1	N	825	A	Sidechain
1	N	826	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	833	G	Sidechain
1	N	835	U	Sidechain
1	N	837	U	Sidechain
1	N	838	G	Sidechain
1	N	842	U	Sidechain
1	N	844	G	Sidechain
1	N	845	A	Sidechain
1	N	846	G	Sidechain
1	N	847	G	Sidechain
1	N	848	C	Sidechain
1	N	850	U	Sidechain
1	N	851	G	Sidechain
1	N	855	U	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

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Mol	Chain	Res	Type	Group
1	N	861	G	Sidechain
1	N	862	C	Sidechain
1	N	864	A	Sidechain
1	N	866	C	Sidechain
1	N	867	G	Sidechain
1	N	868	C	Sidechain
1	N	869	G	Sidechain
1	N	870	U	Sidechain
1	N	873	A	Sidechain
1	N	874	G	Sidechain
1	N	877	G	Sidechain
1	N	88	U	Sidechain
1	N	880	C	Sidechain
1	N	881	G	Sidechain
1	N	882	C	Sidechain
1	N	884	U	Sidechain
1	N	885	G	Sidechain
1	N	886	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	892	A	Sidechain
1	N	893	C	Sidechain
1	N	894	G	Sidechain
1	N	895	G	Sidechain
1	N	896	C	Sidechain
1	N	897	C	Sidechain
1	N	898	G	Sidechain
1	N	899	C	Sidechain
1	N	900	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	911	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	912	C	Sidechain
1	N	913	A	Sidechain
1	N	914	A	Sidechain
1	N	915	A	Sidechain
1	N	916	U	Sidechain
1	N	917	G	Sidechain
1	N	918	A	Sidechain
1	N	919	A	Sidechain
1	N	92	U	Sidechain
1	N	920	U	Sidechain
1	N	921	U	Sidechain
1	N	923	A	Sidechain
1	N	924	C	Sidechain
1	N	925	G	Sidechain
1	N	926	G	Sidechain
1	N	927	G	Sidechain
1	N	928	G	Sidechain
1	N	929	G	Sidechain
1	N	931	C	Sidechain
1	N	937	A	Sidechain
1	N	938	A	Sidechain
1	N	939	G	Sidechain
1	N	94	G	Sidechain
1	N	940	C	Sidechain
1	N	941	G	Sidechain
1	N	943	U	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	957	U	Sidechain
1	N	958	A	Sidechain
1	N	959	A	Sidechain
1	N	96	U	Sidechain
1	N	961	U	Sidechain
1	N	962	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	968	A	Sidechain
1	N	969	A	Sidechain
1	N	97	G	Sidechain
1	N	970	C	Sidechain
1	N	971	G	Sidechain
1	N	973	G	Sidechain
1	N	975	A	Sidechain
1	N	977	A	Sidechain
1	N	978	A	Sidechain
1	N	98	A	Sidechain
1	N	980	C	Sidechain
1	N	981	U	Sidechain
1	N	982	U	Sidechain
1	N	983	A	Sidechain
1	N	984	C	Sidechain
1	N	985	C	Sidechain
1	N	986	U	Sidechain
1	N	987	G	Sidechain
1	N	989	U	Sidechain
1	N	99	C	Sidechain
1	N	990	C	Sidechain
1	N	991	U	Sidechain
1	N	992	U	Sidechain
1	N	994	A	Sidechain
1	N	995	C	Sidechain
1	N	996	A	Sidechain
1	N	997	U	Sidechain
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	16522	562	0
All	All	32892	16554	16522	562	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 11.

All (562) 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:594:U:C4	1:N:595:A:C6	2.75	0.74
1:N:120:A:C2	1:N:122:G:C6	2.78	0.72
1:N:67:C:H2'	1:N:68:G:C8	2.25	0.71
1:N:1343:G:C5	1:N:1344:C:C4	2.79	0.70
1:N:411:A:H61	1:N:428:G:H1'	1.56	0.70
1:N:25:C:H41	1:N:559:A:H61	1.41	0.69
1:N:668:G:C6	1:N:669:G:C6	2.81	0.68
1:N:39:G:H1'	1:N:497:G:H21	1.58	0.67
1:N:116:A:H61	1:N:313:A:H1'	1.59	0.67
1:N:1315:U:C4	1:N:1316:G:C6	2.84	0.66
1:N:275:G:C8	1:N:275:G:H5''	2.31	0.66
1:N:197:A:H2	1:N:198:G:C4	2.15	0.65
1:N:664:G:H22	1:N:741:G:H1	1.44	0.65
1:N:1255:G:H2'	1:N:1279:G:H1	1.61	0.65
1:N:998:C:H42	1:N:1042:A:H61	1.45	0.65
1:N:794:A:H2'	1:N:795:C:H5'	1.77	0.64
1:N:575:G:C5	1:N:821:G:C8	2.85	0.64
1:N:172:A:C8	1:N:174:A:C8	2.85	0.64
1:N:1250:A:C8	1:N:1287:A:C8	2.86	0.63
1:N:113:G:H21	1:N:353:A:H2'	1.63	0.62
1:N:1249:C:H3'	1:N:1250:A:H5''	1.81	0.62
1:N:338:A:H61	1:N:351:G:H1	1.47	0.62
1:N:949:A:H61	1:N:1232:U:H3	1.47	0.62
1:N:1102:A:C2	1:N:1103:C:C2	2.88	0.62
1:N:1366:C:C4	1:N:1367:C:C4	2.87	0.62
1:N:1394:A:H3'	1:N:1395:C:H5'	1.80	0.62
1:N:17:U:H2'	1:N:18:C:C6	2.35	0.62
1:N:1500:A:C6	1:N:1501:C:C5	2.88	0.61
1:N:1083:U:C5	1:N:1084:G:C6	2.88	0.61
1:N:1383:C:C4	1:N:1384:C:C4	2.89	0.61
1:N:80:A:C5	1:N:81:A:H1'	2.37	0.59
1:N:604:G:C2	1:N:605:U:C2	2.90	0.59
1:N:465:A:C2	1:N:466:A:C4	2.90	0.59
1:N:320:A:H2'	1:N:321:A:C8	2.37	0.59
1:N:403:C:H41	1:N:547:A:H5''	1.66	0.59
1:N:425:G:C5	1:N:426:U:C4	2.91	0.59
1:N:840:C:H1'	1:N:843:U:H3	1.68	0.58
1:N:78:A:C5	1:N:79:G:C6	2.91	0.58
1:N:859:G:C6	1:N:860:A:C6	2.91	0.58
1:N:1321:U:H2'	1:N:1322:C:H2'	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1072:G:C2	1:N:1073:U:C2	2.91	0.58
1:N:596:A:H61	1:N:644:U:H3	1.50	0.58
1:N:585:G:C6	1:N:586:C:N3	2.72	0.58
1:N:117:G:H5''	1:N:1425:U:H5''	1.84	0.57
1:N:1090:U:H2'	1:N:1091:U:C6	2.39	0.57
1:N:1439:G:C5	1:N:1440:U:C6	2.93	0.57
1:N:98:A:C5	1:N:99:C:C4	2.92	0.57
1:N:1082:A:C5	1:N:1083:U:C4	2.92	0.57
1:N:1240:U:C6	1:N:1241:G:H5'	2.39	0.57
1:N:688:G:C8	1:N:688:G:H5''	2.40	0.57
1:N:985:C:C4	1:N:986:U:C4	2.93	0.57
1:N:1282:C:H2'	1:N:1283:U:C6	2.40	0.57
1:N:372:C:H4'	1:N:373:A:OP1	2.03	0.57
1:N:373:A:C2	1:N:374:A:C4	2.93	0.57
1:N:986:U:H3	1:N:1219:A:H61	1.52	0.57
1:N:1316:G:C2	1:N:1319:A:C8	2.92	0.57
1:N:1413:A:H2	1:N:1487:G:H22	1.51	0.56
1:N:512:U:H2'	1:N:513:C:C6	2.40	0.56
1:N:1207:G:C6	1:N:1208:C:C4	2.93	0.56
1:N:91:U:C5	1:N:92:U:C2	2.93	0.56
1:N:208:U:C2	1:N:209:U:C5	2.93	0.56
1:N:64:G:C2	1:N:69:G:C6	2.94	0.56
1:N:904:U:C4	1:N:905:U:C4	2.94	0.56
1:N:465:A:C6	1:N:466:A:C6	2.93	0.56
1:N:50:A:H1'	1:N:52:C:C6	2.41	0.56
1:N:780:A:C2	1:N:801:U:C5	2.93	0.56
1:N:64:G:N2	1:N:69:G:C5	2.74	0.56
1:N:64:G:C5	1:N:99:C:C2	2.94	0.56
1:N:338:A:C8	1:N:339:C:C5	2.94	0.56
1:N:501:C:H2'	1:N:502:A:C8	2.41	0.56
1:N:80:A:C4	1:N:81:A:H1'	2.41	0.55
1:N:946:A:C2	1:N:1236:A:C2	2.94	0.55
1:N:1240:U:C2	1:N:1240:U:OP1	2.59	0.55
1:N:349:A:C6	1:N:350:G:C6	2.94	0.55
1:N:383:A:C5	1:N:384:G:H1'	2.41	0.55
1:N:1056:U:H3	1:N:1204:A:H61	1.54	0.55
1:N:145:G:C2	1:N:178:C:C2	2.94	0.55
1:N:613:C:C4	1:N:614:C:C4	2.95	0.55
1:N:1343:G:C6	1:N:1344:C:C4	2.95	0.55
1:N:1483:A:C8	1:N:1484:C:C6	2.94	0.55
1:N:858:G:H1	1:N:869:G:H2'	1.72	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1011:C:C2	1:N:1019:A:C2	2.93	0.55
1:N:169:C:C4	1:N:170:U:C4	2.95	0.55
1:N:414:A:C5	1:N:431:A:C2	2.95	0.55
1:N:1268:G:H21	1:N:1326:U:H1'	1.72	0.55
1:N:11:G:C6	1:N:12:U:C4	2.95	0.55
1:N:620:C:H3'	1:N:621:A:C8	2.42	0.55
1:N:829:G:C6	1:N:830:G:C5	2.95	0.55
1:N:1071:C:H2'	1:N:1072:G:C8	2.42	0.55
1:N:442:G:C6	1:N:443:C:C4	2.95	0.55
1:N:78:A:C6	1:N:79:G:C6	2.95	0.54
1:N:438:U:C4	1:N:494:G:C8	2.95	0.54
1:N:1301:U:H2'	1:N:1303:C:C5	2.43	0.54
1:N:655:A:C2	1:N:656:G:C4	2.96	0.54
1:N:297:G:C2	1:N:301:G:C6	2.96	0.54
1:N:669:G:C5	1:N:670:G:C5	2.96	0.54
1:N:391:G:C6	1:N:392:C:C4	2.96	0.54
1:N:1256:A:C2	1:N:1258:G:C6	2.96	0.54
1:N:405:U:H5'	1:N:495:A:C2	2.43	0.53
1:N:130:A:H2	1:N:232:G:H22	1.55	0.53
1:N:804:U:C6	1:N:805:C:C5	2.96	0.53
1:N:1523:G:C6	1:N:1524:C:C4	2.97	0.53
1:N:19:A:C2	1:N:917:G:C6	2.97	0.53
1:N:107:G:H5''	1:N:134:G:H21	1.74	0.53
1:N:468:A:H3'	1:N:470:C:H41	1.74	0.53
1:N:1053:G:H5''	1:N:1200:C:C5	2.44	0.53
1:N:1102:A:C5	1:N:1103:C:C4	2.97	0.53
1:N:1041:G:C6	1:N:1042:A:C6	2.97	0.53
1:N:867:G:H2'	1:N:868:C:H6	1.74	0.53
1:N:19:A:C2	1:N:917:G:C5	2.98	0.52
1:N:168:G:C6	1:N:169:C:C5	2.97	0.52
1:N:179:A:C5	1:N:180:U:C4	2.98	0.52
1:N:1009:U:C2	1:N:1021:A:C2	2.97	0.52
1:N:1434:A:C5	1:N:1435:G:C5	2.97	0.52
1:N:69:G:C4	1:N:70:U:C5	2.97	0.52
1:N:651:C:C4	1:N:652:U:C4	2.96	0.52
1:N:232:G:C6	1:N:233:C:C4	2.97	0.52
1:N:441:A:H61	1:N:493:A:N6	2.08	0.52
1:N:509:A:C4	1:N:510:A:C2	2.97	0.52
1:N:941:G:N1	1:N:1343:G:C6	2.77	0.52
1:N:1035:A:H62	1:N:1036:A:H2	1.57	0.52
1:N:1036:A:OP2	1:N:1036:A:C8	2.63	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:117:G:C5'	1:N:1425:U:H5''	2.38	0.52
1:N:198:G:H2'	1:N:199:A:C8	2.45	0.52
1:N:595:A:C2	1:N:596:A:N6	2.77	0.52
1:N:872:A:C5	1:N:874:G:C8	2.98	0.52
1:N:76:G:C6	1:N:77:A:C5	2.98	0.52
1:N:209:U:C4	1:N:211:G:N1	2.77	0.52
1:N:760:G:C6	1:N:761:G:C4	2.98	0.52
1:N:207:C:H2'	1:N:208:U:C2	2.45	0.52
1:N:444:G:C6	1:N:491:G:C6	2.98	0.52
1:N:482:A:C6	1:N:483:C:C2	2.98	0.52
1:N:626:G:H2'	1:N:627:G:C8	2.45	0.52
1:N:1157:A:C8	1:N:1180:A:C2	2.98	0.52
1:N:197:A:C2	1:N:198:G:C4	2.98	0.51
1:N:833:G:C5	1:N:834:U:C5	2.98	0.51
1:N:64:G:N2	1:N:69:G:C6	2.79	0.51
1:N:50:A:C2	1:N:52:C:N3	2.78	0.51
1:N:64:G:C8	1:N:99:C:C5	2.99	0.51
1:N:118:U:H2'	1:N:121:U:C5	2.46	0.51
1:N:112:G:H22	1:N:315:A:H2	1.57	0.51
1:N:208:U:C2	1:N:209:U:C4	2.99	0.51
1:N:444:G:C6	1:N:445:G:C5	2.99	0.51
1:N:701:U:H5''	1:N:703:G:H5'	1.92	0.51
1:N:1365:G:N1	1:N:1366:C:C2	2.79	0.51
1:N:893:C:C2	1:N:894:G:C8	2.98	0.51
1:N:1484:C:C4	1:N:1485:U:N3	2.78	0.51
1:N:79:G:H2'	1:N:80:A:C8	2.46	0.51
1:N:439:U:C5	1:N:440:C:C5	2.99	0.51
1:N:79:G:C6	1:N:80:A:C6	2.99	0.50
1:N:147:G:C2	1:N:148:G:C5	2.99	0.50
1:N:342:C:C4	1:N:343:U:C4	2.99	0.50
1:N:769:G:H4'	1:N:1513:A:H4'	1.92	0.50
1:N:21:G:H1'	1:N:914:A:H61	1.77	0.50
1:N:17:U:H2'	1:N:18:C:C5	2.46	0.50
1:N:892:A:H1'	1:N:1486:G:H5'	1.93	0.50
1:N:904:U:C6	1:N:905:U:C5	2.99	0.50
1:N:64:G:N1	1:N:69:G:C2	2.80	0.50
1:N:867:G:H2'	1:N:868:C:C6	2.47	0.50
1:N:141:G:C6	1:N:223:A:C6	3.00	0.50
1:N:411:A:C8	1:N:429:U:C5	2.99	0.50
1:N:1500:A:C5	1:N:1501:C:C5	3.00	0.50
1:N:273:U:C4	1:N:274:A:C6	3.00	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:316:C:O2	1:N:338:A:C2	2.65	0.50
1:N:1146:A:C6	1:N:1147:C:C2	2.99	0.50
1:N:373:A:H2'	1:N:374:A:C8	2.47	0.50
1:N:381:C:C5	1:N:382:A:C5	3.00	0.49
1:N:424:G:C6	1:N:425:G:C6	3.00	0.49
1:N:934:C:C5	1:N:1344:C:H2'	2.47	0.49
1:N:160:A:C2	1:N:346:G:N1	2.80	0.49
1:N:516:U:O4	1:N:533:A:C8	2.65	0.49
1:N:1066:C:H3'	1:N:1067:A:C8	2.48	0.49
1:N:64:G:C4	1:N:99:C:C4	3.00	0.49
1:N:1357:A:C4	1:N:1358:U:C2	3.01	0.49
1:N:109:A:C4	1:N:327:A:C2	3.01	0.49
1:N:256:U:H3	1:N:270:A:H61	1.60	0.49
1:N:507:C:H3'	1:N:508:U:H5''	1.94	0.49
1:N:1501:C:C5	1:N:1504:G:C4	2.99	0.49
1:N:1241:G:C8	1:N:1241:G:O5'	2.66	0.49
1:N:1343:G:C5	1:N:1344:C:C5	3.00	0.49
1:N:203:G:H1'	1:N:465:A:H61	1.78	0.49
1:N:585:G:C6	1:N:586:C:C4	3.00	0.49
1:N:768:A:H3'	1:N:769:G:C8	2.47	0.49
1:N:68:G:C4	1:N:69:G:H1'	2.48	0.49
1:N:980:C:C6	1:N:981:U:C5	3.00	0.49
1:N:49:U:C2	1:N:362:G:H1'	2.48	0.49
1:N:283:U:C5	1:N:284:C:C5	3.01	0.49
1:N:1127:G:H22	1:N:1145:A:H2	1.60	0.49
1:N:64:G:H2'	1:N:99:C:H41	1.78	0.49
1:N:713:G:C6	1:N:714:G:C6	3.01	0.49
1:N:1220:G:C6	1:N:1221:G:C5	3.01	0.49
1:N:1423:G:C6	1:N:1424:U:C4	3.01	0.49
1:N:168:G:C8	1:N:168:G:H3'	2.47	0.49
1:N:886:G:C6	1:N:887:G:C5	3.01	0.48
1:N:901:A:C5	1:N:902:G:H1'	2.48	0.48
1:N:949:A:N6	1:N:1232:U:H3	2.10	0.48
1:N:1223:C:H5''	1:N:1224:U:H3'	1.94	0.48
1:N:136:C:C2	1:N:228:A:C2	3.01	0.48
1:N:494:G:C4	1:N:496:A:C8	3.01	0.48
1:N:773:G:C4	1:N:774:G:H1'	2.48	0.48
1:N:1100:C:H4'	1:N:1102:A:H4'	1.95	0.48
1:N:62:U:N3	1:N:63:C:C4	2.81	0.48
1:N:1051:C:H2'	1:N:1052:U:C6	2.49	0.48
1:N:687:A:C2	1:N:704:A:C6	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:25:C:H41	1:N:559:A:N6	2.10	0.48
1:N:69:G:H2'	1:N:70:U:C6	2.48	0.48
1:N:503:C:O2	1:N:510:A:C2	2.66	0.48
1:N:585:G:C2	1:N:586:C:C2	3.01	0.48
1:N:788:U:H2'	1:N:789:U:C6	2.48	0.48
1:N:908:A:H2	1:N:1486:G:H21	1.60	0.48
1:N:770:C:C5	1:N:803:G:H5''	2.48	0.48
1:N:1258:G:H2'	1:N:1259:C:C6	2.49	0.48
1:N:57:G:C6	1:N:356:A:N1	2.81	0.48
1:N:602:A:C2	1:N:603:U:C2	3.01	0.48
1:N:953:G:C6	1:N:954:G:C4	3.02	0.48
1:N:301:G:C6	1:N:302:G:C5	3.02	0.48
1:N:364:A:C2	1:N:365:U:N3	2.82	0.48
1:N:506:G:C5	1:N:507:C:C4	3.02	0.48
1:N:807:A:C2	1:N:808:C:C2	3.02	0.48
1:N:320:A:H4'	1:N:1435:G:H21	1.78	0.48
1:N:770:C:H2'	1:N:771:G:C8	2.48	0.48
1:N:1068:G:C6	1:N:1108:G:C6	3.02	0.48
1:N:47:C:C2	1:N:365:U:H5	2.32	0.47
1:N:556:C:C6	1:N:556:C:H3'	2.49	0.47
1:N:834:U:C4	1:N:835:U:C4	3.02	0.47
1:N:1500:A:C6	1:N:1501:C:C4	3.02	0.47
1:N:413:G:C5	1:N:426:U:OP2	2.67	0.47
1:N:1170:A:H2'	1:N:1171:A:O4'	2.15	0.47
1:N:39:G:C4	1:N:498:A:C2	3.03	0.47
1:N:556:C:H3'	1:N:556:C:H6	1.79	0.47
1:N:139:A:C6	1:N:140:U:C4	3.02	0.47
1:N:646:G:C5	1:N:647:C:C5	3.02	0.47
1:N:1371:G:C6	1:N:1372:U:C4	3.02	0.47
1:N:107:G:C5'	1:N:134:G:H21	2.28	0.47
1:N:644:U:H2'	1:N:645:G:C8	2.50	0.47
1:N:1060:U:H3	1:N:1197:A:H61	1.62	0.47
1:N:1049:U:H4'	1:N:1050:G:H5'	1.95	0.47
1:N:1357:A:C6	1:N:1363:A:C2	3.02	0.47
1:N:265:G:H3'	1:N:267:C:C5	2.50	0.47
1:N:342:C:C2	1:N:343:U:C6	3.02	0.47
1:N:1239:A:C5	1:N:1241:G:C2	3.02	0.47
1:N:70:U:C5	1:N:94:G:H2'	2.50	0.47
1:N:584:G:C6	1:N:585:G:C6	3.03	0.47
1:N:955:U:H3	1:N:1225:A:H2	1.59	0.47
1:N:1004:A:C5'	1:N:1024:G:H22	2.28	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1438:G:C2	1:N:1464:U:C2	3.03	0.47
1:N:669:G:C6	1:N:670:G:C6	3.03	0.47
1:N:772:U:H2'	1:N:773:G:C8	2.50	0.47
1:N:781:A:C2	1:N:802:A:C2	3.03	0.47
1:N:1102:A:C6	1:N:1103:C:C4	3.03	0.47
1:N:1210:C:C5	1:N:1211:U:C5	3.03	0.47
1:N:1366:C:C5	1:N:1367:C:C4	3.03	0.47
1:N:69:G:C6	1:N:70:U:C4	3.03	0.47
1:N:260:G:H2'	1:N:261:U:C6	2.50	0.47
1:N:596:A:N6	1:N:644:U:H3	2.13	0.46
1:N:1368:A:C6	1:N:1369:C:C5	3.03	0.46
1:N:65:A:H4'	1:N:66:A:H5'	1.97	0.46
1:N:68:G:C8	1:N:69:G:C8	3.03	0.46
1:N:199:A:C2	1:N:219:U:O2	2.68	0.46
1:N:449:G:C6	1:N:450:G:C6	3.03	0.46
1:N:673:A:H61	1:N:717:U:H3	1.62	0.46
1:N:934:C:C4	1:N:1344:C:C2	3.04	0.46
1:N:944:G:C5	1:N:945:G:C8	3.04	0.46
1:N:474:G:C5	1:N:475:C:C4	3.03	0.46
1:N:219:U:H2'	1:N:220:G:C8	2.51	0.46
1:N:1123:U:H3	1:N:1150:A:H61	1.62	0.46
1:N:105:G:H2'	1:N:106:C:C6	2.51	0.46
1:N:295:C:C4	1:N:296:U:C4	3.03	0.46
1:N:474:G:C6	1:N:475:C:N3	2.84	0.46
1:N:1511:G:C6	1:N:1525:G:C6	3.03	0.46
1:N:301:G:C6	1:N:302:G:C6	3.03	0.46
1:N:840:C:C1'	1:N:843:U:H3	2.27	0.46
1:N:1530:G:C4	1:N:1531:A:C2	3.04	0.46
1:N:71:A:H61	1:N:99:C:H1'	1.79	0.46
1:N:143:A:H2	1:N:220:G:H1	1.63	0.46
1:N:475:C:H2'	1:N:476:U:H6	1.80	0.46
1:N:891:U:C5	1:N:906:A:C6	3.03	0.46
1:N:135:C:H42	1:N:228:A:H61	1.64	0.46
1:N:143:A:N3	1:N:143:A:H2'	2.31	0.46
1:N:218:U:H2'	1:N:219:U:O4'	2.16	0.46
1:N:253:A:H2'	1:N:254:G:C8	2.51	0.46
1:N:475:C:H2'	1:N:476:U:C6	2.51	0.46
1:N:676:A:H2'	1:N:677:U:C6	2.51	0.46
1:N:830:G:C6	1:N:831:A:C5	3.04	0.46
1:N:1181:G:O2'	1:N:1182:G:C5	2.67	0.46
1:N:1415:G:C2	1:N:1416:G:C5	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1083:U:C4	1:N:1084:G:C2	3.04	0.46
1:N:199:A:C4	1:N:200:G:C8	3.04	0.45
1:N:236:A:C6	1:N:237:G:C6	3.04	0.45
1:N:558:G:H2'	1:N:559:A:C2	2.51	0.45
1:N:768:A:H3'	1:N:769:G:H8	1.81	0.45
1:N:1276:G:C5	1:N:1277:C:C4	3.04	0.45
1:N:1523:G:C5	1:N:1524:C:C5	3.03	0.45
1:N:158:G:H2'	1:N:159:G:H5''	1.98	0.45
1:N:738:C:C4	1:N:739:C:C4	3.04	0.45
1:N:804:U:C5	1:N:805:C:C4	3.04	0.45
1:N:1369:C:H2'	1:N:1370:G:C8	2.50	0.45
1:N:202:G:H1'	1:N:468:A:H8	1.81	0.45
1:N:272:C:C4	1:N:273:U:C4	3.04	0.45
1:N:486:U:C6	1:N:486:U:H5''	2.51	0.45
1:N:1095:U:C4	1:N:1096:C:C4	3.05	0.45
1:N:1225:A:H2'	1:N:1226:C:C6	2.52	0.45
1:N:1434:A:C6	1:N:1435:G:C6	3.05	0.45
1:N:142:G:C2	1:N:222:C:C6	3.04	0.45
1:N:438:U:C5	1:N:494:G:C8	3.04	0.45
1:N:998:C:H42	1:N:1042:A:N6	2.14	0.45
1:N:1436:U:H2'	1:N:1437:A:C8	2.51	0.45
1:N:243:A:C2	1:N:282:A:N6	2.85	0.45
1:N:322:C:H3'	1:N:323:U:C6	2.51	0.45
1:N:406:G:C6	1:N:407:U:C4	3.05	0.45
1:N:1025:U:N3	1:N:1031:C:C2	2.85	0.45
1:N:1154:G:C2	1:N:1155:A:C8	3.05	0.45
1:N:897:C:H1'	1:N:903:G:N2	2.32	0.45
1:N:934:C:C2	1:N:1344:C:C4	3.04	0.45
1:N:1244:G:C6	1:N:1294:G:C6	3.05	0.45
1:N:1299:A:C2	1:N:1301:U:C2	3.05	0.45
1:N:186:C:H2'	1:N:187:G:O4'	2.17	0.45
1:N:780:A:C2	1:N:803:G:N1	2.84	0.45
1:N:109:A:C5	1:N:326:G:C5	3.05	0.45
1:N:362:G:N2	1:N:364:A:H3'	2.32	0.45
1:N:943:U:C5	1:N:944:G:C6	3.05	0.45
1:N:1084:G:H5''	1:N:1099:G:H22	1.80	0.45
1:N:1357:A:H2'	1:N:1358:U:C2	2.52	0.45
1:N:177:G:H2'	1:N:178:C:H5'	1.98	0.45
1:N:484:G:C6	1:N:486:U:C6	3.05	0.45
1:N:544:G:C2	1:N:545:C:C2	3.05	0.45
1:N:773:G:C5	1:N:774:G:H1'	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1177:G:C5	1:N:1178:G:C5	3.05	0.45
1:N:11:G:C5	1:N:12:U:C4	3.05	0.44
1:N:756:C:C4	1:N:757:U:C4	3.05	0.44
1:N:904:U:C5	1:N:905:U:C4	3.05	0.44
1:N:64:G:H2'	1:N:99:C:N4	2.32	0.44
1:N:171:A:C5	1:N:172:A:C6	3.05	0.44
1:N:243:A:H4'	1:N:244:U:H5''	1.99	0.44
1:N:344:A:H4'	1:N:345:C:OP2	2.18	0.44
1:N:933:G:C2	1:N:1385:G:C2	3.05	0.44
1:N:1072:G:C6	1:N:1073:U:N3	2.85	0.44
1:N:61:G:H22	1:N:105:G:N2	2.14	0.44
1:N:198:G:C6	1:N:220:G:C4	3.05	0.44
1:N:447:G:H3'	1:N:447:G:C8	2.52	0.44
1:N:18:C:C6	1:N:18:C:H3'	2.52	0.44
1:N:99:C:HO2'	1:N:100:G:H8	1.62	0.44
1:N:295:C:N3	1:N:296:U:C4	2.85	0.44
1:N:737:C:H2'	1:N:738:C:C6	2.52	0.44
1:N:1006:G:N2	1:N:1024:G:H1'	2.31	0.44
1:N:32:A:H4'	1:N:48:C:H42	1.81	0.44
1:N:184:G:C6	1:N:194:C:C4	3.05	0.44
1:N:362:G:N3	1:N:364:A:C8	2.86	0.44
1:N:979:C:C5	1:N:980:C:C6	3.06	0.44
1:N:405:U:C5'	1:N:495:A:C2	3.01	0.44
1:N:625:U:H2'	1:N:626:G:C8	2.52	0.44
1:N:952:U:O2	1:N:969:A:C2	2.71	0.44
1:N:22:G:H5''	1:N:561:U:C2	2.53	0.44
1:N:980:C:H3'	1:N:981:U:H6	1.83	0.44
1:N:1104:G:C6	1:N:1105:A:C6	3.06	0.44
1:N:1371:G:C5	1:N:1372:U:C5	3.06	0.44
1:N:24:U:C2	1:N:25:C:C5	3.06	0.44
1:N:301:G:C2	1:N:302:G:C4	3.05	0.44
1:N:506:G:C6	1:N:507:C:N3	2.86	0.44
1:N:661:G:H1'	1:N:745:G:H22	1.83	0.44
1:N:1068:G:N7	1:N:1094:G:C8	2.86	0.44
1:N:145:G:N2	1:N:178:C:C2	2.86	0.43
1:N:588:G:C6	1:N:753:A:C8	3.06	0.43
1:N:832:G:C5	1:N:855:U:N3	2.86	0.43
1:N:1345:U:C4	1:N:1377:A:C2	3.06	0.43
1:N:1355:G:C4	1:N:1368:A:C2	3.05	0.43
1:N:240:G:C6	1:N:241:G:C5	3.05	0.43
1:N:441:A:C4	1:N:497:G:C6	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:606:G:H3'	1:N:607:A:C5'	2.48	0.43
1:N:749:A:H2'	1:N:750:C:C6	2.53	0.43
1:N:803:G:C5	1:N:804:U:C5	3.06	0.43
1:N:1241:G:C2	1:N:1242:G:C5	3.06	0.43
1:N:1269:A:C2	1:N:1313:U:O4'	2.71	0.43
1:N:1287:A:C6	1:N:1288:A:C6	3.07	0.43
1:N:1481:U:C4	1:N:1482:G:C5	3.06	0.43
1:N:14:U:O2	1:N:16:A:C5	2.71	0.43
1:N:335:C:H2'	1:N:336:A:C8	2.53	0.43
1:N:1056:U:H3	1:N:1204:A:N6	2.17	0.43
1:N:292:G:C5	1:N:293:G:H1'	2.53	0.43
1:N:327:A:C4	1:N:329:A:C8	3.05	0.43
1:N:519:C:C4	1:N:520:A:C6	3.06	0.43
1:N:575:G:C6	1:N:821:G:C5	3.06	0.43
1:N:584:G:C6	1:N:585:G:C5	3.07	0.43
1:N:1287:A:H2'	1:N:1288:A:C8	2.53	0.43
1:N:52:C:C6	1:N:52:C:H3'	2.53	0.43
1:N:716:A:C2	1:N:717:U:C2	3.06	0.43
1:N:761:G:C5	1:N:762:U:C4	3.06	0.43
1:N:73:C:C6	1:N:73:C:H5''	2.54	0.43
1:N:73:C:H5'	1:N:91:U:OP1	2.19	0.43
1:N:411:A:C4	1:N:429:U:C4	3.07	0.43
1:N:533:A:C2	1:N:535:A:H8	2.37	0.43
1:N:125:U:H2'	1:N:126:G:O4'	2.19	0.43
1:N:243:A:H61	1:N:281:G:H1'	1.83	0.43
1:N:620:C:C5	1:N:621:A:C5	3.06	0.43
1:N:668:G:C5	1:N:669:G:C5	3.06	0.43
1:N:1074:G:C5	1:N:1075:U:C4	3.07	0.43
1:N:1257:A:H3'	1:N:1258:G:H5'	1.99	0.43
1:N:1296:C:H3'	1:N:1297:G:C8	2.52	0.43
1:N:127:G:C5	1:N:128:G:C8	3.07	0.43
1:N:259:G:C4	1:N:260:G:C8	3.07	0.43
1:N:318:G:O2'	1:N:1468:A:C5'	2.66	0.43
1:N:482:A:C5	1:N:483:C:C2	3.06	0.43
1:N:687:A:N3	1:N:688:G:H1'	2.34	0.43
1:N:1131:G:C6	1:N:1132:C:C5	3.06	0.43
1:N:1266:G:N2	1:N:1269:A:C8	2.79	0.43
1:N:1495:U:N3	1:N:1496:C:C4	2.87	0.43
1:N:94:G:H4'	1:N:95:C:H5''	2.01	0.43
1:N:141:G:N1	1:N:223:A:C5	2.87	0.43
1:N:321:A:H2'	1:N:322:C:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:556:C:C6	1:N:556:C:C3'	3.02	0.43
1:N:585:G:N1	1:N:586:C:C2	2.86	0.43
1:N:657:U:H2'	1:N:658:C:O4'	2.19	0.43
1:N:711:G:H2'	1:N:712:A:C8	2.54	0.43
1:N:150:U:C5	1:N:170:U:C5	3.07	0.43
1:N:701:U:C5'	1:N:703:G:H5'	2.49	0.43
1:N:980:C:C6	1:N:981:U:C6	3.07	0.43
1:N:985:C:H2'	1:N:986:U:O4'	2.18	0.43
1:N:179:A:N6	1:N:195:A:H8	2.16	0.42
1:N:452:A:C5	1:N:453:G:C4	3.07	0.42
1:N:1084:G:H1'	1:N:1103:C:H41	1.84	0.42
1:N:414:A:H8	1:N:428:G:H22	1.65	0.42
1:N:627:G:H2'	1:N:628:G:C8	2.54	0.42
1:N:646:G:C6	1:N:647:C:C4	3.06	0.42
1:N:1025:U:H2'	1:N:1031:C:C5	2.53	0.42
1:N:1089:G:H2'	1:N:1090:U:O4'	2.19	0.42
1:N:135:C:N4	1:N:228:A:H61	2.18	0.42
1:N:154:U:H2'	1:N:155:A:C8	2.55	0.42
1:N:301:G:H2'	1:N:302:G:O4'	2.20	0.42
1:N:557:G:C6	1:N:558:G:N1	2.87	0.42
1:N:862:C:H1'	1:N:874:G:H5''	2.01	0.42
1:N:1299:A:C2	1:N:1301:U:N3	2.87	0.42
1:N:1266:G:N2	1:N:1268:G:H3'	2.35	0.42
1:N:240:G:C6	1:N:241:G:C6	3.08	0.42
1:N:737:C:H2'	1:N:738:C:O4'	2.19	0.42
1:N:1305:G:H22	1:N:1331:G:H2'	1.83	0.42
1:N:1360:A:H3'	1:N:1361:G:C8	2.55	0.42
1:N:1484:C:H2'	1:N:1485:U:C6	2.54	0.42
1:N:290:C:H2'	1:N:291:U:H6	1.85	0.42
1:N:309:A:C6	1:N:310:G:C5	3.08	0.42
1:N:339:C:C4	1:N:340:U:C4	3.07	0.42
1:N:1127:G:C6	1:N:1128:C:C4	3.08	0.42
1:N:1253:G:N2	1:N:1285:A:H62	2.17	0.42
1:N:381:C:H3'	1:N:382:A:C8	2.54	0.42
1:N:425:G:C6	1:N:426:U:N3	2.88	0.42
1:N:466:A:H2'	1:N:467:U:C2	2.54	0.42
1:N:92:U:C2	1:N:93:U:C6	3.07	0.42
1:N:115:G:C6	1:N:289:G:C6	3.08	0.42
1:N:369:G:C2	1:N:393:A:C2	3.08	0.42
1:N:780:A:C2	1:N:803:G:C6	3.07	0.42
1:N:914:A:H8	1:N:914:A:H5''	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1332:A:C6	1:N:1333:A:C6	3.07	0.42
1:N:57:G:N1	1:N:356:A:C2	2.88	0.42
1:N:251:G:C6	1:N:266:G:C6	3.08	0.42
1:N:537:G:C6	1:N:538:G:C6	3.08	0.42
1:N:582:C:C2	1:N:760:G:N1	2.88	0.42
1:N:1302:C:H3'	1:N:1303:C:C5'	2.50	0.42
1:N:98:A:H2'	1:N:99:C:O4'	2.20	0.42
1:N:108:G:C4	1:N:109:A:N1	2.88	0.42
1:N:139:A:C5	1:N:140:U:C5	3.08	0.42
1:N:301:G:N1	1:N:302:G:C4	2.88	0.42
1:N:362:G:C2	1:N:364:A:H3'	2.55	0.42
1:N:594:U:C4	1:N:595:A:N6	2.87	0.42
1:N:1005:A:C8	1:N:1006:G:C8	3.08	0.42
1:N:121:U:C6	1:N:122:G:C8	3.08	0.41
1:N:215:C:C4	1:N:216:U:C2	3.08	0.41
1:N:1049:U:C5	1:N:1202:U:H5''	2.55	0.41
1:N:297:G:H22	1:N:299:G:H3'	1.85	0.41
1:N:189:A:H2'	1:N:190:A:H5'	2.02	0.41
1:N:579:A:C6	1:N:763:G:C6	3.08	0.41
1:N:751:U:O4	1:N:752:G:C2	2.73	0.41
1:N:830:G:C6	1:N:831:A:C6	3.08	0.41
1:N:954:G:C6	1:N:955:U:C4	3.08	0.41
1:N:1060:U:H3	1:N:1197:A:N6	2.18	0.41
1:N:1433:A:C1'	1:N:1468:A:C2	3.04	0.41
1:N:460:A:C2	1:N:462:G:C8	3.08	0.41
1:N:941:G:C6	1:N:1343:G:C6	3.08	0.41
1:N:1177:G:C6	1:N:1178:G:C2	3.08	0.41
1:N:1213:A:H2'	1:N:1215:G:C8	2.55	0.41
1:N:1317:C:C5	1:N:1318:A:C6	3.08	0.41
1:N:1360:A:H3'	1:N:1361:G:H8	1.84	0.41
1:N:143:A:H5'	1:N:144:G:H5'	2.03	0.41
1:N:157:U:O2	1:N:165:G:C2	2.73	0.41
1:N:347:G:N3	1:N:348:G:H1'	2.36	0.41
1:N:628:G:C4	1:N:629:A:C8	3.08	0.41
1:N:640:A:C2	1:N:642:A:N6	2.88	0.41
1:N:1083:U:C6	1:N:1084:G:C5	3.08	0.41
1:N:1157:A:C2	1:N:1181:G:C4	3.08	0.41
1:N:724:G:H5''	1:N:724:G:H8	1.86	0.41
1:N:923:A:C2	1:N:924:C:C2	3.08	0.41
1:N:354:G:C6	1:N:355:C:C4	3.08	0.41
1:N:420:U:C5	1:N:422:C:H1'	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:516:U:O2	1:N:520:A:C2	2.72	0.41
1:N:678:U:H3	1:N:712:A:H61	1.69	0.41
1:N:1220:G:C2	1:N:1221:G:C4	3.09	0.41
1:N:1254:A:C2	1:N:1255:G:C4	3.09	0.41
1:N:59:A:H1'	1:N:354:G:C2	2.55	0.41
1:N:200:G:C2	1:N:218:U:C2	3.09	0.41
1:N:232:G:C5	1:N:233:C:C5	3.09	0.41
1:N:338:A:C8	1:N:339:C:C6	3.09	0.41
1:N:462:G:O6	1:N:468:A:H5''	2.21	0.41
1:N:700:G:H2'	1:N:701:U:O4'	2.20	0.41
1:N:998:C:N4	1:N:1042:A:H61	2.15	0.41
1:N:1148:U:C6	1:N:1149:C:C4	3.09	0.41
1:N:109:A:C6	1:N:326:G:C6	3.09	0.41
1:N:335:C:H2'	1:N:336:A:O4'	2.20	0.41
1:N:594:U:N3	1:N:595:A:C6	2.88	0.41
1:N:632:U:C5	1:N:633:G:C4	3.09	0.41
1:N:635:A:C6	1:N:636:U:N3	2.89	0.41
1:N:687:A:N1	1:N:704:A:C5	2.89	0.41
1:N:768:A:H4'	1:N:1524:C:H1'	2.03	0.41
1:N:917:G:C6	1:N:918:A:C6	3.08	0.41
1:N:920:U:H2'	1:N:921:U:C6	2.56	0.41
1:N:1074:G:C6	1:N:1075:U:N3	2.89	0.41
1:N:1365:G:C6	1:N:1366:C:C4	3.09	0.41
1:N:1400:C:H3'	1:N:1401:G:H5'	2.01	0.41
1:N:1484:C:N3	1:N:1485:U:C2	2.88	0.41
1:N:64:G:C2	1:N:69:G:N1	2.89	0.41
1:N:141:G:N1	1:N:223:A:C6	2.89	0.41
1:N:146:G:C2	1:N:147:G:C8	3.09	0.41
1:N:215:C:C5	1:N:216:U:C4	3.09	0.41
1:N:272:C:H2'	1:N:273:U:C6	2.56	0.41
1:N:381:C:C5	1:N:382:A:C6	3.08	0.41
1:N:768:A:H2'	1:N:769:G:O4'	2.21	0.41
1:N:828:U:H5'	1:N:870:U:C4	2.56	0.41
1:N:1205:U:H2'	1:N:1206:G:C8	2.56	0.41
1:N:109:A:C6	1:N:327:A:C6	3.09	0.40
1:N:150:U:C2	1:N:151:A:C8	3.09	0.40
1:N:265:G:C2'	1:N:266:G:H5'	2.51	0.40
1:N:597:G:C8	1:N:598:U:C5	3.09	0.40
1:N:895:G:C6	1:N:896:C:N3	2.89	0.40
1:N:1047:G:C2	1:N:1213:A:H2	2.39	0.40
1:N:59:A:C2	1:N:331:G:C5	3.10	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:169:C:C5	1:N:170:U:C5	3.09	0.40
1:N:215:C:C4	1:N:216:U:N3	2.90	0.40
1:N:829:G:N1	1:N:858:G:H1'	2.37	0.40
1:N:984:C:H2'	1:N:985:C:C6	2.57	0.40
1:N:5:U:H3	1:N:613:C:H5'	1.86	0.40
1:N:198:G:C6	1:N:199:A:C6	3.09	0.40
1:N:208:U:C6	1:N:210:C:C6	3.09	0.40
1:N:668:G:C5	1:N:669:G:C6	3.10	0.40
1:N:811:C:H2'	1:N:812:G:H5'	2.03	0.40
1:N:1075:U:H2'	1:N:1076:U:O4'	2.21	0.40
1:N:1095:U:C2	1:N:1096:C:C2	3.10	0.40
1:N:1139:G:N2	1:N:1141:C:C4	2.89	0.40
1:N:1176:A:N6	1:N:1182:G:H1	2.19	0.40
1:N:1219:A:C2	1:N:1220:G:C4	3.09	0.40
1:N:1332:A:H3'	1:N:1333:A:H8	1.86	0.40
1:N:1343:G:C6	1:N:1344:C:N3	2.89	0.40
1:N:202:G:H1'	1:N:468:A:C8	2.57	0.40
1:N:581:G:C5	1:N:758:C:C5	3.09	0.40
1:N:627:G:H2'	1:N:628:G:H8	1.87	0.40
1:N:781:A:C8	1:N:782:A:C8	3.09	0.40
1:N:1133:G:N1	1:N:1134:G:C5	2.90	0.40
1:N:1170:A:C5	1:N:1171:A:C4	3.10	0.40
1:N:1447:A:H3'	1:N:1448:C:H5'	2.04	0.40
1:N:473:U:H2'	1:N:474:G:O4'	2.21	0.40
1:N:898:G:C2	1:N:902:G:C5	3.10	0.40
1:N:946:A:H2'	1:N:947:G:C8	2.56	0.40
1:N:1047:G:C2	1:N:1213:A:C2	3.09	0.40
1:N:1052:U:C2	1:N:1207:G:N1	2.89	0.40
1:N:1213:A:C5	1:N:1215:G:C4	3.10	0.40
1:N:1519:A:N3	1:N:1519:A:H2'	2.37	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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%)	456 (29%)	155 (10%)

All (456) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	N	3	A
1	N	4	U
1	N	5	U
1	N	6	G
1	N	8	A
1	N	9	G
1	N	13	U
1	N	14	U
1	N	22	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	59	A
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

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Mol	Chain	Res	Type
1	N	79	G
1	N	80	A
1	N	81	A
1	N	82	G
1	N	83	C
1	N	85	U
1	N	87	C
1	N	88	U
1	N	89	U
1	N	90	C
1	N	91	U
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	121	U
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

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Mol	Chain	Res	Type
1	N	182	A
1	N	183	C
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
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	273	U
1	N	274	A
1	N	275	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

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Mol	Chain	Res	Type
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
1	N	354	G
1	N	363	A
1	N	366	A
1	N	367	U
1	N	368	U
1	N	371	A
1	N	372	C
1	N	373	A
1	N	374	A
1	N	384	G
1	N	390	U
1	N	392	C
1	N	406	G
1	N	411	A
1	N	412	A
1	N	413	G
1	N	414	A
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	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

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Mol	Chain	Res	Type
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
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	501	C
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	537	G
1	N	548	G
1	N	556	C
1	N	559	A
1	N	560	A
1	N	561	U
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

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Mol	Chain	Res	Type
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	633	G
1	N	642	A
1	N	649	A
1	N	653	U
1	N	665	A
1	N	666	G
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	754	C
1	N	755	G
1	N	767	A
1	N	774	G
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	812	G
1	N	813	U
1	N	815	A
1	N	816	A

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Mol	Chain	Res	Type
1	N	817	C
1	N	818	G
1	N	820	U
1	N	821	G
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
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	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	966	G
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

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Mol	Chain	Res	Type
1	N	989	U
1	N	992	U
1	N	993	G
1	N	1003	G
1	N	1004	A
1	N	1008	U
1	N	1014	A
1	N	1017	U
1	N	1018	G
1	N	1022	A
1	N	1028	C
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	1037	C
1	N	1050	G
1	N	1052	U
1	N	1053	G
1	N	1054	C
1	N	1055	A
1	N	1064	G
1	N	1065	U
1	N	1066	C
1	N	1079	G
1	N	1085	U
1	N	1086	U
1	N	1087	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

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Mol	Chain	Res	Type
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	1136	C
1	N	1137	C
1	N	1138	G
1	N	1139	G
1	N	1140	C
1	N	1141	C
1	N	1143	G
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	1189	U
1	N	1190	G
1	N	1191	A
1	N	1192	C
1	N	1193	G
1	N	1194	U
1	N	1196	A
1	N	1197	A
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

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Mol	Chain	Res	Type
1	N	1225	A
1	N	1226	C
1	N	1227	A
1	N	1228	C
1	N	1229	A
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	1257	A
1	N	1258	G
1	N	1275	A
1	N	1278	G
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	1341	U
1	N	1346	A

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Mol	Chain	Res	Type
1	N	1348	U
1	N	1349	A
1	N	1353	G
1	N	1359	C
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1371	G
1	N	1380	U
1	N	1381	U
1	N	1394	A
1	N	1396	A
1	N	1397	C
1	N	1398	A
1	N	1399	C
1	N	1400	C
1	N	1406	U
1	N	1433	A
1	N	1440	U
1	N	1441	A
1	N	1446	A
1	N	1448	C
1	N	1452	C
1	N	1453	G
1	N	1456	A
1	N	1457	G
1	N	1469	C
1	N	1470	U
1	N	1476	A
1	N	1492	A
1	N	1493	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	1520	C

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Mol	Chain	Res	Type
1	N	1529	G
1	N	1530	G
1	N	1531	A
1	N	1533	C
1	N	1534	A

All (155) 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
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	134	G
1	N	159	G
1	N	167	A
1	N	168	G
1	N	178	C
1	N	181	A
1	N	197	A
1	N	198	G
1	N	204	G
1	N	210	C

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Mol	Chain	Res	Type
1	N	243	A
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	280	C
1	N	305	G
1	N	327	A
1	N	328	C
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	412	A
1	N	423	G
1	N	428	G
1	N	429	U
1	N	438	U
1	N	451	A
1	N	463	U
1	N	467	U
1	N	481	G
1	N	484	G
1	N	485	U
1	N	486	U
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	548	G
1	N	559	A

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Mol	Chain	Res	Type
1	N	563	A
1	N	566	G
1	N	575	G
1	N	637	C
1	N	641	U
1	N	686	U
1	N	717	U
1	N	720	C
1	N	721	G
1	N	723	U
1	N	754	C
1	N	792	A
1	N	817	C
1	N	820	U
1	N	843	U
1	N	870	U
1	N	884	U
1	N	913	A
1	N	934	C
1	N	960	U
1	N	966	G
1	N	974	A
1	N	982	U
1	N	991	U
1	N	993	G
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	1094	G
1	N	1101	A
1	N	1129	C
1	N	1136	C
1	N	1151	A
1	N	1152	A
1	N	1156	G
1	N	1167	A
1	N	1168	U

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Mol	Chain	Res	Type
1	N	1185	G
1	N	1190	G
1	N	1191	A
1	N	1193	G
1	N	1197	A
1	N	1201	A
1	N	1224	U
1	N	1228	C
1	N	1239	A
1	N	1263	C
1	N	1282	C
1	N	1283	U
1	N	1285	A
1	N	1299	A
1	N	1303	C
1	N	1316	G
1	N	1319	A
1	N	1331	G
1	N	1336	C
1	N	1337	G
1	N	1338	G
1	N	1345	U
1	N	1348	U
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	1477	U
1	N	1492	A
1	N	1498	U
1	N	1502	A
1	N	1506	U
1	N	1530	G
1	N	1533	C

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates [i](#)

There are no monosaccharides 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.

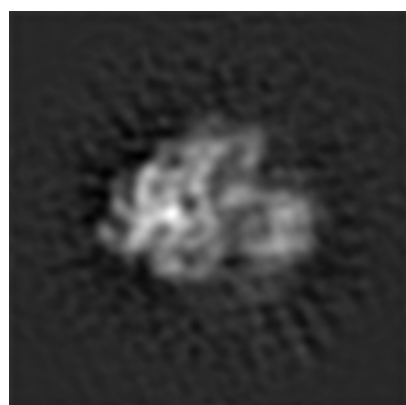
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5507. These allow visual inspection of the internal detail of the map and identification of artifacts.

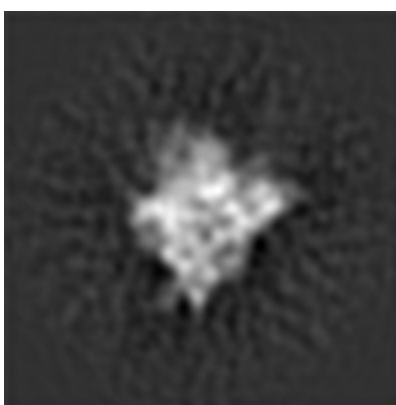
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

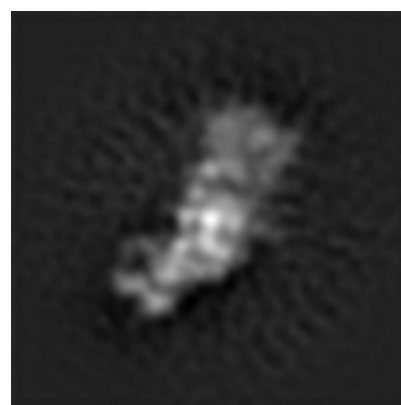
6.1.1 Primary map



X



Y

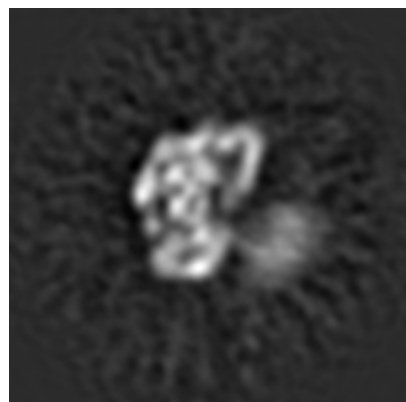


Z

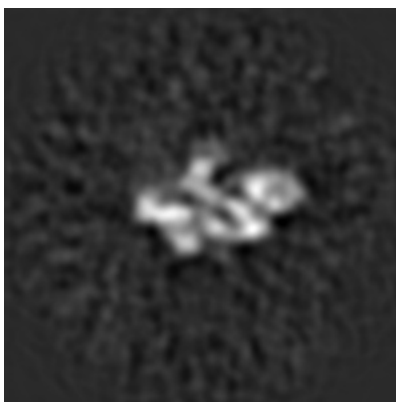
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

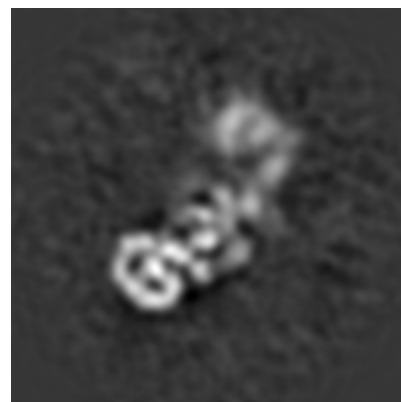
6.2.1 Primary map



X Index: 62



Y Index: 62

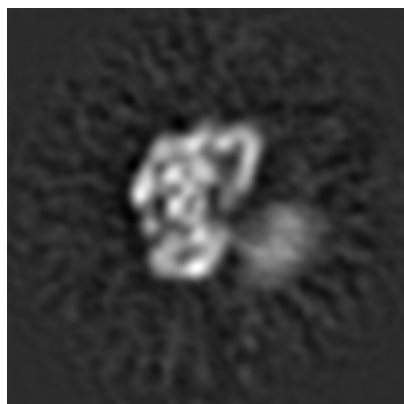


Z Index: 62

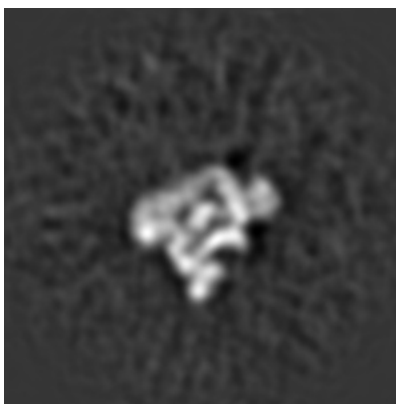
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

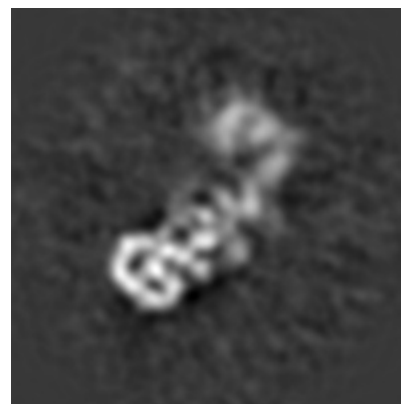
6.3.1 Primary map



X Index: 62



Y Index: 51

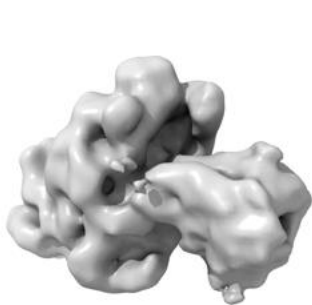


Z Index: 61

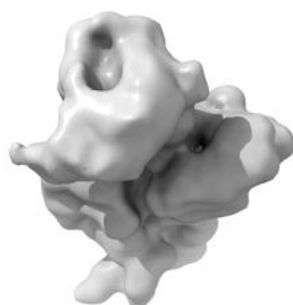
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level - 2.5. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

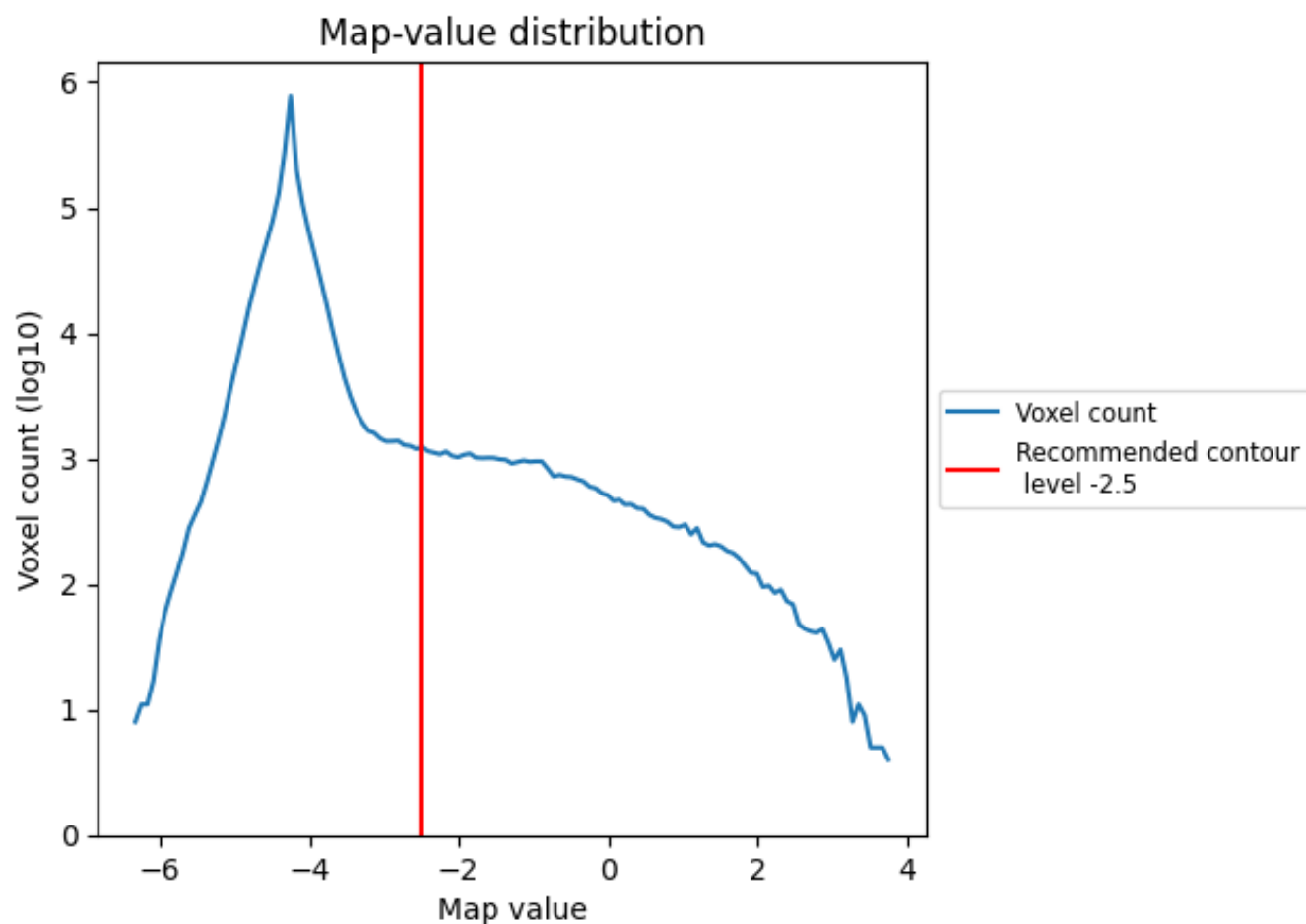
6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

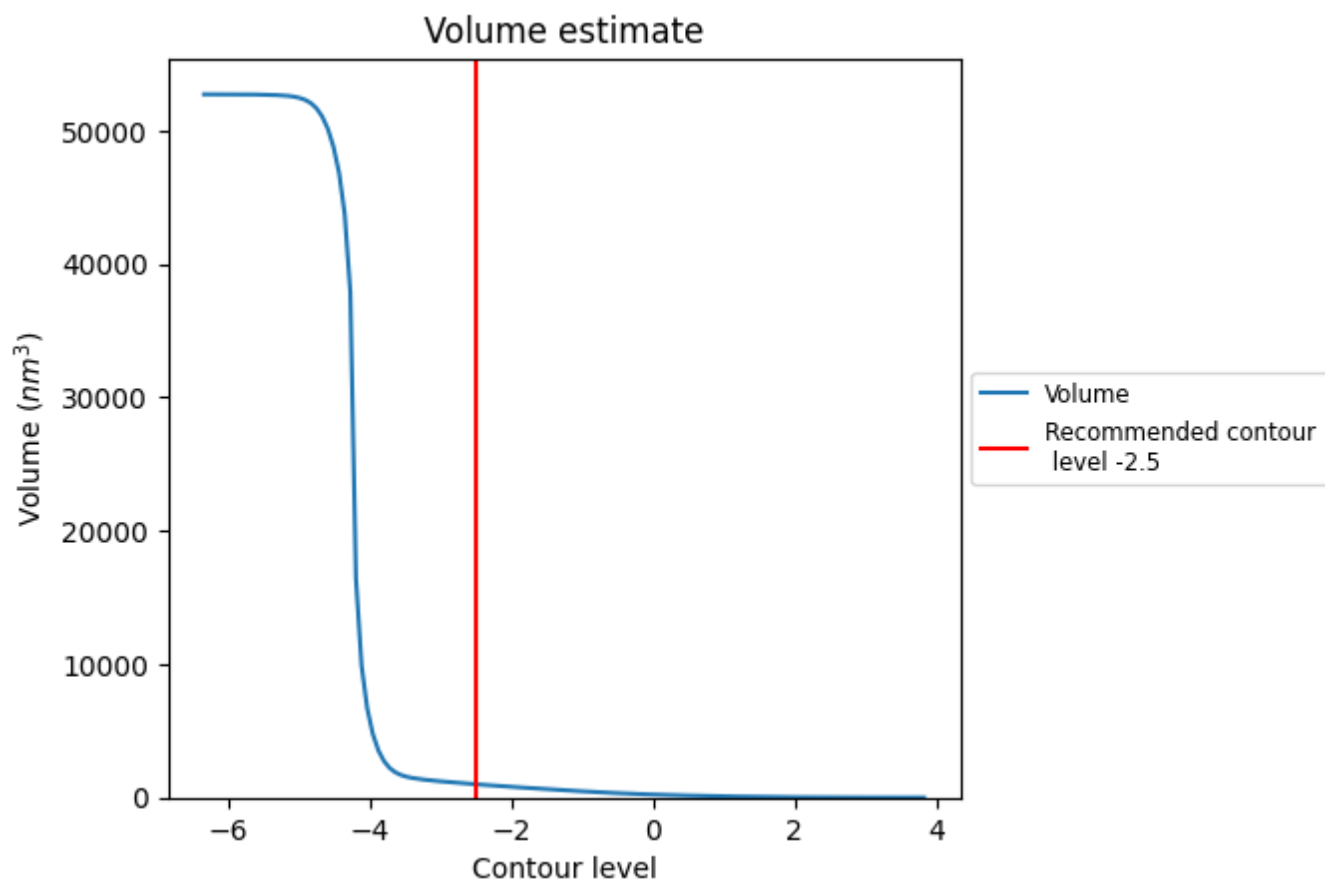
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

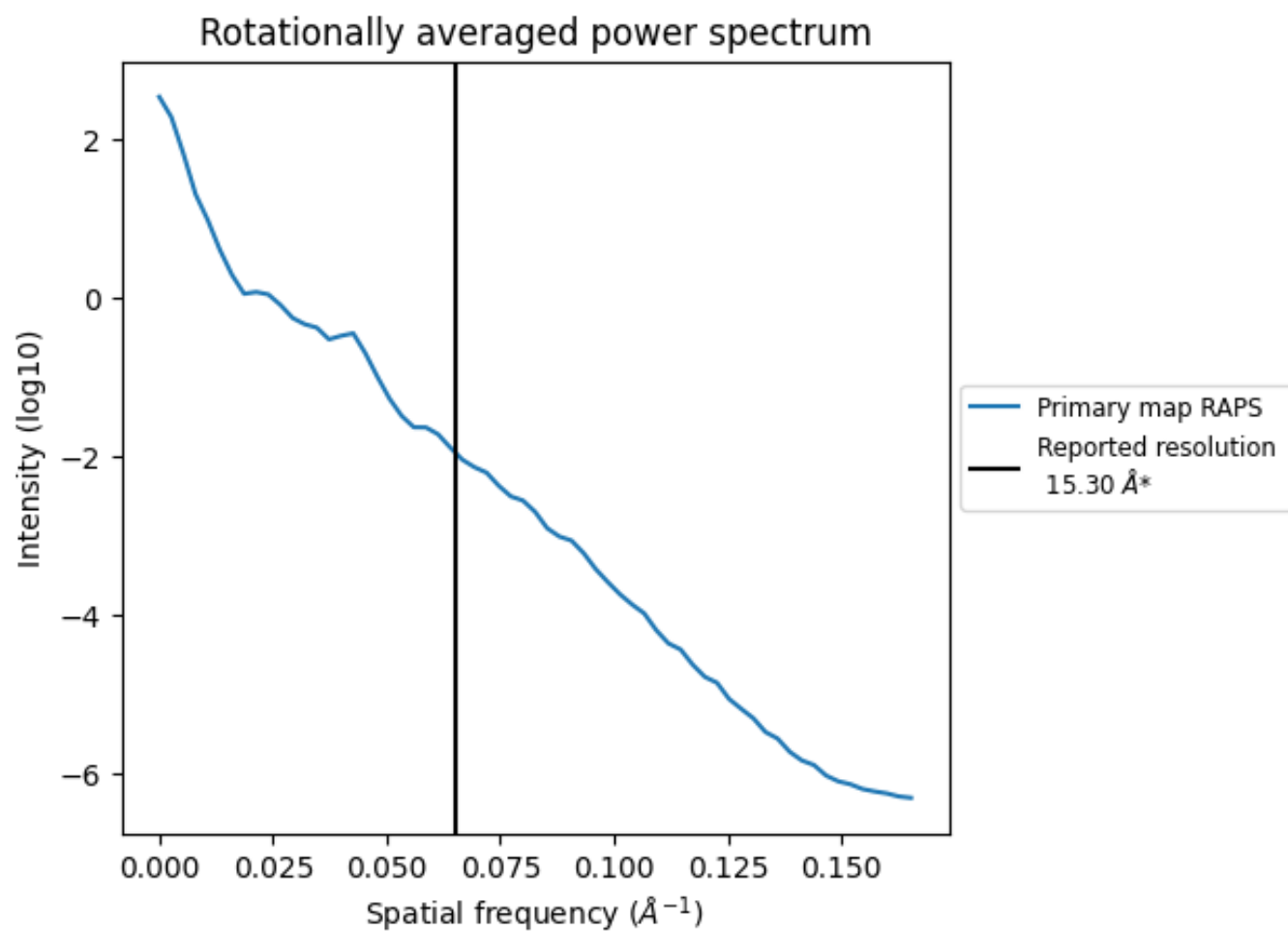
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 998 nm³; this corresponds to an approximate mass of 901 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.065 Å⁻¹

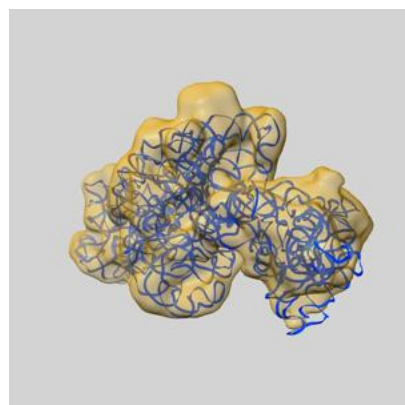
8 Fourier-Shell correlation ⓘ

This section was not generated. No FSC curve or half-maps provided.

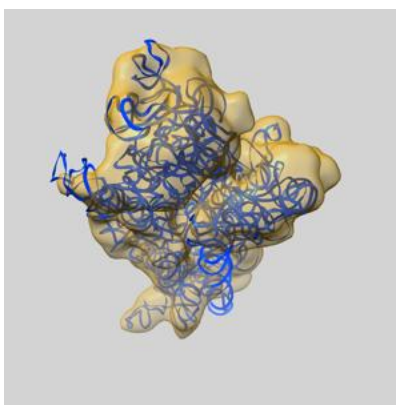
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-5507 and PDB model 3J2E. Per-residue inclusion information can be found in [section 3](#) on [page 4](#).

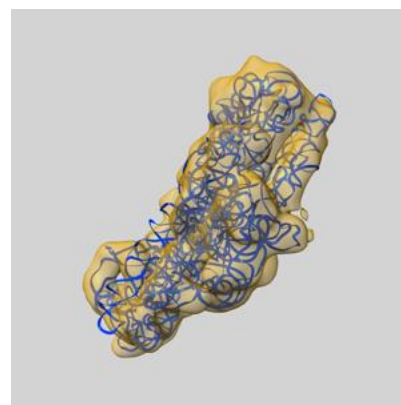
9.1 Map-model overlay [i](#)



X



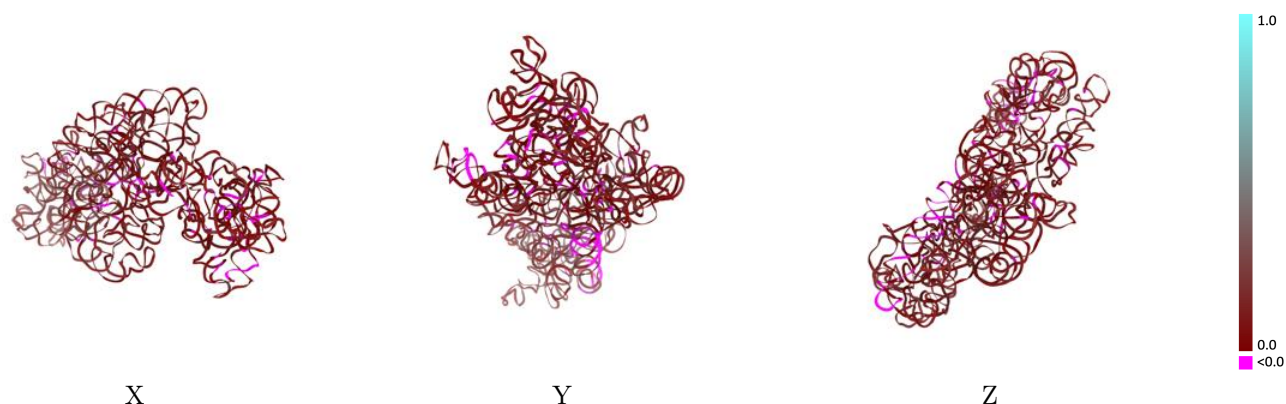
Y



Z

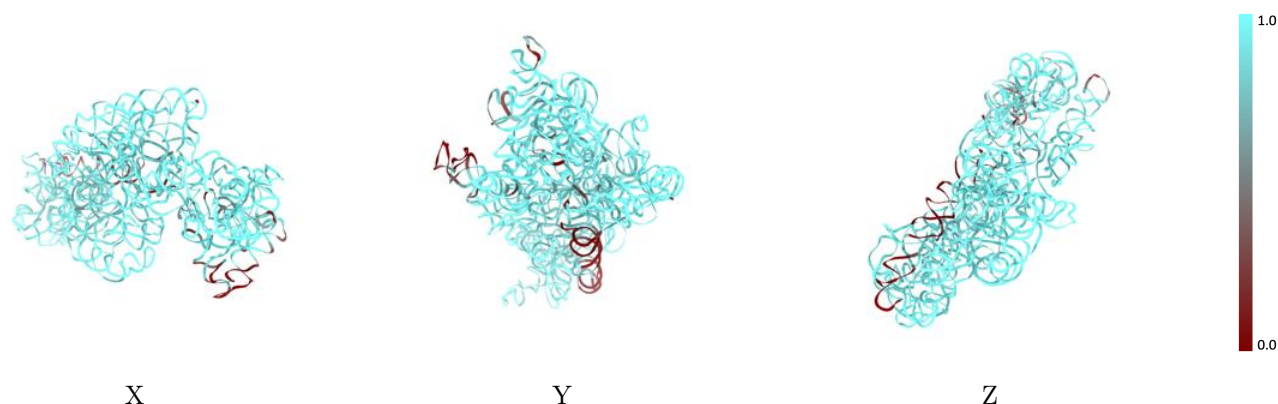
The images above show the 3D surface view of the map at the recommended contour level -2.5 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



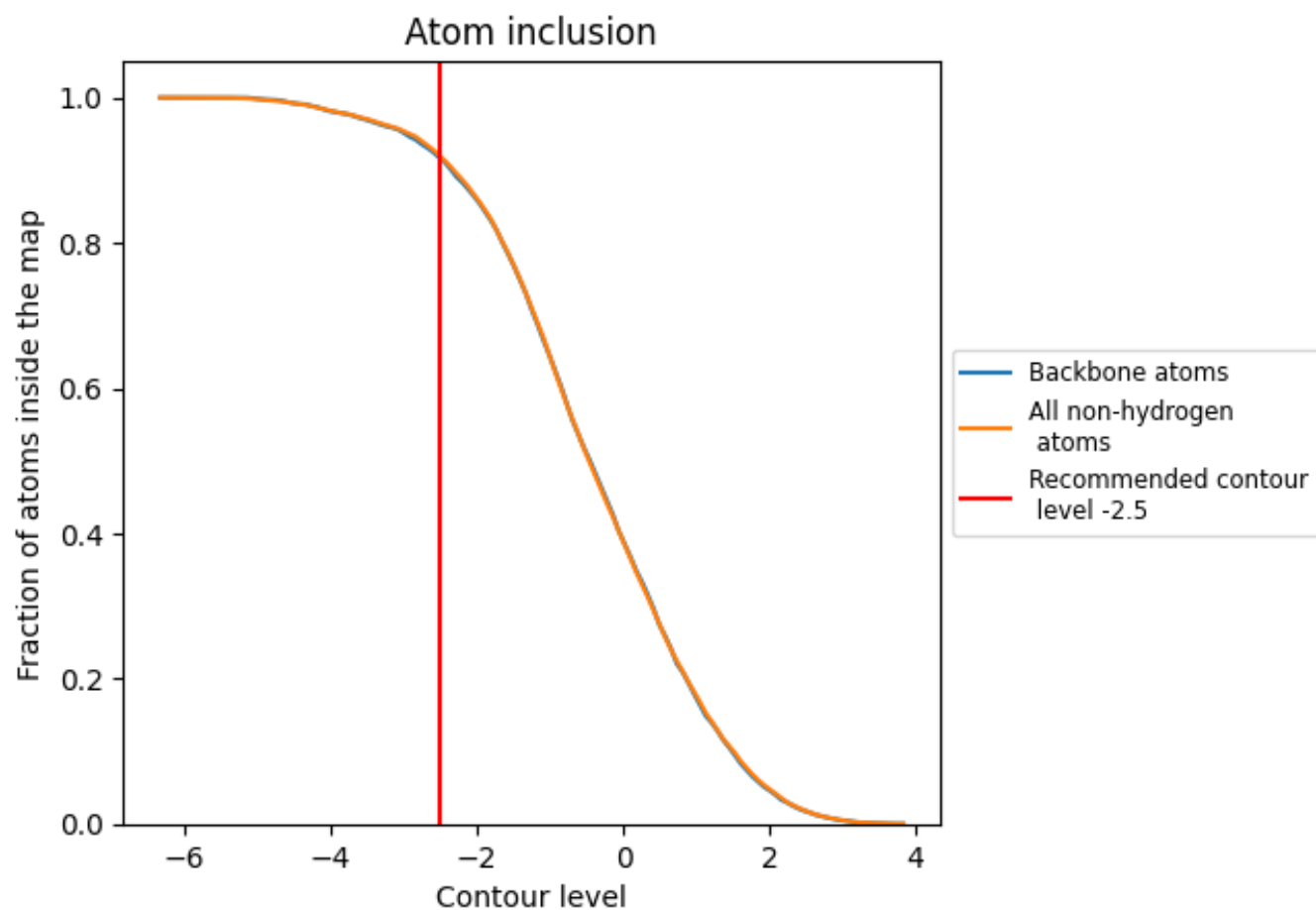
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (-2.5).

9.4 Atom inclusion [i](#)



At the recommended contour level, 92% of all backbone atoms, 92% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (-2.5) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div><div></div></div> 0.9190	<div><div></div></div> 0.0900
N	<div><div></div></div> 0.9189	<div><div></div></div> 0.0900

