



Full wwPDB EM Validation Report ⓘ

Dec 12, 2022 – 12:04 PM EST

PDB ID : 3J28
EMDB ID : EMD-5500
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 : 12.90 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

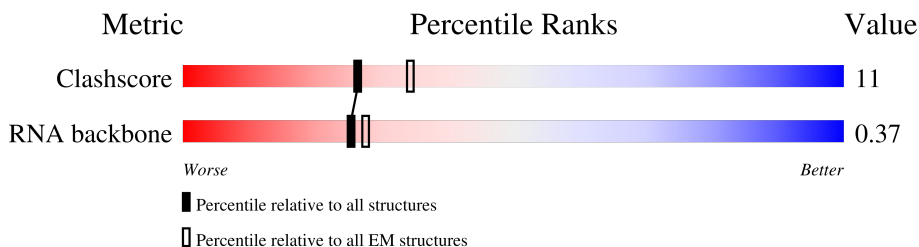
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY


The reported resolution of this entry is 12.90 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	

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.

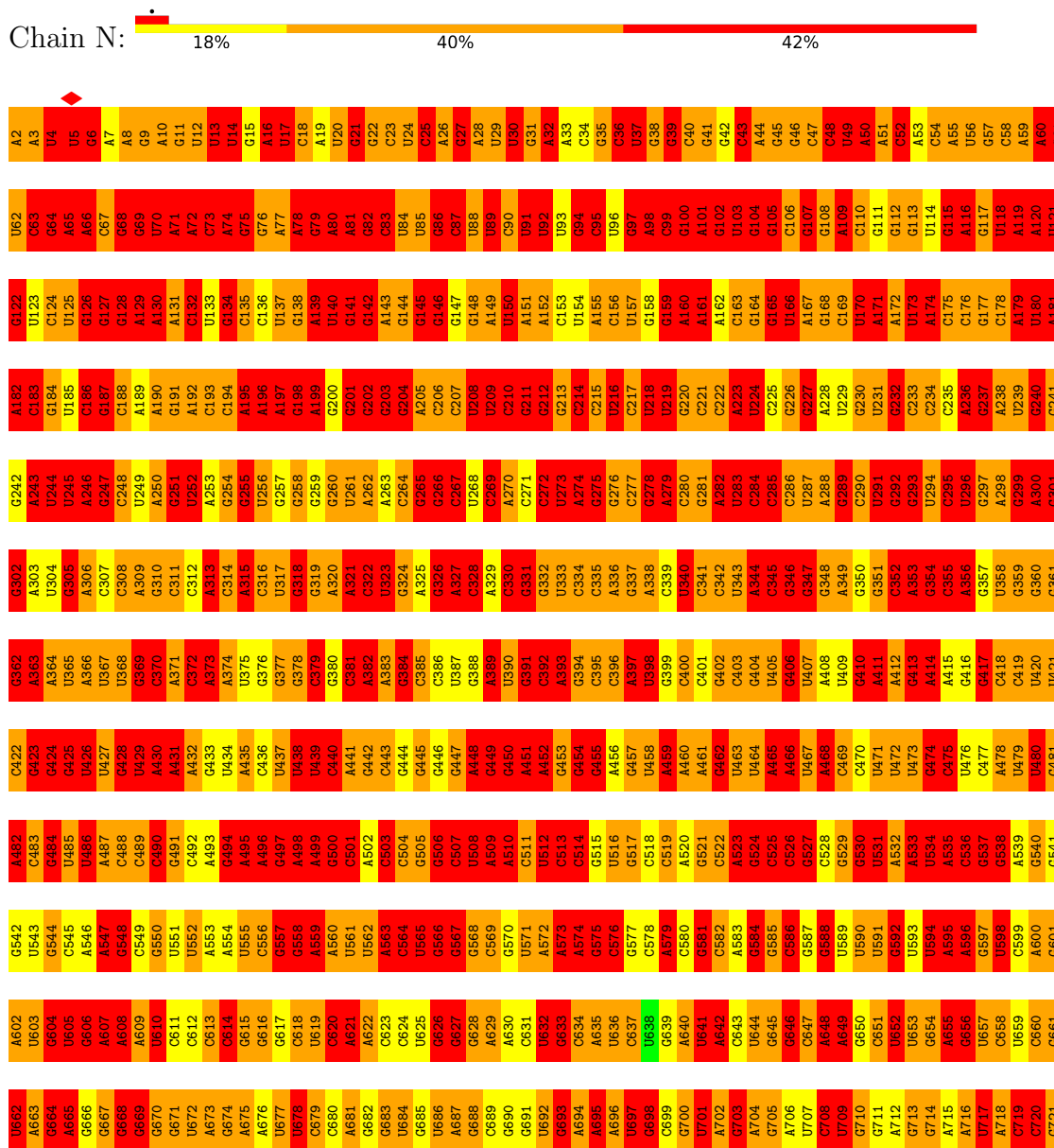
- Molecule 1 is a RNA chain called 16S rRNA.

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	C1322	C1262	U1202	G1142	A1082	U1022	C962	G902	U842	A782	G722
A1503	C1443	C1383	G1323	C1263	C1203	G1143	U1083	U1023	G963	G903	U843	C783	U723
G1504	U1444	C1384	A1324	U1264	A1204	U1144	G1084	G1024	A964	U904	A784	A764	G724
G1505	U1445	C1385	C1325	C1265	U1205	A1145	U1085	U1025	U965	U905	A845	G785	G725
U1506	A1446	G1386	U1326	G1266	G1206	A1146	G1086	G1026	G966	A906	G846	G786	G726
U1507	C1447	G1387	C1327	G1267	G1207	U1147	G1087	U1027	C967	A907	G847	A787	G727
A1508	C1448	C1388	C1328	G1268	C1208	U1148	G1088	C1027	C968	A908	C848	U788	A728
A1509	C1449	C1389	C1329	A1269	C1209	A1149	G1089	C1028	A969	A909	C849	U789	A729
C1510	U1450	U1390	U1330	G1270	C1210	A1150	U1090	C1028	U969	C910	U850	U790	G730
U1512	G1451	U1391	G1331	A1271	U1211	A1151	U1091	U1029	C970	G911	G851	G791	G731
A1513	U1452	C1392	A1332	G1272	U1212	A1152	A1092	U1030	G971	U912	G852	A792	G732
G1514	C1453	U1393	C1333	C1273	A1213	G1153	A1093	G1031	G972	A913	C853	U793	G733
G1515	C1454	C1394	G1334	A1274	C1214	G1154	G1094	G1032	C973	A914	U854	A794	G734
G1516	G1455	C1395	U1335	A1275	G1215	A1155	U1095	G1033	G974	A915	U855	C795	G735
G1517	G1456	C1396	C1336	G1276	A1216	G1156	U1096	G1034	C975	U916	C856	C796	G736
A1518	C1457	C1397	G1337	C1277	C1217	A1157	C1097	A1035	A976	G917	C857	C797	G737
U1519	A1458	A1398	G1338	G1278	C1218	C1158	C1098	A1036	G976	A918	G858	U798	C738
C1520	G1459	C1399	G1339	G1279	A1219	U1159	G1099	C1037	A977	A919	G859	G799	C739
C1521	G1460	A1401	U1340	A1280	G1220	G1160	C1100	G1038	A978	U920	G800	U740	U740
U1522	C1461	C1402	U1341	C1281	G1221	C1161	A1101	G1039	C979	U921	C861	U801	G741
C1523	G1462	C1403	G1342	C1282	G1222	C1162	A1102	U1040	U981	G922	C862	A802	G742
C1524	C1463	U1404	C1343	U1283	C1223	A1163	C1103	G1041	U982	A923	U863	G803	A743
G1525	U1464	G1405	G1344	C1284	U1224	G1164	G1104	A1042	A983	C924	A864	U804	C744
U1526	U1465	C1406	U1345	A1285	A1225	U1165	A1105	G1043	C984	G925	A865	C805	G745
U1527	U1466	C1407	A1346	U1286	C1226	G1166	G1106	A1044	C985	G926	C866	C806	A746
U1528	A1467	C1408	G1347	A1287	A1227	A1167	C1107	C1045	C986	G927	C867	A807	A747
G1529	C1468	A1409	U1348	A1288	C1228	U1168	G1108	A1046	U986	G928	C868	C808	G748
U1530	C1469	C1410	A1349	A1289	A1229	A1169	C1109	G1047	G987	G929	G869	G809	A749
A1531	A1470	U1411	U1350	C1290	C1230	A1170	A1110	G1048	G988	U930	U870	C810	C750
U1532	C1471	C1412	U1351	U1291	G1231	A1171	A1111	U1049	U989	C931	U871	C811	U751
C1533	U1472	A1413	C1352	G1292	U1232	C1172	C1112	G1050	C990	G932	A872	G812	G752
A1534	G1473	U1414	G1353	C1293	G1233	U1173	C1113	C1051	U991	G933	A873	U813	A753
U1474	G1474	G1415	U1354	G1294	C1234	G1174	C1114	U1052	U992	C934	G874	A814	C754
G1475	G1475	G1416	G1355	U1295	U1235	G1175	U1115	G1053	A994	A935	U875	A815	G755
U1476	G1476	G1417	G1356	C1296	U1236	A1176	C1116	C1054	C995	G936	C876	A816	C756
U1477	A1477	A1418	A1357	G1297	A1237	G1177	A1117	A1055	A996	A937	G877	C817	U757
U1478	U1478	U1419	U1358	U1298	C1238	G1178	C1118	U1056	U997	G938	A878	G818	G758
C1479	A1480	G1423	C1359	A1299	A1239	A1179	C1119	G1057	C998	G939	C879	A819	A759
U1481	U1481	U1424	A1360	G1300	A1240	A1180	C1120	G1058	C999	G940	C880	U820	G760
G1482	G1482	G1425	G1361	U1301	G1241	G1181	U1121	C1059	G941	G941	G881	G821	G761
A1483	C1426	G1426	A1362	C1302	G1242	G1182	U1122	U1060	C882	G942	C882	U822	U762
C1484	C1427	C1427	U1363	C1303	C1243	U1183	U1123	G1061	C883	U943	C883	C823	G763
U1485	U1485	G1428	G1364	G1304	G1244	G1184	G1124	U1062	U884	G944	U884	G824	C764
G1486	U1428	U1428	C1365	G1305	C1245	G1185	U1125	C1063	G945	G945	G885	A825	G765
G1487	A1429	A1430	A1366	A1306	A1246	G1186	U1126	G1064	A946	G947	G886	C826	A766
G1488	A1431	A1431	C1367	U1307	U1247	G1187	G1127	U1065	A1005	G948	G887	U827	A767
G1489	G1432	A1432	A1368	U1308	A1248	A1188	C1128	C1066	G1006	C949	G888	U828	A768
U1490	A1433	A1433	U1375	C1309	C1249	U1189	C1229	U1067	A889	U950	A889	G829	G769
G1491	A1434	U1376	G1376	G1316	G1255	G1190	A1130	G1068	U1007	U951	G890	G830	C770
A1492	G1435	U1377	C1377	C1317	A1256	A1191	G1131	C1069	U1008	G951	U891	A831	G771
A1493	U1436	C1378	A1378	A1318	A1257	C1192	C1132	U1070	U1009	U952	A892	G832	U772
U1494	U1437	G1379	A1379	C1319	G1258	G1193	G1133	G1071	U1010	G953	C893	G833	G773
U1495	G1438	U1380	C1320	A1321	A1261	U1194	G1134	G1072	C1011	G954	G894	U834	G774
C1496	U1440	U1441	U1381	U1321	U1261	C1195	U1135	U1073	A1012	U955	G895	U835	G775
U1498	A1441	A1441	U1381	U1321	U1261	C1196	C1136	G1074	G1013	U956	G896	G836	G776
A1499	A1500	C1501	U1381	U1321	U1261	C1197	C1137	U1075	A1014	U957	C897	U837	A777
						C1198	G1138	U1076	G1015	A958	C898	G838	G778
						A1197	G1139	U1077	A1016	A959	C899	C839	C779
						U1199	C1140	U1078	U1017	U960	C840	A780	
						C1200	C1141	G1079	G1018	U961	A901	C841	A781
						A1201	C1141	A1081	G1020				
									A1021				

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	32152	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Weiner filter	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1300	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	80000	Depositor
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum map value	4.191	Depositor
Minimum map value	-6.676	Depositor
Average map value	-4.024	Depositor
Map value standard deviation	0.567	Depositor
Recommended contour level	-2.8	Depositor
Map size (Å)	345.0, 345.0, 345.0	wwPDB
Map dimensions	125, 125, 125	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.76, 2.76, 2.76	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	3.47	5260/36831 (14.3%)	3.94	9443/57458 (16.4%)

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	948

All (5260) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	16	A	N7-C5	-19.48	1.27	1.39
1	N	563	A	N7-C5	-18.95	1.27	1.39
1	N	1396	A	N3-C4	-18.85	1.23	1.34
1	N	28	A	N7-C5	-18.07	1.28	1.39
1	N	1243	C	N1-C6	17.88	1.47	1.37
1	N	223	A	N9-C4	-17.66	1.27	1.37
1	N	1337	G	N9-C8	17.54	1.50	1.37
1	N	1102	A	N7-C5	-16.96	1.29	1.39
1	N	696	A	N7-C5	-16.78	1.29	1.39
1	N	645	G	N7-C5	-16.64	1.29	1.39
1	N	1268	G	N7-C5	-16.55	1.29	1.39
1	N	1255	G	N3-C4	-16.39	1.24	1.35
1	N	1392	G	C2-N3	16.32	1.45	1.32
1	N	585	G	N7-C5	-16.29	1.29	1.39
1	N	527	G	C6-N1	15.93	1.50	1.39
1	N	66	A	N7-C5	-15.81	1.29	1.39
1	N	1324	A	N9-C4	-15.09	1.28	1.37
1	N	350	G	N7-C5	-15.06	1.30	1.39
1	N	1050	G	C2-N3	15.04	1.44	1.32
1	N	1437	A	C6-N6	14.92	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	913	A	N9-C4	14.88	1.46	1.37
1	N	1170	A	N7-C5	-14.62	1.30	1.39
1	N	703	G	C6-N1	14.42	1.49	1.39
1	N	1507	A	C6-N6	14.40	1.45	1.33
1	N	704	A	C6-N1	14.36	1.45	1.35
1	N	1151	A	C6-N6	14.33	1.45	1.33
1	N	482	A	N9-C8	-14.27	1.26	1.37
1	N	217	C	N1-C6	14.25	1.45	1.37
1	N	129	A	N7-C5	-14.22	1.30	1.39
1	N	909	A	N7-C5	-14.12	1.30	1.39
1	N	858	G	N7-C5	-14.07	1.30	1.39
1	N	642	A	C8-N7	-13.99	1.21	1.31
1	N	1249	C	N1-C6	13.95	1.45	1.37
1	N	816	A	N7-C5	-13.90	1.30	1.39
1	N	1200	C	N1-C6	13.87	1.45	1.37
1	N	844	G	N7-C5	-13.81	1.30	1.39
1	N	890	G	C6-N1	13.79	1.49	1.39
1	N	741	G	N7-C5	-13.78	1.30	1.39
1	N	865	A	N7-C5	-13.77	1.30	1.39
1	N	1044	A	N7-C5	-13.74	1.31	1.39
1	N	917	G	N9-C8	-13.73	1.28	1.37
1	N	408	A	C5-C4	13.65	1.48	1.38
1	N	388	G	N7-C5	13.62	1.47	1.39
1	N	184	G	C8-N7	-13.57	1.22	1.30
1	N	1277	C	N3-C4	13.56	1.43	1.33
1	N	196	A	N7-C5	-13.51	1.31	1.39
1	N	874	G	N7-C5	-13.45	1.31	1.39
1	N	1002	G	C2-N3	13.43	1.43	1.32
1	N	1490	U	C2-N3	13.43	1.47	1.37
1	N	274	A	N7-C5	-13.39	1.31	1.39
1	N	959	A	C8-N7	-13.36	1.22	1.31
1	N	558	G	C2-N3	13.34	1.43	1.32
1	N	765	G	C8-N7	-13.34	1.23	1.30
1	N	1179	A	N7-C5	-13.33	1.31	1.39
1	N	1340	A	C6-N6	13.32	1.44	1.33
1	N	1502	A	N7-C5	-13.32	1.31	1.39
1	N	1368	A	N7-C5	-13.31	1.31	1.39
1	N	289	G	N7-C5	-13.29	1.31	1.39
1	N	172	A	N7-C5	-13.28	1.31	1.39
1	N	640	A	N3-C4	-13.25	1.26	1.34
1	N	360	G	C2-N3	13.24	1.43	1.32
1	N	356	A	C6-N1	13.23	1.44	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	116	A	N7-C5	-13.21	1.31	1.39
1	N	958	A	C5-C4	13.20	1.48	1.38
1	N	223	A	N3-C4	-13.14	1.26	1.34
1	N	517	G	N7-C5	-13.14	1.31	1.39
1	N	1398	A	N7-C5	-13.09	1.31	1.39
1	N	1215	G	C8-N7	-13.07	1.23	1.30
1	N	1231	G	C6-N1	13.05	1.48	1.39
1	N	1408	A	P-O5'	-13.04	1.46	1.59
1	N	711	G	N7-C5	-13.03	1.31	1.39
1	N	360	G	N7-C5	-13.03	1.31	1.39
1	N	144	G	N9-C4	-13.01	1.27	1.38
1	N	374	A	C6-N6	13.01	1.44	1.33
1	N	149	A	C6-N6	13.00	1.44	1.33
1	N	377	G	C2-N3	12.96	1.43	1.32
1	N	222	C	C4-N4	12.95	1.45	1.33
1	N	353	A	C6-N6	12.95	1.44	1.33
1	N	48	C	N1-C6	12.89	1.44	1.37
1	N	1349	A	N7-C5	-12.87	1.31	1.39
1	N	59	A	N7-C5	-12.86	1.31	1.39
1	N	949	A	C6-N1	12.86	1.44	1.35
1	N	1234	C	C2-N3	12.85	1.46	1.35
1	N	714	G	N7-C5	-12.84	1.31	1.39
1	N	959	A	N7-C5	-12.81	1.31	1.39
1	N	461	A	C6-N1	12.77	1.44	1.35
1	N	1002	G	C8-N7	-12.75	1.23	1.30
1	N	1191	A	C6-N1	12.75	1.44	1.35
1	N	871	U	N1-C2	12.72	1.50	1.38
1	N	728	A	C6-N6	12.71	1.44	1.33
1	N	595	A	C6-N1	12.68	1.44	1.35
1	N	509	A	N7-C5	-12.66	1.31	1.39
1	N	1333	A	N7-C5	-12.66	1.31	1.39
1	N	1294	G	N1-C2	12.63	1.47	1.37
1	N	25	C	C4-C5	12.61	1.53	1.43
1	N	1106	G	C6-N1	12.60	1.48	1.39
1	N	394	G	N9-C8	12.60	1.46	1.37
1	N	1355	G	N1-C2	12.59	1.47	1.37
1	N	415	A	N7-C5	-12.56	1.31	1.39
1	N	1202	U	C2-N3	12.55	1.46	1.37
1	N	90	C	N3-C4	12.55	1.42	1.33
1	N	31	G	N3-C4	-12.54	1.26	1.35
1	N	1434	A	N7-C5	-12.53	1.31	1.39
1	N	1504	G	N7-C5	-12.52	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1185	G	N7-C5	-12.52	1.31	1.39
1	N	595	A	N7-C5	-12.51	1.31	1.39
1	N	794	A	N7-C5	-12.51	1.31	1.39
1	N	538	G	N7-C5	-12.50	1.31	1.39
1	N	268	U	C2-N3	12.48	1.46	1.37
1	N	707	U	C2-N3	12.47	1.46	1.37
1	N	755	G	C2-N3	12.40	1.42	1.32
1	N	254	G	N1-C2	12.40	1.47	1.37
1	N	1209	C	N3-C4	12.40	1.42	1.33
1	N	363	A	N3-C4	-12.36	1.27	1.34
1	N	1493	A	C8-N7	-12.36	1.22	1.31
1	N	966	G	C8-N7	12.29	1.38	1.30
1	N	1293	C	C4-N4	12.28	1.45	1.33
1	N	1306	A	N3-C4	12.28	1.42	1.34
1	N	742	G	C6-N1	12.26	1.48	1.39
1	N	11	G	C4'-C3'	12.21	1.66	1.53
1	N	771	G	C6-N1	12.20	1.48	1.39
1	N	389	A	N7-C5	-12.19	1.31	1.39
1	N	953	G	N1-C2	12.14	1.47	1.37
1	N	1508	A	C5-C4	12.11	1.47	1.38
1	N	767	A	C6-N6	12.11	1.43	1.33
1	N	715	A	N9-C4	-12.09	1.30	1.37
1	N	211	G	C6-N1	12.09	1.48	1.39
1	N	361	G	N1-C2	12.06	1.47	1.37
1	N	676	A	C6-N6	12.06	1.43	1.33
1	N	505	G	N1-C2	12.03	1.47	1.37
1	N	676	A	N7-C5	-12.03	1.32	1.39
1	N	1390	U	C2-N3	12.03	1.46	1.37
1	N	1306	A	N7-C5	-12.02	1.32	1.39
1	N	1515	G	N1-C2	12.01	1.47	1.37
1	N	838	G	N1-C2	11.99	1.47	1.37
1	N	720	C	C4-N4	11.96	1.44	1.33
1	N	1178	G	C6-N1	11.95	1.48	1.39
1	N	560	A	C6-N1	11.94	1.44	1.35
1	N	1064	G	N7-C5	-11.92	1.32	1.39
1	N	540	G	N3-C4	-11.92	1.27	1.35
1	N	204	G	C2-N3	11.90	1.42	1.32
1	N	654	G	N1-C2	11.83	1.47	1.37
1	N	390	U	C2-N3	11.78	1.46	1.37
1	N	1403	C	N1-C6	11.77	1.44	1.37
1	N	211	G	N9-C4	-11.77	1.28	1.38
1	N	1111	A	N7-C5	-11.77	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	310	G	N1-C2	11.75	1.47	1.37
1	N	947	G	N7-C5	-11.75	1.32	1.39
1	N	557	G	C6-N1	11.74	1.47	1.39
1	N	568	G	C2-N3	11.70	1.42	1.32
1	N	182	A	C5-C4	11.67	1.47	1.38
1	N	211	G	N7-C5	-11.66	1.32	1.39
1	N	1458	G	C8-N7	-11.66	1.24	1.30
1	N	699	C	N1-C6	11.66	1.44	1.37
1	N	1283	U	N1-C2	11.64	1.49	1.38
1	N	1387	G	N7-C5	11.64	1.46	1.39
1	N	484	G	C6-N1	11.64	1.47	1.39
1	N	694	A	N7-C5	-11.64	1.32	1.39
1	N	1180	A	N7-C5	-11.63	1.32	1.39
1	N	938	A	C6-N6	11.62	1.43	1.33
1	N	927	G	N7-C5	-11.61	1.32	1.39
1	N	955	U	N3-C4	11.60	1.48	1.38
1	N	1339	A	C6-N6	11.60	1.43	1.33
1	N	1101	A	N9-C8	11.59	1.47	1.37
1	N	1494	G	N7-C5	11.59	1.46	1.39
1	N	607	A	C6-N1	11.58	1.43	1.35
1	N	412	A	N9-C4	11.58	1.44	1.37
1	N	1275	A	C8-N7	-11.57	1.23	1.31
1	N	128	G	N1-C2	11.57	1.47	1.37
1	N	1277	C	N1-C6	11.55	1.44	1.37
1	N	1321	U	C2-N3	11.55	1.45	1.37
1	N	738	C	N3-C4	11.54	1.42	1.33
1	N	384	G	N1-C2	11.53	1.47	1.37
1	N	165	G	N1-C2	11.53	1.47	1.37
1	N	987	G	C2-N3	11.53	1.42	1.32
1	N	579	A	C6-N6	11.52	1.43	1.33
1	N	651	C	N1-C6	11.51	1.44	1.37
1	N	1491	G	N1-C2	11.50	1.47	1.37
1	N	863	U	C2-N3	11.48	1.45	1.37
1	N	7	A	N9-C4	-11.47	1.30	1.37
1	N	797	C	N3-C4	11.47	1.42	1.33
1	N	1229	A	C5'-C4'	11.46	1.65	1.51
1	N	1266	G	C6-N1	11.46	1.47	1.39
1	N	1157	A	N7-C5	-11.45	1.32	1.39
1	N	648	A	N3-C4	11.44	1.41	1.34
1	N	282	A	N7-C5	-11.40	1.32	1.39
1	N	1419	G	N9-C8	-11.38	1.29	1.37
1	N	1356	G	C8-N7	-11.38	1.24	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1518	A	C2'-C1'	-11.37	1.40	1.53
1	N	1058	G	N9-C4	-11.36	1.28	1.38
1	N	436	C	N1-C6	11.36	1.44	1.37
1	N	1079	G	N3-C4	-11.36	1.27	1.35
1	N	156	C	N1-C6	11.35	1.44	1.37
1	N	761	G	C4'-C3'	-11.35	1.40	1.53
1	N	1287	A	C6-N6	11.33	1.43	1.33
1	N	1386	G	P-O5'	-11.32	1.48	1.59
1	N	1166	G	C2-N3	11.31	1.41	1.32
1	N	829	G	N9-C8	11.30	1.45	1.37
1	N	794	A	C2'-C1'	-11.29	1.41	1.53
1	N	849	G	N1-C2	11.28	1.46	1.37
1	N	649	A	N3-C4	11.28	1.41	1.34
1	N	1380	U	C2-N3	11.28	1.45	1.37
1	N	1425	U	C2-N3	11.28	1.45	1.37
1	N	730	G	N3-C4	11.27	1.43	1.35
1	N	650	G	N7-C5	-11.26	1.32	1.39
1	N	559	A	C8-N7	-11.26	1.23	1.31
1	N	917	G	N7-C5	-11.22	1.32	1.39
1	N	963	G	C2-N3	11.22	1.41	1.32
1	N	1179	A	C5-C4	11.21	1.46	1.38
1	N	1422	G	C5-C4	-11.21	1.30	1.38
1	N	292	G	N7-C5	-11.21	1.32	1.39
1	N	1130	A	N3-C4	11.20	1.41	1.34
1	N	224	U	C2-N3	11.19	1.45	1.37
1	N	773	G	N1-C2	11.15	1.46	1.37
1	N	996	A	C6-N6	11.15	1.42	1.33
1	N	1466	C	C5'-C4'	11.15	1.64	1.51
1	N	800	G	C6-N1	11.14	1.47	1.39
1	N	333	U	C2-N3	11.14	1.45	1.37
1	N	299	G	C2-N3	11.12	1.41	1.32
1	N	1419	G	C2-N3	11.10	1.41	1.32
1	N	340	U	C2-N3	11.10	1.45	1.37
1	N	1370	G	N7-C5	-11.09	1.32	1.39
1	N	416	G	N7-C5	-11.07	1.32	1.39
1	N	856	C	N1-C6	-11.05	1.30	1.37
1	N	482	A	N7-C5	-11.05	1.32	1.39
1	N	1232	U	C2-N3	11.04	1.45	1.37
1	N	767	A	N7-C5	-11.02	1.32	1.39
1	N	164	G	N3-C4	11.02	1.43	1.35
1	N	1183	U	C2-N3	11.01	1.45	1.37
1	N	77	A	N9-C4	-11.01	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	663	A	C6-N6	11.00	1.42	1.33
1	N	1258	G	N7-C5	-11.00	1.32	1.39
1	N	380	G	C2-N2	11.00	1.45	1.34
1	N	257	G	C6-N1	10.99	1.47	1.39
1	N	300	A	N7-C5	-10.98	1.32	1.39
1	N	1039	G	C2-N3	10.97	1.41	1.32
1	N	675	A	N7-C5	-10.97	1.32	1.39
1	N	885	G	N9-C4	-10.97	1.29	1.38
1	N	656	G	N1-C2	10.96	1.46	1.37
1	N	1343	G	N3-C4	-10.96	1.27	1.35
1	N	90	C	N1-C6	10.95	1.43	1.37
1	N	315	A	N7-C5	-10.95	1.32	1.39
1	N	1289	A	N7-C5	-10.95	1.32	1.39
1	N	1337	G	N7-C5	-10.94	1.32	1.39
1	N	985	C	N3-C4	10.94	1.41	1.33
1	N	1275	A	N7-C5	-10.93	1.32	1.39
1	N	640	A	N7-C5	-10.93	1.32	1.39
1	N	1439	G	N7-C5	-10.93	1.32	1.39
1	N	1329	A	C6-N6	10.92	1.42	1.33
1	N	1333	A	N3-C4	-10.92	1.28	1.34
1	N	624	C	C4-C5	-10.91	1.34	1.43
1	N	373	A	C2'-C1'	-10.91	1.41	1.53
1	N	647	C	N3-C4	10.90	1.41	1.33
1	N	1488	G	N1-C2	10.90	1.46	1.37
1	N	868	C	P-O5'	-10.90	1.48	1.59
1	N	1174	G	C6-N1	10.88	1.47	1.39
1	N	629	A	N7-C5	-10.87	1.32	1.39
1	N	182	A	C6-N6	10.85	1.42	1.33
1	N	75	G	C6-N1	10.85	1.47	1.39
1	N	1419	G	N7-C5	10.85	1.45	1.39
1	N	1111	A	C6-N6	10.85	1.42	1.33
1	N	151	A	N3-C4	-10.84	1.28	1.34
1	N	1083	U	C2-N3	10.84	1.45	1.37
1	N	1154	G	N7-C5	-10.84	1.32	1.39
1	N	526	C	N3-C4	10.83	1.41	1.33
1	N	1516	G	N7-C5	10.83	1.45	1.39
1	N	250	A	C5-C4	10.82	1.46	1.38
1	N	1526	G	N7-C5	-10.81	1.32	1.39
1	N	725	G	N9-C4	-10.79	1.29	1.38
1	N	446	G	N7-C5	-10.79	1.32	1.39
1	N	271	C	P-O5'	-10.79	1.49	1.59
1	N	886	G	N9-C4	10.79	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	700	G	N7-C5	-10.79	1.32	1.39
1	N	986	U	C2-N3	10.79	1.45	1.37
1	N	1278	G	N7-C5	-10.78	1.32	1.39
1	N	1250	A	N7-C5	-10.77	1.32	1.39
1	N	1285	A	N3-C4	-10.77	1.28	1.34
1	N	713	G	C8-N7	10.76	1.37	1.30
1	N	1134	G	C6-N1	-10.74	1.32	1.39
1	N	1240	U	C1'-N1	10.74	1.64	1.48
1	N	1234	C	N1-C6	10.72	1.43	1.37
1	N	149	A	N7-C5	-10.71	1.32	1.39
1	N	821	G	N1-C2	10.71	1.46	1.37
1	N	271	C	N3-C4	10.70	1.41	1.33
1	N	499	A	C4'-C3'	10.70	1.65	1.53
1	N	342	C	C2-N3	10.67	1.44	1.35
1	N	861	G	N9-C8	10.66	1.45	1.37
1	N	1222	G	C2-N3	10.66	1.41	1.32
1	N	151	A	C6-N6	10.65	1.42	1.33
1	N	695	A	N7-C5	-10.64	1.32	1.39
1	N	1370	G	N9-C8	10.64	1.45	1.37
1	N	1363	A	N9-C4	10.64	1.44	1.37
1	N	963	G	C2-N2	10.63	1.45	1.34
1	N	1041	G	C6-N1	10.63	1.47	1.39
1	N	1303	C	C4-N4	10.63	1.43	1.33
1	N	784	A	C6-N6	10.62	1.42	1.33
1	N	1110	A	N9-C4	10.62	1.44	1.37
1	N	1223	C	N1-C6	10.61	1.43	1.37
1	N	1301	U	C2-N3	10.60	1.45	1.37
1	N	972	C	N1-C6	10.60	1.43	1.37
1	N	787	A	C6-N6	10.60	1.42	1.33
1	N	1245	C	C4-N4	10.60	1.43	1.33
1	N	277	C	N3-C4	10.59	1.41	1.33
1	N	820	U	C2-N3	10.57	1.45	1.37
1	N	660	C	C2-N3	-10.53	1.27	1.35
1	N	315	A	C6-N1	10.53	1.43	1.35
1	N	130	A	N9-C4	-10.52	1.31	1.37
1	N	729	A	C6-N6	10.52	1.42	1.33
1	N	1022	A	N3-C4	-10.51	1.28	1.34
1	N	325	A	N9-C8	-10.51	1.29	1.37
1	N	620	C	N1-C6	10.50	1.43	1.37
1	N	73	C	N1-C6	-10.49	1.30	1.37
1	N	1294	G	C8-N7	-10.49	1.24	1.30
1	N	402	G	N9-C4	10.48	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	518	C	C4-N4	10.46	1.43	1.33
1	N	752	G	C4'-C3'	10.46	1.64	1.53
1	N	683	G	C5-C4	10.45	1.45	1.38
1	N	302	G	N1-C2	10.44	1.46	1.37
1	N	465	A	N7-C5	-10.43	1.32	1.39
1	N	1248	A	C6-N1	10.43	1.42	1.35
1	N	1094	G	N9-C8	-10.43	1.30	1.37
1	N	1332	A	P-O5'	10.43	1.70	1.59
1	N	1144	G	N7-C5	-10.43	1.32	1.39
1	N	535	A	N7-C5	-10.42	1.32	1.39
1	N	197	A	N7-C5	-10.42	1.33	1.39
1	N	549	C	C4-C5	10.41	1.51	1.43
1	N	606	G	N7-C5	-10.41	1.33	1.39
1	N	1495	U	C2-N3	10.40	1.45	1.37
1	N	829	G	N7-C5	-10.40	1.33	1.39
1	N	189	A	N7-C5	-10.39	1.33	1.39
1	N	1127	G	P-O5'	-10.38	1.49	1.59
1	N	372	C	C5'-C4'	10.38	1.63	1.51
1	N	417	G	N9-C4	-10.35	1.29	1.38
1	N	468	A	C6-N1	10.35	1.42	1.35
1	N	298	A	C5-C4	10.35	1.46	1.38
1	N	103	U	C2-N3	10.35	1.45	1.37
1	N	269	C	N3-C4	10.35	1.41	1.33
1	N	557	G	N7-C5	-10.34	1.33	1.39
1	N	1104	G	N1-C2	10.34	1.46	1.37
1	N	1255	G	N9-C4	-10.34	1.29	1.38
1	N	481	G	C6-N1	10.34	1.46	1.39
1	N	259	G	N9-C8	10.34	1.45	1.37
1	N	732	C	N1-C6	10.33	1.43	1.37
1	N	1359	C	N1-C6	10.33	1.43	1.37
1	N	488	C	N1-C6	10.32	1.43	1.37
1	N	171	A	N3-C4	10.31	1.41	1.34
1	N	951	G	N7-C5	-10.31	1.33	1.39
1	N	455	G	C6-N1	10.31	1.46	1.39
1	N	1106	G	N7-C5	-10.31	1.33	1.39
1	N	1376	U	P-O5'	-10.29	1.49	1.59
1	N	258	G	N7-C5	-10.29	1.33	1.39
1	N	225	C	N1-C6	-10.28	1.30	1.37
1	N	376	G	N7-C5	-10.28	1.33	1.39
1	N	1062	U	P-O5'	-10.28	1.49	1.59
1	N	1184	G	C6-N1	10.28	1.46	1.39
1	N	18	C	N3-C4	10.27	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1402	C	N3-C4	10.26	1.41	1.33
1	N	945	G	C2-N3	10.26	1.41	1.32
1	N	1485	U	C1'-N1	10.26	1.64	1.48
1	N	273	U	C2-N3	10.25	1.45	1.37
1	N	1042	A	N7-C5	-10.25	1.33	1.39
1	N	1465	A	N3-C4	10.25	1.41	1.34
1	N	158	G	C5-C6	10.24	1.52	1.42
1	N	846	G	C6-N1	10.24	1.46	1.39
1	N	885	G	C8-N7	-10.24	1.24	1.30
1	N	222	C	P-O5'	-10.24	1.49	1.59
1	N	230	G	C6-N1	10.24	1.46	1.39
1	N	133	U	C2-N3	10.22	1.45	1.37
1	N	421	U	N3-C4	10.22	1.47	1.38
1	N	272	C	N1-C6	10.22	1.43	1.37
1	N	270	A	N7-C5	-10.21	1.33	1.39
1	N	965	U	N3-C4	10.19	1.47	1.38
1	N	546	A	N9-C4	-10.18	1.31	1.37
1	N	1275	A	N9-C4	-10.17	1.31	1.37
1	N	552	U	N3-C4	10.17	1.47	1.38
1	N	1361	G	C5-C4	10.16	1.45	1.38
1	N	1000	A	N7-C5	-10.16	1.33	1.39
1	N	220	G	C2-N3	10.15	1.40	1.32
1	N	620	C	C4-N4	10.14	1.43	1.33
1	N	1145	A	C8-N7	-10.14	1.24	1.31
1	N	72	A	N9-C4	-10.13	1.31	1.37
1	N	16	A	C2'-C1'	-10.12	1.42	1.53
1	N	1338	G	N1-C2	10.12	1.45	1.37
1	N	144	G	N7-C5	-10.12	1.33	1.39
1	N	1387	G	C6-N1	10.12	1.46	1.39
1	N	1259	C	N1-C6	10.12	1.43	1.37
1	N	556	C	N1-C6	-10.11	1.31	1.37
1	N	684	U	C2-N3	10.11	1.44	1.37
1	N	523	A	O3'-P	-10.10	1.49	1.61
1	N	574	A	N7-C5	-10.10	1.33	1.39
1	N	1145	A	C6-N6	10.09	1.42	1.33
1	N	1163	A	N7-C5	-10.09	1.33	1.39
1	N	845	A	C6-N1	10.08	1.42	1.35
1	N	288	A	C6-N6	10.07	1.42	1.33
1	N	962	C	N3-C4	10.07	1.41	1.33
1	N	357	G	C2-N3	10.07	1.40	1.32
1	N	895	G	N9-C4	-10.07	1.29	1.38
1	N	492	C	O3'-P	-10.07	1.49	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1101	A	C6-N1	10.07	1.42	1.35
1	N	91	U	C4'-C3'	10.06	1.64	1.53
1	N	592	G	N9-C4	-10.05	1.29	1.38
1	N	1084	G	N9-C8	-10.05	1.30	1.37
1	N	246	A	N3-C4	10.05	1.40	1.34
1	N	848	C	N1-C6	10.05	1.43	1.37
1	N	860	A	N7-C5	-10.04	1.33	1.39
1	N	159	G	C6-N1	10.04	1.46	1.39
1	N	730	G	C4'-C3'	10.04	1.64	1.53
1	N	1206	G	N7-C5	-10.03	1.33	1.39
1	N	120	A	C4'-C3'	10.03	1.64	1.53
1	N	17	U	N3-C4	10.02	1.47	1.38
1	N	770	C	N1-C6	10.01	1.43	1.37
1	N	971	G	N1-C2	10.01	1.45	1.37
1	N	1107	C	N3-C4	10.01	1.41	1.33
1	N	446	G	N3-C4	-10.00	1.28	1.35
1	N	621	A	N7-C5	-10.00	1.33	1.39
1	N	568	G	N7-C5	-10.00	1.33	1.39
1	N	954	G	C6-N1	9.99	1.46	1.39
1	N	153	C	C4'-C3'	9.99	1.64	1.53
1	N	418	C	N3-C4	9.99	1.41	1.33
1	N	1181	G	N7-C5	-9.98	1.33	1.39
1	N	972	C	N3-C4	9.98	1.41	1.33
1	N	1080	A	N9-C4	9.98	1.43	1.37
1	N	1033	G	P-O5'	-9.98	1.49	1.59
1	N	1254	A	C6-N1	9.97	1.42	1.35
1	N	1264	U	C2-N3	9.97	1.44	1.37
1	N	80	A	C6-N1	9.97	1.42	1.35
1	N	9	G	C8-N7	-9.97	1.25	1.30
1	N	329	A	C6-N1	9.97	1.42	1.35
1	N	1048	G	N7-C5	-9.96	1.33	1.39
1	N	220	G	N1-C2	9.95	1.45	1.37
1	N	322	C	N1-C6	-9.96	1.31	1.37
1	N	1371	G	O3'-P	-9.95	1.49	1.61
1	N	1010	U	C2-N3	9.95	1.44	1.37
1	N	1181	G	C1'-N9	9.95	1.63	1.48
1	N	1143	G	N7-C5	-9.94	1.33	1.39
1	N	609	A	C6-N1	9.94	1.42	1.35
1	N	1274	A	N9-C4	-9.93	1.31	1.37
1	N	347	G	P-O5'	-9.92	1.49	1.59
1	N	1138	G	C6-N1	9.90	1.46	1.39
1	N	1046	A	C6-N1	9.88	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	490	C	C2-N3	9.88	1.43	1.35
1	N	585	G	N9-C4	-9.87	1.30	1.38
1	N	1027	C	N1-C6	9.86	1.43	1.37
1	N	1486	G	N7-C5	-9.85	1.33	1.39
1	N	246	A	C5-C4	9.85	1.45	1.38
1	N	1409	C	N1-C6	9.84	1.43	1.37
1	N	1531	A	N7-C5	-9.84	1.33	1.39
1	N	404	G	C4'-C3'	-9.83	1.42	1.53
1	N	1127	G	N1-C2	9.83	1.45	1.37
1	N	1443	C	N1-C6	9.83	1.43	1.37
1	N	182	A	N9-C4	-9.83	1.31	1.37
1	N	98	A	C5'-C4'	9.82	1.63	1.51
1	N	790	A	C6-N6	9.82	1.41	1.33
1	N	663	A	N7-C5	-9.82	1.33	1.39
1	N	1076	U	N3-C4	9.82	1.47	1.38
1	N	255	G	C2-N3	9.82	1.40	1.32
1	N	925	G	C2-N3	9.81	1.40	1.32
1	N	173	U	C3'-C2'	9.80	1.63	1.52
1	N	710	G	C2-N3	9.80	1.40	1.32
1	N	294	U	N1-C6	9.80	1.46	1.38
1	N	403	C	C4-C5	9.80	1.50	1.43
1	N	953	G	C2-N3	9.80	1.40	1.32
1	N	101	A	C6-N6	9.79	1.41	1.33
1	N	1343	G	C5-C6	-9.77	1.32	1.42
1	N	1181	G	N9-C4	-9.77	1.30	1.38
1	N	1216	A	C6-N6	9.76	1.41	1.33
1	N	28	A	N9-C4	-9.75	1.31	1.37
1	N	174	A	C5-C4	9.75	1.45	1.38
1	N	514	C	N1-C6	9.75	1.43	1.37
1	N	197	A	C6-N1	9.74	1.42	1.35
1	N	892	A	C6-N6	9.73	1.41	1.33
1	N	958	A	C6-N6	9.73	1.41	1.33
1	N	250	A	N3-C4	-9.73	1.29	1.34
1	N	81	A	N9-C8	-9.73	1.29	1.37
1	N	973	G	N7-C5	-9.73	1.33	1.39
1	N	1370	G	C6-N1	9.73	1.46	1.39
1	N	1418	A	N7-C5	-9.73	1.33	1.39
1	N	1456	A	N7-C5	-9.73	1.33	1.39
1	N	560	A	C6-N6	9.72	1.41	1.33
1	N	994	A	N3-C4	9.71	1.40	1.34
1	N	669	G	C2-N3	9.70	1.40	1.32
1	N	570	G	N9-C4	9.70	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	687	A	N7-C5	-9.70	1.33	1.39
1	N	1466	C	N1-C6	-9.68	1.31	1.37
1	N	415	A	C6-N6	9.68	1.41	1.33
1	N	1410	A	N7-C5	-9.68	1.33	1.39
1	N	1415	G	N9-C4	9.68	1.45	1.38
1	N	1033	G	N1-C2	9.66	1.45	1.37
1	N	973	G	N3-C4	9.66	1.42	1.35
1	N	79	G	C5'-C4'	9.66	1.62	1.51
1	N	428	G	C2'-C1'	-9.65	1.42	1.53
1	N	1352	C	N3-C4	9.65	1.40	1.33
1	N	146	G	C2-N3	9.65	1.40	1.32
1	N	1416	G	N9-C4	-9.64	1.30	1.38
1	N	558	G	N3-C4	-9.64	1.28	1.35
1	N	584	G	N3-C4	-9.64	1.28	1.35
1	N	738	C	P-O5'	-9.64	1.50	1.59
1	N	747	A	N7-C5	-9.62	1.33	1.39
1	N	1379	G	N3-C4	-9.63	1.28	1.35
1	N	1371	G	N7-C5	-9.62	1.33	1.39
1	N	542	G	N3-C4	9.62	1.42	1.35
1	N	1041	G	C2'-C1'	-9.61	1.42	1.53
1	N	1136	C	N3-C4	9.61	1.40	1.33
1	N	1384	C	N3-C4	9.61	1.40	1.33
1	N	532	A	N3-C4	-9.61	1.29	1.34
1	N	440	C	N3-C4	9.60	1.40	1.33
1	N	422	C	N1-C6	9.59	1.43	1.37
1	N	928	G	C6-N1	9.59	1.46	1.39
1	N	787	A	N9-C8	9.58	1.45	1.37
1	N	546	A	C6-N1	9.58	1.42	1.35
1	N	1048	G	N1-C2	9.57	1.45	1.37
1	N	1122	U	C2-N3	9.57	1.44	1.37
1	N	988	G	C2'-C1'	-9.56	1.42	1.53
1	N	1143	G	C6-N1	9.56	1.46	1.39
1	N	519	C	C2-N3	9.56	1.43	1.35
1	N	411	A	N3-C4	9.55	1.40	1.34
1	N	317	U	C2'-C1'	-9.55	1.42	1.53
1	N	1459	G	C6-N1	9.55	1.46	1.39
1	N	259	G	C2-N3	9.54	1.40	1.32
1	N	1055	A	N9-C8	9.54	1.45	1.37
1	N	1297	G	C5-C6	9.52	1.51	1.42
1	N	496	A	N3-C4	-9.51	1.29	1.34
1	N	616	G	N1-C2	9.51	1.45	1.37
1	N	104	G	N1-C2	9.50	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1021	A	N3-C4	-9.50	1.29	1.34
1	N	538	G	N1-C2	9.50	1.45	1.37
1	N	424	G	N9-C8	-9.49	1.31	1.37
1	N	1316	G	N7-C5	-9.49	1.33	1.39
1	N	1433	A	P-O5'	-9.48	1.50	1.59
1	N	154	U	C4'-O4'	9.48	1.57	1.45
1	N	433	G	C6-N1	9.48	1.46	1.39
1	N	1403	C	C4-C5	-9.48	1.35	1.43
1	N	693	G	C2-N3	9.48	1.40	1.32
1	N	288	A	N7-C5	-9.47	1.33	1.39
1	N	106	C	N1-C6	9.47	1.42	1.37
1	N	190	A	N7-C5	-9.47	1.33	1.39
1	N	258	G	C5'-C4'	9.46	1.62	1.51
1	N	1033	G	C2-N3	9.46	1.40	1.32
1	N	765	G	N3-C4	-9.45	1.28	1.35
1	N	457	G	C6-N1	9.44	1.46	1.39
1	N	1188	A	O3'-P	-9.43	1.49	1.61
1	N	1153	G	C3'-C2'	9.43	1.63	1.52
1	N	1279	G	N7-C5	-9.43	1.33	1.39
1	N	1437	A	N7-C5	-9.43	1.33	1.39
1	N	546	A	N7-C5	-9.43	1.33	1.39
1	N	1367	C	N1-C6	9.42	1.42	1.37
1	N	366	A	C2'-C1'	-9.42	1.43	1.53
1	N	1213	A	N9-C8	-9.42	1.30	1.37
1	N	866	C	C4-N4	9.41	1.42	1.33
1	N	709	U	P-O5'	-9.39	1.50	1.59
1	N	1066	C	N3-C4	9.38	1.40	1.33
1	N	1213	A	C6-N6	9.38	1.41	1.33
1	N	212	G	C6-N1	9.38	1.46	1.39
1	N	950	U	N1-C2	-9.38	1.30	1.38
1	N	1014	A	N9-C8	-9.37	1.30	1.37
1	N	1449	C	N1-C6	9.37	1.42	1.37
1	N	241	G	C6-N1	9.37	1.46	1.39
1	N	529	G	O3'-P	-9.37	1.50	1.61
1	N	1074	G	N1-C2	9.37	1.45	1.37
1	N	1015	G	C3'-O3'	9.36	1.55	1.42
1	N	998	C	N1-C6	9.36	1.42	1.37
1	N	73	C	C5'-C4'	9.35	1.62	1.51
1	N	1484	C	N1-C6	-9.34	1.31	1.37
1	N	172	A	O3'-P	-9.34	1.50	1.61
1	N	885	G	N7-C5	-9.34	1.33	1.39
1	N	1041	G	C5-C4	9.34	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	593	U	C2-N3	9.34	1.44	1.37
1	N	413	G	N1-C2	9.33	1.45	1.37
1	N	220	G	C5-C4	9.33	1.44	1.38
1	N	406	G	N1-C2	9.32	1.45	1.37
1	N	1014	A	N7-C5	-9.32	1.33	1.39
1	N	251	G	N1-C2	9.32	1.45	1.37
1	N	185	U	P-O5'	-9.32	1.50	1.59
1	N	1016	A	N9-C4	-9.32	1.32	1.37
1	N	288	A	C4'-C3'	-9.31	1.43	1.53
1	N	484	G	C2'-C1'	-9.31	1.43	1.53
1	N	511	C	O3'-P	-9.31	1.50	1.61
1	N	971	G	C3'-C2'	9.31	1.63	1.52
1	N	592	G	N9-C8	9.30	1.44	1.37
1	N	937	A	N3-C4	-9.30	1.29	1.34
1	N	488	C	N3-C4	9.30	1.40	1.33
1	N	1268	G	C5-C4	9.30	1.44	1.38
1	N	1313	U	C2-N3	-9.30	1.31	1.37
1	N	198	G	C8-N7	-9.29	1.25	1.30
1	N	1361	G	C2'-C1'	-9.29	1.43	1.53
1	N	160	A	C5-C6	-9.29	1.32	1.41
1	N	1185	G	C6-N1	9.27	1.46	1.39
1	N	1215	G	C2'-C1'	-9.27	1.43	1.53
1	N	664	G	C2-N3	9.27	1.40	1.32
1	N	1389	C	C2-N3	9.27	1.43	1.35
1	N	975	A	C5-C4	9.26	1.45	1.38
1	N	97	G	C2-N3	9.26	1.40	1.32
1	N	226	G	C8-N7	-9.26	1.25	1.30
1	N	1274	A	C6-N1	9.26	1.42	1.35
1	N	117	G	C6-N1	9.26	1.46	1.39
1	N	772	U	N3-C4	9.26	1.46	1.38
1	N	1237	C	N1-C6	9.26	1.42	1.37
1	N	1096	C	N3-C4	9.26	1.40	1.33
1	N	702	A	C6-N1	9.26	1.42	1.35
1	N	113	G	C2'-C1'	-9.25	1.43	1.53
1	N	1209	C	N1-C6	9.25	1.42	1.37
1	N	142	G	C2-N2	9.25	1.43	1.34
1	N	249	U	N1-C2	9.25	1.46	1.38
1	N	683	G	N9-C8	9.24	1.44	1.37
1	N	862	C	O3'-P	-9.24	1.50	1.61
1	N	1134	G	N7-C5	-9.24	1.33	1.39
1	N	1313	U	N3-C4	9.24	1.46	1.38
1	N	1433	A	N9-C4	-9.24	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	731	G	C6-N1	9.24	1.46	1.39
1	N	1393	U	C2-N3	9.24	1.44	1.37
1	N	1271	A	C6-N1	9.23	1.42	1.35
1	N	1462	C	O3'-P	-9.23	1.50	1.61
1	N	1012	A	C6-N1	9.23	1.42	1.35
1	N	30	U	C2-N3	9.23	1.44	1.37
1	N	608	A	N7-C5	-9.22	1.33	1.39
1	N	771	G	C5-C4	9.22	1.44	1.38
1	N	860	A	N9-C4	-9.22	1.32	1.37
1	N	1110	A	N3-C4	-9.22	1.29	1.34
1	N	444	G	C2-N3	9.21	1.40	1.32
1	N	1309	G	C2-N3	9.19	1.40	1.32
1	N	192	A	N7-C5	-9.19	1.33	1.39
1	N	827	U	C4'-C3'	9.18	1.63	1.53
1	N	1047	G	N9-C8	9.18	1.44	1.37
1	N	1276	G	N7-C5	-9.18	1.33	1.39
1	N	1371	G	C6-N1	9.18	1.46	1.39
1	N	775	G	N7-C5	-9.18	1.33	1.39
1	N	156	C	C4'-O4'	-9.18	1.33	1.45
1	N	649	A	O3'-P	-9.17	1.50	1.61
1	N	32	A	N9-C4	-9.16	1.32	1.37
1	N	494	G	N7-C5	-9.16	1.33	1.39
1	N	598	U	C3'-C2'	-9.16	1.42	1.52
1	N	1493	A	C6-N1	9.16	1.42	1.35
1	N	1144	G	N1-C2	9.15	1.45	1.37
1	N	1362	A	C6-N6	9.15	1.41	1.33
1	N	295	C	N3-C4	9.15	1.40	1.33
1	N	882	C	N3-C4	9.15	1.40	1.33
1	N	1416	G	N7-C5	-9.15	1.33	1.39
1	N	987	G	P-O5'	-9.14	1.50	1.59
1	N	890	G	N3-C4	9.14	1.41	1.35
1	N	1267	C	N1-C6	9.14	1.42	1.37
1	N	759	A	N9-C4	9.14	1.43	1.37
1	N	1228	C	N1-C6	9.14	1.42	1.37
1	N	77	A	N3-C4	9.13	1.40	1.34
1	N	454	G	C5'-C4'	9.14	1.62	1.51
1	N	197	A	N3-C4	-9.13	1.29	1.34
1	N	330	C	C4-N4	9.13	1.42	1.33
1	N	586	C	N3-C4	9.12	1.40	1.33
1	N	444	G	C5-C4	9.12	1.44	1.38
1	N	889	A	C6-N6	9.12	1.41	1.33
1	N	718	A	N7-C5	-9.12	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	698	G	C2-N3	9.12	1.40	1.32
1	N	1155	A	N3-C4	-9.12	1.29	1.34
1	N	270	A	C5-C4	9.12	1.45	1.38
1	N	588	G	C5-C4	-9.11	1.31	1.38
1	N	683	G	N9-C4	-9.11	1.30	1.38
1	N	737	C	C5-C6	-9.11	1.27	1.34
1	N	1164	G	C6-N1	9.11	1.46	1.39
1	N	64	G	N9-C4	-9.11	1.30	1.38
1	N	69	G	C6-N1	9.11	1.46	1.39
1	N	879	C	C4-C5	9.11	1.50	1.43
1	N	65	A	C2'-C1'	-9.10	1.43	1.53
1	N	539	A	P-O5'	-9.09	1.50	1.59
1	N	801	U	C2-N3	9.09	1.44	1.37
1	N	1052	U	N3-C4	9.09	1.46	1.38
1	N	1197	A	C6-N6	9.09	1.41	1.33
1	N	1318	A	C6-N6	9.08	1.41	1.33
1	N	9	G	C2-N3	9.08	1.40	1.32
1	N	79	G	C8-N7	-9.08	1.25	1.30
1	N	899	C	C3'-C2'	-9.08	1.42	1.52
1	N	1162	C	N3-C4	9.08	1.40	1.33
1	N	1523	G	O3'-P	-9.07	1.50	1.61
1	N	1127	G	C2-N3	9.07	1.40	1.32
1	N	1412	C	O4'-C1'	9.07	1.53	1.41
1	N	776	G	N9-C4	-9.06	1.30	1.38
1	N	1233	G	N9-C4	9.06	1.45	1.38
1	N	1344	C	N3-C4	9.06	1.40	1.33
1	N	665	A	N7-C5	-9.06	1.33	1.39
1	N	1264	U	O3'-P	-9.05	1.50	1.61
1	N	977	A	C6-N6	9.05	1.41	1.33
1	N	1018	G	C5-C4	9.05	1.44	1.38
1	N	766	A	N7-C5	-9.04	1.33	1.39
1	N	179	A	C8-N7	-9.04	1.25	1.31
1	N	1127	G	N3-C4	-9.04	1.29	1.35
1	N	1274	A	N7-C5	-9.04	1.33	1.39
1	N	745	G	C2-N3	9.04	1.40	1.32
1	N	139	A	N3-C4	-9.03	1.29	1.34
1	N	922	G	C5-C6	-9.03	1.33	1.42
1	N	1489	G	C6-N1	9.03	1.45	1.39
1	N	445	G	C2-N3	9.03	1.40	1.32
1	N	551	U	N3-C4	9.03	1.46	1.38
1	N	664	G	N7-C5	9.03	1.44	1.39
1	N	834	U	C5-C6	9.03	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	830	G	N1-C2	9.03	1.45	1.37
1	N	130	A	C8-N7	-9.02	1.25	1.31
1	N	653	U	N3-C4	9.02	1.46	1.38
1	N	685	G	C2-N3	9.01	1.40	1.32
1	N	1315	U	C2-N3	9.01	1.44	1.37
1	N	949	A	N3-C4	-9.01	1.29	1.34
1	N	1290	G	N7-C5	-9.00	1.33	1.39
1	N	22	G	N7-C5	-9.00	1.33	1.39
1	N	832	G	N7-C5	-9.00	1.33	1.39
1	N	691	G	N1-C2	9.00	1.45	1.37
1	N	1326	U	C2'-C1'	-9.00	1.43	1.53
1	N	384	G	N7-C5	-8.99	1.33	1.39
1	N	1279	G	C3'-C2'	-8.99	1.42	1.52
1	N	87	C	C2'-C1'	-8.99	1.43	1.53
1	N	652	U	C2-N3	8.99	1.44	1.37
1	N	941	G	C2-N3	8.98	1.40	1.32
1	N	133	U	N1-C6	8.98	1.46	1.38
1	N	363	A	C2'-C1'	-8.98	1.43	1.53
1	N	633	G	C2-N3	8.98	1.40	1.32
1	N	316	C	N3-C4	8.97	1.40	1.33
1	N	838	G	C2-N3	8.97	1.40	1.32
1	N	1249	C	P-O5'	-8.97	1.50	1.59
1	N	511	C	C4'-C3'	8.97	1.63	1.53
1	N	1297	G	C5-C4	8.97	1.44	1.38
1	N	61	G	N1-C2	-8.96	1.30	1.37
1	N	1003	G	C2'-C1'	-8.96	1.43	1.53
1	N	1309	G	C6-N1	8.96	1.45	1.39
1	N	102	G	P-O5'	-8.96	1.50	1.59
1	N	1530	G	C6-N1	8.96	1.45	1.39
1	N	1032	G	N3-C4	-8.95	1.29	1.35
1	N	947	G	C2'-C1'	-8.95	1.43	1.53
1	N	948	C	C5'-C4'	8.95	1.62	1.51
1	N	317	U	N1-C6	8.94	1.46	1.38
1	N	1176	A	C5'-C4'	8.94	1.62	1.51
1	N	76	G	C8-N7	-8.93	1.25	1.30
1	N	105	G	N9-C8	8.93	1.44	1.37
1	N	626	G	P-O5'	-8.93	1.50	1.59
1	N	185	U	C2-N3	8.93	1.44	1.37
1	N	1292	G	C5-C4	8.93	1.44	1.38
1	N	807	A	C6-N6	8.93	1.41	1.33
1	N	155	A	N7-C5	-8.92	1.33	1.39
1	N	695	A	C6-N1	8.92	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	878	A	C6-N1	8.92	1.41	1.35
1	N	399	G	N3-C4	-8.92	1.29	1.35
1	N	862	C	C4-C5	8.91	1.50	1.43
1	N	1072	G	C5'-C4'	8.91	1.62	1.51
1	N	929	G	N1-C2	8.90	1.44	1.37
1	N	1388	C	C4'-C3'	8.89	1.62	1.53
1	N	311	C	N3-C4	8.89	1.40	1.33
1	N	112	G	C6-N1	8.89	1.45	1.39
1	N	414	A	C5-C4	-8.89	1.32	1.38
1	N	873	A	C6-N6	8.89	1.41	1.33
1	N	552	U	C2-N3	8.89	1.44	1.37
1	N	273	U	C1'-N1	8.88	1.62	1.48
1	N	443	C	N1-C6	8.88	1.42	1.37
1	N	1398	A	N9-C8	-8.88	1.30	1.37
1	N	1514	G	N9-C4	-8.88	1.30	1.38
1	N	626	G	O3'-P	-8.88	1.50	1.61
1	N	653	U	N1-C2	8.88	1.46	1.38
1	N	1101	A	C6-N6	8.88	1.41	1.33
1	N	1289	A	N9-C4	8.88	1.43	1.37
1	N	58	C	C3'-C2'	8.87	1.62	1.52
1	N	1177	G	C6-N1	8.87	1.45	1.39
1	N	1193	G	C6-N1	8.87	1.45	1.39
1	N	1082	A	N3-C4	-8.87	1.29	1.34
1	N	140	U	P-O5'	-8.86	1.50	1.59
1	N	127	G	C5'-C4'	8.86	1.61	1.51
1	N	1040	U	C2-N3	8.86	1.44	1.37
1	N	351	G	C2-N3	8.86	1.39	1.32
1	N	409	U	O3'-P	-8.86	1.50	1.61
1	N	635	A	C2'-C1'	-8.86	1.43	1.53
1	N	1331	G	N9-C4	8.86	1.45	1.38
1	N	498	A	C2'-C1'	-8.86	1.43	1.53
1	N	461	A	N9-C4	8.86	1.43	1.37
1	N	422	C	C4-N4	8.85	1.42	1.33
1	N	1422	G	C2-N2	8.85	1.43	1.34
1	N	1506	U	C4'-C3'	8.85	1.62	1.53
1	N	705	G	C2-N3	8.84	1.39	1.32
1	N	1432	G	C6-N1	8.84	1.45	1.39
1	N	302	G	C5-C4	8.83	1.44	1.38
1	N	1226	C	O3'-P	-8.83	1.50	1.61
1	N	1253	G	N3-C4	-8.82	1.29	1.35
1	N	941	G	N7-C5	-8.82	1.33	1.39
1	N	1208	C	P-O5'	-8.82	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1386	G	C8-N7	8.82	1.36	1.30
1	N	41	G	C2-N3	8.82	1.39	1.32
1	N	1360	A	N3-C4	8.82	1.40	1.34
1	N	117	G	N9-C8	8.82	1.44	1.37
1	N	609	A	C6-N6	8.81	1.41	1.33
1	N	502	A	P-O5'	-8.81	1.50	1.59
1	N	873	A	N7-C5	-8.81	1.33	1.39
1	N	777	A	C6-N1	8.80	1.41	1.35
1	N	1462	C	N3-C4	8.80	1.40	1.33
1	N	1343	G	P-O5'	8.80	1.68	1.59
1	N	1364	U	C4-C5	8.79	1.51	1.43
1	N	504	C	N3-C4	8.79	1.40	1.33
1	N	1272	G	N9-C4	-8.79	1.30	1.38
1	N	1497	G	C8-N7	8.79	1.36	1.30
1	N	916	U	O3'-P	-8.78	1.50	1.61
1	N	1294	G	C2-N3	8.78	1.39	1.32
1	N	1208	C	C4-N4	8.78	1.41	1.33
1	N	233	C	C5'-C4'	8.77	1.61	1.51
1	N	1156	G	N3-C4	-8.77	1.29	1.35
1	N	1449	C	C2'-C1'	-8.76	1.43	1.53
1	N	293	G	N3-C4	8.76	1.41	1.35
1	N	808	C	N3-C4	8.76	1.40	1.33
1	N	903	G	N9-C8	-8.76	1.31	1.37
1	N	1097	C	C4-N4	8.76	1.41	1.33
1	N	108	G	C2-N3	8.75	1.39	1.32
1	N	803	G	N1-C2	8.75	1.44	1.37
1	N	801	U	N1-C2	8.75	1.46	1.38
1	N	28	A	N3-C4	-8.75	1.29	1.34
1	N	1274	A	C2'-C1'	-8.73	1.43	1.53
1	N	748	G	C5-C4	8.73	1.44	1.38
1	N	296	U	C2-N3	8.73	1.43	1.37
1	N	15	G	C2-N3	8.73	1.39	1.32
1	N	347	G	O4'-C1'	8.72	1.52	1.41
1	N	725	G	O3'-P	-8.72	1.50	1.61
1	N	921	U	P-O5'	-8.72	1.51	1.59
1	N	206	C	N3-C4	8.72	1.40	1.33
1	N	57	G	C5'-C4'	8.72	1.61	1.51
1	N	719	C	O3'-P	-8.71	1.50	1.61
1	N	1206	G	N9-C8	-8.71	1.31	1.37
1	N	195	A	O3'-P	-8.71	1.50	1.61
1	N	1439	G	N1-C2	8.71	1.44	1.37
1	N	1066	C	C2-N3	8.71	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	515	G	C2-N3	8.70	1.39	1.32
1	N	81	A	N3-C4	8.70	1.40	1.34
1	N	288	A	O3'-P	-8.69	1.50	1.61
1	N	669	G	N9-C4	-8.69	1.30	1.38
1	N	1246	A	C6-N1	8.69	1.41	1.35
1	N	1227	A	C6-N6	8.68	1.40	1.33
1	N	1395	C	C4'-C3'	-8.68	1.43	1.53
1	N	491	G	C8-N7	-8.68	1.25	1.30
1	N	1530	G	C2-N3	8.68	1.39	1.32
1	N	862	C	N1-C6	-8.67	1.31	1.37
1	N	524	G	C2-N3	8.67	1.39	1.32
1	N	807	A	N3-C4	-8.67	1.29	1.34
1	N	1059	C	N3-C4	8.67	1.40	1.33
1	N	200	G	C5-C4	8.66	1.44	1.38
1	N	821	G	N7-C5	-8.66	1.34	1.39
1	N	1143	G	N9-C4	-8.66	1.31	1.38
1	N	445	G	N3-C4	-8.66	1.29	1.35
1	N	228	A	N9-C4	-8.66	1.32	1.37
1	N	1508	A	C5'-C4'	8.65	1.61	1.51
1	N	939	G	O4'-C1'	-8.65	1.30	1.41
1	N	520	A	N7-C5	-8.65	1.34	1.39
1	N	547	A	C6-N6	8.65	1.40	1.33
1	N	712	A	C8-N7	-8.65	1.25	1.31
1	N	935	A	N7-C5	-8.65	1.34	1.39
1	N	1530	G	C5-C6	-8.64	1.33	1.42
1	N	721	G	C2-N3	8.64	1.39	1.32
1	N	144	G	C6-N1	8.64	1.45	1.39
1	N	296	U	N3-C4	8.63	1.46	1.38
1	N	219	U	N1-C2	-8.63	1.30	1.38
1	N	1079	G	N7-C5	-8.63	1.34	1.39
1	N	94	G	P-O5'	-8.63	1.51	1.59
1	N	134	G	C8-N7	-8.62	1.25	1.30
1	N	1501	C	C1'-N1	8.62	1.61	1.48
1	N	621	A	N3-C4	-8.62	1.29	1.34
1	N	376	G	C5-C6	-8.61	1.33	1.42
1	N	836	G	N9-C4	-8.61	1.31	1.38
1	N	12	U	N1-C6	8.61	1.45	1.38
1	N	466	A	N7-C5	-8.61	1.34	1.39
1	N	1502	A	C6-N6	8.60	1.40	1.33
1	N	541	G	C6-N1	8.60	1.45	1.39
1	N	569	C	N3-C4	8.60	1.40	1.33
1	N	907	A	C4'-C3'	8.60	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1200	C	N1-C2	-8.60	1.31	1.40
1	N	1517	G	C6-N1	8.60	1.45	1.39
1	N	139	A	C6-N6	8.60	1.40	1.33
1	N	688	G	N9-C8	8.60	1.43	1.37
1	N	819	A	N9-C8	-8.60	1.30	1.37
1	N	655	A	N7-C5	-8.60	1.34	1.39
1	N	639	G	C6-N1	8.60	1.45	1.39
1	N	577	G	N1-C2	8.59	1.44	1.37
1	N	73	C	N3-C4	8.59	1.40	1.33
1	N	274	A	C8-N7	8.59	1.37	1.31
1	N	1483	A	C6-N1	8.59	1.41	1.35
1	N	118	U	C1'-N1	8.59	1.61	1.48
1	N	935	A	C5-C4	8.59	1.44	1.38
1	N	1008	U	C2-N3	8.59	1.43	1.37
1	N	87	C	C3'-C2'	8.58	1.62	1.52
1	N	362	G	C2-N2	8.57	1.43	1.34
1	N	910	C	N1-C6	8.57	1.42	1.37
1	N	674	G	C6-N1	8.57	1.45	1.39
1	N	350	G	N9-C4	-8.57	1.31	1.38
1	N	457	G	N9-C4	8.57	1.44	1.38
1	N	791	G	N9-C4	8.57	1.44	1.38
1	N	1074	G	N7-C5	8.57	1.44	1.39
1	N	517	G	C6-N1	8.56	1.45	1.39
1	N	485	U	O3'-P	-8.56	1.50	1.61
1	N	802	A	C5'-C4'	8.56	1.61	1.51
1	N	238	A	C6-N6	8.56	1.40	1.33
1	N	1344	C	P-O5'	-8.55	1.51	1.59
1	N	1010	U	N1-C6	8.55	1.45	1.38
1	N	169	C	O3'-P	-8.55	1.50	1.61
1	N	215	C	N3-C4	8.54	1.40	1.33
1	N	398	U	C2-N3	8.54	1.43	1.37
1	N	45	G	C3'-C2'	-8.54	1.43	1.52
1	N	505	G	C2-N3	8.54	1.39	1.32
1	N	141	G	O3'-P	-8.54	1.50	1.61
1	N	887	G	P-O5'	-8.54	1.51	1.59
1	N	1200	C	N3-C4	8.53	1.40	1.33
1	N	487	A	N7-C5	-8.53	1.34	1.39
1	N	1177	G	C4'-C3'	8.53	1.62	1.53
1	N	643	C	P-O5'	-8.52	1.51	1.59
1	N	410	G	N7-C5	-8.52	1.34	1.39
1	N	445	G	O3'-P	-8.52	1.50	1.61
1	N	147	G	N1-C2	8.52	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	198	G	C5'-C4'	8.52	1.61	1.51
1	N	709	U	O4'-C1'	-8.52	1.30	1.41
1	N	873	A	N9-C4	8.52	1.43	1.37
1	N	68	G	C5'-C4'	8.51	1.61	1.51
1	N	348	G	C2'-C1'	-8.51	1.44	1.53
1	N	561	U	C4'-C3'	8.51	1.62	1.53
1	N	738	C	C2-N3	8.51	1.42	1.35
1	N	1377	A	N9-C8	8.51	1.44	1.37
1	N	336	A	C2-N3	-8.51	1.25	1.33
1	N	1311	A	C6-N6	8.51	1.40	1.33
1	N	364	A	C6-N1	8.51	1.41	1.35
1	N	368	U	C2-N3	8.51	1.43	1.37
1	N	78	A	C4'-C3'	8.50	1.62	1.53
1	N	298	A	C5'-C4'	8.50	1.61	1.51
1	N	1250	A	N9-C4	-8.50	1.32	1.37
1	N	1334	G	N3-C4	-8.50	1.29	1.35
1	N	1473	G	C2-N3	8.50	1.39	1.32
1	N	1243	C	N3-C4	8.49	1.39	1.33
1	N	1355	G	C6-N1	8.49	1.45	1.39
1	N	1416	G	C6-N1	8.49	1.45	1.39
1	N	632	U	C4'-C3'	8.49	1.62	1.53
1	N	1418	A	C6-N6	8.49	1.40	1.33
1	N	782	A	N9-C8	8.49	1.44	1.37
1	N	886	G	N1-C2	8.49	1.44	1.37
1	N	1068	G	N3-C4	-8.49	1.29	1.35
1	N	386	C	N1-C6	8.48	1.42	1.37
1	N	1017	U	N3-C4	8.48	1.46	1.38
1	N	260	G	N7-C5	-8.48	1.34	1.39
1	N	1495	U	C5'-C4'	8.48	1.61	1.51
1	N	1492	A	N3-C4	-8.47	1.29	1.34
1	N	7	A	N3-C4	-8.47	1.29	1.34
1	N	1256	A	C8-N7	-8.46	1.25	1.31
1	N	404	G	N9-C8	8.46	1.43	1.37
1	N	184	G	N1-C2	8.46	1.44	1.37
1	N	681	A	N9-C4	8.46	1.43	1.37
1	N	1525	G	C5-C4	-8.46	1.32	1.38
1	N	1527	U	C2-N3	8.45	1.43	1.37
1	N	584	G	N1-C2	8.45	1.44	1.37
1	N	23	C	C4-N4	8.45	1.41	1.33
1	N	213	G	C2-N3	8.45	1.39	1.32
1	N	457	G	C8-N7	-8.45	1.25	1.30
1	N	587	G	C8-N7	8.45	1.36	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	127	G	C2-N2	8.44	1.43	1.34
1	N	413	G	C2-N3	8.44	1.39	1.32
1	N	579	A	C8-N7	-8.44	1.25	1.31
1	N	1008	U	N3-C4	8.44	1.46	1.38
1	N	524	G	N1-C2	8.43	1.44	1.37
1	N	551	U	C2-N3	8.43	1.43	1.37
1	N	1126	U	N1-C2	8.43	1.46	1.38
1	N	434	U	C5-C6	-8.43	1.26	1.34
1	N	1467	C	N3-C4	8.43	1.39	1.33
1	N	541	G	N9-C8	8.43	1.43	1.37
1	N	877	G	C2-N3	8.43	1.39	1.32
1	N	1380	U	C4'-C3'	8.43	1.62	1.53
1	N	958	A	N1-C2	8.42	1.42	1.34
1	N	1131	G	C2-N3	8.42	1.39	1.32
1	N	369	G	N7-C5	-8.42	1.34	1.39
1	N	665	A	N3-C4	-8.41	1.29	1.34
1	N	942	G	C5-C4	-8.41	1.32	1.38
1	N	890	G	C3'-C2'	8.41	1.62	1.52
1	N	1514	G	C8-N7	8.41	1.35	1.30
1	N	698	G	C2'-C1'	-8.41	1.44	1.53
1	N	560	A	C5-C4	8.41	1.44	1.38
1	N	481	G	O3'-P	-8.40	1.51	1.61
1	N	321	A	N3-C4	8.40	1.39	1.34
1	N	348	G	N1-C2	8.40	1.44	1.37
1	N	102	G	N3-C4	-8.40	1.29	1.35
1	N	565	U	N3-C4	8.40	1.46	1.38
1	N	168	G	C8-N7	-8.39	1.25	1.30
1	N	1345	U	C2-N3	8.39	1.43	1.37
1	N	597	G	N1-C2	8.39	1.44	1.37
1	N	661	G	C8-N7	-8.39	1.25	1.30
1	N	805	C	N1-C6	8.39	1.42	1.37
1	N	1525	G	N1-C2	8.39	1.44	1.37
1	N	873	A	C5'-C4'	8.39	1.61	1.51
1	N	235	C	C2'-C1'	-8.38	1.44	1.53
1	N	1312	G	C2-N3	8.38	1.39	1.32
1	N	1518	A	N9-C4	8.38	1.42	1.37
1	N	278	G	C2-N2	8.38	1.43	1.34
1	N	305	G	N1-C2	8.38	1.44	1.37
1	N	616	G	N7-C5	-8.38	1.34	1.39
1	N	513	C	N3-C4	8.37	1.39	1.33
1	N	766	A	N9-C8	8.37	1.44	1.37
1	N	1114	C	P-O5'	-8.37	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	898	G	C8-N7	-8.36	1.25	1.30
1	N	873	A	C3'-C2'	8.35	1.62	1.52
1	N	1181	G	C2'-C1'	-8.35	1.44	1.53
1	N	357	G	C5-C4	8.35	1.44	1.38
1	N	54	C	C3'-C2'	8.34	1.62	1.52
1	N	872	A	C4'-C3'	8.34	1.62	1.53
1	N	1518	A	C8-N7	-8.34	1.25	1.31
1	N	554	A	C6-N6	8.34	1.40	1.33
1	N	993	G	N7-C5	-8.34	1.34	1.39
1	N	1099	G	C2-N3	8.34	1.39	1.32
1	N	1220	G	N1-C2	8.34	1.44	1.37
1	N	1236	A	C6-N6	8.34	1.40	1.33
1	N	699	C	C2-N3	8.33	1.42	1.35
1	N	1178	G	N3-C4	-8.33	1.29	1.35
1	N	887	G	N1-C2	8.32	1.44	1.37
1	N	1041	G	N3-C4	-8.32	1.29	1.35
1	N	34	C	N3-C4	8.32	1.39	1.33
1	N	938	A	C6-N1	8.32	1.41	1.35
1	N	161	A	N7-C5	-8.31	1.34	1.39
1	N	101	A	C2'-C1'	8.31	1.62	1.53
1	N	724	G	N9-C4	8.31	1.44	1.38
1	N	749	A	N7-C5	-8.31	1.34	1.39
1	N	320	A	C6-N6	8.31	1.40	1.33
1	N	842	U	P-O5'	-8.31	1.51	1.59
1	N	932	C	N3-C4	8.31	1.39	1.33
1	N	1533	C	N1-C6	8.31	1.42	1.37
1	N	121	U	C4'-C3'	8.30	1.62	1.53
1	N	166	U	C3'-C2'	8.30	1.62	1.52
1	N	1101	A	N3-C4	-8.30	1.29	1.34
1	N	860	A	C8-N7	-8.30	1.25	1.31
1	N	984	C	C5'-C4'	8.30	1.61	1.51
1	N	1491	G	C6-N1	8.30	1.45	1.39
1	N	1190	G	N9-C8	-8.29	1.32	1.37
1	N	1193	G	N9-C8	-8.29	1.32	1.37
1	N	1201	A	N3-C4	8.29	1.39	1.34
1	N	397	A	C6-N6	8.28	1.40	1.33
1	N	641	U	N1-C2	8.28	1.46	1.38
1	N	28	A	N9-C8	8.28	1.44	1.37
1	N	285	C	C5-C6	8.28	1.41	1.34
1	N	752	G	N7-C5	8.28	1.44	1.39
1	N	641	U	O3'-P	-8.28	1.51	1.61
1	N	365	U	C4-C5	-8.28	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	621	A	C6-N1	8.28	1.41	1.35
1	N	1459	G	N9-C8	8.27	1.43	1.37
1	N	810	C	N1-C6	8.26	1.42	1.37
1	N	235	C	C4-N4	8.26	1.41	1.33
1	N	1132	C	N3-C4	8.26	1.39	1.33
1	N	1422	G	C6-N1	8.26	1.45	1.39
1	N	482	A	C6-N1	8.25	1.41	1.35
1	N	203	G	C4'-C3'	-8.25	1.44	1.53
1	N	517	G	C2-N3	8.25	1.39	1.32
1	N	1129	C	P-O5'	-8.25	1.51	1.59
1	N	194	C	P-O5'	-8.24	1.51	1.59
1	N	547	A	N9-C8	-8.24	1.31	1.37
1	N	542	G	N1-C2	8.24	1.44	1.37
1	N	876	C	N1-C6	8.24	1.42	1.37
1	N	728	A	C5'-C4'	8.24	1.61	1.51
1	N	1378	C	C5'-C4'	8.23	1.61	1.51
1	N	465	A	O3'-P	-8.23	1.51	1.61
1	N	1362	A	O3'-P	-8.23	1.51	1.61
1	N	940	C	P-O5'	-8.22	1.51	1.59
1	N	1242	G	N7-C5	-8.22	1.34	1.39
1	N	1336	C	C4-N4	8.22	1.41	1.33
1	N	467	U	N3-C4	8.22	1.45	1.38
1	N	785	G	N3-C4	-8.22	1.29	1.35
1	N	935	A	N9-C4	-8.21	1.32	1.37
1	N	1065	U	C5-C6	-8.21	1.26	1.34
1	N	74	A	N3-C4	-8.21	1.29	1.34
1	N	80	A	C5'-C4'	8.21	1.61	1.51
1	N	1513	A	C6-N1	8.21	1.41	1.35
1	N	796	C	C2-N3	8.21	1.42	1.35
1	N	915	A	C8-N7	-8.21	1.25	1.31
1	N	1121	U	C2-N3	8.21	1.43	1.37
1	N	506	G	C8-N7	-8.20	1.26	1.30
1	N	405	U	N3-C4	8.20	1.45	1.38
1	N	60	A	N7-C5	-8.20	1.34	1.39
1	N	148	G	C6-N1	8.20	1.45	1.39
1	N	423	G	C2-N3	8.20	1.39	1.32
1	N	230	G	C5'-C4'	8.20	1.61	1.51
1	N	937	A	C5-C4	8.19	1.44	1.38
1	N	506	G	N7-C5	-8.19	1.34	1.39
1	N	556	C	N3-C4	8.19	1.39	1.33
1	N	581	G	C5-C4	8.19	1.44	1.38
1	N	670	G	C6-N1	8.19	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	239	U	C2-N3	8.19	1.43	1.37
1	N	1026	G	C5'-C4'	8.19	1.61	1.51
1	N	1295	U	C2-N3	8.19	1.43	1.37
1	N	1320	C	C4-N4	8.19	1.41	1.33
1	N	1468	A	N7-C5	-8.19	1.34	1.39
1	N	1117	A	N9-C4	8.19	1.42	1.37
1	N	1081	A	C5-C4	8.18	1.44	1.38
1	N	683	G	C2-N3	8.18	1.39	1.32
1	N	1298	U	N3-C4	8.18	1.45	1.38
1	N	425	G	N9-C4	-8.18	1.31	1.38
1	N	887	G	N3-C4	8.18	1.41	1.35
1	N	492	C	C2-N3	8.17	1.42	1.35
1	N	594	U	C2'-C1'	-8.17	1.44	1.53
1	N	700	G	N9-C4	-8.17	1.31	1.38
1	N	369	G	P-O5'	-8.17	1.51	1.59
1	N	506	G	C2-N3	8.17	1.39	1.32
1	N	797	C	C2-O2	-8.17	1.17	1.24
1	N	821	G	C2-N3	8.17	1.39	1.32
1	N	1326	U	C2-N3	8.17	1.43	1.37
1	N	1423	G	N9-C4	-8.16	1.31	1.38
1	N	221	C	C4-C5	8.16	1.49	1.43
1	N	1517	G	N7-C5	-8.16	1.34	1.39
1	N	596	A	N3-C4	-8.15	1.29	1.34
1	N	609	A	N7-C5	-8.15	1.34	1.39
1	N	29	U	N3-C4	8.15	1.45	1.38
1	N	230	G	C2-N3	8.15	1.39	1.32
1	N	1229	A	P-O5'	-8.15	1.51	1.59
1	N	76	G	C1'-N9	8.15	1.60	1.48
1	N	563	A	N9-C4	8.15	1.42	1.37
1	N	921	U	N1-C2	8.15	1.45	1.38
1	N	923	A	N7-C5	-8.15	1.34	1.39
1	N	1426	G	N7-C5	-8.15	1.34	1.39
1	N	271	C	N1-C6	-8.14	1.32	1.37
1	N	519	C	N1-C6	8.14	1.42	1.37
1	N	945	G	C8-N7	-8.14	1.26	1.30
1	N	1323	G	N3-C4	-8.14	1.29	1.35
1	N	685	G	C5-C6	-8.14	1.34	1.42
1	N	995	C	O4'-C1'	8.14	1.52	1.41
1	N	317	U	O4'-C1'	8.14	1.52	1.41
1	N	112	G	C2-N2	8.13	1.42	1.34
1	N	237	G	N7-C5	-8.13	1.34	1.39
1	N	1202	U	C5-C6	8.13	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	123	U	C4'-C3'	-8.13	1.44	1.53
1	N	1348	U	C4'-C3'	8.13	1.62	1.53
1	N	781	A	O4'-C1'	8.13	1.52	1.41
1	N	474	G	N1-C2	8.12	1.44	1.37
1	N	247	G	C2-N2	8.12	1.42	1.34
1	N	596	A	N7-C5	-8.12	1.34	1.39
1	N	1004	A	O4'-C1'	8.12	1.52	1.41
1	N	1533	C	C4'-C3'	8.12	1.62	1.53
1	N	241	G	C5-C4	8.12	1.44	1.38
1	N	1279	G	N9-C8	-8.12	1.32	1.37
1	N	344	A	C4'-C3'	8.12	1.62	1.53
1	N	387	U	N3-C4	8.12	1.45	1.38
1	N	266	G	C6-N1	8.12	1.45	1.39
1	N	55	A	N7-C5	-8.11	1.34	1.39
1	N	198	G	C4'-C3'	8.11	1.62	1.53
1	N	276	G	C2'-C1'	-8.11	1.44	1.53
1	N	1352	C	C2'-C1'	-8.11	1.44	1.53
1	N	1511	G	C6-N1	8.11	1.45	1.39
1	N	339	C	N1-C6	-8.11	1.32	1.37
1	N	784	A	C5-C4	8.11	1.44	1.38
1	N	628	G	C8-N7	-8.11	1.26	1.30
1	N	71	A	C8-N7	-8.10	1.25	1.31
1	N	137	U	C2-N3	8.10	1.43	1.37
1	N	646	G	C2-N3	8.10	1.39	1.32
1	N	1099	G	N7-C5	-8.10	1.34	1.39
1	N	7	A	C6-N6	8.10	1.40	1.33
1	N	1266	G	C5-C4	-8.10	1.32	1.38
1	N	31	G	C2-N3	8.09	1.39	1.32
1	N	471	U	C2-N3	8.09	1.43	1.37
1	N	704	A	C4'-C3'	8.09	1.62	1.53
1	N	1188	A	N3-C4	-8.09	1.29	1.34
1	N	45	G	N1-C2	8.09	1.44	1.37
1	N	781	A	N3-C4	8.09	1.39	1.34
1	N	496	A	N7-C5	-8.09	1.34	1.39
1	N	947	G	C2-N2	8.08	1.42	1.34
1	N	120	A	C5'-C4'	8.08	1.61	1.51
1	N	780	A	C6-N6	8.08	1.40	1.33
1	N	1513	A	C6-N6	8.08	1.40	1.33
1	N	151	A	N7-C5	-8.08	1.34	1.39
1	N	668	G	C6-N1	8.08	1.45	1.39
1	N	1504	G	C6-N1	8.08	1.45	1.39
1	N	641	U	C2'-C1'	-8.07	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	630	A	O3'-P	-8.07	1.51	1.61
1	N	743	A	C8-N7	-8.07	1.25	1.31
1	N	915	A	N7-C5	-8.07	1.34	1.39
1	N	1413	A	P-O5'	-8.07	1.51	1.59
1	N	948	C	C2-N3	8.07	1.42	1.35
1	N	1153	G	C2-N3	8.06	1.39	1.32
1	N	383	A	C6-N6	8.06	1.40	1.33
1	N	392	C	N3-C4	8.06	1.39	1.33
1	N	833	G	N1-C2	8.06	1.44	1.37
1	N	1216	A	C4'-C3'	-8.06	1.44	1.53
1	N	377	G	C2'-C1'	-8.06	1.44	1.53
1	N	577	G	N9-C8	8.06	1.43	1.37
1	N	851	G	N7-C5	-8.06	1.34	1.39
1	N	1153	G	C6-N1	8.06	1.45	1.39
1	N	1265	C	P-O5'	-8.06	1.51	1.59
1	N	1121	U	N1-C6	8.06	1.45	1.38
1	N	411	A	C5-C4	-8.06	1.33	1.38
1	N	68	G	C5-C6	-8.05	1.34	1.42
1	N	313	A	C2'-C1'	-8.05	1.44	1.53
1	N	1230	C	C2-N3	8.05	1.42	1.35
1	N	1194	U	N1-C6	8.05	1.45	1.38
1	N	1429	A	N7-C5	-8.05	1.34	1.39
1	N	122	G	N1-C2	8.05	1.44	1.37
1	N	1480	A	C8-N7	-8.04	1.25	1.31
1	N	642	A	C6-N6	8.04	1.40	1.33
1	N	466	A	N9-C4	8.04	1.42	1.37
1	N	1128	C	C5'-C4'	8.04	1.60	1.51
1	N	602	A	N9-C4	-8.03	1.33	1.37
1	N	1207	G	C2-N3	8.03	1.39	1.32
1	N	225	C	N3-C4	8.03	1.39	1.33
1	N	1360	A	N9-C8	8.03	1.44	1.37
1	N	93	U	C5'-C4'	8.03	1.60	1.51
1	N	39	G	N7-C5	-8.02	1.34	1.39
1	N	147	G	O3'-P	-8.02	1.51	1.61
1	N	200	G	N7-C5	-8.02	1.34	1.39
1	N	773	G	N3-C4	8.02	1.41	1.35
1	N	1084	G	N1-C2	8.02	1.44	1.37
1	N	483	C	O3'-P	-8.01	1.51	1.61
1	N	110	C	N1-C6	-8.01	1.32	1.37
1	N	736	C	P-O5'	-8.00	1.51	1.59
1	N	737	C	C5'-C4'	8.00	1.60	1.51
1	N	1466	C	C2-O2	8.00	1.31	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	141	G	N9-C4	-8.00	1.31	1.38
1	N	706	A	C6-N6	8.00	1.40	1.33
1	N	49	U	N3-C4	8.00	1.45	1.38
1	N	112	G	N9-C8	8.00	1.43	1.37
1	N	788	U	C5'-C4'	8.00	1.60	1.51
1	N	421	U	C4-C5	7.99	1.50	1.43
1	N	1062	U	C2'-C1'	-7.99	1.44	1.53
1	N	1465	A	N1-C2	7.99	1.41	1.34
1	N	1373	G	N1-C2	7.99	1.44	1.37
1	N	253	A	C5-C4	-7.98	1.33	1.38
1	N	673	A	N9-C4	-7.98	1.33	1.37
1	N	81	A	N7-C5	-7.98	1.34	1.39
1	N	882	C	C4-C5	-7.98	1.36	1.43
1	N	1162	C	C4-N4	7.98	1.41	1.33
1	N	207	C	C2-N3	7.97	1.42	1.35
1	N	673	A	C8-N7	-7.97	1.25	1.31
1	N	819	A	N7-C5	-7.97	1.34	1.39
1	N	21	G	N1-C2	7.97	1.44	1.37
1	N	316	C	C4-N4	7.97	1.41	1.33
1	N	440	C	C4-N4	7.97	1.41	1.33
1	N	1410	A	C8-N7	-7.97	1.25	1.31
1	N	393	A	P-O5'	-7.97	1.51	1.59
1	N	1497	G	C5-C4	-7.97	1.32	1.38
1	N	299	G	C5'-C4'	7.96	1.60	1.51
1	N	607	A	P-O5'	-7.96	1.51	1.59
1	N	1168	U	O4'-C1'	7.96	1.52	1.41
1	N	1429	A	C5-C6	-7.96	1.33	1.41
1	N	1061	G	N1-C2	7.96	1.44	1.37
1	N	1150	A	N9-C8	7.96	1.44	1.37
1	N	785	G	C5-C6	-7.96	1.34	1.42
1	N	242	G	C5-C4	7.96	1.44	1.38
1	N	250	A	N7-C5	-7.95	1.34	1.39
1	N	1233	G	C2-N3	7.95	1.39	1.32
1	N	1455	G	C5-C4	7.95	1.44	1.38
1	N	887	G	C2'-C1'	-7.94	1.44	1.53
1	N	161	A	C4'-C3'	-7.94	1.44	1.53
1	N	896	C	N1-C6	-7.94	1.32	1.37
1	N	1241	G	C2-N3	7.94	1.39	1.32
1	N	774	G	N1-C2	7.94	1.44	1.37
1	N	467	U	C4'-O4'	-7.93	1.35	1.45
1	N	1500	A	C6-N6	7.93	1.40	1.33
1	N	219	U	C1'-N1	7.93	1.60	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1071	C	C1'-N1	7.93	1.60	1.48
1	N	1139	G	N9-C4	-7.93	1.31	1.38
1	N	1342	C	C4'-C3'	-7.93	1.44	1.53
1	N	108	G	C5-C4	-7.93	1.32	1.38
1	N	281	G	C4'-C3'	7.93	1.61	1.53
1	N	1144	G	N9-C8	-7.93	1.32	1.37
1	N	75	G	N1-C2	7.92	1.44	1.37
1	N	635	A	N9-C4	-7.92	1.33	1.37
1	N	79	G	C2'-C1'	7.92	1.62	1.53
1	N	1010	U	N1-C2	-7.90	1.31	1.38
1	N	304	U	C2-N3	7.90	1.43	1.37
1	N	533	A	C6-N1	7.90	1.41	1.35
1	N	673	A	N3-C4	-7.90	1.30	1.34
1	N	340	U	C2'-C1'	-7.90	1.44	1.53
1	N	283	U	N3-C4	7.89	1.45	1.38
1	N	474	G	N9-C4	-7.89	1.31	1.38
1	N	1487	G	C2'-C1'	-7.89	1.44	1.53
1	N	319	G	P-O5'	-7.89	1.51	1.59
1	N	911	U	C5'-C4'	7.89	1.60	1.51
1	N	569	C	C2'-C1'	7.89	1.62	1.53
1	N	1000	A	C3'-C2'	7.89	1.61	1.52
1	N	1094	G	N1-C2	7.89	1.44	1.37
1	N	806	C	C4-N4	7.88	1.41	1.33
1	N	829	G	C2-N3	7.88	1.39	1.32
1	N	1177	G	C5'-C4'	7.88	1.60	1.51
1	N	56	U	O3'-P	-7.88	1.51	1.61
1	N	806	C	C2-N3	7.88	1.42	1.35
1	N	966	G	N7-C5	-7.88	1.34	1.39
1	N	330	C	C1'-N1	7.88	1.60	1.48
1	N	506	G	C6-N1	7.88	1.45	1.39
1	N	1412	C	C4-N4	7.88	1.41	1.33
1	N	1049	U	C2-N3	7.88	1.43	1.37
1	N	1377	A	N7-C5	-7.87	1.34	1.39
1	N	146	G	C2'-C1'	-7.87	1.44	1.53
1	N	1374	A	N3-C4	-7.87	1.30	1.34
1	N	144	G	P-O5'	-7.87	1.51	1.59
1	N	963	G	N9-C4	7.87	1.44	1.38
1	N	40	C	N1-C6	7.86	1.41	1.37
1	N	246	A	N7-C5	-7.86	1.34	1.39
1	N	374	A	C5'-C4'	7.86	1.60	1.51
1	N	1511	G	C8-N7	7.86	1.35	1.30
1	N	411	A	C6-N1	7.86	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1353	G	N7-C5	7.86	1.44	1.39
1	N	671	G	N3-C4	-7.86	1.29	1.35
1	N	32	A	N1-C2	-7.86	1.27	1.34
1	N	742	G	N7-C5	-7.86	1.34	1.39
1	N	896	C	C1'-N1	7.86	1.60	1.48
1	N	262	A	C6-N1	7.86	1.41	1.35
1	N	815	A	O3'-P	-7.86	1.51	1.61
1	N	378	G	C2'-C1'	-7.85	1.44	1.53
1	N	869	G	O3'-P	-7.85	1.51	1.61
1	N	915	A	C5-C6	-7.85	1.33	1.41
1	N	39	G	C8-N7	-7.85	1.26	1.30
1	N	117	G	C5'-C4'	7.85	1.60	1.51
1	N	1148	U	C2-N3	7.85	1.43	1.37
1	N	198	G	C2-N2	7.85	1.42	1.34
1	N	244	U	C2-N3	7.85	1.43	1.37
1	N	940	C	N3-C4	7.84	1.39	1.33
1	N	895	G	N1-C2	7.84	1.44	1.37
1	N	1095	U	N1-C2	-7.84	1.31	1.38
1	N	1458	G	N1-C2	7.84	1.44	1.37
1	N	1477	U	C2-N3	7.84	1.43	1.37
1	N	177	G	N1-C2	7.84	1.44	1.37
1	N	485	U	N1-C2	7.84	1.45	1.38
1	N	987	G	C6-N1	7.84	1.45	1.39
1	N	1467	C	C4-C5	7.84	1.49	1.43
1	N	1523	G	C2-N3	7.84	1.39	1.32
1	N	635	A	C6-N6	7.84	1.40	1.33
1	N	873	A	C2'-C1'	-7.84	1.44	1.53
1	N	801	U	C5'-C4'	7.83	1.60	1.51
1	N	592	G	C8-N7	-7.83	1.26	1.30
1	N	809	G	N3-C4	-7.83	1.29	1.35
1	N	1507	A	C8-N7	-7.83	1.26	1.31
1	N	578	C	N1-C6	7.83	1.41	1.37
1	N	683	G	C2'-C1'	7.83	1.61	1.53
1	N	186	C	P-O5'	-7.83	1.51	1.59
1	N	598	U	N3-C4	7.83	1.45	1.38
1	N	1530	G	N7-C5	-7.83	1.34	1.39
1	N	1036	A	N9-C4	7.82	1.42	1.37
1	N	615	G	N1-C2	7.82	1.44	1.37
1	N	329	A	N9-C8	-7.82	1.31	1.37
1	N	593	U	N1-C2	-7.82	1.31	1.38
1	N	235	C	C5'-C4'	7.81	1.60	1.51
1	N	1174	G	N7-C5	-7.81	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	371	A	C5'-C4'	7.81	1.60	1.51
1	N	1331	G	C8-N7	-7.81	1.26	1.30
1	N	1113	C	N3-C4	7.81	1.39	1.33
1	N	618	C	N3-C4	7.81	1.39	1.33
1	N	914	A	N7-C5	-7.80	1.34	1.39
1	N	1332	A	N7-C5	-7.80	1.34	1.39
1	N	1353	G	N9-C8	7.80	1.43	1.37
1	N	89	U	N3-C4	7.80	1.45	1.38
1	N	1368	A	N9-C8	-7.80	1.31	1.37
1	N	1389	C	C4-C5	7.80	1.49	1.43
1	N	334	C	N3-C4	7.80	1.39	1.33
1	N	1236	A	C4'-C3'	-7.80	1.44	1.53
1	N	22	G	C6-N1	7.80	1.45	1.39
1	N	263	A	N7-C5	-7.80	1.34	1.39
1	N	282	A	N9-C4	7.80	1.42	1.37
1	N	887	G	C5-C4	-7.80	1.32	1.38
1	N	1213	A	N7-C5	-7.80	1.34	1.39
1	N	1480	A	C6-N6	7.80	1.40	1.33
1	N	1020	G	N1-C2	7.79	1.44	1.37
1	N	1401	G	C6-N1	7.79	1.45	1.39
1	N	1394	A	O3'-P	-7.79	1.51	1.61
1	N	126	G	O4'-C1'	-7.79	1.31	1.41
1	N	449	G	P-O5'	-7.79	1.51	1.59
1	N	160	A	N9-C4	-7.78	1.33	1.37
1	N	1124	G	C2'-C1'	-7.78	1.44	1.53
1	N	926	G	C8-N7	-7.78	1.26	1.30
1	N	438	U	O3'-P	-7.78	1.51	1.61
1	N	780	A	C5-C4	-7.78	1.33	1.38
1	N	1225	A	P-O5'	-7.78	1.51	1.59
1	N	716	A	C6-N6	7.78	1.40	1.33
1	N	670	G	N9-C4	-7.77	1.31	1.38
1	N	1454	G	N1-C2	7.77	1.44	1.37
1	N	933	G	C2'-C1'	-7.77	1.44	1.53
1	N	1241	G	N7-C5	-7.77	1.34	1.39
1	N	51	A	C5-C4	7.77	1.44	1.38
1	N	1014	A	N9-C4	7.77	1.42	1.37
1	N	570	G	C5-C6	-7.76	1.34	1.42
1	N	931	C	C4-C5	7.76	1.49	1.43
1	N	1526	G	C2-N3	7.76	1.39	1.32
1	N	1074	G	N9-C4	-7.76	1.31	1.38
1	N	112	G	N1-C2	7.76	1.44	1.37
1	N	157	U	N1-C2	-7.76	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1115	U	C2-N3	7.76	1.43	1.37
1	N	614	C	N3-C4	7.76	1.39	1.33
1	N	1286	U	C2-N3	7.76	1.43	1.37
1	N	1311	A	C5-C4	7.76	1.44	1.38
1	N	1509	C	N3-C4	7.76	1.39	1.33
1	N	414	A	N9-C4	7.75	1.42	1.37
1	N	1272	G	C2-N3	7.75	1.39	1.32
1	N	973	G	N9-C8	7.75	1.43	1.37
1	N	194	C	N1-C6	7.75	1.41	1.37
1	N	522	C	C4'-C3'	7.75	1.61	1.53
1	N	604	G	C6-N1	7.75	1.45	1.39
1	N	1438	G	C8-N7	7.75	1.35	1.30
1	N	615	G	N3-C4	7.74	1.40	1.35
1	N	838	G	C5-C6	-7.74	1.34	1.42
1	N	1278	G	N9-C8	-7.74	1.32	1.37
1	N	835	U	C4-O4	7.74	1.29	1.23
1	N	1453	G	N7-C5	7.74	1.43	1.39
1	N	604	G	N7-C5	-7.74	1.34	1.39
1	N	642	A	C2-N3	7.74	1.40	1.33
1	N	1179	A	N3-C4	-7.74	1.30	1.34
1	N	408	A	O3'-P	-7.73	1.51	1.61
1	N	16	A	N3-C4	-7.73	1.30	1.34
1	N	297	G	C6-N1	7.72	1.45	1.39
1	N	746	A	N3-C4	7.72	1.39	1.34
1	N	944	G	N3-C4	7.72	1.40	1.35
1	N	1374	A	C1'-N9	7.72	1.60	1.48
1	N	629	A	C3'-C2'	7.72	1.61	1.52
1	N	412	A	C6-N1	7.72	1.41	1.35
1	N	1429	A	O3'-P	-7.72	1.51	1.61
1	N	357	G	N3-C4	-7.71	1.30	1.35
1	N	532	A	N7-C5	-7.71	1.34	1.39
1	N	1224	U	C5'-C4'	7.71	1.60	1.51
1	N	377	G	N3-C4	-7.71	1.30	1.35
1	N	1072	G	C2'-C1'	-7.71	1.44	1.53
1	N	203	G	N7-C5	-7.71	1.34	1.39
1	N	324	G	N9-C4	-7.71	1.31	1.38
1	N	1522	U	C5-C6	7.70	1.41	1.34
1	N	447	G	C8-N7	-7.70	1.26	1.30
1	N	739	C	P-O5'	-7.70	1.52	1.59
1	N	18	C	N1-C6	7.70	1.41	1.37
1	N	1308	U	C2-N3	7.70	1.43	1.37
1	N	727	G	N7-C5	-7.69	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1295	U	C4'-C3'	7.69	1.61	1.53
1	N	295	C	N1-C6	7.69	1.41	1.37
1	N	123	U	N1-C6	7.69	1.44	1.38
1	N	124	C	N3-C4	7.69	1.39	1.33
1	N	1525	G	N3-C4	7.69	1.40	1.35
1	N	760	G	C8-N7	-7.69	1.26	1.30
1	N	48	C	C3'-C2'	7.69	1.61	1.52
1	N	48	C	C4-N4	7.69	1.40	1.33
1	N	654	G	C5-C4	-7.68	1.32	1.38
1	N	1449	C	N3-C4	7.68	1.39	1.33
1	N	773	G	C3'-C2'	-7.68	1.44	1.52
1	N	1018	G	C2-N3	7.68	1.38	1.32
1	N	749	A	C2'-C1'	-7.67	1.45	1.53
1	N	648	A	C4'-C3'	7.67	1.61	1.53
1	N	499	A	C6-N1	7.67	1.41	1.35
1	N	527	G	C3'-O3'	7.67	1.52	1.42
1	N	83	C	C4-N4	7.67	1.40	1.33
1	N	206	C	C4-N4	7.66	1.40	1.33
1	N	265	G	C5-C4	-7.66	1.32	1.38
1	N	425	G	N7-C5	7.66	1.43	1.39
1	N	755	G	C2-N2	7.66	1.42	1.34
1	N	1077	G	P-O5'	-7.66	1.52	1.59
1	N	470	C	P-O5'	-7.66	1.52	1.59
1	N	1084	G	O3'-P	-7.66	1.51	1.61
1	N	1146	A	N7-C5	-7.65	1.34	1.39
1	N	224	U	P-O5'	7.65	1.67	1.59
1	N	556	C	C2'-C1'	-7.65	1.45	1.53
1	N	1305	G	C6-N1	7.65	1.45	1.39
1	N	18	C	C2'-C1'	-7.65	1.45	1.53
1	N	336	A	C5-C6	-7.64	1.34	1.41
1	N	439	U	C5-C6	7.64	1.41	1.34
1	N	1516	G	C2-N3	7.64	1.38	1.32
1	N	906	A	C6-N6	7.64	1.40	1.33
1	N	1258	G	C3'-O3'	7.64	1.52	1.42
1	N	1377	A	C6-N6	7.63	1.40	1.33
1	N	1385	G	N9-C8	-7.63	1.32	1.37
1	N	733	G	C2'-C1'	-7.63	1.45	1.53
1	N	80	A	C8-N7	-7.63	1.26	1.31
1	N	167	A	C5-C4	7.63	1.44	1.38
1	N	484	G	N7-C5	-7.63	1.34	1.39
1	N	566	G	C3'-C2'	-7.63	1.44	1.52
1	N	824	G	N1-C2	7.63	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	847	G	N1-C2	7.63	1.43	1.37
1	N	1113	C	O3'-P	-7.63	1.51	1.61
1	N	542	G	C8-N7	-7.62	1.26	1.30
1	N	1479	C	N3-C4	7.62	1.39	1.33
1	N	498	A	C6-N1	7.62	1.40	1.35
1	N	1396	A	P-O5'	-7.62	1.52	1.59
1	N	18	C	C5-C6	-7.62	1.28	1.34
1	N	116	A	C6-N1	7.62	1.40	1.35
1	N	1180	A	C6-N1	7.62	1.40	1.35
1	N	524	G	C3'-C2'	-7.61	1.44	1.52
1	N	276	G	N9-C8	7.61	1.43	1.37
1	N	146	G	N9-C8	7.61	1.43	1.37
1	N	1041	G	N7-C5	-7.61	1.34	1.39
1	N	1357	A	C6-N6	7.61	1.40	1.33
1	N	1204	A	C6-N1	7.61	1.40	1.35
1	N	1268	G	C2-N3	7.61	1.38	1.32
1	N	1164	G	C1'-N9	7.60	1.60	1.48
1	N	1221	G	N3-C4	-7.60	1.30	1.35
1	N	6	G	C5'-C4'	7.60	1.60	1.51
1	N	1104	G	C8-N7	-7.60	1.26	1.30
1	N	258	G	C2-N2	7.60	1.42	1.34
1	N	615	G	C6-N1	-7.60	1.34	1.39
1	N	889	A	C5'-C4'	7.60	1.60	1.51
1	N	790	A	C8-N7	-7.59	1.26	1.31
1	N	933	G	N1-C2	7.59	1.43	1.37
1	N	1426	G	C5'-C4'	7.59	1.60	1.51
1	N	617	G	C2-N3	7.59	1.38	1.32
1	N	715	A	C6-N6	7.59	1.40	1.33
1	N	812	G	O3'-P	-7.59	1.52	1.61
1	N	505	G	N7-C5	-7.59	1.34	1.39
1	N	1339	A	N9-C4	7.59	1.42	1.37
1	N	94	G	O5'-C5'	7.59	1.56	1.44
1	N	175	C	C5'-C4'	7.59	1.60	1.51
1	N	407	U	P-O5'	-7.59	1.52	1.59
1	N	1150	A	N9-C4	-7.58	1.33	1.37
1	N	649	A	C6-N1	-7.58	1.30	1.35
1	N	845	A	N7-C5	-7.58	1.34	1.39
1	N	216	U	N3-C4	7.58	1.45	1.38
1	N	1412	C	N1-C6	7.58	1.41	1.37
1	N	1506	U	O3'-P	-7.58	1.52	1.61
1	N	690	G	N7-C5	-7.58	1.34	1.39
1	N	1195	C	N3-C4	7.58	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	143	A	C2-N3	7.58	1.40	1.33
1	N	1185	G	N9-C4	-7.58	1.31	1.38
1	N	1529	G	C2-N3	7.58	1.38	1.32
1	N	677	U	N3-C4	7.57	1.45	1.38
1	N	643	C	N3-C4	7.57	1.39	1.33
1	N	900	A	C6-N6	7.57	1.40	1.33
1	N	16	A	C8-N7	7.56	1.36	1.31
1	N	1492	A	N9-C4	7.56	1.42	1.37
1	N	705	G	N7-C5	-7.56	1.34	1.39
1	N	8	A	N9-C4	7.56	1.42	1.37
1	N	205	A	C5'-C4'	7.56	1.60	1.51
1	N	1522	U	N3-C4	7.56	1.45	1.38
1	N	203	G	N1-C2	7.55	1.43	1.37
1	N	1023	U	P-O5'	7.55	1.67	1.59
1	N	1156	G	C6-N1	7.55	1.44	1.39
1	N	202	G	N9-C4	-7.55	1.31	1.38
1	N	483	C	N3-C4	7.55	1.39	1.33
1	N	1289	A	N3-C4	-7.55	1.30	1.34
1	N	754	C	C4-N4	7.55	1.40	1.33
1	N	947	G	N1-C2	7.55	1.43	1.37
1	N	124	C	N1-C6	7.55	1.41	1.37
1	N	1163	A	C4'-C3'	-7.55	1.44	1.53
1	N	1074	G	C8-N7	-7.55	1.26	1.30
1	N	1388	C	N1-C6	7.55	1.41	1.37
1	N	1111	A	C8-N7	-7.54	1.26	1.31
1	N	1471	U	C5-C6	7.54	1.41	1.34
1	N	301	G	N1-C2	7.54	1.43	1.37
1	N	309	A	C6-N6	7.54	1.40	1.33
1	N	1042	A	C6-N6	7.54	1.40	1.33
1	N	853	C	C2-N3	-7.54	1.29	1.35
1	N	147	G	C2'-C1'	-7.54	1.45	1.53
1	N	1357	A	C8-N7	-7.54	1.26	1.31
1	N	305	G	N9-C8	-7.53	1.32	1.37
1	N	864	A	C6-N6	7.53	1.40	1.33
1	N	797	C	N1-C6	-7.53	1.32	1.37
1	N	960	U	C4-C5	7.53	1.50	1.43
1	N	988	G	C6-N1	7.53	1.44	1.39
1	N	343	U	C3'-C2'	-7.53	1.44	1.52
1	N	414	A	C8-N7	-7.52	1.26	1.31
1	N	455	G	C2-N3	7.52	1.38	1.32
1	N	475	C	N3-C4	7.52	1.39	1.33
1	N	361	G	C6-N1	7.52	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1020	G	C5-C4	7.52	1.43	1.38
1	N	1305	G	N7-C5	7.51	1.43	1.39
1	N	13	U	C4'-C3'	7.51	1.61	1.53
1	N	1214	C	P-O5'	-7.51	1.52	1.59
1	N	420	U	C2-N3	7.51	1.43	1.37
1	N	764	C	C2-N3	7.51	1.41	1.35
1	N	510	A	P-O5'	-7.51	1.52	1.59
1	N	397	A	C6-N1	7.50	1.40	1.35
1	N	228	A	P-O5'	-7.50	1.52	1.59
1	N	484	G	C2-N2	7.50	1.42	1.34
1	N	826	C	N3-C4	7.50	1.39	1.33
1	N	1299	A	C6-N6	-7.50	1.27	1.33
1	N	674	G	C8-N7	-7.49	1.26	1.30
1	N	784	A	C6-N1	7.49	1.40	1.35
1	N	1166	G	P-O5'	-7.49	1.52	1.59
1	N	207	C	C4-N4	7.49	1.40	1.33
1	N	748	G	N1-C2	7.49	1.43	1.37
1	N	1323	G	C2-N3	7.48	1.38	1.32
1	N	1436	U	C5-C6	7.48	1.40	1.34
1	N	1340	A	P-O5'	-7.48	1.52	1.59
1	N	105	G	C2-N3	-7.48	1.26	1.32
1	N	501	C	P-O5'	-7.48	1.52	1.59
1	N	18	C	N1-C2	-7.47	1.32	1.40
1	N	1044	A	C6-N6	7.47	1.40	1.33
1	N	163	C	O3'-P	-7.47	1.52	1.61
1	N	244	U	C5'-C4'	7.47	1.60	1.51
1	N	1035	A	C6-N1	7.47	1.40	1.35
1	N	1215	G	N1-C2	7.47	1.43	1.37
1	N	130	A	C5-C6	-7.47	1.34	1.41
1	N	134	G	O4'-C1'	7.47	1.51	1.41
1	N	660	C	C2'-C1'	-7.47	1.45	1.53
1	N	701	U	N3-C4	7.46	1.45	1.38
1	N	1226	C	N3-C4	7.46	1.39	1.33
1	N	466	A	C8-N7	-7.46	1.26	1.31
1	N	630	A	C5-C4	7.46	1.44	1.38
1	N	1333	A	C5-C4	7.46	1.44	1.38
1	N	11	G	P-O5'	-7.46	1.52	1.59
1	N	318	G	C5-C4	-7.46	1.33	1.38
1	N	783	C	N3-C4	7.46	1.39	1.33
1	N	138	G	C4'-C3'	7.46	1.61	1.53
1	N	630	A	N7-C5	-7.46	1.34	1.39
1	N	786	G	N7-C5	-7.46	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1180	A	C5'-C4'	7.46	1.60	1.51
1	N	1199	U	C2-N3	7.46	1.43	1.37
1	N	1229	A	C6-N6	7.46	1.40	1.33
1	N	1379	G	C8-N7	7.46	1.35	1.30
1	N	490	C	N1-C6	7.45	1.41	1.37
1	N	1149	C	N3-C4	7.45	1.39	1.33
1	N	1385	G	P-O5'	-7.45	1.52	1.59
1	N	1049	U	C2'-C1'	-7.45	1.45	1.53
1	N	93	U	C2-N3	7.45	1.43	1.37
1	N	100	G	N1-C2	7.45	1.43	1.37
1	N	81	A	O4'-C1'	-7.45	1.31	1.41
1	N	179	A	C5'-C4'	-7.45	1.42	1.51
1	N	1460	C	C4-N4	7.45	1.40	1.33
1	N	833	G	N7-C5	-7.45	1.34	1.39
1	N	212	G	N1-C2	7.45	1.43	1.37
1	N	66	A	C5-C4	7.44	1.44	1.38
1	N	1005	A	C2'-C1'	-7.44	1.45	1.53
1	N	1019	A	C6-N6	7.44	1.40	1.33
1	N	811	C	C2'-C1'	-7.44	1.45	1.53
1	N	427	U	O4'-C1'	7.44	1.51	1.41
1	N	763	G	C6-N1	7.44	1.44	1.39
1	N	376	G	N9-C4	-7.43	1.32	1.38
1	N	916	U	C2'-C1'	-7.43	1.45	1.53
1	N	1497	G	C2'-C1'	-7.43	1.45	1.53
1	N	741	G	C2-N3	7.43	1.38	1.32
1	N	1444	U	C2-N3	7.43	1.43	1.37
1	N	499	A	C6-N6	7.43	1.39	1.33
1	N	719	C	C2-N3	7.43	1.41	1.35
1	N	1339	A	C6-N1	7.42	1.40	1.35
1	N	294	U	C2-N3	7.42	1.43	1.37
1	N	435	A	C5-C4	7.42	1.44	1.38
1	N	959	A	N3-C4	-7.42	1.30	1.34
1	N	1087	G	N1-C2	7.42	1.43	1.37
1	N	27	G	C5-C4	7.42	1.43	1.38
1	N	690	G	C2-N3	7.42	1.38	1.32
1	N	220	G	C4'-O4'	7.42	1.55	1.45
1	N	467	U	C4'-C3'	7.42	1.61	1.53
1	N	522	C	N1-C2	-7.42	1.32	1.40
1	N	899	C	C2'-C1'	-7.42	1.45	1.53
1	N	71	A	N9-C4	7.41	1.42	1.37
1	N	48	C	C4'-C3'	7.41	1.61	1.53
1	N	918	A	N7-C5	-7.41	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	779	C	C4'-C3'	-7.41	1.45	1.53
1	N	1135	U	C4'-C3'	-7.41	1.45	1.53
1	N	234	C	C4-N4	7.40	1.40	1.33
1	N	882	C	N1-C6	7.40	1.41	1.37
1	N	820	U	N3-C4	7.40	1.45	1.38
1	N	1175	G	N1-C2	7.40	1.43	1.37
1	N	1483	A	N7-C5	-7.40	1.34	1.39
1	N	164	G	C2-N3	7.40	1.38	1.32
1	N	168	G	N1-C2	7.40	1.43	1.37
1	N	502	A	N1-C2	-7.40	1.27	1.34
1	N	139	A	N9-C4	7.40	1.42	1.37
1	N	276	G	N1-C2	7.40	1.43	1.37
1	N	829	G	C6-N1	7.39	1.44	1.39
1	N	768	A	C5'-C4'	7.39	1.60	1.51
1	N	141	G	C6-N1	7.39	1.44	1.39
1	N	753	A	C6-N1	7.39	1.40	1.35
1	N	433	G	C5-C4	-7.39	1.33	1.38
1	N	952	U	C2-N3	-7.39	1.32	1.37
1	N	1065	U	C2'-C1'	-7.39	1.45	1.53
1	N	680	C	C2'-C1'	-7.39	1.45	1.53
1	N	227	G	C8-N7	-7.38	1.26	1.30
1	N	83	C	N1-C6	7.38	1.41	1.37
1	N	1098	C	C4'-C3'	7.38	1.61	1.53
1	N	1261	A	N9-C4	7.38	1.42	1.37
1	N	89	U	N1-C2	7.38	1.45	1.38
1	N	1166	G	C2'-C1'	-7.38	1.45	1.53
1	N	243	A	C2-N3	7.38	1.40	1.33
1	N	670	G	N9-C8	7.38	1.43	1.37
1	N	1505	G	C6-N1	7.38	1.44	1.39
1	N	941	G	C6-N1	7.37	1.44	1.39
1	N	1180	A	N9-C4	-7.37	1.33	1.37
1	N	1242	G	C6-N1	7.37	1.44	1.39
1	N	1407	C	N1-C6	7.37	1.41	1.37
1	N	1457	G	C2-N3	7.37	1.38	1.32
1	N	62	U	O3'-P	-7.37	1.52	1.61
1	N	649	A	C5'-C4'	7.36	1.60	1.51
1	N	1213	A	C6-N1	7.36	1.40	1.35
1	N	750	C	C4-N4	7.36	1.40	1.33
1	N	955	U	C2'-C1'	-7.36	1.45	1.53
1	N	1382	C	C5-C6	-7.36	1.28	1.34
1	N	585	G	N3-C4	-7.36	1.30	1.35
1	N	569	C	O3'-P	-7.35	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1303	C	C2'-C1'	-7.35	1.45	1.53
1	N	87	C	C4-N4	7.35	1.40	1.33
1	N	746	A	N7-C5	-7.35	1.34	1.39
1	N	1369	C	N1-C6	-7.35	1.32	1.37
1	N	1534	A	C5-C6	7.35	1.47	1.41
1	N	109	A	C6-N6	7.35	1.39	1.33
1	N	1432	G	N3-C4	-7.35	1.30	1.35
1	N	136	C	P-O5'	-7.35	1.52	1.59
1	N	835	U	C2'-C1'	7.35	1.61	1.53
1	N	533	A	O3'-P	-7.34	1.52	1.61
1	N	696	A	C6-N1	7.34	1.40	1.35
1	N	943	U	C2-N3	7.34	1.42	1.37
1	N	1119	C	C2-N3	7.34	1.41	1.35
1	N	166	U	C1'-N1	7.34	1.59	1.48
1	N	851	G	C5-C6	-7.34	1.35	1.42
1	N	1106	G	N9-C4	-7.34	1.32	1.38
1	N	693	G	C2'-C1'	-7.33	1.45	1.53
1	N	13	U	C2'-C1'	-7.33	1.45	1.53
1	N	962	C	C5'-C4'	7.33	1.60	1.51
1	N	576	C	C4-N4	7.33	1.40	1.33
1	N	668	G	N9-C4	-7.33	1.32	1.38
1	N	1260	G	N1-C2	7.33	1.43	1.37
1	N	1242	G	C2-N3	7.32	1.38	1.32
1	N	1144	G	O3'-P	-7.32	1.52	1.61
1	N	1260	G	C6-N1	7.32	1.44	1.39
1	N	186	C	C1'-N1	7.32	1.59	1.48
1	N	19	A	C2'-C1'	-7.32	1.45	1.53
1	N	527	G	C5-C4	7.32	1.43	1.38
1	N	1097	C	C2'-C1'	-7.32	1.45	1.53
1	N	408	A	C8-N7	-7.32	1.26	1.31
1	N	444	G	C2-N2	7.32	1.41	1.34
1	N	1153	G	P-O5'	-7.31	1.52	1.59
1	N	1384	C	C4-N4	7.31	1.40	1.33
1	N	199	A	C6-N6	7.31	1.39	1.33
1	N	1521	C	C4'-C3'	-7.31	1.45	1.53
1	N	513	C	O3'-P	-7.31	1.52	1.61
1	N	814	A	C5-C6	-7.31	1.34	1.41
1	N	878	A	C5-C4	-7.31	1.33	1.38
1	N	114	U	C2-N3	7.31	1.42	1.37
1	N	256	U	N3-C4	7.31	1.45	1.38
1	N	1238	A	C5-C4	-7.31	1.33	1.38
1	N	370	C	C4-C5	7.30	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	553	A	C6-N1	7.30	1.40	1.35
1	N	930	C	C5'-C4'	7.30	1.60	1.51
1	N	1431	A	C6-N6	7.30	1.39	1.33
1	N	772	U	N1-C2	7.30	1.45	1.38
1	N	964	A	C6-N1	7.30	1.40	1.35
1	N	1006	G	N9-C4	-7.30	1.32	1.38
1	N	50	A	N9-C4	7.30	1.42	1.37
1	N	116	A	C2-N3	7.30	1.40	1.33
1	N	56	U	C4-C5	7.29	1.50	1.43
1	N	353	A	C4'-C3'	7.29	1.61	1.53
1	N	1218	C	C2'-C1'	-7.29	1.45	1.53
1	N	64	G	C4'-C3'	7.29	1.61	1.53
1	N	315	A	N3-C4	7.29	1.39	1.34
1	N	1026	G	C2-N3	7.29	1.38	1.32
1	N	1079	G	C5'-C4'	7.29	1.60	1.51
1	N	100	G	C2-N2	7.29	1.41	1.34
1	N	1523	G	C4'-C3'	-7.29	1.45	1.53
1	N	46	G	N9-C4	7.28	1.43	1.38
1	N	1188	A	C8-N7	-7.28	1.26	1.31
1	N	1258	G	N3-C4	-7.28	1.30	1.35
1	N	145	G	N3-C4	7.28	1.40	1.35
1	N	149	A	C6-N1	7.28	1.40	1.35
1	N	181	A	C3'-C2'	7.28	1.60	1.52
1	N	296	U	C4'-C3'	-7.28	1.45	1.53
1	N	427	U	C4-C5	-7.28	1.36	1.43
1	N	660	C	P-O5'	-7.28	1.52	1.59
1	N	929	G	P-O5'	-7.28	1.52	1.59
1	N	1108	G	N3-C4	-7.28	1.30	1.35
1	N	332	G	N7-C5	-7.27	1.34	1.39
1	N	803	G	C6-N1	7.27	1.44	1.39
1	N	86	G	C2-N3	7.27	1.38	1.32
1	N	765	G	N9-C8	-7.27	1.32	1.37
1	N	459	A	C5'-C4'	7.27	1.60	1.51
1	N	1172	C	C2-N3	7.27	1.41	1.35
1	N	938	A	C8-N7	-7.27	1.26	1.31
1	N	1374	A	C8-N7	-7.27	1.26	1.31
1	N	733	G	P-O5'	-7.27	1.52	1.59
1	N	975	A	N9-C4	7.27	1.42	1.37
1	N	563	A	C8-N7	7.26	1.36	1.31
1	N	120	A	N9-C8	7.26	1.43	1.37
1	N	267	C	N1-C2	7.26	1.47	1.40
1	N	815	A	N9-C4	7.26	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	57	G	N9-C4	-7.26	1.32	1.38
1	N	633	G	C4'-C3'	7.26	1.61	1.53
1	N	710	G	C2-N2	7.26	1.41	1.34
1	N	1007	U	N1-C6	7.26	1.44	1.38
1	N	1041	G	N1-C2	7.26	1.43	1.37
1	N	1266	G	C8-N7	-7.26	1.26	1.30
1	N	1349	A	C2-N3	7.26	1.40	1.33
1	N	987	G	C5'-C4'	7.25	1.60	1.51
1	N	957	U	C2-N3	7.25	1.42	1.37
1	N	1156	G	C2-N3	7.25	1.38	1.32
1	N	1205	U	C4'-O4'	7.25	1.54	1.45
1	N	1452	C	N3-C4	7.25	1.39	1.33
1	N	671	G	C5-C4	7.25	1.43	1.38
1	N	1398	A	C5-C4	7.25	1.43	1.38
1	N	243	A	N7-C5	-7.24	1.34	1.39
1	N	458	U	C1'-N1	7.24	1.59	1.48
1	N	784	A	N1-C2	-7.24	1.27	1.34
1	N	1127	G	C4'-O4'	7.24	1.54	1.45
1	N	548	G	C2-N3	7.24	1.38	1.32
1	N	543	U	N1-C2	7.24	1.45	1.38
1	N	876	C	P-O5'	-7.24	1.52	1.59
1	N	1043	G	P-O5'	-7.24	1.52	1.59
1	N	1342	C	C3'-C2'	7.24	1.60	1.52
1	N	1521	C	N3-C4	7.24	1.39	1.33
1	N	533	A	N9-C4	7.23	1.42	1.37
1	N	886	G	N7-C5	-7.23	1.34	1.39
1	N	1273	C	C2-N3	7.23	1.41	1.35
1	N	1049	U	C3'-C2'	7.23	1.60	1.52
1	N	1086	U	C2-N3	7.23	1.42	1.37
1	N	1365	G	N1-C2	7.23	1.43	1.37
1	N	1426	G	C2-N3	7.23	1.38	1.32
1	N	908	A	C3'-O3'	7.23	1.52	1.42
1	N	108	G	C2'-C1'	7.23	1.61	1.53
1	N	312	C	N3-C4	7.23	1.39	1.33
1	N	736	C	O4'-C1'	7.23	1.51	1.41
1	N	126	G	C5-C6	-7.23	1.35	1.42
1	N	513	C	C4-N4	7.23	1.40	1.33
1	N	1093	A	C6-N1	7.22	1.40	1.35
1	N	1248	A	C6-N6	7.22	1.39	1.33
1	N	1435	G	N7-C5	-7.22	1.34	1.39
1	N	454	G	N7-C5	-7.22	1.34	1.39
1	N	1361	G	C6-N1	7.22	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	386	C	N3-C4	7.22	1.39	1.33
1	N	356	A	N7-C5	-7.21	1.34	1.39
1	N	959	A	C6-N6	7.21	1.39	1.33
1	N	1047	G	C5'-C4'	7.21	1.60	1.51
1	N	1048	G	C2-N2	7.21	1.41	1.34
1	N	1084	G	C2-N2	7.21	1.41	1.34
1	N	1145	A	N7-C5	-7.21	1.34	1.39
1	N	1410	A	N9-C4	-7.21	1.33	1.37
1	N	821	G	N9-C8	7.21	1.42	1.37
1	N	1170	A	O3'-P	-7.21	1.52	1.61
1	N	456	A	C5-C6	-7.21	1.34	1.41
1	N	1222	G	N7-C5	-7.21	1.34	1.39
1	N	1273	C	C4-N4	7.21	1.40	1.33
1	N	34	C	N1-C6	-7.21	1.32	1.37
1	N	211	G	N3-C4	-7.21	1.30	1.35
1	N	877	G	N9-C8	-7.21	1.32	1.37
1	N	474	G	C5-C4	-7.20	1.33	1.38
1	N	729	A	C6-N1	7.20	1.40	1.35
1	N	795	C	C5'-C4'	7.20	1.59	1.51
1	N	735	C	C4-C5	7.20	1.48	1.43
1	N	980	C	C4-N4	7.20	1.40	1.33
1	N	388	G	C2-N3	7.20	1.38	1.32
1	N	1329	A	C6-N1	7.20	1.40	1.35
1	N	251	G	C1'-N9	-7.20	1.36	1.46
1	N	890	G	O4'-C1'	-7.20	1.32	1.41
1	N	1111	A	C6-N1	7.20	1.40	1.35
1	N	1089	G	N7-C5	-7.19	1.34	1.39
1	N	267	C	C4'-C3'	7.19	1.61	1.53
1	N	19	A	C8-N7	-7.19	1.26	1.31
1	N	606	G	C5'-C4'	7.19	1.59	1.51
1	N	632	U	C4-C5	7.19	1.50	1.43
1	N	787	A	N7-C5	-7.19	1.34	1.39
1	N	1412	C	C4-C5	7.19	1.48	1.43
1	N	261	U	C5'-C4'	7.19	1.59	1.51
1	N	1246	A	C6-N6	7.19	1.39	1.33
1	N	1412	C	C4'-O4'	-7.19	1.36	1.45
1	N	61	G	O3'-P	-7.18	1.52	1.61
1	N	613	C	C2-N3	7.18	1.41	1.35
1	N	1326	U	P-O5'	-7.18	1.52	1.59
1	N	1186	G	C2-N3	7.18	1.38	1.32
1	N	1275	A	C5-C6	-7.18	1.34	1.41
1	N	303	A	C8-N7	7.18	1.36	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1256	A	N1-C2	7.18	1.40	1.34
1	N	1483	A	C2'-C1'	-7.18	1.45	1.53
1	N	622	A	N7-C5	-7.17	1.34	1.39
1	N	798	U	C2-N3	7.17	1.42	1.37
1	N	783	C	C4-N4	7.17	1.40	1.33
1	N	1512	U	C2'-C1'	-7.17	1.45	1.53
1	N	725	G	P-O5'	-7.16	1.52	1.59
1	N	1133	G	N7-C5	-7.16	1.34	1.39
1	N	872	A	C5-C4	7.16	1.43	1.38
1	N	938	A	P-O5'	-7.16	1.52	1.59
1	N	166	U	P-O5'	-7.16	1.52	1.59
1	N	1429	A	C5-C4	7.16	1.43	1.38
1	N	148	G	N9-C4	7.16	1.43	1.38
1	N	478	A	C6-N6	7.16	1.39	1.33
1	N	996	A	C6-N1	7.16	1.40	1.35
1	N	523	A	C2-N3	7.15	1.40	1.33
1	N	1427	C	O3'-P	-7.15	1.52	1.61
1	N	1476	A	C5-C6	-7.15	1.34	1.41
1	N	87	C	C2-N3	7.15	1.41	1.35
1	N	412	A	P-O5'	7.15	1.66	1.59
1	N	408	A	N9-C4	-7.14	1.33	1.37
1	N	736	C	N3-C4	7.14	1.39	1.33
1	N	1168	U	N1-C2	7.14	1.45	1.38
1	N	425	G	C2'-C1'	-7.14	1.45	1.53
1	N	1115	U	P-O5'	-7.14	1.52	1.59
1	N	1138	G	N1-C2	7.14	1.43	1.37
1	N	1337	G	C2'-C1'	-7.14	1.45	1.53
1	N	57	G	N1-C2	7.13	1.43	1.37
1	N	119	A	C4'-C3'	7.13	1.60	1.53
1	N	550	G	C2-N3	7.13	1.38	1.32
1	N	766	A	C6-N1	7.13	1.40	1.35
1	N	976	G	N7-C5	-7.13	1.34	1.39
1	N	1071	C	N3-C4	7.13	1.39	1.33
1	N	1438	G	C2-N2	7.13	1.41	1.34
1	N	1300	G	C6-N1	7.13	1.44	1.39
1	N	857	C	C3'-C2'	-7.13	1.45	1.52
1	N	1344	C	C4-N4	7.13	1.40	1.33
1	N	26	A	C5-C4	7.12	1.43	1.38
1	N	1172	C	N3-C4	7.12	1.39	1.33
1	N	1447	A	C5-C4	-7.12	1.33	1.38
1	N	1312	G	C2'-C1'	-7.12	1.45	1.53
1	N	265	G	C5-C6	-7.12	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	630	A	N3-C4	-7.12	1.30	1.34
1	N	663	A	N3-C4	-7.12	1.30	1.34
1	N	806	C	N1-C2	-7.12	1.33	1.40
1	N	842	U	N3-C4	7.12	1.44	1.38
1	N	900	A	N9-C8	-7.12	1.32	1.37
1	N	1208	C	N1-C6	7.12	1.41	1.37
1	N	1423	G	C2-N3	7.12	1.38	1.32
1	N	230	G	N7-C5	-7.11	1.34	1.39
1	N	954	G	C5-C4	7.11	1.43	1.38
1	N	1328	C	N3-C4	7.11	1.39	1.33
1	N	1415	G	O4'-C1'	7.11	1.50	1.41
1	N	477	C	N3-C4	7.11	1.39	1.33
1	N	529	G	C8-N7	-7.11	1.26	1.30
1	N	717	U	O3'-P	-7.11	1.52	1.61
1	N	1233	G	C5-C4	-7.11	1.33	1.38
1	N	1002	G	C6-N1	7.11	1.44	1.39
1	N	1264	U	N3-C4	7.11	1.44	1.38
1	N	650	G	C6-N1	7.10	1.44	1.39
1	N	1088	G	P-O5'	-7.10	1.52	1.59
1	N	1105	A	C6-N6	7.10	1.39	1.33
1	N	14	U	C5-C6	7.10	1.40	1.34
1	N	452	A	N9-C4	-7.10	1.33	1.37
1	N	534	U	C2'-C1'	-7.10	1.45	1.53
1	N	1435	G	C6-N1	7.10	1.44	1.39
1	N	602	A	N9-C8	7.09	1.43	1.37
1	N	193	C	C2-N3	7.09	1.41	1.35
1	N	798	U	N3-C4	7.09	1.44	1.38
1	N	1356	G	C2-N3	7.09	1.38	1.32
1	N	1406	U	O4'-C1'	7.09	1.50	1.41
1	N	4	U	C2'-C1'	-7.09	1.45	1.53
1	N	666	G	N1-C2	7.09	1.43	1.37
1	N	978	A	C5-C4	7.09	1.43	1.38
1	N	1368	A	N3-C4	-7.09	1.30	1.34
1	N	440	C	P-O5'	-7.09	1.52	1.59
1	N	48	C	N3-C4	7.09	1.39	1.33
1	N	38	G	C4'-O4'	7.09	1.54	1.45
1	N	1524	C	C4-C5	7.09	1.48	1.43
1	N	879	C	P-O5'	7.08	1.66	1.59
1	N	818	G	C2-N3	7.08	1.38	1.32
1	N	1428	A	N9-C4	-7.08	1.33	1.37
1	N	647	C	N1-C6	7.08	1.41	1.37
1	N	684	U	C4-C5	7.08	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	522	C	N1-C6	-7.08	1.32	1.37
1	N	1377	A	N1-C2	-7.08	1.27	1.34
1	N	1508	A	C6-N1	7.08	1.40	1.35
1	N	564	C	O4'-C1'	7.07	1.50	1.41
1	N	833	G	C3'-O3'	7.07	1.52	1.42
1	N	83	C	O3'-P	-7.07	1.52	1.61
1	N	319	G	C6-N1	7.07	1.44	1.39
1	N	506	G	C5'-C4'	7.07	1.59	1.51
1	N	65	A	N9-C8	7.07	1.43	1.37
1	N	398	U	N1-C6	-7.07	1.31	1.38
1	N	1022	A	C2'-C1'	-7.07	1.45	1.53
1	N	114	U	P-O5'	-7.07	1.52	1.59
1	N	817	C	O3'-P	-7.07	1.52	1.61
1	N	648	A	P-O5'	-7.06	1.52	1.59
1	N	553	A	N9-C4	-7.06	1.33	1.37
1	N	1033	G	N7-C5	-7.06	1.35	1.39
1	N	581	G	C2-N2	7.06	1.41	1.34
1	N	650	G	C2'-C1'	7.06	1.61	1.53
1	N	1019	A	C3'-C2'	7.06	1.60	1.52
1	N	254	G	C6-N1	7.06	1.44	1.39
1	N	740	U	C2'-C1'	-7.06	1.45	1.53
1	N	883	C	C2-N3	-7.05	1.30	1.35
1	N	1225	A	C3'-C2'	7.05	1.60	1.52
1	N	1143	G	C3'-O3'	7.05	1.52	1.42
1	N	642	A	N7-C5	-7.05	1.35	1.39
1	N	1258	G	C2'-C1'	-7.05	1.45	1.53
1	N	1378	C	O3'-P	-7.05	1.52	1.61
1	N	58	C	N3-C4	7.05	1.38	1.33
1	N	257	G	N7-C5	-7.05	1.35	1.39
1	N	524	G	N9-C8	7.04	1.42	1.37
1	N	530	G	N9-C4	7.04	1.43	1.38
1	N	300	A	N3-C4	-7.04	1.30	1.34
1	N	917	G	N1-C2	7.04	1.43	1.37
1	N	8	A	N9-C8	-7.04	1.32	1.37
1	N	570	G	C2'-C1'	-7.04	1.45	1.53
1	N	1401	G	C2-N3	7.04	1.38	1.32
1	N	444	G	O4'-C1'	7.04	1.50	1.41
1	N	1451	U	C4'-C3'	7.04	1.60	1.53
1	N	314	C	C4'-O4'	7.03	1.54	1.45
1	N	355	C	C4-N4	7.03	1.40	1.33
1	N	1323	G	N1-C2	7.03	1.43	1.37
1	N	223	A	C6-N6	7.03	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1345	U	C4-C5	7.03	1.49	1.43
1	N	241	G	C5'-C4'	-7.03	1.43	1.51
1	N	898	G	C2-N2	-7.03	1.27	1.34
1	N	911	U	C2'-C1'	-7.03	1.45	1.53
1	N	1169	A	C8-N7	-7.03	1.26	1.31
1	N	1437	A	C2'-C1'	-7.03	1.45	1.53
1	N	134	G	C3'-C2'	-7.03	1.45	1.52
1	N	276	G	N3-C4	-7.02	1.30	1.35
1	N	984	C	C3'-O3'	7.02	1.51	1.42
1	N	1201	A	C4'-C3'	7.02	1.60	1.53
1	N	491	G	C6-N1	7.02	1.44	1.39
1	N	138	G	N9-C4	-7.02	1.32	1.38
1	N	344	A	C8-N7	-7.02	1.26	1.31
1	N	430	A	N7-C5	-7.02	1.35	1.39
1	N	24	U	O3'-P	-7.02	1.52	1.61
1	N	964	A	N9-C4	-7.01	1.33	1.37
1	N	392	C	C2-N3	7.01	1.41	1.35
1	N	62	U	N3-C4	7.01	1.44	1.38
1	N	479	U	C2'-C1'	-7.01	1.45	1.53
1	N	1281	C	C4-N4	7.01	1.40	1.33
1	N	144	G	N3-C4	7.01	1.40	1.35
1	N	858	G	C5-C4	7.01	1.43	1.38
1	N	1175	G	C5-C4	7.01	1.43	1.38
1	N	836	G	N1-C2	7.01	1.43	1.37
1	N	1109	C	N1-C6	7.01	1.41	1.37
1	N	447	G	N1-C2	7.01	1.43	1.37
1	N	1270	G	C6-N1	7.01	1.44	1.39
1	N	350	G	N3-C4	-7.00	1.30	1.35
1	N	36	C	C2'-C1'	-7.00	1.45	1.53
1	N	1200	C	C4'-C3'	7.00	1.60	1.53
1	N	714	G	N9-C4	7.00	1.43	1.38
1	N	723	U	C2-N3	7.00	1.42	1.37
1	N	771	G	O3'-P	-7.00	1.52	1.61
1	N	1086	U	C4'-C3'	7.00	1.60	1.53
1	N	1131	G	N9-C8	7.00	1.42	1.37
1	N	1003	G	N9-C4	-7.00	1.32	1.38
1	N	1415	G	C2-N3	7.00	1.38	1.32
1	N	7	A	C8-N7	-7.00	1.26	1.31
1	N	1515	G	C2-N3	7.00	1.38	1.32
1	N	802	A	N9-C4	7.00	1.42	1.37
1	N	1500	A	N7-C5	-7.00	1.35	1.39
1	N	577	G	N7-C5	-6.99	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1365	G	N9-C8	-6.99	1.32	1.37
1	N	153	C	O3'-P	-6.99	1.52	1.61
1	N	210	C	N1-C6	6.99	1.41	1.37
1	N	462	G	C3'-C2'	-6.99	1.45	1.52
1	N	1224	U	C4'-C3'	6.99	1.60	1.53
1	N	132	C	N1-C6	6.99	1.41	1.37
1	N	407	U	C2-N3	6.99	1.42	1.37
1	N	327	A	N9-C4	6.98	1.42	1.37
1	N	115	G	N3-C4	6.98	1.40	1.35
1	N	327	A	C4'-C3'	6.98	1.60	1.53
1	N	501	C	C2-N3	6.98	1.41	1.35
1	N	545	C	C1'-N1	6.98	1.59	1.48
1	N	669	G	O3'-P	-6.98	1.52	1.61
1	N	887	G	O3'-P	-6.98	1.52	1.61
1	N	1161	C	N3-C4	6.98	1.38	1.33
1	N	1511	G	C5-C4	6.98	1.43	1.38
1	N	268	U	P-O5'	-6.98	1.52	1.59
1	N	382	A	C4'-O4'	6.98	1.54	1.45
1	N	971	G	C5'-C4'	6.98	1.59	1.51
1	N	595	A	C6-N6	6.98	1.39	1.33
1	N	171	A	C2'-C1'	-6.98	1.45	1.53
1	N	294	U	C4-C5	6.98	1.49	1.43
1	N	551	U	C3'-O3'	6.98	1.51	1.42
1	N	191	G	C2'-C1'	-6.98	1.45	1.53
1	N	1153	G	C6-O6	-6.98	1.17	1.24
1	N	160	A	C3'-C2'	-6.97	1.45	1.52
1	N	475	C	N1-C6	-6.97	1.32	1.37
1	N	1300	G	N9-C8	6.97	1.42	1.37
1	N	393	A	C6-N1	6.97	1.40	1.35
1	N	1447	A	O3'-P	-6.97	1.52	1.61
1	N	953	G	C2'-C1'	6.96	1.61	1.53
1	N	1049	U	C4-O4	6.96	1.29	1.23
1	N	1394	A	C5'-C4'	6.96	1.59	1.51
1	N	384	G	C2'-C1'	-6.96	1.45	1.53
1	N	902	G	C2'-C1'	-6.96	1.45	1.53
1	N	1261	A	C6-N6	6.96	1.39	1.33
1	N	82	G	C5-C4	6.96	1.43	1.38
1	N	297	G	C8-N7	6.96	1.35	1.30
1	N	328	C	C4-N4	6.96	1.40	1.33
1	N	567	G	C2-N3	6.96	1.38	1.32
1	N	787	A	C4'-C3'	-6.96	1.45	1.53
1	N	1016	A	C6-N6	6.96	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	236	A	C2'-C1'	-6.96	1.45	1.53
1	N	327	A	C2-N3	6.96	1.39	1.33
1	N	1025	U	C2-N3	6.95	1.42	1.37
1	N	1469	C	C2-N3	6.95	1.41	1.35
1	N	338	A	N7-C5	-6.95	1.35	1.39
1	N	864	A	N7-C5	-6.95	1.35	1.39
1	N	91	U	C5'-C4'	6.95	1.59	1.51
1	N	904	U	C2'-C1'	-6.95	1.45	1.53
1	N	1210	C	C5-C6	-6.95	1.28	1.34
1	N	201	G	N3-C4	-6.94	1.30	1.35
1	N	1276	G	C6-O6	6.94	1.30	1.24
1	N	529	G	N9-C4	-6.94	1.32	1.38
1	N	937	A	C8-N7	-6.94	1.26	1.31
1	N	1001	C	N3-C4	6.94	1.38	1.33
1	N	560	A	C8-N7	-6.93	1.26	1.31
1	N	1005	A	O3'-P	-6.93	1.52	1.61
1	N	1056	U	C2-N3	6.93	1.42	1.37
1	N	1284	C	N1-C6	6.93	1.41	1.37
1	N	1391	U	C4-C5	6.93	1.49	1.43
1	N	213	G	C6-N1	6.93	1.44	1.39
1	N	302	G	N9-C8	-6.93	1.33	1.37
1	N	1371	G	N9-C4	-6.92	1.32	1.38
1	N	1387	G	C5-C4	-6.92	1.33	1.38
1	N	136	C	C2-N3	-6.92	1.30	1.35
1	N	726	C	C2-N3	6.92	1.41	1.35
1	N	785	G	C2-N2	6.92	1.41	1.34
1	N	1099	G	N1-C2	6.92	1.43	1.37
1	N	471	U	C4-O4	6.92	1.29	1.23
1	N	694	A	C3'-C2'	-6.92	1.45	1.52
1	N	1020	G	C2-N3	6.92	1.38	1.32
1	N	1073	U	C4-C5	6.92	1.49	1.43
1	N	379	C	C5-C6	6.92	1.39	1.34
1	N	575	G	O3'-P	-6.91	1.52	1.61
1	N	728	A	C6-N1	6.91	1.40	1.35
1	N	1208	C	N3-C4	6.91	1.38	1.33
1	N	165	G	C5-C6	-6.91	1.35	1.42
1	N	542	G	C5-C4	-6.91	1.33	1.38
1	N	717	U	C2-N3	6.91	1.42	1.37
1	N	1405	G	N1-C2	6.91	1.43	1.37
1	N	1534	A	C2-N3	6.91	1.39	1.33
1	N	1318	A	C6-N1	-6.91	1.30	1.35
1	N	343	U	C4'-C3'	6.91	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	106	C	C2-N3	6.91	1.41	1.35
1	N	255	G	N1-C2	6.91	1.43	1.37
1	N	633	G	C2'-C1'	-6.91	1.45	1.53
1	N	1516	G	N9-C4	-6.90	1.32	1.38
1	N	341	C	N3-C4	6.90	1.38	1.33
1	N	873	A	N3-C4	-6.90	1.30	1.34
1	N	976	G	C2-N3	6.90	1.38	1.32
1	N	1271	A	O3'-P	-6.90	1.52	1.61
1	N	697	U	P-O5'	-6.90	1.52	1.59
1	N	1426	G	N3-C4	-6.90	1.30	1.35
1	N	1473	G	N7-C5	-6.90	1.35	1.39
1	N	840	C	C3'-C2'	-6.90	1.45	1.52
1	N	1022	A	N7-C5	-6.90	1.35	1.39
1	N	127	G	C5-C6	-6.90	1.35	1.42
1	N	579	A	C6-N1	-6.90	1.30	1.35
1	N	82	G	N3-C4	-6.89	1.30	1.35
1	N	348	G	C2-N3	6.89	1.38	1.32
1	N	976	G	O3'-P	-6.89	1.52	1.61
1	N	1294	G	N9-C4	-6.89	1.32	1.38
1	N	169	C	C4-N4	6.89	1.40	1.33
1	N	679	C	C4-N4	6.89	1.40	1.33
1	N	1206	G	C5-C6	-6.89	1.35	1.42
1	N	223	A	C4'-C3'	6.89	1.60	1.53
1	N	374	A	C8-N7	6.89	1.36	1.31
1	N	1093	A	N9-C4	6.89	1.42	1.37
1	N	7	A	N9-C8	6.89	1.43	1.37
1	N	1482	G	P-O5'	-6.89	1.52	1.59
1	N	249	U	P-O5'	-6.88	1.52	1.59
1	N	106	C	O4'-C1'	6.88	1.50	1.41
1	N	659	U	N1-C2	6.88	1.44	1.38
1	N	951	G	C2-N3	6.88	1.38	1.32
1	N	249	U	N1-C6	6.88	1.44	1.38
1	N	760	G	N1-C2	6.88	1.43	1.37
1	N	1378	C	N1-C6	6.88	1.41	1.37
1	N	1047	G	C2-N2	6.88	1.41	1.34
1	N	1330	U	C2-N3	6.88	1.42	1.37
1	N	438	U	C5'-C4'	6.88	1.59	1.51
1	N	581	G	C8-N7	-6.88	1.26	1.30
1	N	290	C	C4-C5	-6.88	1.37	1.43
1	N	581	G	C2-N3	6.88	1.38	1.32
1	N	655	A	C6-N6	6.88	1.39	1.33
1	N	800	G	C3'-C2'	6.88	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1171	A	P-O5'	6.88	1.66	1.59
1	N	929	G	N9-C8	-6.88	1.33	1.37
1	N	828	U	N1-C2	-6.87	1.32	1.38
1	N	1409	C	C2-N3	6.87	1.41	1.35
1	N	63	C	C5-C6	-6.87	1.28	1.34
1	N	306	A	N9-C4	6.87	1.42	1.37
1	N	204	G	N1-C2	6.87	1.43	1.37
1	N	758	C	C4'-C3'	6.87	1.60	1.53
1	N	451	A	C6-N6	6.87	1.39	1.33
1	N	1067	A	C5-C4	6.87	1.43	1.38
1	N	1358	U	C1'-N1	6.87	1.59	1.48
1	N	138	G	C2'-C1'	-6.87	1.45	1.53
1	N	189	A	O5'-C5'	6.87	1.55	1.44
1	N	833	G	C5-C4	6.87	1.43	1.38
1	N	939	G	C6-N1	6.87	1.44	1.39
1	N	1467	C	N1-C6	6.86	1.41	1.37
1	N	1520	C	N1-C6	6.86	1.41	1.37
1	N	264	C	C5'-C4'	6.86	1.59	1.51
1	N	745	G	N1-C2	6.86	1.43	1.37
1	N	1401	G	C5-C6	-6.86	1.35	1.42
1	N	983	A	N9-C4	6.86	1.42	1.37
1	N	197	A	C1'-N9	-6.86	1.37	1.46
1	N	1395	C	O3'-P	-6.86	1.52	1.61
1	N	939	G	N9-C4	-6.86	1.32	1.38
1	N	1459	G	C2-N3	6.86	1.38	1.32
1	N	53	A	N9-C8	-6.85	1.32	1.37
1	N	637	C	C4-C5	-6.85	1.37	1.43
1	N	1520	C	C3'-C2'	-6.85	1.45	1.52
1	N	86	G	P-O5'	-6.85	1.52	1.59
1	N	493	A	N1-C2	-6.85	1.28	1.34
1	N	527	G	C5'-C4'	6.85	1.59	1.51
1	N	1332	A	C5-C6	6.85	1.47	1.41
1	N	1449	C	C2-N3	6.85	1.41	1.35
1	N	449	G	C3'-C2'	6.85	1.60	1.52
1	N	891	U	N1-C6	6.85	1.44	1.38
1	N	955	U	C1'-N1	6.85	1.59	1.48
1	N	783	C	C4-C5	6.85	1.48	1.43
1	N	354	G	C5-C6	-6.84	1.35	1.42
1	N	832	G	N1-C2	6.84	1.43	1.37
1	N	391	G	C3'-C2'	6.84	1.60	1.52
1	N	540	G	O4'-C1'	-6.84	1.32	1.41
1	N	1026	G	C2'-C1'	6.84	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	669	G	N9-C8	6.84	1.42	1.37
1	N	1511	G	N1-C2	6.84	1.43	1.37
1	N	354	G	N7-C5	-6.84	1.35	1.39
1	N	443	C	C5-C6	6.84	1.39	1.34
1	N	108	G	C6-N1	6.83	1.44	1.39
1	N	683	G	C5-C6	-6.83	1.35	1.42
1	N	454	G	C6-N1	6.83	1.44	1.39
1	N	1435	G	N9-C4	-6.83	1.32	1.38
1	N	1443	C	P-O5'	-6.83	1.52	1.59
1	N	28	A	C6-N1	6.83	1.40	1.35
1	N	668	G	C5-C6	-6.83	1.35	1.42
1	N	1461	G	C5-C4	6.83	1.43	1.38
1	N	289	G	N1-C2	6.83	1.43	1.37
1	N	814	A	C8-N7	6.83	1.36	1.31
1	N	1023	U	C4'-C3'	6.83	1.60	1.53
1	N	1231	G	N1-C2	6.83	1.43	1.37
1	N	1303	C	P-O5'	-6.83	1.52	1.59
1	N	239	U	N3-C4	6.83	1.44	1.38
1	N	1467	C	C2'-C1'	-6.83	1.45	1.53
1	N	262	A	N9-C8	6.83	1.43	1.37
1	N	838	G	O4'-C1'	6.83	1.50	1.41
1	N	8	A	C6-N1	6.83	1.40	1.35
1	N	549	C	N3-C4	6.83	1.38	1.33
1	N	807	A	N7-C5	-6.83	1.35	1.39
1	N	968	A	C4'-O4'	-6.83	1.36	1.45
1	N	1434	A	C2'-C1'	-6.83	1.45	1.53
1	N	535	A	N9-C4	6.82	1.42	1.37
1	N	1003	G	N1-C2	6.82	1.43	1.37
1	N	360	G	N1-C2	6.82	1.43	1.37
1	N	1219	A	N7-C5	-6.82	1.35	1.39
1	N	796	C	O4'-C1'	-6.82	1.32	1.41
1	N	1022	A	N9-C8	6.82	1.43	1.37
1	N	1064	G	C8-N7	-6.82	1.26	1.30
1	N	223	A	N9-C8	6.82	1.43	1.37
1	N	1292	G	P-O5'	-6.82	1.52	1.59
1	N	1461	G	N3-C4	6.81	1.40	1.35
1	N	200	G	C5-C6	-6.81	1.35	1.42
1	N	273	U	C4'-C3'	-6.81	1.45	1.53
1	N	274	A	P-O5'	-6.81	1.52	1.59
1	N	107	G	N1-C2	6.81	1.43	1.37
1	N	343	U	C5-C6	6.81	1.40	1.34
1	N	774	G	C2'-C1'	-6.81	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	927	G	C2-N3	6.81	1.38	1.32
1	N	957	U	N1-C6	-6.81	1.31	1.38
1	N	258	G	C4'-C3'	6.80	1.60	1.53
1	N	1258	G	N9-C8	6.80	1.42	1.37
1	N	1099	G	P-O5'	-6.80	1.52	1.59
1	N	966	G	C2-N2	6.80	1.41	1.34
1	N	189	A	C8-N7	-6.80	1.26	1.31
1	N	534	U	N1-C2	6.80	1.44	1.38
1	N	1260	G	C5'-C4'	6.80	1.59	1.51
1	N	1295	U	C5-C6	6.80	1.40	1.34
1	N	250	A	C6-N6	6.80	1.39	1.33
1	N	265	G	C2-N3	6.80	1.38	1.32
1	N	648	A	C6-N1	6.80	1.40	1.35
1	N	1272	G	O3'-P	-6.80	1.52	1.61
1	N	393	A	N7-C5	-6.79	1.35	1.39
1	N	12	U	C4-C5	6.79	1.49	1.43
1	N	26	A	C5'-C4'	6.79	1.59	1.51
1	N	495	A	C8-N7	6.79	1.36	1.31
1	N	739	C	C1'-N1	6.79	1.58	1.48
1	N	81	A	P-O5'	-6.79	1.52	1.59
1	N	601	G	C2-N3	6.79	1.38	1.32
1	N	828	U	P-O5'	-6.79	1.52	1.59
1	N	775	G	C5-C4	6.79	1.43	1.38
1	N	45	G	N9-C8	-6.79	1.33	1.37
1	N	516	U	N3-C4	6.79	1.44	1.38
1	N	959	A	N9-C4	6.79	1.42	1.37
1	N	1277	C	C2-N3	6.79	1.41	1.35
1	N	64	G	C6-N1	6.78	1.44	1.39
1	N	148	G	C3'-C2'	-6.78	1.45	1.52
1	N	159	G	N9-C4	-6.78	1.32	1.38
1	N	206	C	N1-C2	6.78	1.47	1.40
1	N	230	G	N3-C4	-6.78	1.30	1.35
1	N	1084	G	N7-C5	-6.78	1.35	1.39
1	N	1205	U	C2-N3	6.78	1.42	1.37
1	N	1408	A	N9-C8	6.78	1.43	1.37
1	N	105	G	N1-C2	6.78	1.43	1.37
1	N	1277	C	C4-N4	6.78	1.40	1.33
1	N	148	G	C5-C4	6.78	1.43	1.38
1	N	369	G	C5-C4	-6.78	1.33	1.38
1	N	681	A	P-O5'	-6.78	1.52	1.59
1	N	1072	G	O3'-P	-6.78	1.53	1.61
1	N	1156	G	C5-C4	6.78	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1346	A	C6-N1	6.78	1.40	1.35
1	N	359	G	C8-N7	-6.78	1.26	1.30
1	N	616	G	P-O5'	-6.77	1.52	1.59
1	N	835	U	N1-C6	-6.77	1.31	1.38
1	N	1090	U	C4-C5	6.77	1.49	1.43
1	N	1399	C	C2'-O2'	-6.77	1.32	1.41
1	N	1330	U	N1-C6	6.77	1.44	1.38
1	N	1477	U	C4-C5	6.77	1.49	1.43
1	N	903	G	C6-N1	6.77	1.44	1.39
1	N	959	A	C6-N1	6.77	1.40	1.35
1	N	763	G	N9-C4	-6.76	1.32	1.38
1	N	1072	G	P-O5'	-6.76	1.52	1.59
1	N	408	A	N9-C8	6.76	1.43	1.37
1	N	502	A	C8-N7	-6.76	1.26	1.31
1	N	1405	G	N9-C4	-6.76	1.32	1.38
1	N	1411	C	O4'-C1'	6.76	1.50	1.41
1	N	349	A	C5-C4	6.76	1.43	1.38
1	N	420	U	N1-C2	-6.76	1.32	1.38
1	N	1189	U	N3-C4	6.76	1.44	1.38
1	N	803	G	C2-N3	6.75	1.38	1.32
1	N	197	A	N9-C4	-6.75	1.33	1.37
1	N	779	C	N1-C6	-6.75	1.33	1.37
1	N	52	C	O3'-P	-6.75	1.53	1.61
1	N	366	A	P-O5'	-6.75	1.52	1.59
1	N	1323	G	C5-C4	6.75	1.43	1.38
1	N	1082	A	P-O5'	-6.75	1.52	1.59
1	N	515	G	C8-N7	-6.75	1.26	1.30
1	N	322	C	C4'-C3'	-6.75	1.45	1.53
1	N	661	G	C2-N2	6.75	1.41	1.34
1	N	746	A	N9-C4	6.75	1.41	1.37
1	N	179	A	N9-C4	6.75	1.41	1.37
1	N	1028	C	N3-C4	6.75	1.38	1.33
1	N	366	A	N7-C5	-6.74	1.35	1.39
1	N	441	A	N9-C4	-6.74	1.33	1.37
1	N	836	G	N7-C5	-6.74	1.35	1.39
1	N	1064	G	N9-C4	-6.74	1.32	1.38
1	N	483	C	N1-C6	6.74	1.41	1.37
1	N	44	A	C5-C6	-6.74	1.34	1.41
1	N	963	G	C6-N1	6.74	1.44	1.39
1	N	544	G	N9-C8	6.74	1.42	1.37
1	N	756	C	C4-C5	6.74	1.48	1.43
1	N	915	A	C6-N6	6.74	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1240	U	C5'-C4'	6.74	1.59	1.51
1	N	265	G	N9-C8	-6.74	1.33	1.37
1	N	434	U	C2-N3	6.74	1.42	1.37
1	N	525	C	C1'-N1	6.74	1.58	1.48
1	N	265	G	C6-N1	6.73	1.44	1.39
1	N	1158	C	N1-C6	6.73	1.41	1.37
1	N	1469	C	C4-C5	-6.73	1.37	1.43
1	N	42	G	N9-C4	-6.73	1.32	1.38
1	N	984	C	N1-C6	6.73	1.41	1.37
1	N	1196	A	N9-C8	-6.73	1.32	1.37
1	N	735	C	O4'-C1'	6.73	1.50	1.41
1	N	356	A	C5'-C4'	6.73	1.59	1.51
1	N	898	G	C3'-C2'	-6.73	1.45	1.52
1	N	77	A	N7-C5	-6.72	1.35	1.39
1	N	292	G	N1-C2	6.72	1.43	1.37
1	N	303	A	N7-C5	-6.72	1.35	1.39
1	N	680	C	C4-C5	6.72	1.48	1.43
1	N	1236	A	N9-C4	-6.72	1.33	1.37
1	N	150	U	C1'-N1	6.72	1.58	1.48
1	N	367	U	P-O5'	-6.72	1.53	1.59
1	N	1221	G	C5-C6	-6.72	1.35	1.42
1	N	1270	G	C8-N7	6.72	1.34	1.30
1	N	528	C	N1-C6	6.72	1.41	1.37
1	N	557	G	C2'-C1'	-6.72	1.46	1.53
1	N	620	C	C4'-C3'	6.72	1.60	1.53
1	N	443	C	C2-N3	6.71	1.41	1.35
1	N	1229	A	N3-C4	6.71	1.38	1.34
1	N	1273	C	N1-C6	6.71	1.41	1.37
1	N	1342	C	C1'-N1	6.71	1.58	1.48
1	N	1411	C	C4'-C3'	6.71	1.60	1.53
1	N	757	U	N3-C4	6.71	1.44	1.38
1	N	74	A	N9-C4	-6.71	1.33	1.37
1	N	792	A	P-O5'	-6.71	1.53	1.59
1	N	1095	U	C2-N3	6.71	1.42	1.37
1	N	1239	A	O3'-P	-6.71	1.53	1.61
1	N	1438	G	N1-C2	6.71	1.43	1.37
1	N	1204	A	N3-C4	-6.71	1.30	1.34
1	N	1434	A	C3'-C2'	6.71	1.60	1.52
1	N	754	C	C5'-C4'	6.70	1.59	1.51
1	N	923	A	C2'-C1'	-6.70	1.46	1.53
1	N	1046	A	N1-C2	6.70	1.40	1.34
1	N	1259	C	C3'-C2'	-6.70	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	392	C	O3'-P	-6.70	1.53	1.61
1	N	909	A	N3-C4	-6.70	1.30	1.34
1	N	1088	G	C6-N1	6.70	1.44	1.39
1	N	40	C	N3-C4	6.70	1.38	1.33
1	N	154	U	C4-C5	6.70	1.49	1.43
1	N	693	G	N7-C5	-6.70	1.35	1.39
1	N	1058	G	N7-C5	-6.70	1.35	1.39
1	N	1338	G	N7-C5	-6.70	1.35	1.39
1	N	936	C	C4-N4	6.70	1.40	1.33
1	N	1042	A	N1-C2	6.70	1.40	1.34
1	N	1054	C	C4-C5	6.70	1.48	1.43
1	N	323	U	C4'-C3'	-6.70	1.45	1.53
1	N	886	G	C2-N3	6.70	1.38	1.32
1	N	1075	U	C2-N3	6.70	1.42	1.37
1	N	1340	A	N3-C4	6.69	1.38	1.34
1	N	983	A	N3-C4	6.69	1.38	1.34
1	N	349	A	C6-N1	6.69	1.40	1.35
1	N	423	G	N7-C5	-6.69	1.35	1.39
1	N	646	G	C2'-C1'	-6.69	1.46	1.53
1	N	1190	G	C8-N7	-6.69	1.26	1.30
1	N	1519	A	N3-C4	-6.69	1.30	1.34
1	N	910	C	N3-C4	6.69	1.38	1.33
1	N	378	G	C2-N3	6.69	1.38	1.32
1	N	666	G	N7-C5	-6.69	1.35	1.39
1	N	795	C	C1'-N1	6.69	1.58	1.48
1	N	1028	C	C4'-O4'	6.69	1.54	1.45
1	N	1171	A	N3-C4	-6.69	1.30	1.34
1	N	303	A	N3-C4	-6.69	1.30	1.34
1	N	4	U	N1-C6	-6.68	1.31	1.38
1	N	579	A	N1-C2	6.68	1.40	1.34
1	N	678	U	P-O5'	-6.68	1.53	1.59
1	N	1283	U	C2'-C1'	-6.68	1.46	1.53
1	N	1169	A	C5-C4	6.68	1.43	1.38
1	N	389	A	C6-N6	6.68	1.39	1.33
1	N	1424	U	C2-N3	6.68	1.42	1.37
1	N	978	A	C6-N1	6.68	1.40	1.35
1	N	1411	C	C4-N4	6.68	1.40	1.33
1	N	1072	G	C4'-C3'	6.67	1.60	1.53
1	N	1396	A	C6-N1	6.67	1.40	1.35
1	N	1157	A	C6-N1	6.67	1.40	1.35
1	N	135	C	N1-C6	6.67	1.41	1.37
1	N	709	U	C2'-C1'	-6.67	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1308	U	C3'-C2'	6.67	1.60	1.52
1	N	264	C	C4-N4	6.67	1.40	1.33
1	N	237	G	C2-N3	6.67	1.38	1.32
1	N	1451	U	P-O5'	-6.67	1.53	1.59
1	N	799	G	N9-C4	-6.66	1.32	1.38
1	N	1071	C	O4'-C1'	6.66	1.50	1.41
1	N	1082	A	C1'-N9	6.66	1.58	1.48
1	N	176	C	N1-C2	6.66	1.46	1.40
1	N	1289	A	C5'-C4'	6.66	1.59	1.51
1	N	79	G	C2-N3	6.66	1.38	1.32
1	N	110	C	C4-N4	6.66	1.40	1.33
1	N	258	G	P-O5'	-6.66	1.53	1.59
1	N	973	G	N1-C2	6.66	1.43	1.37
1	N	617	G	C6-N1	6.66	1.44	1.39
1	N	842	U	C2-N3	6.66	1.42	1.37
1	N	1446	A	C8-N7	6.66	1.36	1.31
1	N	717	U	N3-C4	6.66	1.44	1.38
1	N	823	C	N3-C4	6.66	1.38	1.33
1	N	1004	A	N7-C5	-6.65	1.35	1.39
1	N	293	G	C2-N3	6.65	1.38	1.32
1	N	505	G	C2-N2	6.65	1.41	1.34
1	N	509	A	P-O5'	-6.65	1.53	1.59
1	N	1252	A	N3-C4	-6.65	1.30	1.34
1	N	317	U	P-O5'	-6.65	1.53	1.59
1	N	659	U	C2-N3	6.65	1.42	1.37
1	N	776	G	C6-N1	6.65	1.44	1.39
1	N	243	A	N9-C4	-6.65	1.33	1.37
1	N	358	U	C5-C6	-6.65	1.28	1.34
1	N	360	G	C6-N1	6.65	1.44	1.39
1	N	778	G	N7-C5	-6.65	1.35	1.39
1	N	1110	A	C5'-C4'	6.65	1.59	1.51
1	N	668	G	N3-C4	6.65	1.40	1.35
1	N	1089	G	C5-C4	6.65	1.43	1.38
1	N	257	G	C2'-C1'	6.64	1.60	1.53
1	N	903	G	C2'-C1'	-6.64	1.46	1.53
1	N	1189	U	C5-C6	-6.64	1.28	1.34
1	N	1058	G	C4'-O4'	6.64	1.54	1.45
1	N	1009	U	C3'-O3'	6.64	1.51	1.42
1	N	82	G	C5'-C4'	6.64	1.59	1.51
1	N	705	G	C6-N1	6.64	1.44	1.39
1	N	1308	U	O4'-C1'	6.64	1.50	1.41
1	N	1481	U	N3-C4	6.64	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	745	G	C3'-C2'	-6.64	1.45	1.52
1	N	916	U	C5'-C4'	6.64	1.59	1.51
1	N	1090	U	N3-C4	6.64	1.44	1.38
1	N	26	A	C6-N6	-6.63	1.28	1.33
1	N	160	A	C8-N7	-6.63	1.26	1.31
1	N	441	A	C5-C4	6.63	1.43	1.38
1	N	466	A	C6-N6	6.63	1.39	1.33
1	N	929	G	N7-C5	-6.63	1.35	1.39
1	N	1449	C	P-O5'	-6.63	1.53	1.59
1	N	1519	A	P-O5'	6.63	1.66	1.59
1	N	158	G	N7-C5	-6.63	1.35	1.39
1	N	802	A	C2-N3	6.63	1.39	1.33
1	N	679	C	C1'-N1	6.63	1.58	1.48
1	N	206	C	C5-C6	-6.63	1.29	1.34
1	N	580	C	C4'-C3'	6.63	1.60	1.53
1	N	828	U	C2-N3	6.63	1.42	1.37
1	N	1151	A	N7-C5	-6.63	1.35	1.39
1	N	175	C	C4-N4	6.63	1.40	1.33
1	N	1207	G	C6-N1	6.63	1.44	1.39
1	N	1391	U	C1'-N1	6.63	1.58	1.48
1	N	1497	G	O3'-P	-6.63	1.53	1.61
1	N	502	A	N3-C4	-6.62	1.30	1.34
1	N	175	C	P-O5'	-6.62	1.53	1.59
1	N	897	C	C5'-C4'	6.62	1.59	1.51
1	N	100	G	N9-C8	-6.62	1.33	1.37
1	N	178	C	N3-C4	6.62	1.38	1.33
1	N	897	C	O3'-P	-6.62	1.53	1.61
1	N	1223	C	O3'-P	-6.62	1.53	1.61
1	N	1333	A	C6-N6	6.62	1.39	1.33
1	N	10	A	C3'-C2'	6.62	1.60	1.52
1	N	373	A	C5-C4	6.62	1.43	1.38
1	N	1362	A	C4'-C3'	-6.62	1.45	1.53
1	N	448	A	C6-N1	6.61	1.40	1.35
1	N	977	A	C6-N1	6.61	1.40	1.35
1	N	800	G	N9-C4	-6.61	1.32	1.38
1	N	276	G	C2-N3	6.61	1.38	1.32
1	N	976	G	C5'-C4'	6.61	1.59	1.51
1	N	985	C	C4-C5	-6.61	1.37	1.43
1	N	467	U	C4-C5	-6.61	1.37	1.43
1	N	469	C	C2-N3	-6.61	1.30	1.35
1	N	51	A	C6-N6	6.61	1.39	1.33
1	N	715	A	C5-C4	6.61	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	896	C	P-O5'	-6.61	1.53	1.59
1	N	312	C	C4-N4	6.61	1.39	1.33
1	N	404	G	C5-C6	-6.61	1.35	1.42
1	N	419	C	P-O5'	-6.61	1.53	1.59
1	N	458	U	C2'-C1'	-6.61	1.46	1.53
1	N	618	C	C4-N4	6.61	1.39	1.33
1	N	732	C	N3-C4	6.61	1.38	1.33
1	N	764	C	N1-C2	-6.61	1.33	1.40
1	N	854	U	C2'-C1'	-6.61	1.46	1.53
1	N	1225	A	C5'-C4'	6.61	1.59	1.51
1	N	1056	U	C4'-C3'	6.60	1.60	1.53
1	N	146	G	N1-C2	-6.60	1.32	1.37
1	N	101	A	N7-C5	-6.60	1.35	1.39
1	N	709	U	O3'-P	-6.60	1.53	1.61
1	N	1235	U	C2-N3	6.60	1.42	1.37
1	N	110	C	C2-N3	6.60	1.41	1.35
1	N	535	A	O3'-P	-6.60	1.53	1.61
1	N	869	G	N3-C4	6.60	1.40	1.35
1	N	1183	U	N1-C6	-6.60	1.32	1.38
1	N	1518	A	P-O5'	6.60	1.66	1.59
1	N	24	U	C2'-O2'	-6.59	1.33	1.41
1	N	343	U	C5'-C4'	6.59	1.59	1.51
1	N	1372	U	P-O5'	-6.59	1.53	1.59
1	N	1455	G	C2-N2	6.59	1.41	1.34
1	N	730	G	C4'-O4'	6.59	1.54	1.45
1	N	1154	G	C2-N3	6.59	1.38	1.32
1	N	1279	G	C5'-C4'	6.59	1.59	1.51
1	N	1219	A	C5-C4	6.59	1.43	1.38
1	N	103	U	C4-C5	-6.59	1.37	1.43
1	N	243	A	N1-C2	-6.59	1.28	1.34
1	N	721	G	C5-C6	-6.59	1.35	1.42
1	N	1324	A	C8-N7	-6.59	1.26	1.31
1	N	1103	C	C2-N3	6.58	1.41	1.35
1	N	1386	G	N7-C5	-6.58	1.35	1.39
1	N	9	G	N1-C2	6.58	1.43	1.37
1	N	800	G	N7-C5	-6.58	1.35	1.39
1	N	334	C	C4-N4	6.58	1.39	1.33
1	N	196	A	N3-C4	-6.58	1.30	1.34
1	N	205	A	C6-N6	6.58	1.39	1.33
1	N	273	U	N1-C2	-6.58	1.32	1.38
1	N	828	U	N3-C4	6.58	1.44	1.38
1	N	1400	C	C4-N4	6.58	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1089	G	N1-C2	6.57	1.43	1.37
1	N	1245	C	N1-C6	-6.57	1.33	1.37
1	N	376	G	N9-C8	6.57	1.42	1.37
1	N	998	C	C2-N3	6.57	1.41	1.35
1	N	170	U	C5-C6	6.57	1.40	1.34
1	N	737	C	P-O5'	-6.57	1.53	1.59
1	N	945	G	C5-C4	6.57	1.43	1.38
1	N	970	C	N3-C4	6.57	1.38	1.33
1	N	1427	C	C2-N3	6.57	1.41	1.35
1	N	851	G	C8-N7	-6.57	1.27	1.30
1	N	1227	A	C6-N1	6.57	1.40	1.35
1	N	201	G	C2'-C1'	-6.56	1.46	1.53
1	N	1294	G	N7-C5	-6.56	1.35	1.39
1	N	1455	G	N9-C4	-6.56	1.32	1.38
1	N	129	A	C5'-C4'	6.56	1.59	1.51
1	N	1025	U	O3'-P	-6.56	1.53	1.61
1	N	551	U	C5-C6	6.56	1.40	1.34
1	N	1243	C	C5'-C4'	6.56	1.59	1.51
1	N	1446	A	N3-C4	6.56	1.38	1.34
1	N	270	A	N9-C4	-6.56	1.33	1.37
1	N	733	G	N7-C5	-6.56	1.35	1.39
1	N	1179	A	C6-N1	6.55	1.40	1.35
1	N	1193	G	C2'-C1'	-6.55	1.46	1.53
1	N	846	G	C2-N3	6.55	1.38	1.32
1	N	997	U	O3'-P	-6.55	1.53	1.61
1	N	1248	A	C2'-C1'	-6.55	1.46	1.53
1	N	1334	G	N1-C2	6.55	1.43	1.37
1	N	1339	A	C2-N3	6.55	1.39	1.33
1	N	100	G	C5-C6	-6.55	1.35	1.42
1	N	205	A	N3-C4	-6.55	1.30	1.34
1	N	771	G	C4'-C3'	-6.55	1.46	1.53
1	N	353	A	N3-C4	-6.55	1.30	1.34
1	N	642	A	C2'-C1'	-6.55	1.46	1.53
1	N	214	C	N1-C2	-6.55	1.33	1.40
1	N	914	A	C5-C4	6.55	1.43	1.38
1	N	969	A	C5-C6	-6.55	1.35	1.41
1	N	525	C	N1-C6	6.54	1.41	1.37
1	N	201	G	O3'-P	-6.54	1.53	1.61
1	N	533	A	N9-C8	-6.54	1.32	1.37
1	N	1497	G	C6-N1	6.54	1.44	1.39
1	N	48	C	O4'-C1'	6.54	1.50	1.41
1	N	59	A	C6-N6	6.54	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1384	C	C5'-C4'	6.54	1.59	1.51
1	N	381	C	C1'-N1	6.54	1.58	1.48
1	N	325	A	P-O5'	-6.54	1.53	1.59
1	N	476	U	C2-N3	6.54	1.42	1.37
1	N	1160	G	C4'-C3'	6.54	1.60	1.53
1	N	1507	A	C5'-C4'	6.53	1.59	1.51
1	N	909	A	C4'-C3'	6.53	1.60	1.53
1	N	978	A	P-O5'	-6.53	1.53	1.59
1	N	1497	G	C3'-O3'	-6.53	1.33	1.42
1	N	704	A	N7-C5	-6.53	1.35	1.39
1	N	2	A	O3'-P	-6.53	1.53	1.61
1	N	96	U	C2-N3	6.53	1.42	1.37
1	N	356	A	C3'-C2'	-6.53	1.45	1.52
1	N	464	U	C4-C5	-6.53	1.37	1.43
1	N	524	G	C2-N2	6.53	1.41	1.34
1	N	595	A	N9-C4	-6.53	1.33	1.37
1	N	1173	U	C2-O2	6.53	1.28	1.22
1	N	257	G	N1-C2	6.53	1.43	1.37
1	N	297	G	N9-C4	-6.53	1.32	1.38
1	N	888	G	N7-C5	-6.53	1.35	1.39
1	N	1071	C	C4-C5	-6.53	1.37	1.43
1	N	354	G	P-O5'	-6.52	1.53	1.59
1	N	884	U	C2-N3	6.52	1.42	1.37
1	N	1280	A	C6-N1	6.52	1.40	1.35
1	N	117	G	C2'-C1'	-6.52	1.46	1.53
1	N	1186	G	N1-C2	6.52	1.43	1.37
1	N	118	U	N3-C4	6.52	1.44	1.38
1	N	891	U	O3'-P	-6.52	1.53	1.61
1	N	1375	A	N7-C5	-6.52	1.35	1.39
1	N	40	C	C5'-C4'	6.52	1.59	1.51
1	N	920	U	C3'-O3'	6.52	1.51	1.42
1	N	67	C	C2-N3	-6.52	1.30	1.35
1	N	158	G	C5'-C4'	6.52	1.59	1.51
1	N	719	C	C4-N4	6.52	1.39	1.33
1	N	1177	G	C3'-C2'	-6.52	1.45	1.52
1	N	1125	U	P-O5'	-6.51	1.53	1.59
1	N	213	G	N9-C4	6.51	1.43	1.38
1	N	1110	A	C8-N7	-6.51	1.26	1.31
1	N	1187	G	O3'-P	-6.51	1.53	1.61
1	N	1270	G	N1-C2	6.51	1.43	1.37
1	N	335	C	C3'-O3'	6.51	1.51	1.42
1	N	520	A	C5'-C4'	6.51	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	557	G	N9-C8	6.51	1.42	1.37
1	N	573	A	C5-C4	-6.51	1.34	1.38
1	N	928	G	C2-N3	6.51	1.38	1.32
1	N	198	G	C2'-C1'	-6.51	1.46	1.53
1	N	931	C	N3-C4	6.51	1.38	1.33
1	N	144	G	C2-N3	-6.51	1.27	1.32
1	N	460	A	O3'-P	-6.51	1.53	1.61
1	N	721	G	N1-C2	6.51	1.43	1.37
1	N	733	G	N9-C4	-6.51	1.32	1.38
1	N	1275	A	C6-N6	6.51	1.39	1.33
1	N	94	G	N9-C4	-6.50	1.32	1.38
1	N	386	C	C2-N3	6.50	1.41	1.35
1	N	816	A	N9-C4	6.50	1.41	1.37
1	N	96	U	N3-C4	6.50	1.44	1.38
1	N	1051	C	N1-C6	-6.50	1.33	1.37
1	N	1198	G	C5-C4	-6.50	1.33	1.38
1	N	1418	A	O4'-C1'	-6.50	1.33	1.41
1	N	208	U	C1'-N1	6.50	1.58	1.48
1	N	713	G	P-O5'	-6.50	1.53	1.59
1	N	1256	A	C5'-C4'	6.50	1.59	1.51
1	N	597	G	C2'-C1'	-6.50	1.46	1.53
1	N	642	A	P-O5'	6.50	1.66	1.59
1	N	1146	A	P-O5'	-6.50	1.53	1.59
1	N	1529	G	N7-C5	-6.50	1.35	1.39
1	N	1145	A	N9-C4	-6.50	1.33	1.37
1	N	1039	G	C6-N1	6.49	1.44	1.39
1	N	1028	C	P-O5'	-6.49	1.53	1.59
1	N	1492	A	C6-N1	6.49	1.40	1.35
1	N	195	A	C8-N7	-6.49	1.27	1.31
1	N	420	U	C5'-C4'	6.49	1.59	1.51
1	N	485	U	N3-C4	6.49	1.44	1.38
1	N	1517	G	C8-N7	-6.49	1.27	1.30
1	N	337	G	C2-N3	6.49	1.38	1.32
1	N	475	C	C2'-C1'	6.49	1.60	1.53
1	N	684	U	C2'-O2'	-6.49	1.33	1.41
1	N	220	G	C8-N7	-6.49	1.27	1.30
1	N	1169	A	C6-N6	6.49	1.39	1.33
1	N	1189	U	N1-C2	6.49	1.44	1.38
1	N	422	C	C2-N3	6.49	1.41	1.35
1	N	1157	A	N3-C4	-6.49	1.30	1.34
1	N	404	G	C3'-C2'	-6.48	1.45	1.52
1	N	564	C	C2-O2	6.48	1.30	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	960	U	C2'-C1'	-6.48	1.46	1.53
1	N	1444	U	C5'-C4'	6.48	1.59	1.51
1	N	171	A	C3'-C2'	6.48	1.60	1.52
1	N	265	G	N9-C4	6.48	1.43	1.38
1	N	514	C	C4-N4	6.48	1.39	1.33
1	N	734	G	N7-C5	-6.48	1.35	1.39
1	N	1020	G	C5'-C4'	6.48	1.59	1.51
1	N	1316	G	C2-N3	-6.48	1.27	1.32
1	N	762	U	O3'-P	-6.48	1.53	1.61
1	N	787	A	N9-C4	-6.48	1.33	1.37
1	N	1375	A	C1'-N9	6.48	1.58	1.48
1	N	1440	U	N1-C2	-6.48	1.32	1.38
1	N	967	C	N3-C4	6.48	1.38	1.33
1	N	1089	G	C6-N1	-6.48	1.35	1.39
1	N	20	U	C2'-C1'	-6.48	1.46	1.53
1	N	287	U	C2-N3	6.48	1.42	1.37
1	N	430	A	C5'-C4'	6.48	1.59	1.51
1	N	1367	C	C3'-C2'	6.48	1.60	1.52
1	N	909	A	C6-N6	6.47	1.39	1.33
1	N	1013	G	C5'-C4'	6.47	1.59	1.51
1	N	166	U	C4'-O4'	6.47	1.53	1.45
1	N	472	U	C5-C6	6.47	1.40	1.34
1	N	1323	G	C4'-O4'	6.47	1.53	1.45
1	N	1420	U	C5-C6	6.47	1.40	1.34
1	N	1109	C	C4'-C3'	-6.47	1.46	1.53
1	N	187	G	N9-C4	-6.47	1.32	1.38
1	N	220	G	C5-C6	-6.47	1.35	1.42
1	N	226	G	N9-C8	6.47	1.42	1.37
1	N	253	A	N3-C4	-6.47	1.30	1.34
1	N	872	A	C2-N3	6.47	1.39	1.33
1	N	649	A	C6-N6	6.47	1.39	1.33
1	N	1069	C	N3-C4	6.47	1.38	1.33
1	N	889	A	N7-C5	-6.47	1.35	1.39
1	N	1011	C	C1'-N1	6.47	1.58	1.48
1	N	1237	C	C4-N4	6.47	1.39	1.33
1	N	1519	A	C5-C4	6.47	1.43	1.38
1	N	670	G	C8-N7	-6.46	1.27	1.30
1	N	1005	A	N1-C2	6.46	1.40	1.34
1	N	1349	A	N9-C8	6.46	1.43	1.37
1	N	628	G	C2-N2	6.46	1.41	1.34
1	N	750	C	N3-C4	6.46	1.38	1.33
1	N	984	C	P-O5'	-6.46	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1079	G	N1-C2	6.46	1.43	1.37
1	N	169	C	O4'-C1'	6.46	1.50	1.41
1	N	1474	U	P-O5'	-6.46	1.53	1.59
1	N	1238	A	P-O5'	-6.45	1.53	1.59
1	N	634	C	N3-C4	6.45	1.38	1.33
1	N	1370	G	P-O5'	6.45	1.66	1.59
1	N	482	A	C6-N6	6.45	1.39	1.33
1	N	503	C	C1'-N1	6.45	1.58	1.48
1	N	1496	C	C2-N3	6.45	1.41	1.35
1	N	32	A	N9-C8	6.45	1.43	1.37
1	N	1439	G	C2-N2	6.45	1.41	1.34
1	N	1468	A	N9-C4	-6.45	1.33	1.37
1	N	1489	G	C2'-C1'	6.45	1.60	1.53
1	N	102	G	N7-C5	-6.45	1.35	1.39
1	N	701	U	C5'-C4'	6.45	1.59	1.51
1	N	989	U	N1-C2	6.45	1.44	1.38
1	N	528	C	C2-N3	6.44	1.41	1.35
1	N	81	A	C3'-O3'	6.44	1.51	1.42
1	N	240	G	N7-C5	-6.44	1.35	1.39
1	N	1387	G	C2'-C1'	-6.44	1.46	1.53
1	N	346	G	C2-N3	6.44	1.38	1.32
1	N	544	G	N3-C4	-6.44	1.30	1.35
1	N	922	G	C6-O6	6.44	1.29	1.24
1	N	1146	A	N3-C4	-6.44	1.30	1.34
1	N	1256	A	C2-N3	6.44	1.39	1.33
1	N	1247	U	P-O5'	-6.44	1.53	1.59
1	N	1458	G	O4'-C1'	6.44	1.50	1.41
1	N	616	G	C5'-C4'	6.43	1.59	1.51
1	N	1000	A	C5-C6	-6.43	1.35	1.41
1	N	1211	U	C5'-C4'	6.43	1.59	1.51
1	N	515	G	O4'-C1'	-6.43	1.33	1.41
1	N	1126	U	P-O5'	6.43	1.66	1.59
1	N	32	A	C2-N3	6.43	1.39	1.33
1	N	953	G	N9-C4	6.42	1.43	1.38
1	N	1227	A	N9-C8	6.42	1.42	1.37
1	N	39	G	C2'-C1'	-6.42	1.46	1.53
1	N	1012	A	P-O5'	-6.42	1.53	1.59
1	N	335	C	P-O5'	6.42	1.66	1.59
1	N	366	A	C6-N1	6.42	1.40	1.35
1	N	656	G	N7-C5	-6.42	1.35	1.39
1	N	192	A	C6-N6	6.42	1.39	1.33
1	N	568	G	C4'-C3'	6.42	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	673	A	N9-C8	-6.42	1.32	1.37
1	N	883	C	N1-C2	6.42	1.46	1.40
1	N	884	U	N3-C4	6.42	1.44	1.38
1	N	1142	G	N3-C4	6.42	1.40	1.35
1	N	494	G	C2'-C1'	6.42	1.60	1.53
1	N	1123	U	C2'-C1'	-6.42	1.46	1.53
1	N	1166	G	C5'-C4'	6.42	1.59	1.51
1	N	1039	G	C4'-O4'	-6.42	1.37	1.45
1	N	237	G	C6-N1	6.41	1.44	1.39
1	N	455	G	N3-C4	-6.41	1.30	1.35
1	N	729	A	C5-C6	-6.41	1.35	1.41
1	N	1006	G	C8-N7	-6.41	1.27	1.30
1	N	1290	G	C2'-C1'	-6.41	1.46	1.53
1	N	864	A	C5-C4	6.41	1.43	1.38
1	N	108	G	C8-N7	-6.41	1.27	1.30
1	N	457	G	N1-C2	6.41	1.42	1.37
1	N	1130	A	C6-N6	6.41	1.39	1.33
1	N	1208	C	C5'-C4'	6.41	1.59	1.51
1	N	186	C	C4-C5	6.41	1.48	1.43
1	N	211	G	C5-C4	6.41	1.42	1.38
1	N	927	G	C2-N2	6.41	1.41	1.34
1	N	1175	G	N9-C8	6.41	1.42	1.37
1	N	1297	G	N9-C8	6.41	1.42	1.37
1	N	790	A	C2-N3	6.41	1.39	1.33
1	N	1480	A	C4'-O4'	6.41	1.53	1.45
1	N	213	G	N1-C2	6.41	1.42	1.37
1	N	408	A	N3-C4	-6.41	1.31	1.34
1	N	990	C	C4'-C3'	-6.41	1.46	1.53
1	N	1018	G	C5'-C4'	6.41	1.59	1.51
1	N	1250	A	C8-N7	6.41	1.36	1.31
1	N	849	G	C2'-C1'	-6.40	1.46	1.53
1	N	917	G	N3-C4	-6.40	1.30	1.35
1	N	231	U	P-O5'	-6.40	1.53	1.59
1	N	572	A	N9-C4	6.40	1.41	1.37
1	N	1069	C	N1-C6	-6.40	1.33	1.37
1	N	254	G	O3'-P	-6.40	1.53	1.61
1	N	376	G	C3'-C2'	6.40	1.59	1.52
1	N	1058	G	N1-C2	6.40	1.42	1.37
1	N	733	G	C3'-C2'	6.40	1.59	1.52
1	N	1113	C	C4-C5	-6.40	1.37	1.43
1	N	1237	C	N3-C4	6.40	1.38	1.33
1	N	1072	G	N7-C5	-6.39	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	769	G	C6-N1	6.39	1.44	1.39
1	N	1062	U	C3'-C2'	6.39	1.59	1.52
1	N	1356	G	P-O5'	-6.39	1.53	1.59
1	N	1454	G	C6-N1	6.39	1.44	1.39
1	N	42	G	N7-C5	-6.39	1.35	1.39
1	N	736	C	N1-C2	-6.39	1.33	1.40
1	N	1317	C	C1'-N1	6.39	1.58	1.48
1	N	683	G	N1-C2	6.39	1.42	1.37
1	N	570	G	N1-C2	6.39	1.42	1.37
1	N	632	U	C5'-C4'	-6.39	1.43	1.51
1	N	643	C	C1'-N1	6.39	1.58	1.48
1	N	1322	C	C5-C6	-6.39	1.29	1.34
1	N	930	C	C2-N3	6.38	1.40	1.35
1	N	693	G	C3'-C2'	-6.38	1.45	1.52
1	N	803	G	N3-C4	-6.38	1.30	1.35
1	N	1012	A	C8-N7	-6.38	1.27	1.31
1	N	413	G	C8-N7	-6.38	1.27	1.30
1	N	436	C	N1-C2	-6.38	1.33	1.40
1	N	708	C	C2-N3	6.38	1.40	1.35
1	N	938	A	O4'-C1'	6.38	1.50	1.41
1	N	175	C	C4'-C3'	6.38	1.60	1.53
1	N	325	A	C6-N6	6.38	1.39	1.33
1	N	1117	A	C6-N6	6.38	1.39	1.33
1	N	297	G	N1-C2	6.38	1.42	1.37
1	N	886	G	N9-C8	-6.38	1.33	1.37
1	N	1002	G	C5-C4	-6.38	1.33	1.38
1	N	1031	C	P-O5'	-6.38	1.53	1.59
1	N	1312	G	C5-C6	-6.38	1.35	1.42
1	N	421	U	C2'-C1'	-6.38	1.46	1.53
1	N	1063	C	C5'-C4'	6.37	1.58	1.51
1	N	1190	G	C5-C4	-6.37	1.33	1.38
1	N	1367	C	C2-N3	6.37	1.40	1.35
1	N	975	A	C2'-C1'	-6.37	1.46	1.53
1	N	301	G	C4'-C3'	6.37	1.60	1.53
1	N	292	G	N9-C4	-6.37	1.32	1.38
1	N	1254	A	N3-C4	6.37	1.38	1.34
1	N	124	C	C2-O2	6.37	1.30	1.24
1	N	343	U	C2-N3	6.37	1.42	1.37
1	N	944	G	C6-N1	6.37	1.44	1.39
1	N	1059	C	C5-C6	6.37	1.39	1.34
1	N	25	C	N1-C6	-6.37	1.33	1.37
1	N	960	U	N3-C4	6.37	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	393	A	C4'-C3'	-6.36	1.46	1.53
1	N	1132	C	C4-N4	6.36	1.39	1.33
1	N	1249	C	N3-C4	6.36	1.38	1.33
1	N	1238	A	O3'-P	-6.36	1.53	1.61
1	N	1499	A	N9-C4	-6.36	1.34	1.37
1	N	1140	C	N3-C4	6.36	1.38	1.33
1	N	1465	A	O3'-P	-6.36	1.53	1.61
1	N	149	A	C8-N7	-6.36	1.27	1.31
1	N	1147	C	C2-N3	6.36	1.40	1.35
1	N	902	G	N1-C2	6.35	1.42	1.37
1	N	245	U	C5'-C4'	6.35	1.58	1.51
1	N	922	G	C6-N1	6.35	1.44	1.39
1	N	1424	U	P-O5'	-6.35	1.53	1.59
1	N	362	G	C5-C6	-6.35	1.35	1.42
1	N	180	U	C1'-N1	6.35	1.58	1.48
1	N	471	U	O3'-P	-6.35	1.53	1.61
1	N	76	G	C6-O6	-6.35	1.18	1.24
1	N	381	C	O3'-P	-6.35	1.53	1.61
1	N	1363	A	C6-N1	6.35	1.40	1.35
1	N	272	C	O4'-C1'	6.34	1.49	1.41
1	N	358	U	C5'-C4'	6.34	1.58	1.51
1	N	374	A	N7-C5	-6.34	1.35	1.39
1	N	964	A	C8-N7	6.34	1.35	1.31
1	N	700	G	C2-N3	6.34	1.37	1.32
1	N	1163	A	P-O5'	-6.34	1.53	1.59
1	N	1149	C	N1-C2	-6.33	1.33	1.40
1	N	836	G	C6-N1	-6.33	1.35	1.39
1	N	1175	G	C2-N3	6.33	1.37	1.32
1	N	710	G	N1-C2	-6.33	1.32	1.37
1	N	996	A	N3-C4	-6.33	1.31	1.34
1	N	352	C	N3-C4	6.33	1.38	1.33
1	N	714	G	C2'-O2'	6.33	1.49	1.41
1	N	1285	A	N7-C5	-6.33	1.35	1.39
1	N	1441	A	N9-C4	-6.33	1.34	1.37
1	N	1052	U	C4'-C3'	6.33	1.60	1.53
1	N	481	G	C5'-C4'	6.33	1.58	1.51
1	N	1054	C	C4-N4	6.33	1.39	1.33
1	N	1160	G	N1-C2	6.33	1.42	1.37
1	N	807	A	N9-C8	-6.32	1.32	1.37
1	N	69	G	C2-N2	6.32	1.40	1.34
1	N	633	G	N1-C2	6.32	1.42	1.37
1	N	1060	U	C2'-C1'	-6.32	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	471	U	C4-C5	-6.32	1.37	1.43
1	N	923	A	C8-N7	-6.32	1.27	1.31
1	N	1141	C	C2-O2	6.32	1.30	1.24
1	N	108	G	C1'-N9	6.32	1.58	1.48
1	N	1470	U	C2-N3	6.32	1.42	1.37
1	N	1186	G	C5'-C4'	6.32	1.58	1.51
1	N	1267	C	N3-C4	6.32	1.38	1.33
1	N	1486	G	C2-N3	6.32	1.37	1.32
1	N	1102	A	C5'-C4'	6.31	1.58	1.51
1	N	756	C	P-O5'	6.31	1.66	1.59
1	N	644	U	C2'-C1'	-6.31	1.46	1.53
1	N	665	A	C2'-C1'	-6.31	1.46	1.53
1	N	700	G	P-O5'	-6.31	1.53	1.59
1	N	1499	A	C5'-C4'	6.31	1.58	1.51
1	N	1169	A	N7-C5	-6.30	1.35	1.39
1	N	1518	A	C5-C4	-6.30	1.34	1.38
1	N	1527	U	C4-C5	6.30	1.49	1.43
1	N	1288	A	C5'-C4'	6.30	1.58	1.51
1	N	176	C	C4'-C3'	6.30	1.60	1.53
1	N	479	U	P-O5'	-6.30	1.53	1.59
1	N	658	C	N1-C6	6.30	1.41	1.37
1	N	1197	A	C5-C6	6.30	1.46	1.41
1	N	550	G	N9-C4	6.30	1.43	1.38
1	N	1374	A	N7-C5	-6.30	1.35	1.39
1	N	109	A	C5-C4	-6.30	1.34	1.38
1	N	1075	U	N1-C6	6.30	1.43	1.38
1	N	1087	G	C8-N7	-6.30	1.27	1.30
1	N	888	G	P-O5'	-6.29	1.53	1.59
1	N	978	A	C6-N6	6.29	1.39	1.33
1	N	1415	G	C5-C4	6.29	1.42	1.38
1	N	375	U	C4-C5	6.29	1.49	1.43
1	N	251	G	C8-N7	6.29	1.34	1.30
1	N	583	A	C6-N6	-6.29	1.28	1.33
1	N	1031	C	C4-N4	6.29	1.39	1.33
1	N	1297	G	C4'-C3'	6.29	1.60	1.53
1	N	914	A	C8-N7	-6.29	1.27	1.31
1	N	1173	U	P-O5'	-6.29	1.53	1.59
1	N	199	A	N7-C5	-6.29	1.35	1.39
1	N	232	G	O3'-P	-6.29	1.53	1.61
1	N	865	A	C6-N1	6.29	1.40	1.35
1	N	1140	C	C2'-C1'	-6.29	1.46	1.53
1	N	148	G	N7-C5	-6.29	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	999	C	N3-C4	-6.29	1.29	1.33
1	N	1459	G	N1-C2	6.29	1.42	1.37
1	N	889	A	C2'-C1'	-6.28	1.46	1.53
1	N	1168	U	C4-C5	6.28	1.49	1.43
1	N	2	A	C3'-C2'	6.28	1.59	1.52
1	N	183	C	N1-C6	6.28	1.41	1.37
1	N	544	G	P-O5'	-6.28	1.53	1.59
1	N	505	G	C4'-O4'	6.28	1.53	1.45
1	N	1518	A	C2-N3	-6.28	1.27	1.33
1	N	583	A	C5-C4	-6.28	1.34	1.38
1	N	855	U	N1-C6	6.28	1.43	1.38
1	N	948	C	N1-C6	6.28	1.41	1.37
1	N	981	U	C2'-O2'	6.28	1.49	1.41
1	N	981	U	C5'-C4'	6.28	1.58	1.51
1	N	1481	U	C2-N3	6.28	1.42	1.37
1	N	1363	A	C4'-O4'	6.27	1.53	1.45
1	N	1486	G	C4'-C3'	6.27	1.60	1.53
1	N	160	A	C5-C4	6.27	1.43	1.38
1	N	261	U	C4-O4	6.27	1.28	1.23
1	N	1261	A	N9-C8	-6.27	1.32	1.37
1	N	247	G	P-O5'	-6.27	1.53	1.59
1	N	1319	A	C2'-C1'	-6.27	1.46	1.53
1	N	1493	A	N3-C4	6.27	1.38	1.34
1	N	1491	G	O4'-C1'	-6.27	1.33	1.41
1	N	1517	G	N1-C2	6.27	1.42	1.37
1	N	648	A	C2'-C1'	-6.27	1.46	1.53
1	N	376	G	P-O5'	-6.26	1.53	1.59
1	N	545	C	N1-C6	6.26	1.41	1.37
1	N	865	A	C2'-C1'	-6.26	1.46	1.53
1	N	478	A	N7-C5	-6.26	1.35	1.39
1	N	907	A	P-O5'	-6.26	1.53	1.59
1	N	12	U	P-O5'	-6.26	1.53	1.59
1	N	38	G	C3'-C2'	6.26	1.59	1.52
1	N	457	G	O3'-P	-6.26	1.53	1.61
1	N	968	A	N3-C4	6.26	1.38	1.34
1	N	253	A	C2'-C1'	-6.26	1.46	1.53
1	N	674	G	N1-C2	6.26	1.42	1.37
1	N	1437	A	N9-C8	-6.26	1.32	1.37
1	N	88	U	O3'-P	-6.25	1.53	1.61
1	N	45	G	N7-C5	-6.25	1.35	1.39
1	N	45	G	N9-C4	-6.25	1.32	1.38
1	N	130	A	C5'-C4'	6.25	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	357	G	C4'-O4'	6.25	1.53	1.45
1	N	1091	U	N1-C2	6.25	1.44	1.38
1	N	1285	A	C5-C4	6.25	1.43	1.38
1	N	1494	G	N9-C4	6.25	1.43	1.38
1	N	953	G	C5'-C4'	6.25	1.58	1.51
1	N	532	A	C6-N6	6.25	1.39	1.33
1	N	750	C	C1'-N1	6.25	1.58	1.48
1	N	942	G	P-O5'	6.25	1.66	1.59
1	N	1165	U	C4'-C3'	6.25	1.60	1.53
1	N	111	G	C6-N1	6.25	1.44	1.39
1	N	1219	A	C2'-C1'	-6.25	1.46	1.53
1	N	1232	U	C4-C5	6.25	1.49	1.43
1	N	360	G	N9-C8	6.25	1.42	1.37
1	N	828	U	C1'-N1	6.25	1.58	1.48
1	N	867	G	C2-N2	6.25	1.40	1.34
1	N	1197	A	N9-C4	6.25	1.41	1.37
1	N	867	G	C5-C6	-6.24	1.36	1.42
1	N	947	G	C6-N1	6.24	1.44	1.39
1	N	1223	C	C5-C6	6.24	1.39	1.34
1	N	311	C	C2-O2	-6.24	1.18	1.24
1	N	777	A	C6-N6	6.24	1.39	1.33
1	N	25	C	C2-O2	6.24	1.30	1.24
1	N	1085	U	C4-O4	6.24	1.28	1.23
1	N	1336	C	N1-C6	6.24	1.40	1.37
1	N	356	A	N9-C4	-6.24	1.34	1.37
1	N	409	U	P-O5'	-6.24	1.53	1.59
1	N	819	A	C6-N1	6.24	1.40	1.35
1	N	937	A	C6-N6	6.24	1.39	1.33
1	N	944	G	N7-C5	-6.24	1.35	1.39
1	N	528	C	C2'-C1'	-6.24	1.46	1.53
1	N	1253	G	N9-C4	6.24	1.43	1.38
1	N	1014	A	C6-N6	6.23	1.39	1.33
1	N	1280	A	C4'-C3'	-6.23	1.46	1.53
1	N	377	G	C4'-C3'	-6.23	1.46	1.53
1	N	437	U	P-O5'	-6.23	1.53	1.59
1	N	785	G	N9-C4	-6.23	1.32	1.38
1	N	968	A	C6-N6	6.23	1.39	1.33
1	N	1386	G	C5-C4	-6.23	1.33	1.38
1	N	693	G	N1-C2	6.23	1.42	1.37
1	N	1022	A	O3'-P	6.23	1.68	1.61
1	N	1050	G	C5-C4	6.23	1.42	1.38
1	N	1185	G	N1-C2	6.23	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	59	A	N3-C4	-6.23	1.31	1.34
1	N	128	G	O3'-P	-6.23	1.53	1.61
1	N	189	A	C3'-O3'	6.23	1.50	1.42
1	N	542	G	C5-C6	6.23	1.48	1.42
1	N	655	A	C2'-C1'	-6.23	1.46	1.53
1	N	347	G	C2-N3	6.23	1.37	1.32
1	N	583	A	C8-N7	-6.23	1.27	1.31
1	N	1478	U	N3-C4	6.23	1.44	1.38
1	N	71	A	C6-N1	6.22	1.40	1.35
1	N	393	A	N9-C8	6.22	1.42	1.37
1	N	426	U	O4'-C1'	-6.22	1.33	1.41
1	N	1218	C	N1-C6	6.22	1.40	1.37
1	N	1261	A	C6-N1	6.22	1.40	1.35
1	N	1372	U	C2-N3	6.22	1.42	1.37
1	N	497	G	C6-N1	6.22	1.44	1.39
1	N	636	U	C2-N3	6.22	1.42	1.37
1	N	711	G	C2-N2	6.22	1.40	1.34
1	N	1301	U	N1-C6	6.22	1.43	1.38
1	N	1359	C	N3-C4	6.22	1.38	1.33
1	N	67	C	C4-C5	6.22	1.48	1.43
1	N	467	U	C2'-C1'	-6.22	1.46	1.53
1	N	19	A	N7-C5	6.22	1.43	1.39
1	N	688	G	C2'-C1'	-6.22	1.46	1.53
1	N	1101	A	O3'-P	-6.22	1.53	1.61
1	N	1179	A	C3'-C2'	-6.22	1.46	1.52
1	N	426	U	C2-N3	6.22	1.42	1.37
1	N	616	G	C3'-C2'	6.22	1.59	1.52
1	N	723	U	N1-C6	6.22	1.43	1.38
1	N	753	A	C5'-C4'	6.22	1.58	1.51
1	N	782	A	C6-N6	6.22	1.39	1.33
1	N	465	A	N3-C4	-6.21	1.31	1.34
1	N	531	U	C4-O4	-6.21	1.18	1.23
1	N	1408	A	C6-N6	6.21	1.39	1.33
1	N	671	G	C2-N3	6.21	1.37	1.32
1	N	240	G	C5-C4	6.21	1.42	1.38
1	N	715	A	N9-C8	6.21	1.42	1.37
1	N	767	A	P-O5'	-6.21	1.53	1.59
1	N	1472	U	C5'-C4'	6.21	1.58	1.51
1	N	889	A	C5-C4	6.21	1.43	1.38
1	N	1521	C	C2'-C1'	-6.21	1.46	1.53
1	N	35	G	P-O5'	-6.21	1.53	1.59
1	N	46	G	C2-N2	6.21	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	660	C	C4-N4	6.21	1.39	1.33
1	N	900	A	N7-C5	-6.21	1.35	1.39
1	N	1510	C	N1-C6	6.21	1.40	1.37
1	N	131	A	C6-N1	6.20	1.39	1.35
1	N	820	U	C5'-C4'	6.20	1.58	1.51
1	N	1473	G	C3'-C2'	6.20	1.59	1.52
1	N	78	A	O4'-C1'	6.20	1.49	1.41
1	N	326	G	N9-C4	6.20	1.43	1.38
1	N	482	A	C5-C4	-6.20	1.34	1.38
1	N	1024	G	C2'-C1'	-6.20	1.46	1.53
1	N	1221	G	N7-C5	-6.20	1.35	1.39
1	N	1448	C	C4'-O4'	6.20	1.53	1.45
1	N	559	A	C6-N1	6.20	1.39	1.35
1	N	1182	G	O4'-C1'	-6.20	1.33	1.41
1	N	253	A	C6-N6	6.19	1.39	1.33
1	N	861	G	C6-O6	-6.19	1.18	1.24
1	N	404	G	N1-C2	6.19	1.42	1.37
1	N	466	A	P-O5'	-6.19	1.53	1.59
1	N	479	U	C2-N3	6.19	1.42	1.37
1	N	1500	A	P-O5'	6.19	1.66	1.59
1	N	106	C	N3-C4	6.19	1.38	1.33
1	N	427	U	C2-N3	6.19	1.42	1.37
1	N	580	C	O4'-C1'	6.19	1.49	1.41
1	N	642	A	C5-C4	-6.19	1.34	1.38
1	N	729	A	N7-C5	-6.19	1.35	1.39
1	N	685	G	N3-C4	6.19	1.39	1.35
1	N	410	G	N3-C4	-6.19	1.31	1.35
1	N	479	U	C5-C6	6.19	1.39	1.34
1	N	909	A	C2-N3	6.19	1.39	1.33
1	N	1036	A	O4'-C1'	6.19	1.49	1.41
1	N	1263	C	C4'-C3'	6.19	1.59	1.53
1	N	1507	A	C6-N1	6.19	1.39	1.35
1	N	874	G	N1-C2	6.19	1.42	1.37
1	N	639	G	N3-C4	6.18	1.39	1.35
1	N	859	G	N3-C4	6.18	1.39	1.35
1	N	58	C	N1-C2	-6.18	1.33	1.40
1	N	507	C	C4'-C3'	6.18	1.59	1.53
1	N	909	A	C5'-C4'	6.18	1.58	1.51
1	N	1207	G	N7-C5	-6.18	1.35	1.39
1	N	403	C	N1-C2	6.18	1.46	1.40
1	N	951	G	N3-C4	6.18	1.39	1.35
1	N	513	C	P-O5'	-6.18	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1439	G	C6-N1	6.18	1.43	1.39
1	N	1479	C	C2-O2	6.18	1.30	1.24
1	N	3	A	N9-C8	6.18	1.42	1.37
1	N	1015	G	N9-C4	-6.18	1.33	1.38
1	N	1192	C	N3-C4	6.18	1.38	1.33
1	N	687	A	N1-C2	6.17	1.40	1.34
1	N	1300	G	C5-C4	6.17	1.42	1.38
1	N	1319	A	N7-C5	-6.17	1.35	1.39
1	N	191	G	C5-C6	6.17	1.48	1.42
1	N	53	A	C5-C6	6.17	1.46	1.41
1	N	189	A	C5-C6	6.17	1.46	1.41
1	N	818	G	O3'-P	-6.17	1.53	1.61
1	N	481	G	C5-C4	6.17	1.42	1.38
1	N	898	G	C4'-C3'	6.17	1.59	1.53
1	N	1473	G	O3'-P	-6.17	1.53	1.61
1	N	696	A	C5'-C4'	6.17	1.58	1.51
1	N	454	G	C8-N7	-6.16	1.27	1.30
1	N	505	G	C5'-C4'	6.16	1.58	1.51
1	N	764	C	N1-C6	6.16	1.40	1.37
1	N	1279	G	P-O5'	-6.16	1.53	1.59
1	N	1446	A	C5-C4	6.16	1.43	1.38
1	N	695	A	N3-C4	-6.16	1.31	1.34
1	N	1068	G	C2'-C1'	-6.16	1.46	1.53
1	N	1454	G	N7-C5	-6.16	1.35	1.39
1	N	275	G	N1-C2	6.16	1.42	1.37
1	N	416	G	C2-N3	6.16	1.37	1.32
1	N	490	C	C4'-C3'	6.16	1.59	1.53
1	N	552	U	P-O5'	-6.16	1.53	1.59
1	N	570	G	C6-N1	6.16	1.43	1.39
1	N	604	G	P-O5'	6.16	1.66	1.59
1	N	1153	G	C2-N2	6.16	1.40	1.34
1	N	1209	C	P-O5'	-6.16	1.53	1.59
1	N	152	A	N7-C5	-6.16	1.35	1.39
1	N	380	G	C2'-C1'	-6.16	1.46	1.53
1	N	148	G	C2-N2	6.16	1.40	1.34
1	N	465	A	N9-C8	6.16	1.42	1.37
1	N	220	G	C3'-C2'	-6.16	1.46	1.52
1	N	378	G	C4'-C3'	-6.16	1.46	1.53
1	N	529	G	C2-N3	6.16	1.37	1.32
1	N	701	U	C1'-N1	6.16	1.57	1.48
1	N	14	U	C4'-C3'	-6.15	1.46	1.53
1	N	198	G	N9-C4	-6.15	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	403	C	C5'-C4'	6.15	1.58	1.51
1	N	766	A	C5-C4	-6.15	1.34	1.38
1	N	1054	C	C5'-C4'	6.15	1.58	1.51
1	N	282	A	C4'-C3'	6.15	1.59	1.53
1	N	371	A	N9-C8	6.15	1.42	1.37
1	N	430	A	N9-C8	-6.15	1.32	1.37
1	N	1253	G	N1-C2	6.15	1.42	1.37
1	N	201	G	C5'-C4'	6.15	1.58	1.51
1	N	955	U	C3'-C2'	-6.15	1.46	1.52
1	N	150	U	N3-C4	6.15	1.44	1.38
1	N	469	C	C5'-C4'	6.15	1.58	1.51
1	N	790	A	N7-C5	-6.15	1.35	1.39
1	N	1057	G	N1-C2	6.14	1.42	1.37
1	N	1004	A	N9-C4	6.14	1.41	1.37
1	N	1058	G	C2-N3	6.14	1.37	1.32
1	N	1316	G	C6-N1	6.14	1.43	1.39
1	N	14	U	C5'-C4'	6.14	1.58	1.51
1	N	285	C	N3-C4	6.14	1.38	1.33
1	N	1201	A	C3'-C2'	6.14	1.59	1.52
1	N	597	G	N7-C5	-6.13	1.35	1.39
1	N	1260	G	O4'-C1'	-6.13	1.33	1.41
1	N	1067	A	P-O5'	-6.13	1.53	1.59
1	N	1016	A	C2-N3	6.13	1.39	1.33
1	N	1291	U	C2'-C1'	6.13	1.60	1.53
1	N	1395	C	C4-N4	6.13	1.39	1.33
1	N	1469	C	O3'-P	-6.13	1.53	1.61
1	N	401	C	N1-C6	6.13	1.40	1.37
1	N	589	U	C4-C5	6.13	1.49	1.43
1	N	1204	A	C8-N7	-6.13	1.27	1.31
1	N	33	A	O3'-P	-6.13	1.53	1.61
1	N	636	U	N3-C4	6.13	1.44	1.38
1	N	707	U	P-O5'	-6.13	1.53	1.59
1	N	753	A	N9-C4	-6.13	1.34	1.37
1	N	1050	G	C6-N1	6.13	1.43	1.39
1	N	119	A	C8-N7	-6.13	1.27	1.31
1	N	1294	G	C6-N1	6.13	1.43	1.39
1	N	68	G	O3'-P	-6.12	1.53	1.61
1	N	243	A	C3'-C2'	6.12	1.59	1.52
1	N	45	G	C2-N3	6.12	1.37	1.32
1	N	178	C	C4'-C3'	-6.12	1.46	1.53
1	N	971	G	C2-N3	6.12	1.37	1.32
1	N	1239	A	C8-N7	-6.12	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	563	A	C6-N1	6.12	1.39	1.35
1	N	575	G	N9-C4	-6.12	1.33	1.38
1	N	637	C	N3-C4	6.12	1.38	1.33
1	N	774	G	N9-C4	6.12	1.42	1.38
1	N	1051	C	C5'-C4'	-6.12	1.44	1.51
1	N	1509	C	C5'-C4'	6.12	1.58	1.51
1	N	215	C	C4'-C3'	6.12	1.59	1.53
1	N	586	C	N1-C6	-6.12	1.33	1.37
1	N	755	G	P-O5'	-6.12	1.53	1.59
1	N	842	U	C3'-C2'	6.12	1.59	1.52
1	N	842	U	C5'-C4'	6.12	1.58	1.51
1	N	919	A	N1-C2	6.12	1.39	1.34
1	N	1060	U	P-O5'	-6.12	1.53	1.59
1	N	1353	G	C3'-O3'	6.12	1.50	1.42
1	N	1219	A	C6-N1	6.12	1.39	1.35
1	N	315	A	C5'-C4'	6.12	1.58	1.51
1	N	246	A	N1-C2	6.11	1.39	1.34
1	N	253	A	P-O5'	-6.11	1.53	1.59
1	N	122	G	N7-C5	-6.11	1.35	1.39
1	N	468	A	C5-C4	-6.11	1.34	1.38
1	N	721	G	C8-N7	6.11	1.34	1.30
1	N	105	G	C6-N1	6.11	1.43	1.39
1	N	281	G	N7-C5	-6.11	1.35	1.39
1	N	333	U	C5-C6	6.11	1.39	1.34
1	N	819	A	N3-C4	-6.11	1.31	1.34
1	N	978	A	N3-C4	-6.11	1.31	1.34
1	N	1239	A	N1-C2	-6.11	1.28	1.34
1	N	1103	C	C4'-C3'	6.10	1.59	1.53
1	N	1523	G	N7-C5	-6.10	1.35	1.39
1	N	200	G	N1-C2	6.10	1.42	1.37
1	N	1458	G	C5-C4	6.10	1.42	1.38
1	N	110	C	C5'-C4'	6.10	1.58	1.51
1	N	338	A	C2'-C1'	-6.10	1.46	1.53
1	N	667	G	N9-C8	6.10	1.42	1.37
1	N	787	A	N3-C4	-6.10	1.31	1.34
1	N	944	G	N9-C4	6.10	1.42	1.38
1	N	855	U	O3'-P	-6.10	1.53	1.61
1	N	1314	C	P-O5'	-6.10	1.53	1.59
1	N	6	G	C2-N2	6.09	1.40	1.34
1	N	606	G	C2-N3	6.09	1.37	1.32
1	N	759	A	C6-N6	6.09	1.38	1.33
1	N	1306	A	N1-C2	6.09	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	10	A	C6-N6	6.09	1.38	1.33
1	N	235	C	C3'-C2'	-6.09	1.46	1.52
1	N	288	A	C5-C4	6.09	1.43	1.38
1	N	630	A	N9-C4	-6.09	1.34	1.37
1	N	983	A	O4'-C1'	6.09	1.49	1.41
1	N	380	G	N1-C2	6.09	1.42	1.37
1	N	312	C	C4-C5	-6.09	1.38	1.43
1	N	298	A	C6-N6	6.09	1.38	1.33
1	N	767	A	C2'-C1'	-6.09	1.46	1.53
1	N	1452	C	C5'-C4'	6.09	1.58	1.51
1	N	7	A	C6-N1	6.08	1.39	1.35
1	N	1096	C	C4-N4	6.08	1.39	1.33
1	N	1176	A	C3'-O3'	6.08	1.50	1.42
1	N	157	U	C2-N3	6.08	1.42	1.37
1	N	346	G	N7-C5	-6.08	1.35	1.39
1	N	495	A	N9-C4	6.08	1.41	1.37
1	N	1106	G	C6-O6	6.08	1.29	1.24
1	N	92	U	C2'-C1'	-6.08	1.46	1.53
1	N	351	G	N7-C5	-6.08	1.35	1.39
1	N	418	C	P-O5'	-6.08	1.53	1.59
1	N	1092	A	N9-C8	-6.08	1.32	1.37
1	N	1180	A	C5-C4	-6.08	1.34	1.38
1	N	1252	A	O4'-C1'	6.08	1.49	1.41
1	N	1378	C	C3'-O3'	6.08	1.50	1.42
1	N	264	C	P-O5'	-6.08	1.53	1.59
1	N	272	C	O3'-P	-6.08	1.53	1.61
1	N	1046	A	C6-N6	6.08	1.38	1.33
1	N	292	G	C5-C4	6.08	1.42	1.38
1	N	302	G	N3-C4	6.08	1.39	1.35
1	N	13	U	C2'-O2'	-6.07	1.33	1.41
1	N	384	G	C4'-C3'	-6.07	1.46	1.53
1	N	622	A	P-O5'	-6.07	1.53	1.59
1	N	119	A	C6-N1	6.07	1.39	1.35
1	N	593	U	C5-C6	6.07	1.39	1.34
1	N	813	U	C5'-C4'	6.07	1.58	1.51
1	N	1101	A	C5'-C4'	6.07	1.58	1.51
1	N	1447	A	C6-N1	6.07	1.39	1.35
1	N	1451	U	C3'-O3'	6.07	1.50	1.42
1	N	1330	U	C2'-C1'	-6.07	1.46	1.53
1	N	424	G	C4'-C3'	-6.07	1.46	1.53
1	N	745	G	C5'-C4'	6.07	1.58	1.51
1	N	1355	G	C2-N2	-6.07	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	85	U	C5-C6	6.07	1.39	1.34
1	N	177	G	C3'-C2'	-6.07	1.46	1.52
1	N	1013	G	C3'-C2'	-6.07	1.46	1.52
1	N	1146	A	C5-C4	6.07	1.43	1.38
1	N	1484	C	C3'-C2'	6.07	1.59	1.52
1	N	57	G	C6-N1	6.06	1.43	1.39
1	N	936	C	C5-C6	-6.06	1.29	1.34
1	N	654	G	C2-N2	6.06	1.40	1.34
1	N	741	G	C8-N7	-6.06	1.27	1.30
1	N	1237	C	C3'-C2'	6.06	1.59	1.52
1	N	1462	C	C4'-C3'	-6.06	1.46	1.53
1	N	782	A	C2'-C1'	-6.06	1.46	1.53
1	N	1206	G	C5-C4	6.06	1.42	1.38
1	N	503	C	N1-C6	6.06	1.40	1.37
1	N	569	C	N1-C6	-6.06	1.33	1.37
1	N	814	A	O3'-P	-6.06	1.53	1.61
1	N	1057	G	C2-N3	6.06	1.37	1.32
1	N	1195	C	C2-N3	6.06	1.40	1.35
1	N	27	G	N1-C2	6.06	1.42	1.37
1	N	1281	C	P-O5'	-6.06	1.53	1.59
1	N	112	G	N3-C4	-6.06	1.31	1.35
1	N	803	G	N9-C8	6.06	1.42	1.37
1	N	1402	C	C2-O2	-6.06	1.19	1.24
1	N	1033	G	C8-N7	6.05	1.34	1.30
1	N	366	A	N3-C4	6.05	1.38	1.34
1	N	1064	G	C2-N3	6.05	1.37	1.32
1	N	142	G	N3-C4	-6.05	1.31	1.35
1	N	1179	A	C8-N7	6.05	1.35	1.31
1	N	365	U	N3-C4	6.05	1.43	1.38
1	N	614	C	C5-C6	6.05	1.39	1.34
1	N	707	U	N1-C6	-6.05	1.32	1.38
1	N	1252	A	N7-C5	-6.05	1.35	1.39
1	N	1484	C	P-O5'	-6.05	1.53	1.59
1	N	974	A	C6-N6	6.05	1.38	1.33
1	N	1246	A	N7-C5	-6.05	1.35	1.39
1	N	1310	G	O3'-P	-6.05	1.53	1.61
1	N	1149	C	C2-N3	-6.04	1.30	1.35
1	N	616	G	C2'-O2'	-6.04	1.33	1.41
1	N	617	G	C4'-C3'	6.04	1.59	1.53
1	N	1071	C	C2-N3	6.04	1.40	1.35
1	N	1361	G	C5'-C4'	6.04	1.58	1.51
1	N	1455	G	N7-C5	-6.04	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	55	A	C3'-C2'	6.04	1.59	1.52
1	N	172	A	P-O5'	-6.04	1.53	1.59
1	N	371	A	C5-C4	-6.04	1.34	1.38
1	N	530	G	C6-N1	6.04	1.43	1.39
1	N	1276	G	C5-C4	6.04	1.42	1.38
1	N	177	G	O4'-C1'	6.04	1.49	1.41
1	N	317	U	C4-C5	-6.04	1.38	1.43
1	N	319	G	C4'-C3'	-6.04	1.46	1.53
1	N	814	A	C6-N6	6.04	1.38	1.33
1	N	1021	A	C8-N7	-6.04	1.27	1.31
1	N	1184	G	C4'-C3'	6.04	1.59	1.53
1	N	1434	A	N3-C4	6.04	1.38	1.34
1	N	291	U	N1-C6	6.04	1.43	1.38
1	N	853	C	N3-C4	6.04	1.38	1.33
1	N	1449	C	C4-N4	6.04	1.39	1.33
1	N	377	G	N1-C2	6.04	1.42	1.37
1	N	421	U	O3'-P	-6.04	1.53	1.61
1	N	614	C	C4'-O4'	6.04	1.53	1.45
1	N	662	U	N3-C4	6.04	1.43	1.38
1	N	894	G	C2-N3	6.04	1.37	1.32
1	N	1174	G	N3-C4	6.04	1.39	1.35
1	N	320	A	C2'-C1'	-6.03	1.46	1.53
1	N	678	U	N3-C4	6.03	1.43	1.38
1	N	1207	G	P-O5'	-6.03	1.53	1.59
1	N	66	A	C5-C6	-6.03	1.35	1.41
1	N	335	C	N3-C4	6.03	1.38	1.33
1	N	1280	A	C5-C4	6.03	1.43	1.38
1	N	441	A	C3'-C2'	-6.03	1.46	1.52
1	N	731	G	C4'-O4'	6.03	1.53	1.45
1	N	528	C	P-O5'	6.03	1.65	1.59
1	N	595	A	C5'-C4'	6.03	1.58	1.51
1	N	741	G	C4'-O4'	-6.03	1.37	1.45
1	N	758	C	C5-C6	6.03	1.39	1.34
1	N	1212	U	N3-C4	6.03	1.43	1.38
1	N	772	U	P-O5'	-6.03	1.53	1.59
1	N	297	G	C5'-C4'	6.02	1.58	1.51
1	N	695	A	N9-C4	6.02	1.41	1.37
1	N	1054	C	P-O5'	-6.02	1.53	1.59
1	N	1187	G	C2-N3	6.02	1.37	1.32
1	N	858	G	C2-N3	-6.02	1.27	1.32
1	N	1353	G	N3-C4	6.02	1.39	1.35
1	N	452	A	N7-C5	-6.02	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	19	A	C6-N1	6.02	1.39	1.35
1	N	46	G	O3'-P	-6.01	1.53	1.61
1	N	347	G	C4'-C3'	6.01	1.59	1.53
1	N	172	A	C6-N1	6.01	1.39	1.35
1	N	1456	A	C8-N7	-6.01	1.27	1.31
1	N	96	U	C2'-C1'	-6.01	1.46	1.53
1	N	324	G	C3'-C2'	-6.01	1.46	1.52
1	N	1419	G	N1-C2	6.01	1.42	1.37
1	N	36	C	O3'-P	-6.01	1.53	1.61
1	N	365	U	C2-N3	6.01	1.42	1.37
1	N	841	C	C4'-O4'	-6.01	1.37	1.45
1	N	920	U	C5'-C4'	6.01	1.58	1.51
1	N	958	A	C6-N1	6.01	1.39	1.35
1	N	240	G	N1-C2	6.01	1.42	1.37
1	N	1415	G	N9-C8	6.01	1.42	1.37
1	N	1144	G	O4'-C1'	6.00	1.49	1.41
1	N	913	A	O4'-C1'	6.00	1.49	1.41
1	N	1218	C	O3'-P	-6.00	1.53	1.61
1	N	1258	G	O3'-P	-6.00	1.53	1.61
1	N	1260	G	N9-C4	-6.00	1.33	1.38
1	N	859	G	C2'-C1'	6.00	1.59	1.53
1	N	1334	G	C2-N3	6.00	1.37	1.32
1	N	147	G	C2-N3	6.00	1.37	1.32
1	N	989	U	O3'-P	-6.00	1.53	1.61
1	N	1102	A	C5-C4	6.00	1.43	1.38
1	N	184	G	P-O5'	-6.00	1.53	1.59
1	N	442	G	C5-C6	-6.00	1.36	1.42
1	N	930	C	C4'-O4'	6.00	1.53	1.45
1	N	1496	C	C5'-C4'	6.00	1.58	1.51
1	N	1047	G	O4'-C1'	6.00	1.49	1.41
1	N	378	G	C6-O6	-5.99	1.18	1.24
1	N	454	G	N1-C2	5.99	1.42	1.37
1	N	989	U	N3-C4	5.99	1.43	1.38
1	N	1053	G	C3'-C2'	-5.99	1.46	1.52
1	N	57	G	C2-N2	5.99	1.40	1.34
1	N	426	U	P-O5'	-5.99	1.53	1.59
1	N	284	C	N1-C2	-5.99	1.34	1.40
1	N	202	G	C5'-C4'	5.99	1.58	1.51
1	N	506	G	C2-N2	5.99	1.40	1.34
1	N	566	G	C6-O6	-5.99	1.18	1.24
1	N	687	A	C5'-C4'	5.99	1.58	1.51
1	N	1522	U	C1'-N1	5.98	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	348	G	C8-N7	5.98	1.34	1.30
1	N	781	A	C2'-O2'	-5.98	1.33	1.41
1	N	804	U	N3-C4	-5.98	1.33	1.38
1	N	845	A	C1'-N9	5.98	1.57	1.48
1	N	1318	A	C5'-C4'	5.98	1.58	1.51
1	N	1319	A	C5-C4	5.98	1.43	1.38
1	N	1437	A	C8-N7	-5.98	1.27	1.31
1	N	573	A	N7-C5	-5.98	1.35	1.39
1	N	460	A	C6-N6	5.98	1.38	1.33
1	N	601	G	P-O5'	-5.98	1.53	1.59
1	N	1268	G	C2'-C1'	-5.98	1.46	1.53
1	N	171	A	C6-N1	5.98	1.39	1.35
1	N	1425	U	C3'-O3'	5.98	1.50	1.42
1	N	752	G	N9-C8	5.97	1.42	1.37
1	N	927	G	N3-C4	-5.97	1.31	1.35
1	N	1351	U	C2-N3	5.97	1.42	1.37
1	N	1421	G	N1-C2	5.97	1.42	1.37
1	N	1423	G	N7-C5	-5.97	1.35	1.39
1	N	1391	U	C4'-C3'	5.97	1.59	1.53
1	N	845	A	N1-C2	-5.97	1.28	1.34
1	N	1181	G	C6-N1	-5.97	1.35	1.39
1	N	290	C	N3-C4	5.97	1.38	1.33
1	N	348	G	C6-N1	5.97	1.43	1.39
1	N	491	G	N3-C4	5.96	1.39	1.35
1	N	1040	U	C2'-C1'	-5.96	1.46	1.53
1	N	1417	G	N1-C2	5.96	1.42	1.37
1	N	325	A	C5'-C4'	5.96	1.58	1.51
1	N	604	G	C5'-C4'	5.96	1.58	1.51
1	N	83	C	C1'-N1	5.96	1.57	1.48
1	N	603	U	P-O5'	-5.96	1.53	1.59
1	N	801	U	P-O5'	5.96	1.65	1.59
1	N	1256	A	N3-C4	-5.96	1.31	1.34
1	N	1003	G	O3'-P	-5.96	1.54	1.61
1	N	44	A	C2-N3	-5.96	1.28	1.33
1	N	1273	C	P-O5'	-5.96	1.53	1.59
1	N	76	G	C2-N3	5.96	1.37	1.32
1	N	619	U	N3-C4	5.96	1.43	1.38
1	N	10	A	C4'-C3'	5.95	1.59	1.53
1	N	602	A	C4'-O4'	5.95	1.53	1.45
1	N	1349	A	C8-N7	-5.95	1.27	1.31
1	N	669	G	N7-C5	-5.95	1.35	1.39
1	N	1447	A	N9-C8	-5.95	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	466	A	N3-C4	5.95	1.38	1.34
1	N	44	A	C6-N6	5.95	1.38	1.33
1	N	579	A	N3-C4	-5.95	1.31	1.34
1	N	623	C	C2-N3	-5.95	1.30	1.35
1	N	1223	C	C4'-O4'	-5.95	1.37	1.45
1	N	1427	C	C4-N4	5.95	1.39	1.33
1	N	825	A	C6-N1	5.95	1.39	1.35
1	N	1122	U	C4-O4	5.95	1.28	1.23
1	N	361	G	C8-N7	-5.95	1.27	1.30
1	N	824	G	P-O5'	-5.95	1.53	1.59
1	N	849	G	N7-C5	5.95	1.42	1.39
1	N	1068	G	C1'-N9	5.95	1.57	1.48
1	N	1407	C	C4-C5	5.95	1.47	1.43
1	N	624	C	C2'-C1'	-5.94	1.46	1.53
1	N	870	U	N3-C4	5.94	1.43	1.38
1	N	889	A	P-O5'	-5.94	1.53	1.59
1	N	1332	A	C5'-C4'	5.94	1.58	1.51
1	N	14	U	N3-C4	5.94	1.43	1.38
1	N	180	U	C3'-C2'	-5.94	1.46	1.52
1	N	591	U	N3-C4	5.94	1.43	1.38
1	N	1502	A	C5-C4	-5.94	1.34	1.38
1	N	977	A	C5-C6	5.94	1.46	1.41
1	N	1106	G	N9-C8	5.94	1.42	1.37
1	N	603	U	N3-C4	5.94	1.43	1.38
1	N	755	G	C6-N1	5.94	1.43	1.39
1	N	145	G	N7-C5	-5.94	1.35	1.39
1	N	266	G	N3-C4	5.94	1.39	1.35
1	N	601	G	N3-C4	5.94	1.39	1.35
1	N	1207	G	N9-C4	-5.94	1.33	1.38
1	N	1223	C	C3'-C2'	5.94	1.59	1.52
1	N	1508	A	C2-N3	-5.94	1.28	1.33
1	N	1442	G	N9-C4	5.94	1.42	1.38
1	N	1038	C	C4-C5	5.93	1.47	1.43
1	N	1162	C	N1-C2	-5.93	1.34	1.40
1	N	1305	G	C4'-C3'	5.93	1.59	1.53
1	N	417	G	C2'-C1'	-5.93	1.46	1.53
1	N	1027	C	C4-C5	5.93	1.47	1.43
1	N	1264	U	C5'-C4'	5.93	1.58	1.51
1	N	904	U	C2-N3	5.93	1.41	1.37
1	N	1161	C	P-O5'	5.93	1.65	1.59
1	N	1257	A	N9-C8	5.93	1.42	1.37
1	N	1402	C	C4-N4	5.93	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	478	A	P-O5'	-5.93	1.53	1.59
1	N	1251	A	C2'-C1'	-5.93	1.46	1.53
1	N	1430	A	N9-C4	5.93	1.41	1.37
1	N	208	U	N1-C2	-5.93	1.33	1.38
1	N	609	A	C4'-O4'	5.93	1.53	1.45
1	N	706	A	C5-C4	5.93	1.42	1.38
1	N	874	G	P-O5'	-5.93	1.53	1.59
1	N	1127	G	C8-N7	-5.93	1.27	1.30
1	N	712	A	N9-C4	-5.92	1.34	1.37
1	N	1266	G	C2-N2	-5.92	1.28	1.34
1	N	1281	C	N1-C6	5.92	1.40	1.37
1	N	156	C	C4-C5	-5.92	1.38	1.43
1	N	839	C	C4'-C3'	5.92	1.59	1.53
1	N	883	C	O3'-P	-5.92	1.54	1.61
1	N	903	G	C8-N7	5.92	1.34	1.30
1	N	1328	C	C5-C6	5.92	1.39	1.34
1	N	1359	C	C4'-C3'	-5.92	1.46	1.52
1	N	1139	G	C5-C4	-5.92	1.34	1.38
1	N	1413	A	C6-N1	5.92	1.39	1.35
1	N	78	A	C4'-O4'	-5.92	1.37	1.45
1	N	140	U	C2-N3	5.92	1.41	1.37
1	N	1083	U	C4-O4	5.92	1.28	1.23
1	N	456	A	C6-N6	5.92	1.38	1.33
1	N	741	G	N1-C2	5.92	1.42	1.37
1	N	1053	G	C4'-C3'	5.92	1.59	1.53
1	N	596	A	C4'-O4'	5.92	1.53	1.45
1	N	910	C	C2'-C1'	-5.92	1.46	1.53
1	N	1158	C	C5-C6	-5.92	1.29	1.34
1	N	97	G	C2'-C1'	-5.91	1.46	1.53
1	N	730	G	C2-N3	5.91	1.37	1.32
1	N	735	C	C5'-C4'	5.91	1.58	1.51
1	N	1188	A	C6-N1	5.91	1.39	1.35
1	N	776	G	N1-C2	5.91	1.42	1.37
1	N	1496	C	N1-C2	-5.91	1.34	1.40
1	N	64	G	C5-C4	5.91	1.42	1.38
1	N	282	A	C5'-C4'	5.91	1.58	1.51
1	N	1031	C	C3'-O3'	5.91	1.50	1.42
1	N	12	U	C3'-C2'	-5.91	1.46	1.52
1	N	886	G	C2'-C1'	-5.91	1.46	1.53
1	N	1155	A	C8-N7	5.91	1.35	1.31
1	N	1322	C	C1'-N1	5.91	1.57	1.48
1	N	695	A	O3'-P	-5.90	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1431	A	C6-N1	5.90	1.39	1.35
1	N	91	U	C4'-O4'	5.90	1.53	1.45
1	N	404	G	O3'-P	-5.90	1.54	1.61
1	N	453	G	C5-C6	-5.90	1.36	1.42
1	N	739	C	N3-C4	5.90	1.38	1.33
1	N	1142	G	C2-N3	5.90	1.37	1.32
1	N	1291	U	C2-N3	5.90	1.41	1.37
1	N	50	A	N9-C8	5.90	1.42	1.37
1	N	984	C	C2'-C1'	-5.90	1.46	1.53
1	N	882	C	C2-N3	5.90	1.40	1.35
1	N	907	A	C6-N1	5.90	1.39	1.35
1	N	899	C	N1-C2	5.90	1.46	1.40
1	N	901	A	C4'-O4'	5.90	1.53	1.45
1	N	611	C	N3-C4	5.89	1.38	1.33
1	N	969	A	C6-N1	5.89	1.39	1.35
1	N	972	C	C2'-C1'	5.89	1.59	1.53
1	N	1111	A	C5'-C4'	-5.89	1.44	1.51
1	N	1372	U	N1-C6	5.89	1.43	1.38
1	N	812	G	C5'-C4'	5.89	1.58	1.51
1	N	1058	G	C5-C4	5.89	1.42	1.38
1	N	1062	U	N3-C4	5.89	1.43	1.38
1	N	1165	U	C5'-C4'	5.89	1.58	1.51
1	N	13	U	C5-C6	-5.89	1.28	1.34
1	N	286	C	C2-N3	5.89	1.40	1.35
1	N	566	G	C8-N7	-5.89	1.27	1.30
1	N	987	G	N1-C2	5.89	1.42	1.37
1	N	1507	A	N9-C8	5.89	1.42	1.37
1	N	1474	U	N1-C6	5.89	1.43	1.38
1	N	721	G	O3'-P	-5.89	1.54	1.61
1	N	788	U	N1-C2	5.89	1.43	1.38
1	N	855	U	O4'-C1'	5.89	1.49	1.41
1	N	1081	A	C5'-C4'	5.89	1.58	1.51
1	N	1427	C	C2'-C1'	-5.89	1.46	1.53
1	N	174	A	C6-N6	5.88	1.38	1.33
1	N	596	A	C5-C4	-5.88	1.34	1.38
1	N	617	G	C3'-C2'	-5.88	1.46	1.52
1	N	1000	A	C8-N7	-5.88	1.27	1.31
1	N	839	C	O4'-C1'	5.88	1.49	1.41
1	N	23	C	P-O5'	-5.88	1.53	1.59
1	N	527	G	C2-N3	5.88	1.37	1.32
1	N	49	U	O4'-C1'	-5.88	1.34	1.41
1	N	541	G	C2'-C1'	-5.88	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	71	A	O3'-P	-5.88	1.54	1.61
1	N	557	G	P-O5'	-5.88	1.53	1.59
1	N	932	C	O3'-P	-5.88	1.54	1.61
1	N	952	U	C2'-C1'	-5.88	1.46	1.53
1	N	1261	A	C5-C4	-5.88	1.34	1.38
1	N	1455	G	C2-N3	5.88	1.37	1.32
1	N	376	G	C5-C4	5.88	1.42	1.38
1	N	11	G	N1-C2	5.87	1.42	1.37
1	N	773	G	C2-N3	5.87	1.37	1.32
1	N	1137	C	C1'-N1	5.87	1.57	1.48
1	N	225	C	C2-N3	5.87	1.40	1.35
1	N	914	A	N3-C4	5.87	1.38	1.34
1	N	1055	A	C4'-O4'	-5.87	1.38	1.45
1	N	1131	G	C8-N7	-5.87	1.27	1.30
1	N	1276	G	N3-C4	-5.87	1.31	1.35
1	N	745	G	C8-N7	-5.87	1.27	1.30
1	N	1250	A	C3'-O3'	5.87	1.50	1.42
1	N	1257	A	C3'-O3'	5.87	1.50	1.42
1	N	3	A	N1-C2	5.87	1.39	1.34
1	N	303	A	C5'-C4'	5.87	1.58	1.51
1	N	347	G	O3'-P	-5.87	1.54	1.61
1	N	492	C	N1-C6	5.87	1.40	1.37
1	N	674	G	C2'-C1'	-5.87	1.46	1.53
1	N	407	U	N1-C2	5.87	1.43	1.38
1	N	683	G	O4'-C1'	-5.87	1.34	1.41
1	N	881	G	O3'-P	-5.87	1.54	1.61
1	N	1221	G	N1-C2	5.87	1.42	1.37
1	N	1302	C	O3'-P	5.87	1.68	1.61
1	N	1394	A	N9-C4	5.87	1.41	1.37
1	N	1445	U	N1-C6	-5.87	1.32	1.38
1	N	55	A	C5'-C4'	5.86	1.58	1.51
1	N	409	U	C3'-C2'	5.86	1.59	1.52
1	N	1303	C	O4'-C1'	5.86	1.49	1.41
1	N	754	C	N1-C6	5.86	1.40	1.37
1	N	837	U	C4-O4	5.86	1.28	1.23
1	N	1455	G	N3-C4	-5.86	1.31	1.35
1	N	1503	A	C6-N6	5.86	1.38	1.33
1	N	329	A	C8-N7	-5.86	1.27	1.31
1	N	416	G	N9-C8	-5.86	1.33	1.37
1	N	762	U	C1'-N1	5.86	1.57	1.48
1	N	877	G	C5-C4	-5.86	1.34	1.38
1	N	1191	A	N3-C4	-5.86	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1233	G	C8-N7	-5.86	1.27	1.30
1	N	200	G	C6-N1	5.86	1.43	1.39
1	N	866	C	O3'-P	-5.86	1.54	1.61
1	N	1215	G	C4'-O4'	-5.86	1.38	1.45
1	N	1259	C	C5-C6	-5.86	1.29	1.34
1	N	1303	C	C4'-O4'	-5.86	1.38	1.45
1	N	1532	U	C2-N3	5.86	1.41	1.37
1	N	356	A	C6-N6	5.85	1.38	1.33
1	N	766	A	C6-N6	5.85	1.38	1.33
1	N	1302	C	N1-C6	5.85	1.40	1.37
1	N	320	A	C5-C4	5.85	1.42	1.38
1	N	532	A	C6-N1	5.85	1.39	1.35
1	N	1013	G	C6-N1	5.85	1.43	1.39
1	N	1205	U	C4-C5	5.85	1.48	1.43
1	N	42	G	N1-C2	5.85	1.42	1.37
1	N	104	G	C5-C4	5.85	1.42	1.38
1	N	734	G	C2-N3	5.85	1.37	1.32
1	N	463	U	C2-N3	5.85	1.41	1.37
1	N	1014	A	N3-C4	-5.85	1.31	1.34
1	N	68	G	C3'-C2'	-5.85	1.46	1.52
1	N	1392	G	C5-C6	-5.85	1.36	1.42
1	N	129	A	C2'-C1'	-5.84	1.47	1.53
1	N	355	C	C2-N3	5.84	1.40	1.35
1	N	867	G	O4'-C1'	5.84	1.49	1.41
1	N	153	C	N3-C4	5.84	1.38	1.33
1	N	428	G	O4'-C1'	-5.84	1.34	1.41
1	N	882	C	C3'-O3'	5.84	1.50	1.42
1	N	1072	G	N1-C2	5.84	1.42	1.37
1	N	277	C	C2'-C1'	-5.84	1.47	1.53
1	N	313	A	C8-N7	-5.84	1.27	1.31
1	N	327	A	C3'-C2'	-5.84	1.46	1.52
1	N	596	A	P-O5'	-5.84	1.53	1.59
1	N	153	C	C3'-O3'	5.84	1.50	1.42
1	N	435	A	N9-C8	5.84	1.42	1.37
1	N	1303	C	C4-C5	5.84	1.47	1.43
1	N	465	A	N9-C4	-5.83	1.34	1.37
1	N	900	A	C5-C4	5.83	1.42	1.38
1	N	1526	G	C8-N7	-5.83	1.27	1.30
1	N	962	C	C4-N4	5.83	1.39	1.33
1	N	1494	G	C2-N3	5.83	1.37	1.32
1	N	746	A	C3'-C2'	-5.83	1.46	1.52
1	N	1526	G	C5-C4	-5.83	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	195	A	N9-C4	-5.83	1.34	1.37
1	N	540	G	C5'-C4'	5.83	1.58	1.51
1	N	1383	C	N1-C6	-5.83	1.33	1.37
1	N	462	G	C5-C6	-5.83	1.36	1.42
1	N	1102	A	N9-C4	5.83	1.41	1.37
1	N	698	G	N1-C2	5.82	1.42	1.37
1	N	842	U	C2'-C1'	-5.82	1.47	1.53
1	N	1386	G	C2'-C1'	-5.82	1.47	1.53
1	N	1066	C	N1-C6	5.82	1.40	1.37
1	N	1445	U	C4-C5	5.82	1.48	1.43
1	N	106	C	N1-C2	-5.82	1.34	1.40
1	N	342	C	C5-C6	5.82	1.39	1.34
1	N	713	G	C5'-C4'	5.82	1.58	1.51
1	N	102	G	C2'-O2'	5.82	1.49	1.41
1	N	174	A	C2'-C1'	-5.82	1.47	1.53
1	N	210	C	C4-C5	5.82	1.47	1.43
1	N	351	G	N9-C8	5.82	1.42	1.37
1	N	543	U	C3'-C2'	5.82	1.59	1.52
1	N	667	G	N9-C4	5.82	1.42	1.38
1	N	983	A	C6-N1	-5.82	1.31	1.35
1	N	1194	U	C4'-O4'	-5.82	1.38	1.45
1	N	114	U	C4-C5	5.81	1.48	1.43
1	N	233	C	C3'-O3'	5.81	1.50	1.42
1	N	688	G	N1-C2	5.81	1.42	1.37
1	N	784	A	C2'-C1'	-5.81	1.47	1.53
1	N	981	U	C4-C5	-5.81	1.38	1.43
1	N	235	C	N1-C6	5.81	1.40	1.37
1	N	882	C	C2-O2	-5.81	1.19	1.24
1	N	1526	G	N9-C8	-5.81	1.33	1.37
1	N	325	A	C6-N1	5.81	1.39	1.35
1	N	748	G	N7-C5	-5.81	1.35	1.39
1	N	809	G	C8-N7	5.81	1.34	1.30
1	N	1085	U	C3'-C2'	5.81	1.59	1.52
1	N	1270	G	C5-C4	5.81	1.42	1.38
1	N	1529	G	N1-C2	5.81	1.42	1.37
1	N	351	G	N9-C4	-5.81	1.33	1.38
1	N	575	G	N9-C8	5.81	1.42	1.37
1	N	849	G	N3-C4	-5.81	1.31	1.35
1	N	1293	C	C5'-C4'	5.81	1.58	1.51
1	N	580	C	C4'-O4'	5.80	1.53	1.45
1	N	1328	C	C4-N4	-5.80	1.28	1.33
1	N	452	A	N3-C4	-5.80	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1290	G	N1-C2	5.80	1.42	1.37
1	N	1312	G	O4'-C1'	5.80	1.49	1.41
1	N	232	G	C6-N1	5.80	1.43	1.39
1	N	330	C	N1-C6	5.80	1.40	1.37
1	N	65	A	C6-N6	5.80	1.38	1.33
1	N	289	G	N9-C8	5.80	1.42	1.37
1	N	796	C	C4'-O4'	5.80	1.53	1.45
1	N	1255	G	O4'-C1'	5.80	1.49	1.41
1	N	159	G	N7-C5	-5.79	1.35	1.39
1	N	240	G	N9-C8	5.79	1.42	1.37
1	N	335	C	C4'-C3'	5.79	1.59	1.53
1	N	341	C	P-O5'	-5.79	1.53	1.59
1	N	415	A	P-O5'	-5.79	1.53	1.59
1	N	604	G	N1-C2	5.79	1.42	1.37
1	N	715	A	C2'-C1'	-5.79	1.47	1.53
1	N	1239	A	C5'-C4'	5.79	1.58	1.51
1	N	508	U	O3'-P	-5.79	1.54	1.61
1	N	667	G	O3'-P	-5.79	1.54	1.61
1	N	701	U	P-O5'	-5.79	1.53	1.59
1	N	1038	C	C4-N4	5.79	1.39	1.33
1	N	1051	C	C3'-O3'	5.79	1.50	1.42
1	N	1461	G	C2'-C1'	-5.79	1.47	1.53
1	N	1187	G	P-O5'	-5.79	1.53	1.59
1	N	398	U	N1-C2	5.79	1.43	1.38
1	N	667	G	C5-C4	-5.79	1.34	1.38
1	N	923	A	C3'-C2'	5.79	1.59	1.52
1	N	961	U	C2'-C1'	-5.79	1.47	1.53
1	N	374	A	O5'-C5'	5.79	1.53	1.44
1	N	512	U	N3-C4	-5.79	1.33	1.38
1	N	347	G	C3'-C2'	5.79	1.59	1.52
1	N	352	C	C5'-C4'	5.79	1.58	1.51
1	N	681	A	C4'-C3'	-5.79	1.46	1.52
1	N	710	G	C4'-O4'	-5.78	1.38	1.45
1	N	848	C	P-O5'	-5.78	1.53	1.59
1	N	1173	U	O3'-P	-5.78	1.54	1.61
1	N	1487	G	C6-N1	5.78	1.43	1.39
1	N	247	G	C6-N1	5.78	1.43	1.39
1	N	162	A	C8-N7	-5.78	1.27	1.31
1	N	703	G	C8-N7	5.78	1.34	1.30
1	N	743	A	C6-N1	5.78	1.39	1.35
1	N	914	A	N1-C2	5.78	1.39	1.34
1	N	551	U	P-O5'	-5.78	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1043	G	O3'-P	-5.78	1.54	1.61
1	N	307	C	C4-N4	5.78	1.39	1.33
1	N	1193	G	C5-C6	-5.78	1.36	1.42
1	N	1234	C	C4'-C3'	5.78	1.59	1.53
1	N	407	U	C3'-O3'	5.78	1.50	1.42
1	N	774	G	C5-C6	-5.78	1.36	1.42
1	N	1195	C	O3'-P	-5.78	1.54	1.61
1	N	25	C	P-O5'	-5.77	1.53	1.59
1	N	485	U	C4'-C3'	5.77	1.59	1.53
1	N	1127	G	C5-C4	-5.77	1.34	1.38
1	N	313	A	N3-C4	-5.77	1.31	1.34
1	N	878	A	P-O5'	-5.77	1.53	1.59
1	N	898	G	N1-C2	5.77	1.42	1.37
1	N	1391	U	C2'-C1'	-5.77	1.47	1.53
1	N	1430	A	N3-C4	-5.77	1.31	1.34
1	N	1519	A	N9-C4	5.77	1.41	1.37
1	N	134	G	N1-C2	-5.77	1.33	1.37
1	N	209	U	C2-O2	5.77	1.27	1.22
1	N	1141	C	C1'-N1	5.77	1.57	1.48
1	N	1304	G	C5'-C4'	5.77	1.58	1.51
1	N	259	G	C2-N2	5.76	1.40	1.34
1	N	458	U	C2-N3	5.76	1.41	1.37
1	N	775	G	P-O5'	-5.76	1.53	1.59
1	N	794	A	C5-C4	5.76	1.42	1.38
1	N	1105	A	N3-C4	-5.76	1.31	1.34
1	N	95	C	N1-C6	5.76	1.40	1.37
1	N	929	G	N9-C4	-5.76	1.33	1.38
1	N	1433	A	C2-N3	5.76	1.38	1.33
1	N	74	A	P-O5'	-5.76	1.53	1.59
1	N	1438	G	P-O5'	5.76	1.65	1.59
1	N	848	C	C3'-C2'	-5.76	1.46	1.52
1	N	1517	G	C4'-C3'	-5.76	1.46	1.52
1	N	141	G	N1-C2	5.75	1.42	1.37
1	N	223	A	C8-N7	-5.75	1.27	1.31
1	N	497	G	C3'-C2'	5.75	1.59	1.52
1	N	499	A	N7-C5	-5.75	1.35	1.39
1	N	517	G	O3'-P	-5.75	1.54	1.61
1	N	542	G	C3'-C2'	-5.75	1.46	1.52
1	N	736	C	C2'-C1'	-5.75	1.47	1.53
1	N	859	G	N1-C2	5.75	1.42	1.37
1	N	196	A	C5'-C4'	5.75	1.58	1.51
1	N	519	C	C4-N4	5.75	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	818	G	N9-C8	5.75	1.41	1.37
1	N	1088	G	C2-N3	-5.75	1.28	1.32
1	N	812	G	N1-C2	5.75	1.42	1.37
1	N	45	G	C5-C4	-5.75	1.34	1.38
1	N	157	U	C2'-O2'	-5.75	1.34	1.41
1	N	391	G	C6-O6	-5.75	1.19	1.24
1	N	942	G	O3'-P	-5.75	1.54	1.61
1	N	1021	A	C4'-C3'	5.75	1.59	1.53
1	N	1327	C	N3-C4	5.75	1.38	1.33
1	N	1522	U	C2-N3	5.75	1.41	1.37
1	N	443	C	C4-C5	5.75	1.47	1.43
1	N	623	C	C3'-C2'	5.75	1.59	1.52
1	N	649	A	N7-C5	5.75	1.42	1.39
1	N	865	A	C8-N7	-5.75	1.27	1.31
1	N	1002	G	N1-C2	5.75	1.42	1.37
1	N	1329	A	C4'-O4'	5.75	1.53	1.45
1	N	197	A	C5-C4	5.75	1.42	1.38
1	N	795	C	C4-C5	-5.75	1.38	1.43
1	N	174	A	C8-N7	5.74	1.35	1.31
1	N	460	A	N7-C5	5.74	1.42	1.39
1	N	752	G	C2'-C1'	-5.74	1.47	1.53
1	N	844	G	P-O5'	-5.74	1.54	1.59
1	N	906	A	C4'-C3'	5.74	1.59	1.53
1	N	379	C	C2'-C1'	-5.74	1.47	1.53
1	N	911	U	C4-O4	-5.74	1.19	1.23
1	N	162	A	N9-C4	5.74	1.41	1.37
1	N	395	C	C2-N3	5.74	1.40	1.35
1	N	625	U	C5-C6	5.74	1.39	1.34
1	N	810	C	O4'-C1'	5.74	1.49	1.41
1	N	822	U	C4-O4	5.74	1.28	1.23
1	N	538	G	C8-N7	5.74	1.34	1.30
1	N	542	G	C2'-C1'	-5.74	1.47	1.53
1	N	586	C	P-O5'	-5.74	1.54	1.59
1	N	919	A	C4'-C3'	5.74	1.59	1.53
1	N	53	A	N1-C2	5.74	1.39	1.34
1	N	1097	C	N3-C4	5.74	1.38	1.33
1	N	817	C	C4'-O4'	-5.74	1.38	1.45
1	N	421	U	N1-C2	5.73	1.43	1.38
1	N	918	A	N1-C2	5.73	1.39	1.34
1	N	21	G	C5'-C4'	5.73	1.58	1.51
1	N	321	A	C5'-C4'	5.73	1.58	1.51
1	N	548	G	C2-N2	5.73	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	656	G	N9-C8	5.73	1.41	1.37
1	N	452	A	C4'-C3'	5.73	1.59	1.53
1	N	1216	A	C2'-C1'	-5.73	1.47	1.53
1	N	1423	G	C5-C4	5.73	1.42	1.38
1	N	1528	U	C2-N3	5.73	1.41	1.37
1	N	94	G	O3'-P	-5.73	1.54	1.61
1	N	216	U	C2'-C1'	-5.73	1.47	1.53
1	N	1244	G	N1-C2	5.73	1.42	1.37
1	N	234	C	C5-C6	5.73	1.39	1.34
1	N	317	U	C2-N3	5.73	1.41	1.37
1	N	398	U	C4'-C3'	5.73	1.59	1.53
1	N	704	A	N9-C4	-5.73	1.34	1.37
1	N	818	G	C8-N7	-5.73	1.27	1.30
1	N	1459	G	N3-C4	5.73	1.39	1.35
1	N	559	A	C6-N6	5.73	1.38	1.33
1	N	1036	A	N7-C5	5.73	1.42	1.39
1	N	827	U	O3'-P	-5.72	1.54	1.61
1	N	914	A	C4'-C3'	5.72	1.59	1.53
1	N	1516	G	C2'-C1'	-5.72	1.47	1.53
1	N	374	A	C3'-C2'	5.72	1.59	1.52
1	N	414	A	N3-C4	-5.72	1.31	1.34
1	N	1030	U	N1-C6	5.72	1.43	1.38
1	N	1285	A	N9-C4	-5.72	1.34	1.37
1	N	166	U	C2-N3	5.72	1.41	1.37
1	N	432	A	N7-C5	-5.72	1.35	1.39
1	N	919	A	C8-N7	-5.72	1.27	1.31
1	N	1343	G	N7-C5	-5.72	1.35	1.39
1	N	298	A	N1-C2	5.72	1.39	1.34
1	N	313	A	N9-C8	-5.72	1.33	1.37
1	N	529	G	C5-C4	5.72	1.42	1.38
1	N	986	U	O3'-P	-5.72	1.54	1.61
1	N	1303	C	N1-C6	5.72	1.40	1.37
1	N	1317	C	N3-C4	5.72	1.38	1.33
1	N	303	A	P-O5'	-5.71	1.54	1.59
1	N	473	U	C4-O4	-5.71	1.19	1.23
1	N	1197	A	C6-N1	5.71	1.39	1.35
1	N	1529	G	C6-N1	5.71	1.43	1.39
1	N	1362	A	N7-C5	-5.71	1.35	1.39
1	N	605	U	C3'-C2'	5.71	1.59	1.52
1	N	770	C	C4-N4	5.71	1.39	1.33
1	N	823	C	C2-N3	-5.71	1.31	1.35
1	N	865	A	N1-C2	-5.71	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	215	C	C1'-N1	5.71	1.57	1.48
1	N	608	A	C8-N7	-5.71	1.27	1.31
1	N	1350	A	O3'-P	-5.71	1.54	1.61
1	N	47	C	O3'-P	-5.71	1.54	1.61
1	N	62	U	C2-N3	5.71	1.41	1.37
1	N	797	C	C4'-O4'	-5.71	1.38	1.45
1	N	1029	U	C2-N3	5.71	1.41	1.37
1	N	1144	G	C2-N2	5.71	1.40	1.34
1	N	1496	C	C3'-O3'	5.71	1.50	1.42
1	N	666	G	N9-C8	-5.71	1.33	1.37
1	N	675	A	P-O5'	-5.71	1.54	1.59
1	N	81	A	C5-C6	5.71	1.46	1.41
1	N	203	G	C2'-C1'	-5.71	1.47	1.53
1	N	1375	A	N3-C4	5.71	1.38	1.34
1	N	1134	G	N1-C2	5.70	1.42	1.37
1	N	1484	C	C2-N3	5.70	1.40	1.35
1	N	69	G	C8-N7	-5.70	1.27	1.30
1	N	324	G	C2'-C1'	-5.70	1.47	1.53
1	N	768	A	N9-C4	5.70	1.41	1.37
1	N	1157	A	C5-C4	-5.70	1.34	1.38
1	N	906	A	C4'-O4'	-5.70	1.38	1.45
1	N	1018	G	O4'-C1'	5.70	1.49	1.41
1	N	1467	C	O3'-P	-5.70	1.54	1.61
1	N	953	G	N7-C5	-5.70	1.35	1.39
1	N	1511	G	P-O5'	-5.70	1.54	1.59
1	N	502	A	C6-N6	5.69	1.38	1.33
1	N	1156	G	N9-C4	-5.69	1.33	1.38
1	N	362	G	C5-C4	-5.69	1.34	1.38
1	N	400	C	N3-C4	5.69	1.38	1.33
1	N	769	G	N7-C5	-5.69	1.35	1.39
1	N	862	C	C2-N3	5.69	1.40	1.35
1	N	1000	A	N9-C4	-5.69	1.34	1.37
1	N	1481	U	C3'-O3'	5.69	1.50	1.42
1	N	1456	A	N9-C8	-5.69	1.33	1.37
1	N	474	G	C8-N7	-5.69	1.27	1.30
1	N	744	C	C4-N4	5.69	1.39	1.33
1	N	1117	A	C2'-C1'	-5.69	1.47	1.53
1	N	1519	A	C6-N6	5.69	1.38	1.33
1	N	484	G	N9-C4	-5.68	1.33	1.38
1	N	763	G	O4'-C1'	5.68	1.49	1.41
1	N	903	G	N9-C4	5.68	1.42	1.38
1	N	904	U	P-O5'	-5.68	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1498	U	C4-C5	5.68	1.48	1.43
1	N	151	A	C5-C4	5.68	1.42	1.38
1	N	256	U	N1-C6	5.68	1.43	1.38
1	N	406	G	N7-C5	5.68	1.42	1.39
1	N	541	G	C2-N2	5.68	1.40	1.34
1	N	955	U	C3'-O3'	5.68	1.50	1.42
1	N	1080	A	C2-N3	5.68	1.38	1.33
1	N	1332	A	C2'-C1'	-5.68	1.47	1.53
1	N	181	A	C4'-C3'	5.68	1.59	1.53
1	N	372	C	P-O5'	-5.68	1.54	1.59
1	N	536	C	O3'-P	-5.68	1.54	1.61
1	N	1130	A	O3'-P	-5.68	1.54	1.61
1	N	276	G	C5-C4	5.68	1.42	1.38
1	N	41	G	C5-C4	5.68	1.42	1.38
1	N	306	A	P-O5'	5.68	1.65	1.59
1	N	1148	U	C1'-N1	5.68	1.57	1.48
1	N	50	A	N7-C5	-5.67	1.35	1.39
1	N	782	A	N7-C5	-5.67	1.35	1.39
1	N	1207	G	N9-C8	-5.67	1.33	1.37
1	N	1346	A	C3'-C2'	-5.67	1.46	1.52
1	N	1474	U	N3-C4	5.67	1.43	1.38
1	N	261	U	C3'-C2'	-5.67	1.46	1.52
1	N	117	G	N7-C5	-5.67	1.35	1.39
1	N	118	U	N1-C2	-5.67	1.33	1.38
1	N	159	G	C3'-C2'	-5.67	1.46	1.52
1	N	487	A	C6-N6	5.67	1.38	1.33
1	N	668	G	C2'-O2'	-5.67	1.34	1.41
1	N	1125	U	C4-O4	-5.67	1.19	1.23
1	N	675	A	N9-C4	-5.67	1.34	1.37
1	N	148	G	N3-C4	5.67	1.39	1.35
1	N	336	A	N7-C5	-5.67	1.35	1.39
1	N	439	U	C2'-O2'	5.67	1.49	1.41
1	N	824	G	C6-N1	5.67	1.43	1.39
1	N	1109	C	N1-C2	5.67	1.45	1.40
1	N	21	G	C6-N1	5.67	1.43	1.39
1	N	389	A	C5-C6	5.67	1.46	1.41
1	N	1177	G	N7-C5	-5.67	1.35	1.39
1	N	1304	G	C2-N3	5.67	1.37	1.32
1	N	1530	G	C2'-O2'	5.67	1.49	1.41
1	N	281	G	C6-N1	5.66	1.43	1.39
1	N	407	U	C4-O4	5.66	1.28	1.23
1	N	876	C	C4'-C3'	-5.66	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	909	A	C3'-C2'	-5.66	1.46	1.52
1	N	1016	A	N1-C2	5.66	1.39	1.34
1	N	1177	G	P-O5'	-5.66	1.54	1.59
1	N	451	A	N9-C8	-5.66	1.33	1.37
1	N	892	A	C6-N1	-5.66	1.31	1.35
1	N	72	A	P-O5'	-5.66	1.54	1.59
1	N	198	G	C3'-C2'	5.66	1.59	1.52
1	N	221	C	C2-N3	5.66	1.40	1.35
1	N	634	C	O3'-P	-5.66	1.54	1.61
1	N	805	C	C4-C5	5.66	1.47	1.43
1	N	1147	C	C4-N4	5.66	1.39	1.33
1	N	1292	G	C2-N3	5.66	1.37	1.32
1	N	901	A	C8-N7	-5.66	1.27	1.31
1	N	1534	A	C5'-C4'	5.66	1.58	1.51
1	N	126	G	N9-C8	5.66	1.41	1.37
1	N	247	G	C3'-C2'	-5.66	1.46	1.52
1	N	304	U	C3'-O3'	5.66	1.50	1.42
1	N	791	G	P-O5'	-5.66	1.54	1.59
1	N	1337	G	N9-C4	5.66	1.42	1.38
1	N	1350	A	N3-C4	-5.66	1.31	1.34
1	N	1403	C	C4'-O4'	-5.66	1.38	1.45
1	N	469	C	C5-C6	5.65	1.38	1.34
1	N	1072	G	C2-N2	5.65	1.40	1.34
1	N	1116	U	P-O5'	-5.65	1.54	1.59
1	N	1378	C	C1'-N1	5.65	1.57	1.48
1	N	1522	U	C4-C5	5.65	1.48	1.43
1	N	106	C	C1'-N1	5.65	1.57	1.48
1	N	1318	A	P-O5'	-5.65	1.54	1.59
1	N	377	G	N7-C5	-5.65	1.35	1.39
1	N	840	C	O3'-P	-5.65	1.54	1.61
1	N	483	C	C5-C6	-5.65	1.29	1.34
1	N	542	G	N9-C4	-5.65	1.33	1.38
1	N	555	U	O3'-P	-5.65	1.54	1.61
1	N	1080	A	O3'-P	-5.65	1.54	1.61
1	N	1200	C	C4-N4	5.65	1.39	1.33
1	N	1442	G	O4'-C1'	5.65	1.49	1.41
1	N	313	A	N7-C5	-5.65	1.35	1.39
1	N	1085	U	C4'-O4'	-5.65	1.38	1.45
1	N	468	A	C8-N7	-5.64	1.27	1.31
1	N	664	G	C5-C6	-5.64	1.36	1.42
1	N	693	G	C5-C4	5.64	1.42	1.38
1	N	125	U	C5-C6	5.64	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1205	U	N1-C6	5.64	1.43	1.38
1	N	386	C	P-O5'	-5.64	1.54	1.59
1	N	774	G	C5-C4	5.64	1.42	1.38
1	N	1276	G	C2-N3	5.64	1.37	1.32
1	N	1374	A	C5-C4	5.64	1.42	1.38
1	N	344	A	C5-C4	5.64	1.42	1.38
1	N	855	U	N3-C4	5.64	1.43	1.38
1	N	1253	G	C2-N2	5.64	1.40	1.34
1	N	1269	A	C8-N7	5.64	1.35	1.31
1	N	1490	U	O3'-P	5.64	1.68	1.61
1	N	514	C	C4'-C3'	5.64	1.59	1.53
1	N	465	A	C2-N3	5.64	1.38	1.33
1	N	587	G	N1-C2	5.64	1.42	1.37
1	N	681	A	C2'-C1'	-5.64	1.47	1.53
1	N	705	G	C5'-C4'	5.64	1.58	1.51
1	N	1187	G	N9-C8	5.64	1.41	1.37
1	N	1189	U	C5'-C4'	5.64	1.58	1.51
1	N	1482	G	N1-C2	5.64	1.42	1.37
1	N	190	A	C6-N1	5.63	1.39	1.35
1	N	203	G	P-O5'	5.63	1.65	1.59
1	N	380	G	C5-C4	5.63	1.42	1.38
1	N	477	C	C4'-C3'	5.63	1.59	1.53
1	N	670	G	P-O5'	-5.63	1.54	1.59
1	N	1175	G	N9-C4	5.63	1.42	1.38
1	N	28	A	O3'-P	-5.63	1.54	1.61
1	N	103	U	C5'-C4'	5.63	1.58	1.51
1	N	262	A	C8-N7	-5.63	1.27	1.31
1	N	1141	C	C3'-O3'	5.63	1.50	1.42
1	N	451	A	C3'-C2'	5.63	1.59	1.52
1	N	1238	A	N3-C4	-5.63	1.31	1.34
1	N	1305	G	N1-C2	5.63	1.42	1.37
1	N	550	G	N1-C2	5.63	1.42	1.37
1	N	566	G	C2'-C1'	-5.63	1.47	1.53
1	N	770	C	O3'-P	-5.63	1.54	1.61
1	N	1296	C	C4'-C3'	5.63	1.59	1.53
1	N	1440	U	P-O5'	5.63	1.65	1.59
1	N	548	G	N1-C2	5.62	1.42	1.37
1	N	853	C	C4-N4	5.62	1.39	1.33
1	N	1463	U	N1-C2	-5.62	1.33	1.38
1	N	242	G	P-O5'	-5.62	1.54	1.59
1	N	410	G	C5-C6	-5.62	1.36	1.42
1	N	710	G	C8-N7	-5.62	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1442	G	C5'-C4'	5.62	1.58	1.51
1	N	1210	C	C4-N4	5.62	1.39	1.33
1	N	151	A	P-O5'	5.62	1.65	1.59
1	N	190	A	C6-N6	5.62	1.38	1.33
1	N	702	A	N3-C4	-5.62	1.31	1.34
1	N	1310	G	N7-C5	5.62	1.42	1.39
1	N	1193	G	N1-C2	5.62	1.42	1.37
1	N	516	U	O4'-C1'	5.62	1.49	1.41
1	N	953	G	C3'-C2'	-5.62	1.46	1.52
1	N	1294	G	C6-O6	5.62	1.29	1.24
1	N	1355	G	C2-N3	-5.62	1.28	1.32
1	N	1360	A	O3'-P	-5.62	1.54	1.61
1	N	1182	G	C6-N1	5.61	1.43	1.39
1	N	830	G	N9-C8	5.61	1.41	1.37
1	N	134	G	C4'-C3'	5.61	1.59	1.53
1	N	196	A	C3'-C2'	5.61	1.59	1.52
1	N	362	G	C6-N1	5.61	1.43	1.39
1	N	679	C	N3-C4	5.61	1.37	1.33
1	N	1228	C	C2-O2	5.61	1.29	1.24
1	N	337	G	C8-N7	5.61	1.34	1.30
1	N	923	A	N3-C4	5.61	1.38	1.34
1	N	1123	U	N1-C6	5.61	1.43	1.38
1	N	1236	A	C3'-C2'	5.61	1.59	1.52
1	N	1282	C	P-O5'	-5.61	1.54	1.59
1	N	762	U	N3-C4	5.61	1.43	1.38
1	N	1081	A	C3'-C2'	-5.61	1.46	1.52
1	N	859	G	O4'-C1'	5.60	1.49	1.41
1	N	1390	U	N3-C4	5.60	1.43	1.38
1	N	999	C	C2-N3	5.60	1.40	1.35
1	N	1155	A	N7-C5	-5.60	1.35	1.39
1	N	1301	U	N3-C4	5.60	1.43	1.38
1	N	1004	A	C3'-C2'	5.60	1.59	1.52
1	N	296	U	C3'-C2'	-5.60	1.46	1.52
1	N	1473	G	C6-N1	5.60	1.43	1.39
1	N	472	U	C3'-C2'	5.60	1.59	1.52
1	N	1060	U	C2-N3	5.60	1.41	1.37
1	N	60	A	N3-C4	-5.60	1.31	1.34
1	N	325	A	C8-N7	-5.60	1.27	1.31
1	N	1252	A	C2'-C1'	-5.60	1.47	1.53
1	N	1514	G	C1'-N9	-5.60	1.39	1.46
1	N	83	C	N3-C4	5.59	1.37	1.33
1	N	444	G	P-O5'	-5.59	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	918	A	N9-C8	-5.59	1.33	1.37
1	N	975	A	C5'-C4'	5.59	1.58	1.51
1	N	1307	U	C5'-C4'	5.59	1.58	1.51
1	N	636	U	C3'-C2'	-5.59	1.46	1.52
1	N	1463	U	P-O5'	5.59	1.65	1.59
1	N	134	G	N9-C8	5.59	1.41	1.37
1	N	1167	A	C2-N3	5.59	1.38	1.33
1	N	1228	C	O3'-P	-5.59	1.54	1.61
1	N	800	G	C8-N7	-5.59	1.27	1.30
1	N	115	G	N7-C5	-5.59	1.35	1.39
1	N	598	U	C4-C5	5.59	1.48	1.43
1	N	633	G	P-O5'	-5.59	1.54	1.59
1	N	1347	G	C3'-C2'	-5.59	1.46	1.52
1	N	6	G	N3-C4	-5.59	1.31	1.35
1	N	403	C	C4-N4	5.59	1.39	1.33
1	N	500	G	C5-C6	-5.59	1.36	1.42
1	N	998	C	C4-N4	5.59	1.39	1.33
1	N	1197	A	N3-C4	5.59	1.38	1.34
1	N	1279	G	N9-C4	-5.59	1.33	1.38
1	N	1012	A	C5-C4	5.58	1.42	1.38
1	N	790	A	C5-C4	5.58	1.42	1.38
1	N	1131	G	N1-C2	5.58	1.42	1.37
1	N	358	U	N3-C4	5.58	1.43	1.38
1	N	582	C	P-O5'	-5.58	1.54	1.59
1	N	651	C	C2'-O2'	5.58	1.49	1.41
1	N	808	C	C4'-O4'	-5.58	1.38	1.45
1	N	415	A	C5-C6	5.58	1.46	1.41
1	N	204	G	P-O5'	-5.58	1.54	1.59
1	N	222	C	C2-N3	5.58	1.40	1.35
1	N	268	U	N1-C2	-5.58	1.33	1.38
1	N	549	C	N1-C6	5.58	1.40	1.37
1	N	585	G	N9-C8	-5.58	1.33	1.37
1	N	1350	A	N9-C8	5.58	1.42	1.37
1	N	470	C	C4-N4	5.58	1.39	1.33
1	N	359	G	C5-C4	5.58	1.42	1.38
1	N	376	G	C5'-C4'	5.58	1.58	1.51
1	N	839	C	C1'-N1	5.58	1.57	1.48
1	N	971	G	C3'-O3'	5.58	1.50	1.42
1	N	220	G	N7-C5	-5.57	1.35	1.39
1	N	354	G	N1-C2	5.57	1.42	1.37
1	N	969	A	C4'-O4'	5.57	1.52	1.45
1	N	277	C	C3'-C2'	5.57	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	213	G	P-O5'	-5.57	1.54	1.59
1	N	329	A	N7-C5	-5.57	1.35	1.39
1	N	920	U	C5-C6	5.57	1.39	1.34
1	N	1316	G	C5'-C4'	5.57	1.58	1.51
1	N	292	G	C5-C6	-5.57	1.36	1.42
1	N	311	C	C1'-N1	5.57	1.57	1.48
1	N	673	A	C6-N6	5.57	1.38	1.33
1	N	1296	C	O3'-P	-5.57	1.54	1.61
1	N	1072	G	N9-C8	-5.57	1.33	1.37
1	N	270	A	C4'-C3'	5.56	1.59	1.53
1	N	606	G	C8-N7	-5.56	1.27	1.30
1	N	250	A	C6-N1	5.56	1.39	1.35
1	N	442	G	C6-N1	5.56	1.43	1.39
1	N	658	C	C4-C5	5.56	1.47	1.43
1	N	1016	A	C8-N7	-5.56	1.27	1.31
1	N	1502	A	P-O5'	5.56	1.65	1.59
1	N	344	A	C5-C6	5.56	1.46	1.41
1	N	748	G	C6-N1	5.56	1.43	1.39
1	N	1175	G	N3-C4	5.56	1.39	1.35
1	N	64	G	C2-N3	-5.56	1.28	1.32
1	N	748	G	C8-N7	-5.56	1.27	1.30
1	N	20	U	C2-N3	5.56	1.41	1.37
1	N	715	A	C8-N7	-5.56	1.27	1.31
1	N	858	G	C5-C6	-5.56	1.36	1.42
1	N	951	G	C5'-C4'	5.56	1.58	1.51
1	N	1187	G	N1-C2	5.56	1.42	1.37
1	N	1272	G	N7-C5	-5.56	1.35	1.39
1	N	1299	A	C5'-C4'	5.56	1.58	1.51
1	N	1390	U	P-O5'	-5.56	1.54	1.59
1	N	1504	G	C2-N3	5.56	1.37	1.32
1	N	1513	A	C8-N7	-5.56	1.27	1.31
1	N	158	G	N9-C4	-5.56	1.33	1.38
1	N	390	U	N1-C6	5.55	1.43	1.38
1	N	919	A	C6-N6	5.55	1.38	1.33
1	N	308	C	C1'-N1	5.55	1.57	1.48
1	N	644	U	N3-C4	5.55	1.43	1.38
1	N	377	G	O4'-C1'	5.55	1.48	1.41
1	N	580	C	P-O5'	-5.55	1.54	1.59
1	N	734	G	N9-C8	-5.55	1.33	1.37
1	N	1250	A	C4'-O4'	-5.55	1.38	1.45
1	N	331	G	C2-N2	5.55	1.40	1.34
1	N	894	G	C8-N7	5.55	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	913	A	N7-C5	-5.55	1.35	1.39
1	N	1337	G	C4'-O4'	5.55	1.52	1.45
1	N	1338	G	O4'-C1'	5.55	1.48	1.41
1	N	1491	G	P-O5'	-5.55	1.54	1.59
1	N	450	G	C5-C6	-5.55	1.36	1.42
1	N	656	G	C2'-C1'	-5.55	1.47	1.53
1	N	775	G	C6-N1	5.55	1.43	1.39
1	N	184	G	C4'-O4'	5.55	1.52	1.45
1	N	968	A	P-O5'	-5.55	1.54	1.59
1	N	1405	G	N9-C8	-5.55	1.33	1.37
1	N	208	U	C4'-C3'	-5.54	1.47	1.52
1	N	788	U	C5-C6	5.54	1.39	1.34
1	N	203	G	C5-C4	5.54	1.42	1.38
1	N	591	U	N1-C6	5.54	1.43	1.38
1	N	775	G	O3'-P	5.54	1.67	1.61
1	N	1077	G	N3-C4	-5.54	1.31	1.35
1	N	753	A	P-O5'	-5.54	1.54	1.59
1	N	1091	U	C2-N3	5.54	1.41	1.37
1	N	402	G	N1-C2	5.54	1.42	1.37
1	N	418	C	O3'-P	-5.54	1.54	1.61
1	N	889	A	C6-N1	5.54	1.39	1.35
1	N	1061	G	C4'-C3'	5.54	1.59	1.53
1	N	1222	G	C8-N7	-5.54	1.27	1.30
1	N	232	G	N9-C4	5.54	1.42	1.38
1	N	349	A	N7-C5	-5.54	1.35	1.39
1	N	439	U	C1'-N1	5.54	1.57	1.48
1	N	555	U	C2'-C1'	-5.54	1.47	1.53
1	N	1003	G	C2-N2	5.54	1.40	1.34
1	N	1036	A	C5'-C4'	5.54	1.57	1.51
1	N	1410	A	C6-N1	5.54	1.39	1.35
1	N	52	C	C4-N4	5.53	1.39	1.33
1	N	312	C	C5'-C4'	5.53	1.57	1.51
1	N	1482	G	C8-N7	-5.53	1.27	1.30
1	N	489	C	N3-C4	5.53	1.37	1.33
1	N	612	C	C5'-C4'	5.53	1.57	1.51
1	N	1004	A	C2'-C1'	-5.53	1.47	1.53
1	N	177	G	C4'-O4'	5.53	1.52	1.45
1	N	117	G	C2-N2	5.53	1.40	1.34
1	N	372	C	C2-N3	-5.53	1.31	1.35
1	N	978	A	N7-C5	-5.53	1.35	1.39
1	N	240	G	C5'-C4'	5.52	1.57	1.51
1	N	95	C	C2-N3	-5.52	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	127	G	C6-O6	5.52	1.29	1.24
1	N	144	G	N1-C2	5.52	1.42	1.37
1	N	1113	C	C3'-O3'	5.52	1.49	1.42
1	N	1257	A	N9-C4	5.52	1.41	1.37
1	N	1410	A	C2'-C1'	5.52	1.59	1.53
1	N	446	G	C5'-C4'	5.52	1.57	1.51
1	N	714	G	C2'-C1'	-5.52	1.47	1.53
1	N	1056	U	C4-O4	5.52	1.28	1.23
1	N	1278	G	N1-C2	5.52	1.42	1.37
1	N	41	G	N9-C8	5.52	1.41	1.37
1	N	557	G	C5-C6	-5.52	1.36	1.42
1	N	1081	A	N7-C5	-5.52	1.35	1.39
1	N	1165	U	O3'-P	-5.52	1.54	1.61
1	N	1405	G	C5-C4	5.52	1.42	1.38
1	N	1411	C	O3'-P	-5.52	1.54	1.61
1	N	1520	C	C4'-O4'	-5.52	1.38	1.45
1	N	618	C	N1-C2	-5.52	1.34	1.40
1	N	1340	A	C6-N1	5.52	1.39	1.35
1	N	771	G	N1-C2	5.52	1.42	1.37
1	N	233	C	C4-N4	5.51	1.39	1.33
1	N	766	A	C4'-O4'	5.51	1.52	1.45
1	N	35	G	O3'-P	-5.51	1.54	1.61
1	N	568	G	C5-C4	5.51	1.42	1.38
1	N	887	G	C3'-O3'	5.51	1.49	1.42
1	N	1001	C	C4-C5	-5.51	1.38	1.43
1	N	1015	G	C2'-C1'	-5.51	1.47	1.53
1	N	1287	A	N3-C4	5.51	1.38	1.34
1	N	83	C	P-O5'	5.51	1.65	1.59
1	N	196	A	C6-N6	5.51	1.38	1.33
1	N	229	U	C4-C5	5.51	1.48	1.43
1	N	375	U	C3'-C2'	-5.51	1.46	1.52
1	N	1334	G	N9-C4	-5.51	1.33	1.38
1	N	288	A	C2'-C1'	-5.51	1.47	1.53
1	N	1049	U	O3'-P	-5.51	1.54	1.61
1	N	740	U	C4'-C3'	-5.50	1.47	1.52
1	N	151	A	O4'-C1'	5.50	1.48	1.41
1	N	783	C	C1'-N1	5.50	1.57	1.48
1	N	845	A	P-O5'	-5.50	1.54	1.59
1	N	847	G	N9-C4	5.50	1.42	1.38
1	N	1523	G	C5-C4	-5.50	1.34	1.38
1	N	127	G	C4'-O4'	5.50	1.52	1.45
1	N	129	A	C2-N3	-5.50	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	432	A	P-O5'	-5.50	1.54	1.59
1	N	883	C	P-O5'	-5.50	1.54	1.59
1	N	1082	A	C5-C6	-5.50	1.36	1.41
1	N	1437	A	C5-C4	-5.50	1.34	1.38
1	N	1019	A	C5'-C4'	5.50	1.57	1.51
1	N	816	A	C6-N6	5.50	1.38	1.33
1	N	1156	G	N1-C2	5.50	1.42	1.37
1	N	541	G	C5-C4	5.50	1.42	1.38
1	N	857	C	C4-N4	5.50	1.38	1.33
1	N	971	G	C2'-C1'	-5.50	1.47	1.53
1	N	1104	G	C2-N3	5.50	1.37	1.32
1	N	1278	G	C1'-N9	5.50	1.56	1.48
1	N	1280	A	C2'-C1'	-5.50	1.47	1.53
1	N	292	G	C5'-C4'	5.50	1.57	1.51
1	N	120	A	C3'-C2'	5.49	1.58	1.52
1	N	414	A	N1-C2	-5.49	1.29	1.34
1	N	1186	G	C4'-C3'	5.49	1.59	1.53
1	N	255	G	C5'-C4'	5.49	1.57	1.51
1	N	23	C	C4-C5	-5.49	1.38	1.43
1	N	39	G	N1-C2	5.49	1.42	1.37
1	N	348	G	C2-N2	5.49	1.40	1.34
1	N	313	A	C5-C6	-5.49	1.36	1.41
1	N	573	A	N3-C4	-5.49	1.31	1.34
1	N	889	A	C2-N3	-5.49	1.28	1.33
1	N	33	A	N9-C4	-5.49	1.34	1.37
1	N	716	A	N7-C5	-5.49	1.35	1.39
1	N	1447	A	C6-N6	5.49	1.38	1.33
1	N	1453	G	C5-C4	5.49	1.42	1.38
1	N	1463	U	C5'-C4'	5.49	1.57	1.51
1	N	164	G	C2'-C1'	-5.48	1.47	1.53
1	N	1102	A	C3'-C2'	-5.48	1.46	1.52
1	N	1335	U	N1-C2	5.48	1.43	1.38
1	N	258	G	N1-C2	5.48	1.42	1.37
1	N	614	C	C2-O2	5.48	1.29	1.24
1	N	1102	A	O3'-P	-5.48	1.54	1.61
1	N	1503	A	O3'-P	-5.48	1.54	1.61
1	N	464	U	C2-N3	5.48	1.41	1.37
1	N	478	A	N9-C8	5.48	1.42	1.37
1	N	609	A	N9-C8	-5.48	1.33	1.37
1	N	895	G	C2-N3	5.48	1.37	1.32
1	N	979	C	C4-N4	5.48	1.38	1.33
1	N	1059	C	C3'-C2'	5.48	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1351	U	C5-C6	5.48	1.39	1.34
1	N	1445	U	C5-C6	5.48	1.39	1.34
1	N	804	U	C2-N3	-5.48	1.33	1.37
1	N	1015	G	C2-N2	5.48	1.40	1.34
1	N	345	C	C4-N4	5.48	1.38	1.33
1	N	529	G	C5'-C4'	5.48	1.57	1.51
1	N	885	G	C1'-N9	-5.48	1.39	1.46
1	N	1122	U	N1-C6	5.48	1.42	1.38
1	N	1304	G	C6-O6	-5.48	1.19	1.24
1	N	1400	C	C5'-C4'	5.48	1.57	1.51
1	N	221	C	C3'-C2'	-5.48	1.46	1.52
1	N	574	A	C6-N6	5.48	1.38	1.33
1	N	1191	A	C6-N6	5.48	1.38	1.33
1	N	320	A	C3'-C2'	5.47	1.58	1.52
1	N	369	G	C8-N7	-5.47	1.27	1.30
1	N	372	C	C3'-C2'	5.47	1.58	1.52
1	N	383	A	C5'-C4'	5.47	1.57	1.51
1	N	728	A	N7-C5	-5.47	1.35	1.39
1	N	933	G	C5-C6	-5.47	1.36	1.42
1	N	1226	C	P-O5'	-5.47	1.54	1.59
1	N	1382	C	C2'-O2'	-5.47	1.34	1.41
1	N	128	G	O4'-C1'	5.47	1.48	1.41
1	N	902	G	C2-N3	5.47	1.37	1.32
1	N	1084	G	C5-C4	-5.47	1.34	1.38
1	N	110	C	C4-C5	-5.47	1.38	1.43
1	N	1274	A	C2-N3	5.47	1.38	1.33
1	N	288	A	C6-N1	5.47	1.39	1.35
1	N	596	A	O4'-C1'	5.47	1.48	1.41
1	N	915	A	C3'-C2'	5.47	1.58	1.52
1	N	1043	G	C6-N1	5.47	1.43	1.39
1	N	1183	U	C4-C5	5.47	1.48	1.43
1	N	1463	U	C4-C5	5.47	1.48	1.43
1	N	17	U	C5-C6	5.47	1.39	1.34
1	N	450	G	N1-C2	5.47	1.42	1.37
1	N	1312	G	C4'-C3'	5.47	1.59	1.53
1	N	1312	G	N1-C2	5.47	1.42	1.37
1	N	360	G	C2-N2	5.46	1.40	1.34
1	N	951	G	C8-N7	-5.46	1.27	1.30
1	N	1183	U	C1'-N1	5.46	1.56	1.48
1	N	198	G	N9-C8	5.46	1.41	1.37
1	N	222	C	C4-C5	5.46	1.47	1.43
1	N	39	G	O3'-P	-5.46	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	50	A	C5'-C4'	5.46	1.57	1.51
1	N	779	C	O3'-P	-5.46	1.54	1.61
1	N	821	G	C3'-C2'	5.46	1.58	1.52
1	N	829	G	C8-N7	-5.46	1.27	1.30
1	N	1488	G	C5'-C4'	5.46	1.57	1.51
1	N	374	A	N1-C2	-5.46	1.29	1.34
1	N	503	C	O3'-P	-5.46	1.54	1.61
1	N	797	C	C1'-N1	5.46	1.56	1.48
1	N	1154	G	C5-C4	5.46	1.42	1.38
1	N	109	A	N7-C5	5.46	1.42	1.39
1	N	177	G	C8-N7	-5.46	1.27	1.30
1	N	238	A	N9-C4	5.46	1.41	1.37
1	N	276	G	C8-N7	-5.46	1.27	1.30
1	N	332	G	C3'-C2'	-5.46	1.46	1.52
1	N	382	A	C8-N7	-5.46	1.27	1.31
1	N	920	U	C2-N3	5.46	1.41	1.37
1	N	1092	A	C4'-C3'	5.46	1.59	1.53
1	N	1216	A	P-O5'	-5.46	1.54	1.59
1	N	43	C	C2'-C1'	5.46	1.59	1.53
1	N	197	A	P-O5'	-5.46	1.54	1.59
1	N	666	G	C2'-C1'	-5.46	1.47	1.53
1	N	794	A	C8-N7	5.46	1.35	1.31
1	N	815	A	P-O5'	-5.46	1.54	1.59
1	N	1253	G	C5'-C4'	5.46	1.57	1.51
1	N	1268	G	C6-N1	5.46	1.43	1.39
1	N	426	U	C4'-C3'	-5.46	1.47	1.52
1	N	715	A	P-O5'	5.46	1.65	1.59
1	N	883	C	C4'-C3'	-5.46	1.47	1.52
1	N	902	G	C6-O6	-5.46	1.19	1.24
1	N	61	G	C2'-C1'	-5.45	1.47	1.53
1	N	352	C	C4-N4	5.45	1.38	1.33
1	N	731	G	C3'-C2'	5.45	1.58	1.52
1	N	738	C	C5-C6	-5.45	1.29	1.34
1	N	868	C	O3'-P	-5.45	1.54	1.61
1	N	1104	G	N9-C8	-5.45	1.34	1.37
1	N	1211	U	P-O5'	-5.45	1.54	1.59
1	N	1323	G	N9-C4	-5.45	1.33	1.38
1	N	1398	A	C6-N1	5.45	1.39	1.35
1	N	1428	A	C5-C4	5.45	1.42	1.38
1	N	527	G	N7-C5	-5.45	1.35	1.39
1	N	1470	U	C4'-C3'	-5.45	1.47	1.52
1	N	862	C	C3'-O3'	5.45	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1088	G	N7-C5	-5.45	1.35	1.39
1	N	1126	U	C5'-C4'	5.45	1.57	1.51
1	N	3	A	C8-N7	-5.45	1.27	1.31
1	N	871	U	C4-O4	5.45	1.28	1.23
1	N	1244	G	C5-C4	5.45	1.42	1.38
1	N	429	U	C2-O2	5.45	1.27	1.22
1	N	1118	U	C2'-C1'	-5.45	1.47	1.53
1	N	1139	G	O4'-C1'	5.45	1.48	1.41
1	N	832	G	P-O5'	5.45	1.65	1.59
1	N	869	G	C5-C6	-5.45	1.36	1.42
1	N	937	A	O3'-P	-5.45	1.54	1.61
1	N	1440	U	O3'-P	-5.45	1.54	1.61
1	N	69	G	N9-C4	-5.44	1.33	1.38
1	N	95	C	N3-C4	5.44	1.37	1.33
1	N	126	G	C5-C4	5.44	1.42	1.38
1	N	717	U	C4-C5	5.44	1.48	1.43
1	N	722	G	C2-N3	5.44	1.37	1.32
1	N	915	A	N1-C2	-5.44	1.29	1.34
1	N	695	A	C3'-C2'	5.44	1.58	1.52
1	N	725	G	C2-N3	5.44	1.37	1.32
1	N	922	G	P-O5'	5.44	1.65	1.59
1	N	181	A	C2'-C1'	-5.44	1.47	1.53
1	N	521	G	C8-N7	5.44	1.34	1.30
1	N	799	G	N9-C8	-5.44	1.34	1.37
1	N	1040	U	N3-C4	5.44	1.43	1.38
1	N	1368	A	P-O5'	-5.44	1.54	1.59
1	N	840	C	O4'-C1'	5.44	1.48	1.41
1	N	446	G	N9-C8	5.44	1.41	1.37
1	N	532	A	C5-C6	5.44	1.46	1.41
1	N	902	G	N7-C5	-5.44	1.35	1.39
1	N	189	A	C5'-C4'	5.43	1.57	1.51
1	N	602	A	C6-N1	5.43	1.39	1.35
1	N	105	G	C2-N2	5.43	1.40	1.34
1	N	115	G	N9-C4	-5.43	1.33	1.38
1	N	581	G	N1-C2	5.43	1.42	1.37
1	N	703	G	C2'-O2'	-5.43	1.34	1.41
1	N	825	A	C5'-C4'	5.43	1.57	1.51
1	N	1076	U	C4'-O4'	-5.43	1.38	1.45
1	N	1158	C	C4-N4	5.43	1.38	1.33
1	N	1216	A	N3-C4	5.43	1.38	1.34
1	N	1311	A	P-O5'	-5.43	1.54	1.59
1	N	1435	G	P-O5'	-5.43	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	704	A	C1'-N9	5.43	1.56	1.48
1	N	1355	G	C8-N7	5.43	1.34	1.30
1	N	64	G	C2-N2	5.43	1.40	1.34
1	N	1141	C	N3-C4	5.43	1.37	1.33
1	N	1273	C	N1-C2	-5.43	1.34	1.40
1	N	1434	A	P-O5'	-5.43	1.54	1.59
1	N	910	C	C4-C5	5.43	1.47	1.43
1	N	999	C	C3'-C2'	5.43	1.58	1.52
1	N	1085	U	C2-N3	5.43	1.41	1.37
1	N	1415	G	N3-C4	-5.42	1.31	1.35
1	N	67	C	C4'-C3'	-5.42	1.47	1.52
1	N	307	C	C5-C6	5.42	1.38	1.34
1	N	325	A	N3-C4	5.42	1.38	1.34
1	N	331	G	O4'-C1'	5.42	1.48	1.41
1	N	370	C	N1-C6	5.42	1.40	1.37
1	N	392	C	C5'-C4'	5.42	1.57	1.51
1	N	509	A	C2'-C1'	-5.42	1.47	1.53
1	N	594	U	N1-C6	-5.42	1.33	1.38
1	N	670	G	C5'-C4'	5.42	1.57	1.51
1	N	790	A	C2'-C1'	-5.42	1.47	1.53
1	N	1235	U	P-O5'	5.42	1.65	1.59
1	N	248	C	P-O5'	-5.42	1.54	1.59
1	N	523	A	C5'-C4'	5.42	1.57	1.51
1	N	8	A	C5'-C4'	5.42	1.57	1.51
1	N	332	G	C5-C6	-5.42	1.36	1.42
1	N	1243	C	C4-C5	-5.42	1.38	1.43
1	N	400	C	C4'-O4'	5.42	1.52	1.45
1	N	707	U	C4-C5	5.42	1.48	1.43
1	N	1045	C	C2-N3	5.42	1.40	1.35
1	N	1082	A	N9-C4	5.42	1.41	1.37
1	N	1387	G	C5-C6	5.42	1.47	1.42
1	N	243	A	C2'-C1'	-5.41	1.47	1.53
1	N	348	G	N9-C8	5.41	1.41	1.37
1	N	525	C	P-O5'	-5.41	1.54	1.59
1	N	582	C	C1'-N1	5.41	1.56	1.48
1	N	740	U	P-O5'	5.41	1.65	1.59
1	N	199	A	N9-C8	-5.41	1.33	1.37
1	N	484	G	N9-C8	5.41	1.41	1.37
1	N	849	G	C2-N3	5.41	1.37	1.32
1	N	906	A	N7-C5	-5.41	1.36	1.39
1	N	263	A	C6-N1	5.41	1.39	1.35
1	N	682	G	C8-N7	5.41	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	869	G	N7-C5	-5.41	1.36	1.39
1	N	124	C	O3'-P	-5.41	1.54	1.61
1	N	658	C	C3'-C2'	5.41	1.58	1.52
1	N	986	U	C4-C5	5.41	1.48	1.43
1	N	1015	G	N1-C2	5.41	1.42	1.37
1	N	196	A	C5-C4	5.41	1.42	1.38
1	N	681	A	N9-C8	5.41	1.42	1.37
1	N	415	A	N9-C8	5.41	1.42	1.37
1	N	430	A	P-O5'	-5.41	1.54	1.59
1	N	1045	C	C4-N4	5.41	1.38	1.33
1	N	623	C	O3'-P	-5.40	1.54	1.61
1	N	1283	U	C4'-C3'	-5.40	1.47	1.52
1	N	131	A	C2'-C1'	-5.40	1.47	1.53
1	N	328	C	C5'-C4'	5.40	1.57	1.51
1	N	511	C	N3-C4	5.40	1.37	1.33
1	N	933	G	N7-C5	-5.40	1.36	1.39
1	N	1436	U	N1-C6	5.40	1.42	1.38
1	N	70	U	C5-C6	-5.40	1.29	1.34
1	N	1196	A	C5-C4	-5.40	1.34	1.38
1	N	1413	A	C3'-O3'	5.40	1.49	1.42
1	N	1522	U	C2-O2	5.40	1.27	1.22
1	N	829	G	C5'-C4'	5.40	1.57	1.51
1	N	859	G	C4'-C3'	-5.40	1.47	1.52
1	N	1516	G	C3'-O3'	5.40	1.49	1.42
1	N	6	G	C2'-C1'	-5.39	1.47	1.53
1	N	1292	G	C6-N1	5.39	1.43	1.39
1	N	26	A	N7-C5	-5.39	1.36	1.39
1	N	351	G	C4'-C3'	5.39	1.59	1.53
1	N	890	G	C2-N3	5.39	1.37	1.32
1	N	1007	U	N3-C4	5.39	1.43	1.38
1	N	1030	U	O5'-C5'	5.39	1.53	1.44
1	N	1282	C	C4-N4	-5.39	1.29	1.33
1	N	1341	U	C3'-C2'	-5.39	1.46	1.52
1	N	491	G	N9-C8	5.39	1.41	1.37
1	N	1508	A	C6-N6	5.39	1.38	1.33
1	N	95	C	C1'-N1	5.39	1.56	1.48
1	N	479	U	O4'-C1'	5.39	1.48	1.41
1	N	969	A	O4'-C1'	5.39	1.48	1.41
1	N	44	A	C8-N7	-5.39	1.27	1.31
1	N	391	G	C2-N3	5.39	1.37	1.32
1	N	658	C	C4-N4	5.39	1.38	1.33
1	N	790	A	C5'-C4'	5.39	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1273	C	O3'-P	-5.39	1.54	1.61
1	N	1304	G	N3-C4	-5.39	1.31	1.35
1	N	903	G	C2-N2	-5.38	1.29	1.34
1	N	908	A	C6-N6	5.38	1.38	1.33
1	N	1515	G	C5-C6	5.38	1.47	1.42
1	N	236	A	N7-C5	-5.38	1.36	1.39
1	N	336	A	N3-C4	-5.38	1.31	1.34
1	N	1309	G	C8-N7	-5.38	1.27	1.30
1	N	781	A	P-O5'	5.38	1.65	1.59
1	N	1154	G	N3-C4	-5.38	1.31	1.35
1	N	81	A	C4'-C3'	5.38	1.59	1.53
1	N	512	U	P-O5'	5.38	1.65	1.59
1	N	1528	U	C4'-O4'	5.38	1.52	1.45
1	N	23	C	C4'-O4'	5.38	1.52	1.45
1	N	162	A	C6-N6	5.38	1.38	1.33
1	N	345	C	C4-C5	-5.38	1.38	1.43
1	N	395	C	C4-C5	5.38	1.47	1.43
1	N	850	U	C4'-O4'	5.38	1.52	1.45
1	N	1486	G	C5'-C4'	5.38	1.57	1.51
1	N	12	U	N1-C2	-5.38	1.33	1.38
1	N	657	U	C1'-N1	5.38	1.56	1.48
1	N	913	A	C4'-C3'	5.38	1.59	1.53
1	N	1081	A	N9-C4	-5.38	1.34	1.37
1	N	1226	C	C4'-C3'	5.38	1.59	1.53
1	N	413	G	C2-N2	-5.38	1.29	1.34
1	N	469	C	O3'-P	-5.38	1.54	1.61
1	N	61	G	C2-N2	-5.37	1.29	1.34
1	N	270	A	P-O5'	-5.37	1.54	1.59
1	N	313	A	N9-C4	5.37	1.41	1.37
1	N	497	G	P-O5'	-5.37	1.54	1.59
1	N	693	G	C3'-O3'	5.37	1.49	1.42
1	N	186	C	C4-N4	5.37	1.38	1.33
1	N	433	G	C5'-C4'	-5.37	1.45	1.51
1	N	759	A	C8-N7	-5.37	1.27	1.31
1	N	945	G	N9-C4	-5.37	1.33	1.38
1	N	1458	G	C2-N3	5.37	1.37	1.32
1	N	115	G	O4'-C1'	-5.37	1.34	1.41
1	N	1163	A	C4'-O4'	5.37	1.52	1.45
1	N	1370	G	C2-N2	-5.37	1.29	1.34
1	N	1473	G	N9-C4	-5.37	1.33	1.38
1	N	142	G	C5'-C4'	5.37	1.57	1.51
1	N	989	U	C2'-O2'	-5.37	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1469	C	C4'-C3'	5.37	1.59	1.53
1	N	232	G	C2'-C1'	-5.36	1.47	1.53
1	N	324	G	C6-N1	5.36	1.43	1.39
1	N	336	A	O3'-P	-5.36	1.54	1.61
1	N	532	A	C8-N7	-5.36	1.27	1.31
1	N	583	A	P-O5'	-5.36	1.54	1.59
1	N	804	U	C3'-O3'	5.36	1.49	1.42
1	N	841	C	C4-C5	5.36	1.47	1.43
1	N	1310	G	N3-C4	-5.36	1.31	1.35
1	N	1497	G	N1-C2	5.36	1.42	1.37
1	N	120	A	N7-C5	5.36	1.42	1.39
1	N	122	G	N3-C4	-5.36	1.31	1.35
1	N	851	G	C6-N1	5.36	1.43	1.39
1	N	1487	G	C4'-O4'	-5.36	1.38	1.45
1	N	188	C	C4-N4	5.36	1.38	1.33
1	N	375	U	P-O5'	-5.36	1.54	1.59
1	N	605	U	P-O5'	5.36	1.65	1.59
1	N	1222	G	C2'-C1'	-5.36	1.47	1.53
1	N	1486	G	C2'-C1'	-5.36	1.47	1.53
1	N	299	G	N9-C8	5.36	1.41	1.37
1	N	1110	A	C2-N3	5.36	1.38	1.33
1	N	1140	C	C4-N4	5.36	1.38	1.33
1	N	286	C	C2'-C1'	-5.36	1.47	1.53
1	N	590	U	C4'-C3'	5.36	1.59	1.53
1	N	1052	U	C4'-O4'	5.36	1.52	1.45
1	N	1101	A	C2'-C1'	-5.36	1.47	1.53
1	N	518	C	C4'-C3'	5.36	1.59	1.53
1	N	826	C	C3'-C2'	-5.36	1.46	1.52
1	N	932	C	P-O5'	5.36	1.65	1.59
1	N	1471	U	C2-N3	-5.36	1.34	1.37
1	N	1230	C	P-O5'	-5.35	1.54	1.59
1	N	161	A	C4'-O4'	-5.35	1.38	1.45
1	N	622	A	C8-N7	-5.35	1.27	1.31
1	N	936	C	N3-C4	5.35	1.37	1.33
1	N	1034	G	N7-C5	-5.35	1.36	1.39
1	N	1155	A	N9-C4	5.35	1.41	1.37
1	N	701	U	C2-O2	5.35	1.27	1.22
1	N	901	A	N3-C4	-5.35	1.31	1.34
1	N	1161	C	N1-C6	-5.35	1.33	1.37
1	N	1514	G	C5-C4	-5.35	1.34	1.38
1	N	78	A	C5-C4	5.35	1.42	1.38
1	N	749	A	C2-N3	5.35	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	850	U	P-O5'	-5.35	1.54	1.59
1	N	939	G	N9-C8	5.35	1.41	1.37
1	N	977	A	N9-C4	5.35	1.41	1.37
1	N	1004	A	C6-N1	5.35	1.39	1.35
1	N	1038	C	P-O5'	-5.35	1.54	1.59
1	N	1135	U	C4-C5	5.35	1.48	1.43
1	N	1191	A	N9-C8	-5.35	1.33	1.37
1	N	27	G	C8-N7	-5.35	1.27	1.30
1	N	547	A	N3-C4	5.35	1.38	1.34
1	N	465	A	C6-N6	-5.34	1.29	1.33
1	N	1511	G	N3-C4	5.34	1.39	1.35
1	N	157	U	O3'-P	-5.34	1.54	1.61
1	N	210	C	C2-N3	5.34	1.40	1.35
1	N	280	C	C4-N4	5.34	1.38	1.33
1	N	624	C	C2-N3	5.34	1.40	1.35
1	N	1279	G	N3-C4	-5.34	1.31	1.35
1	N	4	U	C2-O2	-5.34	1.17	1.22
1	N	198	G	C5-C6	-5.34	1.37	1.42
1	N	697	U	C4-C5	5.34	1.48	1.43
1	N	1220	G	C4'-C3'	5.34	1.59	1.53
1	N	1329	A	P-O5'	5.34	1.65	1.59
1	N	1440	U	C2'-O2'	5.34	1.48	1.41
1	N	254	G	N7-C5	5.34	1.42	1.39
1	N	1333	A	P-O5'	-5.34	1.54	1.59
1	N	1401	G	C2-N2	5.34	1.39	1.34
1	N	336	A	N9-C4	-5.34	1.34	1.37
1	N	760	G	N9-C8	5.34	1.41	1.37
1	N	1392	G	N1-C2	5.34	1.42	1.37
1	N	929	G	C2'-C1'	-5.33	1.47	1.53
1	N	64	G	C2'-O2'	-5.33	1.34	1.41
1	N	974	A	C3'-C2'	5.33	1.58	1.52
1	N	230	G	C5-C4	5.33	1.42	1.38
1	N	670	G	N7-C5	-5.33	1.36	1.39
1	N	743	A	C5'-C4'	5.33	1.57	1.51
1	N	800	G	C4'-C3'	5.33	1.59	1.53
1	N	1235	U	O3'-P	-5.33	1.54	1.61
1	N	1040	U	C4'-O4'	-5.33	1.38	1.45
1	N	355	C	N3-C4	5.33	1.37	1.33
1	N	722	G	N1-C2	5.33	1.42	1.37
1	N	846	G	C5'-C4'	5.33	1.57	1.51
1	N	1013	G	N9-C4	-5.33	1.33	1.38
1	N	1205	U	C1'-N1	5.33	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	54	C	C5-C6	-5.33	1.30	1.34
1	N	79	G	N1-C2	5.33	1.42	1.37
1	N	1152	A	N7-C5	5.33	1.42	1.39
1	N	548	G	O4'-C1'	5.32	1.48	1.41
1	N	1292	G	N9-C8	5.32	1.41	1.37
1	N	24	U	C2-O2	5.32	1.27	1.22
1	N	249	U	C2-N3	5.32	1.41	1.37
1	N	363	A	C4'-C3'	-5.32	1.47	1.52
1	N	733	G	C5-C4	-5.32	1.34	1.38
1	N	777	A	C2'-C1'	-5.32	1.47	1.53
1	N	688	G	C6-N1	5.32	1.43	1.39
1	N	731	G	C3'-O3'	5.32	1.49	1.42
1	N	833	G	C2-N3	5.32	1.37	1.32
1	N	923	A	C6-N6	5.32	1.38	1.33
1	N	1164	G	C2-N2	5.32	1.39	1.34
1	N	1525	G	O3'-P	-5.32	1.54	1.61
1	N	17	U	N1-C2	5.32	1.43	1.38
1	N	51	A	C5'-C4'	5.32	1.57	1.51
1	N	969	A	C4'-C3'	5.32	1.58	1.53
1	N	1060	U	C5-C6	5.32	1.39	1.34
1	N	1296	C	C4-N4	5.32	1.38	1.33
1	N	1528	U	C2'-C1'	5.32	1.59	1.53
1	N	811	C	N1-C6	5.31	1.40	1.37
1	N	364	A	C5-C6	-5.31	1.36	1.41
1	N	790	A	C6-N1	5.31	1.39	1.35
1	N	1094	G	C4'-C3'	-5.31	1.47	1.52
1	N	1409	C	P-O5'	5.31	1.65	1.59
1	N	425	G	C6-N1	5.31	1.43	1.39
1	N	784	A	N7-C5	5.31	1.42	1.39
1	N	1205	U	C2'-C1'	-5.31	1.47	1.53
1	N	1482	G	C2'-O2'	5.31	1.48	1.41
1	N	255	G	C6-N1	5.31	1.43	1.39
1	N	577	G	N3-C4	5.31	1.39	1.35
1	N	912	C	C5'-C4'	5.31	1.57	1.51
1	N	949	A	C5'-C4'	5.31	1.57	1.51
1	N	1079	G	C8-N7	5.31	1.34	1.30
1	N	1186	G	C8-N7	-5.31	1.27	1.30
1	N	1229	A	C5-C6	-5.31	1.36	1.41
1	N	1381	U	C2-N3	5.31	1.41	1.37
1	N	102	G	C5-C6	-5.30	1.37	1.42
1	N	945	G	C4'-C3'	5.30	1.58	1.53
1	N	744	C	N3-C4	5.30	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	914	A	C2'-C1'	-5.30	1.47	1.53
1	N	1156	G	C2-N2	5.30	1.39	1.34
1	N	72	A	C3'-O3'	5.30	1.49	1.42
1	N	517	G	N1-C2	5.30	1.42	1.37
1	N	1160	G	C6-N1	-5.30	1.35	1.39
1	N	1504	G	C3'-O3'	5.30	1.49	1.42
1	N	213	G	N3-C4	5.30	1.39	1.35
1	N	280	C	C4-C5	5.30	1.47	1.43
1	N	771	G	C8-N7	-5.30	1.27	1.30
1	N	1235	U	C4'-C3'	-5.30	1.47	1.52
1	N	428	G	C8-N7	-5.29	1.27	1.30
1	N	910	C	P-O5'	-5.29	1.54	1.59
1	N	1142	G	N7-C5	-5.29	1.36	1.39
1	N	189	A	C2-N3	5.29	1.38	1.33
1	N	211	G	C5'-C4'	5.29	1.57	1.51
1	N	393	A	N3-C4	-5.29	1.31	1.34
1	N	718	A	N9-C4	-5.29	1.34	1.37
1	N	882	C	O3'-P	-5.29	1.54	1.61
1	N	926	G	C2-N3	5.29	1.36	1.32
1	N	1013	G	P-O5'	-5.29	1.54	1.59
1	N	1204	A	N1-C2	-5.29	1.29	1.34
1	N	1524	C	C4'-O4'	5.29	1.52	1.45
1	N	196	A	N9-C4	-5.29	1.34	1.37
1	N	649	A	C2'-C1'	5.29	1.59	1.53
1	N	1135	U	C1'-N1	5.29	1.56	1.48
1	N	318	G	N3-C4	5.29	1.39	1.35
1	N	1178	G	N9-C8	5.29	1.41	1.37
1	N	60	A	C5-C4	5.29	1.42	1.38
1	N	248	C	N1-C2	-5.29	1.34	1.40
1	N	292	G	O3'-P	-5.29	1.54	1.61
1	N	590	U	P-O5'	-5.29	1.54	1.59
1	N	980	C	C1'-N1	5.29	1.56	1.48
1	N	1249	C	O3'-P	-5.29	1.54	1.61
1	N	805	C	O4'-C1'	-5.29	1.34	1.41
1	N	912	C	N3-C4	5.29	1.37	1.33
1	N	1393	U	O4'-C1'	5.29	1.48	1.41
1	N	721	G	N7-C5	5.29	1.42	1.39
1	N	1068	G	C2-N2	-5.29	1.29	1.34
1	N	476	U	C4-C5	5.28	1.48	1.43
1	N	1478	U	C2'-C1'	-5.28	1.47	1.53
1	N	645	G	C1'-N9	5.28	1.56	1.48
1	N	728	A	N3-C4	-5.28	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	373	A	N7-C5	-5.28	1.36	1.39
1	N	140	U	N1-C2	5.28	1.43	1.38
1	N	242	G	C2-N2	5.28	1.39	1.34
1	N	35	G	C2'-C1'	-5.28	1.47	1.53
1	N	232	G	C5'-C4'	5.28	1.57	1.51
1	N	319	G	N7-C5	-5.28	1.36	1.39
1	N	329	A	C4'-C3'	5.28	1.58	1.53
1	N	712	A	C5'-C4'	5.28	1.57	1.51
1	N	809	G	C2-N2	5.28	1.39	1.34
1	N	834	U	C4'-C3'	5.28	1.58	1.53
1	N	1052	U	C2-N3	5.28	1.41	1.37
1	N	1172	C	O3'-P	-5.28	1.54	1.61
1	N	383	A	O3'-P	-5.27	1.54	1.61
1	N	621	A	C6-N6	5.27	1.38	1.33
1	N	1099	G	C5-C4	-5.27	1.34	1.38
1	N	1255	G	C6-N1	5.27	1.43	1.39
1	N	353	A	N9-C8	-5.27	1.33	1.37
1	N	1016	A	C5'-C4'	5.27	1.57	1.51
1	N	1313	U	C4'-C3'	5.27	1.58	1.53
1	N	904	U	C1'-N1	5.27	1.56	1.48
1	N	391	G	N9-C4	-5.27	1.33	1.38
1	N	746	A	N1-C2	5.27	1.39	1.34
1	N	1089	G	C2'-C1'	-5.27	1.47	1.53
1	N	1499	A	C6-N6	5.27	1.38	1.33
1	N	521	G	C2-N3	5.27	1.36	1.32
1	N	1504	G	C2'-O2'	-5.27	1.34	1.41
1	N	352	C	P-O5'	-5.27	1.54	1.59
1	N	395	C	C3'-C2'	-5.27	1.47	1.52
1	N	512	U	N1-C6	-5.27	1.33	1.38
1	N	1213	A	N9-C4	5.27	1.41	1.37
1	N	227	G	P-O5'	-5.26	1.54	1.59
1	N	301	G	O3'-P	-5.26	1.54	1.61
1	N	556	C	C1'-N1	5.26	1.56	1.48
1	N	654	G	N9-C4	5.26	1.42	1.38
1	N	1289	A	C5-C4	5.26	1.42	1.38
1	N	1448	C	O3'-P	5.26	1.67	1.61
1	N	268	U	C2'-C1'	-5.26	1.47	1.53
1	N	308	C	C2'-C1'	-5.26	1.47	1.53
1	N	420	U	C3'-O3'	5.26	1.49	1.42
1	N	445	G	N1-C2	5.26	1.42	1.37
1	N	468	A	N7-C5	-5.26	1.36	1.39
1	N	488	C	C4-C5	-5.26	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	881	G	C6-N1	5.26	1.43	1.39
1	N	1139	G	C2-N2	5.26	1.39	1.34
1	N	1314	C	C5'-C4'	5.26	1.57	1.51
1	N	1344	C	C5'-C4'	5.26	1.57	1.51
1	N	1499	A	P-O5'	5.26	1.65	1.59
1	N	94	G	C2'-C1'	-5.26	1.47	1.53
1	N	442	G	C4'-C3'	5.26	1.58	1.53
1	N	988	G	N9-C8	-5.26	1.34	1.37
1	N	1291	U	P-O5'	-5.26	1.54	1.59
1	N	1499	A	O4'-C1'	5.26	1.48	1.41
1	N	1067	A	N9-C4	-5.26	1.34	1.37
1	N	1363	A	O4'-C1'	5.26	1.48	1.41
1	N	1323	G	C2'-C1'	-5.25	1.47	1.53
1	N	578	C	C2'-C1'	-5.25	1.47	1.53
1	N	616	G	C5-C4	-5.25	1.34	1.38
1	N	310	G	C6-N1	5.25	1.43	1.39
1	N	361	G	P-O5'	-5.25	1.54	1.59
1	N	601	G	C5-C6	-5.25	1.37	1.42
1	N	1100	C	C4-C5	5.25	1.47	1.43
1	N	1388	C	P-O5'	5.25	1.65	1.59
1	N	1525	G	N9-C4	-5.25	1.33	1.38
1	N	1164	G	N1-C2	5.25	1.42	1.37
1	N	806	C	N3-C4	5.25	1.37	1.33
1	N	1013	G	C4'-C3'	-5.25	1.47	1.52
1	N	1318	A	C2-N3	5.25	1.38	1.33
1	N	227	G	N1-C2	5.24	1.42	1.37
1	N	346	G	O4'-C1'	-5.24	1.34	1.41
1	N	962	C	C2-O2	5.24	1.29	1.24
1	N	979	C	C2'-O2'	-5.24	1.34	1.41
1	N	1322	C	P-O5'	5.24	1.65	1.59
1	N	1404	C	C2-N3	5.24	1.40	1.35
1	N	1434	A	C6-N1	5.24	1.39	1.35
1	N	1517	G	C5-C4	5.24	1.42	1.38
1	N	598	U	C5'-C4'	5.24	1.57	1.51
1	N	701	U	C2-N3	5.24	1.41	1.37
1	N	714	G	N1-C2	5.24	1.42	1.37
1	N	1063	C	O4'-C1'	5.24	1.48	1.41
1	N	1130	A	N9-C4	5.24	1.41	1.37
1	N	1424	U	C1'-N1	5.24	1.56	1.48
1	N	201	G	N1-C2	5.24	1.42	1.37
1	N	1489	G	C4'-C3'	5.24	1.58	1.53
1	N	259	G	C4'-C3'	-5.24	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	463	U	C4-O4	-5.23	1.19	1.23
1	N	1504	G	O3'-P	-5.23	1.54	1.61
1	N	862	C	C4-N4	5.23	1.38	1.33
1	N	884	U	N1-C6	-5.23	1.33	1.38
1	N	146	G	N7-C5	5.23	1.42	1.39
1	N	332	G	N9-C4	-5.23	1.33	1.38
1	N	505	G	C4'-C3'	5.23	1.58	1.53
1	N	889	A	C5-C6	-5.23	1.36	1.41
1	N	983	A	C2'-C1'	-5.23	1.47	1.53
1	N	1396	A	C5-C4	-5.23	1.35	1.38
1	N	1494	G	C3'-C2'	-5.23	1.47	1.52
1	N	152	A	O3'-P	-5.23	1.54	1.61
1	N	445	G	N7-C5	5.23	1.42	1.39
1	N	1476	A	N9-C4	5.23	1.41	1.37
1	N	198	G	C6-N1	5.23	1.43	1.39
1	N	905	U	C4'-C3'	-5.23	1.47	1.52
1	N	1023	U	C1'-N1	5.23	1.56	1.48
1	N	1407	C	C4-N4	5.23	1.38	1.33
1	N	498	A	C5'-C4'	5.23	1.57	1.51
1	N	724	G	C3'-C2'	-5.23	1.47	1.52
1	N	1107	C	O4'-C1'	5.23	1.48	1.41
1	N	227	G	C1'-N9	5.22	1.56	1.48
1	N	1376	U	C2-N3	5.22	1.41	1.37
1	N	328	C	P-O5'	-5.22	1.54	1.59
1	N	789	U	C5-C6	5.22	1.38	1.34
1	N	969	A	N3-C4	5.22	1.38	1.34
1	N	1155	A	C1'-N9	5.22	1.56	1.48
1	N	1223	C	C2-O2	5.22	1.29	1.24
1	N	845	A	C2'-C1'	-5.22	1.47	1.53
1	N	149	A	C2'-C1'	-5.22	1.47	1.53
1	N	997	U	N1-C6	5.22	1.42	1.38
1	N	1171	A	C8-N7	-5.22	1.27	1.31
1	N	1250	A	C2'-C1'	-5.22	1.47	1.53
1	N	38	G	C5-C4	-5.22	1.34	1.38
1	N	973	G	N9-C4	-5.22	1.33	1.38
1	N	66	A	O3'-P	-5.22	1.54	1.61
1	N	123	U	N3-C4	5.22	1.43	1.38
1	N	238	A	C8-N7	-5.22	1.27	1.31
1	N	639	G	C2-N3	5.22	1.36	1.32
1	N	811	C	C4'-C3'	-5.22	1.47	1.52
1	N	1134	G	C2'-C1'	-5.22	1.47	1.53
1	N	1308	U	N3-C4	5.22	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1461	G	N1-C2	5.22	1.42	1.37
1	N	187	G	C8-N7	-5.21	1.27	1.30
1	N	864	A	P-O5'	-5.21	1.54	1.59
1	N	1048	G	O3'-P	5.21	1.67	1.61
1	N	1165	U	C4-C5	-5.21	1.38	1.43
1	N	1365	G	C2'-C1'	-5.21	1.47	1.53
1	N	112	G	P-O5'	-5.21	1.54	1.59
1	N	321	A	C5-C4	5.21	1.42	1.38
1	N	649	A	C1'-N9	5.21	1.56	1.48
1	N	712	A	N3-C4	-5.21	1.31	1.34
1	N	999	C	O4'-C1'	5.21	1.48	1.41
1	N	1293	C	N1-C2	-5.21	1.34	1.40
1	N	405	U	C1'-N1	5.21	1.56	1.48
1	N	749	A	C8-N7	-5.21	1.27	1.31
1	N	867	G	C4'-C3'	5.21	1.58	1.53
1	N	1074	G	C5'-C4'	5.21	1.57	1.51
1	N	1100	C	C2-N3	5.21	1.40	1.35
1	N	500	G	N7-C5	-5.21	1.36	1.39
1	N	932	C	N1-C6	-5.21	1.34	1.37
1	N	1017	U	N1-C6	5.21	1.42	1.38
1	N	1367	C	P-O5'	-5.21	1.54	1.59
1	N	195	A	C2'-C1'	5.21	1.59	1.53
1	N	258	G	C2-N3	5.21	1.36	1.32
1	N	306	A	C4'-O4'	-5.21	1.38	1.45
1	N	443	C	N3-C4	5.21	1.37	1.33
1	N	1089	G	N9-C4	5.21	1.42	1.38
1	N	1136	C	C4-N4	5.21	1.38	1.33
1	N	1411	C	C2-N3	5.21	1.40	1.35
1	N	111	G	C5-C6	5.21	1.47	1.42
1	N	405	U	O3'-P	-5.21	1.54	1.61
1	N	927	G	C6-N1	5.21	1.43	1.39
1	N	1179	A	C6-N6	5.21	1.38	1.33
1	N	1286	U	P-O5'	-5.21	1.54	1.59
1	N	95	C	O4'-C1'	5.20	1.48	1.41
1	N	587	G	C6-N1	-5.20	1.35	1.39
1	N	688	G	C5'-C4'	5.20	1.57	1.51
1	N	803	G	C3'-C2'	-5.20	1.47	1.52
1	N	847	G	N3-C4	-5.20	1.31	1.35
1	N	1382	C	O4'-C1'	5.20	1.48	1.41
1	N	1416	G	O5'-C5'	5.20	1.52	1.44
1	N	1440	U	C4'-C3'	5.20	1.58	1.53
1	N	26	A	C2'-C1'	-5.20	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	633	G	C6-N1	5.20	1.43	1.39
1	N	1100	C	C2'-O2'	-5.20	1.34	1.41
1	N	1440	U	O4'-C1'	5.20	1.48	1.41
1	N	124	C	P-O5'	5.20	1.65	1.59
1	N	288	A	C2-N3	-5.20	1.28	1.33
1	N	747	A	O3'-P	-5.20	1.54	1.61
1	N	974	A	O4'-C1'	-5.20	1.34	1.41
1	N	391	G	C6-N1	-5.20	1.35	1.39
1	N	723	U	C4-O4	-5.20	1.19	1.23
1	N	927	G	P-O5'	5.20	1.65	1.59
1	N	38	G	O4'-C1'	5.20	1.48	1.41
1	N	257	G	P-O5'	-5.20	1.54	1.59
1	N	444	G	C5-C6	-5.20	1.37	1.42
1	N	610	U	C3'-C2'	5.20	1.58	1.52
1	N	1061	G	N7-C5	-5.20	1.36	1.39
1	N	1265	C	N1-C2	5.20	1.45	1.40
1	N	1359	C	C4-N4	5.20	1.38	1.33
1	N	152	A	C5-C6	-5.19	1.36	1.41
1	N	20	U	C1'-N1	5.19	1.56	1.48
1	N	245	U	P-O5'	5.19	1.65	1.59
1	N	320	A	C5-C6	-5.19	1.36	1.41
1	N	500	G	C8-N7	-5.19	1.27	1.30
1	N	956	U	C1'-N1	5.19	1.56	1.48
1	N	895	G	C8-N7	-5.19	1.27	1.30
1	N	908	A	C5-C6	5.19	1.45	1.41
1	N	1000	A	C5-C4	-5.19	1.35	1.38
1	N	1141	C	C5-C6	-5.19	1.30	1.34
1	N	1474	U	C4-C5	5.19	1.48	1.43
1	N	128	G	C5-C4	5.19	1.42	1.38
1	N	170	U	C1'-N1	5.19	1.56	1.48
1	N	1269	A	N3-C4	-5.19	1.31	1.34
1	N	1493	A	P-O5'	5.19	1.65	1.59
1	N	436	C	C4-N4	5.19	1.38	1.33
1	N	802	A	N3-C4	5.19	1.38	1.34
1	N	1373	G	C5'-C4'	5.19	1.57	1.51
1	N	847	G	O4'-C1'	-5.19	1.34	1.41
1	N	1079	G	O3'-P	-5.19	1.54	1.61
1	N	328	C	N1-C6	-5.18	1.34	1.37
1	N	617	G	N9-C8	-5.18	1.34	1.37
1	N	639	G	C2-N2	5.18	1.39	1.34
1	N	1111	A	C5-C4	-5.18	1.35	1.38
1	N	1157	A	N9-C4	-5.18	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1170	A	C3'-O3'	5.18	1.49	1.42
1	N	1298	U	C3'-C2'	5.18	1.58	1.52
1	N	61	G	N9-C8	-5.18	1.34	1.37
1	N	190	A	O3'-P	-5.18	1.54	1.61
1	N	278	G	C6-N1	5.18	1.43	1.39
1	N	353	A	N9-C4	-5.18	1.34	1.37
1	N	241	G	C5-C6	-5.18	1.37	1.42
1	N	455	G	N7-C5	-5.18	1.36	1.39
1	N	682	G	C5'-C4'	5.18	1.57	1.51
1	N	26	A	C3'-C2'	-5.18	1.47	1.52
1	N	84	U	N3-C4	5.18	1.43	1.38
1	N	628	G	O3'-P	-5.18	1.54	1.61
1	N	831	A	C3'-O3'	-5.18	1.34	1.42
1	N	856	C	P-O5'	-5.18	1.54	1.59
1	N	1055	A	N1-C2	5.18	1.39	1.34
1	N	1075	U	C4-O4	5.18	1.27	1.23
1	N	1138	G	C6-O6	-5.18	1.19	1.24
1	N	1200	C	C2'-C1'	-5.18	1.47	1.53
1	N	849	G	C5-C4	5.18	1.42	1.38
1	N	1427	C	C4'-C3'	-5.18	1.47	1.52
1	N	122	G	C5'-C4'	5.18	1.57	1.51
1	N	415	A	N3-C4	-5.18	1.31	1.34
1	N	436	C	C2-N3	5.18	1.39	1.35
1	N	1250	A	C6-N6	5.18	1.38	1.33
1	N	1493	A	C3'-O3'	5.18	1.49	1.42
1	N	383	A	C5-C4	5.17	1.42	1.38
1	N	709	U	C3'-O3'	-5.17	1.34	1.42
1	N	768	A	N1-C2	5.17	1.39	1.34
1	N	817	C	C4'-C3'	5.17	1.58	1.53
1	N	977	A	N3-C4	-5.17	1.31	1.34
1	N	1251	A	O4'-C1'	-5.17	1.34	1.41
1	N	1373	G	C2'-C1'	-5.17	1.47	1.53
1	N	611	C	C5'-C4'	5.17	1.57	1.51
1	N	1044	A	C5'-C4'	5.17	1.57	1.51
1	N	1278	G	C6-N1	5.17	1.43	1.39
1	N	1324	A	C6-N6	5.17	1.38	1.33
1	N	278	G	C3'-C2'	-5.17	1.47	1.52
1	N	533	A	P-O5'	-5.17	1.54	1.59
1	N	1075	U	C3'-C2'	-5.17	1.47	1.52
1	N	1111	A	N9-C4	-5.17	1.34	1.37
1	N	598	U	C2'-C1'	-5.17	1.47	1.53
1	N	1127	G	C2'-C1'	-5.17	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1480	A	C2'-C1'	5.17	1.59	1.53
1	N	79	G	N9-C4	-5.17	1.33	1.38
1	N	764	C	C4-C5	5.17	1.47	1.43
1	N	836	G	C3'-C2'	-5.17	1.47	1.52
1	N	855	U	C5-C6	-5.17	1.29	1.34
1	N	974	A	C5'-C4'	5.17	1.57	1.51
1	N	1106	G	N1-C2	5.17	1.41	1.37
1	N	596	A	C8-N7	-5.17	1.27	1.31
1	N	1296	C	C4'-O4'	5.17	1.52	1.45
1	N	1343	G	C5-C4	5.17	1.42	1.38
1	N	1350	A	C2-N3	5.17	1.38	1.33
1	N	134	G	C2-N3	5.16	1.36	1.32
1	N	152	A	C2-N3	-5.16	1.28	1.33
1	N	937	A	C6-N1	5.16	1.39	1.35
1	N	1159	U	C2-N3	5.16	1.41	1.37
1	N	480	U	P-O5'	-5.16	1.54	1.59
1	N	1004	A	C6-N6	5.16	1.38	1.33
1	N	527	G	C5-C6	-5.16	1.37	1.42
1	N	893	C	N1-C2	5.16	1.45	1.40
1	N	1040	U	P-O5'	5.16	1.65	1.59
1	N	32	A	C6-N6	5.16	1.38	1.33
1	N	169	C	C5'-C4'	5.16	1.57	1.51
1	N	789	U	C4-C5	5.16	1.48	1.43
1	N	1006	G	O4'-C1'	5.16	1.48	1.41
1	N	1482	G	N7-C5	-5.16	1.36	1.39
1	N	658	C	C3'-O3'	5.16	1.49	1.42
1	N	738	C	O3'-P	-5.16	1.54	1.61
1	N	16	A	N9-C8	-5.16	1.33	1.37
1	N	939	G	C5-C4	5.16	1.42	1.38
1	N	1114	C	N1-C6	-5.16	1.34	1.37
1	N	347	G	C5-C6	-5.15	1.37	1.42
1	N	893	C	C3'-O3'	5.15	1.49	1.42
1	N	1341	U	C2'-O2'	5.15	1.48	1.41
1	N	453	G	N1-C2	5.15	1.41	1.37
1	N	532	A	C3'-C2'	5.15	1.58	1.52
1	N	838	G	C4'-C3'	5.15	1.58	1.53
1	N	1151	A	O3'-P	-5.15	1.54	1.61
1	N	1355	G	C4'-C3'	-5.15	1.47	1.52
1	N	700	G	N3-C4	-5.15	1.31	1.35
1	N	1173	U	C4-C5	-5.15	1.39	1.43
1	N	414	A	C5'-C4'	5.15	1.57	1.51
1	N	672	U	C5-C6	-5.15	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	792	A	C5-C4	5.15	1.42	1.38
1	N	1375	A	C5-C4	-5.15	1.35	1.38
1	N	126	G	C2-N3	5.15	1.36	1.32
1	N	305	G	N3-C4	-5.15	1.31	1.35
1	N	352	C	N1-C6	5.15	1.40	1.37
1	N	637	C	C2-N3	-5.15	1.31	1.35
1	N	772	U	O3'-P	-5.15	1.54	1.61
1	N	1107	C	C4-N4	5.15	1.38	1.33
1	N	934	C	C2-N3	5.14	1.39	1.35
1	N	1220	G	C6-N1	5.14	1.43	1.39
1	N	1286	U	C4'-C3'	5.14	1.58	1.53
1	N	626	G	C2-N3	5.14	1.36	1.32
1	N	1035	A	N9-C4	5.14	1.41	1.37
1	N	1123	U	C2-N3	-5.14	1.34	1.37
1	N	1362	A	C6-N1	5.14	1.39	1.35
1	N	307	C	N3-C4	5.14	1.37	1.33
1	N	711	G	N1-C2	5.14	1.41	1.37
1	N	1255	G	N7-C5	-5.14	1.36	1.39
1	N	511	C	C5'-C4'	5.14	1.57	1.51
1	N	656	G	C2-N2	5.14	1.39	1.34
1	N	720	C	C2'-C1'	-5.14	1.47	1.53
1	N	1057	G	C2'-C1'	-5.14	1.47	1.53
1	N	1088	G	C2-N2	5.14	1.39	1.34
1	N	1462	C	C4-N4	5.14	1.38	1.33
1	N	94	G	C4'-O4'	-5.13	1.38	1.45
1	N	1450	U	N3-C4	5.13	1.43	1.38
1	N	631	C	C5-C6	-5.13	1.30	1.34
1	N	844	G	C2-N2	5.13	1.39	1.34
1	N	1368	A	C5-C4	5.13	1.42	1.38
1	N	291	U	C2-N3	5.13	1.41	1.37
1	N	789	U	C2-N3	5.13	1.41	1.37
1	N	795	C	O3'-P	-5.13	1.54	1.61
1	N	1287	A	C5'-C4'	5.13	1.57	1.51
1	N	395	C	C5-C6	-5.13	1.30	1.34
1	N	431	A	C2'-C1'	5.13	1.58	1.53
1	N	1048	G	C2'-C1'	-5.13	1.47	1.53
1	N	581	G	P-O5'	-5.13	1.54	1.59
1	N	1136	C	C2-N3	5.13	1.39	1.35
1	N	1225	A	N7-C5	5.12	1.42	1.39
1	N	1282	C	N3-C4	5.12	1.37	1.33
1	N	1422	G	C6-O6	-5.12	1.19	1.24
1	N	202	G	C6-O6	5.12	1.28	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	225	C	C4'-C3'	-5.12	1.47	1.52
1	N	1071	C	C5-C6	5.12	1.38	1.34
1	N	1236	A	N7-C5	-5.12	1.36	1.39
1	N	322	C	N3-C4	5.12	1.37	1.33
1	N	721	G	N9-C8	5.12	1.41	1.37
1	N	791	G	C4'-O4'	-5.12	1.38	1.45
1	N	819	A	C2'-C1'	-5.12	1.47	1.53
1	N	937	A	N1-C2	-5.12	1.29	1.34
1	N	1021	A	C5'-C4'	5.12	1.57	1.51
1	N	1044	A	N9-C4	5.12	1.41	1.37
1	N	1077	G	C3'-O3'	5.12	1.49	1.42
1	N	1126	U	O3'-P	-5.12	1.55	1.61
1	N	491	G	C5'-C4'	5.12	1.57	1.51
1	N	658	C	C1'-N1	5.12	1.56	1.48
1	N	665	A	O3'-P	5.12	1.67	1.61
1	N	665	A	O4'-C1'	5.12	1.48	1.41
1	N	935	A	C5-C6	-5.12	1.36	1.41
1	N	1054	C	N3-C4	5.12	1.37	1.33
1	N	1158	C	C4-C5	5.12	1.47	1.43
1	N	100	G	O3'-P	-5.12	1.55	1.61
1	N	575	G	C2-N3	-5.12	1.28	1.32
1	N	1311	A	C8-N7	-5.12	1.27	1.31
1	N	7	A	N7-C5	-5.11	1.36	1.39
1	N	33	A	C2'-C1'	-5.11	1.47	1.53
1	N	203	G	C2-N3	5.11	1.36	1.32
1	N	986	U	C1'-N1	5.11	1.56	1.48
1	N	1359	C	P-O5'	5.11	1.64	1.59
1	N	449	G	C5-C4	5.11	1.42	1.38
1	N	482	A	C5'-C4'	5.11	1.57	1.51
1	N	1175	G	O4'-C1'	5.11	1.48	1.41
1	N	131	A	C6-N6	5.11	1.38	1.33
1	N	364	A	N9-C4	-5.11	1.34	1.37
1	N	1133	G	C6-N1	5.11	1.43	1.39
1	N	1415	G	C2'-C1'	-5.11	1.47	1.53
1	N	93	U	C2'-C1'	-5.11	1.47	1.53
1	N	770	C	C2-N3	-5.11	1.31	1.35
1	N	97	G	C5'-C4'	5.11	1.57	1.51
1	N	101	A	P-O5'	-5.11	1.54	1.59
1	N	482	A	C2'-C1'	-5.11	1.47	1.53
1	N	491	G	N9-C4	-5.11	1.33	1.38
1	N	569	C	C5'-C4'	5.11	1.57	1.51
1	N	721	G	C4'-C3'	5.11	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	826	C	N1-C6	5.11	1.40	1.37
1	N	974	A	C8-N7	-5.11	1.27	1.31
1	N	1152	A	C6-N6	5.11	1.38	1.33
1	N	644	U	C4-C5	5.10	1.48	1.43
1	N	161	A	C3'-C2'	5.10	1.58	1.52
1	N	732	C	C5'-C4'	5.10	1.57	1.51
1	N	220	G	N9-C8	5.10	1.41	1.37
1	N	420	U	C4'-C3'	5.10	1.58	1.53
1	N	671	G	C3'-C2'	5.10	1.58	1.52
1	N	171	A	N9-C8	5.10	1.41	1.37
1	N	1200	C	C3'-O3'	5.10	1.49	1.42
1	N	1215	G	C5-C6	-5.10	1.37	1.42
1	N	1368	A	C8-N7	5.10	1.35	1.31
1	N	1475	G	C4'-C3'	5.10	1.58	1.53
1	N	393	A	O3'-P	-5.10	1.55	1.61
1	N	1292	G	N3-C4	-5.10	1.31	1.35
1	N	22	G	C5'-C4'	5.10	1.57	1.51
1	N	151	A	C4'-C3'	-5.10	1.47	1.52
1	N	544	G	O3'-P	-5.10	1.55	1.61
1	N	742	G	C3'-C2'	-5.10	1.47	1.52
1	N	781	A	C4'-C3'	5.10	1.58	1.53
1	N	1359	C	C2-O2	5.10	1.29	1.24
1	N	198	G	N7-C5	5.09	1.42	1.39
1	N	215	C	C2-N3	-5.09	1.31	1.35
1	N	400	C	O4'-C1'	5.09	1.48	1.41
1	N	596	A	N1-C2	5.09	1.39	1.34
1	N	879	C	N1-C2	-5.09	1.35	1.40
1	N	326	G	C2-N2	5.09	1.39	1.34
1	N	776	G	C8-N7	5.09	1.34	1.30
1	N	1520	C	N3-C4	5.09	1.37	1.33
1	N	128	G	N9-C4	5.09	1.42	1.38
1	N	884	U	N1-C2	5.09	1.43	1.38
1	N	1002	G	C3'-C2'	5.09	1.58	1.52
1	N	1065	U	C2'-O2'	5.09	1.48	1.41
1	N	1065	U	C5'-C4'	5.09	1.57	1.51
1	N	1426	G	N9-C4	5.09	1.42	1.38
1	N	65	A	O3'-P	-5.09	1.55	1.61
1	N	168	G	O4'-C1'	5.09	1.48	1.41
1	N	279	A	C6-N1	5.09	1.39	1.35
1	N	280	C	O4'-C1'	5.09	1.48	1.41
1	N	626	G	C5-C6	-5.09	1.37	1.42
1	N	1069	C	C1'-N1	5.09	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	433	G	N1-C2	5.09	1.41	1.37
1	N	137	U	N1-C2	5.09	1.43	1.38
1	N	273	U	C5'-C4'	5.09	1.57	1.51
1	N	627	G	C2-N3	5.09	1.36	1.32
1	N	1271	A	N9-C4	5.09	1.41	1.37
1	N	1408	A	N3-C4	5.09	1.38	1.34
1	N	1422	G	C5'-C4'	5.09	1.57	1.51
1	N	1517	G	N3-C4	-5.09	1.31	1.35
1	N	1529	G	C5'-C4'	5.09	1.57	1.51
1	N	170	U	N3-C4	5.08	1.43	1.38
1	N	82	G	C2'-C1'	-5.08	1.47	1.53
1	N	602	A	P-O5'	-5.08	1.54	1.59
1	N	734	G	N3-C4	5.08	1.39	1.35
1	N	1065	U	C4'-C3'	-5.08	1.47	1.52
1	N	1504	G	N1-C2	5.08	1.41	1.37
1	N	231	U	C4'-C3'	-5.08	1.47	1.52
1	N	372	C	O3'-P	-5.08	1.55	1.61
1	N	727	G	C2'-C1'	-5.08	1.47	1.53
1	N	1227	A	C1'-N9	5.08	1.56	1.48
1	N	1450	U	C4'-C3'	-5.08	1.47	1.52
1	N	1532	U	C4'-C3'	-5.08	1.47	1.52
1	N	514	C	N3-C4	5.08	1.37	1.33
1	N	1420	U	P-O5'	-5.08	1.54	1.59
1	N	1460	C	N3-C4	5.08	1.37	1.33
1	N	1482	G	C2'-C1'	-5.08	1.47	1.53
1	N	289	G	C5-C6	5.08	1.47	1.42
1	N	1250	A	C4'-C3'	-5.08	1.47	1.52
1	N	1328	C	C2-N3	-5.08	1.31	1.35
1	N	1458	G	N7-C5	-5.08	1.36	1.39
1	N	608	A	C2'-C1'	-5.08	1.47	1.53
1	N	618	C	N1-C6	5.08	1.40	1.37
1	N	1171	A	C6-N6	5.08	1.38	1.33
1	N	835	U	C4-C5	-5.08	1.39	1.43
1	N	1086	U	N1-C6	5.08	1.42	1.38
1	N	1146	A	C1'-N9	5.07	1.56	1.48
1	N	22	G	C2'-C1'	-5.07	1.47	1.53
1	N	523	A	N7-C5	5.07	1.42	1.39
1	N	834	U	C2-N3	5.07	1.41	1.37
1	N	30	U	P-O5'	-5.07	1.54	1.59
1	N	745	G	C6-N1	5.07	1.43	1.39
1	N	1229	A	C4'-C3'	5.07	1.58	1.53
1	N	1316	G	N9-C4	-5.07	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	361	G	N9-C4	-5.07	1.33	1.38
1	N	549	C	O3'-P	-5.07	1.55	1.61
1	N	1003	G	C2-N3	5.07	1.36	1.32
1	N	712	A	C2'-C1'	-5.07	1.47	1.53
1	N	1120	C	C4-N4	5.07	1.38	1.33
1	N	1154	G	C6-N1	5.07	1.43	1.39
1	N	834	U	P-O5'	-5.07	1.54	1.59
1	N	933	G	C2-N2	5.07	1.39	1.34
1	N	1168	U	C5'-C4'	5.07	1.57	1.51
1	N	1195	C	O4'-C1'	5.07	1.48	1.41
1	N	1409	C	C2-O2	5.07	1.29	1.24
1	N	119	A	N3-C4	5.06	1.37	1.34
1	N	501	C	C1'-N1	5.06	1.56	1.48
1	N	835	U	C2-N3	5.06	1.41	1.37
1	N	1153	G	N9-C4	5.06	1.42	1.38
1	N	1169	A	C5-C6	-5.06	1.36	1.41
1	N	1258	G	C2-N3	5.06	1.36	1.32
1	N	1387	G	N1-C2	5.06	1.41	1.37
1	N	103	U	C1'-N1	5.06	1.56	1.48
1	N	195	A	C6-N6	5.06	1.38	1.33
1	N	1254	A	N7-C5	-5.06	1.36	1.39
1	N	1377	A	O3'-P	-5.06	1.55	1.61
1	N	1393	U	O3'-P	-5.06	1.55	1.61
1	N	584	G	C2'-C1'	-5.06	1.47	1.53
1	N	677	U	C4-C5	-5.06	1.39	1.43
1	N	752	G	C5-C4	5.06	1.41	1.38
1	N	1028	C	C4'-C3'	5.06	1.58	1.53
1	N	1120	C	N1-C6	5.06	1.40	1.37
1	N	1262	C	C2'-C1'	-5.06	1.47	1.53
1	N	203	G	N9-C8	5.06	1.41	1.37
1	N	435	A	C8-N7	-5.06	1.28	1.31
1	N	473	U	C3'-C2'	5.06	1.58	1.52
1	N	590	U	C2'-C1'	-5.06	1.47	1.53
1	N	902	G	N9-C4	-5.06	1.33	1.38
1	N	1113	C	C2-N3	-5.06	1.31	1.35
1	N	264	C	C3'-C2'	-5.06	1.47	1.52
1	N	307	C	N1-C2	5.06	1.45	1.40
1	N	992	U	N3-C4	5.06	1.43	1.38
1	N	1188	A	C4'-C3'	5.06	1.58	1.53
1	N	1191	A	C2-N3	5.06	1.38	1.33
1	N	1514	G	O3'-P	-5.06	1.55	1.61
1	N	1156	G	O5'-C5'	-5.05	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1312	G	P-O5'	-5.05	1.54	1.59
1	N	1473	G	C6-O6	-5.05	1.19	1.24
1	N	534	U	C4-C5	5.05	1.48	1.43
1	N	1260	G	P-O5'	-5.05	1.54	1.59
1	N	1377	A	C5-C6	-5.05	1.36	1.41
1	N	692	U	P-O5'	-5.05	1.54	1.59
1	N	809	G	C2-N3	5.05	1.36	1.32
1	N	869	G	C2-N3	5.05	1.36	1.32
1	N	912	C	C2-N3	5.05	1.39	1.35
1	N	1305	G	C2'-C1'	-5.05	1.47	1.53
1	N	63	C	C4-N4	5.05	1.38	1.33
1	N	947	G	O3'-P	-5.05	1.55	1.61
1	N	1213	A	C2-N3	-5.05	1.29	1.33
1	N	1305	G	N9-C8	5.05	1.41	1.37
1	N	623	C	C4'-C3'	5.05	1.58	1.53
1	N	1138	G	N3-C4	-5.05	1.31	1.35
1	N	186	C	C4'-C3'	5.04	1.58	1.53
1	N	512	U	C1'-N1	5.04	1.56	1.48
1	N	750	C	O3'-P	-5.04	1.55	1.61
1	N	1143	G	C3'-C2'	-5.04	1.47	1.52
1	N	138	G	C6-N1	5.04	1.43	1.39
1	N	164	G	N7-C5	-5.04	1.36	1.39
1	N	632	U	C2-N3	5.04	1.41	1.37
1	N	555	U	C5'-C4'	5.04	1.57	1.51
1	N	1088	G	O4'-C1'	5.04	1.48	1.41
1	N	1107	C	P-O5'	5.04	1.64	1.59
1	N	1130	A	O4'-C1'	5.04	1.48	1.41
1	N	1171	A	C3'-O3'	-5.04	1.35	1.42
1	N	1285	A	O3'-P	-5.04	1.55	1.61
1	N	122	G	C2-N3	5.04	1.36	1.32
1	N	207	C	O3'-P	-5.04	1.55	1.61
1	N	541	G	C4'-C3'	-5.04	1.47	1.52
1	N	396	C	C4-C5	5.04	1.47	1.43
1	N	654	G	C5'-C4'	5.04	1.57	1.51
1	N	924	C	C3'-C2'	-5.04	1.47	1.52
1	N	924	C	N1-C2	-5.04	1.35	1.40
1	N	1071	C	C3'-C2'	5.04	1.58	1.52
1	N	1300	G	N7-C5	-5.04	1.36	1.39
1	N	1410	A	P-O5'	-5.04	1.54	1.59
1	N	1236	A	N3-C4	-5.04	1.31	1.34
1	N	150	U	C2-N3	5.04	1.41	1.37
1	N	472	U	C5'-C4'	5.04	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	655	A	C6-N1	5.04	1.39	1.35
1	N	784	A	O4'-C1'	-5.04	1.35	1.41
1	N	791	G	C5-C4	-5.04	1.34	1.38
1	N	803	G	C5-C6	-5.04	1.37	1.42
1	N	1041	G	C4'-C3'	-5.04	1.47	1.52
1	N	1533	C	C5-C6	5.04	1.38	1.34
1	N	21	G	N3-C4	-5.03	1.31	1.35
1	N	269	C	C2-N3	5.03	1.39	1.35
1	N	402	G	N7-C5	-5.03	1.36	1.39
1	N	1085	U	C2'-C1'	-5.03	1.47	1.53
1	N	1382	C	C4-C5	5.03	1.47	1.43
1	N	302	G	N7-C5	-5.03	1.36	1.39
1	N	1346	A	C8-N7	-5.03	1.28	1.31
1	N	66	A	N9-C4	-5.03	1.34	1.37
1	N	447	G	C6-N1	5.03	1.43	1.39
1	N	667	G	C4'-O4'	-5.03	1.39	1.45
1	N	698	G	C6-N1	5.03	1.43	1.39
1	N	1343	G	C4'-O4'	-5.03	1.39	1.45
1	N	456	A	C5'-C4'	5.03	1.57	1.51
1	N	717	U	P-O5'	-5.03	1.54	1.59
1	N	993	G	C2-N3	5.03	1.36	1.32
1	N	1125	U	C1'-N1	5.03	1.56	1.48
1	N	137	U	C1'-N1	5.03	1.56	1.48
1	N	166	U	C5'-C4'	5.03	1.57	1.51
1	N	193	C	C4-C5	5.03	1.47	1.43
1	N	792	A	O4'-C1'	-5.03	1.35	1.41
1	N	1183	U	O5'-C5'	5.03	1.52	1.44
1	N	325	A	C3'-C2'	-5.03	1.47	1.52
1	N	513	C	C3'-O3'	-5.03	1.35	1.42
1	N	1131	G	C3'-C2'	-5.03	1.47	1.52
1	N	1250	A	C5-C4	5.03	1.42	1.38
1	N	553	A	P-O5'	-5.02	1.54	1.59
1	N	417	G	C2-N2	5.02	1.39	1.34
1	N	735	C	C3'-C2'	-5.02	1.47	1.52
1	N	1032	G	N9-C4	5.02	1.42	1.38
1	N	1045	C	C1'-N1	5.02	1.56	1.48
1	N	201	G	N9-C4	-5.02	1.33	1.38
1	N	227	G	N9-C4	-5.02	1.33	1.38
1	N	403	C	C2'-C1'	5.02	1.58	1.53
1	N	540	G	N1-C2	5.02	1.41	1.37
1	N	793	U	O3'-P	-5.02	1.55	1.61
1	N	955	U	P-O5'	-5.02	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1182	G	N9-C4	5.02	1.42	1.38
1	N	161	A	P-O5'	-5.02	1.54	1.59
1	N	370	C	C4'-C3'	-5.02	1.47	1.52
1	N	812	G	C5-C4	5.02	1.41	1.38
1	N	1417	G	O3'-P	-5.02	1.55	1.61
1	N	1479	C	O3'-P	-5.02	1.55	1.61
1	N	1480	A	N3-C4	5.02	1.37	1.34
1	N	240	G	C6-N1	5.02	1.43	1.39
1	N	747	A	C5-C6	-5.01	1.36	1.41
1	N	825	A	C8-N7	-5.01	1.28	1.31
1	N	1139	G	O3'-P	-5.01	1.55	1.61
1	N	1397	C	C4'-C3'	5.01	1.58	1.53
1	N	31	G	N7-C5	-5.01	1.36	1.39
1	N	286	C	N3-C4	5.01	1.37	1.33
1	N	1011	C	C3'-C2'	-5.01	1.47	1.52
1	N	79	G	N3-C4	-5.01	1.31	1.35
1	N	767	A	C5-C6	5.01	1.45	1.41
1	N	162	A	C3'-C2'	5.01	1.58	1.52
1	N	659	U	C5'-C4'	5.01	1.57	1.51
1	N	1221	G	N9-C8	5.01	1.41	1.37
1	N	675	A	C4'-O4'	-5.01	1.39	1.45
1	N	791	G	N7-C5	-5.01	1.36	1.39
1	N	982	U	C3'-C2'	5.01	1.58	1.52
1	N	983	A	O3'-P	-5.01	1.55	1.61
1	N	147	G	C8-N7	-5.00	1.27	1.30
1	N	392	C	C4'-C3'	-5.00	1.47	1.52
1	N	394	G	C2-N2	5.00	1.39	1.34
1	N	699	C	O3'-P	-5.00	1.55	1.61
1	N	1216	A	C5-C6	-5.00	1.36	1.41
1	N	1242	G	O5'-C5'	-5.00	1.34	1.42
1	N	1421	G	C4'-C3'	5.00	1.58	1.53
1	N	502	A	C2'-C1'	-5.00	1.47	1.53

All (9443) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1362	A	P-O3'-C3'	29.77	155.43	119.70
1	N	1004	A	N1-C6-N6	26.64	134.59	118.60
1	N	766	A	N1-C6-N6	26.51	134.50	118.60
1	N	191	G	C5-C6-O6	-25.76	113.14	128.60
1	N	94	G	P-O3'-C3'	24.94	149.63	119.70
1	N	309	A	N1-C6-N6	24.20	133.12	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1184	G	N1-C6-O6	23.85	134.21	119.90
1	N	184	G	N1-C6-O6	23.50	134.00	119.90
1	N	595	A	N1-C6-N6	23.43	132.66	118.60
1	N	192	A	N1-C6-N6	23.35	132.61	118.60
1	N	831	A	N1-C6-N6	23.33	132.60	118.60
1	N	982	U	P-O3'-C3'	22.92	147.20	119.70
1	N	1236	A	N1-C6-N6	22.79	132.28	118.60
1	N	141	G	N1-C6-O6	22.76	133.56	119.90
1	N	1254	A	N1-C6-N6	22.60	132.16	118.60
1	N	1413	A	N1-C6-N6	22.44	132.07	118.60
1	N	457	G	N1-C6-O6	22.44	133.36	119.90
1	N	213	G	C5-C6-O6	-22.44	115.14	128.60
1	N	954	G	N1-C6-O6	22.34	133.30	119.90
1	N	191	G	N1-C6-O6	22.30	133.28	119.90
1	N	833	G	N1-C6-O6	22.27	133.26	119.90
1	N	47	C	P-O3'-C3'	22.14	146.26	119.70
1	N	693	G	C5-C6-O6	-22.11	115.33	128.60
1	N	1299	A	N1-C6-N6	21.77	131.66	118.60
1	N	147	G	C5-C6-O6	-21.71	115.57	128.60
1	N	1197	A	N1-C6-N6	21.69	131.61	118.60
1	N	79	G	C5-C6-O6	-21.58	115.65	128.60
1	N	959	A	N1-C6-N6	21.58	131.55	118.60
1	N	270	A	N1-C6-N6	21.41	131.45	118.60
1	N	542	G	N1-C6-O6	21.38	132.73	119.90
1	N	506	G	N1-C6-O6	21.36	132.72	119.90
1	N	511	C	P-O3'-C3'	21.32	145.28	119.70
1	N	210	C	P-O3'-C3'	21.18	145.12	119.70
1	N	1042	A	N1-C6-N6	21.13	131.28	118.60
1	N	1491	G	N1-C6-O6	21.07	132.54	119.90
1	N	542	G	C5-C6-O6	-20.97	116.02	128.60
1	N	1201	A	P-O3'-C3'	20.91	144.79	119.70
1	N	318	G	N1-C6-O6	20.85	132.41	119.90
1	N	338	A	N1-C6-N6	20.71	131.02	118.60
1	N	130	A	N1-C6-N6	20.66	130.99	118.60
1	N	484	G	P-O3'-C3'	20.17	143.90	119.70
1	N	1246	A	N1-C6-N6	20.01	130.61	118.60
1	N	1014	A	N1-C6-N6	20.00	130.60	118.60
1	N	197	A	N1-C6-N6	19.94	130.56	118.60
1	N	792	A	P-O3'-C3'	19.91	143.59	119.70
1	N	873	A	N1-C6-N6	19.86	130.51	118.60
1	N	1021	A	N1-C6-N6	19.84	130.51	118.60
1	N	313	A	C4-C5-C6	19.82	126.91	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1416	G	N1-C6-O6	19.78	131.77	119.90
1	N	459	A	N1-C6-N6	19.73	130.44	118.60
1	N	832	G	C6-N1-C2	-19.68	113.29	125.10
1	N	484	G	N1-C6-O6	19.67	131.70	119.90
1	N	706	A	N1-C6-N6	19.59	130.35	118.60
1	N	408	A	N1-C6-N6	19.48	130.29	118.60
1	N	164	G	N1-C6-O6	19.45	131.57	119.90
1	N	819	A	N1-C6-N6	19.44	130.26	118.60
1	N	873	A	C5-C6-N1	-19.35	108.03	117.70
1	N	1105	A	N1-C6-N6	19.23	130.14	118.60
1	N	1500	A	N1-C6-N6	19.22	130.13	118.60
1	N	815	A	N1-C6-N6	19.22	130.13	118.60
1	N	228	A	N1-C6-N6	19.20	130.12	118.60
1	N	213	G	N1-C6-O6	19.19	131.41	119.90
1	N	329	A	N1-C6-N6	19.14	130.09	118.60
1	N	1433	A	N1-C6-N6	19.14	130.09	118.60
1	N	976	G	C5-C6-O6	-19.11	117.13	128.60
1	N	242	G	N1-C6-O6	19.10	131.36	119.90
1	N	1164	G	C5-C6-O6	-19.09	117.15	128.60
1	N	595	A	C5-C6-N1	-19.07	108.16	117.70
1	N	652	U	O4'-C1'-N1	19.03	123.42	108.20
1	N	327	A	N1-C6-N6	18.97	129.98	118.60
1	N	53	A	N1-C6-N6	18.93	129.96	118.60
1	N	1302	C	N3-C4-C5	-18.90	114.34	121.90
1	N	389	A	N1-C6-N6	18.89	129.93	118.60
1	N	809	G	N1-C6-O6	18.81	131.19	119.90
1	N	491	G	N1-C6-O6	18.81	131.19	119.90
1	N	539	A	N1-C6-N6	18.77	129.86	118.60
1	N	1077	G	C5-C6-O6	-18.67	117.40	128.60
1	N	1446	A	N1-C6-N6	18.67	129.80	118.60
1	N	1426	G	C5-C6-O6	-18.62	117.43	128.60
1	N	693	G	N1-C6-O6	18.59	131.06	119.90
1	N	233	C	C6-N1-C2	-18.59	112.86	120.30
1	N	840	C	C6-N1-C2	-18.53	112.89	120.30
1	N	1378	C	C6-N1-C2	-18.45	112.92	120.30
1	N	1240	U	C6-N1-C2	-18.41	109.95	121.00
1	N	172	A	P-O3'-C3'	18.41	141.79	119.70
1	N	976	G	N1-C6-O6	18.40	130.94	119.90
1	N	1508	A	N1-C6-N6	18.36	129.62	118.60
1	N	481	G	N1-C6-O6	18.35	130.91	119.90
1	N	547	A	P-O3'-C3'	18.33	141.70	119.70
1	N	1346	A	N1-C6-N6	18.30	129.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	168	G	N1-C6-O6	18.29	130.87	119.90
1	N	1216	A	N1-C6-N6	18.29	129.57	118.60
1	N	1077	G	N1-C6-O6	18.28	130.87	119.90
1	N	181	A	N1-C6-N6	18.20	129.52	118.60
1	N	141	G	C5-C6-O6	-18.16	117.70	128.60
1	N	147	G	N1-C6-O6	18.10	130.76	119.90
1	N	865	A	N1-C6-N6	18.08	129.45	118.60
1	N	190	A	N1-C6-N6	18.08	129.45	118.60
1	N	949	A	N1-C6-N6	18.06	129.43	118.60
1	N	572	A	N1-C6-N6	18.02	129.41	118.60
1	N	1418	A	N1-C6-N6	18.00	129.40	118.60
1	N	438	U	P-O3'-C3'	17.98	141.28	119.70
1	N	1003	G	C5-C6-O6	-17.98	117.81	128.60
1	N	579	A	N1-C6-N6	17.92	129.35	118.60
1	N	373	A	N1-C6-N6	17.89	129.34	118.60
1	N	1332	A	N1-C6-N6	17.87	129.32	118.60
1	N	332	G	N1-C6-O6	17.81	130.59	119.90
1	N	447	G	N1-C6-O6	17.80	130.58	119.90
1	N	1164	G	N1-C6-O6	17.78	130.57	119.90
1	N	959	A	C5-N7-C8	17.69	112.75	103.90
1	N	1095	U	O4'-C1'-N1	17.65	122.32	108.20
1	N	61	G	N1-C6-O6	17.64	130.49	119.90
1	N	973	G	C5-C6-O6	-17.62	118.03	128.60
1	N	1426	G	N1-C6-O6	17.60	130.46	119.90
1	N	508	U	P-O3'-C3'	17.59	140.81	119.70
1	N	714	G	O4'-C1'-N9	17.54	122.23	108.20
1	N	119	A	P-O3'-C3'	17.52	140.72	119.70
1	N	1491	G	C5-C6-O6	-17.44	118.14	128.60
1	N	243	A	P-O3'-C3'	17.41	140.60	119.70
1	N	50	A	O4'-C1'-N9	17.41	122.12	108.20
1	N	1242	G	P-O5'-C5'	17.38	148.72	120.90
1	N	1150	A	N1-C6-N6	17.38	129.03	118.60
1	N	787	A	N1-C6-N6	17.36	129.02	118.60
1	N	257	G	N1-C6-O6	17.35	130.31	119.90
1	N	344	A	P-O3'-C3'	17.27	140.43	119.70
1	N	412	A	N1-C6-N6	17.26	128.96	118.60
1	N	773	G	N1-C6-O6	17.26	130.25	119.90
1	N	97	G	N1-C6-O6	17.24	130.24	119.90
1	N	988	G	O4'-C1'-N9	17.23	121.98	108.20
1	N	491	G	C5-C6-O6	-17.19	118.28	128.60
1	N	315	A	N1-C6-N6	17.17	128.90	118.60
1	N	59	A	N1-C6-N6	17.16	128.90	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	775	G	N1-C6-O6	17.13	130.18	119.90
1	N	894	G	N1-C6-O6	17.13	130.18	119.90
1	N	968	A	N1-C6-N6	17.11	128.86	118.60
1	N	784	A	N1-C6-N6	17.04	128.82	118.60
1	N	1101	A	P-O3'-C3'	17.01	140.12	119.70
1	N	607	A	N1-C6-N6	16.99	128.80	118.60
1	N	1329	A	N1-C6-N6	16.96	128.78	118.60
1	N	448	A	N1-C6-N6	16.94	128.77	118.60
1	N	299	G	N1-C6-O6	16.94	130.06	119.90
1	N	946	A	N1-C6-N6	16.94	128.76	118.60
1	N	918	A	C5-C6-N1	-16.93	109.23	117.70
1	N	731	G	N1-C6-O6	16.88	130.03	119.90
1	N	1505	G	C5-C6-O6	-16.88	118.47	128.60
1	N	606	G	N1-C6-O6	16.87	130.02	119.90
1	N	1047	G	N1-C6-O6	16.83	130.00	119.90
1	N	641	U	P-O3'-C3'	16.82	139.88	119.70
1	N	1236	A	P-O3'-C3'	16.78	139.83	119.70
1	N	1233	G	C5-C6-O6	-16.77	118.54	128.60
1	N	1363	A	N1-C6-N6	16.75	128.65	118.60
1	N	1304	G	N1-C6-O6	16.73	129.94	119.90
1	N	168	G	C5-C6-O6	-16.72	118.57	128.60
1	N	1173	U	P-O5'-C5'	16.72	147.65	120.90
1	N	1191	A	N1-C6-N6	16.71	128.62	118.60
1	N	1455	G	N1-C6-O6	16.71	129.92	119.90
1	N	1242	G	N1-C6-O6	16.70	129.92	119.90
1	N	378	G	N1-C6-O6	16.66	129.89	119.90
1	N	648	A	N1-C6-N6	16.63	128.58	118.60
1	N	160	A	N1-C6-N6	16.61	128.57	118.60
1	N	1531	A	N1-C6-N6	16.60	128.56	118.60
1	N	840	C	N3-C4-N4	16.60	129.62	118.00
1	N	299	G	C5-C6-O6	-16.59	118.64	128.60
1	N	728	A	N1-C6-N6	16.52	128.51	118.60
1	N	1377	A	N1-C6-N6	16.52	128.51	118.60
1	N	879	C	N3-C4-C5	-16.50	115.30	121.90
1	N	1004	A	C5-C6-N1	-16.49	109.45	117.70
1	N	344	A	N1-C6-N6	16.49	128.50	118.60
1	N	977	A	N1-C6-N6	16.49	128.49	118.60
1	N	72	A	N1-C6-N6	16.48	128.49	118.60
1	N	309	A	C5-C6-N6	-16.45	110.54	123.70
1	N	582	C	O4'-C1'-N1	16.42	121.33	108.20
1	N	371	A	N1-C6-N6	16.36	128.42	118.60
1	N	288	A	N1-C6-N6	16.31	128.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1292	G	N1-C6-O6	16.28	129.67	119.90
1	N	496	A	N1-C6-N6	16.26	128.36	118.60
1	N	790	A	N1-C6-N6	16.23	128.34	118.60
1	N	55	A	N1-C6-N6	16.18	128.31	118.60
1	N	559	A	P-O3'-C3'	16.17	139.11	119.70
1	N	1269	A	N1-C6-N6	16.15	128.29	118.60
1	N	1410	A	N1-C6-N6	16.14	128.28	118.60
1	N	1319	A	P-O3'-C3'	16.11	139.03	119.70
1	N	1255	G	C5-C6-O6	-16.11	118.94	128.60
1	N	1467	C	O4'-C1'-N1	16.11	121.08	108.20
1	N	174	A	N1-C6-N6	16.10	128.26	118.60
1	N	1033	G	N1-C6-O6	16.04	129.53	119.90
1	N	1306	A	N1-C6-N6	16.04	128.22	118.60
1	N	32	A	N1-C6-N6	16.00	128.20	118.60
1	N	320	A	N1-C6-N6	16.00	128.20	118.60
1	N	782	A	N1-C6-N6	16.00	128.20	118.60
1	N	1530	G	P-O3'-C3'	15.99	138.89	119.70
1	N	1174	G	N1-C6-O6	15.98	129.49	119.90
1	N	502	A	N1-C6-N6	15.95	128.17	118.60
1	N	1169	A	N1-C6-N6	15.94	128.16	118.60
1	N	821	G	C5-C6-O6	-15.92	119.05	128.60
1	N	833	G	C5-C6-O6	-15.91	119.06	128.60
1	N	139	A	N1-C6-N6	15.88	128.13	118.60
1	N	739	C	N3-C4-C5	-15.88	115.55	121.90
1	N	1233	G	N1-C6-O6	15.88	129.43	119.90
1	N	327	A	P-O3'-C3'	15.87	138.74	119.70
1	N	1529	G	N1-C6-O6	15.87	129.42	119.90
1	N	332	G	C5-C6-O6	-15.84	119.09	128.60
1	N	1447	A	C4-C5-C6	15.82	124.91	117.00
1	N	483	C	N3-C4-C5	-15.80	115.58	121.90
1	N	628	G	N1-C6-O6	15.81	129.38	119.90
1	N	686	U	P-O3'-C3'	15.80	138.67	119.70
1	N	832	G	C5-C6-O6	-15.80	119.12	128.60
1	N	306	A	N1-C6-N6	15.80	128.08	118.60
1	N	1392	G	C5-C6-O6	-15.79	119.13	128.60
1	N	1408	A	N1-C6-N6	15.79	128.07	118.60
1	N	1316	G	N1-C6-O6	15.76	129.36	119.90
1	N	223	A	N1-C6-N6	15.75	128.05	118.60
1	N	33	A	N1-C6-N6	15.74	128.04	118.60
1	N	1320	C	N3-C4-C5	-15.72	115.61	121.90
1	N	725	G	C5-C6-O6	-15.71	119.17	128.60
1	N	499	A	N1-C6-N6	15.69	128.01	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	485	U	O4'-C1'-N1	15.69	120.75	108.20
1	N	1355	G	N1-C6-O6	15.69	129.31	119.90
1	N	1139	G	N1-C6-O6	15.68	129.31	119.90
1	N	631	C	N3-C4-C5	-15.68	115.63	121.90
1	N	3	A	N1-C6-N6	15.68	128.01	118.60
1	N	821	G	N1-C6-O6	15.67	129.30	119.90
1	N	115	G	P-O3'-C3'	15.67	138.50	119.70
1	N	935	A	N1-C6-N6	15.65	127.99	118.60
1	N	481	G	C5-C6-O6	-15.64	119.21	128.60
1	N	119	A	N1-C6-N6	15.62	127.97	118.60
1	N	937	A	C5-C6-N1	-15.62	109.89	117.70
1	N	1316	G	C5-C6-O6	-15.60	119.24	128.60
1	N	1468	A	C5-C6-N1	-15.59	109.90	117.70
1	N	867	G	C5-C6-O6	-15.59	119.25	128.60
1	N	111	G	N1-C6-O6	15.58	129.25	119.90
1	N	184	G	C5-C6-O6	-15.57	119.26	128.60
1	N	718	A	N1-C6-N6	15.55	127.93	118.60
1	N	748	G	N1-C6-O6	15.55	129.23	119.90
1	N	1531	A	C5-C6-N1	-15.55	109.93	117.70
1	N	682	G	N1-C6-O6	15.54	129.22	119.90
1	N	1278	G	P-O3'-C3'	15.54	138.34	119.70
1	N	1046	A	N1-C6-N6	15.53	127.92	118.60
1	N	777	A	N1-C6-N6	15.53	127.92	118.60
1	N	1379	G	N1-C6-O6	15.52	129.21	119.90
1	N	938	A	N1-C6-N6	15.50	127.90	118.60
1	N	457	G	C5-C6-O6	-15.48	119.31	128.60
1	N	742	G	N1-C6-O6	15.46	129.18	119.90
1	N	1074	G	N1-C6-O6	15.44	129.16	119.90
1	N	171	A	N1-C6-N6	15.43	127.86	118.60
1	N	493	A	N1-C6-N6	15.42	127.85	118.60
1	N	832	G	N1-C6-O6	15.42	129.15	119.90
1	N	687	A	N1-C6-N6	15.41	127.85	118.60
1	N	1241	G	N1-C6-O6	15.38	129.13	119.90
1	N	736	C	O4'-C1'-N1	15.36	120.49	108.20
1	N	1020	G	N1-C6-O6	15.36	129.12	119.90
1	N	555	U	P-O3'-C3'	15.34	138.11	119.70
1	N	919	A	N1-C6-N6	15.34	127.80	118.60
1	N	1087	G	N1-C6-O6	15.33	129.10	119.90
1	N	461	A	C8-N9-C4	-15.32	99.67	105.80
1	N	1225	A	C4-C5-C6	15.31	124.66	117.00
1	N	1374	A	N1-C6-N6	15.30	127.78	118.60
1	N	1275	A	C2-N3-C4	-15.28	102.96	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	867	G	N1-C6-O6	15.27	129.06	119.90
1	N	1496	C	N3-C4-N4	15.25	128.68	118.00
1	N	172	A	N1-C6-N6	15.24	127.75	118.60
1	N	138	G	O4'-C1'-N9	15.24	120.39	108.20
1	N	984	C	O4'-C1'-N1	15.24	120.39	108.20
1	N	617	G	N1-C6-O6	15.23	129.04	119.90
1	N	1319	A	N1-C6-N6	15.21	127.73	118.60
1	N	71	A	N1-C6-N6	15.21	127.73	118.60
1	N	1504	G	C5-C6-O6	-15.21	119.48	128.60
1	N	1299	A	C5-C6-N6	-15.17	111.56	123.70
1	N	608	A	N1-C6-N6	15.16	127.70	118.60
1	N	1281	C	N3-C4-C5	-15.16	115.84	121.90
1	N	1369	C	O4'-C1'-N1	15.16	120.32	108.20
1	N	776	G	P-O5'-C5'	15.15	145.14	120.90
1	N	1508	A	C5-C6-N1	-15.14	110.13	117.70
1	N	91	U	O4'-C1'-N1	15.12	120.30	108.20
1	N	478	A	N1-C6-N6	15.12	127.67	118.60
1	N	207	C	C5-C6-N1	15.09	128.55	121.00
1	N	1412	C	N3-C4-C5	-15.09	115.86	121.90
1	N	80	A	N1-C6-N6	15.07	127.64	118.60
1	N	43	C	N3-C4-C5	-15.06	115.87	121.90
1	N	484	G	C5-C6-N1	-15.06	103.97	111.50
1	N	525	C	O4'-C1'-N1	15.06	120.25	108.20
1	N	236	A	N1-C6-N6	15.04	127.62	118.60
1	N	994	A	N1-C6-N6	15.01	127.61	118.60
1	N	1022	A	C4-C5-C6	15.01	124.51	117.00
1	N	212	G	N1-C6-O6	15.01	128.91	119.90
1	N	705	G	C5-C6-O6	-15.01	119.59	128.60
1	N	112	G	N1-C6-O6	14.99	128.90	119.90
1	N	126	G	C5-C6-O6	-14.98	119.61	128.60
1	N	1157	A	N1-C6-N6	14.96	127.58	118.60
1	N	1094	G	P-O3'-C3'	14.95	137.64	119.70
1	N	1003	G	N1-C6-O6	14.93	128.86	119.90
1	N	232	G	N1-C6-O6	14.92	128.85	119.90
1	N	105	G	N1-C6-O6	14.92	128.85	119.90
1	N	120	A	N1-C6-N6	14.91	127.55	118.60
1	N	316	C	O4'-C1'-N1	14.90	120.12	108.20
1	N	936	C	N3-C4-N4	14.90	128.43	118.00
1	N	175	C	N3-C4-C5	-14.90	115.94	121.90
1	N	788	U	N3-C4-O4	14.90	129.83	119.40
1	N	780	A	N1-C6-N6	14.89	127.53	118.60
1	N	1399	C	N3-C4-C5	-14.86	115.95	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	566	G	N1-C6-O6	14.86	128.81	119.90
1	N	660	C	O4'-C1'-N1	14.85	120.08	108.20
1	N	877	G	N1-C6-O6	14.85	128.81	119.90
1	N	861	G	C5-C6-O6	-14.82	119.70	128.60
1	N	93	U	O4'-C1'-N1	14.82	120.05	108.20
1	N	176	C	C6-N1-C2	-14.81	114.38	120.30
1	N	627	G	N1-C6-O6	14.80	128.78	119.90
1	N	792	A	N1-C6-N6	14.80	127.48	118.60
1	N	520	A	N1-C6-N6	14.79	127.48	118.60
1	N	167	A	N1-C6-N6	14.79	127.47	118.60
1	N	513	C	C5-C4-N4	-14.79	109.85	120.20
1	N	635	A	N1-C6-N6	14.79	127.47	118.60
1	N	468	A	N1-C6-N6	14.77	127.46	118.60
1	N	682	G	C5-C6-O6	-14.76	119.75	128.60
1	N	1421	G	C5-C6-O6	-14.73	119.76	128.60
1	N	265	G	C5-C6-O6	-14.72	119.77	128.60
1	N	1337	G	C8-N9-C4	-14.71	100.52	106.40
1	N	1143	G	N1-C6-O6	14.71	128.72	119.90
1	N	1044	A	C8-N9-C4	-14.70	99.92	105.80
1	N	144	G	N1-C6-O6	14.68	128.71	119.90
1	N	199	A	N1-C6-N6	14.68	127.41	118.60
1	N	202	G	N1-C6-O6	14.68	128.71	119.90
1	N	62	U	N1-C2-N3	-14.67	106.10	114.90
1	N	159	G	N1-C6-O6	14.66	128.70	119.90
1	N	575	G	N1-C6-O6	14.66	128.70	119.90
1	N	298	A	N1-C6-N6	14.65	127.39	118.60
1	N	1357	A	N1-C6-N6	14.65	127.39	118.60
1	N	668	G	N1-C6-O6	14.65	128.69	119.90
1	N	522	C	N3-C4-C5	-14.64	116.04	121.90
1	N	242	G	C5-C6-O6	-14.64	119.82	128.60
1	N	363	A	N1-C6-N6	14.64	127.38	118.60
1	N	574	A	C4-C5-C6	14.62	124.31	117.00
1	N	200	G	N1-C6-O6	14.61	128.67	119.90
1	N	447	G	C5-C6-O6	-14.61	119.83	128.60
1	N	506	G	C5-C6-O6	-14.61	119.83	128.60
1	N	228	A	C4-C5-C6	14.60	124.30	117.00
1	N	1255	G	N1-C6-O6	14.60	128.66	119.90
1	N	1242	G	C6-C5-N7	-14.60	121.64	130.40
1	N	696	A	N1-C6-N6	14.59	127.35	118.60
1	N	1304	G	C5-C6-O6	-14.58	119.85	128.60
1	N	1101	A	N1-C6-N6	14.57	127.34	118.60
1	N	1419	G	N1-C6-O6	14.57	128.64	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	174	A	C8-N9-C4	14.55	111.62	105.80
1	N	814	A	N1-C6-N6	14.54	127.33	118.60
1	N	574	A	C5-C6-N1	-14.54	110.43	117.70
1	N	115	G	C5-C6-O6	-14.53	119.88	128.60
1	N	1069	C	N3-C4-C5	-14.51	116.10	121.90
1	N	530	G	N1-C6-O6	14.51	128.60	119.90
1	N	633	G	C5-C6-O6	-14.49	119.90	128.60
1	N	1419	G	N1-C2-N3	-14.49	115.21	123.90
1	N	1252	A	N1-C6-N6	14.48	127.29	118.60
1	N	484	G	N1-C2-N3	-14.48	115.21	123.90
1	N	696	A	C5-C6-N1	-14.45	110.48	117.70
1	N	861	G	N1-C6-O6	14.44	128.56	119.90
1	N	892	A	N1-C6-N6	14.44	127.26	118.60
1	N	628	G	C5-C6-O6	-14.43	119.94	128.60
1	N	778	G	C5-C6-O6	-14.43	119.94	128.60
1	N	1509	C	O4'-C1'-N1	14.42	119.73	108.20
1	N	1248	A	N1-C6-N6	14.41	127.25	118.60
1	N	1066	C	C6-N1-C2	-14.39	114.54	120.30
1	N	958	A	C4-C5-C6	14.38	124.19	117.00
1	N	135	C	O4'-C1'-N1	14.37	119.70	108.20
1	N	1204	A	N1-C6-N6	14.37	127.22	118.60
1	N	79	G	N1-C6-O6	14.37	128.52	119.90
1	N	913	A	P-O3'-C3'	14.36	136.94	119.70
1	N	559	A	N1-C6-N6	14.35	127.21	118.60
1	N	954	G	C5-C6-O6	-14.32	120.01	128.60
1	N	483	C	C6-N1-C2	-14.30	114.58	120.30
1	N	1127	G	N1-C6-O6	14.30	128.48	119.90
1	N	300	A	N1-C6-N6	14.29	127.18	118.60
1	N	710	G	N1-C6-O6	14.29	128.47	119.90
1	N	1266	G	N1-C6-O6	14.29	128.47	119.90
1	N	944	G	N1-C6-O6	14.28	128.47	119.90
1	N	1417	G	C5-C6-O6	-14.27	120.04	128.60
1	N	738	C	C2-N3-C4	-14.25	112.78	119.90
1	N	1423	G	N1-C6-O6	14.25	128.45	119.90
1	N	1462	C	N3-C4-C5	-14.24	116.20	121.90
1	N	35	G	N1-C6-O6	14.24	128.44	119.90
1	N	575	G	P-O3'-C3'	14.23	136.78	119.70
1	N	9	G	N1-C6-O6	14.22	128.43	119.90
1	N	1438	G	N1-C6-O6	14.22	128.43	119.90
1	N	43	C	O4'-C1'-N1	14.21	119.57	108.20
1	N	1494	G	C5-C6-O6	-14.21	120.07	128.60
1	N	115	G	N1-C6-O6	14.21	128.42	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	535	A	P-O3'-C3'	14.20	136.74	119.70
1	N	212	G	C5-C6-O6	-14.20	120.08	128.60
1	N	1282	C	O4'-C1'-N1	14.20	119.56	108.20
1	N	524	G	C8-N9-C4	-14.19	100.72	106.40
1	N	1229	A	N1-C6-N6	14.19	127.11	118.60
1	N	335	C	N3-C4-N4	14.18	127.92	118.00
1	N	533	A	N1-C6-N6	14.17	127.10	118.60
1	N	1038	C	N3-C4-N4	14.16	127.92	118.00
1	N	1468	A	N1-C6-N6	14.15	127.09	118.60
1	N	753	A	N1-C6-N6	14.14	127.08	118.60
1	N	925	G	C5-C6-O6	-14.14	120.12	128.60
1	N	932	C	O4'-C1'-N1	14.13	119.50	108.20
1	N	1155	A	N1-C2-N3	-14.13	122.23	129.30
1	N	322	C	N3-C4-N4	14.13	127.89	118.00
1	N	364	A	N1-C6-N6	14.13	127.08	118.60
1	N	617	G	C5-C6-O6	-14.13	120.12	128.60
1	N	198	G	O4'-C1'-N9	14.11	119.49	108.20
1	N	560	A	P-O3'-C3'	14.11	136.63	119.70
1	N	867	G	C2-N3-C4	-14.11	104.85	111.90
1	N	800	G	N1-C6-O6	14.10	128.36	119.90
1	N	102	G	N1-C6-O6	14.10	128.36	119.90
1	N	101	A	N1-C6-N6	14.10	127.06	118.60
1	N	355	C	C6-N1-C2	14.10	125.94	120.30
1	N	126	G	N1-C6-O6	14.09	128.36	119.90
1	N	668	G	C5-C6-O6	-14.09	120.14	128.60
1	N	1146	A	C5-C6-N1	-14.08	110.66	117.70
1	N	217	C	C6-N1-C2	-14.08	114.67	120.30
1	N	1431	A	N1-C6-N6	14.08	127.05	118.60
1	N	1362	A	N1-C6-N6	14.07	127.04	118.60
1	N	83	C	N3-C4-C5	-14.06	116.27	121.90
1	N	1368	A	N1-C6-N6	14.05	127.03	118.60
1	N	766	A	C5-C6-N6	-14.04	112.47	123.70
1	N	1457	G	C5-C6-O6	-14.04	120.18	128.60
1	N	613	C	O4'-C1'-N1	14.01	119.41	108.20
1	N	1087	G	O4'-C1'-N9	14.01	119.41	108.20
1	N	741	G	N1-C6-O6	13.99	128.29	119.90
1	N	1507	A	N1-C6-N6	13.99	127.00	118.60
1	N	195	A	N1-C6-N6	13.98	126.99	118.60
1	N	1032	G	N1-C6-O6	13.98	128.29	119.90
1	N	782	A	C5-C6-N1	-13.97	110.71	117.70
1	N	1059	C	C6-N1-C2	-13.97	114.71	120.30
1	N	253	A	N1-C6-N6	13.97	126.98	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1215	G	N1-C6-O6	13.97	128.28	119.90
1	N	531	U	O4'-C1'-N1	13.96	119.37	108.20
1	N	529	G	C5-C6-O6	-13.96	120.22	128.60
1	N	1184	G	C5-C6-O6	-13.95	120.23	128.60
1	N	271	C	O4'-C1'-N1	13.95	119.36	108.20
1	N	885	G	C5-C6-N1	-13.94	104.53	111.50
1	N	1022	A	N9-C4-C5	13.93	111.37	105.80
1	N	1000	A	N1-C6-N6	13.92	126.95	118.60
1	N	748	G	C5-C6-O6	-13.91	120.25	128.60
1	N	695	A	N1-C6-N6	13.90	126.94	118.60
1	N	1456	A	N1-C6-N6	13.89	126.94	118.60
1	N	1513	A	N1-C6-N6	13.89	126.94	118.60
1	N	804	U	O4'-C1'-N1	13.88	119.31	108.20
1	N	223	A	C5-C6-N1	-13.88	110.76	117.70
1	N	397	A	N1-C6-N6	13.88	126.93	118.60
1	N	1362	A	O4'-C1'-N9	13.87	119.29	108.20
1	N	1166	G	N3-C2-N2	13.85	129.59	119.90
1	N	817	C	P-O3'-C3'	13.83	136.30	119.70
1	N	801	U	O4'-C1'-N1	13.83	119.26	108.20
1	N	1220	G	N1-C6-O6	13.83	128.20	119.90
1	N	425	G	O4'-C1'-N9	13.80	119.24	108.20
1	N	1222	G	C5-C6-O6	-13.79	120.33	128.60
1	N	370	C	N3-C4-C5	-13.79	116.39	121.90
1	N	345	C	P-O3'-C3'	13.77	136.23	119.70
1	N	1225	A	C5-C6-N1	-13.77	110.81	117.70
1	N	1171	A	N1-C6-N6	13.77	126.86	118.60
1	N	702	A	N1-C6-N6	13.76	126.86	118.60
1	N	759	A	C5-C6-N1	-13.76	110.82	117.70
1	N	1158	C	C2-N1-C1'	13.76	133.94	118.80
1	N	765	G	N1-C6-O6	13.76	128.15	119.90
1	N	337	G	N1-C6-O6	13.73	128.14	119.90
1	N	600	A	N1-C6-N6	13.72	126.83	118.60
1	N	1271	A	N1-C6-N6	13.70	126.82	118.60
1	N	197	A	C5-C6-N1	-13.69	110.86	117.70
1	N	1067	A	C8-N9-C4	13.69	111.28	105.80
1	N	1347	G	P-O3'-C3'	13.69	136.13	119.70
1	N	777	A	C4-C5-C6	13.69	123.84	117.00
1	N	878	A	N1-C6-N6	13.69	126.81	118.60
1	N	1508	A	C6-N1-C2	13.68	126.81	118.60
1	N	1101	A	N7-C8-N9	-13.67	106.96	113.80
1	N	239	U	O4'-C1'-N1	13.67	119.14	108.20
1	N	1134	G	O4'-C1'-N9	13.66	119.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	809	G	C5-C6-O6	-13.66	120.41	128.60
1	N	272	C	O4'-C1'-N1	13.66	119.12	108.20
1	N	1438	G	C5-C6-O6	-13.65	120.41	128.60
1	N	913	A	C8-N9-C4	-13.64	100.34	105.80
1	N	1087	G	C5-C6-O6	-13.64	120.41	128.60
1	N	1226	C	O4'-C1'-N1	13.64	119.11	108.20
1	N	73	C	C6-N1-C2	-13.64	114.84	120.30
1	N	319	G	N1-C6-O6	13.63	128.08	119.90
1	N	574	A	C6-C5-N7	-13.61	122.78	132.30
1	N	265	G	P-O3'-C3'	13.60	136.03	119.70
1	N	1408	A	C4-C5-C6	13.60	123.80	117.00
1	N	1331	G	O4'-C1'-N9	13.60	119.08	108.20
1	N	454	G	N1-C6-O6	13.59	128.05	119.90
1	N	881	G	N1-C6-O6	13.59	128.05	119.90
1	N	312	C	C2-N3-C4	13.59	126.69	119.90
1	N	1490	U	O4'-C1'-N1	13.59	119.07	108.20
1	N	1270	G	N1-C6-O6	13.57	128.04	119.90
1	N	864	A	N1-C6-N6	13.57	126.74	118.60
1	N	897	C	N3-C4-C5	-13.56	116.47	121.90
1	N	1395	C	N3-C4-C5	-13.56	116.47	121.90
1	N	54	C	C5-C6-N1	13.56	127.78	121.00
1	N	851	G	C8-N9-C4	-13.56	100.98	106.40
1	N	1022	A	C8-N9-C4	-13.56	100.38	105.80
1	N	606	G	N3-C2-N2	13.56	129.39	119.90
1	N	829	G	C5-C6-O6	-13.56	120.47	128.60
1	N	451	A	N1-C6-N6	13.55	126.73	118.60
1	N	1006	G	N1-C6-O6	13.55	128.03	119.90
1	N	347	G	N1-C6-O6	13.54	128.03	119.90
1	N	55	A	C5-C6-N6	-13.54	112.87	123.70
1	N	773	G	C5-C6-O6	-13.54	120.48	128.60
1	N	1493	A	C4-C5-C6	13.53	123.77	117.00
1	N	1458	G	N1-C6-O6	13.53	128.01	119.90
1	N	34	C	O4'-C1'-N1	13.52	119.02	108.20
1	N	1415	G	C5-C6-O6	-13.52	120.49	128.60
1	N	877	G	C5-C6-O6	-13.51	120.49	128.60
1	N	1518	A	N1-C6-N6	13.51	126.70	118.60
1	N	583	A	N1-C6-N6	13.49	126.69	118.60
1	N	592	G	N1-C6-O6	13.48	127.99	119.90
1	N	1434	A	N1-C2-N3	13.48	136.04	129.30
1	N	1139	G	C5-C6-O6	-13.46	120.52	128.60
1	N	907	A	N1-C6-N6	13.46	126.68	118.60
1	N	667	G	N1-C6-O6	13.45	127.97	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	73	C	O4'-C1'-N1	13.45	118.96	108.20
1	N	1188	A	P-O3'-C3'	13.45	135.83	119.70
1	N	345	C	C5-C4-N4	-13.43	110.80	120.20
1	N	546	A	C5-C6-N1	-13.43	110.98	117.70
1	N	1047	G	C5-C6-O6	-13.43	120.54	128.60
1	N	721	G	N1-C6-O6	13.42	127.95	119.90
1	N	1475	G	N1-C6-O6	13.41	127.95	119.90
1	N	723	U	O4'-C1'-N1	13.41	118.92	108.20
1	N	913	A	N1-C6-N6	13.40	126.64	118.60
1	N	747	A	N1-C6-N6	13.39	126.64	118.60
1	N	1011	C	N3-C4-C5	-13.39	116.54	121.90
1	N	1439	G	C6-C5-N7	-13.38	122.37	130.40
1	N	1523	G	N1-C6-O6	13.37	127.92	119.90
1	N	1072	G	C5-C6-N1	-13.36	104.82	111.50
1	N	301	G	N1-C6-O6	13.36	127.91	119.90
1	N	610	U	N3-C4-O4	13.35	128.75	119.40
1	N	744	C	N3-C4-C5	-13.35	116.56	121.90
1	N	1412	C	N3-C4-N4	13.34	127.33	118.00
1	N	547	A	N1-C6-N6	13.33	126.60	118.60
1	N	725	G	N1-C6-O6	13.33	127.89	119.90
1	N	1254	A	C5-C6-N6	-13.32	113.04	123.70
1	N	264	C	P-O5'-C5'	13.32	142.21	120.90
1	N	873	A	C4-C5-C6	13.32	123.66	117.00
1	N	226	G	C5-C6-O6	-13.31	120.61	128.60
1	N	902	G	N1-C2-N3	-13.29	115.92	123.90
1	N	345	C	N3-C4-N4	13.29	127.31	118.00
1	N	1151	A	N1-C6-N6	13.28	126.57	118.60
1	N	105	G	C5-C6-O6	-13.28	120.63	128.60
1	N	164	G	C5-C6-O6	-13.28	120.63	128.60
1	N	780	A	O4'-C1'-N9	13.27	118.82	108.20
1	N	886	G	N1-C6-O6	13.27	127.86	119.90
1	N	344	A	C5-C6-N1	-13.27	111.07	117.70
1	N	418	C	N3-C4-C5	-13.27	116.59	121.90
1	N	1241	G	C6-C5-N7	-13.27	122.44	130.40
1	N	840	C	C2-N1-C1'	13.26	133.38	118.80
1	N	1392	G	N1-C6-O6	13.25	127.85	119.90
1	N	1469	C	O4'-C1'-N1	13.25	118.80	108.20
1	N	415	A	N1-C6-N6	13.25	126.55	118.60
1	N	456	A	C8-N9-C4	-13.25	100.50	105.80
1	N	138	G	C5-C6-O6	-13.23	120.66	128.60
1	N	1493	A	C5-N7-C8	13.22	110.51	103.90
1	N	799	G	N1-C6-O6	13.21	127.83	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	802	A	P-O3'-C3'	13.18	135.52	119.70
1	N	117	G	N1-C6-O6	13.18	127.81	119.90
1	N	205	A	C5-C6-N1	-13.17	111.11	117.70
1	N	721	G	P-O3'-C3'	13.17	135.51	119.70
1	N	1059	C	O4'-C1'-N1	13.17	118.73	108.20
1	N	1022	A	C5-C6-N1	-13.15	111.12	117.70
1	N	226	G	N1-C6-O6	13.15	127.79	119.90
1	N	975	A	N1-C6-N6	13.15	126.49	118.60
1	N	68	G	N1-C6-O6	13.14	127.79	119.90
1	N	175	C	N3-C4-N4	13.14	127.20	118.00
1	N	705	G	N1-C6-O6	13.14	127.79	119.90
1	N	1019	A	C5-C6-N1	-13.14	111.13	117.70
1	N	134	G	N1-C6-O6	13.14	127.78	119.90
1	N	265	G	N1-C6-O6	13.12	127.77	119.90
1	N	1418	A	C5-C6-N6	-13.12	113.20	123.70
1	N	1423	G	C5-C6-O6	-13.12	120.73	128.60
1	N	767	A	N1-C6-N6	13.12	126.47	118.60
1	N	68	G	C5-C6-O6	-13.09	120.74	128.60
1	N	1499	A	N1-C6-N6	13.09	126.46	118.60
1	N	1276	G	N1-C6-O6	13.08	127.75	119.90
1	N	1466	C	O4'-C1'-N1	13.07	118.66	108.20
1	N	621	A	N1-C6-N6	13.07	126.44	118.60
1	N	1515	G	N1-C6-O6	13.07	127.74	119.90
1	N	1063	C	N3-C4-C5	-13.06	116.68	121.90
1	N	1163	A	N1-C6-N6	13.06	126.44	118.60
1	N	1289	A	C8-N9-C4	-13.06	100.58	105.80
1	N	316	C	C5'-C4'-C3'	-13.06	95.11	116.00
1	N	217	C	N3-C4-C5	-13.04	116.69	121.90
1	N	97	G	C5-C6-O6	-13.04	120.78	128.60
1	N	670	G	O4'-C1'-N9	13.02	118.62	108.20
1	N	1252	A	O4'-C1'-N9	13.02	118.61	108.20
1	N	461	A	N9-C4-C5	13.01	111.00	105.80
1	N	674	G	N1-C6-O6	13.01	127.71	119.90
1	N	829	G	N1-C6-O6	13.01	127.70	119.90
1	N	1395	C	O4'-C1'-N1	13.01	118.61	108.20
1	N	1493	A	N1-C6-N6	13.01	126.40	118.60
1	N	1447	A	C5-C6-N1	-13.01	111.20	117.70
1	N	1441	A	N1-C6-N6	13.00	126.40	118.60
1	N	1496	C	C6-N1-C2	-13.00	115.10	120.30
1	N	555	U	O4'-C1'-N1	12.99	118.59	108.20
1	N	318	G	C5-C6-O6	-12.98	120.81	128.60
1	N	513	C	N3-C4-N4	12.98	127.09	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	179	A	N1-C6-N6	12.98	126.39	118.60
1	N	645	G	N1-C6-O6	12.97	127.68	119.90
1	N	1258	G	C5-C6-O6	-12.97	120.82	128.60
1	N	1500	A	C5-C6-N6	-12.96	113.33	123.70
1	N	788	U	C5-C4-O4	-12.96	118.12	125.90
1	N	1011	C	C2-N3-C4	12.95	126.38	119.90
1	N	1432	G	P-O3'-C3'	12.95	135.25	119.70
1	N	1448	C	N3-C4-N4	12.95	127.06	118.00
1	N	1283	U	O4'-C1'-N1	12.95	118.56	108.20
1	N	160	A	C5-C6-N1	-12.94	111.23	117.70
1	N	544	G	N1-C6-O6	12.94	127.66	119.90
1	N	346	G	C5-C6-O6	-12.93	120.84	128.60
1	N	832	G	C2-N3-C4	-12.92	105.44	111.90
1	N	503	C	O4'-C1'-N1	12.91	118.53	108.20
1	N	1074	G	C8-N9-C4	12.91	111.56	106.40
1	N	840	C	C5-C4-N4	-12.91	111.17	120.20
1	N	1121	U	O4'-C1'-N1	12.90	118.52	108.20
1	N	1323	G	N1-C2-N3	-12.90	116.16	123.90
1	N	591	U	C5-C4-O4	12.90	133.64	125.90
1	N	1370	G	C4-C5-N7	12.89	115.96	110.80
1	N	1390	U	N1-C2-O2	-12.89	113.78	122.80
1	N	75	G	N1-C6-O6	12.89	127.64	119.90
1	N	654	G	C5-C6-O6	-12.88	120.87	128.60
1	N	794	A	N1-C6-N6	12.88	126.33	118.60
1	N	946	A	C5-C6-N1	-12.88	111.26	117.70
1	N	1127	G	C5-C6-O6	-12.87	120.88	128.60
1	N	81	A	N1-C6-N6	12.86	126.32	118.60
1	N	996	A	O4'-C1'-N9	12.86	118.49	108.20
1	N	142	G	O4'-C1'-N9	12.85	118.48	108.20
1	N	144	G	C5-C6-O6	-12.85	120.89	128.60
1	N	120	A	P-O3'-C3'	12.85	135.11	119.70
1	N	328	C	C6-N1-C2	-12.85	115.16	120.30
1	N	1258	G	C4-C5-N7	12.84	115.93	110.80
1	N	1439	G	N1-C6-O6	12.84	127.60	119.90
1	N	669	G	C5-C6-O6	-12.83	120.90	128.60
1	N	1180	A	N1-C6-N6	12.83	126.30	118.60
1	N	857	C	N3-C4-C5	-12.81	116.77	121.90
1	N	1430	A	N1-C6-N6	12.81	126.29	118.60
1	N	119	A	O4'-C1'-N9	12.81	118.44	108.20
1	N	38	G	N1-C6-O6	12.80	127.58	119.90
1	N	182	A	N1-C6-N6	12.80	126.28	118.60
1	N	325	A	N1-C6-N6	12.80	126.28	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	833	G	C6-C5-N7	-12.79	122.72	130.40
1	N	327	A	C4-C5-C6	12.79	123.39	117.00
1	N	1457	G	N1-C6-O6	12.79	127.57	119.90
1	N	980	C	O4'-C1'-N1	12.78	118.43	108.20
1	N	536	C	N3-C4-N4	12.77	126.94	118.00
1	N	356	A	C5-C6-N1	-12.77	111.31	117.70
1	N	1123	U	P-O3'-C3'	12.77	135.02	119.70
1	N	333	U	O4'-C1'-N1	12.76	118.41	108.20
1	N	271	C	N3-C4-N4	12.76	126.93	118.00
1	N	642	A	C5-N7-C8	12.75	110.28	103.90
1	N	646	G	N1-C6-O6	12.75	127.55	119.90
1	N	22	G	N1-C6-O6	12.74	127.55	119.90
1	N	1447	A	N1-C6-N6	12.73	126.24	118.60
1	N	466	A	N1-C6-N6	12.73	126.24	118.60
1	N	873	A	C2-N3-C4	-12.72	104.24	110.60
1	N	57	G	N1-C6-O6	12.71	127.52	119.90
1	N	359	G	C5-C6-O6	-12.70	120.98	128.60
1	N	633	G	O4'-C1'-N9	12.70	118.36	108.20
1	N	558	G	N1-C6-O6	12.69	127.51	119.90
1	N	160	A	C4-C5-C6	12.69	123.34	117.00
1	N	1243	C	O4'-C1'-N1	12.67	118.34	108.20
1	N	2	A	N1-C6-N6	12.67	126.20	118.60
1	N	190	A	C5-C6-N1	-12.67	111.37	117.70
1	N	35	G	N1-C2-N3	-12.66	116.30	123.90
1	N	1141	C	N3-C4-C5	-12.65	116.84	121.90
1	N	1224	U	O4'-C1'-N1	12.63	118.31	108.20
1	N	39	G	N1-C6-O6	12.63	127.48	119.90
1	N	509	A	C8-N9-C4	-12.63	100.75	105.80
1	N	529	G	N1-C6-O6	12.63	127.48	119.90
1	N	847	G	N3-C4-C5	12.63	134.91	128.60
1	N	109	A	N1-C6-N6	12.62	126.17	118.60
1	N	1358	U	P-O3'-C3'	12.62	134.84	119.70
1	N	820	U	P-O3'-C3'	12.61	134.84	119.70
1	N	1130	A	C8-N9-C4	-12.61	100.76	105.80
1	N	574	A	N1-C6-N6	12.61	126.17	118.60
1	N	54	C	C6-N1-C2	-12.60	115.26	120.30
1	N	215	C	N3-C4-N4	12.59	126.81	118.00
1	N	352	C	C2-N1-C1'	12.59	132.65	118.80
1	N	1135	U	N1-C2-O2	-12.59	113.99	122.80
1	N	526	C	N3-C4-N4	12.59	126.81	118.00
1	N	896	C	C6-N1-C2	12.59	125.33	120.30
1	N	190	A	C4-C5-C6	12.58	123.29	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	374	A	N1-C6-N6	12.57	126.14	118.60
1	N	484	G	C6-N1-C2	12.57	132.64	125.10
1	N	207	C	C5-C4-N4	-12.57	111.40	120.20
1	N	164	G	C6-N1-C2	12.57	132.64	125.10
1	N	1496	C	O4'-C1'-N1	12.56	118.25	108.20
1	N	1097	C	C6-N1-C2	-12.56	115.28	120.30
1	N	896	C	N3-C4-N4	12.56	126.79	118.00
1	N	1099	G	C4-C5-N7	12.55	115.82	110.80
1	N	100	G	C8-N9-C4	-12.54	101.39	106.40
1	N	732	C	N3-C4-C5	-12.53	116.89	121.90
1	N	1368	A	C8-N9-C4	-12.53	100.79	105.80
1	N	280	C	C2-N3-C4	12.53	126.16	119.90
1	N	1166	G	N1-C2-N3	-12.53	116.39	123.90
1	N	524	G	C5-C6-O6	-12.52	121.09	128.60
1	N	1059	C	N3-C4-C5	-12.52	116.89	121.90
1	N	775	G	C5-C6-O6	-12.52	121.09	128.60
1	N	1437	A	N1-C6-N6	12.51	126.11	118.60
1	N	39	G	O4'-C1'-N9	12.51	118.20	108.20
1	N	162	A	C5-N7-C8	12.51	110.15	103.90
1	N	615	G	N1-C6-O6	12.50	127.40	119.90
1	N	380	G	O4'-C1'-N9	12.50	118.20	108.20
1	N	1136	C	N3-C4-C5	-12.49	116.90	121.90
1	N	939	G	N3-C2-N2	12.49	128.64	119.90
1	N	1489	G	O4'-C1'-N9	12.48	118.19	108.20
1	N	878	A	O4'-C1'-N9	12.48	118.18	108.20
1	N	530	G	C5-C6-O6	-12.48	121.11	128.60
1	N	1169	A	C8-N9-C4	-12.47	100.81	105.80
1	N	1519	A	C8-N9-C4	-12.47	100.81	105.80
1	N	761	G	N1-C6-O6	12.47	127.38	119.90
1	N	815	A	O4'-C1'-N9	12.46	118.17	108.20
1	N	560	A	N1-C6-N6	12.46	126.08	118.60
1	N	1394	A	N1-C6-N6	12.46	126.07	118.60
1	N	559	A	C5-C6-N1	-12.45	111.48	117.70
1	N	210	C	C6-N1-C2	-12.45	115.32	120.30
1	N	1498	U	P-O3'-C3'	12.45	134.64	119.70
1	N	1435	G	N1-C6-O6	12.45	127.37	119.90
1	N	902	G	C6-N1-C2	12.44	132.56	125.10
1	N	333	U	N3-C4-O4	12.43	128.10	119.40
1	N	812	G	P-O3'-C3'	12.43	134.62	119.70
1	N	1312	G	N1-C6-O6	12.43	127.36	119.90
1	N	515	G	N1-C6-O6	12.43	127.36	119.90
1	N	494	G	N1-C6-O6	12.42	127.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	489	C	O4'-C1'-N1	12.42	118.14	108.20
1	N	1252	A	C5-N7-C8	12.42	110.11	103.90
1	N	42	G	N1-C6-O6	12.42	127.35	119.90
1	N	1504	G	N7-C8-N9	-12.41	106.89	113.10
1	N	1377	A	C5-C6-N6	-12.41	113.77	123.70
1	N	1428	A	N9-C4-C5	12.40	110.76	105.80
1	N	243	A	N1-C6-N6	12.40	126.04	118.60
1	N	1384	C	O4'-C1'-N1	12.40	118.12	108.20
1	N	699	C	O4'-C1'-N1	12.39	118.11	108.20
1	N	1153	G	N1-C6-O6	12.38	127.33	119.90
1	N	1268	G	C5-N7-C8	12.38	110.49	104.30
1	N	1479	C	N3-C4-N4	12.38	126.67	118.00
1	N	140	U	C2-N3-C4	-12.38	119.57	127.00
1	N	31	G	N7-C8-N9	-12.37	106.92	113.10
1	N	1195	C	C5-C6-N1	12.37	127.19	121.00
1	N	1215	G	C5-C6-O6	-12.37	121.18	128.60
1	N	155	A	N1-C6-N6	12.36	126.02	118.60
1	N	602	A	N1-C6-N6	12.36	126.02	118.60
1	N	658	C	C5-C4-N4	-12.36	111.55	120.20
1	N	719	C	C6-N1-C2	-12.36	115.36	120.30
1	N	1227	A	N1-C6-N6	12.35	126.01	118.60
1	N	1364	U	O4'-C1'-N1	12.35	118.08	108.20
1	N	1090	U	C5-C4-O4	12.34	133.31	125.90
1	N	1178	G	N1-C6-O6	12.33	127.30	119.90
1	N	251	G	N7-C8-N9	-12.33	106.94	113.10
1	N	1323	G	O4'-C1'-N9	12.32	118.06	108.20
1	N	999	C	O4'-C1'-N1	12.32	118.05	108.20
1	N	605	U	P-O3'-C3'	12.31	134.47	119.70
1	N	1000	A	P-O5'-C5'	12.31	140.60	120.90
1	N	1315	U	C5-C6-N1	12.31	128.85	122.70
1	N	183	C	C6-N1-C2	-12.30	115.38	120.30
1	N	1201	A	C5-C6-N1	-12.30	111.55	117.70
1	N	1515	G	C6-C5-N7	-12.30	123.02	130.40
1	N	1080	A	C8-N9-C4	-12.29	100.88	105.80
1	N	710	G	C5-C6-O6	-12.28	121.23	128.60
1	N	889	A	N1-C6-N6	12.28	125.97	118.60
1	N	846	G	N1-C6-O6	12.27	127.26	119.90
1	N	1036	A	N1-C6-N6	12.27	125.96	118.60
1	N	718	A	O4'-C1'-N9	12.27	118.01	108.20
1	N	1515	G	O4'-C1'-N9	12.27	118.01	108.20
1	N	64	G	C4-C5-N7	-12.26	105.90	110.80
1	N	112	G	C5-C6-O6	-12.26	121.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	117	G	C6-C5-N7	-12.26	123.05	130.40
1	N	1408	A	N9-C4-C5	12.26	110.70	105.80
1	N	1442	G	C4-C5-C6	12.26	126.15	118.80
1	N	932	C	N3-C4-C5	-12.25	117.00	121.90
1	N	1209	C	O4'-C1'-N1	12.25	118.00	108.20
1	N	1410	A	C4-C5-C6	12.25	123.13	117.00
1	N	435	A	C5-C6-N1	-12.25	111.58	117.70
1	N	928	G	N1-C6-O6	12.25	127.25	119.90
1	N	1264	U	C5-C6-N1	12.25	128.82	122.70
1	N	1428	A	C4-C5-N7	-12.24	104.58	110.70
1	N	539	A	C2-N3-C4	-12.24	104.48	110.60
1	N	1285	A	P-O3'-C3'	12.24	134.39	119.70
1	N	1137	C	N3-C4-C5	-12.24	117.00	121.90
1	N	1171	A	P-O3'-C3'	12.24	134.38	119.70
1	N	888	G	O4'-C1'-N9	12.23	117.98	108.20
1	N	1210	C	N3-C4-N4	12.23	126.56	118.00
1	N	1366	C	N3-C4-C5	-12.23	117.01	121.90
1	N	1033	G	C5-C6-O6	-12.23	121.26	128.60
1	N	1315	U	O4'-C1'-N1	12.22	117.98	108.20
1	N	655	A	N1-C6-N6	12.21	125.92	118.60
1	N	886	G	C5-C6-O6	-12.21	121.28	128.60
1	N	606	G	C8-N9-C4	-12.20	101.52	106.40
1	N	702	A	C4-C5-C6	12.20	123.10	117.00
1	N	501	C	C6-N1-C2	-12.20	115.42	120.30
1	N	1198	G	N1-C6-O6	12.20	127.22	119.90
1	N	1168	U	P-O3'-C3'	12.20	134.34	119.70
1	N	1271	A	C5-C6-N1	-12.19	111.61	117.70
1	N	1417	G	N1-C6-O6	12.19	127.21	119.90
1	N	1463	U	N3-C4-O4	12.19	127.93	119.40
1	N	408	A	N7-C8-N9	12.18	119.89	113.80
1	N	838	G	C4-C5-C6	12.18	126.11	118.80
1	N	1096	C	O4'-C1'-N1	12.18	117.94	108.20
1	N	853	C	N3-C4-C5	-12.17	117.03	121.90
1	N	1532	U	O4'-C1'-N1	12.17	117.94	108.20
1	N	1495	U	O4'-C1'-N1	12.16	117.93	108.20
1	N	597	G	N1-C6-O6	12.15	127.19	119.90
1	N	927	G	C5-C6-O6	-12.15	121.31	128.60
1	N	819	A	O4'-C1'-N9	12.15	117.92	108.20
1	N	1268	G	C5-C6-N1	-12.15	105.43	111.50
1	N	907	A	C4-C5-C6	12.14	123.07	117.00
1	N	88	U	P-O3'-C3'	12.14	134.27	119.70
1	N	1249	C	C6-N1-C2	-12.14	115.44	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1044	A	N1-C6-N6	12.14	125.88	118.60
1	N	696	A	C4-C5-C6	12.14	123.07	117.00
1	N	610	U	O4'-C1'-N1	12.12	117.90	108.20
1	N	810	C	C6-N1-C2	-12.12	115.45	120.30
1	N	1287	A	N1-C6-N6	12.12	125.87	118.60
1	N	564	C	C5-C4-N4	-12.11	111.72	120.20
1	N	175	C	O4'-C1'-N1	12.11	117.89	108.20
1	N	522	C	O4'-C1'-N1	12.11	117.89	108.20
1	N	1427	C	O4'-C1'-N1	12.11	117.89	108.20
1	N	917	G	N1-C2-N3	-12.10	116.64	123.90
1	N	1070	U	C5-C4-O4	-12.10	118.64	125.90
1	N	312	C	N3-C4-C5	-12.08	117.07	121.90
1	N	474	G	N1-C6-O6	12.08	127.15	119.90
1	N	994	A	C5-C6-N6	-12.07	114.04	123.70
1	N	1302	C	C2-N3-C4	12.07	125.94	119.90
1	N	1208	C	C6-N1-C2	-12.07	115.47	120.30
1	N	939	G	C5-C6-N1	-12.06	105.47	111.50
1	N	700	G	C8-N9-C4	-12.06	101.58	106.40
1	N	1115	U	O4'-C1'-N1	12.05	117.84	108.20
1	N	658	C	O4'-C1'-N1	12.05	117.84	108.20
1	N	1219	A	N1-C6-N6	12.05	125.83	118.60
1	N	1352	C	O4'-C1'-N1	12.05	117.84	108.20
1	N	706	A	C5-C6-N6	-12.05	114.06	123.70
1	N	130	A	C5-C6-N1	-12.04	111.68	117.70
1	N	187	G	C8-N9-C4	12.05	111.22	106.40
1	N	280	C	N3-C4-C5	-12.04	117.08	121.90
1	N	732	C	N3-C4-N4	12.04	126.43	118.00
1	N	904	U	O4'-C1'-N1	12.04	117.83	108.20
1	N	1109	C	C6-N1-C2	-12.04	115.48	120.30
1	N	1443	C	N3-C4-N4	12.03	126.42	118.00
1	N	560	A	O4'-C1'-N9	12.03	117.83	108.20
1	N	184	G	O4'-C1'-N9	12.03	117.82	108.20
1	N	731	G	O4'-C1'-N9	12.03	117.82	108.20
1	N	769	G	N1-C6-O6	12.02	127.11	119.90
1	N	1432	G	N1-C6-O6	12.02	127.11	119.90
1	N	11	G	C5-C6-O6	-12.02	121.39	128.60
1	N	794	A	C5-C6-N6	-12.01	114.09	123.70
1	N	1249	C	P-O3'-C3'	12.00	134.10	119.70
1	N	953	G	N1-C6-O6	12.00	127.10	119.90
1	N	23	C	N3-C4-C5	-12.00	117.10	121.90
1	N	196	A	N1-C2-N3	11.99	135.30	129.30
1	N	23	C	N3-C4-N4	11.99	126.39	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1305	G	C5-C6-O6	-11.99	121.41	128.60
1	N	1151	A	C5-C6-N1	-11.99	111.71	117.70
1	N	1275	A	C4-C5-C6	11.98	122.99	117.00
1	N	313	A	N1-C6-N6	11.98	125.79	118.60
1	N	1244	G	N1-C6-O6	11.98	127.08	119.90
1	N	1092	A	N1-C2-N3	11.97	135.29	129.30
1	N	369	G	N1-C6-O6	11.96	127.08	119.90
1	N	673	A	N1-C6-N6	11.96	125.78	118.60
1	N	1242	G	C4-C5-N7	11.96	115.58	110.80
1	N	324	G	N1-C6-O6	11.96	127.08	119.90
1	N	844	G	C8-N9-C4	-11.96	101.62	106.40
1	N	383	A	C2-N3-C4	-11.95	104.63	110.60
1	N	495	A	P-O3'-C3'	11.95	134.04	119.70
1	N	805	C	O4'-C1'-N1	11.94	117.75	108.20
1	N	251	G	C8-N9-C4	11.93	111.17	106.40
1	N	1066	C	C5-C6-N1	11.93	126.97	121.00
1	N	610	U	C5-C4-O4	-11.93	118.74	125.90
1	N	854	U	O4'-C1'-N1	11.93	117.74	108.20
1	N	846	G	N3-C2-N2	11.93	128.25	119.90
1	N	356	A	N1-C2-N3	-11.92	123.34	129.30
1	N	1373	G	C5-C6-N1	-11.92	105.54	111.50
1	N	777	A	C5-C6-N1	-11.92	111.74	117.70
1	N	329	A	C4-C5-C6	11.92	122.96	117.00
1	N	564	C	N3-C4-N4	11.91	126.34	118.00
1	N	1261	A	N1-C6-N6	11.91	125.75	118.60
1	N	1467	C	N3-C4-C5	-11.91	117.14	121.90
1	N	908	A	N1-C6-N6	11.90	125.74	118.60
1	N	1158	C	C6-N1-C1'	-11.90	106.52	120.80
1	N	1184	G	C5-C6-N1	-11.90	105.55	111.50
1	N	323	U	O4'-C1'-N1	11.90	117.72	108.20
1	N	538	G	O4'-C1'-N9	11.90	117.72	108.20
1	N	944	G	C5-C6-O6	-11.90	121.46	128.60
1	N	102	G	C5-C6-O6	-11.89	121.46	128.60
1	N	1529	G	C5-C6-O6	-11.89	121.47	128.60
1	N	19	A	N1-C6-N6	11.88	125.73	118.60
1	N	830	G	C5-C6-O6	-11.87	121.48	128.60
1	N	1412	C	C6-N1-C2	-11.87	115.55	120.30
1	N	1482	G	N1-C6-O6	11.87	127.02	119.90
1	N	389	A	C5-C6-N6	-11.86	114.21	123.70
1	N	1053	G	C5-C6-O6	-11.86	121.48	128.60
1	N	815	A	C5-C6-N6	-11.86	114.22	123.70
1	N	1402	C	N3-C4-C5	-11.86	117.16	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	391	G	O4'-C1'-N9	11.85	117.68	108.20
1	N	347	G	C5-C6-N1	-11.85	105.57	111.50
1	N	959	A	C4-C5-C6	11.85	122.92	117.00
1	N	1292	G	O4'-C1'-N9	11.85	117.68	108.20
1	N	1275	A	N1-C6-N6	11.84	125.70	118.60
1	N	228	A	C5-C6-N1	-11.84	111.78	117.70
1	N	431	A	N1-C6-N6	11.84	125.70	118.60
1	N	444	G	C5-C6-O6	-11.84	121.50	128.60
1	N	563	A	N1-C6-N6	11.84	125.70	118.60
1	N	513	C	P-O5'-C5'	11.83	139.83	120.90
1	N	606	G	C5-C6-O6	-11.82	121.50	128.60
1	N	780	A	C4-C5-C6	11.82	122.91	117.00
1	N	176	C	O4'-C1'-N1	11.82	117.65	108.20
1	N	184	G	C6-C5-N7	-11.82	123.31	130.40
1	N	1052	U	N3-C4-C5	-11.82	107.51	114.60
1	N	263	A	N1-C6-N6	11.81	125.69	118.60
1	N	814	A	C5-C6-N6	-11.81	114.25	123.70
1	N	202	G	C5-C6-O6	-11.80	121.52	128.60
1	N	972	C	O4'-C1'-N1	11.80	117.64	108.20
1	N	106	C	N3-C4-C5	-11.80	117.18	121.90
1	N	258	G	N1-C6-O6	11.80	126.98	119.90
1	N	1039	G	C5-C6-O6	-11.80	121.52	128.60
1	N	1222	G	N1-C6-O6	11.80	126.98	119.90
1	N	832	G	C6-C5-N7	-11.78	123.33	130.40
1	N	1275	A	C5-C6-N1	-11.78	111.81	117.70
1	N	386	C	O4'-C1'-N1	11.78	117.62	108.20
1	N	1340	A	N1-C6-N6	11.78	125.67	118.60
1	N	1405	G	C5-C6-O6	-11.77	121.54	128.60
1	N	284	C	N3-C4-C5	-11.77	117.19	121.90
1	N	1069	C	N3-C4-N4	11.77	126.24	118.00
1	N	797	C	N3-C4-C5	-11.76	117.19	121.90
1	N	279	A	N1-C6-N6	11.76	125.66	118.60
1	N	413	G	N1-C6-O6	11.75	126.95	119.90
1	N	450	G	N1-C6-O6	11.75	126.95	119.90
1	N	592	G	C5-C6-O6	-11.75	121.55	128.60
1	N	694	A	N1-C6-N6	11.75	125.65	118.60
1	N	514	C	O4'-C1'-N1	11.75	117.60	108.20
1	N	721	G	C4-C5-C6	11.75	125.85	118.80
1	N	1118	U	C5-C6-N1	11.75	128.57	122.70
1	N	441	A	N1-C6-N6	11.75	125.65	118.60
1	N	178	C	C6-N1-C2	11.74	125.00	120.30
1	N	836	G	O4'-C1'-N9	11.74	117.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1483	A	C4-C5-C6	11.74	122.87	117.00
1	N	196	A	C5-C6-N1	-11.74	111.83	117.70
1	N	1015	G	O4'-C1'-N9	11.74	117.59	108.20
1	N	461	A	C4-C5-C6	11.74	122.87	117.00
1	N	1523	G	C5-C6-O6	-11.74	121.56	128.60
1	N	1401	G	N3-C2-N2	11.74	128.12	119.90
1	N	76	G	C5-C6-O6	-11.73	121.56	128.60
1	N	314	C	O4'-C1'-N1	11.73	117.59	108.20
1	N	337	G	C5-C6-O6	-11.73	121.56	128.60
1	N	833	G	C4-C5-N7	11.73	115.49	110.80
1	N	271	C	N3-C4-C5	-11.73	117.21	121.90
1	N	1355	G	C5-C6-O6	-11.73	121.56	128.60
1	N	1021	A	C5-C6-N6	-11.73	114.32	123.70
1	N	1028	C	O4'-C1'-N1	11.73	117.58	108.20
1	N	1099	G	C6-C5-N7	-11.73	123.36	130.40
1	N	222	C	O4'-C1'-N1	11.72	117.58	108.20
1	N	778	G	O4'-C1'-N9	11.72	117.58	108.20
1	N	1111	A	O4'-C1'-N9	11.72	117.58	108.20
1	N	465	A	C8-N9-C4	-11.72	101.11	105.80
1	N	1136	C	N3-C4-N4	11.72	126.20	118.00
1	N	857	C	C6-N1-C2	-11.71	115.61	120.30
1	N	1182	G	P-O3'-C3'	11.71	133.75	119.70
1	N	1505	G	N1-C6-O6	11.71	126.92	119.90
1	N	985	C	O4'-C1'-N1	11.71	117.56	108.20
1	N	1482	G	P-O5'-C5'	11.71	139.63	120.90
1	N	1026	G	N1-C6-O6	11.70	126.92	119.90
1	N	70	U	C5-C6-N1	11.70	128.55	122.70
1	N	1497	G	P-O3'-C3'	11.70	133.74	119.70
1	N	1226	C	P-O3'-C3'	11.69	133.73	119.70
1	N	1140	C	N3-C4-C5	-11.68	117.23	121.90
1	N	1320	C	C2-N3-C4	11.68	125.74	119.90
1	N	1484	C	N3-C4-C5	-11.68	117.23	121.90
1	N	430	A	N9-C4-C5	-11.68	101.13	105.80
1	N	937	A	C4-C5-C6	11.68	122.84	117.00
1	N	378	G	C5-C6-O6	-11.68	121.59	128.60
1	N	303	A	N1-C6-N6	11.67	125.60	118.60
1	N	672	U	O4'-C1'-N1	11.67	117.53	108.20
1	N	924	C	C5-C6-N1	11.67	126.83	121.00
1	N	1396	A	C5-C6-N1	-11.66	111.87	117.70
1	N	103	U	C5-C6-N1	11.65	128.53	122.70
1	N	1250	A	C2-N3-C4	-11.65	104.77	110.60
1	N	127	G	N1-C6-O6	11.65	126.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	946	A	C4-C5-C6	11.65	122.83	117.00
1	N	1529	G	P-O3'-C3'	11.65	133.68	119.70
1	N	1406	U	O4'-C1'-N1	11.65	117.52	108.20
1	N	192	A	C5-C6-N6	-11.64	114.39	123.70
1	N	1337	G	C4-C5-N7	11.64	115.45	110.80
1	N	618	C	N3-C4-C5	-11.64	117.25	121.90
1	N	933	G	C5-C6-O6	-11.63	121.62	128.60
1	N	1415	G	N1-C6-O6	11.63	126.88	119.90
1	N	407	U	P-O5'-C5'	11.63	139.51	120.90
1	N	1064	G	C5-C6-O6	-11.63	121.62	128.60
1	N	324	G	C5-C6-O6	-11.62	121.63	128.60
1	N	524	G	N1-C6-O6	11.62	126.87	119.90
1	N	269	C	N3-C4-C5	-11.62	117.25	121.90
1	N	936	C	C5-C4-N4	-11.61	112.07	120.20
1	N	157	U	O4'-C1'-N1	11.61	117.49	108.20
1	N	683	G	N1-C6-O6	11.61	126.87	119.90
1	N	1171	A	O4'-C1'-N9	11.60	117.48	108.20
1	N	1516	G	N1-C6-O6	11.60	126.86	119.90
1	N	1210	C	N3-C4-C5	-11.60	117.26	121.90
1	N	67	C	O4'-C1'-N1	11.59	117.47	108.20
1	N	193	C	O4'-C1'-N1	11.59	117.47	108.20
1	N	847	G	N9-C4-C5	-11.59	100.76	105.40
1	N	549	C	O4'-C1'-N1	11.59	117.47	108.20
1	N	695	A	C2-N3-C4	11.58	116.39	110.60
1	N	921	U	C2-N3-C4	-11.58	120.05	127.00
1	N	1274	A	P-O5'-C5'	11.58	139.42	120.90
1	N	1396	A	C4-C5-C6	11.58	122.79	117.00
1	N	460	A	N1-C2-N3	11.57	135.09	129.30
1	N	764	C	C5-C6-N1	11.57	126.78	121.00
1	N	1033	G	C6-C5-N7	-11.57	123.46	130.40
1	N	1050	G	O4'-C1'-N9	11.56	117.45	108.20
1	N	1191	A	C4-C5-C6	11.56	122.78	117.00
1	N	926	G	N1-C6-O6	11.55	126.83	119.90
1	N	338	A	O4'-C1'-N9	11.55	117.44	108.20
1	N	366	A	N1-C6-N6	11.55	125.53	118.60
1	N	933	G	N1-C2-N3	-11.55	116.97	123.90
1	N	342	C	O4'-C1'-N1	11.55	117.44	108.20
1	N	741	G	C5-C6-O6	-11.54	121.68	128.60
1	N	194	C	O4'-C1'-N1	11.54	117.43	108.20
1	N	1282	C	N3-C4-N4	11.54	126.08	118.00
1	N	332	G	O4'-C1'-N9	11.53	117.42	108.20
1	N	1019	A	C4-C5-C6	11.53	122.76	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1416	G	C5-C6-O6	-11.53	121.69	128.60
1	N	379	C	C2-N3-C4	11.52	125.66	119.90
1	N	745	G	N1-C6-O6	11.52	126.81	119.90
1	N	457	G	O4'-C1'-N9	11.51	117.41	108.20
1	N	954	G	N3-C2-N2	11.51	127.95	119.90
1	N	321	A	N1-C2-N3	11.50	135.05	129.30
1	N	879	C	N3-C4-N4	11.50	126.05	118.00
1	N	60	A	P-O3'-C3'	11.49	133.49	119.70
1	N	321	A	N1-C6-N6	11.49	125.50	118.60
1	N	673	A	C8-N9-C4	11.49	110.40	105.80
1	N	1236	A	C5-C6-N6	-11.49	114.51	123.70
1	N	208	U	P-O3'-C3'	11.48	133.48	119.70
1	N	1037	C	O4'-C1'-N1	11.48	117.38	108.20
1	N	1225	A	N1-C6-N6	11.48	125.49	118.60
1	N	138	G	N1-C6-O6	11.48	126.79	119.90
1	N	919	A	O4'-C1'-N9	11.47	117.38	108.20
1	N	1284	C	C5-C6-N1	11.47	126.73	121.00
1	N	1493	A	C5-C6-N1	-11.47	111.97	117.70
1	N	991	U	P-O3'-C3'	11.46	133.46	119.70
1	N	448	A	C5-C6-N6	-11.46	114.53	123.70
1	N	615	G	C5-C6-O6	-11.46	121.72	128.60
1	N	1368	A	N1-C2-N3	11.46	135.03	129.30
1	N	590	U	N3-C4-O4	11.45	127.42	119.40
1	N	672	U	C5-C6-N1	11.45	128.43	122.70
1	N	264	C	C6-N1-C2	11.45	124.88	120.30
1	N	93	U	P-O5'-C5'	11.45	139.22	120.90
1	N	759	A	C4-C5-C6	11.44	122.72	117.00
1	N	1144	G	O4'-C1'-N9	11.44	117.36	108.20
1	N	201	G	P-O3'-C3'	11.44	133.43	119.70
1	N	742	G	C5-C6-O6	-11.44	121.73	128.60
1	N	17	U	O4'-C1'-N1	11.43	117.35	108.20
1	N	1359	C	N3-C4-C5	-11.43	117.33	121.90
1	N	1516	G	C4-C5-N7	-11.43	106.23	110.80
1	N	1040	U	N1-C2-O2	-11.43	114.80	122.80
1	N	711	G	N7-C8-N9	-11.42	107.39	113.10
1	N	1507	A	O4'-C1'-N9	11.41	117.33	108.20
1	N	100	G	N7-C8-N9	11.41	118.81	113.10
1	N	1124	G	N1-C6-O6	11.41	126.75	119.90
1	N	430	A	N1-C6-N6	11.41	125.44	118.60
1	N	797	C	C6-N1-C2	11.41	124.86	120.30
1	N	1038	C	N3-C4-C5	-11.41	117.34	121.90
1	N	1013	G	O4'-C1'-N9	11.40	117.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	899	C	N3-C4-C5	-11.40	117.34	121.90
1	N	1281	C	C4-C5-C6	11.40	123.10	117.40
1	N	397	A	C5-C6-N6	-11.40	114.58	123.70
1	N	1051	C	N3-C4-N4	11.39	125.97	118.00
1	N	1088	G	N1-C6-O6	11.39	126.74	119.90
1	N	1338	G	C6-C5-N7	-11.39	123.56	130.40
1	N	1269	A	C5-C6-N6	-11.39	114.59	123.70
1	N	631	C	C2-N3-C4	11.39	125.59	119.90
1	N	764	C	O4'-C1'-N1	11.38	117.30	108.20
1	N	711	G	N1-C6-O6	11.38	126.73	119.90
1	N	321	A	C2-N3-C4	-11.37	104.92	110.60
1	N	1124	G	C6-C5-N7	-11.37	123.58	130.40
1	N	567	G	C6-C5-N7	-11.37	123.58	130.40
1	N	343	U	C6-N1-C2	-11.36	114.18	121.00
1	N	439	U	O4'-C1'-N1	11.36	117.29	108.20
1	N	1206	G	N1-C6-O6	11.35	126.71	119.90
1	N	849	G	N3-C2-N2	11.35	127.84	119.90
1	N	207	C	C6-N1-C2	-11.35	115.76	120.30
1	N	1228	C	C6-N1-C2	-11.35	115.76	120.30
1	N	307	C	N3-C4-N4	11.35	125.94	118.00
1	N	1101	A	O4'-C1'-N9	11.35	117.28	108.20
1	N	1395	C	N3-C4-N4	11.34	125.94	118.00
1	N	853	C	O4'-C1'-N1	11.33	117.27	108.20
1	N	1066	C	O4'-C1'-N1	11.33	117.26	108.20
1	N	1063	C	N3-C4-N4	11.33	125.93	118.00
1	N	1220	G	C8-N9-C4	11.32	110.93	106.40
1	N	268	U	O4'-C1'-N1	11.32	117.26	108.20
1	N	1127	G	C8-N9-C4	-11.32	101.87	106.40
1	N	127	G	C5-C6-O6	-11.31	121.81	128.60
1	N	413	G	N3-C2-N2	11.31	127.82	119.90
1	N	659	U	O4'-C1'-N1	11.31	117.25	108.20
1	N	727	G	C5-C6-O6	-11.31	121.82	128.60
1	N	872	A	N1-C2-N3	-11.31	123.65	129.30
1	N	351	G	C5-C6-O6	-11.30	121.82	128.60
1	N	790	A	C5-C6-N6	-11.30	114.66	123.70
1	N	254	G	N1-C2-N3	-11.29	117.12	123.90
1	N	802	A	C4-C5-C6	11.29	122.65	117.00
1	N	1054	C	C6-N1-C2	-11.29	115.78	120.30
1	N	1081	A	C4-C5-C6	11.29	122.65	117.00
1	N	731	G	C5-C6-O6	-11.29	121.83	128.60
1	N	1405	G	C8-N9-C4	11.29	110.92	106.40
1	N	900	A	N1-C6-N6	11.29	125.37	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	615	G	N9-C4-C5	11.29	109.92	105.40
1	N	1415	G	C8-N9-C4	-11.29	101.89	106.40
1	N	983	A	N1-C6-N6	11.28	125.37	118.60
1	N	700	G	N9-C4-C5	11.27	109.91	105.40
1	N	871	U	C5-C4-O4	-11.27	119.14	125.90
1	N	1399	C	C2-N3-C4	11.27	125.53	119.90
1	N	257	G	C5-C6-O6	-11.27	121.84	128.60
1	N	539	A	C5-C6-N1	-11.26	112.07	117.70
1	N	1105	A	C5-C6-N6	-11.26	114.70	123.70
1	N	939	G	N1-C6-O6	11.25	126.65	119.90
1	N	327	A	C5-C6-N1	-11.25	112.08	117.70
1	N	1188	A	N1-C6-N6	11.24	125.35	118.60
1	N	958	A	N1-C6-N6	11.24	125.34	118.60
1	N	139	A	O4'-C1'-N9	11.24	117.19	108.20
1	N	933	G	O4'-C1'-N9	11.24	117.19	108.20
1	N	1070	U	O4'-C1'-N1	11.24	117.19	108.20
1	N	1188	A	O4'-C1'-N9	11.24	117.19	108.20
1	N	335	C	C5-C4-N4	-11.23	112.34	120.20
1	N	64	G	N1-C6-O6	11.23	126.64	119.90
1	N	1289	A	C5-C6-N1	-11.23	112.08	117.70
1	N	159	G	C5-C6-O6	-11.23	121.86	128.60
1	N	297	G	O4'-C1'-N9	11.22	117.18	108.20
1	N	303	A	C5-C6-N1	-11.22	112.09	117.70
1	N	1387	G	N1-C6-O6	11.21	126.63	119.90
1	N	1004	A	C5-C6-N6	-11.21	114.73	123.70
1	N	285	C	C4-C5-C6	-11.21	111.80	117.40
1	N	1428	A	N1-C6-N6	11.21	125.32	118.60
1	N	1162	C	N3-C4-C5	-11.20	117.42	121.90
1	N	1217	C	N3-C4-C5	-11.21	117.42	121.90
1	N	1531	A	P-O5'-C5'	11.20	138.82	120.90
1	N	833	G	N9-C4-C5	-11.20	100.92	105.40
1	N	739	C	O4'-C1'-N1	11.19	117.15	108.20
1	N	262	A	N1-C6-N6	11.19	125.31	118.60
1	N	966	G	C8-N9-C4	-11.19	101.93	106.40
1	N	1129	C	O4'-C1'-C2'	11.19	117.67	107.60
1	N	855	U	P-O3'-C3'	11.18	133.12	119.70
1	N	1040	U	N3-C2-O2	11.18	130.03	122.20
1	N	1318	A	C5-C6-N6	-11.18	114.76	123.70
1	N	1111	A	N1-C6-N6	11.18	125.31	118.60
1	N	548	G	N1-C6-O6	11.17	126.60	119.90
1	N	639	G	N1-C6-O6	11.17	126.60	119.90
1	N	749	A	N1-C6-N6	11.17	125.30	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	463	U	C5-C4-O4	-11.17	119.20	125.90
1	N	1166	G	O4'-C1'-N9	11.16	117.13	108.20
1	N	642	A	C4-C5-C6	11.16	122.58	117.00
1	N	203	G	O4'-C1'-N9	11.16	117.13	108.20
1	N	1197	A	C5-C6-N1	-11.15	112.12	117.70
1	N	613	C	C5-C6-N1	11.15	126.58	121.00
1	N	1442	G	N1-C6-O6	11.15	126.59	119.90
1	N	156	C	C5-C4-N4	-11.15	112.39	120.20
1	N	1093	A	N1-C2-N3	11.15	134.88	129.30
1	N	1128	C	O4'-C1'-N1	11.15	117.12	108.20
1	N	205	A	N1-C6-N6	11.15	125.29	118.60
1	N	369	G	C5-C6-O6	-11.13	121.92	128.60
1	N	435	A	C4-C5-C6	11.12	122.56	117.00
1	N	832	G	C4-C5-N7	11.12	115.25	110.80
1	N	1142	G	C5-C6-O6	-11.12	121.93	128.60
1	N	1250	A	N1-C2-N3	11.12	134.86	129.30
1	N	53	A	C5-C6-N6	-11.11	114.81	123.70
1	N	1043	G	P-O3'-C3'	11.11	133.04	119.70
1	N	438	U	O4'-C1'-N1	11.11	117.09	108.20
1	N	926	G	P-O3'-C3'	11.11	133.03	119.70
1	N	626	G	C6-C5-N7	-11.11	123.74	130.40
1	N	723	U	C5-C4-O4	-11.11	119.24	125.90
1	N	122	G	N1-C6-O6	11.10	126.56	119.90
1	N	727	G	N1-C6-O6	11.10	126.56	119.90
1	N	223	A	C4-C5-C6	11.10	122.55	117.00
1	N	59	A	C8-N9-C4	-11.10	101.36	105.80
1	N	926	G	C5-C6-O6	-11.09	121.94	128.60
1	N	38	G	C5-C6-O6	-11.09	121.94	128.60
1	N	1490	U	C5-C6-N1	11.09	128.25	122.70
1	N	351	G	P-O3'-C3'	11.09	133.01	119.70
1	N	823	C	N3-C4-N4	11.09	125.76	118.00
1	N	218	U	O4'-C1'-N1	11.09	117.07	108.20
1	N	1202	U	O4'-C1'-N1	11.08	117.07	108.20
1	N	391	G	P-O3'-C3'	11.08	133.00	119.70
1	N	1389	C	O4'-C1'-N1	11.08	117.06	108.20
1	N	1174	G	C5-C6-O6	-11.07	121.95	128.60
1	N	1221	G	N1-C2-N3	-11.07	117.25	123.90
1	N	270	A	C5-C6-N6	-11.07	114.84	123.70
1	N	71	A	O4'-C1'-N9	11.07	117.05	108.20
1	N	327	A	C2-N3-C4	-11.07	105.07	110.60
1	N	1103	C	N3-C4-N4	11.06	125.75	118.00
1	N	6	G	C2-N3-C4	11.06	117.43	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	712	A	N1-C6-N6	11.05	125.23	118.60
1	N	882	C	O4'-C1'-N1	11.05	117.04	108.20
1	N	1327	C	N3-C4-C5	-11.05	117.48	121.90
1	N	890	G	N3-C2-N2	11.04	127.63	119.90
1	N	411	A	N1-C6-N6	11.04	125.22	118.60
1	N	906	A	O4'-C1'-N9	11.03	117.02	108.20
1	N	1496	C	N3-C4-C5	-11.03	117.49	121.90
1	N	346	G	N1-C6-O6	11.02	126.51	119.90
1	N	248	C	O4'-C1'-N1	11.02	117.01	108.20
1	N	311	C	O4'-C1'-N1	11.01	117.01	108.20
1	N	823	C	C5-C4-N4	-11.01	112.49	120.20
1	N	974	A	C8-N9-C4	-11.01	101.39	105.80
1	N	546	A	C4-C5-C6	11.01	122.51	117.00
1	N	279	A	C4-C5-C6	11.01	122.50	117.00
1	N	923	A	N1-C6-N6	11.01	125.20	118.60
1	N	924	C	N3-C4-C5	-11.00	117.50	121.90
1	N	374	A	O4'-C1'-N9	11.00	117.00	108.20
1	N	1504	G	N1-C6-O6	11.00	126.50	119.90
1	N	220	G	N7-C8-N9	10.99	118.60	113.10
1	N	443	C	O4'-C1'-N1	10.99	116.99	108.20
1	N	254	G	N1-C6-O6	10.98	126.49	119.90
1	N	1250	A	C5-C6-N1	-10.98	112.21	117.70
1	N	199	A	C2-N3-C4	-10.98	105.11	110.60
1	N	894	G	C5-C6-O6	-10.98	122.01	128.60
1	N	810	C	N3-C4-C5	-10.98	117.51	121.90
1	N	156	C	N3-C4-N4	10.97	125.68	118.00
1	N	1198	G	C5-C6-O6	-10.97	122.02	128.60
1	N	265	G	C5-N7-C8	10.97	109.78	104.30
1	N	1147	C	O4'-C1'-N1	10.97	116.97	108.20
1	N	420	U	O4'-C1'-N1	10.96	116.97	108.20
1	N	537	G	C5-C6-O6	-10.96	122.02	128.60
1	N	859	G	N1-C6-O6	10.96	126.48	119.90
1	N	424	G	C4-C5-C6	10.96	125.37	118.80
1	N	759	A	O4'-C1'-N9	10.96	116.97	108.20
1	N	774	G	N1-C6-O6	10.96	126.47	119.90
1	N	903	G	N1-C6-O6	10.95	126.47	119.90
1	N	781	A	O4'-C1'-N9	10.95	116.96	108.20
1	N	1443	C	C5-C4-N4	-10.95	112.53	120.20
1	N	1309	G	C8-N9-C4	-10.94	102.02	106.40
1	N	338	A	C5-C6-N1	-10.94	112.23	117.70
1	N	25	C	O4'-C1'-N1	10.94	116.95	108.20
1	N	711	G	C5-N7-C8	10.94	109.77	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	750	C	C2-N3-C4	-10.94	114.43	119.90
1	N	228	A	N1-C2-N3	10.94	134.77	129.30
1	N	763	G	C5-C6-N1	-10.94	106.03	111.50
1	N	1421	G	N1-C6-O6	10.94	126.46	119.90
1	N	1143	G	C5-C6-N1	-10.93	106.03	111.50
1	N	207	C	P-O3'-C3'	10.93	132.81	119.70
1	N	818	G	C6-C5-N7	-10.93	123.84	130.40
1	N	256	U	O4'-C1'-N1	10.91	116.93	108.20
1	N	1461	G	C5-C6-O6	-10.91	122.05	128.60
1	N	1503	A	N1-C6-N6	10.91	125.15	118.60
1	N	1169	A	N7-C8-N9	10.91	119.25	113.80
1	N	249	U	C4-C5-C6	10.91	126.24	119.70
1	N	787	A	C4-C5-C6	10.90	122.45	117.00
1	N	865	A	N1-C2-N3	10.90	134.75	129.30
1	N	738	C	C5-C4-N4	-10.89	112.58	120.20
1	N	830	G	N1-C6-O6	10.89	126.44	119.90
1	N	99	C	O4'-C1'-N1	10.89	116.91	108.20
1	N	266	G	P-O3'-C3'	10.88	132.76	119.70
1	N	586	C	O4'-C1'-N1	10.88	116.90	108.20
1	N	220	G	C8-N9-C4	-10.88	102.05	106.40
1	N	933	G	C2-N3-C4	10.88	117.34	111.90
1	N	1441	A	C8-N9-C4	-10.87	101.45	105.80
1	N	1373	G	C6-N1-C2	10.87	131.62	125.10
1	N	391	G	C5-C6-O6	-10.87	122.08	128.60
1	N	1014	A	C5-C6-N6	-10.87	115.01	123.70
1	N	1031	C	C5-C4-N4	-10.87	112.59	120.20
1	N	1148	U	C5-C6-N1	10.86	128.13	122.70
1	N	380	G	C5-C6-O6	-10.86	122.09	128.60
1	N	1020	G	C5-C6-O6	-10.86	122.09	128.60
1	N	1031	C	N3-C4-N4	10.86	125.60	118.00
1	N	1382	C	O4'-C1'-N1	10.86	116.88	108.20
1	N	651	C	C2-N3-C4	10.85	125.33	119.90
1	N	1207	G	C5-C6-O6	-10.85	122.09	128.60
1	N	658	C	C6-N1-C2	-10.85	115.96	120.30
1	N	566	G	P-O3'-C3'	10.85	132.72	119.70
1	N	831	A	C5-C6-N6	-10.85	115.02	123.70
1	N	61	G	C5-C6-N1	-10.84	106.08	111.50
1	N	1366	C	N3-C4-N4	10.84	125.59	118.00
1	N	1434	A	C2-N3-C4	-10.84	105.18	110.60
1	N	377	G	C2-N3-C4	-10.84	106.48	111.90
1	N	76	G	N1-C6-O6	10.83	126.40	119.90
1	N	1532	U	N3-C4-O4	10.83	126.98	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1336	C	P-O3'-C3'	10.83	132.70	119.70
1	N	154	U	O4'-C1'-N1	10.83	116.86	108.20
1	N	1146	A	C4-C5-C6	10.83	122.42	117.00
1	N	1531	A	C4-C5-C6	10.83	122.42	117.00
1	N	373	A	O4'-C1'-N9	10.83	116.86	108.20
1	N	1433	A	C6-N1-C2	10.83	125.10	118.60
1	N	1067	A	N9-C4-C5	-10.82	101.47	105.80
1	N	1494	G	N1-C6-O6	10.82	126.39	119.90
1	N	558	G	N3-C2-N2	10.82	127.47	119.90
1	N	227	G	N1-C6-O6	10.82	126.39	119.90
1	N	39	G	C8-N9-C4	-10.81	102.07	106.40
1	N	673	A	N9-C4-C5	-10.81	101.47	105.80
1	N	1300	G	C8-N9-C4	-10.81	102.08	106.40
1	N	1411	C	O4'-C1'-N1	10.81	116.85	108.20
1	N	370	C	N3-C4-N4	10.81	125.57	118.00
1	N	453	G	C5-C6-O6	-10.81	122.11	128.60
1	N	721	G	C5-C6-O6	-10.81	122.11	128.60
1	N	454	G	C5-C6-O6	-10.81	122.11	128.60
1	N	466	A	C8-N9-C4	-10.81	101.48	105.80
1	N	31	G	C5-N7-C8	10.80	109.70	104.30
1	N	586	C	N3-C4-C5	-10.80	117.58	121.90
1	N	181	A	P-O3'-C3'	10.80	132.66	119.70
1	N	394	G	N7-C8-N9	-10.80	107.70	113.10
1	N	595	A	C4-C5-C6	10.80	122.40	117.00
1	N	1034	G	N7-C8-N9	10.80	118.50	113.10
1	N	1182	G	N1-C2-N3	-10.79	117.42	123.90
1	N	392	C	N3-C4-N4	10.79	125.55	118.00
1	N	865	A	C5-C6-N6	-10.79	115.07	123.70
1	N	1024	G	N1-C6-O6	10.78	126.37	119.90
1	N	1250	A	C4-C5-C6	10.78	122.39	117.00
1	N	1061	G	O4'-C1'-N9	10.78	116.82	108.20
1	N	1515	G	C8-N9-C4	10.78	110.71	106.40
1	N	269	C	O4'-C1'-N1	10.77	116.82	108.20
1	N	537	G	N1-C6-O6	10.77	126.36	119.90
1	N	433	G	C8-N9-C4	10.77	110.71	106.40
1	N	78	A	C1'-O4'-C4'	10.76	118.51	109.90
1	N	1516	G	C5-C6-N1	-10.76	106.12	111.50
1	N	829	G	C2-N3-C4	10.76	117.28	111.90
1	N	656	G	C5-C6-O6	-10.75	122.15	128.60
1	N	675	A	O4'-C1'-N9	10.75	116.80	108.20
1	N	981	U	O4'-C1'-N1	10.75	116.80	108.20
1	N	430	A	C8-N9-C4	10.75	110.10	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	109	A	P-O3'-C3'	10.75	132.60	119.70
1	N	1120	C	O4'-C1'-N1	10.74	116.79	108.20
1	N	1242	G	N9-C4-C5	-10.74	101.11	105.40
1	N	667	G	C8-N9-C4	-10.73	102.11	106.40
1	N	214	C	O4'-C1'-N1	10.72	116.78	108.20
1	N	378	G	N3-C2-N2	10.72	127.41	119.90
1	N	658	C	C4-C5-C6	-10.72	112.04	117.40
1	N	702	A	O4'-C1'-N9	10.72	116.78	108.20
1	N	948	C	O4'-C1'-N1	10.72	116.77	108.20
1	N	1305	G	O4'-C1'-N9	10.71	116.77	108.20
1	N	452	A	N1-C6-N6	10.71	125.03	118.60
1	N	939	G	C6-N1-C2	10.71	131.53	125.10
1	N	130	A	N1-C2-N3	-10.71	123.95	129.30
1	N	232	G	C5-C6-N1	-10.71	106.15	111.50
1	N	342	C	C6-N1-C2	-10.71	116.02	120.30
1	N	678	U	O4'-C1'-N1	10.71	116.77	108.20
1	N	99	C	P-O3'-C3'	10.70	132.54	119.70
1	N	750	C	C5-C4-N4	-10.69	112.71	120.20
1	N	877	G	N1-C2-N3	-10.69	117.48	123.90
1	N	800	G	N3-C2-N2	10.69	127.38	119.90
1	N	1419	G	C5-C6-O6	-10.69	122.19	128.60
1	N	1258	G	N1-C2-N3	-10.69	117.49	123.90
1	N	8	A	N1-C6-N6	10.69	125.01	118.60
1	N	575	G	C5-C6-O6	-10.69	122.19	128.60
1	N	308	C	C6-N1-C2	-10.69	116.03	120.30
1	N	1417	G	N3-C2-N2	10.69	127.38	119.90
1	N	933	G	N1-C6-O6	10.68	126.31	119.90
1	N	1526	G	C5-C6-O6	-10.68	122.19	128.60
1	N	258	G	N1-C2-N3	-10.68	117.49	123.90
1	N	515	G	C5-C6-O6	-10.68	122.19	128.60
1	N	1318	A	N1-C6-N6	10.68	125.01	118.60
1	N	1413	A	C5-C6-N6	-10.68	115.16	123.70
1	N	934	C	O4'-C1'-N1	10.68	116.74	108.20
1	N	995	C	P-O3'-C3'	-10.68	106.89	119.70
1	N	941	G	P-O3'-C3'	10.67	132.51	119.70
1	N	1088	G	P-O5'-C5'	10.67	137.98	120.90
1	N	739	C	N3-C4-N4	10.67	125.47	118.00
1	N	116	A	N1-C6-N6	10.66	125.00	118.60
1	N	1131	G	C5-C6-O6	-10.66	122.20	128.60
1	N	7	A	N1-C6-N6	10.66	125.00	118.60
1	N	520	A	C4-C5-C6	10.65	122.33	117.00
1	N	1257	A	N1-C6-N6	10.65	124.99	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1383	C	C6-N1-C2	-10.65	116.04	120.30
1	N	1331	G	P-O3'-C3'	10.65	132.48	119.70
1	N	831	A	C5-C6-N1	-10.65	112.38	117.70
1	N	873	A	N1-C2-N3	10.64	134.62	129.30
1	N	1453	G	C5-C6-O6	-10.64	122.22	128.60
1	N	1331	G	C6-C5-N7	-10.64	124.02	130.40
1	N	891	U	O4'-C1'-N1	10.63	116.71	108.20
1	N	94	G	N7-C8-N9	-10.63	107.78	113.10
1	N	774	G	O4'-C1'-N9	10.63	116.70	108.20
1	N	730	G	N3-C4-N9	10.63	132.38	126.00
1	N	73	C	N3-C4-C5	-10.62	117.65	121.90
1	N	536	C	O4'-C1'-N1	10.62	116.70	108.20
1	N	916	U	O5'-P-OP2	-10.62	96.14	105.70
1	N	858	G	C8-N9-C4	-10.62	102.15	106.40
1	N	1112	C	O4'-C1'-N1	10.62	116.69	108.20
1	N	1261	A	O4'-C1'-N9	10.62	116.69	108.20
1	N	740	U	O4'-C1'-N1	10.61	116.69	108.20
1	N	1374	A	C5-C6-N6	-10.61	115.21	123.70
1	N	703	G	N1-C6-O6	10.60	126.26	119.90
1	N	974	A	C5-C6-N6	-10.60	115.22	123.70
1	N	636	U	O4'-C1'-N1	10.60	116.68	108.20
1	N	130	A	C5-C6-N6	-10.60	115.22	123.70
1	N	1131	G	N1-C6-O6	10.59	126.25	119.90
1	N	829	G	C8-N9-C4	-10.59	102.16	106.40
1	N	985	C	C5-C6-N1	10.59	126.29	121.00
1	N	1519	A	N1-C6-N6	10.59	124.95	118.60
1	N	1097	C	N3-C4-C5	-10.58	117.67	121.90
1	N	1430	A	C5-C6-N1	-10.58	112.41	117.70
1	N	476	U	O4'-C1'-N1	10.58	116.67	108.20
1	N	1182	G	N3-C2-N2	10.58	127.31	119.90
1	N	1387	G	C6-C5-N7	-10.58	124.05	130.40
1	N	1404	C	N3-C4-C5	10.58	126.13	121.90
1	N	520	A	C5-C6-N1	-10.58	112.41	117.70
1	N	530	G	N3-C2-N2	10.58	127.31	119.90
1	N	1082	A	C5-C6-N1	-10.58	112.41	117.70
1	N	1306	A	C5-C6-N6	-10.58	115.24	123.70
1	N	1399	C	P-O3'-C3'	10.57	132.39	119.70
1	N	433	G	C6-C5-N7	-10.57	124.06	130.40
1	N	1222	G	N1-C2-N3	-10.57	117.56	123.90
1	N	423	G	O4'-C1'-N9	10.57	116.66	108.20
1	N	661	G	P-O5'-C5'	10.57	137.81	120.90
1	N	884	U	C2-N3-C4	-10.57	120.66	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	970	C	N3-C4-N4	10.57	125.40	118.00
1	N	416	G	C5-C6-O6	-10.57	122.26	128.60
1	N	257	G	C6-C5-N7	-10.56	124.06	130.40
1	N	806	C	C5-C6-N1	10.56	126.28	121.00
1	N	1434	A	C5-C6-N1	-10.56	112.42	117.70
1	N	134	G	C5-C6-O6	-10.56	122.26	128.60
1	N	77	A	C4-C5-C6	10.55	122.28	117.00
1	N	941	G	C6-N1-C2	-10.55	118.77	125.10
1	N	1100	C	C2-N1-C1'	10.55	130.41	118.80
1	N	1242	G	C5-C6-O6	-10.55	122.27	128.60
1	N	51	A	P-O3'-C3'	10.55	132.36	119.70
1	N	179	A	C4-C5-C6	10.55	122.28	117.00
1	N	375	U	N3-C4-C5	-10.54	108.27	114.60
1	N	459	A	C5-C6-N6	-10.54	115.26	123.70
1	N	521	G	C2-N3-C4	-10.55	106.63	111.90
1	N	1334	G	C5-C6-O6	-10.54	122.27	128.60
1	N	1250	A	O4'-C1'-N9	10.54	116.63	108.20
1	N	1483	A	N1-C6-N6	10.54	124.92	118.60
1	N	466	A	C5-C6-N6	-10.54	115.27	123.70
1	N	323	U	P-O5'-C5'	10.54	137.76	120.90
1	N	962	C	N3-C4-N4	10.53	125.37	118.00
1	N	506	G	C6-C5-N7	-10.53	124.08	130.40
1	N	1466	C	C6-N1-C2	10.53	124.51	120.30
1	N	1133	G	N1-C6-O6	10.53	126.22	119.90
1	N	1258	G	N1-C6-O6	10.53	126.22	119.90
1	N	108	G	C4-C5-C6	10.53	125.11	118.80
1	N	1259	C	O4'-C1'-N1	10.53	116.62	108.20
1	N	931	C	O4'-C1'-N1	10.52	116.62	108.20
1	N	411	A	C4-C5-C6	10.52	122.26	117.00
1	N	496	A	C5-C6-N6	-10.52	115.29	123.70
1	N	545	C	C6-N1-C2	-10.52	116.09	120.30
1	N	807	A	O4'-C1'-N9	10.52	116.61	108.20
1	N	1405	G	O4'-C1'-N9	10.52	116.61	108.20
1	N	131	A	O4'-C1'-N9	10.51	116.61	108.20
1	N	500	G	N3-C2-N2	10.51	127.26	119.90
1	N	548	G	C5-C6-O6	-10.51	122.29	128.60
1	N	799	G	C5-C6-O6	-10.51	122.29	128.60
1	N	1270	G	C5-C6-O6	-10.51	122.29	128.60
1	N	235	C	O4'-C1'-N1	10.51	116.61	108.20
1	N	1440	U	O4'-C1'-N1	10.51	116.61	108.20
1	N	139	A	C3'-C2'-C1'	-10.51	93.09	101.50
1	N	1289	A	N1-C6-N6	10.51	124.90	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1448	C	C5-C4-N4	-10.51	112.84	120.20
1	N	1020	G	N9-C4-C5	-10.51	101.20	105.40
1	N	1042	A	C5-C6-N6	-10.51	115.30	123.70
1	N	476	U	C5-C6-N1	10.50	127.95	122.70
1	N	1139	G	C6-C5-N7	-10.50	124.10	130.40
1	N	459	A	C4-C5-C6	10.50	122.25	117.00
1	N	388	G	N1-C6-O6	10.49	126.20	119.90
1	N	1305	G	N1-C6-O6	10.49	126.20	119.90
1	N	1344	C	O4'-C1'-N1	10.49	116.60	108.20
1	N	528	C	N3-C4-N4	10.49	125.34	118.00
1	N	1331	G	N9-C4-C5	-10.49	101.21	105.40
1	N	1456	A	C5-C6-N1	-10.49	112.46	117.70
1	N	3	A	C5-C6-N6	-10.48	115.32	123.70
1	N	449	G	N7-C8-N9	10.48	118.34	113.10
1	N	621	A	C5-C6-N1	-10.47	112.46	117.70
1	N	940	C	N3-C4-N4	10.47	125.33	118.00
1	N	1152	A	O4'-C1'-N9	10.47	116.57	108.20
1	N	845	A	N1-C6-N6	10.46	124.87	118.60
1	N	70	U	C6-N1-C2	-10.45	114.73	121.00
1	N	176	C	C5-C6-N1	10.45	126.22	121.00
1	N	551	U	O4'-C1'-N1	10.45	116.56	108.20
1	N	633	G	C4-C5-N7	10.45	114.98	110.80
1	N	537	G	N3-C4-C5	-10.44	123.38	128.60
1	N	366	A	C8-N9-C4	-10.44	101.62	105.80
1	N	536	C	C5-C4-N4	-10.44	112.89	120.20
1	N	1434	A	C4-C5-C6	10.44	122.22	117.00
1	N	215	C	O4'-C1'-N1	10.44	116.55	108.20
1	N	1447	A	N9-C4-C5	10.43	109.97	105.80
1	N	1374	A	O4'-C1'-N9	10.43	116.54	108.20
1	N	184	G	P-O5'-C5'	10.43	137.58	120.90
1	N	789	U	O4'-C1'-N1	10.43	116.54	108.20
1	N	1479	C	N3-C4-C5	-10.43	117.73	121.90
1	N	995	C	C4-C5-C6	-10.42	112.19	117.40
1	N	850	U	O4'-C1'-N1	10.42	116.54	108.20
1	N	667	G	C5-C6-O6	-10.42	122.35	128.60
1	N	890	G	N1-C2-N3	-10.41	117.65	123.90
1	N	995	C	N3-C4-C5	10.41	126.06	121.90
1	N	207	C	C4-C5-C6	-10.41	112.19	117.40
1	N	937	A	O4'-C1'-N9	10.41	116.53	108.20
1	N	573	A	N1-C6-N6	10.40	124.84	118.60
1	N	803	G	C6-C5-N7	-10.40	124.16	130.40
1	N	1185	G	C4-C5-N7	10.40	114.96	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	81	A	C5-C6-N1	-10.40	112.50	117.70
1	N	841	C	O4'-C1'-N1	10.40	116.52	108.20
1	N	1276	G	N3-C4-C5	10.40	133.80	128.60
1	N	1153	G	C5-N7-C8	10.39	109.50	104.30
1	N	185	U	C5-C4-O4	-10.39	119.67	125.90
1	N	1246	A	C5-C6-N1	-10.39	112.51	117.70
1	N	500	G	C5-C6-O6	-10.38	122.37	128.60
1	N	873	A	C5-N7-C8	10.38	109.09	103.90
1	N	715	A	N1-C6-N6	10.38	124.83	118.60
1	N	814	A	P-O3'-C3'	10.38	132.16	119.70
1	N	970	C	C5-C4-N4	-10.37	112.94	120.20
1	N	1530	G	C6-C5-N7	-10.37	124.18	130.40
1	N	1004	A	C4-C5-C6	10.37	122.18	117.00
1	N	1132	C	N3-C4-C5	-10.37	117.75	121.90
1	N	635	A	N9-C4-C5	10.37	109.95	105.80
1	N	1423	G	O4'-C1'-N9	10.37	116.49	108.20
1	N	1433	A	C5-C6-N1	-10.36	112.52	117.70
1	N	183	C	C5-C6-N1	10.36	126.18	121.00
1	N	278	G	N1-C6-O6	10.36	126.12	119.90
1	N	566	G	C4'-C3'-C2'	10.36	112.96	102.60
1	N	774	G	C4-C5-C6	10.36	125.02	118.80
1	N	555	U	N1-C2-N3	-10.36	108.69	114.90
1	N	632	U	O4'-C1'-N1	10.36	116.49	108.20
1	N	874	G	C5-C6-O6	-10.36	122.39	128.60
1	N	370	C	C2-N3-C4	10.35	125.08	119.90
1	N	735	C	N3-C4-N4	10.35	125.25	118.00
1	N	1081	A	N1-C6-N6	10.35	124.81	118.60
1	N	499	A	C4-C5-C6	10.34	122.17	117.00
1	N	9	G	C5-C6-O6	-10.34	122.40	128.60
1	N	66	A	N1-C6-N6	10.34	124.80	118.60
1	N	735	C	C6-N1-C2	-10.33	116.17	120.30
1	N	1363	A	C5-C6-N1	-10.33	112.53	117.70
1	N	562	U	C4-C5-C6	-10.33	113.50	119.70
1	N	1250	A	N1-C6-N6	10.33	124.80	118.60
1	N	609	A	N1-C6-N6	10.32	124.80	118.60
1	N	1313	U	O4'-C1'-N1	10.32	116.46	108.20
1	N	479	U	O4'-C1'-N1	10.32	116.46	108.20
1	N	196	A	N1-C6-N6	10.32	124.79	118.60
1	N	335	C	O4'-C1'-N1	10.32	116.45	108.20
1	N	794	A	O4'-C1'-N9	10.32	116.45	108.20
1	N	1223	C	P-O3'-C3'	10.32	132.08	119.70
1	N	1483	A	O4'-C4'-C3'	-10.31	93.69	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1053	G	P-O3'-C3'	10.31	132.07	119.70
1	N	236	A	C5-C6-N1	-10.30	112.55	117.70
1	N	151	A	C4-C5-C6	10.30	122.15	117.00
1	N	352	C	C6-N1-C1'	-10.30	108.44	120.80
1	N	440	C	N3-C4-N4	10.30	125.21	118.00
1	N	1403	C	C6-N1-C2	-10.29	116.18	120.30
1	N	114	U	N3-C2-O2	10.29	129.40	122.20
1	N	501	C	C5-C6-N1	10.29	126.15	121.00
1	N	703	G	C5-C6-N1	-10.29	106.35	111.50
1	N	1189	U	N1-C2-N3	-10.29	108.72	114.90
1	N	1394	A	C8-N9-C4	-10.29	101.68	105.80
1	N	1466	C	N3-C4-C5	-10.29	117.78	121.90
1	N	419	C	O4'-C1'-N1	10.29	116.43	108.20
1	N	646	G	C6-C5-N7	-10.28	124.23	130.40
1	N	542	G	O4'-C1'-N9	10.28	116.42	108.20
1	N	639	G	C5-C6-O6	-10.28	122.43	128.60
1	N	902	G	C5-C6-N1	-10.28	106.36	111.50
1	N	83	C	O4'-C1'-N1	10.27	116.42	108.20
1	N	516	U	C2-N3-C4	-10.27	120.84	127.00
1	N	584	G	O4'-C1'-N9	10.27	116.42	108.20
1	N	744	C	N3-C4-N4	10.27	125.19	118.00
1	N	1113	C	C6-N1-C2	-10.27	116.19	120.30
1	N	886	G	N9-C4-C5	-10.26	101.30	105.40
1	N	1146	A	N1-C6-N6	10.26	124.75	118.60
1	N	544	G	C5-C6-O6	-10.26	122.45	128.60
1	N	257	G	C4-C5-C6	10.25	124.95	118.80
1	N	747	A	O4'-C1'-N9	10.25	116.40	108.20
1	N	770	C	C6-N1-C2	-10.25	116.20	120.30
1	N	86	G	C5-C6-O6	-10.24	122.45	128.60
1	N	442	G	N1-C6-O6	10.24	126.05	119.90
1	N	152	A	O4'-C1'-N9	10.24	116.39	108.20
1	N	808	C	O4'-C1'-N1	10.24	116.39	108.20
1	N	22	G	N3-C2-N2	10.23	127.06	119.90
1	N	65	A	C4-C5-N7	10.23	115.81	110.70
1	N	847	G	N3-C2-N2	10.23	127.06	119.90
1	N	907	A	C8-N9-C4	-10.22	101.71	105.80
1	N	928	G	N7-C8-N9	-10.22	107.99	113.10
1	N	308	C	N1-C2-O2	-10.22	112.77	118.90
1	N	749	A	C8-N9-C4	-10.22	101.71	105.80
1	N	1039	G	N1-C6-O6	10.22	126.03	119.90
1	N	959	A	C5-C6-N1	-10.21	112.59	117.70
1	N	1323	G	C2-N3-C4	10.21	117.00	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	378	G	O4'-C1'-N9	10.21	116.36	108.20
1	N	955	U	O4'-C1'-N1	10.21	116.36	108.20
1	N	1397	C	N3-C4-C5	-10.21	117.82	121.90
1	N	1431	A	C3'-C2'-C1'	10.21	109.66	101.50
1	N	380	G	N1-C6-O6	10.20	126.02	119.90
1	N	1190	G	C4-C5-C6	10.20	124.92	118.80
1	N	973	G	C5-C6-N1	10.20	116.60	111.50
1	N	1172	C	N3-C4-C5	-10.20	117.82	121.90
1	N	1441	A	N7-C8-N9	10.20	118.90	113.80
1	N	265	G	N1-C2-N3	-10.20	117.78	123.90
1	N	350	G	C2-N3-C4	10.19	117.00	111.90
1	N	572	A	C5-C6-N1	-10.19	112.61	117.70
1	N	1038	C	P-O3'-C3'	10.19	131.93	119.70
1	N	934	C	C5'-C4'-C3'	-10.19	99.70	116.00
1	N	1262	C	O4'-C1'-N1	10.19	116.35	108.20
1	N	1154	G	O4'-C1'-N9	10.19	116.35	108.20
1	N	924	C	C6-N1-C2	-10.18	116.23	120.30
1	N	47	C	N3-C4-N4	10.18	125.13	118.00
1	N	351	G	N7-C8-N9	-10.18	108.01	113.10
1	N	372	C	P-O3'-C3'	10.18	131.92	119.70
1	N	1290	G	C5-C6-O6	-10.18	122.50	128.60
1	N	546	A	N1-C6-N6	10.17	124.70	118.60
1	N	1252	A	C4-C5-N7	-10.17	105.61	110.70
1	N	1431	A	C5-C6-N6	-10.17	115.56	123.70
1	N	289	G	C6-C5-N7	-10.17	124.30	130.40
1	N	1108	G	C1'-O4'-C4'	-10.17	101.76	109.90
1	N	1379	G	C5-C6-O6	-10.17	122.50	128.60
1	N	954	G	C5-C6-N1	-10.16	106.42	111.50
1	N	1454	G	N1-C6-O6	10.16	126.00	119.90
1	N	383	A	N1-C6-N6	10.16	124.69	118.60
1	N	979	C	C2-N3-C4	10.16	124.98	119.90
1	N	1030	U	O4'-C1'-N1	10.16	116.33	108.20
1	N	1189	U	O4'-C1'-N1	10.16	116.33	108.20
1	N	339	C	N3-C4-C5	-10.15	117.84	121.90
1	N	1519	A	C4-C5-C6	10.15	122.08	117.00
1	N	417	G	N1-C6-O6	10.15	125.99	119.90
1	N	207	C	N3-C4-N4	10.15	125.10	118.00
1	N	339	C	O4'-C1'-N1	10.14	116.31	108.20
1	N	1534	A	N1-C6-N6	10.14	124.69	118.60
1	N	990	C	O4'-C1'-N1	10.14	116.31	108.20
1	N	26	A	N1-C6-N6	10.14	124.68	118.60
1	N	1093	A	N1-C6-N6	10.14	124.68	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	581	G	C4-C5-N7	-10.13	106.75	110.80
1	N	317	U	N1-C2-O2	-10.13	115.71	122.80
1	N	1316	G	C6-N1-C2	-10.13	119.02	125.10
1	N	1332	A	C5-C6-N6	-10.13	115.59	123.70
1	N	847	G	C8-N9-C4	10.13	110.45	106.40
1	N	1171	A	C4-C5-C6	10.13	122.06	117.00
1	N	18	C	C6-N1-C2	10.12	124.35	120.30
1	N	58	C	N3-C4-C5	-10.12	117.85	121.90
1	N	1285	A	N1-C6-N6	10.12	124.67	118.60
1	N	197	A	O4'-C1'-N9	10.12	116.30	108.20
1	N	365	U	N3-C4-O4	10.12	126.48	119.40
1	N	1038	C	O4'-C1'-N1	10.12	116.29	108.20
1	N	475	C	N3-C4-C5	-10.11	117.86	121.90
1	N	1502	A	P-O3'-C3'	10.11	131.84	119.70
1	N	1420	U	N1-C2-O2	-10.11	115.72	122.80
1	N	544	G	O4'-C1'-N9	10.11	116.29	108.20
1	N	593	U	C5-C6-N1	10.11	127.75	122.70
1	N	254	G	O4'-C1'-N9	10.11	116.28	108.20
1	N	787	A	C6-C5-N7	-10.11	125.22	132.30
1	N	843	U	C5-C4-O4	-10.11	119.84	125.90
1	N	318	G	C6-C5-N7	-10.10	124.34	130.40
1	N	523	A	N1-C6-N6	10.10	124.66	118.60
1	N	207	C	O4'-C1'-N1	10.10	116.28	108.20
1	N	656	G	N3-C2-N2	10.10	126.97	119.90
1	N	1221	G	C4-C5-N7	10.10	114.84	110.80
1	N	1508	A	C5-N7-C8	10.10	108.95	103.90
1	N	680	C	O4'-C1'-N1	10.10	116.28	108.20
1	N	1139	G	P-O3'-C3'	10.10	131.81	119.70
1	N	1526	G	N1-C6-O6	10.10	125.96	119.90
1	N	40	C	N3-C4-C5	-10.09	117.86	121.90
1	N	45	G	N1-C6-O6	10.09	125.96	119.90
1	N	397	A	N1-C2-N3	-10.09	124.26	129.30
1	N	1087	G	C5-N7-C8	10.08	109.34	104.30
1	N	1482	G	N3-C2-N2	10.08	126.96	119.90
1	N	1165	U	O4'-C1'-N1	10.08	116.26	108.20
1	N	1413	A	C5-C6-N1	-10.07	112.66	117.70
1	N	559	A	C8-N9-C4	-10.07	101.77	105.80
1	N	677	U	O4'-C1'-N1	10.07	116.26	108.20
1	N	274	A	N1-C2-N3	-10.07	124.27	129.30
1	N	294	U	N3-C4-O4	10.06	126.44	119.40
1	N	563	A	C4-C5-C6	10.06	122.03	117.00
1	N	941	G	C5-C6-O6	-10.06	122.56	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	341	C	O4'-C1'-N1	10.05	116.24	108.20
1	N	547	A	C5-C6-N6	-10.05	115.66	123.70
1	N	758	C	N3-C4-N4	10.05	125.04	118.00
1	N	326	G	C8-N9-C4	-10.05	102.38	106.40
1	N	1145	A	P-O3'-C3'	10.05	131.76	119.70
1	N	1015	G	N1-C6-O6	10.05	125.93	119.90
1	N	379	C	O4'-C1'-N1	10.04	116.24	108.20
1	N	872	A	C6-N1-C2	10.04	124.63	118.60
1	N	478	A	C5-C6-N6	-10.04	115.67	123.70
1	N	1292	G	C5-C6-O6	-10.04	122.58	128.60
1	N	1102	A	N9-C4-C5	-10.04	101.78	105.80
1	N	57	G	C5-C6-N1	-10.03	106.48	111.50
1	N	633	G	P-O5'-C5'	10.03	136.95	120.90
1	N	705	G	N9-C4-C5	-10.03	101.39	105.40
1	N	1515	G	C4'-C3'-C2'	-10.03	92.57	102.60
1	N	185	U	P-O5'-C5'	10.03	136.95	120.90
1	N	313	A	C5-C6-N1	-10.03	112.69	117.70
1	N	1053	G	N1-C6-O6	10.02	125.91	119.90
1	N	518	C	C6-N1-C1'	-10.01	108.78	120.80
1	N	669	G	N7-C8-N9	-10.01	108.09	113.10
1	N	1513	A	C5-N7-C8	10.01	108.91	103.90
1	N	454	G	N9-C4-C5	-10.01	101.40	105.40
1	N	581	G	N3-C2-N2	10.01	126.90	119.90
1	N	1363	A	C4-C5-C6	10.01	122.00	117.00
1	N	1200	C	N3-C4-C5	-10.00	117.90	121.90
1	N	651	C	C6-N1-C2	-10.00	116.30	120.30
1	N	1373	G	N1-C2-N3	-10.00	117.90	123.90
1	N	1509	C	C6-N1-C2	-10.00	116.30	120.30
1	N	446	G	C5-N7-C8	9.99	109.30	104.30
1	N	1140	C	O4'-C1'-N1	9.99	116.20	108.20
1	N	1421	G	O4'-C1'-N9	9.99	116.20	108.20
1	N	234	C	C6-N1-C2	-9.99	116.30	120.30
1	N	1216	A	C5-C6-N6	-9.99	115.70	123.70
1	N	383	A	N1-C2-N3	9.99	134.30	129.30
1	N	988	G	N1-C2-N3	-9.99	117.91	123.90
1	N	32	A	C5-C6-N6	-9.99	115.71	123.70
1	N	917	G	C2-N3-C4	9.99	116.89	111.90
1	N	788	U	N3-C2-O2	9.99	129.19	122.20
1	N	511	C	N3-C4-N4	9.98	124.99	118.00
1	N	1135	U	C5-C6-N1	9.98	127.69	122.70
1	N	312	C	O4'-C1'-N1	9.98	116.19	108.20
1	N	1222	G	N3-C2-N2	9.98	126.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	522	C	C6-N1-C2	-9.98	116.31	120.30
1	N	589	U	C5-C6-N1	9.98	127.69	122.70
1	N	902	G	O4'-C1'-N9	9.98	116.18	108.20
1	N	183	C	N3-C4-N4	9.97	124.98	118.00
1	N	516	U	O4'-C1'-N1	9.97	116.18	108.20
1	N	217	C	O4'-C1'-N1	9.97	116.18	108.20
1	N	518	C	C2-N1-C1'	9.97	129.76	118.80
1	N	865	A	O4'-C1'-N9	9.97	116.17	108.20
1	N	52	C	O4'-C1'-N1	9.96	116.17	108.20
1	N	364	A	C8-N9-C4	9.96	109.78	105.80
1	N	773	G	O4'-C1'-N9	9.96	116.17	108.20
1	N	1297	G	N1-C6-O6	9.96	125.88	119.90
1	N	553	A	O4'-C1'-N9	9.95	116.16	108.20
1	N	286	C	O4'-C1'-N1	9.95	116.16	108.20
1	N	215	C	N3-C4-C5	-9.94	117.92	121.90
1	N	483	C	C5-C6-N1	9.95	125.97	121.00
1	N	627	G	C5-C6-O6	-9.95	122.63	128.60
1	N	1148	U	C6-N1-C2	-9.94	115.03	121.00
1	N	1161	C	N3-C4-N4	9.94	124.96	118.00
1	N	315	A	C8-N9-C4	-9.94	101.83	105.80
1	N	418	C	O4'-C1'-N1	9.94	116.15	108.20
1	N	424	G	O4'-C1'-N9	9.93	116.15	108.20
1	N	592	G	N1-C2-N3	-9.93	117.94	123.90
1	N	145	G	P-O3'-C3'	-9.93	107.78	119.70
1	N	373	A	C5-C6-N6	-9.93	115.75	123.70
1	N	1265	C	N3-C4-N4	9.93	124.95	118.00
1	N	1416	G	C5-C6-N1	-9.93	106.54	111.50
1	N	1042	A	P-O5'-C5'	9.92	136.78	120.90
1	N	364	A	C2-N3-C4	-9.92	105.64	110.60
1	N	351	G	C1'-O4'-C4'	-9.91	101.97	109.90
1	N	1403	C	N3-C4-C5	-9.91	117.94	121.90
1	N	1513	A	N7-C8-N9	-9.91	108.84	113.80
1	N	1417	G	C4-N9-C1'	9.91	139.38	126.50
1	N	933	G	N9-C4-C5	-9.90	101.44	105.40
1	N	464	U	C4'-C3'-C2'	9.90	112.50	102.60
1	N	1234	C	C5-C6-N1	9.90	125.95	121.00
1	N	1186	G	N1-C6-O6	9.90	125.84	119.90
1	N	382	A	N1-C6-N6	9.90	124.54	118.60
1	N	1314	C	P-O3'-C3'	-9.90	107.83	119.70
1	N	291	U	O4'-C1'-N1	9.89	116.11	108.20
1	N	1151	A	C4-C5-C6	9.89	121.95	117.00
1	N	1443	C	O4'-C1'-N1	9.89	116.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1410	A	O4'-C1'-N9	9.89	116.11	108.20
1	N	59	A	C5-C6-N6	-9.89	115.79	123.70
1	N	1170	A	C5'-C4'-C3'	9.89	131.82	116.00
1	N	1515	G	N9-C4-C5	-9.89	101.44	105.40
1	N	901	A	N1-C6-N6	9.89	124.53	118.60
1	N	139	A	C5-C6-N1	-9.88	112.76	117.70
1	N	933	G	N3-C4-N9	9.88	131.93	126.00
1	N	110	C	O4'-C1'-N1	9.88	116.10	108.20
1	N	1138	G	O4'-C1'-N9	9.88	116.10	108.20
1	N	975	A	C5-C6-N6	-9.87	115.80	123.70
1	N	496	A	P-O5'-C5'	9.87	136.69	120.90
1	N	776	G	C8-N9-C4	9.87	110.35	106.40
1	N	1195	C	P-O3'-C3'	9.87	131.54	119.70
1	N	1455	G	C6-N1-C2	9.87	131.02	125.10
1	N	726	C	O4'-C1'-N1	9.86	116.09	108.20
1	N	974	A	N1-C6-N6	9.86	124.52	118.60
1	N	706	A	N3-C4-C5	-9.86	119.90	126.80
1	N	1206	G	C5-C6-O6	-9.86	122.69	128.60
1	N	436	C	O4'-C1'-N1	9.86	116.08	108.20
1	N	227	G	C5-C6-N1	-9.86	106.57	111.50
1	N	629	A	N1-C6-N6	9.86	124.51	118.60
1	N	1160	G	C4-C5-N7	-9.86	106.86	110.80
1	N	925	G	N1-C2-N3	-9.85	117.99	123.90
1	N	948	C	N3-C4-N4	9.85	124.89	118.00
1	N	289	G	C4-C5-N7	9.85	114.74	110.80
1	N	1314	C	O4'-C1'-N1	9.85	116.08	108.20
1	N	938	A	C5-C6-N6	-9.84	115.83	123.70
1	N	1319	A	C5-C6-N6	-9.84	115.83	123.70
1	N	409	U	O4'-C1'-N1	9.84	116.07	108.20
1	N	691	G	O4'-C1'-N9	9.84	116.07	108.20
1	N	579	A	O4'-C1'-N9	9.84	116.07	108.20
1	N	70	U	P-O3'-C3'	9.84	131.50	119.70
1	N	129	A	N1-C2-N3	9.84	134.22	129.30
1	N	899	C	O4'-C1'-N1	9.84	116.07	108.20
1	N	927	G	C5-C6-N1	9.84	116.42	111.50
1	N	107	G	N1-C2-N3	-9.83	118.00	123.90
1	N	108	G	O4'-C1'-N9	9.83	116.06	108.20
1	N	200	G	C5-C6-O6	-9.83	122.70	128.60
1	N	353	A	N1-C6-N6	9.83	124.50	118.60
1	N	501	C	O4'-C1'-N1	9.83	116.07	108.20
1	N	608	A	C2-N3-C4	-9.83	105.69	110.60
1	N	181	A	C5-C6-N6	-9.82	115.84	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	783	C	C4-C5-C6	-9.82	112.49	117.40
1	N	1024	G	C8-N9-C4	-9.82	102.47	106.40
1	N	959	A	C5-C6-N6	-9.82	115.84	123.70
1	N	1242	G	C5-C6-N1	-9.82	106.59	111.50
1	N	273	U	C1'-O4'-C4'	9.81	117.75	109.90
1	N	766	A	C5-C6-N1	-9.81	112.80	117.70
1	N	1250	A	N7-C8-N9	-9.81	108.89	113.80
1	N	648	A	P-O5'-C5'	9.81	136.59	120.90
1	N	468	A	C8-N9-C4	-9.81	101.88	105.80
1	N	968	A	C4-C5-C6	9.80	121.90	117.00
1	N	31	G	N1-C2-N3	-9.80	118.02	123.90
1	N	973	G	O4'-C1'-N9	9.80	116.04	108.20
1	N	942	G	N1-C6-O6	9.80	125.78	119.90
1	N	41	G	O4'-C1'-N9	9.79	116.03	108.20
1	N	633	G	N1-C6-O6	9.79	125.78	119.90
1	N	1512	U	C3'-C2'-C1'	9.79	109.34	101.50
1	N	593	U	O4'-C1'-N1	9.79	116.03	108.20
1	N	1059	C	N3-C4-N4	9.78	124.85	118.00
1	N	1276	G	C2-N3-C4	-9.78	107.01	111.90
1	N	498	A	C8-N9-C4	-9.78	101.89	105.80
1	N	179	A	C8-N9-C4	-9.78	101.89	105.80
1	N	1313	U	N3-C4-C5	-9.78	108.73	114.60
1	N	344	A	C4-C5-C6	9.78	121.89	117.00
1	N	778	G	N1-C6-O6	9.78	125.77	119.90
1	N	322	C	C5-C4-N4	-9.78	113.36	120.20
1	N	866	C	P-O3'-C3'	9.78	131.43	119.70
1	N	995	C	O4'-C1'-N1	9.77	116.02	108.20
1	N	1280	A	N9-C4-C5	9.77	109.71	105.80
1	N	388	G	C5-C6-O6	-9.77	122.74	128.60
1	N	615	G	N1-C2-N3	-9.77	118.04	123.90
1	N	124	C	O4'-C1'-N1	9.77	116.01	108.20
1	N	482	A	C5-C6-N1	-9.77	112.82	117.70
1	N	445	G	N1-C2-N3	-9.76	118.04	123.90
1	N	811	C	C6-N1-C2	-9.76	116.39	120.30
1	N	1303	C	C2-N3-C4	9.76	124.78	119.90
1	N	399	G	N1-C6-O6	9.76	125.76	119.90
1	N	174	A	N9-C4-C5	-9.76	101.90	105.80
1	N	1271	A	C4-C5-C6	9.76	121.88	117.00
1	N	642	A	N7-C8-N9	-9.76	108.92	113.80
1	N	305	G	N3-C2-N2	9.75	126.73	119.90
1	N	940	C	C5-C4-N4	-9.75	113.37	120.20
1	N	581	G	N1-C6-O6	9.75	125.75	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	830	G	P-O5'-C5'	9.75	136.50	120.90
1	N	1135	U	N3-C2-O2	9.75	129.03	122.20
1	N	1352	C	N3-C2-O2	9.75	128.73	121.90
1	N	1429	A	C4-C5-C6	9.75	121.88	117.00
1	N	1018	G	N9-C4-C5	-9.75	101.50	105.40
1	N	1287	A	C4-C5-C6	9.75	121.87	117.00
1	N	837	U	C5-C4-O4	-9.75	120.05	125.90
1	N	228	A	C2-N3-C4	-9.74	105.73	110.60
1	N	924	C	P-O5'-C5'	9.74	136.49	120.90
1	N	1348	U	O4'-C1'-N1	9.74	115.99	108.20
1	N	1252	A	C4-C5-C6	9.74	121.87	117.00
1	N	837	U	N3-C4-O4	9.74	126.22	119.40
1	N	945	G	N3-C4-N9	9.74	131.84	126.00
1	N	819	A	C5-C6-N6	-9.73	115.91	123.70
1	N	1203	C	O4'-C1'-N1	9.73	115.99	108.20
1	N	1390	U	C5-C6-N1	9.73	127.57	122.70
1	N	650	G	N9-C4-C5	-9.73	101.51	105.40
1	N	1090	U	O4'-C1'-N1	9.73	115.98	108.20
1	N	611	C	C6-N1-C1'	-9.73	109.13	120.80
1	N	646	G	N1-C2-N3	-9.73	118.06	123.90
1	N	1363	A	C6-C5-N7	-9.73	125.49	132.30
1	N	1262	C	C6-N1-C2	9.73	124.19	120.30
1	N	242	G	O4'-C1'-N9	9.72	115.98	108.20
1	N	669	G	N1-C6-O6	9.72	125.73	119.90
1	N	199	A	C5-C6-N1	-9.72	112.84	117.70
1	N	250	A	N1-C6-N6	9.72	124.43	118.60
1	N	946	A	N1-C2-N3	-9.72	124.44	129.30
1	N	1419	G	N3-C2-N2	9.71	126.70	119.90
1	N	750	C	N3-C4-N4	9.71	124.80	118.00
1	N	410	G	N1-C6-O6	9.71	125.72	119.90
1	N	1446	A	C5-C6-N6	-9.71	115.94	123.70
1	N	1171	A	C5-C6-N1	-9.70	112.85	117.70
1	N	505	G	C5-C6-O6	-9.70	122.78	128.60
1	N	65	A	N9-C4-C5	-9.70	101.92	105.80
1	N	849	G	N1-C2-N3	-9.70	118.08	123.90
1	N	288	A	C5-C6-N1	-9.69	112.85	117.70
1	N	947	G	C8-N9-C4	-9.70	102.52	106.40
1	N	1026	G	C5-C6-O6	-9.69	122.78	128.60
1	N	336	A	C2-N3-C4	9.69	115.44	110.60
1	N	559	A	O4'-C1'-N9	9.69	115.95	108.20
1	N	887	G	N1-C6-O6	9.69	125.71	119.90
1	N	861	G	O4'-C1'-N9	9.69	115.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	876	C	N3-C4-N4	9.68	124.78	118.00
1	N	1304	G	N7-C8-N9	9.68	117.94	113.10
1	N	1422	G	C5-C6-O6	-9.68	122.79	128.60
1	N	467	U	C3'-C2'-C1'	-9.68	93.76	101.50
1	N	611	C	C2-N1-C1'	9.68	129.44	118.80
1	N	1160	G	O4'-C1'-N9	9.68	115.94	108.20
1	N	1347	G	O4'-C1'-N9	9.68	115.94	108.20
1	N	148	G	N3-C2-N2	9.68	126.67	119.90
1	N	470	C	O4'-C1'-N1	9.68	115.94	108.20
1	N	417	G	C5-C6-O6	-9.67	122.80	128.60
1	N	581	G	C5-C6-O6	-9.67	122.80	128.60
1	N	1418	A	P-O5'-C5'	9.67	136.37	120.90
1	N	62	U	C2-N3-C4	9.67	132.80	127.00
1	N	282	A	O4'-C1'-N9	9.67	115.93	108.20
1	N	539	A	O4'-C1'-N9	9.66	115.93	108.20
1	N	649	A	N1-C6-N6	9.66	124.40	118.60
1	N	769	G	C4-C5-N7	9.66	114.67	110.80
1	N	1239	A	O4'-C1'-N9	9.66	115.93	108.20
1	N	1342	C	C6-N1-C2	-9.66	116.44	120.30
1	N	953	G	N3-C2-N2	9.66	126.66	119.90
1	N	178	C	O4'-C1'-N1	9.66	115.92	108.20
1	N	901	A	C5-C6-N1	-9.66	112.87	117.70
1	N	938	A	C2-N3-C4	-9.66	105.77	110.60
1	N	1432	G	C5-C6-O6	-9.66	122.81	128.60
1	N	878	A	C5-C6-N6	-9.65	115.98	123.70
1	N	1268	G	N1-C6-O6	9.65	125.69	119.90
1	N	150	U	O4'-C1'-N1	9.64	115.91	108.20
1	N	1280	A	C4-C5-C6	9.64	121.82	117.00
1	N	51	A	C4-C5-C6	9.64	121.82	117.00
1	N	1138	G	P-O3'-C3'	9.64	131.26	119.70
1	N	7	A	C4-C5-C6	9.64	121.82	117.00
1	N	1396	A	C6-C5-N7	-9.63	125.56	132.30
1	N	682	G	C5-N7-C8	-9.63	99.48	104.30
1	N	1232	U	O4'-C1'-N1	9.63	115.90	108.20
1	N	210	C	C5'-C4'-O4'	9.62	120.65	109.10
1	N	1495	U	C5-C4-O4	-9.63	120.12	125.90
1	N	1388	C	O4'-C1'-N1	9.62	115.90	108.20
1	N	969	A	C6-N1-C2	-9.62	112.83	118.60
1	N	1341	U	N3-C4-O4	9.62	126.14	119.40
1	N	235	C	N3-C4-C5	-9.62	118.05	121.90
1	N	599	C	O4'-C1'-N1	9.62	115.89	108.20
1	N	1227	A	C4'-C3'-C2'	9.61	112.21	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1348	U	C5-C6-N1	9.61	127.51	122.70
1	N	7	A	N1-C2-N3	-9.61	124.49	129.30
1	N	363	A	C5-C6-N1	-9.61	112.89	117.70
1	N	670	G	C5-C6-O6	-9.61	122.83	128.60
1	N	499	A	P-O3'-C3'	9.61	131.23	119.70
1	N	696	A	C6-C5-N7	-9.61	125.57	132.30
1	N	818	G	N1-C6-O6	9.61	125.67	119.90
1	N	1472	U	N3-C4-O4	9.61	126.13	119.40
1	N	1531	A	C5-N7-C8	9.61	108.70	103.90
1	N	485	U	P-O3'-C3'	9.61	131.23	119.70
1	N	824	G	C6-C5-N7	-9.61	124.64	130.40
1	N	1304	G	C8-N9-C4	-9.61	102.56	106.40
1	N	58	C	C5-C6-N1	9.60	125.80	121.00
1	N	60	A	C5-N7-C8	9.60	108.70	103.90
1	N	1002	G	C8-N9-C4	-9.60	102.56	106.40
1	N	1284	C	C6-N1-C2	-9.60	116.46	120.30
1	N	161	A	N1-C6-N6	9.60	124.36	118.60
1	N	523	A	C5-C6-N6	-9.60	116.02	123.70
1	N	254	G	C5-C6-O6	-9.60	122.84	128.60
1	N	1241	G	C5-C6-O6	-9.59	122.84	128.60
1	N	451	A	P-O3'-C3'	9.59	131.21	119.70
1	N	1048	G	N1-C6-O6	9.59	125.65	119.90
1	N	1255	G	C2-N3-C4	9.59	116.69	111.90
1	N	375	U	C6-N1-C2	-9.59	115.25	121.00
1	N	302	G	O4'-C1'-N9	9.58	115.87	108.20
1	N	252	U	C5-C4-O4	-9.58	120.15	125.90
1	N	502	A	O4'-C1'-N9	9.58	115.86	108.20
1	N	742	G	C2-N3-C4	9.58	116.69	111.90
1	N	1390	U	C2-N3-C4	-9.58	121.25	127.00
1	N	97	G	C6-C5-N7	-9.58	124.65	130.40
1	N	1169	A	C5-C6-N6	-9.58	116.04	123.70
1	N	408	A	C5-C6-N6	-9.58	116.04	123.70
1	N	1468	A	C2-N3-C4	-9.58	105.81	110.60
1	N	732	C	C4-C5-C6	9.57	122.19	117.40
1	N	1190	G	O4'-C1'-N9	9.57	115.86	108.20
1	N	428	G	C5-C6-O6	-9.57	122.86	128.60
1	N	272	C	C5-C4-N4	-9.57	113.50	120.20
1	N	874	G	C8-N9-C4	-9.57	102.57	106.40
1	N	900	A	C5-C6-N1	-9.57	112.92	117.70
1	N	1478	U	O4'-C1'-N1	9.57	115.86	108.20
1	N	955	U	C5-C6-N1	9.57	127.48	122.70
1	N	1423	G	C4-C5-N7	-9.57	106.97	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	725	G	O4'-C1'-N9	9.56	115.85	108.20
1	N	738	C	N3-C4-N4	9.56	124.69	118.00
1	N	1408	A	C8-N9-C4	-9.56	101.97	105.80
1	N	385	C	C6-N1-C2	-9.56	116.48	120.30
1	N	1064	G	N1-C6-O6	9.56	125.64	119.90
1	N	1220	G	O4'-C1'-N9	9.56	115.84	108.20
1	N	612	C	N3-C4-N4	9.56	124.69	118.00
1	N	892	A	C5-C6-N6	-9.55	116.06	123.70
1	N	925	G	N1-C6-O6	9.55	125.63	119.90
1	N	197	A	C4-C5-C6	9.55	121.77	117.00
1	N	605	U	N1-C2-N3	-9.54	109.17	114.90
1	N	1114	C	O4'-C1'-N1	9.54	115.83	108.20
1	N	1107	C	N3-C4-C5	-9.54	118.08	121.90
1	N	1081	A	C6-C5-N7	-9.54	125.62	132.30
1	N	1183	U	C5-C6-N1	9.54	127.47	122.70
1	N	443	C	N3-C4-C5	-9.54	118.09	121.90
1	N	648	A	C5-C6-N1	-9.54	112.93	117.70
1	N	1103	C	N1-C2-O2	-9.54	113.18	118.90
1	N	1294	G	N1-C6-O6	9.54	125.62	119.90
1	N	506	G	N9-C4-C5	-9.53	101.59	105.40
1	N	740	U	N3-C2-O2	9.53	128.87	122.20
1	N	896	C	N3-C4-C5	-9.53	118.09	121.90
1	N	1497	G	O4'-C1'-N9	9.53	115.83	108.20
1	N	1387	G	C5-C6-N1	-9.53	106.74	111.50
1	N	690	G	N3-C2-N2	9.53	126.57	119.90
1	N	1252	A	N9-C4-C5	9.53	109.61	105.80
1	N	594	U	O4'-C1'-N1	9.52	115.82	108.20
1	N	595	A	C5-N7-C8	9.52	108.66	103.90
1	N	1048	G	C5-C6-O6	-9.52	122.89	128.60
1	N	282	A	N1-C2-N3	9.52	134.06	129.30
1	N	250	A	C4-C5-C6	9.52	121.76	117.00
1	N	343	U	P-O5'-C5'	9.52	136.13	120.90
1	N	1369	C	N3-C4-C5	-9.52	118.09	121.90
1	N	818	G	C8-N9-C4	-9.52	102.59	106.40
1	N	374	A	C5-C6-N6	-9.51	116.09	123.70
1	N	730	G	N9-C4-C5	-9.51	101.59	105.40
1	N	184	G	C5-C6-N1	-9.51	106.75	111.50
1	N	888	G	N1-C6-O6	9.51	125.61	119.90
1	N	983	A	C5-C6-N6	-9.51	116.09	123.70
1	N	489	C	N3-C4-N4	9.51	124.66	118.00
1	N	1172	C	C4-C5-C6	9.51	122.15	117.40
1	N	493	A	C5-C6-N1	-9.51	112.95	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	128	G	O4'-C1'-N9	9.50	115.80	108.20
1	N	567	G	O4'-C1'-N9	9.50	115.80	108.20
1	N	595	A	N7-C8-N9	-9.50	109.05	113.80
1	N	897	C	N3-C4-N4	9.50	124.65	118.00
1	N	1455	G	N1-C2-N3	-9.50	118.20	123.90
1	N	9	G	N3-C2-N2	9.50	126.55	119.90
1	N	317	U	P-O5'-C5'	9.50	136.09	120.90
1	N	1080	A	N7-C8-N9	9.50	118.55	113.80
1	N	1504	G	C5-N7-C8	9.50	109.05	104.30
1	N	1033	G	C4-C5-C6	9.49	124.50	118.80
1	N	1357	A	O4'-C1'-N9	9.49	115.80	108.20
1	N	1404	C	C4-C5-C6	-9.49	112.65	117.40
1	N	1211	U	N3-C2-O2	-9.49	115.56	122.20
1	N	72	A	C5-C6-N6	-9.49	116.11	123.70
1	N	80	A	O4'-C1'-N9	9.49	115.79	108.20
1	N	192	A	C5-C6-N1	-9.49	112.96	117.70
1	N	289	G	N7-C8-N9	-9.49	108.36	113.10
1	N	1455	G	C5-C6-N1	-9.49	106.76	111.50
1	N	1346	A	C5-C6-N6	-9.48	116.11	123.70
1	N	433	G	C4-C5-N7	9.48	114.59	110.80
1	N	111	G	C5-C6-O6	-9.48	122.91	128.60
1	N	1311	A	N9-C4-C5	-9.47	102.01	105.80
1	N	915	A	C5-C6-N1	-9.47	112.97	117.70
1	N	1331	G	N1-C6-O6	9.47	125.58	119.90
1	N	537	G	C2-N3-C4	9.47	116.63	111.90
1	N	1182	G	C5-C6-O6	-9.47	122.92	128.60
1	N	265	G	O4'-C1'-N9	9.47	115.77	108.20
1	N	1378	C	N3-C4-N4	9.46	124.62	118.00
1	N	7	A	C2-N3-C4	9.46	115.33	110.60
1	N	238	A	O4'-C1'-N9	9.46	115.77	108.20
1	N	939	G	N1-C2-N3	-9.46	118.22	123.90
1	N	999	C	C5-C6-N1	9.46	125.73	121.00
1	N	1060	U	O4'-C1'-N1	9.46	115.77	108.20
1	N	1002	G	N1-C6-O6	9.46	125.58	119.90
1	N	424	G	N1-C6-O6	9.45	125.57	119.90
1	N	318	G	C5-C6-N1	-9.45	106.77	111.50
1	N	468	A	C4-C5-C6	9.45	121.72	117.00
1	N	843	U	C1'-O4'-C4'	-9.45	102.34	109.90
1	N	285	C	C5-C6-N1	9.45	125.72	121.00
1	N	1322	C	N3-C4-C5	-9.45	118.12	121.90
1	N	212	G	P-O5'-C5'	9.44	136.01	120.90
1	N	510	A	N1-C6-N6	9.44	124.27	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	784	A	C4-C5-C6	9.45	121.72	117.00
1	N	171	A	C8-N9-C4	-9.44	102.02	105.80
1	N	1132	C	C4-C5-C6	9.44	122.12	117.40
1	N	1279	G	N1-C6-O6	9.44	125.56	119.90
1	N	782	A	C4-C5-C6	9.44	121.72	117.00
1	N	319	G	C5-C6-O6	-9.43	122.94	128.60
1	N	410	G	C5-C6-N1	-9.43	106.78	111.50
1	N	884	U	N1-C2-N3	9.43	120.56	114.90
1	N	1409	C	C2-N3-C4	9.43	124.62	119.90
1	N	566	G	C5-C6-N1	-9.43	106.79	111.50
1	N	1201	A	C4-C5-C6	9.43	121.72	117.00
1	N	507	C	O4'-C1'-N1	9.43	115.74	108.20
1	N	1350	A	N9-C4-C5	9.43	109.57	105.80
1	N	52	C	N3-C4-N4	9.42	124.59	118.00
1	N	1001	C	O4'-C1'-N1	9.42	115.73	108.20
1	N	328	C	C5-C6-N1	9.41	125.71	121.00
1	N	1403	C	O4'-C1'-N1	9.41	115.73	108.20
1	N	658	C	C5-C6-N1	9.41	125.70	121.00
1	N	1049	U	O4'-C1'-N1	9.41	115.73	108.20
1	N	1350	A	C8-N9-C4	-9.41	102.04	105.80
1	N	1512	U	O4'-C1'-N1	9.41	115.72	108.20
1	N	113	G	C5-C6-O6	-9.40	122.96	128.60
1	N	956	U	N3-C4-C5	-9.40	108.96	114.60
1	N	1462	C	O4'-C1'-N1	9.40	115.72	108.20
1	N	1453	G	O4'-C1'-N9	9.40	115.72	108.20
1	N	864	A	N1-C2-N3	9.40	134.00	129.30
1	N	1365	G	P-O5'-C5'	-9.40	105.86	120.90
1	N	1434	A	N1-C6-N6	9.40	124.24	118.60
1	N	245	U	O4'-C1'-N1	9.39	115.72	108.20
1	N	969	A	C5-C6-N1	9.39	122.40	117.70
1	N	1512	U	C2-N3-C4	-9.39	121.36	127.00
1	N	502	A	C5-C6-N6	-9.39	116.19	123.70
1	N	954	G	C6-N1-C2	9.39	130.73	125.10
1	N	220	G	C5-C6-N1	9.39	116.19	111.50
1	N	195	A	O4'-C1'-N9	9.39	115.71	108.20
1	N	227	G	C8-N9-C4	-9.39	102.64	106.40
1	N	567	G	N1-C6-O6	9.39	125.53	119.90
1	N	540	G	N1-C6-O6	9.38	125.53	119.90
1	N	1327	C	C6-N1-C2	9.38	124.05	120.30
1	N	1349	A	O4'-C1'-N9	9.39	115.71	108.20
1	N	520	A	C6-C5-N7	-9.38	125.73	132.30
1	N	173	U	C2-N3-C4	-9.38	121.37	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1153	G	C5-C6-O6	-9.37	122.97	128.60
1	N	1398	A	N9-C4-C5	-9.38	102.05	105.80
1	N	642	A	O4'-C1'-N9	9.37	115.70	108.20
1	N	591	U	C2-N3-C4	9.37	132.62	127.00
1	N	633	G	C6-C5-N7	-9.37	124.78	130.40
1	N	509	A	N9-C4-C5	9.37	109.55	105.80
1	N	907	A	C5-C6-N1	-9.37	113.02	117.70
1	N	736	C	C6-N1-C2	9.37	124.05	120.30
1	N	774	G	C5-C6-N1	-9.37	106.82	111.50
1	N	149	A	C5-N7-C8	9.36	108.58	103.90
1	N	879	C	O4'-C1'-N1	9.36	115.69	108.20
1	N	917	G	N1-C6-O6	9.36	125.52	119.90
1	N	1196	A	N1-C6-N6	9.36	124.22	118.60
1	N	158	G	C5-C6-N1	-9.36	106.82	111.50
1	N	645	G	O4'-C1'-N9	9.36	115.69	108.20
1	N	936	C	P-O3'-C3'	-9.36	108.47	119.70
1	N	948	C	C2-N3-C4	9.36	124.58	119.90
1	N	1198	G	N3-C2-N2	9.36	126.45	119.90
1	N	1299	A	C5-N7-C8	9.36	108.58	103.90
1	N	464	U	P-O5'-C5'	9.35	135.87	120.90
1	N	529	G	O4'-C1'-N9	9.35	115.68	108.20
1	N	835	U	N3-C4-O4	9.35	125.95	119.40
1	N	1016	A	N1-C6-N6	9.35	124.21	118.60
1	N	1042	A	C4-C5-C6	9.35	121.68	117.00
1	N	429	U	N1-C2-N3	9.35	120.51	114.90
1	N	618	C	N3-C4-N4	9.35	124.55	118.00
1	N	1500	A	C4-C5-C6	9.35	121.67	117.00
1	N	36	C	C6-N1-C2	-9.35	116.56	120.30
1	N	532	A	N1-C6-N6	9.35	124.21	118.60
1	N	1048	G	C3'-C2'-C1'	9.35	108.98	101.50
1	N	1230	C	C5-C4-N4	-9.35	113.66	120.20
1	N	433	G	N9-C4-C5	-9.34	101.66	105.40
1	N	663	A	N1-C6-N6	9.34	124.20	118.60
1	N	677	U	N3-C4-O4	9.34	125.94	119.40
1	N	1057	G	C6-C5-N7	-9.34	124.80	130.40
1	N	1389	C	N3-C4-N4	9.34	124.54	118.00
1	N	329	A	C5-C6-N6	-9.34	116.23	123.70
1	N	663	A	N1-C2-N3	9.34	133.97	129.30
1	N	1326	U	C3'-C2'-C1'	9.34	108.97	101.50
1	N	270	A	O4'-C1'-N9	9.33	115.67	108.20
1	N	652	U	C2-N3-C4	-9.33	121.40	127.00
1	N	49	U	N3-C2-O2	9.33	128.73	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1049	U	P-O3'-C3'	9.33	130.90	119.70
1	N	364	A	C5-C6-N6	-9.33	116.24	123.70
1	N	1072	G	O4'-C1'-N9	9.33	115.66	108.20
1	N	1319	A	N9-C4-C5	-9.33	102.07	105.80
1	N	352	C	N3-C4-C5	-9.33	118.17	121.90
1	N	330	C	C4-C5-C6	9.33	122.06	117.40
1	N	1197	A	C5-C6-N6	-9.33	116.24	123.70
1	N	324	G	O4'-C1'-N9	9.32	115.66	108.20
1	N	1533	C	C2-N1-C1'	9.32	129.06	118.80
1	N	913	A	C5-C6-N1	-9.32	113.04	117.70
1	N	48	C	O4'-C1'-N1	9.32	115.66	108.20
1	N	819	A	C4-C5-C6	9.32	121.66	117.00
1	N	424	G	C4-C5-N7	-9.32	107.07	110.80
1	N	1046	A	O4'-C1'-N9	9.32	115.66	108.20
1	N	706	A	C2-N3-C4	9.31	115.26	110.60
1	N	402	G	N9-C4-C5	-9.31	101.67	105.40
1	N	142	G	C5-C6-N1	-9.31	106.84	111.50
1	N	233	C	N3-C2-O2	-9.31	115.38	121.90
1	N	535	A	C5-N7-C8	9.31	108.56	103.90
1	N	846	G	C5-C6-O6	-9.31	123.02	128.60
1	N	139	A	C4-C5-C6	9.30	121.65	117.00
1	N	299	G	O4'-C1'-N9	9.30	115.64	108.20
1	N	356	A	O4'-C1'-N9	9.30	115.64	108.20
1	N	398	U	O4'-C1'-N1	9.31	115.64	108.20
1	N	1482	G	C5-C6-O6	-9.30	123.02	128.60
1	N	1129	C	C2-N3-C4	9.30	124.55	119.90
1	N	1488	G	N1-C6-O6	9.30	125.48	119.90
1	N	1277	C	O4'-C1'-N1	9.30	115.64	108.20
1	N	433	G	N7-C8-N9	-9.30	108.45	113.10
1	N	182	A	C5-C6-N6	-9.29	116.27	123.70
1	N	443	C	C5-C4-N4	9.29	126.71	120.20
1	N	1496	C	C5-C4-N4	-9.29	113.69	120.20
1	N	422	C	O4'-C1'-N1	9.29	115.63	108.20
1	N	968	A	C5-C6-N1	-9.29	113.05	117.70
1	N	1082	A	C6-C5-N7	-9.29	125.80	132.30
1	N	1200	C	C6-N1-C2	9.29	124.02	120.30
1	N	680	C	N3-C4-C5	-9.28	118.19	121.90
1	N	644	U	C5-C4-O4	-9.28	120.33	125.90
1	N	1284	C	N3-C4-N4	9.28	124.50	118.00
1	N	356	A	N1-C6-N6	9.28	124.17	118.60
1	N	765	G	C4-C5-C6	9.28	124.37	118.80
1	N	132	C	N3-C4-C5	-9.27	118.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	376	G	O4'-C1'-N9	9.27	115.62	108.20
1	N	1317	C	O4'-C1'-N1	9.27	115.61	108.20
1	N	36	C	N3-C4-N4	9.26	124.48	118.00
1	N	340	U	O4'-C1'-N1	9.26	115.61	108.20
1	N	1168	U	C1'-O4'-C4'	-9.26	102.49	109.90
1	N	464	U	P-O3'-C3'	9.26	130.81	119.70
1	N	586	C	N3-C4-N4	9.26	124.48	118.00
1	N	654	G	N1-C6-O6	9.26	125.46	119.90
1	N	918	A	C4-C5-C6	9.25	121.63	117.00
1	N	1088	G	C4-C5-N7	-9.25	107.10	110.80
1	N	993	G	N1-C6-O6	9.25	125.45	119.90
1	N	1067	A	N1-C6-N6	9.25	124.15	118.60
1	N	1034	G	N1-C6-O6	9.24	125.45	119.90
1	N	609	A	C5-C6-N1	-9.24	113.08	117.70
1	N	1075	U	C5-C6-N1	9.24	127.32	122.70
1	N	1275	A	N1-C2-N3	9.24	133.92	129.30
1	N	311	C	C5-C4-N4	-9.24	113.73	120.20
1	N	350	G	N3-C2-N2	9.24	126.37	119.90
1	N	361	G	C5-C6-N1	-9.24	106.88	111.50
1	N	1077	G	N3-C2-N2	9.24	126.37	119.90
1	N	1227	A	C5-C6-N1	-9.24	113.08	117.70
1	N	787	A	C5-C6-N1	-9.24	113.08	117.70
1	N	871	U	N3-C4-O4	9.23	125.86	119.40
1	N	1383	C	C5-C6-N1	9.23	125.62	121.00
1	N	1380	U	C2-N3-C4	-9.23	121.46	127.00
1	N	487	A	N1-C6-N6	9.23	124.14	118.60
1	N	532	A	P-O3'-C3'	9.23	130.78	119.70
1	N	929	G	C4-C5-N7	-9.23	107.11	110.80
1	N	1353	G	C4-C5-N7	-9.23	107.11	110.80
1	N	38	G	O4'-C1'-N9	9.23	115.58	108.20
1	N	714	G	C3'-C2'-C1'	9.23	108.88	101.50
1	N	500	G	N1-C6-O6	9.22	125.44	119.90
1	N	563	A	C8-N9-C4	-9.22	102.11	105.80
1	N	810	C	O4'-C1'-N1	9.22	115.58	108.20
1	N	1521	C	O4'-C1'-N1	9.22	115.58	108.20
1	N	8	A	O4'-C1'-N9	9.22	115.57	108.20
1	N	579	A	C5-C6-N6	-9.22	116.33	123.70
1	N	1530	G	O4'-C1'-N9	9.22	115.58	108.20
1	N	461	A	C4-C5-N7	-9.22	106.09	110.70
1	N	1114	C	N3-C4-N4	9.21	124.45	118.00
1	N	1468	A	C4-C5-C6	9.21	121.61	117.00
1	N	27	G	N3-C2-N2	9.21	126.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	353	A	P-O3'-C3'	9.21	130.75	119.70
1	N	301	G	C5-C6-O6	-9.21	123.07	128.60
1	N	1168	U	O4'-C1'-N1	9.21	115.57	108.20
1	N	1452	C	O4'-C1'-N1	9.21	115.57	108.20
1	N	1128	C	C5'-C4'-O4'	9.21	120.15	109.10
1	N	1220	G	C5-C6-O6	-9.21	123.08	128.60
1	N	656	G	N1-C6-O6	9.21	125.42	119.90
1	N	1052	U	N3-C4-O4	9.21	125.84	119.40
1	N	880	C	C5-C6-N1	9.20	125.60	121.00
1	N	38	G	C6-C5-N7	-9.20	124.88	130.40
1	N	457	G	N1-C2-N3	-9.20	118.38	123.90
1	N	236	A	C6-C5-N7	-9.20	125.86	132.30
1	N	387	U	C5-C4-O4	-9.20	120.38	125.90
1	N	1034	G	C5-C6-O6	-9.20	123.08	128.60
1	N	616	G	C6-C5-N7	-9.19	124.88	130.40
1	N	914	A	O4'-C1'-N9	9.19	115.56	108.20
1	N	1277	C	C5-C6-N1	9.20	125.60	121.00
1	N	654	G	N3-C2-N2	9.19	126.33	119.90
1	N	1129	C	N3-C4-C5	-9.19	118.22	121.90
1	N	1385	G	N1-C6-O6	9.19	125.42	119.90
1	N	735	C	O4'-C1'-N1	9.19	115.55	108.20
1	N	784	A	N9-C4-C5	9.19	109.48	105.80
1	N	1069	C	C6-N1-C2	-9.19	116.62	120.30
1	N	885	G	C6-C5-N7	-9.18	124.89	130.40
1	N	1293	C	N3-C4-N4	9.18	124.43	118.00
1	N	1283	U	C6-N1-C2	-9.18	115.49	121.00
1	N	61	G	O4'-C1'-N9	9.18	115.54	108.20
1	N	440	C	P-O5'-C5'	9.18	135.58	120.90
1	N	645	G	C5-C6-N1	-9.18	106.91	111.50
1	N	1081	A	C5'-C4'-C3'	-9.18	101.32	116.00
1	N	1266	G	C5-C6-O6	-9.18	123.09	128.60
1	N	1289	A	C4-C5-C6	9.18	121.59	117.00
1	N	465	A	N1-C6-N6	9.17	124.10	118.60
1	N	1245	C	O4'-C1'-N1	9.17	115.54	108.20
1	N	1248	A	C5-C6-N6	-9.17	116.36	123.70
1	N	518	C	C2-N3-C4	9.17	124.48	119.90
1	N	1396	A	P-O5'-C5'	9.17	135.57	120.90
1	N	141	G	C8-N9-C4	9.17	110.07	106.40
1	N	919	A	C4-C5-C6	9.17	121.58	117.00
1	N	177	G	O4'-C1'-N9	9.16	115.53	108.20
1	N	535	A	N1-C6-N6	9.16	124.10	118.60
1	N	333	U	C5-C4-O4	-9.16	120.40	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1212	U	C2-N3-C4	-9.16	121.50	127.00
1	N	780	A	C6-C5-N7	-9.16	125.89	132.30
1	N	1350	A	C2-N3-C4	9.15	115.18	110.60
1	N	412	A	C5-C6-N6	-9.15	116.38	123.70
1	N	1258	G	O4'-C1'-N9	9.15	115.52	108.20
1	N	83	C	C2-N3-C4	9.14	124.47	119.90
1	N	127	G	O4'-C1'-N9	9.14	115.51	108.20
1	N	797	C	O4'-C1'-N1	9.14	115.51	108.20
1	N	671	G	N7-C8-N9	9.14	117.67	113.10
1	N	16	A	C4-C5-C6	9.14	121.57	117.00
1	N	967	C	O4'-C1'-N1	9.14	115.51	108.20
1	N	681	A	N1-C6-N6	9.14	124.08	118.60
1	N	781	A	N1-C6-N6	9.14	124.08	118.60
1	N	313	A	C4-C5-N7	-9.13	106.13	110.70
1	N	1343	G	C4-C5-C6	9.13	124.28	118.80
1	N	1278	G	C4-N9-C1'	9.12	138.36	126.50
1	N	1152	A	C5-C6-N1	-9.12	113.14	117.70
1	N	1174	G	N9-C4-C5	-9.12	101.75	105.40
1	N	1437	A	C5-C6-N1	-9.12	113.14	117.70
1	N	978	A	N1-C6-N6	9.12	124.07	118.60
1	N	588	G	C4-C5-N7	9.12	114.45	110.80
1	N	237	G	C5-C6-O6	-9.11	123.13	128.60
1	N	733	G	C6-C5-N7	-9.11	124.93	130.40
1	N	107	G	N3-C2-N2	9.11	126.28	119.90
1	N	170	U	N1-C2-O2	-9.11	116.42	122.80
1	N	376	G	N1-C6-O6	9.11	125.37	119.90
1	N	377	G	N1-C6-O6	9.11	125.37	119.90
1	N	662	U	O4'-C1'-N1	9.11	115.49	108.20
1	N	410	G	C8-N9-C4	-9.11	102.76	106.40
1	N	1255	G	C5-N7-C8	-9.11	99.75	104.30
1	N	946	A	C6-N1-C2	9.11	124.06	118.60
1	N	618	C	C6-N1-C2	9.11	123.94	120.30
1	N	532	A	C4-C5-C6	9.10	121.55	117.00
1	N	690	G	O4'-C1'-N9	9.10	115.48	108.20
1	N	964	A	C2-N3-C4	9.10	115.15	110.60
1	N	486	U	O4'-C1'-N1	9.09	115.47	108.20
1	N	553	A	N1-C6-N6	9.09	124.06	118.60
1	N	683	G	O4'-C1'-N9	9.09	115.47	108.20
1	N	1167	A	N1-C6-N6	9.09	124.06	118.60
1	N	1229	A	N1-C2-N3	-9.09	124.75	129.30
1	N	18	C	O4'-C1'-N1	9.09	115.47	108.20
1	N	1485	U	C6-N1-C2	-9.09	115.55	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	860	A	O4'-C1'-N9	9.08	115.47	108.20
1	N	1468	A	C6-C5-N7	-9.08	125.94	132.30
1	N	317	U	C6-N1-C2	-9.08	115.55	121.00
1	N	882	C	C6-N1-C2	-9.08	116.67	120.30
1	N	1268	G	C4-C5-C6	9.08	124.25	118.80
1	N	819	A	C4-C5-N7	-9.07	106.16	110.70
1	N	900	A	O4'-C1'-N9	9.07	115.46	108.20
1	N	472	U	C2-N3-C4	9.07	132.44	127.00
1	N	1118	U	O4'-C1'-N1	9.07	115.46	108.20
1	N	233	C	C2-N1-C1'	9.07	128.78	118.80
1	N	524	G	N9-C4-C5	9.06	109.03	105.40
1	N	689	C	C5-C6-N1	9.06	125.53	121.00
1	N	396	C	C6-N1-C2	9.06	123.92	120.30
1	N	845	A	P-O3'-C3'	9.06	130.57	119.70
1	N	1293	C	N3-C4-C5	-9.06	118.28	121.90
1	N	387	U	O4'-C1'-N1	9.06	115.45	108.20
1	N	868	C	O4'-C1'-N1	9.06	115.45	108.20
1	N	1293	C	O4'-C1'-N1	9.06	115.45	108.20
1	N	671	G	N1-C6-O6	9.06	125.33	119.90
1	N	244	U	C5'-C4'-O4'	9.05	119.96	109.10
1	N	461	A	N3-C4-C5	-9.05	120.46	126.80
1	N	784	A	C4-C5-N7	-9.05	106.17	110.70
1	N	854	U	P-O3'-C3'	-9.05	108.83	119.70
1	N	1326	U	O4'-C1'-N1	9.05	115.44	108.20
1	N	42	G	C5-C6-O6	-9.05	123.17	128.60
1	N	655	A	P-O5'-C5'	9.05	135.38	120.90
1	N	115	G	O4'-C1'-N9	9.05	115.44	108.20
1	N	769	G	N1-C2-N3	-9.05	118.47	123.90
1	N	1169	A	P-O3'-C3'	9.05	130.56	119.70
1	N	253	A	C5-C6-N6	-9.05	116.46	123.70
1	N	1281	C	O4'-C1'-N1	9.04	115.44	108.20
1	N	188	C	N3-C4-C5	-9.04	118.28	121.90
1	N	272	C	N3-C4-N4	9.04	124.33	118.00
1	N	148	G	N9-C4-C5	-9.04	101.78	105.40
1	N	955	U	C2-N1-C1'	9.04	128.54	117.70
1	N	1435	G	O4'-C1'-N9	9.04	115.43	108.20
1	N	411	A	C6-C5-N7	-9.03	125.98	132.30
1	N	876	C	N3-C4-C5	-9.04	118.29	121.90
1	N	267	C	O4'-C1'-N1	9.03	115.43	108.20
1	N	371	A	C5-C6-N1	-9.03	113.18	117.70
1	N	713	G	N7-C8-N9	-9.03	108.58	113.10
1	N	752	G	O4'-C1'-N9	9.03	115.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1011	C	O4'-C1'-N1	9.03	115.43	108.20
1	N	1119	C	N3-C4-C5	-9.03	118.29	121.90
1	N	351	G	N1-C6-O6	9.03	125.32	119.90
1	N	1280	A	N1-C6-N6	9.03	124.02	118.60
1	N	47	C	O4'-C1'-N1	9.03	115.42	108.20
1	N	562	U	C5-C6-N1	9.03	127.21	122.70
1	N	702	A	C8-N9-C4	-9.03	102.19	105.80
1	N	1169	A	C4-C5-C6	9.03	121.51	117.00
1	N	45	G	O4'-C1'-N9	9.02	115.42	108.20
1	N	743	A	N1-C6-N6	9.02	124.01	118.60
1	N	1157	A	C3'-C2'-C1'	9.02	108.72	101.50
1	N	223	A	P-O5'-C5'	9.02	135.33	120.90
1	N	928	G	C5-C6-O6	-9.02	123.19	128.60
1	N	1236	A	C5-C6-N1	-9.02	113.19	117.70
1	N	1362	A	C1'-O4'-C4'	-9.02	102.68	109.90
1	N	1372	U	O4'-C1'-N1	9.02	115.42	108.20
1	N	157	U	C5-C4-O4	-9.01	120.49	125.90
1	N	1178	G	C5-C6-N1	-9.01	106.99	111.50
1	N	1006	G	C5-C6-O6	-9.01	123.20	128.60
1	N	710	G	O4'-C1'-N9	9.00	115.40	108.20
1	N	914	A	C5'-C4'-C3'	-9.00	101.60	116.00
1	N	1399	C	N3-C4-N4	9.00	124.30	118.00
1	N	1455	G	C5-C6-O6	-9.00	123.20	128.60
1	N	154	U	N3-C4-O4	8.99	125.70	119.40
1	N	139	A	C8-N9-C4	-8.99	102.20	105.80
1	N	616	G	N1-C6-O6	8.99	125.30	119.90
1	N	907	A	N9-C4-C5	8.99	109.40	105.80
1	N	1057	G	N1-C6-O6	8.99	125.30	119.90
1	N	313	A	C6-C5-N7	-8.99	126.01	132.30
1	N	872	A	O4'-C1'-N9	8.99	115.39	108.20
1	N	1233	G	C8-N9-C4	-8.99	102.80	106.40
1	N	1338	G	N1-C2-N3	-8.99	118.50	123.90
1	N	350	G	O4'-C1'-N9	8.99	115.39	108.20
1	N	349	A	O4'-C1'-N9	8.98	115.39	108.20
1	N	148	G	C6-N1-C2	8.98	130.49	125.10
1	N	1023	U	C6-N1-C2	-8.98	115.61	121.00
1	N	338	A	C5-C6-N6	-8.98	116.52	123.70
1	N	426	U	C6-N1-C2	-8.98	115.61	121.00
1	N	669	G	P-O5'-C5'	8.98	135.26	120.90
1	N	180	U	C4-C5-C6	-8.97	114.32	119.70
1	N	683	G	C5-C6-O6	-8.97	123.22	128.60
1	N	1307	U	O4'-C1'-N1	8.97	115.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	293	G	C4-C5-C6	8.97	124.18	118.80
1	N	465	A	N9-C4-C5	8.97	109.39	105.80
1	N	526	C	C5-C4-N4	-8.97	113.92	120.20
1	N	1266	G	O4'-C1'-N9	8.97	115.38	108.20
1	N	607	A	P-O5'-C5'	8.97	135.25	120.90
1	N	1275	A	C6-C5-N7	-8.97	126.02	132.30
1	N	342	C	N3-C4-N4	8.97	124.28	118.00
1	N	350	G	C5-C6-O6	-8.97	123.22	128.60
1	N	938	A	O4'-C1'-N9	8.97	115.37	108.20
1	N	1181	G	C5-C6-N1	-8.96	107.02	111.50
1	N	168	G	C4-C5-N7	-8.96	107.22	110.80
1	N	837	U	O4'-C1'-N1	8.96	115.37	108.20
1	N	1053	G	O4'-C1'-N9	8.96	115.37	108.20
1	N	1177	G	N1-C6-O6	8.96	125.28	119.90
1	N	1218	C	O4'-C1'-N1	8.96	115.37	108.20
1	N	917	G	N3-C2-N2	8.96	126.17	119.90
1	N	1446	A	C6-N1-C2	8.96	123.97	118.60
1	N	39	G	C5-C6-O6	-8.95	123.23	128.60
1	N	89	U	C5-C4-O4	-8.95	120.53	125.90
1	N	1005	A	C4-C5-C6	8.95	121.48	117.00
1	N	294	U	C5-C4-O4	-8.95	120.53	125.90
1	N	977	A	C5-C6-N6	-8.95	116.54	123.70
1	N	1068	G	O4'-C1'-N9	8.95	115.36	108.20
1	N	1220	G	N9-C4-C5	-8.95	101.82	105.40
1	N	50	A	C8-N9-C4	-8.95	102.22	105.80
1	N	109	A	C5-C6-N6	-8.95	116.54	123.70
1	N	1153	G	C4-C5-N7	-8.95	107.22	110.80
1	N	255	G	O4'-C1'-N9	8.95	115.36	108.20
1	N	1491	G	N1-C2-N3	-8.95	118.53	123.90
1	N	588	G	C6-C5-N7	-8.95	125.03	130.40
1	N	811	C	C1'-O4'-C4'	-8.95	102.74	109.90
1	N	1460	C	C6-N1-C2	-8.95	116.72	120.30
1	N	204	G	C6-C5-N7	-8.94	125.04	130.40
1	N	721	G	N3-C4-C5	-8.94	124.13	128.60
1	N	500	G	N1-C2-N3	-8.94	118.54	123.90
1	N	506	G	C2-N3-C4	-8.94	107.43	111.90
1	N	684	U	C5-C6-N1	8.94	127.17	122.70
1	N	807	A	N1-C6-N6	8.93	123.96	118.60
1	N	988	G	N1-C6-O6	8.93	125.26	119.90
1	N	1314	C	N3-C4-N4	8.93	124.25	118.00
1	N	315	A	C5-C6-N6	-8.93	116.56	123.70
1	N	859	G	O4'-C1'-N9	8.93	115.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1016	A	N7-C8-N9	-8.93	109.33	113.80
1	N	196	A	C4-C5-C6	8.92	121.46	117.00
1	N	942	G	C5-C6-O6	-8.92	123.25	128.60
1	N	1073	U	N3-C4-C5	-8.92	109.25	114.60
1	N	313	A	N3-C4-C5	-8.92	120.55	126.80
1	N	1034	G	C8-N9-C4	-8.92	102.83	106.40
1	N	1228	C	N3-C4-C5	-8.92	118.33	121.90
1	N	1127	G	C4-C5-C6	8.92	124.15	118.80
1	N	1205	U	O4'-C1'-N1	8.92	115.33	108.20
1	N	61	G	O4'-C4'-C3'	-8.92	95.08	104.00
1	N	730	G	C4-C5-N7	8.92	114.37	110.80
1	N	568	G	O4'-C1'-N9	8.91	115.33	108.20
1	N	202	G	C6-C5-N7	-8.91	125.06	130.40
1	N	651	C	N3-C4-N4	8.91	124.23	118.00
1	N	800	G	O4'-C1'-N9	8.91	115.33	108.20
1	N	1074	G	N7-C8-N9	-8.91	108.65	113.10
1	N	1454	G	N1-C2-N3	-8.91	118.56	123.90
1	N	448	A	O4'-C1'-N9	8.90	115.32	108.20
1	N	856	C	N3-C4-N4	8.90	124.23	118.00
1	N	1052	U	C4-C5-C6	8.90	125.04	119.70
1	N	1471	U	C5-C4-O4	-8.90	120.56	125.90
1	N	141	G	C5-C6-N1	-8.90	107.05	111.50
1	N	609	A	O4'-C1'-N9	8.90	115.32	108.20
1	N	303	A	C4-C5-C6	8.90	121.45	117.00
1	N	99	C	C6-N1-C2	-8.89	116.74	120.30
1	N	126	G	C4'-C3'-C2'	-8.89	93.71	102.60
1	N	977	A	C8-N9-C4	-8.89	102.24	105.80
1	N	1408	A	N3-C4-C5	-8.89	120.57	126.80
1	N	71	A	C5-C6-N6	-8.89	116.59	123.70
1	N	1157	A	C6-C5-N7	-8.89	126.08	132.30
1	N	497	G	O4'-C1'-N9	8.89	115.31	108.20
1	N	871	U	N1-C2-N3	-8.89	109.57	114.90
1	N	1320	C	N3-C4-N4	8.89	124.22	118.00
1	N	1334	G	N1-C6-O6	8.89	125.23	119.90
1	N	697	U	C6-N1-C2	-8.88	115.67	121.00
1	N	1133	G	C5-C6-O6	-8.88	123.27	128.60
1	N	172	A	C4-C5-C6	8.88	121.44	117.00
1	N	301	G	C6-C5-N7	-8.88	125.07	130.40
1	N	953	G	C5-C6-O6	-8.88	123.27	128.60
1	N	764	C	N3-C4-C5	-8.88	118.35	121.90
1	N	1501	C	C6-N1-C1'	8.88	131.46	120.80
1	N	1341	U	C5-C4-O4	-8.88	120.57	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	245	U	C1'-O4'-C4'	8.88	117.00	109.90
1	N	505	G	C4-C5-N7	8.88	114.35	110.80
1	N	558	G	C4-C5-N7	-8.88	107.25	110.80
1	N	858	G	N1-C6-O6	8.88	125.23	119.90
1	N	949	A	C5-C6-N1	-8.88	113.26	117.70
1	N	1448	C	O4'-C1'-N1	8.88	115.30	108.20
1	N	836	G	C4-C5-N7	8.88	114.35	110.80
1	N	29	U	O4'-C1'-N1	8.87	115.30	108.20
1	N	808	C	N3-C2-O2	8.87	128.11	121.90
1	N	902	G	N1-C2-N2	8.87	124.18	116.20
1	N	990	C	C5-C4-N4	-8.87	113.99	120.20
1	N	320	A	C5-C6-N6	-8.87	116.61	123.70
1	N	198	G	C3'-C2'-C1'	8.87	108.59	101.50
1	N	743	A	C5-C6-N1	-8.87	113.27	117.70
1	N	768	A	N1-C6-N6	8.87	123.92	118.60
1	N	773	G	C6-C5-N7	-8.87	125.08	130.40
1	N	303	A	C6-C5-N7	-8.86	126.09	132.30
1	N	726	C	N3-C4-C5	-8.87	118.35	121.90
1	N	8	A	C5-C6-N1	-8.86	113.27	117.70
1	N	49	U	O4'-C1'-N1	8.86	115.29	108.20
1	N	260	G	N3-C2-N2	8.86	126.10	119.90
1	N	381	C	C6-N1-C2	8.86	123.84	120.30
1	N	467	U	O4'-C1'-N1	8.86	115.28	108.20
1	N	123	U	O4'-C1'-N1	8.85	115.28	108.20
1	N	535	A	N7-C8-N9	-8.85	109.37	113.80
1	N	1097	C	C5-C6-N1	8.85	125.42	121.00
1	N	730	G	C6-C5-N7	-8.85	125.09	130.40
1	N	451	A	C1'-O4'-C4'	-8.84	102.83	109.90
1	N	900	A	C2-N3-C4	-8.84	106.18	110.60
1	N	1282	C	P-O5'-C5'	8.84	135.05	120.90
1	N	1042	A	C5-C6-N1	-8.84	113.28	117.70
1	N	1522	U	O4'-C1'-N1	8.84	115.27	108.20
1	N	87	C	C6-N1-C2	-8.84	116.76	120.30
1	N	197	A	P-O3'-C3'	8.84	130.31	119.70
1	N	1403	C	C2-N3-C4	8.84	124.32	119.90
1	N	1172	C	N3-C4-N4	8.84	124.19	118.00
1	N	42	G	C6-C5-N7	-8.84	125.10	130.40
1	N	1255	G	O4'-C1'-N9	8.84	115.27	108.20
1	N	1082	A	C4-C5-C6	8.84	121.42	117.00
1	N	440	C	P-O3'-C3'	8.83	130.30	119.70
1	N	255	G	C8-N9-C4	-8.83	102.87	106.40
1	N	142	G	N1-C6-O6	8.83	125.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	646	G	C5-C6-O6	-8.83	123.30	128.60
1	N	290	C	C4-C5-C6	-8.83	112.99	117.40
1	N	700	G	C6-C5-N7	-8.83	125.10	130.40
1	N	745	G	C4-C5-C6	8.83	124.10	118.80
1	N	1012	A	C4-C5-C6	8.83	121.41	117.00
1	N	1196	A	O4'-C1'-N9	8.83	115.26	108.20
1	N	1022	A	N1-C6-N6	8.82	123.89	118.60
1	N	369	G	O4'-C1'-N9	8.82	115.26	108.20
1	N	1245	C	N3-C4-C5	-8.82	118.37	121.90
1	N	1293	C	C5-C6-N1	8.82	125.41	121.00
1	N	703	G	C6-C5-N7	-8.82	125.11	130.40
1	N	236	A	O4'-C1'-N9	8.82	115.26	108.20
1	N	1499	A	C8-N9-C4	-8.82	102.27	105.80
1	N	683	G	N1-C2-N3	-8.82	118.61	123.90
1	N	1176	A	O4'-C1'-N9	8.82	115.26	108.20
1	N	477	C	N1-C2-O2	-8.82	113.61	118.90
1	N	1014	A	N1-C2-N3	8.82	133.71	129.30
1	N	1238	A	C5-C6-N1	-8.81	113.29	117.70
1	N	1246	A	C5-C6-N6	-8.81	116.65	123.70
1	N	702	A	C5-C6-N1	-8.81	113.29	117.70
1	N	884	U	C6-N1-C2	-8.81	115.72	121.00
1	N	1150	A	C5-C6-N6	-8.81	116.65	123.70
1	N	361	G	P-O5'-C5'	8.81	134.99	120.90
1	N	455	G	N7-C8-N9	8.81	117.50	113.10
1	N	341	C	C4-C5-C6	-8.80	113.00	117.40
1	N	647	C	C6-N1-C2	8.80	123.82	120.30
1	N	1510	C	N3-C4-C5	-8.80	118.38	121.90
1	N	400	C	O4'-C1'-N1	8.80	115.24	108.20
1	N	1258	G	N9-C4-C5	-8.79	101.88	105.40
1	N	219	U	N1-C2-O2	-8.79	116.64	122.80
1	N	705	G	N1-C2-N3	-8.79	118.62	123.90
1	N	47	C	C5-C4-N4	-8.79	114.05	120.20
1	N	1192	C	C6-N1-C2	8.79	123.81	120.30
1	N	475	C	O4'-C1'-N1	8.78	115.23	108.20
1	N	1515	G	C5-C6-O6	-8.78	123.33	128.60
1	N	530	G	N9-C4-C5	-8.78	101.89	105.40
1	N	805	C	P-O5'-C5'	8.78	134.95	120.90
1	N	943	U	N3-C4-C5	8.78	119.87	114.60
1	N	608	A	C5-N7-C8	8.78	108.29	103.90
1	N	1019	A	O4'-C1'-N9	8.77	115.22	108.20
1	N	1453	G	C8-N9-C4	8.77	109.91	106.40
1	N	911	U	N1-C2-O2	-8.77	116.66	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1024	G	N3-C4-C5	-8.77	124.22	128.60
1	N	457	G	N3-C2-N2	8.77	126.04	119.90
1	N	1103	C	N3-C2-O2	8.77	128.04	121.90
1	N	246	A	C4-C5-C6	8.76	121.38	117.00
1	N	1441	A	C5-C6-N6	-8.76	116.69	123.70
1	N	1422	G	N1-C6-O6	8.76	125.16	119.90
1	N	388	G	C5-N7-C8	-8.76	99.92	104.30
1	N	1353	G	P-O3'-C3'	-8.75	109.19	119.70
1	N	682	G	N7-C8-N9	8.75	117.48	113.10
1	N	1143	G	C6-C5-N7	-8.75	125.15	130.40
1	N	1352	C	N3-C4-N4	8.75	124.13	118.00
1	N	16	A	C5-C6-N1	-8.75	113.33	117.70
1	N	53	A	N1-C2-N3	8.75	133.68	129.30
1	N	573	A	C5-C6-N6	-8.75	116.70	123.70
1	N	739	C	C6-N1-C2	-8.75	116.80	120.30
1	N	75	G	C5-C6-O6	-8.75	123.35	128.60
1	N	690	G	N1-C6-O6	8.75	125.15	119.90
1	N	1329	A	C5-C6-N1	-8.75	113.33	117.70
1	N	1426	G	O4'-C1'-N9	8.75	115.20	108.20
1	N	613	C	N3-C4-N4	8.74	124.12	118.00
1	N	633	G	C6-N1-C2	-8.74	119.85	125.10
1	N	828	U	C2-N3-C4	-8.74	121.75	127.00
1	N	912	C	N3-C4-C5	-8.74	118.40	121.90
1	N	1399	C	O4'-C1'-N1	8.74	115.19	108.20
1	N	844	G	O4'-C1'-N9	8.74	115.19	108.20
1	N	436	C	C2-N3-C4	-8.74	115.53	119.90
1	N	21	G	C4-C5-N7	-8.74	107.31	110.80
1	N	824	G	C4'-C3'-C2'	-8.74	93.86	102.60
1	N	434	U	O4'-C1'-N1	8.73	115.19	108.20
1	N	107	G	C2-N3-C4	8.73	116.27	111.90
1	N	425	G	P-O5'-C5'	8.73	134.87	120.90
1	N	843	U	O4'-C1'-N1	8.73	115.18	108.20
1	N	992	U	P-O5'-C5'	-8.73	106.93	120.90
1	N	1502	A	O4'-C1'-N9	8.73	115.18	108.20
1	N	50	A	C5-N7-C8	8.73	108.26	103.90
1	N	83	C	C4-C5-C6	8.73	121.77	117.40
1	N	1093	A	C6-C5-N7	-8.73	126.19	132.30
1	N	1326	U	C4'-C3'-C2'	-8.73	93.87	102.60
1	N	804	U	P-O3'-C3'	-8.72	109.23	119.70
1	N	987	G	N3-C2-N2	8.72	126.01	119.90
1	N	1044	A	C5-C6-N6	-8.72	116.72	123.70
1	N	1200	C	C5-C6-N1	-8.72	116.64	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1029	U	O4'-C1'-N1	8.72	115.18	108.20
1	N	1347	G	N1-C2-N3	-8.72	118.67	123.90
1	N	837	U	C5-C6-N1	-8.72	118.34	122.70
1	N	962	C	N3-C4-C5	-8.72	118.41	121.90
1	N	473	U	N3-C4-O4	8.72	125.50	119.40
1	N	1073	U	N3-C4-O4	8.72	125.50	119.40
1	N	141	G	C6-C5-N7	-8.71	125.17	130.40
1	N	754	C	N3-C4-N4	8.72	124.10	118.00
1	N	1458	G	O4'-C1'-N9	8.71	115.17	108.20
1	N	15	G	O4'-C1'-N9	8.71	115.17	108.20
1	N	1059	C	C5-C6-N1	8.71	125.36	121.00
1	N	885	G	C6-N1-C2	8.71	130.33	125.10
1	N	1193	G	C5-C6-O6	-8.71	123.37	128.60
1	N	1238	A	C6-C5-N7	-8.71	126.20	132.30
1	N	217	C	C2-N3-C4	8.71	124.25	119.90
1	N	1004	A	C5-N7-C8	8.71	108.25	103.90
1	N	546	A	C6-C5-N7	-8.71	126.20	132.30
1	N	1440	U	C5'-C4'-O4'	8.71	119.55	109.10
1	N	233	C	C5-C6-N1	8.71	125.35	121.00
1	N	326	G	N7-C8-N9	8.70	117.45	113.10
1	N	674	G	C5-C6-O6	-8.70	123.38	128.60
1	N	1045	C	C6-N1-C2	-8.70	116.82	120.30
1	N	1415	G	N7-C8-N9	8.70	117.45	113.10
1	N	225	C	N3-C4-C5	-8.70	118.42	121.90
1	N	608	A	N1-C2-N3	8.69	133.65	129.30
1	N	223	A	C6-N1-C2	8.69	123.81	118.60
1	N	898	G	N1-C6-O6	8.69	125.11	119.90
1	N	1115	U	C6-N1-C2	-8.69	115.78	121.00
1	N	1335	U	O4'-C1'-N1	8.69	115.15	108.20
1	N	143	A	N1-C6-N6	8.69	123.81	118.60
1	N	18	C	N3-C4-C5	-8.69	118.42	121.90
1	N	864	A	C2-N3-C4	-8.69	106.26	110.60
1	N	1070	U	N3-C4-O4	8.69	125.48	119.40
1	N	1273	C	O4'-C1'-N1	8.69	115.15	108.20
1	N	15	G	N3-C2-N2	8.69	125.98	119.90
1	N	723	U	N3-C2-O2	8.69	128.28	122.20
1	N	1264	U	N3-C4-C5	-8.69	109.39	114.60
1	N	1507	A	C5-N7-C8	8.69	108.24	103.90
1	N	22	G	N1-C2-N2	-8.68	108.39	116.20
1	N	451	A	O4'-C1'-N9	8.68	115.15	108.20
1	N	505	G	N1-C6-O6	8.68	125.11	119.90
1	N	1000	A	O4'-C1'-N9	8.68	115.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1491	G	N3-C4-C5	8.68	132.94	128.60
1	N	155	A	C5-N7-C8	8.68	108.24	103.90
1	N	345	C	O4'-C1'-N1	8.68	115.14	108.20
1	N	1016	A	O4'-C1'-N9	8.68	115.14	108.20
1	N	1047	G	C6-C5-N7	-8.68	125.19	130.40
1	N	1191	A	C5-C6-N1	-8.68	113.36	117.70
1	N	174	A	N7-C8-N9	-8.67	109.46	113.80
1	N	585	G	O4'-C1'-N9	8.67	115.14	108.20
1	N	315	A	N9-C4-C5	8.67	109.27	105.80
1	N	580	C	C6-N1-C2	-8.67	116.83	120.30
1	N	281	G	P-O3'-C3'	8.67	130.10	119.70
1	N	385	C	N3-C4-N4	8.66	124.06	118.00
1	N	475	C	N3-C4-N4	8.66	124.06	118.00
1	N	686	U	O4'-C1'-N1	8.66	115.13	108.20
1	N	712	A	P-O3'-C3'	8.66	130.09	119.70
1	N	788	U	O4'-C1'-N1	8.66	115.13	108.20
1	N	116	A	C6-C5-N7	-8.66	126.24	132.30
1	N	315	A	O4'-C1'-N9	8.66	115.13	108.20
1	N	905	U	N1-C1'-C2'	8.66	125.26	114.00
1	N	1241	G	P-O5'-C5'	8.66	134.75	120.90
1	N	1458	G	C5-C6-O6	-8.66	123.40	128.60
1	N	282	A	C6-C5-N7	-8.66	126.24	132.30
1	N	24	U	O4'-C1'-N1	8.66	115.12	108.20
1	N	77	A	N1-C6-N6	8.66	123.79	118.60
1	N	1159	U	C2-N3-C4	-8.66	121.81	127.00
1	N	1261	A	C5'-C4'-O4'	8.66	119.49	109.10
1	N	1263	C	O4'-C1'-N1	8.66	115.12	108.20
1	N	647	C	N3-C2-O2	8.65	127.96	121.90
1	N	1488	G	C5-C6-O6	-8.65	123.41	128.60
1	N	130	A	C6-N1-C2	8.65	123.79	118.60
1	N	252	U	N3-C4-O4	8.65	125.46	119.40
1	N	389	A	O4'-C1'-N9	8.65	115.12	108.20
1	N	755	G	N1-C2-N3	-8.65	118.71	123.90
1	N	1516	G	C4-C5-C6	8.65	123.99	118.80
1	N	364	A	N7-C8-N9	-8.64	109.48	113.80
1	N	440	C	C4-C5-C6	8.64	121.72	117.40
1	N	607	A	C5-C6-N6	-8.64	116.79	123.70
1	N	1116	U	N3-C4-C5	-8.64	109.41	114.60
1	N	149	A	N1-C6-N6	8.64	123.78	118.60
1	N	865	A	C2-N3-C4	-8.64	106.28	110.60
1	N	1135	U	C6-N1-C2	-8.64	115.82	121.00
1	N	35	G	C6-N1-C2	8.64	130.28	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	836	G	C5-C6-O6	-8.64	123.42	128.60
1	N	616	G	C5-C6-O6	-8.64	123.42	128.60
1	N	561	U	P-O3'-C3'	8.63	130.06	119.70
1	N	1493	A	C4-C5-N7	-8.64	106.38	110.70
1	N	945	G	C6-C5-N7	-8.63	125.22	130.40
1	N	1006	G	C2-N3-C4	-8.63	107.58	111.90
1	N	395	C	O4'-C1'-N1	8.63	115.10	108.20
1	N	1042	A	C8-N9-C4	-8.63	102.35	105.80
1	N	98	A	N1-C6-N6	8.63	123.78	118.60
1	N	320	A	P-O3'-C3'	8.63	130.06	119.70
1	N	973	G	N3-C4-C5	8.63	132.91	128.60
1	N	1096	C	N3-C4-C5	-8.63	118.45	121.90
1	N	400	C	C5-C4-N4	-8.63	114.16	120.20
1	N	61	G	C5-C6-O6	-8.62	123.42	128.60
1	N	459	A	O4'-C1'-N9	8.62	115.10	108.20
1	N	120	A	C4-C5-C6	8.62	121.31	117.00
1	N	265	G	C4-C5-N7	-8.62	107.35	110.80
1	N	1246	A	C8-N9-C4	-8.62	102.35	105.80
1	N	307	C	C2-N3-C4	8.62	124.21	119.90
1	N	700	G	C4-C5-C6	8.62	123.97	118.80
1	N	14	U	O4'-C1'-N1	8.61	115.09	108.20
1	N	1003	G	C5-N7-C8	-8.61	99.99	104.30
1	N	1074	G	C5-C6-N1	-8.62	107.19	111.50
1	N	1247	U	P-O3'-C3'	-8.61	109.36	119.70
1	N	769	G	N9-C4-C5	-8.61	101.95	105.40
1	N	910	C	C5-C6-N1	8.61	125.31	121.00
1	N	973	G	C4-C5-N7	8.61	114.24	110.80
1	N	1178	G	N3-C2-N2	8.61	125.93	119.90
1	N	95	C	P-O5'-C5'	-8.61	107.12	120.90
1	N	177	G	N9-C4-C5	-8.61	101.96	105.40
1	N	414	A	C2-N3-C4	-8.61	106.30	110.60
1	N	654	G	N3-C4-C5	8.61	132.91	128.60
1	N	1079	G	C5-C6-O6	-8.61	123.43	128.60
1	N	343	U	O4'-C1'-N1	8.61	115.09	108.20
1	N	941	G	C5-C6-N1	8.61	115.80	111.50
1	N	675	A	C4-C5-C6	8.60	121.30	117.00
1	N	33	A	C5-C6-N6	-8.60	116.82	123.70
1	N	461	A	N1-C6-N6	8.60	123.76	118.60
1	N	934	C	P-O3'-C3'	8.60	130.02	119.70
1	N	230	G	N1-C6-O6	8.60	125.06	119.90
1	N	1009	U	N1-C2-O2	-8.60	116.78	122.80
1	N	1127	G	C6-C5-N7	-8.60	125.24	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	742	G	N1-C2-N3	-8.60	118.74	123.90
1	N	79	G	C5-C6-N1	8.60	115.80	111.50
1	N	1409	C	O4'-C1'-N1	8.59	115.08	108.20
1	N	366	A	P-O3'-C3'	8.59	130.01	119.70
1	N	494	G	C5-C6-O6	-8.59	123.45	128.60
1	N	1493	A	O4'-C1'-N9	8.59	115.07	108.20
1	N	681	A	C5-C6-N6	-8.59	116.83	123.70
1	N	1089	G	C8-N9-C4	-8.59	102.97	106.40
1	N	306	A	C5-C6-N1	-8.58	113.41	117.70
1	N	1429	A	C5-C6-N1	-8.58	113.41	117.70
1	N	15	G	N1-C6-O6	8.58	125.05	119.90
1	N	43	C	C2-N3-C4	8.58	124.19	119.90
1	N	897	C	O4'-C1'-N1	8.58	115.06	108.20
1	N	531	U	C6-N1-C2	-8.58	115.85	121.00
1	N	1175	G	O4'-C1'-N9	8.58	115.06	108.20
1	N	410	G	C4-C5-C6	8.57	123.94	118.80
1	N	635	A	C5-C6-N6	-8.57	116.84	123.70
1	N	859	G	C5-C6-O6	-8.57	123.45	128.60
1	N	1064	G	N3-C2-N2	8.57	125.90	119.90
1	N	679	C	C6-N1-C1'	-8.57	110.52	120.80
1	N	1093	A	C2-N3-C4	-8.57	106.31	110.60
1	N	1302	C	C6-N1-C2	-8.57	116.87	120.30
1	N	270	A	C5-N7-C8	8.57	108.18	103.90
1	N	1336	C	O4'-C1'-N1	8.57	115.05	108.20
1	N	205	A	C4-C5-C6	8.56	121.28	117.00
1	N	970	C	C2-N1-C1'	8.56	128.22	118.80
1	N	1524	C	C6-N1-C2	8.56	123.72	120.30
1	N	788	U	P-O5'-C5'	8.56	134.60	120.90
1	N	1253	G	N9-C4-C5	-8.56	101.97	105.40
1	N	613	C	C6-N1-C2	-8.56	116.88	120.30
1	N	885	G	N1-C6-O6	8.56	125.03	119.90
1	N	1523	G	C4-C5-N7	8.56	114.22	110.80
1	N	505	G	C6-C5-N7	-8.56	125.27	130.40
1	N	101	A	C4-C5-C6	8.55	121.28	117.00
1	N	1511	G	N1-C6-O6	8.55	125.03	119.90
1	N	860	A	P-O3'-C3'	8.55	129.96	119.70
1	N	1502	A	C5-N7-C8	8.55	108.17	103.90
1	N	1023	U	N3-C4-O4	8.55	125.38	119.40
1	N	1167	A	O4'-C1'-N9	8.55	115.04	108.20
1	N	1382	C	C5-C6-N1	8.55	125.27	121.00
1	N	104	G	N3-C4-N9	8.54	131.13	126.00
1	N	1331	G	C5-C6-N1	-8.54	107.23	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	647	C	C2-N3-C4	8.54	124.17	119.90
1	N	976	G	N3-C4-C5	8.54	132.87	128.60
1	N	1408	A	C5-C6-N6	-8.54	116.87	123.70
1	N	618	C	C4-C5-C6	8.54	121.67	117.40
1	N	191	G	O4'-C1'-N9	8.54	115.03	108.20
1	N	626	G	N3-C4-C5	-8.54	124.33	128.60
1	N	737	C	O4'-C1'-N1	8.54	115.03	108.20
1	N	926	G	C5'-C4'-C3'	8.54	129.66	116.00
1	N	1108	G	N3-C2-N2	8.54	125.88	119.90
1	N	1207	G	N1-C6-O6	8.54	125.02	119.90
1	N	821	G	O4'-C1'-N9	8.54	115.03	108.20
1	N	358	U	N1-C2-O2	8.53	128.77	122.80
1	N	896	C	C5-C4-N4	-8.53	114.23	120.20
1	N	1433	A	O3'-P-O5'	-8.53	87.80	104.00
1	N	456	A	N7-C8-N9	8.53	118.06	113.80
1	N	16	A	O4'-C1'-N9	8.53	115.02	108.20
1	N	813	U	O4'-C1'-N1	8.53	115.02	108.20
1	N	1099	G	C2-N3-C4	-8.53	107.64	111.90
1	N	1117	A	N1-C6-N6	8.53	123.72	118.60
1	N	113	G	N1-C6-O6	8.52	125.01	119.90
1	N	714	G	C5-N7-C8	8.52	108.56	104.30
1	N	413	G	N1-C2-N3	-8.52	118.79	123.90
1	N	559	A	C4-C5-C6	8.52	121.26	117.00
1	N	178	C	N3-C2-O2	8.52	127.86	121.90
1	N	277	C	C5-C6-N1	8.52	125.26	121.00
1	N	1442	G	N3-C4-C5	-8.52	124.34	128.60
1	N	517	G	O4'-C1'-N9	8.52	115.01	108.20
1	N	567	G	N3-C2-N2	8.52	125.86	119.90
1	N	687	A	C8-N9-C4	-8.52	102.39	105.80
1	N	1387	G	C5-N7-C8	-8.52	100.04	104.30
1	N	1375	A	C6-C5-N7	-8.52	126.34	132.30
1	N	1471	U	O4'-C1'-N1	8.52	115.01	108.20
1	N	306	A	C4-C5-C6	8.51	121.26	117.00
1	N	1040	U	C5-C4-O4	-8.51	120.79	125.90
1	N	385	C	O4'-C1'-N1	8.51	115.01	108.20
1	N	1024	G	O4'-C1'-N9	8.51	115.01	108.20
1	N	1457	G	N9-C4-C5	-8.51	102.00	105.40
1	N	457	G	C5-C6-N1	-8.51	107.25	111.50
1	N	40	C	C2-N3-C4	8.51	124.16	119.90
1	N	84	U	C5-C6-N1	8.51	126.95	122.70
1	N	515	G	C6-C5-N7	-8.51	125.30	130.40
1	N	695	A	C5-C6-N6	-8.51	116.89	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	712	A	C4-C5-C6	8.51	121.25	117.00
1	N	109	A	C4-C5-C6	8.51	121.25	117.00
1	N	576	C	N3-C4-C5	-8.51	118.50	121.90
1	N	844	G	N1-C2-N3	-8.51	118.80	123.90
1	N	702	A	C6-C5-N7	-8.51	126.35	132.30
1	N	188	C	O4'-C1'-N1	8.50	115.00	108.20
1	N	1405	G	N1-C6-O6	8.50	125.00	119.90
1	N	1449	C	O4'-C1'-N1	8.50	115.00	108.20
1	N	631	C	C5-C4-N4	8.50	126.15	120.20
1	N	1069	C	N1-C1'-C2'	-8.50	102.65	112.00
1	N	871	U	O4'-C1'-N1	8.49	115.00	108.20
1	N	1371	G	C5-C6-N1	-8.49	107.25	111.50
1	N	764	C	C6-N1-C2	-8.49	116.91	120.30
1	N	1136	C	O4'-C1'-N1	8.49	114.99	108.20
1	N	1524	C	N1-C2-N3	-8.49	113.26	119.20
1	N	908	A	C5-C6-N1	-8.48	113.46	117.70
1	N	950	U	P-O5'-C5'	8.48	134.48	120.90
1	N	1093	A	C4-C5-C6	8.48	121.24	117.00
1	N	127	G	N1-C2-N3	-8.48	118.81	123.90
1	N	167	A	C5-C6-N6	-8.48	116.92	123.70
1	N	959	A	O4'-C1'-N9	8.48	114.98	108.20
1	N	521	G	C5-C6-N1	-8.47	107.26	111.50
1	N	554	A	C5-N7-C8	8.47	108.14	103.90
1	N	187	G	C4-N9-C1'	-8.47	115.49	126.50
1	N	1101	A	C5-N7-C8	8.47	108.14	103.90
1	N	1334	G	O4'-C1'-N9	8.47	114.98	108.20
1	N	1110	A	N1-C6-N6	8.47	123.68	118.60
1	N	945	G	O4'-C1'-N9	8.47	114.97	108.20
1	N	1151	A	O4'-C1'-N9	8.47	114.97	108.20
1	N	1265	C	O4'-C1'-N1	8.47	114.97	108.20
1	N	1050	G	N1-C6-O6	8.46	124.98	119.90
1	N	1324	A	N1-C6-N6	8.46	123.68	118.60
1	N	1482	G	N9-C4-C5	-8.46	102.01	105.40
1	N	674	G	N1-C2-N3	-8.46	118.82	123.90
1	N	1417	G	C8-N9-C1'	-8.46	116.00	127.00
1	N	296	U	N1-C2-O2	-8.46	116.88	122.80
1	N	880	C	O4'-C1'-N1	8.46	114.97	108.20
1	N	1167	A	N1-C2-N3	-8.46	125.07	129.30
1	N	1023	U	N3-C4-C5	-8.46	109.53	114.60
1	N	1304	G	C5-N7-C8	-8.46	100.07	104.30
1	N	1361	G	N9-C4-C5	-8.46	102.02	105.40
1	N	604	G	N1-C6-O6	8.46	124.97	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	327	A	O4'-C1'-N9	8.45	114.96	108.20
1	N	932	C	C4-C5-C6	8.45	121.63	117.40
1	N	1522	U	N1-C2-O2	-8.45	116.88	122.80
1	N	590	U	N3-C4-C5	-8.45	109.53	114.60
1	N	747	A	C5-C6-N6	-8.45	116.94	123.70
1	N	1113	C	N3-C2-O2	-8.45	115.98	121.90
1	N	1114	C	P-O5'-C5'	8.45	134.42	120.90
1	N	1216	A	C4-C5-C6	8.45	121.22	117.00
1	N	1455	G	N3-C2-N2	8.45	125.81	119.90
1	N	64	G	C5-C6-N1	-8.45	107.28	111.50
1	N	599	C	C5-C6-N1	8.45	125.22	121.00
1	N	1093	A	O4'-C1'-N9	8.45	114.96	108.20
1	N	1178	G	C8-N9-C4	-8.44	103.02	106.40
1	N	31	G	N3-C2-N2	8.44	125.81	119.90
1	N	288	A	C6-C5-N7	-8.44	126.39	132.30
1	N	637	C	O4'-C1'-N1	8.44	114.95	108.20
1	N	282	A	C8-N9-C4	-8.44	102.42	105.80
1	N	38	G	N7-C8-N9	-8.43	108.88	113.10
1	N	131	A	N1-C6-N6	8.43	123.66	118.60
1	N	427	U	C5'-C4'-O4'	-8.43	98.98	109.10
1	N	745	G	C5-C6-N1	-8.43	107.28	111.50
1	N	905	U	C2-N3-C4	-8.43	121.94	127.00
1	N	1102	A	P-O5'-C5'	8.43	134.39	120.90
1	N	1531	A	C6-N1-C2	8.43	123.66	118.60
1	N	730	G	P-O3'-C3'	8.43	129.82	119.70
1	N	883	C	N1-C2-N3	-8.43	113.30	119.20
1	N	1145	A	N1-C6-N6	8.43	123.66	118.60
1	N	1210	C	O4'-C1'-N1	8.43	114.94	108.20
1	N	1325	C	C6-N1-C2	-8.43	116.93	120.30
1	N	772	U	O4'-C1'-N1	8.43	114.94	108.20
1	N	1187	G	C8-N9-C4	-8.43	103.03	106.40
1	N	664	G	C4-C5-C6	8.42	123.85	118.80
1	N	14	U	C6-N1-C2	-8.42	115.95	121.00
1	N	399	G	C5-C6-O6	-8.42	123.55	128.60
1	N	958	A	C5-C6-N1	-8.42	113.49	117.70
1	N	308	C	O4'-C1'-N1	8.42	114.93	108.20
1	N	1525	G	N1-C2-N3	-8.42	118.85	123.90
1	N	423	G	N7-C8-N9	-8.41	108.89	113.10
1	N	1252	A	C5-C6-N1	-8.41	113.49	117.70
1	N	645	G	C6-C5-N7	-8.41	125.35	130.40
1	N	713	G	C8-N9-C4	8.41	109.77	106.40
1	N	756	C	C5-C6-N1	8.41	125.21	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	361	G	N3-C2-N2	8.41	125.79	119.90
1	N	1221	G	C6-C5-N7	-8.41	125.35	130.40
1	N	348	G	C2-N3-C4	-8.41	107.70	111.90
1	N	639	G	C2-N3-C4	8.41	116.10	111.90
1	N	756	C	C4-C5-C6	-8.41	113.20	117.40
1	N	1331	G	C4-C5-N7	8.41	114.16	110.80
1	N	605	U	N3-C2-O2	8.40	128.08	122.20
1	N	774	G	C6-C5-N7	-8.40	125.36	130.40
1	N	1125	U	P-O3'-C3'	8.40	129.78	119.70
1	N	1362	A	C5-C6-N1	-8.40	113.50	117.70
1	N	366	A	C5-C6-N1	-8.40	113.50	117.70
1	N	547	A	C2-N3-C4	-8.40	106.40	110.60
1	N	1375	A	C4-C5-C6	8.40	121.20	117.00
1	N	1394	A	P-O5'-C5'	8.40	134.34	120.90
1	N	1149	C	C6-N1-C2	-8.39	116.94	120.30
1	N	428	G	N1-C2-N3	-8.39	118.86	123.90
1	N	117	G	C5-C6-O6	-8.39	123.57	128.60
1	N	220	G	C5-C6-O6	-8.39	123.57	128.60
1	N	598	U	O4'-C1'-N1	8.39	114.91	108.20
1	N	1038	C	C5-C4-N4	-8.39	114.33	120.20
1	N	923	A	P-O3'-C3'	8.39	129.77	119.70
1	N	1321	U	P-O5'-C5'	8.39	134.32	120.90
1	N	784	A	C5-C6-N6	-8.39	116.99	123.70
1	N	370	C	C6-N1-C2	8.38	123.65	120.30
1	N	1055	A	N1-C6-N6	8.38	123.63	118.60
1	N	1155	A	O4'-C1'-N9	8.38	114.91	108.20
1	N	8	A	C4-C5-C6	8.38	121.19	117.00
1	N	95	C	C5'-C4'-C3'	-8.38	102.59	116.00
1	N	187	G	N9-C4-C5	-8.38	102.05	105.40
1	N	1017	U	O4'-C1'-N1	8.38	114.91	108.20
1	N	408	A	C5-C6-N1	-8.38	113.51	117.70
1	N	1166	G	C2-N3-C4	8.38	116.09	111.90
1	N	853	C	C6-N1-C2	-8.38	116.95	120.30
1	N	1241	G	C8-N9-C1'	-8.38	116.11	127.00
1	N	92	U	O4'-C1'-N1	8.38	114.90	108.20
1	N	342	C	C1'-O4'-C4'	8.38	116.60	109.90
1	N	467	U	O4'-C1'-C2'	8.38	115.14	107.60
1	N	1287	A	C1'-O4'-C4'	8.38	116.60	109.90
1	N	1487	G	N1-C6-O6	8.37	124.92	119.90
1	N	210	C	C5-C6-N1	8.37	125.19	121.00
1	N	258	G	C6-N1-C2	8.37	130.12	125.10
1	N	800	G	C5-C6-N1	-8.37	107.31	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1166	G	P-O3'-C3'	8.37	129.74	119.70
1	N	1498	U	N3-C4-C5	-8.37	109.58	114.60
1	N	247	G	O4'-C1'-N9	8.36	114.89	108.20
1	N	158	G	N1-C6-O6	8.36	124.92	119.90
1	N	679	C	O4'-C1'-N1	8.36	114.89	108.20
1	N	1072	G	N1-C6-O6	8.36	124.92	119.90
1	N	1080	A	C4-C5-C6	8.36	121.18	117.00
1	N	938	A	N1-C2-N3	8.36	133.48	129.30
1	N	1515	G	C4-C5-N7	8.36	114.14	110.80
1	N	149	A	C4-C5-C6	8.36	121.18	117.00
1	N	213	G	N9-C4-C5	-8.36	102.06	105.40
1	N	925	G	C2-N3-C4	8.36	116.08	111.90
1	N	538	G	N1-C2-N3	-8.35	118.89	123.90
1	N	1499	A	C5-C6-N6	-8.35	117.02	123.70
1	N	721	G	N9-C4-C5	8.35	108.74	105.40
1	N	1228	C	O4'-C1'-N1	8.35	114.88	108.20
1	N	120	A	C5-C6-N6	-8.35	117.02	123.70
1	N	39	G	N1-C2-N3	-8.35	118.89	123.90
1	N	449	G	C5-N7-C8	-8.35	100.13	104.30
1	N	1507	A	C4-C5-N7	-8.35	106.53	110.70
1	N	499	A	C5-C6-N1	-8.34	113.53	117.70
1	N	1125	U	N3-C4-C5	-8.34	109.59	114.60
1	N	521	G	C6-C5-N7	-8.34	125.39	130.40
1	N	1074	G	C5-C6-O6	-8.34	123.59	128.60
1	N	1124	G	C5-C6-O6	-8.34	123.59	128.60
1	N	1168	U	C2-N3-C4	8.34	132.01	127.00
1	N	921	U	N1-C2-N3	8.34	119.90	114.90
1	N	1229	A	C5-C6-N6	-8.34	117.03	123.70
1	N	270	A	C5-C6-N1	-8.34	113.53	117.70
1	N	1531	A	C6-C5-N7	-8.34	126.46	132.30
1	N	145	G	C8-N9-C4	-8.34	103.06	106.40
1	N	41	G	C6-C5-N7	-8.34	125.40	130.40
1	N	208	U	C5-C4-O4	-8.34	120.90	125.90
1	N	903	G	C5-C6-O6	-8.34	123.60	128.60
1	N	1152	A	C5-N7-C8	-8.34	99.73	103.90
1	N	63	C	P-O3'-C3'	8.33	129.70	119.70
1	N	1039	G	N1-C2-N3	-8.33	118.90	123.90
1	N	102	G	C8-N9-C4	-8.33	103.07	106.40
1	N	796	C	O4'-C1'-N1	8.33	114.86	108.20
1	N	937	A	C6-C5-N7	-8.33	126.47	132.30
1	N	1146	A	C5-N7-C8	8.33	108.06	103.90
1	N	48	C	C6-N1-C2	-8.33	116.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	129	A	O4'-C1'-N9	8.33	114.86	108.20
1	N	969	A	N1-C2-N3	8.33	133.46	129.30
1	N	789	U	N3-C4-C5	-8.33	109.60	114.60
1	N	342	C	N3-C4-C5	-8.32	118.57	121.90
1	N	341	C	C5-C6-N1	8.32	125.16	121.00
1	N	371	A	C5-C6-N6	-8.32	117.04	123.70
1	N	436	C	N3-C4-C5	8.32	125.23	121.90
1	N	769	G	C6-C5-N7	-8.32	125.41	130.40
1	N	1197	A	C4-C5-C6	8.32	121.16	117.00
1	N	1227	A	O4'-C1'-N9	8.32	114.86	108.20
1	N	582	C	C6-N1-C2	-8.32	116.97	120.30
1	N	1051	C	N3-C4-C5	-8.32	118.57	121.90
1	N	973	G	N1-C6-O6	8.32	124.89	119.90
1	N	1280	A	C4-C5-N7	-8.32	106.54	110.70
1	N	1312	G	C5-C6-O6	-8.32	123.61	128.60
1	N	156	C	C6-N1-C2	-8.31	116.97	120.30
1	N	401	C	O4'-C1'-N1	8.31	114.85	108.20
1	N	620	C	C2-N3-C4	8.31	124.06	119.90
1	N	700	G	N3-C4-C5	-8.31	124.44	128.60
1	N	1045	C	N3-C4-C5	-8.31	118.58	121.90
1	N	531	U	C5-C6-N1	8.31	126.86	122.70
1	N	654	G	N1-C2-N3	-8.31	118.92	123.90
1	N	779	C	O4'-C1'-N1	8.31	114.85	108.20
1	N	840	C	O4'-C1'-N1	8.31	114.85	108.20
1	N	868	C	N3-C4-N4	8.31	123.82	118.00
1	N	357	G	N1-C6-O6	8.30	124.88	119.90
1	N	563	A	C5-C6-N1	-8.31	113.55	117.70
1	N	759	A	C5-N7-C8	8.30	108.05	103.90
1	N	155	A	N7-C8-N9	-8.30	109.65	113.80
1	N	71	A	C4-C5-C6	8.30	121.15	117.00
1	N	634	C	C6-N1-C2	8.30	123.62	120.30
1	N	313	A	C8-N9-C4	-8.30	102.48	105.80
1	N	1334	G	C6-N1-C2	-8.30	120.12	125.10
1	N	1181	G	N1-C6-O6	8.30	124.88	119.90
1	N	519	C	O4'-C1'-N1	8.29	114.83	108.20
1	N	1024	G	C5-C6-N1	-8.29	107.35	111.50
1	N	581	G	C4'-C3'-C2'	-8.29	94.31	102.60
1	N	882	C	N3-C4-N4	8.29	123.80	118.00
1	N	1142	G	C2-N3-C4	-8.29	107.76	111.90
1	N	1163	A	N7-C8-N9	-8.29	109.66	113.80
1	N	63	C	C4-C5-C6	8.29	121.54	117.40
1	N	295	C	O4'-C1'-N1	8.28	114.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	505	G	C5'-C4'-O4'	8.29	119.04	109.10
1	N	609	A	C4-C5-C6	8.29	121.14	117.00
1	N	970	C	C3'-C2'-C1'	-8.29	94.87	101.50
1	N	982	U	N3-C4-O4	8.29	125.20	119.40
1	N	1412	C	O4'-C1'-N1	8.29	114.83	108.20
1	N	1174	G	N1-C2-N3	-8.28	118.93	123.90
1	N	1343	G	O4'-C1'-N9	8.28	114.83	108.20
1	N	227	G	O4'-C1'-N9	8.28	114.82	108.20
1	N	1067	A	N7-C8-N9	-8.28	109.66	113.80
1	N	1311	A	C4-C5-C6	8.28	121.14	117.00
1	N	61	G	N9-C4-C5	8.28	108.71	105.40
1	N	300	A	C5-N7-C8	8.28	108.04	103.90
1	N	390	U	O4'-C1'-N1	8.28	114.82	108.20
1	N	915	A	C2-N3-C4	-8.28	106.46	110.60
1	N	204	G	C4-C5-C6	8.27	123.76	118.80
1	N	377	G	N3-C4-N9	-8.27	121.04	126.00
1	N	731	G	N9-C1'-C2'	-8.27	102.90	112.00
1	N	858	G	C5-C6-O6	-8.27	123.64	128.60
1	N	910	C	P-O5'-C5'	8.27	134.14	120.90
1	N	216	U	C5-C6-N1	8.27	126.83	122.70
1	N	32	A	N7-C8-N9	-8.27	109.67	113.80
1	N	35	G	O4'-C1'-N9	8.27	114.81	108.20
1	N	517	G	N3-C4-C5	8.27	132.73	128.60
1	N	765	G	N3-C4-C5	-8.27	124.47	128.60
1	N	1178	G	C2-N3-C4	8.27	116.03	111.90
1	N	1260	G	N3-C2-N2	8.27	125.69	119.90
1	N	993	G	C8-N9-C1'	-8.26	116.26	127.00
1	N	1318	A	C8-N9-C4	-8.26	102.49	105.80
1	N	1263	C	C5-C4-N4	-8.26	114.42	120.20
1	N	766	A	C4-C5-C6	8.26	121.13	117.00
1	N	324	G	N3-C2-N2	8.26	125.68	119.90
1	N	818	G	N1-C2-N3	-8.26	118.95	123.90
1	N	1301	U	C2-N3-C4	-8.26	122.05	127.00
1	N	1488	G	N1-C2-N3	-8.26	118.95	123.90
1	N	268	U	P-O3'-C3'	8.25	129.60	119.70
1	N	351	G	C8-N9-C4	8.25	109.70	106.40
1	N	1401	G	C5-C6-O6	-8.25	123.65	128.60
1	N	754	C	N3-C4-C5	-8.25	118.60	121.90
1	N	588	G	C8-N9-C4	-8.25	103.10	106.40
1	N	921	U	C5-C4-O4	-8.25	120.95	125.90
1	N	1022	A	C6-C5-N7	-8.25	126.53	132.30
1	N	1510	C	N3-C4-N4	8.25	123.77	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	190	A	C5-C6-N6	-8.24	117.11	123.70
1	N	202	G	C5-N7-C8	-8.24	100.18	104.30
1	N	484	G	O4'-C1'-N9	8.24	114.80	108.20
1	N	573	A	N7-C8-N9	-8.24	109.68	113.80
1	N	1311	A	C6-C5-N7	-8.24	126.53	132.30
1	N	436	C	C5-C4-N4	-8.24	114.43	120.20
1	N	841	C	C2-N1-C1'	8.24	127.86	118.80
1	N	931	C	C4'-C3'-C2'	-8.24	94.36	102.60
1	N	484	G	C2-N3-C4	8.24	116.02	111.90
1	N	786	G	O4'-C1'-N9	8.24	114.79	108.20
1	N	533	A	C4'-C3'-C2'	-8.23	94.37	102.60
1	N	993	G	C6-C5-N7	-8.23	125.46	130.40
1	N	265	G	N3-C2-N2	8.23	125.66	119.90
1	N	269	C	N3-C4-N4	8.23	123.76	118.00
1	N	369	G	P-O3'-C3'	-8.23	109.82	119.70
1	N	857	C	C5-C4-N4	8.23	125.96	120.20
1	N	949	A	C8-N9-C4	-8.23	102.51	105.80
1	N	1338	G	N1-C6-O6	8.23	124.84	119.90
1	N	728	A	C5-C6-N6	-8.23	117.12	123.70
1	N	318	G	O4'-C1'-N9	8.23	114.78	108.20
1	N	543	U	N3-C2-O2	8.23	127.96	122.20
1	N	1255	G	N1-C2-N3	-8.23	118.96	123.90
1	N	557	G	P-O3'-C3'	8.22	129.57	119.70
1	N	948	C	N1-C2-N3	-8.22	113.44	119.20
1	N	1033	G	P-O5'-C5'	8.22	134.06	120.90
1	N	106	C	O4'-C1'-N1	8.22	114.78	108.20
1	N	830	G	O4'-C1'-N9	8.22	114.78	108.20
1	N	383	A	N7-C8-N9	8.22	117.91	113.80
1	N	1446	A	C8-N9-C4	-8.22	102.51	105.80
1	N	827	U	O4'-C1'-N1	8.22	114.78	108.20
1	N	949	A	C5-C6-N6	-8.22	117.13	123.70
1	N	1459	G	C8-N9-C4	-8.21	103.11	106.40
1	N	1433	A	C5-C6-N6	-8.21	117.13	123.70
1	N	575	G	C8-N9-C4	8.21	109.68	106.40
1	N	1191	A	O4'-C1'-N9	8.21	114.77	108.20
1	N	1462	C	C2-N3-C4	8.21	124.00	119.90
1	N	215	C	C2-N3-C4	8.21	124.00	119.90
1	N	307	C	C5-C4-N4	-8.21	114.46	120.20
1	N	881	G	C5-C6-N1	-8.21	107.40	111.50
1	N	570	G	C5-C6-O6	-8.20	123.68	128.60
1	N	918	A	C2-N3-C4	-8.20	106.50	110.60
1	N	520	A	C8-N9-C4	-8.20	102.52	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	582	C	N3-C4-C5	-8.20	118.62	121.90
1	N	718	A	C5-C6-N1	-8.20	113.60	117.70
1	N	1056	U	O4'-C1'-N1	8.20	114.76	108.20
1	N	996	A	N7-C8-N9	-8.20	109.70	113.80
1	N	1181	G	C5'-C4'-C3'	-8.20	102.88	116.00
1	N	207	C	O4'-C4'-C3'	-8.20	95.81	104.00
1	N	1476	A	C4-C5-C6	8.20	121.10	117.00
1	N	1498	U	C2-N3-C4	8.20	131.92	127.00
1	N	787	A	P-O5'-C5'	8.19	134.01	120.90
1	N	1110	A	C5-N7-C8	8.19	108.00	103.90
1	N	1143	G	O4'-C1'-N9	8.20	114.76	108.20
1	N	1487	G	C5'-C4'-C3'	-8.19	102.89	116.00
1	N	402	G	C5-C6-O6	-8.19	123.69	128.60
1	N	719	C	O4'-C1'-N1	8.19	114.75	108.20
1	N	736	C	N3-C2-O2	8.19	127.63	121.90
1	N	61	G	C6-N1-C2	8.19	130.01	125.10
1	N	1437	A	C4-C5-C6	8.19	121.09	117.00
1	N	170	U	C5-C4-O4	-8.19	120.99	125.90
1	N	347	G	O4'-C1'-N9	8.19	114.75	108.20
1	N	538	G	C6-C5-N7	-8.19	125.49	130.40
1	N	885	G	C4-C5-C6	8.19	123.71	118.80
1	N	1161	C	N3-C4-C5	-8.19	118.62	121.90
1	N	1184	G	C8-N9-C4	-8.19	103.13	106.40
1	N	1417	G	C1'-O4'-C4'	8.19	116.45	109.90
1	N	1508	A	N9-C4-C5	-8.19	102.53	105.80
1	N	62	U	C6-N1-C2	8.18	125.91	121.00
1	N	695	A	N3-C4-C5	-8.18	121.07	126.80
1	N	1059	C	C2-N3-C4	8.18	123.99	119.90
1	N	1324	A	O4'-C1'-N9	8.18	114.75	108.20
1	N	1009	U	C2-N3-C4	-8.18	122.09	127.00
1	N	1325	C	O4'-C1'-N1	8.18	114.75	108.20
1	N	58	C	C1'-O4'-C4'	8.18	116.44	109.90
1	N	508	U	N1-C2-O2	-8.18	117.07	122.80
1	N	148	G	N1-C2-N3	-8.18	118.99	123.90
1	N	178	C	N1-C2-N3	-8.18	113.47	119.20
1	N	648	A	C2-N3-C4	-8.18	106.51	110.60
1	N	1406	U	C6-N1-C2	-8.18	116.09	121.00
1	N	1409	C	N3-C2-O2	8.18	127.62	121.90
1	N	547	A	C4'-C3'-C2'	8.18	110.78	102.60
1	N	844	G	C4-C5-N7	8.18	114.07	110.80
1	N	868	C	C5-C4-N4	-8.18	114.48	120.20
1	N	889	A	C5-C6-N1	-8.18	113.61	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1041	G	O4'-C1'-N9	8.18	114.74	108.20
1	N	1114	C	C5-C4-N4	-8.18	114.48	120.20
1	N	1310	G	O4'-C1'-N9	8.18	114.74	108.20
1	N	1451	U	P-O5'-C5'	8.18	133.98	120.90
1	N	973	G	C4-C5-C6	-8.17	113.90	118.80
1	N	1223	C	N3-C4-C5	-8.17	118.63	121.90
1	N	1309	G	N9-C4-C5	8.17	108.67	105.40
1	N	68	G	C2-N3-C4	-8.17	107.82	111.90
1	N	391	G	C4-N9-C1'	-8.17	115.89	126.50
1	N	588	G	O4'-C1'-N9	8.17	114.73	108.20
1	N	622	A	N1-C6-N6	8.16	123.50	118.60
1	N	77	A	C8-N9-C4	-8.16	102.53	105.80
1	N	563	A	O4'-C1'-N9	8.16	114.73	108.20
1	N	184	G	N9-C4-C5	-8.16	102.14	105.40
1	N	727	G	N3-C2-N2	8.16	125.61	119.90
1	N	1190	G	C5-C6-N1	-8.16	107.42	111.50
1	N	23	C	O4'-C1'-N1	8.16	114.73	108.20
1	N	391	G	N1-C6-O6	8.16	124.80	119.90
1	N	432	A	C5-C6-N6	-8.16	117.17	123.70
1	N	450	G	N3-C2-N2	8.16	125.61	119.90
1	N	833	G	C5-C6-N1	-8.16	107.42	111.50
1	N	131	A	C5-C6-N1	-8.16	113.62	117.70
1	N	498	A	P-O3'-C3'	-8.16	109.91	119.70
1	N	564	C	O4'-C1'-N1	8.16	114.72	108.20
1	N	1342	C	P-O3'-C3'	-8.16	109.91	119.70
1	N	274	A	N1-C6-N6	8.15	123.49	118.60
1	N	712	A	C2-N3-C4	8.15	114.68	110.60
1	N	999	C	C2-N3-C4	8.15	123.98	119.90
1	N	1277	C	C5-C4-N4	-8.15	114.49	120.20
1	N	26	A	N1-C2-N3	8.15	133.38	129.30
1	N	132	C	N3-C4-N4	8.15	123.70	118.00
1	N	162	A	N7-C8-N9	-8.15	109.72	113.80
1	N	712	A	C6-C5-N7	-8.15	126.59	132.30
1	N	279	A	C5-C6-N6	-8.15	117.18	123.70
1	N	819	A	C5-C6-N1	-8.15	113.62	117.70
1	N	1223	C	C2-N3-C4	8.15	123.97	119.90
1	N	1075	U	C6-N1-C2	-8.15	116.11	121.00
1	N	1221	G	O4'-C1'-N9	8.14	114.72	108.20
1	N	1485	U	N1-C2-N3	8.14	119.79	114.90
1	N	1509	C	C2-N1-C1'	8.14	127.76	118.80
1	N	695	A	C6-C5-N7	-8.14	126.60	132.30
1	N	258	G	C5-C6-O6	-8.14	123.72	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	604	G	C6-C5-N7	-8.14	125.52	130.40
1	N	811	C	C4'-C3'-C2'	-8.14	94.46	102.60
1	N	937	A	N3-C4-C5	-8.14	121.10	126.80
1	N	14	U	N3-C4-O4	8.14	125.10	119.40
1	N	745	G	C6-C5-N7	-8.14	125.52	130.40
1	N	1282	C	C5-C4-N4	-8.13	114.51	120.20
1	N	80	A	C4-C5-C6	8.13	121.07	117.00
1	N	296	U	C5-C6-N1	8.13	126.77	122.70
1	N	836	G	N1-C6-O6	8.13	124.78	119.90
1	N	897	C	C2-N3-C4	8.13	123.97	119.90
1	N	1504	G	P-O3'-C3'	8.13	129.45	119.70
1	N	136	C	C2-N3-C4	8.12	123.96	119.90
1	N	163	C	C3'-C2'-C1'	-8.12	95.00	101.50
1	N	563	A	C6-C5-N7	-8.12	126.61	132.30
1	N	1234	C	O4'-C1'-N1	8.12	114.70	108.20
1	N	1304	G	P-O3'-C3'	8.12	129.45	119.70
1	N	676	A	O4'-C1'-N9	8.12	114.70	108.20
1	N	285	C	O4'-C1'-N1	8.12	114.70	108.20
1	N	468	A	C5-C6-N6	-8.12	117.20	123.70
1	N	726	C	C6-N1-C2	-8.12	117.05	120.30
1	N	1373	G	N1-C6-O6	8.12	124.77	119.90
1	N	1439	G	C4-C5-C6	8.12	123.67	118.80
1	N	887	G	N9-C4-C5	8.12	108.65	105.40
1	N	1043	G	C5-C6-N1	-8.12	107.44	111.50
1	N	630	A	C5-C6-N1	-8.12	113.64	117.70
1	N	1248	A	N1-C2-N3	-8.12	125.24	129.30
1	N	1463	U	N3-C4-C5	-8.12	109.73	114.60
1	N	1041	G	C5-C6-N1	-8.11	107.44	111.50
1	N	1198	G	O4'-C1'-N9	8.11	114.69	108.20
1	N	46	G	N1-C6-O6	8.11	124.77	119.90
1	N	199	A	P-O3'-C3'	-8.11	109.97	119.70
1	N	384	G	N1-C6-O6	8.11	124.77	119.90
1	N	537	G	C6-C5-N7	-8.11	125.53	130.40
1	N	240	G	N1-C6-O6	8.11	124.76	119.90
1	N	485	U	N1-C2-O2	8.11	128.47	122.80
1	N	506	G	C5-C6-N1	-8.11	107.45	111.50
1	N	826	C	C2-N3-C4	8.11	123.95	119.90
1	N	1297	G	C2-N3-C4	8.11	115.95	111.90
1	N	18	C	N1-C2-N3	-8.10	113.53	119.20
1	N	838	G	C6-C5-N7	-8.10	125.54	130.40
1	N	765	G	C8-N9-C4	-8.10	103.16	106.40
1	N	631	C	C5-C6-N1	8.10	125.05	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	896	C	O4'-C1'-N1	8.10	114.68	108.20
1	N	283	U	O4'-C1'-N1	8.10	114.68	108.20
1	N	393	A	O4'-C1'-N9	8.10	114.68	108.20
1	N	739	C	C2-N3-C4	8.10	123.95	119.90
1	N	414	A	C4-C5-C6	8.09	121.05	117.00
1	N	579	A	C4-C5-C6	8.09	121.05	117.00
1	N	970	C	O4'-C1'-C2'	8.09	114.88	107.60
1	N	1216	A	O4'-C4'-C3'	-8.09	95.91	104.00
1	N	166	U	O4'-C1'-N1	8.09	114.67	108.20
1	N	192	A	C4-C5-C6	8.09	121.04	117.00
1	N	758	C	N3-C4-C5	-8.09	118.67	121.90
1	N	1007	U	P-O3'-C3'	8.09	129.41	119.70
1	N	425	G	C5-N7-C8	-8.09	100.26	104.30
1	N	587	G	C4'-C3'-C2'	-8.09	94.52	102.60
1	N	1035	A	C2-N3-C4	-8.09	106.56	110.60
1	N	1100	C	C6-N1-C2	-8.09	117.07	120.30
1	N	684	U	O4'-C1'-N1	8.08	114.67	108.20
1	N	763	G	N1-C6-O6	8.08	124.75	119.90
1	N	1341	U	O4'-C1'-N1	8.08	114.67	108.20
1	N	408	A	C8-N9-C4	-8.08	102.57	105.80
1	N	434	U	C4-C5-C6	8.08	124.55	119.70
1	N	145	G	C2-N3-C4	-8.08	107.86	111.90
1	N	254	G	C2-N3-C4	8.08	115.94	111.90
1	N	1098	C	O4'-C1'-N1	8.08	114.66	108.20
1	N	1340	A	O4'-C1'-N9	8.08	114.66	108.20
1	N	524	G	C6-C5-N7	-8.08	125.55	130.40
1	N	1282	C	C2-N1-C1'	8.08	127.69	118.80
1	N	69	G	N1-C6-O6	8.08	124.75	119.90
1	N	172	A	C5-C6-N1	-8.08	113.66	117.70
1	N	307	C	C2-N1-C1'	8.08	127.68	118.80
1	N	558	G	C5-N7-C8	8.08	108.34	104.30
1	N	101	A	C5-C6-N1	-8.07	113.66	117.70
1	N	149	A	P-O3'-C3'	8.07	129.39	119.70
1	N	630	A	N1-C6-N6	8.07	123.44	118.60
1	N	758	C	C4'-C3'-C2'	-8.07	94.53	102.60
1	N	558	G	C5-C6-N1	-8.07	107.47	111.50
1	N	509	A	N1-C6-N6	8.07	123.44	118.60
1	N	1101	A	C5-C6-N6	-8.07	117.25	123.70
1	N	1510	C	C2-N3-C4	8.07	123.93	119.90
1	N	94	G	N1-C2-N2	8.06	123.46	116.20
1	N	366	A	C4'-C3'-C2'	8.06	110.67	102.60
1	N	1240	U	C5-C6-N1	8.06	126.73	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1343	G	C5-C6-N1	-8.06	107.47	111.50
1	N	41	G	N1-C6-O6	8.06	124.74	119.90
1	N	138	G	N9-C4-C5	8.06	108.62	105.40
1	N	140	U	C5-C6-N1	-8.06	118.67	122.70
1	N	881	G	C4-C5-C6	8.06	123.64	118.80
1	N	1017	U	N3-C4-O4	8.06	125.04	119.40
1	N	1162	C	O4'-C1'-N1	8.06	114.65	108.20
1	N	414	A	C5-C6-N1	-8.06	113.67	117.70
1	N	685	G	O4'-C1'-N9	8.06	114.65	108.20
1	N	765	G	N7-C8-N9	8.06	117.13	113.10
1	N	1519	A	O4'-C1'-N9	8.06	114.65	108.20
1	N	167	A	N1-C2-N3	8.06	133.33	129.30
1	N	1256	A	C4-C5-C6	8.05	121.03	117.00
1	N	546	A	O4'-C1'-N9	8.05	114.64	108.20
1	N	1032	G	P-O5'-C5'	8.05	133.78	120.90
1	N	1408	A	C6-C5-N7	-8.05	126.67	132.30
1	N	615	G	O4'-C1'-N9	8.05	114.64	108.20
1	N	856	C	O4'-C4'-C3'	-8.05	95.95	104.00
1	N	55	A	O4'-C1'-N9	8.05	114.64	108.20
1	N	845	A	N7-C8-N9	-8.05	109.78	113.80
1	N	1276	G	N3-C4-N9	-8.05	121.17	126.00
1	N	534	U	C5-C4-O4	-8.04	121.07	125.90
1	N	495	A	O4'-C1'-N9	8.04	114.64	108.20
1	N	851	G	O4'-C1'-N9	8.04	114.63	108.20
1	N	1216	A	C5-N7-C8	8.04	107.92	103.90
1	N	329	A	C5-C6-N1	-8.04	113.68	117.70
1	N	465	A	O4'-C1'-N9	8.04	114.63	108.20
1	N	937	A	N3-C4-N9	8.04	133.83	127.40
1	N	1311	A	N1-C6-N6	8.04	123.42	118.60
1	N	577	G	C1'-O4'-C4'	8.03	116.33	109.90
1	N	1373	G	N3-C4-C5	8.04	132.62	128.60
1	N	1479	C	O4'-C1'-N1	8.03	114.63	108.20
1	N	275	G	O4'-C1'-N9	8.03	114.62	108.20
1	N	741	G	N1-C2-N3	-8.03	119.08	123.90
1	N	1007	U	O4'-C1'-N1	8.03	114.63	108.20
1	N	790	A	O4'-C1'-N9	8.03	114.62	108.20
1	N	1113	C	N1-C2-O2	8.03	123.72	118.90
1	N	387	U	N3-C4-O4	8.03	125.02	119.40
1	N	509	A	C4-C5-C6	8.03	121.01	117.00
1	N	821	G	N7-C8-N9	-8.03	109.08	113.10
1	N	899	C	C6-N1-C2	-8.03	117.09	120.30
1	N	996	A	C5-N7-C8	8.03	107.91	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1287	A	C5-C6-N1	-8.03	113.69	117.70
1	N	1498	U	N3-C4-O4	8.03	125.02	119.40
1	N	426	U	C2-N1-C1'	-8.03	108.07	117.70
1	N	1353	G	N9-C4-C5	8.03	108.61	105.40
1	N	264	C	C5-C6-N1	-8.02	116.99	121.00
1	N	601	G	C5-C6-O6	-8.02	123.78	128.60
1	N	1130	A	O4'-C1'-N9	8.02	114.62	108.20
1	N	111	G	N3-C4-N9	-8.02	121.19	126.00
1	N	404	G	C5-N7-C8	8.02	108.31	104.30
1	N	610	U	P-O5'-C5'	-8.02	108.06	120.90
1	N	1156	G	C5-C6-N1	-8.02	107.49	111.50
1	N	1210	C	P-O5'-C5'	-8.02	108.06	120.90
1	N	1347	G	N3-C2-N2	8.02	125.52	119.90
1	N	1475	G	C5-C6-O6	-8.02	123.79	128.60
1	N	1477	U	O4'-C1'-N1	8.02	114.62	108.20
1	N	1530	G	P-O5'-C5'	-8.02	108.07	120.90
1	N	686	U	C1'-O4'-C4'	-8.02	103.48	109.90
1	N	1155	A	N1-C6-N6	8.02	123.41	118.60
1	N	30	U	C3'-C2'-C1'	8.02	107.91	101.50
1	N	891	U	N3-C4-C5	8.02	119.41	114.60
1	N	1078	U	C5-C4-O4	-8.02	121.09	125.90
1	N	1294	G	C4-C5-N7	-8.02	107.59	110.80
1	N	194	C	N3-C4-N4	8.01	123.61	118.00
1	N	775	G	P-O3'-C3'	-8.01	110.08	119.70
1	N	462	G	N1-C6-O6	8.01	124.71	119.90
1	N	810	C	C2-N3-C4	8.01	123.91	119.90
1	N	225	C	O4'-C1'-N1	8.01	114.61	108.20
1	N	705	G	N3-C4-C5	8.01	132.60	128.60
1	N	775	G	N9-C4-C5	-8.01	102.20	105.40
1	N	1115	U	C5-C6-N1	8.01	126.70	122.70
1	N	26	A	O4'-C1'-N9	8.01	114.61	108.20
1	N	182	A	C2-N3-C4	-8.00	106.60	110.60
1	N	197	A	C5'-C4'-C3'	8.00	128.81	116.00
1	N	261	U	N1-C2-N3	8.00	119.70	114.90
1	N	404	G	C5-C6-O6	-8.00	123.80	128.60
1	N	630	A	C3'-C2'-C1'	8.00	107.90	101.50
1	N	1508	A	C8-N9-C4	8.00	109.00	105.80
1	N	109	A	N9-C4-C5	8.00	109.00	105.80
1	N	1485	U	C5-C6-N1	8.00	126.70	122.70
1	N	1516	G	C4'-C3'-C2'	-8.00	94.60	102.60
1	N	596	A	C6-C5-N7	-8.00	126.70	132.30
1	N	957	U	P-O5'-C5'	8.00	133.69	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	310	G	O4'-C1'-N9	8.00	114.60	108.20
1	N	1322	C	C2-N3-C4	7.99	123.90	119.90
1	N	407	U	O4'-C1'-N1	7.99	114.59	108.20
1	N	858	G	N3-C2-N2	7.99	125.49	119.90
1	N	935	A	C5-C6-N6	-7.99	117.31	123.70
1	N	1483	A	C3'-C2'-C1'	-7.99	95.11	101.50
1	N	66	A	C6-N1-C2	7.99	123.39	118.60
1	N	1433	A	C1'-O4'-C4'	7.99	116.29	109.90
1	N	441	A	C4-C5-C6	7.99	120.99	117.00
1	N	691	G	N1-C6-O6	7.99	124.69	119.90
1	N	1253	G	C5-C6-N1	-7.99	107.51	111.50
1	N	1206	G	C8-N9-C4	7.98	109.59	106.40
1	N	174	A	O4'-C1'-N9	7.98	114.59	108.20
1	N	575	G	N7-C8-N9	-7.98	109.11	113.10
1	N	899	C	C4-C5-C6	7.98	121.39	117.40
1	N	918	A	C8-N9-C4	-7.98	102.61	105.80
1	N	567	G	C4-C5-N7	7.98	113.99	110.80
1	N	1000	A	C4-C5-C6	7.98	120.99	117.00
1	N	1257	A	C5-C6-N6	-7.98	117.31	123.70
1	N	1518	A	C5-C6-N6	-7.98	117.31	123.70
1	N	1185	G	C5-C6-O6	-7.98	123.81	128.60
1	N	1201	A	N1-C6-N6	7.98	123.39	118.60
1	N	841	C	C6-N1-C1'	-7.98	111.23	120.80
1	N	1002	G	C4-C5-N7	-7.98	107.61	110.80
1	N	243	A	C1'-O4'-C4'	7.97	116.28	109.90
1	N	449	G	C8-N9-C4	-7.97	103.21	106.40
1	N	1055	A	C6-C5-N7	-7.97	126.72	132.30
1	N	753	A	C5-C6-N1	-7.97	113.71	117.70
1	N	86	G	C8-N9-C4	-7.97	103.21	106.40
1	N	67	C	C2-N3-C4	7.97	123.88	119.90
1	N	726	C	N3-C4-N4	7.97	123.58	118.00
1	N	133	U	C5-C6-N1	-7.97	118.72	122.70
1	N	556	C	C4-C5-C6	-7.96	113.42	117.40
1	N	954	G	O4'-C1'-N9	7.96	114.57	108.20
1	N	1464	U	N3-C4-C5	-7.96	109.82	114.60
1	N	1014	A	C4-C5-C6	7.96	120.98	117.00
1	N	698	G	O4'-C1'-N9	7.96	114.57	108.20
1	N	360	G	C8-N9-C4	-7.96	103.22	106.40
1	N	171	A	C5'-C4'-C3'	-7.96	103.27	116.00
1	N	566	G	C5-C6-O6	-7.96	123.83	128.60
1	N	797	C	C2-N1-C1'	-7.96	110.05	118.80
1	N	953	G	N1-C2-N3	-7.96	119.12	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1296	C	N1-C2-O2	7.96	123.67	118.90
1	N	9	G	N9-C4-C5	-7.96	102.22	105.40
1	N	35	G	C5-C6-N1	-7.96	107.52	111.50
1	N	566	G	O4'-C1'-N9	7.96	114.56	108.20
1	N	624	C	C5-C4-N4	-7.96	114.63	120.20
1	N	260	G	N1-C6-O6	7.95	124.67	119.90
1	N	80	A	C5-C6-N6	-7.95	117.34	123.70
1	N	282	A	C2-N3-C4	-7.95	106.62	110.60
1	N	468	A	N1-C2-N3	-7.95	125.33	129.30
1	N	796	C	C6-N1-C2	-7.95	117.12	120.30
1	N	1440	U	N3-C4-C5	-7.95	109.83	114.60
1	N	526	C	C5'-C4'-C3'	7.95	128.72	116.00
1	N	534	U	O4'-C1'-N1	7.95	114.56	108.20
1	N	845	A	C5-N7-C8	7.94	107.87	103.90
1	N	9	G	C2-N3-C4	-7.94	107.93	111.90
1	N	583	A	N9-C4-C5	7.94	108.98	105.80
1	N	1142	G	N3-C4-C5	7.94	132.57	128.60
1	N	58	C	C6-N1-C2	-7.94	117.12	120.30
1	N	258	G	O4'-C1'-N9	7.94	114.55	108.20
1	N	891	U	N1-C2-N3	-7.94	110.14	114.90
1	N	1287	A	P-O5'-C5'	7.94	133.60	120.90
1	N	280	C	P-O3'-C3'	7.94	129.22	119.70
1	N	1355	G	O4'-C1'-N9	7.94	114.55	108.20
1	N	1387	G	O4'-C1'-N9	7.94	114.55	108.20
1	N	428	G	N1-C6-O6	7.94	124.66	119.90
1	N	81	A	N9-C1'-C2'	7.93	124.31	114.00
1	N	107	G	C8-N9-C4	-7.93	103.23	106.40
1	N	361	G	N1-C2-N3	-7.93	119.14	123.90
1	N	523	A	O4'-C1'-N9	7.93	114.55	108.20
1	N	604	G	C2-N3-C4	-7.93	107.93	111.90
1	N	1294	G	C5-C6-N1	-7.93	107.53	111.50
1	N	308	C	C2-N1-C1'	7.93	127.53	118.80
1	N	608	A	C5-C6-N1	-7.93	113.73	117.70
1	N	736	C	N3-C4-N4	7.93	123.55	118.00
1	N	358	U	N1-C2-N3	-7.93	110.14	114.90
1	N	507	C	N3-C4-C5	-7.93	118.73	121.90
1	N	840	C	C6-N1-C1'	-7.93	111.29	120.80
1	N	925	G	N3-C2-N2	7.93	125.45	119.90
1	N	1231	G	N1-C6-O6	7.92	124.65	119.90
1	N	576	C	O4'-C1'-N1	7.92	114.53	108.20
1	N	843	U	C2-N1-C1'	7.92	127.20	117.70
1	N	1032	G	C5-C6-O6	-7.92	123.85	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1141	C	C6-N1-C2	-7.92	117.13	120.30
1	N	1278	G	C8-N9-C1'	-7.92	116.71	127.00
1	N	1441	A	O4'-C1'-N9	7.92	114.53	108.20
1	N	607	A	C5'-C4'-O4'	7.92	118.60	109.10
1	N	801	U	C2-N3-C4	-7.92	122.25	127.00
1	N	36	C	C5-C6-N1	7.92	124.96	121.00
1	N	974	A	N1-C2-N3	7.92	133.26	129.30
1	N	1314	C	C5-C4-N4	-7.92	114.66	120.20
1	N	237	G	N1-C2-N3	-7.91	119.15	123.90
1	N	17	U	O4'-C4'-C3'	-7.91	96.09	104.00
1	N	358	U	P-O3'-C3'	-7.91	110.21	119.70
1	N	1019	A	C6-C5-N7	-7.91	126.76	132.30
1	N	1225	A	N3-C4-C5	-7.91	121.26	126.80
1	N	1395	C	O3'-P-O5'	-7.91	88.97	104.00
1	N	151	A	O4'-C1'-N9	7.91	114.53	108.20
1	N	421	U	N1-C2-O2	-7.91	117.27	122.80
1	N	755	G	C5-C6-O6	-7.91	123.86	128.60
1	N	1459	G	C4-C5-N7	-7.91	107.64	110.80
1	N	77	A	C6-C5-N7	-7.91	126.77	132.30
1	N	442	G	N7-C8-N9	-7.91	109.15	113.10
1	N	1320	C	C6-N1-C2	-7.91	117.14	120.30
1	N	326	G	C2-N3-C4	7.90	115.85	111.90
1	N	430	A	O4'-C1'-N9	7.90	114.52	108.20
1	N	1155	A	C2-N3-C4	7.90	114.55	110.60
1	N	1046	A	C8-N9-C4	7.90	108.96	105.80
1	N	1530	G	C4-C5-C6	7.90	123.54	118.80
1	N	117	G	C4-C5-C6	7.90	123.54	118.80
1	N	143	A	O4'-C1'-N9	7.90	114.52	108.20
1	N	181	A	C4'-C3'-C2'	-7.90	94.70	102.60
1	N	974	A	P-O3'-C3'	7.90	129.18	119.70
1	N	1101	A	C8-N9-C4	7.90	108.96	105.80
1	N	1290	G	N1-C6-O6	7.90	124.64	119.90
1	N	805	C	N3-C4-N4	7.90	123.53	118.00
1	N	1419	G	C2-N3-C4	7.89	115.85	111.90
1	N	362	G	N3-C2-N2	7.89	125.42	119.90
1	N	1046	A	C5-C6-N6	-7.89	117.39	123.70
1	N	1129	C	C1'-O4'-C4'	-7.89	103.59	109.90
1	N	290	C	C5-C6-N1	7.89	124.94	121.00
1	N	684	U	C4-C5-C6	-7.89	114.97	119.70
1	N	738	C	O4'-C1'-N1	7.88	114.51	108.20
1	N	1251	A	N9-C1'-C2'	-7.88	103.33	112.00
1	N	105	G	C6-C5-N7	-7.88	125.67	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	922	G	O4'-C1'-N9	7.88	114.50	108.20
1	N	98	A	C5-C6-N6	-7.88	117.40	123.70
1	N	744	C	C4-C5-C6	7.88	121.34	117.40
1	N	1442	G	C5-N7-C8	7.88	108.24	104.30
1	N	335	C	P-O3'-C3'	-7.88	110.25	119.70
1	N	418	C	N1-C2-O2	-7.88	114.17	118.90
1	N	612	C	C5-C4-N4	-7.88	114.69	120.20
1	N	1416	G	P-O3'-C3'	-7.88	110.25	119.70
1	N	88	U	O4'-C1'-N1	7.87	114.50	108.20
1	N	222	C	N3-C4-C5	-7.87	118.75	121.90
1	N	563	A	C4-N9-C1'	7.87	140.47	126.30
1	N	1410	A	C5-C6-N6	-7.87	117.40	123.70
1	N	255	G	C6-C5-N7	-7.87	125.68	130.40
1	N	322	C	N3-C4-C5	-7.87	118.75	121.90
1	N	410	G	P-O3'-C3'	7.87	129.15	119.70
1	N	736	C	C5-C4-N4	-7.87	114.69	120.20
1	N	240	G	C5-C6-N1	-7.87	107.56	111.50
1	N	626	G	C4-C5-C6	7.87	123.52	118.80
1	N	626	G	N1-C6-O6	7.87	124.62	119.90
1	N	310	G	C5-C6-N1	-7.87	107.57	111.50
1	N	374	A	C5'-C4'-O4'	-7.87	99.66	109.10
1	N	429	U	C2-N3-C4	-7.87	122.28	127.00
1	N	1020	G	C4-C5-N7	7.87	113.95	110.80
1	N	1343	G	N1-C6-O6	7.87	124.62	119.90
1	N	235	C	N3-C4-N4	7.86	123.50	118.00
1	N	898	G	N7-C8-N9	7.86	117.03	113.10
1	N	919	A	C5-C6-N6	-7.86	117.41	123.70
1	N	1276	G	C5-C6-O6	-7.86	123.88	128.60
1	N	658	C	N3-C4-N4	7.86	123.50	118.00
1	N	1517	G	N1-C6-O6	7.86	124.62	119.90
1	N	1061	G	N3-C4-N9	-7.86	121.29	126.00
1	N	1226	C	N3-C2-O2	7.86	127.40	121.90
1	N	1397	C	C5-C6-N1	7.86	124.93	121.00
1	N	33	A	P-O3'-C3'	7.86	129.13	119.70
1	N	528	C	C5-C4-N4	-7.86	114.70	120.20
1	N	1244	G	C5-C6-N1	-7.86	107.57	111.50
1	N	1071	C	N3-C4-C5	-7.85	118.76	121.90
1	N	402	G	C4-C5-N7	7.85	113.94	110.80
1	N	709	U	O4'-C1'-N1	7.85	114.48	108.20
1	N	181	A	O4'-C1'-N9	7.85	114.48	108.20
1	N	168	G	C4'-C3'-C2'	-7.85	94.75	102.60
1	N	400	C	N1-C2-O2	7.85	123.61	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1361	G	N3-C2-N2	7.85	125.39	119.90
1	N	693	G	P-O3'-C3'	7.85	129.12	119.70
1	N	1459	G	N9-C4-C5	7.85	108.54	105.40
1	N	447	G	C6-C5-N7	-7.84	125.69	130.40
1	N	1419	G	C5-N7-C8	-7.84	100.38	104.30
1	N	16	A	C6-C5-N7	-7.84	126.81	132.30
1	N	720	C	C4-C5-C6	7.84	121.32	117.40
1	N	1230	C	N3-C4-N4	7.84	123.49	118.00
1	N	764	C	C2-N3-C4	7.84	123.82	119.90
1	N	1426	G	N1-C2-N3	-7.84	119.20	123.90
1	N	1079	G	P-O3'-C3'	7.84	129.11	119.70
1	N	1297	G	C5-C6-O6	-7.84	123.90	128.60
1	N	236	A	C4-C5-C6	7.84	120.92	117.00
1	N	929	G	C5-N7-C8	7.84	108.22	104.30
1	N	1442	G	C8-N9-C4	-7.84	103.27	106.40
1	N	761	G	O4'-C1'-N9	7.83	114.47	108.20
1	N	932	C	N1-C2-N3	7.83	124.68	119.20
1	N	25	C	C6-N1-C2	7.83	123.43	120.30
1	N	1055	A	C4-C5-C6	7.83	120.92	117.00
1	N	1142	G	N3-C4-N9	-7.83	121.30	126.00
1	N	780	A	C5-C6-N1	-7.83	113.79	117.70
1	N	996	A	C8-N9-C4	7.83	108.93	105.80
1	N	1248	A	C2-N3-C4	7.83	114.51	110.60
1	N	1464	U	O4'-C1'-N1	7.83	114.46	108.20
1	N	198	G	C5-C6-O6	7.83	133.30	128.60
1	N	1237	C	C6-N1-C2	-7.83	117.17	120.30
1	N	85	U	C5-C4-O4	7.83	130.59	125.90
1	N	321	A	N9-C4-C5	-7.83	102.67	105.80
1	N	451	A	C5-C6-N6	-7.83	117.44	123.70
1	N	533	A	C4-C5-C6	7.83	120.91	117.00
1	N	2	A	C5-C6-N6	-7.82	117.44	123.70
1	N	122	G	C5-C6-O6	-7.82	123.91	128.60
1	N	507	C	N3-C4-N4	7.82	123.48	118.00
1	N	712	A	N7-C8-N9	7.82	117.71	113.80
1	N	159	G	N7-C8-N9	-7.82	109.19	113.10
1	N	483	C	O4'-C1'-N1	7.82	114.46	108.20
1	N	1147	C	P-O3'-C3'	7.82	129.09	119.70
1	N	1192	C	O4'-C1'-N1	7.82	114.46	108.20
1	N	578	C	C2-N3-C4	7.82	123.81	119.90
1	N	721	G	C6-C5-N7	-7.82	125.71	130.40
1	N	730	G	O4'-C4'-C3'	-7.82	96.18	104.00
1	N	1123	U	O4'-C1'-N1	7.82	114.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1407	C	O4'-C1'-N1	7.81	114.45	108.20
1	N	486	U	C5'-C4'-C3'	-7.81	103.50	116.00
1	N	487	A	O4'-C1'-N9	7.81	114.45	108.20
1	N	999	C	C4-C5-C6	-7.81	113.49	117.40
1	N	1059	C	C6-N1-C1'	-7.81	111.42	120.80
1	N	1088	G	O4'-C1'-N9	7.81	114.45	108.20
1	N	1342	C	O4'-C1'-N1	7.81	114.45	108.20
1	N	326	G	N1-C2-N3	-7.81	119.21	123.90
1	N	1062	U	N3-C4-C5	-7.81	109.91	114.60
1	N	484	G	C6-C5-N7	-7.81	125.72	130.40
1	N	978	A	C5-C6-N1	-7.81	113.80	117.70
1	N	1099	G	N3-C4-C5	7.81	132.50	128.60
1	N	699	C	N3-C4-N4	7.80	123.46	118.00
1	N	1051	C	O4'-C1'-N1	7.80	114.44	108.20
1	N	1097	C	O4'-C1'-N1	7.80	114.44	108.20
1	N	1196	A	C5-C6-N1	-7.80	113.80	117.70
1	N	100	G	N9-C4-C5	7.80	108.52	105.40
1	N	149	A	C8-N9-C4	-7.80	102.68	105.80
1	N	570	G	N1-C6-O6	7.80	124.58	119.90
1	N	579	A	N9-C4-C5	-7.80	102.68	105.80
1	N	1113	C	C5'-C4'-C3'	-7.80	103.52	116.00
1	N	1187	G	C4-N9-C1'	7.80	136.64	126.50
1	N	1461	G	N1-C6-O6	7.80	124.58	119.90
1	N	1284	C	C5-C4-N4	-7.80	114.74	120.20
1	N	1343	G	C6-C5-N7	-7.80	125.72	130.40
1	N	1352	C	C5-C4-N4	-7.80	114.74	120.20
1	N	1416	G	C4-C5-C6	7.80	123.48	118.80
1	N	1260	G	N1-C6-O6	7.79	124.58	119.90
1	N	413	G	C5-C6-O6	-7.79	123.92	128.60
1	N	1125	U	O4'-C1'-N1	7.79	114.44	108.20
1	N	1282	C	N1-C2-O2	-7.79	114.22	118.90
1	N	1400	C	N1-C2-O2	7.79	123.58	118.90
1	N	733	G	N3-C2-N2	7.79	125.35	119.90
1	N	1131	G	C3'-C2'-C1'	-7.79	95.27	101.50
1	N	883	C	N1-C2-O2	7.79	123.57	118.90
1	N	1002	G	C5-N7-C8	7.79	108.19	104.30
1	N	587	G	N3-C2-N2	7.79	125.35	119.90
1	N	1433	A	P-O3'-C3'	7.79	129.04	119.70
1	N	116	A	C5-C6-N1	-7.79	113.81	117.70
1	N	56	U	N3-C4-O4	7.78	124.85	119.40
1	N	835	U	C5-C4-O4	-7.78	121.23	125.90
1	N	970	C	C6-N1-C1'	-7.78	111.46	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1347	G	C6-N1-C2	7.78	129.77	125.10
1	N	533	A	C5-C6-N6	-7.78	117.47	123.70
1	N	888	G	C6-C5-N7	-7.78	125.73	130.40
1	N	980	C	N3-C4-C5	-7.78	118.79	121.90
1	N	1348	U	C6-N1-C2	-7.78	116.33	121.00
1	N	36	C	C5-C4-N4	-7.78	114.75	120.20
1	N	329	A	N1-C2-N3	7.78	133.19	129.30
1	N	450	G	C5-C6-O6	-7.78	123.93	128.60
1	N	1195	C	N3-C4-N4	7.78	123.45	118.00
1	N	31	G	C5-C6-O6	-7.78	123.93	128.60
1	N	579	A	C5-C6-N1	-7.78	113.81	117.70
1	N	169	C	O4'-C1'-N1	7.78	114.42	108.20
1	N	403	C	N1-C2-O2	7.78	123.57	118.90
1	N	915	A	C6-N1-C2	7.78	123.27	118.60
1	N	1223	C	N3-C4-N4	7.78	123.44	118.00
1	N	1502	A	N7-C8-N9	-7.77	109.91	113.80
1	N	40	C	N3-C4-N4	7.77	123.44	118.00
1	N	1130	A	N7-C8-N9	7.77	117.69	113.80
1	N	1223	C	C6-N1-C2	-7.77	117.19	120.30
1	N	879	C	N1-C2-O2	-7.77	114.24	118.90
1	N	379	C	N3-C4-N4	7.77	123.44	118.00
1	N	887	G	O4'-C1'-N9	7.77	114.42	108.20
1	N	193	C	C5-C6-N1	-7.77	117.12	121.00
1	N	171	A	C5-C6-N6	-7.76	117.49	123.70
1	N	1246	A	C6-C5-N7	-7.76	126.87	132.30
1	N	164	G	C5-C6-N1	-7.76	107.62	111.50
1	N	319	G	N3-C2-N2	7.76	125.33	119.90
1	N	694	A	C5-C6-N6	-7.76	117.50	123.70
1	N	1144	G	P-O3'-C3'	7.76	129.01	119.70
1	N	1193	G	N1-C6-O6	7.76	124.55	119.90
1	N	620	C	N3-C4-N4	7.75	123.43	118.00
1	N	75	G	C6-C5-N7	-7.75	125.75	130.40
1	N	960	U	C2-N1-C1'	7.75	127.00	117.70
1	N	1234	C	N3-C4-N4	7.75	123.43	118.00
1	N	1362	A	C6-C5-N7	-7.75	126.87	132.30
1	N	597	G	C5-C6-O6	-7.75	123.95	128.60
1	N	659	U	N3-C2-O2	7.75	127.62	122.20
1	N	1435	G	C5-C6-O6	-7.75	123.95	128.60
1	N	559	A	N7-C8-N9	7.75	117.67	113.80
1	N	205	A	N1-C2-N3	7.74	133.17	129.30
1	N	271	C	C5-C4-N4	-7.74	114.78	120.20
1	N	298	A	P-O5'-C5'	-7.74	108.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	927	G	P-O5'-C5'	-7.74	108.51	120.90
1	N	1256	A	O4'-C1'-N9	7.74	114.39	108.20
1	N	87	C	C5'-C4'-O4'	-7.74	99.81	109.10
1	N	955	U	C6-N1-C1'	-7.74	110.36	121.20
1	N	372	C	N3-C4-C5	-7.74	118.80	121.90
1	N	630	A	C8-N9-C4	-7.74	102.70	105.80
1	N	647	C	N1-C2-N3	-7.74	113.78	119.20
1	N	114	U	N1-C2-N3	-7.74	110.26	114.90
1	N	453	G	O4'-C1'-N9	7.74	114.39	108.20
1	N	1019	A	N1-C6-N6	7.74	123.24	118.60
1	N	818	G	C5-C6-O6	-7.74	123.96	128.60
1	N	897	C	C3'-C2'-C1'	-7.74	95.31	101.50
1	N	382	A	C4-C5-C6	7.74	120.87	117.00
1	N	716	A	O4'-C1'-N9	7.74	114.39	108.20
1	N	140	U	P-O3'-C3'	7.73	128.98	119.70
1	N	1277	C	C6-N1-C2	-7.73	117.21	120.30
1	N	154	U	N3-C4-C5	-7.73	109.96	114.60
1	N	556	C	C5-C6-N1	7.73	124.87	121.00
1	N	925	G	C4-C5-N7	7.73	113.89	110.80
1	N	604	G	C5-C6-N1	-7.73	107.64	111.50
1	N	838	G	O4'-C1'-N9	7.73	114.38	108.20
1	N	928	G	C5-N7-C8	7.73	108.16	104.30
1	N	304	U	O4'-C1'-N1	7.72	114.38	108.20
1	N	378	G	C2-N3-C4	-7.72	108.04	111.90
1	N	933	G	C5-N7-C8	7.72	108.16	104.30
1	N	979	C	N1-C2-O2	7.72	123.53	118.90
1	N	1072	G	C6-N1-C2	7.72	129.73	125.10
1	N	239	U	N1-C2-O2	-7.72	117.39	122.80
1	N	351	G	C8-N9-C1'	-7.72	116.96	127.00
1	N	402	G	N1-C6-O6	7.72	124.53	119.90
1	N	522	C	N3-C4-N4	7.72	123.41	118.00
1	N	589	U	N3-C4-O4	7.72	124.81	119.40
1	N	895	G	O4'-C1'-N9	7.72	114.38	108.20
1	N	639	G	N1-C2-N3	-7.72	119.27	123.90
1	N	1107	C	N3-C4-N4	7.72	123.40	118.00
1	N	1174	G	N3-C2-N2	7.72	125.30	119.90
1	N	1527	U	O4'-C1'-N1	7.72	114.37	108.20
1	N	276	G	C8-N9-C4	-7.71	103.31	106.40
1	N	301	G	C5-C6-N1	-7.71	107.64	111.50
1	N	1346	A	O4'-C1'-N9	7.71	114.37	108.20
1	N	504	C	N3-C4-C5	-7.71	118.81	121.90
1	N	611	C	O4'-C1'-N1	7.71	114.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	706	A	C4-C5-C6	7.71	120.86	117.00
1	N	891	U	C4-C5-C6	-7.71	115.07	119.70
1	N	1092	A	C4'-C3'-C2'	-7.71	94.89	102.60
1	N	1092	A	O4'-C1'-N9	7.71	114.37	108.20
1	N	1368	A	N9-C4-C5	7.71	108.89	105.80
1	N	161	A	C4-C5-N7	7.71	114.55	110.70
1	N	1291	U	P-O3'-C3'	-7.71	110.45	119.70
1	N	1182	G	N1-C6-O6	7.71	124.52	119.90
1	N	326	G	N3-C4-C5	-7.70	124.75	128.60
1	N	493	A	C5-N7-C8	-7.70	100.05	103.90
1	N	123	U	N3-C4-O4	7.70	124.79	119.40
1	N	816	A	C5-N7-C8	7.70	107.75	103.90
1	N	1003	G	N7-C8-N9	7.70	116.95	113.10
1	N	1103	C	C2-N1-C1'	7.70	127.27	118.80
1	N	1301	U	C5-C6-N1	-7.70	118.85	122.70
1	N	64	G	N9-C4-C5	7.70	108.48	105.40
1	N	485	U	N3-C2-O2	-7.70	116.81	122.20
1	N	558	G	C4-C5-C6	7.70	123.42	118.80
1	N	922	G	C8-N9-C4	-7.70	103.32	106.40
1	N	135	C	C2-N1-C1'	7.70	127.27	118.80
1	N	1163	A	N3-C4-N9	7.70	133.56	127.40
1	N	1297	G	C8-N9-C4	-7.70	103.32	106.40
1	N	1383	C	N3-C4-C5	-7.70	118.82	121.90
1	N	74	A	C5-C6-N1	-7.70	113.85	117.70
1	N	86	G	N1-C6-O6	7.70	124.52	119.90
1	N	959	A	C4-C5-N7	-7.70	106.85	110.70
1	N	1513	A	C5-C6-N6	-7.70	117.54	123.70
1	N	262	A	C5-C6-N6	-7.69	117.55	123.70
1	N	1290	G	C8-N9-C4	-7.69	103.32	106.40
1	N	754	C	C2-N3-C4	7.69	123.75	119.90
1	N	834	U	C4'-C3'-C2'	-7.69	94.91	102.60
1	N	935	A	C4-C5-C6	7.69	120.84	117.00
1	N	138	G	C8-N9-C4	-7.69	103.33	106.40
1	N	246	A	P-O3'-C3'	7.69	128.92	119.70
1	N	945	G	N7-C8-N9	7.69	116.94	113.10
1	N	964	A	N1-C6-N6	7.69	123.21	118.60
1	N	1472	U	N1-C2-O2	-7.69	117.42	122.80
1	N	184	G	C4-C5-C6	7.68	123.41	118.80
1	N	602	A	C5-C6-N6	-7.68	117.55	123.70
1	N	1197	A	N1-C2-N3	7.68	133.14	129.30
1	N	1289	A	N1-C2-N3	7.68	133.14	129.30
1	N	554	A	N7-C8-N9	-7.68	109.96	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	875	U	N3-C4-O4	7.68	124.78	119.40
1	N	1018	G	N1-C6-O6	7.68	124.51	119.90
1	N	1391	U	O4'-C1'-N1	7.68	114.34	108.20
1	N	1413	A	N9-C4-C5	7.68	108.87	105.80
1	N	376	G	C6-C5-N7	-7.68	125.79	130.40
1	N	567	G	P-O5'-C5'	7.68	133.18	120.90
1	N	1084	G	C5-C6-O6	7.68	133.21	128.60
1	N	132	C	O4'-C1'-N1	7.68	114.34	108.20
1	N	583	A	C5-N7-C8	7.68	107.74	103.90
1	N	687	A	C5-C6-N6	-7.68	117.56	123.70
1	N	1139	G	O3'-P-O5'	-7.68	89.42	104.00
1	N	1442	G	C6-C5-N7	-7.68	125.79	130.40
1	N	393	A	C6-C5-N7	-7.67	126.93	132.30
1	N	613	C	N3-C4-C5	-7.67	118.83	121.90
1	N	653	U	O4'-C1'-N1	7.67	114.34	108.20
1	N	855	U	N1-C2-N3	-7.67	110.30	114.90
1	N	943	U	C2-N3-C4	-7.67	122.39	127.00
1	N	1280	A	O4'-C1'-N9	7.67	114.34	108.20
1	N	499	A	C2-N3-C4	7.67	114.44	110.60
1	N	1416	G	C6-C5-N7	-7.67	125.80	130.40
1	N	238	A	C5-C6-N6	-7.67	117.57	123.70
1	N	367	U	C5-C4-O4	-7.67	121.30	125.90
1	N	765	G	C5-C6-N1	-7.66	107.67	111.50
1	N	365	U	C5-C4-O4	-7.66	121.31	125.90
1	N	1028	C	N3-C4-N4	7.66	123.36	118.00
1	N	38	G	C8-N9-C4	7.66	109.46	106.40
1	N	802	A	C6-C5-N7	-7.65	126.94	132.30
1	N	1233	G	O4'-C1'-N9	7.65	114.32	108.20
1	N	562	U	O4'-C1'-N1	7.65	114.32	108.20
1	N	1111	A	N1-C2-N3	7.65	133.13	129.30
1	N	7	A	C8-N9-C4	-7.65	102.74	105.80
1	N	16	A	N1-C6-N6	7.65	123.19	118.60
1	N	80	A	N1-C2-N3	-7.65	125.47	129.30
1	N	414	A	O4'-C1'-N9	7.65	114.32	108.20
1	N	596	A	N1-C6-N6	7.65	123.19	118.60
1	N	1507	A	C5-C6-N6	-7.65	117.58	123.70
1	N	297	G	C6-N1-C2	-7.65	120.51	125.10
1	N	1452	C	C6-N1-C2	-7.65	117.24	120.30
1	N	703	G	C2-N3-C4	7.64	115.72	111.90
1	N	654	G	N7-C8-N9	-7.64	109.28	113.10
1	N	663	A	C4-C5-C6	7.64	120.82	117.00
1	N	1191	A	C6-C5-N7	-7.64	126.95	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1228	C	P-O3'-C3'	7.64	128.87	119.70
1	N	260	G	C5-C6-O6	-7.64	124.02	128.60
1	N	864	A	C5-C6-N6	-7.64	117.59	123.70
1	N	1300	G	C3'-C2'-C1'	-7.64	95.39	101.50
1	N	237	G	N1-C6-O6	7.64	124.48	119.90
1	N	338	A	C6-N1-C2	7.64	123.18	118.60
1	N	851	G	N3-C2-N2	7.64	125.25	119.90
1	N	870	U	C2-N3-C4	-7.64	122.42	127.00
1	N	1208	C	N3-C4-C5	-7.64	118.84	121.90
1	N	1250	A	C6-C5-N7	-7.64	126.95	132.30
1	N	781	A	C5-C6-N6	-7.63	117.59	123.70
1	N	79	G	N3-C2-N2	7.63	125.24	119.90
1	N	315	A	P-O3'-C3'	7.63	128.86	119.70
1	N	897	C	C5-C6-N1	7.63	124.81	121.00
1	N	1344	C	N1-C2-O2	7.63	123.48	118.90
1	N	697	U	O4'-C1'-N1	7.63	114.30	108.20
1	N	126	G	N1-C2-N3	-7.63	119.32	123.90
1	N	1379	G	C6-C5-N7	-7.63	125.82	130.40
1	N	11	G	C5-C6-N1	7.63	115.31	111.50
1	N	946	A	C2-N3-C4	7.63	114.41	110.60
1	N	1292	G	C5-C6-N1	-7.63	107.69	111.50
1	N	162	A	C5'-C4'-O4'	7.62	118.25	109.10
1	N	298	A	N1-C2-N3	7.62	133.11	129.30
1	N	322	C	C5'-C4'-O4'	7.62	118.25	109.10
1	N	344	A	C1'-O4'-C4'	7.62	116.00	109.90
1	N	623	C	N3-C4-N4	7.62	123.34	118.00
1	N	1034	G	C8-N9-C1'	7.62	136.91	127.00
1	N	513	C	C2-N3-C4	-7.62	116.09	119.90
1	N	889	A	C4-C5-C6	7.62	120.81	117.00
1	N	1274	A	C8-N9-C4	-7.62	102.75	105.80
1	N	929	G	N1-C2-N3	-7.62	119.33	123.90
1	N	1442	G	C5-C6-N1	-7.62	107.69	111.50
1	N	958	A	C6-C5-N7	-7.62	126.97	132.30
1	N	498	A	C5-C6-N1	-7.62	113.89	117.70
1	N	1002	G	C4-C5-C6	7.62	123.37	118.80
1	N	1277	C	N3-C4-N4	7.61	123.33	118.00
1	N	132	C	C2-N3-C4	7.61	123.71	119.90
1	N	190	A	C6-C5-N7	-7.61	126.97	132.30
1	N	313	A	C5-N7-C8	7.61	107.70	103.90
1	N	678	U	N3-C4-C5	-7.61	110.03	114.60
1	N	775	G	P-O5'-C5'	7.61	133.08	120.90
1	N	1483	A	C6-C5-N7	-7.61	126.97	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1512	U	N3-C2-O2	7.61	127.53	122.20
1	N	35	G	C5-C6-O6	-7.61	124.03	128.60
1	N	379	C	C6-N1-C2	-7.61	117.26	120.30
1	N	586	C	C6-N1-C2	-7.61	117.26	120.30
1	N	878	A	C4-C5-C6	7.61	120.80	117.00
1	N	411	A	C5-C6-N1	-7.61	113.90	117.70
1	N	845	A	N1-C2-N3	7.61	133.10	129.30
1	N	1262	C	P-O3'-C3'	-7.61	110.57	119.70
1	N	288	A	C4-C5-C6	7.60	120.80	117.00
1	N	727	G	N1-C2-N2	-7.60	109.36	116.20
1	N	266	G	N3-C4-C5	-7.60	124.80	128.60
1	N	666	G	N7-C8-N9	7.60	116.90	113.10
1	N	1313	U	N3-C4-O4	7.60	124.72	119.40
1	N	1077	G	P-O3'-C3'	-7.60	110.58	119.70
1	N	103	U	C2-N3-C4	7.60	131.56	127.00
1	N	356	A	N7-C8-N9	-7.60	110.00	113.80
1	N	608	A	P-O3'-C3'	-7.60	110.58	119.70
1	N	848	C	O4'-C1'-N1	7.60	114.28	108.20
1	N	1065	U	N1-C2-N3	-7.60	110.34	114.90
1	N	1236	A	C4-C5-C6	7.60	120.80	117.00
1	N	317	U	O4'-C1'-N1	7.60	114.28	108.20
1	N	804	U	N3-C4-O4	7.60	124.72	119.40
1	N	119	A	C5-C6-N6	-7.59	117.62	123.70
1	N	1056	U	N1-C2-O2	-7.59	117.48	122.80
1	N	1204	A	C5-C6-N6	-7.59	117.63	123.70
1	N	1409	C	C1'-O4'-C4'	7.59	115.97	109.90
1	N	247	G	C5-C6-O6	-7.59	124.05	128.60
1	N	275	G	C6-C5-N7	-7.59	125.85	130.40
1	N	471	U	C6-N1-C2	-7.59	116.45	121.00
1	N	1230	C	C1'-O4'-C4'	-7.59	103.83	109.90
1	N	852	G	N9-C4-C5	7.59	108.44	105.40
1	N	204	G	N1-C2-N3	-7.58	119.35	123.90
1	N	246	A	C2-N3-C4	-7.58	106.81	110.60
1	N	895	G	C4-C5-C6	7.58	123.35	118.80
1	N	697	U	C5-C6-N1	7.58	126.49	122.70
1	N	892	A	O4'-C1'-N9	7.58	114.26	108.20
1	N	1168	U	N3-C4-C5	-7.58	110.05	114.60
1	N	1394	A	C4-C5-C6	7.58	120.79	117.00
1	N	31	G	C8-N9-C4	7.58	109.43	106.40
1	N	109	A	C1'-O4'-C4'	7.58	115.96	109.90
1	N	266	G	C6-C5-N7	-7.58	125.85	130.40
1	N	577	G	N1-C6-O6	7.58	124.45	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1082	A	N1-C6-N6	7.58	123.15	118.60
1	N	1453	G	N9-C4-C5	-7.58	102.37	105.40
1	N	63	C	C6-N1-C2	-7.58	117.27	120.30
1	N	255	G	N1-C6-O6	7.58	124.44	119.90
1	N	257	G	C5-C6-N1	-7.58	107.71	111.50
1	N	398	U	N3-C4-O4	7.58	124.70	119.40
1	N	1152	A	C6-C5-N7	-7.58	127.00	132.30
1	N	33	A	C5-C6-N1	-7.57	113.91	117.70
1	N	409	U	N3-C4-O4	7.57	124.70	119.40
1	N	506	G	O4'-C1'-N9	7.57	114.26	108.20
1	N	1258	G	N3-C4-C5	7.57	132.39	128.60
1	N	49	U	N1-C2-O2	-7.57	117.50	122.80
1	N	1060	U	C5-C6-N1	-7.57	118.91	122.70
1	N	308	C	N3-C4-C5	-7.57	118.87	121.90
1	N	323	U	N1-C2-O2	-7.57	117.50	122.80
1	N	797	C	N3-C4-N4	7.57	123.30	118.00
1	N	736	C	C4-C5-C6	-7.57	113.61	117.40
1	N	1099	G	N9-C4-C5	-7.57	102.37	105.40
1	N	195	A	C5-C6-N6	-7.57	117.64	123.70
1	N	532	A	C6-N1-C2	-7.57	114.06	118.60
1	N	844	G	C6-C5-N7	-7.57	125.86	130.40
1	N	1109	C	C2-N3-C4	7.57	123.68	119.90
1	N	1200	C	C5'-C4'-O4'	-7.57	100.02	109.10
1	N	601	G	O4'-C1'-N9	7.57	114.25	108.20
1	N	780	A	N9-C4-C5	7.57	108.83	105.80
1	N	1136	C	C6-N1-C2	-7.57	117.27	120.30
1	N	1207	G	O4'-C1'-N9	7.57	114.25	108.20
1	N	722	G	N1-C2-N3	-7.56	119.36	123.90
1	N	997	U	C5-C4-O4	-7.56	121.36	125.90
1	N	344	A	P-O5'-C5'	7.56	133.00	120.90
1	N	1448	C	C2-N3-C4	7.56	123.68	119.90
1	N	49	U	P-O3'-C3'	-7.56	110.63	119.70
1	N	849	G	C4-C5-N7	-7.56	107.78	110.80
1	N	1401	G	C2-N3-C4	7.56	115.68	111.90
1	N	688	G	O4'-C1'-N9	7.56	114.25	108.20
1	N	524	G	O4'-C1'-N9	7.55	114.24	108.20
1	N	752	G	C4-N9-C1'	-7.55	116.68	126.50
1	N	844	G	C2-N3-C4	7.55	115.68	111.90
1	N	941	G	O4'-C1'-N9	7.55	114.24	108.20
1	N	985	C	N1-C2-N3	-7.55	113.91	119.20
1	N	615	G	C6-N1-C2	7.55	129.63	125.10
1	N	1366	C	O4'-C1'-N1	7.55	114.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1532	U	C4-C5-C6	7.55	124.23	119.70
1	N	11	G	N3-C2-N2	7.55	125.18	119.90
1	N	1280	A	C8-N9-C4	-7.55	102.78	105.80
1	N	1375	A	N1-C6-N6	7.55	123.13	118.60
1	N	1439	G	C5-C6-O6	-7.55	124.07	128.60
1	N	435	A	C6-C5-N7	-7.55	127.02	132.30
1	N	1396	A	C2-N3-C4	7.55	114.37	110.60
1	N	330	C	C5-C6-N1	-7.55	117.23	121.00
1	N	392	C	C5-C4-N4	-7.55	114.92	120.20
1	N	1297	G	N3-C4-C5	-7.55	124.83	128.60
1	N	1349	A	N1-C6-N6	7.55	123.13	118.60
1	N	94	G	P-O5'-C5'	-7.54	108.83	120.90
1	N	1118	U	C2-N3-C4	7.54	131.53	127.00
1	N	843	U	N3-C4-O4	7.54	124.68	119.40
1	N	1311	A	P-O3'-C3'	-7.54	110.65	119.70
1	N	75	G	C2-N3-C4	-7.54	108.13	111.90
1	N	1005	A	N9-C4-C5	7.54	108.81	105.80
1	N	582	C	P-O5'-C5'	7.54	132.96	120.90
1	N	1352	C	C5-C6-N1	7.54	124.77	121.00
1	N	185	U	C5-C6-N1	7.53	126.47	122.70
1	N	658	C	N3-C4-C5	7.53	124.91	121.90
1	N	675	A	N1-C2-N3	7.53	133.07	129.30
1	N	1212	U	N1-C2-O2	-7.53	117.53	122.80
1	N	1533	C	C6-N1-C2	-7.53	117.29	120.30
1	N	90	C	N1-C2-O2	7.53	123.42	118.90
1	N	580	C	C5-C6-N1	7.53	124.77	121.00
1	N	1389	C	C5'-C4'-C3'	7.53	128.05	116.00
1	N	1431	A	O4'-C1'-N9	7.53	114.22	108.20
1	N	360	G	N3-C2-N2	7.53	125.17	119.90
1	N	537	G	C4-C5-C6	7.53	123.32	118.80
1	N	1100	C	C6-N1-C1'	-7.53	111.77	120.80
1	N	157	U	N3-C4-O4	7.53	124.67	119.40
1	N	327	A	N1-C2-N3	7.53	133.06	129.30
1	N	833	G	C2-N3-C4	-7.52	108.14	111.90
1	N	867	G	N3-C2-N2	-7.52	114.63	119.90
1	N	199	A	N1-C2-N3	7.52	133.06	129.30
1	N	675	A	P-O3'-C3'	7.52	128.73	119.70
1	N	1032	G	C1'-O4'-C4'	-7.52	103.88	109.90
1	N	1046	A	P-O5'-C5'	-7.52	108.87	120.90
1	N	540	G	C5-C6-O6	-7.52	124.09	128.60
1	N	1433	A	N1-C2-N3	-7.52	125.54	129.30
1	N	11	G	C4-C5-C6	-7.52	114.29	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	430	A	N3-C4-N9	7.52	133.41	127.40
1	N	487	A	C8-N9-C4	-7.52	102.79	105.80
1	N	498	A	C4-C5-C6	7.52	120.76	117.00
1	N	22	G	C5-C6-O6	-7.52	124.09	128.60
1	N	945	G	N3-C4-C5	-7.52	124.84	128.60
1	N	1268	G	C6-C5-N7	-7.52	125.89	130.40
1	N	496	A	C4-C5-C6	7.51	120.76	117.00
1	N	1003	G	C4'-C3'-C2'	-7.51	95.09	102.60
1	N	118	U	C5'-C4'-O4'	7.51	118.11	109.10
1	N	422	C	C2-N3-C4	7.51	123.66	119.90
1	N	828	U	O4'-C1'-N1	7.51	114.21	108.20
1	N	570	G	C6-C5-N7	-7.51	125.89	130.40
1	N	1148	U	C4'-C3'-C2'	-7.51	95.09	102.60
1	N	435	A	C8-N9-C4	-7.51	102.80	105.80
1	N	693	G	C1'-O4'-C4'	-7.51	103.89	109.90
1	N	281	G	C5-C6-O6	-7.50	124.10	128.60
1	N	1428	A	C5-N7-C8	7.50	107.65	103.90
1	N	89	U	N3-C4-O4	7.50	124.65	119.40
1	N	155	A	C4-C5-C6	7.50	120.75	117.00
1	N	1040	U	O4'-C1'-N1	7.50	114.20	108.20
1	N	1386	G	C4-C5-N7	7.50	113.80	110.80
1	N	179	A	C5-C6-N6	-7.50	117.70	123.70
1	N	1014	A	O4'-C1'-N9	7.50	114.20	108.20
1	N	340	U	C5-C4-O4	-7.50	121.40	125.90
1	N	342	C	C5-C6-N1	7.50	124.75	121.00
1	N	940	C	P-O5'-C5'	7.50	132.90	120.90
1	N	291	U	C2-N3-C4	7.50	131.50	127.00
1	N	1103	C	N3-C4-C5	-7.50	118.90	121.90
1	N	69	G	C8-N9-C4	7.49	109.40	106.40
1	N	534	U	N3-C4-O4	7.49	124.65	119.40
1	N	651	C	O4'-C1'-N1	7.49	114.20	108.20
1	N	1111	A	C6-N1-C2	-7.49	114.11	118.60
1	N	482	A	O4'-C1'-N9	7.49	114.19	108.20
1	N	1187	G	C6-C5-N7	-7.49	125.91	130.40
1	N	216	U	O4'-C1'-N1	7.49	114.19	108.20
1	N	174	A	C5-C6-N1	-7.49	113.96	117.70
1	N	318	G	C4-C5-C6	7.49	123.29	118.80
1	N	507	C	C4-C5-C6	7.49	121.14	117.40
1	N	584	G	C1'-O4'-C4'	7.49	115.89	109.90
1	N	1144	G	P-O5'-C5'	7.49	132.88	120.90
1	N	406	G	N3-C2-N2	7.48	125.14	119.90
1	N	467	U	P-O3'-C3'	-7.48	110.72	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	151	A	N3-C4-N9	7.48	133.38	127.40
1	N	307	C	C6-N1-C1'	-7.48	111.82	120.80
1	N	923	A	C5-N7-C8	7.48	107.64	103.90
1	N	1450	U	O4'-C1'-N1	7.48	114.18	108.20
1	N	1496	C	C5-C6-N1	7.48	124.74	121.00
1	N	202	G	N1-C2-N3	-7.48	119.41	123.90
1	N	456	A	N1-C6-N6	7.48	123.09	118.60
1	N	151	A	C2-N3-C4	7.48	114.34	110.60
1	N	284	C	N3-C4-N4	7.48	123.23	118.00
1	N	327	A	C5-C6-N6	-7.48	117.72	123.70
1	N	505	G	N9-C4-C5	-7.48	102.41	105.40
1	N	577	G	O4'-C1'-N9	7.48	114.18	108.20
1	N	890	G	O4'-C1'-N9	7.48	114.18	108.20
1	N	302	G	N1-C6-O6	7.47	124.39	119.90
1	N	245	U	P-O5'-C5'	-7.47	108.94	120.90
1	N	366	A	N1-C2-N3	7.47	133.04	129.30
1	N	366	A	N9-C4-C5	7.47	108.79	105.80
1	N	545	C	C5-C6-N1	7.47	124.74	121.00
1	N	583	A	C5-C6-N1	-7.47	113.96	117.70
1	N	207	C	C2-N1-C1'	7.47	127.02	118.80
1	N	569	C	N3-C4-C5	-7.47	118.91	121.90
1	N	64	G	O4'-C1'-N9	7.47	114.18	108.20
1	N	993	G	C4-N9-C1'	7.47	136.21	126.50
1	N	1217	C	N3-C4-N4	7.47	123.23	118.00
1	N	1424	U	N1-C2-O2	7.47	128.03	122.80
1	N	1456	A	C4-C5-C6	7.47	120.73	117.00
1	N	877	G	C8-N9-C4	7.47	109.39	106.40
1	N	370	C	N1-C2-N3	-7.47	113.97	119.20
1	N	901	A	C8-N9-C4	-7.47	102.81	105.80
1	N	929	G	C5-C6-N1	-7.47	107.77	111.50
1	N	1524	C	N3-C2-O2	7.47	127.13	121.90
1	N	58	C	O4'-C1'-N1	7.46	114.17	108.20
1	N	846	G	C8-N9-C4	7.46	109.39	106.40
1	N	894	G	C5-C6-N1	-7.46	107.77	111.50
1	N	208	U	C4-C5-C6	-7.46	115.22	119.70
1	N	1008	U	N3-C4-C5	-7.46	110.12	114.60
1	N	703	G	N3-C2-N2	7.46	125.12	119.90
1	N	791	G	C8-N9-C4	-7.46	103.42	106.40
1	N	25	C	C2-N3-C4	7.46	123.63	119.90
1	N	330	C	O4'-C1'-N1	7.46	114.17	108.20
1	N	525	C	N3-C4-N4	7.46	123.22	118.00
1	N	615	G	C8-N9-C4	-7.46	103.42	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	114	U	O4'-C1'-N1	7.46	114.16	108.20
1	N	415	A	C5-C6-N6	-7.46	117.74	123.70
1	N	576	C	C4-C5-C6	7.46	121.13	117.40
1	N	1463	U	O4'-C1'-N1	7.45	114.16	108.20
1	N	1380	U	N1-C2-O2	-7.45	117.58	122.80
1	N	26	A	C5-C6-N6	-7.45	117.74	123.70
1	N	206	C	O4'-C1'-N1	7.45	114.16	108.20
1	N	866	C	P-O5'-C5'	7.45	132.82	120.90
1	N	1130	A	C5-C6-N1	-7.45	113.98	117.70
1	N	118	U	N3-C4-C5	-7.45	110.13	114.60
1	N	311	C	N3-C4-N4	7.45	123.21	118.00
1	N	494	G	C3'-C2'-C1'	7.45	107.46	101.50
1	N	988	G	N3-C2-N2	7.44	125.11	119.90
1	N	1472	U	O4'-C1'-N1	7.44	114.16	108.20
1	N	651	C	N3-C4-C5	-7.44	118.92	121.90
1	N	937	A	N1-C6-N6	7.44	123.06	118.60
1	N	1283	U	N3-C4-O4	7.44	124.61	119.40
1	N	1085	U	C1'-O4'-C4'	7.44	115.85	109.90
1	N	1416	G	O4'-C1'-N9	7.44	114.15	108.20
1	N	880	C	C6-N1-C2	-7.44	117.33	120.30
1	N	881	G	C5-C6-O6	-7.44	124.14	128.60
1	N	1046	A	C4-C5-C6	7.44	120.72	117.00
1	N	594	U	P-O3'-C3'	7.44	128.62	119.70
1	N	607	A	C8-N9-C4	-7.44	102.83	105.80
1	N	943	U	P-O3'-C3'	-7.44	110.78	119.70
1	N	1136	C	C4-C5-C6	7.44	121.12	117.40
1	N	478	A	C3'-C2'-C1'	-7.43	95.55	101.50
1	N	177	G	C5-C6-O6	-7.43	124.14	128.60
1	N	979	C	N1-C2-N3	-7.43	114.00	119.20
1	N	932	C	N3-C2-O2	-7.43	116.70	121.90
1	N	1243	C	N3-C4-N4	7.43	123.20	118.00
1	N	103	U	C6-N1-C2	-7.43	116.54	121.00
1	N	309	A	O4'-C1'-N9	7.43	114.14	108.20
1	N	765	G	C5-C6-O6	-7.43	124.14	128.60
1	N	1245	C	C4'-C3'-C2'	-7.43	95.17	102.60
1	N	55	A	C8-N9-C4	-7.42	102.83	105.80
1	N	59	A	O4'-C1'-N9	7.42	114.14	108.20
1	N	842	U	C2-N3-C4	-7.42	122.55	127.00
1	N	887	G	C4-C5-C6	7.42	123.25	118.80
1	N	1204	A	C4'-C3'-C2'	-7.42	95.17	102.60
1	N	673	A	O4'-C1'-N9	7.42	114.14	108.20
1	N	227	G	N9-C4-C5	7.42	108.37	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1331	G	P-O5'-C5'	7.42	132.77	120.90
1	N	14	U	C5-C6-N1	7.42	126.41	122.70
1	N	970	C	C1'-O4'-C4'	-7.42	103.96	109.90
1	N	600	A	C5-C6-N1	-7.42	113.99	117.70
1	N	644	U	N3-C4-O4	7.42	124.59	119.40
1	N	773	G	C2-N3-C4	-7.42	108.19	111.90
1	N	799	G	N3-C2-N2	7.42	125.09	119.90
1	N	1163	A	N9-C4-C5	-7.42	102.83	105.80
1	N	649	A	O4'-C1'-N9	7.42	114.13	108.20
1	N	806	C	N1-C2-O2	7.42	123.35	118.90
1	N	964	A	N3-C4-C5	-7.42	121.61	126.80
1	N	979	C	O4'-C1'-N1	7.42	114.13	108.20
1	N	685	G	C6-C5-N7	-7.41	125.95	130.40
1	N	1111	A	P-O5'-C5'	-7.41	109.04	120.90
1	N	1180	A	C4-C5-C6	7.41	120.71	117.00
1	N	315	A	C5-C6-N1	-7.41	113.99	117.70
1	N	856	C	O4'-C1'-N1	7.41	114.13	108.20
1	N	1278	G	C5-C6-O6	-7.41	124.15	128.60
1	N	7	A	O4'-C1'-N9	7.41	114.13	108.20
1	N	499	A	C5-N7-C8	7.41	107.61	103.90
1	N	593	U	C4-C5-C6	-7.41	115.25	119.70
1	N	1169	A	C6-C5-N7	-7.41	127.11	132.30
1	N	1294	G	N3-C4-N9	-7.41	121.55	126.00
1	N	415	A	C8-N9-C4	-7.41	102.84	105.80
1	N	1019	A	C2-N3-C4	-7.41	106.89	110.60
1	N	1229	A	C6-N1-C2	7.41	123.05	118.60
1	N	901	A	N7-C8-N9	7.41	117.50	113.80
1	N	305	G	P-O3'-C3'	7.41	128.59	119.70
1	N	849	G	N1-C6-O6	7.41	124.34	119.90
1	N	1018	G	C6-C5-N7	-7.41	125.96	130.40
1	N	602	A	C8-N9-C4	-7.40	102.84	105.80
1	N	57	G	C6-C5-N7	-7.40	125.96	130.40
1	N	192	A	O4'-C1'-N9	7.40	114.12	108.20
1	N	967	C	N3-C4-C5	-7.40	118.94	121.90
1	N	7	A	C5-C6-N1	-7.40	114.00	117.70
1	N	326	G	N3-C4-N9	7.40	130.44	126.00
1	N	1532	U	P-O3'-C3'	7.40	128.58	119.70
1	N	174	A	C5-C6-N6	-7.40	117.78	123.70
1	N	474	G	N3-C2-N2	7.40	125.08	119.90
1	N	818	G	C4'-C3'-C2'	-7.40	95.20	102.60
1	N	1241	G	C4-N9-C1'	7.40	136.12	126.50
1	N	1364	U	C1'-O4'-C4'	-7.40	103.98	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	539	A	C5-N7-C8	-7.40	100.20	103.90
1	N	760	G	N1-C2-N3	-7.40	119.46	123.90
1	N	440	C	O4'-C1'-N1	7.39	114.12	108.20
1	N	647	C	N3-C4-N4	7.39	123.17	118.00
1	N	682	G	O4'-C1'-N9	7.39	114.11	108.20
1	N	791	G	N1-C2-N2	7.39	122.85	116.20
1	N	995	C	C5-C4-N4	-7.39	115.03	120.20
1	N	281	G	N1-C6-O6	7.39	124.33	119.90
1	N	1421	G	C8-N9-C4	7.39	109.36	106.40
1	N	624	C	N1-C2-N3	-7.39	114.03	119.20
1	N	1081	A	N1-C2-N3	7.39	132.99	129.30
1	N	325	A	O4'-C1'-N9	7.39	114.11	108.20
1	N	932	C	C6-N1-C2	-7.39	117.34	120.30
1	N	111	G	C5-C6-N1	-7.38	107.81	111.50
1	N	263	A	N7-C8-N9	-7.38	110.11	113.80
1	N	375	U	C2-N3-C4	7.38	131.43	127.00
1	N	1118	U	N1-C2-O2	7.38	127.97	122.80
1	N	1437	A	C6-C5-N7	-7.38	127.13	132.30
1	N	23	C	C2-N3-C4	7.38	123.59	119.90
1	N	213	G	C2-N3-C4	-7.38	108.21	111.90
1	N	1311	A	N3-C4-N9	7.38	133.31	127.40
1	N	613	C	N1-C2-O2	7.38	123.33	118.90
1	N	108	G	C5-C6-N1	-7.38	107.81	111.50
1	N	262	A	O4'-C1'-N9	7.38	114.10	108.20
1	N	431	A	C5-C6-N6	-7.38	117.80	123.70
1	N	1354	U	O4'-C1'-N1	7.38	114.10	108.20
1	N	588	G	C5-N7-C8	-7.38	100.61	104.30
1	N	647	C	O4'-C1'-N1	7.38	114.10	108.20
1	N	14	U	C2-N1-C1'	7.37	126.55	117.70
1	N	728	A	O4'-C1'-N9	7.37	114.10	108.20
1	N	1447	A	C6-C5-N7	-7.37	127.14	132.30
1	N	540	G	C4-N9-C1'	-7.37	116.92	126.50
1	N	925	G	C6-C5-N7	-7.37	125.98	130.40
1	N	1520	C	O4'-C1'-N1	7.37	114.09	108.20
1	N	1307	U	C4-C5-C6	-7.37	115.28	119.70
1	N	45	G	C5-C6-O6	-7.36	124.18	128.60
1	N	240	G	C4-C5-C6	7.36	123.22	118.80
1	N	579	A	C5-N7-C8	7.36	107.58	103.90
1	N	888	G	C2-N3-C4	7.36	115.58	111.90
1	N	1087	G	N3-C2-N2	7.36	125.06	119.90
1	N	129	A	C8-N9-C4	-7.36	102.86	105.80
1	N	909	A	N1-C6-N6	7.36	123.02	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	801	U	N1-C1'-C2'	-7.36	103.90	112.00
1	N	1258	G	N7-C8-N9	-7.36	109.42	113.10
1	N	1400	C	O5'-P-OP2	-7.36	99.08	105.70
1	N	1429	A	N1-C6-N6	7.36	123.02	118.60
1	N	614	C	C5-C4-N4	-7.36	115.05	120.20
1	N	1157	A	O4'-C4'-C3'	7.36	111.99	106.10
1	N	336	A	O4'-C1'-N9	7.36	114.09	108.20
1	N	1012	A	C5-C6-N1	-7.36	114.02	117.70
1	N	1042	A	O4'-C1'-N9	7.36	114.09	108.20
1	N	1428	A	C5-C6-N6	-7.36	117.81	123.70
1	N	128	G	N9-C4-C5	-7.36	102.46	105.40
1	N	883	C	C6-N1-C2	7.36	123.24	120.30
1	N	180	U	C2'-C3'-O3'	7.35	125.68	109.50
1	N	912	C	N3-C4-N4	7.35	123.15	118.00
1	N	120	A	N9-C4-C5	7.35	108.74	105.80
1	N	352	C	P-O5'-C5'	7.35	132.66	120.90
1	N	607	A	C5-C6-N1	-7.35	114.03	117.70
1	N	793	U	O4'-C1'-N1	7.35	114.08	108.20
1	N	140	U	C4'-C3'-C2'	-7.35	95.25	102.60
1	N	252	U	P-O3'-C3'	-7.35	110.88	119.70
1	N	628	G	N3-C2-N2	7.35	125.05	119.90
1	N	644	U	O4'-C1'-N1	7.35	114.08	108.20
1	N	884	U	C5-C6-N1	7.35	126.37	122.70
1	N	356	A	C6-N1-C2	7.34	123.01	118.60
1	N	68	G	C6-C5-N7	-7.34	125.99	130.40
1	N	164	G	C8-N9-C4	-7.34	103.46	106.40
1	N	405	U	C4-C5-C6	-7.34	115.29	119.70
1	N	1300	G	N1-C6-O6	7.34	124.31	119.90
1	N	88	U	C1'-O4'-C4'	7.34	115.77	109.90
1	N	284	C	C4-C5-C6	7.34	121.07	117.40
1	N	802	A	N1-C6-N6	7.34	123.00	118.60
1	N	1282	C	N3-C4-C5	-7.34	118.96	121.90
1	N	1312	G	C5'-C4'-C3'	-7.34	104.25	116.00
1	N	62	U	P-O5'-C5'	7.34	132.65	120.90
1	N	993	G	O4'-C1'-N9	7.34	114.07	108.20
1	N	1117	A	N9-C4-C5	-7.34	102.86	105.80
1	N	1459	G	C4-C5-C6	7.34	123.20	118.80
1	N	129	A	C2'-C3'-O3'	7.34	125.64	109.50
1	N	1497	G	C4-C5-N7	7.34	113.73	110.80
1	N	1513	A	C8-N9-C4	7.34	108.73	105.80
1	N	727	G	C8-N9-C4	-7.34	103.47	106.40
1	N	1237	C	C2-N1-C1'	7.34	126.87	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1195	C	C6-N1-C2	-7.33	117.37	120.30
1	N	493	A	C6-N1-C2	7.33	123.00	118.60
1	N	974	A	N7-C8-N9	7.33	117.47	113.80
1	N	1263	C	N3-C4-N4	7.33	123.13	118.00
1	N	1495	U	C5-C6-N1	7.33	126.37	122.70
1	N	1256	A	N1-C2-N3	-7.33	125.63	129.30
1	N	1430	A	O4'-C1'-N9	7.33	114.06	108.20
1	N	1501	C	C2-N1-C1'	-7.33	110.73	118.80
1	N	1002	G	O4'-C1'-N9	7.33	114.06	108.20
1	N	424	G	N3-C4-C5	-7.33	124.94	128.60
1	N	600	A	N9-C4-C5	7.33	108.73	105.80
1	N	733	G	N9-C4-C5	7.33	108.33	105.40
1	N	787	A	C5-C6-N6	-7.33	117.84	123.70
1	N	509	A	C4-C5-N7	-7.33	107.04	110.70
1	N	739	C	N3-C2-O2	7.33	127.03	121.90
1	N	1417	G	C2-N3-C4	7.33	115.56	111.90
1	N	645	G	C8-N9-C4	-7.33	103.47	106.40
1	N	511	C	C5-C4-N4	-7.32	115.07	120.20
1	N	1206	G	N9-C4-C5	-7.32	102.47	105.40
1	N	528	C	O4'-C1'-N1	7.32	114.06	108.20
1	N	285	C	P-O5'-C5'	7.32	132.61	120.90
1	N	486	U	P-O5'-C5'	-7.32	109.19	120.90
1	N	676	A	N1-C6-N6	7.32	122.99	118.60
1	N	6	G	N3-C4-C5	-7.32	124.94	128.60
1	N	951	G	C5'-C4'-C3'	7.32	127.71	116.00
1	N	187	G	N3-C2-N2	7.32	125.02	119.90
1	N	199	A	C4-C5-N7	-7.32	107.04	110.70
1	N	914	A	N7-C8-N9	7.32	117.46	113.80
1	N	100	G	N3-C2-N2	7.32	125.02	119.90
1	N	459	A	N9-C4-C5	7.32	108.73	105.80
1	N	760	G	N3-C4-N9	-7.32	121.61	126.00
1	N	1280	A	C3'-C2'-C1'	7.32	107.35	101.50
1	N	343	U	C5-C6-N1	7.31	126.36	122.70
1	N	1371	G	N1-C6-O6	7.31	124.29	119.90
1	N	74	A	P-O5'-C5'	7.31	132.60	120.90
1	N	888	G	N1-C2-N3	-7.31	119.51	123.90
1	N	1187	G	N3-C4-C5	-7.31	124.94	128.60
1	N	1397	C	C6-N1-C2	-7.31	117.38	120.30
1	N	28	A	O4'-C1'-N9	7.31	114.05	108.20
1	N	232	G	O4'-C4'-C3'	-7.31	96.69	104.00
1	N	300	A	C4-C5-C6	7.31	120.66	117.00
1	N	952	U	N3-C4-O4	7.31	124.52	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	76	G	C8-N9-C4	-7.31	103.48	106.40
1	N	278	G	C6-C5-N7	-7.31	126.02	130.40
1	N	354	G	C8-N9-C4	-7.31	103.48	106.40
1	N	1441	A	N9-C4-C5	7.31	108.72	105.80
1	N	130	A	C4-C5-C6	7.31	120.65	117.00
1	N	603	U	P-O3'-C3'	7.31	128.47	119.70
1	N	881	G	C6-C5-N7	-7.30	126.02	130.40
1	N	1234	C	C6-N1-C2	-7.30	117.38	120.30
1	N	1459	G	C5-N7-C8	7.30	107.95	104.30
1	N	111	G	N3-C4-C5	7.30	132.25	128.60
1	N	513	C	P-O3'-C3'	7.30	128.46	119.70
1	N	1060	U	C2-N3-C4	-7.30	122.62	127.00
1	N	11	G	C1'-O4'-C4'	-7.30	104.06	109.90
1	N	232	G	O4'-C1'-N9	7.30	114.04	108.20
1	N	615	G	N3-C4-C5	-7.30	124.95	128.60
1	N	477	C	C5-C6-N1	7.30	124.65	121.00
1	N	219	U	C5'-C4'-C3'	-7.30	104.32	116.00
1	N	782	A	O4'-C1'-N9	7.30	114.04	108.20
1	N	956	U	N3-C4-O4	7.30	124.51	119.40
1	N	981	U	C4-C5-C6	7.29	124.08	119.70
1	N	1032	G	C5-C6-N1	-7.29	107.85	111.50
1	N	539	A	N7-C8-N9	7.29	117.45	113.80
1	N	329	A	O4'-C1'-N9	7.29	114.03	108.20
1	N	1410	A	C5-C6-N1	-7.29	114.06	117.70
1	N	1441	A	C2-N3-C4	-7.29	106.95	110.60
1	N	525	C	C5-C4-N4	-7.29	115.10	120.20
1	N	1314	C	O4'-C4'-C3'	-7.29	96.71	104.00
1	N	883	C	O4'-C1'-N1	7.29	114.03	108.20
1	N	1057	G	N3-C2-N2	7.29	125.00	119.90
1	N	1367	C	C3'-C2'-C1'	-7.29	95.67	101.50
1	N	134	G	C5'-C4'-O4'	7.28	117.84	109.10
1	N	557	G	C5-N7-C8	7.28	107.94	104.30
1	N	927	G	N1-C2-N3	-7.28	119.53	123.90
1	N	2	A	C4'-C3'-C2'	-7.28	95.32	102.60
1	N	331	G	P-O5'-C5'	7.28	132.55	120.90
1	N	701	U	C5-C6-N1	7.28	126.34	122.70
1	N	812	G	O4'-C1'-N9	7.28	114.02	108.20
1	N	412	A	N9-C4-C5	-7.28	102.89	105.80
1	N	1105	A	C5-C6-N1	-7.28	114.06	117.70
1	N	104	G	N3-C4-C5	-7.28	124.96	128.60
1	N	964	A	C6-N1-C2	-7.28	114.23	118.60
1	N	1508	A	N1-C2-N3	-7.28	125.66	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	67	C	N3-C2-O2	7.27	126.99	121.90
1	N	381	C	C3'-C2'-C1'	-7.27	95.68	101.50
1	N	1042	A	N9-C4-C5	7.27	108.71	105.80
1	N	1088	G	C5-C6-N1	-7.27	107.86	111.50
1	N	179	A	N3-C4-C5	-7.27	121.71	126.80
1	N	997	U	N1-C2-O2	7.27	127.89	122.80
1	N	1219	A	N9-C4-C5	-7.27	102.89	105.80
1	N	1234	C	C5-C4-N4	-7.27	115.11	120.20
1	N	1329	A	C5-C6-N6	-7.27	117.89	123.70
1	N	1034	G	C5-N7-C8	-7.27	100.67	104.30
1	N	731	G	C8-N9-C4	7.26	109.31	106.40
1	N	843	U	P-O3'-C3'	-7.26	110.98	119.70
1	N	794	A	N7-C8-N9	-7.26	110.17	113.80
1	N	119	A	C5-C6-N1	-7.26	114.07	117.70
1	N	1524	C	O4'-C1'-N1	7.26	114.01	108.20
1	N	1525	G	N3-C2-N2	7.26	124.98	119.90
1	N	1393	U	C5-C6-N1	7.26	126.33	122.70
1	N	119	A	N9-C4-C5	-7.26	102.90	105.80
1	N	757	U	C2-N3-C4	-7.26	122.65	127.00
1	N	1208	C	C2-N1-C1'	7.26	126.78	118.80
1	N	1274	A	O4'-C1'-N9	7.25	114.00	108.20
1	N	794	A	C8-N9-C4	7.25	108.70	105.80
1	N	880	C	N1-C2-O2	-7.25	114.55	118.90
1	N	980	C	N3-C4-N4	7.25	123.08	118.00
1	N	1368	A	C5-C6-N1	-7.25	114.07	117.70
1	N	20	U	C5-C6-N1	7.25	126.33	122.70
1	N	923	A	C4-C5-C6	7.25	120.63	117.00
1	N	1408	A	O4'-C1'-N9	7.25	114.00	108.20
1	N	991	U	C5'-C4'-C3'	-7.25	104.40	116.00
1	N	51	A	C4-C5-N7	-7.25	107.08	110.70
1	N	283	U	C5-C6-N1	7.25	126.32	122.70
1	N	1243	C	P-O5'-C5'	7.25	132.50	120.90
1	N	224	U	C4'-C3'-C2'	-7.25	95.36	102.60
1	N	280	C	C6-N1-C1'	-7.25	112.11	120.80
1	N	694	A	C8-N9-C4	-7.24	102.90	105.80
1	N	898	G	C5-C6-O6	-7.24	124.25	128.60
1	N	1300	G	N9-C4-C5	7.24	108.30	105.40
1	N	1468	A	C6-N1-C2	7.24	122.95	118.60
1	N	953	G	N9-C4-C5	-7.24	102.50	105.40
1	N	277	C	N3-C4-N4	7.24	123.07	118.00
1	N	847	G	O4'-C1'-N9	7.24	113.99	108.20
1	N	1215	G	N7-C8-N9	7.24	116.72	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	450	G	N1-C2-N3	-7.24	119.56	123.90
1	N	524	G	C4-C5-C6	7.24	123.14	118.80
1	N	1003	G	P-O3'-C3'	7.24	128.39	119.70
1	N	1180	A	C5-C6-N6	-7.24	117.91	123.70
1	N	1251	A	N1-C6-N6	7.24	122.94	118.60
1	N	77	A	C5-C6-N1	-7.24	114.08	117.70
1	N	1338	G	C4-C5-N7	7.24	113.69	110.80
1	N	286	C	C2-N1-C1'	7.24	126.76	118.80
1	N	1242	G	C5-N7-C8	-7.24	100.68	104.30
1	N	171	A	N9-C4-C5	7.23	108.69	105.80
1	N	1428	A	C6-C5-N7	7.23	137.36	132.30
1	N	512	U	C5-C4-O4	-7.23	121.56	125.90
1	N	1398	A	N1-C6-N6	7.23	122.94	118.60
1	N	816	A	C4-C5-C6	7.23	120.61	117.00
1	N	1344	C	N3-C2-O2	-7.23	116.84	121.90
1	N	293	G	N3-C4-C5	-7.23	124.99	128.60
1	N	1519	A	N1-C2-N3	7.23	132.91	129.30
1	N	1346	A	C5-C6-N1	-7.22	114.09	117.70
1	N	219	U	C2-N3-C4	-7.22	122.67	127.00
1	N	233	C	O4'-C1'-N1	7.22	113.98	108.20
1	N	236	A	C8-N9-C4	-7.22	102.91	105.80
1	N	265	G	N7-C8-N9	-7.22	109.49	113.10
1	N	846	G	C4-C5-C6	7.22	123.13	118.80
1	N	954	G	N1-C2-N3	-7.22	119.57	123.90
1	N	1116	U	C2-N3-C4	7.22	131.33	127.00
1	N	1337	G	C6-C5-N7	-7.22	126.07	130.40
1	N	175	C	C2-N3-C4	7.22	123.51	119.90
1	N	359	G	C4-C5-C6	-7.22	114.47	118.80
1	N	414	A	C6-C5-N7	-7.22	127.25	132.30
1	N	800	G	C5-C6-O6	-7.22	124.27	128.60
1	N	339	C	N3-C4-N4	7.22	123.05	118.00
1	N	596	A	P-O5'-C5'	7.22	132.45	120.90
1	N	737	C	O5'-C5'-C4'	-7.22	97.99	111.70
1	N	1305	G	N1-C2-N2	-7.22	109.70	116.20
1	N	117	G	N3-C4-N9	7.21	130.33	126.00
1	N	419	C	C5-C4-N4	-7.21	115.15	120.20
1	N	666	G	C5'-C4'-C3'	7.21	127.54	116.00
1	N	1151	A	N9-C4-C5	7.21	108.69	105.80
1	N	541	G	C4'-C3'-C2'	-7.21	95.39	102.60
1	N	766	A	C6-C5-N7	-7.21	127.25	132.30
1	N	1032	G	N3-C2-N2	7.21	124.95	119.90
1	N	1525	G	N3-C4-N9	-7.21	121.67	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	806	C	C4-C5-C6	-7.21	113.80	117.40
1	N	852	G	C8-N9-C4	-7.21	103.52	106.40
1	N	199	A	C4-C5-C6	7.21	120.60	117.00
1	N	352	C	C2-N3-C4	7.21	123.50	119.90
1	N	714	G	N1-C2-N3	-7.21	119.58	123.90
1	N	962	C	O4'-C1'-N1	7.21	113.97	108.20
1	N	1054	C	C5-C6-N1	7.21	124.61	121.00
1	N	1308	U	C5-C4-O4	-7.21	121.58	125.90
1	N	85	U	N3-C4-C5	-7.21	110.28	114.60
1	N	181	A	C4-C5-C6	7.20	120.60	117.00
1	N	532	A	N3-C4-N9	7.20	133.16	127.40
1	N	615	G	N3-C2-N2	7.20	124.94	119.90
1	N	944	G	O4'-C1'-N9	7.20	113.96	108.20
1	N	1079	G	O5'-P-OP2	-7.20	99.22	105.70
1	N	1153	G	C4-C5-C6	7.20	123.12	118.80
1	N	784	A	N3-C4-C5	-7.20	121.76	126.80
1	N	1091	U	P-O3'-C3'	7.20	128.34	119.70
1	N	142	G	C4-C5-C6	7.20	123.12	118.80
1	N	438	U	C1'-O4'-C4'	-7.20	104.14	109.90
1	N	741	G	C3'-C2'-C1'	-7.20	95.74	101.50
1	N	761	G	C5-C6-O6	-7.20	124.28	128.60
1	N	803	G	C5-N7-C8	-7.20	100.70	104.30
1	N	1108	G	N7-C8-N9	7.20	116.70	113.10
1	N	1124	G	C4-C5-C6	7.20	123.12	118.80
1	N	1264	U	C2-N3-C4	7.20	131.32	127.00
1	N	1285	A	C4-C5-C6	7.20	120.60	117.00
1	N	120	A	C1'-O4'-C4'	-7.20	104.14	109.90
1	N	357	G	C5-C6-O6	-7.20	124.28	128.60
1	N	909	A	N3-C4-N9	7.20	133.16	127.40
1	N	985	C	N3-C4-N4	7.20	123.04	118.00
1	N	1139	G	N1-C2-N2	7.20	122.68	116.20
1	N	1523	G	N1-C2-N3	-7.20	119.58	123.90
1	N	381	C	N3-C4-C5	-7.19	119.02	121.90
1	N	440	C	C5-C4-N4	-7.19	115.17	120.20
1	N	480	U	O4'-C1'-N1	7.19	113.95	108.20
1	N	737	C	C6-N1-C2	-7.19	117.42	120.30
1	N	876	C	O4'-C1'-N1	7.19	113.95	108.20
1	N	887	G	C5-C6-O6	-7.19	124.28	128.60
1	N	35	G	C2-N3-C4	7.19	115.50	111.90
1	N	66	A	C6-C5-N7	-7.19	127.27	132.30
1	N	177	G	N1-C2-N3	-7.19	119.59	123.90
1	N	607	A	C4-C5-C6	7.19	120.59	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1045	C	C5-C6-N1	7.19	124.59	121.00
1	N	1326	U	N1-C2-N3	-7.19	110.58	114.90
1	N	1439	G	C4-C5-N7	7.19	113.68	110.80
1	N	785	G	O4'-C1'-N9	7.19	113.95	108.20
1	N	670	G	N1-C6-O6	7.19	124.21	119.90
1	N	572	A	C5-C6-N6	-7.19	117.95	123.70
1	N	1401	G	N1-C2-N3	-7.19	119.59	123.90
1	N	1454	G	C5-C6-O6	-7.18	124.29	128.60
1	N	102	G	N1-C2-N3	-7.18	119.59	123.90
1	N	366	A	C5-N7-C8	7.18	107.49	103.90
1	N	1516	G	C2-N3-C4	-7.18	108.31	111.90
1	N	400	C	C4-C5-C6	-7.18	113.81	117.40
1	N	455	G	O4'-C1'-N9	7.18	113.94	108.20
1	N	1157	A	C5-C6-N6	-7.18	117.95	123.70
1	N	1225	A	C6-C5-N7	-7.18	127.27	132.30
1	N	1459	G	N1-C6-O6	7.18	124.21	119.90
1	N	601	G	N3-C2-N2	7.18	124.93	119.90
1	N	1030	U	C2-N1-C1'	7.18	126.32	117.70
1	N	1079	G	N1-C6-O6	7.18	124.21	119.90
1	N	612	C	O4'-C1'-N1	7.18	113.94	108.20
1	N	28	A	C8-N9-C4	-7.18	102.93	105.80
1	N	277	C	C5-C4-N4	-7.18	115.18	120.20
1	N	776	G	C5-N7-C8	-7.18	100.71	104.30
1	N	831	A	N9-C4-C5	7.18	108.67	105.80
1	N	879	C	C6-N1-C2	-7.18	117.43	120.30
1	N	973	G	N3-C4-N9	-7.18	121.69	126.00
1	N	228	A	C5-C6-N6	-7.17	117.96	123.70
1	N	231	U	O4'-C1'-N1	7.17	113.94	108.20
1	N	304	U	P-O3'-C3'	-7.17	111.09	119.70
1	N	821	G	C6-C5-N7	-7.17	126.10	130.40
1	N	991	U	O4'-C1'-N1	7.17	113.94	108.20
1	N	1057	G	C4-C5-C6	7.17	123.11	118.80
1	N	1232	U	C6-N1-C2	7.17	125.31	121.00
1	N	1329	A	C8-N9-C4	-7.17	102.93	105.80
1	N	120	A	O4'-C1'-N9	7.17	113.94	108.20
1	N	1317	C	C1'-O4'-C4'	-7.17	104.16	109.90
1	N	1376	U	N1-C2-N3	-7.17	110.60	114.90
1	N	259	G	O4'-C1'-N9	7.17	113.94	108.20
1	N	641	U	C5-C4-O4	-7.17	121.60	125.90
1	N	1020	G	C6-C5-N7	-7.17	126.10	130.40
1	N	93	U	O4'-C4'-C3'	-7.17	96.83	104.00
1	N	172	A	C5-C6-N6	-7.17	117.96	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	942	G	C4-N9-C1'	-7.17	117.18	126.50
1	N	232	G	C5-C6-O6	-7.17	124.30	128.60
1	N	766	A	N9-C4-C5	7.17	108.67	105.80
1	N	866	C	N3-C4-N4	7.17	123.02	118.00
1	N	949	A	C4-C5-C6	7.17	120.58	117.00
1	N	75	G	N3-C4-N9	-7.17	121.70	126.00
1	N	75	G	O4'-C1'-N9	7.17	113.93	108.20
1	N	829	G	N1-C2-N3	-7.17	119.60	123.90
1	N	41	G	C4-C5-C6	7.17	123.10	118.80
1	N	1163	A	C5-N7-C8	7.17	107.48	103.90
1	N	462	G	O4'-C1'-N9	7.16	113.93	108.20
1	N	855	U	O4'-C1'-N1	7.16	113.93	108.20
1	N	1400	C	N1-C2-N3	-7.16	114.19	119.20
1	N	620	C	N3-C4-C5	-7.16	119.03	121.90
1	N	741	G	N3-C2-N2	7.16	124.91	119.90
1	N	844	G	N7-C8-N9	7.16	116.68	113.10
1	N	1071	C	O4'-C1'-N1	7.16	113.93	108.20
1	N	356	A	C4-C5-C6	7.16	120.58	117.00
1	N	663	A	C5-C6-N1	-7.16	114.12	117.70
1	N	690	G	N1-C2-N3	-7.16	119.61	123.90
1	N	1332	A	C8-N9-C4	-7.16	102.94	105.80
1	N	112	G	C8-N9-C4	7.16	109.26	106.40
1	N	327	A	C6-C5-N7	-7.16	127.29	132.30
1	N	997	U	O4'-C1'-N1	7.16	113.92	108.20
1	N	1093	A	C5'-C4'-C3'	7.16	127.45	116.00
1	N	1221	G	C2-N3-C4	7.16	115.48	111.90
1	N	1402	C	C4'-C3'-C2'	-7.16	95.44	102.60
1	N	279	A	N3-C4-C5	-7.15	121.79	126.80
1	N	658	C	P-O3'-C3'	-7.15	111.12	119.70
1	N	731	G	C5-C6-N1	-7.15	107.92	111.50
1	N	844	G	N1-C6-O6	7.15	124.19	119.90
1	N	890	G	C5-C6-N1	-7.15	107.92	111.50
1	N	947	G	C6-C5-N7	-7.15	126.11	130.40
1	N	1154	G	N1-C2-N3	-7.15	119.61	123.90
1	N	1382	C	OP1-P-OP2	-7.15	108.88	119.60
1	N	223	A	N1-C2-N3	-7.15	125.72	129.30
1	N	943	U	C5'-C4'-C3'	-7.15	104.56	116.00
1	N	456	A	C5-C6-N6	-7.15	117.98	123.70
1	N	695	A	C4-C5-C6	7.15	120.57	117.00
1	N	797	C	O4'-C1'-C2'	7.15	114.03	107.60
1	N	819	A	C5-N7-C8	7.15	107.47	103.90
1	N	64	G	C5-N7-C8	7.15	107.87	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	798	U	N3-C4-O4	7.15	124.40	119.40
1	N	1047	G	C4-C5-N7	7.15	113.66	110.80
1	N	1086	U	C5-C4-O4	-7.14	121.61	125.90
1	N	1446	A	C5-C6-N1	-7.14	114.13	117.70
1	N	759	A	N9-C1'-C2'	-7.14	104.14	112.00
1	N	932	C	C5'-C4'-O4'	7.14	117.67	109.10
1	N	1190	G	O4'-C1'-C2'	-7.14	98.66	105.80
1	N	1185	G	N1-C6-O6	7.14	124.19	119.90
1	N	531	U	O4'-C4'-C3'	-7.14	96.86	104.00
1	N	623	C	O4'-C1'-N1	7.14	113.91	108.20
1	N	817	C	O4'-C1'-N1	7.14	113.91	108.20
1	N	492	C	P-O3'-C3'	7.14	128.27	119.70
1	N	690	G	C8-N9-C4	-7.14	103.55	106.40
1	N	1438	G	C4'-C3'-C2'	-7.14	95.46	102.60
1	N	81	A	C6-C5-N7	-7.13	127.31	132.30
1	N	584	G	C2-N3-C4	7.13	115.47	111.90
1	N	896	C	C5-C6-N1	-7.13	117.43	121.00
1	N	1073	U	O4'-C1'-N1	7.13	113.91	108.20
1	N	148	G	C8-N9-C4	-7.13	103.55	106.40
1	N	374	A	P-O5'-C5'	-7.13	109.49	120.90
1	N	966	G	N9-C4-C5	7.13	108.25	105.40
1	N	1160	G	C1'-O4'-C4'	7.13	115.61	109.90
1	N	15	G	C5-C6-O6	-7.13	124.32	128.60
1	N	640	A	C2-N3-C4	7.13	114.17	110.60
1	N	1491	G	C4-N9-C1'	-7.13	117.23	126.50
1	N	579	A	N3-C4-N9	7.13	133.10	127.40
1	N	730	G	C8-N9-C4	7.13	109.25	106.40
1	N	1005	A	N1-C2-N3	7.13	132.86	129.30
1	N	1469	C	P-O3'-C3'	7.13	128.25	119.70
1	N	745	G	O4'-C1'-N9	7.12	113.90	108.20
1	N	932	C	C1'-O4'-C4'	7.12	115.60	109.90
1	N	1037	C	C5-C4-N4	-7.12	115.21	120.20
1	N	1241	G	C5-C6-N1	-7.12	107.94	111.50
1	N	484	G	C5-C6-O6	-7.12	124.33	128.60
1	N	583	A	C4-C5-N7	-7.12	107.14	110.70
1	N	674	G	C4-C5-C6	7.12	123.07	118.80
1	N	889	A	C5-N7-C8	7.12	107.46	103.90
1	N	975	A	C8-N9-C4	-7.12	102.95	105.80
1	N	1011	C	N1-C2-N3	-7.12	114.22	119.20
1	N	427	U	P-O3'-C3'	-7.12	111.16	119.70
1	N	1118	U	N1-C2-N3	-7.12	110.63	114.90
1	N	1191	A	C5-C6-N6	-7.12	118.00	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1212	U	N1-C2-N3	7.12	119.17	114.90
1	N	1393	U	P-O3'-C3'	7.12	128.24	119.70
1	N	1486	G	N1-C6-O6	7.12	124.17	119.90
1	N	1218	C	C6-N1-C2	-7.12	117.45	120.30
1	N	1174	G	C4'-C3'-C2'	-7.12	95.48	102.60
1	N	1357	A	C5-C6-N6	-7.12	118.01	123.70
1	N	862	C	N3-C4-N4	7.11	122.98	118.00
1	N	47	C	C6-N1-C2	-7.11	117.45	120.30
1	N	1200	C	O4'-C1'-N1	7.11	113.89	108.20
1	N	5	U	N3-C4-O4	7.11	124.38	119.40
1	N	555	U	C4-C5-C6	-7.11	115.43	119.70
1	N	997	U	N3-C4-O4	7.11	124.38	119.40
1	N	1208	C	O4'-C1'-N1	7.11	113.89	108.20
1	N	1501	C	N3-C4-C5	-7.11	119.06	121.90
1	N	458	U	C2-N1-C1'	7.11	126.23	117.70
1	N	1400	C	C6-N1-C2	7.11	123.14	120.30
1	N	90	C	C5'-C4'-C3'	7.11	127.37	116.00
1	N	774	G	C6-N1-C2	7.11	129.36	125.10
1	N	1117	A	O4'-C1'-N9	7.11	113.88	108.20
1	N	1368	A	N7-C8-N9	7.11	117.35	113.80
1	N	1214	C	O4'-C1'-N1	7.10	113.88	108.20
1	N	512	U	N3-C4-O4	7.10	124.37	119.40
1	N	961	U	O4'-C1'-N1	7.10	113.88	108.20
1	N	1102	A	O4'-C1'-N9	7.10	113.88	108.20
1	N	1531	A	N7-C8-N9	-7.10	110.25	113.80
1	N	966	G	O4'-C1'-N9	7.10	113.88	108.20
1	N	406	G	N1-C6-O6	7.10	124.16	119.90
1	N	780	A	C5-C6-N6	-7.10	118.02	123.70
1	N	958	A	N3-C4-C5	-7.10	121.83	126.80
1	N	792	A	C5-C6-N1	-7.10	114.15	117.70
1	N	219	U	O4'-C1'-N1	7.10	113.88	108.20
1	N	282	A	C5-C6-N1	-7.10	114.15	117.70
1	N	174	A	C6-N1-C2	7.09	122.86	118.60
1	N	779	C	P-O3'-C3'	7.09	128.21	119.70
1	N	1018	G	C4-C5-N7	7.09	113.64	110.80
1	N	1411	C	N3-C4-N4	7.09	122.97	118.00
1	N	461	A	C5-N7-C8	7.09	107.45	103.90
1	N	1423	G	N1-C2-N3	-7.09	119.65	123.90
1	N	236	A	C5-C6-N6	-7.09	118.03	123.70
1	N	676	A	N3-C4-N9	7.09	133.07	127.40
1	N	884	U	N1-C2-O2	-7.09	117.84	122.80
1	N	255	G	N3-C2-N2	7.09	124.86	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1390	U	N3-C2-O2	7.09	127.16	122.20
1	N	648	A	N1-C2-N3	7.09	132.84	129.30
1	N	917	G	N3-C4-C5	-7.09	125.06	128.60
1	N	1032	G	O4'-C1'-C2'	7.09	113.98	107.60
1	N	206	C	N3-C4-N4	7.08	122.96	118.00
1	N	228	A	C6-C5-N7	-7.08	127.34	132.30
1	N	42	G	N3-C2-N2	7.08	124.86	119.90
1	N	128	G	N3-C2-N2	7.08	124.86	119.90
1	N	482	A	C4-C5-C6	7.08	120.54	117.00
1	N	720	C	C5-C6-N1	-7.08	117.46	121.00
1	N	733	G	C8-N9-C4	-7.08	103.57	106.40
1	N	857	C	C2'-C3'-O3'	7.08	125.08	109.50
1	N	942	G	N7-C8-N9	-7.08	109.56	113.10
1	N	1055	A	N7-C8-N9	-7.08	110.26	113.80
1	N	1205	U	C2-N3-C4	7.08	131.25	127.00
1	N	926	G	O4'-C1'-N9	7.08	113.86	108.20
1	N	1361	G	N1-C2-N2	-7.08	109.83	116.20
1	N	57	G	C6-N1-C2	7.08	129.34	125.10
1	N	594	U	C2-N1-C1'	7.08	126.19	117.70
1	N	888	G	C5-C6-O6	-7.08	124.35	128.60
1	N	158	G	C2-N3-C4	7.07	115.44	111.90
1	N	409	U	C6-N1-C2	-7.07	116.76	121.00
1	N	704	A	O4'-C4'-C3'	-7.07	96.93	104.00
1	N	858	G	N7-C8-N9	7.07	116.64	113.10
1	N	1197	A	C5-N7-C8	7.07	107.44	103.90
1	N	1380	U	N1-C2-N3	7.07	119.14	114.90
1	N	1399	C	O3'-P-O5'	7.07	117.44	104.00
1	N	1409	C	O4'-C4'-C3'	-7.07	96.93	104.00
1	N	93	U	P-O3'-C3'	-7.07	111.21	119.70
1	N	368	U	O4'-C1'-N1	7.07	113.86	108.20
1	N	766	A	N7-C8-N9	-7.07	110.27	113.80
1	N	1150	A	C5-C6-N1	-7.07	114.17	117.70
1	N	1412	C	C2-N3-C4	7.07	123.44	119.90
1	N	1433	A	O4'-C1'-N9	7.07	113.86	108.20
1	N	75	G	P-O5'-C5'	-7.07	109.59	120.90
1	N	490	C	N3-C4-N4	7.07	122.95	118.00
1	N	1517	G	N3-C4-N9	7.07	130.24	126.00
1	N	728	A	C5-C6-N1	-7.07	114.17	117.70
1	N	815	A	P-O3'-C3'	7.07	128.18	119.70
1	N	1026	G	O4'-C1'-N9	7.07	113.85	108.20
1	N	75	G	N3-C4-C5	7.06	132.13	128.60
1	N	524	G	P-O5'-C5'	-7.06	109.60	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	539	A	C5-C6-N6	-7.06	118.05	123.70
1	N	1304	G	N3-C2-N2	7.06	124.84	119.90
1	N	545	C	N3-C4-N4	7.06	122.94	118.00
1	N	805	C	C5-C4-N4	-7.06	115.26	120.20
1	N	840	C	N3-C2-O2	-7.06	116.96	121.90
1	N	1338	G	C5-C6-N1	-7.06	107.97	111.50
1	N	697	U	N3-C4-C5	-7.06	110.36	114.60
1	N	1015	G	C5-C6-N1	-7.06	107.97	111.50
1	N	1135	U	C4-C5-C6	-7.06	115.46	119.70
1	N	1268	G	C4-C5-N7	-7.06	107.98	110.80
1	N	77	A	N9-C4-C5	7.06	108.62	105.80
1	N	307	C	N3-C4-C5	-7.06	119.08	121.90
1	N	629	A	P-O3'-C3'	-7.06	111.23	119.70
1	N	779	C	C2-N3-C4	-7.06	116.37	119.90
1	N	1398	A	N1-C2-N3	7.06	132.83	129.30
1	N	1452	C	C1'-O4'-C4'	7.06	115.55	109.90
1	N	66	A	N1-C2-N3	-7.06	125.77	129.30
1	N	558	G	C5-C6-O6	-7.06	124.36	128.60
1	N	1295	U	N1-C2-O2	-7.06	117.86	122.80
1	N	797	C	P-O3'-C3'	-7.06	111.23	119.70
1	N	319	G	C6-C5-N7	-7.05	126.17	130.40
1	N	1115	U	P-O3'-C3'	-7.05	111.23	119.70
1	N	1187	G	C5-C6-O6	-7.05	124.37	128.60
1	N	215	C	C5-C4-N4	-7.05	115.26	120.20
1	N	297	G	C3'-C2'-C1'	-7.05	95.86	101.50
1	N	472	U	N3-C4-O4	7.05	124.34	119.40
1	N	1380	U	C4'-C3'-C2'	-7.05	95.55	102.60
1	N	1366	C	P-O5'-C5'	7.05	132.18	120.90
1	N	271	C	C4-C5-C6	7.05	120.92	117.40
1	N	298	A	C4-C5-C6	7.05	120.53	117.00
1	N	1008	U	C4-C5-C6	7.05	123.93	119.70
1	N	1297	G	N7-C8-N9	7.05	116.62	113.10
1	N	189	A	N1-C6-N6	7.05	122.83	118.60
1	N	1192	C	C5'-C4'-O4'	7.05	117.56	109.10
1	N	1481	U	P-O3'-C3'	-7.05	111.24	119.70
1	N	79	G	C6-N1-C2	-7.05	120.87	125.10
1	N	183	C	C2-N3-C4	7.05	123.42	119.90
1	N	199	A	C8-N9-C4	-7.05	102.98	105.80
1	N	1517	G	C5-N7-C8	7.05	107.82	104.30
1	N	468	A	O4'-C1'-N9	7.04	113.83	108.20
1	N	683	G	C6-N1-C2	7.04	129.33	125.10
1	N	756	C	N3-C2-O2	7.04	126.83	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	968	A	C5-C6-N6	-7.04	118.06	123.70
1	N	1533	C	C2-N3-C4	7.04	123.42	119.90
1	N	253	A	O4'-C1'-N9	7.04	113.83	108.20
1	N	440	C	N1-C2-O2	-7.04	114.68	118.90
1	N	441	A	N1-C2-N3	7.04	132.82	129.30
1	N	514	C	N3-C4-C5	-7.04	119.08	121.90
1	N	776	G	C6-C5-N7	-7.04	126.17	130.40
1	N	1398	A	C2-N3-C4	-7.04	107.08	110.60
1	N	1257	A	N1-C2-N3	7.04	132.82	129.30
1	N	200	G	C4-C5-C6	7.04	123.02	118.80
1	N	309	A	N9-C1'-C2'	-7.04	104.26	112.00
1	N	350	G	C5-C6-N1	7.04	115.02	111.50
1	N	417	G	O4'-C1'-N9	7.04	113.83	108.20
1	N	537	G	O4'-C1'-N9	7.04	113.83	108.20
1	N	571	U	O4'-C1'-N1	7.04	113.83	108.20
1	N	591	U	N3-C4-C5	-7.04	110.38	114.60
1	N	620	C	O4'-C1'-N1	7.04	113.83	108.20
1	N	648	A	C4-C5-C6	7.04	120.52	117.00
1	N	1398	A	N7-C8-N9	7.04	117.32	113.80
1	N	61	G	C8-N9-C4	-7.04	103.59	106.40
1	N	1040	U	C5-C6-N1	7.04	126.22	122.70
1	N	1074	G	O4'-C1'-N9	7.04	113.83	108.20
1	N	1087	G	C4-C5-N7	-7.04	107.99	110.80
1	N	1101	A	C5-C6-N1	-7.04	114.18	117.70
1	N	723	U	P-O3'-C3'	-7.03	111.26	119.70
1	N	886	G	C6-C5-N7	-7.03	126.18	130.40
1	N	1034	G	C2-N3-C4	7.03	115.42	111.90
1	N	1397	C	C2-N3-C4	7.03	123.42	119.90
1	N	53	A	C8-N9-C4	7.03	108.61	105.80
1	N	310	G	N1-C6-O6	7.03	124.12	119.90
1	N	1479	C	C5-C4-N4	-7.03	115.28	120.20
1	N	210	C	O4'-C1'-N1	7.03	113.83	108.20
1	N	275	G	C4-C5-C6	7.03	123.02	118.80
1	N	1143	G	C4-C5-C6	7.03	123.02	118.80
1	N	607	A	N9-C4-C5	7.03	108.61	105.80
1	N	80	A	N7-C8-N9	7.03	117.31	113.80
1	N	182	A	N9-C4-C5	-7.03	102.99	105.80
1	N	378	G	C5-C6-N1	-7.03	107.99	111.50
1	N	568	G	C5-C6-O6	-7.03	124.38	128.60
1	N	784	A	C5-C6-N1	-7.03	114.19	117.70
1	N	1306	A	C2-N3-C4	-7.03	107.09	110.60
1	N	1431	A	C4'-C3'-C2'	-7.03	95.57	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	773	G	C4-N9-C1'	-7.03	117.37	126.50
1	N	948	C	C5-C4-N4	-7.03	115.28	120.20
1	N	991	U	C3'-C2'-C1'	7.03	107.12	101.50
1	N	1014	A	C5-C6-N1	-7.03	114.19	117.70
1	N	1057	G	N1-C2-N3	-7.03	119.68	123.90
1	N	1100	C	C5-C6-N1	7.03	124.51	121.00
1	N	1155	A	N7-C8-N9	-7.03	110.29	113.80
1	N	1027	C	C2-N3-C4	7.02	123.41	119.90
1	N	53	A	C5-C6-N1	-7.02	114.19	117.70
1	N	101	A	C3'-C2'-C1'	-7.02	95.88	101.50
1	N	129	A	N1-C6-N6	7.02	122.81	118.60
1	N	205	A	C6-C5-N7	-7.02	127.39	132.30
1	N	278	G	C5-C6-N1	-7.02	107.99	111.50
1	N	344	A	N3-C4-N9	7.02	133.01	127.40
1	N	466	A	C5-N7-C8	7.02	107.41	103.90
1	N	724	G	O4'-C1'-N9	7.02	113.82	108.20
1	N	1531	A	C3'-C2'-C1'	-7.02	95.88	101.50
1	N	535	A	O4'-C4'-C3'	-7.01	96.98	104.00
1	N	792	A	C5-C6-N6	-7.01	118.09	123.70
1	N	902	G	C4'-C3'-C2'	-7.01	95.58	102.60
1	N	979	C	C4'-C3'-C2'	-7.01	95.58	102.60
1	N	156	C	C4-C5-C6	7.01	120.91	117.40
1	N	62	U	N1-C2-O2	7.01	127.71	122.80
1	N	164	G	N1-C2-N3	-7.01	119.69	123.90
1	N	1230	C	C6-N1-C1'	-7.01	112.39	120.80
1	N	151	A	N3-C4-C5	-7.01	121.89	126.80
1	N	744	C	O4'-C1'-C2'	-7.01	98.79	105.80
1	N	1210	C	C2-N3-C4	7.01	123.40	119.90
1	N	25	C	N3-C4-C5	-7.01	119.10	121.90
1	N	51	A	N9-C4-C5	7.01	108.60	105.80
1	N	122	G	C8-N9-C4	-7.01	103.60	106.40
1	N	1400	C	C5-C4-N4	-7.01	115.30	120.20
1	N	1532	U	C2-N1-C1'	7.01	126.11	117.70
1	N	915	A	C4-C5-C6	7.00	120.50	117.00
1	N	1510	C	O4'-C1'-N1	7.00	113.80	108.20
1	N	533	A	C6-N1-C2	-7.00	114.40	118.60
1	N	964	A	C5-C6-N6	-7.00	118.10	123.70
1	N	1268	G	O4'-C1'-N9	7.00	113.80	108.20
1	N	1452	C	C5'-C4'-O4'	7.00	117.50	109.10
1	N	718	A	C2-N3-C4	-7.00	107.10	110.60
1	N	833	G	O4'-C1'-N9	7.00	113.80	108.20
1	N	1103	C	C5-C4-N4	-7.00	115.30	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1187	G	O4'-C1'-N9	7.00	113.80	108.20
1	N	46	G	C5-C6-N1	-7.00	108.00	111.50
1	N	378	G	N1-C2-N2	-7.00	109.90	116.20
1	N	487	A	C5-C6-N1	-7.00	114.20	117.70
1	N	700	G	O4'-C1'-N9	7.00	113.80	108.20
1	N	1010	U	O4'-C1'-N1	7.00	113.80	108.20
1	N	1305	G	N3-C2-N2	7.00	124.80	119.90
1	N	1477	U	C3'-C2'-C1'	-7.00	95.90	101.50
1	N	206	C	C5-C4-N4	-7.00	115.30	120.20
1	N	320	A	C1'-O4'-C4'	6.99	115.50	109.90
1	N	501	C	N1-C2-O2	-6.99	114.70	118.90
1	N	816	A	N1-C6-N6	6.99	122.80	118.60
1	N	899	C	C2-N1-C1'	6.99	126.49	118.80
1	N	26	A	C1'-O4'-C4'	-6.99	104.31	109.90
1	N	153	C	O4'-C1'-N1	6.99	113.79	108.20
1	N	95	C	C5-C4-N4	-6.99	115.31	120.20
1	N	349	A	N1-C6-N6	6.99	122.79	118.60
1	N	602	A	N9-C4-C5	6.99	108.60	105.80
1	N	712	A	O4'-C1'-N9	6.99	113.79	108.20
1	N	1127	G	N9-C4-C5	6.99	108.20	105.40
1	N	1457	G	C4-C5-N7	6.99	113.60	110.80
1	N	769	G	C6-N1-C2	6.99	129.29	125.10
1	N	1252	A	N7-C8-N9	-6.99	110.31	113.80
1	N	1504	G	C6-N1-C2	-6.99	120.91	125.10
1	N	578	C	O4'-C1'-N1	6.99	113.79	108.20
1	N	614	C	N3-C4-N4	6.99	122.89	118.00
1	N	793	U	OP1-P-OP2	-6.99	109.12	119.60
1	N	1370	G	N9-C4-C5	-6.99	102.61	105.40
1	N	823	C	N3-C2-O2	-6.99	117.01	121.90
1	N	1426	G	N3-C2-N2	6.99	124.79	119.90
1	N	674	G	C5-N7-C8	6.98	107.79	104.30
1	N	1288	A	P-O3'-C3'	-6.98	111.32	119.70
1	N	297	G	N1-C2-N2	-6.98	109.92	116.20
1	N	1427	C	C5-C4-N4	-6.98	115.31	120.20
1	N	741	G	C8-N9-C1'	6.98	136.07	127.00
1	N	1247	U	C4'-C3'-C2'	-6.98	95.62	102.60
1	N	1261	A	C5-C6-N6	-6.98	118.11	123.70
1	N	1441	A	C5-N7-C8	-6.98	100.41	103.90
1	N	1487	G	C5'-C4'-O4'	6.98	117.48	109.10
1	N	28	A	N1-C6-N6	6.98	122.79	118.60
1	N	396	C	N3-C4-C5	-6.98	119.11	121.90
1	N	461	A	C2-N3-C4	6.98	114.09	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	489	C	N3-C4-C5	-6.98	119.11	121.90
1	N	932	C	N3-C4-N4	6.98	122.89	118.00
1	N	1326	U	N3-C2-O2	6.98	127.08	122.20
1	N	1427	C	N3-C4-N4	6.98	122.89	118.00
1	N	296	U	N3-C2-O2	6.98	127.08	122.20
1	N	1072	G	C6-C5-N7	-6.98	126.21	130.40
1	N	1266	G	C6-C5-N7	-6.98	126.21	130.40
1	N	254	G	N1-C2-N2	6.98	122.48	116.20
1	N	1532	U	N3-C4-C5	-6.98	110.41	114.60
1	N	276	G	C6-C5-N7	-6.97	126.22	130.40
1	N	650	G	N1-C2-N3	-6.97	119.72	123.90
1	N	719	C	C2-N1-C1'	6.97	126.47	118.80
1	N	1432	G	C4-N9-C1'	-6.97	117.44	126.50
1	N	1445	U	N3-C4-O4	6.97	124.28	119.40
1	N	1318	A	O4'-C4'-C3'	6.97	111.68	106.10
1	N	1365	G	C5-C6-N1	-6.97	108.01	111.50
1	N	51	A	C3'-C2'-C1'	6.97	107.08	101.50
1	N	825	A	C6-N1-C2	-6.97	114.42	118.60
1	N	1103	C	O4'-C1'-N1	6.97	113.78	108.20
1	N	1042	A	O5'-P-OP2	6.97	119.06	110.70
1	N	444	G	N1-C6-O6	6.97	124.08	119.90
1	N	459	A	C5-C6-N1	-6.96	114.22	117.70
1	N	532	A	N1-C2-N3	6.96	132.78	129.30
1	N	730	G	N3-C4-C5	-6.96	125.12	128.60
1	N	1434	A	C6-C5-N7	-6.96	127.42	132.30
1	N	1075	U	O4'-C4'-C3'	-6.96	97.04	104.00
1	N	1349	A	N7-C8-N9	-6.96	110.32	113.80
1	N	583	A	C4-C5-C6	6.96	120.48	117.00
1	N	1419	G	C6-N1-C2	6.96	129.28	125.10
1	N	581	G	N1-C2-N2	-6.96	109.94	116.20
1	N	669	G	O4'-C1'-N9	6.96	113.77	108.20
1	N	1398	A	P-O3'-C3'	-6.96	111.35	119.70
1	N	717	U	N3-C4-C5	-6.96	110.43	114.60
1	N	937	A	N1-C2-N3	6.96	132.78	129.30
1	N	1116	U	N3-C4-O4	6.96	124.27	119.40
1	N	859	G	C5-C6-N1	-6.95	108.02	111.50
1	N	1012	A	P-O3'-C3'	-6.95	111.36	119.70
1	N	1375	A	O4'-C1'-N9	6.95	113.76	108.20
1	N	1489	G	C5-C6-O6	-6.95	124.43	128.60
1	N	151	A	O4'-C4'-C3'	-6.95	97.05	104.00
1	N	66	A	C5-C6-N1	-6.95	114.22	117.70
1	N	293	G	O4'-C1'-N9	6.95	113.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	670	G	N1-C2-N3	-6.95	119.73	123.90
1	N	925	G	O4'-C1'-N9	6.95	113.76	108.20
1	N	1247	U	O4'-C1'-N1	6.95	113.76	108.20
1	N	1303	C	C1'-O4'-C4'	6.95	115.46	109.90
1	N	328	C	O4'-C1'-N1	6.95	113.76	108.20
1	N	710	G	N1-C2-N3	-6.95	119.73	123.90
1	N	1484	C	P-O5'-C5'	6.95	132.02	120.90
1	N	1515	G	N7-C8-N9	-6.95	109.63	113.10
1	N	947	G	C5'-C4'-C3'	6.95	127.11	116.00
1	N	54	C	P-O5'-C5'	-6.94	109.79	120.90
1	N	267	C	N3-C4-C5	-6.94	119.12	121.90
1	N	292	G	N1-C6-O6	6.94	124.07	119.90
1	N	873	A	C5'-C4'-O4'	6.94	117.43	109.10
1	N	179	A	C4-C5-N7	-6.94	107.23	110.70
1	N	280	C	C2-N1-C1'	6.94	126.44	118.80
1	N	428	G	O4'-C4'-C3'	-6.94	97.06	104.00
1	N	840	C	N1-C2-N3	6.94	124.06	119.20
1	N	1086	U	O5'-C5'-C4'	6.94	124.89	111.70
1	N	1092	A	C6-N1-C2	-6.94	114.43	118.60
1	N	1152	A	C4-C5-C6	6.94	120.47	117.00
1	N	8	A	P-O5'-C5'	-6.94	109.80	120.90
1	N	240	G	C5-N7-C8	6.94	107.77	104.30
1	N	438	U	C6-N1-C1'	-6.94	111.48	121.20
1	N	759	A	C2-N3-C4	-6.94	107.13	110.60
1	N	1128	C	C5-C4-N4	-6.94	115.34	120.20
1	N	174	A	N3-C4-N9	6.94	132.95	127.40
1	N	246	A	N1-C2-N3	6.94	132.77	129.30
1	N	278	G	C4-C5-C6	6.94	122.96	118.80
1	N	988	G	C6-C5-N7	-6.94	126.24	130.40
1	N	1011	C	N3-C4-N4	6.94	122.86	118.00
1	N	1061	G	C5-C6-O6	-6.94	124.44	128.60
1	N	1191	A	C6-N1-C2	-6.94	114.44	118.60
1	N	781	A	N9-C4-C5	-6.94	103.03	105.80
1	N	1174	G	C5-C6-N1	-6.94	108.03	111.50
1	N	1190	G	C4-C5-N7	-6.94	108.03	110.80
1	N	713	G	O4'-C1'-N9	6.93	113.75	108.20
1	N	809	G	C5-C6-N1	-6.93	108.03	111.50
1	N	1000	A	C5-C6-N1	-6.93	114.23	117.70
1	N	1048	G	N3-C4-N9	-6.93	121.84	126.00
1	N	1051	C	C5-C4-N4	-6.93	115.35	120.20
1	N	1442	G	C4-C5-N7	-6.93	108.03	110.80
1	N	380	G	C4-N9-C1'	-6.93	117.49	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	103	U	O4'-C1'-N1	6.93	113.74	108.20
1	N	206	C	C2-N1-C1'	6.93	126.42	118.80
1	N	1308	U	C2-N3-C4	-6.93	122.84	127.00
1	N	1428	A	C8-N9-C4	-6.93	103.03	105.80
1	N	250	A	C5-C6-N1	-6.92	114.24	117.70
1	N	447	G	O4'-C1'-N9	6.92	113.74	108.20
1	N	534	U	P-O5'-C5'	6.92	131.98	120.90
1	N	746	A	O4'-C1'-N9	6.92	113.74	108.20
1	N	118	U	P-O5'-C5'	6.92	131.97	120.90
1	N	644	U	P-O5'-C5'	6.92	131.98	120.90
1	N	695	A	C8-N9-C4	-6.92	103.03	105.80
1	N	1088	G	N9-C4-C5	6.92	108.17	105.40
1	N	1274	A	OP1-P-OP2	-6.92	109.22	119.60
1	N	1478	U	C2-N3-C4	6.92	131.15	127.00
1	N	1368	A	C5-C6-N6	-6.92	118.16	123.70
1	N	1408	A	C5-C6-N1	-6.92	114.24	117.70
1	N	116	A	C4-C5-C6	6.92	120.46	117.00
1	N	474	G	C5-C6-O6	-6.92	124.45	128.60
1	N	695	A	N3-C4-N9	6.92	132.94	127.40
1	N	422	C	N1-C2-N3	-6.92	114.36	119.20
1	N	452	A	O4'-C1'-N9	6.92	113.73	108.20
1	N	1237	C	N1-C2-O2	-6.92	114.75	118.90
1	N	1469	C	C4-C5-C6	6.92	120.86	117.40
1	N	1469	C	O5'-C5'-C4'	6.92	124.84	111.70
1	N	1473	G	C4'-C3'-C2'	-6.92	95.68	102.60
1	N	419	C	N3-C4-N4	6.92	122.84	118.00
1	N	1061	G	C8-N9-C4	-6.92	103.63	106.40
1	N	1364	U	C2-N3-C4	-6.91	122.85	127.00
1	N	178	C	N3-C4-N4	6.91	122.84	118.00
1	N	1334	G	C6-C5-N7	-6.91	126.25	130.40
1	N	854	U	C4-C5-C6	-6.91	115.55	119.70
1	N	229	U	O4'-C1'-N1	6.91	113.73	108.20
1	N	405	U	P-O3'-C3'	6.91	127.99	119.70
1	N	945	G	N1-C2-N3	-6.91	119.75	123.90
1	N	1182	G	C4-N9-C1'	-6.91	117.52	126.50
1	N	255	G	C5-C6-O6	-6.91	124.46	128.60
1	N	326	G	C6-C5-N7	-6.91	126.26	130.40
1	N	573	A	C6-N1-C2	-6.91	114.46	118.60
1	N	991	U	C5-C4-O4	-6.91	121.76	125.90
1	N	1224	U	C6-N1-C1'	-6.91	111.53	121.20
1	N	1460	C	C5-C6-N1	6.91	124.45	121.00
1	N	1409	C	N1-C2-N3	-6.90	114.37	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1488	G	C8-N9-C4	6.90	109.16	106.40
1	N	1358	U	N1-C1'-C2'	6.90	122.97	114.00
1	N	1508	A	O4'-C1'-N9	6.90	113.72	108.20
1	N	990	C	C4-C5-C6	-6.90	113.95	117.40
1	N	1242	G	P-O3'-C3'	-6.90	111.42	119.70
1	N	715	A	N1-C2-N3	6.90	132.75	129.30
1	N	1108	G	P-O3'-C3'	6.90	127.98	119.70
1	N	1376	U	C2-N3-C4	6.90	131.14	127.00
1	N	1381	U	O4'-C1'-N1	6.90	113.72	108.20
1	N	276	G	C5-C6-N1	-6.90	108.05	111.50
1	N	148	G	O4'-C1'-N9	6.89	113.72	108.20
1	N	629	A	O4'-C1'-N9	6.89	113.72	108.20
1	N	820	U	C5-C6-N1	6.89	126.15	122.70
1	N	710	G	C4-C5-N7	-6.89	108.04	110.80
1	N	320	A	C3'-C2'-C1'	6.89	107.01	101.50
1	N	1356	G	N1-C6-O6	6.89	124.03	119.90
1	N	206	C	C6-N1-C2	-6.89	117.54	120.30
1	N	621	A	C4-C5-C6	6.89	120.44	117.00
1	N	1142	G	C4-N9-C1'	6.89	135.46	126.50
1	N	1213	A	O4'-C1'-N9	6.89	113.71	108.20
1	N	1281	C	N3-C4-N4	6.89	122.82	118.00
1	N	401	C	N3-C4-N4	6.89	122.82	118.00
1	N	541	G	N1-C6-O6	6.89	124.03	119.90
1	N	1225	A	C1'-O4'-C4'	6.89	115.41	109.90
1	N	1349	A	C6-C5-N7	-6.88	127.48	132.30
1	N	539	A	C6-C5-N7	-6.88	127.48	132.30
1	N	347	G	C6-N1-C2	6.88	129.23	125.10
1	N	1331	G	C6-N1-C2	6.88	129.23	125.10
1	N	2	A	O4'-C1'-N9	6.88	113.70	108.20
1	N	52	C	C5-C4-N4	-6.88	115.39	120.20
1	N	379	C	N3-C4-C5	-6.88	119.15	121.90
1	N	509	A	O4'-C1'-N9	6.88	113.70	108.20
1	N	911	U	N3-C4-O4	6.88	124.21	119.40
1	N	691	G	C5-C6-N1	-6.88	108.06	111.50
1	N	632	U	C5-C4-O4	-6.87	121.78	125.90
1	N	1307	U	C5-C6-N1	6.87	126.14	122.70
1	N	928	G	N1-C2-N3	-6.87	119.78	123.90
1	N	1213	A	C4-C5-C6	6.87	120.44	117.00
1	N	1310	G	C2'-C3'-O3'	6.87	124.69	113.70
1	N	1534	A	C5-C6-N6	-6.87	118.20	123.70
1	N	1246	A	C4-C5-C6	6.87	120.43	117.00
1	N	1458	G	C4-N9-C1'	6.87	135.43	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1087	G	N7-C8-N9	-6.87	109.67	113.10
1	N	1127	G	C6-N1-C2	-6.87	120.98	125.10
1	N	172	A	N7-C8-N9	-6.86	110.37	113.80
1	N	711	G	O4'-C1'-N9	6.86	113.69	108.20
1	N	758	C	C2-N3-C4	6.86	123.33	119.90
1	N	1011	C	N1-C2-O2	6.86	123.02	118.90
1	N	1087	G	C1'-O4'-C4'	6.86	115.39	109.90
1	N	971	G	C6-N1-C2	-6.86	120.98	125.10
1	N	136	C	O4'-C1'-N1	6.86	113.69	108.20
1	N	897	C	C5'-C4'-O4'	6.86	117.33	109.10
1	N	1239	A	C4-C5-N7	-6.86	107.27	110.70
1	N	1230	C	N3-C2-O2	6.86	126.70	121.90
1	N	249	U	C6-N1-C2	-6.86	116.89	121.00
1	N	1048	G	N3-C2-N2	6.86	124.70	119.90
1	N	1457	G	O4'-C1'-N9	6.86	113.69	108.20
1	N	111	G	O4'-C1'-N9	6.86	113.69	108.20
1	N	151	A	N1-C6-N6	6.86	122.71	118.60
1	N	300	A	C5-C6-N6	-6.86	118.22	123.70
1	N	623	C	C4-C5-C6	-6.86	113.97	117.40
1	N	906	A	C8-N9-C4	-6.86	103.06	105.80
1	N	1199	U	N3-C2-O2	6.86	127.00	122.20
1	N	1280	A	C5-C6-N1	-6.86	114.27	117.70
1	N	824	G	C4-C5-C6	6.85	122.91	118.80
1	N	1004	A	C4-C5-N7	-6.85	107.27	110.70
1	N	1121	U	C6-N1-C2	-6.85	116.89	121.00
1	N	811	C	O4'-C1'-N1	6.85	113.68	108.20
1	N	1262	C	N3-C4-C5	-6.85	119.16	121.90
1	N	1514	G	O4'-C1'-N9	6.85	113.68	108.20
1	N	1373	G	N3-C2-N2	6.85	124.69	119.90
1	N	121	U	C2-N1-C1'	6.85	125.92	117.70
1	N	148	G	N7-C8-N9	6.85	116.52	113.10
1	N	1118	U	C4-C5-C6	-6.85	115.59	119.70
1	N	1404	C	C6-N1-C2	6.85	123.04	120.30
1	N	230	G	C5-C6-O6	-6.84	124.49	128.60
1	N	515	G	P-O5'-C5'	6.84	131.85	120.90
1	N	735	C	C5-C4-N4	-6.84	115.41	120.20
1	N	997	U	N1-C2-N3	-6.84	110.79	114.90
1	N	131	A	C3'-C2'-C1'	6.84	106.97	101.50
1	N	1438	G	P-O3'-C3'	-6.84	111.49	119.70
1	N	555	U	P-O5'-C5'	6.84	131.85	120.90
1	N	27	G	N7-C8-N9	6.84	116.52	113.10
1	N	74	A	N9-C4-C5	6.84	108.54	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	116	A	N9-C4-C5	-6.84	103.06	105.80
1	N	453	G	C5-C6-N1	6.84	114.92	111.50
1	N	655	A	N1-C2-N3	-6.84	125.88	129.30
1	N	1240	U	N3-C4-O4	6.84	124.19	119.40
1	N	1323	G	N1-C6-O6	6.83	124.00	119.90
1	N	424	G	C5-C6-N1	-6.83	108.08	111.50
1	N	554	A	N1-C6-N6	6.83	122.70	118.60
1	N	1255	G	N7-C8-N9	6.83	116.52	113.10
1	N	30	U	C2-N3-C4	-6.83	122.90	127.00
1	N	442	G	C4-C5-C6	6.83	122.90	118.80
1	N	450	G	C6-C5-N7	-6.83	126.30	130.40
1	N	531	U	C5'-C4'-O4'	6.83	117.30	109.10
1	N	1050	G	C5-C6-O6	-6.83	124.50	128.60
1	N	1243	C	C2-N3-C4	6.83	123.32	119.90
1	N	115	G	C6-C5-N7	-6.83	126.30	130.40
1	N	843	U	C6-N1-C1'	-6.83	111.64	121.20
1	N	890	G	C6-N1-C2	6.83	129.20	125.10
1	N	1292	G	C6-N1-C2	6.83	129.20	125.10
1	N	747	A	C4'-C3'-C2'	-6.83	95.77	102.60
1	N	1454	G	O4'-C1'-N9	6.83	113.66	108.20
1	N	939	G	C4'-C3'-C2'	-6.83	95.77	102.60
1	N	1405	G	C4-N9-C1'	-6.83	117.63	126.50
1	N	298	A	C5-C6-N6	-6.82	118.24	123.70
1	N	626	G	C8-N9-C4	-6.82	103.67	106.40
1	N	878	A	C6-N1-C2	-6.82	114.51	118.60
1	N	147	G	C5'-C4'-O4'	6.82	117.29	109.10
1	N	196	A	C4-C5-N7	-6.82	107.29	110.70
1	N	1401	G	O4'-C1'-N9	6.82	113.66	108.20
1	N	359	G	C5-C6-N1	6.82	114.91	111.50
1	N	1253	G	N1-C2-N3	-6.82	119.81	123.90
1	N	1254	A	C1'-O4'-C4'	-6.82	104.44	109.90
1	N	177	G	C1'-O4'-C4'	-6.82	104.44	109.90
1	N	279	A	C5-C6-N1	-6.82	114.29	117.70
1	N	338	A	C6-C5-N7	-6.82	127.53	132.30
1	N	103	U	N3-C4-O4	6.82	124.17	119.40
1	N	1238	A	C4-C5-C6	6.82	120.41	117.00
1	N	1472	U	N3-C2-O2	6.82	126.97	122.20
1	N	558	G	N9-C4-C5	6.82	108.13	105.40
1	N	698	G	C2-N3-C4	6.82	115.31	111.90
1	N	860	A	C2-N3-C4	-6.82	107.19	110.60
1	N	1151	A	C3'-C2'-C1'	6.82	106.95	101.50
1	N	1201	A	C6-N1-C2	6.82	122.69	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1265	C	C5-C4-N4	-6.82	115.43	120.20
1	N	981	U	C5-C4-O4	-6.81	121.81	125.90
1	N	1404	C	N3-C2-O2	6.81	126.67	121.90
1	N	201	G	O4'-C1'-N9	6.81	113.65	108.20
1	N	298	A	C5-C6-N1	-6.81	114.29	117.70
1	N	394	G	N3-C2-N2	6.81	124.67	119.90
1	N	688	G	C6-C5-N7	-6.81	126.31	130.40
1	N	912	C	O4'-C1'-N1	6.81	113.65	108.20
1	N	1071	C	C2-N1-C1'	6.81	126.29	118.80
1	N	930	C	O4'-C1'-N1	6.81	113.65	108.20
1	N	1041	G	P-O3'-C3'	-6.81	111.53	119.70
1	N	1363	A	C5'-C4'-C3'	-6.81	105.10	116.00
1	N	1519	A	C5-C6-N1	-6.81	114.30	117.70
1	N	42	G	C4-C5-N7	6.81	113.52	110.80
1	N	112	G	N7-C8-N9	-6.81	109.69	113.10
1	N	259	G	N3-C2-N2	6.81	124.67	119.90
1	N	291	U	N3-C4-C5	-6.81	110.51	114.60
1	N	339	C	N1-C2-O2	-6.81	114.81	118.90
1	N	358	U	C5-C6-N1	6.81	126.11	122.70
1	N	855	U	C5-C6-N1	6.81	126.11	122.70
1	N	574	A	C5'-C4'-O4'	6.81	117.27	109.10
1	N	608	A	C5-C6-N6	-6.81	118.25	123.70
1	N	799	G	O4'-C1'-N9	6.81	113.64	108.20
1	N	1095	U	C1'-O4'-C4'	6.81	115.35	109.90
1	N	1190	G	N1-C6-O6	6.81	123.98	119.90
1	N	499	A	C5-C6-N6	-6.81	118.26	123.70
1	N	656	G	C8-N9-C4	-6.80	103.68	106.40
1	N	678	U	C2-N3-C4	6.80	131.08	127.00
1	N	515	G	N9-C4-C5	-6.80	102.68	105.40
1	N	668	G	O4'-C1'-N9	6.80	113.64	108.20
1	N	791	G	N1-C2-N3	-6.80	119.82	123.90
1	N	937	A	C4'-C3'-C2'	-6.80	95.80	102.60
1	N	464	U	C5'-C4'-C3'	6.80	126.88	116.00
1	N	785	G	C6-N1-C2	-6.80	121.02	125.10
1	N	1360	A	C4-C5-C6	6.80	120.40	117.00
1	N	606	G	N1-C2-N3	-6.80	119.82	123.90
1	N	338	A	C4-C5-C6	6.80	120.40	117.00
1	N	355	C	P-O3'-C3'	6.80	127.86	119.70
1	N	569	C	P-O3'-C3'	6.79	127.85	119.70
1	N	883	C	C5-C6-N1	-6.79	117.60	121.00
1	N	964	A	N9-C4-C5	6.79	108.52	105.80
1	N	982	U	C5-C4-O4	-6.79	121.83	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	104	G	C3'-C2'-C1'	-6.79	96.07	101.50
1	N	1517	G	N9-C4-C5	-6.79	102.68	105.40
1	N	554	A	O4'-C4'-C3'	-6.79	97.21	104.00
1	N	1159	U	O4'-C1'-C2'	-6.79	99.01	105.80
1	N	675	A	N1-C6-N6	6.79	122.67	118.60
1	N	840	C	N3-C4-C5	-6.78	119.19	121.90
1	N	897	C	C2-N1-C1'	6.78	126.26	118.80
1	N	1200	C	N3-C4-N4	6.78	122.75	118.00
1	N	753	A	C4-C5-C6	6.78	120.39	117.00
1	N	856	C	N3-C4-C5	-6.78	119.19	121.90
1	N	1271	A	O4'-C1'-N9	6.78	113.62	108.20
1	N	1276	G	C5-C6-N1	-6.78	108.11	111.50
1	N	20	U	O4'-C1'-N1	6.78	113.62	108.20
1	N	1112	C	C5-C6-N1	6.78	124.39	121.00
1	N	530	G	C4'-C3'-C2'	-6.78	95.82	102.60
1	N	798	U	N3-C4-C5	-6.78	110.53	114.60
1	N	732	C	C5-C6-N1	-6.78	117.61	121.00
1	N	1078	U	N3-C4-O4	6.78	124.14	119.40
1	N	100	G	C4-N9-C1'	6.77	135.31	126.50
1	N	220	G	N3-C2-N2	6.77	124.64	119.90
1	N	223	A	O4'-C1'-N9	6.77	113.62	108.20
1	N	614	C	O4'-C1'-N1	6.77	113.62	108.20
1	N	720	C	N3-C4-C5	-6.77	119.19	121.90
1	N	1475	G	O4'-C1'-N9	6.77	113.62	108.20
1	N	841	C	C2-N3-C4	-6.77	116.52	119.90
1	N	933	G	N1-C2-N2	6.77	122.29	116.20
1	N	959	A	N7-C8-N9	-6.77	110.42	113.80
1	N	1057	G	C5-C6-N1	-6.77	108.11	111.50
1	N	1204	A	N9-C4-C5	-6.77	103.09	105.80
1	N	60	A	C4-C5-N7	-6.77	107.32	110.70
1	N	228	A	N9-C4-C5	6.77	108.51	105.80
1	N	704	A	N1-C6-N6	6.77	122.66	118.60
1	N	828	U	P-O5'-C5'	6.77	131.73	120.90
1	N	1146	A	C4-C5-N7	-6.77	107.32	110.70
1	N	1166	G	C3'-C2'-C1'	6.77	106.92	101.50
1	N	1464	U	C6-N1-C2	-6.77	116.94	121.00
1	N	1475	G	C5-C6-N1	-6.77	108.12	111.50
1	N	716	A	C5-C6-N1	-6.76	114.32	117.70
1	N	596	A	C8-N9-C4	-6.76	103.09	105.80
1	N	133	U	C4-C5-C6	6.76	123.76	119.70
1	N	832	G	O4'-C1'-N9	6.76	113.61	108.20
1	N	860	A	C5-N7-C8	6.76	107.28	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	865	A	C4'-C3'-C2'	-6.76	95.84	102.60
1	N	971	G	C8-N9-C4	6.76	109.10	106.40
1	N	977	A	N1-C2-N3	6.76	132.68	129.30
1	N	1047	G	C8-N9-C4	-6.76	103.70	106.40
1	N	1346	A	C4-C5-N7	-6.76	107.32	110.70
1	N	213	G	C6-N1-C2	-6.76	121.05	125.10
1	N	252	U	C5'-C4'-C3'	-6.76	105.19	116.00
1	N	596	A	O4'-C1'-N9	6.76	113.61	108.20
1	N	953	G	C5-N7-C8	6.76	107.68	104.30
1	N	1474	U	C5-C6-N1	-6.75	119.32	122.70
1	N	16	A	C8-N9-C4	-6.75	103.10	105.80
1	N	37	U	C5-C6-N1	6.75	126.08	122.70
1	N	776	G	N1-C2-N3	-6.75	119.85	123.90
1	N	1339	A	N7-C8-N9	-6.75	110.42	113.80
1	N	175	C	P-O5'-C5'	6.75	131.70	120.90
1	N	1064	G	N1-C2-N2	-6.75	110.12	116.20
1	N	1185	G	N9-C4-C5	-6.75	102.70	105.40
1	N	1331	G	C5'-C4'-C3'	-6.75	105.20	116.00
1	N	956	U	C4-C5-C6	6.75	123.75	119.70
1	N	1023	U	N1-C2-N3	6.75	118.95	114.90
1	N	1123	U	C2-N3-C4	6.75	131.05	127.00
1	N	157	U	C2-N3-C4	-6.75	122.95	127.00
1	N	1323	G	C4'-C3'-C2'	-6.75	95.85	102.60
1	N	1333	A	N1-C6-N6	6.75	122.65	118.60
1	N	1378	C	C5-C4-N4	-6.75	115.48	120.20
1	N	320	A	O4'-C1'-N9	6.75	113.60	108.20
1	N	617	G	C4-C5-C6	6.75	122.85	118.80
1	N	61	G	C4-C5-N7	-6.74	108.10	110.80
1	N	95	C	N3-C4-N4	6.74	122.72	118.00
1	N	222	C	C4'-C3'-C2'	-6.74	95.86	102.60
1	N	446	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	713	G	C5-C6-O6	-6.74	124.55	128.60
1	N	292	G	N9-C4-C5	-6.74	102.70	105.40
1	N	899	C	N3-C4-N4	6.74	122.72	118.00
1	N	63	C	C5'-C4'-O4'	6.74	117.19	109.10
1	N	71	A	C1'-O4'-C4'	6.74	115.29	109.90
1	N	79	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	286	C	C6-N1-C1'	-6.74	112.72	120.80
1	N	338	A	O4'-C4'-C3'	-6.74	97.26	104.00
1	N	1260	G	N1-C2-N3	-6.74	119.86	123.90
1	N	898	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	1117	A	C2-N3-C4	-6.74	107.23	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1142	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	1417	G	O4'-C4'-C3'	-6.74	97.26	104.00
1	N	773	G	N1-C2-N3	-6.73	119.86	123.90
1	N	1145	A	C5-C6-N6	-6.73	118.31	123.70
1	N	1490	U	N3-C4-O4	6.73	124.11	119.40
1	N	312	C	N1-C2-N3	-6.73	114.49	119.20
1	N	663	A	C8-N9-C4	-6.73	103.11	105.80
1	N	331	G	C5-C6-O6	-6.73	124.56	128.60
1	N	1340	A	C5-C6-N6	-6.73	118.32	123.70
1	N	237	G	C5-N7-C8	6.73	107.66	104.30
1	N	255	G	C4-C5-C6	6.73	122.84	118.80
1	N	932	C	C5'-C4'-C3'	-6.73	105.23	116.00
1	N	1362	A	C4-C5-C6	6.73	120.36	117.00
1	N	1455	G	O4'-C1'-N9	6.73	113.58	108.20
1	N	81	A	C4-C5-C6	6.73	120.36	117.00
1	N	588	G	P-O5'-C5'	6.73	131.66	120.90
1	N	1110	A	C4-C5-C6	6.73	120.36	117.00
1	N	185	U	N3-C4-O4	6.72	124.11	119.40
1	N	741	G	C8-N9-C4	-6.72	103.71	106.40
1	N	776	G	C1'-O4'-C4'	-6.72	104.52	109.90
1	N	266	G	N3-C4-N9	6.72	130.03	126.00
1	N	721	G	C4-C5-N7	-6.72	108.11	110.80
1	N	1195	C	N3-C4-C5	-6.72	119.21	121.90
1	N	1157	A	C5-C6-N1	-6.72	114.34	117.70
1	N	1032	G	O4'-C1'-N9	6.72	113.57	108.20
1	N	1048	G	O4'-C1'-N9	6.72	113.57	108.20
1	N	1027	C	N3-C4-N4	6.72	122.70	118.00
1	N	1390	U	C6-N1-C2	-6.72	116.97	121.00
1	N	168	G	C5'-C4'-O4'	6.71	117.16	109.10
1	N	200	G	O4'-C1'-N9	6.71	113.57	108.20
1	N	434	U	N3-C4-O4	6.71	124.10	119.40
1	N	721	G	O5'-P-OP2	6.71	118.76	110.70
1	N	1240	U	O4'-C4'-C3'	-6.71	97.29	104.00
1	N	591	U	O4'-C1'-N1	6.71	113.57	108.20
1	N	689	C	P-O3'-C3'	-6.71	111.64	119.70
1	N	1004	A	C6-N1-C2	6.71	122.63	118.60
1	N	1058	G	C1'-O4'-C4'	6.71	115.27	109.90
1	N	1518	A	C8-N9-C4	-6.71	103.11	105.80
1	N	897	C	C6-N1-C2	-6.71	117.61	120.30
1	N	977	A	N9-C4-C5	6.71	108.48	105.80
1	N	1156	G	C5-C6-O6	6.71	132.62	128.60
1	N	1315	U	C3'-C2'-C1'	6.71	106.87	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1464	U	N3-C4-O4	6.71	124.10	119.40
1	N	246	A	C3'-C2'-C1'	6.71	106.87	101.50
1	N	1043	G	C8-N9-C4	6.71	109.08	106.40
1	N	1514	G	C5-C6-O6	-6.71	124.58	128.60
1	N	280	C	N3-C4-N4	6.71	122.69	118.00
1	N	348	G	N3-C4-C5	6.71	131.95	128.60
1	N	140	U	C2'-C3'-O3'	6.70	124.43	113.70
1	N	326	G	N1-C6-O6	6.70	123.92	119.90
1	N	351	G	N1-C2-N3	-6.70	119.88	123.90
1	N	403	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	1358	U	O4'-C1'-N1	6.70	113.56	108.20
1	N	1487	G	O4'-C1'-N9	6.70	113.56	108.20
1	N	536	C	N3-C4-C5	-6.70	119.22	121.90
1	N	1520	C	N3-C2-O2	-6.70	117.21	121.90
1	N	1406	U	C5-C6-N1	6.70	126.05	122.70
1	N	260	G	N1-C2-N3	-6.70	119.88	123.90
1	N	547	A	N1-C2-N3	6.70	132.65	129.30
1	N	695	A	N1-C2-N3	-6.70	125.95	129.30
1	N	1154	G	C5'-C4'-C3'	-6.70	105.28	116.00
1	N	1261	A	N1-C2-N3	-6.70	125.95	129.30
1	N	1292	G	P-O5'-C5'	6.70	131.62	120.90
1	N	184	G	N3-C2-N2	6.70	124.59	119.90
1	N	731	G	P-O3'-C3'	-6.70	111.66	119.70
1	N	836	G	C6-C5-N7	-6.70	126.38	130.40
1	N	45	G	N7-C8-N9	-6.70	109.75	113.10
1	N	259	G	C8-N9-C4	-6.70	103.72	106.40
1	N	735	C	N3-C4-C5	-6.70	119.22	121.90
1	N	500	G	O4'-C1'-N9	6.69	113.56	108.20
1	N	849	G	C5-C6-O6	-6.69	124.58	128.60
1	N	1459	G	C4'-C3'-C2'	-6.69	95.91	102.60
1	N	18	C	N3-C2-O2	6.69	126.58	121.90
1	N	230	G	O4'-C1'-N9	6.69	113.55	108.20
1	N	506	G	C4-C5-C6	6.69	122.81	118.80
1	N	890	G	N1-C6-O6	6.69	123.92	119.90
1	N	1168	U	C4'-C3'-C2'	-6.69	95.91	102.60
1	N	1258	G	C2-N3-C4	6.69	115.25	111.90
1	N	1050	G	C5'-C4'-C3'	-6.69	105.30	116.00
1	N	160	A	C2-N3-C4	-6.69	107.26	110.60
1	N	261	U	C6-N1-C2	-6.69	116.99	121.00
1	N	328	C	C1'-O4'-C4'	-6.69	104.55	109.90
1	N	411	A	O4'-C1'-N9	6.69	113.55	108.20
1	N	654	G	C4-C5-N7	6.69	113.47	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1055	A	C5'-C4'-C3'	6.69	126.70	116.00
1	N	1154	G	N9-C4-C5	-6.69	102.72	105.40
1	N	120	A	C4'-C3'-C2'	-6.69	95.91	102.60
1	N	1047	G	P-O3'-C3'	6.69	127.72	119.70
1	N	1386	G	N1-C6-O6	6.69	123.91	119.90
1	N	421	U	O4'-C1'-N1	6.68	113.55	108.20
1	N	699	C	P-O3'-C3'	-6.68	111.68	119.70
1	N	967	C	C6-N1-C2	-6.68	117.63	120.30
1	N	1239	A	N1-C6-N6	6.68	122.61	118.60
1	N	1375	A	C5-C6-N1	-6.68	114.36	117.70
1	N	655	A	C5'-C4'-O4'	6.68	117.12	109.10
1	N	1344	C	N3-C4-C5	-6.68	119.23	121.90
1	N	1357	A	C4-C5-C6	6.68	120.34	117.00
1	N	1357	A	C5-C6-N1	-6.68	114.36	117.70
1	N	306	A	P-O3'-C3'	6.68	127.72	119.70
1	N	532	A	C5'-C4'-C3'	6.68	126.69	116.00
1	N	860	A	N1-C2-N3	6.68	132.64	129.30
1	N	1127	G	N3-C4-N9	-6.68	121.99	126.00
1	N	699	C	C5-C4-N4	-6.68	115.52	120.20
1	N	755	G	C6-C5-N7	-6.68	126.39	130.40
1	N	964	A	C4-C5-C6	6.68	120.34	117.00
1	N	1435	G	C5-C6-N1	-6.68	108.16	111.50
1	N	284	C	O4'-C1'-N1	6.68	113.54	108.20
1	N	450	G	C8-N9-C4	6.68	109.07	106.40
1	N	683	G	C1'-O4'-C4'	6.68	115.24	109.90
1	N	755	G	N1-C6-O6	6.68	123.91	119.90
1	N	911	U	C5-C4-O4	-6.68	121.89	125.90
1	N	1171	A	O5'-C5'-C4'	-6.68	99.02	111.70
1	N	1218	C	N3-C4-N4	6.68	122.67	118.00
1	N	1452	C	N3-C4-N4	6.68	122.67	118.00
1	N	186	C	N3-C4-C5	-6.67	119.23	121.90
1	N	274	A	P-O3'-C3'	6.67	127.71	119.70
1	N	1274	A	P-O3'-C3'	-6.67	111.69	119.70
1	N	1020	G	C8-N9-C4	6.67	109.07	106.40
1	N	1364	U	N1-C2-N3	6.67	118.90	114.90
1	N	21	G	C4'-C3'-C2'	-6.67	95.93	102.60
1	N	461	A	P-O3'-C3'	6.67	127.70	119.70
1	N	777	A	C6-C5-N7	-6.67	127.63	132.30
1	N	963	G	N1-C2-N3	-6.67	119.90	123.90
1	N	697	U	N3-C4-O4	6.67	124.07	119.40
1	N	1157	A	N9-C4-C5	-6.67	103.13	105.80
1	N	1060	U	C5-C4-O4	-6.67	121.90	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	355	C	C5-C6-N1	-6.66	117.67	121.00
1	N	439	U	C6-N1-C2	-6.66	117.00	121.00
1	N	577	G	C5-C6-N1	-6.66	108.17	111.50
1	N	962	C	C5-C4-N4	-6.66	115.54	120.20
1	N	1376	U	C2-N1-C1'	-6.66	109.71	117.70
1	N	165	G	C6-C5-N7	-6.66	126.40	130.40
1	N	1355	G	N3-C4-N9	-6.66	122.00	126.00
1	N	1472	U	C5-C4-O4	-6.66	121.90	125.90
1	N	42	G	C5-N7-C8	-6.66	100.97	104.30
1	N	1163	A	C5-C6-N6	-6.66	118.37	123.70
1	N	1371	G	C3'-C2'-C1'	-6.66	96.17	101.50
1	N	302	G	N7-C8-N9	6.66	116.43	113.10
1	N	1093	A	C5-C6-N1	-6.66	114.37	117.70
1	N	235	C	C2-N3-C4	6.66	123.23	119.90
1	N	499	A	O4'-C1'-C2'	6.66	113.59	107.60
1	N	711	G	C5-C6-O6	-6.66	124.61	128.60
1	N	747	A	C4-C5-C6	6.66	120.33	117.00
1	N	766	A	C8-N9-C4	-6.66	103.14	105.80
1	N	784	A	O4'-C1'-N9	6.66	113.52	108.20
1	N	1185	G	C6-C5-N7	-6.66	126.41	130.40
1	N	19	A	C5-C6-N6	-6.65	118.38	123.70
1	N	196	A	C2-N3-C4	-6.65	107.27	110.60
1	N	798	U	C5'-C4'-C3'	6.65	126.65	116.00
1	N	849	G	N7-C8-N9	6.65	116.43	113.10
1	N	999	C	C5-C4-N4	-6.65	115.54	120.20
1	N	1224	U	P-O3'-C3'	6.65	127.68	119.70
1	N	1320	C	O4'-C1'-N1	6.65	113.52	108.20
1	N	51	A	N3-C4-C5	-6.65	122.14	126.80
1	N	277	C	N1-C1'-C2'	-6.65	104.68	112.00
1	N	336	A	C5-C6-N6	-6.65	118.38	123.70
1	N	919	A	C5-C6-N1	-6.65	114.38	117.70
1	N	1279	G	N1-C2-N3	-6.65	119.91	123.90
1	N	1501	C	O4'-C4'-C3'	-6.65	97.35	104.00
1	N	168	G	O4'-C1'-N9	6.65	113.52	108.20
1	N	172	A	C5-N7-C8	6.65	107.22	103.90
1	N	445	G	N3-C2-N2	6.65	124.55	119.90
1	N	759	A	N1-C6-N6	6.65	122.59	118.60
1	N	1303	C	N3-C4-C5	-6.65	119.24	121.90
1	N	600	A	C4-C5-N7	-6.64	107.38	110.70
1	N	788	U	C3'-C2'-C1'	6.64	106.81	101.50
1	N	377	G	C5-C6-O6	-6.64	124.61	128.60
1	N	1076	U	O4'-C1'-N1	6.64	113.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1132	C	P-O5'-C5'	6.64	131.53	120.90
1	N	1273	C	C3'-C2'-C1'	6.64	106.81	101.50
1	N	733	G	C5-N7-C8	-6.64	100.98	104.30
1	N	770	C	C2-N1-C1'	6.64	126.10	118.80
1	N	895	G	N1-C6-O6	6.64	123.88	119.90
1	N	1074	G	C4-C5-C6	6.64	122.78	118.80
1	N	1199	U	N1-C2-O2	-6.64	118.15	122.80
1	N	1477	U	C5-C4-O4	-6.64	121.92	125.90
1	N	603	U	O5'-C5'-C4'	-6.64	99.09	111.70
1	N	666	G	O4'-C4'-C3'	-6.64	97.36	104.00
1	N	421	U	N3-C2-O2	6.64	126.85	122.20
1	N	554	A	O4'-C1'-N9	6.64	113.51	108.20
1	N	770	C	O4'-C1'-N1	6.64	113.51	108.20
1	N	1349	A	C5-N7-C8	6.64	107.22	103.90
1	N	1432	G	C2'-C3'-O3'	6.64	124.32	113.70
1	N	1533	C	C6-N1-C1'	-6.64	112.84	120.80
1	N	37	U	O4'-C1'-N1	6.63	113.51	108.20
1	N	824	G	C2'-C3'-O3'	6.63	124.32	113.70
1	N	1275	A	O4'-C1'-N9	6.63	113.51	108.20
1	N	1459	G	N3-C2-N2	6.63	124.54	119.90
1	N	511	C	P-O5'-C5'	-6.63	110.29	120.90
1	N	1081	A	O4'-C1'-N9	6.63	113.50	108.20
1	N	1316	G	C5'-C4'-O4'	6.63	117.06	109.10
1	N	423	G	C8-N9-C4	6.63	109.05	106.40
1	N	361	G	N1-C6-O6	6.63	123.88	119.90
1	N	369	G	N7-C8-N9	-6.63	109.79	113.10
1	N	928	G	C8-N9-C4	6.63	109.05	106.40
1	N	1386	G	O4'-C1'-N9	6.63	113.50	108.20
1	N	1499	A	C5-C6-N1	-6.63	114.39	117.70
1	N	1371	G	O4'-C1'-N9	6.62	113.50	108.20
1	N	183	C	N3-C4-C5	-6.62	119.25	121.90
1	N	377	G	C5-N7-C8	6.62	107.61	104.30
1	N	769	G	C5-C6-N1	-6.62	108.19	111.50
1	N	1102	A	N1-C2-N3	6.62	132.61	129.30
1	N	1274	A	C5'-C4'-C3'	6.62	126.59	116.00
1	N	108	G	C6-C5-N7	-6.62	126.43	130.40
1	N	1211	U	O4'-C1'-C2'	-6.62	99.18	105.80
1	N	719	C	N3-C4-C5	-6.62	119.25	121.90
1	N	1263	C	N1-C2-O2	6.62	122.87	118.90
1	N	557	G	P-O5'-C5'	6.62	131.49	120.90
1	N	1203	C	P-O5'-C5'	6.62	131.49	120.90
1	N	1207	G	P-O5'-C5'	6.62	131.49	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	225	C	C6-N1-C2	6.62	122.95	120.30
1	N	956	U	O4'-C1'-N1	6.62	113.49	108.20
1	N	1125	U	N3-C2-O2	6.62	126.83	122.20
1	N	298	A	C6-C5-N7	-6.61	127.67	132.30
1	N	376	G	C5-C6-O6	-6.61	124.63	128.60
1	N	559	A	C4'-C3'-C2'	6.61	109.21	102.60
1	N	748	G	N9-C4-C5	-6.61	102.75	105.40
1	N	860	A	C4-C5-C6	6.61	120.31	117.00
1	N	1244	G	C2-N3-C4	-6.61	108.59	111.90
1	N	1323	G	N3-C2-N2	6.61	124.53	119.90
1	N	237	G	N7-C8-N9	-6.61	109.79	113.10
1	N	135	C	C6-N1-C1'	-6.61	112.87	120.80
1	N	252	U	O3'-P-O5'	-6.61	91.44	104.00
1	N	650	G	C4-C5-N7	6.61	113.44	110.80
1	N	1174	G	C8-N9-C4	6.61	109.04	106.40
1	N	103	U	N1-C2-N3	-6.61	110.94	114.90
1	N	589	U	O4'-C1'-N1	6.61	113.49	108.20
1	N	839	C	N3-C2-O2	6.61	126.53	121.90
1	N	1198	G	N1-C2-N3	-6.61	119.94	123.90
1	N	1377	A	C5-N7-C8	6.61	107.20	103.90
1	N	49	U	P-O5'-C5'	6.61	131.47	120.90
1	N	300	A	C5-C6-N1	-6.61	114.40	117.70
1	N	671	G	C5-C6-O6	-6.61	124.64	128.60
1	N	836	G	C2-N3-C4	-6.61	108.60	111.90
1	N	963	G	C4'-C3'-C2'	-6.61	95.99	102.60
1	N	57	G	C1'-O4'-C4'	-6.61	104.61	109.90
1	N	458	U	N3-C2-O2	6.61	126.82	122.20
1	N	851	G	N7-C8-N9	6.61	116.40	113.10
1	N	246	A	C5-C6-N1	-6.60	114.40	117.70
1	N	375	U	O4'-C1'-N1	6.60	113.48	108.20
1	N	526	C	N3-C4-C5	-6.60	119.26	121.90
1	N	907	A	C6-C5-N7	-6.60	127.68	132.30
1	N	1109	C	O4'-C1'-N1	6.60	113.48	108.20
1	N	1423	G	C4'-C3'-C2'	-6.60	96.00	102.60
1	N	462	G	C5-C6-O6	-6.60	124.64	128.60
1	N	496	A	C2-N3-C4	6.60	113.90	110.60
1	N	685	G	N1-C2-N3	-6.60	119.94	123.90
1	N	1089	G	P-O5'-C5'	-6.60	110.34	120.90
1	N	1092	A	N7-C8-N9	6.60	117.10	113.80
1	N	1333	A	C5-N7-C8	6.60	107.20	103.90
1	N	278	G	O4'-C1'-N9	6.60	113.48	108.20
1	N	331	G	P-O3'-C3'	-6.60	111.78	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1337	G	C4'-C3'-C2'	6.60	109.20	102.60
1	N	41	G	C5-C6-O6	-6.59	124.64	128.60
1	N	114	U	C5-C6-N1	6.59	126.00	122.70
1	N	160	A	C4-C5-N7	-6.59	107.40	110.70
1	N	204	G	C5'-C4'-C3'	6.59	126.55	116.00
1	N	242	G	C4-C5-C6	6.59	122.76	118.80
1	N	451	A	C4-C5-N7	-6.59	107.40	110.70
1	N	694	A	C4-C5-C6	6.59	120.30	117.00
1	N	1252	A	C4'-C3'-C2'	-6.59	96.01	102.60
1	N	1395	C	P-O3'-C3'	6.59	127.61	119.70
1	N	263	A	C5-C6-N6	-6.59	118.43	123.70
1	N	279	A	C3'-C2'-C1'	6.59	106.77	101.50
1	N	336	A	C3'-C2'-C1'	-6.59	96.23	101.50
1	N	537	G	N3-C4-N9	6.59	129.96	126.00
1	N	648	A	C5-C6-N6	-6.59	118.43	123.70
1	N	722	G	C5'-C4'-C3'	-6.59	105.45	116.00
1	N	1160	G	C5-N7-C8	6.59	107.59	104.30
1	N	1244	G	C4-C5-C6	6.59	122.75	118.80
1	N	1432	G	C8-N9-C1'	6.59	135.57	127.00
1	N	1170	A	N1-C2-N3	6.59	132.59	129.30
1	N	1241	G	O4'-C1'-N9	6.59	113.47	108.20
1	N	1282	C	C6-N1-C1'	-6.59	112.89	120.80
1	N	1284	C	O4'-C1'-N1	6.59	113.47	108.20
1	N	143	A	C8-N9-C4	-6.58	103.17	105.80
1	N	1021	A	N1-C2-N3	6.58	132.59	129.30
1	N	64	G	N7-C8-N9	-6.58	109.81	113.10
1	N	317	U	N3-C2-O2	6.58	126.81	122.20
1	N	605	U	C6-N1-C2	6.58	124.95	121.00
1	N	838	G	N3-C4-C5	-6.58	125.31	128.60
1	N	927	G	C2-N3-C4	6.58	115.19	111.90
1	N	152	A	C5'-C4'-C3'	6.58	126.53	116.00
1	N	267	C	C4'-C3'-C2'	6.58	109.18	102.60
1	N	476	U	C2-N1-C1'	6.58	125.60	117.70
1	N	765	G	C2-N3-C4	6.58	115.19	111.90
1	N	774	G	N1-C2-N3	-6.58	119.95	123.90
1	N	1260	G	O5'-C5'-C4'	-6.58	99.20	111.70
1	N	1453	G	N1-C6-O6	6.58	123.85	119.90
1	N	62	U	N3-C4-C5	-6.58	110.65	114.60
1	N	601	G	N1-C6-O6	6.58	123.85	119.90
1	N	1369	C	N1-C2-O2	-6.58	114.95	118.90
1	N	177	G	P-O3'-C3'	-6.58	111.81	119.70
1	N	1379	G	P-O3'-C3'	-6.58	111.81	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	90	C	N3-C4-N4	6.58	122.60	118.00
1	N	491	G	P-O5'-C5'	-6.58	110.38	120.90
1	N	898	G	C6-C5-N7	-6.58	126.45	130.40
1	N	1509	C	N3-C4-N4	6.58	122.60	118.00
1	N	11	G	C2-N3-C4	6.57	115.19	111.90
1	N	851	G	N3-C4-N9	-6.57	122.06	126.00
1	N	1197	A	C8-N9-C4	-6.57	103.17	105.80
1	N	809	G	N3-C2-N2	6.57	124.50	119.90
1	N	1419	G	C8-N9-C4	6.57	109.03	106.40
1	N	354	G	N1-C2-N3	-6.57	119.96	123.90
1	N	374	A	N7-C8-N9	-6.57	110.52	113.80
1	N	545	C	N3-C4-C5	-6.57	119.27	121.90
1	N	612	C	C6-N1-C2	-6.57	117.67	120.30
1	N	718	A	C5-C6-N6	-6.57	118.44	123.70
1	N	851	G	N9-C4-C5	6.57	108.03	105.40
1	N	769	G	C4'-C3'-C2'	-6.57	96.03	102.60
1	N	753	A	C8-N9-C4	-6.57	103.17	105.80
1	N	839	C	N3-C4-N4	6.57	122.60	118.00
1	N	1241	G	C4-C5-N7	6.57	113.43	110.80
1	N	1515	G	C4-C5-C6	6.57	122.74	118.80
1	N	898	G	P-O3'-C3'	-6.57	111.82	119.70
1	N	319	G	C5'-C4'-O4'	6.56	116.97	109.10
1	N	518	C	N1-C2-N3	-6.56	114.61	119.20
1	N	743	A	C4-C5-C6	6.56	120.28	117.00
1	N	1091	U	N1-C2-N3	-6.56	110.96	114.90
1	N	398	U	C5-C4-O4	-6.56	121.96	125.90
1	N	803	G	P-O3'-C3'	-6.56	111.83	119.70
1	N	31	G	N1-C6-O6	6.56	123.83	119.90
1	N	769	G	C5-C6-O6	-6.56	124.67	128.60
1	N	1235	U	O4'-C1'-N1	6.56	113.45	108.20
1	N	1338	G	C4-C5-C6	6.56	122.74	118.80
1	N	70	U	C5'-C4'-O4'	6.56	116.97	109.10
1	N	117	G	O4'-C1'-N9	6.56	113.45	108.20
1	N	605	U	O4'-C1'-N1	6.56	113.44	108.20
1	N	806	C	P-O3'-C3'	-6.56	111.83	119.70
1	N	1005	A	O4'-C1'-N9	6.56	113.44	108.20
1	N	1157	A	C4'-C3'-C2'	-6.56	96.04	102.60
1	N	340	U	C3'-C2'-C1'	6.56	106.74	101.50
1	N	935	A	C8-N9-C4	-6.56	103.18	105.80
1	N	256	U	C3'-C2'-C1'	-6.55	96.26	101.50
1	N	326	G	C5-N7-C8	-6.55	101.02	104.30
1	N	1119	C	N3-C2-O2	6.55	126.49	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1268	G	C2-N3-C4	-6.55	108.62	111.90
1	N	182	A	C5'-C4'-C3'	-6.55	105.52	116.00
1	N	6	G	N1-C2-N3	-6.55	119.97	123.90
1	N	71	A	P-O3'-C3'	6.55	127.56	119.70
1	N	87	C	O4'-C1'-N1	6.55	113.44	108.20
1	N	603	U	N3-C4-C5	-6.55	110.67	114.60
1	N	1442	G	C4-N9-C1'	6.55	135.02	126.50
1	N	79	G	N9-C4-C5	-6.55	102.78	105.40
1	N	287	U	C2-N3-C4	-6.55	123.07	127.00
1	N	306	A	C5-C6-N6	-6.55	118.46	123.70
1	N	362	G	P-O5'-C5'	-6.55	110.42	120.90
1	N	464	U	N3-C4-O4	6.55	123.98	119.40
1	N	1217	C	O4'-C1'-N1	6.55	113.44	108.20
1	N	1216	A	O4'-C1'-N9	6.55	113.44	108.20
1	N	666	G	C5-N7-C8	-6.55	101.03	104.30
1	N	867	G	P-O5'-C5'	6.55	131.37	120.90
1	N	925	G	N3-C4-N9	6.55	129.93	126.00
1	N	1476	A	C6-C5-N7	-6.55	127.72	132.30
1	N	48	C	P-O3'-C3'	6.54	127.55	119.70
1	N	71	A	C6-C5-N7	-6.54	127.72	132.30
1	N	870	U	N1-C2-O2	-6.54	118.22	122.80
1	N	438	U	C2-N1-C1'	6.54	125.55	117.70
1	N	460	A	O4'-C1'-N9	6.54	113.43	108.20
1	N	468	A	C4-N9-C1'	6.54	138.08	126.30
1	N	3	A	C6-C5-N7	-6.54	127.72	132.30
1	N	723	U	C4'-C3'-C2'	-6.54	96.06	102.60
1	N	1404	C	C5-C4-N4	-6.54	115.62	120.20
1	N	1508	A	C4'-C3'-C2'	-6.54	96.06	102.60
1	N	87	C	C5'-C4'-C3'	-6.54	105.54	116.00
1	N	238	A	N9-C4-C5	-6.54	103.19	105.80
1	N	933	G	C4'-C3'-C2'	-6.54	96.06	102.60
1	N	1037	C	P-O5'-C5'	6.54	131.35	120.90
1	N	512	U	O4'-C4'-C3'	6.53	111.33	106.10
1	N	614	C	C2-N3-C4	-6.53	116.63	119.90
1	N	913	A	C4-C5-C6	6.53	120.27	117.00
1	N	942	G	C8-N9-C1'	6.53	135.49	127.00
1	N	1174	G	C3'-C2'-C1'	6.53	106.73	101.50
1	N	188	C	C2-N3-C4	6.53	123.17	119.90
1	N	1483	A	O4'-C1'-N9	6.53	113.42	108.20
1	N	332	G	N1-C2-N3	-6.53	119.98	123.90
1	N	353	A	C5-C6-N6	-6.53	118.48	123.70
1	N	441	A	C5-C6-N6	-6.53	118.47	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	699	C	P-O5'-C5'	6.53	131.35	120.90
1	N	831	A	O4'-C1'-N9	6.53	113.42	108.20
1	N	1104	G	N7-C8-N9	6.53	116.36	113.10
1	N	1118	U	C5'-C4'-O4'	-6.53	101.26	109.10
1	N	1306	A	O4'-C1'-N9	6.53	113.42	108.20
1	N	1357	A	N3-C4-N9	6.53	132.62	127.40
1	N	1418	A	N9-C4-C5	6.53	108.41	105.80
1	N	656	G	N1-C2-N3	-6.53	119.98	123.90
1	N	1387	G	C4-C5-N7	6.53	113.41	110.80
1	N	1390	U	P-O5'-C5'	6.53	131.35	120.90
1	N	391	G	C8-N9-C1'	6.53	135.49	127.00
1	N	717	U	C2'-C3'-O3'	6.53	124.14	113.70
1	N	915	A	N9-C4-C5	-6.53	103.19	105.80
1	N	948	C	C6-N1-C1'	-6.53	112.97	120.80
1	N	35	G	N1-C2-N2	6.53	122.07	116.20
1	N	344	A	C6-C5-N7	-6.53	127.73	132.30
1	N	406	G	N1-C2-N2	-6.53	110.33	116.20
1	N	570	G	C4-N9-C1'	6.53	134.98	126.50
1	N	1361	G	N1-C6-O6	6.53	123.81	119.90
1	N	1420	U	C6-N1-C2	-6.52	117.09	121.00
1	N	484	G	C4-C5-C6	6.52	122.71	118.80
1	N	647	C	N3-C4-C5	-6.52	119.29	121.90
1	N	929	G	N7-C8-N9	-6.52	109.84	113.10
1	N	1169	A	C2'-C3'-O3'	6.52	124.14	113.70
1	N	98	A	N3-C4-C5	-6.52	122.23	126.80
1	N	117	G	C4-C5-N7	6.52	113.41	110.80
1	N	404	G	N1-C6-O6	6.52	123.81	119.90
1	N	580	C	C4'-C3'-C2'	-6.52	96.08	102.60
1	N	441	A	C6-C5-N7	-6.52	127.74	132.30
1	N	687	A	C5-C6-N1	-6.52	114.44	117.70
1	N	909	A	N9-C4-C5	-6.52	103.19	105.80
1	N	1157	A	C4-C5-N7	6.52	113.96	110.70
1	N	1483	A	C6-N1-C2	-6.52	114.69	118.60
1	N	201	G	C8-N9-C4	6.52	109.01	106.40
1	N	1359	C	O4'-C1'-N1	6.52	113.41	108.20
1	N	1524	C	P-O3'-C3'	-6.52	111.88	119.70
1	N	890	G	C4'-C3'-C2'	-6.52	96.08	102.60
1	N	1111	A	C5-C6-N6	-6.52	118.49	123.70
1	N	32	A	N9-C4-C5	6.51	108.41	105.80
1	N	516	U	N3-C4-O4	6.51	123.96	119.40
1	N	763	G	C4-C5-C6	6.51	122.71	118.80
1	N	1009	U	C6-N1-C2	-6.51	117.09	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1184	G	N3-C2-N2	6.51	124.46	119.90
1	N	178	C	C5-C4-N4	-6.51	115.64	120.20
1	N	222	C	P-O3'-C3'	-6.51	111.89	119.70
1	N	44	A	N7-C8-N9	6.51	117.06	113.80
1	N	230	G	C6-C5-N7	-6.51	126.49	130.40
1	N	762	U	P-O3'-C3'	6.51	127.51	119.70
1	N	122	G	O4'-C1'-N9	6.51	113.41	108.20
1	N	1290	G	C4-N9-C1'	6.51	134.96	126.50
1	N	1524	C	N3-C4-N4	6.51	122.56	118.00
1	N	929	G	N1-C2-N2	6.51	122.06	116.20
1	N	63	C	C6-N1-C1'	-6.51	112.99	120.80
1	N	749	A	C4'-C3'-C2'	-6.51	96.09	102.60
1	N	1184	G	N3-C4-N9	-6.51	122.10	126.00
1	N	396	C	N1-C2-N3	-6.50	114.65	119.20
1	N	497	G	C5'-C4'-O4'	-6.50	101.29	109.10
1	N	377	G	C4-C5-N7	-6.50	108.20	110.80
1	N	422	C	C5'-C4'-O4'	6.50	116.90	109.10
1	N	445	G	N9-C4-C5	6.50	108.00	105.40
1	N	616	G	N9-C1'-C2'	-6.50	104.85	112.00
1	N	1196	A	C4-C5-N7	-6.50	107.45	110.70
1	N	532	A	C8-N9-C1'	-6.50	116.00	127.70
1	N	626	G	O4'-C1'-N9	6.50	113.40	108.20
1	N	1423	G	C5-N7-C8	6.50	107.55	104.30
1	N	1267	C	N3-C4-C5	-6.50	119.30	121.90
1	N	574	A	C6-N1-C2	6.50	122.50	118.60
1	N	599	C	O4'-C4'-C3'	-6.50	97.50	104.00
1	N	695	A	P-O3'-C3'	6.50	127.50	119.70
1	N	938	A	C5-C6-N1	-6.50	114.45	117.70
1	N	1360	A	N7-C8-N9	-6.50	110.55	113.80
1	N	302	G	N1-C2-N2	6.50	122.05	116.20
1	N	416	G	N1-C6-O6	6.50	123.80	119.90
1	N	522	C	C5-C6-N1	6.50	124.25	121.00
1	N	786	G	C4-C5-N7	6.50	113.40	110.80
1	N	858	G	C4'-C3'-C2'	-6.50	96.10	102.60
1	N	1024	G	P-O5'-C5'	6.50	131.29	120.90
1	N	1269	A	O3'-P-O5'	-6.50	91.66	104.00
1	N	50	A	C5'-C4'-C3'	-6.50	105.61	116.00
1	N	799	G	N1-C2-N2	-6.50	110.35	116.20
1	N	860	A	C4-C5-N7	-6.50	107.45	110.70
1	N	84	U	N3-C4-O4	6.49	123.94	119.40
1	N	945	G	C1'-O4'-C4'	-6.49	104.70	109.90
1	N	1108	G	C5-N7-C8	-6.49	101.05	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	622	A	C5-C6-N6	-6.49	118.51	123.70
1	N	1267	C	C5-C6-N1	-6.49	117.75	121.00
1	N	902	G	N1-C6-O6	6.49	123.80	119.90
1	N	1163	A	C8-N9-C4	6.49	108.40	105.80
1	N	1342	C	C5-C4-N4	-6.49	115.66	120.20
1	N	1413	A	C8-N9-C4	-6.49	103.20	105.80
1	N	1516	G	C3'-C2'-C1'	6.49	106.69	101.50
1	N	297	G	N3-C2-N2	6.49	124.44	119.90
1	N	451	A	C3'-C2'-C1'	-6.49	96.31	101.50
1	N	845	A	N3-C4-N9	6.49	132.59	127.40
1	N	958	A	N7-C8-N9	6.49	117.04	113.80
1	N	1188	A	C5-C6-N6	-6.49	118.51	123.70
1	N	501	C	C5'-C4'-O4'	6.49	116.88	109.10
1	N	731	G	N7-C8-N9	-6.49	109.86	113.10
1	N	832	G	N9-C4-C5	-6.49	102.81	105.40
1	N	6	G	N3-C2-N2	6.49	124.44	119.90
1	N	203	G	C5'-C4'-C3'	6.49	126.38	116.00
1	N	432	A	N1-C6-N6	6.49	122.49	118.60
1	N	660	C	C5-C6-N1	-6.49	117.76	121.00
1	N	951	G	N9-C4-C5	-6.49	102.81	105.40
1	N	1211	U	C3'-C2'-C1'	-6.48	96.31	101.50
1	N	1390	U	N1-C2-N3	6.48	118.79	114.90
1	N	90	C	N3-C4-C5	-6.48	119.31	121.90
1	N	624	C	N3-C4-N4	6.48	122.54	118.00
1	N	1530	G	N1-C2-N3	-6.48	120.01	123.90
1	N	943	U	C5-C4-O4	-6.48	122.01	125.90
1	N	1152	A	N1-C2-N3	6.48	132.54	129.30
1	N	173	U	O5'-C5'-C4'	6.48	124.01	111.70
1	N	1242	G	C4-C5-C6	6.48	122.69	118.80
1	N	197	A	C5-C6-N6	-6.48	118.52	123.70
1	N	385	C	C5-C4-N4	-6.48	115.67	120.20
1	N	271	C	C2-N1-C1'	6.47	125.92	118.80
1	N	1069	C	C4'-C3'-C2'	-6.47	96.13	102.60
1	N	57	G	N1-C2-N3	-6.47	120.02	123.90
1	N	606	G	N9-C4-C5	6.47	107.99	105.40
1	N	928	G	N3-C2-N2	6.47	124.43	119.90
1	N	1484	C	C5-C6-N1	6.47	124.24	121.00
1	N	171	A	N1-C2-N3	6.47	132.53	129.30
1	N	325	A	O4'-C4'-C3'	-6.47	97.53	104.00
1	N	129	A	C6-N1-C2	-6.47	114.72	118.60
1	N	532	A	C6-C5-N7	-6.47	127.77	132.30
1	N	703	G	C4-C5-C6	6.47	122.68	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	181	A	C6-C5-N7	-6.47	127.77	132.30
1	N	541	G	C5-C6-O6	-6.47	124.72	128.60
1	N	929	G	C8-N9-C4	6.47	108.99	106.40
1	N	1506	U	C3'-C2'-C1'	-6.47	96.33	101.50
1	N	164	G	O4'-C1'-N9	6.47	113.37	108.20
1	N	412	A	C5-C6-N1	-6.47	114.47	117.70
1	N	489	C	C5-C4-N4	-6.47	115.67	120.20
1	N	582	C	C4-C5-C6	6.47	120.63	117.40
1	N	1223	C	C5'-C4'-O4'	6.47	116.86	109.10
1	N	910	C	C4-C5-C6	-6.46	114.17	117.40
1	N	939	G	C5'-C4'-C3'	-6.46	105.66	116.00
1	N	981	U	C2-N3-C4	-6.46	123.12	127.00
1	N	1232	U	N1-C2-N3	-6.46	111.02	114.90
1	N	1439	G	C8-N9-C4	-6.46	103.81	106.40
1	N	709	U	O5'-C5'-C4'	-6.46	99.42	111.70
1	N	1176	A	C5-C6-N1	-6.46	114.47	117.70
1	N	1379	G	C4-N9-C1'	-6.46	118.10	126.50
1	N	2	A	C5-N7-C8	6.46	107.13	103.90
1	N	292	G	C6-C5-N7	-6.46	126.52	130.40
1	N	418	C	N3-C2-O2	6.46	126.42	121.90
1	N	288	A	C5-C6-N6	-6.46	118.53	123.70
1	N	690	G	C6-N1-C2	6.46	128.98	125.10
1	N	1246	A	O4'-C1'-N9	6.46	113.37	108.20
1	N	1440	U	N3-C4-O4	6.46	123.92	119.40
1	N	472	U	N3-C4-C5	-6.46	110.72	114.60
1	N	1000	A	N7-C8-N9	-6.46	110.57	113.80
1	N	1230	C	N1-C2-N3	-6.46	114.68	119.20
1	N	44	A	N1-C6-N6	6.46	122.47	118.60
1	N	415	A	P-O5'-C5'	6.46	131.23	120.90
1	N	822	U	C5'-C4'-O4'	6.46	116.85	109.10
1	N	951	G	O4'-C1'-N9	6.46	113.36	108.20
1	N	1096	C	P-O5'-C5'	6.46	131.23	120.90
1	N	1379	G	C5-C6-N1	-6.46	108.27	111.50
1	N	1486	G	C2-N3-C4	-6.46	108.67	111.90
1	N	22	G	P-O3'-C3'	6.46	127.45	119.70
1	N	666	G	N1-C2-N2	6.46	122.01	116.20
1	N	1033	G	N1-C2-N2	6.46	122.01	116.20
1	N	1105	A	O4'-C1'-N9	6.46	113.36	108.20
1	N	1448	C	C1'-O4'-C4'	-6.46	104.74	109.90
1	N	166	U	P-O3'-C3'	6.45	127.44	119.70
1	N	1287	A	C4-C5-N7	-6.45	107.47	110.70
1	N	1452	C	N3-C4-C5	-6.45	119.32	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1218	C	C2-N1-C1'	6.45	125.89	118.80
1	N	55	A	C3'-C2'-C1'	-6.45	96.34	101.50
1	N	297	G	N3-C4-N9	-6.45	122.13	126.00
1	N	488	C	N3-C4-C5	-6.45	119.32	121.90
1	N	750	C	N1-C2-O2	-6.45	115.03	118.90
1	N	873	A	C4-C5-N7	-6.45	107.48	110.70
1	N	1369	C	C5-C6-N1	6.45	124.22	121.00
1	N	1386	G	C5-N7-C8	-6.45	101.08	104.30
1	N	1513	A	C4'-C3'-C2'	-6.45	96.15	102.60
1	N	347	G	C4-C5-C6	6.45	122.67	118.80
1	N	191	G	C6-N1-C2	-6.44	121.23	125.10
1	N	842	U	P-O5'-C5'	6.44	131.21	120.90
1	N	278	G	C8-N9-C4	6.44	108.98	106.40
1	N	303	A	C8-N9-C4	6.44	108.38	105.80
1	N	803	G	N7-C8-N9	6.44	116.32	113.10
1	N	1031	C	P-O5'-C5'	6.44	131.21	120.90
1	N	157	U	P-O3'-C3'	-6.44	111.97	119.70
1	N	874	G	N1-C6-O6	6.44	123.76	119.90
1	N	714	G	N7-C8-N9	-6.44	109.88	113.10
1	N	736	C	N1-C2-N3	-6.44	114.69	119.20
1	N	1045	C	N3-C4-N4	6.44	122.51	118.00
1	N	232	G	P-O5'-C5'	6.44	131.20	120.90
1	N	858	G	N1-C2-N3	-6.44	120.04	123.90
1	N	1147	C	O5'-P-OP1	-6.44	99.91	105.70
1	N	1330	U	C4'-C3'-C2'	-6.44	96.16	102.60
1	N	245	U	O4'-C4'-C3'	-6.44	97.56	104.00
1	N	1281	C	N1-C2-O2	-6.44	115.04	118.90
1	N	175	C	C5'-C4'-C3'	-6.43	105.70	116.00
1	N	804	U	N3-C2-O2	-6.43	117.70	122.20
1	N	83	C	C6-N1-C1'	-6.43	113.08	120.80
1	N	291	U	C5-C6-N1	-6.43	119.48	122.70
1	N	403	C	C5-C6-N1	6.43	124.22	121.00
1	N	1326	U	C5'-C4'-C3'	-6.43	105.71	116.00
1	N	15	G	N1-C2-N3	-6.43	120.04	123.90
1	N	105	G	P-O5'-C5'	6.43	131.19	120.90
1	N	744	C	N1-C2-O2	-6.43	115.04	118.90
1	N	100	G	O4'-C1'-N9	6.43	113.34	108.20
1	N	362	G	N1-C2-N3	-6.43	120.04	123.90
1	N	933	G	N7-C8-N9	-6.43	109.89	113.10
1	N	941	G	N3-C2-N2	6.43	124.40	119.90
1	N	1368	A	C4-C5-N7	-6.43	107.48	110.70
1	N	177	G	N1-C6-O6	6.43	123.76	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1113	C	C5-C6-N1	6.43	124.21	121.00
1	N	251	G	N1-C2-N3	-6.43	120.04	123.90
1	N	492	C	O4'-C1'-N1	6.43	113.34	108.20
1	N	803	G	N1-C6-O6	6.43	123.76	119.90
1	N	1523	G	N3-C4-N9	-6.43	122.14	126.00
1	N	1534	A	O4'-C1'-N9	6.43	113.34	108.20
1	N	456	A	N9-C4-C5	6.42	108.37	105.80
1	N	702	A	N7-C8-N9	6.42	117.01	113.80
1	N	890	G	C8-N9-C1'	6.42	135.35	127.00
1	N	991	U	N3-C4-O4	6.42	123.90	119.40
1	N	1083	U	N3-C2-O2	6.42	126.70	122.20
1	N	98	A	C5'-C4'-C3'	-6.42	105.73	116.00
1	N	259	G	C1'-O4'-C4'	6.42	115.03	109.90
1	N	331	G	N1-C6-O6	6.42	123.75	119.90
1	N	921	U	N1-C2-O2	-6.42	118.31	122.80
1	N	946	A	N9-C4-C5	6.42	108.37	105.80
1	N	1054	C	N3-C4-C5	-6.42	119.33	121.90
1	N	1082	A	O4'-C1'-N9	6.42	113.33	108.20
1	N	1346	A	C4-C5-C6	6.42	120.21	117.00
1	N	210	C	P-O5'-C5'	6.42	131.17	120.90
1	N	323	U	O5'-C5'-C4'	-6.41	99.52	111.70
1	N	1001	C	C5-C6-N1	6.41	124.21	121.00
1	N	361	G	C6-N1-C2	6.41	128.95	125.10
1	N	646	G	C5-C6-N1	-6.41	108.30	111.50
1	N	1348	U	C5'-C4'-O4'	-6.41	101.41	109.10
1	N	1355	G	C8-N9-C4	-6.41	103.84	106.40
1	N	270	A	P-O3'-C3'	6.41	127.39	119.70
1	N	915	A	C4'-C3'-C2'	-6.41	96.19	102.60
1	N	1025	U	O4'-C1'-N1	6.41	113.33	108.20
1	N	142	G	C4-C5-N7	-6.41	108.24	110.80
1	N	180	U	O4'-C1'-N1	6.41	113.33	108.20
1	N	532	A	C5-N7-C8	6.41	107.10	103.90
1	N	1515	G	P-O3'-C3'	-6.41	112.01	119.70
1	N	66	A	C8-N9-C4	-6.41	103.24	105.80
1	N	373	A	C6-C5-N7	-6.41	127.82	132.30
1	N	513	C	C6-N1-C2	-6.41	117.74	120.30
1	N	1139	G	N3-C2-N2	-6.41	115.42	119.90
1	N	1239	A	C5-N7-C8	6.41	107.10	103.90
1	N	1523	G	N3-C4-C5	6.40	131.80	128.60
1	N	195	A	C4-C5-C6	6.40	120.20	117.00
1	N	244	U	C5'-C4'-C3'	-6.40	105.75	116.00
1	N	498	A	N9-C4-C5	6.40	108.36	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	944	G	C6-C5-N7	-6.40	126.56	130.40
1	N	1084	G	N3-C4-N9	-6.40	122.16	126.00
1	N	1494	G	P-O5'-C5'	6.40	131.14	120.90
1	N	107	G	C6-N1-C2	6.40	128.94	125.10
1	N	181	A	C3'-C2'-C1'	6.40	106.62	101.50
1	N	455	G	C5-N7-C8	-6.40	101.10	104.30
1	N	493	A	C6-C5-N7	-6.40	127.82	132.30
1	N	633	G	N9-C1'-C2'	-6.40	104.96	112.00
1	N	1092	A	C3'-C2'-C1'	6.40	106.62	101.50
1	N	1322	C	C5'-C4'-O4'	-6.40	101.42	109.10
1	N	1335	U	P-O3'-C3'	6.40	127.38	119.70
1	N	872	A	N1-C6-N6	6.40	122.44	118.60
1	N	1145	A	O3'-P-O5'	-6.40	91.85	104.00
1	N	164	G	N3-C2-N2	6.40	124.38	119.90
1	N	347	G	C6-C5-N7	-6.40	126.56	130.40
1	N	359	G	N1-C6-O6	6.40	123.74	119.90
1	N	917	G	C5-C6-O6	-6.40	124.76	128.60
1	N	190	A	C5'-C4'-C3'	6.39	126.23	116.00
1	N	483	C	C5'-C4'-O4'	6.39	116.77	109.10
1	N	996	A	P-O3'-C3'	-6.39	112.03	119.70
1	N	824	G	N1-C6-O6	6.39	123.73	119.90
1	N	834	U	N1-C2-O2	-6.39	118.33	122.80
1	N	1031	C	O4'-C1'-N1	6.39	113.31	108.20
1	N	1332	A	P-O5'-C5'	-6.39	110.67	120.90
1	N	698	G	C5-C6-O6	-6.39	124.77	128.60
1	N	1152	A	N7-C8-N9	6.39	117.00	113.80
1	N	1179	A	C5-N7-C8	6.39	107.09	103.90
1	N	1155	A	C5-N7-C8	6.39	107.09	103.90
1	N	197	A	N1-C2-N3	6.39	132.49	129.30
1	N	333	U	OP2-P-O3'	6.39	119.25	105.20
1	N	700	G	C4-N9-C1'	6.39	134.80	126.50
1	N	714	G	C4'-C3'-C2'	-6.39	96.21	102.60
1	N	1509	C	N3-C4-C5	-6.39	119.34	121.90
1	N	54	C	N3-C4-C5	-6.38	119.35	121.90
1	N	320	A	C5'-C4'-O4'	6.38	116.76	109.10
1	N	218	U	N1-C2-O2	-6.38	118.33	122.80
1	N	1188	A	C4-C5-N7	-6.38	107.51	110.70
1	N	779	C	C4-C5-C6	6.38	120.59	117.40
1	N	264	C	O4'-C1'-N1	6.38	113.30	108.20
1	N	1328	C	O4'-C1'-N1	6.38	113.30	108.20
1	N	505	G	O4'-C4'-C3'	-6.38	97.62	104.00
1	N	161	A	C6-C5-N7	-6.38	127.84	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	325	A	C5-C6-N6	-6.38	118.60	123.70
1	N	874	G	C2-N3-C4	6.38	115.09	111.90
1	N	1178	G	C5-C6-O6	-6.38	124.78	128.60
1	N	1456	A	O4'-C1'-N9	6.38	113.30	108.20
1	N	1479	C	C6-N1-C1'	-6.38	113.15	120.80
1	N	1046	A	C5-C6-N1	-6.38	114.51	117.70
1	N	1125	U	N3-C4-O4	6.38	123.86	119.40
1	N	1137	C	C2-N3-C4	6.38	123.09	119.90
1	N	95	C	O4'-C1'-N1	6.37	113.30	108.20
1	N	285	C	C5'-C4'-O4'	6.37	116.75	109.10
1	N	480	U	C2-N1-C1'	-6.37	110.05	117.70
1	N	937	A	N7-C8-N9	6.37	116.99	113.80
1	N	974	A	N9-C4-C5	6.37	108.35	105.80
1	N	680	C	C2-N3-C4	6.37	123.08	119.90
1	N	761	G	C5-C6-N1	-6.37	108.31	111.50
1	N	817	C	N3-C4-N4	6.37	122.46	118.00
1	N	826	C	C5-C6-N1	6.37	124.19	121.00
1	N	505	G	O4'-C1'-N9	6.37	113.30	108.20
1	N	1508	A	C4-C5-N7	-6.37	107.52	110.70
1	N	377	G	N3-C4-C5	6.37	131.78	128.60
1	N	474	G	C1'-O4'-C4'	6.37	114.99	109.90
1	N	1024	G	C4-C5-C6	6.37	122.62	118.80
1	N	223	A	C2-N3-C4	6.37	113.78	110.60
1	N	337	G	N1-C2-N3	-6.37	120.08	123.90
1	N	371	A	C4-C5-C6	6.37	120.18	117.00
1	N	900	A	N1-C2-N3	6.37	132.48	129.30
1	N	90	C	P-O3'-C3'	6.36	127.34	119.70
1	N	452	A	C5-C6-N6	-6.36	118.61	123.70
1	N	309	A	N1-C2-N3	6.36	132.48	129.30
1	N	361	G	C6-C5-N7	-6.36	126.58	130.40
1	N	1490	U	C6-N1-C2	-6.36	117.18	121.00
1	N	17	U	N1-C2-O2	-6.36	118.35	122.80
1	N	203	G	C6-C5-N7	-6.36	126.58	130.40
1	N	381	C	N3-C4-N4	6.36	122.45	118.00
1	N	770	C	C5-C6-N1	6.36	124.18	121.00
1	N	1230	C	P-O5'-C5'	6.36	131.08	120.90
1	N	1308	U	N3-C4-O4	6.36	123.85	119.40
1	N	698	G	N3-C4-C5	-6.36	125.42	128.60
1	N	850	U	N3-C4-O4	6.36	123.85	119.40
1	N	1052	U	O4'-C1'-N1	6.36	113.29	108.20
1	N	1202	U	O4'-C4'-C3'	-6.36	97.64	104.00
1	N	144	G	N3-C2-N2	6.36	124.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	324	G	C5'-C4'-C3'	6.36	126.17	116.00
1	N	518	C	N1-C2-O2	6.36	122.71	118.90
1	N	1130	A	C4-C5-C6	6.36	120.18	117.00
1	N	1137	C	N1-C2-O2	6.36	122.71	118.90
1	N	240	G	O4'-C1'-N9	6.36	113.28	108.20
1	N	782	A	C6-N1-C2	6.35	122.41	118.60
1	N	919	A	C2'-C3'-O3'	6.35	123.87	113.70
1	N	1002	G	C5-C6-N1	-6.35	108.32	111.50
1	N	1454	G	N3-C2-N2	6.35	124.35	119.90
1	N	243	A	C4-C5-C6	6.35	120.18	117.00
1	N	311	C	C3'-C2'-C1'	-6.35	96.42	101.50
1	N	795	C	C6-N1-C1'	-6.35	113.18	120.80
1	N	243	A	C5-C6-N6	-6.35	118.62	123.70
1	N	328	C	N3-C4-N4	6.35	122.44	118.00
1	N	666	G	N1-C2-N3	-6.35	120.09	123.90
1	N	942	G	C5-N7-C8	6.35	107.47	104.30
1	N	1151	A	C8-N9-C4	-6.35	103.26	105.80
1	N	1188	A	C5-C6-N1	-6.35	114.53	117.70
1	N	1439	G	C5-C6-N1	-6.35	108.33	111.50
1	N	590	U	O4'-C1'-N1	6.35	113.28	108.20
1	N	1425	U	N1-C2-N3	-6.35	111.09	114.90
1	N	226	G	C5'-C4'-O4'	6.34	116.71	109.10
1	N	779	C	N3-C2-O2	-6.34	117.46	121.90
1	N	108	G	N9-C4-C5	6.34	107.94	105.40
1	N	427	U	N1-C2-N3	-6.34	111.09	114.90
1	N	204	G	N1-C6-O6	6.34	123.70	119.90
1	N	429	U	P-O3'-C3'	6.34	127.31	119.70
1	N	652	U	C4-C5-C6	6.34	123.50	119.70
1	N	182	A	P-O3'-C3'	6.34	127.31	119.70
1	N	467	U	C1'-O4'-C4'	-6.34	104.83	109.90
1	N	493	A	C4-C5-N7	6.34	113.87	110.70
1	N	705	G	C8-N9-C4	6.34	108.94	106.40
1	N	1209	C	C5-C6-N1	6.34	124.17	121.00
1	N	273	U	O4'-C1'-N1	6.34	113.27	108.20
1	N	23	C	P-O3'-C3'	-6.34	112.09	119.70
1	N	183	C	C5-C4-N4	-6.34	115.76	120.20
1	N	533	A	C4-C5-N7	-6.34	107.53	110.70
1	N	585	G	C4-C5-C6	6.34	122.60	118.80
1	N	769	G	N3-C2-N2	6.34	124.34	119.90
1	N	777	A	O4'-C4'-C3'	-6.34	97.66	104.00
1	N	1087	G	C8-N9-C4	6.34	108.93	106.40
1	N	202	G	C6-N1-C2	6.33	128.90	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	788	U	N1-C2-N3	-6.33	111.10	114.90
1	N	453	G	C6-N1-C2	-6.33	121.30	125.10
1	N	873	A	C6-C5-N7	-6.33	127.87	132.30
1	N	1256	A	C4-C5-N7	-6.33	107.53	110.70
1	N	40	C	O4'-C1'-N1	6.33	113.27	108.20
1	N	45	G	C4-C5-N7	-6.33	108.27	110.80
1	N	247	G	O4'-C1'-C2'	-6.33	99.47	105.80
1	N	597	G	C4-C5-C6	6.33	122.60	118.80
1	N	1216	A	N7-C8-N9	-6.33	110.64	113.80
1	N	160	A	O4'-C1'-N9	6.33	113.26	108.20
1	N	812	G	N1-C6-O6	6.33	123.70	119.90
1	N	1083	U	O4'-C1'-N1	6.33	113.26	108.20
1	N	212	G	C5'-C4'-C3'	6.33	126.13	116.00
1	N	247	G	C8-N9-C4	6.33	108.93	106.40
1	N	495	A	C5-N7-C8	-6.33	100.73	103.90
1	N	578	C	N1-C2-N3	-6.33	114.77	119.20
1	N	792	A	C2-N3-C4	6.33	113.77	110.60
1	N	927	G	C8-N9-C4	-6.33	103.87	106.40
1	N	1090	U	N3-C4-O4	-6.33	114.97	119.40
1	N	116	A	C1'-O4'-C4'	6.33	114.96	109.90
1	N	724	G	P-O5'-C5'	-6.33	110.78	120.90
1	N	1389	C	P-O5'-C5'	-6.33	110.78	120.90
1	N	1419	G	O4'-C1'-N9	6.33	113.26	108.20
1	N	171	A	C4-C5-C6	6.33	120.16	117.00
1	N	350	G	C8-N9-C1'	6.33	135.22	127.00
1	N	941	G	C4-C5-N7	6.33	113.33	110.80
1	N	994	A	C8-N9-C4	-6.33	103.27	105.80
1	N	640	A	N9-C4-C5	-6.32	103.27	105.80
1	N	1178	G	C4-C5-C6	6.32	122.59	118.80
1	N	1290	G	P-O5'-C5'	6.32	131.01	120.90
1	N	765	G	C6-C5-N7	-6.32	126.61	130.40
1	N	841	C	C5-C4-N4	-6.32	115.78	120.20
1	N	875	U	O4'-C1'-N1	6.32	113.25	108.20
1	N	622	A	N1-C2-N3	6.32	132.46	129.30
1	N	910	C	C5-C4-N4	-6.32	115.78	120.20
1	N	987	G	N1-C2-N3	-6.32	120.11	123.90
1	N	1075	U	N1-C2-O2	-6.32	118.38	122.80
1	N	1080	A	N1-C6-N6	6.32	122.39	118.60
1	N	1142	G	N1-C6-O6	6.32	123.69	119.90
1	N	1342	C	C4'-C3'-C2'	-6.32	96.28	102.60
1	N	179	A	P-O5'-C5'	6.32	131.00	120.90
1	N	251	G	N9-C4-C5	-6.32	102.87	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	539	A	C6-N1-C2	6.32	122.39	118.60
1	N	1283	U	C5-C4-O4	-6.32	122.11	125.90
1	N	1357	A	N3-C4-C5	-6.32	122.38	126.80
1	N	220	G	N1-C2-N3	-6.31	120.11	123.90
1	N	452	A	C4-C5-C6	6.31	120.16	117.00
1	N	752	G	C5-C6-O6	-6.31	124.81	128.60
1	N	809	G	C4-C5-C6	6.31	122.59	118.80
1	N	1336	C	C4'-C3'-C2'	6.31	108.91	102.60
1	N	1493	A	C5'-C4'-O4'	6.31	116.68	109.10
1	N	22	G	C5-C6-N1	-6.31	108.34	111.50
1	N	199	A	N9-C4-C5	6.31	108.32	105.80
1	N	567	G	C5-C6-O6	-6.31	124.81	128.60
1	N	572	A	C5'-C4'-C3'	6.31	126.10	116.00
1	N	913	A	N7-C8-N9	6.31	116.95	113.80
1	N	525	C	C6-N1-C2	-6.31	117.78	120.30
1	N	578	C	N1-C1'-C2'	-6.31	105.06	112.00
1	N	1013	G	C6-C5-N7	-6.31	126.61	130.40
1	N	1174	G	C6-N1-C2	6.31	128.88	125.10
1	N	1206	G	P-O3'-C3'	-6.31	112.13	119.70
1	N	1232	U	C2'-C3'-O3'	6.31	123.79	113.70
1	N	14	U	C5'-C4'-O4'	6.31	116.67	109.10
1	N	229	U	N3-C4-C5	-6.31	110.82	114.60
1	N	655	A	C5-C6-N1	-6.31	114.55	117.70
1	N	782	A	C6-C5-N7	-6.31	127.89	132.30
1	N	1000	A	C5-N7-C8	6.31	107.05	103.90
1	N	1092	A	N1-C6-N6	6.31	122.38	118.60
1	N	68	G	N1-C2-N2	-6.30	110.53	116.20
1	N	803	G	C8-N9-C4	-6.30	103.88	106.40
1	N	1161	C	C6-N1-C2	-6.30	117.78	120.30
1	N	1501	C	C6-N1-C2	-6.30	117.78	120.30
1	N	155	A	N1-C2-N3	6.30	132.45	129.30
1	N	689	C	N1-C2-N3	-6.30	114.79	119.20
1	N	1163	A	C4-C5-C6	6.30	120.15	117.00
1	N	477	C	N3-C2-O2	6.30	126.31	121.90
1	N	1024	G	C2-N3-C4	6.30	115.05	111.90
1	N	1070	U	C2-N3-C4	-6.30	123.22	127.00
1	N	1226	C	N1-C2-N3	-6.30	114.79	119.20
1	N	1136	C	C2-N1-C1'	6.30	125.73	118.80
1	N	1389	C	N1-C2-O2	6.30	122.68	118.90
1	N	1449	C	N3-C4-N4	6.30	122.41	118.00
1	N	261	U	C2-N3-C4	-6.29	123.22	127.00
1	N	421	U	C6-N1-C1'	-6.29	112.39	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	786	G	C6-C5-N7	-6.29	126.62	130.40
1	N	899	C	C6-N1-C1'	-6.29	113.25	120.80
1	N	539	A	N3-C4-C5	6.29	131.21	126.80
1	N	1294	G	N1-C2-N3	-6.29	120.12	123.90
1	N	1456	A	N7-C8-N9	6.29	116.95	113.80
1	N	104	G	C4-C5-C6	6.29	122.58	118.80
1	N	469	C	N3-C4-C5	-6.29	119.38	121.90
1	N	1349	A	P-O3'-C3'	-6.29	112.15	119.70
1	N	1454	G	C2-N3-C4	6.29	115.05	111.90
1	N	261	U	N3-C4-O4	6.29	123.80	119.40
1	N	5	U	N3-C4-C5	-6.29	110.83	114.60
1	N	18	C	P-O3'-C3'	-6.29	112.15	119.70
1	N	803	G	N1-C2-N3	-6.29	120.13	123.90
1	N	852	G	N1-C2-N3	-6.29	120.13	123.90
1	N	1178	G	C6-C5-N7	-6.29	126.63	130.40
1	N	1215	G	C8-N9-C4	-6.29	103.89	106.40
1	N	1251	A	N3-C4-C5	-6.29	122.40	126.80
1	N	268	U	C5-C6-N1	6.29	125.84	122.70
1	N	716	A	C5'-C4'-O4'	6.29	116.64	109.10
1	N	1071	C	N3-C4-N4	6.29	122.40	118.00
1	N	648	A	C6-C5-N7	-6.29	127.90	132.30
1	N	1009	U	P-O3'-C3'	-6.29	112.16	119.70
1	N	1414	U	C6-N1-C2	-6.29	117.23	121.00
1	N	332	G	C6-N1-C2	6.28	128.87	125.10
1	N	409	U	C2-N1-C1'	6.28	125.24	117.70
1	N	450	G	N9-C4-C5	-6.28	102.89	105.40
1	N	736	C	P-O3'-C3'	6.28	127.24	119.70
1	N	36	C	C2-N1-C1'	6.28	125.71	118.80
1	N	756	C	O4'-C1'-N1	6.28	113.23	108.20
1	N	1138	G	C6-C5-N7	-6.28	126.63	130.40
1	N	451	A	N9-C4-C5	6.28	108.31	105.80
1	N	521	G	N3-C4-C5	6.28	131.74	128.60
1	N	671	G	O4'-C1'-N9	6.28	113.22	108.20
1	N	914	A	N3-C4-N9	6.28	132.43	127.40
1	N	1132	C	O4'-C1'-N1	6.28	113.22	108.20
1	N	1217	C	C2-N3-C4	6.28	123.04	119.90
1	N	503	C	C2-N1-C1'	6.28	125.71	118.80
1	N	72	A	C4-C5-C6	6.28	120.14	117.00
1	N	729	A	N1-C6-N6	6.28	122.37	118.60
1	N	1155	A	N9-C4-C5	6.28	108.31	105.80
1	N	595	A	C6-C5-N7	-6.28	127.91	132.30
1	N	897	C	C1'-O4'-C4'	6.28	114.92	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1159	U	N1-C2-N3	6.27	118.66	114.90
1	N	483	C	C2-N3-C4	6.27	123.04	119.90
1	N	748	G	O4'-C1'-N9	6.27	113.22	108.20
1	N	1141	C	OP1-P-OP2	-6.27	110.19	119.60
1	N	1191	A	O4'-C1'-C2'	-6.27	99.53	105.80
1	N	1256	A	C5-N7-C8	6.27	107.04	103.90
1	N	1335	U	O4'-C4'-C3'	-6.27	97.73	104.00
1	N	12	U	P-O5'-C5'	6.27	130.93	120.90
1	N	251	G	C5-N7-C8	6.27	107.44	104.30
1	N	315	A	C4-C5-N7	-6.27	107.56	110.70
1	N	439	U	N1-C2-O2	-6.27	118.41	122.80
1	N	659	U	N1-C2-N3	-6.27	111.14	114.90
1	N	732	C	O4'-C1'-N1	6.27	113.22	108.20
1	N	909	A	OP1-P-OP2	-6.27	110.20	119.60
1	N	1487	G	P-O5'-C5'	6.27	130.93	120.90
1	N	728	A	C5-N7-C8	6.27	107.03	103.90
1	N	9	G	N3-C4-C5	6.27	131.73	128.60
1	N	263	A	P-O5'-C5'	-6.27	110.88	120.90
1	N	865	A	C8-N9-C4	-6.27	103.29	105.80
1	N	894	G	C6-C5-N7	-6.27	126.64	130.40
1	N	252	U	C5'-C4'-O4'	6.26	116.62	109.10
1	N	855	U	C4-C5-C6	-6.26	115.94	119.70
1	N	993	G	C2-N3-C4	-6.26	108.77	111.90
1	N	999	C	N3-C4-N4	6.26	122.39	118.00
1	N	1018	G	N3-C4-N9	6.26	129.76	126.00
1	N	1350	A	C4-C5-C6	6.26	120.13	117.00
1	N	780	A	C8-N9-C4	-6.26	103.30	105.80
1	N	1496	C	N3-C2-O2	6.26	126.28	121.90
1	N	302	G	C4-C5-N7	-6.26	108.30	110.80
1	N	700	G	P-O5'-C5'	6.26	130.92	120.90
1	N	846	G	N1-C2-N2	-6.26	110.56	116.20
1	N	1339	A	C5-N7-C8	6.26	107.03	103.90
1	N	1497	G	C6-N1-C2	-6.26	121.34	125.10
1	N	32	A	C5-N7-C8	6.26	107.03	103.90
1	N	672	U	C6-N1-C2	-6.26	117.24	121.00
1	N	1016	A	C4-C5-C6	6.26	120.13	117.00
1	N	1023	U	C2-N1-C1'	6.26	125.21	117.70
1	N	180	U	C2-N3-C4	6.26	130.75	127.00
1	N	621	A	C5-N7-C8	6.26	107.03	103.90
1	N	1086	U	C5'-C4'-C3'	-6.26	105.99	116.00
1	N	81	A	N3-C4-N9	6.26	132.41	127.40
1	N	211	G	C2-N3-C4	6.26	115.03	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	270	A	C4-C5-N7	-6.26	107.57	110.70
1	N	474	G	C5-C6-N1	-6.26	108.37	111.50
1	N	752	G	N1-C6-O6	6.26	123.65	119.90
1	N	1349	A	C5-C6-N6	-6.26	118.69	123.70
1	N	148	G	P-O5'-C5'	6.25	130.91	120.90
1	N	461	A	C5-C6-N1	-6.25	114.57	117.70
1	N	993	G	C5-C6-N1	-6.25	108.37	111.50
1	N	1265	C	C2-N3-C4	6.25	123.03	119.90
1	N	1500	A	C4'-C3'-C2'	-6.25	96.34	102.60
1	N	345	C	N1-C2-O2	6.25	122.65	118.90
1	N	412	A	C5'-C4'-C3'	6.25	126.00	116.00
1	N	764	C	C2-N1-C1'	6.25	125.68	118.80
1	N	1005	A	C6-N1-C2	-6.25	114.85	118.60
1	N	1337	G	P-O3'-C3'	-6.25	112.20	119.70
1	N	92	U	O5'-P-OP2	6.25	118.20	110.70
1	N	204	G	C5-C6-N1	-6.25	108.37	111.50
1	N	795	C	C5-C4-N4	-6.25	115.82	120.20
1	N	1051	C	P-O3'-C3'	-6.25	112.20	119.70
1	N	1166	G	N3-C4-N9	6.25	129.75	126.00
1	N	1246	A	P-O3'-C3'	-6.25	112.20	119.70
1	N	1386	G	C5-C6-O6	-6.25	124.85	128.60
1	N	155	A	P-O5'-C5'	6.25	130.90	120.90
1	N	560	A	C5-C6-N1	-6.25	114.58	117.70
1	N	642	A	C6-C5-N7	-6.25	127.92	132.30
1	N	789	U	C2-N3-C4	6.25	130.75	127.00
1	N	775	G	C5-C6-N1	-6.25	108.38	111.50
1	N	1058	G	C5-C6-O6	-6.25	124.85	128.60
1	N	1372	U	N1-C2-N3	-6.25	111.15	114.90
1	N	386	C	N3-C2-O2	6.25	126.27	121.90
1	N	701	U	P-O5'-C5'	6.25	130.89	120.90
1	N	1532	U	N1-C2-N3	6.25	118.65	114.90
1	N	9	G	P-O5'-C5'	6.24	130.89	120.90
1	N	71	A	O3'-P-O5'	-6.24	92.14	104.00
1	N	451	A	C5'-C4'-O4'	6.24	116.59	109.10
1	N	964	A	O4'-C1'-N9	6.24	113.19	108.20
1	N	1181	G	C6-N1-C2	6.24	128.84	125.10
1	N	1400	C	C2-N1-C1'	-6.24	111.93	118.80
1	N	845	A	C5-C6-N6	-6.24	118.71	123.70
1	N	194	C	C5-C6-N1	-6.24	117.88	121.00
1	N	564	C	C6-N1-C1'	-6.24	113.31	120.80
1	N	765	G	C4-C5-N7	-6.24	108.31	110.80
1	N	1108	G	N3-C4-N9	-6.24	122.26	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1404	C	N1-C2-N3	-6.24	114.83	119.20
1	N	526	C	C6-N1-C2	-6.24	117.81	120.30
1	N	1233	G	C5'-C4'-C3'	-6.24	106.02	116.00
1	N	337	G	N1-C2-N2	6.24	121.81	116.20
1	N	740	U	N1-C2-O2	-6.24	118.44	122.80
1	N	229	U	P-O3'-C3'	-6.23	112.22	119.70
1	N	753	A	N9-C4-C5	6.23	108.29	105.80
1	N	264	C	N3-C4-C5	-6.23	119.41	121.90
1	N	462	G	N3-C2-N2	6.23	124.26	119.90
1	N	922	G	N7-C8-N9	6.23	116.22	113.10
1	N	1009	U	O4'-C1'-N1	6.23	113.19	108.20
1	N	1458	G	N7-C8-N9	6.23	116.22	113.10
1	N	1207	G	N1-C2-N3	-6.23	120.16	123.90
1	N	47	C	C5-C6-N1	6.23	124.11	121.00
1	N	325	A	C4-C5-C6	6.23	120.11	117.00
1	N	649	A	C4'-C3'-C2'	-6.23	96.37	102.60
1	N	698	G	C5'-C4'-C3'	-6.23	106.04	116.00
1	N	1066	C	N3-C4-N4	6.23	122.36	118.00
1	N	1184	G	C4-C5-C6	6.23	122.54	118.80
1	N	1394	A	C5-C6-N1	-6.23	114.59	117.70
1	N	1200	C	C4-C5-C6	6.22	120.51	117.40
1	N	1357	A	C1'-O4'-C4'	6.22	114.88	109.90
1	N	1465	A	C5-C6-N6	-6.22	118.72	123.70
1	N	497	G	N3-C2-N2	6.22	124.26	119.90
1	N	767	A	C5-C6-N6	-6.22	118.72	123.70
1	N	536	C	C5'-C4'-O4'	-6.22	101.64	109.10
1	N	788	U	O5'-C5'-C4'	6.22	123.52	111.70
1	N	592	G	C4-N9-C1'	-6.22	118.42	126.50
1	N	618	C	C5-C6-N1	-6.22	117.89	121.00
1	N	679	C	C2-N1-C1'	6.22	125.64	118.80
1	N	1306	A	C8-N9-C4	-6.22	103.31	105.80
1	N	1424	U	O4'-C1'-N1	6.22	113.18	108.20
1	N	68	G	N9-C4-C5	-6.22	102.91	105.40
1	N	84	U	C2-N1-C1'	6.22	125.16	117.70
1	N	1196	A	C4-C5-C6	6.22	120.11	117.00
1	N	400	C	C5-C6-N1	6.22	124.11	121.00
1	N	1340	A	P-O3'-C3'	6.22	127.16	119.70
1	N	140	U	O5'-C5'-C4'	-6.21	99.89	111.70
1	N	417	G	N3-C4-C5	-6.21	125.49	128.60
1	N	818	G	N7-C8-N9	6.21	116.21	113.10
1	N	1401	G	P-O5'-C5'	6.21	130.84	120.90
1	N	224	U	N3-C4-O4	6.21	123.75	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	56	U	C5-C4-O4	-6.21	122.17	125.90
1	N	75	G	C3'-C2'-C1'	-6.21	96.53	101.50
1	N	951	G	P-O3'-C3'	-6.21	112.25	119.70
1	N	1061	G	N1-C6-O6	6.21	123.63	119.90
1	N	1072	G	N9-C4-C5	-6.21	102.92	105.40
1	N	1192	C	P-O5'-C5'	-6.21	110.96	120.90
1	N	1350	A	N1-C6-N6	6.21	122.33	118.60
1	N	1530	G	N3-C4-C5	-6.21	125.49	128.60
1	N	650	G	N3-C2-N2	6.21	124.25	119.90
1	N	1407	C	C4-C5-C6	-6.21	114.30	117.40
1	N	238	A	N1-C6-N6	6.21	122.33	118.60
1	N	440	C	C2-N3-C4	-6.21	116.80	119.90
1	N	944	G	N3-C4-C5	-6.21	125.50	128.60
1	N	946	A	O4'-C1'-N9	6.21	113.17	108.20
1	N	985	C	N3-C2-O2	6.21	126.25	121.90
1	N	1021	A	C5-C6-N1	-6.21	114.60	117.70
1	N	1411	C	C3'-C2'-C1'	6.21	106.47	101.50
1	N	588	G	N1-C6-O6	6.21	123.62	119.90
1	N	1419	G	O4'-C1'-C2'	-6.21	99.59	105.80
1	N	674	G	C5-C6-N1	-6.21	108.40	111.50
1	N	24	U	C5-C6-N1	-6.20	119.60	122.70
1	N	775	G	O4'-C1'-N9	6.20	113.16	108.20
1	N	1139	G	O5'-C5'-C4'	-6.20	99.91	111.70
1	N	1186	G	C2-N3-C4	-6.20	108.80	111.90
1	N	1519	A	N3-C4-C5	-6.20	122.46	126.80
1	N	154	U	C2-N3-C4	6.20	130.72	127.00
1	N	499	A	C6-C5-N7	-6.20	127.96	132.30
1	N	179	A	C5-N7-C8	6.20	107.00	103.90
1	N	1163	A	O4'-C1'-N9	6.20	113.16	108.20
1	N	7	A	C6-C5-N7	-6.20	127.96	132.30
1	N	244	U	O4'-C1'-N1	6.20	113.16	108.20
1	N	250	A	N1-C2-N3	6.20	132.40	129.30
1	N	1036	A	N1-C2-N3	6.20	132.40	129.30
1	N	1237	C	N3-C4-N4	6.20	122.34	118.00
1	N	1282	C	N3-C2-O2	6.20	126.24	121.90
1	N	1389	C	N3-C4-C5	-6.20	119.42	121.90
1	N	1503	A	C5-C6-N6	-6.20	118.74	123.70
1	N	119	A	C5-N7-C8	6.20	107.00	103.90
1	N	170	U	N1-C2-N3	6.20	118.62	114.90
1	N	680	C	N3-C4-N4	6.20	122.34	118.00
1	N	703	G	N1-C2-N3	-6.20	120.18	123.90
1	N	200	G	P-O3'-C3'	6.20	127.13	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	200	G	C5-N7-C8	6.20	107.40	104.30
1	N	1303	C	O4'-C1'-N1	6.20	113.16	108.20
1	N	1524	C	C2-N3-C4	6.20	123.00	119.90
1	N	789	U	C1'-O4'-C4'	6.19	114.86	109.90
1	N	338	A	P-O3'-C3'	-6.19	112.27	119.70
1	N	1185	G	C5'-C4'-C3'	6.19	125.91	116.00
1	N	1273	C	P-O5'-C5'	-6.19	110.99	120.90
1	N	204	G	N3-C2-N2	6.19	124.23	119.90
1	N	670	G	N3-C4-C5	6.19	131.70	128.60
1	N	815	A	P-O5'-C5'	-6.19	111.00	120.90
1	N	1198	G	N7-C8-N9	-6.19	110.00	113.10
1	N	1304	G	N9-C4-C5	6.19	107.88	105.40
1	N	1446	A	N9-C4-C5	6.19	108.28	105.80
1	N	320	A	C4-C5-N7	-6.19	107.61	110.70
1	N	594	U	C5-C4-O4	-6.19	122.19	125.90
1	N	1491	G	C8-N9-C4	6.19	108.88	106.40
1	N	1508	A	C1'-O4'-C4'	-6.19	104.95	109.90
1	N	465	A	C4-C5-C6	6.19	120.09	117.00
1	N	798	U	P-O3'-C3'	6.19	127.12	119.70
1	N	408	A	C6-N1-C2	6.19	122.31	118.60
1	N	1264	U	O4'-C1'-N1	6.19	113.15	108.20
1	N	292	G	O4'-C1'-N9	6.18	113.15	108.20
1	N	574	A	N3-C4-C5	-6.18	122.47	126.80
1	N	788	U	C2-N3-C4	6.18	130.71	127.00
1	N	25	C	C4'-C3'-C2'	-6.18	96.42	102.60
1	N	239	U	C2-N3-C4	-6.18	123.29	127.00
1	N	933	G	C4-N9-C1'	-6.18	118.46	126.50
1	N	1220	G	N7-C8-N9	-6.18	110.01	113.10
1	N	293	G	N3-C2-N2	6.18	124.23	119.90
1	N	488	C	N3-C4-N4	6.18	122.33	118.00
1	N	963	G	C8-N9-C4	-6.18	103.93	106.40
1	N	130	A	O4'-C1'-N9	6.18	113.14	108.20
1	N	187	G	O4'-C1'-N9	6.18	113.14	108.20
1	N	202	G	C4-C5-N7	6.18	113.27	110.80
1	N	256	U	P-O5'-C5'	6.18	130.79	120.90
1	N	435	A	N3-C4-C5	-6.18	122.47	126.80
1	N	491	G	C5'-C4'-C3'	-6.18	106.11	116.00
1	N	881	G	O4'-C1'-N9	6.18	113.14	108.20
1	N	1036	A	O4'-C1'-N9	6.18	113.14	108.20
1	N	1089	G	C4-N9-C1'	6.18	134.53	126.50
1	N	1412	C	C5-C6-N1	6.18	124.09	121.00
1	N	292	G	C5-C6-O6	-6.18	124.89	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1206	G	C4'-C3'-C2'	-6.18	96.42	102.60
1	N	59	A	N7-C8-N9	6.18	116.89	113.80
1	N	203	G	C4-C5-C6	-6.18	115.09	118.80
1	N	242	G	C5-C6-N1	-6.18	108.41	111.50
1	N	246	A	P-O5'-C5'	6.18	130.78	120.90
1	N	262	A	C6-C5-N7	-6.18	127.98	132.30
1	N	392	C	N3-C4-C5	-6.18	119.43	121.90
1	N	505	G	N1-C2-N3	-6.18	120.19	123.90
1	N	784	A	N7-C8-N9	6.18	116.89	113.80
1	N	1235	U	C4-C5-C6	-6.18	116.00	119.70
1	N	82	G	C5-C6-N1	-6.17	108.41	111.50
1	N	1100	C	P-O3'-C3'	-6.17	112.29	119.70
1	N	1531	A	O4'-C1'-N9	6.17	113.14	108.20
1	N	3	A	C4-C5-C6	6.17	120.08	117.00
1	N	278	G	N9-C4-C5	-6.17	102.93	105.40
1	N	481	G	C4'-C3'-C2'	-6.17	96.43	102.60
1	N	199	A	P-O5'-C5'	6.17	130.77	120.90
1	N	776	G	N1-C6-O6	6.17	123.60	119.90
1	N	951	G	C5-C6-O6	-6.17	124.90	128.60
1	N	1034	G	N1-C2-N3	-6.17	120.20	123.90
1	N	1525	G	C4-C5-N7	-6.17	108.33	110.80
1	N	79	G	N3-C4-C5	6.16	131.68	128.60
1	N	650	G	O4'-C1'-N9	6.16	113.13	108.20
1	N	1458	G	C6-N1-C2	6.16	128.80	125.10
1	N	58	C	C2-N3-C4	6.16	122.98	119.90
1	N	913	A	C5-N7-C8	6.16	106.98	103.90
1	N	999	C	C3'-C2'-C1'	-6.16	96.57	101.50
1	N	1311	A	C8-N9-C4	6.16	108.27	105.80
1	N	1365	G	N3-C2-N2	6.16	124.21	119.90
1	N	1427	C	C1'-O4'-C4'	6.16	114.83	109.90
1	N	940	C	O4'-C1'-N1	6.16	113.13	108.20
1	N	945	G	C4-C5-C6	6.16	122.50	118.80
1	N	995	C	N3-C2-O2	6.16	126.21	121.90
1	N	486	U	N3-C4-C5	-6.16	110.91	114.60
1	N	1368	A	C5'-C4'-O4'	6.16	116.49	109.10
1	N	33	A	C4-C5-C6	6.16	120.08	117.00
1	N	88	U	C5-C4-O4	-6.16	122.21	125.90
1	N	108	G	C4-C5-N7	-6.16	108.34	110.80
1	N	132	C	N3-C2-O2	6.16	126.21	121.90
1	N	495	A	C6-C5-N7	-6.16	127.99	132.30
1	N	879	C	C5'-C4'-O4'	6.16	116.49	109.10
1	N	1148	U	C2-N3-C4	-6.16	123.31	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1108	G	C8-N9-C4	-6.15	103.94	106.40
1	N	1127	G	N3-C2-N2	-6.15	115.59	119.90
1	N	1199	U	N3-C4-O4	6.15	123.71	119.40
1	N	317	U	C2-N1-C1'	6.15	125.08	117.70
1	N	532	A	N7-C8-N9	-6.15	110.72	113.80
1	N	604	G	C1'-O4'-C4'	6.15	114.82	109.90
1	N	627	G	C5-C6-N1	-6.15	108.42	111.50
1	N	758	C	C5-C4-N4	-6.15	115.89	120.20
1	N	768	A	C5-N7-C8	6.15	106.98	103.90
1	N	1090	U	P-O3'-C3'	6.15	127.08	119.70
1	N	1324	A	C5-C6-N6	-6.15	118.78	123.70
1	N	1332	A	N1-C2-N3	6.15	132.38	129.30
1	N	1511	G	O5'-P-OP1	-6.15	100.16	105.70
1	N	1011	C	C6-N1-C1'	-6.15	113.42	120.80
1	N	697	U	N1-C2-O2	-6.15	118.50	122.80
1	N	330	C	C6-N1-C1'	-6.15	113.42	120.80
1	N	497	G	P-O5'-C5'	6.15	130.74	120.90
1	N	739	C	C6-N1-C1'	-6.15	113.42	120.80
1	N	784	A	C8-N9-C4	-6.15	103.34	105.80
1	N	792	A	C4-C5-C6	6.15	120.07	117.00
1	N	1046	A	N1-C2-N3	-6.15	126.23	129.30
1	N	271	C	P-O5'-C5'	6.15	130.73	120.90
1	N	283	U	P-O3'-C3'	-6.15	112.33	119.70
1	N	369	G	P-O5'-C5'	-6.15	111.07	120.90
1	N	77	A	P-O3'-C3'	6.14	127.07	119.70
1	N	486	U	N3-C4-O4	6.14	123.70	119.40
1	N	640	A	C5-N7-C8	6.14	106.97	103.90
1	N	1042	A	C2'-C3'-O3'	6.14	123.53	113.70
1	N	1162	C	N3-C4-N4	6.14	122.30	118.00
1	N	808	C	N1-C2-O2	-6.14	115.21	118.90
1	N	923	A	C5-C6-N1	-6.14	114.63	117.70
1	N	181	A	C5-C6-N1	-6.14	114.63	117.70
1	N	859	G	C2-N3-C4	-6.14	108.83	111.90
1	N	859	G	N9-C4-C5	-6.14	102.94	105.40
1	N	53	A	C4-C5-C6	6.14	120.07	117.00
1	N	216	U	P-O3'-C3'	6.14	127.07	119.70
1	N	678	U	N3-C2-O2	6.14	126.50	122.20
1	N	985	C	C2-N3-C4	6.14	122.97	119.90
1	N	1194	U	C2-N3-C4	-6.14	123.32	127.00
1	N	1254	A	O4'-C1'-N9	6.14	113.11	108.20
1	N	10	A	C4-C5-C6	6.14	120.07	117.00
1	N	211	G	O4'-C1'-N9	6.14	113.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	542	G	O5'-P-OP2	-6.14	100.18	105.70
1	N	1392	G	P-O5'-C5'	6.14	130.72	120.90
1	N	1470	U	C1'-O4'-C4'	6.14	114.81	109.90
1	N	223	A	N9-C4-C5	6.13	108.25	105.80
1	N	227	G	N7-C8-N9	6.13	116.17	113.10
1	N	490	C	O4'-C1'-N1	6.13	113.11	108.20
1	N	634	C	N3-C2-O2	6.13	126.19	121.90
1	N	849	G	P-O5'-C5'	-6.13	111.08	120.90
1	N	944	G	N3-C4-N9	6.13	129.68	126.00
1	N	990	C	N3-C4-N4	6.13	122.29	118.00
1	N	1266	G	C5-C6-N1	-6.13	108.43	111.50
1	N	218	U	C5'-C4'-O4'	6.13	116.46	109.10
1	N	617	G	P-O5'-C5'	6.13	130.71	120.90
1	N	1267	C	P-O5'-C5'	-6.13	111.09	120.90
1	N	456	A	P-O5'-C5'	-6.13	111.09	120.90
1	N	498	A	O4'-C1'-N9	6.13	113.10	108.20
1	N	682	G	C5'-C4'-O4'	6.13	116.46	109.10
1	N	285	C	N3-C4-C5	6.13	124.35	121.90
1	N	1295	U	C5'-C4'-C3'	-6.13	106.20	116.00
1	N	1411	C	C6-N1-C2	-6.13	117.85	120.30
1	N	153	C	N1-C2-N3	-6.13	114.91	119.20
1	N	530	G	O4'-C1'-N9	6.13	113.10	108.20
1	N	616	G	O4'-C1'-N9	6.13	113.10	108.20
1	N	1067	A	C5-C6-N1	-6.12	114.64	117.70
1	N	153	C	C5-C4-N4	-6.12	115.91	120.20
1	N	1185	G	O4'-C4'-C3'	-6.12	97.88	104.00
1	N	1247	U	P-O5'-C5'	6.12	130.69	120.90
1	N	1480	A	O4'-C1'-N9	6.12	113.10	108.20
1	N	646	G	N7-C8-N9	-6.12	110.04	113.10
1	N	171	A	C5-C6-N1	-6.12	114.64	117.70
1	N	337	G	C4-C5-N7	6.12	113.25	110.80
1	N	592	G	C8-N9-C1'	6.12	134.95	127.00
1	N	838	G	C4-C5-N7	-6.12	108.35	110.80
1	N	950	U	O4'-C1'-N1	6.12	113.09	108.20
1	N	1062	U	N3-C4-O4	6.12	123.68	119.40
1	N	1143	G	C5-C6-O6	-6.12	124.93	128.60
1	N	1165	U	C2-N1-C1'	6.12	125.04	117.70
1	N	1241	G	C5'-C4'-C3'	-6.12	106.21	116.00
1	N	449	G	P-O3'-C3'	-6.12	112.36	119.70
1	N	155	A	C5-C6-N1	-6.12	114.64	117.70
1	N	310	G	C4-C5-C6	6.12	122.47	118.80
1	N	1000	A	C5-C6-N6	-6.12	118.81	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1140	C	C2-N1-C1'	6.12	125.53	118.80
1	N	1506	U	C5'-C4'-C3'	6.12	125.79	116.00
1	N	1529	G	C6-C5-N7	-6.12	126.73	130.40
1	N	43	C	C5-C4-N4	6.11	124.48	120.20
1	N	767	A	N7-C8-N9	-6.11	110.74	113.80
1	N	1443	C	C2-N3-C4	6.11	122.96	119.90
1	N	1516	G	C8-N9-C4	6.11	108.84	106.40
1	N	171	A	O4'-C1'-N9	6.11	113.09	108.20
1	N	250	A	C5-N7-C8	6.11	106.96	103.90
1	N	599	C	N3-C4-N4	6.11	122.28	118.00
1	N	1311	A	C5-C6-N1	-6.11	114.64	117.70
1	N	227	G	C6-C5-N7	-6.11	126.73	130.40
1	N	361	G	O4'-C1'-N9	6.11	113.09	108.20
1	N	936	C	N3-C4-C5	-6.11	119.45	121.90
1	N	1483	A	N3-C4-C5	-6.11	122.52	126.80
1	N	343	U	N3-C4-O4	-6.11	115.12	119.40
1	N	1105	A	N9-C4-C5	6.11	108.24	105.80
1	N	76	G	N3-C4-N9	6.11	129.66	126.00
1	N	590	U	C4-C5-C6	6.11	123.36	119.70
1	N	607	A	C3'-C2'-C1'	-6.11	96.61	101.50
1	N	640	A	N1-C2-N3	-6.11	126.25	129.30
1	N	774	G	O4'-C4'-C3'	-6.11	97.89	104.00
1	N	1327	C	N3-C4-N4	6.11	122.28	118.00
1	N	1363	A	C5-C6-N6	-6.11	118.81	123.70
1	N	1458	G	C8-N9-C1'	-6.11	119.06	127.00
1	N	1499	A	C4-C5-C6	6.11	120.05	117.00
1	N	78	A	P-O3'-C3'	6.11	127.03	119.70
1	N	382	A	O4'-C1'-N9	6.11	113.08	108.20
1	N	915	A	N9-C1'-C2'	-6.11	105.28	112.00
1	N	467	U	C2-N1-C1'	6.10	125.03	117.70
1	N	589	U	P-O5'-C5'	6.10	130.67	120.90
1	N	1135	U	O4'-C1'-N1	6.10	113.08	108.20
1	N	1341	U	N1-C2-O2	-6.10	118.53	122.80
1	N	95	C	C3'-C2'-C1'	6.10	106.38	101.50
1	N	229	U	N3-C2-O2	-6.10	117.93	122.20
1	N	460	A	C4-C5-C6	6.10	120.05	117.00
1	N	714	G	N1-C6-O6	6.10	123.56	119.90
1	N	998	C	C5'-C4'-C3'	6.10	125.76	116.00
1	N	1074	G	N9-C4-C5	-6.10	102.96	105.40
1	N	1195	C	C5'-C4'-C3'	6.10	125.76	116.00
1	N	340	U	C4'-C3'-C2'	-6.10	96.50	102.60
1	N	1042	A	C6-C5-N7	-6.10	128.03	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	49	U	N3-C4-C5	-6.10	110.94	114.60
1	N	869	G	C5'-C4'-O4'	6.10	116.42	109.10
1	N	1204	A	N1-C2-N3	6.10	132.35	129.30
1	N	84	U	N1-C2-N3	-6.10	111.24	114.90
1	N	698	G	C5'-C4'-O4'	6.10	116.42	109.10
1	N	917	G	C4'-C3'-C2'	-6.10	96.50	102.60
1	N	1131	G	C4-N9-C1'	-6.10	118.57	126.50
1	N	1378	C	P-O3'-C3'	-6.10	112.38	119.70
1	N	1154	G	C5-C6-O6	-6.10	124.94	128.60
1	N	1477	U	C1'-O4'-C4'	-6.10	105.02	109.90
1	N	186	C	C5-C4-N4	6.09	124.47	120.20
1	N	532	A	C8-N9-C4	6.09	108.24	105.80
1	N	602	A	C4-C5-C6	6.09	120.05	117.00
1	N	846	G	C6-C5-N7	-6.09	126.74	130.40
1	N	1014	A	C5-N7-C8	6.09	106.95	103.90
1	N	1166	G	C5-C6-O6	-6.09	124.94	128.60
1	N	1190	G	C8-N9-C4	-6.09	103.96	106.40
1	N	1281	C	C6-N1-C2	-6.09	117.86	120.30
1	N	94	G	N1-C2-N3	-6.09	120.24	123.90
1	N	1200	C	N3-C2-O2	6.09	126.17	121.90
1	N	285	C	C5-C4-N4	-6.09	115.94	120.20
1	N	375	U	P-O3'-C3'	6.09	127.01	119.70
1	N	974	A	C6-N1-C2	-6.09	114.95	118.60
1	N	399	G	C4-C5-N7	-6.09	108.36	110.80
1	N	754	C	O4'-C1'-C2'	6.09	113.08	107.60
1	N	1138	G	C4-C5-C6	6.09	122.45	118.80
1	N	1290	G	C5-N7-C8	6.09	107.34	104.30
1	N	1295	U	N3-C2-O2	6.09	126.46	122.20
1	N	505	G	N3-C4-C5	6.08	131.64	128.60
1	N	1417	G	N1-C2-N3	-6.08	120.25	123.90
1	N	171	A	C4-N9-C1'	6.08	137.25	126.30
1	N	566	G	C5'-C4'-C3'	-6.08	106.27	116.00
1	N	600	A	C4-C5-C6	6.08	120.04	117.00
1	N	793	U	C5-C4-O4	-6.08	122.25	125.90
1	N	1509	C	C6-N1-C1'	-6.08	113.50	120.80
1	N	247	G	C6-C5-N7	-6.08	126.75	130.40
1	N	976	G	N7-C8-N9	-6.08	110.06	113.10
1	N	577	G	P-O5'-C5'	-6.08	111.17	120.90
1	N	62	U	O4'-C1'-N1	6.08	113.06	108.20
1	N	661	G	C5'-C4'-O4'	6.08	116.39	109.10
1	N	911	U	O4'-C1'-N1	6.08	113.06	108.20
1	N	1122	U	O4'-C1'-N1	6.08	113.06	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1206	G	O5'-C5'-C4'	-6.08	100.15	111.70
1	N	1209	C	C6-N1-C2	-6.08	117.87	120.30
1	N	627	G	P-O5'-C5'	6.08	130.62	120.90
1	N	749	A	C5-C6-N1	-6.08	114.66	117.70
1	N	989	U	N3-C2-O2	6.08	126.45	122.20
1	N	142	G	C8-N9-C4	-6.07	103.97	106.40
1	N	726	C	C5-C6-N1	6.07	124.04	121.00
1	N	1293	C	C2-N3-C4	6.07	122.94	119.90
1	N	1383	C	C2-N3-C4	6.07	122.94	119.90
1	N	315	A	C2'-C3'-O3'	6.07	123.42	113.70
1	N	1413	A	C6-N1-C2	6.07	122.24	118.60
1	N	435	A	N1-C6-N6	6.07	122.24	118.60
1	N	590	U	C5-C4-O4	-6.07	122.26	125.90
1	N	805	C	C4-C5-C6	-6.07	114.36	117.40
1	N	1092	A	O4'-C4'-C3'	-6.07	97.93	104.00
1	N	1501	C	O4'-C1'-N1	6.07	113.06	108.20
1	N	834	U	N1-C2-N3	6.07	118.54	114.90
1	N	993	G	N3-C2-N2	6.07	124.15	119.90
1	N	1026	G	N1-C2-N3	-6.07	120.26	123.90
1	N	1102	A	N1-C6-N6	6.07	122.24	118.60
1	N	1514	G	N1-C2-N3	-6.07	120.26	123.90
1	N	108	G	N3-C4-C5	-6.07	125.57	128.60
1	N	548	G	N1-C2-N3	-6.07	120.26	123.90
1	N	734	G	N1-C2-N3	-6.07	120.26	123.90
1	N	712	A	C5-C6-N6	-6.06	118.85	123.70
1	N	714	G	N3-C4-C5	6.06	131.63	128.60
1	N	756	C	C2-N3-C4	6.06	122.93	119.90
1	N	223	A	C3'-C2'-C1'	6.06	106.35	101.50
1	N	245	U	C5-C4-O4	-6.06	122.26	125.90
1	N	498	A	C4-C5-N7	-6.06	107.67	110.70
1	N	718	A	P-O3'-C3'	6.06	126.97	119.70
1	N	766	A	O4'-C1'-N9	6.06	113.05	108.20
1	N	976	G	C5'-C4'-O4'	6.06	116.38	109.10
1	N	1249	C	O4'-C1'-N1	6.06	113.05	108.20
1	N	1523	G	O4'-C1'-N9	6.06	113.05	108.20
1	N	408	A	P-O5'-C5'	-6.06	111.20	120.90
1	N	521	G	N9-C4-C5	-6.06	102.98	105.40
1	N	1162	C	C2-N3-C4	6.06	122.93	119.90
1	N	276	G	O4'-C4'-C3'	-6.06	97.94	104.00
1	N	1168	U	P-O5'-C5'	6.06	130.59	120.90
1	N	1310	G	C3'-C2'-C1'	-6.06	96.65	101.50
1	N	1327	C	N1-C2-N3	-6.06	114.96	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	268	U	N1-C2-O2	-6.06	118.56	122.80
1	N	606	G	C5-C6-N1	-6.06	108.47	111.50
1	N	1203	C	N3-C4-N4	6.06	122.24	118.00
1	N	426	U	C2'-C3'-O3'	6.06	123.39	113.70
1	N	867	G	N1-C2-N3	6.05	127.53	123.90
1	N	935	A	C5-C6-N1	-6.05	114.67	117.70
1	N	1161	C	C3'-C2'-C1'	6.05	106.34	101.50
1	N	243	A	C4'-C3'-C2'	6.05	108.65	102.60
1	N	980	C	C2-N3-C4	6.05	122.93	119.90
1	N	1074	G	N3-C2-N2	6.05	124.14	119.90
1	N	239	U	N3-C4-O4	-6.05	115.16	119.40
1	N	249	U	N3-C4-C5	-6.05	110.97	114.60
1	N	537	G	N1-C2-N3	-6.05	120.27	123.90
1	N	1170	A	C6-N1-C2	-6.05	114.97	118.60
1	N	1183	U	N3-C2-O2	6.05	126.44	122.20
1	N	908	A	P-O3'-C3'	-6.05	112.44	119.70
1	N	1510	C	C6-N1-C2	-6.05	117.88	120.30
1	N	81	A	O4'-C4'-C3'	-6.05	97.95	104.00
1	N	444	G	N3-C4-N9	6.05	129.63	126.00
1	N	733	G	N1-C2-N3	-6.05	120.27	123.90
1	N	1074	G	C6-N1-C2	6.05	128.73	125.10
1	N	1361	G	C4'-C3'-C2'	6.05	108.65	102.60
1	N	1484	C	O4'-C1'-N1	6.05	113.04	108.20
1	N	45	G	C4-N9-C1'	-6.04	118.64	126.50
1	N	118	U	C6-N1-C2	-6.04	117.37	121.00
1	N	234	C	O4'-C1'-N1	6.04	113.03	108.20
1	N	1018	G	C5-N7-C8	-6.04	101.28	104.30
1	N	1116	U	C3'-C2'-C1'	6.04	106.33	101.50
1	N	1130	A	N1-C6-N6	6.04	122.23	118.60
1	N	1337	G	O4'-C4'-C3'	-6.04	97.96	104.00
1	N	1530	G	N3-C4-N9	6.04	129.63	126.00
1	N	70	U	C4-C5-C6	-6.04	116.08	119.70
1	N	874	G	P-O5'-C5'	6.04	130.57	120.90
1	N	979	C	N1-C1'-C2'	-6.04	105.35	112.00
1	N	372	C	O4'-C1'-N1	6.04	113.03	108.20
1	N	663	A	C6-C5-N7	-6.04	128.07	132.30
1	N	18	C	C2-N3-C4	6.04	122.92	119.90
1	N	32	A	O5'-P-OP2	6.04	117.95	110.70
1	N	487	A	C4-C5-C6	6.04	120.02	117.00
1	N	715	A	C4-C5-C6	6.04	120.02	117.00
1	N	814	A	C5-N7-C8	-6.04	100.88	103.90
1	N	820	U	C5'-C4'-O4'	6.04	116.35	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1182	G	C8-N9-C1'	6.04	134.85	127.00
1	N	1225	A	N9-C4-C5	6.04	108.22	105.80
1	N	25	C	N1-C2-N3	-6.04	114.97	119.20
1	N	73	C	C5-C6-N1	6.04	124.02	121.00
1	N	524	G	P-O3'-C3'	6.04	126.94	119.70
1	N	1493	A	N7-C8-N9	-6.04	110.78	113.80
1	N	338	A	C3'-C2'-C1'	-6.04	96.67	101.50
1	N	864	A	P-O3'-C3'	6.04	126.94	119.70
1	N	1237	C	C5-C4-N4	-6.04	115.97	120.20
1	N	1376	U	O4'-C1'-N1	6.04	113.03	108.20
1	N	122	G	N7-C8-N9	6.03	116.12	113.10
1	N	249	U	C5-C4-O4	6.03	129.52	125.90
1	N	363	A	C5-N7-C8	6.03	106.92	103.90
1	N	460	A	N9-C4-C5	6.03	108.21	105.80
1	N	634	C	P-O5'-C5'	6.03	130.56	120.90
1	N	1209	C	C5-C4-N4	-6.03	115.98	120.20
1	N	1365	G	N1-C6-O6	6.03	123.52	119.90
1	N	1474	U	O4'-C1'-N1	6.03	113.03	108.20
1	N	21	G	C4-C5-C6	6.03	122.42	118.80
1	N	83	C	N3-C4-N4	6.03	122.22	118.00
1	N	130	A	O4'-C4'-C3'	-6.03	97.97	104.00
1	N	1179	A	OP1-P-O3'	6.03	118.47	105.20
1	N	141	G	C4-C5-C6	6.03	122.42	118.80
1	N	328	C	C4'-C3'-C2'	-6.03	96.57	102.60
1	N	692	U	O4'-C1'-N1	6.03	113.02	108.20
1	N	1347	G	C5-N7-C8	-6.03	101.28	104.30
1	N	606	G	N1-C2-N2	-6.03	110.77	116.20
1	N	971	G	C5-C6-O6	-6.03	124.98	128.60
1	N	1036	A	C5-C6-N6	-6.03	118.88	123.70
1	N	3	A	P-O5'-C5'	-6.03	111.26	120.90
1	N	349	A	C5-C6-N6	-6.03	118.88	123.70
1	N	918	A	C5-C6-N6	6.03	128.52	123.70
1	N	1160	G	N9-C4-C5	6.03	107.81	105.40
1	N	1313	U	O4'-C4'-C3'	-6.03	97.97	104.00
1	N	1443	C	P-O5'-C5'	6.03	130.54	120.90
1	N	148	G	C5-C6-N1	-6.03	108.49	111.50
1	N	584	G	P-O5'-C5'	6.03	130.54	120.90
1	N	650	G	C5-C6-O6	-6.03	124.98	128.60
1	N	842	U	O4'-C4'-C3'	6.03	110.92	106.10
1	N	1171	A	C5'-C4'-C3'	6.03	125.64	116.00
1	N	1524	C	N1-C1'-C2'	-6.03	105.37	112.00
1	N	533	A	P-O3'-C3'	6.02	126.93	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1163	A	N1-C2-N3	-6.02	126.29	129.30
1	N	334	C	O4'-C1'-N1	6.02	113.02	108.20
1	N	401	C	C5-C4-N4	-6.02	115.98	120.20
1	N	1291	U	P-O5'-C5'	6.02	130.53	120.90
1	N	407	U	C6-N1-C2	-6.02	117.39	121.00
1	N	617	G	C4-C5-N7	-6.02	108.39	110.80
1	N	65	A	C4-C5-C6	-6.02	113.99	117.00
1	N	79	G	C5-N7-C8	-6.02	101.29	104.30
1	N	396	C	P-O3'-C3'	6.02	126.92	119.70
1	N	452	A	P-O3'-C3'	-6.02	112.48	119.70
1	N	705	G	C5'-C4'-O4'	6.02	116.32	109.10
1	N	761	G	C8-N9-C4	6.02	108.81	106.40
1	N	935	A	O4'-C1'-N9	6.02	113.02	108.20
1	N	1016	A	C5-C6-N6	-6.02	118.88	123.70
1	N	448	A	C5-N7-C8	6.02	106.91	103.90
1	N	1353	G	C5-C6-O6	-6.02	124.99	128.60
1	N	1432	G	O5'-C5'-C4'	-6.02	100.27	111.70
1	N	1452	C	C2-N1-C1'	6.02	125.42	118.80
1	N	18	C	N3-C4-N4	6.02	122.21	118.00
1	N	852	G	C3'-C2'-C1'	-6.02	96.69	101.50
1	N	153	C	N3-C4-N4	6.01	122.21	118.00
1	N	436	C	C4-C5-C6	-6.01	114.39	117.40
1	N	702	A	P-O3'-C3'	6.01	126.92	119.70
1	N	794	A	C2-N3-C4	-6.01	107.59	110.60
1	N	819	A	N9-C4-C5	6.01	108.21	105.80
1	N	1253	G	N3-C2-N2	6.01	124.11	119.90
1	N	74	A	C8-N9-C4	-6.01	103.39	105.80
1	N	150	U	N3-C2-O2	6.01	126.41	122.20
1	N	850	U	C2-N1-C1'	6.01	124.91	117.70
1	N	1050	G	C2-N3-C4	-6.01	108.89	111.90
1	N	211	G	N1-C6-O6	6.01	123.50	119.90
1	N	602	A	N1-C2-N3	6.01	132.30	129.30
1	N	893	C	OP1-P-O3'	6.01	118.42	105.20
1	N	894	G	O4'-C1'-N9	6.01	113.01	108.20
1	N	1225	A	N7-C8-N9	-6.01	110.80	113.80
1	N	705	G	C4-C5-N7	6.01	113.20	110.80
1	N	266	G	C4-C5-C6	6.01	122.40	118.80
1	N	602	A	C6-N1-C2	-6.01	115.00	118.60
1	N	1353	G	N1-C6-O6	6.01	123.50	119.90
1	N	264	C	P-O3'-C3'	6.00	126.91	119.70
1	N	302	G	C8-N9-C1'	6.00	134.81	127.00
1	N	343	U	C4-C5-C6	-6.00	116.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1494	G	C4-C5-N7	-6.00	108.40	110.80
1	N	557	G	N7-C8-N9	-6.00	110.10	113.10
1	N	800	G	N1-C2-N2	-6.00	110.80	116.20
1	N	1145	A	C6-C5-N7	-6.00	128.10	132.30
1	N	1253	G	C8-N9-C4	6.00	108.80	106.40
1	N	1459	G	P-O5'-C5'	6.00	130.51	120.90
1	N	73	C	P-O5'-C5'	-6.00	111.30	120.90
1	N	310	G	OP1-P-OP2	-6.00	110.60	119.60
1	N	513	C	N1-C2-O2	-6.00	115.30	118.90
1	N	1074	G	N1-C2-N3	-6.00	120.30	123.90
1	N	1102	A	C2-N3-C4	-6.00	107.60	110.60
1	N	1211	U	C2-N3-C4	-6.00	123.40	127.00
1	N	1516	G	C6-N1-C2	6.00	128.70	125.10
1	N	86	G	N9-C4-C5	6.00	107.80	105.40
1	N	553	A	C5-C6-N1	-6.00	114.70	117.70
1	N	1309	G	C4-C5-N7	-6.00	108.40	110.80
1	N	1476	A	C5-C6-N1	-6.00	114.70	117.70
1	N	11	G	C3'-C2'-C1'	-6.00	96.70	101.50
1	N	87	C	N3-C4-N4	6.00	122.20	118.00
1	N	299	G	C4-C5-C6	6.00	122.40	118.80
1	N	1431	A	N7-C8-N9	6.00	116.80	113.80
1	N	82	G	P-O3'-C3'	6.00	126.89	119.70
1	N	122	G	P-O5'-C5'	6.00	130.49	120.90
1	N	440	C	N3-C4-C5	-6.00	119.50	121.90
1	N	458	U	C6-N1-C1'	-6.00	112.81	121.20
1	N	520	A	N7-C8-N9	6.00	116.80	113.80
1	N	915	A	C5-N7-C8	6.00	106.90	103.90
1	N	1018	G	N7-C8-N9	6.00	116.10	113.10
1	N	496	A	P-O3'-C3'	6.00	126.89	119.70
1	N	619	U	C5-C6-N1	6.00	125.70	122.70
1	N	1507	A	C5-C6-N1	-6.00	114.70	117.70
1	N	137	U	C2-N3-C4	-5.99	123.40	127.00
1	N	588	G	N3-C2-N2	5.99	124.10	119.90
1	N	896	C	C2-N1-C1'	-5.99	112.21	118.80
1	N	153	C	P-O3'-C3'	-5.99	112.51	119.70
1	N	168	G	O4'-C1'-C2'	-5.99	99.81	105.80
1	N	829	G	O4'-C1'-C2'	-5.99	99.81	105.80
1	N	1497	G	C6-C5-N7	-5.99	126.81	130.40
1	N	81	A	N9-C4-C5	-5.99	103.40	105.80
1	N	508	U	N3-C4-O4	5.99	123.59	119.40
1	N	509	A	C5-N7-C8	5.99	106.89	103.90
1	N	561	U	O4'-C1'-N1	5.99	112.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	796	C	C4'-C3'-C2'	-5.99	96.61	102.60
1	N	847	G	N1-C2-N3	-5.99	120.31	123.90
1	N	960	U	C6-N1-C1'	-5.99	112.82	121.20
1	N	1134	G	C6-C5-N7	-5.99	126.81	130.40
1	N	102	G	N9-C4-C5	5.99	107.79	105.40
1	N	566	G	N7-C8-N9	5.99	116.09	113.10
1	N	819	A	N3-C4-C5	-5.99	122.61	126.80
1	N	894	G	N1-C2-N2	-5.99	110.81	116.20
1	N	1075	U	C1'-O4'-C4'	5.99	114.69	109.90
1	N	1176	A	C4-C5-C6	5.99	119.99	117.00
1	N	1287	A	O4'-C1'-N9	5.99	112.99	108.20
1	N	1325	C	N3-C2-O2	-5.99	117.71	121.90
1	N	1499	A	C4-C5-N7	-5.99	107.71	110.70
1	N	115	G	C1'-O4'-C4'	5.98	114.69	109.90
1	N	153	C	C5-C6-N1	5.98	123.99	121.00
1	N	241	G	O4'-C1'-N9	5.98	112.99	108.20
1	N	803	G	C4-C5-N7	5.98	113.19	110.80
1	N	1388	C	O4'-C4'-C3'	-5.98	98.02	104.00
1	N	1463	U	C5-C4-O4	-5.98	122.31	125.90
1	N	372	C	N3-C4-N4	5.98	122.19	118.00
1	N	477	C	C6-N1-C2	-5.98	117.91	120.30
1	N	721	G	N1-C2-N3	-5.98	120.31	123.90
1	N	916	U	O4'-C4'-C3'	-5.98	98.02	104.00
1	N	65	A	N1-C6-N6	-5.98	115.01	118.60
1	N	73	C	O4'-C1'-C2'	-5.98	99.82	105.80
1	N	800	G	P-O5'-C5'	5.98	130.47	120.90
1	N	1180	A	C6-C5-N7	-5.98	128.11	132.30
1	N	1202	U	C4'-C3'-C2'	-5.98	96.62	102.60
1	N	244	U	C5-C4-O4	-5.98	122.31	125.90
1	N	11	G	O4'-C1'-C2'	5.98	112.98	107.60
1	N	344	A	C3'-C2'-C1'	5.98	106.28	101.50
1	N	471	U	N3-C4-O4	5.98	123.58	119.40
1	N	672	U	N3-C4-C5	-5.98	111.01	114.60
1	N	826	C	N3-C4-C5	-5.98	119.51	121.90
1	N	914	A	C5-C6-N6	-5.98	118.92	123.70
1	N	1220	G	C4-N9-C1'	-5.98	118.73	126.50
1	N	1387	G	C4-C5-C6	5.98	122.39	118.80
1	N	239	U	C5-C6-N1	5.98	125.69	122.70
1	N	834	U	O4'-C1'-N1	5.97	112.98	108.20
1	N	882	C	C5-C6-N1	5.97	123.99	121.00
1	N	1513	A	C4-C5-C6	5.97	119.99	117.00
1	N	644	U	C6-N1-C2	5.97	124.58	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	729	A	O4'-C1'-N9	5.97	112.98	108.20
1	N	1032	G	N1-C2-N2	-5.97	110.82	116.20
1	N	1035	A	C4'-C3'-C2'	-5.97	96.63	102.60
1	N	1216	A	C5-C6-N1	-5.97	114.71	117.70
1	N	1298	U	P-O3'-C3'	5.97	126.87	119.70
1	N	178	C	P-O5'-C5'	5.97	130.45	120.90
1	N	627	G	C4'-C3'-C2'	-5.97	96.63	102.60
1	N	1173	U	C3'-C2'-C1'	-5.97	96.72	101.50
1	N	1338	G	N9-C4-C5	-5.97	103.01	105.40
1	N	1421	G	N7-C8-N9	-5.97	110.11	113.10
1	N	615	G	C5'-C4'-C3'	-5.97	106.45	116.00
1	N	106	C	C4'-C3'-C2'	5.97	108.57	102.60
1	N	540	G	N9-C4-C5	-5.97	103.01	105.40
1	N	595	A	C2-N3-C4	-5.97	107.62	110.60
1	N	942	G	C4-C5-C6	5.97	122.38	118.80
1	N	1083	U	C2-N3-C4	-5.97	123.42	127.00
1	N	89	U	O4'-C1'-N1	5.96	112.97	108.20
1	N	830	G	N9-C4-C5	-5.96	103.01	105.40
1	N	858	G	O4'-C1'-C2'	-5.96	99.83	105.80
1	N	1028	C	C5-C4-N4	-5.96	116.02	120.20
1	N	1315	U	C4-C5-C6	-5.96	116.12	119.70
1	N	32	A	C1'-O4'-C4'	5.96	114.67	109.90
1	N	220	G	C5'-C4'-O4'	5.96	116.25	109.10
1	N	1217	C	C5'-C4'-O4'	5.96	116.25	109.10
1	N	1274	A	N9-C4-C5	5.96	108.18	105.80
1	N	1369	C	P-O3'-C3'	-5.96	112.55	119.70
1	N	364	A	C4-N9-C1'	-5.96	115.57	126.30
1	N	382	A	C5-C6-N6	-5.96	118.93	123.70
1	N	1026	G	N3-C2-N2	5.96	124.07	119.90
1	N	353	A	C4-C5-C6	5.96	119.98	117.00
1	N	1246	A	C2-N3-C4	5.96	113.58	110.60
1	N	460	A	C2-N3-C4	-5.96	107.62	110.60
1	N	491	G	C6-C5-N7	-5.96	126.83	130.40
1	N	996	A	C4-C5-C6	5.96	119.98	117.00
1	N	1021	A	C4'-C3'-C2'	-5.96	96.64	102.60
1	N	1302	C	C4-C5-C6	5.96	120.38	117.40
1	N	1523	G	P-O5'-C5'	-5.96	111.37	120.90
1	N	30	U	C5-C4-O4	-5.96	122.33	125.90
1	N	251	G	C4'-C3'-C2'	-5.96	96.64	102.60
1	N	711	G	C5-C6-N1	-5.96	108.52	111.50
1	N	138	G	N3-C4-N9	-5.95	122.43	126.00
1	N	180	U	C5-C6-N1	5.95	125.68	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	499	A	C5'-C4'-C3'	-5.95	106.47	116.00
1	N	629	A	C5-C6-N1	-5.95	114.72	117.70
1	N	1095	U	C6-N1-C2	5.95	124.57	121.00
1	N	1308	U	P-O5'-C5'	5.95	130.43	120.90
1	N	1389	C	C5-C4-N4	-5.95	116.03	120.20
1	N	55	A	C6-N1-C2	-5.95	115.03	118.60
1	N	946	A	N3-C4-C5	-5.95	122.63	126.80
1	N	966	G	C4-N9-C1'	5.95	134.24	126.50
1	N	1159	U	O4'-C1'-N1	5.95	112.96	108.20
1	N	1260	G	C5-C6-O6	-5.95	125.03	128.60
1	N	1429	A	C6-C5-N7	-5.95	128.13	132.30
1	N	404	G	N3-C2-N2	5.95	124.06	119.90
1	N	420	U	N3-C4-C5	-5.95	111.03	114.60
1	N	582	C	N3-C4-N4	5.95	122.17	118.00
1	N	805	C	C5-C6-N1	5.95	123.97	121.00
1	N	262	A	C5'-C4'-O4'	5.95	116.24	109.10
1	N	331	G	O4'-C1'-N9	5.95	112.96	108.20
1	N	398	U	P-O3'-C3'	-5.95	112.56	119.70
1	N	1086	U	O4'-C1'-N1	5.95	112.96	108.20
1	N	1371	G	C5'-C4'-C3'	-5.95	106.48	116.00
1	N	1492	A	C4-C5-C6	5.95	119.97	117.00
1	N	1312	G	C5-N7-C8	5.95	107.27	104.30
1	N	1316	G	C6-C5-N7	-5.95	126.83	130.40
1	N	575	G	C3'-C2'-C1'	5.94	106.25	101.50
1	N	1213	A	N1-C6-N6	5.94	122.17	118.60
1	N	1353	G	C5-N7-C8	5.94	107.27	104.30
1	N	421	U	C2-N1-C1'	5.94	124.83	117.70
1	N	426	U	P-O5'-C5'	5.94	130.41	120.90
1	N	461	A	O4'-C1'-N9	5.94	112.95	108.20
1	N	877	G	C3'-C2'-C1'	-5.94	96.75	101.50
1	N	1058	G	O4'-C1'-C2'	-5.94	99.86	105.80
1	N	1289	A	N9-C4-C5	5.94	108.18	105.80
1	N	1382	C	C4-C5-C6	-5.94	114.43	117.40
1	N	1446	A	O4'-C1'-N9	5.94	112.95	108.20
1	N	216	U	C5'-C4'-C3'	5.94	125.50	116.00
1	N	729	A	P-O5'-C5'	5.94	130.41	120.90
1	N	1159	U	C2-N1-C1'	5.94	124.83	117.70
1	N	1293	C	C4-C5-C6	-5.94	114.43	117.40
1	N	1519	A	N9-C4-C5	5.94	108.18	105.80
1	N	527	G	N1-C2-N3	-5.94	120.34	123.90
1	N	673	A	C6-C5-N7	-5.94	128.14	132.30
1	N	1289	A	C6-C5-N7	-5.94	128.14	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	159	G	O4'-C1'-N9	5.94	112.95	108.20
1	N	558	G	N1-C2-N3	-5.94	120.34	123.90
1	N	852	G	P-O5'-C5'	-5.94	111.40	120.90
1	N	922	G	N1-C2-N2	5.94	121.55	116.20
1	N	1207	G	C4'-C3'-C2'	-5.94	96.66	102.60
1	N	356	A	C2-N3-C4	5.94	113.57	110.60
1	N	1075	U	N1-C2-N3	5.94	118.46	114.90
1	N	986	U	O4'-C1'-N1	5.93	112.95	108.20
1	N	1018	G	C2-N3-C4	-5.93	108.93	111.90
1	N	1421	G	N3-C4-C5	5.93	131.57	128.60
1	N	1483	A	N1-C2-N3	5.93	132.27	129.30
1	N	1497	G	C4-N9-C1'	-5.93	118.78	126.50
1	N	250	A	C5'-C4'-O4'	5.93	116.22	109.10
1	N	262	A	OP1-P-OP2	-5.93	110.70	119.60
1	N	267	C	C4-C5-C6	5.93	120.37	117.40
1	N	567	G	N9-C1'-C2'	-5.93	105.47	112.00
1	N	1219	A	C5-C6-N6	-5.93	118.95	123.70
1	N	1309	G	N3-C4-N9	-5.93	122.44	126.00
1	N	1443	C	C2-N1-C1'	5.93	125.33	118.80
1	N	592	G	N3-C2-N2	5.93	124.05	119.90
1	N	882	C	C2-N1-C1'	5.93	125.33	118.80
1	N	457	G	N9-C4-C5	-5.93	103.03	105.40
1	N	508	U	C2-N3-C4	-5.93	123.44	127.00
1	N	1265	C	N3-C4-C5	-5.93	119.53	121.90
1	N	1383	C	O4'-C1'-N1	5.93	112.94	108.20
1	N	1522	U	O4'-C4'-C3'	-5.93	98.07	104.00
1	N	202	G	O4'-C1'-N9	5.93	112.94	108.20
1	N	315	A	C4-C5-C6	5.93	119.96	117.00
1	N	112	G	N9-C4-C5	-5.93	103.03	105.40
1	N	412	A	O4'-C1'-N9	5.93	112.94	108.20
1	N	597	G	C2-N3-C4	-5.93	108.94	111.90
1	N	895	G	N1-C2-N3	-5.93	120.34	123.90
1	N	999	C	N3-C2-O2	5.93	126.05	121.90
1	N	1405	G	C4-C5-N7	-5.93	108.43	110.80
1	N	57	G	C4-C5-C6	5.92	122.36	118.80
1	N	63	C	N3-C4-N4	5.92	122.15	118.00
1	N	770	C	N1-C2-O2	-5.92	115.34	118.90
1	N	977	A	C5-C6-N1	-5.92	114.74	117.70
1	N	1302	C	C5-C4-N4	5.92	124.35	120.20
1	N	1449	C	N1-C2-N3	-5.92	115.05	119.20
1	N	1491	G	N7-C8-N9	-5.92	110.14	113.10
1	N	105	G	C4'-C3'-C2'	-5.92	96.68	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	495	A	N7-C8-N9	5.92	116.76	113.80
1	N	758	C	O4'-C1'-N1	5.92	112.94	108.20
1	N	1085	U	C3'-C2'-C1'	5.92	106.24	101.50
1	N	767	A	C5-C6-N1	-5.92	114.74	117.70
1	N	869	G	O3'-P-O5'	-5.92	92.75	104.00
1	N	69	G	O4'-C1'-N9	5.92	112.94	108.20
1	N	283	U	N1-C2-N3	5.92	118.45	114.90
1	N	296	U	C6-N1-C2	-5.92	117.45	121.00
1	N	455	G	C8-N9-C4	-5.92	104.03	106.40
1	N	455	G	N1-C2-N3	-5.92	120.35	123.90
1	N	468	A	N9-C4-C5	5.92	108.17	105.80
1	N	565	U	N3-C4-C5	-5.92	111.05	114.60
1	N	786	G	N1-C6-O6	-5.92	116.35	119.90
1	N	918	A	O4'-C1'-N9	5.92	112.94	108.20
1	N	1141	C	C4-C5-C6	5.92	120.36	117.40
1	N	1522	U	N3-C2-O2	5.92	126.34	122.20
1	N	28	A	N1-C2-N3	5.92	132.26	129.30
1	N	337	G	C5-N7-C8	-5.92	101.34	104.30
1	N	777	A	C5'-C4'-O4'	5.92	116.20	109.10
1	N	781	A	N9-C1'-C2'	-5.92	105.49	112.00
1	N	1156	G	N3-C4-N9	-5.92	122.45	126.00
1	N	645	G	N3-C2-N2	5.92	124.04	119.90
1	N	1018	G	N3-C2-N2	5.92	124.04	119.90
1	N	191	G	C8-N9-C4	5.91	108.77	106.40
1	N	371	A	C8-N9-C4	-5.91	103.44	105.80
1	N	109	A	C3'-C2'-C1'	5.91	106.23	101.50
1	N	168	G	N1-C2-N3	-5.91	120.35	123.90
1	N	200	G	C5-C6-N1	-5.91	108.54	111.50
1	N	426	U	C4'-C3'-C2'	-5.91	96.69	102.60
1	N	960	U	C5'-C4'-C3'	5.91	125.46	116.00
1	N	1311	A	O3'-P-O5'	5.91	115.23	104.00
1	N	1426	G	N3-C4-C5	5.91	131.56	128.60
1	N	1488	G	O4'-C1'-N9	5.91	112.93	108.20
1	N	696	A	C6-N1-C2	5.91	122.14	118.60
1	N	1079	G	C2-N3-C4	5.91	114.85	111.90
1	N	1104	G	C5'-C4'-O4'	5.91	116.19	109.10
1	N	677	U	C5-C4-O4	-5.91	122.36	125.90
1	N	911	U	N3-C2-O2	5.91	126.33	122.20
1	N	399	G	O4'-C1'-N9	5.91	112.92	108.20
1	N	825	A	C5-C6-N6	-5.91	118.97	123.70
1	N	1151	A	C6-N1-C2	5.91	122.14	118.60
1	N	1164	G	N3-C2-N2	5.91	124.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1196	A	C5'-C4'-C3'	5.90	125.45	116.00
1	N	1231	G	N3-C4-C5	5.90	131.55	128.60
1	N	180	U	N1-C2-N3	-5.90	111.36	114.90
1	N	652	U	C5-C4-O4	5.90	129.44	125.90
1	N	771	G	N3-C2-N2	5.90	124.03	119.90
1	N	949	A	C6-C5-N7	-5.90	128.17	132.30
1	N	1505	G	C5-C6-N1	5.90	114.45	111.50
1	N	21	G	C6-N1-C2	-5.90	121.56	125.10
1	N	1384	C	P-O5'-C5'	5.90	130.34	120.90
1	N	1469	C	P-O5'-C5'	-5.90	111.46	120.90
1	N	442	G	C5-N7-C8	5.90	107.25	104.30
1	N	682	G	C8-N9-C4	-5.90	104.04	106.40
1	N	770	C	C5'-C4'-C3'	5.90	125.44	116.00
1	N	1353	G	N3-C4-N9	-5.90	122.46	126.00
1	N	282	A	C4-C5-C6	5.90	119.95	117.00
1	N	473	U	O4'-C1'-N1	5.90	112.92	108.20
1	N	623	C	C5-C6-N1	5.90	123.95	121.00
1	N	624	C	O4'-C1'-N1	5.90	112.92	108.20
1	N	689	C	C2-N3-C4	5.90	122.85	119.90
1	N	715	A	C2-N3-C4	-5.90	107.65	110.60
1	N	1026	G	P-O3'-C3'	5.90	126.78	119.70
1	N	121	U	O4'-C1'-N1	5.90	112.92	108.20
1	N	372	C	OP1-P-OP2	-5.90	110.76	119.60
1	N	1275	A	C8-N9-C4	-5.90	103.44	105.80
1	N	1445	U	C5-C4-O4	-5.90	122.36	125.90
1	N	1523	G	C5'-C4'-C3'	5.90	125.43	116.00
1	N	172	A	C6-C5-N7	-5.89	128.17	132.30
1	N	900	A	N9-C4-C5	-5.89	103.44	105.80
1	N	1056	U	C6-N1-C2	-5.89	117.46	121.00
1	N	1274	A	N7-C8-N9	5.89	116.75	113.80
1	N	1310	G	C5-N7-C8	-5.89	101.35	104.30
1	N	1393	U	N3-C4-O4	5.89	123.53	119.40
1	N	1458	G	C5-C6-N1	-5.89	108.55	111.50
1	N	131	A	C4-C5-C6	5.89	119.95	117.00
1	N	146	G	C6-N1-C2	5.89	128.63	125.10
1	N	455	G	N1-C6-O6	5.89	123.44	119.90
1	N	929	G	C6-N1-C2	5.89	128.63	125.10
1	N	938	A	C4-C5-C6	5.89	119.95	117.00
1	N	946	A	C4-C5-N7	-5.89	107.75	110.70
1	N	996	A	C4'-C3'-C2'	-5.89	96.71	102.60
1	N	563	A	C8-N9-C1'	-5.89	117.10	127.70
1	N	903	G	C6-C5-N7	-5.89	126.86	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1016	A	N1-C2-N3	-5.89	126.36	129.30
1	N	25	C	N1-C2-O2	5.89	122.43	118.90
1	N	120	A	N3-C4-C5	-5.89	122.68	126.80
1	N	300	A	C5'-C4'-O4'	-5.89	102.03	109.10
1	N	425	G	OP2-P-O3'	5.89	118.15	105.20
1	N	653	U	C6-N1-C2	-5.89	117.47	121.00
1	N	848	C	N1-C2-O2	5.89	122.43	118.90
1	N	1523	G	C6-C5-N7	-5.89	126.87	130.40
1	N	591	U	C5-C6-N1	5.89	125.64	122.70
1	N	612	C	C5-C6-N1	5.89	123.94	121.00
1	N	757	U	O4'-C1'-N1	5.89	112.91	108.20
1	N	1385	G	C5-C6-O6	-5.89	125.07	128.60
1	N	474	G	N7-C8-N9	-5.88	110.16	113.10
1	N	885	G	N1-C2-N3	-5.88	120.37	123.90
1	N	1036	A	P-O5'-C5'	5.88	130.31	120.90
1	N	1044	A	N9-C4-C5	5.88	108.15	105.80
1	N	1430	A	C4-C5-C6	5.88	119.94	117.00
1	N	1480	A	C4-C5-C6	5.88	119.94	117.00
1	N	1150	A	C6-N1-C2	5.88	122.13	118.60
1	N	52	C	N1-C1'-C2'	-5.88	105.53	112.00
1	N	335	C	C5-C6-N1	5.88	123.94	121.00
1	N	538	G	C8-N9-C4	-5.88	104.05	106.40
1	N	750	C	O4'-C1'-N1	5.88	112.91	108.20
1	N	1187	G	C6-N1-C2	-5.88	121.57	125.10
1	N	835	U	N1-C2-N3	-5.88	111.37	114.90
1	N	129	A	P-O5'-C5'	5.88	130.31	120.90
1	N	588	G	C5-C6-O6	-5.88	125.07	128.60
1	N	845	A	N3-C4-C5	-5.88	122.69	126.80
1	N	1108	G	N3-C4-C5	5.88	131.54	128.60
1	N	125	U	O4'-C1'-N1	5.87	112.90	108.20
1	N	698	G	N1-C2-N3	-5.87	120.38	123.90
1	N	894	G	O5'-C5'-C4'	-5.87	100.54	111.70
1	N	50	A	C3'-C2'-C1'	-5.87	96.80	101.50
1	N	620	C	OP1-P-OP2	-5.87	110.79	119.60
1	N	958	A	N3-C4-N9	5.87	132.10	127.40
1	N	1019	A	N1-C2-N3	5.87	132.24	129.30
1	N	1237	C	C5-C6-N1	5.87	123.94	121.00
1	N	1346	A	C5-N7-C8	5.87	106.84	103.90
1	N	460	A	C6-N1-C2	-5.87	115.08	118.60
1	N	1264	U	N1-C2-N3	-5.87	111.38	114.90
1	N	47	C	C2-N1-C1'	5.87	125.26	118.80
1	N	61	G	C1'-O4'-C4'	5.87	114.59	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	121	U	O4'-C4'-C3'	-5.87	98.13	104.00
1	N	689	C	O4'-C1'-N1	5.87	112.89	108.20
1	N	723	U	C2-N3-C4	-5.87	123.48	127.00
1	N	890	G	C8-N9-C4	-5.87	104.05	106.40
1	N	949	A	P-O5'-C5'	5.87	130.29	120.90
1	N	1304	G	N1-C2-N3	-5.87	120.38	123.90
1	N	516	U	N3-C2-O2	-5.87	118.09	122.20
1	N	183	C	C2'-C3'-O3'	5.87	123.08	113.70
1	N	771	G	C5'-C4'-C3'	5.87	125.38	116.00
1	N	1102	A	OP1-P-OP2	-5.87	110.80	119.60
1	N	1395	C	C4-C5-C6	5.87	120.33	117.40
1	N	11	G	N1-C2-N3	-5.86	120.38	123.90
1	N	747	A	N1-C2-N3	-5.86	126.37	129.30
1	N	755	G	P-O5'-C5'	5.86	130.28	120.90
1	N	915	A	N1-C6-N6	5.86	122.12	118.60
1	N	963	G	C5'-C4'-C3'	-5.86	106.62	116.00
1	N	1006	G	O4'-C1'-N9	5.86	112.89	108.20
1	N	1220	G	N1-C2-N3	-5.86	120.38	123.90
1	N	1530	G	C1'-O4'-C4'	-5.86	105.21	109.90
1	N	94	G	C5-N7-C8	5.86	107.23	104.30
1	N	233	C	N3-C4-C5	-5.86	119.56	121.90
1	N	809	G	C6-C5-N7	-5.86	126.88	130.40
1	N	1322	C	C2-N1-C1'	5.86	125.25	118.80
1	N	652	U	N3-C4-O4	-5.86	115.30	119.40
1	N	897	C	O4'-C4'-C3'	-5.86	98.14	104.00
1	N	1066	C	C2-N1-C1'	5.86	125.25	118.80
1	N	42	G	N9-C1'-C2'	-5.86	105.56	112.00
1	N	632	U	C6-N1-C1'	-5.86	113.00	121.20
1	N	676	A	C5-C6-N6	-5.86	119.01	123.70
1	N	863	U	P-O3'-C3'	-5.86	112.67	119.70
1	N	1007	U	C3'-C2'-C1'	5.86	106.19	101.50
1	N	1021	A	P-O5'-C5'	5.86	130.27	120.90
1	N	121	U	C6-N1-C2	-5.86	117.49	121.00
1	N	441	A	P-O5'-C5'	-5.86	111.53	120.90
1	N	514	C	O4'-C1'-C2'	-5.86	99.94	105.80
1	N	1500	A	O5'-P-OP1	-5.86	100.43	105.70
1	N	373	A	P-O5'-C5'	-5.85	111.53	120.90
1	N	503	C	N3-C4-C5	-5.85	119.56	121.90
1	N	952	U	C5-C4-O4	-5.85	122.39	125.90
1	N	676	A	N3-C4-C5	-5.85	122.70	126.80
1	N	772	U	P-O5'-C5'	5.85	130.26	120.90
1	N	807	A	C5-C6-N6	-5.85	119.02	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1143	G	C6-N1-C2	5.85	128.61	125.10
1	N	1340	A	C4-C5-N7	-5.85	107.77	110.70
1	N	1488	G	C5-N7-C8	5.85	107.23	104.30
1	N	1519	A	N7-C8-N9	5.85	116.73	113.80
1	N	1521	C	C4'-C3'-C2'	-5.85	96.75	102.60
1	N	788	U	C5-C6-N1	-5.85	119.77	122.70
1	N	1134	G	N1-C6-O6	5.85	123.41	119.90
1	N	533	A	N1-C2-N3	5.85	132.22	129.30
1	N	567	G	C4-C5-C6	5.85	122.31	118.80
1	N	717	U	C5'-C4'-O4'	5.85	116.12	109.10
1	N	862	C	O4'-C1'-N1	5.85	112.88	108.20
1	N	1359	C	C1'-O4'-C4'	5.85	114.58	109.90
1	N	1480	A	C5-N7-C8	5.85	106.83	103.90
1	N	538	G	C4-C5-N7	5.85	113.14	110.80
1	N	798	U	P-O5'-C5'	-5.85	111.55	120.90
1	N	1423	G	N3-C2-N2	5.85	123.99	119.90
1	N	1466	C	C4-C5-C6	5.85	120.32	117.40
1	N	1080	A	C5-C6-N1	-5.85	114.78	117.70
1	N	530	G	N3-C4-N9	5.84	129.51	126.00
1	N	1064	G	C8-N9-C4	-5.84	104.06	106.40
1	N	1225	A	N1-C2-N3	5.84	132.22	129.30
1	N	1279	G	C8-N9-C1'	-5.84	119.40	127.00
1	N	1316	G	N1-C2-N2	-5.84	110.94	116.20
1	N	120	A	C3'-C2'-C1'	-5.84	96.83	101.50
1	N	391	G	N1-C2-N3	-5.84	120.39	123.90
1	N	446	G	N7-C8-N9	-5.84	110.18	113.10
1	N	1404	C	O4'-C1'-N1	5.84	112.87	108.20
1	N	223	A	P-O3'-C3'	-5.84	112.69	119.70
1	N	889	A	N3-C4-C5	-5.84	122.71	126.80
1	N	1275	A	C5'-C4'-C3'	-5.84	106.66	116.00
1	N	1477	U	N3-C4-O4	5.84	123.49	119.40
1	N	778	G	C8-N9-C1'	-5.84	119.41	127.00
1	N	802	A	N3-C4-C5	-5.84	122.71	126.80
1	N	251	G	C6-C5-N7	-5.84	126.90	130.40
1	N	358	U	O4'-C1'-N1	5.84	112.87	108.20
1	N	447	G	N1-C2-N3	-5.84	120.40	123.90
1	N	600	A	C5-C6-N6	-5.84	119.03	123.70
1	N	607	A	O4'-C1'-N9	5.84	112.87	108.20
1	N	802	A	O4'-C1'-N9	5.84	112.87	108.20
1	N	837	U	P-O3'-C3'	-5.84	112.69	119.70
1	N	898	G	C8-N9-C4	-5.84	104.06	106.40
1	N	933	G	C8-N9-C4	5.84	108.73	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	50	A	C4-N9-C1'	5.83	136.80	126.30
1	N	15	G	P-O3'-C3'	-5.83	112.70	119.70
1	N	275	G	OP1-P-OP2	-5.83	110.85	119.60
1	N	901	A	C4-C5-C6	5.83	119.92	117.00
1	N	1058	G	N1-C6-O6	5.83	123.40	119.90
1	N	1138	G	C2-N3-C4	5.83	114.82	111.90
1	N	25	C	C4-C5-C6	-5.83	114.48	117.40
1	N	146	G	N1-C2-N3	-5.83	120.40	123.90
1	N	706	A	N9-C4-C5	5.83	108.13	105.80
1	N	831	A	C4-C5-N7	-5.83	107.78	110.70
1	N	994	A	C3'-C2'-C1'	-5.83	96.84	101.50
1	N	1234	C	C2-N1-C1'	5.83	125.21	118.80
1	N	402	G	C6-C5-N7	-5.83	126.90	130.40
1	N	543	U	O4'-C1'-N1	5.83	112.86	108.20
1	N	566	G	C6-C5-N7	-5.83	126.90	130.40
1	N	812	G	P-O5'-C5'	-5.83	111.57	120.90
1	N	1334	G	C5-N7-C8	-5.83	101.39	104.30
1	N	1510	C	C5-C6-N1	5.83	123.92	121.00
1	N	300	A	N7-C8-N9	-5.83	110.89	113.80
1	N	1224	U	C2-N3-C4	-5.83	123.50	127.00
1	N	1242	G	C8-N9-C4	5.83	108.73	106.40
1	N	1496	C	N1-C2-O2	-5.83	115.40	118.90
1	N	7	A	N9-C4-C5	5.83	108.13	105.80
1	N	464	U	O3'-P-O5'	-5.83	92.93	104.00
1	N	576	C	N1-C1'-C2'	-5.83	105.59	112.00
1	N	833	G	O4'-C4'-C3'	-5.83	98.17	104.00
1	N	948	C	C2-N1-C1'	5.83	125.21	118.80
1	N	1017	U	C5-C4-O4	-5.83	122.41	125.90
1	N	1157	A	C4-C5-C6	5.83	119.91	117.00
1	N	1275	A	C5'-C4'-O4'	5.83	116.09	109.10
1	N	1413	A	N1-C2-N3	-5.83	126.39	129.30
1	N	58	C	N3-C4-N4	5.82	122.08	118.00
1	N	305	G	N1-C2-N3	-5.82	120.41	123.90
1	N	494	G	C5'-C4'-O4'	5.82	116.09	109.10
1	N	512	U	C3'-C2'-C1'	5.82	106.16	101.50
1	N	1320	C	C5-C6-N1	5.82	123.91	121.00
1	N	384	G	O4'-C1'-N9	5.82	112.86	108.20
1	N	489	C	C2-N3-C4	5.82	122.81	119.90
1	N	53	A	C2-N3-C4	-5.82	107.69	110.60
1	N	196	A	O3'-P-O5'	-5.82	92.94	104.00
1	N	218	U	C1'-O4'-C4'	5.82	114.56	109.90
1	N	1160	G	N3-C4-C5	-5.82	125.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1183	U	C4'-C3'-C2'	5.82	108.42	102.60
1	N	1209	C	N3-C4-N4	5.82	122.07	118.00
1	N	1417	G	O4'-C1'-N9	5.82	112.86	108.20
1	N	436	C	N1-C2-N3	5.82	123.27	119.20
1	N	1262	C	C2-N3-C4	5.82	122.81	119.90
1	N	153	C	N1-C2-O2	5.82	122.39	118.90
1	N	461	A	C5'-C4'-O4'	5.82	116.08	109.10
1	N	694	A	C2-N3-C4	-5.82	107.69	110.60
1	N	1406	U	P-O3'-C3'	-5.82	112.72	119.70
1	N	457	G	C6-N1-C2	5.82	128.59	125.10
1	N	613	C	C5-C4-N4	-5.82	116.13	120.20
1	N	909	A	P-O5'-C5'	5.82	130.20	120.90
1	N	1238	A	C5-N7-C8	-5.82	100.99	103.90
1	N	1278	G	N1-C6-O6	5.82	123.39	119.90
1	N	347	G	N3-C4-N9	-5.81	122.51	126.00
1	N	513	C	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	1138	G	C5-C6-N1	-5.81	108.59	111.50
1	N	1220	G	C5-C6-N1	-5.81	108.59	111.50
1	N	126	G	C3'-C2'-C1'	5.81	106.15	101.50
1	N	422	C	C6-N1-C2	5.81	122.62	120.30
1	N	550	G	N1-C2-N3	-5.81	120.41	123.90
1	N	730	G	C5-C6-O6	-5.81	125.11	128.60
1	N	934	C	C4-C5-C6	5.81	120.31	117.40
1	N	1049	U	N1-C2-O2	-5.81	118.73	122.80
1	N	1154	G	C4-C5-N7	5.81	113.12	110.80
1	N	183	C	C2-N1-C1'	5.81	125.19	118.80
1	N	818	G	C4-C5-N7	5.81	113.12	110.80
1	N	629	A	C2-N3-C4	-5.81	107.70	110.60
1	N	756	C	O5'-P-OP1	5.81	117.67	110.70
1	N	780	A	P-O5'-C5'	5.81	130.20	120.90
1	N	879	C	N1-C2-N3	5.81	123.27	119.20
1	N	960	U	P-O5'-C5'	5.81	130.19	120.90
1	N	1254	A	C5-C6-N1	-5.81	114.80	117.70
1	N	595	A	C5-C6-N6	-5.81	119.06	123.70
1	N	626	G	N3-C2-N2	5.81	123.96	119.90
1	N	663	A	C6-N1-C2	-5.81	115.12	118.60
1	N	944	G	N1-C2-N2	5.81	121.43	116.20
1	N	970	C	C5-C6-N1	5.80	123.90	121.00
1	N	1161	C	C5-C6-N1	5.80	123.90	121.00
1	N	1429	A	C5-N7-C8	5.80	106.80	103.90
1	N	274	A	C2'-C3'-O3'	5.80	122.98	113.70
1	N	1276	G	N3-C2-N2	5.80	123.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	397	A	C5-N7-C8	5.80	106.80	103.90
1	N	983	A	C2-N3-C4	-5.80	107.70	110.60
1	N	1365	G	O4'-C1'-N9	5.80	112.84	108.20
1	N	1488	G	N7-C8-N9	-5.80	110.20	113.10
1	N	82	G	C4-C5-N7	-5.80	108.48	110.80
1	N	560	A	C5-N7-C8	5.80	106.80	103.90
1	N	817	C	N3-C4-C5	-5.80	119.58	121.90
1	N	907	A	O4'-C1'-N9	5.80	112.84	108.20
1	N	961	U	C5-C4-O4	-5.80	122.42	125.90
1	N	962	C	C6-N1-C2	-5.80	117.98	120.30
1	N	1007	U	P-O5'-C5'	5.80	130.18	120.90
1	N	311	C	C1'-O4'-C4'	-5.80	105.26	109.90
1	N	1043	G	C4-C5-C6	5.80	122.28	118.80
1	N	68	G	C5'-C4'-C3'	5.80	125.28	116.00
1	N	194	C	C5-C4-N4	-5.80	116.14	120.20
1	N	340	U	N3-C4-O4	5.80	123.46	119.40
1	N	376	G	C4-C5-C6	5.80	122.28	118.80
1	N	752	G	C8-N9-C1'	5.80	134.54	127.00
1	N	1490	U	C3'-C2'-C1'	5.79	106.14	101.50
1	N	75	G	C4-C5-C6	5.79	122.28	118.80
1	N	300	A	N3-C4-N9	5.79	132.03	127.40
1	N	459	A	C8-N9-C4	-5.79	103.48	105.80
1	N	651	C	C2-N1-C1'	5.79	125.17	118.80
1	N	693	G	N9-C4-C5	-5.79	103.08	105.40
1	N	786	G	C4'-C3'-C2'	-5.79	96.81	102.60
1	N	850	U	N3-C4-C5	-5.79	111.12	114.60
1	N	1024	G	N9-C4-C5	5.79	107.72	105.40
1	N	1240	U	N3-C4-C5	-5.79	111.12	114.60
1	N	1455	G	C5'-C4'-C3'	-5.79	106.73	116.00
1	N	37	U	C4-C5-C6	-5.79	116.22	119.70
1	N	1120	C	C4'-C3'-C2'	-5.79	96.81	102.60
1	N	559	A	C6-C5-N7	-5.79	128.25	132.30
1	N	1486	G	C6-C5-N7	-5.79	126.93	130.40
1	N	117	G	C5-C6-N1	-5.79	108.61	111.50
1	N	264	C	O5'-C5'-C4'	-5.79	100.70	111.70
1	N	400	C	C6-N1-C2	5.79	122.61	120.30
1	N	493	A	OP2-P-O3'	5.79	117.93	105.20
1	N	880	C	C4-C5-C6	-5.79	114.50	117.40
1	N	1428	A	C5'-C4'-C3'	5.79	125.26	116.00
1	N	1092	A	C5-C6-N6	-5.79	119.07	123.70
1	N	377	G	O4'-C1'-N9	5.79	112.83	108.20
1	N	413	G	C5-N7-C8	5.79	107.19	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	710	G	C4'-C3'-C2'	-5.79	96.81	102.60
1	N	841	C	N3-C4-N4	5.79	122.05	118.00
1	N	977	A	N3-C4-N9	-5.79	122.77	127.40
1	N	1334	G	N7-C8-N9	5.79	115.99	113.10
1	N	77	A	C5'-C4'-O4'	5.78	116.04	109.10
1	N	433	G	C2-N3-C4	-5.78	109.01	111.90
1	N	675	A	N3-C4-C5	-5.78	122.75	126.80
1	N	981	U	C5-C6-N1	-5.78	119.81	122.70
1	N	1210	C	N1-C2-O2	5.78	122.37	118.90
1	N	653	U	C6-N1-C1'	5.78	129.29	121.20
1	N	23	C	C5-C4-N4	-5.78	116.15	120.20
1	N	415	A	O4'-C1'-N9	5.78	112.82	108.20
1	N	1048	G	N3-C4-C5	5.78	131.49	128.60
1	N	1153	G	O4'-C1'-N9	5.78	112.82	108.20
1	N	1184	G	O4'-C1'-N9	5.78	112.83	108.20
1	N	1210	C	C5-C4-N4	-5.78	116.16	120.20
1	N	1264	U	C3'-C2'-C1'	-5.78	96.88	101.50
1	N	1378	C	N3-C4-C5	-5.78	119.59	121.90
1	N	1478	U	N3-C4-C5	-5.78	111.13	114.60
1	N	467	U	O4'-C4'-C3'	-5.78	98.22	104.00
1	N	531	U	P-O3'-C3'	-5.78	112.77	119.70
1	N	912	C	C6-N1-C2	-5.78	117.99	120.30
1	N	458	U	N3-C4-C5	-5.78	111.13	114.60
1	N	694	A	C6-C5-N7	-5.78	128.26	132.30
1	N	888	G	N3-C2-N2	5.78	123.94	119.90
1	N	957	U	O3'-P-O5'	-5.78	93.03	104.00
1	N	1394	A	C5-C6-N6	-5.77	119.08	123.70
1	N	1416	G	N3-C4-C5	-5.77	125.71	128.60
1	N	1486	G	C5-N7-C8	5.77	107.19	104.30
1	N	457	G	C6-C5-N7	-5.77	126.94	130.40
1	N	731	G	C6-N1-C2	5.77	128.56	125.10
1	N	754	C	C5-C6-N1	-5.77	118.11	121.00
1	N	938	A	C6-C5-N7	-5.77	128.26	132.30
1	N	995	C	C5-C6-N1	5.77	123.89	121.00
1	N	1181	G	C2-N3-C4	-5.77	109.01	111.90
1	N	1186	G	C5-N7-C8	5.77	107.19	104.30
1	N	1513	A	C5'-C4'-C3'	5.77	125.24	116.00
1	N	251	G	N3-C2-N2	5.77	123.94	119.90
1	N	281	G	OP2-P-O3'	5.77	117.90	105.20
1	N	1085	U	N1-C2-N3	-5.77	111.44	114.90
1	N	1292	G	C4'-C3'-C2'	-5.77	96.83	102.60
1	N	276	G	N7-C8-N9	5.77	115.98	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	512	U	C5'-C4'-O4'	-5.77	102.18	109.10
1	N	1214	C	C6-N1-C2	-5.77	117.99	120.30
1	N	1006	G	C6-C5-N7	-5.77	126.94	130.40
1	N	1189	U	N3-C4-O4	5.77	123.44	119.40
1	N	1294	G	C4-C5-C6	5.77	122.26	118.80
1	N	202	G	C8-N9-C4	5.76	108.71	106.40
1	N	386	C	N1-C2-N3	-5.76	115.17	119.20
1	N	652	U	N1-C2-N3	5.76	118.36	114.90
1	N	796	C	N3-C4-N4	5.76	122.03	118.00
1	N	809	G	C8-N9-C1'	5.76	134.49	127.00
1	N	1488	G	N1-C2-N2	5.76	121.39	116.20
1	N	114	U	P-O5'-C5'	5.76	130.12	120.90
1	N	304	U	P-O5'-C5'	5.76	130.12	120.90
1	N	321	A	C5-C6-N6	-5.76	119.09	123.70
1	N	898	G	N9-C1'-C2'	-5.76	105.66	112.00
1	N	936	C	C5'-C4'-O4'	5.76	116.01	109.10
1	N	1034	G	P-O3'-C3'	5.76	126.61	119.70
1	N	1121	U	C4'-C3'-C2'	-5.76	96.84	102.60
1	N	1129	C	P-O5'-C5'	5.76	130.12	120.90
1	N	157	U	C4-C5-C6	-5.76	116.25	119.70
1	N	300	A	N3-C4-C5	-5.76	122.77	126.80
1	N	373	A	C5-C6-N1	-5.76	114.82	117.70
1	N	498	A	C3'-C2'-C1'	5.76	106.11	101.50
1	N	355	C	P-O5'-C5'	5.76	130.11	120.90
1	N	515	G	O4'-C1'-N9	5.76	112.81	108.20
1	N	530	G	N1-C2-N2	-5.76	111.02	116.20
1	N	834	U	C3'-C2'-C1'	5.76	106.11	101.50
1	N	347	G	C2-N3-C4	-5.76	109.02	111.90
1	N	753	A	C5-C6-N6	-5.76	119.09	123.70
1	N	822	U	O4'-C1'-N1	5.76	112.81	108.20
1	N	907	A	C5'-C4'-O4'	5.76	116.01	109.10
1	N	1177	G	C5-C6-N1	-5.76	108.62	111.50
1	N	1189	U	C6-N1-C2	5.76	124.45	121.00
1	N	347	G	C5'-C4'-C3'	-5.75	106.79	116.00
1	N	863	U	N3-C2-O2	5.75	126.23	122.20
1	N	967	C	N3-C4-N4	5.75	122.03	118.00
1	N	973	G	N3-C2-N2	5.75	123.93	119.90
1	N	1095	U	C6-N1-C1'	-5.75	113.15	121.20
1	N	1320	C	C6-N1-C1'	5.75	127.70	120.80
1	N	394	G	C5'-C4'-C3'	-5.75	106.80	116.00
1	N	676	A	P-O3'-C3'	5.75	126.60	119.70
1	N	760	G	O4'-C1'-N9	5.75	112.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1151	A	C1'-O4'-C4'	5.75	114.50	109.90
1	N	1488	G	C2-N3-C4	5.75	114.78	111.90
1	N	103	U	N3-C4-C5	-5.75	111.15	114.60
1	N	924	C	O4'-C1'-N1	5.75	112.80	108.20
1	N	1137	C	C4-C5-C6	5.75	120.27	117.40
1	N	1177	G	N7-C8-N9	5.75	115.97	113.10
1	N	1199	U	O4'-C1'-N1	5.75	112.80	108.20
1	N	1240	U	C3'-C2'-C1'	-5.75	96.90	101.50
1	N	1345	U	O4'-C1'-N1	5.75	112.80	108.20
1	N	361	G	C4'-C3'-C2'	-5.75	96.85	102.60
1	N	616	G	C4-C5-C6	5.75	122.25	118.80
1	N	669	G	O4'-C4'-C3'	-5.75	98.25	104.00
1	N	674	G	N3-C2-N2	5.75	123.92	119.90
1	N	1054	C	N3-C2-O2	-5.75	117.88	121.90
1	N	145	G	N9-C1'-C2'	-5.75	105.68	112.00
1	N	190	A	C8-N9-C4	-5.74	103.50	105.80
1	N	193	C	P-O3'-C3'	-5.74	112.81	119.70
1	N	302	G	N3-C2-N2	-5.74	115.88	119.90
1	N	517	G	N1-C2-N3	-5.74	120.45	123.90
1	N	736	C	C2-N3-C4	5.74	122.77	119.90
1	N	1186	G	O4'-C1'-N9	5.74	112.80	108.20
1	N	350	G	N3-C4-C5	-5.74	125.73	128.60
1	N	572	A	C4-C5-C6	5.74	119.87	117.00
1	N	1080	A	P-O3'-C3'	5.74	126.59	119.70
1	N	281	G	C6-N1-C2	-5.74	121.66	125.10
1	N	335	C	C4-C5-C6	-5.74	114.53	117.40
1	N	1110	A	P-O3'-C3'	5.74	126.59	119.70
1	N	1184	G	P-O3'-C3'	-5.74	112.81	119.70
1	N	392	C	O4'-C1'-N1	5.74	112.79	108.20
1	N	794	A	C5-N7-C8	5.74	106.77	103.90
1	N	1425	U	C5-C4-O4	-5.74	122.46	125.90
1	N	711	G	C4-C5-C6	5.74	122.24	118.80
1	N	139	A	C5-C6-N6	-5.73	119.11	123.70
1	N	174	A	N1-C2-N3	-5.73	126.43	129.30
1	N	1482	G	C5-C6-N1	-5.73	108.63	111.50
1	N	531	U	N1-C2-N3	5.73	118.34	114.90
1	N	606	G	O4'-C1'-N9	5.73	112.79	108.20
1	N	783	C	O4'-C1'-N1	5.73	112.79	108.20
1	N	792	A	N3-C4-C5	-5.73	122.79	126.80
1	N	828	U	C5-C4-O4	-5.73	122.46	125.90
1	N	1515	G	N9-C1'-C2'	-5.73	105.69	112.00
1	N	164	G	C2-N3-C4	-5.73	109.03	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	604	G	N3-C4-C5	5.73	131.47	128.60
1	N	1069	C	C5-C6-N1	5.73	123.86	121.00
1	N	460	A	P-O5'-C5'	5.73	130.07	120.90
1	N	828	U	C1'-O4'-C4'	5.73	114.48	109.90
1	N	1024	G	N1-C2-N3	-5.73	120.46	123.90
1	N	1247	U	N1-C2-O2	-5.73	118.79	122.80
1	N	539	A	P-O5'-C5'	5.73	130.06	120.90
1	N	603	U	C4'-C3'-C2'	-5.73	96.87	102.60
1	N	1128	C	N3-C4-N4	5.73	122.01	118.00
1	N	875	U	C2-N3-C4	5.73	130.44	127.00
1	N	1133	G	C4-N9-C1'	5.73	133.94	126.50
1	N	270	A	C4-C5-C6	5.72	119.86	117.00
1	N	888	G	C1'-O4'-C4'	5.72	114.48	109.90
1	N	945	G	N9-C4-C5	-5.72	103.11	105.40
1	N	1144	G	N1-C6-O6	5.72	123.33	119.90
1	N	1200	C	P-O3'-C3'	-5.72	112.83	119.70
1	N	1514	G	P-O5'-C5'	-5.72	111.74	120.90
1	N	83	C	N1-C2-N3	-5.72	115.19	119.20
1	N	84	U	C6-N1-C1'	-5.72	113.19	121.20
1	N	410	G	C6-C5-N7	-5.72	126.97	130.40
1	N	712	A	C5-N7-C8	-5.72	101.04	103.90
1	N	1059	C	C1'-O4'-C4'	5.72	114.48	109.90
1	N	1182	G	C5'-C4'-O4'	5.72	115.97	109.10
1	N	1370	G	N7-C8-N9	-5.72	110.24	113.10
1	N	76	G	N3-C4-C5	-5.72	125.74	128.60
1	N	360	G	C5-N7-C8	5.72	107.16	104.30
1	N	691	G	N1-C2-N3	-5.72	120.47	123.90
1	N	193	C	C4-C5-C6	5.72	120.26	117.40
1	N	508	U	C6-N1-C2	-5.72	117.57	121.00
1	N	618	C	C2-N3-C4	5.72	122.76	119.90
1	N	1394	A	P-O3'-C3'	5.72	126.56	119.70
1	N	164	G	N7-C8-N9	5.72	115.96	113.10
1	N	560	A	N9-C4-C5	-5.72	103.51	105.80
1	N	1142	G	C5-C6-N1	5.72	114.36	111.50
1	N	1235	U	C3'-C2'-C1'	-5.72	96.93	101.50
1	N	13	U	O5'-C5'-C4'	-5.72	100.84	111.70
1	N	512	U	N1-C2-N3	-5.72	111.47	114.90
1	N	760	G	N3-C2-N2	5.72	123.90	119.90
1	N	878	A	C8-N9-C4	-5.72	103.51	105.80
1	N	307	C	N1-C2-O2	5.71	122.33	118.90
1	N	353	A	N3-C4-C5	-5.71	122.80	126.80
1	N	456	A	OP2-P-O3'	5.71	117.77	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	510	A	C1'-O4'-C4'	5.71	114.47	109.90
1	N	712	A	N3-C4-C5	-5.71	122.80	126.80
1	N	1230	C	C6-N1-C2	5.71	122.59	120.30
1	N	1327	C	C2-N3-C4	5.71	122.76	119.90
1	N	163	C	N3-C4-N4	5.71	122.00	118.00
1	N	608	A	C1'-O4'-C4'	-5.71	105.33	109.90
1	N	1207	G	C8-N9-C4	5.71	108.69	106.40
1	N	317	U	C5-C6-N1	5.71	125.56	122.70
1	N	1156	G	N3-C4-C5	5.71	131.46	128.60
1	N	73	C	C2-N1-C1'	-5.71	112.52	118.80
1	N	673	A	C5-C6-N6	-5.71	119.13	123.70
1	N	1162	C	C5-C6-N1	5.71	123.86	121.00
1	N	513	C	C5-C6-N1	5.71	123.85	121.00
1	N	623	C	C2-N3-C4	5.71	122.75	119.90
1	N	634	C	O4'-C1'-N1	5.71	112.77	108.20
1	N	637	C	C2-N3-C4	5.71	122.75	119.90
1	N	669	G	C4-N9-C1'	-5.71	119.08	126.50
1	N	1251	A	C5-C6-N6	-5.71	119.13	123.70
1	N	1409	C	P-O3'-C3'	-5.71	112.85	119.70
1	N	32	A	C4-C5-N7	-5.71	107.85	110.70
1	N	227	G	C5-C6-O6	-5.71	125.18	128.60
1	N	505	G	C5-N7-C8	-5.71	101.45	104.30
1	N	629	A	C6-C5-N7	-5.71	128.31	132.30
1	N	1308	U	O4'-C1'-N1	5.71	112.77	108.20
1	N	23	C	N1-C2-O2	5.71	122.32	118.90
1	N	101	A	C5-C6-N6	-5.71	119.14	123.70
1	N	726	C	C2-N1-C1'	5.71	125.08	118.80
1	N	1486	G	C5'-C4'-O4'	5.71	115.95	109.10
1	N	1505	G	N3-C4-C5	5.71	131.45	128.60
1	N	9	G	C6-N1-C2	5.70	128.52	125.10
1	N	170	U	C6-N1-C2	-5.70	117.58	121.00
1	N	247	G	N1-C6-O6	5.70	123.32	119.90
1	N	294	U	P-O5'-C5'	5.70	130.03	120.90
1	N	723	U	N1-C2-O2	-5.70	118.81	122.80
1	N	790	A	C2-N3-C4	-5.70	107.75	110.60
1	N	992	U	O4'-C1'-C2'	-5.70	100.10	105.80
1	N	1043	G	C3'-C2'-C1'	5.70	106.06	101.50
1	N	1116	U	P-O3'-C3'	-5.70	112.86	119.70
1	N	1337	G	C4-N9-C1'	5.70	133.91	126.50
1	N	95	C	C4-C5-C6	-5.70	114.55	117.40
1	N	666	G	C1'-O4'-C4'	5.70	114.46	109.90
1	N	223	A	C6-C5-N7	-5.70	128.31	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	555	U	C2'-C3'-O3'	5.70	122.82	113.70
1	N	794	A	N9-C4-C5	-5.70	103.52	105.80
1	N	890	G	N9-C4-C5	5.70	107.68	105.40
1	N	1410	A	C6-C5-N7	-5.70	128.31	132.30
1	N	789	U	N3-C2-O2	5.70	126.19	122.20
1	N	1287	A	C5-N7-C8	5.70	106.75	103.90
1	N	1309	G	N1-C6-O6	5.70	123.32	119.90
1	N	475	C	P-O3'-C3'	5.70	126.54	119.70
1	N	969	A	O4'-C1'-N9	5.70	112.76	108.20
1	N	1488	G	C3'-C2'-C1'	5.70	106.06	101.50
1	N	1196	A	N9-C1'-C2'	-5.69	105.74	112.00
1	N	211	G	C4-N9-C1'	5.69	133.90	126.50
1	N	236	A	OP1-P-OP2	-5.69	111.06	119.60
1	N	496	A	C5'-C4'-C3'	-5.69	106.89	116.00
1	N	511	C	N3-C4-C5	-5.69	119.62	121.90
1	N	514	C	C4-C5-C6	5.69	120.25	117.40
1	N	804	U	C5-C4-O4	-5.69	122.48	125.90
1	N	928	G	C6-N1-C2	5.69	128.52	125.10
1	N	1039	G	C4'-C3'-C2'	-5.69	96.91	102.60
1	N	1391	U	N1-C2-O2	-5.69	118.81	122.80
1	N	416	G	O5'-C5'-C4'	-5.69	100.89	111.70
1	N	882	C	C5-C4-N4	-5.69	116.22	120.20
1	N	1032	G	C6-C5-N7	-5.69	126.99	130.40
1	N	1192	C	N1-C2-N3	-5.69	115.22	119.20
1	N	1306	A	C6-C5-N7	-5.69	128.32	132.30
1	N	366	A	C1'-O4'-C4'	5.69	114.45	109.90
1	N	371	A	C6-C5-N7	-5.69	128.32	132.30
1	N	1503	A	C2-N3-C4	-5.69	107.76	110.60
1	N	426	U	C6-N1-C1'	5.69	129.16	121.20
1	N	596	A	C4-C5-N7	5.69	113.54	110.70
1	N	707	U	C2-N3-C4	-5.68	123.59	127.00
1	N	952	U	C5'-C4'-O4'	5.68	115.92	109.10
1	N	1476	A	N1-C6-N6	5.68	122.01	118.60
1	N	177	G	N3-C2-N2	5.68	123.88	119.90
1	N	276	G	O4'-C1'-N9	5.68	112.75	108.20
1	N	385	C	C1'-O4'-C4'	-5.68	105.35	109.90
1	N	491	G	P-O3'-C3'	5.68	126.52	119.70
1	N	871	U	P-O3'-C3'	5.68	126.52	119.70
1	N	1131	G	C8-N9-C1'	5.68	134.39	127.00
1	N	1196	A	N9-C4-C5	5.68	108.07	105.80
1	N	1355	G	O3'-P-O5'	5.68	114.80	104.00
1	N	646	G	C6-N1-C2	5.68	128.51	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	849	G	C5'-C4'-O4'	5.68	115.92	109.10
1	N	1411	C	C5-C4-N4	-5.68	116.22	120.20
1	N	454	G	C3'-C2'-C1'	-5.68	96.96	101.50
1	N	608	A	O4'-C1'-N9	5.68	112.74	108.20
1	N	613	C	C2-N1-C1'	5.68	125.05	118.80
1	N	719	C	N3-C4-N4	5.68	121.98	118.00
1	N	909	A	O4'-C1'-N9	5.68	112.74	108.20
1	N	1232	U	N3-C2-O2	5.68	126.18	122.20
1	N	1301	U	C5-C4-O4	-5.68	122.49	125.90
1	N	1341	U	O5'-P-OP2	-5.68	100.59	105.70
1	N	380	G	C8-N9-C1'	5.68	134.38	127.00
1	N	102	G	N3-C4-N9	-5.68	122.59	126.00
1	N	1166	G	N3-C4-C5	-5.68	125.76	128.60
1	N	1249	C	N3-C4-C5	-5.68	119.63	121.90
1	N	1250	A	C5-N7-C8	5.68	106.74	103.90
1	N	1364	U	C3'-C2'-C1'	-5.68	96.96	101.50
1	N	1214	C	N3-C4-C5	-5.67	119.63	121.90
1	N	1358	U	C4-C5-C6	-5.67	116.30	119.70
1	N	1514	G	C5-N7-C8	-5.67	101.46	104.30
1	N	386	C	C2-N3-C4	5.67	122.74	119.90
1	N	707	U	C5'-C4'-O4'	5.67	115.91	109.10
1	N	723	U	C5'-C4'-O4'	5.67	115.91	109.10
1	N	264	C	N3-C4-N4	5.67	121.97	118.00
1	N	425	G	C1'-O4'-C4'	5.67	114.44	109.90
1	N	656	G	C5'-C4'-C3'	-5.67	106.93	116.00
1	N	822	U	O5'-C5'-C4'	-5.67	100.92	111.70
1	N	1228	C	C4-C5-C6	5.67	120.23	117.40
1	N	1448	C	N3-C4-C5	-5.67	119.63	121.90
1	N	1269	A	C8-N9-C1'	5.67	137.91	127.70
1	N	1361	G	O4'-C4'-C3'	-5.67	98.33	104.00
1	N	1470	U	O4'-C1'-N1	5.67	112.74	108.20
1	N	854	U	C6-N1-C2	5.67	124.40	121.00
1	N	980	C	OP1-P-OP2	-5.67	111.10	119.60
1	N	1154	G	N1-C6-O6	5.67	123.30	119.90
1	N	1390	U	C4'-C3'-C2'	-5.67	96.93	102.60
1	N	886	G	C4-C5-N7	5.67	113.07	110.80
1	N	1141	C	O4'-C1'-N1	5.67	112.73	108.20
1	N	1346	A	N1-C2-N3	5.67	132.13	129.30
1	N	11	G	N1-C6-O6	5.67	123.30	119.90
1	N	263	A	C4-C5-C6	5.67	119.83	117.00
1	N	276	G	N1-C2-N3	-5.67	120.50	123.90
1	N	408	A	C4'-C3'-C2'	-5.67	96.94	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	366	A	C4-C5-N7	-5.66	107.87	110.70
1	N	410	G	N7-C8-N9	5.66	115.93	113.10
1	N	422	C	OP1-P-OP2	-5.66	111.10	119.60
1	N	604	G	N9-C4-C5	-5.66	103.14	105.40
1	N	772	U	OP1-P-O3'	5.66	117.66	105.20
1	N	789	U	O3'-P-O5'	-5.66	93.24	104.00
1	N	1204	A	C5-C6-N1	-5.66	114.87	117.70
1	N	1299	A	N7-C8-N9	-5.66	110.97	113.80
1	N	1321	U	C5'-C4'-O4'	5.66	115.89	109.10
1	N	14	U	N3-C4-C5	-5.66	111.20	114.60
1	N	50	A	P-O5'-C5'	5.66	129.96	120.90
1	N	677	U	P-O5'-C5'	5.66	129.96	120.90
1	N	1200	C	C5'-C4'-C3'	5.66	125.06	116.00
1	N	1212	U	C5'-C4'-O4'	5.66	115.89	109.10
1	N	334	C	N3-C4-C5	-5.66	119.64	121.90
1	N	660	C	P-O5'-C5'	5.66	129.96	120.90
1	N	671	G	C5-N7-C8	-5.66	101.47	104.30
1	N	709	U	C6-N1-C2	-5.66	117.61	121.00
1	N	809	G	C4-N9-C1'	-5.66	119.14	126.50
1	N	1117	A	C5-C6-N6	-5.66	119.17	123.70
1	N	1176	A	C6-C5-N7	-5.66	128.34	132.30
1	N	53	A	C1'-O4'-C4'	-5.66	105.38	109.90
1	N	66	A	N7-C8-N9	5.66	116.63	113.80
1	N	109	A	O4'-C1'-N9	5.66	112.72	108.20
1	N	444	G	N3-C2-N2	5.66	123.86	119.90
1	N	905	U	C5-C4-O4	-5.66	122.51	125.90
1	N	908	A	O4'-C4'-C3'	-5.66	98.34	104.00
1	N	1187	G	C5'-C4'-C3'	-5.66	106.95	116.00
1	N	1210	C	C2-N1-C1'	5.66	125.02	118.80
1	N	1355	G	P-O5'-C5'	-5.66	111.85	120.90
1	N	307	C	P-O3'-C3'	5.65	126.48	119.70
1	N	685	G	N3-C2-N2	5.65	123.86	119.90
1	N	916	U	O4'-C1'-N1	5.65	112.72	108.20
1	N	196	A	C8-N9-C4	-5.65	103.54	105.80
1	N	334	C	N3-C4-N4	5.65	121.96	118.00
1	N	956	U	P-O5'-C5'	5.65	129.94	120.90
1	N	1035	A	P-O3'-C3'	-5.65	112.92	119.70
1	N	1395	C	C2-N3-C4	5.65	122.73	119.90
1	N	1489	G	C8-N9-C4	5.65	108.66	106.40
1	N	1518	A	C4-C5-C6	5.65	119.83	117.00
1	N	840	C	P-O5'-C5'	5.65	129.94	120.90
1	N	919	A	C4'-C3'-C2'	-5.65	96.95	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	973	G	P-O3'-C3'	5.65	126.48	119.70
1	N	995	C	N1-C2-N3	-5.65	115.24	119.20
1	N	1036	A	C5-C6-N1	-5.65	114.88	117.70
1	N	1517	G	C5-C6-N1	-5.65	108.67	111.50
1	N	552	U	O4'-C1'-N1	5.65	112.72	108.20
1	N	1007	U	N3-C4-C5	-5.65	111.21	114.60
1	N	1435	G	C2-N3-C4	-5.65	109.08	111.90
1	N	131	A	C5'-C4'-C3'	-5.65	106.96	116.00
1	N	1130	A	P-O3'-C3'	5.65	126.48	119.70
1	N	1240	U	O4'-C1'-N1	5.65	112.72	108.20
1	N	1479	C	OP1-P-OP2	-5.65	111.13	119.60
1	N	1503	A	C4-C5-N7	-5.65	107.88	110.70
1	N	888	G	C8-N9-C4	-5.65	104.14	106.40
1	N	126	G	N1-C2-N2	5.64	121.28	116.20
1	N	378	G	C6-N1-C2	5.64	128.49	125.10
1	N	918	A	N1-C6-N6	5.64	121.99	118.60
1	N	719	C	P-O3'-C3'	5.64	126.47	119.70
1	N	760	G	C5'-C4'-O4'	5.64	115.87	109.10
1	N	1394	A	N9-C4-C5	5.64	108.06	105.80
1	N	309	A	C5-N7-C8	5.64	106.72	103.90
1	N	685	G	C4-C5-C6	5.64	122.19	118.80
1	N	845	A	C3'-C2'-C1'	5.64	106.01	101.50
1	N	57	G	C5-C6-O6	-5.64	125.22	128.60
1	N	342	C	O4'-C1'-C2'	-5.64	100.16	105.80
1	N	442	G	C5-C6-O6	-5.64	125.22	128.60
1	N	474	G	O4'-C1'-N9	5.64	112.71	108.20
1	N	754	C	C4-C5-C6	5.64	120.22	117.40
1	N	1279	G	O4'-C1'-C2'	-5.64	100.16	105.80
1	N	1312	G	C4-C5-C6	5.64	122.18	118.80
1	N	399	G	N9-C1'-C2'	-5.64	105.80	112.00
1	N	698	G	C8-N9-C4	-5.64	104.14	106.40
1	N	777	A	N1-C2-N3	5.64	132.12	129.30
1	N	289	G	N9-C4-C5	-5.64	103.14	105.40
1	N	522	C	N3-C2-O2	-5.64	117.95	121.90
1	N	830	G	C4-C5-N7	5.64	113.05	110.80
1	N	913	A	C3'-C2'-C1'	-5.64	96.99	101.50
1	N	1331	G	O5'-P-OP2	5.64	117.47	110.70
1	N	1475	G	C4'-C3'-C2'	-5.64	96.96	102.60
1	N	230	G	C4-C5-N7	5.63	113.05	110.80
1	N	414	A	C4-N9-C1'	5.63	136.44	126.30
1	N	445	G	O4'-C1'-N9	5.63	112.71	108.20
1	N	1108	G	C3'-C2'-C1'	-5.63	96.99	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1283	U	P-O5'-C5'	5.63	129.92	120.90
1	N	1499	A	N9-C4-C5	5.63	108.05	105.80
1	N	251	G	N3-C4-N9	5.63	129.38	126.00
1	N	713	G	C2-N3-C4	-5.63	109.08	111.90
1	N	34	C	N3-C4-C5	-5.63	119.65	121.90
1	N	173	U	C5-C6-N1	-5.63	119.88	122.70
1	N	330	C	N3-C4-C5	-5.63	119.65	121.90
1	N	493	A	C5-C6-N6	-5.63	119.19	123.70
1	N	993	G	C6-N1-C2	5.63	128.48	125.10
1	N	1130	A	C6-C5-N7	-5.63	128.36	132.30
1	N	1229	A	O4'-C1'-N9	5.63	112.71	108.20
1	N	1347	G	N7-C8-N9	5.63	115.92	113.10
1	N	1495	U	C6-N1-C2	-5.63	117.62	121.00
1	N	148	G	C4-C5-N7	5.63	113.05	110.80
1	N	294	U	C6-N1-C2	-5.63	117.62	121.00
1	N	873	A	C8-N9-C4	-5.63	103.55	105.80
1	N	1046	A	N9-C1'-C2'	-5.63	105.81	112.00
1	N	1336	C	O4'-C4'-C3'	-5.63	98.37	104.00
1	N	1422	G	N9-C4-C5	5.63	107.65	105.40
1	N	978	A	C4-C5-N7	-5.62	107.89	110.70
1	N	17	U	C4-C5-C6	-5.62	116.33	119.70
1	N	216	U	C4'-C3'-C2'	-5.62	96.98	102.60
1	N	237	G	C4-C5-N7	-5.62	108.55	110.80
1	N	314	C	O5'-C5'-C4'	-5.62	101.02	111.70
1	N	584	G	N3-C2-N2	5.62	123.84	119.90
1	N	629	A	C4'-C3'-C2'	-5.62	96.98	102.60
1	N	929	G	O4'-C1'-N9	5.62	112.70	108.20
1	N	1490	U	C5-C4-O4	-5.62	122.53	125.90
1	N	213	G	O4'-C1'-N9	5.62	112.70	108.20
1	N	221	C	O4'-C1'-N1	5.62	112.70	108.20
1	N	574	A	N3-C4-N9	5.62	131.90	127.40
1	N	620	C	N1-C2-O2	5.62	122.27	118.90
1	N	851	G	N1-C2-N3	-5.62	120.53	123.90
1	N	909	A	C4-C5-C6	5.62	119.81	117.00
1	N	171	A	C5'-C4'-O4'	5.62	115.84	109.10
1	N	654	G	O4'-C1'-N9	5.62	112.70	108.20
1	N	888	G	C4-C5-N7	5.62	113.05	110.80
1	N	79	G	C4-C5-N7	5.62	113.05	110.80
1	N	706	A	N3-C4-N9	5.62	131.90	127.40
1	N	951	G	OP1-P-OP2	-5.62	111.17	119.60
1	N	1376	U	N3-C2-O2	5.62	126.13	122.20
1	N	532	A	N3-C4-C5	-5.62	122.87	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1190	G	C6-C5-N7	-5.62	127.03	130.40
1	N	1433	A	P-O5'-C5'	5.62	129.89	120.90
1	N	200	G	C6-C5-N7	-5.62	127.03	130.40
1	N	246	A	N7-C8-N9	5.62	116.61	113.80
1	N	257	G	OP2-P-O3'	5.62	117.55	105.20
1	N	384	G	C5-C6-N1	-5.62	108.69	111.50
1	N	496	A	N3-C4-C5	-5.62	122.87	126.80
1	N	1018	G	N1-C2-N2	-5.62	111.15	116.20
1	N	1360	A	C5-C6-N1	-5.62	114.89	117.70
1	N	1489	G	N1-C6-O6	5.62	123.27	119.90
1	N	4	U	C4-C5-C6	-5.61	116.33	119.70
1	N	103	U	C2-N1-C1'	5.61	124.44	117.70
1	N	120	A	N9-C1'-C2'	5.61	121.30	114.00
1	N	293	G	C5-N7-C8	5.61	107.11	104.30
1	N	541	G	O4'-C1'-N9	5.61	112.69	108.20
1	N	677	U	N1-C2-N3	-5.61	111.53	114.90
1	N	914	A	N3-C4-C5	-5.61	122.87	126.80
1	N	1081	A	N3-C4-C5	-5.61	122.87	126.80
1	N	442	G	C5-C6-N1	-5.61	108.69	111.50
1	N	579	A	C6-C5-N7	-5.61	128.37	132.30
1	N	580	C	P-O5'-C5'	5.61	129.88	120.90
1	N	681	A	N1-C2-N3	5.61	132.11	129.30
1	N	809	G	N3-C4-C5	-5.61	125.79	128.60
1	N	845	A	C6-N1-C2	-5.61	115.23	118.60
1	N	1236	A	C6-C5-N7	-5.61	128.37	132.30
1	N	277	C	O4'-C1'-N1	5.61	112.69	108.20
1	N	389	A	C5-N7-C8	5.61	106.71	103.90
1	N	724	G	N3-C2-N2	5.61	123.83	119.90
1	N	728	A	C4-C5-C6	5.61	119.81	117.00
1	N	891	U	OP2-P-O3'	5.61	117.54	105.20
1	N	999	C	N1-C2-N3	-5.61	115.27	119.20
1	N	1332	A	O4'-C1'-N9	5.61	112.69	108.20
1	N	1419	G	C5-C6-N1	-5.61	108.69	111.50
1	N	106	C	N3-C4-N4	5.61	121.92	118.00
1	N	191	G	C3'-C2'-C1'	5.61	105.98	101.50
1	N	424	G	C5-N7-C8	5.61	107.10	104.30
1	N	811	C	C5-C6-N1	5.61	123.80	121.00
1	N	1027	C	P-O3'-C3'	-5.61	112.97	119.70
1	N	1122	U	C5'-C4'-C3'	-5.61	107.03	116.00
1	N	54	C	C4'-C3'-C2'	-5.61	96.99	102.60
1	N	97	G	C4-C5-C6	5.61	122.16	118.80
1	N	424	G	C5'-C4'-C3'	-5.61	107.03	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	449	G	C5'-C4'-C3'	-5.61	107.03	116.00
1	N	652	U	P-O3'-C3'	5.61	126.43	119.70
1	N	1253	G	N3-C4-C5	5.61	131.40	128.60
1	N	43	C	N1-C1'-C2'	-5.60	105.83	112.00
1	N	1252	A	C5-C6-N6	-5.60	119.22	123.70
1	N	566	G	C6-N1-C2	5.60	128.46	125.10
1	N	623	C	C5-C4-N4	-5.60	116.28	120.20
1	N	661	G	N1-C6-O6	5.60	123.26	119.90
1	N	734	G	C6-C5-N7	-5.60	127.04	130.40
1	N	1359	C	P-O5'-C5'	-5.60	111.94	120.90
1	N	1364	U	C5'-C4'-O4'	5.60	115.82	109.10
1	N	1406	U	N3-C4-O4	5.60	123.32	119.40
1	N	118	U	C5-C6-N1	5.60	125.50	122.70
1	N	357	G	O4'-C1'-N9	5.60	112.68	108.20
1	N	1240	U	P-O3'-C3'	5.60	126.42	119.70
1	N	15	G	C6-N1-C2	5.60	128.46	125.10
1	N	317	U	O3'-P-O5'	-5.60	93.36	104.00
1	N	819	A	N1-C2-N3	5.60	132.10	129.30
1	N	1040	U	P-O3'-C3'	5.60	126.42	119.70
1	N	118	U	N3-C4-O4	5.60	123.32	119.40
1	N	211	G	C4-C5-C6	5.60	122.16	118.80
1	N	277	C	C6-N1-C2	-5.60	118.06	120.30
1	N	346	G	OP2-P-O3'	5.60	117.52	105.20
1	N	544	G	P-O5'-C5'	5.60	129.86	120.90
1	N	705	G	P-O5'-C5'	5.60	129.86	120.90
1	N	985	C	N3-C4-C5	-5.60	119.66	121.90
1	N	1216	A	C4-C5-N7	-5.60	107.90	110.70
1	N	289	G	C5-C6-O6	-5.60	125.24	128.60
1	N	326	G	C5-C6-O6	-5.60	125.24	128.60
1	N	1005	A	C6-C5-N7	-5.60	128.38	132.30
1	N	1141	C	C5'-C4'-O4'	-5.60	102.38	109.10
1	N	1316	G	N3-C4-C5	-5.60	125.80	128.60
1	N	564	C	C2-N1-C1'	5.59	124.95	118.80
1	N	750	C	C6-N1-C2	-5.59	118.06	120.30
1	N	961	U	P-O3'-C3'	-5.59	112.99	119.70
1	N	1329	A	C6-C5-N7	-5.59	128.38	132.30
1	N	1449	C	C2-N3-C4	5.59	122.70	119.90
1	N	784	A	N1-C2-N3	5.59	132.10	129.30
1	N	894	G	N3-C2-N2	5.59	123.81	119.90
1	N	1056	U	N3-C4-O4	5.59	123.31	119.40
1	N	141	G	N3-C4-N9	5.59	129.35	126.00
1	N	196	A	O4'-C1'-N9	5.59	112.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	627	G	N3-C4-C5	5.59	131.40	128.60
1	N	655	A	C6-N1-C2	5.59	121.95	118.60
1	N	1056	U	N3-C2-O2	5.59	126.11	122.20
1	N	1216	A	C8-N9-C4	5.59	108.04	105.80
1	N	1514	G	O4'-C4'-C3'	-5.59	98.41	104.00
1	N	111	G	N3-C2-N2	5.59	123.81	119.90
1	N	338	A	N1-C2-N3	-5.59	126.51	129.30
1	N	48	C	C2-N1-C1'	5.59	124.94	118.80
1	N	761	G	C4-C5-C6	5.59	122.15	118.80
1	N	986	U	C5-C6-N1	5.59	125.49	122.70
1	N	1419	G	C4-C5-C6	5.59	122.15	118.80
1	N	223	A	N3-C4-C5	-5.58	122.89	126.80
1	N	535	A	C5-C6-N6	-5.58	119.23	123.70
1	N	573	A	C5-N7-C8	5.58	106.69	103.90
1	N	734	G	N1-C6-O6	5.58	123.25	119.90
1	N	893	C	O4'-C1'-N1	5.58	112.67	108.20
1	N	245	U	N3-C4-O4	5.58	123.31	119.40
1	N	403	C	C4-C5-C6	-5.58	114.61	117.40
1	N	877	G	N9-C4-C5	-5.58	103.17	105.40
1	N	1129	C	C3'-C2'-C1'	-5.58	97.03	101.50
1	N	1138	G	C5'-C4'-O4'	5.58	115.80	109.10
1	N	695	A	C4'-C3'-C2'	-5.58	97.02	102.60
1	N	1018	G	C5-C6-O6	-5.58	125.25	128.60
1	N	1163	A	C6-C5-N7	-5.58	128.39	132.30
1	N	1507	A	N1-C2-N3	-5.58	126.51	129.30
1	N	577	G	C4-C5-C6	5.58	122.15	118.80
1	N	852	G	P-O3'-C3'	-5.58	113.00	119.70
1	N	1061	G	N3-C4-C5	5.58	131.39	128.60
1	N	1318	A	N7-C8-N9	5.58	116.59	113.80
1	N	66	A	P-O3'-C3'	5.58	126.39	119.70
1	N	112	G	C6-C5-N7	-5.58	127.05	130.40
1	N	310	G	N9-C1'-C2'	-5.58	105.86	112.00
1	N	761	G	N3-C4-N9	5.58	129.35	126.00
1	N	1070	U	P-O5'-C5'	-5.58	111.97	120.90
1	N	1140	C	P-O5'-C5'	5.58	129.83	120.90
1	N	1354	U	N1-C2-N3	-5.58	111.55	114.90
1	N	413	G	C6-N1-C2	5.58	128.45	125.10
1	N	45	G	C4-C5-C6	5.58	122.15	118.80
1	N	67	C	C6-N1-C2	5.58	122.53	120.30
1	N	78	A	N9-C4-C5	-5.58	103.57	105.80
1	N	865	A	C5-N7-C8	5.58	106.69	103.90
1	N	971	G	N9-C4-C5	-5.58	103.17	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1054	C	O4'-C1'-N1	5.58	112.66	108.20
1	N	1355	G	N9-C4-C5	5.58	107.63	105.40
1	N	1413	A	C4-C5-C6	5.58	119.79	117.00
1	N	93	U	O3'-P-O5'	5.57	114.59	104.00
1	N	336	A	N7-C8-N9	-5.57	111.01	113.80
1	N	381	C	C5'-C4'-C3'	5.57	124.92	116.00
1	N	483	C	N1-C2-O2	-5.57	115.56	118.90
1	N	524	G	C4'-C3'-C2'	5.57	108.17	102.60
1	N	588	G	N3-C4-N9	-5.57	122.66	126.00
1	N	856	C	C5-C4-N4	-5.57	116.30	120.20
1	N	1183	U	C2-N1-C1'	-5.57	111.01	117.70
1	N	1416	G	C6-N1-C2	5.57	128.44	125.10
1	N	1457	G	C5'-C4'-O4'	5.57	115.79	109.10
1	N	1171	A	C6-C5-N7	-5.57	128.40	132.30
1	N	1350	A	N1-C2-N3	-5.57	126.51	129.30
1	N	24	U	C5'-C4'-C3'	-5.57	107.09	116.00
1	N	108	G	N1-C6-O6	5.57	123.24	119.90
1	N	202	G	O4'-C4'-C3'	-5.57	98.43	104.00
1	N	465	A	N3-C4-N9	-5.57	122.94	127.40
1	N	1390	U	C1'-O4'-C4'	5.57	114.36	109.90
1	N	117	G	N3-C4-C5	-5.57	125.82	128.60
1	N	352	C	N3-C4-N4	5.57	121.90	118.00
1	N	459	A	N3-C4-C5	-5.57	122.90	126.80
1	N	661	G	C2-N3-C4	5.57	114.68	111.90
1	N	944	G	C5-N7-C8	5.57	107.08	104.30
1	N	1394	A	C5'-C4'-O4'	5.57	115.78	109.10
1	N	273	U	O3'-P-O5'	-5.57	93.43	104.00
1	N	276	G	C6-N1-C2	5.57	128.44	125.10
1	N	287	U	C5-C6-N1	5.57	125.48	122.70
1	N	973	G	C4-N9-C1'	5.57	133.74	126.50
1	N	979	C	C1'-O4'-C4'	-5.57	105.45	109.90
1	N	1521	C	C6-N1-C1'	-5.57	114.12	120.80
1	N	55	A	N9-C4-C5	5.56	108.03	105.80
1	N	123	U	C4-C5-C6	5.56	123.04	119.70
1	N	103	U	C4'-C3'-C2'	-5.56	97.04	102.60
1	N	546	A	O5'-P-OP1	-5.56	100.69	105.70
1	N	653	U	N3-C4-O4	5.56	123.29	119.40
1	N	844	G	C5-C6-O6	-5.56	125.26	128.60
1	N	909	A	C6-C5-N7	-5.56	128.41	132.30
1	N	914	A	N1-C6-N6	5.56	121.94	118.60
1	N	1213	A	C8-N9-C4	-5.56	103.58	105.80
1	N	333	U	P-O5'-C5'	5.56	129.80	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1166	G	C8-N9-C1'	-5.56	119.77	127.00
1	N	131	A	C8-N9-C1'	5.56	137.71	127.70
1	N	200	G	N3-C2-N2	5.56	123.79	119.90
1	N	430	A	N7-C8-N9	-5.56	111.02	113.80
1	N	656	G	N3-C4-N9	-5.56	122.66	126.00
1	N	661	G	N1-C2-N3	-5.56	120.56	123.90
1	N	772	U	C3'-C2'-C1'	-5.56	97.05	101.50
1	N	832	G	C5-N7-C8	-5.56	101.52	104.30
1	N	835	U	O4'-C1'-N1	5.56	112.65	108.20
1	N	1012	A	O5'-P-OP2	5.56	117.37	110.70
1	N	1239	A	C5-C6-N6	-5.56	119.25	123.70
1	N	1319	A	C5-C6-N1	-5.56	114.92	117.70
1	N	1420	U	N3-C2-O2	5.56	126.09	122.20
1	N	1073	U	C5-C6-N1	5.56	125.48	122.70
1	N	1318	A	N9-C4-C5	5.56	108.02	105.80
1	N	1370	G	OP1-P-OP2	-5.56	111.27	119.60
1	N	1423	G	N7-C8-N9	-5.56	110.32	113.10
1	N	184	G	N3-C4-N9	5.56	129.33	126.00
1	N	914	A	C4-C5-C6	5.56	119.78	117.00
1	N	1507	A	C4-C5-C6	5.56	119.78	117.00
1	N	9	G	C8-N9-C4	5.55	108.62	106.40
1	N	449	G	N1-C2-N3	-5.55	120.57	123.90
1	N	480	U	N1-C2-N3	-5.55	111.57	114.90
1	N	803	G	N3-C2-N2	5.55	123.79	119.90
1	N	1201	A	O4'-C1'-N9	5.55	112.64	108.20
1	N	1383	C	N3-C4-N4	5.55	121.89	118.00
1	N	1495	U	C2-N1-C1'	5.55	124.37	117.70
1	N	204	G	O4'-C1'-N9	5.55	112.64	108.20
1	N	567	G	C4-N9-C1'	-5.55	119.28	126.50
1	N	1185	G	N3-C4-C5	5.55	131.38	128.60
1	N	175	C	C5-C6-N1	5.55	123.78	121.00
1	N	939	G	C4-C5-C6	5.55	122.13	118.80
1	N	1500	A	C6-C5-N7	-5.55	128.41	132.30
1	N	1532	U	C5-C4-O4	-5.55	122.57	125.90
1	N	357	G	C4'-C3'-C2'	-5.55	97.05	102.60
1	N	709	U	P-O5'-C5'	5.55	129.78	120.90
1	N	1189	U	C5-C4-O4	-5.55	122.57	125.90
1	N	1194	U	C6-N1-C2	-5.55	117.67	121.00
1	N	1391	U	C4-C5-C6	5.55	123.03	119.70
1	N	42	G	C8-N9-C1'	5.55	134.21	127.00
1	N	136	C	C4-C5-C6	-5.55	114.63	117.40
1	N	141	G	N1-C2-N3	-5.55	120.57	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	360	G	C1'-O4'-C4'	-5.55	105.46	109.90
1	N	380	G	N9-C4-C5	-5.55	103.18	105.40
1	N	469	C	N3-C4-N4	5.55	121.88	118.00
1	N	970	C	C5'-C4'-C3'	5.55	124.87	116.00
1	N	1001	C	C2-N3-C4	5.55	122.67	119.90
1	N	1043	G	C6-C5-N7	-5.55	127.07	130.40
1	N	1047	G	C4-N9-C1'	5.55	133.71	126.50
1	N	1048	G	C8-N9-C4	-5.55	104.18	106.40
1	N	1302	C	C6-N1-C1'	5.55	127.45	120.80
1	N	1355	G	P-O3'-C3'	-5.55	113.04	119.70
1	N	155	A	C5-C6-N6	-5.54	119.27	123.70
1	N	918	A	P-O5'-C5'	5.54	129.77	120.90
1	N	947	G	P-O3'-C3'	5.54	126.35	119.70
1	N	153	C	P-O5'-C5'	5.54	129.77	120.90
1	N	456	A	C4-C5-C6	5.54	119.77	117.00
1	N	500	G	C8-N9-C4	-5.54	104.18	106.40
1	N	676	A	C4'-C3'-C2'	-5.54	97.06	102.60
1	N	750	C	O5'-C5'-C4'	-5.54	101.17	111.70
1	N	955	U	N3-C4-O4	5.54	123.28	119.40
1	N	1062	U	O4'-C1'-N1	5.54	112.63	108.20
1	N	1478	U	C5-C6-N1	5.54	125.47	122.70
1	N	25	C	N3-C4-N4	5.54	121.88	118.00
1	N	62	U	N3-C2-O2	5.54	126.08	122.20
1	N	633	G	C5-N7-C8	-5.54	101.53	104.30
1	N	645	G	C4-N9-C1'	-5.54	119.30	126.50
1	N	985	C	P-O5'-C5'	5.54	129.76	120.90
1	N	1088	G	C8-N9-C4	-5.54	104.18	106.40
1	N	1483	A	C5-C6-N6	-5.54	119.27	123.70
1	N	587	G	C2'-C3'-O3'	5.54	122.56	113.70
1	N	635	A	C4-C5-C6	5.54	119.77	117.00
1	N	765	G	C3'-C2'-C1'	-5.54	97.07	101.50
1	N	827	U	P-O3'-C3'	5.54	126.34	119.70
1	N	1400	C	N3-C4-N4	5.54	121.88	118.00
1	N	77	A	N3-C4-C5	-5.53	122.93	126.80
1	N	347	G	C5-C6-O6	-5.53	125.28	128.60
1	N	493	A	N9-C4-C5	-5.53	103.59	105.80
1	N	678	U	P-O5'-C5'	5.53	129.75	120.90
1	N	774	G	C4-C5-N7	-5.53	108.59	110.80
1	N	1080	A	C6-C5-N7	-5.53	128.43	132.30
1	N	1187	G	C4'-C3'-C2'	-5.53	97.07	102.60
1	N	1281	C	C1'-O4'-C4'	5.53	114.33	109.90
1	N	1419	G	C5'-C4'-C3'	-5.53	107.15	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1447	A	O5'-P-OP2	5.53	117.34	110.70
1	N	488	C	C4-C5-C6	5.53	120.17	117.40
1	N	101	A	N1-C2-N3	5.53	132.06	129.30
1	N	405	U	C5-C6-N1	5.53	125.47	122.70
1	N	550	G	N3-C2-N2	5.53	123.77	119.90
1	N	627	G	N9-C4-C5	-5.53	103.19	105.40
1	N	839	C	C5-C6-N1	5.53	123.77	121.00
1	N	1207	G	N7-C8-N9	-5.53	110.33	113.10
1	N	1249	C	C2-N3-C4	5.53	122.67	119.90
1	N	1441	A	C3'-C2'-C1'	-5.53	97.08	101.50
1	N	244	U	OP1-P-OP2	-5.53	111.31	119.60
1	N	406	G	C4-C5-C6	5.53	122.12	118.80
1	N	665	A	P-O5'-C5'	-5.53	112.06	120.90
1	N	1037	C	C1'-O4'-C4'	-5.53	105.48	109.90
1	N	1516	G	O4'-C1'-N9	5.53	112.62	108.20
1	N	1521	C	C6-N1-C2	5.53	122.51	120.30
1	N	53	A	C4-C5-N7	-5.53	107.94	110.70
1	N	251	G	C5'-C4'-O4'	5.53	115.73	109.10
1	N	450	G	C6-N1-C2	5.53	128.41	125.10
1	N	917	G	C4-C5-C6	5.53	122.11	118.80
1	N	918	A	C8-N9-C1'	5.53	137.65	127.70
1	N	1188	A	C5-N7-C8	5.53	106.66	103.90
1	N	167	A	C3'-C2'-C1'	-5.52	97.08	101.50
1	N	472	U	P-O5'-C5'	5.52	129.74	120.90
1	N	491	G	C5'-C4'-O4'	5.52	115.73	109.10
1	N	759	A	C6-C5-N7	-5.52	128.43	132.30
1	N	1153	G	C3'-C2'-C1'	-5.52	97.08	101.50
1	N	1380	U	P-O3'-C3'	5.52	126.33	119.70
1	N	22	G	O4'-C1'-N9	5.52	112.62	108.20
1	N	47	C	C5'-C4'-O4'	-5.52	102.47	109.10
1	N	74	A	C5-N7-C8	-5.52	101.14	103.90
1	N	275	G	C2-N3-C4	-5.52	109.14	111.90
1	N	701	U	C4'-C3'-C2'	5.52	108.12	102.60
1	N	744	C	C6-N1-C1'	-5.52	114.17	120.80
1	N	750	C	P-O3'-C3'	-5.52	113.07	119.70
1	N	1244	G	C5-C6-O6	-5.52	125.29	128.60
1	N	336	A	C5-C6-N1	5.52	120.46	117.70
1	N	449	G	C1'-O4'-C4'	5.52	114.32	109.90
1	N	55	A	P-O3'-C3'	-5.52	113.08	119.70
1	N	258	G	C5'-C4'-C3'	-5.52	107.17	116.00
1	N	426	U	P-O3'-C3'	5.52	126.32	119.70
1	N	480	U	C3'-C2'-C1'	5.52	105.92	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	891	U	N3-C2-O2	5.52	126.06	122.20
1	N	1475	G	N3-C2-N2	5.52	123.76	119.90
1	N	539	A	C4-C5-N7	5.52	113.46	110.70
1	N	429	U	O4'-C1'-N1	5.52	112.61	108.20
1	N	481	G	C4-C5-N7	-5.52	108.59	110.80
1	N	1178	G	N1-C2-N3	-5.52	120.59	123.90
1	N	1366	C	C2-N3-C4	5.52	122.66	119.90
1	N	39	G	C6-C5-N7	-5.51	127.09	130.40
1	N	494	G	C5'-C4'-C3'	-5.51	107.18	116.00
1	N	644	U	N1-C2-N3	-5.51	111.59	114.90
1	N	746	A	P-O3'-C3'	-5.51	113.08	119.70
1	N	901	A	C5'-C4'-O4'	5.51	115.72	109.10
1	N	1020	G	C5-C6-N1	-5.51	108.74	111.50
1	N	1029	U	N1-C2-O2	-5.51	118.94	122.80
1	N	1263	C	C4-C5-C6	-5.51	114.64	117.40
1	N	1269	A	C4-N9-C1'	-5.51	116.37	126.30
1	N	55	A	C5-N7-C8	5.51	106.66	103.90
1	N	160	A	OP1-P-OP2	-5.51	111.33	119.60
1	N	396	C	O4'-C1'-N1	5.51	112.61	108.20
1	N	852	G	C5-C6-N1	-5.51	108.74	111.50
1	N	344	A	C5-N7-C8	5.51	106.66	103.90
1	N	712	A	N3-C4-N9	5.51	131.81	127.40
1	N	731	G	O4'-C4'-C3'	-5.51	98.49	104.00
1	N	736	C	OP2-P-O3'	5.51	117.32	105.20
1	N	753	A	O4'-C1'-N9	5.51	112.61	108.20
1	N	827	U	C4'-C3'-C2'	-5.51	97.09	102.60
1	N	1074	G	C4-C5-N7	-5.51	108.60	110.80
1	N	1132	C	N3-C2-O2	-5.51	118.04	121.90
1	N	1363	A	P-O5'-C5'	5.51	129.72	120.90
1	N	354	G	N3-C2-N2	5.51	123.75	119.90
1	N	403	C	N3-C4-C5	-5.51	119.70	121.90
1	N	665	A	O4'-C1'-N9	5.51	112.61	108.20
1	N	1075	U	O4'-C1'-N1	5.51	112.61	108.20
1	N	1186	G	C5-C6-O6	-5.51	125.30	128.60
1	N	230	G	N9-C4-C5	-5.51	103.20	105.40
1	N	255	G	C4-C5-N7	-5.51	108.60	110.80
1	N	265	G	O5'-C5'-C4'	-5.51	101.24	111.70
1	N	413	G	C5-C6-N1	-5.51	108.75	111.50
1	N	781	A	C2-N3-C4	-5.51	107.85	110.60
1	N	790	A	N7-C8-N9	5.51	116.55	113.80
1	N	1051	C	O3'-P-O5'	-5.51	93.54	104.00
1	N	1071	C	N1-C2-O2	5.51	122.20	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1520	C	C5-C6-N1	-5.51	118.25	121.00
1	N	1399	C	C5'-C4'-C3'	-5.50	107.19	116.00
1	N	1523	G	C8-N9-C4	-5.50	104.20	106.40
1	N	232	G	N3-C2-N2	-5.50	116.05	119.90
1	N	921	U	C6-N1-C2	-5.50	117.70	121.00
1	N	1350	A	N3-C4-C5	-5.50	122.95	126.80
1	N	17	U	C2-N3-C4	-5.50	123.70	127.00
1	N	142	G	P-O3'-C3'	5.50	126.30	119.70
1	N	278	G	C5-C6-O6	-5.50	125.30	128.60
1	N	467	U	C5-C6-N1	5.50	125.45	122.70
1	N	510	A	C4-C5-C6	5.50	119.75	117.00
1	N	662	U	C2-N3-C4	-5.50	123.70	127.00
1	N	664	G	C6-C5-N7	-5.50	127.10	130.40
1	N	928	G	O4'-C1'-N9	5.50	112.60	108.20
1	N	1045	C	O4'-C1'-N1	5.50	112.60	108.20
1	N	1128	C	C5'-C4'-C3'	-5.50	107.20	116.00
1	N	740	U	C5'-C4'-O4'	5.50	115.70	109.10
1	N	1082	A	N3-C4-N9	5.50	131.80	127.40
1	N	221	C	N3-C4-N4	5.50	121.85	118.00
1	N	696	A	O4'-C1'-N9	5.50	112.60	108.20
1	N	802	A	C8-N9-C4	-5.50	103.60	105.80
1	N	1447	A	C4-C5-N7	-5.50	107.95	110.70
1	N	1522	U	P-O3'-C3'	-5.50	113.10	119.70
1	N	391	G	N9-C4-C5	-5.50	103.20	105.40
1	N	435	A	C6-N1-C2	5.50	121.90	118.60
1	N	1343	G	P-O3'-C3'	-5.50	113.10	119.70
1	N	532	A	C2-N3-C4	5.50	113.35	110.60
1	N	951	G	C2-N3-C4	-5.50	109.15	111.90
1	N	1025	U	C3'-C2'-C1'	5.50	105.90	101.50
1	N	524	G	C4-N9-C1'	5.49	133.64	126.50
1	N	945	G	C4'-C3'-C2'	-5.49	97.11	102.60
1	N	274	A	N7-C8-N9	-5.49	111.05	113.80
1	N	844	G	C5'-C4'-C3'	5.49	124.79	116.00
1	N	116	A	C2-N3-C4	-5.49	107.86	110.60
1	N	487	A	O5'-C5'-C4'	-5.49	101.27	111.70
1	N	557	G	C3'-C2'-C1'	5.49	105.89	101.50
1	N	90	C	O4'-C4'-C3'	5.49	110.49	106.10
1	N	254	G	P-O5'-C5'	5.49	129.68	120.90
1	N	789	U	P-O5'-C5'	5.49	129.68	120.90
1	N	1279	G	C5-C6-O6	-5.49	125.31	128.60
1	N	1132	C	N1-C2-O2	5.49	122.19	118.90
1	N	1486	G	O4'-C1'-N9	5.49	112.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1495	U	N1-C2-O2	-5.49	118.96	122.80
1	N	785	G	C4-C5-N7	-5.49	108.61	110.80
1	N	1049	U	C5-C4-O4	5.49	129.19	125.90
1	N	1091	U	O4'-C1'-N1	5.49	112.59	108.20
1	N	1466	C	N3-C4-N4	5.49	121.84	118.00
1	N	162	A	N1-C6-N6	5.48	121.89	118.60
1	N	276	G	C4-C5-C6	5.48	122.09	118.80
1	N	1137	C	C4'-C3'-C2'	-5.48	97.12	102.60
1	N	1403	C	C4-C5-C6	5.48	120.14	117.40
1	N	7	A	C4'-C3'-C2'	5.48	108.08	102.60
1	N	788	U	C5'-C4'-C3'	-5.48	107.23	116.00
1	N	1047	G	O4'-C1'-N9	5.48	112.59	108.20
1	N	1191	A	N1-C2-N3	5.48	132.04	129.30
1	N	1358	U	C4'-C3'-C2'	5.48	108.08	102.60
1	N	183	C	P-O5'-C5'	5.48	129.67	120.90
1	N	294	U	O4'-C4'-C3'	-5.48	98.52	104.00
1	N	383	A	C6-C5-N7	-5.48	128.46	132.30
1	N	632	U	C4-C5-C6	-5.48	116.41	119.70
1	N	1067	A	N3-C4-N9	5.48	131.78	127.40
1	N	1113	C	O4'-C1'-N1	5.48	112.58	108.20
1	N	1134	G	C8-N9-C4	-5.48	104.21	106.40
1	N	1253	G	N7-C8-N9	-5.48	110.36	113.10
1	N	1515	G	N3-C4-N9	5.48	129.29	126.00
1	N	78	A	N3-C4-N9	5.48	131.78	127.40
1	N	508	U	N1-C2-N3	5.48	118.19	114.90
1	N	782	A	N7-C8-N9	-5.48	111.06	113.80
1	N	880	C	N3-C2-O2	5.48	125.73	121.90
1	N	952	U	N3-C4-C5	-5.48	111.31	114.60
1	N	1149	C	N1-C2-O2	-5.48	115.61	118.90
1	N	1191	A	P-O5'-C5'	5.48	129.66	120.90
1	N	1518	A	P-O3'-C3'	5.48	126.27	119.70
1	N	59	A	C4-C5-C6	5.48	119.74	117.00
1	N	687	A	N9-C4-C5	5.48	107.99	105.80
1	N	1102	A	O5'-P-OP1	5.48	117.27	110.70
1	N	154	U	N3-C2-O2	5.47	126.03	122.20
1	N	256	U	O5'-C5'-C4'	-5.47	101.30	111.70
1	N	1094	G	N1-C6-O6	5.47	123.19	119.90
1	N	1208	C	C4'-C3'-C2'	-5.47	97.13	102.60
1	N	1336	C	C5'-C4'-C3'	5.47	124.76	116.00
1	N	1384	C	OP2-P-O3'	5.47	117.25	105.20
1	N	1486	G	C8-N9-C1'	-5.47	119.88	127.00
1	N	13	U	C6-N1-C2	-5.47	117.72	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	198	G	C6-C5-N7	-5.47	127.12	130.40
1	N	477	C	O4'-C1'-N1	5.47	112.58	108.20
1	N	861	G	N1-C2-N3	5.47	127.18	123.90
1	N	881	G	O4'-C4'-C3'	-5.47	98.53	104.00
1	N	909	A	C4'-C3'-C2'	-5.47	97.13	102.60
1	N	1365	G	C8-N9-C4	5.47	108.59	106.40
1	N	969	A	N9-C4-C5	-5.47	103.61	105.80
1	N	50	A	N9-C4-C5	5.47	107.99	105.80
1	N	193	C	N3-C4-N4	5.47	121.83	118.00
1	N	237	G	N3-C2-N2	5.47	123.73	119.90
1	N	309	A	N7-C8-N9	-5.47	111.07	113.80
1	N	324	G	N3-C4-N9	-5.47	122.72	126.00
1	N	596	A	C5-N7-C8	-5.47	101.17	103.90
1	N	1161	C	C5-C4-N4	-5.47	116.37	120.20
1	N	1241	G	N9-C4-C5	-5.47	103.21	105.40
1	N	1278	G	O4'-C1'-N9	5.47	112.58	108.20
1	N	1338	G	C6-N1-C2	5.47	128.38	125.10
1	N	1425	U	N3-C4-O4	5.47	123.23	119.40
1	N	480	U	P-O3'-C3'	5.47	126.26	119.70
1	N	119	A	C6-C5-N7	-5.47	128.47	132.30
1	N	584	G	C3'-C2'-C1'	5.47	105.87	101.50
1	N	749	A	N7-C8-N9	5.47	116.53	113.80
1	N	866	C	C5-C4-N4	-5.47	116.37	120.20
1	N	1514	G	N9-C4-C5	5.47	107.59	105.40
1	N	4	U	C5-C6-N1	5.46	125.43	122.70
1	N	144	G	C2'-C3'-O3'	5.46	122.44	113.70
1	N	272	C	P-O3'-C3'	5.46	126.26	119.70
1	N	1169	A	N1-C2-N3	5.46	132.03	129.30
1	N	211	G	C2'-C3'-O3'	5.46	122.44	113.70
1	N	354	G	C5-C6-O6	-5.46	125.32	128.60
1	N	500	G	O3'-P-O5'	-5.46	93.62	104.00
1	N	633	G	N9-C4-C5	-5.46	103.22	105.40
1	N	631	C	O4'-C1'-N1	5.46	112.57	108.20
1	N	1193	G	P-O3'-C3'	-5.46	113.15	119.70
1	N	217	C	C5-C6-N1	5.46	123.73	121.00
1	N	335	C	N3-C4-C5	-5.46	119.72	121.90
1	N	448	A	C4-C5-N7	-5.46	107.97	110.70
1	N	568	G	C8-N9-C4	-5.46	104.22	106.40
1	N	1033	G	N1-C2-N3	-5.46	120.62	123.90
1	N	1342	C	N3-C4-N4	5.46	121.82	118.00
1	N	430	A	C5-C6-N1	-5.46	114.97	117.70
1	N	463	U	N3-C4-O4	5.46	123.22	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	489	C	C2'-C3'-O3'	5.46	122.43	113.70
1	N	498	A	C5'-C4'-O4'	-5.46	102.55	109.10
1	N	502	A	C4'-C3'-C2'	-5.46	97.14	102.60
1	N	515	G	C4-C5-N7	5.46	112.98	110.80
1	N	579	A	OP2-P-O3'	5.46	117.20	105.20
1	N	580	C	N3-C4-C5	-5.46	119.72	121.90
1	N	661	G	C8-N9-C4	-5.46	104.22	106.40
1	N	1193	G	C6-N1-C2	-5.46	121.83	125.10
1	N	1243	C	N3-C4-C5	-5.46	119.72	121.90
1	N	1360	A	C3'-C2'-C1'	-5.46	97.13	101.50
1	N	1387	G	P-O3'-C3'	5.46	126.25	119.70
1	N	636	U	C5-C6-N1	5.46	125.43	122.70
1	N	684	U	P-O3'-C3'	-5.46	113.15	119.70
1	N	817	C	C6-N1-C2	-5.46	118.12	120.30
1	N	994	A	P-O5'-C5'	-5.46	112.17	120.90
1	N	1235	U	O3'-P-O5'	-5.46	93.64	104.00
1	N	1350	A	C5-N7-C8	5.46	106.63	103.90
1	N	1429	A	P-O3'-C3'	5.46	126.25	119.70
1	N	353	A	C6-C5-N7	-5.45	128.48	132.30
1	N	711	G	C4-C5-N7	-5.45	108.62	110.80
1	N	983	A	N1-C2-N3	5.45	132.03	129.30
1	N	1124	G	C4-C5-N7	5.45	112.98	110.80
1	N	1449	C	N3-C4-C5	-5.45	119.72	121.90
1	N	1529	G	C4-C5-C6	5.45	122.07	118.80
1	N	31	G	C2-N3-C4	5.45	114.63	111.90
1	N	170	U	C2-N3-C4	-5.45	123.73	127.00
1	N	403	C	N1-C2-N3	-5.45	115.38	119.20
1	N	908	A	C5-N7-C8	5.45	106.63	103.90
1	N	1283	U	C5-C6-N1	5.45	125.43	122.70
1	N	165	G	O4'-C1'-N9	5.45	112.56	108.20
1	N	206	C	C5-C6-N1	5.45	123.72	121.00
1	N	287	U	C4'-C3'-C2'	-5.45	97.15	102.60
1	N	583	A	C5-C6-N6	-5.45	119.34	123.70
1	N	596	A	C4-C5-C6	5.45	119.72	117.00
1	N	834	U	N3-C4-C5	-5.45	111.33	114.60
1	N	913	A	O4'-C1'-N9	5.45	112.56	108.20
1	N	931	C	C6-N1-C1'	-5.45	114.26	120.80
1	N	1269	A	O4'-C1'-N9	5.45	112.56	108.20
1	N	381	C	N1-C2-N3	-5.45	115.39	119.20
1	N	391	G	C1'-O4'-C4'	5.45	114.26	109.90
1	N	512	U	C2-N3-C4	5.45	130.27	127.00
1	N	518	C	N3-C4-C5	-5.45	119.72	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1006	G	C5-C6-N1	-5.45	108.78	111.50
1	N	1220	G	P-O3'-C3'	-5.45	113.16	119.70
1	N	1444	U	N1-C2-O2	5.45	126.61	122.80
1	N	225	C	N1-C2-O2	5.45	122.17	118.90
1	N	560	A	C5-C6-N6	-5.45	119.34	123.70
1	N	662	U	C4'-C3'-C2'	-5.45	97.16	102.60
1	N	1138	G	C8-N9-C4	-5.45	104.22	106.40
1	N	297	G	N7-C8-N9	-5.44	110.38	113.10
1	N	462	G	C4-C5-C6	5.44	122.07	118.80
1	N	817	C	N1-C1'-C2'	5.44	121.08	114.00
1	N	1175	G	N9-C4-C5	-5.44	103.22	105.40
1	N	123	U	N3-C4-C5	-5.44	111.34	114.60
1	N	172	A	N1-C2-N3	5.44	132.02	129.30
1	N	273	U	OP1-P-OP2	-5.44	111.44	119.60
1	N	414	A	C8-N9-C4	-5.44	103.62	105.80
1	N	435	A	N7-C8-N9	5.44	116.52	113.80
1	N	444	G	C5-C6-N1	5.44	114.22	111.50
1	N	673	A	C1'-O4'-C4'	5.44	114.25	109.90
1	N	729	A	C6-C5-N7	-5.44	128.49	132.30
1	N	763	G	C6-C5-N7	-5.44	127.14	130.40
1	N	837	U	N3-C2-O2	-5.44	118.39	122.20
1	N	1076	U	C2-N1-C1'	-5.44	111.17	117.70
1	N	151	A	C6-C5-N7	-5.44	128.49	132.30
1	N	894	G	N3-C4-N9	-5.44	122.74	126.00
1	N	197	A	C6-C5-N7	-5.44	128.49	132.30
1	N	329	A	C4-C5-N7	-5.44	107.98	110.70
1	N	755	G	C8-N9-C4	-5.44	104.22	106.40
1	N	1357	A	C2-N3-C4	5.44	113.32	110.60
1	N	45	G	N3-C4-N9	-5.44	122.74	126.00
1	N	223	A	C4-C5-N7	-5.44	107.98	110.70
1	N	507	C	OP1-P-OP2	-5.44	111.45	119.60
1	N	778	G	C6-N1-C2	-5.44	121.84	125.10
1	N	837	U	C2-N3-C4	-5.44	123.74	127.00
1	N	36	C	C6-N1-C1'	-5.43	114.28	120.80
1	N	170	U	N3-C4-O4	5.43	123.20	119.40
1	N	391	G	N3-C4-N9	5.43	129.26	126.00
1	N	711	G	N9-C1'-C2'	-5.43	106.02	112.00
1	N	1145	A	C4-C5-N7	5.43	113.42	110.70
1	N	1170	A	C4-C5-N7	5.43	113.42	110.70
1	N	193	C	N1-C2-O2	5.43	122.16	118.90
1	N	585	G	N1-C6-O6	5.43	123.16	119.90
1	N	1104	G	N1-C2-N3	-5.43	120.64	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	80	A	C6-C5-N7	-5.43	128.50	132.30
1	N	134	G	N3-C4-C5	-5.43	125.89	128.60
1	N	370	C	O4'-C1'-N1	5.43	112.55	108.20
1	N	587	G	N1-C2-N2	-5.43	111.31	116.20
1	N	849	G	C2-N3-C4	5.43	114.61	111.90
1	N	1315	U	P-O5'-C5'	5.43	129.59	120.90
1	N	45	G	N1-C2-N3	-5.43	120.64	123.90
1	N	58	C	C4-C5-C6	-5.43	114.69	117.40
1	N	208	U	N3-C4-O4	5.43	123.20	119.40
1	N	436	C	OP2-P-O3'	5.43	117.15	105.20
1	N	535	A	C5'-C4'-O4'	5.43	115.62	109.10
1	N	993	G	N3-C4-C5	5.43	131.31	128.60
1	N	1524	C	C1'-O4'-C4'	-5.43	105.56	109.90
1	N	165	G	N1-C2-N3	-5.43	120.64	123.90
1	N	344	A	N3-C4-C5	-5.43	123.00	126.80
1	N	4	U	C2-N3-C4	-5.42	123.75	127.00
1	N	442	G	O4'-C1'-N9	5.42	112.54	108.20
1	N	473	U	C2-N3-C4	5.42	130.25	127.00
1	N	635	A	C4-C5-N7	-5.42	107.99	110.70
1	N	751	U	O4'-C1'-N1	5.42	112.54	108.20
1	N	768	A	C4-C5-C6	5.42	119.71	117.00
1	N	877	G	P-O3'-C3'	-5.42	113.19	119.70
1	N	1016	A	C8-N9-C4	5.42	107.97	105.80
1	N	1021	A	O4'-C1'-N9	5.42	112.54	108.20
1	N	1401	G	C5-C6-N1	5.42	114.21	111.50
1	N	84	U	O4'-C1'-N1	5.42	112.54	108.20
1	N	379	C	C5-C6-N1	5.42	123.71	121.00
1	N	508	U	O4'-C1'-N1	5.42	112.54	108.20
1	N	782	A	N9-C4-C5	5.42	107.97	105.80
1	N	1136	C	C5-C4-N4	-5.42	116.41	120.20
1	N	154	U	C6-N1-C2	5.42	124.25	121.00
1	N	208	U	C2-N1-C1'	-5.42	111.20	117.70
1	N	234	C	O5'-C5'-C4'	-5.42	101.40	111.70
1	N	395	C	N3-C4-C5	-5.42	119.73	121.90
1	N	443	C	N3-C2-O2	-5.42	118.11	121.90
1	N	592	G	C6-N1-C2	5.42	128.35	125.10
1	N	723	U	C2-N1-C1'	5.42	124.20	117.70
1	N	811	C	C5'-C4'-O4'	5.42	115.60	109.10
1	N	1292	G	N3-C4-C5	5.42	131.31	128.60
1	N	1343	G	N7-C8-N9	5.42	115.81	113.10
1	N	1473	G	C5-C6-O6	-5.42	125.35	128.60
1	N	48	C	C5-C4-N4	-5.42	116.41	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	445	G	N1-C6-O6	5.42	123.15	119.90
1	N	645	G	C8-N9-C1'	5.42	134.04	127.00
1	N	706	A	C4-C5-N7	-5.42	107.99	110.70
1	N	807	A	N9-C1'-C2'	-5.42	106.04	112.00
1	N	972	C	C5-C6-N1	5.42	123.71	121.00
1	N	1298	U	C5'-C4'-C3'	-5.42	107.33	116.00
1	N	1350	A	C5-C6-N6	-5.42	119.37	123.70
1	N	190	A	C5-N7-C8	5.42	106.61	103.90
1	N	293	G	C6-C5-N7	-5.42	127.15	130.40
1	N	743	A	N9-C4-C5	-5.42	103.63	105.80
1	N	760	G	C8-N9-C4	-5.42	104.23	106.40
1	N	232	G	C8-N9-C1'	5.41	134.04	127.00
1	N	655	A	C5-C6-N6	-5.41	119.37	123.70
1	N	886	G	O4'-C1'-N9	5.41	112.53	108.20
1	N	1232	U	O3'-P-O5'	-5.41	93.71	104.00
1	N	1367	C	C5-C4-N4	-5.41	116.41	120.20
1	N	1426	G	C4'-C3'-C2'	-5.41	97.19	102.60
1	N	135	C	P-O3'-C3'	-5.41	113.21	119.70
1	N	368	U	C5-C4-O4	-5.41	122.65	125.90
1	N	474	G	C6-C5-N7	-5.41	127.15	130.40
1	N	795	C	C2-N3-C4	-5.41	117.19	119.90
1	N	1066	C	C5'-C4'-O4'	-5.41	102.61	109.10
1	N	1090	U	C3'-C2'-C1'	-5.41	97.17	101.50
1	N	227	G	C4-C5-C6	5.41	122.05	118.80
1	N	1379	G	C8-N9-C1'	5.41	134.03	127.00
1	N	71	A	C4'-C3'-C2'	5.41	108.01	102.60
1	N	347	G	C8-N9-C4	-5.41	104.24	106.40
1	N	833	G	C6-N1-C2	5.41	128.34	125.10
1	N	894	G	C8-N9-C4	-5.41	104.24	106.40
1	N	1084	G	C6-C5-N7	-5.41	127.16	130.40
1	N	1435	G	C6-C5-N7	-5.41	127.15	130.40
1	N	347	G	O4'-C1'-C2'	-5.41	100.39	105.80
1	N	601	G	N9-C1'-C2'	-5.41	106.05	112.00
1	N	645	G	C4-C5-N7	5.41	112.96	110.80
1	N	122	G	C2-N3-C4	-5.41	109.20	111.90
1	N	428	G	C5'-C4'-O4'	-5.40	102.62	109.10
1	N	478	A	C4'-C3'-C2'	5.40	108.00	102.60
1	N	642	A	C5-C6-N1	-5.40	115.00	117.70
1	N	814	A	O4'-C1'-N9	5.40	112.52	108.20
1	N	1086	U	OP1-P-OP2	-5.40	111.50	119.60
1	N	1336	C	C5-C4-N4	-5.40	116.42	120.20
1	N	1359	C	N3-C4-N4	5.40	121.78	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	236	A	P-O5'-C5'	-5.40	112.26	120.90
1	N	411	A	P-O5'-C5'	5.40	129.54	120.90
1	N	689	C	C3'-C2'-C1'	-5.40	97.18	101.50
1	N	968	A	C3'-C2'-C1'	-5.40	97.18	101.50
1	N	1145	A	P-O5'-C5'	5.40	129.54	120.90
1	N	1466	C	N1-C2-N3	-5.40	115.42	119.20
1	N	112	G	C3'-C2'-C1'	-5.40	97.18	101.50
1	N	33	A	C6-C5-N7	-5.40	128.52	132.30
1	N	367	U	C3'-C2'-C1'	-5.40	97.18	101.50
1	N	876	C	C4-C5-C6	5.40	120.10	117.40
1	N	1000	A	C2-N3-C4	-5.40	107.90	110.60
1	N	1118	U	C5-C4-O4	5.40	129.14	125.90
1	N	1296	C	C4-C5-C6	-5.40	114.70	117.40
1	N	1302	C	C4'-C3'-C2'	5.40	108.00	102.60
1	N	1348	U	N1-C2-N3	5.40	118.14	114.90
1	N	326	G	C4-C5-N7	5.40	112.96	110.80
1	N	352	C	C5-C6-N1	5.40	123.70	121.00
1	N	715	A	C5-C6-N6	-5.40	119.38	123.70
1	N	945	G	N1-C6-O6	5.40	123.14	119.90
1	N	1286	U	C6-N1-C2	-5.40	117.76	121.00
1	N	171	A	O4'-C4'-C3'	-5.39	98.61	104.00
1	N	264	C	N1-C2-O2	5.39	122.14	118.90
1	N	367	U	C1'-O4'-C4'	-5.39	105.58	109.90
1	N	491	G	C2'-C3'-O3'	5.39	122.33	113.70
1	N	584	G	O5'-C5'-C4'	-5.39	101.45	111.70
1	N	874	G	N7-C8-N9	5.39	115.80	113.10
1	N	1295	U	N3-C4-C5	-5.39	111.36	114.60
1	N	1458	G	N3-C2-N2	5.39	123.68	119.90
1	N	76	G	C4-N9-C1'	5.39	133.51	126.50
1	N	244	U	C1'-O4'-C4'	5.39	114.21	109.90
1	N	698	G	C2'-C3'-O3'	5.39	122.33	113.70
1	N	805	C	C3'-C2'-C1'	5.39	105.81	101.50
1	N	823	C	O5'-C5'-C4'	-5.39	101.45	111.70
1	N	1168	U	C3'-C2'-C1'	5.39	105.81	101.50
1	N	1193	G	C2-N3-C4	5.39	114.60	111.90
1	N	29	U	C2'-C3'-O3'	5.39	122.33	113.70
1	N	148	G	C5'-C4'-O4'	5.39	115.57	109.10
1	N	410	G	P-O5'-C5'	5.39	129.53	120.90
1	N	666	G	N9-C4-C5	-5.39	103.24	105.40
1	N	195	A	C5-C6-N1	-5.39	115.00	117.70
1	N	529	G	N3-C2-N2	5.39	123.67	119.90
1	N	603	U	N3-C4-O4	5.39	123.17	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	80	A	C5-C6-N1	-5.39	115.01	117.70
1	N	211	G	C8-N9-C1'	-5.39	120.00	127.00
1	N	990	C	P-O3'-C3'	-5.39	113.23	119.70
1	N	183	C	O4'-C4'-C3'	5.39	110.41	106.10
1	N	348	G	C5-C6-O6	-5.39	125.37	128.60
1	N	499	A	N7-C8-N9	-5.39	111.11	113.80
1	N	633	G	O4'-C4'-C3'	-5.39	98.61	104.00
1	N	1433	A	O4'-C4'-C3'	-5.39	98.61	104.00
1	N	1507	A	C2-N3-C4	5.39	113.29	110.60
1	N	150	U	C5-C6-N1	5.38	125.39	122.70
1	N	1318	A	C1'-O4'-C4'	-5.38	105.59	109.90
1	N	416	G	C5-N7-C8	5.38	106.99	104.30
1	N	479	U	N3-C2-O2	5.38	125.97	122.20
1	N	510	A	C5-C6-N1	-5.38	115.01	117.70
1	N	782	A	O4'-C4'-C3'	-5.38	98.62	104.00
1	N	916	U	P-O5'-C5'	5.38	129.51	120.90
1	N	1422	G	O4'-C1'-N9	5.38	112.51	108.20
1	N	17	U	O3'-P-O5'	5.38	114.22	104.00
1	N	438	U	C5'-C4'-O4'	5.38	115.56	109.10
1	N	1034	G	C4-N9-C1'	-5.38	119.50	126.50
1	N	1218	C	N3-C4-C5	-5.38	119.75	121.90
1	N	1392	G	N1-C2-N3	-5.38	120.67	123.90
1	N	1482	G	C2'-C3'-O3'	5.38	122.31	113.70
1	N	1502	A	C2'-C3'-O3'	5.38	122.31	113.70
1	N	1525	G	C4-N9-C1'	-5.38	119.50	126.50
1	N	233	C	N1-C2-O2	5.38	122.13	118.90
1	N	373	A	O4'-C4'-C3'	-5.38	98.62	104.00
1	N	485	U	C4-C5-C6	5.38	122.93	119.70
1	N	371	A	O5'-C5'-C4'	-5.38	101.48	111.70
1	N	794	A	P-O5'-C5'	-5.38	112.29	120.90
1	N	901	A	O4'-C1'-N9	5.38	112.50	108.20
1	N	1100	C	N3-C2-O2	-5.38	118.14	121.90
1	N	1104	G	C6-C5-N7	-5.38	127.17	130.40
1	N	1135	U	C2-N1-C1'	5.38	124.16	117.70
1	N	1369	C	N3-C4-N4	5.38	121.77	118.00
1	N	23	C	C4-C5-C6	5.38	120.09	117.40
1	N	138	G	C4'-C3'-C2'	-5.38	97.22	102.60
1	N	301	G	N1-C2-N3	-5.38	120.67	123.90
1	N	390	U	N3-C4-C5	5.38	117.83	114.60
1	N	948	C	N3-C4-C5	-5.38	119.75	121.90
1	N	968	A	N3-C4-C5	-5.38	123.04	126.80
1	N	981	U	N3-C4-O4	5.38	123.16	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1056	U	C5-C6-N1	5.38	125.39	122.70
1	N	1103	C	C6-N1-C1'	-5.38	114.35	120.80
1	N	1112	C	C2-N1-C1'	5.38	124.71	118.80
1	N	482	A	N1-C2-N3	-5.38	126.61	129.30
1	N	1291	U	C5-C4-O4	-5.38	122.67	125.90
1	N	1294	G	N3-C4-C5	5.38	131.29	128.60
1	N	12	U	O4'-C1'-N1	5.37	112.50	108.20
1	N	14	U	C1'-O4'-C4'	5.37	114.20	109.90
1	N	487	A	C6-C5-N7	-5.37	128.54	132.30
1	N	984	C	P-O5'-C5'	5.37	129.50	120.90
1	N	1320	C	O4'-C4'-C3'	-5.37	98.63	104.00
1	N	1333	A	O4'-C1'-N9	5.37	112.50	108.20
1	N	1335	U	N3-C2-O2	5.37	125.96	122.20
1	N	1357	A	OP2-P-O3'	5.37	117.02	105.20
1	N	1371	G	N3-C2-N2	5.37	123.66	119.90
1	N	1430	A	C6-N1-C2	5.37	121.82	118.60
1	N	278	G	N3-C2-N2	5.37	123.66	119.90
1	N	782	A	C8-N9-C4	-5.37	103.65	105.80
1	N	1145	A	N9-C4-C5	-5.37	103.65	105.80
1	N	1526	G	C6-C5-N7	-5.37	127.18	130.40
1	N	257	G	O5'-C5'-C4'	-5.37	101.50	111.70
1	N	371	A	P-O3'-C3'	-5.37	113.26	119.70
1	N	585	G	C4-C5-N7	-5.37	108.65	110.80
1	N	1206	G	N1-C2-N3	-5.37	120.68	123.90
1	N	1471	U	C4-C5-C6	-5.37	116.48	119.70
1	N	507	C	C1'-O4'-C4'	5.37	114.19	109.90
1	N	764	C	C4-C5-C6	-5.37	114.72	117.40
1	N	371	A	N9-C4-C5	5.37	107.95	105.80
1	N	947	G	O4'-C1'-N9	5.37	112.49	108.20
1	N	1223	C	C1'-O4'-C4'	-5.37	105.61	109.90
1	N	98	A	O4'-C1'-N9	5.37	112.49	108.20
1	N	371	A	OP1-P-O3'	5.37	117.00	105.20
1	N	415	A	C4'-C3'-C2'	-5.37	97.23	102.60
1	N	669	G	O5'-C5'-C4'	-5.37	101.51	111.70
1	N	917	G	N3-C4-N9	5.37	129.22	126.00
1	N	1300	G	C4-C5-N7	-5.37	108.65	110.80
1	N	1352	C	N1-C2-O2	-5.37	115.68	118.90
1	N	1473	G	N1-C6-O6	5.37	123.12	119.90
1	N	889	A	C1'-O4'-C4'	5.36	114.19	109.90
1	N	1036	A	C4'-C3'-C2'	5.36	107.96	102.60
1	N	1174	G	N3-C4-N9	5.36	129.22	126.00
1	N	1511	G	N7-C8-N9	5.36	115.78	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	65	A	OP1-P-OP2	-5.36	111.56	119.60
1	N	69	G	C5-C6-O6	-5.36	125.38	128.60
1	N	243	A	N9-C4-C5	5.36	107.94	105.80
1	N	628	G	C8-N9-C4	-5.36	104.25	106.40
1	N	1523	G	OP1-P-OP2	-5.36	111.56	119.60
1	N	100	G	C4-C5-N7	-5.36	108.66	110.80
1	N	965	U	C5-C6-N1	5.36	125.38	122.70
1	N	1284	C	C4-C5-C6	-5.36	114.72	117.40
1	N	408	A	C5'-C4'-C3'	-5.36	107.42	116.00
1	N	443	C	O5'-P-OP2	5.36	117.13	110.70
1	N	48	C	C1'-O4'-C4'	-5.36	105.61	109.90
1	N	257	G	O4'-C1'-N9	5.36	112.49	108.20
1	N	473	U	N3-C4-C5	-5.36	111.39	114.60
1	N	568	G	N1-C6-O6	5.36	123.11	119.90
1	N	763	G	C8-N9-C4	5.36	108.54	106.40
1	N	920	U	P-O5'-C5'	5.36	129.47	120.90
1	N	1420	U	N1-C2-N3	5.36	118.11	114.90
1	N	159	G	C5-N7-C8	5.36	106.98	104.30
1	N	528	C	C4-C5-C6	5.36	120.08	117.40
1	N	887	G	C4'-C3'-C2'	-5.36	97.25	102.60
1	N	1267	C	C4-C5-C6	5.36	120.08	117.40
1	N	1345	U	N3-C4-C5	-5.36	111.39	114.60
1	N	1440	U	N1-C2-O2	-5.36	119.05	122.80
1	N	1532	U	C4'-C3'-C2'	5.36	107.95	102.60
1	N	127	G	C4-C5-N7	-5.35	108.66	110.80
1	N	839	C	C5-C4-N4	-5.35	116.45	120.20
1	N	918	A	C6-C5-N7	-5.35	128.55	132.30
1	N	1047	G	C5-N7-C8	-5.35	101.62	104.30
1	N	1461	G	N7-C8-N9	5.35	115.78	113.10
1	N	1514	G	N1-C6-O6	5.35	123.11	119.90
1	N	69	G	C1'-O4'-C4'	5.35	114.18	109.90
1	N	320	A	N7-C8-N9	5.35	116.48	113.80
1	N	1194	U	N1-C2-O2	-5.35	119.05	122.80
1	N	1225	A	C4-C5-N7	-5.35	108.02	110.70
1	N	1486	G	C4-C5-C6	5.35	122.01	118.80
1	N	23	C	P-O5'-C5'	5.35	129.46	120.90
1	N	353	A	C5-N7-C8	-5.35	101.22	103.90
1	N	134	G	C4-C5-C6	5.35	122.01	118.80
1	N	723	U	N3-C4-O4	5.35	123.14	119.40
1	N	1161	C	N3-C2-O2	-5.35	118.16	121.90
1	N	1259	C	N1-C2-N3	-5.35	115.46	119.20
1	N	1425	U	O4'-C1'-N1	5.35	112.48	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	293	G	C4-C5-N7	-5.35	108.66	110.80
1	N	484	G	N3-C2-N2	5.35	123.64	119.90
1	N	572	A	C8-N9-C1'	-5.35	118.07	127.70
1	N	613	C	C2-N3-C4	5.35	122.57	119.90
1	N	645	G	C5-C6-O6	-5.35	125.39	128.60
1	N	945	G	N3-C2-N2	5.35	123.64	119.90
1	N	959	A	C8-N9-C4	-5.35	103.66	105.80
1	N	1249	C	C2-N1-C1'	5.35	124.68	118.80
1	N	731	G	N3-C2-N2	5.35	123.64	119.90
1	N	768	A	C5-C6-N6	-5.35	119.42	123.70
1	N	1199	U	P-O5'-C5'	5.35	129.45	120.90
1	N	1385	G	P-O5'-C5'	5.35	129.45	120.90
1	N	9	G	C5-C6-N1	-5.34	108.83	111.50
1	N	568	G	N3-C4-C5	-5.34	125.93	128.60
1	N	1168	U	C6-N1-C2	-5.34	117.79	121.00
1	N	319	G	OP1-P-OP2	-5.34	111.59	119.60
1	N	399	G	C5'-C4'-C3'	5.34	124.55	116.00
1	N	793	U	P-O3'-C3'	5.34	126.11	119.70
1	N	1088	G	C5-C6-O6	-5.34	125.39	128.60
1	N	1350	A	C4-C5-N7	-5.34	108.03	110.70
1	N	34	C	C3'-C2'-C1'	-5.34	97.23	101.50
1	N	559	A	N1-C2-N3	-5.34	126.63	129.30
1	N	712	A	N1-C2-N3	-5.34	126.63	129.30
1	N	1356	G	C5-C6-N1	-5.34	108.83	111.50
1	N	191	G	N7-C8-N9	-5.34	110.43	113.10
1	N	242	G	C6-C5-N7	-5.34	127.20	130.40
1	N	1135	U	C2-N3-C4	5.34	130.20	127.00
1	N	1219	A	C5-C6-N1	-5.34	115.03	117.70
1	N	1263	C	O5'-C5'-C4'	-5.34	101.55	111.70
1	N	517	G	N3-C4-N9	-5.34	122.80	126.00
1	N	1064	G	N7-C8-N9	5.34	115.77	113.10
1	N	55	A	N1-C2-N3	5.34	131.97	129.30
1	N	184	G	C3'-C2'-C1'	-5.34	97.23	101.50
1	N	274	A	C6-N1-C2	5.34	121.80	118.60
1	N	301	G	C4-N9-C1'	5.34	133.44	126.50
1	N	104	G	C6-C5-N7	-5.33	127.20	130.40
1	N	661	G	P-O3'-C3'	-5.33	113.30	119.70
1	N	833	G	C5-N7-C8	-5.33	101.63	104.30
1	N	1509	C	C4-C5-C6	5.33	120.07	117.40
1	N	444	G	C2-N3-C4	5.33	114.57	111.90
1	N	829	G	O4'-C1'-N9	5.33	112.47	108.20
1	N	1071	C	C2-N3-C4	5.33	122.57	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	208	U	N1-C2-N3	-5.33	111.70	114.90
1	N	329	A	P-O5'-C5'	-5.33	112.37	120.90
1	N	506	G	C4-C5-N7	5.33	112.93	110.80
1	N	570	G	C4-C5-N7	5.33	112.93	110.80
1	N	1071	C	C5-C6-N1	5.33	123.67	121.00
1	N	1084	G	O5'-P-OP2	-5.33	100.90	105.70
1	N	1226	C	C6-N1-C2	5.33	122.43	120.30
1	N	1189	U	N1-C2-O2	5.33	126.53	122.80
1	N	1298	U	C2-N3-C4	-5.33	123.80	127.00
1	N	405	U	P-O5'-C5'	5.33	129.43	120.90
1	N	418	C	C2'-C3'-O3'	5.33	122.23	113.70
1	N	1032	G	C5'-C4'-O4'	5.33	115.50	109.10
1	N	1054	C	N3-C4-N4	5.33	121.73	118.00
1	N	1129	C	O4'-C1'-N1	5.33	112.46	108.20
1	N	1348	U	N1-C1'-C2'	-5.33	106.14	112.00
1	N	1526	G	C5'-C4'-O4'	5.33	115.49	109.10
1	N	207	C	C3'-C2'-C1'	5.33	105.76	101.50
1	N	664	G	C5'-C4'-O4'	5.33	115.49	109.10
1	N	1342	C	C6-N1-C1'	-5.33	114.41	120.80
1	N	1421	G	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	302	G	C5-C6-O6	-5.33	125.41	128.60
1	N	359	G	C6-C5-N7	5.33	133.59	130.40
1	N	606	G	C6-N1-C2	5.33	128.29	125.10
1	N	632	U	C2-N1-C1'	5.33	124.09	117.70
1	N	1211	U	N1-C2-O2	5.33	126.53	122.80
1	N	1498	U	N1-C2-O2	-5.33	119.07	122.80
1	N	301	G	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	359	G	N7-C8-N9	5.32	115.76	113.10
1	N	490	C	N3-C4-C5	-5.32	119.77	121.90
1	N	538	G	C5-N7-C8	-5.32	101.64	104.30
1	N	709	U	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	726	C	P-O3'-C3'	-5.32	113.31	119.70
1	N	730	G	P-O5'-C5'	5.32	129.42	120.90
1	N	829	G	N3-C4-C5	-5.32	125.94	128.60
1	N	903	G	N1-C2-N3	-5.32	120.71	123.90
1	N	1487	G	OP1-P-OP2	-5.32	111.61	119.60
1	N	423	G	C6-N1-C2	5.32	128.29	125.10
1	N	601	G	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	1112	C	C5'-C4'-O4'	5.32	115.49	109.10
1	N	1476	A	N9-C4-C5	-5.32	103.67	105.80
1	N	1487	G	C5-C6-N1	-5.32	108.84	111.50
1	N	510	A	O4'-C1'-N9	5.32	112.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	793	U	O4'-C4'-C3'	-5.32	98.68	104.00
1	N	941	G	N1-C2-N2	-5.32	111.41	116.20
1	N	1218	C	C3'-C2'-C1'	5.32	105.76	101.50
1	N	166	U	C5'-C4'-O4'	5.32	115.48	109.10
1	N	285	C	C6-N1-C2	-5.32	118.17	120.30
1	N	597	G	C5-C6-N1	-5.32	108.84	111.50
1	N	793	U	N1-C2-N3	-5.32	111.71	114.90
1	N	1142	G	C8-N9-C1'	-5.32	120.09	127.00
1	N	1272	G	O4'-C1'-N9	5.32	112.45	108.20
1	N	1422	G	C6-N1-C2	-5.32	121.91	125.10
1	N	159	G	C5-C6-N1	-5.32	108.84	111.50
1	N	366	A	C2-N3-C4	-5.32	107.94	110.60
1	N	882	C	N3-C4-C5	-5.32	119.77	121.90
1	N	935	A	C4-C5-N7	-5.32	108.04	110.70
1	N	1360	A	N1-C6-N6	5.32	121.79	118.60
1	N	1362	A	C5-C6-N6	-5.32	119.45	123.70
1	N	486	U	C4-C5-C6	5.31	122.89	119.70
1	N	1238	A	C4-C5-N7	5.31	113.36	110.70
1	N	1347	G	C8-N9-C4	-5.31	104.28	106.40
1	N	16	A	P-O5'-C5'	-5.31	112.40	120.90
1	N	48	C	O4'-C1'-C2'	5.31	112.38	107.60
1	N	192	A	C6-C5-N7	-5.31	128.58	132.30
1	N	376	G	C2-N3-C4	-5.31	109.24	111.90
1	N	413	G	C4-C5-C6	5.31	121.99	118.80
1	N	706	A	P-O3'-C3'	5.31	126.08	119.70
1	N	1072	G	P-O3'-C3'	5.31	126.07	119.70
1	N	1124	G	O4'-C1'-N9	5.31	112.45	108.20
1	N	1296	C	O4'-C1'-N1	5.31	112.45	108.20
1	N	468	A	C5-C6-N1	-5.31	115.05	117.70
1	N	715	A	C5-C6-N1	-5.31	115.04	117.70
1	N	183	C	C3'-C2'-C1'	5.31	105.75	101.50
1	N	720	C	O4'-C1'-N1	5.31	112.45	108.20
1	N	1257	A	C8-N9-C4	-5.31	103.68	105.80
1	N	1264	U	C6-N1-C2	-5.31	117.81	121.00
1	N	39	G	N9-C4-C5	5.31	107.52	105.40
1	N	61	G	O5'-C5'-C4'	-5.31	101.61	111.70
1	N	200	G	O3'-P-O5'	-5.31	93.92	104.00
1	N	277	C	C5'-C4'-O4'	5.31	115.47	109.10
1	N	831	A	C4-C5-C6	5.31	119.65	117.00
1	N	1494	G	C1'-O4'-C4'	-5.31	105.65	109.90
1	N	926	G	N1-C2-N3	-5.31	120.72	123.90
1	N	2	A	C4-C5-C6	5.30	119.65	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	124	C	N3-C2-O2	-5.30	118.19	121.90
1	N	169	C	C1'-O4'-C4'	-5.30	105.66	109.90
1	N	274	A	C5-C6-N1	-5.30	115.05	117.70
1	N	383	A	C5-C6-N1	-5.30	115.05	117.70
1	N	383	A	C5-C6-N6	-5.30	119.46	123.70
1	N	712	A	C8-N9-C4	-5.30	103.68	105.80
1	N	823	C	C1'-O4'-C4'	-5.30	105.66	109.90
1	N	46	G	C2-N3-C4	-5.30	109.25	111.90
1	N	50	A	N1-C6-N6	5.30	121.78	118.60
1	N	194	C	C3'-C2'-C1'	5.30	105.74	101.50
1	N	194	C	C4-C5-C6	5.30	120.05	117.40
1	N	1047	G	C6-N1-C2	5.30	128.28	125.10
1	N	390	U	C5-C4-O4	-5.30	122.72	125.90
1	N	650	G	N1-C6-O6	5.30	123.08	119.90
1	N	737	C	C4-C5-C6	5.30	120.05	117.40
1	N	1316	G	N1-C2-N3	5.30	127.08	123.90
1	N	1482	G	C4'-C3'-C2'	-5.30	97.30	102.60
1	N	289	G	N1-C6-O6	5.30	123.08	119.90
1	N	577	G	C5'-C4'-O4'	-5.30	102.74	109.10
1	N	683	G	C3'-C2'-C1'	-5.30	97.26	101.50
1	N	823	C	C3'-C2'-C1'	-5.30	97.26	101.50
1	N	1208	C	C5-C6-N1	5.30	123.65	121.00
1	N	203	G	C4-N9-C1'	-5.30	119.61	126.50
1	N	1194	U	O4'-C1'-N1	5.30	112.44	108.20
1	N	8	A	P-O3'-C3'	-5.30	113.34	119.70
1	N	444	G	N1-C2-N3	-5.30	120.72	123.90
1	N	533	A	C5'-C4'-O4'	5.30	115.45	109.10
1	N	760	G	N1-C6-O6	5.30	123.08	119.90
1	N	1178	G	N3-C4-C5	-5.30	125.95	128.60
1	N	1184	G	N9-C4-C5	5.30	107.52	105.40
1	N	1363	A	C8-N9-C4	-5.30	103.68	105.80
1	N	316	C	C2-N1-C1'	5.29	124.62	118.80
1	N	358	U	C4-C5-C6	-5.29	116.52	119.70
1	N	427	U	N3-C2-O2	5.29	125.91	122.20
1	N	470	C	P-O3'-C3'	5.29	126.05	119.70
1	N	729	A	C6-N1-C2	-5.29	115.42	118.60
1	N	212	G	O4'-C1'-N9	5.29	112.43	108.20
1	N	331	G	C2-N3-C4	-5.29	109.25	111.90
1	N	412	A	C2'-C3'-O3'	5.29	122.17	113.70
1	N	1287	A	N3-C4-C5	-5.29	123.10	126.80
1	N	267	C	N3-C4-N4	5.29	121.70	118.00
1	N	512	U	C6-N1-C2	5.29	124.17	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1377	A	C4-N9-C1'	-5.29	116.78	126.30
1	N	27	G	N1-C2-N2	-5.29	111.44	116.20
1	N	78	A	C6-C5-N7	-5.29	128.60	132.30
1	N	137	U	C6-N1-C2	-5.29	117.83	121.00
1	N	532	A	N9-C4-C5	-5.29	103.68	105.80
1	N	577	G	C8-N9-C4	-5.29	104.28	106.40
1	N	591	U	C6-N1-C2	-5.29	117.83	121.00
1	N	1130	A	O4'-C4'-C3'	-5.29	98.71	104.00
1	N	1190	G	C1'-O4'-C4'	-5.29	105.67	109.90
1	N	33	A	O4'-C1'-N9	5.29	112.43	108.20
1	N	293	G	C5'-C4'-O4'	5.29	115.44	109.10
1	N	668	G	C4'-C3'-C2'	-5.29	97.31	102.60
1	N	1140	C	C5-C6-N1	5.29	123.64	121.00
1	N	1149	C	C4'-C3'-C2'	-5.29	97.31	102.60
1	N	1261	A	C3'-C2'-C1'	-5.29	97.27	101.50
1	N	78	A	OP1-P-OP2	-5.29	111.67	119.60
1	N	224	U	O4'-C1'-N1	5.29	112.43	108.20
1	N	298	A	C2-N3-C4	-5.29	107.96	110.60
1	N	1179	A	C4-C5-C6	5.29	119.64	117.00
1	N	111	G	C4-C5-N7	-5.28	108.69	110.80
1	N	256	U	O4'-C4'-C3'	-5.28	98.72	104.00
1	N	509	A	C5-C6-N6	-5.28	119.47	123.70
1	N	526	C	O5'-C5'-C4'	-5.28	101.66	111.70
1	N	680	C	P-O3'-C3'	5.28	126.04	119.70
1	N	1119	C	N1-C2-O2	-5.28	115.73	118.90
1	N	1264	U	N1-C1'-C2'	-5.28	106.19	112.00
1	N	1459	G	C5-C6-O6	-5.28	125.43	128.60
1	N	1505	G	C5-N7-C8	-5.28	101.66	104.30
1	N	1062	U	C4-C5-C6	5.28	122.87	119.70
1	N	349	A	C4'-C3'-C2'	-5.28	97.32	102.60
1	N	630	A	N7-C8-N9	5.28	116.44	113.80
1	N	845	A	C4-C5-C6	5.28	119.64	117.00
1	N	1238	A	C5'-C4'-O4'	5.28	115.44	109.10
1	N	119	A	O3'-P-O5'	5.28	114.03	104.00
1	N	921	U	N3-C4-C5	5.28	117.77	114.60
1	N	1005	A	C5-N7-C8	5.28	106.54	103.90
1	N	108	G	C5-N7-C8	5.28	106.94	104.30
1	N	334	C	C2-N1-C1'	-5.28	112.99	118.80
1	N	493	A	N7-C8-N9	5.28	116.44	113.80
1	N	1186	G	C5-C6-N1	-5.28	108.86	111.50
1	N	114	U	C4'-C3'-C2'	-5.28	97.33	102.60
1	N	375	U	N1-C2-O2	-5.28	119.11	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	649	A	C5-C6-N6	-5.28	119.48	123.70
1	N	833	G	N3-C4-C5	5.28	131.24	128.60
1	N	1325	C	C5-C6-N1	5.28	123.64	121.00
1	N	1332	A	C5-C6-N1	-5.28	115.06	117.70
1	N	1423	G	C6-N1-C2	5.28	128.27	125.10
1	N	624	C	P-O3'-C3'	-5.27	113.37	119.70
1	N	654	G	P-O3'-C3'	-5.27	113.37	119.70
1	N	1467	C	N1-C1'-C2'	-5.27	106.20	112.00
1	N	235	C	O4'-C4'-C3'	-5.27	98.73	104.00
1	N	603	U	C2-N3-C4	5.27	130.16	127.00
1	N	637	C	C5-C4-N4	-5.27	116.51	120.20
1	N	727	G	P-O5'-C5'	-5.27	112.47	120.90
1	N	829	G	C4-N9-C1'	5.27	133.35	126.50
1	N	1407	C	C5-C6-N1	5.27	123.64	121.00
1	N	86	G	N3-C4-N9	-5.27	122.84	126.00
1	N	382	A	C4-C5-N7	-5.27	108.06	110.70
1	N	682	G	N1-C2-N3	-5.27	120.74	123.90
1	N	1040	U	N3-C4-O4	5.27	123.09	119.40
1	N	1375	A	OP2-P-O3'	5.27	116.80	105.20
1	N	1389	C	C6-N1-C2	5.27	122.41	120.30
1	N	207	C	C1'-O4'-C4'	5.27	114.11	109.90
1	N	466	A	N3-C4-C5	-5.27	123.11	126.80
1	N	956	U	N3-C2-O2	5.27	125.89	122.20
1	N	1211	U	O4'-C1'-N1	5.27	112.42	108.20
1	N	381	C	C2-N3-C4	5.27	122.53	119.90
1	N	494	G	N9-C4-C5	-5.27	103.29	105.40
1	N	514	C	C4'-C3'-C2'	-5.27	97.33	102.60
1	N	524	G	N7-C8-N9	5.27	115.73	113.10
1	N	988	G	C5-C6-O6	-5.27	125.44	128.60
1	N	992	U	C4-C5-C6	-5.27	116.54	119.70
1	N	1279	G	C4-C5-C6	-5.27	115.64	118.80
1	N	1458	G	N3-C4-C5	5.27	131.23	128.60
1	N	300	A	C2-N3-C4	5.27	113.23	110.60
1	N	702	A	C3'-C2'-C1'	5.27	105.71	101.50
1	N	788	U	N1-C2-O2	-5.27	119.11	122.80
1	N	1347	G	C5'-C4'-O4'	5.27	115.42	109.10
1	N	2	A	C8-N9-C4	-5.26	103.69	105.80
1	N	104	G	C5'-C4'-O4'	5.26	115.42	109.10
1	N	475	C	OP1-P-OP2	-5.26	111.70	119.60
1	N	478	A	C1'-O4'-C4'	5.26	114.11	109.90
1	N	528	C	N3-C4-C5	-5.26	119.79	121.90
1	N	623	C	C2-N1-C1'	5.26	124.59	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	698	G	N9-C4-C5	5.26	107.51	105.40
1	N	1180	A	C2-N3-C4	5.26	113.23	110.60
1	N	1253	G	O4'-C1'-N9	5.26	112.41	108.20
1	N	1400	C	C2-N3-C4	5.26	122.53	119.90
1	N	1488	G	OP1-P-OP2	-5.26	111.70	119.60
1	N	146	G	N3-C2-N2	5.26	123.58	119.90
1	N	431	A	O4'-C1'-N9	5.26	112.41	108.20
1	N	744	C	C2-N1-C1'	5.26	124.59	118.80
1	N	1106	G	P-O3'-C3'	5.26	126.02	119.70
1	N	1262	C	N1-C2-N3	-5.26	115.52	119.20
1	N	428	G	C8-N9-C1'	5.26	133.84	127.00
1	N	474	G	C4-C5-C6	5.26	121.96	118.80
1	N	853	C	N3-C4-N4	5.26	121.68	118.00
1	N	977	A	P-O5'-C5'	-5.26	112.48	120.90
1	N	305	G	C5-C6-O6	-5.26	125.44	128.60
1	N	423	G	OP2-P-O3'	5.26	116.77	105.20
1	N	635	A	O4'-C1'-N9	5.26	112.41	108.20
1	N	719	C	C5-C6-N1	5.26	123.63	121.00
1	N	1181	G	C2'-C3'-O3'	5.26	122.11	113.70
1	N	201	G	C3'-C2'-C1'	5.26	105.71	101.50
1	N	424	G	N3-C4-N9	5.26	129.16	126.00
1	N	1147	C	N1-C2-O2	-5.26	115.75	118.90
1	N	1406	U	C5-C4-O4	-5.26	122.75	125.90
1	N	50	A	N3-C4-C5	-5.26	123.12	126.80
1	N	588	G	N3-C4-C5	5.26	131.23	128.60
1	N	929	G	C4-C5-C6	5.26	121.95	118.80
1	N	1186	G	C4-C5-C6	5.26	121.95	118.80
1	N	1191	A	P-O3'-C3'	-5.26	113.39	119.70
1	N	1312	G	C5-C6-N1	-5.26	108.87	111.50
1	N	293	G	N3-C4-N9	5.25	129.15	126.00
1	N	457	G	C5-N7-C8	5.25	106.93	104.30
1	N	1043	G	P-O5'-C5'	5.25	129.31	120.90
1	N	85	U	C2-N3-C4	5.25	130.15	127.00
1	N	416	G	P-O5'-C5'	5.25	129.31	120.90
1	N	1055	A	C5-C6-N6	-5.25	119.50	123.70
1	N	1161	C	P-O5'-C5'	-5.25	112.49	120.90
1	N	1241	G	C6-N1-C2	5.25	128.25	125.10
1	N	1312	G	C2-N3-C4	-5.25	109.27	111.90
1	N	1391	U	C3'-C2'-C1'	5.25	105.70	101.50
1	N	1486	G	C5-C6-N1	-5.25	108.87	111.50
1	N	1515	G	C5-C6-N1	-5.25	108.87	111.50
1	N	98	A	C6-N1-C2	-5.25	115.45	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	167	A	C5'-C4'-O4'	5.25	115.40	109.10
1	N	179	A	N7-C8-N9	5.25	116.43	113.80
1	N	588	G	OP2-P-O3'	5.25	116.75	105.20
1	N	687	A	C8-N9-C1'	5.25	137.15	127.70
1	N	699	C	C2-N3-C4	5.25	122.53	119.90
1	N	730	G	C1'-O4'-C4'	5.25	114.10	109.90
1	N	1049	U	C6-N1-C2	-5.25	117.85	121.00
1	N	1363	A	N1-C2-N3	-5.25	126.67	129.30
1	N	372	C	C6-N1-C2	-5.25	118.20	120.30
1	N	1012	A	N9-C4-C5	-5.25	103.70	105.80
1	N	1156	G	C1'-O4'-C4'	-5.25	105.70	109.90
1	N	320	A	C4-C5-C6	5.25	119.62	117.00
1	N	696	A	C8-N9-C4	-5.25	103.70	105.80
1	N	984	C	N3-C4-N4	5.25	121.67	118.00
1	N	1016	A	C5-N7-C8	5.25	106.52	103.90
1	N	1396	A	P-O3'-C3'	5.25	126.00	119.70
1	N	915	A	P-O3'-C3'	-5.25	113.40	119.70
1	N	1102	A	C4-C5-N7	5.25	113.32	110.70
1	N	337	G	C6-C5-N7	-5.25	127.25	130.40
1	N	969	A	C5-C6-N6	-5.25	119.50	123.70
1	N	1180	A	N7-C8-N9	-5.25	111.18	113.80
1	N	1416	G	N9-C4-C5	5.25	107.50	105.40
1	N	957	U	N3-C2-O2	5.24	125.87	122.20
1	N	1259	C	C5-C6-N1	5.24	123.62	121.00
1	N	1516	G	N9-C4-C5	5.24	107.50	105.40
1	N	616	G	N3-C4-N9	5.24	129.15	126.00
1	N	825	A	C4'-C3'-C2'	-5.24	97.36	102.60
1	N	1310	G	C6-C5-N7	-5.24	127.25	130.40
1	N	105	G	C6-N1-C2	-5.24	121.96	125.10
1	N	303	A	N1-C2-N3	5.24	131.92	129.30
1	N	748	G	C1'-O4'-C4'	5.24	114.09	109.90
1	N	815	A	O5'-C5'-C4'	-5.24	101.74	111.70
1	N	855	U	P-O5'-C5'	-5.24	112.52	120.90
1	N	1093	A	C6-N1-C2	-5.24	115.46	118.60
1	N	1202	U	N3-C2-O2	5.24	125.87	122.20
1	N	312	C	P-O3'-C3'	-5.24	113.41	119.70
1	N	459	A	C4-C5-N7	-5.24	108.08	110.70
1	N	763	G	N3-C4-C5	5.24	131.22	128.60
1	N	992	U	C6-N1-C2	5.24	124.14	121.00
1	N	1309	G	P-O5'-C5'	-5.24	112.52	120.90
1	N	943	U	O4'-C1'-N1	5.24	112.39	108.20
1	N	270	A	N7-C8-N9	-5.24	111.18	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	903	G	N3-C4-N9	5.24	129.14	126.00
1	N	1070	U	C4-C5-C6	5.24	122.84	119.70
1	N	1149	C	C2'-C3'-O3'	5.24	122.08	113.70
1	N	1413	A	P-O3'-C3'	-5.24	113.42	119.70
1	N	1462	C	N3-C4-N4	5.24	121.67	118.00
1	N	22	G	C1'-O4'-C4'	5.23	114.09	109.90
1	N	219	U	N1-C2-N3	5.23	118.04	114.90
1	N	1057	G	C6-N1-C2	5.23	128.24	125.10
1	N	46	G	C8-N9-C1'	5.23	133.80	127.00
1	N	357	G	N9-C4-C5	-5.23	103.31	105.40
1	N	369	G	C5-N7-C8	5.23	106.92	104.30
1	N	398	U	C5'-C4'-C3'	-5.23	107.63	116.00
1	N	814	A	C5'-C4'-O4'	5.23	115.38	109.10
1	N	903	G	C2-N3-C4	5.23	114.52	111.90
1	N	1151	A	C4-C5-N7	-5.23	108.08	110.70
1	N	1183	U	P-O3'-C3'	-5.23	113.42	119.70
1	N	1316	G	P-O3'-C3'	5.23	125.98	119.70
1	N	1414	U	N1-C2-N3	5.23	118.04	114.90
1	N	38	G	C4-C5-C6	5.23	121.94	118.80
1	N	177	G	C2-N3-C4	5.23	114.52	111.90
1	N	262	A	C6-N1-C2	-5.23	115.46	118.60
1	N	278	G	P-O3'-C3'	5.23	125.98	119.70
1	N	302	G	C4-N9-C1'	-5.23	119.70	126.50
1	N	532	A	C4-N9-C1'	5.23	135.71	126.30
1	N	1118	U	C5'-C4'-C3'	5.23	124.37	116.00
1	N	103	U	P-O3'-C3'	-5.23	113.42	119.70
1	N	541	G	C6-C5-N7	-5.23	127.26	130.40
1	N	500	G	C4-C5-N7	5.23	112.89	110.80
1	N	609	A	C6-C5-N7	-5.23	128.64	132.30
1	N	805	C	C1'-O4'-C4'	5.23	114.08	109.90
1	N	1468	A	C5-N7-C8	5.23	106.51	103.90
1	N	356	A	C6-C5-N7	-5.23	128.64	132.30
1	N	606	G	P-O3'-C3'	5.23	125.97	119.70
1	N	862	C	C2-N3-C4	-5.23	117.29	119.90
1	N	930	C	C6-N1-C2	-5.23	118.21	120.30
1	N	1533	C	O4'-C1'-C2'	-5.23	100.57	105.80
1	N	254	G	C5-N7-C8	-5.22	101.69	104.30
1	N	325	A	C5-C6-N1	-5.22	115.09	117.70
1	N	648	A	C4'-C3'-C2'	-5.22	97.38	102.60
1	N	1003	G	N1-C2-N3	-5.22	120.77	123.90
1	N	1236	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	9	G	N1-C2-N2	-5.22	111.50	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	447	G	N9-C1'-C2'	-5.22	106.25	112.00
1	N	1388	C	C5-C4-N4	-5.22	116.54	120.20
1	N	119	A	C4-C5-C6	5.22	119.61	117.00
1	N	138	G	C5-N7-C8	-5.22	101.69	104.30
1	N	182	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	673	A	C5-C6-N1	-5.22	115.09	117.70
1	N	823	C	C4-C5-C6	-5.22	114.79	117.40
1	N	945	G	C5-N7-C8	-5.22	101.69	104.30
1	N	1180	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	14	U	N1-C2-O2	-5.22	119.15	122.80
1	N	87	C	C5-C4-N4	-5.22	116.55	120.20
1	N	447	G	N1-C2-N2	5.22	120.90	116.20
1	N	765	G	O4'-C1'-N9	5.22	112.38	108.20
1	N	894	G	C2-N3-C4	-5.22	109.29	111.90
1	N	1326	U	OP1-P-OP2	-5.22	111.77	119.60
1	N	1497	G	N3-C4-N9	-5.22	122.87	126.00
1	N	189	A	C5-N7-C8	5.22	106.51	103.90
1	N	193	C	O5'-C5'-C4'	-5.22	101.79	111.70
1	N	234	C	N3-C4-C5	-5.22	119.81	121.90
1	N	268	U	C2-N3-C4	-5.22	123.87	127.00
1	N	407	U	N1-C1'-C2'	-5.22	106.26	112.00
1	N	721	G	C5'-C4'-O4'	5.22	115.36	109.10
1	N	910	C	N3-C4-N4	5.22	121.65	118.00
1	N	1268	G	N7-C8-N9	-5.22	110.49	113.10
1	N	1282	C	C5'-C4'-O4'	-5.22	102.84	109.10
1	N	1364	U	C5-C4-O4	5.22	129.03	125.90
1	N	623	C	N3-C2-O2	-5.21	118.25	121.90
1	N	793	U	C4'-C3'-C2'	5.21	107.81	102.60
1	N	890	G	N7-C8-N9	5.21	115.71	113.10
1	N	1311	A	C1'-O4'-C4'	-5.21	105.73	109.90
1	N	842	U	C4'-C3'-C2'	-5.21	97.39	102.60
1	N	351	G	C4-N9-C1'	5.21	133.28	126.50
1	N	901	A	C2-N3-C4	-5.21	107.99	110.60
1	N	391	G	C8-N9-C4	5.21	108.48	106.40
1	N	581	G	C5-N7-C8	5.21	106.91	104.30
1	N	760	G	C4-N9-C1'	5.21	133.27	126.50
1	N	936	C	C5-C6-N1	5.21	123.61	121.00
1	N	1095	U	O4'-C4'-C3'	-5.21	98.79	104.00
1	N	1287	A	N9-C4-C5	5.21	107.88	105.80
1	N	350	G	C4-N9-C1'	-5.21	119.73	126.50
1	N	384	G	C4-C5-C6	5.21	121.92	118.80
1	N	481	G	O4'-C4'-C3'	-5.21	98.79	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1144	G	C5-C6-O6	-5.21	125.47	128.60
1	N	107	G	C5'-C4'-O4'	5.21	115.35	109.10
1	N	849	G	C4-C5-C6	5.21	121.92	118.80
1	N	921	U	C4'-C3'-C2'	-5.21	97.39	102.60
1	N	1012	A	C1'-O4'-C4'	-5.21	105.73	109.90
1	N	1141	C	C5-C6-N1	5.21	123.60	121.00
1	N	1292	G	N9-C4-C5	-5.21	103.32	105.40
1	N	1311	A	P-O5'-C5'	5.21	129.23	120.90
1	N	1356	G	N3-C2-N2	5.21	123.55	119.90
1	N	1425	U	N3-C2-O2	5.21	125.84	122.20
1	N	775	G	C5-N7-C8	-5.21	101.70	104.30
1	N	790	A	C4-C5-C6	5.21	119.60	117.00
1	N	832	G	N9-C1'-C2'	-5.21	106.28	112.00
1	N	875	U	N3-C4-C5	-5.21	111.48	114.60
1	N	1241	G	C4-C5-C6	5.21	121.92	118.80
1	N	1365	G	N7-C8-N9	-5.21	110.50	113.10
1	N	45	G	C8-N9-C1'	5.20	133.76	127.00
1	N	294	U	C3'-C2'-C1'	-5.20	97.34	101.50
1	N	348	G	N3-C4-N9	-5.20	122.88	126.00
1	N	628	G	C4-C5-C6	5.20	121.92	118.80
1	N	821	G	C5-N7-C8	5.20	106.90	104.30
1	N	1029	U	P-O3'-C3'	-5.20	113.46	119.70
1	N	1225	A	P-O5'-C5'	5.20	129.22	120.90
1	N	1427	C	C5-C6-N1	5.20	123.60	121.00
1	N	183	C	C1'-O4'-C4'	-5.20	105.74	109.90
1	N	370	C	N3-C2-O2	5.20	125.54	121.90
1	N	661	G	C5-C6-O6	-5.20	125.48	128.60
1	N	800	G	C8-N9-C4	5.20	108.48	106.40
1	N	1511	G	C5-C6-O6	-5.20	125.48	128.60
1	N	14	U	C5-C4-O4	-5.20	122.78	125.90
1	N	371	A	C2-N3-C4	-5.20	108.00	110.60
1	N	481	G	C5-N7-C8	5.20	106.90	104.30
1	N	652	U	C5'-C4'-C3'	-5.20	107.68	116.00
1	N	663	A	O4'-C1'-N9	5.20	112.36	108.20
1	N	769	G	N3-C4-N9	5.20	129.12	126.00
1	N	867	G	N3-C4-N9	-5.20	122.88	126.00
1	N	869	G	N1-C2-N3	-5.20	120.78	123.90
1	N	1372	U	C5-C6-N1	-5.20	120.10	122.70
1	N	1503	A	C5-N7-C8	5.20	106.50	103.90
1	N	36	C	C4'-C3'-C2'	-5.20	97.40	102.60
1	N	354	G	C5-N7-C8	5.20	106.90	104.30
1	N	435	A	O4'-C1'-N9	5.20	112.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	584	G	N1-C2-N3	-5.20	120.78	123.90
1	N	9	G	C3'-C2'-C1'	-5.19	97.34	101.50
1	N	134	G	O4'-C4'-C3'	-5.19	98.81	104.00
1	N	483	C	N3-C4-N4	5.19	121.64	118.00
1	N	631	C	N1-C2-N3	-5.19	115.56	119.20
1	N	115	G	N3-C2-N2	5.19	123.53	119.90
1	N	333	U	N3-C4-C5	-5.19	111.48	114.60
1	N	375	U	C5-C4-O4	5.19	129.02	125.90
1	N	492	C	C2-N3-C4	5.19	122.50	119.90
1	N	1081	A	C5-C6-N1	-5.19	115.10	117.70
1	N	1130	A	C2-N3-C4	-5.19	108.00	110.60
1	N	1276	G	O4'-C4'-C3'	-5.19	98.81	104.00
1	N	1365	G	N9-C1'-C2'	-5.19	106.29	112.00
1	N	377	G	C4-C5-C6	5.19	121.92	118.80
1	N	450	G	C5-C6-N1	-5.19	108.91	111.50
1	N	494	G	C5-N7-C8	5.19	106.90	104.30
1	N	816	A	C6-C5-N7	-5.19	128.67	132.30
1	N	847	G	C4'-C3'-C2'	-5.19	97.41	102.60
1	N	963	G	OP1-P-OP2	-5.19	111.81	119.60
1	N	1227	A	P-O5'-C5'	-5.19	112.60	120.90
1	N	162	A	N9-C4-C5	-5.19	103.72	105.80
1	N	502	A	O5'-C5'-C4'	-5.19	101.84	111.70
1	N	783	C	C5-C4-N4	-5.19	116.57	120.20
1	N	890	G	C4-C5-C6	5.19	121.91	118.80
1	N	1455	G	C6-C5-N7	-5.19	127.29	130.40
1	N	36	C	N3-C4-C5	-5.18	119.83	121.90
1	N	129	A	C5-N7-C8	5.18	106.49	103.90
1	N	290	C	O5'-C5'-C4'	-5.18	101.85	111.70
1	N	423	G	N9-C4-C5	-5.18	103.33	105.40
1	N	476	U	C6-N1-C2	-5.18	117.89	121.00
1	N	641	U	C3'-C2'-C1'	5.18	105.65	101.50
1	N	754	C	C4'-C3'-C2'	5.18	107.78	102.60
1	N	816	A	N7-C8-N9	-5.18	111.21	113.80
1	N	842	U	C3'-C2'-C1'	5.18	105.65	101.50
1	N	919	A	P-O5'-C5'	-5.18	112.61	120.90
1	N	950	U	O5'-C5'-C4'	-5.18	101.85	111.70
1	N	1125	U	C5'-C4'-C3'	-5.18	107.71	116.00
1	N	1269	A	C5'-C4'-C3'	5.18	124.29	116.00
1	N	103	U	N3-C2-O2	5.18	125.83	122.20
1	N	118	U	N1-C2-N3	5.18	118.01	114.90
1	N	310	G	C6-C5-N7	-5.18	127.29	130.40
1	N	343	U	C5-C4-O4	5.18	129.01	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	486	U	C2-N1-C1'	5.18	123.92	117.70
1	N	794	A	N1-C2-N3	5.18	131.89	129.30
1	N	889	A	C4-C5-N7	-5.18	108.11	110.70
1	N	1285	A	C5-C6-N6	-5.18	119.55	123.70
1	N	11	G	C6-C5-N7	5.18	133.51	130.40
1	N	997	U	C2-N3-C4	5.18	130.11	127.00
1	N	67	C	N3-C4-C5	-5.18	119.83	121.90
1	N	94	G	N3-C2-N2	-5.18	116.27	119.90
1	N	229	U	C4-C5-C6	5.18	122.81	119.70
1	N	534	U	C5'-C4'-C3'	-5.18	107.71	116.00
1	N	1318	A	N3-C4-C5	-5.18	123.17	126.80
1	N	1353	G	O4'-C1'-C2'	-5.18	100.62	105.80
1	N	1379	G	C5-N7-C8	-5.18	101.71	104.30
1	N	1417	G	O4'-C1'-C2'	-5.18	100.62	105.80
1	N	140	U	C4-C5-C6	5.18	122.81	119.70
1	N	289	G	C6-N1-C2	-5.18	121.99	125.10
1	N	739	C	C2-N1-C1'	5.18	124.50	118.80
1	N	447	G	C5-C6-N1	-5.18	108.91	111.50
1	N	621	A	C6-C5-N7	-5.18	128.68	132.30
1	N	781	A	C3'-C2'-C1'	5.18	105.64	101.50
1	N	72	A	C4'-C3'-C2'	-5.17	97.43	102.60
1	N	880	C	N1-C1'-C2'	-5.17	106.31	112.00
1	N	1039	G	N3-C2-N2	5.17	123.52	119.90
1	N	635	A	C5-C6-N1	-5.17	115.11	117.70
1	N	177	G	C4-C5-N7	5.17	112.87	110.80
1	N	403	C	P-O3'-C3'	-5.17	113.49	119.70
1	N	529	G	P-O3'-C3'	5.17	125.91	119.70
1	N	656	G	N9-C4-C5	5.17	107.47	105.40
1	N	784	A	C4'-C3'-C2'	-5.17	97.43	102.60
1	N	851	G	C6-C5-N7	-5.17	127.30	130.40
1	N	1268	G	C6-N1-C2	5.17	128.20	125.10
1	N	59	A	N1-C2-N3	5.17	131.88	129.30
1	N	570	G	O5'-P-OP1	-5.17	101.05	105.70
1	N	1172	C	C6-N1-C2	-5.17	118.23	120.30
1	N	1273	C	N3-C4-C5	-5.17	119.83	121.90
1	N	95	C	C5-C6-N1	5.17	123.58	121.00
1	N	130	A	C4'-C3'-C2'	-5.17	97.43	102.60
1	N	182	A	OP1-P-OP2	-5.17	111.85	119.60
1	N	353	A	C2-N3-C4	5.17	113.19	110.60
1	N	617	G	C3'-C2'-C1'	5.17	105.64	101.50
1	N	693	G	O4'-C1'-N9	5.17	112.33	108.20
1	N	1019	A	N9-C4-C5	-5.17	103.73	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1360	A	C5-N7-C8	5.17	106.48	103.90
1	N	498	A	C4'-C3'-C2'	5.17	107.77	102.60
1	N	906	A	N7-C8-N9	5.17	116.38	113.80
1	N	924	C	C2-N3-C4	5.17	122.48	119.90
1	N	1361	G	N7-C8-N9	5.17	115.68	113.10
1	N	535	A	C2'-C3'-O3'	5.17	121.96	113.70
1	N	1198	G	C8-N9-C4	5.17	108.47	106.40
1	N	430	A	C5-C6-N6	-5.16	119.57	123.70
1	N	583	A	C5'-C4'-O4'	5.16	115.30	109.10
1	N	652	U	C5-C6-N1	-5.16	120.12	122.70
1	N	669	G	C5-N7-C8	5.16	106.88	104.30
1	N	742	G	C5-C6-N1	-5.16	108.92	111.50
1	N	761	G	OP2-P-O3'	5.16	116.56	105.20
1	N	773	G	C4-C5-C6	5.16	121.90	118.80
1	N	1352	C	N1-C2-N3	-5.16	115.58	119.20
1	N	1449	C	C1'-O4'-C4'	-5.16	105.77	109.90
1	N	1519	A	N9-C1'-C2'	-5.16	106.32	112.00
1	N	1377	A	C8-N9-C1'	5.16	136.99	127.70
1	N	1390	U	C5-C4-O4	-5.16	122.80	125.90
1	N	1466	C	C2-N3-C4	5.16	122.48	119.90
1	N	1511	G	N1-C2-N2	5.16	120.85	116.20
1	N	31	G	N9-C4-C5	-5.16	103.34	105.40
1	N	258	G	N3-C2-N2	5.16	123.51	119.90
1	N	1100	C	O4'-C1'-N1	5.16	112.33	108.20
1	N	1234	C	C4'-C3'-C2'	-5.16	97.44	102.60
1	N	90	C	C4'-C3'-C2'	-5.16	97.44	102.60
1	N	149	A	N1-C2-N3	5.16	131.88	129.30
1	N	777	A	N9-C1'-C2'	-5.16	106.33	112.00
1	N	1386	G	C5'-C4'-C3'	5.16	124.25	116.00
1	N	1452	C	C5'-C4'-C3'	-5.16	107.75	116.00
1	N	567	G	N9-C4-C5	-5.16	103.34	105.40
1	N	660	C	C5-C4-N4	-5.16	116.59	120.20
1	N	1231	G	C5-C6-N1	-5.16	108.92	111.50
1	N	3	A	P-O3'-C3'	-5.16	113.51	119.70
1	N	79	G	P-O3'-C3'	5.16	125.89	119.70
1	N	159	G	C8-N9-C4	5.16	108.46	106.40
1	N	652	U	N3-C2-O2	-5.16	118.59	122.20
1	N	1309	G	OP2-P-O3'	5.16	116.54	105.20
1	N	78	A	N1-C2-N3	5.15	131.88	129.30
1	N	310	G	O5'-P-OP2	5.15	116.88	110.70
1	N	597	G	O4'-C4'-C3'	-5.15	98.85	104.00
1	N	994	A	N9-C4-C5	5.15	107.86	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	182	A	C4-C5-C6	-5.15	114.42	117.00
1	N	514	C	P-O3'-C3'	-5.15	113.52	119.70
1	N	543	U	N1-C2-N3	-5.15	111.81	114.90
1	N	733	G	C4-N9-C1'	5.15	133.20	126.50
1	N	777	A	C5-C6-N6	-5.15	119.58	123.70
1	N	853	C	N1-C2-O2	-5.15	115.81	118.90
1	N	1052	U	N1-C2-N3	-5.15	111.81	114.90
1	N	1092	A	O4'-C1'-C2'	-5.15	100.65	105.80
1	N	1292	G	N1-C2-N3	-5.15	120.81	123.90
1	N	1342	C	C2-N1-C1'	5.15	124.47	118.80
1	N	1350	A	P-O5'-C5'	5.15	129.14	120.90
1	N	275	G	C5-C6-N1	-5.15	108.92	111.50
1	N	578	C	C5-C4-N4	-5.15	116.59	120.20
1	N	668	G	N9-C1'-C2'	-5.15	106.33	112.00
1	N	999	C	O5'-C5'-C4'	-5.15	101.91	111.70
1	N	1187	G	C8-N9-C1'	-5.15	120.30	127.00
1	N	1213	A	C5-C6-N1	-5.15	115.12	117.70
1	N	532	A	C5-C6-N1	-5.15	115.12	117.70
1	N	36	C	O4'-C1'-N1	5.15	112.32	108.20
1	N	299	G	N1-C2-N3	-5.15	120.81	123.90
1	N	363	A	C4'-C3'-C2'	-5.15	97.45	102.60
1	N	665	A	N7-C8-N9	-5.15	111.23	113.80
1	N	926	G	C4-C5-N7	-5.15	108.74	110.80
1	N	1003	G	N3-C2-N2	5.15	123.50	119.90
1	N	1228	C	C5'-C4'-C3'	-5.15	107.77	116.00
1	N	633	G	C5-C6-N1	5.15	114.07	111.50
1	N	1303	C	C4-C5-C6	-5.15	114.83	117.40
1	N	42	G	C4-N9-C1'	-5.14	119.81	126.50
1	N	166	U	C5-C6-N1	5.14	125.27	122.70
1	N	296	U	C2-N3-C4	-5.14	123.91	127.00
1	N	648	A	O5'-C5'-C4'	-5.14	101.92	111.70
1	N	806	C	OP2-P-O3'	5.14	116.52	105.20
1	N	1267	C	N1-C2-O2	5.14	121.99	118.90
1	N	1458	G	N1-C2-N3	-5.14	120.81	123.90
1	N	1499	A	O4'-C1'-N9	5.14	112.31	108.20
1	N	331	G	N1-C2-N3	5.14	126.99	123.90
1	N	615	G	C3'-C2'-C1'	-5.14	97.39	101.50
1	N	675	A	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	968	A	C5-N7-C8	5.14	106.47	103.90
1	N	1340	A	C4-C5-C6	5.14	119.57	117.00
1	N	172	A	C4'-C3'-C2'	5.14	107.74	102.60
1	N	199	A	C5-C6-N6	-5.14	119.59	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	662	U	C5-C4-O4	-5.14	122.82	125.90
1	N	869	G	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	887	G	N3-C4-N9	-5.14	122.92	126.00
1	N	70	U	C5-C4-O4	-5.14	122.82	125.90
1	N	388	G	N3-C4-C5	-5.14	126.03	128.60
1	N	639	G	N3-C4-C5	-5.14	126.03	128.60
1	N	706	A	C5-C6-N1	-5.14	115.13	117.70
1	N	713	G	C3'-C2'-C1'	5.14	105.61	101.50
1	N	875	U	N3-C2-O2	5.14	125.80	122.20
1	N	1215	G	O4'-C1'-N9	5.14	112.31	108.20
1	N	1256	A	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	1258	G	N1-C2-N2	5.14	120.83	116.20
1	N	365	U	C4-C5-C6	5.14	122.78	119.70
1	N	531	U	C1'-O4'-C4'	-5.14	105.79	109.90
1	N	1185	G	C3'-C2'-C1'	-5.14	97.39	101.50
1	N	1240	U	OP1-P-OP2	-5.14	111.89	119.60
1	N	1441	A	N1-C2-N3	5.14	131.87	129.30
1	N	358	U	C6-N1-C2	5.14	124.08	121.00
1	N	458	U	O4'-C1'-N1	5.14	112.31	108.20
1	N	623	C	N1-C2-O2	5.14	121.98	118.90
1	N	1137	C	N3-C2-O2	-5.14	118.30	121.90
1	N	1321	U	C3'-C2'-C1'	5.14	105.61	101.50
1	N	1521	C	N1-C2-O2	5.14	121.98	118.90
1	N	87	C	P-O5'-C5'	-5.13	112.69	120.90
1	N	124	C	N1-C2-N3	5.13	122.79	119.20
1	N	186	C	O4'-C1'-N1	5.13	112.31	108.20
1	N	378	G	C4'-C3'-C2'	-5.13	97.47	102.60
1	N	434	U	C5-C4-O4	-5.13	122.82	125.90
1	N	651	C	C5-C6-N1	5.13	123.57	121.00
1	N	850	U	C4-C5-C6	5.13	122.78	119.70
1	N	861	G	OP2-P-O3'	5.13	116.50	105.20
1	N	1174	G	C5-N7-C8	5.13	106.87	104.30
1	N	1241	G	P-O3'-C3'	-5.13	113.54	119.70
1	N	1306	A	C4-C5-N7	5.13	113.27	110.70
1	N	684	U	C2-N1-C1'	5.13	123.86	117.70
1	N	759	A	N1-C2-N3	5.13	131.87	129.30
1	N	771	G	O4'-C1'-N9	5.13	112.31	108.20
1	N	879	C	C5-C6-N1	5.13	123.57	121.00
1	N	927	G	C4-C5-C6	-5.13	115.72	118.80
1	N	1293	C	C6-N1-C2	-5.13	118.25	120.30
1	N	76	G	N1-C2-N3	-5.13	120.82	123.90
1	N	1526	G	O4'-C1'-N9	5.13	112.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	112	G	C4-C5-N7	5.13	112.85	110.80
1	N	191	G	N3-C4-N9	5.13	129.08	126.00
1	N	212	G	N9-C1'-C2'	5.13	120.67	114.00
1	N	393	A	P-O3'-C3'	-5.13	113.55	119.70
1	N	454	G	OP1-P-OP2	-5.13	111.91	119.60
1	N	509	A	C2-N3-C4	-5.13	108.04	110.60
1	N	614	C	P-O5'-C5'	-5.13	112.69	120.90
1	N	637	C	N1-C2-O2	5.13	121.98	118.90
1	N	771	G	O5'-C5'-C4'	-5.13	101.95	111.70
1	N	837	U	N1-C2-N3	5.13	117.98	114.90
1	N	955	U	N3-C4-C5	-5.13	111.52	114.60
1	N	1061	G	N7-C8-N9	5.13	115.66	113.10
1	N	1145	A	C5'-C4'-C3'	5.13	124.21	116.00
1	N	87	C	C3'-C2'-C1'	5.13	105.60	101.50
1	N	1374	A	O3'-P-O5'	-5.13	94.26	104.00
1	N	1386	G	C6-C5-N7	-5.13	127.32	130.40
1	N	1459	G	N1-C2-N3	-5.12	120.83	123.90
1	N	43	C	P-O5'-C5'	5.12	129.10	120.90
1	N	306	A	C6-C5-N7	-5.12	128.71	132.30
1	N	317	U	C5'-C4'-C3'	-5.12	107.80	116.00
1	N	413	G	C5'-C4'-O4'	5.12	115.25	109.10
1	N	554	A	C5-C6-N6	-5.12	119.60	123.70
1	N	628	G	C3'-C2'-C1'	5.12	105.60	101.50
1	N	904	U	N1-C2-O2	-5.12	119.21	122.80
1	N	1030	U	C6-N1-C1'	-5.12	114.03	121.20
1	N	1250	A	P-O5'-C5'	5.12	129.10	120.90
1	N	1372	U	C4'-C3'-C2'	-5.12	97.48	102.60
1	N	63	C	C5-C4-N4	-5.12	116.61	120.20
1	N	98	A	C5-N7-C8	5.12	106.46	103.90
1	N	127	G	N3-C2-N2	5.12	123.48	119.90
1	N	573	A	C6-C5-N7	-5.12	128.72	132.30
1	N	740	U	C1'-O4'-C4'	5.12	114.00	109.90
1	N	1329	A	O4'-C1'-N9	5.12	112.30	108.20
1	N	775	G	N3-C2-N2	5.12	123.48	119.90
1	N	1482	G	N1-C2-N3	-5.12	120.83	123.90
1	N	414	A	C4'-C3'-C2'	-5.12	97.48	102.60
1	N	829	G	N3-C2-N2	5.12	123.48	119.90
1	N	1367	C	C4'-C3'-C2'	-5.12	97.48	102.60
1	N	7	A	N3-C4-C5	-5.12	123.22	126.80
1	N	75	G	C5-C6-N1	-5.12	108.94	111.50
1	N	914	A	C8-N9-C4	-5.12	103.75	105.80
1	N	133	U	C5'-C4'-O4'	5.12	115.24	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	395	C	P-O5'-C5'	5.12	129.09	120.90
1	N	840	C	C4-C5-C6	5.12	119.96	117.40
1	N	1021	A	C5-N7-C8	5.12	106.46	103.90
1	N	1109	C	C2-N1-C1'	5.12	124.43	118.80
1	N	1352	C	O5'-P-OP2	-5.12	101.09	105.70
1	N	1419	G	C4'-C3'-C2'	-5.12	97.48	102.60
1	N	41	G	N3-C2-N2	-5.11	116.32	119.90
1	N	52	C	N3-C4-C5	-5.11	119.85	121.90
1	N	261	U	C4'-C3'-C2'	5.11	107.71	102.60
1	N	735	C	C3'-C2'-C1'	-5.11	97.41	101.50
1	N	758	C	C6-N1-C2	-5.11	118.25	120.30
1	N	831	A	C2-N3-C4	-5.11	108.04	110.60
1	N	1015	G	C8-N9-C1'	-5.11	120.35	127.00
1	N	1058	G	P-O5'-C5'	5.11	129.08	120.90
1	N	1150	A	P-O5'-C5'	5.11	129.08	120.90
1	N	1300	G	C4'-C3'-C2'	-5.11	97.49	102.60
1	N	1525	G	N7-C8-N9	-5.11	110.54	113.10
1	N	453	G	N1-C6-O6	5.11	122.97	119.90
1	N	631	C	N3-C2-O2	5.11	125.48	121.90
1	N	949	A	O5'-C5'-C4'	-5.11	101.99	111.70
1	N	1482	G	N3-C4-N9	5.11	129.07	126.00
1	N	72	A	N1-C2-N3	5.11	131.85	129.30
1	N	110	C	C5-C6-N1	5.11	123.56	121.00
1	N	201	G	C6-C5-N7	-5.11	127.33	130.40
1	N	236	A	C2-N3-C4	-5.11	108.05	110.60
1	N	312	C	C6-N1-C2	5.11	122.34	120.30
1	N	762	U	C2-N3-C4	-5.11	123.93	127.00
1	N	789	U	O4'-C4'-C3'	-5.11	98.89	104.00
1	N	856	C	C1'-O4'-C4'	5.11	113.99	109.90
1	N	1221	G	C5'-C4'-O4'	5.11	115.23	109.10
1	N	1301	U	P-O3'-C3'	-5.11	113.57	119.70
1	N	725	G	C5-N7-C8	-5.11	101.75	104.30
1	N	348	G	C6-C5-N7	-5.11	127.34	130.40
1	N	424	G	C5'-C4'-O4'	5.11	115.23	109.10
1	N	572	A	C4-N9-C1'	5.11	135.49	126.30
1	N	1120	C	P-O3'-C3'	-5.11	113.57	119.70
1	N	69	G	C4-C5-C6	5.11	121.86	118.80
1	N	401	C	C3'-C2'-C1'	-5.11	97.42	101.50
1	N	1426	G	O4'-C1'-C2'	-5.11	100.69	105.80
1	N	551	U	C5-C6-N1	5.10	125.25	122.70
1	N	139	A	N9-C4-C5	5.10	107.84	105.80
1	N	366	A	C4-C5-C6	5.10	119.55	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	605	U	N3-C4-O4	5.10	122.97	119.40
1	N	615	G	C2-N3-C4	5.10	114.45	111.90
1	N	715	A	O4'-C1'-N9	5.10	112.28	108.20
1	N	829	G	C4'-C3'-C2'	-5.10	97.50	102.60
1	N	1243	C	C5-C4-N4	-5.10	116.63	120.20
1	N	1370	G	N3-C4-C5	5.10	131.15	128.60
1	N	1518	A	C5-N7-C8	5.10	106.45	103.90
1	N	629	A	C4-C5-C6	5.10	119.55	117.00
1	N	1153	G	C5'-C4'-O4'	-5.10	102.98	109.10
1	N	1184	G	C6-N1-C2	5.10	128.16	125.10
1	N	50	A	N9-C1'-C2'	5.10	120.63	114.00
1	N	82	G	O4'-C1'-N9	5.10	112.28	108.20
1	N	441	A	N3-C4-N9	5.10	131.48	127.40
1	N	751	U	N3-C2-O2	5.10	125.77	122.20
1	N	1087	G	P-O5'-C5'	5.10	129.05	120.90
1	N	363	A	C5-C6-N6	-5.09	119.62	123.70
1	N	402	G	P-O3'-C3'	5.09	125.81	119.70
1	N	928	G	N9-C4-C5	-5.09	103.36	105.40
1	N	951	G	C6-C5-N7	-5.09	127.34	130.40
1	N	1179	A	P-O5'-C5'	-5.09	112.75	120.90
1	N	156	C	P-O5'-C5'	-5.09	112.75	120.90
1	N	635	A	C5'-C4'-O4'	5.09	115.21	109.10
1	N	1372	U	C6-N1-C2	5.09	124.06	121.00
1	N	708	C	C6-N1-C2	5.09	122.34	120.30
1	N	947	G	C4-C5-C6	5.09	121.86	118.80
1	N	1127	G	O4'-C1'-N9	5.09	112.27	108.20
1	N	211	G	C5-C6-N1	-5.09	108.95	111.50
1	N	446	G	N1-C2-N2	5.09	120.78	116.20
1	N	968	A	C6-C5-N7	-5.09	128.74	132.30
1	N	1502	A	C8-N9-C4	-5.09	103.76	105.80
1	N	1505	G	N7-C8-N9	5.09	115.64	113.10
1	N	850	U	C6-N1-C2	-5.09	117.95	121.00
1	N	1216	A	C2-N3-C4	-5.09	108.06	110.60
1	N	1322	C	C6-N1-C1'	-5.09	114.69	120.80
1	N	48	C	N3-C4-N4	5.09	121.56	118.00
1	N	191	G	C5-N7-C8	5.09	106.84	104.30
1	N	243	A	C5-C6-N1	-5.09	115.16	117.70
1	N	286	C	C5'-C4'-O4'	5.09	115.20	109.10
1	N	388	G	N7-C8-N9	5.09	115.64	113.10
1	N	548	G	C4-C5-C6	5.09	121.85	118.80
1	N	566	G	C2-N3-C4	5.09	114.44	111.90
1	N	864	A	OP1-P-OP2	-5.09	111.97	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	204	G	C6-N1-C2	5.08	128.15	125.10
1	N	894	G	C5-N7-C8	-5.08	101.76	104.30
1	N	1470	U	N1-C2-N3	-5.08	111.85	114.90
1	N	116	A	C4-C5-N7	5.08	113.24	110.70
1	N	527	G	O4'-C1'-N9	5.08	112.27	108.20
1	N	168	G	N3-C4-N9	-5.08	122.95	126.00
1	N	344	A	C6-N1-C2	5.08	121.65	118.60
1	N	1099	G	C3'-C2'-C1'	-5.08	97.43	101.50
1	N	1245	C	C5-C6-N1	5.08	123.54	121.00
1	N	1431	A	O4'-C4'-C3'	5.08	110.16	106.10
1	N	116	A	O4'-C1'-N9	5.08	112.26	108.20
1	N	408	A	O4'-C1'-N9	5.08	112.26	108.20
1	N	570	G	C8-N9-C1'	-5.08	120.40	127.00
1	N	783	C	C3'-C2'-C1'	-5.08	97.44	101.50
1	N	1277	C	C4'-C3'-C2'	-5.08	97.52	102.60
1	N	1447	A	O4'-C1'-N9	5.08	112.26	108.20
1	N	543	U	C2-N1-C1'	5.08	123.79	117.70
1	N	619	U	P-O5'-C5'	5.08	129.03	120.90
1	N	767	A	C4-C5-C6	5.08	119.54	117.00
1	N	1076	U	N3-C4-O4	5.08	122.95	119.40
1	N	1084	G	C8-N9-C1'	5.08	133.60	127.00
1	N	1281	C	C2-N1-C1'	5.08	124.39	118.80
1	N	66	A	C4-C5-N7	5.08	113.24	110.70
1	N	152	A	C1'-O4'-C4'	5.08	113.96	109.90
1	N	422	C	O3'-P-O5'	-5.08	94.35	104.00
1	N	698	G	C5-C6-N1	5.08	114.04	111.50
1	N	864	A	C8-N9-C4	-5.08	103.77	105.80
1	N	1000	A	C4'-C3'-C2'	-5.08	97.52	102.60
1	N	1163	A	C5-C6-N1	-5.08	115.16	117.70
1	N	1372	U	N3-C2-O2	5.08	125.75	122.20
1	N	78	A	C5-C6-N1	-5.08	115.16	117.70
1	N	455	G	C6-C5-N7	-5.08	127.35	130.40
1	N	637	C	C5'-C4'-O4'	5.08	115.19	109.10
1	N	1049	U	C4-C5-C6	5.08	122.75	119.70
1	N	1243	C	C6-N1-C2	-5.08	118.27	120.30
1	N	907	A	C5-C6-N6	-5.07	119.64	123.70
1	N	1137	C	O4'-C1'-N1	5.07	112.26	108.20
1	N	1386	G	N1-C2-N3	-5.07	120.86	123.90
1	N	752	G	O4'-C1'-C2'	5.07	112.17	107.60
1	N	792	A	C5'-C4'-C3'	-5.07	107.89	116.00
1	N	811	C	N3-C4-N4	5.07	121.55	118.00
1	N	95	C	C6-N1-C2	-5.07	118.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	383	A	C4-C5-C6	5.07	119.53	117.00
1	N	550	G	C5-N7-C8	5.07	106.84	104.30
1	N	674	G	N7-C8-N9	-5.07	110.56	113.10
1	N	927	G	C3'-C2'-C1'	5.07	105.56	101.50
1	N	1231	G	P-O3'-C3'	5.07	125.78	119.70
1	N	1276	G	N1-C2-N2	-5.07	111.64	116.20
1	N	823	C	P-O3'-C3'	5.07	125.78	119.70
1	N	149	A	C5-C6-N1	-5.07	115.17	117.70
1	N	213	G	C6-C5-N7	-5.07	127.36	130.40
1	N	261	U	C4-C5-C6	5.07	122.74	119.70
1	N	393	A	C4-C5-N7	5.07	113.23	110.70
1	N	584	G	C5'-C4'-O4'	5.07	115.18	109.10
1	N	627	G	N1-C2-N3	-5.07	120.86	123.90
1	N	657	U	C2-N1-C1'	-5.07	111.62	117.70
1	N	666	G	O4'-C1'-N9	5.07	112.25	108.20
1	N	1199	U	C5'-C4'-C3'	5.07	124.11	116.00
1	N	1215	G	C4-C5-C6	5.07	121.84	118.80
1	N	1303	C	N1-C2-N3	-5.07	115.65	119.20
1	N	176	C	P-O5'-C5'	5.07	129.00	120.90
1	N	235	C	OP1-P-O3'	5.07	116.35	105.20
1	N	691	G	P-O5'-C5'	5.07	129.00	120.90
1	N	1103	C	C4-C5-C6	5.07	119.93	117.40
1	N	1266	G	N1-C2-N3	-5.07	120.86	123.90
1	N	1276	G	C1'-O4'-C4'	5.07	113.95	109.90
1	N	1283	U	C5'-C4'-O4'	-5.07	103.02	109.10
1	N	311	C	C6-N1-C2	5.06	122.33	120.30
1	N	340	U	C2-N3-C4	-5.06	123.96	127.00
1	N	1334	G	C4-C5-C6	5.06	121.84	118.80
1	N	1379	G	O4'-C1'-N9	5.06	112.25	108.20
1	N	175	C	C5-C4-N4	-5.06	116.66	120.20
1	N	352	C	C6-N1-C2	-5.06	118.28	120.30
1	N	578	C	C4-C5-C6	-5.06	114.87	117.40
1	N	609	A	N1-C2-N3	5.06	131.83	129.30
1	N	1200	C	N1-C2-O2	-5.06	115.86	118.90
1	N	1336	C	N3-C2-O2	5.06	125.44	121.90
1	N	204	G	O4'-C4'-C3'	-5.06	98.94	104.00
1	N	558	G	C8-N9-C4	-5.06	104.38	106.40
1	N	968	A	O4'-C1'-C2'	-5.06	100.74	105.80
1	N	1314	C	C5-C6-N1	5.06	123.53	121.00
1	N	24	U	C3'-C2'-C1'	5.06	105.55	101.50
1	N	370	C	C4-C5-C6	5.06	119.93	117.40
1	N	490	C	C4-C5-C6	5.06	119.93	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	634	C	N3-C4-N4	5.06	121.54	118.00
1	N	57	G	C4'-C3'-C2'	-5.06	97.54	102.60
1	N	230	G	C8-N9-C4	-5.06	104.38	106.40
1	N	428	G	C2-N3-C4	5.06	114.43	111.90
1	N	572	A	C5-N7-C8	5.06	106.43	103.90
1	N	682	G	C6-C5-N7	-5.06	127.36	130.40
1	N	702	A	C5-C6-N6	-5.06	119.65	123.70
1	N	829	G	C6-C5-N7	-5.06	127.36	130.40
1	N	971	G	O4'-C1'-N9	5.06	112.25	108.20
1	N	1319	A	C6-N1-C2	5.06	121.63	118.60
1	N	1418	A	C8-N9-C4	-5.06	103.78	105.80
1	N	404	G	C6-C5-N7	-5.06	127.37	130.40
1	N	1431	A	P-O5'-C5'	5.06	128.99	120.90
1	N	31	G	C5'-C4'-C3'	5.05	124.09	116.00
1	N	98	A	N9-C4-C5	5.05	107.82	105.80
1	N	104	G	N1-C6-O6	5.05	122.93	119.90
1	N	121	U	N1-C1'-C2'	-5.05	106.44	112.00
1	N	138	G	O4'-C4'-C3'	-5.05	98.94	104.00
1	N	204	G	C3'-C2'-C1'	-5.05	97.46	101.50
1	N	204	G	O5'-C5'-C4'	-5.05	102.09	111.70
1	N	773	G	C6-N1-C2	5.05	128.13	125.10
1	N	830	G	N7-C8-N9	-5.05	110.57	113.10
1	N	958	A	O4'-C1'-N9	5.05	112.24	108.20
1	N	498	A	N3-C4-C5	-5.05	123.26	126.80
1	N	789	U	N1-C2-O2	-5.05	119.26	122.80
1	N	838	G	N3-C2-N2	5.05	123.44	119.90
1	N	993	G	C3'-C2'-C1'	5.05	105.54	101.50
1	N	1403	C	N3-C4-N4	5.05	121.54	118.00
1	N	271	C	C6-N1-C1'	-5.05	114.74	120.80
1	N	765	G	N3-C4-N9	5.05	129.03	126.00
1	N	833	G	C1'-O4'-C4'	5.05	113.94	109.90
1	N	851	G	N1-C6-O6	5.05	122.93	119.90
1	N	248	C	C3'-C2'-C1'	-5.05	97.46	101.50
1	N	573	A	N9-C4-C5	-5.05	103.78	105.80
1	N	693	G	C3'-C2'-C1'	5.05	105.54	101.50
1	N	808	C	N3-C4-C5	-5.05	119.88	121.90
1	N	1360	A	C5'-C4'-O4'	5.05	115.16	109.10
1	N	1424	U	N1-C2-N3	-5.05	111.87	114.90
1	N	828	U	N1-C2-N3	5.05	117.93	114.90
1	N	97	G	C5-C6-N1	-5.05	108.98	111.50
1	N	137	U	O4'-C1'-C2'	-5.05	100.75	105.80
1	N	226	G	C5'-C4'-C3'	-5.05	107.92	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	288	A	C3'-C2'-C1'	-5.05	97.46	101.50
1	N	295	C	C5-C4-N4	-5.05	116.67	120.20
1	N	573	A	C1'-O4'-C4'	5.05	113.94	109.90
1	N	1447	A	C1'-O4'-C4'	5.05	113.94	109.90
1	N	1513	A	P-O3'-C3'	-5.05	113.64	119.70
1	N	119	A	N7-C8-N9	-5.04	111.28	113.80
1	N	562	U	N3-C2-O2	5.04	125.73	122.20
1	N	823	C	N1-C2-O2	5.04	121.93	118.90
1	N	1129	C	P-O3'-C3'	5.04	125.75	119.70
1	N	1185	G	C4'-C3'-C2'	-5.04	97.56	102.60
1	N	131	A	C4-N9-C1'	-5.04	117.22	126.30
1	N	142	G	N9-C4-C5	5.04	107.42	105.40
1	N	151	A	C3'-C2'-C1'	-5.04	97.47	101.50
1	N	328	C	P-O3'-C3'	-5.04	113.65	119.70
1	N	477	C	C4'-C3'-C2'	-5.04	97.56	102.60
1	N	746	A	N1-C6-N6	5.04	121.63	118.60
1	N	330	C	C2-N3-C4	5.04	122.42	119.90
1	N	484	G	N1-C2-N2	5.04	120.74	116.20
1	N	729	A	C4-C5-C6	5.04	119.52	117.00
1	N	826	C	O4'-C1'-N1	5.04	112.23	108.20
1	N	1146	A	N3-C4-C5	-5.04	123.27	126.80
1	N	1254	A	C5'-C4'-O4'	5.04	115.15	109.10
1	N	527	G	C4-C5-N7	-5.04	108.78	110.80
1	N	1146	A	C8-N9-C4	-5.04	103.78	105.80
1	N	792	A	N3-C4-N9	5.04	131.43	127.40
1	N	823	C	OP2-P-O3'	5.04	116.29	105.20
1	N	863	U	C5'-C4'-C3'	-5.04	107.94	116.00
1	N	1039	G	P-O3'-C3'	5.04	125.75	119.70
1	N	1100	C	N1-C2-O2	5.04	121.92	118.90
1	N	1359	C	C2-N3-C4	5.04	122.42	119.90
1	N	1493	A	C2-N3-C4	-5.04	108.08	110.60
1	N	319	G	C5-C6-N1	-5.04	108.98	111.50
1	N	332	G	OP1-P-O3'	5.04	116.28	105.20
1	N	396	C	C2-N1-C1'	-5.04	113.26	118.80
1	N	682	G	P-O3'-C3'	5.04	125.75	119.70
1	N	1008	U	N3-C4-O4	5.04	122.93	119.40
1	N	442	G	C6-C5-N7	-5.04	127.38	130.40
1	N	732	C	C5-C4-N4	-5.04	116.68	120.20
1	N	1055	A	C5'-C4'-O4'	-5.04	103.06	109.10
1	N	1185	G	N3-C2-N2	-5.04	116.37	119.90
1	N	81	A	P-O3'-C3'	-5.03	113.66	119.70
1	N	394	G	C4-C5-N7	5.03	112.81	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	657	U	C4'-C3'-C2'	-5.03	97.57	102.60
1	N	838	G	N7-C8-N9	5.03	115.62	113.10
1	N	1388	C	N3-C4-N4	5.03	121.52	118.00
1	N	1480	A	N3-C4-C5	-5.03	123.28	126.80
1	N	1498	U	N3-C2-O2	5.03	125.72	122.20
1	N	738	C	C6-N1-C2	-5.03	118.29	120.30
1	N	891	U	C2-N1-C1'	-5.03	111.66	117.70
1	N	942	G	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	283	U	N1-C2-O2	-5.03	119.28	122.80
1	N	418	C	C5-C6-N1	5.03	123.52	121.00
1	N	756	C	N1-C2-O2	-5.03	115.88	118.90
1	N	923	A	N3-C4-C5	-5.03	123.28	126.80
1	N	1021	A	C4-C5-N7	-5.03	108.19	110.70
1	N	1169	A	C4'-C3'-C2'	-5.03	97.57	102.60
1	N	1451	U	C4-C5-C6	5.03	122.72	119.70
1	N	93	U	C1'-O4'-C4'	5.03	113.92	109.90
1	N	173	U	C3'-C2'-C1'	5.03	105.52	101.50
1	N	896	C	O3'-P-O5'	5.03	113.56	104.00
1	N	161	A	C8-N9-C4	-5.03	103.79	105.80
1	N	218	U	C5-C4-O4	-5.03	122.88	125.90
1	N	353	A	C8-N9-C4	5.03	107.81	105.80
1	N	804	U	C4'-C3'-C2'	-5.03	97.57	102.60
1	N	1066	C	C5-C4-N4	-5.03	116.68	120.20
1	N	1345	U	N3-C2-O2	5.03	125.72	122.20
1	N	1507	A	N9-C4-C5	5.03	107.81	105.80
1	N	1044	A	C5'-C4'-O4'	5.03	115.13	109.10
1	N	1119	C	C5'-C4'-O4'	5.03	115.13	109.10
1	N	297	G	N9-C4-C5	5.02	107.41	105.40
1	N	832	G	P-O5'-C5'	-5.02	112.86	120.90
1	N	166	U	N3-C4-C5	-5.02	111.59	114.60
1	N	189	A	C4-C5-C6	5.02	119.51	117.00
1	N	559	A	C6-N1-C2	5.02	121.61	118.60
1	N	563	A	N3-C4-C5	-5.02	123.28	126.80
1	N	644	U	C4-C5-C6	-5.02	116.69	119.70
1	N	717	U	O3'-P-O5'	-5.02	94.46	104.00
1	N	1117	A	C3'-C2'-C1'	5.02	105.52	101.50
1	N	1405	G	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	1503	A	N1-C2-N3	5.02	131.81	129.30
1	N	181	A	C5'-C4'-C3'	5.02	124.03	116.00
1	N	424	G	N3-C2-N2	5.02	123.42	119.90
1	N	1530	G	O5'-C5'-C4'	5.02	121.24	111.70
1	N	320	A	C5-C6-N1	-5.02	115.19	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	578	C	N3-C4-N4	5.02	121.51	118.00
1	N	650	G	N3-C4-N9	5.02	129.01	126.00
1	N	913	A	C6-N1-C2	5.02	121.61	118.60
1	N	26	A	C6-N1-C2	-5.02	115.59	118.60
1	N	246	A	C6-C5-N7	-5.02	128.79	132.30
1	N	723	U	N3-C4-C5	5.02	117.61	114.60
1	N	900	A	C6-N1-C2	5.02	121.61	118.60
1	N	1460	C	O4'-C1'-N1	5.02	112.21	108.20
1	N	85	U	C6-N1-C2	-5.02	117.99	121.00
1	N	158	G	N1-C2-N2	5.02	120.71	116.20
1	N	997	U	P-O3'-C3'	5.02	125.72	119.70
1	N	1052	U	N1-C2-O2	5.02	126.31	122.80
1	N	1532	U	C6-N1-C1'	-5.02	114.18	121.20
1	N	458	U	C5'-C4'-C3'	-5.01	107.97	116.00
1	N	694	A	C4'-C3'-C2'	-5.01	97.59	102.60
1	N	768	A	P-O5'-C5'	5.01	128.92	120.90
1	N	779	C	C6-N1-C2	-5.01	118.29	120.30
1	N	787	A	C8-N9-C4	-5.01	103.79	105.80
1	N	754	C	C6-N1-C2	5.01	122.31	120.30
1	N	836	G	N9-C4-C5	-5.01	103.39	105.40
1	N	852	G	N3-C4-N9	-5.01	122.99	126.00
1	N	996	A	N3-C4-N9	5.01	131.41	127.40
1	N	1074	G	C8-N9-C1'	-5.01	120.48	127.00
1	N	66	A	C1'-O4'-C4'	5.01	113.91	109.90
1	N	175	C	O5'-P-OP1	-5.01	101.19	105.70
1	N	489	C	OP2-P-O3'	5.01	116.22	105.20
1	N	505	G	N7-C8-N9	5.01	115.61	113.10
1	N	654	G	N9-C4-C5	-5.01	103.39	105.40
1	N	722	G	N1-C2-N2	5.01	120.71	116.20
1	N	795	C	N3-C4-C5	5.01	123.90	121.90
1	N	1077	G	O4'-C1'-N9	5.01	112.21	108.20
1	N	1112	C	OP1-P-OP2	-5.01	112.08	119.60
1	N	1361	G	N3-C4-N9	5.01	129.01	126.00
1	N	13	U	P-O3'-C3'	5.01	125.71	119.70
1	N	45	G	C5'-C4'-C3'	5.01	124.02	116.00
1	N	88	U	OP1-P-OP2	-5.01	112.09	119.60
1	N	640	A	O4'-C1'-N9	5.01	112.21	108.20
1	N	1312	G	N1-C2-N3	-5.01	120.89	123.90
1	N	1505	G	C6-N1-C2	-5.01	122.09	125.10
1	N	3	A	O4'-C4'-C3'	-5.01	98.99	104.00
1	N	138	G	P-O3'-C3'	-5.01	113.69	119.70
1	N	738	C	C5'-C4'-C3'	5.01	124.01	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	854	U	C5-C4-O4	-5.01	122.90	125.90
1	N	956	U	N1-C2-O2	-5.01	119.30	122.80
1	N	1396	A	N1-C6-N6	5.01	121.60	118.60
1	N	1449	C	N3-C2-O2	5.01	125.41	121.90
1	N	358	U	O5'-C5'-C4'	-5.00	102.19	111.70
1	N	1142	G	C3'-C2'-C1'	-5.00	97.50	101.50
1	N	1504	G	C5-C6-N1	5.00	114.00	111.50
1	N	38	G	P-O5'-C5'	-5.00	112.89	120.90
1	N	51	A	N9-C1'-C2'	-5.00	106.50	112.00
1	N	268	U	N3-C2-O2	5.00	125.70	122.20
1	N	492	C	C6-N1-C1'	-5.00	114.80	120.80
1	N	551	U	OP1-P-OP2	-5.00	112.09	119.60
1	N	678	U	N3-C4-O4	5.00	122.90	119.40
1	N	864	A	C3'-C2'-C1'	5.00	105.50	101.50
1	N	903	G	C5'-C4'-O4'	5.00	115.10	109.10
1	N	1025	U	P-O3'-C3'	5.00	125.70	119.70
1	N	1173	U	O4'-C1'-N1	5.00	112.20	108.20
1	N	1204	A	C2-N3-C4	-5.00	108.10	110.60
1	N	1474	U	P-O5'-C5'	5.00	128.91	120.90
1	N	65	A	N3-C4-N9	5.00	131.40	127.40
1	N	150	U	N1-C2-N3	-5.00	111.90	114.90
1	N	403	C	C2-N3-C4	5.00	122.40	119.90
1	N	839	C	N1-C2-N3	-5.00	115.70	119.20
1	N	1015	G	C5-C6-O6	-5.00	125.60	128.60
1	N	1153	G	N9-C1'-C2'	-5.00	106.50	112.00
1	N	1313	U	O5'-C5'-C4'	-5.00	102.20	111.70
1	N	1318	A	C4-C5-N7	-5.00	108.20	110.70
1	N	1373	G	C6-C5-N7	-5.00	127.40	130.40
1	N	1467	C	P-O5'-C5'	5.00	128.90	120.90

There are no chirality outliers.

All (948) 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	1001	C	Sidechain
1	N	1002	G	Sidechain
1	N	1003	G	Sidechain
1	N	1004	A	Sidechain
1	N	1006	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1007	U	Sidechain
1	N	1009	U	Sidechain
1	N	101	A	Sidechain
1	N	1010	U	Sidechain
1	N	1011	C	Sidechain
1	N	1012	A	Sidechain
1	N	102	G	Sidechain
1	N	1020	G	Sidechain
1	N	1023	U	Sidechain
1	N	1024	G	Sidechain
1	N	1027	C	Sidechain
1	N	103	U	Sidechain
1	N	1030	U	Sidechain
1	N	1031	C	Sidechain
1	N	1035	A	Sidechain
1	N	1037	C	Sidechain
1	N	1038	C	Sidechain
1	N	1039	G	Sidechain
1	N	104	G	Sidechain
1	N	1041	G	Sidechain
1	N	1043	G	Sidechain
1	N	1045	C	Sidechain
1	N	1047	G	Sidechain
1	N	1048	G	Sidechain
1	N	105	G	Sidechain
1	N	1053	G	Sidechain
1	N	1055	A	Sidechain
1	N	1058	G	Sidechain
1	N	1059	C	Sidechain
1	N	106	C	Sidechain
1	N	1061	G	Sidechain
1	N	1062	U	Sidechain
1	N	1064	G	Sidechain
1	N	1066	C	Sidechain
1	N	1067	A	Sidechain
1	N	1068	G	Sidechain
1	N	1069	C	Sidechain
1	N	107	G	Sidechain
1	N	1070	U	Sidechain
1	N	1071	C	Sidechain
1	N	1072	G	Sidechain
1	N	1073	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1074	G	Sidechain
1	N	1075	U	Sidechain
1	N	1076	U	Sidechain
1	N	1077	G	Sidechain
1	N	1079	G	Sidechain
1	N	1080	A	Sidechain
1	N	1081	A	Sidechain
1	N	1083	U	Sidechain
1	N	1084	G	Sidechain
1	N	1085	U	Sidechain
1	N	1087	G	Sidechain
1	N	1089	G	Sidechain
1	N	109	A	Sidechain
1	N	1091	U	Sidechain
1	N	1092	A	Sidechain
1	N	1095	U	Sidechain
1	N	1096	C	Sidechain
1	N	1097	C	Sidechain
1	N	1099	G	Sidechain
1	N	11	G	Sidechain
1	N	1100	C	Sidechain
1	N	1101	A	Sidechain
1	N	1102	A	Sidechain
1	N	1104	G	Sidechain
1	N	1106	G	Sidechain
1	N	1107	C	Sidechain
1	N	1108	G	Sidechain
1	N	1111	A	Sidechain
1	N	1113	C	Sidechain
1	N	1115	U	Sidechain
1	N	1116	U	Sidechain
1	N	1119	C	Sidechain
1	N	1121	U	Sidechain
1	N	1122	U	Sidechain
1	N	1123	U	Sidechain
1	N	1125	U	Sidechain
1	N	1126	U	Sidechain
1	N	113	G	Sidechain
1	N	1130	A	Sidechain
1	N	1131	G	Sidechain
1	N	1132	C	Sidechain
1	N	1134	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1137	C	Sidechain
1	N	1139	G	Sidechain
1	N	1140	C	Sidechain
1	N	1141	C	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	1153	G	Sidechain
1	N	1154	G	Sidechain
1	N	1155	A	Sidechain
1	N	1156	G	Sidechain
1	N	1158	C	Sidechain
1	N	1159	U	Sidechain
1	N	1160	G	Sidechain
1	N	1161	C	Sidechain
1	N	1164	G	Sidechain
1	N	1167	A	Sidechain
1	N	1168	U	Sidechain
1	N	1169	A	Sidechain
1	N	117	G	Sidechain
1	N	1170	A	Sidechain
1	N	1171	A	Sidechain
1	N	1172	C	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	1179	A	Sidechain
1	N	118	U	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	1187	G	Sidechain
1	N	1188	A	Sidechain
1	N	119	A	Sidechain
1	N	1190	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1191	A	Sidechain
1	N	1194	U	Sidechain
1	N	1199	U	Sidechain
1	N	12	U	Sidechain
1	N	120	A	Sidechain
1	N	1200	C	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	1208	C	Sidechain
1	N	1209	C	Sidechain
1	N	121	U	Sidechain
1	N	1211	U	Sidechain
1	N	1212	U	Sidechain
1	N	1214	C	Sidechain
1	N	1216	A	Sidechain
1	N	1218	C	Sidechain
1	N	1219	A	Sidechain
1	N	122	G	Sidechain
1	N	1221	G	Sidechain
1	N	1222	G	Sidechain
1	N	1223	C	Sidechain
1	N	1224	U	Sidechain
1	N	1225	A	Sidechain
1	N	1226	C	Sidechain
1	N	1227	A	Sidechain
1	N	1228	C	Sidechain
1	N	1229	A	Sidechain
1	N	1232	U	Sidechain
1	N	1234	C	Sidechain
1	N	1235	U	Sidechain
1	N	1236	A	Sidechain
1	N	1237	C	Sidechain
1	N	1239	A	Sidechain
1	N	1240	U	Sidechain
1	N	1241	G	Sidechain
1	N	1242	G	Sidechain
1	N	1243	C	Sidechain
1	N	1245	C	Sidechain
1	N	1247	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1249	C	Sidechain
1	N	125	U	Sidechain
1	N	1250	A	Sidechain
1	N	1251	A	Sidechain
1	N	1252	A	Sidechain
1	N	1253	G	Sidechain
1	N	1254	A	Sidechain
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	1263	C	Sidechain
1	N	1267	C	Sidechain
1	N	1268	G	Sidechain
1	N	127	G	Sidechain
1	N	1270	G	Sidechain
1	N	1273	C	Sidechain
1	N	1274	A	Sidechain
1	N	1275	A	Sidechain
1	N	1276	G	Sidechain
1	N	1277	C	Sidechain
1	N	1278	G	Sidechain
1	N	1279	G	Sidechain
1	N	128	G	Sidechain
1	N	1281	C	Sidechain
1	N	1282	C	Sidechain
1	N	1283	U	Sidechain
1	N	1286	U	Sidechain
1	N	1287	A	Sidechain
1	N	1288	A	Sidechain
1	N	129	A	Sidechain
1	N	1291	U	Sidechain
1	N	1292	G	Sidechain
1	N	1293	C	Sidechain
1	N	1296	C	Sidechain
1	N	1298	U	Sidechain
1	N	1299	A	Sidechain
1	N	130	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1301	U	Sidechain
1	N	1302	C	Sidechain
1	N	1303	C	Sidechain
1	N	1304	G	Sidechain
1	N	1305	G	Sidechain
1	N	1306	A	Sidechain
1	N	1310	G	Sidechain
1	N	1313	U	Sidechain
1	N	1316	G	Sidechain
1	N	1318	A	Sidechain
1	N	1319	A	Sidechain
1	N	132	C	Sidechain
1	N	1321	U	Sidechain
1	N	1323	G	Sidechain
1	N	1326	U	Sidechain
1	N	1328	C	Sidechain
1	N	1331	G	Sidechain
1	N	1332	A	Sidechain
1	N	1333	A	Sidechain
1	N	1334	G	Sidechain
1	N	1335	U	Sidechain
1	N	1336	C	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	1345	U	Sidechain
1	N	1346	A	Sidechain
1	N	1348	U	Sidechain
1	N	1349	A	Sidechain
1	N	1351	U	Sidechain
1	N	1353	G	Sidechain
1	N	1356	G	Sidechain
1	N	1357	A	Sidechain
1	N	1358	U	Sidechain
1	N	1359	C	Sidechain
1	N	1362	A	Sidechain
1	N	1363	A	Sidechain
1	N	1364	U	Sidechain
1	N	1365	G	Sidechain
1	N	1366	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	137	U	Sidechain
1	N	1371	G	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
1	N	1382	C	Sidechain
1	N	1383	C	Sidechain
1	N	1384	C	Sidechain
1	N	1385	G	Sidechain
1	N	1387	G	Sidechain
1	N	1389	C	Sidechain
1	N	139	A	Sidechain
1	N	1390	U	Sidechain
1	N	1392	G	Sidechain
1	N	1399	C	Sidechain
1	N	14	U	Sidechain
1	N	140	U	Sidechain
1	N	1400	C	Sidechain
1	N	1401	G	Sidechain
1	N	1403	C	Sidechain
1	N	1405	G	Sidechain
1	N	1406	U	Sidechain
1	N	1409	C	Sidechain
1	N	141	G	Sidechain
1	N	1410	A	Sidechain
1	N	1411	C	Sidechain
1	N	1413	A	Sidechain
1	N	1416	G	Sidechain
1	N	1417	G	Sidechain
1	N	1418	A	Sidechain
1	N	1419	G	Sidechain
1	N	142	G	Sidechain
1	N	1420	U	Sidechain
1	N	1423	G	Sidechain
1	N	1424	U	Sidechain
1	N	1429	A	Sidechain
1	N	1430	A	Sidechain
1	N	1431	A	Sidechain
1	N	1432	G	Sidechain
1	N	1433	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1434	A	Sidechain
1	N	1435	G	Sidechain
1	N	1438	G	Sidechain
1	N	1439	G	Sidechain
1	N	144	G	Sidechain
1	N	1440	U	Sidechain
1	N	1441	A	Sidechain
1	N	1442	G	Sidechain
1	N	1443	C	Sidechain
1	N	1444	U	Sidechain
1	N	1445	U	Sidechain
1	N	1446	A	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	1455	G	Sidechain
1	N	1456	A	Sidechain
1	N	1457	G	Sidechain
1	N	1459	G	Sidechain
1	N	146	G	Sidechain
1	N	1460	C	Sidechain
1	N	1461	G	Sidechain
1	N	1463	U	Sidechain
1	N	1464	U	Sidechain
1	N	1466	C	Sidechain
1	N	1468	A	Sidechain
1	N	1469	C	Sidechain
1	N	1470	U	Sidechain
1	N	1472	U	Sidechain
1	N	1474	U	Sidechain
1	N	1475	G	Sidechain
1	N	1477	U	Sidechain
1	N	1479	C	Sidechain
1	N	148	G	Sidechain
1	N	1481	U	Sidechain
1	N	1482	G	Sidechain
1	N	1483	A	Sidechain
1	N	1485	U	Sidechain
1	N	1486	G	Sidechain
1	N	149	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1490	U	Sidechain
1	N	1491	G	Sidechain
1	N	1495	U	Sidechain
1	N	1496	C	Sidechain
1	N	1497	G	Sidechain
1	N	1498	U	Sidechain
1	N	1499	A	Sidechain
1	N	150	U	Sidechain
1	N	1503	A	Sidechain
1	N	1504	G	Sidechain
1	N	1509	C	Sidechain
1	N	151	A	Sidechain
1	N	1512	U	Sidechain
1	N	1515	G	Sidechain
1	N	1516	G	Sidechain
1	N	1517	G	Sidechain
1	N	1519	A	Sidechain
1	N	152	A	Sidechain
1	N	1520	C	Sidechain
1	N	1522	U	Sidechain
1	N	1523	G	Sidechain
1	N	1524	C	Sidechain
1	N	1525	G	Sidechain
1	N	1526	G	Sidechain
1	N	1527	U	Sidechain
1	N	1529	G	Sidechain
1	N	1530	G	Sidechain
1	N	1531	A	Sidechain
1	N	1532	U	Sidechain
1	N	157	U	Sidechain
1	N	159	G	Sidechain
1	N	16	A	Sidechain
1	N	160	A	Sidechain
1	N	161	A	Sidechain
1	N	165	G	Sidechain
1	N	17	U	Sidechain
1	N	170	U	Sidechain
1	N	171	A	Sidechain
1	N	173	U	Sidechain
1	N	174	A	Sidechain
1	N	176	C	Sidechain
1	N	179	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	180	U	Sidechain
1	N	181	A	Sidechain
1	N	182	A	Sidechain
1	N	183	C	Sidechain
1	N	184	G	Sidechain
1	N	186	C	Sidechain
1	N	187	G	Sidechain
1	N	188	C	Sidechain
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	196	A	Sidechain
1	N	197	A	Sidechain
1	N	199	A	Sidechain
1	N	2	A	Sidechain
1	N	20	U	Sidechain
1	N	201	G	Sidechain
1	N	202	G	Sidechain
1	N	203	G	Sidechain
1	N	204	G	Sidechain
1	N	206	C	Sidechain
1	N	208	U	Sidechain
1	N	21	G	Sidechain
1	N	210	C	Sidechain
1	N	212	G	Sidechain
1	N	214	C	Sidechain
1	N	216	U	Sidechain
1	N	217	C	Sidechain
1	N	218	U	Sidechain
1	N	220	G	Sidechain
1	N	221	C	Sidechain
1	N	223	A	Sidechain
1	N	224	U	Sidechain
1	N	227	G	Sidechain
1	N	23	C	Sidechain
1	N	230	G	Sidechain
1	N	231	U	Sidechain
1	N	232	G	Sidechain
1	N	234	C	Sidechain
1	N	236	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	237	G	Sidechain
1	N	239	U	Sidechain
1	N	24	U	Sidechain
1	N	240	G	Sidechain
1	N	241	G	Sidechain
1	N	243	A	Sidechain
1	N	244	U	Sidechain
1	N	246	A	Sidechain
1	N	247	G	Sidechain
1	N	248	C	Sidechain
1	N	25	C	Sidechain
1	N	251	G	Sidechain
1	N	252	U	Sidechain
1	N	255	G	Sidechain
1	N	26	A	Sidechain
1	N	262	A	Sidechain
1	N	264	C	Sidechain
1	N	265	G	Sidechain
1	N	266	G	Sidechain
1	N	267	C	Sidechain
1	N	269	C	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	282	A	Sidechain
1	N	283	U	Sidechain
1	N	284	C	Sidechain
1	N	285	C	Sidechain
1	N	286	C	Sidechain
1	N	287	U	Sidechain
1	N	288	A	Sidechain
1	N	289	G	Sidechain
1	N	29	U	Sidechain
1	N	290	C	Sidechain
1	N	291	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	295	C	Sidechain
1	N	296	U	Sidechain
1	N	298	A	Sidechain
1	N	299	G	Sidechain
1	N	30	U	Sidechain
1	N	300	A	Sidechain
1	N	301	G	Sidechain
1	N	302	G	Sidechain
1	N	305	G	Sidechain
1	N	308	C	Sidechain
1	N	313	A	Sidechain
1	N	314	C	Sidechain
1	N	315	A	Sidechain
1	N	317	U	Sidechain
1	N	318	G	Sidechain
1	N	319	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	327	A	Sidechain
1	N	328	C	Sidechain
1	N	330	C	Sidechain
1	N	331	G	Sidechain
1	N	333	U	Sidechain
1	N	334	C	Sidechain
1	N	337	G	Sidechain
1	N	338	A	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	355	C	Sidechain
1	N	356	A	Sidechain
1	N	358	U	Sidechain
1	N	359	G	Sidechain
1	N	36	C	Sidechain
1	N	360	G	Sidechain
1	N	362	G	Sidechain
1	N	363	A	Sidechain
1	N	364	A	Sidechain
1	N	365	U	Sidechain
1	N	369	G	Sidechain
1	N	37	U	Sidechain
1	N	370	C	Sidechain
1	N	371	A	Sidechain
1	N	372	C	Sidechain
1	N	373	A	Sidechain
1	N	377	G	Sidechain
1	N	378	G	Sidechain
1	N	379	C	Sidechain
1	N	38	G	Sidechain
1	N	381	C	Sidechain
1	N	382	A	Sidechain
1	N	384	G	Sidechain
1	N	389	A	Sidechain
1	N	39	G	Sidechain
1	N	391	G	Sidechain
1	N	392	C	Sidechain
1	N	393	A	Sidechain
1	N	394	G	Sidechain
1	N	395	C	Sidechain
1	N	396	C	Sidechain
1	N	397	A	Sidechain
1	N	4	U	Sidechain
1	N	40	C	Sidechain
1	N	400	C	Sidechain
1	N	402	G	Sidechain
1	N	403	C	Sidechain
1	N	404	G	Sidechain
1	N	405	U	Sidechain
1	N	406	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	407	U	Sidechain
1	N	41	G	Sidechain
1	N	410	G	Sidechain
1	N	413	G	Sidechain
1	N	417	G	Sidechain
1	N	419	C	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	429	U	Sidechain
1	N	43	C	Sidechain
1	N	431	A	Sidechain
1	N	432	A	Sidechain
1	N	435	A	Sidechain
1	N	437	U	Sidechain
1	N	438	U	Sidechain
1	N	440	C	Sidechain
1	N	442	G	Sidechain
1	N	443	C	Sidechain
1	N	447	G	Sidechain
1	N	448	A	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	454	G	Sidechain
1	N	455	G	Sidechain
1	N	457	G	Sidechain
1	N	46	G	Sidechain
1	N	462	G	Sidechain
1	N	464	U	Sidechain
1	N	465	A	Sidechain
1	N	466	A	Sidechain
1	N	468	A	Sidechain
1	N	471	U	Sidechain
1	N	472	U	Sidechain
1	N	473	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	474	G	Sidechain
1	N	475	C	Sidechain
1	N	48	C	Sidechain
1	N	480	U	Sidechain
1	N	482	A	Sidechain
1	N	484	G	Sidechain
1	N	486	U	Sidechain
1	N	487	A	Sidechain
1	N	488	C	Sidechain
1	N	489	C	Sidechain
1	N	49	U	Sidechain
1	N	490	C	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	499	A	Sidechain
1	N	5	U	Sidechain
1	N	50	A	Sidechain
1	N	501	C	Sidechain
1	N	503	C	Sidechain
1	N	504	C	Sidechain
1	N	506	G	Sidechain
1	N	507	C	Sidechain
1	N	508	U	Sidechain
1	N	509	A	Sidechain
1	N	510	A	Sidechain
1	N	513	C	Sidechain
1	N	514	C	Sidechain
1	N	516	U	Sidechain
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	525	C	Sidechain
1	N	526	C	Sidechain
1	N	527	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	529	G	Sidechain
1	N	530	G	Sidechain
1	N	531	U	Sidechain
1	N	533	A	Sidechain
1	N	536	C	Sidechain
1	N	537	G	Sidechain
1	N	538	G	Sidechain
1	N	540	G	Sidechain
1	N	544	G	Sidechain
1	N	547	A	Sidechain
1	N	548	G	Sidechain
1	N	55	A	Sidechain
1	N	550	G	Sidechain
1	N	552	U	Sidechain
1	N	555	U	Sidechain
1	N	557	G	Sidechain
1	N	558	G	Sidechain
1	N	56	U	Sidechain
1	N	564	C	Sidechain
1	N	565	U	Sidechain
1	N	566	G	Sidechain
1	N	568	G	Sidechain
1	N	569	C	Sidechain
1	N	571	U	Sidechain
1	N	573	A	Sidechain
1	N	574	A	Sidechain
1	N	575	G	Sidechain
1	N	576	C	Sidechain
1	N	581	G	Sidechain
1	N	582	C	Sidechain
1	N	584	G	Sidechain
1	N	586	C	Sidechain
1	N	588	G	Sidechain
1	N	59	A	Sidechain
1	N	590	U	Sidechain
1	N	592	G	Sidechain
1	N	594	U	Sidechain
1	N	595	A	Sidechain
1	N	596	A	Sidechain
1	N	598	U	Sidechain
1	N	6	G	Sidechain
1	N	60	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	600	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	608	A	Sidechain
1	N	609	A	Sidechain
1	N	61	G	Sidechain
1	N	610	U	Sidechain
1	N	614	C	Sidechain
1	N	616	G	Sidechain
1	N	618	C	Sidechain
1	N	619	U	Sidechain
1	N	620	C	Sidechain
1	N	621	A	Sidechain
1	N	622	A	Sidechain
1	N	626	G	Sidechain
1	N	627	G	Sidechain
1	N	63	C	Sidechain
1	N	632	U	Sidechain
1	N	633	G	Sidechain
1	N	634	C	Sidechain
1	N	64	G	Sidechain
1	N	641	U	Sidechain
1	N	642	A	Sidechain
1	N	645	G	Sidechain
1	N	646	G	Sidechain
1	N	648	A	Sidechain
1	N	649	A	Sidechain
1	N	652	U	Sidechain
1	N	653	U	Sidechain
1	N	654	G	Sidechain
1	N	655	A	Sidechain
1	N	656	G	Sidechain
1	N	657	U	Sidechain
1	N	658	C	Sidechain
1	N	66	A	Sidechain
1	N	660	C	Sidechain
1	N	662	U	Sidechain
1	N	664	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	665	A	Sidechain
1	N	667	G	Sidechain
1	N	668	G	Sidechain
1	N	669	G	Sidechain
1	N	671	G	Sidechain
1	N	672	U	Sidechain
1	N	673	A	Sidechain
1	N	674	G	Sidechain
1	N	678	U	Sidechain
1	N	679	C	Sidechain
1	N	68	G	Sidechain
1	N	681	A	Sidechain
1	N	683	G	Sidechain
1	N	684	U	Sidechain
1	N	687	A	Sidechain
1	N	688	G	Sidechain
1	N	69	G	Sidechain
1	N	692	U	Sidechain
1	N	693	G	Sidechain
1	N	695	A	Sidechain
1	N	696	A	Sidechain
1	N	697	U	Sidechain
1	N	698	G	Sidechain
1	N	70	U	Sidechain
1	N	700	G	Sidechain
1	N	701	U	Sidechain
1	N	703	G	Sidechain
1	N	705	G	Sidechain
1	N	708	C	Sidechain
1	N	709	U	Sidechain
1	N	71	A	Sidechain
1	N	710	G	Sidechain
1	N	713	G	Sidechain
1	N	714	G	Sidechain
1	N	717	U	Sidechain
1	N	719	C	Sidechain
1	N	72	A	Sidechain
1	N	720	C	Sidechain
1	N	722	G	Sidechain
1	N	723	U	Sidechain
1	N	727	G	Sidechain
1	N	728	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	73	C	Sidechain
1	N	732	C	Sidechain
1	N	733	G	Sidechain
1	N	735	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	745	G	Sidechain
1	N	748	G	Sidechain
1	N	749	A	Sidechain
1	N	75	G	Sidechain
1	N	750	C	Sidechain
1	N	751	U	Sidechain
1	N	752	G	Sidechain
1	N	753	A	Sidechain
1	N	754	C	Sidechain
1	N	755	G	Sidechain
1	N	757	U	Sidechain
1	N	758	C	Sidechain
1	N	759	A	Sidechain
1	N	760	G	Sidechain
1	N	761	G	Sidechain
1	N	762	U	Sidechain
1	N	763	G	Sidechain
1	N	765	G	Sidechain
1	N	766	A	Sidechain
1	N	767	A	Sidechain
1	N	768	A	Sidechain
1	N	769	G	Sidechain
1	N	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	779	C	Sidechain
1	N	78	A	Sidechain
1	N	780	A	Sidechain
1	N	782	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	783	C	Sidechain
1	N	788	U	Sidechain
1	N	79	G	Sidechain
1	N	791	G	Sidechain
1	N	793	U	Sidechain
1	N	794	A	Sidechain
1	N	795	C	Sidechain
1	N	796	C	Sidechain
1	N	798	U	Sidechain
1	N	80	A	Sidechain
1	N	800	G	Sidechain
1	N	801	U	Sidechain
1	N	802	A	Sidechain
1	N	803	G	Sidechain
1	N	804	U	Sidechain
1	N	805	C	Sidechain
1	N	807	A	Sidechain
1	N	808	C	Sidechain
1	N	81	A	Sidechain
1	N	810	C	Sidechain
1	N	811	C	Sidechain
1	N	814	A	Sidechain
1	N	817	C	Sidechain
1	N	818	G	Sidechain
1	N	82	G	Sidechain
1	N	821	G	Sidechain
1	N	822	U	Sidechain
1	N	824	G	Sidechain
1	N	825	A	Sidechain
1	N	827	U	Sidechain
1	N	828	U	Sidechain
1	N	83	C	Sidechain
1	N	830	G	Sidechain
1	N	831	A	Sidechain
1	N	832	G	Sidechain
1	N	835	U	Sidechain
1	N	837	U	Sidechain
1	N	839	C	Sidechain
1	N	841	C	Sidechain
1	N	842	U	Sidechain
1	N	844	G	Sidechain
1	N	845	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	847	G	Sidechain
1	N	848	C	Sidechain
1	N	849	G	Sidechain
1	N	850	U	Sidechain
1	N	851	G	Sidechain
1	N	852	G	Sidechain
1	N	853	C	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
1	N	861	G	Sidechain
1	N	864	A	Sidechain
1	N	865	A	Sidechain
1	N	87	C	Sidechain
1	N	870	U	Sidechain
1	N	871	U	Sidechain
1	N	872	A	Sidechain
1	N	873	A	Sidechain
1	N	874	G	Sidechain
1	N	879	C	Sidechain
1	N	880	C	Sidechain
1	N	881	G	Sidechain
1	N	883	C	Sidechain
1	N	884	U	Sidechain
1	N	885	G	Sidechain
1	N	886	G	Sidechain
1	N	888	G	Sidechain
1	N	890	G	Sidechain
1	N	892	A	Sidechain
1	N	895	G	Sidechain
1	N	896	C	Sidechain
1	N	898	G	Sidechain
1	N	899	C	Sidechain
1	N	900	A	Sidechain
1	N	901	A	Sidechain
1	N	902	G	Sidechain
1	N	904	U	Sidechain
1	N	905	U	Sidechain
1	N	906	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	907	A	Sidechain
1	N	908	A	Sidechain
1	N	91	U	Sidechain
1	N	912	C	Sidechain
1	N	914	A	Sidechain
1	N	915	A	Sidechain
1	N	917	G	Sidechain
1	N	92	U	Sidechain
1	N	920	U	Sidechain
1	N	921	U	Sidechain
1	N	922	G	Sidechain
1	N	923	A	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	930	C	Sidechain
1	N	933	G	Sidechain
1	N	934	C	Sidechain
1	N	937	A	Sidechain
1	N	938	A	Sidechain
1	N	939	G	Sidechain
1	N	94	G	Sidechain
1	N	941	G	Sidechain
1	N	944	G	Sidechain
1	N	945	G	Sidechain
1	N	946	A	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	957	U	Sidechain
1	N	961	U	Sidechain
1	N	969	A	Sidechain
1	N	97	G	Sidechain
1	N	971	G	Sidechain
1	N	972	C	Sidechain
1	N	973	G	Sidechain
1	N	974	A	Sidechain
1	N	975	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	976	G	Sidechain
1	N	977	A	Sidechain
1	N	978	A	Sidechain
1	N	98	A	Sidechain
1	N	982	U	Sidechain
1	N	984	C	Sidechain
1	N	985	C	Sidechain
1	N	987	G	Sidechain
1	N	988	G	Sidechain
1	N	99	C	Sidechain
1	N	991	U	Sidechain
1	N	992	U	Sidechain
1	N	993	G	Sidechain
1	N	995	C	Sidechain
1	N	996	A	Sidechain
1	N	998	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	16511	547	0
All	All	32892	16554	16511	547	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 (547) 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:664:G:H22	1:N:741:G:H1	1.31	0.76
1:N:596:A:H61	1:N:644:U:H3	1.37	0.73
1:N:116:A:H61	1:N:313:A:H1'	1.56	0.70
1:N:67:C:H2'	1:N:68:G:C8	2.26	0.70
1:N:381:C:C5	1:N:382:A:C5	2.81	0.69
1:N:410:G:H2'	1:N:429:U:C5	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:50:A:H1'	1:N:52:C:C6	2.28	0.68
1:N:1343:G:C5	1:N:1344:C:C4	2.82	0.68
1:N:411:A:H61	1:N:428:G:H1'	1.60	0.66
1:N:32:A:H4'	1:N:48:C:H42	1.61	0.65
1:N:25:C:H41	1:N:559:A:H61	1.45	0.64
1:N:507:C:H3'	1:N:508:U:H5''	1.79	0.64
1:N:1210:C:C5	1:N:1211:U:C5	2.86	0.64
1:N:1066:C:C6	1:N:1066:C:H5''	2.33	0.64
1:N:1385:G:C6	1:N:1386:G:C6	2.86	0.63
1:N:120:A:C2	1:N:122:G:C6	2.87	0.63
1:N:424:G:C6	1:N:425:G:C6	2.87	0.63
1:N:73:C:C6	1:N:73:C:H5''	2.33	0.63
1:N:1315:U:C4	1:N:1316:G:C6	2.87	0.63
1:N:655:A:C2	1:N:656:G:C4	2.87	0.62
1:N:669:G:C6	1:N:670:G:C6	2.88	0.62
1:N:1244:G:C6	1:N:1294:G:C6	2.87	0.62
1:N:486:U:C6	1:N:486:U:H5''	2.35	0.62
1:N:558:G:H2'	1:N:559:A:C2	2.35	0.61
1:N:807:A:C2	1:N:808:C:C2	2.89	0.61
1:N:1041:G:C6	1:N:1042:A:C6	2.88	0.61
1:N:1294:G:C5	1:N:1295:U:C5	2.89	0.61
1:N:584:G:C6	1:N:585:G:C6	2.89	0.61
1:N:169:C:C4	1:N:170:U:C4	2.88	0.60
1:N:594:U:C4	1:N:595:A:C6	2.89	0.60
1:N:1261:A:H61	1:N:1274:A:H2'	1.66	0.60
1:N:1065:U:H1'	1:N:1067:A:H61	1.65	0.60
1:N:78:A:C6	1:N:79:G:C6	2.90	0.60
1:N:247:G:C5	1:N:278:G:C2	2.90	0.60
1:N:1240:U:C2	1:N:1240:U:OP1	2.55	0.60
1:N:655:A:C4	1:N:656:G:C8	2.90	0.59
1:N:1383:C:C4	1:N:1384:C:C4	2.90	0.59
1:N:209:U:C4	1:N:211:G:N1	2.70	0.59
1:N:372:C:H4'	1:N:373:A:OP1	2.03	0.59
1:N:243:A:H4'	1:N:244:U:H5''	1.84	0.59
1:N:410:G:H2'	1:N:429:U:C4	2.37	0.59
1:N:1433:A:H3'	1:N:1434:A:H8	1.67	0.58
1:N:160:A:H2'	1:N:161:A:C8	2.38	0.58
1:N:595:A:C2	1:N:596:A:N6	2.72	0.58
1:N:668:G:C6	1:N:669:G:C6	2.91	0.58
1:N:1256:A:C2	1:N:1258:G:C6	2.91	0.58
1:N:44:A:H2	1:N:398:U:H3	1.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:581:G:C6	1:N:758:C:C5	2.92	0.57
1:N:171:A:C2	1:N:172:A:C2	2.92	0.57
1:N:804:U:H5	1:N:805:C:C4	2.22	0.57
1:N:858:G:H1	1:N:869:G:H2'	1.69	0.57
1:N:804:U:C6	1:N:805:C:C5	2.91	0.57
1:N:301:G:C6	1:N:302:G:C5	2.92	0.57
1:N:1095:U:C4	1:N:1096:C:C4	2.93	0.57
1:N:1340:A:H2'	1:N:1341:U:C6	2.40	0.57
1:N:91:U:C5	1:N:92:U:C2	2.94	0.56
1:N:1240:U:C6	1:N:1241:G:H5'	2.41	0.56
1:N:904:U:C4	1:N:905:U:C4	2.93	0.56
1:N:243:A:C2	1:N:282:A:N6	2.73	0.56
1:N:322:C:C6	1:N:323:U:C5	2.93	0.56
1:N:301:G:C6	1:N:302:G:C6	2.93	0.56
1:N:979:C:C5	1:N:980:C:C6	2.94	0.56
1:N:69:G:C6	1:N:70:U:C4	2.94	0.56
1:N:373:A:C2	1:N:374:A:C4	2.93	0.56
1:N:1140:C:HO2'	1:N:1141:C:H5	1.54	0.56
1:N:425:G:C5	1:N:426:U:C4	2.93	0.55
1:N:384:G:C6	1:N:385:C:C4	2.94	0.55
1:N:49:U:C2	1:N:362:G:H1'	2.42	0.55
1:N:920:U:H2'	1:N:921:U:C6	2.42	0.55
1:N:1436:U:H2'	1:N:1437:A:C8	2.40	0.55
1:N:173:U:H3	1:N:198:G:H21	1.55	0.55
1:N:782:A:C8	1:N:783:C:C5	2.93	0.55
1:N:626:G:H2'	1:N:627:G:C8	2.41	0.55
1:N:969:A:H62	1:N:1230:C:H1'	1.72	0.55
1:N:1292:G:C6	1:N:1293:C:C4	2.94	0.55
1:N:986:U:H3	1:N:1219:A:H61	1.54	0.55
1:N:1349:A:N1	1:N:1374:A:H1'	2.22	0.54
1:N:596:A:N6	1:N:644:U:H3	2.04	0.54
1:N:1438:G:C6	1:N:1464:U:N3	2.76	0.54
1:N:818:G:H3'	1:N:819:A:C5'	2.37	0.54
1:N:251:G:C6	1:N:266:G:C6	2.96	0.54
1:N:354:G:C6	1:N:355:C:C4	2.96	0.54
1:N:776:G:H21	1:N:779:C:N4	2.06	0.54
1:N:663:A:C2	1:N:743:A:C2	2.95	0.54
1:N:39:G:H1'	1:N:497:G:H21	1.71	0.53
1:N:1434:A:C5	1:N:1435:G:C5	2.96	0.53
1:N:150:U:C5	1:N:170:U:C5	2.97	0.53
1:N:922:G:H2'	1:N:923:A:C8	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:223:A:H2'	1:N:224:U:H6	1.74	0.53
1:N:94:G:H4'	1:N:95:C:H5''	1.90	0.53
1:N:1225:A:H2'	1:N:1226:C:C6	2.42	0.53
1:N:1511:G:C6	1:N:1525:G:C6	2.97	0.53
1:N:69:G:C4	1:N:70:U:C5	2.96	0.53
1:N:397:A:H4'	1:N:398:U:C5	2.43	0.53
1:N:450:G:H1	1:N:483:C:H42	1.53	0.53
1:N:776:G:H21	1:N:779:C:H42	1.56	0.53
1:N:932:C:H2'	1:N:933:G:C8	2.44	0.53
1:N:1219:A:C6	1:N:1220:G:C6	2.97	0.53
1:N:1255:G:H2'	1:N:1279:G:H1	1.74	0.53
1:N:949:A:H61	1:N:1232:U:H3	1.55	0.53
1:N:17:U:H2'	1:N:18:C:C5	2.44	0.53
1:N:803:G:C6	1:N:804:U:C4	2.97	0.53
1:N:894:G:C4	1:N:895:G:C8	2.97	0.53
1:N:1058:G:C5	1:N:1059:C:C5	2.96	0.53
1:N:1501:C:C5	1:N:1504:G:C4	2.96	0.53
1:N:780:A:C2	1:N:801:U:C5	2.97	0.53
1:N:1058:G:C6	1:N:1059:C:C4	2.97	0.53
1:N:1071:C:H2'	1:N:1072:G:C8	2.45	0.53
1:N:581:G:C6	1:N:758:C:C6	2.96	0.52
1:N:78:A:C5	1:N:79:G:C6	2.98	0.52
1:N:1144:G:H21	1:N:1146:A:H62	1.58	0.52
1:N:1170:A:C5	1:N:1171:A:C4	2.97	0.52
1:N:98:A:H2'	1:N:99:C:O4'	2.09	0.52
1:N:179:A:C2	1:N:180:U:C2	2.98	0.52
1:N:803:G:C5	1:N:804:U:C5	2.98	0.52
1:N:1147:C:H2'	1:N:1148:U:C6	2.44	0.52
1:N:738:C:C4	1:N:739:C:C4	2.98	0.52
1:N:168:G:C6	1:N:169:C:C5	2.97	0.52
1:N:579:A:C2	1:N:763:G:C4	2.98	0.52
1:N:208:U:C6	1:N:210:C:C6	2.98	0.52
1:N:1125:U:C5	1:N:1127:G:C6	2.98	0.52
1:N:1423:G:C5	1:N:1424:U:C4	2.98	0.52
1:N:1433:A:H3'	1:N:1434:A:C8	2.45	0.52
1:N:1072:G:C2	1:N:1073:U:C2	2.98	0.52
1:N:697:U:H3'	1:N:698:G:H8	1.74	0.52
1:N:1261:A:C2	1:N:1274:A:C2	2.97	0.52
1:N:79:G:H2'	1:N:80:A:C8	2.46	0.51
1:N:585:G:C6	1:N:586:C:N3	2.78	0.51
1:N:793:U:H2'	1:N:1519:A:H61	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1058:G:C5	1:N:1059:C:C4	2.98	0.51
1:N:13:U:C5	1:N:21:G:C2	2.98	0.51
1:N:17:U:C2	1:N:919:A:C2	2.98	0.51
1:N:301:G:C2	1:N:302:G:C4	2.98	0.51
1:N:322:C:H3'	1:N:323:U:C6	2.45	0.51
1:N:859:G:C6	1:N:860:A:C6	2.99	0.51
1:N:1146:A:C2	1:N:1147:C:H1'	2.45	0.51
1:N:322:C:C5	1:N:323:U:C4	2.98	0.51
1:N:665:A:C8	1:N:733:G:C2	2.98	0.51
1:N:1394:A:H3'	1:N:1395:C:H5'	1.92	0.51
1:N:65:A:H4'	1:N:66:A:H5'	1.92	0.51
1:N:160:A:H2'	1:N:161:A:O4'	2.10	0.51
1:N:1350:A:N1	1:N:1373:G:C2	2.79	0.51
1:N:1218:C:H2'	1:N:1219:A:C8	2.46	0.51
1:N:598:U:H3	1:N:640:A:H61	1.59	0.51
1:N:840:C:H1'	1:N:843:U:H3	1.76	0.51
1:N:811:C:H2'	1:N:812:G:H5'	1.93	0.51
1:N:1315:U:H2'	1:N:1316:G:C8	2.46	0.51
1:N:1366:C:C4	1:N:1367:C:C4	2.99	0.51
1:N:507:C:C3'	1:N:508:U:H5''	2.41	0.51
1:N:98:A:C5	1:N:99:C:C4	2.99	0.50
1:N:1104:G:C6	1:N:1105:A:C6	2.99	0.50
1:N:73:C:H5'	1:N:91:U:OP1	2.11	0.50
1:N:1239:A:C4	1:N:1241:G:C5	2.99	0.50
1:N:675:A:N1	1:N:716:A:C2	2.79	0.50
1:N:870:U:OP1	1:N:871:U:C5	2.64	0.50
1:N:985:C:C4	1:N:986:U:C4	2.99	0.50
1:N:1074:G:C5	1:N:1075:U:C4	3.00	0.50
1:N:1249:C:H3'	1:N:1250:A:H5''	1.93	0.50
1:N:1294:G:C6	1:N:1295:U:C4	3.00	0.50
1:N:500:G:C6	1:N:501:C:C4	3.00	0.50
1:N:803:G:C2	1:N:804:U:C2	3.00	0.50
1:N:925:G:H2'	1:N:927:G:C8	2.47	0.50
1:N:141:G:H22	1:N:195:A:H2	1.59	0.50
1:N:807:A:C6	1:N:808:C:C4	2.99	0.50
1:N:1049:U:H4'	1:N:1050:G:H5'	1.93	0.50
1:N:1241:G:C8	1:N:1241:G:O5'	2.64	0.50
1:N:80:A:C4	1:N:81:A:H1'	2.46	0.50
1:N:525:C:C4	1:N:526:C:C4	2.99	0.50
1:N:703:G:H3'	1:N:704:A:H5'	1.93	0.50
1:N:818:G:H3'	1:N:819:A:H5''	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:941:G:N1	1:N:1343:G:C6	2.80	0.50
1:N:25:C:H41	1:N:559:A:N6	2.08	0.49
1:N:272:C:H2'	1:N:273:U:O4'	2.12	0.49
1:N:557:G:C2	1:N:558:G:C2	3.00	0.49
1:N:791:G:H21	1:N:1519:A:H2'	1.76	0.49
1:N:1255:G:H3'	1:N:1279:G:H22	1.75	0.49
1:N:64:G:C5	1:N:99:C:C2	3.00	0.49
1:N:1160:G:O6	1:N:1181:G:C6	2.65	0.49
1:N:1305:G:H22	1:N:1331:G:H2'	1.78	0.49
1:N:251:G:N1	1:N:266:G:C6	2.80	0.49
1:N:1239:A:C4	1:N:1241:G:C6	3.00	0.49
1:N:1343:G:C6	1:N:1344:C:C4	3.00	0.49
1:N:513:C:H2'	1:N:514:C:C6	2.48	0.49
1:N:592:G:C6	1:N:648:A:C6	3.00	0.49
1:N:1240:U:H6	1:N:1241:G:H5'	1.76	0.49
1:N:503:C:O2	1:N:510:A:C2	2.66	0.49
1:N:1125:U:C5	1:N:1127:G:C5	3.01	0.49
1:N:16:A:C2	1:N:17:U:C6	3.00	0.49
1:N:68:G:C8	1:N:69:G:C8	3.01	0.49
1:N:142:G:N2	1:N:222:C:C6	2.81	0.49
1:N:1316:G:C2	1:N:1319:A:C8	3.01	0.49
1:N:533:A:H2	1:N:535:A:H3'	1.77	0.49
1:N:68:G:C4	1:N:69:G:H1'	2.48	0.49
1:N:318:G:H21	1:N:1468:A:H1'	1.78	0.49
1:N:677:U:C5	1:N:678:U:C5	3.01	0.49
1:N:1246:A:C2	1:N:1292:G:C4	3.01	0.49
1:N:272:C:C4	1:N:273:U:C4	3.01	0.48
1:N:934:C:C5	1:N:1344:C:H2'	2.48	0.48
1:N:109:A:C5	1:N:326:G:C5	3.00	0.48
1:N:677:U:C4	1:N:678:U:C4	3.01	0.48
1:N:39:G:C4	1:N:498:A:C2	3.02	0.48
1:N:1102:A:C2	1:N:1103:C:C2	3.01	0.48
1:N:1342:C:H2'	1:N:1343:G:H8	1.78	0.48
1:N:661:G:C6	1:N:662:U:C4	3.02	0.48
1:N:1268:G:C6	1:N:1269:A:C6	3.02	0.48
1:N:321:A:C4	1:N:322:C:C5	3.01	0.48
1:N:856:C:H2'	1:N:857:C:C6	2.48	0.48
1:N:236:A:C6	1:N:237:G:C5	3.02	0.48
1:N:145:G:C2	1:N:178:C:C2	3.01	0.48
1:N:57:G:C6	1:N:58:C:C4	3.02	0.48
1:N:451:A:C8	1:N:480:U:H2'	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:804:U:C5	1:N:805:C:C4	3.01	0.48
1:N:124:C:C2	1:N:238:A:C2	3.02	0.48
1:N:627:G:C6	1:N:628:G:C6	3.02	0.48
1:N:1065:U:C5	1:N:1190:G:H4'	2.49	0.48
1:N:1239:A:N3	1:N:1241:G:C6	2.82	0.48
1:N:474:G:C5	1:N:475:C:C4	3.02	0.47
1:N:858:G:H22	1:N:869:G:H2'	1.79	0.47
1:N:197:A:C2	1:N:198:G:C4	3.02	0.47
1:N:430:A:C5	1:N:431:A:C8	3.02	0.47
1:N:613:C:H2'	1:N:614:C:O4'	2.14	0.47
1:N:917:G:C6	1:N:918:A:C6	3.02	0.47
1:N:1266:G:N2	1:N:1269:A:C8	2.82	0.47
1:N:50:A:C2	1:N:52:C:N3	2.82	0.47
1:N:282:A:C2	1:N:283:U:H1'	2.49	0.47
1:N:300:A:C5	1:N:301:G:H1'	2.49	0.47
1:N:1268:G:H2'	1:N:1269:A:O4'	2.14	0.47
1:N:291:U:H3'	1:N:305:G:H22	1.80	0.47
1:N:604:G:C6	1:N:605:U:N3	2.82	0.47
1:N:933:G:C2	1:N:1385:G:C2	3.02	0.47
1:N:173:U:H3'	1:N:174:A:C5'	2.45	0.47
1:N:804:U:C5	1:N:805:C:C5	3.03	0.47
1:N:824:G:N1	1:N:877:G:C6	2.83	0.47
1:N:413:G:H4'	1:N:428:G:C2	2.50	0.47
1:N:635:A:C2	1:N:636:U:C2	3.03	0.47
1:N:701:U:H5''	1:N:703:G:H5'	1.97	0.47
1:N:777:A:C8	1:N:777:A:H3'	2.49	0.47
1:N:1038:C:H2'	1:N:1039:G:C8	2.50	0.47
1:N:1100:C:H4'	1:N:1102:A:H4'	1.97	0.47
1:N:1244:G:C6	1:N:1245:C:C4	3.02	0.47
1:N:425:G:C6	1:N:426:U:N3	2.83	0.47
1:N:894:G:H2'	1:N:895:G:O4'	2.15	0.47
1:N:1075:U:HO2'	1:N:1101:A:H2	1.63	0.47
1:N:449:G:C6	1:N:450:G:C6	3.03	0.47
1:N:1009:U:C2	1:N:1021:A:C2	3.03	0.47
1:N:1290:G:H3'	1:N:1291:U:H6	1.79	0.47
1:N:273:U:C4	1:N:274:A:C6	3.03	0.46
1:N:669:G:C6	1:N:670:G:C5	3.02	0.46
1:N:1423:G:C5	1:N:1424:U:C5	3.03	0.46
1:N:1423:G:C6	1:N:1424:U:C4	3.04	0.46
1:N:1254:A:C2	1:N:1255:G:C4	3.03	0.46
1:N:1416:G:C6	1:N:1417:G:C4	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:68:G:C5	1:N:69:G:H1'	2.51	0.46
1:N:255:G:C5	1:N:256:U:C4	3.04	0.46
1:N:738:C:H2'	1:N:739:C:C6	2.51	0.46
1:N:411:A:C4	1:N:429:U:C4	3.03	0.46
1:N:482:A:C6	1:N:483:C:C2	3.03	0.46
1:N:982:U:H4'	1:N:983:A:O5'	2.15	0.46
1:N:761:G:C6	1:N:762:U:C4	3.04	0.46
1:N:64:G:N2	1:N:69:G:C5	2.84	0.46
1:N:112:G:C2	1:N:330:C:C5	3.03	0.46
1:N:174:A:C5	1:N:175:C:C5	3.03	0.46
1:N:204:G:H3'	1:N:204:G:C8	2.50	0.46
1:N:226:G:C6	1:N:227:G:C6	3.03	0.46
1:N:512:U:C5	1:N:534:U:H4'	2.50	0.46
1:N:603:U:H2'	1:N:604:G:C8	2.51	0.46
1:N:761:G:C5	1:N:762:U:C4	3.04	0.46
1:N:1009:U:C2	1:N:1021:A:N1	2.84	0.46
1:N:1191:A:H5'	1:N:1191:A:C8	2.51	0.46
1:N:142:G:H2'	1:N:196:A:H2	1.80	0.46
1:N:214:C:C5	1:N:215:C:C5	3.04	0.46
1:N:1385:G:C6	1:N:1386:G:C5	3.04	0.46
1:N:1484:C:C4	1:N:1485:U:N3	2.83	0.46
1:N:369:G:C2	1:N:393:A:C2	3.04	0.46
1:N:391:G:C6	1:N:392:C:C4	3.04	0.46
1:N:784:A:H2'	1:N:785:G:H8	1.79	0.46
1:N:1060:U:H3	1:N:1197:A:H61	1.63	0.46
1:N:43:C:H2'	1:N:44:A:H8	1.80	0.46
1:N:445:G:C2	1:N:490:C:C2	3.04	0.46
1:N:459:A:C4	1:N:460:A:C8	3.04	0.46
1:N:474:G:H2'	1:N:475:C:O4'	2.16	0.46
1:N:1125:U:H2'	1:N:1126:U:H2'	1.97	0.46
1:N:141:G:H21	1:N:182:A:H61	1.64	0.45
1:N:955:U:H3	1:N:1225:A:H2	1.56	0.45
1:N:981:U:C2	1:N:982:U:C5	3.04	0.45
1:N:1068:G:C6	1:N:1069:C:C5	3.04	0.45
1:N:179:A:C5	1:N:180:U:C4	3.04	0.45
1:N:17:U:H2'	1:N:18:C:C6	2.52	0.45
1:N:98:A:C6	1:N:99:C:C4	3.04	0.45
1:N:547:A:H4'	1:N:548:G:O5'	2.15	0.45
1:N:677:U:C5	1:N:678:U:C4	3.04	0.45
1:N:803:G:C5	1:N:804:U:C4	3.04	0.45
1:N:840:C:C1'	1:N:843:U:H3	2.29	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:934:C:H2'	1:N:1344:C:C5	2.52	0.45
1:N:1206:G:C6	1:N:1207:G:C5	3.04	0.45
1:N:1341:U:N3	1:N:1342:C:C5	2.85	0.45
1:N:81:A:OP2	1:N:83:C:C5	2.70	0.45
1:N:139:A:C2'	1:N:140:U:H5'	2.46	0.45
1:N:439:U:C5	1:N:440:C:C5	3.05	0.45
1:N:585:G:C2	1:N:586:C:C2	3.04	0.45
1:N:1129:C:N3	1:N:1144:G:C6	2.85	0.45
1:N:1433:A:H1'	1:N:1468:A:C2	2.52	0.45
1:N:668:G:C5	1:N:669:G:C5	3.05	0.45
1:N:669:G:C5	1:N:670:G:C5	3.05	0.45
1:N:1019:A:C2	1:N:1020:G:C8	3.04	0.45
1:N:1072:G:C6	1:N:1073:U:N3	2.85	0.45
1:N:1468:A:C2	1:N:1469:C:C2	3.05	0.45
1:N:126:G:N1	1:N:127:G:C5	2.85	0.45
1:N:181:A:H4'	1:N:182:A:O5'	2.17	0.45
1:N:218:U:C5	1:N:219:U:C4	3.05	0.45
1:N:300:A:C4	1:N:301:G:H1'	2.52	0.45
1:N:620:C:H3'	1:N:621:A:C8	2.52	0.45
1:N:1003:G:C6	1:N:1005:A:OP1	2.70	0.45
1:N:1269:A:C5	1:N:1270:G:H1'	2.52	0.45
1:N:1343:G:C8	1:N:1344:C:C5	3.04	0.45
1:N:236:A:C6	1:N:237:G:C6	3.04	0.44
1:N:771:G:C5	1:N:772:U:C4	3.05	0.44
1:N:779:C:H2'	1:N:780:A:C8	2.53	0.44
1:N:1098:C:C4	1:N:1099:G:C5	3.05	0.44
1:N:1273:C:N4	1:N:1274:A:C2	2.85	0.44
1:N:70:U:C5	1:N:94:G:H2'	2.52	0.44
1:N:130:A:H2	1:N:232:G:H22	1.66	0.44
1:N:198:G:H2'	1:N:199:A:C8	2.52	0.44
1:N:832:G:H3'	1:N:832:G:C8	2.53	0.44
1:N:1130:A:C2	1:N:1131:G:C5	3.05	0.44
1:N:1406:U:H2'	1:N:1407:C:H5'	1.99	0.44
1:N:62:U:N3	1:N:63:C:C4	2.86	0.44
1:N:296:U:H2'	1:N:297:G:C8	2.52	0.44
1:N:78:A:C6	1:N:79:G:N1	2.85	0.44
1:N:129:A:H2	1:N:232:G:H1	1.65	0.44
1:N:455:G:H22	1:N:478:A:H1'	1.82	0.44
1:N:778:G:H22	1:N:804:U:H2'	1.83	0.44
1:N:856:C:C4	1:N:857:C:C4	3.06	0.44
1:N:962:C:C2	1:N:963:G:C8	3.06	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1066:C:H5''	1:N:1066:C:H6	1.82	0.44
1:N:620:C:C5	1:N:621:A:C5	3.05	0.44
1:N:708:C:H2'	1:N:709:U:C6	2.52	0.44
1:N:1149:C:H2'	1:N:1150:A:C8	2.52	0.44
1:N:829:G:C6	1:N:830:G:C5	3.06	0.44
1:N:830:G:C6	1:N:831:A:C5	3.05	0.44
1:N:1345:U:C1'	1:N:1375:A:H61	2.31	0.44
1:N:102:G:C6	1:N:103:U:C4	3.06	0.44
1:N:585:G:C6	1:N:586:C:C4	3.06	0.44
1:N:723:U:H3	1:N:832:G:N2	2.15	0.44
1:N:939:G:C6	1:N:940:C:N3	2.85	0.44
1:N:1456:A:H3'	1:N:1457:G:C5'	2.48	0.44
1:N:260:G:H2'	1:N:261:U:C6	2.53	0.44
1:N:894:G:C5	1:N:895:G:N7	2.86	0.44
1:N:901:A:C5	1:N:902:G:H1'	2.53	0.44
1:N:1523:G:C6	1:N:1524:C:C4	3.06	0.44
1:N:27:G:C5	1:N:557:G:C2	3.06	0.43
1:N:27:G:C6	1:N:28:A:C5	3.06	0.43
1:N:36:C:C4	1:N:37:U:C5	3.06	0.43
1:N:243:A:C2	1:N:245:U:N3	2.86	0.43
1:N:282:A:H3'	1:N:283:U:C6	2.53	0.43
1:N:292:G:C5	1:N:293:G:H1'	2.52	0.43
1:N:537:G:C2	1:N:538:G:C4	3.06	0.43
1:N:1144:G:O6	1:N:1145:A:C6	2.70	0.43
1:N:1239:A:C5	1:N:1241:G:C2	3.06	0.43
1:N:1261:A:H61	1:N:1274:A:C2'	2.29	0.43
1:N:107:G:H1'	1:N:379:C:H5'	2.00	0.43
1:N:246:A:C6	1:N:279:A:C4	3.06	0.43
1:N:254:G:C2	1:N:273:U:O2	2.71	0.43
1:N:1285:A:H61	1:N:1355:G:H4'	1.83	0.43
1:N:1501:C:H3'	1:N:1504:G:C8	2.52	0.43
1:N:80:A:H61	1:N:89:U:H3	1.64	0.43
1:N:383:A:C5	1:N:384:G:H1'	2.53	0.43
1:N:439:U:C5	1:N:440:C:C4	3.06	0.43
1:N:604:G:C2	1:N:605:U:C2	3.06	0.43
1:N:668:G:C6	1:N:669:G:C5	3.06	0.43
1:N:232:G:C5	1:N:233:C:C5	3.07	0.43
1:N:215:C:C5	1:N:216:U:C4	3.07	0.43
1:N:223:A:H2'	1:N:224:U:C6	2.54	0.43
1:N:299:G:O2'	1:N:300:A:H5'	2.18	0.43
1:N:579:A:C4	1:N:763:G:C2	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:720:C:C4	1:N:733:G:H2'	2.54	0.43
1:N:914:A:H8	1:N:914:A:H5''	1.82	0.43
1:N:1366:C:C5	1:N:1367:C:C4	3.06	0.43
1:N:130:A:N1	1:N:233:C:O2	2.51	0.43
1:N:301:G:C4	1:N:302:G:C8	3.07	0.43
1:N:465:A:C2	1:N:466:A:C4	3.07	0.43
1:N:693:G:O6	1:N:694:A:C6	2.71	0.43
1:N:802:A:H3'	1:N:803:G:C8	2.53	0.43
1:N:1009:U:O2	1:N:1021:A:C2	2.72	0.43
1:N:1416:G:H2'	1:N:1417:G:H5'	2.01	0.43
1:N:1495:U:N3	1:N:1496:C:C4	2.87	0.43
1:N:453:G:O6	1:N:480:U:C4	2.71	0.43
1:N:255:G:N1	1:N:272:C:C2	2.87	0.43
1:N:506:G:C2	1:N:507:C:C2	3.07	0.43
1:N:693:G:C6	1:N:694:A:C6	3.06	0.43
1:N:804:U:H6	1:N:805:C:C5	2.35	0.43
1:N:80:A:C5	1:N:81:A:H1'	2.54	0.43
1:N:100:G:C6	1:N:101:A:C6	3.06	0.43
1:N:265:G:H3'	1:N:267:C:C5	2.54	0.43
1:N:406:G:C8	1:N:495:A:H3'	2.54	0.43
1:N:597:G:C6	1:N:598:U:C2	3.07	0.43
1:N:785:G:C2	1:N:786:G:C8	3.07	0.43
1:N:949:A:N6	1:N:1232:U:H3	2.16	0.43
1:N:951:G:C6	1:N:1231:G:C6	3.07	0.43
1:N:1389:C:H2'	1:N:1390:U:O4'	2.19	0.43
1:N:61:G:N2	1:N:105:G:H22	2.17	0.43
1:N:474:G:C6	1:N:475:C:N3	2.87	0.43
1:N:862:C:H1'	1:N:874:G:H5''	2.01	0.43
1:N:941:G:C6	1:N:1343:G:C6	3.07	0.43
1:N:201:G:N2	1:N:468:A:H62	2.17	0.42
1:N:828:U:H2'	1:N:829:G:C8	2.54	0.42
1:N:898:G:C2	1:N:902:G:C5	3.07	0.42
1:N:1097:C:H2'	1:N:1098:C:H6	1.82	0.42
1:N:54:C:O2	1:N:54:C:H2'	2.19	0.42
1:N:173:U:H3'	1:N:174:A:H5'	2.00	0.42
1:N:584:G:C6	1:N:585:G:C5	3.08	0.42
1:N:749:A:H2'	1:N:750:C:C6	2.54	0.42
1:N:925:G:C6	1:N:927:G:C6	3.07	0.42
1:N:1127:G:H22	1:N:1145:A:H2	1.67	0.42
1:N:662:U:H2'	1:N:663:A:C8	2.55	0.42
1:N:1072:G:C2	1:N:1104:G:C2	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1363:A:H2'	1:N:1363:A:H5''	1.94	0.42
1:N:171:A:C5	1:N:172:A:C6	3.07	0.42
1:N:211:G:N2	1:N:213:G:C8	2.87	0.42
1:N:1023:U:H2'	1:N:1024:G:C8	2.54	0.42
1:N:1102:A:C2	1:N:1103:C:N3	2.87	0.42
1:N:322:C:H3'	1:N:323:U:H6	1.83	0.42
1:N:335:C:C2	1:N:336:A:C8	3.08	0.42
1:N:361:G:C8	1:N:362:G:N7	2.88	0.42
1:N:594:U:H3'	1:N:595:A:C8	2.55	0.42
1:N:597:G:C2	1:N:644:U:C2	3.07	0.42
1:N:781:A:H4'	1:N:1522:U:O2'	2.20	0.42
1:N:1061:G:C5	1:N:1197:A:C6	3.07	0.42
1:N:1148:U:N3	1:N:1149:C:C2	2.87	0.42
1:N:1183:U:H3'	1:N:1183:U:C6	2.54	0.42
1:N:1268:G:C5	1:N:1269:A:C5	3.07	0.42
1:N:223:A:C5	1:N:224:U:C5	3.07	0.42
1:N:340:U:H2'	1:N:341:C:C6	2.55	0.42
1:N:479:U:N3	1:N:480:U:C5	2.87	0.42
1:N:1262:C:C5	1:N:1263:C:C6	3.08	0.42
1:N:64:G:N1	1:N:69:G:C2	2.87	0.42
1:N:139:A:C6	1:N:140:U:C4	3.07	0.42
1:N:335:C:H2'	1:N:336:A:C8	2.54	0.42
1:N:309:A:H1'	1:N:608:A:C2	2.55	0.42
1:N:1287:A:C6	1:N:1288:A:C6	3.08	0.42
1:N:127:G:N2	1:N:128:G:H1'	2.35	0.42
1:N:139:A:H2'	1:N:140:U:O4'	2.20	0.42
1:N:462:G:N3	1:N:462:G:H2'	2.35	0.42
1:N:723:U:N3	1:N:855:U:H1'	2.34	0.42
1:N:1360:A:H3'	1:N:1361:G:H8	1.83	0.42
1:N:1365:G:C6	1:N:1366:C:C4	3.08	0.42
1:N:64:G:C4	1:N:99:C:C4	3.08	0.42
1:N:112:G:H22	1:N:315:A:H2	1.68	0.42
1:N:615:G:C2	1:N:626:G:C2	3.07	0.42
1:N:701:U:C5'	1:N:703:G:H5'	2.50	0.42
1:N:941:G:C5	1:N:942:G:H1'	2.55	0.42
1:N:1042:A:C2	1:N:1043:G:N1	2.88	0.42
1:N:1415:G:C2	1:N:1486:G:C5	3.07	0.42
1:N:145:G:C6	1:N:146:G:N7	2.88	0.41
1:N:160:A:H4'	1:N:344:A:C6	2.55	0.41
1:N:255:G:C4	1:N:256:U:C6	3.07	0.41
1:N:417:G:C5	1:N:418:C:C4	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1159:U:H5	1:N:1162:C:H42	1.67	0.41
1:N:118:U:H2'	1:N:121:U:C6	2.55	0.41
1:N:155:A:H2'	1:N:156:C:C6	2.54	0.41
1:N:245:U:O2	1:N:284:C:C2	2.73	0.41
1:N:322:C:N4	1:N:327:A:C8	2.88	0.41
1:N:524:G:C2	1:N:525:C:C2	3.08	0.41
1:N:584:G:C5	1:N:585:G:C5	3.07	0.41
1:N:595:A:H4'	1:N:596:A:H5'	2.02	0.41
1:N:804:U:C6	1:N:805:C:C6	3.08	0.41
1:N:900:A:C6	1:N:901:A:C6	3.08	0.41
1:N:453:G:C6	1:N:454:G:C6	3.08	0.41
1:N:1104:G:C6	1:N:1105:A:C5	3.08	0.41
1:N:57:G:C6	1:N:356:A:N1	2.89	0.41
1:N:141:G:C6	1:N:223:A:C6	3.08	0.41
1:N:655:A:C2	1:N:754:C:N4	2.88	0.41
1:N:917:G:H2'	1:N:918:A:C8	2.55	0.41
1:N:1266:G:N2	1:N:1269:A:H8	2.19	0.41
1:N:1375:A:H2'	1:N:1376:U:O4'	2.20	0.41
1:N:103:U:C4	1:N:104:G:N7	2.88	0.41
1:N:160:A:C5	1:N:161:A:C6	3.08	0.41
1:N:197:A:H2	1:N:198:G:C4	2.37	0.41
1:N:203:G:H1'	1:N:465:A:H61	1.86	0.41
1:N:310:G:C6	1:N:311:C:C4	3.08	0.41
1:N:486:U:H5''	1:N:486:U:H6	1.82	0.41
1:N:646:G:C5	1:N:647:C:C4	3.08	0.41
1:N:795:C:C5	1:N:796:C:C4	3.09	0.41
1:N:171:A:C6	1:N:172:A:N1	2.89	0.41
1:N:755:G:C6	1:N:756:C:C4	3.08	0.41
1:N:1007:U:H2'	1:N:1008:U:H5''	2.02	0.41
1:N:1105:A:H2'	1:N:1106:G:H8	1.86	0.41
1:N:1215:G:H2'	1:N:1216:A:H5'	2.03	0.41
1:N:1282:C:H2'	1:N:1283:U:C6	2.56	0.41
1:N:1342:C:H2'	1:N:1343:G:C8	2.55	0.41
1:N:18:C:C6	1:N:18:C:H3'	2.56	0.41
1:N:269:C:H2'	1:N:270:A:C8	2.55	0.41
1:N:272:C:H2'	1:N:273:U:C6	2.55	0.41
1:N:369:G:C6	1:N:370:C:C4	3.08	0.41
1:N:414:A:H8	1:N:428:G:H22	1.68	0.41
1:N:895:G:C6	1:N:896:C:C4	3.08	0.41
1:N:186:C:N3	1:N:187:G:C5	2.89	0.41
1:N:275:G:C8	1:N:275:G:H5''	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:923:A:C2	1:N:924:C:C2	3.09	0.41
1:N:1068:G:C2	1:N:1069:C:C6	3.08	0.41
1:N:1256:A:C2	1:N:1258:G:O6	2.74	0.41
1:N:1345:U:C2	1:N:1375:A:N1	2.88	0.41
1:N:21:G:H1'	1:N:914:A:H61	1.85	0.41
1:N:27:G:C6	1:N:28:A:C6	3.09	0.41
1:N:64:G:N2	1:N:69:G:C6	2.89	0.41
1:N:160:A:C2	1:N:346:G:N1	2.89	0.41
1:N:832:G:C5	1:N:855:U:N3	2.89	0.41
1:N:934:C:C4	1:N:1344:C:C2	3.09	0.41
1:N:1006:G:N2	1:N:1024:G:H1'	2.36	0.41
1:N:1047:G:C2	1:N:1213:A:C2	3.09	0.41
1:N:1053:G:H5''	1:N:1200:C:C5	2.55	0.41
1:N:1069:C:N4	1:N:1094:G:C2	2.89	0.41
1:N:1083:U:C5	1:N:1084:G:C6	3.09	0.41
1:N:1223:C:H5''	1:N:1224:U:H3'	2.02	0.41
1:N:1502:A:H5'	1:N:1504:G:N7	2.36	0.41
1:N:109:A:C6	1:N:326:G:C6	3.09	0.41
1:N:1095:U:H2'	1:N:1096:C:O4'	2.21	0.41
1:N:165:G:C2	1:N:166:U:C2	3.10	0.40
1:N:321:A:H2'	1:N:322:C:C6	2.56	0.40
1:N:438:U:C4	1:N:494:G:C8	3.09	0.40
1:N:780:A:H1'	1:N:803:G:H22	1.86	0.40
1:N:651:C:C4	1:N:652:U:C4	3.09	0.40
1:N:750:C:N3	1:N:751:U:C4	2.89	0.40
1:N:1299:A:C2	1:N:1301:U:C2	3.09	0.40
1:N:1357:A:N1	1:N:1363:A:C6	2.90	0.40
1:N:1371:G:C6	1:N:1372:U:C4	3.09	0.40
1:N:895:G:H2'	1:N:896:C:O4'	2.21	0.40
1:N:1266:G:N2	1:N:1268:G:H3'	2.36	0.40
1:N:1299:A:C2	1:N:1301:U:N3	2.89	0.40
1:N:1476:A:C6	1:N:1477:U:C4	3.10	0.40
1:N:295:C:C4	1:N:296:U:C4	3.10	0.40
1:N:465:A:C6	1:N:466:A:C6	3.09	0.40
1:N:507:C:C4	1:N:508:U:C2	3.09	0.40
1:N:563:A:C2	1:N:567:G:C5	3.09	0.40
1:N:646:G:C5	1:N:647:C:C5	3.09	0.40
1:N:782:A:N7	1:N:783:C:C4	2.89	0.40
1:N:837:U:H2'	1:N:838:G:H8	1.87	0.40
1:N:1021:A:H2'	1:N:1022:A:H5''	2.04	0.40
1:N:1117:A:C2	1:N:1184:G:C6	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1258:G:H2'	1:N:1259:C:C6	2.57	0.40
1:N:64:G:C2	1:N:69:G:C6	3.09	0.40
1:N:208:U:H2'	1:N:209:U:C6	2.57	0.40
1:N:295:C:H2'	1:N:296:U:C6	2.57	0.40
1:N:300:A:H1'	1:N:565:U:O2	2.22	0.40
1:N:330:C:H2'	1:N:331:G:C8	2.56	0.40
1:N:591:U:H6	1:N:591:U:O5'	2.05	0.40
1:N:1326:U:H2'	1:N:1327:C:C6	2.57	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

There are no protein molecules in this entry.

5.3.2 Protein sidechains [i](#)

There are no protein molecules in this entry.

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	N	1532/1533 (99%)	451 (29%)	150 (9%)

All (451) 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	27	G

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Mol	Chain	Res	Type
1	N	31	G
1	N	32	A
1	N	39	G
1	N	47	C
1	N	48	C
1	N	49	U
1	N	50	A
1	N	51	A
1	N	52	C
1	N	60	A
1	N	61	G
1	N	65	A
1	N	66	A
1	N	70	U
1	N	71	A
1	N	72	A
1	N	73	C
1	N	74	A
1	N	75	G
1	N	76	G
1	N	77	A
1	N	79	G
1	N	81	A
1	N	82	G
1	N	83	C
1	N	84	U
1	N	85	U
1	N	86	G
1	N	87	C
1	N	88	U
1	N	89	U
1	N	90	C
1	N	91	U
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

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Mol	Chain	Res	Type
1	N	116	A
1	N	119	A
1	N	120	A
1	N	127	G
1	N	130	A
1	N	131	A
1	N	132	C
1	N	134	G
1	N	135	C
1	N	138	G
1	N	141	G
1	N	142	G
1	N	143	A
1	N	159	G
1	N	160	A
1	N	161	A
1	N	163	C
1	N	164	G
1	N	173	U
1	N	174	A
1	N	177	G
1	N	181	A
1	N	182	A
1	N	183	C
1	N	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

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Mol	Chain	Res	Type
1	N	245	U
1	N	247	G
1	N	250	A
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	281	G
1	N	285	C
1	N	289	G
1	N	306	A
1	N	316	C
1	N	321	A
1	N	328	C
1	N	330	C
1	N	331	G
1	N	332	G
1	N	344	A
1	N	345	C
1	N	346	G
1	N	347	G
1	N	351	G
1	N	352	C
1	N	353	A
1	N	354	G
1	N	363	A
1	N	366	A
1	N	367	U
1	N	368	U
1	N	372	C
1	N	373	A
1	N	384	G
1	N	389	A
1	N	390	U
1	N	392	C
1	N	398	U
1	N	406	G
1	N	411	A

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Mol	Chain	Res	Type
1	N	412	A
1	N	413	G
1	N	414	A
1	N	421	U
1	N	422	C
1	N	423	G
1	N	424	G
1	N	428	G
1	N	429	U
1	N	430	A
1	N	431	A
1	N	439	U
1	N	441	A
1	N	448	A
1	N	451	A
1	N	452	A
1	N	458	U
1	N	459	A
1	N	461	A
1	N	462	G
1	N	463	U
1	N	466	A
1	N	467	U
1	N	468	A
1	N	469	C
1	N	481	G
1	N	482	A
1	N	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	523	A
1	N	527	G
1	N	530	G

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Mol	Chain	Res	Type
1	N	531	U
1	N	532	A
1	N	533	A
1	N	534	U
1	N	535	A
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
1	N	579	A
1	N	588	G
1	N	595	A
1	N	596	A
1	N	604	G
1	N	606	G
1	N	607	A
1	N	610	U
1	N	629	A
1	N	632	U
1	N	633	G
1	N	642	A
1	N	649	A
1	N	665	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

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Mol	Chain	Res	Type
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	768	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	811	C
1	N	812	G
1	N	813	U
1	N	815	A
1	N	816	A
1	N	817	C
1	N	818	G
1	N	819	A
1	N	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	849	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	914	A

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Mol	Chain	Res	Type
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	967	C
1	N	968	A
1	N	969	A
1	N	970	C
1	N	971	G
1	N	972	C
1	N	974	A
1	N	975	A
1	N	976	G
1	N	977	A
1	N	982	U
1	N	983	A
1	N	992	U
1	N	993	G
1	N	1003	G
1	N	1004	A
1	N	1008	U
1	N	1017	U
1	N	1018	G
1	N	1022	A
1	N	1028	C
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

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Mol	Chain	Res	Type
1	N	1055	A
1	N	1064	G
1	N	1065	U
1	N	1066	C
1	N	1067	A
1	N	1078	U
1	N	1085	U
1	N	1086	U
1	N	1087	G
1	N	1088	G
1	N	1091	U
1	N	1092	A
1	N	1093	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	1112	C
1	N	1113	C
1	N	1124	G
1	N	1125	U
1	N	1126	U
1	N	1127	G
1	N	1129	C
1	N	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	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

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Mol	Chain	Res	Type
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	1189	U
1	N	1190	G
1	N	1191	A
1	N	1192	C
1	N	1194	U
1	N	1196	A
1	N	1197	A
1	N	1198	G
1	N	1200	C
1	N	1201	A
1	N	1202	U
1	N	1211	U
1	N	1213	A
1	N	1223	C
1	N	1224	U
1	N	1225	A
1	N	1226	C
1	N	1227	A
1	N	1228	C
1	N	1238	A
1	N	1239	A
1	N	1240	U
1	N	1241	G
1	N	1250	A
1	N	1252	A
1	N	1256	A
1	N	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	1286	U
1	N	1287	A
1	N	1293	C

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Mol	Chain	Res	Type
1	N	1297	G
1	N	1298	U
1	N	1299	A
1	N	1300	G
1	N	1302	C
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	1346	A
1	N	1353	G
1	N	1359	C
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1365	G
1	N	1371	G
1	N	1380	U
1	N	1381	U
1	N	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	1432	G
1	N	1433	A
1	N	1441	A
1	N	1446	A
1	N	1448	C
1	N	1451	U
1	N	1452	C
1	N	1453	G
1	N	1456	A

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Mol	Chain	Res	Type
1	N	1457	G
1	N	1469	C
1	N	1470	U
1	N	1482	G
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	1520	C
1	N	1529	G
1	N	1530	G
1	N	1531	A
1	N	1533	C
1	N	1534	A

All (150) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	N	5	U
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	92	U
1	N	94	G
1	N	109	A
1	N	115	G

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Mol	Chain	Res	Type
1	N	119	A
1	N	120	A
1	N	129	A
1	N	130	A
1	N	131	A
1	N	166	U
1	N	167	A
1	N	181	A
1	N	197	A
1	N	198	G
1	N	203	G
1	N	204	G
1	N	210	C
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	279	A
1	N	280	C
1	N	305	G
1	N	327	A
1	N	344	A
1	N	346	G
1	N	351	G
1	N	366	A
1	N	372	C
1	N	391	G
1	N	412	A
1	N	421	U
1	N	428	G
1	N	429	U
1	N	430	A
1	N	438	U
1	N	451	A
1	N	467	U
1	N	481	G
1	N	484	G
1	N	485	U
1	N	495	A
1	N	496	A

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Mol	Chain	Res	Type
1	N	499	A
1	N	500	G
1	N	505	G
1	N	508	U
1	N	511	C
1	N	531	U
1	N	532	A
1	N	533	A
1	N	535	A
1	N	547	A
1	N	559	A
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	695	A
1	N	717	U
1	N	720	C
1	N	721	G
1	N	723	U
1	N	733	G
1	N	754	C
1	N	774	G
1	N	792	A
1	N	811	C
1	N	817	C
1	N	820	U
1	N	865	A
1	N	870	U
1	N	884	U
1	N	913	A
1	N	914	A
1	N	934	C
1	N	960	U
1	N	974	A
1	N	982	U
1	N	991	U
1	N	1049	U
1	N	1053	G
1	N	1064	G

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Mol	Chain	Res	Type
1	N	1066	C
1	N	1087	G
1	N	1094	G
1	N	1101	A
1	N	1112	C
1	N	1129	C
1	N	1136	C
1	N	1140	C
1	N	1151	A
1	N	1156	G
1	N	1167	A
1	N	1168	U
1	N	1185	G
1	N	1188	A
1	N	1190	G
1	N	1191	A
1	N	1196	A
1	N	1197	A
1	N	1201	A
1	N	1214	C
1	N	1223	C
1	N	1224	U
1	N	1228	C
1	N	1239	A
1	N	1263	C
1	N	1282	C
1	N	1285	A
1	N	1299	A
1	N	1303	C
1	N	1319	A
1	N	1331	G
1	N	1336	C
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

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Mol	Chain	Res	Type
1	N	1440	U
1	N	1498	U
1	N	1502	A
1	N	1505	G
1	N	1506	U
1	N	1530	G
1	N	1533	C

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

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

5.5 Carbohydrates [i](#)

There are no 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.

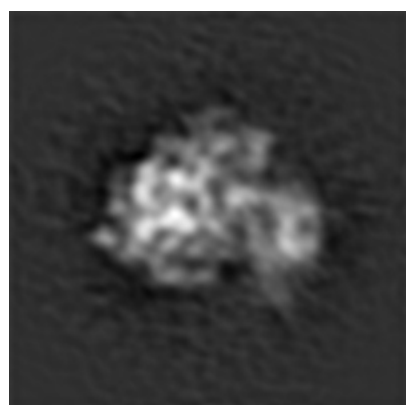
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5500. These allow visual inspection of the internal detail of the map and identification of artifacts.

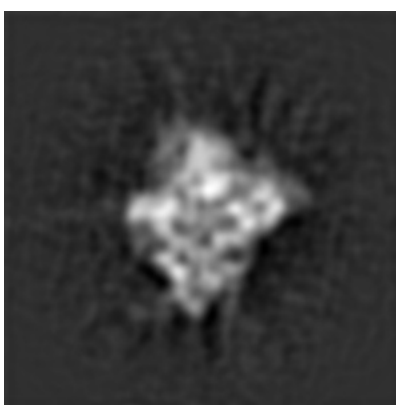
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

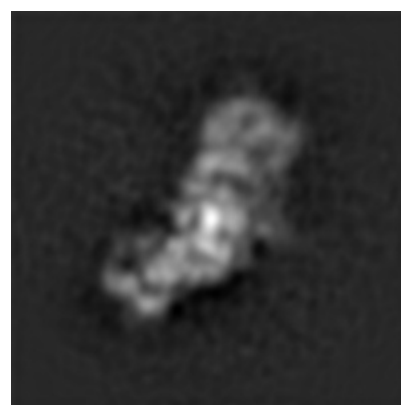
6.1.1 Primary map



X



Y

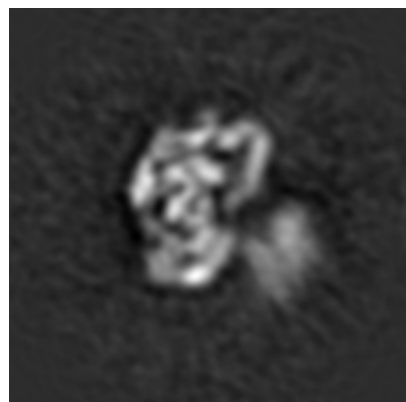


Z

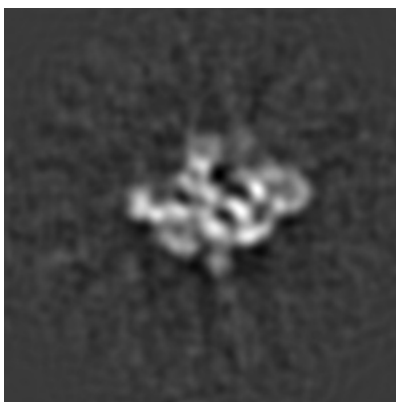
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

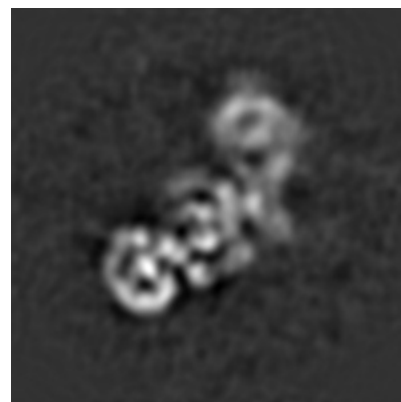
6.2.1 Primary map



X Index: 62



Y Index: 62

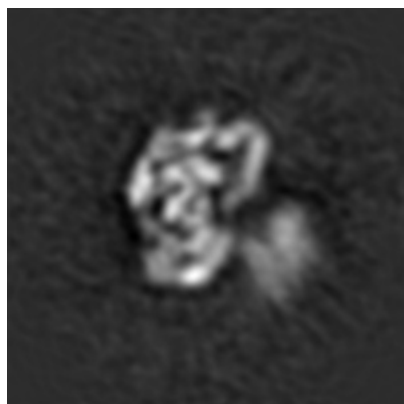


Z Index: 62

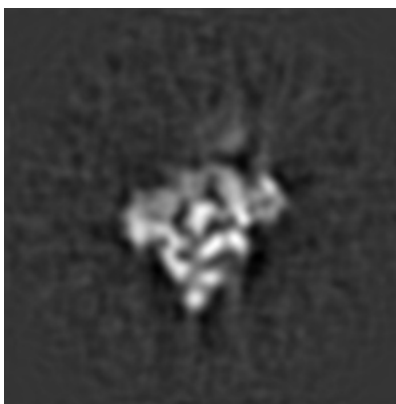
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

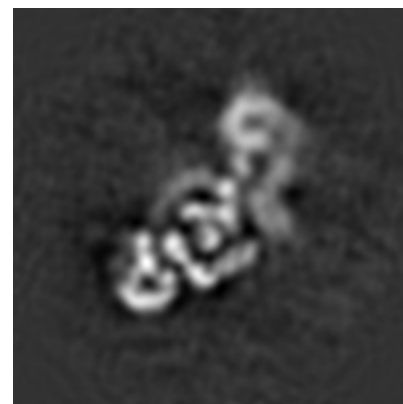
6.3.1 Primary map



X Index: 62



Y Index: 51

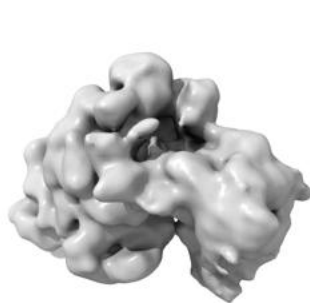


Z Index: 64

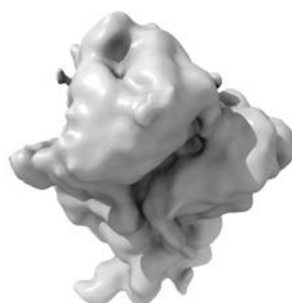
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

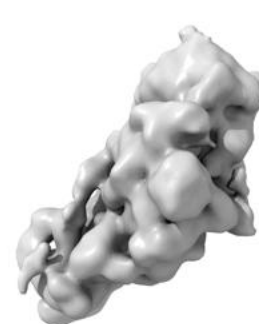
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level - 2.8. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

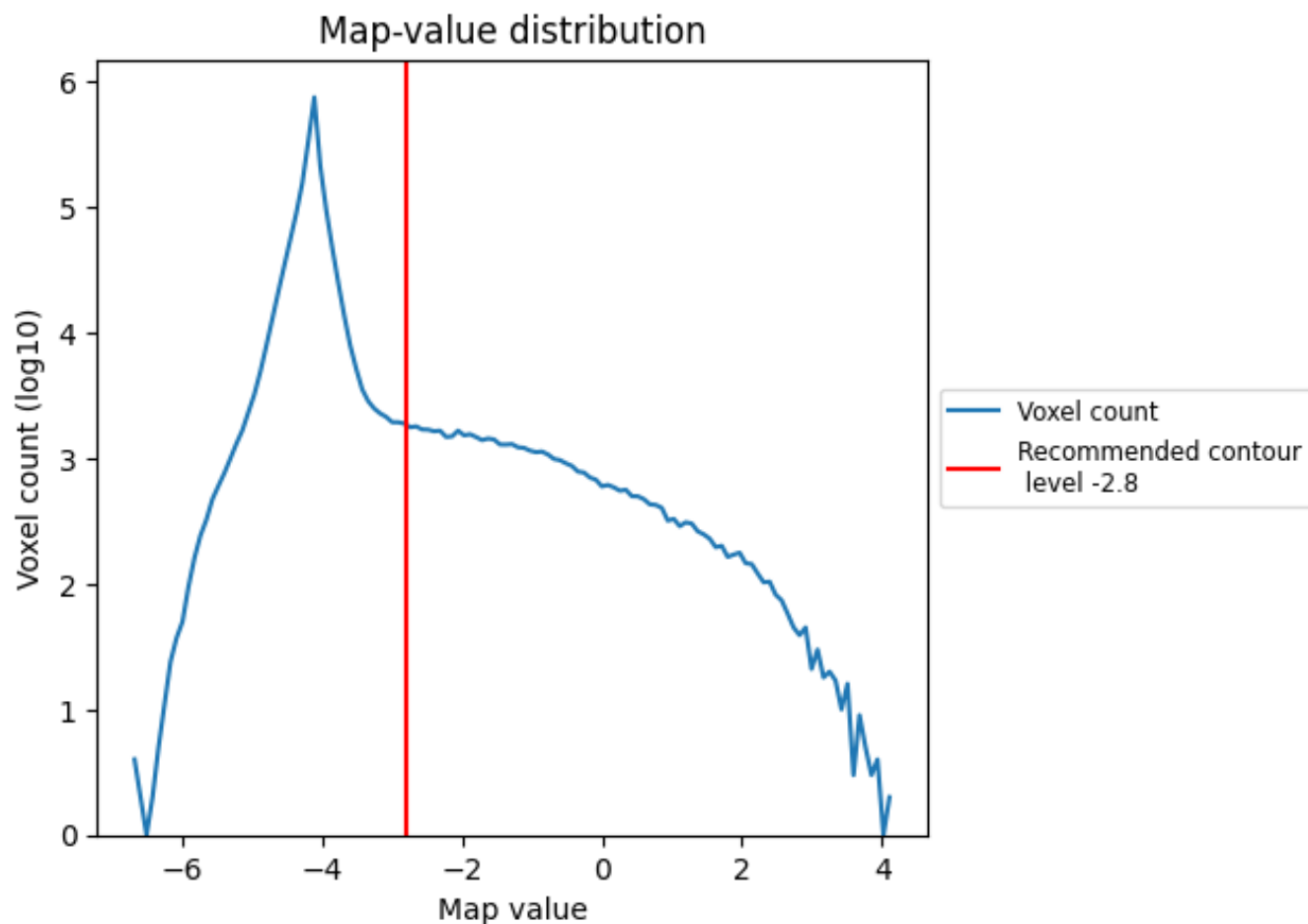
6.5 Mask visualisation

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

7 Map analysis [i](#)

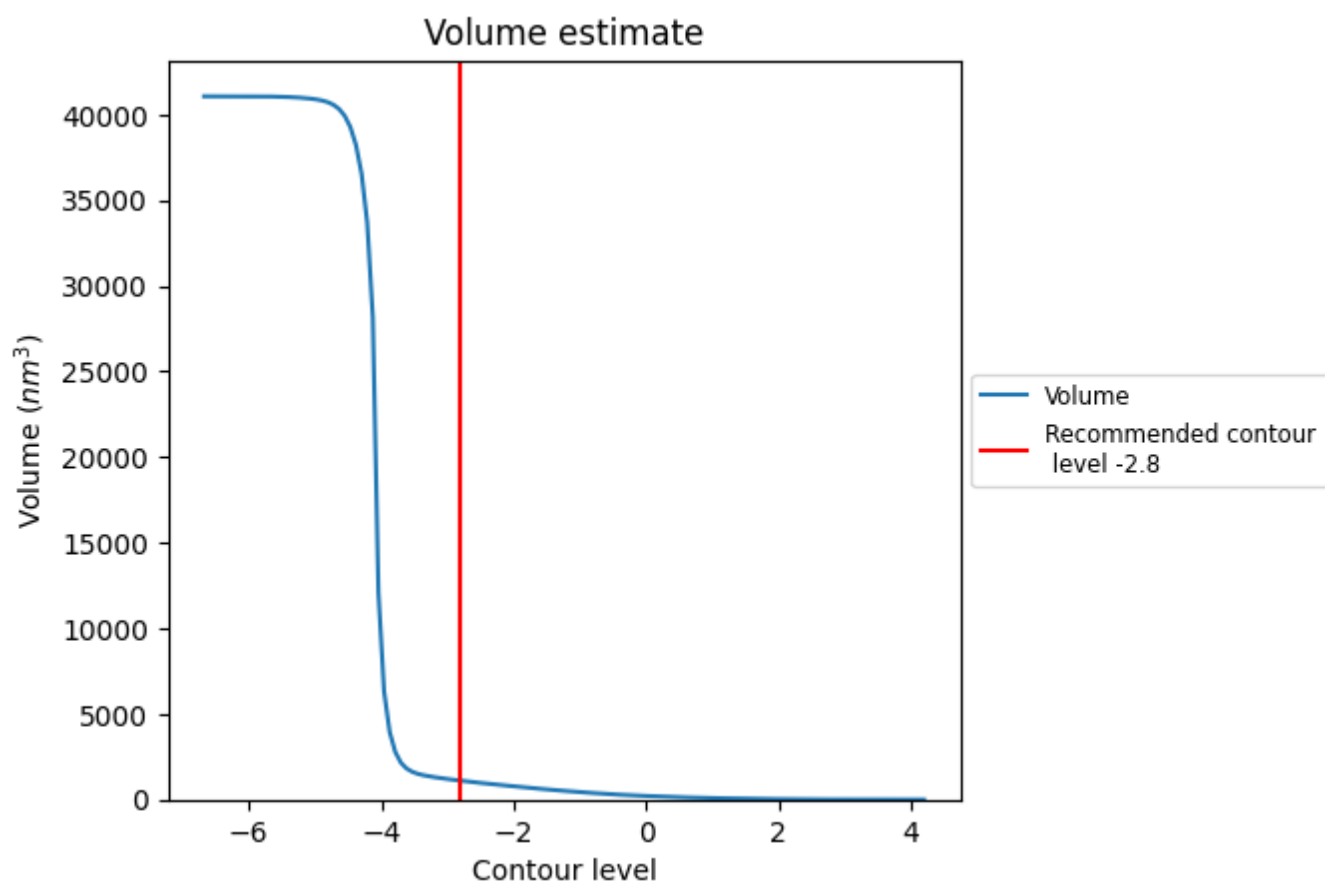
This section contains the results of statistical analysis of the map.

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.

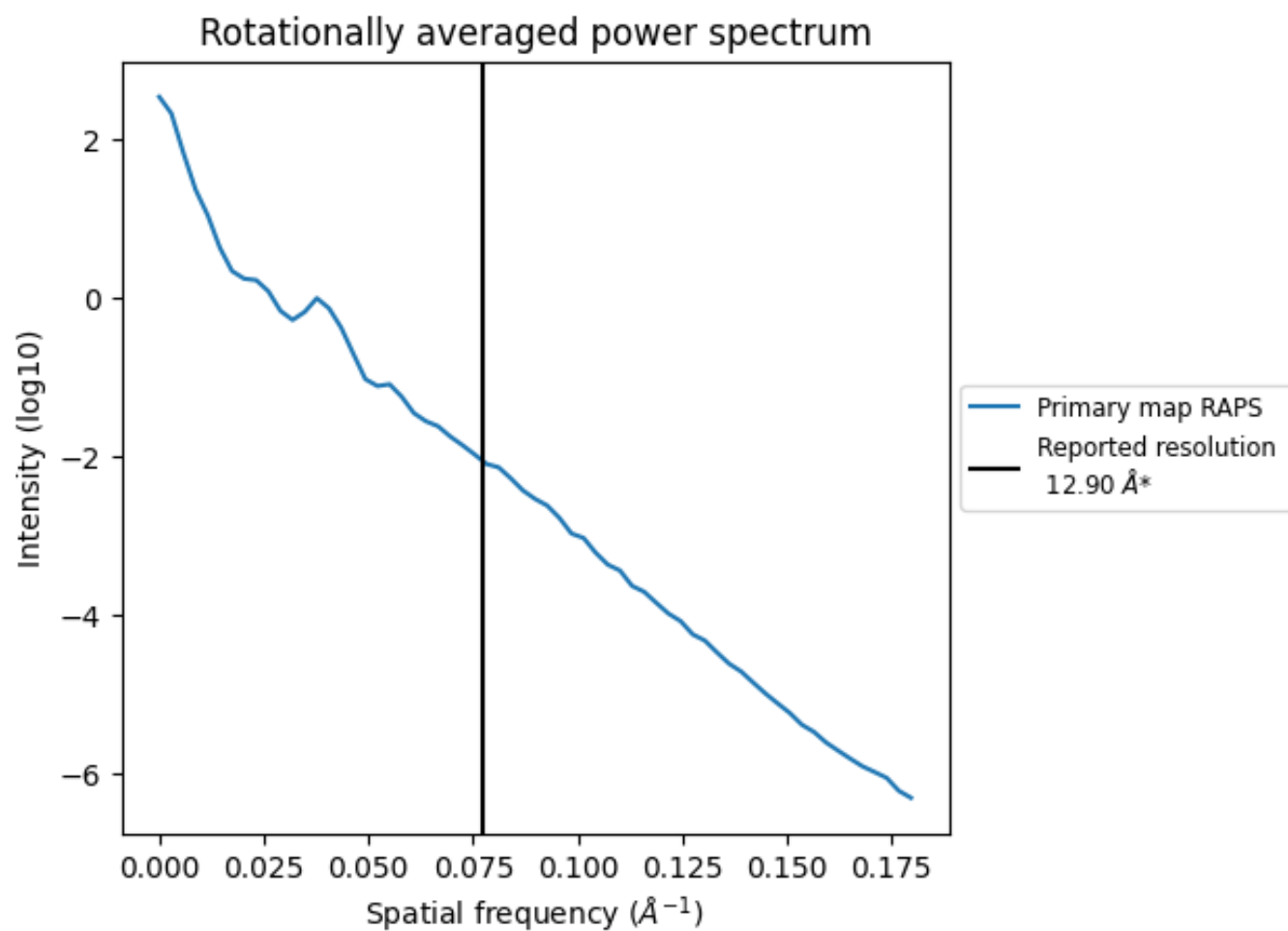
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1102 nm^3 ; this corresponds to an approximate mass of 995 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 0.078 Å⁻¹

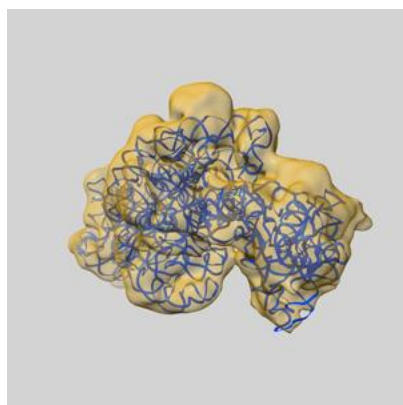
8 Fourier-Shell correlation

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

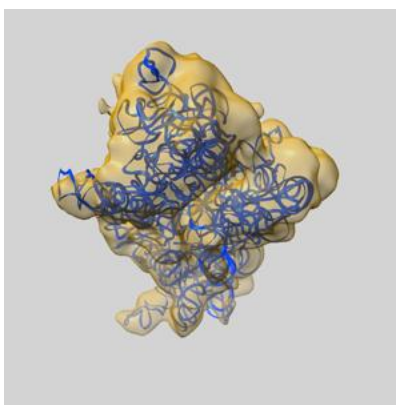
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-5500 and PDB model 3J28. Per-residue inclusion information can be found in [section 3](#) on [page 4](#).

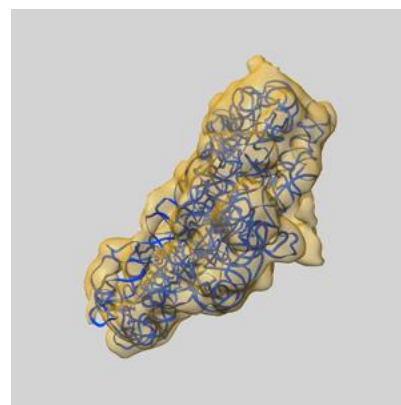
9.1 Map-model overlay [i](#)



X



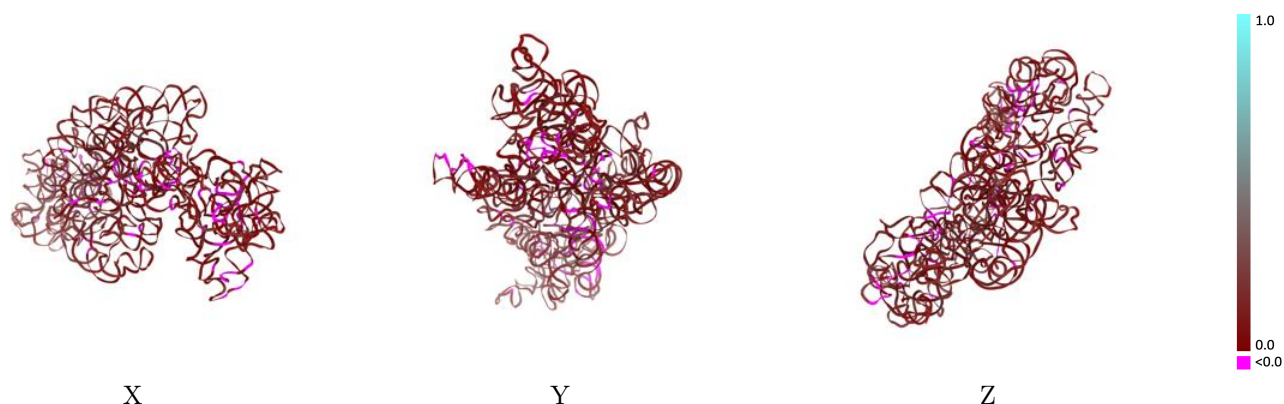
Y



Z

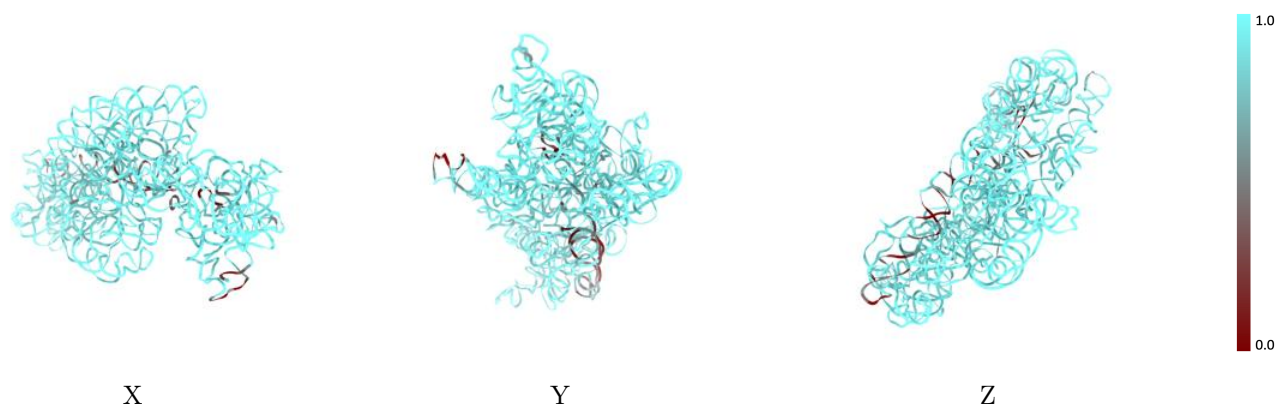
The images above show the 3D surface view of the map at the recommended contour level -2.8 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



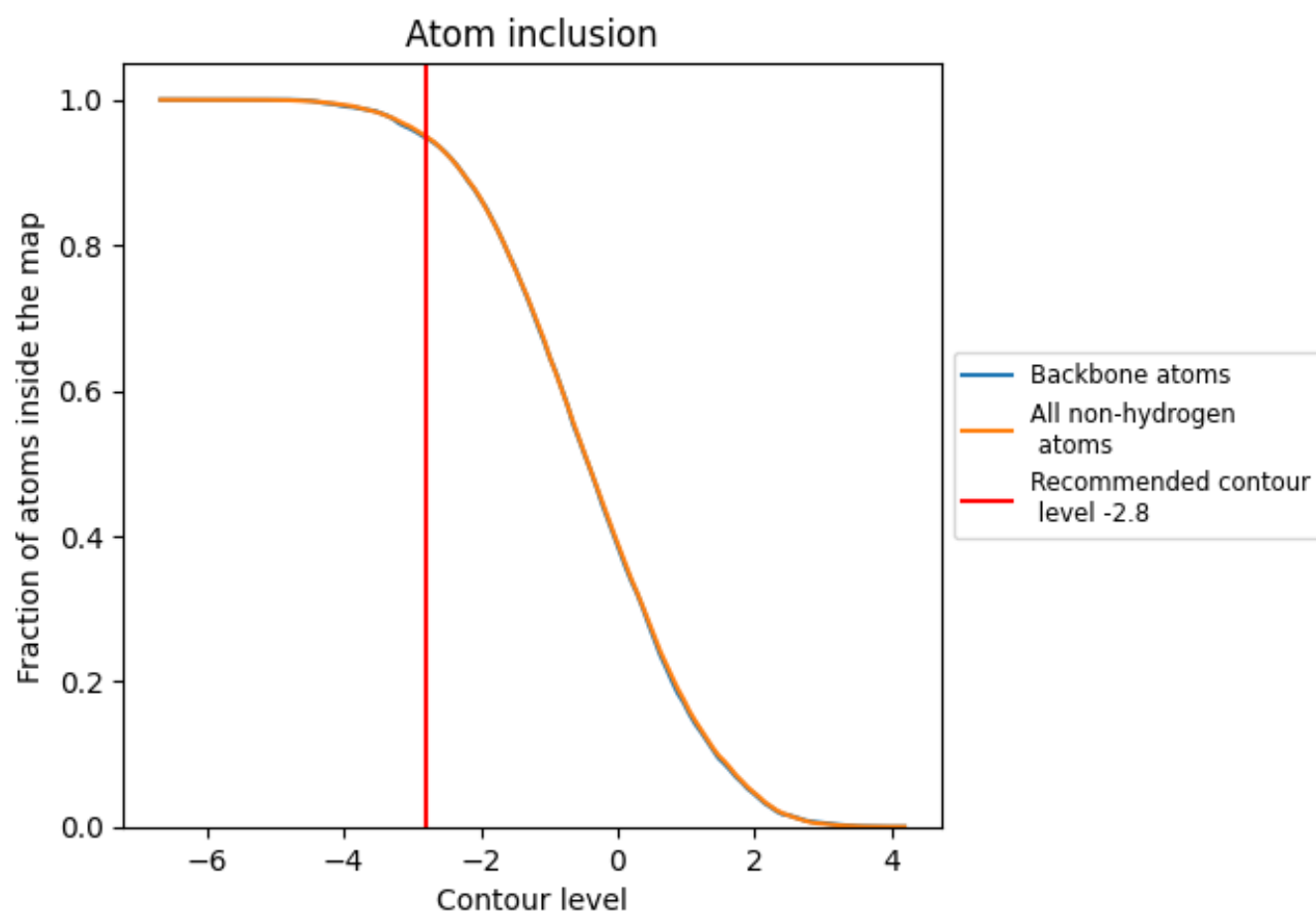
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (-2.8).

9.4 Atom inclusion [i](#)



At the recommended contour level, 95% of all backbone atoms, 95% 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 (-2.8) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div></div> 0.9497	<div></div> 0.1010
N	<div></div> 0.9500	<div></div> 0.1010

