



Full wwPDB/EMDatabank EM Map/Model Validation Report ⓘ

Dec 9, 2019 – 11:40 AM EST

PDB ID : 3J2G
EMDB ID: : EMD-5509
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 : 16.50 Å(reported)
Based on PDB ID : 3OFA

This is a Full wwPDB/EMDatabank EM Map/Model Validation Report
for a publicly released PDB/EMDB 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.

MolProbity : 4.02b-467
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : 2.4

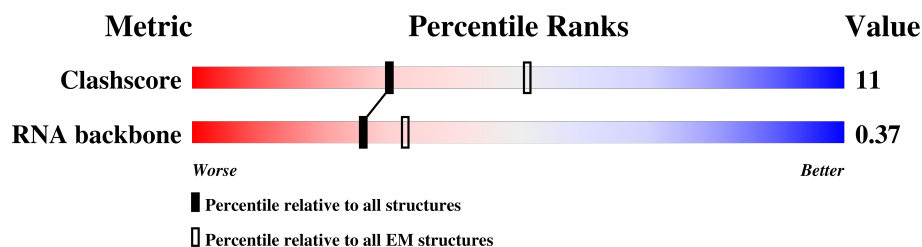
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY


The reported resolution of this entry is 16.50 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	136327	1886
RNA backbone	3747	458

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

Mol	Chain	Length	Quality of chain
1	N	1533	 18% 39% 43%

2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 49446 atoms, of which 16554 are hydrogens and 0 are deuteriums.

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

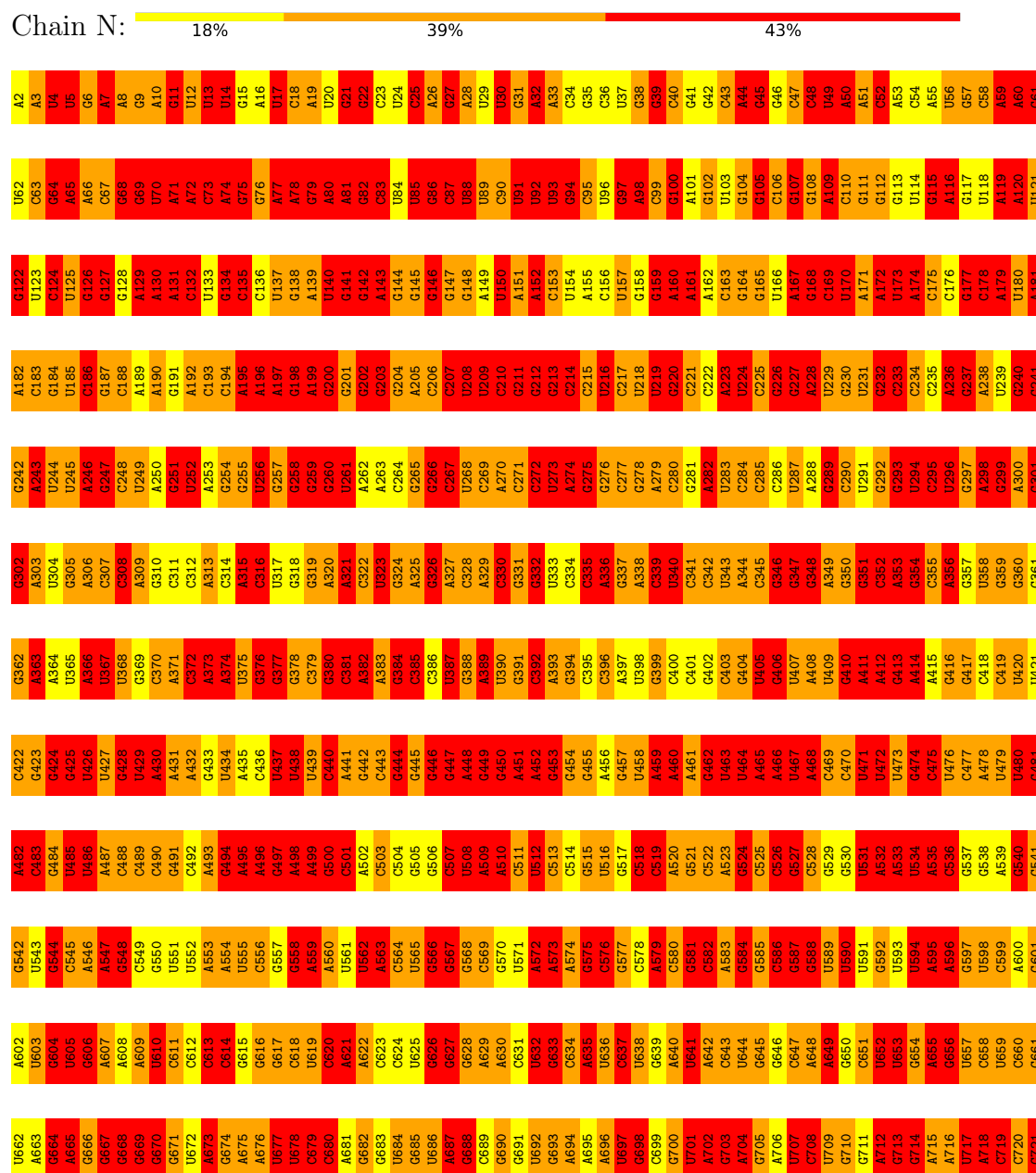
- Molecule 1 is a RNA chain called 16S rRNA.

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

3 Residue-property plots

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

• Molecule 1: 16S rRNA



A1502	C1442	C1382	C1322	C1262	U1202	G1142	A1082	A1022	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	G1144	G1084	G1024	A964	U904	G844	A784	G724
G1505	U1445	C1385	C1325	C1265	U1205	A1145	U1085	U1025	U965	U905	A845	G785	G725
A1506	G1446	G1386	U1326	G1266	G1206	A1146	U1086	G1026	G866	A906	G786	G786	G726
A1507	A1447	G1387	G1327	G1267	G1207	C1147	G1087	C1027	G967	A907	G847	G787	G727
A1508	C1448	C1388	C1328	G1268	C1208	U1148	G1088	U1028	A968	A908	C848	U788	A728
G1509	C1449	C1389	A1329	A1269	C1209	C1149	G1089	U1029	A969	A909	G849	U789	A729
U1510	U1450	U1390	U1330	G1270	C1210	A1150	U1090	U1030	C970	C910	U850	U790	G730
G1511	U1451	G1391	G1331	A1271	U1211	A1151	U1091	C1031	G971	U911	G851	G791	G731
U1512	C1452	G1392	A1332	G1272	U1212	A1152	A1092	G1032	C972	C912	G852	A792	C732
A1513	G1453	U1393	A1333	C1273	A1213	G1153	A1093	G1033	G973	A913	C853	U793	G733
G1514	A1454	A1394	G1334	A1274	C1214	G1154	G1094	G1034	A974	A914	U854	A794	G734
G1515	G1455	C1395	U1335	A1275	G1215	A1155	U1095	A1035	A975	A915	U855	C795	C735
G1516	A1456	A1396	G1336	G1276	A1216	G1156	C1096	A1036	G976	U916	C856	C796	C736
G1517	G1457	C1397	G1337	G1277	C1217	A1157	C1097	C1037	A977	G917	C857	C797	C737
A1518	G1458	A1398	G1338	G1278	C1218	U1158	C1098	C1038	A978	A918	G858	U798	C738
A1519	G1459	C1399	A1339	G1279	A1219	U1159	G1099	G1039	C979	A919	G859	G799	C739
C1520	C1460	G1400	A1340	A1280	G1220	G1160	C1100	U1040	C980	U920	A860	G800	U740
C1521	G1461	G1401	U1341	C1281	G1221	C1161	A1101	C1041	U981	U921	G861	U801	G741
U1522	C1462	C1402	C1342	C1282	G1222	C1162	A1102	A1042	U982	G922	C862	A802	G742
G1523	C1463	C1403	G1343	U1283	C1223	A1163	C1103	G1043	A983	A923	U863	G803	A743
C1524	U1464	C1404	C1344	C1284	U1224	G1164	G1104	A1044	C984	C924	A864	U804	C744
G1525	A1465	G1405	U1345	A1285	A1225	U1165	A1105	C1045	C985	G925	A865	C805	G745
G1526	C1466	U1406	A1346	U1286	C1226	G1166	G1106	A1046	U986	G926	C866	C806	A746
U1527	C1467	C1407	G1347	A1287	A1227	A1167	C1107	G1047	C987	C927	G867	A807	A747
U1528	A1468	A1408	U1348	C1288	C1228	U1168	C1108	U1048	G988	G928	C868	C808	G748
G1529	C1469	C1409	A1349	A1289	A1229	A1169	C1109	U1049	U989	G929	G869	G809	A749
G1530	U1470	A1410	C1350	G1290	C1230	A1170	A1110	G1050	C990	C930	U870	C810	C750
A1531	U1471	C1411	U1351	U1291	G1231	A1171	A1111	C1051	U991	C931	U871	C811	C751
U1532	U1472	C1412	C1352	G1292	U1232	C1172	C1112	U1052	U992	C932	A872	G812	G752
C1533	A1473	A1413	G1353	C1293	G1233	U1173	C1113	G1053	C993	C933	A873	U813	A753
A1534	U1474	U1414	U1354	U1294	C1234	G1174	C1114	C1054	A994	C934	G874	A814	C754
	G1475	G1415	G1355	U1295	U1235	G1175	U1115	A1055	C995	A935	U875	A815	G755
	A1476	A1416	C1356	C1296	A1236	U1176	U1116	U1056	A996	C936	C876	A816	C756
	U1477	G1417	A1357	G1297	C1237	G1177	A1117	G1057	U997	A937	G877	C817	U757
	U1478	A1418	U1358	U1298	A1238	G1178	U1118	G1058	C998	A938	A878	G818	C758
	C1479	C1419	C1359	A1299	U1239	A1179	C1119	C1059	C999	C939	C879	A819	A759
	A1480	U1420	A1360	G1300	U1240	U1180	C1120	U1060	A1000	G940	C880	U820	G760
	U1481	G1421	G1361	U1301	G1241	G1181	U1121	G1061	C1001	G941	G881	G821	G761
	G1482	G1422	A1362	C1302	G1242	U1182	U1122	U1062	G1002	G942	C882	U822	U762
	A1483	G1423	A1363	C1303	C1243	U1183	U1123	G1063	G1003	U943	C883	G823	G763
	C1484	U1424	U1364	G1304	G1244	G1184	G1124	A1064	A1004	G944	U884	G824	C764
	U1485	U1425	G1365	G1305	C1245	G1185	U1125	U1065	A1005	G945	G885	A825	G765
	G1486	G1426	C1366	A1306	A1246	G1186	U1126	C1066	G1006	A946	G886	C826	A766
	G1487	C1427	C1367	U1307	U1247	G1187	G1127	A1067	U1007	G947	G887	U827	A767
	G1488	A1428	A1368	U1308	A1248	A1188	C1128	G1068	U1008	C948	G888	U828	A768
	G1489	A1429	C1369	G1309	C1249	U1189	C1129	C1069	U1009	A949	A889	G829	G769
	U1490	A1430	G1370	G1310	A1250	G1190	A1130	U1070	U1010	U950	G890	G830	C770
	G1491	A1431	G1371	A1311	A1251	A1191	G1131	C1071	C1011	G951	U891	A831	G771
	A1492	G1432	U1372	G1312	A1252	C1192	C1132	G1072	A1012	U952	A892	G832	U772
	A1493	A1433	G1373	G1313	G1253	G1193	C1133	U1073	G1013	G953	C893	G833	G773
	G1494	A1434	C1374	C1314	A1254	U1194	G1134	G1074	A1014	G954	G894	U834	G774
	U1495	G1435	A1375	G1315	G1255	C1195	U1135	U1075	G1015	U955	G895	U835	G775
	C1496	U1436	U1376	A1256	A1256	A1196	C1136	U1076	A1016	U956	C896	G836	G776
	G1497	A1437	G1377	C1317	A1257	A1197	C1137	G1077	U1017	U957	C897	U837	A777
	U1498	G1438	C1378	A1318	G1258	C1198	C1138	U1078	G1018	A958	G898	G838	G778
	A1499	G1439	G1379	A1319	C1259	U1199	G1139	G1079	A1019	A959	C899	C839	C779
	A1500	U1440	C1320	G1260	G1260	U1199	C1140	A1080	U960	A900	C899	C840	A780
	C1501	A1441	U1321	U1321	A1261	A1201	C1141	A1081	A1021	U961	A901	C841	A781

4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	25631	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Weiner filter	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3800	Depositor
Magnification	59000	Depositor
Image detector	FEI EAGLE (4k x 4k)	Depositor

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	$\# Z > 2$	RMSZ	$\# Z > 2$
1	N	3.49	5309/36831 (14.4%)	3.98	9576/57458 (16.7%)

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	956

All (5309) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	161	A	N7-C5	-20.10	1.27	1.39
1	N	1012	A	N7-C5	-18.32	1.28	1.39
1	N	771	G	N7-C5	-18.03	1.28	1.39
1	N	54	C	N1-C6	17.94	1.48	1.37
1	N	335	C	N1-C6	17.48	1.47	1.37
1	N	3	A	N7-C5	-17.48	1.28	1.39
1	N	776	G	N9-C4	-17.20	1.24	1.38
1	N	1057	G	N7-C5	-17.04	1.29	1.39
1	N	1257	A	N7-C5	-16.81	1.29	1.39
1	N	272	C	N1-C6	16.65	1.47	1.37
1	N	889	A	N7-C5	-16.43	1.29	1.39
1	N	167	A	N7-C5	-16.42	1.29	1.39
1	N	1275	A	N9-C4	16.36	1.47	1.37
1	N	60	A	N9-C4	-16.19	1.28	1.37
1	N	1023	U	C2-N3	16.17	1.49	1.37
1	N	3	A	N3-C4	-16.07	1.25	1.34
1	N	1472	U	C2-N3	15.80	1.48	1.37
1	N	977	A	N7-C5	-15.74	1.29	1.39
1	N	1431	A	N7-C5	-15.59	1.29	1.39
1	N	87	C	N1-C6	15.48	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	816	A	N7-C5	-15.43	1.29	1.39
1	N	282	A	N7-C5	-15.38	1.30	1.39
1	N	738	C	C4-N4	15.16	1.47	1.33
1	N	896	C	P-O5'	-14.83	1.45	1.59
1	N	376	G	N7-C5	-14.81	1.30	1.39
1	N	895	G	N9-C4	-14.74	1.26	1.38
1	N	481	G	C6-N1	14.68	1.49	1.39
1	N	155	A	N7-C5	-14.63	1.30	1.39
1	N	366	A	C5-C4	14.51	1.49	1.38
1	N	763	G	N7-C5	-14.46	1.30	1.39
1	N	860	A	N7-C5	-14.41	1.30	1.39
1	N	1434	A	N7-C5	-14.35	1.30	1.39
1	N	315	A	N7-C5	-14.34	1.30	1.39
1	N	791	G	N7-C5	-14.23	1.30	1.39
1	N	16	A	C6-N6	14.19	1.45	1.33
1	N	749	A	N7-C5	-14.12	1.30	1.39
1	N	756	C	N1-C6	14.10	1.45	1.37
1	N	885	G	N7-C5	-14.05	1.30	1.39
1	N	700	G	N7-C5	-14.01	1.30	1.39
1	N	94	G	C6-N1	13.97	1.49	1.39
1	N	259	G	N9-C8	13.87	1.47	1.37
1	N	1081	A	N7-C5	-13.86	1.30	1.39
1	N	122	G	C5-C4	13.80	1.48	1.38
1	N	541	G	N3-C4	13.77	1.45	1.35
1	N	747	A	N9-C4	-13.74	1.29	1.37
1	N	1191	A	N9-C4	13.72	1.46	1.37
1	N	94	G	N3-C4	-13.71	1.25	1.35
1	N	275	G	N9-C4	13.68	1.48	1.38
1	N	100	G	C6-N1	13.59	1.49	1.39
1	N	977	A	C6-N6	13.54	1.44	1.33
1	N	330	C	N1-C6	13.50	1.45	1.37
1	N	1061	G	C2-N2	13.49	1.48	1.34
1	N	655	A	N9-C4	-13.43	1.29	1.37
1	N	130	A	N3-C4	-13.41	1.26	1.34
1	N	50	A	N7-C5	-13.39	1.31	1.39
1	N	1531	A	N3-C4	13.37	1.42	1.34
1	N	298	A	C6-N1	13.35	1.44	1.35
1	N	1181	G	C8-N7	-13.33	1.23	1.30
1	N	1433	A	N9-C4	-13.32	1.29	1.37
1	N	942	G	N7-C5	-13.28	1.31	1.39
1	N	792	A	N7-C5	-13.27	1.31	1.39
1	N	205	A	N3-C4	-13.24	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1400	C	N1-C6	13.24	1.45	1.37
1	N	1139	G	N3-C4	-13.23	1.26	1.35
1	N	227	G	C6-N1	13.21	1.48	1.39
1	N	420	U	C2-N3	13.19	1.47	1.37
1	N	1074	G	N7-C5	-13.14	1.31	1.39
1	N	696	A	N7-C5	-13.14	1.31	1.39
1	N	551	U	C2-N3	13.14	1.47	1.37
1	N	1357	A	N7-C5	-13.14	1.31	1.39
1	N	83	C	N3-C4	13.13	1.43	1.33
1	N	1197	A	N7-C5	-13.13	1.31	1.39
1	N	1467	C	C4-N4	13.06	1.45	1.33
1	N	1458	G	C5-C4	13.05	1.47	1.38
1	N	695	A	N7-C5	-13.03	1.31	1.39
1	N	1059	C	N3-C4	13.01	1.43	1.33
1	N	1468	A	N9-C4	-13.01	1.30	1.37
1	N	1277	C	N3-C4	13.00	1.43	1.33
1	N	1241	G	C2-N3	12.99	1.43	1.32
1	N	608	A	N7-C5	-12.96	1.31	1.39
1	N	894	G	C5-C4	12.96	1.47	1.38
1	N	1475	G	C6-N1	12.95	1.48	1.39
1	N	829	G	N7-C5	-12.92	1.31	1.39
1	N	1157	A	N9-C4	-12.91	1.30	1.37
1	N	1103	C	N1-C6	12.88	1.44	1.37
1	N	700	G	C2-N3	12.87	1.43	1.32
1	N	112	G	N7-C5	12.86	1.47	1.39
1	N	452	A	N7-C5	-12.86	1.31	1.39
1	N	376	G	N9-C8	-12.83	1.28	1.37
1	N	269	C	P-O5'	-12.82	1.47	1.59
1	N	1138	G	C2-N3	12.82	1.43	1.32
1	N	1160	G	C2-N3	12.82	1.43	1.32
1	N	819	A	C6-N6	12.75	1.44	1.33
1	N	831	A	N7-C5	-12.73	1.31	1.39
1	N	711	G	C2'-C1'	-12.71	1.39	1.53
1	N	177	G	N7-C5	-12.65	1.31	1.39
1	N	833	G	N7-C5	-12.64	1.31	1.39
1	N	1214	C	N1-C6	12.64	1.44	1.37
1	N	7	A	N9-C4	-12.59	1.30	1.37
1	N	413	G	C2-N3	12.58	1.42	1.32
1	N	7	A	N3-C4	-12.57	1.27	1.34
1	N	815	A	C6-N6	12.57	1.44	1.33
1	N	922	G	N9-C8	12.54	1.46	1.37
1	N	624	C	N1-C6	12.52	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1066	C	N3-C4	12.50	1.42	1.33
1	N	712	A	N7-C5	-12.50	1.31	1.39
1	N	571	U	N3-C4	12.49	1.49	1.38
1	N	130	A	N9-C4	-12.49	1.30	1.37
1	N	491	G	N3-C4	-12.49	1.26	1.35
1	N	466	A	N7-C5	-12.48	1.31	1.39
1	N	1143	G	C6-N1	12.46	1.48	1.39
1	N	461	A	N7-C5	-12.45	1.31	1.39
1	N	1376	U	C2-N3	12.44	1.46	1.37
1	N	738	C	N3-C4	12.42	1.42	1.33
1	N	42	G	N9-C4	-12.42	1.28	1.38
1	N	706	A	N7-C5	-12.35	1.31	1.39
1	N	1509	C	C4-N4	12.33	1.45	1.33
1	N	453	G	N1-C2	12.32	1.47	1.37
1	N	1058	G	N7-C5	-12.30	1.31	1.39
1	N	1132	C	N1-C6	12.29	1.44	1.37
1	N	639	G	N1-C2	12.28	1.47	1.37
1	N	873	A	N7-C5	-12.28	1.31	1.39
1	N	1530	G	C8-N7	-12.28	1.23	1.30
1	N	1170	A	C3'-C2'	-12.27	1.39	1.52
1	N	1131	G	N3-C4	-12.24	1.26	1.35
1	N	510	A	N9-C4	-12.21	1.30	1.37
1	N	212	G	N1-C2	12.21	1.47	1.37
1	N	931	C	N1-C6	12.20	1.44	1.37
1	N	1440	U	C2-N3	12.17	1.46	1.37
1	N	1213	A	N3-C4	-12.15	1.27	1.34
1	N	1035	A	N7-C5	-12.15	1.31	1.39
1	N	1283	U	C2-N3	12.14	1.46	1.37
1	N	94	G	N9-C4	-12.10	1.28	1.38
1	N	1237	C	N3-C4	12.07	1.42	1.33
1	N	40	C	N1-C6	12.06	1.44	1.37
1	N	566	G	P-O5'	-12.06	1.47	1.59
1	N	245	U	C5'-C4'	12.04	1.65	1.51
1	N	259	G	N7-C5	-12.01	1.32	1.39
1	N	1332	A	N9-C4	12.00	1.45	1.37
1	N	1419	G	N7-C5	-11.99	1.32	1.39
1	N	633	G	N1-C2	11.99	1.47	1.37
1	N	1242	G	P-O5'	-11.95	1.47	1.59
1	N	45	G	C6-N1	11.94	1.48	1.39
1	N	408	A	N9-C8	11.91	1.47	1.37
1	N	80	A	N7-C5	-11.90	1.32	1.39
1	N	1377	A	N7-C5	-11.89	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	560	A	C6-N6	11.87	1.43	1.33
1	N	176	C	N1-C6	11.86	1.44	1.37
1	N	98	A	P-O5'	-11.86	1.47	1.59
1	N	329	A	N7-C5	-11.85	1.32	1.39
1	N	1447	A	C2'-C1'	-11.84	1.40	1.53
1	N	1296	C	C2'-C1'	-11.84	1.40	1.53
1	N	104	G	N7-C5	-11.81	1.32	1.39
1	N	475	C	N1-C6	11.80	1.44	1.37
1	N	628	G	N7-C5	-11.80	1.32	1.39
1	N	988	G	C6-N1	11.80	1.47	1.39
1	N	1028	C	N1-C6	11.78	1.44	1.37
1	N	930	C	N3-C4	11.77	1.42	1.33
1	N	347	G	N7-C5	-11.75	1.32	1.39
1	N	53	A	N7-C5	-11.74	1.32	1.39
1	N	1180	A	C6-N6	11.74	1.43	1.33
1	N	883	C	C2-N3	11.73	1.45	1.35
1	N	1195	C	C2-N3	11.73	1.45	1.35
1	N	601	G	N9-C8	11.72	1.46	1.37
1	N	839	C	N3-C4	11.72	1.42	1.33
1	N	1389	C	N1-C6	11.71	1.44	1.37
1	N	1408	A	C6-N1	11.67	1.43	1.35
1	N	718	A	C6-N1	11.66	1.43	1.35
1	N	991	U	C2-N3	11.66	1.46	1.37
1	N	1534	A	N7-C5	-11.66	1.32	1.39
1	N	629	A	N9-C4	11.65	1.44	1.37
1	N	1050	G	C8-N7	-11.65	1.24	1.30
1	N	1271	A	N3-C4	-11.63	1.27	1.34
1	N	790	A	N7-C5	-11.60	1.32	1.39
1	N	1505	G	C5-C4	-11.60	1.30	1.38
1	N	1357	A	C2'-C1'	-11.59	1.40	1.53
1	N	500	G	N9-C4	-11.58	1.28	1.38
1	N	575	G	N9-C8	11.57	1.46	1.37
1	N	772	U	N3-C4	11.54	1.48	1.38
1	N	1042	A	P-O5'	-11.54	1.48	1.59
1	N	381	C	C4-N4	11.53	1.44	1.33
1	N	712	A	C6-N6	11.53	1.43	1.33
1	N	362	G	C6-N1	11.53	1.47	1.39
1	N	79	G	C5'-C4'	11.51	1.65	1.51
1	N	1061	G	C8-N7	11.51	1.37	1.30
1	N	767	A	N7-C5	-11.48	1.32	1.39
1	N	1311	A	N9-C4	-11.48	1.30	1.37
1	N	698	G	N3-C4	-11.47	1.27	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	426	U	P-O5'	-11.40	1.48	1.59
1	N	879	C	N1-C6	11.37	1.44	1.37
1	N	1105	A	C6-N1	11.37	1.43	1.35
1	N	1087	G	C2-N3	11.36	1.41	1.32
1	N	1401	G	N7-C5	-11.34	1.32	1.39
1	N	220	G	N7-C5	-11.34	1.32	1.39
1	N	256	U	P-O5'	-11.34	1.48	1.59
1	N	1047	G	N7-C5	-11.32	1.32	1.39
1	N	812	G	C6-N1	11.29	1.47	1.39
1	N	1054	C	C4-N4	11.29	1.44	1.33
1	N	877	G	N7-C5	-11.28	1.32	1.39
1	N	658	C	C4-N4	11.26	1.44	1.33
1	N	1169	A	N7-C5	-11.26	1.32	1.39
1	N	1517	G	N7-C5	-11.26	1.32	1.39
1	N	466	A	C4'-C3'	11.24	1.65	1.53
1	N	1151	A	C6-N1	11.23	1.43	1.35
1	N	44	A	N7-C5	-11.21	1.32	1.39
1	N	1468	A	N7-C5	-11.20	1.32	1.39
1	N	1495	U	C2-N3	11.19	1.45	1.37
1	N	446	G	N1-C2	11.19	1.46	1.37
1	N	152	A	N7-C5	-11.18	1.32	1.39
1	N	414	A	N7-C5	-11.18	1.32	1.39
1	N	546	A	C6-N1	11.17	1.43	1.35
1	N	596	A	N7-C5	-11.17	1.32	1.39
1	N	977	A	N3-C4	-11.16	1.28	1.34
1	N	1023	U	N3-C4	11.15	1.48	1.38
1	N	823	C	N1-C6	11.14	1.43	1.37
1	N	39	G	N7-C5	-11.13	1.32	1.39
1	N	625	U	C2-N3	11.13	1.45	1.37
1	N	338	A	C6-N6	11.09	1.42	1.33
1	N	364	A	N7-C5	-11.09	1.32	1.39
1	N	1189	U	C2-N3	11.09	1.45	1.37
1	N	430	A	N7-C5	-11.08	1.32	1.39
1	N	246	A	N7-C5	-11.07	1.32	1.39
1	N	754	C	N3-C4	11.07	1.41	1.33
1	N	1418	A	N9-C4	11.07	1.44	1.37
1	N	129	A	C5-C4	11.06	1.46	1.38
1	N	521	G	C6-N1	11.06	1.47	1.39
1	N	773	G	C6-N1	11.06	1.47	1.39
1	N	237	G	C8-N7	-11.05	1.24	1.30
1	N	301	G	N1-C2	11.05	1.46	1.37
1	N	141	G	C6-N1	11.04	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	918	A	C6-N6	11.04	1.42	1.33
1	N	608	A	N1-C2	11.03	1.44	1.34
1	N	530	G	C2-N3	11.02	1.41	1.32
1	N	748	G	N1-C2	11.01	1.46	1.37
1	N	1447	A	C6-N6	11.01	1.42	1.33
1	N	207	C	N1-C6	10.99	1.43	1.37
1	N	1105	A	N9-C4	-10.99	1.31	1.37
1	N	1110	A	N9-C4	10.98	1.44	1.37
1	N	1229	A	N7-C5	-10.97	1.32	1.39
1	N	102	G	N7-C5	-10.97	1.32	1.39
1	N	1460	C	N3-C4	10.97	1.41	1.33
1	N	26	A	N3-C4	-10.96	1.28	1.34
1	N	111	G	C6-N1	10.96	1.47	1.39
1	N	573	A	C3'-C2'	10.96	1.65	1.52
1	N	1240	U	C5'-C4'	10.96	1.64	1.51
1	N	143	A	N7-C5	-10.95	1.32	1.39
1	N	914	A	N7-C5	-10.95	1.32	1.39
1	N	82	G	C2-N3	10.94	1.41	1.32
1	N	494	G	C5-C4	10.92	1.46	1.38
1	N	1468	A	N3-C4	-10.90	1.28	1.34
1	N	25	C	N1-C6	10.89	1.43	1.37
1	N	162	A	N7-C5	-10.88	1.32	1.39
1	N	1412	C	C4-C5	10.88	1.51	1.43
1	N	1088	G	N9-C4	-10.87	1.29	1.38
1	N	739	C	N1-C6	10.86	1.43	1.37
1	N	1417	G	N7-C5	-10.84	1.32	1.39
1	N	1534	A	C6-N1	10.84	1.43	1.35
1	N	1003	G	N7-C5	-10.82	1.32	1.39
1	N	1130	A	C6-N1	10.81	1.43	1.35
1	N	851	G	C4'-C3'	-10.81	1.41	1.53
1	N	1084	G	C2-N3	10.80	1.41	1.32
1	N	594	U	C2-N3	10.79	1.45	1.37
1	N	442	G	N9-C4	-10.78	1.29	1.38
1	N	771	G	N9-C4	-10.77	1.29	1.38
1	N	892	A	N7-C5	-10.77	1.32	1.39
1	N	1059	C	C4-C5	10.76	1.51	1.43
1	N	1500	A	N7-C5	-10.76	1.32	1.39
1	N	669	G	C6-N1	10.74	1.47	1.39
1	N	836	G	N7-C5	-10.74	1.32	1.39
1	N	1500	A	C6-N6	10.73	1.42	1.33
1	N	755	G	N7-C5	-10.72	1.32	1.39
1	N	113	G	N9-C8	10.72	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	527	G	C5'-C4'	10.71	1.64	1.51
1	N	832	G	C6-N1	10.71	1.47	1.39
1	N	954	G	N7-C5	-10.70	1.32	1.39
1	N	688	G	C6-N1	10.69	1.47	1.39
1	N	365	U	N1-C2	10.68	1.48	1.38
1	N	787	A	C6-N6	10.68	1.42	1.33
1	N	1401	G	N1-C2	10.67	1.46	1.37
1	N	364	A	C6-N1	10.67	1.43	1.35
1	N	987	G	C5-C4	10.66	1.45	1.38
1	N	693	G	N3-C4	10.66	1.43	1.35
1	N	1336	C	N1-C6	10.65	1.43	1.37
1	N	696	A	N9-C4	10.65	1.44	1.37
1	N	910	C	N1-C6	10.65	1.43	1.37
1	N	134	G	C4'-C3'	10.63	1.64	1.53
1	N	1151	A	N7-C5	-10.63	1.32	1.39
1	N	1120	C	C2-N3	10.62	1.44	1.35
1	N	1497	G	C6-N1	10.62	1.47	1.39
1	N	535	A	N7-C5	-10.61	1.32	1.39
1	N	1482	G	N7-C5	-10.61	1.32	1.39
1	N	1009	U	N1-C6	10.61	1.47	1.38
1	N	891	U	N1-C6	-10.60	1.28	1.38
1	N	1058	G	N3-C4	10.60	1.42	1.35
1	N	416	G	N9-C8	-10.59	1.30	1.37
1	N	935	A	C6-N6	10.59	1.42	1.33
1	N	1324	A	N7-C5	-10.59	1.32	1.39
1	N	1252	A	C5'-C4'	10.58	1.64	1.51
1	N	414	A	N9-C4	-10.56	1.31	1.37
1	N	456	A	C6-N6	10.55	1.42	1.33
1	N	1381	U	C2-N3	10.54	1.45	1.37
1	N	1063	C	C2-N3	10.53	1.44	1.35
1	N	968	A	C6-N6	10.53	1.42	1.33
1	N	1432	G	C8-N7	-10.52	1.24	1.30
1	N	36	C	N3-C4	10.51	1.41	1.33
1	N	818	G	C8-N7	-10.51	1.24	1.30
1	N	316	C	C2-N3	10.51	1.44	1.35
1	N	667	G	N3-C4	-10.51	1.28	1.35
1	N	1504	G	C6-N1	10.50	1.46	1.39
1	N	679	C	C2-N3	10.48	1.44	1.35
1	N	1329	A	C6-N6	10.48	1.42	1.33
1	N	1271	A	N7-C5	-10.48	1.32	1.39
1	N	1152	A	C6-N6	10.46	1.42	1.33
1	N	1531	A	C6-N6	10.46	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1403	C	C2'-C1'	-10.45	1.41	1.53
1	N	818	G	N7-C5	-10.45	1.32	1.39
1	N	258	G	C2-N3	10.45	1.41	1.32
1	N	701	U	C2-N3	10.44	1.45	1.37
1	N	700	G	C2'-C1'	-10.43	1.41	1.53
1	N	788	U	C2'-C1'	-10.43	1.41	1.53
1	N	1475	G	C8-N7	10.43	1.37	1.30
1	N	402	G	C6-N1	10.42	1.46	1.39
1	N	1338	G	C2-N3	10.41	1.41	1.32
1	N	4	U	C2-N3	10.41	1.45	1.37
1	N	31	G	N7-C5	-10.41	1.33	1.39
1	N	836	G	C5-C4	10.41	1.45	1.38
1	N	704	A	N3-C4	10.41	1.41	1.34
1	N	633	G	C2-N3	10.40	1.41	1.32
1	N	1154	G	C2-N3	10.40	1.41	1.32
1	N	781	A	N7-C5	-10.39	1.33	1.39
1	N	152	A	C6-N6	10.38	1.42	1.33
1	N	901	A	C8-N7	-10.37	1.24	1.31
1	N	197	A	N3-C4	-10.37	1.28	1.34
1	N	184	G	N7-C5	-10.37	1.33	1.39
1	N	690	G	C6-N1	10.37	1.46	1.39
1	N	1107	C	C4-N4	10.37	1.43	1.33
1	N	1175	G	N1-C2	10.36	1.46	1.37
1	N	1312	G	C5'-C4'	10.36	1.63	1.51
1	N	967	C	N3-C4	10.36	1.41	1.33
1	N	694	A	N9-C4	-10.35	1.31	1.37
1	N	909	A	O3'-P	-10.34	1.48	1.61
1	N	1296	C	C4-N4	10.33	1.43	1.33
1	N	29	U	P-O5'	-10.32	1.49	1.59
1	N	412	A	C6-N6	10.32	1.42	1.33
1	N	1220	G	C8-N7	-10.32	1.24	1.30
1	N	488	C	N3-C4	10.31	1.41	1.33
1	N	189	A	C2'-C1'	-10.30	1.42	1.53
1	N	283	U	N1-C6	10.30	1.47	1.38
1	N	325	A	N3-C4	10.30	1.41	1.34
1	N	87	C	C3'-C2'	10.29	1.64	1.52
1	N	15	G	N7-C5	-10.28	1.33	1.39
1	N	1429	A	C6-N6	10.28	1.42	1.33
1	N	149	A	C6-N6	10.27	1.42	1.33
1	N	1048	G	N9-C4	-10.27	1.29	1.38
1	N	472	U	O3'-P	-10.25	1.48	1.61
1	N	676	A	N7-C5	-10.25	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1362	A	N3-C4	-10.25	1.28	1.34
1	N	856	C	C4-N4	10.25	1.43	1.33
1	N	1421	G	C6-N1	10.25	1.46	1.39
1	N	1374	A	C6-N1	10.23	1.42	1.35
1	N	418	C	N3-C4	10.22	1.41	1.33
1	N	65	A	N7-C5	-10.22	1.33	1.39
1	N	901	A	C5-C4	10.21	1.45	1.38
1	N	1285	A	C2-N3	10.20	1.42	1.33
1	N	152	A	C6-N1	10.20	1.42	1.35
1	N	404	G	N1-C2	10.19	1.45	1.37
1	N	1233	G	N9-C8	10.19	1.45	1.37
1	N	184	G	C2-N3	10.18	1.40	1.32
1	N	667	G	C8-N7	10.17	1.37	1.30
1	N	969	A	C6-N1	10.16	1.42	1.35
1	N	1018	G	C2-N3	10.16	1.40	1.32
1	N	1222	G	C6-N1	10.16	1.46	1.39
1	N	299	G	C2-N3	10.15	1.40	1.32
1	N	670	G	C5-C4	10.15	1.45	1.38
1	N	1246	A	N9-C4	-10.15	1.31	1.37
1	N	1375	A	N7-C5	-10.15	1.33	1.39
1	N	1513	A	N9-C4	-10.14	1.31	1.37
1	N	1353	G	C2-N2	10.13	1.44	1.34
1	N	969	A	C6-N6	10.13	1.42	1.33
1	N	347	G	C2-N3	10.12	1.40	1.32
1	N	580	C	N3-C4	10.12	1.41	1.33
1	N	832	G	N9-C4	-10.12	1.29	1.38
1	N	866	C	P-O5'	-10.12	1.49	1.59
1	N	1405	G	N3-C4	-10.11	1.28	1.35
1	N	413	G	N7-C5	-10.10	1.33	1.39
1	N	1257	A	C5-C4	10.10	1.45	1.38
1	N	257	G	N1-C2	10.08	1.45	1.37
1	N	829	G	C2-N3	10.08	1.40	1.32
1	N	1064	G	N1-C2	10.08	1.45	1.37
1	N	336	A	N9-C8	-10.08	1.29	1.37
1	N	1514	G	C6-N1	10.08	1.46	1.39
1	N	303	A	C5'-C4'	10.07	1.63	1.51
1	N	413	G	C6-N1	10.07	1.46	1.39
1	N	163	C	C2'-C1'	-10.07	1.42	1.53
1	N	839	C	C4-N4	10.07	1.43	1.33
1	N	1088	G	N7-C5	-10.06	1.33	1.39
1	N	809	G	N1-C2	10.05	1.45	1.37
1	N	755	G	C8-N7	-10.05	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	767	A	P-O5'	-10.05	1.49	1.59
1	N	935	A	C5-C4	10.04	1.45	1.38
1	N	319	G	C6-N1	10.04	1.46	1.39
1	N	1110	A	N7-C5	-10.04	1.33	1.39
1	N	1178	G	C8-N7	10.03	1.36	1.30
1	N	1303	C	C2-N3	10.03	1.43	1.35
1	N	381	C	C5'-C4'	10.02	1.63	1.51
1	N	411	A	N9-C4	-10.01	1.31	1.37
1	N	582	C	C4'-C3'	10.01	1.64	1.53
1	N	269	C	C4'-O4'	10.01	1.58	1.45
1	N	1046	A	C6-N6	10.01	1.42	1.33
1	N	1493	A	N9-C4	-10.01	1.31	1.37
1	N	296	U	N3-C4	10.00	1.47	1.38
1	N	298	A	N9-C4	-10.00	1.31	1.37
1	N	555	U	C2-N3	9.99	1.44	1.37
1	N	639	G	N9-C4	9.99	1.46	1.38
1	N	411	A	C5'-C4'	9.98	1.63	1.51
1	N	1322	C	N3-C4	9.98	1.41	1.33
1	N	1208	C	N1-C6	-9.97	1.31	1.37
1	N	649	A	N7-C5	-9.97	1.33	1.39
1	N	793	U	P-O5'	-9.95	1.49	1.59
1	N	168	G	C2-N2	9.95	1.44	1.34
1	N	716	A	C8-N7	-9.95	1.24	1.31
1	N	1101	A	N9-C4	9.95	1.43	1.37
1	N	1148	U	C2-N3	9.95	1.44	1.37
1	N	1360	A	N7-C5	-9.94	1.33	1.39
1	N	933	G	N1-C2	9.92	1.45	1.37
1	N	957	U	C4'-C3'	-9.91	1.42	1.53
1	N	884	U	C4'-C3'	9.90	1.64	1.53
1	N	85	U	C2'-C1'	-9.90	1.42	1.53
1	N	1038	C	O3'-P	-9.90	1.49	1.61
1	N	37	U	N3-C4	9.89	1.47	1.38
1	N	49	U	C3'-C2'	9.89	1.63	1.52
1	N	509	A	O3'-P	-9.89	1.49	1.61
1	N	301	G	C2-N3	9.89	1.40	1.32
1	N	1318	A	C8-N7	-9.88	1.24	1.31
1	N	685	G	N7-C5	-9.88	1.33	1.39
1	N	254	G	N7-C5	-9.88	1.33	1.39
1	N	126	G	C6-N1	9.87	1.46	1.39
1	N	889	A	C6-N6	9.87	1.41	1.33
1	N	720	C	N1-C6	9.87	1.43	1.37
1	N	7	A	C6-N1	9.86	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1274	A	C6-N6	9.85	1.41	1.33
1	N	336	A	N7-C5	-9.85	1.33	1.39
1	N	617	G	N7-C5	-9.84	1.33	1.39
1	N	504	C	C4-C5	9.83	1.50	1.43
1	N	433	G	C2-N3	9.82	1.40	1.32
1	N	443	C	N1-C6	9.82	1.43	1.37
1	N	298	A	N3-C4	-9.82	1.28	1.34
1	N	1415	G	N7-C5	-9.81	1.33	1.39
1	N	248	C	N3-C4	9.80	1.40	1.33
1	N	721	G	N1-C2	9.80	1.45	1.37
1	N	1399	C	N3-C4	9.80	1.40	1.33
1	N	291	U	N1-C6	9.80	1.46	1.38
1	N	632	U	C2-N3	9.80	1.44	1.37
1	N	101	A	N1-C2	9.78	1.43	1.34
1	N	1163	A	P-O5'	-9.78	1.50	1.59
1	N	334	C	N3-C4	9.78	1.40	1.33
1	N	1026	G	N7-C5	-9.77	1.33	1.39
1	N	1257	A	C6-N6	9.77	1.41	1.33
1	N	492	C	C4'-C3'	9.77	1.63	1.53
1	N	934	C	C2'-C1'	-9.76	1.42	1.53
1	N	422	C	C5'-C4'	9.76	1.63	1.51
1	N	1365	G	C2-N3	9.76	1.40	1.32
1	N	668	G	C5-C4	9.76	1.45	1.38
1	N	800	G	C5-C6	-9.76	1.32	1.42
1	N	715	A	C6-N6	9.75	1.41	1.33
1	N	1250	A	N9-C4	-9.75	1.31	1.37
1	N	19	A	N7-C5	-9.75	1.33	1.39
1	N	63	C	O3'-P	-9.75	1.49	1.61
1	N	532	A	C6-N6	9.74	1.41	1.33
1	N	1318	A	N3-C4	9.73	1.40	1.34
1	N	1074	G	C2-N3	9.73	1.40	1.32
1	N	68	G	N7-C5	-9.73	1.33	1.39
1	N	1343	G	C6-N1	9.73	1.46	1.39
1	N	1227	A	N3-C4	9.72	1.40	1.34
1	N	1494	G	C6-N1	9.72	1.46	1.39
1	N	849	G	C2-N3	9.72	1.40	1.32
1	N	64	G	C2-N3	9.71	1.40	1.32
1	N	825	A	C6-N6	9.71	1.41	1.33
1	N	86	G	C2-N3	9.71	1.40	1.32
1	N	1021	A	N7-C5	-9.71	1.33	1.39
1	N	213	G	C2-N3	9.70	1.40	1.32
1	N	759	A	C6-N6	9.70	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1332	A	C8-N7	-9.70	1.24	1.31
1	N	1185	G	C8-N7	-9.69	1.25	1.30
1	N	573	A	N9-C4	-9.68	1.32	1.37
1	N	766	A	C5-C6	9.68	1.49	1.41
1	N	391	G	N1-C2	9.68	1.45	1.37
1	N	1188	A	N9-C8	9.68	1.45	1.37
1	N	119	A	N7-C5	-9.67	1.33	1.39
1	N	1161	C	C5'-C4'	9.67	1.62	1.51
1	N	207	C	C2-N3	9.67	1.43	1.35
1	N	574	A	P-O5'	-9.66	1.50	1.59
1	N	412	A	C6-N1	9.66	1.42	1.35
1	N	268	U	C2-N3	9.66	1.44	1.37
1	N	1099	G	C2-N2	9.65	1.44	1.34
1	N	1528	U	C4'-C3'	9.65	1.63	1.53
1	N	328	C	C4-N4	9.65	1.42	1.33
1	N	807	A	N7-C5	-9.65	1.33	1.39
1	N	271	C	P-O5'	-9.64	1.50	1.59
1	N	850	U	C2-N3	9.64	1.44	1.37
1	N	1236	A	C6-N6	9.64	1.41	1.33
1	N	99	C	N3-C4	9.64	1.40	1.33
1	N	115	G	N9-C8	9.63	1.44	1.37
1	N	1234	C	N1-C2	9.63	1.49	1.40
1	N	1333	A	N7-C5	-9.63	1.33	1.39
1	N	809	G	N7-C5	-9.62	1.33	1.39
1	N	1144	G	N1-C2	9.62	1.45	1.37
1	N	529	G	C2-N3	9.61	1.40	1.32
1	N	865	A	C6-N6	9.61	1.41	1.33
1	N	1094	G	N9-C8	9.61	1.44	1.37
1	N	763	G	P-O5'	-9.60	1.50	1.59
1	N	502	A	P-O5'	-9.59	1.50	1.59
1	N	1163	A	N7-C5	-9.59	1.33	1.39
1	N	1204	A	N7-C5	-9.58	1.33	1.39
1	N	1326	U	C2-N3	9.58	1.44	1.37
1	N	204	G	N3-C4	-9.58	1.28	1.35
1	N	1486	G	C8-N7	9.58	1.36	1.30
1	N	1208	C	N3-C4	9.57	1.40	1.33
1	N	1318	A	C6-N6	9.57	1.41	1.33
1	N	51	A	C6-N6	9.56	1.41	1.33
1	N	975	A	N3-C4	-9.56	1.29	1.34
1	N	678	U	P-O5'	-9.55	1.50	1.59
1	N	1481	U	N1-C2	-9.55	1.29	1.38
1	N	1134	G	N9-C8	9.55	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1520	C	N1-C6	9.53	1.42	1.37
1	N	134	G	N9-C4	9.53	1.45	1.38
1	N	444	G	C5-C4	9.53	1.45	1.38
1	N	861	G	C2'-C1'	-9.53	1.42	1.53
1	N	629	A	C3'-C2'	9.52	1.63	1.52
1	N	925	G	C8-N7	-9.52	1.25	1.30
1	N	492	C	C4-C5	9.52	1.50	1.43
1	N	1269	A	C2'-C1'	-9.52	1.42	1.53
1	N	338	A	N7-C5	-9.51	1.33	1.39
1	N	695	A	P-O5'	-9.51	1.50	1.59
1	N	395	C	N3-C4	9.51	1.40	1.33
1	N	397	A	C5-C4	9.51	1.45	1.38
1	N	151	A	N9-C4	9.51	1.43	1.37
1	N	973	G	C6-N1	9.51	1.46	1.39
1	N	1251	A	N9-C4	-9.51	1.32	1.37
1	N	1078	U	C2-N3	9.50	1.44	1.37
1	N	457	G	C8-N7	-9.49	1.25	1.30
1	N	651	C	C4-N4	9.49	1.42	1.33
1	N	1279	G	C5-C4	-9.49	1.31	1.38
1	N	409	U	C2-N3	9.48	1.44	1.37
1	N	235	C	C2'-C1'	-9.48	1.43	1.53
1	N	761	G	N1-C2	9.48	1.45	1.37
1	N	1353	G	N7-C5	-9.47	1.33	1.39
1	N	336	A	N3-C4	-9.47	1.29	1.34
1	N	53	A	C5-C4	9.47	1.45	1.38
1	N	267	C	C2-N3	9.47	1.43	1.35
1	N	1216	A	C8-N7	9.46	1.38	1.31
1	N	1151	A	C5'-C4'	9.45	1.62	1.51
1	N	688	G	N7-C5	-9.45	1.33	1.39
1	N	827	U	C5'-C4'	9.44	1.62	1.51
1	N	1079	G	C2-N3	9.43	1.40	1.32
1	N	975	A	N9-C8	-9.42	1.30	1.37
1	N	954	G	N1-C2	9.42	1.45	1.37
1	N	1344	C	N3-C4	9.42	1.40	1.33
1	N	585	G	C2-N3	9.41	1.40	1.32
1	N	439	U	N3-C4	9.41	1.47	1.38
1	N	557	G	C6-N1	9.40	1.46	1.39
1	N	485	U	C2-N3	9.40	1.44	1.37
1	N	1243	C	C4-C5	-9.40	1.35	1.43
1	N	187	G	N3-C4	-9.40	1.28	1.35
1	N	681	A	N3-C4	-9.40	1.29	1.34
1	N	1048	G	N1-C2	9.40	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	66	A	N9-C4	-9.39	1.32	1.37
1	N	510	A	N1-C2	-9.39	1.25	1.34
1	N	917	G	N7-C5	-9.39	1.33	1.39
1	N	454	G	C6-N1	9.39	1.46	1.39
1	N	358	U	C2-O2	9.39	1.30	1.22
1	N	1304	G	N9-C4	9.39	1.45	1.38
1	N	1432	G	N9-C8	9.39	1.44	1.37
1	N	690	G	N1-C2	9.38	1.45	1.37
1	N	556	C	C2'-C1'	-9.38	1.43	1.53
1	N	676	A	C8-N7	9.38	1.38	1.31
1	N	349	A	C6-N1	9.37	1.42	1.35
1	N	402	G	N7-C5	-9.37	1.33	1.39
1	N	1081	A	C8-N7	-9.37	1.25	1.31
1	N	348	G	C2-N3	9.36	1.40	1.32
1	N	265	G	N1-C2	9.35	1.45	1.37
1	N	168	G	N7-C5	-9.35	1.33	1.39
1	N	626	G	C2-N3	9.35	1.40	1.32
1	N	408	A	C5-C4	9.35	1.45	1.38
1	N	126	G	C2-N3	9.34	1.40	1.32
1	N	994	A	N7-C5	-9.34	1.33	1.39
1	N	207	C	C4'-C3'	-9.34	1.42	1.53
1	N	1350	A	C5-C4	9.34	1.45	1.38
1	N	377	G	N7-C5	9.33	1.44	1.39
1	N	1102	A	C2'-C1'	-9.33	1.43	1.53
1	N	419	C	N3-C4	9.32	1.40	1.33
1	N	958	A	N9-C8	9.32	1.45	1.37
1	N	1432	G	C2-N3	9.32	1.40	1.32
1	N	1368	A	N9-C4	9.32	1.43	1.37
1	N	1416	G	N7-C5	-9.31	1.33	1.39
1	N	1319	A	C6-N6	9.31	1.41	1.33
1	N	982	U	C2-N3	9.31	1.44	1.37
1	N	459	A	N3-C4	-9.30	1.29	1.34
1	N	377	G	C5-C6	-9.30	1.33	1.42
1	N	54	C	N3-C4	9.30	1.40	1.33
1	N	880	C	N1-C6	9.30	1.42	1.37
1	N	494	G	N9-C4	-9.29	1.30	1.38
1	N	1189	U	N3-C4	9.29	1.46	1.38
1	N	1331	G	O3'-P	-9.29	1.50	1.61
1	N	279	A	C6-N1	9.28	1.42	1.35
1	N	939	G	C8-N7	-9.28	1.25	1.30
1	N	239	U	C2'-C1'	9.28	1.63	1.53
1	N	431	A	N7-C5	-9.28	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	780	A	N7-C5	-9.27	1.33	1.39
1	N	1021	A	O4'-C1'	9.27	1.53	1.41
1	N	592	G	N1-C2	9.27	1.45	1.37
1	N	857	C	N3-C4	9.26	1.40	1.33
1	N	198	G	C4'-C3'	9.26	1.63	1.53
1	N	298	A	C6-N6	9.26	1.41	1.33
1	N	1094	G	C5-C4	9.26	1.44	1.38
1	N	908	A	C5-C4	9.25	1.45	1.38
1	N	714	G	C4'-C3'	9.24	1.63	1.53
1	N	998	C	N3-C4	9.23	1.40	1.33
1	N	1316	G	C5'-C4'	9.23	1.62	1.51
1	N	559	A	N9-C4	-9.23	1.32	1.37
1	N	1132	C	O3'-P	-9.23	1.50	1.61
1	N	1160	G	N7-C5	-9.22	1.33	1.39
1	N	1426	G	N7-C5	-9.22	1.33	1.39
1	N	204	G	C6-N1	-9.22	1.33	1.39
1	N	266	G	O3'-P	-9.21	1.50	1.61
1	N	694	A	C6-N6	9.21	1.41	1.33
1	N	712	A	N9-C4	-9.21	1.32	1.37
1	N	776	G	P-O5'	-9.21	1.50	1.59
1	N	1010	U	C2-N3	9.21	1.44	1.37
1	N	1206	G	N7-C5	-9.21	1.33	1.39
1	N	616	G	C2-N3	9.20	1.40	1.32
1	N	1133	G	N9-C4	-9.20	1.30	1.38
1	N	541	G	C2-N3	9.20	1.40	1.32
1	N	945	G	N9-C4	-9.19	1.30	1.38
1	N	475	C	C4-N4	9.19	1.42	1.33
1	N	344	A	N1-C2	9.19	1.42	1.34
1	N	1299	A	N7-C5	-9.19	1.33	1.39
1	N	348	G	O3'-P	-9.19	1.50	1.61
1	N	1274	A	N7-C5	-9.18	1.33	1.39
1	N	1442	G	C2-N2	9.18	1.43	1.34
1	N	494	G	C2-N3	9.18	1.40	1.32
1	N	742	G	C2-N3	9.18	1.40	1.32
1	N	691	G	C2'-C1'	-9.18	1.43	1.53
1	N	857	C	C4'-C3'	9.18	1.63	1.53
1	N	861	G	N3-C4	-9.18	1.29	1.35
1	N	1497	G	C5'-C4'	9.18	1.62	1.51
1	N	323	U	P-O5'	-9.17	1.50	1.59
1	N	675	A	C6-N1	9.17	1.42	1.35
1	N	1404	C	N3-C4	9.17	1.40	1.33
1	N	590	U	N1-C2	-9.17	1.30	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	529	G	C8-N7	9.16	1.36	1.30
1	N	424	G	C3'-C2'	9.16	1.63	1.52
1	N	1068	G	C8-N7	-9.16	1.25	1.30
1	N	1375	A	C6-N6	9.16	1.41	1.33
1	N	90	C	O3'-P	-9.16	1.50	1.61
1	N	171	A	N3-C4	-9.15	1.29	1.34
1	N	821	G	N3-C4	-9.15	1.29	1.35
1	N	120	A	C6-N1	9.14	1.42	1.35
1	N	345	C	N1-C6	9.14	1.42	1.37
1	N	424	G	N7-C5	-9.14	1.33	1.39
1	N	1016	A	C5-C4	-9.14	1.32	1.38
1	N	1057	G	C2-N3	9.14	1.40	1.32
1	N	253	A	P-O5'	-9.13	1.50	1.59
1	N	1196	A	N7-C5	-9.13	1.33	1.39
1	N	918	A	C6-N1	9.13	1.42	1.35
1	N	1507	A	C6-N1	9.13	1.42	1.35
1	N	1163	A	N9-C8	9.13	1.45	1.37
1	N	366	A	N3-C4	-9.12	1.29	1.34
1	N	441	A	N3-C4	9.12	1.40	1.34
1	N	1010	U	P-O5'	-9.11	1.50	1.59
1	N	1373	G	C2-N3	9.11	1.40	1.32
1	N	1274	A	N9-C4	9.11	1.43	1.37
1	N	328	C	C2-N3	9.11	1.43	1.35
1	N	95	C	C3'-O3'	9.11	1.54	1.42
1	N	755	G	C5-C4	9.11	1.44	1.38
1	N	802	A	C6-N1	9.11	1.42	1.35
1	N	43	C	C2-N3	9.10	1.43	1.35
1	N	342	C	N1-C6	9.10	1.42	1.37
1	N	834	U	C3'-C2'	9.10	1.62	1.52
1	N	1297	G	C2'-C1'	-9.09	1.43	1.53
1	N	361	G	N7-C5	-9.09	1.33	1.39
1	N	584	G	C2-N3	9.09	1.40	1.32
1	N	1149	C	C2-N3	-9.08	1.28	1.35
1	N	1384	C	C4-C5	9.08	1.50	1.43
1	N	815	A	N9-C4	-9.08	1.32	1.37
1	N	1331	G	C2'-C1'	-9.07	1.43	1.53
1	N	347	G	P-O5'	-9.06	1.50	1.59
1	N	614	C	P-O5'	-9.06	1.50	1.59
1	N	1043	G	C4'-C3'	-9.06	1.43	1.53
1	N	1458	G	N7-C5	-9.06	1.33	1.39
1	N	597	G	P-O5'	-9.06	1.50	1.59
1	N	527	G	C6-N1	9.05	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	173	U	N3-C4	9.05	1.46	1.38
1	N	1027	C	N3-C4	9.05	1.40	1.33
1	N	1450	U	C2-N3	9.05	1.44	1.37
1	N	848	C	N1-C6	9.05	1.42	1.37
1	N	867	G	N3-C4	-9.05	1.29	1.35
1	N	177	G	C2-N3	9.04	1.40	1.32
1	N	1394	A	C6-N6	9.04	1.41	1.33
1	N	263	A	C2'-C1'	-9.04	1.43	1.53
1	N	1111	A	N7-C5	-9.04	1.33	1.39
1	N	478	A	N7-C5	-9.03	1.33	1.39
1	N	1104	G	C5-C4	9.03	1.44	1.38
1	N	553	A	C4'-C3'	-9.03	1.43	1.53
1	N	557	G	C2'-C1'	-9.03	1.43	1.53
1	N	728	A	C5-C4	-9.03	1.32	1.38
1	N	1110	A	C8-N7	-9.02	1.25	1.31
1	N	442	G	P-O5'	-9.02	1.50	1.59
1	N	869	G	C6-N1	9.02	1.45	1.39
1	N	346	G	N9-C4	-9.01	1.30	1.38
1	N	1270	G	C6-N1	9.01	1.45	1.39
1	N	442	G	C6-N1	9.01	1.45	1.39
1	N	1210	C	C5'-C4'	9.01	1.62	1.51
1	N	1510	C	N3-C4	9.01	1.40	1.33
1	N	299	G	C5'-C4'	9.01	1.62	1.51
1	N	820	U	C2-N3	9.01	1.44	1.37
1	N	220	G	C5-C4	9.00	1.44	1.38
1	N	234	C	C4'-C3'	-9.00	1.43	1.53
1	N	437	U	C2'-C1'	-8.99	1.43	1.53
1	N	509	A	N7-C5	-8.99	1.33	1.39
1	N	1235	U	C2-N3	8.99	1.44	1.37
1	N	1047	G	C5-C4	8.99	1.44	1.38
1	N	1471	U	C2-N3	8.99	1.44	1.37
1	N	581	G	C6-N1	8.98	1.45	1.39
1	N	949	A	C3'-C2'	-8.98	1.42	1.52
1	N	710	G	C2-N3	8.98	1.40	1.32
1	N	1258	G	C8-N7	-8.98	1.25	1.30
1	N	240	G	C8-N7	-8.98	1.25	1.30
1	N	1036	A	C6-N6	8.98	1.41	1.33
1	N	996	A	C6-N6	8.98	1.41	1.33
1	N	1526	G	N3-C4	-8.97	1.29	1.35
1	N	926	G	C8-N7	-8.96	1.25	1.30
1	N	1216	A	C6-N1	8.96	1.41	1.35
1	N	604	G	C2'-C1'	-8.96	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1418	A	C6-N1	8.95	1.41	1.35
1	N	1422	G	N9-C8	8.95	1.44	1.37
1	N	632	U	C4'-C3'	8.95	1.62	1.53
1	N	424	G	C2-N3	8.95	1.40	1.32
1	N	1131	G	N1-C2	8.94	1.45	1.37
1	N	829	G	C5'-C4'	8.94	1.62	1.51
1	N	785	G	C6-N1	8.94	1.45	1.39
1	N	1094	G	C8-N7	8.93	1.36	1.30
1	N	82	G	C2'-C1'	-8.92	1.43	1.53
1	N	957	U	C2-N3	8.92	1.44	1.37
1	N	879	C	C2'-C1'	-8.92	1.43	1.53
1	N	917	G	C2-N3	8.92	1.39	1.32
1	N	120	A	C4'-C3'	8.91	1.62	1.53
1	N	479	U	C2-N3	8.91	1.44	1.37
1	N	643	C	N1-C6	8.90	1.42	1.37
1	N	767	A	C5-C4	8.90	1.45	1.38
1	N	1457	G	N1-C2	8.90	1.44	1.37
1	N	103	U	C3'-C2'	-8.89	1.43	1.52
1	N	264	C	P-O5'	-8.89	1.50	1.59
1	N	302	G	C5-C4	-8.89	1.32	1.38
1	N	1015	G	C4'-C3'	8.89	1.62	1.53
1	N	347	G	C6-N1	8.89	1.45	1.39
1	N	630	A	O3'-P	-8.89	1.50	1.61
1	N	1302	C	C4'-C3'	8.89	1.62	1.53
1	N	74	A	C6-N6	8.88	1.41	1.33
1	N	327	A	N7-C5	-8.88	1.33	1.39
1	N	877	G	P-O5'	-8.88	1.50	1.59
1	N	1074	G	P-O5'	-8.88	1.50	1.59
1	N	520	A	N9-C4	8.88	1.43	1.37
1	N	1162	C	N3-C4	8.88	1.40	1.33
1	N	654	G	P-O5'	-8.88	1.50	1.59
1	N	1211	U	N3-C4	8.88	1.46	1.38
1	N	126	G	C5'-C4'	8.88	1.62	1.51
1	N	1206	G	N9-C8	-8.88	1.31	1.37
1	N	714	G	C2-N2	8.88	1.43	1.34
1	N	907	A	C6-N6	8.87	1.41	1.33
1	N	469	C	N3-C4	8.87	1.40	1.33
1	N	815	A	N7-C5	-8.87	1.33	1.39
1	N	1167	A	C6-N1	8.87	1.41	1.35
1	N	1241	G	N9-C8	-8.87	1.31	1.37
1	N	145	G	C2-N3	8.87	1.39	1.32
1	N	500	G	C8-N7	-8.87	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	731	G	C6-N1	8.86	1.45	1.39
1	N	1220	G	P-O5'	-8.86	1.50	1.59
1	N	737	C	P-O5'	-8.86	1.50	1.59
1	N	1217	C	C4-N4	8.85	1.42	1.33
1	N	42	G	N7-C5	-8.85	1.33	1.39
1	N	344	A	C5-C6	8.85	1.49	1.41
1	N	733	G	N9-C4	-8.85	1.30	1.38
1	N	1299	A	N3-C4	8.85	1.40	1.34
1	N	1486	G	N9-C8	8.85	1.44	1.37
1	N	46	G	N9-C8	-8.84	1.31	1.37
1	N	765	G	C2-N3	8.84	1.39	1.32
1	N	1239	A	C4'-C3'	8.84	1.62	1.53
1	N	151	A	C6-N6	8.84	1.41	1.33
1	N	390	U	N3-C4	8.84	1.46	1.38
1	N	20	U	N1-C6	8.84	1.46	1.38
1	N	273	U	C2-N3	8.84	1.44	1.37
1	N	1385	G	C6-N1	8.84	1.45	1.39
1	N	570	G	C5-C6	-8.83	1.33	1.42
1	N	1362	A	C5-C4	8.83	1.45	1.38
1	N	1386	G	N9-C4	-8.83	1.30	1.38
1	N	1523	G	C5-C6	-8.83	1.33	1.42
1	N	328	C	C4-C5	8.83	1.50	1.43
1	N	773	G	P-O5'	-8.83	1.50	1.59
1	N	907	A	N7-C5	-8.82	1.33	1.39
1	N	1387	G	C6-N1	8.82	1.45	1.39
1	N	282	A	O3'-P	-8.82	1.50	1.61
1	N	1441	A	N7-C5	-8.82	1.33	1.39
1	N	1322	C	C2'-C1'	-8.81	1.43	1.53
1	N	1196	A	C5-C4	8.81	1.45	1.38
1	N	41	G	N7-C5	-8.81	1.33	1.39
1	N	63	C	C4-N4	8.81	1.41	1.33
1	N	467	U	C2-N3	8.80	1.44	1.37
1	N	872	A	C5-C4	8.80	1.45	1.38
1	N	1376	U	C4-C5	8.81	1.51	1.43
1	N	1199	U	N1-C6	8.80	1.45	1.38
1	N	1413	A	C6-N1	8.80	1.41	1.35
1	N	1022	A	N3-C4	-8.79	1.29	1.34
1	N	600	A	N7-C5	-8.79	1.33	1.39
1	N	778	G	N1-C2	8.79	1.44	1.37
1	N	1114	C	P-O5'	-8.79	1.50	1.59
1	N	912	C	P-O5'	-8.78	1.50	1.59
1	N	294	U	C2'-C1'	-8.78	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	355	C	N3-C4	8.78	1.40	1.33
1	N	1503	A	N9-C4	-8.78	1.32	1.37
1	N	484	G	O3'-P	-8.78	1.50	1.61
1	N	1252	A	C5-C4	8.78	1.44	1.38
1	N	1375	A	C2-N3	8.78	1.41	1.33
1	N	1215	G	N1-C2	8.77	1.44	1.37
1	N	671	G	N3-C4	8.77	1.41	1.35
1	N	1375	A	N9-C4	8.77	1.43	1.37
1	N	680	C	C4-N4	8.77	1.41	1.33
1	N	939	G	N9-C8	-8.77	1.31	1.37
1	N	1358	U	N3-C4	8.77	1.46	1.38
1	N	1449	C	N3-C4	8.77	1.40	1.33
1	N	936	C	C4-C5	-8.77	1.35	1.43
1	N	1457	G	C2-N3	8.77	1.39	1.32
1	N	515	G	C8-N7	-8.76	1.25	1.30
1	N	1461	G	C8-N7	-8.76	1.25	1.30
1	N	278	G	N1-C2	8.75	1.44	1.37
1	N	1281	C	N1-C6	8.75	1.42	1.37
1	N	908	A	N7-C5	-8.74	1.34	1.39
1	N	1139	G	C5-C6	-8.74	1.33	1.42
1	N	230	G	C6-N1	8.74	1.45	1.39
1	N	1396	A	N7-C5	-8.74	1.34	1.39
1	N	1433	A	C1'-N9	8.74	1.61	1.48
1	N	265	G	C6-N1	8.74	1.45	1.39
1	N	649	A	C6-N1	8.74	1.41	1.35
1	N	1297	G	C5'-C4'	8.73	1.61	1.51
1	N	1160	G	C4'-C3'	8.73	1.62	1.53
1	N	1181	G	N7-C5	-8.73	1.34	1.39
1	N	339	C	N1-C6	8.72	1.42	1.37
1	N	646	G	N3-C4	-8.72	1.29	1.35
1	N	1399	C	C4-C5	8.72	1.50	1.43
1	N	1256	A	N7-C5	-8.72	1.34	1.39
1	N	795	C	N3-C4	8.72	1.40	1.33
1	N	230	G	C2-N3	8.72	1.39	1.32
1	N	1268	G	C6-N1	8.71	1.45	1.39
1	N	847	G	C4'-C3'	8.71	1.62	1.53
1	N	1050	G	N7-C5	-8.71	1.34	1.39
1	N	1494	G	C5'-C4'	8.70	1.61	1.51
1	N	796	C	N1-C6	8.70	1.42	1.37
1	N	797	C	C2'-C1'	-8.69	1.43	1.53
1	N	1316	G	C2'-C1'	-8.70	1.43	1.53
1	N	1047	G	N1-C2	8.69	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	185	U	N1-C2	8.69	1.46	1.38
1	N	1353	G	C6-N1	8.69	1.45	1.39
1	N	1505	G	C2-N3	8.68	1.39	1.32
1	N	790	A	C4'-C3'	8.68	1.62	1.53
1	N	697	U	P-O5'	-8.68	1.51	1.59
1	N	1382	C	P-O5'	-8.68	1.51	1.59
1	N	455	G	N9-C4	-8.67	1.31	1.38
1	N	642	A	C6-N6	8.67	1.40	1.33
1	N	1257	A	C6-N1	8.67	1.41	1.35
1	N	1285	A	N7-C5	-8.67	1.34	1.39
1	N	179	A	P-O5'	-8.67	1.51	1.59
1	N	285	C	C4-C5	8.67	1.49	1.43
1	N	191	G	C4'-C3'	8.66	1.62	1.53
1	N	690	G	C2-N3	8.66	1.39	1.32
1	N	1250	A	C2'-C1'	-8.66	1.43	1.53
1	N	398	U	C2'-C1'	-8.66	1.43	1.53
1	N	867	G	N7-C5	-8.66	1.34	1.39
1	N	570	G	N3-C4	-8.66	1.29	1.35
1	N	452	A	C6-N6	8.65	1.40	1.33
1	N	455	G	C5-C6	-8.65	1.33	1.42
1	N	1198	G	C8-N7	-8.65	1.25	1.30
1	N	1529	G	N7-C5	8.65	1.44	1.39
1	N	746	A	C8-N7	-8.65	1.25	1.31
1	N	1025	U	C2-N3	8.65	1.43	1.37
1	N	673	A	N9-C4	-8.65	1.32	1.37
1	N	1053	G	C6-N1	8.65	1.45	1.39
1	N	108	G	N1-C2	8.65	1.44	1.37
1	N	712	A	C6-N1	8.65	1.41	1.35
1	N	250	A	C5-C4	8.64	1.44	1.38
1	N	1374	A	C6-N6	8.64	1.40	1.33
1	N	1137	C	N1-C6	8.64	1.42	1.37
1	N	297	G	P-O5'	-8.64	1.51	1.59
1	N	724	G	C8-N7	-8.64	1.25	1.30
1	N	1150	A	P-O5'	-8.64	1.51	1.59
1	N	633	G	C2'-C1'	-8.63	1.43	1.53
1	N	767	A	C6-N1	8.64	1.41	1.35
1	N	1206	G	C2-N3	8.64	1.39	1.32
1	N	979	C	C2-N3	8.63	1.42	1.35
1	N	618	C	N1-C6	8.63	1.42	1.37
1	N	1339	A	N7-C5	-8.63	1.34	1.39
1	N	1530	G	C6-N1	8.63	1.45	1.39
1	N	615	G	P-O5'	-8.62	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	14	U	N3-C4	8.62	1.46	1.38
1	N	461	A	C6-N1	8.62	1.41	1.35
1	N	488	C	C4-C5	8.62	1.49	1.43
1	N	1181	G	N9-C4	-8.62	1.31	1.38
1	N	820	U	C4-C5	8.61	1.51	1.43
1	N	858	G	C6-N1	8.61	1.45	1.39
1	N	1355	G	N7-C5	-8.61	1.34	1.39
1	N	743	A	C6-N1	8.61	1.41	1.35
1	N	917	G	C6-N1	8.61	1.45	1.39
1	N	1101	A	C2'-C1'	-8.61	1.43	1.53
1	N	106	C	C5'-C4'	8.60	1.61	1.51
1	N	761	G	C8-N7	-8.60	1.25	1.30
1	N	528	C	N3-C4	8.60	1.40	1.33
1	N	1504	G	C2-N3	8.59	1.39	1.32
1	N	945	G	C6-N1	8.59	1.45	1.39
1	N	986	U	P-O5'	-8.58	1.51	1.59
1	N	455	G	C6-N1	8.58	1.45	1.39
1	N	1137	C	P-O5'	-8.58	1.51	1.59
1	N	354	G	O3'-P	-8.58	1.50	1.61
1	N	6	G	N9-C4	8.58	1.44	1.38
1	N	913	A	N7-C5	-8.57	1.34	1.39
1	N	273	U	C1'-N1	8.57	1.61	1.48
1	N	253	A	C8-N7	-8.57	1.25	1.31
1	N	687	A	C6-N6	8.56	1.40	1.33
1	N	713	G	C5-C6	-8.56	1.33	1.42
1	N	229	U	N3-C4	8.56	1.46	1.38
1	N	504	C	P-O5'	-8.56	1.51	1.59
1	N	882	C	C2-N3	8.56	1.42	1.35
1	N	391	G	N9-C4	-8.56	1.31	1.38
1	N	141	G	C4'-C3'	8.55	1.62	1.53
1	N	362	G	C2'-C1'	-8.55	1.44	1.53
1	N	1022	A	N9-C4	8.55	1.43	1.37
1	N	1176	A	N9-C4	-8.55	1.32	1.37
1	N	152	A	N9-C4	-8.55	1.32	1.37
1	N	570	G	C5'-C4'	8.55	1.61	1.51
1	N	551	U	P-O5'	-8.54	1.51	1.59
1	N	1462	C	C5'-C4'	8.54	1.61	1.51
1	N	1522	U	N1-C6	8.54	1.45	1.38
1	N	1084	G	N9-C8	-8.54	1.31	1.37
1	N	1410	A	N9-C4	-8.54	1.32	1.37
1	N	193	C	P-O5'	-8.53	1.51	1.59
1	N	896	C	N3-C4	8.53	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1221	G	N9-C4	-8.53	1.31	1.38
1	N	1233	G	P-O5'	-8.53	1.51	1.59
1	N	1293	C	N3-C4	8.53	1.40	1.33
1	N	922	G	C2-N3	8.52	1.39	1.32
1	N	1007	U	C2-N3	8.52	1.43	1.37
1	N	1159	U	N1-C2	8.52	1.46	1.38
1	N	693	G	C2-N2	8.52	1.43	1.34
1	N	876	C	N3-C4	8.51	1.40	1.33
1	N	1231	G	N7-C5	-8.51	1.34	1.39
1	N	83	C	C2-N3	8.51	1.42	1.35
1	N	297	G	N7-C5	-8.50	1.34	1.39
1	N	1289	A	C4'-C3'	8.50	1.62	1.53
1	N	76	G	P-O5'	-8.50	1.51	1.59
1	N	170	U	C2-N3	8.50	1.43	1.37
1	N	273	U	P-O5'	-8.49	1.51	1.59
1	N	395	C	C4-N4	8.49	1.41	1.33
1	N	1508	A	N9-C8	8.49	1.44	1.37
1	N	459	A	C5'-C4'	8.49	1.61	1.51
1	N	1034	G	C8-N7	-8.49	1.25	1.30
1	N	717	U	N3-C4	8.49	1.46	1.38
1	N	116	A	C6-N6	8.48	1.40	1.33
1	N	277	C	N1-C6	8.48	1.42	1.37
1	N	248	C	C2'-C1'	-8.48	1.44	1.53
1	N	926	G	C2'-C1'	-8.48	1.44	1.53
1	N	602	A	C5-C4	8.47	1.44	1.38
1	N	691	G	N1-C2	8.46	1.44	1.37
1	N	1024	G	N7-C5	-8.46	1.34	1.39
1	N	59	A	P-O5'	-8.46	1.51	1.59
1	N	604	G	C6-N1	8.46	1.45	1.39
1	N	1222	G	N9-C8	-8.46	1.31	1.37
1	N	1327	C	C4'-C3'	-8.46	1.43	1.53
1	N	361	G	N9-C8	-8.46	1.31	1.37
1	N	1348	U	C4-O4	-8.46	1.16	1.23
1	N	613	C	C2-N3	8.44	1.42	1.35
1	N	1225	A	C6-N6	8.45	1.40	1.33
1	N	971	G	N9-C8	-8.44	1.31	1.37
1	N	997	U	C2'-C1'	-8.44	1.44	1.53
1	N	217	C	C2'-C1'	-8.44	1.44	1.53
1	N	465	A	C6-N1	8.44	1.41	1.35
1	N	557	G	N1-C2	8.44	1.44	1.37
1	N	1382	C	C4-N4	8.43	1.41	1.33
1	N	691	G	N9-C8	8.43	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	542	G	N7-C5	-8.43	1.34	1.39
1	N	734	G	C8-N7	8.43	1.36	1.30
1	N	1111	A	N9-C4	-8.43	1.32	1.37
1	N	109	A	N7-C5	-8.43	1.34	1.39
1	N	993	G	C2'-C1'	-8.43	1.44	1.53
1	N	404	G	P-O5'	8.43	1.68	1.59
1	N	959	A	N7-C5	-8.42	1.34	1.39
1	N	383	A	N3-C4	-8.42	1.29	1.34
1	N	465	A	P-O5'	-8.42	1.51	1.59
1	N	351	G	C2-N2	8.42	1.43	1.34
1	N	876	C	N1-C6	8.42	1.42	1.37
1	N	1330	U	C2-N3	8.41	1.43	1.37
1	N	1236	A	C6-N1	8.41	1.41	1.35
1	N	1318	A	C6-N1	8.41	1.41	1.35
1	N	777	A	C2'-C1'	-8.41	1.44	1.53
1	N	37	U	P-O5'	-8.40	1.51	1.59
1	N	553	A	O3'-P	-8.40	1.51	1.61
1	N	1290	G	C6-N1	8.40	1.45	1.39
1	N	987	G	C8-N7	8.40	1.35	1.30
1	N	1002	G	C6-N1	8.39	1.45	1.39
1	N	478	A	C6-N6	8.39	1.40	1.33
1	N	922	G	N7-C5	-8.39	1.34	1.39
1	N	1114	C	C4-N4	8.39	1.41	1.33
1	N	1482	G	C4'-C3'	8.39	1.62	1.53
1	N	218	U	P-O5'	-8.38	1.51	1.59
1	N	311	C	C3'-O3'	8.38	1.53	1.42
1	N	563	A	C8-N7	-8.38	1.25	1.31
1	N	942	G	N1-C2	8.38	1.44	1.37
1	N	949	A	N9-C4	-8.38	1.32	1.37
1	N	428	G	C3'-C2'	8.38	1.62	1.52
1	N	1534	A	N9-C8	8.38	1.44	1.37
1	N	231	U	C2-N3	8.37	1.43	1.37
1	N	897	C	N1-C6	8.37	1.42	1.37
1	N	923	A	N7-C5	-8.37	1.34	1.39
1	N	546	A	N9-C4	8.37	1.42	1.37
1	N	1319	A	N7-C5	-8.37	1.34	1.39
1	N	727	G	N7-C5	-8.37	1.34	1.39
1	N	429	U	C2'-C1'	-8.37	1.44	1.53
1	N	142	G	C8-N7	8.36	1.35	1.30
1	N	558	G	C6-N1	8.36	1.45	1.39
1	N	1290	G	N9-C8	8.36	1.43	1.37
1	N	130	A	N7-C5	-8.36	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	197	A	C6-N1	8.36	1.41	1.35
1	N	555	U	C5'-C4'	8.36	1.61	1.51
1	N	917	G	P-O5'	-8.36	1.51	1.59
1	N	120	A	C6-N6	8.35	1.40	1.33
1	N	941	G	O4'-C1'	8.35	1.52	1.41
1	N	955	U	C2-N3	-8.35	1.31	1.37
1	N	167	A	C6-N1	8.35	1.41	1.35
1	N	976	G	C2-N3	8.35	1.39	1.32
1	N	1355	G	N1-C2	8.35	1.44	1.37
1	N	337	G	N3-C4	-8.34	1.29	1.35
1	N	1415	G	C8-N7	8.34	1.35	1.30
1	N	234	C	N3-C4	8.34	1.39	1.33
1	N	734	G	N7-C5	-8.34	1.34	1.39
1	N	1183	U	C5'-C4'	8.34	1.61	1.51
1	N	730	G	N9-C8	8.34	1.43	1.37
1	N	162	A	C6-N1	8.33	1.41	1.35
1	N	572	A	C6-N1	8.33	1.41	1.35
1	N	604	G	N7-C5	8.33	1.44	1.39
1	N	995	C	C2-N3	8.33	1.42	1.35
1	N	826	C	N3-C4	8.33	1.39	1.33
1	N	1521	C	N1-C6	8.33	1.42	1.37
1	N	929	G	N7-C5	-8.32	1.34	1.39
1	N	28	A	C5-C6	-8.32	1.33	1.41
1	N	214	C	N1-C6	-8.32	1.32	1.37
1	N	990	C	O4'-C1'	8.32	1.52	1.41
1	N	785	G	N3-C4	-8.32	1.29	1.35
1	N	1014	A	N9-C4	8.32	1.42	1.37
1	N	1103	C	C2'-C1'	-8.32	1.44	1.53
1	N	797	C	C5-C6	8.31	1.41	1.34
1	N	1082	A	N7-C5	-8.31	1.34	1.39
1	N	209	U	N1-C2	8.31	1.46	1.38
1	N	1191	A	C6-N6	8.31	1.40	1.33
1	N	347	G	C4'-O4'	8.30	1.56	1.45
1	N	831	A	N9-C4	-8.31	1.32	1.37
1	N	1136	C	O3'-P	-8.30	1.51	1.61
1	N	518	C	N1-C6	8.30	1.42	1.37
1	N	1254	A	N9-C4	8.30	1.42	1.37
1	N	24	U	C2-N3	8.30	1.43	1.37
1	N	117	G	C5-C6	-8.30	1.34	1.42
1	N	949	A	C8-N7	-8.29	1.25	1.31
1	N	554	A	C6-N6	8.29	1.40	1.33
1	N	658	C	N3-C4	8.29	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	934	C	N3-C4	8.29	1.39	1.33
1	N	1407	C	N3-C4	8.29	1.39	1.33
1	N	577	G	C2-N3	8.29	1.39	1.32
1	N	644	U	C4'-C3'	-8.29	1.44	1.53
1	N	997	U	C4'-C3'	8.28	1.62	1.53
1	N	1447	A	C6-N1	8.27	1.41	1.35
1	N	428	G	C6-N1	8.27	1.45	1.39
1	N	80	A	C5'-C4'	8.27	1.61	1.51
1	N	923	A	C6-N6	8.27	1.40	1.33
1	N	786	G	N1-C2	8.27	1.44	1.37
1	N	377	G	C8-N7	-8.27	1.25	1.30
1	N	201	G	N1-C2	8.26	1.44	1.37
1	N	532	A	N7-C5	-8.26	1.34	1.39
1	N	1018	G	C5-C6	-8.26	1.34	1.42
1	N	791	G	N1-C2	8.26	1.44	1.37
1	N	1181	G	N1-C2	8.26	1.44	1.37
1	N	78	A	C5-C4	8.26	1.44	1.38
1	N	929	G	C6-N1	8.26	1.45	1.39
1	N	970	C	C4'-O4'	8.26	1.56	1.45
1	N	1486	G	N1-C2	8.26	1.44	1.37
1	N	456	A	C2-N3	-8.26	1.26	1.33
1	N	1315	U	C2-N3	8.26	1.43	1.37
1	N	271	C	N3-C4	8.25	1.39	1.33
1	N	381	C	C4-C5	-8.25	1.36	1.43
1	N	528	C	C5'-C4'	8.25	1.61	1.51
1	N	943	U	N3-C4	8.25	1.45	1.38
1	N	1084	G	N9-C4	8.25	1.44	1.38
1	N	1379	G	N3-C4	-8.25	1.29	1.35
1	N	9	G	C2-N3	8.25	1.39	1.32
1	N	57	G	C6-N1	8.25	1.45	1.39
1	N	473	U	C2-N3	8.25	1.43	1.37
1	N	1389	C	C4-C5	8.25	1.49	1.43
1	N	115	G	C6-N1	8.24	1.45	1.39
1	N	542	G	P-O5'	8.24	1.68	1.59
1	N	1316	G	O3'-P	-8.24	1.51	1.61
1	N	1416	G	C6-N1	8.24	1.45	1.39
1	N	158	G	C5'-C4'	8.24	1.61	1.51
1	N	177	G	P-O5'	-8.24	1.51	1.59
1	N	247	G	C6-N1	8.23	1.45	1.39
1	N	1179	A	N7-C5	-8.23	1.34	1.39
1	N	1511	G	C6-N1	8.23	1.45	1.39
1	N	644	U	C4-C5	-8.23	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	647	C	C4-N4	8.23	1.41	1.33
1	N	765	G	N7-C5	-8.23	1.34	1.39
1	N	573	A	C4'-C3'	8.22	1.62	1.53
1	N	690	G	C8-N7	8.22	1.35	1.30
1	N	108	G	C5-C4	8.22	1.44	1.38
1	N	189	A	N7-C5	-8.22	1.34	1.39
1	N	272	C	C5-C6	-8.22	1.27	1.34
1	N	292	G	C6-N1	8.22	1.45	1.39
1	N	211	G	N1-C2	8.21	1.44	1.37
1	N	1006	G	N1-C2	8.21	1.44	1.37
1	N	1024	G	C6-N1	8.21	1.45	1.39
1	N	1111	A	N9-C8	-8.21	1.31	1.37
1	N	1341	U	N1-C2	8.21	1.46	1.38
1	N	45	G	C8-N7	-8.21	1.26	1.30
1	N	1036	A	O3'-P	-8.21	1.51	1.61
1	N	334	C	C4-N4	8.20	1.41	1.33
1	N	410	G	C2-N2	8.20	1.42	1.34
1	N	65	A	C6-N6	8.20	1.40	1.33
1	N	139	A	N7-C5	-8.20	1.34	1.39
1	N	1380	U	N1-C2	-8.20	1.31	1.38
1	N	354	G	N1-C2	8.19	1.44	1.37
1	N	181	A	N7-C5	-8.19	1.34	1.39
1	N	1446	A	N7-C5	-8.19	1.34	1.39
1	N	1220	G	C2-N3	8.19	1.39	1.32
1	N	634	C	N3-C4	8.18	1.39	1.33
1	N	716	A	C2'-C1'	-8.18	1.44	1.53
1	N	1430	A	N7-C5	-8.18	1.34	1.39
1	N	903	G	N3-C4	-8.18	1.29	1.35
1	N	1118	U	C4'-O4'	8.18	1.56	1.45
1	N	1345	U	C2'-C1'	-8.18	1.44	1.53
1	N	127	G	N7-C5	-8.18	1.34	1.39
1	N	569	C	N3-C4	8.18	1.39	1.33
1	N	837	U	C5-C6	8.17	1.41	1.34
1	N	1003	G	N1-C2	8.17	1.44	1.37
1	N	1230	C	N3-C4	8.17	1.39	1.33
1	N	243	A	N9-C4	-8.17	1.32	1.37
1	N	288	A	C8-N7	-8.17	1.25	1.31
1	N	1335	U	O4'-C1'	-8.17	1.31	1.41
1	N	748	G	C5-C4	8.17	1.44	1.38
1	N	549	C	P-O5'	-8.16	1.51	1.59
1	N	1104	G	C2'-C1'	-8.16	1.44	1.53
1	N	1221	G	N9-C8	8.16	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	249	U	C4'-C3'	8.16	1.62	1.53
1	N	81	A	C6-N1	8.15	1.41	1.35
1	N	1329	A	N7-C5	-8.15	1.34	1.39
1	N	118	U	C1'-N1	8.15	1.60	1.48
1	N	201	G	C2-N3	-8.15	1.26	1.32
1	N	206	C	N3-C4	8.15	1.39	1.33
1	N	1016	A	N7-C5	-8.15	1.34	1.39
1	N	423	G	C4'-C3'	-8.14	1.44	1.53
1	N	885	G	C2'-C1'	-8.14	1.44	1.53
1	N	796	C	C4-N4	8.14	1.41	1.33
1	N	1417	G	C2-N3	8.14	1.39	1.32
1	N	1500	A	C2'-C1'	-8.14	1.44	1.53
1	N	1172	C	N1-C6	8.14	1.42	1.37
1	N	321	A	N7-C5	-8.13	1.34	1.39
1	N	1032	G	N1-C2	8.13	1.44	1.37
1	N	663	A	N9-C4	8.13	1.42	1.37
1	N	682	G	C5'-C4'	8.12	1.61	1.51
1	N	1502	A	N9-C4	-8.12	1.32	1.37
1	N	363	A	C2'-C1'	-8.12	1.44	1.53
1	N	753	A	N3-C4	-8.12	1.29	1.34
1	N	1094	G	N1-C2	8.12	1.44	1.37
1	N	102	G	C2'-C1'	-8.12	1.44	1.53
1	N	881	G	C6-N1	8.12	1.45	1.39
1	N	1255	G	N3-C4	-8.12	1.29	1.35
1	N	1191	A	N3-C4	8.11	1.39	1.34
1	N	238	A	C5-C4	8.11	1.44	1.38
1	N	513	C	P-O5'	-8.11	1.51	1.59
1	N	1280	A	C8-N7	-8.11	1.25	1.31
1	N	328	C	N1-C6	8.11	1.42	1.37
1	N	82	G	N1-C2	8.10	1.44	1.37
1	N	377	G	C6-N1	8.10	1.45	1.39
1	N	441	A	C6-N6	8.10	1.40	1.33
1	N	175	C	N1-C6	8.10	1.42	1.37
1	N	526	C	C4-N4	8.10	1.41	1.33
1	N	589	U	C5'-C4'	8.10	1.61	1.51
1	N	196	A	C6-N6	8.09	1.40	1.33
1	N	1236	A	N7-C5	-8.09	1.34	1.39
1	N	247	G	N7-C5	-8.09	1.34	1.39
1	N	553	A	C5-C6	-8.09	1.33	1.41
1	N	891	U	C4-C5	8.09	1.50	1.43
1	N	290	C	C4-C5	8.09	1.49	1.43
1	N	650	G	N7-C5	-8.09	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	947	G	C2-N3	8.09	1.39	1.32
1	N	1487	G	C2-N3	8.08	1.39	1.32
1	N	539	A	N7-C5	-8.08	1.34	1.39
1	N	362	G	N1-C2	8.08	1.44	1.37
1	N	1206	G	N1-C2	8.08	1.44	1.37
1	N	27	G	N1-C2	8.07	1.44	1.37
1	N	90	C	N3-C4	8.07	1.39	1.33
1	N	895	G	P-O5'	-8.07	1.51	1.59
1	N	425	G	C8-N7	-8.07	1.26	1.30
1	N	528	C	C2-N3	8.07	1.42	1.35
1	N	446	G	N9-C4	-8.06	1.31	1.38
1	N	640	A	C6-N6	8.06	1.40	1.33
1	N	1177	G	C2-N3	8.06	1.39	1.32
1	N	1312	G	C2-N3	8.06	1.39	1.32
1	N	403	C	N3-C4	8.06	1.39	1.33
1	N	1000	A	C5'-C4'	8.06	1.61	1.51
1	N	486	U	C3'-C2'	-8.06	1.43	1.52
1	N	1179	A	P-O5'	-8.06	1.51	1.59
1	N	91	U	C4-C5	8.06	1.50	1.43
1	N	744	C	C5'-C4'	8.05	1.61	1.51
1	N	1216	A	C6-N6	8.05	1.40	1.33
1	N	493	A	N9-C8	8.05	1.44	1.37
1	N	749	A	C4'-C3'	-8.05	1.44	1.53
1	N	1242	G	N9-C8	8.05	1.43	1.37
1	N	1493	A	N3-C4	-8.05	1.30	1.34
1	N	28	A	N9-C4	-8.05	1.33	1.37
1	N	667	G	N7-C5	-8.05	1.34	1.39
1	N	717	U	C2-N3	8.05	1.43	1.37
1	N	406	G	N7-C5	-8.04	1.34	1.39
1	N	809	G	C6-N1	8.04	1.45	1.39
1	N	838	G	C2-N3	8.04	1.39	1.32
1	N	1310	G	P-O5'	-8.04	1.51	1.59
1	N	1367	C	N1-C2	-8.04	1.32	1.40
1	N	1152	A	C2-N3	8.04	1.40	1.33
1	N	329	A	C6-N6	8.04	1.40	1.33
1	N	499	A	C6-N6	8.04	1.40	1.33
1	N	1374	A	C5'-C4'	8.04	1.60	1.51
1	N	1116	U	P-O5'	-8.03	1.51	1.59
1	N	299	G	C6-N1	8.03	1.45	1.39
1	N	1171	A	N9-C4	-8.03	1.33	1.37
1	N	242	G	C2-N3	8.03	1.39	1.32
1	N	655	A	C6-N6	8.03	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1208	C	C2-N3	8.02	1.42	1.35
1	N	397	A	N7-C5	-8.02	1.34	1.39
1	N	1131	G	C8-N7	-8.02	1.26	1.30
1	N	1228	C	N1-C6	8.02	1.42	1.37
1	N	1387	G	P-O5'	-8.02	1.51	1.59
1	N	1329	A	C5'-C4'	8.02	1.60	1.51
1	N	107	G	N9-C8	8.01	1.43	1.37
1	N	139	A	N1-C2	8.01	1.41	1.34
1	N	324	G	C2'-C1'	-8.01	1.44	1.53
1	N	920	U	C2'-C1'	-8.01	1.44	1.53
1	N	595	A	N3-C4	8.01	1.39	1.34
1	N	1377	A	O3'-P	-8.01	1.51	1.61
1	N	710	G	N1-C2	8.00	1.44	1.37
1	N	1254	A	C6-N6	8.00	1.40	1.33
1	N	1353	G	C6-O6	-8.00	1.17	1.24
1	N	406	G	C6-N1	8.00	1.45	1.39
1	N	18	C	C4-C5	-8.00	1.36	1.43
1	N	1271	A	N9-C4	-8.00	1.33	1.37
1	N	342	C	C2'-C1'	-7.99	1.44	1.53
1	N	560	A	C2'-C1'	-7.99	1.44	1.53
1	N	1134	G	C2-N3	7.99	1.39	1.32
1	N	1343	G	C2-N3	7.99	1.39	1.32
1	N	1365	G	O3'-P	-7.99	1.51	1.61
1	N	373	A	N9-C4	7.99	1.42	1.37
1	N	9	G	C6-N1	7.98	1.45	1.39
1	N	384	G	N9-C8	7.98	1.43	1.37
1	N	271	C	C4-C5	-7.98	1.36	1.43
1	N	1004	A	N9-C4	-7.97	1.33	1.37
1	N	182	A	C8-N7	-7.97	1.25	1.31
1	N	77	A	C6-N6	7.97	1.40	1.33
1	N	449	G	C8-N7	-7.97	1.26	1.30
1	N	1251	A	N3-C4	-7.97	1.30	1.34
1	N	731	G	C5-C4	7.96	1.44	1.38
1	N	425	G	N9-C4	7.96	1.44	1.38
1	N	1173	U	C2-N3	7.96	1.43	1.37
1	N	401	C	C4-N4	7.96	1.41	1.33
1	N	150	U	C2-N3	7.95	1.43	1.37
1	N	190	A	C6-N1	7.95	1.41	1.35
1	N	1060	U	P-O5'	-7.95	1.51	1.59
1	N	246	A	C4'-C3'	7.95	1.61	1.53
1	N	668	G	C2'-C1'	-7.95	1.44	1.53
1	N	1113	C	C2-N3	7.95	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1169	A	C5-C6	-7.95	1.33	1.41
1	N	622	A	N7-C5	-7.95	1.34	1.39
1	N	304	U	N1-C2	7.94	1.45	1.38
1	N	909	A	P-O5'	-7.94	1.51	1.59
1	N	195	A	C4'-C3'	-7.94	1.44	1.53
1	N	723	U	C3'-C2'	7.94	1.61	1.52
1	N	51	A	N9-C4	-7.94	1.33	1.37
1	N	79	G	C2-N3	7.94	1.39	1.32
1	N	115	G	C2-N2	7.94	1.42	1.34
1	N	212	G	C5-C4	7.94	1.44	1.38
1	N	774	G	C2-N3	7.93	1.39	1.32
1	N	1118	U	C4-C5	7.93	1.50	1.43
1	N	403	C	N1-C6	7.93	1.42	1.37
1	N	753	A	N9-C8	-7.93	1.31	1.37
1	N	1195	C	N3-C4	7.93	1.39	1.33
1	N	994	A	C5'-C4'	7.92	1.60	1.51
1	N	633	G	N7-C5	-7.92	1.34	1.39
1	N	1301	U	C1'-N1	7.92	1.60	1.48
1	N	671	G	C2-N2	7.92	1.42	1.34
1	N	587	G	C2-N3	7.92	1.39	1.32
1	N	1068	G	C2-N2	7.92	1.42	1.34
1	N	1352	C	N3-C4	7.92	1.39	1.33
1	N	154	U	N1-C6	-7.91	1.30	1.38
1	N	202	G	C8-N7	-7.91	1.26	1.30
1	N	23	C	C4-C5	-7.91	1.36	1.43
1	N	1491	G	C5'-C4'	7.91	1.60	1.51
1	N	1332	A	C5-C4	-7.91	1.33	1.38
1	N	39	G	C6-N1	7.90	1.45	1.39
1	N	337	G	O4'-C1'	-7.90	1.31	1.41
1	N	1275	A	C5-C4	7.90	1.44	1.38
1	N	682	G	O3'-P	-7.90	1.51	1.61
1	N	805	C	P-O5'	-7.90	1.51	1.59
1	N	483	C	N1-C6	-7.89	1.32	1.37
1	N	686	U	C5'-C4'	7.89	1.60	1.51
1	N	533	A	C3'-C2'	-7.89	1.44	1.52
1	N	1088	G	C2-N3	7.89	1.39	1.32
1	N	932	C	C2-N3	7.89	1.42	1.35
1	N	1294	G	N9-C8	7.89	1.43	1.37
1	N	1103	C	P-O5'	-7.89	1.51	1.59
1	N	179	A	C5-C6	-7.88	1.33	1.41
1	N	1279	G	C5'-C4'	7.88	1.60	1.51
1	N	438	U	O3'-P	-7.88	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1171	A	C6-N1	-7.88	1.30	1.35
1	N	616	G	C6-N1	7.88	1.45	1.39
1	N	1526	G	N9-C8	-7.88	1.32	1.37
1	N	797	C	C4-N4	7.88	1.41	1.33
1	N	803	G	C6-N1	7.88	1.45	1.39
1	N	467	U	N3-C4	7.88	1.45	1.38
1	N	1269	A	C5-C4	-7.88	1.33	1.38
1	N	645	G	C2-N3	7.88	1.39	1.32
1	N	222	C	N3-C4	7.87	1.39	1.33
1	N	894	G	C2-N3	7.87	1.39	1.32
1	N	298	A	N7-C5	-7.87	1.34	1.39
1	N	346	G	N9-C8	-7.87	1.32	1.37
1	N	1208	C	C4-N4	7.87	1.41	1.33
1	N	682	G	C4'-C3'	7.87	1.61	1.53
1	N	708	C	C2-N3	7.87	1.42	1.35
1	N	712	A	N9-C8	-7.87	1.31	1.37
1	N	903	G	C2-N3	7.87	1.39	1.32
1	N	1350	A	C5'-C4'	7.87	1.60	1.51
1	N	1502	A	N7-C5	-7.86	1.34	1.39
1	N	523	A	C6-N6	7.86	1.40	1.33
1	N	105	G	N9-C4	-7.86	1.31	1.38
1	N	453	G	P-O5'	-7.86	1.51	1.59
1	N	1420	U	N1-C6	-7.86	1.30	1.38
1	N	1496	C	C4-C5	-7.86	1.36	1.43
1	N	572	A	N3-C4	-7.85	1.30	1.34
1	N	1237	C	C2'-C1'	-7.85	1.44	1.53
1	N	148	G	C2-N2	7.85	1.42	1.34
1	N	1205	U	N3-C4	7.85	1.45	1.38
1	N	1490	U	N3-C4	7.85	1.45	1.38
1	N	533	A	N9-C4	7.84	1.42	1.37
1	N	840	C	C2-N3	7.84	1.42	1.35
1	N	1080	A	N9-C8	7.84	1.44	1.37
1	N	1043	G	C8-N7	-7.84	1.26	1.30
1	N	231	U	C4-O4	7.84	1.29	1.23
1	N	661	G	C2-N3	7.84	1.39	1.32
1	N	800	G	N7-C5	-7.84	1.34	1.39
1	N	1073	U	C2-N3	7.84	1.43	1.37
1	N	517	G	N7-C5	7.84	1.44	1.39
1	N	988	G	N1-C2	7.84	1.44	1.37
1	N	213	G	N9-C4	7.83	1.44	1.38
1	N	869	G	N7-C5	-7.83	1.34	1.39
1	N	182	A	P-O5'	7.83	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	335	C	N3-C4	7.83	1.39	1.33
1	N	668	G	N7-C5	-7.83	1.34	1.39
1	N	590	U	P-O5'	-7.83	1.51	1.59
1	N	244	U	C1'-N1	7.83	1.60	1.48
1	N	604	G	P-O5'	-7.83	1.51	1.59
1	N	198	G	C2'-C1'	-7.82	1.44	1.53
1	N	843	U	C4'-C3'	7.82	1.61	1.53
1	N	914	A	P-O5'	7.82	1.67	1.59
1	N	110	C	C4-N4	7.81	1.41	1.33
1	N	34	C	N1-C6	7.81	1.41	1.37
1	N	122	G	N1-C2	7.81	1.44	1.37
1	N	1423	G	N1-C2	7.81	1.44	1.37
1	N	232	G	N7-C5	-7.81	1.34	1.39
1	N	1041	G	N7-C5	7.81	1.44	1.39
1	N	781	A	C6-N6	7.81	1.40	1.33
1	N	824	G	C8-N7	-7.81	1.26	1.30
1	N	1377	A	C3'-C2'	-7.81	1.44	1.52
1	N	828	U	N1-C2	-7.80	1.31	1.38
1	N	1364	U	C4'-C3'	7.80	1.61	1.53
1	N	1433	A	C2-N3	7.80	1.40	1.33
1	N	493	A	C8-N7	-7.80	1.26	1.31
1	N	581	G	C2-N2	-7.79	1.26	1.34
1	N	128	G	N7-C5	-7.79	1.34	1.39
1	N	1528	U	N3-C4	7.79	1.45	1.38
1	N	138	G	N7-C5	-7.79	1.34	1.39
1	N	1159	U	C2-N3	7.79	1.43	1.37
1	N	234	C	N1-C6	7.79	1.41	1.37
1	N	1252	A	C6-N6	7.79	1.40	1.33
1	N	414	A	C6-N6	7.79	1.40	1.33
1	N	801	U	C2-N3	7.78	1.43	1.37
1	N	897	C	N3-C4	7.78	1.39	1.33
1	N	567	G	N3-C4	-7.78	1.30	1.35
1	N	1525	G	N3-C4	-7.78	1.30	1.35
1	N	423	G	C8-N7	7.78	1.35	1.30
1	N	1200	C	C4'-C3'	7.78	1.61	1.53
1	N	488	C	C2-N3	7.78	1.42	1.35
1	N	312	C	N3-C4	7.77	1.39	1.33
1	N	668	G	C2-N3	7.77	1.39	1.32
1	N	893	C	C4-N4	7.77	1.41	1.33
1	N	64	G	N3-C4	-7.76	1.30	1.35
1	N	347	G	C3'-C2'	7.76	1.61	1.52
1	N	1174	G	N7-C5	-7.76	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	693	G	C6-N1	7.76	1.45	1.39
1	N	1408	A	N7-C5	-7.76	1.34	1.39
1	N	813	U	O3'-P	-7.75	1.51	1.61
1	N	1442	G	N9-C8	7.75	1.43	1.37
1	N	617	G	N9-C8	-7.75	1.32	1.37
1	N	102	G	N9-C4	-7.75	1.31	1.38
1	N	705	G	N3-C4	-7.75	1.30	1.35
1	N	973	G	N9-C8	-7.75	1.32	1.37
1	N	491	G	C5'-C4'	7.74	1.60	1.51
1	N	536	C	N1-C6	7.74	1.41	1.37
1	N	1124	G	C2-N3	7.74	1.39	1.32
1	N	1098	C	P-O5'	-7.74	1.52	1.59
1	N	394	G	C6-N1	7.74	1.45	1.39
1	N	242	G	C2'-C1'	-7.74	1.44	1.53
1	N	1101	A	N7-C5	-7.74	1.34	1.39
1	N	1516	G	C5-C4	-7.74	1.32	1.38
1	N	454	G	C2-N3	7.74	1.39	1.32
1	N	162	A	C5'-C4'	7.74	1.60	1.51
1	N	41	G	N1-C2	7.73	1.44	1.37
1	N	862	C	P-O5'	-7.73	1.52	1.59
1	N	410	G	C8-N7	-7.73	1.26	1.30
1	N	646	G	N1-C2	7.73	1.44	1.37
1	N	671	G	C2-N3	7.72	1.39	1.32
1	N	812	G	O3'-P	-7.72	1.51	1.61
1	N	716	A	N9-C8	-7.72	1.31	1.37
1	N	1443	C	C1'-N1	7.71	1.60	1.48
1	N	282	A	N1-C2	7.71	1.41	1.34
1	N	410	G	N3-C4	-7.70	1.30	1.35
1	N	1039	G	C2-N3	7.70	1.39	1.32
1	N	51	A	C6-N1	7.70	1.41	1.35
1	N	151	A	C6-N1	7.70	1.41	1.35
1	N	681	A	C6-N1	7.70	1.41	1.35
1	N	1491	G	P-O5'	-7.70	1.52	1.59
1	N	368	U	C5'-C4'	7.70	1.60	1.51
1	N	223	A	C5'-C4'	7.70	1.60	1.51
1	N	858	G	N3-C4	-7.70	1.30	1.35
1	N	481	G	O3'-P	-7.69	1.51	1.61
1	N	1373	G	O3'-P	-7.69	1.51	1.61
1	N	30	U	O3'-P	-7.69	1.51	1.61
1	N	305	G	O3'-P	-7.69	1.51	1.61
1	N	438	U	P-O5'	-7.69	1.52	1.59
1	N	448	A	C6-N6	7.69	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	644	U	C2-N3	7.68	1.43	1.37
1	N	890	G	C4'-C3'	7.68	1.61	1.53
1	N	1221	G	N7-C5	-7.68	1.34	1.39
1	N	630	A	C2-N3	7.68	1.40	1.33
1	N	508	U	N3-C4	7.68	1.45	1.38
1	N	1327	C	P-O5'	-7.68	1.52	1.59
1	N	222	C	N1-C6	7.68	1.41	1.37
1	N	772	U	C4'-O4'	7.68	1.55	1.45
1	N	785	G	N7-C5	-7.68	1.34	1.39
1	N	204	G	C2-N2	7.68	1.42	1.34
1	N	209	U	C4-C5	7.68	1.50	1.43
1	N	774	G	N7-C5	-7.68	1.34	1.39
1	N	1117	A	O3'-P	-7.68	1.51	1.61
1	N	1331	G	P-O5'	-7.68	1.52	1.59
1	N	1450	U	N1-C2	-7.68	1.31	1.38
1	N	1192	C	C2-N3	7.67	1.41	1.35
1	N	1412	C	C4'-C3'	7.67	1.61	1.53
1	N	540	G	C8-N7	7.67	1.35	1.30
1	N	1238	A	N9-C4	-7.67	1.33	1.37
1	N	311	C	C2-N3	7.67	1.41	1.35
1	N	1284	C	C4-N4	7.67	1.40	1.33
1	N	1368	A	P-O5'	-7.67	1.52	1.59
1	N	1137	C	C1'-N1	7.66	1.60	1.48
1	N	1261	A	C5'-C4'	7.66	1.60	1.51
1	N	1015	G	N7-C5	-7.66	1.34	1.39
1	N	253	A	C2'-C1'	-7.66	1.45	1.53
1	N	878	A	N9-C8	7.66	1.43	1.37
1	N	402	G	C2-N3	7.65	1.38	1.32
1	N	1022	A	C6-N6	7.65	1.40	1.33
1	N	694	A	N3-C4	-7.65	1.30	1.34
1	N	310	G	C2-N3	7.65	1.38	1.32
1	N	15	G	C8-N7	-7.64	1.26	1.30
1	N	177	G	C5-C6	-7.64	1.34	1.42
1	N	484	G	C4'-C3'	7.64	1.61	1.53
1	N	1219	A	C4'-O4'	-7.64	1.35	1.45
1	N	249	U	C2-N3	7.64	1.43	1.37
1	N	347	G	N9-C4	-7.64	1.31	1.38
1	N	1119	C	O4'-C1'	7.64	1.51	1.41
1	N	1248	A	C6-N6	7.64	1.40	1.33
1	N	1035	A	C5-C4	-7.63	1.33	1.38
1	N	860	A	N9-C8	-7.63	1.31	1.37
1	N	1360	A	C2'-C1'	7.63	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	984	C	C2'-C1'	-7.63	1.45	1.53
1	N	140	U	N1-C6	7.63	1.44	1.38
1	N	16	A	C2'-C1'	-7.62	1.45	1.53
1	N	1394	A	N7-C5	-7.62	1.34	1.39
1	N	952	U	N3-C4	7.62	1.45	1.38
1	N	988	G	C8-N7	-7.62	1.26	1.30
1	N	1417	G	C3'-C2'	7.62	1.61	1.52
1	N	1506	U	C2-N3	7.62	1.43	1.37
1	N	588	G	C2-N2	7.62	1.42	1.34
1	N	110	C	C2-N3	-7.62	1.29	1.35
1	N	1471	U	C4-O4	7.62	1.29	1.23
1	N	704	A	C8-N7	7.61	1.36	1.31
1	N	619	U	C2'-C1'	-7.61	1.45	1.53
1	N	306	A	N9-C4	7.61	1.42	1.37
1	N	874	G	C2-N3	7.61	1.38	1.32
1	N	1045	C	C4-C5	7.61	1.49	1.43
1	N	304	U	C4-O4	-7.60	1.17	1.23
1	N	838	G	C5-C4	-7.60	1.33	1.38
1	N	341	C	P-O5'	-7.60	1.52	1.59
1	N	746	A	N7-C5	-7.60	1.34	1.39
1	N	619	U	C2-N3	7.59	1.43	1.37
1	N	1016	A	C8-N7	-7.59	1.26	1.31
1	N	1430	A	N9-C8	7.59	1.43	1.37
1	N	131	A	N9-C8	7.59	1.43	1.37
1	N	350	G	N1-C2	7.59	1.43	1.37
1	N	990	C	C2'-C1'	-7.59	1.45	1.53
1	N	1059	C	C2-N3	-7.59	1.29	1.35
1	N	1459	G	N1-C2	7.58	1.43	1.37
1	N	675	A	N7-C5	-7.58	1.34	1.39
1	N	773	G	C4'-O4'	7.58	1.55	1.45
1	N	1277	C	C2-N3	7.58	1.41	1.35
1	N	1465	A	P-O5'	-7.58	1.52	1.59
1	N	313	A	C8-N7	-7.58	1.26	1.31
1	N	79	G	C8-N7	-7.58	1.26	1.30
1	N	259	G	N1-C2	7.57	1.43	1.37
1	N	1527	U	C2-N3	7.57	1.43	1.37
1	N	506	G	C6-N1	7.57	1.44	1.39
1	N	961	U	N3-C4	7.57	1.45	1.38
1	N	41	G	C6-N1	7.57	1.44	1.39
1	N	82	G	C8-N7	-7.57	1.26	1.30
1	N	609	A	N9-C4	7.57	1.42	1.37
1	N	1251	A	C5-C4	7.57	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	505	G	C2-N3	7.57	1.38	1.32
1	N	838	G	N9-C8	-7.56	1.32	1.37
1	N	81	A	N9-C4	7.56	1.42	1.37
1	N	1126	U	C4'-O4'	7.56	1.55	1.45
1	N	1228	C	C4-N4	7.56	1.40	1.33
1	N	244	U	N1-C6	-7.56	1.31	1.38
1	N	840	C	N3-C4	7.56	1.39	1.33
1	N	906	A	N9-C4	-7.56	1.33	1.37
1	N	117	G	C2'-C1'	-7.55	1.45	1.53
1	N	913	A	P-O5'	-7.55	1.52	1.59
1	N	1083	U	N1-C2	7.55	1.45	1.38
1	N	1427	C	N3-C4	7.55	1.39	1.33
1	N	342	C	C5-C6	7.55	1.40	1.34
1	N	66	A	C4'-C3'	7.55	1.61	1.53
1	N	382	A	N7-C5	-7.55	1.34	1.39
1	N	554	A	N7-C5	-7.55	1.34	1.39
1	N	1201	A	C5-C4	7.55	1.44	1.38
1	N	1241	G	P-O5'	-7.55	1.52	1.59
1	N	916	U	C3'-C2'	-7.55	1.44	1.52
1	N	1134	G	O3'-P	-7.55	1.52	1.61
1	N	1534	A	C8-N7	-7.55	1.26	1.31
1	N	1085	U	C2-N3	7.55	1.43	1.37
1	N	1203	C	C2-N3	7.55	1.41	1.35
1	N	68	G	N9-C4	-7.54	1.31	1.38
1	N	550	G	C2-N2	7.54	1.42	1.34
1	N	130	A	C5-C6	-7.54	1.34	1.41
1	N	766	A	P-O5'	-7.54	1.52	1.59
1	N	1418	A	N3-C4	-7.54	1.30	1.34
1	N	1192	C	P-O5'	-7.54	1.52	1.59
1	N	1403	C	N3-C4	7.54	1.39	1.33
1	N	165	G	C2'-C1'	-7.54	1.45	1.53
1	N	174	A	C5'-C4'	7.54	1.60	1.51
1	N	1368	A	C2-N3	7.54	1.40	1.33
1	N	767	A	C4'-O4'	7.53	1.55	1.45
1	N	661	G	C2'-C1'	7.53	1.61	1.53
1	N	1475	G	C2-N3	7.53	1.38	1.32
1	N	588	G	C6-N1	7.53	1.44	1.39
1	N	681	A	C6-N6	7.53	1.40	1.33
1	N	357	G	N9-C8	7.52	1.43	1.37
1	N	344	A	N9-C8	-7.52	1.31	1.37
1	N	369	G	C2'-C1'	-7.52	1.45	1.53
1	N	111	G	N9-C8	7.52	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	319	G	C5-C6	-7.52	1.34	1.42
1	N	501	C	C4-N4	7.52	1.40	1.33
1	N	723	U	C5'-C4'	7.52	1.60	1.51
1	N	654	G	C6-O6	-7.52	1.17	1.24
1	N	1458	G	O3'-P	-7.51	1.52	1.61
1	N	208	U	O3'-P	-7.51	1.52	1.61
1	N	973	G	C3'-C2'	7.51	1.61	1.52
1	N	145	G	C8-N7	-7.51	1.26	1.30
1	N	702	A	N3-C4	-7.51	1.30	1.34
1	N	1220	G	C5-C6	-7.51	1.34	1.42
1	N	1304	G	C6-N1	7.51	1.44	1.39
1	N	569	C	C4-N4	-7.51	1.27	1.33
1	N	495	A	N7-C5	-7.51	1.34	1.39
1	N	973	G	N7-C5	-7.51	1.34	1.39
1	N	1482	G	N9-C8	7.51	1.43	1.37
1	N	937	A	N7-C5	-7.50	1.34	1.39
1	N	1504	G	C4'-C3'	7.50	1.61	1.53
1	N	873	A	C5-C4	7.50	1.44	1.38
1	N	1396	A	C6-N6	7.50	1.40	1.33
1	N	816	A	N9-C4	-7.50	1.33	1.37
1	N	945	G	P-O5'	-7.50	1.52	1.59
1	N	1020	G	N9-C4	7.50	1.44	1.38
1	N	1150	A	N7-C5	7.50	1.43	1.39
1	N	908	A	N9-C4	-7.50	1.33	1.37
1	N	334	C	N1-C6	7.50	1.41	1.37
1	N	724	G	N9-C8	7.50	1.43	1.37
1	N	843	U	C2-N3	7.50	1.43	1.37
1	N	775	G	C2-N3	7.50	1.38	1.32
1	N	656	G	N1-C2	7.49	1.43	1.37
1	N	267	C	N1-C6	7.49	1.41	1.37
1	N	542	G	C2'-C1'	-7.49	1.45	1.53
1	N	1462	C	N1-C6	-7.49	1.32	1.37
1	N	347	G	O3'-P	7.48	1.70	1.61
1	N	758	C	C3'-O3'	7.48	1.52	1.42
1	N	1134	G	N3-C4	-7.48	1.30	1.35
1	N	1088	G	C5'-C4'	7.48	1.60	1.51
1	N	747	A	N9-C8	-7.47	1.31	1.37
1	N	253	A	C6-N1	7.47	1.40	1.35
1	N	208	U	C4-C5	7.47	1.50	1.43
1	N	886	G	N7-C5	-7.47	1.34	1.39
1	N	853	C	N3-C4	7.47	1.39	1.33
1	N	1140	C	C4-N4	7.47	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	507	C	P-O5'	7.47	1.67	1.59
1	N	117	G	C2-N3	7.46	1.38	1.32
1	N	998	C	C5'-C4'	7.46	1.60	1.51
1	N	94	G	O3'-P	-7.46	1.52	1.61
1	N	478	A	C6-N1	7.46	1.40	1.35
1	N	886	G	N1-C2	7.46	1.43	1.37
1	N	450	G	N7-C5	-7.45	1.34	1.39
1	N	929	G	N1-C2	7.45	1.43	1.37
1	N	828	U	N1-C6	7.45	1.44	1.38
1	N	578	C	N1-C6	7.45	1.41	1.37
1	N	619	U	C5-C6	7.45	1.40	1.34
1	N	593	U	C5'-C4'	7.45	1.60	1.51
1	N	289	G	C5-C4	-7.44	1.33	1.38
1	N	611	C	N3-C4	7.44	1.39	1.33
1	N	1167	A	N9-C8	7.44	1.43	1.37
1	N	1200	C	C2'-C1'	-7.44	1.45	1.53
1	N	1485	U	C3'-O3'	7.44	1.52	1.42
1	N	384	G	C5-C6	-7.44	1.34	1.42
1	N	98	A	N7-C5	-7.44	1.34	1.39
1	N	427	U	C4-C5	-7.44	1.36	1.43
1	N	885	G	N9-C4	-7.44	1.32	1.38
1	N	977	A	P-O5'	-7.44	1.52	1.59
1	N	593	U	P-O5'	-7.43	1.52	1.59
1	N	670	G	P-O5'	-7.43	1.52	1.59
1	N	724	G	N7-C5	7.43	1.43	1.39
1	N	745	G	N1-C2	7.43	1.43	1.37
1	N	153	C	N3-C4	7.43	1.39	1.33
1	N	321	A	C1'-N9	-7.43	1.36	1.46
1	N	975	A	C5-C4	-7.43	1.33	1.38
1	N	910	C	C5'-C4'	7.43	1.60	1.51
1	N	913	A	O3'-P	-7.43	1.52	1.61
1	N	32	A	C6-N1	7.43	1.40	1.35
1	N	1482	G	C6-N1	7.43	1.44	1.39
1	N	213	G	C8-N7	7.43	1.35	1.30
1	N	448	A	C2'-C1'	-7.43	1.45	1.53
1	N	567	G	C8-N7	7.43	1.35	1.30
1	N	785	G	N1-C2	7.43	1.43	1.37
1	N	878	A	C5-C6	7.42	1.47	1.41
1	N	932	C	O3'-P	-7.42	1.52	1.61
1	N	1188	A	C6-N6	7.42	1.39	1.33
1	N	1487	G	C6-N1	7.42	1.44	1.39
1	N	44	A	C6-N1	7.42	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	114	U	N1-C2	-7.42	1.31	1.38
1	N	200	G	N1-C2	7.42	1.43	1.37
1	N	1261	A	N3-C4	-7.42	1.30	1.34
1	N	1429	A	C8-N7	-7.41	1.26	1.31
1	N	1501	C	C5'-C4'	7.41	1.60	1.51
1	N	271	C	C4'-C3'	-7.41	1.45	1.53
1	N	304	U	O4'-C1'	7.41	1.51	1.41
1	N	1396	A	O3'-P	-7.41	1.52	1.61
1	N	1103	C	O3'-P	-7.41	1.52	1.61
1	N	1533	C	C4-C5	7.41	1.48	1.43
1	N	270	A	N3-C4	-7.40	1.30	1.34
1	N	1385	G	N7-C5	-7.40	1.34	1.39
1	N	101	A	N7-C5	-7.40	1.34	1.39
1	N	1093	A	N9-C4	-7.39	1.33	1.37
1	N	173	U	C2-N3	7.39	1.43	1.37
1	N	1464	U	C2-N3	7.39	1.43	1.37
1	N	1175	G	N7-C5	-7.39	1.34	1.39
1	N	327	A	N9-C4	-7.38	1.33	1.37
1	N	614	C	N1-C6	-7.38	1.32	1.37
1	N	670	G	C2'-C1'	-7.38	1.45	1.53
1	N	29	U	C2-N3	7.38	1.43	1.37
1	N	424	G	C4'-O4'	7.38	1.55	1.45
1	N	1306	A	C6-N1	7.38	1.40	1.35
1	N	131	A	C6-N1	7.38	1.40	1.35
1	N	874	G	P-O5'	-7.38	1.52	1.59
1	N	874	G	N3-C4	-7.38	1.30	1.35
1	N	269	C	C4'-C3'	7.38	1.61	1.53
1	N	1449	C	C3'-C2'	-7.38	1.44	1.52
1	N	744	C	C4-C5	7.38	1.48	1.43
1	N	626	G	C4'-C3'	7.37	1.61	1.53
1	N	896	C	C4-N4	7.37	1.40	1.33
1	N	649	A	C6-N6	7.37	1.39	1.33
1	N	776	G	C2-N3	7.37	1.38	1.32
1	N	1303	C	C3'-O3'	7.37	1.52	1.42
1	N	803	G	C5-C4	7.37	1.43	1.38
1	N	830	G	P-O5'	-7.37	1.52	1.59
1	N	539	A	N9-C4	-7.36	1.33	1.37
1	N	1494	G	N1-C2	7.36	1.43	1.37
1	N	655	A	N3-C4	7.36	1.39	1.34
1	N	1107	C	N1-C6	7.36	1.41	1.37
1	N	1194	U	C2-N3	7.36	1.43	1.37
1	N	147	G	N7-C5	7.36	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	832	G	N3-C4	-7.36	1.30	1.35
1	N	680	C	N1-C6	7.36	1.41	1.37
1	N	1025	U	O3'-P	-7.35	1.52	1.61
1	N	1026	G	C2-N3	7.35	1.38	1.32
1	N	1333	A	N3-C4	-7.35	1.30	1.34
1	N	1384	C	N1-C6	7.35	1.41	1.37
1	N	682	G	C2-N3	7.34	1.38	1.32
1	N	942	G	N9-C4	-7.34	1.32	1.38
1	N	311	C	C4-N4	7.34	1.40	1.33
1	N	746	A	C2'-C1'	-7.34	1.45	1.53
1	N	1503	A	C2'-C1'	-7.34	1.45	1.53
1	N	51	A	C5'-C4'	7.34	1.60	1.51
1	N	393	A	N9-C4	7.34	1.42	1.37
1	N	20	U	C2'-C1'	-7.33	1.45	1.53
1	N	673	A	C2'-C1'	-7.33	1.45	1.53
1	N	915	A	N3-C4	-7.33	1.30	1.34
1	N	1157	A	C8-N7	-7.33	1.26	1.31
1	N	1458	G	N1-C2	7.33	1.43	1.37
1	N	751	U	C4'-C3'	-7.33	1.45	1.53
1	N	1091	U	O3'-P	-7.33	1.52	1.61
1	N	204	G	C6-O6	-7.33	1.17	1.24
1	N	280	C	O3'-P	-7.33	1.52	1.61
1	N	1439	G	C5'-C4'	7.33	1.60	1.51
1	N	967	C	C5'-C4'	7.32	1.60	1.51
1	N	1204	A	C2'-C1'	-7.32	1.45	1.53
1	N	825	A	C6-N1	7.32	1.40	1.35
1	N	205	A	C6-N1	7.32	1.40	1.35
1	N	885	G	N1-C2	7.31	1.43	1.37
1	N	1005	A	C6-N6	7.31	1.39	1.33
1	N	660	C	C4-C5	7.31	1.48	1.43
1	N	449	G	O3'-P	-7.31	1.52	1.61
1	N	45	G	C5-C4	-7.31	1.33	1.38
1	N	915	A	N1-C2	7.31	1.41	1.34
1	N	1094	G	C2-N3	7.31	1.38	1.32
1	N	11	G	C2-N2	7.31	1.41	1.34
1	N	604	G	N9-C8	7.31	1.43	1.37
1	N	725	G	C2-N3	7.31	1.38	1.32
1	N	1321	U	P-O5'	-7.30	1.52	1.59
1	N	386	C	N3-C4	7.30	1.39	1.33
1	N	464	U	O3'-P	-7.30	1.52	1.61
1	N	941	G	C2-N2	7.30	1.41	1.34
1	N	1310	G	C8-N7	7.30	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	513	C	C1'-N1	7.30	1.59	1.48
1	N	778	G	C6-N1	7.30	1.44	1.39
1	N	851	G	C6-N1	7.30	1.44	1.39
1	N	1166	G	C2-N3	7.30	1.38	1.32
1	N	1444	U	C4-C5	-7.30	1.36	1.43
1	N	439	U	C5'-C4'	7.30	1.60	1.51
1	N	1346	A	C6-N6	7.30	1.39	1.33
1	N	65	A	N9-C4	-7.30	1.33	1.37
1	N	842	U	C4'-C3'	7.30	1.61	1.53
1	N	1143	G	C8-N7	-7.29	1.26	1.30
1	N	1010	U	C2'-C1'	-7.29	1.45	1.53
1	N	1142	G	N9-C8	-7.29	1.32	1.37
1	N	1180	A	N7-C5	-7.29	1.34	1.39
1	N	1429	A	C4'-C3'	7.29	1.61	1.53
1	N	107	G	N9-C4	7.29	1.43	1.38
1	N	654	G	N1-C2	7.29	1.43	1.37
1	N	944	G	C2-N2	7.29	1.41	1.34
1	N	1117	A	C5-C6	7.29	1.47	1.41
1	N	1257	A	N3-C4	-7.29	1.30	1.34
1	N	1392	G	N9-C8	-7.29	1.32	1.37
1	N	682	G	N3-C4	-7.29	1.30	1.35
1	N	775	G	C2-N2	7.29	1.41	1.34
1	N	1453	G	C8-N7	7.29	1.35	1.30
1	N	487	A	N9-C4	7.29	1.42	1.37
1	N	829	G	N1-C2	7.29	1.43	1.37
1	N	1074	G	C2-N2	7.29	1.41	1.34
1	N	316	C	N3-C4	7.28	1.39	1.33
1	N	457	G	P-O5'	-7.28	1.52	1.59
1	N	333	U	C4'-C3'	-7.28	1.45	1.53
1	N	1191	A	P-O5'	-7.28	1.52	1.59
1	N	1510	C	O3'-P	-7.28	1.52	1.61
1	N	390	U	N1-C2	7.28	1.45	1.38
1	N	538	G	C6-N1	7.28	1.44	1.39
1	N	882	C	N3-C4	7.28	1.39	1.33
1	N	1054	C	C4-C5	-7.28	1.37	1.43
1	N	96	U	P-O5'	-7.28	1.52	1.59
1	N	110	C	P-O5'	-7.28	1.52	1.59
1	N	535	A	C5'-C4'	7.27	1.60	1.51
1	N	1004	A	C6-N1	7.27	1.40	1.35
1	N	1222	G	C2'-C1'	-7.27	1.45	1.53
1	N	750	C	N1-C6	7.27	1.41	1.37
1	N	852	G	N1-C2	7.27	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	482	A	C8-N7	-7.27	1.26	1.31
1	N	306	A	N9-C8	7.26	1.43	1.37
1	N	578	C	P-O5'	-7.26	1.52	1.59
1	N	644	U	N1-C6	7.26	1.44	1.38
1	N	363	A	C6-N6	7.26	1.39	1.33
1	N	1006	G	N9-C8	-7.26	1.32	1.37
1	N	1405	G	N1-C2	7.26	1.43	1.37
1	N	638	U	C2'-C1'	-7.26	1.45	1.53
1	N	638	U	P-O5'	-7.26	1.52	1.59
1	N	813	U	C2-O2	7.26	1.28	1.22
1	N	91	U	C2'-C1'	-7.25	1.45	1.53
1	N	1411	C	N3-C4	7.25	1.39	1.33
1	N	1478	U	N3-C4	7.25	1.45	1.38
1	N	1110	A	C5-C4	7.25	1.43	1.38
1	N	107	G	C5-C4	7.25	1.43	1.38
1	N	148	G	C4'-C3'	7.25	1.61	1.53
1	N	315	A	N1-C2	7.25	1.40	1.34
1	N	670	G	C8-N7	-7.25	1.26	1.30
1	N	1086	U	C5'-C4'	7.25	1.60	1.51
1	N	1239	A	O3'-P	-7.25	1.52	1.61
1	N	1278	G	C5'-C4'	7.25	1.60	1.51
1	N	31	G	C2-N3	7.25	1.38	1.32
1	N	259	G	C3'-C2'	7.24	1.60	1.52
1	N	603	U	N1-C6	7.24	1.44	1.38
1	N	1039	G	P-O5'	-7.24	1.52	1.59
1	N	732	C	N3-C4	7.24	1.39	1.33
1	N	1185	G	N7-C5	-7.24	1.34	1.39
1	N	304	U	C2-N3	7.24	1.42	1.37
1	N	763	G	C6-N1	7.24	1.44	1.39
1	N	186	C	C1'-N1	7.24	1.59	1.48
1	N	1241	G	N7-C5	-7.24	1.34	1.39
1	N	226	G	N1-C2	7.24	1.43	1.37
1	N	367	U	C3'-O3'	7.24	1.52	1.42
1	N	705	G	N1-C2	7.23	1.43	1.37
1	N	397	A	C3'-O3'	7.23	1.52	1.42
1	N	983	A	P-O5'	-7.23	1.52	1.59
1	N	453	G	C6-N1	7.22	1.44	1.39
1	N	962	C	N3-C4	7.22	1.39	1.33
1	N	457	G	N9-C8	7.22	1.43	1.37
1	N	887	G	N1-C2	7.22	1.43	1.37
1	N	953	G	C5-C6	-7.22	1.35	1.42
1	N	1186	G	C2-N3	7.22	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	990	C	N3-C4	7.21	1.39	1.33
1	N	808	C	O4'-C1'	7.21	1.51	1.41
1	N	1243	C	N1-C6	7.21	1.41	1.37
1	N	242	G	N9-C8	-7.21	1.32	1.37
1	N	729	A	C6-N6	7.21	1.39	1.33
1	N	804	U	C3'-O3'	7.21	1.52	1.42
1	N	774	G	N1-C2	7.21	1.43	1.37
1	N	1101	A	C5-C6	7.21	1.47	1.41
1	N	168	G	C6-N1	7.20	1.44	1.39
1	N	814	A	C6-N1	7.20	1.40	1.35
1	N	1185	G	C2-N3	7.20	1.38	1.32
1	N	1269	A	C6-N6	7.20	1.39	1.33
1	N	1447	A	N7-C5	-7.20	1.34	1.39
1	N	827	U	P-O5'	7.20	1.67	1.59
1	N	507	C	C1'-N1	7.19	1.59	1.48
1	N	954	G	N3-C4	7.19	1.40	1.35
1	N	1015	G	C6-N1	7.19	1.44	1.39
1	N	1141	C	P-O5'	-7.19	1.52	1.59
1	N	1198	G	N9-C4	-7.19	1.32	1.38
1	N	517	G	C8-N7	-7.19	1.26	1.30
1	N	865	A	C2-N3	7.19	1.40	1.33
1	N	441	A	C5'-C4'	7.19	1.59	1.51
1	N	1489	G	P-O5'	7.19	1.67	1.59
1	N	1314	C	N3-C4	7.18	1.39	1.33
1	N	407	U	N1-C6	-7.18	1.31	1.38
1	N	52	C	C4'-O4'	7.18	1.54	1.45
1	N	62	U	N3-C4	7.18	1.45	1.38
1	N	936	C	N3-C4	7.18	1.39	1.33
1	N	214	C	P-O5'	-7.18	1.52	1.59
1	N	519	C	P-O5'	-7.18	1.52	1.59
1	N	755	G	N1-C2	7.18	1.43	1.37
1	N	486	U	N1-C6	7.17	1.44	1.38
1	N	999	C	O4'-C1'	-7.17	1.32	1.41
1	N	699	C	C4-N4	7.17	1.40	1.33
1	N	1029	U	C4-C5	7.17	1.50	1.43
1	N	374	A	N3-C4	-7.17	1.30	1.34
1	N	910	C	C2-N3	7.17	1.41	1.35
1	N	604	G	C5'-C4'	7.17	1.59	1.51
1	N	621	A	N9-C8	-7.17	1.32	1.37
1	N	1466	C	N3-C4	7.17	1.39	1.33
1	N	961	U	C1'-N1	7.16	1.59	1.48
1	N	1454	G	C2-N2	7.16	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1092	A	C6-N1	7.16	1.40	1.35
1	N	1474	U	C4-C5	7.16	1.50	1.43
1	N	950	U	N1-C6	7.16	1.44	1.38
1	N	29	U	C2'-O2'	-7.16	1.32	1.41
1	N	162	A	C4'-C3'	-7.16	1.45	1.53
1	N	648	A	C6-N1	7.16	1.40	1.35
1	N	757	U	C2-N3	7.16	1.42	1.37
1	N	1190	G	C3'-O3'	7.15	1.52	1.42
1	N	1514	G	N7-C5	-7.15	1.34	1.39
1	N	1515	G	N3-C4	-7.15	1.30	1.35
1	N	727	G	C2-N3	7.15	1.38	1.32
1	N	1431	A	C6-N6	7.15	1.39	1.33
1	N	320	A	C8-N7	-7.15	1.26	1.31
1	N	605	U	N1-C2	-7.15	1.32	1.38
1	N	820	U	P-O5'	-7.15	1.52	1.59
1	N	868	C	C1'-N1	7.15	1.59	1.48
1	N	1401	G	C6-N1	7.15	1.44	1.39
1	N	545	C	C5'-C4'	7.14	1.59	1.51
1	N	885	G	N3-C4	-7.14	1.30	1.35
1	N	1118	U	C2'-C1'	-7.14	1.45	1.53
1	N	1185	G	N3-C4	-7.14	1.30	1.35
1	N	23	C	N3-C4	7.14	1.39	1.33
1	N	543	U	P-O5'	-7.13	1.52	1.59
1	N	670	G	C2-N2	7.13	1.41	1.34
1	N	1030	U	C4-C5	7.13	1.50	1.43
1	N	1399	C	O3'-P	-7.13	1.52	1.61
1	N	795	C	P-O5'	-7.13	1.52	1.59
1	N	855	U	C4-C5	-7.13	1.37	1.43
1	N	1128	C	N1-C6	7.13	1.41	1.37
1	N	76	G	N7-C5	-7.12	1.34	1.39
1	N	421	U	C2'-C1'	-7.12	1.45	1.53
1	N	1146	A	C8-N7	-7.12	1.26	1.31
1	N	1152	A	N7-C5	-7.12	1.34	1.39
1	N	1163	A	C6-N6	7.12	1.39	1.33
1	N	1455	G	C5-C4	7.11	1.43	1.38
1	N	1231	G	C2'-C1'	-7.11	1.45	1.53
1	N	428	G	C3'-O3'	-7.11	1.32	1.42
1	N	633	G	N9-C8	-7.11	1.32	1.37
1	N	854	U	C2'-C1'	-7.11	1.45	1.53
1	N	246	A	C5'-C4'	7.11	1.59	1.51
1	N	453	G	N3-C4	-7.11	1.30	1.35
1	N	900	A	C2'-C1'	-7.11	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1093	A	O3'-P	-7.10	1.52	1.61
1	N	318	G	C2-N2	7.10	1.41	1.34
1	N	1221	G	C2-N2	7.10	1.41	1.34
1	N	849	G	C1'-N9	7.10	1.59	1.48
1	N	905	U	C2-N3	7.10	1.42	1.37
1	N	1431	A	O4'-C1'	7.10	1.50	1.41
1	N	569	C	C3'-O3'	7.10	1.52	1.42
1	N	81	A	C6-N6	7.09	1.39	1.33
1	N	500	G	N9-C8	7.09	1.42	1.37
1	N	1137	C	N1-C2	7.09	1.47	1.40
1	N	34	C	C4-C5	7.09	1.48	1.43
1	N	281	G	N7-C5	-7.09	1.34	1.39
1	N	306	A	C6-N1	7.09	1.40	1.35
1	N	469	C	C4'-O4'	-7.09	1.36	1.45
1	N	546	A	N9-C8	7.09	1.43	1.37
1	N	1210	C	C4-C5	-7.09	1.37	1.43
1	N	1228	C	C2-N3	7.09	1.41	1.35
1	N	1295	U	C2-N3	7.09	1.42	1.37
1	N	382	A	C8-N7	-7.09	1.26	1.31
1	N	710	G	O3'-P	-7.09	1.52	1.61
1	N	186	C	C2'-C1'	-7.08	1.45	1.53
1	N	655	A	C4'-C3'	-7.08	1.45	1.53
1	N	1124	G	N9-C8	7.08	1.42	1.37
1	N	143	A	C6-N6	7.08	1.39	1.33
1	N	589	U	N1-C2	-7.08	1.32	1.38
1	N	775	G	P-O5'	-7.08	1.52	1.59
1	N	585	G	N7-C5	-7.08	1.35	1.39
1	N	1403	C	C4'-C3'	7.08	1.60	1.53
1	N	794	A	C6-N1	7.08	1.40	1.35
1	N	1075	U	N1-C6	7.08	1.44	1.38
1	N	197	A	N9-C8	7.08	1.43	1.37
1	N	328	C	N3-C4	7.08	1.39	1.33
1	N	344	A	N7-C5	-7.07	1.35	1.39
1	N	734	G	C1'-N9	7.07	1.59	1.48
1	N	905	U	C3'-O3'	7.07	1.52	1.42
1	N	266	G	C5-C4	7.07	1.43	1.38
1	N	1356	G	C5-C4	7.07	1.43	1.38
1	N	1495	U	N3-C4	7.07	1.44	1.38
1	N	567	G	C2-N3	7.07	1.38	1.32
1	N	895	G	C2-N2	7.07	1.41	1.34
1	N	37	U	C2'-C1'	-7.07	1.45	1.53
1	N	847	G	C2-N3	7.07	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	580	C	C4'-C3'	7.07	1.60	1.53
1	N	300	A	C3'-C2'	-7.07	1.45	1.52
1	N	402	G	C8-N7	-7.06	1.26	1.30
1	N	627	G	C6-N1	7.06	1.44	1.39
1	N	281	G	N9-C4	7.06	1.43	1.38
1	N	542	G	C6-N1	7.06	1.44	1.39
1	N	590	U	N3-C4	7.06	1.44	1.38
1	N	740	U	C4'-O4'	-7.06	1.36	1.45
1	N	761	G	N9-C8	-7.06	1.32	1.37
1	N	299	G	N7-C5	7.06	1.43	1.39
1	N	443	C	P-O5'	-7.06	1.52	1.59
1	N	848	C	P-O5'	-7.06	1.52	1.59
1	N	1287	A	C2-N3	7.06	1.40	1.33
1	N	404	G	C8-N7	7.06	1.35	1.30
1	N	1257	A	C2-N3	7.06	1.39	1.33
1	N	1125	U	N1-C2	7.05	1.44	1.38
1	N	520	A	N7-C5	-7.05	1.35	1.39
1	N	523	A	O4'-C1'	7.05	1.50	1.41
1	N	630	A	C8-N7	-7.05	1.26	1.31
1	N	1369	C	C3'-C2'	7.05	1.60	1.52
1	N	621	A	N9-C4	-7.05	1.33	1.37
1	N	860	A	C5-C4	7.05	1.43	1.38
1	N	1058	G	C6-N1	7.05	1.44	1.39
1	N	620	C	C1'-N1	7.05	1.59	1.48
1	N	1468	A	C5-C6	-7.04	1.34	1.41
1	N	1492	A	N7-C5	-7.04	1.35	1.39
1	N	241	G	P-O5'	-7.04	1.52	1.59
1	N	804	U	N1-C2	7.04	1.44	1.38
1	N	715	A	N3-C4	7.04	1.39	1.34
1	N	1393	U	O3'-P	-7.04	1.52	1.61
1	N	534	U	C2-N3	7.04	1.42	1.37
1	N	941	G	C8-N7	-7.04	1.26	1.30
1	N	58	C	N3-C4	7.04	1.38	1.33
1	N	146	G	C2-N2	7.04	1.41	1.34
1	N	729	A	C6-N1	7.03	1.40	1.35
1	N	853	C	C2-N3	7.03	1.41	1.35
1	N	1280	A	C5-C4	7.03	1.43	1.38
1	N	904	U	C2'-C1'	-7.03	1.45	1.53
1	N	1418	A	C8-N7	-7.03	1.26	1.31
1	N	31	G	N1-C2	7.03	1.43	1.37
1	N	83	C	C5'-C4'	7.03	1.59	1.51
1	N	705	G	N9-C4	7.03	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	894	G	C6-O6	-7.03	1.17	1.24
1	N	1132	C	N3-C4	7.03	1.38	1.33
1	N	31	G	C6-N1	7.03	1.44	1.39
1	N	678	U	C2-N3	7.03	1.42	1.37
1	N	1334	G	C3'-C2'	7.03	1.60	1.52
1	N	151	A	C5'-C4'	7.03	1.59	1.51
1	N	339	C	C4'-C3'	7.03	1.60	1.53
1	N	1499	A	C3'-C2'	7.03	1.60	1.52
1	N	1379	G	C4'-C3'	7.02	1.60	1.53
1	N	1522	U	C3'-O3'	7.02	1.51	1.42
1	N	219	U	C5'-C4'	7.02	1.59	1.51
1	N	376	G	N9-C4	-7.02	1.32	1.38
1	N	544	G	C6-N1	7.02	1.44	1.39
1	N	119	A	C2'-C1'	-7.02	1.45	1.53
1	N	361	G	C2-N2	-7.02	1.27	1.34
1	N	453	G	C8-N7	-7.02	1.26	1.30
1	N	758	C	C4'-C3'	-7.02	1.45	1.53
1	N	718	A	N7-C5	-7.01	1.35	1.39
1	N	1174	G	C5'-C4'	7.01	1.59	1.51
1	N	249	U	C4-O4	-7.01	1.18	1.23
1	N	1318	A	N9-C4	-7.01	1.33	1.37
1	N	1385	G	C2-N3	7.01	1.38	1.32
1	N	22	G	C5-C6	-7.01	1.35	1.42
1	N	1476	A	N9-C4	7.01	1.42	1.37
1	N	1379	G	C2-N3	7.00	1.38	1.32
1	N	1183	U	N1-C6	7.00	1.44	1.38
1	N	1315	U	C3'-C2'	7.00	1.60	1.52
1	N	204	G	C4'-O4'	7.00	1.54	1.45
1	N	585	G	C6-N1	7.00	1.44	1.39
1	N	785	G	C2-N2	7.00	1.41	1.34
1	N	69	G	O3'-P	7.00	1.69	1.61
1	N	255	G	C2'-C1'	-7.00	1.45	1.53
1	N	465	A	C2'-C1'	-7.00	1.45	1.53
1	N	472	U	N3-C4	7.00	1.44	1.38
1	N	923	A	N9-C8	6.99	1.43	1.37
1	N	273	U	C4-O4	6.99	1.29	1.23
1	N	1146	A	C4'-O4'	-6.99	1.36	1.45
1	N	1423	G	C2-N3	6.99	1.38	1.32
1	N	374	A	N7-C5	6.99	1.43	1.39
1	N	883	C	N3-C4	6.98	1.38	1.33
1	N	1178	G	O3'-P	-6.98	1.52	1.61
1	N	1306	A	N7-C5	-6.98	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	286	C	N3-C4	6.98	1.38	1.33
1	N	615	G	C2-N3	6.98	1.38	1.32
1	N	184	G	C8-N7	6.98	1.35	1.30
1	N	471	U	O4'-C1'	6.98	1.50	1.41
1	N	953	G	N7-C5	-6.98	1.35	1.39
1	N	1338	G	P-O5'	-6.98	1.52	1.59
1	N	1340	A	C6-N1	6.98	1.40	1.35
1	N	1027	C	O4'-C1'	6.97	1.50	1.41
1	N	1337	G	N1-C2	6.97	1.43	1.37
1	N	1443	C	C4-N4	6.97	1.40	1.33
1	N	1514	G	N9-C8	6.97	1.42	1.37
1	N	704	A	C6-N6	6.97	1.39	1.33
1	N	862	C	N1-C6	6.97	1.41	1.37
1	N	888	G	N7-C5	-6.97	1.35	1.39
1	N	1133	G	N1-C2	6.97	1.43	1.37
1	N	1437	A	C6-N1	6.97	1.40	1.35
1	N	1192	C	C4-N4	6.96	1.40	1.33
1	N	1216	A	N9-C4	6.96	1.42	1.37
1	N	1061	G	C2-N3	6.96	1.38	1.32
1	N	60	A	N9-C8	6.96	1.43	1.37
1	N	595	A	N7-C5	-6.96	1.35	1.39
1	N	849	G	C6-N1	6.96	1.44	1.39
1	N	942	G	C2-N3	6.96	1.38	1.32
1	N	461	A	C8-N7	-6.96	1.26	1.31
1	N	575	G	C6-N1	6.96	1.44	1.39
1	N	205	A	C1'-N9	6.96	1.59	1.48
1	N	380	G	P-O5'	-6.96	1.52	1.59
1	N	673	A	C8-N7	-6.95	1.26	1.31
1	N	104	G	C2-N3	6.95	1.38	1.32
1	N	1010	U	C4-C5	6.95	1.49	1.43
1	N	355	C	O3'-P	-6.95	1.52	1.61
1	N	610	U	O4'-C1'	6.95	1.50	1.41
1	N	1068	G	C5'-C4'	6.95	1.59	1.51
1	N	1435	G	N3-C4	-6.95	1.30	1.35
1	N	423	G	C2-N2	6.94	1.41	1.34
1	N	313	A	P-O5'	-6.94	1.52	1.59
1	N	337	G	N9-C8	6.94	1.42	1.37
1	N	919	A	N9-C8	6.94	1.43	1.37
1	N	1287	A	C5-C6	-6.94	1.34	1.41
1	N	1023	U	C1'-N1	6.94	1.59	1.48
1	N	1255	G	C8-N7	6.94	1.35	1.30
1	N	1333	A	N9-C8	6.94	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1200	C	N1-C6	6.93	1.41	1.37
1	N	1201	A	C1'-N9	6.93	1.59	1.48
1	N	499	A	C6-N1	6.93	1.40	1.35
1	N	1413	A	C6-N6	6.93	1.39	1.33
1	N	1043	G	C6-N1	6.93	1.44	1.39
1	N	82	G	C6-N1	6.93	1.44	1.39
1	N	944	G	C5-C4	6.93	1.43	1.38
1	N	1083	U	C4-C5	6.93	1.49	1.43
1	N	755	G	P-O5'	-6.93	1.52	1.59
1	N	765	G	C5-C6	-6.93	1.35	1.42
1	N	1340	A	C6-N6	6.93	1.39	1.33
1	N	441	A	C5-C4	6.92	1.43	1.38
1	N	667	G	N9-C4	-6.92	1.32	1.38
1	N	1184	G	N1-C2	6.92	1.43	1.37
1	N	563	A	C3'-C2'	6.92	1.60	1.52
1	N	1336	C	N3-C4	6.92	1.38	1.33
1	N	870	U	C2-N3	6.92	1.42	1.37
1	N	474	G	C2-N3	6.92	1.38	1.32
1	N	1304	G	C2-N3	6.92	1.38	1.32
1	N	22	G	N9-C8	6.92	1.42	1.37
1	N	524	G	N9-C8	6.92	1.42	1.37
1	N	865	A	N9-C4	6.92	1.42	1.37
1	N	1149	C	N3-C4	6.92	1.38	1.33
1	N	318	G	C2-N3	6.92	1.38	1.32
1	N	894	G	P-O5'	-6.92	1.52	1.59
1	N	936	C	C2-N3	6.91	1.41	1.35
1	N	1189	U	C4'-O4'	-6.91	1.36	1.45
1	N	8	A	P-O5'	-6.91	1.52	1.59
1	N	1063	C	N1-C6	-6.91	1.33	1.37
1	N	188	C	N1-C6	6.91	1.41	1.37
1	N	766	A	C8-N7	-6.91	1.26	1.31
1	N	1530	G	C2'-C1'	-6.91	1.45	1.53
1	N	635	A	O3'-P	-6.91	1.52	1.61
1	N	746	A	C6-N6	6.91	1.39	1.33
1	N	1186	G	C5-C4	-6.91	1.33	1.38
1	N	1417	G	C5'-C4'	6.90	1.59	1.51
1	N	341	C	N1-C6	6.90	1.41	1.37
1	N	1416	G	C3'-O3'	6.90	1.51	1.42
1	N	396	C	P-O5'	-6.90	1.52	1.59
1	N	736	C	N3-C4	6.90	1.38	1.33
1	N	1002	G	N9-C4	-6.90	1.32	1.38
1	N	1289	A	C5'-C4'	6.90	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	34	C	C2-N3	6.89	1.41	1.35
1	N	189	A	C5-C4	6.89	1.43	1.38
1	N	309	A	C4'-C3'	6.89	1.60	1.53
1	N	1019	A	P-O5'	-6.89	1.52	1.59
1	N	903	G	C6-N1	6.89	1.44	1.39
1	N	126	G	C4'-O4'	-6.89	1.36	1.45
1	N	754	C	C2-N3	-6.89	1.30	1.35
1	N	852	G	C5-C4	6.89	1.43	1.38
1	N	373	A	N9-C8	-6.88	1.32	1.37
1	N	767	A	C6-N6	6.88	1.39	1.33
1	N	768	A	N9-C4	6.88	1.42	1.37
1	N	806	C	C4'-C3'	-6.88	1.45	1.53
1	N	1079	G	C3'-C2'	-6.88	1.45	1.52
1	N	1070	U	C2'-C1'	6.88	1.60	1.53
1	N	73	C	C4-N4	6.88	1.40	1.33
1	N	611	C	N1-C6	-6.88	1.33	1.37
1	N	1307	U	N3-C4	6.88	1.44	1.38
1	N	1357	A	N3-C4	-6.88	1.30	1.34
1	N	145	G	N3-C4	-6.88	1.30	1.35
1	N	529	G	N9-C8	6.88	1.42	1.37
1	N	1299	A	O3'-P	-6.88	1.52	1.61
1	N	31	G	P-O5'	-6.88	1.52	1.59
1	N	194	C	C4'-O4'	-6.88	1.36	1.45
1	N	520	A	C3'-C2'	-6.88	1.45	1.52
1	N	1516	G	N1-C2	6.88	1.43	1.37
1	N	264	C	O4'-C1'	6.87	1.50	1.41
1	N	848	C	C2'-C1'	-6.87	1.45	1.53
1	N	858	G	C5'-C4'	6.87	1.59	1.51
1	N	928	G	C2-N3	6.87	1.38	1.32
1	N	440	C	C4'-C3'	6.87	1.60	1.53
1	N	794	A	N7-C5	-6.87	1.35	1.39
1	N	948	C	C1'-N1	6.87	1.59	1.48
1	N	1156	G	C8-N7	-6.87	1.26	1.30
1	N	1169	A	N9-C8	-6.87	1.32	1.37
1	N	1239	A	C6-N1	6.87	1.40	1.35
1	N	942	G	C2'-C1'	-6.86	1.45	1.53
1	N	1109	C	C4-N4	6.86	1.40	1.33
1	N	1440	U	C5'-C4'	6.86	1.59	1.51
1	N	122	G	N3-C4	-6.86	1.30	1.35
1	N	444	G	C6-N1	6.86	1.44	1.39
1	N	492	C	C4-N4	6.86	1.40	1.33
1	N	789	U	N3-C4	6.86	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1068	G	N7-C5	-6.86	1.35	1.39
1	N	468	A	C6-N1	6.86	1.40	1.35
1	N	1114	C	C1'-N1	6.86	1.59	1.48
1	N	200	G	O4'-C1'	6.85	1.50	1.41
1	N	313	A	C5-C4	6.85	1.43	1.38
1	N	506	G	N3-C4	-6.85	1.30	1.35
1	N	1419	G	N9-C4	-6.85	1.32	1.38
1	N	652	U	N1-C2	6.85	1.44	1.38
1	N	840	C	C4-N4	-6.85	1.27	1.33
1	N	868	C	C2-N3	6.85	1.41	1.35
1	N	100	G	C2-N3	6.85	1.38	1.32
1	N	1046	A	P-O5'	6.85	1.66	1.59
1	N	373	A	C4'-C3'	6.85	1.60	1.53
1	N	808	C	C4-N4	6.85	1.40	1.33
1	N	902	G	C2-N2	6.85	1.41	1.34
1	N	1015	G	C2-N3	6.85	1.38	1.32
1	N	615	G	C6-O6	-6.85	1.18	1.24
1	N	256	U	C5'-C4'	6.84	1.59	1.51
1	N	643	C	P-O5'	-6.84	1.52	1.59
1	N	1179	A	C2'-C1'	-6.84	1.45	1.53
1	N	1439	G	C1'-N9	6.84	1.59	1.48
1	N	948	C	C4-N4	6.84	1.40	1.33
1	N	449	G	P-O5'	-6.84	1.52	1.59
1	N	1480	A	C5'-C4'	6.84	1.59	1.51
1	N	916	U	N1-C6	6.84	1.44	1.38
1	N	161	A	N3-C4	-6.84	1.30	1.34
1	N	811	C	O3'-P	-6.83	1.52	1.61
1	N	864	A	C8-N7	-6.83	1.26	1.31
1	N	552	U	C3'-C2'	-6.83	1.45	1.52
1	N	1104	G	N3-C4	-6.83	1.30	1.35
1	N	1353	G	N9-C8	-6.83	1.33	1.37
1	N	268	U	C4'-C3'	6.83	1.60	1.53
1	N	384	G	C2'-C1'	-6.83	1.45	1.53
1	N	548	G	C5-C4	-6.83	1.33	1.38
1	N	1512	U	C5'-C4'	6.83	1.59	1.51
1	N	1189	U	N1-C6	-6.83	1.31	1.38
1	N	380	G	N1-C2	6.82	1.43	1.37
1	N	661	G	C5-C4	6.82	1.43	1.38
1	N	277	C	N3-C4	6.82	1.38	1.33
1	N	1216	A	C3'-C2'	6.82	1.60	1.52
1	N	97	G	C5'-C4'	6.82	1.59	1.51
1	N	116	A	C5'-C4'	6.82	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	978	A	C2'-C1'	-6.82	1.45	1.53
1	N	345	C	C2-N3	6.81	1.41	1.35
1	N	172	A	C2-N3	6.81	1.39	1.33
1	N	295	C	C5-C6	6.81	1.39	1.34
1	N	829	G	C4'-C3'	6.81	1.60	1.53
1	N	1450	U	C4-C5	6.81	1.49	1.43
1	N	122	G	N9-C4	-6.81	1.32	1.38
1	N	601	G	C2-N3	6.81	1.38	1.32
1	N	792	A	N9-C8	-6.80	1.32	1.37
1	N	1086	U	C2'-C1'	-6.80	1.45	1.53
1	N	25	C	C4'-O4'	-6.80	1.36	1.45
1	N	933	G	C8-N7	-6.80	1.26	1.30
1	N	1372	U	N1-C2	6.80	1.44	1.38
1	N	226	G	C5-C6	-6.80	1.35	1.42
1	N	873	A	C6-N1	6.80	1.40	1.35
1	N	902	G	O3'-P	-6.80	1.52	1.61
1	N	1225	A	N7-C5	-6.80	1.35	1.39
1	N	1292	G	O4'-C1'	6.80	1.50	1.41
1	N	721	G	N3-C4	-6.79	1.30	1.35
1	N	187	G	N1-C2	6.79	1.43	1.37
1	N	445	G	N1-C2	6.79	1.43	1.37
1	N	584	G	C5-C4	6.79	1.43	1.38
1	N	903	G	C5-C6	-6.79	1.35	1.42
1	N	1048	G	C6-N1	6.79	1.44	1.39
1	N	1114	C	N3-C4	6.79	1.38	1.33
1	N	66	A	N9-C8	6.79	1.43	1.37
1	N	747	A	C5-C4	-6.79	1.33	1.38
1	N	5	U	C5'-C4'	6.79	1.59	1.51
1	N	564	C	P-O5'	6.79	1.66	1.59
1	N	898	G	C2-N3	6.79	1.38	1.32
1	N	1136	C	C4-N4	6.79	1.40	1.33
1	N	209	U	C4-O4	-6.78	1.18	1.23
1	N	570	G	C8-N7	-6.78	1.26	1.30
1	N	1342	C	C5'-C4'	6.78	1.59	1.51
1	N	1366	C	C4-N4	6.78	1.40	1.33
1	N	858	G	N7-C5	-6.78	1.35	1.39
1	N	694	A	N1-C2	6.77	1.40	1.34
1	N	760	G	C1'-N9	6.77	1.58	1.48
1	N	847	G	C5'-C4'	6.77	1.59	1.51
1	N	1349	A	C6-N6	6.77	1.39	1.33
1	N	283	U	C3'-O3'	6.77	1.51	1.42
1	N	1199	U	O4'-C1'	-6.77	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1043	G	N7-C5	-6.77	1.35	1.39
1	N	1338	G	C5-C6	-6.77	1.35	1.42
1	N	21	G	C6-N1	6.77	1.44	1.39
1	N	275	G	N1-C2	6.77	1.43	1.37
1	N	806	C	N1-C6	6.77	1.41	1.37
1	N	1101	A	C6-N6	6.77	1.39	1.33
1	N	1336	C	C4-C5	6.77	1.48	1.43
1	N	737	C	N3-C4	6.77	1.38	1.33
1	N	940	C	N3-C4	6.76	1.38	1.33
1	N	8	A	C6-N6	6.76	1.39	1.33
1	N	28	A	C4'-C3'	6.76	1.60	1.53
1	N	643	C	C4-C5	6.76	1.48	1.43
1	N	242	G	C8-N7	6.75	1.35	1.30
1	N	907	A	C2'-C1'	-6.75	1.46	1.53
1	N	902	G	C2'-C1'	-6.75	1.46	1.53
1	N	1190	G	N3-C4	6.75	1.40	1.35
1	N	1377	A	N3-C4	-6.75	1.30	1.34
1	N	1449	C	C4-N4	6.75	1.40	1.33
1	N	1380	U	C2-N3	6.75	1.42	1.37
1	N	1011	C	C2-O2	6.75	1.30	1.24
1	N	1361	G	C8-N7	6.75	1.34	1.30
1	N	724	G	C6-N1	6.75	1.44	1.39
1	N	969	A	O3'-P	-6.75	1.53	1.61
1	N	1224	U	C4'-C3'	6.75	1.60	1.53
1	N	1378	C	N3-C4	6.75	1.38	1.33
1	N	1436	U	N1-C2	6.75	1.44	1.38
1	N	641	U	C4-C5	-6.75	1.37	1.43
1	N	153	C	O4'-C1'	6.74	1.50	1.41
1	N	454	G	C3'-O3'	6.74	1.51	1.42
1	N	1441	A	N1-C2	-6.74	1.28	1.34
1	N	1109	C	C2-N3	6.74	1.41	1.35
1	N	374	A	C8-N7	-6.74	1.26	1.31
1	N	1369	C	C2-N3	6.74	1.41	1.35
1	N	1385	G	N1-C2	6.74	1.43	1.37
1	N	344	A	N9-C4	6.73	1.41	1.37
1	N	1369	C	C4-C5	6.73	1.48	1.43
1	N	1430	A	C8-N7	-6.73	1.26	1.31
1	N	1509	C	C2'-C1'	-6.73	1.46	1.53
1	N	49	U	C2'-C1'	-6.73	1.46	1.53
1	N	494	G	C6-N1	6.73	1.44	1.39
1	N	646	G	C5-C4	6.73	1.43	1.38
1	N	1036	A	C5-C4	6.73	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	874	G	C6-N1	6.73	1.44	1.39
1	N	129	A	N7-C5	-6.73	1.35	1.39
1	N	284	C	C2'-C1'	-6.73	1.46	1.53
1	N	1065	U	O3'-P	-6.73	1.53	1.61
1	N	1380	U	P-O5'	-6.73	1.53	1.59
1	N	1398	A	C6-N6	6.73	1.39	1.33
1	N	1043	G	N9-C8	6.72	1.42	1.37
1	N	1323	G	C2'-C1'	-6.72	1.46	1.53
1	N	545	C	C4-N4	6.72	1.40	1.33
1	N	776	G	C2-N2	6.72	1.41	1.34
1	N	848	C	N3-C4	6.72	1.38	1.33
1	N	426	U	N1-C2	-6.72	1.32	1.38
1	N	316	C	C3'-C2'	-6.72	1.45	1.52
1	N	1026	G	N1-C2	6.72	1.43	1.37
1	N	252	U	C5'-C4'	-6.72	1.43	1.51
1	N	321	A	C6-N6	6.72	1.39	1.33
1	N	348	G	C5-C4	6.72	1.43	1.38
1	N	1403	C	C4-C5	-6.72	1.37	1.43
1	N	514	C	N3-C4	6.71	1.38	1.33
1	N	864	A	C5-C6	-6.71	1.35	1.41
1	N	1346	A	N9-C4	-6.71	1.33	1.37
1	N	448	A	C5-C6	6.71	1.47	1.41
1	N	873	A	C6-N6	6.71	1.39	1.33
1	N	898	G	P-O5'	-6.71	1.53	1.59
1	N	978	A	N1-C2	6.71	1.40	1.34
1	N	1095	U	C2-N3	6.71	1.42	1.37
1	N	1270	G	N7-C5	6.71	1.43	1.39
1	N	456	A	N3-C4	-6.71	1.30	1.34
1	N	1254	A	C5'-C4'	6.71	1.59	1.51
1	N	5	U	N1-C2	6.70	1.44	1.38
1	N	396	C	C4'-C3'	6.70	1.60	1.53
1	N	1275	A	N7-C5	-6.70	1.35	1.39
1	N	1428	A	C6-N6	6.70	1.39	1.33
1	N	921	U	C4-C5	-6.70	1.37	1.43
1	N	1347	G	N1-C2	6.70	1.43	1.37
1	N	15	G	N1-C2	6.70	1.43	1.37
1	N	1365	G	N9-C8	6.70	1.42	1.37
1	N	234	C	C3'-C2'	6.69	1.60	1.52
1	N	905	U	N1-C2	-6.69	1.32	1.38
1	N	129	A	C6-N1	6.69	1.40	1.35
1	N	1197	A	N9-C4	-6.69	1.33	1.37
1	N	1282	C	N3-C4	6.69	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	482	A	C5-C6	-6.69	1.35	1.41
1	N	537	G	C5'-C4'	6.69	1.59	1.51
1	N	1482	G	C2'-C1'	6.69	1.60	1.53
1	N	400	C	C4-N4	6.69	1.40	1.33
1	N	1080	A	N3-C4	6.69	1.38	1.34
1	N	119	A	C8-N7	6.69	1.36	1.31
1	N	356	A	C3'-C2'	-6.69	1.45	1.52
1	N	623	C	C2-O2	-6.69	1.18	1.24
1	N	529	G	C6-N1	6.69	1.44	1.39
1	N	1011	C	N1-C6	-6.69	1.33	1.37
1	N	1080	A	P-O5'	-6.69	1.53	1.59
1	N	1278	G	C3'-C2'	6.69	1.60	1.52
1	N	1195	C	C5'-C4'	6.68	1.59	1.51
1	N	780	A	C2'-C1'	-6.68	1.46	1.53
1	N	1306	A	C6-N6	6.68	1.39	1.33
1	N	762	U	N3-C4	6.68	1.44	1.38
1	N	722	G	N1-C2	6.68	1.43	1.37
1	N	392	C	N3-C4	6.68	1.38	1.33
1	N	71	A	N9-C4	-6.67	1.33	1.37
1	N	464	U	C2'-C1'	-6.67	1.46	1.53
1	N	467	U	C5'-C4'	6.67	1.59	1.51
1	N	666	G	C3'-C2'	-6.67	1.45	1.52
1	N	1193	G	C2-N2	6.67	1.41	1.34
1	N	1033	G	C2'-C1'	-6.67	1.46	1.53
1	N	40	C	C4-N4	6.67	1.40	1.33
1	N	125	U	C4'-C3'	6.67	1.60	1.53
1	N	500	G	C2'-C1'	-6.67	1.46	1.53
1	N	574	A	N3-C4	-6.67	1.30	1.34
1	N	1372	U	C4-C5	6.67	1.49	1.43
1	N	1411	C	C3'-C2'	6.67	1.60	1.52
1	N	177	G	N1-C2	6.67	1.43	1.37
1	N	650	G	O3'-P	-6.67	1.53	1.61
1	N	674	G	C5-C6	-6.67	1.35	1.42
1	N	825	A	O3'-P	-6.67	1.53	1.61
1	N	1009	U	C2-N3	6.67	1.42	1.37
1	N	496	A	N7-C5	-6.67	1.35	1.39
1	N	1172	C	O3'-P	-6.67	1.53	1.61
1	N	1329	A	P-O5'	6.67	1.66	1.59
1	N	880	C	P-O5'	-6.66	1.53	1.59
1	N	1379	G	N9-C8	6.66	1.42	1.37
1	N	645	G	C5-C4	-6.66	1.33	1.38
1	N	1169	A	C8-N7	-6.66	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1262	C	N1-C2	6.66	1.46	1.40
1	N	552	U	N1-C6	-6.66	1.31	1.38
1	N	783	C	C5-C6	6.66	1.39	1.34
1	N	1011	C	P-O5'	-6.66	1.53	1.59
1	N	1081	A	N9-C8	-6.66	1.32	1.37
1	N	1310	G	N3-C4	6.66	1.40	1.35
1	N	165	G	C6-N1	6.66	1.44	1.39
1	N	572	A	C2-N3	6.66	1.39	1.33
1	N	1256	A	N9-C4	-6.66	1.33	1.37
1	N	93	U	C5'-C4'	6.66	1.59	1.51
1	N	449	G	C6-N1	6.66	1.44	1.39
1	N	563	A	N9-C8	6.66	1.43	1.37
1	N	1506	U	C4-C5	6.66	1.49	1.43
1	N	12	U	C2-N3	6.65	1.42	1.37
1	N	703	G	C6-N1	6.65	1.44	1.39
1	N	119	A	O3'-P	-6.65	1.53	1.61
1	N	289	G	C2-N3	6.65	1.38	1.32
1	N	873	A	C2'-C1'	-6.65	1.46	1.53
1	N	1378	C	C4'-C3'	6.65	1.60	1.53
1	N	228	A	C2'-C1'	-6.65	1.46	1.53
1	N	946	A	N7-C5	-6.65	1.35	1.39
1	N	1118	U	P-O5'	-6.65	1.53	1.59
1	N	890	G	C6-N1	6.65	1.44	1.39
1	N	1053	G	C1'-N9	6.65	1.58	1.48
1	N	748	G	C5'-C4'	6.65	1.59	1.51
1	N	888	G	C6-O6	-6.65	1.18	1.24
1	N	938	A	C5-C4	-6.65	1.34	1.38
1	N	1159	U	N3-C4	6.65	1.44	1.38
1	N	1419	G	N1-C2	6.65	1.43	1.37
1	N	716	A	N9-C4	-6.64	1.33	1.37
1	N	1533	C	N1-C2	6.64	1.46	1.40
1	N	64	G	C3'-O3'	6.64	1.51	1.42
1	N	965	U	N3-C4	6.64	1.44	1.38
1	N	1480	A	N9-C4	-6.64	1.33	1.37
1	N	196	A	C3'-C2'	6.64	1.60	1.52
1	N	784	A	N9-C8	-6.64	1.32	1.37
1	N	1152	A	N3-C4	-6.64	1.30	1.34
1	N	181	A	C6-N6	6.64	1.39	1.33
1	N	452	A	C2'-C1'	-6.64	1.46	1.53
1	N	1069	C	C4-C5	6.64	1.48	1.43
1	N	1166	G	C2'-C1'	-6.64	1.46	1.53
1	N	217	C	C2-N3	-6.63	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1047	G	C2-N2	6.63	1.41	1.34
1	N	1251	A	N1-C2	6.63	1.40	1.34
1	N	1401	G	C3'-C2'	6.63	1.60	1.52
1	N	1243	C	C4-N4	6.63	1.40	1.33
1	N	414	A	C8-N7	-6.63	1.26	1.31
1	N	1002	G	C5'-C4'	6.63	1.59	1.51
1	N	1048	G	C4'-C3'	-6.63	1.45	1.53
1	N	1163	A	C4'-C3'	6.63	1.60	1.53
1	N	156	C	C2-N3	6.63	1.41	1.35
1	N	343	U	C4-C5	6.63	1.49	1.43
1	N	655	A	C8-N7	-6.63	1.26	1.31
1	N	1460	C	C4-C5	6.63	1.48	1.43
1	N	139	A	C8-N7	-6.63	1.26	1.31
1	N	1027	C	C4'-C3'	6.63	1.60	1.53
1	N	1165	U	C5'-C4'	6.63	1.59	1.51
1	N	1291	U	N3-C4	6.63	1.44	1.38
1	N	1369	C	P-O5'	6.63	1.66	1.59
1	N	1454	G	N1-C2	6.63	1.43	1.37
1	N	523	A	N7-C5	-6.62	1.35	1.39
1	N	529	G	C5-C4	6.62	1.43	1.38
1	N	768	A	N7-C5	-6.62	1.35	1.39
1	N	1038	C	P-O5'	-6.62	1.53	1.59
1	N	10	A	C5'-C4'	6.62	1.59	1.51
1	N	1481	U	C2-N3	6.62	1.42	1.37
1	N	1131	G	C3'-C2'	-6.62	1.45	1.52
1	N	11	G	C6-N1	6.61	1.44	1.39
1	N	198	G	N9-C8	-6.61	1.33	1.37
1	N	321	A	N1-C2	6.61	1.40	1.34
1	N	1496	C	P-O5'	-6.61	1.53	1.59
1	N	1508	A	C8-N7	-6.61	1.26	1.31
1	N	553	A	C5-C4	6.61	1.43	1.38
1	N	1531	A	N7-C5	-6.61	1.35	1.39
1	N	945	G	N1-C2	6.61	1.43	1.37
1	N	1396	A	C5-C4	6.61	1.43	1.38
1	N	25	C	C2'-C1'	-6.60	1.46	1.53
1	N	851	G	N7-C5	6.60	1.43	1.39
1	N	891	U	C5'-C4'	6.60	1.59	1.51
1	N	1213	A	C5'-C4'	6.60	1.59	1.51
1	N	1133	G	N7-C5	-6.60	1.35	1.39
1	N	1226	C	O3'-P	-6.60	1.53	1.61
1	N	1402	C	C4-N4	6.60	1.39	1.33
1	N	101	A	C5-C4	6.60	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1230	C	N1-C6	6.60	1.41	1.37
1	N	64	G	N9-C4	-6.60	1.32	1.38
1	N	319	G	O3'-P	-6.60	1.53	1.61
1	N	715	A	C5'-C4'	6.59	1.59	1.51
1	N	733	G	C8-N7	-6.59	1.26	1.30
1	N	1034	G	C2-N3	-6.59	1.27	1.32
1	N	983	A	C2-N3	6.59	1.39	1.33
1	N	610	U	C2'-C1'	-6.59	1.46	1.53
1	N	731	G	C8-N7	6.59	1.34	1.30
1	N	1179	A	N9-C8	6.59	1.43	1.37
1	N	34	C	N3-C4	6.59	1.38	1.33
1	N	1031	C	P-O5'	6.58	1.66	1.59
1	N	1491	G	N7-C5	6.58	1.43	1.39
1	N	199	A	C6-N6	6.58	1.39	1.33
1	N	576	C	C2-O2	6.58	1.30	1.24
1	N	183	C	N3-C4	6.58	1.38	1.33
1	N	338	A	O3'-P	-6.58	1.53	1.61
1	N	695	A	C5-C6	-6.58	1.35	1.41
1	N	79	G	N7-C5	6.58	1.43	1.39
1	N	1484	C	C4-N4	6.58	1.39	1.33
1	N	351	G	O3'-P	-6.58	1.53	1.61
1	N	904	U	C5-C6	-6.58	1.28	1.34
1	N	1144	G	C5-C4	6.58	1.43	1.38
1	N	609	A	N3-C4	-6.58	1.30	1.34
1	N	1066	C	C2-N3	6.58	1.41	1.35
1	N	52	C	C2'-C1'	-6.58	1.46	1.53
1	N	1110	A	C5'-C4'	6.58	1.59	1.51
1	N	1129	C	C4'-C3'	6.58	1.60	1.53
1	N	607	A	N7-C5	-6.57	1.35	1.39
1	N	1405	G	P-O5'	-6.57	1.53	1.59
1	N	1406	U	N3-C4	6.57	1.44	1.38
1	N	1454	G	C6-O6	-6.57	1.18	1.24
1	N	505	G	N1-C2	6.57	1.43	1.37
1	N	984	C	N3-C4	6.57	1.38	1.33
1	N	132	C	N1-C6	-6.57	1.33	1.37
1	N	351	G	C4'-C3'	6.57	1.60	1.53
1	N	457	G	N3-C4	-6.57	1.30	1.35
1	N	1090	U	C5-C6	6.57	1.40	1.34
1	N	1242	G	N3-C4	-6.57	1.30	1.35
1	N	1301	U	C2-N3	6.57	1.42	1.37
1	N	47	C	C4-C5	6.56	1.48	1.43
1	N	728	A	N9-C8	-6.56	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	818	G	N9-C8	6.56	1.42	1.37
1	N	257	G	C6-N1	6.56	1.44	1.39
1	N	120	A	C5-C4	-6.56	1.34	1.38
1	N	395	C	C4'-C3'	6.56	1.60	1.53
1	N	761	G	N9-C4	-6.56	1.32	1.38
1	N	1139	G	C8-N7	-6.56	1.27	1.30
1	N	115	G	C5-C6	-6.56	1.35	1.42
1	N	129	A	N9-C4	-6.56	1.33	1.37
1	N	1386	G	C5-C6	-6.56	1.35	1.42
1	N	1485	U	P-O5'	-6.56	1.53	1.59
1	N	974	A	C8-N7	-6.56	1.26	1.31
1	N	1099	G	P-O5'	-6.56	1.53	1.59
1	N	27	G	C6-N1	6.55	1.44	1.39
1	N	455	G	P-O5'	-6.55	1.53	1.59
1	N	942	G	N9-C8	6.55	1.42	1.37
1	N	141	G	N9-C4	-6.55	1.32	1.38
1	N	742	G	C5-C4	-6.55	1.33	1.38
1	N	1140	C	N1-C6	6.55	1.41	1.37
1	N	1233	G	C4'-C3'	-6.55	1.46	1.53
1	N	1513	A	N3-C4	-6.55	1.30	1.34
1	N	160	A	N7-C5	-6.55	1.35	1.39
1	N	540	G	N9-C4	-6.55	1.32	1.38
1	N	706	A	N9-C4	-6.55	1.33	1.37
1	N	966	G	N9-C4	6.55	1.43	1.38
1	N	1256	A	O3'-P	6.55	1.69	1.61
1	N	142	G	C2'-C1'	-6.55	1.46	1.53
1	N	1487	G	C8-N7	-6.55	1.27	1.30
1	N	32	A	N1-C2	-6.55	1.28	1.34
1	N	68	G	C4'-C3'	6.55	1.60	1.53
1	N	77	A	N3-C4	-6.55	1.30	1.34
1	N	712	A	C2'-C1'	-6.55	1.46	1.53
1	N	1361	G	N7-C5	-6.55	1.35	1.39
1	N	370	C	N3-C4	6.54	1.38	1.33
1	N	558	G	C4'-O4'	6.54	1.54	1.45
1	N	994	A	C4'-C3'	6.54	1.60	1.53
1	N	1128	C	C4-C5	6.54	1.48	1.43
1	N	1167	A	C2-N3	6.54	1.39	1.33
1	N	1246	A	C5-C6	-6.54	1.35	1.41
1	N	406	G	O3'-P	-6.54	1.53	1.61
1	N	1233	G	N7-C5	-6.54	1.35	1.39
1	N	524	G	N3-C4	-6.54	1.30	1.35
1	N	819	A	P-O5'	6.54	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	365	U	O4'-C1'	6.53	1.50	1.41
1	N	714	G	P-O5'	-6.53	1.53	1.59
1	N	925	G	N9-C8	6.53	1.42	1.37
1	N	812	G	N3-C4	-6.53	1.30	1.35
1	N	909	A	N3-C4	-6.53	1.30	1.34
1	N	350	G	C2-N2	6.53	1.41	1.34
1	N	371	A	N9-C4	-6.53	1.33	1.37
1	N	394	G	P-O5'	-6.53	1.53	1.59
1	N	543	U	O3'-P	-6.53	1.53	1.61
1	N	972	C	N3-C4	6.53	1.38	1.33
1	N	168	G	C8-N7	-6.53	1.27	1.30
1	N	232	G	C8-N7	6.53	1.34	1.30
1	N	292	G	C4'-C3'	6.53	1.60	1.53
1	N	1252	A	C8-N7	6.53	1.36	1.31
1	N	249	U	C2'-C1'	-6.52	1.46	1.53
1	N	689	C	C4-N4	6.52	1.39	1.33
1	N	916	U	C2-N3	6.52	1.42	1.37
1	N	1082	A	N9-C4	6.52	1.41	1.37
1	N	1247	U	C3'-C2'	6.52	1.60	1.52
1	N	356	A	C2'-C1'	-6.52	1.46	1.53
1	N	1368	A	C6-N6	6.52	1.39	1.33
1	N	1492	A	P-O5'	-6.52	1.53	1.59
1	N	1047	G	O3'-P	-6.52	1.53	1.61
1	N	735	C	N3-C4	6.52	1.38	1.33
1	N	767	A	C8-N7	6.52	1.36	1.31
1	N	1024	G	C4'-C3'	6.52	1.60	1.53
1	N	289	G	N1-C2	6.52	1.43	1.37
1	N	415	A	C6-N6	6.52	1.39	1.33
1	N	1215	G	C3'-C2'	-6.52	1.45	1.52
1	N	817	C	O3'-P	-6.52	1.53	1.61
1	N	1525	G	O3'-P	-6.52	1.53	1.61
1	N	55	A	C8-N7	-6.51	1.26	1.31
1	N	104	G	N1-C2	6.51	1.43	1.37
1	N	609	A	C5-C6	-6.51	1.35	1.41
1	N	1057	G	C6-O6	-6.51	1.18	1.24
1	N	1028	C	N3-C4	6.51	1.38	1.33
1	N	601	G	P-O5'	-6.51	1.53	1.59
1	N	841	C	N3-C4	6.51	1.38	1.33
1	N	1177	G	N7-C5	-6.51	1.35	1.39
1	N	282	A	N9-C4	6.51	1.41	1.37
1	N	311	C	C5-C6	6.51	1.39	1.34
1	N	1241	G	C5'-C4'	6.51	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	466	A	C6-N6	6.51	1.39	1.33
1	N	901	A	C3'-C2'	-6.51	1.45	1.52
1	N	343	U	C4'-O4'	-6.50	1.37	1.45
1	N	444	G	N9-C8	6.50	1.42	1.37
1	N	935	A	N7-C5	-6.50	1.35	1.39
1	N	127	G	C5'-C4'	6.50	1.59	1.51
1	N	778	G	P-O5'	-6.50	1.53	1.59
1	N	1218	C	C2'-C1'	-6.50	1.46	1.53
1	N	79	G	C6-N1	6.50	1.44	1.39
1	N	726	C	C4-N4	6.50	1.39	1.33
1	N	931	C	C2-N3	6.50	1.41	1.35
1	N	1334	G	C2-N3	6.50	1.38	1.32
1	N	1439	G	N3-C4	6.50	1.40	1.35
1	N	512	U	C4'-O4'	6.50	1.53	1.45
1	N	573	A	C6-N6	6.50	1.39	1.33
1	N	49	U	C4'-C3'	6.49	1.60	1.53
1	N	91	U	O4'-C1'	6.49	1.50	1.41
1	N	332	G	N1-C2	6.49	1.43	1.37
1	N	1313	U	C2'-O2'	6.49	1.50	1.41
1	N	33	A	C2'-C1'	-6.49	1.46	1.53
1	N	626	G	N7-C5	-6.49	1.35	1.39
1	N	1130	A	C5-C4	-6.49	1.34	1.38
1	N	68	G	C3'-C2'	-6.49	1.45	1.52
1	N	748	G	N9-C8	-6.49	1.33	1.37
1	N	1319	A	C6-N1	6.49	1.40	1.35
1	N	227	G	N1-C2	6.49	1.43	1.37
1	N	1111	A	C5-C6	6.49	1.46	1.41
1	N	545	C	N3-C4	6.49	1.38	1.33
1	N	696	A	N3-C4	-6.49	1.30	1.34
1	N	751	U	C3'-O3'	6.49	1.51	1.42
1	N	1337	G	C4'-C3'	6.49	1.60	1.53
1	N	415	A	C2-N3	6.49	1.39	1.33
1	N	480	U	N3-C4	6.49	1.44	1.38
1	N	1239	A	C3'-C2'	-6.49	1.45	1.52
1	N	1244	G	C2-N2	6.48	1.41	1.34
1	N	20	U	C4'-C3'	6.48	1.60	1.53
1	N	327	A	N9-C8	6.48	1.43	1.37
1	N	415	A	N7-C5	-6.48	1.35	1.39
1	N	544	G	C5-C4	-6.48	1.33	1.38
1	N	757	U	C4'-C3'	6.48	1.60	1.53
1	N	980	C	O4'-C1'	6.48	1.50	1.41
1	N	43	C	C2'-O2'	-6.48	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	654	G	O3'-P	-6.48	1.53	1.61
1	N	330	C	C4'-C3'	6.48	1.60	1.53
1	N	866	C	N1-C6	6.48	1.41	1.37
1	N	756	C	C2-N3	6.48	1.41	1.35
1	N	964	A	N7-C5	6.48	1.43	1.39
1	N	399	G	P-O5'	-6.47	1.53	1.59
1	N	1096	C	N3-C4	6.47	1.38	1.33
1	N	1244	G	N3-C4	-6.47	1.30	1.35
1	N	1300	G	C2-N3	6.47	1.38	1.32
1	N	1000	A	N9-C4	6.47	1.41	1.37
1	N	1143	G	C2'-C1'	-6.47	1.46	1.53
1	N	1350	A	C6-N1	6.47	1.40	1.35
1	N	170	U	C1'-N1	6.46	1.58	1.48
1	N	460	A	O3'-P	-6.46	1.53	1.61
1	N	872	A	N9-C4	-6.46	1.33	1.37
1	N	1515	G	C2-N2	6.46	1.41	1.34
1	N	410	G	P-O5'	-6.46	1.53	1.59
1	N	476	U	N3-C4	6.46	1.44	1.38
1	N	1117	A	O4'-C1'	-6.46	1.33	1.41
1	N	1522	U	C2-N3	6.46	1.42	1.37
1	N	69	G	C2-N3	-6.46	1.27	1.32
1	N	583	A	C5-C6	6.46	1.46	1.41
1	N	834	U	C5'-C4'	6.46	1.59	1.51
1	N	350	G	C8-N7	6.46	1.34	1.30
1	N	1103	C	C4-N4	6.46	1.39	1.33
1	N	38	G	C2-N3	6.45	1.38	1.32
1	N	182	A	N9-C8	6.45	1.43	1.37
1	N	864	A	N3-C4	-6.45	1.30	1.34
1	N	1230	C	C4-N4	6.45	1.39	1.33
1	N	616	G	C2'-O2'	-6.45	1.33	1.41
1	N	672	U	O4'-C1'	-6.45	1.33	1.41
1	N	232	G	P-O5'	-6.45	1.53	1.59
1	N	898	G	C4'-C3'	-6.45	1.46	1.53
1	N	934	C	N1-C6	6.45	1.41	1.37
1	N	1174	G	C5-C6	-6.45	1.35	1.42
1	N	328	C	C4'-C3'	6.45	1.60	1.53
1	N	443	C	C3'-C2'	6.45	1.60	1.52
1	N	902	G	N7-C5	-6.45	1.35	1.39
1	N	1204	A	C4'-O4'	-6.45	1.37	1.45
1	N	1367	C	C5'-C4'	6.44	1.59	1.51
1	N	380	G	C6-N1	6.44	1.44	1.39
1	N	515	G	C2-N3	6.44	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	882	C	N1-C2	6.44	1.46	1.40
1	N	1082	A	N9-C8	6.44	1.43	1.37
1	N	1309	G	N9-C8	6.44	1.42	1.37
1	N	1135	U	P-O5'	-6.44	1.53	1.59
1	N	1158	C	O3'-P	-6.44	1.53	1.61
1	N	1451	U	C2-N3	6.44	1.42	1.37
1	N	582	C	C1'-N1	6.44	1.58	1.48
1	N	6	G	N7-C5	-6.44	1.35	1.39
1	N	230	G	C8-N7	6.44	1.34	1.30
1	N	371	A	C6-N1	6.44	1.40	1.35
1	N	517	G	C2-N3	6.44	1.38	1.32
1	N	764	C	N3-C4	6.44	1.38	1.33
1	N	1187	G	O4'-C1'	-6.44	1.33	1.41
1	N	1251	A	N7-C5	-6.44	1.35	1.39
1	N	279	A	O3'-P	-6.44	1.53	1.61
1	N	1179	A	C6-N6	6.44	1.39	1.33
1	N	1519	A	N7-C5	-6.44	1.35	1.39
1	N	176	C	P-O5'	-6.43	1.53	1.59
1	N	1229	A	C8-N7	-6.43	1.27	1.31
1	N	152	A	C2'-C1'	-6.43	1.46	1.53
1	N	254	G	C8-N7	-6.43	1.27	1.30
1	N	533	A	C5-C4	-6.43	1.34	1.38
1	N	899	C	O4'-C1'	6.43	1.50	1.41
1	N	480	U	C4-C5	6.43	1.49	1.43
1	N	937	A	C5'-C4'	6.43	1.59	1.51
1	N	1129	C	C2-N3	6.43	1.40	1.35
1	N	1133	G	O4'-C1'	6.43	1.50	1.41
1	N	1041	G	N9-C8	-6.43	1.33	1.37
1	N	152	A	N3-C4	6.43	1.38	1.34
1	N	693	G	N9-C4	6.43	1.43	1.38
1	N	1124	G	C5-C6	-6.43	1.35	1.42
1	N	1488	G	C6-N1	6.43	1.44	1.39
1	N	1011	C	N3-C4	6.42	1.38	1.33
1	N	1353	G	C8-N7	6.42	1.34	1.30
1	N	482	A	C6-N6	6.42	1.39	1.33
1	N	315	A	C6-N1	6.42	1.40	1.35
1	N	473	U	N3-C4	6.42	1.44	1.38
1	N	656	G	C5-C4	6.42	1.42	1.38
1	N	61	G	C5-C4	6.41	1.42	1.38
1	N	1297	G	C8-N7	6.41	1.34	1.30
1	N	1111	A	C8-N7	-6.41	1.27	1.31
1	N	61	G	C6-N1	6.41	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	192	A	N7-C5	-6.41	1.35	1.39
1	N	232	G	C5-C6	-6.41	1.35	1.42
1	N	519	C	N1-C6	6.41	1.41	1.37
1	N	969	A	C3'-O3'	6.41	1.51	1.42
1	N	1228	C	C5'-C4'	6.41	1.59	1.51
1	N	1238	A	C5-C6	6.41	1.46	1.41
1	N	1432	G	C4'-C3'	6.41	1.60	1.53
1	N	108	G	N9-C8	6.41	1.42	1.37
1	N	665	A	C1'-N9	6.41	1.58	1.48
1	N	1075	U	C4'-C3'	-6.41	1.46	1.53
1	N	1372	U	C1'-N1	6.41	1.58	1.48
1	N	567	G	C6-N1	6.40	1.44	1.39
1	N	1202	U	C2'-C1'	-6.40	1.46	1.53
1	N	86	G	N7-C5	-6.40	1.35	1.39
1	N	790	A	C6-N1	6.40	1.40	1.35
1	N	838	G	C8-N7	-6.40	1.27	1.30
1	N	68	G	C2-N3	6.40	1.37	1.32
1	N	113	G	P-O5'	-6.40	1.53	1.59
1	N	491	G	C6-N1	6.40	1.44	1.39
1	N	798	U	N3-C4	6.40	1.44	1.38
1	N	1378	C	P-O5'	-6.40	1.53	1.59
1	N	780	A	N9-C4	-6.40	1.34	1.37
1	N	215	C	C2'-C1'	-6.39	1.46	1.53
1	N	824	G	C4'-C3'	-6.39	1.46	1.53
1	N	910	C	C5-C6	6.39	1.39	1.34
1	N	517	G	O3'-P	-6.39	1.53	1.61
1	N	751	U	C4-C5	6.39	1.49	1.43
1	N	1504	G	C5-C4	-6.39	1.33	1.38
1	N	940	C	C4-N4	6.39	1.39	1.33
1	N	32	A	C5-C6	6.39	1.46	1.41
1	N	36	C	N1-C6	6.39	1.41	1.37
1	N	402	G	N3-C4	-6.39	1.30	1.35
1	N	538	G	O3'-P	-6.39	1.53	1.61
1	N	725	G	C5-C6	-6.39	1.35	1.42
1	N	1119	C	C5'-C4'	6.39	1.59	1.51
1	N	1275	A	C2'-C1'	-6.39	1.46	1.53
1	N	1316	G	C6-N1	6.39	1.44	1.39
1	N	987	G	C4'-C3'	6.39	1.60	1.53
1	N	1104	G	N7-C5	-6.39	1.35	1.39
1	N	454	G	C2'-C1'	-6.38	1.46	1.53
1	N	750	C	C4-C5	6.38	1.48	1.43
1	N	1178	G	N9-C8	6.38	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	425	G	C2-N2	6.38	1.41	1.34
1	N	495	A	C6-N1	6.38	1.40	1.35
1	N	1370	G	N1-C2	6.38	1.42	1.37
1	N	707	U	C2'-C1'	-6.38	1.46	1.53
1	N	994	A	O4'-C1'	6.38	1.50	1.41
1	N	761	G	C5-C4	-6.38	1.33	1.38
1	N	1305	G	C5-C6	-6.38	1.35	1.42
1	N	1423	G	N7-C5	-6.38	1.35	1.39
1	N	797	C	N3-C4	6.38	1.38	1.33
1	N	922	G	C8-N7	-6.38	1.27	1.30
1	N	360	G	C2-N2	6.38	1.41	1.34
1	N	614	C	C4-C5	6.38	1.48	1.43
1	N	888	G	C2-N3	6.38	1.37	1.32
1	N	1300	G	N3-C4	-6.37	1.30	1.35
1	N	1317	C	C4'-O4'	-6.37	1.37	1.45
1	N	1338	G	N3-C4	6.37	1.40	1.35
1	N	55	A	C6-N1	6.37	1.40	1.35
1	N	441	A	N9-C4	-6.37	1.34	1.37
1	N	507	C	N1-C6	-6.37	1.33	1.37
1	N	892	A	C8-N7	6.37	1.36	1.31
1	N	830	G	N9-C8	6.37	1.42	1.37
1	N	848	C	C4-N4	6.37	1.39	1.33
1	N	1351	U	N3-C4	6.37	1.44	1.38
1	N	196	A	N9-C8	6.36	1.42	1.37
1	N	210	C	C4-C5	6.36	1.48	1.43
1	N	841	C	C4-N4	6.36	1.39	1.33
1	N	377	G	P-O5'	-6.36	1.53	1.59
1	N	391	G	C2'-C1'	-6.36	1.46	1.53
1	N	1089	G	C5-C4	6.36	1.42	1.38
1	N	1406	U	C4'-C3'	6.36	1.60	1.53
1	N	250	A	C6-N6	6.36	1.39	1.33
1	N	711	G	C5-C6	-6.36	1.35	1.42
1	N	1146	A	P-O5'	6.36	1.66	1.59
1	N	208	U	C4'-C3'	6.36	1.60	1.53
1	N	1045	C	C5-C6	6.36	1.39	1.34
1	N	1181	G	N3-C4	-6.36	1.31	1.35
1	N	1335	U	C2'-C1'	-6.35	1.46	1.53
1	N	147	G	C2-N2	6.35	1.41	1.34
1	N	1348	U	N3-C4	6.35	1.44	1.38
1	N	1067	A	N9-C8	-6.35	1.32	1.37
1	N	1438	G	N9-C4	-6.35	1.32	1.38
1	N	1476	A	C8-N7	-6.35	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	74	A	C4'-C3'	6.35	1.60	1.53
1	N	199	A	N3-C4	-6.35	1.31	1.34
1	N	297	G	N9-C8	6.35	1.42	1.37
1	N	596	A	N3-C4	6.35	1.38	1.34
1	N	364	A	C5-C6	6.34	1.46	1.41
1	N	733	G	C6-N1	6.34	1.44	1.39
1	N	1225	A	P-O5'	6.34	1.66	1.59
1	N	1261	A	C5-C4	6.34	1.43	1.38
1	N	1375	A	C8-N7	-6.34	1.27	1.31
1	N	539	A	C5-C6	-6.34	1.35	1.41
1	N	1191	A	C8-N7	-6.34	1.27	1.31
1	N	330	C	C5-C6	-6.34	1.29	1.34
1	N	471	U	N1-C2	-6.34	1.32	1.38
1	N	142	G	C5-C4	6.34	1.42	1.38
1	N	461	A	O3'-P	-6.34	1.53	1.61
1	N	1351	U	C4-C5	6.34	1.49	1.43
1	N	1402	C	C3'-C2'	6.34	1.59	1.52
1	N	99	C	O3'-P	-6.34	1.53	1.61
1	N	323	U	C2'-C1'	-6.34	1.46	1.53
1	N	399	G	C2-N3	-6.34	1.27	1.32
1	N	1034	G	N1-C2	6.34	1.42	1.37
1	N	1086	U	N1-C6	-6.34	1.32	1.38
1	N	956	U	P-O5'	-6.33	1.53	1.59
1	N	62	U	N1-C2	-6.33	1.32	1.38
1	N	107	G	C2-N3	6.33	1.37	1.32
1	N	501	C	C5'-C4'	6.33	1.58	1.51
1	N	10	A	C6-N1	6.33	1.40	1.35
1	N	217	C	N1-C6	6.33	1.41	1.37
1	N	1254	A	N7-C5	-6.33	1.35	1.39
1	N	144	G	C6-N1	6.33	1.44	1.39
1	N	168	G	N3-C4	-6.33	1.31	1.35
1	N	265	G	P-O5'	-6.33	1.53	1.59
1	N	359	G	C2-N3	6.33	1.37	1.32
1	N	361	G	C6-O6	6.33	1.29	1.24
1	N	1057	G	N1-C2	6.33	1.42	1.37
1	N	1259	C	N1-C2	-6.33	1.33	1.40
1	N	713	G	C2-N3	6.33	1.37	1.32
1	N	1158	C	N3-C4	6.33	1.38	1.33
1	N	1195	C	C4-C5	-6.33	1.37	1.43
1	N	1204	A	C5-C6	-6.33	1.35	1.41
1	N	48	C	N3-C4	6.33	1.38	1.33
1	N	919	A	N9-C4	-6.33	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1387	G	C2-N3	6.33	1.37	1.32
1	N	251	G	N1-C2	6.32	1.42	1.37
1	N	326	G	C2-N3	6.32	1.37	1.32
1	N	413	G	C2'-C1'	-6.32	1.46	1.53
1	N	1053	G	C8-N7	-6.32	1.27	1.30
1	N	1146	A	N9-C4	-6.32	1.34	1.37
1	N	1206	G	C4'-O4'	6.32	1.53	1.45
1	N	1402	C	N3-C4	6.32	1.38	1.33
1	N	352	C	N1-C2	6.32	1.46	1.40
1	N	421	U	C5-C6	6.32	1.39	1.34
1	N	584	G	N7-C5	-6.32	1.35	1.39
1	N	616	G	N7-C5	-6.32	1.35	1.39
1	N	768	A	P-O5'	6.32	1.66	1.59
1	N	773	G	C5-C4	6.32	1.42	1.38
1	N	346	G	C8-N7	-6.32	1.27	1.30
1	N	1233	G	C6-N1	6.32	1.44	1.39
1	N	1362	A	O3'-P	-6.32	1.53	1.61
1	N	1195	C	C3'-C2'	6.32	1.59	1.52
1	N	1325	C	P-O5'	-6.32	1.53	1.59
1	N	1355	G	C6-N1	6.32	1.44	1.39
1	N	1380	U	C4'-O4'	6.32	1.53	1.45
1	N	1489	G	O4'-C1'	-6.32	1.33	1.41
1	N	342	C	C2-N3	6.31	1.40	1.35
1	N	232	G	N9-C8	-6.31	1.33	1.37
1	N	536	C	C2-N3	6.31	1.40	1.35
1	N	174	A	C5-C4	-6.31	1.34	1.38
1	N	295	C	N1-C6	-6.31	1.33	1.37
1	N	359	G	C8-N7	-6.31	1.27	1.30
1	N	1187	G	C6-N1	6.31	1.44	1.39
1	N	1346	A	P-O5'	-6.31	1.53	1.59
1	N	98	A	C3'-C2'	6.31	1.59	1.52
1	N	259	G	N3-C4	-6.31	1.31	1.35
1	N	450	G	C5-C4	-6.31	1.33	1.38
1	N	577	G	C2'-C1'	-6.31	1.46	1.53
1	N	1445	U	N3-C4	6.31	1.44	1.38
1	N	1511	G	C2-N2	6.31	1.40	1.34
1	N	352	C	C4-N4	6.31	1.39	1.33
1	N	77	A	N9-C4	-6.30	1.34	1.37
1	N	266	G	N7-C5	-6.30	1.35	1.39
1	N	1138	G	N7-C5	-6.30	1.35	1.39
1	N	1271	A	C6-N1	6.30	1.40	1.35
1	N	1488	G	N7-C5	6.30	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1089	G	N9-C8	6.30	1.42	1.37
1	N	1525	G	C5-C6	-6.30	1.36	1.42
1	N	861	G	C2-N3	6.30	1.37	1.32
1	N	984	C	N1-C6	-6.30	1.33	1.37
1	N	1224	U	C4'-O4'	6.30	1.53	1.45
1	N	1485	U	C2-N3	6.30	1.42	1.37
1	N	84	U	C2-N3	6.30	1.42	1.37
1	N	127	G	N9-C8	-6.30	1.33	1.37
1	N	484	G	N7-C5	6.30	1.43	1.39
1	N	1214	C	N3-C4	6.30	1.38	1.33
1	N	579	A	N3-C4	-6.30	1.31	1.34
1	N	749	A	N9-C8	-6.30	1.32	1.37
1	N	1055	A	N3-C4	-6.30	1.31	1.34
1	N	628	G	C8-N7	-6.29	1.27	1.30
1	N	1213	A	C3'-C2'	6.29	1.59	1.52
1	N	1292	G	C2'-O2'	-6.29	1.33	1.41
1	N	112	G	N1-C2	6.29	1.42	1.37
1	N	1531	A	P-O5'	-6.29	1.53	1.59
1	N	484	G	N1-C2	6.29	1.42	1.37
1	N	536	C	N3-C4	6.29	1.38	1.33
1	N	1282	C	C1'-N1	6.29	1.58	1.48
1	N	1369	C	N1-C6	6.29	1.41	1.37
1	N	662	U	N3-C4	6.29	1.44	1.38
1	N	114	U	N1-C6	6.29	1.43	1.38
1	N	265	G	O3'-P	-6.29	1.53	1.61
1	N	942	G	P-O5'	-6.29	1.53	1.59
1	N	1103	C	C5-C6	-6.29	1.29	1.34
1	N	331	G	N7-C5	-6.29	1.35	1.39
1	N	778	G	C2'-O2'	6.29	1.49	1.41
1	N	169	C	C4'-C3'	-6.29	1.46	1.53
1	N	332	G	C8-N7	-6.29	1.27	1.30
1	N	370	C	C4-C5	6.29	1.48	1.43
1	N	692	U	C4'-C3'	6.29	1.60	1.53
1	N	712	A	N1-C2	-6.29	1.28	1.34
1	N	928	G	N7-C5	-6.29	1.35	1.39
1	N	1426	G	C5'-C4'	6.29	1.58	1.51
1	N	1511	G	N7-C5	-6.28	1.35	1.39
1	N	1523	G	C6-N1	6.28	1.44	1.39
1	N	310	G	C2-N2	6.28	1.40	1.34
1	N	969	A	C5-C4	6.28	1.43	1.38
1	N	1201	A	C2-N3	6.28	1.39	1.33
1	N	2	A	N7-C5	-6.28	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	108	G	N7-C5	-6.28	1.35	1.39
1	N	219	U	N1-C2	-6.28	1.32	1.38
1	N	818	G	C2-N3	6.28	1.37	1.32
1	N	870	U	C2'-C1'	-6.28	1.46	1.53
1	N	936	C	O5'-C5'	6.28	1.54	1.44
1	N	1038	C	C4'-C3'	6.28	1.60	1.53
1	N	1418	A	C5-C4	-6.28	1.34	1.38
1	N	163	C	P-O5'	6.28	1.66	1.59
1	N	1102	A	N7-C5	-6.28	1.35	1.39
1	N	1310	G	C4'-O4'	-6.28	1.37	1.45
1	N	909	A	N7-C5	-6.28	1.35	1.39
1	N	1092	A	C2'-C1'	-6.28	1.46	1.53
1	N	157	U	P-O5'	-6.27	1.53	1.59
1	N	1006	G	N7-C5	-6.27	1.35	1.39
1	N	1310	G	O4'-C1'	6.27	1.49	1.41
1	N	1348	U	O4'-C1'	6.27	1.49	1.41
1	N	168	G	N9-C4	-6.27	1.32	1.38
1	N	498	A	N3-C4	-6.27	1.31	1.34
1	N	730	G	C2-N3	6.27	1.37	1.32
1	N	928	G	C4'-O4'	-6.27	1.37	1.45
1	N	715	A	N7-C5	-6.27	1.35	1.39
1	N	1159	U	C5-C6	6.27	1.39	1.34
1	N	1292	G	C5-C4	-6.27	1.33	1.38
1	N	1519	A	P-O5'	-6.27	1.53	1.59
1	N	396	C	C4-C5	6.27	1.48	1.43
1	N	672	U	C3'-O3'	6.27	1.50	1.42
1	N	1011	C	C4'-C3'	-6.27	1.46	1.53
1	N	1213	A	N7-C5	-6.27	1.35	1.39
1	N	11	G	N1-C2	6.26	1.42	1.37
1	N	330	C	O3'-P	-6.26	1.53	1.61
1	N	63	C	N3-C4	6.26	1.38	1.33
1	N	729	A	P-O5'	-6.26	1.53	1.59
1	N	530	G	C6-N1	6.26	1.44	1.39
1	N	38	G	C4'-C3'	6.26	1.60	1.53
1	N	699	C	C4'-O4'	6.26	1.53	1.45
1	N	710	G	N9-C4	-6.26	1.32	1.38
1	N	731	G	C2'-C1'	-6.26	1.46	1.53
1	N	1045	C	O3'-P	-6.26	1.53	1.61
1	N	1222	G	N1-C2	6.26	1.42	1.37
1	N	1267	C	C5'-C4'	6.26	1.58	1.51
1	N	1441	A	N9-C4	6.26	1.41	1.37
1	N	1477	U	N1-C6	6.26	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	445	G	C6-O6	6.26	1.29	1.24
1	N	980	C	N1-C6	-6.26	1.33	1.37
1	N	1147	C	N3-C4	6.26	1.38	1.33
1	N	1377	A	N9-C4	-6.26	1.34	1.37
1	N	1505	G	P-O5'	-6.26	1.53	1.59
1	N	307	C	N1-C2	6.25	1.46	1.40
1	N	1112	C	N1-C6	6.25	1.41	1.37
1	N	132	C	O3'-P	-6.25	1.53	1.61
1	N	321	A	C2-N3	6.25	1.39	1.33
1	N	630	A	N7-C5	-6.25	1.35	1.39
1	N	1221	G	O3'-P	-6.25	1.53	1.61
1	N	224	U	C5'-C4'	6.25	1.58	1.51
1	N	543	U	N1-C6	6.25	1.43	1.38
1	N	792	A	C6-N1	6.25	1.40	1.35
1	N	624	C	N1-C2	-6.25	1.33	1.40
1	N	1384	C	C2-O2	-6.25	1.18	1.24
1	N	180	U	P-O5'	-6.25	1.53	1.59
1	N	1507	A	N7-C5	-6.25	1.35	1.39
1	N	379	C	P-O5'	-6.25	1.53	1.59
1	N	468	A	C6-N6	6.25	1.39	1.33
1	N	666	G	O3'-P	-6.25	1.53	1.61
1	N	17	U	P-O5'	-6.24	1.53	1.59
1	N	929	G	P-O5'	-6.24	1.53	1.59
1	N	1477	U	O4'-C1'	6.24	1.49	1.41
1	N	602	A	C8-N7	-6.24	1.27	1.31
1	N	686	U	C3'-C2'	6.24	1.59	1.52
1	N	759	A	C4'-O4'	6.24	1.53	1.45
1	N	1108	G	C2-N3	6.24	1.37	1.32
1	N	725	G	N1-C2	6.24	1.42	1.37
1	N	941	G	N1-C2	6.24	1.42	1.37
1	N	1193	G	C3'-C2'	6.24	1.59	1.52
1	N	1201	A	C6-N6	6.24	1.39	1.33
1	N	1490	U	C1'-N1	6.24	1.58	1.48
1	N	116	A	N3-C4	6.24	1.38	1.34
1	N	145	G	N7-C5	-6.24	1.35	1.39
1	N	169	C	C2-N3	6.24	1.40	1.35
1	N	377	G	N9-C4	-6.24	1.32	1.38
1	N	1360	A	O3'-P	-6.24	1.53	1.61
1	N	1292	G	C2'-C1'	-6.23	1.46	1.53
1	N	31	G	C1'-N9	-6.23	1.38	1.46
1	N	766	A	C6-N1	6.23	1.40	1.35
1	N	365	U	C4'-O4'	6.23	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	786	G	C6-N1	6.23	1.44	1.39
1	N	1513	A	C5-C4	6.23	1.43	1.38
1	N	477	C	C2'-C1'	6.23	1.60	1.53
1	N	662	U	P-O5'	6.23	1.66	1.59
1	N	1214	C	O3'-P	-6.23	1.53	1.61
1	N	1435	G	N1-C2	6.23	1.42	1.37
1	N	554	A	C5-C4	6.23	1.43	1.38
1	N	80	A	C3'-O3'	6.22	1.50	1.42
1	N	353	A	O3'-P	-6.22	1.53	1.61
1	N	535	A	C3'-C2'	6.22	1.59	1.52
1	N	1231	G	C8-N7	-6.22	1.27	1.30
1	N	655	A	C5-C4	6.22	1.43	1.38
1	N	699	C	C2-N3	6.22	1.40	1.35
1	N	1133	G	C3'-C2'	6.22	1.59	1.52
1	N	1131	G	N7-C5	-6.22	1.35	1.39
1	N	1334	G	C8-N7	-6.22	1.27	1.30
1	N	1322	C	C3'-C2'	6.22	1.59	1.52
1	N	161	A	C6-N1	6.22	1.40	1.35
1	N	428	G	C5-C6	-6.21	1.36	1.42
1	N	423	G	P-O5'	-6.21	1.53	1.59
1	N	666	G	C5-C6	-6.21	1.36	1.42
1	N	1305	G	C6-N1	6.21	1.43	1.39
1	N	142	G	P-O5'	-6.21	1.53	1.59
1	N	437	U	N3-C4	6.21	1.44	1.38
1	N	1280	A	C4'-C3'	6.21	1.59	1.53
1	N	769	G	C2-N3	6.21	1.37	1.32
1	N	1142	G	C5-C6	-6.21	1.36	1.42
1	N	186	C	C4-C5	-6.20	1.38	1.43
1	N	870	U	C5-C6	-6.20	1.28	1.34
1	N	1020	G	C5-C6	-6.20	1.36	1.42
1	N	1021	A	N9-C4	-6.20	1.34	1.37
1	N	306	A	C6-N6	6.20	1.39	1.33
1	N	1465	A	C6-N1	6.20	1.39	1.35
1	N	116	A	C2'-C1'	-6.20	1.46	1.53
1	N	356	A	C2-N3	-6.20	1.27	1.33
1	N	1149	C	C4-C5	6.20	1.48	1.43
1	N	614	C	C4'-C3'	6.20	1.59	1.53
1	N	939	G	C2'-C1'	6.20	1.60	1.53
1	N	1266	G	C4'-O4'	6.20	1.53	1.45
1	N	1483	A	C2-N3	6.20	1.39	1.33
1	N	1285	A	N9-C8	6.20	1.42	1.37
1	N	60	A	N3-C4	-6.20	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	845	A	C5-C4	6.20	1.43	1.38
1	N	1046	A	N7-C5	-6.20	1.35	1.39
1	N	1070	U	C4-C5	6.20	1.49	1.43
1	N	424	G	C5'-C4'	6.19	1.58	1.51
1	N	412	A	C2-N3	6.19	1.39	1.33
1	N	558	G	N3-C4	6.19	1.39	1.35
1	N	93	U	C1'-N1	6.19	1.58	1.48
1	N	1051	C	C1'-N1	6.19	1.58	1.48
1	N	523	A	C6-N1	6.19	1.39	1.35
1	N	631	C	C4-N4	6.19	1.39	1.33
1	N	1020	G	C6-N1	-6.19	1.35	1.39
1	N	1027	C	C4-N4	6.19	1.39	1.33
1	N	1209	C	C4'-C3'	6.19	1.59	1.53
1	N	1285	A	C8-N7	-6.19	1.27	1.31
1	N	138	G	N3-C4	6.19	1.39	1.35
1	N	1348	U	C5'-C4'	6.19	1.58	1.51
1	N	838	G	C5'-C4'	6.19	1.58	1.51
1	N	785	G	C2-N3	6.18	1.37	1.32
1	N	845	A	C6-N6	6.18	1.38	1.33
1	N	857	C	C2'-C1'	6.18	1.60	1.53
1	N	1056	U	N1-C6	6.18	1.43	1.38
1	N	1193	G	C8-N7	-6.18	1.27	1.30
1	N	1245	C	C2'-C1'	-6.18	1.46	1.53
1	N	1251	A	C6-N6	6.18	1.38	1.33
1	N	1385	G	N9-C4	-6.18	1.33	1.38
1	N	57	G	C2-N3	6.18	1.37	1.32
1	N	633	G	C8-N7	-6.18	1.27	1.30
1	N	1467	C	N1-C6	6.18	1.40	1.37
1	N	1059	C	C1'-N1	6.18	1.58	1.48
1	N	1196	A	P-O5'	-6.18	1.53	1.59
1	N	120	A	O3'-P	-6.18	1.53	1.61
1	N	503	C	N1-C6	-6.18	1.33	1.37
1	N	757	U	C3'-C2'	6.18	1.59	1.52
1	N	1015	G	O3'-P	6.18	1.68	1.61
1	N	1375	A	N9-C8	6.18	1.42	1.37
1	N	530	G	O3'-P	-6.17	1.53	1.61
1	N	630	A	C5-C6	6.17	1.46	1.41
1	N	1289	A	C8-N7	-6.17	1.27	1.31
1	N	300	A	N9-C8	6.17	1.42	1.37
1	N	577	G	C6-N1	6.17	1.43	1.39
1	N	904	U	N3-C4	6.17	1.44	1.38
1	N	566	G	N7-C5	6.17	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	911	U	C4-O4	6.17	1.28	1.23
1	N	1216	A	C4'-O4'	-6.17	1.37	1.45
1	N	1434	A	C4'-C3'	-6.17	1.46	1.53
1	N	1512	U	O4'-C1'	6.17	1.49	1.41
1	N	219	U	C2-N3	6.17	1.42	1.37
1	N	498	A	N9-C4	-6.17	1.34	1.37
1	N	627	G	C3'-C2'	-6.17	1.46	1.52
1	N	651	C	C5'-C4'	6.17	1.58	1.51
1	N	830	G	C2-N2	6.17	1.40	1.34
1	N	1198	G	N3-C4	-6.17	1.31	1.35
1	N	283	U	C2-N3	6.17	1.42	1.37
1	N	846	G	N1-C2	6.17	1.42	1.37
1	N	1521	C	C4-C5	6.17	1.47	1.43
1	N	573	A	C2'-C1'	-6.16	1.46	1.53
1	N	223	A	P-O5'	-6.16	1.53	1.59
1	N	450	G	N9-C8	-6.16	1.33	1.37
1	N	1450	U	C1'-N1	6.16	1.57	1.48
1	N	647	C	N3-C4	6.16	1.38	1.33
1	N	827	U	O3'-P	-6.16	1.53	1.61
1	N	600	A	N9-C4	6.16	1.41	1.37
1	N	687	A	C2'-C1'	-6.16	1.46	1.53
1	N	312	C	N1-C6	6.16	1.40	1.37
1	N	863	U	P-O5'	-6.16	1.53	1.59
1	N	613	C	C4-N4	6.15	1.39	1.33
1	N	776	G	O4'-C1'	6.15	1.49	1.41
1	N	780	A	C6-N6	6.15	1.38	1.33
1	N	860	A	C5-C6	-6.15	1.35	1.41
1	N	1075	U	C1'-N1	6.15	1.57	1.48
1	N	761	G	C5-C6	-6.15	1.36	1.42
1	N	1056	U	C2-N3	6.15	1.42	1.37
1	N	243	A	C6-N6	6.15	1.38	1.33
1	N	272	C	C2'-C1'	-6.15	1.46	1.53
1	N	945	G	O4'-C1'	6.15	1.49	1.41
1	N	465	A	C5-C6	6.15	1.46	1.41
1	N	596	A	O3'-P	-6.15	1.53	1.61
1	N	319	G	C5-C4	6.15	1.42	1.38
1	N	437	U	N1-C2	6.15	1.44	1.38
1	N	892	A	N3-C4	6.15	1.38	1.34
1	N	1398	A	C2'-C1'	-6.15	1.46	1.53
1	N	7	A	C5'-C4'	6.15	1.58	1.51
1	N	1217	C	N3-C4	6.15	1.38	1.33
1	N	817	C	C4-N4	6.14	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1334	G	N1-C2	6.14	1.42	1.37
1	N	134	G	P-O5'	-6.14	1.53	1.59
1	N	266	G	C5-C6	-6.14	1.36	1.42
1	N	624	C	O3'-P	-6.14	1.53	1.61
1	N	217	C	C4'-C3'	-6.14	1.46	1.53
1	N	417	G	C2-N3	6.14	1.37	1.32
1	N	63	C	C4-C5	6.14	1.47	1.43
1	N	307	C	C2'-C1'	-6.14	1.46	1.53
1	N	800	G	C6-N1	6.14	1.43	1.39
1	N	960	U	O4'-C1'	-6.14	1.33	1.41
1	N	995	C	C4-N4	6.14	1.39	1.33
1	N	1044	A	N7-C5	-6.14	1.35	1.39
1	N	1085	U	C2'-C1'	6.14	1.60	1.53
1	N	160	A	C1'-N9	6.14	1.57	1.48
1	N	1292	G	N9-C4	6.14	1.42	1.38
1	N	41	G	C2-N3	6.14	1.37	1.32
1	N	113	G	O4'-C1'	6.14	1.49	1.41
1	N	251	G	C5-C6	-6.14	1.36	1.42
1	N	73	C	C4-C5	6.13	1.47	1.43
1	N	1383	C	C3'-C2'	6.13	1.59	1.52
1	N	319	G	P-O5'	-6.13	1.53	1.59
1	N	323	U	C4'-C3'	6.13	1.59	1.53
1	N	337	G	N1-C2	6.13	1.42	1.37
1	N	482	A	C5-C4	-6.13	1.34	1.38
1	N	957	U	N3-C4	6.13	1.44	1.38
1	N	1323	G	C5-C6	-6.13	1.36	1.42
1	N	844	G	C2-N3	6.13	1.37	1.32
1	N	12	U	C5'-C4'	6.13	1.58	1.51
1	N	721	G	C2-N3	6.13	1.37	1.32
1	N	623	C	C4-N4	6.13	1.39	1.33
1	N	462	G	C5'-C4'	6.12	1.58	1.51
1	N	1523	G	O3'-P	-6.12	1.53	1.61
1	N	725	G	N3-C4	6.12	1.39	1.35
1	N	1049	U	N3-C4	6.12	1.44	1.38
1	N	1084	G	C5-C4	6.12	1.42	1.38
1	N	1242	G	N9-C4	-6.12	1.33	1.38
1	N	1363	A	C5-C4	-6.12	1.34	1.38
1	N	1463	U	C2'-C1'	-6.12	1.46	1.53
1	N	1505	G	O3'-P	-6.12	1.53	1.61
1	N	163	C	C4-N4	6.12	1.39	1.33
1	N	646	G	C3'-O3'	6.12	1.50	1.42
1	N	1089	G	C8-N7	6.12	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	626	G	C8-N7	-6.12	1.27	1.30
1	N	954	G	C5-C4	6.12	1.42	1.38
1	N	1197	A	C8-N7	-6.12	1.27	1.31
1	N	802	A	N9-C8	6.12	1.42	1.37
1	N	169	C	N3-C4	6.12	1.38	1.33
1	N	512	U	C5-C6	6.12	1.39	1.34
1	N	643	C	O4'-C1'	6.12	1.49	1.41
1	N	833	G	N3-C4	-6.12	1.31	1.35
1	N	1086	U	C2-N3	6.12	1.42	1.37
1	N	254	G	N9-C4	-6.11	1.33	1.38
1	N	950	U	P-O5'	-6.11	1.53	1.59
1	N	1141	C	C4'-C3'	6.11	1.59	1.53
1	N	134	G	C2-N2	6.11	1.40	1.34
1	N	832	G	C5'-C4'	6.11	1.58	1.51
1	N	998	C	C2-N3	6.11	1.40	1.35
1	N	355	C	C3'-C2'	-6.11	1.46	1.52
1	N	607	A	C3'-C2'	-6.11	1.46	1.52
1	N	722	G	C2'-C1'	-6.11	1.46	1.53
1	N	724	G	O3'-P	-6.11	1.53	1.61
1	N	862	C	C2'-O2'	-6.11	1.33	1.41
1	N	1210	C	C4-N4	6.11	1.39	1.33
1	N	1458	G	C6-N1	6.11	1.43	1.39
1	N	354	G	C4'-C3'	-6.11	1.46	1.53
1	N	700	G	N9-C4	-6.11	1.33	1.38
1	N	841	C	C2-O2	6.11	1.29	1.24
1	N	113	G	N9-C4	-6.11	1.33	1.38
1	N	1033	G	C5-C4	6.11	1.42	1.38
1	N	1197	A	N1-C2	6.11	1.39	1.34
1	N	182	A	C5-C4	6.11	1.43	1.38
1	N	204	G	C2'-C1'	-6.11	1.46	1.53
1	N	517	G	C2'-C1'	-6.11	1.46	1.53
1	N	768	A	C6-N1	6.11	1.39	1.35
1	N	1007	U	O3'-P	-6.11	1.53	1.61
1	N	951	G	C2-N3	6.10	1.37	1.32
1	N	1020	G	P-O5'	6.10	1.65	1.59
1	N	300	A	N7-C5	-6.10	1.35	1.39
1	N	382	A	O3'-P	-6.10	1.53	1.61
1	N	787	A	N3-C4	-6.10	1.31	1.34
1	N	887	G	C6-N1	6.10	1.43	1.39
1	N	1022	A	C2-N3	6.10	1.39	1.33
1	N	756	C	C2'-C1'	-6.10	1.46	1.53
1	N	772	U	C4-C5	6.10	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	72	A	C2'-C1'	-6.10	1.46	1.53
1	N	590	U	C2-N3	6.10	1.42	1.37
1	N	1283	U	P-O5'	-6.10	1.53	1.59
1	N	707	U	C3'-O3'	6.10	1.50	1.42
1	N	1304	G	N9-C8	6.10	1.42	1.37
1	N	148	G	C5-C4	6.09	1.42	1.38
1	N	807	A	C6-N6	6.09	1.38	1.33
1	N	954	G	C6-O6	6.09	1.29	1.24
1	N	1015	G	C5-C4	6.09	1.42	1.38
1	N	1288	A	C5-C4	-6.09	1.34	1.38
1	N	730	G	N7-C5	6.09	1.43	1.39
1	N	789	U	O3'-P	-6.09	1.53	1.61
1	N	1392	G	P-O5'	-6.09	1.53	1.59
1	N	975	A	C8-N7	-6.09	1.27	1.31
1	N	1002	G	C2-N3	6.09	1.37	1.32
1	N	1410	A	C6-N6	6.09	1.38	1.33
1	N	50	A	N9-C4	-6.09	1.34	1.37
1	N	98	A	C5'-C4'	6.09	1.58	1.51
1	N	451	A	C5-C6	6.09	1.46	1.41
1	N	978	A	C5-C6	-6.09	1.35	1.41
1	N	81	A	C5'-C4'	6.09	1.58	1.51
1	N	350	G	N9-C4	-6.09	1.33	1.38
1	N	619	U	N1-C2	6.09	1.44	1.38
1	N	909	A	C2'-C1'	-6.09	1.46	1.53
1	N	383	A	N7-C5	-6.09	1.35	1.39
1	N	495	A	C2'-C1'	-6.09	1.46	1.53
1	N	610	U	N3-C4	6.09	1.44	1.38
1	N	964	A	N3-C4	6.09	1.38	1.34
1	N	1279	G	C8-N7	-6.09	1.27	1.30
1	N	503	C	N3-C4	6.08	1.38	1.33
1	N	523	A	N9-C4	6.08	1.41	1.37
1	N	1417	G	C8-N7	-6.08	1.27	1.30
1	N	423	G	C2'-C1'	-6.08	1.46	1.53
1	N	1220	G	N9-C4	-6.08	1.33	1.38
1	N	300	A	C5-C4	6.08	1.43	1.38
1	N	588	G	N1-C2	6.08	1.42	1.37
1	N	895	G	C6-N1	6.08	1.43	1.39
1	N	958	A	C2-N3	6.08	1.39	1.33
1	N	1438	G	N1-C2	6.08	1.42	1.37
1	N	118	U	C4'-O4'	6.08	1.53	1.45
1	N	136	C	C3'-O3'	6.08	1.50	1.42
1	N	146	G	C5-C6	-6.08	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	184	G	N3-C4	6.08	1.39	1.35
1	N	1308	U	C5'-C4'	6.08	1.58	1.51
1	N	1529	G	C2-N3	6.08	1.37	1.32
1	N	292	G	C5'-C4'	6.07	1.58	1.51
1	N	338	A	N3-C4	6.07	1.38	1.34
1	N	446	G	C6-N1	6.07	1.43	1.39
1	N	514	C	C3'-C2'	6.07	1.59	1.52
1	N	704	A	N1-C2	6.07	1.39	1.34
1	N	867	G	C5'-C4'	6.07	1.58	1.51
1	N	1008	U	N1-C6	-6.07	1.32	1.38
1	N	1468	A	O4'-C1'	6.07	1.49	1.41
1	N	108	G	C4'-O4'	-6.07	1.37	1.45
1	N	221	C	N1-C6	6.07	1.40	1.37
1	N	374	A	C6-N6	6.07	1.38	1.33
1	N	497	G	C2-N3	6.07	1.37	1.32
1	N	1497	G	N1-C2	6.07	1.42	1.37
1	N	638	U	C4'-C3'	-6.07	1.46	1.53
1	N	55	A	N1-C2	6.07	1.39	1.34
1	N	344	A	C3'-C2'	6.07	1.59	1.52
1	N	434	U	C4-C5	6.07	1.49	1.43
1	N	567	G	C5-C6	-6.07	1.36	1.42
1	N	671	G	N7-C5	-6.07	1.35	1.39
1	N	484	G	C8-N7	-6.07	1.27	1.30
1	N	650	G	C8-N7	-6.07	1.27	1.30
1	N	125	U	C5'-C4'	6.06	1.58	1.51
1	N	303	A	C6-N1	6.06	1.39	1.35
1	N	538	G	N3-C4	-6.06	1.31	1.35
1	N	1206	G	C5'-C4'	6.06	1.58	1.51
1	N	1529	G	C5-C4	6.06	1.42	1.38
1	N	671	G	C3'-C2'	-6.06	1.46	1.52
1	N	920	U	N1-C6	6.06	1.43	1.38
1	N	1209	C	C2'-O2'	-6.06	1.33	1.41
1	N	1299	A	C6-N6	6.06	1.38	1.33
1	N	102	G	P-O5'	-6.06	1.53	1.59
1	N	768	A	N9-C8	6.06	1.42	1.37
1	N	1228	C	N3-C4	6.06	1.38	1.33
1	N	1421	G	C5'-C4'	6.06	1.58	1.51
1	N	941	G	N7-C5	-6.05	1.35	1.39
1	N	783	C	C2-N3	-6.05	1.30	1.35
1	N	1050	G	N3-C4	-6.05	1.31	1.35
1	N	318	G	N7-C5	-6.05	1.35	1.39
1	N	1227	A	C6-N6	6.05	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	928	G	C5'-C4'	6.05	1.58	1.51
1	N	1370	G	C8-N7	-6.05	1.27	1.30
1	N	1140	C	C1'-N1	6.05	1.57	1.48
1	N	1086	U	P-O5'	-6.05	1.53	1.59
1	N	1381	U	C5'-C4'	6.05	1.58	1.51
1	N	1016	A	C6-N6	6.04	1.38	1.33
1	N	344	A	C2-N3	6.04	1.39	1.33
1	N	542	G	N3-C4	6.04	1.39	1.35
1	N	1138	G	N3-C4	-6.04	1.31	1.35
1	N	255	G	O4'-C1'	6.04	1.49	1.41
1	N	281	G	C2-N3	6.04	1.37	1.32
1	N	480	U	N1-C6	-6.04	1.32	1.38
1	N	830	G	N3-C4	-6.04	1.31	1.35
1	N	1005	A	C6-N1	6.04	1.39	1.35
1	N	1297	G	C5-C4	6.04	1.42	1.38
1	N	140	U	C2'-O2'	-6.04	1.33	1.41
1	N	729	A	C2'-C1'	-6.04	1.46	1.53
1	N	792	A	C4'-C3'	6.04	1.59	1.53
1	N	689	C	C2-N3	6.04	1.40	1.35
1	N	776	G	C5-C4	-6.04	1.34	1.38
1	N	1153	G	C3'-O3'	6.04	1.50	1.42
1	N	79	G	C5-C4	-6.04	1.34	1.38
1	N	1145	A	C6-N6	6.04	1.38	1.33
1	N	31	G	C5-C4	6.03	1.42	1.38
1	N	677	U	C4'-C3'	6.03	1.59	1.53
1	N	849	G	C5-C6	-6.03	1.36	1.42
1	N	958	A	C6-N6	6.03	1.38	1.33
1	N	809	G	C8-N7	-6.03	1.27	1.30
1	N	486	U	C5-C6	-6.03	1.28	1.34
1	N	1105	A	C3'-C2'	6.03	1.59	1.52
1	N	1289	A	C1'-N9	6.03	1.57	1.48
1	N	1486	G	P-O5'	-6.03	1.53	1.59
1	N	985	C	C5'-C4'	6.03	1.58	1.51
1	N	1458	G	N9-C4	-6.03	1.33	1.38
1	N	188	C	C3'-C2'	-6.03	1.46	1.52
1	N	540	G	N9-C8	6.03	1.42	1.37
1	N	1494	G	O3'-P	6.03	1.68	1.61
1	N	336	A	N9-C4	-6.03	1.34	1.37
1	N	675	A	C2'-C1'	-6.03	1.46	1.53
1	N	853	C	C4-C5	6.03	1.47	1.43
1	N	701	U	N1-C6	6.02	1.43	1.38
1	N	916	U	C2'-C1'	-6.02	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1167	A	O3'-P	-6.02	1.53	1.61
1	N	100	G	C2-N2	6.02	1.40	1.34
1	N	1204	A	C6-N1	6.02	1.39	1.35
1	N	1502	A	C2'-C1'	-6.02	1.46	1.53
1	N	97	G	C2'-C1'	-6.02	1.46	1.53
1	N	203	G	C5'-C4'	6.02	1.58	1.51
1	N	723	U	N1-C2	6.02	1.44	1.38
1	N	833	G	O4'-C1'	-6.02	1.33	1.41
1	N	53	A	C6-N6	6.02	1.38	1.33
1	N	281	G	C3'-C2'	6.02	1.59	1.52
1	N	568	G	N1-C2	6.02	1.42	1.37
1	N	666	G	N3-C4	6.02	1.39	1.35
1	N	759	A	C6-N1	6.02	1.39	1.35
1	N	1213	A	C1'-N9	6.02	1.57	1.48
1	N	1417	G	C3'-O3'	-6.02	1.33	1.42
1	N	30	U	C4'-O4'	6.02	1.53	1.45
1	N	824	G	P-O5'	-6.02	1.53	1.59
1	N	1221	G	C6-N1	6.02	1.43	1.39
1	N	1456	A	C8-N7	-6.02	1.27	1.31
1	N	433	G	N9-C8	6.01	1.42	1.37
1	N	635	A	C2'-C1'	-6.01	1.46	1.53
1	N	750	C	C4-N4	6.01	1.39	1.33
1	N	1511	G	N9-C4	6.01	1.42	1.38
1	N	1253	G	C5'-C4'	6.01	1.58	1.51
1	N	131	A	C2'-C1'	-6.01	1.46	1.53
1	N	457	G	C2-N3	6.01	1.37	1.32
1	N	640	A	N7-C5	-6.01	1.35	1.39
1	N	1104	G	C2-N3	6.01	1.37	1.32
1	N	1041	G	O4'-C1'	6.01	1.49	1.41
1	N	1109	C	C2'-C1'	-6.01	1.46	1.53
1	N	1118	U	C5'-C4'	6.01	1.58	1.51
1	N	50	A	C6-N6	6.01	1.38	1.33
1	N	767	A	C5-C6	6.01	1.46	1.41
1	N	1373	G	N7-C5	-6.01	1.35	1.39
1	N	24	U	N3-C4	6.00	1.43	1.38
1	N	229	U	C5-C6	6.00	1.39	1.34
1	N	848	C	O3'-P	-6.00	1.53	1.61
1	N	944	G	C5'-C4'	6.00	1.58	1.51
1	N	440	C	C4-N4	6.00	1.39	1.33
1	N	617	G	C2-N3	6.00	1.37	1.32
1	N	1195	C	C2'-C1'	-6.00	1.46	1.53
1	N	359	G	N9-C4	-6.00	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	770	C	C5-C6	-6.00	1.29	1.34
1	N	1269	A	C8-N7	-6.00	1.27	1.31
1	N	361	G	C5'-C4'	6.00	1.58	1.51
1	N	584	G	N3-C4	-6.00	1.31	1.35
1	N	895	G	C8-N7	6.00	1.34	1.30
1	N	1250	A	C5'-C4'	6.00	1.58	1.51
1	N	85	U	O3'-P	-6.00	1.53	1.61
1	N	200	G	C8-N7	-6.00	1.27	1.30
1	N	798	U	C5'-C4'	6.00	1.58	1.51
1	N	1090	U	C2-N3	6.00	1.42	1.37
1	N	336	A	O3'-P	-6.00	1.53	1.61
1	N	718	A	C5-C4	6.00	1.43	1.38
1	N	1300	G	N9-C4	-6.00	1.33	1.38
1	N	1485	U	N1-C6	6.00	1.43	1.38
1	N	321	A	N3-C4	-5.99	1.31	1.34
1	N	670	G	O3'-P	-5.99	1.53	1.61
1	N	746	A	C2-N3	5.99	1.39	1.33
1	N	926	G	P-O5'	-5.99	1.53	1.59
1	N	444	G	C5-C6	-5.99	1.36	1.42
1	N	604	G	O4'-C1'	5.99	1.49	1.41
1	N	980	C	P-O5'	-5.99	1.53	1.59
1	N	1155	A	C5-C4	-5.99	1.34	1.38
1	N	1490	U	N1-C6	5.99	1.43	1.38
1	N	11	G	N7-C5	-5.99	1.35	1.39
1	N	49	U	P-O5'	-5.99	1.53	1.59
1	N	478	A	P-O5'	-5.99	1.53	1.59
1	N	574	A	N9-C4	5.99	1.41	1.37
1	N	803	G	C2'-C1'	-5.99	1.46	1.53
1	N	384	G	C5'-C4'	5.99	1.58	1.51
1	N	284	C	N1-C6	5.98	1.40	1.37
1	N	1167	A	C6-N6	5.98	1.38	1.33
1	N	598	U	O3'-P	-5.98	1.53	1.61
1	N	1210	C	C2'-C1'	-5.98	1.46	1.53
1	N	56	U	N3-C4	5.98	1.43	1.38
1	N	115	G	C4'-O4'	-5.98	1.37	1.45
1	N	559	A	O3'-P	-5.98	1.53	1.61
1	N	228	A	N3-C4	-5.98	1.31	1.34
1	N	650	G	N1-C2	5.98	1.42	1.37
1	N	1181	G	C5-C4	5.98	1.42	1.38
1	N	812	G	C2-N3	5.97	1.37	1.32
1	N	970	C	N3-C4	5.97	1.38	1.33
1	N	1106	G	C5'-C4'	5.97	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	484	G	C2'-C1'	-5.97	1.46	1.53
1	N	659	U	C4-C5	5.97	1.49	1.43
1	N	548	G	C2'-C1'	-5.97	1.46	1.53
1	N	725	G	C4'-C3'	-5.97	1.46	1.52
1	N	777	A	C3'-C2'	5.97	1.59	1.52
1	N	1143	G	N9-C8	5.97	1.42	1.37
1	N	440	C	C2-N3	5.97	1.40	1.35
1	N	65	A	O3'-P	-5.97	1.53	1.61
1	N	1014	A	O3'-P	-5.97	1.53	1.61
1	N	1105	A	P-O5'	-5.97	1.53	1.59
1	N	1211	U	C4-O4	-5.97	1.18	1.23
1	N	1349	A	C8-N7	-5.97	1.27	1.31
1	N	167	A	C5'-C4'	5.96	1.58	1.51
1	N	713	G	C5-C4	5.96	1.42	1.38
1	N	429	U	C5-C6	5.96	1.39	1.34
1	N	978	A	C6-N6	5.96	1.38	1.33
1	N	174	A	C6-N6	5.96	1.38	1.33
1	N	1255	G	C5-C4	5.96	1.42	1.38
1	N	933	G	C2'-C1'	5.96	1.59	1.53
1	N	1058	G	P-O5'	-5.96	1.53	1.59
1	N	167	A	C8-N7	-5.96	1.27	1.31
1	N	308	C	N3-C4	5.96	1.38	1.33
1	N	634	C	C1'-N1	5.96	1.57	1.48
1	N	769	G	C2-N2	5.96	1.40	1.34
1	N	971	G	N7-C5	-5.96	1.35	1.39
1	N	17	U	C2-N3	5.96	1.42	1.37
1	N	19	A	C6-N6	5.96	1.38	1.33
1	N	246	A	C6-N6	5.96	1.38	1.33
1	N	1054	C	C2-N3	5.96	1.40	1.35
1	N	250	A	C3'-O3'	5.96	1.50	1.42
1	N	687	A	C6-N1	5.96	1.39	1.35
1	N	877	G	C6-N1	5.96	1.43	1.39
1	N	1144	G	O3'-P	-5.96	1.54	1.61
1	N	225	C	N3-C4	5.95	1.38	1.33
1	N	703	G	N7-C5	-5.95	1.35	1.39
1	N	762	U	C2-N3	5.95	1.42	1.37
1	N	1486	G	C4'-C3'	-5.95	1.46	1.52
1	N	36	C	C5-C6	-5.95	1.29	1.34
1	N	127	G	C6-N1	5.95	1.43	1.39
1	N	684	U	C3'-C2'	-5.95	1.46	1.52
1	N	1059	C	C3'-C2'	5.95	1.59	1.52
1	N	582	C	N1-C2	-5.95	1.34	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	641	U	O3'-P	-5.95	1.54	1.61
1	N	822	U	C4'-C3'	-5.95	1.46	1.52
1	N	278	G	C2-N3	5.95	1.37	1.32
1	N	828	U	C3'-O3'	5.95	1.50	1.42
1	N	856	C	N3-C4	5.95	1.38	1.33
1	N	333	U	C3'-C2'	5.94	1.59	1.52
1	N	336	A	N1-C2	5.94	1.39	1.34
1	N	366	A	O3'-P	-5.94	1.54	1.61
1	N	1108	G	C2-N2	5.94	1.40	1.34
1	N	1405	G	C4'-C3'	5.94	1.59	1.53
1	N	579	A	C8-N7	-5.94	1.27	1.31
1	N	860	A	C6-N6	5.94	1.38	1.33
1	N	1370	G	C6-O6	-5.94	1.18	1.24
1	N	87	C	C1'-N1	5.94	1.57	1.48
1	N	243	A	O3'-P	-5.94	1.54	1.61
1	N	264	C	N1-C6	-5.94	1.33	1.37
1	N	1172	C	C3'-C2'	5.94	1.59	1.52
1	N	1525	G	N9-C4	-5.94	1.33	1.38
1	N	1253	G	C8-N7	-5.94	1.27	1.30
1	N	361	G	C6-N1	5.94	1.43	1.39
1	N	662	U	O4'-C1'	5.94	1.49	1.41
1	N	766	A	C6-N6	5.94	1.38	1.33
1	N	1502	A	C3'-C2'	5.94	1.59	1.52
1	N	585	G	N1-C2	5.94	1.42	1.37
1	N	664	G	N1-C2	5.94	1.42	1.37
1	N	745	G	O3'-P	-5.93	1.54	1.61
1	N	775	G	N1-C2	5.93	1.42	1.37
1	N	1268	G	C2'-O2'	-5.93	1.33	1.41
1	N	1305	G	C2'-C1'	-5.93	1.46	1.53
1	N	1435	G	N9-C8	5.93	1.42	1.37
1	N	124	C	C3'-C2'	5.93	1.59	1.52
1	N	172	A	O3'-P	-5.93	1.54	1.61
1	N	380	G	N7-C5	-5.93	1.35	1.39
1	N	721	G	C2-N2	5.93	1.40	1.34
1	N	1529	G	C6-N1	5.93	1.43	1.39
1	N	863	U	C5-C6	-5.93	1.28	1.34
1	N	989	U	N1-C6	5.93	1.43	1.38
1	N	1027	C	C2-N3	5.93	1.40	1.35
1	N	376	G	C5'-C4'	5.93	1.58	1.51
1	N	812	G	O4'-C1'	-5.93	1.33	1.41
1	N	1169	A	C1'-N9	5.93	1.57	1.48
1	N	1190	G	C2'-C1'	-5.93	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1526	G	C2-N3	5.93	1.37	1.32
1	N	1310	G	N9-C8	-5.93	1.33	1.37
1	N	27	G	P-O5'	-5.93	1.53	1.59
1	N	109	A	O3'-P	-5.93	1.54	1.61
1	N	614	C	C5'-C4'	5.93	1.58	1.51
1	N	534	U	C5'-C4'	5.92	1.58	1.51
1	N	776	G	C5'-C4'	5.92	1.58	1.51
1	N	1195	C	N1-C6	-5.92	1.33	1.37
1	N	41	G	C8-N7	5.92	1.34	1.30
1	N	813	U	C4'-C3'	-5.92	1.46	1.52
1	N	1319	A	C4'-C3'	5.92	1.59	1.53
1	N	1336	C	C4-N4	5.92	1.39	1.33
1	N	64	G	C1'-N9	5.92	1.57	1.48
1	N	506	G	P-O5'	5.92	1.65	1.59
1	N	289	G	N7-C5	-5.92	1.35	1.39
1	N	1211	U	C2-N3	5.92	1.41	1.37
1	N	234	C	C1'-N1	5.92	1.57	1.48
1	N	15	G	N9-C4	-5.91	1.33	1.38
1	N	1086	U	C1'-N1	5.91	1.57	1.48
1	N	1253	G	C2-N2	5.91	1.40	1.34
1	N	109	A	P-O5'	5.91	1.65	1.59
1	N	304	U	C3'-O3'	5.91	1.50	1.42
1	N	1216	A	O3'-P	-5.91	1.54	1.61
1	N	1280	A	N3-C4	5.91	1.38	1.34
1	N	1501	C	C1'-N1	5.91	1.57	1.48
1	N	1048	G	N9-C8	5.91	1.42	1.37
1	N	1159	U	C2'-C1'	-5.91	1.46	1.53
1	N	186	C	C4-N4	5.91	1.39	1.33
1	N	913	A	N1-C2	-5.91	1.29	1.34
1	N	1328	C	N1-C6	5.91	1.40	1.37
1	N	1424	U	C4-C5	5.90	1.48	1.43
1	N	48	C	N1-C6	-5.90	1.33	1.37
1	N	344	A	C5'-C4'	5.90	1.58	1.51
1	N	612	C	N3-C4	5.90	1.38	1.33
1	N	665	A	C6-N6	5.90	1.38	1.33
1	N	1380	U	C3'-C2'	-5.90	1.46	1.52
1	N	1502	A	O3'-P	-5.90	1.54	1.61
1	N	1039	G	C6-N1	5.90	1.43	1.39
1	N	121	U	N1-C6	5.90	1.43	1.38
1	N	712	A	N3-C4	5.90	1.38	1.34
1	N	971	G	C8-N7	-5.90	1.27	1.30
1	N	806	C	P-O5'	-5.90	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1061	G	C5'-C4'	5.90	1.58	1.51
1	N	43	C	C4-C5	-5.89	1.38	1.43
1	N	22	G	C2-N3	5.89	1.37	1.32
1	N	353	A	C5-C4	5.89	1.42	1.38
1	N	151	A	C5-C4	5.89	1.42	1.38
1	N	611	C	C2-N3	5.89	1.40	1.35
1	N	1136	C	C5'-C4'	5.89	1.58	1.51
1	N	458	U	C2-N3	5.89	1.41	1.37
1	N	846	G	N9-C4	5.89	1.42	1.38
1	N	880	C	O4'-C1'	5.89	1.49	1.41
1	N	236	A	C5-C4	5.89	1.42	1.38
1	N	265	G	C5-C4	-5.89	1.34	1.38
1	N	328	C	C5'-C4'	5.89	1.58	1.51
1	N	882	C	C3'-O3'	5.89	1.50	1.42
1	N	933	G	N9-C4	-5.89	1.33	1.38
1	N	1360	A	C6-N6	5.89	1.38	1.33
1	N	326	G	P-O5'	5.88	1.65	1.59
1	N	666	G	C5'-C4'	-5.88	1.44	1.51
1	N	939	G	O3'-P	5.88	1.68	1.61
1	N	1182	G	P-O5'	-5.88	1.53	1.59
1	N	378	G	C6-N1	5.88	1.43	1.39
1	N	95	C	C2-N3	5.88	1.40	1.35
1	N	790	A	O3'-P	-5.88	1.54	1.61
1	N	1334	G	C2'-C1'	-5.88	1.46	1.53
1	N	572	A	N9-C4	5.88	1.41	1.37
1	N	1387	G	N3-C4	5.88	1.39	1.35
1	N	404	G	N9-C4	-5.88	1.33	1.38
1	N	1018	G	C2'-C1'	-5.88	1.46	1.53
1	N	146	G	C2'-C1'	-5.88	1.46	1.53
1	N	541	G	C8-N7	5.88	1.34	1.30
1	N	118	U	N1-C2	5.87	1.43	1.38
1	N	754	C	C4-C5	5.87	1.47	1.43
1	N	1110	A	C3'-O3'	-5.87	1.33	1.42
1	N	104	G	C2-N2	5.87	1.40	1.34
1	N	379	C	C4-N4	5.87	1.39	1.33
1	N	386	C	N1-C2	-5.87	1.34	1.40
1	N	1249	C	C2-N3	5.87	1.40	1.35
1	N	1437	A	C4'-C3'	5.87	1.59	1.53
1	N	369	G	C4'-C3'	-5.87	1.46	1.52
1	N	193	C	O4'-C1'	5.87	1.49	1.41
1	N	340	U	C5-C6	-5.87	1.28	1.34
1	N	896	C	C2-N3	-5.87	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1199	U	N3-C4	5.87	1.43	1.38
1	N	172	A	N7-C5	-5.87	1.35	1.39
1	N	813	U	C5'-C4'	5.87	1.58	1.51
1	N	279	A	C6-N6	5.87	1.38	1.33
1	N	463	U	C4-O4	5.86	1.28	1.23
1	N	1409	C	C1'-N1	5.86	1.57	1.48
1	N	1479	C	N3-C4	5.86	1.38	1.33
1	N	27	G	C2-N3	5.86	1.37	1.32
1	N	169	C	C4-N4	5.86	1.39	1.33
1	N	266	G	N1-C2	5.86	1.42	1.37
1	N	282	A	C3'-C2'	-5.86	1.46	1.52
1	N	1265	C	C4-N4	5.86	1.39	1.33
1	N	1387	G	N1-C2	5.86	1.42	1.37
1	N	1396	A	C2'-C1'	-5.86	1.47	1.53
1	N	1058	G	N1-C2	5.86	1.42	1.37
1	N	379	C	C5'-C4'	5.86	1.58	1.51
1	N	622	A	C3'-O3'	5.86	1.50	1.42
1	N	694	A	N7-C5	-5.86	1.35	1.39
1	N	716	A	C4'-C3'	5.86	1.59	1.53
1	N	1508	A	C4'-C3'	5.86	1.59	1.53
1	N	641	U	C2'-C1'	5.86	1.59	1.53
1	N	793	U	C2-N3	5.86	1.41	1.37
1	N	974	A	C3'-C2'	5.86	1.59	1.52
1	N	1023	U	C2-O2	5.86	1.27	1.22
1	N	137	U	N3-C4	5.85	1.43	1.38
1	N	380	G	N3-C4	-5.85	1.31	1.35
1	N	133	U	O4'-C1'	5.85	1.49	1.41
1	N	317	U	O4'-C1'	5.85	1.49	1.41
1	N	780	A	C4'-C3'	5.85	1.59	1.53
1	N	81	A	O4'-C1'	-5.85	1.34	1.41
1	N	223	A	C5-C4	5.85	1.42	1.38
1	N	259	G	C4'-C3'	-5.85	1.46	1.52
1	N	799	G	P-O5'	-5.85	1.53	1.59
1	N	1140	C	C4'-O4'	5.85	1.53	1.45
1	N	328	C	P-O5'	-5.85	1.53	1.59
1	N	764	C	C3'-C2'	5.85	1.59	1.52
1	N	726	C	C3'-O3'	5.85	1.50	1.42
1	N	223	A	N7-C5	-5.84	1.35	1.39
1	N	453	G	N7-C5	-5.84	1.35	1.39
1	N	723	U	C4'-O4'	5.84	1.53	1.45
1	N	757	U	P-O5'	-5.84	1.53	1.59
1	N	111	G	C2-N3	5.84	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	151	A	N3-C4	-5.84	1.31	1.34
1	N	1469	C	N1-C6	5.84	1.40	1.37
1	N	66	A	C4'-O4'	-5.84	1.38	1.45
1	N	560	A	N9-C8	5.84	1.42	1.37
1	N	1169	A	C2'-O2'	-5.84	1.34	1.41
1	N	1059	C	N1-C6	5.83	1.40	1.37
1	N	760	G	C8-N7	-5.83	1.27	1.30
1	N	1452	C	C2'-C1'	-5.83	1.47	1.53
1	N	745	G	C2-N3	5.83	1.37	1.32
1	N	769	G	P-O5'	-5.83	1.53	1.59
1	N	1033	G	C6-N1	5.83	1.43	1.39
1	N	1129	C	C4-N4	5.83	1.39	1.33
1	N	1324	A	C2'-C1'	-5.83	1.47	1.53
1	N	229	U	P-O5'	-5.83	1.53	1.59
1	N	625	U	N3-C4	5.83	1.43	1.38
1	N	959	A	C5'-C4'	5.83	1.58	1.51
1	N	1351	U	N1-C2	-5.83	1.33	1.38
1	N	508	U	C5-C6	5.82	1.39	1.34
1	N	718	A	C6-N6	5.82	1.38	1.33
1	N	744	C	N3-C4	5.82	1.38	1.33
1	N	1357	A	N1-C2	5.82	1.39	1.34
1	N	1448	C	N1-C6	5.82	1.40	1.37
1	N	470	C	C2-O2	-5.82	1.19	1.24
1	N	691	G	C2-N2	5.82	1.40	1.34
1	N	1501	C	P-O5'	-5.82	1.53	1.59
1	N	54	C	C1'-N1	5.82	1.57	1.48
1	N	867	G	C8-N7	-5.82	1.27	1.30
1	N	315	A	C6-N6	5.82	1.38	1.33
1	N	660	C	N1-C6	5.82	1.40	1.37
1	N	946	A	C6-N6	5.82	1.38	1.33
1	N	1174	G	N9-C4	-5.82	1.33	1.38
1	N	559	A	C2-N3	5.82	1.38	1.33
1	N	1047	G	C6-N1	5.82	1.43	1.39
1	N	122	G	N7-C5	-5.81	1.35	1.39
1	N	1484	C	C3'-O3'	5.81	1.50	1.42
1	N	487	A	N3-C4	-5.81	1.31	1.34
1	N	862	C	C2'-C1'	5.81	1.59	1.53
1	N	1077	G	N7-C5	-5.81	1.35	1.39
1	N	803	G	N9-C8	5.81	1.42	1.37
1	N	826	C	C4-C5	5.81	1.47	1.43
1	N	904	U	P-O5'	-5.81	1.53	1.59
1	N	1284	C	N3-C4	5.81	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	51	A	N3-C4	5.81	1.38	1.34
1	N	615	G	N1-C2	5.81	1.42	1.37
1	N	887	G	O3'-P	-5.81	1.54	1.61
1	N	41	G	C3'-C2'	5.81	1.59	1.52
1	N	628	G	C2-N3	5.81	1.37	1.32
1	N	455	G	N1-C2	5.80	1.42	1.37
1	N	1151	A	C4'-C3'	5.80	1.59	1.53
1	N	1257	A	C8-N7	5.80	1.35	1.31
1	N	780	A	N9-C8	5.80	1.42	1.37
1	N	1111	A	C2-N3	5.80	1.38	1.33
1	N	195	A	N7-C5	-5.80	1.35	1.39
1	N	1016	A	O3'-P	5.80	1.68	1.61
1	N	1268	G	P-O5'	-5.80	1.53	1.59
1	N	601	G	C6-N1	5.80	1.43	1.39
1	N	48	C	O4'-C1'	5.80	1.49	1.41
1	N	235	C	N3-C4	5.80	1.38	1.33
1	N	1124	G	N7-C5	-5.80	1.35	1.39
1	N	39	G	N3-C4	5.79	1.39	1.35
1	N	572	A	C6-N6	5.79	1.38	1.33
1	N	973	G	C5-C4	-5.79	1.34	1.38
1	N	987	G	N9-C8	5.79	1.42	1.37
1	N	31	G	C5-C6	-5.79	1.36	1.42
1	N	297	G	C2'-C1'	-5.79	1.47	1.53
1	N	721	G	N9-C8	5.79	1.42	1.37
1	N	1325	C	N3-C4	5.79	1.38	1.33
1	N	1454	G	C2-N3	5.79	1.37	1.32
1	N	661	G	C2-N2	5.79	1.40	1.34
1	N	1111	A	C6-N6	5.79	1.38	1.33
1	N	279	A	N9-C8	-5.79	1.33	1.37
1	N	1294	G	C3'-O3'	5.79	1.50	1.42
1	N	317	U	P-O5'	-5.79	1.53	1.59
1	N	608	A	C5-C4	5.79	1.42	1.38
1	N	662	U	C1'-N1	5.79	1.57	1.48
1	N	1200	C	C5'-C4'	5.79	1.58	1.51
1	N	1246	A	C2'-C1'	-5.79	1.47	1.53
1	N	1142	G	N3-C4	-5.79	1.31	1.35
1	N	1297	G	C6-N1	5.79	1.43	1.39
1	N	137	U	C2'-C1'	-5.79	1.47	1.53
1	N	211	G	N7-C5	-5.79	1.35	1.39
1	N	690	G	N7-C5	-5.79	1.35	1.39
1	N	725	G	P-O5'	-5.79	1.53	1.59
1	N	1095	U	C4'-O4'	5.79	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1159	U	C4-O4	5.79	1.28	1.23
1	N	1274	A	C2'-O2'	-5.79	1.34	1.41
1	N	238	A	C2'-C1'	-5.78	1.47	1.53
1	N	374	A	P-O5'	-5.78	1.53	1.59
1	N	643	C	C3'-C2'	5.78	1.59	1.52
1	N	978	A	C5'-C4'	5.78	1.58	1.51
1	N	1473	G	P-O5'	-5.78	1.53	1.59
1	N	13	U	N3-C4	5.78	1.43	1.38
1	N	509	A	C5-C6	5.78	1.46	1.41
1	N	927	G	C5-C4	5.78	1.42	1.38
1	N	944	G	N3-C4	-5.78	1.31	1.35
1	N	1523	G	N7-C5	-5.78	1.35	1.39
1	N	319	G	C2-N2	5.78	1.40	1.34
1	N	333	U	C1'-N1	5.78	1.57	1.48
1	N	534	U	N3-C4	5.78	1.43	1.38
1	N	586	C	C4-N4	5.78	1.39	1.33
1	N	684	U	C4'-C3'	-5.78	1.46	1.52
1	N	733	G	N1-C2	5.78	1.42	1.37
1	N	1064	G	C5-C4	-5.78	1.34	1.38
1	N	1360	A	C5-C4	-5.78	1.34	1.38
1	N	167	A	C6-N6	5.78	1.38	1.33
1	N	359	G	N7-C5	-5.78	1.35	1.39
1	N	528	C	C4'-C3'	5.78	1.59	1.53
1	N	1379	G	C6-N1	5.78	1.43	1.39
1	N	869	G	N3-C4	-5.77	1.31	1.35
1	N	508	U	C1'-N1	5.77	1.57	1.48
1	N	517	G	C2-N2	5.77	1.40	1.34
1	N	823	C	N3-C4	5.77	1.38	1.33
1	N	898	G	N7-C5	-5.77	1.35	1.39
1	N	1001	C	C3'-C2'	5.77	1.59	1.52
1	N	36	C	C2-N3	5.77	1.40	1.35
1	N	448	A	C4'-C3'	-5.77	1.46	1.52
1	N	291	U	C3'-O3'	5.77	1.50	1.42
1	N	606	G	N7-C5	-5.77	1.35	1.39
1	N	830	G	C4'-C3'	-5.77	1.46	1.52
1	N	950	U	C3'-O3'	5.77	1.50	1.42
1	N	991	U	C5'-C4'	5.77	1.58	1.51
1	N	1078	U	C1'-N1	5.77	1.57	1.48
1	N	1310	G	C2-N2	5.77	1.40	1.34
1	N	1429	A	N7-C5	-5.77	1.35	1.39
1	N	463	U	O3'-P	-5.77	1.54	1.61
1	N	944	G	N9-C8	-5.76	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1451	U	C4-O4	-5.76	1.19	1.23
1	N	1431	A	C6-N1	-5.76	1.31	1.35
1	N	597	G	N9-C4	5.76	1.42	1.38
1	N	1177	G	N3-C4	-5.76	1.31	1.35
1	N	253	A	C3'-O3'	5.76	1.50	1.42
1	N	339	C	C3'-C2'	-5.76	1.46	1.52
1	N	359	G	C3'-O3'	5.76	1.50	1.42
1	N	468	A	O3'-P	-5.76	1.54	1.61
1	N	887	G	C5-C4	5.76	1.42	1.38
1	N	1269	A	O3'-P	-5.76	1.54	1.61
1	N	340	U	C2'-C1'	-5.76	1.47	1.53
1	N	799	G	N1-C2	5.76	1.42	1.37
1	N	1345	U	P-O5'	-5.76	1.53	1.59
1	N	30	U	C5'-C4'	5.75	1.58	1.51
1	N	1255	G	O4'-C1'	5.75	1.49	1.41
1	N	305	G	O4'-C1'	-5.75	1.34	1.41
1	N	173	U	C3'-C2'	5.75	1.59	1.52
1	N	198	G	N3-C4	-5.75	1.31	1.35
1	N	934	C	C5'-C4'	5.75	1.58	1.51
1	N	1040	U	N1-C6	5.75	1.43	1.38
1	N	1295	U	N1-C2	5.75	1.43	1.38
1	N	508	U	N1-C2	5.75	1.43	1.38
1	N	550	G	N9-C4	5.75	1.42	1.38
1	N	50	A	C4'-C3'	5.75	1.59	1.53
1	N	363	A	P-O5'	-5.75	1.54	1.59
1	N	714	G	C2'-C1'	-5.75	1.47	1.53
1	N	1085	U	C5'-C4'	5.75	1.58	1.51
1	N	1123	U	N1-C2	-5.75	1.33	1.38
1	N	1172	C	N1-C2	-5.75	1.34	1.40
1	N	1321	U	C5'-C4'	5.75	1.58	1.51
1	N	1454	G	C8-N7	5.75	1.34	1.30
1	N	205	A	P-O5'	5.75	1.65	1.59
1	N	1108	G	N3-C4	-5.75	1.31	1.35
1	N	205	A	C3'-O3'	5.74	1.50	1.42
1	N	390	U	N1-C6	5.74	1.43	1.38
1	N	561	U	C4'-O4'	5.74	1.53	1.45
1	N	843	U	C4-O4	5.74	1.28	1.23
1	N	1088	G	N1-C2	5.74	1.42	1.37
1	N	1266	G	C4'-C3'	5.74	1.59	1.53
1	N	1524	C	C4-N4	5.74	1.39	1.33
1	N	386	C	C2-O2	5.74	1.29	1.24
1	N	927	G	N7-C5	-5.74	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1343	G	C4'-O4'	-5.74	1.38	1.45
1	N	595	A	C8-N7	-5.74	1.27	1.31
1	N	761	G	P-O5'	-5.74	1.54	1.59
1	N	655	A	N1-C2	5.74	1.39	1.34
1	N	1297	G	C2-N3	5.74	1.37	1.32
1	N	485	U	C4'-C3'	5.73	1.59	1.53
1	N	1306	A	N9-C8	5.73	1.42	1.37
1	N	1312	G	N1-C2	-5.73	1.33	1.37
1	N	13	U	N1-C2	5.73	1.43	1.38
1	N	72	A	C6-N6	5.73	1.38	1.33
1	N	215	C	C1'-N1	5.73	1.57	1.48
1	N	356	A	C6-N6	5.73	1.38	1.33
1	N	634	C	N1-C6	5.73	1.40	1.37
1	N	745	G	C8-N7	-5.73	1.27	1.30
1	N	1240	U	C2-N3	5.73	1.41	1.37
1	N	391	G	C6-O6	-5.73	1.19	1.24
1	N	861	G	O3'-P	-5.73	1.54	1.61
1	N	885	G	C3'-C2'	5.73	1.59	1.52
1	N	1275	A	C3'-C2'	5.73	1.59	1.52
1	N	287	U	P-O5'	-5.73	1.54	1.59
1	N	290	C	C4-N4	5.73	1.39	1.33
1	N	216	U	C4'-C3'	5.73	1.59	1.53
1	N	394	G	N9-C8	-5.73	1.33	1.37
1	N	454	G	P-O5'	-5.73	1.54	1.59
1	N	268	U	C2'-C1'	-5.73	1.47	1.53
1	N	1080	A	N7-C5	-5.73	1.35	1.39
1	N	1395	C	C3'-C2'	5.73	1.59	1.52
1	N	1428	A	N7-C5	-5.72	1.35	1.39
1	N	754	C	N1-C2	5.72	1.45	1.40
1	N	859	G	C8-N7	-5.72	1.27	1.30
1	N	1534	A	C2-N3	5.72	1.38	1.33
1	N	210	C	N1-C2	5.72	1.45	1.40
1	N	848	C	C5'-C4'	5.72	1.58	1.51
1	N	1302	C	N3-C4	5.72	1.38	1.33
1	N	568	G	P-O5'	5.71	1.65	1.59
1	N	966	G	N1-C2	5.71	1.42	1.37
1	N	990	C	C4-C5	-5.71	1.38	1.43
1	N	994	A	O3'-P	-5.71	1.54	1.61
1	N	208	U	C4'-O4'	-5.71	1.38	1.45
1	N	354	G	C6-N1	5.71	1.43	1.39
1	N	906	A	C5-C4	5.71	1.42	1.38
1	N	992	U	C3'-O3'	5.71	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1467	C	C2-N3	5.71	1.40	1.35
1	N	570	G	N7-C5	-5.71	1.35	1.39
1	N	955	U	P-O5'	-5.71	1.54	1.59
1	N	1242	G	C8-N7	-5.71	1.27	1.30
1	N	1410	A	C4'-O4'	5.71	1.52	1.45
1	N	57	G	O3'-P	-5.71	1.54	1.61
1	N	1053	G	N3-C4	-5.71	1.31	1.35
1	N	1428	A	C2'-C1'	-5.71	1.47	1.53
1	N	146	G	C2-N3	5.71	1.37	1.32
1	N	684	U	C1'-N1	5.71	1.57	1.48
1	N	739	C	C3'-C2'	5.71	1.59	1.52
1	N	741	G	C2-N3	5.71	1.37	1.32
1	N	1077	G	C2-N3	5.71	1.37	1.32
1	N	1248	A	N7-C5	-5.71	1.35	1.39
1	N	380	G	O4'-C1'	-5.71	1.34	1.41
1	N	472	U	C4'-C3'	5.71	1.59	1.53
1	N	4	U	C3'-O3'	5.70	1.50	1.42
1	N	236	A	N9-C4	5.70	1.41	1.37
1	N	1145	A	N7-C5	-5.70	1.35	1.39
1	N	294	U	N3-C4	5.70	1.43	1.38
1	N	411	A	C6-N6	5.70	1.38	1.33
1	N	502	A	C8-N7	-5.70	1.27	1.31
1	N	80	A	N9-C8	-5.70	1.33	1.37
1	N	146	G	N7-C5	5.70	1.42	1.39
1	N	167	A	C4'-C3'	-5.70	1.46	1.52
1	N	353	A	C4'-C3'	5.70	1.59	1.53
1	N	647	C	O3'-P	-5.70	1.54	1.61
1	N	1267	C	C1'-N1	5.70	1.57	1.48
1	N	160	A	C6-N1	5.70	1.39	1.35
1	N	1018	G	N9-C4	-5.70	1.33	1.38
1	N	1109	C	O3'-P	-5.70	1.54	1.61
1	N	1315	U	C4'-C3'	5.70	1.59	1.53
1	N	192	A	N3-C4	-5.70	1.31	1.34
1	N	1237	C	P-O5'	-5.70	1.54	1.59
1	N	598	U	P-O5'	-5.70	1.54	1.59
1	N	676	A	O4'-C1'	5.70	1.49	1.41
1	N	822	U	N1-C2	-5.70	1.33	1.38
1	N	832	G	N9-C8	-5.70	1.33	1.37
1	N	789	U	N1-C2	5.69	1.43	1.38
1	N	24	U	C1'-N1	5.69	1.57	1.48
1	N	197	A	C5-C4	-5.69	1.34	1.38
1	N	323	U	O3'-P	5.69	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	629	A	C8-N7	-5.69	1.27	1.31
1	N	753	A	C8-N7	-5.69	1.27	1.31
1	N	974	A	O3'-P	-5.69	1.54	1.61
1	N	1152	A	C8-N7	-5.69	1.27	1.31
1	N	1157	A	C6-N1	5.69	1.39	1.35
1	N	275	G	C2-N3	5.69	1.37	1.32
1	N	475	C	C2'-C1'	5.69	1.59	1.53
1	N	988	G	C4'-C3'	5.69	1.59	1.53
1	N	1179	A	C3'-O3'	5.69	1.50	1.42
1	N	1406	U	C4-C5	-5.69	1.38	1.43
1	N	1431	A	C5-C4	5.69	1.42	1.38
1	N	181	A	N9-C4	-5.68	1.34	1.37
1	N	617	G	N3-C4	-5.68	1.31	1.35
1	N	891	U	C2'-C1'	-5.68	1.47	1.53
1	N	522	C	C1'-N1	5.68	1.57	1.48
1	N	871	U	O3'-P	-5.68	1.54	1.61
1	N	1248	A	P-O5'	-5.68	1.54	1.59
1	N	1349	A	C2'-C1'	-5.68	1.47	1.53
1	N	66	A	C1'-N9	5.68	1.57	1.48
1	N	110	C	C2-O2	-5.68	1.19	1.24
1	N	393	A	C6-N1	5.68	1.39	1.35
1	N	429	U	C3'-O3'	5.68	1.50	1.42
1	N	578	C	C2'-C1'	-5.68	1.47	1.53
1	N	702	A	C4'-C3'	-5.68	1.46	1.52
1	N	1068	G	O3'-P	-5.68	1.54	1.61
1	N	173	U	N1-C6	5.68	1.43	1.38
1	N	524	G	N7-C5	-5.68	1.35	1.39
1	N	887	G	C2'-C1'	5.68	1.59	1.53
1	N	1232	U	N3-C4	5.68	1.43	1.38
1	N	1342	C	C2'-C1'	-5.68	1.47	1.53
1	N	1403	C	C4-N4	5.68	1.39	1.33
1	N	303	A	N3-C4	-5.67	1.31	1.34
1	N	560	A	O3'-P	-5.67	1.54	1.61
1	N	968	A	C5'-C4'	5.67	1.58	1.51
1	N	1072	G	C4'-C3'	5.67	1.59	1.53
1	N	1195	C	O4'-C1'	5.67	1.49	1.41
1	N	1291	U	P-O5'	-5.67	1.54	1.59
1	N	241	G	N1-C2	5.67	1.42	1.37
1	N	859	G	C1'-N9	5.67	1.57	1.48
1	N	931	C	C4-N4	5.67	1.39	1.33
1	N	1080	A	O3'-P	-5.67	1.54	1.61
1	N	1091	U	C4-O4	5.67	1.28	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	495	A	C6-N6	5.67	1.38	1.33
1	N	553	A	C2-N3	5.67	1.38	1.33
1	N	79	G	C3'-O3'	5.67	1.50	1.42
1	N	299	G	C8-N7	-5.67	1.27	1.30
1	N	615	G	C4'-O4'	5.67	1.52	1.45
1	N	1426	G	P-O5'	-5.67	1.54	1.59
1	N	170	U	O3'-P	-5.67	1.54	1.61
1	N	909	A	C6-N6	5.67	1.38	1.33
1	N	1167	A	C2'-C1'	-5.67	1.47	1.53
1	N	78	A	N3-C4	-5.66	1.31	1.34
1	N	763	G	N3-C4	-5.66	1.31	1.35
1	N	1146	A	C5-C6	5.66	1.46	1.41
1	N	1320	C	C1'-N1	5.66	1.57	1.48
1	N	1344	C	N1-C6	-5.66	1.33	1.37
1	N	1441	A	C2'-O2'	-5.66	1.34	1.41
1	N	1471	U	C3'-C2'	5.66	1.59	1.52
1	N	192	A	C3'-O3'	-5.66	1.34	1.42
1	N	236	A	N3-C4	-5.66	1.31	1.34
1	N	923	A	O3'-P	-5.66	1.54	1.61
1	N	1282	C	N1-C6	-5.66	1.33	1.37
1	N	1383	C	N3-C4	5.66	1.38	1.33
1	N	5	U	C4-C5	5.66	1.48	1.43
1	N	541	G	C5'-C4'	5.66	1.58	1.51
1	N	584	G	C6-O6	-5.66	1.19	1.24
1	N	740	U	C2-N3	5.66	1.41	1.37
1	N	1071	C	C4-N4	5.66	1.39	1.33
1	N	1508	A	C3'-O3'	5.66	1.50	1.42
1	N	1366	C	P-O5'	-5.66	1.54	1.59
1	N	435	A	C3'-C2'	-5.66	1.46	1.52
1	N	1195	C	O5'-C5'	5.66	1.53	1.44
1	N	6	G	C5'-C4'	5.65	1.58	1.51
1	N	473	U	C1'-N1	5.65	1.57	1.48
1	N	522	C	C2-N3	5.65	1.40	1.35
1	N	869	G	O3'-P	-5.65	1.54	1.61
1	N	661	G	N9-C8	5.65	1.41	1.37
1	N	792	A	C6-N6	5.65	1.38	1.33
1	N	714	G	N7-C5	-5.65	1.35	1.39
1	N	750	C	P-O5'	-5.65	1.54	1.59
1	N	802	A	C2'-C1'	-5.65	1.47	1.53
1	N	1198	G	C4'-C3'	5.65	1.59	1.53
1	N	453	G	N9-C8	5.65	1.41	1.37
1	N	729	A	N1-C2	5.65	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1090	U	C5'-C4'	5.65	1.58	1.51
1	N	419	C	C2-N3	5.65	1.40	1.35
1	N	477	C	P-O5'	-5.65	1.54	1.59
1	N	1054	C	N1-C2	5.65	1.45	1.40
1	N	655	A	C5-C6	-5.64	1.35	1.41
1	N	786	G	C6-O6	-5.64	1.19	1.24
1	N	133	U	N1-C2	5.64	1.43	1.38
1	N	164	G	C8-N7	-5.64	1.27	1.30
1	N	182	A	C6-N6	5.64	1.38	1.33
1	N	1154	G	N7-C5	-5.64	1.35	1.39
1	N	765	G	C8-N7	-5.64	1.27	1.30
1	N	316	C	C4'-C3'	-5.64	1.47	1.52
1	N	460	A	N3-C4	-5.64	1.31	1.34
1	N	711	G	C4'-C3'	-5.64	1.47	1.52
1	N	791	G	N9-C8	-5.64	1.33	1.37
1	N	546	A	N3-C4	5.64	1.38	1.34
1	N	920	U	C4'-O4'	-5.64	1.38	1.45
1	N	1192	C	N1-C6	-5.64	1.33	1.37
1	N	294	U	C5-C6	5.64	1.39	1.34
1	N	673	A	C1'-N9	-5.64	1.39	1.46
1	N	866	C	C2'-C1'	-5.64	1.47	1.53
1	N	900	A	C3'-C2'	5.64	1.59	1.52
1	N	1213	A	O3'-P	-5.63	1.54	1.61
1	N	993	G	C5-C6	-5.63	1.36	1.42
1	N	246	A	C2'-C1'	-5.63	1.47	1.53
1	N	821	G	C4'-O4'	5.63	1.52	1.45
1	N	859	G	C4'-C3'	5.63	1.59	1.53
1	N	998	C	C4-C5	-5.63	1.38	1.43
1	N	1274	A	O3'-P	-5.63	1.54	1.61
1	N	1012	A	N9-C4	5.63	1.41	1.37
1	N	1243	C	C2-N3	-5.63	1.31	1.35
1	N	276	G	N9-C4	-5.63	1.33	1.38
1	N	410	G	N1-C2	5.63	1.42	1.37
1	N	411	A	C5-C4	-5.63	1.34	1.38
1	N	515	G	C5-C6	-5.63	1.36	1.42
1	N	1000	A	N9-C8	-5.63	1.33	1.37
1	N	1055	A	C6-N6	-5.63	1.29	1.33
1	N	1082	A	C5-C6	-5.63	1.35	1.41
1	N	1174	G	O3'-P	-5.63	1.54	1.61
1	N	1216	A	N7-C5	-5.63	1.35	1.39
1	N	1283	U	C3'-C2'	5.63	1.59	1.52
1	N	247	G	C8-N7	5.63	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1158	C	C4-N4	5.63	1.39	1.33
1	N	484	G	C5-C4	-5.62	1.34	1.38
1	N	630	A	N9-C4	-5.62	1.34	1.37
1	N	1517	G	C5'-C4'	5.62	1.58	1.51
1	N	156	C	N1-C2	-5.62	1.34	1.40
1	N	391	G	C5'-C4'	5.62	1.58	1.51
1	N	619	U	N1-C6	5.62	1.43	1.38
1	N	1431	A	N9-C4	5.62	1.41	1.37
1	N	1505	G	N9-C8	-5.62	1.33	1.37
1	N	223	A	C4'-O4'	-5.62	1.38	1.45
1	N	702	A	C6-N1	5.62	1.39	1.35
1	N	736	C	C4-C5	-5.62	1.38	1.43
1	N	1289	A	N9-C8	5.62	1.42	1.37
1	N	1323	G	C5'-C4'	-5.62	1.44	1.51
1	N	1452	C	C4'-O4'	5.62	1.52	1.45
1	N	1117	A	P-O5'	-5.62	1.54	1.59
1	N	1133	G	C2-N3	5.62	1.37	1.32
1	N	609	A	C2-N3	-5.62	1.28	1.33
1	N	1181	G	C6-N1	-5.62	1.35	1.39
1	N	1387	G	C2'-C1'	-5.62	1.47	1.53
1	N	493	A	C6-N6	5.62	1.38	1.33
1	N	873	A	C5'-C4'	5.62	1.58	1.51
1	N	1406	U	C2-N3	5.62	1.41	1.37
1	N	374	A	N9-C4	-5.61	1.34	1.37
1	N	889	A	N3-C4	5.61	1.38	1.34
1	N	147	G	C5-C4	-5.61	1.34	1.38
1	N	679	C	N3-C4	5.61	1.37	1.33
1	N	1105	A	N7-C5	-5.61	1.35	1.39
1	N	1295	U	C5'-C4'	5.61	1.58	1.51
1	N	22	G	C8-N7	5.61	1.34	1.30
1	N	220	G	C8-N7	-5.61	1.27	1.30
1	N	259	G	C2-N3	5.61	1.37	1.32
1	N	1473	G	C4'-O4'	-5.61	1.38	1.45
1	N	399	G	C8-N7	-5.61	1.27	1.30
1	N	538	G	C2-N3	5.61	1.37	1.32
1	N	1211	U	N1-C2	5.61	1.43	1.38
1	N	1465	A	C8-N7	-5.61	1.27	1.31
1	N	1475	G	N1-C2	5.61	1.42	1.37
1	N	225	C	C4-N4	5.61	1.39	1.33
1	N	295	C	O4'-C1'	5.61	1.49	1.41
1	N	495	A	P-O5'	-5.61	1.54	1.59
1	N	668	G	N3-C4	-5.61	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	959	A	C3'-O3'	5.61	1.50	1.42
1	N	167	A	N3-C4	-5.60	1.31	1.34
1	N	649	A	N9-C8	-5.60	1.33	1.37
1	N	862	C	C5'-C4'	5.60	1.58	1.51
1	N	11	G	C3'-O3'	5.60	1.50	1.42
1	N	92	U	C2'-C1'	-5.60	1.47	1.53
1	N	155	A	N9-C4	-5.60	1.34	1.37
1	N	734	G	C2-N2	5.60	1.40	1.34
1	N	771	G	C8-N7	-5.60	1.27	1.30
1	N	983	A	C6-N1	5.60	1.39	1.35
1	N	1088	G	C6-N1	5.60	1.43	1.39
1	N	1173	U	O3'-P	-5.60	1.54	1.61
1	N	1384	C	N3-C4	5.60	1.37	1.33
1	N	1481	U	N3-C4	5.60	1.43	1.38
1	N	140	U	O3'-P	-5.60	1.54	1.61
1	N	275	G	C2'-C1'	-5.60	1.47	1.53
1	N	202	G	C5'-C4'	5.60	1.58	1.51
1	N	212	G	C3'-O3'	5.60	1.50	1.42
1	N	284	C	N3-C4	5.60	1.37	1.33
1	N	764	C	C2'-C1'	-5.60	1.47	1.53
1	N	115	G	C5'-C4'	5.60	1.58	1.51
1	N	872	A	N7-C5	-5.60	1.35	1.39
1	N	1031	C	C4'-C3'	5.60	1.59	1.53
1	N	1064	G	N9-C4	5.59	1.42	1.38
1	N	1077	G	N3-C4	-5.59	1.31	1.35
1	N	16	A	C8-N7	-5.59	1.27	1.31
1	N	169	C	N1-C6	-5.59	1.33	1.37
1	N	1049	U	O3'-P	-5.59	1.54	1.61
1	N	1499	A	C2'-C1'	-5.59	1.47	1.53
1	N	557	G	P-O5'	-5.59	1.54	1.59
1	N	829	G	C5-C4	5.59	1.42	1.38
1	N	213	G	C5-C4	5.58	1.42	1.38
1	N	513	C	O3'-P	-5.58	1.54	1.61
1	N	158	G	C6-N1	5.58	1.43	1.39
1	N	931	C	N3-C4	5.58	1.37	1.33
1	N	211	G	N9-C8	-5.58	1.33	1.37
1	N	267	C	C4'-C3'	5.58	1.59	1.53
1	N	1163	A	C5'-C4'	5.58	1.58	1.51
1	N	550	G	N1-C2	5.58	1.42	1.37
1	N	736	C	C1'-N1	5.58	1.57	1.48
1	N	59	A	N9-C8	-5.58	1.33	1.37
1	N	72	A	C5-C6	-5.58	1.36	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	807	A	C8-N7	-5.58	1.27	1.31
1	N	1252	A	O4'-C1'	-5.58	1.34	1.41
1	N	1423	G	P-O5'	-5.58	1.54	1.59
1	N	212	G	N9-C8	-5.57	1.33	1.37
1	N	1092	A	C5'-C4'	5.57	1.58	1.51
1	N	1143	G	N7-C5	-5.57	1.35	1.39
1	N	1241	G	C3'-O3'	5.57	1.50	1.42
1	N	809	G	N9-C8	5.57	1.41	1.37
1	N	85	U	C5'-C4'	5.57	1.58	1.51
1	N	360	G	C5'-C4'	5.57	1.58	1.51
1	N	823	C	C4-N4	5.57	1.39	1.33
1	N	1033	G	C4'-O4'	-5.57	1.38	1.45
1	N	1180	A	O4'-C1'	-5.57	1.34	1.41
1	N	755	G	C2-N2	5.57	1.40	1.34
1	N	1151	A	C5-C4	-5.57	1.34	1.38
1	N	127	G	C2'-C1'	-5.57	1.47	1.53
1	N	647	C	C2'-C1'	-5.57	1.47	1.53
1	N	1129	C	O3'-P	5.57	1.67	1.61
1	N	854	U	C3'-C2'	5.56	1.59	1.52
1	N	901	A	N9-C8	-5.56	1.33	1.37
1	N	1390	U	C5'-C4'	5.56	1.58	1.51
1	N	526	C	N1-C6	5.56	1.40	1.37
1	N	575	G	N7-C5	-5.56	1.35	1.39
1	N	843	U	C3'-O3'	5.56	1.50	1.42
1	N	1373	G	C5'-C4'	5.56	1.58	1.51
1	N	1503	A	N7-C5	-5.56	1.35	1.39
1	N	638	U	C1'-N1	5.56	1.57	1.48
1	N	534	U	O3'-P	-5.56	1.54	1.61
1	N	794	A	C4'-O4'	5.56	1.52	1.45
1	N	1433	A	O3'-P	-5.56	1.54	1.61
1	N	497	G	N9-C4	5.56	1.42	1.38
1	N	636	U	C2-N3	5.56	1.41	1.37
1	N	645	G	O3'-P	-5.56	1.54	1.61
1	N	709	U	C4-C5	-5.56	1.38	1.43
1	N	1057	G	C4'-O4'	-5.56	1.38	1.45
1	N	1446	A	C5'-C4'	5.56	1.58	1.51
1	N	66	A	O3'-P	-5.55	1.54	1.61
1	N	390	U	C2-N3	5.55	1.41	1.37
1	N	611	C	C5-C6	5.55	1.38	1.34
1	N	670	G	N1-C2	5.55	1.42	1.37
1	N	1227	A	C6-N1	5.55	1.39	1.35
1	N	318	G	N9-C4	-5.55	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	593	U	N1-C2	-5.55	1.33	1.38
1	N	814	A	N3-C4	5.55	1.38	1.34
1	N	1426	G	C2-N3	5.55	1.37	1.32
1	N	878	A	C6-N6	5.55	1.38	1.33
1	N	959	A	C8-N7	-5.55	1.27	1.31
1	N	1418	A	C2-N3	5.55	1.38	1.33
1	N	1520	C	O4'-C1'	5.55	1.48	1.41
1	N	248	C	C1'-N1	5.55	1.57	1.48
1	N	606	G	C4'-C3'	5.55	1.59	1.53
1	N	1373	G	C2-N2	5.55	1.40	1.34
1	N	243	A	C4'-C3'	5.54	1.59	1.53
1	N	1290	G	N3-C4	-5.54	1.31	1.35
1	N	609	A	N7-C5	-5.54	1.35	1.39
1	N	789	U	C5-C6	-5.54	1.29	1.34
1	N	104	G	C8-N7	-5.54	1.27	1.30
1	N	144	G	N9-C4	-5.54	1.33	1.38
1	N	1351	U	C4'-O4'	5.54	1.52	1.45
1	N	220	G	N9-C4	-5.54	1.33	1.38
1	N	469	C	C5'-C4'	5.54	1.57	1.51
1	N	498	A	C6-N1	5.54	1.39	1.35
1	N	710	G	C2-N2	5.54	1.40	1.34
1	N	771	G	C3'-C2'	-5.54	1.46	1.52
1	N	1406	U	C2'-C1'	-5.54	1.47	1.53
1	N	179	A	O4'-C1'	5.54	1.48	1.41
1	N	149	A	C5-C4	5.54	1.42	1.38
1	N	961	U	C3'-O3'	5.54	1.49	1.42
1	N	1303	C	C4'-C3'	-5.54	1.47	1.52
1	N	684	U	N3-C4	5.53	1.43	1.38
1	N	836	G	N9-C4	-5.53	1.33	1.38
1	N	135	C	C2-N3	5.53	1.40	1.35
1	N	525	C	N1-C2	5.53	1.45	1.40
1	N	1178	G	C5-C6	-5.53	1.36	1.42
1	N	98	A	C5-C4	5.53	1.42	1.38
1	N	249	U	N1-C2	5.53	1.43	1.38
1	N	752	G	N9-C4	-5.53	1.33	1.38
1	N	1156	G	C2-N2	5.53	1.40	1.34
1	N	1237	C	N1-C2	5.53	1.45	1.40
1	N	1316	G	C8-N7	-5.53	1.27	1.30
1	N	753	A	C4'-C3'	5.53	1.59	1.53
1	N	115	G	N1-C2	5.53	1.42	1.37
1	N	65	A	C6-N1	5.53	1.39	1.35
1	N	251	G	N9-C4	-5.53	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	347	G	C5-C4	5.53	1.42	1.38
1	N	650	G	C1'-N9	5.53	1.57	1.48
1	N	659	U	P-O5'	5.53	1.65	1.59
1	N	892	A	C6-N1	5.53	1.39	1.35
1	N	987	G	N7-C5	5.53	1.42	1.39
1	N	1386	G	N1-C2	5.53	1.42	1.37
1	N	1205	U	N1-C2	-5.52	1.33	1.38
1	N	140	U	C4'-O4'	5.52	1.52	1.45
1	N	1020	G	N1-C2	5.52	1.42	1.37
1	N	1360	A	C6-N1	5.52	1.39	1.35
1	N	681	A	O4'-C1'	-5.52	1.34	1.41
1	N	557	G	O3'-P	-5.52	1.54	1.61
1	N	686	U	C4-C5	5.52	1.48	1.43
1	N	1163	A	C4'-O4'	-5.52	1.38	1.45
1	N	160	A	C2'-C1'	-5.52	1.47	1.53
1	N	793	U	C2'-C1'	-5.52	1.47	1.53
1	N	1452	C	C4-C5	5.52	1.47	1.43
1	N	685	G	N1-C2	5.52	1.42	1.37
1	N	828	U	C1'-N1	5.52	1.57	1.48
1	N	462	G	C2-N3	5.51	1.37	1.32
1	N	826	C	C1'-N1	-5.51	1.39	1.46
1	N	1484	C	C2-N3	5.51	1.40	1.35
1	N	442	G	C5-C4	-5.51	1.34	1.38
1	N	527	G	C5-C4	-5.51	1.34	1.38
1	N	713	G	N1-C2	5.51	1.42	1.37
1	N	945	G	C1'-N9	5.51	1.57	1.48
1	N	7	A	C6-N6	5.51	1.38	1.33
1	N	404	G	C6-N1	-5.51	1.35	1.39
1	N	690	G	C3'-O3'	5.51	1.49	1.42
1	N	807	A	C5-C6	5.51	1.46	1.41
1	N	1061	G	N1-C2	5.51	1.42	1.37
1	N	1296	C	N1-C6	5.51	1.40	1.37
1	N	1409	C	N1-C2	-5.51	1.34	1.40
1	N	1183	U	C3'-C2'	-5.51	1.46	1.52
1	N	1314	C	C4'-O4'	-5.51	1.38	1.45
1	N	277	C	O3'-P	-5.51	1.54	1.61
1	N	347	G	O4'-C1'	5.51	1.48	1.41
1	N	784	A	C6-N1	5.51	1.39	1.35
1	N	1221	G	C1'-N9	5.51	1.57	1.48
1	N	1304	G	C2'-C1'	-5.51	1.47	1.53
1	N	84	U	N3-C4	5.50	1.43	1.38
1	N	602	A	N7-C5	-5.50	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	637	C	C4-C5	-5.50	1.38	1.43
1	N	1009	U	C4'-C3'	5.50	1.59	1.53
1	N	1131	G	C2-N2	5.50	1.40	1.34
1	N	621	A	C3'-O3'	5.50	1.49	1.42
1	N	624	C	C2'-C1'	-5.50	1.47	1.53
1	N	54	C	P-O5'	-5.50	1.54	1.59
1	N	364	A	N1-C2	-5.50	1.29	1.34
1	N	541	G	N9-C4	-5.50	1.33	1.38
1	N	917	G	O4'-C1'	5.50	1.48	1.41
1	N	999	C	C4-C5	5.50	1.47	1.43
1	N	1210	C	N3-C4	5.50	1.37	1.33
1	N	237	G	C2-N3	5.50	1.37	1.32
1	N	248	C	N1-C6	5.50	1.40	1.37
1	N	296	U	C3'-O3'	5.50	1.49	1.42
1	N	376	G	C6-O6	5.50	1.29	1.24
1	N	715	A	P-O5'	-5.50	1.54	1.59
1	N	798	U	C2'-O2'	-5.50	1.34	1.41
1	N	273	U	N1-C2	-5.50	1.33	1.38
1	N	476	U	P-O5'	-5.50	1.54	1.59
1	N	759	A	C5'-C4'	5.50	1.57	1.51
1	N	834	U	C5-C6	-5.50	1.29	1.34
1	N	1453	G	C3'-O3'	-5.50	1.34	1.42
1	N	1507	A	N9-C8	-5.50	1.33	1.37
1	N	42	G	C5-C4	5.50	1.42	1.38
1	N	1391	U	P-O5'	-5.50	1.54	1.59
1	N	1450	U	C3'-C2'	5.50	1.58	1.52
1	N	986	U	N1-C2	-5.49	1.33	1.38
1	N	1432	G	C2'-C1'	-5.49	1.47	1.53
1	N	136	C	N1-C6	5.49	1.40	1.37
1	N	617	G	C5-C4	-5.49	1.34	1.38
1	N	1161	C	C4-N4	5.49	1.38	1.33
1	N	1425	U	C4-O4	-5.49	1.19	1.23
1	N	177	G	C6-N1	5.49	1.43	1.39
1	N	232	G	C5'-C4'	5.49	1.57	1.51
1	N	524	G	C2'-C1'	-5.49	1.47	1.53
1	N	1083	U	O3'-P	-5.49	1.54	1.61
1	N	1345	U	N3-C4	5.49	1.43	1.38
1	N	1423	G	N3-C4	-5.49	1.31	1.35
1	N	526	C	P-O5'	-5.49	1.54	1.59
1	N	976	G	N7-C5	-5.49	1.35	1.39
1	N	1465	A	C2'-C1'	-5.49	1.47	1.53
1	N	251	G	C8-N7	-5.49	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	350	G	C5-C6	-5.49	1.36	1.42
1	N	1245	C	C5'-C4'	5.49	1.57	1.51
1	N	1266	G	C6-N1	5.49	1.43	1.39
1	N	979	C	C3'-C2'	-5.48	1.46	1.52
1	N	286	C	N1-C6	5.48	1.40	1.37
1	N	966	G	O3'-P	-5.48	1.54	1.61
1	N	1096	C	C4-C5	-5.48	1.38	1.43
1	N	1260	G	O3'-P	-5.48	1.54	1.61
1	N	1361	G	C2-N2	5.48	1.40	1.34
1	N	1161	C	N1-C6	5.48	1.40	1.37
1	N	1389	C	C2'-C1'	-5.48	1.47	1.53
1	N	285	C	C2'-C1'	-5.48	1.47	1.53
1	N	747	A	O4'-C1'	5.48	1.48	1.41
1	N	792	A	C5-C6	5.48	1.46	1.41
1	N	1033	G	C3'-C2'	5.48	1.58	1.52
1	N	1347	G	C4'-O4'	5.48	1.52	1.45
1	N	196	A	N9-C4	-5.48	1.34	1.37
1	N	473	U	N1-C2	-5.48	1.33	1.38
1	N	501	C	P-O5'	-5.48	1.54	1.59
1	N	14	U	C5'-C4'	5.47	1.57	1.51
1	N	582	C	C4-N4	5.47	1.38	1.33
1	N	1057	G	C8-N7	-5.47	1.27	1.30
1	N	919	A	N1-C2	5.47	1.39	1.34
1	N	1218	C	C2-N3	5.47	1.40	1.35
1	N	35	G	C6-N1	5.47	1.43	1.39
1	N	1278	G	C8-N7	5.47	1.34	1.30
1	N	579	A	P-O5'	5.47	1.65	1.59
1	N	850	U	O3'-P	-5.47	1.54	1.61
1	N	919	A	N3-C4	5.47	1.38	1.34
1	N	197	A	C2'-C1'	-5.47	1.47	1.53
1	N	634	C	N1-C2	-5.47	1.34	1.40
1	N	253	A	N7-C5	-5.46	1.35	1.39
1	N	1175	G	N3-C4	5.46	1.39	1.35
1	N	1230	C	C2-N3	5.46	1.40	1.35
1	N	1263	C	C4-N4	5.46	1.38	1.33
1	N	1506	U	C5'-C4'	5.46	1.57	1.51
1	N	319	G	N3-C4	5.46	1.39	1.35
1	N	388	G	N9-C4	5.46	1.42	1.38
1	N	481	G	N3-C4	5.46	1.39	1.35
1	N	585	G	C5-C6	-5.46	1.36	1.42
1	N	908	A	N1-C2	5.46	1.39	1.34
1	N	594	U	N1-C2	-5.46	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	488	C	C4-N4	5.46	1.38	1.33
1	N	537	G	C5-C6	-5.46	1.36	1.42
1	N	775	G	N3-C4	-5.46	1.31	1.35
1	N	1183	U	C2-N3	5.46	1.41	1.37
1	N	1186	G	C5'-C4'	5.46	1.57	1.51
1	N	1419	G	C4'-O4'	-5.46	1.38	1.45
1	N	33	A	C8-N7	-5.46	1.27	1.31
1	N	98	A	C6-N6	5.46	1.38	1.33
1	N	364	A	C6-N6	5.46	1.38	1.33
1	N	963	G	C8-N7	-5.46	1.27	1.30
1	N	1334	G	C5-C4	5.46	1.42	1.38
1	N	38	G	O3'-P	-5.46	1.54	1.61
1	N	447	G	N7-C5	-5.46	1.35	1.39
1	N	960	U	C1'-N1	5.46	1.56	1.48
1	N	1033	G	C5-C6	-5.46	1.36	1.42
1	N	1227	A	C3'-O3'	5.46	1.49	1.42
1	N	127	G	C2-N3	5.45	1.37	1.32
1	N	348	G	C4'-C3'	-5.45	1.47	1.52
1	N	1127	G	C5'-C4'	5.45	1.57	1.51
1	N	1286	U	N1-C2	-5.45	1.33	1.38
1	N	1515	G	C2-N3	5.45	1.37	1.32
1	N	1529	G	O3'-P	-5.45	1.54	1.61
1	N	1019	A	C3'-O3'	5.45	1.49	1.42
1	N	1334	G	C5-C6	-5.45	1.36	1.42
1	N	46	G	N1-C2	5.45	1.42	1.37
1	N	184	G	N9-C4	5.45	1.42	1.38
1	N	669	G	N1-C2	5.45	1.42	1.37
1	N	275	G	C3'-C2'	5.45	1.58	1.52
1	N	872	A	C5'-C4'	5.45	1.57	1.51
1	N	975	A	P-O5'	-5.45	1.54	1.59
1	N	1222	G	N3-C4	5.45	1.39	1.35
1	N	787	A	P-O5'	-5.45	1.54	1.59
1	N	1047	G	N9-C4	-5.45	1.33	1.38
1	N	74	A	N9-C4	5.45	1.41	1.37
1	N	130	A	N1-C2	-5.45	1.29	1.34
1	N	212	G	P-O5'	-5.45	1.54	1.59
1	N	417	G	N1-C2	5.45	1.42	1.37
1	N	678	U	O3'-P	-5.45	1.54	1.61
1	N	1207	G	C2-N3	-5.45	1.28	1.32
1	N	1242	G	N1-C2	5.45	1.42	1.37
1	N	880	C	N1-C2	-5.44	1.34	1.40
1	N	77	A	C5'-C4'	5.44	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	204	G	N7-C5	-5.44	1.35	1.39
1	N	415	A	C8-N7	5.44	1.35	1.31
1	N	130	A	C6-N1	5.44	1.39	1.35
1	N	223	A	C8-N7	-5.44	1.27	1.31
1	N	259	G	C8-N7	-5.44	1.27	1.30
1	N	337	G	C5-C4	5.44	1.42	1.38
1	N	695	A	C8-N7	5.44	1.35	1.31
1	N	896	C	O3'-P	5.44	1.67	1.61
1	N	921	U	C3'-C2'	-5.44	1.46	1.52
1	N	1274	A	C3'-C2'	-5.44	1.46	1.52
1	N	353	A	C8-N7	-5.44	1.27	1.31
1	N	484	G	N9-C4	-5.44	1.33	1.38
1	N	965	U	O3'-P	-5.44	1.54	1.61
1	N	693	G	N1-C2	5.44	1.42	1.37
1	N	698	G	C4'-C3'	-5.44	1.47	1.52
1	N	1130	A	O3'-P	-5.44	1.54	1.61
1	N	1504	G	C8-N7	-5.44	1.27	1.30
1	N	302	G	C8-N7	5.43	1.34	1.30
1	N	479	U	C2-O2	5.43	1.27	1.22
1	N	1076	U	C3'-C2'	5.43	1.58	1.52
1	N	1130	A	C2-N3	5.43	1.38	1.33
1	N	1218	C	C1'-N1	5.43	1.56	1.48
1	N	615	G	C8-N7	-5.43	1.27	1.30
1	N	805	C	C4-N4	5.43	1.38	1.33
1	N	939	G	N1-C2	5.43	1.42	1.37
1	N	1275	A	C8-N7	5.43	1.35	1.31
1	N	1416	G	C2-N2	5.43	1.40	1.34
1	N	962	C	C1'-N1	5.43	1.56	1.48
1	N	1356	G	N9-C8	5.43	1.41	1.37
1	N	231	U	P-O5'	-5.43	1.54	1.59
1	N	573	A	N3-C4	5.43	1.38	1.34
1	N	607	A	C1'-N9	5.43	1.56	1.48
1	N	775	G	N7-C5	-5.43	1.35	1.39
1	N	999	C	C3'-O3'	-5.43	1.34	1.42
1	N	301	G	N9-C4	-5.43	1.33	1.38
1	N	419	C	C4-N4	5.43	1.38	1.33
1	N	1120	C	N1-C6	-5.43	1.33	1.37
1	N	31	G	N9-C8	5.43	1.41	1.37
1	N	342	C	O3'-P	-5.43	1.54	1.61
1	N	554	A	N9-C4	-5.43	1.34	1.37
1	N	730	G	N3-C4	-5.42	1.31	1.35
1	N	1339	A	P-O5'	5.42	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1358	U	C3'-C2'	5.42	1.58	1.52
1	N	207	C	N3-C4	5.42	1.37	1.33
1	N	347	G	C8-N7	-5.42	1.27	1.30
1	N	515	G	N1-C2	5.42	1.42	1.37
1	N	738	C	C2-N3	5.42	1.40	1.35
1	N	1169	A	C5-C4	5.42	1.42	1.38
1	N	1381	U	O3'-P	-5.42	1.54	1.61
1	N	118	U	N1-C6	-5.42	1.33	1.38
1	N	193	C	C5'-C4'	5.42	1.57	1.51
1	N	240	G	C6-N1	5.42	1.43	1.39
1	N	681	A	C8-N7	-5.42	1.27	1.31
1	N	846	G	P-O5'	5.42	1.65	1.59
1	N	101	A	C6-N6	5.42	1.38	1.33
1	N	122	G	O3'-P	5.42	1.67	1.61
1	N	275	G	C5'-C4'	5.42	1.57	1.51
1	N	595	A	N9-C8	-5.42	1.33	1.37
1	N	627	G	C5-C6	-5.42	1.36	1.42
1	N	755	G	C2-N3	5.42	1.37	1.32
1	N	1184	G	C5-C6	-5.42	1.36	1.42
1	N	1296	C	C4'-C3'	-5.42	1.47	1.52
1	N	220	G	C3'-O3'	5.42	1.49	1.42
1	N	898	G	N3-C4	-5.42	1.31	1.35
1	N	334	C	C3'-O3'	5.41	1.49	1.42
1	N	351	G	C6-N1	5.41	1.43	1.39
1	N	727	G	N9-C4	-5.41	1.33	1.38
1	N	1193	G	N9-C8	5.41	1.41	1.37
1	N	249	U	C3'-O3'	5.41	1.49	1.42
1	N	692	U	O3'-P	-5.41	1.54	1.61
1	N	1112	C	C4'-C3'	5.41	1.59	1.53
1	N	407	U	P-O5'	-5.41	1.54	1.59
1	N	1087	G	N9-C4	5.41	1.42	1.38
1	N	1204	A	C8-N7	-5.41	1.27	1.31
1	N	17	U	C4'-C3'	-5.41	1.47	1.52
1	N	390	U	O3'-P	-5.41	1.54	1.61
1	N	651	C	C2'-C1'	5.41	1.59	1.53
1	N	1168	U	N3-C4	5.41	1.43	1.38
1	N	1278	G	O3'-P	-5.41	1.54	1.61
1	N	1201	A	N1-C2	5.41	1.39	1.34
1	N	878	A	P-O5'	-5.41	1.54	1.59
1	N	1162	C	N1-C6	5.41	1.40	1.37
1	N	1471	U	C4'-C3'	-5.41	1.47	1.52
1	N	52	C	N3-C4	5.40	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	751	U	C2-N3	5.40	1.41	1.37
1	N	1277	C	C5'-C4'	5.40	1.57	1.51
1	N	1383	C	C4-N4	5.40	1.38	1.33
1	N	203	G	C5-C4	5.40	1.42	1.38
1	N	1366	C	C5-C6	5.40	1.38	1.34
1	N	465	A	C6-N6	5.40	1.38	1.33
1	N	694	A	O3'-P	-5.40	1.54	1.61
1	N	843	U	C4-C5	-5.40	1.38	1.43
1	N	956	U	N1-C6	5.40	1.42	1.38
1	N	1313	U	C3'-C2'	-5.40	1.46	1.52
1	N	1356	G	C8-N7	5.40	1.34	1.30
1	N	368	U	C2'-C1'	-5.40	1.47	1.53
1	N	430	A	C5'-C4'	5.40	1.57	1.51
1	N	856	C	C5-C6	5.40	1.38	1.34
1	N	520	A	C6-N6	5.40	1.38	1.33
1	N	574	A	C6-N1	5.40	1.39	1.35
1	N	1177	G	C5'-C4'	5.40	1.57	1.51
1	N	933	G	C3'-O3'	5.40	1.49	1.42
1	N	1272	G	C2'-C1'	-5.40	1.47	1.53
1	N	231	U	C2-O2	5.39	1.27	1.22
1	N	1082	A	P-O5'	-5.39	1.54	1.59
1	N	1133	G	C5-C4	-5.39	1.34	1.38
1	N	753	A	C5'-C4'	-5.39	1.44	1.51
1	N	878	A	N3-C4	-5.39	1.31	1.34
1	N	1324	A	C6-N6	5.39	1.38	1.33
1	N	1511	G	C2'-C1'	-5.39	1.47	1.53
1	N	1483	A	C2'-C1'	-5.39	1.47	1.53
1	N	1517	G	C2-N2	5.39	1.40	1.34
1	N	18	C	N1-C2	-5.39	1.34	1.40
1	N	799	G	C8-N7	-5.39	1.27	1.30
1	N	952	U	C2-N3	5.39	1.41	1.37
1	N	115	G	P-O5'	-5.39	1.54	1.59
1	N	1346	A	N9-C8	-5.39	1.33	1.37
1	N	1507	A	C4'-O4'	5.39	1.52	1.45
1	N	460	A	C5-C4	5.39	1.42	1.38
1	N	1341	U	O3'-P	-5.39	1.54	1.61
1	N	1395	C	O3'-P	-5.39	1.54	1.61
1	N	143	A	N9-C4	5.38	1.41	1.37
1	N	331	G	C5'-C4'	5.38	1.57	1.51
1	N	581	G	C2-N3	5.38	1.37	1.32
1	N	607	A	P-O5'	-5.38	1.54	1.59
1	N	1132	C	C2-N3	5.38	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1449	C	C5'-C4'	5.38	1.57	1.51
1	N	399	G	C5-C6	-5.38	1.36	1.42
1	N	1482	G	N3-C4	5.38	1.39	1.35
1	N	93	U	C4'-C3'	-5.38	1.47	1.52
1	N	678	U	N1-C6	-5.38	1.33	1.38
1	N	722	G	C5-C6	-5.38	1.36	1.42
1	N	1267	C	C4-N4	5.38	1.38	1.33
1	N	1064	G	N3-C4	5.38	1.39	1.35
1	N	636	U	C1'-N1	5.38	1.56	1.48
1	N	802	A	N9-C4	5.38	1.41	1.37
1	N	1067	A	C5-C6	5.38	1.45	1.41
1	N	1427	C	O3'-P	-5.38	1.54	1.61
1	N	1440	U	P-O5'	5.38	1.65	1.59
1	N	259	G	C2'-C1'	-5.38	1.47	1.53
1	N	648	A	C6-N6	5.38	1.38	1.33
1	N	658	C	C5-C6	5.38	1.38	1.34
1	N	1269	A	P-O5'	-5.38	1.54	1.59
1	N	260	G	N9-C4	5.38	1.42	1.38
1	N	324	G	N9-C4	-5.38	1.33	1.38
1	N	1035	A	N1-C2	-5.38	1.29	1.34
1	N	1241	G	C2'-C1'	-5.38	1.47	1.53
1	N	153	C	C2'-C1'	-5.37	1.47	1.53
1	N	635	A	N1-C2	-5.37	1.29	1.34
1	N	1432	G	N7-C5	5.37	1.42	1.39
1	N	161	A	C4'-O4'	-5.37	1.38	1.45
1	N	428	G	N1-C2	5.37	1.42	1.37
1	N	577	G	N7-C5	5.37	1.42	1.39
1	N	665	A	C8-N7	-5.37	1.27	1.31
1	N	946	A	C2'-O2'	-5.37	1.34	1.41
1	N	963	G	C4'-C3'	5.37	1.59	1.53
1	N	976	G	C3'-C2'	5.37	1.58	1.52
1	N	1273	C	C4-C5	5.37	1.47	1.43
1	N	1420	U	N3-C4	5.37	1.43	1.38
1	N	1446	A	C8-N7	-5.37	1.27	1.31
1	N	709	U	C5-C6	5.37	1.39	1.34
1	N	1130	A	C5'-C4'	5.37	1.57	1.51
1	N	190	A	C4'-O4'	-5.37	1.38	1.45
1	N	255	G	C3'-C2'	5.37	1.58	1.52
1	N	540	G	N1-C2	5.37	1.42	1.37
1	N	632	U	C2-O2	5.37	1.27	1.22
1	N	833	G	C5-C4	5.37	1.42	1.38
1	N	889	A	C6-N1	5.37	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1122	U	C3'-O3'	5.37	1.49	1.42
1	N	1205	U	N1-C6	5.37	1.42	1.38
1	N	1422	G	C3'-C2'	5.37	1.58	1.52
1	N	399	G	N7-C5	-5.37	1.36	1.39
1	N	1072	G	P-O5'	-5.37	1.54	1.59
1	N	1185	G	N9-C8	5.37	1.41	1.37
1	N	233	C	C5-C6	-5.37	1.30	1.34
1	N	570	G	C5-C4	5.37	1.42	1.38
1	N	599	C	C3'-O3'	5.37	1.49	1.42
1	N	1064	G	C5'-C4'	5.37	1.57	1.51
1	N	1501	C	O3'-P	-5.37	1.54	1.61
1	N	269	C	C2-N3	-5.36	1.31	1.35
1	N	1215	G	C5-C6	-5.36	1.36	1.42
1	N	1480	A	C6-N1	5.36	1.39	1.35
1	N	307	C	C4-N4	5.36	1.38	1.33
1	N	396	C	C2'-O2'	-5.36	1.34	1.41
1	N	1298	U	C5'-C4'	5.36	1.57	1.51
1	N	1133	G	C2'-O2'	-5.36	1.34	1.41
1	N	1237	C	N1-C6	-5.36	1.33	1.37
1	N	1307	U	N1-C2	5.36	1.43	1.38
1	N	1329	A	O3'-P	5.36	1.67	1.61
1	N	1431	A	C2'-C1'	-5.36	1.47	1.53
1	N	81	A	C3'-O3'	5.36	1.49	1.42
1	N	218	U	C2'-O2'	-5.36	1.34	1.41
1	N	220	G	C2-N3	5.36	1.37	1.32
1	N	882	C	O3'-P	-5.36	1.54	1.61
1	N	915	A	C4'-C3'	5.36	1.59	1.53
1	N	3	A	C3'-C2'	-5.36	1.46	1.52
1	N	59	A	C6-N1	5.36	1.39	1.35
1	N	196	A	C8-N7	-5.36	1.27	1.31
1	N	201	G	N3-C4	-5.36	1.31	1.35
1	N	493	A	C4'-C3'	-5.36	1.47	1.52
1	N	740	U	C4'-C3'	-5.36	1.47	1.52
1	N	747	A	P-O5'	5.36	1.65	1.59
1	N	876	C	C2-O2	-5.36	1.19	1.24
1	N	1113	C	C1'-N1	5.36	1.56	1.48
1	N	152	A	P-O5'	-5.36	1.54	1.59
1	N	418	C	C4-C5	5.36	1.47	1.43
1	N	844	G	C5-C4	-5.36	1.34	1.38
1	N	1192	C	C2'-O2'	-5.36	1.34	1.41
1	N	1503	A	N3-C4	-5.36	1.31	1.34
1	N	1524	C	C2-N3	5.36	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	432	A	C2-N3	5.35	1.38	1.33
1	N	1103	C	C2-O2	-5.35	1.19	1.24
1	N	1188	A	N9-C4	-5.35	1.34	1.37
1	N	1203	C	C3'-C2'	-5.35	1.46	1.52
1	N	418	C	P-O5'	-5.35	1.54	1.59
1	N	671	G	N9-C4	-5.35	1.33	1.38
1	N	1182	G	N3-C4	-5.35	1.31	1.35
1	N	1269	A	C4'-O4'	-5.35	1.38	1.45
1	N	1346	A	C2-N3	5.35	1.38	1.33
1	N	1364	U	N3-C4	5.35	1.43	1.38
1	N	1524	C	C4-C5	5.35	1.47	1.43
1	N	1432	G	C5-C4	-5.35	1.34	1.38
1	N	355	C	C4-N4	5.35	1.38	1.33
1	N	477	C	C4-N4	5.35	1.38	1.33
1	N	729	A	C5-C4	5.35	1.42	1.38
1	N	462	G	N9-C8	-5.35	1.34	1.37
1	N	518	C	C2'-O2'	-5.35	1.34	1.41
1	N	642	A	N7-C5	-5.35	1.36	1.39
1	N	795	C	N1-C6	-5.35	1.33	1.37
1	N	560	A	C4'-C3'	5.34	1.59	1.53
1	N	867	G	C2-N3	5.34	1.37	1.32
1	N	1465	A	C4'-C3'	-5.34	1.47	1.52
1	N	1468	A	N1-C2	5.34	1.39	1.34
1	N	543	U	N3-C4	5.34	1.43	1.38
1	N	903	G	C4'-O4'	-5.34	1.38	1.45
1	N	1188	A	O3'-P	-5.34	1.54	1.61
1	N	952	U	C2'-C1'	-5.34	1.47	1.53
1	N	370	C	C4-N4	5.34	1.38	1.33
1	N	1074	G	N9-C4	5.34	1.42	1.38
1	N	1275	A	C5'-C4'	5.34	1.57	1.51
1	N	1446	A	C6-N6	5.34	1.38	1.33
1	N	1350	A	C3'-O3'	-5.33	1.34	1.42
1	N	522	C	N3-C4	5.33	1.37	1.33
1	N	675	A	N1-C2	5.33	1.39	1.34
1	N	1300	G	C2-N2	5.33	1.39	1.34
1	N	26	A	N9-C4	5.33	1.41	1.37
1	N	74	A	C2'-C1'	-5.33	1.47	1.53
1	N	613	C	C2'-C1'	-5.33	1.47	1.53
1	N	730	G	C5'-C4'	5.33	1.57	1.51
1	N	795	C	N1-C2	-5.33	1.34	1.40
1	N	1060	U	N1-C2	5.33	1.43	1.38
1	N	1192	C	C2'-C1'	-5.33	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	543	U	C1'-N1	5.33	1.56	1.48
1	N	95	C	C4-N4	5.33	1.38	1.33
1	N	264	C	O3'-P	-5.33	1.54	1.61
1	N	374	A	C4'-C3'	-5.33	1.47	1.52
1	N	841	C	C5'-C4'	5.33	1.57	1.51
1	N	389	A	N9-C4	-5.32	1.34	1.37
1	N	470	C	C4-N4	5.32	1.38	1.33
1	N	584	G	N9-C8	5.32	1.41	1.37
1	N	961	U	N1-C6	5.32	1.42	1.38
1	N	1179	A	N3-C4	5.32	1.38	1.34
1	N	105	G	N3-C4	-5.32	1.31	1.35
1	N	489	C	P-O5'	-5.32	1.54	1.59
1	N	707	U	C3'-C2'	5.32	1.58	1.52
1	N	1272	G	C3'-C2'	5.32	1.58	1.52
1	N	226	G	C2'-C1'	5.32	1.59	1.53
1	N	590	U	O3'-P	-5.32	1.54	1.61
1	N	1068	G	C2'-O2'	5.32	1.48	1.41
1	N	1126	U	C4-C5	-5.32	1.38	1.43
1	N	715	A	N9-C4	5.32	1.41	1.37
1	N	734	G	O4'-C1'	5.32	1.48	1.41
1	N	1380	U	O3'-P	-5.32	1.54	1.61
1	N	1524	C	N3-C4	5.32	1.37	1.33
1	N	436	C	N3-C4	-5.32	1.30	1.33
1	N	691	G	C2'-O2'	-5.32	1.34	1.41
1	N	1079	G	P-O5'	5.32	1.65	1.59
1	N	1436	U	C2-N3	5.32	1.41	1.37
1	N	700	G	C5-C4	5.32	1.42	1.38
1	N	1193	G	C5'-C4'	5.32	1.57	1.51
1	N	1368	A	O3'-P	-5.32	1.54	1.61
1	N	395	C	C3'-C2'	-5.31	1.47	1.52
1	N	692	U	N3-C4	5.31	1.43	1.38
1	N	863	U	O3'-P	-5.31	1.54	1.61
1	N	1030	U	C2-N3	5.31	1.41	1.37
1	N	1216	A	C5-C4	-5.31	1.35	1.38
1	N	1526	G	N1-C2	5.31	1.42	1.37
1	N	448	A	N3-C4	5.31	1.38	1.34
1	N	979	C	N1-C6	5.31	1.40	1.37
1	N	408	A	N9-C4	-5.31	1.34	1.37
1	N	807	A	C6-N1	5.31	1.39	1.35
1	N	1079	G	C8-N7	-5.31	1.27	1.30
1	N	36	C	C5'-C4'	5.31	1.57	1.51
1	N	358	U	C2-N3	5.31	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	785	G	N9-C4	-5.31	1.33	1.38
1	N	164	G	N1-C2	5.30	1.42	1.37
1	N	280	C	C4-N4	5.30	1.38	1.33
1	N	299	G	N3-C4	-5.30	1.31	1.35
1	N	830	G	N1-C2	5.30	1.42	1.37
1	N	832	G	C3'-C2'	5.30	1.58	1.52
1	N	843	U	C5-C6	5.30	1.39	1.34
1	N	854	U	O4'-C1'	5.30	1.48	1.41
1	N	1188	A	C3'-C2'	-5.30	1.47	1.52
1	N	1360	A	C2-N3	5.30	1.38	1.33
1	N	1215	G	C6-N1	5.30	1.43	1.39
1	N	503	C	C1'-N1	5.30	1.56	1.48
1	N	580	C	C4-N4	5.30	1.38	1.33
1	N	628	G	P-O5'	5.30	1.65	1.59
1	N	884	U	P-O5'	-5.30	1.54	1.59
1	N	1180	A	C2-N3	5.30	1.38	1.33
1	N	1279	G	P-O5'	5.30	1.65	1.59
1	N	1285	A	N3-C4	-5.30	1.31	1.34
1	N	375	U	C3'-C2'	-5.30	1.47	1.52
1	N	1132	C	P-O5'	-5.30	1.54	1.59
1	N	1140	C	C5'-C4'	5.30	1.57	1.51
1	N	1386	G	N9-C8	5.30	1.41	1.37
1	N	246	A	O3'-P	-5.30	1.54	1.61
1	N	211	G	C5'-C4'	5.30	1.57	1.51
1	N	216	U	O3'-P	-5.30	1.54	1.61
1	N	714	G	N3-C4	5.30	1.39	1.35
1	N	1129	C	C5'-C4'	5.30	1.57	1.51
1	N	1326	U	P-O5'	-5.30	1.54	1.59
1	N	1358	U	C4-C5	5.30	1.48	1.43
1	N	1381	U	C4'-C3'	5.30	1.58	1.53
1	N	983	A	O3'-P	-5.29	1.54	1.61
1	N	442	G	C4'-C3'	5.29	1.58	1.53
1	N	446	G	C5-C4	-5.29	1.34	1.38
1	N	858	G	C2-N3	5.29	1.36	1.32
1	N	860	A	O3'-P	-5.29	1.54	1.61
1	N	967	C	P-O5'	-5.29	1.54	1.59
1	N	471	U	N3-C4	5.29	1.43	1.38
1	N	862	C	N1-C2	-5.29	1.34	1.40
1	N	359	G	C2'-C1'	-5.29	1.47	1.53
1	N	548	G	N3-C4	-5.29	1.31	1.35
1	N	605	U	N3-C4	5.29	1.43	1.38
1	N	981	U	C5'-C4'	5.29	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1260	G	C2-N2	5.29	1.39	1.34
1	N	1350	A	C6-N6	5.29	1.38	1.33
1	N	603	U	C4'-O4'	-5.29	1.38	1.45
1	N	126	G	C3'-C2'	5.29	1.58	1.52
1	N	397	A	N3-C4	-5.29	1.31	1.34
1	N	606	G	C6-N1	5.29	1.43	1.39
1	N	1017	U	C5'-C4'	5.29	1.57	1.51
1	N	1040	U	C2-N3	5.29	1.41	1.37
1	N	1224	U	N3-C4	5.29	1.43	1.38
1	N	1340	A	C5-C4	5.29	1.42	1.38
1	N	511	C	C2-N3	-5.28	1.31	1.35
1	N	587	G	C2-N2	5.28	1.39	1.34
1	N	994	A	N3-C4	5.28	1.38	1.34
1	N	1177	G	C3'-C2'	-5.28	1.47	1.52
1	N	1492	A	C5-C4	-5.28	1.35	1.38
1	N	196	A	C2-N3	-5.28	1.28	1.33
1	N	336	A	C5-C4	-5.28	1.35	1.38
1	N	487	A	N7-C5	5.28	1.42	1.39
1	N	713	G	C2-N2	5.28	1.39	1.34
1	N	1073	U	C4-O4	-5.28	1.19	1.23
1	N	1207	G	N9-C8	5.28	1.41	1.37
1	N	218	U	C4'-C3'	-5.28	1.47	1.52
1	N	1107	C	C1'-N1	5.28	1.56	1.48
1	N	1133	G	C5-C6	-5.28	1.37	1.42
1	N	31	G	C2-N2	5.28	1.39	1.34
1	N	246	A	C6-N1	5.28	1.39	1.35
1	N	287	U	C3'-C2'	5.28	1.58	1.52
1	N	562	U	C2-N3	5.28	1.41	1.37
1	N	983	A	N3-C4	5.28	1.38	1.34
1	N	1444	U	C5'-C4'	5.28	1.57	1.51
1	N	1477	U	C4-C5	5.28	1.48	1.43
1	N	11	G	C4'-O4'	-5.28	1.38	1.45
1	N	449	G	N7-C5	5.28	1.42	1.39
1	N	889	A	C5-C4	5.28	1.42	1.38
1	N	976	G	C4'-O4'	5.28	1.52	1.45
1	N	745	G	N7-C5	-5.27	1.36	1.39
1	N	877	G	C2-N2	5.27	1.39	1.34
1	N	289	G	C8-N7	-5.27	1.27	1.30
1	N	478	A	N3-C4	-5.27	1.31	1.34
1	N	1482	G	C5-C6	-5.27	1.37	1.42
1	N	236	A	C6-N6	5.27	1.38	1.33
1	N	889	A	C3'-C2'	-5.27	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1090	U	C4'-C3'	-5.27	1.47	1.52
1	N	1121	U	C4-C5	5.27	1.48	1.43
1	N	1484	C	C4'-C3'	-5.27	1.47	1.52
1	N	1518	A	P-O5'	-5.27	1.54	1.59
1	N	619	U	N3-C4	5.27	1.43	1.38
1	N	1497	G	N7-C5	5.27	1.42	1.39
1	N	779	C	C2-N3	5.27	1.40	1.35
1	N	1393	U	C3'-C2'	5.27	1.58	1.52
1	N	160	A	C5-C6	5.26	1.45	1.41
1	N	766	A	N9-C8	5.26	1.42	1.37
1	N	1250	A	C6-N1	-5.26	1.31	1.35
1	N	618	C	P-O5'	-5.26	1.54	1.59
1	N	1077	G	N1-C2	5.26	1.42	1.37
1	N	1419	G	C2-N3	5.26	1.36	1.32
1	N	1506	U	N1-C2	5.26	1.43	1.38
1	N	338	A	C8-N7	-5.26	1.27	1.31
1	N	846	G	C4'-O4'	-5.26	1.38	1.45
1	N	38	G	C5-C6	5.26	1.47	1.42
1	N	115	G	C2'-C1'	-5.26	1.47	1.53
1	N	177	G	N3-C4	-5.26	1.31	1.35
1	N	657	U	P-O5'	-5.26	1.54	1.59
1	N	1059	C	C4'-O4'	-5.26	1.38	1.45
1	N	1404	C	N1-C2	5.26	1.45	1.40
1	N	85	U	C2-N3	5.25	1.41	1.37
1	N	508	U	N1-C6	-5.25	1.33	1.38
1	N	1061	G	N7-C5	-5.25	1.36	1.39
1	N	171	A	C6-N6	5.25	1.38	1.33
1	N	1142	G	N1-C2	5.25	1.42	1.37
1	N	1362	A	C3'-C2'	5.25	1.58	1.52
1	N	1530	G	C2-N2	5.25	1.39	1.34
1	N	338	A	N9-C4	-5.25	1.34	1.37
1	N	429	U	C4-C5	5.25	1.48	1.43
1	N	998	C	N1-C2	-5.25	1.34	1.40
1	N	1005	A	N9-C8	-5.25	1.33	1.37
1	N	99	C	C5-C6	5.25	1.38	1.34
1	N	251	G	C3'-C2'	-5.25	1.47	1.52
1	N	456	A	C5'-C4'	5.25	1.57	1.51
1	N	537	G	N1-C2	5.25	1.42	1.37
1	N	702	A	C5-C6	-5.25	1.36	1.41
1	N	364	A	C4'-C3'	5.25	1.58	1.53
1	N	941	G	C3'-C2'	-5.25	1.47	1.52
1	N	1237	C	C4-N4	5.25	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1385	G	C3'-C2'	5.25	1.58	1.52
1	N	172	A	C3'-C2'	-5.25	1.47	1.52
1	N	1080	A	C4'-C3'	5.25	1.58	1.53
1	N	1296	C	N3-C4	5.25	1.37	1.33
1	N	1492	A	C5'-C4'	5.25	1.57	1.51
1	N	780	A	C5-C4	5.25	1.42	1.38
1	N	14	U	C4-O4	-5.24	1.19	1.23
1	N	459	A	C6-N1	5.24	1.39	1.35
1	N	462	G	C2-N2	5.24	1.39	1.34
1	N	4	U	C3'-C2'	5.24	1.58	1.52
1	N	119	A	C5'-C4'	5.24	1.57	1.51
1	N	601	G	C5-C4	5.24	1.42	1.38
1	N	781	A	C5-C4	-5.24	1.35	1.38
1	N	1018	G	N3-C4	5.24	1.39	1.35
1	N	65	A	N1-C2	5.24	1.39	1.34
1	N	266	G	C5'-C4'	5.24	1.57	1.51
1	N	1259	C	C4'-O4'	-5.24	1.38	1.45
1	N	1052	U	C2-O2	5.24	1.27	1.22
1	N	30	U	C2-N3	5.24	1.41	1.37
1	N	504	C	C3'-C2'	-5.24	1.47	1.52
1	N	566	G	C3'-C2'	-5.24	1.47	1.52
1	N	814	A	N9-C4	5.24	1.41	1.37
1	N	817	C	C2'-C1'	-5.24	1.47	1.53
1	N	1067	A	C6-N6	5.24	1.38	1.33
1	N	1236	A	C2'-C1'	5.24	1.59	1.53
1	N	1319	A	N1-C2	5.24	1.39	1.34
1	N	627	G	C2'-C1'	5.23	1.59	1.53
1	N	42	G	O3'-P	-5.23	1.54	1.61
1	N	116	A	C6-N1	5.23	1.39	1.35
1	N	466	A	P-O5'	-5.23	1.54	1.59
1	N	1131	G	N9-C4	-5.23	1.33	1.38
1	N	1261	A	N9-C4	-5.23	1.34	1.37
1	N	416	G	C2-N3	5.23	1.36	1.32
1	N	1081	A	P-O5'	-5.23	1.54	1.59
1	N	328	C	C2-O2	5.23	1.29	1.24
1	N	613	C	C1'-N1	5.23	1.56	1.48
1	N	1510	C	N1-C6	5.23	1.40	1.37
1	N	1023	U	C4-C5	5.22	1.48	1.43
1	N	1347	G	C2-N3	5.22	1.36	1.32
1	N	204	G	O3'-P	-5.22	1.54	1.61
1	N	450	G	N9-C4	-5.22	1.33	1.38
1	N	1370	G	C2-N3	5.22	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	74	A	N7-C5	5.22	1.42	1.39
1	N	602	A	C3'-C2'	5.22	1.58	1.52
1	N	773	G	N1-C2	5.22	1.42	1.37
1	N	948	C	C4'-O4'	-5.22	1.38	1.45
1	N	1280	A	O3'-P	-5.22	1.54	1.61
1	N	1317	C	C5'-C4'	5.22	1.57	1.51
1	N	1519	A	O4'-C1'	5.22	1.48	1.41
1	N	267	C	C3'-C2'	5.22	1.58	1.52
1	N	965	U	C4'-C3'	5.22	1.58	1.53
1	N	1295	U	N3-C4	5.22	1.43	1.38
1	N	101	A	C4'-O4'	-5.21	1.38	1.45
1	N	155	A	N9-C8	-5.21	1.33	1.37
1	N	539	A	N3-C4	5.21	1.38	1.34
1	N	704	A	C6-N1	5.21	1.39	1.35
1	N	1151	A	N1-C2	5.21	1.39	1.34
1	N	1480	A	C5-C4	5.21	1.42	1.38
1	N	57	G	C8-N7	5.21	1.34	1.30
1	N	224	U	C2'-C1'	-5.21	1.47	1.53
1	N	544	G	C2'-C1'	-5.21	1.47	1.53
1	N	671	G	N9-C8	5.21	1.41	1.37
1	N	1118	U	O3'-P	-5.21	1.54	1.61
1	N	926	G	N7-C5	-5.21	1.36	1.39
1	N	1158	C	C5-C6	-5.21	1.30	1.34
1	N	229	U	C2'-C1'	-5.21	1.47	1.53
1	N	840	C	C5'-C4'	-5.21	1.45	1.51
1	N	853	C	C4'-O4'	5.21	1.52	1.45
1	N	1059	C	C4'-C3'	5.21	1.58	1.53
1	N	1198	G	C6-N1	-5.21	1.35	1.39
1	N	89	U	C4'-C3'	-5.21	1.47	1.52
1	N	147	G	N9-C8	5.21	1.41	1.37
1	N	537	G	N9-C8	-5.21	1.34	1.37
1	N	1191	A	N7-C5	-5.21	1.36	1.39
1	N	934	C	C4'-O4'	5.21	1.52	1.45
1	N	1041	G	C5-C4	-5.21	1.34	1.38
1	N	1508	A	C5'-C4'	5.21	1.57	1.51
1	N	714	G	N1-C2	5.21	1.42	1.37
1	N	924	C	P-O5'	-5.21	1.54	1.59
1	N	356	A	C5-C6	5.20	1.45	1.41
1	N	390	U	C2'-C1'	5.20	1.59	1.53
1	N	538	G	C8-N7	-5.20	1.27	1.30
1	N	1059	C	C4-N4	5.20	1.38	1.33
1	N	1250	A	C3'-C2'	-5.20	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1292	G	N1-C2	5.20	1.42	1.37
1	N	75	G	N1-C2	5.20	1.42	1.37
1	N	484	G	C2'-O2'	-5.20	1.34	1.41
1	N	131	A	C6-N6	5.20	1.38	1.33
1	N	255	G	N7-C5	-5.20	1.36	1.39
1	N	433	G	C2-N2	5.20	1.39	1.34
1	N	469	C	C2'-C1'	-5.20	1.47	1.53
1	N	440	C	C5'-C4'	5.20	1.57	1.51
1	N	839	C	N1-C6	5.20	1.40	1.37
1	N	1041	G	C3'-O3'	5.20	1.49	1.42
1	N	1362	A	N9-C4	5.20	1.41	1.37
1	N	1515	G	C6-N1	5.20	1.43	1.39
1	N	330	C	C4'-O4'	-5.20	1.38	1.45
1	N	953	G	N1-C2	5.20	1.42	1.37
1	N	503	C	P-O5'	-5.20	1.54	1.59
1	N	608	A	C4'-C3'	-5.20	1.47	1.52
1	N	716	A	C6-N1	5.20	1.39	1.35
1	N	987	G	C2-N3	5.20	1.36	1.32
1	N	1042	A	C5'-C4'	5.20	1.57	1.51
1	N	1097	C	C3'-O3'	5.20	1.49	1.42
1	N	1458	G	C2-N3	5.20	1.36	1.32
1	N	1472	U	C4'-O4'	-5.20	1.38	1.45
1	N	1497	G	N9-C8	-5.20	1.34	1.37
1	N	505	G	C8-N7	5.19	1.34	1.30
1	N	228	A	C3'-C2'	5.19	1.58	1.52
1	N	530	G	C6-O6	-5.19	1.19	1.24
1	N	784	A	O3'-P	-5.19	1.54	1.61
1	N	846	G	O3'-P	5.19	1.67	1.61
1	N	1207	G	C4'-C3'	5.19	1.58	1.53
1	N	1257	A	N9-C4	-5.19	1.34	1.37
1	N	1340	A	O3'-P	-5.19	1.54	1.61
1	N	1367	C	C2'-C1'	-5.19	1.47	1.53
1	N	54	C	C4-N4	5.19	1.38	1.33
1	N	412	A	C8-N7	-5.19	1.27	1.31
1	N	745	G	C2-N2	5.19	1.39	1.34
1	N	1532	U	C5'-C4'	-5.19	1.45	1.51
1	N	385	C	C3'-O3'	5.19	1.49	1.42
1	N	611	C	O3'-P	-5.19	1.54	1.61
1	N	739	C	P-O5'	-5.19	1.54	1.59
1	N	796	C	C3'-C2'	5.19	1.58	1.52
1	N	979	C	N3-C4	5.19	1.37	1.33
1	N	1001	C	C2'-C1'	-5.19	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	35	G	N7-C5	-5.19	1.36	1.39
1	N	699	C	N1-C6	5.19	1.40	1.37
1	N	705	G	C2-N3	5.19	1.36	1.32
1	N	741	G	C6-N1	5.19	1.43	1.39
1	N	862	C	C2-N3	5.19	1.39	1.35
1	N	864	A	C6-N6	5.19	1.38	1.33
1	N	382	A	C5-C6	-5.19	1.36	1.41
1	N	536	C	C4'-O4'	-5.19	1.38	1.45
1	N	1473	G	C2-N3	5.19	1.36	1.32
1	N	148	G	C2-N3	5.18	1.36	1.32
1	N	940	C	N1-C6	5.18	1.40	1.37
1	N	970	C	O3'-P	-5.18	1.54	1.61
1	N	447	G	N1-C2	5.18	1.41	1.37
1	N	457	G	C5-C6	-5.18	1.37	1.42
1	N	467	U	C5-C6	5.18	1.38	1.34
1	N	915	A	P-O5'	-5.18	1.54	1.59
1	N	927	G	N9-C4	5.18	1.42	1.38
1	N	1074	G	C6-N1	5.18	1.43	1.39
1	N	1229	A	O4'-C1'	5.18	1.48	1.41
1	N	1441	A	N3-C4	-5.18	1.31	1.34
1	N	993	G	C2-N3	5.18	1.36	1.32
1	N	428	G	C2-N3	5.18	1.36	1.32
1	N	927	G	C6-N1	5.18	1.43	1.39
1	N	1046	A	N3-C4	-5.18	1.31	1.34
1	N	1182	G	C1'-N9	5.18	1.56	1.48
1	N	1384	C	O4'-C1'	5.18	1.48	1.41
1	N	267	C	C4-C5	5.18	1.47	1.43
1	N	408	A	C4'-O4'	5.18	1.52	1.45
1	N	1026	G	C2-N2	5.18	1.39	1.34
1	N	1177	G	C5-C4	5.18	1.42	1.38
1	N	517	G	C5-C4	5.17	1.42	1.38
1	N	646	G	N9-C8	5.17	1.41	1.37
1	N	760	G	P-O5'	-5.17	1.54	1.59
1	N	1324	A	C8-N7	5.17	1.35	1.31
1	N	1385	G	O4'-C1'	5.17	1.48	1.41
1	N	1459	G	C6-N1	5.17	1.43	1.39
1	N	258	G	N7-C5	-5.17	1.36	1.39
1	N	341	C	C2-N3	5.17	1.39	1.35
1	N	175	C	N3-C4	5.17	1.37	1.33
1	N	413	G	C8-N7	-5.17	1.27	1.30
1	N	539	A	C2-N3	5.17	1.38	1.33
1	N	787	A	C5'-C4'	5.17	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1170	A	P-O5'	-5.17	1.54	1.59
1	N	1423	G	O3'-P	-5.17	1.54	1.61
1	N	250	A	C6-N1	5.17	1.39	1.35
1	N	334	C	C4-C5	5.17	1.47	1.43
1	N	783	C	N1-C6	5.17	1.40	1.37
1	N	875	U	C2'-C1'	-5.17	1.47	1.53
1	N	903	G	C5-C4	5.17	1.42	1.38
1	N	1024	G	C3'-C2'	-5.17	1.47	1.52
1	N	1089	G	N1-C2	5.17	1.41	1.37
1	N	1305	G	C5-C4	5.17	1.42	1.38
1	N	153	C	C4'-C3'	-5.17	1.47	1.52
1	N	959	A	C6-N6	5.17	1.38	1.33
1	N	1166	G	C4'-C3'	5.17	1.58	1.53
1	N	265	G	N3-C4	-5.17	1.31	1.35
1	N	431	A	O3'-P	-5.17	1.54	1.61
1	N	235	C	O3'-P	-5.16	1.54	1.61
1	N	986	U	C2-N3	5.16	1.41	1.37
1	N	1123	U	N3-C4	5.16	1.43	1.38
1	N	1244	G	C5-C6	5.16	1.47	1.42
1	N	1476	A	C4'-C3'	5.16	1.58	1.53
1	N	807	A	O3'-P	-5.16	1.54	1.61
1	N	1246	A	N7-C5	-5.16	1.36	1.39
1	N	75	G	O3'-P	5.16	1.67	1.61
1	N	469	C	C3'-O3'	-5.16	1.34	1.42
1	N	1220	G	N1-C2	5.16	1.41	1.37
1	N	129	A	C8-N7	-5.16	1.27	1.31
1	N	235	C	C3'-C2'	5.16	1.58	1.52
1	N	1076	U	C2'-C1'	5.16	1.59	1.53
1	N	1531	A	N9-C4	5.16	1.41	1.37
1	N	277	C	C5-C6	-5.16	1.30	1.34
1	N	879	C	C3'-C2'	-5.16	1.47	1.52
1	N	1093	A	C3'-O3'	5.16	1.49	1.42
1	N	1175	G	C6-N1	5.16	1.43	1.39
1	N	1409	C	C5-C6	5.16	1.38	1.34
1	N	1454	G	N3-C4	5.16	1.39	1.35
1	N	1068	G	N9-C8	5.15	1.41	1.37
1	N	474	G	O3'-P	-5.15	1.54	1.61
1	N	869	G	C2-N3	5.15	1.36	1.32
1	N	905	U	O3'-P	-5.15	1.54	1.61
1	N	87	C	N3-C4	5.15	1.37	1.33
1	N	177	G	C4'-C3'	5.15	1.58	1.53
1	N	235	C	C5-C6	-5.15	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	322	C	N1-C2	5.15	1.45	1.40
1	N	844	G	C4'-O4'	5.15	1.52	1.45
1	N	1505	G	N1-C2	5.15	1.41	1.37
1	N	142	G	N9-C4	5.15	1.42	1.38
1	N	418	C	C1'-N1	5.15	1.56	1.48
1	N	955	U	O4'-C1'	5.15	1.48	1.41
1	N	1432	G	C5'-C4'	5.15	1.57	1.51
1	N	414	A	P-O5'	-5.15	1.54	1.59
1	N	571	U	C2-N3	5.15	1.41	1.37
1	N	807	A	N1-C2	5.15	1.39	1.34
1	N	899	C	C2'-O2'	5.15	1.48	1.41
1	N	976	G	C5-C6	-5.15	1.37	1.42
1	N	1074	G	N9-C8	5.15	1.41	1.37
1	N	1272	G	C5-C4	5.15	1.42	1.38
1	N	836	G	N3-C4	-5.14	1.31	1.35
1	N	1037	C	C4-N4	5.14	1.38	1.33
1	N	1116	U	C3'-C2'	5.14	1.58	1.52
1	N	1143	G	C5'-C4'	5.14	1.57	1.51
1	N	1215	G	C2-N3	5.14	1.36	1.32
1	N	1351	U	O4'-C1'	-5.14	1.34	1.41
1	N	674	G	C8-N7	5.14	1.34	1.30
1	N	702	A	N9-C8	5.14	1.41	1.37
1	N	903	G	N9-C4	5.14	1.42	1.38
1	N	956	U	C5'-C4'	5.14	1.57	1.51
1	N	1105	A	C5'-C4'	5.14	1.57	1.51
1	N	1114	C	C2'-C1'	-5.14	1.47	1.53
1	N	218	U	C1'-N1	5.14	1.56	1.48
1	N	456	A	N7-C5	-5.14	1.36	1.39
1	N	749	A	C6-N1	5.14	1.39	1.35
1	N	1344	C	O4'-C1'	5.14	1.48	1.41
1	N	1443	C	N3-C4	5.14	1.37	1.33
1	N	276	G	P-O5'	-5.14	1.54	1.59
1	N	1434	A	N9-C4	5.14	1.41	1.37
1	N	674	G	N3-C4	-5.14	1.31	1.35
1	N	782	A	C3'-O3'	5.14	1.49	1.42
1	N	246	A	N9-C4	5.13	1.41	1.37
1	N	574	A	C3'-C2'	-5.13	1.47	1.52
1	N	673	A	P-O5'	-5.13	1.54	1.59
1	N	802	A	N7-C5	-5.13	1.36	1.39
1	N	981	U	C2-O2	5.13	1.26	1.22
1	N	1321	U	C2-N3	5.13	1.41	1.37
1	N	1018	G	C8-N7	5.13	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1429	A	C2'-C1'	-5.13	1.47	1.53
1	N	990	C	P-O5'	5.13	1.64	1.59
1	N	337	G	C5-C6	-5.13	1.37	1.42
1	N	441	A	N7-C5	5.13	1.42	1.39
1	N	682	G	C2-N2	5.13	1.39	1.34
1	N	807	A	C5-C4	5.13	1.42	1.38
1	N	908	A	N9-C8	5.13	1.41	1.37
1	N	1164	G	P-O5'	-5.13	1.54	1.59
1	N	178	C	C4-C5	-5.13	1.38	1.43
1	N	695	A	C3'-C2'	-5.13	1.47	1.52
1	N	747	A	C3'-C2'	5.13	1.58	1.52
1	N	1084	G	C3'-C2'	-5.13	1.47	1.52
1	N	1174	G	C2-N3	5.13	1.36	1.32
1	N	1275	A	N9-C8	-5.13	1.33	1.37
1	N	211	G	N3-C4	-5.12	1.31	1.35
1	N	273	U	C5-C6	5.12	1.38	1.34
1	N	611	C	C4-C5	-5.12	1.38	1.43
1	N	1006	G	N3-C4	5.12	1.39	1.35
1	N	1154	G	C5-C6	5.12	1.47	1.42
1	N	1043	G	C5-C4	-5.12	1.34	1.38
1	N	1104	G	N1-C2	5.12	1.41	1.37
1	N	1124	G	N3-C4	-5.12	1.31	1.35
1	N	1152	A	N9-C4	5.12	1.41	1.37
1	N	1270	G	O4'-C1'	5.12	1.48	1.41
1	N	1433	A	C3'-C2'	-5.12	1.47	1.52
1	N	1397	C	C3'-O3'	5.12	1.49	1.42
1	N	366	A	C5-C6	-5.12	1.36	1.41
1	N	870	U	P-O5'	-5.12	1.54	1.59
1	N	879	C	N3-C4	5.12	1.37	1.33
1	N	380	G	O3'-P	-5.12	1.55	1.61
1	N	621	A	N3-C4	-5.12	1.31	1.34
1	N	666	G	C5-C4	5.12	1.42	1.38
1	N	1306	A	C5'-C4'	5.12	1.57	1.51
1	N	38	G	C2'-C1'	-5.12	1.47	1.53
1	N	627	G	P-O5'	-5.12	1.54	1.59
1	N	690	G	N9-C4	-5.12	1.33	1.38
1	N	720	C	C2-O2	5.12	1.29	1.24
1	N	194	C	P-O5'	-5.11	1.54	1.59
1	N	256	U	C1'-N1	5.11	1.56	1.48
1	N	816	A	C3'-O3'	-5.11	1.34	1.42
1	N	1239	A	C8-N7	5.11	1.35	1.31
1	N	306	A	O3'-P	-5.11	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1534	A	C5-C4	5.11	1.42	1.38
1	N	241	G	C2-N2	5.11	1.39	1.34
1	N	468	A	N3-C4	-5.11	1.31	1.34
1	N	479	U	N3-C4	5.11	1.43	1.38
1	N	729	A	N9-C4	-5.11	1.34	1.37
1	N	892	A	C6-N6	5.11	1.38	1.33
1	N	1330	U	O4'-C1'	5.11	1.48	1.41
1	N	1385	G	C8-N7	-5.11	1.27	1.30
1	N	1461	G	N1-C2	5.11	1.41	1.37
1	N	486	U	N1-C2	5.11	1.43	1.38
1	N	1160	G	C6-O6	-5.11	1.19	1.24
1	N	47	C	C3'-C2'	5.11	1.58	1.52
1	N	1003	G	N9-C4	-5.11	1.33	1.38
1	N	1250	A	C5-C4	5.11	1.42	1.38
1	N	1418	A	O4'-C1'	5.11	1.48	1.41
1	N	1122	U	C5'-C4'	5.11	1.57	1.51
1	N	430	A	C6-N6	5.10	1.38	1.33
1	N	527	G	C8-N7	5.10	1.34	1.30
1	N	740	U	C5'-C4'	5.10	1.57	1.51
1	N	108	G	C5'-C4'	5.10	1.57	1.51
1	N	216	U	C3'-C2'	-5.10	1.47	1.52
1	N	329	A	C8-N7	-5.10	1.27	1.31
1	N	651	C	O3'-P	5.10	1.67	1.61
1	N	517	G	N1-C2	5.10	1.41	1.37
1	N	933	G	C2'-O2'	-5.10	1.35	1.41
1	N	1420	U	C2-N3	5.10	1.41	1.37
1	N	180	U	N1-C2	5.10	1.43	1.38
1	N	1533	C	O3'-P	5.10	1.67	1.61
1	N	172	A	N1-C2	-5.10	1.29	1.34
1	N	439	U	C3'-O3'	5.10	1.49	1.42
1	N	825	A	N7-C5	-5.10	1.36	1.39
1	N	881	G	C5'-C4'	5.10	1.57	1.51
1	N	958	A	C5-C4	5.10	1.42	1.38
1	N	1155	A	N7-C5	-5.10	1.36	1.39
1	N	1265	C	C2-N3	5.10	1.39	1.35
1	N	63	C	C3'-C2'	5.10	1.58	1.52
1	N	143	A	N1-C2	5.09	1.39	1.34
1	N	970	C	C3'-C2'	5.09	1.58	1.52
1	N	1061	G	P-O5'	-5.09	1.54	1.59
1	N	1355	G	C8-N7	5.09	1.34	1.30
1	N	993	G	C5'-C4'	5.09	1.57	1.51
1	N	494	G	N1-C2	5.09	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	950	U	N3-C4	5.09	1.43	1.38
1	N	1510	C	O4'-C1'	5.09	1.48	1.41
1	N	378	G	N7-C5	-5.09	1.36	1.39
1	N	703	G	N9-C4	-5.09	1.33	1.38
1	N	768	A	C5-C4	5.09	1.42	1.38
1	N	403	C	O3'-P	5.09	1.67	1.61
1	N	1116	U	C2-N3	5.09	1.41	1.37
1	N	292	G	C8-N7	-5.09	1.27	1.30
1	N	885	G	O3'-P	-5.09	1.55	1.61
1	N	361	G	C2-N3	5.08	1.36	1.32
1	N	620	C	O3'-P	5.08	1.67	1.61
1	N	1184	G	O3'-P	-5.08	1.55	1.61
1	N	1417	G	N9-C4	5.08	1.42	1.38
1	N	1487	G	C5-C6	5.08	1.47	1.42
1	N	176	C	O3'-P	-5.08	1.55	1.61
1	N	435	A	C6-N1	-5.08	1.31	1.35
1	N	1014	A	N9-C8	5.08	1.41	1.37
1	N	1460	C	P-O5'	-5.08	1.54	1.59
1	N	324	G	N3-C4	5.08	1.39	1.35
1	N	638	U	N1-C2	5.08	1.43	1.38
1	N	1307	U	C2'-C1'	-5.08	1.47	1.53
1	N	1461	G	N3-C4	-5.08	1.31	1.35
1	N	149	A	C6-N1	5.08	1.39	1.35
1	N	1051	C	C4'-C3'	-5.08	1.47	1.52
1	N	28	A	N7-C5	-5.08	1.36	1.39
1	N	215	C	N1-C6	-5.08	1.34	1.37
1	N	478	A	C5-C4	5.08	1.42	1.38
1	N	736	C	C2'-C1'	-5.08	1.47	1.53
1	N	1353	G	C3'-O3'	5.08	1.49	1.42
1	N	407	U	C4'-C3'	5.08	1.58	1.53
1	N	602	A	C6-N6	-5.08	1.29	1.33
1	N	999	C	C4-N4	5.08	1.38	1.33
1	N	38	G	P-O5'	-5.08	1.54	1.59
1	N	536	C	C4-N4	5.08	1.38	1.33
1	N	955	U	C4-O4	5.08	1.27	1.23
1	N	1045	C	C1'-N1	5.08	1.56	1.48
1	N	15	G	C5'-C4'	5.07	1.57	1.51
1	N	197	A	P-O5'	-5.07	1.54	1.59
1	N	281	G	C4'-O4'	5.07	1.52	1.45
1	N	350	G	N7-C5	-5.07	1.36	1.39
1	N	462	G	C4'-C3'	5.07	1.58	1.53
1	N	466	A	C3'-C2'	5.07	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	622	A	N3-C4	5.07	1.37	1.34
1	N	850	U	P-O5'	-5.07	1.54	1.59
1	N	1137	C	N3-C4	5.07	1.37	1.33
1	N	35	G	C2-N3	5.07	1.36	1.32
1	N	794	A	N9-C8	-5.07	1.33	1.37
1	N	1264	U	N3-C4	5.07	1.43	1.38
1	N	251	G	N3-C4	-5.07	1.31	1.35
1	N	416	G	C8-N7	5.07	1.33	1.30
1	N	138	G	N9-C4	-5.07	1.33	1.38
1	N	485	U	C3'-O3'	5.07	1.49	1.42
1	N	161	A	O5'-C5'	5.07	1.52	1.44
1	N	580	C	C3'-C2'	5.07	1.58	1.52
1	N	730	G	C6-O6	5.07	1.28	1.24
1	N	741	G	C5'-C4'	5.07	1.57	1.51
1	N	858	G	C3'-C2'	5.07	1.58	1.52
1	N	1286	U	C5-C6	5.07	1.38	1.34
1	N	1482	G	P-O5'	-5.07	1.54	1.59
1	N	183	C	C4'-O4'	-5.07	1.39	1.45
1	N	307	C	N3-C4	5.07	1.37	1.33
1	N	514	C	C5'-C4'	5.07	1.57	1.51
1	N	865	A	N3-C4	5.07	1.37	1.34
1	N	888	G	P-O5'	-5.07	1.54	1.59
1	N	691	G	C4'-C3'	5.06	1.58	1.53
1	N	261	U	C4'-O4'	5.06	1.52	1.45
1	N	268	U	C4-O4	-5.06	1.19	1.23
1	N	903	G	C5'-C4'	5.06	1.57	1.51
1	N	1140	C	C3'-O3'	5.06	1.49	1.42
1	N	1203	C	C2'-C1'	-5.06	1.47	1.53
1	N	1387	G	N9-C8	5.06	1.41	1.37
1	N	527	G	N1-C2	5.06	1.41	1.37
1	N	1219	A	C6-N1	5.06	1.39	1.35
1	N	147	G	C4'-C3'	5.06	1.58	1.53
1	N	231	U	C5-C6	5.06	1.38	1.34
1	N	265	G	C2-N3	5.06	1.36	1.32
1	N	572	A	N9-C8	5.06	1.41	1.37
1	N	739	C	C4-C5	5.06	1.47	1.43
1	N	903	G	N9-C8	5.06	1.41	1.37
1	N	1064	G	P-O5'	-5.06	1.54	1.59
1	N	1207	G	O4'-C1'	5.06	1.48	1.41
1	N	1497	G	O3'-P	-5.06	1.55	1.61
1	N	581	G	O5'-C5'	-5.06	1.34	1.42
1	N	1343	G	C6-O6	-5.06	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	206	C	C4-C5	-5.06	1.39	1.43
1	N	758	C	C4-N4	5.06	1.38	1.33
1	N	1261	A	C8-N7	-5.06	1.28	1.31
1	N	1434	A	N3-C4	-5.06	1.31	1.34
1	N	21	G	C4'-C3'	5.05	1.58	1.53
1	N	88	U	C5-C6	5.05	1.38	1.34
1	N	221	C	C4'-C3'	-5.05	1.47	1.52
1	N	297	G	C6-N1	5.05	1.43	1.39
1	N	718	A	C2'-C1'	-5.05	1.47	1.53
1	N	884	U	O3'-P	-5.05	1.55	1.61
1	N	1042	A	C8-N7	-5.05	1.28	1.31
1	N	1234	C	C4-N4	5.05	1.38	1.33
1	N	401	C	N1-C6	5.05	1.40	1.37
1	N	177	G	C2-N2	5.05	1.39	1.34
1	N	585	G	N9-C8	-5.05	1.34	1.37
1	N	986	U	O4'-C1'	5.05	1.48	1.41
1	N	24	U	C3'-C2'	5.05	1.58	1.52
1	N	170	U	C2'-C1'	-5.05	1.47	1.53
1	N	371	A	C2'-C1'	5.05	1.58	1.53
1	N	1509	C	C4-C5	5.05	1.47	1.43
1	N	785	G	N9-C8	-5.05	1.34	1.37
1	N	533	A	C5'-C4'	5.05	1.57	1.51
1	N	637	C	N3-C4	5.05	1.37	1.33
1	N	652	U	C2-N3	5.05	1.41	1.37
1	N	1125	U	C2-N3	5.05	1.41	1.37
1	N	1148	U	N3-C4	5.05	1.43	1.38
1	N	1134	G	C8-N7	-5.04	1.27	1.30
1	N	1473	G	N1-C2	5.04	1.41	1.37
1	N	147	G	C2'-C1'	-5.04	1.47	1.53
1	N	473	U	C3'-C2'	5.04	1.58	1.52
1	N	1143	G	N1-C2	5.04	1.41	1.37
1	N	490	C	O3'-P	-5.04	1.55	1.61
1	N	1196	A	C6-N1	5.04	1.39	1.35
1	N	1235	U	N3-C4	5.04	1.43	1.38
1	N	1308	U	P-O5'	-5.04	1.54	1.59
1	N	108	G	C3'-C2'	5.04	1.58	1.52
1	N	890	G	C2-N3	5.04	1.36	1.32
1	N	264	C	C4-N4	5.04	1.38	1.33
1	N	635	A	C6-N1	5.04	1.39	1.35
1	N	658	C	C3'-C2'	-5.04	1.47	1.52
1	N	753	A	C5-C4	5.04	1.42	1.38
1	N	892	A	C4'-C3'	5.04	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	925	G	C3'-C2'	5.04	1.58	1.52
1	N	952	U	N1-C6	-5.04	1.33	1.38
1	N	572	A	N7-C5	-5.04	1.36	1.39
1	N	105	G	N1-C2	5.04	1.41	1.37
1	N	412	A	N1-C2	5.04	1.38	1.34
1	N	633	G	C5-C6	-5.04	1.37	1.42
1	N	708	C	C2-O2	5.04	1.28	1.24
1	N	885	G	C6-O6	-5.04	1.19	1.24
1	N	1442	G	C2-N3	5.04	1.36	1.32
1	N	406	G	N9-C8	-5.03	1.34	1.37
1	N	1504	G	N9-C4	5.03	1.42	1.38
1	N	959	A	C2'-C1'	-5.03	1.47	1.53
1	N	1363	A	N7-C5	-5.03	1.36	1.39
1	N	37	U	O3'-P	-5.03	1.55	1.61
1	N	491	G	C8-N7	-5.03	1.27	1.30
1	N	672	U	P-O5'	5.03	1.64	1.59
1	N	938	A	O3'-P	-5.03	1.55	1.61
1	N	993	G	C5-C4	5.03	1.41	1.38
1	N	69	G	N7-C5	-5.03	1.36	1.39
1	N	590	U	C3'-O3'	5.03	1.49	1.42
1	N	623	C	C2'-C1'	5.03	1.58	1.53
1	N	864	A	N9-C8	5.03	1.41	1.37
1	N	975	A	C6-N1	5.03	1.39	1.35
1	N	1133	G	C2-N2	5.03	1.39	1.34
1	N	71	A	N7-C5	-5.03	1.36	1.39
1	N	163	C	C2-N3	-5.03	1.31	1.35
1	N	174	A	C4'-C3'	-5.03	1.47	1.52
1	N	578	C	C1'-N1	5.03	1.56	1.48
1	N	1483	A	C5'-C4'	5.03	1.57	1.51
1	N	287	U	N1-C2	5.02	1.43	1.38
1	N	75	G	N9-C8	-5.02	1.34	1.37
1	N	294	U	C2-N3	5.02	1.41	1.37
1	N	444	G	C1'-N9	5.02	1.56	1.48
1	N	620	C	C5-C6	-5.02	1.30	1.34
1	N	709	U	N3-C4	5.02	1.43	1.38
1	N	1375	A	P-O5'	-5.02	1.54	1.59
1	N	982	U	N3-C4	5.02	1.43	1.38
1	N	1090	U	N1-C6	5.02	1.42	1.38
1	N	1196	A	C1'-N9	5.02	1.56	1.48
1	N	96	U	N1-C6	5.02	1.42	1.38
1	N	175	C	N1-C2	-5.02	1.35	1.40
1	N	913	A	C5-C4	5.02	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	276	G	C6-N1	5.02	1.43	1.39
1	N	721	G	O3'-P	-5.02	1.55	1.61
1	N	838	G	N7-C5	-5.02	1.36	1.39
1	N	1150	A	C4'-C3'	5.02	1.58	1.53
1	N	1417	G	C6-N1	5.02	1.43	1.39
1	N	92	U	C4'-O4'	-5.02	1.39	1.45
1	N	76	G	C5'-C4'	-5.01	1.45	1.51
1	N	357	G	C4'-C3'	5.01	1.58	1.53
1	N	705	G	C4'-C3'	5.01	1.58	1.53
1	N	740	U	N1-C2	5.01	1.43	1.38
1	N	905	U	C2'-C1'	5.01	1.58	1.53
1	N	1175	G	C4'-O4'	-5.01	1.39	1.45
1	N	1219	A	N7-C5	-5.01	1.36	1.39
1	N	1310	G	C6-O6	5.01	1.28	1.24
1	N	1375	A	C5-C4	-5.01	1.35	1.38
1	N	277	C	C5'-C4'	5.01	1.57	1.51
1	N	753	A	N7-C5	5.01	1.42	1.39
1	N	1431	A	C3'-O3'	5.01	1.49	1.42
1	N	363	A	C6-N1	5.01	1.39	1.35
1	N	406	G	C8-N7	5.01	1.33	1.30
1	N	969	A	C5-C6	5.01	1.45	1.41
1	N	1114	C	N1-C2	-5.01	1.35	1.40
1	N	140	U	C4'-C3'	-5.01	1.47	1.52
1	N	375	U	N1-C6	5.01	1.42	1.38
1	N	1274	A	C4'-O4'	-5.01	1.39	1.45
1	N	935	A	C8-N7	5.01	1.35	1.31
1	N	1352	C	C3'-O3'	5.01	1.49	1.42
1	N	157	U	N1-C6	5.01	1.42	1.38
1	N	636	U	N1-C6	-5.01	1.33	1.38
1	N	1245	C	O3'-P	-5.01	1.55	1.61
1	N	1425	U	P-O5'	5.01	1.64	1.59
1	N	108	G	O4'-C1'	-5.00	1.35	1.41
1	N	348	G	C8-N7	5.00	1.33	1.30
1	N	1497	G	N3-C4	-5.00	1.31	1.35
1	N	959	A	N1-C2	5.00	1.38	1.34
1	N	1005	A	N7-C5	-5.00	1.36	1.39
1	N	338	A	C3'-C2'	-5.00	1.47	1.52
1	N	600	A	C4'-C3'	5.00	1.58	1.53
1	N	1438	G	N9-C8	5.00	1.41	1.37

All (9576) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	438	U	P-O3'-C3'	29.61	155.24	119.70
1	N	79	G	C5-C6-O6	-29.58	110.85	128.60
1	N	462	G	N1-C6-O6	25.96	135.48	119.90
1	N	459	A	N1-C6-N6	25.79	134.07	118.60
1	N	766	A	N1-C6-N6	25.52	133.91	118.60
1	N	465	A	N1-C6-N6	25.13	133.68	118.60
1	N	236	A	N1-C6-N6	25.05	133.63	118.60
1	N	1279	G	N1-C6-O6	24.88	134.83	119.90
1	N	32	A	N1-C6-N6	24.77	133.46	118.60
1	N	141	G	C5-C6-O6	-23.81	114.31	128.60
1	N	1279	G	C5-C6-O6	-23.60	114.44	128.60
1	N	547	A	P-O3'-C3'	22.99	147.28	119.70
1	N	77	A	N1-C6-N6	22.91	132.34	118.60
1	N	546	A	N1-C6-N6	22.90	132.34	118.60
1	N	1082	A	N1-C6-N6	22.58	132.15	118.60
1	N	462	G	C5-C6-O6	-22.53	115.08	128.60
1	N	250	A	N1-C6-N6	22.15	131.89	118.60
1	N	938	A	N1-C6-N6	22.15	131.89	118.60
1	N	595	A	N1-C6-N6	22.14	131.89	118.60
1	N	746	A	N1-C6-N6	22.01	131.81	118.60
1	N	141	G	N1-C6-O6	21.96	133.08	119.90
1	N	79	G	N1-C6-O6	21.86	133.01	119.90
1	N	484	G	P-O3'-C3'	21.61	145.63	119.70
1	N	376	G	N1-C6-O6	21.46	132.78	119.90
1	N	313	A	N1-C6-N6	21.40	131.44	118.60
1	N	515	G	C5-C6-O6	-21.40	115.76	128.60
1	N	119	A	P-O3'-C3'	21.31	145.27	119.70
1	N	94	G	P-O3'-C3'	21.28	145.24	119.70
1	N	1229	A	C8-N9-C4	-21.15	97.34	105.80
1	N	430	A	N1-C6-N6	21.09	131.25	118.60
1	N	191	G	N1-C6-O6	21.00	132.50	119.90
1	N	487	A	N1-C6-N6	20.96	131.18	118.60
1	N	78	A	N1-C6-N6	20.89	131.13	118.60
1	N	318	G	N1-C6-O6	20.86	132.42	119.90
1	N	1421	G	N1-C6-O6	20.83	132.40	119.90
1	N	213	G	C5-C6-O6	-20.80	116.12	128.60
1	N	787	A	N1-C6-N6	20.69	131.02	118.60
1	N	1155	A	N1-C6-N6	20.69	131.02	118.60
1	N	661	G	N1-C6-O6	20.50	132.20	119.90
1	N	441	A	N1-C6-N6	20.45	130.87	118.60
1	N	688	G	N1-C6-O6	20.39	132.13	119.90
1	N	1405	G	N1-C6-O6	20.38	132.13	119.90
1	N	959	A	N1-C6-N6	20.35	130.81	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1003	G	C5-C6-O6	-20.32	116.41	128.60
1	N	1384	C	N3-C4-C5	-20.28	113.79	121.90
1	N	1349	A	N1-C6-N6	20.12	130.67	118.60
1	N	733	G	N1-C6-O6	20.11	131.97	119.90
1	N	39	G	N1-C6-O6	20.02	131.91	119.90
1	N	918	A	N1-C6-N6	19.95	130.57	118.60
1	N	144	G	C5-C6-O6	-19.94	116.63	128.60
1	N	1285	A	P-O3'-C3'	19.88	143.56	119.70
1	N	251	G	N1-C6-O6	19.86	131.81	119.90
1	N	1251	A	N1-C6-N6	19.84	130.50	118.60
1	N	39	G	C5-C6-O6	-19.77	116.74	128.60
1	N	1155	A	C4-C5-C6	19.74	126.87	117.00
1	N	149	A	N1-C6-N6	19.74	130.44	118.60
1	N	120	A	N1-C6-N6	19.69	130.41	118.60
1	N	500	G	N1-C6-O6	19.61	131.67	119.90
1	N	541	G	N1-C6-O6	19.60	131.66	119.90
1	N	670	G	N1-C6-O6	19.60	131.66	119.90
1	N	642	A	N1-C6-N6	19.55	130.33	118.60
1	N	59	A	N1-C6-N6	19.54	130.32	118.60
1	N	74	A	N1-C6-N6	19.45	130.27	118.60
1	N	55	A	N1-C6-N6	19.39	130.24	118.60
1	N	535	A	P-O3'-C3'	19.37	142.94	119.70
1	N	1252	A	C8-N9-C4	-19.37	98.05	105.80
1	N	814	A	N1-C6-N6	19.29	130.17	118.60
1	N	1312	G	N1-C6-O6	19.14	131.38	119.90
1	N	482	A	C4-C5-C6	19.02	126.51	117.00
1	N	1219	A	N1-C6-N6	18.95	129.97	118.60
1	N	1184	G	N1-C6-O6	18.94	131.26	119.90
1	N	683	G	N1-C6-O6	18.91	131.24	119.90
1	N	279	A	N1-C6-N6	18.86	129.92	118.60
1	N	251	G	C5-C6-O6	-18.85	117.29	128.60
1	N	386	C	N3-C4-C5	-18.85	114.36	121.90
1	N	412	A	N1-C6-N6	18.84	129.91	118.60
1	N	160	A	N1-C6-N6	18.79	129.88	118.60
1	N	315	A	N1-C6-N6	18.76	129.85	118.60
1	N	190	A	N1-C6-N6	18.73	129.84	118.60
1	N	760	G	N1-C6-O6	18.73	131.14	119.90
1	N	416	G	N1-C6-O6	18.71	131.12	119.90
1	N	57	G	N1-C6-O6	18.70	131.12	119.90
1	N	548	G	N1-C6-O6	18.61	131.06	119.90
1	N	1039	G	C5-C6-O6	-18.58	117.45	128.60
1	N	1197	A	N1-C6-N6	18.58	129.75	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	496	A	N1-C6-N6	18.54	129.72	118.60
1	N	897	C	C6-N1-C2	-18.41	112.93	120.30
1	N	1184	G	C5-C6-O6	-18.41	117.56	128.60
1	N	128	G	N1-C6-O6	18.39	130.94	119.90
1	N	767	A	N1-C6-N6	18.38	129.62	118.60
1	N	886	G	N1-C6-O6	18.34	130.90	119.90
1	N	80	A	N1-C6-N6	18.32	129.59	118.60
1	N	47	C	P-O3'-C3'	18.32	141.68	119.70
1	N	289	G	C5-C6-O6	-18.31	117.61	128.60
1	N	448	A	N1-C6-N6	18.28	129.57	118.60
1	N	1111	A	N1-C6-N6	18.23	129.54	118.60
1	N	500	G	C5-C6-O6	-18.23	117.66	128.60
1	N	1032	G	C5-C6-O6	-18.22	117.67	128.60
1	N	376	G	C5-C6-O6	-18.21	117.68	128.60
1	N	1331	G	N1-C6-O6	18.21	130.82	119.90
1	N	1299	A	N1-C6-N6	18.20	129.52	118.60
1	N	829	G	C5-C6-O6	-18.19	117.69	128.60
1	N	128	G	C5-C6-O6	-18.16	117.70	128.60
1	N	289	G	N1-C6-O6	18.14	130.78	119.90
1	N	982	U	P-O3'-C3'	18.08	141.39	119.70
1	N	544	G	N1-C6-O6	18.06	130.74	119.90
1	N	923	A	N1-C6-N6	18.04	129.42	118.60
1	N	499	A	N1-C6-N6	18.03	129.42	118.60
1	N	515	G	N1-C6-O6	18.02	130.71	119.90
1	N	780	A	N1-C6-N6	17.86	129.31	118.60
1	N	1362	A	P-O3'-C3'	17.83	141.09	119.70
1	N	1458	G	N1-C6-O6	17.81	130.59	119.90
1	N	714	G	N1-C6-O6	17.76	130.55	119.90
1	N	192	A	N1-C6-N6	17.75	129.25	118.60
1	N	977	A	N1-C6-N6	17.75	129.25	118.60
1	N	831	A	C5-C6-N1	-17.70	108.85	117.70
1	N	455	G	N1-C6-O6	17.68	130.51	119.90
1	N	1418	A	N1-C6-N6	17.66	129.20	118.60
1	N	241	G	N1-C6-O6	17.65	130.49	119.90
1	N	704	A	N1-C6-N6	17.64	129.18	118.60
1	N	213	G	N1-C6-O6	17.64	130.48	119.90
1	N	258	G	C5-C6-O6	-17.63	118.02	128.60
1	N	1201	A	P-O3'-C3'	17.62	140.85	119.70
1	N	901	A	N1-C6-N6	17.58	129.15	118.60
1	N	886	G	C5-C6-O6	-17.58	118.05	128.60
1	N	298	A	N1-C6-N6	17.56	129.14	118.60
1	N	639	G	C5-C6-O6	-17.55	118.07	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	393	A	N1-C6-N6	17.53	129.12	118.60
1	N	1012	A	N1-C6-N6	17.52	129.11	118.60
1	N	168	G	C5-C6-O6	-17.51	118.09	128.60
1	N	646	G	N1-C6-O6	17.49	130.40	119.90
1	N	1171	A	N1-C6-N6	17.47	129.08	118.60
1	N	115	G	P-O3'-C3'	17.44	140.63	119.70
1	N	639	G	N1-C6-O6	17.40	130.34	119.90
1	N	139	A	N1-C6-N6	17.37	129.02	118.60
1	N	246	A	N1-C6-N6	17.36	129.02	118.60
1	N	573	A	N1-C6-N6	17.33	129.00	118.60
1	N	1032	G	N1-C6-O6	17.32	130.29	119.90
1	N	75	G	N1-C6-O6	17.31	130.29	119.90
1	N	1484	C	N3-C4-C5	-17.31	114.98	121.90
1	N	1006	G	N1-C6-O6	17.30	130.28	119.90
1	N	895	G	N1-C6-O6	17.28	130.27	119.90
1	N	681	A	N1-C6-N6	17.26	128.95	118.60
1	N	366	A	N1-C6-N6	17.23	128.94	118.60
1	N	301	G	N1-C6-O6	17.22	130.23	119.90
1	N	1530	G	P-O3'-C3'	17.22	140.36	119.70
1	N	1392	G	N1-C6-O6	17.20	130.22	119.90
1	N	1437	A	N1-C6-N6	17.17	128.90	118.60
1	N	1206	G	C5-C6-O6	-17.17	118.30	128.60
1	N	933	G	N1-C6-O6	17.17	130.20	119.90
1	N	1221	G	N1-C6-O6	17.13	130.18	119.90
1	N	144	G	N1-C6-O6	17.13	130.18	119.90
1	N	550	G	N1-C6-O6	17.13	130.18	119.90
1	N	1501	C	N3-C4-C5	-17.11	115.06	121.90
1	N	1152	A	N1-C6-N6	17.10	128.86	118.60
1	N	50	A	N1-C6-N6	17.07	128.84	118.60
1	N	814	A	C5-C6-N1	-17.07	109.17	117.70
1	N	306	A	N1-C6-N6	17.06	128.84	118.60
1	N	1456	A	N1-C6-N6	17.06	128.84	118.60
1	N	1252	A	N9-C4-C5	17.02	112.61	105.80
1	N	1504	G	N1-C6-O6	16.98	130.09	119.90
1	N	1468	A	N1-C6-N6	16.97	128.78	118.60
1	N	321	A	N1-C6-N6	16.97	128.78	118.60
1	N	1497	G	N1-C6-O6	16.96	130.08	119.90
1	N	873	A	C5-C6-N1	-16.96	109.22	117.70
1	N	735	C	N3-C4-N4	16.91	129.84	118.00
1	N	605	U	P-O3'-C3'	16.90	139.98	119.70
1	N	417	G	N1-C6-O6	16.89	130.03	119.90
1	N	912	C	N3-C4-N4	16.86	129.80	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1362	A	O4'-C1'-N9	16.84	121.67	108.20
1	N	919	A	N1-C6-N6	16.82	128.69	118.60
1	N	600	A	N1-C6-N6	16.82	128.69	118.60
1	N	557	G	P-O3'-C3'	16.82	139.88	119.70
1	N	891	U	O4'-C1'-N1	16.81	121.65	108.20
1	N	184	G	P-O5'-C5'	16.81	147.79	120.90
1	N	1273	C	C6-N1-C2	-16.81	113.58	120.30
1	N	464	U	P-O3'-C3'	16.80	139.86	119.70
1	N	1419	G	N1-C6-O6	16.80	129.98	119.90
1	N	771	G	N1-C6-O6	16.76	129.96	119.90
1	N	19	A	C5-C6-N1	-16.75	109.32	117.70
1	N	1198	G	N1-C6-O6	16.74	129.94	119.90
1	N	1016	A	C8-N9-C4	-16.73	99.11	105.80
1	N	308	C	N3-C4-C5	-16.73	115.21	121.90
1	N	729	A	N1-C6-N6	16.69	128.61	118.60
1	N	1206	G	N1-C6-O6	16.66	129.90	119.90
1	N	491	G	C5-C6-O6	-16.65	118.61	128.60
1	N	1156	G	N1-C6-O6	16.64	129.88	119.90
1	N	253	A	N1-C6-N6	16.63	128.58	118.60
1	N	1191	A	N1-C6-N6	16.63	128.58	118.60
1	N	1319	A	P-O3'-C3'	16.62	139.65	119.70
1	N	845	A	N1-C6-N6	16.58	128.55	118.60
1	N	949	A	N1-C6-N6	16.58	128.55	118.60
1	N	724	G	N1-C6-O6	16.58	129.85	119.90
1	N	519	C	O4'-C1'-N1	16.53	121.43	108.20
1	N	416	G	C5-C6-O6	-16.52	118.69	128.60
1	N	1215	G	N1-C6-O6	16.51	129.81	119.90
1	N	258	G	N1-C6-O6	16.48	129.79	119.90
1	N	1146	A	N1-C6-N6	16.47	128.48	118.60
1	N	1306	A	N1-C6-N6	16.47	128.48	118.60
1	N	1508	A	N1-C6-N6	16.45	128.47	118.60
1	N	1292	G	C5-C6-O6	-16.45	118.73	128.60
1	N	1384	C	N3-C4-N4	16.43	129.50	118.00
1	N	57	G	C5-C6-O6	-16.43	118.74	128.60
1	N	670	G	C5-C6-O6	-16.43	118.74	128.60
1	N	1005	A	N1-C6-N6	16.41	128.45	118.60
1	N	264	C	P-O5'-C5'	16.40	147.14	120.90
1	N	909	A	C4-C5-C6	16.36	125.18	117.00
1	N	1003	G	N1-C6-O6	16.35	129.71	119.90
1	N	1054	C	C4-C5-C6	16.29	125.55	117.40
1	N	581	G	N1-C6-O6	16.28	129.67	119.90
1	N	1157	A	N1-C6-N6	16.28	128.37	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	776	G	P-O5'-C5'	16.27	146.94	120.90
1	N	661	G	C5-C6-O6	-16.24	118.86	128.60
1	N	354	G	N1-C6-O6	16.23	129.64	119.90
1	N	858	G	N1-C6-O6	16.21	129.62	119.90
1	N	938	A	C5-C6-N6	-16.20	110.74	123.70
1	N	626	G	N1-C6-O6	16.19	129.62	119.90
1	N	1421	G	C5-C6-O6	-16.18	118.89	128.60
1	N	560	A	C4-C5-C6	16.17	125.09	117.00
1	N	408	A	N1-C6-N6	16.16	128.30	118.60
1	N	101	A	N1-C6-N6	16.16	128.30	118.60
1	N	1269	A	N1-C6-N6	16.14	128.28	118.60
1	N	937	A	N1-C6-N6	16.12	128.27	118.60
1	N	1480	A	N1-C6-N6	16.10	128.26	118.60
1	N	1501	C	C2-N3-C4	16.10	127.95	119.90
1	N	969	A	N1-C6-N6	16.08	128.25	118.60
1	N	42	G	N1-C6-O6	16.06	129.54	119.90
1	N	829	G	N1-C6-O6	16.02	129.51	119.90
1	N	60	A	N9-C4-C5	16.01	112.20	105.80
1	N	1167	A	N1-C6-N6	15.99	128.19	118.60
1	N	1195	C	N3-C4-C5	-15.99	115.50	121.90
1	N	667	G	N1-C6-O6	15.98	129.49	119.90
1	N	303	A	N1-C6-N6	15.98	128.19	118.60
1	N	771	G	C5-C6-O6	-15.94	119.03	128.60
1	N	241	G	C5-C6-O6	-15.94	119.03	128.60
1	N	1068	G	N1-C6-O6	15.91	129.44	119.90
1	N	200	G	N1-C6-O6	15.88	129.43	119.90
1	N	1182	G	C5-C6-O6	-15.87	119.08	128.60
1	N	1033	G	N1-C6-O6	15.87	129.42	119.90
1	N	1179	A	N1-C6-N6	15.87	128.12	118.60
1	N	1101	A	P-O3'-C3'	15.86	138.73	119.70
1	N	1360	A	C4-C5-C6	15.85	124.92	117.00
1	N	1501	C	N3-C4-N4	15.84	129.09	118.00
1	N	795	C	O4'-C1'-N1	15.83	120.86	108.20
1	N	93	U	P-O5'-C5'	15.82	146.22	120.90
1	N	275	G	N1-C6-O6	15.82	129.39	119.90
1	N	40	C	O4'-C1'-N1	15.82	120.85	108.20
1	N	1045	C	O4'-C1'-N1	15.78	120.83	108.20
1	N	685	G	N1-C6-O6	15.77	129.36	119.90
1	N	1182	G	N1-C6-O6	15.75	129.35	119.90
1	N	873	A	N1-C6-N6	15.73	128.04	118.60
1	N	673	A	N1-C6-N6	15.72	128.03	118.60
1	N	455	G	C5-C6-O6	-15.70	119.18	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	338	A	N1-C6-N6	15.70	128.02	118.60
1	N	626	G	C5-C6-O6	-15.69	119.19	128.60
1	N	950	U	P-O5'-C5'	15.67	145.97	120.90
1	N	660	C	N3-C4-C5	-15.64	115.64	121.90
1	N	124	C	N3-C4-C5	-15.61	115.66	121.90
1	N	792	A	N1-C6-N6	15.61	127.96	118.60
1	N	895	G	C8-N9-C4	15.58	112.63	106.40
1	N	541	G	C5-C6-O6	-15.56	119.26	128.60
1	N	546	A	C5-C6-N6	-15.54	111.27	123.70
1	N	371	A	C4-C5-C6	15.51	124.76	117.00
1	N	336	A	N1-C6-N6	15.50	127.90	118.60
1	N	1215	G	C5-C6-O6	-15.49	119.31	128.60
1	N	28	A	N1-C6-N6	15.48	127.89	118.60
1	N	117	G	N1-C6-O6	15.48	129.19	119.90
1	N	1500	A	N1-C6-N6	15.45	127.87	118.60
1	N	168	G	N1-C6-O6	15.45	129.17	119.90
1	N	1312	G	C5-C6-O6	-15.44	119.34	128.60
1	N	1399	C	P-O3'-C3'	15.43	138.21	119.70
1	N	299	G	N1-C6-O6	15.41	129.14	119.90
1	N	310	G	N7-C8-N9	15.40	120.80	113.10
1	N	1255	G	C5-C6-O6	-15.40	119.36	128.60
1	N	903	G	C5-C6-O6	-15.38	119.37	128.60
1	N	668	G	N1-C6-O6	15.38	129.13	119.90
1	N	1110	A	N1-C6-N6	15.37	127.82	118.60
1	N	1125	U	O4'-C1'-N1	15.34	120.47	108.20
1	N	817	C	N3-C4-N4	15.33	128.73	118.00
1	N	1229	A	N9-C4-C5	15.32	111.93	105.80
1	N	1223	C	C6-N1-C2	-15.30	114.18	120.30
1	N	491	G	N1-C6-O6	15.29	129.08	119.90
1	N	662	U	O4'-C1'-N1	15.29	120.43	108.20
1	N	1486	G	N1-C6-O6	15.29	129.07	119.90
1	N	1497	G	C5-C6-O6	-15.25	119.45	128.60
1	N	396	C	N3-C4-N4	15.23	128.66	118.00
1	N	120	A	O4'-C1'-N9	15.23	120.38	108.20
1	N	1492	A	N1-C6-N6	15.19	127.71	118.60
1	N	847	G	C5-C6-O6	-15.17	119.50	128.60
1	N	586	C	N3-C4-C5	-15.17	115.83	121.90
1	N	1518	A	N1-C6-N6	15.17	127.70	118.60
1	N	1226	C	P-O3'-C3'	15.16	137.90	119.70
1	N	703	G	N1-C6-O6	15.15	128.99	119.90
1	N	1033	G	C5-C6-O6	-15.15	119.51	128.60
1	N	724	G	C5-C6-O6	-15.15	119.51	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	575	G	P-O3'-C3'	15.15	137.88	119.70
1	N	873	A	C4-C5-C6	15.15	124.58	117.00
1	N	414	A	C4-C5-C6	15.13	124.57	117.00
1	N	120	A	P-O3'-C3'	15.12	137.85	119.70
1	N	1101	A	N1-C6-N6	15.12	127.67	118.60
1	N	1140	C	O4'-C1'-N1	15.11	120.29	108.20
1	N	570	G	N1-C6-O6	15.05	128.93	119.90
1	N	1297	G	N1-C6-O6	15.05	128.93	119.90
1	N	869	G	N1-C6-O6	15.04	128.92	119.90
1	N	1380	U	P-O3'-C3'	15.04	137.74	119.70
1	N	51	A	P-O3'-C3'	15.03	137.74	119.70
1	N	702	A	O4'-C1'-N9	15.02	120.21	108.20
1	N	344	A	N1-C6-N6	15.01	127.60	118.60
1	N	912	C	C5-C4-N4	-15.00	109.70	120.20
1	N	1357	A	N1-C6-N6	14.98	127.58	118.60
1	N	942	G	C6-C5-N7	-14.96	121.42	130.40
1	N	768	A	N1-C6-N6	14.96	127.58	118.60
1	N	115	G	N1-C6-O6	14.96	128.87	119.90
1	N	922	G	C8-N9-C4	-14.95	100.42	106.40
1	N	1285	A	N1-C6-N6	14.94	127.57	118.60
1	N	809	G	C8-N9-C4	-14.93	100.43	106.40
1	N	77	A	C5-C6-N1	-14.89	110.25	117.70
1	N	313	A	C5-C6-N6	-14.89	111.78	123.70
1	N	363	A	N1-C6-N6	14.89	127.53	118.60
1	N	270	A	N1-C6-N6	14.88	127.53	118.60
1	N	1055	A	N1-C6-N6	14.88	127.53	118.60
1	N	864	A	N1-C6-N6	14.88	127.53	118.60
1	N	475	C	C6-N1-C2	-14.84	114.36	120.30
1	N	495	A	P-O3'-C3'	14.84	137.51	119.70
1	N	1504	G	C5-C6-O6	-14.84	119.69	128.60
1	N	832	G	N1-C6-O6	14.84	128.81	119.90
1	N	1260	G	N3-C2-N2	14.83	130.28	119.90
1	N	361	G	N1-C2-N3	-14.83	115.00	123.90
1	N	210	C	P-O3'-C3'	14.82	137.49	119.70
1	N	1046	A	N1-C6-N6	14.82	127.49	118.60
1	N	417	G	C5-C6-O6	-14.81	119.71	128.60
1	N	511	C	P-O3'-C3'	14.81	137.47	119.70
1	N	1494	G	N1-C6-O6	14.81	128.78	119.90
1	N	14	U	O4'-C1'-N1	14.80	120.04	108.20
1	N	73	C	C6-N1-C2	-14.78	114.39	120.30
1	N	1482	G	N3-C2-N2	14.77	130.24	119.90
1	N	1344	C	O4'-C1'-N1	14.77	120.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	743	A	N1-C6-N6	14.76	127.46	118.60
1	N	913	A	P-O3'-C3'	14.75	137.40	119.70
1	N	1429	A	C8-N9-C4	-14.74	99.90	105.80
1	N	1044	A	N1-C6-N6	14.73	127.44	118.60
1	N	1253	G	N1-C6-O6	14.72	128.73	119.90
1	N	1495	U	C5-C6-N1	14.71	130.06	122.70
1	N	1401	G	C8-N9-C4	-14.69	100.52	106.40
1	N	1342	C	N3-C4-C5	-14.68	116.03	121.90
1	N	968	A	C4-C5-C6	14.68	124.34	117.00
1	N	600	A	C5-C6-N6	-14.68	111.96	123.70
1	N	1238	A	N1-C6-N6	14.66	127.39	118.60
1	N	1174	G	N1-C6-O6	14.66	128.69	119.90
1	N	1299	A	N7-C8-N9	-14.65	106.47	113.80
1	N	155	A	N1-C6-N6	14.63	127.38	118.60
1	N	633	G	N1-C6-O6	14.62	128.67	119.90
1	N	596	A	N1-C6-N6	14.62	127.37	118.60
1	N	748	G	N1-C6-O6	14.61	128.67	119.90
1	N	378	G	N1-C6-O6	14.61	128.67	119.90
1	N	786	G	N1-C6-O6	14.60	128.66	119.90
1	N	821	G	N1-C6-O6	14.60	128.66	119.90
1	N	544	G	C5-C6-O6	-14.60	119.84	128.60
1	N	263	A	N1-C6-N6	14.59	127.36	118.60
1	N	877	G	C5-C6-O6	-14.59	119.85	128.60
1	N	1428	A	C8-N9-C4	-14.59	99.96	105.80
1	N	862	C	O4'-C1'-N1	14.56	119.85	108.20
1	N	1229	A	N1-C6-N6	14.55	127.33	118.60
1	N	1148	U	C6-N1-C2	-14.55	112.27	121.00
1	N	895	G	P-O5'-C5'	14.54	144.16	120.90
1	N	109	A	P-O3'-C3'	14.53	137.14	119.70
1	N	522	C	O4'-C1'-N1	14.53	119.82	108.20
1	N	114	U	O4'-C1'-N1	14.52	119.81	108.20
1	N	1437	A	C5-C6-N1	-14.52	110.44	117.70
1	N	548	G	C5-C6-O6	-14.51	119.89	128.60
1	N	1155	A	C6-C5-N7	-14.51	122.14	132.30
1	N	694	A	N1-C6-N6	14.50	127.30	118.60
1	N	126	G	N1-C2-N3	-14.50	115.20	123.90
1	N	1155	A	C5-C6-N1	-14.50	110.45	117.70
1	N	454	G	N1-C6-O6	14.49	128.59	119.90
1	N	17	U	O4'-C1'-N1	14.47	119.78	108.20
1	N	197	A	O4'-C1'-N9	14.47	119.78	108.20
1	N	1252	A	N7-C8-N9	14.47	121.03	113.80
1	N	1164	G	N1-C6-O6	14.44	128.56	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1494	G	C5-C6-O6	-14.43	119.94	128.60
1	N	799	G	C5-C6-O6	-14.42	119.95	128.60
1	N	1488	G	N1-C6-O6	14.42	128.55	119.90
1	N	397	A	N1-C6-N6	14.41	127.25	118.60
1	N	1064	G	N1-C6-O6	14.41	128.55	119.90
1	N	559	A	N1-C6-N6	14.40	127.24	118.60
1	N	1270	G	N1-C6-O6	14.40	128.54	119.90
1	N	1128	C	C5-C4-N4	-14.40	110.12	120.20
1	N	1231	G	N1-C6-O6	14.39	128.53	119.90
1	N	1092	A	O4'-C1'-N9	14.35	119.68	108.20
1	N	1051	C	C5-C4-N4	-14.33	110.17	120.20
1	N	930	C	O4'-C1'-N1	14.33	119.66	108.20
1	N	162	A	N1-C6-N6	14.33	127.20	118.60
1	N	131	A	N1-C6-N6	14.31	127.19	118.60
1	N	1209	C	N3-C4-C5	-14.31	116.17	121.90
1	N	468	A	N1-C6-N6	14.31	127.18	118.60
1	N	327	A	N1-C6-N6	14.30	127.18	118.60
1	N	1164	G	C5-C6-O6	-14.30	120.02	128.60
1	N	115	G	C5-C6-O6	-14.30	120.02	128.60
1	N	116	A	N1-C6-N6	14.30	127.18	118.60
1	N	1113	C	N3-C4-C5	-14.29	116.19	121.90
1	N	1236	A	P-O3'-C3'	14.28	136.83	119.70
1	N	942	G	C4-C5-C6	14.27	127.36	118.80
1	N	1223	C	N3-C4-C5	-14.27	116.19	121.90
1	N	223	A	N1-C6-N6	14.27	127.16	118.60
1	N	874	G	C5-C6-O6	-14.27	120.04	128.60
1	N	459	A	C5-C6-N1	-14.25	110.58	117.70
1	N	1332	A	C4-C5-C6	14.23	124.12	117.00
1	N	1014	A	N1-C6-N6	14.22	127.13	118.60
1	N	151	A	N1-C6-N6	14.21	127.13	118.60
1	N	1059	C	N3-C4-N4	14.21	127.95	118.00
1	N	494	G	N1-C6-O6	14.21	128.42	119.90
1	N	896	C	P-O5'-C5'	14.20	143.62	120.90
1	N	665	A	N1-C6-N6	14.19	127.12	118.60
1	N	735	C	N3-C4-C5	-14.19	116.22	121.90
1	N	819	A	N1-C6-N6	14.18	127.11	118.60
1	N	248	C	N3-C4-N4	14.17	127.92	118.00
1	N	1163	A	N1-C6-N6	14.16	127.09	118.60
1	N	1234	C	C6-N1-C2	-14.16	114.64	120.30
1	N	1482	G	C6-C5-N7	-14.16	121.91	130.40
1	N	139	A	N1-C2-N3	-14.13	122.23	129.30
1	N	596	A	C8-N9-C4	-14.13	100.15	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	496	A	C5-C6-N6	-14.13	112.40	123.70
1	N	82	G	N1-C6-O6	14.12	128.37	119.90
1	N	898	G	N1-C6-O6	14.11	128.37	119.90
1	N	1356	G	N1-C6-O6	14.11	128.37	119.90
1	N	1453	G	N1-C6-O6	14.11	128.37	119.90
1	N	1218	C	N3-C4-N4	14.11	127.87	118.00
1	N	374	A	O4'-C1'-N9	14.09	119.47	108.20
1	N	728	A	N1-C6-N6	14.08	127.05	118.60
1	N	909	A	C5-C6-N1	-14.07	110.66	117.70
1	N	111	G	C5-C6-O6	-14.06	120.16	128.60
1	N	652	U	O4'-C1'-N1	14.05	119.44	108.20
1	N	630	A	N1-C6-N6	14.05	127.03	118.60
1	N	685	G	C5-C6-O6	-14.05	120.17	128.60
1	N	660	C	C2-N3-C4	14.04	126.92	119.90
1	N	691	G	C5-C6-O6	-14.04	120.18	128.60
1	N	1483	A	O4'-C1'-N9	14.03	119.42	108.20
1	N	255	G	C4-C5-N7	14.02	116.41	110.80
1	N	413	G	C5-C6-O6	-14.02	120.19	128.60
1	N	840	C	C6-N1-C2	-14.01	114.70	120.30
1	N	971	G	C5-C6-O6	-14.01	120.20	128.60
1	N	194	C	C6-N1-C2	-13.97	114.71	120.30
1	N	310	G	C8-N9-C4	-13.95	100.82	106.40
1	N	903	G	N1-C6-O6	13.95	128.27	119.90
1	N	838	G	N1-C6-O6	13.95	128.27	119.90
1	N	1255	G	N1-C6-O6	13.94	128.26	119.90
1	N	104	G	C5-C6-O6	-13.94	120.24	128.60
1	N	1053	G	N1-C6-O6	13.94	128.26	119.90
1	N	418	C	N3-C4-C5	-13.93	116.33	121.90
1	N	172	A	P-O3'-C3'	13.91	136.39	119.70
1	N	1201	A	N1-C6-N6	13.90	126.94	118.60
1	N	445	G	C5-C6-O6	-13.90	120.26	128.60
1	N	1221	G	C5-C6-O6	-13.90	120.26	128.60
1	N	72	A	N1-C6-N6	13.89	126.93	118.60
1	N	1413	A	O4'-C1'-N9	13.88	119.30	108.20
1	N	1039	G	N1-C6-O6	13.86	128.22	119.90
1	N	465	A	C5-C6-N6	-13.86	112.61	123.70
1	N	1513	A	N1-C6-N6	13.85	126.91	118.60
1	N	655	A	C4-C5-C6	13.84	123.92	117.00
1	N	372	C	P-O3'-C3'	13.82	136.29	119.70
1	N	1004	A	N1-C6-N6	13.81	126.89	118.60
1	N	1331	G	C5-C6-O6	-13.81	120.31	128.60
1	N	383	A	N1-C6-N6	13.80	126.88	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1405	G	C5-C6-O6	-13.80	120.32	128.60
1	N	767	A	C5-C6-N1	-13.79	110.80	117.70
1	N	184	G	C4-C5-N7	-13.79	105.28	110.80
1	N	423	G	O4'-C1'-N9	13.79	119.23	108.20
1	N	1292	G	N1-C6-O6	13.74	128.15	119.90
1	N	232	G	C6-C5-N7	-13.74	122.16	130.40
1	N	318	G	C5-C6-O6	-13.74	120.36	128.60
1	N	588	G	N1-C6-O6	13.73	128.14	119.90
1	N	502	A	N1-C6-N6	13.73	126.84	118.60
1	N	1311	A	N1-C6-N6	13.72	126.83	118.60
1	N	228	A	N1-C6-N6	13.72	126.83	118.60
1	N	793	U	P-O3'-C3'	13.71	136.15	119.70
1	N	1258	G	O4'-C1'-N9	13.71	119.17	108.20
1	N	44	A	N1-C6-N6	13.70	126.82	118.60
1	N	272	C	O4'-C1'-N1	13.69	119.16	108.20
1	N	1170	A	C2-N3-C4	-13.69	103.76	110.60
1	N	9	G	N1-C6-O6	13.66	128.10	119.90
1	N	776	G	N1-C6-O6	13.66	128.10	119.90
1	N	784	A	C8-N9-C4	13.63	111.25	105.80
1	N	758	C	O4'-C1'-N1	13.62	119.10	108.20
1	N	1364	U	O4'-C1'-N1	13.62	119.10	108.20
1	N	676	A	N1-C6-N6	13.62	126.77	118.60
1	N	1175	G	N1-C6-O6	13.60	128.06	119.90
1	N	803	G	N1-C6-O6	13.59	128.05	119.90
1	N	396	C	C6-N1-C2	-13.58	114.87	120.30
1	N	389	A	N1-C6-N6	13.58	126.75	118.60
1	N	994	A	N1-C6-N6	13.57	126.74	118.60
1	N	492	C	N3-C4-C5	-13.53	116.49	121.90
1	N	901	A	C5-C6-N1	-13.53	110.94	117.70
1	N	82	G	C5-C6-O6	-13.52	120.49	128.60
1	N	1022	A	N1-C6-N6	13.52	126.71	118.60
1	N	1069	C	C2-N3-C4	13.52	126.66	119.90
1	N	98	A	O4'-C1'-N9	13.52	119.01	108.20
1	N	1339	A	N1-C6-N6	13.51	126.71	118.60
1	N	22	G	C5-C6-O6	-13.51	120.50	128.60
1	N	338	A	C5-C6-N6	-13.50	112.90	123.70
1	N	493	A	N1-C6-N6	13.50	126.70	118.60
1	N	1437	A	C4-C5-C6	13.49	123.75	117.00
1	N	26	A	N1-C6-N6	13.49	126.69	118.60
1	N	510	A	N1-C6-N6	13.48	126.69	118.60
1	N	1195	C	C4-C5-C6	13.48	124.14	117.40
1	N	6	G	C8-N9-C4	-13.47	101.01	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1213	A	C5-C6-N1	-13.47	110.97	117.70
1	N	220	G	O4'-C1'-N9	13.46	118.96	108.20
1	N	1457	G	C5-N7-C8	-13.45	97.57	104.30
1	N	63	C	C6-N1-C2	-13.45	114.92	120.30
1	N	746	A	C5-C6-N6	-13.45	112.94	123.70
1	N	307	C	C6-N1-C2	-13.44	114.92	120.30
1	N	606	G	N1-C6-O6	13.44	127.97	119.90
1	N	414	A	C5-C6-N1	-13.43	110.99	117.70
1	N	1225	A	N1-C6-N6	13.43	126.66	118.60
1	N	529	G	N1-C6-O6	13.43	127.96	119.90
1	N	1273	C	N3-C4-C5	-13.42	116.53	121.90
1	N	198	G	O4'-C1'-N9	13.40	118.92	108.20
1	N	159	G	C5-C6-O6	-13.39	120.57	128.60
1	N	498	A	O4'-C1'-N9	13.38	118.91	108.20
1	N	1242	G	P-O5'-C5'	13.38	142.32	120.90
1	N	302	G	N1-C6-O6	13.38	127.93	119.90
1	N	763	G	N1-C6-O6	13.37	127.92	119.90
1	N	609	A	N1-C6-N6	13.37	126.62	118.60
1	N	271	C	C5-C4-N4	-13.37	110.84	120.20
1	N	942	G	C5-C6-N1	-13.37	104.82	111.50
1	N	101	A	C8-N9-C4	-13.36	100.46	105.80
1	N	991	U	P-O3'-C3'	13.36	135.73	119.70
1	N	1343	G	N1-C6-O6	13.36	127.92	119.90
1	N	1098	C	N3-C4-N4	13.35	127.35	118.00
1	N	342	C	N3-C4-C5	-13.35	116.56	121.90
1	N	309	A	N1-C6-N6	13.34	126.60	118.60
1	N	1486	G	C5-C6-O6	-13.34	120.60	128.60
1	N	735	C	C6-N1-C2	-13.33	114.97	120.30
1	N	1383	C	N3-C4-N4	13.33	127.33	118.00
1	N	1534	A	N1-C6-N6	13.32	126.59	118.60
1	N	71	A	N1-C6-N6	13.30	126.58	118.60
1	N	1144	G	P-O3'-C3'	13.30	135.66	119.70
1	N	1257	A	N1-C6-N6	13.30	126.58	118.60
1	N	1181	G	N1-C6-O6	13.28	127.87	119.90
1	N	525	C	O4'-C1'-N1	13.27	118.81	108.20
1	N	454	G	C5-C6-O6	-13.26	120.64	128.60
1	N	823	C	C6-N1-C2	-13.26	115.00	120.30
1	N	202	G	N1-C6-O6	13.25	127.85	119.90
1	N	1491	G	N1-C6-O6	13.24	127.85	119.90
1	N	553	A	C4-C5-C6	13.24	123.62	117.00
1	N	1529	G	P-O3'-C3'	13.24	135.59	119.70
1	N	1519	A	N1-C6-N6	13.23	126.54	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	7	A	N1-C6-N6	13.23	126.54	118.60
1	N	185	U	P-O5'-C5'	13.23	142.07	120.90
1	N	196	A	N1-C6-N6	13.23	126.54	118.60
1	N	1170	A	N1-C2-N3	13.23	135.92	129.30
1	N	778	G	N1-C6-O6	13.23	127.84	119.90
1	N	385	C	C5-C4-N4	-13.23	110.94	120.20
1	N	299	G	C5-C6-O6	-13.22	120.67	128.60
1	N	646	G	C5-C6-O6	-13.21	120.67	128.60
1	N	807	A	N1-C6-N6	13.20	126.52	118.60
1	N	1462	C	O4'-C1'-N1	13.19	118.75	108.20
1	N	718	A	P-O3'-C3'	13.18	135.52	119.70
1	N	825	A	N1-C6-N6	13.18	126.51	118.60
1	N	538	G	C5-C6-O6	-13.17	120.70	128.60
1	N	209	U	O4'-C1'-N1	13.16	118.73	108.20
1	N	1248	A	P-O5'-C5'	13.16	141.95	120.90
1	N	1362	A	N1-C6-N6	13.15	126.49	118.60
1	N	816	A	C8-N9-C4	-13.14	100.54	105.80
1	N	928	G	O4'-C1'-N9	13.14	118.71	108.20
1	N	1263	C	O4'-C1'-N1	13.14	118.71	108.20
1	N	1463	U	O4'-C1'-N1	13.14	118.71	108.20
1	N	838	G	C5-C6-O6	-13.13	120.72	128.60
1	N	1329	A	C4-C5-C6	13.13	123.57	117.00
1	N	658	C	O4'-C1'-N1	13.12	118.69	108.20
1	N	283	U	C5-C4-O4	-13.11	118.04	125.90
1	N	666	G	N1-C6-O6	13.11	127.76	119.90
1	N	1094	G	N1-C6-O6	13.10	127.76	119.90
1	N	1409	C	O4'-C1'-N1	13.09	118.67	108.20
1	N	122	G	N1-C6-O6	13.08	127.75	119.90
1	N	447	G	C5-C6-N1	-13.08	104.96	111.50
1	N	667	G	C5-C6-O6	-13.07	120.75	128.60
1	N	342	C	C2-N3-C4	13.07	126.44	119.90
1	N	714	G	C5-C6-O6	-13.05	120.77	128.60
1	N	614	C	C6-N1-C2	-13.05	115.08	120.30
1	N	892	A	N1-C6-N6	13.04	126.43	118.60
1	N	138	G	C5-C6-O6	-13.04	120.78	128.60
1	N	949	A	C5-C6-N6	-13.04	113.27	123.70
1	N	1002	G	N1-C6-O6	13.04	127.72	119.90
1	N	1491	G	C5-C6-O6	-13.03	120.78	128.60
1	N	533	A	C5-N7-C8	13.03	110.41	103.90
1	N	1457	G	C6-C5-N7	-13.01	122.59	130.40
1	N	31	G	C5-C6-O6	-13.01	120.79	128.60
1	N	1315	U	P-O5'-C5'	13.01	141.72	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	314	C	N3-C4-N4	13.01	127.10	118.00
1	N	1337	G	N1-C6-O6	13.01	127.70	119.90
1	N	1509	C	N3-C4-C5	-13.01	116.70	121.90
1	N	307	C	N3-C4-N4	13.00	127.10	118.00
1	N	1453	G	C4-C5-N7	13.00	116.00	110.80
1	N	656	G	N1-C6-O6	12.99	127.70	119.90
1	N	1373	G	C8-N9-C4	-12.99	101.20	106.40
1	N	1360	A	N1-C6-N6	12.99	126.39	118.60
1	N	530	G	P-O3'-C3'	12.98	135.28	119.70
1	N	321	A	C5-C6-N6	-12.98	113.32	123.70
1	N	16	A	N1-C6-N6	12.97	126.39	118.60
1	N	1169	A	N1-C2-N3	12.96	135.78	129.30
1	N	953	G	C6-C5-N7	-12.96	122.63	130.40
1	N	412	A	P-O3'-C3'	12.94	135.23	119.70
1	N	979	C	C4-C5-C6	12.94	123.87	117.40
1	N	1387	G	N1-C6-O6	12.94	127.66	119.90
1	N	77	A	C4-C5-C6	12.94	123.47	117.00
1	N	240	G	N1-C6-O6	12.94	127.66	119.90
1	N	1197	A	C5-C6-N6	-12.93	113.36	123.70
1	N	380	G	O4'-C1'-N9	12.92	118.54	108.20
1	N	11	G	N1-C6-O6	12.90	127.64	119.90
1	N	276	G	C8-N9-C4	12.90	111.56	106.40
1	N	538	G	N1-C6-O6	12.90	127.64	119.90
1	N	1151	A	N1-C6-N6	12.90	126.34	118.60
1	N	899	C	O4'-C1'-N1	12.89	118.51	108.20
1	N	737	C	O4'-C1'-N1	12.88	118.50	108.20
1	N	361	G	C2-N3-C4	12.88	118.34	111.90
1	N	914	A	N1-C6-N6	12.87	126.32	118.60
1	N	1433	A	N1-C6-N6	12.87	126.32	118.60
1	N	1352	C	O4'-C1'-N1	12.87	118.50	108.20
1	N	1110	A	P-O3'-C3'	12.87	135.14	119.70
1	N	1392	G	C5-C6-N1	-12.86	105.07	111.50
1	N	1374	A	C5-C6-N1	-12.85	111.27	117.70
1	N	560	A	C5-N7-C8	12.84	110.32	103.90
1	N	88	U	P-O3'-C3'	12.84	135.10	119.70
1	N	1043	G	C8-N9-C4	-12.83	101.27	106.40
1	N	1373	G	N1-C2-N3	-12.83	116.20	123.90
1	N	1508	A	O4'-C1'-N9	12.82	118.45	108.20
1	N	786	G	C5-C6-O6	-12.80	120.92	128.60
1	N	943	U	N3-C4-O4	12.80	128.36	119.40
1	N	1261	A	O4'-C1'-N9	12.79	118.43	108.20
1	N	1416	G	N1-C6-O6	12.79	127.57	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	572	A	N1-C6-N6	12.78	126.27	118.60
1	N	335	C	N3-C4-C5	-12.78	116.79	121.90
1	N	220	G	C8-N9-C4	-12.77	101.29	106.40
1	N	515	G	P-O5'-C5'	12.77	141.33	120.90
1	N	1089	G	C4-C5-N7	12.77	115.91	110.80
1	N	760	G	C5-C6-O6	-12.75	120.95	128.60
1	N	946	A	O4'-C1'-N9	12.74	118.39	108.20
1	N	1284	C	O4'-C1'-N1	12.73	118.39	108.20
1	N	482	A	N9-C4-C5	12.72	110.89	105.80
1	N	1382	C	C6-N1-C2	-12.72	115.21	120.30
1	N	1160	G	C5-N7-C8	12.72	110.66	104.30
1	N	1101	A	C5-C6-N1	-12.71	111.34	117.70
1	N	621	A	N1-C6-N6	12.71	126.23	118.60
1	N	435	A	N1-C6-N6	12.71	126.22	118.60
1	N	59	A	O4'-C1'-N9	12.70	118.36	108.20
1	N	1225	A	C5-C6-N1	-12.70	111.35	117.70
1	N	111	G	N1-C6-O6	12.70	127.52	119.90
1	N	190	A	C5-C6-N1	-12.70	111.35	117.70
1	N	1128	C	N3-C4-N4	12.70	126.89	118.00
1	N	176	C	C5-C4-N4	-12.70	111.31	120.20
1	N	1080	A	C4-C5-C6	12.70	123.35	117.00
1	N	1148	U	C5-C6-N1	12.69	129.04	122.70
1	N	1186	G	C5-C6-O6	-12.69	120.99	128.60
1	N	59	A	C5-C6-N6	-12.68	113.56	123.70
1	N	647	C	N3-C4-N4	12.68	126.87	118.00
1	N	1050	G	N1-C6-O6	12.68	127.51	119.90
1	N	1285	A	C4-C5-C6	12.68	123.34	117.00
1	N	412	A	C5-N7-C8	12.65	110.23	103.90
1	N	533	A	N1-C6-N6	12.65	126.19	118.60
1	N	925	G	C5-N7-C8	12.65	110.63	104.30
1	N	1063	C	O4'-C1'-N1	12.65	118.32	108.20
1	N	999	C	N3-C4-C5	-12.65	116.84	121.90
1	N	1051	C	N3-C4-N4	12.65	126.85	118.00
1	N	719	C	N3-C4-N4	12.64	126.85	118.00
1	N	860	A	N1-C6-N6	12.64	126.19	118.60
1	N	599	C	O4'-C1'-N1	12.64	118.31	108.20
1	N	768	A	C5-N7-C8	12.64	110.22	103.90
1	N	196	A	N7-C8-N9	-12.63	107.48	113.80
1	N	254	G	C5-C6-O6	-12.63	121.02	128.60
1	N	217	C	O4'-C1'-N1	12.63	118.30	108.20
1	N	348	G	C5-C6-O6	-12.63	121.02	128.60
1	N	1296	C	O4'-C1'-N1	12.62	118.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1282	C	N3-C4-C5	-12.61	116.86	121.90
1	N	14	U	N3-C4-O4	12.60	128.22	119.40
1	N	280	C	N3-C4-C5	-12.60	116.86	121.90
1	N	1175	G	C5-C6-O6	-12.59	121.05	128.60
1	N	442	G	C5-C6-O6	-12.58	121.05	128.60
1	N	210	C	C6-N1-C2	-12.58	115.27	120.30
1	N	560	A	C5-C6-N1	-12.57	111.41	117.70
1	N	703	G	C5-C6-O6	-12.57	121.06	128.60
1	N	278	G	O4'-C1'-N9	12.56	118.25	108.20
1	N	939	G	O4'-C1'-N9	12.55	118.24	108.20
1	N	1082	A	C4-C5-C6	12.55	123.27	117.00
1	N	1243	C	C6-N1-C2	-12.55	115.28	120.30
1	N	495	A	N1-C6-N6	12.54	126.13	118.60
1	N	805	C	O4'-C1'-N1	12.54	118.23	108.20
1	N	1091	U	P-O3'-C3'	12.54	134.74	119.70
1	N	184	G	N1-C6-O6	12.53	127.42	119.90
1	N	814	A	C4-C5-C6	12.53	123.26	117.00
1	N	950	U	O4'-C1'-N1	12.52	118.22	108.20
1	N	184	G	C5-N7-C8	12.52	110.56	104.30
1	N	6	G	N1-C6-O6	12.52	127.41	119.90
1	N	277	C	N3-C4-C5	-12.50	116.90	121.90
1	N	45	G	O4'-C1'-N9	12.49	118.19	108.20
1	N	346	G	N1-C6-O6	12.49	127.39	119.90
1	N	889	A	N1-C6-N6	12.49	126.09	118.60
1	N	316	C	O4'-C1'-N1	12.48	118.19	108.20
1	N	197	A	N1-C6-N6	12.47	126.08	118.60
1	N	1318	A	C4-C5-C6	12.47	123.24	117.00
1	N	1047	G	N3-C4-C5	12.47	134.84	128.60
1	N	31	G	N1-C6-O6	12.47	127.38	119.90
1	N	528	C	N1-C2-O2	12.46	126.38	118.90
1	N	959	A	C5-C6-N6	-12.46	113.73	123.70
1	N	753	A	C8-N9-C4	12.46	110.78	105.80
1	N	1279	G	N1-C2-N3	-12.45	116.43	123.90
1	N	1160	G	O4'-C1'-N9	12.44	118.15	108.20
1	N	278	G	N1-C6-O6	12.43	127.36	119.90
1	N	787	A	C5-C6-N6	-12.42	113.76	123.70
1	N	945	G	N1-C6-O6	12.41	127.35	119.90
1	N	1427	C	O4'-C1'-N1	12.41	118.13	108.20
1	N	307	C	N3-C4-C5	-12.41	116.94	121.90
1	N	148	G	N1-C6-O6	12.41	127.34	119.90
1	N	517	G	P-O3'-C3'	12.40	134.58	119.70
1	N	19	A	C4-C5-C6	12.40	123.20	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	768	A	C5-C6-N6	-12.39	113.78	123.70
1	N	135	C	O4'-C1'-N1	12.39	118.11	108.20
1	N	796	C	N3-C4-N4	12.39	126.67	118.00
1	N	584	G	C5-C6-O6	-12.38	121.17	128.60
1	N	692	U	C5-C6-N1	12.38	128.89	122.70
1	N	755	G	C8-N9-C4	-12.38	101.45	106.40
1	N	1109	C	P-O3'-C3'	12.38	134.56	119.70
1	N	211	G	N1-C6-O6	12.38	127.33	119.90
1	N	736	C	N3-C4-N4	12.38	126.66	118.00
1	N	55	A	C4-C5-C6	12.37	123.19	117.00
1	N	642	A	C5-C6-N1	-12.37	111.51	117.70
1	N	1435	G	N1-C6-O6	12.37	127.32	119.90
1	N	371	A	C5-C6-N1	-12.37	111.51	117.70
1	N	550	G	C5-C6-O6	-12.37	121.18	128.60
1	N	872	A	C2-N3-C4	-12.37	104.42	110.60
1	N	1196	A	C5-C6-N1	-12.37	111.52	117.70
1	N	181	A	O4'-C1'-N9	12.36	118.09	108.20
1	N	738	C	N3-C4-C5	-12.36	116.96	121.90
1	N	655	A	N1-C6-N6	12.35	126.01	118.60
1	N	824	G	N1-C6-O6	12.35	127.31	119.90
1	N	1165	U	N3-C4-O4	12.33	128.03	119.40
1	N	1328	C	N3-C4-C5	-12.33	116.97	121.90
1	N	334	C	O4'-C1'-N1	12.33	118.06	108.20
1	N	1053	G	P-O3'-C3'	12.32	134.49	119.70
1	N	1521	C	O4'-C1'-N1	12.32	118.06	108.20
1	N	933	G	C5-C6-N1	-12.32	105.34	111.50
1	N	533	A	N1-C2-N3	12.32	135.46	129.30
1	N	412	A	C5-C6-N6	-12.31	113.85	123.70
1	N	769	G	N1-C2-N3	-12.31	116.51	123.90
1	N	1241	G	N1-C6-O6	12.31	127.28	119.90
1	N	1067	A	N1-C6-N6	12.30	125.98	118.60
1	N	449	G	N1-C6-O6	12.30	127.28	119.90
1	N	1325	C	O4'-C1'-N1	12.29	118.03	108.20
1	N	688	G	C5-C6-O6	-12.29	121.22	128.60
1	N	276	G	C5-C6-O6	-12.29	121.23	128.60
1	N	377	G	C5-C6-O6	-12.29	121.23	128.60
1	N	1299	A	C5-N7-C8	12.29	110.05	103.90
1	N	712	A	N1-C6-N6	12.29	125.97	118.60
1	N	1346	A	N1-C6-N6	12.28	125.97	118.60
1	N	378	G	C5-C6-O6	-12.28	121.23	128.60
1	N	1253	G	C5-C6-O6	-12.28	121.23	128.60
1	N	874	G	N1-C6-O6	12.27	127.26	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	632	U	O4'-C1'-N1	12.27	118.01	108.20
1	N	215	C	N3-C4-N4	12.26	126.58	118.00
1	N	74	A	C5-C6-N6	-12.25	113.90	123.70
1	N	918	A	C5-C6-N1	-12.25	111.57	117.70
1	N	264	C	P-O3'-C3'	12.25	134.40	119.70
1	N	807	A	C5-N7-C8	12.25	110.03	103.90
1	N	1013	G	N1-C6-O6	12.25	127.25	119.90
1	N	931	C	C5-C4-N4	-12.24	111.63	120.20
1	N	1343	G	C5-C6-N1	-12.23	105.38	111.50
1	N	447	G	N1-C6-O6	12.22	127.23	119.90
1	N	671	G	N1-C6-O6	12.22	127.23	119.90
1	N	985	C	O4'-C1'-N1	12.22	117.98	108.20
1	N	172	A	C4-C5-C6	12.22	123.11	117.00
1	N	205	A	N1-C6-N6	12.22	125.93	118.60
1	N	975	A	N1-C6-N6	12.22	125.93	118.60
1	N	766	A	C5-C6-N1	-12.21	111.59	117.70
1	N	1339	A	C8-N9-C4	-12.21	100.92	105.80
1	N	719	C	O4'-C1'-N1	12.21	117.97	108.20
1	N	1349	A	C5-C6-N1	-12.21	111.59	117.70
1	N	45	G	N1-C6-O6	12.20	127.22	119.90
1	N	448	A	C5-C6-N6	-12.20	113.94	123.70
1	N	581	G	C5-C6-O6	-12.20	121.28	128.60
1	N	90	C	P-O3'-C3'	12.20	134.34	119.70
1	N	1294	G	N1-C6-O6	12.19	127.22	119.90
1	N	976	G	N1-C6-O6	12.19	127.21	119.90
1	N	52	C	O4'-C1'-N1	12.18	117.95	108.20
1	N	632	U	C2-N3-C4	-12.18	119.69	127.00
1	N	102	G	N1-C6-O6	12.18	127.21	119.90
1	N	761	G	C5-C6-O6	-12.18	121.29	128.60
1	N	983	A	N1-C6-N6	12.18	125.91	118.60
1	N	1298	U	C2-N3-C4	-12.17	119.70	127.00
1	N	1145	A	N1-C6-N6	12.17	125.90	118.60
1	N	1258	G	N1-C6-O6	12.17	127.20	119.90
1	N	566	G	P-O3'-C3'	12.16	134.29	119.70
1	N	648	A	N9-C4-C5	12.14	110.66	105.80
1	N	243	A	P-O3'-C3'	12.14	134.27	119.70
1	N	184	G	N3-C2-N2	12.13	128.39	119.90
1	N	776	G	C5-C6-O6	-12.13	121.32	128.60
1	N	1432	G	C5-C6-O6	-12.13	121.32	128.60
1	N	777	A	N1-C6-N6	12.13	125.88	118.60
1	N	194	C	O4'-C1'-N1	12.12	117.90	108.20
1	N	922	G	C2-N3-C4	12.12	117.96	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1239	A	C4-C5-C6	12.12	123.06	117.00
1	N	939	G	N1-C6-O6	12.11	127.17	119.90
1	N	1012	A	C5-C6-N1	-12.11	111.64	117.70
1	N	1263	C	N3-C4-C5	-12.11	117.06	121.90
1	N	571	U	C5-C6-N1	12.11	128.75	122.70
1	N	641	U	P-O3'-C3'	12.11	134.23	119.70
1	N	15	G	C5-C6-O6	-12.11	121.34	128.60
1	N	27	G	N1-C2-N3	-12.11	116.64	123.90
1	N	536	C	N3-C4-C5	12.11	126.74	121.90
1	N	1454	G	O4'-C1'-N9	12.11	117.88	108.20
1	N	265	G	C5-C6-O6	-12.10	121.34	128.60
1	N	1014	A	C4-C5-C6	12.10	123.05	117.00
1	N	396	C	N3-C4-C5	-12.10	117.06	121.90
1	N	327	A	P-O3'-C3'	12.10	134.22	119.70
1	N	1098	C	C5-C6-N1	12.09	127.05	121.00
1	N	32	A	C5-C6-N1	-12.09	111.66	117.70
1	N	94	G	N3-C4-N9	-12.08	118.75	126.00
1	N	135	C	N3-C4-N4	12.08	126.46	118.00
1	N	1090	U	N3-C4-O4	12.08	127.86	119.40
1	N	1288	A	C6-C5-N7	-12.08	123.84	132.30
1	N	1181	G	C5-C6-N1	-12.07	105.46	111.50
1	N	273	U	C1'-O4'-C4'	12.07	119.55	109.90
1	N	306	A	C4-C5-C6	12.06	123.03	117.00
1	N	860	A	C5-C6-N1	-12.06	111.67	117.70
1	N	129	A	N9-C4-C5	-12.06	100.98	105.80
1	N	491	G	C2-N3-C4	12.06	117.93	111.90
1	N	553	A	C2-N3-C4	-12.06	104.57	110.60
1	N	53	A	N1-C6-N6	12.05	125.83	118.60
1	N	194	C	C5-C6-N1	12.05	127.03	121.00
1	N	342	C	N3-C4-N4	12.05	126.43	118.00
1	N	1048	G	C5-C6-N1	-12.05	105.48	111.50
1	N	1048	G	C4-C5-C6	12.04	126.03	118.80
1	N	1160	G	C4-C5-N7	-12.04	105.98	110.80
1	N	1333	A	N1-C6-N6	12.04	125.83	118.60
1	N	400	C	O4'-C1'-N1	12.04	117.83	108.20
1	N	1317	C	C2-N3-C4	12.04	125.92	119.90
1	N	221	C	N3-C4-N4	12.03	126.42	118.00
1	N	1079	G	C5-C6-O6	-12.03	121.38	128.60
1	N	861	G	O4'-C1'-N9	12.03	117.82	108.20
1	N	232	G	N1-C6-O6	12.03	127.12	119.90
1	N	1408	A	N1-C6-N6	12.03	125.82	118.60
1	N	848	C	N3-C4-N4	12.03	126.42	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	821	G	C5-C6-O6	-12.02	121.39	128.60
1	N	328	C	N3-C4-C5	-12.02	117.09	121.90
1	N	174	A	N1-C6-N6	12.02	125.81	118.60
1	N	184	G	C5-C6-O6	-12.02	121.39	128.60
1	N	521	G	N1-C6-O6	12.02	127.11	119.90
1	N	1231	G	C5-C6-O6	-12.02	121.39	128.60
1	N	753	A	N9-C4-C5	-12.01	101.00	105.80
1	N	61	G	O4'-C1'-N9	12.01	117.81	108.20
1	N	188	C	C6-N1-C2	-12.01	115.50	120.30
1	N	215	C	O4'-C1'-N1	12.00	117.80	108.20
1	N	860	A	P-O3'-C3'	12.00	134.10	119.70
1	N	895	G	C5-C6-O6	-11.99	121.41	128.60
1	N	1332	A	O4'-C1'-N9	11.99	117.79	108.20
1	N	301	G	C5-C6-O6	-11.98	121.41	128.60
1	N	1187	G	N1-C6-O6	11.98	127.09	119.90
1	N	1290	G	N1-C6-O6	11.98	127.09	119.90
1	N	236	A	C5-C6-N6	-11.98	114.12	123.70
1	N	948	C	O4'-C1'-N1	11.98	117.78	108.20
1	N	1161	C	N3-C4-N4	11.98	126.39	118.00
1	N	1363	A	N1-C6-N6	11.98	125.78	118.60
1	N	993	G	P-O3'-C3'	11.97	134.07	119.70
1	N	1032	G	O4'-C1'-N9	11.97	117.78	108.20
1	N	369	G	N1-C6-O6	11.97	127.08	119.90
1	N	1347	G	O4'-C1'-N9	11.96	117.77	108.20
1	N	129	A	N1-C6-N6	11.96	125.78	118.60
1	N	143	A	N1-C6-N6	11.95	125.77	118.60
1	N	1077	G	N1-C2-N3	-11.95	116.73	123.90
1	N	633	G	C6-C5-N7	-11.95	123.23	130.40
1	N	1311	A	C4-C5-C6	11.95	122.97	117.00
1	N	664	G	N1-C6-O6	11.94	127.06	119.90
1	N	1047	G	N1-C6-O6	11.94	127.06	119.90
1	N	160	A	C5-C6-N6	-11.92	114.17	123.70
1	N	779	C	C6-N1-C2	-11.92	115.53	120.30
1	N	1442	G	C5-C6-O6	-11.91	121.45	128.60
1	N	1064	G	C5'-C4'-C3'	11.91	135.05	116.00
1	N	1459	G	N1-C6-O6	11.91	127.04	119.90
1	N	37	U	N1-C2-N3	-11.90	107.76	114.90
1	N	360	G	N1-C6-O6	11.90	127.04	119.90
1	N	1115	U	P-O3'-C3'	-11.90	105.42	119.70
1	N	235	C	O4'-C1'-N1	11.90	117.72	108.20
1	N	1531	A	P-O5'-C5'	11.90	139.94	120.90
1	N	159	G	N1-C6-O6	11.90	127.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1329	A	C5-C6-N1	-11.90	111.75	117.70
1	N	731	G	N1-C6-O6	11.89	127.04	119.90
1	N	780	A	C8-N9-C4	-11.89	101.04	105.80
1	N	922	G	C5-C6-O6	-11.89	121.47	128.60
1	N	1282	C	O4'-C1'-N1	11.88	117.70	108.20
1	N	671	G	N3-C2-N2	11.88	128.21	119.90
1	N	1370	G	O4'-C1'-N9	11.88	117.70	108.20
1	N	1366	C	N3-C4-N4	11.88	126.31	118.00
1	N	312	C	N3-C4-N4	11.87	126.31	118.00
1	N	1218	C	C5-C4-N4	-11.87	111.89	120.20
1	N	1251	A	C5-C6-N6	-11.87	114.20	123.70
1	N	278	G	C5-C6-O6	-11.87	121.48	128.60
1	N	925	G	N1-C6-O6	11.87	127.02	119.90
1	N	621	A	C4-C5-N7	-11.86	104.77	110.70
1	N	369	G	C5-C6-O6	-11.86	121.48	128.60
1	N	595	A	C5-C6-N6	-11.85	114.22	123.70
1	N	831	A	C4-C5-C6	11.85	122.93	117.00
1	N	3	A	N1-C6-N6	11.85	125.71	118.60
1	N	71	A	C5-C6-N6	-11.85	114.22	123.70
1	N	141	G	C2-N3-C4	11.85	117.83	111.90
1	N	41	G	C5-C6-O6	-11.85	121.49	128.60
1	N	227	G	C6-C5-N7	-11.85	123.29	130.40
1	N	1382	C	C5-C6-N1	11.84	126.92	121.00
1	N	1081	A	C5-N7-C8	11.83	109.82	103.90
1	N	1131	G	N1-C6-O6	11.83	127.00	119.90
1	N	461	A	N1-C6-N6	11.83	125.70	118.60
1	N	1133	G	O4'-C1'-N9	11.83	117.66	108.20
1	N	733	G	C5-C6-O6	-11.82	121.51	128.60
1	N	1013	G	C5-C6-O6	-11.82	121.51	128.60
1	N	857	C	N3-C4-C5	-11.81	117.17	121.90
1	N	88	U	N1-C2-N3	11.81	121.99	114.90
1	N	436	C	N3-C4-N4	11.81	126.27	118.00
1	N	218	U	C5-C6-N1	11.81	128.60	122.70
1	N	200	G	C5-C6-O6	-11.80	121.52	128.60
1	N	1092	A	N1-C6-N6	11.80	125.68	118.60
1	N	625	U	C5-C4-O4	-11.80	118.82	125.90
1	N	230	G	N1-C6-O6	11.79	126.97	119.90
1	N	809	G	N1-C6-O6	11.79	126.97	119.90
1	N	908	A	N1-C6-N6	11.78	125.67	118.60
1	N	125	U	O4'-C1'-N1	11.78	117.63	108.20
1	N	199	A	N1-C6-N6	11.78	125.67	118.60
1	N	310	G	C5-N7-C8	-11.78	98.41	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	968	A	N1-C6-N6	11.77	125.66	118.60
1	N	976	G	N1-C2-N3	-11.77	116.84	123.90
1	N	190	A	C2-N3-C4	-11.77	104.72	110.60
1	N	226	G	N1-C6-O6	11.76	126.96	119.90
1	N	1059	C	N3-C4-C5	-11.76	117.20	121.90
1	N	191	G	C5-C6-N1	-11.76	105.62	111.50
1	N	265	G	N1-C6-O6	11.76	126.95	119.90
1	N	865	A	O4'-C1'-N9	11.76	117.61	108.20
1	N	1090	U	N3-C2-O2	11.76	130.43	122.20
1	N	1125	U	P-O3'-C3'	11.75	133.81	119.70
1	N	532	A	C5-N7-C8	11.75	109.78	103.90
1	N	996	A	O4'-C1'-N9	11.75	117.60	108.20
1	N	487	A	C5-C6-N6	-11.75	114.30	123.70
1	N	812	G	N1-C6-O6	11.75	126.95	119.90
1	N	360	G	C5-N7-C8	-11.74	98.43	104.30
1	N	539	A	N1-C6-N6	11.74	125.65	118.60
1	N	459	A	N7-C8-N9	11.74	119.67	113.80
1	N	531	U	O4'-C1'-N1	11.73	117.58	108.20
1	N	749	A	N1-C6-N6	11.73	125.64	118.60
1	N	574	A	N1-C6-N6	11.72	125.63	118.60
1	N	1409	C	N3-C4-N4	11.72	126.20	118.00
1	N	443	C	N3-C4-N4	11.72	126.20	118.00
1	N	90	C	N3-C4-N4	11.71	126.20	118.00
1	N	1330	U	O4'-C1'-N1	11.72	117.57	108.20
1	N	117	G	C5-C6-O6	-11.70	121.58	128.60
1	N	1340	A	N1-C6-N6	11.70	125.62	118.60
1	N	138	G	N1-C6-O6	11.69	126.92	119.90
1	N	905	U	O4'-C1'-N1	11.70	117.56	108.20
1	N	1496	C	C5-C6-N1	11.70	126.85	121.00
1	N	392	C	O4'-C1'-N1	11.69	117.55	108.20
1	N	236	A	C5-C6-N1	-11.68	111.86	117.70
1	N	404	G	N9-C4-C5	11.68	110.07	105.40
1	N	447	G	C4-C5-C6	11.68	125.81	118.80
1	N	392	C	N3-C4-C5	-11.68	117.23	121.90
1	N	794	A	C4-C5-C6	11.68	122.84	117.00
1	N	281	G	P-O3'-C3'	11.67	133.71	119.70
1	N	339	C	O4'-C1'-N1	11.67	117.54	108.20
1	N	1496	C	C6-N1-C2	-11.67	115.63	120.30
1	N	410	G	N1-C6-O6	11.67	126.90	119.90
1	N	1530	G	N9-C4-C5	-11.67	100.73	105.40
1	N	1034	G	N1-C6-O6	11.66	126.90	119.90
1	N	1213	A	N1-C6-N6	11.66	125.60	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1174	G	N3-C4-N9	11.66	133.00	126.00
1	N	769	G	C8-N9-C4	-11.66	101.74	106.40
1	N	386	C	N3-C4-N4	11.65	126.16	118.00
1	N	629	A	C4-C5-C6	11.65	122.83	117.00
1	N	479	U	O4'-C1'-N1	11.65	117.52	108.20
1	N	161	A	C5-C6-N1	-11.65	111.88	117.70
1	N	360	G	C8-N9-C4	-11.64	101.75	106.40
1	N	831	A	N1-C6-N6	11.63	125.58	118.60
1	N	683	G	C5-C6-O6	-11.62	121.62	128.60
1	N	671	G	C5-C6-O6	-11.62	121.63	128.60
1	N	541	G	C2-N3-C4	-11.62	106.09	111.90
1	N	668	G	C5-C6-O6	-11.62	121.63	128.60
1	N	1259	C	N3-C4-C5	-11.61	117.25	121.90
1	N	919	A	C5-C6-N6	-11.61	114.41	123.70
1	N	397	A	C4-C5-C6	11.61	122.80	117.00
1	N	766	A	C5-C6-N6	-11.61	114.41	123.70
1	N	845	A	C4-C5-C6	11.61	122.80	117.00
1	N	1379	G	N1-C2-N3	-11.60	116.94	123.90
1	N	392	C	N3-C4-N4	11.60	126.12	118.00
1	N	700	G	N1-C6-O6	11.60	126.86	119.90
1	N	817	C	N3-C4-C5	-11.60	117.26	121.90
1	N	98	A	C5-C6-N6	-11.59	114.43	123.70
1	N	107	G	C8-N9-C4	-11.59	101.76	106.40
1	N	1501	C	C6-N1-C2	11.59	124.94	120.30
1	N	380	G	N1-C6-O6	11.59	126.86	119.90
1	N	872	A	C5-C6-N1	-11.59	111.90	117.70
1	N	504	C	N3-C4-C5	-11.59	117.27	121.90
1	N	832	G	C5-C6-O6	-11.58	121.65	128.60
1	N	759	A	N9-C4-C5	11.58	110.43	105.80
1	N	87	C	N3-C4-N4	11.57	126.10	118.00
1	N	743	A	C5-C6-N6	-11.57	114.44	123.70
1	N	352	C	C2-N1-C1'	11.57	131.53	118.80
1	N	812	G	P-O3'-C3'	11.56	133.58	119.70
1	N	1158	C	N3-C4-N4	11.56	126.09	118.00
1	N	169	C	O4'-C1'-N1	11.55	117.44	108.20
1	N	586	C	O4'-C1'-N1	11.55	117.44	108.20
1	N	75	G	C6-N1-C2	11.55	132.03	125.10
1	N	240	G	C5-C6-O6	-11.55	121.67	128.60
1	N	386	C	C2-N3-C4	11.54	125.67	119.90
1	N	388	G	N1-C6-O6	11.54	126.83	119.90
1	N	320	A	N1-C6-N6	11.54	125.53	118.60
1	N	766	A	N7-C8-N9	-11.54	108.03	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	397	A	N1-C2-N3	11.54	135.07	129.30
1	N	639	G	N1-C2-N3	-11.54	116.98	123.90
1	N	675	A	N1-C6-N6	11.54	125.52	118.60
1	N	748	G	C5-C6-O6	-11.53	121.68	128.60
1	N	666	G	C5-C6-O6	-11.53	121.68	128.60
1	N	486	U	P-O5'-C5'	-11.53	102.46	120.90
1	N	1088	G	O4'-C1'-N9	11.53	117.42	108.20
1	N	1374	A	N1-C6-N6	11.52	125.51	118.60
1	N	239	U	O4'-C1'-N1	11.52	117.41	108.20
1	N	758	C	C6-N1-C2	-11.51	115.70	120.30
1	N	152	A	C4-C5-C6	11.50	122.75	117.00
1	N	700	G	C5-C6-O6	-11.50	121.70	128.60
1	N	1338	G	N1-C6-O6	11.50	126.80	119.90
1	N	227	G	N1-C6-O6	11.50	126.80	119.90
1	N	246	A	P-O3'-C3'	11.49	133.49	119.70
1	N	676	A	C6-C5-N7	-11.49	124.25	132.30
1	N	346	G	C5-C6-O6	-11.49	121.71	128.60
1	N	770	C	O4'-C1'-N1	11.49	117.39	108.20
1	N	803	G	C2-N3-C4	-11.49	106.16	111.90
1	N	1219	A	C5-C6-N1	-11.48	111.96	117.70
1	N	1017	U	C2-N3-C4	11.48	133.89	127.00
1	N	713	G	N3-C2-N2	11.46	127.92	119.90
1	N	1023	U	N3-C4-C5	-11.46	107.72	114.60
1	N	1257	A	O4'-C1'-N9	11.46	117.37	108.20
1	N	1412	C	O4'-C1'-N1	11.46	117.37	108.20
1	N	672	U	O4'-C1'-N1	11.46	117.37	108.20
1	N	962	C	N3-C4-C5	-11.46	117.32	121.90
1	N	91	U	O4'-C1'-N1	11.45	117.36	108.20
1	N	1082	A	C5-N7-C8	11.45	109.63	103.90
1	N	1240	U	N1-C2-N3	-11.45	108.03	114.90
1	N	588	G	C5-C6-O6	-11.45	121.73	128.60
1	N	1304	G	C2-N3-C4	11.45	117.62	111.90
1	N	589	U	N1-C2-N3	11.44	121.77	114.90
1	N	1297	G	C5-C6-O6	-11.44	121.74	128.60
1	N	271	C	C2-N3-C4	-11.43	114.18	119.90
1	N	971	G	O4'-C1'-N9	11.43	117.34	108.20
1	N	1365	G	N3-C2-N2	11.43	127.90	119.90
1	N	44	A	C5-C6-N1	-11.42	111.99	117.70
1	N	497	G	C5-C6-O6	-11.41	121.75	128.60
1	N	866	C	C2-N3-C4	11.41	125.61	119.90
1	N	1153	G	P-O3'-C3'	-11.41	106.00	119.70
1	N	1406	U	O4'-C1'-N1	11.41	117.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1198	G	O4'-C1'-N9	11.41	117.33	108.20
1	N	1090	U	C2-N3-C4	11.40	133.84	127.00
1	N	1453	G	C5-C6-O6	-11.40	121.76	128.60
1	N	9	G	C5-C6-O6	-11.40	121.76	128.60
1	N	1332	A	C5-N7-C8	11.40	109.60	103.90
1	N	1427	C	N3-C4-C5	-11.39	117.34	121.90
1	N	1396	A	N1-C6-N6	11.39	125.43	118.60
1	N	1418	A	C5-C6-N6	-11.39	114.59	123.70
1	N	478	A	N1-C6-N6	11.39	125.43	118.60
1	N	347	G	N1-C6-O6	11.38	126.73	119.90
1	N	924	C	N3-C4-N4	11.38	125.97	118.00
1	N	144	G	C8-N9-C4	11.38	110.95	106.40
1	N	1071	C	N3-C4-C5	-11.38	117.35	121.90
1	N	485	U	O4'-C1'-N1	11.38	117.30	108.20
1	N	629	A	C4-C5-N7	-11.38	105.01	110.70
1	N	352	C	C4-C5-C6	11.37	123.09	117.40
1	N	497	G	N1-C6-O6	11.37	126.72	119.90
1	N	668	G	N7-C8-N9	11.37	118.79	113.10
1	N	1097	C	O4'-C1'-N1	11.37	117.30	108.20
1	N	1525	G	N1-C6-O6	11.37	126.72	119.90
1	N	353	A	N1-C6-N6	11.37	125.42	118.60
1	N	744	C	O4'-C1'-N1	11.37	117.30	108.20
1	N	199	A	P-O5'-C5'	11.37	139.09	120.90
1	N	640	A	N1-C6-N6	11.37	125.42	118.60
1	N	1083	U	O4'-C1'-N1	11.37	117.30	108.20
1	N	1449	C	N3-C4-N4	11.36	125.95	118.00
1	N	67	C	C6-N1-C2	-11.36	115.76	120.30
1	N	808	C	O4'-C1'-N1	11.35	117.28	108.20
1	N	882	C	N3-C4-C5	-11.35	117.36	121.90
1	N	1256	A	N9-C4-C5	-11.35	101.26	105.80
1	N	1410	A	O4'-C1'-N9	11.35	117.28	108.20
1	N	658	C	O4'-C4'-C3'	-11.35	92.65	104.00
1	N	855	U	O4'-C1'-N1	11.34	117.28	108.20
1	N	996	A	N1-C6-N6	11.34	125.41	118.60
1	N	702	A	N1-C6-N6	11.34	125.40	118.60
1	N	726	C	O4'-C1'-N1	11.33	117.26	108.20
1	N	352	C	C6-N1-C1'	-11.33	107.21	120.80
1	N	1303	C	O4'-C1'-N1	11.33	117.26	108.20
1	N	251	G	N1-C2-N3	-11.32	117.11	123.90
1	N	279	A	C5-C6-N6	-11.32	114.64	123.70
1	N	296	U	C2-N3-C4	-11.32	120.21	127.00
1	N	889	A	C5-C6-N1	-11.32	112.04	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1081	A	N1-C6-N6	11.32	125.39	118.60
1	N	1226	C	N3-C4-N4	11.32	125.92	118.00
1	N	1239	A	O4'-C1'-N9	11.32	117.25	108.20
1	N	1288	A	N1-C6-N6	11.32	125.39	118.60
1	N	1480	A	C5-C6-N6	-11.31	114.65	123.70
1	N	65	A	N1-C6-N6	11.30	125.38	118.60
1	N	1526	G	N1-C6-O6	11.30	126.68	119.90
1	N	1219	A	C5-N7-C8	11.30	109.55	103.90
1	N	656	G	C5-C6-O6	-11.30	121.82	128.60
1	N	1488	G	N7-C8-N9	11.30	118.75	113.10
1	N	826	C	O4'-C1'-N1	11.29	117.23	108.20
1	N	689	C	N3-C4-N4	11.29	125.91	118.00
1	N	560	A	C4-C5-N7	-11.29	105.06	110.70
1	N	193	C	O4'-C1'-N1	11.29	117.23	108.20
1	N	442	G	N1-C6-O6	11.28	126.67	119.90
1	N	1047	G	C2-N3-C4	-11.28	106.26	111.90
1	N	691	G	N1-C6-O6	11.28	126.67	119.90
1	N	806	C	O4'-C1'-N1	11.28	117.22	108.20
1	N	83	C	O4'-C1'-N1	11.27	117.22	108.20
1	N	430	A	C5-C6-N6	-11.27	114.68	123.70
1	N	1497	G	N3-C2-N2	11.27	127.79	119.90
1	N	388	G	C5-N7-C8	11.27	109.94	104.30
1	N	398	U	O4'-C1'-N1	11.27	117.22	108.20
1	N	918	A	C4-C5-C6	11.27	122.64	117.00
1	N	384	G	N1-C6-O6	11.27	126.66	119.90
1	N	923	A	C5-C6-N6	-11.27	114.69	123.70
1	N	861	G	C5-C6-O6	-11.26	121.84	128.60
1	N	177	G	N1-C2-N3	-11.26	117.14	123.90
1	N	722	G	N1-C6-O6	11.26	126.65	119.90
1	N	1127	G	C5-C6-O6	-11.25	121.85	128.60
1	N	1244	G	N1-C6-O6	11.25	126.65	119.90
1	N	437	U	N3-C2-O2	11.24	130.07	122.20
1	N	1418	A	C5-N7-C8	11.24	109.52	103.90
1	N	563	A	N1-C6-N6	11.24	125.34	118.60
1	N	573	A	C5-C6-N6	-11.24	114.71	123.70
1	N	191	G	C5-C6-O6	-11.23	121.86	128.60
1	N	860	A	C4-C5-C6	11.23	122.62	117.00
1	N	221	C	N3-C4-C5	-11.23	117.41	121.90
1	N	177	G	N3-C2-N2	11.23	127.76	119.90
1	N	205	A	C5-C6-N1	-11.23	112.09	117.70
1	N	488	C	O4'-C1'-N1	11.23	117.18	108.20
1	N	193	C	C6-N1-C2	11.22	124.79	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1184	G	N1-C2-N3	-11.22	117.17	123.90
1	N	486	U	O4'-C1'-N1	11.22	117.18	108.20
1	N	1042	A	N1-C6-N6	11.22	125.33	118.60
1	N	1500	A	O4'-C1'-N9	11.22	117.17	108.20
1	N	348	G	N1-C6-O6	11.22	126.63	119.90
1	N	176	C	P-O3'-C3'	11.21	133.16	119.70
1	N	1174	G	C5-C6-O6	-11.21	121.88	128.60
1	N	241	G	C4-C5-N7	-11.21	106.32	110.80
1	N	754	C	N3-C4-N4	11.21	125.84	118.00
1	N	1096	C	O4'-C1'-N1	11.20	117.16	108.20
1	N	456	A	N1-C6-N6	11.19	125.31	118.60
1	N	976	G	C5-C6-O6	-11.19	121.88	128.60
1	N	1047	G	N9-C4-C5	-11.19	100.92	105.40
1	N	841	C	N3-C4-C5	-11.19	117.43	121.90
1	N	1428	A	N9-C4-C5	11.19	110.27	105.80
1	N	136	C	N3-C4-C5	-11.18	117.43	121.90
1	N	199	A	C5-C6-N1	-11.18	112.11	117.70
1	N	1518	A	C5-C6-N1	-11.18	112.11	117.70
1	N	511	C	O4'-C1'-N1	11.17	117.13	108.20
1	N	175	C	O4'-C1'-N1	11.16	117.13	108.20
1	N	445	G	C5-C6-N1	11.15	117.08	111.50
1	N	812	G	C5-C6-N1	-11.15	105.92	111.50
1	N	1181	G	C6-N1-C2	11.15	131.79	125.10
1	N	1355	G	N9-C4-C5	11.15	109.86	105.40
1	N	1504	G	N1-C2-N3	-11.15	117.21	123.90
1	N	307	C	O4'-C1'-N1	11.15	117.12	108.20
1	N	1119	C	O4'-C1'-N1	11.15	117.12	108.20
1	N	853	C	O4'-C1'-N1	11.15	117.12	108.20
1	N	929	G	C5-C6-O6	-11.14	121.92	128.60
1	N	955	U	N1-C2-O2	-11.14	115.00	122.80
1	N	1186	G	N7-C8-N9	-11.14	107.53	113.10
1	N	1531	A	N1-C6-N6	11.14	125.28	118.60
1	N	94	G	C3'-C2'-C1'	11.14	110.41	101.50
1	N	766	A	C5-N7-C8	11.14	109.47	103.90
1	N	1082	A	C8-N9-C4	-11.13	101.35	105.80
1	N	216	U	O4'-C1'-N1	11.13	117.10	108.20
1	N	355	C	O4'-C1'-N1	11.13	117.10	108.20
1	N	465	A	C5-C6-N1	-11.13	112.14	117.70
1	N	174	A	C5-C6-N1	-11.12	112.14	117.70
1	N	197	A	P-O3'-C3'	11.12	133.05	119.70
1	N	149	A	C5-C6-N1	-11.12	112.14	117.70
1	N	975	A	C5-C6-N1	-11.12	112.14	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1277	C	O4'-C1'-N1	11.12	117.09	108.20
1	N	48	C	O4'-C1'-N1	11.11	117.09	108.20
1	N	755	G	N1-C6-O6	11.12	126.57	119.90
1	N	1305	G	C6-C5-N7	-11.11	123.73	130.40
1	N	357	G	O4'-C1'-N9	11.11	117.09	108.20
1	N	1279	G	C2-N3-C4	11.11	117.46	111.90
1	N	815	A	N1-C6-N6	11.11	125.27	118.60
1	N	1458	G	C5-C6-O6	-11.10	121.94	128.60
1	N	1180	A	N1-C6-N6	11.10	125.26	118.60
1	N	499	A	C5-C6-N6	-11.10	114.82	123.70
1	N	1171	A	C4-C5-C6	11.10	122.55	117.00
1	N	1366	C	C6-N1-C2	-11.10	115.86	120.30
1	N	1100	C	N3-C4-C5	-11.10	117.46	121.90
1	N	1048	G	N1-C6-O6	11.09	126.56	119.90
1	N	800	G	N3-C2-N2	11.09	127.66	119.90
1	N	499	A	P-O3'-C3'	11.09	133.00	119.70
1	N	1438	G	C4-C5-N7	11.09	115.23	110.80
1	N	996	A	N7-C8-N9	-11.09	108.26	113.80
1	N	1484	C	C2-N3-C4	11.09	125.44	119.90
1	N	32	A	C4-C5-C6	11.08	122.54	117.00
1	N	1114	C	P-O5'-C5'	11.08	138.62	120.90
1	N	1271	A	C5-C6-N1	-11.07	112.17	117.70
1	N	198	G	N3-C2-N2	11.07	127.65	119.90
1	N	278	G	N1-C2-N3	-11.07	117.26	123.90
1	N	1213	A	C6-C5-N7	-11.07	124.55	132.30
1	N	1271	A	N1-C6-N6	11.07	125.24	118.60
1	N	1366	C	C5-C6-N1	11.06	126.53	121.00
1	N	145	G	C2-N3-C4	11.06	117.43	111.90
1	N	802	A	C8-N9-C4	-11.06	101.38	105.80
1	N	1152	A	C5-C6-N6	-11.05	114.86	123.70
1	N	783	C	N3-C4-C5	-11.04	117.48	121.90
1	N	143	A	C4-C5-C6	11.04	122.52	117.00
1	N	898	G	O4'-C1'-N9	11.03	117.03	108.20
1	N	1208	C	O4'-C1'-N1	11.03	117.02	108.20
1	N	800	G	N1-C6-O6	11.03	126.52	119.90
1	N	1266	G	N1-C6-O6	11.03	126.52	119.90
1	N	32	A	C5-C6-N6	-11.03	114.88	123.70
1	N	1117	A	P-O5'-C5'	11.03	138.54	120.90
1	N	946	A	C8-N9-C4	-11.02	101.39	105.80
1	N	259	G	C4-C5-N7	11.02	115.21	110.80
1	N	457	G	C5-C6-O6	-11.01	121.99	128.60
1	N	1481	U	N3-C2-O2	11.01	129.91	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	337	G	N1-C6-O6	11.01	126.50	119.90
1	N	1530	G	N1-C6-O6	11.01	126.50	119.90
1	N	332	G	N1-C6-O6	11.01	126.50	119.90
1	N	34	C	O4'-C1'-N1	11.00	117.00	108.20
1	N	7	A	C5-C6-N1	-11.00	112.20	117.70
1	N	41	G	N1-C6-O6	11.00	126.50	119.90
1	N	1133	G	N1-C2-N3	-11.00	117.30	123.90
1	N	185	U	C5-C4-O4	-11.00	119.30	125.90
1	N	1109	C	N3-C4-C5	-11.00	117.50	121.90
1	N	1457	G	C5-C6-O6	-11.00	122.00	128.60
1	N	94	G	N1-C6-O6	10.99	126.50	119.90
1	N	649	A	N1-C6-N6	10.99	125.20	118.60
1	N	718	A	N1-C6-N6	10.99	125.20	118.60
1	N	732	C	N3-C4-N4	10.99	125.70	118.00
1	N	1111	A	C5-C6-N6	-10.99	114.91	123.70
1	N	1275	A	N1-C6-N6	10.99	125.19	118.60
1	N	1004	A	C4-C5-C6	10.99	122.49	117.00
1	N	1447	A	C4-C5-C6	10.99	122.49	117.00
1	N	179	A	N1-C6-N6	10.98	125.19	118.60
1	N	211	G	P-O3'-C3'	10.97	132.87	119.70
1	N	593	U	N3-C4-O4	10.97	127.08	119.40
1	N	1001	C	N3-C4-N4	10.97	125.68	118.00
1	N	1311	A	C5-C6-N1	-10.97	112.21	117.70
1	N	1378	C	N3-C4-N4	10.97	125.68	118.00
1	N	660	C	N3-C4-N4	10.97	125.68	118.00
1	N	1532	U	O4'-C1'-N1	10.96	116.97	108.20
1	N	364	A	N1-C6-N6	10.96	125.17	118.60
1	N	855	U	N1-C2-N3	-10.96	108.33	114.90
1	N	1432	G	C4-C5-N7	10.96	115.18	110.80
1	N	1093	A	N1-C6-N6	10.95	125.17	118.60
1	N	987	G	C5-C6-N1	-10.95	106.03	111.50
1	N	1138	G	O4'-C1'-N9	10.95	116.96	108.20
1	N	1447	A	O4'-C1'-N9	10.95	116.96	108.20
1	N	50	A	O4'-C1'-N9	10.95	116.96	108.20
1	N	1213	A	N9-C4-C5	-10.95	101.42	105.80
1	N	1508	A	C5-C6-N6	-10.95	114.94	123.70
1	N	503	C	O4'-C1'-N1	10.95	116.96	108.20
1	N	1141	C	O4'-C1'-N1	10.94	116.95	108.20
1	N	1068	G	C5-C6-O6	-10.94	122.03	128.60
1	N	224	U	O4'-C1'-N1	10.94	116.95	108.20
1	N	1121	U	O4'-C1'-N1	10.93	116.95	108.20
1	N	705	G	N3-C4-C5	10.93	134.07	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1233	G	C4-C5-N7	10.93	115.17	110.80
1	N	547	A	C5-C6-N1	-10.93	112.24	117.70
1	N	974	A	C5-C6-N1	-10.92	112.24	117.70
1	N	27	G	N3-C2-N2	10.92	127.54	119.90
1	N	575	G	C8-N9-C4	-10.92	102.03	106.40
1	N	478	A	O4'-C1'-N9	10.92	116.93	108.20
1	N	1117	A	N1-C6-N6	10.92	125.15	118.60
1	N	276	G	N9-C4-C5	-10.91	101.03	105.40
1	N	1180	A	C5-C6-N6	-10.91	114.97	123.70
1	N	1123	U	O4'-C1'-N1	10.90	116.92	108.20
1	N	878	A	N1-C6-N6	10.90	125.14	118.60
1	N	181	A	C4-C5-C6	10.90	122.45	117.00
1	N	843	U	O4'-C1'-N1	10.90	116.92	108.20
1	N	87	C	C5-C4-N4	-10.89	112.58	120.20
1	N	305	G	P-O3'-C3'	10.89	132.77	119.70
1	N	704	A	C5-C6-N6	-10.89	114.99	123.70
1	N	1529	G	N1-C6-O6	10.89	126.43	119.90
1	N	312	C	C5-C4-N4	-10.89	112.58	120.20
1	N	34	C	C4-C5-C6	10.88	122.84	117.40
1	N	763	G	C6-C5-N7	-10.88	123.87	130.40
1	N	872	A	N1-C6-N6	10.88	125.13	118.60
1	N	1141	C	N3-C4-N4	10.88	125.61	118.00
1	N	1328	C	C2-N3-C4	10.88	125.34	119.90
1	N	687	A	N1-C6-N6	10.87	125.12	118.60
1	N	633	G	C5-C6-O6	-10.87	122.08	128.60
1	N	1105	A	C5-C6-N1	-10.87	112.26	117.70
1	N	1173	U	N3-C2-O2	10.87	129.81	122.20
1	N	142	G	O4'-C1'-N9	10.87	116.89	108.20
1	N	351	G	C4-C5-N7	10.87	115.15	110.80
1	N	719	C	C5-C4-N4	-10.87	112.59	120.20
1	N	681	A	C4-C5-C6	10.87	122.43	117.00
1	N	700	G	C4-C5-N7	10.87	115.15	110.80
1	N	769	G	N7-C8-N9	10.87	118.53	113.10
1	N	926	G	N7-C8-N9	10.87	118.53	113.10
1	N	1501	C	C2-N1-C1'	-10.87	106.85	118.80
1	N	967	C	N3-C4-C5	-10.86	117.56	121.90
1	N	1105	A	N1-C6-N6	10.86	125.12	118.60
1	N	934	C	N3-C4-N4	10.86	125.60	118.00
1	N	1064	G	N1-C2-N3	-10.86	117.38	123.90
1	N	1314	C	O4'-C1'-N1	10.86	116.89	108.20
1	N	778	G	C5-C6-O6	-10.86	122.09	128.60
1	N	418	C	C6-N1-C2	-10.85	115.96	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	946	A	N1-C6-N6	10.85	125.11	118.60
1	N	1064	G	C4-C5-C6	10.85	125.31	118.80
1	N	381	C	C6-N1-C2	-10.85	115.96	120.30
1	N	931	C	N3-C4-N4	10.85	125.59	118.00
1	N	1002	G	N3-C2-N2	10.85	127.49	119.90
1	N	329	A	N1-C6-N6	10.85	125.11	118.60
1	N	1525	G	C5-C6-O6	-10.85	122.09	128.60
1	N	430	A	C5-N7-C8	10.84	109.32	103.90
1	N	583	A	N1-C6-N6	10.84	125.10	118.60
1	N	533	A	C4-C5-C6	10.84	122.42	117.00
1	N	1444	U	C2-N3-C4	-10.84	120.50	127.00
1	N	315	A	C5-C6-N6	-10.83	115.03	123.70
1	N	523	A	O4'-C1'-N9	10.83	116.87	108.20
1	N	75	G	C5-C6-N1	-10.83	106.08	111.50
1	N	840	C	C5-C6-N1	10.83	126.41	121.00
1	N	799	G	N1-C6-O6	10.82	126.39	119.90
1	N	305	G	C8-N9-C4	10.82	110.73	106.40
1	N	1427	C	N3-C4-N4	10.82	125.57	118.00
1	N	819	A	C5-C6-N6	-10.81	115.05	123.70
1	N	1001	C	N3-C4-C5	-10.81	117.58	121.90
1	N	1173	U	N3-C4-C5	-10.81	108.11	114.60
1	N	335	C	O4'-C1'-N1	10.80	116.84	108.20
1	N	584	G	N1-C6-O6	10.80	126.38	119.90
1	N	715	A	N1-C6-N6	10.80	125.08	118.60
1	N	207	C	C5-C4-N4	-10.79	112.65	120.20
1	N	725	G	N7-C8-N9	10.79	118.50	113.10
1	N	922	G	N1-C2-N3	-10.78	117.43	123.90
1	N	1157	A	C5-C6-N6	-10.78	115.07	123.70
1	N	207	C	N3-C4-N4	10.78	125.55	118.00
1	N	498	A	C4-C5-C6	10.78	122.39	117.00
1	N	1209	C	C2-N3-C4	10.78	125.29	119.90
1	N	1284	C	N3-C4-N4	10.78	125.55	118.00
1	N	1344	C	N3-C4-C5	-10.78	117.59	121.90
1	N	15	G	N1-C6-O6	10.78	126.37	119.90
1	N	78	A	C5-C6-N1	-10.78	112.31	117.70
1	N	1250	A	N1-C6-N6	10.78	125.07	118.60
1	N	420	U	O4'-C1'-N1	10.77	116.82	108.20
1	N	608	A	N1-C6-N6	10.76	125.06	118.60
1	N	975	A	C4-C5-C6	10.76	122.38	117.00
1	N	1282	C	N3-C4-N4	10.76	125.53	118.00
1	N	60	A	O4'-C1'-N9	10.76	116.81	108.20
1	N	295	C	N3-C4-C5	-10.75	117.60	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1414	U	O4'-C1'-N1	10.75	116.80	108.20
1	N	833	G	C4-C5-N7	10.75	115.10	110.80
1	N	1280	A	N1-C6-N6	10.75	125.05	118.60
1	N	255	G	C5-N7-C8	-10.74	98.93	104.30
1	N	602	A	C4-C5-C6	10.74	122.37	117.00
1	N	752	G	O4'-C1'-N9	10.74	116.79	108.20
1	N	974	A	C4-C5-C6	10.74	122.37	117.00
1	N	869	G	C5-C6-N1	-10.74	106.13	111.50
1	N	196	A	C5-N7-C8	10.73	109.27	103.90
1	N	543	U	N3-C2-O2	10.73	129.71	122.20
1	N	932	C	N3-C4-C5	-10.73	117.61	121.90
1	N	536	C	C4-C5-C6	-10.72	112.04	117.40
1	N	1016	A	N9-C4-C5	10.72	110.09	105.80
1	N	1239	A	C5-C6-N1	-10.72	112.34	117.70
1	N	1534	A	C5-N7-C8	10.72	109.26	103.90
1	N	521	G	C5-C6-N1	-10.72	106.14	111.50
1	N	1351	U	N3-C4-C5	-10.72	108.17	114.60
1	N	240	G	N9-C4-C5	-10.71	101.11	105.40
1	N	730	G	C8-N9-C4	-10.71	102.11	106.40
1	N	308	C	O4'-C1'-N1	10.71	116.77	108.20
1	N	527	G	O4'-C1'-N9	10.71	116.77	108.20
1	N	792	A	C4-C5-C6	10.71	122.35	117.00
1	N	937	A	C5-C6-N6	-10.71	115.13	123.70
1	N	108	G	N1-C2-N3	-10.70	117.48	123.90
1	N	250	A	C5-C6-N1	-10.70	112.35	117.70
1	N	730	G	N3-C2-N2	10.70	127.39	119.90
1	N	360	G	N7-C8-N9	10.69	118.44	113.10
1	N	1110	A	C5-C6-N6	-10.69	115.15	123.70
1	N	1211	U	O4'-C1'-N1	10.69	116.75	108.20
1	N	288	A	C6-N1-C2	-10.68	112.19	118.60
1	N	487	A	C5-N7-C8	10.68	109.24	103.90
1	N	958	A	N1-C6-N6	10.68	125.01	118.60
1	N	1487	G	C5-C6-N1	-10.68	106.16	111.50
1	N	784	A	C4-C5-C6	10.68	122.34	117.00
1	N	1259	C	O4'-C1'-N1	10.67	116.74	108.20
1	N	119	A	N1-C6-N6	10.67	125.00	118.60
1	N	1082	A	C5-C6-N6	-10.66	115.17	123.70
1	N	900	A	C5-C6-N1	-10.66	112.37	117.70
1	N	648	A	C2-N3-C4	10.66	115.93	110.60
1	N	1005	A	C5-C6-N6	-10.66	115.17	123.70
1	N	833	G	C6-C5-N7	-10.65	124.01	130.40
1	N	148	G	C5-C6-O6	-10.65	122.21	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	802	A	N1-C6-N6	10.65	124.99	118.60
1	N	1476	A	N1-C6-N6	10.65	124.99	118.60
1	N	881	G	N1-C6-O6	10.64	126.29	119.90
1	N	1229	A	C4-C5-C6	10.64	122.32	117.00
1	N	1293	C	N3-C4-C5	-10.63	117.65	121.90
1	N	810	C	C6-N1-C2	-10.63	116.05	120.30
1	N	1283	U	O4'-C1'-N1	10.63	116.70	108.20
1	N	816	A	N1-C6-N6	10.62	124.97	118.60
1	N	118	U	N3-C4-O4	10.62	126.83	119.40
1	N	1455	G	C5-C6-N1	-10.62	106.19	111.50
1	N	710	G	N1-C6-O6	10.61	126.27	119.90
1	N	959	A	C8-N9-C4	-10.61	101.56	105.80
1	N	1054	C	N3-C4-C5	-10.61	117.66	121.90
1	N	448	A	N1-C2-N3	10.61	134.60	129.30
1	N	859	G	N9-C4-C5	-10.61	101.16	105.40
1	N	1507	A	N1-C6-N6	10.60	124.96	118.60
1	N	880	C	C6-N1-C2	10.60	124.54	120.30
1	N	1331	G	P-O5'-C5'	10.60	137.86	120.90
1	N	832	G	N1-C2-N3	-10.60	117.54	123.90
1	N	1159	U	N3-C2-O2	10.60	129.62	122.20
1	N	131	A	O4'-C1'-N9	10.59	116.67	108.20
1	N	527	G	C2-N3-C4	10.59	117.20	111.90
1	N	1079	G	N1-C6-O6	10.59	126.25	119.90
1	N	578	C	O4'-C1'-N1	10.59	116.67	108.20
1	N	627	G	C5-C6-O6	-10.59	122.25	128.60
1	N	1496	C	N3-C4-N4	10.59	125.41	118.00
1	N	649	A	C5-C6-N1	-10.58	112.41	117.70
1	N	244	U	N3-C2-O2	10.58	129.60	122.20
1	N	422	C	C5-C4-N4	-10.57	112.80	120.20
1	N	627	G	N1-C2-N3	-10.57	117.56	123.90
1	N	466	A	C2-N3-C4	10.56	115.88	110.60
1	N	960	U	O4'-C1'-N1	10.56	116.65	108.20
1	N	1245	C	O4'-C1'-N1	10.56	116.65	108.20
1	N	1101	A	C4-C5-C6	10.56	122.28	117.00
1	N	127	G	N1-C6-O6	10.56	126.23	119.90
1	N	99	C	O4'-C1'-N1	10.55	116.64	108.20
1	N	840	C	C2-N1-C1'	10.55	130.41	118.80
1	N	679	C	O4'-C1'-N1	10.55	116.64	108.20
1	N	1143	G	O4'-C1'-N9	10.55	116.64	108.20
1	N	1209	C	O4'-C1'-N1	10.55	116.64	108.20
1	N	753	A	N1-C6-N6	10.54	124.93	118.60
1	N	926	G	P-O3'-C3'	10.54	132.35	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	428	G	P-O3'-C3'	10.54	132.35	119.70
1	N	880	C	O4'-C1'-N1	10.54	116.63	108.20
1	N	1504	G	C5-N7-C8	10.54	109.57	104.30
1	N	1398	A	C8-N9-C4	-10.54	101.59	105.80
1	N	627	G	N3-C2-N2	10.53	127.27	119.90
1	N	1247	U	C2-N3-C4	10.53	133.32	127.00
1	N	459	A	C4-C5-C6	10.52	122.26	117.00
1	N	480	U	O4'-C1'-N1	10.52	116.62	108.20
1	N	1323	G	O4'-C1'-N9	10.52	116.62	108.20
1	N	774	G	O4'-C1'-N9	10.52	116.61	108.20
1	N	1263	C	N3-C4-N4	10.51	125.36	118.00
1	N	559	A	O4'-C1'-N9	10.51	116.61	108.20
1	N	1400	C	O4'-C1'-N1	10.51	116.61	108.20
1	N	1409	C	C6-N1-C2	-10.51	116.10	120.30
1	N	1066	C	O4'-C1'-N1	10.51	116.61	108.20
1	N	206	C	C5-C6-N1	10.51	126.25	121.00
1	N	936	C	C5-C6-N1	10.51	126.25	121.00
1	N	539	A	O4'-C1'-N9	10.50	116.60	108.20
1	N	793	U	O4'-C1'-N1	10.50	116.60	108.20
1	N	989	U	N3-C4-O4	10.50	126.75	119.40
1	N	127	G	C5-C6-O6	-10.50	122.30	128.60
1	N	36	C	N3-C4-C5	-10.50	117.70	121.90
1	N	120	A	C5-C6-N6	-10.50	115.30	123.70
1	N	237	G	C5-C6-O6	-10.50	122.30	128.60
1	N	483	C	N3-C4-C5	-10.50	117.70	121.90
1	N	570	G	C5-C6-O6	-10.49	122.30	128.60
1	N	683	G	C6-N1-C2	10.49	131.40	125.10
1	N	189	A	C8-N9-C4	-10.49	101.60	105.80
1	N	569	C	O4'-C1'-N1	10.49	116.59	108.20
1	N	935	A	N1-C6-N6	10.49	124.89	118.60
1	N	1198	G	C5-C6-O6	-10.49	122.31	128.60
1	N	1314	C	C6-N1-C2	-10.49	116.11	120.30
1	N	1298	U	C6-N1-C2	-10.48	114.71	121.00
1	N	1444	U	C5-C4-O4	-10.48	119.61	125.90
1	N	1485	U	O4'-C1'-N1	10.48	116.59	108.20
1	N	1342	C	C4-C5-C6	10.48	122.64	117.40
1	N	1166	G	P-O3'-C3'	10.47	132.27	119.70
1	N	51	A	N1-C6-N6	10.47	124.88	118.60
1	N	705	G	N9-C4-C5	-10.47	101.21	105.40
1	N	143	A	C8-N9-C4	-10.47	101.61	105.80
1	N	796	C	C5-C4-N4	-10.47	112.87	120.20
1	N	225	C	O4'-C1'-N1	10.47	116.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	345	C	N3-C4-C5	-10.46	117.71	121.90
1	N	266	G	N1-C6-O6	10.46	126.18	119.90
1	N	1236	A	N1-C6-N6	10.46	124.88	118.60
1	N	1124	G	C6-C5-N7	-10.46	124.12	130.40
1	N	1154	G	N1-C6-O6	10.46	126.17	119.90
1	N	741	G	N1-C6-O6	10.45	126.17	119.90
1	N	66	A	N1-C6-N6	10.45	124.87	118.60
1	N	322	C	C5-C4-N4	-10.44	112.89	120.20
1	N	919	A	N9-C4-C5	10.44	109.98	105.80
1	N	425	G	N1-C6-O6	10.44	126.16	119.90
1	N	987	G	N1-C6-O6	10.44	126.16	119.90
1	N	459	A	C5-C6-N6	-10.44	115.35	123.70
1	N	1457	G	N1-C6-O6	10.44	126.16	119.90
1	N	926	G	C8-N9-C4	-10.43	102.23	106.40
1	N	1293	C	N3-C4-N4	10.43	125.30	118.00
1	N	461	A	C5-N7-C8	10.43	109.12	103.90
1	N	765	G	O4'-C1'-N9	10.43	116.54	108.20
1	N	1380	U	O4'-C1'-N1	10.43	116.54	108.20
1	N	628	G	C5-C6-O6	-10.43	122.34	128.60
1	N	826	C	N3-C4-C5	-10.43	117.73	121.90
1	N	215	C	C5-C4-N4	-10.42	112.91	120.20
1	N	688	G	C5-C6-N1	-10.42	106.29	111.50
1	N	790	A	N1-C6-N6	10.42	124.85	118.60
1	N	306	A	C5-C6-N1	-10.41	112.49	117.70
1	N	843	U	C2-N1-C1'	10.41	130.20	117.70
1	N	643	C	N3-C4-N4	10.41	125.29	118.00
1	N	1278	G	P-O3'-C3'	10.41	132.19	119.70
1	N	1447	A	C5-C6-N1	-10.41	112.50	117.70
1	N	1457	G	C4-C5-N7	10.41	114.96	110.80
1	N	807	A	C4-C5-C6	10.40	122.20	117.00
1	N	1271	A	C4-C5-C6	10.40	122.20	117.00
1	N	1274	A	C8-N9-C4	-10.40	101.64	105.80
1	N	757	U	C5-C4-O4	-10.40	119.66	125.90
1	N	1264	U	O4'-C1'-N1	10.40	116.52	108.20
1	N	277	C	O4'-C1'-N1	10.39	116.51	108.20
1	N	614	C	O4'-C1'-N1	10.39	116.51	108.20
1	N	177	G	C6-C5-N7	-10.39	124.17	130.40
1	N	694	A	C5-C6-N6	-10.38	115.40	123.70
1	N	1016	A	N1-C2-N3	-10.38	124.11	129.30
1	N	696	A	O4'-C1'-N9	10.38	116.50	108.20
1	N	1233	G	N1-C6-O6	10.38	126.13	119.90
1	N	796	C	C6-N1-C1'	-10.38	108.35	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	621	A	N9-C4-C5	10.38	109.95	105.80
1	N	887	G	N3-C4-C5	10.38	133.79	128.60
1	N	468	A	C5-C6-N6	-10.37	115.40	123.70
1	N	901	A	C4-C5-C6	10.37	122.18	117.00
1	N	1314	C	C5-C6-N1	10.37	126.19	121.00
1	N	878	A	C8-N9-C4	-10.37	101.65	105.80
1	N	1086	U	O4'-C1'-N1	10.37	116.49	108.20
1	N	676	A	C4-C5-N7	10.37	115.88	110.70
1	N	1316	G	N1-C6-O6	10.36	126.12	119.90
1	N	738	C	C5-C6-N1	10.36	126.18	121.00
1	N	806	C	C2-N3-C4	10.36	125.08	119.90
1	N	827	U	O4'-C1'-N1	10.35	116.48	108.20
1	N	176	C	P-O5'-C5'	10.35	137.46	120.90
1	N	592	G	N1-C6-O6	10.35	126.11	119.90
1	N	1063	C	C6-N1-C2	-10.35	116.16	120.30
1	N	1468	A	O4'-C1'-N9	10.35	116.48	108.20
1	N	181	A	N1-C6-N6	10.35	124.81	118.60
1	N	266	G	P-O3'-C3'	10.35	132.12	119.70
1	N	1251	A	O4'-C1'-N9	10.35	116.48	108.20
1	N	978	A	N1-C6-N6	10.34	124.81	118.60
1	N	105	G	N1-C6-O6	10.34	126.10	119.90
1	N	881	G	C2-N3-C4	10.34	117.07	111.90
1	N	154	U	C5-C4-O4	10.33	132.10	125.90
1	N	415	A	C4-C5-C6	10.33	122.17	117.00
1	N	579	A	C6-C5-N7	-10.33	125.07	132.30
1	N	895	G	N7-C8-N9	-10.33	107.94	113.10
1	N	1254	A	N1-C6-N6	10.32	124.80	118.60
1	N	804	U	P-O3'-C3'	-10.32	107.31	119.70
1	N	637	C	N3-C4-N4	10.32	125.22	118.00
1	N	76	G	C5-C6-O6	-10.32	122.41	128.60
1	N	459	A	C8-N9-C4	-10.32	101.67	105.80
1	N	725	G	C5-N7-C8	-10.32	99.14	104.30
1	N	735	C	C5-C4-N4	-10.32	112.98	120.20
1	N	1433	A	C4-C5-C6	10.31	122.16	117.00
1	N	122	G	C5-C6-O6	-10.31	122.42	128.60
1	N	162	A	O4'-C1'-N9	10.31	116.45	108.20
1	N	532	A	C4-C5-C6	10.31	122.16	117.00
1	N	673	A	C5-C6-N6	-10.31	115.45	123.70
1	N	576	C	N3-C4-C5	-10.31	117.78	121.90
1	N	944	G	C2-N3-C4	10.30	117.05	111.90
1	N	985	C	N3-C4-C5	-10.30	117.78	121.90
1	N	1339	A	C5-C6-N1	-10.30	112.55	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1350	A	O4'-C1'-N9	10.31	116.44	108.20
1	N	669	G	N1-C6-O6	10.30	126.08	119.90
1	N	679	C	C5-C6-N1	10.30	126.15	121.00
1	N	865	A	N1-C6-N6	10.30	124.78	118.60
1	N	547	A	C4-C5-C6	10.29	122.15	117.00
1	N	500	G	O4'-C1'-N9	10.29	116.43	108.20
1	N	460	A	N1-C6-N6	10.29	124.77	118.60
1	N	526	C	C2-N3-C4	-10.29	114.76	119.90
1	N	934	C	P-O3'-C3'	10.29	132.04	119.70
1	N	1151	A	N7-C8-N9	-10.29	108.66	113.80
1	N	1044	A	C5-C6-N1	-10.28	112.56	117.70
1	N	536	C	C5-C6-N1	10.28	126.14	121.00
1	N	1242	G	N1-C6-O6	10.28	126.07	119.90
1	N	1092	A	C5-C6-N1	-10.27	112.56	117.70
1	N	1220	G	O4'-C1'-N9	10.27	116.42	108.20
1	N	711	G	N3-C2-N2	10.27	127.09	119.90
1	N	1483	A	N1-C6-N6	10.27	124.76	118.60
1	N	214	C	C6-N1-C2	-10.26	116.20	120.30
1	N	1400	C	C2-N3-C4	10.26	125.03	119.90
1	N	1426	G	O4'-C1'-N9	10.26	116.41	108.20
1	N	818	G	O4'-C1'-N9	10.26	116.40	108.20
1	N	936	C	C6-N1-C2	-10.26	116.20	120.30
1	N	730	G	C5-C6-O6	-10.25	122.45	128.60
1	N	937	A	C8-N9-C4	-10.25	101.70	105.80
1	N	823	C	N3-C4-C5	10.25	126.00	121.90
1	N	382	A	O4'-C1'-N9	10.24	116.39	108.20
1	N	1006	G	C5-C6-O6	-10.24	122.46	128.60
1	N	1160	G	N7-C8-N9	-10.23	107.98	113.10
1	N	545	C	O4'-C1'-N1	10.23	116.38	108.20
1	N	1196	A	C4-C5-C6	10.23	122.11	117.00
1	N	1387	G	C5-C6-O6	-10.23	122.46	128.60
1	N	1002	G	C5-C6-O6	-10.23	122.47	128.60
1	N	135	C	P-O3'-C3'	-10.22	107.43	119.70
1	N	1221	G	N3-C2-N2	10.22	127.06	119.90
1	N	1360	A	C6-C5-N7	-10.21	125.15	132.30
1	N	1449	C	C5-C4-N4	-10.21	113.05	120.20
1	N	298	A	C5-C6-N1	-10.21	112.59	117.70
1	N	36	C	N3-C4-N4	10.21	125.14	118.00
1	N	574	A	C8-N9-C4	-10.21	101.72	105.80
1	N	250	A	C5-C6-N6	-10.20	115.54	123.70
1	N	786	G	O4'-C1'-N9	10.21	116.36	108.20
1	N	374	A	C2-N3-C4	10.20	115.70	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	901	A	C4-C5-N7	-10.20	105.60	110.70
1	N	1252	A	N1-C6-N6	10.20	124.72	118.60
1	N	1080	A	C5-C6-N1	-10.20	112.60	117.70
1	N	680	C	C6-N1-C2	-10.20	116.22	120.30
1	N	1189	U	C6-N1-C2	10.20	127.12	121.00
1	N	1407	C	N3-C4-N4	10.19	125.14	118.00
1	N	773	G	N1-C6-O6	10.19	126.01	119.90
1	N	894	G	N1-C6-O6	10.19	126.01	119.90
1	N	1307	U	C5-C6-N1	10.19	127.79	122.70
1	N	759	A	C8-N9-C4	-10.19	101.73	105.80
1	N	411	A	N1-C6-N6	10.18	124.71	118.60
1	N	1350	A	N1-C6-N6	10.18	124.71	118.60
1	N	433	G	C5-C6-O6	-10.18	122.49	128.60
1	N	1037	C	C6-N1-C2	-10.18	116.23	120.30
1	N	1080	A	C6-C5-N7	-10.18	125.18	132.30
1	N	287	U	C5-C4-O4	-10.17	119.80	125.90
1	N	553	A	N1-C2-N3	10.17	134.39	129.30
1	N	143	A	O4'-C1'-N9	10.17	116.34	108.20
1	N	447	G	O4'-C1'-N9	10.17	116.34	108.20
1	N	1388	C	N3-C4-N4	10.17	125.12	118.00
1	N	1095	U	O4'-C1'-N1	10.17	116.34	108.20
1	N	1304	G	C8-N9-C4	-10.17	102.33	106.40
1	N	578	C	C6-N1-C2	-10.16	116.23	120.30
1	N	1432	G	P-O3'-C3'	10.16	131.90	119.70
1	N	606	G	C6-C5-N7	-10.16	124.31	130.40
1	N	640	A	C6-C5-N7	-10.16	125.19	132.30
1	N	917	G	C8-N9-C4	-10.16	102.34	106.40
1	N	1276	G	N1-C6-O6	10.16	125.99	119.90
1	N	441	A	C5-C6-N1	-10.15	112.62	117.70
1	N	889	A	C8-N9-C4	-10.15	101.74	105.80
1	N	1088	G	P-O5'-C5'	10.15	137.15	120.90
1	N	643	C	C5-C4-N4	-10.15	113.09	120.20
1	N	881	G	C5-C6-O6	-10.15	122.51	128.60
1	N	567	G	O4'-C1'-N9	10.15	116.32	108.20
1	N	947	G	C5-C6-O6	-10.15	122.51	128.60
1	N	1185	G	O4'-C1'-N9	10.15	116.32	108.20
1	N	1232	U	O4'-C1'-N1	10.14	116.31	108.20
1	N	222	C	N3-C4-N4	10.14	125.10	118.00
1	N	1020	G	C5-C6-O6	-10.14	122.52	128.60
1	N	1169	A	C6-N1-C2	-10.13	112.52	118.60
1	N	1058	G	C5-C6-O6	-10.13	122.52	128.60
1	N	291	U	C2-N3-C4	10.13	133.08	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	629	A	C5-N7-C8	10.13	108.96	103.90
1	N	1442	G	N1-C6-O6	10.12	125.97	119.90
1	N	253	A	C5-C6-N6	-10.12	115.60	123.70
1	N	692	U	O4'-C1'-N1	10.12	116.30	108.20
1	N	722	G	N1-C2-N3	-10.12	117.83	123.90
1	N	452	A	N1-C2-N3	10.12	134.36	129.30
1	N	433	G	C4-C5-N7	10.11	114.85	110.80
1	N	1233	G	C5-C6-O6	-10.11	122.53	128.60
1	N	922	G	N1-C6-O6	10.11	125.97	119.90
1	N	35	G	N1-C6-O6	10.11	125.96	119.90
1	N	457	G	N1-C6-O6	10.11	125.96	119.90
1	N	166	U	O4'-C1'-N1	10.10	116.28	108.20
1	N	913	A	C8-N9-C4	-10.10	101.76	105.80
1	N	385	C	C4-C5-C6	-10.10	112.35	117.40
1	N	462	G	C4-C5-N7	-10.10	106.76	110.80
1	N	318	G	C6-C5-N7	-10.09	124.34	130.40
1	N	22	G	N1-C2-N3	-10.09	117.84	123.90
1	N	711	G	N1-C2-N3	-10.09	117.84	123.90
1	N	1283	U	P-O5'-C5'	10.09	137.04	120.90
1	N	1530	G	C5-C6-O6	-10.08	122.55	128.60
1	N	1462	C	C6-N1-C2	10.08	124.33	120.30
1	N	67	C	N3-C4-C5	-10.08	117.87	121.90
1	N	516	U	O4'-C1'-N1	10.07	116.26	108.20
1	N	560	A	N9-C4-C5	10.07	109.83	105.80
1	N	1366	C	O4'-C1'-N1	10.07	116.26	108.20
1	N	332	G	N9-C4-C5	-10.07	101.37	105.40
1	N	945	G	C5-C6-O6	-10.07	122.56	128.60
1	N	866	C	P-O5'-C5'	10.07	137.01	120.90
1	N	1016	A	N1-C6-N6	10.07	124.64	118.60
1	N	750	C	C6-N1-C2	-10.07	116.27	120.30
1	N	1113	C	C2-N3-C4	10.07	124.93	119.90
1	N	1313	U	C5-C4-O4	-10.06	119.86	125.90
1	N	90	C	P-O5'-C5'	10.06	137.00	120.90
1	N	1346	A	C5-C6-N1	-10.06	112.67	117.70
1	N	651	C	N3-C4-N4	10.06	125.04	118.00
1	N	1166	G	N1-C2-N3	-10.06	117.86	123.90
1	N	733	G	C5-C6-N1	-10.06	106.47	111.50
1	N	1252	A	C4-C5-C6	10.05	122.03	117.00
1	N	254	G	N3-C4-C5	-10.05	123.58	128.60
1	N	621	A	C4-C5-C6	10.05	122.02	117.00
1	N	764	C	C4'-C3'-C2'	-10.05	92.55	102.60
1	N	1177	G	C5-C6-O6	-10.04	122.57	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1239	A	C6-C5-N7	-10.04	125.27	132.30
1	N	1414	U	N3-C2-O2	10.04	129.23	122.20
1	N	507	C	O4'-C1'-N1	10.04	116.23	108.20
1	N	275	G	C5-C6-O6	-10.04	122.58	128.60
1	N	381	C	O4'-C1'-N1	10.04	116.23	108.20
1	N	731	G	C8-N9-C4	-10.04	102.38	106.40
1	N	1449	C	O4'-C1'-N1	10.04	116.23	108.20
1	N	1082	A	C5-C6-N1	-10.04	112.68	117.70
1	N	1162	C	O4'-C1'-N1	10.04	116.23	108.20
1	N	92	U	O4'-C1'-N1	10.04	116.23	108.20
1	N	779	C	C5-C6-N1	10.04	126.02	121.00
1	N	161	A	C8-N9-C4	-10.03	101.79	105.80
1	N	286	C	N3-C4-N4	10.03	125.02	118.00
1	N	1181	G	N1-C2-N3	-10.03	117.88	123.90
1	N	1354	U	O4'-C1'-N1	10.03	116.22	108.20
1	N	1501	C	N1-C2-N3	-10.03	112.18	119.20
1	N	555	U	N3-C4-C5	-10.03	108.58	114.60
1	N	1384	C	C4-C5-C6	10.03	122.41	117.40
1	N	181	A	P-O3'-C3'	10.03	131.73	119.70
1	N	344	A	P-O5'-C5'	10.02	136.94	120.90
1	N	1011	C	O4'-C1'-N1	10.02	116.22	108.20
1	N	292	G	C8-N9-C4	-10.02	102.39	106.40
1	N	371	A	N1-C6-N6	10.02	124.61	118.60
1	N	513	C	N3-C4-N4	10.02	125.01	118.00
1	N	984	C	O4'-C1'-N1	10.02	116.21	108.20
1	N	1446	A	N9-C4-C5	-10.02	101.79	105.80
1	N	433	G	N3-C4-C5	10.01	133.61	128.60
1	N	520	A	C5-N7-C8	10.01	108.91	103.90
1	N	1369	C	N3-C4-C5	-10.01	117.89	121.90
1	N	1489	G	N9-C4-C5	-10.01	101.39	105.40
1	N	269	C	C6-N1-C2	-10.01	116.30	120.30
1	N	1504	G	P-O3'-C3'	10.01	131.71	119.70
1	N	163	C	N3-C4-C5	-10.01	117.90	121.90
1	N	1507	A	O4'-C1'-N9	10.01	116.20	108.20
1	N	247	G	C6-C5-N7	-10.01	124.40	130.40
1	N	32	A	N9-C4-C5	10.00	109.80	105.80
1	N	305	G	N9-C4-C5	-10.00	101.40	105.40
1	N	1174	G	C6-C5-N7	-10.00	124.40	130.40
1	N	274	A	C2-N3-C4	-9.99	105.60	110.60
1	N	1024	G	N3-C4-C5	9.99	133.60	128.60
1	N	270	A	C4-C5-C6	9.99	122.00	117.00
1	N	1089	G	N9-C4-C5	-9.99	101.40	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	517	G	C5-C6-O6	-9.99	122.61	128.60
1	N	449	G	C5-C6-N1	-9.98	106.51	111.50
1	N	605	U	C5-C6-N1	9.98	127.69	122.70
1	N	1331	G	P-O3'-C3'	9.98	131.68	119.70
1	N	1416	G	C5-C6-O6	-9.98	122.61	128.60
1	N	1487	G	C8-N9-C4	-9.98	102.41	106.40
1	N	634	C	O4'-C1'-N1	9.98	116.19	108.20
1	N	1355	G	C2-N3-C4	9.98	116.89	111.90
1	N	26	A	O4'-C1'-N9	9.98	116.18	108.20
1	N	792	A	C6-C5-N7	-9.98	125.32	132.30
1	N	1292	G	N3-C2-N2	9.98	126.88	119.90
1	N	920	U	O4'-C1'-N1	9.97	116.18	108.20
1	N	993	G	C8-N9-C4	-9.97	102.41	106.40
1	N	745	G	O4'-C1'-N9	9.97	116.18	108.20
1	N	490	C	O4'-C1'-N1	9.97	116.18	108.20
1	N	1241	G	N1-C2-N3	-9.97	117.92	123.90
1	N	204	G	C5-C6-N1	-9.96	106.52	111.50
1	N	811	C	O4'-C1'-N1	9.95	116.16	108.20
1	N	1017	U	N1-C2-N3	-9.96	108.93	114.90
1	N	1294	G	C5-C6-O6	-9.96	122.63	128.60
1	N	1131	G	C4-C5-C6	9.95	124.77	118.80
1	N	1320	C	O4'-C1'-N1	9.95	116.16	108.20
1	N	3	A	C5-C6-N1	-9.95	112.72	117.70
1	N	536	C	O4'-C1'-N1	9.95	116.16	108.20
1	N	595	A	C4-C5-C6	9.95	121.97	117.00
1	N	1050	G	C4-C5-C6	9.94	124.77	118.80
1	N	1191	A	C5-C6-N6	-9.95	115.74	123.70
1	N	1196	A	P-O3'-C3'	9.95	131.63	119.70
1	N	732	C	N1-C2-O2	-9.94	112.94	118.90
1	N	993	G	C5-C6-O6	-9.94	122.64	128.60
1	N	1033	G	N3-C4-C5	-9.94	123.63	128.60
1	N	389	A	C2-N3-C4	-9.94	105.63	110.60
1	N	535	A	N1-C2-N3	9.94	134.27	129.30
1	N	669	G	O4'-C1'-N9	9.94	116.15	108.20
1	N	1106	G	C2-N3-C4	9.94	116.87	111.90
1	N	889	A	C4-C5-C6	9.93	121.97	117.00
1	N	1379	G	O4'-C1'-N9	9.93	116.14	108.20
1	N	1042	A	C2-N3-C4	-9.93	105.64	110.60
1	N	1339	A	N7-C8-N9	9.93	118.76	113.80
1	N	8	A	O4'-C1'-N9	9.92	116.14	108.20
1	N	769	G	N3-C2-N2	9.92	126.84	119.90
1	N	986	U	O4'-C1'-N1	9.92	116.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1490	U	O4'-C1'-N1	9.91	116.13	108.20
1	N	83	C	C5-C6-N1	9.91	125.96	121.00
1	N	167	A	C6-C5-N7	-9.91	125.36	132.30
1	N	36	C	O4'-C1'-N1	9.91	116.13	108.20
1	N	78	A	C5-C6-N6	-9.91	115.77	123.70
1	N	1280	A	C4-C5-C6	9.91	121.95	117.00
1	N	158	G	N1-C6-O6	9.90	125.84	119.90
1	N	1174	G	N3-C4-C5	-9.90	123.65	128.60
1	N	1299	A	C5-C6-N6	-9.90	115.78	123.70
1	N	63	C	P-O3'-C3'	9.90	131.58	119.70
1	N	210	C	N3-C4-N4	9.90	124.93	118.00
1	N	1296	C	N3-C4-C5	-9.90	117.94	121.90
1	N	98	A	N1-C6-N6	9.89	124.54	118.60
1	N	1438	G	C5-N7-C8	-9.89	99.35	104.30
1	N	586	C	C6-N1-C2	-9.89	116.34	120.30
1	N	1384	C	C2-N3-C4	9.89	124.84	119.90
1	N	7	A	C4-C5-C6	9.89	121.94	117.00
1	N	84	U	O4'-C1'-N1	9.89	116.11	108.20
1	N	674	G	P-O5'-C5'	9.89	136.72	120.90
1	N	249	U	O4'-C1'-N1	9.88	116.11	108.20
1	N	1336	C	N3-C4-C5	-9.88	117.95	121.90
1	N	42	G	O4'-C1'-N9	9.88	116.10	108.20
1	N	1522	U	O4'-C1'-N1	9.88	116.10	108.20
1	N	727	G	O4'-C1'-N9	9.87	116.10	108.20
1	N	574	A	C5-C6-N6	-9.87	115.80	123.70
1	N	205	A	C4-C5-C6	9.87	121.93	117.00
1	N	632	U	C5-C4-O4	-9.87	119.98	125.90
1	N	413	G	N1-C6-O6	9.86	125.82	119.90
1	N	1004	A	C5-C6-N1	-9.86	112.77	117.70
1	N	1349	A	C4-C5-C6	9.86	121.93	117.00
1	N	252	U	N3-C4-O4	9.86	126.30	119.40
1	N	999	C	O4'-C1'-N1	9.86	116.09	108.20
1	N	523	A	N1-C6-N6	9.86	124.52	118.60
1	N	1256	A	C6-C5-N7	-9.86	125.40	132.30
1	N	1148	U	C2-N3-C4	-9.86	121.09	127.00
1	N	314	C	C5-C4-N4	-9.86	113.30	120.20
1	N	635	A	C5-C6-N1	-9.86	112.77	117.70
1	N	257	G	N1-C2-N3	-9.85	117.99	123.90
1	N	1450	U	N3-C4-O4	9.85	126.30	119.40
1	N	255	G	C6-C5-N7	-9.85	124.49	130.40
1	N	747	A	O4'-C1'-N9	9.84	116.08	108.20
1	N	824	G	C5-C6-N1	-9.84	106.58	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1269	A	C5-C6-N6	-9.84	115.83	123.70
1	N	593	U	N3-C4-C5	-9.84	108.70	114.60
1	N	1133	G	C5-C6-O6	-9.84	122.70	128.60
1	N	441	A	C6-N1-C2	9.84	124.50	118.60
1	N	660	C	O4'-C1'-N1	9.83	116.07	108.20
1	N	1345	U	C6-N1-C2	9.83	126.90	121.00
1	N	918	A	O4'-C1'-N9	9.83	116.06	108.20
1	N	529	G	C5-C6-O6	-9.82	122.71	128.60
1	N	360	G	C5-C6-O6	-9.82	122.71	128.60
1	N	35	G	C5-C6-O6	-9.82	122.71	128.60
1	N	1482	G	N1-C2-N2	-9.82	107.36	116.20
1	N	54	C	N3-C4-C5	-9.82	117.97	121.90
1	N	412	A	N7-C8-N9	-9.82	108.89	113.80
1	N	794	A	N1-C6-N6	9.82	124.49	118.60
1	N	21	G	C5-C6-N1	-9.81	106.59	111.50
1	N	1367	C	O4'-C1'-N1	9.81	116.05	108.20
1	N	890	G	C5-C6-O6	-9.81	122.71	128.60
1	N	961	U	O4'-C1'-N1	9.81	116.05	108.20
1	N	759	A	N1-C2-N3	9.81	134.21	129.30
1	N	1275	A	C8-N9-C4	-9.81	101.88	105.80
1	N	1468	A	C4-C5-C6	9.81	121.91	117.00
1	N	212	G	P-O3'-C3'	9.81	131.47	119.70
1	N	837	U	O4'-C1'-N1	9.81	116.05	108.20
1	N	508	U	P-O3'-C3'	9.80	131.47	119.70
1	N	596	A	O4'-C1'-N9	9.79	116.03	108.20
1	N	101	A	N9-C4-C5	9.79	109.72	105.80
1	N	487	A	N7-C8-N9	-9.78	108.91	113.80
1	N	747	A	C8-N9-C4	9.78	109.71	105.80
1	N	151	A	C5-N7-C8	9.78	108.79	103.90
1	N	809	G	N1-C2-N3	-9.78	118.03	123.90
1	N	1014	A	C5-C6-N1	-9.78	112.81	117.70
1	N	358	U	O4'-C1'-N1	9.78	116.02	108.20
1	N	441	A	C2-N3-C4	-9.78	105.71	110.60
1	N	566	G	C4-C5-N7	-9.78	106.89	110.80
1	N	915	A	O4'-C1'-N9	9.78	116.02	108.20
1	N	517	G	N7-C8-N9	9.77	117.99	113.10
1	N	1050	G	C6-C5-N7	-9.77	124.54	130.40
1	N	459	A	C6-C5-N7	-9.77	125.46	132.30
1	N	263	A	O4'-C1'-N9	9.76	116.01	108.20
1	N	331	G	C4-C5-C6	9.76	124.66	118.80
1	N	898	G	C5-C6-O6	-9.76	122.74	128.60
1	N	583	A	O4'-C1'-N9	9.76	116.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	966	G	N9-C4-C5	-9.76	101.50	105.40
1	N	1325	C	N3-C4-N4	9.76	124.83	118.00
1	N	792	A	C5-C6-N1	-9.75	112.82	117.70
1	N	335	C	N3-C4-N4	9.75	124.83	118.00
1	N	1127	G	N1-C6-O6	9.75	125.75	119.90
1	N	1401	G	N3-C2-N2	9.75	126.72	119.90
1	N	475	C	O4'-C1'-N1	9.74	116.00	108.20
1	N	1363	A	C8-N9-C4	-9.74	101.90	105.80
1	N	1417	G	N9-C4-C5	-9.74	101.50	105.40
1	N	334	C	C6-N1-C2	9.74	124.20	120.30
1	N	546	A	N1-C2-N3	9.74	134.17	129.30
1	N	1024	G	O4'-C1'-N9	9.74	115.99	108.20
1	N	1342	C	N3-C4-N4	9.74	124.82	118.00
1	N	761	G	O4'-C1'-N9	9.74	115.99	108.20
1	N	391	G	O4'-C1'-N9	9.73	115.99	108.20
1	N	524	G	C8-N9-C4	-9.73	102.51	106.40
1	N	579	A	N1-C6-N6	9.73	124.44	118.60
1	N	379	C	O4'-C1'-N1	9.72	115.98	108.20
1	N	598	U	C5-C6-N1	9.72	127.56	122.70
1	N	700	G	C2-N3-C4	-9.72	107.04	111.90
1	N	1020	G	N1-C6-O6	9.72	125.73	119.90
1	N	736	C	O4'-C1'-N1	9.72	115.97	108.20
1	N	196	A	C5-C6-N1	-9.71	112.84	117.70
1	N	494	G	C5-C6-O6	-9.71	122.77	128.60
1	N	208	U	P-O3'-C3'	9.71	131.35	119.70
1	N	614	C	N3-C4-C5	-9.71	118.02	121.90
1	N	1375	A	C6-C5-N7	-9.71	125.50	132.30
1	N	1244	G	N1-C2-N3	-9.71	118.07	123.90
1	N	362	G	C6-N1-C2	-9.71	119.28	125.10
1	N	640	A	C4-C5-C6	9.71	121.85	117.00
1	N	654	G	N3-C2-N2	9.71	126.69	119.90
1	N	979	C	N3-C4-C5	-9.71	118.02	121.90
1	N	1163	A	C8-N9-C4	-9.71	101.92	105.80
1	N	681	A	C8-N9-C4	-9.70	101.92	105.80
1	N	945	G	C5-N7-C8	-9.70	99.45	104.30
1	N	94	G	C5-C6-O6	-9.70	122.78	128.60
1	N	707	U	N3-C4-O4	9.70	126.19	119.40
1	N	800	G	C5-C6-O6	-9.69	122.78	128.60
1	N	1395	C	O4'-C1'-N1	9.70	115.96	108.20
1	N	1453	G	C5-N7-C8	-9.70	99.45	104.30
1	N	26	A	C5-C6-N6	-9.69	115.94	123.70
1	N	188	C	N3-C4-C5	-9.69	118.03	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	254	G	O4'-C1'-N9	9.69	115.95	108.20
1	N	993	G	N1-C6-O6	9.68	125.71	119.90
1	N	924	C	C5-C4-N4	-9.68	113.43	120.20
1	N	1518	A	C6-C5-N7	-9.68	125.53	132.30
1	N	126	G	N3-C2-N2	9.67	126.67	119.90
1	N	542	G	N1-C6-O6	9.67	125.70	119.90
1	N	696	A	C5-C6-N1	-9.67	112.86	117.70
1	N	926	G	C5-C6-O6	-9.67	122.80	128.60
1	N	720	C	C6-N1-C2	-9.67	116.43	120.30
1	N	1459	G	C5-C6-O6	-9.67	122.80	128.60
1	N	582	C	N3-C4-N4	9.67	124.77	118.00
1	N	1230	C	O4'-C1'-N1	9.67	115.94	108.20
1	N	608	A	C4-C5-C6	9.67	121.83	117.00
1	N	28	A	C4-C5-C6	9.66	121.83	117.00
1	N	858	G	C5-C6-O6	-9.66	122.80	128.60
1	N	254	G	C2-N3-C4	9.66	116.73	111.90
1	N	731	G	C4-C5-N7	-9.66	106.94	110.80
1	N	1015	G	N9-C4-C5	-9.66	101.54	105.40
1	N	1094	G	P-O3'-C3'	9.66	131.29	119.70
1	N	1030	U	O4'-C1'-N1	9.66	115.92	108.20
1	N	795	C	N3-C4-N4	9.65	124.76	118.00
1	N	1086	U	C5'-C4'-C3'	-9.65	100.55	116.00
1	N	146	G	N9-C4-C5	9.65	109.26	105.40
1	N	305	G	N7-C8-N9	-9.65	108.27	113.10
1	N	585	G	N1-C6-O6	9.65	125.69	119.90
1	N	1006	G	O4'-C1'-N9	9.65	115.92	108.20
1	N	1493	A	O4'-C1'-N9	9.65	115.92	108.20
1	N	779	C	N3-C4-N4	9.64	124.75	118.00
1	N	983	A	O4'-C1'-N9	9.64	115.91	108.20
1	N	923	A	P-O3'-C3'	9.64	131.27	119.70
1	N	602	A	C5-C6-N1	-9.64	112.88	117.70
1	N	1063	C	C5-C6-N1	9.64	125.82	121.00
1	N	1292	G	C4-C5-N7	9.63	114.65	110.80
1	N	1319	A	N1-C6-N6	9.63	124.38	118.60
1	N	198	G	C3'-C2'-C1'	9.63	109.21	101.50
1	N	697	U	O4'-C1'-N1	9.63	115.90	108.20
1	N	1203	C	C2-N3-C4	9.63	124.72	119.90
1	N	881	G	N1-C2-N3	-9.63	118.12	123.90
1	N	1048	G	N9-C4-C5	9.63	109.25	105.40
1	N	31	G	N3-C2-N2	9.63	126.64	119.90
1	N	1488	G	C5-C6-O6	-9.63	122.82	128.60
1	N	1053	G	C5-C6-O6	-9.62	122.83	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1076	U	O4'-C1'-N1	9.62	115.90	108.20
1	N	67	C	O4'-C1'-N1	9.62	115.90	108.20
1	N	647	C	O4'-C1'-N1	9.62	115.89	108.20
1	N	211	G	N3-C2-N2	9.62	126.63	119.90
1	N	301	G	C4-C5-C6	9.62	124.57	118.80
1	N	1019	A	C8-N9-C4	-9.61	101.95	105.80
1	N	628	G	C2-N3-C4	9.61	116.71	111.90
1	N	906	A	O4'-C1'-N9	9.61	115.89	108.20
1	N	1523	G	N3-C2-N2	9.61	126.63	119.90
1	N	1012	A	O4'-C1'-N9	9.61	115.89	108.20
1	N	795	C	C6-N1-C1'	-9.61	109.27	120.80
1	N	462	G	O4'-C1'-N9	9.61	115.88	108.20
1	N	80	A	C4-C5-C6	9.60	121.80	117.00
1	N	1253	G	P-O3'-C3'	-9.60	108.18	119.70
1	N	1277	C	N3-C4-C5	-9.60	118.06	121.90
1	N	1295	U	O4'-C1'-N1	9.60	115.88	108.20
1	N	1495	U	O4'-C1'-N1	9.60	115.88	108.20
1	N	1272	G	O4'-C1'-N9	9.60	115.88	108.20
1	N	1353	G	P-O3'-C3'	-9.60	108.19	119.70
1	N	508	U	C2-N3-C4	-9.59	121.25	127.00
1	N	563	A	C5-C6-N6	-9.59	116.03	123.70
1	N	607	A	N1-C6-N6	9.59	124.35	118.60
1	N	747	A	N7-C8-N9	-9.59	109.01	113.80
1	N	1021	A	P-O3'-C3'	9.59	131.21	119.70
1	N	1186	G	C8-N9-C4	9.59	110.23	106.40
1	N	547	A	C1'-O4'-C4'	-9.58	102.23	109.90
1	N	780	A	N1-C2-N3	9.58	134.09	129.30
1	N	677	U	P-O5'-C5'	9.58	136.23	120.90
1	N	1252	A	P-O3'-C3'	-9.58	108.20	119.70
1	N	93	U	O4'-C1'-N1	9.58	115.86	108.20
1	N	1233	G	O4'-C1'-N9	9.58	115.86	108.20
1	N	1343	G	C6-C5-N7	-9.58	124.66	130.40
1	N	59	A	C4-C5-N7	-9.57	105.91	110.70
1	N	521	G	N3-C2-N2	9.57	126.60	119.90
1	N	1163	A	C5-C6-N6	-9.57	116.04	123.70
1	N	648	A	C4-C5-C6	9.57	121.78	117.00
1	N	1174	G	N1-C2-N3	-9.57	118.16	123.90
1	N	1471	U	O4'-C1'-N1	9.57	115.86	108.20
1	N	273	U	O4'-C1'-N1	9.56	115.85	108.20
1	N	725	G	N3-C4-C5	9.56	133.38	128.60
1	N	143	A	C5-C6-N1	-9.56	112.92	117.70
1	N	1360	A	C5-C6-N1	-9.56	112.92	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	440	C	P-O5'-C5'	9.56	136.19	120.90
1	N	648	A	C4-C5-N7	-9.56	105.92	110.70
1	N	764	C	N1-C2-O2	-9.56	113.17	118.90
1	N	223	A	C5-C6-N1	-9.56	112.92	117.70
1	N	1070	U	O4'-C1'-N1	9.55	115.84	108.20
1	N	281	G	C8-N9-C4	-9.55	102.58	106.40
1	N	742	G	C4-C5-N7	9.55	114.62	110.80
1	N	351	G	P-O3'-C3'	9.54	131.15	119.70
1	N	543	U	C5-C4-O4	-9.55	120.17	125.90
1	N	599	C	C6-N1-C2	-9.55	116.48	120.30
1	N	167	A	C5-C6-N1	-9.54	112.93	117.70
1	N	1139	G	N1-C2-N3	-9.54	118.18	123.90
1	N	230	G	N9-C4-C5	9.54	109.21	105.40
1	N	1186	G	N1-C6-O6	9.53	125.62	119.90
1	N	1036	A	P-O3'-C3'	9.53	131.14	119.70
1	N	309	A	C4-C5-C6	9.53	121.76	117.00
1	N	1457	G	N7-C8-N9	9.53	117.86	113.10
1	N	1509	C	O4'-C1'-N1	9.53	115.82	108.20
1	N	309	A	P-O3'-C3'	-9.53	108.27	119.70
1	N	531	U	C5-C6-N1	9.53	127.46	122.70
1	N	610	U	O4'-C1'-N1	9.53	115.82	108.20
1	N	1366	C	C2-N3-C4	9.53	124.66	119.90
1	N	559	A	P-O3'-C3'	9.52	131.13	119.70
1	N	731	G	N3-C2-N2	9.52	126.56	119.90
1	N	1034	G	C5-C6-O6	-9.52	122.89	128.60
1	N	1219	A	C4-C5-N7	-9.52	105.94	110.70
1	N	620	C	N3-C4-C5	-9.52	118.09	121.90
1	N	633	G	P-O5'-C5'	9.52	136.13	120.90
1	N	1238	A	C5-C6-N1	-9.52	112.94	117.70
1	N	1531	A	N9-C4-C5	-9.52	101.99	105.80
1	N	1097	C	N3-C4-N4	9.51	124.66	118.00
1	N	1254	A	O4'-C1'-N9	9.51	115.81	108.20
1	N	856	C	C5-C4-N4	-9.51	113.54	120.20
1	N	1149	C	N3-C4-C5	-9.51	118.10	121.90
1	N	1333	A	C8-N9-C4	-9.51	102.00	105.80
1	N	210	C	O4'-C1'-N1	9.51	115.81	108.20
1	N	359	G	O4'-C1'-N9	9.51	115.81	108.20
1	N	813	U	C5-C4-O4	-9.51	120.19	125.90
1	N	1043	G	N1-C6-O6	9.51	125.61	119.90
1	N	1046	A	C4-C5-C6	9.51	121.75	117.00
1	N	354	G	C5-C6-N1	-9.51	106.75	111.50
1	N	406	G	C8-N9-C4	-9.51	102.60	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1243	C	P-O5'-C5'	9.51	136.11	120.90
1	N	498	A	C4-C5-N7	-9.50	105.95	110.70
1	N	78	A	P-O3'-C3'	9.50	131.10	119.70
1	N	414	A	O4'-C1'-N9	9.50	115.80	108.20
1	N	795	C	N3-C4-C5	-9.50	118.10	121.90
1	N	1077	G	C8-N9-C4	-9.50	102.60	106.40
1	N	1156	G	O4'-C1'-N9	9.50	115.80	108.20
1	N	42	G	C5-C6-N1	-9.50	106.75	111.50
1	N	757	U	N1-C2-O2	-9.50	116.15	122.80
1	N	963	G	N7-C8-N9	9.50	117.85	113.10
1	N	1046	A	C5-C6-N6	-9.50	116.10	123.70
1	N	220	G	C4-N9-C1'	9.50	138.85	126.50
1	N	908	A	C4-C5-C6	9.50	121.75	117.00
1	N	1090	U	O4'-C1'-N1	9.50	115.80	108.20
1	N	1177	G	N1-C6-O6	9.50	125.60	119.90
1	N	250	A	C4-C5-C6	9.49	121.75	117.00
1	N	299	G	O4'-C1'-N9	9.49	115.80	108.20
1	N	408	A	C5-C6-N6	-9.49	116.10	123.70
1	N	431	A	C4-C5-C6	9.49	121.75	117.00
1	N	1395	C	N3-C4-C5	-9.49	118.10	121.90
1	N	532	A	O4'-C1'-N9	9.49	115.79	108.20
1	N	902	G	N1-C6-O6	9.49	125.59	119.90
1	N	1019	A	C4-C5-C6	9.49	121.75	117.00
1	N	1378	C	C5-C4-N4	-9.49	113.56	120.20
1	N	618	C	N3-C4-N4	9.49	124.64	118.00
1	N	960	U	C5-C6-N1	9.49	127.44	122.70
1	N	1230	C	N3-C4-N4	9.49	124.64	118.00
1	N	1479	C	O4'-C1'-N1	9.49	115.79	108.20
1	N	370	C	C4-C5-C6	-9.48	112.66	117.40
1	N	641	U	N1-C2-N3	-9.48	109.21	114.90
1	N	721	G	P-O3'-C3'	9.48	131.08	119.70
1	N	1365	G	P-O5'-C5'	-9.48	105.73	120.90
1	N	1505	G	C5-C6-O6	-9.48	122.91	128.60
1	N	978	A	P-O3'-C3'	9.48	131.08	119.70
1	N	800	G	P-O5'-C5'	9.48	136.07	120.90
1	N	1160	G	C4-C5-C6	9.48	124.49	118.80
1	N	696	A	C3'-C2'-C1'	-9.48	93.92	101.50
1	N	890	G	N1-C6-O6	9.48	125.59	119.90
1	N	1010	U	C5-C6-N1	9.48	127.44	122.70
1	N	1150	A	N1-C6-N6	9.48	124.29	118.60
1	N	378	G	O4'-C1'-N9	9.47	115.78	108.20
1	N	929	G	C8-N9-C4	-9.47	102.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1317	C	O4'-C1'-N1	9.47	115.78	108.20
1	N	254	G	N1-C6-O6	9.47	125.58	119.90
1	N	1489	G	C8-N9-C4	9.47	110.19	106.40
1	N	699	C	O4'-C1'-N1	9.47	115.78	108.20
1	N	1244	G	O4'-C1'-N9	9.47	115.78	108.20
1	N	1035	A	C8-N9-C4	-9.47	102.01	105.80
1	N	423	G	P-O5'-C5'	9.47	136.04	120.90
1	N	982	U	C2-N3-C4	-9.46	121.32	127.00
1	N	983	A	C5-C6-N6	-9.46	116.13	123.70
1	N	1054	C	O4'-C1'-N1	9.46	115.77	108.20
1	N	761	G	N1-C6-O6	9.46	125.58	119.90
1	N	765	G	C5-C6-O6	-9.46	122.92	128.60
1	N	830	G	C5-C6-N1	-9.46	106.77	111.50
1	N	1134	G	N1-C2-N3	-9.46	118.22	123.90
1	N	914	A	O4'-C1'-N9	9.46	115.76	108.20
1	N	363	A	C5-C6-N6	-9.45	116.14	123.70
1	N	1419	G	C5-C6-N1	-9.45	106.77	111.50
1	N	1399	C	O4'-C1'-N1	9.45	115.76	108.20
1	N	137	U	C5-C6-N1	9.45	127.42	122.70
1	N	1131	G	C5-C6-N1	-9.45	106.78	111.50
1	N	306	A	C6-C5-N7	-9.44	125.69	132.30
1	N	858	G	N1-C2-N3	-9.44	118.23	123.90
1	N	651	C	C5-C4-N4	-9.44	113.59	120.20
1	N	1222	G	C2-N3-C4	9.44	116.62	111.90
1	N	1502	A	O4'-C1'-N9	9.44	115.75	108.20
1	N	739	C	N3-C2-O2	9.44	128.51	121.90
1	N	446	G	C5-C6-N1	-9.44	106.78	111.50
1	N	886	G	C2-N3-C4	9.43	116.62	111.90
1	N	331	G	C5-C6-N1	-9.43	106.78	111.50
1	N	433	G	N1-C6-O6	9.43	125.56	119.90
1	N	723	U	C1'-O4'-C4'	-9.43	102.36	109.90
1	N	899	C	N3-C4-C5	-9.43	118.13	121.90
1	N	1128	C	O4'-C1'-N1	9.43	115.74	108.20
1	N	1377	A	N1-C6-N6	9.43	124.26	118.60
1	N	487	A	C8-N9-C4	9.43	109.57	105.80
1	N	725	G	N3-C4-N9	-9.43	120.34	126.00
1	N	1016	A	C5-C6-N1	-9.42	112.99	117.70
1	N	364	A	C4-C5-N7	-9.42	105.99	110.70
1	N	698	G	N1-C6-O6	9.42	125.55	119.90
1	N	831	A	C6-N1-C2	9.42	124.25	118.60
1	N	1499	A	N1-C6-N6	9.42	124.25	118.60
1	N	1395	C	N1-C2-O2	9.42	124.55	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	332	G	C5-C6-O6	-9.41	122.95	128.60
1	N	711	G	C5-C6-O6	-9.41	122.95	128.60
1	N	947	G	N1-C6-O6	9.41	125.55	119.90
1	N	1265	C	O4'-C1'-N1	9.41	115.72	108.20
1	N	442	G	C5-N7-C8	-9.40	99.60	104.30
1	N	1510	C	C6-N1-C2	9.40	124.06	120.30
1	N	45	G	C5-C6-O6	-9.40	122.96	128.60
1	N	1066	C	C5-C6-N1	9.40	125.70	121.00
1	N	645	G	O4'-C1'-N9	9.40	115.72	108.20
1	N	1110	A	C2-N3-C4	-9.40	105.90	110.60
1	N	475	C	N3-C4-C5	-9.39	118.14	121.90
1	N	716	A	C4-C5-N7	-9.39	106.00	110.70
1	N	1178	G	C5-C6-O6	-9.39	122.96	128.60
1	N	1195	C	O4'-C1'-N1	9.39	115.71	108.20
1	N	1488	G	C5-N7-C8	-9.39	99.60	104.30
1	N	248	C	C5-C4-N4	-9.39	113.63	120.20
1	N	689	C	P-O5'-C5'	9.39	135.92	120.90
1	N	885	G	C4-C5-N7	9.39	114.56	110.80
1	N	669	G	C5-C6-O6	-9.39	122.97	128.60
1	N	98	A	C6-N1-C2	-9.39	112.97	118.60
1	N	695	A	N9-C4-C5	9.38	109.55	105.80
1	N	720	C	N3-C4-C5	9.38	125.65	121.90
1	N	773	G	O4'-C1'-N9	9.38	115.71	108.20
1	N	647	C	N3-C4-C5	-9.38	118.15	121.90
1	N	582	C	P-O3'-C3'	-9.38	108.44	119.70
1	N	817	C	P-O3'-C3'	9.38	130.96	119.70
1	N	1007	U	C6-N1-C2	-9.38	115.37	121.00
1	N	852	G	N1-C6-O6	9.38	125.53	119.90
1	N	1151	A	C3'-C2'-C1'	9.38	109.00	101.50
1	N	216	U	N3-C4-O4	9.37	125.96	119.40
1	N	741	G	O4'-C1'-N9	9.37	115.70	108.20
1	N	968	A	C5-C6-N1	-9.37	113.02	117.70
1	N	284	C	P-O5'-C5'	9.36	135.88	120.90
1	N	734	G	C6-C5-N7	-9.36	124.78	130.40
1	N	943	U	N3-C4-C5	-9.37	108.98	114.60
1	N	1058	G	C4-C5-N7	9.36	114.55	110.80
1	N	1174	G	O4'-C1'-N9	9.37	115.69	108.20
1	N	1379	G	N7-C8-N9	-9.37	108.42	113.10
1	N	1137	C	C2-N3-C4	9.36	124.58	119.90
1	N	151	A	C4-C5-C6	9.36	121.68	117.00
1	N	248	C	O4'-C1'-N1	9.36	115.69	108.20
1	N	1064	G	C5-C6-N1	-9.36	106.82	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	255	G	N1-C6-O6	9.36	125.52	119.90
1	N	269	C	N3-C4-N4	9.36	124.55	118.00
1	N	596	A	C4-C5-C6	9.36	121.68	117.00
1	N	1159	U	P-O3'-C3'	-9.36	108.47	119.70
1	N	1183	U	O4'-C1'-N1	9.36	115.69	108.20
1	N	1435	G	C5-C6-O6	-9.36	122.98	128.60
1	N	1357	A	N1-C2-N3	9.36	133.98	129.30
1	N	854	U	O4'-C1'-N1	9.36	115.69	108.20
1	N	62	U	O4'-C1'-N1	9.36	115.68	108.20
1	N	187	G	N1-C6-O6	9.36	125.51	119.90
1	N	1399	C	C6-N1-C2	9.36	124.04	120.30
1	N	540	G	O4'-C1'-N9	9.35	115.68	108.20
1	N	783	C	C2-N3-C4	9.35	124.58	119.90
1	N	833	G	N9-C4-C5	-9.35	101.66	105.40
1	N	61	G	N3-C4-N9	-9.35	120.39	126.00
1	N	64	G	N1-C6-O6	9.35	125.51	119.90
1	N	683	G	C5-C6-N1	-9.35	106.83	111.50
1	N	288	A	C5-C6-N1	9.34	122.37	117.70
1	N	425	G	O4'-C1'-N9	9.34	115.67	108.20
1	N	795	C	C5-C6-N1	9.34	125.67	121.00
1	N	1189	U	C2-N3-C4	-9.34	121.39	127.00
1	N	1362	A	C4'-C3'-C2'	-9.34	93.26	102.60
1	N	1513	A	C5-C6-N6	-9.34	116.23	123.70
1	N	726	C	P-O3'-C3'	-9.34	108.49	119.70
1	N	14	U	C5-C4-O4	-9.34	120.30	125.90
1	N	1170	A	C5'-C4'-C3'	9.34	130.94	116.00
1	N	1239	A	N1-C2-N3	9.34	133.97	129.30
1	N	1195	C	N3-C4-N4	9.33	124.53	118.00
1	N	1485	U	N1-C2-O2	-9.33	116.27	122.80
1	N	602	A	N1-C6-N6	9.33	124.20	118.60
1	N	729	A	O4'-C1'-N9	9.33	115.67	108.20
1	N	849	G	N1-C6-O6	9.33	125.50	119.90
1	N	1429	A	N1-C6-N6	9.33	124.20	118.60
1	N	206	C	N3-C4-N4	9.33	124.53	118.00
1	N	1237	C	C2-N3-C4	-9.33	115.24	119.90
1	N	607	A	C5-C6-N6	-9.32	116.24	123.70
1	N	611	C	C5-C4-N4	-9.32	113.67	120.20
1	N	778	G	O4'-C1'-N9	9.32	115.66	108.20
1	N	1171	A	C5-C6-N6	-9.32	116.24	123.70
1	N	1273	C	O4'-C1'-N1	9.32	115.66	108.20
1	N	1274	A	N1-C6-N6	9.32	124.19	118.60
1	N	4	U	C5'-C4'-C3'	-9.32	101.09	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1252	A	C5-C6-N1	-9.32	113.04	117.70
1	N	464	U	P-O5'-C5'	9.31	135.80	120.90
1	N	1346	A	P-O3'-C3'	9.31	130.88	119.70
1	N	557	G	C6-N1-C2	-9.31	119.51	125.10
1	N	648	A	N1-C6-N6	9.31	124.19	118.60
1	N	1038	C	P-O3'-C3'	9.31	130.88	119.70
1	N	1098	C	C5-C4-N4	-9.31	113.68	120.20
1	N	1502	A	C5-C6-N6	-9.31	116.25	123.70
1	N	560	A	N1-C6-N6	9.31	124.18	118.60
1	N	467	U	O4'-C1'-N1	9.30	115.64	108.20
1	N	776	G	N1-C2-N3	-9.30	118.32	123.90
1	N	815	A	C4-C5-C6	9.30	121.65	117.00
1	N	246	A	C5-C6-N6	-9.30	116.26	123.70
1	N	563	A	O4'-C1'-N9	9.30	115.64	108.20
1	N	774	G	N3-C2-N2	9.30	126.41	119.90
1	N	1063	C	N3-C4-C5	-9.30	118.18	121.90
1	N	700	G	N3-C4-C5	9.30	133.25	128.60
1	N	1331	G	C5'-C4'-C3'	-9.30	101.12	116.00
1	N	466	A	N1-C2-N3	-9.29	124.65	129.30
1	N	1373	G	N9-C4-C5	9.29	109.12	105.40
1	N	1531	A	C5-C6-N6	-9.29	116.26	123.70
1	N	213	G	N1-C2-N3	-9.29	118.33	123.90
1	N	198	G	N1-C2-N3	-9.29	118.33	123.90
1	N	575	G	N9-C4-C5	9.29	109.11	105.40
1	N	915	A	C4-C5-N7	-9.29	106.06	110.70
1	N	1431	A	N1-C6-N6	9.29	124.17	118.60
1	N	943	U	O4'-C1'-N1	9.28	115.63	108.20
1	N	1028	C	O4'-C1'-N1	9.28	115.62	108.20
1	N	1098	C	C6-N1-C2	-9.28	116.59	120.30
1	N	928	G	N1-C6-O6	9.28	125.47	119.90
1	N	1418	A	P-O5'-C5'	9.28	135.74	120.90
1	N	742	G	C5-C6-O6	-9.27	123.04	128.60
1	N	780	A	C2-N3-C4	-9.27	105.96	110.60
1	N	784	A	C6-C5-N7	-9.27	125.81	132.30
1	N	803	G	C5-C6-N1	-9.27	106.86	111.50
1	N	1383	C	N3-C4-C5	-9.27	118.19	121.90
1	N	897	C	O4'-C1'-N1	9.27	115.61	108.20
1	N	1047	G	O4'-C1'-N9	9.27	115.61	108.20
1	N	1239	A	N1-C6-N6	9.27	124.16	118.60
1	N	90	C	C5-C4-N4	-9.26	113.72	120.20
1	N	695	A	N1-C6-N6	9.26	124.16	118.60
1	N	406	G	N3-C2-N2	9.26	126.38	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	887	G	C2-N3-C4	-9.26	107.27	111.90
1	N	1329	A	N1-C6-N6	9.26	124.16	118.60
1	N	1386	G	N1-C6-O6	9.26	125.45	119.90
1	N	323	U	P-O5'-C5'	9.25	135.71	120.90
1	N	422	C	N3-C4-N4	9.25	124.48	118.00
1	N	1069	C	N1-C2-N3	-9.25	112.72	119.20
1	N	485	U	C5-C6-N1	9.25	127.32	122.70
1	N	1273	C	N1-C2-O2	-9.25	113.35	118.90
1	N	1093	A	C5-C6-N6	-9.24	116.31	123.70
1	N	1156	G	C5-C6-O6	-9.24	123.06	128.60
1	N	1149	C	O4'-C1'-N1	9.24	115.59	108.20
1	N	1313	U	O4'-C1'-N1	9.24	115.59	108.20
1	N	115	G	C6-C5-N7	-9.23	124.86	130.40
1	N	581	G	O4'-C1'-N9	9.23	115.59	108.20
1	N	801	U	C2-N3-C4	-9.23	121.46	127.00
1	N	135	C	C5-C4-N4	-9.23	113.74	120.20
1	N	670	G	O4'-C1'-N9	9.23	115.58	108.20
1	N	131	A	N1-C2-N3	-9.23	124.69	129.30
1	N	385	C	N3-C4-C5	9.22	125.59	121.90
1	N	458	U	P-O3'-C3'	9.22	130.77	119.70
1	N	702	A	C5-C6-N6	-9.22	116.32	123.70
1	N	843	U	C6-N1-C1'	-9.22	108.28	121.20
1	N	1045	C	N3-C4-C5	-9.22	118.21	121.90
1	N	1523	G	N1-C2-N3	-9.22	118.36	123.90
1	N	791	G	C5-C6-N1	-9.22	106.89	111.50
1	N	980	C	O4'-C1'-N1	9.22	115.58	108.20
1	N	729	A	C8-N9-C4	-9.22	102.11	105.80
1	N	1050	G	C5-C6-N1	-9.22	106.89	111.50
1	N	107	G	N7-C8-N9	9.22	117.71	113.10
1	N	1316	G	C5-C6-O6	-9.21	123.07	128.60
1	N	121	U	N3-C4-C5	-9.21	109.07	114.60
1	N	276	G	N1-C6-O6	9.21	125.43	119.90
1	N	314	C	O4'-C1'-N1	9.21	115.57	108.20
1	N	1508	A	N1-C2-N3	-9.21	124.69	129.30
1	N	1514	G	C5-C6-O6	-9.21	123.08	128.60
1	N	478	A	C5-C6-N1	-9.21	113.10	117.70
1	N	767	A	C8-N9-C4	-9.21	102.12	105.80
1	N	171	A	C6-N1-C2	-9.21	113.08	118.60
1	N	845	A	C5-C6-N1	-9.20	113.10	117.70
1	N	1448	C	O4'-C1'-N1	9.20	115.56	108.20
1	N	279	A	N1-C2-N3	-9.20	124.70	129.30
1	N	498	A	N3-C4-C5	-9.20	120.36	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	206	C	C5-C4-N4	-9.20	113.76	120.20
1	N	1086	U	O5'-C5'-C4'	9.20	129.17	111.70
1	N	299	G	N3-C2-N2	9.19	126.34	119.90
1	N	265	G	C4-N9-C1'	-9.19	114.55	126.50
1	N	587	G	O4'-C1'-N9	9.19	115.55	108.20
1	N	1097	C	C5-C4-N4	-9.19	113.77	120.20
1	N	208	U	O4'-C1'-N1	9.19	115.55	108.20
1	N	1487	G	O4'-C1'-N9	9.19	115.55	108.20
1	N	345	C	N3-C4-N4	9.19	124.43	118.00
1	N	395	C	O4'-C1'-N1	9.19	115.55	108.20
1	N	432	A	O4'-C1'-N9	9.19	115.55	108.20
1	N	948	C	N3-C4-N4	9.19	124.43	118.00
1	N	1315	U	N3-C4-C5	-9.19	109.09	114.60
1	N	2	A	N1-C2-N3	9.18	133.89	129.30
1	N	167	A	N9-C4-C5	-9.18	102.13	105.80
1	N	635	A	N1-C6-N6	9.18	124.11	118.60
1	N	351	G	C6-C5-N7	-9.18	124.89	130.40
1	N	1205	U	C2-N3-C4	-9.18	121.49	127.00
1	N	138	G	C2-N3-C4	9.18	116.49	111.90
1	N	510	A	N9-C4-C5	9.18	109.47	105.80
1	N	1389	C	N3-C4-C5	-9.18	118.23	121.90
1	N	1242	G	C5-C6-O6	-9.18	123.09	128.60
1	N	393	A	C5-C6-N6	-9.17	116.36	123.70
1	N	1004	A	O4'-C1'-N9	9.17	115.54	108.20
1	N	80	A	C5-C6-N6	-9.17	116.36	123.70
1	N	579	A	N9-C4-C5	-9.17	102.13	105.80
1	N	1250	A	C5-C6-N6	-9.17	116.36	123.70
1	N	1108	G	C5-C6-O6	-9.16	123.10	128.60
1	N	402	G	N9-C4-C5	-9.16	101.74	105.40
1	N	1023	U	N3-C4-O4	9.16	125.81	119.40
1	N	741	G	N9-C4-C5	-9.16	101.74	105.40
1	N	749	A	C8-N9-C4	-9.15	102.14	105.80
1	N	6	G	N7-C8-N9	9.15	117.68	113.10
1	N	72	A	C4-C5-C6	9.15	121.58	117.00
1	N	389	A	C5-C6-N6	-9.15	116.38	123.70
1	N	897	C	N3-C4-C5	-9.15	118.24	121.90
1	N	616	G	N1-C6-O6	9.15	125.39	119.90
1	N	723	U	O4'-C1'-N1	9.15	115.52	108.20
1	N	793	U	C6-N1-C2	9.15	126.49	121.00
1	N	863	U	O4'-C1'-N1	9.15	115.52	108.20
1	N	1073	U	O4'-C1'-N1	9.15	115.52	108.20
1	N	602	A	O4'-C1'-N9	9.15	115.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	736	C	C5-C4-N4	-9.15	113.80	120.20
1	N	783	C	N3-C4-N4	9.15	124.40	118.00
1	N	600	A	C8-N9-C4	-9.14	102.14	105.80
1	N	1349	A	C5-N7-C8	9.14	108.47	103.90
1	N	1361	G	C6-C5-N7	-9.14	124.92	130.40
1	N	119	A	C5-C6-N1	-9.14	113.13	117.70
1	N	361	G	N3-C2-N2	9.14	126.30	119.90
1	N	564	C	O4'-C1'-N1	9.14	115.51	108.20
1	N	788	U	C5-C4-O4	9.14	131.38	125.90
1	N	815	A	C6-C5-N7	-9.13	125.91	132.30
1	N	968	A	C6-C5-N7	-9.13	125.91	132.30
1	N	352	C	N3-C4-N4	9.13	124.39	118.00
1	N	388	G	N7-C8-N9	-9.13	108.53	113.10
1	N	1048	G	C6-C5-N7	-9.13	124.92	130.40
1	N	981	U	C2-N3-C4	-9.13	121.52	127.00
1	N	1356	G	C5-C6-O6	-9.13	123.12	128.60
1	N	95	C	O4'-C1'-N1	9.13	115.50	108.20
1	N	373	A	C5'-C4'-O4'	-9.12	98.15	109.10
1	N	1016	A	C4-C5-C6	9.13	121.56	117.00
1	N	998	C	N3-C4-C5	-9.12	118.25	121.90
1	N	1165	U	C5-C4-O4	-9.12	120.42	125.90
1	N	1169	A	C2-N3-C4	-9.12	106.04	110.60
1	N	1361	G	N1-C6-O6	9.12	125.37	119.90
1	N	880	C	C5-C6-N1	-9.12	116.44	121.00
1	N	1515	G	N1-C6-O6	9.12	125.37	119.90
1	N	433	G	C5-N7-C8	-9.11	99.74	104.30
1	N	537	G	O4'-C1'-N9	9.11	115.49	108.20
1	N	447	G	C8-N9-C4	-9.11	102.76	106.40
1	N	1270	G	C5-C6-O6	-9.11	123.13	128.60
1	N	231	U	O4'-C1'-N1	9.11	115.49	108.20
1	N	492	C	C2-N3-C4	9.11	124.45	119.90
1	N	393	A	O4'-C1'-N9	9.11	115.49	108.20
1	N	779	C	C5-C4-N4	-9.11	113.83	120.20
1	N	1000	A	N1-C6-N6	9.11	124.06	118.60
1	N	15	G	N3-C2-N2	9.10	126.27	119.90
1	N	493	A	C4-C5-C6	9.10	121.55	117.00
1	N	950	U	C3'-C2'-C1'	-9.10	94.22	101.50
1	N	738	C	N3-C4-N4	9.10	124.37	118.00
1	N	1043	G	O4'-C1'-N9	9.09	115.47	108.20
1	N	1124	G	C4-C5-N7	9.09	114.44	110.80
1	N	1311	A	N9-C4-C5	9.09	109.44	105.80
1	N	1514	G	N1-C6-O6	9.09	125.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	300	A	N1-C6-N6	9.09	124.05	118.60
1	N	424	G	C5-C6-O6	-9.09	123.15	128.60
1	N	777	A	C2-N3-C4	-9.09	106.06	110.60
1	N	873	A	C4-C5-N7	-9.09	106.16	110.70
1	N	1496	C	C2-N3-C4	9.09	124.44	119.90
1	N	115	G	C1'-O4'-C4'	9.08	117.17	109.90
1	N	449	G	C6-N1-C2	9.08	130.55	125.10
1	N	482	A	C8-N9-C4	-9.08	102.17	105.80
1	N	1231	G	O4'-C1'-N9	9.08	115.47	108.20
1	N	1262	C	O4'-C1'-N1	9.08	115.47	108.20
1	N	293	G	N1-C6-O6	9.08	125.35	119.90
1	N	1194	U	C5-C4-O4	-9.08	120.45	125.90
1	N	283	U	N3-C4-O4	9.08	125.75	119.40
1	N	701	U	C6-N1-C2	-9.08	115.56	121.00
1	N	1069	C	C6-N1-C2	9.08	123.93	120.30
1	N	1525	G	C4-C5-N7	-9.08	107.17	110.80
1	N	309	A	C5-C6-N1	-9.07	113.16	117.70
1	N	1273	C	N1-C2-N3	9.07	125.55	119.20
1	N	689	C	C5-C4-N4	-9.07	113.85	120.20
1	N	990	C	O4'-C1'-N1	9.07	115.46	108.20
1	N	1026	G	O4'-C1'-N9	9.07	115.46	108.20
1	N	556	C	N3-C4-C5	-9.07	118.27	121.90
1	N	583	A	C5-C6-N1	-9.07	113.16	117.70
1	N	895	G	C5-C6-N1	-9.07	106.96	111.50
1	N	301	G	C6-C5-N7	-9.07	124.96	130.40
1	N	915	A	C6-N1-C2	-9.06	113.16	118.60
1	N	955	U	C6-N1-C2	-9.06	115.56	121.00
1	N	844	G	N1-C2-N3	-9.06	118.46	123.90
1	N	953	G	C4-C5-C6	9.06	124.24	118.80
1	N	41	G	O4'-C1'-N9	9.06	115.45	108.20
1	N	50	A	P-O5'-C5'	9.06	135.39	120.90
1	N	640	A	C5-C6-N1	-9.05	113.17	117.70
1	N	1013	G	C2-N3-C4	9.05	116.43	111.90
1	N	721	G	O4'-C1'-N9	9.05	115.44	108.20
1	N	1350	A	P-O3'-C3'	9.05	130.56	119.70
1	N	184	G	N9-C4-C5	9.05	109.02	105.40
1	N	203	G	O4'-C1'-N9	9.05	115.44	108.20
1	N	1112	C	O4'-C1'-N1	9.05	115.44	108.20
1	N	343	U	C3'-C2'-C1'	-9.04	94.26	101.50
1	N	460	A	P-O5'-C5'	9.05	135.37	120.90
1	N	520	A	C4-C5-C6	9.05	121.52	117.00
1	N	1413	A	N7-C8-N9	-9.05	109.28	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1519	A	C5-C6-N6	-9.04	116.47	123.70
1	N	642	A	C5-C6-N6	-9.04	116.47	123.70
1	N	1184	G	C2-N3-C4	9.04	116.42	111.90
1	N	792	A	O4'-C1'-N9	9.04	115.43	108.20
1	N	131	A	C5-C6-N1	-9.04	113.18	117.70
1	N	345	C	C4-C5-C6	9.04	121.92	117.40
1	N	858	G	C4'-C3'-C2'	-9.04	93.56	102.60
1	N	443	C	C5-C4-N4	-9.04	113.88	120.20
1	N	498	A	C5-C6-N1	-9.04	113.18	117.70
1	N	608	A	P-O3'-C3'	-9.03	108.86	119.70
1	N	1445	U	O4'-C1'-N1	9.03	115.43	108.20
1	N	85	U	O4'-C1'-N1	9.03	115.42	108.20
1	N	1502	A	N1-C6-N6	9.03	124.02	118.60
1	N	1503	A	C4-C5-C6	9.03	121.52	117.00
1	N	267	C	O4'-C1'-N1	9.03	115.42	108.20
1	N	1244	G	C2-N3-C4	9.03	116.41	111.90
1	N	1397	C	C4-C5-C6	9.03	121.91	117.40
1	N	1415	G	N1-C6-O6	9.02	125.31	119.90
1	N	1518	A	C4-C5-C6	9.02	121.51	117.00
1	N	1447	A	N1-C6-N6	9.02	124.01	118.60
1	N	1074	G	N1-C6-O6	9.02	125.31	119.90
1	N	61	G	C2-N3-C4	-9.02	107.39	111.90
1	N	317	U	C5'-C4'-C3'	-9.02	101.57	116.00
1	N	871	U	P-O3'-C3'	9.02	130.52	119.70
1	N	440	C	O4'-C1'-N1	9.01	115.41	108.20
1	N	441	A	C5-C6-N6	-9.01	116.49	123.70
1	N	442	G	N1-C2-N3	-9.01	118.50	123.90
1	N	910	C	O4'-C1'-N1	9.01	115.40	108.20
1	N	211	G	C5-C6-N1	-9.00	107.00	111.50
1	N	980	C	N3-C4-N4	9.00	124.30	118.00
1	N	1276	G	C5-C6-O6	-9.00	123.20	128.60
1	N	589	U	N3-C4-O4	9.00	125.70	119.40
1	N	1274	A	C3'-C2'-C1'	-9.00	94.30	101.50
1	N	1015	G	C6-C5-N7	-9.00	125.00	130.40
1	N	1455	G	N1-C6-O6	9.00	125.30	119.90
1	N	606	G	C8-N9-C4	-9.00	102.80	106.40
1	N	73	C	P-O5'-C5'	-9.00	106.51	120.90
1	N	38	G	N1-C6-O6	8.99	125.30	119.90
1	N	1057	G	C8-N9-C4	-8.99	102.80	106.40
1	N	1325	C	C5-C4-N4	-8.99	113.90	120.20
1	N	55	A	C5-C6-N1	-8.99	113.20	117.70
1	N	874	G	C6-C5-N7	-8.99	125.00	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	38	G	N1-C2-N3	-8.99	118.51	123.90
1	N	106	C	O4'-C1'-N1	8.99	115.39	108.20
1	N	873	A	C8-N9-C4	-8.99	102.20	105.80
1	N	482	A	C4-C5-N7	-8.99	106.21	110.70
1	N	913	A	N1-C6-N6	8.99	123.99	118.60
1	N	609	A	N1-C2-N3	8.99	133.79	129.30
1	N	1160	G	P-O5'-C5'	8.98	135.28	120.90
1	N	334	C	N3-C4-N4	8.98	124.29	118.00
1	N	1320	C	C2-N3-C4	-8.98	115.41	119.90
1	N	1449	C	P-O5'-C5'	8.98	135.27	120.90
1	N	242	G	N1-C2-N3	-8.98	118.51	123.90
1	N	739	C	O4'-C1'-N1	8.98	115.38	108.20
1	N	392	C	C6-N1-C2	-8.98	116.71	120.30
1	N	1173	U	P-O3'-C3'	8.98	130.47	119.70
1	N	204	G	C6-N1-C2	8.97	130.49	125.10
1	N	337	G	N3-C2-N2	8.97	126.18	119.90
1	N	613	C	O4'-C1'-N1	8.97	115.38	108.20
1	N	1367	C	N3-C4-C5	-8.97	118.31	121.90
1	N	1269	A	O4'-C1'-N9	8.97	115.38	108.20
1	N	1166	G	O4'-C1'-N9	8.97	115.37	108.20
1	N	582	C	P-O5'-C5'	8.97	135.25	120.90
1	N	1403	C	O4'-C1'-N1	8.96	115.37	108.20
1	N	553	A	O4'-C1'-N9	8.96	115.37	108.20
1	N	1411	C	N3-C4-N4	8.96	124.27	118.00
1	N	167	A	N1-C2-N3	8.96	133.78	129.30
1	N	192	A	C5-C6-N6	-8.96	116.54	123.70
1	N	1419	G	C5-C6-O6	-8.96	123.23	128.60
1	N	1484	C	C4-C5-C6	8.96	121.88	117.40
1	N	1507	A	C5-C6-N6	-8.96	116.54	123.70
1	N	189	A	N1-C6-N6	8.95	123.97	118.60
1	N	370	C	C5-C6-N1	8.95	125.48	121.00
1	N	676	A	C2-N3-C4	-8.95	106.12	110.60
1	N	712	A	C5-C6-N6	-8.95	116.54	123.70
1	N	151	A	O4'-C1'-N9	8.95	115.36	108.20
1	N	1379	G	N1-C2-N2	8.95	124.25	116.20
1	N	184	G	N1-C2-N3	-8.94	118.53	123.90
1	N	248	C	N3-C4-C5	-8.94	118.32	121.90
1	N	807	A	O4'-C1'-N9	8.94	115.35	108.20
1	N	803	G	C5-N7-C8	8.94	108.77	104.30
1	N	308	C	C2-N3-C4	8.94	124.37	119.90
1	N	448	A	O4'-C1'-N9	8.94	115.35	108.20
1	N	101	A	C5-C6-N6	-8.93	116.55	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1007	U	P-O3'-C3'	8.93	130.42	119.70
1	N	1352	C	N1-C2-O2	-8.93	113.54	118.90
1	N	871	U	C5-C6-N1	8.93	127.17	122.70
1	N	55	A	C5-C6-N6	-8.93	116.56	123.70
1	N	447	G	C6-C5-N7	-8.93	125.04	130.40
1	N	907	A	O4'-C1'-N9	8.93	115.34	108.20
1	N	255	G	N7-C8-N9	8.93	117.56	113.10
1	N	400	C	C4-C5-C6	-8.93	112.94	117.40
1	N	502	A	C5-C6-N6	-8.93	116.56	123.70
1	N	618	C	C5-C4-N4	-8.93	113.95	120.20
1	N	633	G	N1-C2-N3	-8.93	118.55	123.90
1	N	139	A	C6-N1-C2	8.92	123.95	118.60
1	N	607	A	P-O5'-C5'	8.92	135.18	120.90
1	N	510	A	C5-C6-N1	-8.92	113.24	117.70
1	N	642	A	C6-N1-C2	8.92	123.95	118.60
1	N	973	G	O4'-C1'-N9	8.92	115.33	108.20
1	N	236	A	C4-C5-C6	8.92	121.46	117.00
1	N	1422	G	N1-C2-N3	-8.92	118.55	123.90
1	N	55	A	C6-C5-N7	-8.91	126.06	132.30
1	N	786	G	C8-N9-C4	-8.91	102.83	106.40
1	N	1488	G	O4'-C1'-N9	8.91	115.33	108.20
1	N	1077	G	C2-N3-C4	8.91	116.36	111.90
1	N	996	A	C4-C5-C6	8.91	121.45	117.00
1	N	1252	A	C4-C5-N7	-8.91	106.25	110.70
1	N	629	A	C8-N9-C4	-8.90	102.24	105.80
1	N	202	G	C6-C5-N7	-8.90	125.06	130.40
1	N	601	G	C5-N7-C8	8.90	108.75	104.30
1	N	1033	G	C4-C5-C6	8.90	124.14	118.80
1	N	1226	C	C5-C4-N4	-8.90	113.97	120.20
1	N	710	G	C5-C6-N1	-8.90	107.05	111.50
1	N	905	U	C5-C4-O4	-8.90	120.56	125.90
1	N	1068	G	C8-N9-C4	-8.90	102.84	106.40
1	N	169	C	C5-C6-N1	8.90	125.45	121.00
1	N	16	A	C5-N7-C8	8.89	108.35	103.90
1	N	204	G	C5-C6-O6	8.89	133.94	128.60
1	N	287	U	O4'-C1'-N1	8.89	115.31	108.20
1	N	1219	A	C4-C5-C6	8.89	121.44	117.00
1	N	6	G	C5-C6-O6	-8.89	123.27	128.60
1	N	577	G	N9-C4-C5	8.89	108.95	105.40
1	N	932	C	N3-C4-N4	8.89	124.22	118.00
1	N	898	G	N3-C2-N2	8.89	126.12	119.90
1	N	480	U	N1-C2-N3	8.88	120.23	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	338	A	C8-N9-C4	-8.88	102.25	105.80
1	N	479	U	C5-C6-N1	8.88	127.14	122.70
1	N	1156	G	C5-C6-N1	-8.88	107.06	111.50
1	N	993	G	N7-C8-N9	8.88	117.54	113.10
1	N	172	A	C2-N3-C4	-8.88	106.16	110.60
1	N	362	G	C5-C6-O6	-8.88	123.27	128.60
1	N	391	G	N3-C2-N2	8.88	126.11	119.90
1	N	684	U	O4'-C1'-N1	8.88	115.30	108.20
1	N	926	G	N1-C6-O6	8.88	125.23	119.90
1	N	1234	C	O4'-C1'-N1	8.88	115.30	108.20
1	N	817	C	C5-C4-N4	-8.88	113.99	120.20
1	N	519	C	C2-N1-C1'	8.88	128.56	118.80
1	N	1191	A	P-O3'-C3'	8.88	130.35	119.70
1	N	848	C	C4-C5-C6	8.87	121.84	117.40
1	N	75	G	P-O5'-C5'	-8.87	106.70	120.90
1	N	184	G	C8-N9-C4	-8.87	102.85	106.40
1	N	853	C	N3-C4-N4	8.87	124.21	118.00
1	N	387	U	N3-C4-O4	8.87	125.61	119.40
1	N	423	G	N3-C2-N2	8.87	126.11	119.90
1	N	739	C	C6-N1-C2	-8.87	116.75	120.30
1	N	1457	G	N1-C2-N3	-8.87	118.58	123.90
1	N	1517	G	O4'-C1'-N9	8.87	115.29	108.20
1	N	192	A	C5-C6-N1	-8.87	113.27	117.70
1	N	657	U	O4'-C1'-N1	8.87	115.29	108.20
1	N	280	C	C2-N3-C4	8.86	124.33	119.90
1	N	562	U	C5'-C4'-C3'	8.86	130.18	116.00
1	N	915	A	C5-N7-C8	8.86	108.33	103.90
1	N	1131	G	N7-C8-N9	8.86	117.53	113.10
1	N	760	G	C5-C6-N1	-8.86	107.07	111.50
1	N	1202	U	O4'-C1'-N1	8.86	115.29	108.20
1	N	1374	A	C4-C5-C6	8.86	121.43	117.00
1	N	344	A	C5-C6-N1	-8.86	113.27	117.70
1	N	681	A	C5-C6-N1	-8.85	113.28	117.70
1	N	22	G	C2-N3-C4	8.85	116.32	111.90
1	N	1136	C	N3-C4-C5	-8.85	118.36	121.90
1	N	451	A	P-O3'-C3'	8.85	130.32	119.70
1	N	1268	G	P-O3'-C3'	8.85	130.32	119.70
1	N	509	A	N1-C2-N3	8.84	133.72	129.30
1	N	484	G	N1-C2-N3	-8.84	118.60	123.90
1	N	812	G	N3-C2-N2	8.84	126.09	119.90
1	N	314	C	C2-N3-C4	8.84	124.32	119.90
1	N	572	A	N1-C2-N3	-8.84	124.88	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	729	A	N9-C4-C5	8.84	109.33	105.80
1	N	996	A	C5-N7-C8	8.84	108.32	103.90
1	N	425	G	C5-C6-O6	-8.83	123.30	128.60
1	N	1236	A	C4-C5-C6	8.83	121.42	117.00
1	N	838	G	C6-C5-N7	-8.83	125.10	130.40
1	N	531	U	C5'-C4'-O4'	8.83	119.69	109.10
1	N	1498	U	N1-C2-O2	-8.83	116.62	122.80
1	N	172	A	C5-C6-N1	-8.83	113.29	117.70
1	N	985	C	N3-C4-N4	8.83	124.18	118.00
1	N	1355	G	C8-N9-C4	-8.83	102.87	106.40
1	N	1167	A	C5-C6-N6	-8.82	116.64	123.70
1	N	199	A	O4'-C1'-N9	8.82	115.26	108.20
1	N	567	G	C4-C5-N7	8.82	114.33	110.80
1	N	265	G	C8-N9-C1'	8.82	138.47	127.00
1	N	586	C	N3-C4-N4	8.82	124.17	118.00
1	N	1183	U	N3-C4-C5	-8.82	109.31	114.60
1	N	1429	A	C4-C5-C6	8.82	121.41	117.00
1	N	576	C	O4'-C1'-N1	8.82	115.25	108.20
1	N	24	U	O4'-C1'-N1	8.81	115.25	108.20
1	N	201	G	C3'-C2'-C1'	8.81	108.55	101.50
1	N	262	A	N1-C6-N6	8.81	123.89	118.60
1	N	496	A	C4'-C3'-C2'	8.81	111.41	102.60
1	N	955	U	O4'-C1'-N1	8.81	115.25	108.20
1	N	1496	C	C5-C4-N4	-8.81	114.03	120.20
1	N	912	C	P-O5'-C5'	8.81	134.99	120.90
1	N	414	A	P-O5'-C5'	8.80	134.99	120.90
1	N	595	A	C8-N9-C4	-8.80	102.28	105.80
1	N	681	A	O4'-C1'-N9	8.80	115.24	108.20
1	N	687	A	O4'-C1'-N9	8.80	115.24	108.20
1	N	1491	G	C8-N9-C1'	8.80	138.44	127.00
1	N	11	G	C5-C6-N1	-8.80	107.10	111.50
1	N	451	A	N1-C6-N6	8.80	123.88	118.60
1	N	1041	G	P-O3'-C3'	-8.80	109.14	119.70
1	N	1501	C	O4'-C1'-N1	8.80	115.24	108.20
1	N	994	A	C4-C5-C6	8.80	121.40	117.00
1	N	51	A	N1-C2-N3	8.80	133.70	129.30
1	N	318	G	P-O3'-C3'	-8.80	109.14	119.70
1	N	957	U	O4'-C1'-N1	8.79	115.24	108.20
1	N	592	G	C5-C6-O6	-8.79	123.33	128.60
1	N	730	G	N1-C6-O6	8.79	125.17	119.90
1	N	869	G	O4'-C1'-N9	8.79	115.23	108.20
1	N	1201	A	N9-C4-C5	-8.79	102.28	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	202	G	C5-C6-O6	-8.79	123.33	128.60
1	N	461	A	C5-C6-N6	-8.79	116.67	123.70
1	N	300	A	C5-C6-N1	-8.79	113.31	117.70
1	N	665	A	C5-C6-N6	-8.79	116.67	123.70
1	N	1256	A	C5-C6-N1	-8.79	113.31	117.70
1	N	1529	G	N1-C2-N3	-8.79	118.63	123.90
1	N	425	G	N3-C4-C5	8.79	132.99	128.60
1	N	259	G	C8-N9-C4	-8.78	102.89	106.40
1	N	578	C	N3-C4-C5	-8.79	118.39	121.90
1	N	1368	A	C4-C5-C6	8.79	121.39	117.00
1	N	1116	U	P-O3'-C3'	-8.78	109.16	119.70
1	N	213	G	C8-N9-C4	-8.78	102.89	106.40
1	N	426	U	O4'-C1'-N1	8.78	115.23	108.20
1	N	712	A	O4'-C1'-N9	8.78	115.22	108.20
1	N	894	G	N3-C2-N2	8.78	126.05	119.90
1	N	1049	U	P-O3'-C3'	8.78	130.24	119.70
1	N	139	A	C5-C6-N1	-8.78	113.31	117.70
1	N	187	G	C5-C6-N1	-8.78	107.11	111.50
1	N	885	G	N9-C4-C5	-8.78	101.89	105.40
1	N	1275	A	N7-C8-N9	8.78	118.19	113.80
1	N	1534	A	C5-C6-N6	-8.78	116.68	123.70
1	N	37	U	C6-N1-C2	8.78	126.27	121.00
1	N	621	A	C5-C6-N6	-8.78	116.68	123.70
1	N	725	G	C5-C6-O6	-8.78	123.33	128.60
1	N	1128	C	C4-C5-C6	-8.78	113.01	117.40
1	N	191	G	N1-C2-N3	-8.77	118.64	123.90
1	N	364	A	C5-N7-C8	8.77	108.29	103.90
1	N	1001	C	O4'-C1'-N1	8.77	115.22	108.20
1	N	1227	A	N1-C6-N6	8.77	123.86	118.60
1	N	1468	A	C5-C6-N1	-8.77	113.32	117.70
1	N	716	A	N1-C6-N6	8.77	123.86	118.60
1	N	191	G	C4-C5-C6	8.76	124.06	118.80
1	N	356	A	C5-C6-N1	-8.76	113.32	117.70
1	N	655	A	C2-N3-C4	-8.76	106.22	110.60
1	N	152	A	N1-C6-N6	8.76	123.86	118.60
1	N	877	G	N1-C6-O6	8.76	125.16	119.90
1	N	848	C	C6-N1-C2	-8.76	116.80	120.30
1	N	80	A	C5-C6-N1	-8.75	113.32	117.70
1	N	728	A	N7-C8-N9	-8.75	109.42	113.80
1	N	302	G	O4'-C1'-N9	8.75	115.20	108.20
1	N	613	C	C5-C4-N4	-8.75	114.08	120.20
1	N	956	U	C3'-C2'-C1'	8.75	108.50	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1266	G	O4'-C1'-N9	8.75	115.20	108.20
1	N	327	A	C5-C6-N1	-8.75	113.33	117.70
1	N	597	G	O4'-C1'-N9	8.75	115.20	108.20
1	N	709	U	O4'-C1'-N1	8.75	115.20	108.20
1	N	862	C	N3-C4-C5	-8.75	118.40	121.90
1	N	533	A	N7-C8-N9	-8.74	109.43	113.80
1	N	1306	A	C5-C6-N6	-8.74	116.70	123.70
1	N	539	A	C5-C6-N6	-8.74	116.71	123.70
1	N	842	U	P-O5'-C5'	8.74	134.88	120.90
1	N	1229	A	C5-C6-N6	-8.74	116.71	123.70
1	N	1446	A	C5-N7-C8	8.74	108.27	103.90
1	N	578	C	N1-C2-O2	-8.74	113.66	118.90
1	N	1288	A	C4-C5-N7	8.74	115.07	110.70
1	N	520	A	N1-C6-N6	8.74	123.84	118.60
1	N	1274	A	C5-C6-N6	-8.73	116.71	123.70
1	N	101	A	N7-C8-N9	8.73	118.17	113.80
1	N	1151	A	N1-C2-N3	-8.73	124.94	129.30
1	N	1279	G	N7-C8-N9	-8.73	108.73	113.10
1	N	1510	C	O4'-C1'-N1	8.73	115.18	108.20
1	N	282	A	C5-C6-N1	-8.73	113.34	117.70
1	N	438	U	O4'-C1'-N1	8.73	115.18	108.20
1	N	21	G	C6-C5-N7	-8.73	125.16	130.40
1	N	162	A	C5-C6-N1	-8.72	113.34	117.70
1	N	38	G	C2-N3-C4	8.72	116.26	111.90
1	N	718	A	O4'-C1'-N9	8.72	115.17	108.20
1	N	1278	G	N3-C4-C5	-8.72	124.24	128.60
1	N	77	A	N9-C4-C5	8.71	109.29	105.80
1	N	599	C	N3-C4-C5	-8.71	118.42	121.90
1	N	1115	U	C5-C4-O4	-8.71	120.67	125.90
1	N	1508	A	C8-N9-C4	-8.71	102.32	105.80
1	N	1520	C	O4'-C1'-N1	8.71	115.17	108.20
1	N	444	G	C2-N3-C4	-8.71	107.55	111.90
1	N	764	C	O4'-C1'-N1	8.71	115.17	108.20
1	N	1006	G	C5-C6-N1	-8.71	107.15	111.50
1	N	1341	U	O4'-C1'-N1	8.71	115.17	108.20
1	N	1492	A	P-O5'-C5'	8.71	134.83	120.90
1	N	50	A	C5-C6-N6	-8.71	116.74	123.70
1	N	888	G	C2-N3-C4	-8.71	107.55	111.90
1	N	682	G	N1-C6-O6	8.70	125.12	119.90
1	N	936	C	O4'-C1'-N1	8.71	115.16	108.20
1	N	926	G	N3-C2-N2	8.70	125.99	119.90
1	N	77	A	C8-N9-C4	-8.70	102.32	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1034	G	O4'-C1'-N9	8.70	115.16	108.20
1	N	1183	U	C6-N1-C2	-8.70	115.78	121.00
1	N	894	G	N7-C8-N9	8.70	117.45	113.10
1	N	1159	U	C4-C5-C6	8.70	124.92	119.70
1	N	1329	A	O4'-C1'-N9	8.70	115.16	108.20
1	N	1473	G	C5-C6-O6	-8.69	123.39	128.60
1	N	1509	C	C2-N3-C4	8.69	124.25	119.90
1	N	1137	C	N1-C2-N3	-8.69	113.12	119.20
1	N	398	U	C5-C4-O4	-8.69	120.69	125.90
1	N	696	A	C6-N1-C2	8.69	123.81	118.60
1	N	1498	U	C2-N3-C4	-8.68	121.79	127.00
1	N	722	G	C5-C6-O6	-8.68	123.39	128.60
1	N	1025	U	N3-C2-O2	8.68	128.28	122.20
1	N	1252	A	N3-C4-C5	-8.68	120.72	126.80
1	N	1338	G	C6-C5-N7	-8.68	125.19	130.40
1	N	136	C	C2-N3-C4	8.68	124.24	119.90
1	N	218	U	C4-C5-C6	-8.68	114.49	119.70
1	N	552	U	C6-N1-C2	-8.68	115.79	121.00
1	N	737	C	N3-C4-N4	8.68	124.07	118.00
1	N	1044	A	C4-C5-C6	8.67	121.34	117.00
1	N	666	G	C6-C5-N7	-8.67	125.20	130.40
1	N	216	U	C5-C4-O4	-8.67	120.70	125.90
1	N	404	G	C4-C5-N7	-8.67	107.33	110.80
1	N	606	G	C5-C6-O6	-8.67	123.40	128.60
1	N	629	A	C5-C6-N1	-8.67	113.36	117.70
1	N	505	G	O4'-C1'-N9	8.67	115.14	108.20
1	N	962	C	C4-C5-C6	8.67	121.73	117.40
1	N	1442	G	C8-N9-C4	-8.67	102.93	106.40
1	N	80	A	P-O3'-C3'	-8.66	109.30	119.70
1	N	396	C	C5-C4-N4	-8.66	114.14	120.20
1	N	731	G	N9-C4-C5	8.66	108.87	105.40
1	N	1134	G	C2-N3-C4	8.66	116.23	111.90
1	N	42	G	C5-C6-O6	-8.66	123.40	128.60
1	N	251	G	P-O3'-C3'	8.66	130.09	119.70
1	N	421	U	O4'-C1'-N1	8.66	115.13	108.20
1	N	264	C	C4'-C3'-C2'	-8.66	93.94	102.60
1	N	469	C	N3-C4-C5	-8.66	118.44	121.90
1	N	782	A	N1-C6-N6	8.66	123.79	118.60
1	N	1373	G	N3-C2-N2	8.65	125.96	119.90
1	N	156	C	O4'-C1'-N1	8.65	115.12	108.20
1	N	274	A	N1-C6-N6	8.65	123.79	118.60
1	N	841	C	N3-C4-N4	8.65	124.06	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1150	A	C4-C5-C6	8.65	121.33	117.00
1	N	1348	U	O4'-C1'-N1	8.65	115.12	108.20
1	N	419	C	C6-N1-C2	-8.65	116.84	120.30
1	N	1319	A	C5-C6-N1	-8.65	113.38	117.70
1	N	300	A	C4-C5-C6	8.64	121.32	117.00
1	N	1453	G	O4'-C1'-N9	8.64	115.12	108.20
1	N	628	G	N1-C2-N3	-8.64	118.71	123.90
1	N	40	C	N1-C2-N3	-8.64	113.15	119.20
1	N	1072	G	C5-C6-N1	-8.64	107.18	111.50
1	N	385	C	O4'-C1'-N1	8.64	115.11	108.20
1	N	893	C	C6-N1-C2	-8.64	116.84	120.30
1	N	818	G	N9-C4-C5	-8.64	101.94	105.40
1	N	647	C	C4-C5-C6	8.63	121.72	117.40
1	N	1352	C	N3-C2-O2	8.63	127.94	121.90
1	N	772	U	O4'-C1'-N1	8.63	115.10	108.20
1	N	1036	A	N1-C6-N6	8.63	123.78	118.60
1	N	735	C	C5-C6-N1	8.63	125.31	121.00
1	N	807	A	C5-C6-N1	-8.62	113.39	117.70
1	N	60	A	N1-C6-N6	8.62	123.77	118.60
1	N	1089	G	N1-C6-O6	8.62	125.07	119.90
1	N	1338	G	C5-C6-O6	-8.62	123.43	128.60
1	N	735	C	O4'-C1'-N1	8.62	115.09	108.20
1	N	983	A	C4-C5-C6	8.62	121.31	117.00
1	N	293	G	O4'-C1'-N9	8.62	115.09	108.20
1	N	1264	U	C5-C6-N1	8.62	127.01	122.70
1	N	1450	U	N3-C4-C5	-8.62	109.43	114.60
1	N	1301	U	N3-C2-O2	8.61	128.23	122.20
1	N	690	G	C6-C5-N7	-8.61	125.23	130.40
1	N	197	A	C5-C6-N6	-8.61	116.81	123.70
1	N	1353	G	N1-C2-N3	-8.61	118.73	123.90
1	N	308	C	N3-C4-N4	8.60	124.02	118.00
1	N	1363	A	P-O5'-C5'	8.60	134.67	120.90
1	N	1422	G	O4'-C1'-N9	8.60	115.08	108.20
1	N	424	G	N1-C6-O6	8.59	125.06	119.90
1	N	729	A	C4-C5-N7	-8.59	106.40	110.70
1	N	679	C	C5-C4-N4	-8.59	114.19	120.20
1	N	57	G	C6-C5-N7	-8.59	125.25	130.40
1	N	331	G	C6-C5-N7	-8.59	125.25	130.40
1	N	351	G	N9-C4-C5	-8.59	101.97	105.40
1	N	892	A	C5-C6-N6	-8.59	116.83	123.70
1	N	967	C	N3-C4-N4	8.59	124.01	118.00
1	N	1083	U	N3-C2-O2	8.59	128.21	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	65	A	C4-C5-C6	8.58	121.29	117.00
1	N	100	G	C8-N9-C4	-8.58	102.97	106.40
1	N	270	A	C5-C6-N6	-8.58	116.83	123.70
1	N	927	G	C6-C5-N7	-8.58	125.25	130.40
1	N	773	G	C4-C5-N7	-8.58	107.37	110.80
1	N	924	C	O4'-C1'-N1	8.57	115.06	108.20
1	N	1503	A	C5-C6-N1	-8.57	113.41	117.70
1	N	1124	G	C3'-C2'-C1'	8.57	108.36	101.50
1	N	1203	C	N1-C2-O2	8.57	124.04	118.90
1	N	1456	A	C4-C5-C6	8.57	121.28	117.00
1	N	251	G	C4'-C3'-C2'	-8.57	94.03	102.60
1	N	886	G	N1-C2-N3	-8.57	118.76	123.90
1	N	186	C	C2-N3-C4	8.56	124.18	119.90
1	N	259	G	C6-C5-N7	-8.56	125.26	130.40
1	N	780	A	C5-C6-N1	-8.56	113.42	117.70
1	N	1277	C	N1-C2-N3	-8.56	113.21	119.20
1	N	1386	G	C5-C6-O6	-8.56	123.46	128.60
1	N	862	C	C2-N1-C1'	8.56	128.22	118.80
1	N	878	A	N1-C2-N3	8.56	133.58	129.30
1	N	1485	U	P-O5'-C5'	8.56	134.60	120.90
1	N	446	G	O4'-C1'-N9	8.56	115.05	108.20
1	N	303	A	C5-C6-N6	-8.55	116.86	123.70
1	N	446	G	C4-C5-C6	8.55	123.93	118.80
1	N	977	A	C5-C6-N6	-8.55	116.86	123.70
1	N	1161	C	C5-C4-N4	-8.55	114.21	120.20
1	N	1505	G	N1-C6-O6	8.56	125.03	119.90
1	N	182	A	N1-C6-N6	8.55	123.73	118.60
1	N	220	G	N7-C8-N9	8.55	117.38	113.10
1	N	408	A	N7-C8-N9	-8.55	109.53	113.80
1	N	577	G	N1-C6-O6	8.55	125.03	119.90
1	N	1035	A	O4'-C1'-N9	8.55	115.04	108.20
1	N	1049	U	O4'-C1'-N1	8.55	115.04	108.20
1	N	1128	C	C6-N1-C2	-8.55	116.88	120.30
1	N	1233	G	C4-N9-C1'	8.55	137.62	126.50
1	N	318	G	C5-C6-N1	-8.55	107.23	111.50
1	N	650	G	C1'-O4'-C4'	-8.55	103.06	109.90
1	N	889	A	O4'-C1'-N9	8.55	115.04	108.20
1	N	905	U	C2-N3-C4	-8.55	121.87	127.00
1	N	41	G	P-O3'-C3'	-8.55	109.44	119.70
1	N	1247	U	O4'-C1'-N1	8.55	115.04	108.20
1	N	1012	A	C8-N9-C4	-8.54	102.38	105.80
1	N	1038	C	O4'-C1'-N1	8.54	115.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1256	A	C8-N9-C4	8.54	109.22	105.80
1	N	1348	U	C5'-C4'-O4'	-8.54	98.85	109.10
1	N	215	C	P-O5'-C5'	8.54	134.57	120.90
1	N	791	G	C5-C6-O6	8.54	133.72	128.60
1	N	1491	G	C4-N9-C1'	-8.54	115.40	126.50
1	N	195	A	N1-C6-N6	8.54	123.72	118.60
1	N	759	A	N1-C6-N6	8.54	123.72	118.60
1	N	211	G	C5-C6-O6	-8.54	123.48	128.60
1	N	211	G	N1-C2-N3	-8.54	118.78	123.90
1	N	383	A	C5-C6-N6	-8.54	116.87	123.70
1	N	1273	C	N3-C4-N4	8.54	123.98	118.00
1	N	1402	C	N3-C4-N4	8.54	123.98	118.00
1	N	23	C	P-O5'-C5'	8.54	134.56	120.90
1	N	46	G	C5-C6-O6	-8.54	123.48	128.60
1	N	147	G	C8-N9-C4	8.54	109.81	106.40
1	N	1307	U	N3-C4-O4	8.53	125.37	119.40
1	N	1454	G	N1-C6-O6	8.54	125.02	119.90
1	N	160	A	N1-C2-N3	8.53	133.56	129.30
1	N	446	G	C6-C5-N7	-8.53	125.28	130.40
1	N	700	G	N9-C4-C5	-8.53	101.99	105.40
1	N	944	G	N3-C4-N9	8.53	131.12	126.00
1	N	73	C	O4'-C1'-N1	8.53	115.02	108.20
1	N	100	G	C6-C5-N7	-8.53	125.28	130.40
1	N	232	G	C4-C5-C6	8.53	123.92	118.80
1	N	353	A	C5-C6-N6	-8.53	116.88	123.70
1	N	559	A	C4'-C3'-C2'	8.53	111.13	102.60
1	N	329	A	C4-C5-C6	8.53	121.26	117.00
1	N	585	G	N3-C2-N2	8.52	125.87	119.90
1	N	848	C	N3-C4-C5	-8.52	118.49	121.90
1	N	1069	C	O4'-C1'-N1	8.52	115.02	108.20
1	N	1218	C	C5-C6-N1	8.52	125.26	121.00
1	N	70	U	P-O3'-C3'	8.52	129.93	119.70
1	N	149	A	C8-N9-C4	-8.52	102.39	105.80
1	N	642	A	C8-N9-C4	-8.52	102.39	105.80
1	N	1133	G	C2-N3-C4	8.52	116.16	111.90
1	N	459	A	N1-C2-N3	8.52	133.56	129.30
1	N	1116	U	N1-C2-N3	-8.52	109.79	114.90
1	N	1277	C	N3-C2-O2	8.52	127.86	121.90
1	N	151	A	N1-C2-N3	8.51	133.56	129.30
1	N	328	C	C5-C6-N1	8.51	125.26	121.00
1	N	991	U	N1-C2-N3	-8.51	109.79	114.90
1	N	1516	G	C4-C5-N7	8.51	114.20	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	866	C	C5-C6-N1	8.51	125.26	121.00
1	N	700	G	C6-N1-C2	8.51	130.20	125.10
1	N	310	G	C5-C6-O6	-8.51	123.50	128.60
1	N	1155	A	O4'-C1'-N9	8.51	115.00	108.20
1	N	174	A	C4-C5-C6	8.50	121.25	117.00
1	N	220	G	C5'-C4'-O4'	8.50	119.30	109.10
1	N	1342	C	C2-N3-C4	8.50	124.15	119.90
1	N	512	U	C2-N3-C4	8.50	132.10	127.00
1	N	610	U	C2-N3-C4	-8.50	121.90	127.00
1	N	1244	G	C5-C6-O6	-8.50	123.50	128.60
1	N	286	C	O4'-C1'-N1	8.50	115.00	108.20
1	N	794	A	N9-C4-C5	8.50	109.20	105.80
1	N	615	G	N9-C4-C5	-8.49	102.00	105.40
1	N	909	A	C8-N9-C4	-8.49	102.40	105.80
1	N	1009	U	O4'-C1'-N1	8.49	114.99	108.20
1	N	1046	A	C5-N7-C8	8.49	108.15	103.90
1	N	1091	U	C2-N3-C4	-8.49	121.91	127.00
1	N	1061	G	N1-C6-O6	8.49	124.99	119.90
1	N	1100	C	O4'-C1'-N1	8.49	114.99	108.20
1	N	1131	G	C8-N9-C4	-8.49	103.00	106.40
1	N	1322	C	C2-N1-C1'	8.49	128.14	118.80
1	N	1408	A	N9-C4-C5	8.49	109.19	105.80
1	N	801	U	O4'-C1'-N1	8.48	114.99	108.20
1	N	879	C	N3-C4-N4	8.48	123.94	118.00
1	N	478	A	N7-C8-N9	8.48	118.04	113.80
1	N	958	A	P-O5'-C5'	8.48	134.47	120.90
1	N	730	G	C5-N7-C8	-8.48	100.06	104.30
1	N	1333	A	C2-N3-C4	8.48	114.84	110.60
1	N	1241	G	N3-C2-N2	8.47	125.83	119.90
1	N	179	A	C6-C5-N7	-8.47	126.37	132.30
1	N	894	G	C6-N1-C2	8.47	130.18	125.10
1	N	1438	G	C6-C5-N7	-8.47	125.32	130.40
1	N	453	G	N3-C2-N2	8.47	125.83	119.90
1	N	859	G	C5-C6-O6	-8.47	123.52	128.60
1	N	38	G	O4'-C1'-N9	8.47	114.97	108.20
1	N	79	G	C5-C6-N1	8.47	115.73	111.50
1	N	271	C	N3-C4-C5	8.47	125.29	121.90
1	N	75	G	N1-C2-N3	-8.47	118.82	123.90
1	N	161	A	C4-C5-C6	8.47	121.23	117.00
1	N	1285	A	C8-N9-C4	-8.47	102.41	105.80
1	N	204	G	O4'-C4'-C3'	-8.46	95.54	104.00
1	N	444	G	N3-C4-C5	8.46	132.83	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1074	G	C6-C5-N7	-8.46	125.32	130.40
1	N	1321	U	O4'-C1'-N1	8.46	114.97	108.20
1	N	1370	G	N1-C2-N3	-8.46	118.82	123.90
1	N	1478	U	C5-C6-N1	8.46	126.93	122.70
1	N	249	U	C5-C4-O4	-8.46	120.83	125.90
1	N	908	A	C5-N7-C8	8.46	108.13	103.90
1	N	1199	U	C3'-C2'-C1'	8.46	108.27	101.50
1	N	1234	C	C2-N3-C4	8.46	124.13	119.90
1	N	410	G	N3-C2-N2	8.46	125.82	119.90
1	N	572	A	C5-C6-N1	-8.46	113.47	117.70
1	N	1165	U	O4'-C1'-N1	8.46	114.97	108.20
1	N	1465	A	C4-C5-C6	8.45	121.23	117.00
1	N	1144	G	N1-C6-O6	8.45	124.97	119.90
1	N	1468	A	C2-N3-C4	-8.45	106.38	110.60
1	N	781	A	C4-C5-C6	8.45	121.22	117.00
1	N	1357	A	C5-C6-N1	-8.45	113.48	117.70
1	N	200	G	C6-N1-C2	8.44	130.17	125.10
1	N	1159	U	N3-C4-O4	8.45	125.31	119.40
1	N	705	G	C4-C5-N7	8.44	114.18	110.80
1	N	1133	G	N7-C8-N9	-8.44	108.88	113.10
1	N	1025	U	P-O3'-C3'	8.44	129.83	119.70
1	N	1173	U	P-O5'-C5'	8.44	134.40	120.90
1	N	79	G	C6-N1-C2	-8.44	120.04	125.10
1	N	336	A	O4'-C1'-N9	8.44	114.95	108.20
1	N	968	A	N3-C4-C5	-8.44	120.89	126.80
1	N	1304	G	N3-C4-C5	-8.44	124.38	128.60
1	N	1402	C	C5'-C4'-O4'	8.44	119.22	109.10
1	N	16	A	N7-C8-N9	-8.43	109.58	113.80
1	N	334	C	N3-C4-C5	-8.43	118.53	121.90
1	N	840	C	C2-N3-C4	-8.43	115.69	119.90
1	N	1109	C	O4'-C1'-N1	8.43	114.94	108.20
1	N	1325	C	P-O3'-C3'	-8.43	109.58	119.70
1	N	780	A	C5-C6-N6	-8.43	116.96	123.70
1	N	1413	A	C6-N1-C2	-8.43	113.54	118.60
1	N	700	G	C5-N7-C8	-8.43	100.09	104.30
1	N	149	A	C4-C5-N7	-8.42	106.49	110.70
1	N	971	G	C5-C6-N1	8.42	115.71	111.50
1	N	857	C	N3-C4-N4	8.42	123.89	118.00
1	N	915	A	C4'-C3'-C2'	-8.42	94.18	102.60
1	N	94	G	P-O5'-C5'	-8.42	107.43	120.90
1	N	637	C	C6-N1-C2	-8.42	116.93	120.30
1	N	1287	A	C5-N7-C8	8.42	108.11	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1300	G	N1-C6-O6	8.42	124.95	119.90
1	N	484	G	N1-C6-O6	8.41	124.95	119.90
1	N	679	C	C6-N1-C2	-8.41	116.94	120.30
1	N	690	G	N1-C2-N3	-8.41	118.85	123.90
1	N	1090	U	C5-C4-O4	-8.41	120.85	125.90
1	N	1406	U	C5'-C4'-C3'	-8.41	102.54	116.00
1	N	1456	A	C5-C6-N1	-8.41	113.49	117.70
1	N	1241	G	P-O5'-C5'	8.41	134.35	120.90
1	N	1504	G	N7-C8-N9	-8.41	108.89	113.10
1	N	1440	U	O4'-C1'-N1	8.41	114.93	108.20
1	N	912	C	P-O3'-C3'	8.41	129.79	119.70
1	N	100	G	C5-C6-N1	-8.41	107.30	111.50
1	N	977	A	C5-N7-C8	8.41	108.10	103.90
1	N	26	A	C8-N9-C4	-8.40	102.44	105.80
1	N	144	G	O4'-C1'-N9	8.40	114.92	108.20
1	N	502	A	C1'-O4'-C4'	-8.40	103.18	109.90
1	N	875	U	O4'-C1'-N1	8.40	114.92	108.20
1	N	191	G	C6-N1-C2	8.40	130.14	125.10
1	N	1252	A	O4'-C1'-N9	8.40	114.92	108.20
1	N	378	G	C2-N3-C4	-8.40	107.70	111.90
1	N	731	G	P-O3'-C3'	-8.40	109.62	119.70
1	N	1440	U	N1-C2-N3	-8.40	109.86	114.90
1	N	391	G	C6-C5-N7	-8.40	125.36	130.40
1	N	847	G	N1-C6-O6	8.40	124.94	119.90
1	N	925	G	C4-C5-N7	-8.40	107.44	110.80
1	N	1235	U	O4'-C1'-N1	8.40	114.92	108.20
1	N	104	G	C5'-C4'-O4'	8.39	119.17	109.10
1	N	1357	A	P-O3'-C3'	8.39	129.77	119.70
1	N	117	G	C8-N9-C4	-8.39	103.04	106.40
1	N	1488	G	N3-C4-N9	-8.39	120.97	126.00
1	N	176	C	N3-C4-N4	8.39	123.87	118.00
1	N	186	C	N3-C2-O2	8.39	127.77	121.90
1	N	259	G	C5-C6-O6	-8.39	123.57	128.60
1	N	1014	A	C5-N7-C8	8.39	108.09	103.90
1	N	661	G	N9-C4-C5	-8.39	102.05	105.40
1	N	729	A	C5-C6-N1	-8.39	113.51	117.70
1	N	401	C	O4'-C1'-N1	8.38	114.91	108.20
1	N	941	G	N9-C4-C5	-8.38	102.05	105.40
1	N	4	U	C5-C6-N1	-8.38	118.51	122.70
1	N	28	A	C5-C6-N1	-8.38	113.51	117.70
1	N	1064	G	C4-N9-C1'	8.38	137.39	126.50
1	N	814	A	C6-C5-N7	-8.38	126.44	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1110	A	N9-C4-C5	-8.38	102.45	105.80
1	N	117	G	C4-C5-C6	8.38	123.83	118.80
1	N	121	U	O4'-C1'-N1	8.38	114.90	108.20
1	N	1352	C	C5-C4-N4	-8.38	114.34	120.20
1	N	1114	C	N3-C4-C5	-8.37	118.55	121.90
1	N	1533	C	C3'-C2'-C1'	-8.37	94.80	101.50
1	N	118	U	C5-C4-O4	-8.37	120.88	125.90
1	N	403	C	O4'-C1'-N1	8.37	114.90	108.20
1	N	524	G	C5-C6-O6	-8.37	123.58	128.60
1	N	1207	G	O4'-C1'-N9	8.37	114.90	108.20
1	N	278	G	C6-C5-N7	-8.37	125.38	130.40
1	N	445	G	C6-N1-C2	-8.37	120.08	125.10
1	N	1135	U	O4'-C1'-N1	8.37	114.89	108.20
1	N	233	C	C2-N1-C1'	8.37	128.00	118.80
1	N	134	G	N3-C2-N2	8.36	125.75	119.90
1	N	1118	U	C4-C5-C6	-8.36	114.68	119.70
1	N	1134	G	C8-N9-C4	-8.36	103.06	106.40
1	N	1345	U	N1-C2-N3	-8.36	109.89	114.90
1	N	1458	G	C5-C6-N1	-8.36	107.32	111.50
1	N	1381	U	C5'-C4'-C3'	-8.35	102.63	116.00
1	N	1400	C	C1'-O4'-C4'	8.35	116.58	109.90
1	N	226	G	C5-C6-O6	-8.35	123.59	128.60
1	N	1321	U	C5-C4-O4	-8.35	120.89	125.90
1	N	1352	C	N3-C4-N4	8.35	123.84	118.00
1	N	1368	A	C5-N7-C8	8.35	108.08	103.90
1	N	149	A	C5-C6-N6	-8.35	117.02	123.70
1	N	650	G	C8-N9-C4	-8.35	103.06	106.40
1	N	933	G	C6-N1-C2	8.35	130.11	125.10
1	N	408	A	C5-N7-C8	8.35	108.07	103.90
1	N	1363	A	C4-C5-C6	8.35	121.17	117.00
1	N	886	G	N3-C4-C5	-8.35	124.43	128.60
1	N	1412	C	C4-C5-C6	-8.35	113.23	117.40
1	N	287	U	C2-N3-C4	-8.34	121.99	127.00
1	N	670	G	N9-C4-C5	-8.34	102.06	105.40
1	N	1497	G	C4-C5-N7	-8.34	107.46	110.80
1	N	87	C	C5'-C4'-C3'	-8.34	102.66	116.00
1	N	546	A	O4'-C1'-N9	8.34	114.87	108.20
1	N	1513	A	C8-N9-C4	8.34	109.14	105.80
1	N	600	A	O4'-C1'-N9	8.34	114.87	108.20
1	N	1151	A	C4-C5-C6	8.34	121.17	117.00
1	N	306	A	C1'-O4'-C4'	8.34	116.57	109.90
1	N	802	A	C4-C5-C6	8.34	121.17	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1469	C	O4'-C1'-N1	8.34	114.87	108.20
1	N	614	C	N3-C4-N4	8.33	123.83	118.00
1	N	1094	G	C5-C6-O6	-8.33	123.60	128.60
1	N	98	A	N3-C4-C5	-8.33	120.97	126.80
1	N	1336	C	C2'-C3'-O3'	8.33	127.83	109.50
1	N	700	G	N7-C8-N9	8.33	117.27	113.10
1	N	770	C	N3-C4-C5	-8.33	118.57	121.90
1	N	1322	C	C6-N1-C2	-8.33	116.97	120.30
1	N	612	C	N3-C4-C5	-8.33	118.57	121.90
1	N	1418	A	P-O3'-C3'	8.33	129.69	119.70
1	N	374	A	C5-C6-N1	-8.32	113.54	117.70
1	N	1181	G	N9-C4-C5	-8.32	102.07	105.40
1	N	439	U	N3-C4-O4	8.32	125.23	119.40
1	N	1223	C	C2-N3-C4	8.32	124.06	119.90
1	N	52	C	N3-C4-N4	8.32	123.82	118.00
1	N	270	A	O4'-C1'-N9	8.32	114.86	108.20
1	N	354	G	C5-C6-O6	-8.32	123.61	128.60
1	N	445	G	N7-C8-N9	8.32	117.26	113.10
1	N	1055	A	C5-C6-N6	-8.32	117.04	123.70
1	N	517	G	N1-C6-O6	8.32	124.89	119.90
1	N	707	U	O4'-C1'-N1	8.32	114.85	108.20
1	N	1156	G	C4-C5-C6	8.31	123.79	118.80
1	N	1229	A	N7-C8-N9	8.31	117.96	113.80
1	N	1503	A	O4'-C1'-N9	8.31	114.85	108.20
1	N	345	C	O4'-C1'-N1	8.31	114.85	108.20
1	N	351	G	C5-C6-O6	-8.31	123.61	128.60
1	N	425	G	N9-C4-C5	-8.31	102.08	105.40
1	N	1533	C	C1'-O4'-C4'	-8.31	103.25	109.90
1	N	604	G	C6-C5-N7	-8.31	125.42	130.40
1	N	1033	G	C8-N9-C4	-8.30	103.08	106.40
1	N	1122	U	C5-C6-N1	-8.30	118.55	122.70
1	N	1524	C	N3-C4-N4	8.30	123.81	118.00
1	N	46	G	C2-N3-C4	8.30	116.05	111.90
1	N	1429	A	N7-C8-N9	8.30	117.95	113.80
1	N	162	A	N1-C2-N3	8.30	133.45	129.30
1	N	732	C	C6-N1-C2	-8.30	116.98	120.30
1	N	1333	A	N1-C2-N3	-8.30	125.15	129.30
1	N	582	C	C4'-C3'-C2'	-8.29	94.31	102.60
1	N	730	G	P-O3'-C3'	8.30	129.66	119.70
1	N	1148	U	O4'-C1'-N1	8.29	114.83	108.20
1	N	1193	G	C5-C6-O6	-8.29	123.62	128.60
1	N	75	G	C5-C6-O6	-8.29	123.63	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	344	A	N9-C4-C5	-8.29	102.48	105.80
1	N	495	A	C5-N7-C8	8.29	108.05	103.90
1	N	583	A	C4-C5-C6	8.29	121.14	117.00
1	N	1002	G	C4'-C3'-C2'	-8.29	94.31	102.60
1	N	222	C	O4'-C1'-N1	8.28	114.83	108.20
1	N	391	G	N1-C2-N3	-8.28	118.93	123.90
1	N	674	G	C4-C5-C6	8.28	123.77	118.80
1	N	88	U	C6-N1-C2	-8.28	116.03	121.00
1	N	444	G	N9-C4-C5	-8.28	102.09	105.40
1	N	1290	G	N1-C2-N3	-8.28	118.93	123.90
1	N	154	U	N3-C4-O4	-8.28	113.61	119.40
1	N	739	C	N3-C4-N4	8.28	123.80	118.00
1	N	909	A	C4-C5-N7	-8.28	106.56	110.70
1	N	959	A	N9-C4-C5	8.28	109.11	105.80
1	N	966	G	O4'-C1'-N9	8.28	114.82	108.20
1	N	27	G	C5-C6-O6	-8.28	123.63	128.60
1	N	181	A	C5-N7-C8	8.28	108.04	103.90
1	N	1144	G	C5-N7-C8	-8.28	100.16	104.30
1	N	1517	G	C5-C6-N1	-8.28	107.36	111.50
1	N	35	G	C6-C5-N7	-8.27	125.44	130.40
1	N	362	G	N1-C6-O6	8.27	124.86	119.90
1	N	656	G	N3-C4-C5	8.27	132.74	128.60
1	N	792	A	C1'-O4'-C4'	8.27	116.52	109.90
1	N	897	C	C2-N1-C1'	8.27	127.90	118.80
1	N	814	A	C6-N1-C2	8.27	123.56	118.60
1	N	1142	G	O4'-C1'-N9	8.27	114.82	108.20
1	N	856	C	O4'-C1'-N1	8.27	114.82	108.20
1	N	484	G	N3-C2-N2	8.27	125.69	119.90
1	N	576	C	C4-C5-C6	8.27	121.53	117.40
1	N	366	A	C5-C6-N6	-8.27	117.09	123.70
1	N	628	G	N1-C6-O6	8.27	124.86	119.90
1	N	426	U	P-O3'-C3'	8.27	129.62	119.70
1	N	1332	A	N1-C6-N6	8.27	123.56	118.60
1	N	580	C	O4'-C1'-N1	8.26	114.81	108.20
1	N	698	G	C5-C6-O6	-8.26	123.64	128.60
1	N	235	C	N3-C4-C5	-8.26	118.59	121.90
1	N	347	G	O4'-C1'-N9	8.26	114.81	108.20
1	N	956	U	C4'-C3'-C2'	-8.26	94.34	102.60
1	N	1068	G	C5'-C4'-C3'	-8.26	102.78	116.00
1	N	1489	G	C4-C5-N7	8.26	114.11	110.80
1	N	222	C	C2-N3-C4	8.26	124.03	119.90
1	N	242	G	C5-C6-O6	-8.26	123.65	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	912	C	N3-C2-O2	8.26	127.68	121.90
1	N	1257	A	C2-N3-C4	8.26	114.73	110.60
1	N	365	U	N3-C4-O4	8.25	125.18	119.40
1	N	394	G	N1-C6-O6	8.25	124.85	119.90
1	N	503	C	N3-C4-N4	8.25	123.78	118.00
1	N	598	U	C6-N1-C2	-8.25	116.05	121.00
1	N	706	A	C6-C5-N7	-8.25	126.52	132.30
1	N	1237	C	N1-C2-O2	-8.25	113.95	118.90
1	N	1109	C	C6-N1-C2	-8.25	117.00	120.30
1	N	1323	G	O4'-C4'-C3'	-8.25	95.75	104.00
1	N	189	A	N9-C4-C5	8.25	109.10	105.80
1	N	370	C	C5-C4-N4	-8.25	114.42	120.20
1	N	424	G	O4'-C1'-N9	8.25	114.80	108.20
1	N	628	G	C8-N9-C4	-8.25	103.10	106.40
1	N	784	A	N9-C1'-C2'	-8.25	102.93	112.00
1	N	847	G	C3'-C2'-C1'	-8.25	94.90	101.50
1	N	1499	A	N1-C2-N3	8.25	133.42	129.30
1	N	1293	C	C2-N3-C4	8.25	124.02	119.90
1	N	21	G	C4-C5-C6	8.24	123.75	118.80
1	N	127	G	C2-N3-C4	8.24	116.02	111.90
1	N	811	C	C2-N3-C4	-8.24	115.78	119.90
1	N	102	G	C5-C6-O6	-8.24	123.66	128.60
1	N	164	G	P-O3'-C3'	-8.24	109.81	119.70
1	N	941	G	C5-C6-O6	-8.24	123.65	128.60
1	N	1021	A	O4'-C1'-N9	8.24	114.79	108.20
1	N	1248	A	C4-C5-C6	8.24	121.12	117.00
1	N	77	A	C6-C5-N7	-8.24	126.53	132.30
1	N	265	G	P-O3'-C3'	8.24	129.59	119.70
1	N	850	U	O4'-C1'-N1	8.24	114.79	108.20
1	N	977	A	C4-C5-C6	8.24	121.12	117.00
1	N	98	A	C5'-C4'-C3'	-8.24	102.82	116.00
1	N	774	G	C5-C6-O6	-8.24	123.66	128.60
1	N	1284	C	C5-C4-N4	-8.24	114.43	120.20
1	N	1093	A	O4'-C1'-N9	8.24	114.79	108.20
1	N	1139	G	N3-C4-C5	8.24	132.72	128.60
1	N	1144	G	N7-C8-N9	8.24	117.22	113.10
1	N	1247	U	N1-C2-N3	-8.24	109.96	114.90
1	N	615	G	N1-C2-N3	-8.23	118.96	123.90
1	N	1053	G	C5-N7-C8	8.23	108.42	104.30
1	N	130	A	C4'-C3'-C2'	-8.23	94.37	102.60
1	N	213	G	N7-C8-N9	8.23	117.22	113.10
1	N	753	A	C5-C6-N1	-8.23	113.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	331	G	O4'-C1'-N9	8.23	114.78	108.20
1	N	1064	G	C6-N1-C2	8.23	130.04	125.10
1	N	162	A	P-O3'-C3'	8.22	129.57	119.70
1	N	263	A	C8-N9-C4	8.22	109.09	105.80
1	N	1101	A	N1-C2-N3	8.22	133.41	129.30
1	N	1167	A	C5-C6-N1	-8.22	113.59	117.70
1	N	1194	U	N3-C4-O4	8.22	125.16	119.40
1	N	185	U	N3-C4-O4	8.22	125.16	119.40
1	N	259	G	N1-C6-O6	8.22	124.83	119.90
1	N	661	G	C6-C5-N7	-8.22	125.47	130.40
1	N	1395	C	C2-N3-C4	8.22	124.01	119.90
1	N	1453	G	C6-C5-N7	-8.22	125.47	130.40
1	N	683	G	C8-N9-C4	8.22	109.69	106.40
1	N	969	A	C5-C6-N1	-8.22	113.59	117.70
1	N	1120	C	N3-C4-C5	-8.22	118.61	121.90
1	N	364	A	O4'-C1'-N9	8.21	114.77	108.20
1	N	288	A	C5-C6-N6	-8.21	117.13	123.70
1	N	375	U	O4'-C1'-N1	8.21	114.77	108.20
1	N	890	G	O4'-C1'-N9	8.21	114.77	108.20
1	N	336	A	C5-C6-N6	-8.21	117.13	123.70
1	N	678	U	C2-N3-C4	-8.21	122.07	127.00
1	N	1174	G	C4-C5-C6	8.21	123.73	118.80
1	N	139	A	O4'-C1'-N9	8.21	114.77	108.20
1	N	145	G	N1-C2-N3	-8.21	118.97	123.90
1	N	504	C	C2-N3-C4	8.21	124.00	119.90
1	N	1277	C	P-O3'-C3'	-8.21	109.85	119.70
1	N	286	C	C5-C4-N4	-8.21	114.46	120.20
1	N	1214	C	C6-N1-C2	-8.21	117.02	120.30
1	N	1533	C	C6-N1-C2	8.20	123.58	120.30
1	N	355	C	C5-C6-N1	8.20	125.10	121.00
1	N	945	G	C2-N3-C4	8.20	116.00	111.90
1	N	940	C	O4'-C1'-N1	8.20	114.76	108.20
1	N	316	C	C5'-C4'-C3'	-8.20	102.88	116.00
1	N	587	G	P-O3'-C3'	8.20	129.54	119.70
1	N	1370	G	C5'-C4'-C3'	-8.20	102.88	116.00
1	N	32	A	C8-N9-C4	-8.20	102.52	105.80
1	N	690	G	C4-C5-N7	8.20	114.08	110.80
1	N	1166	G	N1-C6-O6	8.20	124.82	119.90
1	N	1240	U	N1-C2-O2	8.19	128.53	122.80
1	N	111	G	N3-C2-N2	8.19	125.63	119.90
1	N	1022	A	C5-C6-N1	-8.19	113.61	117.70
1	N	1475	G	N3-C2-N2	8.19	125.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	868	C	C4-C5-C6	8.19	121.49	117.40
1	N	1292	G	O4'-C1'-N9	8.19	114.75	108.20
1	N	120	A	O4'-C1'-C2'	-8.18	97.62	105.80
1	N	886	G	C4'-C3'-C2'	-8.18	94.42	102.60
1	N	85	U	C2-N3-C4	8.18	131.91	127.00
1	N	937	A	N7-C8-N9	8.18	117.89	113.80
1	N	939	G	P-O3'-C3'	-8.18	109.88	119.70
1	N	1383	C	C5-C4-N4	-8.18	114.47	120.20
1	N	1518	A	N1-C2-N3	8.18	133.39	129.30
1	N	154	U	O4'-C1'-N1	8.18	114.74	108.20
1	N	315	A	P-O5'-C5'	8.18	133.99	120.90
1	N	878	A	C6-N1-C2	-8.18	113.69	118.60
1	N	883	C	C5-C6-N1	8.18	125.09	121.00
1	N	922	G	N3-C2-N2	8.18	125.62	119.90
1	N	1489	G	C4-N9-C1'	-8.18	115.87	126.50
1	N	198	G	C8-N9-C4	8.18	109.67	106.40
1	N	585	G	N3-C4-C5	8.18	132.69	128.60
1	N	1019	A	N1-C6-N6	8.18	123.51	118.60
1	N	746	A	C4-C5-C6	8.17	121.09	117.00
1	N	1071	C	N3-C4-N4	8.17	123.72	118.00
1	N	851	G	N1-C6-O6	8.17	124.80	119.90
1	N	1346	A	C4-C5-C6	8.17	121.08	117.00
1	N	117	G	N9-C4-C5	8.17	108.67	105.40
1	N	167	A	C4-C5-C6	8.17	121.08	117.00
1	N	1089	G	O4'-C1'-N9	8.17	114.73	108.20
1	N	61	G	N3-C4-C5	8.16	132.68	128.60
1	N	374	A	C4-C5-C6	8.16	121.08	117.00
1	N	449	G	C4-N9-C1'	8.16	137.11	126.50
1	N	473	U	N3-C2-O2	8.16	127.92	122.20
1	N	1388	C	C2-N3-C4	8.16	123.98	119.90
1	N	345	C	C4'-C3'-C2'	-8.16	94.44	102.60
1	N	582	C	O4'-C1'-N1	8.16	114.73	108.20
1	N	839	C	O4'-C1'-N1	8.16	114.73	108.20
1	N	366	A	N9-C4-C5	-8.16	102.54	105.80
1	N	925	G	O4'-C1'-N9	8.16	114.73	108.20
1	N	1169	A	C5-C6-N6	-8.16	117.17	123.70
1	N	237	G	O4'-C1'-N9	8.16	114.73	108.20
1	N	1334	G	N9-C4-C5	-8.16	102.14	105.40
1	N	1082	A	N9-C4-C5	8.15	109.06	105.80
1	N	1176	A	N1-C6-N6	8.15	123.49	118.60
1	N	1516	G	N3-C4-C5	8.15	132.68	128.60
1	N	124	C	N3-C4-N4	8.15	123.70	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	596	A	C5-C6-N6	-8.15	117.18	123.70
1	N	947	G	N1-C2-N3	-8.15	119.01	123.90
1	N	1288	A	C4-C5-C6	8.14	121.07	117.00
1	N	914	A	C5-N7-C8	8.14	107.97	103.90
1	N	538	G	O4'-C1'-N9	8.14	114.71	108.20
1	N	729	A	P-O5'-C5'	8.14	133.93	120.90
1	N	751	U	C4-C5-C6	-8.14	114.81	119.70
1	N	1124	G	C5-C6-O6	-8.14	123.72	128.60
1	N	1415	G	O4'-C1'-N9	8.14	114.71	108.20
1	N	134	G	C6-C5-N7	-8.14	125.52	130.40
1	N	126	G	C2-N3-C4	8.13	115.97	111.90
1	N	734	G	N1-C2-N3	-8.13	119.02	123.90
1	N	143	A	C5-N7-C8	8.13	107.97	103.90
1	N	567	G	C5-C6-O6	-8.13	123.72	128.60
1	N	742	G	C5-C6-N1	8.13	115.57	111.50
1	N	1482	G	N1-C6-O6	8.13	124.78	119.90
1	N	866	C	N3-C4-C5	-8.13	118.65	121.90
1	N	77	A	C5-C6-N6	-8.13	117.20	123.70
1	N	1144	G	O4'-C1'-N9	8.13	114.70	108.20
1	N	1401	G	C6-C5-N7	-8.13	125.52	130.40
1	N	1437	A	C5-N7-C8	8.13	107.96	103.90
1	N	31	G	N1-C2-N3	-8.12	119.03	123.90
1	N	1395	C	N1-C2-N3	-8.12	113.51	119.20
1	N	474	G	O4'-C1'-N9	8.12	114.70	108.20
1	N	1204	A	N9-C4-C5	-8.12	102.55	105.80
1	N	1382	C	O4'-C1'-N1	8.12	114.70	108.20
1	N	22	G	N1-C6-O6	8.12	124.77	119.90
1	N	4	U	P-O3'-C3'	-8.12	109.96	119.70
1	N	176	C	O4'-C1'-N1	8.12	114.69	108.20
1	N	447	G	P-O5'-C5'	8.12	133.89	120.90
1	N	596	A	N9-C4-C5	8.12	109.05	105.80
1	N	847	G	C5-C6-N1	8.12	115.56	111.50
1	N	1304	G	N3-C2-N2	8.12	125.58	119.90
1	N	1511	G	N1-C6-O6	8.12	124.77	119.90
1	N	22	G	C6-C5-N7	-8.12	125.53	130.40
1	N	521	G	C6-C5-N7	-8.12	125.53	130.40
1	N	818	G	P-O3'-C3'	8.12	129.44	119.70
1	N	1462	C	O4'-C4'-C3'	-8.12	95.88	104.00
1	N	1351	U	C2-N3-C4	8.11	131.87	127.00
1	N	367	U	N3-C2-O2	8.11	127.88	122.20
1	N	397	A	C5-C6-N1	-8.11	113.64	117.70
1	N	1380	U	C4'-C3'-C2'	-8.11	94.49	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1405	G	C5-C6-N1	-8.11	107.44	111.50
1	N	604	G	C5-C6-N1	-8.11	107.44	111.50
1	N	520	A	O4'-C1'-N9	8.11	114.69	108.20
1	N	1423	G	C6-C5-N7	-8.11	125.54	130.40
1	N	1446	A	N7-C8-N9	-8.11	109.75	113.80
1	N	1466	C	N3-C4-C5	-8.11	118.66	121.90
1	N	197	A	C5'-C4'-C3'	8.10	128.97	116.00
1	N	1146	A	C5-C6-N6	-8.10	117.22	123.70
1	N	391	G	C5-N7-C8	-8.10	100.25	104.30
1	N	504	C	O4'-C1'-N1	8.10	114.68	108.20
1	N	945	G	N1-C2-N3	-8.10	119.04	123.90
1	N	1241	G	C5-C6-O6	-8.10	123.74	128.60
1	N	779	C	O4'-C1'-N1	8.10	114.68	108.20
1	N	1142	G	C5-N7-C8	-8.10	100.25	104.30
1	N	1453	G	N9-C4-C5	-8.10	102.16	105.40
1	N	272	C	N3-C4-N4	8.10	123.67	118.00
1	N	327	A	N7-C8-N9	-8.10	109.75	113.80
1	N	33	A	N1-C6-N6	8.10	123.46	118.60
1	N	76	G	C4-C5-N7	8.10	114.04	110.80
1	N	556	C	O5'-P-OP2	-8.10	98.42	105.70
1	N	589	U	C6-N1-C2	-8.10	116.14	121.00
1	N	612	C	C4'-C3'-C2'	-8.10	94.50	102.60
1	N	103	U	O4'-C1'-N1	8.09	114.67	108.20
1	N	444	G	N1-C6-O6	8.09	124.76	119.90
1	N	547	A	N1-C6-N6	8.09	123.46	118.60
1	N	878	A	C5-C6-N6	-8.09	117.23	123.70
1	N	508	U	C6-N1-C2	-8.09	116.15	121.00
1	N	995	C	O4'-C1'-N1	8.09	114.67	108.20
1	N	1092	A	C4-C5-C6	8.09	121.04	117.00
1	N	1190	G	O4'-C1'-N9	8.09	114.67	108.20
1	N	1388	C	O4'-C1'-N1	8.09	114.67	108.20
1	N	337	G	N1-C2-N3	-8.09	119.05	123.90
1	N	411	A	N1-C2-N3	-8.09	125.26	129.30
1	N	1305	G	O4'-C1'-N9	8.09	114.67	108.20
1	N	158	G	O4'-C4'-C3'	-8.08	95.92	104.00
1	N	879	C	O4'-C1'-N1	8.08	114.67	108.20
1	N	139	A	C5-C6-N6	-8.08	117.24	123.70
1	N	765	G	C2-N3-C4	-8.08	107.86	111.90
1	N	1309	G	O4'-C1'-N9	8.08	114.66	108.20
1	N	225	C	C6-N1-C2	-8.08	117.07	120.30
1	N	685	G	C6-C5-N7	-8.08	125.55	130.40
1	N	919	A	C8-N9-C4	-8.08	102.57	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	988	G	C5-C6-N1	-8.08	107.46	111.50
1	N	242	G	N7-C8-N9	8.07	117.14	113.10
1	N	328	C	N3-C4-N4	8.07	123.65	118.00
1	N	729	A	C5-C6-N6	-8.07	117.24	123.70
1	N	276	G	C4-C5-N7	8.07	114.03	110.80
1	N	783	C	C6-N1-C2	-8.07	117.07	120.30
1	N	67	C	C5-C6-N1	8.07	125.03	121.00
1	N	116	A	C5-C6-N6	-8.07	117.25	123.70
1	N	147	G	O4'-C1'-N9	8.07	114.66	108.20
1	N	955	U	N3-C2-O2	8.07	127.85	122.20
1	N	1030	U	C5-C6-N1	8.07	126.73	122.70
1	N	1373	G	C6-N1-C2	8.07	129.94	125.10
1	N	410	G	O4'-C1'-N9	8.07	114.65	108.20
1	N	633	G	C4-C5-C6	8.06	123.64	118.80
1	N	865	A	C8-N9-C4	8.06	109.03	105.80
1	N	1064	G	O4'-C1'-N9	8.06	114.65	108.20
1	N	1189	U	C6-N1-C1'	-8.06	109.91	121.20
1	N	1285	A	C5-N7-C8	8.06	107.93	103.90
1	N	122	G	O4'-C1'-N9	8.06	114.65	108.20
1	N	483	C	O4'-C1'-C2'	8.06	114.85	107.60
1	N	683	G	O4'-C1'-N9	8.06	114.65	108.20
1	N	742	G	C8-N9-C4	-8.06	103.18	106.40
1	N	1223	C	N3-C4-N4	8.06	123.64	118.00
1	N	19	A	C6-N1-C2	8.05	123.43	118.60
1	N	218	U	P-O5'-C5'	8.05	133.79	120.90
1	N	1019	A	C5-C6-N1	-8.05	113.67	117.70
1	N	1206	G	N7-C8-N9	8.05	117.13	113.10
1	N	1526	G	C4-C5-C6	8.05	123.63	118.80
1	N	646	G	C6-C5-N7	-8.05	125.57	130.40
1	N	972	C	O4'-C1'-N1	8.05	114.64	108.20
1	N	1079	G	C5'-C4'-O4'	8.05	118.76	109.10
1	N	1411	C	C3'-C2'-C1'	-8.05	95.06	101.50
1	N	139	A	C2-N3-C4	8.05	114.62	110.60
1	N	162	A	C2-N3-C4	-8.04	106.58	110.60
1	N	282	A	N1-C6-N6	8.04	123.43	118.60
1	N	755	G	C5-C6-N1	-8.05	107.48	111.50
1	N	1194	U	O4'-C1'-N1	8.05	114.64	108.20
1	N	231	U	C5-C6-N1	8.04	126.72	122.70
1	N	1265	C	C5-C4-N4	-8.04	114.57	120.20
1	N	572	A	C8-N9-C4	-8.04	102.58	105.80
1	N	1179	A	C5-C6-N6	-8.04	117.27	123.70
1	N	1412	C	C5-C4-N4	-8.04	114.57	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	248	C	C5-C6-N1	8.04	125.02	121.00
1	N	977	A	C5-C6-N1	-8.04	113.68	117.70
1	N	226	G	C4-C5-C6	8.03	123.62	118.80
1	N	176	C	C4-C5-C6	-8.03	113.39	117.40
1	N	608	A	O4'-C1'-N9	8.03	114.62	108.20
1	N	899	C	C6-N1-C2	-8.03	117.09	120.30
1	N	912	C	C6-N1-C1'	-8.03	111.16	120.80
1	N	1363	A	C4'-C3'-C2'	-8.03	94.57	102.60
1	N	828	U	C5-C4-O4	-8.03	121.08	125.90
1	N	275	G	C8-N9-C4	-8.03	103.19	106.40
1	N	1100	C	P-O3'-C3'	-8.03	110.07	119.70
1	N	416	G	C6-C5-N7	-8.03	125.58	130.40
1	N	510	A	N7-C8-N9	-8.03	109.79	113.80
1	N	966	G	C4-C5-N7	8.03	114.01	110.80
1	N	107	G	N3-C2-N2	8.02	125.52	119.90
1	N	150	U	C5-C4-O4	-8.02	121.09	125.90
1	N	1007	U	N3-C4-O4	8.02	125.01	119.40
1	N	316	C	N3-C4-N4	8.02	123.61	118.00
1	N	1158	C	C2-N1-C1'	8.02	127.62	118.80
1	N	214	C	O4'-C1'-N1	8.02	114.61	108.20
1	N	271	C	C5'-C4'-O4'	8.02	118.72	109.10
1	N	765	G	P-O3'-C3'	-8.02	110.08	119.70
1	N	1086	U	C6-N1-C2	8.02	125.81	121.00
1	N	1517	G	C4-C5-C6	8.02	123.61	118.80
1	N	352	C	C5-C6-N1	-8.01	116.99	121.00
1	N	362	G	O4'-C1'-N9	8.01	114.61	108.20
1	N	602	A	P-O3'-C3'	-8.01	110.08	119.70
1	N	683	G	N1-C2-N3	-8.01	119.09	123.90
1	N	1006	G	C2-N3-C4	-8.01	107.89	111.90
1	N	1366	C	N3-C4-C5	-8.01	118.69	121.90
1	N	149	A	N9-C4-C5	8.01	109.00	105.80
1	N	511	C	C2-N3-C4	8.01	123.91	119.90
1	N	683	G	N7-C8-N9	-8.01	109.10	113.10
1	N	939	G	C4-C5-N7	-8.01	107.60	110.80
1	N	1146	A	C5-C6-N1	-8.01	113.69	117.70
1	N	1244	G	C8-N9-C4	-8.01	103.20	106.40
1	N	430	A	C4-C5-N7	-8.01	106.70	110.70
1	N	1052	U	O4'-C1'-N1	8.01	114.61	108.20
1	N	221	C	C2-N3-C4	8.00	123.90	119.90
1	N	564	C	C6-N1-C1'	-8.00	111.20	120.80
1	N	691	G	P-O3'-C3'	8.00	129.30	119.70
1	N	850	U	P-O5'-C5'	8.00	133.70	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	310	G	N3-C4-N9	-8.00	121.20	126.00
1	N	329	A	C5-N7-C8	8.00	107.90	103.90
1	N	623	C	O4'-C1'-N1	8.00	114.60	108.20
1	N	1258	G	C5-C6-O6	-8.00	123.80	128.60
1	N	381	C	C4-C5-C6	8.00	121.40	117.40
1	N	601	G	N1-C6-O6	8.00	124.70	119.90
1	N	1143	G	N1-C6-O6	8.00	124.70	119.90
1	N	671	G	N9-C4-C5	7.99	108.60	105.40
1	N	1042	A	O4'-C1'-N9	7.99	114.59	108.20
1	N	1060	U	P-O3'-C3'	-7.99	110.11	119.70
1	N	1131	G	C6-C5-N7	-7.99	125.61	130.40
1	N	757	U	N3-C2-O2	7.99	127.79	122.20
1	N	976	G	P-O3'-C3'	-7.99	110.11	119.70
1	N	41	G	N3-C4-N9	-7.99	121.21	126.00
1	N	136	C	O4'-C1'-N1	7.99	114.59	108.20
1	N	693	G	N3-C4-C5	-7.99	124.61	128.60
1	N	715	A	C5-C6-N6	-7.99	117.31	123.70
1	N	739	C	N3-C4-C5	-7.99	118.71	121.90
1	N	939	G	C5-C6-O6	-7.99	123.81	128.60
1	N	1318	A	C6-C5-N7	-7.99	126.71	132.30
1	N	1420	U	C5-C6-N1	7.99	126.69	122.70
1	N	1522	U	P-O3'-C3'	-7.98	110.12	119.70
1	N	318	G	C6-N1-C2	7.98	129.89	125.10
1	N	769	G	C5-N7-C8	-7.98	100.31	104.30
1	N	875	U	N3-C4-O4	7.98	124.99	119.40
1	N	1219	A	O4'-C1'-N9	7.98	114.59	108.20
1	N	648	A	N3-C4-C5	-7.98	121.21	126.80
1	N	896	C	C5-C6-N1	-7.98	117.01	121.00
1	N	985	C	C2-N3-C4	7.98	123.89	119.90
1	N	935	A	C5-C6-N1	-7.98	113.71	117.70
1	N	955	U	C2-N1-C1'	7.98	127.27	117.70
1	N	1064	G	O5'-C5'-C4'	7.98	126.86	111.70
1	N	94	G	N9-C4-C5	7.98	108.59	105.40
1	N	817	C	C2-N3-C4	7.98	123.89	119.90
1	N	1409	C	C5-C4-N4	-7.98	114.62	120.20
1	N	555	U	P-O3'-C3'	7.98	129.27	119.70
1	N	674	G	C6-C5-N7	-7.98	125.61	130.40
1	N	803	G	O4'-C1'-N9	7.97	114.58	108.20
1	N	897	C	C5-C6-N1	7.97	124.99	121.00
1	N	1338	G	C4-C5-C6	7.97	123.58	118.80
1	N	1455	G	C4-C5-C6	7.97	123.58	118.80
1	N	765	G	N1-C6-O6	7.97	124.68	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	95	C	N3-C4-C5	-7.97	118.71	121.90
1	N	242	G	C5-N7-C8	-7.97	100.32	104.30
1	N	347	G	N3-C2-N2	7.97	125.48	119.90
1	N	32	A	C4-C5-N7	-7.97	106.72	110.70
1	N	1040	U	P-O5'-C5'	7.97	133.65	120.90
1	N	483	C	N3-C4-N4	7.96	123.58	118.00
1	N	1105	A	C4-C5-C6	7.96	120.98	117.00
1	N	1271	A	O4'-C1'-N9	7.96	114.57	108.20
1	N	223	A	O4'-C1'-N9	7.96	114.57	108.20
1	N	198	G	C5'-C4'-C3'	-7.96	103.26	116.00
1	N	1047	G	C5-C6-O6	-7.96	123.83	128.60
1	N	1297	G	O4'-C1'-N9	7.96	114.57	108.20
1	N	1374	A	C8-N9-C4	-7.96	102.62	105.80
1	N	1528	U	N1-C2-N3	-7.96	110.13	114.90
1	N	506	G	C2-N3-C4	7.96	115.88	111.90
1	N	22	G	N3-C4-C5	-7.95	124.62	128.60
1	N	418	C	C5-C6-N1	7.95	124.98	121.00
1	N	427	U	O4'-C1'-N1	7.95	114.56	108.20
1	N	721	G	N1-C6-O6	7.95	124.67	119.90
1	N	766	A	N1-C2-N3	7.95	133.28	129.30
1	N	805	C	P-O5'-C5'	7.95	133.63	120.90
1	N	857	C	C6-N1-C2	-7.95	117.12	120.30
1	N	140	U	C2'-C3'-O3'	7.95	126.99	109.50
1	N	382	A	P-O3'-C3'	7.95	129.24	119.70
1	N	729	A	C4-C5-C6	7.95	120.97	117.00
1	N	129	A	O4'-C1'-N9	7.95	114.56	108.20
1	N	318	G	C4-C5-C6	7.95	123.57	118.80
1	N	631	C	N3-C4-C5	-7.95	118.72	121.90
1	N	948	C	N3-C4-C5	-7.95	118.72	121.90
1	N	1101	A	C6-C5-N7	-7.95	126.74	132.30
1	N	1483	A	N1-C2-N3	-7.95	125.33	129.30
1	N	162	A	C4-C5-C6	7.94	120.97	117.00
1	N	255	G	N9-C4-C5	-7.94	102.22	105.40
1	N	704	A	N7-C8-N9	-7.94	109.83	113.80
1	N	1290	G	C1'-O4'-C4'	7.94	116.25	109.90
1	N	695	A	C5-N7-C8	7.94	107.87	103.90
1	N	514	C	C4-C5-C6	-7.94	113.43	117.40
1	N	1366	C	C5-C4-N4	-7.94	114.64	120.20
1	N	961	U	C5-C4-O4	-7.94	121.14	125.90
1	N	1511	G	C8-N9-C4	-7.94	103.23	106.40
1	N	1038	C	N3-C4-C5	-7.93	118.73	121.90
1	N	1425	U	O4'-C1'-N1	7.93	114.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	413	G	C5-N7-C8	7.93	108.27	104.30
1	N	1529	G	C6-N1-C2	7.93	129.86	125.10
1	N	119	A	C4-C5-C6	7.93	120.97	117.00
1	N	789	U	C5-C6-N1	7.93	126.67	122.70
1	N	1161	C	N3-C4-C5	-7.93	118.73	121.90
1	N	1415	G	C5-C6-O6	-7.93	123.84	128.60
1	N	882	C	C5-C6-N1	7.93	124.96	121.00
1	N	10	A	P-O3'-C3'	-7.93	110.19	119.70
1	N	235	C	N3-C4-N4	7.93	123.55	118.00
1	N	404	G	C5-C6-O6	-7.93	123.84	128.60
1	N	1410	A	N9-C4-C5	7.93	108.97	105.80
1	N	66	A	O4'-C1'-N9	7.92	114.54	108.20
1	N	341	C	C4'-C3'-C2'	-7.92	94.68	102.60
1	N	469	C	C5'-C4'-C3'	7.92	128.68	116.00
1	N	732	C	N3-C4-C5	-7.92	118.73	121.90
1	N	1075	U	O4'-C1'-N1	7.92	114.54	108.20
1	N	912	C	O4'-C1'-N1	7.92	114.54	108.20
1	N	1158	C	N3-C4-C5	-7.92	118.73	121.90
1	N	407	U	C2-N3-C4	-7.92	122.25	127.00
1	N	626	G	N3-C2-N2	7.92	125.44	119.90
1	N	47	C	N3-C4-C5	-7.92	118.73	121.90
1	N	338	A	N7-C8-N9	7.92	117.76	113.80
1	N	392	C	C5-C6-N1	7.92	124.96	121.00
1	N	56	U	O4'-C1'-N1	7.92	114.53	108.20
1	N	1265	C	C5-C6-N1	7.92	124.96	121.00
1	N	1526	G	C6-C5-N7	-7.92	125.65	130.40
1	N	42	G	N9-C4-C5	7.92	108.57	105.40
1	N	396	C	N1-C2-N3	7.92	124.74	119.20
1	N	658	C	C1'-O4'-C4'	7.92	116.23	109.90
1	N	468	A	N9-C4-C5	-7.92	102.63	105.80
1	N	1433	A	C5-C6-N1	-7.92	113.74	117.70
1	N	121	U	C5-C4-O4	7.91	130.65	125.90
1	N	365	U	C6-N1-C2	-7.91	116.25	121.00
1	N	1042	A	P-O5'-C5'	7.91	133.56	120.90
1	N	1389	C	C2-N3-C4	7.91	123.86	119.90
1	N	728	A	C5-C6-N6	-7.91	117.37	123.70
1	N	1134	G	N3-C2-N2	7.91	125.44	119.90
1	N	436	C	C5-C4-N4	-7.91	114.67	120.20
1	N	816	A	O5'-C5'-C4'	-7.91	96.68	111.70
1	N	923	A	N1-C2-N3	7.91	133.25	129.30
1	N	1321	U	C4-C5-C6	-7.91	114.96	119.70
1	N	148	G	N1-C2-N3	-7.90	119.16	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	249	U	C4'-C3'-C2'	-7.90	94.70	102.60
1	N	1428	A	C4-C5-C6	7.90	120.95	117.00
1	N	195	A	O4'-C1'-N9	7.90	114.52	108.20
1	N	1530	G	C8-N9-C4	7.90	109.56	106.40
1	N	1225	A	C4-C5-C6	7.90	120.95	117.00
1	N	1278	G	C5-C6-O6	-7.90	123.86	128.60
1	N	1411	C	N3-C4-C5	-7.90	118.74	121.90
1	N	478	A	C8-N9-C4	-7.90	102.64	105.80
1	N	686	U	P-O3'-C3'	7.90	129.18	119.70
1	N	95	C	N3-C4-N4	7.90	123.53	118.00
1	N	605	U	N3-C2-O2	7.90	127.73	122.20
1	N	653	U	O4'-C1'-N1	7.90	114.52	108.20
1	N	713	G	N1-C2-N3	-7.89	119.16	123.90
1	N	852	G	C5-C6-O6	-7.89	123.86	128.60
1	N	928	G	C5-C6-O6	-7.89	123.86	128.60
1	N	318	G	N1-C2-N3	-7.89	119.17	123.90
1	N	233	C	C6-N1-C1'	-7.89	111.33	120.80
1	N	1257	A	C5-C6-N6	-7.89	117.39	123.70
1	N	1523	G	C5-C6-O6	-7.89	123.87	128.60
1	N	41	G	N3-C4-C5	7.89	132.54	128.60
1	N	262	A	C5-C6-N1	-7.89	113.76	117.70
1	N	1183	U	C5-C4-O4	7.89	130.63	125.90
1	N	1260	G	P-O3'-C3'	7.89	129.16	119.70
1	N	179	A	C4-C5-C6	7.88	120.94	117.00
1	N	865	A	N9-C4-C5	-7.88	102.65	105.80
1	N	873	A	O4'-C1'-N9	7.88	114.51	108.20
1	N	1399	C	N3-C4-C5	-7.88	118.75	121.90
1	N	1440	U	C5'-C4'-O4'	7.88	118.56	109.10
1	N	556	C	C6-N1-C2	-7.88	117.15	120.30
1	N	713	G	C6-C5-N7	-7.88	125.67	130.40
1	N	601	G	O4'-C1'-N9	7.88	114.50	108.20
1	N	724	G	N3-C2-N2	7.88	125.42	119.90
1	N	366	A	C5-C6-N1	-7.88	113.76	117.70
1	N	554	A	N1-C6-N6	7.88	123.33	118.60
1	N	1307	U	C2-N3-C4	7.88	131.73	127.00
1	N	575	G	C5-C6-N1	-7.88	107.56	111.50
1	N	246	A	P-O5'-C5'	7.87	133.50	120.90
1	N	1033	G	C4-C5-N7	-7.87	107.65	110.80
1	N	1050	G	C5'-C4'-C3'	-7.87	103.40	116.00
1	N	1080	A	N1-C6-N6	7.87	123.32	118.60
1	N	62	U	N3-C4-C5	-7.87	109.88	114.60
1	N	532	A	C4-C5-N7	-7.87	106.76	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	228	A	C8-N9-C4	-7.87	102.65	105.80
1	N	755	G	N7-C8-N9	7.87	117.03	113.10
1	N	1531	A	N3-C4-N9	7.87	133.70	127.40
1	N	652	U	C2-N1-C1'	-7.87	108.26	117.70
1	N	908	A	C5-C6-N6	-7.87	117.41	123.70
1	N	1306	A	C4-C5-C6	7.87	120.93	117.00
1	N	1353	G	N1-C6-O6	7.87	124.62	119.90
1	N	161	A	N1-C6-N6	7.87	123.32	118.60
1	N	1149	C	C6-N1-C2	-7.87	117.15	120.30
1	N	450	G	C5-C6-O6	-7.87	123.88	128.60
1	N	514	C	C4'-C3'-C2'	-7.87	94.73	102.60
1	N	1478	U	O4'-C1'-N1	7.87	114.49	108.20
1	N	137	U	C6-N1-C2	-7.86	116.28	121.00
1	N	1433	A	O3'-P-O5'	-7.86	89.06	104.00
1	N	502	A	N1-C2-N3	7.86	133.23	129.30
1	N	148	G	N3-C2-N2	7.86	125.40	119.90
1	N	579	A	O4'-C1'-N9	7.86	114.49	108.20
1	N	900	A	C4-C5-C6	7.86	120.93	117.00
1	N	1517	G	C6-C5-N7	-7.86	125.68	130.40
1	N	320	A	C5-C6-N6	-7.86	117.41	123.70
1	N	617	G	C6-C5-N7	-7.86	125.69	130.40
1	N	1337	G	P-O3'-C3'	-7.86	110.27	119.70
1	N	172	A	C8-N9-C4	-7.86	102.66	105.80
1	N	428	G	C5'-C4'-O4'	-7.86	99.67	109.10
1	N	1268	G	C5-C6-N1	-7.86	107.57	111.50
1	N	792	A	N1-C2-N3	7.85	133.23	129.30
1	N	954	G	N7-C8-N9	7.85	117.03	113.10
1	N	373	A	N1-C6-N6	7.85	123.31	118.60
1	N	858	G	C5-C6-N1	-7.85	107.57	111.50
1	N	917	G	C4-C5-N7	7.85	113.94	110.80
1	N	1063	C	N3-C4-N4	7.85	123.50	118.00
1	N	1528	U	N3-C2-O2	7.85	127.70	122.20
1	N	507	C	C5-C6-N1	7.85	124.93	121.00
1	N	579	A	C4-C5-N7	7.85	114.62	110.70
1	N	731	G	C5-C6-N1	-7.85	107.57	111.50
1	N	145	G	C6-C5-N7	-7.85	125.69	130.40
1	N	888	G	C6-C5-N7	-7.85	125.69	130.40
1	N	1103	C	O4'-C1'-N1	7.85	114.48	108.20
1	N	241	G	N1-C2-N3	-7.85	119.19	123.90
1	N	777	A	C5-C6-N6	-7.85	117.42	123.70
1	N	1308	U	N1-C2-N3	-7.85	110.19	114.90
1	N	1532	U	C2-N1-C1'	7.85	127.12	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	96	U	C2-N1-C1'	7.85	127.11	117.70
1	N	630	A	O4'-C1'-N9	7.84	114.47	108.20
1	N	754	C	C5-C6-N1	7.84	124.92	121.00
1	N	1402	C	N3-C4-C5	-7.84	118.76	121.90
1	N	1481	U	N1-C2-O2	-7.84	117.31	122.80
1	N	796	C	O4'-C1'-N1	7.84	114.47	108.20
1	N	879	C	C6-N1-C2	-7.84	117.16	120.30
1	N	1174	G	C6-N1-C2	7.84	129.80	125.10
1	N	1489	G	N3-C4-C5	7.84	132.52	128.60
1	N	614	C	C5-C6-N1	7.83	124.92	121.00
1	N	7	A	O4'-C1'-N9	7.83	114.47	108.20
1	N	192	A	C6-C5-N7	-7.83	126.82	132.30
1	N	449	G	N7-C8-N9	7.83	117.02	113.10
1	N	1203	C	C5-C6-N1	7.83	124.92	121.00
1	N	1289	A	C5-C6-N1	-7.83	113.78	117.70
1	N	97	G	O4'-C1'-N9	7.83	114.46	108.20
1	N	86	G	O4'-C1'-N9	7.83	114.46	108.20
1	N	668	G	C6-N1-C2	7.83	129.80	125.10
1	N	816	A	N9-C4-C5	7.83	108.93	105.80
1	N	1192	C	O4'-C1'-N1	7.83	114.46	108.20
1	N	108	G	C2-N3-C4	7.82	115.81	111.90
1	N	380	G	C5-C6-O6	-7.82	123.91	128.60
1	N	576	C	P-O3'-C3'	7.82	129.09	119.70
1	N	695	A	C8-N9-C4	-7.82	102.67	105.80
1	N	730	G	C6-C5-N7	-7.82	125.71	130.40
1	N	1111	A	N7-C8-N9	7.82	117.71	113.80
1	N	1008	U	O4'-C1'-N1	7.82	114.45	108.20
1	N	1277	C	C6-N1-C2	7.82	123.43	120.30
1	N	1357	A	C6-C5-N7	-7.82	126.83	132.30
1	N	19	A	C6-C5-N7	-7.82	126.83	132.30
1	N	186	C	C5-C6-N1	7.82	124.91	121.00
1	N	419	C	N3-C4-C5	-7.82	118.77	121.90
1	N	754	C	C4'-C3'-C2'	7.82	110.42	102.60
1	N	138	G	O4'-C1'-N9	7.82	114.45	108.20
1	N	1407	C	N3-C4-C5	-7.81	118.77	121.90
1	N	486	U	P-O3'-C3'	-7.81	110.33	119.70
1	N	654	G	N3-C4-N9	-7.81	121.31	126.00
1	N	1173	U	N1-C2-O2	-7.81	117.33	122.80
1	N	271	C	N1-C2-O2	-7.81	114.21	118.90
1	N	360	G	N3-C2-N2	7.81	125.37	119.90
1	N	739	C	P-O5'-C5'	7.81	133.40	120.90
1	N	809	G	N9-C4-C5	7.81	108.52	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1349	A	C5-C6-N6	-7.81	117.45	123.70
1	N	1393	U	N3-C4-C5	-7.81	109.92	114.60
1	N	146	G	N3-C4-N9	-7.81	121.32	126.00
1	N	1241	G	C5'-C4'-C3'	-7.81	103.51	116.00
1	N	1153	G	O4'-C1'-N9	7.80	114.44	108.20
1	N	818	G	C4-C5-N7	7.80	113.92	110.80
1	N	1348	U	N1-C2-O2	-7.80	117.34	122.80
1	N	180	U	P-O5'-C5'	7.80	133.38	120.90
1	N	443	C	N3-C4-C5	-7.80	118.78	121.90
1	N	933	G	N1-C2-N3	-7.80	119.22	123.90
1	N	1142	G	N7-C8-N9	7.80	117.00	113.10
1	N	313	A	C5-N7-C8	7.80	107.80	103.90
1	N	35	G	C8-N9-C4	-7.79	103.28	106.40
1	N	166	U	C5-C4-O4	-7.79	121.22	125.90
1	N	395	C	N3-C4-N4	7.79	123.45	118.00
1	N	1019	A	N9-C4-C5	7.79	108.92	105.80
1	N	72	A	C6-C5-N7	-7.79	126.85	132.30
1	N	285	C	O4'-C1'-N1	7.79	114.43	108.20
1	N	777	A	C5'-C4'-O4'	7.79	118.45	109.10
1	N	177	G	P-O3'-C3'	-7.79	110.35	119.70
1	N	763	G	O4'-C1'-N9	7.79	114.43	108.20
1	N	851	G	N3-C2-N2	7.79	125.35	119.90
1	N	275	G	C5-C6-N1	-7.79	107.61	111.50
1	N	500	G	C6-N1-C2	7.79	129.77	125.10
1	N	595	A	C5-C6-N1	-7.79	113.81	117.70
1	N	1334	G	C6-C5-N7	-7.79	125.73	130.40
1	N	1444	U	N3-C4-C5	7.79	119.27	114.60
1	N	369	G	N3-C2-N2	7.78	125.35	119.90
1	N	942	G	C8-N9-C4	-7.78	103.29	106.40
1	N	1177	G	O4'-C1'-N9	7.78	114.43	108.20
1	N	1263	C	P-O5'-C5'	7.78	133.35	120.90
1	N	238	A	O4'-C1'-N9	7.78	114.42	108.20
1	N	480	U	C5-C6-N1	7.78	126.59	122.70
1	N	482	A	C5-C6-N1	-7.78	113.81	117.70
1	N	510	A	C4-C5-C6	7.78	120.89	117.00
1	N	1373	G	P-O3'-C3'	7.78	129.03	119.70
1	N	934	C	C3'-C2'-C1'	7.78	107.72	101.50
1	N	1012	A	C6-N1-C2	7.78	123.27	118.60
1	N	1417	G	N3-C2-N2	7.78	125.34	119.90
1	N	647	C	C5-C6-N1	-7.78	117.11	121.00
1	N	1439	G	C5-C6-O6	-7.78	123.94	128.60
1	N	127	G	N1-C2-N3	-7.77	119.24	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	173	U	C2-N3-C4	-7.77	122.34	127.00
1	N	969	A	N1-C2-N3	7.77	133.19	129.30
1	N	1201	A	C8-N9-C4	7.77	108.91	105.80
1	N	1326	U	C5-C6-N1	7.77	126.58	122.70
1	N	497	G	O4'-C1'-N9	7.77	114.42	108.20
1	N	823	C	P-O3'-C3'	7.77	129.02	119.70
1	N	897	C	N3-C4-N4	7.77	123.44	118.00
1	N	1369	C	C5-C6-N1	7.77	124.89	121.00
1	N	262	A	N1-C2-N3	-7.77	125.42	129.30
1	N	429	U	C6-N1-C2	7.77	125.66	121.00
1	N	730	G	N7-C8-N9	7.77	116.98	113.10
1	N	1511	G	N1-C2-N3	-7.77	119.24	123.90
1	N	809	G	N3-C2-N2	7.77	125.34	119.90
1	N	611	C	O4'-C1'-N1	7.76	114.41	108.20
1	N	907	A	N1-C2-N3	7.76	133.18	129.30
1	N	917	G	N7-C8-N9	7.76	116.98	113.10
1	N	232	G	N9-C4-C5	-7.76	102.30	105.40
1	N	469	C	P-O3'-C3'	7.76	129.01	119.70
1	N	481	G	O4'-C4'-C3'	-7.76	96.24	104.00
1	N	609	A	C5-C6-N6	-7.76	117.49	123.70
1	N	970	C	N3-C2-O2	7.76	127.33	121.90
1	N	250	A	N3-C4-C5	-7.76	121.37	126.80
1	N	257	G	N1-C6-O6	7.76	124.56	119.90
1	N	482	A	C6-C5-N7	-7.76	126.87	132.30
1	N	646	G	N9-C4-C5	-7.76	102.30	105.40
1	N	757	U	C1'-O4'-C4'	7.76	116.11	109.90
1	N	1511	G	P-O3'-C3'	-7.76	110.39	119.70
1	N	126	G	O4'-C1'-N9	7.76	114.40	108.20
1	N	282	A	N1-C2-N3	7.76	133.18	129.30
1	N	434	U	C6-N1-C2	-7.76	116.35	121.00
1	N	1098	C	N3-C4-C5	-7.76	118.80	121.90
1	N	183	C	P-O3'-C3'	7.75	129.00	119.70
1	N	629	A	N1-C6-N6	7.75	123.25	118.60
1	N	630	A	C5-C6-N1	-7.75	113.82	117.70
1	N	1171	A	C5-C6-N1	-7.75	113.83	117.70
1	N	1280	A	N1-C2-N3	7.75	133.18	129.30
1	N	533	A	C4-C5-N7	-7.75	106.83	110.70
1	N	534	U	O4'-C1'-N1	7.75	114.40	108.20
1	N	503	C	C5-C6-N1	7.75	124.87	121.00
1	N	621	A	O4'-C1'-N9	7.75	114.40	108.20
1	N	893	C	C2-N1-C1'	7.75	127.32	118.80
1	N	1208	C	N3-C4-C5	-7.75	118.80	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1067	A	O4'-C1'-N9	7.74	114.39	108.20
1	N	1275	A	C4-C5-C6	7.74	120.87	117.00
1	N	1419	G	C6-N1-C2	7.74	129.75	125.10
1	N	1431	A	C5-N7-C8	7.74	107.77	103.90
1	N	295	C	O4'-C1'-N1	7.74	114.39	108.20
1	N	662	U	C5-C4-O4	7.74	130.54	125.90
1	N	1101	A	C5-N7-C8	7.74	107.77	103.90
1	N	1120	C	P-O3'-C3'	-7.74	110.41	119.70
1	N	697	U	N3-C2-O2	7.74	127.62	122.20
1	N	707	U	C4-C5-C6	7.74	124.34	119.70
1	N	66	A	C4-C5-C6	7.74	120.87	117.00
1	N	415	A	P-O5'-C5'	7.74	133.28	120.90
1	N	113	G	O4'-C1'-N9	7.74	114.39	108.20
1	N	211	G	O4'-C1'-N9	7.74	114.39	108.20
1	N	237	G	N1-C6-O6	7.73	124.54	119.90
1	N	323	U	P-O3'-C3'	-7.73	110.42	119.70
1	N	1070	U	N1-C2-O2	-7.73	117.39	122.80
1	N	1450	U	C5-C6-N1	7.73	126.57	122.70
1	N	257	G	N3-C2-N2	7.73	125.31	119.90
1	N	329	A	C8-N9-C4	-7.73	102.71	105.80
1	N	145	G	N9-C1'-C2'	-7.73	103.50	112.00
1	N	1236	A	C3'-C2'-C1'	7.73	107.68	101.50
1	N	472	U	C6-N1-C2	7.72	125.64	121.00
1	N	1100	C	C2-N1-C1'	7.72	127.30	118.80
1	N	1166	G	N3-C2-N2	7.72	125.31	119.90
1	N	721	G	C5-C6-O6	-7.72	123.97	128.60
1	N	1151	A	C5-C6-N1	-7.72	113.84	117.70
1	N	54	C	C2-N3-C4	7.72	123.76	119.90
1	N	787	A	P-O5'-C5'	7.72	133.25	120.90
1	N	419	C	O4'-C1'-N1	7.72	114.37	108.20
1	N	540	G	C5-C6-O6	-7.72	123.97	128.60
1	N	732	C	C5-C4-N4	-7.72	114.80	120.20
1	N	1463	U	N1-C2-O2	-7.72	117.40	122.80
1	N	907	A	C5-C6-N6	-7.72	117.53	123.70
1	N	1063	C	C2-N1-C1'	7.72	127.29	118.80
1	N	1222	G	N3-C4-C5	-7.72	124.74	128.60
1	N	214	C	C5-C6-N1	7.71	124.86	121.00
1	N	282	A	C4-C5-C6	7.71	120.86	117.00
1	N	972	C	C5'-C4'-C3'	-7.71	103.66	116.00
1	N	1401	G	N7-C8-N9	7.71	116.96	113.10
1	N	1432	G	N1-C6-O6	7.71	124.53	119.90
1	N	447	G	C2-N3-C4	-7.71	108.04	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	897	C	N1-C2-N3	7.71	124.60	119.20
1	N	1046	A	P-O5'-C5'	-7.71	108.56	120.90
1	N	1245	C	C6-N1-C2	-7.71	117.22	120.30
1	N	908	A	N3-C4-C5	-7.71	121.40	126.80
1	N	1047	G	C8-N9-C4	7.71	109.48	106.40
1	N	111	G	O4'-C1'-N9	7.71	114.37	108.20
1	N	934	C	C5-C4-N4	-7.71	114.80	120.20
1	N	1104	G	C4-C5-N7	-7.71	107.72	110.80
1	N	1115	U	N3-C4-O4	7.71	124.80	119.40
1	N	1224	U	C1'-O4'-C4'	-7.71	103.73	109.90
1	N	203	G	N1-C6-O6	7.71	124.52	119.90
1	N	992	U	C5'-C4'-C3'	7.71	128.33	116.00
1	N	231	U	C6-N1-C2	-7.71	116.38	121.00
1	N	263	A	C5-C6-N6	-7.70	117.54	123.70
1	N	1296	C	C4'-C3'-C2'	7.70	110.30	102.60
1	N	367	U	N1-C2-N3	-7.70	110.28	114.90
1	N	1270	G	C2-N3-C4	7.70	115.75	111.90
1	N	1397	C	N3-C4-N4	7.70	123.39	118.00
1	N	1423	G	O4'-C1'-N9	7.70	114.36	108.20
1	N	317	U	P-O5'-C5'	7.70	133.22	120.90
1	N	1343	G	C4-C5-C6	7.70	123.42	118.80
1	N	681	A	C5-C6-N6	-7.70	117.54	123.70
1	N	1305	G	N1-C2-N3	-7.70	119.28	123.90
1	N	720	C	C5-C4-N4	-7.69	114.81	120.20
1	N	1285	A	C5-C6-N6	-7.69	117.55	123.70
1	N	1398	A	N7-C8-N9	7.69	117.65	113.80
1	N	410	G	C5-C6-O6	-7.69	123.98	128.60
1	N	666	G	C5'-C4'-C3'	7.69	128.30	116.00
1	N	549	C	N3-C4-N4	7.69	123.38	118.00
1	N	469	C	C6-N1-C2	7.69	123.38	120.30
1	N	924	C	C2-N3-C4	7.69	123.74	119.90
1	N	1227	A	O4'-C1'-N9	7.69	114.35	108.20
1	N	1303	C	P-O5'-C5'	7.69	133.20	120.90
1	N	473	U	P-O5'-C5'	7.68	133.19	120.90
1	N	173	U	P-O3'-C3'	7.68	128.92	119.70
1	N	285	C	C3'-C2'-C1'	-7.68	95.35	101.50
1	N	596	A	N1-C2-N3	7.68	133.14	129.30
1	N	680	C	O4'-C1'-N1	7.68	114.35	108.20
1	N	1267	C	O4'-C1'-N1	7.68	114.35	108.20
1	N	1452	C	C6-N1-C2	-7.68	117.23	120.30
1	N	191	G	C6-C5-N7	-7.68	125.79	130.40
1	N	236	A	O4'-C1'-N9	7.68	114.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	309	A	C6-C5-N7	-7.68	126.92	132.30
1	N	317	U	N3-C4-O4	7.68	124.78	119.40
1	N	467	U	C5'-C4'-C3'	7.68	128.29	116.00
1	N	67	C	C2-N1-C1'	7.68	127.25	118.80
1	N	327	A	C6-C5-N7	-7.68	126.93	132.30
1	N	331	G	N1-C6-O6	7.67	124.50	119.90
1	N	854	U	N1-C2-N3	-7.67	110.30	114.90
1	N	1059	C	C5-C4-N4	-7.67	114.83	120.20
1	N	1469	C	C4-C5-C6	-7.67	113.56	117.40
1	N	966	G	N3-C2-N2	7.67	125.27	119.90
1	N	1185	G	C5-C6-O6	-7.67	124.00	128.60
1	N	1241	G	C6-N1-C2	7.67	129.70	125.10
1	N	915	A	C5-C6-N1	7.67	121.53	117.70
1	N	10	A	N7-C8-N9	-7.67	109.97	113.80
1	N	446	G	N3-C4-N9	-7.67	121.40	126.00
1	N	507	C	N3-C4-N4	7.67	123.37	118.00
1	N	532	A	N3-C4-C5	-7.67	121.43	126.80
1	N	566	G	N9-C4-C5	7.67	108.47	105.40
1	N	909	A	O4'-C1'-N9	7.67	114.33	108.20
1	N	1361	G	N3-C4-C5	-7.67	124.77	128.60
1	N	160	A	C1'-O4'-C4'	-7.66	103.77	109.90
1	N	1042	A	N1-C2-N3	7.66	133.13	129.30
1	N	1173	U	C4'-C3'-C2'	-7.66	94.94	102.60
1	N	796	C	N3-C2-O2	7.66	127.26	121.90
1	N	1454	G	C6-C5-N7	-7.66	125.80	130.40
1	N	325	A	C4-C5-N7	-7.66	106.87	110.70
1	N	326	G	N1-C6-O6	7.66	124.50	119.90
1	N	278	G	P-O3'-C3'	7.66	128.89	119.70
1	N	726	C	C6-N1-C1'	-7.66	111.61	120.80
1	N	1111	A	C4'-C3'-C2'	-7.66	94.94	102.60
1	N	1318	A	C8-N9-C4	-7.66	102.74	105.80
1	N	354	G	C6-C5-N7	-7.65	125.81	130.40
1	N	275	G	O4'-C1'-N9	7.65	114.32	108.20
1	N	382	A	N9-C4-C5	-7.65	102.74	105.80
1	N	1199	U	C2-N3-C4	7.65	131.59	127.00
1	N	1246	A	C6-C5-N7	-7.65	126.94	132.30
1	N	1291	U	P-O5'-C5'	7.65	133.14	120.90
1	N	1343	G	P-O3'-C3'	-7.65	110.52	119.70
1	N	37	U	N3-C2-O2	7.65	127.55	122.20
1	N	322	C	N3-C4-N4	7.65	123.36	118.00
1	N	1058	G	N3-C2-N2	7.65	125.25	119.90
1	N	147	G	N1-C2-N3	-7.65	119.31	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1046	A	N7-C8-N9	-7.65	109.98	113.80
1	N	1372	U	O4'-C1'-N1	7.65	114.32	108.20
1	N	110	C	P-O3'-C3'	7.64	128.87	119.70
1	N	195	A	C8-N9-C4	-7.64	102.74	105.80
1	N	711	G	N7-C8-N9	-7.64	109.28	113.10
1	N	436	C	O4'-C1'-N1	7.64	114.31	108.20
1	N	504	C	N1-C2-O2	7.64	123.49	118.90
1	N	1429	A	N9-C4-C5	7.64	108.86	105.80
1	N	3	A	C4-C5-C6	7.64	120.82	117.00
1	N	543	U	N1-C2-N3	-7.64	110.31	114.90
1	N	754	C	C5-C4-N4	-7.64	114.85	120.20
1	N	874	G	O4'-C1'-N9	7.64	114.31	108.20
1	N	1355	G	C4-C5-C6	7.64	123.39	118.80
1	N	385	C	N3-C4-N4	7.64	123.35	118.00
1	N	498	A	N9-C4-C5	7.64	108.86	105.80
1	N	531	U	C1'-O4'-C4'	-7.64	103.79	109.90
1	N	717	U	O4'-C1'-N1	7.64	114.31	108.20
1	N	1096	C	P-O5'-C5'	7.64	133.12	120.90
1	N	63	C	N3-C4-N4	7.64	123.35	118.00
1	N	144	G	N3-C4-C5	7.64	132.42	128.60
1	N	590	U	C3'-C2'-C1'	-7.64	95.39	101.50
1	N	147	G	N7-C8-N9	-7.63	109.28	113.10
1	N	645	G	N1-C2-N3	-7.63	119.32	123.90
1	N	785	G	O4'-C1'-N9	7.63	114.31	108.20
1	N	950	U	N3-C2-O2	7.63	127.54	122.20
1	N	1396	A	P-O3'-C3'	7.63	128.86	119.70
1	N	663	A	C5-C6-N1	-7.63	113.88	117.70
1	N	1488	G	C8-N9-C4	-7.63	103.35	106.40
1	N	859	G	O4'-C1'-N9	7.63	114.30	108.20
1	N	918	A	C5-C6-N6	-7.63	117.60	123.70
1	N	1134	G	C1'-O4'-C4'	-7.63	103.80	109.90
1	N	1315	U	C5-C6-N1	7.63	126.51	122.70
1	N	85	U	N3-C4-C5	-7.63	110.02	114.60
1	N	151	A	C5-C6-N1	-7.63	113.89	117.70
1	N	887	G	N3-C4-N9	-7.62	121.42	126.00
1	N	345	C	C2-N3-C4	7.62	123.71	119.90
1	N	799	G	N3-C2-N2	7.62	125.24	119.90
1	N	1487	G	C4-C5-C6	7.62	123.37	118.80
1	N	1514	G	O4'-C1'-N9	7.62	114.30	108.20
1	N	909	A	P-O5'-C5'	7.62	133.09	120.90
1	N	446	G	C4'-C3'-C2'	-7.62	94.98	102.60
1	N	809	G	C5-C6-O6	-7.62	124.03	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	858	G	N3-C2-N2	7.62	125.23	119.90
1	N	845	A	N3-C4-C5	-7.61	121.47	126.80
1	N	1091	U	C6-N1-C2	-7.61	116.43	121.00
1	N	1349	A	C4-C5-N7	-7.61	106.89	110.70
1	N	1360	A	O4'-C1'-N9	7.61	114.29	108.20
1	N	1512	U	C5-C6-N1	-7.61	118.89	122.70
1	N	252	U	C5-C6-N1	7.61	126.50	122.70
1	N	1173	U	O4'-C1'-N1	7.61	114.29	108.20
1	N	1482	G	C8-N9-C4	-7.61	103.36	106.40
1	N	426	U	C2'-C3'-O3'	7.61	126.24	109.50
1	N	1155	A	N3-C4-C5	-7.61	121.47	126.80
1	N	268	U	O4'-C1'-N1	7.61	114.28	108.20
1	N	423	G	P-O3'-C3'	7.61	128.83	119.70
1	N	763	G	C4-C5-C6	7.61	123.36	118.80
1	N	807	A	N1-C2-N3	7.61	133.10	129.30
1	N	1129	C	N1-C2-O2	-7.61	114.34	118.90
1	N	1456	A	C5-C6-N6	-7.61	117.62	123.70
1	N	99	C	P-O3'-C3'	7.60	128.82	119.70
1	N	1362	A	C5-C6-N6	-7.60	117.62	123.70
1	N	67	C	N3-C4-N4	7.60	123.32	118.00
1	N	1255	G	N3-C2-N2	7.60	125.22	119.90
1	N	1486	G	C6-C5-N7	-7.60	125.84	130.40
1	N	1523	G	C4-C5-N7	7.60	113.84	110.80
1	N	416	G	P-O5'-C5'	7.60	133.06	120.90
1	N	691	G	N3-C2-N2	7.60	125.22	119.90
1	N	929	G	N1-C6-O6	7.60	124.46	119.90
1	N	521	G	N1-C2-N3	-7.60	119.34	123.90
1	N	451	A	C4-C5-N7	-7.59	106.90	110.70
1	N	1409	C	N1-C2-N3	7.59	124.52	119.20
1	N	330	C	C2-N3-C4	7.59	123.69	119.90
1	N	1173	U	O5'-C5'-C4'	-7.59	97.28	111.70
1	N	79	G	C5-N7-C8	-7.59	100.51	104.30
1	N	496	A	N1-C2-N3	7.59	133.09	129.30
1	N	781	A	C5-C6-N1	-7.59	113.91	117.70
1	N	47	C	C6-N1-C2	-7.59	117.27	120.30
1	N	744	C	C4-C5-C6	-7.59	113.61	117.40
1	N	1271	A	C2-N3-C4	7.59	114.39	110.60
1	N	34	C	N3-C4-C5	-7.58	118.87	121.90
1	N	1326	U	N3-C4-O4	7.58	124.71	119.40
1	N	142	G	N3-C4-C5	-7.58	124.81	128.60
1	N	335	C	C4-C5-C6	7.58	121.19	117.40
1	N	643	C	C6-N1-C2	-7.58	117.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	759	A	C2-N3-C4	-7.58	106.81	110.60
1	N	1334	G	O4'-C1'-N9	7.58	114.27	108.20
1	N	1383	C	O4'-C1'-N1	7.58	114.26	108.20
1	N	591	U	P-O5'-C5'	7.58	133.03	120.90
1	N	725	G	N1-C6-O6	7.58	124.45	119.90
1	N	501	C	O4'-C1'-N1	7.58	114.26	108.20
1	N	1407	C	C5-C6-N1	7.58	124.79	121.00
1	N	165	G	C5-C6-N1	-7.57	107.71	111.50
1	N	1500	A	C5-C6-N1	-7.57	113.91	117.70
1	N	27	G	C2-N3-C4	7.57	115.69	111.90
1	N	599	C	P-O3'-C3'	-7.57	110.62	119.70
1	N	1410	A	C8-N9-C4	-7.57	102.77	105.80
1	N	495	A	C5-C6-N6	-7.57	117.65	123.70
1	N	1169	A	N9-C4-C5	-7.57	102.77	105.80
1	N	1406	U	C2-N3-C4	-7.57	122.46	127.00
1	N	823	C	C2-N3-C4	-7.57	116.12	119.90
1	N	933	G	O4'-C1'-N9	7.57	114.25	108.20
1	N	1417	G	C4-N9-C1'	7.56	136.33	126.50
1	N	1519	A	C5-N7-C8	7.56	107.68	103.90
1	N	634	C	N3-C4-C5	-7.56	118.88	121.90
1	N	1442	G	C6-C5-N7	-7.56	125.86	130.40
1	N	256	U	N1-C2-N3	-7.56	110.36	114.90
1	N	298	A	C2-N3-C4	7.56	114.38	110.60
1	N	49	U	P-O3'-C3'	-7.56	110.63	119.70
1	N	541	G	C4'-C3'-C2'	-7.56	95.04	102.60
1	N	1502	A	P-O3'-C3'	7.56	128.77	119.70
1	N	696	A	C5-N7-C8	7.56	107.68	103.90
1	N	1289	A	N1-C6-N6	7.56	123.13	118.60
1	N	169	C	C6-N1-C2	-7.55	117.28	120.30
1	N	412	A	C4'-C3'-C2'	7.55	110.16	102.60
1	N	475	C	P-O3'-C3'	7.55	128.76	119.70
1	N	607	A	C8-N9-C4	-7.55	102.78	105.80
1	N	889	A	C5-N7-C8	7.55	107.68	103.90
1	N	959	A	C1'-O4'-C4'	7.55	115.94	109.90
1	N	1185	G	N9-C4-C5	-7.55	102.38	105.40
1	N	36	C	N1-C2-O2	7.55	123.43	118.90
1	N	107	G	P-O5'-C5'	-7.55	108.82	120.90
1	N	622	A	O4'-C1'-N9	7.55	114.24	108.20
1	N	664	G	C5-C6-O6	-7.55	124.07	128.60
1	N	1434	A	C8-N9-C4	-7.55	102.78	105.80
1	N	222	C	C5-C4-N4	-7.55	114.92	120.20
1	N	245	U	C5-C6-N1	7.55	126.47	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	587	G	C5-N7-C8	-7.55	100.53	104.30
1	N	954	G	C4-C5-N7	7.55	113.82	110.80
1	N	66	A	C6-C5-N7	-7.55	127.02	132.30
1	N	100	G	N1-C2-N3	-7.55	119.37	123.90
1	N	662	U	N3-C2-O2	7.55	127.48	122.20
1	N	1060	U	N3-C2-O2	7.55	127.48	122.20
1	N	1440	U	P-O3'-C3'	-7.55	110.64	119.70
1	N	642	A	O4'-C1'-N9	7.54	114.23	108.20
1	N	930	C	N3-C4-N4	7.54	123.28	118.00
1	N	369	G	N1-C2-N3	-7.54	119.38	123.90
1	N	413	G	N1-C2-N3	-7.54	119.38	123.90
1	N	835	U	C5-C6-N1	-7.54	118.93	122.70
1	N	1261	A	N1-C6-N6	7.54	123.12	118.60
1	N	914	A	C4-C5-C6	7.54	120.77	117.00
1	N	910	C	P-O5'-C5'	7.54	132.96	120.90
1	N	935	A	C4-C5-N7	-7.54	106.93	110.70
1	N	468	A	C8-N9-C4	7.54	108.81	105.80
1	N	849	G	N3-C2-N2	7.54	125.18	119.90
1	N	270	A	P-O3'-C3'	7.54	128.74	119.70
1	N	439	U	O4'-C1'-N1	7.54	114.23	108.20
1	N	679	C	N3-C4-N4	7.54	123.28	118.00
1	N	730	G	O4'-C1'-N9	7.54	114.23	108.20
1	N	1022	A	C6-C5-N7	-7.54	127.03	132.30
1	N	790	A	C4'-C3'-C2'	-7.53	95.07	102.60
1	N	1223	C	C5'-C4'-O4'	7.53	118.14	109.10
1	N	1260	G	N1-C2-N2	-7.53	109.42	116.20
1	N	955	U	C5-C4-O4	7.53	130.42	125.90
1	N	1329	A	C6-C5-N7	-7.53	127.03	132.30
1	N	551	U	O4'-C1'-N1	7.53	114.22	108.20
1	N	4	U	C5-C4-O4	7.53	130.41	125.90
1	N	740	U	C2-N3-C4	7.52	131.51	127.00
1	N	1045	C	C2-N3-C4	7.52	123.66	119.90
1	N	1493	A	P-O3'-C3'	7.52	128.73	119.70
1	N	137	U	N3-C4-O4	7.52	124.67	119.40
1	N	407	U	P-O5'-C5'	7.52	132.93	120.90
1	N	1198	G	C5-C6-N1	-7.52	107.74	111.50
1	N	911	U	N1-C2-O2	-7.52	117.54	122.80
1	N	974	A	N3-C4-C5	-7.52	121.54	126.80
1	N	1043	G	C5-C6-O6	-7.52	124.09	128.60
1	N	1138	G	C4-C5-C6	7.52	123.31	118.80
1	N	329	A	C5-C6-N1	-7.52	113.94	117.70
1	N	676	A	C5-C6-N1	-7.52	113.94	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	710	G	C6-C5-N7	-7.52	125.89	130.40
1	N	872	A	C6-N1-C2	7.51	123.11	118.60
1	N	1387	G	C8-N9-C4	-7.51	103.39	106.40
1	N	1040	U	P-O3'-C3'	7.51	128.71	119.70
1	N	1459	G	N1-C2-N3	-7.51	119.39	123.90
1	N	1472	U	C5-C6-N1	-7.51	118.95	122.70
1	N	609	A	C2-N3-C4	-7.51	106.85	110.60
1	N	291	U	N3-C4-O4	7.51	124.66	119.40
1	N	354	G	N1-C2-N3	-7.51	119.40	123.90
1	N	88	U	C2-N3-C4	-7.50	122.50	127.00
1	N	994	A	C5-C6-N6	-7.50	117.70	123.70
1	N	157	U	C5-C6-N1	7.50	126.45	122.70
1	N	302	G	C5-C6-N1	-7.50	107.75	111.50
1	N	500	G	N9-C1'-C2'	-7.50	103.75	112.00
1	N	1136	C	P-O5'-C5'	-7.50	108.90	120.90
1	N	1342	C	C4'-C3'-C2'	-7.50	95.10	102.60
1	N	297	G	O4'-C1'-N9	7.50	114.20	108.20
1	N	554	A	N7-C8-N9	-7.50	110.05	113.80
1	N	884	U	O4'-C1'-N1	7.50	114.20	108.20
1	N	1493	A	N1-C2-N3	7.50	133.05	129.30
1	N	633	G	O4'-C1'-N9	7.50	114.20	108.20
1	N	1085	U	P-O3'-C3'	-7.50	110.70	119.70
1	N	271	C	P-O5'-C5'	7.50	132.89	120.90
1	N	443	C	O4'-C1'-N1	7.50	114.20	108.20
1	N	950	U	C5-C4-O4	7.50	130.40	125.90
1	N	145	G	C4'-C3'-C2'	-7.49	95.11	102.60
1	N	340	U	O4'-C1'-N1	7.49	114.19	108.20
1	N	784	A	C5-C6-N1	-7.49	113.96	117.70
1	N	1101	A	C4'-C3'-C2'	7.49	110.09	102.60
1	N	131	A	C6-N1-C2	7.49	123.09	118.60
1	N	168	G	N7-C8-N9	-7.49	109.36	113.10
1	N	378	G	N3-C4-C5	7.49	132.34	128.60
1	N	1021	A	N1-C6-N6	7.49	123.09	118.60
1	N	1175	G	C3'-C2'-C1'	-7.49	95.51	101.50
1	N	39	G	C6-C5-N7	-7.48	125.91	130.40
1	N	1074	G	C8-N9-C4	-7.48	103.41	106.40
1	N	1321	U	N1-C2-N3	-7.48	110.41	114.90
1	N	1369	C	C2-N3-C4	7.48	123.64	119.90
1	N	386	C	O4'-C1'-N1	7.48	114.19	108.20
1	N	759	A	C4-C5-C6	7.48	120.74	117.00
1	N	760	G	P-O5'-C5'	7.48	132.87	120.90
1	N	1281	C	N3-C4-C5	-7.48	118.91	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1379	G	N1-C6-O6	7.48	124.39	119.90
1	N	736	C	C4'-C3'-C2'	-7.48	95.12	102.60
1	N	767	A	O4'-C1'-N9	7.48	114.18	108.20
1	N	1091	U	N1-C2-N3	7.48	119.39	114.90
1	N	1138	G	C6-C5-N7	-7.48	125.91	130.40
1	N	1213	A	C4-C5-C6	7.48	120.74	117.00
1	N	1424	U	N1-C2-N3	-7.48	110.41	114.90
1	N	1328	C	O4'-C1'-N1	7.48	114.18	108.20
1	N	198	G	C6-N1-C2	7.47	129.59	125.10
1	N	254	G	N1-C2-N3	-7.47	119.42	123.90
1	N	524	G	N1-C6-O6	7.47	124.39	119.90
1	N	674	G	C8-N9-C4	7.47	109.39	106.40
1	N	772	U	C2-N3-C4	-7.47	122.52	127.00
1	N	804	U	C2-N1-C1'	-7.47	108.73	117.70
1	N	1006	G	C6-C5-N7	-7.47	125.92	130.40
1	N	1159	U	N1-C2-O2	-7.47	117.57	122.80
1	N	802	A	P-O3'-C3'	7.47	128.67	119.70
1	N	1129	C	C6-N1-C1'	-7.47	111.83	120.80
1	N	1486	G	N7-C8-N9	-7.47	109.36	113.10
1	N	731	G	N7-C8-N9	7.47	116.83	113.10
1	N	1197	A	N1-C2-N3	-7.47	125.56	129.30
1	N	789	U	C6-N1-C2	-7.47	116.52	121.00
1	N	917	G	C6-C5-N7	-7.47	125.92	130.40
1	N	277	C	N1-C1'-C2'	-7.47	103.79	112.00
1	N	279	A	C5-C6-N1	-7.47	113.97	117.70
1	N	624	C	C2-N3-C4	7.47	123.63	119.90
1	N	1223	C	C1'-O4'-C4'	-7.47	103.93	109.90
1	N	1334	G	C6-N1-C2	7.47	129.58	125.10
1	N	1416	G	O4'-C1'-N9	7.47	114.17	108.20
1	N	132	C	O4'-C1'-N1	7.46	114.17	108.20
1	N	572	A	P-O3'-C3'	7.46	128.66	119.70
1	N	1337	G	C5-C6-O6	-7.46	124.12	128.60
1	N	1375	A	O4'-C1'-N9	7.46	114.17	108.20
1	N	647	C	C5-C4-N4	-7.46	114.98	120.20
1	N	1211	U	N3-C2-O2	7.46	127.42	122.20
1	N	47	C	C5'-C4'-O4'	-7.46	100.15	109.10
1	N	50	A	C3'-C2'-C1'	-7.46	95.53	101.50
1	N	271	C	N3-C4-N4	7.46	123.22	118.00
1	N	349	A	C5-N7-C8	-7.46	100.17	103.90
1	N	1388	C	C5-C4-N4	-7.46	114.98	120.20
1	N	1468	A	C8-N9-C4	-7.46	102.82	105.80
1	N	1482	G	C4-C5-N7	7.46	113.78	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1363	A	N9-C4-C5	7.46	108.78	105.80
1	N	53	A	C8-N9-C4	-7.46	102.82	105.80
1	N	498	A	P-O3'-C3'	-7.46	110.75	119.70
1	N	903	G	C8-N9-C4	-7.46	103.42	106.40
1	N	324	G	O4'-C1'-N9	7.45	114.16	108.20
1	N	1287	A	N7-C8-N9	-7.45	110.07	113.80
1	N	764	C	P-O3'-C3'	-7.45	110.76	119.70
1	N	216	U	C4'-C3'-C2'	-7.45	95.15	102.60
1	N	776	G	C1'-O4'-C4'	-7.45	103.94	109.90
1	N	893	C	O4'-C1'-N1	7.45	114.16	108.20
1	N	1120	C	O4'-C1'-N1	7.45	114.16	108.20
1	N	1257	A	C4-C5-C6	7.45	120.72	117.00
1	N	1276	G	N1-C2-N3	-7.45	119.43	123.90
1	N	1373	G	O4'-C1'-N9	7.45	114.16	108.20
1	N	174	A	C6-C5-N7	-7.45	127.09	132.30
1	N	932	C	O4'-C1'-N1	7.45	114.16	108.20
1	N	100	G	C4-C5-C6	7.45	123.27	118.80
1	N	312	C	O4'-C1'-N1	7.45	114.16	108.20
1	N	432	A	N1-C6-N6	7.45	123.07	118.60
1	N	1472	U	O4'-C1'-N1	7.45	114.16	108.20
1	N	273	U	C6-N1-C2	-7.44	116.53	121.00
1	N	436	C	N3-C4-C5	-7.44	118.92	121.90
1	N	979	C	N3-C4-N4	7.44	123.21	118.00
1	N	980	C	N3-C4-C5	-7.44	118.92	121.90
1	N	1309	G	C2-N3-C4	7.44	115.62	111.90
1	N	314	C	N1-C2-N3	-7.44	113.99	119.20
1	N	701	U	C1'-O4'-C4'	7.44	115.85	109.90
1	N	1207	G	N1-C6-O6	7.44	124.36	119.90
1	N	1334	G	P-O3'-C3'	7.44	128.63	119.70
1	N	1517	G	C5-N7-C8	7.44	108.02	104.30
1	N	666	G	P-O3'-C3'	-7.44	110.78	119.70
1	N	1081	A	C5-C6-N6	-7.44	117.75	123.70
1	N	577	G	C4-C5-C6	7.44	123.26	118.80
1	N	751	U	N3-C4-C5	7.44	119.06	114.60
1	N	829	G	N1-C2-N3	-7.44	119.44	123.90
1	N	385	C	C5-C6-N1	7.43	124.72	121.00
1	N	1520	C	P-O5'-C5'	7.43	132.79	120.90
1	N	414	A	C6-C5-N7	-7.43	127.10	132.30
1	N	304	U	C5-C6-N1	7.43	126.41	122.70
1	N	896	C	O4'-C1'-N1	7.43	114.14	108.20
1	N	1129	C	P-O3'-C3'	7.43	128.62	119.70
1	N	1180	A	C8-N9-C4	-7.43	102.83	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	237	G	N9-C4-C5	-7.43	102.43	105.40
1	N	655	A	C4-C5-N7	-7.43	106.99	110.70
1	N	711	G	C4-N9-C1'	-7.42	116.85	126.50
1	N	999	C	C6-N1-C2	-7.42	117.33	120.30
1	N	1392	G	C5-C6-O6	-7.42	124.14	128.60
1	N	1428	A	N1-C6-N6	7.42	123.06	118.60
1	N	513	C	C5-C4-N4	-7.42	115.00	120.20
1	N	734	G	N1-C6-O6	7.42	124.35	119.90
1	N	1254	A	C5-C6-N6	-7.42	117.76	123.70
1	N	1239	A	C2-N3-C4	-7.42	106.89	110.60
1	N	1367	C	N3-C4-N4	7.42	123.19	118.00
1	N	1437	A	C4-C5-N7	-7.42	106.99	110.70
1	N	51	A	N9-C4-C5	7.42	108.77	105.80
1	N	378	G	N3-C4-N9	-7.42	121.55	126.00
1	N	777	A	N1-C2-N3	7.42	133.01	129.30
1	N	205	A	C5-N7-C8	7.42	107.61	103.90
1	N	1274	A	P-O5'-C5'	7.41	132.76	120.90
1	N	518	C	N3-C4-N4	7.41	123.19	118.00
1	N	227	G	C5-C6-O6	-7.41	124.15	128.60
1	N	314	C	N3-C4-C5	-7.41	118.94	121.90
1	N	360	G	C4-C5-N7	7.41	113.76	110.80
1	N	1528	U	C2-N3-C4	7.41	131.44	127.00
1	N	374	A	C5'-C4'-O4'	-7.41	100.21	109.10
1	N	956	U	N1-C2-O2	-7.41	117.61	122.80
1	N	617	G	C4-C5-C6	7.40	123.24	118.80
1	N	38	G	C6-C5-N7	-7.40	125.96	130.40
1	N	183	C	N3-C4-N4	7.40	123.18	118.00
1	N	916	U	O4'-C1'-N1	7.40	114.12	108.20
1	N	889	A	C6-N1-C2	7.40	123.04	118.60
1	N	1299	A	N1-C2-N3	7.40	133.00	129.30
1	N	597	G	N9-C4-C5	-7.40	102.44	105.40
1	N	763	G	C5-C6-N1	-7.40	107.80	111.50
1	N	873	A	C5-N7-C8	7.40	107.60	103.90
1	N	726	C	P-O5'-C5'	-7.39	109.07	120.90
1	N	718	A	N9-C4-C5	-7.39	102.84	105.80
1	N	973	G	C4'-C3'-C2'	-7.39	95.21	102.60
1	N	1174	G	C8-N9-C4	7.39	109.36	106.40
1	N	384	G	C5-C6-O6	-7.39	124.17	128.60
1	N	873	A	C6-N1-C2	7.39	123.03	118.60
1	N	497	G	C3'-C2'-C1'	7.39	107.41	101.50
1	N	817	C	C3'-C2'-C1'	7.39	107.41	101.50
1	N	1242	G	C2-N3-C4	7.39	115.59	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1332	A	C6-C5-N7	-7.39	127.13	132.30
1	N	541	G	O4'-C1'-N9	7.38	114.11	108.20
1	N	561	U	O4'-C1'-N1	7.38	114.11	108.20
1	N	1067	A	C5-C6-N1	-7.38	114.01	117.70
1	N	243	A	O4'-C1'-N9	7.38	114.11	108.20
1	N	326	G	O4'-C1'-N9	7.38	114.11	108.20
1	N	616	G	C6-C5-N7	-7.38	125.97	130.40
1	N	1226	C	O4'-C1'-N1	7.38	114.11	108.20
1	N	668	G	N1-C2-N3	-7.38	119.47	123.90
1	N	924	C	C1'-O4'-C4'	7.38	115.80	109.90
1	N	1009	U	N3-C2-O2	7.38	127.36	122.20
1	N	341	C	N1-C2-N3	-7.38	114.04	119.20
1	N	874	G	C4-C5-N7	7.38	113.75	110.80
1	N	902	G	C6-C5-N7	-7.38	125.97	130.40
1	N	463	U	O4'-C1'-N1	7.38	114.10	108.20
1	N	951	G	N1-C6-O6	7.38	124.33	119.90
1	N	1212	U	P-O3'-C3'	-7.38	110.85	119.70
1	N	1216	A	C2-N3-C4	-7.38	106.91	110.60
1	N	131	A	C2-N3-C4	7.37	114.29	110.60
1	N	227	G	C4-C5-C6	7.37	123.22	118.80
1	N	865	A	C5-C6-N6	-7.37	117.80	123.70
1	N	962	C	O4'-C1'-N1	7.37	114.10	108.20
1	N	1086	U	C5-C4-O4	-7.37	121.48	125.90
1	N	1220	G	C5-C6-O6	-7.37	124.17	128.60
1	N	162	A	C6-C5-N7	-7.37	127.14	132.30
1	N	1185	G	N1-C6-O6	7.37	124.32	119.90
1	N	1511	G	C5-C6-O6	-7.37	124.18	128.60
1	N	918	A	C6-C5-N7	-7.37	127.14	132.30
1	N	1241	G	C6-C5-N7	-7.37	125.98	130.40
1	N	19	A	N1-C6-N6	7.37	123.02	118.60
1	N	769	G	C6-N1-C2	7.37	129.52	125.10
1	N	1332	A	C8-N9-C4	-7.37	102.85	105.80
1	N	13	U	C5-C4-O4	-7.37	121.48	125.90
1	N	429	U	C5-C6-N1	-7.37	119.02	122.70
1	N	409	U	P-O3'-C3'	7.36	128.54	119.70
1	N	617	G	N1-C2-N3	-7.36	119.48	123.90
1	N	796	C	C2-N3-C4	7.36	123.58	119.90
1	N	1353	G	C5-C6-O6	-7.36	124.18	128.60
1	N	470	C	C3'-C2'-C1'	-7.36	95.61	101.50
1	N	527	G	C6-C5-N7	-7.36	125.98	130.40
1	N	177	G	O4'-C1'-N9	7.36	114.09	108.20
1	N	700	G	N3-C2-N2	7.36	125.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	725	G	C8-N9-C4	-7.36	103.46	106.40
1	N	220	G	C8-N9-C1'	-7.36	117.43	127.00
1	N	655	A	C5-C6-N6	-7.36	117.81	123.70
1	N	1234	C	C5-C6-N1	7.36	124.68	121.00
1	N	528	C	N3-C4-C5	-7.36	118.96	121.90
1	N	1523	G	C5-N7-C8	-7.36	100.62	104.30
1	N	333	U	O4'-C1'-N1	7.36	114.08	108.20
1	N	360	G	N1-C2-N3	-7.36	119.49	123.90
1	N	1483	A	N9-C4-C5	7.36	108.74	105.80
1	N	1484	C	N3-C4-N4	7.36	123.15	118.00
1	N	861	G	N1-C6-O6	7.35	124.31	119.90
1	N	1521	C	N3-C4-N4	7.35	123.15	118.00
1	N	1041	G	C5-N7-C8	-7.35	100.62	104.30
1	N	1422	G	N1-C2-N2	7.35	122.82	116.20
1	N	1439	G	N1-C6-O6	7.35	124.31	119.90
1	N	864	A	C5-C6-N6	-7.35	117.82	123.70
1	N	1159	U	C5-C6-N1	-7.35	119.03	122.70
1	N	1207	G	C5-C6-N1	-7.35	107.83	111.50
1	N	1336	C	O4'-C1'-N1	7.35	114.08	108.20
1	N	1395	C	O4'-C4'-C3'	-7.35	96.65	104.00
1	N	1469	C	C5-C6-N1	7.35	124.67	121.00
1	N	746	A	O4'-C1'-N9	7.35	114.08	108.20
1	N	1091	U	O4'-C1'-N1	7.35	114.08	108.20
1	N	1289	A	C8-N9-C4	-7.35	102.86	105.80
1	N	487	A	C5-C6-N1	-7.35	114.03	117.70
1	N	290	C	O4'-C1'-N1	7.34	114.08	108.20
1	N	1226	C	C1'-O4'-C4'	7.34	115.77	109.90
1	N	1516	G	N9-C4-C5	-7.34	102.46	105.40
1	N	900	A	N1-C6-N6	7.34	123.00	118.60
1	N	1021	A	C5-C6-N6	-7.34	117.83	123.70
1	N	784	A	N3-C4-N9	7.34	133.27	127.40
1	N	805	C	C6-N1-C2	-7.34	117.36	120.30
1	N	1361	G	C4-C5-C6	7.34	123.20	118.80
1	N	662	U	C2-N3-C4	7.34	131.40	127.00
1	N	156	C	O4'-C1'-C2'	-7.34	98.46	105.80
1	N	307	C	C4-C5-C6	7.34	121.07	117.40
1	N	1369	C	N3-C2-O2	7.34	127.04	121.90
1	N	1469	C	P-O5'-C5'	-7.34	109.16	120.90
1	N	100	G	N3-C2-N2	7.33	125.03	119.90
1	N	151	A	C4-C5-N7	-7.33	107.03	110.70
1	N	532	A	P-O3'-C3'	7.33	128.50	119.70
1	N	1466	C	C4-C5-C6	7.33	121.07	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1468	A	N7-C8-N9	7.33	117.47	113.80
1	N	700	G	C6-C5-N7	-7.33	126.00	130.40
1	N	1115	U	N3-C2-O2	7.33	127.33	122.20
1	N	1280	A	C5-N7-C8	7.33	107.56	103.90
1	N	459	A	C2-N3-C4	-7.33	106.94	110.60
1	N	564	C	C2-N1-C1'	7.33	126.86	118.80
1	N	124	C	C2-N3-C4	7.33	123.56	119.90
1	N	1304	G	N1-C2-N3	-7.33	119.50	123.90
1	N	49	U	N1-C2-N3	-7.33	110.50	114.90
1	N	99	C	C5-C6-N1	-7.33	117.34	121.00
1	N	1417	G	C8-N9-C1'	-7.33	117.48	127.00
1	N	44	A	C6-N1-C2	7.32	122.99	118.60
1	N	510	A	C4-C5-N7	-7.32	107.04	110.70
1	N	613	C	N3-C4-N4	7.32	123.13	118.00
1	N	915	A	C6-C5-N7	7.32	137.43	132.30
1	N	1141	C	N3-C4-C5	-7.32	118.97	121.90
1	N	1250	A	P-O5'-C5'	7.32	132.62	120.90
1	N	141	G	N1-C2-N3	-7.32	119.51	123.90
1	N	867	G	O4'-C1'-N9	7.32	114.06	108.20
1	N	976	G	C8-N9-C4	-7.32	103.47	106.40
1	N	347	G	C6-C5-N7	-7.32	126.01	130.40
1	N	349	A	C6-C5-N7	-7.32	127.18	132.30
1	N	402	G	O4'-C1'-N9	7.32	114.05	108.20
1	N	1034	G	P-O3'-C3'	7.32	128.48	119.70
1	N	430	A	C5-C6-N1	-7.32	114.04	117.70
1	N	494	G	C5'-C4'-C3'	-7.32	104.29	116.00
1	N	965	U	O4'-C1'-N1	7.32	114.05	108.20
1	N	1060	U	O4'-C1'-N1	7.32	114.05	108.20
1	N	1138	G	C5'-C4'-O4'	7.32	117.88	109.10
1	N	232	G	N3-C4-N9	7.31	130.39	126.00
1	N	798	U	C5'-C4'-C3'	7.31	127.70	116.00
1	N	1011	C	P-O5'-C5'	7.31	132.60	120.90
1	N	302	G	C6-C5-N7	-7.31	126.01	130.40
1	N	78	A	N9-C4-C5	-7.31	102.88	105.80
1	N	295	C	N1-C2-O2	-7.31	114.51	118.90
1	N	343	U	O4'-C1'-N1	7.31	114.05	108.20
1	N	517	G	N1-C2-N3	-7.31	119.51	123.90
1	N	1222	G	O4'-C1'-N9	7.31	114.05	108.20
1	N	64	G	O4'-C1'-N9	7.31	114.05	108.20
1	N	140	U	C5-C4-O4	-7.31	121.52	125.90
1	N	145	G	P-O3'-C3'	-7.31	110.93	119.70
1	N	890	G	C1'-O4'-C4'	-7.31	104.05	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	932	C	C2-N3-C4	7.31	123.55	119.90
1	N	870	U	C2-N3-C4	-7.31	122.62	127.00
1	N	220	G	C5-C6-N1	-7.30	107.85	111.50
1	N	489	C	C6-N1-C2	-7.30	117.38	120.30
1	N	625	U	N3-C4-O4	7.30	124.51	119.40
1	N	898	G	C5-N7-C8	7.30	107.95	104.30
1	N	1119	C	C5-C6-N1	7.30	124.65	121.00
1	N	1472	U	C2-N1-C1'	-7.30	108.94	117.70
1	N	179	A	C8-N9-C4	-7.30	102.88	105.80
1	N	1027	C	C5'-C4'-O4'	7.30	117.86	109.10
1	N	36	C	C6-N1-C2	-7.30	117.38	120.30
1	N	352	C	N3-C4-C5	-7.30	118.98	121.90
1	N	764	C	C2-N3-C4	-7.30	116.25	119.90
1	N	848	C	C5-C4-N4	-7.30	115.09	120.20
1	N	1468	A	C5-C6-N6	-7.30	117.86	123.70
1	N	248	C	C2-N3-C4	7.30	123.55	119.90
1	N	1114	C	C5'-C4'-O4'	7.30	117.86	109.10
1	N	999	C	N3-C4-N4	7.30	123.11	118.00
1	N	1044	A	N1-C2-N3	7.30	132.95	129.30
1	N	965	U	C2-N3-C4	-7.29	122.62	127.00
1	N	606	G	C4-C5-C6	7.29	123.18	118.80
1	N	322	C	N1-C2-N3	-7.29	114.10	119.20
1	N	1282	C	C6-N1-C1'	-7.29	112.05	120.80
1	N	998	C	N3-C4-N4	7.29	123.10	118.00
1	N	155	A	C5-C6-N6	-7.29	117.87	123.70
1	N	1126	U	O5'-P-OP2	-7.29	99.14	105.70
1	N	46	G	C4-C5-N7	-7.29	107.89	110.80
1	N	242	G	O4'-C1'-N9	7.29	114.03	108.20
1	N	401	C	N3-C4-N4	7.29	123.10	118.00
1	N	758	C	N3-C2-O2	-7.29	116.80	121.90
1	N	940	C	C5-C6-N1	7.29	124.64	121.00
1	N	967	C	C4-C5-C6	7.29	121.04	117.40
1	N	429	U	O4'-C1'-N1	7.29	114.03	108.20
1	N	569	C	N3-C4-C5	-7.29	118.99	121.90
1	N	1433	A	C2-N3-C4	-7.29	106.96	110.60
1	N	885	G	C6-C5-N7	-7.28	126.03	130.40
1	N	901	A	C5-N7-C8	7.28	107.54	103.90
1	N	1515	G	N3-C2-N2	7.28	125.00	119.90
1	N	90	C	N3-C4-C5	-7.28	118.99	121.90
1	N	427	U	N3-C4-C5	7.28	118.97	114.60
1	N	538	G	N9-C4-C5	-7.28	102.49	105.40
1	N	1233	G	C6-C5-N7	-7.28	126.03	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	2	A	C6-N1-C2	-7.28	114.23	118.60
1	N	146	G	C4-C5-N7	-7.28	107.89	110.80
1	N	321	A	N9-C4-C5	-7.28	102.89	105.80
1	N	641	U	N3-C2-O2	7.28	127.29	122.20
1	N	678	U	O4'-C1'-N1	7.28	114.02	108.20
1	N	829	G	C8-N9-C4	-7.28	103.49	106.40
1	N	1225	A	N1-C2-N3	-7.28	125.66	129.30
1	N	1263	C	C4-C5-C6	7.28	121.04	117.40
1	N	149	A	C4-C5-C6	7.28	120.64	117.00
1	N	195	A	N9-C4-C5	7.28	108.71	105.80
1	N	289	G	N1-C2-N2	7.28	122.75	116.20
1	N	1196	A	N1-C6-N6	7.28	122.97	118.60
1	N	541	G	N3-C4-C5	7.27	132.24	128.60
1	N	993	G	N3-C4-C5	-7.27	124.96	128.60
1	N	43	C	O4'-C1'-N1	7.27	114.02	108.20
1	N	635	A	C1'-O4'-C4'	-7.27	104.08	109.90
1	N	163	C	C6-N1-C2	7.27	123.21	120.30
1	N	447	G	P-O3'-C3'	7.27	128.42	119.70
1	N	801	U	C5'-C4'-C3'	7.27	127.63	116.00
1	N	1147	C	C5-C4-N4	-7.27	115.11	120.20
1	N	247	G	C4-C5-N7	7.27	113.71	110.80
1	N	306	A	O4'-C1'-N9	7.27	114.01	108.20
1	N	432	A	C5'-C4'-O4'	7.27	117.82	109.10
1	N	494	G	N3-C4-N9	-7.27	121.64	126.00
1	N	962	C	N3-C2-O2	7.27	126.99	121.90
1	N	1061	G	C6-C5-N7	-7.27	126.04	130.40
1	N	116	A	C4-C5-C6	7.26	120.63	117.00
1	N	1329	A	N7-C8-N9	-7.26	110.17	113.80
1	N	1362	A	C4-C5-C6	7.26	120.63	117.00
1	N	104	G	N1-C6-O6	7.26	124.26	119.90
1	N	401	C	P-O3'-C3'	-7.26	110.98	119.70
1	N	950	U	N1-C2-O2	-7.26	117.72	122.80
1	N	566	G	O4'-C1'-N9	7.26	114.01	108.20
1	N	1247	U	N3-C4-C5	-7.26	110.24	114.60
1	N	1282	C	C2-N3-C4	7.26	123.53	119.90
1	N	98	A	N1-C2-N3	7.26	132.93	129.30
1	N	255	G	O4'-C4'-C3'	-7.26	96.74	104.00
1	N	1017	U	N3-C4-O4	7.26	124.48	119.40
1	N	1097	C	OP1-P-OP2	-7.26	108.71	119.60
1	N	90	C	O4'-C4'-C3'	7.26	111.91	106.10
1	N	371	A	O4'-C1'-N9	7.26	114.01	108.20
1	N	714	G	C4-C5-C6	7.26	123.16	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	344	A	C8-N9-C4	7.26	108.70	105.80
1	N	625	U	O4'-C1'-N1	7.26	114.01	108.20
1	N	710	G	C4-C5-C6	7.26	123.15	118.80
1	N	1031	C	C2-N3-C4	7.25	123.53	119.90
1	N	232	G	C5-C6-O6	-7.25	124.25	128.60
1	N	585	G	N1-C2-N3	-7.25	119.55	123.90
1	N	427	U	C5-C4-O4	-7.25	121.55	125.90
1	N	1025	U	O4'-C1'-N1	7.25	114.00	108.20
1	N	1152	A	C5-N7-C8	7.25	107.53	103.90
1	N	1478	U	C6-N1-C2	-7.25	116.65	121.00
1	N	1186	G	N9-C4-C5	-7.25	102.50	105.40
1	N	1498	U	P-O3'-C3'	7.25	128.40	119.70
1	N	38	G	C5-C6-O6	-7.25	124.25	128.60
1	N	46	G	N1-C6-O6	7.25	124.25	119.90
1	N	725	G	C2-N3-C4	-7.25	108.28	111.90
1	N	1219	A	C5-C6-N6	-7.25	117.90	123.70
1	N	163	C	O4'-C4'-C3'	-7.25	96.75	104.00
1	N	1013	G	N3-C4-C5	-7.25	124.98	128.60
1	N	325	A	C5'-C4'-C3'	7.25	127.59	116.00
1	N	1414	U	N1-C2-O2	-7.25	117.73	122.80
1	N	998	C	C4-C5-C6	7.24	121.02	117.40
1	N	61	G	C6-C5-N7	7.24	134.75	130.40
1	N	81	A	N1-C6-N6	7.24	122.94	118.60
1	N	484	G	C4-C5-C6	7.24	123.14	118.80
1	N	671	G	C3'-C2'-C1'	-7.24	95.71	101.50
1	N	1307	U	N3-C4-C5	-7.24	110.25	114.60
1	N	273	U	C2-N3-C4	-7.24	122.66	127.00
1	N	371	A	C4-C5-N7	-7.24	107.08	110.70
1	N	662	U	N1-C2-N3	-7.24	110.56	114.90
1	N	1158	C	C5-C4-N4	-7.24	115.13	120.20
1	N	170	U	O4'-C1'-N1	7.24	113.99	108.20
1	N	1313	U	N3-C4-O4	7.24	124.47	119.40
1	N	681	A	N9-C4-C5	7.24	108.69	105.80
1	N	1492	A	C5-C6-N6	-7.24	117.91	123.70
1	N	265	G	C6-N1-C2	-7.24	120.76	125.10
1	N	535	A	C6-C5-N7	-7.24	127.23	132.30
1	N	637	C	C5-C4-N4	-7.24	115.14	120.20
1	N	969	A	C8-N9-C4	-7.23	102.91	105.80
1	N	726	C	N1-C2-N3	-7.23	114.14	119.20
1	N	909	A	N9-C4-C5	7.23	108.69	105.80
1	N	1058	G	N1-C6-O6	7.23	124.24	119.90
1	N	1122	U	O4'-C1'-N1	7.23	113.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1422	G	C5-C6-O6	-7.23	124.26	128.60
1	N	28	A	C6-N1-C2	7.23	122.94	118.60
1	N	412	A	C4-C5-N7	-7.23	107.08	110.70
1	N	1136	C	N3-C4-N4	7.23	123.06	118.00
1	N	1157	A	C2-N3-C4	-7.23	106.98	110.60
1	N	1518	A	C3'-C2'-C1'	-7.23	95.72	101.50
1	N	45	G	C5-C6-N1	-7.23	107.89	111.50
1	N	110	C	N3-C4-C5	-7.23	119.01	121.90
1	N	1413	A	C5-C6-N6	-7.23	117.92	123.70
1	N	1448	C	C5-C4-N4	-7.23	115.14	120.20
1	N	1394	A	O4'-C1'-N9	7.23	113.98	108.20
1	N	302	G	C5-C6-O6	-7.22	124.27	128.60
1	N	801	U	P-O5'-C5'	-7.22	109.34	120.90
1	N	839	C	P-O5'-C5'	7.22	132.46	120.90
1	N	1080	A	C8-N9-C4	-7.22	102.91	105.80
1	N	178	C	C1'-O4'-C4'	-7.22	104.12	109.90
1	N	337	G	C5-C6-N1	-7.22	107.89	111.50
1	N	452	A	O4'-C1'-N9	7.22	113.98	108.20
1	N	941	G	P-O3'-C3'	7.22	128.37	119.70
1	N	1191	A	O4'-C1'-N9	7.22	113.98	108.20
1	N	1377	A	C5-N7-C8	7.22	107.51	103.90
1	N	1419	G	N1-C2-N3	-7.22	119.57	123.90
1	N	1064	G	N3-C2-N2	7.22	124.95	119.90
1	N	1102	A	P-O5'-C5'	7.22	132.45	120.90
1	N	318	G	N7-C8-N9	-7.22	109.49	113.10
1	N	800	G	N1-C2-N2	-7.22	109.70	116.20
1	N	874	G	N3-C2-N2	7.22	124.95	119.90
1	N	1176	A	O4'-C1'-N9	7.22	113.97	108.20
1	N	801	U	C5-C6-N1	7.22	126.31	122.70
1	N	413	G	N3-C2-N2	7.21	124.95	119.90
1	N	499	A	C8-N9-C4	-7.21	102.91	105.80
1	N	905	U	P-O5'-C5'	7.21	132.44	120.90
1	N	1014	A	N9-C4-C5	7.21	108.69	105.80
1	N	246	A	C3'-C2'-C1'	7.21	107.27	101.50
1	N	480	U	C6-N1-C2	-7.21	116.67	121.00
1	N	1480	A	O4'-C1'-C2'	-7.21	98.59	105.80
1	N	1487	G	N7-C8-N9	7.21	116.71	113.10
1	N	763	G	C5-C6-O6	-7.21	124.27	128.60
1	N	823	C	N1-C2-O2	-7.21	114.58	118.90
1	N	1022	A	C4-C5-C6	7.21	120.60	117.00
1	N	1038	C	N3-C4-N4	7.21	123.05	118.00
1	N	1319	A	C4-C5-C6	7.21	120.60	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	688	G	C4-C5-C6	7.21	123.12	118.80
1	N	833	G	N1-C6-O6	7.21	124.22	119.90
1	N	1000	A	N9-C4-C5	-7.21	102.92	105.80
1	N	711	G	N1-C6-O6	7.20	124.22	119.90
1	N	940	C	C6-N1-C2	-7.20	117.42	120.30
1	N	941	G	O4'-C1'-N9	7.20	113.96	108.20
1	N	276	G	C6-C5-N7	-7.20	126.08	130.40
1	N	388	G	C5-C6-O6	-7.20	124.28	128.60
1	N	152	A	N7-C8-N9	-7.20	110.20	113.80
1	N	153	C	O4'-C1'-N1	7.20	113.96	108.20
1	N	794	A	C4-C5-N7	-7.20	107.10	110.70
1	N	1191	A	N9-C4-C5	-7.20	102.92	105.80
1	N	1282	C	C5'-C4'-C3'	-7.20	104.48	116.00
1	N	1363	A	C5-C6-N6	-7.20	117.94	123.70
1	N	1481	U	C6-N1-C2	7.20	125.32	121.00
1	N	110	C	C5-C6-N1	-7.20	117.40	121.00
1	N	741	G	C8-N9-C4	7.20	109.28	106.40
1	N	129	A	C5-C6-N6	-7.20	117.94	123.70
1	N	656	G	O4'-C1'-N9	7.20	113.96	108.20
1	N	465	A	N7-C8-N9	-7.19	110.20	113.80
1	N	1396	A	C5-C6-N1	-7.19	114.10	117.70
1	N	371	A	N1-C2-N3	-7.19	125.70	129.30
1	N	1035	A	N1-C6-N6	7.19	122.92	118.60
1	N	146	G	C8-N9-C4	-7.19	103.52	106.40
1	N	1058	G	C6-C5-N7	-7.19	126.09	130.40
1	N	1118	U	C5'-C4'-C3'	7.19	127.50	116.00
1	N	1193	G	N1-C6-O6	7.19	124.21	119.90
1	N	1371	G	O4'-C1'-N9	7.19	113.95	108.20
1	N	69	G	N9-C4-C5	-7.19	102.52	105.40
1	N	548	G	O4'-C1'-N9	7.19	113.95	108.20
1	N	239	U	N3-C4-C5	-7.19	110.29	114.60
1	N	106	C	C4'-C3'-C2'	7.19	109.79	102.60
1	N	298	A	O4'-C1'-N9	7.18	113.95	108.20
1	N	695	A	C4-C5-C6	7.18	120.59	117.00
1	N	886	G	N3-C4-N9	7.18	130.31	126.00
1	N	1272	G	C8-N9-C4	7.18	109.27	106.40
1	N	1064	G	C6-C5-N7	-7.18	126.09	130.40
1	N	1295	U	N1-C2-N3	-7.18	110.59	114.90
1	N	49	U	O3'-P-O5'	-7.18	90.36	104.00
1	N	869	G	C5-C6-O6	-7.18	124.29	128.60
1	N	839	C	N3-C4-N4	7.18	123.03	118.00
1	N	925	G	C4-C5-C6	7.18	123.11	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	942	G	C5-C6-O6	7.18	132.91	128.60
1	N	1266	G	C8-N9-C1'	7.18	136.33	127.00
1	N	470	C	C5-C6-N1	7.18	124.59	121.00
1	N	264	C	N3-C4-C5	-7.17	119.03	121.90
1	N	267	C	C6-N1-C2	-7.17	117.43	120.30
1	N	509	A	P-O3'-C3'	7.17	128.31	119.70
1	N	691	G	C4-C5-N7	7.17	113.67	110.80
1	N	726	C	N3-C2-O2	7.17	126.92	121.90
1	N	759	A	C5-C6-N1	-7.17	114.11	117.70
1	N	1155	A	C5-C6-N6	-7.17	117.96	123.70
1	N	715	A	C3'-C2'-C1'	-7.17	95.76	101.50
1	N	1499	A	C6-C5-N7	-7.17	127.28	132.30
1	N	666	G	O4'-C1'-N9	7.17	113.94	108.20
1	N	156	C	N3-C4-C5	-7.17	119.03	121.90
1	N	422	C	O4'-C1'-N1	7.17	113.94	108.20
1	N	256	U	C4'-C3'-C2'	-7.17	95.43	102.60
1	N	406	G	C5-C6-O6	-7.17	124.30	128.60
1	N	619	U	C6-N1-C2	-7.17	116.70	121.00
1	N	703	G	C4-C5-N7	7.17	113.67	110.80
1	N	996	A	C5-C6-N1	-7.17	114.12	117.70
1	N	213	G	P-O5'-C5'	-7.17	109.43	120.90
1	N	305	G	C2-N3-C4	-7.17	108.32	111.90
1	N	975	A	C4-C5-N7	-7.17	107.12	110.70
1	N	1203	C	N3-C4-C5	-7.17	119.03	121.90
1	N	1252	A	C5'-C4'-C3'	7.17	127.47	116.00
1	N	1372	U	N1-C2-O2	-7.17	117.78	122.80
1	N	1408	A	C5-C6-N6	-7.17	117.97	123.70
1	N	719	C	C6-N1-C2	-7.17	117.43	120.30
1	N	796	C	N1-C2-N3	-7.17	114.18	119.20
1	N	223	A	C6-N1-C2	7.16	122.90	118.60
1	N	299	G	N1-C2-N3	-7.16	119.60	123.90
1	N	336	A	C4-C5-C6	7.16	120.58	117.00
1	N	365	U	O4'-C1'-N1	7.16	113.93	108.20
1	N	605	U	C3'-C2'-C1'	7.16	107.23	101.50
1	N	971	G	C6-N1-C2	-7.16	120.80	125.10
1	N	985	C	P-O5'-C5'	7.16	132.36	120.90
1	N	145	G	N1-C2-N2	7.16	122.64	116.20
1	N	228	A	O4'-C1'-N9	7.16	113.93	108.20
1	N	757	U	N3-C4-O4	7.16	124.41	119.40
1	N	767	A	P-O3'-C3'	7.16	128.29	119.70
1	N	1124	G	O4'-C1'-N9	7.16	113.93	108.20
1	N	1296	C	C6-N1-C2	7.16	123.16	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1327	C	N3-C4-N4	7.16	123.01	118.00
1	N	10	A	C5-C6-N1	-7.16	114.12	117.70
1	N	567	G	C5-N7-C8	-7.16	100.72	104.30
1	N	1110	A	C8-N9-C4	-7.16	102.94	105.80
1	N	1236	A	O4'-C1'-N9	7.16	113.93	108.20
1	N	630	A	C2-N3-C4	-7.16	107.02	110.60
1	N	477	C	C5-C6-N1	7.16	124.58	121.00
1	N	1483	A	C5-C6-N6	-7.16	117.97	123.70
1	N	577	G	C5-C6-O6	-7.15	124.31	128.60
1	N	1124	G	N3-C2-N2	7.15	124.91	119.90
1	N	76	G	N3-C2-N2	7.15	124.91	119.90
1	N	1446	A	C8-N9-C4	7.15	108.66	105.80
1	N	558	G	O4'-C1'-N9	7.15	113.92	108.20
1	N	701	U	O4'-C1'-N1	7.15	113.92	108.20
1	N	963	G	C8-N9-C4	-7.15	103.54	106.40
1	N	394	G	C5-C6-N1	-7.15	107.92	111.50
1	N	8	A	N1-C6-N6	7.15	122.89	118.60
1	N	40	C	C2-N3-C4	7.15	123.47	119.90
1	N	65	A	O4'-C1'-N9	7.15	113.92	108.20
1	N	1436	U	C5'-C4'-C3'	7.15	127.43	116.00
1	N	7	A	C6-C5-N7	-7.14	127.30	132.30
1	N	152	A	C6-C5-N7	-7.14	127.30	132.30
1	N	768	A	N7-C8-N9	-7.14	110.23	113.80
1	N	1405	G	O4'-C1'-N9	7.14	113.92	108.20
1	N	1203	C	O4'-C1'-N1	7.14	113.91	108.20
1	N	1533	C	P-O5'-C5'	7.14	132.33	120.90
1	N	226	G	N3-C2-N2	7.14	124.90	119.90
1	N	956	U	C6-N1-C2	-7.14	116.72	121.00
1	N	777	A	N9-C1'-C2'	-7.14	104.15	112.00
1	N	808	C	C6-N1-C2	-7.14	117.44	120.30
1	N	1433	A	C4-C5-N7	-7.14	107.13	110.70
1	N	1278	G	C6-N1-C2	-7.14	120.82	125.10
1	N	1300	G	N3-C4-N9	-7.14	121.72	126.00
1	N	61	G	N1-C2-N3	7.13	128.18	123.90
1	N	264	C	C6-N1-C2	-7.13	117.45	120.30
1	N	793	U	C6-N1-C1'	-7.13	111.21	121.20
1	N	60	A	N1-C2-N3	-7.13	125.73	129.30
1	N	575	G	N1-C2-N3	-7.13	119.62	123.90
1	N	603	U	C6-N1-C2	-7.13	116.72	121.00
1	N	966	G	N7-C8-N9	-7.13	109.53	113.10
1	N	1288	A	C5-C6-N1	-7.13	114.13	117.70
1	N	1396	A	C6-N1-C2	7.13	122.88	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1401	G	C4-C5-C6	7.13	123.08	118.80
1	N	1415	G	C6-C5-N7	-7.13	126.12	130.40
1	N	566	G	N3-C4-C5	-7.13	125.03	128.60
1	N	37	U	O4'-C1'-N1	7.13	113.90	108.20
1	N	527	G	N1-C2-N3	-7.13	119.62	123.90
1	N	627	G	N1-C6-O6	7.13	124.18	119.90
1	N	784	A	N9-C4-C5	-7.13	102.95	105.80
1	N	1023	U	C5'-C4'-C3'	-7.13	104.59	116.00
1	N	1142	G	N1-C6-O6	7.13	124.18	119.90
1	N	1530	G	O4'-C1'-N9	7.13	113.90	108.20
1	N	431	A	C6-C5-N7	-7.13	127.31	132.30
1	N	559	A	C5-C6-N6	-7.13	118.00	123.70
1	N	673	A	N9-C4-C5	-7.13	102.95	105.80
1	N	865	A	N7-C8-N9	-7.13	110.24	113.80
1	N	1108	G	P-O3'-C3'	7.13	128.25	119.70
1	N	1472	U	C4-C5-C6	7.13	123.98	119.70
1	N	461	A	C4-C5-C6	7.12	120.56	117.00
1	N	502	A	C4'-C3'-C2'	-7.12	95.47	102.60
1	N	582	C	C5-C6-N1	7.12	124.56	121.00
1	N	326	G	N1-C2-N3	-7.12	119.63	123.90
1	N	937	A	N1-C2-N3	7.12	132.86	129.30
1	N	1233	G	C8-N9-C1'	-7.12	117.74	127.00
1	N	1326	U	C3'-C2'-C1'	7.12	107.20	101.50
1	N	513	C	O4'-C1'-N1	7.12	113.90	108.20
1	N	740	U	C2-N1-C1'	-7.12	109.16	117.70
1	N	393	A	C3'-C2'-C1'	-7.12	95.80	101.50
1	N	624	C	N3-C4-N4	7.12	122.98	118.00
1	N	75	G	C5'-C4'-O4'	7.12	117.64	109.10
1	N	1034	G	C5'-C4'-O4'	-7.12	100.56	109.10
1	N	1241	G	C4-C5-C6	7.12	123.07	118.80
1	N	1257	A	N3-C4-C5	-7.12	121.82	126.80
1	N	269	C	C5-C4-N4	-7.12	115.22	120.20
1	N	305	G	C5-C6-N1	-7.12	107.94	111.50
1	N	787	A	C4-C5-C6	7.12	120.56	117.00
1	N	1106	G	O4'-C1'-N9	7.12	113.89	108.20
1	N	172	A	C2'-C3'-O3'	7.12	125.15	109.50
1	N	1195	C	P-O3'-C3'	7.12	128.24	119.70
1	N	98	A	N3-C4-N9	7.11	133.09	127.40
1	N	646	G	C4-C5-N7	7.11	113.64	110.80
1	N	739	C	P-O3'-C3'	-7.11	111.16	119.70
1	N	799	G	C4-C5-N7	7.11	113.64	110.80
1	N	1372	U	C5-C6-N1	-7.11	119.14	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1409	C	N1-C2-O2	-7.11	114.63	118.90
1	N	1499	A	C4-C5-C6	7.11	120.56	117.00
1	N	115	G	C8-N9-C4	-7.11	103.56	106.40
1	N	927	G	C5-C6-N1	-7.11	107.94	111.50
1	N	1015	G	C4-C5-N7	7.11	113.64	110.80
1	N	292	G	O4'-C1'-N9	7.11	113.89	108.20
1	N	1529	G	N9-C4-C5	-7.11	102.56	105.40
1	N	26	A	C4'-C3'-C2'	-7.11	95.50	102.60
1	N	216	U	C3'-C2'-C1'	7.11	107.19	101.50
1	N	230	G	P-O3'-C3'	-7.11	111.17	119.70
1	N	849	G	C5-C6-O6	-7.11	124.34	128.60
1	N	1507	A	C6-N1-C2	-7.11	114.34	118.60
1	N	1061	G	P-O5'-C5'	7.10	132.27	120.90
1	N	1151	A	C5-N7-C8	7.10	107.45	103.90
1	N	164	G	O4'-C1'-N9	7.10	113.88	108.20
1	N	255	G	C5-C6-O6	-7.10	124.34	128.60
1	N	304	U	O4'-C1'-N1	7.10	113.88	108.20
1	N	802	A	C5-C6-N1	-7.10	114.15	117.70
1	N	1318	A	C5'-C4'-O4'	7.10	117.62	109.10
1	N	1395	C	N3-C4-N4	7.10	122.97	118.00
1	N	1460	C	C4-C5-C6	-7.10	113.85	117.40
1	N	1533	C	C5-C4-N4	-7.10	115.23	120.20
1	N	63	C	N3-C4-C5	-7.10	119.06	121.90
1	N	178	C	C2-N3-C4	7.10	123.45	119.90
1	N	277	C	C2-N3-C4	7.10	123.45	119.90
1	N	282	A	C5-N7-C8	7.10	107.45	103.90
1	N	310	G	N9-C4-C5	7.10	108.24	105.40
1	N	874	G	N1-C2-N3	-7.10	119.64	123.90
1	N	155	A	P-O5'-C5'	7.09	132.25	120.90
1	N	771	G	O4'-C1'-N9	7.09	113.88	108.20
1	N	797	C	N3-C4-N4	7.09	122.97	118.00
1	N	907	A	N1-C6-N6	7.09	122.86	118.60
1	N	1122	U	C4-C5-C6	7.09	123.96	119.70
1	N	1288	A	O4'-C1'-N9	7.09	113.88	108.20
1	N	255	G	O4'-C1'-N9	7.09	113.87	108.20
1	N	1096	C	C5-C6-N1	7.09	124.55	121.00
1	N	87	C	O4'-C1'-N1	7.09	113.87	108.20
1	N	1296	C	P-O3'-C3'	7.09	128.21	119.70
1	N	119	A	N7-C8-N9	-7.09	110.25	113.80
1	N	735	C	N1-C1'-C2'	-7.09	104.20	112.00
1	N	807	A	P-O3'-C3'	7.09	128.21	119.70
1	N	973	G	C5-C6-N1	-7.09	107.95	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1166	G	C8-N9-C4	-7.09	103.56	106.40
1	N	1232	U	C5-C4-O4	-7.09	121.65	125.90
1	N	642	A	N9-C4-C5	7.09	108.64	105.80
1	N	989	U	C2-N3-C4	7.09	131.25	127.00
1	N	1084	G	N3-C2-N2	7.08	124.86	119.90
1	N	803	G	C5-C6-O6	-7.08	124.35	128.60
1	N	1499	A	C6-N1-C2	-7.08	114.35	118.60
1	N	16	A	C8-N9-C4	7.08	108.63	105.80
1	N	267	C	C1'-O4'-C4'	7.08	115.56	109.90
1	N	800	G	C4-C5-C6	7.08	123.05	118.80
1	N	1469	C	N3-C4-N4	7.08	122.96	118.00
1	N	128	G	C2-N3-C4	7.08	115.44	111.90
1	N	1350	A	C5-C6-N6	-7.08	118.04	123.70
1	N	1074	G	C5-C6-O6	-7.08	124.36	128.60
1	N	1432	G	N9-C4-C5	-7.08	102.57	105.40
1	N	445	G	C5-N7-C8	-7.07	100.76	104.30
1	N	1347	G	P-O3'-C3'	7.07	128.19	119.70
1	N	1216	A	N1-C6-N6	7.07	122.84	118.60
1	N	409	U	O4'-C1'-N1	7.07	113.86	108.20
1	N	933	G	C5-C6-O6	-7.07	124.36	128.60
1	N	1334	G	N3-C2-N2	7.07	124.85	119.90
1	N	1033	G	N9-C4-C5	7.07	108.23	105.40
1	N	1257	A	C5-N7-C8	7.07	107.44	103.90
1	N	402	G	N3-C4-C5	7.07	132.13	128.60
1	N	637	C	O4'-C1'-N1	7.07	113.85	108.20
1	N	944	G	O4'-C1'-N9	7.07	113.85	108.20
1	N	1132	C	C6-N1-C2	-7.07	117.47	120.30
1	N	1507	A	C5-N7-C8	7.07	107.43	103.90
1	N	493	A	C5-C6-N1	-7.07	114.17	117.70
1	N	546	A	C6-N1-C2	-7.07	114.36	118.60
1	N	781	A	C8-N9-C4	-7.07	102.97	105.80
1	N	814	A	N9-C4-C5	-7.07	102.97	105.80
1	N	376	G	C4-C5-C6	7.06	123.04	118.80
1	N	101	A	C4-C5-N7	-7.06	107.17	110.70
1	N	1282	C	P-O5'-C5'	7.06	132.20	120.90
1	N	31	G	O4'-C1'-C2'	-7.06	98.74	105.80
1	N	189	A	P-O3'-C3'	-7.06	111.23	119.70
1	N	414	A	C5-C6-N6	7.06	129.35	123.70
1	N	477	C	P-O5'-C5'	7.06	132.20	120.90
1	N	869	G	C6-C5-N7	-7.06	126.17	130.40
1	N	924	C	N1-C2-N3	-7.06	114.26	119.20
1	N	987	G	C6-N1-C2	7.06	129.34	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	99	C	N3-C4-C5	-7.06	119.08	121.90
1	N	144	G	N7-C8-N9	-7.06	109.57	113.10
1	N	377	G	N1-C6-O6	7.06	124.13	119.90
1	N	530	G	C6-C5-N7	-7.06	126.17	130.40
1	N	675	A	C5-C6-N6	-7.06	118.05	123.70
1	N	752	G	C2-N3-C4	7.06	115.43	111.90
1	N	786	G	C6-C5-N7	-7.06	126.17	130.40
1	N	1095	U	C2-N1-C1'	7.06	126.17	117.70
1	N	1238	A	C4-C5-C6	7.06	120.53	117.00
1	N	165	G	N1-C6-O6	7.05	124.13	119.90
1	N	262	A	C4-C5-C6	7.05	120.53	117.00
1	N	310	G	O4'-C1'-N9	7.05	113.84	108.20
1	N	824	G	C8-N9-C4	-7.05	103.58	106.40
1	N	1222	G	C4-C5-N7	-7.05	107.98	110.80
1	N	921	U	O4'-C4'-C3'	-7.05	96.95	104.00
1	N	1107	C	P-O3'-C3'	-7.05	111.24	119.70
1	N	150	U	O4'-C1'-N1	7.05	113.84	108.20
1	N	373	A	OP1-P-OP2	-7.05	109.02	119.60
1	N	1482	G	C4-C5-C6	7.05	123.03	118.80
1	N	92	U	C2-N3-C4	-7.05	122.77	127.00
1	N	374	A	C4-N9-C1'	-7.05	113.61	126.30
1	N	931	C	O4'-C1'-N1	7.05	113.84	108.20
1	N	750	C	N1-C2-O2	-7.05	114.67	118.90
1	N	925	G	C5-C6-N1	-7.05	107.98	111.50
1	N	989	U	N3-C4-C5	-7.05	110.37	114.60
1	N	203	G	C4'-C3'-C2'	-7.05	95.55	102.60
1	N	503	C	C2-N1-C1'	7.05	126.55	118.80
1	N	751	U	C5-C4-O4	-7.05	121.67	125.90
1	N	993	G	O4'-C1'-N9	7.05	113.84	108.20
1	N	854	U	N3-C4-O4	7.04	124.33	119.40
1	N	1345	U	N3-C2-O2	7.04	127.13	122.20
1	N	449	G	N1-C2-N3	-7.04	119.67	123.90
1	N	552	U	N1-C2-N3	7.04	119.13	114.90
1	N	1009	U	N3-C4-C5	-7.04	110.37	114.60
1	N	105	G	N3-C2-N2	7.04	124.83	119.90
1	N	120	A	C5-C6-N1	-7.04	114.18	117.70
1	N	705	G	P-O5'-C5'	7.04	132.17	120.90
1	N	811	C	N3-C2-O2	-7.04	116.97	121.90
1	N	876	C	N3-C4-N4	-7.04	113.07	118.00
1	N	1136	C	C2-N3-C4	7.04	123.42	119.90
1	N	1122	U	N1-C2-N3	7.04	119.12	114.90
1	N	305	G	N1-C6-O6	7.04	124.12	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	508	U	N3-C4-C5	-7.04	110.38	114.60
1	N	855	U	C5-C4-O4	-7.04	121.68	125.90
1	N	1315	U	C6-N1-C2	-7.04	116.78	121.00
1	N	451	A	C5-N7-C8	7.04	107.42	103.90
1	N	730	G	N9-C4-C5	7.04	108.21	105.40
1	N	421	U	C3'-C2'-C1'	-7.03	95.87	101.50
1	N	757	U	O4'-C1'-N1	7.03	113.83	108.20
1	N	995	C	N3-C4-N4	7.03	122.92	118.00
1	N	23	C	N3-C4-N4	7.03	122.92	118.00
1	N	506	G	C5-C6-N1	-7.03	107.98	111.50
1	N	603	U	O4'-C1'-N1	7.03	113.82	108.20
1	N	944	G	N3-C4-C5	-7.03	125.09	128.60
1	N	533	A	C5-C6-N6	-7.03	118.08	123.70
1	N	288	A	O4'-C1'-N9	7.02	113.82	108.20
1	N	629	A	N9-C4-C5	7.02	108.61	105.80
1	N	99	C	C4-C5-C6	7.02	120.91	117.40
1	N	1529	G	C8-N9-C4	7.02	109.21	106.40
1	N	289	G	C5'-C4'-C3'	-7.02	104.77	116.00
1	N	879	C	C5-C4-N4	-7.02	115.29	120.20
1	N	1149	C	N3-C4-N4	7.02	122.91	118.00
1	N	100	G	C5-C6-O6	7.02	132.81	128.60
1	N	718	A	C8-N9-C4	7.02	108.61	105.80
1	N	1440	U	C3'-C2'-C1'	-7.02	95.89	101.50
1	N	166	U	N3-C4-O4	7.01	124.31	119.40
1	N	898	G	N7-C8-N9	-7.01	109.59	113.10
1	N	960	U	P-O3'-C3'	7.01	128.12	119.70
1	N	1356	G	O4'-C1'-N9	7.01	113.81	108.20
1	N	103	U	C5-C4-O4	-7.01	121.69	125.90
1	N	969	A	C5-C6-N6	-7.01	118.09	123.70
1	N	973	G	N1-C2-N3	-7.01	119.69	123.90
1	N	125	U	P-O5'-C5'	7.01	132.12	120.90
1	N	469	C	C5-C4-N4	7.01	125.11	120.20
1	N	843	U	C5'-C4'-O4'	7.01	117.51	109.10
1	N	1075	U	C5-C6-N1	7.01	126.20	122.70
1	N	1198	G	C6-N1-C2	7.01	129.31	125.10
1	N	1486	G	O4'-C1'-N9	7.01	113.81	108.20
1	N	255	G	C3'-C2'-C1'	-7.01	95.89	101.50
1	N	1205	U	C5-C6-N1	-7.01	119.20	122.70
1	N	930	C	N3-C4-C5	-7.00	119.10	121.90
1	N	1166	G	C6-N1-C2	7.00	129.30	125.10
1	N	1434	A	C5-N7-C8	7.00	107.40	103.90
1	N	741	G	C5-C6-O6	-7.00	124.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	946	A	C5-C6-N1	-7.00	114.20	117.70
1	N	1375	A	C2-N3-C4	-7.00	107.10	110.60
1	N	141	G	C8-N9-C4	7.00	109.20	106.40
1	N	402	G	C4-C5-N7	7.00	113.60	110.80
1	N	415	A	O4'-C1'-N9	7.00	113.80	108.20
1	N	543	U	O4'-C1'-N1	7.00	113.80	108.20
1	N	886	G	C6-C5-N7	-7.00	126.20	130.40
1	N	1106	G	N1-C2-N3	-7.00	119.70	123.90
1	N	1230	C	C5-C4-N4	-7.00	115.30	120.20
1	N	77	A	P-O3'-C3'	7.00	128.10	119.70
1	N	636	U	C4'-C3'-C2'	-7.00	95.60	102.60
1	N	282	A	C2-N3-C4	-7.00	107.10	110.60
1	N	298	A	C5-C6-N6	-7.00	118.10	123.70
1	N	589	U	N1-C2-O2	-7.00	117.90	122.80
1	N	709	U	N1-C2-N3	-7.00	110.70	114.90
1	N	853	C	N3-C4-C5	-7.00	119.10	121.90
1	N	708	C	N3-C4-C5	-6.99	119.10	121.90
1	N	1202	U	C3'-C2'-C1'	6.99	107.09	101.50
1	N	1316	G	C6-N1-C2	-6.99	120.91	125.10
1	N	1367	C	C1'-O4'-C4'	6.99	115.49	109.90
1	N	1390	U	C5'-C4'-C3'	6.99	127.19	116.00
1	N	1409	C	C2-N1-C1'	6.99	126.49	118.80
1	N	256	U	P-O5'-C5'	6.99	132.08	120.90
1	N	1095	U	P-O3'-C3'	-6.99	111.31	119.70
1	N	417	G	C4-C5-C6	6.99	122.99	118.80
1	N	802	A	O4'-C1'-N9	6.99	113.79	108.20
1	N	1382	C	C4-C5-C6	-6.99	113.91	117.40
1	N	594	U	C5-C4-O4	6.99	130.09	125.90
1	N	793	U	C5-C6-N1	-6.99	119.21	122.70
1	N	1037	C	N3-C4-N4	6.99	122.89	118.00
1	N	1281	C	C2-N3-C4	6.99	123.39	119.90
1	N	1299	A	C8-N9-C4	6.99	108.59	105.80
1	N	1505	G	N1-C2-N3	-6.99	119.71	123.90
1	N	669	G	C4'-C3'-C2'	-6.98	95.62	102.60
1	N	1403	C	C5'-C4'-C3'	6.98	127.17	116.00
1	N	156	C	C1'-O4'-C4'	6.98	115.49	109.90
1	N	316	C	N3-C4-C5	-6.98	119.11	121.90
1	N	366	A	O4'-C1'-N9	6.98	113.79	108.20
1	N	440	C	N3-C4-C5	-6.98	119.11	121.90
1	N	518	C	C5-C4-N4	-6.98	115.31	120.20
1	N	1050	G	O4'-C1'-N9	6.98	113.79	108.20
1	N	441	A	O4'-C1'-N9	6.98	113.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1228	C	C5-C4-N4	-6.98	115.31	120.20
1	N	347	G	N1-C2-N3	-6.98	119.71	123.90
1	N	361	G	N1-C6-O6	6.98	124.09	119.90
1	N	585	G	C8-N9-C4	6.98	109.19	106.40
1	N	682	G	C5-C6-O6	-6.98	124.41	128.60
1	N	840	C	P-O5'-C5'	6.98	132.06	120.90
1	N	1131	G	C2-N3-C4	6.98	115.39	111.90
1	N	898	G	N1-C2-N3	-6.98	119.71	123.90
1	N	1010	U	N3-C2-O2	6.98	127.08	122.20
1	N	1160	G	N3-C4-C5	-6.98	125.11	128.60
1	N	1485	U	C6-N1-C2	-6.98	116.81	121.00
1	N	144	G	N9-C4-C5	-6.97	102.61	105.40
1	N	404	G	N3-C2-N2	6.97	124.78	119.90
1	N	721	G	N1-C2-N3	-6.97	119.72	123.90
1	N	1180	A	P-O3'-C3'	6.97	128.07	119.70
1	N	1276	G	O4'-C1'-N9	6.97	113.78	108.20
1	N	188	C	C4-C5-C6	6.97	120.89	117.40
1	N	729	A	N7-C8-N9	6.97	117.28	113.80
1	N	1064	G	N9-C4-C5	6.97	108.19	105.40
1	N	1133	G	C5-C6-N1	6.97	114.98	111.50
1	N	1337	G	C5-C6-N1	-6.97	108.02	111.50
1	N	700	G	O4'-C1'-N9	6.97	113.77	108.20
1	N	759	A	O4'-C1'-N9	6.97	113.77	108.20
1	N	1420	U	O4'-C1'-N1	6.97	113.77	108.20
1	N	1517	G	C5-C6-O6	6.97	132.78	128.60
1	N	914	A	C5'-C4'-C3'	-6.96	104.86	116.00
1	N	1064	G	C5-N7-C8	6.96	107.78	104.30
1	N	1085	U	P-O5'-C5'	6.96	132.04	120.90
1	N	46	G	N1-C2-N3	-6.96	119.72	123.90
1	N	1039	G	N3-C2-N2	6.96	124.77	119.90
1	N	1079	G	P-O3'-C3'	6.96	128.06	119.70
1	N	27	G	N1-C6-O6	6.96	124.08	119.90
1	N	148	G	N9-C4-C5	-6.96	102.62	105.40
1	N	1199	U	C4'-C3'-C2'	-6.96	95.64	102.60
1	N	1331	G	O4'-C1'-N9	6.96	113.77	108.20
1	N	1437	A	N9-C4-C5	6.96	108.58	105.80
1	N	562	U	O4'-C1'-N1	6.96	113.77	108.20
1	N	1496	C	N1-C2-N3	-6.96	114.33	119.20
1	N	307	C	N3-C2-O2	-6.96	117.03	121.90
1	N	388	G	N3-C2-N2	6.96	124.77	119.90
1	N	933	G	C4-C5-C6	6.96	122.97	118.80
1	N	1189	U	C5-C6-N1	-6.96	119.22	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1205	U	O4'-C1'-N1	6.96	113.77	108.20
1	N	605	U	O4'-C1'-N1	6.96	113.76	108.20
1	N	1448	C	P-O3'-C3'	6.96	128.05	119.70
1	N	89	U	N3-C4-O4	6.95	124.27	119.40
1	N	1387	G	C4-C5-C6	6.95	122.97	118.80
1	N	543	U	C6-N1-C2	6.95	125.17	121.00
1	N	734	G	C5-C6-O6	-6.95	124.43	128.60
1	N	1422	G	C2-N3-C4	6.95	115.38	111.90
1	N	204	G	N1-C2-N3	-6.95	119.73	123.90
1	N	812	G	C4-C5-N7	-6.95	108.02	110.80
1	N	1392	G	C3'-C2'-C1'	6.95	107.06	101.50
1	N	1026	G	N3-C2-N2	6.95	124.76	119.90
1	N	1122	U	N1-C2-O2	-6.95	117.94	122.80
1	N	59	A	N9-C4-C5	6.95	108.58	105.80
1	N	440	C	O5'-C5'-C4'	-6.95	98.50	111.70
1	N	591	U	C1'-O4'-C4'	6.95	115.46	109.90
1	N	1441	A	C8-N9-C4	-6.95	103.02	105.80
1	N	635	A	C4-C5-C6	6.94	120.47	117.00
1	N	953	G	O4'-C1'-N9	6.94	113.75	108.20
1	N	1339	A	C4-C5-C6	6.94	120.47	117.00
1	N	1393	U	O4'-C1'-N1	6.94	113.75	108.20
1	N	693	G	C8-N9-C4	-6.94	103.62	106.40
1	N	909	A	N1-C6-N6	6.94	122.76	118.60
1	N	1032	G	C1'-O4'-C4'	-6.94	104.35	109.90
1	N	1206	G	C5'-C4'-O4'	6.94	117.43	109.10
1	N	1410	A	C5-N7-C8	-6.94	100.43	103.90
1	N	113	G	C8-N9-C4	-6.94	103.62	106.40
1	N	145	G	C8-N9-C4	-6.94	103.62	106.40
1	N	625	U	C2-N3-C4	-6.94	122.84	127.00
1	N	646	G	O4'-C1'-N9	6.94	113.75	108.20
1	N	659	U	O4'-C1'-N1	6.94	113.75	108.20
1	N	943	U	C5-C4-O4	-6.94	121.74	125.90
1	N	1438	G	C5-C6-N1	-6.94	108.03	111.50
1	N	1514	G	C5'-C4'-O4'	6.94	117.42	109.10
1	N	243	A	C5-C6-N1	-6.94	114.23	117.70
1	N	347	G	P-O3'-C3'	-6.94	111.38	119.70
1	N	652	U	C4'-C3'-C2'	-6.94	95.66	102.60
1	N	784	A	N1-C6-N6	6.94	122.76	118.60
1	N	1267	C	N3-C4-C5	-6.94	119.12	121.90
1	N	58	C	C5-C4-N4	-6.93	115.35	120.20
1	N	79	G	N7-C8-N9	6.93	116.57	113.10
1	N	713	G	C4-C5-N7	6.93	113.57	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	787	A	C5-N7-C8	6.93	107.37	103.90
1	N	1043	G	P-O3'-C3'	6.93	128.02	119.70
1	N	403	C	C2-N3-C4	6.93	123.37	119.90
1	N	453	G	N1-C2-N3	-6.93	119.74	123.90
1	N	987	G	P-O3'-C3'	-6.93	111.38	119.70
1	N	1176	A	C8-N9-C4	6.93	108.57	105.80
1	N	1180	A	O4'-C1'-N9	6.93	113.75	108.20
1	N	1031	C	C5-C6-N1	6.93	124.46	121.00
1	N	1124	G	N1-C6-O6	6.93	124.06	119.90
1	N	1378	C	P-O3'-C3'	-6.93	111.39	119.70
1	N	1497	G	O4'-C1'-N9	6.93	113.74	108.20
1	N	485	U	N3-C2-O2	6.93	127.05	122.20
1	N	641	U	C5-C4-O4	-6.93	121.74	125.90
1	N	1421	G	N9-C4-C5	6.93	108.17	105.40
1	N	1523	G	C8-N9-C4	-6.93	103.63	106.40
1	N	28	A	N1-C2-N3	-6.92	125.84	129.30
1	N	711	G	N9-C4-C5	-6.92	102.63	105.40
1	N	1191	A	C5-N7-C8	6.92	107.36	103.90
1	N	1266	G	C6-C5-N7	-6.92	126.25	130.40
1	N	577	G	C5'-C4'-O4'	-6.92	100.79	109.10
1	N	905	U	C5'-C4'-C3'	-6.92	104.93	116.00
1	N	1130	A	N1-C6-N6	6.92	122.75	118.60
1	N	356	A	N1-C2-N3	6.92	132.76	129.30
1	N	580	C	N3-C4-N4	6.92	122.84	118.00
1	N	970	C	N1-C2-O2	-6.92	114.75	118.90
1	N	586	C	C4-C5-C6	6.92	120.86	117.40
1	N	1120	C	N3-C4-N4	6.92	122.84	118.00
1	N	430	A	O4'-C1'-N9	6.92	113.73	108.20
1	N	775	G	O4'-C1'-N9	6.92	113.73	108.20
1	N	1043	G	C3'-C2'-C1'	6.92	107.03	101.50
1	N	435	A	N3-C4-C5	-6.92	121.96	126.80
1	N	1181	G	N1-C2-N2	6.92	122.42	116.20
1	N	1529	G	C2-N3-C4	6.92	115.36	111.90
1	N	148	G	C4'-C3'-C2'	-6.91	95.69	102.60
1	N	172	A	C5-N7-C8	6.91	107.36	103.90
1	N	415	A	C6-C5-N7	-6.91	127.46	132.30
1	N	878	A	C1'-O4'-C4'	-6.91	104.37	109.90
1	N	1128	C	P-O5'-C5'	6.91	131.96	120.90
1	N	873	A	N9-C4-C5	6.91	108.56	105.80
1	N	780	A	C4-C5-C6	6.91	120.46	117.00
1	N	1428	A	N7-C8-N9	6.91	117.25	113.80
1	N	648	A	C5-C6-N1	-6.91	114.25	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1118	U	C5-C6-N1	6.91	126.15	122.70
1	N	1011	C	C2-N3-C4	-6.91	116.45	119.90
1	N	1081	A	N1-C2-N3	-6.91	125.85	129.30
1	N	1120	C	C1'-O4'-C4'	-6.90	104.38	109.90
1	N	1159	U	C5-C4-O4	-6.90	121.76	125.90
1	N	1173	U	C4-C5-C6	6.90	123.84	119.70
1	N	553	A	C5-C6-N1	-6.90	114.25	117.70
1	N	935	A	O4'-C1'-N9	6.90	113.72	108.20
1	N	1014	A	C8-N9-C4	-6.90	103.04	105.80
1	N	1061	G	N9-C1'-C2'	-6.90	104.41	112.00
1	N	1401	G	N1-C6-O6	6.90	124.04	119.90
1	N	296	U	O4'-C1'-N1	6.90	113.72	108.20
1	N	1245	C	P-O3'-C3'	6.90	127.98	119.70
1	N	843	U	N3-C2-O2	6.90	127.03	122.20
1	N	1501	C	N1-C2-O2	6.90	123.04	118.90
1	N	593	U	C2-N3-C4	6.90	131.14	127.00
1	N	718	A	C5-C6-N1	-6.89	114.25	117.70
1	N	107	G	O4'-C1'-N9	6.89	113.71	108.20
1	N	192	A	P-O3'-C3'	6.89	127.97	119.70
1	N	484	G	C5-C6-N1	-6.89	108.05	111.50
1	N	814	A	P-O3'-C3'	6.89	127.97	119.70
1	N	1171	A	N3-C4-C5	-6.89	121.98	126.80
1	N	1236	A	N9-C4-C5	6.89	108.56	105.80
1	N	261	U	O4'-C1'-N1	6.89	113.71	108.20
1	N	317	U	N1-C2-N3	-6.89	110.77	114.90
1	N	318	G	P-O5'-C5'	-6.89	109.88	120.90
1	N	573	A	N1-C2-N3	-6.89	125.86	129.30
1	N	718	A	C4-C5-C6	6.89	120.44	117.00
1	N	36	C	C4-C5-C6	6.88	120.84	117.40
1	N	1022	A	N9-C4-C5	-6.88	103.05	105.80
1	N	1141	C	C5-C4-N4	-6.88	115.38	120.20
1	N	1201	A	C5-C6-N6	-6.88	118.19	123.70
1	N	32	A	N7-C8-N9	6.88	117.24	113.80
1	N	878	A	P-O5'-C5'	6.88	131.91	120.90
1	N	911	U	C5-C6-N1	-6.88	119.26	122.70
1	N	1107	C	C1'-O4'-C4'	-6.88	104.39	109.90
1	N	1130	A	C5-C6-N1	-6.88	114.26	117.70
1	N	1374	A	O4'-C1'-N9	6.88	113.70	108.20
1	N	1379	G	P-O3'-C3'	-6.88	111.44	119.70
1	N	849	G	C6-C5-N7	-6.88	126.27	130.40
1	N	101	A	N1-C2-N3	-6.88	125.86	129.30
1	N	247	G	C2-N3-C4	6.88	115.34	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	572	A	C6-C5-N7	-6.88	127.48	132.30
1	N	893	C	C5-C6-N1	6.88	124.44	121.00
1	N	1458	G	O4'-C1'-N9	6.88	113.70	108.20
1	N	1500	A	C5-C6-N6	-6.88	118.20	123.70
1	N	548	G	C3'-C2'-C1'	6.88	107.00	101.50
1	N	617	G	N1-C6-O6	6.88	124.03	119.90
1	N	1285	A	C6-C5-N7	-6.88	127.49	132.30
1	N	1355	G	N1-C2-N2	6.88	122.39	116.20
1	N	1459	G	O4'-C1'-N9	6.88	113.70	108.20
1	N	140	U	C4-C5-C6	-6.87	115.58	119.70
1	N	152	A	O4'-C1'-N9	6.87	113.70	108.20
1	N	230	G	C4-C5-N7	-6.87	108.05	110.80
1	N	601	G	N7-C8-N9	-6.87	109.66	113.10
1	N	1141	C	C2-N3-C4	6.87	123.34	119.90
1	N	503	C	C5-C4-N4	-6.87	115.39	120.20
1	N	171	A	N1-C2-N3	6.87	132.73	129.30
1	N	1172	C	N3-C4-N4	6.87	122.81	118.00
1	N	1240	U	C3'-C2'-C1'	-6.87	96.01	101.50
1	N	37	U	C2-N3-C4	6.87	131.12	127.00
1	N	293	G	P-O5'-C5'	6.87	131.88	120.90
1	N	324	G	C5-C6-O6	-6.87	124.48	128.60
1	N	369	G	N9-C4-C5	-6.87	102.65	105.40
1	N	838	G	N9-C4-C5	-6.87	102.65	105.40
1	N	201	G	N1-C6-O6	6.86	124.02	119.90
1	N	245	U	N1-C2-O2	6.86	127.60	122.80
1	N	1060	U	C2-N3-C4	6.86	131.12	127.00
1	N	1416	G	C4'-C3'-C2'	-6.86	95.74	102.60
1	N	417	G	N3-C2-N2	6.86	124.70	119.90
1	N	759	A	C4-C5-N7	-6.86	107.27	110.70
1	N	152	A	C5'-C4'-C3'	6.86	126.97	116.00
1	N	845	A	C4-C5-N7	-6.86	107.27	110.70
1	N	41	G	C4'-C3'-C2'	-6.86	95.74	102.60
1	N	176	C	N3-C4-C5	6.86	124.64	121.90
1	N	876	C	O4'-C1'-N1	6.86	113.69	108.20
1	N	991	U	O4'-C1'-N1	6.86	113.69	108.20
1	N	207	C	C1'-O4'-C4'	6.86	115.38	109.90
1	N	464	U	C6-N1-C2	-6.86	116.89	121.00
1	N	769	G	N3-C4-C5	-6.86	125.17	128.60
1	N	1170	A	N1-C6-N6	6.86	122.71	118.60
1	N	1211	U	N1-C2-N3	-6.86	110.79	114.90
1	N	1280	A	C5-C6-N1	-6.86	114.27	117.70
1	N	452	A	C8-N9-C4	-6.85	103.06	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	194	C	C5'-C4'-C3'	-6.85	105.04	116.00
1	N	963	G	C5'-C4'-C3'	-6.85	105.04	116.00
1	N	1147	C	P-O3'-C3'	6.85	127.92	119.70
1	N	268	U	C1'-O4'-C4'	-6.85	104.42	109.90
1	N	399	G	N1-C6-O6	6.85	124.01	119.90
1	N	265	G	O4'-C1'-N9	6.85	113.68	108.20
1	N	442	G	P-O5'-C5'	6.85	131.86	120.90
1	N	706	A	C6-N1-C2	6.85	122.71	118.60
1	N	798	U	P-O5'-C5'	-6.85	109.94	120.90
1	N	976	G	C6-N1-C2	6.85	129.21	125.10
1	N	1114	C	C2-N3-C4	6.85	123.33	119.90
1	N	1275	A	C4'-C3'-C2'	-6.85	95.75	102.60
1	N	775	G	C3'-C2'-C1'	6.85	106.98	101.50
1	N	1170	A	C5-C6-N1	-6.85	114.28	117.70
1	N	298	A	C6-C5-N7	-6.84	127.51	132.30
1	N	800	G	C8-N9-C4	-6.84	103.66	106.40
1	N	1161	C	P-O3'-C3'	6.84	127.91	119.70
1	N	1256	A	C4-C5-N7	6.84	114.12	110.70
1	N	24	U	N3-C4-C5	-6.84	110.50	114.60
1	N	58	C	C5-C6-N1	6.84	124.42	121.00
1	N	1218	C	C6-N1-C2	-6.84	117.56	120.30
1	N	1290	G	C5-C6-N1	-6.84	108.08	111.50
1	N	1373	G	N7-C8-N9	6.84	116.52	113.10
1	N	325	A	C5-N7-C8	6.84	107.32	103.90
1	N	841	C	O4'-C1'-N1	6.84	113.67	108.20
1	N	121	U	C2-N3-C4	6.84	131.10	127.00
1	N	557	G	N7-C8-N9	6.84	116.52	113.10
1	N	603	U	C5-C6-N1	6.84	126.12	122.70
1	N	906	A	N1-C6-N6	6.84	122.70	118.60
1	N	1154	G	C5-C6-O6	-6.84	124.50	128.60
1	N	1525	G	O4'-C1'-N9	6.84	113.67	108.20
1	N	1532	U	C6-N1-C1'	-6.84	111.63	121.20
1	N	779	C	P-O3'-C3'	6.84	127.90	119.70
1	N	558	G	N7-C8-N9	6.83	116.52	113.10
1	N	606	G	O4'-C1'-N9	6.83	113.67	108.20
1	N	960	U	O4'-C1'-C2'	-6.83	98.97	105.80
1	N	1215	G	N3-C2-N2	6.83	124.68	119.90
1	N	42	G	C4-C5-C6	6.83	122.90	118.80
1	N	200	G	N1-C2-N3	-6.83	119.80	123.90
1	N	380	G	C6-C5-N7	-6.83	126.30	130.40
1	N	898	G	C5-C6-N1	-6.83	108.08	111.50
1	N	658	C	N3-C4-C5	-6.83	119.17	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	690	G	C8-N9-C1'	-6.83	118.12	127.00
1	N	119	A	P-O5'-C5'	-6.83	109.98	120.90
1	N	217	C	N1-C2-O2	-6.83	114.80	118.90
1	N	354	G	C2-N3-C4	6.83	115.31	111.90
1	N	455	G	N1-C2-N3	-6.83	119.80	123.90
1	N	874	G	N9-C4-C5	-6.83	102.67	105.40
1	N	1010	U	P-O5'-C5'	6.83	131.83	120.90
1	N	353	A	C4-C5-N7	-6.83	107.29	110.70
1	N	1438	G	N1-C6-O6	6.83	124.00	119.90
1	N	435	A	C4-C5-C6	6.83	120.41	117.00
1	N	1213	A	C4-C5-N7	6.83	114.11	110.70
1	N	1534	A	N7-C8-N9	-6.83	110.39	113.80
1	N	110	C	C2-N3-C4	6.82	123.31	119.90
1	N	754	C	N3-C4-C5	-6.82	119.17	121.90
1	N	56	U	C5-C6-N1	6.82	126.11	122.70
1	N	347	G	C5-C6-N1	-6.82	108.09	111.50
1	N	356	A	N1-C6-N6	6.82	122.69	118.60
1	N	1316	G	P-O3'-C3'	6.82	127.88	119.70
1	N	212	G	O4'-C1'-N9	6.82	113.66	108.20
1	N	1111	A	C1'-O4'-C4'	-6.82	104.44	109.90
1	N	1329	A	C5-N7-C8	6.82	107.31	103.90
1	N	193	C	N3-C4-N4	6.82	122.77	118.00
1	N	266	G	N1-C2-N3	-6.82	119.81	123.90
1	N	393	A	C8-N9-C4	-6.82	103.07	105.80
1	N	744	C	C5-C4-N4	-6.82	115.43	120.20
1	N	885	G	C5-C6-O6	-6.82	124.51	128.60
1	N	959	A	C4-C5-C6	6.82	120.41	117.00
1	N	1464	U	C4-C5-C6	6.82	123.79	119.70
1	N	115	G	C5-N7-C8	-6.82	100.89	104.30
1	N	567	G	N9-C4-C5	-6.82	102.67	105.40
1	N	1176	A	C5-C6-N1	-6.82	114.29	117.70
1	N	1508	A	N9-C4-C5	6.82	108.53	105.80
1	N	219	U	N1-C2-O2	-6.81	118.03	122.80
1	N	1419	G	N7-C8-N9	-6.81	109.69	113.10
1	N	1479	C	N3-C4-N4	6.81	122.77	118.00
1	N	57	G	O4'-C1'-N9	6.81	113.65	108.20
1	N	122	G	N7-C8-N9	6.81	116.51	113.10
1	N	159	G	C4-C5-N7	6.81	113.53	110.80
1	N	382	A	C5-C6-N6	-6.81	118.25	123.70
1	N	134	G	N7-C8-N9	6.81	116.50	113.10
1	N	30	U	N3-C2-O2	6.81	126.97	122.20
1	N	129	A	N1-C2-N3	6.81	132.70	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	239	U	C4-C5-C6	6.81	123.78	119.70
1	N	459	A	C5-N7-C8	-6.81	100.50	103.90
1	N	1066	C	N3-C4-N4	6.81	122.77	118.00
1	N	1416	G	C8-N9-C4	-6.81	103.68	106.40
1	N	618	C	C2-N3-C4	6.81	123.30	119.90
1	N	616	G	C4-C5-C6	6.80	122.88	118.80
1	N	1387	G	N3-C2-N2	6.80	124.66	119.90
1	N	1409	C	N3-C4-C5	-6.80	119.18	121.90
1	N	988	G	C4-C5-C6	6.80	122.88	118.80
1	N	321	A	C5-N7-C8	6.80	107.30	103.90
1	N	934	C	C6-N1-C1'	-6.80	112.64	120.80
1	N	266	G	C5-C6-N1	-6.80	108.10	111.50
1	N	510	A	P-O3'-C3'	6.80	127.86	119.70
1	N	563	A	C4'-C3'-C2'	6.80	109.40	102.60
1	N	73	C	N1-C2-O2	-6.80	114.82	118.90
1	N	468	A	C8-N9-C1'	-6.80	115.47	127.70
1	N	797	C	N1-C2-O2	-6.80	114.82	118.90
1	N	966	G	N1-C2-N3	-6.80	119.82	123.90
1	N	1366	C	P-O5'-C5'	6.79	131.77	120.90
1	N	328	C	C6-N1-C2	-6.79	117.58	120.30
1	N	1375	A	C8-N9-C4	-6.79	103.08	105.80
1	N	552	U	C5-C6-N1	6.79	126.09	122.70
1	N	877	G	C5-C6-N1	6.79	114.90	111.50
1	N	593	U	N3-C2-O2	6.79	126.95	122.20
1	N	725	G	N1-C2-N3	-6.79	119.83	123.90
1	N	825	A	C5-C6-N1	-6.79	114.31	117.70
1	N	51	A	C5-C6-N6	-6.79	118.27	123.70
1	N	396	C	N1-C2-O2	-6.79	114.83	118.90
1	N	894	G	C5-C6-O6	-6.79	124.53	128.60
1	N	81	A	C5'-C4'-C3'	6.79	126.86	116.00
1	N	501	C	N1-C2-O2	-6.79	114.83	118.90
1	N	533	A	C2-N3-C4	-6.79	107.21	110.60
1	N	31	G	C4'-C3'-C2'	-6.79	95.81	102.60
1	N	1078	U	O4'-C1'-N1	6.79	113.63	108.20
1	N	1353	G	C1'-O4'-C4'	6.79	115.33	109.90
1	N	1377	A	C5-C6-N1	-6.79	114.31	117.70
1	N	1467	C	O4'-C1'-N1	6.79	113.63	108.20
1	N	277	C	C4-C5-C6	6.78	120.79	117.40
1	N	701	U	N3-C2-O2	-6.78	117.45	122.20
1	N	133	U	C5-C4-O4	-6.78	121.83	125.90
1	N	788	U	C1'-O4'-C4'	-6.78	104.47	109.90
1	N	321	A	OP1-P-OP2	-6.78	109.43	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	362	G	N9-C4-C5	6.78	108.11	105.40
1	N	1029	U	C5-C4-O4	6.78	129.97	125.90
1	N	1059	C	C6-N1-C2	-6.78	117.59	120.30
1	N	1306	A	N9-C4-C5	6.78	108.51	105.80
1	N	1375	A	N1-C6-N6	6.78	122.67	118.60
1	N	1387	G	N9-C4-C5	6.78	108.11	105.40
1	N	1112	C	C3'-C2'-C1'	-6.78	96.08	101.50
1	N	68	G	C6-C5-N7	-6.78	126.33	130.40
1	N	945	G	O4'-C1'-N9	6.78	113.62	108.20
1	N	1095	U	C6-N1-C1'	-6.78	111.71	121.20
1	N	577	G	C8-N9-C4	-6.77	103.69	106.40
1	N	713	G	N9-C4-C5	-6.77	102.69	105.40
1	N	819	A	N7-C8-N9	-6.77	110.41	113.80
1	N	146	G	P-O5'-C5'	6.77	131.74	120.90
1	N	1069	C	N3-C4-C5	-6.77	119.19	121.90
1	N	860	A	C6-C5-N7	-6.77	127.56	132.30
1	N	131	A	C8-N9-C4	-6.77	103.09	105.80
1	N	944	G	N1-C2-N3	-6.77	119.84	123.90
1	N	868	C	N3-C4-N4	6.77	122.74	118.00
1	N	1079	G	N9-C4-C5	-6.77	102.69	105.40
1	N	1156	G	C6-C5-N7	-6.77	126.34	130.40
1	N	671	G	N3-C4-C5	-6.76	125.22	128.60
1	N	1193	G	N7-C8-N9	-6.76	109.72	113.10
1	N	1392	G	C6-N1-C2	6.76	129.16	125.10
1	N	617	G	C2-N3-C4	6.76	115.28	111.90
1	N	32	A	N1-C2-N3	6.76	132.68	129.30
1	N	860	A	C2-N3-C4	-6.76	107.22	110.60
1	N	634	C	P-O5'-C5'	6.76	131.72	120.90
1	N	685	G	N3-C4-N9	6.76	130.06	126.00
1	N	1027	C	C5'-C4'-C3'	-6.76	105.19	116.00
1	N	1294	G	P-O3'-C3'	-6.76	111.59	119.70
1	N	657	U	C5'-C4'-C3'	6.75	126.81	116.00
1	N	1061	G	O4'-C1'-N9	6.75	113.60	108.20
1	N	1069	C	N1-C2-O2	6.75	122.95	118.90
1	N	462	G	C5-N7-C8	6.75	107.68	104.30
1	N	473	U	C6-N1-C2	6.75	125.05	121.00
1	N	506	G	C6-C5-N7	-6.75	126.35	130.40
1	N	851	G	N3-C4-C5	-6.75	125.22	128.60
1	N	856	C	C5'-C4'-C3'	6.75	126.81	116.00
1	N	896	C	C6-N1-C2	6.75	123.00	120.30
1	N	1274	A	C4'-C3'-C2'	6.75	109.35	102.60
1	N	1529	G	C5-C6-N1	-6.75	108.12	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	207	C	O4'-C4'-C3'	-6.75	97.25	104.00
1	N	326	G	C8-N9-C4	-6.75	103.70	106.40
1	N	831	A	C6-C5-N7	-6.75	127.57	132.30
1	N	230	G	C5-C6-O6	-6.75	124.55	128.60
1	N	330	C	C4-C5-C6	6.75	120.77	117.40
1	N	341	C	N3-C2-O2	6.75	126.62	121.90
1	N	1192	C	C3'-C2'-C1'	6.75	106.90	101.50
1	N	1363	A	C6-C5-N7	-6.75	127.58	132.30
1	N	329	A	C4-C5-N7	-6.75	107.33	110.70
1	N	1510	C	N3-C4-C5	-6.75	119.20	121.90
1	N	661	G	C4-C5-N7	6.74	113.50	110.80
1	N	1068	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	1288	A	C2-N3-C4	-6.74	107.23	110.60
1	N	1420	U	OP1-P-OP2	-6.74	109.49	119.60
1	N	1517	G	P-O5'-C5'	-6.74	110.11	120.90
1	N	905	U	N3-C4-O4	6.74	124.12	119.40
1	N	35	G	N9-C4-C5	6.74	108.10	105.40
1	N	297	G	C4-N9-C1'	-6.74	117.74	126.50
1	N	737	C	N3-C4-C5	-6.74	119.20	121.90
1	N	864	A	P-O3'-C3'	6.74	127.79	119.70
1	N	1070	U	C4'-C3'-C2'	-6.74	95.86	102.60
1	N	1283	U	C5-C4-O4	-6.74	121.86	125.90
1	N	1347	G	N3-C4-C5	-6.74	125.23	128.60
1	N	1461	G	C5-N7-C8	6.74	107.67	104.30
1	N	602	A	C6-C5-N7	-6.74	127.58	132.30
1	N	798	U	O4'-C1'-N1	6.74	113.59	108.20
1	N	732	C	C4-C5-C6	6.74	120.77	117.40
1	N	1410	A	N7-C8-N9	6.74	117.17	113.80
1	N	424	G	C4-N9-C1'	6.74	135.25	126.50
1	N	974	A	C6-C5-N7	-6.74	127.58	132.30
1	N	1129	C	N3-C2-O2	6.74	126.61	121.90
1	N	210	C	N3-C4-C5	-6.73	119.21	121.90
1	N	251	G	C6-C5-N7	-6.73	126.36	130.40
1	N	1145	A	P-O3'-C3'	6.73	127.78	119.70
1	N	761	G	N3-C4-C5	6.73	131.97	128.60
1	N	1025	U	N1-C2-O2	-6.73	118.09	122.80
1	N	317	U	C5-C4-O4	-6.73	121.86	125.90
1	N	365	U	N1-C2-O2	-6.73	118.09	122.80
1	N	939	G	N1-C2-N3	-6.73	119.86	123.90
1	N	580	C	N3-C4-C5	-6.73	119.21	121.90
1	N	454	G	N3-C2-N2	6.73	124.61	119.90
1	N	837	U	C4-C5-C6	-6.73	115.66	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	310	G	N1-C6-O6	6.73	123.94	119.90
1	N	653	U	N3-C4-C5	-6.73	110.56	114.60
1	N	1290	G	C4-N9-C1'	6.73	135.24	126.50
1	N	139	A	C6-C5-N7	-6.72	127.59	132.30
1	N	190	A	O5'-P-OP2	6.72	118.77	110.70
1	N	207	C	P-O3'-C3'	6.72	127.77	119.70
1	N	453	G	C5-C6-N1	-6.72	108.14	111.50
1	N	638	U	N3-C4-O4	6.72	124.11	119.40
1	N	696	A	N1-C6-N6	6.72	122.64	118.60
1	N	963	G	C5-N7-C8	-6.72	100.94	104.30
1	N	1134	G	C4-C5-N7	6.72	113.49	110.80
1	N	1171	A	N9-C4-C5	6.72	108.49	105.80
1	N	133	U	C5'-C4'-O4'	6.72	117.17	109.10
1	N	234	C	N3-C4-C5	-6.72	119.21	121.90
1	N	513	C	O5'-C5'-C4'	-6.72	98.93	111.70
1	N	765	G	C6-N1-C2	-6.72	121.07	125.10
1	N	542	G	C8-N9-C4	-6.72	103.71	106.40
1	N	648	A	O4'-C1'-N9	6.72	113.58	108.20
1	N	1224	U	O4'-C1'-N1	6.72	113.58	108.20
1	N	1292	G	N9-C4-C5	-6.72	102.71	105.40
1	N	637	C	C5-C6-N1	6.72	124.36	121.00
1	N	663	A	C8-N9-C4	-6.72	103.11	105.80
1	N	1024	G	N3-C4-N9	-6.72	121.97	126.00
1	N	400	C	N1-C1'-C2'	-6.72	104.61	112.00
1	N	277	C	N3-C4-N4	6.71	122.70	118.00
1	N	302	G	C4-N9-C1'	-6.71	117.77	126.50
1	N	604	G	N3-C2-N2	6.71	124.60	119.90
1	N	701	U	P-O5'-C5'	6.71	131.64	120.90
1	N	737	C	C1'-O4'-C4'	6.71	115.27	109.90
1	N	1192	C	P-O3'-C3'	6.71	127.76	119.70
1	N	514	C	C5-C6-N1	6.71	124.36	121.00
1	N	92	U	N3-C4-O4	6.71	124.10	119.40
1	N	344	A	C2-N3-C4	-6.71	107.24	110.60
1	N	371	A	N9-C4-C5	6.71	108.48	105.80
1	N	292	G	C6-C5-N7	-6.71	126.37	130.40
1	N	727	G	C6-C5-N7	-6.71	126.37	130.40
1	N	1057	G	C5-N7-C8	6.71	107.66	104.30
1	N	14	U	C4'-C3'-C2'	-6.71	95.89	102.60
1	N	669	G	P-O5'-C5'	6.71	131.63	120.90
1	N	899	C	N3-C4-N4	6.71	122.70	118.00
1	N	1404	C	C5-C4-N4	-6.71	115.50	120.20
1	N	696	A	C6-C5-N7	-6.71	127.61	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1231	G	C5'-C4'-O4'	6.71	117.15	109.10
1	N	1480	A	C6-C5-N7	-6.71	127.61	132.30
1	N	338	A	N1-C2-N3	-6.71	125.95	129.30
1	N	655	A	P-O5'-C5'	6.71	131.63	120.90
1	N	787	A	C5'-C4'-C3'	6.71	126.73	116.00
1	N	1006	G	C4-C5-C6	6.71	122.82	118.80
1	N	1134	G	O4'-C1'-N9	6.71	113.56	108.20
1	N	214	C	N1-C2-N3	6.70	123.89	119.20
1	N	934	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	1117	A	O4'-C1'-N9	6.70	113.56	108.20
1	N	1465	A	N3-C4-N9	6.70	132.76	127.40
1	N	1332	A	C6-N1-C2	-6.70	114.58	118.60
1	N	1496	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	88	U	C5'-C4'-O4'	6.70	117.14	109.10
1	N	96	U	C5-C6-N1	6.70	126.05	122.70
1	N	716	A	C2-N3-C4	-6.70	107.25	110.60
1	N	262	A	C6-N1-C2	6.70	122.62	118.60
1	N	1325	C	C3'-C2'-C1'	6.70	106.86	101.50
1	N	213	G	C2-N3-C4	6.70	115.25	111.90
1	N	254	G	N3-C4-N9	6.70	130.02	126.00
1	N	269	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	470	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	14	U	N1-C2-N3	-6.70	110.88	114.90
1	N	347	G	C5-C6-O6	-6.70	124.58	128.60
1	N	518	C	C5'-C4'-O4'	6.70	117.14	109.10
1	N	593	U	C6-N1-C2	6.70	125.02	121.00
1	N	599	C	N3-C4-N4	6.70	122.69	118.00
1	N	168	G	N3-C2-N2	6.69	124.59	119.90
1	N	654	G	N1-C2-N2	-6.69	110.18	116.20
1	N	803	G	N1-C2-N3	6.69	127.92	123.90
1	N	1104	G	N1-C2-N3	-6.69	119.89	123.90
1	N	1474	U	O4'-C1'-N1	6.69	113.55	108.20
1	N	587	G	C5-C6-O6	-6.69	124.59	128.60
1	N	653	U	C4-C5-C6	6.69	123.71	119.70
1	N	844	G	C6-C5-N7	-6.69	126.39	130.40
1	N	1102	A	N1-C6-N6	6.69	122.61	118.60
1	N	1273	C	C4-C5-C6	6.69	120.75	117.40
1	N	263	A	C5-C6-N1	-6.69	114.36	117.70
1	N	807	A	N7-C8-N9	-6.69	110.46	113.80
1	N	1183	U	C4-C5-C6	6.69	123.71	119.70
1	N	16	A	C1'-O4'-C4'	6.69	115.25	109.90
1	N	635	A	C5'-C4'-O4'	6.69	117.12	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	845	A	C5-C6-N6	-6.69	118.35	123.70
1	N	1178	G	N3-C2-N2	6.69	124.58	119.90
1	N	1371	G	P-O3'-C3'	6.69	127.72	119.70
1	N	1462	C	P-O3'-C3'	6.69	127.72	119.70
1	N	1496	C	P-O5'-C5'	6.69	131.60	120.90
1	N	192	A	O4'-C1'-N9	6.68	113.55	108.20
1	N	359	G	P-O3'-C3'	-6.68	111.68	119.70
1	N	764	C	N1-C2-N3	6.68	123.88	119.20
1	N	1248	A	C8-N9-C4	-6.68	103.13	105.80
1	N	882	C	C6-N1-C2	-6.68	117.63	120.30
1	N	932	C	C5-C6-N1	6.68	124.34	121.00
1	N	1059	C	C5-C6-N1	6.68	124.34	121.00
1	N	1135	U	N1-C2-O2	-6.68	118.12	122.80
1	N	1145	A	C3'-C2'-C1'	6.68	106.85	101.50
1	N	1175	G	N3-C4-C5	6.68	131.94	128.60
1	N	9	G	N3-C4-C5	6.68	131.94	128.60
1	N	187	G	C8-N9-C1'	6.68	135.69	127.00
1	N	1018	G	N9-C4-C5	6.68	108.07	105.40
1	N	1413	A	C5-N7-C8	6.68	107.24	103.90
1	N	9	G	O4'-C1'-N9	6.68	113.54	108.20
1	N	491	G	C6-C5-N7	-6.68	126.39	130.40
1	N	741	G	C4-N9-C1'	-6.68	117.82	126.50
1	N	928	G	C5'-C4'-C3'	-6.68	105.31	116.00
1	N	50	A	C5-C6-N1	-6.67	114.36	117.70
1	N	364	A	C2-N3-C4	6.67	113.94	110.60
1	N	608	A	C5-C6-N1	-6.67	114.36	117.70
1	N	790	A	C5-C6-N6	-6.67	118.36	123.70
1	N	1087	G	N1-C6-O6	6.67	123.91	119.90
1	N	28	A	C5-C6-N6	-6.67	118.36	123.70
1	N	575	G	C6-N1-C2	6.67	129.10	125.10
1	N	1464	U	O4'-C1'-N1	6.67	113.54	108.20
1	N	1512	U	C3'-C2'-C1'	6.67	106.84	101.50
1	N	228	A	C5-C6-N6	-6.67	118.36	123.70
1	N	489	C	N3-C4-C5	-6.67	119.23	121.90
1	N	595	A	O4'-C1'-N9	6.67	113.54	108.20
1	N	770	C	C6-N1-C2	-6.67	117.63	120.30
1	N	872	A	P-O3'-C3'	6.67	127.71	119.70
1	N	1064	G	C5-C6-O6	-6.67	124.60	128.60
1	N	1169	A	C5-C6-N1	6.67	121.04	117.70
1	N	1429	A	C4-C5-N7	-6.67	107.36	110.70
1	N	98	A	C5-C6-N1	6.67	121.03	117.70
1	N	1340	A	O4'-C1'-N9	6.67	113.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1492	A	C5-C6-N1	-6.67	114.36	117.70
1	N	445	G	C4-C5-N7	6.67	113.47	110.80
1	N	1129	C	C5-C6-N1	-6.67	117.67	121.00
1	N	342	C	C6-N1-C2	-6.67	117.63	120.30
1	N	365	U	C5-C4-O4	-6.67	121.90	125.90
1	N	584	G	C8-N9-C4	-6.67	103.73	106.40
1	N	704	A	O4'-C1'-N9	6.67	113.53	108.20
1	N	1041	G	O4'-C1'-N9	6.67	113.53	108.20
1	N	1181	G	O4'-C1'-N9	6.67	113.53	108.20
1	N	1269	A	N3-C4-N9	-6.67	122.07	127.40
1	N	524	G	N7-C8-N9	6.66	116.43	113.10
1	N	736	C	C2-N1-C1'	6.66	126.13	118.80
1	N	1227	A	C4-C5-C6	6.66	120.33	117.00
1	N	315	A	O4'-C1'-N9	6.66	113.53	108.20
1	N	718	A	C1'-O4'-C4'	6.66	115.23	109.90
1	N	745	G	N1-C2-N3	-6.66	119.91	123.90
1	N	285	C	O4'-C4'-C3'	-6.66	97.34	104.00
1	N	186	C	C6-N1-C2	-6.66	117.64	120.30
1	N	325	A	O4'-C1'-N9	6.66	113.53	108.20
1	N	425	G	P-O3'-C3'	-6.66	111.71	119.70
1	N	1066	C	C5-C4-N4	-6.66	115.54	120.20
1	N	1305	G	C8-N9-C1'	6.66	135.65	127.00
1	N	661	G	OP1-P-OP2	-6.65	109.62	119.60
1	N	668	G	C8-N9-C4	-6.65	103.74	106.40
1	N	1100	C	C5-C4-N4	6.65	124.86	120.20
1	N	1489	G	C2-N3-C4	-6.65	108.57	111.90
1	N	187	G	C4-N9-C1'	-6.65	117.85	126.50
1	N	460	A	C5-C6-N1	-6.65	114.38	117.70
1	N	674	G	N1-C6-O6	6.65	123.89	119.90
1	N	968	A	C4'-C3'-C2'	-6.65	95.95	102.60
1	N	232	G	C8-N9-C4	6.65	109.06	106.40
1	N	1223	C	C4-C5-C6	6.65	120.72	117.40
1	N	1203	C	N3-C4-N4	6.65	122.65	118.00
1	N	1473	G	O4'-C1'-N9	6.65	113.52	108.20
1	N	111	G	N7-C8-N9	-6.64	109.78	113.10
1	N	232	G	C4-C5-N7	6.64	113.46	110.80
1	N	443	C	C1'-O4'-C4'	6.64	115.22	109.90
1	N	612	C	C4-C5-C6	6.64	120.72	117.40
1	N	671	G	C4-C5-C6	6.64	122.79	118.80
1	N	685	G	N3-C4-C5	-6.64	125.28	128.60
1	N	774	G	N1-C6-O6	6.64	123.89	119.90
1	N	974	A	N1-C6-N6	6.64	122.59	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	82	G	N3-C2-N2	6.64	124.55	119.90
1	N	759	A	P-O3'-C3'	-6.64	111.73	119.70
1	N	1138	G	C5-C6-N1	-6.64	108.18	111.50
1	N	1150	A	C8-N9-C4	-6.64	103.14	105.80
1	N	1397	C	N3-C4-C5	-6.64	119.24	121.90
1	N	381	C	P-O3'-C3'	6.64	127.67	119.70
1	N	1344	C	N3-C4-N4	6.64	122.65	118.00
1	N	481	G	N1-C6-O6	6.64	123.88	119.90
1	N	733	G	C8-N9-C1'	-6.64	118.37	127.00
1	N	388	G	C4-C5-N7	-6.64	108.14	110.80
1	N	766	A	O4'-C1'-N9	6.64	113.51	108.20
1	N	281	G	C6-C5-N7	-6.64	126.42	130.40
1	N	533	A	C5'-C4'-O4'	6.64	117.06	109.10
1	N	874	G	C2-N3-C4	6.64	115.22	111.90
1	N	938	A	N7-C8-N9	-6.64	110.48	113.80
1	N	1187	G	C5-C6-N1	-6.64	108.18	111.50
1	N	18	C	N3-C4-C5	-6.63	119.25	121.90
1	N	82	G	C8-N9-C4	-6.63	103.75	106.40
1	N	1028	C	P-O3'-C3'	6.63	127.66	119.70
1	N	1204	A	C2-N3-C4	-6.63	107.28	110.60
1	N	846	G	C6-C5-N7	-6.63	126.42	130.40
1	N	871	U	O4'-C1'-N1	6.63	113.51	108.20
1	N	1168	U	C5'-C4'-O4'	6.63	117.06	109.10
1	N	372	C	N1-C2-O2	-6.63	114.92	118.90
1	N	1453	G	N3-C4-C5	6.63	131.92	128.60
1	N	1242	G	P-O3'-C3'	-6.63	111.74	119.70
1	N	105	G	C5'-C4'-O4'	6.63	117.05	109.10
1	N	658	C	C3'-C2'-C1'	-6.63	96.20	101.50
1	N	908	A	N7-C8-N9	-6.63	110.49	113.80
1	N	910	C	C2-N3-C4	6.63	123.21	119.90
1	N	1015	G	O4'-C1'-N9	6.63	113.50	108.20
1	N	1301	U	N1-C2-N3	-6.63	110.92	114.90
1	N	96	U	C6-N1-C2	-6.63	117.02	121.00
1	N	193	C	C5-C4-N4	-6.63	115.56	120.20
1	N	631	C	N1-C2-N3	-6.63	114.56	119.20
1	N	1397	C	N1-C2-O2	6.63	122.88	118.90
1	N	98	A	C5-N7-C8	6.62	107.21	103.90
1	N	189	A	C4-C5-N7	-6.62	107.39	110.70
1	N	1014	A	C6-C5-N7	-6.62	127.66	132.30
1	N	1065	U	P-O5'-C5'	6.62	131.50	120.90
1	N	37	U	C3'-C2'-C1'	6.62	106.80	101.50
1	N	431	A	C5'-C4'-O4'	6.62	117.05	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	544	G	O4'-C1'-N9	6.62	113.50	108.20
1	N	724	G	O4'-C1'-N9	6.62	113.50	108.20
1	N	798	U	N3-C4-O4	6.62	124.04	119.40
1	N	806	C	C1'-O4'-C4'	6.62	115.20	109.90
1	N	866	C	N1-C2-N3	-6.62	114.56	119.20
1	N	1190	G	P-O3'-C3'	-6.62	111.75	119.70
1	N	1190	G	N3-C2-N2	6.62	124.54	119.90
1	N	278	G	C2-N3-C4	6.62	115.21	111.90
1	N	657	U	C1'-O4'-C4'	6.62	115.20	109.90
1	N	696	A	C4-C5-C6	6.62	120.31	117.00
1	N	1191	A	C4-C5-C6	6.62	120.31	117.00
1	N	16	A	C5-C6-N1	-6.62	114.39	117.70
1	N	129	A	C8-N9-C4	6.62	108.45	105.80
1	N	1104	G	C5-N7-C8	6.62	107.61	104.30
1	N	1176	A	C4-C5-C6	6.62	120.31	117.00
1	N	1249	C	C5-C6-N1	6.62	124.31	121.00
1	N	1185	G	N3-C4-C5	6.62	131.91	128.60
1	N	253	A	O4'-C1'-N9	6.62	113.49	108.20
1	N	894	G	C8-N9-C4	-6.62	103.75	106.40
1	N	348	G	C5-N7-C8	-6.61	100.99	104.30
1	N	366	A	N7-C8-N9	6.61	117.11	113.80
1	N	443	C	N1-C2-O2	6.61	122.87	118.90
1	N	1083	U	C6-N1-C2	6.61	124.97	121.00
1	N	1142	G	C5-C6-O6	-6.61	124.63	128.60
1	N	864	A	C4-C5-C6	6.61	120.31	117.00
1	N	168	G	N9-C1'-C2'	-6.61	104.73	112.00
1	N	1275	A	C5-C6-N1	-6.61	114.39	117.70
1	N	1305	G	C4-C5-N7	6.61	113.44	110.80
1	N	1334	G	C5-C6-N1	-6.61	108.19	111.50
1	N	1410	A	N1-C6-N6	6.61	122.57	118.60
1	N	1417	G	O4'-C1'-N9	6.61	113.49	108.20
1	N	1455	G	C6-N1-C2	6.61	129.07	125.10
1	N	101	A	C2'-C3'-O3'	6.61	124.28	113.70
1	N	356	A	O4'-C4'-C3'	-6.61	97.39	104.00
1	N	547	A	N1-C2-N3	6.61	132.60	129.30
1	N	634	C	C5-C6-N1	6.61	124.31	121.00
1	N	737	C	C5'-C4'-O4'	6.61	117.03	109.10
1	N	178	C	O4'-C1'-N1	6.61	113.49	108.20
1	N	404	G	N3-C4-C5	-6.61	125.30	128.60
1	N	1465	A	O4'-C1'-N9	6.61	113.49	108.20
1	N	109	A	C2-N3-C4	6.61	113.90	110.60
1	N	598	U	N3-C4-O4	6.61	124.02	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1399	C	C5-C4-N4	6.61	124.82	120.20
1	N	61	G	N9-C1'-C2'	-6.60	104.74	112.00
1	N	1484	C	O4'-C1'-N1	6.60	113.48	108.20
1	N	10	A	C4-C5-C6	6.60	120.30	117.00
1	N	813	U	N1-C2-N3	-6.60	110.94	114.90
1	N	1321	U	N3-C4-O4	6.60	124.02	119.40
1	N	1455	G	C6-C5-N7	-6.60	126.44	130.40
1	N	498	A	N1-C6-N6	6.60	122.56	118.60
1	N	575	G	C5-N7-C8	6.60	107.60	104.30
1	N	750	C	N3-C4-N4	6.60	122.62	118.00
1	N	775	G	C4'-C3'-C2'	-6.60	96.00	102.60
1	N	1188	A	N1-C6-N6	6.60	122.56	118.60
1	N	1337	G	C4-C5-C6	6.60	122.76	118.80
1	N	1512	U	P-O3'-C3'	6.60	127.62	119.70
1	N	236	A	C4'-C3'-C2'	-6.60	96.00	102.60
1	N	292	G	N1-C6-O6	6.60	123.86	119.90
1	N	650	G	N3-C2-N2	6.60	124.52	119.90
1	N	966	G	C6-C5-N7	-6.60	126.44	130.40
1	N	1465	A	N9-C4-C5	-6.60	103.16	105.80
1	N	272	C	N3-C4-C5	-6.60	119.26	121.90
1	N	1294	G	O4'-C1'-N9	6.60	113.48	108.20
1	N	1502	A	N7-C8-N9	-6.59	110.50	113.80
1	N	323	U	C1'-O4'-C4'	6.59	115.17	109.90
1	N	867	G	C1'-O4'-C4'	6.59	115.17	109.90
1	N	1100	C	C2-N3-C4	6.59	123.20	119.90
1	N	1178	G	P-O5'-C5'	6.59	131.45	120.90
1	N	602	A	N3-C4-N9	6.59	132.67	127.40
1	N	744	C	C5-C6-N1	6.59	124.30	121.00
1	N	1023	U	C4-C5-C6	6.59	123.65	119.70
1	N	1198	G	N9-C4-C5	-6.59	102.76	105.40
1	N	1341	U	N3-C4-O4	6.59	124.01	119.40
1	N	1037	C	P-O3'-C3'	6.59	127.60	119.70
1	N	1246	A	N9-C4-C5	-6.59	103.17	105.80
1	N	430	A	N7-C8-N9	-6.58	110.51	113.80
1	N	1399	C	O5'-C5'-C4'	-6.58	99.19	111.70
1	N	443	C	OP2-P-O3'	6.58	119.69	105.20
1	N	862	C	C6-N1-C1'	-6.58	112.90	120.80
1	N	1064	G	C8-N9-C1'	-6.58	118.44	127.00
1	N	1437	A	C8-N9-C4	-6.58	103.17	105.80
1	N	1491	G	C5'-C4'-C3'	6.58	126.53	116.00
1	N	165	G	P-O5'-C5'	6.58	131.43	120.90
1	N	182	A	C4-C5-C6	6.58	120.29	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	529	G	O4'-C1'-N9	6.58	113.46	108.20
1	N	714	G	C5-C6-N1	-6.58	108.21	111.50
1	N	271	C	O4'-C1'-N1	6.58	113.46	108.20
1	N	595	A	P-O3'-C3'	6.58	127.59	119.70
1	N	728	A	C5-N7-C8	6.58	107.19	103.90
1	N	1509	C	C6-N1-C2	-6.58	117.67	120.30
1	N	1526	G	O4'-C1'-N9	6.58	113.46	108.20
1	N	252	U	N3-C4-C5	-6.58	110.65	114.60
1	N	430	A	C1'-O4'-C4'	6.58	115.16	109.90
1	N	674	G	C4-N9-C1'	-6.58	117.95	126.50
1	N	1105	A	N9-C4-C5	6.58	108.43	105.80
1	N	208	U	C6-N1-C2	-6.58	117.06	121.00
1	N	903	G	P-O3'-C3'	6.58	127.59	119.70
1	N	1090	U	N1-C2-N3	-6.58	110.95	114.90
1	N	246	A	C5-C6-N1	-6.57	114.41	117.70
1	N	990	C	N3-C4-C5	-6.57	119.27	121.90
1	N	660	C	N1-C2-O2	6.57	122.84	118.90
1	N	1014	A	N1-C2-N3	6.57	132.59	129.30
1	N	1090	U	N1-C2-O2	-6.57	118.20	122.80
1	N	1131	G	N3-C4-C5	-6.57	125.31	128.60
1	N	105	G	C5-C6-N1	-6.57	108.22	111.50
1	N	119	A	O4'-C1'-N9	6.57	113.46	108.20
1	N	285	C	C5'-C4'-O4'	6.57	116.98	109.10
1	N	417	G	C8-N9-C4	-6.57	103.77	106.40
1	N	810	C	N3-C4-C5	-6.57	119.27	121.90
1	N	1193	G	C5-N7-C8	6.57	107.58	104.30
1	N	1305	G	N1-C6-O6	6.57	123.84	119.90
1	N	1499	A	C5-C6-N6	-6.57	118.44	123.70
1	N	182	A	C5'-C4'-C3'	-6.57	105.49	116.00
1	N	830	G	N1-C6-O6	6.57	123.84	119.90
1	N	182	A	C8-N9-C4	-6.57	103.17	105.80
1	N	504	C	C6-N1-C2	6.57	122.93	120.30
1	N	1437	A	N3-C4-C5	-6.57	122.20	126.80
1	N	182	A	C5-C6-N1	-6.56	114.42	117.70
1	N	424	G	C3'-C2'-C1'	6.56	106.75	101.50
1	N	1121	U	C5-C4-O4	-6.56	121.96	125.90
1	N	432	A	C5-C6-N6	-6.56	118.45	123.70
1	N	1013	G	O4'-C1'-N9	6.56	113.45	108.20
1	N	1257	A	C4-C5-N7	-6.56	107.42	110.70
1	N	95	C	C2-N1-C1'	6.56	126.01	118.80
1	N	785	G	C3'-C2'-C1'	6.56	106.75	101.50
1	N	859	G	C4'-C3'-C2'	-6.56	96.04	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	929	G	P-O5'-C5'	6.56	131.39	120.90
1	N	1239	A	O3'-P-O5'	6.56	116.46	104.00
1	N	1278	G	C4'-C3'-C2'	-6.56	96.04	102.60
1	N	172	A	N1-C6-N6	6.56	122.53	118.60
1	N	352	C	O5'-P-OP2	6.56	118.57	110.70
1	N	54	C	P-O3'-C3'	-6.55	111.84	119.70
1	N	93	U	O4'-C4'-C3'	-6.55	97.44	104.00
1	N	681	A	O4'-C4'-C3'	-6.55	97.45	104.00
1	N	685	G	C8-N9-C4	-6.55	103.78	106.40
1	N	740	U	N3-C4-C5	-6.55	110.67	114.60
1	N	656	G	N7-C8-N9	-6.55	109.83	113.10
1	N	311	C	O4'-C1'-N1	6.55	113.44	108.20
1	N	601	G	C4-C5-N7	-6.55	108.18	110.80
1	N	173	U	P-O5'-C5'	-6.55	110.42	120.90
1	N	613	C	OP1-P-OP2	-6.55	109.78	119.60
1	N	1033	G	N7-C8-N9	6.55	116.37	113.10
1	N	1291	U	N3-C4-O4	6.55	123.98	119.40
1	N	1333	A	C6-C5-N7	-6.55	127.72	132.30
1	N	1477	U	N3-C4-O4	6.55	123.98	119.40
1	N	428	G	N1-C2-N3	-6.54	119.97	123.90
1	N	519	C	C6-N1-C2	-6.54	117.68	120.30
1	N	1348	U	N1-C2-N3	6.54	118.83	114.90
1	N	531	U	C4-C5-C6	-6.54	115.78	119.70
1	N	1008	U	N3-C2-O2	6.54	126.78	122.20
1	N	1046	A	O4'-C1'-N9	6.54	113.43	108.20
1	N	1057	G	C5-C6-N1	6.54	114.77	111.50
1	N	1501	C	C5-C4-N4	-6.54	115.62	120.20
1	N	370	C	O4'-C1'-N1	6.54	113.43	108.20
1	N	450	G	O4'-C1'-N9	6.54	113.43	108.20
1	N	536	C	C2-N3-C4	-6.54	116.63	119.90
1	N	1185	G	C4-C5-N7	6.54	113.42	110.80
1	N	1225	A	C6-N1-C2	6.54	122.52	118.60
1	N	1336	C	C3'-C2'-C1'	-6.54	96.27	101.50
1	N	1388	C	P-O3'-C3'	6.54	127.55	119.70
1	N	1497	G	N1-C2-N3	-6.54	119.98	123.90
1	N	335	C	C2-N1-C1'	6.54	125.99	118.80
1	N	440	C	N1-C2-N3	-6.54	114.62	119.20
1	N	1384	C	P-O5'-C5'	6.54	131.36	120.90
1	N	76	G	C5'-C4'-C3'	-6.54	105.54	116.00
1	N	579	A	C5-C6-N6	-6.54	118.47	123.70
1	N	1072	G	C6-N1-C2	6.53	129.02	125.10
1	N	1292	G	C6-C5-N7	-6.53	126.48	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1456	A	C6-C5-N7	-6.53	127.73	132.30
1	N	222	C	O4'-C4'-C3'	-6.53	97.47	104.00
1	N	587	G	C4-C5-N7	6.53	113.41	110.80
1	N	765	G	C8-N9-C4	-6.53	103.79	106.40
1	N	1222	G	C4-C5-C6	6.53	122.72	118.80
1	N	1361	G	C5'-C4'-C3'	6.53	126.45	116.00
1	N	652	U	O4'-C4'-C3'	6.53	111.32	106.10
1	N	1024	G	C2-N3-C4	-6.53	108.64	111.90
1	N	567	G	C5-C6-N1	6.53	114.76	111.50
1	N	39	G	N3-C4-N9	-6.53	122.08	126.00
1	N	1533	C	N3-C4-N4	6.53	122.57	118.00
1	N	28	A	C6-C5-N7	-6.52	127.73	132.30
1	N	406	G	O4'-C1'-N9	6.52	113.42	108.20
1	N	430	A	C4-C5-C6	6.52	120.26	117.00
1	N	340	U	C2-N3-C4	-6.52	123.09	127.00
1	N	1343	G	N7-C8-N9	6.52	116.36	113.10
1	N	871	U	C6-N1-C2	-6.52	117.09	121.00
1	N	1063	C	N1-C2-O2	-6.52	114.99	118.90
1	N	1184	G	C6-C5-N7	-6.52	126.49	130.40
1	N	291	U	N1-C2-N3	-6.52	110.99	114.90
1	N	354	G	N3-C2-N2	6.52	124.46	119.90
1	N	648	A	P-O3'-C3'	6.52	127.52	119.70
1	N	732	C	N1-C2-N3	6.52	123.76	119.20
1	N	1057	G	C5-C6-O6	-6.52	124.69	128.60
1	N	1187	G	C5-C6-O6	-6.52	124.69	128.60
1	N	1504	G	C2-N3-C4	6.52	115.16	111.90
1	N	217	C	N3-C4-N4	6.52	122.56	118.00
1	N	230	G	C8-N9-C4	-6.52	103.79	106.40
1	N	241	G	C5-N7-C8	6.52	107.56	104.30
1	N	960	U	C6-N1-C2	-6.52	117.09	121.00
1	N	1074	G	C2-N3-C4	-6.52	108.64	111.90
1	N	1390	U	C5-C4-O4	6.52	129.81	125.90
1	N	449	G	C8-N9-C1'	-6.52	118.53	127.00
1	N	1377	A	N7-C8-N9	-6.52	110.54	113.80
1	N	72	A	C5-C6-N6	-6.51	118.49	123.70
1	N	471	U	C6-N1-C2	6.51	124.91	121.00
1	N	73	C	C6-N1-C1'	6.51	128.62	120.80
1	N	268	U	N3-C2-O2	6.51	126.76	122.20
1	N	691	G	N3-C4-C5	6.51	131.86	128.60
1	N	1486	G	C8-N9-C4	6.51	109.00	106.40
1	N	137	U	N3-C4-C5	-6.51	110.69	114.60
1	N	1255	G	N1-C2-N2	-6.51	110.34	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	93	U	C3'-C2'-C1'	-6.51	96.29	101.50
1	N	233	C	O4'-C1'-N1	6.51	113.41	108.20
1	N	570	G	N1-C2-N3	-6.51	120.00	123.90
1	N	663	A	C2-N3-C4	-6.51	107.34	110.60
1	N	747	A	C4-C5-C6	6.51	120.25	117.00
1	N	1030	U	C5-C4-O4	-6.51	121.99	125.90
1	N	1363	A	C1'-O4'-C4'	-6.51	104.69	109.90
1	N	1412	C	C4'-C3'-C2'	-6.51	96.09	102.60
1	N	116	A	C6-C5-N7	-6.51	127.75	132.30
1	N	664	G	C6-C5-N7	-6.51	126.50	130.40
1	N	1039	G	P-O3'-C3'	-6.51	111.89	119.70
1	N	1082	A	O4'-C1'-C2'	6.51	113.45	107.60
1	N	1232	U	C2-N3-C4	-6.51	123.10	127.00
1	N	1400	C	C4-C5-C6	-6.51	114.15	117.40
1	N	620	C	O4'-C1'-N1	6.50	113.40	108.20
1	N	650	G	N3-C4-N9	-6.50	122.10	126.00
1	N	1261	A	O5'-P-OP1	-6.50	99.85	105.70
1	N	15	G	N3-C4-C5	6.50	131.85	128.60
1	N	565	U	C3'-C2'-C1'	-6.50	96.30	101.50
1	N	717	U	N3-C4-C5	-6.50	110.70	114.60
1	N	1030	U	C2-N1-C1'	6.50	125.50	117.70
1	N	1142	G	C6-C5-N7	-6.50	126.50	130.40
1	N	1185	G	O4'-C4'-C3'	-6.50	97.50	104.00
1	N	563	A	P-O5'-C5'	-6.50	110.50	120.90
1	N	1300	G	O4'-C1'-N9	6.50	113.40	108.20
1	N	369	G	N3-C4-N9	6.50	129.90	126.00
1	N	582	C	N3-C4-C5	-6.50	119.30	121.90
1	N	952	U	C5-C6-N1	6.50	125.95	122.70
1	N	1274	A	C6-N1-C2	-6.50	114.70	118.60
1	N	1390	U	C3'-C2'-C1'	6.50	106.70	101.50
1	N	93	U	P-O3'-C3'	-6.50	111.91	119.70
1	N	177	G	N1-C6-O6	6.50	123.80	119.90
1	N	237	G	N1-C2-N3	-6.50	120.00	123.90
1	N	390	U	C6-N1-C2	-6.50	117.10	121.00
1	N	739	C	C6-N1-C1'	-6.50	113.00	120.80
1	N	1495	U	C4-C5-C6	-6.50	115.80	119.70
1	N	1533	C	O4'-C1'-N1	6.50	113.40	108.20
1	N	540	G	N1-C6-O6	6.50	123.80	119.90
1	N	573	A	C4'-C3'-C2'	-6.50	96.11	102.60
1	N	69	G	C5-C6-O6	-6.49	124.70	128.60
1	N	1133	G	C8-N9-C1'	-6.49	118.56	127.00
1	N	854	U	C5'-C4'-O4'	6.49	116.89	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	109	A	N3-C4-N9	6.49	132.59	127.40
1	N	5	U	P-O5'-C5'	-6.49	110.52	120.90
1	N	527	G	N1-C6-O6	6.49	123.79	119.90
1	N	813	U	O4'-C1'-N1	6.49	113.39	108.20
1	N	979	C	N1-C2-O2	6.49	122.79	118.90
1	N	1467	C	C6-N1-C2	-6.49	117.70	120.30
1	N	242	G	N1-C6-O6	6.49	123.79	119.90
1	N	1279	G	C8-N9-C1'	-6.49	118.57	127.00
1	N	245	U	C4-C5-C6	-6.49	115.81	119.70
1	N	264	C	N3-C4-N4	6.49	122.54	118.00
1	N	403	C	C5-C6-N1	6.49	124.24	121.00
1	N	586	C	C2-N3-C4	6.49	123.14	119.90
1	N	642	A	C4-C5-N7	-6.49	107.46	110.70
1	N	1139	G	P-O3'-C3'	6.49	127.48	119.70
1	N	426	U	C2-N3-C4	6.48	130.89	127.00
1	N	1135	U	C5-C4-O4	-6.48	122.01	125.90
1	N	1178	G	N1-C6-O6	6.48	123.79	119.90
1	N	1210	C	C2-N1-C1'	6.48	125.93	118.80
1	N	126	G	C6-N1-C2	6.48	128.99	125.10
1	N	292	G	C5-C6-O6	-6.48	124.71	128.60
1	N	602	A	N9-C4-C5	-6.48	103.21	105.80
1	N	666	G	N3-C4-N9	6.48	129.89	126.00
1	N	944	G	N7-C8-N9	6.48	116.34	113.10
1	N	1076	U	N1-C2-O2	-6.48	118.26	122.80
1	N	1333	A	P-O3'-C3'	-6.48	111.92	119.70
1	N	479	U	N3-C2-O2	6.48	126.74	122.20
1	N	973	G	N1-C6-O6	6.48	123.79	119.90
1	N	1266	G	C1'-O4'-C4'	-6.48	104.72	109.90
1	N	1323	G	N3-C4-C5	6.48	131.84	128.60
1	N	450	G	C4'-C3'-C2'	-6.48	96.12	102.60
1	N	758	C	C5-C6-N1	6.48	124.24	121.00
1	N	1243	C	O4'-C1'-N1	6.48	113.38	108.20
1	N	683	G	N9-C4-C5	-6.48	102.81	105.40
1	N	929	G	C6-N1-C2	-6.48	121.21	125.10
1	N	1270	G	O4'-C1'-N9	6.48	113.38	108.20
1	N	1419	G	C4-C5-C6	6.48	122.69	118.80
1	N	53	A	P-O5'-C5'	6.48	131.26	120.90
1	N	922	G	N3-C4-C5	-6.48	125.36	128.60
1	N	1365	G	N1-C2-N2	-6.48	110.37	116.20
1	N	1466	C	O4'-C1'-N1	6.48	113.38	108.20
1	N	127	G	N3-C2-N2	6.47	124.43	119.90
1	N	245	U	N3-C4-O4	6.47	123.93	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	537	G	C4-C5-N7	-6.47	108.21	110.80
1	N	187	G	C4-C5-C6	6.47	122.68	118.80
1	N	303	A	O4'-C1'-N9	6.47	113.38	108.20
1	N	384	G	N1-C2-N3	-6.47	120.02	123.90
1	N	988	G	C8-N9-C4	-6.47	103.81	106.40
1	N	421	U	N3-C4-O4	6.47	123.93	119.40
1	N	228	A	C4-C5-C6	6.47	120.23	117.00
1	N	542	G	C5-C6-O6	-6.47	124.72	128.60
1	N	687	A	C5-C6-N6	-6.47	118.53	123.70
1	N	939	G	N3-C2-N2	6.47	124.43	119.90
1	N	1203	C	N1-C2-N3	-6.47	114.67	119.20
1	N	1375	A	C4-C5-N7	6.47	113.94	110.70
1	N	4	U	C3'-C2'-C1'	6.47	106.67	101.50
1	N	1037	C	N3-C4-C5	-6.47	119.31	121.90
1	N	62	U	P-O3'-C3'	-6.47	111.94	119.70
1	N	681	A	P-O3'-C3'	6.47	127.46	119.70
1	N	858	G	C6-C5-N7	-6.47	126.52	130.40
1	N	971	G	N1-C6-O6	6.46	123.78	119.90
1	N	1092	A	N9-C4-C5	6.46	108.39	105.80
1	N	555	U	C5-C4-O4	6.46	129.78	125.90
1	N	736	C	N3-C4-C5	-6.46	119.31	121.90
1	N	22	G	C5-C6-N1	6.46	114.73	111.50
1	N	51	A	C8-N9-C4	-6.46	103.22	105.80
1	N	455	G	N3-C2-N2	6.46	124.42	119.90
1	N	628	G	C5-N7-C8	6.46	107.53	104.30
1	N	706	A	N1-C2-N3	-6.46	126.07	129.30
1	N	104	G	C5-C6-N1	6.46	114.73	111.50
1	N	856	C	N3-C4-N4	6.46	122.52	118.00
1	N	105	G	N9-C4-C5	6.46	107.98	105.40
1	N	542	G	C4-C5-C6	6.46	122.67	118.80
1	N	806	C	P-O3'-C3'	-6.46	111.95	119.70
1	N	1039	G	C2-N3-C4	6.46	115.13	111.90
1	N	1108	G	N1-C2-N3	-6.46	120.03	123.90
1	N	317	U	C2-N3-C4	6.46	130.87	127.00
1	N	1270	G	C5-C6-N1	-6.46	108.27	111.50
1	N	782	A	C8-N9-C4	-6.46	103.22	105.80
1	N	79	G	O4'-C1'-N9	6.45	113.36	108.20
1	N	144	G	C4-C5-N7	6.45	113.38	110.80
1	N	326	G	C5-N7-C8	-6.45	101.07	104.30
1	N	460	A	C3'-C2'-C1'	-6.45	96.34	101.50
1	N	793	U	C5-C4-O4	-6.45	122.03	125.90
1	N	1023	U	N1-C2-N3	-6.45	111.03	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1308	U	O4'-C1'-N1	6.45	113.36	108.20
1	N	1389	C	O4'-C1'-N1	6.45	113.36	108.20
1	N	473	U	N1-C2-N3	-6.45	111.03	114.90
1	N	1118	U	O4'-C1'-N1	6.45	113.36	108.20
1	N	145	G	N3-C4-C5	-6.45	125.38	128.60
1	N	146	G	C4-C5-C6	6.45	122.67	118.80
1	N	205	A	N7-C8-N9	-6.45	110.58	113.80
1	N	525	C	C2-N3-C4	6.45	123.12	119.90
1	N	1426	G	N1-C2-N3	-6.45	120.03	123.90
1	N	42	G	C6-N1-C2	6.45	128.97	125.10
1	N	200	G	N3-C4-C5	6.45	131.82	128.60
1	N	216	U	P-O3'-C3'	6.45	127.44	119.70
1	N	259	G	N3-C2-N2	6.45	124.41	119.90
1	N	269	C	P-O3'-C3'	-6.45	111.96	119.70
1	N	473	U	O4'-C1'-N1	6.45	113.36	108.20
1	N	480	U	C1'-O4'-C4'	-6.45	104.74	109.90
1	N	501	C	C4'-C3'-C2'	-6.45	96.15	102.60
1	N	711	G	C5-N7-C8	6.45	107.53	104.30
1	N	773	G	C8-N9-C1'	6.45	135.38	127.00
1	N	1117	A	P-O3'-C3'	6.45	127.44	119.70
1	N	1117	A	C3'-C2'-C1'	6.45	106.66	101.50
1	N	1357	A	O4'-C1'-N9	6.45	113.36	108.20
1	N	197	A	P-O5'-C5'	6.45	131.22	120.90
1	N	1266	G	C5-C6-O6	-6.45	124.73	128.60
1	N	668	G	C5-N7-C8	-6.45	101.08	104.30
1	N	210	C	C5-C6-N1	6.44	124.22	121.00
1	N	274	A	C5-C6-N1	-6.44	114.48	117.70
1	N	1026	G	C5-C6-O6	-6.44	124.73	128.60
1	N	68	G	N1-C6-O6	6.44	123.77	119.90
1	N	131	A	C5-C6-N6	-6.44	118.55	123.70
1	N	468	A	P-O3'-C3'	6.44	127.43	119.70
1	N	572	A	C4-C5-C6	6.44	120.22	117.00
1	N	812	G	O3'-P-O5'	-6.44	91.76	104.00
1	N	859	G	N3-C4-C5	6.44	131.82	128.60
1	N	1451	U	C1'-O4'-C4'	-6.44	104.75	109.90
1	N	49	U	C5-C4-O4	-6.44	122.03	125.90
1	N	274	A	C1'-O4'-C4'	6.44	115.05	109.90
1	N	364	A	C8-N9-C4	-6.44	103.22	105.80
1	N	373	A	C5-N7-C8	6.44	107.12	103.90
1	N	1004	A	N9-C4-C5	6.44	108.38	105.80
1	N	1483	A	P-O5'-C5'	6.44	131.20	120.90
1	N	60	A	C4-C5-N7	-6.44	107.48	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	95	C	C6-N1-C2	-6.44	117.72	120.30
1	N	161	A	C5'-C4'-C3'	6.44	126.30	116.00
1	N	204	G	O4'-C1'-N9	6.44	113.35	108.20
1	N	417	G	N9-C4-C5	6.44	107.97	105.40
1	N	833	G	C5-C6-N1	-6.44	108.28	111.50
1	N	1073	U	C5-C6-N1	6.44	125.92	122.70
1	N	1260	G	N1-C2-N3	-6.44	120.04	123.90
1	N	112	G	C4-C5-N7	-6.44	108.23	110.80
1	N	1144	G	C2-N3-C4	-6.44	108.68	111.90
1	N	1242	G	C6-C5-N7	-6.44	126.54	130.40
1	N	227	G	O4'-C1'-N9	6.43	113.35	108.20
1	N	326	G	N3-C2-N2	6.43	124.41	119.90
1	N	1206	G	P-O5'-C5'	6.43	131.19	120.90
1	N	1407	C	N1-C2-O2	6.43	122.76	118.90
1	N	1516	G	C5-C6-O6	-6.43	124.74	128.60
1	N	172	A	N9-C4-C5	6.43	108.37	105.80
1	N	841	C	C2-N1-C1'	6.43	125.88	118.80
1	N	886	G	C1'-O4'-C4'	-6.43	104.75	109.90
1	N	1101	A	N3-C4-N9	6.43	132.54	127.40
1	N	30	U	P-O3'-C3'	6.43	127.41	119.70
1	N	287	U	C4'-C3'-C2'	-6.43	96.17	102.60
1	N	378	G	N3-C2-N2	-6.43	115.40	119.90
1	N	556	C	N3-C2-O2	-6.43	117.40	121.90
1	N	648	A	P-O5'-C5'	6.43	131.19	120.90
1	N	700	G	N1-C2-N3	-6.43	120.04	123.90
1	N	361	G	C6-N1-C2	6.43	128.96	125.10
1	N	746	A	C6-C5-N7	-6.43	127.80	132.30
1	N	56	U	C5'-C4'-O4'	6.43	116.81	109.10
1	N	120	A	C6-C5-N7	-6.43	127.80	132.30
1	N	148	G	C6-N1-C2	6.43	128.96	125.10
1	N	521	G	C2-N3-C4	6.43	115.11	111.90
1	N	973	G	C4-C5-C6	6.43	122.66	118.80
1	N	1252	A	O4'-C4'-C3'	-6.43	97.57	104.00
1	N	267	C	P-O3'-C3'	6.42	127.41	119.70
1	N	389	A	O4'-C1'-N9	6.42	113.34	108.20
1	N	655	A	C5-C6-N1	-6.42	114.49	117.70
1	N	706	A	C5-C6-N1	-6.42	114.49	117.70
1	N	1520	C	C5-C4-N4	-6.42	115.70	120.20
1	N	707	U	C5-C4-O4	-6.42	122.05	125.90
1	N	70	U	N1-C2-N3	-6.42	111.05	114.90
1	N	179	A	C5-C6-N6	-6.42	118.56	123.70
1	N	534	U	N1-C2-N3	-6.42	111.05	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	647	C	C6-N1-C1'	-6.42	113.09	120.80
1	N	984	C	P-O5'-C5'	6.42	131.18	120.90
1	N	842	U	C5-C6-N1	6.42	125.91	122.70
1	N	990	C	N3-C4-N4	6.42	122.49	118.00
1	N	1454	G	N3-C2-N2	6.42	124.39	119.90
1	N	322	C	N3-C2-O2	6.42	126.39	121.90
1	N	467	U	C6-N1-C1'	-6.42	112.21	121.20
1	N	537	G	C4-C5-C6	6.42	122.65	118.80
1	N	718	A	N7-C8-N9	-6.42	110.59	113.80
1	N	554	A	P-O5'-C5'	-6.42	110.63	120.90
1	N	1168	U	C1'-O4'-C4'	-6.42	104.77	109.90
1	N	289	G	N9-C4-C5	-6.42	102.83	105.40
1	N	109	A	N3-C4-C5	-6.41	122.31	126.80
1	N	127	G	O4'-C1'-N9	6.41	113.33	108.20
1	N	214	C	N3-C4-N4	6.41	122.49	118.00
1	N	252	U	C5-C4-O4	-6.41	122.05	125.90
1	N	696	A	N3-C4-N9	6.41	132.53	127.40
1	N	1241	G	P-O3'-C3'	-6.41	112.00	119.70
1	N	178	C	P-O5'-C5'	6.41	131.16	120.90
1	N	210	C	C5-C4-N4	-6.41	115.71	120.20
1	N	364	A	N1-C2-N3	6.41	132.50	129.30
1	N	391	G	P-O3'-C3'	6.41	127.39	119.70
1	N	546	A	P-O5'-C5'	-6.41	110.65	120.90
1	N	650	G	N1-C6-O6	6.41	123.74	119.90
1	N	81	A	N9-C1'-C2'	6.41	122.33	114.00
1	N	946	A	N9-C4-C5	6.40	108.36	105.80
1	N	489	C	N1-C2-O2	-6.40	115.06	118.90
1	N	1021	A	N7-C8-N9	-6.40	110.60	113.80
1	N	257	G	C2'-C3'-O3'	6.40	123.94	113.70
1	N	1042	A	O3'-P-O5'	-6.40	91.84	104.00
1	N	606	G	N3-C2-N2	6.40	124.38	119.90
1	N	731	G	N1-C2-N2	-6.40	110.44	116.20
1	N	442	G	C2-N3-C4	6.40	115.10	111.90
1	N	970	C	P-O3'-C3'	6.40	127.38	119.70
1	N	1147	C	N3-C4-N4	6.40	122.48	118.00
1	N	1246	A	C4-C5-C6	6.40	120.20	117.00
1	N	1514	G	C3'-C2'-C1'	-6.40	96.38	101.50
1	N	407	U	N1-C2-O2	-6.40	118.32	122.80
1	N	1064	G	N3-C4-C5	-6.40	125.40	128.60
1	N	1136	C	C1'-O4'-C4'	-6.40	104.78	109.90
1	N	1290	G	C2-N3-C4	6.40	115.10	111.90
1	N	170	U	C4'-C3'-C2'	-6.39	96.20	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	622	A	C5-C6-N6	-6.39	118.58	123.70
1	N	631	C	C2-N3-C4	6.39	123.10	119.90
1	N	1082	A	C5'-C4'-C3'	-6.39	105.77	116.00
1	N	1202	U	C1'-O4'-C4'	-6.39	104.78	109.90
1	N	1531	A	N7-C8-N9	-6.39	110.60	113.80
1	N	38	G	C8-N9-C4	-6.39	103.84	106.40
1	N	612	C	O4'-C1'-N1	6.39	113.31	108.20
1	N	931	C	N1-C2-N3	-6.39	114.73	119.20
1	N	1150	A	C5-C6-N1	-6.39	114.50	117.70
1	N	1279	G	C8-N9-C4	6.39	108.96	106.40
1	N	752	G	N3-C4-C5	-6.39	125.40	128.60
1	N	831	A	C3'-C2'-C1'	-6.39	96.39	101.50
1	N	519	C	C6-N1-C1'	-6.39	113.13	120.80
1	N	1130	A	C4-C5-C6	6.39	120.19	117.00
1	N	1219	A	C2-N3-C4	-6.39	107.41	110.60
1	N	786	G	C6-N1-C2	-6.39	121.27	125.10
1	N	902	G	C4-C5-N7	6.39	113.36	110.80
1	N	908	A	N3-C4-N9	6.39	132.51	127.40
1	N	1050	G	N3-C2-N2	6.39	124.37	119.90
1	N	1383	C	C6-N1-C2	-6.39	117.75	120.30
1	N	383	A	N9-C4-C5	-6.39	103.25	105.80
1	N	696	A	N9-C4-C5	-6.39	103.25	105.80
1	N	780	A	P-O3'-C3'	6.39	127.36	119.70
1	N	983	A	N3-C4-C5	-6.39	122.33	126.80
1	N	1233	G	C8-N9-C4	-6.39	103.84	106.40
1	N	1321	U	P-O5'-C5'	6.39	131.12	120.90
1	N	145	G	N3-C4-N9	6.38	129.83	126.00
1	N	181	A	N3-C4-C5	-6.38	122.33	126.80
1	N	233	C	O4'-C4'-C3'	-6.38	97.61	104.00
1	N	585	G	O4'-C1'-N9	6.38	113.31	108.20
1	N	1326	U	N3-C4-C5	-6.38	110.77	114.60
1	N	1386	G	C5'-C4'-C3'	6.38	126.22	116.00
1	N	11	G	C4'-C3'-C2'	-6.38	96.22	102.60
1	N	363	A	C4-C5-C6	6.38	120.19	117.00
1	N	813	U	O3'-P-O5'	-6.38	91.87	104.00
1	N	984	C	N3-C4-N4	6.38	122.47	118.00
1	N	1080	A	N3-C4-C5	-6.38	122.33	126.80
1	N	50	A	N9-C1'-C2'	6.38	122.30	114.00
1	N	111	G	C6-C5-N7	-6.38	126.57	130.40
1	N	390	U	N3-C4-O4	6.38	123.87	119.40
1	N	577	G	N3-C4-C5	-6.38	125.41	128.60
1	N	1289	A	N9-C4-C5	6.38	108.35	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1462	C	N3-C2-O2	6.38	126.37	121.90
1	N	533	A	C6-N1-C2	-6.38	114.77	118.60
1	N	1435	G	O4'-C1'-N9	6.38	113.30	108.20
1	N	177	G	C4'-C3'-C2'	-6.38	96.22	102.60
1	N	477	C	C4-C5-C6	-6.38	114.21	117.40
1	N	920	U	C4'-C3'-C2'	-6.38	96.22	102.60
1	N	979	C	C5-C6-N1	-6.38	117.81	121.00
1	N	1233	G	N3-C2-N2	6.38	124.36	119.90
1	N	883	C	C6-N1-C2	-6.38	117.75	120.30
1	N	1292	G	P-O5'-C5'	6.38	131.10	120.90
1	N	1359	C	N3-C2-O2	-6.38	117.44	121.90
1	N	276	G	O4'-C1'-N9	6.38	113.30	108.20
1	N	772	U	O4'-C4'-C3'	-6.38	97.62	104.00
1	N	1130	A	P-O5'-C5'	-6.38	110.70	120.90
1	N	1138	G	P-O3'-C3'	6.38	127.35	119.70
1	N	1433	A	P-O3'-C3'	6.38	127.35	119.70
1	N	176	C	N3-C2-O2	6.37	126.36	121.90
1	N	351	G	C5-N7-C8	-6.37	101.11	104.30
1	N	471	U	N3-C2-O2	-6.37	117.74	122.20
1	N	566	G	N1-C6-O6	6.37	123.72	119.90
1	N	593	U	C5-C6-N1	-6.37	119.51	122.70
1	N	732	C	C2-N3-C4	-6.37	116.71	119.90
1	N	1200	C	O4'-C1'-N1	6.37	113.30	108.20
1	N	147	G	C5'-C4'-O4'	6.37	116.75	109.10
1	N	401	C	C5-C4-N4	-6.37	115.74	120.20
1	N	576	C	C5-C6-N1	-6.37	117.81	121.00
1	N	908	A	O4'-C1'-N9	6.37	113.30	108.20
1	N	1115	U	P-O5'-C5'	6.37	131.09	120.90
1	N	1431	A	P-O5'-C5'	6.37	131.09	120.90
1	N	364	A	C8-N9-C1'	6.37	139.17	127.70
1	N	393	A	C5-C6-N1	-6.37	114.52	117.70
1	N	415	A	N1-C6-N6	6.37	122.42	118.60
1	N	588	G	C6-C5-N7	-6.37	126.58	130.40
1	N	643	C	O4'-C1'-N1	6.37	113.29	108.20
1	N	720	C	C2-N3-C4	-6.37	116.72	119.90
1	N	1110	A	C5-N7-C8	6.37	107.08	103.90
1	N	1511	G	C4-C5-N7	6.37	113.35	110.80
1	N	50	A	C6-C5-N7	-6.37	127.84	132.30
1	N	72	A	C5-C6-N1	-6.37	114.52	117.70
1	N	177	G	P-O5'-C5'	6.37	131.08	120.90
1	N	704	A	N1-C2-N3	-6.37	126.12	129.30
1	N	1089	G	C5-N7-C8	-6.37	101.12	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1502	A	C8-N9-C4	6.37	108.35	105.80
1	N	192	A	N9-C4-C5	-6.36	103.25	105.80
1	N	250	A	N9-C4-C5	6.36	108.34	105.80
1	N	606	G	C5-C6-N1	-6.36	108.32	111.50
1	N	1208	C	C4-C5-C6	6.36	120.58	117.40
1	N	1367	C	P-O5'-C5'	6.36	131.08	120.90
1	N	42	G	N3-C4-C5	-6.36	125.42	128.60
1	N	744	C	N3-C2-O2	6.36	126.35	121.90
1	N	1132	C	N3-C4-C5	-6.36	119.36	121.90
1	N	1340	A	N9-C4-C5	-6.36	103.26	105.80
1	N	1053	G	C5'-C4'-C3'	-6.36	105.83	116.00
1	N	1419	G	C5-N7-C8	6.36	107.48	104.30
1	N	1482	G	P-O3'-C3'	6.36	127.33	119.70
1	N	92	U	C1'-O4'-C4'	6.36	114.99	109.90
1	N	265	G	C2-N3-C4	6.36	115.08	111.90
1	N	304	U	OP1-P-OP2	-6.36	110.06	119.60
1	N	797	C	O4'-C1'-N1	6.36	113.29	108.20
1	N	568	G	O4'-C1'-N9	6.36	113.28	108.20
1	N	864	A	C5-C6-N1	-6.36	114.52	117.70
1	N	925	G	C1'-O4'-C4'	6.36	114.98	109.90
1	N	1046	A	C1'-O4'-C4'	-6.36	104.82	109.90
1	N	182	A	C5'-C4'-O4'	6.35	116.72	109.10
1	N	814	A	O4'-C1'-N9	6.35	113.28	108.20
1	N	1271	A	C8-N9-C4	-6.35	103.26	105.80
1	N	465	A	C8-N9-C4	6.35	108.34	105.80
1	N	808	C	N3-C2-O2	6.35	126.35	121.90
1	N	1186	G	C4'-C3'-C2'	-6.35	96.25	102.60
1	N	1319	A	C4'-C3'-C2'	-6.35	96.25	102.60
1	N	1325	C	C4'-C3'-C2'	-6.35	96.25	102.60
1	N	1468	A	N3-C4-N9	-6.35	122.32	127.40
1	N	167	A	C1'-O4'-C4'	-6.35	104.82	109.90
1	N	301	G	C5-C6-N1	-6.35	108.33	111.50
1	N	717	U	C5'-C4'-C3'	-6.35	105.84	116.00
1	N	778	G	N9-C1'-C2'	-6.35	105.02	112.00
1	N	1470	U	C3'-C2'-C1'	6.35	106.58	101.50
1	N	155	A	C4-C5-C6	6.35	120.17	117.00
1	N	219	U	O4'-C1'-N1	6.35	113.28	108.20
1	N	380	G	C8-N9-C1'	6.35	135.25	127.00
1	N	431	A	C5-C6-N1	-6.35	114.53	117.70
1	N	437	U	N1-C2-O2	-6.35	118.36	122.80
1	N	575	G	N1-C6-O6	6.35	123.71	119.90
1	N	649	A	C4-C5-C6	6.35	120.17	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1353	G	O4'-C1'-N9	6.35	113.28	108.20
1	N	323	U	C5'-C4'-O4'	6.34	116.71	109.10
1	N	332	G	C6-C5-N7	-6.34	126.59	130.40
1	N	640	A	C8-N9-C4	-6.34	103.26	105.80
1	N	888	G	N1-C6-O6	6.34	123.71	119.90
1	N	60	A	C8-N9-C4	-6.34	103.26	105.80
1	N	134	G	O4'-C4'-C3'	-6.34	97.66	104.00
1	N	693	G	C1'-O4'-C4'	-6.34	104.83	109.90
1	N	53	A	C6-N1-C2	6.34	122.41	118.60
1	N	263	A	P-O5'-C5'	-6.34	110.75	120.90
1	N	784	A	N7-C8-N9	-6.34	110.63	113.80
1	N	988	G	N1-C2-N3	-6.34	120.09	123.90
1	N	1278	G	N9-C4-C5	6.34	107.94	105.40
1	N	232	G	C4-N9-C1'	-6.34	118.26	126.50
1	N	513	C	C5'-C4'-C3'	6.34	126.14	116.00
1	N	774	G	N1-C2-N3	-6.34	120.10	123.90
1	N	1012	A	C6-C5-N7	-6.34	127.86	132.30
1	N	212	G	P-O5'-C5'	6.34	131.04	120.90
1	N	812	G	N9-C4-C5	6.34	107.94	105.40
1	N	1287	A	C2-N3-C4	-6.34	107.43	110.60
1	N	1304	G	C5-C6-O6	-6.34	124.80	128.60
1	N	397	A	N3-C4-C5	-6.34	122.36	126.80
1	N	529	G	N3-C2-N2	6.34	124.34	119.90
1	N	577	G	C4-C5-N7	-6.34	108.27	110.80
1	N	826	C	C2-N3-C4	6.34	123.07	119.90
1	N	1184	G	P-O5'-C5'	6.34	131.04	120.90
1	N	1416	G	C4-C5-N7	6.33	113.33	110.80
1	N	826	C	N3-C4-N4	6.33	122.43	118.00
1	N	831	A	O4'-C1'-N9	6.33	113.27	108.20
1	N	1531	A	C8-N9-C4	6.33	108.33	105.80
1	N	25	C	O4'-C1'-N1	6.33	113.27	108.20
1	N	327	A	C4-C5-C6	6.33	120.17	117.00
1	N	924	C	N3-C2-O2	6.33	126.33	121.90
1	N	452	A	C6-N1-C2	-6.33	114.80	118.60
1	N	1179	A	C5-C6-N1	-6.33	114.53	117.70
1	N	306	A	C5-C6-N6	-6.33	118.64	123.70
1	N	327	A	O4'-C1'-N9	6.33	113.26	108.20
1	N	559	A	P-O5'-C5'	6.33	131.03	120.90
1	N	951	G	C5-C6-O6	-6.33	124.80	128.60
1	N	1206	G	C5-N7-C8	-6.33	101.14	104.30
1	N	1083	U	N1-C2-N3	-6.33	111.10	114.90
1	N	1256	A	C4-C5-C6	6.33	120.16	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	180	U	C2-N3-C4	-6.33	123.20	127.00
1	N	461	A	O4'-C1'-N9	6.33	113.26	108.20
1	N	579	A	C4-C5-C6	6.33	120.16	117.00
1	N	1292	G	N3-C4-C5	6.33	131.76	128.60
1	N	1312	G	O4'-C1'-N9	6.33	113.26	108.20
1	N	1376	U	O4'-C1'-N1	6.33	113.26	108.20
1	N	773	G	C5-C6-O6	-6.32	124.81	128.60
1	N	999	C	C4'-C3'-C2'	-6.32	96.28	102.60
1	N	1297	G	N1-C2-N3	-6.32	120.11	123.90
1	N	199	A	C8-N9-C4	-6.32	103.27	105.80
1	N	895	G	N3-C2-N2	6.32	124.33	119.90
1	N	922	G	N9-C4-C5	6.32	107.93	105.40
1	N	1063	C	C2'-C3'-O3'	6.32	123.81	113.70
1	N	147	G	C6-C5-N7	-6.32	126.61	130.40
1	N	153	C	N1-C2-N3	-6.32	114.78	119.20
1	N	278	G	P-O5'-C5'	-6.32	110.79	120.90
1	N	532	A	N1-C2-N3	6.32	132.46	129.30
1	N	544	G	N7-C8-N9	-6.32	109.94	113.10
1	N	767	A	P-O5'-C5'	6.32	131.01	120.90
1	N	806	C	C6-N1-C2	6.32	122.83	120.30
1	N	587	G	N7-C8-N9	6.32	116.26	113.10
1	N	1290	G	C5-C6-O6	-6.32	124.81	128.60
1	N	1433	A	O4'-C1'-N9	6.32	113.25	108.20
1	N	220	G	N1-C6-O6	6.32	123.69	119.90
1	N	628	G	C1'-O4'-C4'	6.32	114.95	109.90
1	N	953	G	N1-C6-O6	6.32	123.69	119.90
1	N	57	G	C4-C5-C6	6.32	122.59	118.80
1	N	1483	A	C5'-C4'-O4'	6.32	116.68	109.10
1	N	181	A	N7-C8-N9	-6.31	110.64	113.80
1	N	372	C	O4'-C1'-N1	6.31	113.25	108.20
1	N	823	C	N3-C4-N4	-6.31	113.58	118.00
1	N	366	A	C4'-C3'-C2'	6.31	108.91	102.60
1	N	443	C	O4'-C4'-C3'	-6.31	97.69	104.00
1	N	734	G	C4-C5-N7	6.31	113.32	110.80
1	N	794	A	C5'-C4'-C3'	-6.31	105.90	116.00
1	N	836	G	C2-N3-C4	6.31	115.06	111.90
1	N	1226	C	C2-N3-C4	6.31	123.06	119.90
1	N	1334	G	N1-C6-O6	6.31	123.69	119.90
1	N	1457	G	O4'-C1'-N9	6.31	113.25	108.20
1	N	344	A	P-O3'-C3'	6.31	127.27	119.70
1	N	583	A	C8-N9-C4	-6.31	103.28	105.80
1	N	1497	G	C2-N3-C4	6.31	115.05	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	639	G	C6-N1-C2	6.30	128.88	125.10
1	N	914	A	C5-C6-N6	-6.30	118.66	123.70
1	N	935	A	C4-C5-C6	6.30	120.15	117.00
1	N	241	G	N3-C2-N2	6.30	124.31	119.90
1	N	1059	C	C1'-O4'-C4'	6.30	114.94	109.90
1	N	1077	G	O4'-C1'-N9	6.30	113.24	108.20
1	N	320	A	C5'-C4'-O4'	6.30	116.66	109.10
1	N	1178	G	N9-C4-C5	6.30	107.92	105.40
1	N	42	G	C6-C5-N7	-6.30	126.62	130.40
1	N	1131	G	C5'-C4'-O4'	6.30	116.66	109.10
1	N	1529	G	N3-C4-N9	6.30	129.78	126.00
1	N	90	C	C5'-C4'-C3'	6.30	126.08	116.00
1	N	704	A	C5-N7-C8	6.30	107.05	103.90
1	N	11	G	O4'-C1'-N9	6.30	113.24	108.20
1	N	791	G	C4-C5-C6	6.30	122.58	118.80
1	N	108	G	O4'-C1'-N9	6.29	113.24	108.20
1	N	809	G	C8-N9-C1'	6.29	135.18	127.00
1	N	1089	G	C5-C6-O6	-6.29	124.82	128.60
1	N	251	G	C1'-O4'-C4'	-6.29	104.87	109.90
1	N	360	G	C5-C6-N1	-6.29	108.35	111.50
1	N	535	A	C2'-C3'-O3'	6.29	123.77	113.70
1	N	582	C	C4-C5-C6	-6.29	114.25	117.40
1	N	639	G	N3-C2-N2	6.29	124.30	119.90
1	N	556	C	P-O3'-C3'	-6.29	112.15	119.70
1	N	1348	U	C2-N3-C4	-6.29	123.23	127.00
1	N	528	C	N1-C2-N3	-6.29	114.80	119.20
1	N	957	U	C4-C5-C6	6.29	123.47	119.70
1	N	792	A	C5'-C4'-O4'	6.29	116.64	109.10
1	N	979	C	C1'-O4'-C4'	-6.29	104.87	109.90
1	N	1374	A	C6-C5-N7	-6.29	127.90	132.30
1	N	1522	U	N1-C2-N3	-6.29	111.13	114.90
1	N	20	U	C4'-C3'-C2'	-6.28	96.32	102.60
1	N	805	C	C5-C6-N1	6.28	124.14	121.00
1	N	944	G	C5-C6-O6	-6.28	124.83	128.60
1	N	1300	G	C4'-C3'-C2'	-6.28	96.32	102.60
1	N	1487	G	C5'-C4'-C3'	6.28	126.05	116.00
1	N	325	A	N3-C4-C5	-6.28	122.40	126.80
1	N	411	A	P-O5'-C5'	6.28	130.95	120.90
1	N	466	A	N3-C4-C5	-6.28	122.40	126.80
1	N	895	G	O4'-C1'-N9	6.28	113.22	108.20
1	N	1131	G	O4'-C4'-C3'	-6.28	97.72	104.00
1	N	1151	A	O4'-C1'-N9	6.28	113.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1342	C	P-O3'-C3'	-6.28	112.16	119.70
1	N	1526	G	C5-C6-O6	-6.28	124.83	128.60
1	N	785	G	C6-C5-N7	-6.28	126.63	130.40
1	N	838	G	N3-C4-N9	6.28	129.77	126.00
1	N	1391	U	N3-C2-O2	6.28	126.59	122.20
1	N	42	G	C2-N3-C4	6.28	115.04	111.90
1	N	69	G	P-O5'-C5'	-6.28	110.86	120.90
1	N	150	U	C2-N3-C4	-6.28	123.23	127.00
1	N	250	A	C4-C5-N7	-6.28	107.56	110.70
1	N	1150	A	N9-C4-C5	6.28	108.31	105.80
1	N	1422	G	C4-C5-N7	6.28	113.31	110.80
1	N	40	C	N1-C2-O2	6.28	122.67	118.90
1	N	101	A	C4'-C3'-C2'	-6.28	96.32	102.60
1	N	147	G	N3-C2-N2	6.28	124.29	119.90
1	N	108	G	N3-C2-N2	6.27	124.29	119.90
1	N	139	A	C4-C5-C6	6.27	120.14	117.00
1	N	193	C	N1-C2-O2	6.27	122.66	118.90
1	N	975	A	C5-N7-C8	6.27	107.04	103.90
1	N	1152	A	C2-N3-C4	-6.27	107.46	110.60
1	N	634	C	C2-N3-C4	6.27	123.04	119.90
1	N	705	G	N3-C2-N2	6.27	124.29	119.90
1	N	708	C	P-O3'-C3'	-6.27	112.17	119.70
1	N	36	C	OP1-P-OP2	-6.27	110.19	119.60
1	N	336	A	C2-N3-C4	6.27	113.73	110.60
1	N	1103	C	N3-C4-C5	6.27	124.41	121.90
1	N	1398	A	C2-N3-C4	-6.27	107.47	110.60
1	N	295	C	C2-N3-C4	6.27	123.03	119.90
1	N	417	G	N1-C2-N3	-6.27	120.14	123.90
1	N	559	A	N1-C2-N3	6.27	132.43	129.30
1	N	894	G	N1-C2-N3	-6.27	120.14	123.90
1	N	1152	A	N1-C2-N3	6.27	132.43	129.30
1	N	863	U	N1-C2-N3	-6.27	111.14	114.90
1	N	876	C	C5-C4-N4	6.27	124.59	120.20
1	N	1426	G	C8-N9-C4	-6.27	103.89	106.40
1	N	163	C	O4'-C1'-N1	6.26	113.21	108.20
1	N	314	C	C6-N1-C2	6.26	122.81	120.30
1	N	499	A	C4-C5-C6	6.26	120.13	117.00
1	N	1007	U	C5'-C4'-O4'	6.26	116.62	109.10
1	N	1022	A	N7-C8-N9	6.26	116.93	113.80
1	N	1471	U	N3-C4-O4	6.26	123.78	119.40
1	N	54	C	C5'-C4'-O4'	6.26	116.62	109.10
1	N	413	G	C2-N3-C4	6.26	115.03	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	694	A	O3'-P-O5'	-6.26	92.10	104.00
1	N	1479	C	C5-C4-N4	-6.26	115.82	120.20
1	N	109	A	N1-C6-N6	6.26	122.36	118.60
1	N	384	G	C5-N7-C8	6.26	107.43	104.30
1	N	353	A	O4'-C1'-N9	6.26	113.21	108.20
1	N	617	G	N3-C2-N2	6.26	124.28	119.90
1	N	1123	U	C4'-C3'-C2'	-6.26	96.34	102.60
1	N	1450	U	O4'-C1'-N1	6.26	113.21	108.20
1	N	632	U	C6-N1-C1'	-6.26	112.44	121.20
1	N	781	A	C6-C5-N7	-6.26	127.92	132.30
1	N	1188	A	C1'-O4'-C4'	-6.26	104.89	109.90
1	N	50	A	C1'-O4'-C4'	-6.26	104.89	109.90
1	N	1194	U	O4'-C4'-C3'	-6.26	97.74	104.00
1	N	111	G	C4-C5-N7	6.25	113.30	110.80
1	N	275	G	N7-C8-N9	6.25	116.23	113.10
1	N	845	A	C5-N7-C8	6.25	107.03	103.90
1	N	1437	A	C6-N1-C2	6.25	122.35	118.60
1	N	1504	G	N3-C2-N2	6.25	124.28	119.90
1	N	52	C	C5-C4-N4	-6.25	115.82	120.20
1	N	153	C	N1-C2-O2	6.25	122.65	118.90
1	N	287	U	C5'-C4'-O4'	6.25	116.61	109.10
1	N	1421	G	C4-C5-N7	-6.25	108.30	110.80
1	N	125	U	C5-C6-N1	6.25	125.83	122.70
1	N	151	A	C5-C6-N6	-6.25	118.70	123.70
1	N	444	G	C8-N9-C4	6.25	108.90	106.40
1	N	556	C	C5'-C4'-C3'	6.25	126.00	116.00
1	N	1355	G	N3-C4-C5	-6.25	125.47	128.60
1	N	770	C	C2-N1-C1'	6.25	125.67	118.80
1	N	921	U	C5-C4-O4	-6.25	122.15	125.90
1	N	555	U	O4'-C1'-N1	6.25	113.20	108.20
1	N	407	U	O4'-C1'-N1	6.25	113.20	108.20
1	N	650	G	C5-C6-O6	-6.25	124.85	128.60
1	N	681	A	C3'-C2'-C1'	-6.25	96.50	101.50
1	N	735	C	C4-C5-C6	6.25	120.52	117.40
1	N	784	A	O4'-C1'-N9	6.25	113.20	108.20
1	N	1000	A	N1-C2-N3	-6.25	126.18	129.30
1	N	1160	G	N9-C1'-C2'	-6.25	105.13	112.00
1	N	1473	G	N1-C6-O6	6.25	123.65	119.90
1	N	1483	A	C3'-C2'-C1'	-6.25	96.50	101.50
1	N	665	A	C4-C5-N7	-6.25	107.58	110.70
1	N	326	G	C5-C6-N1	-6.24	108.38	111.50
1	N	1102	A	C5-C6-N1	-6.24	114.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	499	A	N3-C4-C5	-6.24	122.43	126.80
1	N	611	C	N3-C4-N4	6.24	122.37	118.00
1	N	756	C	O4'-C4'-C3'	-6.24	97.76	104.00
1	N	118	U	N1-C2-N3	-6.24	111.16	114.90
1	N	752	G	C4-C5-N7	-6.24	108.30	110.80
1	N	49	U	C5'-C4'-C3'	-6.24	106.02	116.00
1	N	294	U	O3'-P-O5'	-6.24	92.15	104.00
1	N	922	G	C4-N9-C1'	6.24	134.61	126.50
1	N	1401	G	N1-C2-N2	-6.24	110.59	116.20
1	N	1441	A	C5'-C4'-C3'	-6.24	106.02	116.00
1	N	93	U	O3'-P-O5'	6.24	115.85	104.00
1	N	122	G	N3-C2-N2	6.24	124.27	119.90
1	N	186	C	C2-N1-C1'	6.24	125.66	118.80
1	N	732	C	O4'-C1'-N1	6.24	113.19	108.20
1	N	1296	C	C4-C5-C6	6.24	120.52	117.40
1	N	1312	G	C5-C6-N1	-6.24	108.38	111.50
1	N	654	G	N1-C6-O6	6.23	123.64	119.90
1	N	1005	A	N1-C2-N3	6.23	132.42	129.30
1	N	1441	A	C5-C6-N1	-6.23	114.58	117.70
1	N	747	A	N3-C4-C5	-6.23	122.44	126.80
1	N	978	A	C4-C5-C6	6.23	120.11	117.00
1	N	1089	G	C6-N1-C2	6.23	128.84	125.10
1	N	308	C	N3-C2-O2	6.23	126.26	121.90
1	N	31	G	C8-N9-C4	-6.23	103.91	106.40
1	N	164	G	C5-N7-C8	6.23	107.41	104.30
1	N	297	G	N7-C8-N9	-6.23	109.99	113.10
1	N	1173	U	C2-N3-C4	6.23	130.74	127.00
1	N	1329	A	C6-N1-C2	6.23	122.34	118.60
1	N	1191	A	C6-C5-N7	-6.23	127.94	132.30
1	N	1246	A	C5-N7-C8	-6.23	100.79	103.90
1	N	1404	C	O4'-C1'-N1	6.23	113.18	108.20
1	N	1498	U	O4'-C1'-N1	6.23	113.18	108.20
1	N	507	C	C5-C4-N4	-6.22	115.84	120.20
1	N	558	G	C3'-C2'-C1'	6.22	106.48	101.50
1	N	575	G	O4'-C1'-N9	6.22	113.18	108.20
1	N	707	U	N3-C4-C5	-6.22	110.86	114.60
1	N	1168	U	C2'-C3'-O3'	6.22	123.66	113.70
1	N	1304	G	N1-C6-O6	6.22	123.64	119.90
1	N	85	U	C5-C6-N1	6.22	125.81	122.70
1	N	1317	C	C2-N1-C1'	-6.22	111.96	118.80
1	N	22	G	N3-C4-N9	6.22	129.73	126.00
1	N	447	G	N9-C1'-C2'	-6.22	105.16	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1408	A	C4-C5-N7	-6.22	107.59	110.70
1	N	199	A	C2-N3-C4	-6.22	107.49	110.60
1	N	535	A	C6-N1-C2	-6.22	114.87	118.60
1	N	586	C	C4'-C3'-C2'	-6.22	96.38	102.60
1	N	1429	A	N3-C4-C5	-6.22	122.45	126.80
1	N	241	G	P-O5'-C5'	6.22	130.85	120.90
1	N	449	G	O4'-C1'-N9	6.22	113.17	108.20
1	N	1054	C	C6-N1-C2	-6.22	117.81	120.30
1	N	259	G	N1-C2-N3	-6.22	120.17	123.90
1	N	762	U	C2-N3-C4	-6.22	123.27	127.00
1	N	783	C	C5'-C4'-O4'	6.22	116.56	109.10
1	N	1356	G	C6-C5-N7	-6.22	126.67	130.40
1	N	1434	A	N1-C6-N6	6.22	122.33	118.60
1	N	667	G	C2-N3-C4	6.21	115.01	111.90
1	N	767	A	O4'-C4'-C3'	-6.21	97.79	104.00
1	N	769	G	O5'-C5'-C4'	-6.21	99.89	111.70
1	N	780	A	N7-C8-N9	6.21	116.91	113.80
1	N	880	C	P-O5'-C5'	6.21	130.84	120.90
1	N	1066	C	C5'-C4'-C3'	-6.21	106.06	116.00
1	N	203	G	C5-C6-O6	-6.21	124.87	128.60
1	N	265	G	C4-C5-C6	6.21	122.53	118.80
1	N	1421	G	C8-N9-C4	-6.21	103.92	106.40
1	N	130	A	N1-C6-N6	6.21	122.33	118.60
1	N	641	U	C6-N1-C2	6.21	124.73	121.00
1	N	693	G	C6-C5-N7	-6.21	126.67	130.40
1	N	1288	A	C8-N9-C4	-6.21	103.31	105.80
1	N	1333	A	C5-C6-N6	-6.21	118.73	123.70
1	N	230	G	C5-C6-N1	-6.21	108.40	111.50
1	N	565	U	C2-N1-C1'	-6.21	110.25	117.70
1	N	676	A	N1-C2-N3	6.21	132.40	129.30
1	N	937	A	O4'-C1'-N9	6.21	113.17	108.20
1	N	63	C	O4'-C1'-C2'	6.21	113.19	107.60
1	N	207	C	N1-C2-O2	-6.21	115.18	118.90
1	N	330	C	C5-C6-N1	-6.21	117.90	121.00
1	N	352	C	C5-C4-N4	-6.21	115.86	120.20
1	N	683	G	N3-C4-N9	6.21	129.72	126.00
1	N	724	G	P-O5'-C5'	-6.21	110.97	120.90
1	N	901	A	C6-N1-C2	6.21	122.32	118.60
1	N	553	A	C4'-C3'-C2'	6.21	108.81	102.60
1	N	734	G	C2-N3-C4	6.21	115.00	111.90
1	N	148	G	O4'-C1'-N9	6.20	113.16	108.20
1	N	207	C	C6-N1-C2	-6.20	117.82	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	470	C	C5'-C4'-O4'	6.20	116.54	109.10
1	N	989	U	O4'-C1'-N1	6.20	113.16	108.20
1	N	1099	G	C5-N7-C8	-6.20	101.20	104.30
1	N	1113	C	C5-C6-N1	6.20	124.10	121.00
1	N	623	C	N3-C4-N4	6.20	122.34	118.00
1	N	706	A	N9-C4-C5	-6.20	103.32	105.80
1	N	134	G	C8-N9-C4	-6.20	103.92	106.40
1	N	489	C	N3-C4-N4	6.20	122.34	118.00
1	N	1283	U	P-O3'-C3'	-6.20	112.26	119.70
1	N	89	U	C2-N3-C4	6.20	130.72	127.00
1	N	472	U	C2-N3-C4	-6.20	123.28	127.00
1	N	922	G	C5-N7-C8	6.20	107.40	104.30
1	N	1031	C	N1-C2-O2	6.20	122.62	118.90
1	N	1268	G	N1-C6-O6	6.20	123.62	119.90
1	N	1466	C	C4'-C3'-C2'	-6.20	96.40	102.60
1	N	351	G	O5'-P-OP2	6.20	118.14	110.70
1	N	664	G	O3'-P-O5'	-6.20	92.23	104.00
1	N	1408	A	C4-C5-C6	6.20	120.10	117.00
1	N	208	U	O4'-C4'-C3'	-6.20	97.81	104.00
1	N	607	A	O4'-C4'-C3'	-6.20	97.81	104.00
1	N	1439	G	C6-C5-N7	-6.20	126.68	130.40
1	N	133	U	P-O3'-C3'	-6.19	112.27	119.70
1	N	694	A	C6-C5-N7	-6.19	127.96	132.30
1	N	371	A	C6-C5-N7	-6.19	127.97	132.30
1	N	407	U	C6-N1-C2	-6.19	117.28	121.00
1	N	534	U	N3-C4-C5	-6.19	110.89	114.60
1	N	1324	A	N1-C6-N6	6.19	122.32	118.60
1	N	57	G	C4'-C3'-C2'	-6.19	96.41	102.60
1	N	78	A	C4-C5-C6	6.19	120.10	117.00
1	N	212	G	N7-C8-N9	6.19	116.20	113.10
1	N	335	C	C6-N1-C2	-6.19	117.82	120.30
1	N	722	G	C4-N9-C1'	6.19	134.55	126.50
1	N	1229	A	C5-C6-N1	-6.19	114.61	117.70
1	N	1372	U	C1'-O4'-C4'	-6.19	104.95	109.90
1	N	343	U	N3-C4-C5	-6.19	110.89	114.60
1	N	334	C	P-O5'-C5'	6.19	130.80	120.90
1	N	566	G	N1-C2-N3	-6.19	120.19	123.90
1	N	813	U	C4-C5-C6	-6.19	115.99	119.70
1	N	1393	U	N1-C2-O2	-6.19	118.47	122.80
1	N	1513	A	O4'-C1'-N9	6.19	113.15	108.20
1	N	817	C	O4'-C1'-N1	6.19	113.15	108.20
1	N	1090	U	C5'-C4'-O4'	6.19	116.52	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	38	G	N3-C4-C5	-6.18	125.51	128.60
1	N	1355	G	C6-C5-N7	-6.18	126.69	130.40
1	N	43	C	C6-N1-C2	-6.18	117.83	120.30
1	N	275	G	P-O3'-C3'	-6.18	112.28	119.70
1	N	1341	U	N1-C1'-C2'	-6.18	105.20	112.00
1	N	1349	A	N9-C4-C5	6.18	108.27	105.80
1	N	68	G	C5-C6-O6	-6.18	124.89	128.60
1	N	300	A	C5'-C4'-C3'	6.18	125.89	116.00
1	N	371	A	P-O3'-C3'	-6.18	112.28	119.70
1	N	815	A	C5-C6-N1	-6.18	114.61	117.70
1	N	1139	G	N1-C6-O6	6.18	123.61	119.90
1	N	398	U	N3-C4-O4	6.18	123.73	119.40
1	N	774	G	C6-C5-N7	-6.18	126.69	130.40
1	N	787	A	N9-C4-C5	6.18	108.27	105.80
1	N	819	A	O4'-C1'-N9	6.18	113.14	108.20
1	N	138	G	N3-C4-C5	-6.17	125.51	128.60
1	N	518	C	C2-N1-C1'	6.17	125.59	118.80
1	N	840	C	N3-C2-O2	-6.17	117.58	121.90
1	N	1497	G	N9-C4-C5	6.17	107.87	105.40
1	N	1510	C	N3-C2-O2	6.17	126.22	121.90
1	N	1532	U	C4'-C3'-C2'	6.17	108.78	102.60
1	N	119	A	O3'-P-O5'	6.17	115.73	104.00
1	N	644	U	N3-C2-O2	6.17	126.52	122.20
1	N	821	G	P-O3'-C3'	-6.17	112.29	119.70
1	N	190	A	C5-C6-N6	-6.17	118.76	123.70
1	N	582	C	C5-C4-N4	-6.17	115.88	120.20
1	N	667	G	N3-C4-C5	-6.17	125.51	128.60
1	N	988	G	N1-C6-O6	6.17	123.60	119.90
1	N	1017	U	N3-C2-O2	6.17	126.52	122.20
1	N	1075	U	C4-C5-C6	-6.17	116.00	119.70
1	N	1196	A	N3-C4-C5	-6.17	122.48	126.80
1	N	902	G	O4'-C1'-N9	6.17	113.14	108.20
1	N	367	U	C5'-C4'-C3'	-6.17	106.13	116.00
1	N	541	G	C8-N9-C4	6.17	108.87	106.40
1	N	1077	G	N9-C4-C5	6.17	107.87	105.40
1	N	32	A	N3-C4-C5	-6.17	122.48	126.80
1	N	1248	A	N3-C4-C5	-6.17	122.48	126.80
1	N	1318	A	N3-C4-C5	-6.17	122.48	126.80
1	N	281	G	C5-C6-O6	-6.17	124.90	128.60
1	N	750	C	N3-C4-C5	-6.17	119.43	121.90
1	N	233	C	O5'-P-OP2	-6.16	100.15	105.70
1	N	374	A	N1-C2-N3	-6.16	126.22	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	519	C	N3-C4-C5	-6.16	119.44	121.90
1	N	856	C	O4'-C4'-C3'	-6.16	97.84	104.00
1	N	1085	U	N1-C2-N3	-6.16	111.20	114.90
1	N	1198	G	C4'-C3'-C2'	-6.16	96.44	102.60
1	N	4	U	C5'-C4'-O4'	6.16	116.50	109.10
1	N	147	G	N1-C6-O6	6.16	123.60	119.90
1	N	816	A	C5-C6-N6	-6.16	118.77	123.70
1	N	974	A	C8-N9-C4	-6.16	103.34	105.80
1	N	1214	C	O4'-C1'-N1	6.16	113.13	108.20
1	N	1408	A	C8-N9-C4	-6.16	103.34	105.80
1	N	76	G	C6-N1-C2	-6.16	121.40	125.10
1	N	680	C	P-O5'-C5'	6.16	130.75	120.90
1	N	1074	G	C4'-C3'-C2'	-6.16	96.44	102.60
1	N	11	G	C4-C5-C6	6.16	122.49	118.80
1	N	115	G	C4-C5-C6	6.16	122.49	118.80
1	N	406	G	N1-C2-N3	-6.16	120.21	123.90
1	N	1087	G	N1-C2-N3	-6.16	120.21	123.90
1	N	1196	A	N3-C4-N9	6.16	132.32	127.40
1	N	644	U	C4-C5-C6	6.16	123.39	119.70
1	N	749	A	C5-C6-N6	-6.16	118.78	123.70
1	N	1115	U	C2-N3-C4	6.16	130.69	127.00
1	N	1290	G	C8-N9-C4	-6.16	103.94	106.40
1	N	550	G	C3'-C2'-C1'	-6.15	96.58	101.50
1	N	786	G	C4-C5-C6	6.15	122.49	118.80
1	N	843	U	N1-C2-N3	-6.15	111.21	114.90
1	N	1311	A	C4-C5-N7	-6.15	107.62	110.70
1	N	587	G	C6-C5-N7	-6.15	126.71	130.40
1	N	694	A	N7-C8-N9	-6.15	110.72	113.80
1	N	919	A	C4-C5-C6	6.15	120.08	117.00
1	N	508	U	C5-C6-N1	6.15	125.78	122.70
1	N	557	G	C8-N9-C4	-6.15	103.94	106.40
1	N	1190	G	C6-N1-C2	6.15	128.79	125.10
1	N	1197	A	C2-N3-C4	6.15	113.67	110.60
1	N	231	U	N3-C4-O4	6.15	123.70	119.40
1	N	405	U	N1-C2-O2	6.15	127.10	122.80
1	N	229	U	C2-N3-C4	-6.15	123.31	127.00
1	N	596	A	N3-C4-C5	-6.15	122.50	126.80
1	N	988	G	N3-C2-N2	6.15	124.20	119.90
1	N	1259	C	N3-C4-N4	6.15	122.30	118.00
1	N	869	G	C5'-C4'-O4'	6.15	116.47	109.10
1	N	1000	A	O5'-P-OP2	-6.15	100.17	105.70
1	N	300	A	C2-N3-C4	-6.14	107.53	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1191	A	N3-C4-N9	6.14	132.31	127.40
1	N	1451	U	N3-C4-O4	6.14	123.70	119.40
1	N	973	G	N9-C4-C5	6.14	107.86	105.40
1	N	1423	G	N1-C2-N3	-6.14	120.22	123.90
1	N	677	U	C4'-C3'-C2'	-6.14	96.46	102.60
1	N	832	G	P-O3'-C3'	-6.14	112.33	119.70
1	N	1434	A	O4'-C1'-N9	6.14	113.11	108.20
1	N	94	G	O5'-P-OP1	-6.14	100.17	105.70
1	N	828	U	P-O5'-C5'	6.14	130.72	120.90
1	N	886	G	N3-C2-N2	6.14	124.20	119.90
1	N	930	C	C5-C6-N1	6.14	124.07	121.00
1	N	1413	A	N1-C6-N6	6.14	122.28	118.60
1	N	1531	A	N1-C2-N3	6.14	132.37	129.30
1	N	293	G	C6-N1-C2	6.14	128.78	125.10
1	N	941	G	C2-N3-C4	-6.14	108.83	111.90
1	N	1405	G	C4'-C3'-C2'	-6.14	96.46	102.60
1	N	194	C	N3-C4-N4	6.13	122.29	118.00
1	N	437	U	O4'-C1'-N1	6.13	113.11	108.20
1	N	928	G	N9-C1'-C2'	-6.13	105.25	112.00
1	N	1117	A	C5-C6-N1	-6.13	114.63	117.70
1	N	1336	C	C4-C5-C6	6.13	120.47	117.40
1	N	1340	A	C5-C6-N6	-6.13	118.79	123.70
1	N	1355	G	N1-C2-N3	-6.13	120.22	123.90
1	N	1363	A	C5'-C4'-C3'	-6.13	106.19	116.00
1	N	1379	G	C2-N3-C4	6.13	114.97	111.90
1	N	1357	A	C5-C6-N6	-6.13	118.79	123.70
1	N	125	U	C4-C5-C6	-6.13	116.02	119.70
1	N	311	C	C5-C4-N4	-6.13	115.91	120.20
1	N	500	G	N1-C2-N3	-6.13	120.22	123.90
1	N	224	U	N3-C4-C5	-6.13	110.92	114.60
1	N	854	U	C2-N3-C4	6.13	130.68	127.00
1	N	148	G	C8-N9-C4	6.13	108.85	106.40
1	N	300	A	C8-N9-C4	-6.13	103.35	105.80
1	N	411	A	C5-C6-N6	-6.13	118.80	123.70
1	N	882	C	C4'-C3'-C2'	-6.13	96.47	102.60
1	N	942	G	C4'-C3'-C2'	-6.13	96.47	102.60
1	N	964	A	C5-C6-N6	-6.13	118.80	123.70
1	N	83	C	C4'-C3'-C2'	-6.13	96.47	102.60
1	N	362	G	C8-N9-C4	-6.13	103.95	106.40
1	N	571	U	O4'-C1'-N1	6.13	113.10	108.20
1	N	593	U	O4'-C1'-N1	6.13	113.10	108.20
1	N	838	G	C4-C5-C6	6.13	122.48	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1228	C	O4'-C1'-N1	6.13	113.10	108.20
1	N	233	C	C5'-C4'-O4'	6.12	116.45	109.10
1	N	595	A	C4-N9-C1'	6.12	137.32	126.30
1	N	641	U	C2'-C3'-O3'	6.12	123.50	113.70
1	N	1161	C	C5'-C4'-C3'	-6.12	106.20	116.00
1	N	1198	G	C5-N7-C8	-6.12	101.24	104.30
1	N	1301	U	O4'-C1'-N1	6.12	113.10	108.20
1	N	67	C	C2-N3-C4	6.12	122.96	119.90
1	N	373	A	N1-C2-N3	6.12	132.36	129.30
1	N	187	G	P-O3'-C3'	-6.12	112.36	119.70
1	N	129	A	P-O5'-C5'	6.12	130.69	120.90
1	N	227	G	C8-N9-C4	-6.12	103.95	106.40
1	N	240	G	N1-C2-N3	-6.12	120.23	123.90
1	N	247	G	C4'-C3'-C2'	-6.12	96.48	102.60
1	N	712	A	P-O3'-C3'	6.12	127.04	119.70
1	N	739	C	C2-N3-C4	6.12	122.96	119.90
1	N	885	G	N3-C4-C5	6.12	131.66	128.60
1	N	1407	C	P-O5'-C5'	6.12	130.69	120.90
1	N	355	C	C6-N1-C2	-6.12	117.85	120.30
1	N	562	U	C1'-O4'-C4'	6.12	114.79	109.90
1	N	723	U	C4'-C3'-C2'	-6.12	96.48	102.60
1	N	1137	C	N1-C2-O2	6.12	122.57	118.90
1	N	1509	C	C5'-C4'-C3'	-6.12	106.22	116.00
1	N	186	C	N3-C4-C5	-6.11	119.45	121.90
1	N	527	G	N7-C8-N9	-6.11	110.04	113.10
1	N	559	A	N9-C1'-C2'	-6.11	105.27	112.00
1	N	168	G	O4'-C1'-N9	6.11	113.09	108.20
1	N	579	A	N3-C4-N9	6.11	132.29	127.40
1	N	1064	G	C2-N3-C4	6.11	114.96	111.90
1	N	86	G	N1-C2-N3	-6.11	120.23	123.90
1	N	771	G	O3'-P-O5'	-6.11	92.39	104.00
1	N	969	A	C4-C5-N7	-6.11	107.64	110.70
1	N	1376	U	N3-C4-O4	6.11	123.68	119.40
1	N	305	G	N1-C2-N2	-6.11	110.70	116.20
1	N	584	G	P-O5'-C5'	6.11	130.67	120.90
1	N	1203	C	P-O5'-C5'	6.11	130.67	120.90
1	N	1488	G	N3-C4-C5	6.11	131.65	128.60
1	N	145	G	C4-C5-C6	6.11	122.47	118.80
1	N	519	C	N1-C2-O2	-6.11	115.24	118.90
1	N	1311	A	N3-C4-C5	-6.11	122.52	126.80
1	N	1468	A	O4'-C4'-C3'	6.11	110.99	106.10
1	N	23	C	N3-C2-O2	6.11	126.17	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	80	A	C5-N7-C8	6.11	106.95	103.90
1	N	89	U	N3-C4-C5	-6.11	110.94	114.60
1	N	137	U	N1-C2-O2	-6.11	118.53	122.80
1	N	1408	A	O4'-C1'-N9	6.11	113.08	108.20
1	N	330	C	N3-C4-C5	-6.10	119.46	121.90
1	N	849	G	C5'-C4'-C3'	-6.10	106.23	116.00
1	N	904	U	C4-C5-C6	6.10	123.36	119.70
1	N	830	G	C6-N1-C2	6.10	128.76	125.10
1	N	859	G	C4-C5-C6	-6.10	115.14	118.80
1	N	1017	U	N3-C4-C5	-6.10	110.94	114.60
1	N	1495	U	C2-N1-C1'	6.10	125.02	117.70
1	N	50	A	C6-N1-C2	6.10	122.26	118.60
1	N	69	G	N1-C6-O6	6.10	123.56	119.90
1	N	217	C	C2-N1-C1'	6.10	125.51	118.80
1	N	961	U	N3-C4-O4	6.10	123.67	119.40
1	N	1147	C	C2-N3-C4	-6.10	116.85	119.90
1	N	20	U	O4'-C1'-N1	6.10	113.08	108.20
1	N	528	C	C6-N1-C2	6.10	122.74	120.30
1	N	1043	G	C5-N7-C8	6.10	107.35	104.30
1	N	256	U	O4'-C1'-C2'	-6.10	99.70	105.80
1	N	18	C	C4-C5-C6	6.09	120.45	117.40
1	N	244	U	N1-C2-O2	-6.09	118.53	122.80
1	N	543	U	P-O5'-C5'	6.09	130.65	120.90
1	N	1050	G	C5-N7-C8	6.09	107.35	104.30
1	N	1072	G	N1-C6-O6	6.09	123.56	119.90
1	N	59	A	C5-N7-C8	6.09	106.95	103.90
1	N	231	U	N1-C1'-C2'	-6.09	105.30	112.00
1	N	255	G	C8-N9-C4	-6.09	103.96	106.40
1	N	25	C	P-O3'-C3'	-6.09	112.39	119.70
1	N	36	C	C5-C4-N4	-6.09	115.94	120.20
1	N	49	U	N3-C2-O2	6.09	126.46	122.20
1	N	58	C	N1-C1'-C2'	-6.09	105.30	112.00
1	N	337	G	P-O3'-C3'	-6.09	112.39	119.70
1	N	343	U	C2-N1-C1'	-6.09	110.39	117.70
1	N	387	U	C5-C4-O4	-6.09	122.25	125.90
1	N	457	G	N9-C4-C5	-6.09	102.96	105.40
1	N	540	G	N7-C8-N9	-6.09	110.05	113.10
1	N	595	A	C4-C5-N7	-6.09	107.65	110.70
1	N	607	A	C5'-C4'-C3'	-6.09	106.25	116.00
1	N	280	C	O4'-C1'-N1	6.09	113.07	108.20
1	N	1112	C	P-O5'-C5'	6.09	130.64	120.90
1	N	1233	G	N1-C2-N3	-6.09	120.25	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	64	G	C5-C6-O6	-6.09	124.95	128.60
1	N	1319	A	O4'-C1'-N9	6.09	113.07	108.20
1	N	1516	G	C4-N9-C1'	-6.09	118.59	126.50
1	N	239	U	C1'-O4'-C4'	6.09	114.77	109.90
1	N	520	A	C5-C6-N1	-6.09	114.66	117.70
1	N	1013	G	N3-C4-N9	6.09	129.65	126.00
1	N	48	C	C5-C4-N4	-6.08	115.94	120.20
1	N	1464	U	N1-C2-O2	-6.08	118.54	122.80
1	N	304	U	C6-N1-C2	-6.08	117.35	121.00
1	N	543	U	C3'-C2'-C1'	6.08	106.37	101.50
1	N	806	C	N1-C2-N3	-6.08	114.94	119.20
1	N	971	G	P-O5'-C5'	6.08	130.63	120.90
1	N	249	U	C2-N3-C4	-6.08	123.35	127.00
1	N	717	U	C3'-C2'-C1'	6.08	106.36	101.50
1	N	812	G	C4-C5-C6	6.08	122.45	118.80
1	N	558	G	N1-C2-N2	-6.08	110.73	116.20
1	N	593	U	C4-C5-C6	6.08	123.35	119.70
1	N	71	A	P-O3'-C3'	6.08	127.00	119.70
1	N	113	G	C5-N7-C8	-6.08	101.26	104.30
1	N	220	G	O4'-C4'-C3'	-6.08	97.92	104.00
1	N	606	G	N7-C8-N9	6.08	116.14	113.10
1	N	929	G	C4-C5-N7	6.08	113.23	110.80
1	N	1318	A	N9-C4-C5	6.08	108.23	105.80
1	N	79	G	C4-C5-N7	6.08	113.23	110.80
1	N	344	A	C5-C6-N6	-6.08	118.84	123.70
1	N	92	U	N1-C2-O2	-6.08	118.55	122.80
1	N	228	A	C5-C6-N1	-6.08	114.66	117.70
1	N	295	C	N3-C2-O2	6.08	126.15	121.90
1	N	364	A	N3-C4-C5	-6.08	122.55	126.80
1	N	572	A	C4-N9-C1'	6.08	137.24	126.30
1	N	306	A	C8-N9-C4	-6.07	103.37	105.80
1	N	711	G	C8-N9-C1'	6.07	134.89	127.00
1	N	283	U	P-O3'-C3'	-6.07	112.42	119.70
1	N	608	A	C5-N7-C8	6.07	106.94	103.90
1	N	894	G	C4-C5-N7	-6.07	108.37	110.80
1	N	1153	G	N9-C1'-C2'	-6.07	105.32	112.00
1	N	1184	G	N7-C8-N9	6.07	116.14	113.10
1	N	1353	G	C4-C5-N7	6.07	113.23	110.80
1	N	117	G	N3-C4-N9	-6.07	122.36	126.00
1	N	670	G	C4-N9-C1'	-6.07	118.61	126.50
1	N	212	G	C5-C6-N1	-6.07	108.47	111.50
1	N	283	U	O4'-C1'-N1	6.07	113.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	302	G	C8-N9-C1'	6.07	134.89	127.00
1	N	767	A	N1-C2-N3	6.07	132.33	129.30
1	N	198	G	C2-N3-C4	6.07	114.93	111.90
1	N	278	G	N3-C2-N2	6.07	124.15	119.90
1	N	442	G	O4'-C1'-N9	6.07	113.05	108.20
1	N	861	G	C6-N1-C2	-6.07	121.46	125.10
1	N	241	G	N9-C4-C5	6.06	107.83	105.40
1	N	520	A	N1-C2-N3	6.06	132.33	129.30
1	N	1200	C	N3-C4-C5	-6.06	119.47	121.90
1	N	1311	A	C6-N1-C2	6.06	122.24	118.60
1	N	494	G	C6-N1-C2	6.06	128.74	125.10
1	N	591	U	N3-C4-C5	-6.06	110.96	114.60
1	N	714	G	N3-C4-C5	-6.06	125.57	128.60
1	N	812	G	OP2-P-O3'	6.06	118.54	105.20
1	N	386	C	C3'-C2'-C1'	6.06	106.35	101.50
1	N	1133	G	C8-N9-C4	6.06	108.82	106.40
1	N	1515	G	O4'-C4'-C3'	-6.06	97.94	104.00
1	N	490	C	N3-C4-C5	-6.06	119.48	121.90
1	N	661	G	N3-C4-N9	6.06	129.63	126.00
1	N	992	U	C1'-O4'-C4'	-6.06	105.06	109.90
1	N	1276	G	N3-C2-N2	6.06	124.14	119.90
1	N	1423	G	C5-N7-C8	-6.06	101.27	104.30
1	N	493	A	C5-C6-N6	-6.06	118.86	123.70
1	N	1041	G	N7-C8-N9	6.06	116.13	113.10
1	N	1534	A	C6-N1-C2	-6.06	114.97	118.60
1	N	134	G	N1-C2-N2	-6.05	110.75	116.20
1	N	307	C	C5-C4-N4	-6.05	115.96	120.20
1	N	916	U	C5'-C4'-O4'	6.05	116.37	109.10
1	N	966	G	C2-N3-C4	6.05	114.93	111.90
1	N	1361	G	C5-C6-O6	-6.05	124.97	128.60
1	N	210	C	O3'-P-O5'	-6.05	92.50	104.00
1	N	607	A	C6-N1-C2	-6.05	114.97	118.60
1	N	675	A	C2-N3-C4	-6.05	107.57	110.60
1	N	82	G	N7-C8-N9	6.05	116.13	113.10
1	N	164	G	N1-C6-O6	6.05	123.53	119.90
1	N	491	G	N3-C4-C5	-6.05	125.57	128.60
1	N	1134	G	C5-C6-O6	-6.05	124.97	128.60
1	N	485	U	P-O3'-C3'	6.05	126.96	119.70
1	N	1082	A	N7-C8-N9	-6.05	110.78	113.80
1	N	1163	A	C5-N7-C8	6.05	106.92	103.90
1	N	1314	C	C3'-C2'-C1'	-6.05	96.66	101.50
1	N	247	G	N1-C2-N3	-6.05	120.27	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1277	C	C5-C4-N4	6.05	124.43	120.20
1	N	1481	U	N3-C4-O4	6.05	123.63	119.40
1	N	1483	A	C5-N7-C8	6.05	106.92	103.90
1	N	1098	C	O4'-C1'-N1	6.04	113.04	108.20
1	N	1333	A	O4'-C1'-N9	6.04	113.03	108.20
1	N	160	A	C2-N3-C4	-6.04	107.58	110.60
1	N	172	A	C4'-C3'-O3'	-6.04	96.71	109.40
1	N	1147	C	C2'-C3'-O3'	6.04	123.37	113.70
1	N	1526	G	C5-C6-N1	-6.04	108.48	111.50
1	N	1001	C	C2-N3-C4	6.04	122.92	119.90
1	N	1081	A	C4-C5-N7	-6.04	107.68	110.70
1	N	1125	U	N3-C4-O4	6.04	123.63	119.40
1	N	1128	C	C2-N1-C1'	6.04	125.44	118.80
1	N	377	G	O4'-C4'-C3'	-6.04	97.96	104.00
1	N	442	G	N3-C4-N9	-6.04	122.38	126.00
1	N	720	C	O4'-C1'-N1	6.04	113.03	108.20
1	N	724	G	C5'-C4'-C3'	-6.04	106.34	116.00
1	N	1044	A	C2-N3-C4	-6.04	107.58	110.60
1	N	1524	C	N3-C4-C5	-6.04	119.48	121.90
1	N	686	U	N1-C1'-C2'	6.04	121.85	114.00
1	N	851	G	C5-C6-N1	-6.04	108.48	111.50
1	N	54	C	C3'-C2'-C1'	-6.03	96.67	101.50
1	N	60	A	C6-N1-C2	6.03	122.22	118.60
1	N	1252	A	C4'-C3'-C2'	-6.03	96.57	102.60
1	N	832	G	C5'-C4'-C3'	-6.03	106.35	116.00
1	N	877	G	N3-C4-C5	6.03	131.62	128.60
1	N	1216	A	O4'-C1'-N9	6.03	113.03	108.20
1	N	1258	G	C5-C6-N1	-6.03	108.48	111.50
1	N	1458	G	C6-N1-C2	6.03	128.72	125.10
1	N	532	A	C6-N1-C2	-6.03	114.98	118.60
1	N	963	G	C2-N3-C4	-6.03	108.89	111.90
1	N	1363	A	C4-N9-C1'	6.03	137.15	126.30
1	N	776	G	N9-C4-C5	6.03	107.81	105.40
1	N	1042	A	C5-C6-N1	-6.03	114.69	117.70
1	N	1094	G	O3'-P-O5'	-6.03	92.55	104.00
1	N	1204	A	N1-C6-N6	6.03	122.22	118.60
1	N	90	C	C4'-C3'-C2'	-6.03	96.57	102.60
1	N	236	A	P-O3'-C3'	-6.03	112.47	119.70
1	N	288	A	N1-C2-N3	6.03	132.31	129.30
1	N	423	G	N1-C6-O6	6.03	123.52	119.90
1	N	435	A	C5-C6-N1	-6.03	114.69	117.70
1	N	570	G	C4-C5-C6	6.03	122.42	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	618	C	O4'-C1'-N1	6.03	113.02	108.20
1	N	663	A	N1-C6-N6	6.03	122.22	118.60
1	N	771	G	C2-N3-C4	6.03	114.91	111.90
1	N	75	G	O4'-C1'-N9	6.03	113.02	108.20
1	N	119	A	C5-N7-C8	6.03	106.91	103.90
1	N	169	C	N3-C4-C5	-6.03	119.49	121.90
1	N	394	G	C4-C5-C6	6.03	122.42	118.80
1	N	686	U	C1'-O4'-C4'	-6.03	105.08	109.90
1	N	1489	G	O4'-C1'-N9	6.03	113.02	108.20
1	N	553	A	C8-N9-C4	-6.02	103.39	105.80
1	N	873	A	C6-C5-N7	-6.02	128.08	132.30
1	N	447	G	C4'-C3'-C2'	-6.02	96.58	102.60
1	N	561	U	C3'-C2'-C1'	6.02	106.32	101.50
1	N	911	U	C4'-C3'-C2'	6.02	108.62	102.60
1	N	985	C	C5'-C4'-C3'	-6.02	106.36	116.00
1	N	443	C	C2-N3-C4	6.02	122.91	119.90
1	N	1129	C	C2-N1-C1'	6.02	125.42	118.80
1	N	1206	G	C8-N9-C4	-6.02	103.99	106.40
1	N	213	G	C5-N7-C8	-6.02	101.29	104.30
1	N	574	A	O4'-C1'-N9	6.02	113.02	108.20
1	N	744	C	N1-C1'-C2'	-6.02	105.38	112.00
1	N	15	G	O4'-C1'-N9	6.02	113.02	108.20
1	N	260	G	C4'-C3'-C2'	-6.02	96.58	102.60
1	N	389	A	N1-C2-N3	6.02	132.31	129.30
1	N	821	G	C6-C5-N7	-6.02	126.79	130.40
1	N	1242	G	N3-C4-C5	-6.02	125.59	128.60
1	N	1247	U	C4'-C3'-C2'	-6.02	96.58	102.60
1	N	1249	C	C6-N1-C2	-6.02	117.89	120.30
1	N	721	G	C4-N9-C1'	-6.01	118.68	126.50
1	N	391	G	C2-N3-C4	6.01	114.91	111.90
1	N	530	G	C5-N7-C8	6.01	107.31	104.30
1	N	777	A	O4'-C4'-C3'	-6.01	97.99	104.00
1	N	347	G	P-O5'-C5'	6.01	130.52	120.90
1	N	400	C	C5-C6-N1	6.01	124.01	121.00
1	N	558	G	C6-C5-N7	-6.01	126.79	130.40
1	N	597	G	N3-C2-N2	6.01	124.11	119.90
1	N	690	G	N7-C8-N9	-6.01	110.09	113.10
1	N	994	A	C5-N7-C8	6.01	106.91	103.90
1	N	1067	A	C5-C6-N6	-6.01	118.89	123.70
1	N	482	A	N1-C6-N6	6.01	122.21	118.60
1	N	543	U	N3-C4-O4	6.01	123.61	119.40
1	N	898	G	C4-C5-C6	6.01	122.41	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1299	A	C8-N9-C1'	-6.01	116.88	127.70
1	N	1364	U	C2-N1-C1'	6.01	124.91	117.70
1	N	60	A	C5-C6-N1	-6.01	114.70	117.70
1	N	120	A	N1-C2-N3	6.01	132.30	129.30
1	N	429	U	C2-N3-C4	6.01	130.60	127.00
1	N	531	U	P-O5'-C5'	6.01	130.51	120.90
1	N	994	A	N3-C4-C5	-6.01	122.60	126.80
1	N	1042	A	O5'-C5'-C4'	-6.01	100.29	111.70
1	N	1271	A	N1-C2-N3	-6.01	126.30	129.30
1	N	441	A	C4-C5-C6	6.00	120.00	117.00
1	N	511	C	N1-C2-N3	-6.00	115.00	119.20
1	N	925	G	C5-C6-O6	-6.00	125.00	128.60
1	N	988	G	C2-N3-C4	6.00	114.90	111.90
1	N	279	A	C2-N3-C4	6.00	113.60	110.60
1	N	682	G	C5'-C4'-O4'	6.00	116.30	109.10
1	N	1356	G	C5-C6-N1	-6.00	108.50	111.50
1	N	1498	U	C5-C6-N1	-6.00	119.70	122.70
1	N	1528	U	O4'-C1'-N1	6.00	113.00	108.20
1	N	481	G	C4'-C3'-C2'	-6.00	96.60	102.60
1	N	913	A	N7-C8-N9	6.00	116.80	113.80
1	N	915	A	N9-C1'-C2'	-6.00	105.40	112.00
1	N	1137	C	O4'-C1'-N1	6.00	113.00	108.20
1	N	941	G	C4-C5-N7	6.00	113.20	110.80
1	N	270	A	C5-N7-C8	6.00	106.90	103.90
1	N	801	U	N1-C2-N3	6.00	118.50	114.90
1	N	932	C	C5'-C4'-O4'	6.00	116.30	109.10
1	N	1407	C	C5-C4-N4	-6.00	116.00	120.20
1	N	1299	A	C5-C6-N1	-6.00	114.70	117.70
1	N	1357	A	C1'-O4'-C4'	6.00	114.70	109.90
1	N	326	G	C6-C5-N7	-6.00	126.80	130.40
1	N	560	A	N7-C8-N9	-6.00	110.80	113.80
1	N	456	A	C8-N9-C4	-5.99	103.40	105.80
1	N	1027	C	C5-C6-N1	5.99	124.00	121.00
1	N	1069	C	C4'-C3'-C2'	-5.99	96.61	102.60
1	N	1091	U	C5-C4-O4	-5.99	122.30	125.90
1	N	1213	A	N3-C4-N9	5.99	132.19	127.40
1	N	1438	G	N7-C8-N9	5.99	116.10	113.10
1	N	1440	U	C2-N3-C4	5.99	130.60	127.00
1	N	1483	A	O4'-C4'-C3'	-5.99	98.01	104.00
1	N	363	A	C5-N7-C8	5.99	106.90	103.90
1	N	716	A	C5'-C4'-O4'	5.99	116.29	109.10
1	N	34	C	C5-C6-N1	-5.99	118.00	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	366	A	P-O3'-C3'	5.99	126.89	119.70
1	N	999	C	C4-C5-C6	5.99	120.39	117.40
1	N	301	G	N3-C2-N2	5.99	124.09	119.90
1	N	1234	C	C5'-C4'-O4'	5.99	116.28	109.10
1	N	1428	A	C5-C6-N1	-5.99	114.71	117.70
1	N	1440	U	C5'-C4'-C3'	-5.99	106.42	116.00
1	N	261	U	N3-C4-C5	-5.99	111.01	114.60
1	N	933	G	C4-C5-N7	-5.99	108.41	110.80
1	N	1067	A	C5-N7-C8	5.99	106.89	103.90
1	N	1101	A	N3-C4-C5	-5.99	122.61	126.80
1	N	1223	C	P-O3'-C3'	5.99	126.89	119.70
1	N	160	A	O4'-C1'-N9	5.99	112.99	108.20
1	N	200	G	O4'-C1'-N9	5.99	112.99	108.20
1	N	334	C	N3-C2-O2	5.98	126.09	121.90
1	N	250	A	C6-N1-C2	5.98	122.19	118.60
1	N	446	G	N9-C4-C5	5.98	107.79	105.40
1	N	824	G	C4-C5-C6	5.98	122.39	118.80
1	N	881	G	C3'-C2'-C1'	-5.98	96.71	101.50
1	N	1266	G	C4-N9-C1'	-5.98	118.72	126.50
1	N	147	G	C5-C6-O6	-5.98	125.01	128.60
1	N	266	G	C4-C5-C6	5.98	122.39	118.80
1	N	628	G	C4-N9-C1'	5.98	134.28	126.50
1	N	766	A	P-O3'-C3'	-5.98	112.52	119.70
1	N	1036	A	N1-C2-N3	5.98	132.29	129.30
1	N	350	G	O4'-C1'-N9	5.98	112.98	108.20
1	N	1431	A	C5-C6-N6	-5.98	118.92	123.70
1	N	414	A	N3-C4-C5	-5.98	122.61	126.80
1	N	868	C	C6-N1-C2	-5.98	117.91	120.30
1	N	270	A	C5-C6-N1	-5.98	114.71	117.70
1	N	851	G	O4'-C1'-N9	5.98	112.98	108.20
1	N	964	A	O4'-C1'-N9	5.98	112.98	108.20
1	N	1239	A	C4-N9-C1'	-5.98	115.54	126.30
1	N	81	A	C5-C6-N6	-5.97	118.92	123.70
1	N	628	G	N3-C4-C5	-5.97	125.61	128.60
1	N	20	U	C4-C5-C6	5.97	123.28	119.70
1	N	92	U	C5-C4-O4	-5.97	122.32	125.90
1	N	601	G	C5-C6-O6	-5.97	125.02	128.60
1	N	821	G	O4'-C1'-N9	5.97	112.98	108.20
1	N	1466	C	C2-N1-C1'	-5.97	112.23	118.80
1	N	457	G	C1'-O4'-C4'	-5.97	105.12	109.90
1	N	1220	G	N1-C6-O6	5.97	123.48	119.90
1	N	352	C	O4'-C1'-N1	5.97	112.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	765	G	C5-N7-C8	5.97	107.28	104.30
1	N	812	G	N1-C2-N3	-5.97	120.32	123.90
1	N	847	G	O4'-C4'-C3'	-5.97	98.03	104.00
1	N	1113	C	O4'-C1'-N1	5.97	112.98	108.20
1	N	171	A	C4-C5-C6	5.97	119.98	117.00
1	N	758	C	C2-N1-C1'	5.97	125.36	118.80
1	N	872	A	C4-C5-C6	5.97	119.98	117.00
1	N	1447	A	P-O3'-C3'	5.97	126.86	119.70
1	N	811	C	N1-C2-O2	5.97	122.48	118.90
1	N	991	U	C6-N1-C2	5.97	124.58	121.00
1	N	1106	G	P-O5'-C5'	-5.97	111.36	120.90
1	N	1243	C	C4-C5-C6	5.97	120.38	117.40
1	N	10	A	O4'-C4'-C3'	-5.96	98.03	104.00
1	N	802	A	OP1-P-OP2	-5.96	110.65	119.60
1	N	28	A	N3-C4-C5	-5.96	122.63	126.80
1	N	333	U	P-O5'-C5'	5.96	130.44	120.90
1	N	637	C	N3-C4-C5	-5.96	119.52	121.90
1	N	1334	G	C4-C5-C6	5.96	122.38	118.80
1	N	1534	A	N1-C2-N3	5.96	132.28	129.30
1	N	842	U	C2-N1-C1'	5.96	124.85	117.70
1	N	1068	G	C5-C6-N1	-5.96	108.52	111.50
1	N	81	A	C5-N7-C8	5.96	106.88	103.90
1	N	3	A	C6-C5-N7	-5.96	128.13	132.30
1	N	237	G	C4'-C3'-C2'	-5.96	96.64	102.60
1	N	310	G	C3'-C2'-C1'	-5.96	96.73	101.50
1	N	374	A	N7-C8-N9	-5.96	110.82	113.80
1	N	685	G	C4-C5-C6	5.96	122.38	118.80
1	N	1087	G	C5-C6-O6	-5.96	125.02	128.60
1	N	1088	G	P-O3'-C3'	-5.96	112.55	119.70
1	N	1089	G	N1-C2-N3	-5.96	120.33	123.90
1	N	1323	G	C1'-O4'-C4'	5.96	114.67	109.90
1	N	1496	C	C4-C5-C6	-5.96	114.42	117.40
1	N	1019	A	P-O3'-C3'	-5.96	112.55	119.70
1	N	179	A	C3'-C2'-C1'	-5.95	96.74	101.50
1	N	396	C	C5-C6-N1	5.95	123.98	121.00
1	N	620	C	C3'-C2'-C1'	-5.95	96.74	101.50
1	N	833	G	C2-N3-C4	-5.95	108.92	111.90
1	N	834	U	C2-N3-C4	-5.95	123.43	127.00
1	N	1129	C	C6-N1-C2	5.95	122.68	120.30
1	N	1280	A	C4-C5-N7	-5.95	107.72	110.70
1	N	1396	A	C3'-C2'-C1'	5.95	106.26	101.50
1	N	1465	A	C5-N7-C8	5.95	106.88	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	860	A	N7-C8-N9	5.95	116.78	113.80
1	N	1292	G	N1-C2-N3	-5.95	120.33	123.90
1	N	103	U	O4'-C1'-C2'	-5.95	99.85	105.80
1	N	158	G	C5-C6-N1	-5.95	108.53	111.50
1	N	184	G	C6-N1-C2	5.95	128.67	125.10
1	N	844	G	N1-C6-O6	5.95	123.47	119.90
1	N	926	G	N1-C2-N3	-5.95	120.33	123.90
1	N	1323	G	C8-N9-C1'	-5.95	119.27	127.00
1	N	1410	A	C2'-C3'-O3'	5.95	123.22	113.70
1	N	648	A	C5-N7-C8	5.95	106.88	103.90
1	N	845	A	O4'-C1'-N9	5.95	112.96	108.20
1	N	1071	C	C4-C5-C6	5.95	120.37	117.40
1	N	1365	G	C4-N9-C1'	5.95	134.23	126.50
1	N	822	U	O4'-C1'-N1	5.95	112.96	108.20
1	N	256	U	O4'-C1'-N1	5.95	112.96	108.20
1	N	1076	U	C2-N3-C4	-5.95	123.43	127.00
1	N	1478	U	C1'-O4'-C4'	-5.95	105.14	109.90
1	N	1533	C	C5-C6-N1	-5.95	118.03	121.00
1	N	1144	G	C4-C5-N7	5.94	113.18	110.80
1	N	1218	C	O4'-C1'-N1	5.94	112.95	108.20
1	N	1410	A	C5-C6-N6	-5.94	118.94	123.70
1	N	258	G	C2-N3-C4	-5.94	108.93	111.90
1	N	451	A	O4'-C1'-N9	5.94	112.95	108.20
1	N	542	G	O4'-C1'-N9	5.94	112.95	108.20
1	N	792	A	O4'-C4'-C3'	-5.94	98.06	104.00
1	N	966	G	N3-C4-N9	5.94	129.57	126.00
1	N	1018	G	C4-C5-C6	5.94	122.37	118.80
1	N	94	G	C6-N1-C2	-5.94	121.54	125.10
1	N	142	G	C6-C5-N7	-5.94	126.84	130.40
1	N	655	A	N1-C2-N3	5.94	132.27	129.30
1	N	836	G	N1-C2-N3	-5.94	120.34	123.90
1	N	1167	A	C4-C5-C6	5.94	119.97	117.00
1	N	1306	A	C5-C6-N1	-5.94	114.73	117.70
1	N	631	C	O4'-C1'-N1	5.94	112.95	108.20
1	N	684	U	N3-C4-C5	-5.94	111.04	114.60
1	N	1280	A	N3-C4-C5	-5.94	122.64	126.80
1	N	778	G	C6-C5-N7	-5.94	126.84	130.40
1	N	895	G	N1-C2-N2	-5.94	110.86	116.20
1	N	705	G	C5'-C4'-O4'	5.94	116.22	109.10
1	N	1210	C	O4'-C1'-N1	5.94	112.95	108.20
1	N	1490	U	O4'-C4'-C3'	-5.94	98.06	104.00
1	N	53	A	C5-C6-N1	-5.93	114.73	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	56	U	C5-C4-O4	-5.93	122.34	125.90
1	N	136	C	C6-N1-C2	5.93	122.67	120.30
1	N	235	C	P-O5'-C5'	5.93	130.40	120.90
1	N	618	C	C5'-C4'-O4'	5.93	116.22	109.10
1	N	766	A	C8-N9-C4	5.93	108.17	105.80
1	N	1006	G	N9-C1'-C2'	-5.93	105.47	112.00
1	N	1116	U	N1-C2-O2	5.93	126.95	122.80
1	N	1361	G	P-O5'-C5'	-5.93	111.41	120.90
1	N	1514	G	N7-C8-N9	-5.93	110.13	113.10
1	N	368	U	O4'-C1'-N1	5.93	112.95	108.20
1	N	471	U	N1-C2-O2	5.93	126.95	122.80
1	N	587	G	C3'-C2'-C1'	-5.93	96.75	101.50
1	N	889	A	P-O3'-C3'	5.93	126.82	119.70
1	N	1441	A	N1-C6-N6	5.93	122.16	118.60
1	N	377	G	C5-C6-N1	5.93	114.47	111.50
1	N	771	G	N3-C4-N9	5.93	129.56	126.00
1	N	1166	G	N9-C4-C5	5.93	107.77	105.40
1	N	1297	G	C6-N1-C2	5.93	128.66	125.10
1	N	1500	A	C8-N9-C4	-5.93	103.43	105.80
1	N	722	G	C8-N9-C1'	-5.92	119.30	127.00
1	N	1026	G	N1-C2-N3	-5.92	120.34	123.90
1	N	1427	C	C1'-O4'-C4'	5.92	114.64	109.90
1	N	1463	U	C4-C5-C6	5.92	123.25	119.70
1	N	154	U	C4'-C3'-C2'	-5.92	96.68	102.60
1	N	332	G	C8-N9-C4	5.92	108.77	106.40
1	N	356	A	C5'-C4'-O4'	5.92	116.21	109.10
1	N	100	G	C3'-C2'-C1'	-5.92	96.76	101.50
1	N	113	G	N9-C4-C5	5.92	107.77	105.40
1	N	459	A	C5'-C4'-C3'	-5.92	106.53	116.00
1	N	848	C	P-O5'-C5'	5.92	130.37	120.90
1	N	863	U	C2-N3-C4	5.92	130.55	127.00
1	N	1051	C	O4'-C1'-N1	5.92	112.94	108.20
1	N	1085	U	O4'-C1'-N1	5.92	112.94	108.20
1	N	1220	G	N1-C2-N3	-5.92	120.35	123.90
1	N	262	A	C6-C5-N7	-5.92	128.16	132.30
1	N	266	G	C6-N1-C2	5.92	128.65	125.10
1	N	522	C	N3-C4-N4	5.92	122.14	118.00
1	N	1161	C	N3-C2-O2	-5.92	117.76	121.90
1	N	483	C	C1'-O4'-C4'	-5.92	105.17	109.90
1	N	866	C	N3-C4-N4	5.92	122.14	118.00
1	N	872	A	N1-C2-N3	5.92	132.26	129.30
1	N	969	A	N9-C4-C5	5.92	108.17	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1251	A	C4-C5-C6	5.92	119.96	117.00
1	N	417	G	C4-N9-C1'	5.92	134.19	126.50
1	N	204	G	C2'-C3'-O3'	5.91	123.16	113.70
1	N	633	G	N3-C2-N2	5.91	124.04	119.90
1	N	1077	G	C6-N1-C2	5.91	128.65	125.10
1	N	1303	C	N3-C2-O2	5.91	126.04	121.90
1	N	845	A	N1-C2-N3	5.91	132.26	129.30
1	N	1108	G	N1-C6-O6	5.91	123.45	119.90
1	N	1175	G	N1-C2-N3	-5.91	120.35	123.90
1	N	1389	C	C4'-C3'-C2'	-5.91	96.69	102.60
1	N	444	G	N9-C1'-C2'	-5.91	105.50	112.00
1	N	911	U	P-O3'-C3'	5.91	126.79	119.70
1	N	1441	A	C4-C5-C6	5.91	119.95	117.00
1	N	529	G	N1-C2-N3	-5.91	120.36	123.90
1	N	841	C	C6-N1-C1'	-5.91	113.71	120.80
1	N	872	A	C6-C5-N7	-5.91	128.16	132.30
1	N	1452	C	N3-C4-N4	5.91	122.14	118.00
1	N	35	G	C4-C5-C6	5.91	122.34	118.80
1	N	284	C	O4'-C1'-N1	5.91	112.93	108.20
1	N	438	U	C4-C5-C6	5.91	123.24	119.70
1	N	444	G	C5-C6-O6	-5.91	125.06	128.60
1	N	773	G	N9-C4-C5	5.91	107.76	105.40
1	N	995	C	C4-C5-C6	5.91	120.35	117.40
1	N	1077	G	N1-C6-O6	5.91	123.44	119.90
1	N	1441	A	N1-C2-N3	5.91	132.25	129.30
1	N	107	G	P-O3'-C3'	5.91	126.79	119.70
1	N	319	G	C5-C6-O6	-5.91	125.06	128.60
1	N	347	G	C4-C5-C6	5.91	122.34	118.80
1	N	424	G	C8-N9-C4	-5.91	104.04	106.40
1	N	630	A	C5-C6-N6	-5.91	118.98	123.70
1	N	1316	G	C6-C5-N7	-5.91	126.86	130.40
1	N	1361	G	C3'-C2'-C1'	-5.91	96.78	101.50
1	N	85	U	N1-C2-N3	-5.90	111.36	114.90
1	N	104	G	C6-N1-C2	-5.90	121.56	125.10
1	N	155	A	C5-C6-N1	-5.90	114.75	117.70
1	N	300	A	N9-C1'-C2'	5.90	121.67	114.00
1	N	479	U	N3-C4-C5	-5.90	111.06	114.60
1	N	715	A	O4'-C1'-N9	5.90	112.92	108.20
1	N	741	G	C4'-C3'-C2'	-5.90	96.70	102.60
1	N	790	A	C4-C5-C6	5.90	119.95	117.00
1	N	959	A	C4-C5-N7	-5.90	107.75	110.70
1	N	1012	A	C5-C6-N6	-5.90	118.98	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1220	G	C4-N9-C1'	-5.90	118.83	126.50
1	N	1322	C	N3-C4-C5	-5.90	119.54	121.90
1	N	426	U	N3-C4-C5	-5.90	111.06	114.60
1	N	482	A	N3-C4-C5	-5.90	122.67	126.80
1	N	746	A	C8-N9-C4	-5.90	103.44	105.80
1	N	806	C	N3-C4-C5	-5.90	119.54	121.90
1	N	1432	G	C6-C5-N7	-5.90	126.86	130.40
1	N	69	G	C4-C5-N7	5.90	113.16	110.80
1	N	741	G	N3-C4-N9	5.90	129.54	126.00
1	N	100	G	N7-C8-N9	5.90	116.05	113.10
1	N	199	A	C1'-O4'-C4'	5.90	114.62	109.90
1	N	332	G	N1-C2-N3	-5.90	120.36	123.90
1	N	376	G	P-O5'-C5'	-5.90	111.46	120.90
1	N	987	G	C4-C5-C6	5.90	122.34	118.80
1	N	1004	A	C4-C5-N7	-5.90	107.75	110.70
1	N	1035	A	P-O3'-C3'	-5.90	112.62	119.70
1	N	1106	G	N3-C4-C5	-5.90	125.65	128.60
1	N	1318	A	C5-C6-N1	-5.90	114.75	117.70
1	N	243	A	C1'-O4'-C4'	5.90	114.62	109.90
1	N	656	G	C4-N9-C1'	-5.90	118.83	126.50
1	N	622	A	N3-C4-C5	-5.89	122.67	126.80
1	N	1334	G	N1-C2-N3	-5.89	120.36	123.90
1	N	305	G	C6-C5-N7	-5.89	126.86	130.40
1	N	1158	C	C6-N1-C1'	-5.89	113.73	120.80
1	N	1256	A	N1-C6-N6	5.89	122.14	118.60
1	N	58	C	O4'-C1'-N1	5.89	112.91	108.20
1	N	480	U	N3-C2-O2	-5.89	118.08	122.20
1	N	517	G	N3-C4-C5	-5.89	125.65	128.60
1	N	540	G	C8-N9-C4	5.89	108.76	106.40
1	N	1317	C	N3-C4-C5	-5.89	119.54	121.90
1	N	1529	G	C5-C6-O6	-5.89	125.06	128.60
1	N	102	G	C6-C5-N7	-5.89	126.87	130.40
1	N	255	G	P-O5'-C5'	-5.89	111.48	120.90
1	N	559	A	C5-C6-N1	-5.89	114.76	117.70
1	N	28	A	N3-C4-N9	5.89	132.11	127.40
1	N	1327	C	N1-C2-O2	-5.89	115.37	118.90
1	N	1437	A	P-O3'-C3'	5.89	126.77	119.70
1	N	113	G	C3'-C2'-C1'	-5.89	96.79	101.50
1	N	426	U	N3-C4-O4	5.89	123.52	119.40
1	N	555	U	C2-N3-C4	5.89	130.53	127.00
1	N	782	A	C5-C6-N6	-5.89	118.99	123.70
1	N	1089	G	C6-C5-N7	-5.89	126.87	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	201	G	C8-N9-C4	5.88	108.75	106.40
1	N	447	G	N1-C2-N2	-5.88	110.91	116.20
1	N	221	C	C4-C5-C6	5.88	120.34	117.40
1	N	809	G	N3-C4-N9	-5.88	122.47	126.00
1	N	174	A	C6-N1-C2	5.88	122.13	118.60
1	N	178	C	C6-N1-C2	5.88	122.65	120.30
1	N	808	C	N1-C2-O2	-5.88	115.37	118.90
1	N	934	C	N3-C4-C5	-5.88	119.55	121.90
1	N	1216	A	C4-C5-N7	5.88	113.64	110.70
1	N	1342	C	C5-C6-N1	-5.88	118.06	121.00
1	N	146	G	C5'-C4'-C3'	-5.88	106.59	116.00
1	N	206	C	O4'-C1'-N1	5.88	112.90	108.20
1	N	244	U	C5'-C4'-O4'	5.88	116.15	109.10
1	N	923	A	C5-N7-C8	5.88	106.84	103.90
1	N	461	A	C4-C5-N7	-5.88	107.76	110.70
1	N	652	U	C5-C4-O4	-5.88	122.38	125.90
1	N	976	G	C6-C5-N7	-5.88	126.87	130.40
1	N	1289	A	O4'-C1'-N9	5.88	112.90	108.20
1	N	292	G	C4-C5-C6	5.88	122.33	118.80
1	N	351	G	C6-N1-C2	-5.88	121.58	125.10
1	N	1087	G	C5-N7-C8	5.88	107.24	104.30
1	N	373	A	P-O5'-C5'	-5.87	111.50	120.90
1	N	487	A	O4'-C1'-N9	5.87	112.90	108.20
1	N	535	A	O4'-C1'-N9	5.87	112.90	108.20
1	N	794	A	C5-C6-N1	-5.87	114.76	117.70
1	N	1185	G	P-O3'-C3'	-5.87	112.65	119.70
1	N	1313	U	P-O5'-C5'	5.87	130.30	120.90
1	N	1394	A	P-O3'-C3'	5.87	126.75	119.70
1	N	1430	A	N9-C4-C5	-5.87	103.45	105.80
1	N	187	G	N3-C2-N2	5.87	124.01	119.90
1	N	320	A	C5'-C4'-C3'	-5.87	106.61	116.00
1	N	410	G	N9-C4-C5	-5.87	103.05	105.40
1	N	755	G	C5'-C4'-C3'	-5.87	106.61	116.00
1	N	814	A	C2-N3-C4	-5.87	107.66	110.60
1	N	1100	C	C6-N1-C1'	-5.87	113.75	120.80
1	N	1451	U	N3-C4-C5	-5.87	111.08	114.60
1	N	88	U	N1-C2-O2	-5.87	118.69	122.80
1	N	313	A	P-O5'-C5'	5.87	130.29	120.90
1	N	715	A	N9-C4-C5	-5.87	103.45	105.80
1	N	1015	G	N3-C4-N9	5.87	129.52	126.00
1	N	1362	A	C8-N9-C4	-5.87	103.45	105.80
1	N	692	U	P-O5'-C5'	-5.87	111.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1012	A	C4-C5-C6	5.87	119.93	117.00
1	N	1469	C	C6-N1-C2	-5.87	117.95	120.30
1	N	61	G	O4'-C4'-C3'	-5.87	98.13	104.00
1	N	258	G	N3-C4-C5	5.87	131.53	128.60
1	N	677	U	OP1-P-OP2	-5.87	110.80	119.60
1	N	789	U	N1-C2-O2	-5.87	118.69	122.80
1	N	117	G	C5-C6-N1	-5.87	108.57	111.50
1	N	823	C	O4'-C1'-N1	5.87	112.89	108.20
1	N	849	G	N1-C2-N3	-5.87	120.38	123.90
1	N	1185	G	C3'-C2'-C1'	-5.87	96.81	101.50
1	N	1454	G	C1'-O4'-C4'	5.87	114.59	109.90
1	N	229	U	C2-N1-C1'	-5.86	110.66	117.70
1	N	273	U	P-O3'-C3'	-5.86	112.67	119.70
1	N	485	U	C6-N1-C2	-5.86	117.48	121.00
1	N	1186	G	O4'-C1'-N9	5.86	112.89	108.20
1	N	52	C	N3-C4-C5	-5.86	119.56	121.90
1	N	273	U	C3'-C2'-C1'	5.86	106.19	101.50
1	N	550	G	C5-C6-N1	-5.86	108.57	111.50
1	N	745	G	N9-C4-C5	-5.86	103.06	105.40
1	N	1078	U	C2-N3-C4	-5.86	123.48	127.00
1	N	694	A	C8-N9-C4	5.86	108.14	105.80
1	N	1307	U	OP1-P-OP2	-5.86	110.81	119.60
1	N	84	U	P-O3'-C3'	-5.86	112.67	119.70
1	N	181	A	C3'-C2'-C1'	5.86	106.19	101.50
1	N	287	U	N3-C4-O4	5.86	123.50	119.40
1	N	853	C	C5-C4-N4	-5.86	116.10	120.20
1	N	1249	C	P-O3'-C3'	5.86	126.73	119.70
1	N	1299	A	C4-C5-C6	5.86	119.93	117.00
1	N	505	G	N1-C6-O6	5.86	123.41	119.90
1	N	514	C	C1'-O4'-C4'	5.86	114.58	109.90
1	N	190	A	N7-C8-N9	5.85	116.73	113.80
1	N	206	C	C2-N1-C1'	5.85	125.24	118.80
1	N	1139	G	O3'-P-O5'	-5.85	92.88	104.00
1	N	1228	C	C6-N1-C1'	-5.85	113.78	120.80
1	N	128	G	C8-N9-C4	-5.85	104.06	106.40
1	N	481	G	C5-C6-O6	-5.85	125.09	128.60
1	N	714	G	C8-N9-C4	-5.85	104.06	106.40
1	N	746	A	O4'-C4'-C3'	-5.85	98.15	104.00
1	N	679	C	O4'-C4'-C3'	-5.85	98.15	104.00
1	N	25	C	N1-C2-N3	-5.85	115.11	119.20
1	N	318	G	N3-C2-N2	5.85	123.99	119.90
1	N	695	A	O4'-C1'-N9	5.85	112.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	854	U	C5-C4-O4	-5.85	122.39	125.90
1	N	954	G	C5-N7-C8	-5.85	101.38	104.30
1	N	1145	A	O3'-P-O5'	-5.85	92.89	104.00
1	N	1279	G	N3-C2-N2	5.85	124.00	119.90
1	N	94	G	N3-C4-C5	5.85	131.52	128.60
1	N	341	C	P-O5'-C5'	5.85	130.25	120.90
1	N	773	G	P-O3'-C3'	5.85	126.72	119.70
1	N	904	U	N3-C4-O4	5.85	123.49	119.40
1	N	1196	A	OP2-P-O3'	5.85	118.06	105.20
1	N	1349	A	C6-N1-C2	5.85	122.11	118.60
1	N	122	G	C6-C5-N7	-5.84	126.89	130.40
1	N	602	A	N1-C2-N3	5.84	132.22	129.30
1	N	693	G	C4-C5-C6	5.84	122.31	118.80
1	N	1218	C	C4'-C3'-C2'	-5.84	96.75	102.60
1	N	1433	A	P-O5'-C5'	5.84	130.25	120.90
1	N	301	G	C8-N9-C1'	-5.84	119.41	127.00
1	N	1145	A	C5-C6-N1	-5.84	114.78	117.70
1	N	1188	A	C5-C6-N6	-5.84	119.03	123.70
1	N	351	G	C4-N9-C1'	5.84	134.09	126.50
1	N	541	G	N3-C4-N9	-5.84	122.50	126.00
1	N	574	A	N7-C8-N9	5.84	116.72	113.80
1	N	748	G	N9-C4-C5	-5.84	103.06	105.40
1	N	1032	G	P-O3'-C3'	5.84	126.71	119.70
1	N	1446	A	O4'-C1'-N9	5.84	112.87	108.20
1	N	1457	G	C5'-C4'-O4'	5.84	116.11	109.10
1	N	1502	A	C2'-C3'-O3'	5.84	123.05	113.70
1	N	73	C	N3-C4-C5	-5.84	119.56	121.90
1	N	325	A	C4-C5-C6	5.84	119.92	117.00
1	N	379	C	N3-C4-N4	5.84	122.09	118.00
1	N	435	A	C5-C6-N6	-5.84	119.03	123.70
1	N	503	C	C6-N1-C1'	-5.84	113.79	120.80
1	N	570	G	C4-C5-N7	-5.84	108.46	110.80
1	N	656	G	N9-C4-C5	-5.84	103.06	105.40
1	N	671	G	N1-C2-N2	-5.84	110.94	116.20
1	N	726	C	C2-N1-C1'	5.84	125.22	118.80
1	N	848	C	C5'-C4'-O4'	5.84	116.11	109.10
1	N	250	A	C8-N9-C4	-5.84	103.47	105.80
1	N	843	U	O4'-C4'-C3'	-5.84	98.16	104.00
1	N	855	U	C5'-C4'-O4'	5.84	116.11	109.10
1	N	1270	G	N1-C2-N2	5.84	121.45	116.20
1	N	137	U	O4'-C1'-N1	5.84	112.87	108.20
1	N	469	C	C3'-C2'-C1'	-5.84	96.83	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	605	U	N1-C2-O2	-5.84	118.71	122.80
1	N	714	G	N9-C4-C5	5.84	107.73	105.40
1	N	715	A	N1-C2-N3	-5.84	126.38	129.30
1	N	788	U	P-O3'-C3'	-5.84	112.70	119.70
1	N	1358	U	C1'-O4'-C4'	5.84	114.57	109.90
1	N	446	G	N1-C6-O6	5.83	123.40	119.90
1	N	722	G	N3-C2-N2	5.83	123.98	119.90
1	N	825	A	C5-C6-N6	-5.83	119.03	123.70
1	N	1469	C	C5-C4-N4	-5.83	116.12	120.20
1	N	1530	G	N3-C4-N9	5.83	129.50	126.00
1	N	409	U	P-O5'-C5'	5.83	130.23	120.90
1	N	813	U	N3-C4-C5	5.83	118.10	114.60
1	N	91	U	C5'-C4'-O4'	-5.83	102.10	109.10
1	N	713	G	O4'-C1'-N9	5.83	112.86	108.20
1	N	729	A	OP1-P-OP2	-5.83	110.86	119.60
1	N	962	C	N1-C2-O2	-5.83	115.40	118.90
1	N	1030	U	C4-C5-C6	-5.83	116.20	119.70
1	N	1298	U	C1'-O4'-C4'	5.83	114.56	109.90
1	N	1528	U	N3-C4-C5	-5.83	111.10	114.60
1	N	64	G	N3-C4-N9	-5.83	122.50	126.00
1	N	885	G	N3-C2-N2	5.83	123.98	119.90
1	N	1253	G	C4'-C3'-C2'	-5.83	96.77	102.60
1	N	1426	G	N1-C6-O6	5.83	123.40	119.90
1	N	402	G	N1-C2-N3	-5.83	120.41	123.90
1	N	836	G	N9-C4-C5	-5.83	103.07	105.40
1	N	994	A	N7-C8-N9	-5.83	110.89	113.80
1	N	1228	C	C3'-C2'-C1'	5.83	106.16	101.50
1	N	1261	A	C5-C6-N6	-5.83	119.04	123.70
1	N	1468	A	P-O3'-C3'	5.83	126.69	119.70
1	N	339	C	O5'-C5'-C4'	-5.82	100.64	111.70
1	N	381	C	N3-C4-C5	-5.82	119.57	121.90
1	N	924	C	O4'-C4'-C3'	-5.82	98.18	104.00
1	N	231	U	C2-N1-C1'	5.82	124.69	117.70
1	N	592	G	N3-C4-N9	-5.82	122.51	126.00
1	N	909	A	C6-C5-N7	-5.82	128.22	132.30
1	N	1143	G	C1'-O4'-C4'	-5.82	105.24	109.90
1	N	1200	C	OP1-P-OP2	-5.82	110.87	119.60
1	N	1276	G	C3'-C2'-C1'	5.82	106.16	101.50
1	N	43	C	P-O3'-C3'	-5.82	112.72	119.70
1	N	211	G	C6-N1-C2	5.82	128.59	125.10
1	N	230	G	N3-C2-N2	5.82	123.97	119.90
1	N	997	U	C4'-C3'-C2'	-5.82	96.78	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1348	U	C5-C4-O4	5.82	129.39	125.90
1	N	1443	C	N1-C2-O2	-5.82	115.41	118.90
1	N	231	U	N1-C2-O2	-5.82	118.73	122.80
1	N	305	G	N3-C2-N2	5.82	123.97	119.90
1	N	645	G	C4-C5-C6	5.82	122.29	118.80
1	N	679	C	C1'-O4'-C4'	5.82	114.55	109.90
1	N	731	G	O4'-C1'-N9	5.82	112.85	108.20
1	N	791	G	O4'-C1'-N9	5.82	112.85	108.20
1	N	1322	C	C2'-C3'-O3'	5.82	123.01	113.70
1	N	117	G	N1-C2-N3	-5.82	120.41	123.90
1	N	185	U	C5-C6-N1	5.82	125.61	122.70
1	N	585	G	C5-C6-N1	-5.82	108.59	111.50
1	N	955	U	N3-C4-C5	-5.82	111.11	114.60
1	N	964	A	N1-C6-N6	5.82	122.09	118.60
1	N	1076	U	N1-C2-N3	5.82	118.39	114.90
1	N	1443	C	C1'-O4'-C4'	-5.82	105.25	109.90
1	N	128	G	N3-C4-C5	-5.81	125.69	128.60
1	N	221	C	O4'-C1'-N1	5.81	112.85	108.20
1	N	872	A	O4'-C1'-N9	5.81	112.85	108.20
1	N	924	C	P-O3'-C3'	5.81	126.68	119.70
1	N	1068	G	C4-N9-C1'	5.81	134.06	126.50
1	N	99	C	N3-C4-N4	5.81	122.07	118.00
1	N	294	U	O4'-C1'-N1	5.81	112.85	108.20
1	N	596	A	N7-C8-N9	5.81	116.70	113.80
1	N	48	C	C5-C6-N1	5.81	123.90	121.00
1	N	426	U	O5'-C5'-C4'	-5.81	100.67	111.70
1	N	566	G	C5'-C4'-C3'	-5.81	106.71	116.00
1	N	912	C	N1-C2-N3	-5.81	115.13	119.20
1	N	1180	A	C2-N3-C4	-5.81	107.70	110.60
1	N	1440	U	N3-C4-O4	5.81	123.47	119.40
1	N	264	C	C1'-O4'-C4'	-5.81	105.25	109.90
1	N	1018	G	O4'-C1'-N9	5.81	112.84	108.20
1	N	1137	C	N1-C1'-C2'	5.81	121.55	114.00
1	N	628	G	N3-C4-N9	5.80	129.48	126.00
1	N	635	A	C3'-C2'-C1'	-5.80	96.86	101.50
1	N	243	A	C4-C5-C6	5.80	119.90	117.00
1	N	1338	G	C2-N3-C4	-5.80	109.00	111.90
1	N	147	G	N9-C4-C5	-5.80	103.08	105.40
1	N	614	C	P-O3'-C3'	5.80	126.66	119.70
1	N	667	G	C6-N1-C2	-5.80	121.62	125.10
1	N	716	A	N1-C2-N3	5.80	132.20	129.30
1	N	908	A	C5-C6-N1	-5.80	114.80	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1191	A	C5'-C4'-O4'	-5.80	102.14	109.10
1	N	1237	C	P-O3'-C3'	5.80	126.66	119.70
1	N	1331	G	C5-C6-N1	-5.80	108.60	111.50
1	N	1379	G	C5-C6-O6	-5.80	125.12	128.60
1	N	21	G	O4'-C1'-N9	5.80	112.84	108.20
1	N	495	A	N7-C8-N9	-5.80	110.90	113.80
1	N	646	G	N1-C2-N3	-5.80	120.42	123.90
1	N	20	U	C6-N1-C2	-5.80	117.52	121.00
1	N	128	G	O4'-C1'-N9	5.80	112.84	108.20
1	N	152	A	C5-C6-N1	-5.80	114.80	117.70
1	N	200	G	C3'-C2'-C1'	5.80	106.14	101.50
1	N	822	U	C5-C4-O4	5.80	129.38	125.90
1	N	437	U	N1-C2-N3	-5.79	111.42	114.90
1	N	127	G	C3'-C2'-C1'	-5.79	96.86	101.50
1	N	575	G	N9-C1'-C2'	-5.79	105.63	112.00
1	N	575	G	C4-C5-N7	-5.79	108.48	110.80
1	N	750	C	P-O5'-C5'	5.79	130.17	120.90
1	N	916	U	C6-N1-C2	-5.79	117.52	121.00
1	N	1304	G	C6-C5-N7	-5.79	126.92	130.40
1	N	1473	G	N9-C4-C5	-5.79	103.08	105.40
1	N	84	U	C6-N1-C1'	-5.79	113.09	121.20
1	N	202	G	O4'-C4'-C3'	-5.79	98.21	104.00
1	N	260	G	C8-N9-C1'	5.79	134.53	127.00
1	N	289	G	C6-C5-N7	-5.79	126.92	130.40
1	N	885	G	C5-C6-N1	5.79	114.40	111.50
1	N	1089	G	C5'-C4'-C3'	-5.79	106.73	116.00
1	N	184	G	C3'-C2'-C1'	-5.79	96.87	101.50
1	N	256	U	N1-C2-O2	5.79	126.85	122.80
1	N	430	A	N9-C4-C5	5.79	108.12	105.80
1	N	1266	G	C5-C6-N1	-5.79	108.61	111.50
1	N	111	G	N9-C4-C5	-5.79	103.08	105.40
1	N	1248	A	N9-C4-C5	5.79	108.11	105.80
1	N	1493	A	C2-N3-C4	-5.79	107.70	110.60
1	N	42	G	N1-C2-N2	5.79	121.41	116.20
1	N	312	C	C2-N1-C1'	5.79	125.17	118.80
1	N	1059	C	C2-N3-C4	5.79	122.79	119.90
1	N	1530	G	C8-N9-C1'	-5.79	119.48	127.00
1	N	24	U	C4'-C3'-C2'	-5.79	96.81	102.60
1	N	53	A	O4'-C1'-N9	5.78	112.83	108.20
1	N	444	G	P-O3'-C3'	-5.78	112.76	119.70
1	N	713	G	C5-N7-C8	-5.78	101.41	104.30
1	N	718	A	C5-N7-C8	5.78	106.79	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	799	G	N7-C8-N9	5.78	115.99	113.10
1	N	953	G	C4-C5-N7	5.78	113.11	110.80
1	N	1278	G	C4-N9-C1'	5.78	134.02	126.50
1	N	761	G	P-O3'-C3'	-5.78	112.76	119.70
1	N	1046	A	C4-C5-N7	-5.78	107.81	110.70
1	N	63	C	C6-N1-C1'	-5.78	113.86	120.80
1	N	851	G	N3-C4-N9	5.78	129.47	126.00
1	N	1031	C	O4'-C1'-N1	5.78	112.82	108.20
1	N	1147	C	C6-N1-C2	-5.78	117.99	120.30
1	N	771	G	C1'-O4'-C4'	5.78	114.52	109.90
1	N	1141	C	P-O3'-C3'	-5.78	112.77	119.70
1	N	1385	G	N3-C4-C5	5.78	131.49	128.60
1	N	1522	U	N3-C2-O2	5.78	126.25	122.20
1	N	604	G	N1-C2-N3	-5.78	120.44	123.90
1	N	1324	A	O4'-C1'-N9	5.78	112.82	108.20
1	N	1426	G	C5-C6-O6	-5.78	125.14	128.60
1	N	428	G	N3-C2-N2	5.77	123.94	119.90
1	N	1042	A	C2'-C3'-O3'	5.77	122.94	113.70
1	N	1195	C	N3-C2-O2	5.77	125.94	121.90
1	N	1043	G	C5'-C4'-O4'	5.77	116.03	109.10
1	N	1489	G	C1'-O4'-C4'	-5.77	105.28	109.90
1	N	316	C	O4'-C4'-C3'	-5.77	98.23	104.00
1	N	335	C	O4'-C4'-C3'	-5.77	98.23	104.00
1	N	554	A	C8-N9-C4	5.77	108.11	105.80
1	N	665	A	C8-N9-C1'	5.77	138.09	127.70
1	N	759	A	N3-C4-N9	-5.77	122.78	127.40
1	N	1047	G	C5-C6-N1	-5.77	108.61	111.50
1	N	1063	C	C4-C5-C6	5.77	120.28	117.40
1	N	366	A	C4-C5-C6	5.77	119.88	117.00
1	N	676	A	O4'-C1'-N9	5.77	112.81	108.20
1	N	875	U	O4'-C4'-C3'	-5.77	98.23	104.00
1	N	1182	G	C1'-O4'-C4'	5.77	114.51	109.90
1	N	1197	A	C6-C5-N7	-5.77	128.26	132.30
1	N	330	C	O4'-C1'-N1	5.77	112.81	108.20
1	N	997	U	N1-C2-O2	-5.77	118.76	122.80
1	N	340	U	C1'-O4'-C4'	5.76	114.51	109.90
1	N	671	G	C8-N9-C4	-5.76	104.09	106.40
1	N	832	G	N9-C4-C5	5.76	107.71	105.40
1	N	865	A	C4'-C3'-C2'	-5.76	96.83	102.60
1	N	912	C	C1'-O4'-C4'	5.76	114.51	109.90
1	N	1141	C	C5-C6-N1	5.76	123.88	121.00
1	N	1356	G	C4-C5-N7	5.76	113.11	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1043	G	C1'-O4'-C4'	5.76	114.51	109.90
1	N	117	G	OP1-P-OP2	-5.76	110.96	119.60
1	N	221	C	C5-C4-N4	-5.76	116.17	120.20
1	N	463	U	O4'-C4'-C3'	-5.76	98.24	104.00
1	N	887	G	O4'-C1'-N9	5.76	112.81	108.20
1	N	921	U	N3-C4-O4	5.76	123.43	119.40
1	N	1066	C	C3'-C2'-C1'	5.76	106.11	101.50
1	N	1124	G	N1-C2-N3	-5.76	120.44	123.90
1	N	87	C	N3-C2-O2	5.76	125.93	121.90
1	N	201	G	P-O3'-C3'	5.76	126.61	119.70
1	N	544	G	C4'-C3'-C2'	-5.76	96.84	102.60
1	N	989	U	P-O3'-C3'	-5.76	112.79	119.70
1	N	1340	A	C2-N3-C4	-5.76	107.72	110.60
1	N	170	U	C5-C4-O4	-5.76	122.45	125.90
1	N	202	G	C5'-C4'-C3'	5.76	125.21	116.00
1	N	397	A	C5-C6-N6	-5.76	119.09	123.70
1	N	1262	C	C2-N3-C4	5.76	122.78	119.90
1	N	641	U	O4'-C1'-N1	5.75	112.80	108.20
1	N	742	G	C5-N7-C8	-5.75	101.42	104.30
1	N	755	G	C5-C6-O6	-5.75	125.15	128.60
1	N	904	U	N3-C4-C5	-5.75	111.15	114.60
1	N	241	G	C3'-C2'-C1'	-5.75	96.90	101.50
1	N	453	G	N3-C4-C5	5.75	131.48	128.60
1	N	484	G	N9-C4-C5	5.75	107.70	105.40
1	N	1041	G	N3-C2-N2	-5.75	115.87	119.90
1	N	1043	G	O4'-C1'-C2'	-5.75	100.05	105.80
1	N	1351	U	C5-C4-O4	5.75	129.35	125.90
1	N	317	U	O4'-C1'-N1	5.75	112.80	108.20
1	N	318	G	OP1-P-OP2	-5.75	110.97	119.60
1	N	355	C	N3-C4-N4	5.75	122.03	118.00
1	N	429	U	C4'-C3'-C2'	-5.75	96.85	102.60
1	N	449	G	C8-N9-C4	-5.75	104.10	106.40
1	N	673	A	C5-N7-C8	-5.75	101.02	103.90
1	N	1104	G	O4'-C1'-N9	5.75	112.80	108.20
1	N	1247	U	N3-C4-O4	5.75	123.43	119.40
1	N	1306	A	C6-C5-N7	-5.75	128.27	132.30
1	N	1393	U	N3-C4-O4	5.75	123.43	119.40
1	N	506	G	C4'-C3'-C2'	5.75	108.35	102.60
1	N	547	A	C6-C5-N7	-5.75	128.28	132.30
1	N	1184	G	C8-N9-C4	-5.75	104.10	106.40
1	N	1471	U	C4-C5-C6	5.75	123.15	119.70
1	N	521	G	C6-N1-C2	5.75	128.55	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	859	G	N3-C2-N2	5.75	123.92	119.90
1	N	1172	C	C5-C4-N4	-5.75	116.18	120.20
1	N	1488	G	C5-C6-N1	-5.75	108.63	111.50
1	N	1082	A	C6-C5-N7	-5.75	128.28	132.30
1	N	1151	A	C6-C5-N7	-5.75	128.28	132.30
1	N	1368	A	C4-C5-N7	-5.75	107.83	110.70
1	N	202	G	N9-C4-C5	-5.75	103.10	105.40
1	N	766	A	C4-C5-N7	-5.75	107.83	110.70
1	N	917	G	N1-C2-N3	-5.75	120.45	123.90
1	N	1302	C	N1-C2-O2	-5.75	115.45	118.90
1	N	42	G	N1-C2-N3	-5.74	120.45	123.90
1	N	318	G	C4'-C3'-C2'	-5.74	96.86	102.60
1	N	1293	C	C5-C6-N1	5.74	123.87	121.00
1	N	1335	U	C2'-C3'-O3'	5.74	122.89	113.70
1	N	1345	U	O4'-C1'-N1	5.74	112.79	108.20
1	N	422	C	N1-C2-O2	5.74	122.34	118.90
1	N	885	G	C6-N1-C2	-5.74	121.66	125.10
1	N	70	U	C2'-C3'-O3'	5.74	122.88	113.70
1	N	810	C	C4-C5-C6	5.74	120.27	117.40
1	N	829	G	C2-N3-C4	5.74	114.77	111.90
1	N	1090	U	N3-C4-C5	-5.74	111.16	114.60
1	N	1121	U	C2-N1-C1'	-5.74	110.81	117.70
1	N	13	U	O4'-C1'-C2'	-5.74	100.06	105.80
1	N	206	C	C6-N1-C2	-5.74	118.01	120.30
1	N	348	G	N1-C2-N3	-5.74	120.46	123.90
1	N	388	G	C8-N9-C1'	-5.74	119.54	127.00
1	N	1492	A	C4-C5-N7	5.74	113.57	110.70
1	N	626	G	O4'-C1'-N9	5.73	112.79	108.20
1	N	716	A	OP1-P-OP2	-5.73	111.00	119.60
1	N	232	G	C5-C6-N1	-5.73	108.63	111.50
1	N	751	U	N1-C2-N3	-5.73	111.46	114.90
1	N	1160	G	C3'-C2'-C1'	5.73	106.09	101.50
1	N	1203	C	C5'-C4'-C3'	5.73	125.17	116.00
1	N	201	G	O4'-C1'-N9	5.73	112.78	108.20
1	N	457	G	N3-C2-N2	5.73	123.91	119.90
1	N	696	A	C8-N9-C4	-5.73	103.51	105.80
1	N	855	U	N1-C2-O2	5.73	126.81	122.80
1	N	643	C	C2-N1-C1'	5.73	125.10	118.80
1	N	1410	A	C5'-C4'-O4'	-5.73	102.22	109.10
1	N	475	C	C4-C5-C6	5.73	120.26	117.40
1	N	583	A	P-O5'-C5'	-5.73	111.74	120.90
1	N	1228	C	C2-N3-C4	-5.73	117.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	252	U	O3'-P-O5'	-5.73	93.12	104.00
1	N	277	C	C5'-C4'-O4'	5.73	115.97	109.10
1	N	695	A	C5-C6-N6	-5.73	119.12	123.70
1	N	803	G	N7-C8-N9	-5.73	110.24	113.10
1	N	835	U	O4'-C1'-N1	5.73	112.78	108.20
1	N	859	G	N1-C6-O6	5.73	123.33	119.90
1	N	163	C	C2-N3-C4	5.72	122.76	119.90
1	N	765	G	C1'-O4'-C4'	-5.72	105.32	109.90
1	N	95	C	P-O5'-C5'	-5.72	111.74	120.90
1	N	469	C	C1'-O4'-C4'	5.72	114.48	109.90
1	N	594	U	C3'-C2'-C1'	5.72	106.08	101.50
1	N	1094	G	C5-C6-N1	-5.72	108.64	111.50
1	N	1185	G	C2-N3-C4	-5.72	109.04	111.90
1	N	17	U	P-O3'-C3'	5.72	126.56	119.70
1	N	620	C	C6-N1-C1'	-5.72	113.94	120.80
1	N	1145	A	C1'-O4'-C4'	5.72	114.47	109.90
1	N	1202	U	P-O5'-C5'	-5.72	111.75	120.90
1	N	1224	U	P-O3'-C3'	5.72	126.56	119.70
1	N	193	C	O5'-C5'-C4'	-5.72	100.84	111.70
1	N	296	U	C5-C4-O4	-5.72	122.47	125.90
1	N	802	A	N9-C4-C5	5.72	108.09	105.80
1	N	1158	C	C6-N1-C2	-5.72	118.01	120.30
1	N	1107	C	N3-C4-N4	5.71	122.00	118.00
1	N	1319	A	C5-N7-C8	5.71	106.76	103.90
1	N	1460	C	P-O5'-C5'	5.71	130.04	120.90
1	N	14	U	N3-C4-C5	-5.71	111.17	114.60
1	N	324	G	N9-C4-C5	-5.71	103.11	105.40
1	N	689	C	C5'-C4'-C3'	-5.71	106.86	116.00
1	N	1131	G	C8-N9-C1'	5.71	134.43	127.00
1	N	452	A	C2-N3-C4	-5.71	107.75	110.60
1	N	510	A	N3-C4-C5	-5.71	122.80	126.80
1	N	536	C	C6-N1-C2	-5.71	118.02	120.30
1	N	695	A	C4-C5-N7	-5.71	107.84	110.70
1	N	717	U	C4-C5-C6	5.71	123.13	119.70
1	N	776	G	N3-C2-N2	5.71	123.90	119.90
1	N	913	A	C4'-C3'-C2'	-5.71	96.89	102.60
1	N	1033	G	C1'-O4'-C4'	5.71	114.47	109.90
1	N	1246	A	C8-N9-C4	5.71	108.08	105.80
1	N	535	A	C4-C5-C6	5.71	119.86	117.00
1	N	1505	G	C6-C5-N7	-5.71	126.97	130.40
1	N	432	A	N9-C4-C5	-5.71	103.52	105.80
1	N	438	U	C5-C6-N1	-5.71	119.85	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	553	A	C6-C5-N7	-5.71	128.30	132.30
1	N	862	C	C6-N1-C2	-5.71	118.02	120.30
1	N	1531	A	C6-C5-N7	-5.71	128.30	132.30
1	N	149	A	C5-N7-C8	5.71	106.75	103.90
1	N	416	G	C8-N9-C4	-5.71	104.12	106.40
1	N	1174	G	C2-N3-C4	5.71	114.75	111.90
1	N	1362	A	N3-C4-C5	-5.71	122.81	126.80
1	N	297	G	C8-N9-C1'	5.71	134.42	127.00
1	N	1484	C	N3-C2-O2	5.71	125.89	121.90
1	N	1507	A	C4-C5-N7	-5.71	107.85	110.70
1	N	113	G	N3-C2-N2	5.70	123.89	119.90
1	N	863	U	N1-C2-O2	5.70	126.79	122.80
1	N	883	C	C2-N3-C4	-5.70	117.05	119.90
1	N	1385	G	N1-C2-N3	-5.70	120.48	123.90
1	N	1458	G	C4'-C3'-C2'	-5.70	96.90	102.60
1	N	348	G	C4-C5-N7	5.70	113.08	110.80
1	N	667	G	C6-C5-N7	-5.70	126.98	130.40
1	N	902	G	C5-C6-O6	-5.70	125.18	128.60
1	N	1454	G	C2-N3-C4	-5.70	109.05	111.90
1	N	313	A	C4-C5-N7	-5.70	107.85	110.70
1	N	521	G	C4-C5-C6	5.70	122.22	118.80
1	N	788	U	O4'-C1'-N1	5.70	112.76	108.20
1	N	1206	G	N3-C4-C5	5.70	131.45	128.60
1	N	676	A	C4-C5-C6	5.70	119.85	117.00
1	N	706	A	C4-C5-N7	5.70	113.55	110.70
1	N	747	A	O5'-C5'-C4'	-5.70	100.87	111.70
1	N	1118	U	C5-C4-O4	-5.70	122.48	125.90
1	N	1182	G	C4-N9-C1'	-5.70	119.09	126.50
1	N	1402	C	OP2-P-O3'	5.70	117.74	105.20
1	N	1472	U	C1'-O4'-C4'	5.70	114.46	109.90
1	N	1071	C	C4'-C3'-C2'	-5.70	96.90	102.60
1	N	241	G	O4'-C1'-N9	5.70	112.76	108.20
1	N	272	C	C4'-C3'-C2'	-5.70	96.91	102.60
1	N	785	G	N9-C4-C5	-5.70	103.12	105.40
1	N	1004	A	C6-C5-N7	-5.70	128.31	132.30
1	N	1170	A	C4-C5-C6	5.70	119.85	117.00
1	N	1357	A	O4'-C4'-C3'	-5.70	98.31	104.00
1	N	531	U	N1-C2-O2	5.69	126.79	122.80
1	N	70	U	C2-N3-C4	5.69	130.42	127.00
1	N	322	C	C5'-C4'-O4'	5.69	115.93	109.10
1	N	388	G	C5-C6-N1	-5.69	108.65	111.50
1	N	570	G	C5-C6-N1	-5.69	108.65	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1271	A	C6-C5-N7	-5.69	128.31	132.30
1	N	377	G	C3'-C2'-C1'	-5.69	96.95	101.50
1	N	795	C	C4-C5-C6	-5.69	114.56	117.40
1	N	867	G	O5'-C5'-C4'	-5.69	100.89	111.70
1	N	1216	A	C6-C5-N7	-5.69	128.32	132.30
1	N	1225	A	C8-N9-C4	-5.69	103.52	105.80
1	N	76	G	N1-C6-O6	5.69	123.31	119.90
1	N	1285	A	C5-C6-N1	-5.69	114.86	117.70
1	N	311	C	N3-C4-N4	5.69	121.98	118.00
1	N	865	A	C5-N7-C8	5.69	106.74	103.90
1	N	1012	A	C2-N3-C4	-5.69	107.76	110.60
1	N	1116	U	C5'-C4'-C3'	-5.69	106.90	116.00
1	N	1232	U	C3'-C2'-C1'	-5.69	96.95	101.50
1	N	1430	A	C8-N9-C4	-5.69	103.53	105.80
1	N	1497	G	N9-C1'-C2'	-5.69	105.74	112.00
1	N	1294	G	N9-C4-C5	-5.69	103.13	105.40
1	N	549	C	O4'-C1'-N1	5.68	112.75	108.20
1	N	951	G	N1-C2-N2	5.68	121.32	116.20
1	N	351	G	C8-N9-C1'	-5.68	119.61	127.00
1	N	650	G	C3'-C2'-C1'	-5.68	96.95	101.50
1	N	652	U	N3-C4-O4	5.68	123.38	119.40
1	N	778	G	C4-C5-N7	5.68	113.07	110.80
1	N	801	U	C6-N1-C2	-5.68	117.59	121.00
1	N	829	G	N7-C8-N9	5.68	115.94	113.10
1	N	1284	C	N3-C4-C5	-5.68	119.63	121.90
1	N	1443	C	C2-N3-C4	-5.68	117.06	119.90
1	N	1300	G	P-O3'-C3'	5.68	126.52	119.70
1	N	194	C	C4-C5-C6	-5.68	114.56	117.40
1	N	367	U	C5-C6-N1	-5.68	119.86	122.70
1	N	390	U	C5'-C4'-O4'	5.68	115.92	109.10
1	N	412	A	C6-N1-C2	-5.68	115.19	118.60
1	N	1036	A	N7-C8-N9	5.68	116.64	113.80
1	N	1363	A	C5'-C4'-O4'	5.68	115.92	109.10
1	N	1411	C	C4-C5-C6	5.68	120.24	117.40
1	N	331	G	P-O5'-C5'	5.68	129.99	120.90
1	N	7	A	C8-N9-C4	-5.68	103.53	105.80
1	N	112	G	N3-C2-N2	5.68	123.87	119.90
1	N	225	C	N3-C4-C5	-5.68	119.63	121.90
1	N	346	G	N3-C2-N2	-5.68	115.93	119.90
1	N	753	A	C4-N9-C1'	-5.68	116.08	126.30
1	N	1201	A	C5-C6-N1	-5.68	114.86	117.70
1	N	1248	A	O4'-C1'-N9	5.68	112.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1309	G	C5'-C4'-C3'	5.68	125.08	116.00
1	N	1341	U	C5'-C4'-O4'	5.68	115.91	109.10
1	N	91	U	N1-C2-N3	-5.67	111.50	114.90
1	N	161	A	C6-C5-N7	-5.67	128.33	132.30
1	N	433	G	O5'-C5'-C4'	-5.67	100.92	111.70
1	N	820	U	O4'-C1'-N1	5.67	112.74	108.20
1	N	932	C	N1-C2-N3	-5.67	115.23	119.20
1	N	953	G	N3-C4-N9	5.67	129.41	126.00
1	N	1084	G	C6-N1-C2	5.67	128.50	125.10
1	N	138	G	N1-C2-N3	-5.67	120.50	123.90
1	N	323	U	C5-C6-N1	-5.67	119.86	122.70
1	N	669	G	C6-N1-C2	-5.67	121.70	125.10
1	N	23	C	OP2-P-O3'	5.67	117.68	105.20
1	N	357	G	O5'-C5'-C4'	-5.67	100.93	111.70
1	N	906	A	O5'-C5'-C4'	-5.67	100.92	111.70
1	N	997	U	O4'-C1'-N1	5.67	112.74	108.20
1	N	1305	G	C4-N9-C1'	-5.67	119.13	126.50
1	N	171	A	C8-N9-C1'	-5.67	117.50	127.70
1	N	964	A	C1'-O4'-C4'	5.67	114.44	109.90
1	N	1510	C	N1-C2-N3	-5.67	115.23	119.20
1	N	240	G	P-O5'-C5'	5.67	129.97	120.90
1	N	328	C	C2-N3-C4	5.67	122.73	119.90
1	N	664	G	O4'-C1'-N9	5.67	112.73	108.20
1	N	819	A	P-O5'-C5'	-5.67	111.83	120.90
1	N	907	A	C1'-O4'-C4'	5.67	114.44	109.90
1	N	26	A	C2-N3-C4	5.67	113.43	110.60
1	N	465	A	C5-N7-C8	5.67	106.73	103.90
1	N	792	A	C5-C6-N6	-5.67	119.17	123.70
1	N	1182	G	O4'-C1'-N9	5.67	112.73	108.20
1	N	296	U	C4-C5-C6	-5.67	116.30	119.70
1	N	365	U	N3-C2-O2	5.67	126.17	122.20
1	N	695	A	N7-C8-N9	-5.67	110.97	113.80
1	N	769	G	C5-C6-N1	-5.67	108.67	111.50
1	N	1156	G	C4-C5-N7	-5.67	108.53	110.80
1	N	1243	C	C2-N1-C1'	5.67	125.03	118.80
1	N	49	U	N3-C4-O4	5.66	123.36	119.40
1	N	336	A	N1-C2-N3	-5.66	126.47	129.30
1	N	401	C	C4'-C3'-C2'	-5.66	96.94	102.60
1	N	675	A	O4'-C1'-N9	5.66	112.73	108.20
1	N	678	U	C4-C5-C6	5.66	123.10	119.70
1	N	1000	A	C5-C6-N6	-5.66	119.17	123.70
1	N	1358	U	N3-C4-C5	-5.66	111.20	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	900	A	P-O3'-C3'	-5.66	112.91	119.70
1	N	1455	G	C5'-C4'-C3'	-5.66	106.94	116.00
1	N	164	G	C1'-O4'-C4'	5.66	114.43	109.90
1	N	508	U	C5'-C4'-C3'	-5.66	106.94	116.00
1	N	794	A	N3-C4-C5	-5.66	122.84	126.80
1	N	66	A	P-O3'-C3'	5.66	126.49	119.70
1	N	648	A	C8-N9-C4	-5.66	103.54	105.80
1	N	755	G	P-O5'-C5'	5.66	129.95	120.90
1	N	1453	G	C3'-C2'-C1'	5.66	106.03	101.50
1	N	733	G	C4-N9-C1'	5.66	133.85	126.50
1	N	762	U	C4'-C3'-C2'	-5.66	96.94	102.60
1	N	1515	G	P-O3'-C3'	-5.66	112.91	119.70
1	N	182	A	P-O5'-C5'	-5.66	111.85	120.90
1	N	208	U	C2-N3-C4	-5.66	123.61	127.00
1	N	694	A	C4-C5-C6	5.66	119.83	117.00
1	N	883	C	O4'-C1'-N1	5.66	112.72	108.20
1	N	985	C	C5-C6-N1	5.66	123.83	121.00
1	N	483	C	C4-C5-C6	5.65	120.23	117.40
1	N	546	A	C5-N7-C8	5.65	106.73	103.90
1	N	13	U	O4'-C1'-N1	5.65	112.72	108.20
1	N	245	U	C5-C4-O4	-5.65	122.51	125.90
1	N	273	U	N1-C1'-C2'	5.65	121.35	114.00
1	N	1415	G	C4-C5-N7	5.65	113.06	110.80
1	N	1464	U	N3-C2-O2	5.65	126.16	122.20
1	N	107	G	C4'-C3'-C2'	-5.65	96.95	102.60
1	N	266	G	C4'-C3'-C2'	5.65	108.25	102.60
1	N	665	A	C4-C5-C6	5.65	119.83	117.00
1	N	763	G	C5-N7-C8	5.65	107.12	104.30
1	N	1196	A	C5-N7-C8	5.65	106.72	103.90
1	N	60	A	C4-C5-C6	5.65	119.82	117.00
1	N	549	C	P-O5'-C5'	5.65	129.94	120.90
1	N	737	C	O4'-C4'-C3'	-5.65	98.35	104.00
1	N	141	G	C5'-C4'-C3'	-5.65	106.96	116.00
1	N	186	C	O4'-C1'-N1	5.65	112.72	108.20
1	N	265	G	N7-C8-N9	-5.65	110.28	113.10
1	N	468	A	P-O5'-C5'	5.65	129.94	120.90
1	N	690	G	C4-N9-C1'	5.65	133.84	126.50
1	N	1150	A	C4-C5-N7	-5.65	107.88	110.70
1	N	44	A	N1-C2-N3	-5.64	126.48	129.30
1	N	502	A	C6-N1-C2	-5.64	115.21	118.60
1	N	834	U	N3-C2-O2	-5.64	118.25	122.20
1	N	25	C	N3-C2-O2	5.64	125.85	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	79	G	N9-C4-C5	-5.64	103.14	105.40
1	N	841	C	C5'-C4'-C3'	5.64	125.03	116.00
1	N	1455	G	C8-N9-C4	-5.64	104.14	106.40
1	N	1517	G	N7-C8-N9	-5.64	110.28	113.10
1	N	472	U	O4'-C1'-N1	5.64	112.71	108.20
1	N	1373	G	C2-N3-C4	5.64	114.72	111.90
1	N	114	U	C5-C4-O4	-5.64	122.52	125.90
1	N	520	A	P-O3'-C3'	-5.64	112.93	119.70
1	N	829	G	N3-C2-N2	5.64	123.85	119.90
1	N	866	C	N1-C1'-C2'	5.64	121.33	114.00
1	N	368	U	N3-C4-O4	5.64	123.35	119.40
1	N	923	A	O4'-C1'-N9	5.64	112.71	108.20
1	N	178	C	N1-C2-N3	-5.64	115.25	119.20
1	N	232	G	N7-C8-N9	-5.64	110.28	113.10
1	N	336	A	C5-C6-N1	-5.64	114.88	117.70
1	N	397	A	C5'-C4'-C3'	5.64	125.02	116.00
1	N	809	G	C2-N3-C4	5.64	114.72	111.90
1	N	1152	A	O4'-C1'-N9	5.64	112.71	108.20
1	N	1222	G	N1-C6-O6	5.64	123.28	119.90
1	N	1354	U	C2-N3-C4	5.64	130.38	127.00
1	N	315	A	C6-C5-N7	-5.63	128.36	132.30
1	N	447	G	O4'-C1'-C2'	-5.63	100.17	105.80
1	N	517	G	N3-C4-N9	5.63	129.38	126.00
1	N	842	U	C3'-C2'-C1'	5.63	106.01	101.50
1	N	873	A	N3-C4-C5	-5.63	122.86	126.80
1	N	1061	G	C5-C6-O6	-5.63	125.22	128.60
1	N	1278	G	C8-N9-C4	-5.63	104.15	106.40
1	N	1498	U	N3-C2-O2	5.63	126.14	122.20
1	N	1503	A	C6-C5-N7	-5.63	128.36	132.30
1	N	330	C	N3-C2-O2	5.63	125.84	121.90
1	N	714	G	O4'-C1'-N9	5.63	112.71	108.20
1	N	785	G	C4'-C3'-C2'	-5.63	96.97	102.60
1	N	866	C	P-O3'-C3'	5.63	126.46	119.70
1	N	948	C	C5-C4-N4	-5.63	116.26	120.20
1	N	1254	A	C5'-C4'-O4'	5.63	115.86	109.10
1	N	1307	U	C5-C4-O4	-5.63	122.52	125.90
1	N	1378	C	O4'-C1'-N1	5.63	112.71	108.20
1	N	260	G	C8-N9-C4	-5.63	104.15	106.40
1	N	686	U	O4'-C1'-N1	5.63	112.70	108.20
1	N	303	A	C5-C6-N1	-5.63	114.89	117.70
1	N	751	U	C6-N1-C2	5.63	124.38	121.00
1	N	843	U	C1'-O4'-C4'	-5.63	105.40	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1421	G	C5-C6-N1	-5.63	108.69	111.50
1	N	82	G	N1-C2-N3	-5.63	120.52	123.90
1	N	148	G	C8-N9-C1'	-5.63	119.69	127.00
1	N	171	A	C4-N9-C1'	5.63	136.43	126.30
1	N	431	A	O4'-C1'-N9	5.62	112.70	108.20
1	N	780	A	N9-C4-C5	5.62	108.05	105.80
1	N	1376	U	N3-C4-C5	-5.62	111.23	114.60
1	N	1422	G	P-O3'-C3'	-5.62	112.95	119.70
1	N	143	A	C4-C5-N7	-5.62	107.89	110.70
1	N	326	G	C5'-C4'-O4'	5.62	115.85	109.10
1	N	523	A	C4-C5-C6	5.62	119.81	117.00
1	N	585	G	N7-C8-N9	-5.62	110.29	113.10
1	N	982	U	C4'-C3'-C2'	5.62	108.22	102.60
1	N	1067	A	P-O3'-C3'	-5.62	112.95	119.70
1	N	64	G	N9-C4-C5	5.62	107.65	105.40
1	N	252	U	O4'-C1'-N1	5.62	112.70	108.20
1	N	254	G	P-O5'-C5'	5.62	129.89	120.90
1	N	1269	A	C2-N3-C4	-5.62	107.79	110.60
1	N	1275	A	P-O3'-C3'	-5.62	112.96	119.70
1	N	1351	U	O4'-C1'-C2'	5.62	112.66	107.60
1	N	313	A	O4'-C1'-N9	5.62	112.69	108.20
1	N	589	U	C5-C4-O4	-5.62	122.53	125.90
1	N	621	A	N7-C8-N9	5.62	116.61	113.80
1	N	634	C	N3-C2-O2	5.62	125.83	121.90
1	N	717	U	C6-N1-C2	-5.62	117.63	121.00
1	N	1079	G	C2-N3-C4	-5.62	109.09	111.90
1	N	1249	C	C4'-C3'-C2'	-5.62	96.98	102.60
1	N	87	C	N1-C2-O2	-5.62	115.53	118.90
1	N	692	U	C3'-C2'-C1'	-5.62	97.01	101.50
1	N	695	A	N3-C4-C5	-5.62	122.87	126.80
1	N	794	A	O4'-C1'-N9	5.62	112.69	108.20
1	N	7	A	P-O5'-C5'	-5.62	111.92	120.90
1	N	109	A	C5-C6-N1	-5.62	114.89	117.70
1	N	235	C	N3-C2-O2	5.62	125.83	121.90
1	N	276	G	C4-C5-C6	-5.62	115.43	118.80
1	N	392	C	N1-C2-N3	-5.62	115.27	119.20
1	N	650	G	N3-C4-C5	5.62	131.41	128.60
1	N	1210	C	N3-C4-N4	5.62	121.93	118.00
1	N	54	C	OP1-P-OP2	-5.61	111.18	119.60
1	N	434	U	N1-C2-O2	-5.61	118.87	122.80
1	N	1053	G	N7-C8-N9	-5.61	110.29	113.10
1	N	1361	G	P-O3'-C3'	5.61	126.44	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1447	A	C5-N7-C8	5.61	106.71	103.90
1	N	16	A	C5-C6-N6	-5.61	119.21	123.70
1	N	251	G	C2-N3-C4	5.61	114.71	111.90
1	N	591	U	C6-N1-C2	-5.61	117.63	121.00
1	N	109	A	OP1-P-OP2	-5.61	111.18	119.60
1	N	399	G	C5-C6-O6	-5.61	125.23	128.60
1	N	568	G	C4-C5-C6	5.61	122.17	118.80
1	N	709	U	C4'-C3'-C2'	-5.61	96.99	102.60
1	N	1006	G	C4'-C3'-C2'	-5.61	96.99	102.60
1	N	758	C	OP2-P-O3'	5.61	117.54	105.20
1	N	357	G	N7-C8-N9	-5.61	110.30	113.10
1	N	454	G	N1-C2-N2	-5.61	111.15	116.20
1	N	771	G	N9-C4-C5	-5.61	103.16	105.40
1	N	1335	U	N1-C2-O2	5.61	126.72	122.80
1	N	1205	U	P-O5'-C5'	5.60	129.87	120.90
1	N	1223	C	C5'-C4'-C3'	-5.60	107.03	116.00
1	N	22	G	O4'-C1'-N9	5.60	112.68	108.20
1	N	186	C	N1-C2-N3	-5.60	115.28	119.20
1	N	201	G	N3-C4-C5	5.60	131.40	128.60
1	N	907	A	C6-N1-C2	-5.60	115.24	118.60
1	N	1198	G	N7-C8-N9	5.60	115.90	113.10
1	N	64	G	C3'-C2'-C1'	5.60	105.98	101.50
1	N	1064	G	C8-N9-C4	-5.60	104.16	106.40
1	N	1155	A	N3-C4-N9	5.60	131.88	127.40
1	N	181	A	C5-C6-N6	-5.60	119.22	123.70
1	N	289	G	N3-C2-N2	-5.60	115.98	119.90
1	N	788	U	O4'-C1'-C2'	5.60	112.64	107.60
1	N	1149	C	C5-C6-N1	5.60	123.80	121.00
1	N	1223	C	N1-C1'-C2'	5.60	121.28	114.00
1	N	124	C	O4'-C1'-N1	5.60	112.68	108.20
1	N	337	G	C4-C5-C6	5.60	122.16	118.80
1	N	454	G	C6-C5-N7	-5.60	127.04	130.40
1	N	540	G	C4-N9-C1'	-5.60	119.22	126.50
1	N	580	C	P-O5'-C5'	5.60	129.85	120.90
1	N	616	G	N3-C2-N2	5.60	123.82	119.90
1	N	1181	G	N3-C4-N9	5.60	129.36	126.00
1	N	1523	G	P-O3'-C3'	-5.60	112.98	119.70
1	N	1524	C	C6-N1-C2	5.60	122.54	120.30
1	N	1182	G	P-O3'-C3'	5.60	126.42	119.70
1	N	461	A	C1'-O4'-C4'	5.59	114.38	109.90
1	N	1214	C	N1-C2-O2	5.59	122.26	118.90
1	N	1468	A	C6-C5-N7	-5.59	128.38	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	11	G	C5-C6-O6	-5.59	125.25	128.60
1	N	523	A	C5-C6-N6	-5.59	119.23	123.70
1	N	914	A	C5-C6-N1	-5.59	114.90	117.70
1	N	1068	G	N7-C8-N9	5.59	115.90	113.10
1	N	1216	A	C6-N1-C2	-5.59	115.25	118.60
1	N	1374	A	C5'-C4'-O4'	5.59	115.81	109.10
1	N	23	C	N3-C4-C5	-5.59	119.66	121.90
1	N	433	G	N9-C4-C5	-5.59	103.16	105.40
1	N	588	G	P-O5'-C5'	5.59	129.84	120.90
1	N	633	G	C5-C6-N1	-5.59	108.70	111.50
1	N	656	G	C8-N9-C4	5.59	108.64	106.40
1	N	888	G	O4'-C1'-C2'	5.59	112.63	107.60
1	N	1166	G	N7-C8-N9	5.59	115.89	113.10
1	N	264	C	C5-C6-N1	5.59	123.79	121.00
1	N	1102	A	C6-N1-C2	5.59	121.95	118.60
1	N	435	A	C4-C5-N7	-5.59	107.91	110.70
1	N	1234	C	C5'-C4'-C3'	-5.59	107.06	116.00
1	N	156	C	O3'-P-O5'	-5.58	93.39	104.00
1	N	362	G	C4-C5-N7	-5.58	108.57	110.80
1	N	544	G	C5'-C4'-O4'	5.58	115.80	109.10
1	N	1347	G	C5'-C4'-C3'	-5.58	107.07	116.00
1	N	1356	G	N3-C2-N2	-5.58	115.99	119.90
1	N	74	A	O4'-C1'-N9	5.58	112.67	108.20
1	N	151	A	C6-N1-C2	-5.58	115.25	118.60
1	N	157	U	C4-C5-C6	-5.58	116.35	119.70
1	N	619	U	C5-C4-O4	-5.58	122.55	125.90
1	N	723	U	C2-N1-C1'	5.58	124.40	117.70
1	N	1456	A	P-O3'-C3'	5.58	126.40	119.70
1	N	1462	C	N1-C2-N3	-5.58	115.29	119.20
1	N	740	U	N1-C2-N3	-5.58	111.55	114.90
1	N	772	U	C2'-C3'-O3'	5.58	122.63	113.70
1	N	45	G	C6-C5-N7	-5.58	127.05	130.40
1	N	957	U	C5'-C4'-C3'	5.58	124.92	116.00
1	N	1423	G	C5-C6-O6	-5.58	125.25	128.60
1	N	517	G	C2-N3-C4	5.58	114.69	111.90
1	N	161	A	O3'-P-O5'	-5.58	93.41	104.00
1	N	282	A	C6-C5-N7	-5.58	128.40	132.30
1	N	1518	A	C2-N3-C4	-5.58	107.81	110.60
1	N	58	C	C4-C5-C6	-5.57	114.61	117.40
1	N	182	A	O4'-C1'-N9	5.57	112.66	108.20
1	N	469	C	O4'-C1'-N1	5.57	112.66	108.20
1	N	494	G	C5-C6-N1	-5.57	108.71	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	512	U	N3-C4-C5	-5.57	111.26	114.60
1	N	632	U	C2-N1-C1'	5.57	124.39	117.70
1	N	703	G	C6-C5-N7	-5.57	127.06	130.40
1	N	360	G	C2-N3-C4	5.57	114.69	111.90
1	N	1217	C	C2-N3-C4	5.57	122.69	119.90
1	N	254	G	N3-C2-N2	5.57	123.80	119.90
1	N	466	A	C5-C6-N6	-5.57	119.24	123.70
1	N	657	U	P-O3'-C3'	5.57	126.38	119.70
1	N	1064	G	C4-C5-N7	-5.57	108.57	110.80
1	N	1067	A	C4-C5-N7	-5.57	107.92	110.70
1	N	1287	A	N9-C4-C5	5.57	108.03	105.80
1	N	1361	G	C8-N9-C4	-5.57	104.17	106.40
1	N	1386	G	P-O3'-C3'	-5.57	113.02	119.70
1	N	1428	A	C4-C5-N7	-5.57	107.92	110.70
1	N	222	C	C4'-C3'-C2'	-5.57	97.03	102.60
1	N	599	C	C5-C6-N1	5.57	123.78	121.00
1	N	763	G	C2-N3-C4	-5.57	109.12	111.90
1	N	1058	G	P-O3'-C3'	-5.57	113.02	119.70
1	N	1063	C	C3'-C2'-C1'	5.57	105.95	101.50
1	N	223	A	C1'-O4'-C4'	5.57	114.36	109.90
1	N	290	C	O5'-C5'-C4'	-5.57	101.12	111.70
1	N	1245	C	N3-C2-O2	-5.57	118.00	121.90
1	N	266	G	C5-C6-O6	-5.57	125.26	128.60
1	N	626	G	N1-C2-N2	-5.57	111.19	116.20
1	N	654	G	N3-C4-C5	5.57	131.38	128.60
1	N	724	G	C1'-O4'-C4'	-5.57	105.45	109.90
1	N	1043	G	N9-C4-C5	5.57	107.63	105.40
1	N	1051	C	C4-C5-C6	-5.57	114.62	117.40
1	N	1060	U	OP1-P-OP2	-5.57	111.25	119.60
1	N	10	A	N1-C2-N3	-5.56	126.52	129.30
1	N	140	U	N3-C4-C5	5.56	117.94	114.60
1	N	880	C	C4-C5-C6	5.56	120.18	117.40
1	N	1029	U	O4'-C1'-N1	5.56	112.65	108.20
1	N	1269	A	C5'-C4'-C3'	5.56	124.90	116.00
1	N	554	A	C5-C6-N1	-5.56	114.92	117.70
1	N	572	A	C3'-C2'-C1'	5.56	105.95	101.50
1	N	1238	A	C6-C5-N7	-5.56	128.41	132.30
1	N	1241	G	C5-C6-N1	-5.56	108.72	111.50
1	N	662	U	C6-N1-C2	5.56	124.34	121.00
1	N	708	C	N3-C2-O2	5.56	125.79	121.90
1	N	1491	G	P-O3'-C3'	-5.56	113.03	119.70
1	N	66	A	C5-C6-N6	-5.56	119.25	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	181	A	C4-C5-N7	-5.56	107.92	110.70
1	N	597	G	N9-C1'-C2'	-5.56	105.88	112.00
1	N	928	G	C4'-C3'-C2'	-5.56	97.04	102.60
1	N	1471	U	N3-C4-C5	-5.56	111.26	114.60
1	N	19	A	O4'-C1'-N9	5.56	112.64	108.20
1	N	121	U	C1'-O4'-C4'	5.56	114.35	109.90
1	N	342	C	C5-C4-N4	-5.56	116.31	120.20
1	N	530	G	C4-C5-C6	5.56	122.13	118.80
1	N	598	U	C1'-O4'-C4'	5.56	114.35	109.90
1	N	619	U	O4'-C1'-N1	5.56	112.65	108.20
1	N	675	A	N3-C4-N9	-5.56	122.95	127.40
1	N	996	A	P-O3'-C3'	-5.56	113.03	119.70
1	N	1386	G	O4'-C1'-N9	5.56	112.64	108.20
1	N	1419	G	O4'-C1'-N9	5.56	112.64	108.20
1	N	291	U	C5-C4-O4	-5.56	122.57	125.90
1	N	723	U	P-O3'-C3'	-5.56	113.03	119.70
1	N	849	G	O4'-C1'-N9	5.56	112.64	108.20
1	N	1020	G	N1-C2-N3	-5.56	120.57	123.90
1	N	1259	C	C2-N1-C1'	5.56	124.91	118.80
1	N	72	A	C2-N3-C4	-5.55	107.82	110.60
1	N	635	A	C8-N9-C4	-5.55	103.58	105.80
1	N	810	C	N3-C4-N4	5.55	121.89	118.00
1	N	841	C	N1-C2-O2	5.55	122.23	118.90
1	N	928	G	N1-C2-N3	-5.55	120.57	123.90
1	N	978	A	C5-C6-N1	-5.55	114.92	117.70
1	N	1177	G	C5'-C4'-C3'	5.55	124.89	116.00
1	N	1186	G	N3-C4-C5	5.55	131.38	128.60
1	N	244	U	C6-N1-C2	5.55	124.33	121.00
1	N	1159	U	C5'-C4'-O4'	5.55	115.76	109.10
1	N	292	G	C4-N9-C1'	5.55	133.72	126.50
1	N	458	U	C2-N1-C1'	5.55	124.36	117.70
1	N	660	C	N3-C2-O2	-5.55	118.01	121.90
1	N	868	C	C2-N3-C4	-5.55	117.12	119.90
1	N	9	G	O4'-C1'-C2'	-5.55	100.25	105.80
1	N	65	A	N7-C8-N9	-5.55	111.03	113.80
1	N	1526	G	P-O5'-C5'	5.55	129.78	120.90
1	N	862	C	P-O3'-C3'	-5.55	113.04	119.70
1	N	953	G	N3-C4-C5	-5.55	125.83	128.60
1	N	1418	A	C4-C5-C6	5.55	119.77	117.00
1	N	65	A	C4-C5-N7	-5.55	107.93	110.70
1	N	487	A	N9-C4-C5	-5.55	103.58	105.80
1	N	557	G	C5-N7-C8	-5.55	101.53	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1176	A	C6-C5-N7	-5.55	128.42	132.30
1	N	1475	G	N1-C2-N3	-5.55	120.57	123.90
1	N	16	A	C3'-C2'-C1'	5.54	105.94	101.50
1	N	75	G	N9-C1'-C2'	-5.54	105.90	112.00
1	N	257	G	O4'-C1'-N9	5.54	112.64	108.20
1	N	371	A	C2'-C3'-O3'	5.54	122.57	113.70
1	N	524	G	C4-N9-C1'	5.54	133.71	126.50
1	N	1395	C	C1'-O4'-C4'	5.54	114.33	109.90
1	N	341	C	P-O3'-C3'	5.54	126.35	119.70
1	N	378	G	C6-C5-N7	-5.54	127.08	130.40
1	N	1327	C	P-O5'-C5'	5.54	129.76	120.90
1	N	565	U	O4'-C1'-C2'	5.54	112.59	107.60
1	N	1407	C	C4'-C3'-C2'	-5.54	97.06	102.60
1	N	330	C	O5'-P-OP1	-5.54	100.72	105.70
1	N	927	G	C4-C5-C6	5.54	122.12	118.80
1	N	1016	A	C6-N1-C2	5.54	121.92	118.60
1	N	1101	A	C3'-C2'-C1'	-5.54	97.07	101.50
1	N	1442	G	O4'-C1'-N9	5.54	112.63	108.20
1	N	464	U	N1-C2-N3	5.54	118.22	114.90
1	N	285	C	N3-C2-O2	-5.54	118.03	121.90
1	N	676	A	C5-C6-N6	-5.54	119.27	123.70
1	N	803	G	N3-C4-N9	-5.54	122.68	126.00
1	N	1020	G	P-O3'-C3'	5.54	126.34	119.70
1	N	1084	G	C5-C6-N1	-5.54	108.73	111.50
1	N	76	G	C6-C5-N7	-5.53	127.08	130.40
1	N	931	C	C2-N3-C4	5.53	122.67	119.90
1	N	1084	G	O4'-C1'-N9	5.53	112.63	108.20
1	N	1108	G	N3-C2-N2	5.53	123.77	119.90
1	N	1109	C	C2-N3-C4	5.53	122.67	119.90
1	N	1474	U	OP1-P-OP2	-5.53	111.30	119.60
1	N	15	G	N1-C2-N3	-5.53	120.58	123.90
1	N	472	U	P-O3'-C3'	5.53	126.34	119.70
1	N	649	A	P-O3'-C3'	-5.53	113.06	119.70
1	N	1491	G	N9-C4-C5	5.53	107.61	105.40
1	N	338	A	C5-N7-C8	-5.53	101.14	103.90
1	N	840	C	N1-C2-N3	5.53	123.07	119.20
1	N	1486	G	C4-C5-N7	5.53	113.01	110.80
1	N	12	U	O4'-C1'-N1	5.53	112.62	108.20
1	N	82	G	N3-C4-N9	-5.53	122.68	126.00
1	N	513	C	C4-C5-C6	5.53	120.16	117.40
1	N	627	G	C4'-C3'-C2'	-5.53	97.07	102.60
1	N	637	C	C5'-C4'-O4'	5.53	115.73	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1346	A	C6-C5-N7	-5.53	128.43	132.30
1	N	1447	A	C6-C5-N7	-5.53	128.43	132.30
1	N	273	U	O3'-P-O5'	-5.53	93.50	104.00
1	N	279	A	P-O3'-C3'	5.53	126.33	119.70
1	N	752	G	C5'-C4'-O4'	-5.53	102.47	109.10
1	N	766	A	O3'-P-O5'	-5.53	93.50	104.00
1	N	65	A	C5-C6-N6	-5.52	119.28	123.70
1	N	837	U	C5'-C4'-C3'	5.52	124.84	116.00
1	N	978	A	C2-N3-C4	-5.52	107.84	110.60
1	N	290	C	C4'-C3'-C2'	-5.52	97.08	102.60
1	N	722	G	C6-N1-C2	5.52	128.41	125.10
1	N	1510	C	C2-N3-C4	5.52	122.66	119.90
1	N	96	U	P-O3'-C3'	5.52	126.32	119.70
1	N	202	G	C4-C5-N7	5.52	113.01	110.80
1	N	555	U	OP1-P-O3'	5.52	117.34	105.20
1	N	601	G	N9-C1'-C2'	-5.52	105.93	112.00
1	N	785	G	C8-N9-C4	5.52	108.61	106.40
1	N	803	G	C4-C5-N7	-5.52	108.59	110.80
1	N	1075	U	O4'-C1'-C2'	-5.52	100.28	105.80
1	N	1257	A	P-O3'-C3'	5.52	126.32	119.70
1	N	134	G	C4'-C3'-C2'	-5.52	97.08	102.60
1	N	304	U	N3-C4-C5	5.52	117.91	114.60
1	N	546	A	N7-C8-N9	-5.52	111.04	113.80
1	N	635	A	O4'-C1'-C2'	5.52	112.57	107.60
1	N	1013	G	C6-C5-N7	-5.52	127.09	130.40
1	N	1118	U	C5'-C4'-O4'	-5.52	102.48	109.10
1	N	264	C	O4'-C1'-N1	5.52	112.61	108.20
1	N	836	G	C5'-C4'-O4'	5.52	115.72	109.10
1	N	122	G	N1-C2-N2	-5.51	111.24	116.20
1	N	983	A	O5'-P-OP1	-5.51	100.74	105.70
1	N	1019	A	N9-C1'-C2'	-5.51	105.93	112.00
1	N	400	C	N1-C2-N3	-5.51	115.34	119.20
1	N	694	A	C6-N1-C2	-5.51	115.29	118.60
1	N	1184	G	N3-C2-N2	5.51	123.76	119.90
1	N	292	G	C2-N3-C4	5.51	114.66	111.90
1	N	1208	C	C5-C6-N1	5.51	123.76	121.00
1	N	1403	C	C6-N1-C2	-5.51	118.10	120.30
1	N	1418	A	C8-N9-C4	-5.51	103.60	105.80
1	N	893	C	O4'-C1'-C2'	-5.51	100.29	105.80
1	N	971	G	C8-N9-C1'	5.51	134.16	127.00
1	N	1163	A	N9-C4-C5	5.51	108.00	105.80
1	N	7	A	O4'-C4'-C3'	5.51	110.50	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	227	G	P-O3'-C3'	-5.51	113.09	119.70
1	N	255	G	N3-C2-N2	5.51	123.75	119.90
1	N	388	G	O4'-C1'-N9	5.51	112.61	108.20
1	N	552	U	N3-C4-C5	-5.51	111.30	114.60
1	N	640	A	C3'-C2'-C1'	-5.51	97.09	101.50
1	N	203	G	N1-C2-N3	-5.50	120.60	123.90
1	N	692	U	C4-C5-C6	-5.50	116.40	119.70
1	N	728	A	C8-N9-C4	5.50	108.00	105.80
1	N	1468	A	C3'-C2'-C1'	5.50	105.90	101.50
1	N	300	A	O4'-C1'-N9	5.50	112.60	108.20
1	N	440	C	C2-N1-C1'	-5.50	112.75	118.80
1	N	535	A	C8-N9-C4	-5.50	103.60	105.80
1	N	365	U	C5-C6-N1	5.50	125.45	122.70
1	N	983	A	C8-N9-C4	-5.50	103.60	105.80
1	N	1261	A	C8-N9-C4	5.50	108.00	105.80
1	N	1296	C	C2-N3-C4	5.50	122.65	119.90
1	N	1493	A	C5-C6-N1	-5.50	114.95	117.70
1	N	327	A	C4'-C3'-C2'	-5.50	97.10	102.60
1	N	767	A	C4-C5-C6	5.50	119.75	117.00
1	N	1235	U	N3-C2-O2	5.50	126.05	122.20
1	N	1488	G	OP1-P-OP2	-5.50	111.35	119.60
1	N	98	A	C5'-C4'-O4'	5.50	115.70	109.10
1	N	397	A	C5-N7-C8	5.50	106.65	103.90
1	N	493	A	C6-C5-N7	-5.50	128.45	132.30
1	N	520	A	C8-N9-C4	-5.50	103.60	105.80
1	N	849	G	C4-C5-C6	5.50	122.10	118.80
1	N	954	G	C8-N9-C4	-5.50	104.20	106.40
1	N	1002	G	N1-C2-N2	-5.50	111.25	116.20
1	N	1206	G	C4-C5-N7	5.50	113.00	110.80
1	N	1278	G	C2-N3-C4	5.50	114.65	111.90
1	N	1375	A	C4-C5-C6	5.50	119.75	117.00
1	N	1423	G	N9-C1'-C2'	-5.50	105.95	112.00
1	N	731	G	C5-C6-O6	-5.50	125.30	128.60
1	N	772	U	P-O3'-C3'	5.50	126.30	119.70
1	N	1119	C	C6-N1-C2	-5.50	118.10	120.30
1	N	1284	C	OP1-P-OP2	-5.50	111.35	119.60
1	N	1331	G	N3-C4-C5	5.50	131.35	128.60
1	N	552	U	C5'-C4'-O4'	5.50	115.69	109.10
1	N	641	U	OP1-P-OP2	-5.50	111.36	119.60
1	N	737	C	O4'-C1'-C2'	-5.50	100.31	105.80
1	N	1058	G	O4'-C4'-C3'	-5.50	98.50	104.00
1	N	1374	A	N7-C8-N9	5.50	116.55	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	617	G	C8-N9-C4	-5.49	104.20	106.40
1	N	747	A	C2-N3-C4	5.49	113.35	110.60
1	N	1485	U	N1-C2-N3	5.49	118.20	114.90
1	N	394	G	C1'-O4'-C4'	5.49	114.29	109.90
1	N	619	U	N3-C4-O4	5.49	123.24	119.40
1	N	909	A	C1'-O4'-C4'	-5.49	105.51	109.90
1	N	931	C	N3-C2-O2	5.49	125.74	121.90
1	N	941	G	N3-C4-C5	5.49	131.34	128.60
1	N	1000	A	O5'-C5'-C4'	-5.49	101.27	111.70
1	N	1093	A	C4-C5-N7	-5.49	107.95	110.70
1	N	1314	C	C2-N1-C1'	5.49	124.84	118.80
1	N	183	C	C5'-C4'-O4'	5.49	115.69	109.10
1	N	273	U	C5'-C4'-O4'	5.49	115.69	109.10
1	N	656	G	N1-C2-N3	-5.49	120.61	123.90
1	N	861	G	C3'-C2'-C1'	-5.49	97.11	101.50
1	N	156	C	C2-N3-C4	5.49	122.64	119.90
1	N	568	G	C6-C5-N7	-5.49	127.11	130.40
1	N	395	C	C5-C4-N4	-5.49	116.36	120.20
1	N	565	U	C4'-C3'-C2'	5.49	108.09	102.60
1	N	618	C	N3-C4-C5	-5.49	119.71	121.90
1	N	730	G	N1-C2-N2	-5.49	111.26	116.20
1	N	909	A	C5-N7-C8	5.49	106.64	103.90
1	N	973	G	C6-C5-N7	-5.49	127.11	130.40
1	N	1129	C	C4'-C3'-C2'	5.49	108.08	102.60
1	N	1327	C	O4'-C1'-N1	5.49	112.59	108.20
1	N	1451	U	C3'-C2'-C1'	-5.49	97.11	101.50
1	N	1520	C	N3-C4-N4	5.48	121.84	118.00
1	N	292	G	N7-C8-N9	5.48	115.84	113.10
1	N	778	G	N3-C4-C5	5.48	131.34	128.60
1	N	928	G	P-O3'-C3'	-5.48	113.12	119.70
1	N	1087	G	N9-C4-C5	-5.48	103.21	105.40
1	N	1145	A	C5-C6-N6	-5.48	119.31	123.70
1	N	1341	U	C1'-O4'-C4'	5.48	114.29	109.90
1	N	1413	A	C1'-O4'-C4'	5.48	114.29	109.90
1	N	1447	A	C8-N9-C4	-5.48	103.61	105.80
1	N	343	U	N3-C2-O2	-5.48	118.36	122.20
1	N	425	G	O5'-C5'-C4'	-5.48	101.28	111.70
1	N	1323	G	C5-C6-O6	-5.48	125.31	128.60
1	N	892	A	C5'-C4'-C3'	5.48	124.77	116.00
1	N	1112	C	C2-N1-C1'	5.48	124.83	118.80
1	N	104	G	N9-C4-C5	-5.48	103.21	105.40
1	N	478	A	C5-N7-C8	-5.48	101.16	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	915	A	C5-C6-N6	-5.48	119.32	123.70
1	N	1215	G	P-O3'-C3'	-5.48	113.13	119.70
1	N	1429	A	C4'-C3'-C2'	-5.48	97.12	102.60
1	N	56	U	N1-C2-N3	5.47	118.19	114.90
1	N	218	U	C5-C4-O4	-5.47	122.62	125.90
1	N	245	U	OP2-P-O3'	5.47	117.24	105.20
1	N	276	G	P-O3'-C3'	-5.47	113.13	119.70
1	N	309	A	O4'-C1'-N9	5.47	112.58	108.20
1	N	376	G	C1'-O4'-C4'	-5.47	105.52	109.90
1	N	417	G	O3'-P-O5'	-5.47	93.60	104.00
1	N	549	C	N3-C4-C5	-5.47	119.71	121.90
1	N	1140	C	C6-N1-C2	-5.47	118.11	120.30
1	N	1315	U	N3-C4-O4	5.47	123.23	119.40
1	N	1456	A	C5'-C4'-O4'	5.47	115.67	109.10
1	N	49	U	O5'-C5'-C4'	5.47	122.10	111.70
1	N	101	A	C6-N1-C2	5.47	121.88	118.60
1	N	360	G	P-O5'-C5'	-5.47	112.14	120.90
1	N	662	U	N3-C4-C5	-5.47	111.32	114.60
1	N	1359	C	P-O5'-C5'	-5.47	112.14	120.90
1	N	1362	A	C2'-C3'-O3'	5.47	122.45	113.70
1	N	101	A	N3-C4-N9	-5.47	123.02	127.40
1	N	672	U	C5'-C4'-O4'	5.47	115.66	109.10
1	N	1087	G	OP1-P-OP2	-5.47	111.39	119.60
1	N	1508	A	C4-C5-C6	5.47	119.73	117.00
1	N	408	A	N9-C4-C5	5.47	107.99	105.80
1	N	787	A	N7-C8-N9	-5.47	111.07	113.80
1	N	117	G	C4-C5-N7	-5.47	108.61	110.80
1	N	204	G	C8-N9-C4	-5.47	104.21	106.40
1	N	702	A	P-O3'-C3'	5.47	126.26	119.70
1	N	1020	G	C6-N1-C2	5.47	128.38	125.10
1	N	1231	G	C8-N9-C4	-5.47	104.21	106.40
1	N	40	C	C4-C5-C6	-5.46	114.67	117.40
1	N	406	G	OP1-P-OP2	-5.46	111.40	119.60
1	N	741	G	C6-N1-C2	5.46	128.38	125.10
1	N	1139	G	N9-C4-C5	-5.46	103.21	105.40
1	N	1485	U	P-O3'-C3'	-5.46	113.14	119.70
1	N	230	G	C4-C5-C6	5.46	122.08	118.80
1	N	292	G	N3-C4-C5	-5.46	125.87	128.60
1	N	1031	C	C6-N1-C2	-5.46	118.11	120.30
1	N	25	C	C2-N3-C4	5.46	122.63	119.90
1	N	737	C	C5-C4-N4	-5.46	116.38	120.20
1	N	886	G	C4-C5-C6	5.46	122.08	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1045	C	C2-N1-C1'	5.46	124.81	118.80
1	N	1120	C	C4-C5-C6	5.46	120.13	117.40
1	N	1469	C	C2-N3-C4	5.46	122.63	119.90
1	N	404	G	C5'-C4'-O4'	5.46	115.65	109.10
1	N	1371	G	N9-C4-C5	-5.46	103.22	105.40
1	N	1436	U	O4'-C4'-C3'	5.46	110.47	106.10
1	N	60	A	P-O3'-C3'	5.46	126.25	119.70
1	N	420	U	C5'-C4'-C3'	-5.46	107.27	116.00
1	N	510	A	N1-C2-N3	5.46	132.03	129.30
1	N	788	U	C5'-C4'-C3'	-5.46	107.27	116.00
1	N	1210	C	C5-C4-N4	-5.46	116.38	120.20
1	N	1302	C	C6-N1-C2	-5.46	118.12	120.30
1	N	1367	C	C2'-C3'-O3'	5.46	122.44	113.70
1	N	1520	C	C5-C6-N1	-5.46	118.27	121.00
1	N	1168	U	N1-C2-O2	5.46	126.62	122.80
1	N	556	C	N1-C2-N3	5.46	123.02	119.20
1	N	607	A	C5-N7-C8	5.46	106.63	103.90
1	N	647	C	C6-N1-C2	5.46	122.48	120.30
1	N	7	A	C4'-C3'-C2'	-5.45	97.15	102.60
1	N	180	U	C2'-C3'-O3'	5.45	122.43	113.70
1	N	253	A	C8-N9-C4	-5.45	103.62	105.80
1	N	396	C	C5'-C4'-O4'	5.45	115.64	109.10
1	N	685	G	O4'-C1'-N9	5.45	112.56	108.20
1	N	1069	C	C2-N1-C1'	-5.45	112.80	118.80
1	N	1357	A	C4-C5-C6	5.45	119.73	117.00
1	N	1369	C	C1'-O4'-C4'	5.45	114.26	109.90
1	N	1396	A	N1-C2-N3	-5.45	126.57	129.30
1	N	40	C	C6-N1-C1'	-5.45	114.26	120.80
1	N	155	A	C2'-C3'-O3'	5.45	122.42	113.70
1	N	197	A	N7-C8-N9	-5.45	111.07	113.80
1	N	204	G	C4-C5-C6	5.45	122.07	118.80
1	N	665	A	C4-N9-C1'	-5.45	116.49	126.30
1	N	998	C	C6-N1-C1'	-5.45	114.26	120.80
1	N	1436	U	C3'-C2'-C1'	5.45	105.86	101.50
1	N	114	U	C5-C6-N1	5.45	125.42	122.70
1	N	824	G	C6-N1-C2	5.45	128.37	125.10
1	N	1292	G	C5'-C4'-C3'	5.45	124.72	116.00
1	N	1328	C	C1'-O4'-C4'	5.45	114.26	109.90
1	N	1336	C	C5'-C4'-O4'	5.45	115.64	109.10
1	N	1386	G	C8-N9-C1'	5.45	134.09	127.00
1	N	1407	C	C6-N1-C2	-5.45	118.12	120.30
1	N	52	C	C2-N1-C1'	-5.45	112.81	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	66	A	N7-C8-N9	-5.45	111.08	113.80
1	N	91	U	C2-N3-C4	5.45	130.27	127.00
1	N	711	G	C5'-C4'-O4'	5.45	115.64	109.10
1	N	927	G	N1-C6-O6	5.45	123.17	119.90
1	N	1306	A	P-O5'-C5'	5.45	129.62	120.90
1	N	1479	C	C2-N3-C4	-5.45	117.17	119.90
1	N	268	U	C5-C6-N1	5.45	125.42	122.70
1	N	1322	C	C6-N1-C1'	-5.45	114.26	120.80
1	N	1337	G	C6-C5-N7	-5.45	127.13	130.40
1	N	380	G	C4-C5-C6	5.45	122.07	118.80
1	N	530	G	N7-C8-N9	-5.45	110.38	113.10
1	N	635	A	N1-C2-N3	5.45	132.02	129.30
1	N	809	G	C4-C5-C6	5.45	122.07	118.80
1	N	1313	U	C2'-C3'-O3'	5.45	122.41	113.70
1	N	1511	G	C5'-C4'-O4'	5.45	115.63	109.10
1	N	56	U	C2-N3-C4	-5.44	123.73	127.00
1	N	507	C	N1-C2-O2	-5.44	115.63	118.90
1	N	1329	A	N3-C4-C5	-5.44	122.99	126.80
1	N	468	A	C5'-C4'-O4'	-5.44	102.57	109.10
1	N	680	C	C4'-C3'-C2'	-5.44	97.16	102.60
1	N	723	U	C6-N1-C2	-5.44	117.73	121.00
1	N	1120	C	C3'-C2'-C1'	5.44	105.86	101.50
1	N	382	A	N1-C6-N6	5.44	121.86	118.60
1	N	451	A	C5-C6-N6	-5.44	119.35	123.70
1	N	923	A	C4-C5-C6	5.44	119.72	117.00
1	N	1347	G	C2-N3-C4	5.44	114.62	111.90
1	N	1235	U	C4'-C3'-C2'	-5.44	97.16	102.60
1	N	11	G	C5-N7-C8	5.44	107.02	104.30
1	N	271	C	C2-N1-C1'	5.44	124.78	118.80
1	N	691	G	N1-C2-N2	-5.44	111.31	116.20
1	N	1211	U	O4'-C1'-C2'	-5.44	100.36	105.80
1	N	1213	A	N1-C2-N3	5.44	132.02	129.30
1	N	1348	U	C4-C5-C6	5.44	122.96	119.70
1	N	1413	A	C8-N9-C4	5.44	107.97	105.80
1	N	82	G	C4-N9-C1'	5.44	133.57	126.50
1	N	365	U	C5'-C4'-O4'	5.44	115.62	109.10
1	N	555	U	C6-N1-C2	-5.44	117.74	121.00
1	N	1007	U	C1'-O4'-C4'	5.44	114.25	109.90
1	N	229	U	C3'-C2'-C1'	5.43	105.85	101.50
1	N	350	G	N7-C8-N9	-5.43	110.38	113.10
1	N	573	A	P-O5'-C5'	-5.43	112.21	120.90
1	N	862	C	C3'-C2'-C1'	-5.43	97.15	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1186	G	N9-C1'-C2'	-5.43	106.02	112.00
1	N	466	A	N1-C6-N6	5.43	121.86	118.60
1	N	584	G	C4-N9-C1'	5.43	133.56	126.50
1	N	828	U	C4'-C3'-C2'	-5.43	97.17	102.60
1	N	875	U	C5-C4-O4	-5.43	122.64	125.90
1	N	906	A	C5-C6-N1	-5.43	114.98	117.70
1	N	963	G	C6-C5-N7	-5.43	127.14	130.40
1	N	1084	G	C4-C5-C6	5.43	122.06	118.80
1	N	412	A	C2-N3-C4	-5.43	107.89	110.60
1	N	130	A	C6-N1-C2	-5.43	115.34	118.60
1	N	172	A	C4-C5-N7	-5.43	107.98	110.70
1	N	322	C	C5-C6-N1	-5.43	118.28	121.00
1	N	531	U	N1-C2-N3	-5.43	111.64	114.90
1	N	581	G	C5'-C4'-O4'	5.43	115.62	109.10
1	N	730	G	N1-C2-N3	-5.43	120.64	123.90
1	N	1096	C	C6-N1-C2	-5.43	118.13	120.30
1	N	261	U	N1-C2-N3	-5.43	111.64	114.90
1	N	182	A	N1-C2-N3	5.43	132.01	129.30
1	N	959	A	C5-N7-C8	5.43	106.61	103.90
1	N	1064	G	P-O3'-C3'	-5.43	113.19	119.70
1	N	1505	G	C5'-C4'-O4'	-5.43	102.59	109.10
1	N	609	A	C8-N9-C4	-5.42	103.63	105.80
1	N	783	C	O4'-C1'-N1	5.42	112.54	108.20
1	N	1275	A	C5'-C4'-C3'	-5.42	107.32	116.00
1	N	1276	G	C1'-O4'-C4'	5.42	114.24	109.90
1	N	1430	A	C4-C5-N7	5.42	113.41	110.70
1	N	493	A	C5-N7-C8	5.42	106.61	103.90
1	N	615	G	C4-N9-C1'	-5.42	119.45	126.50
1	N	656	G	C2-N3-C4	-5.42	109.19	111.90
1	N	657	U	O4'-C1'-C2'	-5.42	100.38	105.80
1	N	967	C	N1-C2-O2	-5.42	115.65	118.90
1	N	185	U	C6-N1-C2	-5.42	117.75	121.00
1	N	506	G	C4-C5-C6	5.42	122.05	118.80
1	N	775	G	P-O5'-C5'	5.42	129.57	120.90
1	N	829	G	C6-C5-N7	-5.42	127.15	130.40
1	N	874	G	P-O5'-C5'	5.42	129.57	120.90
1	N	978	A	C5-C6-N6	-5.42	119.36	123.70
1	N	1134	G	C6-C5-N7	-5.42	127.15	130.40
1	N	1396	A	C8-N9-C4	-5.42	103.63	105.80
1	N	26	A	OP1-P-OP2	-5.42	111.47	119.60
1	N	211	G	C4'-C3'-C2'	5.42	108.02	102.60
1	N	522	C	C3'-C2'-C1'	5.42	105.83	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1152	A	C5'-C4'-C3'	-5.42	107.33	116.00
1	N	1270	G	P-O5'-C5'	5.42	129.57	120.90
1	N	339	C	C4'-C3'-C2'	-5.42	97.18	102.60
1	N	727	G	O4'-C4'-C3'	-5.42	98.58	104.00
1	N	791	G	C5-N7-C8	5.42	107.01	104.30
1	N	795	C	P-O5'-C5'	5.42	129.57	120.90
1	N	826	C	O3'-P-O5'	-5.42	93.71	104.00
1	N	1465	A	C6-C5-N7	-5.42	128.51	132.30
1	N	1524	C	O4'-C1'-N1	5.42	112.53	108.20
1	N	1026	G	N3-C4-C5	5.42	131.31	128.60
1	N	1038	C	N1-C2-O2	5.42	122.15	118.90
1	N	152	A	N3-C4-C5	-5.41	123.01	126.80
1	N	160	A	C4'-C3'-C2'	-5.41	97.19	102.60
1	N	349	A	C4-C5-N7	5.41	113.41	110.70
1	N	575	G	C8-N9-C1'	5.41	134.04	127.00
1	N	926	G	O4'-C1'-N9	5.41	112.53	108.20
1	N	963	G	N3-C2-N2	-5.41	116.11	119.90
1	N	1534	A	C4-C5-C6	5.41	119.71	117.00
1	N	798	U	C1'-O4'-C4'	5.41	114.23	109.90
1	N	1162	C	C5-C4-N4	-5.41	116.41	120.20
1	N	1332	A	C5-C6-N1	-5.41	114.99	117.70
1	N	202	G	C5-C6-N1	-5.41	108.80	111.50
1	N	222	C	N3-C4-C5	-5.41	119.74	121.90
1	N	251	G	C5'-C4'-O4'	5.41	115.59	109.10
1	N	1048	G	N3-C4-C5	-5.41	125.89	128.60
1	N	1251	A	C5-C6-N1	-5.41	115.00	117.70
1	N	1330	U	C2'-C3'-O3'	5.41	122.36	113.70
1	N	1493	A	C4-C5-C6	5.41	119.70	117.00
1	N	325	A	N9-C4-C5	5.41	107.96	105.80
1	N	364	A	C4-N9-C1'	-5.41	116.56	126.30
1	N	534	U	N3-C2-O2	5.41	125.99	122.20
1	N	725	G	C6-N1-C2	5.41	128.35	125.10
1	N	771	G	O4'-C1'-C2'	-5.41	100.39	105.80
1	N	1193	G	C8-N9-C1'	-5.41	119.97	127.00
1	N	1293	C	P-O3'-C3'	-5.41	113.21	119.70
1	N	220	G	C6-N1-C2	5.41	128.34	125.10
1	N	587	G	N3-C4-C5	5.41	131.30	128.60
1	N	714	G	C6-C5-N7	-5.41	127.16	130.40
1	N	1167	A	O3'-P-O5'	5.41	114.27	104.00
1	N	1390	U	N1-C2-O2	-5.41	119.02	122.80
1	N	37	U	C4-C5-C6	-5.41	116.46	119.70
1	N	218	U	O3'-P-O5'	-5.41	93.73	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	353	A	N3-C4-C5	-5.41	123.02	126.80
1	N	467	U	C2-N1-C1'	5.41	124.19	117.70
1	N	828	U	C5'-C4'-O4'	-5.41	102.61	109.10
1	N	1099	G	C4-C5-N7	5.41	112.96	110.80
1	N	1300	G	P-O5'-C5'	5.41	129.55	120.90
1	N	1363	A	N9-C1'-C2'	5.41	121.03	114.00
1	N	1454	G	C5-C6-O6	-5.41	125.36	128.60
1	N	442	G	N7-C8-N9	5.40	115.80	113.10
1	N	1470	U	C4'-C3'-C2'	-5.40	97.20	102.60
1	N	295	C	C5'-C4'-C3'	-5.40	107.36	116.00
1	N	351	G	N3-C4-N9	5.40	129.24	126.00
1	N	747	A	C4-C5-N7	-5.40	108.00	110.70
1	N	798	U	N3-C2-O2	5.40	125.98	122.20
1	N	976	G	C4-C5-C6	5.40	122.04	118.80
1	N	1174	G	P-O5'-C5'	5.40	129.54	120.90
1	N	1351	U	N3-C2-O2	5.40	125.98	122.20
1	N	1398	A	C5-N7-C8	-5.40	101.20	103.90
1	N	134	G	O4'-C1'-N9	5.40	112.52	108.20
1	N	596	A	C4'-C3'-C2'	-5.40	97.20	102.60
1	N	740	U	C4-C5-C6	5.40	122.94	119.70
1	N	1165	U	N3-C2-O2	5.40	125.98	122.20
1	N	1408	A	C2-N3-C4	5.40	113.30	110.60
1	N	1495	U	C6-N1-C2	-5.40	117.76	121.00
1	N	260	G	C5-C6-O6	-5.40	125.36	128.60
1	N	392	C	C5'-C4'-O4'	5.40	115.58	109.10
1	N	466	A	C5-N7-C8	5.40	106.60	103.90
1	N	485	U	C3'-C2'-C1'	5.40	105.82	101.50
1	N	823	C	C5-C6-N1	5.40	123.70	121.00
1	N	317	U	O5'-P-OP1	-5.40	100.84	105.70
1	N	369	G	C8-N9-C4	5.40	108.56	106.40
1	N	629	A	N3-C4-C5	-5.40	123.02	126.80
1	N	539	A	C2-N3-C4	-5.40	107.90	110.60
1	N	522	C	N3-C4-C5	-5.39	119.74	121.90
1	N	818	G	C6-C5-N7	-5.39	127.16	130.40
1	N	1050	G	N1-C2-N3	-5.39	120.66	123.90
1	N	346	G	O4'-C1'-C2'	5.39	112.45	107.60
1	N	431	A	N3-C4-C5	-5.39	123.03	126.80
1	N	783	C	C4-C5-C6	-5.39	114.70	117.40
1	N	1183	U	C3'-C2'-C1'	-5.39	97.19	101.50
1	N	1399	C	N1-C2-N3	-5.39	115.42	119.20
1	N	10	A	C5-N7-C8	5.39	106.59	103.90
1	N	357	G	N9-C1'-C2'	-5.39	106.07	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	857	C	O4'-C1'-N1	5.39	112.51	108.20
1	N	1072	G	N1-C2-N2	5.39	121.05	116.20
1	N	1242	G	O4'-C1'-N9	5.39	112.51	108.20
1	N	1421	G	C8-N9-C1'	5.39	134.01	127.00
1	N	936	C	C5'-C4'-O4'	5.39	115.57	109.10
1	N	1058	G	N9-C4-C5	-5.39	103.24	105.40
1	N	1250	A	N1-C2-N3	5.39	132.00	129.30
1	N	288	A	N9-C4-C5	-5.39	103.64	105.80
1	N	481	G	N3-C2-N2	5.39	123.67	119.90
1	N	993	G	C5-N7-C8	-5.39	101.61	104.30
1	N	1498	U	C5'-C4'-C3'	-5.39	107.38	116.00
1	N	112	G	O4'-C1'-N9	5.39	112.51	108.20
1	N	705	G	N1-C6-O6	5.39	123.13	119.90
1	N	1241	G	C5-N7-C8	-5.39	101.61	104.30
1	N	1367	C	O4'-C4'-C3'	-5.39	98.61	104.00
1	N	109	A	C1'-O4'-C4'	5.38	114.21	109.90
1	N	590	U	C6-N1-C2	5.38	124.23	121.00
1	N	935	A	C5-N7-C8	5.38	106.59	103.90
1	N	239	U	C5-C6-N1	-5.38	120.01	122.70
1	N	761	G	N3-C4-N9	-5.38	122.77	126.00
1	N	848	C	C3'-C2'-C1'	5.38	105.81	101.50
1	N	944	G	P-O3'-C3'	-5.38	113.24	119.70
1	N	1515	G	N1-C2-N3	-5.38	120.67	123.90
1	N	59	A	C1'-O4'-C4'	5.38	114.20	109.90
1	N	262	A	P-O3'-C3'	5.38	126.16	119.70
1	N	494	G	O4'-C1'-N9	5.38	112.50	108.20
1	N	840	C	C5-C4-N4	-5.38	116.43	120.20
1	N	985	C	C2-N1-C1'	5.38	124.72	118.80
1	N	1347	G	C5-C6-N1	5.38	114.19	111.50
1	N	97	G	P-O3'-C3'	-5.38	113.25	119.70
1	N	500	G	N3-C2-N2	5.38	123.66	119.90
1	N	892	A	C1'-O4'-C4'	5.38	114.20	109.90
1	N	936	C	C2-N1-C1'	5.38	124.72	118.80
1	N	973	G	C2-N3-C4	5.38	114.59	111.90
1	N	1483	A	N7-C8-N9	-5.38	111.11	113.80
1	N	204	G	C3'-C2'-C1'	-5.38	97.20	101.50
1	N	360	G	P-O3'-C3'	5.38	126.15	119.70
1	N	403	C	C4-C5-C6	-5.38	114.71	117.40
1	N	480	U	N3-C4-C5	-5.38	111.37	114.60
1	N	537	G	C4'-C3'-C2'	-5.38	97.22	102.60
1	N	587	G	C2-N3-C4	-5.38	109.21	111.90
1	N	1080	A	N9-C4-C5	5.38	107.95	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1087	G	N3-C2-N2	5.38	123.66	119.90
1	N	1174	G	C5-C6-N1	-5.38	108.81	111.50
1	N	1266	G	C4-C5-C6	5.38	122.03	118.80
1	N	204	G	C6-C5-N7	-5.38	127.17	130.40
1	N	679	C	C5'-C4'-O4'	5.38	115.55	109.10
1	N	551	U	N1-C2-O2	5.37	126.56	122.80
1	N	604	G	C5-N7-C8	-5.37	101.61	104.30
1	N	733	G	C4-C5-N7	-5.37	108.65	110.80
1	N	755	G	P-O3'-C3'	-5.37	113.25	119.70
1	N	911	U	C4-C5-C6	5.37	122.92	119.70
1	N	935	A	C6-N1-C2	5.37	121.83	118.60
1	N	1523	G	N7-C8-N9	5.37	115.79	113.10
1	N	188	C	P-O3'-C3'	5.37	126.14	119.70
1	N	533	A	OP1-P-OP2	-5.37	111.54	119.60
1	N	1191	A	P-O5'-C5'	5.37	129.50	120.90
1	N	1265	C	N3-C4-N4	5.37	121.76	118.00
1	N	649	A	C2-N3-C4	-5.37	107.92	110.60
1	N	775	G	N1-C2-N3	-5.37	120.68	123.90
1	N	970	C	OP1-P-OP2	-5.37	111.55	119.60
1	N	86	G	C2-N3-C4	5.37	114.58	111.90
1	N	1052	U	C6-N1-C2	-5.37	117.78	121.00
1	N	1162	C	N3-C2-O2	5.37	125.66	121.90
1	N	1229	A	C4-C5-N7	-5.37	108.02	110.70
1	N	538	G	N3-C4-C5	5.37	131.28	128.60
1	N	832	G	C6-N1-C2	-5.37	121.88	125.10
1	N	1162	C	N1-C2-O2	-5.37	115.68	118.90
1	N	576	C	C3'-C2'-C1'	5.37	105.79	101.50
1	N	705	G	N1-C2-N3	-5.37	120.68	123.90
1	N	285	C	N3-C4-C5	-5.36	119.75	121.90
1	N	399	G	P-O3'-C3'	-5.36	113.26	119.70
1	N	433	G	C4'-C3'-C2'	-5.36	97.24	102.60
1	N	1115	U	N1-C2-N3	-5.36	111.68	114.90
1	N	642	A	N1-C2-N3	-5.36	126.62	129.30
1	N	749	A	O4'-C1'-N9	5.36	112.49	108.20
1	N	836	G	N7-C8-N9	5.36	115.78	113.10
1	N	1351	U	O4'-C1'-N1	5.36	112.49	108.20
1	N	53	A	C5-C6-N6	-5.36	119.41	123.70
1	N	205	A	C5'-C4'-O4'	5.36	115.53	109.10
1	N	517	G	C4'-C3'-C2'	-5.36	97.24	102.60
1	N	549	C	O3'-P-O5'	-5.36	93.81	104.00
1	N	1057	G	C6-N1-C2	-5.36	121.88	125.10
1	N	1501	C	C6-N1-C1'	5.36	127.23	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	661	G	C1'-O4'-C4'	5.36	114.19	109.90
1	N	661	G	C5-C6-N1	-5.36	108.82	111.50
1	N	877	G	N9-C4-C5	-5.36	103.26	105.40
1	N	188	C	N1-C2-O2	-5.36	115.69	118.90
1	N	322	C	O3'-P-O5'	-5.36	93.82	104.00
1	N	681	A	C6-C5-N7	-5.36	128.55	132.30
1	N	941	G	C5-C6-N1	5.36	114.18	111.50
1	N	1062	U	OP2-P-O3'	5.36	116.98	105.20
1	N	1206	G	C2-N3-C4	-5.36	109.22	111.90
1	N	1347	G	C6-N1-C2	-5.36	121.89	125.10
1	N	1458	G	N7-C8-N9	5.36	115.78	113.10
1	N	130	A	C5-C6-N6	-5.35	119.42	123.70
1	N	382	A	C4-C5-C6	5.35	119.68	117.00
1	N	255	G	N1-C2-N3	-5.35	120.69	123.90
1	N	321	A	N7-C8-N9	-5.35	111.12	113.80
1	N	865	A	N3-C4-N9	5.35	131.68	127.40
1	N	910	C	N3-C4-C5	-5.35	119.76	121.90
1	N	1498	U	C3'-C2'-C1'	5.35	105.78	101.50
1	N	494	G	N1-C2-N3	-5.35	120.69	123.90
1	N	832	G	O5'-P-OP2	-5.35	100.89	105.70
1	N	946	A	N7-C8-N9	5.35	116.47	113.80
1	N	1193	G	C2-N3-C4	5.35	114.58	111.90
1	N	1516	G	N1-C2-N3	-5.35	120.69	123.90
1	N	274	A	C4'-C3'-O3'	5.35	123.69	113.00
1	N	321	A	C5'-C4'-O4'	5.35	115.52	109.10
1	N	366	A	C2'-C3'-O3'	5.35	122.26	113.70
1	N	438	U	C1'-O4'-C4'	-5.35	105.62	109.90
1	N	454	G	N9-C4-C5	-5.35	103.26	105.40
1	N	456	A	C5-C6-N6	-5.35	119.42	123.70
1	N	1210	C	C6-N1-C1'	-5.35	114.38	120.80
1	N	1465	A	C1'-O4'-C4'	-5.35	105.62	109.90
1	N	1505	G	O4'-C1'-N9	5.35	112.48	108.20
1	N	58	C	N3-C4-N4	5.35	121.74	118.00
1	N	481	G	N9-C4-C5	-5.34	103.26	105.40
1	N	798	U	C5-C4-O4	-5.34	122.69	125.90
1	N	948	C	C4-C5-C6	5.34	120.07	117.40
1	N	1365	G	C5-N7-C8	5.34	106.97	104.30
1	N	1392	G	N1-C2-N3	-5.34	120.69	123.90
1	N	1395	C	C5-C6-N1	-5.34	118.33	121.00
1	N	293	G	C5-C6-O6	-5.34	125.39	128.60
1	N	950	U	C4'-C3'-C2'	5.34	107.94	102.60
1	N	64	G	C5'-C4'-C3'	-5.34	107.45	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	220	G	C1'-O4'-C4'	5.34	114.17	109.90
1	N	8	A	C5-C6-N6	-5.34	119.43	123.70
1	N	257	G	C6-N1-C2	5.34	128.30	125.10
1	N	667	G	N7-C8-N9	-5.34	110.43	113.10
1	N	791	G	P-O3'-C3'	5.34	126.11	119.70
1	N	867	G	N1-C6-O6	5.34	123.10	119.90
1	N	870	U	O5'-C5'-C4'	-5.34	101.56	111.70
1	N	989	U	C1'-O4'-C4'	5.34	114.17	109.90
1	N	1003	G	C2-N3-C4	5.34	114.57	111.90
1	N	1035	A	C6-C5-N7	-5.34	128.56	132.30
1	N	1059	C	C4-C5-C6	-5.34	114.73	117.40
1	N	1143	G	C5-C6-O6	-5.34	125.40	128.60
1	N	1174	G	N9-C4-C5	-5.34	103.26	105.40
1	N	1430	A	N1-C6-N6	5.34	121.80	118.60
1	N	1489	G	C8-N9-C1'	5.34	133.94	127.00
1	N	1146	A	N9-C1'-C2'	5.34	120.94	114.00
1	N	1204	A	O4'-C4'-C3'	-5.34	98.66	104.00
1	N	1462	C	C1'-O4'-C4'	5.34	114.17	109.90
1	N	9	G	C1'-O4'-C4'	5.34	114.17	109.90
1	N	1138	G	N1-C6-O6	5.34	123.10	119.90
1	N	1225	A	N9-C4-C5	5.34	107.94	105.80
1	N	1036	A	C5-C6-N6	-5.33	119.43	123.70
1	N	1073	U	C1'-O4'-C4'	5.33	114.17	109.90
1	N	1238	A	C5-C6-N6	-5.33	119.43	123.70
1	N	128	G	N1-C2-N2	5.33	121.00	116.20
1	N	167	A	C2-N3-C4	-5.33	107.93	110.60
1	N	397	A	O4'-C1'-N9	5.33	112.47	108.20
1	N	585	G	P-O3'-C3'	-5.33	113.30	119.70
1	N	1053	G	C5-C6-N1	-5.33	108.83	111.50
1	N	1196	A	O4'-C1'-N9	5.33	112.47	108.20
1	N	773	G	C4-N9-C1'	-5.33	119.57	126.50
1	N	1465	A	C5-C6-N1	-5.33	115.03	117.70
1	N	1521	C	N3-C4-C5	-5.33	119.77	121.90
1	N	231	U	C5'-C4'-C3'	5.33	124.53	116.00
1	N	935	A	N9-C4-C5	5.33	107.93	105.80
1	N	1392	G	C2-N3-C4	-5.33	109.23	111.90
1	N	1444	U	O4'-C1'-N1	5.33	112.46	108.20
1	N	94	G	C2-N3-C4	5.33	114.56	111.90
1	N	267	C	C5-C4-N4	-5.33	116.47	120.20
1	N	541	G	C6-C5-N7	-5.33	127.20	130.40
1	N	737	C	P-O5'-C5'	5.33	129.43	120.90
1	N	847	G	N1-C2-N3	-5.33	120.70	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	921	U	C1'-O4'-C4'	5.33	114.16	109.90
1	N	1014	A	N7-C8-N9	-5.33	111.14	113.80
1	N	1178	G	C4'-C3'-C2'	-5.33	97.27	102.60
1	N	69	G	N9-C1'-C2'	5.33	120.93	114.00
1	N	560	A	C8-N9-C4	-5.33	103.67	105.80
1	N	608	A	N1-C2-N3	-5.33	126.64	129.30
1	N	929	G	N7-C8-N9	5.33	115.76	113.10
1	N	1341	U	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	1465	A	C4'-C3'-C2'	-5.33	97.27	102.60
1	N	137	U	N3-C2-O2	5.32	125.93	122.20
1	N	364	A	C5-C6-N6	-5.32	119.44	123.70
1	N	1272	G	N1-C6-O6	5.32	123.09	119.90
1	N	609	A	C6-C5-N7	-5.32	128.57	132.30
1	N	1075	U	C2-N3-C4	5.32	130.19	127.00
1	N	1259	C	P-O5'-C5'	5.32	129.42	120.90
1	N	86	G	C5'-C4'-O4'	5.32	115.48	109.10
1	N	323	U	O4'-C4'-C3'	-5.32	98.68	104.00
1	N	337	G	O4'-C1'-C2'	5.32	112.39	107.60
1	N	897	C	N1-C2-O2	-5.32	115.71	118.90
1	N	1259	C	C6-N1-C1'	-5.32	114.42	120.80
1	N	1269	A	C4-C5-C6	5.32	119.66	117.00
1	N	1287	A	C4-C5-N7	-5.32	108.04	110.70
1	N	1432	G	O5'-C5'-C4'	-5.32	101.59	111.70
1	N	47	C	O4'-C1'-N1	5.32	112.45	108.20
1	N	1161	C	N1-C2-O2	5.32	122.09	118.90
1	N	1468	A	N9-C4-C5	5.32	107.93	105.80
1	N	462	G	C4-C5-C6	5.32	121.99	118.80
1	N	498	A	C6-N1-C2	-5.32	115.41	118.60
1	N	596	A	C6-C5-N7	-5.32	128.58	132.30
1	N	643	C	C5-C6-N1	5.32	123.66	121.00
1	N	736	C	P-O5'-C5'	-5.32	112.39	120.90
1	N	1482	G	N3-C4-N9	5.32	129.19	126.00
1	N	691	G	C6-C5-N7	-5.32	127.21	130.40
1	N	827	U	P-O3'-C3'	5.32	126.08	119.70
1	N	1020	G	O4'-C1'-C2'	-5.32	100.48	105.80
1	N	1042	A	C4-C5-C6	5.32	119.66	117.00
1	N	1072	G	N1-C2-N3	-5.32	120.71	123.90
1	N	1431	A	P-O3'-C3'	5.32	126.08	119.70
1	N	522	C	P-O3'-C3'	-5.31	113.32	119.70
1	N	803	G	N3-C4-C5	5.31	131.26	128.60
1	N	946	A	C4-C5-C6	5.31	119.66	117.00
1	N	1356	G	C8-N9-C1'	-5.31	120.09	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	373	A	C5-C6-N6	-5.31	119.45	123.70
1	N	887	G	N1-C6-O6	5.31	123.09	119.90
1	N	1034	G	C1'-O4'-C4'	-5.31	105.65	109.90
1	N	98	A	C1'-O4'-C4'	5.31	114.15	109.90
1	N	608	A	N3-C4-C5	-5.31	123.08	126.80
1	N	766	A	C4-C5-C6	5.31	119.66	117.00
1	N	1169	A	N1-C6-N6	5.31	121.79	118.60
1	N	1458	G	P-O3'-C3'	-5.31	113.33	119.70
1	N	113	G	C4'-C3'-C2'	5.31	107.91	102.60
1	N	342	C	C1'-O4'-C4'	5.31	114.15	109.90
1	N	548	G	C5-C6-N1	-5.31	108.84	111.50
1	N	629	A	P-O3'-C3'	-5.31	113.33	119.70
1	N	836	G	C6-N1-C2	5.31	128.28	125.10
1	N	1137	C	P-O5'-C5'	5.31	129.40	120.90
1	N	1143	G	C5'-C4'-C3'	-5.31	107.51	116.00
1	N	1269	A	O3'-P-O5'	-5.31	93.91	104.00
1	N	281	G	N3-C4-C5	-5.31	125.95	128.60
1	N	309	A	C4'-C3'-C2'	-5.31	97.29	102.60
1	N	369	G	C2-N3-C4	5.31	114.55	111.90
1	N	711	G	N3-C4-C5	5.31	131.25	128.60
1	N	809	G	C5-N7-C8	5.31	106.95	104.30
1	N	353	A	O4'-C4'-C3'	-5.30	98.70	104.00
1	N	1361	G	C4'-C3'-C2'	5.30	107.90	102.60
1	N	1385	G	O4'-C1'-N9	5.30	112.44	108.20
1	N	172	A	C6-C5-N7	-5.30	128.59	132.30
1	N	1071	C	N1-C2-O2	-5.30	115.72	118.90
1	N	1074	G	C4-C5-N7	5.30	112.92	110.80
1	N	1292	G	P-O3'-C3'	-5.30	113.34	119.70
1	N	1295	U	C5'-C4'-C3'	-5.30	107.52	116.00
1	N	1304	G	C4-C5-C6	5.30	121.98	118.80
1	N	1411	C	N1-C2-O2	-5.30	115.72	118.90
1	N	1430	A	N1-C2-N3	-5.30	126.65	129.30
1	N	231	U	N3-C4-C5	-5.30	111.42	114.60
1	N	284	C	C5-C6-N1	5.30	123.65	121.00
1	N	385	C	C3'-C2'-C1'	-5.30	97.26	101.50
1	N	557	G	N3-C4-C5	5.30	131.25	128.60
1	N	559	A	C2-N3-C4	-5.30	107.95	110.60
1	N	854	U	O5'-C5'-C4'	-5.30	101.63	111.70
1	N	912	C	C2-N1-C1'	5.30	124.63	118.80
1	N	1054	C	N1-C2-O2	-5.30	115.72	118.90
1	N	1304	G	N3-C4-N9	5.30	129.18	126.00
1	N	1487	G	C8-N9-C1'	5.30	133.89	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1515	G	C5-C6-N1	-5.30	108.85	111.50
1	N	100	G	C2-N3-C4	5.30	114.55	111.90
1	N	135	C	N3-C4-C5	-5.30	119.78	121.90
1	N	484	G	C6-N1-C2	5.30	128.28	125.10
1	N	831	A	N9-C4-C5	5.30	107.92	105.80
1	N	966	G	O4'-C4'-C3'	-5.30	98.70	104.00
1	N	1085	U	C1'-O4'-C4'	5.30	114.14	109.90
1	N	1386	G	N9-C4-C5	5.30	107.52	105.40
1	N	162	A	C5-C6-N6	-5.30	119.46	123.70
1	N	269	C	C3'-C2'-C1'	5.30	105.74	101.50
1	N	336	A	N9-C4-C5	5.30	107.92	105.80
1	N	406	G	C4'-C3'-C2'	-5.30	97.30	102.60
1	N	549	C	C5-C4-N4	-5.30	116.49	120.20
1	N	557	G	C4-C5-N7	5.30	112.92	110.80
1	N	647	C	P-O5'-C5'	5.30	129.38	120.90
1	N	815	A	C1'-O4'-C4'	-5.30	105.66	109.90
1	N	1179	A	C5'-C4'-O4'	5.30	115.46	109.10
1	N	628	G	N3-C2-N2	5.29	123.61	119.90
1	N	1167	A	N9-C4-C5	5.29	107.92	105.80
1	N	1370	G	N1-C6-O6	5.29	123.08	119.90
1	N	1389	C	P-O5'-C5'	-5.29	112.43	120.90
1	N	1482	G	P-O5'-C5'	5.29	129.37	120.90
1	N	361	G	P-O3'-C3'	5.29	126.05	119.70
1	N	507	C	OP1-P-O3'	5.29	116.84	105.20
1	N	868	C	C6-N1-C1'	5.29	127.15	120.80
1	N	1035	A	N1-C2-N3	5.29	131.95	129.30
1	N	103	U	N3-C2-O2	5.29	125.90	122.20
1	N	471	U	O4'-C1'-N1	5.29	112.43	108.20
1	N	634	C	C2-N1-C1'	5.29	124.62	118.80
1	N	656	G	C5'-C4'-C3'	-5.29	107.53	116.00
1	N	1001	C	C5-C4-N4	-5.29	116.50	120.20
1	N	1329	A	P-O5'-C5'	-5.29	112.43	120.90
1	N	532	A	N9-C1'-C2'	-5.29	106.18	112.00
1	N	1219	A	P-O3'-C3'	-5.29	113.35	119.70
1	N	1317	C	C5-C6-N1	-5.29	118.36	121.00
1	N	1397	C	N3-C2-O2	-5.29	118.20	121.90
1	N	1403	C	O5'-P-OP1	-5.29	100.94	105.70
1	N	131	A	C5'-C4'-C3'	-5.29	107.54	116.00
1	N	195	A	C2-N3-C4	5.29	113.25	110.60
1	N	524	G	C4'-C3'-C2'	5.29	107.89	102.60
1	N	457	G	C2-N3-C4	-5.29	109.26	111.90
1	N	1339	A	N9-C4-C5	5.29	107.92	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	109	A	C6-C5-N7	-5.29	128.60	132.30
1	N	268	U	O4'-C1'-C2'	5.29	112.36	107.60
1	N	450	G	C2'-C3'-O3'	5.29	122.16	113.70
1	N	524	G	O4'-C4'-C3'	-5.29	98.71	104.00
1	N	528	C	C2-N3-C4	5.29	122.54	119.90
1	N	674	G	N3-C2-N2	-5.29	116.20	119.90
1	N	709	U	O5'-C5'-C4'	-5.29	101.66	111.70
1	N	842	U	C6-N1-C2	-5.29	117.83	121.00
1	N	1117	A	C5-C6-N6	-5.29	119.47	123.70
1	N	1242	G	N1-C2-N3	-5.29	120.73	123.90
1	N	11	G	N3-C2-N2	5.28	123.60	119.90
1	N	326	G	N7-C8-N9	5.28	115.74	113.10
1	N	351	G	N7-C8-N9	5.28	115.74	113.10
1	N	646	G	C5-C6-N1	-5.28	108.86	111.50
1	N	968	A	C2-N3-C4	5.28	113.24	110.60
1	N	1125	U	N3-C4-C5	-5.28	111.43	114.60
1	N	1443	C	C5-C4-N4	-5.28	116.50	120.20
1	N	1068	G	P-O3'-C3'	-5.28	113.36	119.70
1	N	1365	G	N3-C4-C5	-5.28	125.96	128.60
1	N	283	U	C5-C6-N1	-5.28	120.06	122.70
1	N	404	G	C2-N3-C4	5.28	114.54	111.90
1	N	455	G	O4'-C1'-N9	5.28	112.42	108.20
1	N	865	A	C3'-C2'-C1'	-5.28	97.28	101.50
1	N	1351	U	C5'-C4'-C3'	5.28	124.45	116.00
1	N	1503	A	N1-C6-N6	5.28	121.77	118.60
1	N	533	A	N9-C4-C5	5.28	107.91	105.80
1	N	1379	G	C5-N7-C8	5.28	106.94	104.30
1	N	173	U	C4-C5-C6	5.28	122.87	119.70
1	N	364	A	N9-C4-C5	5.28	107.91	105.80
1	N	579	A	C6-N1-C2	-5.28	115.43	118.60
1	N	611	C	C2-N3-C4	-5.28	117.26	119.90
1	N	664	G	C5-C6-N1	-5.28	108.86	111.50
1	N	1008	U	N1-C2-O2	-5.28	119.11	122.80
1	N	1482	G	N3-C4-C5	-5.28	125.96	128.60
1	N	75	G	C1'-O4'-C4'	-5.28	105.68	109.90
1	N	76	G	N1-C2-N2	-5.28	111.45	116.20
1	N	91	U	C5'-C4'-C3'	5.28	124.44	116.00
1	N	187	G	C6-C5-N7	-5.28	127.23	130.40
1	N	198	G	N9-C4-C5	-5.28	103.29	105.40
1	N	584	G	O4'-C1'-N9	5.28	112.42	108.20
1	N	642	A	C5-N7-C8	5.28	106.54	103.90
1	N	919	A	C1'-O4'-C4'	-5.28	105.68	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1132	C	P-O3'-C3'	5.28	126.03	119.70
1	N	262	A	C1'-O4'-C4'	5.27	114.12	109.90
1	N	1137	C	N3-C4-N4	5.27	121.69	118.00
1	N	1341	U	N1-C2-N3	-5.27	111.73	114.90
1	N	1480	A	N9-C4-C5	-5.27	103.69	105.80
1	N	83	C	N3-C4-N4	5.27	121.69	118.00
1	N	385	C	C1'-O4'-C4'	-5.27	105.68	109.90
1	N	567	G	C6-N1-C2	-5.27	121.94	125.10
1	N	1152	A	C4-C5-C6	5.27	119.64	117.00
1	N	1207	G	N9-C1'-C2'	-5.27	106.20	112.00
1	N	285	C	N3-C4-N4	5.27	121.69	118.00
1	N	603	U	N3-C4-O4	5.27	123.09	119.40
1	N	1490	U	C1'-O4'-C4'	-5.27	105.68	109.90
1	N	88	U	C3'-C2'-C1'	5.27	105.72	101.50
1	N	306	A	N3-C4-C5	-5.27	123.11	126.80
1	N	516	U	C3'-C2'-C1'	5.27	105.72	101.50
1	N	844	G	C2-N3-C4	5.27	114.53	111.90
1	N	925	G	C8-N9-C4	-5.27	104.29	106.40
1	N	1043	G	P-O5'-C5'	5.27	129.33	120.90
1	N	1112	C	C6-N1-C1'	-5.27	114.48	120.80
1	N	1277	C	C2-N3-C4	5.27	122.53	119.90
1	N	1482	G	C5-C6-O6	-5.27	125.44	128.60
1	N	240	G	C3'-C2'-C1'	-5.27	97.29	101.50
1	N	476	U	C5'-C4'-C3'	5.27	124.43	116.00
1	N	1075	U	OP1-P-OP2	-5.27	111.70	119.60
1	N	1515	G	C2-N3-C4	5.27	114.53	111.90
1	N	545	C	N1-C2-O2	5.27	122.06	118.90
1	N	1049	U	C2'-C3'-O3'	5.27	122.13	113.70
1	N	1269	A	C5'-C4'-O4'	-5.27	102.78	109.10
1	N	1505	G	N3-C2-N2	5.27	123.59	119.90
1	N	11	G	C8-N9-C4	-5.26	104.29	106.40
1	N	102	G	C5-N7-C8	-5.26	101.67	104.30
1	N	973	G	C8-N9-C4	-5.26	104.30	106.40
1	N	1055	A	O3'-P-O5'	-5.26	94.00	104.00
1	N	1205	U	P-O3'-C3'	-5.26	113.38	119.70
1	N	1439	G	C4-C5-C6	5.26	121.96	118.80
1	N	553	A	N9-C4-C5	5.26	107.91	105.80
1	N	1167	A	C8-N9-C4	-5.26	103.69	105.80
1	N	1508	A	C5-N7-C8	5.26	106.53	103.90
1	N	260	G	O4'-C1'-N9	5.26	112.41	108.20
1	N	327	A	C5-C6-N6	-5.26	119.49	123.70
1	N	432	A	C6-C5-N7	-5.26	128.62	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	462	G	C8-N9-C1'	-5.26	120.16	127.00
1	N	690	G	C5-C6-O6	-5.26	125.44	128.60
1	N	767	A	C5-C6-N6	-5.26	119.49	123.70
1	N	1005	A	C2-N3-C4	-5.26	107.97	110.60
1	N	9	G	P-O3'-C3'	-5.26	113.39	119.70
1	N	458	U	C5-C4-O4	-5.26	122.74	125.90
1	N	1159	U	C6-N1-C1'	-5.26	113.84	121.20
1	N	1316	G	P-O5'-C5'	-5.26	112.49	120.90
1	N	439	U	C5-C4-O4	-5.26	122.75	125.90
1	N	548	G	C5-N7-C8	5.26	106.93	104.30
1	N	553	A	C4-C5-N7	-5.26	108.07	110.70
1	N	731	G	C4'-C3'-C2'	-5.26	97.34	102.60
1	N	948	C	N1-C2-O2	5.26	122.06	118.90
1	N	1033	G	C6-C5-N7	-5.26	127.25	130.40
1	N	1089	G	N1-C2-N2	5.26	120.93	116.20
1	N	563	A	C5-N7-C8	5.26	106.53	103.90
1	N	676	A	OP2-P-O3'	5.26	116.77	105.20
1	N	1437	A	O4'-C1'-N9	5.26	112.41	108.20
1	N	21	G	C4-N9-C1'	5.25	133.33	126.50
1	N	99	C	C5'-C4'-C3'	5.25	124.41	116.00
1	N	143	A	C6-N1-C2	5.25	121.75	118.60
1	N	629	A	OP1-P-OP2	-5.25	111.72	119.60
1	N	851	G	C2-N3-C4	5.25	114.53	111.90
1	N	1071	C	C2-N3-C4	5.25	122.53	119.90
1	N	65	A	C5-C6-N1	-5.25	115.07	117.70
1	N	71	A	C6-N1-C2	-5.25	115.45	118.60
1	N	636	U	C2'-C3'-O3'	5.25	122.11	113.70
1	N	990	C	C4-C5-C6	5.25	120.03	117.40
1	N	1021	A	C5-N7-C8	5.25	106.53	103.90
1	N	586	C	P-O3'-C3'	-5.25	113.40	119.70
1	N	770	C	O4'-C4'-C3'	-5.25	98.75	104.00
1	N	892	A	N1-C2-N3	5.25	131.93	129.30
1	N	1036	A	C5'-C4'-O4'	5.25	115.40	109.10
1	N	1432	G	C5-C6-N1	5.25	114.13	111.50
1	N	1312	G	N1-C2-N3	-5.25	120.75	123.90
1	N	22	G	N3-C2-N2	5.25	123.57	119.90
1	N	77	A	O4'-C1'-N9	5.25	112.40	108.20
1	N	244	U	C5'-C4'-C3'	-5.25	107.60	116.00
1	N	294	U	O4'-C4'-C3'	-5.25	98.75	104.00
1	N	511	C	C1'-O4'-C4'	-5.25	105.70	109.90
1	N	544	G	C5-C6-N1	-5.25	108.88	111.50
1	N	566	G	C4-C5-C6	5.25	121.95	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	813	U	N3-C2-O2	5.25	125.87	122.20
1	N	851	G	C4-C5-C6	5.25	121.95	118.80
1	N	1003	G	N1-C2-N3	-5.25	120.75	123.90
1	N	1299	A	C2-N3-C4	-5.25	107.98	110.60
1	N	1388	C	N3-C4-C5	-5.25	119.80	121.90
1	N	56	U	C6-N1-C2	-5.25	117.85	121.00
1	N	105	G	C4-C5-C6	5.25	121.95	118.80
1	N	1060	U	C4'-C3'-C2'	-5.25	97.35	102.60
1	N	1193	G	N3-C4-N9	5.25	129.15	126.00
1	N	1274	A	N1-C2-N3	5.25	131.92	129.30
1	N	270	A	N7-C8-N9	-5.25	111.18	113.80
1	N	679	C	C2-N1-C1'	5.25	124.57	118.80
1	N	711	G	O4'-C4'-C3'	-5.25	98.75	104.00
1	N	1098	C	C2-N3-C4	5.25	122.52	119.90
1	N	1373	G	C4-C5-C6	5.25	121.95	118.80
1	N	82	G	C5'-C4'-C3'	5.24	124.39	116.00
1	N	143	A	N1-C2-N3	-5.24	126.68	129.30
1	N	155	A	N7-C8-N9	-5.24	111.18	113.80
1	N	267	C	N3-C4-N4	5.24	121.67	118.00
1	N	393	A	C4-C5-C6	5.24	119.62	117.00
1	N	899	C	N1-C1'-C2'	-5.24	106.23	112.00
1	N	1394	A	C8-N9-C4	-5.24	103.70	105.80
1	N	80	A	C4-C5-N7	-5.24	108.08	110.70
1	N	449	G	O3'-P-O5'	-5.24	94.04	104.00
1	N	742	G	N7-C8-N9	5.24	115.72	113.10
1	N	808	C	C6-N1-C1'	-5.24	114.51	120.80
1	N	998	C	O4'-C1'-N1	5.24	112.39	108.20
1	N	1487	G	N1-C6-O6	5.24	123.04	119.90
1	N	1504	G	C4'-C3'-C2'	-5.24	97.36	102.60
1	N	217	C	O4'-C4'-C3'	-5.24	98.76	104.00
1	N	542	G	C6-C5-N7	-5.24	127.26	130.40
1	N	585	G	C5'-C4'-O4'	-5.24	102.81	109.10
1	N	748	G	C8-N9-C4	5.24	108.50	106.40
1	N	1423	G	N1-C6-O6	5.24	123.04	119.90
1	N	321	A	C8-N9-C4	5.24	107.89	105.80
1	N	451	A	N9-C4-C5	5.24	107.89	105.80
1	N	807	A	C6-C5-N7	-5.24	128.63	132.30
1	N	1264	U	C6-N1-C2	-5.24	117.86	121.00
1	N	1456	A	C1'-O4'-C4'	-5.24	105.71	109.90
1	N	304	U	C5-C4-O4	-5.24	122.76	125.90
1	N	350	G	C6-C5-N7	-5.24	127.26	130.40
1	N	442	G	C8-N9-C4	-5.24	104.31	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	534	U	C3'-C2'-C1'	5.24	105.69	101.50
1	N	684	U	C5'-C4'-O4'	-5.24	102.82	109.10
1	N	690	G	C2-N3-C4	5.24	114.52	111.90
1	N	806	C	C6-N1-C1'	-5.24	114.52	120.80
1	N	858	G	N7-C8-N9	5.24	115.72	113.10
1	N	995	C	C5-C4-N4	-5.24	116.53	120.20
1	N	762	U	C2-N1-C1'	-5.23	111.42	117.70
1	N	866	C	C5'-C4'-O4'	5.23	115.38	109.10
1	N	1480	A	N3-C4-N9	5.23	131.59	127.40
1	N	220	G	O4'-C1'-C2'	-5.23	100.57	105.80
1	N	900	A	O4'-C1'-N9	5.23	112.39	108.20
1	N	915	A	N7-C8-N9	-5.23	111.18	113.80
1	N	967	C	O4'-C1'-N1	5.23	112.39	108.20
1	N	49	U	C1'-O4'-C4'	5.23	114.08	109.90
1	N	257	G	N3-C4-C5	5.23	131.22	128.60
1	N	460	A	C2-N3-C4	-5.23	107.98	110.60
1	N	810	C	O4'-C1'-N1	5.23	112.38	108.20
1	N	888	G	N3-C4-N9	-5.23	122.86	126.00
1	N	112	G	C4'-C3'-C2'	-5.23	97.37	102.60
1	N	514	C	P-O3'-C3'	-5.23	113.42	119.70
1	N	586	C	C2'-C3'-O3'	5.23	122.07	113.70
1	N	1213	A	O4'-C1'-N9	5.23	112.38	108.20
1	N	1344	C	C1'-O4'-C4'	-5.23	105.72	109.90
1	N	278	G	C4'-C3'-C2'	-5.23	97.37	102.60
1	N	699	C	O5'-C5'-C4'	-5.23	101.77	111.70
1	N	746	A	C5-C6-N1	-5.23	115.09	117.70
1	N	1114	C	C6-N1-C2	5.23	122.39	120.30
1	N	1343	G	O4'-C1'-N9	5.23	112.38	108.20
1	N	1513	A	C5'-C4'-C3'	5.23	124.36	116.00
1	N	223	A	C5'-C4'-C3'	-5.23	107.64	116.00
1	N	935	A	C5'-C4'-O4'	-5.23	102.83	109.10
1	N	945	G	N7-C8-N9	5.23	115.71	113.10
1	N	96	U	N1-C2-O2	-5.22	119.14	122.80
1	N	323	U	O5'-C5'-C4'	-5.22	101.77	111.70
1	N	445	G	C8-N9-C4	-5.22	104.31	106.40
1	N	489	C	N1-C2-N3	5.22	122.86	119.20
1	N	519	C	OP1-P-OP2	-5.22	111.76	119.60
1	N	571	U	C4-C5-C6	-5.22	116.56	119.70
1	N	697	U	C5-C4-O4	5.22	129.03	125.90
1	N	860	A	C8-N9-C4	-5.22	103.71	105.80
1	N	1129	C	O4'-C1'-C2'	5.22	112.30	107.60
1	N	1169	A	C2'-C3'-O3'	5.22	122.06	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1196	A	O5'-C5'-C4'	-5.22	101.77	111.70
1	N	1430	A	C5-C6-N6	-5.22	119.52	123.70
1	N	1465	A	C8-N9-C4	5.22	107.89	105.80
1	N	168	G	N1-C2-N3	-5.22	120.77	123.90
1	N	261	U	P-O3'-C3'	-5.22	113.43	119.70
1	N	476	U	P-O3'-C3'	-5.22	113.43	119.70
1	N	824	G	P-O5'-C5'	5.22	129.26	120.90
1	N	1265	C	C2-N3-C4	-5.22	117.29	119.90
1	N	281	G	OP1-P-OP2	-5.22	111.77	119.60
1	N	326	G	C6-N1-C2	5.22	128.23	125.10
1	N	554	A	C4-N9-C1'	-5.22	116.90	126.30
1	N	666	G	N9-C4-C5	-5.22	103.31	105.40
1	N	709	U	C2-N1-C1'	-5.22	111.44	117.70
1	N	1082	A	C4-C5-N7	-5.22	108.09	110.70
1	N	32	A	O4'-C1'-N9	5.22	112.38	108.20
1	N	89	U	N1-C2-N3	-5.22	111.77	114.90
1	N	173	U	C5-C4-O4	-5.22	122.77	125.90
1	N	196	A	O3'-P-O5'	-5.22	94.08	104.00
1	N	622	A	N1-C6-N6	5.22	121.73	118.60
1	N	670	G	N1-C2-N2	5.22	120.90	116.20
1	N	1374	A	C5'-C4'-C3'	-5.22	107.65	116.00
1	N	1512	U	C6-N1-C1'	-5.22	113.89	121.20
1	N	49	U	C4-C5-C6	-5.22	116.57	119.70
1	N	113	G	N1-C2-N3	-5.22	120.77	123.90
1	N	118	U	C6-N1-C2	5.22	124.13	121.00
1	N	788	U	C3'-C2'-C1'	5.22	105.67	101.50
1	N	21	G	C5-C6-O6	5.22	131.73	128.60
1	N	563	A	N3-C4-C5	-5.22	123.15	126.80
1	N	576	C	C1'-O4'-C4'	-5.22	105.73	109.90
1	N	616	G	C5-C6-O6	-5.22	125.47	128.60
1	N	836	G	O4'-C1'-N9	5.22	112.37	108.20
1	N	858	G	O4'-C1'-C2'	-5.22	100.58	105.80
1	N	957	U	N3-C2-O2	5.22	125.85	122.20
1	N	1327	C	C5-C4-N4	-5.22	116.55	120.20
1	N	404	G	C5-C6-N1	5.21	114.11	111.50
1	N	1370	G	C4-C5-N7	-5.21	108.71	110.80
1	N	1426	G	O5'-C5'-C4'	-5.21	101.79	111.70
1	N	129	A	N3-C4-N9	5.21	131.57	127.40
1	N	782	A	C3'-C2'-C1'	-5.21	97.33	101.50
1	N	964	A	C2-N3-C4	-5.21	107.99	110.60
1	N	301	G	C8-N9-C4	5.21	108.48	106.40
1	N	656	G	C5-N7-C8	5.21	106.91	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	864	A	C5-N7-C8	5.21	106.51	103.90
1	N	985	C	C5'-C4'-O4'	5.21	115.36	109.10
1	N	1180	A	N7-C8-N9	5.21	116.41	113.80
1	N	1235	U	O5'-P-OP1	-5.21	101.01	105.70
1	N	1316	G	C4-C5-C6	5.21	121.93	118.80
1	N	1514	G	O5'-P-OP2	5.21	116.95	110.70
1	N	60	A	C4'-C3'-C2'	5.21	107.81	102.60
1	N	226	G	C6-C5-N7	-5.21	127.27	130.40
1	N	1305	G	N3-C4-N9	5.21	129.13	126.00
1	N	1160	G	C8-N9-C4	5.21	108.48	106.40
1	N	1207	G	N3-C2-N2	-5.21	116.25	119.90
1	N	59	A	C5'-C4'-O4'	5.21	115.35	109.10
1	N	194	C	C5-C4-N4	-5.21	116.56	120.20
1	N	257	G	C4'-C3'-C2'	-5.21	97.39	102.60
1	N	1108	G	C2-N3-C4	5.21	114.50	111.90
1	N	1369	C	N1-C2-N3	-5.21	115.56	119.20
1	N	332	G	N3-C2-N2	5.21	123.54	119.90
1	N	656	G	OP1-P-OP2	-5.21	111.79	119.60
1	N	245	U	N1-C2-N3	-5.20	111.78	114.90
1	N	460	A	O4'-C1'-N9	5.20	112.36	108.20
1	N	624	C	N3-C4-C5	-5.20	119.82	121.90
1	N	978	A	C5'-C4'-O4'	5.20	115.34	109.10
1	N	1275	A	C4-N9-C1'	5.20	135.66	126.30
1	N	102	G	C5-C6-N1	-5.20	108.90	111.50
1	N	380	G	C8-N9-C4	-5.20	104.32	106.40
1	N	408	A	C4-C5-N7	-5.20	108.10	110.70
1	N	1452	C	C5-C6-N1	5.20	123.60	121.00
1	N	139	A	C5'-C4'-O4'	5.20	115.34	109.10
1	N	508	U	N1-C2-N3	5.20	118.02	114.90
1	N	1386	G	C4-C5-C6	5.20	121.92	118.80
1	N	300	A	C6-C5-N7	-5.20	128.66	132.30
1	N	378	G	C5-N7-C8	-5.20	101.70	104.30
1	N	432	A	O4'-C4'-C3'	-5.20	98.80	104.00
1	N	856	C	C4'-C3'-C2'	-5.20	97.40	102.60
1	N	1043	G	N9-C1'-C2'	5.20	120.76	114.00
1	N	1211	U	C6-N1-C2	5.20	124.12	121.00
1	N	1386	G	C4-N9-C1'	-5.20	119.74	126.50
1	N	1480	A	O4'-C1'-N9	5.20	112.36	108.20
1	N	207	C	O4'-C1'-C2'	-5.20	100.60	105.80
1	N	208	U	N1-C2-O2	5.20	126.44	122.80
1	N	506	G	C8-N9-C4	-5.20	104.32	106.40
1	N	1244	G	C4'-C3'-C2'	-5.20	97.40	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	560	A	O4'-C1'-N9	5.20	112.36	108.20
1	N	621	A	C5-C6-N1	-5.20	115.10	117.70
1	N	621	A	C5'-C4'-C3'	5.20	124.31	116.00
1	N	824	G	C8-N9-C1'	5.20	133.75	127.00
1	N	913	A	C3'-C2'-C1'	5.20	105.66	101.50
1	N	1532	U	OP1-P-OP2	-5.20	111.81	119.60
1	N	142	G	C3'-C2'-C1'	5.19	105.66	101.50
1	N	200	G	C5-C6-N1	-5.19	108.90	111.50
1	N	1377	A	P-O5'-C5'	-5.19	112.59	120.90
1	N	251	G	C4-C5-N7	5.19	112.88	110.80
1	N	308	C	OP1-P-OP2	-5.19	111.81	119.60
1	N	354	G	C4-C5-C6	5.19	121.92	118.80
1	N	446	G	C3'-C2'-C1'	5.19	105.65	101.50
1	N	1010	U	N1-C2-N3	-5.19	111.78	114.90
1	N	1199	U	C5-C6-N1	5.19	125.30	122.70
1	N	1273	C	C5-C6-N1	5.19	123.60	121.00
1	N	1356	G	C4-N9-C1'	5.19	133.25	126.50
1	N	217	C	C5-C4-N4	-5.19	116.57	120.20
1	N	236	A	C8-N9-C4	-5.19	103.72	105.80
1	N	547	A	N7-C8-N9	-5.19	111.20	113.80
1	N	1343	G	C1'-O4'-C4'	5.19	114.05	109.90
1	N	1379	G	O5'-C5'-C4'	-5.19	101.84	111.70
1	N	30	U	C3'-C2'-C1'	5.19	105.65	101.50
1	N	258	G	O4'-C1'-N9	5.19	112.35	108.20
1	N	889	A	C6-C5-N7	-5.19	128.67	132.30
1	N	10	A	C8-N9-C4	5.19	107.88	105.80
1	N	245	U	C2-N3-C4	5.19	130.11	127.00
1	N	265	G	C6-C5-N7	-5.19	127.29	130.40
1	N	315	A	C5-C6-N1	-5.19	115.11	117.70
1	N	355	C	C2-N1-C1'	5.19	124.51	118.80
1	N	775	G	N1-C6-O6	5.19	123.01	119.90
1	N	802	A	C6-C5-N7	-5.19	128.67	132.30
1	N	320	A	C4-C5-C6	5.19	119.59	117.00
1	N	797	C	N3-C4-C5	-5.19	119.83	121.90
1	N	1306	A	O4'-C1'-N9	5.19	112.35	108.20
1	N	65	A	N9-C4-C5	5.18	107.87	105.80
1	N	271	C	C1'-O4'-C4'	5.18	114.05	109.90
1	N	432	A	P-O5'-C5'	5.18	129.20	120.90
1	N	739	C	N1-C2-O2	-5.18	115.79	118.90
1	N	744	C	N1-C2-O2	-5.18	115.79	118.90
1	N	965	U	C4-C5-C6	5.18	122.81	119.70
1	N	976	G	N1-C2-N2	5.18	120.86	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	985	C	C6-N1-C1'	-5.18	114.58	120.80
1	N	1276	G	C4'-C3'-C2'	-5.18	97.42	102.60
1	N	433	G	C2-N3-C4	-5.18	109.31	111.90
1	N	472	U	C5-C6-N1	-5.18	120.11	122.70
1	N	944	G	C5-N7-C8	-5.18	101.71	104.30
1	N	1089	G	N3-C4-C5	5.18	131.19	128.60
1	N	1518	A	C5-C6-N6	-5.18	119.55	123.70
1	N	179	A	C5-N7-C8	-5.18	101.31	103.90
1	N	1439	G	OP1-P-OP2	-5.18	111.83	119.60
1	N	131	A	C3'-C2'-C1'	5.18	105.64	101.50
1	N	979	C	C2-N1-C1'	-5.18	113.10	118.80
1	N	1416	G	C5-N7-C8	-5.18	101.71	104.30
1	N	1418	A	C6-N1-C2	-5.18	115.49	118.60
1	N	1516	G	C8-N9-C1'	5.18	133.73	127.00
1	N	17	U	C5'-C4'-C3'	5.18	124.28	116.00
1	N	587	G	C2'-C3'-O3'	5.18	121.98	113.70
1	N	1171	A	O5'-C5'-C4'	-5.18	101.86	111.70
1	N	141	G	N9-C4-C5	-5.18	103.33	105.40
1	N	579	A	C5'-C4'-O4'	5.18	115.31	109.10
1	N	702	A	O4'-C4'-C3'	-5.18	98.82	104.00
1	N	733	G	O4'-C1'-N9	5.18	112.34	108.20
1	N	872	A	N9-C4-C5	-5.18	103.73	105.80
1	N	1108	G	OP1-P-O3'	5.18	116.59	105.20
1	N	1529	G	O4'-C1'-N9	5.18	112.34	108.20
1	N	96	U	O4'-C1'-N1	5.17	112.34	108.20
1	N	289	G	C5'-C4'-O4'	5.17	115.31	109.10
1	N	855	U	C2-N3-C4	5.17	130.10	127.00
1	N	1065	U	C6-N1-C2	-5.17	117.89	121.00
1	N	1090	U	C4'-C3'-C2'	-5.17	97.43	102.60
1	N	128	G	N1-C2-N3	-5.17	120.80	123.90
1	N	699	C	C5-C6-N1	5.17	123.59	121.00
1	N	900	A	C8-N9-C4	-5.17	103.73	105.80
1	N	1384	C	C5-C4-N4	-5.17	116.58	120.20
1	N	1192	C	C4'-C3'-C2'	-5.17	97.43	102.60
1	N	1300	G	C5-C6-O6	-5.17	125.50	128.60
1	N	1446	A	C2-N3-C4	-5.17	108.01	110.60
1	N	433	G	C3'-C2'-C1'	-5.17	97.36	101.50
1	N	498	A	C4'-C3'-C2'	5.17	107.77	102.60
1	N	992	U	C4-C5-C6	5.17	122.80	119.70
1	N	1215	G	C6-C5-N7	-5.17	127.30	130.40
1	N	61	G	C4-C5-C6	-5.17	115.70	118.80
1	N	91	U	C1'-O4'-C4'	-5.17	105.76	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	298	A	N7-C8-N9	-5.17	111.22	113.80
1	N	336	A	O4'-C4'-C3'	-5.17	98.83	104.00
1	N	436	C	C6-N1-C2	-5.17	118.23	120.30
1	N	767	A	C8-N9-C1'	5.17	137.00	127.70
1	N	1060	U	N1-C2-O2	-5.17	119.18	122.80
1	N	1069	C	N3-C4-N4	5.17	121.62	118.00
1	N	1457	G	OP2-P-O3'	5.17	116.57	105.20
1	N	1476	A	C5-C6-N1	-5.17	115.12	117.70
1	N	1517	G	C2-N3-C4	-5.17	109.32	111.90
1	N	180	U	O4'-C1'-N1	5.17	112.33	108.20
1	N	336	A	C4-C5-N7	-5.17	108.12	110.70
1	N	457	G	N1-C2-N2	-5.17	111.55	116.20
1	N	588	G	O5'-P-OP2	-5.17	101.05	105.70
1	N	789	U	C5'-C4'-O4'	5.17	115.30	109.10
1	N	836	G	N3-C4-N9	5.17	129.10	126.00
1	N	917	G	N1-C6-O6	5.17	123.00	119.90
1	N	957	U	N1-C2-O2	-5.17	119.18	122.80
1	N	1120	C	N3-C2-O2	5.17	125.52	121.90
1	N	1143	G	N3-C4-C5	5.17	131.18	128.60
1	N	1196	A	C6-N1-C2	5.17	121.70	118.60
1	N	332	G	C4-C5-N7	5.17	112.87	110.80
1	N	529	G	N7-C8-N9	-5.17	110.52	113.10
1	N	150	U	N3-C4-O4	5.16	123.02	119.40
1	N	713	G	C5-C6-N1	5.16	114.08	111.50
1	N	786	G	N7-C8-N9	5.16	115.68	113.10
1	N	1051	C	OP1-P-OP2	-5.16	111.85	119.60
1	N	1256	A	C2-N3-C4	-5.16	108.02	110.60
1	N	1497	G	C4-N9-C1'	-5.16	119.79	126.50
1	N	940	C	N3-C4-C5	-5.16	119.83	121.90
1	N	1054	C	C5-C6-N1	-5.16	118.42	121.00
1	N	1258	G	P-O5'-C5'	5.16	129.16	120.90
1	N	1517	G	O3'-P-O5'	-5.16	94.19	104.00
1	N	52	C	N1-C2-N3	-5.16	115.59	119.20
1	N	289	G	N1-C2-N3	-5.16	120.80	123.90
1	N	555	U	OP1-P-OP2	-5.16	111.86	119.60
1	N	751	U	N1-C2-O2	5.16	126.41	122.80
1	N	837	U	N3-C2-O2	5.16	125.81	122.20
1	N	1381	U	C4'-C3'-C2'	-5.16	97.44	102.60
1	N	666	G	C4-C5-C6	5.16	121.89	118.80
1	N	771	G	O4'-C4'-C3'	-5.16	98.84	104.00
1	N	885	G	C8-N9-C4	5.16	108.46	106.40
1	N	895	G	P-O3'-C3'	-5.16	113.51	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	977	A	C4-C5-N7	-5.16	108.12	110.70
1	N	989	U	C5-C4-O4	-5.16	122.81	125.90
1	N	1040	U	N3-C4-O4	5.16	123.01	119.40
1	N	1287	A	N1-C6-N6	5.16	121.69	118.60
1	N	1476	A	C4-C5-C6	5.16	119.58	117.00
1	N	69	G	O4'-C4'-C3'	-5.16	98.84	104.00
1	N	80	A	C8-N9-C4	-5.16	103.74	105.80
1	N	338	A	O4'-C1'-N9	5.16	112.33	108.20
1	N	211	G	N9-C4-C5	-5.16	103.34	105.40
1	N	449	G	N3-C2-N2	5.16	123.51	119.90
1	N	475	C	N1-C2-O2	-5.16	115.81	118.90
1	N	685	G	C5'-C4'-O4'	5.16	115.29	109.10
1	N	1022	A	C5-C6-N6	-5.16	119.58	123.70
1	N	1119	C	N3-C2-O2	5.16	125.51	121.90
1	N	1440	U	O4'-C4'-C3'	-5.16	98.84	104.00
1	N	229	U	C1'-O4'-C4'	5.15	114.02	109.90
1	N	344	A	C5-N7-C8	5.15	106.48	103.90
1	N	1204	A	C6-C5-N7	-5.15	128.69	132.30
1	N	1318	A	P-O5'-C5'	5.15	129.15	120.90
1	N	220	G	N3-C4-N9	-5.15	122.91	126.00
1	N	721	G	C6-C5-N7	-5.15	127.31	130.40
1	N	728	A	O4'-C1'-N9	5.15	112.32	108.20
1	N	838	G	C8-N9-C4	5.15	108.46	106.40
1	N	1010	U	O4'-C1'-N1	5.15	112.32	108.20
1	N	1242	G	C4-C5-C6	5.15	121.89	118.80
1	N	1354	U	C5'-C4'-O4'	5.15	115.28	109.10
1	N	144	G	C6-N1-C2	-5.15	122.01	125.10
1	N	223	A	N9-C4-C5	-5.15	103.74	105.80
1	N	733	G	C4'-C3'-C2'	5.15	107.75	102.60
1	N	741	G	O4'-C4'-C3'	5.15	110.22	106.10
1	N	747	A	C4'-C3'-C2'	-5.15	97.45	102.60
1	N	346	G	P-O5'-C5'	-5.15	112.66	120.90
1	N	656	G	C5'-C4'-O4'	5.15	115.28	109.10
1	N	766	A	C3'-C2'-C1'	-5.15	97.38	101.50
1	N	1084	G	N9-C4-C5	-5.15	103.34	105.40
1	N	360	G	C5'-C4'-C3'	-5.15	107.76	116.00
1	N	384	G	N7-C8-N9	-5.15	110.53	113.10
1	N	427	U	C2-N3-C4	-5.15	123.91	127.00
1	N	428	G	C6-C5-N7	-5.15	127.31	130.40
1	N	485	U	N1-C2-O2	-5.15	119.20	122.80
1	N	760	G	N7-C8-N9	5.15	115.67	113.10
1	N	1239	A	C4'-C3'-O3'	5.15	123.30	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1475	G	C6-C5-N7	-5.15	127.31	130.40
1	N	1513	A	O4'-C4'-C3'	-5.15	98.85	104.00
1	N	97	G	C8-N9-C1'	-5.15	120.31	127.00
1	N	525	C	C4'-C3'-C2'	-5.15	97.45	102.60
1	N	671	G	N1-C2-N3	-5.15	120.81	123.90
1	N	888	G	N7-C8-N9	-5.15	110.53	113.10
1	N	450	G	N1-C6-O6	5.14	122.99	119.90
1	N	457	G	C8-N9-C4	5.14	108.46	106.40
1	N	717	U	N3-C4-O4	5.14	123.00	119.40
1	N	788	U	N3-C4-C5	-5.14	111.51	114.60
1	N	1165	U	N3-C4-C5	-5.14	111.51	114.60
1	N	1297	G	N9-C4-C5	-5.14	103.34	105.40
1	N	144	G	C2-N3-C4	-5.14	109.33	111.90
1	N	153	C	C5'-C4'-O4'	5.14	115.27	109.10
1	N	243	A	C6-C5-N7	-5.14	128.70	132.30
1	N	260	G	N1-C2-N3	-5.14	120.81	123.90
1	N	541	G	C6-N1-C2	5.14	128.19	125.10
1	N	736	C	C6-N1-C1'	-5.14	114.63	120.80
1	N	742	G	N1-C2-N3	-5.14	120.81	123.90
1	N	1024	G	P-O5'-C5'	5.14	129.13	120.90
1	N	1119	C	C4-C5-C6	-5.14	114.83	117.40
1	N	1370	G	N3-C2-N2	5.14	123.50	119.90
1	N	1478	U	N1-C2-O2	-5.14	119.20	122.80
1	N	414	A	C4-C5-N7	-5.14	108.13	110.70
1	N	609	A	OP2-P-O3'	5.14	116.51	105.20
1	N	1244	G	C5'-C4'-C3'	5.14	124.23	116.00
1	N	51	A	C4'-C3'-C2'	5.14	107.74	102.60
1	N	319	G	N1-C6-O6	5.14	122.98	119.90
1	N	405	U	N1-C2-N3	-5.14	111.82	114.90
1	N	650	G	P-O3'-C3'	5.14	125.87	119.70
1	N	804	U	C6-N1-C1'	5.14	128.40	121.20
1	N	834	U	P-O5'-C5'	5.14	129.12	120.90
1	N	962	C	N3-C4-N4	5.14	121.60	118.00
1	N	971	G	C2-N3-C4	5.14	114.47	111.90
1	N	1196	A	C2'-C3'-O3'	5.14	121.92	113.70
1	N	1252	A	C6-N1-C2	5.14	121.68	118.60
1	N	1333	A	C4-C5-N7	5.14	113.27	110.70
1	N	1419	G	C4-C5-N7	-5.14	108.74	110.80
1	N	31	G	C5-N7-C8	5.14	106.87	104.30
1	N	1123	U	C3'-C2'-C1'	5.14	105.61	101.50
1	N	131	A	N9-C4-C5	5.14	107.86	105.80
1	N	131	A	C8-N9-C1'	5.14	136.94	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	227	G	C5-C6-N1	-5.14	108.93	111.50
1	N	309	A	C5-C6-N6	-5.14	119.59	123.70
1	N	456	A	C5-C6-N1	-5.14	115.13	117.70
1	N	476	U	C1'-O4'-C4'	5.14	114.01	109.90
1	N	644	U	C5-C6-N1	-5.14	120.13	122.70
1	N	714	G	C5'-C4'-C3'	-5.14	107.78	116.00
1	N	768	A	O4'-C1'-N9	5.14	112.31	108.20
1	N	855	U	N3-C4-O4	5.14	123.00	119.40
1	N	888	G	C1'-O4'-C4'	-5.14	105.79	109.90
1	N	1167	A	C5'-C4'-O4'	5.14	115.27	109.10
1	N	1179	A	C8-N9-C4	-5.14	103.75	105.80
1	N	1395	C	C6-N1-C2	5.14	122.35	120.30
1	N	682	G	O4'-C1'-N9	5.13	112.31	108.20
1	N	1019	A	N7-C8-N9	5.13	116.37	113.80
1	N	1085	U	C3'-C2'-C1'	5.13	105.61	101.50
1	N	1086	U	P-O5'-C5'	-5.13	112.69	120.90
1	N	1088	G	C6-C5-N7	-5.13	127.32	130.40
1	N	1300	G	N9-C4-C5	5.13	107.45	105.40
1	N	1319	A	C5'-C4'-C3'	-5.13	107.78	116.00
1	N	1515	G	C6-C5-N7	-5.13	127.32	130.40
1	N	121	U	O4'-C1'-C2'	-5.13	100.67	105.80
1	N	672	U	P-O3'-C3'	-5.13	113.54	119.70
1	N	781	A	C1'-O4'-C4'	5.13	114.01	109.90
1	N	1362	A	OP1-P-O3'	5.13	116.49	105.20
1	N	374	A	N3-C4-C5	-5.13	123.21	126.80
1	N	958	A	C5-C6-N1	-5.13	115.13	117.70
1	N	164	G	N9-C4-C5	-5.13	103.35	105.40
1	N	639	G	C5-N7-C8	5.13	106.86	104.30
1	N	926	G	C5'-C4'-C3'	5.13	124.21	116.00
1	N	78	A	C3'-C2'-C1'	5.13	105.60	101.50
1	N	539	A	N1-C2-N3	-5.13	126.74	129.30
1	N	789	U	N3-C2-O2	5.13	125.79	122.20
1	N	1248	A	C4-C5-N7	-5.13	108.14	110.70
1	N	1253	G	C6-N1-C2	5.13	128.18	125.10
1	N	1403	C	O4'-C4'-C3'	-5.13	98.87	104.00
1	N	293	G	N9-C1'-C2'	-5.13	106.36	112.00
1	N	341	C	N3-C4-N4	5.13	121.59	118.00
1	N	367	U	C6-N1-C2	5.13	124.08	121.00
1	N	975	A	P-O3'-C3'	-5.13	113.55	119.70
1	N	1283	U	O4'-C1'-C2'	5.13	112.21	107.60
1	N	142	G	N3-C4-N9	5.12	129.07	126.00
1	N	466	A	N3-C4-N9	5.12	131.50	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	122	G	OP1-P-O3'	5.12	116.47	105.20
1	N	877	G	C4-C5-C6	-5.12	115.73	118.80
1	N	943	U	C4-C5-C6	5.12	122.78	119.70
1	N	1236	A	C5-C6-N6	-5.12	119.60	123.70
1	N	1282	C	P-O3'-C3'	-5.12	113.55	119.70
1	N	1292	G	C5'-C4'-O4'	-5.12	102.95	109.10
1	N	133	U	N3-C4-O4	5.12	122.98	119.40
1	N	592	G	N3-C4-C5	5.12	131.16	128.60
1	N	592	G	C2-N3-C4	-5.12	109.34	111.90
1	N	925	G	N7-C8-N9	-5.12	110.54	113.10
1	N	1235	U	C2'-C3'-O3'	5.12	121.89	113.70
1	N	1400	C	N1-C2-N3	-5.12	115.61	119.20
1	N	1441	A	C6-C5-N7	-5.12	128.72	132.30
1	N	184	G	N3-C4-N9	-5.12	122.93	126.00
1	N	479	U	C5'-C4'-O4'	5.12	115.24	109.10
1	N	822	U	C2-N1-C1'	5.12	123.84	117.70
1	N	975	A	C3'-C2'-C1'	-5.12	97.40	101.50
1	N	1335	U	O4'-C4'-C3'	-5.12	98.88	104.00
1	N	531	U	O4'-C1'-C2'	5.12	112.21	107.60
1	N	592	G	O4'-C1'-N9	5.12	112.30	108.20
1	N	723	U	C5'-C4'-O4'	5.12	115.24	109.10
1	N	744	C	N3-C4-N4	5.12	121.58	118.00
1	N	768	A	C2-N3-C4	5.12	113.16	110.60
1	N	816	A	N7-C8-N9	5.12	116.36	113.80
1	N	1171	A	C4-C5-N7	-5.12	108.14	110.70
1	N	1196	A	C6-C5-N7	-5.12	128.72	132.30
1	N	207	C	C5'-C4'-C3'	5.12	124.19	116.00
1	N	596	A	O5'-C5'-C4'	-5.12	101.98	111.70
1	N	929	G	C6-C5-N7	-5.12	127.33	130.40
1	N	1524	C	C5-C4-N4	-5.12	116.62	120.20
1	N	293	G	C8-N9-C4	5.12	108.45	106.40
1	N	1407	C	O4'-C1'-N1	5.12	112.29	108.20
1	N	262	A	P-O5'-C5'	-5.11	112.72	120.90
1	N	558	G	C5'-C4'-C3'	5.11	124.18	116.00
1	N	710	G	C6-N1-C2	5.11	128.17	125.10
1	N	1220	G	C4-C5-N7	-5.11	108.75	110.80
1	N	743	A	O4'-C1'-N9	5.11	112.29	108.20
1	N	73	C	C3'-C2'-C1'	5.11	105.59	101.50
1	N	469	C	O5'-P-OP1	5.11	116.83	110.70
1	N	615	G	C8-N9-C4	5.11	108.44	106.40
1	N	1046	A	N9-C4-C5	5.11	107.84	105.80
1	N	146	G	O4'-C1'-N9	5.11	112.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	187	G	C4'-C3'-C2'	-5.11	97.49	102.60
1	N	272	C	P-O3'-C3'	5.11	125.83	119.70
1	N	1100	C	C5-C6-N1	5.11	123.55	121.00
1	N	1236	A	C8-N9-C4	-5.11	103.76	105.80
1	N	1264	U	P-O5'-C5'	5.11	129.07	120.90
1	N	101	A	C5-C6-N1	-5.11	115.15	117.70
1	N	223	A	P-O3'-C3'	-5.11	113.57	119.70
1	N	819	A	C5-N7-C8	5.11	106.45	103.90
1	N	993	G	C4-C5-C6	5.11	121.86	118.80
1	N	1387	G	C6-C5-N7	-5.11	127.34	130.40
1	N	234	C	O4'-C1'-N1	5.10	112.28	108.20
1	N	798	U	C2-N3-C4	5.10	130.06	127.00
1	N	1280	A	P-O3'-C3'	5.10	125.82	119.70
1	N	600	A	N9-C4-C5	5.10	107.84	105.80
1	N	638	U	C5-C6-N1	-5.10	120.15	122.70
1	N	697	U	N1-C2-O2	-5.10	119.23	122.80
1	N	702	A	N7-C8-N9	-5.10	111.25	113.80
1	N	1200	C	C6-N1-C2	5.10	122.34	120.30
1	N	174	A	C5'-C4'-O4'	-5.10	102.98	109.10
1	N	535	A	O4'-C4'-C3'	-5.10	98.90	104.00
1	N	1151	A	C5-C6-N6	-5.10	119.62	123.70
1	N	1217	C	N1-C2-O2	5.10	121.96	118.90
1	N	436	C	C4-C5-C6	5.10	119.95	117.40
1	N	541	G	C5-C6-N1	-5.10	108.95	111.50
1	N	558	G	O4'-C1'-C2'	-5.10	100.70	105.80
1	N	750	C	O4'-C1'-N1	5.10	112.28	108.20
1	N	924	C	C5-C6-N1	5.10	123.55	121.00
1	N	992	U	N3-C4-C5	-5.10	111.54	114.60
1	N	1211	U	O4'-C4'-C3'	-5.10	98.90	104.00
1	N	1346	A	C5-N7-C8	-5.10	101.35	103.90
1	N	34	C	OP2-P-O3'	5.10	116.42	105.20
1	N	449	G	C4-C5-N7	-5.10	108.76	110.80
1	N	1153	G	N1-C6-O6	5.10	122.96	119.90
1	N	1218	C	N3-C4-C5	-5.10	119.86	121.90
1	N	1458	G	C5'-C4'-O4'	5.10	115.22	109.10
1	N	183	C	C5-C4-N4	-5.10	116.63	120.20
1	N	404	G	C8-N9-C4	-5.10	104.36	106.40
1	N	506	G	N7-C8-N9	5.10	115.65	113.10
1	N	655	A	N9-C1'-C2'	-5.10	106.39	112.00
1	N	108	G	O3'-P-O5'	5.09	113.68	104.00
1	N	285	C	N1-C2-O2	5.09	121.96	118.90
1	N	516	U	C2-N1-C1'	5.09	123.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	682	G	C4'-C3'-C2'	-5.09	97.51	102.60
1	N	867	G	C5-N7-C8	5.09	106.85	104.30
1	N	1010	U	C4'-C3'-C2'	-5.09	97.51	102.60
1	N	1066	C	C4-C5-C6	-5.09	114.85	117.40
1	N	1209	C	N1-C2-O2	5.09	121.96	118.90
1	N	1250	A	C5-N7-C8	-5.09	101.35	103.90
1	N	1350	A	N9-C4-C5	-5.09	103.76	105.80
1	N	1477	U	O4'-C1'-N1	5.09	112.28	108.20
1	N	956	U	N3-C2-O2	5.09	125.77	122.20
1	N	1086	U	N1-C2-N3	-5.09	111.84	114.90
1	N	147	G	C4-C5-N7	5.09	112.84	110.80
1	N	248	C	C6-N1-C2	-5.09	118.26	120.30
1	N	412	A	C4-C5-C6	5.09	119.55	117.00
1	N	534	U	C5'-C4'-O4'	5.09	115.21	109.10
1	N	886	G	C4-N9-C1'	5.09	133.12	126.50
1	N	7	A	N9-C4-C5	5.09	107.83	105.80
1	N	126	G	C4'-C3'-C2'	-5.09	97.51	102.60
1	N	238	A	C5-C6-N1	-5.09	115.16	117.70
1	N	244	U	N1-C2-N3	-5.09	111.85	114.90
1	N	322	C	C5'-C4'-C3'	-5.09	107.86	116.00
1	N	506	G	N1-C6-O6	5.09	122.95	119.90
1	N	621	A	N3-C4-C5	-5.09	123.24	126.80
1	N	1327	C	C6-N1-C1'	-5.09	114.69	120.80
1	N	774	G	C3'-C2'-C1'	5.09	105.57	101.50
1	N	1229	A	O4'-C1'-N9	5.09	112.27	108.20
1	N	576	C	N3-C4-N4	5.09	121.56	118.00
1	N	688	G	C6-C5-N7	-5.09	127.35	130.40
1	N	988	G	N9-C4-C5	5.09	107.44	105.40
1	N	1140	C	O4'-C1'-C2'	-5.09	100.71	105.80
1	N	1406	U	C5-C4-O4	-5.09	122.85	125.90
1	N	15	G	N3-C4-N9	-5.08	122.95	126.00
1	N	196	A	C4-C5-N7	-5.08	108.16	110.70
1	N	1149	C	C5'-C4'-O4'	5.08	115.20	109.10
1	N	20	U	P-O5'-C5'	5.08	129.03	120.90
1	N	276	G	N7-C8-N9	-5.08	110.56	113.10
1	N	392	C	C5-C4-N4	-5.08	116.64	120.20
1	N	532	A	P-O5'-C5'	-5.08	112.77	120.90
1	N	535	A	C4'-C3'-C2'	-5.08	97.52	102.60
1	N	556	C	N3-C4-N4	5.08	121.56	118.00
1	N	678	U	N3-C4-O4	5.08	122.96	119.40
1	N	884	U	P-O5'-C5'	5.08	129.03	120.90
1	N	1108	G	O4'-C1'-N9	5.08	112.27	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1392	G	N3-C4-C5	5.08	131.14	128.60
1	N	1404	C	C5'-C4'-O4'	5.08	115.20	109.10
1	N	271	C	O5'-C5'-C4'	-5.08	102.05	111.70
1	N	581	G	O5'-C5'-C4'	-5.08	102.05	111.70
1	N	1051	C	C5-C6-N1	5.08	123.54	121.00
1	N	1076	U	OP2-P-O3'	5.08	116.38	105.20
1	N	1521	C	C5-C4-N4	-5.08	116.64	120.20
1	N	773	G	C5-C6-N1	-5.08	108.96	111.50
1	N	939	G	C5-C6-N1	-5.08	108.96	111.50
1	N	1071	C	C6-N1-C2	-5.08	118.27	120.30
1	N	1334	G	C1'-O4'-C4'	5.08	113.96	109.90
1	N	130	A	C8-N9-C4	5.08	107.83	105.80
1	N	304	U	C3'-C2'-C1'	5.08	105.56	101.50
1	N	1059	C	P-O3'-C3'	5.08	125.79	119.70
1	N	1262	C	C4'-C3'-C2'	-5.08	97.52	102.60
1	N	141	G	N9-C1'-C2'	-5.08	106.42	112.00
1	N	308	C	O4'-C1'-C2'	-5.08	100.72	105.80
1	N	408	A	C5-C6-N1	-5.08	115.16	117.70
1	N	747	A	N9-C4-C5	5.08	107.83	105.80
1	N	992	U	C3'-C2'-C1'	-5.08	97.44	101.50
1	N	1080	A	C5'-C4'-O4'	5.08	115.19	109.10
1	N	1160	G	C5'-C4'-O4'	-5.08	103.01	109.10
1	N	1307	U	C6-N1-C2	-5.08	117.95	121.00
1	N	1317	C	N1-C2-N3	-5.08	115.65	119.20
1	N	414	A	C8-N9-C4	-5.07	103.77	105.80
1	N	822	U	C4-C5-C6	5.07	122.74	119.70
1	N	852	G	O5'-P-OP1	5.07	116.79	110.70
1	N	911	U	OP2-P-O3'	5.07	116.36	105.20
1	N	1259	C	C2-N3-C4	5.07	122.44	119.90
1	N	1345	U	C1'-O4'-C4'	-5.07	105.84	109.90
1	N	897	C	O4'-C1'-C2'	-5.07	100.73	105.80
1	N	142	G	C5-C6-O6	-5.07	125.56	128.60
1	N	305	G	C4-C5-N7	5.07	112.83	110.80
1	N	370	C	N3-C4-N4	5.07	121.55	118.00
1	N	631	C	OP1-P-O3'	5.07	116.36	105.20
1	N	693	G	N3-C2-N2	5.07	123.45	119.90
1	N	839	C	C5-C4-N4	-5.07	116.65	120.20
1	N	1144	G	N3-C4-C5	5.07	131.13	128.60
1	N	155	A	C6-C5-N7	-5.07	128.75	132.30
1	N	371	A	C6-N1-C2	5.07	121.64	118.60
1	N	1257	A	P-O5'-C5'	5.07	129.01	120.90
1	N	1519	A	N1-C2-N3	5.07	131.84	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1523	G	C8-N9-C1'	5.07	133.59	127.00
1	N	274	A	C4-N9-C1'	-5.07	117.18	126.30
1	N	337	G	C5-C6-O6	-5.07	125.56	128.60
1	N	339	C	C2-N3-C4	5.07	122.43	119.90
1	N	1016	A	C8-N9-C1'	5.07	136.82	127.70
1	N	55	A	N1-C2-N3	-5.07	126.77	129.30
1	N	435	A	O4'-C1'-N9	5.07	112.25	108.20
1	N	721	G	C1'-O4'-C4'	-5.07	105.85	109.90
1	N	784	A	C4'-C3'-C2'	-5.07	97.53	102.60
1	N	1148	U	C1'-O4'-C4'	5.07	113.95	109.90
1	N	1432	G	P-O5'-C5'	5.07	129.00	120.90
1	N	297	G	N1-C6-O6	5.06	122.94	119.90
1	N	358	U	C4-C5-C6	5.06	122.74	119.70
1	N	1443	C	OP1-P-OP2	-5.06	112.00	119.60
1	N	57	G	N7-C8-N9	-5.06	110.57	113.10
1	N	124	C	C5'-C4'-C3'	5.06	124.10	116.00
1	N	602	A	O3'-P-O5'	-5.06	94.38	104.00
1	N	948	C	N3-C2-O2	-5.06	118.36	121.90
1	N	1239	A	C2'-C3'-O3'	5.06	121.80	113.70
1	N	1262	C	P-O3'-C3'	-5.06	113.62	119.70
1	N	388	G	C4-C5-C6	5.06	121.84	118.80
1	N	1506	U	C1'-O4'-C4'	5.06	113.95	109.90
1	N	837	U	N1-C2-O2	-5.06	119.26	122.80
1	N	1157	A	N1-C2-N3	5.06	131.83	129.30
1	N	1523	G	O4'-C1'-N9	5.06	112.25	108.20
1	N	1525	G	N9-C4-C5	5.06	107.42	105.40
1	N	159	G	C5-N7-C8	-5.06	101.77	104.30
1	N	307	C	C2-N1-C1'	5.06	124.36	118.80
1	N	460	A	N1-C2-N3	5.06	131.83	129.30
1	N	464	U	C5-C6-N1	5.06	125.23	122.70
1	N	527	G	N9-C1'-C2'	-5.06	106.44	112.00
1	N	1206	G	OP1-P-OP2	-5.06	112.02	119.60
1	N	1207	G	O5'-C5'-C4'	-5.06	102.09	111.70
1	N	76	G	C5-N7-C8	-5.05	101.77	104.30
1	N	147	G	C2-N3-C4	5.05	114.43	111.90
1	N	456	A	OP2-P-O3'	5.05	116.32	105.20
1	N	655	A	O4'-C1'-N9	5.05	112.24	108.20
1	N	991	U	C6-N1-C1'	-5.05	114.12	121.20
1	N	1144	G	C5-C6-O6	-5.05	125.57	128.60
1	N	1228	C	N3-C4-N4	5.05	121.54	118.00
1	N	1252	A	C1'-O4'-C4'	5.05	113.94	109.90
1	N	54	C	C6-N1-C2	-5.05	118.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	142	G	C4-C5-C6	5.05	121.83	118.80
1	N	152	A	C5-N7-C8	5.05	106.43	103.90
1	N	270	A	C6-C5-N7	-5.05	128.76	132.30
1	N	464	U	O4'-C1'-N1	5.05	112.24	108.20
1	N	634	C	C4-C5-C6	-5.05	114.87	117.40
1	N	1038	C	C6-N1-C2	5.05	122.32	120.30
1	N	1417	G	C6-C5-N7	-5.05	127.37	130.40
1	N	1493	A	OP1-P-O3'	5.05	116.31	105.20
1	N	397	A	C4-C5-N7	-5.05	108.17	110.70
1	N	648	A	C3'-C2'-C1'	-5.05	97.46	101.50
1	N	652	U	C5'-C4'-C3'	-5.05	107.92	116.00
1	N	721	G	OP1-P-OP2	-5.05	112.03	119.60
1	N	969	A	O5'-P-OP1	5.05	116.76	110.70
1	N	1352	C	C2-N1-C1'	5.05	124.36	118.80
1	N	1412	C	N3-C4-N4	5.05	121.53	118.00
1	N	91	U	C4-C5-C6	-5.05	116.67	119.70
1	N	256	U	N3-C4-O4	5.05	122.93	119.40
1	N	451	A	C6-C5-N7	5.05	135.83	132.30
1	N	1101	A	C8-N9-C1'	-5.05	118.61	127.70
1	N	653	U	C6-N1-C1'	-5.05	114.13	121.20
1	N	692	U	OP1-P-OP2	-5.05	112.03	119.60
1	N	721	G	P-O5'-C5'	-5.05	112.83	120.90
1	N	1509	C	OP1-P-OP2	-5.05	112.03	119.60
1	N	78	A	N3-C4-C5	-5.04	123.27	126.80
1	N	485	U	C5'-C4'-C3'	-5.04	107.93	116.00
1	N	1420	U	N1-C2-O2	-5.04	119.27	122.80
1	N	524	G	C6-C5-N7	-5.04	127.37	130.40
1	N	553	A	N1-C6-N6	5.04	121.63	118.60
1	N	613	C	P-O3'-C3'	-5.04	113.65	119.70
1	N	806	C	C4-C5-C6	-5.04	114.88	117.40
1	N	38	G	N9-C4-C5	5.04	107.42	105.40
1	N	856	C	N3-C4-C5	5.04	123.92	121.90
1	N	1443	C	O4'-C1'-N1	5.04	112.23	108.20
1	N	381	C	C5'-C4'-C3'	5.04	124.06	116.00
1	N	305	G	C4-N9-C1'	-5.04	119.95	126.50
1	N	470	C	P-O3'-C3'	5.04	125.75	119.70
1	N	672	U	C4'-C3'-C2'	-5.04	97.56	102.60
1	N	943	U	C4'-C3'-C2'	5.04	107.64	102.60
1	N	1271	A	OP2-P-O3'	5.04	116.28	105.20
1	N	389	A	C3'-C2'-C1'	5.04	105.53	101.50
1	N	485	U	OP1-P-OP2	-5.04	112.05	119.60
1	N	227	G	C2-N3-C4	5.04	114.42	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	496	A	C5'-C4'-O4'	5.04	115.14	109.10
1	N	585	G	C6-N1-C2	5.04	128.12	125.10
1	N	828	U	C4-C5-C6	-5.04	116.68	119.70
1	N	909	A	P-O3'-C3'	5.04	125.74	119.70
1	N	1081	A	C3'-C2'-C1'	-5.04	97.47	101.50
1	N	1093	A	C5'-C4'-O4'	5.04	115.14	109.10
1	N	1103	C	C2-N1-C1'	5.04	124.34	118.80
1	N	1236	A	C6-C5-N7	-5.04	128.78	132.30
1	N	1329	A	C1'-O4'-C4'	5.04	113.93	109.90
1	N	1368	A	C5-C6-N1	-5.04	115.18	117.70
1	N	1404	C	C6-N1-C1'	-5.04	114.76	120.80
1	N	1413	A	N9-C1'-C2'	-5.04	106.46	112.00
1	N	1439	G	O4'-C1'-N9	5.04	112.23	108.20
1	N	645	G	N1-C6-O6	5.03	122.92	119.90
1	N	725	G	C8-N9-C1'	5.03	133.54	127.00
1	N	96	U	C5-C4-O4	-5.03	122.88	125.90
1	N	680	C	C5-C6-N1	5.03	123.52	121.00
1	N	840	C	C6-N1-C1'	-5.03	114.76	120.80
1	N	1416	G	C6-C5-N7	-5.03	127.38	130.40
1	N	1528	U	C6-N1-C1'	-5.03	114.16	121.20
1	N	446	G	C5'-C4'-O4'	5.03	115.14	109.10
1	N	583	A	C5'-C4'-O4'	5.03	115.14	109.10
1	N	715	A	C6-N1-C2	5.03	121.62	118.60
1	N	835	U	N3-C2-O2	5.03	125.72	122.20
1	N	993	G	N9-C4-C5	5.03	107.41	105.40
1	N	1476	A	P-O3'-C3'	5.03	125.73	119.70
1	N	324	G	C8-N9-C4	5.03	108.41	106.40
1	N	458	U	P-O5'-C5'	-5.03	112.86	120.90
1	N	478	A	C6-C5-N7	-5.03	128.78	132.30
1	N	1242	G	N3-C2-N2	5.03	123.42	119.90
1	N	1269	A	C6-N1-C2	-5.03	115.58	118.60
1	N	1339	A	O4'-C1'-N9	5.03	112.22	108.20
1	N	103	U	N3-C4-O4	5.03	122.92	119.40
1	N	355	C	N3-C4-C5	-5.03	119.89	121.90
1	N	604	G	C4-C5-C6	5.03	121.81	118.80
1	N	999	C	C2-N1-C1'	5.03	124.33	118.80
1	N	1139	G	C5-C6-N1	-5.03	108.99	111.50
1	N	491	G	C3'-C2'-C1'	-5.02	97.48	101.50
1	N	668	G	O4'-C1'-N9	5.02	112.22	108.20
1	N	1443	C	C6-N1-C2	5.02	122.31	120.30
1	N	84	U	C2-N1-C1'	5.02	123.73	117.70
1	N	416	G	N7-C8-N9	5.02	115.61	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	680	C	N3-C4-N4	5.02	121.52	118.00
1	N	788	U	P-O5'-C5'	5.02	128.94	120.90
1	N	935	A	N9-C1'-C2'	-5.02	106.48	112.00
1	N	977	A	C2-N3-C4	-5.02	108.09	110.60
1	N	1122	U	C5-C4-O4	5.02	128.91	125.90
1	N	1508	A	C2-N3-C4	5.02	113.11	110.60
1	N	1002	G	C6-C5-N7	-5.02	127.39	130.40
1	N	1400	C	C5-C6-N1	5.02	123.51	121.00
1	N	117	G	C6-N1-C2	5.02	128.11	125.10
1	N	208	U	N3-C2-O2	-5.02	118.69	122.20
1	N	424	G	O4'-C1'-C2'	-5.02	100.78	105.80
1	N	523	A	C8-N9-C1'	5.02	136.74	127.70
1	N	690	G	C5'-C4'-O4'	5.02	115.12	109.10
1	N	1275	A	C6-C5-N7	-5.02	128.79	132.30
1	N	1297	G	N3-C2-N2	5.02	123.41	119.90
1	N	1528	U	C5'-C4'-O4'	5.02	115.12	109.10
1	N	192	A	C4-C5-N7	5.02	113.21	110.70
1	N	199	A	N3-C4-N9	-5.02	123.39	127.40
1	N	366	A	N3-C4-N9	5.02	131.41	127.40
1	N	562	U	C4'-C3'-C2'	5.02	107.62	102.60
1	N	770	C	O3'-P-O5'	-5.02	94.47	104.00
1	N	809	G	C5-C6-N1	-5.02	108.99	111.50
1	N	880	C	N1-C2-N3	-5.02	115.69	119.20
1	N	900	A	C6-N1-C2	5.02	121.61	118.60
1	N	1297	G	P-O5'-C5'	5.02	128.93	120.90
1	N	1331	G	C5-N7-C8	5.02	106.81	104.30
1	N	1448	C	C4'-C3'-C2'	5.02	107.62	102.60
1	N	972	C	C2-N1-C1'	-5.02	113.28	118.80
1	N	1144	G	N9-C4-C5	-5.02	103.39	105.40
1	N	1235	U	C5'-C4'-O4'	5.02	115.12	109.10
1	N	1361	G	C5-N7-C8	-5.02	101.79	104.30
1	N	277	C	P-O3'-C3'	5.01	125.72	119.70
1	N	577	G	C2-N3-C4	5.01	114.41	111.90
1	N	608	A	C2-N3-C4	5.01	113.11	110.60
1	N	671	G	P-O3'-C3'	5.01	125.72	119.70
1	N	1047	G	C4-C5-N7	5.01	112.81	110.80
1	N	1202	U	N1-C1'-C2'	-5.01	106.48	112.00
1	N	1302	C	C2-N3-C4	-5.01	117.39	119.90
1	N	1311	A	C6-C5-N7	-5.01	128.79	132.30
1	N	552	U	N1-C2-O2	-5.01	119.29	122.80
1	N	1482	G	C3'-C2'-C1'	-5.01	97.49	101.50
1	N	771	G	C6-C5-N7	-5.01	127.39	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1050	G	C5-C6-O6	-5.01	125.59	128.60
1	N	1385	G	C6-N1-C2	5.01	128.11	125.10
1	N	1530	G	O5'-C5'-C4'	5.01	121.22	111.70
1	N	89	U	O4'-C1'-N1	5.01	112.21	108.20
1	N	242	G	C8-N9-C4	-5.01	104.40	106.40
1	N	291	U	N3-C2-O2	5.01	125.71	122.20
1	N	351	G	N1-C6-O6	5.01	122.91	119.90
1	N	550	G	N9-C1'-C2'	-5.01	106.49	112.00
1	N	705	G	O4'-C1'-N9	5.01	112.21	108.20
1	N	876	C	C2-N3-C4	-5.01	117.40	119.90
1	N	956	U	O5'-C5'-C4'	-5.01	102.18	111.70
1	N	971	G	C4-N9-C1'	-5.01	119.99	126.50
1	N	1182	G	C8-N9-C1'	5.01	133.51	127.00
1	N	1290	G	C6-N1-C2	5.01	128.11	125.10
1	N	7	A	C1'-O4'-C4'	-5.01	105.89	109.90
1	N	250	A	C2-N3-C4	5.01	113.10	110.60
1	N	505	G	P-O3'-C3'	5.01	125.71	119.70
1	N	1220	G	O5'-P-OP1	-5.01	101.19	105.70
1	N	372	C	C2-N1-C1'	5.01	124.31	118.80
1	N	466	A	O3'-P-O5'	5.01	113.51	104.00
1	N	470	C	N3-C4-N4	5.01	121.50	118.00
1	N	613	C	C6-N1-C1'	-5.01	114.79	120.80
1	N	1300	G	N1-C2-N3	-5.01	120.90	123.90
1	N	1326	U	O4'-C1'-N1	5.01	112.20	108.20
1	N	605	U	N3-C4-C5	-5.00	111.60	114.60
1	N	976	G	C5'-C4'-O4'	5.00	115.11	109.10
1	N	190	A	N1-C2-N3	5.00	131.80	129.30
1	N	346	G	C4-C5-N7	-5.00	108.80	110.80
1	N	603	U	N1-C1'-C2'	-5.00	106.50	112.00
1	N	707	U	P-O3'-C3'	5.00	125.70	119.70
1	N	718	A	C6-C5-N7	-5.00	128.80	132.30
1	N	720	C	C4'-C3'-C2'	-5.00	97.60	102.60
1	N	756	C	C5-C6-N1	5.00	123.50	121.00
1	N	798	U	O4'-C4'-C3'	-5.00	99.00	104.00
1	N	800	G	C3'-C2'-C1'	5.00	105.50	101.50
1	N	1077	G	C4-C5-C6	5.00	121.80	118.80
1	N	1202	U	C5'-C4'-O4'	-5.00	103.10	109.10
1	N	1397	C	C5-C6-N1	-5.00	118.50	121.00
1	N	256	U	O5'-C5'-C4'	-5.00	102.20	111.70
1	N	672	U	N1-C2-O2	-5.00	119.30	122.80
1	N	1484	C	N1-C1'-C2'	5.00	120.50	114.00

There are no chirality outliers.

All (956) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	N	10	A	Sidechain
1	N	100	G	Sidechain
1	N	1000	A	Sidechain
1	N	1002	G	Sidechain
1	N	1004	A	Sidechain
1	N	1005	A	Sidechain
1	N	1006	G	Sidechain
1	N	1007	U	Sidechain
1	N	1009	U	Sidechain
1	N	1010	U	Sidechain
1	N	1011	C	Sidechain
1	N	1012	A	Sidechain
1	N	1013	G	Sidechain
1	N	1014	A	Sidechain
1	N	1015	G	Sidechain
1	N	1018	G	Sidechain
1	N	1019	A	Sidechain
1	N	1020	G	Sidechain
1	N	1024	G	Sidechain
1	N	1026	G	Sidechain
1	N	1029	U	Sidechain
1	N	1032	G	Sidechain
1	N	1033	G	Sidechain
1	N	1034	G	Sidechain
1	N	1035	A	Sidechain
1	N	1036	A	Sidechain
1	N	1039	G	Sidechain
1	N	104	G	Sidechain
1	N	1040	U	Sidechain
1	N	1041	G	Sidechain
1	N	1042	A	Sidechain
1	N	1044	A	Sidechain
1	N	1047	G	Sidechain
1	N	105	G	Sidechain
1	N	1050	G	Sidechain
1	N	1052	U	Sidechain
1	N	1053	G	Sidechain
1	N	1055	A	Sidechain
1	N	1056	U	Sidechain
1	N	1058	G	Sidechain
1	N	1059	C	Sidechain
1	N	106	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1061	G	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	1072	G	Sidechain
1	N	1073	U	Sidechain
1	N	1074	G	Sidechain
1	N	1075	U	Sidechain
1	N	1076	U	Sidechain
1	N	1077	G	Sidechain
1	N	1078	U	Sidechain
1	N	1079	G	Sidechain
1	N	1080	A	Sidechain
1	N	1081	A	Sidechain
1	N	1082	A	Sidechain
1	N	1083	U	Sidechain
1	N	1084	G	Sidechain
1	N	1085	U	Sidechain
1	N	1088	G	Sidechain
1	N	1089	G	Sidechain
1	N	109	A	Sidechain
1	N	1091	U	Sidechain
1	N	1092	A	Sidechain
1	N	1093	A	Sidechain
1	N	1094	G	Sidechain
1	N	1095	U	Sidechain
1	N	1096	C	Sidechain
1	N	1097	C	Sidechain
1	N	11	G	Sidechain
1	N	1100	C	Sidechain
1	N	1102	A	Sidechain
1	N	1103	C	Sidechain
1	N	1104	G	Sidechain
1	N	1105	A	Sidechain
1	N	1106	G	Sidechain
1	N	1108	G	Sidechain
1	N	1109	C	Sidechain
1	N	111	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1111	A	Sidechain
1	N	1113	C	Sidechain
1	N	1116	U	Sidechain
1	N	1117	A	Sidechain
1	N	1118	U	Sidechain
1	N	1119	C	Sidechain
1	N	1121	U	Sidechain
1	N	1130	A	Sidechain
1	N	1131	G	Sidechain
1	N	1132	C	Sidechain
1	N	1134	G	Sidechain
1	N	1137	C	Sidechain
1	N	1138	G	Sidechain
1	N	1139	G	Sidechain
1	N	1141	C	Sidechain
1	N	1142	G	Sidechain
1	N	1143	G	Sidechain
1	N	1144	G	Sidechain
1	N	1145	A	Sidechain
1	N	1146	A	Sidechain
1	N	1148	U	Sidechain
1	N	1149	C	Sidechain
1	N	115	G	Sidechain
1	N	1150	A	Sidechain
1	N	1153	G	Sidechain
1	N	1154	G	Sidechain
1	N	1155	A	Sidechain
1	N	1156	G	Sidechain
1	N	1157	A	Sidechain
1	N	1159	U	Sidechain
1	N	116	A	Sidechain
1	N	1160	G	Sidechain
1	N	1161	C	Sidechain
1	N	1165	U	Sidechain
1	N	1166	G	Sidechain
1	N	1168	U	Sidechain
1	N	1169	A	Sidechain
1	N	1170	A	Sidechain
1	N	1171	A	Sidechain
1	N	1173	U	Sidechain
1	N	1174	G	Sidechain
1	N	1176	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1177	G	Sidechain
1	N	1178	G	Sidechain
1	N	1180	A	Sidechain
1	N	1181	G	Sidechain
1	N	1182	G	Sidechain
1	N	1185	G	Sidechain
1	N	1187	G	Sidechain
1	N	1188	A	Sidechain
1	N	1189	U	Sidechain
1	N	119	A	Sidechain
1	N	1191	A	Sidechain
1	N	1192	C	Sidechain
1	N	1194	U	Sidechain
1	N	1195	C	Sidechain
1	N	1197	A	Sidechain
1	N	1198	G	Sidechain
1	N	1199	U	Sidechain
1	N	120	A	Sidechain
1	N	1204	A	Sidechain
1	N	1205	U	Sidechain
1	N	1207	G	Sidechain
1	N	121	U	Sidechain
1	N	1211	U	Sidechain
1	N	1212	U	Sidechain
1	N	1214	C	Sidechain
1	N	1215	G	Sidechain
1	N	1216	A	Sidechain
1	N	1219	A	Sidechain
1	N	122	G	Sidechain
1	N	1220	G	Sidechain
1	N	1221	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	123	U	Sidechain
1	N	1231	G	Sidechain
1	N	1233	G	Sidechain
1	N	1235	U	Sidechain
1	N	1238	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1239	A	Sidechain
1	N	124	C	Sidechain
1	N	1240	U	Sidechain
1	N	1241	G	Sidechain
1	N	1242	G	Sidechain
1	N	1244	G	Sidechain
1	N	1245	C	Sidechain
1	N	1248	A	Sidechain
1	N	125	U	Sidechain
1	N	1252	A	Sidechain
1	N	1255	G	Sidechain
1	N	1256	A	Sidechain
1	N	1257	A	Sidechain
1	N	1259	C	Sidechain
1	N	126	G	Sidechain
1	N	1260	G	Sidechain
1	N	1261	A	Sidechain
1	N	1262	C	Sidechain
1	N	1265	C	Sidechain
1	N	1266	G	Sidechain
1	N	1267	C	Sidechain
1	N	1269	A	Sidechain
1	N	127	G	Sidechain
1	N	1270	G	Sidechain
1	N	1272	G	Sidechain
1	N	1273	C	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	1281	C	Sidechain
1	N	1282	C	Sidechain
1	N	1283	U	Sidechain
1	N	1284	C	Sidechain
1	N	1286	U	Sidechain
1	N	1287	A	Sidechain
1	N	1289	A	Sidechain
1	N	129	A	Sidechain
1	N	1290	G	Sidechain
1	N	1291	U	Sidechain
1	N	1292	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1293	C	Sidechain
1	N	1295	U	Sidechain
1	N	1297	G	Sidechain
1	N	1298	U	Sidechain
1	N	13	U	Sidechain
1	N	130	A	Sidechain
1	N	1300	G	Sidechain
1	N	1301	U	Sidechain
1	N	1302	C	Sidechain
1	N	1303	C	Sidechain
1	N	1305	G	Sidechain
1	N	1306	A	Sidechain
1	N	1307	U	Sidechain
1	N	1309	G	Sidechain
1	N	131	A	Sidechain
1	N	1312	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	1320	C	Sidechain
1	N	1321	U	Sidechain
1	N	1322	C	Sidechain
1	N	1324	A	Sidechain
1	N	1326	U	Sidechain
1	N	1327	C	Sidechain
1	N	1328	C	Sidechain
1	N	1331	G	Sidechain
1	N	1334	G	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	1344	C	Sidechain
1	N	1345	U	Sidechain
1	N	1346	A	Sidechain
1	N	1347	G	Sidechain
1	N	1348	U	Sidechain
1	N	1349	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	135	C	Sidechain
1	N	1350	A	Sidechain
1	N	1351	U	Sidechain
1	N	1353	G	Sidechain
1	N	1354	U	Sidechain
1	N	1356	G	Sidechain
1	N	1357	A	Sidechain
1	N	1363	A	Sidechain
1	N	1364	U	Sidechain
1	N	1365	G	Sidechain
1	N	1368	A	Sidechain
1	N	1369	C	Sidechain
1	N	137	U	Sidechain
1	N	1373	G	Sidechain
1	N	1374	A	Sidechain
1	N	1375	A	Sidechain
1	N	1376	U	Sidechain
1	N	1378	C	Sidechain
1	N	1380	U	Sidechain
1	N	1381	U	Sidechain
1	N	1383	C	Sidechain
1	N	1384	C	Sidechain
1	N	1385	G	Sidechain
1	N	1386	G	Sidechain
1	N	1391	U	Sidechain
1	N	1392	G	Sidechain
1	N	1394	A	Sidechain
1	N	1395	C	Sidechain
1	N	1396	A	Sidechain
1	N	1398	A	Sidechain
1	N	14	U	Sidechain
1	N	140	U	Sidechain
1	N	1400	C	Sidechain
1	N	1401	G	Sidechain
1	N	1406	U	Sidechain
1	N	1409	C	Sidechain
1	N	141	G	Sidechain
1	N	1410	A	Sidechain
1	N	1416	G	Sidechain
1	N	1417	G	Sidechain
1	N	1419	G	Sidechain
1	N	142	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1422	G	Sidechain
1	N	1423	G	Sidechain
1	N	1424	U	Sidechain
1	N	1429	A	Sidechain
1	N	1431	A	Sidechain
1	N	1432	G	Sidechain
1	N	1433	A	Sidechain
1	N	1434	A	Sidechain
1	N	1435	G	Sidechain
1	N	1436	U	Sidechain
1	N	1438	G	Sidechain
1	N	1439	G	Sidechain
1	N	144	G	Sidechain
1	N	1440	U	Sidechain
1	N	1444	U	Sidechain
1	N	1446	A	Sidechain
1	N	1447	A	Sidechain
1	N	1449	C	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	1457	G	Sidechain
1	N	1458	G	Sidechain
1	N	1459	G	Sidechain
1	N	146	G	Sidechain
1	N	1461	G	Sidechain
1	N	1464	U	Sidechain
1	N	1467	C	Sidechain
1	N	1468	A	Sidechain
1	N	1469	C	Sidechain
1	N	147	G	Sidechain
1	N	1470	U	Sidechain
1	N	1471	U	Sidechain
1	N	1476	A	Sidechain
1	N	1477	U	Sidechain
1	N	1478	U	Sidechain
1	N	148	G	Sidechain
1	N	1481	U	Sidechain
1	N	1483	A	Sidechain
1	N	1486	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1487	G	Sidechain
1	N	1489	G	Sidechain
1	N	1490	U	Sidechain
1	N	1492	A	Sidechain
1	N	1494	G	Sidechain
1	N	1495	U	Sidechain
1	N	1496	C	Sidechain
1	N	1497	G	Sidechain
1	N	1498	U	Sidechain
1	N	1499	A	Sidechain
1	N	150	U	Sidechain
1	N	1500	A	Sidechain
1	N	1502	A	Sidechain
1	N	1504	G	Sidechain
1	N	1506	U	Sidechain
1	N	1507	A	Sidechain
1	N	1509	C	Sidechain
1	N	151	A	Sidechain
1	N	1511	G	Sidechain
1	N	1512	U	Sidechain
1	N	1515	G	Sidechain
1	N	1516	G	Sidechain
1	N	1517	G	Sidechain
1	N	152	A	Sidechain
1	N	1522	U	Sidechain
1	N	1523	G	Sidechain
1	N	1524	C	Sidechain
1	N	1525	G	Sidechain
1	N	1527	U	Sidechain
1	N	1529	G	Sidechain
1	N	153	C	Sidechain
1	N	1532	U	Sidechain
1	N	1533	C	Sidechain
1	N	157	U	Sidechain
1	N	159	G	Sidechain
1	N	160	A	Sidechain
1	N	161	A	Sidechain
1	N	165	G	Sidechain
1	N	167	A	Sidechain
1	N	169	C	Sidechain
1	N	17	U	Sidechain
1	N	170	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	172	A	Sidechain
1	N	173	U	Sidechain
1	N	177	G	Sidechain
1	N	178	C	Sidechain
1	N	179	A	Sidechain
1	N	181	A	Sidechain
1	N	184	G	Sidechain
1	N	185	U	Sidechain
1	N	186	C	Sidechain
1	N	188	C	Sidechain
1	N	190	A	Sidechain
1	N	192	A	Sidechain
1	N	193	C	Sidechain
1	N	194	C	Sidechain
1	N	195	A	Sidechain
1	N	196	A	Sidechain
1	N	197	A	Sidechain
1	N	199	A	Sidechain
1	N	200	G	Sidechain
1	N	201	G	Sidechain
1	N	202	G	Sidechain
1	N	203	G	Sidechain
1	N	204	G	Sidechain
1	N	208	U	Sidechain
1	N	21	G	Sidechain
1	N	210	C	Sidechain
1	N	211	G	Sidechain
1	N	212	G	Sidechain
1	N	213	G	Sidechain
1	N	216	U	Sidechain
1	N	218	U	Sidechain
1	N	219	U	Sidechain
1	N	22	G	Sidechain
1	N	220	G	Sidechain
1	N	221	C	Sidechain
1	N	223	A	Sidechain
1	N	224	U	Sidechain
1	N	225	C	Sidechain
1	N	226	G	Sidechain
1	N	227	G	Sidechain
1	N	228	A	Sidechain
1	N	229	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	230	G	Sidechain
1	N	231	U	Sidechain
1	N	233	C	Sidechain
1	N	234	C	Sidechain
1	N	236	A	Sidechain
1	N	237	G	Sidechain
1	N	240	G	Sidechain
1	N	241	G	Sidechain
1	N	242	G	Sidechain
1	N	246	A	Sidechain
1	N	247	G	Sidechain
1	N	248	C	Sidechain
1	N	249	U	Sidechain
1	N	25	C	Sidechain
1	N	251	G	Sidechain
1	N	252	U	Sidechain
1	N	254	G	Sidechain
1	N	255	G	Sidechain
1	N	256	U	Sidechain
1	N	258	G	Sidechain
1	N	259	G	Sidechain
1	N	26	A	Sidechain
1	N	260	G	Sidechain
1	N	261	U	Sidechain
1	N	265	G	Sidechain
1	N	266	G	Sidechain
1	N	267	C	Sidechain
1	N	269	C	Sidechain
1	N	27	G	Sidechain
1	N	271	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	28	A	Sidechain
1	N	282	A	Sidechain
1	N	284	C	Sidechain
1	N	287	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	289	G	Sidechain
1	N	290	C	Sidechain
1	N	292	G	Sidechain
1	N	293	G	Sidechain
1	N	294	U	Sidechain
1	N	295	C	Sidechain
1	N	296	U	Sidechain
1	N	298	A	Sidechain
1	N	299	G	Sidechain
1	N	30	U	Sidechain
1	N	301	G	Sidechain
1	N	302	G	Sidechain
1	N	307	C	Sidechain
1	N	308	C	Sidechain
1	N	309	A	Sidechain
1	N	315	A	Sidechain
1	N	316	C	Sidechain
1	N	319	G	Sidechain
1	N	32	A	Sidechain
1	N	322	C	Sidechain
1	N	323	U	Sidechain
1	N	326	G	Sidechain
1	N	33	A	Sidechain
1	N	332	G	Sidechain
1	N	335	C	Sidechain
1	N	336	A	Sidechain
1	N	337	G	Sidechain
1	N	338	A	Sidechain
1	N	339	C	Sidechain
1	N	340	U	Sidechain
1	N	341	C	Sidechain
1	N	342	C	Sidechain
1	N	343	U	Sidechain
1	N	346	G	Sidechain
1	N	347	G	Sidechain
1	N	348	G	Sidechain
1	N	351	G	Sidechain
1	N	352	C	Sidechain
1	N	353	A	Sidechain
1	N	354	G	Sidechain
1	N	356	A	Sidechain
1	N	358	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	359	G	Sidechain
1	N	360	G	Sidechain
1	N	362	G	Sidechain
1	N	363	A	Sidechain
1	N	367	U	Sidechain
1	N	370	C	Sidechain
1	N	371	A	Sidechain
1	N	374	A	Sidechain
1	N	375	U	Sidechain
1	N	376	G	Sidechain
1	N	377	G	Sidechain
1	N	378	G	Sidechain
1	N	38	G	Sidechain
1	N	380	G	Sidechain
1	N	381	C	Sidechain
1	N	382	A	Sidechain
1	N	383	A	Sidechain
1	N	384	G	Sidechain
1	N	385	C	Sidechain
1	N	387	U	Sidechain
1	N	388	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	396	C	Sidechain
1	N	399	G	Sidechain
1	N	4	U	Sidechain
1	N	40	C	Sidechain
1	N	404	G	Sidechain
1	N	405	U	Sidechain
1	N	406	G	Sidechain
1	N	407	U	Sidechain
1	N	408	A	Sidechain
1	N	410	G	Sidechain
1	N	412	A	Sidechain
1	N	413	G	Sidechain
1	N	414	A	Sidechain
1	N	416	G	Sidechain
1	N	417	G	Sidechain

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Mol	Chain	Res	Type	Group
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	43	C	Sidechain
1	N	430	A	Sidechain
1	N	432	A	Sidechain
1	N	434	U	Sidechain
1	N	437	U	Sidechain
1	N	44	A	Sidechain
1	N	440	C	Sidechain
1	N	442	G	Sidechain
1	N	443	C	Sidechain
1	N	444	G	Sidechain
1	N	446	G	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	452	A	Sidechain
1	N	453	G	Sidechain
1	N	454	G	Sidechain
1	N	455	G	Sidechain
1	N	457	G	Sidechain
1	N	459	A	Sidechain
1	N	460	A	Sidechain
1	N	462	G	Sidechain
1	N	463	U	Sidechain
1	N	464	U	Sidechain
1	N	465	A	Sidechain
1	N	466	A	Sidechain
1	N	467	U	Sidechain
1	N	468	A	Sidechain
1	N	470	C	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	477	C	Sidechain
1	N	478	A	Sidechain
1	N	479	U	Sidechain
1	N	48	C	Sidechain
1	N	480	U	Sidechain
1	N	481	G	Sidechain
1	N	483	C	Sidechain
1	N	485	U	Sidechain
1	N	486	U	Sidechain
1	N	49	U	Sidechain
1	N	491	G	Sidechain
1	N	493	A	Sidechain
1	N	494	G	Sidechain
1	N	495	A	Sidechain
1	N	497	G	Sidechain
1	N	498	A	Sidechain
1	N	499	A	Sidechain
1	N	5	U	Sidechain
1	N	50	A	Sidechain
1	N	500	G	Sidechain
1	N	501	C	Sidechain
1	N	507	C	Sidechain
1	N	508	U	Sidechain
1	N	509	A	Sidechain
1	N	510	A	Sidechain
1	N	515	G	Sidechain
1	N	516	U	Sidechain
1	N	518	C	Sidechain
1	N	519	C	Sidechain
1	N	52	C	Sidechain
1	N	521	G	Sidechain
1	N	522	C	Sidechain
1	N	524	G	Sidechain
1	N	526	C	Sidechain
1	N	527	G	Sidechain
1	N	528	C	Sidechain
1	N	531	U	Sidechain
1	N	534	U	Sidechain
1	N	536	C	Sidechain
1	N	540	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	542	G	Sidechain
1	N	544	G	Sidechain
1	N	546	A	Sidechain
1	N	547	A	Sidechain
1	N	548	G	Sidechain
1	N	553	A	Sidechain
1	N	554	A	Sidechain
1	N	555	U	Sidechain
1	N	558	G	Sidechain
1	N	559	A	Sidechain
1	N	56	U	Sidechain
1	N	562	U	Sidechain
1	N	563	A	Sidechain
1	N	565	U	Sidechain
1	N	566	G	Sidechain
1	N	567	G	Sidechain
1	N	568	G	Sidechain
1	N	569	C	Sidechain
1	N	572	A	Sidechain
1	N	573	A	Sidechain
1	N	575	G	Sidechain
1	N	576	C	Sidechain
1	N	580	C	Sidechain
1	N	581	G	Sidechain
1	N	582	C	Sidechain
1	N	583	A	Sidechain
1	N	584	G	Sidechain
1	N	586	C	Sidechain
1	N	587	G	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	597	G	Sidechain
1	N	598	U	Sidechain
1	N	599	C	Sidechain
1	N	601	G	Sidechain
1	N	604	G	Sidechain
1	N	605	U	Sidechain
1	N	606	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	609	A	Sidechain
1	N	610	U	Sidechain
1	N	611	C	Sidechain
1	N	613	C	Sidechain
1	N	614	C	Sidechain
1	N	616	G	Sidechain
1	N	617	G	Sidechain
1	N	618	C	Sidechain
1	N	619	U	Sidechain
1	N	620	C	Sidechain
1	N	621	A	Sidechain
1	N	626	G	Sidechain
1	N	627	G	Sidechain
1	N	63	C	Sidechain
1	N	630	A	Sidechain
1	N	632	U	Sidechain
1	N	633	G	Sidechain
1	N	634	C	Sidechain
1	N	635	A	Sidechain
1	N	637	C	Sidechain
1	N	638	U	Sidechain
1	N	64	G	Sidechain
1	N	640	A	Sidechain
1	N	641	U	Sidechain
1	N	647	C	Sidechain
1	N	648	A	Sidechain
1	N	649	A	Sidechain
1	N	652	U	Sidechain
1	N	653	U	Sidechain
1	N	655	A	Sidechain
1	N	656	G	Sidechain
1	N	657	U	Sidechain
1	N	658	C	Sidechain
1	N	659	U	Sidechain
1	N	660	C	Sidechain
1	N	661	G	Sidechain
1	N	664	G	Sidechain
1	N	665	A	Sidechain
1	N	667	G	Sidechain
1	N	668	G	Sidechain
1	N	669	G	Sidechain
1	N	670	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	671	G	Sidechain
1	N	673	A	Sidechain
1	N	675	A	Sidechain
1	N	677	U	Sidechain
1	N	678	U	Sidechain
1	N	679	C	Sidechain
1	N	68	G	Sidechain
1	N	680	C	Sidechain
1	N	682	G	Sidechain
1	N	684	U	Sidechain
1	N	685	G	Sidechain
1	N	687	A	Sidechain
1	N	688	G	Sidechain
1	N	69	G	Sidechain
1	N	690	G	Sidechain
1	N	692	U	Sidechain
1	N	693	G	Sidechain
1	N	694	A	Sidechain
1	N	696	A	Sidechain
1	N	697	U	Sidechain
1	N	698	G	Sidechain
1	N	7	A	Sidechain
1	N	70	U	Sidechain
1	N	700	G	Sidechain
1	N	701	U	Sidechain
1	N	702	A	Sidechain
1	N	703	G	Sidechain
1	N	704	A	Sidechain
1	N	705	G	Sidechain
1	N	707	U	Sidechain
1	N	708	C	Sidechain
1	N	709	U	Sidechain
1	N	71	A	Sidechain
1	N	710	G	Sidechain
1	N	712	A	Sidechain
1	N	713	G	Sidechain
1	N	714	G	Sidechain
1	N	715	A	Sidechain
1	N	716	A	Sidechain
1	N	717	U	Sidechain
1	N	718	A	Sidechain
1	N	719	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	72	A	Sidechain
1	N	721	G	Sidechain
1	N	723	U	Sidechain
1	N	726	C	Sidechain
1	N	727	G	Sidechain
1	N	728	A	Sidechain
1	N	729	A	Sidechain
1	N	73	C	Sidechain
1	N	730	G	Sidechain
1	N	732	C	Sidechain
1	N	733	G	Sidechain
1	N	734	G	Sidechain
1	N	739	C	Sidechain
1	N	74	A	Sidechain
1	N	740	U	Sidechain
1	N	742	G	Sidechain
1	N	744	C	Sidechain
1	N	745	G	Sidechain
1	N	746	A	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	755	G	Sidechain
1	N	756	C	Sidechain
1	N	757	U	Sidechain
1	N	759	A	Sidechain
1	N	761	G	Sidechain
1	N	762	U	Sidechain
1	N	763	G	Sidechain
1	N	765	G	Sidechain
1	N	768	A	Sidechain
1	N	769	G	Sidechain
1	N	77	A	Sidechain
1	N	770	C	Sidechain
1	N	771	G	Sidechain
1	N	772	U	Sidechain
1	N	773	G	Sidechain
1	N	775	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	776	G	Sidechain
1	N	777	A	Sidechain
1	N	778	G	Sidechain
1	N	78	A	Sidechain
1	N	780	A	Sidechain
1	N	781	A	Sidechain
1	N	782	A	Sidechain
1	N	783	C	Sidechain
1	N	784	A	Sidechain
1	N	785	G	Sidechain
1	N	786	G	Sidechain
1	N	787	A	Sidechain
1	N	791	G	Sidechain
1	N	793	U	Sidechain
1	N	795	C	Sidechain
1	N	796	C	Sidechain
1	N	798	U	Sidechain
1	N	799	G	Sidechain
1	N	80	A	Sidechain
1	N	800	G	Sidechain
1	N	801	U	Sidechain
1	N	802	A	Sidechain
1	N	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	809	G	Sidechain
1	N	81	A	Sidechain
1	N	810	C	Sidechain
1	N	811	C	Sidechain
1	N	812	G	Sidechain
1	N	815	A	Sidechain
1	N	818	G	Sidechain
1	N	819	A	Sidechain
1	N	82	G	Sidechain
1	N	825	A	Sidechain
1	N	827	U	Sidechain
1	N	83	C	Sidechain
1	N	830	G	Sidechain
1	N	832	G	Sidechain
1	N	833	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	834	U	Sidechain
1	N	835	U	Sidechain
1	N	837	U	Sidechain
1	N	838	G	Sidechain
1	N	839	C	Sidechain
1	N	840	C	Sidechain
1	N	841	C	Sidechain
1	N	843	U	Sidechain
1	N	844	G	Sidechain
1	N	847	G	Sidechain
1	N	848	C	Sidechain
1	N	85	U	Sidechain
1	N	852	G	Sidechain
1	N	855	U	Sidechain
1	N	857	C	Sidechain
1	N	858	G	Sidechain
1	N	859	G	Sidechain
1	N	86	G	Sidechain
1	N	861	G	Sidechain
1	N	862	C	Sidechain
1	N	864	A	Sidechain
1	N	865	A	Sidechain
1	N	866	C	Sidechain
1	N	867	G	Sidechain
1	N	869	G	Sidechain
1	N	87	C	Sidechain
1	N	870	U	Sidechain
1	N	871	U	Sidechain
1	N	872	A	Sidechain
1	N	874	G	Sidechain
1	N	875	U	Sidechain
1	N	876	C	Sidechain
1	N	877	G	Sidechain
1	N	883	C	Sidechain
1	N	884	U	Sidechain
1	N	885	G	Sidechain
1	N	887	G	Sidechain
1	N	888	G	Sidechain
1	N	889	A	Sidechain
1	N	890	G	Sidechain
1	N	891	U	Sidechain
1	N	893	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	894	G	Sidechain
1	N	895	G	Sidechain
1	N	896	C	Sidechain
1	N	898	G	Sidechain
1	N	899	C	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
1	N	908	A	Sidechain
1	N	909	A	Sidechain
1	N	91	U	Sidechain
1	N	910	C	Sidechain
1	N	912	C	Sidechain
1	N	917	G	Sidechain
1	N	919	A	Sidechain
1	N	92	U	Sidechain
1	N	920	U	Sidechain
1	N	921	U	Sidechain
1	N	923	A	Sidechain
1	N	924	C	Sidechain
1	N	925	G	Sidechain
1	N	928	G	Sidechain
1	N	929	G	Sidechain
1	N	93	U	Sidechain
1	N	931	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	943	U	Sidechain
1	N	944	G	Sidechain
1	N	945	G	Sidechain
1	N	946	A	Sidechain
1	N	947	G	Sidechain
1	N	948	C	Sidechain
1	N	951	G	Sidechain
1	N	954	G	Sidechain
1	N	955	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	957	U	Sidechain
1	N	959	A	Sidechain
1	N	962	C	Sidechain
1	N	963	G	Sidechain
1	N	964	A	Sidechain
1	N	965	U	Sidechain
1	N	966	G	Sidechain
1	N	967	C	Sidechain
1	N	968	A	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	977	A	Sidechain
1	N	978	A	Sidechain
1	N	98	A	Sidechain
1	N	981	U	Sidechain
1	N	982	U	Sidechain
1	N	984	C	Sidechain
1	N	985	C	Sidechain
1	N	986	U	Sidechain
1	N	987	G	Sidechain
1	N	989	U	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	997	U	Sidechain
1	N	999	C	Sidechain

5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	N	32892	16554	16536	531	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	32892	16554	16536	531	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 (531) 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:858:G:H1	1:N:869:G:H2'	1.53	0.74
1:N:1240:U:C6	1:N:1241:G:H5'	2.26	0.70
1:N:67:C:H2'	1:N:68:G:C8	2.27	0.70
1:N:594:U:C4	1:N:595:A:C6	2.80	0.69
1:N:909:A:H2	1:N:1487:G:H21	1.40	0.68
1:N:575:G:C5	1:N:821:G:C8	2.82	0.68
1:N:1315:U:C4	1:N:1316:G:C6	2.82	0.68
1:N:947:G:H1'	1:N:1332:A:H62	1.58	0.67
1:N:1240:U:H6	1:N:1241:G:H5'	1.59	0.66
1:N:811:C:H2'	1:N:812:G:H5'	1.75	0.66
1:N:459:A:H61	1:N:472:U:H3	1.43	0.66
1:N:1282:C:H2'	1:N:1283:U:C6	2.31	0.65
1:N:79:G:H2'	1:N:80:A:C8	2.31	0.65
1:N:1255:G:H3'	1:N:1279:G:H22	1.62	0.65
1:N:859:G:C6	1:N:860:A:C6	2.85	0.64
1:N:116:A:H61	1:N:313:A:H1'	1.61	0.64
1:N:596:A:H61	1:N:644:U:H3	1.46	0.64
1:N:688:G:C8	1:N:688:G:H5''	2.33	0.64
1:N:668:G:C6	1:N:669:G:C6	2.86	0.63
1:N:815:A:C2	1:N:1529:G:C4	2.87	0.62
1:N:1357:A:C6	1:N:1363:A:C2	2.88	0.61
1:N:240:G:C6	1:N:241:G:C5	2.89	0.61
1:N:500:G:C6	1:N:501:C:C4	2.88	0.61
1:N:573:A:C2	1:N:915:A:C2	2.89	0.61
1:N:410:G:H2'	1:N:429:U:C5	2.36	0.60
1:N:1301:U:H2'	1:N:1303:C:C5	2.37	0.60
1:N:946:A:C2	1:N:1236:A:C2	2.89	0.60
1:N:272:C:C4	1:N:273:U:C4	2.89	0.59
1:N:80:A:C5	1:N:81:A:H1'	2.37	0.59
1:N:1090:U:H2'	1:N:1091:U:C6	2.37	0.59
1:N:1149:C:H2'	1:N:1150:A:C8	2.38	0.59
1:N:78:A:C5	1:N:79:G:C6	2.91	0.59
1:N:372:C:H4'	1:N:373:A:OP1	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:172:A:C8	1:N:174:A:C8	2.92	0.58
1:N:512:U:H2'	1:N:513:C:C6	2.38	0.58
1:N:169:C:C4	1:N:170:U:C4	2.91	0.58
1:N:459:A:N6	1:N:472:U:H3	2.01	0.58
1:N:17:U:H2'	1:N:18:C:C6	2.39	0.58
1:N:584:G:C6	1:N:585:G:C6	2.91	0.58
1:N:976:G:H22	1:N:1362:A:H3'	1.68	0.58
1:N:68:G:C8	1:N:69:G:C8	2.92	0.57
1:N:1219:A:C6	1:N:1220:G:C6	2.92	0.57
1:N:1268:G:H21	1:N:1326:U:H1'	1.70	0.57
1:N:1240:U:OP1	1:N:1240:U:C2	2.57	0.57
1:N:603:U:H2'	1:N:604:G:C8	2.39	0.57
1:N:1216:A:H2'	1:N:1217:C:C6	2.40	0.56
1:N:998:C:H42	1:N:1042:A:H61	1.52	0.56
1:N:1066:C:C6	1:N:1066:C:H5''	2.41	0.56
1:N:145:G:C2	1:N:178:C:C2	2.93	0.56
1:N:655:A:C4	1:N:656:G:C8	2.94	0.56
1:N:80:A:C4	1:N:81:A:H1'	2.41	0.56
1:N:425:G:C6	1:N:426:U:N3	2.74	0.56
1:N:32:A:H4'	1:N:48:C:H42	1.70	0.56
1:N:713:G:C2	1:N:714:G:C2	2.93	0.56
1:N:1072:G:C2	1:N:1104:G:C2	2.94	0.55
1:N:168:G:C6	1:N:169:C:C5	2.94	0.55
1:N:171:A:H2'	1:N:172:A:C8	2.41	0.55
1:N:1272:G:C6	1:N:1273:C:C5	2.94	0.55
1:N:860:A:N6	1:N:861:G:C2	2.75	0.55
1:N:942:G:H22	1:N:1341:U:H3	1.53	0.55
1:N:701:U:H5''	1:N:703:G:H5'	1.89	0.55
1:N:354:G:C6	1:N:355:C:C4	2.95	0.55
1:N:1102:A:C2	1:N:1103:C:C2	2.95	0.54
1:N:1244:G:C6	1:N:1245:C:C4	2.95	0.54
1:N:197:A:C2	1:N:198:G:C4	2.96	0.54
1:N:986:U:H3	1:N:1219:A:H61	1.54	0.54
1:N:585:G:C2	1:N:586:C:C2	2.96	0.54
1:N:207:C:H2'	1:N:208:U:C2	2.43	0.54
1:N:673:A:H61	1:N:717:U:H3	1.54	0.54
1:N:64:G:H2'	1:N:99:C:H41	1.73	0.54
1:N:141:G:N1	1:N:223:A:C5	2.76	0.54
1:N:50:A:H1'	1:N:52:C:C6	2.42	0.54
1:N:512:U:H5''	1:N:512:U:H6	1.72	0.54
1:N:936:C:H1'	1:N:1382:C:H42	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:722:G:H1	1:N:733:G:H1	1.55	0.53
1:N:381:C:C5	1:N:382:A:C5	2.96	0.53
1:N:99:C:HO2'	1:N:100:G:H8	1.55	0.53
1:N:1021:A:H2'	1:N:1022:A:H5''	1.91	0.53
1:N:1198:G:C5	1:N:1199:U:C4	2.96	0.53
1:N:1315:U:H2'	1:N:1316:G:C8	2.43	0.53
1:N:107:G:H5''	1:N:134:G:H21	1.73	0.53
1:N:257:G:C2	1:N:258:G:C4	2.97	0.53
1:N:1365:G:C6	1:N:1366:C:C4	2.97	0.53
1:N:19:A:C2	1:N:917:G:C5	2.96	0.53
1:N:499:A:C2	1:N:547:A:C2	2.97	0.53
1:N:424:G:C6	1:N:425:G:C6	2.97	0.53
1:N:664:G:N2	1:N:741:G:H22	2.07	0.53
1:N:160:A:C2	1:N:346:G:N1	2.76	0.53
1:N:664:G:H22	1:N:741:G:H22	1.57	0.53
1:N:449:G:C6	1:N:450:G:C6	2.96	0.53
1:N:410:G:H2'	1:N:429:U:C4	2.44	0.53
1:N:64:G:C2	1:N:69:G:C6	2.97	0.52
1:N:803:G:C5	1:N:804:U:C5	2.97	0.52
1:N:627:G:C6	1:N:628:G:C6	2.97	0.52
1:N:1164:G:C6	1:N:1165:U:C4	2.97	0.52
1:N:632:U:H3'	1:N:633:G:C8	2.44	0.52
1:N:664:G:H22	1:N:741:G:H1	1.55	0.52
1:N:595:A:H2	1:N:643:C:H42	1.55	0.52
1:N:780:A:C2	1:N:801:U:C5	2.98	0.52
1:N:1071:C:H2'	1:N:1072:G:C8	2.43	0.52
1:N:1433:A:C1'	1:N:1468:A:C2	2.93	0.52
1:N:214:C:C5	1:N:215:C:C5	2.98	0.52
1:N:141:G:C6	1:N:223:A:C6	2.98	0.52
1:N:1058:G:C6	1:N:1059:C:C4	2.98	0.52
1:N:558:G:H2'	1:N:559:A:C2	2.45	0.52
1:N:1083:U:C5	1:N:1084:G:C6	2.98	0.51
1:N:1218:C:H2'	1:N:1219:A:C8	2.45	0.51
1:N:1296:C:H2'	1:N:1297:G:O4'	2.09	0.51
1:N:651:C:C4	1:N:652:U:C4	2.98	0.51
1:N:91:U:C5	1:N:92:U:C2	2.98	0.51
1:N:1434:A:C5	1:N:1435:G:C5	2.99	0.51
1:N:260:G:H2'	1:N:261:U:C6	2.45	0.51
1:N:295:C:C4	1:N:296:U:C4	2.98	0.51
1:N:621:A:C6	1:N:622:A:C6	2.99	0.51
1:N:751:U:C5	1:N:752:G:C4	2.98	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:970:C:H3'	1:N:971:G:H5''	1.92	0.51
1:N:1148:U:N3	1:N:1149:C:C2	2.79	0.51
1:N:376:G:C6	1:N:377:G:C6	2.99	0.51
1:N:807:A:H2'	1:N:808:C:O4'	2.11	0.51
1:N:339:C:C4	1:N:340:U:C4	2.99	0.51
1:N:1383:C:C4	1:N:1384:C:C4	2.99	0.51
1:N:50:A:C2	1:N:52:C:N3	2.78	0.51
1:N:669:G:C6	1:N:670:G:C6	2.99	0.51
1:N:69:G:C4	1:N:70:U:C5	2.99	0.51
1:N:979:C:H41	1:N:1360:A:N6	2.08	0.51
1:N:1254:A:C2	1:N:1255:G:C4	2.99	0.51
1:N:273:U:C4	1:N:274:A:C6	2.99	0.51
1:N:761:G:C5	1:N:762:U:C4	2.99	0.51
1:N:1164:G:C2	1:N:1165:U:C2	2.98	0.51
1:N:73:C:H5''	1:N:73:C:C6	2.46	0.51
1:N:771:G:H2'	1:N:772:U:O4'	2.11	0.51
1:N:1016:A:C8	1:N:1017:U:H1'	2.46	0.50
1:N:1316:G:C2	1:N:1319:A:C8	2.98	0.50
1:N:934:C:C2	1:N:1344:C:C4	2.99	0.50
1:N:209:U:C4	1:N:211:G:N1	2.79	0.50
1:N:687:A:C2	1:N:704:A:C6	3.00	0.50
1:N:70:U:C5	1:N:94:G:H2'	2.46	0.50
1:N:1350:A:C6	1:N:1373:G:C2	2.99	0.50
1:N:17:U:H2'	1:N:18:C:C5	2.46	0.50
1:N:453:G:O6	1:N:480:U:C5	2.64	0.50
1:N:1447:A:H3'	1:N:1448:C:H5'	1.92	0.50
1:N:949:A:H61	1:N:1232:U:H3	1.58	0.50
1:N:1296:C:C5	1:N:1297:G:C5	3.00	0.50
1:N:966:G:C6	1:N:1385:G:H4'	2.47	0.50
1:N:1391:U:H2'	1:N:1392:G:C8	2.47	0.50
1:N:335:C:C2	1:N:336:A:C8	3.00	0.50
1:N:596:A:N6	1:N:644:U:H3	2.08	0.50
1:N:1072:G:C2	1:N:1073:U:C2	3.00	0.50
1:N:482:A:C6	1:N:483:C:C2	3.00	0.50
1:N:738:C:C4	1:N:739:C:C4	3.00	0.50
1:N:213:G:C8	1:N:214:C:C6	2.99	0.50
1:N:301:G:C6	1:N:302:G:C5	2.99	0.50
1:N:665:A:C8	1:N:733:G:C2	3.00	0.50
1:N:934:C:H2'	1:N:1344:C:C5	2.46	0.50
1:N:804:U:C5	1:N:805:C:C4	3.00	0.50
1:N:908:A:C2	1:N:909:A:C4	3.00	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:946:A:H2'	1:N:947:G:C8	2.47	0.50
1:N:1419:G:C5	1:N:1420:U:C5	3.00	0.49
1:N:525:C:C4	1:N:526:C:C4	3.00	0.49
1:N:489:C:N3	1:N:490:C:C5	2.79	0.49
1:N:937:A:C2	1:N:1379:G:O6	2.65	0.49
1:N:256:U:H3	1:N:270:A:H61	1.61	0.49
1:N:354:G:N1	1:N:355:C:C2	2.80	0.49
1:N:771:G:C6	1:N:772:U:N3	2.80	0.49
1:N:894:G:C6	1:N:895:G:C6	3.00	0.49
1:N:1011:C:C2	1:N:1019:A:C2	3.00	0.49
1:N:1433:A:H1'	1:N:1468:A:C2	2.48	0.49
1:N:751:U:C5	1:N:752:G:C5	3.01	0.49
1:N:1056:U:H6	1:N:1056:U:H5''	1.78	0.49
1:N:859:G:C6	1:N:860:A:C5	3.01	0.49
1:N:1095:U:C4	1:N:1096:C:C4	3.01	0.49
1:N:668:G:C2	1:N:669:G:C4	3.00	0.49
1:N:772:U:H2'	1:N:773:G:C8	2.47	0.49
1:N:1021:A:C2	1:N:1022:A:C8	3.01	0.49
1:N:223:A:C2	1:N:224:U:C2	3.01	0.49
1:N:259:G:C4	1:N:260:G:C8	3.01	0.49
1:N:446:G:C2	1:N:489:C:C2	3.01	0.49
1:N:1023:U:H2'	1:N:1024:G:C8	2.48	0.49
1:N:1198:G:C6	1:N:1199:U:N3	2.81	0.49
1:N:1244:G:C6	1:N:1294:G:C6	3.01	0.49
1:N:64:G:N2	1:N:69:G:C5	2.80	0.49
1:N:1169:A:H2'	1:N:1170:A:C8	2.48	0.49
1:N:197:A:H2	1:N:198:G:C4	2.30	0.49
1:N:933:G:C2	1:N:1385:G:C2	3.00	0.49
1:N:507:C:H3'	1:N:508:U:H5''	1.95	0.48
1:N:509:A:C4	1:N:510:A:C2	3.00	0.48
1:N:1084:G:H5''	1:N:1099:G:H22	1.77	0.48
1:N:112:G:C2	1:N:330:C:C5	3.01	0.48
1:N:1255:G:C6	1:N:1279:G:C5	3.01	0.48
1:N:57:G:C6	1:N:58:C:C4	3.01	0.48
1:N:832:G:C5	1:N:855:U:N3	2.82	0.48
1:N:909:A:H2	1:N:1487:G:N2	2.09	0.48
1:N:942:G:C6	1:N:943:U:C4	3.01	0.48
1:N:413:G:H4'	1:N:428:G:N2	2.28	0.48
1:N:1228:C:H2'	1:N:1229:A:C8	2.49	0.48
1:N:465:A:C6	1:N:466:A:C6	3.01	0.48
1:N:751:U:H5	1:N:752:G:C5	2.30	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1255:G:H2'	1:N:1279:G:H1	1.77	0.48
1:N:1259:C:C4	1:N:1260:G:C5	3.01	0.48
1:N:579:A:C6	1:N:763:G:C6	3.01	0.48
1:N:1365:G:C6	1:N:1366:C:N3	2.82	0.48
1:N:174:A:C5	1:N:175:C:C5	3.01	0.48
1:N:68:G:C2	1:N:102:G:C2	3.02	0.48
1:N:1148:U:C5	1:N:1149:C:C4	3.02	0.48
1:N:226:G:C6	1:N:227:G:C6	3.02	0.48
1:N:475:C:H2'	1:N:476:U:C6	2.49	0.48
1:N:917:G:C6	1:N:918:A:C6	3.02	0.48
1:N:105:G:H21	1:N:380:G:H5'	1.78	0.48
1:N:668:G:C6	1:N:669:G:C5	3.02	0.48
1:N:635:A:C2	1:N:636:U:C2	3.02	0.48
1:N:581:G:C5	1:N:758:C:C5	3.02	0.48
1:N:949:A:N6	1:N:1232:U:H3	2.11	0.48
1:N:1144:G:C6	1:N:1145:A:C5	3.02	0.47
1:N:654:G:H21	1:N:755:G:C4'	2.27	0.47
1:N:1523:G:C6	1:N:1524:C:C4	3.02	0.47
1:N:761:G:C5	1:N:762:U:C5	3.02	0.47
1:N:109:A:C5	1:N:326:G:C5	3.03	0.47
1:N:1176:A:C6	1:N:1177:G:C6	3.03	0.47
1:N:425:G:C5	1:N:426:U:C4	3.02	0.47
1:N:486:U:H5''	1:N:486:U:C6	2.48	0.47
1:N:766:A:C8	1:N:814:A:C6	3.02	0.47
1:N:985:C:H2'	1:N:986:U:O4'	2.14	0.47
1:N:208:U:C2	1:N:209:U:C4	3.02	0.47
1:N:124:C:C2	1:N:238:A:C2	3.02	0.47
1:N:1127:G:H22	1:N:1145:A:H2	1.62	0.47
1:N:1287:A:C6	1:N:1288:A:C6	3.01	0.47
1:N:1358:U:H2'	1:N:1359:C:C5	2.49	0.47
1:N:198:G:H2'	1:N:199:A:C8	2.50	0.47
1:N:438:U:C5	1:N:494:G:C8	3.03	0.47
1:N:198:G:C6	1:N:220:G:C4	3.03	0.47
1:N:93:U:H5	1:N:94:G:C8	2.33	0.47
1:N:208:U:C2	1:N:209:U:C5	3.03	0.47
1:N:64:G:C4	1:N:99:C:C4	3.03	0.47
1:N:815:A:C2	1:N:1529:G:C5	3.02	0.47
1:N:954:G:C6	1:N:955:U:C4	3.03	0.47
1:N:142:G:H2'	1:N:196:A:H2	1.80	0.47
1:N:297:G:C2	1:N:301:G:C6	3.03	0.47
1:N:323:U:N3	1:N:324:G:C4	2.83	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:79:G:C6	1:N:80:A:C6	3.03	0.47
1:N:807:A:C6	1:N:808:C:C4	3.03	0.47
1:N:64:G:H2'	1:N:99:C:N4	2.29	0.47
1:N:1138:G:C6	1:N:1140:C:C2	3.03	0.47
1:N:141:G:H22	1:N:195:A:H2	1.63	0.47
1:N:509:A:C5	1:N:510:A:N1	2.83	0.47
1:N:540:G:C6	1:N:541:G:C5	3.03	0.47
1:N:737:C:H2'	1:N:738:C:C6	2.50	0.47
1:N:1296:C:C5	1:N:1297:G:C6	3.03	0.46
1:N:1438:G:C6	1:N:1464:U:N3	2.83	0.46
1:N:424:G:C6	1:N:425:G:C5	3.03	0.46
1:N:437:U:C4	1:N:438:U:C5	3.03	0.46
1:N:68:G:C4	1:N:69:G:H1'	2.50	0.46
1:N:838:G:C6	1:N:849:G:C5	3.04	0.46
1:N:139:A:C2	1:N:140:U:C2	3.03	0.46
1:N:585:G:C6	1:N:586:C:C4	3.03	0.46
1:N:471:U:H2'	1:N:472:U:C6	2.50	0.46
1:N:68:G:C5	1:N:69:G:H1'	2.50	0.46
1:N:1024:G:C6	1:N:1025:U:C5	3.04	0.46
1:N:1075:U:C4	1:N:1076:U:C4	3.04	0.46
1:N:1394:A:H3'	1:N:1395:C:H5'	1.97	0.46
1:N:707:U:H2'	1:N:708:C:C6	2.51	0.46
1:N:1012:A:C6	1:N:1013:G:C5	3.03	0.46
1:N:107:G:C5'	1:N:134:G:H21	2.28	0.46
1:N:1314:C:C2	1:N:1315:U:C5	3.03	0.46
1:N:179:A:C5	1:N:180:U:C4	3.04	0.46
1:N:1483:A:C8	1:N:1484:C:C6	3.03	0.46
1:N:81:A:OP2	1:N:83:C:C5	2.69	0.46
1:N:1357:A:C5	1:N:1358:U:N3	2.84	0.46
1:N:152:A:N6	1:N:170:U:C2	2.84	0.46
1:N:899:C:C4	1:N:900:A:C5	3.03	0.46
1:N:981:U:C2	1:N:982:U:C5	3.04	0.46
1:N:1309:G:C6	1:N:1310:G:C6	3.03	0.46
1:N:1500:A:C6	1:N:1501:C:C5	3.04	0.46
1:N:227:G:C4	1:N:228:A:C8	3.04	0.46
1:N:1138:G:C5	1:N:1140:C:C2	3.03	0.45
1:N:1223:C:H5''	1:N:1224:U:H3'	1.97	0.45
1:N:512:U:C6	1:N:512:U:H5''	2.51	0.45
1:N:548:G:H8	1:N:548:G:H5''	1.81	0.45
1:N:69:G:C6	1:N:70:U:C4	3.04	0.45
1:N:941:G:C6	1:N:1343:G:C6	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1479:C:H2'	1:N:1480:A:C8	2.50	0.45
1:N:584:G:C4	1:N:585:G:C8	3.04	0.45
1:N:604:G:C2	1:N:605:U:C2	3.05	0.45
1:N:655:A:C2	1:N:656:G:C4	3.05	0.45
1:N:830:G:N1	1:N:857:C:C2	2.84	0.45
1:N:120:A:C2	1:N:122:G:C6	3.05	0.45
1:N:424:G:C5	1:N:425:G:C5	3.04	0.45
1:N:635:A:C6	1:N:636:U:C4	3.05	0.45
1:N:1104:G:C6	1:N:1105:A:C6	3.04	0.45
1:N:1276:G:C5	1:N:1277:C:C4	3.05	0.45
1:N:216:U:H4'	1:N:464:U:H4'	1.98	0.45
1:N:1157:A:C4	1:N:1181:G:C6	3.04	0.45
1:N:1239:A:C5	1:N:1241:G:C2	3.04	0.45
1:N:1244:G:C2	1:N:1245:C:C2	3.04	0.45
1:N:197:A:C2	1:N:198:G:N9	2.85	0.45
1:N:524:G:C5	1:N:525:C:C4	3.05	0.45
1:N:802:A:H3'	1:N:803:G:C8	2.52	0.45
1:N:585:G:C6	1:N:586:C:N3	2.84	0.45
1:N:115:G:C6	1:N:289:G:C6	3.05	0.45
1:N:1416:G:C6	1:N:1417:G:C4	3.04	0.45
1:N:19:A:C2	1:N:917:G:C6	3.04	0.45
1:N:931:C:H2'	1:N:932:C:C6	2.52	0.45
1:N:1058:G:C4	1:N:1059:C:C6	3.05	0.45
1:N:1385:G:C6	1:N:1386:G:C6	3.05	0.45
1:N:1511:G:C6	1:N:1525:G:C6	3.04	0.45
1:N:98:A:C8	1:N:99:C:C5	3.05	0.45
1:N:1256:A:C2	1:N:1258:G:C6	3.05	0.45
1:N:1433:A:C6	1:N:1434:A:C6	3.05	0.45
1:N:39:G:C4	1:N:498:A:C2	3.05	0.45
1:N:584:G:H2'	1:N:585:G:O4'	2.17	0.45
1:N:908:A:H2'	1:N:909:A:C8	2.52	0.45
1:N:1123:U:H3	1:N:1150:A:H61	1.65	0.45
1:N:1239:A:C2	1:N:1241:G:C6	3.05	0.45
1:N:669:G:C6	1:N:670:G:C5	3.04	0.45
1:N:1158:C:C2	1:N:1160:G:C8	3.05	0.44
1:N:1295:U:C4	1:N:1296:C:C4	3.05	0.44
1:N:464:U:H2'	1:N:466:A:N7	2.32	0.44
1:N:872:A:C5	1:N:874:G:C8	3.05	0.44
1:N:519:C:H2'	1:N:520:A:C8	2.53	0.44
1:N:761:G:C6	1:N:762:U:C4	3.05	0.44
1:N:19:A:C6	1:N:917:G:O6	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1006:G:C6	1:N:1024:G:C2	3.06	0.44
1:N:139:A:C6	1:N:140:U:C4	3.05	0.44
1:N:143:A:H2'	1:N:143:A:N3	2.32	0.44
1:N:7:A:C8	1:N:298:A:H1'	2.53	0.44
1:N:232:G:C6	1:N:233:C:C4	3.05	0.44
1:N:411:A:C4	1:N:429:U:C5	3.05	0.44
1:N:1187:G:N3	1:N:1187:G:H2'	2.31	0.44
1:N:1296:C:C6	1:N:1297:G:C5	3.06	0.44
1:N:544:G:C6	1:N:545:C:C4	3.06	0.44
1:N:644:U:N3	1:N:645:G:C5	2.86	0.44
1:N:667:G:N1	1:N:668:G:C5	2.86	0.44
1:N:588:G:C6	1:N:753:A:C8	3.06	0.44
1:N:1072:G:C6	1:N:1073:U:N3	2.86	0.44
1:N:60:A:H5'	1:N:387:U:H4'	2.00	0.44
1:N:61:G:H21	1:N:379:C:H4'	1.83	0.44
1:N:653:U:H2'	1:N:654:G:H5'	1.99	0.44
1:N:78:A:C6	1:N:79:G:C6	3.05	0.44
1:N:92:U:H2'	1:N:93:U:C6	2.53	0.44
1:N:1400:C:H3'	1:N:1401:G:H5'	2.00	0.44
1:N:207:C:H2'	1:N:208:U:C5	2.52	0.44
1:N:855:U:C4	1:N:856:C:C4	3.05	0.44
1:N:908:A:C2	1:N:909:A:C5	3.05	0.44
1:N:59:A:H1'	1:N:354:G:C2	2.53	0.44
1:N:373:A:H2'	1:N:374:A:C8	2.53	0.44
1:N:444:G:C4	1:N:445:G:C8	3.05	0.44
1:N:1215:G:H2'	1:N:1216:A:H5'	2.00	0.44
1:N:1304:G:C6	1:N:1305:G:N1	2.85	0.44
1:N:1083:U:C4	1:N:1084:G:C2	3.06	0.43
1:N:534:U:H2'	1:N:535:A:H5'	2.00	0.43
1:N:604:G:C5	1:N:605:U:C4	3.06	0.43
1:N:678:U:H3	1:N:712:A:H61	1.66	0.43
1:N:1166:G:N2	1:N:1169:A:C8	2.86	0.43
1:N:1306:A:N6	1:N:1331:G:H1'	2.32	0.43
1:N:1484:C:C4	1:N:1485:U:N3	2.86	0.43
1:N:102:G:N2	1:N:171:A:C2	2.86	0.43
1:N:186:C:H2'	1:N:187:G:O4'	2.18	0.43
1:N:130:A:N1	1:N:233:C:O2	2.52	0.43
1:N:299:G:C5	1:N:300:A:C5	3.06	0.43
1:N:449:G:C6	1:N:450:G:O6	2.71	0.43
1:N:440:C:H42	1:N:496:A:N6	2.15	0.43
1:N:1068:G:C6	1:N:1069:C:C5	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1182:G:H4'	1:N:1184:G:H5''	1.99	0.43
1:N:1500:A:C5	1:N:1501:C:C5	3.07	0.43
1:N:301:G:N1	1:N:302:G:C4	2.86	0.43
1:N:489:C:C2	1:N:490:C:C5	3.07	0.43
1:N:775:G:C6	1:N:776:G:C5	3.07	0.43
1:N:673:A:N6	1:N:717:U:H3	2.15	0.43
1:N:872:A:N3	1:N:872:A:H2'	2.33	0.43
1:N:1058:G:C5	1:N:1059:C:C4	3.06	0.43
1:N:1468:A:C2	1:N:1469:C:C2	3.06	0.43
1:N:64:G:C2	1:N:67:C:C4	3.07	0.43
1:N:1056:U:C6	1:N:1056:U:H5''	2.54	0.43
1:N:1305:G:H22	1:N:1331:G:H2'	1.84	0.43
1:N:146:G:C2	1:N:177:G:C8	3.07	0.43
1:N:761:G:C6	1:N:762:U:N3	2.86	0.43
1:N:1138:G:C6	1:N:1140:C:N3	2.87	0.43
1:N:213:G:C8	1:N:214:C:C5	3.07	0.43
1:N:403:C:H41	1:N:547:A:H5''	1.83	0.43
1:N:1043:G:H2'	1:N:1044:A:C8	2.54	0.43
1:N:976:G:N2	1:N:1363:A:C2	2.86	0.43
1:N:981:U:C2	1:N:982:U:C6	3.06	0.43
1:N:1055:A:C6	1:N:1206:G:C5	3.07	0.43
1:N:1129:C:C2	1:N:1144:G:C2	3.07	0.43
1:N:356:A:H5''	1:N:366:A:H2'	2.01	0.43
1:N:411:A:H61	1:N:428:G:H1'	1.83	0.43
1:N:587:G:C2	1:N:755:G:C8	3.07	0.43
1:N:644:U:H2'	1:N:645:G:C8	2.53	0.43
1:N:673:A:C6	1:N:674:G:C6	3.06	0.43
1:N:109:A:C6	1:N:326:G:C6	3.07	0.43
1:N:413:G:C5	1:N:426:U:OP2	2.72	0.43
1:N:627:G:C6	1:N:628:G:C5	3.06	0.43
1:N:756:C:C4	1:N:757:U:C4	3.07	0.43
1:N:98:A:H2'	1:N:99:C:O4'	2.19	0.43
1:N:282:A:C2	1:N:283:U:H1'	2.54	0.42
1:N:532:A:H5'	1:N:533:A:H5'	2.01	0.42
1:N:126:G:N1	1:N:127:G:C5	2.87	0.42
1:N:1324:A:H4'	1:N:1362:A:H4'	2.01	0.42
1:N:240:G:C5	1:N:241:G:C8	3.07	0.42
1:N:405:U:H5''	1:N:495:A:C2	2.54	0.42
1:N:450:G:OP2	1:N:451:A:H3'	2.20	0.42
1:N:474:G:C5	1:N:475:C:C4	3.07	0.42
1:N:620:C:C5	1:N:621:A:C5	3.06	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:862:C:H1'	1:N:874:G:H5''	2.01	0.42
1:N:93:U:H3'	1:N:93:U:C6	2.55	0.42
1:N:1249:C:H3'	1:N:1250:A:H5''	2.01	0.42
1:N:236:A:C2	1:N:237:G:C4	3.08	0.42
1:N:39:G:C2	1:N:498:A:C2	3.07	0.42
1:N:474:G:C6	1:N:475:C:N3	2.87	0.42
1:N:39:G:N3	1:N:498:A:C2	2.88	0.42
1:N:503:C:O2	1:N:510:A:C2	2.72	0.42
1:N:626:G:H2'	1:N:627:G:C8	2.55	0.42
1:N:804:U:H5	1:N:805:C:C4	2.36	0.42
1:N:1136:C:C2	1:N:1138:G:O6	2.73	0.42
1:N:293:G:C5	1:N:294:U:C5	3.08	0.42
1:N:804:U:C6	1:N:805:C:C5	3.08	0.42
1:N:1129:C:N3	1:N:1144:G:C6	2.87	0.42
1:N:349:A:N1	1:N:350:G:C6	2.87	0.42
1:N:98:A:C5	1:N:99:C:C4	3.07	0.42
1:N:257:G:N1	1:N:258:G:C5	2.88	0.42
1:N:57:G:N1	1:N:356:A:C2	2.88	0.42
1:N:978:A:C5	1:N:1319:A:C2	3.08	0.42
1:N:1049:U:H4'	1:N:1050:G:H5'	2.01	0.42
1:N:1219:A:C6	1:N:1220:G:C5	3.07	0.42
1:N:1311:A:C2	1:N:1327:C:N3	2.88	0.42
1:N:25:C:H41	1:N:559:A:H61	1.68	0.42
1:N:932:C:H2'	1:N:933:G:C8	2.54	0.42
1:N:1241:G:C2	1:N:1242:G:C5	3.08	0.42
1:N:697:U:C4	1:N:698:G:C8	3.07	0.42
1:N:1184:G:C6	1:N:1185:G:C8	3.08	0.42
1:N:1446:A:C2	1:N:1447:A:C4	3.08	0.42
1:N:859:G:O6	1:N:860:A:C6	2.73	0.42
1:N:92:U:C4	1:N:93:U:C4	3.08	0.42
1:N:1349:A:C8	1:N:1350:A:C8	3.07	0.42
1:N:1495:U:N3	1:N:1496:C:C4	2.88	0.42
1:N:203:G:H1	1:N:206:C:N4	2.18	0.42
1:N:350:G:C4	1:N:351:G:N1	2.88	0.42
1:N:460:A:C2	1:N:462:G:C8	3.07	0.42
1:N:466:A:H2'	1:N:467:U:C2	2.54	0.42
1:N:1170:A:H2'	1:N:1171:A:O4'	2.20	0.41
1:N:1502:A:H5'	1:N:1504:G:N7	2.35	0.41
1:N:594:U:N3	1:N:595:A:C6	2.88	0.41
1:N:679:C:H2'	1:N:680:C:O4'	2.20	0.41
1:N:870:U:OP1	1:N:871:U:C5	2.72	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:998:C:H42	1:N:1042:A:N6	2.18	0.41
1:N:1058:G:C5	1:N:1059:C:C5	3.08	0.41
1:N:1254:A:N1	1:N:1255:G:C5	2.88	0.41
1:N:217:C:H4'	1:N:463:U:H3	1.85	0.41
1:N:595:A:C2	1:N:596:A:N6	2.88	0.41
1:N:1177:G:C5	1:N:1178:G:C5	3.07	0.41
1:N:44:A:H2'	1:N:45:G:C8	2.55	0.41
1:N:471:U:H2'	1:N:472:U:H6	1.86	0.41
1:N:65:A:C6	1:N:200:G:H1'	2.55	0.41
1:N:1074:G:C4	1:N:1102:A:C2	3.09	0.41
1:N:1074:G:C5	1:N:1075:U:C4	3.09	0.41
1:N:1484:C:H2'	1:N:1485:U:O4'	2.21	0.41
1:N:1295:U:H2'	1:N:1296:C:O4'	2.21	0.41
1:N:282:A:C4	1:N:283:U:C6	3.08	0.41
1:N:294:U:H3	1:N:303:A:H2	1.67	0.41
1:N:558:G:C8	1:N:559:A:H2'	2.56	0.41
1:N:581:G:H1'	1:N:761:G:H22	1.86	0.41
1:N:712:A:C6	1:N:713:G:C6	3.08	0.41
1:N:761:G:C4	1:N:762:U:C6	3.08	0.41
1:N:840:C:C1'	1:N:843:U:H3	2.33	0.41
1:N:840:C:H1'	1:N:843:U:H3	1.84	0.41
1:N:872:A:N7	1:N:874:G:C8	2.89	0.41
1:N:1158:C:C4	1:N:1160:G:C8	3.08	0.41
1:N:1239:A:H4'	1:N:1240:U:OP1	2.20	0.41
1:N:160:A:C2	1:N:346:G:C6	3.08	0.41
1:N:462:G:O6	1:N:468:A:H5''	2.20	0.41
1:N:39:G:H1'	1:N:497:G:H21	1.84	0.41
1:N:52:C:H3'	1:N:52:C:C6	2.56	0.41
1:N:833:G:C5	1:N:834:U:C5	3.09	0.41
1:N:1125:U:C5	1:N:1127:G:C5	3.09	0.41
1:N:1198:G:C6	1:N:1199:U:C4	3.09	0.41
1:N:171:A:C5	1:N:172:A:C6	3.09	0.41
1:N:349:A:C6	1:N:350:G:C6	3.09	0.41
1:N:384:G:C6	1:N:385:C:C4	3.08	0.41
1:N:481:G:OP1	1:N:482:A:C8	2.74	0.41
1:N:958:A:C5	1:N:959:A:C6	3.09	0.41
1:N:978:A:C4	1:N:1319:A:C2	3.09	0.41
1:N:1441:A:H62	1:N:1461:G:N2	2.19	0.41
1:N:409:U:C4	1:N:410:G:C6	3.09	0.41
1:N:613:C:H2'	1:N:614:C:O4'	2.21	0.41
1:N:676:A:H2'	1:N:677:U:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:757:U:H2'	1:N:758:C:C6	2.55	0.41
1:N:11:G:C6	1:N:12:U:N3	2.89	0.41
1:N:240:G:O6	1:N:241:G:C6	2.74	0.41
1:N:447:G:H3'	1:N:447:G:C8	2.56	0.41
1:N:953:G:C6	1:N:1229:A:C6	3.09	0.41
1:N:1020:G:C4	1:N:1021:A:C8	3.09	0.41
1:N:1038:C:H2'	1:N:1039:G:C8	2.56	0.41
1:N:132:C:H6	1:N:132:C:H3'	1.85	0.41
1:N:141:G:N1	1:N:223:A:C6	2.88	0.41
1:N:256:U:H3	1:N:270:A:N6	2.19	0.41
1:N:582:C:N3	1:N:760:G:C6	2.89	0.41
1:N:584:G:C6	1:N:585:G:C5	3.09	0.41
1:N:621:A:H2'	1:N:622:A:C8	2.56	0.41
1:N:655:A:C6	1:N:656:G:C5	3.09	0.41
1:N:730:G:H4'	1:N:816:A:O2'	2.21	0.41
1:N:585:G:N1	1:N:757:U:C2	2.89	0.41
1:N:811:C:H2'	1:N:812:G:C5'	2.45	0.41
1:N:1041:G:C6	1:N:1042:A:C6	3.09	0.41
1:N:1433:A:C8	1:N:1468:A:C6	3.09	0.41
1:N:325:A:N7	1:N:326:G:C5	2.89	0.41
1:N:938:A:C6	1:N:939:G:C5	3.09	0.41
1:N:941:G:C6	1:N:942:G:C5	3.08	0.41
1:N:1100:C:H4'	1:N:1102:A:H4'	2.03	0.40
1:N:11:G:C6	1:N:12:U:C4	3.09	0.40
1:N:1365:G:C5	1:N:1366:C:C4	3.10	0.40
1:N:301:G:C6	1:N:302:G:C6	3.09	0.40
1:N:87:C:C5	1:N:88:U:C5	3.09	0.40
1:N:1042:A:C2	1:N:1043:G:N1	2.89	0.40
1:N:112:G:H22	1:N:315:A:H2	1.69	0.40
1:N:120:A:C2	1:N:122:G:N1	2.88	0.40
1:N:150:U:C5	1:N:170:U:C5	3.09	0.40
1:N:320:A:H2'	1:N:321:A:C8	2.57	0.40
1:N:525:C:H2'	1:N:526:C:C6	2.56	0.40
1:N:794:A:H2'	1:N:795:C:H5'	2.02	0.40
1:N:1366:C:C4	1:N:1367:C:C4	3.10	0.40
1:N:1385:G:C6	1:N:1386:G:C5	3.10	0.40
1:N:487:A:C2	1:N:488:C:H1'	2.56	0.40
1:N:589:U:H2'	1:N:590:U:C6	2.56	0.40
1:N:595:A:H4'	1:N:596:A:H5'	2.03	0.40
1:N:21:G:H1'	1:N:914:A:H61	1.86	0.40
1:N:966:G:H2'	1:N:967:C:H5'	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:347:G:C6	1:N:348:G:C4	3.09	0.40
1:N:465:A:H2'	1:N:466:A:C8	2.56	0.40
1:N:64:G:N2	1:N:69:G:C6	2.90	0.40
1:N:1259:C:N3	1:N:1260:G:C4	2.90	0.40
1:N:243:A:C2	1:N:282:A:N6	2.90	0.40
1:N:953:G:C6	1:N:954:G:C4	3.10	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%)	447 (29%)	150 (9%)

All (447) 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
1	N	31	G
1	N	32	A

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Mol	Chain	Res	Type
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	64	G
1	N	65	A
1	N	66	A
1	N	70	U
1	N	71	A
1	N	72	A
1	N	73	C
1	N	74	A
1	N	75	G
1	N	76	G
1	N	77	A
1	N	79	G
1	N	81	A
1	N	82	G
1	N	83	C
1	N	85	U
1	N	86	G
1	N	87	C
1	N	88	U
1	N	89	U
1	N	90	C
1	N	91	U
1	N	92	U
1	N	94	G
1	N	95	C
1	N	97	G
1	N	107	G
1	N	108	G
1	N	109	A
1	N	110	C
1	N	115	G
1	N	116	A
1	N	119	A

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Mol	Chain	Res	Type
1	N	120	A
1	N	127	G
1	N	130	A
1	N	131	A
1	N	132	C
1	N	134	G
1	N	135	C
1	N	138	G
1	N	141	G
1	N	143	A
1	N	159	G
1	N	160	A
1	N	161	A
1	N	163	C
1	N	164	G
1	N	173	U
1	N	174	A
1	N	177	G
1	N	181	A
1	N	182	A
1	N	183	C
1	N	195	A
1	N	197	A
1	N	198	G
1	N	199	A
1	N	202	G
1	N	205	A
1	N	207	C
1	N	208	U
1	N	209	U
1	N	210	C
1	N	211	G
1	N	212	G
1	N	214	C
1	N	219	U
1	N	232	G
1	N	240	G
1	N	243	A
1	N	244	U
1	N	245	U
1	N	247	G
1	N	251	G

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Mol	Chain	Res	Type
1	N	252	U
1	N	258	G
1	N	266	G
1	N	267	C
1	N	268	U
1	N	273	U
1	N	274	A
1	N	275	G
1	N	280	C
1	N	285	C
1	N	289	G
1	N	305	G
1	N	306	A
1	N	308	C
1	N	316	C
1	N	321	A
1	N	328	C
1	N	329	A
1	N	330	C
1	N	331	G
1	N	332	G
1	N	344	A
1	N	345	C
1	N	346	G
1	N	347	G
1	N	351	G
1	N	352	C
1	N	353	A
1	N	354	G
1	N	363	A
1	N	366	A
1	N	367	U
1	N	368	U
1	N	373	A
1	N	374	A
1	N	376	G
1	N	384	G
1	N	389	A
1	N	390	U
1	N	392	C
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	422	C
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	484	G
1	N	485	U
1	N	486	U
1	N	496	A
1	N	497	G
1	N	498	A
1	N	499	A
1	N	500	G
1	N	501	C
1	N	508	U
1	N	509	A
1	N	511	C
1	N	512	U
1	N	518	C
1	N	523	A
1	N	527	G
1	N	531	U

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Mol	Chain	Res	Type
1	N	532	A
1	N	533	A
1	N	534	U
1	N	535	A
1	N	536	C
1	N	548	G
1	N	556	C
1	N	559	A
1	N	560	A
1	N	562	U
1	N	563	A
1	N	564	C
1	N	566	G
1	N	567	G
1	N	572	A
1	N	573	A
1	N	574	A
1	N	575	G
1	N	576	C
1	N	577	G
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	666	G
1	N	702	A
1	N	703	G
1	N	718	A
1	N	719	C
1	N	720	C
1	N	721	G
1	N	722	G

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Mol	Chain	Res	Type
1	N	723	U
1	N	724	G
1	N	731	G
1	N	733	G
1	N	748	G
1	N	755	G
1	N	767	A
1	N	776	G
1	N	777	A
1	N	787	A
1	N	788	U
1	N	792	A
1	N	793	U
1	N	794	A
1	N	802	A
1	N	812	G
1	N	813	U
1	N	815	A
1	N	816	A
1	N	817	C
1	N	818	G
1	N	819	A
1	N	820	U
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	870	U
1	N	871	U
1	N	874	G
1	N	884	U
1	N	885	G
1	N	889	A
1	N	890	G
1	N	914	A
1	N	926	G
1	N	927	G

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Mol	Chain	Res	Type
1	N	932	C
1	N	934	C
1	N	935	A
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	982	U
1	N	983	A
1	N	989	U
1	N	992	U
1	N	993	G
1	N	1003	G
1	N	1004	A
1	N	1008	U
1	N	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	1050	G
1	N	1053	G
1	N	1054	C
1	N	1063	C
1	N	1064	G
1	N	1065	U
1	N	1066	C
1	N	1085	U
1	N	1086	U

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Mol	Chain	Res	Type
1	N	1087	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	1113	C
1	N	1124	G
1	N	1125	U
1	N	1126	U
1	N	1127	G
1	N	1129	C
1	N	1130	A
1	N	1133	G
1	N	1135	U
1	N	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
1	N	1161	C
1	N	1168	U
1	N	1169	A
1	N	1181	G
1	N	1182	G
1	N	1188	A
1	N	1189	U
1	N	1190	G
1	N	1191	A

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Mol	Chain	Res	Type
1	N	1192	C
1	N	1193	G
1	N	1196	A
1	N	1197	A
1	N	1198	G
1	N	1200	C
1	N	1201	A
1	N	1202	U
1	N	1211	U
1	N	1213	A
1	N	1223	C
1	N	1224	U
1	N	1225	A
1	N	1226	C
1	N	1227	A
1	N	1228	C
1	N	1229	A
1	N	1238	A
1	N	1239	A
1	N	1240	U
1	N	1241	G
1	N	1250	A
1	N	1252	A
1	N	1253	G
1	N	1256	A
1	N	1257	A
1	N	1258	G
1	N	1275	A
1	N	1278	G
1	N	1279	G
1	N	1280	A
1	N	1281	C
1	N	1282	C
1	N	1283	U
1	N	1286	U
1	N	1287	A
1	N	1293	C
1	N	1297	G
1	N	1298	U
1	N	1299	A
1	N	1303	C
1	N	1305	G

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Mol	Chain	Res	Type
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	1348	U
1	N	1353	G
1	N	1358	U
1	N	1359	C
1	N	1360	A
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	1433	A
1	N	1441	A
1	N	1446	A
1	N	1448	C
1	N	1452	C
1	N	1453	G
1	N	1454	G
1	N	1456	A
1	N	1457	G
1	N	1469	C
1	N	1470	U
1	N	1491	G
1	N	1492	A
1	N	1493	A

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Mol	Chain	Res	Type
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	1529	G
1	N	1530	G
1	N	1531	A
1	N	1532	U
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	49	U
1	N	51	A
1	N	60	A
1	N	65	A
1	N	70	U
1	N	71	A
1	N	73	C
1	N	75	G
1	N	81	A
1	N	87	C
1	N	94	G
1	N	95	C
1	N	109	A
1	N	115	G
1	N	119	A
1	N	120	A
1	N	129	A
1	N	130	A
1	N	131	A

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Mol	Chain	Res	Type
1	N	140	U
1	N	159	G
1	N	167	A
1	N	168	G
1	N	181	A
1	N	197	A
1	N	198	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	275	G
1	N	305	G
1	N	327	A
1	N	328	C
1	N	331	G
1	N	344	A
1	N	346	G
1	N	351	G
1	N	352	C
1	N	366	A
1	N	372	C
1	N	412	A
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	480	U
1	N	481	G
1	N	484	G
1	N	485	U
1	N	495	A
1	N	496	A
1	N	499	A
1	N	500	G
1	N	508	U
1	N	511	C

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Mol	Chain	Res	Type
1	N	531	U
1	N	532	A
1	N	535	A
1	N	547	A
1	N	559	A
1	N	560	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	717	U
1	N	721	G
1	N	723	U
1	N	733	G
1	N	754	C
1	N	793	U
1	N	817	C
1	N	843	U
1	N	865	A
1	N	870	U
1	N	884	U
1	N	913	A
1	N	934	C
1	N	941	G
1	N	974	A
1	N	982	U
1	N	991	U
1	N	1020	G
1	N	1036	A
1	N	1041	G
1	N	1042	A
1	N	1046	A
1	N	1049	U
1	N	1053	G
1	N	1063	C
1	N	1064	G
1	N	1066	C
1	N	1093	A
1	N	1094	G
1	N	1101	A

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Mol	Chain	Res	Type
1	N	1129	C
1	N	1136	C
1	N	1151	A
1	N	1160	G
1	N	1168	U
1	N	1185	G
1	N	1191	A
1	N	1196	A
1	N	1197	A
1	N	1201	A
1	N	1214	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	1335	U
1	N	1336	C
1	N	1337	G
1	N	1345	U
1	N	1348	U
1	N	1358	U
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1380	U
1	N	1396	A
1	N	1399	C
1	N	1429	A
1	N	1432	G
1	N	1451	U
1	N	1498	U
1	N	1502	A
1	N	1506	U
1	N	1513	A
1	N	1530	G
1	N	1532	U

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Mol	Chain	Res	Type
1	N	1533	C

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.