



Full wwPDB EM Validation Report (i)

Mar 13, 2024 – 12:29 PM JST

PDB ID : 3J29
EMDB ID : EMD-5501
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 : 14.00 Å(reported)
Based on initial model : 3OFA

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

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

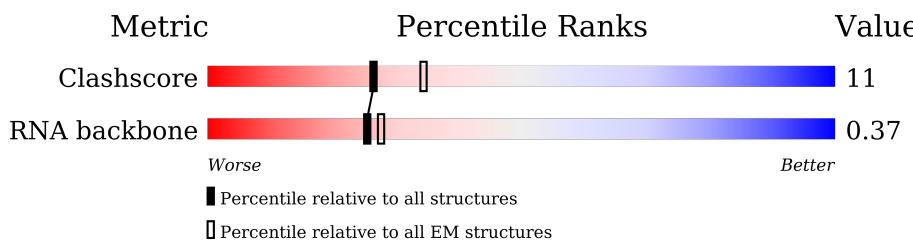
EMDB validation analysis : 0.0.1.dev70
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

1 Overall quality at a glance

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

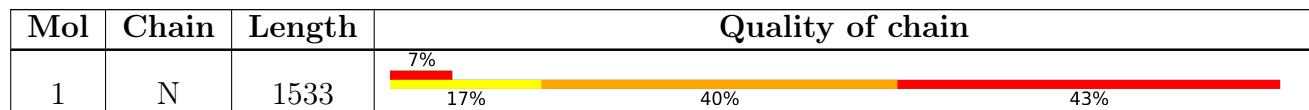
The reported resolution of this entry is 14.00 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.



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.

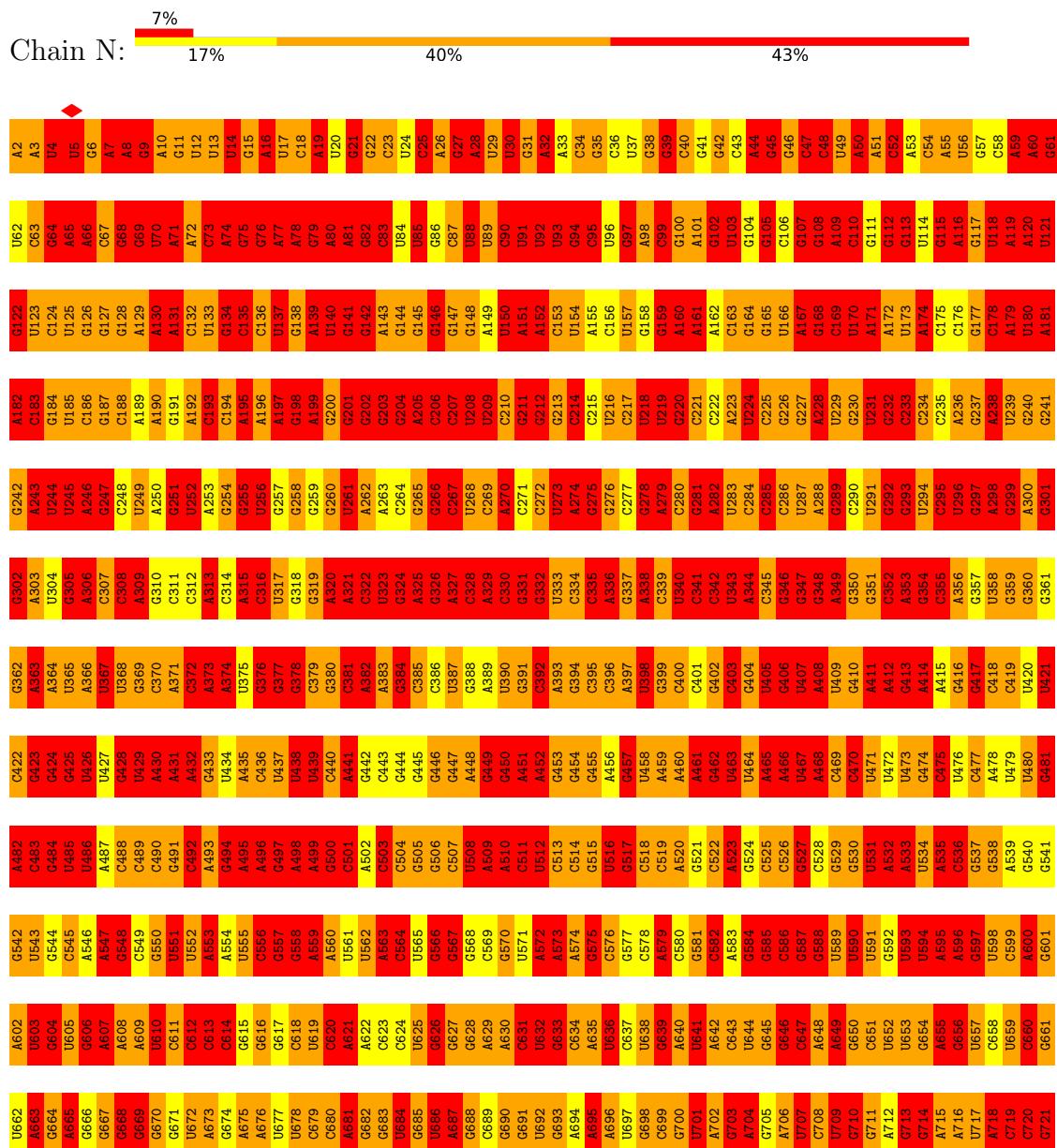
- Molecule 1 is a RNA chain called 16S rRNA.

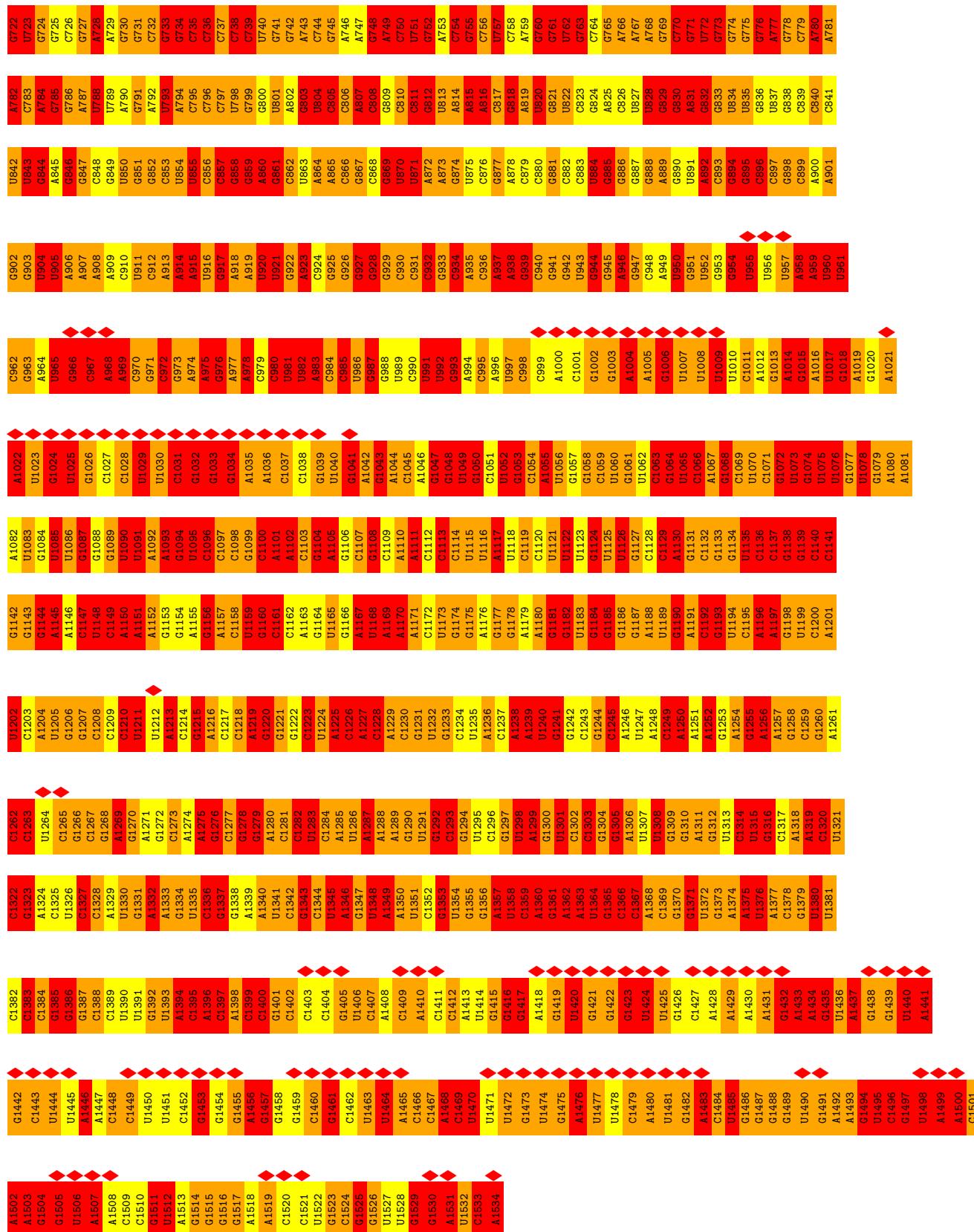
Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	P		
1	N	1533	49446	14671	16554	6036	10653	1532	0	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: 16S rRNA





4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	26670	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Weiner filter	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1300	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	80000	Depositor
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum map value	3.844	Depositor
Minimum map value	-6.202	Depositor
Average map value	-3.839	Depositor
Map value standard deviation	0.520	Depositor
Recommended contour level	-2.8	Depositor
Map size (\AA)	345.0, 345.0, 345.0	wwPDB
Map dimensions	125, 125, 125	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	2.76, 2.76, 2.76	Depositor

5 Model quality i

5.1 Standard geometry i

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	N	3.49	5233/36831 (14.2%)	3.97	9457/57458 (16.5%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	N	0	984

All (5233) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	331	G	N7-C5	-21.91	1.26	1.39
1	N	77	A	N7-C5	-19.35	1.27	1.39
1	N	885	G	N7-C5	-19.01	1.27	1.39
1	N	406	G	C6-N1	18.40	1.52	1.39
1	N	560	A	C6-N6	17.58	1.48	1.33
1	N	68	G	N7-C5	-17.57	1.28	1.39
1	N	1178	G	C6-N1	17.17	1.51	1.39
1	N	736	C	N3-C4	16.97	1.45	1.33
1	N	297	G	N7-C5	-16.40	1.29	1.39
1	N	171	A	N3-C4	-16.38	1.25	1.34
1	N	864	A	N7-C5	-15.89	1.29	1.39
1	N	1476	A	C6-N6	15.85	1.46	1.33
1	N	172	A	N7-C5	-15.81	1.29	1.39
1	N	812	G	N7-C5	-15.75	1.29	1.39
1	N	587	G	N7-C5	-15.73	1.29	1.39
1	N	597	G	C8-N7	-15.67	1.21	1.30
1	N	389	A	N7-C5	-15.66	1.29	1.39
1	N	596	A	N7-C5	-15.62	1.29	1.39
1	N	253	A	N7-C5	-15.57	1.29	1.39
1	N	715	A	C6-N6	15.47	1.46	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1375	A	N7-C5	-15.46	1.29	1.39
1	N	1271	A	N3-C4	-15.42	1.25	1.34
1	N	1064	G	C6-N1	15.39	1.50	1.39
1	N	698	G	N9-C8	15.24	1.48	1.37
1	N	21	G	N9-C4	15.20	1.50	1.38
1	N	1255	G	C8-N7	-15.18	1.21	1.30
1	N	1400	C	N3-C4	15.08	1.44	1.33
1	N	255	G	C2-N3	15.06	1.44	1.32
1	N	95	C	N1-C6	14.91	1.46	1.37
1	N	755	G	N7-C5	-14.88	1.30	1.39
1	N	951	G	N7-C5	-14.71	1.30	1.39
1	N	1481	U	C2-N3	14.69	1.48	1.37
1	N	143	A	N7-C5	-14.61	1.30	1.39
1	N	1257	A	N7-C5	-14.52	1.30	1.39
1	N	1161	C	N1-C6	14.47	1.45	1.37
1	N	515	G	C8-N7	-14.40	1.22	1.30
1	N	1340	A	N7-C5	-14.29	1.30	1.39
1	N	241	G	N1-C2	14.28	1.49	1.37
1	N	988	G	N9-C8	14.28	1.47	1.37
1	N	712	A	N3-C4	14.14	1.43	1.34
1	N	130	A	N9-C4	-14.13	1.29	1.37
1	N	235	C	N1-C6	14.12	1.45	1.37
1	N	1342	C	N3-C4	14.08	1.43	1.33
1	N	1068	G	N7-C5	-14.07	1.30	1.39
1	N	1181	G	N7-C5	-14.07	1.30	1.39
1	N	1286	U	C2-N3	14.06	1.47	1.37
1	N	982	U	C2-N3	13.96	1.47	1.37
1	N	152	A	N9-C4	-13.86	1.29	1.37
1	N	1222	G	C6-N1	13.84	1.49	1.39
1	N	1146	A	N3-C4	13.79	1.43	1.34
1	N	1129	C	N3-C4	13.69	1.43	1.33
1	N	1333	A	N9-C4	13.66	1.46	1.37
1	N	1128	C	N1-C6	13.65	1.45	1.37
1	N	1456	A	N7-C5	-13.64	1.31	1.39
1	N	253	A	N3-C4	-13.58	1.26	1.34
1	N	258	G	N9-C4	-13.57	1.27	1.38
1	N	322	C	N1-C6	13.53	1.45	1.37
1	N	1352	C	C4-N4	13.52	1.46	1.33
1	N	482	A	N7-C5	-13.43	1.31	1.39
1	N	784	A	N7-C5	-13.31	1.31	1.39
1	N	151	A	N7-C5	-13.30	1.31	1.39
1	N	1074	G	N1-C2	13.25	1.48	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1164	G	N1-C2	13.23	1.48	1.37
1	N	191	G	C6-N1	13.15	1.48	1.39
1	N	769	G	C2-N3	13.15	1.43	1.32
1	N	502	A	N7-C5	-13.12	1.31	1.39
1	N	792	A	C6-N6	13.10	1.44	1.33
1	N	988	G	C2-N3	13.09	1.43	1.32
1	N	1371	G	N7-C5	-13.04	1.31	1.39
1	N	689	C	N3-C4	13.04	1.43	1.33
1	N	425	G	P-O5'	-13.00	1.46	1.59
1	N	1504	G	C8-N7	-12.99	1.23	1.30
1	N	577	G	C6-N1	12.92	1.48	1.39
1	N	474	G	N9-C8	12.84	1.46	1.37
1	N	903	G	N1-C2	12.82	1.48	1.37
1	N	918	A	N7-C5	-12.82	1.31	1.39
1	N	1153	G	N1-C2	12.82	1.48	1.37
1	N	782	A	C8-N7	-12.79	1.22	1.31
1	N	275	G	C2-N3	12.78	1.43	1.32
1	N	234	C	N1-C6	12.77	1.44	1.37
1	N	778	G	N1-C2	12.75	1.48	1.37
1	N	1197	A	C6-N6	12.75	1.44	1.33
1	N	689	C	N1-C6	12.74	1.44	1.37
1	N	1036	A	C6-N6	12.71	1.44	1.33
1	N	1231	G	N7-C5	-12.69	1.31	1.39
1	N	1035	A	N3-C4	12.64	1.42	1.34
1	N	1384	C	C4-N4	12.63	1.45	1.33
1	N	1421	G	C2-N2	12.62	1.47	1.34
1	N	718	A	N9-C4	12.62	1.45	1.37
1	N	1192	C	N1-C6	12.61	1.44	1.37
1	N	1334	G	N7-C5	-12.60	1.31	1.39
1	N	661	G	C2-N3	12.59	1.42	1.32
1	N	497	G	C5-C4	-12.57	1.29	1.38
1	N	1420	U	C2-N3	12.53	1.46	1.37
1	N	1208	C	N1-C6	12.51	1.44	1.37
1	N	415	A	C6-N6	12.51	1.44	1.33
1	N	45	G	N3-C4	12.42	1.44	1.35
1	N	919	A	C6-N1	12.41	1.44	1.35
1	N	52	C	N1-C6	12.41	1.44	1.37
1	N	1084	G	C2-N3	12.39	1.42	1.32
1	N	617	G	N7-C5	12.39	1.46	1.39
1	N	685	G	C2-N3	12.30	1.42	1.32
1	N	1142	G	C2-N3	12.29	1.42	1.32
1	N	1023	U	C2-N3	12.29	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	402	G	N7-C5	-12.28	1.31	1.39
1	N	769	G	C6-N1	12.28	1.48	1.39
1	N	651	C	N1-C6	12.25	1.44	1.37
1	N	1248	A	C5-C4	12.25	1.47	1.38
1	N	86	G	C2-N3	12.22	1.42	1.32
1	N	615	G	N1-C2	12.21	1.47	1.37
1	N	1151	A	N7-C5	-12.21	1.31	1.39
1	N	871	U	C2-N3	12.21	1.46	1.37
1	N	144	G	C6-N1	12.17	1.48	1.39
1	N	1451	U	C2-N3	12.14	1.46	1.37
1	N	768	A	N7-C5	-12.12	1.31	1.39
1	N	1488	G	C2-N3	-12.11	1.23	1.32
1	N	165	G	C6-N1	12.11	1.48	1.39
1	N	1067	A	C6-N6	12.10	1.43	1.33
1	N	39	G	N7-C5	-12.08	1.32	1.39
1	N	242	G	C6-N1	12.08	1.48	1.39
1	N	401	C	N3-C4	12.06	1.42	1.33
1	N	1047	G	N3-C4	-12.06	1.27	1.35
1	N	690	G	N3-C4	-12.05	1.27	1.35
1	N	728	A	C6-N1	12.04	1.44	1.35
1	N	181	A	N7-C5	-12.03	1.32	1.39
1	N	1016	A	N7-C5	-11.99	1.32	1.39
1	N	1076	U	N3-C4	11.98	1.49	1.38
1	N	553	A	N7-C5	-11.97	1.32	1.39
1	N	1311	A	C6-N6	11.97	1.43	1.33
1	N	97	G	N3-C4	11.95	1.43	1.35
1	N	1396	A	N7-C5	-11.94	1.32	1.39
1	N	11	G	C6-N1	11.92	1.47	1.39
1	N	1519	A	C6-N1	11.92	1.43	1.35
1	N	193	C	N3-C4	11.88	1.42	1.33
1	N	865	A	N9-C4	11.88	1.45	1.37
1	N	618	C	N1-C6	11.87	1.44	1.37
1	N	1154	G	N9-C8	11.85	1.46	1.37
1	N	734	G	N9-C8	11.85	1.46	1.37
1	N	933	G	N7-C5	-11.84	1.32	1.39
1	N	172	A	O3'-P	-11.84	1.47	1.61
1	N	310	G	C2-N3	11.83	1.42	1.32
1	N	1119	C	C2-N3	11.83	1.45	1.35
1	N	1034	G	N1-C2	11.82	1.47	1.37
1	N	491	G	N7-C5	-11.81	1.32	1.39
1	N	675	A	N7-C5	-11.80	1.32	1.39
1	N	361	G	C6-N1	11.79	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	336	A	C6-N6	11.78	1.43	1.33
1	N	487	A	N7-C5	-11.77	1.32	1.39
1	N	600	A	C6-N6	11.76	1.43	1.33
1	N	1332	A	C8-N7	11.75	1.39	1.31
1	N	417	G	C6-N1	11.74	1.47	1.39
1	N	882	C	N1-C6	11.74	1.44	1.37
1	N	968	A	N7-C5	-11.73	1.32	1.39
1	N	1042	A	C8-N7	-11.73	1.23	1.31
1	N	319	G	C8-N7	-11.73	1.24	1.30
1	N	711	G	C6-N1	11.72	1.47	1.39
1	N	1365	G	C5-C4	11.71	1.46	1.38
1	N	710	G	C5-C4	11.71	1.46	1.38
1	N	1012	A	N7-C5	-11.70	1.32	1.39
1	N	71	A	C6-N1	11.67	1.43	1.35
1	N	1118	U	C2-N3	11.65	1.46	1.37
1	N	722	G	N1-C2	11.64	1.47	1.37
1	N	1282	C	P-O5'	-11.64	1.48	1.59
1	N	1242	G	C6-N1	11.64	1.47	1.39
1	N	1121	U	C2-N3	11.63	1.45	1.37
1	N	566	G	C6-N1	11.62	1.47	1.39
1	N	1399	C	N3-C4	11.62	1.42	1.33
1	N	839	C	C2-N3	11.60	1.45	1.35
1	N	968	A	N3-C4	-11.60	1.27	1.34
1	N	812	G	C5-C4	11.59	1.46	1.38
1	N	831	A	N7-C5	-11.59	1.32	1.39
1	N	134	G	C6-N1	11.59	1.47	1.39
1	N	1154	G	N1-C2	11.58	1.47	1.37
1	N	265	G	C6-N1	11.57	1.47	1.39
1	N	803	G	C6-N1	11.57	1.47	1.39
1	N	1494	G	N7-C5	-11.56	1.32	1.39
1	N	387	U	C2-N3	11.55	1.45	1.37
1	N	1005	A	N7-C5	-11.55	1.32	1.39
1	N	138	G	N3-C4	-11.52	1.27	1.35
1	N	1334	G	C2-N3	11.52	1.42	1.32
1	N	281	G	C2-N3	11.50	1.42	1.32
1	N	1249	C	C4-N4	11.50	1.44	1.33
1	N	765	G	O3'-P	-11.49	1.47	1.61
1	N	1081	A	C6-N1	11.49	1.43	1.35
1	N	126	G	C2-N3	11.48	1.42	1.32
1	N	147	G	C2-N2	11.46	1.46	1.34
1	N	1504	G	N1-C2	11.45	1.47	1.37
1	N	1529	G	C8-N7	11.44	1.37	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	919	A	N7-C5	-11.43	1.32	1.39
1	N	720	C	N3-C4	11.42	1.42	1.33
1	N	1475	G	C6-N1	11.41	1.47	1.39
1	N	213	G	C5-C6	-11.40	1.30	1.42
1	N	383	A	C6-N1	11.39	1.43	1.35
1	N	945	G	C6-N1	11.39	1.47	1.39
1	N	1204	A	N7-C5	-11.38	1.32	1.39
1	N	1492	A	N3-C4	11.38	1.41	1.34
1	N	814	A	N7-C5	-11.38	1.32	1.39
1	N	68	G	N9-C8	-11.37	1.29	1.37
1	N	157	U	C2-N3	11.37	1.45	1.37
1	N	906	A	C6-N6	11.36	1.43	1.33
1	N	1279	G	N1-C2	11.36	1.46	1.37
1	N	960	U	C2-N3	11.36	1.45	1.37
1	N	920	U	C2-N3	11.35	1.45	1.37
1	N	1059	C	N1-C6	11.34	1.44	1.37
1	N	1019	A	N9-C4	-11.34	1.31	1.37
1	N	268	U	C2-N3	11.32	1.45	1.37
1	N	1304	G	N7-C5	-11.32	1.32	1.39
1	N	505	G	N3-C4	11.30	1.43	1.35
1	N	1049	U	N1-C2	11.30	1.48	1.38
1	N	453	G	C2-N3	11.28	1.41	1.32
1	N	945	G	P-O5'	-11.28	1.48	1.59
1	N	1145	A	N7-C5	-11.28	1.32	1.39
1	N	505	G	C2-N2	11.26	1.45	1.34
1	N	66	A	C6-N1	11.25	1.43	1.35
1	N	1196	A	N7-C5	-11.25	1.32	1.39
1	N	1264	U	P-O5'	-11.25	1.48	1.59
1	N	877	G	N7-C5	-11.24	1.32	1.39
1	N	607	A	C6-N1	11.24	1.43	1.35
1	N	424	G	C2-N3	11.22	1.41	1.32
1	N	901	A	N9-C4	11.21	1.44	1.37
1	N	324	G	C6-N1	11.15	1.47	1.39
1	N	668	G	C5-C4	11.15	1.46	1.38
1	N	101	A	C5-C4	11.15	1.46	1.38
1	N	1288	A	C6-N1	-11.13	1.27	1.35
1	N	468	A	C3'-C2'	11.12	1.65	1.52
1	N	773	G	C2-N3	11.12	1.41	1.32
1	N	248	C	N3-C4	11.11	1.41	1.33
1	N	74	A	N7-C5	-11.09	1.32	1.39
1	N	55	A	C6-N1	11.09	1.43	1.35
1	N	67	C	P-O5'	-11.07	1.48	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	937	A	N7-C5	-11.06	1.32	1.39
1	N	882	C	N3-C4	11.05	1.41	1.33
1	N	963	G	C2-N3	11.04	1.41	1.32
1	N	264	C	C2'-C1'	-11.02	1.41	1.53
1	N	1504	G	N7-C5	-11.01	1.32	1.39
1	N	1208	C	N3-C4	11.00	1.41	1.33
1	N	769	G	N7-C5	-11.00	1.32	1.39
1	N	925	G	C6-N1	10.99	1.47	1.39
1	N	857	C	N1-C6	10.98	1.43	1.37
1	N	1093	A	N7-C5	-10.98	1.32	1.39
1	N	308	C	N1-C6	10.98	1.43	1.37
1	N	639	G	N7-C5	-10.96	1.32	1.39
1	N	1405	G	C2-N2	10.96	1.45	1.34
1	N	1491	G	C5'-C4'	10.93	1.64	1.51
1	N	799	G	C8-N7	-10.92	1.24	1.30
1	N	766	A	N9-C4	-10.91	1.31	1.37
1	N	898	G	C3'-C2'	-10.91	1.40	1.52
1	N	1458	G	C5-C4	10.90	1.46	1.38
1	N	533	A	C2'-C1'	-10.89	1.41	1.53
1	N	1044	A	N9-C4	10.89	1.44	1.37
1	N	1084	G	C5-C6	-10.89	1.31	1.42
1	N	487	A	C6-N1	10.89	1.43	1.35
1	N	128	G	N1-C2	10.88	1.46	1.37
1	N	607	A	C8-N7	-10.88	1.24	1.31
1	N	906	A	N7-C5	-10.88	1.32	1.39
1	N	194	C	C4-C5	10.87	1.51	1.43
1	N	895	G	N9-C4	-10.86	1.29	1.38
1	N	733	G	C2-N3	10.86	1.41	1.32
1	N	1480	A	C6-N6	10.85	1.42	1.33
1	N	932	C	C2-N3	10.84	1.44	1.35
1	N	996	A	N7-C5	-10.83	1.32	1.39
1	N	342	C	N3-C4	10.82	1.41	1.33
1	N	523	A	C6-N6	10.82	1.42	1.33
1	N	804	U	C2-N3	10.81	1.45	1.37
1	N	815	A	N7-C5	-10.81	1.32	1.39
1	N	317	U	N3-C4	10.80	1.48	1.38
1	N	613	C	N3-C4	10.80	1.41	1.33
1	N	1053	G	C2'-C1'	-10.80	1.41	1.53
1	N	613	C	N1-C6	10.80	1.43	1.37
1	N	79	G	C5'-C4'	10.80	1.64	1.51
1	N	595	A	N7-C5	-10.79	1.32	1.39
1	N	1446	A	N3-C4	-10.78	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	351	G	N7-C5	10.76	1.45	1.39
1	N	767	A	N9-C4	-10.76	1.31	1.37
1	N	201	G	N3-C4	-10.74	1.27	1.35
1	N	1269	A	N7-C5	-10.74	1.32	1.39
1	N	700	G	C2-N3	10.74	1.41	1.32
1	N	442	G	N7-C5	-10.73	1.32	1.39
1	N	737	C	N3-C4	10.73	1.41	1.33
1	N	521	G	C6-N1	10.73	1.47	1.39
1	N	307	C	N1-C6	10.72	1.43	1.37
1	N	117	G	C2-N3	10.72	1.41	1.32
1	N	469	C	C2-N3	10.71	1.44	1.35
1	N	785	G	N7-C5	-10.72	1.32	1.39
1	N	505	G	C6-N1	10.71	1.47	1.39
1	N	708	C	P-O5'	-10.71	1.49	1.59
1	N	1163	A	C5-C4	10.71	1.46	1.38
1	N	1175	G	C8-N7	-10.70	1.24	1.30
1	N	1314	C	N3-C4	10.69	1.41	1.33
1	N	821	G	C8-N7	10.69	1.37	1.30
1	N	1140	C	N3-C4	10.69	1.41	1.33
1	N	1339	A	C6-N1	10.69	1.43	1.35
1	N	197	A	C6-N1	10.68	1.43	1.35
1	N	384	G	N9-C4	-10.67	1.29	1.38
1	N	687	A	N3-C4	-10.67	1.28	1.34
1	N	415	A	C6-N1	10.66	1.43	1.35
1	N	1365	G	N3-C4	-10.66	1.27	1.35
1	N	1174	G	C5-C6	-10.66	1.31	1.42
1	N	195	A	N3-C4	-10.66	1.28	1.34
1	N	1314	C	N1-C6	10.65	1.43	1.37
1	N	410	G	N9-C8	-10.64	1.30	1.37
1	N	1347	G	C5'-C4'	10.64	1.64	1.51
1	N	80	A	N7-C5	-10.63	1.32	1.39
1	N	633	G	C8-N7	-10.63	1.24	1.30
1	N	1340	A	O3'-P	-10.63	1.48	1.61
1	N	937	A	C6-N6	10.63	1.42	1.33
1	N	652	U	P-O5'	-10.62	1.49	1.59
1	N	484	G	N7-C5	10.62	1.45	1.39
1	N	1213	A	N7-C5	-10.62	1.32	1.39
1	N	1371	G	C6-N1	10.62	1.47	1.39
1	N	325	A	N7-C5	-10.60	1.32	1.39
1	N	1112	C	N3-C4	10.60	1.41	1.33
1	N	393	A	C8-N7	10.59	1.39	1.31
1	N	1046	A	C5-C4	10.57	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	959	A	N7-C5	-10.57	1.32	1.39
1	N	577	G	C2'-C1'	-10.56	1.41	1.53
1	N	1340	A	C6-N6	10.56	1.42	1.33
1	N	739	C	N1-C6	10.54	1.43	1.37
1	N	1476	A	C5'-C4'	10.54	1.64	1.51
1	N	554	A	N7-C5	-10.54	1.32	1.39
1	N	1032	G	C5-C4	10.54	1.45	1.38
1	N	266	G	N9-C4	-10.54	1.29	1.38
1	N	922	G	N7-C5	-10.53	1.32	1.39
1	N	1189	U	N1-C2	10.53	1.48	1.38
1	N	969	A	C6-N1	10.52	1.43	1.35
1	N	1112	C	O3'-P	-10.52	1.48	1.61
1	N	901	A	N7-C5	-10.51	1.32	1.39
1	N	38	G	C6-N1	10.49	1.46	1.39
1	N	286	C	N3-C4	10.48	1.41	1.33
1	N	92	U	C2'-C1'	-10.48	1.41	1.53
1	N	509	A	C5-C4	10.48	1.46	1.38
1	N	1459	G	C4'-C3'	10.47	1.64	1.53
1	N	189	A	C5'-C4'	10.47	1.64	1.51
1	N	1133	G	C6-N1	10.47	1.46	1.39
1	N	1371	G	C5'-C4'	10.46	1.64	1.51
1	N	5	U	P-O5'	10.45	1.70	1.59
1	N	572	A	C6-N6	10.45	1.42	1.33
1	N	139	A	C6-N1	10.45	1.42	1.35
1	N	408	A	N7-C5	-10.45	1.32	1.39
1	N	1269	A	C6-N6	10.44	1.42	1.33
1	N	1030	U	C2-N3	10.43	1.45	1.37
1	N	284	C	C5'-C4'	10.42	1.63	1.51
1	N	929	G	C2-N3	10.42	1.41	1.32
1	N	23	C	N1-C6	-10.42	1.30	1.37
1	N	271	C	N3-C4	10.41	1.41	1.33
1	N	377	G	C6-N1	10.41	1.46	1.39
1	N	1000	A	C6-N1	10.40	1.42	1.35
1	N	195	A	N7-C5	-10.40	1.33	1.39
1	N	1435	G	N7-C5	-10.39	1.33	1.39
1	N	407	U	P-O5'	-10.38	1.49	1.59
1	N	1136	C	N1-C6	10.38	1.43	1.37
1	N	326	G	C8-N7	10.38	1.37	1.30
1	N	372	C	N1-C6	-10.37	1.30	1.37
1	N	552	U	C2-N3	10.37	1.45	1.37
1	N	1277	C	N3-C4	10.36	1.41	1.33
1	N	927	G	N1-C2	10.36	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	993	G	N1-C2	10.36	1.46	1.37
1	N	7	A	C6-N1	10.35	1.42	1.35
1	N	1365	G	C5'-C4'	10.35	1.63	1.51
1	N	522	C	C4-N4	10.35	1.43	1.33
1	N	1104	G	N9-C4	-10.33	1.29	1.38
1	N	913	A	N3-C4	-10.33	1.28	1.34
1	N	1438	G	C6-N1	10.33	1.46	1.39
1	N	401	C	P-O5'	-10.33	1.49	1.59
1	N	949	A	N7-C5	-10.32	1.33	1.39
1	N	1480	A	N7-C5	-10.32	1.33	1.39
1	N	464	U	N3-C4	10.32	1.47	1.38
1	N	1236	A	N9-C4	-10.32	1.31	1.37
1	N	718	A	C6-N1	10.31	1.42	1.35
1	N	949	A	P-O5'	-10.31	1.49	1.59
1	N	1191	A	C6-N6	10.31	1.42	1.33
1	N	20	U	C2-N3	10.31	1.45	1.37
1	N	1519	A	N9-C4	10.30	1.44	1.37
1	N	1151	A	N3-C4	-10.29	1.28	1.34
1	N	1132	C	N1-C6	10.29	1.43	1.37
1	N	226	G	N7-C5	-10.29	1.33	1.39
1	N	64	G	N3-C4	-10.28	1.28	1.35
1	N	1426	G	N7-C5	-10.28	1.33	1.39
1	N	585	G	N1-C2	10.27	1.46	1.37
1	N	904	U	C2-N3	10.27	1.45	1.37
1	N	58	C	N1-C6	10.27	1.43	1.37
1	N	1198	G	N9-C8	10.26	1.45	1.37
1	N	6	G	N1-C2	10.26	1.46	1.37
1	N	746	A	C6-N6	10.26	1.42	1.33
1	N	1383	C	C5-C6	-10.24	1.26	1.34
1	N	1179	A	C2'-C1'	-10.23	1.42	1.53
1	N	257	G	C6-N1	10.22	1.46	1.39
1	N	262	A	N3-C4	-10.22	1.28	1.34
1	N	758	C	C2'-C1'	-10.22	1.42	1.53
1	N	221	C	N3-C4	10.22	1.41	1.33
1	N	139	A	N3-C4	-10.21	1.28	1.34
1	N	15	G	C5-C4	10.21	1.45	1.38
1	N	391	G	N3-C4	10.21	1.42	1.35
1	N	205	A	C5-C4	10.20	1.45	1.38
1	N	1384	C	N3-C4	10.20	1.41	1.33
1	N	56	U	C2-N3	10.20	1.44	1.37
1	N	384	G	N9-C8	10.19	1.45	1.37
1	N	554	A	N3-C4	-10.19	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1134	G	N1-C2	10.19	1.45	1.37
1	N	230	G	C2-N3	10.18	1.40	1.32
1	N	291	U	C2'-C1'	-10.17	1.42	1.53
1	N	1048	G	N7-C5	-10.15	1.33	1.39
1	N	33	A	C8-N7	-10.14	1.24	1.31
1	N	768	A	C6-N1	10.12	1.42	1.35
1	N	688	G	N1-C2	10.12	1.45	1.37
1	N	1447	A	C6-N6	10.12	1.42	1.33
1	N	1214	C	N1-C6	10.12	1.43	1.37
1	N	667	G	N1-C2	10.10	1.45	1.37
1	N	971	G	C2-N3	10.10	1.40	1.32
1	N	1486	G	C5-C4	10.10	1.45	1.38
1	N	1383	C	N1-C6	10.09	1.43	1.37
1	N	1180	A	N9-C4	-10.09	1.31	1.37
1	N	220	G	N9-C8	-10.08	1.30	1.37
1	N	1057	G	C2-N3	10.08	1.40	1.32
1	N	176	C	N1-C6	10.06	1.43	1.37
1	N	1248	A	C6-N6	10.06	1.42	1.33
1	N	1254	A	C6-N6	10.06	1.42	1.33
1	N	614	C	C4-N4	10.06	1.43	1.33
1	N	277	C	N3-C4	10.06	1.41	1.33
1	N	172	A	N9-C8	10.04	1.45	1.37
1	N	249	U	C2-N3	10.04	1.44	1.37
1	N	1014	A	N3-C4	10.04	1.40	1.34
1	N	366	A	C6-N6	10.03	1.42	1.33
1	N	208	U	N3-C4	10.02	1.47	1.38
1	N	436	C	N1-C6	-10.02	1.31	1.37
1	N	944	G	C5-C4	-10.02	1.31	1.38
1	N	573	A	C6-N1	10.02	1.42	1.35
1	N	1316	G	N9-C8	10.02	1.44	1.37
1	N	94	G	N3-C4	-10.01	1.28	1.35
1	N	1278	G	C2-N3	10.01	1.40	1.32
1	N	680	C	N1-C6	10.01	1.43	1.37
1	N	1511	G	C2-N3	10.00	1.40	1.32
1	N	1064	G	C4'-C3'	9.99	1.64	1.53
1	N	242	G	N1-C2	9.99	1.45	1.37
1	N	124	C	C4'-O4'	-9.99	1.32	1.45
1	N	255	G	C8-N7	-9.99	1.25	1.30
1	N	959	A	C6-N6	9.98	1.42	1.33
1	N	358	U	C2-N3	9.97	1.44	1.37
1	N	142	G	N3-C4	-9.97	1.28	1.35
1	N	149	A	C2'-C1'	-9.97	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	430	A	N7-C5	-9.97	1.33	1.39
1	N	980	C	N3-C4	9.97	1.41	1.33
1	N	1010	U	C2-N3	9.97	1.44	1.37
1	N	691	G	N1-C2	9.96	1.45	1.37
1	N	791	G	C8-N7	-9.95	1.25	1.30
1	N	444	G	C8-N7	9.95	1.36	1.30
1	N	1084	G	N9-C8	9.94	1.44	1.37
1	N	383	A	C6-N6	9.94	1.42	1.33
1	N	937	A	N9-C4	-9.94	1.31	1.37
1	N	1097	C	N3-C4	9.94	1.41	1.33
1	N	1233	G	N7-C5	-9.94	1.33	1.39
1	N	736	C	N1-C6	9.93	1.43	1.37
1	N	777	A	N7-C5	-9.93	1.33	1.39
1	N	1414	U	N3-C4	9.93	1.47	1.38
1	N	303	A	N7-C5	-9.92	1.33	1.39
1	N	351	G	C5-C4	-9.92	1.31	1.38
1	N	1272	G	N1-C2	9.92	1.45	1.37
1	N	33	A	C5-C4	-9.92	1.31	1.38
1	N	639	G	C5-C4	9.90	1.45	1.38
1	N	838	G	N3-C4	-9.90	1.28	1.35
1	N	1516	G	P-O5'	-9.90	1.49	1.59
1	N	1403	C	N3-C4	9.89	1.40	1.33
1	N	171	A	C8-N7	-9.88	1.24	1.31
1	N	288	A	N7-C5	-9.89	1.33	1.39
1	N	1144	G	C2-N2	9.88	1.44	1.34
1	N	267	C	N3-C4	9.87	1.40	1.33
1	N	417	G	C8-N7	-9.87	1.25	1.30
1	N	838	G	N1-C2	9.87	1.45	1.37
1	N	174	A	C6-N6	9.86	1.41	1.33
1	N	906	A	C5'-C4'	9.86	1.63	1.51
1	N	1246	A	N9-C4	-9.86	1.31	1.37
1	N	281	G	N9-C4	9.86	1.45	1.38
1	N	1072	G	C6-N1	9.86	1.46	1.39
1	N	912	C	N1-C6	9.85	1.43	1.37
1	N	1152	A	C6-N1	9.85	1.42	1.35
1	N	349	A	N7-C5	-9.85	1.33	1.39
1	N	714	G	C2'-C1'	-9.84	1.42	1.53
1	N	1465	A	C5-C4	9.84	1.45	1.38
1	N	1006	G	N1-C2	9.83	1.45	1.37
1	N	1013	G	C6-N1	9.83	1.46	1.39
1	N	1395	C	N1-C6	9.82	1.43	1.37
1	N	491	G	N9-C8	9.80	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	548	G	N9-C8	9.80	1.44	1.37
1	N	609	A	C6-N1	9.80	1.42	1.35
1	N	902	G	N1-C2	9.80	1.45	1.37
1	N	908	A	C6-N6	9.80	1.41	1.33
1	N	88	U	C4-C5	9.79	1.52	1.43
1	N	144	G	N9-C8	9.79	1.44	1.37
1	N	1401	G	C5-C4	9.79	1.45	1.38
1	N	1006	G	C5-C4	9.79	1.45	1.38
1	N	896	C	P-O5'	-9.78	1.50	1.59
1	N	825	A	C6-N1	9.78	1.42	1.35
1	N	241	G	N9-C4	-9.78	1.30	1.38
1	N	1077	G	P-O5'	-9.78	1.50	1.59
1	N	895	G	P-O5'	-9.77	1.50	1.59
1	N	393	A	N3-C4	-9.77	1.28	1.34
1	N	709	U	P-O5'	-9.77	1.50	1.59
1	N	486	U	C2-N3	9.76	1.44	1.37
1	N	538	G	C6-N1	9.76	1.46	1.39
1	N	1377	A	N7-C5	-9.76	1.33	1.39
1	N	497	G	N7-C5	9.75	1.45	1.39
1	N	776	G	C2-N2	9.75	1.44	1.34
1	N	246	A	P-O5'	-9.75	1.50	1.59
1	N	773	G	N1-C2	9.75	1.45	1.37
1	N	1423	G	N1-C2	9.75	1.45	1.37
1	N	874	G	C5-C4	9.74	1.45	1.38
1	N	226	G	N9-C4	-9.74	1.30	1.38
1	N	499	A	O3'-P	-9.74	1.49	1.61
1	N	845	A	C5-C4	9.73	1.45	1.38
1	N	1042	A	N9-C8	-9.73	1.29	1.37
1	N	1058	G	C5'-C4'	9.73	1.63	1.51
1	N	1431	A	C6-N1	9.73	1.42	1.35
1	N	673	A	C5-C6	-9.73	1.32	1.41
1	N	235	C	N3-C4	9.72	1.40	1.33
1	N	706	A	C8-N7	-9.72	1.24	1.31
1	N	724	G	C8-N7	9.72	1.36	1.30
1	N	429	U	C2-N3	9.71	1.44	1.37
1	N	198	G	N7-C5	-9.71	1.33	1.39
1	N	1312	G	C2-N3	9.70	1.40	1.32
1	N	791	G	N7-C5	-9.70	1.33	1.39
1	N	367	U	N1-C6	-9.69	1.29	1.38
1	N	1497	G	C6-N1	9.69	1.46	1.39
1	N	53	A	N7-C5	-9.69	1.33	1.39
1	N	1428	A	C5-C4	9.69	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	91	U	C2'-C1'	-9.68	1.42	1.53
1	N	1482	G	C2-N3	9.68	1.40	1.32
1	N	1061	G	C8-N7	-9.68	1.25	1.30
1	N	15	G	N9-C4	-9.68	1.30	1.38
1	N	234	C	C2-O2	9.67	1.33	1.24
1	N	596	A	C8-N7	-9.67	1.24	1.31
1	N	357	G	N7-C5	9.67	1.45	1.39
1	N	237	G	P-O5'	-9.66	1.50	1.59
1	N	1467	C	C2'-C1'	-9.65	1.42	1.53
1	N	152	A	C5-C4	9.65	1.45	1.38
1	N	608	A	C6-N1	9.65	1.42	1.35
1	N	198	G	N9-C4	-9.64	1.30	1.38
1	N	695	A	N7-C5	-9.64	1.33	1.39
1	N	466	A	C6-N6	9.64	1.41	1.33
1	N	58	C	N3-C4	9.64	1.40	1.33
1	N	681	A	N9-C4	-9.64	1.32	1.37
1	N	822	U	C3'-C2'	9.64	1.63	1.52
1	N	1513	A	C6-N6	9.64	1.41	1.33
1	N	100	G	C2-N3	9.63	1.40	1.32
1	N	916	U	N3-C4	9.63	1.47	1.38
1	N	399	G	P-O5'	-9.62	1.50	1.59
1	N	580	C	P-O5'	-9.62	1.50	1.59
1	N	751	U	N3-C4	9.62	1.47	1.38
1	N	1331	G	C8-N7	-9.61	1.25	1.30
1	N	310	G	N9-C4	-9.61	1.30	1.38
1	N	507	C	N1-C6	9.61	1.43	1.37
1	N	607	A	O3'-P	-9.61	1.49	1.61
1	N	24	U	C2-N3	9.60	1.44	1.37
1	N	909	A	N7-C5	-9.60	1.33	1.39
1	N	1128	C	C4-C5	9.59	1.50	1.43
1	N	82	G	C2-N3	9.59	1.40	1.32
1	N	748	G	C2-N3	9.58	1.40	1.32
1	N	62	U	C2-N3	9.58	1.44	1.37
1	N	1290	G	N3-C4	9.58	1.42	1.35
1	N	900	A	N7-C5	-9.57	1.33	1.39
1	N	1387	G	N1-C2	9.57	1.45	1.37
1	N	1292	G	C5'-C4'	9.56	1.62	1.51
1	N	885	G	C8-N7	-9.56	1.25	1.30
1	N	1533	C	C2-N3	9.56	1.43	1.35
1	N	418	C	C4'-C3'	-9.55	1.42	1.53
1	N	727	G	N7-C5	-9.56	1.33	1.39
1	N	1048	G	C5-C6	-9.55	1.32	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	968	A	N9-C4	-9.55	1.32	1.37
1	N	1225	A	N7-C5	-9.54	1.33	1.39
1	N	1054	C	N1-C6	9.54	1.42	1.37
1	N	41	G	N1-C2	9.54	1.45	1.37
1	N	557	G	C2-N3	9.54	1.40	1.32
1	N	1130	A	C8-N7	-9.54	1.24	1.31
1	N	129	A	P-O5'	-9.53	1.50	1.59
1	N	1337	G	C8-N7	-9.54	1.25	1.30
1	N	1525	G	P-O5'	-9.53	1.50	1.59
1	N	1526	G	C8-N7	-9.53	1.25	1.30
1	N	1453	G	C8-N7	-9.52	1.25	1.30
1	N	1009	U	C2-N3	9.52	1.44	1.37
1	N	1479	C	C2-N3	9.52	1.43	1.35
1	N	1201	A	C5-C4	9.52	1.45	1.38
1	N	62	U	P-O5'	-9.52	1.50	1.59
1	N	773	G	C8-N7	-9.52	1.25	1.30
1	N	1074	G	C2-N3	9.52	1.40	1.32
1	N	1262	C	N1-C6	9.52	1.42	1.37
1	N	1503	A	C8-N7	9.52	1.38	1.31
1	N	1217	C	C4-N4	9.51	1.42	1.33
1	N	254	G	C8-N7	9.51	1.36	1.30
1	N	554	A	C6-N1	9.51	1.42	1.35
1	N	669	G	N1-C2	9.51	1.45	1.37
1	N	775	G	N7-C5	-9.51	1.33	1.39
1	N	1381	U	O3'-P	-9.50	1.49	1.61
1	N	784	A	C8-N7	-9.50	1.25	1.31
1	N	41	G	C2-N3	9.49	1.40	1.32
1	N	498	A	C2-N3	-9.49	1.25	1.33
1	N	738	C	C4-N4	9.49	1.42	1.33
1	N	733	G	N7-C5	-9.49	1.33	1.39
1	N	1479	C	C4-N4	9.48	1.42	1.33
1	N	655	A	N7-C5	-9.47	1.33	1.39
1	N	1479	C	N1-C6	9.46	1.42	1.37
1	N	24	U	C3'-C2'	-9.45	1.42	1.52
1	N	376	G	N9-C8	9.45	1.44	1.37
1	N	1185	G	P-O5'	-9.44	1.50	1.59
1	N	289	G	N3-C4	-9.44	1.28	1.35
1	N	547	A	N9-C8	-9.44	1.30	1.37
1	N	373	A	C2'-C1'	-9.44	1.43	1.53
1	N	806	C	N1-C6	9.44	1.42	1.37
1	N	6	G	N7-C5	-9.43	1.33	1.39
1	N	82	G	N7-C5	-9.43	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	530	G	C2-N2	9.43	1.44	1.34
1	N	100	G	C8-N7	-9.43	1.25	1.30
1	N	681	A	N7-C5	-9.43	1.33	1.39
1	N	1127	G	N7-C5	-9.43	1.33	1.39
1	N	1416	G	N7-C5	-9.43	1.33	1.39
1	N	1084	G	C6-N1	9.42	1.46	1.39
1	N	585	G	N9-C4	-9.42	1.30	1.38
1	N	991	U	N1-C2	9.42	1.47	1.38
1	N	1502	A	C8-N7	-9.42	1.25	1.31
1	N	220	G	C5-C4	9.41	1.45	1.38
1	N	1081	A	N7-C5	-9.41	1.33	1.39
1	N	967	C	N1-C6	9.41	1.42	1.37
1	N	244	U	C5'-C4'	9.40	1.62	1.51
1	N	1006	G	N3-C4	-9.39	1.28	1.35
1	N	382	A	C5-C4	-9.39	1.32	1.38
1	N	760	G	N1-C2	9.39	1.45	1.37
1	N	784	A	C6-N6	9.39	1.41	1.33
1	N	1453	G	N7-C5	9.39	1.44	1.39
1	N	510	A	N3-C4	9.38	1.40	1.34
1	N	1185	G	N9-C4	-9.38	1.30	1.38
1	N	346	G	N1-C2	9.38	1.45	1.37
1	N	1160	G	C2-N3	9.37	1.40	1.32
1	N	187	G	C6-N1	9.37	1.46	1.39
1	N	799	G	C2-N3	9.37	1.40	1.32
1	N	612	C	N1-C2	9.36	1.49	1.40
1	N	102	G	C8-N7	-9.36	1.25	1.30
1	N	770	C	C2-N3	9.36	1.43	1.35
1	N	252	U	C5'-C4'	9.35	1.62	1.51
1	N	648	A	C6-N6	9.35	1.41	1.33
1	N	1465	A	N3-C4	-9.35	1.29	1.34
1	N	556	C	C5'-C4'	9.34	1.62	1.51
1	N	801	U	N1-C6	-9.34	1.29	1.38
1	N	1003	G	C2-N3	9.34	1.40	1.32
1	N	202	G	N3-C4	-9.34	1.28	1.35
1	N	445	G	C6-N1	9.33	1.46	1.39
1	N	28	A	C5-C4	9.33	1.45	1.38
1	N	1440	U	C2-N3	9.33	1.44	1.37
1	N	1250	A	N7-C5	-9.32	1.33	1.39
1	N	1261	A	C6-N1	9.31	1.42	1.35
1	N	452	A	C6-N1	9.31	1.42	1.35
1	N	929	G	N3-C4	-9.31	1.28	1.35
1	N	1487	G	C5'-C4'	9.30	1.62	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	549	C	N3-C4	9.30	1.40	1.33
1	N	749	A	N3-C4	-9.30	1.29	1.34
1	N	1002	G	C2-N3	9.29	1.40	1.32
1	N	1473	G	N7-C5	-9.29	1.33	1.39
1	N	1487	G	C6-N1	9.29	1.46	1.39
1	N	621	A	C5-C4	9.27	1.45	1.38
1	N	839	C	C4-N4	9.27	1.42	1.33
1	N	1514	G	C3'-C2'	-9.27	1.42	1.52
1	N	449	G	N1-C2	9.27	1.45	1.37
1	N	1014	A	N7-C5	-9.26	1.33	1.39
1	N	189	A	C5-C4	9.26	1.45	1.38
1	N	192	A	O4'-C1'	9.26	1.53	1.41
1	N	251	G	N9-C8	-9.26	1.31	1.37
1	N	668	G	N9-C4	-9.26	1.30	1.38
1	N	682	G	N9-C8	9.26	1.44	1.37
1	N	1095	U	C2'-C1'	-9.26	1.43	1.53
1	N	1010	U	P-O5'	-9.25	1.50	1.59
1	N	500	G	N1-C2	9.25	1.45	1.37
1	N	1300	G	N3-C4	-9.25	1.28	1.35
1	N	1381	U	C2-N3	9.25	1.44	1.37
1	N	597	G	C2'-C1'	-9.24	1.43	1.53
1	N	413	G	C2-N3	9.24	1.40	1.32
1	N	1042	A	N7-C5	-9.22	1.33	1.39
1	N	949	A	N9-C4	-9.21	1.32	1.37
1	N	1196	A	P-O5'	-9.22	1.50	1.59
1	N	373	A	C6-N6	9.21	1.41	1.33
1	N	1402	C	C4-N4	9.21	1.42	1.33
1	N	1486	G	C6-N1	9.21	1.46	1.39
1	N	351	G	C2-N2	9.21	1.43	1.34
1	N	496	A	C6-N1	9.21	1.42	1.35
1	N	119	A	N9-C8	-9.21	1.30	1.37
1	N	413	G	N9-C8	9.20	1.44	1.37
1	N	549	C	C2'-C1'	-9.20	1.43	1.53
1	N	1438	G	C2-N2	9.20	1.43	1.34
1	N	119	A	C2'-C1'	-9.20	1.43	1.53
1	N	702	A	N3-C4	-9.19	1.29	1.34
1	N	1531	A	C8-N7	-9.19	1.25	1.31
1	N	128	G	N9-C8	9.19	1.44	1.37
1	N	1309	G	C2-N3	9.19	1.40	1.32
1	N	711	G	N1-C2	9.18	1.45	1.37
1	N	148	G	N7-C5	-9.17	1.33	1.39
1	N	498	A	C8-N7	9.17	1.38	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	789	U	C3'-C2'	9.17	1.63	1.52
1	N	560	A	C6-N1	9.17	1.42	1.35
1	N	473	U	C2-N3	9.17	1.44	1.37
1	N	806	C	P-O5'	-9.17	1.50	1.59
1	N	358	U	N1-C6	9.16	1.46	1.38
1	N	656	G	N9-C8	-9.16	1.31	1.37
1	N	938	A	C2-N3	9.16	1.41	1.33
1	N	628	G	C6-N1	9.16	1.46	1.39
1	N	212	G	N3-C4	-9.15	1.29	1.35
1	N	893	C	C4-N4	9.15	1.42	1.33
1	N	913	A	N9-C4	9.15	1.43	1.37
1	N	64	G	N7-C5	-9.15	1.33	1.39
1	N	344	A	N9-C4	9.14	1.43	1.37
1	N	1415	G	N1-C2	9.14	1.45	1.37
1	N	1102	A	N7-C5	-9.13	1.33	1.39
1	N	1144	G	N7-C5	-9.13	1.33	1.39
1	N	192	A	N3-C4	-9.13	1.29	1.34
1	N	830	G	C5-C6	-9.13	1.33	1.42
1	N	1109	C	N1-C6	9.13	1.42	1.37
1	N	1441	A	N3-C4	9.12	1.40	1.34
1	N	245	U	C2-N3	9.11	1.44	1.37
1	N	951	G	N9-C8	-9.11	1.31	1.37
1	N	1466	C	N1-C6	9.11	1.42	1.37
1	N	1366	C	N3-C4	9.11	1.40	1.33
1	N	1152	A	C8-N7	-9.11	1.25	1.31
1	N	61	G	N7-C5	-9.11	1.33	1.39
1	N	1246	A	N7-C5	-9.10	1.33	1.39
1	N	1345	U	C4-C5	9.10	1.51	1.43
1	N	668	G	N7-C5	-9.09	1.33	1.39
1	N	715	A	C5-C4	9.09	1.45	1.38
1	N	916	U	C2-N3	9.09	1.44	1.37
1	N	86	G	C5'-C4'	9.09	1.62	1.51
1	N	1324	A	C6-N6	9.09	1.41	1.33
1	N	695	A	N3-C4	9.09	1.40	1.34
1	N	459	A	N7-C5	-9.08	1.33	1.39
1	N	1515	G	N1-C2	9.08	1.45	1.37
1	N	105	G	C6-N1	9.07	1.45	1.39
1	N	1408	A	C6-N1	9.07	1.41	1.35
1	N	117	G	N9-C8	-9.07	1.31	1.37
1	N	447	G	C6-N1	9.06	1.45	1.39
1	N	1142	G	C3'-C2'	9.06	1.62	1.52
1	N	1151	A	P-O5'	-9.06	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	452	A	C8-N7	-9.05	1.25	1.31
1	N	601	G	N9-C4	-9.05	1.30	1.38
1	N	1258	G	C6-N1	9.05	1.45	1.39
1	N	858	G	N9-C8	-9.05	1.31	1.37
1	N	583	A	C6-N1	9.04	1.41	1.35
1	N	1414	U	C5'-C4'	9.04	1.62	1.51
1	N	347	G	N7-C5	-9.04	1.33	1.39
1	N	562	U	P-O5'	-9.04	1.50	1.59
1	N	297	G	N9-C4	-9.04	1.30	1.38
1	N	618	C	C4'-O4'	9.03	1.57	1.45
1	N	831	A	N9-C4	-9.04	1.32	1.37
1	N	60	A	N9-C4	-9.03	1.32	1.37
1	N	1457	G	C6-N1	9.03	1.45	1.39
1	N	152	A	N7-C5	-9.03	1.33	1.39
1	N	1237	C	C2-N3	9.03	1.43	1.35
1	N	767	A	C8-N7	-9.02	1.25	1.31
1	N	645	G	C2-N3	9.02	1.40	1.32
1	N	1112	C	P-O5'	9.02	1.68	1.59
1	N	1414	U	N1-C2	9.02	1.46	1.38
1	N	452	A	C6-N6	9.01	1.41	1.33
1	N	487	A	C6-N6	9.01	1.41	1.33
1	N	1489	G	C6-N1	9.01	1.45	1.39
1	N	1261	A	N7-C5	-9.01	1.33	1.39
1	N	665	A	N9-C8	-9.00	1.30	1.37
1	N	1280	A	C6-N6	9.00	1.41	1.33
1	N	507	C	C4-N4	9.00	1.42	1.33
1	N	741	G	N9-C4	-9.00	1.30	1.38
1	N	1005	A	C8-N7	9.00	1.37	1.31
1	N	1435	G	N3-C4	-8.99	1.29	1.35
1	N	438	U	O3'-P	-8.99	1.50	1.61
1	N	418	C	N3-C4	8.99	1.40	1.33
1	N	705	G	N1-C2	8.98	1.45	1.37
1	N	847	G	C5-C4	8.98	1.44	1.38
1	N	1236	A	P-O5'	-8.98	1.50	1.59
1	N	228	A	C8-N7	-8.97	1.25	1.31
1	N	608	A	N9-C4	-8.97	1.32	1.37
1	N	330	C	C4'-C3'	-8.97	1.43	1.53
1	N	394	G	C8-N7	-8.97	1.25	1.30
1	N	1369	C	C4-C5	8.97	1.50	1.43
1	N	386	C	N1-C6	8.97	1.42	1.37
1	N	1473	G	C8-N7	-8.97	1.25	1.30
1	N	1134	G	C2-N3	8.97	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	156	C	N3-C4	8.96	1.40	1.33
1	N	1296	C	N1-C6	8.96	1.42	1.37
1	N	135	C	N1-C6	8.95	1.42	1.37
1	N	1515	G	C6-N1	8.95	1.45	1.39
1	N	1027	C	C2'-C1'	8.95	1.63	1.53
1	N	260	G	N1-C2	8.95	1.45	1.37
1	N	744	C	C4'-C3'	8.95	1.62	1.53
1	N	1151	A	C3'-C2'	8.95	1.62	1.52
1	N	700	G	P-O5'	-8.95	1.50	1.59
1	N	1270	G	C2-N3	8.95	1.40	1.32
1	N	778	G	C2-N3	8.94	1.39	1.32
1	N	1168	U	C5-C6	-8.94	1.26	1.34
1	N	18	C	C4-C5	8.93	1.50	1.43
1	N	685	G	C6-N1	8.93	1.45	1.39
1	N	1041	G	C4'-C3'	-8.93	1.43	1.53
1	N	455	G	C2-N3	8.92	1.39	1.32
1	N	460	A	N3-C4	-8.91	1.29	1.34
1	N	1455	G	N1-C2	8.91	1.44	1.37
1	N	68	G	C8-N7	-8.91	1.25	1.30
1	N	60	A	N7-C5	-8.90	1.33	1.39
1	N	69	G	C6-N1	8.90	1.45	1.39
1	N	202	G	C2-N3	8.90	1.39	1.32
1	N	242	G	N7-C5	-8.90	1.33	1.39
1	N	1169	A	C5-C4	8.90	1.45	1.38
1	N	976	G	N9-C8	8.90	1.44	1.37
1	N	1439	G	C6-N1	8.90	1.45	1.39
1	N	58	C	C2-N3	8.89	1.42	1.35
1	N	11	G	C5'-C4'	8.89	1.62	1.51
1	N	199	A	C2'-C1'	-8.89	1.43	1.53
1	N	919	A	C6-N6	8.89	1.41	1.33
1	N	624	C	C2-N3	8.89	1.42	1.35
1	N	730	G	N7-C5	-8.89	1.33	1.39
1	N	1331	G	O3'-P	-8.88	1.50	1.61
1	N	243	A	C5'-C4'	8.88	1.62	1.51
1	N	754	C	C4-N4	8.88	1.42	1.33
1	N	1080	A	C5'-C4'	-8.88	1.40	1.51
1	N	1475	G	N9-C8	-8.88	1.31	1.37
1	N	1208	C	C4-N4	8.88	1.42	1.33
1	N	1398	A	C5'-C4'	8.88	1.62	1.51
1	N	496	A	N9-C8	-8.87	1.30	1.37
1	N	274	A	C6-N1	8.87	1.41	1.35
1	N	371	A	P-O5'	-8.87	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	990	C	N1-C6	8.87	1.42	1.37
1	N	1299	A	N9-C8	-8.86	1.30	1.37
1	N	55	A	N7-C5	-8.86	1.33	1.39
1	N	276	G	N3-C4	-8.86	1.29	1.35
1	N	19	A	N7-C5	-8.85	1.33	1.39
1	N	855	U	N3-C4	8.85	1.46	1.38
1	N	1189	U	C2-N3	8.85	1.44	1.37
1	N	818	G	N1-C2	8.85	1.44	1.37
1	N	357	G	N9-C4	-8.84	1.30	1.38
1	N	406	G	N1-C2	8.84	1.44	1.37
1	N	635	A	C6-N6	8.84	1.41	1.33
1	N	179	A	C6-N1	8.84	1.41	1.35
1	N	1031	C	C4-C5	8.84	1.50	1.43
1	N	351	G	O3'-P	-8.84	1.50	1.61
1	N	1231	G	C6-N1	8.83	1.45	1.39
1	N	536	C	N3-C4	8.82	1.40	1.33
1	N	636	U	N1-C6	8.82	1.45	1.38
1	N	667	G	N7-C5	-8.81	1.33	1.39
1	N	847	G	N1-C2	8.80	1.44	1.37
1	N	1210	C	P-O5'	8.80	1.68	1.59
1	N	31	G	C8-N7	8.79	1.36	1.30
1	N	288	A	N3-C4	-8.79	1.29	1.34
1	N	1285	A	N3-C4	8.79	1.40	1.34
1	N	237	G	N1-C2	8.79	1.44	1.37
1	N	949	A	N3-C4	-8.78	1.29	1.34
1	N	963	G	N7-C5	-8.78	1.33	1.39
1	N	1124	G	N7-C5	-8.78	1.33	1.39
1	N	197	A	C2'-C1'	-8.78	1.43	1.53
1	N	861	G	C2'-C1'	-8.78	1.43	1.53
1	N	825	A	C6-N6	8.77	1.41	1.33
1	N	570	G	N1-C2	8.77	1.44	1.37
1	N	151	A	C5-C4	8.76	1.44	1.38
1	N	685	G	C5-C6	-8.76	1.33	1.42
1	N	1386	G	P-O5'	-8.76	1.50	1.59
1	N	792	A	N3-C4	-8.76	1.29	1.34
1	N	1104	G	N1-C2	8.76	1.44	1.37
1	N	107	G	N1-C2	8.75	1.44	1.37
1	N	373	A	C8-N7	-8.75	1.25	1.31
1	N	575	G	N1-C2	8.75	1.44	1.37
1	N	607	A	N7-C5	-8.75	1.34	1.39
1	N	302	G	N9-C8	-8.75	1.31	1.37
1	N	661	G	C6-N1	8.75	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1430	A	P-O5'	8.74	1.68	1.59
1	N	300	A	N3-C4	-8.74	1.29	1.34
1	N	876	C	C4-N4	8.74	1.41	1.33
1	N	961	U	C2'-C1'	-8.74	1.43	1.53
1	N	588	G	C5'-C4'	8.74	1.61	1.51
1	N	663	A	N3-C4	-8.74	1.29	1.34
1	N	310	G	N3-C4	-8.73	1.29	1.35
1	N	1400	C	O3'-P	-8.73	1.50	1.61
1	N	310	G	N7-C5	8.73	1.44	1.39
1	N	1138	G	C6-N1	8.73	1.45	1.39
1	N	1451	U	C4-C5	8.73	1.51	1.43
1	N	718	A	C8-N7	8.72	1.37	1.31
1	N	1024	G	C5-C4	8.72	1.44	1.38
1	N	954	G	N9-C8	-8.72	1.31	1.37
1	N	829	G	C2-N3	8.72	1.39	1.32
1	N	915	A	N3-C4	-8.71	1.29	1.34
1	N	757	U	C2-N3	8.71	1.43	1.37
1	N	1138	G	O3'-P	-8.71	1.50	1.61
1	N	309	A	C8-N7	-8.70	1.25	1.31
1	N	1521	C	N3-C4	8.70	1.40	1.33
1	N	765	G	N3-C4	-8.70	1.29	1.35
1	N	1058	G	P-O5'	-8.70	1.51	1.59
1	N	581	G	C5'-C4'	8.69	1.61	1.51
1	N	621	A	C6-N6	8.69	1.41	1.33
1	N	332	G	C2-N3	8.69	1.39	1.32
1	N	921	U	N1-C2	8.69	1.46	1.38
1	N	843	U	N1-C6	-8.69	1.30	1.38
1	N	247	G	C5'-C4'	8.68	1.61	1.51
1	N	105	G	P-O5'	-8.68	1.51	1.59
1	N	720	C	N1-C6	8.68	1.42	1.37
1	N	867	G	C2-N3	8.68	1.39	1.32
1	N	1204	A	C5-C4	8.67	1.44	1.38
1	N	659	U	N1-C6	8.67	1.45	1.38
1	N	767	A	C6-N1	8.67	1.41	1.35
1	N	1391	U	C2'-C1'	-8.66	1.43	1.53
1	N	376	G	C2-N2	8.66	1.43	1.34
1	N	663	A	C6-N1	8.65	1.41	1.35
1	N	1339	A	C2'-C1'	-8.65	1.43	1.53
1	N	420	U	N3-C4	8.65	1.46	1.38
1	N	1181	G	C8-N7	-8.65	1.25	1.30
1	N	1361	G	N7-C5	-8.65	1.34	1.39
1	N	940	C	C4-C5	8.65	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1149	C	C1'-N1	8.65	1.61	1.48
1	N	1162	C	N3-C4	8.65	1.40	1.33
1	N	1117	A	C6-N6	8.64	1.40	1.33
1	N	1315	U	P-O5'	-8.64	1.51	1.59
1	N	117	G	C5-C4	-8.63	1.32	1.38
1	N	670	G	N1-C2	8.63	1.44	1.37
1	N	488	C	N1-C6	8.63	1.42	1.37
1	N	902	G	C5-C4	8.63	1.44	1.38
1	N	294	U	O4'-C1'	8.62	1.52	1.41
1	N	771	G	C6-N1	8.63	1.45	1.39
1	N	913	A	O3'-P	-8.62	1.50	1.61
1	N	1062	U	C2-N3	8.62	1.43	1.37
1	N	1468	A	N9-C4	-8.62	1.32	1.37
1	N	239	U	C4'-C3'	8.62	1.62	1.53
1	N	1255	G	N9-C4	-8.62	1.31	1.38
1	N	820	U	N3-C4	8.62	1.46	1.38
1	N	304	U	C2-N3	8.61	1.43	1.37
1	N	782	A	C2'-C1'	-8.61	1.43	1.53
1	N	19	A	C6-N1	8.61	1.41	1.35
1	N	261	U	C5'-C4'	8.61	1.61	1.51
1	N	397	A	N9-C4	8.61	1.43	1.37
1	N	1258	G	N1-C2	8.60	1.44	1.37
1	N	509	A	N9-C4	-8.60	1.32	1.37
1	N	1226	C	N1-C6	8.60	1.42	1.37
1	N	101	A	C6-N6	8.60	1.40	1.33
1	N	596	A	N9-C8	-8.60	1.30	1.37
1	N	252	U	N1-C2	-8.59	1.30	1.38
1	N	146	G	C2-N3	8.59	1.39	1.32
1	N	182	A	O3'-P	-8.59	1.50	1.61
1	N	937	A	C5-C4	8.59	1.44	1.38
1	N	1195	C	N1-C6	8.59	1.42	1.37
1	N	643	C	N1-C6	8.59	1.42	1.37
1	N	1157	A	C2'-C1'	-8.59	1.44	1.53
1	N	801	U	C2-N3	8.58	1.43	1.37
1	N	37	U	C4-C5	-8.57	1.35	1.43
1	N	419	C	N3-C4	8.57	1.40	1.33
1	N	4	U	C4'-C3'	8.57	1.62	1.53
1	N	218	U	C2-N3	-8.57	1.31	1.37
1	N	674	G	C6-N1	8.57	1.45	1.39
1	N	1227	A	C6-N1	8.57	1.41	1.35
1	N	491	G	C6-N1	8.56	1.45	1.39
1	N	198	G	C8-N7	-8.56	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1033	G	N7-C5	-8.56	1.34	1.39
1	N	867	G	N9-C8	8.56	1.43	1.37
1	N	1327	C	N1-C6	8.56	1.42	1.37
1	N	1142	G	P-O5'	-8.56	1.51	1.59
1	N	1198	G	C8-N7	-8.55	1.25	1.30
1	N	1275	A	C5'-C4'	8.55	1.61	1.51
1	N	1216	A	C3'-C2'	8.55	1.62	1.52
1	N	305	G	C6-N1	8.55	1.45	1.39
1	N	1458	G	C2-N2	8.55	1.43	1.34
1	N	621	A	N3-C4	-8.54	1.29	1.34
1	N	863	U	C2-N3	8.54	1.43	1.37
1	N	1336	C	N1-C6	-8.54	1.32	1.37
1	N	536	C	C2'-C1'	-8.54	1.44	1.53
1	N	440	C	C5'-C4'	8.54	1.61	1.51
1	N	645	G	N9-C8	8.54	1.43	1.37
1	N	50	A	C5'-C4'	8.53	1.61	1.51
1	N	1045	C	C4-N4	8.53	1.41	1.33
1	N	320	A	N3-C4	8.53	1.40	1.34
1	N	1511	G	C8-N7	-8.52	1.25	1.30
1	N	526	C	N1-C6	8.52	1.42	1.37
1	N	846	G	N7-C5	-8.51	1.34	1.39
1	N	1024	G	N7-C5	-8.51	1.34	1.39
1	N	45	G	C2-N3	8.51	1.39	1.32
1	N	848	C	N3-C4	8.51	1.40	1.33
1	N	1455	G	N3-C4	-8.51	1.29	1.35
1	N	1456	A	C6-N6	8.51	1.40	1.33
1	N	845	A	C6-N6	-8.50	1.27	1.33
1	N	1355	G	C6-N1	8.50	1.45	1.39
1	N	683	G	C2-N2	8.50	1.43	1.34
1	N	918	A	C6-N6	8.49	1.40	1.33
1	N	1244	G	C2-N3	8.49	1.39	1.32
1	N	1531	A	C6-N6	8.49	1.40	1.33
1	N	509	A	O3'-P	-8.49	1.50	1.61
1	N	441	A	C8-N7	-8.49	1.25	1.31
1	N	530	G	N7-C5	-8.48	1.34	1.39
1	N	1392	G	C2-N3	8.48	1.39	1.32
1	N	983	A	C6-N1	8.47	1.41	1.35
1	N	930	C	C4'-O4'	8.47	1.56	1.45
1	N	1003	G	C2'-C1'	-8.46	1.44	1.53
1	N	950	U	C5'-C4'	8.46	1.61	1.51
1	N	469	C	N1-C6	8.45	1.42	1.37
1	N	689	C	C4-N4	8.45	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	235	C	C2-N3	8.44	1.42	1.35
1	N	6	G	C4'-C3'	8.44	1.62	1.53
1	N	1309	G	C2'-C1'	-8.44	1.44	1.53
1	N	1295	U	N3-C4	8.43	1.46	1.38
1	N	385	C	N3-C4	8.43	1.39	1.33
1	N	1336	C	C4-C5	-8.43	1.36	1.43
1	N	42	G	C8-N7	-8.43	1.25	1.30
1	N	411	A	C6-N6	8.43	1.40	1.33
1	N	1030	U	C4-C5	-8.42	1.35	1.43
1	N	282	A	N9-C8	-8.42	1.31	1.37
1	N	309	A	N7-C5	-8.42	1.34	1.39
1	N	1195	C	C4-N4	8.42	1.41	1.33
1	N	964	A	C6-N1	8.41	1.41	1.35
1	N	1047	G	C6-N1	8.41	1.45	1.39
1	N	413	G	N9-C4	8.41	1.44	1.38
1	N	593	U	C2-N3	8.41	1.43	1.37
1	N	335	C	C4-N4	8.39	1.41	1.33
1	N	1143	G	N9-C4	-8.39	1.31	1.38
1	N	914	A	N7-C5	-8.39	1.34	1.39
1	N	955	U	C4-C5	8.39	1.51	1.43
1	N	867	G	P-O5'	-8.38	1.51	1.59
1	N	1526	G	C2-N3	8.38	1.39	1.32
1	N	932	C	N3-C4	8.38	1.39	1.33
1	N	164	G	C5'-C4'	8.38	1.61	1.51
1	N	190	A	N9-C4	-8.38	1.32	1.37
1	N	1497	G	N3-C4	-8.38	1.29	1.35
1	N	169	C	C2-N3	8.37	1.42	1.35
1	N	128	G	P-O5'	-8.37	1.51	1.59
1	N	1274	A	C4'-C3'	8.37	1.62	1.53
1	N	925	G	C2-N3	8.37	1.39	1.32
1	N	1101	A	N7-C5	-8.36	1.34	1.39
1	N	498	A	N3-C4	8.36	1.39	1.34
1	N	500	G	C4'-C3'	8.36	1.62	1.53
1	N	33	A	C4'-C3'	-8.36	1.44	1.53
1	N	1287	A	C2-N3	8.36	1.41	1.33
1	N	959	A	C5-C4	8.36	1.44	1.38
1	N	1070	U	N1-C6	-8.35	1.30	1.38
1	N	1099	G	P-O5'	-8.35	1.51	1.59
1	N	1164	G	C2-N3	8.35	1.39	1.32
1	N	191	G	N9-C4	-8.35	1.31	1.38
1	N	518	C	C2'-C1'	-8.35	1.44	1.53
1	N	615	G	C5-C4	8.35	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	592	G	N3-C4	-8.34	1.29	1.35
1	N	658	C	N3-C4	8.34	1.39	1.33
1	N	908	A	C4'-O4'	-8.34	1.34	1.45
1	N	785	G	N9-C4	-8.34	1.31	1.38
1	N	1396	A	C8-N7	-8.34	1.25	1.31
1	N	519	C	O3'-P	-8.34	1.51	1.61
1	N	747	A	N7-C5	-8.34	1.34	1.39
1	N	1368	A	C6-N6	8.34	1.40	1.33
1	N	834	U	P-O5'	-8.34	1.51	1.59
1	N	1188	A	C6-N1	8.34	1.41	1.35
1	N	388	G	O3'-P	-8.33	1.51	1.61
1	N	271	C	P-O5'	-8.33	1.51	1.59
1	N	296	U	N1-C2	-8.33	1.31	1.38
1	N	877	G	C5-C6	-8.33	1.34	1.42
1	N	1048	G	N1-C2	8.33	1.44	1.37
1	N	881	G	C2-N3	8.33	1.39	1.32
1	N	1167	A	C5'-C4'	8.33	1.61	1.51
1	N	152	A	C6-N6	8.32	1.40	1.33
1	N	694	A	C5-C6	-8.32	1.33	1.41
1	N	806	C	C4-C5	8.32	1.49	1.43
1	N	1512	U	P-O5'	8.32	1.68	1.59
1	N	183	C	C2-N3	8.31	1.42	1.35
1	N	833	G	N9-C8	8.31	1.43	1.37
1	N	755	G	C2-N3	8.31	1.39	1.32
1	N	875	U	P-O5'	-8.31	1.51	1.59
1	N	667	G	C5-C4	8.31	1.44	1.38
1	N	396	C	N3-C4	8.30	1.39	1.33
1	N	1086	U	N1-C2	8.30	1.46	1.38
1	N	38	G	C2-N3	8.30	1.39	1.32
1	N	223	A	N3-C4	8.30	1.39	1.34
1	N	370	C	N1-C2	-8.30	1.31	1.40
1	N	1372	U	O4'-C1'	8.30	1.52	1.41
1	N	1144	G	C6-N1	8.30	1.45	1.39
1	N	161	A	C6-N6	8.30	1.40	1.33
1	N	27	G	C2-N2	8.29	1.42	1.34
1	N	914	A	C2'-C1'	-8.29	1.44	1.53
1	N	1501	C	C4-N4	8.29	1.41	1.33
1	N	539	A	N9-C4	-8.29	1.32	1.37
1	N	562	U	C5-C6	8.29	1.41	1.34
1	N	450	G	N9-C4	-8.29	1.31	1.38
1	N	646	G	C6-N1	8.29	1.45	1.39
1	N	841	C	C4-N4	8.29	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	138	G	C5-C4	8.28	1.44	1.38
1	N	597	G	N7-C5	-8.28	1.34	1.39
1	N	668	G	C5-C6	-8.28	1.34	1.42
1	N	702	A	C5'-C4'	8.28	1.61	1.51
1	N	102	G	C2-N3	8.28	1.39	1.32
1	N	227	G	C2'-C1'	-8.28	1.44	1.53
1	N	974	A	N3-C4	8.28	1.39	1.34
1	N	969	A	N7-C5	-8.27	1.34	1.39
1	N	483	C	N3-C4	8.27	1.39	1.33
1	N	28	A	N7-C5	-8.27	1.34	1.39
1	N	225	C	N1-C6	-8.27	1.32	1.37
1	N	109	A	N7-C5	-8.26	1.34	1.39
1	N	270	A	N9-C8	8.26	1.44	1.37
1	N	508	U	C2-N3	8.26	1.43	1.37
1	N	829	G	C6-N1	8.26	1.45	1.39
1	N	853	C	O4'-C1'	8.26	1.52	1.41
1	N	1119	C	N3-C4	8.26	1.39	1.33
1	N	692	U	C4-C5	8.25	1.50	1.43
1	N	497	G	C2-N3	8.25	1.39	1.32
1	N	941	G	N9-C8	8.25	1.43	1.37
1	N	96	U	P-O5'	-8.25	1.51	1.59
1	N	152	A	N3-C4	-8.25	1.29	1.34
1	N	607	A	C5-C4	8.25	1.44	1.38
1	N	581	G	C2'-C1'	-8.24	1.44	1.53
1	N	715	A	N7-C5	-8.24	1.34	1.39
1	N	1157	A	C6-N6	8.24	1.40	1.33
1	N	1349	A	C2'-C1'	-8.24	1.44	1.53
1	N	115	G	C6-N1	8.24	1.45	1.39
1	N	928	G	C2-N3	8.24	1.39	1.32
1	N	79	G	C3'-O3'	8.23	1.53	1.42
1	N	478	A	C6-N6	8.23	1.40	1.33
1	N	934	C	C2'-C1'	-8.23	1.44	1.53
1	N	270	A	N9-C4	-8.22	1.32	1.37
1	N	747	A	O3'-P	-8.22	1.51	1.61
1	N	1133	G	C2-N2	8.22	1.42	1.34
1	N	301	G	N7-C5	-8.22	1.34	1.39
1	N	673	A	N9-C4	-8.22	1.32	1.37
1	N	673	A	N3-C4	-8.21	1.29	1.34
1	N	1089	G	N7-C5	-8.21	1.34	1.39
1	N	1431	A	P-O5'	-8.21	1.51	1.59
1	N	67	C	C2-N3	8.21	1.42	1.35
1	N	1038	C	C4-N4	8.21	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	202	G	N9-C4	-8.21	1.31	1.38
1	N	1454	G	C8-N7	8.21	1.35	1.30
1	N	1410	A	C6-N6	8.20	1.40	1.33
1	N	438	U	C4-C5	8.20	1.50	1.43
1	N	194	C	N1-C6	-8.20	1.32	1.37
1	N	305	G	P-O5'	-8.19	1.51	1.59
1	N	1319	A	C8-N7	-8.19	1.25	1.31
1	N	695	A	C6-N6	8.19	1.40	1.33
1	N	867	G	C8-N7	-8.19	1.26	1.30
1	N	134	G	C2-N3	8.19	1.39	1.32
1	N	1152	A	N7-C5	-8.19	1.34	1.39
1	N	146	G	C6-N1	8.18	1.45	1.39
1	N	616	G	N7-C5	-8.18	1.34	1.39
1	N	1173	U	N3-C4	8.18	1.45	1.38
1	N	1447	A	C2-N3	8.18	1.41	1.33
1	N	394	G	C6-N1	8.18	1.45	1.39
1	N	1311	A	C6-N1	8.18	1.41	1.35
1	N	155	A	N9-C4	-8.17	1.32	1.37
1	N	589	U	N3-C4	8.17	1.45	1.38
1	N	894	G	N1-C2	8.17	1.44	1.37
1	N	1156	G	C2-N3	8.17	1.39	1.32
1	N	1437	A	C6-N6	8.17	1.40	1.33
1	N	1485	U	P-O5'	-8.17	1.51	1.59
1	N	501	C	C2-N3	8.17	1.42	1.35
1	N	1213	A	C8-N7	-8.17	1.25	1.31
1	N	1253	G	C6-N1	8.17	1.45	1.39
1	N	241	G	C5-C4	8.16	1.44	1.38
1	N	74	A	N1-C2	8.16	1.41	1.34
1	N	1510	C	N3-C4	8.16	1.39	1.33
1	N	110	C	C4-N4	8.16	1.41	1.33
1	N	1405	G	N3-C4	-8.16	1.29	1.35
1	N	566	G	N9-C8	-8.15	1.32	1.37
1	N	1227	A	N7-C5	-8.15	1.34	1.39
1	N	1384	C	N1-C6	8.15	1.42	1.37
1	N	232	G	C2-N3	8.15	1.39	1.32
1	N	468	A	C8-N7	-8.15	1.25	1.31
1	N	497	G	N3-C4	8.15	1.41	1.35
1	N	912	C	P-O5'	-8.15	1.51	1.59
1	N	424	G	C5'-C4'	8.14	1.61	1.51
1	N	778	G	N7-C5	-8.14	1.34	1.39
1	N	335	C	C2-N3	8.14	1.42	1.35
1	N	690	G	C2-N3	8.14	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	318	G	C5-C4	8.13	1.44	1.38
1	N	1508	A	N9-C4	8.14	1.42	1.37
1	N	245	U	N3-C4	8.12	1.45	1.38
1	N	322	C	C5-C6	-8.12	1.27	1.34
1	N	671	G	C6-N1	8.12	1.45	1.39
1	N	635	A	N7-C5	-8.12	1.34	1.39
1	N	1404	C	N1-C6	8.11	1.42	1.37
1	N	1523	G	N9-C8	8.11	1.43	1.37
1	N	1260	G	N9-C8	8.11	1.43	1.37
1	N	1409	C	C2-N3	8.11	1.42	1.35
1	N	829	G	N9-C8	8.10	1.43	1.37
1	N	861	G	N1-C2	8.10	1.44	1.37
1	N	1240	U	C2-N3	8.10	1.43	1.37
1	N	30	U	O3'-P	-8.10	1.51	1.61
1	N	38	G	C2'-C1'	-8.10	1.44	1.53
1	N	1016	A	N9-C4	-8.09	1.32	1.37
1	N	1119	C	C4-N4	8.09	1.41	1.33
1	N	403	C	P-O5'	-8.09	1.51	1.59
1	N	207	C	N1-C6	8.09	1.42	1.37
1	N	455	G	C4'-C3'	8.09	1.62	1.53
1	N	122	G	C4'-O4'	8.09	1.56	1.45
1	N	519	C	N1-C6	8.09	1.42	1.37
1	N	1244	G	C2'-C1'	-8.09	1.44	1.53
1	N	1266	G	C6-N1	8.09	1.45	1.39
1	N	1416	G	C8-N7	8.09	1.35	1.30
1	N	476	U	C2-N3	8.08	1.43	1.37
1	N	348	G	N9-C4	-8.08	1.31	1.38
1	N	866	C	N1-C6	8.08	1.42	1.37
1	N	1155	A	P-O5'	-8.08	1.51	1.59
1	N	145	G	C5'-C4'	8.08	1.61	1.51
1	N	175	C	C3'-C2'	8.08	1.61	1.52
1	N	762	U	C4-C5	8.07	1.50	1.43
1	N	1144	G	N9-C8	-8.07	1.32	1.37
1	N	1179	A	N3-C4	8.07	1.39	1.34
1	N	626	G	C2-N3	8.07	1.39	1.32
1	N	895	G	N1-C2	8.07	1.44	1.37
1	N	917	G	C8-N7	-8.07	1.26	1.30
1	N	1232	U	C5'-C4'	8.07	1.61	1.51
1	N	1433	A	C2'-C1'	-8.07	1.44	1.53
1	N	1379	G	N9-C8	8.07	1.43	1.37
1	N	211	G	N1-C2	8.06	1.44	1.37
1	N	547	A	N9-C4	8.06	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	259	G	P-O5'	8.06	1.67	1.59
1	N	666	G	O3'-P	-8.06	1.51	1.61
1	N	1289	A	N9-C8	8.06	1.44	1.37
1	N	1300	G	C6-N1	8.06	1.45	1.39
1	N	172	A	N3-C4	-8.05	1.30	1.34
1	N	658	C	C5-C6	-8.06	1.27	1.34
1	N	845	A	N7-C5	-8.05	1.34	1.39
1	N	1014	A	C6-N1	8.05	1.41	1.35
1	N	1224	U	N1-C2	8.05	1.45	1.38
1	N	1297	G	N3-C4	-8.05	1.29	1.35
1	N	1045	C	C4-C5	-8.05	1.36	1.43
1	N	1061	G	N1-C2	8.04	1.44	1.37
1	N	1225	A	C6-N6	8.04	1.40	1.33
1	N	1362	A	C5-C4	8.04	1.44	1.38
1	N	1516	G	C5'-C4'	8.04	1.60	1.51
1	N	188	C	C4-N4	8.04	1.41	1.33
1	N	1248	A	N3-C4	-8.04	1.30	1.34
1	N	1465	A	C6-N6	8.04	1.40	1.33
1	N	243	A	C5-C4	8.03	1.44	1.38
1	N	361	G	N9-C8	-8.03	1.32	1.37
1	N	411	A	C5'-C4'	8.03	1.60	1.51
1	N	1012	A	N9-C4	8.03	1.42	1.37
1	N	1087	G	C2-N3	8.03	1.39	1.32
1	N	1146	A	P-O5'	-8.03	1.51	1.59
1	N	1302	C	N3-C4	8.03	1.39	1.33
1	N	513	C	P-O5'	-8.02	1.51	1.59
1	N	680	C	C4-N4	8.02	1.41	1.33
1	N	886	G	C8-N7	-8.02	1.26	1.30
1	N	349	A	C5-C6	-8.02	1.33	1.41
1	N	544	G	C2-N3	8.02	1.39	1.32
1	N	1403	C	P-O5'	-8.02	1.51	1.59
1	N	1533	C	C4-C5	8.02	1.49	1.43
1	N	498	A	N7-C5	-8.01	1.34	1.39
1	N	585	G	C3'-O3'	8.01	1.53	1.42
1	N	292	G	N9-C4	-8.01	1.31	1.38
1	N	582	C	N1-C2	-8.01	1.32	1.40
1	N	194	C	C4'-C3'	-8.00	1.44	1.53
1	N	263	A	N7-C5	-8.00	1.34	1.39
1	N	701	U	N3-C4	8.00	1.45	1.38
1	N	1172	C	C1'-N1	8.00	1.60	1.48
1	N	196	A	N9-C4	-8.00	1.33	1.37
1	N	889	A	C6-N6	8.00	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1360	A	C6-N6	8.00	1.40	1.33
1	N	778	G	C8-N7	8.00	1.35	1.30
1	N	1000	A	P-O5'	-7.99	1.51	1.59
1	N	122	G	C5'-C4'	7.99	1.60	1.51
1	N	1235	U	N3-C4	7.99	1.45	1.38
1	N	1252	A	C6-N6	7.99	1.40	1.33
1	N	1254	A	C6-N1	7.99	1.41	1.35
1	N	794	A	C5-C4	7.99	1.44	1.38
1	N	142	G	N1-C2	7.99	1.44	1.37
1	N	1289	A	C5-C4	7.99	1.44	1.38
1	N	1494	G	N1-C2	7.99	1.44	1.37
1	N	1500	A	N3-C4	7.98	1.39	1.34
1	N	412	A	N7-C5	-7.98	1.34	1.39
1	N	428	G	C8-N7	7.98	1.35	1.30
1	N	481	G	C5-C4	-7.98	1.32	1.38
1	N	745	G	N3-C4	-7.97	1.29	1.35
1	N	1289	A	N3-C4	-7.97	1.30	1.34
1	N	1381	U	C3'-C2'	7.97	1.61	1.52
1	N	291	U	C4-C5	-7.97	1.36	1.43
1	N	775	G	C2-N3	7.96	1.39	1.32
1	N	736	C	O3'-P	-7.96	1.51	1.61
1	N	1034	G	C8-N7	-7.96	1.26	1.30
1	N	1214	C	N3-C4	7.96	1.39	1.33
1	N	45	G	N9-C8	7.96	1.43	1.37
1	N	1047	G	C2-N3	7.96	1.39	1.32
1	N	329	A	N7-C5	-7.95	1.34	1.39
1	N	724	G	N7-C5	-7.95	1.34	1.39
1	N	1201	A	N7-C5	-7.95	1.34	1.39
1	N	197	A	C5'-C4'	7.95	1.60	1.51
1	N	298	A	N3-C4	-7.95	1.30	1.34
1	N	1114	C	C1'-N1	7.95	1.60	1.48
1	N	4	U	N3-C4	7.95	1.45	1.38
1	N	802	A	C5-C4	7.95	1.44	1.38
1	N	314	C	N3-C4	7.95	1.39	1.33
1	N	388	G	N9-C8	-7.94	1.32	1.37
1	N	794	A	C6-N6	7.94	1.40	1.33
1	N	109	A	N9-C8	-7.94	1.31	1.37
1	N	516	U	C2'-C1'	-7.94	1.44	1.53
1	N	1231	G	N9-C4	-7.94	1.31	1.38
1	N	184	G	C8-N7	-7.94	1.26	1.30
1	N	1058	G	N7-C5	-7.94	1.34	1.39
1	N	1125	U	C4-C5	7.94	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	328	C	N3-C4	7.93	1.39	1.33
1	N	1354	U	C2-N3	7.93	1.43	1.37
1	N	966	G	C1'-N9	7.93	1.60	1.48
1	N	108	G	N1-C2	7.93	1.44	1.37
1	N	1370	G	C6-N1	7.93	1.45	1.39
1	N	376	G	C6-N1	7.93	1.45	1.39
1	N	772	U	C2-N3	7.93	1.43	1.37
1	N	371	A	N7-C5	-7.92	1.34	1.39
1	N	803	G	C5-C4	7.92	1.43	1.38
1	N	1272	G	N9-C4	-7.92	1.31	1.38
1	N	119	A	N7-C5	-7.91	1.34	1.39
1	N	365	U	N3-C4	7.91	1.45	1.38
1	N	958	A	C6-N1	7.91	1.41	1.35
1	N	947	G	C2-N3	7.91	1.39	1.32
1	N	1042	A	P-O5'	-7.91	1.51	1.59
1	N	137	U	O3'-P	-7.91	1.51	1.61
1	N	378	G	N9-C4	-7.91	1.31	1.38
1	N	642	A	C8-N7	-7.91	1.26	1.31
1	N	1505	G	O4'-C1'	-7.91	1.31	1.41
1	N	1031	C	C4-N4	7.90	1.41	1.33
1	N	706	A	N7-C5	-7.90	1.34	1.39
1	N	803	G	C2-N3	7.90	1.39	1.32
1	N	1004	A	C6-N1	7.90	1.41	1.35
1	N	660	C	C2-N3	7.90	1.42	1.35
1	N	1139	G	N9-C4	-7.89	1.31	1.38
1	N	924	C	N3-C4	7.89	1.39	1.33
1	N	738	C	C2'-C1'	-7.89	1.44	1.53
1	N	968	A	C8-N7	-7.89	1.26	1.31
1	N	1216	A	N7-C5	-7.89	1.34	1.39
1	N	963	G	N3-C4	-7.88	1.29	1.35
1	N	1074	G	C2-N2	7.88	1.42	1.34
1	N	160	A	C6-N6	7.88	1.40	1.33
1	N	299	G	N9-C8	7.88	1.43	1.37
1	N	353	A	C6-N1	7.88	1.41	1.35
1	N	1136	C	C1'-N1	7.88	1.60	1.48
1	N	608	A	P-O5'	-7.87	1.51	1.59
1	N	826	C	N1-C6	7.87	1.41	1.37
1	N	1164	G	N9-C8	-7.87	1.32	1.37
1	N	1408	A	N9-C4	7.86	1.42	1.37
1	N	237	G	N9-C4	-7.86	1.31	1.38
1	N	665	A	C6-N6	7.86	1.40	1.33
1	N	538	G	C2-N3	7.86	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	181	A	N1-C2	7.86	1.41	1.34
1	N	322	C	P-O5'	-7.86	1.51	1.59
1	N	512	U	C4-O4	7.86	1.29	1.23
1	N	584	G	N3-C4	-7.86	1.29	1.35
1	N	1064	G	C5-C4	-7.86	1.32	1.38
1	N	1439	G	N9-C4	-7.86	1.31	1.38
1	N	223	A	C6-N6	7.86	1.40	1.33
1	N	286	C	C5-C6	-7.86	1.28	1.34
1	N	1230	C	C4-C5	7.86	1.49	1.43
1	N	324	G	C2-N3	7.85	1.39	1.32
1	N	424	G	P-O5'	-7.85	1.51	1.59
1	N	1041	G	N1-C2	7.85	1.44	1.37
1	N	1534	A	C6-N1	7.85	1.41	1.35
1	N	174	A	C5-C4	7.85	1.44	1.38
1	N	181	A	C4'-C3'	7.85	1.61	1.53
1	N	912	C	N3-C4	7.85	1.39	1.33
1	N	974	A	C5-C4	7.85	1.44	1.38
1	N	998	C	C5'-C4'	7.85	1.60	1.51
1	N	368	U	C4'-C3'	7.85	1.61	1.53
1	N	993	G	C8-N7	-7.84	1.26	1.30
1	N	533	A	N7-C5	-7.84	1.34	1.39
1	N	1486	G	C2'-C1'	-7.84	1.44	1.53
1	N	128	G	C5'-C4'	7.84	1.60	1.51
1	N	128	G	N9-C4	7.84	1.44	1.38
1	N	615	G	C5-C6	-7.84	1.34	1.42
1	N	216	U	C2'-C1'	-7.83	1.44	1.53
1	N	499	A	N7-C5	-7.83	1.34	1.39
1	N	1241	G	N7-C5	-7.83	1.34	1.39
1	N	681	A	C6-N1	7.83	1.41	1.35
1	N	1006	G	C2-N2	7.83	1.42	1.34
1	N	761	G	N1-C2	7.83	1.44	1.37
1	N	1533	C	C3'-C2'	7.83	1.61	1.52
1	N	823	C	C4-N4	7.83	1.41	1.33
1	N	459	A	C6-N6	7.82	1.40	1.33
1	N	1365	G	O3'-P	-7.82	1.51	1.61
1	N	1083	U	N3-C4	7.82	1.45	1.38
1	N	1064	G	N3-C4	7.82	1.41	1.35
1	N	936	C	C5-C6	-7.82	1.28	1.34
1	N	1459	G	C2-N3	7.82	1.39	1.32
1	N	471	U	C2'-C1'	-7.82	1.44	1.53
1	N	1496	C	C4'-O4'	-7.81	1.35	1.45
1	N	99	C	N3-C4	7.81	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	146	G	C2-N2	7.81	1.42	1.34
1	N	203	G	O3'-P	-7.81	1.51	1.61
1	N	264	C	P-O5'	-7.80	1.51	1.59
1	N	1074	G	C3'-C2'	-7.80	1.44	1.52
1	N	152	A	P-O5'	-7.80	1.51	1.59
1	N	288	A	C2'-C1'	-7.80	1.44	1.53
1	N	389	A	N9-C8	-7.80	1.31	1.37
1	N	902	G	N9-C4	-7.80	1.31	1.38
1	N	1449	C	C1'-N1	7.80	1.60	1.48
1	N	213	G	C8-N7	-7.79	1.26	1.30
1	N	319	G	C6-N1	-7.79	1.34	1.39
1	N	1123	U	C4'-C3'	7.79	1.61	1.53
1	N	1504	G	C5-C6	-7.79	1.34	1.42
1	N	1158	C	C2-N3	7.79	1.42	1.35
1	N	6	G	N9-C8	-7.79	1.32	1.37
1	N	148	G	N9-C4	-7.79	1.31	1.38
1	N	165	G	C2-N3	-7.78	1.26	1.32
1	N	1240	U	C1'-N1	7.78	1.60	1.48
1	N	488	C	C4'-C3'	-7.78	1.44	1.53
1	N	593	U	N1-C2	-7.78	1.31	1.38
1	N	980	C	C3'-C2'	-7.78	1.44	1.52
1	N	803	G	N9-C4	-7.77	1.31	1.38
1	N	1421	G	C2-N3	7.77	1.39	1.32
1	N	310	G	N1-C2	7.77	1.44	1.37
1	N	33	A	C2'-C1'	-7.77	1.44	1.53
1	N	130	A	N7-C5	-7.77	1.34	1.39
1	N	356	A	C6-N6	7.77	1.40	1.33
1	N	1290	G	N7-C5	-7.77	1.34	1.39
1	N	1533	C	N1-C6	-7.77	1.32	1.37
1	N	583	A	N7-C5	-7.76	1.34	1.39
1	N	241	G	C6-N1	7.76	1.45	1.39
1	N	635	A	C4'-C3'	-7.76	1.44	1.53
1	N	1021	A	C8-N7	-7.76	1.26	1.31
1	N	538	G	C5'-C4'	7.75	1.60	1.51
1	N	1072	G	N7-C5	-7.75	1.34	1.39
1	N	237	G	N7-C5	-7.75	1.34	1.39
1	N	657	U	C4-O4	-7.75	1.17	1.23
1	N	708	C	N3-C4	7.75	1.39	1.33
1	N	1131	G	C5-C4	-7.75	1.32	1.38
1	N	606	G	N7-C5	-7.75	1.34	1.39
1	N	785	G	C6-N1	7.74	1.45	1.39
1	N	268	U	C4-C5	-7.73	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	559	A	C6-N6	7.73	1.40	1.33
1	N	726	C	C5'-C4'	7.73	1.60	1.51
1	N	1405	G	C5-C4	7.73	1.43	1.38
1	N	713	G	N1-C2	7.73	1.44	1.37
1	N	1142	G	N9-C8	7.73	1.43	1.37
1	N	301	G	C2-N3	7.72	1.39	1.32
1	N	1081	A	C6-N6	7.72	1.40	1.33
1	N	1438	G	N9-C4	-7.72	1.31	1.38
1	N	1028	C	O3'-P	-7.72	1.51	1.61
1	N	275	G	N9-C4	-7.72	1.31	1.38
1	N	610	U	C3'-C2'	7.72	1.61	1.52
1	N	1102	A	P-O5'	-7.72	1.52	1.59
1	N	933	G	C5-C4	7.72	1.43	1.38
1	N	46	G	N3-C4	-7.71	1.30	1.35
1	N	49	U	C4'-C3'	7.71	1.61	1.53
1	N	191	G	C5'-C4'	7.71	1.60	1.51
1	N	667	G	C2-N3	7.71	1.39	1.32
1	N	845	A	C6-N1	7.71	1.41	1.35
1	N	467	U	C2'-C1'	-7.71	1.44	1.53
1	N	520	A	C6-N1	7.71	1.41	1.35
1	N	200	G	C5-C4	7.70	1.43	1.38
1	N	1030	U	C5'-C4'	7.70	1.60	1.51
1	N	542	G	C5'-C4'	7.70	1.60	1.51
1	N	1380	U	C2-N3	7.69	1.43	1.37
1	N	186	C	C4'-C3'	-7.69	1.44	1.53
1	N	222	C	N1-C6	7.69	1.41	1.37
1	N	1032	G	N9-C8	7.69	1.43	1.37
1	N	232	G	C5'-C4'	7.69	1.60	1.51
1	N	1131	G	N3-C4	7.69	1.40	1.35
1	N	548	G	N3-C4	7.69	1.40	1.35
1	N	123	U	C4-C5	-7.68	1.36	1.43
1	N	164	G	C6-N1	7.68	1.45	1.39
1	N	290	C	C4-C5	7.68	1.49	1.43
1	N	597	G	N9-C8	7.68	1.43	1.37
1	N	986	U	C4'-C3'	7.68	1.61	1.53
1	N	371	A	C6-N1	7.68	1.41	1.35
1	N	344	A	N3-C4	-7.68	1.30	1.34
1	N	1173	U	O4'-C1'	7.68	1.51	1.41
1	N	110	C	O3'-P	-7.67	1.51	1.61
1	N	1019	A	C2'-C1'	7.67	1.61	1.53
1	N	349	A	O3'-P	-7.67	1.51	1.61
1	N	1474	U	C5'-C4'	7.67	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	425	G	C2-N3	7.67	1.38	1.32
1	N	1072	G	C5-C4	7.67	1.43	1.38
1	N	1284	C	C2-N3	7.67	1.41	1.35
1	N	945	G	N9-C4	-7.67	1.31	1.38
1	N	537	G	C6-N1	7.66	1.45	1.39
1	N	656	G	N7-C5	-7.66	1.34	1.39
1	N	1105	A	N7-C5	-7.66	1.34	1.39
1	N	353	A	C8-N7	-7.66	1.26	1.31
1	N	1052	U	P-O5'	-7.66	1.52	1.59
1	N	1521	C	C2-N3	7.66	1.41	1.35
1	N	441	A	N9-C4	-7.66	1.33	1.37
1	N	17	U	N3-C4	7.65	1.45	1.38
1	N	101	A	N7-C5	-7.65	1.34	1.39
1	N	1080	A	C6-N6	7.65	1.40	1.33
1	N	1358	U	O3'-P	-7.65	1.51	1.61
1	N	647	C	N1-C6	7.65	1.41	1.37
1	N	1147	C	C2-N3	7.65	1.41	1.35
1	N	975	A	C2'-C1'	-7.65	1.45	1.53
1	N	253	A	C2'-C1'	-7.65	1.45	1.53
1	N	446	G	C8-N7	7.65	1.35	1.30
1	N	1281	C	O3'-P	-7.65	1.51	1.61
1	N	597	G	P-O5'	-7.64	1.52	1.59
1	N	873	A	N3-C4	-7.64	1.30	1.34
1	N	615	G	C2-N3	7.64	1.38	1.32
1	N	884	U	N1-C6	7.64	1.44	1.38
1	N	449	G	C2-N3	7.64	1.38	1.32
1	N	55	A	C8-N7	-7.64	1.26	1.31
1	N	506	G	C2'-C1'	-7.64	1.45	1.53
1	N	731	G	C6-N1	7.64	1.44	1.39
1	N	768	A	C5-C4	7.63	1.44	1.38
1	N	1406	U	N1-C2	7.63	1.45	1.38
1	N	415	A	N3-C4	-7.63	1.30	1.34
1	N	425	G	N7-C5	-7.63	1.34	1.39
1	N	83	C	C4'-C3'	7.63	1.61	1.53
1	N	426	U	P-O5'	-7.63	1.52	1.59
1	N	531	U	N3-C4	7.63	1.45	1.38
1	N	599	C	C4'-C3'	-7.63	1.44	1.53
1	N	936	C	N3-C4	7.63	1.39	1.33
1	N	944	G	C2-N3	7.62	1.38	1.32
1	N	335	C	N1-C6	7.62	1.41	1.37
1	N	821	G	C5-C6	-7.62	1.34	1.42
1	N	1125	U	C4-O4	-7.62	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	41	G	C3'-C2'	7.62	1.61	1.52
1	N	322	C	C2-N3	7.62	1.41	1.35
1	N	341	C	C4-C5	-7.62	1.36	1.43
1	N	1417	G	O4'-C1'	7.61	1.51	1.41
1	N	1518	A	C5-C4	7.61	1.44	1.38
1	N	1162	C	C2-O2	-7.61	1.17	1.24
1	N	1519	A	C8-N7	-7.61	1.26	1.31
1	N	442	G	C6-N1	7.61	1.44	1.39
1	N	603	U	C2-N3	7.61	1.43	1.37
1	N	1222	G	N7-C5	7.61	1.43	1.39
1	N	1483	A	P-O5'	-7.61	1.52	1.59
1	N	447	G	C2-N3	7.60	1.38	1.32
1	N	557	G	C6-N1	7.59	1.44	1.39
1	N	1139	G	C6-N1	7.59	1.44	1.39
1	N	354	G	C6-N1	7.59	1.44	1.39
1	N	408	A	C6-N6	7.59	1.40	1.33
1	N	446	G	C6-N1	7.59	1.44	1.39
1	N	1504	G	C5'-C4'	7.59	1.60	1.51
1	N	456	A	N3-C4	-7.59	1.30	1.34
1	N	236	A	C5-C6	-7.58	1.34	1.41
1	N	542	G	N9-C4	-7.58	1.31	1.38
1	N	1519	A	P-O5'	7.58	1.67	1.59
1	N	508	U	C1'-N1	7.58	1.60	1.48
1	N	691	G	P-O5'	-7.58	1.52	1.59
1	N	998	C	N1-C6	7.58	1.41	1.37
1	N	647	C	P-O5'	-7.58	1.52	1.59
1	N	752	G	C2'-C1'	-7.58	1.45	1.53
1	N	1062	U	N3-C4	7.57	1.45	1.38
1	N	604	G	N9-C8	7.57	1.43	1.37
1	N	1384	C	C2'-C1'	-7.57	1.45	1.53
1	N	501	C	C4-N4	7.57	1.40	1.33
1	N	1282	C	N1-C6	7.57	1.41	1.37
1	N	879	C	C4'-C3'	-7.57	1.44	1.53
1	N	929	G	C5-C6	-7.57	1.34	1.42
1	N	936	C	C5'-C4'	7.57	1.60	1.51
1	N	891	U	C5'-C4'	7.56	1.60	1.51
1	N	310	G	C6-N1	7.56	1.44	1.39
1	N	675	A	N9-C4	7.56	1.42	1.37
1	N	271	C	C4'-C3'	-7.56	1.44	1.53
1	N	1257	A	C6-N6	7.56	1.40	1.33
1	N	1291	U	C2-N3	7.56	1.43	1.37
1	N	891	U	C2-N3	7.56	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	244	U	N1-C6	7.56	1.44	1.38
1	N	212	G	C2'-C1'	-7.55	1.45	1.53
1	N	330	C	N3-C4	7.55	1.39	1.33
1	N	620	C	C1'-N1	7.55	1.60	1.48
1	N	247	G	C2-N3	7.55	1.38	1.32
1	N	869	G	N3-C4	7.55	1.40	1.35
1	N	1464	U	C4-C5	-7.55	1.36	1.43
1	N	363	A	C6-N6	7.54	1.40	1.33
1	N	11	G	C2-N3	7.54	1.38	1.32
1	N	69	G	C8-N7	-7.54	1.26	1.30
1	N	1197	A	C4'-C3'	7.54	1.61	1.53
1	N	1431	A	N9-C4	7.54	1.42	1.37
1	N	1201	A	C6-N6	7.54	1.40	1.33
1	N	1436	U	C2-N3	7.54	1.43	1.37
1	N	191	G	O3'-P	-7.54	1.52	1.61
1	N	942	G	C6-N1	7.54	1.44	1.39
1	N	1293	C	O4'-C1'	7.54	1.51	1.41
1	N	767	A	C5-C4	7.53	1.44	1.38
1	N	870	U	P-O5'	-7.53	1.52	1.59
1	N	920	U	C4-C5	-7.53	1.36	1.43
1	N	1106	G	N7-C5	-7.53	1.34	1.39
1	N	640	A	C5-C4	7.53	1.44	1.38
1	N	335	C	N3-C4	7.53	1.39	1.33
1	N	107	G	C5-C6	-7.53	1.34	1.42
1	N	907	A	P-O5'	7.53	1.67	1.59
1	N	346	G	N3-C4	-7.52	1.30	1.35
1	N	1384	C	C1'-N1	7.52	1.60	1.48
1	N	116	A	N9-C4	-7.52	1.33	1.37
1	N	265	G	N1-C2	7.52	1.43	1.37
1	N	1369	C	C4-N4	7.52	1.40	1.33
1	N	987	G	N3-C4	-7.52	1.30	1.35
1	N	1048	G	P-O5'	-7.52	1.52	1.59
1	N	342	C	P-O5'	-7.52	1.52	1.59
1	N	520	A	P-O5'	-7.52	1.52	1.59
1	N	1165	U	P-O5'	-7.52	1.52	1.59
1	N	519	C	N3-C4	7.51	1.39	1.33
1	N	1219	A	O3'-P	-7.51	1.52	1.61
1	N	380	G	C3'-C2'	-7.51	1.44	1.52
1	N	497	G	N1-C2	7.51	1.43	1.37
1	N	1209	C	N1-C6	7.51	1.41	1.37
1	N	466	A	C8-N7	-7.50	1.26	1.31
1	N	1429	A	N7-C5	-7.50	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	289	G	N7-C5	-7.50	1.34	1.39
1	N	1441	A	N9-C8	-7.50	1.31	1.37
1	N	133	U	O3'-P	-7.50	1.52	1.61
1	N	233	C	P-O5'	-7.50	1.52	1.59
1	N	613	C	C2'-C1'	-7.50	1.45	1.53
1	N	1392	G	C6-N1	7.50	1.44	1.39
1	N	412	A	C6-N1	7.50	1.40	1.35
1	N	896	C	N1-C2	-7.50	1.32	1.40
1	N	1517	G	N9-C4	7.50	1.44	1.38
1	N	1304	G	C5-C4	-7.50	1.33	1.38
1	N	1306	A	N7-C5	-7.50	1.34	1.39
1	N	654	G	N7-C5	-7.49	1.34	1.39
1	N	276	G	N9-C8	7.49	1.43	1.37
1	N	591	U	P-O5'	-7.49	1.52	1.59
1	N	1142	G	C6-N1	-7.49	1.34	1.39
1	N	1492	A	N1-C2	7.49	1.41	1.34
1	N	1395	C	N3-C4	7.49	1.39	1.33
1	N	527	G	N1-C2	7.48	1.43	1.37
1	N	494	G	C6-N1	7.48	1.44	1.39
1	N	575	G	C5-C6	7.48	1.49	1.42
1	N	1124	G	N9-C4	-7.48	1.31	1.38
1	N	1033	G	N3-C4	-7.48	1.30	1.35
1	N	1358	U	N1-C6	7.48	1.44	1.38
1	N	902	G	N7-C5	-7.47	1.34	1.39
1	N	696	A	C6-N1	7.47	1.40	1.35
1	N	1188	A	C4'-O4'	-7.47	1.35	1.45
1	N	1370	G	C2'-C1'	-7.47	1.45	1.53
1	N	57	G	C5-C6	-7.47	1.34	1.42
1	N	659	U	P-O5'	-7.47	1.52	1.59
1	N	1473	G	C4'-C3'	7.47	1.61	1.53
1	N	767	A	N7-C5	7.47	1.43	1.39
1	N	1033	G	C8-N7	7.46	1.35	1.30
1	N	1241	G	N9-C4	-7.46	1.31	1.38
1	N	1142	G	N9-C4	-7.46	1.31	1.38
1	N	830	G	C8-N7	7.46	1.35	1.30
1	N	1194	U	C2'-C1'	-7.46	1.45	1.53
1	N	294	U	C5-C6	-7.46	1.27	1.34
1	N	1264	U	C2'-C1'	-7.46	1.45	1.53
1	N	675	A	N3-C4	7.45	1.39	1.34
1	N	1213	A	N9-C4	-7.45	1.33	1.37
1	N	1312	G	N9-C8	-7.45	1.32	1.37
1	N	1457	G	C5-C6	-7.45	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1493	A	C6-N1	7.45	1.40	1.35
1	N	492	C	N1-C6	7.44	1.41	1.37
1	N	925	G	N9-C4	7.44	1.44	1.38
1	N	737	C	P-O5'	-7.44	1.52	1.59
1	N	1020	G	C2-N3	7.44	1.38	1.32
1	N	69	G	C5-C6	-7.43	1.34	1.42
1	N	642	A	C1'-N9	7.43	1.59	1.48
1	N	538	G	P-O5'	-7.43	1.52	1.59
1	N	322	C	C4'-C3'	-7.43	1.45	1.53
1	N	1261	A	N9-C4	7.43	1.42	1.37
1	N	553	A	C5-C4	7.42	1.44	1.38
1	N	1152	A	C4'-O4'	7.42	1.55	1.45
1	N	771	G	O3'-P	-7.42	1.52	1.61
1	N	906	A	C4'-O4'	-7.42	1.35	1.45
1	N	1280	A	N9-C4	7.42	1.42	1.37
1	N	795	C	C2-O2	7.42	1.31	1.24
1	N	1256	A	N9-C4	7.42	1.42	1.37
1	N	1289	A	N7-C5	-7.42	1.34	1.39
1	N	1399	C	N1-C6	-7.42	1.32	1.37
1	N	1406	U	C1'-N1	7.42	1.59	1.48
1	N	553	A	N3-C4	-7.42	1.30	1.34
1	N	878	A	C6-N1	7.42	1.40	1.35
1	N	1098	C	N3-C4	7.41	1.39	1.33
1	N	1447	A	C3'-C2'	-7.41	1.44	1.52
1	N	872	A	C5-C4	-7.41	1.33	1.38
1	N	436	C	N3-C4	7.41	1.39	1.33
1	N	91	U	N1-C6	-7.41	1.31	1.38
1	N	614	C	N3-C4	7.41	1.39	1.33
1	N	947	G	N1-C2	7.41	1.43	1.37
1	N	305	G	C8-N7	7.41	1.35	1.30
1	N	532	A	O3'-P	-7.40	1.52	1.61
1	N	647	C	C2-N3	7.40	1.41	1.35
1	N	1069	C	P-O5'	-7.40	1.52	1.59
1	N	115	G	C2'-C1'	-7.40	1.45	1.53
1	N	281	G	C1'-N9	7.40	1.59	1.48
1	N	169	C	C2'-C1'	-7.40	1.45	1.53
1	N	1453	G	N3-C4	-7.40	1.30	1.35
1	N	6	G	C2'-C1'	-7.39	1.45	1.53
1	N	32	A	C6-N1	7.39	1.40	1.35
1	N	409	U	C2-N3	7.39	1.43	1.37
1	N	1043	G	N1-C2	7.39	1.43	1.37
1	N	55	A	N9-C4	7.39	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	694	A	N9-C8	7.39	1.43	1.37
1	N	195	A	N9-C8	-7.39	1.31	1.37
1	N	51	A	C8-N7	7.38	1.36	1.31
1	N	1022	A	C4'-C3'	7.38	1.61	1.53
1	N	304	U	N3-C4	7.38	1.45	1.38
1	N	606	G	N1-C2	7.38	1.43	1.37
1	N	1394	A	P-O5'	-7.38	1.52	1.59
1	N	1131	G	C6-N1	7.38	1.44	1.39
1	N	1135	U	O3'-P	-7.38	1.52	1.61
1	N	428	G	O3'-P	-7.37	1.52	1.61
1	N	1251	A	C6-N6	7.37	1.39	1.33
1	N	1335	U	C2-N3	7.37	1.43	1.37
1	N	541	G	C2-N3	7.37	1.38	1.32
1	N	754	C	C5'-C4'	7.37	1.60	1.51
1	N	933	G	N1-C2	7.37	1.43	1.37
1	N	1203	C	N1-C6	-7.37	1.32	1.37
1	N	837	U	C2-N3	7.37	1.43	1.37
1	N	1100	C	P-O5'	-7.37	1.52	1.59
1	N	80	A	C5'-C4'	7.36	1.60	1.51
1	N	356	A	N9-C8	-7.36	1.31	1.37
1	N	825	A	N7-C5	-7.36	1.34	1.39
1	N	1176	A	C2-N3	7.36	1.40	1.33
1	N	270	A	N7-C5	-7.36	1.34	1.39
1	N	435	A	C2'-C1'	-7.36	1.45	1.53
1	N	1436	U	P-O5'	-7.36	1.52	1.59
1	N	641	U	C2-N3	7.36	1.42	1.37
1	N	1434	A	P-O5'	-7.36	1.52	1.59
1	N	629	A	C8-N7	-7.35	1.26	1.31
1	N	762	U	C1'-N1	7.35	1.59	1.48
1	N	849	G	N1-C2	7.35	1.43	1.37
1	N	951	G	C5'-C4'	7.35	1.60	1.51
1	N	320	A	C5-C4	7.35	1.43	1.38
1	N	597	G	C2-N3	7.35	1.38	1.32
1	N	1339	A	C5-C4	7.35	1.43	1.38
1	N	198	G	N9-C8	-7.35	1.32	1.37
1	N	669	G	C2'-C1'	-7.34	1.45	1.53
1	N	179	A	C2-N3	7.34	1.40	1.33
1	N	215	C	N1-C6	7.34	1.41	1.37
1	N	319	G	O3'-P	-7.34	1.52	1.61
1	N	520	A	C2-N3	7.34	1.40	1.33
1	N	731	G	C5'-C4'	7.34	1.60	1.51
1	N	973	G	N9-C4	-7.34	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1290	G	C2-N2	7.34	1.41	1.34
1	N	1445	U	C4'-C3'	-7.34	1.45	1.53
1	N	638	U	N3-C4	7.33	1.45	1.38
1	N	315	A	C6-N6	7.33	1.39	1.33
1	N	318	G	C2-N3	7.33	1.38	1.32
1	N	1170	A	C2'-C1'	-7.33	1.45	1.53
1	N	1047	G	N1-C2	7.33	1.43	1.37
1	N	713	G	P-O5'	-7.32	1.52	1.59
1	N	1362	A	C6-N6	7.32	1.39	1.33
1	N	107	G	C2'-C1'	-7.32	1.45	1.53
1	N	1058	G	N3-C4	-7.32	1.30	1.35
1	N	336	A	N7-C5	-7.32	1.34	1.39
1	N	1247	U	C4-C5	7.32	1.50	1.43
1	N	1516	G	N3-C4	-7.32	1.30	1.35
1	N	535	A	C6-N1	7.31	1.40	1.35
1	N	774	G	C5'-C4'	7.31	1.60	1.51
1	N	1531	A	N9-C8	7.31	1.43	1.37
1	N	321	A	C8-N7	-7.31	1.26	1.31
1	N	483	C	P-O5'	-7.31	1.52	1.59
1	N	583	A	C6-N6	7.31	1.39	1.33
1	N	739	C	C5-C6	-7.31	1.28	1.34
1	N	1335	U	O3'-P	-7.31	1.52	1.61
1	N	611	C	C4-N4	7.31	1.40	1.33
1	N	213	G	N1-C2	7.31	1.43	1.37
1	N	816	A	N3-C4	7.31	1.39	1.34
1	N	1473	G	O4'-C1'	7.31	1.51	1.41
1	N	398	U	C2-N3	7.30	1.42	1.37
1	N	772	U	C2'-C1'	-7.30	1.45	1.53
1	N	897	C	O4'-C1'	7.30	1.51	1.41
1	N	958	A	N9-C4	7.30	1.42	1.37
1	N	382	A	N9-C4	-7.30	1.33	1.37
1	N	156	C	C4-N4	7.30	1.40	1.33
1	N	136	C	C4-N4	7.30	1.40	1.33
1	N	517	G	N9-C8	7.30	1.43	1.37
1	N	432	A	N1-C2	7.30	1.41	1.34
1	N	999	C	C4-N4	7.30	1.40	1.33
1	N	594	U	C5-C6	7.30	1.40	1.34
1	N	33	A	N9-C8	-7.29	1.31	1.37
1	N	228	A	N9-C4	-7.29	1.33	1.37
1	N	255	G	N1-C2	7.29	1.43	1.37
1	N	57	G	C2'-C1'	-7.29	1.45	1.53
1	N	543	U	N1-C6	7.29	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1427	C	C4-N4	7.29	1.40	1.33
1	N	39	G	C8-N7	-7.29	1.26	1.30
1	N	285	C	C4'-O4'	7.29	1.55	1.45
1	N	1115	U	C5'-C4'	7.29	1.60	1.51
1	N	38	G	N1-C2	7.29	1.43	1.37
1	N	460	A	P-O5'	-7.29	1.52	1.59
1	N	826	C	C4-N4	7.29	1.40	1.33
1	N	1241	G	C2-N2	7.29	1.41	1.34
1	N	1012	A	C6-N1	7.29	1.40	1.35
1	N	1063	C	C4-N4	7.29	1.40	1.33
1	N	1482	G	N9-C8	-7.29	1.32	1.37
1	N	1485	U	C1'-N1	7.29	1.59	1.48
1	N	120	A	C4'-C3'	7.29	1.61	1.53
1	N	1396	A	P-O5'	-7.29	1.52	1.59
1	N	24	U	P-O5'	-7.28	1.52	1.59
1	N	95	C	C4'-C3'	7.28	1.61	1.53
1	N	1013	G	N9-C4	-7.28	1.32	1.38
1	N	348	G	N7-C5	-7.28	1.34	1.39
1	N	317	U	P-O5'	-7.28	1.52	1.59
1	N	558	G	C2-N3	7.28	1.38	1.32
1	N	669	G	C6-N1	7.28	1.44	1.39
1	N	704	A	C6-N1	7.28	1.40	1.35
1	N	772	U	N3-C4	7.28	1.45	1.38
1	N	885	G	C2-N3	7.28	1.38	1.32
1	N	954	G	N7-C5	-7.28	1.34	1.39
1	N	81	A	C6-N1	7.27	1.40	1.35
1	N	633	G	C5-C4	-7.27	1.33	1.38
1	N	1267	C	C4-N4	7.27	1.40	1.33
1	N	657	U	N1-C6	7.27	1.44	1.38
1	N	705	G	N7-C5	-7.27	1.34	1.39
1	N	1322	C	C5'-C4'	7.27	1.60	1.51
1	N	1311	A	C8-N7	-7.27	1.26	1.31
1	N	31	G	N9-C8	-7.26	1.32	1.37
1	N	481	G	O3'-P	-7.26	1.52	1.61
1	N	719	C	C1'-N1	7.26	1.59	1.48
1	N	860	A	N9-C4	-7.26	1.33	1.37
1	N	947	G	C6-N1	7.26	1.44	1.39
1	N	1405	G	N9-C8	7.26	1.43	1.37
1	N	662	U	C2-N3	7.26	1.42	1.37
1	N	727	G	N1-C2	7.26	1.43	1.37
1	N	1124	G	C6-N1	7.26	1.44	1.39
1	N	174	A	C6-N1	7.26	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	932	C	O3'-P	-7.26	1.52	1.61
1	N	1059	C	N3-C4	7.26	1.39	1.33
1	N	380	G	C2-N3	7.26	1.38	1.32
1	N	599	C	N3-C4	7.26	1.39	1.33
1	N	46	G	O3'-P	-7.26	1.52	1.61
1	N	676	A	C8-N7	-7.26	1.26	1.31
1	N	435	A	C5-C4	7.25	1.43	1.38
1	N	300	A	O3'-P	-7.25	1.52	1.61
1	N	455	G	N3-C4	-7.25	1.30	1.35
1	N	567	G	C8-N7	7.25	1.35	1.30
1	N	1148	U	C5-C6	-7.25	1.27	1.34
1	N	135	C	C2-N3	7.25	1.41	1.35
1	N	983	A	N3-C4	-7.25	1.30	1.34
1	N	1062	U	C4'-C3'	7.25	1.61	1.53
1	N	1331	G	C6-N1	7.25	1.44	1.39
1	N	1346	A	N7-C5	-7.25	1.34	1.39
1	N	959	A	C2'-C1'	-7.25	1.45	1.53
1	N	1277	C	C2-N3	7.25	1.41	1.35
1	N	669	G	C1'-N9	7.25	1.59	1.48
1	N	898	G	N9-C4	-7.25	1.32	1.38
1	N	997	U	C4'-C3'	7.25	1.61	1.53
1	N	1090	U	C2-N3	7.25	1.42	1.37
1	N	612	C	C3'-O3'	7.25	1.52	1.42
1	N	305	G	C2'-C1'	-7.24	1.45	1.53
1	N	1134	G	C3'-C2'	-7.24	1.44	1.52
1	N	955	U	C5'-C4'	7.24	1.60	1.51
1	N	1455	G	N9-C8	-7.24	1.32	1.37
1	N	111	G	N7-C5	-7.23	1.34	1.39
1	N	819	A	N3-C4	-7.23	1.30	1.34
1	N	1415	G	C6-N1	7.23	1.44	1.39
1	N	98	A	C5'-C4'	7.23	1.60	1.51
1	N	832	G	C6-N1	7.23	1.44	1.39
1	N	866	C	C4-C5	-7.23	1.37	1.43
1	N	259	G	N7-C5	-7.23	1.34	1.39
1	N	1181	G	C1'-N9	7.23	1.59	1.48
1	N	639	G	N1-C2	7.23	1.43	1.37
1	N	1126	U	C2-N3	7.23	1.42	1.37
1	N	3	A	N3-C4	7.22	1.39	1.34
1	N	1280	A	N3-C4	-7.22	1.30	1.34
1	N	374	A	C6-N6	7.22	1.39	1.33
1	N	862	C	N3-C4	7.22	1.39	1.33
1	N	107	G	N9-C8	-7.22	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	896	C	C2-N3	7.22	1.41	1.35
1	N	784	A	C2'-C1'	-7.22	1.45	1.53
1	N	830	G	N1-C2	7.22	1.43	1.37
1	N	1072	G	N9-C4	-7.22	1.32	1.38
1	N	1414	U	O3'-P	-7.22	1.52	1.61
1	N	46	G	C5'-C4'	7.21	1.60	1.51
1	N	234	C	C2'-C1'	-7.21	1.45	1.53
1	N	7	A	N7-C5	7.21	1.43	1.39
1	N	920	U	C4-O4	7.21	1.29	1.23
1	N	1195	C	N3-C4	7.21	1.39	1.33
1	N	158	G	N1-C2	7.21	1.43	1.37
1	N	318	G	N9-C8	-7.21	1.32	1.37
1	N	1232	U	O4'-C1'	7.20	1.51	1.41
1	N	1134	G	C6-N1	7.20	1.44	1.39
1	N	1248	A	C2-N3	7.20	1.40	1.33
1	N	558	G	C4'-C3'	7.20	1.61	1.53
1	N	862	C	C4-N4	7.20	1.40	1.33
1	N	1356	G	N1-C2	7.20	1.43	1.37
1	N	33	A	N3-C4	7.20	1.39	1.34
1	N	372	C	C4'-C3'	7.20	1.61	1.53
1	N	798	U	N3-C4	7.20	1.45	1.38
1	N	312	C	N1-C6	7.19	1.41	1.37
1	N	300	A	C2'-C1'	-7.19	1.45	1.53
1	N	1057	G	O3'-P	-7.19	1.52	1.61
1	N	1098	C	P-O5'	-7.19	1.52	1.59
1	N	227	G	N7-C5	-7.19	1.34	1.39
1	N	1356	G	C2'-C1'	-7.19	1.45	1.53
1	N	1407	C	C4-N4	7.19	1.40	1.33
1	N	984	C	C1'-N1	7.19	1.59	1.48
1	N	721	G	N1-C2	7.18	1.43	1.37
1	N	1357	A	C6-N1	7.18	1.40	1.35
1	N	398	U	C5-C6	7.18	1.40	1.34
1	N	1144	G	O4'-C1'	7.18	1.50	1.41
1	N	496	A	C2-N3	7.18	1.40	1.33
1	N	341	C	N1-C6	7.18	1.41	1.37
1	N	1170	A	C5-C6	-7.18	1.34	1.41
1	N	1182	G	C2-N3	-7.18	1.27	1.32
1	N	1289	A	C6-N6	7.18	1.39	1.33
1	N	1309	G	C8-N7	7.17	1.35	1.30
1	N	114	U	C4'-O4'	7.17	1.54	1.45
1	N	732	C	P-O5'	-7.17	1.52	1.59
1	N	616	G	C6-N1	7.17	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1023	U	C4-C5	-7.17	1.37	1.43
1	N	1242	G	N9-C4	-7.17	1.32	1.38
1	N	48	C	C5-C6	-7.16	1.28	1.34
1	N	1426	G	N3-C4	-7.16	1.30	1.35
1	N	805	C	C3'-C2'	7.16	1.60	1.52
1	N	239	U	N1-C2	-7.16	1.32	1.38
1	N	208	U	C1'-N1	7.16	1.59	1.48
1	N	254	G	N1-C2	7.16	1.43	1.37
1	N	321	A	N7-C5	-7.16	1.34	1.39
1	N	1422	G	C8-N7	-7.15	1.26	1.30
1	N	725	G	N9-C8	-7.15	1.32	1.37
1	N	1220	G	C8-N7	-7.15	1.26	1.30
1	N	1367	C	C4-N4	7.15	1.40	1.33
1	N	885	G	N3-C4	-7.15	1.30	1.35
1	N	1027	C	N3-C4	7.15	1.39	1.33
1	N	1072	G	N1-C2	7.15	1.43	1.37
1	N	47	C	N1-C6	-7.15	1.32	1.37
1	N	248	C	C4-N4	7.15	1.40	1.33
1	N	1448	C	O3'-P	-7.15	1.52	1.61
1	N	567	G	N1-C2	7.15	1.43	1.37
1	N	487	A	C8-N7	-7.14	1.26	1.31
1	N	221	C	P-O5'	-7.14	1.52	1.59
1	N	50	A	N3-C4	7.14	1.39	1.34
1	N	528	C	C4-C5	7.14	1.48	1.43
1	N	867	G	C2-N2	7.14	1.41	1.34
1	N	1247	U	P-O5'	-7.14	1.52	1.59
1	N	473	U	N1-C6	7.14	1.44	1.38
1	N	1304	G	O3'-P	-7.14	1.52	1.61
1	N	1511	G	N3-C4	-7.14	1.30	1.35
1	N	1039	G	N1-C2	7.13	1.43	1.37
1	N	352	C	C2-N3	7.13	1.41	1.35
1	N	1421	G	C4'-O4'	-7.13	1.36	1.45
1	N	1124	G	N1-C2	7.13	1.43	1.37
1	N	820	U	O4'-C1'	-7.13	1.32	1.41
1	N	897	C	N3-C4	7.13	1.39	1.33
1	N	116	A	C6-N6	7.13	1.39	1.33
1	N	231	U	N3-C4	7.13	1.44	1.38
1	N	718	A	C5-C4	-7.13	1.33	1.38
1	N	243	A	C6-N6	7.12	1.39	1.33
1	N	277	C	C4'-O4'	-7.12	1.36	1.45
1	N	89	U	N1-C2	-7.12	1.32	1.38
1	N	296	U	C2-N3	7.12	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	781	A	C5'-C4'	7.12	1.59	1.51
1	N	1005	A	N3-C4	7.12	1.39	1.34
1	N	1445	U	N3-C4	7.12	1.44	1.38
1	N	902	G	N3-C4	7.12	1.40	1.35
1	N	714	G	C3'-O3'	7.12	1.52	1.42
1	N	972	C	C4-N4	7.12	1.40	1.33
1	N	299	G	N9-C4	-7.12	1.32	1.38
1	N	338	A	N3-C4	-7.12	1.30	1.34
1	N	444	G	N7-C5	-7.12	1.34	1.39
1	N	460	A	C2-N3	7.12	1.40	1.33
1	N	964	A	C5-C4	7.12	1.43	1.38
1	N	1099	G	C2-N3	7.12	1.38	1.32
1	N	1107	C	C4-N4	7.12	1.40	1.33
1	N	1114	C	C2-N3	-7.12	1.30	1.35
1	N	1482	G	N7-C5	-7.12	1.34	1.39
1	N	145	G	C2'-C1'	-7.11	1.45	1.53
1	N	1304	G	C6-N1	7.11	1.44	1.39
1	N	176	C	C4-C5	-7.11	1.37	1.43
1	N	406	G	C5-C6	-7.11	1.35	1.42
1	N	1056	U	N3-C4	7.11	1.44	1.38
1	N	1011	C	N3-C4	7.11	1.39	1.33
1	N	1331	G	C5-C4	-7.11	1.33	1.38
1	N	628	G	O4'-C1'	7.11	1.50	1.41
1	N	1389	C	C2-N3	7.11	1.41	1.35
1	N	644	U	C4-C5	7.11	1.50	1.43
1	N	715	A	N1-C2	-7.11	1.27	1.34
1	N	881	G	N1-C2	7.11	1.43	1.37
1	N	91	U	C5'-C4'	7.11	1.59	1.51
1	N	375	U	C2-N3	7.11	1.42	1.37
1	N	1185	G	C2-N3	7.11	1.38	1.32
1	N	97	G	P-O5'	-7.10	1.52	1.59
1	N	1492	A	N9-C4	7.10	1.42	1.37
1	N	142	G	C2'-C1'	-7.10	1.45	1.53
1	N	838	G	P-O5'	-7.10	1.52	1.59
1	N	1138	G	N1-C2	7.10	1.43	1.37
1	N	1458	G	N9-C8	7.10	1.42	1.37
1	N	85	U	N1-C2	7.10	1.45	1.38
1	N	779	C	C4'-C3'	7.10	1.60	1.53
1	N	225	C	C4-N4	7.10	1.40	1.33
1	N	1524	C	N3-C4	7.10	1.39	1.33
1	N	42	G	N7-C5	-7.10	1.34	1.39
1	N	331	G	C6-N1	7.10	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	391	G	C6-N1	7.10	1.44	1.39
1	N	1169	A	N7-C5	-7.10	1.34	1.39
1	N	504	C	C2-O2	7.09	1.30	1.24
1	N	468	A	C5-C6	-7.09	1.34	1.41
1	N	356	A	C6-N1	7.09	1.40	1.35
1	N	860	A	N7-C5	-7.09	1.34	1.39
1	N	983	A	N7-C5	-7.08	1.34	1.39
1	N	1298	U	C5'-C4'	7.08	1.59	1.51
1	N	490	C	C2'-C1'	7.08	1.61	1.53
1	N	1035	A	N7-C5	-7.08	1.35	1.39
1	N	1317	C	C4'-C3'	7.08	1.60	1.53
1	N	922	G	C6-N1	7.08	1.44	1.39
1	N	428	G	N9-C8	-7.08	1.32	1.37
1	N	861	G	N7-C5	-7.07	1.35	1.39
1	N	351	G	C2-N3	7.07	1.38	1.32
1	N	770	C	C4-C5	7.07	1.48	1.43
1	N	87	C	C4-N4	7.06	1.40	1.33
1	N	529	G	N1-C2	7.06	1.43	1.37
1	N	646	G	C2-N2	7.06	1.41	1.34
1	N	593	U	C2'-C1'	-7.06	1.45	1.53
1	N	887	G	C5'-C4'	7.06	1.59	1.51
1	N	1302	C	C4-N4	7.06	1.40	1.33
1	N	414	A	C6-N6	7.06	1.39	1.33
1	N	460	A	N7-C5	-7.06	1.35	1.39
1	N	1216	A	C5-C4	-7.06	1.33	1.38
1	N	677	U	P-O5'	-7.06	1.52	1.59
1	N	676	A	C6-N6	7.05	1.39	1.33
1	N	836	G	N1-C2	7.05	1.43	1.37
1	N	1352	C	N1-C6	7.05	1.41	1.37
1	N	1410	A	N9-C4	-7.05	1.33	1.37
1	N	309	A	P-O5'	-7.05	1.52	1.59
1	N	1153	G	C8-N7	-7.05	1.26	1.30
1	N	1242	G	N9-C8	-7.05	1.32	1.37
1	N	1472	U	C4-C5	7.05	1.49	1.43
1	N	247	G	N9-C8	-7.05	1.32	1.37
1	N	794	A	N9-C4	-7.05	1.33	1.37
1	N	189	A	N7-C5	-7.04	1.35	1.39
1	N	450	G	C5-C6	-7.04	1.35	1.42
1	N	831	A	C5'-C4'	7.04	1.59	1.51
1	N	50	A	C6-N6	7.04	1.39	1.33
1	N	412	A	C2-N3	7.04	1.39	1.33
1	N	765	G	C6-N1	7.04	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1205	U	N1-C2	-7.04	1.32	1.38
1	N	1324	A	P-O5'	7.04	1.66	1.59
1	N	98	A	C6-N6	7.04	1.39	1.33
1	N	278	G	C2-N3	7.04	1.38	1.32
1	N	433	G	N1-C2	7.04	1.43	1.37
1	N	802	A	N3-C4	-7.04	1.30	1.34
1	N	220	G	N1-C2	7.04	1.43	1.37
1	N	266	G	C4'-O4'	-7.04	1.36	1.45
1	N	394	G	N3-C4	-7.04	1.30	1.35
1	N	744	C	N1-C6	7.04	1.41	1.37
1	N	166	U	P-O5'	-7.04	1.52	1.59
1	N	791	G	N1-C2	7.04	1.43	1.37
1	N	3	A	C8-N7	-7.03	1.26	1.31
1	N	190	A	C5-C4	7.03	1.43	1.38
1	N	468	A	N3-C4	7.03	1.39	1.34
1	N	622	A	N9-C4	7.03	1.42	1.37
1	N	861	G	C2-N3	7.03	1.38	1.32
1	N	937	A	C2-N3	7.03	1.39	1.33
1	N	1009	U	N3-C4	7.03	1.44	1.38
1	N	665	A	N7-C5	-7.03	1.35	1.39
1	N	278	G	O3'-P	-7.03	1.52	1.61
1	N	443	C	N3-C4	7.03	1.38	1.33
1	N	286	C	C2-N3	7.03	1.41	1.35
1	N	342	C	C5'-C4'	7.03	1.59	1.51
1	N	952	U	C2-N3	7.03	1.42	1.37
1	N	1388	C	N1-C2	7.03	1.47	1.40
1	N	1145	A	C6-N6	7.02	1.39	1.33
1	N	213	G	N9-C4	7.02	1.43	1.38
1	N	1128	C	N3-C4	7.02	1.38	1.33
1	N	1180	A	C6-N1	7.02	1.40	1.35
1	N	508	U	N1-C6	7.02	1.44	1.38
1	N	430	A	C6-N6	7.02	1.39	1.33
1	N	456	A	C6-N6	7.02	1.39	1.33
1	N	1500	A	N7-C5	-7.02	1.35	1.39
1	N	1137	C	N3-C4	7.02	1.38	1.33
1	N	1222	G	N9-C8	-7.02	1.32	1.37
1	N	1451	U	C4'-C3'	7.02	1.60	1.53
1	N	37	U	P-O5'	-7.01	1.52	1.59
1	N	29	U	C4-C5	7.01	1.49	1.43
1	N	1288	A	N3-C4	-7.01	1.30	1.34
1	N	1366	C	C1'-N1	7.01	1.59	1.48
1	N	1432	G	C2'-C1'	-7.01	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	21	G	P-O5'	-7.01	1.52	1.59
1	N	744	C	C4-N4	7.01	1.40	1.33
1	N	484	G	C3'-O3'	-7.00	1.32	1.42
1	N	1241	G	C5'-C4'	7.00	1.59	1.51
1	N	524	G	C2'-C1'	-7.00	1.45	1.53
1	N	686	U	C4'-C3'	7.00	1.60	1.53
1	N	1185	G	C5-C6	-7.00	1.35	1.42
1	N	565	U	N1-C6	7.00	1.44	1.38
1	N	629	A	N3-C4	-7.00	1.30	1.34
1	N	1354	U	C5'-C4'	7.00	1.59	1.51
1	N	106	C	N3-C4	7.00	1.38	1.33
1	N	941	G	N1-C2	7.00	1.43	1.37
1	N	172	A	N9-C4	-7.00	1.33	1.37
1	N	590	U	N1-C2	-7.00	1.32	1.38
1	N	674	G	N9-C4	7.00	1.43	1.38
1	N	971	G	C5'-C4'	7.00	1.59	1.51
1	N	423	G	N7-C5	-6.99	1.35	1.39
1	N	597	G	N3-C4	-6.99	1.30	1.35
1	N	726	C	C2'-C1'	-6.99	1.45	1.53
1	N	901	A	C8-N7	6.99	1.36	1.31
1	N	1362	A	C5'-C4'	-6.99	1.43	1.51
1	N	1411	C	C4-C5	6.99	1.48	1.43
1	N	648	A	N3-C4	6.99	1.39	1.34
1	N	712	A	C6-N1	6.99	1.40	1.35
1	N	925	G	P-O5'	-6.99	1.52	1.59
1	N	1057	G	C6-N1	6.99	1.44	1.39
1	N	1366	C	C4-N4	6.99	1.40	1.33
1	N	1488	G	N1-C2	6.99	1.43	1.37
1	N	306	A	N7-C5	-6.99	1.35	1.39
1	N	773	G	N9-C4	-6.99	1.32	1.38
1	N	805	C	C2'-C1'	-6.99	1.45	1.53
1	N	274	A	C6-N6	6.99	1.39	1.33
1	N	357	G	C4'-O4'	-6.99	1.36	1.45
1	N	1232	U	C2-N3	6.99	1.42	1.37
1	N	361	G	C2-N3	6.99	1.38	1.32
1	N	823	C	N3-C4	6.99	1.38	1.33
1	N	274	A	N3-C4	6.98	1.39	1.34
1	N	562	U	N3-C4	6.98	1.44	1.38
1	N	762	U	O3'-P	-6.98	1.52	1.61
1	N	970	C	C4-N4	6.98	1.40	1.33
1	N	751	U	C2-N3	6.98	1.42	1.37
1	N	881	G	C6-O6	-6.98	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	160	A	C2'-C1'	-6.98	1.45	1.53
1	N	374	A	P-O5'	-6.98	1.52	1.59
1	N	631	C	C2'-C1'	-6.98	1.45	1.53
1	N	364	A	N1-C2	6.98	1.40	1.34
1	N	895	G	N7-C5	6.98	1.43	1.39
1	N	594	U	C2-N3	6.97	1.42	1.37
1	N	328	C	C4-C5	-6.97	1.37	1.43
1	N	378	G	N7-C5	-6.97	1.35	1.39
1	N	1441	A	N7-C5	-6.97	1.35	1.39
1	N	1101	A	C2-N3	6.97	1.39	1.33
1	N	1317	C	N3-C4	6.97	1.38	1.33
1	N	1056	U	N1-C6	6.97	1.44	1.38
1	N	1033	G	C5-C4	6.96	1.43	1.38
1	N	777	A	N9-C4	-6.96	1.33	1.37
1	N	1215	G	C2-N2	6.96	1.41	1.34
1	N	395	C	C2-N3	6.96	1.41	1.35
1	N	429	U	C2'-C1'	-6.96	1.45	1.53
1	N	478	A	C5-C6	-6.96	1.34	1.41
1	N	574	A	C6-N6	6.96	1.39	1.33
1	N	1204	A	N3-C4	6.96	1.39	1.34
1	N	1432	G	N9-C4	-6.96	1.32	1.38
1	N	872	A	C8-N7	-6.96	1.26	1.31
1	N	317	U	N1-C2	6.96	1.44	1.38
1	N	365	U	P-O5'	-6.96	1.52	1.59
1	N	1187	G	N7-C5	6.96	1.43	1.39
1	N	1104	G	C8-N7	-6.95	1.26	1.30
1	N	1125	U	C2-N3	6.95	1.42	1.37
1	N	1320	C	C4-C5	-6.95	1.37	1.43
1	N	1517	G	N1-C2	6.95	1.43	1.37
1	N	733	G	N3-C4	-6.95	1.30	1.35
1	N	399	G	C8-N7	-6.95	1.26	1.30
1	N	1480	A	C2'-C1'	-6.95	1.45	1.53
1	N	378	G	C2-N2	6.95	1.41	1.34
1	N	80	A	N9-C4	6.94	1.42	1.37
1	N	105	G	N9-C8	-6.94	1.32	1.37
1	N	654	G	C6-N1	6.94	1.44	1.39
1	N	1067	A	C5-C6	-6.94	1.34	1.41
1	N	983	A	C4'-O4'	6.94	1.54	1.45
1	N	232	G	C6-N1	6.94	1.44	1.39
1	N	405	U	C2-N3	6.94	1.42	1.37
1	N	1227	A	C6-N6	6.94	1.39	1.33
1	N	675	A	C6-N6	6.93	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1067	A	C2'-C1'	-6.93	1.45	1.53
1	N	1364	U	N3-C4	6.93	1.44	1.38
1	N	210	C	N1-C2	6.93	1.47	1.40
1	N	377	G	N1-C2	6.93	1.43	1.37
1	N	764	C	N1-C6	6.93	1.41	1.37
1	N	1139	G	N1-C2	6.93	1.43	1.37
1	N	1234	C	C5'-C4'	6.93	1.59	1.51
1	N	822	U	C2-N3	6.93	1.42	1.37
1	N	895	G	C5-C6	-6.93	1.35	1.42
1	N	1007	U	O3'-P	-6.92	1.52	1.61
1	N	210	C	O3'-P	-6.92	1.52	1.61
1	N	293	G	O3'-P	-6.92	1.52	1.61
1	N	588	G	C2-N3	6.92	1.38	1.32
1	N	1075	U	C1'-N1	6.92	1.59	1.48
1	N	163	C	C2-N3	6.92	1.41	1.35
1	N	714	G	C8-N7	-6.92	1.26	1.30
1	N	1101	A	C6-N6	6.92	1.39	1.33
1	N	1517	G	N7-C5	-6.92	1.35	1.39
1	N	1276	G	C6-N1	6.92	1.44	1.39
1	N	32	A	N7-C5	-6.92	1.35	1.39
1	N	42	G	N1-C2	6.92	1.43	1.37
1	N	155	A	N7-C5	-6.92	1.35	1.39
1	N	166	U	N1-C6	6.92	1.44	1.38
1	N	770	C	C2'-C1'	-6.92	1.45	1.53
1	N	1323	G	C6-N1	6.92	1.44	1.39
1	N	556	C	C2'-C1'	-6.91	1.45	1.53
1	N	963	G	C1'-N9	6.91	1.59	1.48
1	N	761	G	C4'-C3'	-6.91	1.45	1.53
1	N	1219	A	N1-C2	6.91	1.40	1.34
1	N	687	A	N7-C5	-6.91	1.35	1.39
1	N	734	G	C2-N3	6.91	1.38	1.32
1	N	1284	C	N1-C6	6.91	1.41	1.37
1	N	1331	G	N7-C5	-6.91	1.35	1.39
1	N	408	A	C3'-O3'	6.91	1.51	1.42
1	N	941	G	C4'-C3'	6.91	1.60	1.53
1	N	1268	G	P-O5'	6.90	1.66	1.59
1	N	1484	C	C2-N3	6.90	1.41	1.35
1	N	129	A	C2'-C1'	-6.90	1.45	1.53
1	N	221	C	C4'-C3'	6.90	1.60	1.53
1	N	814	A	N9-C8	-6.90	1.32	1.37
1	N	1219	A	C2'-C1'	-6.90	1.45	1.53
1	N	227	G	C6-N1	-6.90	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	303	A	C3'-C2'	-6.90	1.45	1.52
1	N	316	C	P-O5'	-6.90	1.52	1.59
1	N	462	G	C6-N1	6.89	1.44	1.39
1	N	601	G	P-O5'	-6.89	1.52	1.59
1	N	621	A	N9-C8	6.89	1.43	1.37
1	N	1081	A	C2-N3	6.89	1.39	1.33
1	N	1349	A	C5-C4	6.89	1.43	1.38
1	N	1394	A	C5-C4	6.89	1.43	1.38
1	N	694	A	N3-C4	6.89	1.39	1.34
1	N	969	A	N9-C4	6.89	1.42	1.37
1	N	670	G	C4'-C3'	6.89	1.60	1.53
1	N	1373	G	C5-C6	6.89	1.49	1.42
1	N	426	U	C1'-N1	6.89	1.59	1.48
1	N	900	A	C2'-C1'	-6.89	1.45	1.53
1	N	889	A	N9-C4	6.88	1.42	1.37
1	N	1074	G	N7-C5	-6.88	1.35	1.39
1	N	1060	U	N3-C4	6.88	1.44	1.38
1	N	285	C	C2'-O2'	-6.88	1.32	1.41
1	N	266	G	C2-N3	6.88	1.38	1.32
1	N	651	C	C4'-O4'	-6.88	1.36	1.45
1	N	951	G	C6-N1	6.88	1.44	1.39
1	N	1333	A	N7-C5	-6.88	1.35	1.39
1	N	79	G	N3-C4	-6.88	1.30	1.35
1	N	246	A	O3'-P	-6.88	1.52	1.61
1	N	971	G	C2'-C1'	-6.88	1.45	1.53
1	N	16	A	C5-C6	-6.87	1.34	1.41
1	N	359	G	C6-N1	6.87	1.44	1.39
1	N	754	C	C2-N3	-6.87	1.30	1.35
1	N	773	G	C3'-O3'	6.87	1.51	1.42
1	N	1110	A	C2'-C1'	-6.87	1.45	1.53
1	N	1053	G	C2-N2	6.87	1.41	1.34
1	N	1105	A	C3'-C2'	6.87	1.60	1.52
1	N	1246	A	C5'-C4'	6.87	1.59	1.51
1	N	1336	C	C4'-C3'	6.87	1.60	1.53
1	N	128	G	C2-N2	6.87	1.41	1.34
1	N	1186	G	C5'-C4'	6.87	1.59	1.51
1	N	52	C	C4-N4	6.86	1.40	1.33
1	N	125	U	C2'-C1'	-6.86	1.45	1.53
1	N	424	G	N1-C2	6.86	1.43	1.37
1	N	1450	U	C4-C5	6.86	1.49	1.43
1	N	682	G	C2'-C1'	-6.86	1.45	1.53
1	N	32	A	N9-C8	-6.86	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	270	A	P-O5'	-6.86	1.52	1.59
1	N	452	A	N3-C4	-6.86	1.30	1.34
1	N	1266	G	N9-C8	6.86	1.42	1.37
1	N	1363	A	N7-C5	-6.86	1.35	1.39
1	N	271	C	N1-C6	6.86	1.41	1.37
1	N	1181	G	O3'-P	-6.86	1.52	1.61
1	N	1186	G	C2-N2	6.86	1.41	1.34
1	N	1319	A	N3-C4	6.86	1.39	1.34
1	N	1098	C	C4-C5	6.85	1.48	1.43
1	N	168	G	C2-N3	6.85	1.38	1.32
1	N	621	A	C4'-O4'	-6.85	1.36	1.45
1	N	311	C	N3-C4	6.85	1.38	1.33
1	N	382	A	C8-N7	-6.85	1.26	1.31
1	N	416	G	N9-C8	6.85	1.42	1.37
1	N	583	A	N1-C2	6.85	1.40	1.34
1	N	787	A	C3'-C2'	-6.85	1.45	1.52
1	N	41	G	C8-N7	-6.85	1.26	1.30
1	N	444	G	C5-C4	-6.85	1.33	1.38
1	N	1051	C	C2-N3	6.85	1.41	1.35
1	N	1300	G	P-O5'	-6.85	1.52	1.59
1	N	1152	A	C4'-C3'	-6.84	1.45	1.53
1	N	892	A	C6-N6	6.84	1.39	1.33
1	N	537	G	C5-C6	-6.84	1.35	1.42
1	N	1244	G	C4'-O4'	-6.84	1.36	1.45
1	N	1519	A	C1'-N9	6.84	1.59	1.48
1	N	81	A	O4'-C1'	-6.84	1.32	1.41
1	N	431	A	O3'-P	-6.84	1.52	1.61
1	N	1133	G	N7-C5	-6.84	1.35	1.39
1	N	365	U	C4-C5	6.83	1.49	1.43
1	N	805	C	C4-N4	6.83	1.40	1.33
1	N	1039	G	N7-C5	-6.83	1.35	1.39
1	N	1061	G	N9-C8	6.83	1.42	1.37
1	N	17	U	N1-C6	-6.83	1.31	1.38
1	N	1254	A	C5-C4	6.83	1.43	1.38
1	N	530	G	C5'-C4'	6.83	1.59	1.51
1	N	792	A	C6-N1	6.83	1.40	1.35
1	N	1269	A	C6-N1	6.83	1.40	1.35
1	N	460	A	C4'-C3'	6.82	1.60	1.53
1	N	665	A	C2'-C1'	-6.82	1.45	1.53
1	N	1172	C	N3-C4	6.82	1.38	1.33
1	N	107	G	C4'-O4'	-6.82	1.36	1.45
1	N	741	G	C5'-C4'	6.82	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	73	C	C2'-C1'	-6.82	1.45	1.53
1	N	560	A	N9-C4	6.82	1.42	1.37
1	N	1529	G	N9-C8	6.82	1.42	1.37
1	N	787	A	C4'-C3'	-6.82	1.45	1.53
1	N	11	G	N3-C4	-6.82	1.30	1.35
1	N	241	G	N9-C8	6.82	1.42	1.37
1	N	511	C	O3'-P	-6.82	1.52	1.61
1	N	832	G	N9-C8	6.82	1.42	1.37
1	N	209	U	O4'-C1'	6.82	1.50	1.41
1	N	1093	A	C6-N1	6.82	1.40	1.35
1	N	422	C	C4'-C3'	6.81	1.60	1.53
1	N	1193	G	C8-N7	-6.81	1.26	1.30
1	N	1358	U	P-O5'	-6.81	1.52	1.59
1	N	26	A	N9-C4	-6.81	1.33	1.37
1	N	1016	A	C6-N1	6.81	1.40	1.35
1	N	205	A	N3-C4	-6.81	1.30	1.34
1	N	600	A	O3'-P	-6.81	1.52	1.61
1	N	119	A	C6-N1	6.81	1.40	1.35
1	N	556	C	C4'-O4'	-6.81	1.36	1.45
1	N	189	A	N3-C4	-6.80	1.30	1.34
1	N	221	C	O3'-P	-6.80	1.52	1.61
1	N	292	G	N1-C2	6.80	1.43	1.37
1	N	909	A	C5-C4	6.80	1.43	1.38
1	N	1281	C	C4-N4	6.80	1.40	1.33
1	N	783	C	N3-C4	6.80	1.38	1.33
1	N	113	G	C4'-O4'	6.80	1.54	1.45
1	N	490	C	C4-N4	6.80	1.40	1.33
1	N	898	G	N7-C5	-6.80	1.35	1.39
1	N	1067	A	C6-N1	6.80	1.40	1.35
1	N	1444	U	O3'-P	-6.80	1.52	1.61
1	N	1462	C	N3-C4	6.80	1.38	1.33
1	N	575	G	N9-C4	-6.80	1.32	1.38
1	N	17	U	N1-C2	6.80	1.44	1.38
1	N	138	G	N9-C4	-6.80	1.32	1.38
1	N	390	U	N1-C6	6.80	1.44	1.38
1	N	675	A	C6-N1	6.80	1.40	1.35
1	N	452	A	C2-N3	-6.79	1.27	1.33
1	N	1520	C	C4-N4	6.79	1.40	1.33
1	N	325	A	C2'-C1'	-6.79	1.45	1.53
1	N	376	G	C2-N3	6.79	1.38	1.32
1	N	931	C	N3-C4	6.79	1.38	1.33
1	N	115	G	C5-C6	-6.79	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1332	A	C4'-O4'	6.79	1.54	1.45
1	N	1032	G	P-O5'	-6.79	1.52	1.59
1	N	139	A	N9-C4	-6.79	1.33	1.37
1	N	1305	G	N7-C5	-6.79	1.35	1.39
1	N	1419	G	C5-C6	6.79	1.49	1.42
1	N	698	G	C2-N2	6.79	1.41	1.34
1	N	775	G	C5-C6	-6.79	1.35	1.42
1	N	693	G	C6-N1	6.78	1.44	1.39
1	N	849	G	N7-C5	-6.78	1.35	1.39
1	N	1059	C	C3'-O3'	6.78	1.51	1.42
1	N	287	U	C1'-N1	6.78	1.58	1.48
1	N	800	G	P-O5'	-6.78	1.52	1.59
1	N	808	C	N3-C4	6.78	1.38	1.33
1	N	810	C	C2-N3	6.78	1.41	1.35
1	N	259	G	C2-N3	6.78	1.38	1.32
1	N	500	G	O3'-P	-6.78	1.53	1.61
1	N	252	U	C4-O4	6.78	1.29	1.23
1	N	774	G	C2-N3	6.78	1.38	1.32
1	N	1454	G	C2-N2	6.78	1.41	1.34
1	N	816	A	N1-C2	-6.78	1.28	1.34
1	N	778	G	C5-C4	6.77	1.43	1.38
1	N	1245	C	C3'-C2'	-6.77	1.45	1.52
1	N	432	A	C6-N6	6.77	1.39	1.33
1	N	660	C	P-O5'	-6.77	1.52	1.59
1	N	1397	C	C5'-C4'	6.77	1.59	1.51
1	N	1501	C	C2'-C1'	-6.77	1.46	1.53
1	N	1134	G	N7-C5	-6.77	1.35	1.39
1	N	204	G	N7-C5	-6.77	1.35	1.39
1	N	1180	A	N1-C2	6.77	1.40	1.34
1	N	90	C	C4-C5	6.76	1.48	1.43
1	N	237	G	C2-N3	6.76	1.38	1.32
1	N	282	A	C5-C4	6.76	1.43	1.38
1	N	1492	A	C5'-C4'	6.76	1.59	1.51
1	N	292	G	C6-N1	6.76	1.44	1.39
1	N	732	C	N1-C6	6.76	1.41	1.37
1	N	740	U	C3'-C2'	6.76	1.60	1.52
1	N	843	U	C5'-C4'	6.76	1.59	1.51
1	N	1080	A	C3'-C2'	6.76	1.60	1.52
1	N	602	A	N7-C5	-6.76	1.35	1.39
1	N	1255	G	C1'-N9	6.76	1.58	1.48
1	N	229	U	O3'-P	-6.75	1.53	1.61
1	N	605	U	N1-C2	-6.75	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	954	G	N3-C4	-6.75	1.30	1.35
1	N	980	C	O4'-C1'	6.75	1.50	1.41
1	N	1444	U	P-O5'	-6.75	1.52	1.59
1	N	790	A	C3'-C2'	-6.75	1.45	1.52
1	N	510	A	N9-C8	-6.75	1.32	1.37
1	N	988	G	N3-C4	-6.75	1.30	1.35
1	N	1476	A	N3-C4	6.75	1.39	1.34
1	N	543	U	N1-C2	-6.75	1.32	1.38
1	N	1124	G	O3'-P	-6.75	1.53	1.61
1	N	872	A	C6-N1	-6.75	1.30	1.35
1	N	454	G	C2-N3	6.74	1.38	1.32
1	N	885	G	C5-C6	-6.74	1.35	1.42
1	N	983	A	C6-N6	6.74	1.39	1.33
1	N	7	A	C5-C4	6.74	1.43	1.38
1	N	130	A	C5-C4	-6.74	1.34	1.38
1	N	680	C	C1'-N1	6.74	1.58	1.48
1	N	77	A	C2-N3	-6.74	1.27	1.33
1	N	1506	U	C4'-O4'	-6.74	1.36	1.45
1	N	259	G	N1-C2	6.74	1.43	1.37
1	N	577	G	C2-N2	-6.74	1.27	1.34
1	N	1239	A	N9-C4	-6.74	1.33	1.37
1	N	166	U	C2'-C1'	-6.73	1.46	1.53
1	N	903	G	C5'-C4'	6.73	1.59	1.51
1	N	109	A	C6-N1	6.73	1.40	1.35
1	N	391	G	N7-C5	-6.73	1.35	1.39
1	N	546	A	N7-C5	6.73	1.43	1.39
1	N	1358	U	C5-C6	-6.73	1.28	1.34
1	N	276	G	P-O5'	-6.73	1.53	1.59
1	N	852	G	O4'-C1'	6.73	1.50	1.41
1	N	1197	A	C5-C4	6.73	1.43	1.38
1	N	1210	C	C5'-C4'	6.73	1.59	1.51
1	N	608	A	C1'-N9	6.73	1.58	1.48
1	N	859	G	C2'-C1'	-6.73	1.46	1.53
1	N	337	G	C5'-C4'	6.73	1.59	1.51
1	N	74	A	N3-C4	-6.72	1.30	1.34
1	N	350	G	N1-C2	6.72	1.43	1.37
1	N	429	U	O3'-P	-6.72	1.53	1.61
1	N	1140	C	C4-N4	6.72	1.40	1.33
1	N	181	A	N3-C4	-6.72	1.30	1.34
1	N	354	G	O3'-P	-6.72	1.53	1.61
1	N	957	U	P-O5'	-6.72	1.53	1.59
1	N	1349	A	C8-N7	-6.72	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	658	C	C4-C5	6.72	1.48	1.43
1	N	363	A	C5-C6	6.72	1.47	1.41
1	N	550	G	C5-C4	6.72	1.43	1.38
1	N	1329	A	C3'-O3'	6.72	1.51	1.42
1	N	1311	A	N3-C4	-6.71	1.30	1.34
1	N	499	A	N9-C4	-6.71	1.33	1.37
1	N	1287	A	N7-C5	-6.71	1.35	1.39
1	N	325	A	N9-C4	6.71	1.41	1.37
1	N	812	G	C6-N1	6.71	1.44	1.39
1	N	1372	U	N1-C2	6.71	1.44	1.38
1	N	595	A	N9-C4	-6.71	1.33	1.37
1	N	184	G	P-O5'	-6.70	1.53	1.59
1	N	425	G	N9-C8	-6.70	1.33	1.37
1	N	742	G	O4'-C1'	6.70	1.50	1.41
1	N	745	G	N1-C2	6.70	1.43	1.37
1	N	1017	U	C2-O2	6.70	1.28	1.22
1	N	9	G	N7-C5	-6.70	1.35	1.39
1	N	102	G	C6-N1	6.70	1.44	1.39
1	N	907	A	N7-C5	-6.70	1.35	1.39
1	N	938	A	C8-N7	-6.70	1.26	1.31
1	N	1071	C	N1-C6	6.70	1.41	1.37
1	N	246	A	C2'-C1'	-6.69	1.46	1.53
1	N	1039	G	C6-N1	6.69	1.44	1.39
1	N	279	A	N9-C8	6.69	1.43	1.37
1	N	1021	A	C6-N1	6.69	1.40	1.35
1	N	1255	G	P-O5'	-6.69	1.53	1.59
1	N	512	U	C2-N3	-6.69	1.33	1.37
1	N	647	C	C1'-N1	6.69	1.58	1.48
1	N	1031	C	N3-C4	6.69	1.38	1.33
1	N	61	G	C6-N1	6.68	1.44	1.39
1	N	193	C	C4-C5	-6.68	1.37	1.43
1	N	1155	A	C2'-C1'	-6.68	1.46	1.53
1	N	279	A	C6-N1	6.68	1.40	1.35
1	N	416	G	C4'-C3'	6.68	1.60	1.53
1	N	604	G	N1-C2	6.68	1.43	1.37
1	N	1026	G	N9-C8	-6.68	1.33	1.37
1	N	1154	G	P-O5'	-6.68	1.53	1.59
1	N	38	G	C8-N7	6.68	1.34	1.30
1	N	739	C	C1'-N1	6.68	1.58	1.48
1	N	946	A	C2-N3	6.68	1.39	1.33
1	N	1246	A	N3-C4	6.68	1.38	1.34
1	N	1444	U	C2-N3	6.68	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	326	G	C5'-C4'	6.68	1.59	1.51
1	N	532	A	C5-C4	6.68	1.43	1.38
1	N	1210	C	C2-N3	6.68	1.41	1.35
1	N	1461	G	C2-N3	6.67	1.38	1.32
1	N	1524	C	C4'-C3'	6.67	1.60	1.53
1	N	994	A	P-O5'	-6.67	1.53	1.59
1	N	185	U	C2-N3	6.67	1.42	1.37
1	N	493	A	C4'-C3'	6.67	1.60	1.53
1	N	530	G	C2-N3	6.67	1.38	1.32
1	N	139	A	N7-C5	-6.67	1.35	1.39
1	N	180	U	C3'-C2'	6.67	1.60	1.52
1	N	466	A	N1-C2	6.67	1.40	1.34
1	N	707	U	C2-N3	6.67	1.42	1.37
1	N	765	G	N1-C2	6.67	1.43	1.37
1	N	1138	G	C4'-O4'	-6.67	1.36	1.45
1	N	53	A	C2'-C1'	-6.67	1.46	1.53
1	N	397	A	C6-N6	6.67	1.39	1.33
1	N	741	G	C8-N7	6.67	1.34	1.30
1	N	953	G	C6-N1	6.66	1.44	1.39
1	N	154	U	C4'-C3'	6.66	1.60	1.53
1	N	500	G	N7-C5	-6.66	1.35	1.39
1	N	1116	U	C2-N3	6.66	1.42	1.37
1	N	45	G	C4'-O4'	-6.66	1.36	1.45
1	N	492	C	C5-C6	-6.66	1.29	1.34
1	N	881	G	C8-N7	6.66	1.34	1.30
1	N	1155	A	C6-N1	6.66	1.40	1.35
1	N	616	G	N1-C2	6.66	1.43	1.37
1	N	118	U	C4-C5	-6.66	1.37	1.43
1	N	521	G	C5-C4	6.66	1.43	1.38
1	N	1125	U	C4'-C3'	6.66	1.60	1.53
1	N	1228	C	O3'-P	-6.65	1.53	1.61
1	N	169	C	C1'-N1	6.65	1.58	1.48
1	N	382	A	C6-N1	6.65	1.40	1.35
1	N	1325	C	O4'-C1'	6.65	1.50	1.41
1	N	1372	U	C2'-C1'	-6.65	1.46	1.53
1	N	685	G	N9-C4	-6.65	1.32	1.38
1	N	741	G	N3-C4	-6.65	1.30	1.35
1	N	1059	C	C3'-C2'	-6.65	1.45	1.52
1	N	1436	U	O3'-P	-6.65	1.53	1.61
1	N	1058	G	N1-C2	6.65	1.43	1.37
1	N	1448	C	C1'-N1	6.65	1.58	1.48
1	N	922	G	C2-N2	6.65	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1304	G	P-O5'	-6.65	1.53	1.59
1	N	46	G	N1-C2	6.64	1.43	1.37
1	N	314	C	C4-C5	-6.64	1.37	1.43
1	N	81	A	C6-N6	6.64	1.39	1.33
1	N	459	A	C5-C4	6.64	1.43	1.38
1	N	463	U	C4'-C3'	6.64	1.60	1.53
1	N	1091	U	C5-C6	6.64	1.40	1.34
1	N	1111	A	C6-N6	6.64	1.39	1.33
1	N	1139	G	N3-C4	6.64	1.40	1.35
1	N	1350	A	O4'-C1'	6.64	1.50	1.41
1	N	31	G	C6-N1	6.64	1.44	1.39
1	N	1085	U	C2-N3	6.64	1.42	1.37
1	N	634	C	N3-C4	6.64	1.38	1.33
1	N	944	G	N3-C4	6.64	1.40	1.35
1	N	1124	G	C3'-C2'	6.64	1.60	1.52
1	N	720	C	P-O5'	-6.64	1.53	1.59
1	N	1140	C	O4'-C1'	-6.64	1.33	1.41
1	N	546	A	O4'-C1'	-6.63	1.33	1.41
1	N	651	C	N1-C2	-6.63	1.33	1.40
1	N	664	G	N1-C2	6.63	1.43	1.37
1	N	1113	C	C3'-O3'	6.63	1.51	1.42
1	N	407	U	C2-N3	6.63	1.42	1.37
1	N	489	C	N1-C6	6.63	1.41	1.37
1	N	904	U	O4'-C1'	6.63	1.50	1.41
1	N	1187	G	C5-C4	6.63	1.43	1.38
1	N	254	G	C2'-C1'	-6.63	1.46	1.53
1	N	1224	U	C4'-C3'	6.63	1.60	1.53
1	N	450	G	N1-C2	6.62	1.43	1.37
1	N	502	A	C6-N1	6.62	1.40	1.35
1	N	138	G	N7-C5	-6.62	1.35	1.39
1	N	710	G	C2-N3	6.62	1.38	1.32
1	N	1187	G	N9-C8	6.62	1.42	1.37
1	N	511	C	C2-N3	6.62	1.41	1.35
1	N	977	A	C6-N1	-6.62	1.30	1.35
1	N	722	G	C6-N1	6.62	1.44	1.39
1	N	1248	A	C6-N1	6.62	1.40	1.35
1	N	1476	A	C5-C6	6.62	1.47	1.41
1	N	119	A	C5-C6	6.61	1.47	1.41
1	N	1025	U	O3'-P	-6.61	1.53	1.61
1	N	399	G	N9-C8	6.61	1.42	1.37
1	N	598	U	P-O5'	-6.61	1.53	1.59
1	N	1197	A	C6-N1	6.61	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1205	U	N1-C6	6.61	1.44	1.38
1	N	1120	C	C2-N3	-6.61	1.30	1.35
1	N	906	A	C3'-C2'	-6.61	1.45	1.52
1	N	1428	A	C6-N1	6.61	1.40	1.35
1	N	96	U	C2-N3	6.60	1.42	1.37
1	N	598	U	C5'-C4'	6.60	1.59	1.51
1	N	618	C	O4'-C1'	6.60	1.50	1.41
1	N	658	C	N1-C6	6.60	1.41	1.37
1	N	713	G	C6-N1	6.60	1.44	1.39
1	N	728	A	N3-C4	-6.60	1.30	1.34
1	N	757	U	P-O5'	-6.60	1.53	1.59
1	N	152	A	O3'-P	-6.60	1.53	1.61
1	N	361	G	C8-N7	-6.60	1.26	1.30
1	N	414	A	C5-C4	6.60	1.43	1.38
1	N	730	G	C3'-C2'	6.60	1.60	1.52
1	N	1010	U	C2'-C1'	-6.60	1.46	1.53
1	N	371	A	N9-C4	-6.60	1.33	1.37
1	N	1213	A	C6-N6	6.60	1.39	1.33
1	N	430	A	P-O5'	-6.60	1.53	1.59
1	N	853	C	N3-C4	6.59	1.38	1.33
1	N	491	G	N1-C2	6.59	1.43	1.37
1	N	717	U	C2-N3	6.59	1.42	1.37
1	N	987	G	C2-N3	6.59	1.38	1.32
1	N	1048	G	C2'-C1'	-6.59	1.46	1.53
1	N	1162	C	P-O5'	-6.59	1.53	1.59
1	N	1501	C	O3'-P	-6.59	1.53	1.61
1	N	276	G	C5-C4	6.59	1.43	1.38
1	N	753	A	O3'-P	-6.59	1.53	1.61
1	N	878	A	C6-N6	6.59	1.39	1.33
1	N	1453	G	C2-N2	6.59	1.41	1.34
1	N	919	A	C8-N7	-6.58	1.26	1.31
1	N	1180	A	C5-C6	6.58	1.47	1.41
1	N	1310	G	C2-N3	6.58	1.38	1.32
1	N	184	G	C2-N3	6.58	1.38	1.32
1	N	812	G	C8-N7	6.58	1.34	1.30
1	N	894	G	P-O5'	-6.58	1.53	1.59
1	N	1239	A	N7-C5	6.58	1.43	1.39
1	N	426	U	C4'-O4'	-6.58	1.37	1.45
1	N	576	C	O3'-P	-6.58	1.53	1.61
1	N	768	A	N9-C4	-6.57	1.33	1.37
1	N	941	G	C6-N1	6.57	1.44	1.39
1	N	1379	G	N9-C4	-6.57	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	655	A	N1-C2	6.57	1.40	1.34
1	N	799	G	N7-C5	6.57	1.43	1.39
1	N	337	G	C4'-C3'	-6.57	1.46	1.53
1	N	841	C	C5-C6	6.57	1.39	1.34
1	N	75	G	C8-N7	-6.57	1.27	1.30
1	N	749	A	C6-N6	6.57	1.39	1.33
1	N	1033	G	N1-C2	6.57	1.43	1.37
1	N	1499	A	O3'-P	-6.57	1.53	1.61
1	N	276	G	C6-N1	6.57	1.44	1.39
1	N	336	A	N3-C4	6.57	1.38	1.34
1	N	771	G	C5-C4	6.57	1.43	1.38
1	N	1043	G	N9-C8	6.56	1.42	1.37
1	N	80	A	C4'-C3'	-6.56	1.46	1.53
1	N	411	A	C6-N1	6.56	1.40	1.35
1	N	541	G	C5'-C4'	6.56	1.59	1.51
1	N	580	C	N3-C4	6.56	1.38	1.33
1	N	683	G	N7-C5	-6.56	1.35	1.39
1	N	1498	U	C2'-C1'	-6.56	1.46	1.53
1	N	696	A	N7-C5	-6.56	1.35	1.39
1	N	111	G	N9-C4	-6.56	1.32	1.38
1	N	1040	U	N3-C4	6.56	1.44	1.38
1	N	1175	G	C2-N3	6.56	1.38	1.32
1	N	1184	G	C6-N1	6.56	1.44	1.39
1	N	1250	A	C6-N6	6.56	1.39	1.33
1	N	1418	A	N9-C4	6.56	1.41	1.37
1	N	408	A	N9-C4	6.55	1.41	1.37
1	N	568	G	C2'-C1'	-6.55	1.46	1.53
1	N	850	U	C2'-C1'	-6.55	1.46	1.53
1	N	1017	U	N3-C4	6.55	1.44	1.38
1	N	1117	A	N3-C4	-6.55	1.30	1.34
1	N	1347	G	N9-C8	6.55	1.42	1.37
1	N	139	A	C3'-O3'	6.55	1.51	1.42
1	N	1061	G	C3'-O3'	6.55	1.51	1.42
1	N	817	C	N3-C4	6.55	1.38	1.33
1	N	1082	A	P-O5'	-6.55	1.53	1.59
1	N	163	C	C4'-C3'	6.54	1.60	1.53
1	N	66	A	C8-N7	-6.54	1.26	1.31
1	N	1405	G	N9-C4	-6.54	1.32	1.38
1	N	657	U	C2-N3	6.54	1.42	1.37
1	N	842	U	P-O5'	-6.54	1.53	1.59
1	N	1092	A	C6-N1	6.54	1.40	1.35
1	N	692	U	O4'-C1'	6.54	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	281	G	O3'-P	-6.54	1.53	1.61
1	N	352	C	C5'-C4'	6.54	1.59	1.51
1	N	1274	A	N3-C4	-6.54	1.30	1.34
1	N	1465	A	C2'-C1'	-6.54	1.46	1.53
1	N	435	A	C6-N6	6.53	1.39	1.33
1	N	189	A	C3'-O3'	6.53	1.51	1.42
1	N	709	U	C5'-C4'	-6.53	1.43	1.51
1	N	791	G	N9-C4	-6.53	1.32	1.38
1	N	804	U	C4'-C3'	6.53	1.60	1.53
1	N	1079	G	N9-C8	6.53	1.42	1.37
1	N	1509	C	C5'-C4'	6.53	1.59	1.51
1	N	78	A	N3-C4	6.53	1.38	1.34
1	N	1003	G	C2-N2	6.53	1.41	1.34
1	N	884	U	C2'-C1'	-6.53	1.46	1.53
1	N	674	G	N7-C5	6.53	1.43	1.39
1	N	844	G	N3-C4	-6.53	1.30	1.35
1	N	1483	A	C2'-C1'	-6.53	1.46	1.53
1	N	95	C	N3-C4	6.52	1.38	1.33
1	N	179	A	N7-C5	-6.52	1.35	1.39
1	N	671	G	C2-N3	6.52	1.38	1.32
1	N	1023	U	N1-C6	6.52	1.43	1.38
1	N	1163	A	N7-C5	-6.52	1.35	1.39
1	N	313	A	C2'-C1'	-6.52	1.46	1.53
1	N	1093	A	C4'-O4'	6.52	1.54	1.45
1	N	1283	U	P-O5'	-6.52	1.53	1.59
1	N	1392	G	C5'-C4'	6.52	1.59	1.51
1	N	92	U	C2-N3	-6.51	1.33	1.37
1	N	1135	U	N1-C2	6.51	1.44	1.38
1	N	997	U	C5'-C4'	6.51	1.59	1.51
1	N	1072	G	P-O5'	-6.51	1.53	1.59
1	N	216	U	C4'-C3'	6.51	1.60	1.53
1	N	1255	G	N9-C8	6.51	1.42	1.37
1	N	1297	G	C2-N3	6.51	1.38	1.32
1	N	63	C	O3'-P	-6.51	1.53	1.61
1	N	880	C	C4'-O4'	6.51	1.54	1.45
1	N	898	G	C2-N3	6.51	1.38	1.32
1	N	1061	G	P-O5'	-6.51	1.53	1.59
1	N	441	A	N7-C5	-6.51	1.35	1.39
1	N	786	G	C2-N3	6.51	1.38	1.32
1	N	373	A	C6-N1	6.50	1.40	1.35
1	N	989	U	C2'-C1'	-6.50	1.46	1.53
1	N	49	U	N1-C2	-6.50	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	215	C	N1-C2	-6.50	1.33	1.40
1	N	636	U	N3-C4	6.50	1.44	1.38
1	N	714	G	C6-N1	6.50	1.44	1.39
1	N	1207	G	N7-C5	-6.50	1.35	1.39
1	N	256	U	C5'-C4'	6.50	1.59	1.51
1	N	559	A	N7-C5	-6.50	1.35	1.39
1	N	763	G	N7-C5	-6.50	1.35	1.39
1	N	1094	G	N3-C4	6.50	1.40	1.35
1	N	1523	G	C5-C6	-6.50	1.35	1.42
1	N	710	G	C5'-C4'	6.50	1.59	1.51
1	N	873	A	C2'-O2'	-6.50	1.33	1.41
1	N	260	G	N9-C8	-6.49	1.33	1.37
1	N	546	A	C2-N3	6.49	1.39	1.33
1	N	648	A	N7-C5	-6.49	1.35	1.39
1	N	893	C	C4'-C3'	6.49	1.60	1.53
1	N	1142	G	N3-C4	6.49	1.40	1.35
1	N	1418	A	C6-N6	6.49	1.39	1.33
1	N	1517	G	C2-N3	6.49	1.38	1.32
1	N	1478	U	N3-C4	6.49	1.44	1.38
1	N	431	A	C6-N1	6.49	1.40	1.35
1	N	316	C	C5-C6	6.49	1.39	1.34
1	N	927	G	O4'-C1'	6.49	1.50	1.41
1	N	1218	C	C4-N4	6.49	1.39	1.33
1	N	1290	G	C2-N3	6.49	1.38	1.32
1	N	408	A	N3-C4	6.48	1.38	1.34
1	N	1193	G	N9-C8	6.48	1.42	1.37
1	N	718	A	C5'-C4'	6.48	1.59	1.51
1	N	1201	A	C2'-C1'	-6.48	1.46	1.53
1	N	1304	G	C8-N7	6.48	1.34	1.30
1	N	504	C	N1-C6	-6.48	1.33	1.37
1	N	690	G	P-O5'	-6.48	1.53	1.59
1	N	396	C	C4-C5	6.48	1.48	1.43
1	N	526	C	C5'-C4'	6.48	1.59	1.51
1	N	774	G	P-O5'	6.48	1.66	1.59
1	N	604	G	C4'-O4'	6.48	1.53	1.45
1	N	1365	G	C2-N3	6.48	1.38	1.32
1	N	1496	C	P-O5'	-6.47	1.53	1.59
1	N	260	G	N7-C5	-6.47	1.35	1.39
1	N	977	A	C2-N3	6.47	1.39	1.33
1	N	1489	G	N7-C5	6.47	1.43	1.39
1	N	39	G	C2-N3	6.47	1.38	1.32
1	N	548	G	C5-C6	-6.47	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	703	G	N9-C4	-6.47	1.32	1.38
1	N	1451	U	C4-O4	-6.47	1.18	1.23
1	N	206	C	N3-C4	6.46	1.38	1.33
1	N	558	G	N1-C2	6.46	1.43	1.37
1	N	1105	A	N9-C4	-6.46	1.33	1.37
1	N	1131	G	C6-O6	6.46	1.29	1.24
1	N	172	A	C6-N1	6.46	1.40	1.35
1	N	16	A	C2'-C1'	-6.46	1.46	1.53
1	N	42	G	P-O5'	-6.46	1.53	1.59
1	N	46	G	N9-C4	6.46	1.43	1.38
1	N	1432	G	C3'-C2'	6.46	1.60	1.52
1	N	576	C	C4-C5	6.46	1.48	1.43
1	N	695	A	O3'-P	-6.46	1.53	1.61
1	N	919	A	C3'-C2'	6.46	1.60	1.52
1	N	142	G	C4'-C3'	6.46	1.60	1.53
1	N	475	C	O3'-P	-6.46	1.53	1.61
1	N	80	A	C8-N7	-6.46	1.27	1.31
1	N	743	A	C6-N6	6.46	1.39	1.33
1	N	77	A	C4'-C3'	6.45	1.60	1.53
1	N	922	G	C5'-C4'	6.45	1.59	1.51
1	N	1394	A	C6-N6	6.45	1.39	1.33
1	N	1522	U	C4-O4	6.45	1.28	1.23
1	N	445	G	C6-O6	6.45	1.29	1.24
1	N	198	G	C5'-C4'	6.45	1.59	1.51
1	N	1205	U	N3-C4	6.45	1.44	1.38
1	N	1297	G	C5-C4	6.45	1.42	1.38
1	N	1380	U	C3'-C2'	6.45	1.60	1.52
1	N	563	A	N1-C2	-6.45	1.28	1.34
1	N	505	G	O3'-P	-6.45	1.53	1.61
1	N	672	U	N1-C6	6.45	1.43	1.38
1	N	708	C	C5-C6	6.45	1.39	1.34
1	N	1119	C	O3'-P	6.45	1.68	1.61
1	N	1036	A	C5'-C4'	6.44	1.59	1.51
1	N	1157	A	C5'-C4'	6.44	1.59	1.51
1	N	819	A	O4'-C1'	6.44	1.50	1.41
1	N	1211	U	C4-C5	6.44	1.49	1.43
1	N	1364	U	C3'-C2'	6.44	1.60	1.52
1	N	687	A	C6-N1	6.44	1.40	1.35
1	N	776	G	N3-C4	-6.44	1.30	1.35
1	N	1350	A	N7-C5	6.44	1.43	1.39
1	N	1433	A	C6-N1	-6.44	1.31	1.35
1	N	352	C	N3-C4	6.44	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1032	G	C6-N1	6.44	1.44	1.39
1	N	716	A	N7-C5	-6.43	1.35	1.39
1	N	989	U	N1-C6	6.43	1.43	1.38
1	N	314	C	C4'-C3'	6.43	1.60	1.53
1	N	144	G	N9-C4	-6.43	1.32	1.38
1	N	1041	G	C4'-O4'	6.43	1.53	1.45
1	N	1088	G	C5-C4	6.43	1.42	1.38
1	N	107	G	C8-N7	6.43	1.34	1.30
1	N	164	G	O3'-P	-6.43	1.53	1.61
1	N	990	C	N3-C4	6.43	1.38	1.33
1	N	1372	U	C4'-C3'	-6.43	1.46	1.53
1	N	1374	A	O4'-C1'	6.43	1.50	1.41
1	N	241	G	P-O5'	-6.42	1.53	1.59
1	N	1458	G	O3'-P	-6.42	1.53	1.61
1	N	776	G	C2'-C1'	6.42	1.60	1.53
1	N	1434	A	N3-C4	-6.42	1.30	1.34
1	N	816	A	C6-N6	6.42	1.39	1.33
1	N	1423	G	N9-C4	-6.42	1.32	1.38
1	N	1477	U	C5'-C4'	6.42	1.59	1.51
1	N	378	G	N3-C4	6.42	1.40	1.35
1	N	438	U	C4-O4	6.42	1.28	1.23
1	N	286	C	C4-N4	6.42	1.39	1.33
1	N	494	G	N7-C5	-6.42	1.35	1.39
1	N	577	G	P-O5'	-6.42	1.53	1.59
1	N	984	C	C5-C6	-6.42	1.29	1.34
1	N	12	U	N3-C4	6.41	1.44	1.38
1	N	1130	A	C3'-O3'	6.41	1.51	1.42
1	N	406	G	N7-C5	6.41	1.43	1.39
1	N	903	G	C6-N1	6.41	1.44	1.39
1	N	357	G	N3-C4	-6.41	1.30	1.35
1	N	506	G	N9-C8	-6.41	1.33	1.37
1	N	844	G	C6-N1	6.41	1.44	1.39
1	N	847	G	N9-C4	6.41	1.43	1.38
1	N	861	G	C6-N1	6.41	1.44	1.39
1	N	1507	A	O3'-P	-6.41	1.53	1.61
1	N	718	A	C4'-C3'	-6.41	1.46	1.53
1	N	718	A	C2'-C1'	-6.41	1.46	1.53
1	N	946	A	C6-N1	6.41	1.40	1.35
1	N	948	C	N3-C4	6.41	1.38	1.33
1	N	15	G	C2-N3	6.40	1.37	1.32
1	N	1068	G	C4'-C3'	6.40	1.60	1.53
1	N	90	C	C4-N4	6.40	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1044	A	P-O5'	-6.40	1.53	1.59
1	N	1087	G	N1-C2	6.40	1.42	1.37
1	N	1187	G	C6-N1	6.40	1.44	1.39
1	N	655	A	C6-N6	6.40	1.39	1.33
1	N	1437	A	C5'-C4'	6.40	1.59	1.51
1	N	450	G	C8-N7	-6.40	1.27	1.30
1	N	881	G	C6-N1	6.40	1.44	1.39
1	N	1198	G	C5-C6	-6.39	1.35	1.42
1	N	1332	A	N9-C4	6.39	1.41	1.37
1	N	333	U	N1-C6	-6.39	1.32	1.38
1	N	1161	C	C4-C5	-6.39	1.37	1.43
1	N	1349	A	N9-C8	6.39	1.42	1.37
1	N	31	G	N9-C4	6.39	1.43	1.38
1	N	1265	C	C4-C5	6.39	1.48	1.43
1	N	117	G	C8-N7	-6.39	1.27	1.30
1	N	205	A	C3'-C2'	-6.39	1.45	1.52
1	N	932	C	N1-C6	6.39	1.41	1.37
1	N	985	C	C5'-C4'	6.39	1.59	1.51
1	N	164	G	N7-C5	-6.39	1.35	1.39
1	N	821	G	C2'-C1'	-6.39	1.46	1.53
1	N	704	A	N9-C8	-6.38	1.32	1.37
1	N	853	C	C3'-C2'	6.38	1.59	1.52
1	N	952	U	C5-C6	-6.38	1.28	1.34
1	N	1415	G	C2-N3	6.38	1.37	1.32
1	N	823	C	N1-C2	6.38	1.46	1.40
1	N	896	C	C4-N4	6.38	1.39	1.33
1	N	42	G	C6-N1	6.38	1.44	1.39
1	N	611	C	C2-N3	-6.38	1.30	1.35
1	N	614	C	O4'-C1'	6.38	1.50	1.41
1	N	1214	C	C5'-C4'	6.38	1.59	1.51
1	N	52	C	N3-C4	6.38	1.38	1.33
1	N	356	A	N3-C4	6.38	1.38	1.34
1	N	453	G	C5-C4	6.38	1.42	1.38
1	N	361	G	O3'-P	-6.38	1.53	1.61
1	N	669	G	N9-C4	-6.38	1.32	1.38
1	N	722	G	N9-C8	-6.38	1.33	1.37
1	N	1125	U	N3-C4	6.38	1.44	1.38
1	N	215	C	C2'-C1'	-6.38	1.46	1.53
1	N	730	G	N1-C2	6.37	1.42	1.37
1	N	741	G	N7-C5	6.37	1.43	1.39
1	N	1263	C	N1-C6	6.37	1.41	1.37
1	N	306	A	C5'-C4'	6.37	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	333	U	N3-C4	6.37	1.44	1.38
1	N	1525	G	O3'-P	-6.37	1.53	1.61
1	N	147	G	O4'-C1'	-6.37	1.33	1.41
1	N	1491	G	N9-C4	-6.37	1.32	1.38
1	N	333	U	C5'-C4'	6.37	1.58	1.51
1	N	742	G	N3-C4	6.37	1.40	1.35
1	N	603	U	C4'-O4'	6.37	1.53	1.45
1	N	692	U	C1'-N1	6.37	1.58	1.48
1	N	329	A	C6-N6	6.36	1.39	1.33
1	N	861	G	O3'-P	-6.36	1.53	1.61
1	N	910	C	N1-C6	6.36	1.41	1.37
1	N	1242	G	C3'-O3'	6.36	1.51	1.42
1	N	250	A	C2'-C1'	-6.36	1.46	1.53
1	N	1117	A	C6-N1	6.36	1.40	1.35
1	N	1237	C	P-O5'	-6.36	1.53	1.59
1	N	1326	U	N1-C2	-6.36	1.32	1.38
1	N	28	A	C8-N7	-6.36	1.27	1.31
1	N	114	U	N1-C6	6.36	1.43	1.38
1	N	567	G	N9-C8	6.36	1.42	1.37
1	N	675	A	C4'-C3'	6.36	1.60	1.53
1	N	1106	G	C6-N1	6.36	1.44	1.39
1	N	1259	C	O4'-C1'	6.36	1.50	1.41
1	N	1319	A	C6-N6	6.36	1.39	1.33
1	N	340	U	C2'-O2'	-6.36	1.33	1.41
1	N	1012	A	C8-N7	-6.35	1.27	1.31
1	N	769	G	O3'-P	-6.35	1.53	1.61
1	N	1485	U	C5-C6	6.35	1.39	1.34
1	N	987	G	N7-C5	6.35	1.43	1.39
1	N	247	G	C4'-C3'	6.35	1.60	1.53
1	N	849	G	C6-N1	6.35	1.44	1.39
1	N	909	A	C5-C6	-6.35	1.35	1.41
1	N	1333	A	C6-N1	6.35	1.40	1.35
1	N	973	G	C6-N1	6.35	1.44	1.39
1	N	1139	G	C5'-C4'	6.34	1.58	1.51
1	N	46	G	N7-C5	-6.34	1.35	1.39
1	N	775	G	C8-N7	-6.34	1.27	1.30
1	N	1112	C	C4-C5	6.34	1.48	1.43
1	N	1196	A	N9-C4	6.34	1.41	1.37
1	N	120	A	N9-C4	6.34	1.41	1.37
1	N	945	G	N3-C4	-6.34	1.31	1.35
1	N	537	G	N3-C4	6.34	1.39	1.35
1	N	653	U	N1-C6	6.34	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1203	C	P-O5'	-6.34	1.53	1.59
1	N	134	G	C5-C6	-6.33	1.36	1.42
1	N	922	G	N1-C2	6.33	1.42	1.37
1	N	1459	G	O4'-C1'	6.33	1.49	1.41
1	N	27	G	N9-C8	6.33	1.42	1.37
1	N	1230	C	N3-C4	6.33	1.38	1.33
1	N	1238	A	N3-C4	6.33	1.38	1.34
1	N	940	C	C5'-C4'	6.33	1.58	1.51
1	N	175	C	C5'-C4'	6.33	1.58	1.51
1	N	254	G	C2-N2	6.33	1.40	1.34
1	N	953	G	N7-C5	6.33	1.43	1.39
1	N	1010	U	N1-C2	-6.33	1.32	1.38
1	N	206	C	C5'-C4'	6.32	1.58	1.51
1	N	291	U	N3-C4	6.32	1.44	1.38
1	N	799	G	N1-C2	6.32	1.42	1.37
1	N	211	G	C5'-C4'	6.32	1.58	1.51
1	N	344	A	C5'-C4'	6.32	1.58	1.51
1	N	907	A	C5-C6	-6.32	1.35	1.41
1	N	93	U	C4-C5	-6.32	1.37	1.43
1	N	560	A	C4'-O4'	-6.32	1.37	1.45
1	N	1084	G	C6-O6	-6.31	1.18	1.24
1	N	228	A	C4'-C3'	6.31	1.60	1.53
1	N	302	G	C2'-C1'	6.31	1.60	1.53
1	N	581	G	C5-C4	6.31	1.42	1.38
1	N	1374	A	N7-C5	-6.31	1.35	1.39
1	N	605	U	C4-C5	-6.31	1.37	1.43
1	N	227	G	C4'-O4'	-6.31	1.37	1.45
1	N	1025	U	C3'-C2'	6.31	1.59	1.52
1	N	124	C	O3'-P	-6.31	1.53	1.61
1	N	169	C	N1-C2	-6.30	1.33	1.40
1	N	216	U	N1-C6	-6.30	1.32	1.38
1	N	602	A	C4'-C3'	6.30	1.60	1.53
1	N	1098	C	O3'-P	-6.30	1.53	1.61
1	N	11	G	N1-C2	6.30	1.42	1.37
1	N	859	G	C2-N3	6.30	1.37	1.32
1	N	1332	A	O3'-P	-6.30	1.53	1.61
1	N	1305	G	P-O5'	6.30	1.66	1.59
1	N	62	U	C4-O4	6.30	1.28	1.23
1	N	1480	A	N9-C4	-6.30	1.34	1.37
1	N	588	G	C2-N2	6.29	1.40	1.34
1	N	634	C	N1-C6	6.29	1.41	1.37
1	N	1287	A	C6-N6	6.29	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1383	C	C4'-O4'	6.29	1.53	1.45
1	N	445	G	C5'-C4'	6.29	1.58	1.51
1	N	592	G	C5-C4	6.29	1.42	1.38
1	N	115	G	C6-O6	-6.29	1.18	1.24
1	N	273	U	O3'-P	-6.29	1.53	1.61
1	N	501	C	C1'-N1	6.29	1.58	1.48
1	N	751	U	P-O5'	-6.29	1.53	1.59
1	N	1353	G	C1'-N9	6.29	1.58	1.48
1	N	756	C	C5-C6	-6.29	1.29	1.34
1	N	810	C	C4-N4	6.29	1.39	1.33
1	N	859	G	C4'-C3'	-6.29	1.46	1.53
1	N	140	U	N3-C4	6.29	1.44	1.38
1	N	742	G	C2-N3	6.29	1.37	1.32
1	N	1340	A	C4'-C3'	-6.29	1.46	1.53
1	N	1171	A	P-O5'	-6.28	1.53	1.59
1	N	714	G	C3'-C2'	6.28	1.59	1.52
1	N	813	U	C4'-O4'	6.28	1.53	1.45
1	N	1129	C	C4'-C3'	6.28	1.60	1.53
1	N	77	A	C5'-C4'	6.28	1.58	1.51
1	N	684	U	N3-C4	6.28	1.44	1.38
1	N	9	G	O4'-C1'	6.28	1.49	1.41
1	N	228	A	C3'-O3'	6.28	1.50	1.42
1	N	281	G	C8-N7	6.28	1.34	1.30
1	N	1101	A	P-O5'	-6.28	1.53	1.59
1	N	1171	A	C6-N6	6.28	1.39	1.33
1	N	378	G	C2'-C1'	-6.27	1.46	1.53
1	N	1044	A	C5-C4	6.27	1.43	1.38
1	N	147	G	C4'-O4'	-6.27	1.37	1.45
1	N	1016	A	P-O5'	6.27	1.66	1.59
1	N	1179	A	C5'-C4'	6.27	1.58	1.51
1	N	163	C	C3'-C2'	-6.27	1.45	1.52
1	N	361	G	N7-C5	-6.27	1.35	1.39
1	N	399	G	N9-C4	-6.27	1.32	1.38
1	N	887	G	C8-N7	-6.27	1.27	1.30
1	N	914	A	C8-N7	-6.27	1.27	1.31
1	N	1252	A	P-O5'	6.27	1.66	1.59
1	N	1428	A	C6-N6	6.27	1.39	1.33
1	N	1345	U	O4'-C1'	-6.26	1.33	1.41
1	N	20	U	P-O5'	-6.26	1.53	1.59
1	N	652	U	C5-C6	-6.26	1.28	1.34
1	N	1305	G	C6-N1	6.26	1.44	1.39
1	N	147	G	C5-C4	6.26	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1340	A	N9-C8	6.26	1.42	1.37
1	N	23	C	N3-C4	6.26	1.38	1.33
1	N	373	A	N7-C5	6.26	1.43	1.39
1	N	1043	G	C6-N1	6.26	1.44	1.39
1	N	1321	U	C2'-C1'	-6.26	1.46	1.53
1	N	1499	A	C6-N1	6.26	1.40	1.35
1	N	291	U	N1-C6	6.26	1.43	1.38
1	N	310	G	C8-N7	-6.26	1.27	1.30
1	N	373	A	N3-C4	-6.26	1.31	1.34
1	N	1312	G	C5-C4	-6.26	1.33	1.38
1	N	1236	A	N9-C8	6.25	1.42	1.37
1	N	1175	G	N1-C2	6.25	1.42	1.37
1	N	251	G	C8-N7	-6.25	1.27	1.30
1	N	450	G	N9-C8	-6.25	1.33	1.37
1	N	671	G	C8-N7	-6.25	1.27	1.30
1	N	1400	C	C4'-C3'	6.25	1.60	1.53
1	N	9	G	N9-C8	6.25	1.42	1.37
1	N	69	G	N3-C4	6.25	1.39	1.35
1	N	769	G	C3'-C2'	6.25	1.59	1.52
1	N	402	G	C4'-C3'	-6.25	1.46	1.53
1	N	521	G	C8-N7	-6.25	1.27	1.30
1	N	426	U	C4'-C3'	6.25	1.60	1.53
1	N	771	G	C4'-C3'	-6.25	1.46	1.53
1	N	1089	G	C3'-C2'	6.24	1.59	1.52
1	N	1203	C	C3'-C2'	-6.24	1.45	1.52
1	N	22	G	C2-N3	6.24	1.37	1.32
1	N	19	A	N9-C8	6.24	1.42	1.37
1	N	559	A	C2-N3	6.24	1.39	1.33
1	N	992	U	C3'-C2'	6.24	1.59	1.52
1	N	281	G	C5-C4	6.24	1.42	1.38
1	N	300	A	C5'-C4'	6.24	1.58	1.51
1	N	818	G	C5-C4	6.24	1.42	1.38
1	N	53	A	C6-N1	6.24	1.40	1.35
1	N	735	C	N1-C6	6.24	1.40	1.37
1	N	66	A	P-O5'	6.24	1.66	1.59
1	N	671	G	N9-C4	-6.24	1.32	1.38
1	N	727	G	C5-C6	-6.24	1.36	1.42
1	N	861	G	C8-N7	-6.24	1.27	1.30
1	N	1047	G	P-O5'	6.23	1.66	1.59
1	N	1353	G	C5-C4	-6.23	1.33	1.38
1	N	393	A	C5-C6	6.23	1.46	1.41
1	N	885	G	C2'-C1'	-6.23	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	922	G	C6-O6	-6.23	1.18	1.24
1	N	941	G	C2-N3	6.23	1.37	1.32
1	N	1140	C	P-O5'	-6.23	1.53	1.59
1	N	445	G	O4'-C1'	6.23	1.49	1.41
1	N	1167	A	C6-N6	6.23	1.39	1.33
1	N	220	G	N3-C4	-6.23	1.31	1.35
1	N	1335	U	C3'-C2'	6.22	1.59	1.52
1	N	1116	U	O4'-C1'	6.22	1.49	1.41
1	N	127	G	C2-N3	6.22	1.37	1.32
1	N	401	C	C4'-C3'	6.22	1.59	1.53
1	N	863	U	N1-C6	6.22	1.43	1.38
1	N	585	G	N7-C5	-6.22	1.35	1.39
1	N	1179	A	C8-N7	-6.22	1.27	1.31
1	N	105	G	N9-C4	-6.22	1.32	1.38
1	N	290	C	C3'-C2'	-6.22	1.46	1.52
1	N	524	G	O4'-C1'	6.21	1.49	1.41
1	N	1250	A	C5-C4	-6.21	1.34	1.38
1	N	1361	G	C5-C4	6.21	1.42	1.38
1	N	481	G	P-O5'	6.21	1.66	1.59
1	N	1049	U	C2'-C1'	-6.21	1.46	1.53
1	N	1409	C	N1-C6	-6.21	1.33	1.37
1	N	203	G	N7-C5	6.21	1.43	1.39
1	N	236	A	O4'-C1'	-6.21	1.33	1.41
1	N	507	C	N3-C4	6.21	1.38	1.33
1	N	116	A	C8-N7	-6.21	1.27	1.31
1	N	865	A	N7-C5	-6.21	1.35	1.39
1	N	1006	G	N7-C5	-6.21	1.35	1.39
1	N	278	G	N9-C4	-6.21	1.32	1.38
1	N	856	C	O3'-P	-6.21	1.53	1.61
1	N	985	C	N3-C4	6.21	1.38	1.33
1	N	1499	A	C4'-C3'	6.21	1.59	1.53
1	N	622	A	C5-C4	-6.20	1.34	1.38
1	N	1385	G	N7-C5	-6.20	1.35	1.39
1	N	875	U	C2'-C1'	-6.20	1.46	1.53
1	N	905	U	C1'-N1	6.20	1.58	1.48
1	N	67	C	N3-C4	6.20	1.38	1.33
1	N	92	U	O3'-P	-6.20	1.53	1.61
1	N	833	G	N1-C2	6.20	1.42	1.37
1	N	1434	A	N1-C2	6.20	1.40	1.34
1	N	986	U	C4-C5	6.20	1.49	1.43
1	N	360	G	C5-C4	6.20	1.42	1.38
1	N	651	C	O3'-P	-6.20	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	79	G	C6-N1	6.19	1.43	1.39
1	N	382	A	N7-C5	-6.19	1.35	1.39
1	N	1243	C	C3'-C2'	6.19	1.59	1.52
1	N	1527	U	O3'-P	-6.19	1.53	1.61
1	N	168	G	P-O5'	-6.19	1.53	1.59
1	N	274	A	C2'-C1'	6.19	1.60	1.53
1	N	364	A	N3-C4	-6.19	1.31	1.34
1	N	780	A	C5'-C4'	6.19	1.58	1.51
1	N	947	G	N7-C5	-6.19	1.35	1.39
1	N	272	C	N1-C2	-6.19	1.33	1.40
1	N	484	G	N3-C4	-6.19	1.31	1.35
1	N	601	G	N7-C5	-6.19	1.35	1.39
1	N	1530	G	C5-C4	-6.19	1.34	1.38
1	N	1234	C	C4-C5	6.19	1.47	1.43
1	N	768	A	P-O5'	-6.18	1.53	1.59
1	N	806	C	C2-N3	6.18	1.40	1.35
1	N	115	G	N9-C4	6.18	1.42	1.38
1	N	186	C	C4-C5	6.18	1.47	1.43
1	N	802	A	C3'-C2'	6.18	1.59	1.52
1	N	148	G	N1-C2	6.18	1.42	1.37
1	N	1000	A	C8-N7	-6.18	1.27	1.31
1	N	1371	G	O4'-C1'	6.18	1.49	1.41
1	N	502	A	C4'-O4'	-6.17	1.37	1.45
1	N	454	G	C5-C4	6.17	1.42	1.38
1	N	1197	A	N7-C5	-6.17	1.35	1.39
1	N	275	G	C4'-C3'	6.17	1.59	1.53
1	N	783	C	C3'-C2'	-6.17	1.46	1.52
1	N	999	C	O3'-P	6.17	1.68	1.61
1	N	127	G	O3'-P	-6.17	1.53	1.61
1	N	147	G	C2-N3	6.17	1.37	1.32
1	N	941	G	N7-C5	6.17	1.43	1.39
1	N	1211	U	C4'-C3'	-6.17	1.46	1.53
1	N	586	C	C4-C5	6.17	1.47	1.43
1	N	874	G	N9-C4	6.17	1.42	1.38
1	N	946	A	N1-C2	-6.17	1.28	1.34
1	N	713	G	N3-C4	-6.17	1.31	1.35
1	N	994	A	C5-C4	6.17	1.43	1.38
1	N	1112	C	N1-C2	6.16	1.46	1.40
1	N	586	C	C2'-C1'	6.16	1.60	1.53
1	N	1173	U	C2-N3	6.16	1.42	1.37
1	N	309	A	C6-N6	6.16	1.38	1.33
1	N	620	C	C5'-C4'	6.16	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	697	U	C1'-N1	6.16	1.57	1.48
1	N	866	C	O4'-C1'	6.16	1.49	1.41
1	N	1176	A	C5-C6	-6.16	1.35	1.41
1	N	717	U	O3'-P	-6.16	1.53	1.61
1	N	864	A	O3'-P	-6.16	1.53	1.61
1	N	962	C	C4-C5	6.16	1.47	1.43
1	N	990	C	C4-N4	6.16	1.39	1.33
1	N	1043	G	C1'-N9	6.16	1.57	1.48
1	N	1350	A	C2'-C1'	-6.16	1.46	1.53
1	N	1066	C	C2'-C1'	-6.15	1.46	1.53
1	N	39	G	C4'-O4'	6.15	1.53	1.45
1	N	367	U	C1'-N1	6.15	1.57	1.48
1	N	686	U	O4'-C1'	-6.15	1.33	1.41
1	N	714	G	N9-C8	-6.15	1.33	1.37
1	N	1415	G	C8-N7	6.15	1.34	1.30
1	N	192	A	N9-C4	6.15	1.41	1.37
1	N	230	G	P-O5'	6.15	1.66	1.59
1	N	306	A	O3'-P	-6.15	1.53	1.61
1	N	345	C	C4-N4	6.15	1.39	1.33
1	N	645	G	C2-N2	6.15	1.40	1.34
1	N	954	G	N1-C2	6.15	1.42	1.37
1	N	1089	G	P-O5'	6.15	1.66	1.59
1	N	1105	A	N9-C8	-6.15	1.32	1.37
1	N	1154	G	C5-C4	6.15	1.42	1.38
1	N	1430	A	C6-N1	6.15	1.39	1.35
1	N	970	C	C4'-C3'	-6.15	1.46	1.53
1	N	766	A	P-O5'	-6.14	1.53	1.59
1	N	853	C	N1-C6	6.14	1.40	1.37
1	N	1127	G	C5-C4	6.14	1.42	1.38
1	N	966	G	C2-N2	6.14	1.40	1.34
1	N	1333	A	C5-C4	6.14	1.43	1.38
1	N	156	C	C2-O2	-6.14	1.19	1.24
1	N	297	G	C2-N3	-6.14	1.27	1.32
1	N	976	G	N7-C5	6.14	1.43	1.39
1	N	547	A	C3'-O3'	6.14	1.50	1.42
1	N	1486	G	O3'-P	-6.14	1.53	1.61
1	N	1316	G	N7-C5	-6.14	1.35	1.39
1	N	177	G	C3'-C2'	-6.14	1.46	1.52
1	N	1401	G	C8-N7	-6.14	1.27	1.30
1	N	1461	G	N3-C4	-6.14	1.31	1.35
1	N	242	G	P-O5'	-6.13	1.53	1.59
1	N	563	A	C2-N3	6.13	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	885	G	N9-C4	-6.13	1.33	1.38
1	N	128	G	C5-C4	6.13	1.42	1.38
1	N	11	G	C5-C6	-6.13	1.36	1.42
1	N	238	A	C6-N1	6.13	1.39	1.35
1	N	332	G	O4'-C1'	6.13	1.49	1.41
1	N	1035	A	C3'-C2'	-6.13	1.46	1.52
1	N	1068	G	C2-N3	6.13	1.37	1.32
1	N	1404	C	N3-C4	6.13	1.38	1.33
1	N	1417	G	O3'-P	-6.13	1.53	1.61
1	N	109	A	C6-N6	6.13	1.38	1.33
1	N	962	C	C2-N3	6.13	1.40	1.35
1	N	1178	G	N3-C4	-6.13	1.31	1.35
1	N	1287	A	N9-C8	-6.13	1.32	1.37
1	N	1362	A	O5'-C5'	6.13	1.54	1.44
1	N	574	A	N9-C4	6.13	1.41	1.37
1	N	1376	U	C2-N3	6.13	1.42	1.37
1	N	1421	G	C6-N1	6.13	1.43	1.39
1	N	1079	G	O3'-P	-6.12	1.53	1.61
1	N	320	A	P-O5'	-6.12	1.53	1.59
1	N	560	A	N3-C4	6.12	1.38	1.34
1	N	627	G	C5'-C4'	6.12	1.58	1.51
1	N	1149	C	C4-C5	6.12	1.47	1.43
1	N	1497	G	O3'-P	-6.12	1.53	1.61
1	N	82	G	N3-C4	6.12	1.39	1.35
1	N	821	G	O3'-P	-6.12	1.53	1.61
1	N	803	G	N7-C5	-6.12	1.35	1.39
1	N	1012	A	C6-N6	6.12	1.38	1.33
1	N	619	U	O3'-P	-6.12	1.53	1.61
1	N	1313	U	C4-O4	-6.12	1.18	1.23
1	N	297	G	O3'-P	-6.12	1.53	1.61
1	N	582	C	P-O5'	-6.12	1.53	1.59
1	N	728	A	N7-C5	-6.12	1.35	1.39
1	N	1125	U	C1'-N1	6.12	1.57	1.48
1	N	71	A	C2'-C1'	-6.11	1.46	1.53
1	N	93	U	C1'-N1	6.11	1.57	1.48
1	N	428	G	C2'-C1'	-6.11	1.46	1.53
1	N	1397	C	N3-C4	6.11	1.38	1.33
1	N	102	G	N3-C4	-6.11	1.31	1.35
1	N	775	G	N9-C4	-6.11	1.33	1.38
1	N	1028	C	C4-C5	-6.11	1.38	1.43
1	N	1285	A	N9-C4	-6.11	1.34	1.37
1	N	1317	C	P-O5'	6.11	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1369	C	N1-C2	-6.11	1.34	1.40
1	N	333	U	N1-C2	6.11	1.44	1.38
1	N	277	C	C4-N4	6.11	1.39	1.33
1	N	573	A	C2-N3	6.11	1.39	1.33
1	N	834	U	C1'-N1	6.11	1.57	1.48
1	N	1182	G	O3'-P	-6.11	1.53	1.61
1	N	1316	G	C6-O6	6.11	1.29	1.24
1	N	254	G	O3'-P	6.10	1.68	1.61
1	N	332	G	C8-N7	-6.10	1.27	1.30
1	N	366	A	P-O5'	6.10	1.65	1.59
1	N	50	A	C4'-C3'	6.10	1.59	1.53
1	N	190	A	N7-C5	-6.10	1.35	1.39
1	N	501	C	C4'-C3'	6.10	1.59	1.53
1	N	772	U	C1'-N1	6.10	1.57	1.48
1	N	1037	C	O3'-P	-6.10	1.53	1.61
1	N	1179	A	N9-C4	-6.10	1.34	1.37
1	N	1382	C	O3'-P	-6.10	1.53	1.61
1	N	474	G	P-O5'	-6.10	1.53	1.59
1	N	565	U	N1-C2	-6.10	1.33	1.38
1	N	272	C	C1'-N1	6.10	1.57	1.48
1	N	700	G	C8-N7	-6.10	1.27	1.30
1	N	431	A	N7-C5	6.09	1.43	1.39
1	N	531	U	P-O5'	-6.09	1.53	1.59
1	N	856	C	N1-C6	-6.09	1.33	1.37
1	N	1078	U	C3'-O3'	6.09	1.50	1.42
1	N	1187	G	C4'-C3'	6.09	1.59	1.53
1	N	1261	A	C6-N6	6.09	1.38	1.33
1	N	114	U	C2'-O2'	-6.09	1.33	1.41
1	N	1313	U	N1-C2	-6.09	1.33	1.38
1	N	1331	G	C3'-C2'	-6.09	1.46	1.52
1	N	716	A	C2'-C1'	-6.09	1.46	1.53
1	N	772	U	N1-C2	6.09	1.44	1.38
1	N	961	U	C4-C5	6.09	1.49	1.43
1	N	996	A	P-O5'	-6.09	1.53	1.59
1	N	318	G	N3-C4	-6.09	1.31	1.35
1	N	1042	A	C5-C4	-6.09	1.34	1.38
1	N	53	A	N9-C4	-6.09	1.34	1.37
1	N	1506	U	C2'-C1'	-6.08	1.46	1.53
1	N	536	C	O3'-P	-6.08	1.53	1.61
1	N	871	U	P-O5'	6.08	1.65	1.59
1	N	1334	G	O3'-P	-6.08	1.53	1.61
1	N	40	C	C2-N3	6.08	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	391	G	C5'-C4'	6.08	1.58	1.51
1	N	30	U	P-O5'	-6.08	1.53	1.59
1	N	991	U	C2-O2	6.08	1.27	1.22
1	N	745	G	C2-N3	6.08	1.37	1.32
1	N	1458	G	N7-C5	6.08	1.42	1.39
1	N	642	A	C2-N3	6.08	1.39	1.33
1	N	179	A	N9-C8	6.08	1.42	1.37
1	N	539	A	C2'-C1'	-6.08	1.46	1.53
1	N	644	U	O4'-C1'	6.08	1.49	1.41
1	N	1177	G	C3'-C2'	-6.07	1.46	1.52
1	N	1389	C	N3-C4	6.07	1.38	1.33
1	N	191	G	O4'-C1'	-6.07	1.33	1.41
1	N	1267	C	C4-C5	-6.07	1.38	1.43
1	N	1308	U	C2-N3	6.07	1.42	1.37
1	N	1343	G	C2'-C1'	-6.07	1.46	1.53
1	N	1410	A	O3'-P	-6.07	1.53	1.61
1	N	968	A	P-O5'	6.07	1.65	1.59
1	N	614	C	N1-C6	6.07	1.40	1.37
1	N	31	G	C2'-C1'	-6.07	1.46	1.53
1	N	103	U	C3'-O3'	6.07	1.50	1.42
1	N	224	U	C5'-C4'	6.07	1.58	1.51
1	N	314	C	P-O5'	-6.07	1.53	1.59
1	N	1398	A	C8-N7	-6.07	1.27	1.31
1	N	339	C	P-O5'	-6.07	1.53	1.59
1	N	397	A	C5-C4	-6.07	1.34	1.38
1	N	405	U	C4-C5	6.07	1.49	1.43
1	N	480	U	N1-C2	6.07	1.44	1.38
1	N	923	A	O3'-P	-6.07	1.53	1.61
1	N	366	A	N7-C5	-6.06	1.35	1.39
1	N	1104	G	C5-C6	-6.06	1.36	1.42
1	N	1257	A	C5-C4	6.06	1.43	1.38
1	N	17	U	C3'-C2'	-6.06	1.46	1.52
1	N	492	C	C3'-O3'	-6.06	1.33	1.42
1	N	997	U	N3-C4	6.06	1.44	1.38
1	N	1004	A	C3'-O3'	6.06	1.50	1.42
1	N	1079	G	C5-C4	6.06	1.42	1.38
1	N	152	A	C2'-C1'	-6.06	1.46	1.53
1	N	1207	G	C2'-C1'	-6.06	1.46	1.53
1	N	1529	G	N1-C2	6.06	1.42	1.37
1	N	1176	A	C1'-N9	6.06	1.57	1.48
1	N	1010	U	C4'-C3'	6.05	1.59	1.53
1	N	15	G	C6-N1	6.05	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	358	U	C4'-O4'	-6.05	1.37	1.45
1	N	638	U	C2-N3	6.05	1.42	1.37
1	N	879	C	N3-C4	6.05	1.38	1.33
1	N	1183	U	C2-N3	6.05	1.42	1.37
1	N	1317	C	O4'-C1'	6.05	1.49	1.41
1	N	1528	U	C4'-C3'	6.05	1.59	1.53
1	N	550	G	C3'-C2'	-6.05	1.46	1.52
1	N	699	C	O4'-C1'	6.05	1.49	1.41
1	N	1314	C	C4-N4	6.05	1.39	1.33
1	N	31	G	C4'-O4'	-6.04	1.37	1.45
1	N	643	C	C2-N3	6.04	1.40	1.35
1	N	1030	U	C2'-C1'	-6.04	1.46	1.53
1	N	1294	G	P-O5'	-6.04	1.53	1.59
1	N	70	U	C4-C5	6.04	1.49	1.43
1	N	249	U	C1'-N1	6.04	1.57	1.48
1	N	612	C	N1-C6	-6.04	1.33	1.37
1	N	787	A	C2'-C1'	-6.04	1.46	1.53
1	N	1112	C	C4'-C3'	6.04	1.59	1.53
1	N	1371	G	C2-N2	6.04	1.40	1.34
1	N	1322	C	C4-C5	6.04	1.47	1.43
1	N	183	C	P-O5'	6.04	1.65	1.59
1	N	247	G	C6-N1	6.04	1.43	1.39
1	N	824	G	C5'-C4'	6.04	1.58	1.51
1	N	877	G	N9-C8	6.04	1.42	1.37
1	N	938	A	C5'-C4'	6.04	1.58	1.51
1	N	1384	C	C2'-O2'	6.04	1.49	1.41
1	N	1143	G	N9-C8	6.04	1.42	1.37
1	N	496	A	N7-C5	6.04	1.42	1.39
1	N	1252	A	C5-C4	-6.04	1.34	1.38
1	N	365	U	C2-N3	6.03	1.42	1.37
1	N	460	A	N9-C4	6.03	1.41	1.37
1	N	1290	G	C3'-O3'	6.03	1.50	1.42
1	N	722	G	C5-C4	6.03	1.42	1.38
1	N	15	G	N7-C5	-6.03	1.35	1.39
1	N	422	C	C4-N4	6.03	1.39	1.33
1	N	195	A	C3'-C2'	-6.03	1.46	1.52
1	N	990	C	C4-C5	-6.03	1.38	1.43
1	N	1125	U	P-O5'	-6.03	1.53	1.59
1	N	1206	G	N9-C4	6.03	1.42	1.38
1	N	1285	A	C5-C4	-6.03	1.34	1.38
1	N	1354	U	C2'-C1'	-6.03	1.46	1.53
1	N	254	G	P-O5'	-6.03	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	321	A	C4'-C3'	-6.03	1.46	1.53
1	N	417	G	C5-C4	6.03	1.42	1.38
1	N	447	G	P-O5'	-6.03	1.53	1.59
1	N	705	G	C1'-N9	6.03	1.57	1.48
1	N	1401	G	C3'-C2'	6.03	1.59	1.52
1	N	118	U	C3'-C2'	6.02	1.59	1.52
1	N	741	G	C2-N2	6.02	1.40	1.34
1	N	1268	G	N1-C2	6.02	1.42	1.37
1	N	384	G	N7-C5	-6.02	1.35	1.39
1	N	1106	G	C2-N3	6.02	1.37	1.32
1	N	1480	A	C6-N1	6.02	1.39	1.35
1	N	1530	G	C2-N3	-6.02	1.27	1.32
1	N	320	A	O4'-C1'	-6.02	1.33	1.41
1	N	620	C	O4'-C1'	6.02	1.49	1.41
1	N	742	G	O3'-P	-6.02	1.53	1.61
1	N	1364	U	C4'-C3'	6.02	1.59	1.53
1	N	519	C	C3'-O3'	6.02	1.50	1.42
1	N	587	G	C2-N3	6.02	1.37	1.32
1	N	1263	C	C2'-C1'	6.02	1.59	1.53
1	N	1281	C	C2-N3	6.02	1.40	1.35
1	N	76	G	N3-C4	6.01	1.39	1.35
1	N	331	G	C5'-C4'	6.01	1.58	1.51
1	N	819	A	C4'-C3'	6.01	1.59	1.53
1	N	883	C	P-O5'	-6.01	1.53	1.59
1	N	972	C	P-O5'	-6.01	1.53	1.59
1	N	361	G	P-O5'	-6.01	1.53	1.59
1	N	72	A	N7-C5	-6.01	1.35	1.39
1	N	141	G	N9-C4	-6.01	1.33	1.38
1	N	336	A	C1'-N9	6.01	1.57	1.48
1	N	343	U	N3-C4	6.01	1.43	1.38
1	N	528	C	P-O5'	-6.01	1.53	1.59
1	N	886	G	C4'-O4'	6.01	1.53	1.45
1	N	1004	A	N7-C5	-6.01	1.35	1.39
1	N	1148	U	C2-N3	6.01	1.42	1.37
1	N	1190	G	C2'-C1'	-6.01	1.46	1.53
1	N	1360	A	N3-C4	-6.01	1.31	1.34
1	N	1472	U	C2'-C1'	-6.01	1.46	1.53
1	N	253	A	N9-C4	-6.01	1.34	1.37
1	N	1469	C	N3-C4	6.01	1.38	1.33
1	N	332	G	N9-C4	6.01	1.42	1.38
1	N	1089	G	C2-N3	6.01	1.37	1.32
1	N	1130	A	N3-C4	-6.01	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1202	U	C2'-C1'	-6.01	1.46	1.53
1	N	235	C	O3'-P	-6.00	1.53	1.61
1	N	633	G	N9-C4	-6.00	1.33	1.38
1	N	746	A	N3-C4	6.00	1.38	1.34
1	N	1370	G	N7-C5	-6.00	1.35	1.39
1	N	461	A	C2-N3	6.00	1.39	1.33
1	N	880	C	C4-N4	6.00	1.39	1.33
1	N	1392	G	N9-C8	-6.00	1.33	1.37
1	N	477	C	N1-C6	-6.00	1.33	1.37
1	N	1228	C	O4'-C1'	-6.00	1.33	1.41
1	N	1335	U	N1-C6	-6.00	1.32	1.38
1	N	1222	G	C5'-C4'	6.00	1.58	1.51
1	N	172	A	C3'-C2'	-5.99	1.46	1.52
1	N	572	A	C5'-C4'	5.99	1.58	1.51
1	N	882	C	C2'-C1'	-5.99	1.46	1.53
1	N	1080	A	C8-N7	5.99	1.35	1.31
1	N	852	G	C2'-C1'	-5.99	1.46	1.53
1	N	300	A	C6-N1	5.99	1.39	1.35
1	N	376	G	C5-C6	-5.99	1.36	1.42
1	N	171	A	C6-N6	5.99	1.38	1.33
1	N	262	A	N7-C5	-5.99	1.35	1.39
1	N	437	U	N3-C4	5.99	1.43	1.38
1	N	728	A	N9-C4	5.99	1.41	1.37
1	N	1074	G	C5-C6	-5.99	1.36	1.42
1	N	1123	U	C2-N3	5.99	1.42	1.37
1	N	295	C	N1-C6	5.98	1.40	1.37
1	N	650	G	N9-C8	5.98	1.42	1.37
1	N	1330	U	N1-C2	-5.98	1.33	1.38
1	N	126	G	O3'-P	-5.98	1.53	1.61
1	N	195	A	N9-C4	5.98	1.41	1.37
1	N	628	G	N3-C4	-5.98	1.31	1.35
1	N	1034	G	N9-C4	-5.98	1.33	1.38
1	N	98	A	N3-C4	-5.98	1.31	1.34
1	N	160	A	C5'-C4'	5.98	1.58	1.51
1	N	344	A	O3'-P	-5.98	1.53	1.61
1	N	409	U	C3'-O3'	5.98	1.50	1.42
1	N	698	G	C5-C4	5.98	1.42	1.38
1	N	999	C	C1'-N1	5.98	1.57	1.48
1	N	1116	U	N1-C2	-5.98	1.33	1.38
1	N	1242	G	O5'-C5'	-5.98	1.33	1.42
1	N	1159	U	N1-C6	-5.98	1.32	1.38
1	N	1438	G	C2-N3	5.98	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	715	A	N9-C4	-5.98	1.34	1.37
1	N	196	A	N3-C4	-5.97	1.31	1.34
1	N	832	G	C8-N7	-5.97	1.27	1.30
1	N	1270	G	C6-N1	-5.97	1.35	1.39
1	N	1359	C	P-O5'	-5.97	1.53	1.59
1	N	1389	C	C4-C5	-5.97	1.38	1.43
1	N	574	A	C6-N1	5.97	1.39	1.35
1	N	926	G	C2-N2	5.97	1.40	1.34
1	N	81	A	C4'-O4'	-5.97	1.37	1.45
1	N	223	A	C2'-C1'	-5.97	1.46	1.53
1	N	992	U	C2-N3	5.97	1.42	1.37
1	N	212	G	N1-C2	5.97	1.42	1.37
1	N	890	G	C2-N2	-5.97	1.28	1.34
1	N	1417	G	C8-N7	-5.97	1.27	1.30
1	N	165	G	N1-C2	5.97	1.42	1.37
1	N	171	A	C2'-C1'	-5.97	1.46	1.53
1	N	1079	G	C2-N3	5.97	1.37	1.32
1	N	1082	A	N7-C5	5.97	1.42	1.39
1	N	1185	G	C2-N2	5.96	1.40	1.34
1	N	1072	G	C6-O6	-5.96	1.18	1.24
1	N	2	A	N7-C5	-5.96	1.35	1.39
1	N	377	G	C4'-O4'	-5.96	1.37	1.45
1	N	433	G	N9-C8	-5.96	1.33	1.37
1	N	944	G	C2-N2	5.96	1.40	1.34
1	N	1181	G	N3-C4	-5.96	1.31	1.35
1	N	1276	G	N1-C2	5.96	1.42	1.37
1	N	69	G	C2'-C1'	-5.96	1.46	1.53
1	N	305	G	C4'-O4'	-5.96	1.37	1.45
1	N	419	C	C4-C5	-5.96	1.38	1.43
1	N	461	A	N9-C4	5.96	1.41	1.37
1	N	857	C	O3'-P	-5.96	1.54	1.61
1	N	892	A	C4'-O4'	5.96	1.53	1.45
1	N	281	G	C5'-C4'	5.95	1.58	1.51
1	N	1506	U	C2-N3	5.95	1.42	1.37
1	N	455	G	N9-C4	-5.95	1.33	1.38
1	N	825	A	C2'-C1'	5.95	1.59	1.53
1	N	320	A	C3'-C2'	5.95	1.59	1.52
1	N	455	G	C5'-C4'	5.95	1.58	1.51
1	N	1528	U	N1-C6	5.95	1.43	1.38
1	N	1126	U	C5'-C4'	5.95	1.58	1.51
1	N	1516	G	N1-C2	5.95	1.42	1.37
1	N	1165	U	C4'-O4'	5.95	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1309	G	N7-C5	-5.95	1.35	1.39
1	N	1352	C	N3-C4	5.95	1.38	1.33
1	N	353	A	C5-C4	5.95	1.43	1.38
1	N	709	U	C2'-O2'	-5.95	1.33	1.41
1	N	1231	G	N3-C4	-5.95	1.31	1.35
1	N	703	G	O3'-P	5.94	1.68	1.61
1	N	1048	G	C6-N1	5.94	1.43	1.39
1	N	1141	C	N3-C4	-5.94	1.29	1.33
1	N	1256	A	O4'-C1'	-5.94	1.33	1.41
1	N	1397	C	C1'-N1	5.94	1.57	1.48
1	N	517	G	N7-C5	-5.94	1.35	1.39
1	N	561	U	N1-C6	-5.94	1.32	1.38
1	N	747	A	C6-N6	5.94	1.38	1.33
1	N	1017	U	O3'-P	-5.94	1.54	1.61
1	N	1177	G	N9-C4	5.94	1.42	1.38
1	N	343	U	O3'-P	-5.94	1.54	1.61
1	N	745	G	C4'-C3'	-5.94	1.46	1.52
1	N	639	G	C2-N3	5.94	1.37	1.32
1	N	765	G	C2-N2	5.94	1.40	1.34
1	N	385	C	C1'-N1	5.93	1.57	1.48
1	N	1209	C	N3-C4	5.93	1.38	1.33
1	N	296	U	C2'-C1'	-5.93	1.46	1.53
1	N	664	G	O3'-P	-5.93	1.54	1.61
1	N	749	A	N7-C5	-5.93	1.35	1.39
1	N	860	A	C8-N7	-5.93	1.27	1.31
1	N	1392	G	N1-C2	5.93	1.42	1.37
1	N	35	G	C2'-C1'	5.93	1.59	1.53
1	N	296	U	C3'-O3'	5.93	1.50	1.42
1	N	710	G	N1-C2	5.93	1.42	1.37
1	N	1029	U	C2-N3	-5.93	1.33	1.37
1	N	200	G	P-O5'	5.93	1.65	1.59
1	N	556	C	P-O5'	-5.93	1.53	1.59
1	N	1477	U	C3'-C2'	-5.93	1.46	1.52
1	N	37	U	N1-C2	5.92	1.43	1.38
1	N	215	C	C4-N4	5.92	1.39	1.33
1	N	298	A	N9-C4	-5.92	1.34	1.37
1	N	1094	G	P-O5'	5.92	1.65	1.59
1	N	1241	G	C8-N7	-5.92	1.27	1.30
1	N	1245	C	C5'-C4'	5.92	1.58	1.51
1	N	1352	C	C3'-C2'	-5.92	1.46	1.52
1	N	1405	G	N1-C2	5.92	1.42	1.37
1	N	469	C	C5'-C4'	5.92	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	390	U	O3'-P	-5.92	1.54	1.61
1	N	447	G	C3'-C2'	5.92	1.59	1.52
1	N	507	C	C4'-C3'	5.92	1.59	1.53
1	N	1076	U	C3'-C2'	5.92	1.59	1.52
1	N	1122	U	N1-C2	5.92	1.43	1.38
1	N	1337	G	O3'-P	-5.92	1.54	1.61
1	N	556	C	C2-N3	5.92	1.40	1.35
1	N	568	G	C5'-C4'	5.92	1.58	1.51
1	N	1154	G	N7-C5	-5.92	1.35	1.39
1	N	149	A	O3'-P	-5.92	1.54	1.61
1	N	359	G	C5-C6	-5.92	1.36	1.42
1	N	1460	C	N3-C4	5.92	1.38	1.33
1	N	1469	C	C1'-N1	5.92	1.57	1.48
1	N	15	G	C8-N7	-5.92	1.27	1.30
1	N	572	A	N1-C2	5.92	1.39	1.34
1	N	1265	C	N3-C4	5.92	1.38	1.33
1	N	1434	A	C8-N7	-5.91	1.27	1.31
1	N	959	A	C6-N1	5.91	1.39	1.35
1	N	1101	A	C5'-C4'	5.91	1.58	1.51
1	N	1362	A	N9-C4	5.91	1.41	1.37
1	N	433	G	C2-N2	5.91	1.40	1.34
1	N	440	C	P-O5'	-5.91	1.53	1.59
1	N	484	G	N9-C8	5.91	1.42	1.37
1	N	510	A	N9-C4	-5.91	1.34	1.37
1	N	528	C	C1'-N1	5.91	1.57	1.48
1	N	935	A	C6-N1	5.91	1.39	1.35
1	N	942	G	N9-C8	-5.91	1.33	1.37
1	N	459	A	C8-N7	-5.91	1.27	1.31
1	N	898	G	N3-C4	-5.91	1.31	1.35
1	N	838	G	C2'-C1'	-5.91	1.46	1.53
1	N	128	G	N3-C4	-5.91	1.31	1.35
1	N	242	G	C5-C6	5.91	1.48	1.42
1	N	356	A	N9-C4	-5.91	1.34	1.37
1	N	627	G	C5-C4	5.91	1.42	1.38
1	N	1233	G	N9-C4	5.91	1.42	1.38
1	N	19	A	O3'-P	-5.90	1.54	1.61
1	N	360	G	C2-N3	5.90	1.37	1.32
1	N	393	A	C5'-C4'	5.90	1.58	1.51
1	N	751	U	C5'-C4'	5.90	1.58	1.51
1	N	752	G	C6-N1	5.90	1.43	1.39
1	N	1014	A	C5-C6	-5.90	1.35	1.41
1	N	100	G	C3'-O3'	5.90	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	500	G	N9-C4	5.90	1.42	1.38
1	N	606	G	C4'-C3'	5.90	1.59	1.53
1	N	923	A	N9-C4	-5.90	1.34	1.37
1	N	347	G	C5'-C4'	5.90	1.58	1.51
1	N	433	G	N9-C4	-5.90	1.33	1.38
1	N	944	G	O4'-C1'	5.90	1.49	1.41
1	N	995	C	C4-C5	5.90	1.47	1.43
1	N	16	A	C6-N6	5.90	1.38	1.33
1	N	360	G	C6-N1	5.90	1.43	1.39
1	N	373	A	C5-C4	-5.90	1.34	1.38
1	N	629	A	C3'-C2'	-5.89	1.46	1.52
1	N	750	C	C2-N3	5.89	1.40	1.35
1	N	831	A	N9-C8	5.89	1.42	1.37
1	N	1348	U	P-O5'	-5.89	1.53	1.59
1	N	169	C	N3-C4	5.89	1.38	1.33
1	N	431	A	C4'-C3'	-5.89	1.46	1.52
1	N	1431	A	N3-C4	-5.89	1.31	1.34
1	N	505	G	P-O5'	-5.89	1.53	1.59
1	N	315	A	N1-C2	-5.88	1.29	1.34
1	N	599	C	C1'-N1	5.88	1.57	1.48
1	N	962	C	C4'-C3'	5.88	1.59	1.53
1	N	1124	G	C5'-C4'	5.88	1.58	1.51
1	N	1258	G	N7-C5	-5.88	1.35	1.39
1	N	1333	A	C2'-C1'	-5.88	1.46	1.53
1	N	1387	G	P-O5'	-5.88	1.53	1.59
1	N	21	G	C2-N2	5.88	1.40	1.34
1	N	101	A	C5'-C4'	5.88	1.58	1.51
1	N	187	G	C2-N2	-5.88	1.28	1.34
1	N	428	G	C3'-C2'	5.88	1.59	1.52
1	N	631	C	N3-C4	5.88	1.38	1.33
1	N	780	A	N1-C2	-5.88	1.29	1.34
1	N	182	A	C6-N6	5.88	1.38	1.33
1	N	236	A	C8-N7	-5.88	1.27	1.31
1	N	1031	C	P-O5'	-5.88	1.53	1.59
1	N	1368	A	P-O5'	-5.88	1.53	1.59
1	N	391	G	P-O5'	-5.88	1.53	1.59
1	N	619	U	C2-N3	5.88	1.41	1.37
1	N	873	A	C8-N7	-5.88	1.27	1.31
1	N	937	A	C2'-C1'	-5.87	1.46	1.53
1	N	1150	A	C3'-O3'	5.87	1.50	1.42
1	N	1279	G	C5-C6	-5.87	1.36	1.42
1	N	1322	C	N1-C6	5.87	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	779	C	C4-C5	-5.87	1.38	1.43
1	N	213	G	C6-N1	5.87	1.43	1.39
1	N	1010	U	C5'-C4'	5.87	1.58	1.51
1	N	1292	G	N1-C2	5.87	1.42	1.37
1	N	1473	G	N9-C8	5.87	1.42	1.37
1	N	1000	A	C6-N6	5.87	1.38	1.33
1	N	1128	C	O3'-P	-5.87	1.54	1.61
1	N	1267	C	O3'-P	-5.87	1.54	1.61
1	N	106	C	N1-C6	5.86	1.40	1.37
1	N	119	A	C8-N7	-5.86	1.27	1.31
1	N	2	A	C3'-C2'	-5.86	1.46	1.52
1	N	724	G	O3'-P	-5.86	1.54	1.61
1	N	991	U	C4'-C3'	-5.86	1.46	1.52
1	N	50	A	N7-C5	-5.86	1.35	1.39
1	N	122	G	N7-C5	-5.86	1.35	1.39
1	N	956	U	C1'-N1	5.86	1.57	1.48
1	N	1011	C	N1-C6	5.86	1.40	1.37
1	N	1453	G	N9-C8	5.86	1.42	1.37
1	N	565	U	C4'-C3'	-5.86	1.46	1.52
1	N	752	G	C6-O6	-5.86	1.18	1.24
1	N	963	G	N1-C2	5.86	1.42	1.37
1	N	1129	C	C2-N3	5.86	1.40	1.35
1	N	315	A	N9-C4	5.86	1.41	1.37
1	N	335	C	C5-C6	-5.86	1.29	1.34
1	N	476	U	N3-C4	5.86	1.43	1.38
1	N	536	C	N1-C6	5.86	1.40	1.37
1	N	1022	A	P-O5'	5.86	1.65	1.59
1	N	1184	G	C2'-C1'	-5.86	1.47	1.53
1	N	1260	G	C3'-C2'	5.86	1.59	1.52
1	N	506	G	O4'-C1'	5.85	1.49	1.41
1	N	1393	U	C2'-C1'	-5.85	1.47	1.53
1	N	185	U	P-O5'	-5.85	1.53	1.59
1	N	438	U	C2-N3	5.85	1.41	1.37
1	N	838	G	C2-N3	5.85	1.37	1.32
1	N	670	G	P-O5'	-5.85	1.53	1.59
1	N	1172	C	C5'-C4'	5.85	1.58	1.51
1	N	192	A	C5-C4	-5.85	1.34	1.38
1	N	763	G	C8-N7	-5.85	1.27	1.30
1	N	1067	A	N9-C4	-5.85	1.34	1.37
1	N	126	G	C5'-C4'	5.85	1.58	1.51
1	N	1168	U	C3'-C2'	5.85	1.59	1.52
1	N	540	G	C8-N7	5.85	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1395	C	C4'-C3'	5.85	1.59	1.53
1	N	198	G	N1-C2	5.84	1.42	1.37
1	N	281	G	C6-N1	5.84	1.43	1.39
1	N	810	C	N3-C4	5.84	1.38	1.33
1	N	1261	A	C3'-O3'	5.84	1.50	1.42
1	N	1506	U	N1-C2	5.84	1.43	1.38
1	N	122	G	C8-N7	-5.84	1.27	1.30
1	N	537	G	C4'-C3'	5.84	1.59	1.53
1	N	109	A	N9-C4	5.84	1.41	1.37
1	N	596	A	N9-C4	-5.84	1.34	1.37
1	N	836	G	C6-N1	5.84	1.43	1.39
1	N	1139	G	C2-N2	5.84	1.40	1.34
1	N	994	A	C5'-C4'	5.84	1.58	1.51
1	N	1190	G	C2-N3	5.84	1.37	1.32
1	N	761	G	C8-N7	-5.83	1.27	1.30
1	N	1159	U	C2-N3	5.83	1.41	1.37
1	N	424	G	C2'-C1'	-5.83	1.47	1.53
1	N	552	U	N3-C4	5.83	1.43	1.38
1	N	958	A	C4'-O4'	-5.83	1.38	1.45
1	N	1093	A	N9-C4	-5.83	1.34	1.37
1	N	1381	U	C4-C5	-5.83	1.38	1.43
1	N	1043	G	C2-N2	5.83	1.40	1.34
1	N	1043	G	P-O5'	-5.83	1.53	1.59
1	N	1401	G	C6-O6	-5.83	1.19	1.24
1	N	1331	G	C5-C6	-5.83	1.36	1.42
1	N	1341	U	C2-N3	5.83	1.41	1.37
1	N	415	A	C4'-C3'	5.83	1.59	1.53
1	N	8	A	C6-N6	5.82	1.38	1.33
1	N	177	G	N3-C4	5.82	1.39	1.35
1	N	1362	A	C8-N7	-5.82	1.27	1.31
1	N	1013	G	C2-N3	5.82	1.37	1.32
1	N	1173	U	C2'-C1'	-5.82	1.47	1.53
1	N	1466	C	P-O5'	-5.82	1.53	1.59
1	N	733	G	N1-C2	5.82	1.42	1.37
1	N	178	C	C4-C5	5.82	1.47	1.43
1	N	224	U	C2-N3	-5.82	1.33	1.37
1	N	447	G	C5'-C4'	5.82	1.58	1.51
1	N	1222	G	C4'-O4'	-5.82	1.38	1.45
1	N	1227	A	N9-C4	5.82	1.41	1.37
1	N	210	C	N3-C4	5.82	1.38	1.33
1	N	867	G	N3-C4	-5.82	1.31	1.35
1	N	908	A	N7-C5	-5.82	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1171	A	N9-C8	-5.81	1.33	1.37
1	N	116	A	C5'-C4'	5.81	1.58	1.51
1	N	394	G	C5-C4	5.81	1.42	1.38
1	N	412	A	C6-N6	5.81	1.38	1.33
1	N	1514	G	C5'-C4'	5.81	1.58	1.51
1	N	166	U	N3-C4	5.81	1.43	1.38
1	N	716	A	N9-C4	-5.81	1.34	1.37
1	N	988	G	C2-N2	5.81	1.40	1.34
1	N	1067	A	C5'-C4'	5.81	1.58	1.51
1	N	1205	U	C3'-O3'	5.81	1.50	1.42
1	N	1215	G	C5-C4	5.81	1.42	1.38
1	N	15	G	C4'-C3'	5.81	1.59	1.53
1	N	296	U	C2'-O2'	-5.81	1.34	1.41
1	N	413	G	C5'-C4'	5.81	1.58	1.51
1	N	891	U	P-O5'	-5.81	1.53	1.59
1	N	523	A	C6-N1	5.81	1.39	1.35
1	N	332	G	C6-N1	5.80	1.43	1.39
1	N	335	C	C2'-C1'	-5.80	1.47	1.53
1	N	578	C	N1-C6	5.80	1.40	1.37
1	N	888	G	O3'-P	-5.80	1.54	1.61
1	N	972	C	N3-C4	5.80	1.38	1.33
1	N	1016	A	O3'-P	-5.80	1.54	1.61
1	N	112	G	C5'-C4'	5.80	1.58	1.51
1	N	623	C	C4-N4	5.80	1.39	1.33
1	N	1250	A	O3'-P	-5.80	1.54	1.61
1	N	213	G	C2-N2	5.80	1.40	1.34
1	N	440	C	C4-C5	5.80	1.47	1.43
1	N	797	C	C1'-N1	5.80	1.57	1.48
1	N	895	G	C3'-O3'	5.80	1.50	1.42
1	N	1043	G	C2-N3	5.80	1.37	1.32
1	N	813	U	C5'-C4'	5.80	1.58	1.51
1	N	1272	G	P-O5'	-5.80	1.53	1.59
1	N	1481	U	C3'-O3'	5.80	1.50	1.42
1	N	434	U	C2'-C1'	-5.80	1.47	1.53
1	N	540	G	P-O5'	-5.80	1.53	1.59
1	N	1406	U	N3-C4	5.80	1.43	1.38
1	N	136	C	C4-C5	-5.80	1.38	1.43
1	N	1228	C	C2-N3	5.80	1.40	1.35
1	N	1360	A	C5-C4	5.80	1.42	1.38
1	N	354	G	N3-C4	-5.79	1.31	1.35
1	N	643	C	N1-C2	5.79	1.46	1.40
1	N	65	A	C6-N6	5.79	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	642	A	N7-C5	-5.79	1.35	1.39
1	N	910	C	C4-N4	5.79	1.39	1.33
1	N	95	C	P-O5'	5.79	1.65	1.59
1	N	1378	C	C4'-O4'	-5.79	1.38	1.45
1	N	308	C	C2-N3	5.79	1.40	1.35
1	N	802	A	N9-C4	5.79	1.41	1.37
1	N	1180	A	O3'-P	-5.79	1.54	1.61
1	N	916	U	P-O5'	5.79	1.65	1.59
1	N	1035	A	C6-N6	5.79	1.38	1.33
1	N	1114	C	N3-C4	5.78	1.38	1.33
1	N	1196	A	C5'-C4'	5.78	1.58	1.51
1	N	1256	A	N9-C8	-5.78	1.33	1.37
1	N	750	C	C5-C6	-5.78	1.29	1.34
1	N	832	G	C2'-C1'	5.78	1.59	1.53
1	N	1184	G	C2-N3	5.78	1.37	1.32
1	N	1533	C	P-O5'	-5.78	1.53	1.59
1	N	227	G	N9-C8	-5.78	1.33	1.37
1	N	554	A	N9-C4	-5.78	1.34	1.37
1	N	1093	A	C2'-C1'	-5.78	1.47	1.53
1	N	1101	A	N3-C4	5.78	1.38	1.34
1	N	36	C	C5'-C4'	5.77	1.58	1.51
1	N	544	G	N9-C4	-5.77	1.33	1.38
1	N	568	G	P-O5'	-5.77	1.53	1.59
1	N	250	A	C5-C4	5.77	1.42	1.38
1	N	180	U	O3'-P	-5.77	1.54	1.61
1	N	211	G	C4'-C3'	5.77	1.59	1.53
1	N	537	G	C2'-C1'	-5.77	1.47	1.53
1	N	765	G	C4'-C3'	5.77	1.59	1.53
1	N	213	G	C5'-C4'	5.77	1.58	1.51
1	N	384	G	N1-C2	5.77	1.42	1.37
1	N	1091	U	C2'-O2'	-5.77	1.34	1.41
1	N	1352	C	C1'-N1	5.77	1.57	1.48
1	N	1448	C	C4'-O4'	-5.77	1.38	1.45
1	N	19	A	C2'-C1'	-5.76	1.47	1.53
1	N	68	G	C3'-C2'	-5.76	1.46	1.52
1	N	132	C	C5'-C4'	5.76	1.58	1.51
1	N	383	A	N3-C4	5.76	1.38	1.34
1	N	444	G	C2-N3	5.76	1.37	1.32
1	N	802	A	C6-N6	5.76	1.38	1.33
1	N	841	C	N1-C2	5.76	1.46	1.40
1	N	902	G	C2'-C1'	-5.76	1.47	1.53
1	N	909	A	O5'-C5'	-5.76	1.33	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1430	A	C5-C4	5.76	1.42	1.38
1	N	1520	C	O4'-C1'	5.76	1.49	1.41
1	N	963	G	P-O5'	-5.76	1.53	1.59
1	N	600	A	C6-N1	5.76	1.39	1.35
1	N	615	G	C2'-C1'	-5.76	1.47	1.53
1	N	1529	G	C6-N1	5.76	1.43	1.39
1	N	1167	A	C5-C4	5.76	1.42	1.38
1	N	1514	G	N7-C5	-5.76	1.35	1.39
1	N	1170	A	C3'-C2'	5.76	1.59	1.52
1	N	181	A	C5'-C4'	5.75	1.58	1.51
1	N	425	G	C5'-C4'	5.75	1.58	1.51
1	N	452	A	O4'-C1'	5.75	1.49	1.41
1	N	1337	G	N9-C8	5.75	1.41	1.37
1	N	199	A	C5'-C4'	5.75	1.58	1.51
1	N	505	G	C8-N7	-5.75	1.27	1.30
1	N	587	G	N9-C8	-5.75	1.33	1.37
1	N	850	U	N3-C4	5.75	1.43	1.38
1	N	901	A	C5-C4	5.75	1.42	1.38
1	N	997	U	C1'-N1	5.75	1.57	1.48
1	N	317	U	C5'-C4'	5.75	1.58	1.51
1	N	93	U	C2'-C1'	-5.75	1.47	1.53
1	N	758	C	C3'-C2'	5.75	1.59	1.52
1	N	1485	U	N1-C6	5.75	1.43	1.38
1	N	441	A	C5'-C4'	5.75	1.58	1.51
1	N	605	U	N3-C4	5.75	1.43	1.38
1	N	1107	C	P-O5'	5.75	1.65	1.59
1	N	1316	G	C2'-C1'	-5.75	1.47	1.53
1	N	483	C	C4-N4	5.75	1.39	1.33
1	N	402	G	N9-C8	5.74	1.41	1.37
1	N	447	G	C4'-O4'	5.74	1.53	1.45
1	N	782	A	C2-N3	5.74	1.38	1.33
1	N	332	G	O3'-P	-5.74	1.54	1.61
1	N	461	A	C2'-C1'	-5.74	1.47	1.53
1	N	616	G	C5-C6	5.74	1.48	1.42
1	N	851	G	C2'-C1'	-5.74	1.47	1.53
1	N	1466	C	C4-C5	5.74	1.47	1.43
1	N	48	C	C4-N4	5.74	1.39	1.33
1	N	795	C	P-O5'	-5.74	1.54	1.59
1	N	842	U	C2-N3	5.74	1.41	1.37
1	N	1077	G	N7-C5	-5.74	1.35	1.39
1	N	444	G	C6-N1	5.74	1.43	1.39
1	N	873	A	C5'-C4'	5.74	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1202	U	N3-C4	5.74	1.43	1.38
1	N	1443	C	P-O5'	-5.73	1.54	1.59
1	N	286	C	C3'-C2'	-5.73	1.46	1.52
1	N	670	G	N9-C4	-5.73	1.33	1.38
1	N	1202	U	N1-C6	-5.73	1.32	1.38
1	N	245	U	C4-O4	5.73	1.28	1.23
1	N	1422	G	N1-C2	5.73	1.42	1.37
1	N	347	G	C2-N2	5.73	1.40	1.34
1	N	419	C	C3'-C2'	-5.73	1.46	1.52
1	N	624	C	O3'-P	-5.73	1.54	1.61
1	N	650	G	C5'-C4'	5.73	1.58	1.51
1	N	780	A	C6-N1	-5.73	1.31	1.35
1	N	1350	A	C6-N6	5.73	1.38	1.33
1	N	1438	G	C8-N7	-5.73	1.27	1.30
1	N	1468	A	C4'-O4'	-5.73	1.38	1.45
1	N	514	C	N3-C4	5.72	1.38	1.33
1	N	564	C	N3-C4	5.72	1.38	1.33
1	N	647	C	O3'-P	-5.72	1.54	1.61
1	N	648	A	C6-N1	5.72	1.39	1.35
1	N	945	G	C1'-N9	5.72	1.57	1.48
1	N	1396	A	C6-N1	5.72	1.39	1.35
1	N	88	U	C2-N3	5.72	1.41	1.37
1	N	264	C	O3'-P	-5.72	1.54	1.61
1	N	408	A	O3'-P	-5.72	1.54	1.61
1	N	1143	G	C2-N3	5.72	1.37	1.32
1	N	844	G	C4'-C3'	5.72	1.59	1.53
1	N	1058	G	C5-C6	-5.72	1.36	1.42
1	N	353	A	P-O5'	-5.72	1.54	1.59
1	N	415	A	C8-N7	5.72	1.35	1.31
1	N	571	U	C3'-C2'	5.72	1.59	1.52
1	N	635	A	N9-C8	5.72	1.42	1.37
1	N	1469	C	O3'-P	-5.72	1.54	1.61
1	N	256	U	O3'-P	-5.71	1.54	1.61
1	N	34	C	C2'-C1'	-5.71	1.47	1.53
1	N	1304	G	C2'-C1'	-5.71	1.47	1.53
1	N	28	A	C2'-C1'	-5.71	1.47	1.53
1	N	542	G	C6-N1	5.71	1.43	1.39
1	N	649	A	C2-N3	5.71	1.38	1.33
1	N	249	U	C2'-C1'	-5.71	1.47	1.53
1	N	1338	G	C5-C6	-5.71	1.36	1.42
1	N	1347	G	C5-C4	5.71	1.42	1.38
1	N	16	A	N9-C8	-5.71	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	257	G	C8-N7	-5.71	1.27	1.30
1	N	427	U	C2'-C1'	-5.71	1.47	1.53
1	N	808	C	C1'-N1	5.71	1.57	1.48
1	N	41	G	C6-N1	5.71	1.43	1.39
1	N	237	G	N3-C4	-5.70	1.31	1.35
1	N	489	C	C5-C6	-5.70	1.29	1.34
1	N	633	G	C3'-C2'	5.70	1.59	1.52
1	N	1134	G	C5-C4	5.70	1.42	1.38
1	N	477	C	C5'-C4'	5.70	1.58	1.51
1	N	741	G	N9-C8	5.70	1.41	1.37
1	N	771	G	C2-N3	5.70	1.37	1.32
1	N	744	C	P-O5'	-5.70	1.54	1.59
1	N	911	U	C4'-O4'	-5.70	1.38	1.45
1	N	1243	C	C4-C5	-5.70	1.38	1.43
1	N	809	G	C1'-N9	5.70	1.57	1.48
1	N	5	U	C4'-C3'	5.70	1.59	1.53
1	N	606	G	C2-N3	5.70	1.37	1.32
1	N	857	C	C5-C6	5.70	1.39	1.34
1	N	862	C	O3'-P	-5.70	1.54	1.61
1	N	1196	A	C2-N3	5.70	1.38	1.33
1	N	1242	G	N1-C2	5.70	1.42	1.37
1	N	85	U	C4'-C3'	5.69	1.59	1.53
1	N	891	U	C3'-C2'	5.69	1.59	1.52
1	N	939	G	C5-C6	-5.69	1.36	1.42
1	N	1402	C	N3-C4	5.69	1.38	1.33
1	N	111	G	C4'-O4'	-5.69	1.38	1.45
1	N	591	U	C1'-N1	5.69	1.57	1.48
1	N	598	U	C2-N3	5.69	1.41	1.37
1	N	974	A	N7-C5	-5.69	1.35	1.39
1	N	1060	U	C2-N3	5.69	1.41	1.37
1	N	1148	U	C1'-N1	5.69	1.57	1.48
1	N	1246	A	C6-N6	5.69	1.38	1.33
1	N	1471	U	C5'-C4'	5.69	1.58	1.51
1	N	176	C	C5'-C4'	5.69	1.58	1.51
1	N	596	A	N3-C4	-5.69	1.31	1.34
1	N	1024	G	O5'-C5'	-5.69	1.33	1.42
1	N	1490	U	P-O5'	-5.69	1.54	1.59
1	N	645	G	C6-N1	5.69	1.43	1.39
1	N	1371	G	C3'-C2'	5.69	1.59	1.52
1	N	777	A	C6-N6	5.69	1.38	1.33
1	N	471	U	C3'-O3'	5.68	1.50	1.42
1	N	781	A	N3-C4	-5.68	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	311	C	C3'-C2'	-5.68	1.46	1.52
1	N	391	G	C8-N7	-5.68	1.27	1.30
1	N	777	A	N3-C4	-5.68	1.31	1.34
1	N	905	U	C2'-O2'	5.68	1.49	1.41
1	N	155	A	C4'-C3'	5.68	1.59	1.53
1	N	780	A	C2'-C1'	-5.68	1.47	1.53
1	N	1191	A	C6-N1	5.68	1.39	1.35
1	N	1290	G	N1-C2	5.68	1.42	1.37
1	N	179	A	C6-N6	5.68	1.38	1.33
1	N	729	A	C6-N1	5.68	1.39	1.35
1	N	1294	G	C5'-C4'	5.68	1.58	1.51
1	N	58	C	P-O5'	5.68	1.65	1.59
1	N	601	G	C2-N3	5.68	1.37	1.32
1	N	886	G	C6-N1	5.68	1.43	1.39
1	N	466	A	C5'-C4'	-5.67	1.44	1.51
1	N	904	U	C2'-C1'	-5.67	1.47	1.53
1	N	1419	G	C6-O6	-5.67	1.19	1.24
1	N	51	A	O3'-P	-5.67	1.54	1.61
1	N	130	A	C6-N1	5.67	1.39	1.35
1	N	131	A	C6-N6	5.67	1.38	1.33
1	N	537	G	N7-C5	-5.67	1.35	1.39
1	N	1281	C	N1-C6	5.67	1.40	1.37
1	N	1507	A	C4'-O4'	5.67	1.52	1.45
1	N	569	C	O3'-P	-5.67	1.54	1.61
1	N	892	A	C5-C6	-5.67	1.35	1.41
1	N	674	G	N1-C2	5.67	1.42	1.37
1	N	104	G	N3-C4	-5.67	1.31	1.35
1	N	503	C	N3-C4	5.67	1.38	1.33
1	N	1172	C	C4-N4	5.67	1.39	1.33
1	N	1366	C	C5'-C4'	5.67	1.58	1.51
1	N	337	G	N7-C5	-5.67	1.35	1.39
1	N	1079	G	C4'-O4'	5.67	1.52	1.45
1	N	1516	G	C6-N1	5.67	1.43	1.39
1	N	1200	C	N3-C4	5.67	1.38	1.33
1	N	1348	U	C3'-C2'	5.67	1.59	1.52
1	N	686	U	O3'-P	-5.66	1.54	1.61
1	N	253	A	P-O5'	-5.66	1.54	1.59
1	N	807	A	N1-C2	5.66	1.39	1.34
1	N	153	C	C5'-C4'	5.66	1.58	1.51
1	N	521	G	C2'-C1'	-5.66	1.47	1.53
1	N	648	A	C4'-C3'	-5.66	1.46	1.52
1	N	833	G	C2-N2	5.66	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	222	C	C4-N4	5.66	1.39	1.33
1	N	299	G	N7-C5	-5.66	1.35	1.39
1	N	924	C	C5'-C4'	5.66	1.58	1.51
1	N	1115	U	C4-C5	-5.66	1.38	1.43
1	N	1380	U	N3-C4	5.66	1.43	1.38
1	N	161	A	C3'-O3'	5.65	1.50	1.42
1	N	1375	A	C1'-N9	5.65	1.57	1.48
1	N	1455	G	C6-N1	5.65	1.43	1.39
1	N	233	C	C4'-C3'	5.65	1.59	1.53
1	N	277	C	C4'-C3'	5.65	1.59	1.53
1	N	455	G	N7-C5	-5.65	1.35	1.39
1	N	549	C	P-O5'	-5.65	1.54	1.59
1	N	1041	G	C2'-C1'	-5.65	1.47	1.53
1	N	1439	G	C4'-C3'	5.65	1.59	1.53
1	N	247	G	C5-C4	5.65	1.42	1.38
1	N	616	G	P-O5'	-5.65	1.54	1.59
1	N	1426	G	C5'-C4'	5.65	1.58	1.51
1	N	823	C	N1-C6	5.65	1.40	1.37
1	N	909	A	C6-N6	5.65	1.38	1.33
1	N	1527	U	C5'-C4'	5.65	1.58	1.51
1	N	945	G	C3'-C2'	-5.65	1.46	1.52
1	N	1024	G	C8-N7	-5.65	1.27	1.30
1	N	1106	G	C5'-C4'	5.65	1.58	1.51
1	N	494	G	C8-N7	-5.64	1.27	1.30
1	N	645	G	N7-C5	-5.64	1.35	1.39
1	N	1371	G	N9-C4	-5.64	1.33	1.38
1	N	278	G	N9-C8	-5.64	1.33	1.37
1	N	1441	A	C5-C6	5.64	1.46	1.41
1	N	1264	U	N3-C4	5.64	1.43	1.38
1	N	1308	U	N3-C4	5.64	1.43	1.38
1	N	1446	A	C5-C4	5.64	1.42	1.38
1	N	1036	A	C5-C6	5.64	1.46	1.41
1	N	183	C	N1-C6	5.64	1.40	1.37
1	N	204	G	C3'-C2'	-5.64	1.46	1.52
1	N	318	G	N7-C5	-5.64	1.35	1.39
1	N	1055	A	N7-C5	-5.64	1.35	1.39
1	N	92	U	C3'-C2'	5.63	1.59	1.52
1	N	97	G	N1-C2	5.63	1.42	1.37
1	N	412	A	C2'-C1'	-5.63	1.47	1.53
1	N	1298	U	C3'-C2'	5.63	1.59	1.52
1	N	1439	G	N1-C2	5.63	1.42	1.37
1	N	1362	A	N7-C5	-5.63	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	822	U	C4-C5	5.63	1.48	1.43
1	N	951	G	N1-C2	5.63	1.42	1.37
1	N	1103	C	C4-C5	5.63	1.47	1.43
1	N	1165	U	C5'-C4'	5.63	1.58	1.51
1	N	1204	A	N9-C8	5.63	1.42	1.37
1	N	1282	C	C2-N3	5.63	1.40	1.35
1	N	1138	G	C2'-C1'	-5.63	1.47	1.53
1	N	122	G	C2'-C1'	-5.63	1.47	1.53
1	N	394	G	N7-C5	5.63	1.42	1.39
1	N	524	G	N3-C4	-5.63	1.31	1.35
1	N	1134	G	N9-C4	-5.63	1.33	1.38
1	N	1157	A	N9-C4	-5.63	1.34	1.37
1	N	1312	G	C3'-C2'	5.63	1.59	1.52
1	N	1500	A	N9-C4	-5.63	1.34	1.37
1	N	164	G	C2-N3	5.63	1.37	1.32
1	N	364	A	N9-C4	5.63	1.41	1.37
1	N	876	C	N1-C6	5.63	1.40	1.37
1	N	1219	A	N3-C4	-5.63	1.31	1.34
1	N	1253	G	C5'-C4'	5.63	1.58	1.51
1	N	109	A	P-O5'	5.62	1.65	1.59
1	N	1245	C	N1-C6	-5.62	1.33	1.37
1	N	319	G	N7-C5	-5.62	1.35	1.39
1	N	509	A	N7-C5	-5.62	1.35	1.39
1	N	1060	U	C3'-O3'	5.62	1.50	1.42
1	N	1091	U	O4'-C1'	5.62	1.49	1.41
1	N	814	A	N9-C4	-5.62	1.34	1.37
1	N	826	C	C2'-O2'	-5.62	1.34	1.41
1	N	833	G	C5-C4	-5.62	1.34	1.38
1	N	1319	A	N9-C4	-5.62	1.34	1.37
1	N	180	U	P-O5'	-5.62	1.54	1.59
1	N	704	A	C4'-O4'	5.62	1.52	1.45
1	N	1417	G	C5-C6	-5.62	1.36	1.42
1	N	1441	A	O3'-P	5.62	1.67	1.61
1	N	244	U	N1-C2	5.62	1.43	1.38
1	N	1419	G	C6-N1	5.62	1.43	1.39
1	N	24	U	N3-C4	-5.62	1.33	1.38
1	N	402	G	C6-N1	5.62	1.43	1.39
1	N	486	U	C4'-C3'	5.62	1.59	1.53
1	N	129	A	C4'-O4'	-5.61	1.38	1.45
1	N	812	G	C2-N3	5.61	1.37	1.32
1	N	876	C	C4'-C3'	-5.61	1.47	1.52
1	N	1053	G	N7-C5	-5.61	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	509	A	C6-N6	5.61	1.38	1.33
1	N	712	A	C4'-O4'	5.61	1.52	1.45
1	N	872	A	C6-N6	5.61	1.38	1.33
1	N	906	A	C6-N1	5.61	1.39	1.35
1	N	974	A	N9-C4	-5.61	1.34	1.37
1	N	1294	G	N9-C4	-5.61	1.33	1.38
1	N	1530	G	C3'-C2'	5.61	1.59	1.52
1	N	870	U	C4'-O4'	-5.61	1.38	1.45
1	N	587	G	P-O5'	-5.61	1.54	1.59
1	N	714	G	C2-N3	5.61	1.37	1.32
1	N	178	C	C3'-C2'	-5.61	1.46	1.52
1	N	348	G	C6-O6	5.61	1.29	1.24
1	N	1048	G	C8-N7	-5.61	1.27	1.30
1	N	1056	U	C4'-C3'	5.61	1.59	1.53
1	N	425	G	C5-C6	5.60	1.48	1.42
1	N	88	U	C5'-C4'	5.60	1.58	1.51
1	N	337	G	O3'-P	-5.60	1.54	1.61
1	N	1140	C	C2-N3	5.60	1.40	1.35
1	N	104	G	C2'-C1'	-5.60	1.47	1.53
1	N	152	A	C1'-N9	5.60	1.57	1.48
1	N	253	A	C2-N3	5.60	1.38	1.33
1	N	1068	G	C5-C4	5.60	1.42	1.38
1	N	285	C	C2'-C1'	-5.60	1.47	1.53
1	N	474	G	N9-C4	-5.60	1.33	1.38
1	N	638	U	C2'-C1'	-5.60	1.47	1.53
1	N	953	G	C5'-C4'	5.60	1.58	1.51
1	N	1131	G	N9-C8	-5.60	1.33	1.37
1	N	1252	A	N9-C4	5.60	1.41	1.37
1	N	1331	G	N1-C2	5.60	1.42	1.37
1	N	632	U	O4'-C1'	5.60	1.49	1.41
1	N	1247	U	C2'-C1'	-5.60	1.47	1.53
1	N	250	A	O4'-C1'	-5.60	1.34	1.41
1	N	595	A	C5'-C4'	5.60	1.58	1.51
1	N	777	A	N9-C8	-5.60	1.33	1.37
1	N	1159	U	C4-C5	5.60	1.48	1.43
1	N	1306	A	C8-N7	-5.60	1.27	1.31
1	N	1480	A	C5-C4	-5.60	1.34	1.38
1	N	84	U	C4'-O4'	-5.59	1.38	1.45
1	N	480	U	C4'-O4'	5.59	1.52	1.45
1	N	938	A	C6-N6	5.59	1.38	1.33
1	N	219	U	C2'-O2'	5.59	1.49	1.41
1	N	330	C	C3'-O3'	5.59	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	600	A	N7-C5	-5.59	1.35	1.39
1	N	617	G	C6-N1	5.59	1.43	1.39
1	N	823	C	C2'-C1'	-5.59	1.47	1.53
1	N	1111	A	C5-C4	-5.59	1.34	1.38
1	N	227	G	C5-C4	5.59	1.42	1.38
1	N	678	U	N3-C4	5.59	1.43	1.38
1	N	765	G	C2-N3	5.59	1.37	1.32
1	N	1020	G	C5-C4	5.59	1.42	1.38
1	N	1274	A	C6-N6	5.59	1.38	1.33
1	N	269	C	C2'-C1'	-5.59	1.47	1.53
1	N	416	G	C5'-C4'	5.59	1.58	1.51
1	N	1275	A	C8-N7	-5.59	1.27	1.31
1	N	1099	G	N7-C5	-5.59	1.35	1.39
1	N	238	A	N9-C8	5.58	1.42	1.37
1	N	327	A	C2'-C1'	-5.58	1.47	1.53
1	N	449	G	C6-N1	5.58	1.43	1.39
1	N	563	A	C5-C4	5.58	1.42	1.38
1	N	1225	A	C6-N1	5.58	1.39	1.35
1	N	1309	G	C5'-C4'	5.58	1.58	1.51
1	N	758	C	N3-C4	5.58	1.37	1.33
1	N	1114	C	C4-N4	5.58	1.39	1.33
1	N	183	C	C4-C5	5.58	1.47	1.43
1	N	1339	A	O3'-P	-5.58	1.54	1.61
1	N	425	G	C6-N1	5.58	1.43	1.39
1	N	525	C	C4-N4	5.58	1.39	1.33
1	N	1373	G	O3'-P	-5.58	1.54	1.61
1	N	573	A	C5-C4	-5.58	1.34	1.38
1	N	1003	G	C4'-O4'	-5.58	1.38	1.45
1	N	1343	G	C2-N3	5.58	1.37	1.32
1	N	1452	C	C3'-C2'	-5.58	1.46	1.52
1	N	495	A	N3-C4	-5.57	1.31	1.34
1	N	1262	C	C3'-C2'	5.57	1.59	1.52
1	N	1370	G	C5-C4	-5.57	1.34	1.38
1	N	1403	C	C5-C6	-5.57	1.29	1.34
1	N	1307	U	C2'-C1'	5.57	1.59	1.53
1	N	240	G	N7-C5	-5.57	1.35	1.39
1	N	335	C	N1-C2	-5.57	1.34	1.40
1	N	1251	A	P-O5'	-5.57	1.54	1.59
1	N	1199	U	C2'-C1'	5.57	1.59	1.53
1	N	515	G	C2'-C1'	-5.57	1.47	1.53
1	N	851	G	N3-C4	-5.57	1.31	1.35
1	N	884	U	C2-N3	5.57	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	633	G	P-O5'	-5.56	1.54	1.59
1	N	681	A	C5-C6	-5.56	1.36	1.41
1	N	798	U	C5'-C4'	5.56	1.58	1.51
1	N	1003	G	C6-N1	5.56	1.43	1.39
1	N	30	U	O4'-C1'	-5.56	1.34	1.41
1	N	17	U	C4-C5	5.56	1.48	1.43
1	N	206	C	C2-N3	5.56	1.40	1.35
1	N	929	G	C3'-C2'	-5.56	1.46	1.52
1	N	1399	C	C2-N3	-5.56	1.31	1.35
1	N	130	A	N1-C2	-5.56	1.29	1.34
1	N	538	G	N1-C2	5.56	1.42	1.37
1	N	1107	C	C2'-C1'	-5.56	1.47	1.53
1	N	1119	C	C5-C6	5.56	1.38	1.34
1	N	1214	C	C5-C6	-5.56	1.29	1.34
1	N	197	A	O3'-P	-5.55	1.54	1.61
1	N	797	C	C2'-C1'	-5.55	1.47	1.53
1	N	1062	U	C4'-O4'	5.55	1.52	1.45
1	N	1424	U	C5'-C4'	5.55	1.58	1.51
1	N	92	U	P-O5'	-5.55	1.54	1.59
1	N	790	A	N9-C4	-5.55	1.34	1.37
1	N	1489	G	C2-N3	5.55	1.37	1.32
1	N	173	U	C2-N3	5.55	1.41	1.37
1	N	410	G	N3-C4	-5.55	1.31	1.35
1	N	731	G	C5-C6	-5.55	1.36	1.42
1	N	1144	G	C5-C6	-5.55	1.36	1.42
1	N	1149	C	N1-C6	-5.55	1.33	1.37
1	N	381	C	C4-N4	5.55	1.39	1.33
1	N	746	A	C3'-C2'	-5.55	1.46	1.52
1	N	1235	U	P-O5'	-5.55	1.54	1.59
1	N	776	G	N1-C2	5.55	1.42	1.37
1	N	62	U	N3-C4	5.55	1.43	1.38
1	N	77	A	C4'-O4'	-5.55	1.38	1.45
1	N	101	A	C2'-C1'	-5.55	1.47	1.53
1	N	244	U	C5-C6	5.55	1.39	1.34
1	N	752	G	N3-C4	5.55	1.39	1.35
1	N	1118	U	C4'-O4'	5.54	1.52	1.45
1	N	1507	A	N1-C2	5.54	1.39	1.34
1	N	1508	A	C6-N1	5.54	1.39	1.35
1	N	313	A	C3'-C2'	-5.54	1.46	1.52
1	N	381	C	C4'-O4'	5.54	1.52	1.45
1	N	548	G	N7-C5	-5.54	1.35	1.39
1	N	908	A	C5-C4	5.54	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1200	C	C4-N4	5.54	1.39	1.33
1	N	223	A	C5-C6	-5.54	1.36	1.41
1	N	233	C	C2-N3	5.54	1.40	1.35
1	N	289	G	C5-C4	5.54	1.42	1.38
1	N	1508	A	C2-N3	-5.54	1.28	1.33
1	N	150	U	C5-C6	5.54	1.39	1.34
1	N	247	G	N7-C5	-5.54	1.35	1.39
1	N	939	G	N7-C5	-5.54	1.35	1.39
1	N	264	C	C4-C5	-5.54	1.38	1.43
1	N	394	G	C5'-C4'	5.54	1.57	1.51
1	N	1311	A	C3'-C2'	5.54	1.59	1.52
1	N	1394	A	N7-C5	-5.54	1.35	1.39
1	N	1081	A	C8-N7	-5.54	1.27	1.31
1	N	800	G	O3'-P	-5.54	1.54	1.61
1	N	1009	U	P-O5'	-5.53	1.54	1.59
1	N	1253	G	C2-N2	5.53	1.40	1.34
1	N	1220	G	N1-C2	5.53	1.42	1.37
1	N	299	G	C2'-C1'	-5.53	1.47	1.53
1	N	666	G	P-O5'	5.53	1.65	1.59
1	N	1225	A	O3'-P	-5.53	1.54	1.61
1	N	1473	G	N1-C2	5.53	1.42	1.37
1	N	173	U	C4'-O4'	-5.53	1.38	1.45
1	N	920	U	C3'-O3'	5.53	1.49	1.42
1	N	1321	U	O4'-C1'	-5.53	1.34	1.41
1	N	1384	C	N1-C2	-5.53	1.34	1.40
1	N	70	U	C5-C6	-5.53	1.29	1.34
1	N	76	G	C2'-C1'	5.53	1.59	1.53
1	N	374	A	C4'-O4'	5.53	1.52	1.45
1	N	1117	A	N7-C5	-5.53	1.35	1.39
1	N	1249	C	C4-C5	5.53	1.47	1.43
1	N	1052	U	C5'-C4'	5.52	1.57	1.51
1	N	1075	U	C4'-C3'	5.52	1.59	1.53
1	N	177	G	N7-C5	-5.52	1.35	1.39
1	N	858	G	C6-N1	5.52	1.43	1.39
1	N	1266	G	C2-N2	-5.52	1.29	1.34
1	N	1295	U	C4'-C3'	5.52	1.59	1.53
1	N	1486	G	C2-N2	-5.52	1.29	1.34
1	N	635	A	C5'-C4'	5.52	1.57	1.51
1	N	1398	A	C6-N6	5.52	1.38	1.33
1	N	566	G	O3'-P	-5.52	1.54	1.61
1	N	808	C	C4'-C3'	-5.52	1.47	1.52
1	N	305	G	C2-N3	5.52	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	751	U	C1'-N1	5.52	1.57	1.48
1	N	846	G	N9-C8	-5.52	1.33	1.37
1	N	1385	G	C6-N1	5.52	1.43	1.39
1	N	725	G	N9-C4	-5.52	1.33	1.38
1	N	840	C	C4'-C3'	5.52	1.59	1.53
1	N	1367	C	C5'-C4'	5.52	1.57	1.51
1	N	77	A	C2'-C1'	-5.51	1.47	1.53
1	N	239	U	C4-C5	5.51	1.48	1.43
1	N	1069	C	N1-C6	-5.51	1.33	1.37
1	N	1104	G	C4'-C3'	5.51	1.59	1.53
1	N	1334	G	C2-N2	5.51	1.40	1.34
1	N	1507	A	N3-C4	5.51	1.38	1.34
1	N	1219	A	C8-N7	-5.51	1.27	1.31
1	N	1452	C	C1'-N1	5.51	1.57	1.48
1	N	33	A	P-O5'	-5.51	1.54	1.59
1	N	205	A	C5'-C4'	5.51	1.57	1.51
1	N	811	C	C3'-O3'	5.51	1.49	1.42
1	N	904	U	C1'-N1	5.51	1.57	1.48
1	N	998	C	P-O5'	-5.51	1.54	1.59
1	N	1186	G	N9-C8	-5.51	1.33	1.37
1	N	57	G	N1-C2	5.51	1.42	1.37
1	N	134	G	C3'-C2'	5.51	1.59	1.52
1	N	867	G	C4'-C3'	-5.51	1.47	1.52
1	N	13	U	O3'-P	-5.51	1.54	1.61
1	N	683	G	C3'-C2'	-5.51	1.46	1.52
1	N	1418	A	C5-C4	-5.51	1.34	1.38
1	N	1505	G	O3'-P	-5.51	1.54	1.61
1	N	1523	G	O4'-C1'	-5.51	1.34	1.41
1	N	122	G	P-O5'	-5.51	1.54	1.59
1	N	329	A	N9-C8	-5.51	1.33	1.37
1	N	1162	C	C3'-O3'	5.51	1.49	1.42
1	N	1321	U	C4-C5	5.51	1.48	1.43
1	N	65	A	C3'-O3'	5.50	1.49	1.42
1	N	1329	A	N9-C4	-5.50	1.34	1.37
1	N	727	G	N9-C4	5.50	1.42	1.38
1	N	1386	G	N9-C4	-5.50	1.33	1.38
1	N	43	C	C4-C5	-5.50	1.38	1.43
1	N	199	A	C6-N6	5.50	1.38	1.33
1	N	928	G	N7-C5	-5.50	1.35	1.39
1	N	1221	G	C4'-O4'	-5.50	1.38	1.45
1	N	1236	A	C8-N7	-5.50	1.27	1.31
1	N	358	U	C2'-C1'	5.50	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1359	C	N1-C2	5.50	1.45	1.40
1	N	574	A	C5'-C4'	5.50	1.57	1.51
1	N	1115	U	P-O5'	-5.50	1.54	1.59
1	N	1522	U	C2-O2	5.50	1.27	1.22
1	N	229	U	C4'-O4'	-5.50	1.38	1.45
1	N	465	A	O4'-C1'	5.50	1.48	1.41
1	N	808	C	N1-C6	5.50	1.40	1.37
1	N	1274	A	P-O5'	-5.50	1.54	1.59
1	N	676	A	C6-N1	-5.50	1.31	1.35
1	N	1011	C	C4-N4	5.50	1.38	1.33
1	N	1395	C	C5-C6	-5.50	1.29	1.34
1	N	498	A	C3'-O3'	5.49	1.49	1.42
1	N	921	U	C4-C5	-5.49	1.38	1.43
1	N	1109	C	C4-N4	5.49	1.38	1.33
1	N	1181	G	N1-C2	5.49	1.42	1.37
1	N	135	C	C4-C5	5.49	1.47	1.43
1	N	149	A	C6-N6	5.49	1.38	1.33
1	N	204	G	C2-N2	5.49	1.40	1.34
1	N	332	G	C5'-C4'	5.49	1.57	1.51
1	N	748	G	C4'-O4'	-5.49	1.38	1.45
1	N	847	G	O3'-P	5.49	1.67	1.61
1	N	945	G	C2-N3	5.49	1.37	1.32
1	N	1287	A	N3-C4	5.49	1.38	1.34
1	N	1361	G	C2-N3	5.49	1.37	1.32
1	N	1396	A	C5'-C4'	5.49	1.57	1.51
1	N	1133	G	C3'-C2'	-5.49	1.46	1.52
1	N	1205	U	C5'-C4'	5.49	1.57	1.51
1	N	674	G	C5'-C4'	5.49	1.57	1.51
1	N	696	A	N9-C4	5.49	1.41	1.37
1	N	1178	G	N7-C5	-5.49	1.35	1.39
1	N	1169	A	C2'-C1'	-5.49	1.47	1.53
1	N	1346	A	C4'-O4'	5.49	1.52	1.45
1	N	1405	G	C8-N7	5.49	1.34	1.30
1	N	1527	U	C4-C5	5.49	1.48	1.43
1	N	1475	G	C4'-O4'	-5.48	1.38	1.45
1	N	5	U	C5'-C4'	5.48	1.57	1.51
1	N	119	A	N9-C4	5.48	1.41	1.37
1	N	321	A	C2-N3	5.48	1.38	1.33
1	N	363	A	N3-C4	-5.48	1.31	1.34
1	N	385	C	O4'-C1'	5.48	1.48	1.41
1	N	608	A	C5'-C4'	5.48	1.57	1.51
1	N	673	A	N7-C5	-5.48	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	814	A	C6-N6	5.48	1.38	1.33
1	N	931	C	C2'-C1'	-5.48	1.47	1.53
1	N	1273	C	C2-N3	5.48	1.40	1.35
1	N	515	G	P-O5'	-5.48	1.54	1.59
1	N	647	C	N3-C4	5.48	1.37	1.33
1	N	1018	G	C5'-C4'	5.48	1.57	1.51
1	N	1176	A	C3'-C2'	-5.48	1.46	1.52
1	N	207	C	N3-C4	5.48	1.37	1.33
1	N	754	C	C2'-C1'	-5.48	1.47	1.53
1	N	1215	G	C6-N1	5.48	1.43	1.39
1	N	1424	U	O3'-P	-5.48	1.54	1.61
1	N	351	G	N3-C4	5.48	1.39	1.35
1	N	387	U	N1-C2	-5.48	1.33	1.38
1	N	931	C	C4'-C3'	-5.48	1.47	1.52
1	N	1081	A	P-O5'	5.48	1.65	1.59
1	N	83	C	C2'-O2'	-5.48	1.34	1.41
1	N	844	G	O4'-C1'	5.48	1.48	1.41
1	N	609	A	C1'-N9	5.47	1.56	1.48
1	N	976	G	C3'-C2'	-5.47	1.46	1.52
1	N	1155	A	C5'-C4'	5.47	1.57	1.51
1	N	1285	A	P-O5'	5.47	1.65	1.59
1	N	1442	G	C8-N7	-5.47	1.27	1.30
1	N	91	U	C5-C6	5.47	1.39	1.34
1	N	138	G	N9-C8	5.47	1.41	1.37
1	N	228	A	O3'-P	-5.47	1.54	1.61
1	N	989	U	C2-N3	5.47	1.41	1.37
1	N	996	A	C8-N7	-5.47	1.27	1.31
1	N	1097	C	P-O5'	-5.47	1.54	1.59
1	N	1285	A	O3'-P	-5.47	1.54	1.61
1	N	441	A	C4'-O4'	-5.47	1.38	1.45
1	N	624	C	C4-N4	5.47	1.38	1.33
1	N	1399	C	P-O5'	-5.47	1.54	1.59
1	N	215	C	N3-C4	-5.47	1.30	1.33
1	N	1130	A	C4'-C3'	5.47	1.59	1.53
1	N	1199	U	N1-C6	5.47	1.42	1.38
1	N	1418	A	C4'-C3'	5.47	1.59	1.53
1	N	1482	G	C4'-O4'	5.47	1.52	1.45
1	N	327	A	C5'-C4'	5.47	1.57	1.51
1	N	637	C	C4-N4	5.47	1.38	1.33
1	N	932	C	P-O5'	-5.47	1.54	1.59
1	N	1015	G	N7-C5	-5.47	1.35	1.39
1	N	69	G	N9-C8	5.47	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	211	G	C2-N3	5.47	1.37	1.32
1	N	462	G	O3'-P	-5.47	1.54	1.61
1	N	7	A	C2'-C1'	5.46	1.59	1.53
1	N	315	A	C4'-O4'	5.46	1.52	1.45
1	N	422	C	C4-C5	5.46	1.47	1.43
1	N	1301	U	C1'-N1	5.46	1.56	1.48
1	N	1412	C	C4-N4	5.46	1.38	1.33
1	N	70	U	P-O5'	-5.46	1.54	1.59
1	N	103	U	C3'-C2'	-5.46	1.46	1.52
1	N	1354	U	P-O5'	-5.46	1.54	1.59
1	N	7	A	C8-N7	-5.46	1.27	1.31
1	N	115	G	P-O5'	-5.46	1.54	1.59
1	N	1505	G	N3-C4	5.46	1.39	1.35
1	N	384	G	C2-N2	5.46	1.40	1.34
1	N	485	U	O3'-P	-5.46	1.54	1.61
1	N	753	A	N7-C5	-5.46	1.35	1.39
1	N	564	C	P-O5'	-5.46	1.54	1.59
1	N	442	G	O4'-C1'	5.45	1.48	1.41
1	N	685	G	P-O5'	-5.45	1.54	1.59
1	N	700	G	C3'-O3'	5.45	1.49	1.42
1	N	978	A	N9-C4	5.45	1.41	1.37
1	N	1200	C	C4'-C3'	5.45	1.59	1.53
1	N	315	A	N3-C4	5.45	1.38	1.34
1	N	406	G	C2-N2	5.45	1.40	1.34
1	N	969	A	C5-C6	5.45	1.46	1.41
1	N	1266	G	P-O5'	-5.45	1.54	1.59
1	N	1470	U	C3'-O3'	5.45	1.49	1.42
1	N	416	G	O4'-C1'	5.45	1.48	1.41
1	N	656	G	C2-N3	5.45	1.37	1.32
1	N	1233	G	C6-N1	5.45	1.43	1.39
1	N	1523	G	C6-N1	5.45	1.43	1.39
1	N	104	G	N7-C5	-5.45	1.35	1.39
1	N	162	A	N7-C5	-5.45	1.35	1.39
1	N	337	G	C2-N3	5.45	1.37	1.32
1	N	372	C	C1'-N1	5.45	1.56	1.48
1	N	612	C	C2-N3	5.45	1.40	1.35
1	N	645	G	C4'-C3'	5.45	1.59	1.53
1	N	1235	U	C5-C6	5.45	1.39	1.34
1	N	1438	G	C3'-C2'	-5.45	1.46	1.52
1	N	23	C	C5-C6	5.44	1.38	1.34
1	N	1404	C	C5'-C4'	5.44	1.57	1.51
1	N	579	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	1012	A	C5-C4	5.44	1.42	1.38
1	N	1170	A	N7-C5	-5.44	1.35	1.39
1	N	1385	G	C5-C6	-5.44	1.36	1.42
1	N	62	U	C3'-C2'	-5.44	1.46	1.52
1	N	148	G	C2-N2	5.44	1.40	1.34
1	N	497	G	N9-C8	-5.44	1.34	1.37
1	N	776	G	P-O5'	-5.44	1.54	1.59
1	N	890	G	N7-C5	-5.44	1.35	1.39
1	N	1291	U	C4-O4	-5.44	1.19	1.23
1	N	1519	A	N7-C5	-5.44	1.35	1.39
1	N	33	A	N1-C2	-5.43	1.29	1.34
1	N	327	A	C4'-C3'	-5.43	1.47	1.52
1	N	475	C	C1'-N1	5.43	1.56	1.48
1	N	1440	U	C4-C5	-5.43	1.38	1.43
1	N	949	A	C4'-C3'	5.43	1.59	1.53
1	N	864	A	N9-C4	-5.43	1.34	1.37
1	N	1065	U	N3-C4	-5.43	1.33	1.38
1	N	244	U	C1'-N1	5.43	1.56	1.48
1	N	1524	C	C3'-C2'	-5.43	1.46	1.52
1	N	82	G	C2-N2	5.43	1.40	1.34
1	N	237	G	O3'-P	-5.43	1.54	1.61
1	N	566	G	C8-N7	-5.43	1.27	1.30
1	N	682	G	P-O5'	-5.43	1.54	1.59
1	N	1034	G	P-O5'	5.43	1.65	1.59
1	N	1147	C	C5-C6	-5.43	1.30	1.34
1	N	1184	G	C5'-C4'	5.43	1.57	1.51
1	N	1423	G	N7-C5	-5.43	1.35	1.39
1	N	1463	U	C2-N3	-5.42	1.33	1.37
1	N	1433	A	N9-C4	-5.42	1.34	1.37
1	N	232	G	C8-N7	-5.42	1.27	1.30
1	N	688	G	C6-N1	5.42	1.43	1.39
1	N	283	U	C4-C5	-5.42	1.38	1.43
1	N	1126	U	C3'-O3'	5.42	1.49	1.42
1	N	510	A	P-O5'	-5.42	1.54	1.59
1	N	526	C	N3-C4	5.42	1.37	1.33
1	N	791	G	C2-N2	5.42	1.40	1.34
1	N	1202	U	C3'-O3'	5.42	1.49	1.42
1	N	1339	A	N9-C8	5.42	1.42	1.37
1	N	1332	A	C3'-O3'	5.42	1.49	1.42
1	N	174	A	C4'-C3'	5.41	1.59	1.53
1	N	564	C	C2-N3	5.41	1.40	1.35
1	N	901	A	N3-C4	5.41	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	975	A	C5-C4	5.41	1.42	1.38
1	N	1031	C	N1-C2	5.41	1.45	1.40
1	N	1316	G	O3'-P	-5.41	1.54	1.61
1	N	1437	A	N3-C4	5.41	1.38	1.34
1	N	76	G	C6-N1	5.41	1.43	1.39
1	N	280	C	C4-N4	-5.41	1.29	1.33
1	N	859	G	N7-C5	-5.41	1.36	1.39
1	N	621	A	C8-N7	5.41	1.35	1.31
1	N	671	G	P-O5'	-5.41	1.54	1.59
1	N	1172	C	P-O5'	-5.41	1.54	1.59
1	N	564	C	C4-C5	5.41	1.47	1.43
1	N	1018	G	C8-N7	-5.41	1.27	1.30
1	N	1334	G	N9-C8	5.41	1.41	1.37
1	N	1365	G	C2-N2	5.41	1.40	1.34
1	N	731	G	P-O5'	-5.41	1.54	1.59
1	N	538	G	N3-C4	-5.40	1.31	1.35
1	N	1179	A	N9-C8	-5.40	1.33	1.37
1	N	572	A	N9-C4	-5.40	1.34	1.37
1	N	783	C	C4-N4	5.40	1.38	1.33
1	N	915	A	C2-N3	5.40	1.38	1.33
1	N	1272	G	C5'-C4'	5.40	1.57	1.51
1	N	967	C	C3'-C2'	5.40	1.58	1.52
1	N	1213	A	C4'-O4'	5.40	1.52	1.45
1	N	402	G	C5'-C4'	5.40	1.57	1.51
1	N	993	G	C5-C4	5.40	1.42	1.38
1	N	1215	G	P-O5'	-5.40	1.54	1.59
1	N	279	A	C8-N7	-5.39	1.27	1.31
1	N	748	G	P-O5'	5.39	1.65	1.59
1	N	434	U	C5-C6	-5.39	1.29	1.34
1	N	851	G	C5-C6	-5.39	1.36	1.42
1	N	1005	A	N9-C4	-5.39	1.34	1.37
1	N	1007	U	C1'-N1	5.39	1.56	1.48
1	N	1409	C	O4'-C1'	5.39	1.48	1.41
1	N	1429	A	N9-C8	5.39	1.42	1.37
1	N	166	U	C4-C5	5.39	1.48	1.43
1	N	1263	C	O3'-P	-5.39	1.54	1.61
1	N	1301	U	N3-C4	5.39	1.43	1.38
1	N	1506	U	C4-C5	5.39	1.48	1.43
1	N	17	U	O3'-P	-5.39	1.54	1.61
1	N	723	U	C3'-O3'	5.39	1.49	1.42
1	N	730	G	C5'-C4'	5.39	1.57	1.51
1	N	799	G	C6-N1	5.39	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1043	G	C3'-O3'	5.39	1.49	1.42
1	N	1091	U	C5'-C4'	5.39	1.57	1.51
1	N	1235	U	N1-C2	5.39	1.43	1.38
1	N	1376	U	C2-O2	5.39	1.27	1.22
1	N	200	G	C5'-C4'	5.39	1.57	1.51
1	N	1034	G	N3-C4	-5.39	1.31	1.35
1	N	317	U	C4-O4	5.39	1.27	1.23
1	N	717	U	C3'-O3'	5.39	1.49	1.42
1	N	793	U	O3'-P	-5.39	1.54	1.61
1	N	982	U	C1'-N1	5.39	1.56	1.48
1	N	1102	A	C6-N6	5.39	1.38	1.33
1	N	1528	U	C4'-O4'	5.39	1.52	1.45
1	N	915	A	C3'-O3'	5.38	1.49	1.42
1	N	1462	C	P-O5'	-5.38	1.54	1.59
1	N	1484	C	C1'-N1	5.38	1.56	1.48
1	N	123	U	C2-N3	-5.38	1.33	1.37
1	N	699	C	C3'-O3'	5.38	1.49	1.42
1	N	339	C	C5'-C4'	5.38	1.57	1.51
1	N	1094	G	C3'-O3'	5.38	1.49	1.42
1	N	1174	G	C5'-C4'	5.38	1.57	1.51
1	N	610	U	N3-C4	5.38	1.43	1.38
1	N	963	G	N9-C8	-5.38	1.34	1.37
1	N	1278	G	N7-C5	-5.38	1.36	1.39
1	N	114	U	O3'-P	-5.38	1.54	1.61
1	N	463	U	C1'-N1	5.38	1.56	1.48
1	N	519	C	C2'-C1'	-5.38	1.47	1.53
1	N	55	A	C5-C6	5.38	1.45	1.41
1	N	360	G	C1'-N9	-5.38	1.39	1.46
1	N	1185	G	C6-O6	5.38	1.28	1.24
1	N	1525	G	N9-C8	5.38	1.41	1.37
1	N	1064	G	C5-C6	-5.38	1.36	1.42
1	N	1450	U	C2-N3	5.38	1.41	1.37
1	N	13	U	C4-C5	-5.37	1.38	1.43
1	N	41	G	C4'-C3'	-5.37	1.47	1.52
1	N	52	C	C2'-C1'	-5.37	1.47	1.53
1	N	192	A	C8-N7	-5.37	1.27	1.31
1	N	298	A	C8-N7	-5.37	1.27	1.31
1	N	671	G	N7-C5	-5.37	1.36	1.39
1	N	941	G	C2'-C1'	5.37	1.59	1.53
1	N	1232	U	C4'-O4'	-5.37	1.38	1.45
1	N	1233	G	N9-C8	-5.37	1.34	1.37
1	N	1251	A	O3'-P	-5.37	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1391	U	C5-C6	5.37	1.39	1.34
1	N	68	G	C2-N3	5.37	1.37	1.32
1	N	1385	G	P-O5'	-5.37	1.54	1.59
1	N	50	A	P-O5'	-5.37	1.54	1.59
1	N	331	G	C5-C4	5.37	1.42	1.38
1	N	574	A	C3'-C2'	5.37	1.58	1.52
1	N	1272	G	C8-N7	5.37	1.34	1.30
1	N	114	U	N3-C4	5.37	1.43	1.38
1	N	299	G	C5-C6	-5.37	1.36	1.42
1	N	1116	U	C5-C6	5.37	1.39	1.34
1	N	12	U	C4'-C3'	-5.37	1.47	1.52
1	N	274	A	N7-C5	5.37	1.42	1.39
1	N	400	C	C5-C6	-5.37	1.30	1.34
1	N	540	G	N7-C5	-5.37	1.36	1.39
1	N	635	A	C6-N1	5.37	1.39	1.35
1	N	1121	U	C3'-C2'	-5.37	1.46	1.52
1	N	1313	U	N3-C4	5.37	1.43	1.38
1	N	524	G	N9-C4	5.36	1.42	1.38
1	N	628	G	C2-N2	5.36	1.40	1.34
1	N	840	C	P-O5'	-5.36	1.54	1.59
1	N	1163	A	C6-N6	5.36	1.38	1.33
1	N	252	U	C2'-C1'	-5.36	1.47	1.53
1	N	1340	A	C2-N3	5.36	1.38	1.33
1	N	978	A	N7-C5	-5.36	1.36	1.39
1	N	1433	A	C1'-N9	5.36	1.56	1.48
1	N	1439	G	C3'-O3'	-5.36	1.34	1.42
1	N	170	U	N3-C4	5.36	1.43	1.38
1	N	1127	G	N9-C4	-5.36	1.33	1.38
1	N	724	G	N1-C2	5.36	1.42	1.37
1	N	1515	G	C5'-C4'	5.36	1.57	1.51
1	N	448	A	C6-N6	5.36	1.38	1.33
1	N	651	C	C5'-C4'	5.36	1.57	1.51
1	N	767	A	C2'-C1'	-5.36	1.47	1.53
1	N	1410	A	N7-C5	-5.36	1.36	1.39
1	N	532	A	C6-N6	5.35	1.38	1.33
1	N	1158	C	C4-C5	5.35	1.47	1.43
1	N	77	A	C5-C4	5.35	1.42	1.38
1	N	117	G	O3'-P	-5.35	1.54	1.61
1	N	223	A	N7-C5	-5.35	1.36	1.39
1	N	835	U	C4-C5	5.35	1.48	1.43
1	N	4	U	C5'-C4'	5.35	1.57	1.51
1	N	1365	G	C2'-C1'	-5.35	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	223	A	O4'-C1'	5.35	1.48	1.41
1	N	485	U	C4'-C3'	-5.35	1.47	1.52
1	N	735	C	N1-C2	-5.35	1.34	1.40
1	N	886	G	P-O5'	-5.35	1.54	1.59
1	N	906	A	C4'-C3'	5.35	1.59	1.53
1	N	130	A	N3-C4	-5.35	1.31	1.34
1	N	748	G	C2-N2	-5.35	1.29	1.34
1	N	1368	A	C4'-O4'	-5.35	1.38	1.45
1	N	838	G	O3'-P	-5.35	1.54	1.61
1	N	278	G	C1'-N9	5.34	1.56	1.48
1	N	363	A	C6-N1	-5.34	1.31	1.35
1	N	710	G	C6-O6	-5.34	1.19	1.24
1	N	846	G	C4'-C3'	5.34	1.59	1.53
1	N	885	G	C5-C4	5.34	1.42	1.38
1	N	1034	G	C2'-C1'	-5.34	1.47	1.53
1	N	1228	C	C3'-O3'	5.34	1.49	1.42
1	N	370	C	C3'-C2'	-5.34	1.46	1.52
1	N	770	C	O4'-C1'	5.34	1.48	1.41
1	N	1211	U	C2'-C1'	-5.34	1.47	1.53
1	N	975	A	C6-N1	5.34	1.39	1.35
1	N	130	A	C8-N7	-5.34	1.27	1.31
1	N	135	C	C4-N4	5.34	1.38	1.33
1	N	577	G	C4'-C3'	5.34	1.59	1.53
1	N	589	U	P-O5'	-5.34	1.54	1.59
1	N	852	G	N7-C5	-5.34	1.36	1.39
1	N	1279	G	N9-C8	-5.34	1.34	1.37
1	N	1382	C	C5-C6	5.34	1.38	1.34
1	N	1389	C	C4'-C3'	5.34	1.59	1.53
1	N	1260	G	C4'-O4'	-5.34	1.38	1.45
1	N	64	G	C2-N3	5.34	1.37	1.32
1	N	196	A	C2-N3	5.34	1.38	1.33
1	N	523	A	C4'-C3'	5.34	1.59	1.53
1	N	724	G	N9-C8	5.34	1.41	1.37
1	N	764	C	C5-C6	5.34	1.38	1.34
1	N	860	A	C1'-N9	5.34	1.56	1.48
1	N	312	C	N3-C4	5.33	1.37	1.33
1	N	320	A	N7-C5	-5.33	1.36	1.39
1	N	464	U	C3'-O3'	5.33	1.49	1.42
1	N	595	A	C3'-C2'	5.33	1.58	1.52
1	N	827	U	C4'-C3'	-5.33	1.47	1.52
1	N	890	G	C3'-O3'	5.33	1.49	1.42
1	N	1242	G	C2-N2	5.33	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	157	U	C2'-C1'	-5.33	1.47	1.53
1	N	1210	C	C2'-C1'	-5.33	1.47	1.53
1	N	1307	U	C3'-O3'	5.33	1.49	1.42
1	N	562	U	N1-C6	5.33	1.42	1.38
1	N	719	C	O4'-C1'	5.33	1.48	1.41
1	N	836	G	O3'-P	-5.33	1.54	1.61
1	N	1104	G	O3'-P	-5.33	1.54	1.61
1	N	1131	G	C5'-C4'	5.33	1.57	1.51
1	N	321	A	C3'-O3'	5.33	1.49	1.42
1	N	632	U	C5'-C4'	5.33	1.57	1.51
1	N	675	A	C5'-C4'	5.33	1.57	1.51
1	N	994	A	C8-N7	-5.33	1.27	1.31
1	N	105	G	C4'-C3'	-5.33	1.47	1.52
1	N	320	A	C6-N6	5.33	1.38	1.33
1	N	363	A	P-O5'	5.33	1.65	1.59
1	N	1135	U	P-O5'	-5.33	1.54	1.59
1	N	1376	U	O4'-C1'	5.33	1.48	1.41
1	N	1404	C	O4'-C1'	5.33	1.48	1.41
1	N	1502	A	C2'-C1'	-5.33	1.47	1.53
1	N	9	G	C6-O6	5.32	1.28	1.24
1	N	916	U	N1-C6	5.32	1.42	1.38
1	N	1199	U	C4'-C3'	5.32	1.59	1.53
1	N	1453	G	N9-C4	5.32	1.42	1.38
1	N	33	A	C3'-C2'	5.32	1.58	1.52
1	N	367	U	N1-C2	5.32	1.43	1.38
1	N	1455	G	C5-C4	5.32	1.42	1.38
1	N	138	G	C2-N3	5.32	1.37	1.32
1	N	687	A	P-O5'	-5.32	1.54	1.59
1	N	343	U	C2'-O2'	-5.32	1.34	1.41
1	N	487	A	P-O5'	-5.32	1.54	1.59
1	N	926	G	N7-C5	-5.32	1.36	1.39
1	N	1120	C	C3'-C2'	5.32	1.58	1.52
1	N	1448	C	C4-N4	-5.32	1.29	1.33
1	N	1472	U	C2-N3	5.32	1.41	1.37
1	N	168	G	C2-N2	5.32	1.39	1.34
1	N	582	C	N3-C4	5.32	1.37	1.33
1	N	623	C	C2'-C1'	-5.32	1.47	1.53
1	N	1202	U	C4-O4	5.32	1.27	1.23
1	N	10	A	P-O5'	-5.31	1.54	1.59
1	N	3	A	C5-C4	-5.31	1.35	1.38
1	N	684	U	C2-N3	5.31	1.41	1.37
1	N	1117	A	N9-C4	-5.31	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	416	G	C1'-N9	5.31	1.56	1.48
1	N	469	C	C3'-C2'	-5.31	1.47	1.52
1	N	722	G	O3'-P	-5.31	1.54	1.61
1	N	829	G	C5-C4	5.31	1.42	1.38
1	N	1241	G	C4'-C3'	-5.31	1.47	1.52
1	N	1367	C	P-O5'	-5.31	1.54	1.59
1	N	989	U	C4'-O4'	-5.31	1.38	1.45
1	N	1062	U	C4-C5	5.31	1.48	1.43
1	N	1108	G	C6-N1	5.31	1.43	1.39
1	N	1210	C	C4-C5	-5.31	1.38	1.43
1	N	652	U	C2-N3	-5.31	1.34	1.37
1	N	1342	C	C4-N4	5.31	1.38	1.33
1	N	113	G	C8-N7	-5.30	1.27	1.30
1	N	140	U	C2-N3	5.30	1.41	1.37
1	N	303	A	C6-N6	5.30	1.38	1.33
1	N	516	U	N1-C2	-5.30	1.33	1.38
1	N	806	C	N3-C4	5.30	1.37	1.33
1	N	1226	C	O3'-P	-5.30	1.54	1.61
1	N	764	C	C5'-C4'	5.30	1.57	1.51
1	N	1253	G	C2-N3	-5.30	1.28	1.32
1	N	1475	G	C1'-N9	-5.30	1.39	1.46
1	N	112	G	C2'-O2'	5.30	1.48	1.41
1	N	713	G	N7-C5	-5.30	1.36	1.39
1	N	1254	A	C2-N3	5.30	1.38	1.33
1	N	1377	A	O4'-C1'	-5.30	1.34	1.41
1	N	1499	A	C5-C4	5.30	1.42	1.38
1	N	278	G	N3-C4	5.30	1.39	1.35
1	N	350	G	P-O5'	-5.30	1.54	1.59
1	N	371	A	C6-N6	5.30	1.38	1.33
1	N	489	C	C3'-C2'	-5.30	1.47	1.52
1	N	857	C	C1'-N1	5.30	1.56	1.48
1	N	1318	A	C6-N1	5.30	1.39	1.35
1	N	1334	G	C5'-C4'	5.30	1.57	1.51
1	N	1347	G	N9-C4	-5.30	1.33	1.38
1	N	1485	U	N3-C4	5.30	1.43	1.38
1	N	202	G	C6-N1	5.30	1.43	1.39
1	N	560	A	O3'-P	-5.30	1.54	1.61
1	N	730	G	C2-N2	5.30	1.39	1.34
1	N	1127	G	P-O5'	5.30	1.65	1.59
1	N	1207	G	N9-C4	-5.30	1.33	1.38
1	N	1311	A	N9-C4	-5.30	1.34	1.37
1	N	1424	U	C4-C5	5.30	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	421	U	C2-N3	5.30	1.41	1.37
1	N	721	G	C4'-C3'	5.30	1.58	1.53
1	N	913	A	C6-N1	5.30	1.39	1.35
1	N	1037	C	C5'-C4'	5.30	1.57	1.51
1	N	1420	U	C2-O2	5.30	1.27	1.22
1	N	1249	C	N1-C6	5.29	1.40	1.37
1	N	382	A	P-O5'	-5.29	1.54	1.59
1	N	660	C	N1-C6	5.29	1.40	1.37
1	N	683	G	C4'-C3'	5.29	1.58	1.53
1	N	729	A	N1-C2	5.29	1.39	1.34
1	N	977	A	C5-C4	5.29	1.42	1.38
1	N	1469	C	C4-N4	5.29	1.38	1.33
1	N	1480	A	P-O5'	-5.29	1.54	1.59
1	N	20	U	N1-C2	-5.29	1.33	1.38
1	N	326	G	C4'-C3'	5.29	1.58	1.53
1	N	674	G	P-O5'	-5.29	1.54	1.59
1	N	1122	U	N3-C4	5.29	1.43	1.38
1	N	1333	A	C6-N6	-5.29	1.29	1.33
1	N	466	A	C4'-O4'	5.29	1.52	1.45
1	N	4	U	C4'-O4'	-5.29	1.38	1.45
1	N	282	A	C5'-C4'	5.29	1.57	1.51
1	N	487	A	N1-C2	5.29	1.39	1.34
1	N	356	A	C2-N3	-5.29	1.28	1.33
1	N	226	G	C5'-C4'	5.28	1.57	1.51
1	N	394	G	N9-C8	5.28	1.41	1.37
1	N	1150	A	N7-C5	-5.28	1.36	1.39
1	N	732	C	C5'-C4'	5.28	1.57	1.51
1	N	161	A	C5-C4	5.28	1.42	1.38
1	N	162	A	N9-C8	-5.28	1.33	1.37
1	N	425	G	C4'-O4'	5.28	1.52	1.45
1	N	492	C	C4'-C3'	5.28	1.58	1.53
1	N	771	G	C5'-C4'	5.28	1.57	1.51
1	N	33	A	C5'-C4'	5.28	1.57	1.51
1	N	74	A	C6-N6	5.28	1.38	1.33
1	N	435	A	N7-C5	5.28	1.42	1.39
1	N	475	C	N3-C4	5.28	1.37	1.33
1	N	573	A	P-O5'	-5.28	1.54	1.59
1	N	833	G	P-O5'	-5.28	1.54	1.59
1	N	267	C	C4-C5	5.27	1.47	1.43
1	N	765	G	C5-C6	-5.27	1.37	1.42
1	N	558	G	C5-C4	5.27	1.42	1.38
1	N	719	C	C5'-C4'	5.27	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	995	C	P-O5'	5.27	1.65	1.59
1	N	384	G	C2'-C1'	-5.27	1.47	1.53
1	N	521	G	N1-C2	5.27	1.42	1.37
1	N	578	C	C5-C6	5.27	1.38	1.34
1	N	842	U	C3'-C2'	-5.27	1.47	1.52
1	N	961	U	O3'-P	5.27	1.67	1.61
1	N	1498	U	N3-C4	5.27	1.43	1.38
1	N	18	C	C3'-C2'	5.27	1.58	1.52
1	N	74	A	C3'-C2'	5.27	1.58	1.52
1	N	419	C	C2-N3	5.27	1.40	1.35
1	N	733	G	C6-N1	-5.27	1.35	1.39
1	N	954	G	C2-N2	-5.27	1.29	1.34
1	N	1020	G	C5-C6	-5.27	1.37	1.42
1	N	1383	C	C2-N3	5.27	1.40	1.35
1	N	104	G	C5-C4	5.27	1.42	1.38
1	N	568	G	C5-C4	5.27	1.42	1.38
1	N	1272	G	C2-N3	5.26	1.36	1.32
1	N	1193	G	C5-C4	-5.26	1.34	1.38
1	N	23	C	C2-O2	5.26	1.29	1.24
1	N	243	A	C4'-C3'	5.26	1.58	1.53
1	N	394	G	C2-N3	5.26	1.36	1.32
1	N	1166	G	C2-N2	5.26	1.39	1.34
1	N	1534	A	N1-C2	-5.26	1.29	1.34
1	N	133	U	C4'-O4'	-5.26	1.38	1.45
1	N	389	A	C5-C4	5.26	1.42	1.38
1	N	1274	A	C8-N7	-5.26	1.27	1.31
1	N	1380	U	C4-O4	5.26	1.27	1.23
1	N	796	C	C2-N3	5.26	1.40	1.35
1	N	821	G	N7-C5	-5.26	1.36	1.39
1	N	155	A	C6-N6	5.26	1.38	1.33
1	N	276	G	C8-N7	-5.26	1.27	1.30
1	N	498	A	C4'-C3'	5.26	1.58	1.53
1	N	592	G	N1-C2	5.26	1.42	1.37
1	N	1204	A	C4'-O4'	-5.26	1.38	1.45
1	N	1377	A	O3'-P	-5.26	1.54	1.61
1	N	354	G	C2'-O2'	-5.25	1.34	1.41
1	N	140	U	P-O5'	-5.25	1.54	1.59
1	N	191	G	N1-C2	5.25	1.42	1.37
1	N	258	G	N1-C2	5.25	1.42	1.37
1	N	433	G	P-O5'	-5.25	1.54	1.59
1	N	512	U	N1-C2	-5.25	1.33	1.38
1	N	629	A	C5'-C4'	5.25	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1068	G	O4'-C1'	5.25	1.48	1.41
1	N	1120	C	C4'-C3'	-5.25	1.47	1.52
1	N	1290	G	P-O5'	-5.25	1.54	1.59
1	N	1449	C	C3'-C2'	-5.25	1.47	1.52
1	N	725	G	N7-C5	5.25	1.42	1.39
1	N	1249	C	N3-C4	5.25	1.37	1.33
1	N	81	A	C2-N3	-5.25	1.28	1.33
1	N	185	U	C4-O4	-5.25	1.19	1.23
1	N	293	G	C4'-O4'	5.25	1.52	1.45
1	N	845	A	C8-N7	5.25	1.35	1.31
1	N	1055	A	C6-N6	-5.25	1.29	1.33
1	N	470	C	C3'-O3'	5.25	1.49	1.42
1	N	691	G	C5-C6	-5.25	1.37	1.42
1	N	1079	G	C5-C6	-5.25	1.37	1.42
1	N	1523	G	C2'-C1'	-5.25	1.47	1.53
1	N	22	G	C2'-C1'	-5.25	1.47	1.53
1	N	124	C	C4-N4	5.25	1.38	1.33
1	N	1442	G	P-O5'	-5.25	1.54	1.59
1	N	890	G	C6-N1	5.25	1.43	1.39
1	N	1281	C	C3'-O3'	5.25	1.49	1.42
1	N	1378	C	N3-C4	5.25	1.37	1.33
1	N	100	G	C5-C4	5.24	1.42	1.38
1	N	342	C	C1'-N1	5.24	1.56	1.48
1	N	388	G	N3-C4	5.24	1.39	1.35
1	N	752	G	N1-C2	5.24	1.42	1.37
1	N	1465	A	N9-C4	5.24	1.41	1.37
1	N	76	G	N7-C5	5.24	1.42	1.39
1	N	137	U	O4'-C1'	5.24	1.48	1.41
1	N	748	G	C5'-C4'	5.24	1.57	1.51
1	N	115	G	C5'-C4'	5.24	1.57	1.51
1	N	301	G	O3'-P	-5.24	1.54	1.61
1	N	432	A	P-O5'	-5.24	1.54	1.59
1	N	486	U	C4-C5	5.24	1.48	1.43
1	N	651	C	C2-N3	5.24	1.40	1.35
1	N	824	G	P-O5'	-5.24	1.54	1.59
1	N	1127	G	C5'-C4'	5.24	1.57	1.51
1	N	1433	A	C8-N7	-5.24	1.27	1.31
1	N	90	C	O4'-C1'	-5.24	1.34	1.41
1	N	290	C	C1'-N1	5.24	1.56	1.48
1	N	18	C	C5-C6	-5.24	1.30	1.34
1	N	185	U	O3'-P	-5.24	1.54	1.61
1	N	553	A	C6-N1	5.24	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1153	G	P-O5'	-5.24	1.54	1.59
1	N	1229	A	N9-C4	5.24	1.41	1.37
1	N	1384	C	P-O5'	-5.24	1.54	1.59
1	N	1414	U	C4-C5	5.23	1.48	1.43
1	N	29	U	C2-N3	5.23	1.41	1.37
1	N	575	G	C4'-O4'	5.23	1.52	1.45
1	N	983	A	P-O5'	-5.23	1.54	1.59
1	N	1007	U	C2-N3	5.23	1.41	1.37
1	N	1431	A	C6-N6	5.23	1.38	1.33
1	N	1493	A	C3'-C2'	5.23	1.58	1.52
1	N	282	A	N9-C4	5.23	1.41	1.37
1	N	638	U	C3'-C2'	5.23	1.58	1.52
1	N	1318	A	C6-N6	5.23	1.38	1.33
1	N	1385	G	N1-C2	5.23	1.42	1.37
1	N	1489	G	C2'-O2'	-5.23	1.34	1.41
1	N	685	G	O5'-C5'	5.23	1.52	1.44
1	N	956	U	P-O5'	-5.23	1.54	1.59
1	N	481	G	C4'-O4'	-5.23	1.38	1.45
1	N	484	G	C2'-C1'	-5.23	1.47	1.53
1	N	1015	G	C8-N7	5.23	1.34	1.30
1	N	355	C	N3-C4	5.23	1.37	1.33
1	N	1261	A	C8-N7	-5.23	1.27	1.31
1	N	1336	C	C5-C6	5.23	1.38	1.34
1	N	106	C	C5-C6	5.22	1.38	1.34
1	N	212	G	C5-C4	5.22	1.42	1.38
1	N	1186	G	N7-C5	-5.22	1.36	1.39
1	N	1313	U	P-O5'	-5.22	1.54	1.59
1	N	72	A	C3'-C2'	5.22	1.58	1.52
1	N	93	U	O4'-C1'	5.22	1.48	1.41
1	N	363	A	O3'-P	-5.22	1.54	1.61
1	N	474	G	N1-C2	5.22	1.42	1.37
1	N	533	A	C1'-N9	5.22	1.56	1.48
1	N	544	G	C6-N1	5.22	1.43	1.39
1	N	1231	G	C3'-C2'	-5.22	1.47	1.52
1	N	1477	U	C2-N3	5.22	1.41	1.37
1	N	35	G	C5-C6	-5.22	1.37	1.42
1	N	575	G	C2-N2	5.22	1.39	1.34
1	N	729	A	N3-C4	-5.22	1.31	1.34
1	N	962	C	C4-N4	5.22	1.38	1.33
1	N	613	C	O3'-P	-5.22	1.54	1.61
1	N	625	U	C2'-O2'	-5.22	1.34	1.41
1	N	903	G	C8-N7	5.22	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1046	A	N9-C4	5.22	1.41	1.37
1	N	1058	G	O3'-P	-5.22	1.54	1.61
1	N	1113	C	P-O5'	5.22	1.65	1.59
1	N	1191	A	C2-N3	5.22	1.38	1.33
1	N	99	C	C2-N3	-5.21	1.31	1.35
1	N	265	G	C2-N3	5.21	1.36	1.32
1	N	315	A	C3'-O3'	5.21	1.49	1.42
1	N	1088	G	C8-N7	5.21	1.34	1.30
1	N	1505	G	N7-C5	5.21	1.42	1.39
1	N	64	G	C3'-O3'	5.21	1.49	1.42
1	N	1261	A	C4'-O4'	-5.21	1.38	1.45
1	N	358	U	C3'-C2'	-5.21	1.47	1.52
1	N	647	C	C2'-C1'	-5.21	1.47	1.53
1	N	764	C	C4-N4	5.21	1.38	1.33
1	N	1074	G	C5'-C4'	5.21	1.57	1.51
1	N	1295	U	C4-C5	5.21	1.48	1.43
1	N	44	A	N9-C8	5.21	1.42	1.37
1	N	223	A	C6-N1	-5.21	1.31	1.35
1	N	663	A	C4'-C3'	-5.21	1.47	1.52
1	N	856	C	C4'-O4'	5.21	1.52	1.45
1	N	1110	A	N9-C8	5.21	1.42	1.37
1	N	307	C	C4'-O4'	5.21	1.52	1.45
1	N	474	G	C5-C4	5.21	1.42	1.38
1	N	515	G	N9-C8	5.21	1.41	1.37
1	N	853	C	N1-C2	-5.21	1.34	1.40
1	N	1344	C	N3-C4	-5.21	1.30	1.33
1	N	1016	A	C8-N7	-5.21	1.27	1.31
1	N	1026	G	O4'-C1'	5.21	1.48	1.41
1	N	234	C	C1'-N1	5.20	1.56	1.48
1	N	260	G	C2'-C1'	-5.20	1.47	1.53
1	N	435	A	C6-N1	-5.20	1.31	1.35
1	N	442	G	C5-C6	-5.20	1.37	1.42
1	N	487	A	C2'-C1'	-5.20	1.47	1.53
1	N	514	C	C2-N3	5.20	1.40	1.35
1	N	569	C	C2'-C1'	-5.20	1.47	1.53
1	N	946	A	C5-C4	-5.20	1.35	1.38
1	N	1090	U	C4-O4	5.20	1.27	1.23
1	N	141	G	O3'-P	-5.20	1.54	1.61
1	N	363	A	C3'-O3'	5.20	1.49	1.42
1	N	1159	U	C2-O2	5.20	1.27	1.22
1	N	1251	A	C5-C6	-5.20	1.36	1.41
1	N	414	A	N3-C4	-5.20	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	456	A	C2-N3	-5.20	1.28	1.33
1	N	664	G	C2-N3	5.20	1.36	1.32
1	N	1384	C	C3'-C2'	5.20	1.58	1.52
1	N	384	G	C4'-C3'	5.20	1.58	1.53
1	N	513	C	N1-C2	-5.20	1.34	1.40
1	N	573	A	C3'-C2'	-5.20	1.47	1.52
1	N	1492	A	N7-C5	5.20	1.42	1.39
1	N	788	U	C2-N3	5.20	1.41	1.37
1	N	796	C	C5'-C4'	-5.20	1.45	1.51
1	N	1440	U	C4'-O4'	5.20	1.52	1.45
1	N	72	A	C5-C4	5.20	1.42	1.38
1	N	80	A	C6-N6	5.20	1.38	1.33
1	N	136	C	C2-N3	5.20	1.40	1.35
1	N	531	U	C4-C5	5.20	1.48	1.43
1	N	658	C	C2'-C1'	-5.20	1.47	1.53
1	N	693	G	O3'-P	-5.20	1.54	1.61
1	N	942	G	N3-C4	-5.20	1.31	1.35
1	N	532	A	C8-N7	-5.19	1.27	1.31
1	N	1076	U	N1-C2	5.19	1.43	1.38
1	N	1374	A	C2'-O2'	5.19	1.48	1.41
1	N	1433	A	C5'-C4'	5.19	1.57	1.51
1	N	167	A	C3'-C2'	5.19	1.58	1.52
1	N	249	U	C4'-O4'	5.19	1.52	1.45
1	N	1243	C	N3-C4	-5.19	1.30	1.33
1	N	1423	G	O3'-P	-5.19	1.54	1.61
1	N	676	A	N3-C4	-5.19	1.31	1.34
1	N	709	U	C4-C5	5.19	1.48	1.43
1	N	883	C	N1-C6	5.19	1.40	1.37
1	N	1325	C	C5'-C4'	5.19	1.57	1.51
1	N	1371	G	C2'-C1'	-5.19	1.47	1.53
1	N	302	G	C1'-N9	5.19	1.56	1.48
1	N	712	A	C5-C6	-5.19	1.36	1.41
1	N	989	U	P-O5'	-5.19	1.54	1.59
1	N	1220	G	C2-N2	5.19	1.39	1.34
1	N	1377	A	N3-C4	5.19	1.38	1.34
1	N	41	G	N7-C5	5.18	1.42	1.39
1	N	524	G	N7-C5	5.18	1.42	1.39
1	N	599	C	C2-N3	5.18	1.39	1.35
1	N	650	G	C2-N2	5.18	1.39	1.34
1	N	1531	A	C5-C4	5.18	1.42	1.38
1	N	453	G	N1-C2	5.18	1.41	1.37
1	N	611	C	O4'-C1'	5.18	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	656	G	P-O5'	-5.18	1.54	1.59
1	N	1469	C	N1-C6	5.18	1.40	1.37
1	N	661	G	O5'-C5'	-5.18	1.34	1.42
1	N	691	G	C2-N3	5.18	1.36	1.32
1	N	709	U	C2'-C1'	5.18	1.59	1.53
1	N	759	A	C5-C6	-5.18	1.36	1.41
1	N	780	A	C2-N3	-5.18	1.28	1.33
1	N	1434	A	N9-C4	5.18	1.41	1.37
1	N	22	G	C5-C4	5.18	1.42	1.38
1	N	181	A	O3'-P	-5.18	1.54	1.61
1	N	324	G	N9-C4	5.18	1.42	1.38
1	N	579	A	C3'-O3'	5.18	1.49	1.42
1	N	1041	G	C6-N1	5.18	1.43	1.39
1	N	1104	G	C5'-C4'	5.18	1.57	1.51
1	N	21	G	C4'-O4'	5.17	1.52	1.45
1	N	766	A	N3-C4	-5.17	1.31	1.34
1	N	1141	C	P-OP2	-5.17	1.40	1.49
1	N	1393	U	O3'-P	-5.17	1.54	1.61
1	N	1053	G	C8-N7	-5.17	1.27	1.30
1	N	1532	U	P-O5'	5.17	1.65	1.59
1	N	599	C	C4-N4	5.17	1.38	1.33
1	N	726	C	C1'-N1	5.17	1.56	1.48
1	N	1074	G	C5-C4	5.17	1.42	1.38
1	N	1118	U	C3'-C2'	-5.17	1.47	1.52
1	N	326	G	P-O5'	5.17	1.65	1.59
1	N	489	C	N3-C4	5.17	1.37	1.33
1	N	126	G	C8-N7	-5.17	1.27	1.30
1	N	458	U	C4-C5	5.17	1.48	1.43
1	N	1146	A	C6-N1	5.17	1.39	1.35
1	N	48	C	C4-C5	-5.17	1.38	1.43
1	N	155	A	C8-N7	-5.17	1.27	1.31
1	N	243	A	C6-N1	5.17	1.39	1.35
1	N	453	G	C2'-C1'	-5.17	1.47	1.53
1	N	500	G	C2'-C1'	-5.17	1.47	1.53
1	N	753	A	C4'-C3'	5.17	1.58	1.53
1	N	1214	C	C2'-C1'	-5.17	1.47	1.53
1	N	203	G	C8-N7	5.16	1.34	1.30
1	N	369	G	C3'-O3'	5.16	1.49	1.42
1	N	424	G	C6-N1	5.16	1.43	1.39
1	N	1393	U	C3'-O3'	5.16	1.49	1.42
1	N	760	G	C5-C4	-5.16	1.34	1.38
1	N	558	G	N9-C8	5.16	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	639	G	C4'-O4'	-5.16	1.38	1.45
1	N	1215	G	C5-C6	-5.16	1.37	1.42
1	N	1299	A	C5-C4	5.16	1.42	1.38
1	N	283	U	C2-O2	5.16	1.26	1.22
1	N	380	G	C6-N1	5.16	1.43	1.39
1	N	422	C	C2-N3	5.16	1.39	1.35
1	N	602	A	C5-C4	-5.16	1.35	1.38
1	N	623	C	N3-C4	5.16	1.37	1.33
1	N	530	G	C3'-C2'	-5.16	1.47	1.52
1	N	200	G	N3-C4	-5.16	1.31	1.35
1	N	1264	U	C4'-C3'	5.16	1.58	1.53
1	N	1506	U	C3'-C2'	5.16	1.58	1.52
1	N	409	U	N1-C2	-5.15	1.33	1.38
1	N	328	C	C5-C6	5.15	1.38	1.34
1	N	347	G	C6-O6	-5.15	1.19	1.24
1	N	677	U	C2'-C1'	-5.15	1.47	1.53
1	N	878	A	C5-C4	-5.15	1.35	1.38
1	N	895	G	C1'-N9	5.15	1.56	1.48
1	N	1054	C	C4-N4	5.15	1.38	1.33
1	N	669	G	C2-N2	5.15	1.39	1.34
1	N	688	G	P-O5'	-5.15	1.54	1.59
1	N	1323	G	C5'-C4'	5.15	1.57	1.51
1	N	893	C	C5'-C4'	5.15	1.57	1.51
1	N	1182	G	C6-O6	5.15	1.28	1.24
1	N	49	U	N1-C6	5.15	1.42	1.38
1	N	261	U	C4'-C3'	-5.15	1.47	1.52
1	N	410	G	C4'-O4'	5.15	1.52	1.45
1	N	527	G	C4'-O4'	5.15	1.52	1.45
1	N	568	G	C2-N3	5.15	1.36	1.32
1	N	707	U	O3'-P	-5.15	1.54	1.61
1	N	862	C	C4'-O4'	-5.15	1.38	1.45
1	N	951	G	N3-C4	-5.15	1.31	1.35
1	N	1174	G	C3'-O3'	5.15	1.49	1.42
1	N	108	G	C2-N3	5.14	1.36	1.32
1	N	313	A	N7-C5	-5.14	1.36	1.39
1	N	614	C	O3'-P	-5.14	1.54	1.61
1	N	862	C	N1-C6	5.14	1.40	1.37
1	N	929	G	C6-N1	5.14	1.43	1.39
1	N	1018	G	N1-C2	5.14	1.41	1.37
1	N	1317	C	C1'-N1	5.14	1.56	1.48
1	N	392	C	O4'-C1'	5.14	1.48	1.41
1	N	545	C	C4-C5	5.14	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	792	A	N7-C5	-5.14	1.36	1.39
1	N	1133	G	C4'-C3'	-5.14	1.47	1.52
1	N	1475	G	C2-N2	5.14	1.39	1.34
1	N	129	A	C8-N7	-5.14	1.27	1.31
1	N	773	G	O3'-P	-5.14	1.54	1.61
1	N	881	G	C3'-O3'	5.14	1.49	1.42
1	N	955	U	O3'-P	-5.14	1.54	1.61
1	N	1328	C	C5'-C4'	5.14	1.57	1.51
1	N	578	C	C2-O2	5.14	1.29	1.24
1	N	1426	G	N1-C2	5.14	1.41	1.37
1	N	93	U	C2-N3	5.14	1.41	1.37
1	N	144	G	C4'-C3'	5.14	1.58	1.53
1	N	461	A	O5'-C5'	5.14	1.52	1.44
1	N	617	G	C5-C4	-5.14	1.34	1.38
1	N	1287	A	C6-N1	5.14	1.39	1.35
1	N	1382	C	P-O5'	5.14	1.64	1.59
1	N	278	G	N1-C2	5.13	1.41	1.37
1	N	730	G	C3'-O3'	-5.13	1.34	1.42
1	N	786	G	N7-C5	5.13	1.42	1.39
1	N	848	C	C5'-C4'	5.13	1.57	1.51
1	N	1022	A	N9-C4	5.13	1.41	1.37
1	N	207	C	O3'-P	-5.13	1.54	1.61
1	N	317	U	C2-N3	5.13	1.41	1.37
1	N	266	G	P-O5'	-5.13	1.54	1.59
1	N	325	A	P-O5'	-5.13	1.54	1.59
1	N	379	C	C5'-C4'	5.13	1.57	1.51
1	N	831	A	C6-N6	5.13	1.38	1.33
1	N	935	A	C3'-O3'	5.13	1.49	1.42
1	N	1261	A	C5'-C4'	5.13	1.57	1.51
1	N	1427	C	O4'-C1'	5.13	1.48	1.41
1	N	124	C	C1'-N1	5.13	1.56	1.48
1	N	143	A	C5'-C4'	5.13	1.57	1.51
1	N	461	A	O4'-C1'	5.13	1.48	1.41
1	N	943	U	O4'-C1'	5.13	1.48	1.41
1	N	1020	G	C1'-N9	5.13	1.56	1.48
1	N	11	G	O4'-C1'	5.12	1.48	1.41
1	N	1170	A	N1-C2	-5.12	1.29	1.34
1	N	1175	G	N3-C4	5.12	1.39	1.35
1	N	24	U	C2'-C1'	-5.12	1.47	1.53
1	N	295	C	C2-N3	5.12	1.39	1.35
1	N	288	A	P-O5'	-5.12	1.54	1.59
1	N	901	A	C2-N3	5.12	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1179	A	C6-N6	5.12	1.38	1.33
1	N	1289	A	C8-N7	5.12	1.35	1.31
1	N	1183	U	C5'-C4'	5.12	1.57	1.51
1	N	472	U	C4-O4	-5.12	1.19	1.23
1	N	635	A	N3-C4	5.12	1.38	1.34
1	N	652	U	C5'-C4'	5.12	1.57	1.51
1	N	727	G	N3-C4	-5.12	1.31	1.35
1	N	126	G	C4'-C3'	5.12	1.58	1.53
1	N	239	U	C2-N3	5.12	1.41	1.37
1	N	998	C	N3-C4	5.12	1.37	1.33
1	N	368	U	C3'-C2'	5.12	1.58	1.52
1	N	438	U	C4'-O4'	-5.12	1.38	1.45
1	N	489	C	C2-N3	-5.12	1.31	1.35
1	N	626	G	N3-C4	-5.12	1.31	1.35
1	N	868	C	O5'-C5'	-5.12	1.34	1.42
1	N	899	C	C4'-C3'	5.12	1.58	1.53
1	N	1380	U	C5'-C4'	5.12	1.57	1.51
1	N	201	G	N9-C4	-5.11	1.33	1.38
1	N	255	G	C6-N1	5.11	1.43	1.39
1	N	873	A	C2'-C1'	-5.11	1.47	1.53
1	N	938	A	N9-C4	5.11	1.41	1.37
1	N	233	C	C3'-C2'	-5.11	1.47	1.52
1	N	450	G	O3'-P	-5.11	1.55	1.61
1	N	777	A	O3'-P	-5.11	1.55	1.61
1	N	44	A	C5-C4	5.11	1.42	1.38
1	N	131	A	C5-C4	5.11	1.42	1.38
1	N	507	C	C5-C6	-5.11	1.30	1.34
1	N	509	A	N1-C2	5.11	1.39	1.34
1	N	510	A	C3'-C2'	5.11	1.58	1.52
1	N	866	C	C4-N4	5.11	1.38	1.33
1	N	1151	A	C2-N3	5.11	1.38	1.33
1	N	1249	C	C1'-N1	5.11	1.56	1.48
1	N	1343	G	C2-N2	5.11	1.39	1.34
1	N	360	G	C5-C6	-5.11	1.37	1.42
1	N	630	A	N7-C5	-5.11	1.36	1.39
1	N	803	G	C5-C6	-5.11	1.37	1.42
1	N	931	C	C2-N3	-5.11	1.31	1.35
1	N	996	A	C6-N6	5.11	1.38	1.33
1	N	1082	A	C5'-C4'	5.11	1.57	1.51
1	N	1442	G	N9-C8	5.11	1.41	1.37
1	N	1496	C	C2'-C1'	5.11	1.58	1.53
1	N	360	G	C2-N2	5.11	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	435	A	O3'-P	-5.11	1.55	1.61
1	N	780	A	N9-C8	-5.11	1.33	1.37
1	N	851	G	C3'-O3'	5.11	1.49	1.42
1	N	1278	G	N9-C8	-5.11	1.34	1.37
1	N	676	A	O3'-P	-5.10	1.55	1.61
1	N	182	A	N7-C5	-5.10	1.36	1.39
1	N	349	A	C6-N1	5.10	1.39	1.35
1	N	600	A	N9-C4	-5.10	1.34	1.37
1	N	601	G	C4'-C3'	5.10	1.58	1.53
1	N	878	A	O5'-C5'	-5.10	1.34	1.42
1	N	934	C	C4-N4	5.10	1.38	1.33
1	N	53	A	O4'-C1'	5.10	1.48	1.41
1	N	159	G	N1-C2	5.10	1.41	1.37
1	N	231	U	C4'-C3'	5.10	1.58	1.53
1	N	242	G	C2-N2	5.10	1.39	1.34
1	N	260	G	N3-C4	5.10	1.39	1.35
1	N	661	G	C5'-C4'	5.10	1.57	1.51
1	N	755	G	C4'-C3'	5.10	1.58	1.53
1	N	841	C	C4-C5	5.10	1.47	1.43
1	N	608	A	N7-C5	-5.10	1.36	1.39
1	N	895	G	C6-N1	5.10	1.43	1.39
1	N	1110	A	C6-N6	5.10	1.38	1.33
1	N	111	G	N1-C2	5.10	1.41	1.37
1	N	198	G	C2-N3	5.10	1.36	1.32
1	N	665	A	N9-C4	5.10	1.41	1.37
1	N	1071	C	C4-N4	5.10	1.38	1.33
1	N	557	G	N1-C2	5.09	1.41	1.37
1	N	667	G	N3-C4	5.09	1.39	1.35
1	N	1468	A	C5-C4	5.09	1.42	1.38
1	N	176	C	N3-C4	5.09	1.37	1.33
1	N	534	U	N1-C2	-5.09	1.33	1.38
1	N	1234	C	C3'-O3'	5.09	1.49	1.42
1	N	470	C	O3'-P	-5.09	1.55	1.61
1	N	694	A	C4'-C3'	-5.09	1.47	1.52
1	N	759	A	N7-C5	5.09	1.42	1.39
1	N	928	G	N9-C8	5.09	1.41	1.37
1	N	1082	A	C4'-O4'	-5.09	1.39	1.45
1	N	1147	C	C4-C5	5.09	1.47	1.43
1	N	153	C	C4-C5	-5.09	1.38	1.43
1	N	981	U	C2-O2	5.09	1.26	1.22
1	N	1183	U	N3-C4	5.09	1.43	1.38
1	N	1245	C	O4'-C1'	-5.09	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	903	G	C5-C6	-5.09	1.37	1.42
1	N	1036	A	C2-N3	5.09	1.38	1.33
1	N	1464	U	N3-C4	5.09	1.43	1.38
1	N	1211	U	C4-O4	-5.09	1.19	1.23
1	N	1157	A	P-O5'	-5.08	1.54	1.59
1	N	2	A	N9-C4	-5.08	1.34	1.37
1	N	143	A	C6-N1	5.08	1.39	1.35
1	N	146	G	C5-C4	5.08	1.42	1.38
1	N	727	G	C8-N7	5.08	1.33	1.30
1	N	743	A	C6-N1	5.08	1.39	1.35
1	N	926	G	N9-C4	5.08	1.42	1.38
1	N	1418	A	C2-N3	-5.08	1.28	1.33
1	N	894	G	C5'-C4'	5.08	1.57	1.51
1	N	1294	G	N9-C8	5.08	1.41	1.37
1	N	899	C	C1'-N1	5.08	1.56	1.48
1	N	537	G	N1-C2	5.08	1.41	1.37
1	N	851	G	N7-C5	-5.08	1.36	1.39
1	N	964	A	O3'-P	-5.08	1.55	1.61
1	N	979	C	P-O5'	-5.08	1.54	1.59
1	N	1496	C	N3-C4	5.08	1.37	1.33
1	N	1068	G	C6-N1	5.08	1.43	1.39
1	N	1175	G	C5-C4	-5.08	1.34	1.38
1	N	456	A	P-O5'	5.08	1.64	1.59
1	N	761	G	C5'-C4'	5.08	1.57	1.51
1	N	733	G	C5-C4	5.07	1.42	1.38
1	N	763	G	N9-C8	5.07	1.41	1.37
1	N	1447	A	O4'-C1'	-5.07	1.35	1.41
1	N	267	C	N1-C2	5.07	1.45	1.40
1	N	297	G	C6-N1	-5.07	1.36	1.39
1	N	330	C	C1'-N1	5.07	1.56	1.48
1	N	853	C	C2'-O2'	-5.07	1.35	1.41
1	N	981	U	C3'-O3'	5.07	1.49	1.42
1	N	1147	C	C3'-C2'	-5.07	1.47	1.52
1	N	1435	G	C1'-N9	5.07	1.56	1.48
1	N	495	A	N7-C5	-5.07	1.36	1.39
1	N	917	G	N1-C2	5.07	1.41	1.37
1	N	1136	C	C2-N3	5.07	1.39	1.35
1	N	54	C	O4'-C1'	-5.07	1.35	1.41
1	N	1198	G	C2-N3	5.07	1.36	1.32
1	N	1456	A	C2'-C1'	-5.07	1.47	1.53
1	N	46	G	C4'-C3'	5.07	1.58	1.53
1	N	342	C	N1-C2	-5.07	1.35	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	528	C	C5'-C4'	5.07	1.57	1.51
1	N	700	G	C5-C6	-5.07	1.37	1.42
1	N	759	A	P-O5'	-5.07	1.54	1.59
1	N	779	C	N1-C2	5.07	1.45	1.40
1	N	946	A	N9-C4	-5.07	1.34	1.37
1	N	1284	C	C4-N4	5.07	1.38	1.33
1	N	1441	A	C2'-C1'	-5.07	1.47	1.53
1	N	347	G	C4'-O4'	5.06	1.52	1.45
1	N	1046	A	N3-C4	-5.06	1.31	1.34
1	N	206	C	N1-C6	-5.06	1.34	1.37
1	N	279	A	C4'-O4'	-5.06	1.39	1.45
1	N	280	C	N1-C2	-5.06	1.35	1.40
1	N	550	G	C2-N2	5.06	1.39	1.34
1	N	1300	G	N9-C8	5.06	1.41	1.37
1	N	716	A	O3'-P	-5.06	1.55	1.61
1	N	206	C	N1-C2	-5.06	1.35	1.40
1	N	238	A	C3'-O3'	5.06	1.49	1.42
1	N	433	G	C5-C6	-5.06	1.37	1.42
1	N	827	U	C3'-O3'	5.06	1.49	1.42
1	N	855	U	C2-N3	-5.06	1.34	1.37
1	N	46	G	C6-N1	5.06	1.43	1.39
1	N	174	A	N7-C5	-5.06	1.36	1.39
1	N	1496	C	C5'-C4'	5.06	1.57	1.51
1	N	347	G	P-O5'	-5.06	1.54	1.59
1	N	167	A	O4'-C1'	5.05	1.48	1.41
1	N	244	U	P-O5'	5.05	1.64	1.59
1	N	282	A	C5-C6	-5.05	1.36	1.41
1	N	411	A	N7-C5	-5.05	1.36	1.39
1	N	1305	G	N1-C2	5.05	1.41	1.37
1	N	27	G	C8-N7	-5.05	1.27	1.30
1	N	200	G	O3'-P	-5.05	1.55	1.61
1	N	346	G	N9-C8	-5.05	1.34	1.37
1	N	362	G	C3'-C2'	-5.05	1.47	1.52
1	N	427	U	P-O5'	-5.05	1.54	1.59
1	N	662	U	C5'-C4'	5.05	1.57	1.51
1	N	821	G	N3-C4	-5.05	1.31	1.35
1	N	974	A	C6-N1	5.05	1.39	1.35
1	N	1156	G	C5-C6	-5.05	1.37	1.42
1	N	1208	C	C5-C6	-5.05	1.30	1.34
1	N	64	G	N9-C4	-5.05	1.33	1.38
1	N	337	G	N3-C4	-5.05	1.31	1.35
1	N	385	C	N1-C2	5.05	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	586	C	N3-C4	5.05	1.37	1.33
1	N	719	C	N1-C6	-5.05	1.34	1.37
1	N	860	A	C6-N1	-5.05	1.32	1.35
1	N	1066	C	C1'-N1	5.05	1.56	1.48
1	N	1133	G	N3-C4	-5.05	1.31	1.35
1	N	74	A	C2'-C1'	-5.05	1.47	1.53
1	N	239	U	P-O5'	-5.05	1.54	1.59
1	N	410	G	C5'-C4'	5.05	1.57	1.51
1	N	1158	C	C3'-O3'	5.05	1.49	1.42
1	N	1282	C	C2-O2	5.05	1.28	1.24
1	N	297	G	C8-N7	5.05	1.33	1.30
1	N	604	G	C6-O6	5.05	1.28	1.24
1	N	834	U	C5-C6	5.05	1.38	1.34
1	N	885	G	N1-C2	5.05	1.41	1.37
1	N	907	A	C2-N3	5.05	1.38	1.33
1	N	1245	C	C2-N3	5.05	1.39	1.35
1	N	1460	C	C2-N3	5.05	1.39	1.35
1	N	6	G	C1'-N9	-5.04	1.39	1.46
1	N	901	A	C6-N6	5.04	1.38	1.33
1	N	251	G	N1-C2	5.04	1.41	1.37
1	N	407	U	C2'-C1'	-5.04	1.47	1.53
1	N	424	G	C1'-N9	5.04	1.56	1.48
1	N	630	A	C5'-C4'	5.04	1.57	1.51
1	N	1388	C	N1-C6	5.04	1.40	1.37
1	N	1441	A	C3'-C2'	-5.04	1.47	1.52
1	N	1488	G	C5-C6	5.04	1.47	1.42
1	N	157	U	P-O5'	-5.04	1.54	1.59
1	N	484	G	C5-C6	-5.04	1.37	1.42
1	N	645	G	O3'-P	-5.04	1.55	1.61
1	N	1498	U	P-O5'	5.04	1.64	1.59
1	N	714	G	N9-C4	-5.04	1.33	1.38
1	N	786	G	N1-C2	5.04	1.41	1.37
1	N	98	A	C2'-C1'	-5.04	1.47	1.53
1	N	104	G	N9-C4	5.04	1.42	1.38
1	N	580	C	C4-N4	5.04	1.38	1.33
1	N	805	C	N3-C4	5.04	1.37	1.33
1	N	1048	G	C4'-O4'	5.04	1.52	1.45
1	N	1093	A	C8-N7	-5.04	1.28	1.31
1	N	1168	U	N3-C4	5.04	1.43	1.38
1	N	1525	G	C6-N1	5.04	1.43	1.39
1	N	122	G	N3-C4	-5.04	1.31	1.35
1	N	249	U	N1-C6	-5.04	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	543	U	C4-C5	-5.04	1.39	1.43
1	N	1341	U	N3-C4	5.04	1.43	1.38
1	N	1442	G	N1-C2	5.04	1.41	1.37
1	N	404	G	P-O5'	-5.04	1.54	1.59
1	N	884	U	C4'-O4'	5.04	1.52	1.45
1	N	1082	A	C6-N1	5.04	1.39	1.35
1	N	273	U	C5'-C4'	5.03	1.57	1.51
1	N	459	A	N3-C4	-5.03	1.31	1.34
1	N	674	G	C5-C6	-5.03	1.37	1.42
1	N	716	A	P-O5'	-5.03	1.54	1.59
1	N	971	G	N3-C4	-5.03	1.31	1.35
1	N	987	G	P-O5'	-5.03	1.54	1.59
1	N	1047	G	C3'-C2'	-5.03	1.47	1.52
1	N	768	A	C2'-C1'	-5.03	1.47	1.53
1	N	877	G	N1-C2	5.03	1.41	1.37
1	N	1065	U	C2-O2	5.03	1.26	1.22
1	N	241	G	C5'-C4'	5.03	1.57	1.51
1	N	864	A	P-O5'	-5.03	1.54	1.59
1	N	1176	A	C6-N1	5.03	1.39	1.35
1	N	245	U	N1-C6	5.03	1.42	1.38
1	N	79	G	C5-C6	-5.03	1.37	1.42
1	N	158	G	C8-N7	5.03	1.33	1.30
1	N	1085	U	C1'-N1	5.03	1.56	1.48
1	N	1196	A	C2'-O2'	5.03	1.48	1.41
1	N	1485	U	C4-C5	5.03	1.48	1.43
1	N	1487	G	C4'-O4'	5.03	1.52	1.45
1	N	3	A	C6-N6	5.03	1.38	1.33
1	N	20	U	C5-C6	-5.03	1.29	1.34
1	N	163	C	N1-C6	5.03	1.40	1.37
1	N	402	G	C6-O6	-5.03	1.19	1.24
1	N	447	G	C2-N2	5.03	1.39	1.34
1	N	577	G	N7-C5	-5.03	1.36	1.39
1	N	1239	A	C3'-C2'	-5.02	1.47	1.52
1	N	1260	G	C1'-N9	5.02	1.56	1.48
1	N	511	C	O4'-C1'	-5.02	1.35	1.41
1	N	1008	U	C2'-C1'	-5.02	1.47	1.53
1	N	1365	G	C4'-C3'	5.02	1.58	1.53
1	N	195	A	C5-C4	-5.02	1.35	1.38
1	N	431	A	O4'-C1'	5.02	1.48	1.41
1	N	1113	C	C2'-C1'	5.02	1.58	1.53
1	N	1373	G	N7-C5	-5.02	1.36	1.39
1	N	1478	U	C2-O2	5.02	1.26	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	344	A	P-O5'	-5.02	1.54	1.59
1	N	590	U	O4'-C1'	5.02	1.48	1.41
1	N	1436	U	C4'-C3'	-5.02	1.47	1.52
1	N	802	A	O3'-P	-5.02	1.55	1.61
1	N	1111	A	N9-C8	-5.02	1.33	1.37
1	N	1237	C	N3-C4	5.02	1.37	1.33
1	N	1256	A	C6-N6	-5.02	1.29	1.33
1	N	401	C	C4-C5	5.01	1.47	1.43
1	N	506	G	C8-N7	5.01	1.33	1.30
1	N	1268	G	C4'-C3'	5.01	1.58	1.53
1	N	349	A	O4'-C1'	-5.01	1.35	1.41
1	N	573	A	C5'-C4'	5.01	1.57	1.51
1	N	713	G	C2'-O2'	-5.01	1.35	1.41
1	N	938	A	C6-N1	5.01	1.39	1.35
1	N	372	C	C4-C5	5.01	1.47	1.43
1	N	752	G	C3'-O3'	5.01	1.49	1.42
1	N	770	C	O3'-P	-5.01	1.55	1.61
1	N	777	A	C8-N7	5.01	1.35	1.31
1	N	1452	C	C4-C5	5.01	1.47	1.43
1	N	1464	U	C5-C6	5.01	1.38	1.34
1	N	161	A	C5'-C4'	5.01	1.57	1.51
1	N	492	C	C1'-N1	5.01	1.56	1.48
1	N	805	C	C3'-O3'	5.01	1.49	1.42
1	N	626	G	N1-C2	5.01	1.41	1.37
1	N	588	G	N9-C4	-5.01	1.33	1.38
1	N	660	C	C4-N4	5.01	1.38	1.33
1	N	679	C	C2'-C1'	-5.01	1.47	1.53
1	N	728	A	C3'-O3'	5.01	1.49	1.42
1	N	1209	C	C2'-C1'	-5.01	1.47	1.53
1	N	325	A	N1-C2	-5.00	1.29	1.34
1	N	345	C	C5'-C4'	-5.00	1.45	1.51
1	N	442	G	C5'-C4'	5.00	1.57	1.51
1	N	502	A	C5-C4	-5.00	1.35	1.38
1	N	748	G	C5-C4	5.00	1.41	1.38
1	N	1018	G	C6-N1	5.00	1.43	1.39
1	N	1372	U	C1'-N1	5.00	1.56	1.48
1	N	344	A	N1-C2	5.00	1.38	1.34
1	N	785	G	C2-N2	5.00	1.39	1.34
1	N	912	C	C5'-C4'	5.00	1.57	1.51
1	N	1033	G	C1'-N9	5.00	1.56	1.48
1	N	1157	A	C5-C6	-5.00	1.36	1.41
1	N	1270	G	N7-C5	-5.00	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	1273	C	N3-C4	5.00	1.37	1.33
1	N	1293	C	C1'-N1	-5.00	1.39	1.46
1	N	1413	A	C5-C6	-5.00	1.36	1.41
1	N	1445	U	C3'-C2'	5.00	1.58	1.52
1	N	1473	G	N9-C4	-5.00	1.33	1.38

All (9457) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1299	A	N1-C6-N6	26.26	134.35	118.60
1	N	633	G	N1-C6-O6	25.68	135.31	119.90
1	N	1399	C	P-O3'-C3'	25.34	150.10	119.70
1	N	141	G	N1-C6-O6	24.86	134.81	119.90
1	N	207	C	C6-N1-C2	-24.71	110.42	120.30
1	N	572	A	N1-C6-N6	24.41	133.25	118.60
1	N	313	A	N1-C6-N6	24.30	133.18	118.60
1	N	105	G	N1-C6-O6	23.72	134.13	119.90
1	N	675	A	N1-C6-N6	23.36	132.62	118.60
1	N	919	A	N1-C6-N6	23.32	132.59	118.60
1	N	1253	G	N1-C6-O6	23.08	133.75	119.90
1	N	1225	A	N1-C6-N6	23.07	132.44	118.60
1	N	487	A	N1-C6-N6	22.99	132.39	118.60
1	N	724	G	C5-C6-O6	-22.83	114.90	128.60
1	N	484	G	P-O3'-C3'	22.80	147.06	119.70
1	N	247	G	N1-C6-O6	22.77	133.56	119.90
1	N	79	G	N1-C6-O6	22.52	133.41	119.90
1	N	431	A	N1-C6-N6	22.26	131.95	118.60
1	N	1362	A	P-O3'-C3'	22.20	146.33	119.70
1	N	1282	C	C6-N1-C2	-22.13	111.45	120.30
1	N	1476	A	N1-C6-N6	22.12	131.87	118.60
1	N	354	G	N1-C6-O6	22.07	133.14	119.90
1	N	609	A	N1-C6-N6	22.07	131.84	118.60
1	N	633	G	C5-C6-O6	-22.07	115.36	128.60
1	N	656	G	N1-C6-O6	21.98	133.09	119.90
1	N	412	A	N1-C6-N6	21.73	131.64	118.60
1	N	1236	A	N1-C6-N6	21.72	131.63	118.60
1	N	1079	G	N1-C6-O6	21.68	132.91	119.90
1	N	410	G	N1-C6-O6	21.65	132.89	119.90
1	N	1523	G	N1-C6-O6	21.56	132.84	119.90
1	N	321	A	N1-C6-N6	21.55	131.53	118.60
1	N	265	G	N1-C6-O6	21.52	132.81	119.90
1	N	656	G	C5-C6-O6	-21.51	115.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	864	A	N1-C6-N6	21.51	131.50	118.60
1	N	767	A	N1-C6-N6	21.46	131.48	118.60
1	N	1468	A	N1-C6-N6	21.37	131.42	118.60
1	N	172	A	P-O3'-C3'	20.95	144.85	119.70
1	N	344	A	P-O3'-C3'	20.82	144.69	119.70
1	N	79	G	C5-C6-O6	-20.77	116.14	128.60
1	N	484	G	N1-C6-O6	20.60	132.26	119.90
1	N	109	A	N1-C6-N6	20.59	130.95	118.60
1	N	832	G	C5-C6-O6	-20.58	116.25	128.60
1	N	1419	G	N1-C6-O6	20.55	132.23	119.90
1	N	1311	A	N1-C6-N6	20.47	130.88	118.60
1	N	80	A	N1-C6-N6	20.42	130.85	118.60
1	N	900	A	N1-C6-N6	20.37	130.82	118.60
1	N	1213	A	N1-C6-N6	20.36	130.81	118.60
1	N	1242	G	N1-C6-O6	20.33	132.10	119.90
1	N	457	G	N1-C6-O6	20.17	132.00	119.90
1	N	235	C	N3-C4-C5	-20.16	113.84	121.90
1	N	526	C	C6-N1-C2	-20.11	112.26	120.30
1	N	631	C	P-O3'-C3'	20.02	143.72	119.70
1	N	23	C	N3-C4-C5	-19.94	113.92	121.90
1	N	94	G	P-O3'-C3'	19.90	143.58	119.70
1	N	32	A	N1-C6-N6	19.88	130.53	118.60
1	N	846	G	N1-C6-O6	19.87	131.82	119.90
1	N	867	G	N1-C6-O6	19.86	131.81	119.90
1	N	108	G	C5-C6-O6	-19.82	116.71	128.60
1	N	342	C	N3-C4-C5	-19.77	113.99	121.90
1	N	1154	G	N1-C6-O6	19.75	131.75	119.90
1	N	1042	A	N1-C6-N6	19.70	130.42	118.60
1	N	1220	G	N1-C6-O6	19.57	131.64	119.90
1	N	108	G	N1-C6-O6	19.57	131.64	119.90
1	N	120	A	N1-C6-N6	19.56	130.34	118.60
1	N	1053	G	P-O3'-C3'	19.51	143.11	119.70
1	N	1483	A	N1-C6-N6	19.40	130.24	118.60
1	N	517	G	N1-C6-O6	19.35	131.51	119.90
1	N	946	A	N1-C6-N6	19.31	130.19	118.60
1	N	885	G	C5-C6-O6	-19.30	117.02	128.60
1	N	320	A	N1-C6-N6	19.30	130.18	118.60
1	N	816	A	N1-C6-N6	19.26	130.16	118.60
1	N	197	A	N1-C6-N6	19.23	130.14	118.60
1	N	1519	A	N1-C6-N6	19.08	130.05	118.60
1	N	621	A	N1-C6-N6	19.02	130.01	118.60
1	N	498	A	N9-C4-C5	19.02	113.41	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	354	G	C5-C6-O6	-18.98	117.21	128.60
1	N	832	G	N9-C4-C5	-18.96	97.82	105.40
1	N	247	G	C5-C6-O6	-18.95	117.23	128.60
1	N	1255	G	N1-C6-O6	18.93	131.26	119.90
1	N	52	C	C5-C4-N4	-18.91	106.97	120.20
1	N	840	C	C6-N1-C2	-18.88	112.75	120.30
1	N	1157	A	N1-C6-N6	18.85	129.91	118.60
1	N	511	C	P-O3'-C3'	18.79	142.25	119.70
1	N	1428	A	N1-C6-N6	18.79	129.87	118.60
1	N	1332	A	N1-C6-N6	18.76	129.85	118.60
1	N	1316	G	N1-C6-O6	18.73	131.14	119.90
1	N	415	A	N1-C6-N6	18.73	129.84	118.60
1	N	607	A	N1-C6-N6	18.71	129.82	118.60
1	N	141	G	C5-C6-O6	-18.70	117.38	128.60
1	N	938	A	N1-C6-N6	18.70	129.82	118.60
1	N	19	A	N1-C6-N6	18.69	129.81	118.60
1	N	401	C	N3-C4-C5	-18.67	114.43	121.90
1	N	872	A	N1-C6-N6	18.66	129.79	118.60
1	N	1468	A	C5-C6-N1	-18.65	108.38	117.70
1	N	351	G	P-O3'-C3'	18.55	141.95	119.70
1	N	1151	A	N1-C6-N6	18.53	129.72	118.60
1	N	1398	A	N1-C6-N6	18.49	129.69	118.60
1	N	113	G	N1-C6-O6	18.46	130.98	119.90
1	N	71	A	N1-C6-N6	18.45	129.67	118.60
1	N	454	G	N1-C6-O6	18.45	130.97	119.90
1	N	105	G	C5-C6-O6	-18.43	117.55	128.60
1	N	1226	C	P-O3'-C3'	18.42	141.80	119.70
1	N	1225	A	C5-C6-N1	-18.36	108.52	117.70
1	N	547	A	P-O3'-C3'	18.36	141.73	119.70
1	N	1105	A	N1-C6-N6	18.35	129.61	118.60
1	N	535	A	N1-C6-N6	18.30	129.58	118.60
1	N	1389	C	C6-N1-C2	-18.28	112.99	120.30
1	N	546	A	N1-C6-N6	18.27	129.56	118.60
1	N	739	C	C6-N1-C2	-18.25	113.00	120.30
1	N	143	A	N1-C6-N6	18.22	129.53	118.60
1	N	968	A	N1-C6-N6	18.16	129.50	118.60
1	N	119	A	P-O3'-C3'	18.10	141.42	119.70
1	N	493	A	N1-C6-N6	18.09	129.45	118.60
1	N	1329	A	N1-C6-N6	18.07	129.44	118.60
1	N	763	G	N1-C6-O6	18.05	130.73	119.90
1	N	832	G	C8-N9-C4	17.99	113.60	106.40
1	N	1437	A	N1-C6-N6	17.94	129.36	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1216	A	N1-C6-N6	17.93	129.36	118.60
1	N	1161	C	C6-N1-C2	-17.89	113.14	120.30
1	N	7	A	N1-C6-N6	17.85	129.31	118.60
1	N	1499	A	N1-C6-N6	17.83	129.30	118.60
1	N	1489	G	C5-C6-O6	-17.81	117.91	128.60
1	N	1434	A	N1-C6-N6	17.79	129.28	118.60
1	N	784	A	N1-C6-N6	17.65	129.19	118.60
1	N	500	G	C5-C6-O6	-17.63	118.02	128.60
1	N	885	G	N1-C6-O6	17.62	130.47	119.90
1	N	802	A	N1-C6-N6	17.62	129.17	118.60
1	N	849	G	N1-C6-O6	17.60	130.46	119.90
1	N	301	G	N1-C6-O6	17.54	130.43	119.90
1	N	724	G	N1-C6-O6	17.53	130.42	119.90
1	N	351	G	C5-C6-O6	-17.49	118.11	128.60
1	N	228	A	N1-C6-N6	17.48	129.09	118.60
1	N	9	G	N1-C6-O6	17.47	130.38	119.90
1	N	109	A	P-O3'-C3'	17.47	140.66	119.70
1	N	687	A	N1-C6-N6	17.44	129.06	118.60
1	N	240	G	C5-C6-O6	-17.42	118.15	128.60
1	N	706	A	N9-C4-C5	-17.37	98.85	105.80
1	N	907	A	C4-C5-C6	17.37	125.69	117.00
1	N	251	G	N1-C6-O6	17.36	130.32	119.90
1	N	251	G	C5-C6-O6	-17.29	118.23	128.60
1	N	650	G	N1-C6-O6	17.27	130.26	119.90
1	N	592	G	N1-C6-O6	17.25	130.25	119.90
1	N	781	A	N1-C6-N6	17.24	128.94	118.60
1	N	796	C	C6-N1-C2	-17.22	113.41	120.30
1	N	438	U	P-O3'-C3'	17.22	140.36	119.70
1	N	10	A	N1-C6-N6	17.21	128.92	118.60
1	N	33	A	N1-C6-N6	17.20	128.92	118.60
1	N	1000	A	N1-C6-N6	17.17	128.90	118.60
1	N	86	G	C5-C6-O6	-17.13	118.32	128.60
1	N	1079	G	P-O3'-C3'	17.10	140.22	119.70
1	N	851	G	N1-C6-O6	17.09	130.16	119.90
1	N	406	G	N1-C6-O6	17.06	130.13	119.90
1	N	293	G	N3-C2-N2	16.98	131.79	119.90
1	N	666	G	N1-C6-O6	16.94	130.07	119.90
1	N	233	C	C5-C6-N1	16.92	129.46	121.00
1	N	627	G	N1-C6-O6	16.92	130.05	119.90
1	N	1002	G	N1-C6-O6	16.92	130.05	119.90
1	N	563	A	N1-C6-N6	16.91	128.75	118.60
1	N	1385	G	N1-C6-O6	16.91	130.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1079	G	C5-C6-O6	-16.90	118.46	128.60
1	N	734	G	N1-C6-O6	16.88	130.03	119.90
1	N	1501	C	N3-C4-N4	16.83	129.78	118.00
1	N	991	U	P-O3'-C3'	16.82	139.88	119.70
1	N	592	G	C5-C6-O6	-16.80	118.52	128.60
1	N	509	A	N1-C6-N6	16.77	128.66	118.60
1	N	1002	G	C5-C6-O6	-16.77	118.54	128.60
1	N	93	U	O4'-C1'-N1	16.76	121.61	108.20
1	N	1422	G	N1-C6-O6	16.75	129.95	119.90
1	N	745	G	N1-C6-O6	16.73	129.94	119.90
1	N	174	A	N1-C6-N6	16.72	128.63	118.60
1	N	1278	G	P-O3'-C3'	16.72	139.76	119.70
1	N	939	G	C5-C6-O6	-16.68	118.59	128.60
1	N	668	G	N1-C6-O6	16.68	129.91	119.90
1	N	941	G	N1-C6-O6	16.66	129.90	119.90
1	N	925	G	N1-C6-O6	16.64	129.89	119.90
1	N	939	G	N1-C6-O6	16.56	129.84	119.90
1	N	673	A	N1-C6-N6	16.55	128.53	118.60
1	N	758	C	N3-C4-C5	-16.52	115.29	121.90
1	N	1179	A	N1-C6-N6	16.52	128.51	118.60
1	N	1534	A	N1-C6-N6	16.51	128.50	118.60
1	N	994	A	N1-C6-N6	16.47	128.48	118.60
1	N	1127	G	N1-C6-O6	16.47	129.78	119.90
1	N	599	C	O4'-C1'-N1	16.46	121.36	108.20
1	N	319	G	C5-C6-O6	-16.44	118.73	128.60
1	N	642	A	N1-C6-N6	16.42	128.45	118.60
1	N	1093	A	N1-C6-N6	16.40	128.44	118.60
1	N	1523	G	C5-C6-O6	-16.40	118.76	128.60
1	N	1036	A	N1-C6-N6	16.40	128.44	118.60
1	N	949	A	N1-C6-N6	16.38	128.43	118.60
1	N	524	G	N1-C6-O6	16.36	129.72	119.90
1	N	819	A	N1-C6-N6	16.36	128.42	118.60
1	N	380	G	C5-C6-O6	-16.35	118.79	128.60
1	N	864	A	C5-C6-N6	-16.34	110.62	123.70
1	N	254	G	N1-C6-O6	16.32	129.69	119.90
1	N	719	C	O4'-C1'-N1	16.30	121.24	108.20
1	N	1346	A	N1-C6-N6	16.29	128.38	118.60
1	N	933	G	N1-C6-O6	16.29	129.67	119.90
1	N	1180	A	N1-C6-N6	16.29	128.37	118.60
1	N	832	G	C6-N1-C2	-16.26	115.35	125.10
1	N	630	A	N1-C6-N6	16.25	128.35	118.60
1	N	1127	G	C5-C6-O6	-16.25	118.85	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	749	A	N1-C6-N6	16.25	128.35	118.60
1	N	71	A	C5-C6-N6	-16.23	110.72	123.70
1	N	1204	A	N1-C6-N6	16.23	128.34	118.60
1	N	303	A	N1-C6-N6	16.18	128.31	118.60
1	N	130	A	N1-C6-N6	16.15	128.29	118.60
1	N	325	A	C5-C6-N1	-16.15	109.63	117.70
1	N	611	C	N3-C4-C5	-16.15	115.44	121.90
1	N	515	G	N1-C6-O6	16.12	129.57	119.90
1	N	584	G	N1-C6-O6	16.10	129.56	119.90
1	N	1413	A	N1-C6-N6	16.10	128.26	118.60
1	N	1089	G	N1-C6-O6	16.09	129.56	119.90
1	N	1242	G	P-O5'-C5'	16.09	146.64	120.90
1	N	1253	G	C5-C6-O6	-16.08	118.95	128.60
1	N	470	C	O4'-C1'-N1	16.07	121.05	108.20
1	N	645	G	N1-C6-O6	16.06	129.54	119.90
1	N	1268	G	N1-C6-O6	16.04	129.53	119.90
1	N	306	A	N1-C6-N6	16.04	128.22	118.60
1	N	567	G	N1-C6-O6	16.03	129.52	119.90
1	N	106	C	O4'-C1'-N1	16.01	121.01	108.20
1	N	210	C	P-O3'-C3'	16.01	138.91	119.70
1	N	435	A	N1-C6-N6	16.01	128.21	118.60
1	N	1102	A	N1-C6-N6	16.01	128.21	118.60
1	N	1080	A	N1-C6-N6	16.00	128.20	118.60
1	N	482	A	N1-C6-N6	15.99	128.19	118.60
1	N	446	G	N1-C6-O6	15.97	129.48	119.90
1	N	525	C	N3-C4-C5	-15.97	115.51	121.90
1	N	579	A	N1-C6-N6	15.94	128.17	118.60
1	N	113	G	C5-C6-O6	-15.92	119.05	128.60
1	N	1274	A	N1-C6-N6	15.90	128.14	118.60
1	N	1149	C	C2-N3-C4	-15.88	111.96	119.90
1	N	1405	G	N1-C6-O6	15.88	129.43	119.90
1	N	78	A	N1-C6-N6	15.88	128.13	118.60
1	N	115	G	P-O3'-C3'	15.86	138.73	119.70
1	N	1197	A	N1-C6-N6	15.86	128.12	118.60
1	N	498	A	N1-C2-N3	15.86	137.23	129.30
1	N	805	C	C6-N1-C2	-15.86	113.96	120.30
1	N	535	A	P-O3'-C3'	15.85	138.72	119.70
1	N	1287	A	N1-C6-N6	15.85	128.11	118.60
1	N	391	G	C5-C6-O6	-15.84	119.10	128.60
1	N	1442	G	N1-C6-O6	15.82	129.39	119.90
1	N	351	G	N1-C6-O6	15.79	129.37	119.90
1	N	265	G	C5-C6-O6	-15.78	119.13	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	373	A	N1-C6-N6	15.76	128.06	118.60
1	N	1363	A	N1-C6-N6	15.74	128.05	118.60
1	N	338	A	N1-C6-N6	15.72	128.03	118.60
1	N	1246	A	N1-C6-N6	15.70	128.02	118.60
1	N	161	A	N1-C6-N6	15.69	128.02	118.60
1	N	547	A	N1-C6-N6	15.68	128.01	118.60
1	N	873	A	N1-C6-N6	15.67	128.00	118.60
1	N	233	C	C6-N1-C2	-15.67	114.03	120.30
1	N	243	A	N1-C6-N6	15.66	127.99	118.60
1	N	809	G	N1-C6-O6	15.66	129.29	119.90
1	N	320	A	C5-C6-N6	-15.65	111.18	123.70
1	N	964	A	N1-C6-N6	15.64	127.98	118.60
1	N	982	U	P-O3'-C3'	15.62	138.45	119.70
1	N	77	A	N1-C6-N6	15.62	127.97	118.60
1	N	941	G	C5-C6-O6	-15.61	119.23	128.60
1	N	1366	C	N3-C4-N4	15.59	128.91	118.00
1	N	523	A	N1-C6-N6	15.57	127.94	118.60
1	N	1039	G	C6-C5-N7	-15.56	121.06	130.40
1	N	60	A	N1-C6-N6	15.55	127.93	118.60
1	N	573	A	N1-C6-N6	15.55	127.93	118.60
1	N	1422	G	C5-C6-O6	-15.55	119.27	128.60
1	N	520	A	N1-C6-N6	15.54	127.92	118.60
1	N	1220	G	C5-C6-O6	-15.51	119.29	128.60
1	N	614	C	N3-C4-N4	15.50	128.85	118.00
1	N	729	A	C4-C5-C6	15.49	124.74	117.00
1	N	132	C	N3-C4-C5	-15.46	115.72	121.90
1	N	1112	C	C6-N1-C2	-15.41	114.14	120.30
1	N	1225	A	C4-C5-C6	15.41	124.70	117.00
1	N	380	G	N1-C6-O6	15.40	129.14	119.90
1	N	374	A	O4'-C1'-N9	15.40	120.52	108.20
1	N	550	G	N1-C6-O6	15.40	129.14	119.90
1	N	698	G	N1-C6-O6	15.40	129.14	119.90
1	N	474	G	N1-C6-O6	15.37	129.12	119.90
1	N	184	G	N1-C6-O6	15.36	129.12	119.90
1	N	694	A	C4-C5-C6	15.36	124.68	117.00
1	N	814	A	N1-C6-N6	15.35	127.81	118.60
1	N	326	G	C8-N9-C4	15.34	112.54	106.40
1	N	243	A	P-O3'-C3'	15.31	138.07	119.70
1	N	1459	G	C8-N9-C4	-15.31	100.28	106.40
1	N	648	A	C5-C6-N1	-15.28	110.06	117.70
1	N	155	A	N1-C6-N6	15.27	127.76	118.60
1	N	752	G	N1-C6-O6	15.25	129.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	302	G	N1-C6-O6	15.24	129.05	119.90
1	N	453	G	C5-C6-O6	-15.24	119.45	128.60
1	N	626	G	C5-C6-O6	-15.24	119.46	128.60
1	N	867	G	C5-C6-O6	-15.24	119.46	128.60
1	N	1256	A	N1-C6-N6	15.22	127.73	118.60
1	N	1042	A	C4-C5-C6	15.21	124.61	117.00
1	N	319	G	N1-C6-O6	15.21	129.03	119.90
1	N	770	C	O4'-C1'-N1	15.21	120.37	108.20
1	N	531	U	O4'-C1'-N1	15.20	120.36	108.20
1	N	417	G	N1-C6-O6	15.20	129.02	119.90
1	N	1130	A	N1-C6-N6	15.19	127.72	118.60
1	N	1310	G	N1-C6-O6	15.19	129.02	119.90
1	N	1432	G	N1-C6-O6	15.19	129.02	119.90
1	N	919	A	C8-N9-C4	-15.18	99.73	105.80
1	N	160	A	N1-C6-N6	15.18	127.71	118.60
1	N	1411	C	N3-C4-C5	-15.18	115.83	121.90
1	N	97	G	C5-C6-O6	-15.17	119.50	128.60
1	N	738	C	C6-N1-C2	-15.16	114.24	120.30
1	N	647	C	N3-C4-N4	15.15	128.61	118.00
1	N	1493	A	N9-C4-C5	15.14	111.86	105.80
1	N	1339	A	N1-C6-N6	15.12	127.67	118.60
1	N	846	G	C5-C6-O6	-15.08	119.55	128.60
1	N	577	G	N1-C6-O6	15.07	128.94	119.90
1	N	1252	A	O4'-C1'-N9	15.07	120.25	108.20
1	N	811	C	O4'-C1'-N1	15.06	120.25	108.20
1	N	1374	A	N1-C6-N6	15.03	127.62	118.60
1	N	225	C	N3-C4-N4	15.02	128.52	118.00
1	N	9	G	C5-C6-N1	-15.02	103.99	111.50
1	N	436	C	C5-C6-N1	15.01	128.51	121.00
1	N	389	A	N1-C6-N6	15.00	127.60	118.60
1	N	1389	C	C5-C6-N1	14.99	128.50	121.00
1	N	453	G	N1-C6-O6	14.98	128.89	119.90
1	N	572	A	C5-C6-N1	-14.98	110.21	117.70
1	N	1101	A	N1-C6-N6	14.97	127.58	118.60
1	N	139	A	N1-C6-N6	14.97	127.58	118.60
1	N	331	G	N1-C6-O6	14.96	128.88	119.90
1	N	28	A	N1-C6-N6	14.95	127.57	118.60
1	N	1510	C	N3-C4-C5	-14.94	115.92	121.90
1	N	694	A	N1-C6-N6	14.93	127.56	118.60
1	N	1142	G	C8-N9-C4	-14.93	100.43	106.40
1	N	353	A	N1-C6-N6	14.90	127.54	118.60
1	N	454	G	C5-C6-O6	-14.90	119.66	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1403	C	C5-C6-N1	14.90	128.45	121.00
1	N	922	G	N1-C6-O6	14.90	128.84	119.90
1	N	892	A	N1-C6-N6	14.89	127.53	118.60
1	N	1261	A	N1-C6-N6	14.87	127.52	118.60
1	N	1105	A	C4-C5-C6	14.86	124.43	117.00
1	N	35	G	C5-C6-O6	-14.85	119.69	128.60
1	N	391	G	N1-C6-O6	14.84	128.81	119.90
1	N	668	G	C5-C6-O6	-14.84	119.69	128.60
1	N	563	A	N1-C2-N3	14.84	136.72	129.30
1	N	1050	G	N1-C6-O6	14.83	128.80	119.90
1	N	1000	A	C5-C6-N1	-14.83	110.28	117.70
1	N	498	A	N1-C6-N6	14.81	127.49	118.60
1	N	792	A	C8-N9-C4	-14.81	99.88	105.80
1	N	292	G	C5-C6-O6	-14.80	119.72	128.60
1	N	241	G	N1-C6-O6	14.80	128.78	119.90
1	N	69	G	N1-C6-O6	14.79	128.77	119.90
1	N	913	A	P-O3'-C3'	14.76	137.41	119.70
1	N	1303	C	N3-C4-C5	-14.74	116.00	121.90
1	N	645	G	C5-C6-O6	-14.72	119.77	128.60
1	N	1236	A	C5-C6-N6	-14.72	111.92	123.70
1	N	171	A	N1-C6-N6	14.69	127.41	118.60
1	N	537	G	C6-C5-N7	-14.69	121.59	130.40
1	N	260	G	C5-C6-O6	-14.68	119.79	128.60
1	N	1253	G	C6-C5-N7	-14.67	121.60	130.40
1	N	563	A	C5-C6-N6	-14.66	111.97	123.70
1	N	553	A	N1-C6-N6	14.63	127.38	118.60
1	N	372	C	P-O3'-C3'	14.63	137.25	119.70
1	N	214	C	N3-C4-C5	-14.62	116.05	121.90
1	N	1206	G	C5-C6-O6	-14.62	119.83	128.60
1	N	1531	A	N1-C6-N6	14.60	127.36	118.60
1	N	802	A	P-O3'-C3'	14.59	137.21	119.70
1	N	840	C	N3-C4-N4	14.59	128.21	118.00
1	N	1493	A	N1-C6-N6	14.58	127.35	118.60
1	N	1166	G	C2-N3-C4	14.57	119.19	111.90
1	N	1188	A	N1-C6-N6	14.57	127.34	118.60
1	N	1342	C	O4'-C1'-N1	14.57	119.85	108.20
1	N	496	A	N1-C6-N6	14.56	127.34	118.60
1	N	706	A	C8-N9-C4	14.55	111.62	105.80
1	N	325	A	N1-C6-N6	14.55	127.33	118.60
1	N	1358	U	P-O3'-C3'	14.55	137.16	119.70
1	N	572	A	C4-C5-C6	14.55	124.27	117.00
1	N	177	G	N1-C6-O6	14.54	128.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	554	A	O4'-C1'-N9	14.54	119.83	108.20
1	N	780	A	N1-C6-N6	14.53	127.32	118.60
1	N	915	A	C5-N7-C8	14.52	111.16	103.90
1	N	1409	C	O4'-C1'-N1	14.52	119.82	108.20
1	N	715	A	N1-C6-N6	14.50	127.30	118.60
1	N	1280	A	N1-C6-N6	14.50	127.30	118.60
1	N	326	G	N7-C8-N9	-14.50	105.85	113.10
1	N	292	G	N1-C6-O6	14.49	128.60	119.90
1	N	1294	G	N1-C6-O6	14.49	128.59	119.90
1	N	350	G	N1-C6-O6	14.48	128.59	119.90
1	N	925	G	C5-C6-O6	-14.48	119.91	128.60
1	N	596	A	N1-C6-N6	14.48	127.29	118.60
1	N	1178	G	N1-C6-O6	14.45	128.57	119.90
1	N	36	C	N3-C4-N4	14.43	128.10	118.00
1	N	1254	A	N1-C6-N6	14.43	127.26	118.60
1	N	1107	C	C6-N1-C2	-14.42	114.53	120.30
1	N	346	G	C5-C6-O6	-14.42	119.95	128.60
1	N	702	A	N1-C6-N6	14.41	127.25	118.60
1	N	1084	G	C5-C6-O6	-14.39	119.96	128.60
1	N	404	G	N1-C6-O6	14.39	128.54	119.90
1	N	964	A	C5-C6-N1	-14.38	110.51	117.70
1	N	507	C	N3-C4-C5	-14.38	116.15	121.90
1	N	1331	G	P-O3'-C3'	14.37	136.94	119.70
1	N	489	C	N3-C4-C5	-14.36	116.16	121.90
1	N	985	C	C6-N1-C2	14.36	126.04	120.30
1	N	1100	C	C6-N1-C2	-14.35	114.56	120.30
1	N	1526	G	C5-C6-O6	-14.35	119.99	128.60
1	N	1106	G	C8-N9-C4	-14.34	100.66	106.40
1	N	301	G	C5-C6-O6	-14.34	120.00	128.60
1	N	845	A	N1-C6-N6	14.32	127.19	118.60
1	N	721	G	P-O3'-C3'	14.30	136.87	119.70
1	N	1319	A	N1-C6-N6	14.30	127.18	118.60
1	N	495	A	P-O3'-C3'	14.29	136.85	119.70
1	N	1035	A	N1-C6-N6	14.29	127.17	118.60
1	N	1509	C	O4'-C1'-N1	14.29	119.63	108.20
1	N	172	A	C8-N9-C4	-14.29	100.09	105.80
1	N	492	C	C6-N1-C2	-14.28	114.59	120.30
1	N	203	G	C5-C6-O6	-14.28	120.03	128.60
1	N	326	G	C5-C6-O6	-14.27	120.04	128.60
1	N	1282	C	O4'-C1'-N1	14.27	119.62	108.20
1	N	975	A	N1-C6-N6	14.26	127.16	118.60
1	N	1046	A	N1-C6-N6	14.26	127.15	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	608	A	N1-C6-N6	14.25	127.15	118.60
1	N	86	G	N1-C6-O6	14.23	128.44	119.90
1	N	240	G	N1-C6-O6	14.23	128.44	119.90
1	N	497	G	C5-C6-O6	-14.22	120.06	128.60
1	N	321	A	C5-C6-N1	-14.22	110.59	117.70
1	N	627	G	C5-C6-O6	-14.20	120.08	128.60
1	N	52	C	N3-C4-N4	14.19	127.93	118.00
1	N	1318	A	N1-C6-N6	14.19	127.11	118.60
1	N	965	U	N3-C4-C5	-14.18	106.09	114.60
1	N	1432	G	P-O3'-C3'	14.18	136.72	119.70
1	N	1299	A	C5-C6-N6	-14.18	112.36	123.70
1	N	1533	C	N3-C4-C5	-14.18	116.23	121.90
1	N	745	G	C5-C6-O6	-14.17	120.10	128.60
1	N	348	G	N1-C6-O6	14.17	128.40	119.90
1	N	704	A	N1-C6-N6	14.15	127.09	118.60
1	N	412	A	P-O3'-C3'	14.14	136.67	119.70
1	N	262	A	C5-C6-N1	-14.14	110.63	117.70
1	N	46	G	C8-N9-C4	-14.13	100.75	106.40
1	N	331	G	C5-C6-O6	-14.12	120.13	128.60
1	N	500	G	O4'-C1'-N9	14.12	119.49	108.20
1	N	487	A	C5-C6-N1	-14.11	110.64	117.70
1	N	47	C	P-O3'-C3'	14.11	136.63	119.70
1	N	1434	A	C5-C6-N1	-14.10	110.65	117.70
1	N	716	A	O4'-C1'-N9	14.09	119.47	108.20
1	N	241	G	C5-C6-O6	-14.09	120.15	128.60
1	N	51	A	P-O3'-C3'	14.08	136.59	119.70
1	N	1456	A	N1-C6-N6	14.07	127.04	118.60
1	N	767	A	C5-C6-N1	-14.07	110.67	117.70
1	N	934	C	P-O3'-C3'	14.06	136.58	119.70
1	N	417	G	C5-C6-N1	-14.06	104.47	111.50
1	N	499	A	N1-C6-N6	14.06	127.03	118.60
1	N	1032	G	C5-C6-O6	-14.06	120.17	128.60
1	N	792	A	N1-C6-N6	14.06	127.03	118.60
1	N	829	G	N1-C6-O6	14.05	128.33	119.90
1	N	843	U	O4'-C1'-N1	14.05	119.44	108.20
1	N	1114	C	N3-C4-C5	-14.05	116.28	121.90
1	N	398	U	O4'-C1'-N1	14.04	119.44	108.20
1	N	425	G	O4'-C1'-N9	14.04	119.43	108.20
1	N	1018	G	N1-C6-O6	14.03	128.32	119.90
1	N	1452	C	N3-C4-C5	-14.03	116.29	121.90
1	N	1491	G	N9-C4-C5	14.03	111.01	105.40
1	N	1012	A	N1-C6-N6	14.02	127.02	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	83	C	O4'-C1'-N1	14.02	119.42	108.20
1	N	1101	A	C5-C6-N6	-14.02	112.49	123.70
1	N	1489	G	N1-C6-O6	14.02	128.31	119.90
1	N	1153	G	O4'-C1'-N9	14.01	119.41	108.20
1	N	66	A	N1-C6-N6	14.00	127.00	118.60
1	N	410	G	C5-C6-O6	-13.99	120.21	128.60
1	N	491	G	C5-C6-O6	-13.99	120.21	128.60
1	N	765	G	N1-C6-O6	13.98	128.29	119.90
1	N	339	C	O4'-C1'-N1	13.98	119.38	108.20
1	N	1006	G	N1-C6-O6	13.97	128.28	119.90
1	N	45	G	C5-C6-O6	-13.96	120.22	128.60
1	N	723	U	O4'-C1'-N1	13.95	119.36	108.20
1	N	101	A	N1-C6-N6	13.95	126.97	118.60
1	N	1206	G	N1-C6-O6	13.94	128.26	119.90
1	N	515	G	C5-C6-O6	-13.94	120.24	128.60
1	N	459	A	N1-C6-N6	13.94	126.96	118.60
1	N	336	A	N1-C6-N6	13.92	126.95	118.60
1	N	497	G	N1-C6-O6	13.92	128.25	119.90
1	N	996	A	C8-N9-C4	-13.90	100.24	105.80
1	N	242	G	N1-C6-O6	13.89	128.23	119.90
1	N	489	C	N3-C4-N4	13.88	127.71	118.00
1	N	485	U	O4'-C1'-N1	13.87	119.30	108.20
1	N	21	G	C5-C6-O6	-13.86	120.28	128.60
1	N	619	U	O4'-C1'-N1	13.86	119.29	108.20
1	N	1309	G	N1-C6-O6	13.86	128.22	119.90
1	N	34	C	O4'-C1'-N1	13.85	119.28	108.20
1	N	129	A	N1-C6-N6	13.84	126.90	118.60
1	N	1032	G	N1-C6-O6	13.83	128.20	119.90
1	N	1154	G	C5-C6-O6	-13.80	120.32	128.60
1	N	1020	G	N1-C6-O6	13.78	128.17	119.90
1	N	310	G	N1-C2-N3	-13.78	115.63	123.90
1	N	102	G	C5-C6-N1	-13.78	104.61	111.50
1	N	734	G	C5-C6-O6	-13.77	120.33	128.60
1	N	752	G	C5-C6-O6	-13.77	120.34	128.60
1	N	900	A	C5-C6-N1	-13.76	110.82	117.70
1	N	1517	G	C8-N9-C4	-13.75	100.90	106.40
1	N	1386	G	N1-C6-O6	13.75	128.15	119.90
1	N	286	C	O4'-C1'-N1	13.74	119.19	108.20
1	N	1162	C	O4'-C1'-N1	13.74	119.19	108.20
1	N	808	C	O4'-C1'-N1	13.73	119.19	108.20
1	N	112	G	N1-C6-O6	13.73	128.14	119.90
1	N	873	A	C5-C6-N1	-13.73	110.84	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	150	U	C2-N3-C4	-13.72	118.77	127.00
1	N	1128	C	P-O5'-C5'	13.72	142.85	120.90
1	N	47	C	N3-C4-C5	-13.71	116.42	121.90
1	N	444	G	N1-C6-O6	13.71	128.13	119.90
1	N	1241	G	N1-C6-O6	13.71	128.13	119.90
1	N	1459	G	N1-C6-O6	13.71	128.13	119.90
1	N	1306	A	N1-C6-N6	13.71	126.82	118.60
1	N	1462	C	N3-C4-C5	-13.69	116.42	121.90
1	N	747	A	O4'-C1'-N9	13.69	119.16	108.20
1	N	57	G	C5-C6-O6	-13.69	120.39	128.60
1	N	260	G	N1-C6-O6	13.69	128.11	119.90
1	N	1284	C	O4'-C1'-N1	13.67	119.14	108.20
1	N	495	A	N1-C6-N6	13.66	126.80	118.60
1	N	1195	C	C6-N1-C2	-13.66	114.84	120.30
1	N	1385	G	C5-C6-O6	-13.64	120.41	128.60
1	N	669	G	O4'-C1'-N9	13.62	119.09	108.20
1	N	800	G	N1-C6-O6	13.61	128.07	119.90
1	N	1435	G	N1-C6-O6	13.61	128.06	119.90
1	N	1184	G	N1-C6-O6	13.61	128.06	119.90
1	N	43	C	O4'-C1'-N1	13.60	119.08	108.20
1	N	729	A	N1-C6-N6	13.60	126.76	118.60
1	N	207	C	C5-C6-N1	13.59	127.79	121.00
1	N	1390	U	O4'-C1'-N1	13.59	119.07	108.20
1	N	1319	A	P-O3'-C3'	13.57	135.99	119.70
1	N	1399	C	O4'-C1'-N1	13.56	119.05	108.20
1	N	895	G	P-O5'-C5'	13.56	142.59	120.90
1	N	1087	G	O4'-C1'-N9	13.55	119.04	108.20
1	N	1191	A	N1-C6-N6	13.55	126.73	118.60
1	N	502	A	N1-C6-N6	13.54	126.73	118.60
1	N	1347	G	C8-N9-C4	-13.54	100.98	106.40
1	N	743	A	N1-C6-N6	13.54	126.72	118.60
1	N	262	A	N1-C6-N6	13.54	126.72	118.60
1	N	673	A	C5-C6-N6	-13.54	112.87	123.70
1	N	55	A	N1-C6-N6	13.53	126.72	118.60
1	N	1434	A	C4-C5-C6	13.53	123.76	117.00
1	N	541	G	C8-N9-C4	-13.52	100.99	106.40
1	N	1309	G	C5-C6-O6	-13.51	120.50	128.60
1	N	1089	G	C5-C6-O6	-13.49	120.50	128.60
1	N	1294	G	C5-C6-O6	-13.49	120.50	128.60
1	N	1519	A	C5-C6-N1	-13.48	110.96	117.70
1	N	130	A	N7-C8-N9	-13.47	107.07	113.80
1	N	919	A	C5-C6-N6	-13.46	112.93	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1476	A	P-O3'-C3'	13.46	135.85	119.70
1	N	821	G	C5-C6-O6	-13.45	120.53	128.60
1	N	906	A	O4'-C1'-N9	13.44	118.95	108.20
1	N	557	G	N1-C6-O6	13.43	127.96	119.90
1	N	1168	U	O4'-C1'-N1	13.43	118.95	108.20
1	N	1396	A	N1-C6-N6	13.43	126.66	118.60
1	N	747	A	N1-C6-N6	13.41	126.64	118.60
1	N	1491	G	C4-C5-N7	-13.40	105.44	110.80
1	N	378	G	C5-C6-O6	-13.38	120.57	128.60
1	N	938	A	C5-C6-N6	-13.38	113.00	123.70
1	N	812	G	P-O3'-C3'	13.36	135.73	119.70
1	N	1486	G	N9-C4-C5	-13.36	100.06	105.40
1	N	1377	A	N1-C6-N6	13.35	126.61	118.60
1	N	1111	A	N1-C6-N6	13.34	126.61	118.60
1	N	983	A	C4-C5-C6	13.34	123.67	117.00
1	N	1261	A	C8-N9-C4	-13.34	100.47	105.80
1	N	1045	C	N3-C4-C5	-13.33	116.57	121.90
1	N	1410	A	N1-C6-N6	13.33	126.60	118.60
1	N	1526	G	N1-C6-O6	13.33	127.90	119.90
1	N	383	A	N1-C6-N6	13.32	126.59	118.60
1	N	511	C	N3-C4-C5	-13.32	116.57	121.90
1	N	1014	A	C8-N9-C4	-13.31	100.47	105.80
1	N	313	A	C5-C6-N6	-13.30	113.06	123.70
1	N	50	A	N1-C6-N6	13.30	126.58	118.60
1	N	93	U	P-O5'-C5'	13.30	142.18	120.90
1	N	721	G	N1-C6-O6	13.30	127.88	119.90
1	N	1289	A	N1-C6-N6	13.29	126.58	118.60
1	N	1504	G	P-O3'-C3'	13.29	135.65	119.70
1	N	509	A	P-O3'-C3'	13.29	135.65	119.70
1	N	733	G	C2-N3-C4	-13.28	105.26	111.90
1	N	1468	A	C2-N3-C4	-13.28	103.96	110.60
1	N	1155	A	N1-C6-N6	13.25	126.55	118.60
1	N	860	A	N1-C6-N6	13.25	126.55	118.60
1	N	1290	G	N1-C6-O6	13.25	127.85	119.90
1	N	906	A	N1-C6-N6	13.24	126.55	118.60
1	N	1205	U	O4'-C1'-N1	13.22	118.78	108.20
1	N	1501	C	N3-C4-C5	-13.22	116.61	121.90
1	N	344	A	N1-C6-N6	13.22	126.53	118.60
1	N	379	C	N3-C4-C5	-13.21	116.61	121.90
1	N	1519	A	O4'-C1'-N9	13.21	118.77	108.20
1	N	254	G	C5-C6-O6	-13.20	120.68	128.60
1	N	310	G	C2-N3-C4	13.20	118.50	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1112	C	C5-C6-N1	13.19	127.60	121.00
1	N	366	A	P-O3'-C3'	13.19	135.52	119.70
1	N	1323	G	O4'-C1'-N9	13.18	118.75	108.20
1	N	184	G	P-O5'-C5'	13.18	141.98	120.90
1	N	926	G	C5-C6-O6	-13.17	120.70	128.60
1	N	1370	G	N1-C6-O6	13.17	127.80	119.90
1	N	609	A	C5-C6-N1	-13.16	111.12	117.70
1	N	869	G	N9-C4-C5	13.16	110.66	105.40
1	N	1454	G	C5-C6-O6	-13.16	120.71	128.60
1	N	969	A	C8-N9-C4	-13.14	100.54	105.80
1	N	553	A	C8-N9-C4	-13.14	100.55	105.80
1	N	1396	A	C8-N9-C4	-13.11	100.56	105.80
1	N	1013	G	C5-C6-O6	-13.10	120.74	128.60
1	N	235	C	C4-C5-C6	13.10	123.95	117.40
1	N	1111	A	O4'-C1'-N9	13.10	118.68	108.20
1	N	1236	A	C8-N9-C4	-13.09	100.56	105.80
1	N	1332	A	O4'-C1'-N9	13.09	118.67	108.20
1	N	3	A	N1-C6-N6	13.09	126.45	118.60
1	N	92	U	O4'-C1'-N1	13.09	118.67	108.20
1	N	559	A	P-O3'-C3'	13.09	135.40	119.70
1	N	738	C	N3-C4-C5	-13.08	116.67	121.90
1	N	1429	A	N1-C6-N6	13.08	126.45	118.60
1	N	1419	G	C5-C6-N1	-13.08	104.96	111.50
1	N	1427	C	O4'-C1'-N1	13.07	118.66	108.20
1	N	554	A	C2-N3-C4	13.06	117.13	110.60
1	N	1146	A	P-O5'-C5'	13.06	141.80	120.90
1	N	451	A	N1-C6-N6	13.06	126.43	118.60
1	N	910	C	N3-C4-C5	-13.06	116.68	121.90
1	N	521	G	N1-C6-O6	13.05	127.73	119.90
1	N	896	C	O4'-C1'-N1	13.04	118.63	108.20
1	N	267	C	N3-C4-C5	-13.02	116.69	121.90
1	N	789	U	P-O5'-C5'	13.02	141.72	120.90
1	N	1323	G	N1-C6-O6	13.02	127.71	119.90
1	N	537	G	C4-C5-C6	13.01	126.61	118.80
1	N	729	A	N9-C4-C5	13.01	111.00	105.80
1	N	880	C	N3-C4-C5	-12.99	116.70	121.90
1	N	1482	G	N3-C2-N2	12.99	128.99	119.90
1	N	1467	C	C6-N1-C2	-12.99	115.11	120.30
1	N	580	C	N3-C4-N4	12.98	127.09	118.00
1	N	325	A	O4'-C1'-N9	12.98	118.59	108.20
1	N	974	A	N1-C6-N6	12.98	126.39	118.60
1	N	520	A	C4-C5-C6	12.97	123.48	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	574	A	N1-C6-N6	12.96	126.38	118.60
1	N	1231	G	C6-C5-N7	-12.96	122.62	130.40
1	N	1415	G	O4'-C1'-N9	12.95	118.56	108.20
1	N	39	G	N1-C6-O6	12.95	127.67	119.90
1	N	1151	A	C5-C6-N1	-12.95	111.23	117.70
1	N	1050	G	C5-C6-O6	-12.95	120.83	128.60
1	N	1257	A	N1-C6-N6	12.95	126.37	118.60
1	N	1259	C	C5-C6-N1	12.94	127.47	121.00
1	N	1289	A	C5-C6-N1	-12.94	111.23	117.70
1	N	1476	A	C4-C5-C6	12.94	123.47	117.00
1	N	1282	C	N3-C4-N4	12.94	127.06	118.00
1	N	790	A	N1-C2-N3	12.93	135.76	129.30
1	N	300	A	N1-C6-N6	12.93	126.36	118.60
1	N	716	A	N1-C6-N6	12.93	126.36	118.60
1	N	1170	A	C2-N3-C4	-12.93	104.14	110.60
1	N	517	G	C5-C6-O6	-12.92	120.85	128.60
1	N	758	C	N3-C4-N4	12.92	127.04	118.00
1	N	959	A	N1-C6-N6	12.91	126.34	118.60
1	N	362	G	N1-C6-O6	12.90	127.64	119.90
1	N	1098	C	N3-C4-C5	-12.90	116.74	121.90
1	N	1271	A	N1-C6-N6	12.89	126.34	118.60
1	N	856	C	O4'-C1'-N1	12.89	118.51	108.20
1	N	380	G	C8-N9-C4	-12.89	101.25	106.40
1	N	205	A	N1-C6-N6	12.88	126.33	118.60
1	N	1285	A	P-O3'-C3'	12.88	135.15	119.70
1	N	154	U	O4'-C1'-N1	12.87	118.50	108.20
1	N	586	C	O4'-C1'-N1	12.87	118.50	108.20
1	N	1362	A	O4'-C1'-N9	12.86	118.49	108.20
1	N	366	A	N1-C6-N6	12.85	126.31	118.60
1	N	335	C	N3-C4-N4	12.85	127.00	118.00
1	N	1207	G	C5-C6-O6	-12.85	120.89	128.60
1	N	164	G	N1-C6-O6	12.85	127.61	119.90
1	N	527	G	C5-C6-O6	-12.84	120.89	128.60
1	N	240	G	C6-N1-C2	-12.84	117.40	125.10
1	N	690	G	N1-C6-O6	12.84	127.60	119.90
1	N	1152	A	C8-N9-C4	-12.83	100.67	105.80
1	N	566	G	P-O3'-C3'	12.83	135.09	119.70
1	N	712	A	N1-C6-N6	12.83	126.30	118.60
1	N	1152	A	N1-C6-N6	12.82	126.30	118.60
1	N	400	C	O4'-C1'-N1	12.82	118.45	108.20
1	N	378	G	N1-C6-O6	12.82	127.59	119.90
1	N	266	G	P-O3'-C3'	12.81	135.08	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	120	A	C5-C6-N6	-12.80	113.46	123.70
1	N	761	G	N1-C6-O6	12.80	127.58	119.90
1	N	1507	A	N1-C6-N6	12.80	126.28	118.60
1	N	76	G	C5-C6-O6	-12.79	120.92	128.60
1	N	142	G	N1-C6-O6	12.79	127.58	119.90
1	N	452	A	N1-C6-N6	12.79	126.27	118.60
1	N	1351	U	O4'-C1'-N1	12.78	118.43	108.20
1	N	1405	G	C5-C6-O6	-12.78	120.93	128.60
1	N	1259	C	N3-C4-C5	-12.76	116.80	121.90
1	N	1097	C	N3-C4-C5	-12.76	116.80	121.90
1	N	1097	C	O4'-C1'-N1	12.75	118.40	108.20
1	N	557	G	N1-C2-N3	-12.74	116.25	123.90
1	N	1374	A	O4'-C1'-N9	12.74	118.39	108.20
1	N	447	G	O4'-C1'-N9	12.74	118.39	108.20
1	N	1362	A	N1-C6-N6	12.73	126.24	118.60
1	N	895	G	N1-C6-O6	12.73	127.54	119.90
1	N	272	C	O4'-C1'-N1	12.72	118.38	108.20
1	N	1176	A	N1-C6-N6	12.72	126.23	118.60
1	N	98	A	C4-C5-C6	12.71	123.36	117.00
1	N	275	G	N1-C6-O6	12.71	127.53	119.90
1	N	1141	C	C6-N1-C2	-12.71	115.22	120.30
1	N	7	A	C4-C5-C6	12.70	123.35	117.00
1	N	626	G	C4-C5-N7	12.70	115.88	110.80
1	N	609	A	C4-C5-C6	12.70	123.35	117.00
1	N	844	G	N1-C2-N3	-12.70	116.28	123.90
1	N	700	G	O4'-C1'-N9	12.70	118.36	108.20
1	N	1304	G	C4-C5-N7	12.70	115.88	110.80
1	N	302	G	O4'-C1'-N9	12.69	118.35	108.20
1	N	16	A	N1-C6-N6	12.69	126.22	118.60
1	N	213	G	C6-N1-C2	-12.69	117.49	125.10
1	N	703	G	C8-N9-C4	12.69	111.47	106.40
1	N	634	C	N3-C4-N4	12.68	126.88	118.00
1	N	1417	G	C8-N9-C4	-12.68	101.33	106.40
1	N	1476	A	C5-C6-N1	-12.68	111.36	117.70
1	N	491	G	N1-C6-O6	12.67	127.50	119.90
1	N	1120	C	N3-C4-N4	12.67	126.87	118.00
1	N	184	G	O4'-C1'-N9	12.67	118.33	108.20
1	N	1129	C	O4'-C1'-N1	12.67	118.33	108.20
1	N	1531	A	C8-N9-C4	-12.66	100.73	105.80
1	N	680	C	N3-C4-N4	12.66	126.86	118.00
1	N	385	C	O4'-C1'-N1	12.65	118.32	108.20
1	N	1244	G	C5-C6-O6	-12.63	121.02	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1018	G	C5-C6-O6	-12.62	121.03	128.60
1	N	116	A	N1-C6-N6	12.61	126.16	118.60
1	N	592	G	O4'-C1'-N9	12.61	118.29	108.20
1	N	626	G	N9-C4-C5	-12.61	100.36	105.40
1	N	434	U	C5-C4-O4	-12.60	118.34	125.90
1	N	1164	G	O4'-C1'-N9	12.60	118.28	108.20
1	N	803	G	N1-C6-O6	12.59	127.45	119.90
1	N	1146	A	N1-C6-N6	12.57	126.14	118.60
1	N	355	C	N3-C4-N4	12.56	126.79	118.00
1	N	621	A	C5-C6-N1	-12.56	111.42	117.70
1	N	1228	C	N3-C4-N4	12.56	126.79	118.00
1	N	112	G	C5-C6-O6	-12.56	121.06	128.60
1	N	817	C	O4'-C1'-N1	12.56	118.25	108.20
1	N	78	A	P-O3'-C3'	12.55	134.76	119.70
1	N	672	U	O4'-C1'-N1	12.55	118.24	108.20
1	N	613	C	C5-C6-N1	12.55	127.28	121.00
1	N	633	G	P-O5'-C5'	12.55	140.98	120.90
1	N	1145	A	N1-C6-N6	12.55	126.13	118.60
1	N	694	A	C5-C6-N1	-12.54	111.43	117.70
1	N	131	A	N1-C6-N6	12.54	126.12	118.60
1	N	1208	C	O4'-C1'-N1	12.53	118.22	108.20
1	N	775	G	O4'-C1'-N9	12.52	118.22	108.20
1	N	302	G	C5-C6-O6	-12.52	121.09	128.60
1	N	1140	C	O4'-C1'-N1	12.52	118.22	108.20
1	N	1529	G	N1-C6-O6	12.52	127.41	119.90
1	N	800	G	N3-C4-C5	-12.52	122.34	128.60
1	N	166	U	O4'-C1'-N1	12.51	118.20	108.20
1	N	1185	G	O4'-C1'-N9	12.51	118.20	108.20
1	N	894	G	N1-C6-O6	12.49	127.39	119.90
1	N	413	G	N1-C2-N3	-12.49	116.41	123.90
1	N	1173	U	P-O5'-C5'	12.48	140.87	120.90
1	N	1379	G	N1-C6-O6	12.48	127.39	119.90
1	N	1255	G	C5-C6-O6	-12.48	121.11	128.60
1	N	825	A	N1-C6-N6	12.47	126.08	118.60
1	N	810	C	O4'-C1'-N1	12.46	118.17	108.20
1	N	861	G	C5-C6-O6	-12.45	121.13	128.60
1	N	129	A	C5-C6-N1	-12.45	111.48	117.70
1	N	1207	G	N1-C6-O6	12.45	127.37	119.90
1	N	225	C	C5-C4-N4	-12.45	111.49	120.20
1	N	404	G	C5-C6-O6	-12.44	121.14	128.60
1	N	983	A	N1-C6-N6	12.44	126.06	118.60
1	N	1067	A	N1-C6-N6	12.44	126.06	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	865	A	N1-C6-N6	12.44	126.06	118.60
1	N	969	A	N1-C6-N6	12.43	126.06	118.60
1	N	177	G	C5-C6-O6	-12.42	121.15	128.60
1	N	702	A	O4'-C1'-N9	12.42	118.14	108.20
1	N	1314	C	N3-C4-C5	-12.42	116.93	121.90
1	N	670	G	O4'-C1'-N9	12.41	118.13	108.20
1	N	1105	A	C5-C6-N1	-12.41	111.50	117.70
1	N	732	C	O4'-C1'-N1	12.40	118.12	108.20
1	N	1163	A	N1-C6-N6	12.40	126.04	118.60
1	N	63	C	N3-C4-N4	12.40	126.68	118.00
1	N	1443	C	C6-N1-C2	-12.40	115.34	120.30
1	N	738	C	N3-C4-N4	12.39	126.67	118.00
1	N	433	G	N1-C6-O6	12.39	127.33	119.90
1	N	500	G	N1-C6-O6	12.39	127.33	119.90
1	N	1410	A	O4'-C1'-N9	12.38	118.11	108.20
1	N	769	G	C6-C5-N7	-12.38	122.97	130.40
1	N	399	G	C5-C6-O6	-12.38	121.17	128.60
1	N	90	C	N3-C4-C5	-12.38	116.95	121.90
1	N	1520	C	O4'-C1'-N1	12.37	118.09	108.20
1	N	550	G	C5-C6-O6	-12.36	121.18	128.60
1	N	641	U	P-O3'-C3'	12.36	134.53	119.70
1	N	1332	A	C5-C6-N1	-12.36	111.52	117.70
1	N	980	C	O4'-C1'-N1	12.36	118.09	108.20
1	N	446	G	C5-C6-N1	-12.35	105.32	111.50
1	N	1157	A	C5-C6-N6	-12.35	113.82	123.70
1	N	1513	A	C2-N3-C4	-12.35	104.42	110.60
1	N	1366	C	C5-C4-N4	-12.35	111.56	120.20
1	N	274	A	N1-C6-N6	12.35	126.01	118.60
1	N	736	C	N3-C4-N4	12.34	126.64	118.00
1	N	920	U	N1-C2-O2	-12.34	114.16	122.80
1	N	746	A	C4-C5-C6	12.34	123.17	117.00
1	N	286	C	C5-C6-N1	12.33	127.17	121.00
1	N	231	U	N3-C4-O4	12.32	128.03	119.40
1	N	660	C	N3-C4-N4	12.32	126.63	118.00
1	N	1521	C	O4'-C1'-N1	12.32	118.06	108.20
1	N	203	G	N3-C2-N2	12.32	128.52	119.90
1	N	393	A	N1-C2-N3	12.31	135.46	129.30
1	N	1089	G	N3-C2-N2	12.31	128.52	119.90
1	N	540	G	C5-C6-O6	-12.31	121.22	128.60
1	N	131	A	C5-C6-N1	-12.30	111.55	117.70
1	N	276	G	N1-C6-O6	12.29	127.28	119.90
1	N	969	A	C5-C6-N1	-12.29	111.56	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	199	A	N1-C6-N6	12.29	125.97	118.60
1	N	58	C	N3-C4-C5	-12.29	116.98	121.90
1	N	703	G	N1-C6-O6	12.29	127.27	119.90
1	N	777	A	N1-C6-N6	12.28	125.97	118.60
1	N	1054	C	C5-C4-N4	-12.28	111.61	120.20
1	N	82	G	C4-C5-N7	12.28	115.71	110.80
1	N	1201	A	P-O3'-C3'	12.28	134.43	119.70
1	N	878	A	C4-C5-C6	12.28	123.14	117.00
1	N	587	G	N3-C2-N2	12.27	128.49	119.90
1	N	809	G	C5-C6-O6	-12.27	121.24	128.60
1	N	332	G	C6-C5-N7	-12.27	123.04	130.40
1	N	350	G	C5-C6-O6	-12.26	121.24	128.60
1	N	1089	G	N1-C2-N3	-12.25	116.55	123.90
1	N	639	G	C5-C6-O6	-12.24	121.25	128.60
1	N	798	U	O4'-C1'-N1	12.24	117.99	108.20
1	N	560	A	C2-N3-C4	12.24	116.72	110.60
1	N	617	G	N1-C6-O6	12.23	127.24	119.90
1	N	767	A	C4-C5-C6	12.22	123.11	117.00
1	N	1368	A	N1-C6-N6	12.22	125.93	118.60
1	N	596	A	C4-C5-N7	-12.22	104.59	110.70
1	N	7	A	C5-C6-N1	-12.22	111.59	117.70
1	N	647	C	C5-C4-N4	-12.22	111.65	120.20
1	N	119	A	N1-C6-N6	12.21	125.93	118.60
1	N	1392	G	C5-C6-O6	-12.22	121.27	128.60
1	N	605	U	C2-N3-C4	12.21	134.33	127.00
1	N	1218	C	N3-C4-C5	-12.21	117.02	121.90
1	N	42	G	C5-C6-O6	-12.20	121.28	128.60
1	N	457	G	C5-C6-O6	-12.20	121.28	128.60
1	N	1236	A	P-O3'-C3'	12.20	134.33	119.70
1	N	1489	G	O4'-C1'-N9	12.19	117.95	108.20
1	N	646	G	N1-C6-O6	12.19	127.22	119.90
1	N	793	U	P-O3'-C3'	12.17	134.30	119.70
1	N	496	A	C4-C5-C6	12.17	123.08	117.00
1	N	577	G	C5-C6-O6	-12.17	121.30	128.60
1	N	532	A	O4'-C1'-N9	12.16	117.93	108.20
1	N	566	G	N3-C2-N2	12.16	128.41	119.90
1	N	1138	G	N1-C6-O6	12.16	127.20	119.90
1	N	312	C	N1-C2-O2	12.16	126.19	118.90
1	N	821	G	N1-C6-O6	12.15	127.19	119.90
1	N	1147	C	N3-C4-C5	-12.14	117.05	121.90
1	N	179	A	C4-C5-C6	12.14	123.07	117.00
1	N	461	A	N1-C6-N6	12.13	125.88	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1139	G	N1-C6-O6	12.13	127.18	119.90
1	N	832	G	C4-C5-N7	12.12	115.65	110.80
1	N	246	A	P-O3'-C3'	12.12	134.25	119.70
1	N	944	G	O4'-C1'-N9	12.12	117.89	108.20
1	N	1101	A	P-O3'-C3'	12.12	134.24	119.70
1	N	505	G	N1-C6-O6	12.11	127.17	119.90
1	N	892	A	C4-C5-C6	12.11	123.06	117.00
1	N	611	C	N3-C4-N4	12.10	126.47	118.00
1	N	97	G	N1-C6-O6	12.09	127.16	119.90
1	N	1304	G	C6-C5-N7	-12.09	123.14	130.40
1	N	728	A	N1-C6-N6	12.09	125.85	118.60
1	N	1248	A	N1-C6-N6	12.09	125.85	118.60
1	N	99	C	O4'-C1'-N1	12.08	117.86	108.20
1	N	524	G	C5-C6-O6	-12.08	121.35	128.60
1	N	300	A	C5-C6-N1	-12.08	111.66	117.70
1	N	770	C	C5-C6-N1	12.08	127.04	121.00
1	N	841	C	C5-C6-N1	12.07	127.04	121.00
1	N	567	G	C5-C6-O6	-12.07	121.36	128.60
1	N	566	G	N1-C2-N3	-12.07	116.66	123.90
1	N	38	G	O4'-C1'-N9	12.05	117.84	108.20
1	N	50	A	P-O5'-C5'	12.05	140.18	120.90
1	N	21	G	N1-C6-O6	12.04	127.13	119.90
1	N	516	U	C2-N3-C4	-12.04	119.77	127.00
1	N	1374	A	C4-C5-C6	12.04	123.02	117.00
1	N	1020	G	C5-C6-O6	-12.02	121.39	128.60
1	N	849	G	C5-C6-O6	-12.02	121.39	128.60
1	N	1139	G	C8-N9-C4	12.01	111.20	106.40
1	N	1244	G	N1-C6-O6	12.00	127.10	119.90
1	N	428	G	N3-C2-N2	12.00	128.30	119.90
1	N	729	A	C4-C5-N7	-12.00	104.70	110.70
1	N	880	C	N3-C4-N4	12.00	126.40	118.00
1	N	507	C	C4-C5-C6	11.99	123.39	117.40
1	N	1123	U	O4'-C1'-N1	11.99	117.79	108.20
1	N	403	C	N3-C4-C5	-11.98	117.11	121.90
1	N	1353	G	C5-C6-N1	-11.98	105.51	111.50
1	N	1261	A	N7-C8-N9	11.98	119.79	113.80
1	N	238	A	N1-C6-N6	11.97	125.78	118.60
1	N	1238	A	N9-C4-C5	11.97	110.59	105.80
1	N	1137	C	N3-C4-C5	-11.97	117.11	121.90
1	N	1488	G	N1-C6-O6	11.97	127.08	119.90
1	N	1378	C	O4'-C1'-N1	11.96	117.77	108.20
1	N	658	C	N3-C4-C5	-11.96	117.12	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1063	C	N3-C4-N4	11.96	126.37	118.00
1	N	181	A	P-O3'-C3'	11.94	134.03	119.70
1	N	947	G	C5-C6-O6	-11.93	121.44	128.60
1	N	605	U	N3-C4-C5	-11.93	107.44	114.60
1	N	1289	A	C8-N9-C4	-11.93	101.03	105.80
1	N	153	C	N3-C4-N4	11.92	126.34	118.00
1	N	1268	G	C5-C6-O6	-11.92	121.45	128.60
1	N	1455	G	N1-C6-O6	11.92	127.05	119.90
1	N	891	U	C5-C4-O4	-11.91	118.75	125.90
1	N	1364	U	O4'-C1'-N1	11.91	117.73	108.20
1	N	223	A	C2-N3-C4	-11.90	104.65	110.60
1	N	382	A	N1-C6-N6	11.90	125.74	118.60
1	N	243	A	C5-C6-N6	-11.90	114.18	123.70
1	N	1217	C	O4'-C1'-N1	11.90	117.72	108.20
1	N	1494	G	O4'-C1'-N9	11.90	117.72	108.20
1	N	102	G	N1-C6-O6	11.89	127.03	119.90
1	N	1176	A	C8-N9-C4	-11.89	101.04	105.80
1	N	652	U	O4'-C1'-N1	11.88	117.71	108.20
1	N	380	G	C8-N9-C1'	11.88	142.44	127.00
1	N	1201	A	N1-C6-N6	11.87	125.72	118.60
1	N	674	G	N1-C6-O6	11.87	127.02	119.90
1	N	797	C	O4'-C1'-N1	11.86	117.69	108.20
1	N	527	G	N1-C6-O6	11.85	127.01	119.90
1	N	484	G	O4'-C1'-N9	11.85	117.68	108.20
1	N	531	U	P-O5'-C5'	11.85	139.86	120.90
1	N	617	G	C5-C6-O6	-11.85	121.49	128.60
1	N	1388	C	C6-N1-C2	-11.85	115.56	120.30
1	N	1511	G	C5-C6-O6	-11.85	121.49	128.60
1	N	1170	A	N1-C2-N3	11.85	135.22	129.30
1	N	563	A	O4'-C1'-N9	11.84	117.67	108.20
1	N	151	A	N1-C2-N3	11.84	135.22	129.30
1	N	597	G	O4'-C1'-N9	11.84	117.67	108.20
1	N	1231	G	C5-C6-N1	-11.84	105.58	111.50
1	N	702	A	C4-C5-C6	11.84	122.92	117.00
1	N	1493	A	C8-N9-C4	-11.84	101.06	105.80
1	N	147	G	N1-C6-O6	11.83	127.00	119.90
1	N	915	A	N7-C8-N9	-11.83	107.89	113.80
1	N	972	C	O4'-C1'-N1	11.83	117.67	108.20
1	N	1121	U	C5-C4-O4	-11.82	118.81	125.90
1	N	493	A	C5-C6-N6	-11.82	114.24	123.70
1	N	1088	G	O4'-C1'-N9	11.82	117.66	108.20
1	N	970	C	O4'-C1'-N1	11.82	117.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1009	U	O4'-C1'-N1	11.81	117.65	108.20
1	N	1336	C	P-O3'-C3'	11.81	133.87	119.70
1	N	1414	U	P-O3'-C3'	11.81	133.87	119.70
1	N	1179	A	P-O3'-C3'	11.80	133.87	119.70
1	N	1382	C	C2-N3-C4	11.80	125.80	119.90
1	N	80	A	C5-C6-N6	-11.80	114.26	123.70
1	N	637	C	C6-N1-C2	11.80	125.02	120.30
1	N	560	A	N3-C4-C5	-11.80	118.54	126.80
1	N	746	A	N1-C6-N6	11.80	125.68	118.60
1	N	33	A	C5-C6-N6	-11.79	114.27	123.70
1	N	90	C	C5'-C4'-C3'	11.79	134.87	116.00
1	N	679	C	C2-N3-C4	11.79	125.80	119.90
1	N	1412	C	O4'-C1'-N1	11.79	117.63	108.20
1	N	1158	C	C5-C6-N1	11.78	126.89	121.00
1	N	1308	U	O4'-C1'-N1	11.77	117.62	108.20
1	N	1437	A	C5-C6-N6	-11.77	114.29	123.70
1	N	768	A	C5-C6-N1	-11.77	111.82	117.70
1	N	771	G	N1-C6-O6	11.77	126.96	119.90
1	N	255	G	N1-C6-O6	11.76	126.96	119.90
1	N	917	G	N1-C6-O6	11.76	126.96	119.90
1	N	19	A	C5-C6-N6	-11.76	114.29	123.70
1	N	671	G	N3-C2-N2	11.75	128.12	119.90
1	N	510	A	N1-C6-N6	11.75	125.65	118.60
1	N	264	C	C6-N1-C2	-11.74	115.61	120.30
1	N	1337	G	N1-C6-O6	11.73	126.94	119.90
1	N	1393	U	O4'-C1'-N1	11.73	117.59	108.20
1	N	1383	C	C5-C6-N1	11.73	126.86	121.00
1	N	823	C	N3-C4-N4	11.72	126.21	118.00
1	N	281	G	P-O3'-C3'	11.72	133.76	119.70
1	N	117	G	C5-C6-O6	-11.71	121.57	128.60
1	N	1285	A	N1-C6-N6	11.71	125.63	118.60
1	N	596	A	C5-N7-C8	11.71	109.75	103.90
1	N	346	G	N1-C6-O6	11.71	126.92	119.90
1	N	958	A	N1-C6-N6	11.71	125.62	118.60
1	N	824	G	N1-C6-O6	11.71	126.92	119.90
1	N	658	C	O4'-C1'-N1	11.70	117.56	108.20
1	N	110	C	N3-C4-C5	-11.69	117.22	121.90
1	N	169	C	C6-N1-C2	11.69	124.98	120.30
1	N	174	A	C5-C6-N6	-11.69	114.35	123.70
1	N	316	C	O4'-C1'-N1	11.68	117.55	108.20
1	N	1014	A	C4-C5-C6	11.68	122.84	117.00
1	N	415	A	N9-C4-C5	11.68	110.47	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1349	A	N1-C6-N6	11.67	125.60	118.60
1	N	76	G	N1-C6-O6	11.67	126.90	119.90
1	N	1265	C	N3-C4-C5	-11.66	117.23	121.90
1	N	373	A	N9-C4-C5	11.66	110.46	105.80
1	N	1236	A	N9-C4-C5	11.65	110.46	105.80
1	N	474	G	C5-C6-O6	-11.65	121.61	128.60
1	N	1173	U	O4'-C1'-N1	11.65	117.52	108.20
1	N	504	C	N3-C4-C5	-11.65	117.24	121.90
1	N	803	G	C4-C5-C6	11.65	125.79	118.80
1	N	493	A	C2-N3-C4	11.63	116.42	110.60
1	N	1247	U	O4'-C1'-N1	11.63	117.51	108.20
1	N	557	G	N3-C2-N2	11.63	128.04	119.90
1	N	606	G	N1-C6-O6	11.63	126.88	119.90
1	N	845	A	C8-N9-C4	-11.63	101.15	105.80
1	N	173	U	C4-C5-C6	11.62	126.67	119.70
1	N	499	A	P-O3'-C3'	11.62	133.65	119.70
1	N	832	G	N1-C6-O6	11.61	126.87	119.90
1	N	484	G	C4-C5-N7	-11.61	106.16	110.80
1	N	193	C	O4'-C1'-N1	11.61	117.48	108.20
1	N	669	G	N1-C6-O6	11.61	126.86	119.90
1	N	23	C	N3-C4-N4	11.60	126.12	118.00
1	N	1035	A	O4'-C1'-N9	11.60	117.48	108.20
1	N	211	G	N1-C6-O6	11.60	126.86	119.90
1	N	1128	C	C6-N1-C2	-11.59	115.66	120.30
1	N	198	G	N1-C6-O6	11.59	126.85	119.90
1	N	1117	A	N1-C6-N6	11.59	125.56	118.60
1	N	862	C	N3-C4-C5	-11.59	117.26	121.90
1	N	943	U	O4'-C1'-N1	11.59	117.47	108.20
1	N	285	C	N3-C4-N4	11.58	126.11	118.00
1	N	1007	U	P-O3'-C3'	11.58	133.60	119.70
1	N	259	G	C6-C5-N7	-11.58	123.45	130.40
1	N	1043	G	P-O3'-C3'	11.58	133.59	119.70
1	N	698	G	C5-C6-O6	-11.57	121.66	128.60
1	N	484	G	C5-C6-O6	-11.57	121.66	128.60
1	N	545	C	O4'-C1'-N1	11.56	117.45	108.20
1	N	725	G	C8-N9-C4	11.56	111.03	106.40
1	N	986	U	O4'-C1'-N1	11.56	117.45	108.20
1	N	560	A	C8-N9-C4	-11.56	101.18	105.80
1	N	816	A	N1-C2-N3	11.55	135.08	129.30
1	N	1096	C	N3-C4-C5	-11.55	117.28	121.90
1	N	1106	G	N1-C6-O6	11.54	126.83	119.90
1	N	1101	A	O4'-C1'-N9	11.54	117.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1444	U	O4'-C1'-N1	11.54	117.43	108.20
1	N	697	U	O4'-C1'-N1	11.53	117.43	108.20
1	N	594	U	P-O3'-C3'	11.53	133.53	119.70
1	N	1095	U	O4'-C1'-N1	11.53	117.42	108.20
1	N	1242	G	C5-C6-N1	-11.53	105.74	111.50
1	N	535	A	C5-C6-N6	-11.52	114.48	123.70
1	N	803	G	N3-C4-C5	-11.52	122.84	128.60
1	N	635	A	C4-C5-C6	11.51	122.76	117.00
1	N	10	A	C4-C5-C6	11.51	122.75	117.00
1	N	752	G	O4'-C1'-N9	11.51	117.41	108.20
1	N	952	U	N3-C2-O2	11.51	130.26	122.20
1	N	326	G	N1-C6-O6	11.51	126.81	119.90
1	N	431	A	C5-C6-N6	-11.51	114.50	123.70
1	N	967	C	C2-N3-C4	11.50	125.65	119.90
1	N	661	G	O4'-C1'-N9	11.50	117.40	108.20
1	N	1374	A	C6-C5-N7	-11.50	124.25	132.30
1	N	679	C	N3-C4-C5	-11.50	117.30	121.90
1	N	506	G	C5-C6-O6	-11.50	121.70	128.60
1	N	580	C	C5-C4-N4	-11.49	112.16	120.20
1	N	1132	C	N3-C4-C5	-11.48	117.31	121.90
1	N	1069	C	N3-C4-C5	-11.48	117.31	121.90
1	N	377	G	N1-C6-O6	11.48	126.79	119.90
1	N	869	G	C8-N9-C4	-11.48	101.81	106.40
1	N	1533	C	N3-C4-N4	11.48	126.03	118.00
1	N	1210	C	O4'-C1'-N1	11.47	117.38	108.20
1	N	597	G	C8-N9-C4	-11.47	101.81	106.40
1	N	948	C	N3-C4-N4	11.47	126.03	118.00
1	N	1282	C	N3-C4-C5	-11.47	117.31	121.90
1	N	1504	G	N1-C6-O6	11.47	126.78	119.90
1	N	295	C	C5-C4-N4	-11.46	112.17	120.20
1	N	1263	C	C6-N1-C2	-11.46	115.71	120.30
1	N	444	G	C5-C6-O6	-11.46	121.72	128.60
1	N	1363	A	C5-C6-N1	-11.46	111.97	117.70
1	N	865	A	O4'-C1'-N9	11.46	117.37	108.20
1	N	111	G	N9-C4-C5	11.46	109.98	105.40
1	N	307	C	C6-N1-C2	-11.45	115.72	120.30
1	N	1213	A	C5-C6-N6	-11.45	114.54	123.70
1	N	1275	A	N1-C6-N6	11.45	125.47	118.60
1	N	709	U	O4'-C1'-N1	11.45	117.36	108.20
1	N	197	A	C5-C6-N6	-11.45	114.54	123.70
1	N	1395	C	O4'-C1'-N1	11.45	117.36	108.20
1	N	384	G	N1-C6-O6	11.44	126.77	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	594	U	N3-C2-O2	11.42	130.19	122.20
1	N	378	G	C4-C5-N7	-11.42	106.23	110.80
1	N	1179	A	C5-C6-N6	-11.41	114.57	123.70
1	N	540	G	N1-C6-O6	11.41	126.75	119.90
1	N	57	G	N1-C6-O6	11.41	126.75	119.90
1	N	380	G	O4'-C1'-N9	11.41	117.33	108.20
1	N	1000	A	O4'-C1'-N9	11.41	117.33	108.20
1	N	1203	C	O4'-C1'-N1	11.41	117.33	108.20
1	N	1433	A	C2-N3-C4	-11.41	104.90	110.60
1	N	1375	A	N1-C6-N6	11.40	125.44	118.60
1	N	95	C	N3-C4-N4	11.40	125.98	118.00
1	N	409	U	C5-C4-O4	-11.40	119.06	125.90
1	N	501	C	O4'-C1'-N1	11.40	117.32	108.20
1	N	216	U	O4'-C1'-N1	11.40	117.32	108.20
1	N	413	G	C2-N3-C4	11.40	117.60	111.90
1	N	412	A	C5-C6-N6	-11.39	114.58	123.70
1	N	763	G	C6-C5-N7	-11.39	123.56	130.40
1	N	42	G	N1-C6-O6	11.39	126.73	119.90
1	N	980	C	N3-C4-C5	-11.39	117.34	121.90
1	N	1151	A	C5-N7-C8	11.39	109.59	103.90
1	N	35	G	N1-C6-O6	11.38	126.73	119.90
1	N	1194	U	O4'-C1'-N1	11.38	117.30	108.20
1	N	280	C	C5-C4-N4	-11.37	112.24	120.20
1	N	491	G	N1-C2-N3	-11.38	117.08	123.90
1	N	555	U	P-O3'-C3'	11.37	133.35	119.70
1	N	966	G	N9-C4-C5	-11.37	100.85	105.40
1	N	413	G	N3-C2-N2	11.37	127.86	119.90
1	N	415	A	C8-N9-C4	-11.37	101.25	105.80
1	N	1133	G	C8-N9-C4	-11.36	101.85	106.40
1	N	31	G	C8-N9-C4	-11.36	101.86	106.40
1	N	373	A	C4-C5-C6	11.36	122.68	117.00
1	N	362	G	C8-N9-C4	-11.35	101.86	106.40
1	N	743	A	O4'-C1'-N9	11.35	117.28	108.20
1	N	914	A	O4'-C1'-N9	11.35	117.28	108.20
1	N	357	G	N1-C6-O6	11.35	126.71	119.90
1	N	655	A	C8-N9-C4	-11.35	101.26	105.80
1	N	851	G	C5-C6-O6	-11.35	121.79	128.60
1	N	1519	A	C5-N7-C8	11.35	109.57	103.90
1	N	495	A	O4'-C1'-N9	11.34	117.27	108.20
1	N	428	G	C6-C5-N7	-11.34	123.60	130.40
1	N	1230	C	O4'-C1'-N1	11.33	117.27	108.20
1	N	1524	C	N3-C4-C5	-11.33	117.37	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	839	C	O4'-C1'-N1	11.33	117.27	108.20
1	N	1004	A	C4-C5-C6	11.33	122.67	117.00
1	N	877	G	C5-C6-O6	-11.33	121.80	128.60
1	N	159	G	N1-C6-O6	11.32	126.69	119.90
1	N	498	A	C8-N9-C4	-11.32	101.27	105.80
1	N	1111	A	C4-C5-C6	11.32	122.66	117.00
1	N	1443	C	C5-C6-N1	11.32	126.66	121.00
1	N	935	A	C8-N9-C4	-11.32	101.27	105.80
1	N	93	U	O4'-C4'-C3'	-11.31	92.69	104.00
1	N	522	C	O4'-C1'-N1	11.30	117.24	108.20
1	N	872	A	C5-N7-C8	11.30	109.55	103.90
1	N	1463	U	O4'-C1'-N1	11.30	117.24	108.20
1	N	182	A	N1-C2-N3	-11.30	123.65	129.30
1	N	1374	A	C5-C6-N1	-11.30	112.05	117.70
1	N	1403	C	C6-N1-C2	-11.30	115.78	120.30
1	N	484	G	N9-C4-C5	11.30	109.92	105.40
1	N	832	G	N7-C8-N9	-11.29	107.45	113.10
1	N	448	A	N1-C2-N3	11.29	134.95	129.30
1	N	1098	C	O4'-C1'-N1	11.29	117.23	108.20
1	N	730	G	P-O3'-C3'	11.29	133.24	119.70
1	N	1182	G	N1-C6-O6	11.28	126.67	119.90
1	N	610	U	O4'-C1'-N1	11.28	117.22	108.20
1	N	202	G	N1-C6-O6	11.27	126.66	119.90
1	N	1413	A	O4'-C1'-N9	11.27	117.22	108.20
1	N	325	A	C6-N1-C2	11.27	125.36	118.60
1	N	1331	G	O4'-C1'-N9	11.26	117.21	108.20
1	N	1150	A	N1-C6-N6	11.26	125.36	118.60
1	N	1366	C	N3-C4-C5	-11.26	117.40	121.90
1	N	1128	C	N3-C4-C5	-11.25	117.40	121.90
1	N	279	A	N1-C6-N6	11.25	125.35	118.60
1	N	340	U	C6-N1-C2	-11.25	114.25	121.00
1	N	1032	G	C8-N9-C4	-11.25	101.90	106.40
1	N	1222	G	C2-N3-C4	11.25	117.52	111.90
1	N	111	G	C8-N9-C4	-11.24	101.90	106.40
1	N	666	G	C5-C6-O6	-11.24	121.86	128.60
1	N	1405	G	O4'-C1'-N9	11.24	117.19	108.20
1	N	1531	A	C4-C5-N7	-11.24	105.08	110.70
1	N	540	G	N3-C4-N9	-11.24	119.26	126.00
1	N	508	U	P-O3'-C3'	11.24	133.18	119.70
1	N	1508	A	C8-N9-C4	-11.24	101.31	105.80
1	N	574	A	O4'-C1'-N9	11.23	117.19	108.20
1	N	66	A	P-O3'-C3'	11.23	133.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	386	C	N3-C4-C5	-11.23	117.41	121.90
1	N	355	C	C5-C4-N4	-11.22	112.34	120.20
1	N	194	C	N3-C4-C5	-11.22	117.41	121.90
1	N	310	G	N1-C6-O6	11.22	126.63	119.90
1	N	988	G	N1-C2-N3	-11.21	117.17	123.90
1	N	262	A	C8-N9-C4	-11.21	101.32	105.80
1	N	1064	G	N1-C2-N3	-11.21	117.18	123.90
1	N	1118	U	O4'-C1'-N1	11.20	117.16	108.20
1	N	434	U	N3-C4-O4	11.19	127.23	119.40
1	N	556	C	C2-N3-C4	11.19	125.49	119.90
1	N	1045	C	N3-C4-N4	11.18	125.83	118.00
1	N	364	A	N7-C8-N9	-11.18	108.21	113.80
1	N	1361	G	N3-C4-N9	11.18	132.71	126.00
1	N	1279	G	N1-C6-O6	11.18	126.61	119.90
1	N	700	G	N1-C6-O6	11.17	126.60	119.90
1	N	250	A	N1-C6-N6	11.17	125.30	118.60
1	N	1368	A	C4-C5-C6	11.17	122.58	117.00
1	N	1329	A	N1-C2-N3	11.16	134.88	129.30
1	N	250	A	C5-C6-N1	-11.16	112.12	117.70
1	N	1209	C	O4'-C1'-N1	11.16	117.12	108.20
1	N	242	G	O4'-C1'-N9	11.15	117.12	108.20
1	N	886	G	N1-C6-O6	11.15	126.59	119.90
1	N	262	A	C6-C5-N7	-11.15	124.50	132.30
1	N	868	C	O4'-C1'-N1	11.15	117.12	108.20
1	N	1432	G	C5-C6-O6	-11.15	121.91	128.60
1	N	1453	G	N1-C6-O6	11.15	126.59	119.90
1	N	1482	G	N1-C6-O6	11.14	126.58	119.90
1	N	9	G	C6-N1-C2	11.13	131.78	125.10
1	N	646	G	C5-C6-N1	-11.13	105.94	111.50
1	N	1065	U	P-O5'-C5'	11.13	138.71	120.90
1	N	1246	A	N9-C4-C5	11.13	110.25	105.80
1	N	1229	A	N1-C6-N6	11.13	125.28	118.60
1	N	1531	A	C5-N7-C8	11.13	109.46	103.90
1	N	639	G	N1-C6-O6	11.12	126.57	119.90
1	N	792	A	N9-C4-C5	11.12	110.25	105.80
1	N	1503	A	N1-C6-N6	11.12	125.27	118.60
1	N	1138	G	P-O3'-C3'	11.12	133.04	119.70
1	N	575	G	C5'-C4'-O4'	-11.11	95.77	109.10
1	N	1254	A	C4-C5-C6	11.11	122.56	117.00
1	N	32	A	C5-C6-N1	-11.11	112.14	117.70
1	N	95	C	P-O5'-C5'	-11.11	103.13	120.90
1	N	517	G	O4'-C1'-N9	11.11	117.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	557	G	P-O3'-C3'	11.11	133.03	119.70
1	N	1385	G	C8-N9-C4	-11.11	101.96	106.40
1	N	2	A	C4-C5-C6	11.10	122.55	117.00
1	N	816	A	C5-C6-N6	-11.10	114.82	123.70
1	N	1161	C	N3-C4-N4	11.10	125.77	118.00
1	N	209	U	O4'-C1'-N1	11.09	117.07	108.20
1	N	1391	U	O4'-C1'-N1	11.09	117.07	108.20
1	N	1482	G	C5-C6-O6	-11.09	121.95	128.60
1	N	620	C	O4'-C1'-N1	11.08	117.07	108.20
1	N	532	A	P-O3'-C3'	11.08	133.00	119.70
1	N	1260	G	N1-C6-O6	11.08	126.55	119.90
1	N	1428	A	C5-C6-N6	-11.07	114.84	123.70
1	N	1533	C	P-O5'-C5'	11.07	138.62	120.90
1	N	300	A	N1-C2-N3	11.07	134.84	129.30
1	N	1513	A	N1-C2-N3	11.07	134.84	129.30
1	N	946	A	C5-C6-N6	-11.07	114.84	123.70
1	N	1240	U	C6-N1-C2	-11.07	114.36	121.00
1	N	280	C	N3-C4-N4	11.06	125.74	118.00
1	N	1107	C	N3-C4-N4	11.06	125.74	118.00
1	N	1266	G	C6-C5-N7	-11.06	123.77	130.40
1	N	729	A	C5-C6-N1	-11.05	112.17	117.70
1	N	210	C	O4'-C1'-N1	11.05	117.04	108.20
1	N	120	A	O4'-C1'-N9	11.05	117.04	108.20
1	N	793	U	O4'-C1'-N1	11.05	117.04	108.20
1	N	620	C	C6-N1-C2	-11.05	115.88	120.30
1	N	807	A	N1-C6-N6	11.04	125.22	118.60
1	N	1407	C	C6-N1-C2	-11.04	115.88	120.30
1	N	1230	C	C5-C6-N1	11.04	126.52	121.00
1	N	376	G	N1-C6-O6	11.03	126.52	119.90
1	N	214	C	C2-N3-C4	11.03	125.41	119.90
1	N	263	A	N1-C6-N6	11.03	125.22	118.60
1	N	387	U	O4'-C1'-N1	11.03	117.02	108.20
1	N	550	G	O4'-C1'-N9	11.03	117.02	108.20
1	N	1329	A	N9-C4-C5	11.02	110.21	105.80
1	N	1347	G	N9-C4-C5	11.01	109.81	105.40
1	N	675	A	C5-C6-N6	-11.01	114.89	123.70
1	N	1290	G	C5-C6-O6	-11.01	122.00	128.60
1	N	1530	G	P-O3'-C3'	11.01	132.91	119.70
1	N	605	U	O4'-C1'-N1	11.00	117.00	108.20
1	N	874	G	N9-C4-C5	-11.00	101.00	105.40
1	N	1098	C	C6-N1-C2	-11.00	115.90	120.30
1	N	587	G	C5-C6-O6	-11.00	122.00	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	693	G	N1-C6-O6	11.00	126.50	119.90
1	N	889	A	N1-C6-N6	11.00	125.20	118.60
1	N	609	A	C4-C5-N7	-11.00	105.20	110.70
1	N	1514	G	O4'-C1'-N9	10.99	116.99	108.20
1	N	361	G	C3'-C2'-C1'	10.99	110.29	101.50
1	N	908	A	N1-C6-N6	10.98	125.19	118.60
1	N	1096	C	P-O5'-C5'	10.98	138.46	120.90
1	N	876	C	N1-C2-O2	-10.97	112.32	118.90
1	N	347	G	N3-C2-N2	10.97	127.58	119.90
1	N	814	A	P-O3'-C3'	10.97	132.87	119.70
1	N	676	A	N1-C6-N6	10.97	125.18	118.60
1	N	1263	C	O4'-C1'-N1	10.97	116.97	108.20
1	N	299	G	O4'-C1'-N9	10.96	116.97	108.20
1	N	700	G	C5-C6-O6	-10.96	122.02	128.60
1	N	1457	G	C5-C6-O6	-10.96	122.02	128.60
1	N	82	G	C6-C5-N7	-10.96	123.82	130.40
1	N	172	A	C5-C6-N1	-10.96	112.22	117.70
1	N	922	G	C8-N9-C4	-10.96	102.02	106.40
1	N	1087	G	P-O5'-C5'	10.96	138.44	120.90
1	N	1406	U	O4'-C1'-N1	10.96	116.96	108.20
1	N	1191	A	C5-C6-N6	-10.95	114.94	123.70
1	N	42	G	N9-C4-C5	-10.95	101.02	105.40
1	N	1050	G	O4'-C1'-N9	10.95	116.96	108.20
1	N	680	C	O4'-C1'-N1	10.94	116.95	108.20
1	N	1181	G	C5'-C4'-C3'	-10.94	98.50	116.00
1	N	288	A	P-O3'-C3'	-10.94	106.57	119.70
1	N	949	A	C5-C6-N6	-10.94	114.95	123.70
1	N	27	G	C2-N3-C4	10.94	117.37	111.90
1	N	158	G	C5-C6-O6	-10.94	122.04	128.60
1	N	988	G	C4-C5-C6	10.94	125.36	118.80
1	N	229	U	O4'-C1'-N1	10.94	116.95	108.20
1	N	794	A	N1-C6-N6	10.94	125.16	118.60
1	N	678	U	O4'-C1'-N1	10.93	116.94	108.20
1	N	922	G	P-O3'-C3'	10.93	132.81	119.70
1	N	1082	A	N1-C6-N6	10.93	125.16	118.60
1	N	611	C	C6-N1-C2	-10.93	115.93	120.30
1	N	340	U	O4'-C1'-N1	10.92	116.94	108.20
1	N	1266	G	C8-N9-C4	-10.92	102.03	106.40
1	N	903	G	C5-C6-O6	-10.92	122.05	128.60
1	N	933	G	C5-C6-O6	-10.91	122.05	128.60
1	N	101	A	C5-C6-N1	-10.91	112.25	117.70
1	N	1223	C	N3-C2-O2	-10.91	114.26	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	157	U	O4'-C1'-N1	10.91	116.93	108.20
1	N	1215	G	N1-C6-O6	10.91	126.45	119.90
1	N	1172	C	C5-C6-N1	10.90	126.45	121.00
1	N	383	A	N9-C4-C5	10.90	110.16	105.80
1	N	335	C	N3-C4-C5	-10.90	117.54	121.90
1	N	1139	G	C6-C5-N7	-10.90	123.86	130.40
1	N	510	A	C4-C5-C6	10.89	122.44	117.00
1	N	1311	A	N1-C2-N3	-10.89	123.86	129.30
1	N	1186	G	N1-C6-O6	10.89	126.43	119.90
1	N	536	C	N3-C4-N4	10.88	125.62	118.00
1	N	1188	A	O4'-C1'-N9	10.88	116.90	108.20
1	N	1292	G	N1-C6-O6	10.88	126.43	119.90
1	N	1316	G	C5-C6-O6	-10.87	122.08	128.60
1	N	476	U	O4'-C1'-N1	10.87	116.90	108.20
1	N	765	G	C5-C6-O6	-10.87	122.08	128.60
1	N	827	U	O4'-C1'-N1	10.87	116.90	108.20
1	N	867	G	O4'-C1'-N9	10.87	116.90	108.20
1	N	1445	U	C6-N1-C2	10.87	127.52	121.00
1	N	1353	G	N1-C6-O6	10.87	126.42	119.90
1	N	377	G	O4'-C1'-N9	10.86	116.89	108.20
1	N	535	A	C4-C5-C6	10.86	122.43	117.00
1	N	1095	U	N1-C2-N3	-10.86	108.38	114.90
1	N	1242	G	C5-C6-O6	-10.86	122.08	128.60
1	N	1024	G	N1-C6-O6	10.86	126.42	119.90
1	N	1377	A	C5-C6-N6	-10.86	115.01	123.70
1	N	712	A	C4-C5-C6	10.86	122.43	117.00
1	N	1334	G	C8-N9-C4	-10.86	102.06	106.40
1	N	1372	U	C5-C4-O4	-10.86	119.39	125.90
1	N	1486	G	C8-N9-C4	10.85	110.74	106.40
1	N	416	G	C4-C5-N7	10.85	115.14	110.80
1	N	418	C	N3-C4-N4	10.85	125.59	118.00
1	N	484	G	C5-C6-N1	-10.85	106.08	111.50
1	N	1485	U	N1-C2-O2	-10.85	115.21	122.80
1	N	231	U	C5-C4-O4	-10.84	119.40	125.90
1	N	783	C	O4'-C1'-N1	10.83	116.87	108.20
1	N	1033	G	N1-C6-O6	10.83	126.40	119.90
1	N	1167	A	N1-C6-N6	10.83	125.10	118.60
1	N	15	G	N1-C6-O6	10.82	126.39	119.90
1	N	98	A	O4'-C1'-N9	10.82	116.86	108.20
1	N	505	G	C5-C6-O6	-10.82	122.11	128.60
1	N	270	A	O4'-C1'-N9	10.82	116.86	108.20
1	N	1394	A	N3-C4-N9	10.82	136.05	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	878	A	N1-C6-N6	10.81	125.09	118.60
1	N	1273	C	O4'-C1'-N1	10.81	116.85	108.20
1	N	1348	U	O4'-C1'-N1	10.81	116.85	108.20
1	N	538	G	C5-C6-O6	-10.81	122.11	128.60
1	N	935	A	O4'-C1'-N9	10.81	116.85	108.20
1	N	815	A	N1-C6-N6	10.80	125.08	118.60
1	N	1046	A	C5-C6-N1	-10.80	112.30	117.70
1	N	1166	G	C5-C6-O6	-10.80	122.12	128.60
1	N	541	G	N1-C6-O6	10.79	126.38	119.90
1	N	648	A	P-O5'-C5'	10.79	138.17	120.90
1	N	584	G	C5-C6-O6	-10.79	122.12	128.60
1	N	1507	A	P-O5'-C5'	10.79	138.17	120.90
1	N	1271	A	C4-C5-C6	10.79	122.39	117.00
1	N	369	G	O4'-C1'-N9	10.78	116.83	108.20
1	N	191	G	N1-C6-O6	10.78	126.37	119.90
1	N	985	C	N3-C2-O2	10.78	129.44	121.90
1	N	373	A	C8-N9-C4	-10.77	101.49	105.80
1	N	526	C	N3-C4-C5	-10.77	117.59	121.90
1	N	125	U	C5-C6-N1	-10.77	117.32	122.70
1	N	328	C	C6-N1-C2	-10.77	115.99	120.30
1	N	767	A	C4-C5-N7	-10.76	105.32	110.70
1	N	45	G	C8-N9-C4	10.76	110.70	106.40
1	N	1006	G	O4'-C1'-N9	10.76	116.80	108.20
1	N	155	A	C5-C6-N6	-10.75	115.10	123.70
1	N	475	C	O4'-C1'-N1	10.75	116.80	108.20
1	N	190	A	C4-C5-C6	10.75	122.38	117.00
1	N	196	A	N1-C6-N6	10.74	125.05	118.60
1	N	590	U	N3-C4-O4	10.74	126.92	119.40
1	N	1323	G	C5-C6-O6	-10.74	122.16	128.60
1	N	530	G	C5-C6-O6	-10.74	122.16	128.60
1	N	1303	C	C2-N3-C4	10.73	125.27	119.90
1	N	903	G	N1-C6-O6	10.73	126.34	119.90
1	N	110	C	N3-C4-N4	10.73	125.51	118.00
1	N	1421	G	O4'-C1'-N9	10.73	116.78	108.20
1	N	206	C	O4'-C1'-N1	10.72	116.78	108.20
1	N	215	C	N3-C4-N4	10.72	125.51	118.00
1	N	1127	G	P-O5'-C5'	10.72	138.06	120.90
1	N	840	C	C2-N1-C1'	10.72	130.59	118.80
1	N	1459	G	N9-C4-C5	10.71	109.69	105.40
1	N	182	A	N1-C6-N6	10.71	125.03	118.60
1	N	1178	G	C5-C6-O6	-10.71	122.17	128.60
1	N	1224	U	O4'-C1'-N1	10.71	116.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	557	G	C5-C6-O6	-10.70	122.18	128.60
1	N	869	G	N1-C6-O6	10.70	126.32	119.90
1	N	474	G	C1'-O4'-C4'	10.70	118.46	109.90
1	N	1441	A	N1-C6-N6	10.70	125.02	118.60
1	N	342	C	O4'-C1'-N1	10.70	116.76	108.20
1	N	449	G	O4'-C1'-N9	10.69	116.75	108.20
1	N	1278	G	C5-N7-C8	10.69	109.65	104.30
1	N	1133	G	N1-C2-N3	-10.69	117.49	123.90
1	N	1187	G	N1-C6-O6	10.69	126.31	119.90
1	N	1206	G	N9-C4-C5	-10.69	101.13	105.40
1	N	651	C	N3-C4-N4	10.68	125.48	118.00
1	N	1080	A	C5-C6-N6	-10.68	115.15	123.70
1	N	1319	A	C4-C5-C6	10.68	122.34	117.00
1	N	437	U	O4'-C1'-N1	10.67	116.74	108.20
1	N	1190	G	C5'-C4'-O4'	10.67	121.91	109.10
1	N	1355	G	N1-C6-O6	10.67	126.30	119.90
1	N	362	G	C5-C6-O6	-10.67	122.20	128.60
1	N	1042	A	C5-C6-N1	-10.67	112.36	117.70
1	N	121	U	P-O3'-C3'	-10.67	106.90	119.70
1	N	422	C	N3-C4-C5	-10.66	117.63	121.90
1	N	1517	G	O4'-C1'-N9	10.66	116.73	108.20
1	N	183	C	C6-N1-C2	-10.66	116.04	120.30
1	N	219	U	O4'-C1'-N1	10.66	116.73	108.20
1	N	412	A	N1-C2-N3	10.66	134.63	129.30
1	N	696	A	N1-C6-N6	10.66	125.00	118.60
1	N	1035	A	C2-N3-C4	-10.66	105.27	110.60
1	N	77	A	C5-N7-C8	10.65	109.22	103.90
1	N	521	G	C5-C6-O6	-10.65	122.21	128.60
1	N	1034	G	C5-C6-O6	-10.65	122.21	128.60
1	N	701	U	C2-N3-C4	-10.65	120.61	127.00
1	N	183	C	C5-C6-N1	10.63	126.32	121.00
1	N	773	G	C6-C5-N7	-10.63	124.02	130.40
1	N	600	A	O4'-C1'-N9	10.63	116.70	108.20
1	N	1374	A	C2-N3-C4	-10.63	105.28	110.60
1	N	894	G	C5-C6-O6	-10.63	122.22	128.60
1	N	128	G	C5-C6-O6	-10.62	122.23	128.60
1	N	840	C	O4'-C1'-N1	10.62	116.70	108.20
1	N	1259	C	C6-N1-C2	-10.62	116.05	120.30
1	N	763	G	C5-C6-O6	-10.62	122.23	128.60
1	N	364	A	N1-C6-N6	10.62	124.97	118.60
1	N	487	A	C4-C5-C6	10.62	122.31	117.00
1	N	1074	G	N1-C2-N3	-10.62	117.53	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1081	A	O4'-C1'-N9	10.62	116.69	108.20
1	N	29	U	N1-C2-N3	-10.62	108.53	114.90
1	N	389	A	C5-N7-C8	10.62	109.21	103.90
1	N	87	C	O4'-C1'-N1	10.61	116.69	108.20
1	N	406	G	C5-C6-O6	-10.61	122.24	128.60
1	N	1466	C	O4'-C1'-N1	10.61	116.69	108.20
1	N	1474	U	N1-C2-O2	-10.60	115.38	122.80
1	N	205	A	C5-C6-N1	-10.60	112.40	117.70
1	N	523	A	C5-C6-N1	-10.60	112.40	117.70
1	N	976	G	N1-C6-O6	10.60	126.26	119.90
1	N	845	A	O4'-C1'-N9	10.60	116.68	108.20
1	N	373	A	C5-C6-N1	-10.59	112.40	117.70
1	N	776	G	N1-C6-O6	10.59	126.26	119.90
1	N	49	U	N3-C4-C5	-10.59	108.25	114.60
1	N	128	G	O4'-C1'-N9	10.59	116.67	108.20
1	N	899	C	O4'-C1'-N1	10.59	116.67	108.20
1	N	1332	A	C4-C5-C6	10.59	122.30	117.00
1	N	214	C	N3-C4-N4	10.59	125.41	118.00
1	N	1131	G	N1-C6-O6	10.58	126.25	119.90
1	N	865	A	C8-N9-C4	-10.58	101.57	105.80
1	N	1380	U	O4'-C1'-N1	10.58	116.66	108.20
1	N	1531	A	C4-C5-C6	10.58	122.29	117.00
1	N	94	G	O4'-C1'-N9	10.58	116.66	108.20
1	N	901	A	C8-N9-C4	-10.58	101.57	105.80
1	N	1295	U	N1-C2-O2	-10.58	115.39	122.80
1	N	198	G	C5-C6-O6	-10.57	122.25	128.60
1	N	926	G	N1-C6-O6	10.57	126.25	119.90
1	N	934	C	C6-N1-C2	-10.57	116.07	120.30
1	N	1013	G	N1-C6-O6	10.57	126.25	119.90
1	N	1110	A	C5-C6-N1	-10.57	112.41	117.70
1	N	1246	A	C8-N9-C4	-10.57	101.57	105.80
1	N	1248	A	P-O5'-C5'	10.57	137.82	120.90
1	N	932	C	C6-N1-C2	-10.57	116.07	120.30
1	N	1433	A	N1-C2-N3	10.57	134.58	129.30
1	N	910	C	O4'-C1'-N1	10.57	116.65	108.20
1	N	1261	A	C5-C6-N1	-10.57	112.42	117.70
1	N	1067	A	C4-C5-C6	10.56	122.28	117.00
1	N	1255	G	C8-N9-C4	10.56	110.62	106.40
1	N	1082	A	P-O5'-C5'	10.56	137.79	120.90
1	N	541	G	N7-C8-N9	10.55	118.38	113.10
1	N	245	U	O4'-C1'-N1	10.55	116.64	108.20
1	N	389	A	C4-C5-N7	-10.55	105.43	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	537	G	C5-C6-N1	-10.55	106.23	111.50
1	N	1131	G	C5-C6-O6	-10.55	122.27	128.60
1	N	1254	A	C5-C6-N1	-10.55	112.43	117.70
1	N	472	U	C4'-C3'-C2'	-10.55	92.05	102.60
1	N	1213	A	C5-N7-C8	10.54	109.17	103.90
1	N	1480	A	N1-C6-N6	10.55	124.93	118.60
1	N	1493	A	C5-C6-N1	-10.55	112.43	117.70
1	N	1165	U	O4'-C1'-N1	10.54	116.63	108.20
1	N	451	A	N9-C4-C5	10.54	110.02	105.80
1	N	1169	A	N1-C6-N6	10.54	124.92	118.60
1	N	1084	G	N1-C6-O6	10.53	126.22	119.90
1	N	80	A	C8-N9-C4	-10.53	101.59	105.80
1	N	634	C	C5-C4-N4	-10.53	112.83	120.20
1	N	879	C	C5-C4-N4	-10.53	112.83	120.20
1	N	945	G	C5-C6-N1	-10.52	106.24	111.50
1	N	990	C	C4-C5-C6	10.52	122.66	117.40
1	N	1125	U	O4'-C1'-N1	10.52	116.61	108.20
1	N	321	A	C4-C5-C6	10.52	122.26	117.00
1	N	582	C	P-O5'-C5'	10.52	137.72	120.90
1	N	377	G	N3-C2-N2	10.51	127.26	119.90
1	N	436	C	N3-C4-C5	-10.51	117.70	121.90
1	N	674	G	C5-C6-O6	-10.51	122.30	128.60
1	N	293	G	N1-C2-N3	-10.50	117.60	123.90
1	N	994	A	C5-C6-N6	-10.50	115.30	123.70
1	N	1472	U	O4'-C1'-N1	10.50	116.60	108.20
1	N	317	U	C5-C6-N1	10.50	127.95	122.70
1	N	803	G	C5-C6-N1	-10.50	106.25	111.50
1	N	689	C	O4'-C1'-N1	10.50	116.60	108.20
1	N	1209	C	N3-C4-N4	10.50	125.35	118.00
1	N	1297	G	N3-C2-N2	10.50	127.25	119.90
1	N	888	G	N1-C6-O6	10.49	126.20	119.90
1	N	81	A	C5-C6-N1	-10.49	112.45	117.70
1	N	1332	A	N9-C4-C5	10.49	110.00	105.80
1	N	383	A	C4-C5-C6	10.48	122.24	117.00
1	N	1005	A	O4'-C1'-N9	10.48	116.59	108.20
1	N	36	C	C5-C4-N4	-10.48	112.86	120.20
1	N	88	U	P-O3'-C3'	10.48	132.28	119.70
1	N	1136	C	P-O3'-C3'	10.48	132.28	119.70
1	N	109	A	C5-C6-N6	-10.48	115.32	123.70
1	N	367	U	C4-C5-C6	10.48	125.99	119.70
1	N	1231	G	C4-C5-N7	10.48	114.99	110.80
1	N	377	G	C6-C5-N7	-10.47	124.12	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1231	G	N1-C6-O6	10.47	126.18	119.90
1	N	1266	G	C5-C6-N1	-10.47	106.27	111.50
1	N	1047	G	N1-C6-O6	10.47	126.18	119.90
1	N	710	G	N7-C8-N9	10.46	118.33	113.10
1	N	1347	G	O4'-C1'-N9	10.46	116.57	108.20
1	N	1408	A	C2-N3-C4	10.46	115.83	110.60
1	N	1163	A	C4-C5-C6	10.46	122.23	117.00
1	N	1416	G	C5-C6-N1	-10.46	106.27	111.50
1	N	135	C	C4-C5-C6	-10.45	112.17	117.40
1	N	467	U	C2-N1-C1'	10.46	130.25	117.70
1	N	864	A	P-O3'-C3'	10.45	132.25	119.70
1	N	1283	U	O4'-C1'-N1	10.45	116.56	108.20
1	N	525	C	O4'-C1'-N1	10.45	116.56	108.20
1	N	675	A	C5-C6-N1	-10.45	112.48	117.70
1	N	776	G	P-O5'-C5'	10.45	137.62	120.90
1	N	766	A	N1-C6-N6	10.45	124.87	118.60
1	N	702	A	C5-C6-N1	-10.45	112.48	117.70
1	N	1460	C	N3-C4-C5	-10.44	117.72	121.90
1	N	1483	A	C5-C6-N6	-10.44	115.35	123.70
1	N	512	U	C5-C4-O4	10.43	132.16	125.90
1	N	890	G	C8-N9-C4	-10.43	102.23	106.40
1	N	967	C	N1-C2-O2	10.43	125.16	118.90
1	N	491	G	C4-C5-N7	10.43	114.97	110.80
1	N	840	C	N3-C4-C5	-10.42	117.73	121.90
1	N	4	U	O4'-C1'-N1	10.42	116.54	108.20
1	N	1377	A	N1-C2-N3	10.42	134.51	129.30
1	N	1090	U	O4'-C1'-N1	10.42	116.53	108.20
1	N	950	U	N1-C2-N3	10.42	121.15	114.90
1	N	1531	A	N9-C4-C5	10.42	109.97	105.80
1	N	773	G	N1-C6-O6	10.41	126.15	119.90
1	N	1422	G	O4'-C1'-N9	10.41	116.53	108.20
1	N	670	G	N1-C2-N3	-10.41	117.66	123.90
1	N	751	U	C5-C6-N1	10.41	127.90	122.70
1	N	871	U	O4'-C1'-N1	10.41	116.53	108.20
1	N	136	C	O4'-C1'-N1	10.40	116.52	108.20
1	N	1260	G	C5-C6-O6	-10.40	122.36	128.60
1	N	1329	A	C4-C5-C6	10.40	122.20	117.00
1	N	362	G	N1-C2-N3	-10.39	117.66	123.90
1	N	1188	A	C5-C6-N6	-10.39	115.39	123.70
1	N	1196	A	N1-C6-N6	10.39	124.84	118.60
1	N	1335	U	C2-N3-C4	-10.39	120.77	127.00
1	N	623	C	N3-C4-C5	-10.38	117.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1339	A	C5-C6-N6	-10.38	115.39	123.70
1	N	1499	A	C5-C6-N6	-10.38	115.39	123.70
1	N	650	G	C5-C6-O6	-10.38	122.37	128.60
1	N	824	G	C6-N1-C2	10.37	131.32	125.10
1	N	1350	A	C4-C5-C6	10.37	122.19	117.00
1	N	1423	G	N1-C6-O6	10.37	126.12	119.90
1	N	42	G	N7-C8-N9	-10.37	107.92	113.10
1	N	198	G	O4'-C1'-N9	10.37	116.49	108.20
1	N	796	C	O4'-C1'-N1	10.37	116.49	108.20
1	N	1277	C	O4'-C1'-N1	10.37	116.49	108.20
1	N	1418	A	N1-C6-N6	10.37	124.82	118.60
1	N	472	U	O4'-C1'-N1	10.36	116.49	108.20
1	N	40	C	C6-N1-C2	-10.36	116.16	120.30
1	N	1073	U	C5-C6-N1	10.36	127.88	122.70
1	N	318	G	C5-C6-O6	-10.36	122.39	128.60
1	N	1214	C	C5-C4-N4	-10.36	112.95	120.20
1	N	1302	C	N3-C4-C5	-10.36	117.76	121.90
1	N	151	A	N1-C6-N6	10.36	124.81	118.60
1	N	334	C	O4'-C1'-N1	10.35	116.48	108.20
1	N	1227	A	N1-C6-N6	10.35	124.81	118.60
1	N	1258	G	N3-C2-N2	10.35	127.14	119.90
1	N	961	U	O4'-C1'-N1	10.35	116.48	108.20
1	N	1312	G	C5-C6-O6	-10.35	122.39	128.60
1	N	560	A	N9-C4-C5	10.34	109.94	105.80
1	N	204	G	C2-N3-C4	-10.34	106.73	111.90
1	N	318	G	O4'-C1'-N9	10.34	116.47	108.20
1	N	451	A	C5-C6-N6	-10.34	115.43	123.70
1	N	945	G	C6-C5-N7	-10.34	124.20	130.40
1	N	1283	U	P-O5'-C5'	10.34	137.44	120.90
1	N	74	A	N1-C6-N6	10.34	124.80	118.60
1	N	551	U	O4'-C1'-N1	10.34	116.47	108.20
1	N	1494	G	C8-N9-C4	-10.34	102.27	106.40
1	N	706	A	N1-C6-N6	10.34	124.80	118.60
1	N	966	G	C4-C5-N7	10.34	114.93	110.80
1	N	42	G	C5-N7-C8	10.33	109.47	104.30
1	N	290	C	N3-C4-C5	-10.33	117.77	121.90
1	N	1185	G	C4-C5-N7	-10.33	106.67	110.80
1	N	130	A	C5-C6-N6	-10.33	115.44	123.70
1	N	565	U	O4'-C1'-N1	10.33	116.46	108.20
1	N	362	G	N9-C4-C5	10.32	109.53	105.40
1	N	361	G	N1-C2-N3	-10.32	117.71	123.90
1	N	803	G	O4'-C1'-N9	10.32	116.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	965	U	O4'-C1'-N1	10.31	116.45	108.20
1	N	651	C	C2-N3-C4	10.31	125.05	119.90
1	N	558	G	N1-C6-O6	10.30	126.08	119.90
1	N	529	G	N1-C6-O6	10.30	126.08	119.90
1	N	1435	G	C5-C6-O6	-10.30	122.42	128.60
1	N	1305	G	N1-C6-O6	10.29	126.08	119.90
1	N	410	G	C5-C6-N1	-10.29	106.36	111.50
1	N	974	A	N7-C8-N9	10.29	118.94	113.80
1	N	1103	C	N3-C4-N4	10.29	125.20	118.00
1	N	280	C	O4'-C1'-N1	10.28	116.43	108.20
1	N	614	C	C5-C4-N4	-10.28	113.00	120.20
1	N	60	A	C5-C6-N6	-10.28	115.47	123.70
1	N	847	G	N9-C4-C5	-10.28	101.29	105.40
1	N	6	G	N1-C6-O6	10.28	126.07	119.90
1	N	656	G	C8-N9-C4	-10.27	102.29	106.40
1	N	558	G	C5-C6-O6	-10.27	122.44	128.60
1	N	264	C	P-O5'-C5'	10.27	137.33	120.90
1	N	395	C	N3-C4-N4	10.27	125.19	118.00
1	N	918	A	N1-C6-N6	10.27	124.76	118.60
1	N	221	C	C5-C6-N1	10.26	126.13	121.00
1	N	950	U	O4'-C1'-N1	10.26	116.41	108.20
1	N	1142	G	C5-C6-O6	-10.26	122.44	128.60
1	N	561	U	P-O3'-C3'	10.26	132.01	119.70
1	N	917	G	C5-C6-O6	-10.26	122.45	128.60
1	N	1392	G	N7-C8-N9	10.26	118.23	113.10
1	N	1513	A	N1-C6-N6	10.26	124.75	118.60
1	N	448	A	C6-N1-C2	-10.25	112.45	118.60
1	N	525	C	C2-N3-C4	10.25	125.03	119.90
1	N	298	A	P-O3'-C3'	10.24	131.99	119.70
1	N	8	A	O4'-C1'-N9	10.24	116.39	108.20
1	N	153	C	C5-C4-N4	-10.24	113.03	120.20
1	N	1163	A	C5-C6-N1	-10.24	112.58	117.70
1	N	1439	G	N3-C2-N2	10.24	127.07	119.90
1	N	1310	G	C4-C5-N7	-10.23	106.71	110.80
1	N	1335	U	O4'-C1'-N1	10.23	116.39	108.20
1	N	95	C	O4'-C1'-N1	10.23	116.39	108.20
1	N	262	A	O4'-C1'-N9	10.23	116.39	108.20
1	N	790	A	N1-C6-N6	10.23	124.74	118.60
1	N	1146	A	C4-C5-C6	10.23	122.12	117.00
1	N	915	A	N1-C6-N6	10.23	124.74	118.60
1	N	1311	A	C5-C6-N1	-10.22	112.59	117.70
1	N	801	U	O4'-C1'-N1	10.22	116.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	513	C	C6-N1-C2	-10.22	116.21	120.30
1	N	913	A	N1-C6-N6	10.22	124.73	118.60
1	N	561	U	N3-C2-O2	10.22	129.35	122.20
1	N	1003	G	C5-C6-O6	-10.22	122.47	128.60
1	N	56	U	O4'-C1'-N1	10.21	116.37	108.20
1	N	364	A	O4'-C1'-N9	10.21	116.37	108.20
1	N	1095	U	C6-N1-C2	10.21	127.13	121.00
1	N	448	A	C5-C6-N6	-10.21	115.53	123.70
1	N	1327	C	C6-N1-C2	10.21	124.38	120.30
1	N	968	A	C5-C6-N1	-10.21	112.59	117.70
1	N	1327	C	C5-C4-N4	-10.21	113.06	120.20
1	N	334	C	N3-C4-C5	-10.21	117.82	121.90
1	N	526	C	C2-N3-C4	-10.20	114.80	119.90
1	N	1210	C	C5-C6-N1	10.20	126.10	121.00
1	N	1231	G	C5-N7-C8	-10.20	99.20	104.30
1	N	105	G	P-O3'-C3'	10.20	131.94	119.70
1	N	582	C	N3-C4-C5	-10.19	117.82	121.90
1	N	663	A	N1-C6-N6	10.19	124.72	118.60
1	N	1293	C	O4'-C1'-N1	10.19	116.35	108.20
1	N	362	G	C2-N3-C4	10.19	117.00	111.90
1	N	685	G	C5-C6-O6	-10.19	122.49	128.60
1	N	1365	G	O4'-C1'-N9	10.19	116.35	108.20
1	N	874	G	C6-N1-C2	10.18	131.21	125.10
1	N	50	A	C5-C6-N1	-10.18	112.61	117.70
1	N	456	A	C5-C6-N1	-10.18	112.61	117.70
1	N	1150	A	N3-C4-C5	-10.18	119.67	126.80
1	N	1388	C	O4'-C1'-N1	10.18	116.35	108.20
1	N	1359	C	C4-C5-C6	-10.18	112.31	117.40
1	N	68	G	N1-C6-O6	10.18	126.01	119.90
1	N	559	A	N1-C6-N6	10.18	124.71	118.60
1	N	806	C	O4'-C1'-N1	10.18	116.34	108.20
1	N	920	U	N3-C2-O2	10.18	129.32	122.20
1	N	1150	A	N1-C2-N3	10.18	134.39	129.30
1	N	1037	C	C6-N1-C2	-10.18	116.23	120.30
1	N	1004	A	N1-C6-N6	10.17	124.70	118.60
1	N	1278	G	N1-C2-N3	-10.17	117.80	123.90
1	N	1385	G	N3-C2-N2	10.17	127.02	119.90
1	N	205	A	C4-C5-C6	10.17	122.08	117.00
1	N	974	A	P-O3'-C3'	10.17	131.90	119.70
1	N	63	C	C5-C4-N4	-10.16	113.08	120.20
1	N	1416	G	N1-C6-O6	10.16	126.00	119.90
1	N	299	G	N3-C2-N2	10.16	127.01	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	541	G	O4'-C1'-N9	10.16	116.33	108.20
1	N	396	C	C5-C6-N1	10.16	126.08	121.00
1	N	523	A	C8-N9-C4	-10.16	101.74	105.80
1	N	1394	A	N9-C4-C5	-10.15	101.74	105.80
1	N	139	A	O4'-C1'-N9	10.15	116.32	108.20
1	N	516	U	O4'-C1'-N1	10.15	116.32	108.20
1	N	573	A	C5-C6-N6	-10.15	115.58	123.70
1	N	575	G	C5-C6-O6	-10.15	122.51	128.60
1	N	1516	G	N3-C2-N2	10.15	127.00	119.90
1	N	1525	G	O4'-C1'-N9	10.15	116.32	108.20
1	N	10	A	C5-C6-N1	-10.15	112.63	117.70
1	N	468	A	N1-C6-N6	10.14	124.69	118.60
1	N	455	G	N1-C6-O6	10.14	125.98	119.90
1	N	835	U	O4'-C1'-N1	10.14	116.31	108.20
1	N	906	A	C5-C6-N1	-10.14	112.63	117.70
1	N	151	A	C6-N1-C2	-10.13	112.52	118.60
1	N	1223	C	O4'-C1'-N1	10.13	116.31	108.20
1	N	1292	G	C5-C6-O6	-10.13	122.52	128.60
1	N	1359	C	C5-C6-N1	10.13	126.06	121.00
1	N	674	G	P-O5'-C5'	10.12	137.10	120.90
1	N	126	G	C2-N3-C4	-10.12	106.84	111.90
1	N	376	G	C5-C6-O6	-10.12	122.53	128.60
1	N	644	U	O4'-C1'-N1	10.12	116.30	108.20
1	N	21	G	C8-N9-C4	-10.12	102.35	106.40
1	N	1069	C	O4'-C1'-N1	10.11	116.29	108.20
1	N	684	U	O4'-C1'-N1	10.11	116.29	108.20
1	N	469	C	N3-C4-N4	10.11	125.07	118.00
1	N	376	G	N1-C2-N3	-10.10	117.84	123.90
1	N	896	C	P-O5'-C5'	10.10	137.07	120.90
1	N	1531	A	C5-C6-N6	-10.10	115.62	123.70
1	N	169	C	O4'-C1'-N1	10.09	116.28	108.20
1	N	170	U	C2-N3-C4	-10.09	120.94	127.00
1	N	211	G	C8-N9-C1'	-10.09	113.88	127.00
1	N	632	U	N1-C2-N3	-10.09	108.85	114.90
1	N	660	C	C5-C4-N4	-10.09	113.14	120.20
1	N	90	C	O4'-C1'-N1	-10.09	100.13	108.20
1	N	626	G	N3-C2-N2	10.09	126.96	119.90
1	N	761	G	C5-C6-O6	-10.09	122.55	128.60
1	N	1042	A	P-O5'-C5'	10.09	137.04	120.90
1	N	1496	C	O4'-C1'-N1	10.09	116.27	108.20
1	N	1229	A	C5-C6-N6	-10.09	115.63	123.70
1	N	770	C	C6-N1-C2	-10.08	116.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	945	G	C4-C5-C6	10.08	124.85	118.80
1	N	994	A	N7-C8-N9	10.08	118.84	113.80
1	N	1166	G	N3-C4-C5	-10.08	123.56	128.60
1	N	45	G	N9-C4-C5	-10.07	101.37	105.40
1	N	152	A	N1-C6-N6	10.07	124.64	118.60
1	N	948	C	N3-C4-C5	-10.07	117.87	121.90
1	N	1114	C	C6-N1-C2	-10.07	116.27	120.30
1	N	68	G	N9-C4-C5	-10.07	101.37	105.40
1	N	885	G	C3'-C2'-C1'	-10.07	93.44	101.50
1	N	895	G	C5-C6-N1	-10.07	106.46	111.50
1	N	428	G	P-O3'-C3'	10.07	131.78	119.70
1	N	414	A	C4-C5-C6	10.07	122.03	117.00
1	N	670	G	C8-N9-C4	10.07	110.43	106.40
1	N	1166	G	C8-N9-C4	-10.07	102.37	106.40
1	N	1206	G	C5'-C4'-O4'	10.06	121.18	109.10
1	N	502	A	N7-C8-N9	-10.06	108.77	113.80
1	N	844	G	C2-N3-C4	10.06	116.93	111.90
1	N	1193	G	C6-C5-N7	-10.06	124.36	130.40
1	N	1136	C	C2-N1-C1'	10.06	129.86	118.80
1	N	1529	G	C5-C6-O6	-10.06	122.56	128.60
1	N	429	U	O4'-C1'-N1	10.05	116.24	108.20
1	N	1064	G	N3-C2-N2	10.05	126.94	119.90
1	N	51	A	N7-C8-N9	-10.05	108.78	113.80
1	N	1520	C	N3-C4-N4	10.05	125.03	118.00
1	N	65	A	N1-C6-N6	10.04	124.63	118.60
1	N	609	A	C5-N7-C8	10.04	108.92	103.90
1	N	1259	C	C2-N3-C4	10.04	124.92	119.90
1	N	139	A	C5-C6-N1	-10.04	112.68	117.70
1	N	1392	G	N1-C6-O6	10.03	125.92	119.90
1	N	36	C	N1-C2-O2	-10.03	112.88	118.90
1	N	228	A	C2-N3-C4	-10.03	105.59	110.60
1	N	1516	G	C2-N3-C4	10.03	116.91	111.90
1	N	704	A	O4'-C1'-N9	10.02	116.22	108.20
1	N	919	A	N1-C2-N3	10.02	134.31	129.30
1	N	897	C	N3-C4-N4	10.02	125.01	118.00
1	N	841	C	C2-N1-C1'	10.02	129.82	118.80
1	N	1270	G	C5-C6-O6	-10.02	122.59	128.60
1	N	532	A	N9-C4-C5	-10.01	101.80	105.80
1	N	42	G	N3-C2-N2	10.01	126.91	119.90
1	N	1361	G	N3-C4-C5	-10.01	123.59	128.60
1	N	364	A	C8-N9-C4	10.01	109.80	105.80
1	N	688	G	O4'-C1'-N9	10.01	116.21	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	142	G	O4'-C1'-N9	10.01	116.20	108.20
1	N	1358	U	C5-C6-N1	10.01	127.70	122.70
1	N	480	U	O4'-C1'-N1	10.00	116.20	108.20
1	N	1160	G	O4'-C1'-N9	10.00	116.20	108.20
1	N	814	A	C5-C6-N6	-10.00	115.70	123.70
1	N	1274	A	C5-C6-N6	-10.00	115.70	123.70
1	N	905	U	O4'-C1'-N1	10.00	116.20	108.20
1	N	975	A	C5-C6-N1	-10.00	112.70	117.70
1	N	1252	A	N1-C6-N6	10.00	124.60	118.60
1	N	894	G	C3'-C2'-C1'	-9.99	93.50	101.50
1	N	532	A	N1-C6-N6	9.99	124.60	118.60
1	N	1152	A	O4'-C1'-N9	9.99	116.19	108.20
1	N	1478	U	N3-C4-C5	-9.99	108.60	114.60
1	N	1168	U	P-O3'-C3'	9.99	131.69	119.70
1	N	218	U	O4'-C1'-N1	9.99	116.19	108.20
1	N	1002	G	N1-C2-N3	-9.99	117.91	123.90
1	N	38	G	C6-C5-N7	-9.99	124.41	130.40
1	N	1016	A	P-O3'-C3'	9.98	131.68	119.70
1	N	1064	G	C5'-C4'-C3'	9.98	131.96	116.00
1	N	2	A	N9-C4-C5	9.97	109.79	105.80
1	N	319	G	C8-N9-C4	-9.97	102.41	106.40
1	N	315	A	P-O5'-C5'	9.97	136.85	120.90
1	N	944	G	N7-C8-N9	-9.97	108.12	113.10
1	N	99	C	C2-N3-C4	9.96	124.88	119.90
1	N	719	C	N3-C4-N4	9.96	124.97	118.00
1	N	769	G	C4-C5-C6	9.96	124.78	118.80
1	N	1013	G	N1-C2-N3	-9.96	117.92	123.90
1	N	668	G	N9-C4-C5	-9.96	101.42	105.40
1	N	1357	A	N1-C2-N3	-9.96	124.32	129.30
1	N	75	G	O4'-C1'-N9	9.95	116.16	108.20
1	N	540	G	N9-C4-C5	9.96	109.38	105.40
1	N	1086	U	C5'-C4'-C3'	-9.96	100.07	116.00
1	N	1412	C	C6-N1-C2	-9.95	116.32	120.30
1	N	496	A	C5-C6-N1	-9.95	112.72	117.70
1	N	687	A	C5-C6-N6	-9.95	115.74	123.70
1	N	737	C	O4'-C1'-N1	9.95	116.16	108.20
1	N	879	C	N3-C4-N4	9.95	124.97	118.00
1	N	841	C	C2-N3-C4	9.95	124.88	119.90
1	N	1426	G	N1-C2-N3	-9.95	117.93	123.90
1	N	1319	A	C4-C5-N7	-9.95	105.73	110.70
1	N	907	A	C5-N7-C8	9.95	108.87	103.90
1	N	372	C	C6-N1-C2	9.94	124.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	497	G	N1-C2-N3	-9.94	117.94	123.90
1	N	959	A	N9-C4-C5	-9.94	101.83	105.80
1	N	1434	A	O4'-C1'-N9	9.94	116.15	108.20
1	N	176	C	N3-C4-C5	9.93	125.87	121.90
1	N	686	U	P-O3'-C3'	9.93	131.61	119.70
1	N	850	U	C5-C6-N1	9.93	127.66	122.70
1	N	541	G	N9-C4-C5	9.92	109.37	105.40
1	N	597	G	N1-C2-N3	-9.92	117.95	123.90
1	N	605	U	P-O3'-C3'	9.92	131.61	119.70
1	N	914	A	C2-N3-C4	9.92	115.56	110.60
1	N	1458	G	C5-C6-O6	-9.92	122.65	128.60
1	N	623	C	O4'-C1'-N1	9.92	116.14	108.20
1	N	203	G	N1-C6-O6	9.92	125.85	119.90
1	N	1163	A	N1-C2-N3	9.92	134.26	129.30
1	N	279	A	C5-N7-C8	9.91	108.86	103.90
1	N	296	U	O4'-C1'-N1	9.91	116.13	108.20
1	N	1132	C	O4'-C1'-N1	9.91	116.13	108.20
1	N	1124	G	O4'-C1'-N9	9.91	116.13	108.20
1	N	89	U	N3-C4-O4	9.91	126.34	119.40
1	N	1138	G	C5-C6-O6	-9.91	122.66	128.60
1	N	230	G	C8-N9-C4	-9.91	102.44	106.40
1	N	860	A	C5-C6-N6	-9.91	115.77	123.70
1	N	748	G	N1-C2-N3	-9.91	117.96	123.90
1	N	1350	A	C5-C6-N1	-9.91	112.75	117.70
1	N	907	A	C6-C5-N7	-9.90	125.37	132.30
1	N	1406	U	C5-C4-O4	-9.90	119.96	125.90
1	N	187	G	N1-C6-O6	9.90	125.84	119.90
1	N	420	U	O4'-C1'-N1	9.90	116.12	108.20
1	N	401	C	C2-N3-C4	9.89	124.85	119.90
1	N	722	G	N7-C8-N9	9.89	118.05	113.10
1	N	848	C	O4'-C1'-N1	9.89	116.11	108.20
1	N	985	C	O4'-C1'-N1	9.89	116.11	108.20
1	N	163	C	C5-C6-N1	9.88	125.94	121.00
1	N	321	A	C8-N9-C4	-9.88	101.85	105.80
1	N	348	G	C5-C6-N1	-9.88	106.56	111.50
1	N	1003	G	N1-C6-O6	9.88	125.83	119.90
1	N	1263	C	C5-C6-N1	9.88	125.94	121.00
1	N	24	U	O4'-C1'-N1	9.88	116.10	108.20
1	N	1206	G	C4-C5-N7	9.88	114.75	110.80
1	N	642	A	C4-C5-C6	9.88	121.94	117.00
1	N	1419	G	C5-C6-O6	-9.88	122.67	128.60
1	N	871	U	C6-N1-C2	-9.87	115.08	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1185	G	N9-C4-C5	9.87	109.35	105.40
1	N	658	C	N3-C4-N4	9.87	124.91	118.00
1	N	735	C	O4'-C1'-N1	9.87	116.09	108.20
1	N	1256	A	O4'-C1'-N9	9.87	116.09	108.20
1	N	1500	A	N1-C6-N6	9.87	124.52	118.60
1	N	1064	G	C4-C5-N7	9.87	114.75	110.80
1	N	230	G	N1-C6-O6	9.86	125.82	119.90
1	N	904	U	N1-C2-N3	-9.86	108.98	114.90
1	N	1491	G	N3-C4-C5	-9.86	123.67	128.60
1	N	895	G	C8-N9-C4	9.86	110.34	106.40
1	N	22	G	N3-C2-N2	9.86	126.80	119.90
1	N	1214	C	N3-C4-N4	9.86	124.90	118.00
1	N	1516	G	N1-C2-N3	-9.86	117.98	123.90
1	N	102	G	N3-C2-N2	9.85	126.80	119.90
1	N	1399	C	C6-N1-C2	9.85	124.24	120.30
1	N	332	G	O4'-C1'-N9	9.85	116.08	108.20
1	N	206	C	C6-N1-C2	9.85	124.24	120.30
1	N	262	A	C4-C5-C6	9.85	121.92	117.00
1	N	1504	G	C5-C6-O6	-9.85	122.69	128.60
1	N	695	A	N1-C6-N6	9.84	124.50	118.60
1	N	986	U	P-O5'-C5'	9.84	136.64	120.90
1	N	160	A	C5-C6-N6	-9.84	115.83	123.70
1	N	401	C	O4'-C1'-N1	9.84	116.07	108.20
1	N	1158	C	C4-C5-C6	-9.84	112.48	117.40
1	N	347	G	C5-C6-O6	-9.83	122.70	128.60
1	N	779	C	C5-C4-N4	-9.83	113.32	120.20
1	N	1529	G	N1-C2-N3	-9.83	118.00	123.90
1	N	570	G	N1-C6-O6	9.82	125.80	119.90
1	N	749	A	C4-C5-C6	9.82	121.91	117.00
1	N	7	A	C4-C5-N7	-9.82	105.79	110.70
1	N	11	G	O4'-C1'-N9	9.82	116.06	108.20
1	N	230	G	C4'-C3'-C2'	-9.82	92.78	102.60
1	N	988	G	C5-N7-C8	9.82	109.21	104.30
1	N	1234	C	O4'-C1'-N1	9.82	116.06	108.20
1	N	1255	G	N9-C4-C5	-9.82	101.47	105.40
1	N	207	C	C2-N1-C1'	9.82	129.60	118.80
1	N	468	A	O4'-C1'-N9	9.82	116.06	108.20
1	N	608	A	C5-C6-N1	-9.82	112.79	117.70
1	N	649	A	C4-C5-C6	9.82	121.91	117.00
1	N	861	G	O4'-C1'-N9	9.81	116.05	108.20
1	N	1499	A	N1-C2-N3	9.81	134.21	129.30
1	N	710	G	N1-C6-O6	9.81	125.79	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	112	G	C3'-C2'-C1'	-9.81	93.65	101.50
1	N	198	G	C8-N9-C4	9.81	110.32	106.40
1	N	1459	G	N7-C8-N9	9.80	118.00	113.10
1	N	596	A	C5-C6-N6	-9.80	115.86	123.70
1	N	958	A	C4-C5-C6	9.80	121.90	117.00
1	N	949	A	C8-N9-C4	-9.80	101.88	105.80
1	N	94	G	N1-C6-O6	9.80	125.78	119.90
1	N	406	G	C4-C5-C6	9.80	124.68	118.80
1	N	901	A	C4-C5-C6	9.80	121.90	117.00
1	N	1384	C	C5-C6-N1	9.79	125.89	121.00
1	N	891	U	O4'-C1'-N1	9.79	116.03	108.20
1	N	876	C	N3-C2-O2	9.79	128.75	121.90
1	N	1271	A	C2-N3-C4	9.79	115.49	110.60
1	N	1418	A	C8-N9-C4	-9.78	101.89	105.80
1	N	869	G	C4-C5-C6	9.78	124.67	118.80
1	N	544	G	C5-C6-O6	-9.78	122.73	128.60
1	N	1142	G	N7-C8-N9	9.78	117.99	113.10
1	N	1315	U	O4'-C1'-N1	9.78	116.02	108.20
1	N	1434	A	C5-N7-C8	9.78	108.79	103.90
1	N	1360	A	N1-C6-N6	9.77	124.46	118.60
1	N	533	A	C4-C5-C6	9.77	121.88	117.00
1	N	1162	C	N3-C4-C5	-9.76	118.00	121.90
1	N	648	A	N1-C6-N6	9.76	124.46	118.60
1	N	47	C	O4'-C1'-N1	9.76	116.00	108.20
1	N	1268	G	C5-N7-C8	9.76	109.18	104.30
1	N	1491	G	C2-N3-C4	9.76	116.78	111.90
1	N	25	C	O4'-C1'-N1	9.75	116.00	108.20
1	N	397	A	N1-C6-N6	9.75	124.45	118.60
1	N	1146	A	N9-C4-C5	9.75	109.70	105.80
1	N	1518	A	C4-C5-C6	9.75	121.88	117.00
1	N	151	A	C5-N7-C8	9.74	108.77	103.90
1	N	920	U	O4'-C1'-N1	9.74	116.00	108.20
1	N	1002	G	C8-N9-C4	9.74	110.30	106.40
1	N	576	C	P-O3'-C3'	9.74	131.39	119.70
1	N	630	A	O4'-C4'-C3'	-9.74	94.26	104.00
1	N	6	G	C6-C5-N7	-9.74	124.56	130.40
1	N	1401	G	N3-C2-N2	9.74	126.72	119.90
1	N	638	U	O4'-C1'-N1	9.73	115.99	108.20
1	N	280	C	P-O3'-C3'	9.73	131.38	119.70
1	N	218	U	C2-N3-C4	9.73	132.84	127.00
1	N	667	G	C2-N3-C4	-9.72	107.04	111.90
1	N	128	G	N9-C4-C5	-9.72	101.51	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	872	A	N7-C8-N9	-9.72	108.94	113.80
1	N	635	A	C6-C5-N7	-9.72	125.50	132.30
1	N	1012	A	C8-N9-C4	-9.72	101.91	105.80
1	N	971	G	C5-C6-N1	-9.72	106.64	111.50
1	N	1133	G	C5-C6-N1	-9.71	106.64	111.50
1	N	945	G	N1-C6-O6	9.71	125.73	119.90
1	N	77	A	C5-C6-N6	-9.71	115.93	123.70
1	N	715	A	N1-C2-N3	9.71	134.15	129.30
1	N	795	C	O4'-C1'-N1	9.71	115.96	108.20
1	N	993	G	N1-C6-O6	9.71	125.72	119.90
1	N	1089	G	C8-N9-C4	-9.71	102.52	106.40
1	N	416	G	C6-C5-N7	-9.70	124.58	130.40
1	N	1377	A	N7-C8-N9	-9.70	108.95	113.80
1	N	69	G	C5-C6-O6	-9.70	122.78	128.60
1	N	353	A	C5-C6-N6	-9.70	115.94	123.70
1	N	931	C	N3-C4-C5	-9.70	118.02	121.90
1	N	383	A	C4-C5-N7	-9.70	105.85	110.70
1	N	766	A	O4'-C1'-N9	9.70	115.96	108.20
1	N	220	G	N7-C8-N9	9.69	117.95	113.10
1	N	556	C	N3-C4-C5	-9.69	118.02	121.90
1	N	692	U	N3-C4-O4	9.69	126.18	119.40
1	N	907	A	N3-C4-C5	-9.69	120.02	126.80
1	N	1191	A	C4-C5-C6	9.69	121.84	117.00
1	N	766	A	C4-C5-C6	9.69	121.84	117.00
1	N	1368	A	C2-N3-C4	9.69	115.44	110.60
1	N	1397	C	N3-C4-N4	9.69	124.78	118.00
1	N	1525	G	N1-C6-O6	9.69	125.71	119.90
1	N	257	G	C8-N9-C4	9.68	110.27	106.40
1	N	172	A	N1-C6-N6	9.68	124.41	118.60
1	N	1395	C	P-O3'-C3'	9.68	131.31	119.70
1	N	1493	A	C4-C5-C6	9.68	121.84	117.00
1	N	118	U	C5-C4-O4	-9.67	120.10	125.90
1	N	280	C	C5-C6-N1	9.67	125.83	121.00
1	N	536	C	O4'-C1'-N1	9.66	115.93	108.20
1	N	878	A	P-O5'-C5'	9.66	136.36	120.90
1	N	1487	G	N7-C8-N9	-9.66	108.27	113.10
1	N	1531	A	O4'-C1'-N9	9.66	115.93	108.20
1	N	480	U	C1'-O4'-C4'	-9.66	102.17	109.90
1	N	1516	G	O4'-C1'-N9	9.66	115.93	108.20
1	N	1398	A	C8-N9-C4	-9.66	101.94	105.80
1	N	572	A	N9-C4-C5	9.66	109.66	105.80
1	N	703	G	N3-C2-N2	9.66	126.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1269	A	N1-C6-N6	9.66	124.39	118.60
1	N	665	A	C5-N7-C8	9.65	108.72	103.90
1	N	1329	A	C5-C6-N1	-9.65	112.88	117.70
1	N	1398	A	C5-C6-N6	-9.64	115.98	123.70
1	N	1458	G	N1-C6-O6	9.64	125.69	119.90
1	N	293	G	C2-N3-C4	9.64	116.72	111.90
1	N	513	C	N3-C4-N4	9.64	124.75	118.00
1	N	1228	C	O4'-C1'-N1	9.64	115.91	108.20
1	N	1299	A	C5-C6-N1	-9.64	112.88	117.70
1	N	378	G	O4'-C1'-N9	9.64	115.91	108.20
1	N	859	G	O4'-C1'-N9	9.64	115.91	108.20
1	N	896	C	N3-C4-C5	-9.63	118.05	121.90
1	N	1445	U	O4'-C1'-N1	9.64	115.91	108.20
1	N	202	G	C5-C6-O6	-9.63	122.82	128.60
1	N	457	G	C5-C6-N1	-9.63	106.68	111.50
1	N	731	G	O4'-C1'-N9	9.63	115.91	108.20
1	N	199	A	C5-C6-N1	-9.63	112.89	117.70
1	N	457	G	O4'-C1'-N9	9.62	115.90	108.20
1	N	1019	A	O4'-C1'-N9	9.62	115.90	108.20
1	N	537	G	N1-C6-O6	9.62	125.67	119.90
1	N	738	C	O4'-C1'-N1	9.62	115.89	108.20
1	N	776	G	C6-C5-N7	-9.61	124.63	130.40
1	N	852	G	N1-C6-O6	9.61	125.67	119.90
1	N	540	G	C8-N9-C4	-9.61	102.56	106.40
1	N	640	A	N1-C6-N6	9.61	124.36	118.60
1	N	1214	C	N1-C2-O2	9.61	124.67	118.90
1	N	366	A	C5-C6-N6	-9.61	116.01	123.70
1	N	91	U	O4'-C1'-N1	9.61	115.88	108.20
1	N	1108	G	P-O3'-C3'	9.61	131.22	119.70
1	N	1322	C	C6-N1-C1'	-9.61	109.27	120.80
1	N	970	C	C4-C5-C6	9.60	122.20	117.40
1	N	164	G	C5-C6-N1	-9.60	106.70	111.50
1	N	194	C	N3-C4-N4	9.60	124.72	118.00
1	N	682	G	C8-N9-C4	-9.60	102.56	106.40
1	N	151	A	C8-N9-C4	-9.59	101.96	105.80
1	N	1137	C	N3-C4-N4	9.59	124.71	118.00
1	N	442	G	O4'-C1'-N9	9.59	115.87	108.20
1	N	1100	C	C5-C6-N1	9.59	125.79	121.00
1	N	787	A	O4'-C1'-N9	9.58	115.87	108.20
1	N	893	C	O4'-C1'-N1	9.58	115.86	108.20
1	N	1166	G	N3-C2-N2	9.58	126.61	119.90
1	N	778	G	N3-C2-N2	9.57	126.60	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1107	C	N3-C4-C5	-9.57	118.07	121.90
1	N	1476	A	C5-C6-N6	-9.57	116.04	123.70
1	N	142	G	C6-C5-N7	-9.57	124.66	130.40
1	N	321	A	C4-C5-N7	-9.57	105.92	110.70
1	N	843	U	C2-N1-C1'	9.57	129.18	117.70
1	N	1517	G	N1-C6-O6	9.57	125.64	119.90
1	N	1096	C	N3-C4-N4	9.57	124.70	118.00
1	N	1195	C	O4'-C1'-N1	9.56	115.85	108.20
1	N	154	U	P-O3'-C3'	-9.56	108.23	119.70
1	N	614	C	N3-C4-C5	-9.56	118.08	121.90
1	N	1355	G	C5-C6-O6	-9.56	122.86	128.60
1	N	1353	G	N1-C2-N3	-9.56	118.17	123.90
1	N	791	G	O4'-C1'-N9	9.55	115.84	108.20
1	N	594	U	N1-C2-O2	-9.55	116.11	122.80
1	N	1091	U	O4'-C1'-N1	9.55	115.84	108.20
1	N	315	A	C8-N9-C4	-9.55	101.98	105.80
1	N	484	G	C4-C5-C6	9.55	124.53	118.80
1	N	583	A	N1-C6-N6	9.54	124.33	118.60
1	N	702	A	P-O3'-C3'	9.54	131.15	119.70
1	N	389	A	C5-C6-N6	-9.54	116.07	123.70
1	N	712	A	N1-C2-N3	9.54	134.07	129.30
1	N	968	A	N9-C4-C5	-9.54	101.98	105.80
1	N	1071	C	C6-N1-C2	-9.54	116.49	120.30
1	N	775	G	N1-C2-N3	-9.53	118.18	123.90
1	N	204	G	C5-C6-N1	-9.53	106.73	111.50
1	N	1288	A	N1-C6-N6	9.53	124.32	118.60
1	N	27	G	N1-C2-N3	-9.53	118.18	123.90
1	N	1160	G	C5-C6-O6	-9.53	122.88	128.60
1	N	1453	G	O4'-C1'-N9	9.53	115.82	108.20
1	N	1343	G	C6-C5-N7	-9.53	124.68	130.40
1	N	24	U	C6-N1-C2	-9.53	115.28	121.00
1	N	127	G	N3-C2-N2	9.53	126.57	119.90
1	N	271	C	O4'-C1'-N1	9.53	115.82	108.20
1	N	613	C	N3-C4-N4	9.53	124.67	118.00
1	N	107	G	C5-C6-O6	-9.52	122.89	128.60
1	N	1282	C	C2-N1-C1'	9.52	129.28	118.80
1	N	486	U	C5'-C4'-C3'	-9.52	100.77	116.00
1	N	546	A	C4-C5-C6	9.52	121.76	117.00
1	N	73	C	O4'-C1'-N1	9.52	115.81	108.20
1	N	1243	C	C6-N1-C2	-9.51	116.49	120.30
1	N	581	G	N1-C6-O6	9.51	125.61	119.90
1	N	18	C	C6-N1-C2	9.51	124.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	549	C	O4'-C1'-N1	9.51	115.81	108.20
1	N	1442	G	C8-N9-C4	-9.51	102.59	106.40
1	N	990	C	O4'-C1'-N1	9.51	115.81	108.20
1	N	1316	G	C5-C6-N1	-9.51	106.75	111.50
1	N	172	A	C4-C5-C6	9.50	121.75	117.00
1	N	299	G	C6-C5-N7	-9.50	124.70	130.40
1	N	308	C	C6-N1-C2	-9.50	116.50	120.30
1	N	498	A	C4-C5-N7	-9.50	105.95	110.70
1	N	1349	A	O4'-C1'-N9	9.50	115.80	108.20
1	N	1393	U	P-O3'-C3'	9.50	131.10	119.70
1	N	247	G	C4-C5-N7	-9.49	107.00	110.80
1	N	1013	G	O4'-C1'-N9	9.49	115.79	108.20
1	N	66	A	N1-C2-N3	9.49	134.04	129.30
1	N	1059	C	N3-C4-N4	9.49	124.64	118.00
1	N	1015	G	C4-C5-N7	-9.49	107.01	110.80
1	N	1241	G	N3-C2-N2	9.49	126.54	119.90
1	N	583	A	C4-C5-C6	9.48	121.74	117.00
1	N	1093	A	C5-N7-C8	9.48	108.64	103.90
1	N	623	C	C2-N3-C4	9.48	124.64	119.90
1	N	361	G	P-O5'-C5'	9.48	136.06	120.90
1	N	344	A	C4-C5-C6	9.48	121.74	117.00
1	N	214	C	C1'-O4'-C4'	-9.47	102.32	109.90
1	N	435	A	C5-C6-N6	-9.47	116.12	123.70
1	N	761	G	N9-C4-C5	-9.47	101.61	105.40
1	N	1215	G	C5-C6-O6	-9.47	122.92	128.60
1	N	1310	G	C5-C6-O6	-9.47	122.92	128.60
1	N	1530	G	O4'-C1'-N9	9.47	115.78	108.20
1	N	16	A	C2-N3-C4	-9.47	105.86	110.60
1	N	186	C	N3-C4-N4	9.47	124.63	118.00
1	N	459	A	C4-C5-C6	9.47	121.73	117.00
1	N	1201	A	C5-C6-N1	-9.47	112.96	117.70
1	N	1181	G	N3-C4-C5	9.47	133.34	128.60
1	N	1314	C	C2-N3-C4	9.47	124.64	119.90
1	N	133	U	O4'-C1'-N1	9.47	115.78	108.20
1	N	430	A	N1-C6-N6	9.47	124.28	118.60
1	N	198	G	N3-C2-N2	9.46	126.53	119.90
1	N	836	G	O4'-C1'-N9	9.46	115.77	108.20
1	N	318	G	N9-C4-C5	-9.46	101.61	105.40
1	N	1294	G	N1-C2-N3	-9.46	118.22	123.90
1	N	1318	A	P-O5'-C5'	9.46	136.04	120.90
1	N	1363	A	C4-C5-C6	9.46	121.73	117.00
1	N	1501	C	C2-N3-C4	9.46	124.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	922	G	C5-C6-O6	-9.46	122.92	128.60
1	N	305	G	C5-C6-O6	-9.46	122.93	128.60
1	N	270	A	C6-C5-N7	-9.45	125.68	132.30
1	N	273	U	O4'-C1'-N1	9.45	115.76	108.20
1	N	1349	A	C5-C6-N6	-9.46	116.14	123.70
1	N	1416	G	C6-C5-N7	-9.45	124.73	130.40
1	N	1524	C	N3-C4-N4	9.45	124.62	118.00
1	N	158	G	N1-C6-O6	9.45	125.57	119.90
1	N	888	G	N3-C2-N2	9.45	126.51	119.90
1	N	1148	U	C5-C6-N1	9.45	127.42	122.70
1	N	161	A	C5-C6-N1	-9.45	112.98	117.70
1	N	320	A	C5-N7-C8	9.44	108.62	103.90
1	N	579	A	O4'-C1'-N9	9.44	115.75	108.20
1	N	1279	G	C2-N3-C4	-9.45	107.18	111.90
1	N	1388	C	C5-C4-N4	-9.44	113.59	120.20
1	N	1500	A	O4'-C1'-N9	9.44	115.75	108.20
1	N	853	C	N3-C4-C5	-9.44	118.12	121.90
1	N	1457	G	C1'-O4'-C4'	-9.44	102.35	109.90
1	N	316	C	C5'-C4'-C3'	-9.44	100.90	116.00
1	N	399	G	C8-N9-C4	-9.43	102.63	106.40
1	N	1534	A	C5-C6-N6	-9.43	116.15	123.70
1	N	766	A	N9-C4-C5	9.43	109.57	105.80
1	N	333	U	O4'-C1'-N1	9.43	115.74	108.20
1	N	1459	G	C5-C6-N1	-9.43	106.79	111.50
1	N	172	A	C3'-C2'-C1'	9.42	109.04	101.50
1	N	1176	A	C5-C6-N6	-9.42	116.16	123.70
1	N	529	G	C5-C6-N1	-9.42	106.79	111.50
1	N	132	C	N3-C4-N4	9.42	124.59	118.00
1	N	1304	G	N1-C6-O6	9.42	125.55	119.90
1	N	143	A	C5-C6-N1	-9.42	112.99	117.70
1	N	1109	C	O4'-C1'-N1	9.42	115.73	108.20
1	N	1501	C	C5-C4-N4	-9.41	113.61	120.20
1	N	119	A	C5-N7-C8	9.41	108.61	103.90
1	N	719	C	N3-C4-C5	-9.41	118.14	121.90
1	N	1141	C	O4'-C1'-N1	9.41	115.73	108.20
1	N	882	C	O4'-C1'-N1	9.41	115.73	108.20
1	N	1100	C	P-O5'-C5'	9.41	135.95	120.90
1	N	164	G	C2-N3-C4	-9.41	107.20	111.90
1	N	635	A	N1-C2-N3	9.40	134.00	129.30
1	N	901	A	N1-C6-N6	9.40	124.24	118.60
1	N	100	G	N9-C4-C5	-9.40	101.64	105.40
1	N	690	G	C6-C5-N7	-9.40	124.76	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	872	A	C5-C6-N6	-9.40	116.18	123.70
1	N	1268	G	C4-C5-N7	-9.40	107.04	110.80
1	N	1081	A	N1-C6-N6	9.40	124.24	118.60
1	N	1388	C	C5-C6-N1	9.40	125.70	121.00
1	N	98	A	C4-C5-N7	-9.39	106.00	110.70
1	N	213	G	C5-C6-O6	-9.39	122.96	128.60
1	N	1286	U	N3-C2-O2	9.39	128.78	122.20
1	N	613	C	C6-N1-C2	-9.39	116.54	120.30
1	N	1063	C	N3-C4-C5	-9.39	118.14	121.90
1	N	785	G	N1-C6-O6	9.39	125.53	119.90
1	N	1130	A	C5-N7-C8	9.39	108.60	103.90
1	N	50	A	N3-C4-C5	-9.39	120.23	126.80
1	N	406	G	C6-C5-N7	-9.39	124.77	130.40
1	N	269	C	O4'-C1'-N1	9.38	115.71	108.20
1	N	334	C	N3-C2-O2	9.38	128.47	121.90
1	N	971	G	C4-C5-C6	9.38	124.43	118.80
1	N	1396	A	O4'-C1'-N9	9.38	115.71	108.20
1	N	1358	U	C6-N1-C2	-9.38	115.37	121.00
1	N	513	C	N3-C4-C5	-9.38	118.15	121.90
1	N	1037	C	P-O3'-C3'	9.38	130.96	119.70
1	N	1144	G	N7-C8-N9	9.38	117.79	113.10
1	N	1492	A	N1-C6-N6	9.38	124.23	118.60
1	N	45	G	N7-C8-N9	-9.38	108.41	113.10
1	N	436	C	N3-C4-N4	9.37	124.56	118.00
1	N	1006	G	C5-C6-O6	-9.38	122.97	128.60
1	N	768	A	N1-C6-N6	9.37	124.22	118.60
1	N	1049	U	N1-C2-O2	9.37	129.36	122.80
1	N	637	C	O4'-C1'-N1	9.37	115.70	108.20
1	N	1119	C	C5-C6-N1	9.37	125.69	121.00
1	N	135	C	O4'-C1'-N1	9.37	115.70	108.20
1	N	1400	C	C6-N1-C2	9.37	124.05	120.30
1	N	1325	C	C5-C4-N4	-9.37	113.64	120.20
1	N	881	G	N1-C6-O6	9.36	125.52	119.90
1	N	1120	C	N3-C4-C5	-9.36	118.16	121.90
1	N	44	A	C2-N3-C4	-9.36	105.92	110.60
1	N	1274	A	P-O5'-C5'	9.36	135.87	120.90
1	N	1051	C	O4'-C1'-N1	9.36	115.69	108.20
1	N	769	G	C5-C6-N1	-9.36	106.82	111.50
1	N	1228	C	C5-C4-N4	-9.36	113.65	120.20
1	N	213	G	C6-C5-N7	-9.35	124.79	130.40
1	N	227	G	C5-C6-O6	-9.35	122.99	128.60
1	N	1007	U	C3'-C2'-C1'	9.35	108.98	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1142	G	N1-C6-O6	9.35	125.51	119.90
1	N	1227	A	C3'-C2'-C1'	-9.35	94.02	101.50
1	N	1448	C	N3-C4-N4	9.35	124.55	118.00
1	N	468	A	C5-C6-N6	-9.35	116.22	123.70
1	N	833	G	C6-C5-N7	-9.35	124.79	130.40
1	N	706	A	C5-C6-N1	-9.35	113.03	117.70
1	N	163	C	C6-N1-C2	-9.35	116.56	120.30
1	N	566	G	C2-N3-C4	9.34	116.57	111.90
1	N	1304	G	N1-C2-N3	-9.34	118.29	123.90
1	N	1457	G	N1-C6-O6	9.34	125.51	119.90
1	N	631	C	O4'-C1'-N1	9.34	115.67	108.20
1	N	1361	G	C5-C6-O6	-9.34	123.00	128.60
1	N	214	C	O4'-C1'-N1	9.33	115.67	108.20
1	N	1133	G	N1-C6-O6	9.33	125.50	119.90
1	N	763	G	C4-C5-N7	9.33	114.53	110.80
1	N	1204	A	C5-C6-N6	-9.33	116.23	123.70
1	N	1468	A	C4-C5-C6	9.33	121.66	117.00
1	N	1433	A	N1-C6-N6	9.33	124.20	118.60
1	N	1493	A	C4-C5-N7	-9.33	106.04	110.70
1	N	1357	A	N1-C6-N6	9.32	124.19	118.60
1	N	221	C	O4'-C1'-N1	9.32	115.66	108.20
1	N	1059	C	O4'-C1'-N1	9.32	115.66	108.20
1	N	1488	G	C5-C6-N1	-9.32	106.84	111.50
1	N	1020	G	N3-C2-N2	9.32	126.42	119.90
1	N	20	U	C5-C4-O4	9.31	131.49	125.90
1	N	525	C	N3-C4-N4	9.31	124.52	118.00
1	N	572	A	C4-C5-N7	-9.31	106.04	110.70
1	N	1288	A	C5-C6-N1	-9.31	113.04	117.70
1	N	1338	G	N9-C4-C5	9.31	109.13	105.40
1	N	142	G	C5-C6-O6	-9.31	123.01	128.60
1	N	1183	U	O4'-C1'-N1	9.31	115.65	108.20
1	N	1443	C	N3-C4-C5	-9.31	118.18	121.90
1	N	278	G	N1-C6-O6	9.31	125.48	119.90
1	N	998	C	C6-N1-C2	-9.31	116.58	120.30
1	N	727	G	C6-C5-N7	-9.31	124.82	130.40
1	N	182	A	C6-N1-C2	9.31	124.18	118.60
1	N	623	C	N3-C4-N4	9.30	124.51	118.00
1	N	724	G	C2-N3-C4	9.30	116.55	111.90
1	N	880	C	C4-C5-C6	9.30	122.05	117.40
1	N	1041	G	C6-C5-N7	-9.30	124.82	130.40
1	N	1474	U	O4'-C1'-N1	9.30	115.64	108.20
1	N	147	G	C5-C6-O6	-9.30	123.02	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	764	C	O4'-C1'-N1	9.30	115.64	108.20
1	N	971	G	C6-C5-N7	-9.30	124.82	130.40
1	N	111	G	N1-C2-N3	-9.30	118.32	123.90
1	N	552	U	O4'-C1'-N1	9.30	115.64	108.20
1	N	533	A	N1-C6-N6	9.29	124.18	118.60
1	N	1368	A	N3-C4-C5	-9.29	120.29	126.80
1	N	797	C	C6-N1-C2	9.29	124.02	120.30
1	N	845	A	C5-C6-N1	-9.29	113.05	117.70
1	N	673	A	N9-C4-C5	9.29	109.52	105.80
1	N	777	A	C5-C6-N6	-9.29	116.27	123.70
1	N	127	G	O4'-C1'-N9	9.29	115.63	108.20
1	N	383	A	C5-C6-N1	-9.29	113.06	117.70
1	N	973	G	N3-C2-N2	9.29	126.40	119.90
1	N	148	G	C6-C5-N7	-9.29	124.83	130.40
1	N	186	C	C5-C4-N4	-9.28	113.70	120.20
1	N	407	U	O4'-C1'-N1	9.28	115.62	108.20
1	N	1263	C	N3-C4-N4	9.28	124.50	118.00
1	N	197	A	P-O3'-C3'	9.28	130.83	119.70
1	N	694	A	C2-N3-C4	-9.28	105.96	110.60
1	N	10	A	O4'-C1'-N9	9.28	115.62	108.20
1	N	50	A	O4'-C1'-N9	9.28	115.62	108.20
1	N	308	C	N3-C4-C5	-9.28	118.19	121.90
1	N	611	C	O4'-C1'-N1	9.28	115.62	108.20
1	N	622	A	N1-C6-N6	9.28	124.17	118.60
1	N	117	G	N1-C6-O6	9.27	125.46	119.90
1	N	222	C	O4'-C1'-N1	9.27	115.62	108.20
1	N	311	C	N3-C4-C5	-9.27	118.19	121.90
1	N	436	C	C6-N1-C2	-9.27	116.59	120.30
1	N	39	G	C5-C6-O6	-9.27	123.04	128.60
1	N	36	C	C6-N1-C2	-9.27	116.59	120.30
1	N	508	U	C2-N3-C4	-9.27	121.44	127.00
1	N	1503	A	C4-C5-C6	9.27	121.63	117.00
1	N	373	A	O4'-C1'-N9	9.27	115.61	108.20
1	N	94	G	N3-C4-N9	-9.27	120.44	126.00
1	N	388	G	N1-C2-N3	-9.27	118.34	123.90
1	N	397	A	C6-C5-N7	-9.27	125.81	132.30
1	N	649	A	C2-N3-C4	-9.27	105.97	110.60
1	N	956	U	P-O5'-C5'	9.27	135.72	120.90
1	N	987	G	C5-C6-O6	-9.27	123.04	128.60
1	N	1091	U	P-O3'-C3'	9.27	130.82	119.70
1	N	1378	C	N1-C2-O2	9.27	124.46	118.90
1	N	833	G	C5-C6-O6	-9.26	123.04	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1050	G	C5'-C4'-C3'	-9.26	101.18	116.00
1	N	1249	C	O4'-C1'-N1	9.26	115.61	108.20
1	N	974	A	O4'-C1'-N9	9.26	115.61	108.20
1	N	167	A	N1-C6-N6	9.26	124.16	118.60
1	N	881	G	N1-C2-N3	-9.25	118.35	123.90
1	N	1319	A	C5-N7-C8	9.25	108.53	103.90
1	N	303	A	C5-C6-N1	-9.25	113.08	117.70
1	N	1225	A	C8-N9-C4	-9.25	102.10	105.80
1	N	415	A	C5-C6-N6	-9.25	116.30	123.70
1	N	12	U	O4'-C1'-N1	9.25	115.60	108.20
1	N	1199	U	N3-C4-O4	9.25	125.87	119.40
1	N	20	U	O4'-C1'-N1	9.24	115.60	108.20
1	N	271	C	C2-N3-C4	-9.24	115.28	119.90
1	N	1417	G	N1-C6-O6	9.24	125.45	119.90
1	N	1492	A	C4-C5-C6	9.24	121.62	117.00
1	N	257	G	N9-C4-C5	-9.24	101.70	105.40
1	N	422	C	P-O3'-C3'	9.24	130.79	119.70
1	N	44	A	N1-C6-N6	9.24	124.14	118.60
1	N	19	A	O4'-C1'-N9	9.23	115.59	108.20
1	N	122	G	C6-C5-N7	-9.23	124.86	130.40
1	N	236	A	O4'-C1'-N9	9.23	115.58	108.20
1	N	498	A	C5-C6-N6	-9.23	116.31	123.70
1	N	58	C	N3-C4-N4	9.23	124.46	118.00
1	N	1120	C	C2-N3-C4	9.23	124.52	119.90
1	N	671	G	O4'-C1'-N9	9.23	115.58	108.20
1	N	722	G	O4'-C1'-N9	9.23	115.58	108.20
1	N	800	G	C5-C6-O6	-9.23	123.06	128.60
1	N	1079	G	N1-C2-N3	-9.23	118.36	123.90
1	N	425	G	N1-C6-O6	9.22	125.44	119.90
1	N	298	A	N1-C6-N6	9.22	124.13	118.60
1	N	412	A	C4-C5-C6	9.22	121.61	117.00
1	N	815	A	C5-N7-C8	9.22	108.51	103.90
1	N	499	A	C5-C6-N1	-9.22	113.09	117.70
1	N	738	C	C5-C6-N1	9.22	125.61	121.00
1	N	273	U	N1-C2-N3	-9.21	109.37	114.90
1	N	778	G	C8-N9-C4	9.21	110.09	106.40
1	N	1413	A	C5-C6-N6	-9.21	116.33	123.70
1	N	1448	C	N3-C4-C5	-9.21	118.22	121.90
1	N	460	A	N1-C6-N6	9.21	124.13	118.60
1	N	845	A	C4-C5-C6	9.21	121.61	117.00
1	N	1209	C	N3-C4-C5	-9.21	118.22	121.90
1	N	255	G	C2-N3-C4	-9.21	107.30	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	892	A	C5-C6-N1	-9.21	113.10	117.70
1	N	1349	A	C5-N7-C8	9.21	108.50	103.90
1	N	334	C	C6-N1-C2	9.20	123.98	120.30
1	N	1054	C	N3-C4-N4	9.20	124.44	118.00
1	N	178	C	O4'-C1'-N1	9.20	115.56	108.20
1	N	555	U	P-O5'-C5'	9.20	135.62	120.90
1	N	721	G	C8-N9-C4	-9.20	102.72	106.40
1	N	722	G	N1-C6-O6	9.20	125.42	119.90
1	N	802	A	C5-C6-N6	-9.20	116.34	123.70
1	N	213	G	C5-C6-N1	9.19	116.10	111.50
1	N	81	A	N1-C6-N6	9.19	124.11	118.60
1	N	908	A	N9-C4-C5	9.19	109.48	105.80
1	N	1284	C	N3-C4-N4	9.19	124.43	118.00
1	N	700	G	C4-C5-N7	-9.19	107.12	110.80
1	N	1124	G	N3-C2-N2	9.19	126.33	119.90
1	N	1158	C	C2-N3-C4	9.19	124.49	119.90
1	N	1375	A	C5-C6-N6	-9.19	116.35	123.70
1	N	699	C	N3-C4-C5	-9.18	118.23	121.90
1	N	1044	A	C5-N7-C8	9.18	108.49	103.90
1	N	280	C	C2-N1-C1'	9.17	128.89	118.80
1	N	814	A	C6-C5-N7	-9.17	125.88	132.30
1	N	881	G	N3-C2-N2	9.17	126.32	119.90
1	N	1074	G	C5-C6-O6	-9.17	123.10	128.60
1	N	1151	A	P-O5'-C5'	9.17	135.57	120.90
1	N	424	G	C6-C5-N7	-9.17	124.90	130.40
1	N	829	G	N9-C4-C5	-9.17	101.73	105.40
1	N	872	A	N1-C2-N3	-9.17	124.72	129.30
1	N	1507	A	N1-C2-N3	-9.17	124.72	129.30
1	N	167	A	C5-C6-N1	-9.16	113.12	117.70
1	N	451	A	C8-N9-C4	-9.16	102.14	105.80
1	N	669	G	C5-C6-O6	-9.16	123.10	128.60
1	N	1529	G	C2-N3-C4	9.16	116.48	111.90
1	N	843	U	C6-N1-C1'	-9.16	108.37	121.20
1	N	1167	A	C5-N7-C8	9.16	108.48	103.90
1	N	1530	G	N1-C6-O6	9.16	125.40	119.90
1	N	39	G	O4'-C1'-N9	9.16	115.53	108.20
1	N	300	A	C4-C5-C6	9.16	121.58	117.00
1	N	617	G	C8-N9-C4	9.16	110.06	106.40
1	N	433	G	C5-C6-O6	-9.16	123.11	128.60
1	N	1314	C	N3-C4-N4	9.16	124.41	118.00
1	N	1059	C	C5-C4-N4	-9.15	113.79	120.20
1	N	1147	C	C6-N1-C2	-9.15	116.64	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	984	C	O4'-C1'-N1	9.15	115.52	108.20
1	N	26	A	N1-C6-N6	9.15	124.09	118.60
1	N	781	A	C5-C6-N6	-9.15	116.38	123.70
1	N	661	G	C6-C5-N7	-9.14	124.91	130.40
1	N	511	C	O4'-C1'-N1	9.14	115.51	108.20
1	N	25	C	C6-N1-C2	9.14	123.95	120.30
1	N	556	C	C5-C6-N1	9.14	125.57	121.00
1	N	171	A	O4'-C1'-N9	9.13	115.51	108.20
1	N	416	G	C5-C6-O6	-9.13	123.12	128.60
1	N	462	G	C5-C6-O6	-9.13	123.12	128.60
1	N	1057	G	C4-C5-C6	9.13	124.28	118.80
1	N	77	A	P-O3'-C3'	9.13	130.66	119.70
1	N	248	C	N3-C4-N4	9.13	124.39	118.00
1	N	515	G	P-O5'-C5'	9.13	135.51	120.90
1	N	1083	U	O4'-C1'-N1	9.13	115.50	108.20
1	N	1203	C	N1-C2-O2	-9.13	113.42	118.90
1	N	18	C	O4'-C1'-N1	9.13	115.50	108.20
1	N	573	A	N7-C8-N9	-9.13	109.24	113.80
1	N	1292	G	N1-C2-N3	-9.13	118.42	123.90
1	N	9	G	C4-C5-C6	9.12	124.27	118.80
1	N	23	C	O4'-C1'-N1	9.12	115.50	108.20
1	N	489	C	C4-C5-C6	9.12	121.96	117.40
1	N	601	G	N1-C6-O6	9.12	125.37	119.90
1	N	1315	U	P-O5'-C5'	9.12	135.50	120.90
1	N	1392	G	C8-N9-C4	-9.12	102.75	106.40
1	N	965	U	C4-C5-C6	9.12	125.17	119.70
1	N	1241	G	C4-C5-C6	9.12	124.27	118.80
1	N	568	G	O4'-C1'-N9	9.12	115.49	108.20
1	N	706	A	N3-C4-N9	9.11	134.69	127.40
1	N	1242	G	C6-N1-C2	9.12	130.57	125.10
1	N	1412	C	N3-C4-C5	-9.11	118.25	121.90
1	N	374	A	N1-C2-N3	-9.11	124.74	129.30
1	N	554	A	C6-N1-C2	-9.11	113.13	118.60
1	N	598	U	N3-C4-C5	-9.11	109.13	114.60
1	N	714	G	C5-C6-O6	-9.11	123.14	128.60
1	N	1113	C	O4'-C1'-N1	9.11	115.49	108.20
1	N	1193	G	C4-C5-N7	9.11	114.44	110.80
1	N	233	C	O4'-C1'-N1	9.11	115.49	108.20
1	N	874	G	P-O5'-C5'	9.11	135.47	120.90
1	N	643	C	C6-N1-C2	-9.10	116.66	120.30
1	N	1253	G	C4-C5-N7	9.10	114.44	110.80
1	N	1215	G	N3-C4-C5	-9.10	124.05	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	338	A	C4-C5-N7	-9.10	106.15	110.70
1	N	861	G	P-O3'-C3'	9.10	130.61	119.70
1	N	892	A	C2-N3-C4	-9.10	106.05	110.60
1	N	1311	A	C5-C6-N6	-9.10	116.42	123.70
1	N	563	A	C6-N1-C2	-9.09	113.14	118.60
1	N	1511	G	C5-C6-N1	9.09	116.05	111.50
1	N	612	C	C4-C5-C6	9.09	121.94	117.40
1	N	927	G	N3-C2-N2	9.09	126.26	119.90
1	N	1103	C	C5-C4-N4	-9.08	113.84	120.20
1	N	306	A	C5-N7-C8	9.08	108.44	103.90
1	N	1122	U	O4'-C1'-N1	9.08	115.46	108.20
1	N	75	G	P-O5'-C5'	-9.08	106.38	120.90
1	N	793	U	N3-C4-C5	-9.08	109.15	114.60
1	N	1171	A	N1-C6-N6	9.07	124.05	118.60
1	N	706	A	N7-C8-N9	-9.07	109.27	113.80
1	N	922	G	O4'-C1'-N9	9.07	115.46	108.20
1	N	1143	G	O4'-C1'-N9	9.07	115.46	108.20
1	N	1187	G	C5-C6-O6	-9.07	123.16	128.60
1	N	607	A	C5-C6-N6	-9.07	116.45	123.70
1	N	614	C	O4'-C1'-N1	9.07	115.45	108.20
1	N	933	G	O4'-C1'-N9	9.07	115.45	108.20
1	N	140	U	P-O5'-C5'	9.06	135.40	120.90
1	N	163	C	O4'-C1'-N1	9.06	115.45	108.20
1	N	759	A	C4-C5-C6	9.06	121.53	117.00
1	N	1332	A	P-O5'-C5'	-9.06	106.40	120.90
1	N	1411	C	C2-N3-C4	9.06	124.43	119.90
1	N	1149	C	N1-C2-N3	9.06	125.54	119.20
1	N	290	C	O4'-C1'-N1	9.06	115.45	108.20
1	N	412	A	C2-N3-C4	-9.06	106.07	110.60
1	N	1132	C	P-O5'-C5'	9.06	135.39	120.90
1	N	164	G	N9-C4-C5	-9.05	101.78	105.40
1	N	834	U	C5-C6-N1	-9.05	118.17	122.70
1	N	462	G	N1-C6-O6	9.05	125.33	119.90
1	N	866	C	O4'-C1'-N1	9.05	115.44	108.20
1	N	1456	A	C5-C6-N6	-9.05	116.46	123.70
1	N	49	U	C2-N3-C4	9.05	132.43	127.00
1	N	1361	G	N1-C6-O6	9.05	125.33	119.90
1	N	1498	U	O4'-C1'-N1	9.05	115.44	108.20
1	N	397	A	C5-C6-N1	-9.05	113.18	117.70
1	N	665	A	N1-C6-N6	9.04	124.03	118.60
1	N	780	A	O4'-C1'-N9	9.04	115.44	108.20
1	N	941	G	O4'-C1'-N9	9.04	115.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1461	G	N3-C2-N2	9.04	126.23	119.90
1	N	598	U	N3-C4-O4	9.04	125.73	119.40
1	N	628	G	C5-C6-O6	-9.04	123.17	128.60
1	N	1331	G	C5-C6-O6	-9.04	123.17	128.60
1	N	1352	C	O4'-C1'-N1	9.04	115.43	108.20
1	N	694	A	O4'-C1'-N9	9.04	115.43	108.20
1	N	93	U	P-O3'-C3'	-9.04	108.85	119.70
1	N	403	C	O4'-C1'-N1	9.04	115.43	108.20
1	N	492	C	O4'-C1'-N1	9.03	115.43	108.20
1	N	937	A	C2-N3-C4	-9.03	106.08	110.60
1	N	203	G	N1-C2-N2	-9.03	108.08	116.20
1	N	1366	C	O4'-C1'-N1	9.03	115.42	108.20
1	N	124	C	N3-C4-N4	9.02	124.32	118.00
1	N	374	A	C5-C6-N1	-9.02	113.19	117.70
1	N	902	G	N1-C6-O6	9.02	125.31	119.90
1	N	1021	A	O4'-C1'-N9	9.02	115.42	108.20
1	N	1379	G	C4'-C3'-C2'	-9.02	93.58	102.60
1	N	255	G	N7-C8-N9	9.02	117.61	113.10
1	N	560	A	C4-C5-C6	9.02	121.51	117.00
1	N	1244	G	N9-C4-C5	-9.02	101.79	105.40
1	N	409	U	N3-C4-O4	9.01	125.71	119.40
1	N	1346	A	C5-C6-N1	-9.01	113.19	117.70
1	N	66	A	C5-C6-N1	-9.01	113.19	117.70
1	N	309	A	N1-C6-N6	9.01	124.00	118.60
1	N	487	A	C5-C6-N6	-9.01	116.49	123.70
1	N	817	C	N3-C4-N4	9.01	124.31	118.00
1	N	1128	C	N3-C4-N4	9.01	124.31	118.00
1	N	1079	G	N3-C2-N2	9.01	126.20	119.90
1	N	437	U	N3-C2-O2	9.00	128.50	122.20
1	N	542	G	C5-C6-N1	-9.00	107.00	111.50
1	N	448	A	N1-C6-N6	9.00	124.00	118.60
1	N	630	A	C5-C6-N1	-9.00	113.20	117.70
1	N	1502	A	P-O3'-C3'	9.00	130.50	119.70
1	N	110	C	O4'-C1'-N1	9.00	115.40	108.20
1	N	495	A	C5-C6-N6	-9.00	116.50	123.70
1	N	469	C	N1-C2-N3	-8.99	112.91	119.20
1	N	655	A	N7-C8-N9	8.99	118.30	113.80
1	N	694	A	C6-C5-N7	-8.99	126.01	132.30
1	N	43	C	C5-C6-N1	8.99	125.49	121.00
1	N	356	A	N1-C6-N6	8.99	123.99	118.60
1	N	1379	G	O4'-C1'-N9	8.99	115.39	108.20
1	N	725	G	N1-C6-O6	8.98	125.29	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	763	G	C5-C6-N1	-8.98	107.01	111.50
1	N	1312	G	C8-N9-C4	8.98	109.99	106.40
1	N	52	C	O4'-C1'-N1	8.98	115.38	108.20
1	N	572	A	C5-C6-N6	-8.98	116.52	123.70
1	N	805	C	C5-C6-N1	8.98	125.49	121.00
1	N	75	G	N1-C2-N3	-8.97	118.52	123.90
1	N	82	G	O4'-C1'-N9	-8.97	101.02	108.20
1	N	299	G	N1-C6-O6	8.97	125.28	119.90
1	N	325	A	C4-C5-C6	8.97	121.49	117.00
1	N	332	G	C4-C5-N7	8.97	114.39	110.80
1	N	546	A	C5-C6-N6	-8.97	116.52	123.70
1	N	1002	G	N7-C8-N9	-8.97	108.61	113.10
1	N	1460	C	O4'-C1'-N1	8.97	115.38	108.20
1	N	1338	G	N1-C6-O6	8.97	125.28	119.90
1	N	1442	G	C5-C6-N1	-8.97	107.01	111.50
1	N	1231	G	O4'-C1'-N9	8.97	115.38	108.20
1	N	771	G	C5-C6-O6	-8.96	123.22	128.60
1	N	587	G	C8-N9-C4	-8.96	102.81	106.40
1	N	1521	C	C5-C6-N1	8.96	125.48	121.00
1	N	803	G	N9-C4-C5	8.96	108.98	105.40
1	N	1316	G	C6-C5-N7	-8.96	125.02	130.40
1	N	157	U	C2-N3-C4	-8.96	121.62	127.00
1	N	947	G	N1-C6-O6	8.96	125.28	119.90
1	N	1514	G	N1-C6-O6	8.96	125.27	119.90
1	N	1255	G	C6-N1-C2	8.95	130.47	125.10
1	N	293	G	N1-C6-O6	8.95	125.27	119.90
1	N	695	A	C5-C6-N6	-8.95	116.54	123.70
1	N	741	G	N1-C6-O6	8.95	125.27	119.90
1	N	1133	G	C2-N3-C4	8.95	116.37	111.90
1	N	890	G	N3-C4-C5	-8.95	124.13	128.60
1	N	484	G	N1-C2-N3	-8.94	118.53	123.90
1	N	1114	C	C5-C4-N4	8.94	126.46	120.20
1	N	1331	G	N1-C6-O6	8.94	125.27	119.90
1	N	98	A	N1-C6-N6	8.94	123.96	118.60
1	N	1486	G	N1-C2-N3	-8.94	118.54	123.90
1	N	380	G	N7-C8-N9	8.94	117.57	113.10
1	N	381	C	O4'-C1'-N1	8.94	115.35	108.20
1	N	649	A	C5-C6-N1	-8.94	113.23	117.70
1	N	205	A	O4'-C1'-N9	8.93	115.35	108.20
1	N	422	C	O4'-C1'-N1	8.93	115.35	108.20
1	N	628	G	N1-C6-O6	8.93	125.26	119.90
1	N	998	C	N3-C4-N4	8.93	124.25	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1099	G	N3-C2-N2	8.93	126.15	119.90
1	N	768	A	C4-C5-C6	8.93	121.46	117.00
1	N	578	C	C5-C6-N1	8.93	125.46	121.00
1	N	1335	U	P-O3'-C3'	8.92	130.41	119.70
1	N	1449	C	N3-C4-N4	8.92	124.25	118.00
1	N	423	G	C8-N9-C4	-8.92	102.83	106.40
1	N	162	A	N1-C6-N6	8.92	123.95	118.60
1	N	1505	G	C2-N3-C4	-8.91	107.44	111.90
1	N	46	G	N3-C2-N2	8.91	126.14	119.90
1	N	172	A	C6-C5-N7	-8.91	126.06	132.30
1	N	1279	G	C5'-C4'-O4'	8.91	119.79	109.10
1	N	774	G	C6-C5-N7	-8.91	125.06	130.40
1	N	1289	A	N9-C4-C5	8.91	109.36	105.80
1	N	314	C	O4'-C1'-N1	8.91	115.33	108.20
1	N	1360	A	C5-C6-N6	-8.91	116.58	123.70
1	N	22	G	N1-C2-N3	-8.90	118.56	123.90
1	N	408	A	C5-N7-C8	8.90	108.35	103.90
1	N	714	G	N1-C6-O6	8.90	125.24	119.90
1	N	1262	C	C5-C6-N1	-8.90	116.55	121.00
1	N	1073	U	C6-N1-C2	-8.90	115.66	121.00
1	N	1333	A	N7-C8-N9	8.90	118.25	113.80
1	N	1366	C	C2-N3-C4	8.89	124.35	119.90
1	N	33	A	O4'-C1'-N9	8.89	115.31	108.20
1	N	1503	A	C6-C5-N7	-8.89	126.07	132.30
1	N	285	C	C5-C4-N4	-8.89	113.98	120.20
1	N	447	G	C5-C6-N1	-8.89	107.05	111.50
1	N	682	G	O4'-C1'-N9	8.89	115.31	108.20
1	N	1066	C	C4-C5-C6	8.89	121.85	117.40
1	N	322	C	O4'-C1'-N1	8.89	115.31	108.20
1	N	526	C	C4-C5-C6	8.89	121.84	117.40
1	N	1475	G	N7-C8-N9	8.89	117.54	113.10
1	N	875	U	O4'-C1'-N1	8.88	115.31	108.20
1	N	491	G	C8-N9-C4	-8.88	102.85	106.40
1	N	1048	G	O4'-C1'-N9	8.88	115.30	108.20
1	N	1116	U	N3-C4-C5	-8.88	109.27	114.60
1	N	1334	G	N9-C4-C5	8.88	108.95	105.40
1	N	338	A	C5-C6-N6	-8.88	116.60	123.70
1	N	1055	A	O4'-C1'-N9	8.88	115.30	108.20
1	N	123	U	C5-C6-N1	-8.87	118.26	122.70
1	N	744	C	C6-N1-C2	-8.87	116.75	120.30
1	N	952	U	C5-C6-N1	8.87	127.14	122.70
1	N	1032	G	O4'-C1'-N9	8.87	115.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	239	U	O4'-C1'-N1	8.87	115.29	108.20
1	N	443	C	O4'-C1'-N1	8.87	115.29	108.20
1	N	449	G	C6-C5-N7	-8.87	125.08	130.40
1	N	1044	A	N1-C2-N3	8.87	133.73	129.30
1	N	530	G	N3-C2-N2	8.86	126.10	119.90
1	N	1313	U	O4'-C1'-N1	8.86	115.29	108.20
1	N	1524	C	C5-C6-N1	8.86	125.43	121.00
1	N	52	C	C6-N1-C2	-8.86	116.76	120.30
1	N	910	C	C4-C5-C6	8.86	121.83	117.40
1	N	929	G	O4'-C1'-N9	8.86	115.29	108.20
1	N	587	G	N1-C6-O6	8.86	125.22	119.90
1	N	703	G	C5-C6-O6	-8.86	123.28	128.60
1	N	1452	C	C6-N1-C2	-8.86	116.76	120.30
1	N	233	C	C2-N1-C1'	8.86	128.54	118.80
1	N	973	G	P-O3'-C3'	8.86	130.33	119.70
1	N	240	G	N1-C2-N3	8.85	129.21	123.90
1	N	1499	A	O4'-C1'-N9	8.85	115.28	108.20
1	N	235	C	C6-N1-C2	-8.85	116.76	120.30
1	N	578	C	C2-N3-C4	8.85	124.33	119.90
1	N	833	G	C2-N3-C4	8.85	116.32	111.90
1	N	872	A	C4-C5-C6	8.85	121.42	117.00
1	N	1007	U	O4'-C1'-N1	8.85	115.28	108.20
1	N	1519	A	C5-C6-N6	-8.85	116.62	123.70
1	N	1524	C	O4'-C1'-N1	8.85	115.28	108.20
1	N	1378	C	N3-C4-C5	-8.84	118.36	121.90
1	N	1466	C	N3-C4-C5	-8.84	118.36	121.90
1	N	1348	U	C5'-C4'-O4'	-8.84	98.49	109.10
1	N	1445	U	N1-C2-N3	-8.84	109.60	114.90
1	N	626	G	N1-C6-O6	8.84	125.20	119.90
1	N	800	G	C2-N3-C4	8.83	116.32	111.90
1	N	1349	A	C4-C5-N7	-8.83	106.28	110.70
1	N	498	A	C6-N1-C2	-8.83	113.30	118.60
1	N	1396	A	C5-C6-N1	-8.83	113.28	117.70
1	N	1413	A	C2-N3-C4	-8.83	106.19	110.60
1	N	184	G	C5-C6-O6	-8.83	123.30	128.60
1	N	840	C	C5-C4-N4	-8.83	114.02	120.20
1	N	620	C	N3-C4-N4	8.82	124.18	118.00
1	N	667	G	C4-C5-C6	8.82	124.09	118.80
1	N	928	G	C8-N9-C4	-8.82	102.87	106.40
1	N	414	A	O4'-C1'-N9	8.82	115.26	108.20
1	N	1402	C	N3-C4-C5	-8.82	118.37	121.90
1	N	1343	G	N1-C6-O6	8.82	125.19	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	208	U	C2-N1-C1'	-8.82	107.12	117.70
1	N	378	G	N9-C4-C5	8.82	108.93	105.40
1	N	944	G	C6-C5-N7	-8.82	125.11	130.40
1	N	661	G	N1-C6-O6	8.82	125.19	119.90
1	N	1099	G	N7-C8-N9	-8.82	108.69	113.10
1	N	533	A	C6-C5-N7	-8.81	126.13	132.30
1	N	670	G	C4'-C3'-C2'	-8.81	93.78	102.60
1	N	413	G	C8-N9-C4	-8.81	102.88	106.40
1	N	709	U	C2-N3-C4	-8.81	121.72	127.00
1	N	858	G	N1-C6-O6	8.81	125.18	119.90
1	N	1461	G	O4'-C1'-N9	8.81	115.25	108.20
1	N	143	A	C3'-C2'-C1'	8.80	108.54	101.50
1	N	895	G	O4'-C1'-N9	8.80	115.24	108.20
1	N	1046	A	N9-C4-C5	-8.80	102.28	105.80
1	N	881	G	C5-C6-O6	-8.80	123.32	128.60
1	N	528	C	O4'-C1'-N1	8.80	115.24	108.20
1	N	1368	A	C5-N7-C8	8.80	108.30	103.90
1	N	624	C	C5-C4-N4	-8.80	114.04	120.20
1	N	1279	G	N3-C4-C5	8.80	133.00	128.60
1	N	851	G	P-O3'-C3'	-8.80	109.14	119.70
1	N	1272	G	C6-C5-N7	-8.80	125.12	130.40
1	N	569	C	N3-C4-C5	-8.79	118.38	121.90
1	N	1063	C	C2-N3-C4	8.80	124.30	119.90
1	N	318	G	C8-N9-C4	8.79	109.92	106.40
1	N	1466	C	C4'-C3'-C2'	-8.79	93.81	102.60
1	N	44	A	C5-C6-N1	-8.79	113.31	117.70
1	N	1126	U	O4'-C1'-N1	8.79	115.23	108.20
1	N	40	C	C5-C6-N1	8.78	125.39	121.00
1	N	680	C	P-O3'-C3'	8.79	130.24	119.70
1	N	794	A	C5-C6-N6	-8.79	116.67	123.70
1	N	606	G	C5-C6-O6	-8.78	123.33	128.60
1	N	38	G	N1-C6-O6	8.78	125.17	119.90
1	N	94	G	C5-C6-O6	-8.78	123.33	128.60
1	N	345	C	N3-C4-N4	8.78	124.15	118.00
1	N	769	G	C8-N9-C4	-8.78	102.89	106.40
1	N	548	G	C2-N3-C4	-8.78	107.51	111.90
1	N	825	A	C5-C6-N6	-8.78	116.68	123.70
1	N	904	U	O4'-C1'-N1	8.78	115.22	108.20
1	N	135	C	N1-C2-O2	8.77	124.16	118.90
1	N	316	C	N3-C4-C5	-8.77	118.39	121.90
1	N	332	G	N9-C4-C5	-8.77	101.89	105.40
1	N	38	G	C5-C6-N1	-8.77	107.11	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	497	G	C6-C5-N7	-8.77	125.14	130.40
1	N	369	G	C8-N9-C4	-8.77	102.89	106.40
1	N	917	G	C8-N9-C4	-8.77	102.89	106.40
1	N	1146	A	C5-C6-N1	-8.77	113.32	117.70
1	N	1184	G	C5-C6-O6	-8.77	123.34	128.60
1	N	756	C	N3-C4-C5	-8.76	118.39	121.90
1	N	823	C	C5-C4-N4	-8.76	114.06	120.20
1	N	243	A	O4'-C1'-N9	8.76	115.21	108.20
1	N	1135	U	C5-C6-N1	8.76	127.08	122.70
1	N	784	A	C5-C6-N6	-8.76	116.69	123.70
1	N	824	G	N3-C2-N2	8.76	126.03	119.90
1	N	1523	G	C5-C6-N1	-8.76	107.12	111.50
1	N	116	A	C5-C6-N6	-8.75	116.70	123.70
1	N	415	A	C5-C6-N1	-8.75	113.32	117.70
1	N	830	G	N3-C2-N2	8.75	126.03	119.90
1	N	1050	G	P-O3'-C3'	-8.75	109.19	119.70
1	N	647	C	O4'-C1'-N1	8.75	115.20	108.20
1	N	1379	G	C5-C6-O6	-8.75	123.35	128.60
1	N	125	U	C2-N3-C4	8.75	132.25	127.00
1	N	364	A	C5-N7-C8	8.75	108.28	103.90
1	N	967	C	N1-C2-N3	-8.75	113.08	119.20
1	N	681	A	N1-C6-N6	8.75	123.85	118.60
1	N	773	G	N1-C2-N3	-8.75	118.65	123.90
1	N	1172	C	C6-N1-C2	-8.75	116.80	120.30
1	N	1183	U	C5-C4-O4	-8.75	120.65	125.90
1	N	1309	G	C6-C5-N7	-8.75	125.15	130.40
1	N	220	G	O4'-C1'-N9	8.74	115.19	108.20
1	N	264	C	C2-N1-C1'	8.74	128.42	118.80
1	N	1305	G	C5-C6-O6	-8.74	123.35	128.60
1	N	871	U	C2-N3-C4	-8.74	121.76	127.00
1	N	1024	G	C4-C5-N7	-8.74	107.30	110.80
1	N	1318	A	C5-C6-N6	-8.74	116.71	123.70
1	N	27	G	P-O3'-C3'	-8.74	109.22	119.70
1	N	966	G	N1-C6-O6	8.74	125.14	119.90
1	N	805	C	P-O5'-C5'	8.73	134.87	120.90
1	N	818	G	N7-C8-N9	8.73	117.47	113.10
1	N	338	A	C5-N7-C8	8.73	108.27	103.90
1	N	406	G	N3-C2-N2	8.73	126.01	119.90
1	N	512	U	O4'-C1'-N1	8.73	115.19	108.20
1	N	756	C	C6-N1-C2	-8.73	116.81	120.30
1	N	830	G	N9-C4-C5	8.73	108.89	105.40
1	N	1276	G	C4-C5-N7	8.72	114.29	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1177	G	N3-C2-N2	8.72	126.01	119.90
1	N	1279	G	O4'-C1'-N9	8.72	115.18	108.20
1	N	1285	A	C5-C6-N6	-8.72	116.72	123.70
1	N	451	A	P-O3'-C3'	8.72	130.17	119.70
1	N	803	G	C4-C5-N7	-8.72	107.31	110.80
1	N	334	C	C4-C5-C6	8.72	121.76	117.40
1	N	88	U	O4'-C1'-N1	8.71	115.17	108.20
1	N	760	G	N1-C2-N3	-8.71	118.67	123.90
1	N	1327	C	O4'-C1'-N1	8.71	115.17	108.20
1	N	815	A	C5-C6-N1	-8.71	113.34	117.70
1	N	121	U	O4'-C1'-N1	8.71	115.17	108.20
1	N	629	A	C6-N1-C2	-8.71	113.38	118.60
1	N	379	C	C2-N3-C4	8.71	124.25	119.90
1	N	1121	U	C2-N3-C4	-8.70	121.78	127.00
1	N	1490	U	O4'-C1'-N1	8.70	115.16	108.20
1	N	232	G	O4'-C1'-N9	8.70	115.16	108.20
1	N	681	A	C4-C5-C6	8.70	121.35	117.00
1	N	1119	C	C6-N1-C2	-8.70	116.82	120.30
1	N	1284	C	P-O5'-C5'	8.70	134.82	120.90
1	N	352	C	C2-N1-C1'	8.70	128.37	118.80
1	N	463	U	N3-C4-O4	8.70	125.49	119.40
1	N	890	G	C3'-C2'-C1'	-8.70	94.54	101.50
1	N	1239	A	C5'-C4'-C3'	8.70	129.92	116.00
1	N	1286	U	C5-C4-O4	8.70	131.12	125.90
1	N	598	U	P-O5'-C5'	8.70	134.81	120.90
1	N	909	A	N1-C6-N6	8.70	123.82	118.60
1	N	685	G	C4-C5-C6	8.69	124.02	118.80
1	N	1239	A	O4'-C1'-N9	8.69	115.15	108.20
1	N	34	C	C4-C5-C6	8.69	121.74	117.40
1	N	450	G	N1-C2-N3	-8.69	118.69	123.90
1	N	587	G	C6-C5-N7	-8.69	125.19	130.40
1	N	347	G	N1-C6-O6	8.68	125.11	119.90
1	N	531	U	N3-C4-C5	-8.68	109.39	114.60
1	N	756	C	N1-C2-O2	-8.68	113.69	118.90
1	N	816	A	C5-C6-N1	-8.68	113.36	117.70
1	N	1092	A	P-O3'-C3'	8.68	130.12	119.70
1	N	378	G	C5-N7-C8	8.68	108.64	104.30
1	N	883	C	C2-N3-C4	8.68	124.24	119.90
1	N	151	A	C5-C6-N6	-8.68	116.76	123.70
1	N	211	G	N9-C4-C5	-8.67	101.93	105.40
1	N	884	U	P-O3'-C3'	8.67	130.10	119.70
1	N	988	G	C6-C5-N7	-8.67	125.20	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	184	G	N3-C2-N2	8.67	125.97	119.90
1	N	1029	U	O4'-C1'-N1	8.67	115.13	108.20
1	N	1282	C	C5-C6-N1	8.67	125.33	121.00
1	N	228	A	C5-C6-N6	-8.66	116.77	123.70
1	N	484	G	C6-N1-C2	8.66	130.30	125.10
1	N	565	U	N3-C4-C5	-8.66	109.40	114.60
1	N	1106	G	C5-C6-N1	-8.66	107.17	111.50
1	N	1333	A	C8-N9-C4	-8.66	102.33	105.80
1	N	1287	A	C5-C6-N6	-8.66	116.77	123.70
1	N	9	G	N1-C2-N3	-8.66	118.70	123.90
1	N	754	C	C5-C4-N4	-8.66	114.14	120.20
1	N	854	U	P-O3'-C3'	-8.66	109.31	119.70
1	N	150	U	C6-N1-C2	-8.65	115.81	121.00
1	N	176	C	C3'-C2'-C1'	-8.65	94.58	101.50
1	N	715	A	C5-C6-N1	-8.65	113.37	117.70
1	N	964	A	C4-C5-C6	8.65	121.33	117.00
1	N	1525	G	C8-N9-C4	-8.65	102.94	106.40
1	N	1247	U	N1-C2-O2	-8.65	116.74	122.80
1	N	99	C	P-O3'-C3'	8.65	130.08	119.70
1	N	493	A	N3-C4-C5	-8.65	120.75	126.80
1	N	845	A	N9-C4-C5	8.65	109.26	105.80
1	N	1105	A	C4-C5-N7	-8.65	106.38	110.70
1	N	1171	A	C5-C6-N1	-8.64	113.38	117.70
1	N	791	G	N3-C2-N2	8.64	125.95	119.90
1	N	811	C	C4'-C3'-C2'	-8.64	93.96	102.60
1	N	866	C	N3-C4-N4	8.64	124.05	118.00
1	N	1524	C	C6-N1-C2	-8.64	116.84	120.30
1	N	433	G	C4-C5-C6	8.64	123.98	118.80
1	N	446	G	O4'-C1'-N9	8.64	115.11	108.20
1	N	1250	A	P-O5'-C5'	8.64	134.72	120.90
1	N	1383	C	C5-C4-N4	-8.64	114.15	120.20
1	N	736	C	N3-C4-C5	-8.63	118.45	121.90
1	N	274	A	P-O3'-C3'	8.63	130.06	119.70
1	N	1417	G	C4-N9-C1'	8.63	137.72	126.50
1	N	28	A	C5-C6-N1	-8.63	113.39	117.70
1	N	120	A	C4'-C3'-C2'	-8.63	93.97	102.60
1	N	1037	C	N3-C4-C5	-8.62	118.45	121.90
1	N	1057	G	N1-C6-O6	8.62	125.08	119.90
1	N	1374	A	N1-C2-N3	8.62	133.61	129.30
1	N	227	G	N1-C6-O6	8.62	125.07	119.90
1	N	1262	C	C4-C5-C6	8.62	121.71	117.40
1	N	1342	C	C5-C4-N4	-8.62	114.16	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	589	U	C2-N3-C4	-8.62	121.83	127.00
1	N	834	U	C3'-C2'-C1'	8.62	108.39	101.50
1	N	1015	G	N3-C4-C5	-8.62	124.29	128.60
1	N	59	A	C5-C6-N1	-8.62	113.39	117.70
1	N	143	A	C5-N7-C8	8.62	108.21	103.90
1	N	109	A	N9-C4-C5	-8.61	102.35	105.80
1	N	478	A	C4-C5-C6	8.61	121.31	117.00
1	N	1060	U	C4'-C3'-C2'	-8.61	93.99	102.60
1	N	1353	G	C6-N1-C2	8.61	130.26	125.10
1	N	555	U	C5-C6-N1	8.61	127.00	122.70
1	N	910	C	P-O5'-C5'	8.61	134.67	120.90
1	N	970	C	C5-C6-N1	-8.61	116.70	121.00
1	N	829	G	C5-C6-N1	-8.60	107.20	111.50
1	N	1407	C	C5-C6-N1	8.60	125.30	121.00
1	N	713	G	C6-C5-N7	-8.60	125.24	130.40
1	N	1189	U	N1-C2-N3	-8.60	109.74	114.90
1	N	1319	A	C2-N3-C4	-8.60	106.30	110.60
1	N	782	A	N1-C6-N6	8.60	123.76	118.60
1	N	1015	G	N9-C4-C5	8.60	108.84	105.40
1	N	965	U	C2-N3-C4	8.60	132.16	127.00
1	N	1051	C	N3-C4-N4	8.60	124.02	118.00
1	N	579	A	C5-C6-N6	-8.59	116.83	123.70
1	N	873	A	C2-N3-C4	-8.59	106.31	110.60
1	N	1468	A	C6-N1-C2	8.59	123.75	118.60
1	N	691	G	O4'-C1'-N9	8.59	115.07	108.20
1	N	899	C	C2-N1-C1'	8.59	128.25	118.80
1	N	388	G	C2-N3-C4	8.59	116.19	111.90
1	N	1210	C	N3-C4-N4	8.59	124.01	118.00
1	N	1424	U	C5-C4-O4	-8.59	120.75	125.90
1	N	645	G	O4'-C1'-N9	8.58	115.07	108.20
1	N	749	A	O4'-C1'-N9	8.58	115.07	108.20
1	N	173	U	P-O3'-C3'	8.58	130.00	119.70
1	N	1486	G	C2-N3-C4	8.58	116.19	111.90
1	N	582	C	O4'-C1'-N1	8.58	115.06	108.20
1	N	464	U	N3-C4-O4	8.58	125.40	119.40
1	N	474	G	O4'-C4'-C3'	-8.58	95.42	104.00
1	N	675	A	C8-N9-C4	-8.58	102.37	105.80
1	N	759	A	O4'-C1'-N9	8.58	115.06	108.20
1	N	946	A	C2-N3-C4	-8.58	106.31	110.60
1	N	992	U	C3'-C2'-C1'	-8.57	94.64	101.50
1	N	1072	G	C5-C6-N1	-8.57	107.21	111.50
1	N	721	G	C5-C6-O6	-8.57	123.46	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	864	A	N7-C8-N9	-8.57	109.52	113.80
1	N	451	A	C1'-O4'-C4'	-8.57	103.05	109.90
1	N	991	U	O4'-C1'-N1	8.57	115.05	108.20
1	N	1361	G	N1-C2-N3	-8.57	118.76	123.90
1	N	321	A	C5-N7-C8	8.56	108.18	103.90
1	N	934	C	C5'-C4'-C3'	-8.56	102.30	116.00
1	N	1108	G	N1-C6-O6	8.56	125.04	119.90
1	N	1242	G	N1-C2-N3	-8.56	118.77	123.90
1	N	27	G	N3-C2-N2	8.56	125.89	119.90
1	N	203	G	O4'-C1'-N9	8.56	115.05	108.20
1	N	675	A	C4-C5-C6	8.56	121.28	117.00
1	N	1439	G	N1-C6-O6	8.56	125.03	119.90
1	N	624	C	C2-N3-C4	-8.55	115.62	119.90
1	N	643	C	O4'-C1'-N1	8.56	115.05	108.20
1	N	1061	G	C5-C6-N1	-8.56	107.22	111.50
1	N	1281	C	P-O3'-C3'	8.56	129.97	119.70
1	N	1166	G	N1-C6-O6	8.55	125.03	119.90
1	N	1357	A	C2-N3-C4	8.55	114.88	110.60
1	N	1388	C	C4-C5-C6	-8.55	113.12	117.40
1	N	40	C	O4'-C1'-N1	8.55	115.04	108.20
1	N	749	A	C5-C6-N6	-8.55	116.86	123.70
1	N	1077	G	N1-C6-O6	8.55	125.03	119.90
1	N	1191	A	O4'-C1'-N9	8.55	115.04	108.20
1	N	320	A	C4-C5-N7	-8.55	106.42	110.70
1	N	612	C	N3-C4-C5	-8.55	118.48	121.90
1	N	796	C	C6-N1-C1'	-8.55	110.54	120.80
1	N	829	G	P-O3'-C3'	-8.55	109.44	119.70
1	N	528	C	C5-C6-N1	8.55	125.27	121.00
1	N	746	A	P-O3'-C3'	-8.55	109.44	119.70
1	N	838	G	N1-C2-N3	-8.55	118.77	123.90
1	N	275	G	C5-C6-O6	-8.55	123.47	128.60
1	N	26	A	C5-C6-N6	-8.54	116.86	123.70
1	N	55	A	C5-N7-C8	8.54	108.17	103.90
1	N	806	C	N3-C4-C5	-8.54	118.48	121.90
1	N	1031	C	C6-N1-C1'	-8.54	110.55	120.80
1	N	552	U	C2-N3-C4	-8.54	121.88	127.00
1	N	812	G	C4-C5-C6	8.54	123.92	118.80
1	N	9	G	C6-C5-N7	-8.54	125.28	130.40
1	N	181	A	O4'-C1'-N9	8.54	115.03	108.20
1	N	747	A	P-O3'-C3'	8.54	129.94	119.70
1	N	1039	G	C5-C6-N1	-8.54	107.23	111.50
1	N	1152	A	C5-C6-N6	-8.54	116.87	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1311	A	C2-N3-C4	8.54	114.87	110.60
1	N	1401	G	O4'-C1'-N9	8.54	115.03	108.20
1	N	1190	G	C2-N3-C4	8.54	116.17	111.90
1	N	1442	G	N1-C2-N3	-8.54	118.78	123.90
1	N	913	A	C4-C5-C6	8.53	121.27	117.00
1	N	942	G	N3-C2-N2	8.54	125.88	119.90
1	N	1392	G	C5-N7-C8	-8.53	100.03	104.30
1	N	173	U	N3-C4-C5	-8.53	109.48	114.60
1	N	544	G	N1-C6-O6	8.53	125.02	119.90
1	N	526	C	P-O3'-C3'	8.52	129.93	119.70
1	N	1058	G	C8-N9-C4	-8.52	102.99	106.40
1	N	460	A	P-O5'-C5'	8.52	134.53	120.90
1	N	1510	C	N3-C4-N4	8.52	123.97	118.00
1	N	633	G	N1-C2-N3	-8.52	118.79	123.90
1	N	370	C	C4'-C3'-C2'	-8.52	94.08	102.60
1	N	494	G	C2-N3-C4	8.52	116.16	111.90
1	N	279	A	N7-C8-N9	-8.52	109.54	113.80
1	N	739	C	N1-C2-O2	-8.51	113.79	118.90
1	N	510	A	C2-N3-C4	-8.51	106.34	110.60
1	N	1322	C	C2-N1-C1'	8.51	128.16	118.80
1	N	144	G	N1-C6-O6	8.51	125.01	119.90
1	N	441	A	N1-C6-N6	8.51	123.71	118.60
1	N	481	G	N1-C6-O6	8.51	125.01	119.90
1	N	452	A	N1-C2-N3	8.51	133.55	129.30
1	N	486	U	P-O5'-C5'	-8.51	107.29	120.90
1	N	725	G	C2-N3-C4	-8.51	107.65	111.90
1	N	767	A	N1-C2-N3	8.51	133.55	129.30
1	N	790	A	C6-N1-C2	-8.51	113.50	118.60
1	N	1350	A	P-O3'-C3'	8.51	129.91	119.70
1	N	562	U	P-O3'-C3'	8.50	129.90	119.70
1	N	1154	G	N1-C2-N3	-8.50	118.80	123.90
1	N	449	G	N1-C2-N3	-8.50	118.80	123.90
1	N	724	G	N1-C2-N3	-8.50	118.80	123.90
1	N	305	G	N1-C6-O6	8.50	125.00	119.90
1	N	832	G	C2-N3-C4	-8.50	107.65	111.90
1	N	926	G	P-O3'-C3'	8.50	129.90	119.70
1	N	1507	A	O4'-C1'-N9	8.50	115.00	108.20
1	N	733	G	C6-C5-N7	-8.50	125.30	130.40
1	N	863	U	C5-C4-O4	-8.50	120.80	125.90
1	N	1142	G	C5-N7-C8	-8.50	100.05	104.30
1	N	1217	C	N3-C4-C5	-8.50	118.50	121.90
1	N	635	A	C5-C6-N1	-8.49	113.45	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	664	G	C8-N9-C4	-8.49	103.00	106.40
1	N	1306	A	C5-C6-N1	-8.49	113.45	117.70
1	N	50	A	N9-C4-C5	8.49	109.20	105.80
1	N	98	A	C5-C6-N1	-8.49	113.45	117.70
1	N	211	G	C5-C6-N1	-8.49	107.25	111.50
1	N	747	A	C4-C5-C6	8.49	121.25	117.00
1	N	1500	A	C4-C5-C6	8.49	121.25	117.00
1	N	196	A	C5-C6-N6	-8.49	116.91	123.70
1	N	653	U	C4-C5-C6	-8.49	114.61	119.70
1	N	736	C	O4'-C1'-N1	8.49	114.99	108.20
1	N	790	A	N9-C4-C5	8.49	109.19	105.80
1	N	1282	C	P-O5'-C5'	8.49	134.48	120.90
1	N	1532	U	O4'-C1'-N1	8.49	114.99	108.20
1	N	425	G	C5-C6-O6	-8.48	123.51	128.60
1	N	539	A	N1-C6-N6	8.48	123.69	118.60
1	N	639	G	N9-C4-C5	-8.48	102.01	105.40
1	N	1143	G	C6-C5-N7	-8.48	125.31	130.40
1	N	345	C	N3-C4-C5	-8.48	118.51	121.90
1	N	1378	C	C4-C5-C6	8.48	121.64	117.40
1	N	1184	G	N3-C4-C5	8.48	132.84	128.60
1	N	31	G	C5-C6-O6	-8.48	123.51	128.60
1	N	964	A	C4-C5-N7	-8.48	106.46	110.70
1	N	1285	A	N9-C4-C5	8.48	109.19	105.80
1	N	1525	G	C5-C6-N1	-8.48	107.26	111.50
1	N	1476	A	C8-N9-C4	-8.47	102.41	105.80
1	N	1216	A	C5-C6-N6	-8.47	116.92	123.70
1	N	1240	U	C5-C4-O4	-8.47	120.81	125.90
1	N	3	A	C4-C5-C6	8.47	121.24	117.00
1	N	1144	G	O4'-C1'-N9	8.47	114.98	108.20
1	N	1427	C	N1-C2-O2	8.47	123.98	118.90
1	N	143	A	C4-C5-C6	8.47	121.23	117.00
1	N	1054	C	O4'-C1'-N1	8.47	114.97	108.20
1	N	1181	G	P-O3'-C3'	8.47	129.86	119.70
1	N	174	A	O4'-C1'-N9	8.46	114.97	108.20
1	N	225	C	O4'-C1'-N1	8.47	114.97	108.20
1	N	674	G	N3-C4-C5	8.46	132.83	128.60
1	N	37	U	O4'-C1'-N1	8.46	114.97	108.20
1	N	258	G	O4'-C1'-N9	8.46	114.97	108.20
1	N	610	U	P-O3'-C3'	8.46	129.85	119.70
1	N	978	A	C8-N9-C4	-8.46	102.42	105.80
1	N	510	A	C8-N9-C4	8.46	109.18	105.80
1	N	1028	C	C5-C4-N4	-8.46	114.28	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1319	A	N1-C2-N3	8.46	133.53	129.30
1	N	1338	G	C8-N9-C4	-8.46	103.02	106.40
1	N	1061	G	N1-C6-O6	8.46	124.97	119.90
1	N	1327	C	N3-C4-C5	8.46	125.28	121.90
1	N	6	G	C5-C6-N1	-8.45	107.28	111.50
1	N	371	A	N7-C8-N9	-8.45	109.58	113.80
1	N	852	G	C5-C6-N1	-8.45	107.27	111.50
1	N	1170	A	O5'-P-OP1	-8.45	98.09	105.70
1	N	230	G	N7-C8-N9	8.45	117.33	113.10
1	N	1389	C	O4'-C1'-N1	8.45	114.96	108.20
1	N	1526	G	O4'-C1'-N9	8.45	114.96	108.20
1	N	482	A	C5-N7-C8	8.45	108.12	103.90
1	N	1483	A	O4'-C1'-N9	8.45	114.96	108.20
1	N	862	C	C4-C5-C6	8.45	121.62	117.40
1	N	1293	C	C5-C4-N4	-8.44	114.29	120.20
1	N	815	A	C1'-O4'-C4'	-8.44	103.15	109.90
1	N	1005	A	C4-C5-C6	8.44	121.22	117.00
1	N	1014	A	N9-C4-C5	8.44	109.18	105.80
1	N	1217	C	N3-C4-N4	8.44	123.91	118.00
1	N	314	C	C4'-C3'-C2'	-8.44	94.16	102.60
1	N	355	C	O4'-C1'-N1	8.44	114.95	108.20
1	N	1467	C	C5-C6-N1	8.44	125.22	121.00
1	N	423	G	N3-C2-N2	8.44	125.81	119.90
1	N	1404	C	P-O3'-C3'	8.44	129.83	119.70
1	N	1134	G	C6-C5-N7	-8.44	125.34	130.40
1	N	178	C	C5-C6-N1	8.43	125.22	121.00
1	N	1146	A	C4-C5-N7	-8.43	106.48	110.70
1	N	1156	G	C4-C5-C6	8.43	123.86	118.80
1	N	142	G	C8-N9-C4	-8.43	103.03	106.40
1	N	1319	A	N9-C4-C5	8.42	109.17	105.80
1	N	944	G	C4-C5-C6	8.42	123.85	118.80
1	N	1231	G	N7-C8-N9	8.42	117.31	113.10
1	N	851	G	C5-C6-N1	-8.42	107.29	111.50
1	N	367	U	C5-C4-O4	8.42	130.95	125.90
1	N	1035	A	C5-C6-N6	-8.42	116.97	123.70
1	N	1467	C	N3-C4-N4	8.42	123.89	118.00
1	N	1394	A	O4'-C1'-C2'	-8.42	97.38	105.80
1	N	1413	A	N1-C2-N3	8.42	133.51	129.30
1	N	832	G	C5-C6-N1	8.41	115.71	111.50
1	N	1087	G	C5-C6-O6	-8.41	123.55	128.60
1	N	132	C	C2-N3-C4	8.41	124.11	119.90
1	N	78	A	C6-C5-N7	-8.41	126.41	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	295	C	N3-C4-N4	8.41	123.89	118.00
1	N	438	U	C4-C5-C6	8.41	124.75	119.70
1	N	932	C	N3-C4-N4	8.41	123.89	118.00
1	N	1253	G	C5-C6-N1	-8.41	107.30	111.50
1	N	169	C	N3-C4-C5	-8.41	118.54	121.90
1	N	1508	A	C2-N3-C4	8.41	114.80	110.60
1	N	1064	G	C6-C5-N7	-8.40	125.36	130.40
1	N	607	A	C5-C6-N1	-8.40	113.50	117.70
1	N	1442	G	C5-C6-O6	-8.40	123.56	128.60
1	N	29	U	O4'-C1'-N1	8.40	114.92	108.20
1	N	187	G	C5-C6-N1	-8.40	107.30	111.50
1	N	564	C	N3-C4-C5	-8.40	118.54	121.90
1	N	369	G	C2-N3-C4	8.39	116.10	111.90
1	N	561	U	N1-C2-N3	-8.39	109.86	114.90
1	N	563	A	N3-C4-C5	-8.39	120.92	126.80
1	N	566	G	N1-C6-O6	8.39	124.94	119.90
1	N	1256	A	C4-C5-C6	8.39	121.20	117.00
1	N	815	A	O4'-C1'-N9	8.39	114.91	108.20
1	N	126	G	P-O3'-C3'	8.39	129.77	119.70
1	N	386	C	C2-N3-C4	8.39	124.10	119.90
1	N	625	U	O4'-C1'-N1	8.39	114.91	108.20
1	N	231	U	O4'-C1'-N1	8.39	114.91	108.20
1	N	394	G	O4'-C1'-N9	8.39	114.91	108.20
1	N	342	C	C2-N3-C4	8.39	124.09	119.90
1	N	788	U	P-O5'-C5'	8.39	134.32	120.90
1	N	815	A	C8-N9-C4	-8.39	102.44	105.80
1	N	1093	A	C5-C6-N6	-8.39	116.99	123.70
1	N	1151	A	C4-C5-C6	8.39	121.19	117.00
1	N	1215	G	N3-C2-N2	8.39	125.77	119.90
1	N	419	C	O4'-C1'-N1	8.39	114.91	108.20
1	N	667	G	C5-N7-C8	8.39	108.49	104.30
1	N	824	G	N1-C2-N3	-8.38	118.87	123.90
1	N	840	C	C5-C6-N1	8.38	125.19	121.00
1	N	1279	G	C5-C6-O6	-8.38	123.57	128.60
1	N	70	U	P-O3'-C3'	8.38	129.76	119.70
1	N	482	A	C5-C6-N6	-8.38	117.00	123.70
1	N	933	G	N1-C2-N3	-8.38	118.87	123.90
1	N	1030	U	C2-N1-C1'	8.38	127.76	117.70
1	N	1317	C	O4'-C1'-N1	8.38	114.91	108.20
1	N	150	U	C4-C5-C6	-8.38	114.67	119.70
1	N	217	C	O4'-C1'-N1	8.38	114.90	108.20
1	N	431	A	C5-C6-N1	-8.38	113.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	699	C	O4'-C1'-N1	8.37	114.90	108.20
1	N	1421	G	N1-C6-O6	8.37	124.92	119.90
1	N	289	G	N3-C4-N9	8.37	131.02	126.00
1	N	384	G	C6-C5-N7	-8.37	125.38	130.40
1	N	1180	A	C5-C6-N6	-8.37	117.00	123.70
1	N	1266	G	C4-C5-C6	8.37	123.82	118.80
1	N	861	G	N1-C6-O6	8.37	124.92	119.90
1	N	1284	C	C6-N1-C2	-8.37	116.95	120.30
1	N	532	A	N3-C4-N9	8.36	134.09	127.40
1	N	708	C	O4'-C1'-N1	8.36	114.89	108.20
1	N	1408	A	C5-N7-C8	8.36	108.08	103.90
1	N	64	G	O4'-C1'-N9	8.36	114.89	108.20
1	N	585	G	C5-N7-C8	-8.36	100.12	104.30
1	N	517	G	C5-C6-N1	-8.36	107.32	111.50
1	N	838	G	C4-C5-N7	-8.36	107.46	110.80
1	N	1059	C	C6-N1-C2	-8.36	116.96	120.30
1	N	158	G	C4'-C3'-C2'	-8.36	94.24	102.60
1	N	877	G	C8-N9-C4	-8.36	103.06	106.40
1	N	1265	C	C6-N1-C2	-8.36	116.96	120.30
1	N	344	A	C5-C6-N1	-8.35	113.52	117.70
1	N	756	C	O4'-C1'-N1	8.35	114.88	108.20
1	N	229	U	C5-C6-N1	8.35	126.88	122.70
1	N	1045	C	C4-C5-C6	8.35	121.58	117.40
1	N	374	A	C8-N9-C4	-8.34	102.46	105.80
1	N	1069	C	C2-N3-C4	8.34	124.07	119.90
1	N	1347	G	N7-C8-N9	8.34	117.27	113.10
1	N	828	U	P-O5'-C5'	8.34	134.25	120.90
1	N	207	C	N1-C2-O2	-8.34	113.90	118.90
1	N	1197	A	C5-C6-N1	-8.34	113.53	117.70
1	N	272	C	P-O3'-C3'	8.34	129.70	119.70
1	N	469	C	C5-C4-N4	-8.34	114.36	120.20
1	N	960	U	C1'-O4'-C4'	-8.34	103.23	109.90
1	N	1529	G	P-O3'-C3'	8.34	129.71	119.70
1	N	901	A	C6-C5-N7	-8.33	126.47	132.30
1	N	242	G	C5-C6-O6	-8.33	123.60	128.60
1	N	61	G	N1-C6-O6	8.33	124.90	119.90
1	N	609	A	C5-C6-N6	-8.33	117.04	123.70
1	N	1129	C	C6-N1-C2	8.33	123.63	120.30
1	N	190	A	C5-C6-N1	-8.33	113.54	117.70
1	N	224	U	O4'-C1'-N1	8.33	114.86	108.20
1	N	251	G	C6-C5-N7	-8.33	125.40	130.40
1	N	1123	U	C5-C4-O4	-8.33	120.90	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	413	G	N3-C4-C5	-8.33	124.44	128.60
1	N	491	G	C2-N3-C4	8.33	116.06	111.90
1	N	758	C	C2-N3-C4	8.33	124.06	119.90
1	N	517	G	P-O3'-C3'	8.32	129.69	119.70
1	N	95	C	C5-C4-N4	-8.32	114.38	120.20
1	N	189	A	O4'-C1'-N9	8.32	114.86	108.20
1	N	602	A	C4-C5-C6	8.32	121.16	117.00
1	N	671	G	C2-N3-C4	8.32	116.06	111.90
1	N	1099	G	C5-N7-C8	8.32	108.46	104.30
1	N	1340	A	C2-N3-C4	-8.32	106.44	110.60
1	N	648	A	C4-C5-C6	8.31	121.16	117.00
1	N	817	C	C5-C4-N4	-8.31	114.38	120.20
1	N	1442	G	O4'-C1'-N9	8.31	114.85	108.20
1	N	109	A	C5-C6-N1	-8.31	113.55	117.70
1	N	1029	U	N3-C4-O4	8.31	125.22	119.40
1	N	680	C	N3-C4-C5	-8.31	118.58	121.90
1	N	656	G	N3-C4-N9	-8.31	121.02	126.00
1	N	80	A	C5-C6-N1	-8.31	113.55	117.70
1	N	1269	A	O4'-C1'-N9	8.31	114.84	108.20
1	N	192	A	C5-N7-C8	8.30	108.05	103.90
1	N	540	G	O4'-C1'-N9	8.30	114.84	108.20
1	N	784	A	O4'-C1'-N9	8.30	114.84	108.20
1	N	797	C	N3-C4-C5	-8.30	118.58	121.90
1	N	999	C	C6-N1-C2	-8.30	116.98	120.30
1	N	1255	G	O4'-C1'-N9	8.30	114.84	108.20
1	N	334	C	C5-C6-N1	-8.30	116.85	121.00
1	N	1206	G	N3-C4-C5	8.30	132.75	128.60
1	N	1510	C	C5-C6-N1	8.30	125.15	121.00
1	N	467	U	C5-C6-N1	8.29	126.85	122.70
1	N	650	G	C5-C6-N1	-8.30	107.35	111.50
1	N	930	C	N3-C2-O2	8.30	127.71	121.90
1	N	1045	C	C6-N1-C2	-8.29	116.98	120.30
1	N	195	A	O4'-C1'-N9	8.29	114.83	108.20
1	N	463	U	C2-N1-C1'	8.29	127.65	117.70
1	N	1288	A	C4-C5-C6	8.29	121.15	117.00
1	N	1295	U	C5-C6-N1	8.29	126.84	122.70
1	N	1385	G	N1-C2-N3	-8.29	118.92	123.90
1	N	313	A	C5-C6-N1	-8.29	113.56	117.70
1	N	348	G	C6-N1-C2	8.29	130.07	125.10
1	N	855	U	O4'-C1'-N1	8.29	114.83	108.20
1	N	1174	G	N3-C2-N2	8.29	125.70	119.90
1	N	1386	G	C5-C6-N1	-8.29	107.36	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	866	C	O4'-C4'-C3'	8.28	112.73	106.10
1	N	1228	C	N3-C4-C5	-8.28	118.59	121.90
1	N	289	G	C2-N3-C4	8.28	116.04	111.90
1	N	733	G	N1-C6-O6	8.28	124.87	119.90
1	N	242	G	C5-C6-N1	-8.28	107.36	111.50
1	N	277	C	O4'-C1'-N1	8.28	114.82	108.20
1	N	701	U	N1-C2-O2	-8.28	117.00	122.80
1	N	1249	C	N1-C2-O2	8.28	123.87	118.90
1	N	130	A	C4'-C3'-C2'	-8.28	94.33	102.60
1	N	349	A	C2-N3-C4	-8.28	106.46	110.60
1	N	499	A	C4-C5-C6	8.28	121.14	117.00
1	N	324	G	O4'-C1'-N9	8.27	114.82	108.20
1	N	883	C	N3-C4-N4	8.27	123.79	118.00
1	N	1174	G	C6-C5-N7	-8.27	125.44	130.40
1	N	1261	A	C2-N3-C4	-8.27	106.46	110.60
1	N	1407	C	N3-C2-O2	-8.27	116.11	121.90
1	N	904	U	N1-C2-O2	8.27	128.59	122.80
1	N	1042	A	C5-C6-N6	-8.27	117.08	123.70
1	N	371	A	N1-C2-N3	-8.27	125.17	129.30
1	N	589	U	N1-C2-O2	-8.27	117.01	122.80
1	N	1039	G	N1-C6-O6	8.27	124.86	119.90
1	N	237	G	O4'-C1'-N9	8.27	114.81	108.20
1	N	305	G	P-O3'-C3'	8.27	129.62	119.70
1	N	546	A	C5-C6-N1	-8.27	113.57	117.70
1	N	682	G	N9-C4-C5	8.27	108.71	105.40
1	N	711	G	C5-C6-N1	-8.26	107.37	111.50
1	N	1230	C	N3-C4-C5	-8.26	118.59	121.90
1	N	150	U	C5-C6-N1	8.26	126.83	122.70
1	N	689	C	N3-C4-N4	8.26	123.78	118.00
1	N	571	U	N1-C2-O2	-8.26	117.02	122.80
1	N	775	G	C5-C6-O6	-8.26	123.64	128.60
1	N	1481	U	N1-C2-O2	-8.26	117.02	122.80
1	N	807	A	O4'-C1'-N9	8.26	114.81	108.20
1	N	1129	C	C2-N3-C4	-8.26	115.77	119.90
1	N	1390	U	N1-C2-O2	-8.26	117.02	122.80
1	N	26	A	C4-C5-C6	8.25	121.13	117.00
1	N	306	A	C5-C6-N6	-8.25	117.10	123.70
1	N	362	G	O4'-C1'-N9	8.25	114.80	108.20
1	N	434	U	O4'-C1'-N1	8.25	114.80	108.20
1	N	448	A	C4-C5-C6	8.25	121.12	117.00
1	N	679	C	N1-C2-N3	-8.25	113.42	119.20
1	N	819	A	O4'-C1'-N9	8.25	114.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	697	U	N3-C2-O2	8.25	127.97	122.20
1	N	996	A	C4-C5-C6	8.25	121.12	117.00
1	N	1348	U	N3-C2-O2	8.25	127.97	122.20
1	N	1201	A	N9-C4-C5	-8.24	102.50	105.80
1	N	1004	A	C8-N9-C4	-8.24	102.50	105.80
1	N	1041	G	N9-C4-C5	-8.24	102.10	105.40
1	N	542	G	N1-C6-O6	8.24	124.84	119.90
1	N	1254	A	C4-C5-N7	-8.24	106.58	110.70
1	N	520	A	C5-C6-N6	-8.24	117.11	123.70
1	N	577	G	N3-C4-N9	-8.24	121.06	126.00
1	N	231	U	N3-C2-O2	-8.23	116.44	122.20
1	N	1281	C	N3-C2-O2	8.23	127.66	121.90
1	N	1422	G	C5-N7-C8	8.23	108.42	104.30
1	N	530	G	N1-C6-O6	8.23	124.84	119.90
1	N	1097	C	C4-C5-C6	8.23	121.52	117.40
1	N	1010	U	O4'-C1'-N1	8.23	114.78	108.20
1	N	1293	C	N3-C4-N4	8.23	123.76	118.00
1	N	1441	A	C4-C5-N7	-8.23	106.59	110.70
1	N	832	G	N3-C4-C5	8.22	132.71	128.60
1	N	1070	U	O4'-C1'-N1	8.22	114.78	108.20
1	N	833	G	N1-C6-O6	8.22	124.83	119.90
1	N	895	G	C4-C5-C6	8.22	123.73	118.80
1	N	418	C	C5-C4-N4	-8.22	114.45	120.20
1	N	1289	A	C4-C5-C6	8.22	121.11	117.00
1	N	31	G	N9-C4-C5	8.22	108.69	105.40
1	N	126	G	O4'-C1'-N9	8.22	114.77	108.20
1	N	433	G	N9-C4-C5	8.21	108.69	105.40
1	N	1417	G	N3-C2-N2	8.21	125.65	119.90
1	N	1452	C	C4-C5-C6	8.21	121.51	117.40
1	N	38	G	N3-C4-N9	-8.21	121.07	126.00
1	N	41	G	C5-C6-O6	-8.21	123.67	128.60
1	N	121	U	C2-N1-C1'	8.21	127.55	117.70
1	N	77	A	C4'-C3'-C2'	-8.21	94.39	102.60
1	N	909	A	C8-N9-C4	-8.21	102.52	105.80
1	N	1291	U	N3-C4-C5	-8.21	109.68	114.60
1	N	965	U	N3-C4-O4	8.21	125.14	119.40
1	N	1123	U	P-O5'-C5'	8.21	134.03	120.90
1	N	467	U	O4'-C1'-N1	8.20	114.76	108.20
1	N	739	C	C2-N3-C4	-8.20	115.80	119.90
1	N	1219	A	N1-C6-N6	8.20	123.52	118.60
1	N	1370	G	C5-C6-N1	-8.20	107.40	111.50
1	N	1406	U	N3-C4-O4	8.20	125.14	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1016	A	N1-C6-N6	8.20	123.52	118.60
1	N	1411	C	O4'-C1'-N1	8.20	114.76	108.20
1	N	55	A	C5-C6-N1	-8.19	113.60	117.70
1	N	310	G	C5-C6-O6	-8.19	123.68	128.60
1	N	924	C	N3-C4-C5	-8.19	118.62	121.90
1	N	1058	G	N1-C2-N3	-8.19	118.98	123.90
1	N	36	C	O4'-C1'-N1	8.19	114.75	108.20
1	N	524	G	O4'-C1'-N9	8.19	114.75	108.20
1	N	608	A	C4-C5-C6	8.19	121.09	117.00
1	N	632	U	C2-N3-C4	8.19	131.91	127.00
1	N	1034	G	N1-C6-O6	8.19	124.81	119.90
1	N	150	U	N1-C2-N3	8.19	119.81	114.90
1	N	353	A	P-O3'-C3'	8.19	129.53	119.70
1	N	1071	C	C5-C6-N1	8.19	125.09	121.00
1	N	1491	G	N3-C2-N2	8.19	125.63	119.90
1	N	1518	A	C5-C6-N1	-8.18	113.61	117.70
1	N	263	A	C8-N9-C4	-8.18	102.53	105.80
1	N	481	G	N1-C2-N3	-8.18	118.99	123.90
1	N	890	G	N3-C2-N2	8.18	125.62	119.90
1	N	74	A	C5'-C4'-C3'	-8.18	102.92	116.00
1	N	652	U	P-O3'-C3'	8.18	129.51	119.70
1	N	1081	A	C5-C6-N6	-8.18	117.16	123.70
1	N	27	G	N3-C4-N9	8.17	130.90	126.00
1	N	591	U	P-O3'-C3'	-8.17	109.89	119.70
1	N	1250	A	C5-C6-N6	-8.17	117.16	123.70
1	N	1103	C	C5-C6-N1	8.17	125.09	121.00
1	N	125	U	N1-C2-N3	-8.17	110.00	114.90
1	N	776	G	C4-C5-N7	8.17	114.07	110.80
1	N	860	A	N9-C4-C5	-8.17	102.53	105.80
1	N	1329	A	O4'-C1'-N9	8.17	114.73	108.20
1	N	117	G	O4'-C1'-N9	8.17	114.73	108.20
1	N	981	U	O4'-C1'-N1	8.17	114.73	108.20
1	N	1146	A	O4'-C1'-N9	8.17	114.73	108.20
1	N	888	G	P-O3'-C3'	8.16	129.50	119.70
1	N	1365	G	N3-C4-N9	8.16	130.90	126.00
1	N	754	C	N3-C4-N4	8.16	123.71	118.00
1	N	441	A	N9-C4-C5	-8.16	102.54	105.80
1	N	548	G	C4-C5-N7	8.16	114.06	110.80
1	N	559	A	C2-N3-C4	-8.16	106.52	110.60
1	N	78	A	C4-C5-C6	8.16	121.08	117.00
1	N	237	G	C5-C6-O6	-8.16	123.71	128.60
1	N	828	U	O4'-C1'-N1	8.16	114.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	977	A	N1-C6-N6	8.16	123.49	118.60
1	N	1352	C	N3-C4-N4	8.16	123.71	118.00
1	N	536	C	C6-N1-C2	-8.15	117.04	120.30
1	N	315	A	N9-C4-C5	8.15	109.06	105.80
1	N	84	U	N3-C2-O2	8.15	127.91	122.20
1	N	231	U	N1-C2-N3	8.15	119.79	114.90
1	N	690	G	C5-C6-N1	-8.15	107.42	111.50
1	N	792	A	C5-C6-N6	-8.15	117.18	123.70
1	N	1133	G	C4-C5-C6	8.15	123.69	118.80
1	N	416	G	N1-C6-O6	8.15	124.79	119.90
1	N	872	A	C2-N3-C4	8.15	114.67	110.60
1	N	710	G	O4'-C1'-N9	8.15	114.72	108.20
1	N	1190	G	C3'-C2'-C1'	-8.15	94.98	101.50
1	N	857	C	N3-C4-N4	8.15	123.70	118.00
1	N	884	U	O4'-C1'-N1	8.15	114.72	108.20
1	N	939	G	O4'-C1'-N9	8.15	114.72	108.20
1	N	1252	A	C5-C6-N6	-8.14	117.19	123.70
1	N	1386	G	C5-C6-O6	-8.14	123.71	128.60
1	N	998	C	C5-C4-N4	-8.14	114.50	120.20
1	N	1064	G	N1-C6-O6	8.14	124.78	119.90
1	N	685	G	N1-C6-O6	8.14	124.78	119.90
1	N	924	C	C4-C5-C6	8.14	121.47	117.40
1	N	75	G	N3-C2-N2	8.13	125.59	119.90
1	N	597	G	C6-C5-N7	-8.14	125.52	130.40
1	N	874	G	N3-C2-N2	8.13	125.59	119.90
1	N	1316	G	C4-C5-N7	8.14	114.06	110.80
1	N	1263	C	P-O5'-C5'	8.13	133.91	120.90
1	N	1393	U	C4-C5-C6	-8.13	114.82	119.70
1	N	105	G	C5-C6-N1	-8.13	107.44	111.50
1	N	655	A	P-O5'-C5'	8.13	133.91	120.90
1	N	680	C	C5-C4-N4	-8.13	114.51	120.20
1	N	695	A	N3-C4-C5	-8.13	121.11	126.80
1	N	988	G	C5-C6-N1	-8.13	107.43	111.50
1	N	1150	A	C5-C6-N6	-8.13	117.19	123.70
1	N	1229	A	O4'-C1'-N9	8.13	114.71	108.20
1	N	1255	G	N3-C4-C5	8.13	132.67	128.60
1	N	898	G	N1-C2-N3	-8.13	119.02	123.90
1	N	1416	G	C4-C5-N7	8.13	114.05	110.80
1	N	706	A	C5-N7-C8	8.13	107.97	103.90
1	N	1337	G	C5-C6-N1	-8.13	107.44	111.50
1	N	87	C	C3'-C2'-C1'	8.13	108.00	101.50
1	N	118	U	O4'-C1'-N1	8.13	114.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	276	G	C3'-C2'-C1'	-8.12	95.00	101.50
1	N	1390	U	N3-C4-O4	-8.12	113.71	119.40
1	N	1472	U	O4'-C1'-C2'	-8.12	97.68	105.80
1	N	1484	C	C6-N1-C2	-8.12	117.05	120.30
1	N	1486	G	N3-C2-N2	8.12	125.59	119.90
1	N	327	A	P-O3'-C3'	8.12	129.45	119.70
1	N	837	U	O4'-C1'-N1	8.12	114.70	108.20
1	N	45	G	N1-C6-O6	8.12	124.77	119.90
1	N	606	G	C6-C5-N7	-8.12	125.53	130.40
1	N	670	G	N1-C6-O6	8.12	124.77	119.90
1	N	130	A	C8-N9-C4	8.12	109.05	105.80
1	N	230	G	C6-C5-N7	-8.12	125.53	130.40
1	N	1043	G	N3-C2-N2	8.12	125.58	119.90
1	N	1113	C	C2-N3-C4	8.12	123.96	119.90
1	N	1417	G	C4-C5-C6	8.12	123.67	118.80
1	N	116	A	O4'-C1'-N9	8.12	114.69	108.20
1	N	892	A	C6-C5-N7	-8.12	126.62	132.30
1	N	1518	A	N1-C6-N6	8.12	123.47	118.60
1	N	15	G	C4-C5-N7	-8.11	107.56	110.80
1	N	203	G	N9-C1'-C2'	-8.11	103.08	112.00
1	N	484	G	N3-C2-N2	8.11	125.58	119.90
1	N	1130	A	C5-C6-N6	-8.11	117.21	123.70
1	N	667	G	N1-C2-N3	8.11	128.77	123.90
1	N	897	C	N3-C4-C5	-8.11	118.66	121.90
1	N	1165	U	N3-C2-O2	8.11	127.88	122.20
1	N	869	G	C5'-C4'-O4'	8.11	118.83	109.10
1	N	392	C	O4'-C1'-N1	8.11	114.69	108.20
1	N	406	G	C5-C6-N1	-8.11	107.45	111.50
1	N	1376	U	N1-C2-O2	-8.11	117.12	122.80
1	N	1448	C	P-O3'-C3'	8.11	129.43	119.70
1	N	1506	U	O4'-C1'-N1	8.11	114.69	108.20
1	N	95	C	C2-N3-C4	8.11	123.95	119.90
1	N	553	A	C4-C5-C6	8.11	121.05	117.00
1	N	944	G	P-O3'-C3'	-8.11	109.97	119.70
1	N	1494	G	C5-C6-O6	-8.11	123.74	128.60
1	N	1305	G	C6-C5-N7	-8.11	125.54	130.40
1	N	540	G	C8-N9-C1'	8.10	137.53	127.00
1	N	1292	G	O4'-C1'-N9	8.10	114.68	108.20
1	N	1505	G	C1'-O4'-C4'	8.10	116.38	109.90
1	N	224	U	C5-C6-N1	-8.10	118.65	122.70
1	N	267	C	C6-N1-C2	-8.10	117.06	120.30
1	N	547	A	C5-C6-N1	-8.10	113.65	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	869	G	N3-C4-C5	-8.10	124.55	128.60
1	N	1101	A	C4'-C3'-C2'	8.10	110.70	102.60
1	N	369	G	N1-C6-O6	8.10	124.76	119.90
1	N	1496	C	N3-C4-N4	8.10	123.67	118.00
1	N	785	G	C6-C5-N7	-8.09	125.54	130.40
1	N	330	C	C5-C6-N1	8.09	125.04	121.00
1	N	405	U	P-O3'-C3'	-8.09	110.00	119.70
1	N	900	A	O4'-C1'-N9	8.09	114.67	108.20
1	N	724	G	C4-C5-N7	8.09	114.03	110.80
1	N	1012	A	N7-C8-N9	8.09	117.84	113.80
1	N	1012	A	N9-C4-C5	-8.09	102.56	105.80
1	N	1422	G	C4-C5-N7	-8.09	107.57	110.80
1	N	104	G	C5-N7-C8	8.08	108.34	104.30
1	N	886	G	C5-C6-O6	-8.08	123.75	128.60
1	N	573	A	C8-N9-C4	8.08	109.03	105.80
1	N	642	A	C5-C6-N1	-8.08	113.66	117.70
1	N	983	A	C5-N7-C8	8.08	107.94	103.90
1	N	342	C	N3-C4-N4	8.07	123.65	118.00
1	N	593	U	O4'-C1'-N1	8.07	114.66	108.20
1	N	238	A	C5-C6-N6	-8.07	117.24	123.70
1	N	1129	C	N3-C4-C5	8.07	125.13	121.90
1	N	1344	C	O4'-C1'-N1	8.07	114.66	108.20
1	N	66	A	C2-N3-C4	-8.07	106.57	110.60
1	N	1062	U	C2-N3-C4	-8.06	122.16	127.00
1	N	972	C	N3-C4-N4	8.06	123.64	118.00
1	N	132	C	O4'-C1'-N1	8.06	114.65	108.20
1	N	183	C	P-O3'-C3'	8.06	129.38	119.70
1	N	152	A	O4'-C1'-N9	8.06	114.65	108.20
1	N	855	U	N3-C4-C5	-8.06	109.76	114.60
1	N	1488	G	N7-C8-N9	8.06	117.13	113.10
1	N	442	G	C5-N7-C8	8.06	108.33	104.30
1	N	960	U	C3'-C2'-C1'	8.06	107.95	101.50
1	N	1259	C	C4'-C3'-C2'	8.06	110.66	102.60
1	N	752	G	C4-N9-C1'	-8.05	116.03	126.50
1	N	1313	U	N1-C2-N3	-8.05	110.07	114.90
1	N	1475	G	N1-C6-O6	8.05	124.73	119.90
1	N	58	C	C6-N1-C2	-8.05	117.08	120.30
1	N	184	G	N9-C4-C5	-8.05	102.18	105.40
1	N	1166	G	P-O3'-C3'	8.05	129.36	119.70
1	N	1331	G	N1-C2-N3	-8.05	119.07	123.90
1	N	1129	C	C5-C4-N4	-8.05	114.56	120.20
1	N	89	U	P-O3'-C3'	8.05	129.36	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1177	G	O4'-C1'-N9	8.05	114.64	108.20
1	N	455	G	C5-C6-O6	-8.04	123.78	128.60
1	N	952	U	N1-C2-O2	-8.04	117.17	122.80
1	N	1160	G	C5-C6-N1	8.04	115.52	111.50
1	N	546	A	C2-N3-C4	-8.04	106.58	110.60
1	N	68	G	C5-C6-O6	-8.04	123.78	128.60
1	N	399	G	N1-C2-N3	-8.04	119.08	123.90
1	N	659	U	N3-C4-C5	-8.03	109.78	114.60
1	N	366	A	C5-N7-C8	8.03	107.92	103.90
1	N	425	G	N3-C2-N2	8.03	125.52	119.90
1	N	428	G	O4'-C1'-N9	8.03	114.63	108.20
1	N	763	G	N3-C4-N9	8.03	130.82	126.00
1	N	891	U	N3-C4-O4	8.03	125.02	119.40
1	N	1249	C	N3-C4-N4	8.03	123.62	118.00
1	N	1515	G	N1-C6-O6	8.03	124.72	119.90
1	N	85	U	C5-C6-N1	8.03	126.72	122.70
1	N	618	C	C2-N3-C4	8.03	123.92	119.90
1	N	950	U	P-O5'-C5'	8.03	133.75	120.90
1	N	1019	A	N1-C6-N6	8.03	123.42	118.60
1	N	1223	C	C6-N1-C1'	-8.03	111.17	120.80
1	N	2	A	C8-N9-C4	-8.02	102.59	105.80
1	N	531	U	N3-C4-O4	8.02	125.02	119.40
1	N	635	A	C2-N3-C4	-8.02	106.59	110.60
1	N	713	G	C4-C5-C6	8.02	123.61	118.80
1	N	631	C	N3-C4-C5	-8.02	118.69	121.90
1	N	1284	C	C5-C4-N4	-8.02	114.58	120.20
1	N	676	A	C4-C5-C6	8.02	121.01	117.00
1	N	1534	A	C4-C5-C6	8.02	121.01	117.00
1	N	481	G	N3-C2-N2	8.02	125.51	119.90
1	N	497	G	C4-C5-C6	8.02	123.61	118.80
1	N	1097	C	N3-C4-N4	8.02	123.61	118.00
1	N	1117	A	O4'-C1'-N9	8.02	114.61	108.20
1	N	169	C	C4-C5-C6	8.02	121.41	117.40
1	N	1451	U	O4'-C1'-N1	8.01	114.61	108.20
1	N	797	C	C5-C6-N1	-8.01	116.99	121.00
1	N	885	G	N9-C4-C5	-8.01	102.19	105.40
1	N	689	C	N3-C4-C5	-8.01	118.70	121.90
1	N	812	G	C8-N9-C4	-8.01	103.20	106.40
1	N	229	U	C4-C5-C6	-8.01	114.90	119.70
1	N	644	U	N3-C4-O4	8.01	125.00	119.40
1	N	692	U	N3-C4-C5	-8.01	109.80	114.60
1	N	1139	G	N9-C4-C5	-8.01	102.20	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	611	C	C2-N3-C4	8.00	123.90	119.90
1	N	829	G	N1-C2-N3	-8.00	119.10	123.90
1	N	1089	G	C2-N3-C4	8.00	115.90	111.90
1	N	1150	A	C6-N1-C2	-8.00	113.80	118.60
1	N	1280	A	C5-C6-N6	-8.00	117.30	123.70
1	N	223	A	P-O5'-C5'	8.00	133.70	120.90
1	N	1031	C	N3-C4-N4	8.00	123.60	118.00
1	N	1216	A	C6-N1-C2	8.00	123.40	118.60
1	N	337	G	O4'-C1'-N9	8.00	114.60	108.20
1	N	912	C	N3-C4-C5	-8.00	118.70	121.90
1	N	1132	C	C2-N3-C4	8.00	123.90	119.90
1	N	1241	G	C6-C5-N7	-8.00	125.60	130.40
1	N	924	C	O4'-C1'-N1	8.00	114.60	108.20
1	N	739	C	P-O5'-C5'	7.99	133.69	120.90
1	N	1337	G	C5-N7-C8	7.99	108.30	104.30
1	N	1453	G	C5-C6-O6	-7.99	123.80	128.60
1	N	6	G	C4-C5-C6	7.99	123.59	118.80
1	N	164	G	N3-C4-C5	7.99	132.59	128.60
1	N	228	A	C5-C6-N1	-7.99	113.70	117.70
1	N	1056	U	C6-N1-C2	-7.99	116.21	121.00
1	N	618	C	C4-C5-C6	-7.99	113.41	117.40
1	N	1154	G	C6-C5-N7	-7.99	125.61	130.40
1	N	604	G	N1-C2-N3	-7.98	119.11	123.90
1	N	1025	U	O4'-C1'-N1	7.98	114.59	108.20
1	N	1091	U	C5-C4-O4	-7.98	121.11	125.90
1	N	1256	A	C5-C6-N1	-7.98	113.71	117.70
1	N	102	G	C6-N1-C2	7.98	129.89	125.10
1	N	224	U	N1-C2-O2	-7.98	117.21	122.80
1	N	462	G	C1'-O4'-C4'	7.98	116.28	109.90
1	N	1465	A	C3'-C2'-C1'	7.98	107.88	101.50
1	N	1099	G	O4'-C1'-N9	7.98	114.58	108.20
1	N	399	G	N1-C6-O6	7.98	124.69	119.90
1	N	1216	A	C5-C6-N1	-7.98	113.71	117.70
1	N	710	G	N1-C2-N3	-7.97	119.11	123.90
1	N	1156	G	C6-C5-N7	-7.97	125.61	130.40
1	N	1210	C	N3-C4-C5	-7.97	118.71	121.90
1	N	134	G	C3'-C2'-C1'	-7.97	95.12	101.50
1	N	184	G	C5-C6-N1	-7.97	107.52	111.50
1	N	452	A	C5-N7-C8	7.97	107.89	103.90
1	N	807	A	C5-C6-N1	-7.97	113.72	117.70
1	N	1036	A	C5-C6-N6	-7.97	117.33	123.70
1	N	1180	A	C4-C5-C6	7.97	120.98	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	487	A	C6-C5-N7	-7.97	126.72	132.30
1	N	481	G	C5-C6-O6	-7.97	123.82	128.60
1	N	906	A	C5-N7-C8	7.97	107.88	103.90
1	N	1290	G	C4-C5-N7	7.97	113.99	110.80
1	N	32	A	C5-C6-N6	-7.96	117.33	123.70
1	N	417	G	C2-N3-C4	-7.96	107.92	111.90
1	N	480	U	N1-C1'-C2'	-7.96	103.24	112.00
1	N	844	G	N3-C2-N2	7.96	125.47	119.90
1	N	215	C	C5-C4-N4	-7.96	114.63	120.20
1	N	414	A	C5-C6-N1	-7.96	113.72	117.70
1	N	527	G	N1-C2-N3	-7.96	119.12	123.90
1	N	598	U	C4-C5-C6	7.96	124.47	119.70
1	N	746	A	N3-C4-C5	-7.96	121.23	126.80
1	N	1133	G	N9-C4-C5	7.96	108.58	105.40
1	N	211	G	N1-C2-N3	-7.95	119.13	123.90
1	N	75	G	N9-C1'-C2'	-7.95	103.25	112.00
1	N	382	A	C4-C5-C6	7.95	120.97	117.00
1	N	468	A	P-O3'-C3'	7.95	129.24	119.70
1	N	1150	A	O4'-C1'-N9	7.95	114.56	108.20
1	N	1373	G	P-O3'-C3'	7.95	129.24	119.70
1	N	135	C	N1-C2-N3	-7.95	113.64	119.20
1	N	351	G	C5-N7-C8	-7.95	100.33	104.30
1	N	396	C	N3-C4-N4	7.95	123.56	118.00
1	N	300	A	O4'-C1'-N9	7.94	114.56	108.20
1	N	276	G	N3-C2-N2	7.94	125.46	119.90
1	N	509	A	C5-C6-N1	-7.94	113.73	117.70
1	N	900	A	C8-N9-C4	-7.94	102.62	105.80
1	N	461	A	C5-C6-N6	-7.94	117.35	123.70
1	N	555	U	C4-C5-C6	-7.94	114.94	119.70
1	N	380	G	C4-N9-C1'	-7.94	116.18	126.50
1	N	1373	G	C4-C5-N7	7.94	113.97	110.80
1	N	212	G	N3-C2-N2	-7.93	114.35	119.90
1	N	1130	A	C4-C5-C6	7.93	120.97	117.00
1	N	433	G	C4-C5-N7	-7.93	107.63	110.80
1	N	574	A	C5-C6-N6	-7.93	117.36	123.70
1	N	465	A	C8-N9-C4	7.93	108.97	105.80
1	N	558	G	N3-C4-C5	-7.93	124.64	128.60
1	N	1295	U	N3-C2-O2	7.93	127.75	122.20
1	N	78	A	C5-C6-N6	-7.93	117.36	123.70
1	N	926	G	O3'-P-O5'	7.93	119.06	104.00
1	N	411	A	P-O5'-C5'	7.92	133.58	120.90
1	N	885	G	N3-C4-C5	7.92	132.56	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	976	G	N7-C8-N9	-7.92	109.14	113.10
1	N	605	U	N3-C4-O4	7.92	124.95	119.40
1	N	729	A	C8-N9-C4	-7.92	102.63	105.80
1	N	1304	G	C4-N9-C1'	7.92	136.80	126.50
1	N	878	A	C6-C5-N7	-7.92	126.75	132.30
1	N	915	A	O4'-C1'-N9	7.92	114.54	108.20
1	N	963	G	N1-C6-O6	7.92	124.65	119.90
1	N	1071	C	O4'-C1'-N1	7.92	114.54	108.20
1	N	1478	U	C4-C5-C6	7.92	124.45	119.70
1	N	29	U	C2-N3-C4	7.92	131.75	127.00
1	N	73	C	C6-N1-C2	-7.92	117.13	120.30
1	N	1402	C	C2-N3-C4	7.92	123.86	119.90
1	N	211	G	N3-C2-N2	7.92	125.44	119.90
1	N	656	G	C8-N9-C1'	7.92	137.29	127.00
1	N	985	C	P-O5'-C5'	7.92	133.57	120.90
1	N	1362	A	N3-C4-C5	-7.92	121.26	126.80
1	N	1397	C	C5-C4-N4	-7.92	114.66	120.20
1	N	337	G	C4-C5-N7	7.92	113.97	110.80
1	N	555	U	C5-C4-O4	-7.92	121.15	125.90
1	N	902	G	C2-N3-C4	-7.92	107.94	111.90
1	N	1036	A	C6-C5-N7	-7.92	126.76	132.30
1	N	1061	G	C6-C5-N7	-7.91	125.65	130.40
1	N	1455	G	C5-C6-O6	-7.91	123.85	128.60
1	N	274	A	C5-C6-N6	-7.91	117.37	123.70
1	N	318	G	N1-C6-O6	7.91	124.65	119.90
1	N	486	U	O4'-C1'-N1	7.91	114.53	108.20
1	N	1172	C	O4'-C4'-C3'	-7.91	96.09	104.00
1	N	1331	G	C5-N7-C8	7.91	108.25	104.30
1	N	142	G	C2-N3-C4	7.91	115.85	111.90
1	N	742	G	N1-C6-O6	7.91	124.65	119.90
1	N	1134	G	O4'-C1'-N9	7.91	114.53	108.20
1	N	128	G	P-O5'-C5'	7.91	133.55	120.90
1	N	151	A	C4-C5-C6	7.91	120.95	117.00
1	N	506	G	O4'-C1'-N9	7.91	114.52	108.20
1	N	1455	G	N7-C8-N9	7.91	117.05	113.10
1	N	141	G	C8-N9-C4	7.90	109.56	106.40
1	N	600	A	N1-C6-N6	7.90	123.34	118.60
1	N	710	G	C5-C6-O6	-7.90	123.86	128.60
1	N	864	A	C5-N7-C8	7.90	107.85	103.90
1	N	1249	C	N3-C4-C5	-7.90	118.74	121.90
1	N	585	G	N3-C4-N9	-7.90	121.26	126.00
1	N	754	C	O4'-C1'-N1	7.90	114.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	779	C	C2-N3-C4	-7.90	115.95	119.90
1	N	1534	A	N1-C2-N3	7.90	133.25	129.30
1	N	68	G	N3-C2-N2	7.90	125.43	119.90
1	N	715	A	O4'-C1'-N9	7.90	114.52	108.20
1	N	1226	C	N3-C4-N4	7.90	123.53	118.00
1	N	1462	C	N3-C4-N4	7.90	123.53	118.00
1	N	75	G	C2-N3-C4	7.90	115.85	111.90
1	N	80	A	P-O3'-C3'	-7.89	110.23	119.70
1	N	269	C	N3-C2-O2	7.89	127.43	121.90
1	N	440	C	C2-N3-C4	-7.89	115.95	119.90
1	N	507	C	O4'-C1'-N1	7.89	114.52	108.20
1	N	564	C	N3-C4-N4	7.89	123.53	118.00
1	N	627	G	N3-C2-N2	7.89	125.43	119.90
1	N	719	C	O4'-C4'-C3'	-7.89	96.11	104.00
1	N	664	G	O4'-C1'-N9	7.89	114.51	108.20
1	N	734	G	C6-C5-N7	-7.89	125.67	130.40
1	N	749	A	C8-N9-C4	-7.89	102.64	105.80
1	N	873	A	C6-C5-N7	-7.89	126.78	132.30
1	N	1265	C	O4'-C1'-N1	7.89	114.51	108.20
1	N	968	A	C5-C6-N6	-7.89	117.39	123.70
1	N	1236	A	P-O5'-C5'	7.89	133.52	120.90
1	N	1433	A	N7-C8-N9	7.89	117.74	113.80
1	N	490	C	P-O3'-C3'	-7.88	110.24	119.70
1	N	615	G	C6-C5-N7	-7.88	125.67	130.40
1	N	786	G	O4'-C1'-N9	7.88	114.51	108.20
1	N	1075	U	O4'-C1'-N1	7.88	114.51	108.20
1	N	1177	G	C3'-C2'-C1'	-7.88	95.19	101.50
1	N	357	G	C5-N7-C8	-7.88	100.36	104.30
1	N	474	G	O4'-C1'-C2'	-7.88	97.92	105.80
1	N	90	C	N3-C4-N4	7.88	123.52	118.00
1	N	478	A	O4'-C1'-N9	7.88	114.50	108.20
1	N	982	U	C2-N3-C4	-7.88	122.27	127.00
1	N	1401	G	N1-C6-O6	7.88	124.63	119.90
1	N	275	G	C6-C5-N7	-7.88	125.67	130.40
1	N	370	C	C5-C4-N4	-7.88	114.69	120.20
1	N	540	G	N3-C2-N2	7.88	125.42	119.90
1	N	50	A	C4-C5-C6	7.88	120.94	117.00
1	N	51	A	C8-N9-C4	7.88	108.95	105.80
1	N	135	C	C6-N1-C1'	-7.88	111.35	120.80
1	N	1501	C	C4'-C3'-C2'	-7.88	94.72	102.60
1	N	1107	C	N1-C2-O2	-7.88	114.17	118.90
1	N	1210	C	C2-N3-C4	7.87	123.84	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	361	G	N3-C2-N2	7.87	125.41	119.90
1	N	1312	G	N1-C6-O6	7.87	124.62	119.90
1	N	1424	U	N3-C4-O4	7.87	124.91	119.40
1	N	1500	A	C3'-C2'-C1'	7.87	107.79	101.50
1	N	42	G	C8-N9-C4	7.87	109.55	106.40
1	N	183	C	N3-C4-C5	-7.87	118.75	121.90
1	N	146	G	C5-C6-O6	7.87	133.32	128.60
1	N	258	G	N1-C2-N3	-7.87	119.18	123.90
1	N	601	G	C5-C6-O6	-7.87	123.88	128.60
1	N	979	C	N1-C2-O2	7.87	123.62	118.90
1	N	1105	A	N3-C4-C5	-7.87	121.29	126.80
1	N	1117	A	C4-C5-C6	7.87	120.93	117.00
1	N	1526	G	N9-C4-C5	-7.87	102.25	105.40
1	N	262	A	N7-C8-N9	7.86	117.73	113.80
1	N	723	U	N1-C2-O2	7.86	128.30	122.80
1	N	1267	C	O4'-C1'-N1	7.86	114.49	108.20
1	N	247	G	O5'-P-OP1	7.86	120.14	110.70
1	N	1155	A	C5-C6-N1	-7.86	113.77	117.70
1	N	162	A	C5-C6-N1	-7.86	113.77	117.70
1	N	722	G	C5-N7-C8	-7.86	100.37	104.30
1	N	685	G	C4-C5-N7	-7.86	107.66	110.80
1	N	958	A	C5-C6-N1	-7.86	113.77	117.70
1	N	1459	G	C4-C5-C6	7.86	123.51	118.80
1	N	1533	C	C4-C5-C6	7.86	121.33	117.40
1	N	377	G	C5-C6-N1	-7.85	107.57	111.50
1	N	412	A	C5-C6-N1	-7.85	113.77	117.70
1	N	1033	G	C5-C6-O6	-7.85	123.89	128.60
1	N	516	U	P-O3'-C3'	7.85	129.12	119.70
1	N	509	A	C5-C6-N6	-7.85	117.42	123.70
1	N	1184	G	C2-N3-C4	-7.85	107.97	111.90
1	N	800	G	C4-C5-C6	7.85	123.51	118.80
1	N	1248	A	C5-C6-N6	-7.85	117.42	123.70
1	N	1174	G	O4'-C1'-N9	7.84	114.47	108.20
1	N	1197	A	C4-C5-C6	7.84	120.92	117.00
1	N	1230	C	P-O3'-C3'	7.84	129.11	119.70
1	N	624	C	N3-C4-N4	7.84	123.49	118.00
1	N	697	U	N1-C2-O2	-7.84	117.31	122.80
1	N	787	A	N1-C6-N6	7.84	123.31	118.60
1	N	57	G	C6-C5-N7	-7.84	125.70	130.40
1	N	373	A	C1'-O4'-C4'	7.84	116.17	109.90
1	N	321	A	C5-C6-N6	-7.84	117.43	123.70
1	N	1047	G	N1-C2-N3	-7.84	119.20	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	47	C	N3-C4-N4	7.84	123.48	118.00
1	N	374	A	N1-C6-N6	7.84	123.30	118.60
1	N	1476	A	N9-C4-C5	7.84	108.94	105.80
1	N	519	C	O4'-C1'-N1	7.83	114.47	108.20
1	N	954	G	N3-C2-N2	7.83	125.38	119.90
1	N	216	U	N3-C4-C5	-7.83	109.90	114.60
1	N	408	A	N3-C4-C5	-7.83	121.32	126.80
1	N	655	A	C4-C5-C6	7.83	120.92	117.00
1	N	742	G	O4'-C4'-C3'	-7.83	96.17	104.00
1	N	545	C	C6-N1-C2	7.83	123.43	120.30
1	N	727	G	C4-C5-N7	7.83	113.93	110.80
1	N	873	A	N9-C4-C5	-7.83	102.67	105.80
1	N	187	G	O4'-C1'-N9	7.83	114.46	108.20
1	N	198	G	C5'-C4'-C3'	-7.83	103.47	116.00
1	N	1171	A	N7-C8-N9	7.83	117.72	113.80
1	N	1230	C	C2-N3-C4	7.83	123.81	119.90
1	N	363	A	N1-C6-N6	7.83	123.30	118.60
1	N	440	C	C5-C4-N4	-7.83	114.72	120.20
1	N	847	G	N1-C6-O6	7.83	124.59	119.90
1	N	866	C	C5-C4-N4	-7.83	114.72	120.20
1	N	985	C	N1-C2-N3	-7.83	113.72	119.20
1	N	514	C	O4'-C1'-N1	7.82	114.46	108.20
1	N	59	A	N1-C6-N6	7.82	123.29	118.60
1	N	115	G	C5-C6-O6	-7.82	123.91	128.60
1	N	1047	G	O4'-C1'-N9	7.82	114.46	108.20
1	N	1124	G	N3-C4-N9	-7.82	121.31	126.00
1	N	376	G	N7-C8-N9	-7.82	109.19	113.10
1	N	1495	U	C5-C6-N1	7.82	126.61	122.70
1	N	960	U	O4'-C1'-N1	7.82	114.45	108.20
1	N	1052	U	C5-C6-N1	7.82	126.61	122.70
1	N	1202	U	N3-C4-O4	7.82	124.87	119.40
1	N	134	G	C5'-C4'-O4'	7.82	118.48	109.10
1	N	623	C	C5-C6-N1	7.82	124.91	121.00
1	N	952	U	O4'-C1'-N1	7.82	114.45	108.20
1	N	1129	C	C6-N1-C1'	-7.82	111.42	120.80
1	N	1439	G	C5-C6-N1	-7.82	107.59	111.50
1	N	1442	G	C6-N1-C2	7.82	129.79	125.10
1	N	702	A	C4-C5-N7	-7.81	106.79	110.70
1	N	670	G	N3-C2-N2	7.81	125.37	119.90
1	N	1161	C	C5-C4-N4	-7.81	114.73	120.20
1	N	1005	A	N1-C2-N3	7.81	133.20	129.30
1	N	1321	U	O4'-C1'-N1	7.81	114.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	39	G	C8-N9-C4	-7.81	103.28	106.40
1	N	887	G	C2-N3-C4	-7.81	108.00	111.90
1	N	637	C	N3-C4-C5	-7.80	118.78	121.90
1	N	1281	C	N1-C2-O2	-7.80	114.22	118.90
1	N	126	G	C3'-C2'-C1'	7.80	107.74	101.50
1	N	306	A	P-O3'-C3'	7.80	129.06	119.70
1	N	594	U	O4'-C1'-N1	7.80	114.44	108.20
1	N	772	U	C2-N3-C4	-7.80	122.32	127.00
1	N	664	G	C4-C5-C6	7.80	123.48	118.80
1	N	1102	A	C5-C6-N6	-7.80	117.46	123.70
1	N	312	C	C2-N3-C4	7.80	123.80	119.90
1	N	339	C	N3-C4-C5	-7.80	118.78	121.90
1	N	366	A	N7-C8-N9	-7.80	109.90	113.80
1	N	1203	C	O5'-P-OP2	-7.80	98.68	105.70
1	N	1335	U	N1-C2-O2	-7.80	117.34	122.80
1	N	161	A	C1'-O4'-C4'	7.79	116.14	109.90
1	N	267	C	C2-N3-C4	7.79	123.80	119.90
1	N	360	G	C4-C5-C6	7.79	123.48	118.80
1	N	769	G	N1-C6-O6	7.79	124.58	119.90
1	N	416	G	N3-C2-N2	7.79	125.35	119.90
1	N	1435	G	O4'-C1'-N9	7.79	114.43	108.20
1	N	211	G	C4-N9-C1'	7.79	136.63	126.50
1	N	962	C	O4'-C1'-N1	7.79	114.43	108.20
1	N	143	A	C5-C6-N6	-7.79	117.47	123.70
1	N	284	C	O4'-C1'-N1	7.79	114.43	108.20
1	N	398	U	N1-C2-N3	-7.79	110.23	114.90
1	N	991	U	N3-C4-O4	7.79	124.85	119.40
1	N	1064	G	O4'-C1'-N9	7.79	114.43	108.20
1	N	576	C	N1-C2-O2	7.79	123.57	118.90
1	N	668	G	O4'-C1'-N9	7.79	114.43	108.20
1	N	511	C	C2-N3-C4	7.78	123.79	119.90
1	N	790	A	C5-C6-N6	-7.78	117.47	123.70
1	N	913	A	C6-N1-C2	-7.78	113.93	118.60
1	N	546	A	N1-C2-N3	7.78	133.19	129.30
1	N	1178	G	N9-C4-C5	-7.78	102.29	105.40
1	N	1110	A	C4-C5-C6	7.78	120.89	117.00
1	N	1396	A	C4-C5-C6	7.78	120.89	117.00
1	N	809	G	N1-C2-N3	-7.78	119.23	123.90
1	N	477	C	N3-C4-C5	-7.78	118.79	121.90
1	N	1422	G	N3-C2-N2	7.78	125.34	119.90
1	N	523	A	N7-C8-N9	7.77	117.69	113.80
1	N	1325	C	P-O5'-C5'	7.77	133.34	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	55	A	C4-C5-C6	7.77	120.89	117.00
1	N	661	G	C5-C6-O6	-7.77	123.94	128.60
1	N	1396	A	O4'-C1'-C2'	7.77	114.59	107.60
1	N	1451	U	N3-C2-O2	-7.77	116.76	122.20
1	N	730	G	C8-N9-C4	-7.77	103.29	106.40
1	N	741	G	C8-N9-C4	7.77	109.51	106.40
1	N	1154	G	C2-N3-C4	7.77	115.78	111.90
1	N	1350	A	N1-C6-N6	7.77	123.26	118.60
1	N	473	U	C3'-C2'-C1'	7.77	107.71	101.50
1	N	829	G	C6-C5-N7	-7.77	125.74	130.40
1	N	1200	C	O4'-C1'-N1	7.77	114.42	108.20
1	N	514	C	N3-C4-N4	7.76	123.44	118.00
1	N	191	G	C5-C6-O6	-7.76	123.94	128.60
1	N	396	C	N3-C4-C5	-7.76	118.80	121.90
1	N	459	A	C8-N9-C4	-7.76	102.69	105.80
1	N	776	G	P-O3'-C3'	7.76	129.01	119.70
1	N	241	G	C5-N7-C8	-7.76	100.42	104.30
1	N	646	G	N9-C4-C5	-7.76	102.30	105.40
1	N	819	A	C5-C6-N6	-7.76	117.49	123.70
1	N	879	C	C5-C6-N1	7.76	124.88	121.00
1	N	289	G	N1-C2-N3	-7.76	119.25	123.90
1	N	466	A	N1-C6-N6	7.76	123.25	118.60
1	N	698	G	C5-N7-C8	7.76	108.18	104.30
1	N	773	G	C5-C6-N1	-7.75	107.62	111.50
1	N	1255	G	C5-C6-N1	-7.75	107.62	111.50
1	N	143	A	O4'-C1'-N9	7.75	114.40	108.20
1	N	472	U	C1'-O4'-C4'	-7.75	103.70	109.90
1	N	1322	C	P-O3'-C3'	7.75	129.00	119.70
1	N	264	C	C5-C6-N1	7.75	124.88	121.00
1	N	1350	A	O4'-C1'-N9	7.75	114.40	108.20
1	N	1508	A	N7-C8-N9	7.75	117.67	113.80
1	N	412	A	C8-N9-C4	-7.75	102.70	105.80
1	N	963	G	P-O3'-C3'	-7.75	110.41	119.70
1	N	1216	A	N1-C2-N3	-7.75	125.43	129.30
1	N	26	A	P-O3'-C3'	7.75	128.99	119.70
1	N	1329	A	C5-C6-N6	-7.75	117.50	123.70
1	N	162	A	P-O3'-C3'	7.74	128.99	119.70
1	N	561	U	C2-N3-C4	7.74	131.65	127.00
1	N	841	C	C6-N1-C1'	-7.74	111.51	120.80
1	N	1356	G	O4'-C1'-N9	7.74	114.39	108.20
1	N	459	A	C5-C6-N6	-7.74	117.51	123.70
1	N	1039	G	C4-C5-C6	7.74	123.44	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1002	G	O4'-C1'-N9	7.74	114.39	108.20
1	N	1388	C	N3-C4-N4	7.74	123.42	118.00
1	N	63	C	C6-N1-C2	-7.74	117.20	120.30
1	N	536	C	C5-C4-N4	-7.74	114.78	120.20
1	N	1203	C	C6-N1-C2	-7.74	117.20	120.30
1	N	1378	C	N3-C2-O2	-7.74	116.48	121.90
1	N	207	C	O4'-C4'-C3'	-7.74	96.27	104.00
1	N	1485	U	N3-C2-O2	7.74	127.61	122.20
1	N	336	A	C2-N3-C4	-7.73	106.73	110.60
1	N	293	G	C5-C6-O6	-7.73	123.96	128.60
1	N	1223	C	C2-N1-C1'	7.73	127.31	118.80
1	N	240	G	C4-C5-C6	7.73	123.44	118.80
1	N	282	A	N7-C8-N9	7.73	117.67	113.80
1	N	1364	U	N3-C4-C5	-7.73	109.96	114.60
1	N	395	C	O4'-C1'-N1	7.73	114.38	108.20
1	N	514	C	P-O3'-C3'	-7.73	110.43	119.70
1	N	50	A	C4-C5-N7	-7.72	106.84	110.70
1	N	1068	G	C5'-C4'-C3'	-7.72	103.64	116.00
1	N	1106	G	N1-C2-N3	-7.72	119.27	123.90
1	N	1459	G	C6-C5-N7	-7.72	125.77	130.40
1	N	272	C	C6-N1-C1'	-7.72	111.53	120.80
1	N	872	A	C5-C6-N1	-7.72	113.84	117.70
1	N	1063	C	P-O3'-C3'	-7.72	110.43	119.70
1	N	1151	A	N7-C8-N9	-7.72	109.94	113.80
1	N	1389	C	N3-C4-C5	-7.72	118.81	121.90
1	N	890	G	N7-C8-N9	7.72	116.96	113.10
1	N	1047	G	P-O3'-C3'	7.72	128.97	119.70
1	N	1246	A	C5-C6-N6	-7.72	117.52	123.70
1	N	22	G	N1-C6-O6	7.72	124.53	119.90
1	N	417	G	C6-C5-N7	-7.72	125.77	130.40
1	N	1165	U	N1-C2-O2	-7.72	117.40	122.80
1	N	199	A	N1-C2-N3	7.72	133.16	129.30
1	N	290	C	C5-C6-N1	7.72	124.86	121.00
1	N	599	C	N3-C4-N4	7.72	123.40	118.00
1	N	713	G	O4'-C1'-N9	7.72	114.37	108.20
1	N	736	C	C5-C4-N4	-7.72	114.80	120.20
1	N	1200	C	C5'-C4'-O4'	-7.72	99.84	109.10
1	N	1282	C	C6-N1-C1'	-7.72	111.54	120.80
1	N	171	A	C3'-C2'-C1'	7.71	107.67	101.50
1	N	649	A	N1-C6-N6	7.71	123.23	118.60
1	N	1368	A	C4-C5-N7	-7.71	106.84	110.70
1	N	160	A	N1-C2-N3	7.71	133.16	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	570	G	C5-C6-O6	-7.71	123.97	128.60
1	N	279	A	C5-C6-N1	-7.71	113.84	117.70
1	N	199	A	C1'-O4'-C4'	7.71	116.07	109.90
1	N	308	C	C4-C5-C6	7.71	121.25	117.40
1	N	1197	A	C5-C6-N6	-7.71	117.53	123.70
1	N	703	G	N9-C4-C5	-7.71	102.32	105.40
1	N	855	U	C5-C6-N1	-7.71	118.85	122.70
1	N	1019	A	P-O3'-C3'	-7.71	110.45	119.70
1	N	116	A	C4-C5-C6	7.70	120.85	117.00
1	N	1014	A	N1-C6-N6	7.70	123.22	118.60
1	N	1417	G	N9-C4-C5	7.70	108.48	105.40
1	N	247	G	O4'-C1'-N9	7.70	114.36	108.20
1	N	306	A	N7-C8-N9	-7.70	109.95	113.80
1	N	99	C	N3-C4-C5	-7.70	118.82	121.90
1	N	173	U	P-O5'-C5'	-7.70	108.58	120.90
1	N	1492	A	C2-N3-C4	-7.70	106.75	110.60
1	N	51	A	C5-C6-N1	-7.70	113.85	117.70
1	N	674	G	O4'-C1'-N9	7.70	114.36	108.20
1	N	786	G	C4-C5-N7	-7.70	107.72	110.80
1	N	854	U	O4'-C1'-N1	7.70	114.36	108.20
1	N	993	G	C4-C5-N7	-7.70	107.72	110.80
1	N	370	C	N3-C4-N4	7.69	123.39	118.00
1	N	1291	U	P-O3'-C3'	-7.69	110.47	119.70
1	N	417	G	O4'-C1'-N9	7.69	114.35	108.20
1	N	531	U	C5'-C4'-O4'	7.69	118.33	109.10
1	N	923	A	N1-C6-N6	7.69	123.22	118.60
1	N	76	G	N7-C8-N9	7.69	116.95	113.10
1	N	1241	G	C5-C6-N1	-7.69	107.66	111.50
1	N	1047	G	N3-C2-N2	7.69	125.28	119.90
1	N	49	U	O4'-C1'-N1	7.69	114.35	108.20
1	N	235	C	C2-N3-C4	7.69	123.74	119.90
1	N	1026	G	C6-C5-N7	-7.69	125.79	130.40
1	N	1076	U	N3-C4-C5	-7.69	109.99	114.60
1	N	6	G	C8-N9-C4	-7.69	103.33	106.40
1	N	1079	G	C4-C5-C6	7.69	123.41	118.80
1	N	746	A	C5-C6-N1	-7.68	113.86	117.70
1	N	390	U	C6-N1-C2	-7.68	116.39	121.00
1	N	988	G	N7-C8-N9	-7.68	109.26	113.10
1	N	1266	G	N1-C6-O6	7.68	124.51	119.90
1	N	510	A	C5-C6-N1	-7.68	113.86	117.70
1	N	227	G	N9-C4-C5	-7.67	102.33	105.40
1	N	1275	A	C6-C5-N7	-7.67	126.93	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1377	A	P-O3'-C3'	7.67	128.91	119.70
1	N	513	C	C5-C6-N1	7.67	124.84	121.00
1	N	176	C	C2-N3-C4	-7.67	116.06	119.90
1	N	215	C	C3'-C2'-C1'	7.67	107.64	101.50
1	N	268	U	O4'-C1'-N1	7.67	114.34	108.20
1	N	929	G	C6-C5-N7	-7.67	125.80	130.40
1	N	1034	G	O5'-C5'-C4'	7.67	126.27	111.70
1	N	1144	G	C5-N7-C8	-7.67	100.46	104.30
1	N	268	U	N1-C2-N3	-7.67	110.30	114.90
1	N	1153	G	P-O3'-C3'	-7.67	110.50	119.70
1	N	776	G	C5-N7-C8	-7.67	100.47	104.30
1	N	265	G	C5-C6-N1	-7.67	107.67	111.50
1	N	1042	A	C6-C5-N7	-7.67	126.93	132.30
1	N	1282	C	C5-C4-N4	-7.67	114.83	120.20
1	N	1377	A	O4'-C1'-N9	7.67	114.33	108.20
1	N	154	U	P-O5'-C5'	7.66	133.16	120.90
1	N	395	C	N3-C4-C5	-7.66	118.83	121.90
1	N	974	A	C8-N9-C4	-7.66	102.73	105.80
1	N	415	A	N3-C4-N9	-7.66	121.27	127.40
1	N	900	A	C5-C6-N6	-7.66	117.57	123.70
1	N	1244	G	C8-N9-C4	7.66	109.46	106.40
1	N	67	C	N3-C4-C5	-7.66	118.84	121.90
1	N	902	G	C5-C6-N1	-7.66	107.67	111.50
1	N	1427	C	N3-C4-N4	7.66	123.36	118.00
1	N	168	G	N7-C8-N9	-7.66	109.27	113.10
1	N	1323	G	C4'-C3'-C2'	-7.66	94.94	102.60
1	N	1467	C	O4'-C1'-N1	7.66	114.33	108.20
1	N	1507	A	C5-C6-N6	-7.66	117.58	123.70
1	N	278	G	C5-C6-O6	-7.66	124.01	128.60
1	N	1041	G	C4-C5-N7	7.66	113.86	110.80
1	N	1218	C	N3-C4-N4	7.66	123.36	118.00
1	N	1329	A	C2-N3-C4	-7.66	106.77	110.60
1	N	251	G	O4'-C1'-N9	-7.65	102.08	108.20
1	N	993	G	C4-C5-C6	7.65	123.39	118.80
1	N	1012	A	O4'-C1'-N9	7.65	114.32	108.20
1	N	1401	G	N1-C2-N2	-7.65	109.31	116.20
1	N	142	G	P-O3'-C3'	7.65	128.88	119.70
1	N	259	G	P-O5'-C5'	-7.65	108.66	120.90
1	N	924	C	N1-C2-O2	-7.65	114.31	118.90
1	N	1107	C	N1-C2-N3	7.65	124.56	119.20
1	N	575	G	C5-N7-C8	-7.65	100.48	104.30
1	N	1152	A	N9-C4-C5	7.65	108.86	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	915	A	C4-C5-N7	-7.65	106.88	110.70
1	N	498	A	N3-C4-C5	-7.64	121.45	126.80
1	N	1079	G	N3-C4-C5	-7.64	124.78	128.60
1	N	1112	C	N3-C4-C5	-7.64	118.84	121.90
1	N	1329	A	C4-C5-N7	-7.64	106.88	110.70
1	N	16	A	C4-C5-C6	7.64	120.82	117.00
1	N	661	G	C4-C5-C6	7.64	123.38	118.80
1	N	818	G	N3-C4-C5	-7.64	124.78	128.60
1	N	869	G	C4'-C3'-C2'	-7.64	94.96	102.60
1	N	997	U	C5-C6-N1	7.64	126.52	122.70
1	N	153	C	O4'-C1'-N1	7.63	114.31	108.20
1	N	932	C	N3-C4-C5	-7.63	118.85	121.90
1	N	1294	G	O4'-C1'-N9	7.63	114.31	108.20
1	N	211	G	C4'-C3'-C2'	7.63	110.23	102.60
1	N	538	G	N1-C6-O6	7.63	124.48	119.90
1	N	653	U	O4'-C1'-N1	7.63	114.30	108.20
1	N	1105	A	O4'-C1'-N9	7.63	114.30	108.20
1	N	1115	U	O4'-C1'-N1	7.63	114.30	108.20
1	N	615	G	O4'-C1'-N9	7.63	114.30	108.20
1	N	134	G	C6-C5-N7	-7.63	125.82	130.40
1	N	1271	A	C5-C6-N1	-7.63	113.89	117.70
1	N	149	A	N9-C4-C5	-7.62	102.75	105.80
1	N	117	G	C4-C5-N7	-7.62	107.75	110.80
1	N	1177	G	N1-C6-O6	7.62	124.47	119.90
1	N	205	A	C6-N1-C2	7.62	123.17	118.60
1	N	291	U	C5-C4-O4	-7.62	121.33	125.90
1	N	726	C	O4'-C1'-N1	7.62	114.30	108.20
1	N	1310	G	C5-C6-N1	-7.62	107.69	111.50
1	N	357	G	C5-C6-N1	-7.62	107.69	111.50
1	N	80	A	C4-C5-C6	7.62	120.81	117.00
1	N	237	G	N1-C6-O6	7.62	124.47	119.90
1	N	211	G	C8-N9-C4	7.62	109.45	106.40
1	N	352	C	C6-N1-C1'	-7.62	111.66	120.80
1	N	556	C	C1'-O4'-C4'	7.62	115.99	109.90
1	N	869	G	C4-C5-N7	-7.62	107.75	110.80
1	N	903	G	N1-C2-N3	-7.62	119.33	123.90
1	N	973	G	N1-C2-N3	-7.62	119.33	123.90
1	N	1310	G	O4'-C1'-N9	7.62	114.29	108.20
1	N	1447	A	C5-C6-N6	-7.62	117.61	123.70
1	N	1510	C	C6-N1-C2	-7.62	117.25	120.30
1	N	183	C	C1'-O4'-C4'	-7.61	103.81	109.90
1	N	472	U	N3-C4-C5	-7.61	110.03	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	791	G	N1-C2-N3	-7.61	119.33	123.90
1	N	234	C	C2-N3-C4	7.61	123.70	119.90
1	N	621	A	C5-N7-C8	7.61	107.70	103.90
1	N	1080	A	N1-C2-N3	7.61	133.10	129.30
1	N	1238	A	C5-C6-N1	-7.61	113.89	117.70
1	N	1517	G	C5-C6-O6	-7.61	124.03	128.60
1	N	101	A	P-O5'-C5'	7.61	133.07	120.90
1	N	1036	A	C5-C6-N1	-7.61	113.90	117.70
1	N	1413	A	C4'-C3'-C2'	-7.61	94.99	102.60
1	N	1207	G	N3-C4-N9	-7.61	121.44	126.00
1	N	1315	U	C5-C4-O4	-7.61	121.34	125.90
1	N	1120	C	C5-C4-N4	-7.60	114.88	120.20
1	N	1525	G	C3'-C2'-C1'	-7.60	95.42	101.50
1	N	91	U	N3-C4-O4	7.60	124.72	119.40
1	N	1027	C	C4-C5-C6	7.60	121.20	117.40
1	N	1206	G	N3-C2-N2	7.60	125.22	119.90
1	N	1316	G	O3'-P-O5'	-7.60	89.56	104.00
1	N	73	C	P-O5'-C5'	-7.60	108.74	120.90
1	N	268	U	C6-N1-C2	7.60	125.56	121.00
1	N	761	G	C8-N9-C4	7.60	109.44	106.40
1	N	890	G	C2-N3-C4	7.60	115.70	111.90
1	N	988	G	N3-C4-C5	-7.60	124.80	128.60
1	N	1337	G	N3-C4-N9	7.60	130.56	126.00
1	N	275	G	C4-C5-C6	7.59	123.36	118.80
1	N	1478	U	C2-N3-C4	7.59	131.56	127.00
1	N	694	A	C5-N7-C8	7.59	107.70	103.90
1	N	665	A	C4-C5-N7	-7.59	106.90	110.70
1	N	735	C	C4'-C3'-C2'	-7.59	95.01	102.60
1	N	829	G	C6-N1-C2	7.59	129.66	125.10
1	N	1371	G	P-O5'-C5'	-7.59	108.75	120.90
1	N	1462	C	C2-N3-C4	7.59	123.70	119.90
1	N	67	C	O4'-C1'-N1	7.59	114.27	108.20
1	N	450	G	C8-N9-C4	7.59	109.44	106.40
1	N	577	G	C3'-C2'-C1'	7.59	107.57	101.50
1	N	184	G	C6-N1-C2	7.59	129.65	125.10
1	N	541	G	C4-C5-N7	-7.59	107.77	110.80
1	N	663	A	C5-C6-N6	-7.59	117.63	123.70
1	N	869	G	N1-C2-N3	-7.59	119.35	123.90
1	N	955	U	O4'-C1'-N1	7.59	114.27	108.20
1	N	144	G	N3-C4-N9	-7.58	121.45	126.00
1	N	536	C	N3-C4-C5	-7.58	118.87	121.90
1	N	794	A	N9-C1'-C2'	-7.58	103.66	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1518	A	N1-C2-N3	7.58	133.09	129.30
1	N	172	A	N9-C4-C5	7.58	108.83	105.80
1	N	819	A	C5-C6-N1	-7.58	113.91	117.70
1	N	1032	G	N7-C8-N9	7.58	116.89	113.10
1	N	960	U	N1-C2-N3	-7.58	110.35	114.90
1	N	1447	A	N1-C6-N6	7.58	123.15	118.60
1	N	17	U	C2-N3-C4	-7.58	122.45	127.00
1	N	329	A	C4-C5-C6	7.58	120.79	117.00
1	N	737	C	C5-C6-N1	7.58	124.79	121.00
1	N	1402	C	O4'-C1'-N1	7.58	114.26	108.20
1	N	66	A	O4'-C1'-N9	7.58	114.26	108.20
1	N	74	A	C5-C6-N6	-7.58	117.64	123.70
1	N	1057	G	O4'-C1'-N9	7.58	114.26	108.20
1	N	161	A	OP1-P-OP2	-7.58	108.24	119.60
1	N	460	A	C5-C6-N6	-7.58	117.64	123.70
1	N	548	G	C5-C6-O6	-7.58	124.05	128.60
1	N	695	A	C4-C5-C6	7.58	120.79	117.00
1	N	753	A	P-O3'-C3'	7.58	128.79	119.70
1	N	1180	A	O4'-C1'-N9	7.58	114.26	108.20
1	N	1437	A	N1-C2-N3	-7.58	125.51	129.30
1	N	145	G	C6-C5-N7	-7.57	125.86	130.40
1	N	682	G	C4-C5-N7	-7.57	107.77	110.80
1	N	878	A	N3-C4-C5	-7.57	121.50	126.80
1	N	37	U	C5-C4-O4	-7.57	121.36	125.90
1	N	159	G	C5-C6-O6	-7.57	124.06	128.60
1	N	310	G	N3-C2-N2	7.57	125.20	119.90
1	N	1121	U	O4'-C1'-N1	7.57	114.26	108.20
1	N	1171	A	C4-C5-C6	7.57	120.79	117.00
1	N	25	C	N1-C2-N3	-7.57	113.90	119.20
1	N	465	A	C6-N1-C2	7.57	123.14	118.60
1	N	312	C	O4'-C1'-N1	7.57	114.25	108.20
1	N	783	C	N3-C4-N4	7.57	123.30	118.00
1	N	261	U	O4'-C1'-N1	7.57	114.25	108.20
1	N	280	C	C4-C5-C6	-7.57	113.62	117.40
1	N	471	U	N3-C4-O4	7.57	124.70	119.40
1	N	1186	G	N9-C4-C5	-7.56	102.37	105.40
1	N	1530	G	C5-C6-O6	-7.56	124.06	128.60
1	N	185	U	C5'-C4'-O4'	7.56	118.17	109.10
1	N	907	A	N7-C8-N9	-7.56	110.02	113.80
1	N	1136	C	C5-C4-N4	7.56	125.49	120.20
1	N	655	A	C6-C5-N7	-7.56	127.01	132.30
1	N	778	G	C5-C6-O6	-7.56	124.06	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	826	C	O4'-C1'-N1	7.56	114.25	108.20
1	N	898	G	N7-C8-N9	-7.56	109.32	113.10
1	N	50	A	C8-N9-C4	-7.56	102.78	105.80
1	N	305	G	N3-C2-N2	7.56	125.19	119.90
1	N	426	U	C2-N3-C4	-7.56	122.47	127.00
1	N	712	A	C2-N3-C4	-7.56	106.82	110.60
1	N	1304	G	O4'-C1'-N9	7.56	114.25	108.20
1	N	29	U	C4-C5-C6	-7.55	115.17	119.70
1	N	639	G	P-O5'-C5'	-7.55	108.81	120.90
1	N	437	U	C5-C6-N1	-7.55	118.92	122.70
1	N	867	G	C4-N9-C1'	7.55	136.32	126.50
1	N	329	A	N1-C6-N6	7.55	123.13	118.60
1	N	556	C	C6-N1-C2	-7.55	117.28	120.30
1	N	1000	A	C6-N1-C2	7.55	123.13	118.60
1	N	695	A	C6-C5-N7	-7.55	127.02	132.30
1	N	1118	U	N3-C4-O4	7.55	124.69	119.40
1	N	691	G	N1-C6-O6	7.55	124.43	119.90
1	N	1370	G	C6-C5-N7	-7.55	125.87	130.40
1	N	728	A	C5-C6-N6	-7.54	117.66	123.70
1	N	1291	U	O4'-C1'-N1	7.54	114.24	108.20
1	N	1306	A	C2-N3-C4	-7.54	106.83	110.60
1	N	88	U	C1'-O4'-C4'	7.54	115.94	109.90
1	N	978	A	C3'-C2'-C1'	-7.54	95.47	101.50
1	N	1022	A	C4-C5-C6	7.54	120.77	117.00
1	N	332	G	N1-C6-O6	7.54	124.42	119.90
1	N	1016	A	C5-C6-N1	-7.54	113.93	117.70
1	N	373	A	P-O5'-C5'	-7.54	108.84	120.90
1	N	1250	A	N1-C6-N6	7.54	123.12	118.60
1	N	784	A	C5-C6-N1	-7.54	113.93	117.70
1	N	505	G	C4-C5-N7	-7.53	107.79	110.80
1	N	1185	G	N7-C8-N9	-7.53	109.33	113.10
1	N	659	U	N1-C2-O2	7.53	128.07	122.80
1	N	1418	A	N1-C2-N3	7.53	133.07	129.30
1	N	445	G	C6-C5-N7	-7.53	125.88	130.40
1	N	1476	A	N3-C4-C5	-7.53	121.53	126.80
1	N	856	C	O4'-C4'-C3'	-7.53	96.47	104.00
1	N	1372	U	O4'-C1'-N1	7.53	114.22	108.20
1	N	533	A	C5-C6-N1	-7.53	113.94	117.70
1	N	778	G	C6-C5-N7	-7.53	125.88	130.40
1	N	1214	C	O4'-C1'-N1	7.53	114.22	108.20
1	N	1248	A	C3'-C2'-C1'	7.53	107.52	101.50
1	N	1453	G	N3-C4-N9	-7.53	121.48	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1483	A	C8-N9-C4	7.53	108.81	105.80
1	N	1190	G	N3-C4-C5	-7.52	124.84	128.60
1	N	175	C	N3-C4-C5	-7.52	118.89	121.90
1	N	883	C	O4'-C1'-N1	7.52	114.22	108.20
1	N	1167	A	N1-C2-N3	7.52	133.06	129.30
1	N	243	A	C8-N9-C4	-7.52	102.79	105.80
1	N	264	C	P-O3'-C3'	7.52	128.72	119.70
1	N	878	A	N7-C8-N9	-7.52	110.04	113.80
1	N	841	C	C6-N1-C2	-7.51	117.29	120.30
1	N	892	A	C5'-C4'-C3'	7.51	128.02	116.00
1	N	1387	G	P-O5'-C5'	7.51	132.93	120.90
1	N	1338	G	C4-C5-N7	-7.51	107.80	110.80
1	N	85	U	C1'-O4'-C4'	-7.51	103.89	109.90
1	N	294	U	O4'-C1'-N1	7.51	114.21	108.20
1	N	728	A	C6-N1-C2	-7.51	114.09	118.60
1	N	914	A	C5'-C4'-C3'	-7.51	103.98	116.00
1	N	1355	G	O4'-C1'-N9	7.51	114.21	108.20
1	N	1504	G	C5-N7-C8	7.51	108.05	104.30
1	N	671	G	C4'-C3'-C2'	-7.51	95.09	102.60
1	N	922	G	C3'-C2'-C1'	-7.51	95.49	101.50
1	N	528	C	C4-C5-C6	-7.51	113.65	117.40
1	N	1158	C	N1-C2-N3	-7.51	113.95	119.20
1	N	682	G	C4-C5-C6	7.50	123.30	118.80
1	N	336	A	C5-C6-N1	-7.50	113.95	117.70
1	N	462	G	O4'-C1'-N9	7.50	114.20	108.20
1	N	818	G	C8-N9-C4	-7.50	103.40	106.40
1	N	944	G	N1-C2-N3	-7.50	119.40	123.90
1	N	734	G	N7-C8-N9	-7.50	109.35	113.10
1	N	816	A	C2-N3-C4	-7.50	106.85	110.60
1	N	308	C	C4'-C3'-C2'	-7.50	95.10	102.60
1	N	128	G	N3-C4-C5	7.49	132.35	128.60
1	N	446	G	N1-C2-N3	-7.49	119.40	123.90
1	N	656	G	N7-C8-N9	7.49	116.85	113.10
1	N	969	A	O4'-C1'-N9	7.49	114.19	108.20
1	N	1106	G	N7-C8-N9	7.49	116.85	113.10
1	N	28	A	C5-N7-C8	7.49	107.64	103.90
1	N	230	G	C4-C5-C6	7.49	123.29	118.80
1	N	371	A	N1-C6-N6	7.49	123.09	118.60
1	N	392	C	C4-C5-C6	-7.49	113.66	117.40
1	N	784	A	C5-N7-C8	7.49	107.65	103.90
1	N	1035	A	N9-C4-C5	-7.49	102.80	105.80
1	N	1102	A	O4'-C1'-N9	7.49	114.19	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1357	A	C5-C6-N1	-7.49	113.95	117.70
1	N	1358	U	O4'-C1'-N1	7.49	114.19	108.20
1	N	11	G	C4-C5-C6	7.49	123.29	118.80
1	N	55	A	C8-N9-C4	-7.49	102.81	105.80
1	N	523	A	C4-C5-C6	7.49	120.74	117.00
1	N	998	C	O4'-C1'-N1	7.48	114.19	108.20
1	N	1336	C	O4'-C1'-N1	7.48	114.19	108.20
1	N	1274	A	P-O3'-C3'	-7.48	110.72	119.70
1	N	1492	A	C5-C6-N1	-7.48	113.96	117.70
1	N	1500	A	C6-C5-N7	-7.48	127.06	132.30
1	N	1518	A	N3-C4-C5	-7.48	121.56	126.80
1	N	424	G	C4-C5-C6	7.48	123.29	118.80
1	N	469	C	C2-N3-C4	7.48	123.64	119.90
1	N	634	C	O4'-C1'-N1	7.48	114.18	108.20
1	N	639	G	N1-C2-N3	-7.48	119.41	123.90
1	N	602	A	N7-C8-N9	-7.48	110.06	113.80
1	N	1066	C	N3-C4-C5	-7.48	118.91	121.90
1	N	1073	U	O4'-C1'-N1	7.48	114.18	108.20
1	N	283	U	O4'-C1'-N1	7.47	114.18	108.20
1	N	774	G	N1-C6-O6	7.47	124.38	119.90
1	N	820	U	C2-N3-C4	-7.47	122.52	127.00
1	N	1452	C	O4'-C1'-N1	7.47	114.18	108.20
1	N	135	C	N3-C4-C5	7.47	124.89	121.90
1	N	198	G	N1-C2-N3	-7.47	119.42	123.90
1	N	215	C	C6-N1-C1'	-7.47	111.83	120.80
1	N	643	C	C5-C6-N1	7.47	124.74	121.00
1	N	932	C	O4'-C1'-N1	7.47	114.18	108.20
1	N	1103	C	C4-C5-C6	-7.47	113.67	117.40
1	N	1359	C	C6-N1-C2	-7.47	117.31	120.30
1	N	1469	C	P-O5'-C5'	-7.47	108.95	120.90
1	N	977	A	C2-N3-C4	-7.47	106.87	110.60
1	N	1112	C	P-O5'-C5'	-7.47	108.95	120.90
1	N	1150	A	C4-C5-C6	7.47	120.73	117.00
1	N	486	U	C5-C4-O4	-7.46	121.42	125.90
1	N	663	A	P-O3'-C3'	-7.46	110.74	119.70
1	N	765	G	N1-C2-N3	-7.46	119.42	123.90
1	N	1176	A	N9-C4-C5	7.46	108.78	105.80
1	N	1263	C	C2-N3-C4	7.46	123.63	119.90
1	N	496	A	C8-N9-C4	7.46	108.78	105.80
1	N	627	G	O4'-C1'-N9	7.46	114.17	108.20
1	N	40	C	N3-C4-N4	7.46	123.22	118.00
1	N	418	C	C4-C5-C6	7.46	121.13	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1076	U	C2-N1-C1'	-7.46	108.75	117.70
1	N	345	C	O4'-C1'-N1	7.46	114.17	108.20
1	N	883	C	N3-C4-C5	-7.46	118.92	121.90
1	N	519	C	C4-C5-C6	-7.46	113.67	117.40
1	N	473	U	O5'-P-OP2	-7.45	98.99	105.70
1	N	1012	A	C5-C6-N6	-7.45	117.74	123.70
1	N	1019	A	C5-C6-N1	-7.45	113.97	117.70
1	N	1154	G	C5-C6-N1	-7.45	107.77	111.50
1	N	1525	G	N1-C2-N3	-7.45	119.43	123.90
1	N	804	U	O4'-C1'-N1	7.45	114.16	108.20
1	N	179	A	C4-N9-C1'	7.45	139.71	126.30
1	N	587	G	N1-C2-N2	-7.45	109.50	116.20
1	N	771	G	O4'-C1'-N9	7.45	114.16	108.20
1	N	119	A	O3'-P-O5'	7.45	118.15	104.00
1	N	413	G	C5-C6-O6	-7.45	124.13	128.60
1	N	1218	C	C2-N3-C4	7.45	123.62	119.90
1	N	1362	A	C4-C5-C6	7.45	120.72	117.00
1	N	1501	C	O4'-C1'-N1	7.45	114.16	108.20
1	N	549	C	C6-N1-C2	7.45	123.28	120.30
1	N	723	U	P-O3'-C3'	-7.45	110.76	119.70
1	N	7	A	N1-C2-N3	7.45	133.02	129.30
1	N	263	A	C5-C6-N1	-7.45	113.98	117.70
1	N	125	U	N3-C2-O2	7.44	127.41	122.20
1	N	948	C	O4'-C1'-N1	7.44	114.15	108.20
1	N	370	C	O4'-C1'-N1	7.44	114.15	108.20
1	N	691	G	C6-C5-N7	-7.44	125.94	130.40
1	N	1136	C	C6-N1-C1'	-7.44	111.87	120.80
1	N	1278	G	C5-C6-O6	-7.44	124.14	128.60
1	N	907	A	O4'-C1'-N9	7.44	114.15	108.20
1	N	87	C	N3-C4-N4	7.43	123.20	118.00
1	N	199	A	C4-C5-C6	7.43	120.72	117.00
1	N	820	U	C5-C6-N1	7.43	126.42	122.70
1	N	969	A	N7-C8-N9	7.43	117.52	113.80
1	N	1156	G	N1-C2-N3	-7.43	119.44	123.90
1	N	11	G	N3-C2-N2	7.43	125.10	119.90
1	N	464	U	O4'-C1'-N1	7.43	114.14	108.20
1	N	391	G	C6-C5-N7	-7.43	125.94	130.40
1	N	103	U	C5-C4-O4	7.43	130.36	125.90
1	N	1017	U	O4'-C1'-N1	7.43	114.14	108.20
1	N	742	G	O4'-C1'-N9	7.42	114.14	108.20
1	N	769	G	N1-C2-N3	-7.42	119.45	123.90
1	N	1394	A	C8-N9-C4	7.42	108.77	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	84	U	N1-C2-N3	-7.42	110.45	114.90
1	N	474	G	C3'-C2'-C1'	7.42	107.44	101.50
1	N	842	U	C6-N1-C1'	-7.42	110.81	121.20
1	N	155	A	C8-N9-C4	-7.42	102.83	105.80
1	N	1093	A	N7-C8-N9	-7.42	110.09	113.80
1	N	1210	C	C2-N1-C1'	7.42	126.96	118.80
1	N	1316	G	N7-C8-N9	-7.42	109.39	113.10
1	N	321	A	C6-N1-C2	7.42	123.05	118.60
1	N	848	C	N3-C4-N4	7.42	123.19	118.00
1	N	927	G	C4-C5-N7	-7.42	107.83	110.80
1	N	1178	G	P-O5'-C5'	7.42	132.77	120.90
1	N	890	G	C6-C5-N7	-7.42	125.95	130.40
1	N	1169	A	N9-C4-C5	-7.41	102.83	105.80
1	N	1311	A	P-O3'-C3'	-7.41	110.81	119.70
1	N	578	C	C6-N1-C2	-7.41	117.33	120.30
1	N	243	A	N7-C8-N9	7.41	117.50	113.80
1	N	911	U	O4'-C1'-N1	7.41	114.13	108.20
1	N	1193	G	N3-C2-N2	7.41	125.09	119.90
1	N	7	A	C5-C6-N6	-7.41	117.77	123.70
1	N	922	G	C2-N3-C4	7.41	115.60	111.90
1	N	1363	A	C5'-C4'-C3'	-7.41	104.15	116.00
1	N	85	U	O4'-C1'-N1	7.41	114.12	108.20
1	N	236	A	N1-C6-N6	7.41	123.04	118.60
1	N	685	G	N9-C4-C5	7.41	108.36	105.40
1	N	803	G	C1'-O4'-C4'	7.41	115.83	109.90
1	N	1004	A	N9-C4-C5	7.41	108.76	105.80
1	N	1177	G	N1-C2-N3	-7.41	119.46	123.90
1	N	1362	A	C8-N9-C4	-7.41	102.84	105.80
1	N	593	U	N3-C2-O2	7.40	127.38	122.20
1	N	873	A	C3'-C2'-C1'	7.40	107.42	101.50
1	N	141	G	C5-C6-N1	-7.40	107.80	111.50
1	N	175	C	N3-C4-N4	7.40	123.18	118.00
1	N	197	A	O4'-C1'-N9	7.40	114.12	108.20
1	N	622	A	O4'-C1'-N9	7.40	114.12	108.20
1	N	416	G	C5-N7-C8	-7.40	100.60	104.30
1	N	786	G	C4-C5-C6	7.40	123.24	118.80
1	N	559	A	O4'-C1'-N9	7.40	114.12	108.20
1	N	804	U	C2-N1-C1'	-7.40	108.82	117.70
1	N	1012	A	C4-C5-N7	7.40	114.40	110.70
1	N	566	G	O4'-C1'-N9	7.40	114.12	108.20
1	N	1456	A	C5-N7-C8	7.40	107.60	103.90
1	N	288	A	N1-C6-N6	7.40	123.04	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	549	C	P-O5'-C5'	7.39	132.73	120.90
1	N	953	G	C5-C6-N1	-7.39	107.80	111.50
1	N	1253	G	C4-C5-C6	7.39	123.24	118.80
1	N	235	C	N3-C4-N4	7.39	123.17	118.00
1	N	284	C	N1-C2-O2	7.39	123.33	118.90
1	N	314	C	C5-C6-N1	7.39	124.70	121.00
1	N	452	A	C4-C5-C6	7.39	120.70	117.00
1	N	917	G	N7-C8-N9	7.39	116.80	113.10
1	N	438	U	N3-C4-C5	-7.39	110.17	114.60
1	N	127	G	N1-C2-N3	-7.39	119.47	123.90
1	N	187	G	N3-C4-C5	7.39	132.29	128.60
1	N	1386	G	P-O3'-C3'	-7.39	110.83	119.70
1	N	152	A	C6-N1-C2	7.39	123.03	118.60
1	N	1362	A	N3-C4-N9	7.39	133.31	127.40
1	N	1377	A	C5-N7-C8	7.39	107.59	103.90
1	N	621	A	C2-N3-C4	-7.39	106.91	110.60
1	N	898	G	N3-C2-N2	7.39	125.07	119.90
1	N	1277	C	N3-C4-C5	-7.39	118.94	121.90
1	N	271	C	C5-C4-N4	-7.38	115.03	120.20
1	N	402	G	O4'-C1'-N9	7.38	114.11	108.20
1	N	930	C	N3-C4-N4	7.38	123.17	118.00
1	N	1022	A	C5-C6-N1	-7.38	114.01	117.70
1	N	1160	G	C3'-C2'-C1'	7.38	107.41	101.50
1	N	306	A	C4-C5-C6	7.38	120.69	117.00
1	N	309	A	C6-C5-N7	-7.38	127.13	132.30
1	N	767	A	C5-C6-N6	-7.38	117.80	123.70
1	N	1204	A	N9-C4-C5	-7.38	102.85	105.80
1	N	523	A	N1-C2-N3	7.38	132.99	129.30
1	N	1464	U	O4'-C1'-N1	7.38	114.10	108.20
1	N	91	U	N1-C2-N3	-7.38	110.47	114.90
1	N	899	C	C6-N1-C2	-7.38	117.35	120.30
1	N	616	G	P-O3'-C3'	-7.37	110.85	119.70
1	N	665	A	C4-C5-C6	7.37	120.69	117.00
1	N	1325	C	N3-C4-N4	7.37	123.16	118.00
1	N	732	C	N3-C4-N4	7.37	123.16	118.00
1	N	755	G	C5'-C4'-C3'	-7.37	104.20	116.00
1	N	800	G	N3-C2-N2	7.37	125.06	119.90
1	N	273	U	N3-C4-C5	-7.37	110.18	114.60
1	N	465	A	N1-C6-N6	7.37	123.02	118.60
1	N	782	A	O4'-C1'-N9	7.37	114.09	108.20
1	N	365	U	P-O5'-C5'	7.37	132.68	120.90
1	N	1179	A	O4'-C1'-N9	7.37	114.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	590	U	C5-C4-O4	-7.36	121.48	125.90
1	N	1119	C	P-O3'-C3'	-7.36	110.86	119.70
1	N	1445	U	P-O5'-C5'	7.36	132.68	120.90
1	N	471	U	C4-C5-C6	7.36	124.12	119.70
1	N	505	G	C4-C5-C6	7.36	123.22	118.80
1	N	1198	G	O4'-C1'-N9	7.36	114.09	108.20
1	N	1287	A	C6-C5-N7	-7.36	127.15	132.30
1	N	49	U	P-O5'-C5'	7.36	132.67	120.90
1	N	244	U	N3-C4-C5	7.36	119.02	114.60
1	N	667	G	C4-C5-N7	-7.36	107.86	110.80
1	N	777	A	C5'-C4'-O4'	7.36	117.93	109.10
1	N	795	C	P-O5'-C5'	7.36	132.67	120.90
1	N	1242	G	C8-N9-C4	7.36	109.34	106.40
1	N	1398	A	N1-C2-N3	7.36	132.98	129.30
1	N	653	U	C5-C6-N1	7.35	126.38	122.70
1	N	656	G	C4-C5-N7	-7.35	107.86	110.80
1	N	797	C	P-O5'-C5'	-7.35	109.14	120.90
1	N	1169	A	C5-C6-N6	-7.35	117.82	123.70
1	N	27	G	O4'-C1'-N9	7.35	114.08	108.20
1	N	1237	C	N3-C4-C5	-7.35	118.96	121.90
1	N	766	A	C8-N9-C4	-7.35	102.86	105.80
1	N	1392	G	O4'-C1'-N9	7.35	114.08	108.20
1	N	819	A	C2-N3-C4	-7.34	106.93	110.60
1	N	987	G	C5-C6-N1	7.34	115.17	111.50
1	N	351	G	N3-C4-C5	7.34	132.27	128.60
1	N	1159	U	N3-C2-O2	7.34	127.34	122.20
1	N	1303	C	C6-N1-C2	7.34	123.24	120.30
1	N	41	G	O4'-C1'-N9	7.34	114.07	108.20
1	N	327	A	C1'-O4'-C4'	-7.34	104.03	109.90
1	N	674	G	C4-C5-N7	7.34	113.74	110.80
1	N	1185	G	N1-C2-N3	-7.34	119.50	123.90
1	N	1515	G	O4'-C1'-N9	7.34	114.07	108.20
1	N	976	G	C5-C6-O6	-7.34	124.20	128.60
1	N	1241	G	C5-C6-O6	-7.34	124.20	128.60
1	N	1425	U	O4'-C1'-N1	7.34	114.07	108.20
1	N	16	A	O4'-C1'-N9	7.34	114.07	108.20
1	N	361	G	P-O3'-C3'	7.34	128.50	119.70
1	N	872	A	N9-C4-C5	7.34	108.73	105.80
1	N	872	A	C4-C5-N7	-7.33	107.03	110.70
1	N	204	G	O4'-C1'-N9	7.33	114.07	108.20
1	N	451	A	O4'-C1'-N9	7.33	114.07	108.20
1	N	847	G	C3'-C2'-C1'	-7.33	95.63	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	78	A	C5-C6-N1	-7.33	114.03	117.70
1	N	145	G	N1-C6-O6	7.33	124.30	119.90
1	N	329	A	C6-C5-N7	-7.33	127.17	132.30
1	N	992	U	C2-N1-C1'	7.33	126.50	117.70
1	N	1370	G	C5-C6-O6	-7.33	124.20	128.60
1	N	1429	A	C8-N9-C4	-7.33	102.87	105.80
1	N	1181	G	N3-C4-N9	-7.33	121.60	126.00
1	N	79	G	C6-C5-N7	-7.33	126.00	130.40
1	N	1278	G	C4-C5-N7	-7.33	107.87	110.80
1	N	435	A	O4'-C4'-C3'	-7.33	96.67	104.00
1	N	983	A	C6-C5-N7	-7.33	127.17	132.30
1	N	462	G	O4'-C4'-C3'	-7.33	96.67	104.00
1	N	545	C	P-O3'-C3'	7.33	128.49	119.70
1	N	1163	A	C2-N3-C4	-7.33	106.94	110.60
1	N	1338	G	C4-C5-C6	7.33	123.19	118.80
1	N	399	G	N9-C4-C5	7.32	108.33	105.40
1	N	841	C	O4'-C1'-N1	7.32	114.06	108.20
1	N	258	G	N3-C2-N2	7.32	125.03	119.90
1	N	1260	G	O4'-C1'-N9	7.32	114.06	108.20
1	N	222	C	C5'-C4'-O4'	-7.32	100.32	109.10
1	N	1111	A	N7-C8-N9	-7.32	110.14	113.80
1	N	24	U	N3-C4-O4	7.32	124.52	119.40
1	N	328	C	C2-N1-C1'	7.32	126.85	118.80
1	N	693	G	C5-C6-O6	-7.32	124.21	128.60
1	N	1361	G	C6-C5-N7	-7.32	126.01	130.40
1	N	82	G	C2-N3-C4	-7.32	108.24	111.90
1	N	831	A	N1-C6-N6	7.32	122.99	118.60
1	N	773	G	O4'-C1'-N9	7.31	114.05	108.20
1	N	27	G	N3-C4-C5	-7.31	124.94	128.60
1	N	852	G	C6-C5-N7	-7.31	126.01	130.40
1	N	1143	G	N3-C2-N2	7.31	125.02	119.90
1	N	1487	G	O4'-C1'-N9	7.31	114.05	108.20
1	N	283	U	C5-C4-O4	-7.31	121.51	125.90
1	N	215	C	O4'-C1'-N1	7.31	114.05	108.20
1	N	256	U	C1'-O4'-C4'	7.31	115.75	109.90
1	N	335	C	N3-C2-O2	7.31	127.02	121.90
1	N	1249	C	C2-N3-C4	7.31	123.56	119.90
1	N	1311	A	C6-N1-C2	7.31	122.99	118.60
1	N	1369	C	N1-C2-N3	7.31	124.32	119.20
1	N	111	G	P-O5'-C5'	-7.31	109.21	120.90
1	N	240	G	N3-C2-N2	-7.31	114.78	119.90
1	N	618	C	N1-C2-N3	-7.31	114.08	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1396	A	P-O5'-C5'	7.31	132.59	120.90
1	N	1502	A	N1-C6-N6	7.31	122.98	118.60
1	N	102	G	C4-C5-N7	-7.30	107.88	110.80
1	N	465	A	C5-C6-N1	-7.30	114.05	117.70
1	N	519	C	C5-C4-N4	-7.30	115.09	120.20
1	N	1136	C	N3-C4-N4	-7.30	112.89	118.00
1	N	131	A	O4'-C1'-N9	7.30	114.04	108.20
1	N	865	A	C5-C6-N1	-7.30	114.05	117.70
1	N	270	A	N1-C2-N3	7.30	132.95	129.30
1	N	417	G	N9-C4-C5	-7.30	102.48	105.40
1	N	1458	G	C8-N9-C4	7.30	109.32	106.40
1	N	121	U	C4'-C3'-C2'	-7.30	95.30	102.60
1	N	144	G	N3-C4-C5	7.30	132.25	128.60
1	N	599	C	C6-N1-C2	-7.30	117.38	120.30
1	N	909	A	C4-C5-N7	-7.30	107.05	110.70
1	N	1248	A	N1-C2-N3	7.30	132.95	129.30
1	N	213	G	C4-C5-N7	7.30	113.72	110.80
1	N	759	A	N9-C1'-C2'	-7.30	103.97	112.00
1	N	867	G	C8-N9-C4	-7.29	103.48	106.40
1	N	1105	A	C1'-O4'-C4'	7.29	115.74	109.90
1	N	192	A	N7-C8-N9	-7.29	110.15	113.80
1	N	841	C	C4-C5-C6	-7.29	113.75	117.40
1	N	1039	G	O4'-C1'-N9	7.29	114.03	108.20
1	N	1051	C	C5-C4-N4	-7.29	115.10	120.20
1	N	1454	G	C5-N7-C8	-7.29	100.65	104.30
1	N	122	G	C4-C5-N7	7.29	113.72	110.80
1	N	567	G	O4'-C1'-N9	7.29	114.03	108.20
1	N	1323	G	C5'-C4'-O4'	-7.29	100.36	109.10
1	N	1168	U	C4-C5-C6	7.29	124.07	119.70
1	N	1250	A	N7-C8-N9	-7.29	110.16	113.80
1	N	919	A	C4-C5-C6	7.28	120.64	117.00
1	N	994	A	C6-C5-N7	-7.28	127.20	132.30
1	N	1182	G	N9-C4-C5	7.28	108.31	105.40
1	N	1288	A	C6-N1-C2	7.28	122.97	118.60
1	N	136	C	C6-N1-C2	-7.28	117.39	120.30
1	N	151	A	O4'-C1'-N9	7.28	114.02	108.20
1	N	602	A	C5-C6-N1	-7.28	114.06	117.70
1	N	1049	U	P-O3'-C3'	7.28	128.43	119.70
1	N	385	C	N3-C4-N4	7.28	123.09	118.00
1	N	621	A	C6-N1-C2	7.28	122.97	118.60
1	N	145	G	C4'-C3'-C2'	-7.28	95.32	102.60
1	N	979	C	O4'-C1'-N1	7.28	114.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	988	G	C2-N3-C4	7.28	115.54	111.90
1	N	1303	C	C4-C5-C6	7.28	121.04	117.40
1	N	802	A	N1-C2-N3	-7.27	125.66	129.30
1	N	426	U	N1-C2-O2	-7.27	117.71	122.80
1	N	648	A	C6-N1-C2	7.27	122.96	118.60
1	N	1446	A	C2-N3-C4	7.27	114.24	110.60
1	N	513	C	P-O5'-C5'	7.27	132.53	120.90
1	N	752	G	C8-N9-C1'	7.27	136.45	127.00
1	N	971	G	C2-N3-C4	-7.27	108.27	111.90
1	N	804	U	C5-C6-N1	7.27	126.33	122.70
1	N	1333	A	O4'-C1'-N9	7.27	114.01	108.20
1	N	561	U	C6-N1-C2	7.26	125.36	121.00
1	N	642	A	C5-C6-N6	-7.26	117.89	123.70
1	N	1225	A	N1-C2-N3	7.26	132.93	129.30
1	N	153	C	C2-N3-C4	7.26	123.53	119.90
1	N	168	G	N1-C6-O6	7.26	124.26	119.90
1	N	802	A	O4'-C1'-N9	7.26	114.01	108.20
1	N	835	U	C2-N3-C4	-7.26	122.64	127.00
1	N	1354	U	N1-C2-N3	-7.26	110.54	114.90
1	N	1419	G	O4'-C1'-N9	7.26	114.01	108.20
1	N	136	C	N3-C4-N4	7.26	123.08	118.00
1	N	538	G	C5-N7-C8	-7.26	100.67	104.30
1	N	69	G	P-O5'-C5'	-7.25	109.29	120.90
1	N	931	C	N3-C4-N4	7.25	123.08	118.00
1	N	1111	A	C5-C6-N6	-7.25	117.90	123.70
1	N	148	G	C4-C5-N7	7.25	113.70	110.80
1	N	1116	U	O4'-C1'-N1	7.25	114.00	108.20
1	N	651	C	N3-C4-C5	-7.25	119.00	121.90
1	N	171	A	C5-C6-N1	-7.25	114.08	117.70
1	N	3	A	C5-C6-N6	-7.25	117.90	123.70
1	N	602	A	C5-N7-C8	7.25	107.52	103.90
1	N	473	U	C4'-C3'-C2'	-7.25	95.35	102.60
1	N	836	G	C6-C5-N7	-7.25	126.05	130.40
1	N	868	C	P-O5'-C5'	7.25	132.50	120.90
1	N	1060	U	O4'-C1'-N1	7.25	114.00	108.20
1	N	24	U	N1-C2-N3	7.25	119.25	114.90
1	N	661	G	N7-C8-N9	-7.25	109.48	113.10
1	N	772	U	O4'-C1'-N1	7.25	114.00	108.20
1	N	1370	G	O4'-C1'-N9	7.25	114.00	108.20
1	N	488	C	O4'-C1'-N1	7.24	114.00	108.20
1	N	559	A	C5-C6-N6	-7.24	117.91	123.70
1	N	245	U	C5-C6-N1	7.24	126.32	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	591	U	O4'-C1'-N1	7.24	113.99	108.20
1	N	1332	A	C8-N9-C4	-7.24	102.90	105.80
1	N	673	A	C4-C5-C6	7.24	120.62	117.00
1	N	1350	A	C4-C5-N7	-7.24	107.08	110.70
1	N	384	G	C5-C6-N1	-7.24	107.88	111.50
1	N	505	G	N3-C4-C5	-7.24	124.98	128.60
1	N	792	A	N7-C8-N9	7.24	117.42	113.80
1	N	1081	A	C6-N1-C2	-7.24	114.26	118.60
1	N	1310	G	C2-N3-C4	-7.24	108.28	111.90
1	N	944	G	C5-C6-N1	-7.24	107.88	111.50
1	N	1150	A	N9-C4-C5	7.24	108.69	105.80
1	N	867	G	C6-C5-N7	-7.23	126.06	130.40
1	N	1487	G	C8-N9-C4	7.23	109.29	106.40
1	N	115	G	C4-C5-N7	7.23	113.69	110.80
1	N	591	U	P-O5'-C5'	7.23	132.47	120.90
1	N	1066	C	P-O5'-C5'	7.23	132.47	120.90
1	N	59	A	O4'-C1'-N9	7.23	113.98	108.20
1	N	1125	U	P-O3'-C3'	7.23	128.38	119.70
1	N	293	G	P-O5'-C5'	7.23	132.47	120.90
1	N	659	U	O4'-C1'-N1	7.23	113.98	108.20
1	N	1448	C	C6-N1-C2	-7.23	117.41	120.30
1	N	443	C	C5-C6-N1	7.23	124.61	121.00
1	N	809	G	N3-C2-N2	7.23	124.96	119.90
1	N	452	A	O4'-C1'-N9	7.23	113.98	108.20
1	N	14	U	O4'-C1'-N1	7.22	113.98	108.20
1	N	95	C	C6-N1-C1'	-7.22	112.13	120.80
1	N	605	U	N3-C2-O2	7.22	127.26	122.20
1	N	1471	U	O4'-C1'-N1	7.22	113.98	108.20
1	N	554	A	C4'-C3'-C2'	-7.22	95.38	102.60
1	N	821	G	N3-C2-N2	7.22	124.95	119.90
1	N	908	A	C4-C5-N7	-7.22	107.09	110.70
1	N	54	C	C4'-C3'-C2'	-7.22	95.38	102.60
1	N	765	G	O4'-C1'-N9	7.22	113.98	108.20
1	N	991	U	N1-C2-O2	-7.22	117.75	122.80
1	N	131	A	C8-N9-C4	-7.22	102.91	105.80
1	N	704	A	C4-C5-C6	7.22	120.61	117.00
1	N	1199	U	N3-C4-C5	-7.22	110.27	114.60
1	N	1028	C	O4'-C1'-N1	7.22	113.97	108.20
1	N	1276	G	C5-N7-C8	-7.22	100.69	104.30
1	N	1308	U	N3-C4-C5	-7.22	110.27	114.60
1	N	964	A	C2-N3-C4	-7.21	106.99	110.60
1	N	1235	U	O4'-C1'-N1	7.21	113.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	627	G	N3-C4-N9	7.21	130.33	126.00
1	N	958	A	N1-C2-N3	7.21	132.91	129.30
1	N	1123	U	C4'-C3'-C2'	-7.21	95.39	102.60
1	N	1142	G	N9-C4-C5	7.21	108.28	105.40
1	N	1269	A	C5'-C4'-C3'	7.21	127.54	116.00
1	N	558	G	N3-C4-N9	7.21	130.33	126.00
1	N	840	C	N1-C2-N3	7.21	124.25	119.20
1	N	1257	A	C5-C6-N6	-7.21	117.93	123.70
1	N	1299	A	O4'-C1'-N9	7.21	113.97	108.20
1	N	1333	A	C6-C5-N7	-7.21	127.25	132.30
1	N	1492	A	C6-C5-N7	-7.21	127.25	132.30
1	N	377	G	N1-C2-N2	-7.21	109.71	116.20
1	N	659	U	C5-C6-N1	-7.21	119.10	122.70
1	N	1531	A	N3-C4-C5	-7.21	121.75	126.80
1	N	17	U	C5-C4-O4	-7.21	121.58	125.90
1	N	260	G	P-O5'-C5'	-7.21	109.37	120.90
1	N	596	A	O4'-C1'-N9	7.21	113.97	108.20
1	N	1153	G	C8-N9-C4	-7.21	103.52	106.40
1	N	46	G	C5-C6-O6	-7.21	124.28	128.60
1	N	120	A	P-O3'-C3'	7.21	128.35	119.70
1	N	62	U	O4'-C1'-N1	7.20	113.96	108.20
1	N	1093	A	O4'-C1'-N9	7.20	113.96	108.20
1	N	1186	G	C5-C6-O6	-7.20	124.28	128.60
1	N	1373	G	N1-C2-N3	-7.20	119.58	123.90
1	N	66	A	N9-C4-C5	-7.20	102.92	105.80
1	N	388	G	C5-C6-O6	-7.20	124.28	128.60
1	N	94	G	O5'-P-OP1	-7.20	99.22	105.70
1	N	1197	A	C1'-O4'-C4'	7.20	115.66	109.90
1	N	1504	G	C4-C5-N7	-7.20	107.92	110.80
1	N	587	G	C4'-C3'-C2'	-7.20	95.40	102.60
1	N	781	A	C4-C5-C6	7.20	120.60	117.00
1	N	1136	C	O4'-C1'-N1	7.20	113.96	108.20
1	N	424	G	N1-C6-O6	7.20	124.22	119.90
1	N	703	G	N1-C2-N3	-7.20	119.58	123.90
1	N	752	G	O4'-C1'-C2'	7.20	114.08	107.60
1	N	822	U	P-O5'-C5'	7.20	132.41	120.90
1	N	935	A	C4-C5-C6	7.20	120.60	117.00
1	N	1022	A	N1-C6-N6	7.20	122.92	118.60
1	N	274	A	C2'-C3'-O3'	7.19	125.32	109.50
1	N	1275	A	C4-C5-C6	7.19	120.59	117.00
1	N	1296	C	O4'-C1'-C2'	7.19	114.07	107.60
1	N	560	A	C4-C5-N7	-7.19	107.11	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	297	G	C6-N1-C2	7.19	129.41	125.10
1	N	575	G	P-O3'-C3'	7.19	128.32	119.70
1	N	675	A	N1-C2-N3	7.18	132.89	129.30
1	N	890	G	C4-C5-C6	7.18	123.11	118.80
1	N	809	G	P-O3'-C3'	-7.18	111.08	119.70
1	N	46	G	N9-C4-C5	7.18	108.27	105.40
1	N	1259	C	N3-C4-N4	7.18	123.03	118.00
1	N	65	A	C5-C6-N6	-7.18	117.96	123.70
1	N	819	A	C5'-C4'-C3'	-7.18	104.52	116.00
1	N	316	C	C2-N3-C4	7.18	123.49	119.90
1	N	601	G	C4'-C3'-C2'	-7.18	95.42	102.60
1	N	141	G	C6-C5-N7	-7.17	126.10	130.40
1	N	590	U	O4'-C1'-N1	7.17	113.94	108.20
1	N	1460	C	P-O5'-C5'	7.17	132.38	120.90
1	N	188	C	C4-C5-C6	7.17	120.99	117.40
1	N	1250	A	N1-C2-N3	-7.17	125.71	129.30
1	N	1320	C	C6-N1-C2	-7.17	117.43	120.30
1	N	1027	C	N3-C4-C5	-7.17	119.03	121.90
1	N	1211	U	C2-N3-C4	-7.17	122.70	127.00
1	N	171	A	C8-N9-C1'	-7.17	114.80	127.70
1	N	1067	A	C4-C5-N7	-7.17	107.12	110.70
1	N	1077	G	C5-C6-O6	-7.17	124.30	128.60
1	N	1110	A	C5-N7-C8	7.17	107.48	103.90
1	N	1182	G	C5-C6-O6	-7.17	124.30	128.60
1	N	693	G	N1-C2-N3	-7.17	119.60	123.90
1	N	900	A	C2-N3-C4	-7.17	107.02	110.60
1	N	1111	A	C5-N7-C8	7.17	107.48	103.90
1	N	1514	G	C5-C6-O6	-7.17	124.30	128.60
1	N	22	G	C6-N1-C2	7.16	129.40	125.10
1	N	1118	U	C5-C4-O4	-7.16	121.60	125.90
1	N	1195	C	N3-C4-N4	7.16	123.02	118.00
1	N	1222	G	N1-C2-N3	-7.16	119.60	123.90
1	N	1418	A	C5-C6-N6	-7.16	117.97	123.70
1	N	36	C	N3-C4-C5	-7.16	119.03	121.90
1	N	388	G	N3-C2-N2	7.16	124.91	119.90
1	N	365	U	C5-C4-O4	-7.16	121.60	125.90
1	N	505	G	C5-N7-C8	7.16	107.88	104.30
1	N	1184	G	P-O5'-C5'	7.16	132.36	120.90
1	N	1140	C	C5-C4-N4	-7.16	115.19	120.20
1	N	1299	A	N9-C4-C5	-7.16	102.94	105.80
1	N	426	U	O4'-C1'-N1	7.16	113.92	108.20
1	N	577	G	C8-N9-C4	-7.16	103.54	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	710	G	N3-C2-N2	7.16	124.91	119.90
1	N	721	G	N3-C2-N2	7.16	124.91	119.90
1	N	1216	A	C4'-C3'-C2'	-7.16	95.44	102.60
1	N	571	U	N3-C4-O4	7.15	124.41	119.40
1	N	424	G	C5-C6-O6	-7.15	124.31	128.60
1	N	895	G	N1-C2-N3	-7.15	119.61	123.90
1	N	1005	A	N1-C6-N6	7.15	122.89	118.60
1	N	535	A	C6-N1-C2	-7.15	114.31	118.60
1	N	1124	G	N3-C4-C5	7.15	132.17	128.60
1	N	276	G	C5-C6-O6	-7.15	124.31	128.60
1	N	206	C	N3-C4-N4	7.14	123.00	118.00
1	N	704	A	C5-C6-N6	-7.14	117.98	123.70
1	N	838	G	C8-N9-C4	-7.14	103.54	106.40
1	N	566	G	C4'-C3'-C2'	7.14	109.74	102.60
1	N	782	A	C4-C5-C6	7.14	120.57	117.00
1	N	1125	U	N3-C4-O4	7.14	124.40	119.40
1	N	1314	C	P-O3'-C3'	-7.14	111.13	119.70
1	N	1431	A	C4-C5-C6	7.14	120.57	117.00
1	N	66	A	N7-C8-N9	7.14	117.37	113.80
1	N	106	C	N3-C4-C5	-7.14	119.04	121.90
1	N	1045	C	O4'-C1'-N1	7.14	113.91	108.20
1	N	1071	C	N3-C4-N4	7.14	123.00	118.00
1	N	1160	G	C1'-O4'-C4'	7.14	115.61	109.90
1	N	1393	U	N3-C2-O2	7.14	127.20	122.20
1	N	327	A	N1-C6-N6	7.14	122.88	118.60
1	N	444	G	C6-C5-N7	-7.13	126.12	130.40
1	N	1151	A	C5'-C4'-O4'	-7.13	100.54	109.10
1	N	746	A	C5-N7-C8	7.13	107.47	103.90
1	N	1106	G	N3-C2-N2	7.13	124.89	119.90
1	N	125	U	N3-C4-C5	-7.13	110.32	114.60
1	N	134	G	N1-C6-O6	7.13	124.18	119.90
1	N	177	G	C8-N9-C4	-7.13	103.55	106.40
1	N	335	C	C5-C4-N4	-7.13	115.21	120.20
1	N	1385	G	O4'-C1'-N9	7.13	113.90	108.20
1	N	1139	G	C5-C6-O6	-7.13	124.32	128.60
1	N	1454	G	C5-C6-N1	7.13	115.06	111.50
1	N	571	U	N1-C2-N3	7.12	119.17	114.90
1	N	1047	G	C5-C6-O6	-7.12	124.33	128.60
1	N	1245	C	C5-C6-N1	7.12	124.56	121.00
1	N	246	A	P-O5'-C5'	7.12	132.29	120.90
1	N	1364	U	C6-N1-C2	-7.12	116.73	121.00
1	N	1484	C	N3-C4-C5	-7.12	119.05	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	238	A	O4'-C1'-N9	7.12	113.90	108.20
1	N	1534	A	N7-C8-N9	-7.12	110.24	113.80
1	N	927	G	C4-C5-C6	7.12	123.07	118.80
1	N	1190	G	C1'-O4'-C4'	-7.12	104.21	109.90
1	N	1258	G	N1-C2-N3	-7.12	119.63	123.90
1	N	8	A	N1-C2-N3	7.12	132.86	129.30
1	N	179	A	C8-N9-C4	-7.12	102.95	105.80
1	N	446	G	C6-N1-C2	7.12	129.37	125.10
1	N	768	A	C6-C5-N7	-7.11	127.32	132.30
1	N	1012	A	N1-C2-N3	7.11	132.86	129.30
1	N	1090	U	C4'-C3'-C2'	-7.11	95.49	102.60
1	N	45	G	C4-C5-N7	7.11	113.64	110.80
1	N	739	C	N3-C2-O2	7.11	126.88	121.90
1	N	1079	G	C2-N3-C4	7.11	115.45	111.90
1	N	626	G	N1-C2-N3	-7.11	119.63	123.90
1	N	666	G	C5-C6-N1	-7.11	107.94	111.50
1	N	536	C	C4-C5-C6	7.11	120.95	117.40
1	N	663	A	N9-C4-C5	-7.11	102.96	105.80
1	N	706	A	O5'-P-OP2	7.11	119.23	110.70
1	N	779	C	N3-C2-O2	-7.11	116.92	121.90
1	N	876	C	C5-C4-N4	-7.11	115.22	120.20
1	N	881	G	C2-N3-C4	7.11	115.45	111.90
1	N	1041	G	O4'-C1'-N9	7.10	113.88	108.20
1	N	946	A	P-O5'-C5'	-7.10	109.54	120.90
1	N	1066	C	C5-C6-N1	-7.10	117.45	121.00
1	N	1202	U	N3-C4-C5	-7.10	110.34	114.60
1	N	548	G	O4'-C1'-N9	7.10	113.88	108.20
1	N	91	U	P-O3'-C3'	7.10	128.22	119.70
1	N	428	G	C5'-C4'-O4'	-7.10	100.58	109.10
1	N	1037	C	C1'-O4'-C4'	-7.10	104.22	109.90
1	N	767	A	C2-N3-C4	-7.09	107.05	110.60
1	N	842	U	C5'-C4'-O4'	7.09	117.61	109.10
1	N	1017	U	P-O3'-C3'	7.09	128.21	119.70
1	N	1370	G	N1-C2-N3	-7.09	119.64	123.90
1	N	255	G	N3-C4-C5	7.09	132.15	128.60
1	N	739	C	P-O3'-C3'	-7.09	111.19	119.70
1	N	85	U	N3-C2-O2	7.09	127.16	122.20
1	N	567	G	N1-C2-N3	-7.09	119.65	123.90
1	N	572	A	P-O3'-C3'	7.09	128.21	119.70
1	N	120	A	O4'-C1'-C2'	-7.09	98.71	105.80
1	N	966	G	C5-C6-O6	-7.09	124.35	128.60
1	N	997	U	O4'-C1'-N1	7.09	113.87	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1011	C	N3-C4-N4	7.09	122.96	118.00
1	N	1353	G	C6-C5-N7	-7.09	126.15	130.40
1	N	1444	U	C5-C4-O4	-7.09	121.65	125.90
1	N	1474	U	C6-N1-C2	-7.09	116.75	121.00
1	N	404	G	N9-C4-C5	-7.08	102.57	105.40
1	N	407	U	P-O5'-C5'	7.08	132.23	120.90
1	N	787	A	P-O5'-C5'	7.08	132.23	120.90
1	N	1240	U	P-O3'-C3'	7.08	128.20	119.70
1	N	1362	A	C5-C6-N6	-7.08	118.03	123.70
1	N	724	G	O4'-C1'-N9	7.08	113.86	108.20
1	N	46	G	N1-C2-N3	-7.08	119.65	123.90
1	N	846	G	C5-C6-N1	-7.08	107.96	111.50
1	N	886	G	C5'-C4'-O4'	7.08	117.59	109.10
1	N	1403	C	C4-C5-C6	-7.08	113.86	117.40
1	N	727	G	O4'-C1'-N9	7.08	113.86	108.20
1	N	832	G	N3-C2-N2	-7.08	114.95	119.90
1	N	98	A	N9-C4-C5	7.08	108.63	105.80
1	N	124	C	O4'-C1'-N1	7.08	113.86	108.20
1	N	134	G	C5-C6-O6	-7.08	124.36	128.60
1	N	215	C	C2-N1-C1'	7.08	126.58	118.80
1	N	322	C	C5-C6-N1	7.08	124.54	121.00
1	N	446	G	C2-N3-C4	7.08	115.44	111.90
1	N	502	A	C5-C6-N1	-7.08	114.16	117.70
1	N	558	G	O4'-C1'-N9	7.08	113.86	108.20
1	N	671	G	N1-C2-N3	-7.08	119.65	123.90
1	N	983	A	N3-C4-C5	-7.07	121.85	126.80
1	N	1069	C	C1'-O4'-C4'	-7.07	104.24	109.90
1	N	431	A	C4-C5-N7	-7.07	107.16	110.70
1	N	983	A	C5-C6-N1	-7.07	114.16	117.70
1	N	101	A	N1-C2-N3	7.07	132.84	129.30
1	N	148	G	C5-N7-C8	-7.07	100.77	104.30
1	N	272	C	C2-N1-C1'	7.07	126.58	118.80
1	N	1150	A	C3'-C2'-C1'	7.07	107.16	101.50
1	N	1368	A	P-O3'-C3'	-7.07	111.22	119.70
1	N	1370	G	C8-N9-C4	-7.07	103.57	106.40
1	N	101	A	C4-C5-C6	7.07	120.53	117.00
1	N	488	C	P-O3'-C3'	-7.07	111.22	119.70
1	N	1106	G	N9-C4-C5	7.07	108.23	105.40
1	N	194	C	C1'-O4'-C4'	-7.07	104.25	109.90
1	N	401	C	C4'-C3'-C2'	-7.07	95.53	102.60
1	N	929	G	C2-N3-C4	-7.07	108.37	111.90
1	N	1085	U	N1-C2-N3	-7.07	110.66	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1094	G	C4-C5-N7	-7.07	107.97	110.80
1	N	1240	U	C4-C5-C6	-7.07	115.46	119.70
1	N	62	U	N1-C2-O2	-7.06	117.86	122.80
1	N	770	C	C4-C5-C6	-7.06	113.87	117.40
1	N	104	G	O4'-C1'-N9	7.06	113.85	108.20
1	N	1094	G	N3-C4-C5	-7.06	125.07	128.60
1	N	935	A	N9-C4-C5	7.06	108.62	105.80
1	N	1368	A	C5-C6-N1	-7.06	114.17	117.70
1	N	1406	U	C5'-C4'-C3'	-7.06	104.70	116.00
1	N	1427	C	C5-C4-N4	-7.06	115.26	120.20
1	N	125	U	N3-C4-O4	7.06	124.34	119.40
1	N	352	C	C4-C5-C6	7.06	120.93	117.40
1	N	720	C	C4-C5-C6	-7.06	113.87	117.40
1	N	768	A	C3'-C2'-C1'	7.06	107.15	101.50
1	N	780	A	C5-C6-N6	-7.06	118.05	123.70
1	N	1462	C	C6-N1-C2	-7.06	117.48	120.30
1	N	488	C	C2-N3-C4	7.06	123.43	119.90
1	N	324	G	C5'-C4'-C3'	7.05	127.29	116.00
1	N	1202	U	O4'-C1'-N1	7.05	113.84	108.20
1	N	301	G	N3-C2-N2	7.05	124.84	119.90
1	N	838	G	N9-C4-C5	7.05	108.22	105.40
1	N	1171	A	O4'-C1'-N9	7.05	113.84	108.20
1	N	1203	C	C5-C6-N1	7.05	124.53	121.00
1	N	1215	G	C2-N3-C4	7.05	115.43	111.90
1	N	180	U	N1-C2-N3	-7.05	110.67	114.90
1	N	429	U	P-O3'-C3'	7.05	128.16	119.70
1	N	989	U	O4'-C1'-N1	7.05	113.84	108.20
1	N	195	A	N1-C6-N6	7.05	122.83	118.60
1	N	274	A	O4'-C1'-N9	7.05	113.84	108.20
1	N	747	A	C5-C6-N6	-7.05	118.06	123.70
1	N	206	C	C5'-C4'-O4'	7.05	117.56	109.10
1	N	256	U	O5'-C5'-C4'	-7.05	98.31	111.70
1	N	417	G	N3-C4-C5	7.05	132.12	128.60
1	N	968	A	C8-N9-C4	7.05	108.62	105.80
1	N	825	A	O4'-C1'-N9	7.04	113.83	108.20
1	N	1171	A	C2-N3-C4	-7.04	107.08	110.60
1	N	607	A	C8-N9-C4	-7.04	102.98	105.80
1	N	857	C	O4'-C1'-N1	7.04	113.83	108.20
1	N	1444	U	N3-C4-O4	7.04	124.33	119.40
1	N	101	A	C5-N7-C8	7.04	107.42	103.90
1	N	30	U	C1'-O4'-C4'	7.04	115.53	109.90
1	N	710	G	C4'-C3'-C2'	-7.04	95.56	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	928	G	N3-C2-N2	7.04	124.82	119.90
1	N	996	A	N9-C4-C5	7.04	108.61	105.80
1	N	1337	G	C5-C6-O6	-7.04	124.38	128.60
1	N	98	A	N3-C4-C5	-7.03	121.88	126.80
1	N	608	A	N7-C8-N9	-7.03	110.28	113.80
1	N	716	A	C2-N3-C4	-7.03	107.08	110.60
1	N	830	G	C4-C5-C6	7.03	123.02	118.80
1	N	966	G	C6-C5-N7	-7.03	126.18	130.40
1	N	865	A	C4'-C3'-C2'	-7.03	95.57	102.60
1	N	1244	G	N3-C4-C5	7.03	132.12	128.60
1	N	1473	G	P-O3'-C3'	-7.03	111.26	119.70
1	N	138	G	N1-C2-N3	-7.03	119.68	123.90
1	N	465	A	O4'-C1'-N9	7.03	113.82	108.20
1	N	535	A	C8-N9-C4	-7.03	102.99	105.80
1	N	38	G	C4-C5-C6	7.02	123.01	118.80
1	N	191	G	N7-C8-N9	-7.02	109.59	113.10
1	N	276	G	P-O5'-C5'	7.02	132.14	120.90
1	N	417	G	C6-N1-C2	7.02	129.31	125.10
1	N	915	A	N9-C1'-C2'	-7.02	104.28	112.00
1	N	1285	A	O4'-C1'-N9	7.02	113.82	108.20
1	N	255	G	C5-C6-N1	-7.02	107.99	111.50
1	N	554	A	C5-C6-N6	-7.02	118.08	123.70
1	N	362	G	C4-C5-N7	-7.02	107.99	110.80
1	N	512	U	N3-C4-C5	-7.02	110.39	114.60
1	N	1461	G	C8-N9-C4	-7.02	103.59	106.40
1	N	1484	C	C4-C5-C6	7.02	120.91	117.40
1	N	438	U	C5'-C4'-C3'	-7.01	104.78	116.00
1	N	1449	C	O4'-C1'-N1	7.01	113.81	108.20
1	N	565	U	C4-C5-C6	7.01	123.91	119.70
1	N	627	G	N9-C4-C5	-7.01	102.59	105.40
1	N	733	G	N7-C8-N9	7.01	116.61	113.10
1	N	659	U	C4-C5-C6	7.01	123.91	119.70
1	N	1071	C	C2-N1-C1'	7.01	126.51	118.80
1	N	1107	C	C5-C4-N4	-7.01	115.29	120.20
1	N	1207	G	N9-C4-C5	7.01	108.20	105.40
1	N	175	C	O4'-C1'-N1	7.01	113.81	108.20
1	N	362	G	N7-C8-N9	7.01	116.61	113.10
1	N	646	G	C6-N1-C2	7.01	129.31	125.10
1	N	831	A	C5-C6-N6	-7.01	118.09	123.70
1	N	1144	G	C6-C5-N7	-7.01	126.19	130.40
1	N	1413	A	C4-C5-C6	7.01	120.50	117.00
1	N	30	U	P-O3'-C3'	7.01	128.11	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	216	U	P-O3'-C3'	7.01	128.11	119.70
1	N	918	A	C8-N9-C1'	7.01	140.31	127.70
1	N	95	C	C2-N1-C1'	7.01	126.51	118.80
1	N	183	C	N3-C4-N4	7.01	122.91	118.00
1	N	363	A	C5-C6-N6	-7.01	118.09	123.70
1	N	1475	G	N3-C4-N9	-7.01	121.80	126.00
1	N	746	A	O4'-C4'-C3'	-7.00	97.00	104.00
1	N	1210	C	P-O5'-C5'	-7.00	109.69	120.90
1	N	597	G	N3-C2-N2	7.00	124.80	119.90
1	N	561	U	P-O5'-C5'	-7.00	109.70	120.90
1	N	679	C	C5-C6-N1	7.00	124.50	121.00
1	N	790	A	C4-C5-N7	-7.00	107.20	110.70
1	N	991	U	N3-C2-O2	7.00	127.10	122.20
1	N	1209	C	N3-C2-O2	7.00	126.80	121.90
1	N	1414	U	O4'-C1'-N1	7.00	113.80	108.20
1	N	626	G	C5-N7-C8	-7.00	100.80	104.30
1	N	1069	C	C6-N1-C2	7.00	123.10	120.30
1	N	40	C	N3-C4-C5	-6.99	119.10	121.90
1	N	1511	G	N3-C2-N2	6.99	124.80	119.90
1	N	829	G	C5-C6-O6	-6.99	124.41	128.60
1	N	1120	C	C4'-C3'-C2'	-6.99	95.61	102.60
1	N	1143	G	C5-N7-C8	-6.99	100.80	104.30
1	N	198	G	N9-C4-C5	-6.99	102.60	105.40
1	N	461	A	C4'-C3'-C2'	6.99	109.59	102.60
1	N	858	G	C4-C5-N7	-6.99	108.00	110.80
1	N	944	G	C6-N1-C2	6.99	129.29	125.10
1	N	620	C	C2-N1-C1'	6.99	126.49	118.80
1	N	800	G	N3-C4-N9	6.99	130.19	126.00
1	N	1296	C	C5-C4-N4	-6.99	115.31	120.20
1	N	577	G	N1-C2-N3	-6.99	119.71	123.90
1	N	679	C	N3-C4-N4	6.99	122.89	118.00
1	N	919	A	C6-N1-C2	-6.99	114.41	118.60
1	N	1513	A	P-O5'-C5'	-6.99	109.72	120.90
1	N	128	G	N1-C6-O6	6.99	124.09	119.90
1	N	238	A	C6-N1-C2	-6.99	114.41	118.60
1	N	755	G	O4'-C1'-N9	6.99	113.79	108.20
1	N	1225	A	C6-C5-N7	-6.99	127.41	132.30
1	N	1436	U	O4'-C1'-N1	6.99	113.79	108.20
1	N	328	C	O4'-C4'-C3'	-6.98	97.02	104.00
1	N	1074	G	C5-N7-C8	6.98	107.79	104.30
1	N	9	G	N7-C8-N9	-6.98	109.61	113.10
1	N	31	G	N3-C4-N9	-6.98	121.81	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	809	G	C4-N9-C1'	-6.98	117.42	126.50
1	N	980	C	C2-N3-C4	6.98	123.39	119.90
1	N	1057	G	C6-C5-N7	-6.98	126.21	130.40
1	N	1504	G	C4-C5-C6	6.98	122.99	118.80
1	N	713	G	N1-C6-O6	6.98	124.09	119.90
1	N	1152	A	C5-N7-C8	6.98	107.39	103.90
1	N	1252	A	C2-N3-C4	-6.98	107.11	110.60
1	N	1377	A	N9-C1'-C2'	-6.98	104.32	112.00
1	N	103	U	O4'-C1'-N1	6.98	113.78	108.20
1	N	152	A	N1-C2-N3	-6.98	125.81	129.30
1	N	410	G	O4'-C1'-N9	6.98	113.78	108.20
1	N	577	G	N9-C4-C5	6.98	108.19	105.40
1	N	1393	U	C5-C6-N1	6.98	126.19	122.70
1	N	255	G	C5-C6-O6	-6.98	124.41	128.60
1	N	301	G	C8-N9-C4	-6.98	103.61	106.40
1	N	1338	G	C5-C6-O6	-6.98	124.41	128.60
1	N	1398	A	C5-C6-N1	-6.98	114.21	117.70
1	N	1303	C	N3-C4-N4	6.98	122.88	118.00
1	N	244	U	N1-C2-O2	-6.97	117.92	122.80
1	N	789	U	C4'-C3'-C2'	-6.97	95.63	102.60
1	N	1482	G	C1'-O4'-C4'	-6.97	104.32	109.90
1	N	464	U	C2-N3-C4	-6.97	122.82	127.00
1	N	713	G	C5-C6-N1	-6.97	108.02	111.50
1	N	189	A	N1-C2-N3	6.97	132.78	129.30
1	N	344	A	C6-C5-N7	-6.97	127.42	132.30
1	N	921	U	N3-C2-O2	6.97	127.08	122.20
1	N	927	G	N1-C6-O6	6.97	124.08	119.90
1	N	1377	A	C2-N3-C4	-6.97	107.12	110.60
1	N	1404	C	O4'-C1'-N1	6.97	113.78	108.20
1	N	391	G	C4-N9-C1'	-6.97	117.44	126.50
1	N	476	U	C2-N3-C4	-6.97	122.82	127.00
1	N	706	A	P-O5'-C5'	6.97	132.05	120.90
1	N	823	C	C6-N1-C2	-6.97	117.51	120.30
1	N	979	C	C6-N1-C2	6.97	123.09	120.30
1	N	994	A	C8-N9-C4	-6.97	103.01	105.80
1	N	523	A	N9-C4-C5	6.96	108.59	105.80
1	N	1000	A	P-O5'-C5'	6.96	132.04	120.90
1	N	1315	U	C5-C6-N1	-6.96	119.22	122.70
1	N	675	A	C2-N3-C4	-6.96	107.12	110.60
1	N	1196	A	N1-C2-N3	-6.96	125.82	129.30
1	N	714	G	C4-C5-N7	-6.96	108.02	110.80
1	N	933	G	C5-C6-N1	-6.96	108.02	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	521	G	N1-C2-N3	-6.96	119.72	123.90
1	N	1163	A	C5-N7-C8	6.96	107.38	103.90
1	N	1325	C	O4'-C1'-N1	6.96	113.77	108.20
1	N	1443	C	N3-C4-N4	6.96	122.87	118.00
1	N	466	A	C5-C6-N1	-6.96	114.22	117.70
1	N	857	C	C5-C4-N4	-6.96	115.33	120.20
1	N	1500	A	C4'-C3'-C2'	-6.96	95.64	102.60
1	N	324	G	N7-C8-N9	-6.96	109.62	113.10
1	N	1076	U	N3-C4-O4	6.96	124.27	119.40
1	N	1282	C	C5'-C4'-C3'	-6.96	104.87	116.00
1	N	1534	A	C5-N7-C8	6.96	107.38	103.90
1	N	318	G	N3-C4-N9	6.95	130.17	126.00
1	N	520	A	C5-C6-N1	-6.95	114.22	117.70
1	N	578	C	N3-C4-C5	-6.95	119.12	121.90
1	N	876	C	N3-C4-N4	6.95	122.87	118.00
1	N	1108	G	C6-C5-N7	-6.95	126.23	130.40
1	N	381	C	C3'-C2'-C1'	-6.95	95.94	101.50
1	N	550	G	C6-N1-C2	6.95	129.27	125.10
1	N	825	A	N7-C8-N9	-6.95	110.33	113.80
1	N	1348	U	N1-C2-N3	-6.95	110.73	114.90
1	N	942	G	C2-N3-C4	6.95	115.37	111.90
1	N	1304	G	C2-N3-C4	6.95	115.37	111.90
1	N	1508	A	N1-C6-N6	6.95	122.77	118.60
1	N	1099	G	N1-C2-N3	-6.95	119.73	123.90
1	N	316	C	C5'-C4'-O4'	6.95	117.43	109.10
1	N	1170	A	C1'-O4'-C4'	6.95	115.46	109.90
1	N	991	U	C5-C4-O4	-6.94	121.73	125.90
1	N	1357	A	P-O3'-C3'	6.94	128.03	119.70
1	N	374	A	N7-C8-N9	6.94	117.27	113.80
1	N	527	G	N7-C8-N9	-6.94	109.63	113.10
1	N	662	U	O4'-C1'-N1	6.94	113.75	108.20
1	N	712	A	C4-C5-N7	-6.94	107.23	110.70
1	N	749	A	N3-C4-C5	-6.94	121.94	126.80
1	N	1075	U	C4-C5-C6	-6.94	115.54	119.70
1	N	1241	G	N3-C4-C5	-6.94	125.13	128.60
1	N	146	G	C1'-O4'-C4'	-6.94	104.35	109.90
1	N	177	G	O4'-C1'-N9	6.94	113.75	108.20
1	N	179	A	O4'-C1'-N9	6.94	113.75	108.20
1	N	709	U	P-O5'-C5'	6.94	132.00	120.90
1	N	873	A	C4-C5-C6	6.94	120.47	117.00
1	N	51	A	N1-C6-N6	6.93	122.76	118.60
1	N	351	G	C4-C5-N7	6.93	113.57	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	777	A	O4'-C1'-N9	6.93	113.75	108.20
1	N	678	U	C1'-O4'-C4'	6.93	115.44	109.90
1	N	1315	U	N3-C4-O4	6.93	124.25	119.40
1	N	156	C	C3'-C2'-C1'	-6.93	95.96	101.50
1	N	523	A	O4'-C1'-N9	6.93	113.75	108.20
1	N	923	A	C5-C6-N1	-6.93	114.23	117.70
1	N	1389	C	C4'-C3'-C2'	-6.93	95.67	102.60
1	N	94	G	C8-N9-C1'	6.93	136.01	127.00
1	N	280	C	C6-N1-C1'	-6.93	112.48	120.80
1	N	366	A	C2'-C3'-O3'	6.93	124.79	113.70
1	N	1497	G	N3-C2-N2	6.93	124.75	119.90
1	N	525	C	C4-C5-C6	6.93	120.86	117.40
1	N	276	G	C5-C6-N1	-6.92	108.04	111.50
1	N	526	C	N3-C4-N4	6.92	122.85	118.00
1	N	1139	G	P-O3'-C3'	6.92	128.01	119.70
1	N	1319	A	C5-C6-N1	-6.92	114.24	117.70
1	N	108	G	C2'-C3'-O3'	6.92	124.78	113.70
1	N	235	C	O4'-C1'-N1	6.92	113.74	108.20
1	N	312	C	C6-N1-C2	6.92	123.07	120.30
1	N	959	A	N3-C4-N9	6.92	132.94	127.40
1	N	1160	G	C6-N1-C2	-6.92	120.95	125.10
1	N	723	U	C4'-C3'-C2'	-6.92	95.68	102.60
1	N	1106	G	C6-N1-C2	6.92	129.25	125.10
1	N	1248	A	N7-C8-N9	6.92	117.26	113.80
1	N	1251	A	N1-C6-N6	6.92	122.75	118.60
1	N	1429	A	C6-C5-N7	-6.92	127.46	132.30
1	N	1523	G	C6-C5-N7	-6.92	126.25	130.40
1	N	130	A	C5-N7-C8	6.92	107.36	103.90
1	N	266	G	C5-C6-O6	-6.92	124.45	128.60
1	N	1352	C	C5-C4-N4	-6.92	115.36	120.20
1	N	1428	A	C5-N7-C8	6.92	107.36	103.90
1	N	145	G	C5-C6-O6	-6.92	124.45	128.60
1	N	234	C	C4-C5-C6	-6.92	113.94	117.40
1	N	447	G	N1-C6-O6	6.92	124.05	119.90
1	N	58	C	O4'-C1'-N1	6.91	113.73	108.20
1	N	558	G	O4'-C4'-C3'	-6.91	97.09	104.00
1	N	576	C	C5-C6-N1	6.91	124.46	121.00
1	N	921	U	O4'-C1'-N1	6.91	113.73	108.20
1	N	970	C	N3-C4-C5	-6.91	119.14	121.90
1	N	1030	U	C6-N1-C1'	-6.91	111.52	121.20
1	N	1247	U	P-O3'-C3'	-6.91	111.40	119.70
1	N	55	A	N1-C2-N3	6.91	132.76	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1363	A	N9-C4-C5	6.91	108.56	105.80
1	N	1490	U	N3-C4-O4	6.91	124.24	119.40
1	N	121	U	N3-C4-C5	-6.91	110.45	114.60
1	N	1197	A	C6-C5-N7	-6.91	127.46	132.30
1	N	1290	G	O4'-C1'-N9	6.91	113.73	108.20
1	N	118	U	P-O5'-C5'	6.91	131.95	120.90
1	N	711	G	N1-C6-O6	6.91	124.04	119.90
1	N	775	G	C4-C5-N7	-6.91	108.04	110.80
1	N	1515	G	N3-C2-N2	6.91	124.73	119.90
1	N	565	U	N3-C4-O4	6.90	124.23	119.40
1	N	847	G	C5-C6-N1	-6.90	108.05	111.50
1	N	1461	G	N1-C2-N2	-6.90	109.99	116.20
1	N	121	U	C6-N1-C2	-6.90	116.86	121.00
1	N	652	U	C2-N1-C1'	-6.90	109.42	117.70
1	N	1269	A	C5-C6-N1	-6.90	114.25	117.70
1	N	100	G	N7-C8-N9	6.90	116.55	113.10
1	N	172	A	C2'-C3'-O3'	6.90	124.74	113.70
1	N	303	A	C4-C5-C6	6.90	120.45	117.00
1	N	398	U	N3-C2-O2	6.90	127.03	122.20
1	N	812	G	N3-C4-C5	-6.90	125.15	128.60
1	N	894	G	O4'-C1'-N9	6.90	113.72	108.20
1	N	963	G	C4'-C3'-C2'	-6.90	95.70	102.60
1	N	1117	A	P-O3'-C3'	6.90	127.98	119.70
1	N	1300	G	O4'-C1'-N9	6.90	113.72	108.20
1	N	1316	G	C6-N1-C2	6.90	129.24	125.10
1	N	1062	U	N3-C2-O2	-6.90	117.37	122.20
1	N	423	G	N1-C2-N3	-6.90	119.76	123.90
1	N	1190	G	C6-C5-N7	-6.90	126.26	130.40
1	N	595	A	C2-N3-C4	-6.90	107.15	110.60
1	N	4	U	C5'-C4'-C3'	-6.89	104.97	116.00
1	N	447	G	C4-C5-N7	-6.89	108.04	110.80
1	N	976	G	O4'-C1'-N9	6.89	113.71	108.20
1	N	1074	G	N1-C6-O6	6.89	124.03	119.90
1	N	45	G	N3-C4-N9	6.89	130.13	126.00
1	N	124	C	C5-C4-N4	-6.89	115.38	120.20
1	N	654	G	C1'-O4'-C4'	6.89	115.41	109.90
1	N	656	G	O4'-C1'-N9	6.89	113.71	108.20
1	N	1144	G	C8-N9-C4	-6.89	103.64	106.40
1	N	1211	U	C5'-C4'-O4'	6.89	117.37	109.10
1	N	908	A	C5-C6-N6	-6.89	118.19	123.70
1	N	470	C	C5'-C4'-O4'	6.89	117.36	109.10
1	N	560	A	C6-N1-C2	-6.89	114.47	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	801	U	P-O5'-C5'	-6.89	109.88	120.90
1	N	70	U	C5'-C4'-O4'	6.88	117.36	109.10
1	N	789	U	O4'-C1'-N1	6.88	113.71	108.20
1	N	1329	A	P-O5'-C5'	-6.88	109.88	120.90
1	N	102	G	C3'-C2'-C1'	-6.88	95.99	101.50
1	N	1191	A	C6-N1-C2	-6.88	114.47	118.60
1	N	105	G	C8-N9-C4	6.88	109.15	106.40
1	N	165	G	P-O5'-C5'	6.88	131.91	120.90
1	N	716	A	C5-C6-N6	-6.88	118.19	123.70
1	N	849	G	C6-C5-N7	-6.88	126.27	130.40
1	N	1525	G	C6-N1-C2	6.88	129.23	125.10
1	N	459	A	N1-C2-N3	6.88	132.74	129.30
1	N	444	G	N3-C4-N9	-6.88	121.87	126.00
1	N	1477	U	O4'-C1'-N1	6.88	113.70	108.20
1	N	744	C	N3-C4-C5	-6.88	119.15	121.90
1	N	1482	G	C4-C5-N7	-6.88	108.05	110.80
1	N	486	U	N3-C4-O4	6.88	124.21	119.40
1	N	928	G	O4'-C1'-N9	6.88	113.70	108.20
1	N	1066	C	O4'-C1'-N1	6.88	113.70	108.20
1	N	1356	G	N1-C6-O6	6.88	124.03	119.90
1	N	159	G	P-O5'-C5'	-6.87	109.90	120.90
1	N	206	C	C5-C4-N4	-6.87	115.39	120.20
1	N	855	U	C5'-C4'-O4'	6.87	117.35	109.10
1	N	1166	G	N1-C2-N3	-6.87	119.78	123.90
1	N	1356	G	C5-C6-O6	-6.87	124.48	128.60
1	N	156	C	O4'-C1'-N1	6.87	113.70	108.20
1	N	369	G	N1-C2-N3	-6.87	119.78	123.90
1	N	51	A	C5-N7-C8	6.87	107.33	103.90
1	N	341	C	C1'-O4'-C4'	6.87	115.40	109.90
1	N	466	A	C4-C5-C6	6.87	120.44	117.00
1	N	695	A	P-O3'-C3'	6.87	127.94	119.70
1	N	160	A	O4'-C1'-N9	6.87	113.69	108.20
1	N	729	A	O4'-C1'-N9	6.87	113.69	108.20
1	N	880	C	O4'-C1'-N1	6.87	113.69	108.20
1	N	1013	G	P-O3'-C3'	6.87	127.94	119.70
1	N	171	A	C4-N9-C1'	6.87	138.66	126.30
1	N	185	U	O4'-C1'-N1	6.87	113.69	108.20
1	N	575	G	N3-C4-C5	6.87	132.03	128.60
1	N	776	G	O4'-C1'-N9	6.87	113.69	108.20
1	N	1001	C	O4'-C1'-N1	6.87	113.69	108.20
1	N	1161	C	O4'-C1'-N1	6.87	113.69	108.20
1	N	1180	A	C6-N1-C2	-6.87	114.48	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1376	U	O4'-C1'-N1	6.87	113.69	108.20
1	N	1397	C	C1'-O4'-C4'	6.87	115.39	109.90
1	N	444	G	N9-C4-C5	6.86	108.15	105.40
1	N	1407	C	N1-C2-O2	6.86	123.02	118.90
1	N	583	A	C8-N9-C4	-6.86	103.06	105.80
1	N	609	A	N9-C4-C5	6.86	108.55	105.80
1	N	171	A	C5-C6-N6	-6.86	118.21	123.70
1	N	743	A	C5-C6-N6	-6.86	118.21	123.70
1	N	816	A	C4-C5-C6	6.86	120.43	117.00
1	N	927	G	C5-N7-C8	6.86	107.73	104.30
1	N	1153	G	N7-C8-N9	6.86	116.53	113.10
1	N	1340	A	C6-C5-N7	-6.86	127.50	132.30
1	N	589	U	N1-C2-N3	6.86	119.02	114.90
1	N	790	A	N3-C4-C5	-6.86	122.00	126.80
1	N	555	U	O4'-C1'-N1	6.86	113.69	108.20
1	N	866	C	C2-N3-C4	6.86	123.33	119.90
1	N	1401	G	N7-C8-N9	6.86	116.53	113.10
1	N	933	G	N9-C4-C5	-6.86	102.66	105.40
1	N	995	C	P-O3'-C3'	-6.86	111.47	119.70
1	N	1025	U	N3-C2-O2	6.86	127.00	122.20
1	N	1465	A	N7-C8-N9	6.85	117.23	113.80
1	N	362	G	P-O3'-C3'	6.85	127.92	119.70
1	N	784	A	P-O3'-C3'	-6.85	111.48	119.70
1	N	1160	G	N9-C4-C5	-6.85	102.66	105.40
1	N	1411	C	C5'-C4'-C3'	-6.85	105.04	116.00
1	N	432	A	C5-C6-N6	-6.85	118.22	123.70
1	N	518	C	C2-N1-C1'	6.85	126.34	118.80
1	N	692	U	C6-N1-C2	-6.85	116.89	121.00
1	N	150	U	N1-C2-O2	-6.85	118.01	122.80
1	N	226	G	C6-C5-N7	-6.85	126.29	130.40
1	N	1019	A	C4-C5-C6	6.85	120.42	117.00
1	N	1093	A	C5-C6-N1	-6.85	114.28	117.70
1	N	1152	A	C4-C5-N7	-6.85	107.28	110.70
1	N	1215	G	N3-C4-N9	6.85	130.11	126.00
1	N	448	A	C5-N7-C8	6.84	107.32	103.90
1	N	588	G	P-O5'-C5'	6.84	131.85	120.90
1	N	763	C	N9-C4-C5	-6.84	102.66	105.40
1	N	108	G	P-O5'-C5'	6.84	131.85	120.90
1	N	1068	G	C8-N9-C4	-6.84	103.66	106.40
1	N	1291	U	C4-C5-C6	6.84	123.81	119.70
1	N	814	A	C2-N3-C4	-6.84	107.18	110.60
1	N	964	A	N1-C2-N3	6.84	132.72	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1125	U	C5-C4-O4	-6.84	121.80	125.90
1	N	1307	U	C5-C4-O4	6.84	130.00	125.90
1	N	1365	G	N1-C6-O6	6.84	124.00	119.90
1	N	65	A	O4'-C1'-N9	6.84	113.67	108.20
1	N	236	A	C4-C5-C6	6.84	120.42	117.00
1	N	289	G	C5'-C4'-C3'	-6.84	105.06	116.00
1	N	692	U	C1'-O4'-C4'	-6.84	104.43	109.90
1	N	1021	A	C4-C5-C6	6.84	120.42	117.00
1	N	651	C	C5-C4-N4	-6.84	115.41	120.20
1	N	819	A	N1-C2-N3	6.84	132.72	129.30
1	N	518	C	C2-N3-C4	6.83	123.32	119.90
1	N	165	G	N9-C4-C5	6.83	108.13	105.40
1	N	549	C	C5-C6-N1	-6.83	117.58	121.00
1	N	557	G	C2-N3-C4	6.83	115.32	111.90
1	N	686	U	O4'-C1'-N1	6.83	113.67	108.20
1	N	820	U	O4'-C1'-N1	6.83	113.67	108.20
1	N	1077	G	N7-C8-N9	-6.83	109.68	113.10
1	N	78	A	C3'-C2'-C1'	6.83	106.96	101.50
1	N	597	G	C2-N3-C4	6.83	115.31	111.90
1	N	792	A	C1'-O4'-C4'	6.83	115.36	109.90
1	N	1196	A	O4'-C1'-N9	6.83	113.66	108.20
1	N	1087	G	N1-C2-N3	-6.83	119.80	123.90
1	N	889	A	C4'-C3'-C2'	-6.83	95.78	102.60
1	N	1403	C	O4'-C1'-N1	6.83	113.66	108.20
1	N	1522	U	O4'-C1'-N1	6.83	113.66	108.20
1	N	476	U	O5'-P-OP1	-6.82	99.56	105.70
1	N	497	G	N3-C2-N2	6.82	124.68	119.90
1	N	1069	C	C4'-C3'-C2'	-6.82	95.78	102.60
1	N	1244	G	P-O5'-C5'	6.82	131.82	120.90
1	N	89	U	O4'-C1'-N1	6.82	113.66	108.20
1	N	919	A	C5-C6-N1	-6.82	114.29	117.70
1	N	936	C	N1-C2-N3	-6.82	114.43	119.20
1	N	802	A	C6-N1-C2	6.82	122.69	118.60
1	N	1288	A	O4'-C1'-N9	6.82	113.66	108.20
1	N	1453	G	C8-N9-C4	-6.82	103.67	106.40
1	N	751	U	P-O5'-C5'	-6.82	109.99	120.90
1	N	1064	G	P-O5'-C5'	-6.82	109.99	120.90
1	N	1468	A	C6-C5-N7	-6.82	127.53	132.30
1	N	241	G	N3-C2-N2	6.82	124.67	119.90
1	N	941	G	N3-C2-N2	6.81	124.67	119.90
1	N	1105	A	C5-C6-N6	-6.81	118.25	123.70
1	N	563	A	C4-C5-C6	6.81	120.41	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1423	G	C5-C6-O6	-6.81	124.51	128.60
1	N	269	C	C4-C5-C6	-6.81	114.00	117.40
1	N	312	C	N3-C4-N4	6.81	122.77	118.00
1	N	416	G	C1'-O4'-C4'	-6.81	104.45	109.90
1	N	535	A	C5'-C4'-O4'	6.81	117.27	109.10
1	N	595	A	P-O5'-C5'	6.81	131.79	120.90
1	N	718	A	C4-C5-N7	6.81	114.10	110.70
1	N	778	G	N7-C8-N9	-6.81	109.70	113.10
1	N	852	G	N3-C4-N9	6.81	130.08	126.00
1	N	1223	C	N1-C2-N3	6.81	123.96	119.20
1	N	167	A	C6-N1-C2	6.80	122.68	118.60
1	N	256	U	C5-C6-N1	6.80	126.10	122.70
1	N	438	U	C5'-C4'-O4'	6.80	117.27	109.10
1	N	608	A	C6-C5-N7	-6.80	127.54	132.30
1	N	987	G	O4'-C1'-N9	6.80	113.64	108.20
1	N	227	G	N7-C8-N9	6.80	116.50	113.10
1	N	262	A	N1-C2-N3	6.80	132.70	129.30
1	N	411	A	O4'-C1'-N9	6.80	113.64	108.20
1	N	1009	U	OP1-P-OP2	-6.80	109.40	119.60
1	N	203	G	C4-C5-C6	-6.80	114.72	118.80
1	N	1140	C	N3-C4-N4	6.80	122.76	118.00
1	N	1285	A	C2-N3-C4	-6.80	107.20	110.60
1	N	1314	C	O4'-C1'-N1	6.80	113.64	108.20
1	N	123	U	O4'-C1'-N1	6.80	113.64	108.20
1	N	361	G	C2-N3-C4	6.80	115.30	111.90
1	N	1091	U	N3-C4-O4	6.80	124.16	119.40
1	N	1188	A	C5'-C4'-O4'	6.80	117.26	109.10
1	N	56	U	C5-C4-O4	6.79	129.98	125.90
1	N	781	A	O4'-C1'-N9	6.79	113.64	108.20
1	N	146	G	C4-C5-C6	6.79	122.88	118.80
1	N	588	G	O4'-C1'-N9	6.79	113.63	108.20
1	N	1005	A	C3'-C2'-C1'	6.79	106.94	101.50
1	N	344	A	N3-C4-N9	6.79	132.83	127.40
1	N	1006	G	N3-C4-C5	6.79	132.00	128.60
1	N	1084	G	C6-C5-N7	-6.79	126.33	130.40
1	N	1295	U	N3-C4-O4	6.79	124.16	119.40
1	N	959	A	C5-C6-N6	-6.79	118.27	123.70
1	N	1086	U	O5'-C5'-C4'	6.79	124.60	111.70
1	N	115	G	C3'-C2'-C1'	6.79	106.93	101.50
1	N	123	U	C2-N3-C4	-6.79	122.93	127.00
1	N	463	U	N1-C2-O2	-6.79	118.05	122.80
1	N	547	A	C5-C6-N6	-6.79	118.27	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	659	U	C2-N3-C4	6.79	131.07	127.00
1	N	1045	C	C2-N3-C4	6.79	123.29	119.90
1	N	1151	A	C4-C5-N7	-6.79	107.31	110.70
1	N	152	A	C5'-C4'-C3'	6.78	126.85	116.00
1	N	248	C	C3'-C2'-C1'	-6.78	96.07	101.50
1	N	438	U	O4'-C1'-N1	6.78	113.63	108.20
1	N	849	G	C5-C6-N1	-6.78	108.11	111.50
1	N	883	C	P-O3'-C3'	-6.78	111.56	119.70
1	N	1453	G	N3-C4-C5	6.78	131.99	128.60
1	N	173	U	N3-C4-O4	6.78	124.15	119.40
1	N	485	U	P-O3'-C3'	6.78	127.84	119.70
1	N	212	G	N9-C1'-C2'	6.78	122.82	114.00
1	N	978	A	P-O3'-C3'	6.78	127.84	119.70
1	N	1077	G	C5-N7-C8	6.78	107.69	104.30
1	N	1416	G	N9-C4-C5	-6.78	102.69	105.40
1	N	1515	G	N1-C2-N3	-6.78	119.83	123.90
1	N	1533	C	C6-N1-C1'	-6.78	112.67	120.80
1	N	391	G	C8-N9-C1'	6.78	135.81	127.00
1	N	414	A	N3-C4-C5	-6.78	122.06	126.80
1	N	587	G	N7-C8-N9	6.78	116.49	113.10
1	N	901	A	N3-C4-C5	-6.78	122.06	126.80
1	N	26	A	C1'-O4'-C4'	-6.78	104.48	109.90
1	N	373	A	P-O3'-C3'	-6.78	111.57	119.70
1	N	1015	G	O4'-C1'-N9	6.78	113.62	108.20
1	N	1130	A	C4-C5-N7	-6.78	107.31	110.70
1	N	562	U	P-O5'-C5'	6.78	131.74	120.90
1	N	64	G	C4'-C3'-C2'	6.77	109.37	102.60
1	N	707	U	C4-C5-C6	-6.77	115.64	119.70
1	N	1357	A	C6-N1-C2	6.77	122.66	118.60
1	N	428	G	C4-C5-N7	6.77	113.51	110.80
1	N	804	U	C6-N1-C1'	6.77	130.68	121.20
1	N	922	G	C5-C6-N1	-6.77	108.11	111.50
1	N	1487	G	C5-N7-C8	6.77	107.69	104.30
1	N	34	C	C5-C6-N1	-6.77	117.61	121.00
1	N	420	U	C5-C6-N1	6.77	126.08	122.70
1	N	264	C	C1'-O4'-C4'	-6.77	104.48	109.90
1	N	368	U	C5'-C4'-C3'	6.77	126.83	116.00
1	N	671	G	C8-N9-C1'	-6.77	118.20	127.00
1	N	963	G	C4-C5-C6	6.77	122.86	118.80
1	N	1102	A	N9-C1'-C2'	-6.77	104.55	112.00
1	N	1135	U	C2-N3-C4	6.77	131.06	127.00
1	N	1486	G	N3-C4-N9	6.77	130.06	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1531	A	P-O5'-C5'	6.77	131.73	120.90
1	N	1063	C	C5-C4-N4	-6.77	115.46	120.20
1	N	67	C	N3-C4-N4	6.77	122.74	118.00
1	N	1399	C	C4-C5-C6	-6.77	114.02	117.40
1	N	770	C	N3-C4-N4	6.76	122.73	118.00
1	N	1238	A	C8-N9-C4	-6.76	103.09	105.80
1	N	205	A	C4-C5-N7	-6.76	107.32	110.70
1	N	485	U	N1-C2-N3	6.76	118.96	114.90
1	N	633	G	C5-C6-N1	-6.76	108.12	111.50
1	N	716	A	C4-C5-N7	6.76	114.08	110.70
1	N	1335	U	C4-C5-C6	6.76	123.76	119.70
1	N	832	G	C4-C5-C6	-6.76	114.75	118.80
1	N	1454	G	N1-C6-O6	6.76	123.96	119.90
1	N	393	A	C3'-C2'-C1'	-6.76	96.09	101.50
1	N	1180	A	N1-C2-N3	6.76	132.68	129.30
1	N	45	G	C5-C6-N1	6.76	114.88	111.50
1	N	553	A	C5-C6-N6	-6.76	118.30	123.70
1	N	766	A	P-O3'-C3'	-6.76	111.59	119.70
1	N	1414	U	N3-C2-O2	6.76	126.93	122.20
1	N	1421	G	C5-C6-N1	-6.76	108.12	111.50
1	N	237	G	N7-C8-N9	-6.75	109.72	113.10
1	N	1109	C	C6-N1-C1'	-6.75	112.69	120.80
1	N	354	G	N1-C2-N3	-6.75	119.85	123.90
1	N	354	G	N3-C2-N2	6.75	124.63	119.90
1	N	448	A	C4-C5-N7	-6.75	107.32	110.70
1	N	1235	U	C5-C6-N1	6.75	126.08	122.70
1	N	1246	A	C5-C6-N1	-6.75	114.32	117.70
1	N	147	G	C4'-C3'-C2'	-6.75	95.85	102.60
1	N	424	G	O4'-C1'-N9	6.75	113.60	108.20
1	N	936	C	O4'-C1'-N1	6.75	113.60	108.20
1	N	943	U	N3-C4-C5	-6.75	110.55	114.60
1	N	1238	A	O4'-C1'-N9	6.75	113.60	108.20
1	N	233	C	C4-C5-C6	-6.75	114.03	117.40
1	N	1245	C	P-O5'-C5'	6.75	131.70	120.90
1	N	96	U	C5-C6-N1	6.75	126.07	122.70
1	N	111	G	C2-N3-C4	6.75	115.28	111.90
1	N	415	A	O4'-C1'-N9	6.75	113.60	108.20
1	N	653	U	N1-C2-N3	-6.75	110.85	114.90
1	N	1462	C	O4'-C1'-N1	6.75	113.60	108.20
1	N	367	U	N3-C4-C5	-6.75	110.55	114.60
1	N	369	G	N3-C2-N2	6.75	124.62	119.90
1	N	553	A	C5-C6-N1	-6.75	114.33	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	865	A	C5-C6-N6	-6.75	118.30	123.70
1	N	914	A	N3-C4-C5	-6.75	122.08	126.80
1	N	229	U	C1'-O4'-C4'	6.75	115.30	109.90
1	N	1465	A	N1-C6-N6	6.75	122.65	118.60
1	N	259	G	C4-C5-N7	6.74	113.50	110.80
1	N	666	G	N3-C2-N2	6.74	124.62	119.90
1	N	706	A	C6-C5-N7	-6.74	127.58	132.30
1	N	1048	G	N9-C1'-C2'	-6.74	104.58	112.00
1	N	1302	C	C4-C5-C6	6.74	120.77	117.40
1	N	166	U	OP1-P-OP2	-6.74	109.49	119.60
1	N	188	C	O4'-C1'-N1	6.74	113.59	108.20
1	N	221	C	N3-C4-C5	-6.74	119.20	121.90
1	N	1221	G	O4'-C1'-N9	6.74	113.59	108.20
1	N	125	U	C6-N1-C2	6.74	125.05	121.00
1	N	222	C	N3-C4-N4	6.74	122.72	118.00
1	N	472	U	C2-N3-C4	6.74	131.04	127.00
1	N	1368	A	O4'-C1'-N9	6.74	113.59	108.20
1	N	1444	U	C5'-C4'-O4'	6.74	117.19	109.10
1	N	391	G	N3-C4-N9	6.74	130.04	126.00
1	N	606	G	C8-N9-C4	-6.74	103.70	106.40
1	N	1102	A	C5-C6-N1	-6.74	114.33	117.70
1	N	600	A	N9-C4-C5	-6.74	103.11	105.80
1	N	1213	A	N7-C8-N9	-6.74	110.43	113.80
1	N	1155	A	O4'-C1'-N9	6.74	113.59	108.20
1	N	258	G	C8-N9-C4	6.73	109.09	106.40
1	N	488	C	N3-C4-C5	-6.73	119.21	121.90
1	N	648	A	N9-C4-C5	-6.73	103.11	105.80
1	N	676	A	C6-C5-N7	-6.73	127.59	132.30
1	N	794	A	O4'-C1'-N9	6.73	113.59	108.20
1	N	1338	G	N1-C2-N3	-6.73	119.86	123.90
1	N	336	A	C6-N1-C2	6.73	122.64	118.60
1	N	1127	G	N9-C4-C5	-6.73	102.71	105.40
1	N	742	G	C4-C5-N7	-6.73	108.11	110.80
1	N	290	C	C6-N1-C2	-6.73	117.61	120.30
1	N	467	U	C6-N1-C1'	-6.73	111.78	121.20
1	N	663	A	N1-C2-N3	6.73	132.66	129.30
1	N	936	C	C6-N1-C2	6.73	122.99	120.30
1	N	1098	C	C5-C6-N1	6.73	124.36	121.00
1	N	761	G	O4'-C1'-N9	6.72	113.58	108.20
1	N	1198	G	N3-C4-N9	-6.72	121.97	126.00
1	N	1297	G	N1-C6-O6	6.72	123.94	119.90
1	N	452	A	C5-C6-N1	-6.72	114.34	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	682	G	N1-C6-O6	6.72	123.93	119.90
1	N	920	U	C2-N1-C1'	6.72	125.77	117.70
1	N	1478	U	N3-C4-O4	6.72	124.11	119.40
1	N	298	A	C4-C5-N7	6.72	114.06	110.70
1	N	151	A	N3-C4-C5	-6.72	122.10	126.80
1	N	231	U	C6-N1-C2	-6.72	116.97	121.00
1	N	430	A	C5-C6-N6	-6.72	118.32	123.70
1	N	636	U	C4'-C3'-C2'	-6.72	95.88	102.60
1	N	49	U	P-O3'-C3'	-6.72	111.64	119.70
1	N	1153	G	N3-C4-N9	-6.72	121.97	126.00
1	N	1303	C	O4'-C1'-N1	6.72	113.58	108.20
1	N	42	G	N9-C1'-C2'	-6.72	104.61	112.00
1	N	510	A	C6-C5-N7	-6.72	127.60	132.30
1	N	1478	U	C5-C6-N1	-6.72	119.34	122.70
1	N	553	A	N9-C4-C5	6.71	108.49	105.80
1	N	994	A	C5-N7-C8	-6.71	100.54	103.90
1	N	362	G	C6-N1-C2	6.71	129.13	125.10
1	N	489	C	N1-C2-O2	-6.71	114.87	118.90
1	N	1126	U	C6-N1-C2	-6.71	116.97	121.00
1	N	1461	G	N3-C4-N9	-6.71	121.97	126.00
1	N	911	U	C5-C4-O4	-6.71	121.87	125.90
1	N	1476	A	C4-C5-N7	-6.71	107.34	110.70
1	N	144	G	C5-C6-O6	-6.71	124.58	128.60
1	N	267	C	C5'-C4'-O4'	-6.71	101.05	109.10
1	N	290	C	C2-N3-C4	6.71	123.25	119.90
1	N	691	G	C5-C6-O6	-6.71	124.57	128.60
1	N	915	A	C5-C6-N6	-6.71	118.33	123.70
1	N	1034	G	N3-C2-N2	6.71	124.60	119.90
1	N	1383	C	N1-C2-N3	-6.71	114.50	119.20
1	N	742	G	C5-C6-O6	-6.71	124.58	128.60
1	N	718	A	C6-C5-N7	-6.70	127.61	132.30
1	N	1306	A	O4'-C1'-N9	6.70	113.56	108.20
1	N	1482	G	N1-C2-N3	-6.70	119.88	123.90
1	N	397	A	N1-C2-N3	-6.70	125.95	129.30
1	N	727	G	N1-C2-N3	-6.70	119.88	123.90
1	N	1049	U	C4'-C3'-C2'	6.70	109.30	102.60
1	N	1278	G	C2-N3-C4	6.70	115.25	111.90
1	N	25	C	N3-C4-C5	-6.70	119.22	121.90
1	N	626	G	C5-C6-N1	6.70	114.85	111.50
1	N	1384	C	N3-C4-N4	6.70	122.69	118.00
1	N	185	U	C5-C4-O4	-6.70	121.88	125.90
1	N	298	A	O4'-C1'-N9	6.70	113.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1508	A	O4'-C1'-N9	6.70	113.56	108.20
1	N	1510	C	O4'-C1'-N1	6.70	113.56	108.20
1	N	266	G	OP1-P-OP2	-6.70	109.55	119.60
1	N	161	A	O4'-C1'-N9	6.70	113.56	108.20
1	N	902	G	C4'-C3'-C2'	-6.70	95.91	102.60
1	N	1009	U	C2-N3-C4	-6.70	122.98	127.00
1	N	467	U	O4'-C4'-C3'	-6.69	97.31	104.00
1	N	1081	A	C8-N9-C4	-6.69	103.12	105.80
1	N	1134	G	C4-C5-C6	6.69	122.82	118.80
1	N	471	U	N3-C4-C5	-6.69	110.59	114.60
1	N	504	C	C2-N3-C4	6.69	123.25	119.90
1	N	507	C	C6-N1-C2	-6.69	117.62	120.30
1	N	1167	A	C5-C6-N6	-6.69	118.35	123.70
1	N	205	A	N3-C4-C5	-6.69	122.12	126.80
1	N	494	G	N3-C2-N2	6.69	124.58	119.90
1	N	1172	C	C1'-O4'-C4'	6.69	115.25	109.90
1	N	1281	C	O4'-C1'-N1	6.69	113.55	108.20
1	N	1369	C	C2-N3-C4	-6.69	116.56	119.90
1	N	948	C	C5'-C4'-O4'	6.69	117.12	109.10
1	N	1088	G	C8-N9-C4	-6.69	103.72	106.40
1	N	1304	G	C8-N9-C1'	-6.69	118.31	127.00
1	N	139	A	O3'-P-O5'	-6.68	91.30	104.00
1	N	621	A	N7-C8-N9	-6.68	110.46	113.80
1	N	660	C	C4-C5-C6	6.68	120.74	117.40
1	N	982	U	C3'-C2'-C1'	6.68	106.85	101.50
1	N	1195	C	C2-N1-C1'	6.68	126.15	118.80
1	N	1439	G	C5-N7-C8	-6.68	100.96	104.30
1	N	106	C	N3-C4-N4	6.68	122.68	118.00
1	N	256	U	N3-C2-O2	6.68	126.88	122.20
1	N	371	A	C3'-C2'-C1'	-6.68	96.15	101.50
1	N	940	C	C4-C5-C6	-6.68	114.06	117.40
1	N	1146	A	C4'-C3'-C2'	-6.68	95.92	102.60
1	N	347	G	C5'-C4'-C3'	-6.68	105.31	116.00
1	N	560	A	C5-C6-N6	-6.68	118.36	123.70
1	N	887	G	C5-N7-C8	6.68	107.64	104.30
1	N	1333	A	N1-C6-N6	6.68	122.61	118.60
1	N	1353	G	C4-C5-C6	6.68	122.81	118.80
1	N	988	G	N3-C2-N2	6.68	124.58	119.90
1	N	141	G	N7-C8-N9	-6.68	109.76	113.10
1	N	393	A	N1-C6-N6	6.68	122.61	118.60
1	N	799	G	N1-C6-O6	6.68	123.91	119.90
1	N	94	G	OP1-P-OP2	-6.67	109.59	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	256	U	N3-C4-O4	6.67	124.07	119.40
1	N	558	G	N3-C2-N2	6.67	124.57	119.90
1	N	351	G	N3-C4-N9	-6.67	122.00	126.00
1	N	108	G	O4'-C1'-N9	6.67	113.54	108.20
1	N	285	C	O4'-C4'-C3'	-6.67	97.33	104.00
1	N	493	A	O4'-C1'-N9	6.67	113.54	108.20
1	N	1388	C	C2-N3-C4	6.67	123.23	119.90
1	N	10	A	C5-C6-N6	-6.67	118.36	123.70
1	N	87	C	N3-C4-C5	-6.67	119.23	121.90
1	N	226	G	N1-C6-O6	6.67	123.90	119.90
1	N	1266	G	O4'-C1'-N9	6.67	113.53	108.20
1	N	1396	A	N7-C8-N9	6.67	117.13	113.80
1	N	1479	C	N3-C4-C5	-6.67	119.23	121.90
1	N	134	G	C4'-C3'-C2'	-6.67	95.93	102.60
1	N	200	G	N1-C6-O6	6.67	123.90	119.90
1	N	289	G	C6-C5-N7	-6.67	126.40	130.40
1	N	670	G	C4-N9-C1'	-6.67	117.83	126.50
1	N	628	G	P-O3'-C3'	-6.67	111.70	119.70
1	N	749	A	C6-C5-N7	-6.67	127.64	132.30
1	N	1239	A	C3'-C2'-C1'	-6.67	96.17	101.50
1	N	1416	G	O4'-C1'-N9	6.67	113.53	108.20
1	N	684	U	C2-N3-C4	-6.66	123.00	127.00
1	N	817	C	P-O3'-C3'	6.66	127.70	119.70
1	N	826	C	C2-N3-C4	6.66	123.23	119.90
1	N	975	A	C6-C5-N7	-6.66	127.64	132.30
1	N	8	A	C2-N3-C4	-6.66	107.27	110.60
1	N	542	G	C4-C5-C6	6.66	122.80	118.80
1	N	626	G	C1'-O4'-C4'	6.66	115.23	109.90
1	N	853	C	O4'-C1'-N1	6.66	113.53	108.20
1	N	171	A	C4-C5-C6	6.66	120.33	117.00
1	N	214	C	N1-C2-O2	6.66	122.89	118.90
1	N	352	C	C2-N3-C4	-6.66	116.57	119.90
1	N	566	G	C5-C6-O6	-6.66	124.61	128.60
1	N	691	G	C4-C5-C6	6.66	122.80	118.80
1	N	857	C	C6-N1-C2	-6.66	117.64	120.30
1	N	1060	U	C5-C6-N1	6.66	126.03	122.70
1	N	189	A	C6-N1-C2	-6.66	114.61	118.60
1	N	1070	U	C5-C6-N1	6.66	126.03	122.70
1	N	349	A	N1-C6-N6	6.66	122.59	118.60
1	N	774	G	C4-C5-C6	6.66	122.79	118.80
1	N	1196	A	C5-C6-N6	-6.66	118.38	123.70
1	N	69	G	C6-N1-C2	6.65	129.09	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	766	A	C5-C6-N6	-6.65	118.38	123.70
1	N	824	G	C5-C6-O6	-6.65	124.61	128.60
1	N	93	U	C3'-C2'-C1'	-6.65	96.18	101.50
1	N	364	A	C4-C5-C6	6.65	120.33	117.00
1	N	1171	A	N1-C2-N3	6.65	132.62	129.30
1	N	927	G	O4'-C1'-N9	6.65	113.52	108.20
1	N	438	U	N3-C2-O2	6.65	126.85	122.20
1	N	446	G	N3-C2-N2	6.65	124.55	119.90
1	N	42	G	P-O3'-C3'	-6.64	111.73	119.70
1	N	373	A	C5'-C4'-O4'	-6.64	101.12	109.10
1	N	620	C	C5-C4-N4	-6.64	115.55	120.20
1	N	768	A	O4'-C1'-N9	6.64	113.51	108.20
1	N	888	G	C5-C6-O6	-6.64	124.61	128.60
1	N	1013	G	C2-N3-C4	6.64	115.22	111.90
1	N	1024	G	P-O5'-C5'	6.64	131.53	120.90
1	N	1174	G	C5'-C4'-O4'	6.64	117.07	109.10
1	N	1405	G	C4'-C3'-C2'	-6.64	95.96	102.60
1	N	1490	U	C5-C4-O4	-6.64	121.91	125.90
1	N	198	G	O4'-C1'-C2'	6.64	113.58	107.60
1	N	489	C	N3-C2-O2	6.64	126.55	121.90
1	N	705	G	N9-C4-C5	-6.64	102.74	105.40
1	N	177	G	P-O3'-C3'	-6.64	111.73	119.70
1	N	447	G	P-O3'-C3'	6.64	127.67	119.70
1	N	1130	A	N7-C8-N9	-6.64	110.48	113.80
1	N	1304	G	P-O3'-C3'	6.64	127.67	119.70
1	N	1312	G	C5'-C4'-C3'	-6.64	105.38	116.00
1	N	1323	G	C6-C5-N7	-6.64	126.42	130.40
1	N	1414	U	N3-C4-O4	6.64	124.05	119.40
1	N	80	A	C6-C5-N7	-6.64	127.66	132.30
1	N	303	A	C5-C6-N6	-6.64	118.39	123.70
1	N	681	A	C5-C6-N1	-6.64	114.38	117.70
1	N	164	G	O5'-P-OP2	-6.63	99.73	105.70
1	N	675	A	C6-C5-N7	-6.63	127.66	132.30
1	N	855	U	C5'-C4'-C3'	-6.63	105.38	116.00
1	N	1193	G	N1-C6-O6	6.63	123.88	119.90
1	N	640	A	O4'-C1'-N9	6.63	113.51	108.20
1	N	1455	G	C2-N3-C4	6.63	115.22	111.90
1	N	128	G	C4-C5-N7	6.63	113.45	110.80
1	N	342	C	C4-C5-C6	6.63	120.72	117.40
1	N	438	U	C5-C6-N1	-6.63	119.39	122.70
1	N	529	G	C4-C5-C6	6.63	122.78	118.80
1	N	1082	A	C5'-C4'-C3'	-6.63	105.39	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1130	A	C5-C6-N1	-6.63	114.38	117.70
1	N	1222	G	O4'-C1'-N9	6.63	113.51	108.20
1	N	1329	A	C5-N7-C8	6.63	107.22	103.90
1	N	468	A	C8-N9-C4	-6.63	103.15	105.80
1	N	914	A	C5-C6-N1	-6.63	114.39	117.70
1	N	196	A	C2-N3-C4	-6.63	107.28	110.60
1	N	887	G	N7-C8-N9	-6.63	109.78	113.10
1	N	927	G	N1-C2-N2	-6.63	110.23	116.20
1	N	948	C	C2-N3-C4	6.63	123.22	119.90
1	N	794	A	C5'-C4'-C3'	-6.62	105.40	116.00
1	N	1294	G	C2-N3-C4	6.62	115.21	111.90
1	N	1520	C	C5-C4-N4	-6.62	115.56	120.20
1	N	388	G	P-O3'-C3'	6.62	127.65	119.70
1	N	413	G	N3-C4-N9	6.62	129.97	126.00
1	N	1101	A	C2-N3-C4	-6.62	107.29	110.60
1	N	1148	U	C2-N3-C4	-6.62	123.03	127.00
1	N	1181	G	N1-C6-O6	6.62	123.88	119.90
1	N	1214	C	C5-C6-N1	6.62	124.31	121.00
1	N	1258	G	C2-N3-C4	6.62	115.21	111.90
1	N	151	A	C4-C5-N7	-6.62	107.39	110.70
1	N	657	U	O4'-C1'-N1	6.62	113.50	108.20
1	N	842	U	C2-N1-C1'	6.62	125.64	117.70
1	N	1041	G	C5-C6-O6	-6.62	124.63	128.60
1	N	1241	G	C5'-C4'-C3'	-6.62	105.41	116.00
1	N	262	A	C2-N3-C4	-6.62	107.29	110.60
1	N	833	G	N3-C4-C5	-6.62	125.29	128.60
1	N	167	A	O4'-C1'-N9	6.62	113.49	108.20
1	N	288	A	C4-C5-C6	6.62	120.31	117.00
1	N	349	A	C4'-C3'-C2'	-6.62	95.98	102.60
1	N	370	C	C1'-O4'-C4'	-6.62	104.61	109.90
1	N	406	G	C8-N9-C1'	6.62	135.60	127.00
1	N	860	A	C8-N9-C4	6.62	108.45	105.80
1	N	380	G	C5-N7-C8	-6.62	100.99	104.30
1	N	615	G	C4-C5-C6	6.62	122.77	118.80
1	N	1163	A	C4-C5-N7	-6.62	107.39	110.70
1	N	1201	A	C2-N3-C4	-6.62	107.29	110.60
1	N	1373	G	O4'-C1'-N9	6.62	113.49	108.20
1	N	1441	A	C5-N7-C8	6.62	107.21	103.90
1	N	1504	G	C4'-C3'-C2'	-6.62	95.98	102.60
1	N	230	G	C5-C6-N1	-6.61	108.19	111.50
1	N	1024	G	C6-N1-C2	6.61	129.07	125.10
1	N	1430	A	N1-C6-N6	6.61	122.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	191	G	N3-C4-N9	-6.61	122.03	126.00
1	N	700	G	C4-N9-C1'	6.61	135.09	126.50
1	N	1115	U	C4'-C3'-C2'	-6.61	95.99	102.60
1	N	212	G	C4'-C3'-C2'	-6.61	95.99	102.60
1	N	425	G	P-O5'-C5'	6.61	131.47	120.90
1	N	1047	G	C8-N9-C4	6.61	109.04	106.40
1	N	34	C	N3-C4-N4	6.61	122.62	118.00
1	N	97	G	P-O5'-C5'	6.61	131.47	120.90
1	N	343	U	P-O5'-C5'	6.61	131.47	120.90
1	N	418	C	O4'-C1'-N1	6.61	113.48	108.20
1	N	779	C	C4-C5-C6	6.61	120.70	117.40
1	N	1346	A	C5-C6-N6	-6.61	118.42	123.70
1	N	35	G	O4'-C1'-N9	6.61	113.48	108.20
1	N	820	U	P-O3'-C3'	6.61	127.63	119.70
1	N	913	A	C6-C5-N7	-6.61	127.68	132.30
1	N	104	G	C5'-C4'-O4'	6.60	117.03	109.10
1	N	1304	G	N3-C2-N2	6.60	124.52	119.90
1	N	271	C	C2-N1-C1'	6.60	126.06	118.80
1	N	863	U	N3-C4-O4	6.60	124.02	119.40
1	N	944	G	C5-N7-C8	6.60	107.60	104.30
1	N	1394	A	N3-C4-C5	-6.60	122.18	126.80
1	N	449	G	C2-N3-C4	6.60	115.20	111.90
1	N	538	G	C4-C5-N7	6.60	113.44	110.80
1	N	810	C	N3-C4-N4	6.60	122.62	118.00
1	N	931	C	C5-C6-N1	-6.60	117.70	121.00
1	N	1165	U	P-O5'-C5'	6.60	131.46	120.90
1	N	1225	A	C5'-C4'-O4'	6.60	117.02	109.10
1	N	1529	G	C6-C5-N7	-6.60	126.44	130.40
1	N	210	C	O3'-P-O5'	-6.60	91.47	104.00
1	N	403	C	C4'-C3'-C2'	-6.60	96.00	102.60
1	N	1356	G	N9-C4-C5	-6.60	102.76	105.40
1	N	1387	G	N3-C4-C5	-6.60	125.30	128.60
1	N	147	G	N3-C4-C5	-6.59	125.30	128.60
1	N	717	U	P-O3'-C3'	6.59	127.61	119.70
1	N	1109	C	P-O3'-C3'	6.59	127.61	119.70
1	N	1197	A	N9-C4-C5	-6.59	103.16	105.80
1	N	329	A	O4'-C1'-N9	6.59	113.47	108.20
1	N	1003	G	O5'-C5'-C4'	6.59	124.23	111.70
1	N	278	G	C8-N9-C4	6.59	109.04	106.40
1	N	752	G	N3-C4-C5	-6.59	125.31	128.60
1	N	1483	A	C5-C6-N1	-6.59	114.40	117.70
1	N	248	C	N3-C4-C5	-6.59	119.26	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	492	C	C2-N1-C1'	6.59	126.05	118.80
1	N	739	C	O4'-C1'-N1	6.59	113.47	108.20
1	N	49	U	C4'-C3'-C2'	-6.59	96.01	102.60
1	N	651	C	O4'-C1'-N1	6.59	113.47	108.20
1	N	179	A	C6-C5-N7	-6.59	127.69	132.30
1	N	220	G	C5'-C4'-O4'	6.59	117.00	109.10
1	N	690	G	N9-C4-C5	-6.59	102.77	105.40
1	N	1048	G	C4-C5-C6	6.59	122.75	118.80
1	N	1105	A	N9-C4-C5	6.59	108.44	105.80
1	N	1416	G	C8-N9-C4	6.59	109.03	106.40
1	N	705	G	N3-C2-N2	6.58	124.51	119.90
1	N	1004	A	C5-C6-N1	-6.58	114.41	117.70
1	N	83	C	C6-N1-C2	-6.58	117.67	120.30
1	N	145	G	C4-C5-N7	6.58	113.43	110.80
1	N	542	G	N1-C2-N3	-6.58	119.95	123.90
1	N	76	G	O4'-C1'-N9	6.58	113.47	108.20
1	N	630	A	C5-C6-N6	-6.58	118.44	123.70
1	N	669	G	C6-C5-N7	-6.58	126.45	130.40
1	N	683	G	N1-C2-N3	-6.58	119.95	123.90
1	N	1177	G	C5-C6-O6	-6.58	124.65	128.60
1	N	228	A	N9-C4-C5	-6.58	103.17	105.80
1	N	320	A	N3-C4-C5	-6.58	122.19	126.80
1	N	921	U	C2-N3-C4	6.58	130.95	127.00
1	N	981	U	P-O3'-C3'	-6.58	111.80	119.70
1	N	494	G	N1-C2-N3	-6.58	119.95	123.90
1	N	588	G	C5-N7-C8	-6.58	101.01	104.30
1	N	663	A	C6-N1-C2	-6.58	114.65	118.60
1	N	798	U	N1-C2-N3	-6.58	110.95	114.90
1	N	1431	A	N1-C6-N6	6.58	122.55	118.60
1	N	502	A	C4'-C3'-C2'	-6.58	96.02	102.60
1	N	647	C	C6-N1-C2	6.58	122.93	120.30
1	N	975	A	C5-C6-N6	-6.58	118.44	123.70
1	N	1501	C	C3'-C2'-C1'	6.58	106.76	101.50
1	N	174	A	N9-C1'-C2'	-6.58	104.77	112.00
1	N	273	U	C1'-O4'-C4'	6.58	115.16	109.90
1	N	1068	G	C4-N9-C1'	6.58	135.05	126.50
1	N	1508	A	C5-C6-N1	-6.58	114.41	117.70
1	N	456	A	N1-C6-N6	6.57	122.54	118.60
1	N	677	U	O4'-C1'-N1	6.57	113.46	108.20
1	N	1414	U	O4'-C4'-C3'	-6.57	97.43	104.00
1	N	842	U	C5'-C4'-C3'	-6.57	105.48	116.00
1	N	236	A	C4'-C3'-C2'	-6.57	96.03	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	248	C	P-O3'-C3'	-6.57	111.82	119.70
1	N	337	G	C5-N7-C8	-6.57	101.02	104.30
1	N	823	C	P-O5'-C5'	-6.57	110.39	120.90
1	N	88	U	C5'-C4'-O4'	6.57	116.98	109.10
1	N	240	G	C6-C5-N7	-6.57	126.46	130.40
1	N	1093	A	N1-C2-N3	6.57	132.58	129.30
1	N	1342	C	N3-C4-N4	6.57	122.60	118.00
1	N	285	C	C5'-C4'-O4'	6.57	116.98	109.10
1	N	331	G	P-O5'-C5'	6.57	131.41	120.90
1	N	437	U	N1-C2-N3	-6.57	110.96	114.90
1	N	466	A	C6-C5-N7	-6.57	127.70	132.30
1	N	473	U	N3-C4-O4	6.57	124.00	119.40
1	N	951	G	N9-C4-C5	-6.57	102.77	105.40
1	N	1428	A	C5'-C4'-C3'	6.57	126.50	116.00
1	N	436	C	O4'-C1'-N1	6.56	113.45	108.20
1	N	1263	C	C5-C4-N4	-6.56	115.61	120.20
1	N	613	C	O4'-C1'-N1	6.56	113.45	108.20
1	N	902	G	C4-C5-C6	6.56	122.74	118.80
1	N	392	C	N1-C2-N3	-6.56	114.61	119.20
1	N	335	C	N1-C2-N3	-6.56	114.61	119.20
1	N	1114	C	P-O5'-C5'	6.56	131.39	120.90
1	N	1233	G	N3-C4-N9	6.56	129.94	126.00
1	N	1484	C	O4'-C1'-N1	6.56	113.45	108.20
1	N	129	A	C4-C5-C6	6.56	120.28	117.00
1	N	1027	C	O4'-C1'-N1	6.56	113.45	108.20
1	N	1319	A	C5-C6-N6	-6.56	118.45	123.70
1	N	1355	G	C8-N9-C1'	6.56	135.53	127.00
1	N	1440	U	O4'-C1'-N1	6.56	113.44	108.20
1	N	637	C	C6-N1-C1'	-6.56	112.93	120.80
1	N	1091	U	C6-N1-C2	-6.56	117.07	121.00
1	N	1261	A	N1-C2-N3	6.55	132.58	129.30
1	N	1411	C	N3-C4-N4	6.55	122.59	118.00
1	N	177	G	C5-N7-C8	6.55	107.58	104.30
1	N	639	G	N3-C2-N2	6.55	124.49	119.90
1	N	1285	A	C4-C5-C6	6.55	120.28	117.00
1	N	142	G	C5'-C4'-C3'	-6.55	105.52	116.00
1	N	246	A	N1-C6-N6	6.55	122.53	118.60
1	N	760	G	C5-C6-O6	-6.55	124.67	128.60
1	N	846	G	C5'-C4'-C3'	-6.55	105.52	116.00
1	N	1251	A	C5-C6-N6	-6.55	118.46	123.70
1	N	1300	G	P-O3'-C3'	6.55	127.56	119.70
1	N	1031	C	P-O3'-C3'	-6.55	111.84	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1410	A	C5-C6-N6	-6.55	118.46	123.70
1	N	561	U	C5-C6-N1	-6.55	119.43	122.70
1	N	1384	C	C3'-C2'-C1'	-6.55	96.26	101.50
1	N	1261	A	C6-C5-N7	-6.54	127.72	132.30
1	N	189	A	P-O3'-C3'	-6.54	111.85	119.70
1	N	243	A	C4-C5-N7	-6.54	107.43	110.70
1	N	958	A	O4'-C1'-N9	6.54	113.44	108.20
1	N	177	G	C4-C5-C6	6.54	122.72	118.80
1	N	1069	C	C5-C4-N4	6.54	124.78	120.20
1	N	1533	C	C2-N1-C1'	6.54	126.00	118.80
1	N	94	G	C3'-C2'-C1'	6.54	106.73	101.50
1	N	1440	U	N1-C2-N3	-6.54	110.98	114.90
1	N	18	C	C4'-C3'-C2'	-6.54	96.06	102.60
1	N	800	G	P-O5'-C5'	6.54	131.36	120.90
1	N	1389	C	C2-N1-C1'	6.54	125.99	118.80
1	N	796	C	C4'-C3'-C2'	-6.54	96.06	102.60
1	N	988	G	O4'-C1'-N9	6.54	113.43	108.20
1	N	382	A	C5-C6-N6	-6.54	118.47	123.70
1	N	1449	C	C5-C4-N4	-6.54	115.63	120.20
1	N	122	G	N9-C4-C5	-6.53	102.79	105.40
1	N	791	G	C2-N3-C4	6.53	115.17	111.90
1	N	931	C	O4'-C1'-N1	6.53	113.43	108.20
1	N	1310	G	N9-C4-C5	6.53	108.01	105.40
1	N	1337	G	C6-N1-C2	6.53	129.02	125.10
1	N	860	A	P-O3'-C3'	6.53	127.54	119.70
1	N	165	G	P-O3'-C3'	-6.53	111.86	119.70
1	N	447	G	C8-N9-C4	6.53	109.01	106.40
1	N	979	C	O5'-P-OP2	-6.53	99.82	105.70
1	N	563	A	P-O5'-C5'	-6.53	110.45	120.90
1	N	613	C	N3-C4-C5	-6.53	119.29	121.90
1	N	806	C	P-O3'-C3'	-6.53	111.86	119.70
1	N	1339	A	N1-C2-N3	6.53	132.56	129.30
1	N	554	A	N3-C4-C5	-6.53	122.23	126.80
1	N	803	G	C6-C5-N7	-6.53	126.48	130.40
1	N	874	G	O4'-C1'-N9	6.53	113.42	108.20
1	N	1417	G	C6-C5-N7	-6.53	126.48	130.40
1	N	136	C	C5-C6-N1	6.53	124.26	121.00
1	N	943	U	C2-N1-C1'	6.53	125.53	117.70
1	N	1429	A	C5-C6-N6	-6.53	118.48	123.70
1	N	1462	C	C5-C6-N1	6.53	124.26	121.00
1	N	1532	U	C6-N1-C2	-6.53	117.08	121.00
1	N	408	A	C2-N3-C4	6.52	113.86	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1251	A	C8-N9-C4	-6.52	103.19	105.80
1	N	241	G	C4-C5-N7	6.52	113.41	110.80
1	N	579	A	C5-N7-C8	6.52	107.16	103.90
1	N	598	U	O4'-C1'-N1	6.52	113.42	108.20
1	N	706	A	C4-C5-C6	6.52	120.26	117.00
1	N	1253	G	C5-N7-C8	-6.52	101.04	104.30
1	N	293	G	O4'-C1'-C2'	6.52	113.47	107.60
1	N	1159	U	C2-N1-C1'	6.52	125.53	117.70
1	N	301	G	C6-C5-N7	-6.52	126.49	130.40
1	N	359	G	O4'-C1'-N9	6.52	113.42	108.20
1	N	447	G	N9-C1'-C2'	-6.52	104.83	112.00
1	N	69	G	C3'-C2'-C1'	6.52	106.71	101.50
1	N	420	U	C6-N1-C2	-6.52	117.09	121.00
1	N	543	U	O4'-C1'-N1	6.52	113.41	108.20
1	N	638	U	N3-C2-O2	6.52	126.76	122.20
1	N	1185	G	C4-N9-C1'	-6.52	118.03	126.50
1	N	1285	A	N1-C2-N3	6.52	132.56	129.30
1	N	1383	C	O4'-C1'-N1	6.52	113.41	108.20
1	N	282	A	N1-C6-N6	6.52	122.51	118.60
1	N	676	A	C4'-C3'-C2'	-6.52	96.08	102.60
1	N	1333	A	N3-C4-N9	6.52	132.61	127.40
1	N	1446	A	O4'-C1'-N9	6.52	113.41	108.20
1	N	186	C	O4'-C1'-N1	6.51	113.41	108.20
1	N	339	C	N1-C2-O2	6.51	122.81	118.90
1	N	341	C	C6-N1-C2	-6.51	117.69	120.30
1	N	629	A	N1-C2-N3	6.51	132.56	129.30
1	N	1419	G	C8-N9-C4	-6.51	103.79	106.40
1	N	1515	G	C5-C6-O6	-6.51	124.69	128.60
1	N	93	U	C5-C6-N1	6.51	125.96	122.70
1	N	824	G	N3-C4-C5	-6.51	125.34	128.60
1	N	1248	A	N9-C4-C5	-6.51	103.19	105.80
1	N	761	G	C6-C5-N7	-6.51	126.50	130.40
1	N	890	G	C8-N9-C1'	6.51	135.46	127.00
1	N	241	G	C6-C5-N7	-6.51	126.50	130.40
1	N	457	G	C1'-O4'-C4'	-6.51	104.69	109.90
1	N	501	C	C5-C4-N4	-6.51	115.65	120.20
1	N	1001	C	N3-C2-O2	6.51	126.45	121.90
1	N	1342	C	P-O3'-C3'	-6.51	111.89	119.70
1	N	1487	G	C6-N1-C2	-6.51	121.20	125.10
1	N	211	G	C4-C5-N7	6.50	113.40	110.80
1	N	283	U	P-O3'-C3'	-6.50	111.89	119.70
1	N	298	A	N9-C4-C5	-6.50	103.20	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	257	G	O4'-C4'-C3'	-6.50	97.50	104.00
1	N	505	G	C5'-C4'-O4'	6.50	116.90	109.10
1	N	483	C	N3-C4-N4	6.50	122.55	118.00
1	N	212	G	P-O5'-C5'	6.50	131.29	120.90
1	N	651	C	C4-C5-C6	-6.50	114.15	117.40
1	N	1366	C	C5-C6-N1	6.50	124.25	121.00
1	N	114	U	N3-C4-O4	6.49	123.94	119.40
1	N	1035	A	C8-N9-C4	6.49	108.40	105.80
1	N	1149	C	C5-C4-N4	-6.49	115.65	120.20
1	N	1469	C	N3-C4-N4	6.49	122.54	118.00
1	N	373	A	C4-C5-N7	-6.49	107.45	110.70
1	N	873	A	C5'-C4'-C3'	-6.49	105.61	116.00
1	N	1135	U	N3-C2-O2	6.49	126.74	122.20
1	N	1249	C	N1-C2-N3	-6.49	114.66	119.20
1	N	788	U	C6-N1-C2	6.49	124.89	121.00
1	N	861	G	N1-C2-N3	-6.49	120.01	123.90
1	N	1116	U	P-O3'-C3'	-6.49	111.92	119.70
1	N	286	C	P-O3'-C3'	6.49	127.48	119.70
1	N	1385	G	N7-C8-N9	6.49	116.34	113.10
1	N	1465	A	C4'-C3'-C2'	-6.49	96.11	102.60
1	N	1319	A	C8-N9-C4	-6.48	103.21	105.80
1	N	43	C	C6-N1-C2	-6.48	117.71	120.30
1	N	545	C	N3-C4-N4	6.48	122.54	118.00
1	N	670	G	C2-N3-C4	6.48	115.14	111.90
1	N	792	A	O4'-C1'-N9	6.48	113.39	108.20
1	N	930	C	C5-C4-N4	-6.48	115.66	120.20
1	N	993	G	C5-C6-N1	-6.48	108.26	111.50
1	N	546	A	C6-C5-N7	-6.48	127.76	132.30
1	N	628	G	C5-N7-C8	-6.48	101.06	104.30
1	N	635	A	C5'-C4'-C3'	6.48	126.37	116.00
1	N	773	G	C4-C5-C6	6.48	122.69	118.80
1	N	866	C	C4'-C3'-C2'	-6.48	96.12	102.60
1	N	575	G	N1-C6-O6	6.48	123.79	119.90
1	N	1196	A	N7-C8-N9	-6.48	110.56	113.80
1	N	484	G	OP1-P-OP2	-6.48	109.88	119.60
1	N	615	G	N3-C2-N2	6.48	124.43	119.90
1	N	858	G	C5-C6-N1	-6.48	108.26	111.50
1	N	1113	C	C5'-C4'-C3'	-6.48	105.64	116.00
1	N	1261	A	C4-N9-C1'	6.48	137.96	126.30
1	N	1505	G	N1-C6-O6	6.48	123.79	119.90
1	N	1507	A	C2-N3-C4	6.48	113.84	110.60
1	N	1171	A	P-O3'-C3'	6.48	127.47	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	71	A	C3'-C2'-C1'	6.47	106.68	101.50
1	N	628	G	C6-N1-C2	-6.47	121.22	125.10
1	N	909	A	C6-N1-C2	6.47	122.48	118.60
1	N	1184	G	C6-C5-N7	-6.47	126.52	130.40
1	N	291	U	O4'-C1'-N1	6.47	113.38	108.20
1	N	610	U	N1-C1'-C2'	-6.47	104.88	112.00
1	N	741	G	C5-N7-C8	-6.47	101.07	104.30
1	N	781	A	C6-C5-N7	-6.47	127.77	132.30
1	N	367	U	C5-C6-N1	-6.47	119.47	122.70
1	N	1415	G	C5-C6-O6	-6.47	124.72	128.60
1	N	1495	U	O4'-C1'-N1	6.47	113.37	108.20
1	N	162	A	C4-C5-C6	6.47	120.23	117.00
1	N	199	A	C2-N3-C4	-6.47	107.37	110.60
1	N	558	G	C4-C5-C6	6.47	122.68	118.80
1	N	834	U	N3-C4-O4	6.47	123.93	119.40
1	N	959	A	P-O3'-C3'	6.47	127.46	119.70
1	N	1421	G	C4-C5-N7	-6.47	108.21	110.80
1	N	29	U	C2-N1-C1'	-6.46	109.94	117.70
1	N	58	C	C4-C5-C6	6.46	120.63	117.40
1	N	68	G	N1-C2-N2	-6.46	110.38	116.20
1	N	267	C	O4'-C1'-N1	6.46	113.37	108.20
1	N	279	A	C2-N3-C4	6.46	113.83	110.60
1	N	757	U	P-O5'-C5'	6.46	131.24	120.90
1	N	890	G	C1'-O4'-C4'	-6.46	104.73	109.90
1	N	1240	U	C2-N3-C4	-6.46	123.12	127.00
1	N	270	A	P-O5'-C5'	6.46	131.24	120.90
1	N	91	U	N3-C4-C5	-6.46	110.72	114.60
1	N	197	A	N9-C4-C5	6.46	108.39	105.80
1	N	633	G	O4'-C1'-N9	6.46	113.37	108.20
1	N	1136	C	N3-C2-O2	6.46	126.42	121.90
1	N	1528	U	N1-C2-O2	-6.46	118.28	122.80
1	N	240	G	O4'-C1'-N9	6.46	113.37	108.20
1	N	334	C	C2-N3-C4	6.46	123.13	119.90
1	N	338	A	O4'-C1'-N9	6.46	113.37	108.20
1	N	1135	U	N1-C2-N3	-6.46	111.02	114.90
1	N	1421	G	N9-C1'-C2'	-6.46	104.89	112.00
1	N	257	G	N1-C6-O6	6.46	123.78	119.90
1	N	529	G	C6-C5-N7	-6.46	126.53	130.40
1	N	692	U	N1-C2-O2	-6.46	118.28	122.80
1	N	727	G	C4'-C3'-C2'	-6.46	96.14	102.60
1	N	1166	G	O4'-C1'-N9	6.46	113.37	108.20
1	N	802	A	C5-C6-N1	-6.46	114.47	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	908	A	C8-N9-C4	-6.46	103.22	105.80
1	N	1519	A	O4'-C4'-C3'	-6.46	97.54	104.00
1	N	153	C	C6-N1-C2	-6.46	117.72	120.30
1	N	517	G	C6-C5-N7	-6.46	126.53	130.40
1	N	778	G	N9-C4-C5	-6.46	102.82	105.40
1	N	126	G	OP1-P-OP2	-6.45	109.92	119.60
1	N	181	A	N9-C4-C5	-6.45	103.22	105.80
1	N	541	G	C5-C6-N1	-6.45	108.27	111.50
1	N	733	G	N3-C4-C5	6.45	131.83	128.60
1	N	966	G	P-O3'-C3'	6.45	127.44	119.70
1	N	1085	U	C6-N1-C2	6.45	124.87	121.00
1	N	1365	G	C5-C6-O6	-6.45	124.73	128.60
1	N	1525	G	C4-C5-C6	6.45	122.67	118.80
1	N	1147	C	N3-C4-N4	6.45	122.52	118.00
1	N	1290	G	C6-N1-C2	6.45	128.97	125.10
1	N	1309	G	C4'-C3'-C2'	-6.45	96.15	102.60
1	N	11	G	N1-C6-O6	6.45	123.77	119.90
1	N	31	G	N1-C6-O6	6.45	123.77	119.90
1	N	179	A	P-O5'-C5'	6.45	131.22	120.90
1	N	765	G	C4-C5-C6	6.45	122.67	118.80
1	N	1019	A	C8-N9-C4	6.45	108.38	105.80
1	N	168	G	C5-C6-O6	-6.45	124.73	128.60
1	N	489	C	C5-C6-N1	-6.45	117.78	121.00
1	N	600	A	C6-C5-N7	-6.45	127.79	132.30
1	N	661	G	P-O3'-C3'	-6.45	111.96	119.70
1	N	860	A	C4'-C3'-C2'	-6.45	96.15	102.60
1	N	1180	A	P-O3'-C3'	6.45	127.44	119.70
1	N	450	G	C2'-C3'-O3'	6.45	124.01	113.70
1	N	715	A	N3-C4-N9	6.45	132.56	127.40
1	N	1149	C	C6-N1-C2	-6.45	117.72	120.30
1	N	1190	G	N1-C2-N3	-6.45	120.03	123.90
1	N	1256	A	C5-C6-N6	-6.45	118.54	123.70
1	N	1178	G	C4-C5-N7	6.44	113.38	110.80
1	N	1365	G	N9-C4-C5	-6.44	102.82	105.40
1	N	54	C	O4'-C1'-C2'	-6.44	99.36	105.80
1	N	243	A	N3-C4-C5	-6.44	122.29	126.80
1	N	605	U	N1-C2-N3	-6.44	111.04	114.90
1	N	1145	A	C5-C6-N6	-6.44	118.55	123.70
1	N	1231	G	N9-C4-C5	-6.44	102.82	105.40
1	N	493	A	N3-C4-N9	6.44	132.55	127.40
1	N	849	G	C4-C5-C6	6.44	122.66	118.80
1	N	244	U	C5'-C4'-C3'	-6.44	105.70	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	452	A	C4-C5-N7	-6.44	107.48	110.70
1	N	824	G	C5-C6-N1	-6.44	108.28	111.50
1	N	521	G	O4'-C1'-N9	6.44	113.35	108.20
1	N	789	U	N3-C4-O4	6.44	123.91	119.40
1	N	1004	A	C6-C5-N7	-6.44	127.80	132.30
1	N	386	C	N3-C2-O2	6.43	126.41	121.90
1	N	7	A	C3'-C2'-C1'	-6.43	96.35	101.50
1	N	61	G	O4'-C1'-N9	6.43	113.35	108.20
1	N	289	G	N9-C4-C5	-6.43	102.83	105.40
1	N	360	G	C8-N9-C4	-6.43	103.83	106.40
1	N	474	G	N3-C2-N2	6.43	124.40	119.90
1	N	621	A	C5-C6-N6	-6.43	118.55	123.70
1	N	584	G	C5-C6-N1	-6.43	108.28	111.50
1	N	809	G	C8-N9-C1'	6.43	135.36	127.00
1	N	811	C	C4-C5-C6	-6.43	114.19	117.40
1	N	1146	A	N3-C4-C5	-6.43	122.30	126.80
1	N	389	A	N9-C4-C5	6.43	108.37	105.80
1	N	939	G	C4-N9-C1'	-6.43	118.14	126.50
1	N	1184	G	O4'-C1'-N9	6.43	113.34	108.20
1	N	1241	G	N1-C2-N3	-6.43	120.04	123.90
1	N	1336	C	C6-N1-C1'	-6.43	113.09	120.80
1	N	132	C	C6-N1-C2	-6.43	117.73	120.30
1	N	536	C	C5'-C4'-O4'	-6.43	101.39	109.10
1	N	822	U	C5'-C4'-O4'	6.43	116.81	109.10
1	N	664	G	C6-C5-N7	-6.42	126.55	130.40
1	N	716	A	C5-N7-C8	-6.42	100.69	103.90
1	N	1386	G	O4'-C1'-N9	6.42	113.34	108.20
1	N	1483	A	N7-C8-N9	-6.42	110.59	113.80
1	N	870	U	C5-C6-N1	-6.42	119.49	122.70
1	N	563	A	OP2-P-O3'	6.42	119.33	105.20
1	N	790	A	C4-C5-C6	6.42	120.21	117.00
1	N	813	U	O3'-P-O5'	-6.42	91.80	104.00
1	N	833	G	C6-N1-C2	-6.42	121.25	125.10
1	N	1508	A	C4-C5-C6	6.42	120.21	117.00
1	N	42	G	P-O5'-C5'	6.42	131.17	120.90
1	N	75	G	C5'-C4'-O4'	6.42	116.80	109.10
1	N	319	G	C4-N9-C1'	6.42	134.84	126.50
1	N	293	G	N1-C2-N2	-6.42	110.43	116.20
1	N	708	C	C3'-C2'-C1'	6.42	106.63	101.50
1	N	682	G	C4'-C3'-C2'	-6.41	96.19	102.60
1	N	700	G	N1-C2-N3	-6.41	120.05	123.90
1	N	779	C	P-O3'-C3'	6.41	127.40	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1273	C	N3-C4-C5	-6.41	119.33	121.90
1	N	193	C	N1-C2-O2	6.41	122.75	118.90
1	N	340	U	C2-N3-C4	-6.41	123.15	127.00
1	N	238	A	C2-N3-C4	6.41	113.81	110.60
1	N	411	A	C5-C6-N6	-6.41	118.57	123.70
1	N	1287	A	C4-C5-C6	6.41	120.20	117.00
1	N	124	C	C2-N3-C4	6.41	123.10	119.90
1	N	543	U	C1'-O4'-C4'	6.41	115.03	109.90
1	N	1230	C	O5'-C5'-C4'	-6.41	99.53	111.70
1	N	602	A	N9-C4-C5	6.40	108.36	105.80
1	N	827	U	C5-C4-O4	-6.40	122.06	125.90
1	N	918	A	O4'-C1'-N9	6.40	113.32	108.20
1	N	131	A	N9-C4-C5	6.40	108.36	105.80
1	N	207	C	P-O3'-C3'	6.40	127.38	119.70
1	N	435	A	C4-C5-C6	6.40	120.20	117.00
1	N	600	A	OP1-P-OP2	-6.40	110.00	119.60
1	N	807	A	N1-C2-N3	-6.40	126.10	129.30
1	N	940	C	O4'-C1'-N1	6.40	113.32	108.20
1	N	1074	G	N9-C4-C5	-6.40	102.84	105.40
1	N	618	C	O4'-C1'-N1	6.40	113.32	108.20
1	N	956	U	O4'-C1'-N1	6.40	113.32	108.20
1	N	732	C	N3-C4-C5	-6.40	119.34	121.90
1	N	140	U	C2'-C3'-O3'	6.39	123.93	113.70
1	N	277	C	N1-C1'-C2'	-6.39	104.97	112.00
1	N	315	A	N1-C6-N6	6.39	122.44	118.60
1	N	322	C	P-O5'-C5'	6.39	131.13	120.90
1	N	476	U	C5-C4-O4	-6.39	122.06	125.90
1	N	1024	G	C5-C6-O6	-6.39	124.76	128.60
1	N	869	G	C6-N1-C2	6.39	128.94	125.10
1	N	916	U	O4'-C1'-N1	6.39	113.31	108.20
1	N	1083	U	N1-C2-O2	6.39	127.28	122.80
1	N	365	U	N3-C4-O4	6.39	123.87	119.40
1	N	437	U	C5-C4-O4	-6.39	122.06	125.90
1	N	255	G	C8-N9-C4	-6.39	103.84	106.40
1	N	265	G	O4'-C1'-N9	6.39	113.31	108.20
1	N	321	A	N9-C4-C5	6.39	108.36	105.80
1	N	76	G	C5'-C4'-C3'	-6.39	105.78	116.00
1	N	423	G	C6-N1-C2	6.39	128.93	125.10
1	N	699	C	C6-N1-C2	-6.39	117.75	120.30
1	N	1143	G	N9-C4-C5	-6.39	102.84	105.40
1	N	1209	C	N1-C2-O2	-6.39	115.07	118.90
1	N	1444	U	N1-C2-N3	-6.39	111.07	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	261	U	N1-C2-O2	6.39	127.27	122.80
1	N	830	G	C4-C5-N7	-6.39	108.25	110.80
1	N	892	A	N1-C2-N3	6.39	132.49	129.30
1	N	167	A	C2-N3-C4	6.38	113.79	110.60
1	N	808	C	N1-C2-O2	-6.38	115.07	118.90
1	N	877	G	N1-C6-O6	6.38	123.73	119.90
1	N	1056	U	N3-C4-O4	6.38	123.87	119.40
1	N	1364	U	P-O3'-C3'	6.38	127.36	119.70
1	N	1384	C	N1-C2-O2	-6.38	115.07	118.90
1	N	689	C	P-O5'-C5'	6.38	131.11	120.90
1	N	883	C	N1-C2-N3	-6.38	114.73	119.20
1	N	60	A	C5'-C4'-C3'	-6.38	105.79	116.00
1	N	377	G	C4-C5-C6	6.38	122.63	118.80
1	N	916	U	C3'-C2'-C1'	-6.38	96.40	101.50
1	N	1112	C	C5'-C4'-O4'	6.38	116.76	109.10
1	N	1517	G	N7-C8-N9	6.38	116.29	113.10
1	N	320	A	C5'-C4'-O4'	6.38	116.76	109.10
1	N	783	C	N3-C4-C5	-6.38	119.35	121.90
1	N	238	A	N3-C4-C5	-6.38	122.33	126.80
1	N	583	A	C6-C5-N7	-6.38	127.84	132.30
1	N	1332	A	C5-C6-N6	-6.38	118.60	123.70
1	N	1503	A	O4'-C1'-N9	6.38	113.30	108.20
1	N	343	U	O4'-C1'-N1	6.38	113.30	108.20
1	N	430	A	P-O5'-C5'	6.38	131.10	120.90
1	N	644	U	C3'-C2'-C1'	-6.38	96.40	101.50
1	N	161	A	C6-C5-N7	-6.38	127.84	132.30
1	N	456	A	P-O5'-C5'	-6.38	110.70	120.90
1	N	894	G	C8-N9-C4	-6.38	103.85	106.40
1	N	324	G	N1-C2-N3	-6.37	120.08	123.90
1	N	347	G	P-O5'-C5'	6.37	131.10	120.90
1	N	712	A	C5-C6-N6	-6.37	118.60	123.70
1	N	911	U	C2-N1-C1'	-6.37	110.05	117.70
1	N	1421	G	C4-C5-C6	6.37	122.62	118.80
1	N	733	G	C8-N9-C4	-6.37	103.85	106.40
1	N	848	C	C5-C4-N4	-6.37	115.74	120.20
1	N	792	A	N3-C4-N9	-6.37	122.30	127.40
1	N	798	U	N1-C2-O2	6.37	127.26	122.80
1	N	1024	G	N3-C4-C5	-6.37	125.42	128.60
1	N	1273	C	C4'-C3'-C2'	-6.37	96.23	102.60
1	N	411	A	N1-C6-N6	6.37	122.42	118.60
1	N	127	G	C6-N1-C2	6.36	128.92	125.10
1	N	166	U	C1'-O4'-C4'	6.36	114.99	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	831	A	C8-N9-C4	-6.36	103.25	105.80
1	N	1250	A	C2-N3-C4	6.36	113.78	110.60
1	N	1333	A	C4-C5-N7	6.36	113.88	110.70
1	N	1383	C	N3-C4-N4	6.36	122.45	118.00
1	N	1443	C	C2-N1-C1'	6.36	125.80	118.80
1	N	974	A	N9-C1'-C2'	-6.36	105.00	112.00
1	N	1272	G	C4-C5-C6	6.36	122.62	118.80
1	N	1466	C	N1-C2-O2	-6.36	115.08	118.90
1	N	426	U	N3-C4-O4	-6.36	114.95	119.40
1	N	547	A	N7-C8-N9	6.36	116.98	113.80
1	N	873	A	O5'-C5'-C4'	6.36	123.78	111.70
1	N	15	G	C2-N3-C4	-6.36	108.72	111.90
1	N	550	G	C4-C5-N7	-6.36	108.26	110.80
1	N	953	G	O4'-C1'-C2'	-6.36	99.44	105.80
1	N	393	A	P-O3'-C3'	-6.36	112.07	119.70
1	N	1496	C	P-O5'-C5'	6.36	131.07	120.90
1	N	21	G	C4-N9-C1'	6.36	134.76	126.50
1	N	68	G	C6-C5-N7	-6.36	126.59	130.40
1	N	636	U	O4'-C1'-N1	6.36	113.28	108.20
1	N	923	A	C4-C5-C6	6.36	120.18	117.00
1	N	432	A	N9-C4-C5	6.35	108.34	105.80
1	N	89	U	C6-N1-C2	6.35	124.81	121.00
1	N	213	G	N9-C4-C5	-6.35	102.86	105.40
1	N	406	G	N7-C8-N9	6.35	116.28	113.10
1	N	750	C	N3-C4-N4	6.35	122.45	118.00
1	N	43	C	C5-C4-N4	-6.35	115.75	120.20
1	N	1308	U	C4-C5-C6	6.35	123.51	119.70
1	N	160	A	C4-C5-N7	-6.35	107.53	110.70
1	N	496	A	C5'-C4'-O4'	6.35	116.72	109.10
1	N	754	C	C4'-C3'-C2'	6.35	108.95	102.60
1	N	900	A	C4-C5-C6	6.35	120.17	117.00
1	N	1092	A	C4-C5-C6	6.35	120.17	117.00
1	N	94	G	N9-C4-C5	6.35	107.94	105.40
1	N	266	G	C5'-C4'-O4'	6.35	116.72	109.10
1	N	836	G	C5-C6-N1	-6.35	108.33	111.50
1	N	391	G	P-O3'-C3'	6.34	127.31	119.70
1	N	1389	C	P-O5'-C5'	-6.34	110.75	120.90
1	N	596	A	C8-N9-C4	-6.34	103.26	105.80
1	N	700	G	C4-C5-C6	6.34	122.61	118.80
1	N	1156	G	O4'-C1'-N9	6.34	113.28	108.20
1	N	92	U	N1-C2-O2	-6.34	118.36	122.80
1	N	98	A	C5-N7-C8	6.34	107.07	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	217	C	C5-C6-N1	6.34	124.17	121.00
1	N	442	G	N1-C2-N3	-6.34	120.09	123.90
1	N	1394	A	C2-N3-C4	6.34	113.77	110.60
1	N	600	A	C5-C6-N1	-6.34	114.53	117.70
1	N	750	C	C5-C4-N4	-6.34	115.76	120.20
1	N	1088	G	P-O5'-C5'	6.34	131.04	120.90
1	N	1302	C	N3-C4-N4	6.34	122.44	118.00
1	N	1434	A	N7-C8-N9	-6.34	110.63	113.80
1	N	184	G	C5'-C4'-O4'	-6.34	101.49	109.10
1	N	346	G	C4'-C3'-C2'	6.34	108.94	102.60
1	N	390	U	O4'-C1'-N1	6.34	113.27	108.20
1	N	1431	A	P-O3'-C3'	6.34	127.31	119.70
1	N	759	A	C4-C5-N7	-6.34	107.53	110.70
1	N	1483	A	N9-C4-C5	-6.34	103.27	105.80
1	N	3	A	C5-C6-N1	-6.33	114.53	117.70
1	N	81	A	OP1-P-OP2	-6.33	110.10	119.60
1	N	1245	C	C4-C5-C6	-6.33	114.23	117.40
1	N	204	G	N1-C6-O6	6.33	123.70	119.90
1	N	293	G	C1'-O4'-C4'	-6.33	104.83	109.90
1	N	446	G	C4'-C3'-C2'	-6.33	96.27	102.60
1	N	781	A	O4'-C4'-C3'	-6.33	97.67	104.00
1	N	840	C	N3-C2-O2	-6.33	117.47	121.90
1	N	888	G	N1-C2-N3	-6.33	120.10	123.90
1	N	408	A	O4'-C1'-N9	6.33	113.27	108.20
1	N	547	A	C6-N1-C2	6.33	122.40	118.60
1	N	681	A	C4'-C3'-C2'	-6.33	96.27	102.60
1	N	686	U	C3'-C2'-C1'	6.33	106.57	101.50
1	N	299	G	N7-C8-N9	-6.33	109.94	113.10
1	N	626	G	N3-C4-N9	6.33	129.80	126.00
1	N	818	G	N3-C2-N2	6.33	124.33	119.90
1	N	894	G	C4'-C3'-C2'	6.33	108.93	102.60
1	N	1042	A	C2'-C3'-O3'	6.33	123.83	113.70
1	N	1086	U	C3'-C2'-C1'	-6.33	96.44	101.50
1	N	1324	A	C4-C5-C6	6.33	120.17	117.00
1	N	369	G	N3-C4-C5	-6.33	125.44	128.60
1	N	1287	A	N7-C8-N9	6.33	116.96	113.80
1	N	324	G	N9-C4-C5	-6.33	102.87	105.40
1	N	613	C	C3'-C2'-C1'	6.33	106.56	101.50
1	N	646	G	P-O5'-C5'	6.33	131.02	120.90
1	N	1480	A	C5-C6-N6	-6.33	118.64	123.70
1	N	494	G	N1-C6-O6	6.32	123.69	119.90
1	N	585	G	N1-C2-N3	-6.32	120.11	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	597	G	N7-C8-N9	6.32	116.26	113.10
1	N	829	G	N3-C4-N9	6.32	129.79	126.00
1	N	1182	G	C8-N9-C1'	6.32	135.22	127.00
1	N	113	G	O4'-C1'-N9	6.32	113.26	108.20
1	N	271	C	N1-C2-O2	-6.32	115.11	118.90
1	N	868	C	P-O3'-C3'	-6.32	112.11	119.70
1	N	1499	A	C4-C5-C6	6.32	120.16	117.00
1	N	174	A	N3-C4-C5	-6.32	122.38	126.80
1	N	1371	G	C6-N1-C2	-6.32	121.31	125.10
1	N	1420	U	N1-C2-N3	-6.32	111.11	114.90
1	N	315	A	C3'-C2'-C1'	6.32	106.55	101.50
1	N	613	C	C2-N3-C4	6.32	123.06	119.90
1	N	852	G	P-O3'-C3'	-6.32	112.12	119.70
1	N	953	G	N9-C4-C5	6.32	107.93	105.40
1	N	1011	C	N3-C4-C5	-6.32	119.37	121.90
1	N	1300	G	C6-C5-N7	-6.32	126.61	130.40
1	N	1407	C	N3-C4-N4	6.32	122.42	118.00
1	N	348	G	N1-C2-N3	-6.32	120.11	123.90
1	N	69	G	C5-N7-C8	6.31	107.46	104.30
1	N	1356	G	N3-C4-C5	6.31	131.76	128.60
1	N	1534	A	O4'-C1'-N9	6.31	113.25	108.20
1	N	460	A	C8-N9-C4	-6.31	103.28	105.80
1	N	1380	U	C4'-C3'-C2'	-6.31	96.29	102.60
1	N	1459	G	C5-N7-C8	-6.31	101.14	104.30
1	N	487	A	C5-N7-C8	6.31	107.06	103.90
1	N	765	G	N3-C2-N2	6.31	124.32	119.90
1	N	26	A	C6-N1-C2	-6.31	114.81	118.60
1	N	184	G	C2-N3-C4	-6.31	108.75	111.90
1	N	185	U	P-O5'-C5'	6.31	131.00	120.90
1	N	351	G	C2-N3-C4	-6.31	108.75	111.90
1	N	920	U	C2-N3-C4	-6.31	123.21	127.00
1	N	974	A	C5-C6-N1	-6.31	114.55	117.70
1	N	403	C	C5-C4-N4	6.31	124.61	120.20
1	N	1024	G	C5-N7-C8	6.31	107.45	104.30
1	N	305	G	N1-C2-N3	-6.31	120.12	123.90
1	N	275	G	P-O3'-C3'	-6.30	112.14	119.70
1	N	372	C	O4'-C1'-N1	6.30	113.24	108.20
1	N	953	G	C4-C5-C6	6.30	122.58	118.80
1	N	1210	C	C6-N1-C2	-6.30	117.78	120.30
1	N	823	C	N3-C4-C5	-6.30	119.38	121.90
1	N	91	U	C5'-C4'-O4'	-6.30	101.54	109.10
1	N	1067	A	P-O3'-C3'	-6.30	112.14	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	607	A	C5-N7-C8	6.30	107.05	103.90
1	N	627	G	C4'-C3'-C2'	-6.30	96.30	102.60
1	N	927	G	N7-C8-N9	-6.30	109.95	113.10
1	N	694	A	N1-C2-N3	6.30	132.45	129.30
1	N	181	A	N1-C6-N6	6.30	122.38	118.60
1	N	190	A	C6-C5-N7	-6.30	127.89	132.30
1	N	330	C	O4'-C1'-N1	6.30	113.24	108.20
1	N	863	U	C5-C6-N1	-6.30	119.55	122.70
1	N	1031	C	C5-C4-N4	-6.30	115.79	120.20
1	N	1226	C	C5'-C4'-C3'	-6.30	105.93	116.00
1	N	1506	U	C5'-C4'-C3'	6.30	126.07	116.00
1	N	1075	U	N3-C2-O2	6.29	126.61	122.20
1	N	99	C	N3-C4-N4	6.29	122.41	118.00
1	N	113	G	P-O5'-C5'	6.29	130.97	120.90
1	N	336	A	C5-C6-N6	-6.29	118.67	123.70
1	N	346	G	N3-C4-C5	6.29	131.75	128.60
1	N	640	A	C5-C6-N1	-6.29	114.55	117.70
1	N	805	C	O4'-C1'-N1	6.29	113.23	108.20
1	N	1013	G	C5-N7-C8	-6.29	101.15	104.30
1	N	1469	C	C5-C4-N4	-6.29	115.79	120.20
1	N	44	A	C6-C5-N7	-6.29	127.90	132.30
1	N	427	U	O4'-C1'-N1	6.29	113.23	108.20
1	N	473	U	O4'-C1'-N1	6.29	113.23	108.20
1	N	744	C	N3-C4-N4	6.29	122.40	118.00
1	N	819	A	C1'-O4'-C4'	-6.29	104.87	109.90
1	N	293	G	C5'-C4'-O4'	6.29	116.65	109.10
1	N	647	C	N1-C2-N3	-6.29	114.80	119.20
1	N	1239	A	C4-C5-N7	-6.29	107.56	110.70
1	N	1316	G	N1-C2-N3	-6.29	120.13	123.90
1	N	59	A	C5'-C4'-O4'	6.29	116.65	109.10
1	N	223	A	N1-C2-N3	6.29	132.44	129.30
1	N	535	A	N9-C4-C5	6.29	108.32	105.80
1	N	1319	A	O4'-C1'-N9	6.29	113.23	108.20
1	N	1502	A	P-O5'-C5'	-6.29	110.84	120.90
1	N	18	C	C4-C5-C6	-6.29	114.26	117.40
1	N	1345	U	C4-C5-C6	-6.29	115.93	119.70
1	N	16	A	C5-C6-N6	-6.29	118.67	123.70
1	N	242	G	C8-N9-C4	-6.29	103.89	106.40
1	N	666	G	C5'-C4'-C3'	6.29	126.06	116.00
1	N	732	C	C6-N1-C1'	-6.29	113.26	120.80
1	N	755	G	C6-C5-N7	-6.29	126.63	130.40
1	N	50	A	P-O3'-C3'	-6.28	112.16	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	922	G	C6-C5-N7	-6.28	126.63	130.40
1	N	999	C	N3-C4-N4	6.28	122.40	118.00
1	N	1129	C	N3-C2-O2	6.28	126.30	121.90
1	N	399	G	C2-N3-C4	6.28	115.04	111.90
1	N	1233	G	N1-C2-N3	-6.28	120.13	123.90
1	N	401	C	C5-C4-N4	6.28	124.60	120.20
1	N	444	G	C1'-O4'-C4'	-6.28	104.88	109.90
1	N	1214	C	P-O3'-C3'	-6.28	112.16	119.70
1	N	158	G	N3-C4-N9	-6.28	122.23	126.00
1	N	1076	U	N1-C2-N3	-6.28	111.13	114.90
1	N	1474	U	C4'-C3'-C2'	-6.28	96.32	102.60
1	N	212	G	C6-N1-C2	-6.28	121.33	125.10
1	N	478	A	C6-C5-N7	-6.28	127.91	132.30
1	N	633	G	N9-C1'-C2'	-6.28	105.09	112.00
1	N	887	G	O4'-C1'-N9	6.28	113.22	108.20
1	N	1014	A	C5-C6-N1	-6.28	114.56	117.70
1	N	1067	A	C5-C6-N1	-6.28	114.56	117.70
1	N	1193	G	C5'-C4'-O4'	6.28	116.63	109.10
1	N	1225	A	P-O3'-C3'	6.28	127.23	119.70
1	N	1432	G	C4-C5-N7	-6.28	108.29	110.80
1	N	1496	C	N3-C4-C5	-6.28	119.39	121.90
1	N	256	U	O4'-C1'-N1	6.28	113.22	108.20
1	N	506	G	C1'-O4'-C4'	-6.28	104.88	109.90
1	N	559	A	N1-C2-N3	6.28	132.44	129.30
1	N	941	G	C2'-C3'-O3'	6.28	123.74	113.70
1	N	1108	G	C5-C6-N1	-6.28	108.36	111.50
1	N	1198	G	N1-C2-N3	-6.28	120.13	123.90
1	N	1498	U	N3-C4-O4	6.28	123.79	119.40
1	N	1520	C	N3-C4-C5	-6.28	119.39	121.90
1	N	615	G	C2-N3-C4	-6.27	108.76	111.90
1	N	1008	U	N1-C2-O2	-6.27	118.41	122.80
1	N	1088	G	C4-N9-C1'	6.27	134.66	126.50
1	N	571	U	O4'-C1'-N1	6.27	113.22	108.20
1	N	843	U	O5'-P-OP1	-6.27	100.06	105.70
1	N	1075	U	C5-C4-O4	-6.27	122.14	125.90
1	N	823	C	C5'-C4'-C3'	6.27	126.03	116.00
1	N	1216	A	C8-N9-C4	-6.27	103.29	105.80
1	N	1230	C	C4-C5-C6	-6.27	114.27	117.40
1	N	1345	U	O3'-P-O5'	-6.27	92.09	104.00
1	N	1494	G	N9-C1'-C2'	-6.27	105.11	112.00
1	N	130	A	C3'-C2'-C1'	-6.27	96.49	101.50
1	N	416	G	C3'-C2'-C1'	-6.27	96.49	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	431	A	N9-C4-C5	6.27	108.31	105.80
1	N	770	C	C5-C4-N4	-6.27	115.81	120.20
1	N	1235	U	C4'-C3'-C2'	-6.27	96.33	102.60
1	N	1442	G	C4-C5-C6	6.27	122.56	118.80
1	N	265	G	N1-C2-N3	-6.27	120.14	123.90
1	N	393	A	C5-N7-C8	-6.26	100.77	103.90
1	N	478	A	C3'-C2'-C1'	-6.26	96.49	101.50
1	N	717	U	O4'-C1'-N1	6.26	113.21	108.20
1	N	831	A	O4'-C1'-N9	6.26	113.21	108.20
1	N	1495	U	N3-C4-O4	6.26	123.78	119.40
1	N	500	G	C5-C6-N1	6.26	114.63	111.50
1	N	777	A	N9-C1'-C2'	-6.26	105.11	112.00
1	N	798	U	N3-C4-O4	6.26	123.78	119.40
1	N	1211	U	O4'-C1'-N1	6.26	113.21	108.20
1	N	1393	U	N1-C2-N3	-6.26	111.14	114.90
1	N	167	A	N1-C2-N3	-6.26	126.17	129.30
1	N	265	G	P-O3'-C3'	6.26	127.21	119.70
1	N	621	A	C3'-C2'-C1'	-6.26	96.49	101.50
1	N	779	C	N3-C4-N4	6.26	122.38	118.00
1	N	244	U	C2-N3-C4	-6.26	123.25	127.00
1	N	410	G	N7-C8-N9	6.26	116.23	113.10
1	N	947	G	O4'-C1'-N9	6.26	113.21	108.20
1	N	1055	A	N9-C4-C5	-6.26	103.30	105.80
1	N	632	U	C5-C4-O4	6.26	129.65	125.90
1	N	1065	U	C5-C4-O4	-6.26	122.15	125.90
1	N	380	G	P-O5'-C5'	-6.25	110.89	120.90
1	N	624	C	O4'-C1'-N1	6.25	113.20	108.20
1	N	465	A	C4-C5-C6	6.25	120.13	117.00
1	N	978	A	C4'-C3'-C2'	6.25	108.85	102.60
1	N	986	U	N3-C4-C5	-6.25	110.85	114.60
1	N	1055	A	C5-C6-N6	-6.25	118.70	123.70
1	N	1237	C	C5-C6-N1	6.25	124.13	121.00
1	N	1467	C	N3-C4-C5	-6.25	119.40	121.90
1	N	112	G	O4'-C4'-C3'	-6.25	97.75	104.00
1	N	267	C	C5-C6-N1	6.25	124.12	121.00
1	N	718	A	C8-N9-C4	-6.25	103.30	105.80
1	N	352	C	C3'-C2'-C1'	6.25	106.50	101.50
1	N	920	U	C5'-C4'-C3'	-6.25	106.00	116.00
1	N	638	U	N3-C4-C5	-6.25	110.85	114.60
1	N	660	C	N3-C4-C5	-6.25	119.40	121.90
1	N	1215	G	O4'-C1'-N9	6.25	113.20	108.20
1	N	1452	C	N3-C4-N4	6.25	122.37	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	769	G	P-O5'-C5'	6.25	130.90	120.90
1	N	1128	C	P-O3'-C3'	6.25	127.19	119.70
1	N	126	G	O4'-C4'-C3'	-6.25	97.75	104.00
1	N	240	G	C5'-C4'-C3'	6.25	125.99	116.00
1	N	288	A	O4'-C1'-N9	6.25	113.20	108.20
1	N	1258	G	O4'-C1'-N9	6.25	113.20	108.20
1	N	1331	G	C4-C5-N7	-6.25	108.30	110.80
1	N	1418	A	P-O5'-C5'	6.25	130.89	120.90
1	N	173	U	C5-C6-N1	-6.24	119.58	122.70
1	N	654	G	O4'-C1'-N9	6.24	113.19	108.20
1	N	894	G	C5'-C4'-O4'	6.24	116.59	109.10
1	N	721	G	C5-C6-N1	-6.24	108.38	111.50
1	N	873	A	N1-C2-N3	6.24	132.42	129.30
1	N	303	A	N9-C4-C5	6.24	108.30	105.80
1	N	656	G	N9-C4-C5	6.24	107.90	105.40
1	N	1278	G	N3-C2-N2	6.24	124.27	119.90
1	N	327	A	O4'-C1'-N9	6.24	113.19	108.20
1	N	560	A	N1-C6-N6	6.24	122.34	118.60
1	N	642	A	C6-C5-N7	-6.24	127.93	132.30
1	N	1035	A	N7-C8-N9	-6.24	110.68	113.80
1	N	1515	G	P-O3'-C3'	-6.24	112.21	119.70
1	N	410	G	N3-C2-N2	6.24	124.27	119.90
1	N	766	A	C5-N7-C8	-6.24	100.78	103.90
1	N	980	C	C6-N1-C2	6.23	122.79	120.30
1	N	1188	A	C4-C5-C6	6.23	120.12	117.00
1	N	1487	G	C5-C6-O6	-6.23	124.86	128.60
1	N	520	A	C6-C5-N7	-6.23	127.94	132.30
1	N	810	C	C5-C4-N4	-6.23	115.84	120.20
1	N	983	A	O4'-C1'-N9	6.23	113.19	108.20
1	N	459	A	C5-C6-N1	-6.23	114.58	117.70
1	N	511	C	N3-C4-N4	6.23	122.36	118.00
1	N	1110	A	N1-C6-N6	6.23	122.34	118.60
1	N	1395	C	N3-C4-N4	6.23	122.36	118.00
1	N	1447	A	C4-C5-C6	6.23	120.11	117.00
1	N	94	G	C4-C5-N7	-6.23	108.31	110.80
1	N	238	A	N9-C4-C5	6.23	108.29	105.80
1	N	719	C	C2-N3-C4	6.23	123.01	119.90
1	N	801	U	C5-C6-N1	6.23	125.81	122.70
1	N	1009	U	N3-C2-O2	6.23	126.56	122.20
1	N	1124	G	C1'-O4'-C4'	6.23	114.88	109.90
1	N	1482	G	P-O3'-C3'	6.23	127.17	119.70
1	N	485	U	C5'-C4'-C3'	-6.22	106.04	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	989	U	C2-N1-C1'	6.22	125.17	117.70
1	N	1196	A	C6-C5-N7	-6.22	127.94	132.30
1	N	146	G	C3'-C2'-C1'	-6.22	96.52	101.50
1	N	216	U	N3-C4-O4	6.22	123.76	119.40
1	N	428	G	C5-N7-C8	-6.22	101.19	104.30
1	N	851	G	O4'-C1'-N9	6.22	113.18	108.20
1	N	63	C	P-O3'-C3'	6.22	127.17	119.70
1	N	312	C	N3-C4-C5	-6.22	119.41	121.90
1	N	356	A	O4'-C1'-N9	6.22	113.18	108.20
1	N	1101	A	C5-N7-C8	6.22	107.01	103.90
1	N	1362	A	C2-N3-C4	6.22	113.71	110.60
1	N	1372	U	C2-N3-C4	-6.22	123.27	127.00
1	N	170	U	O4'-C1'-N1	6.22	113.17	108.20
1	N	411	A	O5'-C5'-C4'	6.22	123.51	111.70
1	N	481	G	C6-C5-N7	-6.22	126.67	130.40
1	N	521	G	C2-N3-C4	6.22	115.01	111.90
1	N	784	A	P-O5'-C5'	-6.22	110.95	120.90
1	N	892	A	C5-C6-N6	-6.22	118.73	123.70
1	N	1508	A	N9-C4-C5	6.22	108.29	105.80
1	N	115	G	O4'-C1'-N9	6.21	113.17	108.20
1	N	187	G	C2-N3-C4	-6.21	108.79	111.90
1	N	756	C	C5-C6-N1	6.21	124.11	121.00
1	N	915	A	C4-C5-C6	6.21	120.11	117.00
1	N	1005	A	N7-C8-N9	-6.21	110.69	113.80
1	N	880	C	C5-C6-N1	-6.21	117.89	121.00
1	N	1139	G	C5-C6-N1	-6.21	108.39	111.50
1	N	107	G	P-O3'-C3'	6.21	127.15	119.70
1	N	121	U	C5'-C4'-O4'	6.21	116.55	109.10
1	N	139	A	N7-C8-N9	-6.21	110.69	113.80
1	N	245	U	C6-N1-C2	-6.21	117.27	121.00
1	N	269	C	C6-N1-C2	-6.21	117.82	120.30
1	N	371	A	C8-N9-C4	6.21	108.28	105.80
1	N	673	A	O4'-C1'-N9	6.21	113.17	108.20
1	N	993	G	O4'-C1'-N9	6.21	113.17	108.20
1	N	87	C	C5'-C4'-C3'	-6.21	106.06	116.00
1	N	1055	A	N1-C2-N3	6.21	132.41	129.30
1	N	1417	G	N1-C2-N2	-6.21	110.61	116.20
1	N	1064	G	C5-N7-C8	-6.21	101.20	104.30
1	N	1223	C	P-O3'-C3'	6.21	127.15	119.70
1	N	214	C	C6-N1-C2	-6.21	117.82	120.30
1	N	937	A	N7-C8-N9	6.21	116.90	113.80
1	N	1287	A	C3'-C2'-C1'	6.21	106.46	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	285	C	O4'-C1'-N1	6.20	113.16	108.20
1	N	1441	A	C4-C5-C6	6.20	120.10	117.00
1	N	1446	A	N3-C4-C5	-6.20	122.46	126.80
1	N	1131	G	C4-C5-N7	6.20	113.28	110.80
1	N	256	U	C5'-C4'-O4'	6.20	116.54	109.10
1	N	841	C	N3-C4-C5	-6.20	119.42	121.90
1	N	966	G	N3-C4-N9	6.20	129.72	126.00
1	N	9	G	C5-N7-C8	6.20	107.40	104.30
1	N	582	C	N3-C4-N4	6.20	122.34	118.00
1	N	841	C	N3-C4-N4	6.20	122.34	118.00
1	N	918	A	C4-N9-C1'	-6.20	115.14	126.30
1	N	1344	C	C4-C5-C6	6.20	120.50	117.40
1	N	845	A	C4'-C3'-C2'	-6.20	96.40	102.60
1	N	870	U	N3-C4-O4	-6.20	115.06	119.40
1	N	1360	A	N1-C2-N3	6.20	132.40	129.30
1	N	1523	G	N1-C2-N3	-6.20	120.18	123.90
1	N	575	G	O4'-C1'-C2'	6.19	113.17	107.60
1	N	1518	A	N3-C4-N9	6.19	132.35	127.40
1	N	384	G	C4-C5-N7	6.19	113.28	110.80
1	N	435	A	C1'-O4'-C4'	6.19	114.85	109.90
1	N	913	A	O4'-C1'-N9	6.19	113.15	108.20
1	N	1184	G	C5-C6-N1	-6.19	108.40	111.50
1	N	1288	A	C8-N9-C4	-6.19	103.32	105.80
1	N	576	C	N3-C4-C5	-6.19	119.42	121.90
1	N	742	G	P-O3'-C3'	6.19	127.13	119.70
1	N	947	G	P-O3'-C3'	6.19	127.13	119.70
1	N	372	C	N3-C4-C5	-6.19	119.42	121.90
1	N	1168	U	N3-C4-C5	-6.19	110.89	114.60
1	N	1267	C	N3-C4-N4	6.19	122.33	118.00
1	N	146	G	P-O5'-C5'	6.19	130.80	120.90
1	N	762	U	N3-C4-O4	6.19	123.73	119.40
1	N	1213	A	C5-C6-N1	-6.19	114.61	117.70
1	N	1335	U	C5-C6-N1	-6.19	119.61	122.70
1	N	168	G	N9-C1'-C2'	-6.19	105.19	112.00
1	N	1052	U	O4'-C1'-N1	6.19	113.15	108.20
1	N	236	A	C8-N9-C4	6.18	108.27	105.80
1	N	523	A	P-O3'-C3'	-6.18	112.28	119.70
1	N	710	G	C8-N9-C4	-6.18	103.93	106.40
1	N	936	C	C4-C5-C6	6.18	120.49	117.40
1	N	971	G	N7-C8-N9	6.18	116.19	113.10
1	N	1422	G	C3'-C2'-C1'	-6.18	96.55	101.50
1	N	142	G	N3-C4-C5	-6.18	125.51	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	698	G	N7-C8-N9	-6.18	110.01	113.10
1	N	2	A	N3-C4-C5	-6.18	122.47	126.80
1	N	429	U	C4-C5-C6	6.18	123.41	119.70
1	N	1129	C	C3'-C2'-C1'	6.18	106.44	101.50
1	N	1180	A	C5-C6-N1	-6.18	114.61	117.70
1	N	119	A	C4-C5-N7	-6.18	107.61	110.70
1	N	321	A	N3-C4-C5	-6.18	122.47	126.80
1	N	559	A	C8-N9-C4	-6.18	103.33	105.80
1	N	565	U	C2-N3-C4	6.18	130.71	127.00
1	N	837	U	C4-C5-C6	6.18	123.41	119.70
1	N	1336	C	C2-N1-C1'	6.18	125.60	118.80
1	N	698	G	C6-C5-N7	-6.18	126.69	130.40
1	N	887	G	P-O3'-C3'	-6.18	112.29	119.70
1	N	1068	G	C6-C5-N7	-6.18	126.69	130.40
1	N	1306	A	N1-C2-N3	6.18	132.39	129.30
1	N	472	U	O5'-P-OP1	-6.18	100.14	105.70
1	N	931	C	C6-N1-C2	6.18	122.77	120.30
1	N	1521	C	C4'-C3'-C2'	-6.18	96.42	102.60
1	N	446	G	C3'-C2'-C1'	6.17	106.44	101.50
1	N	866	C	C3'-C2'-C1'	6.17	106.44	101.50
1	N	903	G	P-O3'-C3'	6.17	127.11	119.70
1	N	967	C	O4'-C1'-N1	6.17	113.14	108.20
1	N	1480	A	N7-C8-N9	-6.17	110.71	113.80
1	N	1496	C	C6-N1-C2	-6.17	117.83	120.30
1	N	716	A	C6-C5-N7	-6.17	127.98	132.30
1	N	1454	G	C4-C5-N7	6.17	113.27	110.80
1	N	1475	G	N3-C4-C5	6.17	131.69	128.60
1	N	75	G	C4'-C3'-C2'	-6.17	96.43	102.60
1	N	111	G	C4-C5-C6	6.17	122.50	118.80
1	N	301	G	N7-C8-N9	6.17	116.19	113.10
1	N	463	U	O4'-C4'-C3'	-6.17	97.83	104.00
1	N	558	G	C6-C5-N7	-6.17	126.70	130.40
1	N	960	U	P-O3'-C3'	6.17	127.11	119.70
1	N	974	A	OP1-P-OP2	-6.17	110.34	119.60
1	N	1176	A	C4-C5-C6	6.17	120.09	117.00
1	N	138	G	C2-N3-C4	6.17	114.98	111.90
1	N	298	A	C5-C6-N1	-6.17	114.61	117.70
1	N	319	G	N3-C2-N2	6.17	124.22	119.90
1	N	601	G	N1-C2-N3	-6.17	120.20	123.90
1	N	732	C	C2-N3-C4	6.17	122.98	119.90
1	N	805	C	C4'-C3'-C2'	-6.17	96.43	102.60
1	N	1158	C	C2-N1-C1'	6.17	125.59	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1516	G	P-O5'-C5'	6.17	130.77	120.90
1	N	110	C	C4-C5-C6	6.17	120.48	117.40
1	N	249	U	N1-C1'-C2'	-6.17	105.22	112.00
1	N	425	G	N1-C2-N3	-6.17	120.20	123.90
1	N	435	A	N3-C4-C5	-6.17	122.48	126.80
1	N	1388	C	N1-C2-O2	6.17	122.60	118.90
1	N	363	A	P-O5'-C5'	6.17	130.77	120.90
1	N	485	U	N1-C2-O2	-6.17	118.48	122.80
1	N	588	G	C6-C5-N7	-6.17	126.70	130.40
1	N	816	A	O4'-C1'-N9	6.17	113.13	108.20
1	N	1061	G	C4-C5-C6	6.17	122.50	118.80
1	N	54	C	N1-C2-O2	6.17	122.60	118.90
1	N	264	C	C4'-C3'-C2'	-6.17	96.44	102.60
1	N	646	G	C6-C5-N7	-6.17	126.70	130.40
1	N	57	G	C8-N9-C1'	6.16	135.01	127.00
1	N	802	A	C8-N9-C4	-6.16	103.33	105.80
1	N	1275	A	C5'-C4'-O4'	6.16	116.50	109.10
1	N	39	G	N7-C8-N9	6.16	116.18	113.10
1	N	197	A	C1'-O4'-C4'	-6.16	104.97	109.90
1	N	694	A	N7-C8-N9	-6.16	110.72	113.80
1	N	1309	G	N3-C4-C5	-6.16	125.52	128.60
1	N	1325	C	P-O3'-C3'	-6.16	112.31	119.70
1	N	443	C	C6-N1-C2	-6.16	117.84	120.30
1	N	530	G	P-O3'-C3'	6.16	127.09	119.70
1	N	605	U	O3'-P-O5'	6.16	115.70	104.00
1	N	709	U	C5-C4-O4	6.16	129.60	125.90
1	N	1043	G	C3'-C2'-C1'	6.16	106.43	101.50
1	N	1143	G	N1-C6-O6	6.16	123.59	119.90
1	N	1213	A	O4'-C1'-N9	6.16	113.13	108.20
1	N	1214	C	O4'-C1'-C2'	-6.16	99.64	105.80
1	N	352	C	C1'-O4'-C4'	-6.16	104.97	109.90
1	N	164	G	C6-C5-N7	-6.16	126.71	130.40
1	N	1066	C	C3'-C2'-C1'	6.16	106.42	101.50
1	N	1223	C	C1'-O4'-C4'	-6.15	104.98	109.90
1	N	441	A	N1-C2-N3	6.15	132.38	129.30
1	N	909	A	C5-N7-C8	6.15	106.98	103.90
1	N	1497	G	P-O3'-C3'	6.15	127.08	119.70
1	N	292	G	N1-C2-N3	-6.15	120.21	123.90
1	N	394	G	N3-C2-N2	6.15	124.21	119.90
1	N	1256	A	C4-C5-N7	-6.15	107.62	110.70
1	N	97	G	C6-C5-N7	-6.15	126.71	130.40
1	N	1030	U	O4'-C1'-N1	6.15	113.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1100	C	C2-N1-C1'	6.15	125.56	118.80
1	N	24	U	O5'-P-OP2	-6.15	100.17	105.70
1	N	268	U	N3-C2-O2	6.15	126.50	122.20
1	N	514	C	C5-C4-N4	-6.15	115.90	120.20
1	N	746	A	C4-C5-N7	-6.15	107.63	110.70
1	N	893	C	O4'-C4'-C3'	-6.15	97.85	104.00
1	N	1024	G	O4'-C1'-N9	6.15	113.12	108.20
1	N	1089	G	C6-C5-N7	-6.15	126.71	130.40
1	N	1100	C	N3-C4-C5	-6.15	119.44	121.90
1	N	188	C	C6-N1-C2	-6.15	117.84	120.30
1	N	1058	G	C4-C5-N7	-6.15	108.34	110.80
1	N	206	C	C6-N1-C1'	-6.14	113.43	120.80
1	N	220	G	C5-C6-N1	-6.14	108.43	111.50
1	N	450	G	N3-C2-N2	6.14	124.20	119.90
1	N	780	A	C5-C6-N1	-6.14	114.63	117.70
1	N	1214	C	N1-C2-N3	-6.14	114.90	119.20
1	N	1383	C	C4-C5-C6	-6.14	114.33	117.40
1	N	1485	U	C2-N1-C1'	-6.14	110.33	117.70
1	N	191	G	C8-N9-C4	6.14	108.86	106.40
1	N	344	A	O4'-C1'-N9	6.14	113.11	108.20
1	N	1307	U	N3-C4-O4	-6.14	115.10	119.40
1	N	46	G	N1-C6-O6	6.14	123.58	119.90
1	N	73	C	C2-N1-C1'	-6.14	112.05	118.80
1	N	108	G	OP1-P-O3'	6.14	118.71	105.20
1	N	473	U	C2-N3-C4	6.14	130.68	127.00
1	N	1232	U	N3-C2-O2	6.14	126.50	122.20
1	N	152	A	O4'-C4'-C3'	-6.14	97.86	104.00
1	N	211	G	C6-C5-N7	-6.14	126.72	130.40
1	N	1101	A	C4-N9-C1'	6.14	137.35	126.30
1	N	1157	A	C2-N3-C4	-6.14	107.53	110.60
1	N	1316	G	P-O3'-C3'	6.14	127.06	119.70
1	N	189	A	N3-C4-C5	-6.13	122.51	126.80
1	N	202	G	O4'-C1'-N9	6.13	113.11	108.20
1	N	576	C	N3-C2-O2	-6.13	117.61	121.90
1	N	306	A	C4-C5-N7	-6.13	107.63	110.70
1	N	796	C	C2-N3-C4	-6.13	116.83	119.90
1	N	1166	G	N7-C8-N9	6.13	116.17	113.10
1	N	1253	G	O4'-C1'-C2'	6.13	113.12	107.60
1	N	1343	G	C5-C6-N1	-6.13	108.43	111.50
1	N	6	G	C4-N9-C1'	6.13	134.47	126.50
1	N	17	U	C5-C6-N1	6.13	125.77	122.70
1	N	117	G	C3'-C2'-C1'	-6.13	96.59	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	145	G	C1'-O4'-C4'	-6.13	104.99	109.90
1	N	278	G	O4'-C1'-N9	6.13	113.11	108.20
1	N	904	U	N3-C4-O4	6.13	123.69	119.40
1	N	1104	G	N1-C2-N3	-6.13	120.22	123.90
1	N	1270	G	N1-C6-O6	6.13	123.58	119.90
1	N	19	A	N3-C4-N9	6.13	132.30	127.40
1	N	958	A	P-O5'-C5'	6.13	130.71	120.90
1	N	69	G	C5-C6-N1	-6.13	108.44	111.50
1	N	83	C	C5-C6-N1	6.13	124.06	121.00
1	N	346	G	C4-C5-N7	6.13	113.25	110.80
1	N	506	G	P-O3'-C3'	6.13	127.05	119.70
1	N	145	G	O4'-C1'-N9	6.13	113.10	108.20
1	N	168	G	P-O5'-C5'	6.13	130.70	120.90
1	N	517	G	C8-N9-C4	-6.13	103.95	106.40
1	N	251	G	C4'-C3'-C2'	-6.12	96.47	102.60
1	N	1054	C	C1'-O4'-C4'	6.12	114.80	109.90
1	N	172	A	P-O5'-C5'	6.12	130.70	120.90
1	N	354	G	O5'-P-OP2	6.12	118.05	110.70
1	N	635	A	P-O5'-C5'	-6.12	111.10	120.90
1	N	986	U	O5'-P-OP2	-6.12	100.19	105.70
1	N	159	G	C6-C5-N7	-6.12	126.73	130.40
1	N	310	G	C4-C5-C6	6.12	122.47	118.80
1	N	1489	G	C1'-O4'-C4'	-6.12	105.00	109.90
1	N	155	A	C4-C5-C6	6.12	120.06	117.00
1	N	435	A	C6-N1-C2	6.12	122.27	118.60
1	N	542	G	N9-C4-C5	6.12	107.85	105.40
1	N	1155	A	C4-C5-C6	6.12	120.06	117.00
1	N	486	U	C1'-O4'-C4'	-6.12	105.01	109.90
1	N	953	G	C2-N3-C4	-6.12	108.84	111.90
1	N	188	C	N3-C4-N4	6.11	122.28	118.00
1	N	205	A	C2-N3-C4	6.11	113.66	110.60
1	N	538	G	O5'-C5'-C4'	-6.11	100.08	111.70
1	N	83	C	O4'-C4'-C3'	-6.11	97.89	104.00
1	N	223	A	O4'-C1'-N9	6.11	113.09	108.20
1	N	678	U	P-O5'-C5'	6.11	130.68	120.90
1	N	776	G	OP1-P-OP2	-6.11	110.43	119.60
1	N	1214	C	C4-C5-C6	-6.11	114.34	117.40
1	N	1392	G	N1-C2-N3	-6.11	120.23	123.90
1	N	198	G	N9-C1'-C2'	-6.11	105.28	112.00
1	N	840	C	C3'-C2'-C1'	-6.11	96.61	101.50
1	N	933	G	C6-N1-C2	6.11	128.76	125.10
1	N	1178	G	O4'-C1'-N9	6.11	113.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	816	A	C4-C5-N7	-6.11	107.65	110.70
1	N	1244	G	C2-N3-C4	-6.11	108.85	111.90
1	N	64	G	C1'-O4'-C4'	6.11	114.78	109.90
1	N	518	C	C6-N1-C1'	-6.11	113.47	120.80
1	N	948	C	N3-C2-O2	6.11	126.17	121.90
1	N	546	A	P-O3'-C3'	-6.10	112.38	119.70
1	N	677	U	N3-C4-C5	-6.10	110.94	114.60
1	N	1151	A	C5-C6-N6	-6.10	118.82	123.70
1	N	582	C	C4'-C3'-C2'	-6.10	96.50	102.60
1	N	722	G	C5-C6-N1	-6.10	108.45	111.50
1	N	739	C	C5-C6-N1	6.10	124.05	121.00
1	N	748	G	C5-C6-O6	-6.10	124.94	128.60
1	N	832	G	P-O3'-C3'	-6.10	112.38	119.70
1	N	851	G	C6-C5-N7	-6.10	126.74	130.40
1	N	1184	G	N3-C4-N9	-6.10	122.34	126.00
1	N	1244	G	C4-C5-N7	6.10	113.24	110.80
1	N	1367	C	N3-C4-N4	6.10	122.27	118.00
1	N	306	A	C5-C6-N1	-6.10	114.65	117.70
1	N	1470	U	C4-C5-C6	-6.10	116.04	119.70
1	N	411	A	O4'-C4'-C3'	-6.10	97.90	104.00
1	N	431	A	C4-C5-C6	6.10	120.05	117.00
1	N	781	A	C5-C6-N1	-6.10	114.65	117.70
1	N	822	U	O4'-C1'-N1	6.10	113.08	108.20
1	N	845	A	N7-C8-N9	6.10	116.85	113.80
1	N	1363	A	C8-N9-C4	-6.10	103.36	105.80
1	N	1458	G	C8-N9-C1'	-6.10	119.07	127.00
1	N	813	U	O4'-C1'-N1	6.10	113.08	108.20
1	N	1044	A	C4-C5-N7	-6.10	107.65	110.70
1	N	1367	C	C6-N1-C2	-6.10	117.86	120.30
1	N	1516	G	P-O3'-C3'	-6.10	112.38	119.70
1	N	111	G	C6-N1-C2	6.10	128.76	125.10
1	N	1142	G	C6-C5-N7	-6.10	126.74	130.40
1	N	239	U	P-O5'-C5'	6.09	130.65	120.90
1	N	257	G	C2-N3-C4	-6.09	108.85	111.90
1	N	482	A	C5-C6-N1	-6.09	114.65	117.70
1	N	538	G	P-O5'-C5'	6.09	130.65	120.90
1	N	1284	C	N1-C2-O2	-6.09	115.24	118.90
1	N	246	A	C4'-C3'-C2'	6.09	108.69	102.60
1	N	427	U	C1'-O4'-C4'	6.09	114.77	109.90
1	N	622	A	N9-C4-C5	6.09	108.24	105.80
1	N	1299	A	C8-N9-C4	6.09	108.24	105.80
1	N	337	G	N7-C8-N9	6.09	116.14	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	597	G	C5'-C4'-O4'	6.09	116.41	109.10
1	N	1393	U	O3'-P-O5'	-6.09	92.42	104.00
1	N	191	G	N3-C4-C5	6.09	131.65	128.60
1	N	204	G	N7-C8-N9	-6.09	110.06	113.10
1	N	240	G	C4-N9-C1'	6.09	134.42	126.50
1	N	984	C	P-O3'-C3'	-6.09	112.39	119.70
1	N	381	C	C6-N1-C2	-6.09	117.86	120.30
1	N	1253	G	N3-C2-N2	6.09	124.16	119.90
1	N	165	G	C4-C5-N7	-6.09	108.36	110.80
1	N	465	A	N3-C4-N9	6.09	132.27	127.40
1	N	257	G	N3-C4-C5	6.08	131.64	128.60
1	N	399	G	C6-C5-N7	6.08	134.05	130.40
1	N	481	G	O5'-P-OP2	-6.08	100.23	105.70
1	N	704	A	C5-C6-N1	-6.08	114.66	117.70
1	N	131	A	C6-N1-C2	6.08	122.25	118.60
1	N	540	G	N1-C2-N3	-6.08	120.25	123.90
1	N	361	G	C5-N7-C8	6.08	107.34	104.30
1	N	922	G	C4-C5-C6	6.08	122.45	118.80
1	N	1241	G	P-O5'-C5'	6.08	130.63	120.90
1	N	246	A	C1'-O4'-C4'	6.08	114.76	109.90
1	N	376	G	C6-N1-C2	6.08	128.75	125.10
1	N	974	A	C5-C6-N6	-6.08	118.84	123.70
1	N	1171	A	C5'-C4'-O4'	6.08	116.39	109.10
1	N	1345	U	P-O3'-C3'	6.08	126.99	119.70
1	N	589	U	P-O5'-C5'	6.08	130.62	120.90
1	N	719	C	N3-C2-O2	6.08	126.15	121.90
1	N	932	C	C5-C6-N1	6.08	124.04	121.00
1	N	1332	A	C4-C5-N7	-6.08	107.66	110.70
1	N	1477	U	O5'-P-OP2	-6.08	100.23	105.70
1	N	393	A	C6-N1-C2	-6.08	114.95	118.60
1	N	543	U	P-O3'-C3'	6.08	126.99	119.70
1	N	1340	A	N7-C8-N9	-6.08	110.76	113.80
1	N	309	A	O4'-C1'-N9	6.07	113.06	108.20
1	N	889	A	P-O3'-C3'	-6.07	112.41	119.70
1	N	1006	G	C2-N3-C4	-6.07	108.86	111.90
1	N	93	U	OP2-P-O3'	6.07	118.56	105.20
1	N	491	G	P-O5'-C5'	-6.07	111.19	120.90
1	N	559	A	P-O5'-C5'	6.07	130.62	120.90
1	N	171	A	N3-C4-C5	-6.07	122.55	126.80
1	N	199	A	OP1-P-OP2	-6.07	110.50	119.60
1	N	390	U	C3'-C2'-C1'	-6.07	96.65	101.50
1	N	1340	A	C8-N9-C4	-6.07	103.37	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1469	C	C6-N1-C2	6.07	122.73	120.30
1	N	171	A	N3-C4-N9	6.07	132.25	127.40
1	N	189	A	C4-C5-C6	6.07	120.03	117.00
1	N	421	U	O4'-C1'-N1	6.07	113.05	108.20
1	N	437	U	C6-N1-C2	6.07	124.64	121.00
1	N	444	G	N3-C2-N2	6.07	124.15	119.90
1	N	509	A	C4-C5-C6	6.07	120.03	117.00
1	N	766	A	C6-C5-N7	-6.07	128.05	132.30
1	N	905	U	N3-C2-O2	6.07	126.44	122.20
1	N	1502	A	C2-N3-C4	-6.07	107.57	110.60
1	N	608	A	P-O5'-C5'	6.06	130.60	120.90
1	N	944	G	C4'-C3'-C2'	-6.06	96.54	102.60
1	N	1281	C	C5-C4-N4	-6.06	115.96	120.20
1	N	1387	G	C4-C5-N7	-6.06	108.38	110.80
1	N	933	G	C4'-C3'-C2'	-6.06	96.54	102.60
1	N	1423	G	N9-C4-C5	-6.06	102.98	105.40
1	N	180	U	C5-C6-N1	-6.06	119.67	122.70
1	N	612	C	O4'-C1'-N1	6.06	113.05	108.20
1	N	930	C	P-O3'-C3'	-6.06	112.43	119.70
1	N	1246	A	C4-C5-C6	6.06	120.03	117.00
1	N	1408	A	C4-C5-C6	6.06	120.03	117.00
1	N	1509	C	P-O3'-C3'	-6.06	112.43	119.70
1	N	1512	U	O4'-C1'-N1	6.06	113.05	108.20
1	N	1067	A	N3-C4-C5	-6.06	122.56	126.80
1	N	355	C	N3-C2-O2	6.05	126.14	121.90
1	N	541	G	C4-C5-C6	6.05	122.43	118.80
1	N	743	A	C4-C5-C6	6.05	120.03	117.00
1	N	1028	C	N3-C4-N4	6.05	122.24	118.00
1	N	1036	A	C4-C5-N7	6.05	113.73	110.70
1	N	1159	U	C5-C6-N1	6.05	125.73	122.70
1	N	1278	G	N1-C6-O6	6.05	123.53	119.90
1	N	271	C	C6-N1-C2	-6.05	117.88	120.30
1	N	1077	G	C8-N9-C4	6.05	108.82	106.40
1	N	166	U	O5'-P-OP2	6.05	117.96	110.70
1	N	310	G	C3'-C2'-C1'	-6.05	96.66	101.50
1	N	633	G	C4-C5-C6	6.05	122.43	118.80
1	N	763	G	C5'-C4'-C3'	-6.05	106.32	116.00
1	N	1162	C	N3-C4-N4	6.05	122.23	118.00
1	N	1115	U	C2'-C3'-O3'	6.05	123.38	113.70
1	N	1372	U	N3-C2-O2	6.05	126.43	122.20
1	N	1375	A	C8-N9-C4	-6.05	103.38	105.80
1	N	9	G	O4'-C1'-N9	6.05	113.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	14	U	P-O5'-C5'	-6.05	111.22	120.90
1	N	795	C	C5'-C4'-C3'	6.05	125.68	116.00
1	N	1394	A	C5'-C4'-O4'	6.05	116.36	109.10
1	N	1485	U	C5'-C4'-C3'	6.05	125.68	116.00
1	N	1485	U	P-O5'-C5'	6.05	130.58	120.90
1	N	1520	C	C5-C6-N1	6.05	124.02	121.00
1	N	64	G	N1-C6-O6	6.05	123.53	119.90
1	N	140	U	C2-N3-C4	-6.05	123.37	127.00
1	N	491	G	C5'-C4'-O4'	6.05	116.36	109.10
1	N	1372	U	P-O5'-C5'	-6.05	111.22	120.90
1	N	1376	U	C6-N1-C2	-6.04	117.37	121.00
1	N	1447	A	O4'-C1'-C2'	6.04	113.04	107.60
1	N	161	A	C5-C6-N6	-6.04	118.87	123.70
1	N	271	C	N3-C4-N4	6.04	122.23	118.00
1	N	395	C	C5-C4-N4	-6.04	115.97	120.20
1	N	637	C	N3-C4-N4	6.04	122.23	118.00
1	N	690	G	C5-C6-O6	-6.04	124.97	128.60
1	N	207	C	N1-C2-N3	6.04	123.43	119.20
1	N	251	G	N9-C4-C5	-6.04	102.98	105.40
1	N	613	C	C5-C4-N4	-6.04	115.97	120.20
1	N	328	C	C5-C6-N1	6.04	124.02	121.00
1	N	100	G	O4'-C1'-N9	6.04	113.03	108.20
1	N	489	C	C5-C4-N4	-6.04	115.97	120.20
1	N	528	C	C1'-O4'-C4'	-6.04	105.07	109.90
1	N	807	A	C5-N7-C8	6.04	106.92	103.90
1	N	971	G	C1'-O4'-C4'	-6.04	105.07	109.90
1	N	1408	A	O4'-C1'-N9	6.04	113.03	108.20
1	N	237	G	C4-N9-C1'	-6.04	118.65	126.50
1	N	231	U	C4'-C3'-C2'	-6.04	96.56	102.60
1	N	567	G	C2-N3-C4	6.04	114.92	111.90
1	N	700	G	O3'-P-O5'	6.04	115.47	104.00
1	N	1456	A	P-O3'-C3'	6.04	126.94	119.70
1	N	1203	C	N3-C2-O2	6.03	126.12	121.90
1	N	481	G	O4'-C4'-C3'	-6.03	97.97	104.00
1	N	1020	G	N1-C2-N3	-6.03	120.28	123.90
1	N	1365	G	C6-C5-N7	-6.03	126.78	130.40
1	N	120	A	C1'-O4'-C4'	-6.03	105.08	109.90
1	N	556	C	N3-C4-N4	6.03	122.22	118.00
1	N	700	G	C5-N7-C8	6.03	107.32	104.30
1	N	746	A	C6-C5-N7	-6.03	128.08	132.30
1	N	1519	A	P-O5'-C5'	-6.03	111.25	120.90
1	N	442	G	C5-C6-N1	-6.03	108.49	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	535	A	N3-C4-C5	-6.03	122.58	126.80
1	N	568	G	N7-C8-N9	6.03	116.11	113.10
1	N	1405	G	P-O3'-C3'	-6.03	112.47	119.70
1	N	1422	G	N3-C4-C5	6.03	131.61	128.60
1	N	89	U	N3-C4-C5	-6.03	110.98	114.60
1	N	132	C	C4-C5-C6	6.03	120.41	117.40
1	N	200	G	O4'-C1'-N9	6.03	113.02	108.20
1	N	312	C	C5'-C4'-C3'	6.03	125.64	116.00
1	N	323	U	O5'-C5'-C4'	-6.03	100.25	111.70
1	N	1400	C	C5-C6-N1	6.03	124.01	121.00
1	N	615	G	N9-C4-C5	-6.02	102.99	105.40
1	N	1361	G	C2-N3-C4	6.02	114.91	111.90
1	N	1496	C	N1-C2-O2	-6.02	115.29	118.90
1	N	73	C	C6-N1-C1'	6.02	128.03	120.80
1	N	154	U	N1-C2-N3	-6.02	111.29	114.90
1	N	463	U	C4-C5-C6	6.02	123.31	119.70
1	N	1223	C	C6-N1-C2	-6.02	117.89	120.30
1	N	232	G	N9-C4-C5	-6.02	102.99	105.40
1	N	679	C	O4'-C1'-N1	6.02	113.02	108.20
1	N	111	G	C5-C6-N1	-6.02	108.49	111.50
1	N	182	A	C5'-C4'-C3'	-6.02	106.37	116.00
1	N	325	A	C6-C5-N7	-6.02	128.09	132.30
1	N	348	G	C5-C6-O6	-6.02	124.99	128.60
1	N	366	A	C8-N9-C4	6.02	108.21	105.80
1	N	742	G	C4-C5-C6	6.02	122.41	118.80
1	N	1015	G	C5-N7-C8	6.02	107.31	104.30
1	N	1295	U	C3'-C2'-C1'	6.02	106.32	101.50
1	N	1513	A	C5-C6-N6	-6.02	118.89	123.70
1	N	208	U	N3-C4-O4	6.02	123.61	119.40
1	N	319	G	P-O3'-C3'	6.02	126.92	119.70
1	N	478	A	N3-C4-C5	-6.02	122.59	126.80
1	N	942	G	C3'-C2'-C1'	-6.02	96.69	101.50
1	N	1488	G	C5-N7-C8	-6.02	101.29	104.30
1	N	443	C	N3-C4-N4	6.02	122.21	118.00
1	N	1429	A	P-O3'-C3'	6.02	126.92	119.70
1	N	247	G	C8-N9-C1'	6.01	134.82	127.00
1	N	957	U	C5'-C4'-C3'	6.01	125.62	116.00
1	N	68	G	C2-N3-C4	-6.01	108.89	111.90
1	N	1215	G	C6-C5-N7	-6.01	126.79	130.40
1	N	249	U	N3-C2-O2	6.01	126.41	122.20
1	N	558	G	P-O3'-C3'	6.01	126.92	119.70
1	N	617	G	OP1-P-OP2	-6.01	110.58	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	725	G	O4'-C1'-N9	6.01	113.01	108.20
1	N	743	A	C6-C5-N7	-6.01	128.09	132.30
1	N	1439	G	C4'-C3'-C2'	-6.01	96.59	102.60
1	N	1469	C	C5'-C4'-O4'	-6.01	101.89	109.10
1	N	325	A	C8-N9-C4	-6.01	103.40	105.80
1	N	608	A	O4'-C1'-N9	6.01	113.01	108.20
1	N	647	C	C4'-C3'-C2'	-6.01	96.59	102.60
1	N	899	C	C6-N1-C1'	-6.01	113.59	120.80
1	N	927	G	C5-C6-N1	-6.01	108.50	111.50
1	N	947	G	C5-N7-C8	6.01	107.30	104.30
1	N	1289	A	C1'-O4'-C4'	6.01	114.71	109.90
1	N	152	A	C5-C6-N1	-6.01	114.70	117.70
1	N	337	G	N9-C4-C5	-6.01	103.00	105.40
1	N	754	C	P-O5'-C5'	-6.01	111.29	120.90
1	N	836	G	C4-C5-C6	6.01	122.40	118.80
1	N	1151	A	C6-N1-C2	6.01	122.20	118.60
1	N	1360	A	C6-N1-C2	-6.01	115.00	118.60
1	N	775	G	C8-N9-C4	-6.00	104.00	106.40
1	N	1532	U	C2-N3-C4	6.00	130.60	127.00
1	N	647	C	P-O5'-C5'	6.00	130.51	120.90
1	N	844	G	C6-N1-C2	6.00	128.70	125.10
1	N	1161	C	N3-C4-C5	-6.00	119.50	121.90
1	N	1489	G	O4'-C4'-C3'	-6.00	98.00	104.00
1	N	64	G	P-O5'-C5'	6.00	130.50	120.90
1	N	197	A	C3'-C2'-C1'	-6.00	96.70	101.50
1	N	456	A	N9-C4-C5	-6.00	103.40	105.80
1	N	851	G	C2-N3-C4	-6.00	108.90	111.90
1	N	950	U	C6-N1-C2	-6.00	117.40	121.00
1	N	1478	U	O4'-C1'-N1	6.00	113.00	108.20
1	N	94	G	N3-C4-C5	6.00	131.60	128.60
1	N	696	A	C5'-C4'-C3'	6.00	125.60	116.00
1	N	712	A	C5-C6-N1	-6.00	114.70	117.70
1	N	713	G	C4-N9-C1'	6.00	134.30	126.50
1	N	15	G	C5-C6-N1	-6.00	108.50	111.50
1	N	112	G	O4'-C1'-N9	6.00	113.00	108.20
1	N	384	G	C5'-C4'-O4'	6.00	116.30	109.10
1	N	834	U	C5-C4-O4	-6.00	122.30	125.90
1	N	1225	A	N9-C4-C5	6.00	108.20	105.80
1	N	1271	A	N3-C4-C5	-6.00	122.60	126.80
1	N	908	A	O4'-C1'-N9	6.00	113.00	108.20
1	N	1037	C	P-O5'-C5'	6.00	130.50	120.90
1	N	1046	A	C6-C5-N7	-6.00	128.10	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1215	G	N1-C2-N3	-6.00	120.30	123.90
1	N	1388	C	P-O3'-C3'	6.00	126.90	119.70
1	N	259	G	C5-C6-N1	-6.00	108.50	111.50
1	N	256	U	C5-C4-O4	-5.99	122.30	125.90
1	N	347	G	C8-N9-C4	-5.99	104.00	106.40
1	N	635	A	C3'-C2'-C1'	-5.99	96.71	101.50
1	N	1533	C	C5-C4-N4	-5.99	116.00	120.20
1	N	270	A	N1-C6-N6	5.99	122.19	118.60
1	N	379	C	C4-C5-C6	5.99	120.40	117.40
1	N	673	A	C4-C5-N7	-5.99	107.70	110.70
1	N	1398	A	C4-C5-C6	5.99	120.00	117.00
1	N	1459	G	C5-C6-O6	-5.99	125.00	128.60
1	N	94	G	C4-C5-C6	-5.99	115.21	118.80
1	N	369	G	N7-C8-N9	5.99	116.09	113.10
1	N	1448	C	P-O5'-C5'	-5.99	111.32	120.90
1	N	373	A	O4'-C4'-C3'	-5.99	98.01	104.00
1	N	510	A	O4'-C1'-N9	5.99	112.99	108.20
1	N	645	G	C4-N9-C1'	-5.99	118.72	126.50
1	N	1479	C	O4'-C1'-N1	5.99	112.99	108.20
1	N	369	G	C3'-C2'-C1'	5.99	106.29	101.50
1	N	867	G	C5-C6-N1	-5.99	108.51	111.50
1	N	1002	G	C4'-C3'-C2'	-5.99	96.61	102.60
1	N	1046	A	C2-N3-C4	-5.99	107.61	110.60
1	N	1076	U	C2-N3-C4	5.99	130.59	127.00
1	N	1323	G	N9-C1'-C2'	-5.99	105.41	112.00
1	N	283	U	C5'-C4'-C3'	-5.99	106.42	116.00
1	N	367	U	O4'-C1'-C2'	-5.99	99.81	105.80
1	N	756	C	N3-C4-N4	5.99	122.19	118.00
1	N	907	A	C4-C5-N7	-5.99	107.71	110.70
1	N	1169	A	N1-C2-N3	5.99	132.29	129.30
1	N	1409	C	C6-N1-C2	5.99	122.69	120.30
1	N	107	G	C5-N7-C8	-5.98	101.31	104.30
1	N	232	G	N3-C2-N2	5.98	124.09	119.90
1	N	430	A	N1-C2-N3	5.98	132.29	129.30
1	N	911	U	C1'-O4'-C4'	5.98	114.69	109.90
1	N	1305	G	C4-C5-C6	5.98	122.39	118.80
1	N	43	C	N3-C4-N4	5.98	122.19	118.00
1	N	270	A	C4-C5-C6	5.98	119.99	117.00
1	N	351	G	C6-C5-N7	-5.98	126.81	130.40
1	N	903	G	N3-C4-C5	5.98	131.59	128.60
1	N	1340	A	N1-C6-N6	5.98	122.19	118.60
1	N	1481	U	O3'-P-O5'	-5.98	92.64	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	20	U	N3-C4-O4	-5.98	115.21	119.40
1	N	821	G	N1-C2-N3	-5.98	120.31	123.90
1	N	1010	U	N1-C2-O2	-5.98	118.61	122.80
1	N	1024	G	C5-C6-N1	-5.98	108.51	111.50
1	N	1029	U	C5-C4-O4	-5.98	122.31	125.90
1	N	160	A	C4-C5-C6	5.98	119.99	117.00
1	N	508	U	O4'-C1'-N1	5.98	112.98	108.20
1	N	1298	U	N1-C2-O2	5.98	126.98	122.80
1	N	1473	G	C8-N9-C4	-5.98	104.01	106.40
1	N	135	C	P-O3'-C3'	-5.98	112.53	119.70
1	N	431	A	O4'-C4'-C3'	-5.97	98.03	104.00
1	N	463	U	P-O5'-C5'	5.97	130.46	120.90
1	N	869	G	C5'-C4'-C3'	-5.97	106.44	116.00
1	N	1340	A	C4-C5-C6	5.97	119.99	117.00
1	N	145	G	N9-C4-C5	-5.97	103.01	105.40
1	N	275	G	C5-N7-C8	-5.97	101.31	104.30
1	N	366	A	O4'-C1'-N9	5.97	112.98	108.20
1	N	588	G	N7-C8-N9	5.97	116.09	113.10
1	N	976	G	N1-C2-N3	-5.97	120.32	123.90
1	N	1521	C	O4'-C1'-C2'	-5.97	99.83	105.80
1	N	1296	C	N3-C4-N4	5.97	122.18	118.00
1	N	159	G	C6-N1-C2	5.97	128.68	125.10
1	N	756	C	N3-C2-O2	5.97	126.08	121.90
1	N	923	A	O4'-C1'-N9	5.97	112.97	108.20
1	N	1281	C	N3-C4-N4	5.97	122.18	118.00
1	N	440	C	N3-C4-N4	5.97	122.18	118.00
1	N	502	A	C5-C6-N6	-5.97	118.93	123.70
1	N	747	A	C6-C5-N7	-5.97	128.12	132.30
1	N	1084	G	C4-C5-C6	5.97	122.38	118.80
1	N	1252	A	C4-C5-C6	5.97	119.98	117.00
1	N	1435	G	N3-C2-N2	5.97	124.08	119.90
1	N	1442	G	C6-C5-N7	-5.97	126.82	130.40
1	N	1495	U	P-O5'-C5'	5.97	130.45	120.90
1	N	88	U	P-O5'-C5'	5.96	130.44	120.90
1	N	305	G	C2-N3-C4	5.96	114.88	111.90
1	N	1294	G	N7-C8-N9	-5.96	110.12	113.10
1	N	406	G	C3'-C2'-C1'	5.96	106.27	101.50
1	N	764	C	C2-N3-C4	5.96	122.88	119.90
1	N	1006	G	C5-C6-N1	-5.96	108.52	111.50
1	N	1407	C	N3-C4-C5	-5.96	119.52	121.90
1	N	153	C	O4'-C4'-C3'	-5.96	98.04	104.00
1	N	859	G	O4'-C4'-C3'	-5.96	98.04	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	979	C	O4'-C4'-C3'	-5.96	98.04	104.00
1	N	1040	U	C1'-O4'-C4'	5.96	114.67	109.90
1	N	1276	G	C6-N1-C2	-5.96	121.52	125.10
1	N	1497	G	C5-C6-N1	-5.96	108.52	111.50
1	N	731	G	N7-C8-N9	-5.96	110.12	113.10
1	N	1083	U	N3-C2-O2	-5.96	118.03	122.20
1	N	562	U	C5-C6-N1	-5.96	119.72	122.70
1	N	787	A	C8-N9-C4	-5.96	103.42	105.80
1	N	872	A	N3-C4-C5	-5.96	122.63	126.80
1	N	948	C	C5-C4-N4	-5.96	116.03	120.20
1	N	368	U	O4'-C1'-N1	5.96	112.97	108.20
1	N	446	G	C4-C5-C6	5.96	122.37	118.80
1	N	593	U	N3-C4-C5	-5.96	111.03	114.60
1	N	771	G	O5'-C5'-C4'	-5.96	100.38	111.70
1	N	1327	C	C5-C6-N1	-5.96	118.02	121.00
1	N	963	G	C8-N9-C4	-5.96	104.02	106.40
1	N	25	C	N3-C2-O2	5.95	126.07	121.90
1	N	71	A	C6-N1-C2	-5.95	115.03	118.60
1	N	320	A	N7-C8-N9	-5.95	110.83	113.80
1	N	356	A	C4-C5-C6	5.95	119.97	117.00
1	N	1224	U	C5-C4-O4	-5.95	122.33	125.90
1	N	247	G	C5-N7-C8	5.95	107.27	104.30
1	N	307	C	C4'-C3'-C2'	-5.95	96.65	102.60
1	N	715	A	N3-C4-C5	-5.95	122.64	126.80
1	N	949	A	N9-C4-C5	5.95	108.18	105.80
1	N	945	G	P-O3'-C3'	-5.95	112.56	119.70
1	N	1209	C	C4-C5-C6	5.95	120.37	117.40
1	N	1276	G	C6-C5-N7	-5.95	126.83	130.40
1	N	703	G	C6-C5-N7	-5.95	126.83	130.40
1	N	1185	G	C5'-C4'-O4'	5.95	116.23	109.10
1	N	707	U	N3-C2-O2	5.94	126.36	122.20
1	N	928	G	C6-C5-N7	-5.94	126.83	130.40
1	N	1041	G	N1-C6-O6	5.94	123.47	119.90
1	N	1363	A	P-O5'-C5'	5.94	130.41	120.90
1	N	313	A	C4-C5-C6	5.94	119.97	117.00
1	N	1043	G	N1-C2-N3	-5.94	120.33	123.90
1	N	195	A	C5-N7-C8	5.94	106.87	103.90
1	N	392	C	N1-C2-O2	5.94	122.46	118.90
1	N	576	C	N3-C4-N4	5.94	122.16	118.00
1	N	607	A	C5'-C4'-O4'	5.94	116.23	109.10
1	N	977	A	C5-N7-C8	5.94	106.87	103.90
1	N	245	U	O4'-C4'-C3'	-5.94	98.06	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	702	A	C5-N7-C8	5.94	106.87	103.90
1	N	1278	G	C4'-C3'-C2'	-5.94	96.66	102.60
1	N	199	A	O4'-C4'-C3'	-5.94	98.06	104.00
1	N	522	C	C5-C6-N1	5.94	123.97	121.00
1	N	679	C	N1-C2-O2	5.94	122.46	118.90
1	N	715	A	C5-C6-N6	-5.94	118.95	123.70
1	N	805	C	N3-C4-C5	-5.94	119.53	121.90
1	N	1268	G	N1-C2-N3	-5.94	120.34	123.90
1	N	57	G	N1-C2-N3	-5.94	120.34	123.90
1	N	259	G	N9-C4-C5	-5.94	103.03	105.40
1	N	339	C	N3-C4-N4	5.94	122.16	118.00
1	N	1117	A	C5-C6-N6	-5.94	118.95	123.70
1	N	228	A	O4'-C1'-N9	5.93	112.95	108.20
1	N	344	A	C4'-C3'-C2'	5.93	108.53	102.60
1	N	406	G	N1-C2-N3	-5.93	120.34	123.90
1	N	554	A	N1-C6-N6	5.93	122.16	118.60
1	N	581	G	C5-C6-N1	-5.93	108.53	111.50
1	N	591	U	N3-C4-O4	5.93	123.55	119.40
1	N	838	G	C5-N7-C8	5.93	107.27	104.30
1	N	1175	G	N1-C2-N3	-5.93	120.34	123.90
1	N	1263	C	N3-C4-C5	-5.93	119.53	121.90
1	N	1300	G	N1-C6-O6	5.93	123.46	119.90
1	N	420	U	N1-C2-O2	-5.93	118.65	122.80
1	N	626	G	C6-C5-N7	-5.93	126.84	130.40
1	N	1086	U	O4'-C1'-N1	5.93	112.95	108.20
1	N	1185	G	N9-C1'-C2'	-5.93	105.47	112.00
1	N	1331	G	C5'-C4'-C3'	-5.93	106.51	116.00
1	N	56	U	C2-N3-C4	-5.93	123.44	127.00
1	N	658	C	C5-C6-N1	5.93	123.97	121.00
1	N	1472	U	C4'-C3'-C2'	-5.93	96.67	102.60
1	N	1481	U	N3-C2-O2	5.93	126.35	122.20
1	N	1505	G	C6-C5-N7	-5.93	126.84	130.40
1	N	125	U	C4-C5-C6	5.93	123.26	119.70
1	N	200	G	N3-C2-N2	5.93	124.05	119.90
1	N	414	A	N3-C4-N9	5.93	132.14	127.40
1	N	658	C	O4'-C1'-C2'	-5.93	99.87	105.80
1	N	928	G	C4-C5-N7	5.93	113.17	110.80
1	N	523	A	C5'-C4'-C3'	-5.93	106.52	116.00
1	N	169	C	C5-C6-N1	-5.93	118.04	121.00
1	N	301	G	C4-N9-C1'	5.93	134.20	126.50
1	N	331	G	O4'-C1'-N9	5.93	112.94	108.20
1	N	452	A	C3'-C2'-C1'	-5.93	96.76	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1488	G	C2-N3-C4	5.93	114.86	111.90
1	N	99	C	O3'-P-O5'	-5.92	92.74	104.00
1	N	691	G	P-O5'-C5'	5.92	130.38	120.90
1	N	890	G	C5'-C4'-O4'	5.92	116.21	109.10
1	N	1013	G	N3-C2-N2	5.92	124.05	119.90
1	N	53	A	C5'-C4'-O4'	5.92	116.21	109.10
1	N	382	A	C6-C5-N7	-5.92	128.16	132.30
1	N	696	A	C5-C6-N1	-5.92	114.74	117.70
1	N	881	G	O4'-C1'-N9	5.92	112.94	108.20
1	N	887	G	N1-C2-N3	5.92	127.45	123.90
1	N	1140	C	O4'-C1'-C2'	-5.92	99.88	105.80
1	N	1231	G	C4-C5-C6	5.92	122.35	118.80
1	N	1287	A	C5-C6-N1	-5.92	114.74	117.70
1	N	1422	G	O4'-C4'-C3'	-5.92	98.08	104.00
1	N	832	G	C4'-C3'-C2'	-5.92	96.68	102.60
1	N	167	A	P-O5'-C5'	5.92	130.37	120.90
1	N	631	C	C4'-C3'-C2'	-5.92	96.68	102.60
1	N	752	G	C4-C5-N7	-5.92	108.43	110.80
1	N	930	C	O4'-C1'-N1	5.92	112.94	108.20
1	N	179	A	N1-C6-N6	5.92	122.15	118.60
1	N	544	G	C8-N9-C1'	5.92	134.69	127.00
1	N	782	A	C5-C6-N1	-5.92	114.74	117.70
1	N	984	C	N1-C2-O2	5.92	122.45	118.90
1	N	1131	G	C6-C5-N7	-5.92	126.85	130.40
1	N	1155	A	OP1-P-OP2	-5.92	110.73	119.60
1	N	1191	A	C4-N9-C1'	5.92	136.95	126.30
1	N	1227	A	C4-N9-C1'	5.92	136.95	126.30
1	N	1382	C	N3-C4-C5	-5.92	119.53	121.90
1	N	1511	G	N3-C4-C5	5.92	131.56	128.60
1	N	1123	U	P-O3'-C3'	5.92	126.80	119.70
1	N	79	G	C6-N1-C2	-5.91	121.55	125.10
1	N	269	C	N1-C2-O2	-5.91	115.35	118.90
1	N	404	G	P-O3'-C3'	-5.91	112.61	119.70
1	N	1156	G	C5-C6-N1	-5.91	108.54	111.50
1	N	81	A	N9-C1'-C2'	5.91	121.69	114.00
1	N	1457	G	N7-C8-N9	5.91	116.06	113.10
1	N	166	U	C5-C6-N1	5.91	125.66	122.70
1	N	329	A	N3-C4-N9	5.91	132.13	127.40
1	N	807	A	OP1-P-OP2	-5.91	110.73	119.60
1	N	1107	C	C2-N1-C1'	5.91	125.30	118.80
1	N	1444	U	C2-N3-C4	5.91	130.55	127.00
1	N	24	U	C5-C6-N1	5.91	125.65	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	168	G	C6-C5-N7	-5.91	126.86	130.40
1	N	399	G	C3'-C2'-C1'	-5.91	96.77	101.50
1	N	742	G	O4'-C1'-C2'	-5.91	99.89	105.80
1	N	816	A	P-O5'-C5'	5.91	130.35	120.90
1	N	1256	A	N3-C4-C5	-5.91	122.66	126.80
1	N	939	G	N9-C4-C5	-5.91	103.04	105.40
1	N	1225	A	C5-C6-N6	-5.91	118.97	123.70
1	N	1192	C	C1'-O4'-C4'	-5.91	105.18	109.90
1	N	1262	C	C5-C4-N4	-5.91	116.07	120.20
1	N	1409	C	O4'-C4'-C3'	-5.91	98.09	104.00
1	N	1498	U	P-O3'-C3'	5.91	126.79	119.70
1	N	178	C	O5'-P-OP2	-5.90	100.39	105.70
1	N	953	G	O4'-C1'-N9	5.90	112.92	108.20
1	N	1207	G	O4'-C1'-N9	5.90	112.92	108.20
1	N	1532	U	P-O5'-C5'	-5.90	111.45	120.90
1	N	992	U	C6-N1-C1'	-5.90	112.94	121.20
1	N	142	G	C4-C5-C6	5.90	122.34	118.80
1	N	565	U	C5-C6-N1	-5.90	119.75	122.70
1	N	852	G	O4'-C1'-N9	5.90	112.92	108.20
1	N	923	A	C4-C5-N7	-5.90	107.75	110.70
1	N	951	G	C4-C5-N7	5.90	113.16	110.80
1	N	953	G	N1-C2-N2	-5.90	110.89	116.20
1	N	1079	G	C6-N1-C2	5.90	128.64	125.10
1	N	1131	G	C5'-C4'-O4'	5.90	116.18	109.10
1	N	1370	G	C2-N3-C4	5.90	114.85	111.90
1	N	242	G	C6-C5-N7	-5.90	126.86	130.40
1	N	371	A	N9-C4-C5	-5.90	103.44	105.80
1	N	773	G	C6-N1-C2	5.90	128.64	125.10
1	N	901	A	C5-C6-N1	-5.90	114.75	117.70
1	N	22	G	C8-N9-C4	5.90	108.76	106.40
1	N	298	A	C5-N7-C8	-5.90	100.95	103.90
1	N	671	G	N3-C4-N9	5.90	129.54	126.00
1	N	844	G	O4'-C1'-N9	5.90	112.92	108.20
1	N	446	G	C5-C6-O6	-5.90	125.06	128.60
1	N	94	G	C4-N9-C1'	-5.89	118.84	126.50
1	N	1265	C	C5'-C4'-O4'	5.89	116.17	109.10
1	N	1273	C	C3'-C2'-C1'	5.89	106.22	101.50
1	N	1505	G	C8-N9-C4	5.89	108.76	106.40
1	N	3	A	C6-C5-N7	-5.89	128.18	132.30
1	N	15	G	C5-C6-O6	-5.89	125.06	128.60
1	N	1142	G	N3-C4-C5	-5.89	125.65	128.60
1	N	1349	A	C8-N9-C4	-5.89	103.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1350	A	C6-N1-C2	5.89	122.14	118.60
1	N	1517	G	C6-C5-N7	-5.89	126.86	130.40
1	N	301	G	C6-N1-C2	5.89	128.63	125.10
1	N	1451	U	C5-C6-N1	5.89	125.64	122.70
1	N	37	U	C5-C6-N1	5.89	125.64	122.70
1	N	108	G	C3'-C2'-C1'	5.89	106.21	101.50
1	N	116	A	N3-C4-C5	-5.89	122.68	126.80
1	N	338	A	N9-C4-C5	5.89	108.16	105.80
1	N	607	A	C3'-C2'-C1'	-5.89	96.79	101.50
1	N	809	G	C6-N1-C2	5.89	128.63	125.10
1	N	878	A	N3-C4-N9	5.89	132.11	127.40
1	N	968	A	O4'-C1'-N9	5.89	112.91	108.20
1	N	57	G	C8-N9-C4	-5.89	104.05	106.40
1	N	1112	C	C5'-C4'-C3'	-5.89	106.58	116.00
1	N	1274	A	C2-N3-C4	5.89	113.54	110.60
1	N	1437	A	C6-C5-N7	-5.89	128.18	132.30
1	N	451	A	C4-C5-N7	-5.88	107.76	110.70
1	N	484	G	N7-C8-N9	-5.88	110.16	113.10
1	N	658	C	C4'-C3'-C2'	-5.88	96.72	102.60
1	N	776	G	C5-C6-O6	-5.88	125.07	128.60
1	N	869	G	C5-C6-N1	-5.88	108.56	111.50
1	N	910	C	P-O3'-C3'	5.88	126.76	119.70
1	N	1252	A	C3'-C2'-C1'	5.88	106.21	101.50
1	N	1262	C	P-O3'-C3'	-5.88	112.64	119.70
1	N	1362	A	N7-C8-N9	5.88	116.74	113.80
1	N	354	G	C6-C5-N7	-5.88	126.87	130.40
1	N	1296	C	N3-C2-O2	5.88	126.02	121.90
1	N	915	A	C4'-C3'-C2'	-5.88	96.72	102.60
1	N	1204	A	O4'-C1'-N9	5.88	112.90	108.20
1	N	1407	C	O4'-C1'-N1	5.88	112.90	108.20
1	N	270	A	C4-C5-N7	5.88	113.64	110.70
1	N	1172	C	N3-C4-C5	-5.88	119.55	121.90
1	N	1288	A	C5'-C4'-O4'	-5.88	102.05	109.10
1	N	1314	C	C5'-C4'-O4'	5.88	116.16	109.10
1	N	886	G	C5-C6-N1	-5.88	108.56	111.50
1	N	1126	U	P-O3'-C3'	-5.88	112.65	119.70
1	N	59	A	C4-C5-C6	5.88	119.94	117.00
1	N	61	G	P-O3'-C3'	-5.88	112.65	119.70
1	N	803	G	C5-C6-O6	-5.88	125.08	128.60
1	N	1005	A	P-O5'-C5'	-5.88	111.50	120.90
1	N	1137	C	O4'-C1'-N1	5.88	112.90	108.20
1	N	1265	C	C5-C6-N1	5.88	123.94	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1417	G	N7-C8-N9	5.88	116.04	113.10
1	N	1436	U	P-O3'-C3'	5.88	126.75	119.70
1	N	204	G	C6-C5-N7	-5.87	126.88	130.40
1	N	302	G	C4-N9-C1'	-5.87	118.86	126.50
1	N	323	U	O4'-C1'-N1	5.87	112.90	108.20
1	N	441	A	C1'-O4'-C4'	5.87	114.60	109.90
1	N	637	C	N1-C2-N3	-5.87	115.09	119.20
1	N	1436	U	N3-C4-O4	5.87	123.51	119.40
1	N	634	C	P-O5'-C5'	5.87	130.30	120.90
1	N	928	G	N1-C2-N2	-5.87	110.92	116.20
1	N	1417	G	O4'-C1'-N9	5.87	112.90	108.20
1	N	502	A	O5'-P-OP2	-5.87	100.42	105.70
1	N	877	G	OP2-P-O3'	5.87	118.11	105.20
1	N	45	G	C4'-C3'-C2'	-5.87	96.73	102.60
1	N	458	U	N1-C2-N3	5.87	118.42	114.90
1	N	542	G	O4'-C1'-N9	5.87	112.89	108.20
1	N	544	G	C4-N9-C1'	-5.87	118.87	126.50
1	N	670	G	C5-C6-O6	-5.87	125.08	128.60
1	N	976	G	N1-C2-N2	5.87	121.48	116.20
1	N	1106	G	C4-C5-C6	5.87	122.32	118.80
1	N	298	A	O3'-P-O5'	-5.87	92.85	104.00
1	N	486	U	C6-N1-C2	-5.87	117.48	121.00
1	N	741	G	C5-C6-O6	-5.87	125.08	128.60
1	N	1126	U	C5-C6-N1	5.87	125.63	122.70
1	N	705	G	C6-C5-N7	-5.87	126.88	130.40
1	N	760	G	N1-C6-O6	5.87	123.42	119.90
1	N	855	U	N3-C4-O4	5.87	123.50	119.40
1	N	1157	A	C4-C5-C6	5.87	119.93	117.00
1	N	28	A	O4'-C4'-C3'	-5.86	98.14	104.00
1	N	217	C	N3-C4-C5	-5.86	119.56	121.90
1	N	521	G	P-O5'-C5'	-5.86	111.52	120.90
1	N	1370	G	C4'-C3'-C2'	-5.86	96.74	102.60
1	N	1384	C	N3-C2-O2	5.86	126.00	121.90
1	N	33	A	C5'-C4'-C3'	5.86	125.38	116.00
1	N	251	G	N7-C8-N9	5.86	116.03	113.10
1	N	532	A	C8-N9-C4	5.86	108.14	105.80
1	N	569	C	C3'-C2'-C1'	5.86	106.19	101.50
1	N	718	A	C2-N3-C4	5.86	113.53	110.60
1	N	1193	G	O4'-C1'-N9	5.86	112.89	108.20
1	N	8	A	C8-N9-C4	-5.86	103.46	105.80
1	N	36	C	N1-C2-N3	5.86	123.30	119.20
1	N	435	A	C4-C5-N7	-5.86	107.77	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	746	A	C8-N9-C4	-5.86	103.45	105.80
1	N	107	G	N1-C6-O6	5.86	123.42	119.90
1	N	251	G	C4-N9-C1'	-5.86	118.88	126.50
1	N	1242	G	C4-C5-C6	5.86	122.31	118.80
1	N	173	U	O3'-P-O5'	5.86	115.13	104.00
1	N	204	G	N1-C2-N3	5.86	127.42	123.90
1	N	364	A	N9-C4-C5	-5.86	103.46	105.80
1	N	979	C	N3-C4-C5	-5.86	119.56	121.90
1	N	1104	G	C8-N9-C4	5.86	108.74	106.40
1	N	1296	C	P-O3'-C3'	5.86	126.73	119.70
1	N	389	A	C4-C5-C6	5.86	119.93	117.00
1	N	659	U	C4'-C3'-C2'	-5.86	96.75	102.60
1	N	921	U	N1-C2-N3	-5.86	111.39	114.90
1	N	1115	U	P-O3'-C3'	-5.86	112.67	119.70
1	N	1176	A	C2-N3-C4	-5.86	107.67	110.60
1	N	1278	G	N7-C8-N9	-5.86	110.17	113.10
1	N	174	A	N3-C4-N9	5.85	132.08	127.40
1	N	522	C	N3-C4-N4	5.85	122.10	118.00
1	N	869	G	C5-C6-O6	-5.85	125.09	128.60
1	N	1533	C	P-O3'-C3'	5.85	126.72	119.70
1	N	412	A	C6-C5-N7	-5.85	128.21	132.30
1	N	511	C	C4-C5-C6	5.85	120.33	117.40
1	N	876	C	O4'-C1'-N1	5.85	112.88	108.20
1	N	1191	A	C8-N9-C1'	-5.85	117.17	127.70
1	N	1204	A	C4-C5-C6	5.85	119.92	117.00
1	N	1238	A	C1'-O4'-C4'	5.85	114.58	109.90
1	N	1332	A	N3-C4-C5	-5.85	122.70	126.80
1	N	1463	U	C6-N1-C2	-5.85	117.49	121.00
1	N	137	U	C1'-O4'-C4'	5.85	114.58	109.90
1	N	717	U	N3-C4-O4	5.85	123.49	119.40
1	N	1344	C	N3-C4-N4	5.85	122.09	118.00
1	N	9	G	N3-C2-N2	5.85	123.99	119.90
1	N	585	G	N9-C4-C5	5.85	107.74	105.40
1	N	945	G	C1'-O4'-C4'	-5.85	105.22	109.90
1	N	1171	A	C5-N7-C8	-5.85	100.98	103.90
1	N	1408	A	P-O3'-C3'	5.85	126.72	119.70
1	N	428	G	N1-C2-N2	-5.84	110.94	116.20
1	N	773	G	C4-N9-C1'	-5.84	118.90	126.50
1	N	853	C	C4-C5-C6	5.84	120.32	117.40
1	N	1108	G	C3'-C2'-C1'	-5.84	96.82	101.50
1	N	1175	G	C5-N7-C8	5.84	107.22	104.30
1	N	1220	G	O4'-C1'-N9	5.84	112.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1385	G	C6-C5-N7	-5.84	126.89	130.40
1	N	31	G	N7-C8-N9	5.84	116.02	113.10
1	N	557	G	O3'-P-O5'	-5.84	92.90	104.00
1	N	683	G	O4'-C1'-N9	5.84	112.88	108.20
1	N	1368	A	N1-C2-N3	-5.84	126.38	129.30
1	N	70	U	N3-C2-O2	5.84	126.29	122.20
1	N	846	G	O4'-C1'-N9	5.84	112.87	108.20
1	N	990	C	N3-C4-N4	5.84	122.09	118.00
1	N	1419	G	C5'-C4'-O4'	5.84	116.11	109.10
1	N	26	A	C6-C5-N7	-5.84	128.21	132.30
1	N	179	A	N3-C4-C5	-5.84	122.71	126.80
1	N	217	C	N1-C2-O2	5.84	122.40	118.90
1	N	228	A	C3'-C2'-C1'	-5.84	96.83	101.50
1	N	414	A	C5-N7-C8	5.84	106.82	103.90
1	N	477	C	C5-C6-N1	5.84	123.92	121.00
1	N	894	G	P-O5'-C5'	5.84	130.24	120.90
1	N	1195	C	C5-C4-N4	-5.84	116.11	120.20
1	N	1471	U	C6-N1-C2	5.84	124.50	121.00
1	N	1491	G	N1-C6-O6	5.84	123.40	119.90
1	N	501	C	N3-C4-N4	5.84	122.09	118.00
1	N	960	U	C6-N1-C1'	-5.84	113.03	121.20
1	N	1136	C	C5'-C4'-C3'	-5.84	106.66	116.00
1	N	749	A	C5-C6-N1	-5.84	114.78	117.70
1	N	842	U	C4'-C3'-C2'	5.84	108.44	102.60
1	N	1266	G	C8-N9-C1'	5.84	134.59	127.00
1	N	81	A	C6-N1-C2	5.83	122.10	118.60
1	N	131	A	O4'-C1'-C2'	5.83	112.85	107.60
1	N	1041	G	C5-N7-C8	-5.83	101.38	104.30
1	N	1204	A	N3-C4-C5	-5.83	122.72	126.80
1	N	329	A	N9-C4-C5	-5.83	103.47	105.80
1	N	705	G	C5-C6-O6	-5.83	125.10	128.60
1	N	1284	C	C5'-C4'-O4'	5.83	116.10	109.10
1	N	1287	A	N1-C2-N3	-5.83	126.38	129.30
1	N	179	A	O3'-P-O5'	-5.83	92.92	104.00
1	N	499	A	C3'-C2'-C1'	5.83	106.16	101.50
1	N	878	A	C5-N7-C8	5.83	106.81	103.90
1	N	1101	A	C4-C5-N7	-5.83	107.78	110.70
1	N	1257	A	N9-C4-C5	-5.83	103.47	105.80
1	N	28	A	C5-C6-N6	-5.83	119.04	123.70
1	N	499	A	C8-N9-C4	5.83	108.13	105.80
1	N	652	U	C5'-C4'-C3'	-5.83	106.67	116.00
1	N	865	A	C4-C5-C6	5.83	119.91	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	995	C	O4'-C1'-N1	5.83	112.86	108.20
1	N	1433	A	C5-N7-C8	-5.83	100.98	103.90
1	N	1462	C	C1'-O4'-C4'	-5.83	105.24	109.90
1	N	602	A	N3-C4-C5	-5.83	122.72	126.80
1	N	1079	G	C5-C6-N1	-5.83	108.59	111.50
1	N	197	A	C8-N9-C4	-5.83	103.47	105.80
1	N	311	C	N3-C4-N4	5.83	122.08	118.00
1	N	633	G	C6-C5-N7	-5.83	126.91	130.40
1	N	936	C	N3-C4-C5	-5.83	119.57	121.90
1	N	1039	G	C4-C5-N7	5.83	113.13	110.80
1	N	1058	G	N1-C6-O6	5.83	123.39	119.90
1	N	308	C	P-O5'-C5'	5.82	130.22	120.90
1	N	405	U	C2-N3-C4	-5.82	123.50	127.00
1	N	1297	G	N1-C2-N3	-5.82	120.41	123.90
1	N	1299	A	C6-N1-C2	5.82	122.09	118.60
1	N	1498	U	C6-N1-C1'	-5.82	113.05	121.20
1	N	488	C	N3-C4-N4	5.82	122.08	118.00
1	N	747	A	O4'-C4'-C3'	-5.82	98.18	104.00
1	N	1368	A	N3-C4-N9	5.82	132.06	127.40
1	N	243	A	N1-C2-N3	5.82	132.21	129.30
1	N	312	C	N1-C2-N3	-5.82	115.13	119.20
1	N	856	C	C5-C6-N1	5.82	123.91	121.00
1	N	887	G	C4'-C3'-C2'	-5.82	96.78	102.60
1	N	1061	G	O4'-C1'-N9	5.82	112.86	108.20
1	N	1431	A	C4-C5-N7	-5.82	107.79	110.70
1	N	1180	A	C4-C5-N7	-5.82	107.79	110.70
1	N	215	C	P-O5'-C5'	5.82	130.21	120.90
1	N	311	C	C5-C6-N1	5.82	123.91	121.00
1	N	632	U	O4'-C1'-N1	5.82	112.85	108.20
1	N	795	C	P-O3'-C3'	-5.82	112.72	119.70
1	N	837	U	N3-C2-O2	-5.82	118.13	122.20
1	N	1088	G	N1-C6-O6	5.82	123.39	119.90
1	N	1198	G	C8-N9-C4	-5.82	104.07	106.40
1	N	1230	C	P-O5'-C5'	5.82	130.21	120.90
1	N	6	G	N7-C8-N9	5.82	116.01	113.10
1	N	14	U	N3-C2-O2	5.82	126.27	122.20
1	N	126	G	C6-C5-N7	-5.82	126.91	130.40
1	N	478	A	N3-C4-N9	5.82	132.05	127.40
1	N	988	G	C6-N1-C2	5.82	128.59	125.10
1	N	1387	G	C6-N1-C2	-5.82	121.61	125.10
1	N	323	U	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	373	A	C5'-C4'-C3'	5.81	125.30	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	660	C	O4'-C1'-N1	5.81	112.85	108.20
1	N	1433	A	C5-C6-N6	-5.81	119.05	123.70
1	N	267	C	N1-C2-O2	5.81	122.39	118.90
1	N	36	C	C2-N1-C1'	5.81	125.19	118.80
1	N	1013	G	O4'-C4'-C3'	-5.81	98.19	104.00
1	N	1017	U	N1-C2-O2	-5.81	118.73	122.80
1	N	21	G	P-O5'-C5'	5.81	130.19	120.90
1	N	34	C	N3-C4-C5	-5.81	119.58	121.90
1	N	617	G	C4'-C3'-C2'	-5.81	96.79	102.60
1	N	636	U	N3-C2-O2	5.81	126.26	122.20
1	N	843	U	P-O3'-C3'	-5.81	112.73	119.70
1	N	1415	G	N1-C2-N3	-5.81	120.42	123.90
1	N	192	A	C4-C5-C6	5.80	119.90	117.00
1	N	929	G	C5-N7-C8	-5.80	101.40	104.30
1	N	1223	C	C4-C5-C6	5.80	120.30	117.40
1	N	1502	A	C8-N9-C4	5.80	108.12	105.80
1	N	230	G	O4'-C1'-N9	5.80	112.84	108.20
1	N	743	A	C5-C6-N1	-5.80	114.80	117.70
1	N	823	C	C5-C6-N1	5.80	123.90	121.00
1	N	523	A	C4-C5-N7	-5.80	107.80	110.70
1	N	85	U	P-O3'-C3'	5.80	126.66	119.70
1	N	301	G	N1-C2-N3	-5.80	120.42	123.90
1	N	664	G	N7-C8-N9	5.80	116.00	113.10
1	N	743	A	N3-C4-N9	5.80	132.04	127.40
1	N	988	G	N9-C4-C5	5.80	107.72	105.40
1	N	1054	C	C4-C5-C6	-5.80	114.50	117.40
1	N	1225	A	C4-C5-N7	-5.80	107.80	110.70
1	N	740	U	C2-N1-C1'	-5.80	110.74	117.70
1	N	308	C	O4'-C1'-N1	5.80	112.84	108.20
1	N	1168	U	C5'-C4'-C3'	5.80	125.27	116.00
1	N	1283	U	C6-N1-C2	-5.80	117.52	121.00
1	N	1359	C	O4'-C4'-C3'	-5.80	98.20	104.00
1	N	552	U	C5-C6-N1	-5.79	119.80	122.70
1	N	1486	G	C4-N9-C1'	-5.79	118.97	126.50
1	N	109	A	C5'-C4'-C3'	-5.79	106.73	116.00
1	N	557	G	P-O5'-C5'	5.79	130.17	120.90
1	N	1068	G	N1-C2-N3	-5.79	120.42	123.90
1	N	1251	A	P-O3'-C3'	5.79	126.65	119.70
1	N	1497	G	C4-N9-C1'	-5.79	118.97	126.50
1	N	232	G	P-O5'-C5'	5.79	130.17	120.90
1	N	953	G	N3-C4-N9	-5.79	122.53	126.00
1	N	1526	G	P-O3'-C3'	-5.79	112.75	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	25	C	C2-N3-C4	5.79	122.80	119.90
1	N	197	A	N3-C4-N9	-5.79	122.77	127.40
1	N	830	G	C5-C6-N1	-5.79	108.61	111.50
1	N	1270	G	N1-C2-N3	-5.79	120.43	123.90
1	N	47	C	C1'-O4'-C4'	5.79	114.53	109.90
1	N	353	A	O4'-C1'-N9	5.79	112.83	108.20
1	N	441	A	C5'-C4'-C3'	-5.79	106.74	116.00
1	N	448	A	N3-C4-C5	-5.79	122.75	126.80
1	N	460	A	O4'-C1'-N9	5.79	112.83	108.20
1	N	286	C	N3-C4-C5	-5.79	119.58	121.90
1	N	1474	U	N1-C2-N3	5.79	118.37	114.90
1	N	160	A	N3-C4-C5	-5.79	122.75	126.80
1	N	179	A	C8-N9-C1'	-5.79	117.28	127.70
1	N	344	A	N3-C4-C5	-5.79	122.75	126.80
1	N	404	G	C4-C5-N7	5.79	113.11	110.80
1	N	527	G	C8-N9-C4	5.79	108.72	106.40
1	N	1183	U	N3-C4-O4	5.79	123.45	119.40
1	N	1390	U	C5-C4-O4	5.79	129.37	125.90
1	N	1413	A	N9-C4-C5	5.79	108.11	105.80
1	N	185	U	N3-C4-O4	5.78	123.45	119.40
1	N	211	G	N3-C4-C5	5.78	131.49	128.60
1	N	339	C	C4-C5-C6	5.78	120.29	117.40
1	N	674	G	N9-C4-C5	-5.78	103.09	105.40
1	N	721	G	N7-C8-N9	5.78	115.99	113.10
1	N	41	G	C6-N1-C2	-5.78	121.63	125.10
1	N	159	G	N3-C2-N2	5.78	123.95	119.90
1	N	579	A	C5-C6-N1	-5.78	114.81	117.70
1	N	695	A	O4'-C1'-N9	5.78	112.83	108.20
1	N	133	U	O3'-P-O5'	-5.78	93.02	104.00
1	N	204	G	C5'-C4'-C3'	5.78	125.25	116.00
1	N	303	A	C4-C5-N7	-5.78	107.81	110.70
1	N	313	A	O4'-C1'-N9	5.78	112.82	108.20
1	N	496	A	C4-C5-N7	-5.78	107.81	110.70
1	N	1085	U	N3-C4-O4	5.78	123.45	119.40
1	N	1264	U	O4'-C1'-N1	5.78	112.83	108.20
1	N	1474	U	N3-C2-O2	5.78	126.25	122.20
1	N	341	C	C2-N3-C4	5.78	122.79	119.90
1	N	869	G	OP2-P-O3'	5.78	117.91	105.20
1	N	1475	G	C5-C6-O6	-5.78	125.13	128.60
1	N	61	G	C5-C6-O6	-5.78	125.13	128.60
1	N	271	C	P-O5'-C5'	5.78	130.15	120.90
1	N	685	G	O4'-C1'-N9	5.78	112.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	877	G	C6-N1-C2	-5.78	121.63	125.10
1	N	1156	G	C6-N1-C2	5.78	128.57	125.10
1	N	1162	C	P-O3'-C3'	-5.78	112.77	119.70
1	N	1225	A	C2-N3-C4	-5.78	107.71	110.60
1	N	1300	G	C4-C5-N7	5.78	113.11	110.80
1	N	1514	G	N3-C4-C5	5.78	131.49	128.60
1	N	158	G	N9-C4-C5	5.78	107.71	105.40
1	N	239	U	N3-C4-O4	5.78	123.44	119.40
1	N	1189	U	C6-N1-C2	5.78	124.47	121.00
1	N	1121	U	N3-C4-O4	5.77	123.44	119.40
1	N	1476	A	C6-N1-C2	5.77	122.06	118.60
1	N	149	A	C4-C5-N7	5.77	113.59	110.70
1	N	406	G	C8-N9-C4	-5.77	104.09	106.40
1	N	487	A	C8-N9-C4	-5.77	103.49	105.80
1	N	936	C	N3-C4-N4	5.77	122.04	118.00
1	N	1324	A	N1-C6-N6	5.77	122.06	118.60
1	N	913	A	C5-C6-N6	-5.77	119.08	123.70
1	N	1264	U	C4'-C3'-C2'	-5.77	96.83	102.60
1	N	131	A	C4-C5-N7	-5.77	107.82	110.70
1	N	711	G	C6-C5-N7	-5.77	126.94	130.40
1	N	867	G	N7-C8-N9	5.77	115.98	113.10
1	N	901	A	O3'-P-O5'	-5.77	93.04	104.00
1	N	955	U	C2-N1-C1'	5.77	124.62	117.70
1	N	1128	C	C5-C6-N1	5.77	123.88	121.00
1	N	1143	G	C5-C6-O6	-5.77	125.14	128.60
1	N	1376	U	P-O3'-C3'	-5.77	112.78	119.70
1	N	678	U	N3-C2-O2	5.77	126.24	122.20
1	N	733	G	C5-C6-N1	-5.77	108.62	111.50
1	N	870	U	P-O3'-C3'	-5.77	112.78	119.70
1	N	1154	G	C4-C5-C6	5.77	122.26	118.80
1	N	1242	G	C6-C5-N7	-5.77	126.94	130.40
1	N	1320	C	C5-C6-N1	5.77	123.88	121.00
1	N	1434	A	C4-C5-N7	-5.77	107.82	110.70
1	N	1452	C	C2-N3-C4	5.77	122.78	119.90
1	N	119	A	C5-C6-N6	-5.76	119.09	123.70
1	N	328	C	N1-C1'-C2'	5.76	121.49	114.00
1	N	376	G	C8-N9-C4	5.76	108.71	106.40
1	N	395	C	C6-N1-C2	-5.76	118.00	120.30
1	N	454	G	O4'-C1'-N9	5.76	112.81	108.20
1	N	595	A	C4'-C3'-C2'	-5.76	96.84	102.60
1	N	1050	G	C2-N3-C4	5.76	114.78	111.90
1	N	1142	G	P-O5'-C5'	5.76	130.12	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1181	G	N1-C2-N2	5.76	121.39	116.20
1	N	1238	A	N1-C6-N6	5.76	122.06	118.60
1	N	455	G	N3-C2-N2	5.76	123.93	119.90
1	N	1143	G	C4-C5-N7	5.76	113.11	110.80
1	N	1291	U	O5'-C5'-C4'	-5.76	100.75	111.70
1	N	362	G	N3-C4-C5	-5.76	125.72	128.60
1	N	454	G	N7-C8-N9	5.76	115.98	113.10
1	N	535	A	C6-C5-N7	-5.76	128.27	132.30
1	N	699	C	N3-C4-N4	5.76	122.03	118.00
1	N	959	A	C2-N3-C4	5.76	113.48	110.60
1	N	1464	U	N3-C4-O4	5.76	123.43	119.40
1	N	161	A	C4-C5-C6	5.76	119.88	117.00
1	N	322	C	N1-C2-O2	5.76	122.36	118.90
1	N	391	G	N9-C4-C5	-5.76	103.10	105.40
1	N	617	G	C5-N7-C8	-5.76	101.42	104.30
1	N	1003	G	O4'-C1'-N9	5.76	112.81	108.20
1	N	1483	A	P-O5'-C5'	5.76	130.12	120.90
1	N	299	G	C4'-C3'-C2'	-5.76	96.84	102.60
1	N	1023	U	C6-N1-C2	-5.76	117.55	121.00
1	N	1150	A	C4-C5-N7	-5.76	107.82	110.70
1	N	134	G	N1-C2-N3	-5.76	120.45	123.90
1	N	451	A	N1-C2-N3	5.76	132.18	129.30
1	N	473	U	N3-C4-C5	-5.76	111.15	114.60
1	N	685	G	C5'-C4'-C3'	-5.75	106.79	116.00
1	N	1053	G	OP1-P-O3'	5.75	117.86	105.20
1	N	237	G	N1-C2-N3	-5.75	120.45	123.90
1	N	479	U	N3-C4-C5	-5.75	111.15	114.60
1	N	954	G	N1-C2-N2	-5.75	111.02	116.20
1	N	1067	A	C5'-C4'-O4'	5.75	116.00	109.10
1	N	1224	U	C2-N1-C1'	5.75	124.60	117.70
1	N	1287	A	C8-N9-C4	-5.75	103.50	105.80
1	N	704	A	C1'-O4'-C4'	-5.75	105.30	109.90
1	N	1000	A	N3-C4-C5	5.75	130.83	126.80
1	N	1431	A	C5-N7-C8	5.75	106.78	103.90
1	N	1469	C	C2-N3-C4	5.75	122.78	119.90
1	N	122	G	C5-C6-O6	-5.75	125.15	128.60
1	N	219	U	C2'-C3'-O3'	5.75	122.90	113.70
1	N	858	G	N1-C2-N3	-5.75	120.45	123.90
1	N	164	G	O3'-P-O5'	-5.75	93.08	104.00
1	N	1145	A	C5-C6-N1	-5.75	114.83	117.70
1	N	1315	U	C4-C5-C6	5.75	123.15	119.70
1	N	1439	G	N1-C2-N3	-5.75	120.45	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	542	G	C6-N1-C2	5.75	128.55	125.10
1	N	557	G	C6-C5-N7	-5.75	126.95	130.40
1	N	112	G	C5'-C4'-O4'	5.74	115.99	109.10
1	N	181	A	C6-N1-C2	-5.74	115.15	118.60
1	N	272	C	N1-C2-O2	-5.74	115.45	118.90
1	N	990	C	C6-N1-C2	-5.74	118.00	120.30
1	N	1255	G	C2-N3-C4	-5.74	109.03	111.90
1	N	534	U	C3'-C2'-C1'	5.74	106.09	101.50
1	N	988	G	N1-C6-O6	5.74	123.34	119.90
1	N	196	A	O3'-P-O5'	-5.74	93.09	104.00
1	N	1170	A	C5'-C4'-C3'	5.74	125.19	116.00
1	N	1208	C	N1-C2-O2	5.74	122.34	118.90
1	N	1232	U	C5-C6-N1	5.74	125.57	122.70
1	N	1247	U	C4-C5-C6	-5.74	116.26	119.70
1	N	1358	U	C4'-C3'-C2'	5.74	108.34	102.60
1	N	52	C	C4-C5-C6	-5.74	114.53	117.40
1	N	141	G	C5'-C4'-C3'	-5.74	106.82	116.00
1	N	779	C	O4'-C1'-N1	5.74	112.79	108.20
1	N	934	C	P-O5'-C5'	-5.74	111.72	120.90
1	N	1013	G	C1'-O4'-C4'	5.74	114.49	109.90
1	N	1072	G	C4-N9-C1'	-5.74	119.04	126.50
1	N	1396	A	C5'-C4'-O4'	-5.74	102.21	109.10
1	N	212	G	C5'-C4'-C3'	5.74	125.18	116.00
1	N	806	C	N3-C4-N4	5.74	122.02	118.00
1	N	817	C	N1-C2-N3	-5.74	115.18	119.20
1	N	165	G	O4'-C1'-N9	5.74	112.79	108.20
1	N	184	G	N3-C4-C5	5.74	131.47	128.60
1	N	316	C	P-O3'-C3'	-5.74	112.82	119.70
1	N	410	G	O5'-P-OP2	-5.74	100.54	105.70
1	N	623	C	N1-C2-O2	5.74	122.34	118.90
1	N	1060	U	P-O3'-C3'	-5.74	112.82	119.70
1	N	1522	U	C5-C6-N1	5.74	125.57	122.70
1	N	258	G	O4'-C1'-C2'	-5.73	100.07	105.80
1	N	26	A	O4'-C1'-N9	5.73	112.79	108.20
1	N	122	G	C6-N1-C2	-5.73	121.66	125.10
1	N	387	U	N3-C2-O2	5.73	126.21	122.20
1	N	758	C	O4'-C1'-N1	5.73	112.79	108.20
1	N	1501	C	C2-N1-C1'	-5.73	112.50	118.80
1	N	300	A	C6-C5-N7	-5.73	128.29	132.30
1	N	341	C	N1-C2-N3	-5.73	115.19	119.20
1	N	452	A	C5-C6-N6	-5.73	119.11	123.70
1	N	724	G	N3-C4-C5	-5.73	125.73	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1127	G	C2-N3-C4	-5.73	109.03	111.90
1	N	1313	U	C6-N1-C2	5.73	124.44	121.00
1	N	1438	G	C5-C6-O6	-5.73	125.16	128.60
1	N	539	A	C6-C5-N7	-5.73	128.29	132.30
1	N	1396	A	N9-C4-C5	5.73	108.09	105.80
1	N	852	G	N3-C2-N2	5.73	123.91	119.90
1	N	1048	G	C6-C5-N7	-5.73	126.96	130.40
1	N	1410	A	C5-C6-N1	-5.73	114.84	117.70
1	N	168	G	C4-C5-C6	5.73	122.24	118.80
1	N	402	G	C4-C5-N7	5.73	113.09	110.80
1	N	952	U	C5'-C4'-O4'	5.73	115.97	109.10
1	N	812	G	C6-C5-N7	-5.72	126.97	130.40
1	N	902	G	C6-C5-N7	-5.72	126.97	130.40
1	N	903	G	N3-C4-N9	-5.72	122.56	126.00
1	N	976	G	C5-N7-C8	5.72	107.16	104.30
1	N	305	G	C4-C5-N7	5.72	113.09	110.80
1	N	1218	C	O4'-C1'-N1	5.72	112.78	108.20
1	N	713	G	C8-N9-C1'	-5.72	119.56	127.00
1	N	838	G	N3-C4-N9	-5.72	122.57	126.00
1	N	986	U	N1-C1'-C2'	-5.72	105.71	112.00
1	N	148	G	O4'-C1'-N9	5.72	112.78	108.20
1	N	324	G	C5-N7-C8	5.72	107.16	104.30
1	N	1377	A	O3'-P-O5'	-5.72	93.13	104.00
1	N	1506	U	N1-C2-N3	-5.72	111.47	114.90
1	N	446	G	P-O3'-C3'	-5.72	112.84	119.70
1	N	524	G	N3-C4-N9	-5.72	122.57	126.00
1	N	1152	A	C2-N3-C4	5.72	113.46	110.60
1	N	1461	G	N3-C4-C5	5.72	131.46	128.60
1	N	19	A	N3-C4-C5	-5.72	122.80	126.80
1	N	487	A	C6-N1-C2	5.72	122.03	118.60
1	N	494	G	N3-C4-C5	-5.72	125.74	128.60
1	N	704	A	C6-C5-N7	-5.72	128.30	132.30
1	N	784	A	C4-C5-C6	5.72	119.86	117.00
1	N	1032	G	C1'-O4'-C4'	-5.72	105.33	109.90
1	N	1102	A	P-O5'-C5'	5.72	130.05	120.90
1	N	1176	A	N7-C8-N9	5.72	116.66	113.80
1	N	197	A	N1-C2-N3	5.71	132.16	129.30
1	N	996	A	C6-C5-N7	-5.71	128.30	132.30
1	N	1139	G	C8-N9-C1'	-5.71	119.57	127.00
1	N	1278	G	OP1-P-OP2	-5.71	111.03	119.60
1	N	577	G	C5'-C4'-O4'	-5.71	102.24	109.10
1	N	829	G	OP2-P-O3'	5.71	117.77	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	46	G	C2-N3-C4	5.71	114.76	111.90
1	N	750	C	C4-C5-C6	-5.71	114.54	117.40
1	N	1046	A	C4-C5-C6	5.71	119.86	117.00
1	N	1298	U	N3-C2-O2	-5.71	118.20	122.20
1	N	1307	U	O4'-C1'-N1	5.71	112.77	108.20
1	N	1355	G	P-O5'-C5'	5.71	130.04	120.90
1	N	142	G	C4-N9-C1'	5.71	133.92	126.50
1	N	165	G	N1-C6-O6	5.71	123.33	119.90
1	N	180	U	N3-C4-C5	-5.71	111.17	114.60
1	N	382	A	C6-N1-C2	-5.71	115.17	118.60
1	N	616	G	N3-C2-N2	5.71	123.90	119.90
1	N	707	U	N3-C4-C5	5.71	118.03	114.60
1	N	719	C	C3'-C2'-C1'	-5.71	96.93	101.50
1	N	785	G	C5-C6-N1	-5.71	108.64	111.50
1	N	1169	A	N3-C4-N9	5.71	131.97	127.40
1	N	347	G	N1-C2-N3	-5.71	120.48	123.90
1	N	479	U	O4'-C1'-N1	5.71	112.77	108.20
1	N	494	G	C5-C6-O6	-5.71	125.18	128.60
1	N	834	U	O4'-C1'-N1	5.71	112.77	108.20
1	N	889	A	C5-C6-N1	-5.71	114.85	117.70
1	N	1096	C	O4'-C1'-N1	5.71	112.77	108.20
1	N	1266	G	N9-C4-C5	5.71	107.68	105.40
1	N	120	A	OP1-P-OP2	-5.71	111.04	119.60
1	N	728	A	C5-N7-C8	5.71	106.75	103.90
1	N	1253	G	N3-C4-N9	5.71	129.42	126.00
1	N	298	A	C6-C5-N7	-5.70	128.31	132.30
1	N	408	A	C8-N9-C4	-5.70	103.52	105.80
1	N	776	G	C5-C6-N1	-5.70	108.65	111.50
1	N	1085	U	C5'-C4'-O4'	-5.70	102.25	109.10
1	N	1256	A	C8-N9-C4	-5.70	103.52	105.80
1	N	837	U	C3'-C2'-C1'	-5.70	96.94	101.50
1	N	1011	C	O4'-C1'-N1	5.70	112.76	108.20
1	N	1110	A	N1-C2-N3	5.70	132.15	129.30
1	N	18	C	N3-C4-N4	5.70	121.99	118.00
1	N	775	G	N1-C6-O6	5.70	123.32	119.90
1	N	1014	A	N7-C8-N9	5.70	116.65	113.80
1	N	198	G	N3-C4-C5	5.70	131.45	128.60
1	N	464	U	P-O3'-C3'	5.70	126.54	119.70
1	N	674	G	C5-N7-C8	-5.70	101.45	104.30
1	N	1508	A	C4-C5-N7	-5.70	107.85	110.70
1	N	11	G	C4-C5-N7	-5.70	108.52	110.80
1	N	799	G	C4-C5-C6	5.70	122.22	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1101	A	C8-N9-C1'	-5.69	117.45	127.70
1	N	1249	C	C5-C4-N4	-5.69	116.21	120.20
1	N	55	A	C5-C6-N6	-5.69	119.15	123.70
1	N	343	U	O5'-C5'-C4'	-5.69	100.88	111.70
1	N	456	A	C5'-C4'-C3'	-5.69	106.89	116.00
1	N	696	A	C5-N7-C8	5.69	106.75	103.90
1	N	817	C	N3-C2-O2	5.69	125.89	121.90
1	N	1182	G	C8-N9-C4	-5.69	104.12	106.40
1	N	1262	C	C2-N3-C4	-5.69	117.05	119.90
1	N	1294	G	C6-N1-C2	5.69	128.52	125.10
1	N	1441	A	N9-C4-C5	5.69	108.08	105.80
1	N	232	G	N1-C2-N3	-5.69	120.49	123.90
1	N	376	G	N3-C2-N2	5.69	123.88	119.90
1	N	522	C	C4-C5-C6	-5.69	114.56	117.40
1	N	833	G	N3-C2-N2	5.69	123.88	119.90
1	N	1040	U	C5'-C4'-C3'	5.69	125.11	116.00
1	N	1477	U	C5'-C4'-O4'	5.69	115.93	109.10
1	N	309	A	C5-C6-N6	-5.69	119.15	123.70
1	N	1025	U	P-O5'-C5'	5.69	130.00	120.90
1	N	319	G	C5'-C4'-O4'	5.69	115.93	109.10
1	N	623	C	C4-C5-C6	-5.69	114.56	117.40
1	N	626	G	C4-N9-C1'	-5.69	119.11	126.50
1	N	645	G	N1-C2-N3	-5.69	120.49	123.90
1	N	671	G	C4-N9-C1'	5.69	133.89	126.50
1	N	803	G	O4'-C1'-C2'	-5.69	100.11	105.80
1	N	971	G	O4'-C1'-N9	5.69	112.75	108.20
1	N	1138	G	O4'-C1'-N9	5.69	112.75	108.20
1	N	1521	C	C5-C4-N4	-5.69	116.22	120.20
1	N	158	G	N3-C2-N2	-5.69	115.92	119.90
1	N	260	G	O4'-C1'-N9	5.69	112.75	108.20
1	N	429	U	N3-C2-O2	-5.69	118.22	122.20
1	N	584	G	C8-N9-C1'	-5.69	119.61	127.00
1	N	752	G	N3-C4-N9	5.69	129.41	126.00
1	N	6	G	N1-C2-N3	-5.68	120.49	123.90
1	N	106	C	P-O3'-C3'	5.68	126.52	119.70
1	N	524	G	N3-C4-C5	5.68	131.44	128.60
1	N	999	C	C4'-C3'-C2'	-5.68	96.92	102.60
1	N	1199	U	C6-N1-C2	-5.68	117.59	121.00
1	N	1414	U	C5'-C4'-C3'	5.68	125.10	116.00
1	N	490	C	N3-C4-N4	5.68	121.98	118.00
1	N	1292	G	N1-C2-N2	5.68	121.31	116.20
1	N	177	G	C4-C5-N7	-5.68	108.53	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	209	U	C2-N3-C4	5.68	130.41	127.00
1	N	731	G	C4-C5-C6	5.68	122.21	118.80
1	N	280	C	C6-N1-C2	-5.68	118.03	120.30
1	N	1085	U	C3'-C2'-C1'	5.68	106.04	101.50
1	N	1089	G	P-O5'-C5'	-5.68	111.81	120.90
1	N	1103	C	O4'-C1'-N1	5.68	112.74	108.20
1	N	1204	A	C5-C6-N1	-5.68	114.86	117.70
1	N	1290	G	C6-C5-N7	-5.68	126.99	130.40
1	N	1457	G	P-O3'-C3'	5.68	126.51	119.70
1	N	247	G	C4-N9-C1'	-5.68	119.12	126.50
1	N	281	G	C6-C5-N7	-5.68	126.99	130.40
1	N	614	C	C2-N3-C4	5.68	122.74	119.90
1	N	811	C	C2-N1-C1'	5.68	125.05	118.80
1	N	827	U	N3-C4-O4	5.68	123.37	119.40
1	N	1139	G	C2-N3-C4	-5.68	109.06	111.90
1	N	245	U	N1-C2-O2	-5.67	118.83	122.80
1	N	277	C	P-O3'-C3'	5.67	126.51	119.70
1	N	296	U	C6-N1-C1'	-5.67	113.26	121.20
1	N	1039	G	N1-C2-N3	-5.67	120.50	123.90
1	N	1325	C	N1-C1'-C2'	-5.67	105.76	112.00
1	N	1523	G	N7-C8-N9	-5.67	110.26	113.10
1	N	3	A	O4'-C1'-N9	5.67	112.74	108.20
1	N	1044	A	O4'-C1'-N9	5.67	112.74	108.20
1	N	799	G	N9-C4-C5	-5.67	103.13	105.40
1	N	163	C	N1-C2-O2	-5.67	115.50	118.90
1	N	338	A	N7-C8-N9	-5.67	110.97	113.80
1	N	479	U	P-O3'-C3'	-5.67	112.90	119.70
1	N	579	A	P-O3'-C3'	-5.67	112.90	119.70
1	N	645	G	C8-N9-C1'	5.67	134.37	127.00
1	N	1313	U	O5'-C5'-C4'	-5.67	100.93	111.70
1	N	462	G	N9-C4-C5	-5.67	103.13	105.40
1	N	750	C	P-O5'-C5'	5.67	129.97	120.90
1	N	951	G	C2-N3-C4	5.67	114.73	111.90
1	N	1257	A	C1'-O4'-C4'	5.67	114.44	109.90
1	N	1398	A	P-O3'-C3'	-5.67	112.90	119.70
1	N	1486	G	C5-C6-O6	-5.67	125.20	128.60
1	N	26	A	N3-C4-C5	-5.67	122.83	126.80
1	N	665	A	N1-C2-N3	5.67	132.13	129.30
1	N	682	G	C5-N7-C8	5.67	107.13	104.30
1	N	1297	G	C2-N3-C4	5.67	114.73	111.90
1	N	1357	A	N9-C4-C5	-5.67	103.53	105.80
1	N	766	A	O3'-P-O5'	-5.67	93.24	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	108	G	C8-N9-C1'	-5.66	119.64	127.00
1	N	411	A	C4'-C3'-C2'	5.66	108.26	102.60
1	N	616	G	C8-N9-C4	-5.66	104.14	106.40
1	N	958	A	C6-C5-N7	-5.66	128.34	132.30
1	N	1329	A	N7-C8-N9	-5.66	110.97	113.80
1	N	1377	A	C6-N1-C2	-5.66	115.20	118.60
1	N	852	G	C5'-C4'-O4'	5.66	115.89	109.10
1	N	920	U	P-O5'-C5'	5.66	129.96	120.90
1	N	1014	A	C6-C5-N7	-5.66	128.34	132.30
1	N	537	G	O4'-C4'-C3'	-5.66	98.34	104.00
1	N	1046	A	O3'-P-O5'	5.66	114.75	104.00
1	N	76	G	C5-N7-C8	-5.66	101.47	104.30
1	N	389	A	O4'-C1'-N9	5.66	112.73	108.20
1	N	624	C	O5'-P-OP1	-5.66	100.61	105.70
1	N	728	A	C8-N9-C4	-5.66	103.54	105.80
1	N	1337	G	N3-C4-C5	-5.66	125.77	128.60
1	N	1395	C	C4'-C3'-C2'	-5.66	96.94	102.60
1	N	870	U	O4'-C1'-N1	5.66	112.73	108.20
1	N	945	G	C4'-C3'-C2'	-5.66	96.94	102.60
1	N	95	C	N3-C4-C5	-5.66	119.64	121.90
1	N	410	G	N1-C2-N3	-5.66	120.51	123.90
1	N	788	U	P-O3'-C3'	-5.66	112.91	119.70
1	N	1029	U	C5-C6-N1	-5.66	119.87	122.70
1	N	1337	G	O4'-C4'-C3'	-5.66	98.34	104.00
1	N	360	G	C5'-C4'-C3'	-5.65	106.95	116.00
1	N	1220	G	N9-C4-C5	-5.65	103.14	105.40
1	N	1498	U	C5'-C4'-O4'	5.65	115.88	109.10
1	N	199	A	P-O5'-C5'	5.65	129.94	120.90
1	N	685	G	C3'-C2'-C1'	-5.65	96.98	101.50
1	N	703	G	N7-C8-N9	-5.65	110.27	113.10
1	N	712	A	N9-C4-C5	5.65	108.06	105.80
1	N	772	U	C2'-C3'-O3'	5.65	122.74	113.70
1	N	1408	A	C5'-C4'-O4'	5.65	115.88	109.10
1	N	8	A	P-O3'-C3'	-5.65	112.92	119.70
1	N	810	C	C6-N1-C1'	-5.65	114.02	120.80
1	N	909	A	P-O5'-C5'	5.65	129.94	120.90
1	N	1019	A	C6-C5-N7	-5.65	128.34	132.30
1	N	1436	U	C5'-C4'-C3'	5.65	125.04	116.00
1	N	85	U	C4-C5-C6	-5.65	116.31	119.70
1	N	468	A	C1'-O4'-C4'	5.65	114.42	109.90
1	N	516	U	C5-C6-N1	-5.65	119.88	122.70
1	N	917	G	C4-N9-C1'	5.65	133.84	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	109	A	O5'-P-OP1	-5.65	100.62	105.70
1	N	698	G	N3-C4-N9	5.65	129.39	126.00
1	N	723	U	C5'-C4'-O4'	5.65	115.88	109.10
1	N	1181	G	C2-N3-C4	-5.65	109.08	111.90
1	N	1238	A	C4-C5-C6	5.65	119.82	117.00
1	N	1270	G	N3-C2-N2	5.65	123.85	119.90
1	N	1335	U	N1-C2-N3	5.65	118.29	114.90
1	N	1182	G	C5-C6-N1	-5.64	108.68	111.50
1	N	294	U	O3'-P-O5'	-5.64	93.28	104.00
1	N	488	C	C6-N1-C2	-5.64	118.04	120.30
1	N	964	A	O4'-C1'-N9	5.64	112.71	108.20
1	N	1135	U	N3-C4-O4	5.64	123.35	119.40
1	N	1186	G	N3-C4-N9	5.64	129.38	126.00
1	N	858	G	C4'-C3'-C2'	-5.64	96.96	102.60
1	N	147	G	C6-C5-N7	-5.64	127.02	130.40
1	N	233	C	C4'-C3'-C2'	-5.64	96.96	102.60
1	N	258	G	C6-N1-C2	5.64	128.48	125.10
1	N	471	U	O4'-C1'-N1	5.64	112.71	108.20
1	N	592	G	C5'-C4'-O4'	5.64	115.87	109.10
1	N	784	A	C8-N9-C4	-5.64	103.54	105.80
1	N	893	C	C1'-O4'-C4'	5.64	114.41	109.90
1	N	1274	A	C5-N7-C8	5.64	106.72	103.90
1	N	23	C	C3'-C2'-C1'	-5.64	96.99	101.50
1	N	253	A	C8-N9-C4	-5.64	103.55	105.80
1	N	472	U	O4'-C4'-C3'	5.64	110.61	106.10
1	N	760	G	P-O3'-C3'	-5.64	112.93	119.70
1	N	1236	A	C2-N3-C4	5.64	113.42	110.60
1	N	1482	G	N1-C2-N2	-5.64	111.13	116.20
1	N	372	C	N3-C4-N4	5.64	121.94	118.00
1	N	373	A	C5-C6-N6	-5.64	119.19	123.70
1	N	146	G	C5-C6-N1	-5.63	108.68	111.50
1	N	159	G	C4-C5-C6	5.63	122.18	118.80
1	N	440	C	O4'-C1'-N1	5.63	112.71	108.20
1	N	458	U	N3-C4-O4	5.63	123.34	119.40
1	N	676	A	O4'-C1'-N9	5.63	112.71	108.20
1	N	1147	C	N1-C1'-C2'	5.63	121.33	114.00
1	N	28	A	O4'-C1'-N9	5.63	112.71	108.20
1	N	404	G	C6-C5-N7	-5.63	127.02	130.40
1	N	690	G	N3-C2-N2	5.63	123.84	119.90
1	N	1253	G	C1'-O4'-C4'	-5.63	105.39	109.90
1	N	1290	G	N9-C4-C5	-5.63	103.15	105.40
1	N	36	C	C4'-C3'-C2'	-5.63	96.97	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	57	G	C4-C5-N7	5.63	113.05	110.80
1	N	240	G	N3-C4-C5	-5.63	125.78	128.60
1	N	472	U	C3'-C2'-C1'	5.63	106.01	101.50
1	N	718	A	C5-N7-C8	-5.63	101.08	103.90
1	N	972	C	C5-C4-N4	-5.63	116.26	120.20
1	N	975	A	C4-C5-C6	5.63	119.82	117.00
1	N	426	U	P-O5'-C5'	5.63	129.91	120.90
1	N	1485	U	O5'-C5'-C4'	-5.63	101.00	111.70
1	N	1500	A	O4'-C1'-C2'	-5.63	100.17	105.80
1	N	2	A	N1-C6-N6	5.63	121.98	118.60
1	N	205	A	N1-C2-N3	-5.63	126.49	129.30
1	N	1401	G	C5-C6-O6	-5.63	125.22	128.60
1	N	101	A	C2-N3-C4	-5.63	107.79	110.60
1	N	666	G	P-O5'-C5'	-5.63	111.90	120.90
1	N	939	G	N1-C2-N3	-5.63	120.52	123.90
1	N	288	A	C5-C6-N1	-5.62	114.89	117.70
1	N	1303	C	C5-C6-N1	-5.62	118.19	121.00
1	N	1525	G	C6-C5-N7	-5.62	127.03	130.40
1	N	70	U	C3'-C2'-C1'	5.62	106.00	101.50
1	N	266	G	N3-C4-C5	-5.62	125.79	128.60
1	N	338	A	P-O3'-C3'	-5.62	112.95	119.70
1	N	905	U	C4-C5-C6	-5.62	116.33	119.70
1	N	1129	C	C4-C5-C6	-5.62	114.59	117.40
1	N	1201	A	C2'-C3'-O3'	5.62	122.70	113.70
1	N	1295	U	C6-N1-C2	-5.62	117.63	121.00
1	N	506	G	C5-C6-N1	5.62	114.31	111.50
1	N	664	G	N3-C4-C5	-5.62	125.79	128.60
1	N	807	A	C6-N1-C2	5.62	121.97	118.60
1	N	1431	A	C5-C6-N1	-5.62	114.89	117.70
1	N	1524	C	C2-N3-C4	5.62	122.71	119.90
1	N	102	G	O4'-C1'-N9	5.62	112.70	108.20
1	N	174	A	C4-C5-C6	5.62	119.81	117.00
1	N	425	G	C2-N3-C4	5.62	114.71	111.90
1	N	544	G	C5-N7-C8	-5.62	101.49	104.30
1	N	910	C	N3-C4-N4	5.62	121.93	118.00
1	N	1002	G	N9-C4-C5	-5.62	103.15	105.40
1	N	1265	C	P-O3'-C3'	-5.62	112.96	119.70
1	N	1355	G	C8-N9-C4	-5.62	104.15	106.40
1	N	222	C	C5-C4-N4	-5.62	116.27	120.20
1	N	266	G	N9-C4-C5	5.62	107.65	105.40
1	N	590	U	C3'-C2'-C1'	-5.62	97.01	101.50
1	N	1113	C	C6-N1-C2	-5.62	118.05	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1248	A	O4'-C1'-N9	5.62	112.69	108.20
1	N	1459	G	C6-N1-C2	5.62	128.47	125.10
1	N	469	C	P-O5'-C5'	-5.61	111.92	120.90
1	N	925	G	O3'-P-O5'	-5.61	93.34	104.00
1	N	1192	C	O4'-C1'-N1	5.61	112.69	108.20
1	N	255	G	C6-N1-C2	5.61	128.47	125.10
1	N	433	G	C4'-C3'-C2'	-5.61	96.99	102.60
1	N	580	C	O4'-C1'-N1	5.61	112.69	108.20
1	N	772	U	C4'-C3'-C2'	-5.61	96.99	102.60
1	N	775	G	O4'-C1'-C2'	-5.61	100.19	105.80
1	N	827	U	N1-C2-N3	5.61	118.27	114.90
1	N	978	A	C5-C6-N6	-5.61	119.21	123.70
1	N	1036	A	O4'-C1'-N9	5.61	112.69	108.20
1	N	1283	U	P-O3'-C3'	-5.61	112.97	119.70
1	N	688	G	C5-N7-C8	-5.61	101.50	104.30
1	N	169	C	P-O3'-C3'	-5.61	112.97	119.70
1	N	788	U	O4'-C1'-N1	5.61	112.69	108.20
1	N	883	C	C4'-C3'-C2'	-5.61	96.99	102.60
1	N	992	U	C1'-O4'-C4'	-5.61	105.41	109.90
1	N	2	A	C5-C6-N1	-5.61	114.90	117.70
1	N	197	A	P-O5'-C5'	5.61	129.87	120.90
1	N	421	U	O4'-C1'-C2'	-5.61	100.19	105.80
1	N	439	U	O4'-C4'-C3'	-5.61	98.39	104.00
1	N	1322	C	C6-N1-C2	5.61	122.54	120.30
1	N	578	C	C5'-C4'-C3'	5.60	124.97	116.00
1	N	993	G	N3-C4-C5	-5.60	125.80	128.60
1	N	177	G	C3'-C2'-C1'	-5.60	97.02	101.50
1	N	253	A	C4'-C3'-C2'	-5.60	97.00	102.60
1	N	849	G	O4'-C1'-N9	5.60	112.68	108.20
1	N	1151	A	C3'-C2'-C1'	5.60	105.98	101.50
1	N	1272	G	N1-C6-O6	5.60	123.26	119.90
1	N	1339	A	C8-N9-C4	-5.60	103.56	105.80
1	N	1431	A	O4'-C1'-N9	5.60	112.68	108.20
1	N	119	A	O5'-P-OP2	-5.60	100.66	105.70
1	N	953	G	C1'-O4'-C4'	5.60	114.38	109.90
1	N	1043	G	C6-C5-N7	-5.60	127.04	130.40
1	N	1058	G	C5-C6-N1	-5.60	108.70	111.50
1	N	1269	A	C5-N7-C8	5.60	106.70	103.90
1	N	1526	G	C6-C5-N7	-5.60	127.04	130.40
1	N	111	G	N1-C6-O6	5.60	123.26	119.90
1	N	166	U	P-O5'-C5'	5.60	129.86	120.90
1	N	207	C	O4'-C1'-N1	5.60	112.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	283	U	N3-C4-O4	5.60	123.32	119.40
1	N	247	G	OP1-P-OP2	-5.60	111.20	119.60
1	N	1133	G	C6-C5-N7	-5.60	127.04	130.40
1	N	1239	A	C4-N9-C1'	-5.60	116.22	126.30
1	N	119	A	C5-C6-N1	-5.60	114.90	117.70
1	N	737	C	C4'-C3'-C2'	-5.60	97.00	102.60
1	N	895	G	C6-C5-N7	-5.60	127.04	130.40
1	N	93	U	O3'-P-O5'	5.59	114.63	104.00
1	N	1202	U	C4-C5-C6	5.59	123.06	119.70
1	N	1282	C	C3'-C2'-C1'	5.59	105.98	101.50
1	N	1351	U	N3-C4-O4	5.59	123.32	119.40
1	N	16	A	C5-C6-N1	-5.59	114.91	117.70
1	N	192	A	C6-N1-C2	-5.59	115.25	118.60
1	N	240	G	N9-C4-C5	5.59	107.64	105.40
1	N	293	G	C6-N1-C2	5.59	128.46	125.10
1	N	627	G	N1-C2-N3	-5.59	120.55	123.90
1	N	681	A	C1'-O4'-C4'	-5.59	105.43	109.90
1	N	1014	A	N3-C4-C5	-5.59	122.89	126.80
1	N	1305	G	N3-C4-C5	-5.59	125.81	128.60
1	N	1477	U	C6-N1-C2	-5.59	117.64	121.00
1	N	1504	G	N1-C2-N3	-5.59	120.55	123.90
1	N	82	G	C5-C6-O6	-5.59	125.25	128.60
1	N	438	U	N1-C2-O2	-5.59	118.89	122.80
1	N	731	G	C6-C5-N7	-5.59	127.05	130.40
1	N	1117	A	O3'-P-O5'	-5.59	93.38	104.00
1	N	1253	G	C2-N3-C4	5.59	114.69	111.90
1	N	1417	G	C5-C6-O6	-5.59	125.25	128.60
1	N	738	C	N1-C2-O2	-5.59	115.55	118.90
1	N	1029	U	N1-C2-O2	-5.59	118.89	122.80
1	N	1336	C	C3'-C2'-C1'	-5.59	97.03	101.50
1	N	39	G	C6-C5-N7	-5.59	127.05	130.40
1	N	887	G	C5'-C4'-C3'	-5.59	107.06	116.00
1	N	1030	U	C5'-C4'-C3'	5.59	124.94	116.00
1	N	1232	U	N1-C2-N3	-5.59	111.55	114.90
1	N	1434	A	C6-C5-N7	-5.59	128.39	132.30
1	N	223	A	OP1-P-O3'	5.58	117.49	105.20
1	N	821	G	P-O3'-C3'	-5.58	113.00	119.70
1	N	36	C	P-O3'-C3'	-5.58	113.00	119.70
1	N	73	C	C4-C5-C6	-5.58	114.61	117.40
1	N	139	A	C4-C5-C6	5.58	119.79	117.00
1	N	989	U	C6-N1-C1'	-5.58	113.38	121.20
1	N	1223	C	N3-C4-C5	-5.58	119.67	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1381	U	O4'-C1'-N1	5.58	112.67	108.20
1	N	63	C	O4'-C1'-N1	5.58	112.67	108.20
1	N	438	U	C5-C4-O4	5.58	129.25	125.90
1	N	499	A	C2'-C3'-O3'	5.58	122.63	113.70
1	N	571	U	C2-N3-C4	-5.58	123.65	127.00
1	N	602	A	O3'-P-O5'	-5.58	93.40	104.00
1	N	947	G	C6-N1-C2	-5.58	121.75	125.10
1	N	1349	A	N9-C4-C5	5.58	108.03	105.80
1	N	1465	A	O4'-C1'-N9	5.58	112.67	108.20
1	N	1432	G	N3-C4-N9	-5.58	122.65	126.00
1	N	990	C	N3-C4-C5	-5.58	119.67	121.90
1	N	1134	G	P-O3'-C3'	5.58	126.39	119.70
1	N	1240	U	N3-C4-O4	5.58	123.30	119.40
1	N	167	A	C6-C5-N7	-5.58	128.40	132.30
1	N	252	U	O3'-P-O5'	-5.58	93.40	104.00
1	N	628	G	N3-C4-C5	5.58	131.39	128.60
1	N	655	A	C5-C6-N1	-5.58	114.91	117.70
1	N	929	G	C4-C5-C6	5.58	122.15	118.80
1	N	1045	C	P-O5'-C5'	5.58	129.82	120.90
1	N	194	C	C2-N1-C1'	-5.58	112.67	118.80
1	N	405	U	O4'-C1'-N1	5.58	112.66	108.20
1	N	743	A	OP1-P-OP2	-5.58	111.24	119.60
1	N	1097	C	P-O3'-C3'	-5.58	113.01	119.70
1	N	1491	G	C5-C6-N1	-5.58	108.71	111.50
1	N	371	A	O4'-C1'-N9	5.57	112.66	108.20
1	N	1464	U	N1-C2-N3	-5.57	111.56	114.90
1	N	708	C	C4-C5-C6	-5.57	114.61	117.40
1	N	1125	U	C4'-C3'-C2'	-5.57	97.03	102.60
1	N	137	U	O4'-C1'-N1	5.57	112.66	108.20
1	N	650	G	C6-N1-C2	5.57	128.44	125.10
1	N	986	U	C5-C4-O4	5.57	129.24	125.90
1	N	1317	C	N3-C4-C5	5.57	124.13	121.90
1	N	1443	C	C2-N3-C4	5.57	122.69	119.90
1	N	1519	A	C4-C5-C6	5.57	119.79	117.00
1	N	274	A	C4-N9-C1'	-5.57	116.28	126.30
1	N	1376	U	C5-C6-N1	5.57	125.48	122.70
1	N	1502	A	N9-C4-C5	-5.57	103.57	105.80
1	N	164	G	C6-N1-C2	5.57	128.44	125.10
1	N	472	U	OP2-P-O3'	5.57	117.45	105.20
1	N	954	G	C4-C5-N7	-5.57	108.57	110.80
1	N	69	G	N1-C2-N3	-5.57	120.56	123.90
1	N	203	G	O4'-C4'-C3'	-5.57	98.44	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	569	C	N3-C4-N4	5.57	121.90	118.00
1	N	782	A	N1-C2-N3	-5.57	126.52	129.30
1	N	966	G	C5'-C4'-O4'	5.57	115.78	109.10
1	N	987	G	N1-C2-N3	-5.57	120.56	123.90
1	N	1043	G	O5'-C5'-C4'	-5.57	101.12	111.70
1	N	1155	A	C3'-C2'-C1'	5.57	105.95	101.50
1	N	1420	U	N3-C4-O4	5.57	123.30	119.40
1	N	995	C	N3-C4-C5	-5.56	119.67	121.90
1	N	1472	U	C5-C4-O4	-5.56	122.56	125.90
1	N	1511	G	C6-N1-C2	-5.56	121.76	125.10
1	N	53	A	C5-N7-C8	-5.56	101.12	103.90
1	N	115	G	N1-C2-N3	-5.56	120.56	123.90
1	N	253	A	O4'-C1'-N9	5.56	112.65	108.20
1	N	646	G	P-O3'-C3'	-5.56	113.03	119.70
1	N	811	C	C6-N1-C1'	-5.56	114.13	120.80
1	N	1347	G	P-O3'-C3'	5.56	126.38	119.70
1	N	185	U	C5'-C4'-C3'	-5.56	107.10	116.00
1	N	295	C	P-O5'-C5'	5.56	129.80	120.90
1	N	627	G	C2-N3-C4	5.56	114.68	111.90
1	N	449	G	OP2-P-O3'	5.56	117.43	105.20
1	N	720	C	C5-C6-N1	5.56	123.78	121.00
1	N	177	G	C4-N9-C1'	5.56	133.72	126.50
1	N	728	A	N9-C4-C5	5.56	108.02	105.80
1	N	892	A	C8-N9-C4	-5.56	103.58	105.80
1	N	1350	A	N1-C2-N3	-5.56	126.52	129.30
1	N	1384	C	P-O5'-C5'	5.56	129.79	120.90
1	N	319	G	N7-C8-N9	5.56	115.88	113.10
1	N	358	U	O4'-C1'-N1	5.56	112.64	108.20
1	N	611	C	OP1-P-OP2	-5.56	111.27	119.60
1	N	1043	G	C4-C5-N7	5.56	113.02	110.80
1	N	1499	A	N3-C4-C5	-5.56	122.91	126.80
1	N	53	A	C4-C5-N7	5.55	113.48	110.70
1	N	81	A	P-O5'-C5'	5.55	129.79	120.90
1	N	200	G	C4-C5-N7	-5.55	108.58	110.80
1	N	493	A	C8-N9-C4	-5.55	103.58	105.80
1	N	687	A	C3'-C2'-C1'	-5.55	97.06	101.50
1	N	1027	C	OP1-P-OP2	-5.55	111.27	119.60
1	N	1049	U	N3-C2-O2	-5.55	118.31	122.20
1	N	1054	C	C6-N1-C2	-5.55	118.08	120.30
1	N	126	G	C4'-C3'-C2'	-5.55	97.05	102.60
1	N	299	G	N1-C2-N2	-5.55	111.20	116.20
1	N	309	A	P-O3'-C3'	-5.55	113.04	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	334	C	N1-C2-O2	-5.55	115.57	118.90
1	N	457	G	C2-N3-C4	-5.55	109.12	111.90
1	N	723	U	C1'-O4'-C4'	-5.55	105.46	109.90
1	N	725	G	C5-C6-O6	-5.55	125.27	128.60
1	N	1061	G	N1-C2-N3	-5.55	120.57	123.90
1	N	1129	C	C2-N1-C1'	5.55	124.91	118.80
1	N	1185	G	N1-C6-O6	5.55	123.23	119.90
1	N	465	A	N1-C2-N3	-5.55	126.53	129.30
1	N	621	A	P-O3'-C3'	-5.55	113.04	119.70
1	N	1099	G	C6-N1-C2	5.55	128.43	125.10
1	N	135	C	C2-N1-C1'	5.55	124.90	118.80
1	N	874	G	N1-C6-O6	5.55	123.23	119.90
1	N	605	U	C4'-C3'-C2'	-5.55	97.05	102.60
1	N	1132	C	C5-C4-N4	5.55	124.08	120.20
1	N	1526	G	C2-N3-C4	-5.55	109.13	111.90
1	N	49	U	O5'-C5'-C4'	5.54	122.23	111.70
1	N	799	G	N3-C2-N2	5.54	123.78	119.90
1	N	212	G	N3-C4-C5	-5.54	125.83	128.60
1	N	320	A	C3'-C2'-C1'	5.54	105.94	101.50
1	N	735	C	C6-N1-C2	5.54	122.52	120.30
1	N	758	C	C4'-C3'-C2'	-5.54	97.06	102.60
1	N	1113	C	N3-C4-N4	5.54	121.88	118.00
1	N	1408	A	N1-C2-N3	-5.54	126.53	129.30
1	N	77	A	N7-C8-N9	-5.54	111.03	113.80
1	N	165	G	C5-C6-N1	-5.54	108.73	111.50
1	N	167	A	C4-C5-C6	5.54	119.77	117.00
1	N	190	A	N1-C2-N3	5.54	132.07	129.30
1	N	248	C	C5-C4-N4	-5.54	116.32	120.20
1	N	513	C	C2-N3-C4	5.54	122.67	119.90
1	N	1274	A	C4-C5-N7	-5.54	107.93	110.70
1	N	1452	C	C2-N1-C1'	5.54	124.90	118.80
1	N	370	C	C6-N1-C1'	-5.54	114.15	120.80
1	N	568	G	P-O5'-C5'	-5.54	112.03	120.90
1	N	193	C	C2-N3-C4	-5.54	117.13	119.90
1	N	351	G	C4-N9-C1'	5.54	133.70	126.50
1	N	878	A	C5-C6-N6	-5.54	119.27	123.70
1	N	1113	C	C5-C6-N1	5.54	123.77	121.00
1	N	1181	G	C5-N7-C8	5.54	107.07	104.30
1	N	1305	G	O4'-C1'-N9	5.54	112.63	108.20
1	N	1510	C	C2-N3-C4	5.54	122.67	119.90
1	N	350	G	N1-C2-N3	-5.54	120.58	123.90
1	N	741	G	N3-C2-N2	5.54	123.78	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	50	A	C5-C6-N6	-5.54	119.27	123.70
1	N	78	A	N3-C4-N9	5.54	131.83	127.40
1	N	152	A	P-O5'-C5'	5.54	129.76	120.90
1	N	396	C	C6-N1-C2	-5.54	118.09	120.30
1	N	569	C	O4'-C1'-N1	5.54	112.63	108.20
1	N	692	U	N1-C2-N3	5.54	118.22	114.90
1	N	847	G	N1-C2-N3	-5.54	120.58	123.90
1	N	926	G	C3'-C2'-C1'	-5.54	97.07	101.50
1	N	1149	C	N3-C2-O2	-5.54	118.03	121.90
1	N	1217	C	C6-N1-C2	-5.54	118.08	120.30
1	N	1392	G	C1'-O4'-C4'	5.54	114.33	109.90
1	N	1423	G	N3-C4-C5	5.54	131.37	128.60
1	N	1483	A	C6-C5-N7	-5.54	128.43	132.30
1	N	127	G	O4'-C4'-C3'	-5.53	98.47	104.00
1	N	284	C	O5'-C5'-C4'	-5.53	101.19	111.70
1	N	498	A	O4'-C4'-C3'	-5.53	98.47	104.00
1	N	607	A	P-O5'-C5'	5.53	129.75	120.90
1	N	692	U	P-O3'-C3'	5.53	126.34	119.70
1	N	921	U	C5-C4-O4	-5.53	122.58	125.90
1	N	1111	A	C8-N9-C4	5.53	108.01	105.80
1	N	178	C	C4-C5-C6	-5.53	114.63	117.40
1	N	992	U	O4'-C1'-N1	5.53	112.63	108.20
1	N	1102	A	C6-C5-N7	-5.53	128.43	132.30
1	N	356	A	C5-C6-N1	-5.53	114.93	117.70
1	N	663	A	O4'-C1'-N9	5.53	112.62	108.20
1	N	897	C	C5-C4-N4	-5.53	116.33	120.20
1	N	906	A	C4-C5-C6	5.53	119.77	117.00
1	N	1241	G	N9-C4-C5	-5.53	103.19	105.40
1	N	1279	G	C8-N9-C1'	-5.53	119.81	127.00
1	N	1392	G	N3-C4-C5	5.53	131.37	128.60
1	N	108	G	C4-C5-C6	5.53	122.12	118.80
1	N	533	A	C5'-C4'-O4'	5.53	115.73	109.10
1	N	23	C	C4-C5-C6	5.53	120.16	117.40
1	N	56	U	C3'-C2'-C1'	-5.53	97.08	101.50
1	N	533	A	C5'-C4'-C3'	-5.53	107.16	116.00
1	N	724	G	C5-C6-N1	5.53	114.26	111.50
1	N	1509	C	C5-C4-N4	-5.53	116.33	120.20
1	N	275	G	C5-C6-N1	-5.53	108.74	111.50
1	N	1152	A	C5'-C4'-C3'	-5.53	107.16	116.00
1	N	1209	C	C5-C4-N4	-5.53	116.33	120.20
1	N	1390	U	O4'-C1'-C2'	-5.53	100.27	105.80
1	N	1481	U	C1'-O4'-C4'	5.53	114.32	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1419	G	C6-N1-C2	5.52	128.41	125.10
1	N	423	G	N7-C8-N9	5.52	115.86	113.10
1	N	815	A	P-O5'-C5'	-5.52	112.06	120.90
1	N	830	G	O4'-C1'-N9	5.52	112.62	108.20
1	N	1109	C	C2-N1-C1'	5.52	124.88	118.80
1	N	1111	A	C6-C5-N7	-5.52	128.43	132.30
1	N	162	A	N1-C2-N3	5.52	132.06	129.30
1	N	289	G	C3'-C2'-C1'	-5.52	97.08	101.50
1	N	805	C	N3-C4-N4	5.52	121.86	118.00
1	N	1271	A	C5-C6-N6	-5.52	119.28	123.70
1	N	138	G	N7-C8-N9	-5.52	110.34	113.10
1	N	163	C	C4-C5-C6	-5.52	114.64	117.40
1	N	687	A	N9-C4-C5	5.52	108.01	105.80
1	N	1031	C	P-O5'-C5'	5.52	129.73	120.90
1	N	1193	G	C5-C6-N1	-5.52	108.74	111.50
1	N	1279	G	C8-N9-C4	5.52	108.61	106.40
1	N	1437	A	C6-N1-C2	5.52	121.91	118.60
1	N	1493	A	C5-C6-N6	-5.52	119.28	123.70
1	N	1501	C	C1'-O4'-C4'	-5.52	105.48	109.90
1	N	202	G	C5'-C4'-C3'	5.52	124.83	116.00
1	N	757	U	C6-N1-C2	-5.52	117.69	121.00
1	N	879	C	O4'-C1'-N1	5.52	112.61	108.20
1	N	946	A	C5-C6-N1	-5.52	114.94	117.70
1	N	952	U	N1-C2-N3	-5.52	111.59	114.90
1	N	1003	G	P-O3'-C3'	5.52	126.32	119.70
1	N	1385	G	N9-C4-C5	5.52	107.61	105.40
1	N	824	G	O4'-C1'-N9	5.52	112.61	108.20
1	N	875	U	N3-C4-O4	5.52	123.26	119.40
1	N	1043	G	C1'-O4'-C4'	5.52	114.31	109.90
1	N	108	G	C2-N3-C4	-5.51	109.14	111.90
1	N	180	U	N3-C4-O4	5.51	123.26	119.40
1	N	776	G	C4-N9-C1'	5.51	133.67	126.50
1	N	1117	A	C6-C5-N7	-5.51	128.44	132.30
1	N	1181	G	N3-C2-N2	-5.51	116.04	119.90
1	N	1473	G	O4'-C1'-N9	5.51	112.61	108.20
1	N	523	A	O5'-P-OP1	5.51	117.31	110.70
1	N	822	U	N3-C2-O2	5.51	126.06	122.20
1	N	922	G	N1-C2-N2	5.51	121.16	116.20
1	N	1164	G	C8-N9-C4	5.51	108.61	106.40
1	N	169	C	O4'-C4'-C3'	-5.51	98.49	104.00
1	N	763	G	N3-C2-N2	5.51	123.76	119.90
1	N	787	A	O5'-P-OP2	-5.51	100.74	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	890	G	P-O3'-C3'	5.51	126.31	119.70
1	N	908	A	C5-N7-C8	5.51	106.66	103.90
1	N	1364	U	C5-C6-N1	5.51	125.46	122.70
1	N	1491	G	C8-N9-C4	-5.51	104.19	106.40
1	N	76	G	C1'-O4'-C4'	5.51	114.31	109.90
1	N	93	U	C5-C4-O4	-5.51	122.59	125.90
1	N	102	G	C4-C5-C6	5.51	122.11	118.80
1	N	440	C	C6-N1-C2	5.51	122.50	120.30
1	N	877	G	C5'-C4'-C3'	5.51	124.82	116.00
1	N	152	A	C5-N7-C8	-5.51	101.15	103.90
1	N	217	C	C6-N1-C2	-5.51	118.10	120.30
1	N	360	G	C5-C6-N1	-5.51	108.75	111.50
1	N	435	A	N7-C8-N9	5.51	116.55	113.80
1	N	636	U	C1'-O4'-C4'	-5.51	105.50	109.90
1	N	670	G	N7-C8-N9	-5.51	110.35	113.10
1	N	985	C	C5-C6-N1	-5.51	118.25	121.00
1	N	330	C	O5'-P-OP1	-5.50	100.75	105.70
1	N	747	A	N1-C2-N3	5.50	132.05	129.30
1	N	1493	A	N3-C4-N9	-5.50	123.00	127.40
1	N	113	G	N3-C2-N2	5.50	123.75	119.90
1	N	356	A	C4-C5-N7	-5.50	107.95	110.70
1	N	482	A	P-O3'-C3'	-5.50	113.09	119.70
1	N	540	G	N3-C4-C5	5.50	131.35	128.60
1	N	725	G	N9-C4-C5	-5.50	103.20	105.40
1	N	886	G	C4-C5-C6	5.50	122.10	118.80
1	N	906	A	N7-C8-N9	-5.50	111.05	113.80
1	N	1080	A	C4-C5-C6	5.50	119.75	117.00
1	N	1149	C	N3-C4-N4	5.50	121.85	118.00
1	N	1511	G	N9-C4-C5	-5.50	103.20	105.40
1	N	1529	G	O4'-C1'-N9	5.50	112.60	108.20
1	N	583	A	C5-C6-N1	-5.50	114.95	117.70
1	N	697	U	C5'-C4'-O4'	5.50	115.70	109.10
1	N	712	A	O4'-C1'-N9	5.50	112.60	108.20
1	N	862	C	O4'-C1'-N1	5.50	112.60	108.20
1	N	878	A	O4'-C1'-N9	5.50	112.60	108.20
1	N	885	G	C4-C5-N7	5.50	113.00	110.80
1	N	1314	C	C3'-C2'-C1'	-5.50	97.10	101.50
1	N	6	G	OP1-P-OP2	-5.50	111.35	119.60
1	N	72	A	C5'-C4'-O4'	-5.50	102.50	109.10
1	N	161	A	P-O3'-C3'	-5.50	113.10	119.70
1	N	284	C	N3-C4-C5	-5.50	119.70	121.90
1	N	736	C	C2-N1-C1'	5.50	124.85	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	770	C	N3-C2-O2	-5.50	118.05	121.90
1	N	115	G	N9-C4-C5	-5.50	103.20	105.40
1	N	118	U	C2-N3-C4	-5.50	123.70	127.00
1	N	344	A	N9-C1'-C2'	-5.50	105.95	112.00
1	N	374	A	C6-N1-C2	5.50	121.90	118.60
1	N	581	G	C5-C6-O6	-5.50	125.30	128.60
1	N	758	C	C5-C6-N1	5.50	123.75	121.00
1	N	1035	A	O4'-C4'-C3'	-5.50	98.50	104.00
1	N	1066	C	C5'-C4'-C3'	-5.50	107.20	116.00
1	N	54	C	P-O3'-C3'	-5.50	113.10	119.70
1	N	83	C	C3'-C2'-C1'	-5.50	97.10	101.50
1	N	147	G	N3-C4-N9	5.50	129.30	126.00
1	N	247	G	C5-C6-N1	-5.50	108.75	111.50
1	N	263	A	C4-C5-C6	5.50	119.75	117.00
1	N	319	G	C3'-C2'-C1'	5.50	105.90	101.50
1	N	516	U	N1-C2-N3	5.50	118.20	114.90
1	N	750	C	N1-C2-N3	-5.50	115.35	119.20
1	N	968	A	C6-C5-N7	-5.50	128.45	132.30
1	N	1018	G	C6-C5-N7	-5.50	127.10	130.40
1	N	207	C	P-O5'-C5'	-5.50	112.11	120.90
1	N	733	G	C4-C5-N7	5.50	113.00	110.80
1	N	166	U	P-O3'-C3'	5.49	126.29	119.70
1	N	491	G	C6-C5-N7	-5.49	127.10	130.40
1	N	1304	G	C5-C6-O6	-5.49	125.30	128.60
1	N	1353	G	O4'-C1'-N9	5.49	112.59	108.20
1	N	1380	U	P-O3'-C3'	5.49	126.29	119.70
1	N	147	G	C4-C5-C6	5.49	122.09	118.80
1	N	1092	A	C5'-C4'-O4'	-5.49	102.51	109.10
1	N	1466	C	P-O5'-C5'	5.49	129.69	120.90
1	N	182	A	C5-C6-N1	-5.49	114.95	117.70
1	N	1026	G	N9-C4-C5	-5.49	103.20	105.40
1	N	1158	C	N1-C1'-C2'	5.49	121.14	114.00
1	N	1191	A	C4'-C3'-C2'	5.49	108.09	102.60
1	N	774	G	N3-C4-C5	-5.49	125.86	128.60
1	N	1346	A	C2-N3-C4	-5.49	107.86	110.60
1	N	1446	A	C8-N9-C4	-5.49	103.61	105.80
1	N	523	A	C5-C6-N6	-5.49	119.31	123.70
1	N	547	A	C1'-O4'-C4'	-5.49	105.51	109.90
1	N	563	A	C4-C5-N7	-5.49	107.96	110.70
1	N	236	A	N3-C4-N9	5.49	131.79	127.40
1	N	239	U	N3-C4-C5	-5.49	111.31	114.60
1	N	291	U	C5'-C4'-O4'	5.49	115.68	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	350	G	C4'-C3'-C2'	-5.49	97.11	102.60
1	N	385	C	C5-C4-N4	-5.49	116.36	120.20
1	N	637	C	C2-N3-C4	5.49	122.64	119.90
1	N	933	G	P-O3'-C3'	5.49	126.28	119.70
1	N	1346	A	C4-C5-C6	5.49	119.74	117.00
1	N	1373	G	C2-N3-C4	5.49	114.64	111.90
1	N	1523	G	C4-C5-C6	5.49	122.09	118.80
1	N	1142	G	C4-N9-C1'	5.48	133.63	126.50
1	N	1289	A	O4'-C1'-N9	5.48	112.59	108.20
1	N	215	C	C2-N3-C4	5.48	122.64	119.90
1	N	255	G	C6-C5-N7	-5.48	127.11	130.40
1	N	867	G	C4-C5-C6	5.48	122.09	118.80
1	N	988	G	C8-N9-C4	-5.48	104.21	106.40
1	N	1041	G	P-O5'-C5'	-5.48	112.13	120.90
1	N	1343	G	C5'-C4'-O4'	5.48	115.68	109.10
1	N	654	G	C5'-C4'-O4'	-5.48	102.52	109.10
1	N	798	U	C2-N3-C4	5.48	130.29	127.00
1	N	1334	G	C4-C5-C6	5.48	122.09	118.80
1	N	1534	A	C8-N9-C4	5.48	107.99	105.80
1	N	629	A	C6-C5-N7	-5.48	128.47	132.30
1	N	1042	A	N3-C4-C5	-5.48	122.97	126.80
1	N	1049	U	N1-C2-N3	-5.48	111.61	114.90
1	N	118	U	N3-C4-O4	5.48	123.23	119.40
1	N	581	G	P-O5'-C5'	5.48	129.66	120.90
1	N	1383	C	N1-C2-O2	5.48	122.19	118.90
1	N	1529	G	N3-C4-C5	-5.48	125.86	128.60
1	N	66	A	C6-C5-N7	-5.48	128.47	132.30
1	N	313	A	P-O5'-C5'	5.48	129.66	120.90
1	N	863	U	C4-C5-C6	5.48	122.99	119.70
1	N	1473	G	C4-C5-N7	5.48	112.99	110.80
1	N	939	G	N9-C1'-C2'	-5.47	105.98	112.00
1	N	1275	A	C5-C6-N6	-5.47	119.32	123.70
1	N	1361	G	C3'-C2'-C1'	-5.47	97.12	101.50
1	N	1455	G	N3-C2-N2	5.47	123.73	119.90
1	N	676	A	N3-C4-N9	5.47	131.78	127.40
1	N	774	G	C8-N9-C4	-5.47	104.21	106.40
1	N	785	G	C4-C5-N7	5.47	112.99	110.80
1	N	859	G	C4-C5-N7	5.47	112.99	110.80
1	N	1015	G	C6-N1-C2	-5.47	121.82	125.10
1	N	161	A	N1-C2-N3	5.47	132.03	129.30
1	N	696	A	C8-N9-C4	-5.47	103.61	105.80
1	N	760	G	C5'-C4'-O4'	5.47	115.67	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1290	G	N3-C4-C5	5.47	131.34	128.60
1	N	134	G	N9-C4-C5	-5.47	103.21	105.40
1	N	913	A	C2-N3-C4	5.47	113.33	110.60
1	N	444	G	C4'-C3'-C2'	-5.47	97.13	102.60
1	N	602	A	OP1-P-OP2	-5.47	111.40	119.60
1	N	817	C	C6-N1-C1'	-5.47	114.24	120.80
1	N	960	U	C4'-C3'-C2'	-5.47	97.13	102.60
1	N	2	A	C5-N7-C8	5.47	106.63	103.90
1	N	532	A	C5-C6-N6	-5.47	119.33	123.70
1	N	534	U	C5-C6-N1	-5.47	119.97	122.70
1	N	1299	A	N3-C4-N9	5.47	131.77	127.40
1	N	1454	G	N3-C2-N2	5.47	123.73	119.90
1	N	1521	C	OP1-P-OP2	-5.47	111.40	119.60
1	N	140	U	O5'-C5'-C4'	-5.46	101.32	111.70
1	N	351	G	N7-C8-N9	5.46	115.83	113.10
1	N	426	U	N3-C4-C5	5.46	117.88	114.60
1	N	1020	G	C6-C5-N7	-5.46	127.12	130.40
1	N	1437	A	C5-C6-N1	-5.46	114.97	117.70
1	N	153	C	C2-N1-C1'	5.46	124.81	118.80
1	N	97	G	O4'-C1'-N9	5.46	112.57	108.20
1	N	242	G	N3-C4-N9	-5.46	122.72	126.00
1	N	608	A	C5-C6-N6	-5.46	119.33	123.70
1	N	658	C	C2-N3-C4	5.46	122.63	119.90
1	N	1185	G	C4-C5-C6	5.46	122.08	118.80
1	N	58	C	N1-C2-O2	-5.46	115.62	118.90
1	N	799	G	C6-C5-N7	-5.46	127.12	130.40
1	N	993	G	C8-N9-C4	-5.46	104.22	106.40
1	N	1185	G	O4'-C4'-C3'	-5.46	98.54	104.00
1	N	1359	C	O4'-C1'-N1	5.46	112.57	108.20
1	N	29	U	N3-C2-O2	5.46	126.02	122.20
1	N	122	G	C4-N9-C1'	5.46	133.59	126.50
1	N	250	A	C6-N1-C2	5.46	121.87	118.60
1	N	512	U	C2-N3-C4	5.46	130.27	127.00
1	N	1432	G	C1'-O4'-C4'	5.46	114.27	109.90
1	N	874	G	C2-N3-C4	-5.46	109.17	111.90
1	N	1459	G	C3'-C2'-C1'	-5.46	97.14	101.50
1	N	172	A	O4'-C1'-N9	-5.45	103.84	108.20
1	N	719	C	C6-N1-C1'	-5.45	114.25	120.80
1	N	919	A	N9-C4-C5	5.45	107.98	105.80
1	N	1237	C	N3-C2-O2	5.45	125.72	121.90
1	N	1367	C	O4'-C1'-N1	5.45	112.56	108.20
1	N	867	G	C8-N9-C1'	-5.45	119.91	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	89	U	C5-C6-N1	-5.45	119.97	122.70
1	N	577	G	N3-C2-N2	5.45	123.72	119.90
1	N	615	G	N7-C8-N9	5.45	115.83	113.10
1	N	1432	G	C2'-C3'-O3'	5.45	122.42	113.70
1	N	1441	A	C5-C6-N6	-5.45	119.34	123.70
1	N	288	A	N3-C4-C5	-5.45	122.99	126.80
1	N	361	G	C4-C5-N7	-5.45	108.62	110.80
1	N	540	G	C4-N9-C1'	-5.45	119.42	126.50
1	N	664	G	N9-C4-C5	5.45	107.58	105.40
1	N	1141	C	C5-C6-N1	5.45	123.72	121.00
1	N	1304	G	C5-C6-N1	-5.45	108.78	111.50
1	N	1417	G	C5'-C4'-C3'	5.45	124.72	116.00
1	N	538	G	C6-C5-N7	-5.45	127.13	130.40
1	N	804	U	C5-C4-O4	5.45	129.17	125.90
1	N	1364	U	O5'-C5'-C4'	5.45	122.05	111.70
1	N	173	U	O4'-C1'-C2'	5.44	112.50	107.60
1	N	393	A	O4'-C4'-C3'	-5.44	98.56	104.00
1	N	1326	U	N3-C4-O4	5.44	123.21	119.40
1	N	63	C	N1-C1'-C2'	-5.44	106.01	112.00
1	N	469	C	N1-C2-O2	5.44	122.17	118.90
1	N	1231	G	C3'-C2'-C1'	-5.44	97.15	101.50
1	N	1342	C	C5-C6-N1	5.44	123.72	121.00
1	N	262	A	C4'-C3'-C2'	5.44	108.04	102.60
1	N	391	G	O4'-C1'-N9	5.44	112.55	108.20
1	N	468	A	N3-C4-C5	-5.44	122.99	126.80
1	N	561	U	O4'-C1'-N1	5.44	112.55	108.20
1	N	798	U	N3-C4-C5	-5.44	111.33	114.60
1	N	995	C	C1'-O4'-C4'	5.44	114.25	109.90
1	N	1390	U	P-O5'-C5'	5.44	129.61	120.90
1	N	1309	G	C4-C5-C6	5.44	122.06	118.80
1	N	158	G	C4-C5-N7	-5.44	108.62	110.80
1	N	283	U	C5'-C4'-O4'	5.44	115.62	109.10
1	N	674	G	N1-C2-N3	-5.44	120.64	123.90
1	N	708	C	C2-N1-C1'	5.44	124.78	118.80
1	N	1312	G	N1-C2-N3	-5.44	120.64	123.90
1	N	1370	G	N1-C2-N2	5.44	121.09	116.20
1	N	1491	G	C8-N9-C1'	5.44	134.07	127.00
1	N	10	A	C6-C5-N7	-5.44	128.50	132.30
1	N	689	C	P-O3'-C3'	-5.44	113.18	119.70
1	N	226	G	O4'-C1'-N9	5.43	112.55	108.20
1	N	592	G	C4'-C3'-C2'	-5.43	97.17	102.60
1	N	1217	C	C2-N3-C4	5.43	122.62	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	31	G	C5'-C4'-C3'	5.43	124.69	116.00
1	N	111	G	N3-C2-N2	5.43	123.70	119.90
1	N	1031	C	C2-N1-C1'	5.43	124.78	118.80
1	N	1085	U	P-O3'-C3'	-5.43	113.18	119.70
1	N	1123	U	N3-C4-C5	5.43	117.86	114.60
1	N	1412	C	C4-C5-C6	5.43	120.12	117.40
1	N	1442	G	N3-C2-N2	5.43	123.70	119.90
1	N	142	G	N1-C2-N2	5.43	121.09	116.20
1	N	426	U	N1-C2-N3	5.43	118.16	114.90
1	N	464	U	C5-C4-O4	-5.43	122.64	125.90
1	N	745	G	O4'-C1'-N9	5.43	112.54	108.20
1	N	861	G	C8-N9-C4	-5.43	104.23	106.40
1	N	997	U	C4-C5-C6	-5.43	116.44	119.70
1	N	1004	A	O4'-C1'-N9	5.43	112.54	108.20
1	N	1078	U	N3-C4-O4	5.43	123.20	119.40
1	N	1216	A	C3'-C2'-C1'	5.43	105.84	101.50
1	N	1509	C	N3-C4-N4	5.43	121.80	118.00
1	N	384	G	C5-C6-O6	-5.43	125.34	128.60
1	N	541	G	C5-C6-O6	-5.43	125.34	128.60
1	N	251	G	C8-N9-C1'	5.43	134.06	127.00
1	N	530	G	C5'-C4'-O4'	5.43	115.61	109.10
1	N	610	U	C5'-C4'-C3'	5.43	124.68	116.00
1	N	753	A	N1-C6-N6	5.43	121.86	118.60
1	N	968	A	P-O5'-C5'	-5.43	112.22	120.90
1	N	1466	C	N3-C4-N4	5.43	121.80	118.00
1	N	43	C	C4-C5-C6	-5.42	114.69	117.40
1	N	403	C	C2-N3-C4	5.42	122.61	119.90
1	N	410	G	C6-N1-C2	5.42	128.35	125.10
1	N	1335	U	O4'-C4'-C3'	-5.42	98.58	104.00
1	N	1337	G	C1'-O4'-C4'	5.42	114.24	109.90
1	N	1378	C	C5-C6-N1	-5.42	118.29	121.00
1	N	1497	G	N1-C2-N2	-5.42	111.32	116.20
1	N	96	U	P-O3'-C3'	5.42	126.21	119.70
1	N	59	A	OP1-P-O3'	5.42	117.13	105.20
1	N	167	A	C5'-C4'-O4'	5.42	115.61	109.10
1	N	204	G	O5'-C5'-C4'	-5.42	101.40	111.70
1	N	299	G	C3'-C2'-C1'	5.42	105.84	101.50
1	N	531	U	C2-N3-C4	5.42	130.25	127.00
1	N	733	G	C1'-O4'-C4'	-5.42	105.56	109.90
1	N	742	G	C1'-O4'-C4'	5.42	114.24	109.90
1	N	947	G	N7-C8-N9	-5.42	110.39	113.10
1	N	993	G	C1'-O4'-C4'	5.42	114.24	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1527	U	C5-C4-O4	5.42	129.15	125.90
1	N	1416	G	C4'-C3'-C2'	-5.42	97.18	102.60
1	N	39	G	C2-N3-C4	-5.42	109.19	111.90
1	N	690	G	C4-C5-C6	5.42	122.05	118.80
1	N	873	A	O4'-C4'-C3'	5.42	110.43	106.10
1	N	1242	G	O4'-C1'-N9	5.42	112.53	108.20
1	N	259	G	N1-C2-N3	-5.42	120.65	123.90
1	N	740	U	O4'-C1'-N1	5.42	112.53	108.20
1	N	1297	G	N3-C4-C5	-5.42	125.89	128.60
1	N	447	G	N7-C8-N9	-5.42	110.39	113.10
1	N	470	C	C6-N1-C2	-5.42	118.13	120.30
1	N	481	G	C1'-O4'-C4'	5.42	114.23	109.90
1	N	695	A	N7-C8-N9	-5.42	111.09	113.80
1	N	740	U	P-O3'-C3'	-5.42	113.20	119.70
1	N	1336	C	N3-C4-N4	5.42	121.79	118.00
1	N	795	C	O5'-C5'-C4'	-5.41	101.41	111.70
1	N	1244	G	C3'-C2'-C1'	-5.41	97.17	101.50
1	N	1333	A	N9-C4-C5	-5.41	103.64	105.80
1	N	1428	A	P-O5'-C5'	5.41	129.56	120.90
1	N	1508	A	N1-C2-N3	-5.41	126.59	129.30
1	N	804	U	P-O3'-C3'	-5.41	113.21	119.70
1	N	577	G	C4-C5-N7	-5.41	108.64	110.80
1	N	1133	G	C5'-C4'-O4'	-5.41	102.61	109.10
1	N	1139	G	O5'-C5'-C4'	-5.41	101.42	111.70
1	N	1176	A	O4'-C1'-N9	5.41	112.53	108.20
1	N	1210	C	N1-C2-N3	-5.41	115.41	119.20
1	N	1486	G	C4-C5-N7	5.41	112.96	110.80
1	N	57	G	C1'-O4'-C4'	-5.41	105.57	109.90
1	N	168	G	C2-N3-C4	-5.41	109.20	111.90
1	N	723	U	N1-C2-N3	-5.41	111.66	114.90
1	N	1160	G	P-O3'-C3'	5.41	126.19	119.70
1	N	1478	U	N1-C2-N3	-5.41	111.66	114.90
1	N	676	A	C5-C6-N6	-5.41	119.37	123.70
1	N	1094	G	P-O3'-C3'	5.41	126.19	119.70
1	N	241	G	P-O5'-C5'	5.41	129.55	120.90
1	N	953	G	C4'-C3'-C2'	-5.41	97.19	102.60
1	N	1067	A	C5-C6-N6	-5.41	119.38	123.70
1	N	676	A	N3-C4-C5	-5.40	123.02	126.80
1	N	1412	C	N3-C4-N4	5.40	121.78	118.00
1	N	47	C	C2-N3-C4	5.40	122.60	119.90
1	N	407	U	P-O3'-C3'	-5.40	113.22	119.70
1	N	585	G	C8-N9-C4	-5.40	104.24	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	150	U	C1'-O4'-C4'	5.40	114.22	109.90
1	N	185	U	N1-C2-O2	5.40	126.58	122.80
1	N	486	U	C2-N3-C4	-5.40	123.76	127.00
1	N	573	A	N9-C4-C5	-5.40	103.64	105.80
1	N	978	A	O4'-C1'-C2'	5.40	112.46	107.60
1	N	1016	A	C4-C5-C6	5.40	119.70	117.00
1	N	1391	U	C3'-C2'-C1'	5.40	105.82	101.50
1	N	1496	C	N3-C2-O2	5.40	125.68	121.90
1	N	22	G	N9-C4-C5	-5.40	103.24	105.40
1	N	89	U	C5-C4-O4	-5.40	122.66	125.90
1	N	267	C	P-O3'-C3'	5.40	126.18	119.70
1	N	315	A	C4-C5-N7	-5.40	108.00	110.70
1	N	500	G	C1'-O4'-C4'	5.40	114.22	109.90
1	N	846	G	C4-C5-N7	-5.40	108.64	110.80
1	N	987	G	C6-N1-C2	-5.40	121.86	125.10
1	N	1037	C	O4'-C4'-C3'	-5.40	98.60	104.00
1	N	1082	A	O4'-C4'-C3'	5.40	110.42	106.10
1	N	1158	C	C6-N1-C1'	-5.40	114.32	120.80
1	N	182	A	P-O5'-C5'	-5.40	112.27	120.90
1	N	196	A	O4'-C1'-N9	5.40	112.52	108.20
1	N	407	U	C1'-O4'-C4'	5.40	114.22	109.90
1	N	722	G	N1-C2-N3	-5.40	120.66	123.90
1	N	763	G	C4'-C3'-C2'	-5.40	97.20	102.60
1	N	874	G	C5-C6-N1	-5.40	108.80	111.50
1	N	1115	U	C6-N1-C2	-5.40	117.76	121.00
1	N	1336	C	C2'-C3'-O3'	5.40	122.33	113.70
1	N	144	G	N7-C8-N9	-5.39	110.40	113.10
1	N	324	G	C8-N9-C4	5.39	108.56	106.40
1	N	714	G	C3'-C2'-C1'	5.39	105.82	101.50
1	N	761	G	N3-C4-N9	5.39	129.24	126.00
1	N	1363	A	C6-C5-N7	-5.39	128.52	132.30
1	N	414	A	P-O5'-C5'	5.39	129.53	120.90
1	N	499	A	C6-C5-N7	-5.39	128.53	132.30
1	N	648	A	O4'-C1'-N9	5.39	112.51	108.20
1	N	668	G	C2-N3-C4	-5.39	109.20	111.90
1	N	850	U	N3-C4-C5	-5.39	111.36	114.60
1	N	960	U	O4'-C4'-C3'	5.39	110.41	106.10
1	N	1075	U	C5-C6-N1	5.39	125.40	122.70
1	N	1290	G	C2-N3-C4	-5.39	109.20	111.90
1	N	1429	A	C5-C6-N1	-5.39	115.00	117.70
1	N	1242	G	N3-C4-C5	5.39	131.29	128.60
1	N	193	C	C5-C4-N4	-5.39	116.43	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	377	G	C4-C5-N7	5.39	112.96	110.80
1	N	1226	C	N3-C4-C5	-5.39	119.74	121.90
1	N	1267	C	N1-C2-O2	5.39	122.13	118.90
1	N	1306	A	C5-C6-N6	-5.39	119.39	123.70
1	N	695	A	N3-C4-N9	5.39	131.71	127.40
1	N	705	G	O5'-C5'-C4'	-5.39	101.46	111.70
1	N	915	A	C8-N9-C4	5.39	107.95	105.80
1	N	1128	C	C2-N1-C1'	5.39	124.73	118.80
1	N	578	C	C4'-C3'-C2'	-5.39	97.21	102.60
1	N	647	C	N3-C4-C5	-5.39	119.75	121.90
1	N	669	G	C2-N3-C4	-5.39	109.21	111.90
1	N	698	G	C5-C6-N1	-5.39	108.81	111.50
1	N	731	G	N3-C2-N2	5.39	123.67	119.90
1	N	1094	G	C4-C5-C6	5.39	122.03	118.80
1	N	46	G	O4'-C1'-N9	5.38	112.51	108.20
1	N	191	G	C2-N3-C4	-5.38	109.21	111.90
1	N	451	A	C3'-C2'-C1'	5.38	105.81	101.50
1	N	465	A	N7-C8-N9	-5.38	111.11	113.80
1	N	320	A	N3-C4-N9	5.38	131.71	127.40
1	N	1119	C	N3-C4-C5	-5.38	119.75	121.90
1	N	44	A	C6-N1-C2	5.38	121.83	118.60
1	N	127	G	P-O5'-C5'	5.38	129.51	120.90
1	N	387	U	C4-C5-C6	-5.38	116.47	119.70
1	N	670	G	C2'-C3'-O3'	5.38	122.31	113.70
1	N	1012	A	N9-C1'-C2'	-5.38	106.08	112.00
1	N	1241	G	C2-N3-C4	5.38	114.59	111.90
1	N	1446	A	N9-C4-C5	5.38	107.95	105.80
1	N	187	G	P-O3'-C3'	-5.38	113.25	119.70
1	N	484	G	N3-C4-C5	-5.38	125.91	128.60
1	N	947	G	C1'-O4'-C4'	-5.38	105.60	109.90
1	N	1022	A	C6-C5-N7	-5.38	128.53	132.30
1	N	426	U	C2'-C3'-O3'	5.38	122.30	113.70
1	N	418	C	N3-C4-C5	-5.38	119.75	121.90
1	N	687	A	C5-C6-N1	-5.38	115.01	117.70
1	N	224	U	P-O5'-C5'	5.37	129.50	120.90
1	N	276	G	O4'-C1'-N9	5.37	112.50	108.20
1	N	797	C	C4-C5-C6	5.37	120.09	117.40
1	N	898	G	N1-C6-O6	5.37	123.12	119.90
1	N	1047	G	C6-C5-N7	-5.37	127.18	130.40
1	N	1086	U	C6-N1-C2	-5.37	117.78	121.00
1	N	627	G	C6-N1-C2	5.37	128.32	125.10
1	N	854	U	C5-C6-N1	-5.37	120.02	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	927	G	C1'-O4'-C4'	-5.37	105.60	109.90
1	N	939	G	P-O5'-C5'	-5.37	112.31	120.90
1	N	1254	A	N3-C4-C5	-5.37	123.04	126.80
1	N	889	A	C4-C5-C6	5.37	119.69	117.00
1	N	1145	A	P-O5'-C5'	5.37	129.49	120.90
1	N	1254	A	C5-N7-C8	5.37	106.58	103.90
1	N	1515	G	O4'-C4'-C3'	-5.37	98.63	104.00
1	N	1036	A	N7-C8-N9	-5.37	111.12	113.80
1	N	1195	C	P-O3'-C3'	5.37	126.14	119.70
1	N	1301	U	O4'-C1'-N1	5.37	112.49	108.20
1	N	1423	G	N1-C2-N3	-5.37	120.68	123.90
1	N	157	U	C2-N1-C1'	-5.37	111.26	117.70
1	N	369	G	C5-C6-O6	-5.37	125.38	128.60
1	N	877	G	C5-C6-N1	5.37	114.18	111.50
1	N	4	U	C5-C6-N1	5.36	125.38	122.70
1	N	149	A	C5-C6-N6	-5.36	119.41	123.70
1	N	295	C	C2-N3-C4	-5.36	117.22	119.90
1	N	298	A	N1-C2-N3	-5.36	126.62	129.30
1	N	309	A	N9-C4-C5	-5.36	103.65	105.80
1	N	332	G	C4-C5-C6	5.36	122.02	118.80
1	N	543	U	C6-N1-C2	-5.36	117.78	121.00
1	N	585	G	C4-C5-N7	5.36	112.94	110.80
1	N	913	A	N3-C4-C5	-5.36	123.05	126.80
1	N	1128	C	N1-C2-N3	5.36	122.95	119.20
1	N	1392	G	N3-C4-N9	-5.36	122.78	126.00
1	N	1421	G	N1-C2-N3	-5.36	120.68	123.90
1	N	858	G	O4'-C1'-C2'	-5.36	100.44	105.80
1	N	1514	G	C2-N3-C4	-5.36	109.22	111.90
1	N	392	C	N3-C4-C5	5.36	124.04	121.90
1	N	410	G	C4-C5-C6	5.36	122.02	118.80
1	N	565	U	C3'-C2'-C1'	-5.36	97.21	101.50
1	N	724	G	P-O5'-C5'	-5.36	112.32	120.90
1	N	859	G	N3-C4-C5	5.36	131.28	128.60
1	N	951	G	O5'-P-OP2	5.36	117.13	110.70
1	N	1207	G	C6-C5-N7	5.36	133.62	130.40
1	N	1252	A	C6-C5-N7	-5.36	128.55	132.30
1	N	860	A	C6-C5-N7	-5.36	128.55	132.30
1	N	1032	G	C4-N9-C1'	5.36	133.47	126.50
1	N	507	C	C5-C4-N4	5.36	123.95	120.20
1	N	836	G	O5'-C5'-C4'	-5.36	101.52	111.70
1	N	999	C	O4'-C1'-N1	5.36	112.49	108.20
1	N	1191	A	N3-C4-C5	-5.36	123.05	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1379	G	C3'-C2'-C1'	5.36	105.79	101.50
1	N	1511	G	P-O3'-C3'	-5.36	113.27	119.70
1	N	1424	U	P-O3'-C3'	5.36	126.13	119.70
1	N	1433	A	O3'-P-O5'	-5.36	93.83	104.00
1	N	165	G	C8-N9-C4	-5.35	104.26	106.40
1	N	353	A	N9-C4-C5	-5.35	103.66	105.80
1	N	380	G	C1'-O4'-C4'	-5.35	105.62	109.90
1	N	1036	A	C2-N3-C4	-5.35	107.92	110.60
1	N	1273	C	N3-C4-N4	5.35	121.75	118.00
1	N	432	A	C6-N1-C2	-5.35	115.39	118.60
1	N	914	A	P-O3'-C3'	-5.35	113.28	119.70
1	N	935	A	N1-C6-N6	5.35	121.81	118.60
1	N	1014	A	O4'-C1'-N9	5.35	112.48	108.20
1	N	1414	U	C4'-C3'-C2'	5.35	107.95	102.60
1	N	297	G	O4'-C1'-N9	5.35	112.48	108.20
1	N	553	A	C5-N7-C8	5.35	106.58	103.90
1	N	1125	U	C5-C6-N1	5.35	125.38	122.70
1	N	1439	G	N7-C8-N9	5.35	115.78	113.10
1	N	190	A	N3-C4-C5	-5.35	123.06	126.80
1	N	204	G	C5-N7-C8	5.35	106.97	104.30
1	N	316	C	C4'-C3'-C2'	-5.35	97.25	102.60
1	N	536	C	OP2-P-O3'	5.35	116.96	105.20
1	N	794	A	OP1-P-OP2	-5.35	111.58	119.60
1	N	996	A	N7-C8-N9	5.35	116.47	113.80
1	N	1144	G	C4-C5-N7	5.35	112.94	110.80
1	N	1201	A	P-O5'-C5'	-5.35	112.34	120.90
1	N	311	C	O4'-C1'-N1	5.34	112.48	108.20
1	N	529	G	O4'-C1'-N9	5.34	112.48	108.20
1	N	648	A	C6-C5-N7	-5.34	128.56	132.30
1	N	827	U	C5-C6-N1	5.34	125.37	122.70
1	N	899	C	N3-C4-C5	-5.34	119.76	121.90
1	N	1054	C	O4'-C4'-C3'	-5.34	98.66	104.00
1	N	451	A	C2-N3-C4	-5.34	107.93	110.60
1	N	622	A	C5-C6-N6	-5.34	119.42	123.70
1	N	658	C	N1-C2-O2	5.34	122.11	118.90
1	N	38	G	OP1-P-O3'	5.34	116.95	105.20
1	N	328	C	C5'-C4'-O4'	5.34	115.51	109.10
1	N	441	A	P-O5'-C5'	-5.34	112.35	120.90
1	N	575	G	C8-N9-C4	5.34	108.54	106.40
1	N	1191	A	C4-C5-N7	-5.34	108.03	110.70
1	N	1282	C	C2-N3-C4	5.34	122.57	119.90
1	N	286	C	N3-C4-N4	5.34	121.74	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	401	C	C5-C6-N1	5.34	123.67	121.00
1	N	793	U	C2-N3-C4	5.34	130.20	127.00
1	N	1213	A	C4-C5-N7	-5.34	108.03	110.70
1	N	215	C	N3-C4-C5	-5.34	119.77	121.90
1	N	1358	U	N3-C4-O4	5.34	123.14	119.40
1	N	4	U	P-O3'-C3'	-5.34	113.30	119.70
1	N	8	A	C5-N7-C8	5.34	106.57	103.90
1	N	16	A	C5'-C4'-O4'	-5.34	102.70	109.10
1	N	271	C	N1-C2-N3	5.34	122.94	119.20
1	N	567	G	P-O5'-C5'	5.34	129.44	120.90
1	N	644	U	C5-C4-O4	-5.34	122.70	125.90
1	N	914	A	C8-N9-C4	-5.34	103.67	105.80
1	N	1099	G	C5-C6-N1	-5.34	108.83	111.50
1	N	1369	C	C6-N1-C2	-5.34	118.17	120.30
1	N	259	G	C4-C5-C6	5.33	122.00	118.80
1	N	493	A	C4-C5-C6	5.33	119.67	117.00
1	N	1369	C	C4'-C3'-C2'	-5.33	97.27	102.60
1	N	127	G	C5-C6-N1	-5.33	108.83	111.50
1	N	360	G	O4'-C1'-N9	5.33	112.47	108.20
1	N	408	A	N3-C4-N9	5.33	131.67	127.40
1	N	874	G	N7-C8-N9	5.33	115.77	113.10
1	N	1131	G	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	1187	G	C8-N9-C1'	-5.33	120.07	127.00
1	N	1292	G	O4'-C4'-C3'	-5.33	98.67	104.00
1	N	1317	C	C2-N3-C4	-5.33	117.23	119.90
1	N	1488	G	C8-N9-C1'	5.33	133.93	127.00
1	N	142	G	O5'-C5'-C4'	-5.33	101.57	111.70
1	N	233	C	C2-N3-C4	5.33	122.57	119.90
1	N	503	C	O4'-C1'-N1	5.33	112.47	108.20
1	N	83	C	C4'-C3'-C2'	5.33	107.93	102.60
1	N	116	A	C1'-O4'-C4'	5.33	114.16	109.90
1	N	702	A	N9-C4-C5	5.33	107.93	105.80
1	N	1457	G	C4'-C3'-C2'	-5.33	97.27	102.60
1	N	234	C	C6-N1-C2	-5.33	118.17	120.30
1	N	306	A	N1-C2-N3	5.33	131.96	129.30
1	N	492	C	O5'-C5'-C4'	-5.33	101.58	111.70
1	N	1148	U	N1-C2-O2	5.33	126.53	122.80
1	N	111	G	C6-C5-N7	-5.33	127.20	130.40
1	N	236	A	N1-C2-N3	5.33	131.96	129.30
1	N	554	A	N3-C4-N9	5.33	131.66	127.40
1	N	769	G	C6-N1-C2	5.33	128.30	125.10
1	N	310	G	O4'-C1'-N9	5.33	112.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	411	A	C6-C5-N7	-5.33	128.57	132.30
1	N	789	U	C5-C4-O4	-5.33	122.70	125.90
1	N	1025	U	N1-C2-N3	-5.33	111.70	114.90
1	N	1254	A	C2-N3-C4	5.33	113.26	110.60
1	N	1375	A	C6-C5-N7	-5.33	128.57	132.30
1	N	633	G	C2-N3-C4	5.32	114.56	111.90
1	N	803	G	C8-N9-C4	-5.32	104.27	106.40
1	N	974	A	C4-C5-C6	5.32	119.66	117.00
1	N	1000	A	C6-C5-N7	-5.32	128.57	132.30
1	N	1058	G	O4'-C1'-N9	5.32	112.46	108.20
1	N	1437	A	N7-C8-N9	5.32	116.46	113.80
1	N	144	G	O4'-C1'-N9	5.32	112.46	108.20
1	N	1520	C	C2-N1-C1'	5.32	124.65	118.80
1	N	19	A	C5'-C4'-O4'	5.32	115.48	109.10
1	N	480	U	C2-N1-C1'	-5.32	111.31	117.70
1	N	904	U	C5'-C4'-C3'	5.32	124.51	116.00
1	N	955	U	C5'-C4'-O4'	5.32	115.48	109.10
1	N	1130	A	O4'-C1'-N9	5.32	112.46	108.20
1	N	1252	A	P-O3'-C3'	-5.32	113.31	119.70
1	N	1282	C	N3-C2-O2	5.32	125.62	121.90
1	N	1439	G	C6-N1-C2	5.32	128.29	125.10
1	N	448	A	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	457	G	C4-C5-C6	5.32	121.99	118.80
1	N	479	U	C5'-C4'-C3'	-5.32	107.49	116.00
1	N	800	G	C5-C6-N1	-5.32	108.84	111.50
1	N	1508	A	N3-C4-C5	-5.32	123.08	126.80
1	N	19	A	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	266	G	C6-N1-C2	-5.32	121.91	125.10
1	N	271	C	C3'-C2'-C1'	-5.32	97.25	101.50
1	N	329	A	C5-C6-N1	-5.32	115.04	117.70
1	N	399	G	N7-C8-N9	5.32	115.76	113.10
1	N	446	G	N3-C4-C5	-5.32	125.94	128.60
1	N	536	C	N3-C2-O2	-5.32	118.18	121.90
1	N	617	G	P-O5'-C5'	5.32	129.41	120.90
1	N	924	C	C4'-C3'-C2'	-5.32	97.28	102.60
1	N	1073	U	C3'-C2'-C1'	-5.32	97.25	101.50
1	N	1189	U	C2-N1-C1'	-5.32	111.32	117.70
1	N	1338	G	N3-C4-C5	-5.32	125.94	128.60
1	N	1519	A	C6-N1-C2	5.32	121.79	118.60
1	N	220	G	C3'-C2'-C1'	-5.32	97.25	101.50
1	N	237	G	C2-N3-C4	5.32	114.56	111.90
1	N	266	G	C5-C6-N1	5.32	114.16	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	287	U	C2'-C3'-O3'	5.32	122.21	113.70
1	N	322	C	C6-N1-C2	-5.32	118.17	120.30
1	N	406	G	C4-N9-C1'	-5.32	119.59	126.50
1	N	406	G	O4'-C1'-N9	5.32	112.45	108.20
1	N	428	G	N1-C2-N3	-5.32	120.71	123.90
1	N	1233	G	N3-C2-N2	5.32	123.62	119.90
1	N	1270	G	P-O3'-C3'	5.32	126.08	119.70
1	N	364	A	C5-C6-N1	-5.31	115.04	117.70
1	N	1403	C	C5'-C4'-O4'	5.31	115.48	109.10
1	N	1449	C	C2-N1-C1'	5.31	124.64	118.80
1	N	1525	G	N9-C4-C5	5.31	107.53	105.40
1	N	679	C	O3'-P-O5'	-5.31	93.91	104.00
1	N	946	A	C4-C5-C6	5.31	119.66	117.00
1	N	997	U	O5'-C5'-C4'	-5.31	101.61	111.70
1	N	1367	C	C2-N1-C1'	5.31	124.64	118.80
1	N	443	C	C5-C4-N4	-5.31	116.48	120.20
1	N	21	G	C5-N7-C8	5.31	106.95	104.30
1	N	467	U	C6-N1-C2	-5.31	117.81	121.00
1	N	550	G	N7-C8-N9	5.31	115.75	113.10
1	N	727	G	N9-C4-C5	-5.31	103.28	105.40
1	N	830	G	N1-C2-N3	-5.31	120.71	123.90
1	N	875	U	C1'-O4'-C4'	5.31	114.15	109.90
1	N	1494	G	C6-N1-C2	-5.31	121.91	125.10
1	N	106	C	C2-N3-C4	5.31	122.55	119.90
1	N	226	G	C5-N7-C8	-5.31	101.65	104.30
1	N	243	A	C5'-C4'-C3'	5.31	124.49	116.00
1	N	520	A	C8-N9-C4	-5.31	103.68	105.80
1	N	717	U	C2'-C3'-O3'	5.31	122.19	113.70
1	N	734	G	C2-N3-C4	-5.31	109.25	111.90
1	N	866	C	C1'-O4'-C4'	-5.31	105.65	109.90
1	N	984	C	N1-C2-N3	-5.31	115.48	119.20
1	N	1243	C	C4-C5-C6	5.31	120.05	117.40
1	N	1449	C	N3-C4-C5	-5.31	119.78	121.90
1	N	79	G	N3-C2-N2	5.31	123.61	119.90
1	N	505	G	O4'-C1'-N9	5.31	112.44	108.20
1	N	171	A	C2-N3-C4	5.30	113.25	110.60
1	N	217	C	C2-N3-C4	5.30	122.55	119.90
1	N	719	C	C2-N1-C1'	5.30	124.63	118.80
1	N	946	A	C4'-C3'-C2'	-5.30	97.30	102.60
1	N	17	U	O4'-C1'-N1	5.30	112.44	108.20
1	N	484	G	C5-N7-C8	5.30	106.95	104.30
1	N	829	G	C4'-C3'-C2'	-5.30	97.30	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1335	U	C5-C4-O4	5.30	129.08	125.90
1	N	1352	C	C2-N3-C4	5.30	122.55	119.90
1	N	1413	A	C6-N1-C2	-5.30	115.42	118.60
1	N	1436	U	C5-C6-N1	5.30	125.35	122.70
1	N	485	U	C2-N1-C1'	5.30	124.06	117.70
1	N	839	C	P-O3'-C3'	5.30	126.06	119.70
1	N	362	G	N1-C2-N2	5.30	120.97	116.20
1	N	553	A	C4-C5-N7	-5.30	108.05	110.70
1	N	1236	A	N7-C8-N9	5.30	116.45	113.80
1	N	1502	A	C5'-C4'-O4'	5.30	115.46	109.10
1	N	1513	A	O4'-C1'-N9	5.30	112.44	108.20
1	N	505	G	C2'-C3'-O3'	5.30	122.18	113.70
1	N	1476	A	C6-C5-N7	-5.30	128.59	132.30
1	N	282	A	C4'-C3'-C2'	5.30	107.90	102.60
1	N	952	U	C2-N1-C1'	5.30	124.06	117.70
1	N	1110	A	C2-N3-C4	-5.30	107.95	110.60
1	N	1093	A	C4-C5-C6	5.29	119.65	117.00
1	N	1367	C	C6-N1-C1'	-5.29	114.45	120.80
1	N	25	C	C5-C6-N1	-5.29	118.35	121.00
1	N	275	G	N7-C8-N9	5.29	115.75	113.10
1	N	288	A	C5-N7-C8	5.29	106.55	103.90
1	N	711	G	O4'-C1'-N9	5.29	112.44	108.20
1	N	873	A	O4'-C1'-N9	5.29	112.44	108.20
1	N	1199	U	N1-C2-O2	-5.29	119.09	122.80
1	N	1265	C	N3-C4-N4	5.29	121.70	118.00
1	N	1370	G	C4-C5-C6	5.29	121.98	118.80
1	N	204	G	N3-C4-C5	5.29	131.25	128.60
1	N	285	C	N3-C4-C5	-5.29	119.78	121.90
1	N	788	U	C5'-C4'-C3'	-5.29	107.53	116.00
1	N	792	A	C4-C5-N7	-5.29	108.06	110.70
1	N	1225	A	C5-N7-C8	5.29	106.55	103.90
1	N	1272	G	C3'-C2'-C1'	-5.29	97.27	101.50
1	N	619	U	C3'-C2'-C1'	-5.29	97.27	101.50
1	N	731	G	O4'-C4'-C3'	-5.29	98.71	104.00
1	N	1215	G	N7-C8-N9	5.29	115.75	113.10
1	N	1265	C	C1'-O4'-C4'	5.29	114.13	109.90
1	N	1343	G	C5-N7-C8	-5.29	101.66	104.30
1	N	39	G	N3-C2-N2	5.29	123.60	119.90
1	N	294	U	P-O5'-C5'	5.29	129.36	120.90
1	N	492	C	C3'-C2'-C1'	-5.29	97.27	101.50
1	N	622	A	C8-N9-C4	-5.29	103.69	105.80
1	N	713	G	P-O3'-C3'	5.29	126.05	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	995	C	N1-C2-O2	-5.29	115.73	118.90
1	N	1162	C	C5-C6-N1	5.29	123.64	121.00
1	N	1297	G	O4'-C1'-N9	5.29	112.43	108.20
1	N	1507	A	C4-C5-C6	5.29	119.64	117.00
1	N	122	G	O4'-C1'-N9	5.29	112.43	108.20
1	N	350	G	N3-C4-C5	5.29	131.24	128.60
1	N	421	U	C2-N3-C4	-5.29	123.83	127.00
1	N	634	C	C2-N3-C4	5.29	122.54	119.90
1	N	812	G	O3'-P-O5'	-5.29	93.95	104.00
1	N	1136	C	C6-N1-C2	-5.29	118.19	120.30
1	N	1137	C	C2-N3-C4	5.29	122.54	119.90
1	N	1263	C	C3'-C2'-C1'	-5.29	97.27	101.50
1	N	925	G	N3-C2-N2	5.29	123.60	119.90
1	N	1124	G	N1-C2-N2	-5.29	111.44	116.20
1	N	1497	G	C4-C5-C6	5.29	121.97	118.80
1	N	187	G	C8-N9-C4	5.28	108.51	106.40
1	N	314	C	C6-N1-C2	-5.28	118.19	120.30
1	N	816	A	N9-C4-C5	5.28	107.91	105.80
1	N	1268	G	N7-C8-N9	-5.28	110.46	113.10
1	N	1385	G	C4-C5-C6	5.28	121.97	118.80
1	N	138	G	C5-N7-C8	5.28	106.94	104.30
1	N	1133	G	N1-C2-N2	5.28	120.95	116.20
1	N	593	U	C1'-O4'-C4'	-5.28	105.68	109.90
1	N	606	G	N9-C4-C5	5.28	107.51	105.40
1	N	655	A	C1'-O4'-C4'	5.28	114.12	109.90
1	N	720	C	C2-N3-C4	5.28	122.54	119.90
1	N	1096	C	C2-N3-C4	5.28	122.54	119.90
1	N	1349	A	N3-C4-C5	-5.28	123.10	126.80
1	N	521	G	N9-C4-C5	-5.28	103.29	105.40
1	N	775	G	C1'-O4'-C4'	5.28	114.12	109.90
1	N	406	G	C2-N3-C4	5.28	114.54	111.90
1	N	1253	G	N3-C4-C5	-5.28	125.96	128.60
1	N	54	C	C6-N1-C2	5.28	122.41	120.30
1	N	217	C	C5'-C4'-O4'	5.28	115.43	109.10
1	N	326	G	C8-N9-C1'	-5.28	120.14	127.00
1	N	967	C	N3-C4-N4	5.28	121.69	118.00
1	N	971	G	C5-N7-C8	-5.28	101.66	104.30
1	N	1094	G	N9-C4-C5	5.28	107.51	105.40
1	N	1167	A	C1'-O4'-C4'	-5.28	105.68	109.90
1	N	1034	G	C6-N1-C2	-5.27	121.94	125.10
1	N	1197	A	O4'-C1'-C2'	-5.27	100.53	105.80
1	N	10	A	C2-N3-C4	-5.27	107.96	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	94	G	C5-N7-C8	5.27	106.94	104.30
1	N	220	G	N3-C2-N2	5.27	123.59	119.90
1	N	652	U	N3-C2-O2	5.27	125.89	122.20
1	N	936	C	C3'-C2'-C1'	-5.27	97.28	101.50
1	N	991	U	O4'-C1'-C2'	-5.27	100.53	105.80
1	N	399	G	N3-C4-N9	-5.27	122.84	126.00
1	N	1038	C	C5'-C4'-C3'	5.27	124.43	116.00
1	N	14	U	C2-N1-C1'	5.27	124.02	117.70
1	N	356	A	N3-C4-C5	-5.27	123.11	126.80
1	N	615	G	C5-C6-N1	-5.27	108.87	111.50
1	N	663	A	C4-C5-N7	5.27	113.33	110.70
1	N	903	G	C5-N7-C8	5.27	106.94	104.30
1	N	948	C	O4'-C4'-C3'	-5.27	98.73	104.00
1	N	233	C	OP2-P-O3'	5.27	116.79	105.20
1	N	463	U	N3-C4-C5	-5.27	111.44	114.60
1	N	495	A	N1-C2-N3	5.27	131.93	129.30
1	N	678	U	O4'-C4'-C3'	-5.27	98.73	104.00
1	N	791	G	C5-N7-C8	5.27	106.93	104.30
1	N	939	G	N7-C8-N9	-5.27	110.47	113.10
1	N	1150	A	C8-N9-C4	-5.27	103.69	105.80
1	N	1443	C	C5-C4-N4	-5.27	116.51	120.20
1	N	1447	A	C1'-O4'-C4'	-5.27	105.69	109.90
1	N	233	C	C6-N1-C1'	-5.26	114.48	120.80
1	N	413	G	C6-C5-N7	-5.26	127.24	130.40
1	N	808	C	N3-C4-C5	-5.26	119.80	121.90
1	N	895	G	N3-C4-N9	-5.26	122.84	126.00
1	N	928	G	C2-N3-C4	-5.26	109.27	111.90
1	N	1175	G	C5-C6-O6	-5.26	125.44	128.60
1	N	1207	G	C8-N9-C4	-5.26	104.29	106.40
1	N	1327	C	N1-C2-N3	-5.26	115.51	119.20
1	N	150	U	O4'-C1'-N1	5.26	112.41	108.20
1	N	671	G	N9-C4-C5	-5.26	103.30	105.40
1	N	94	G	C5'-C4'-C3'	-5.26	107.58	116.00
1	N	275	G	N1-C2-N3	-5.26	120.74	123.90
1	N	1239	A	O4'-C1'-C2'	-5.26	100.54	105.80
1	N	299	G	C4-C5-C6	5.26	121.95	118.80
1	N	303	A	C8-N9-C4	-5.26	103.70	105.80
1	N	380	G	N9-C4-C5	5.26	107.50	105.40
1	N	599	C	C5-C4-N4	-5.26	116.52	120.20
1	N	783	C	O4'-C4'-C3'	-5.26	98.74	104.00
1	N	1008	U	OP1-P-O3'	5.26	116.77	105.20
1	N	1152	A	C4-C5-C6	5.26	119.63	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1304	G	C3'-C2'-C1'	5.26	105.71	101.50
1	N	147	G	C3'-C2'-C1'	-5.26	97.29	101.50
1	N	226	G	C4-C5-N7	5.26	112.90	110.80
1	N	255	G	C4-C5-C6	5.26	121.95	118.80
1	N	598	U	C4'-C3'-C2'	5.26	107.86	102.60
1	N	1059	C	C2-N3-C4	-5.26	117.27	119.90
1	N	1255	G	C5'-C4'-C3'	-5.26	107.59	116.00
1	N	176	C	N1-C2-O2	-5.26	115.75	118.90
1	N	717	U	OP1-P-OP2	-5.26	111.72	119.60
1	N	741	G	O4'-C1'-N9	5.26	112.41	108.20
1	N	832	G	C4-N9-C1'	-5.26	119.67	126.50
1	N	1261	A	C4-C5-C6	5.26	119.63	117.00
1	N	1429	A	C4-C5-N7	5.26	113.33	110.70
1	N	1361	G	P-O3'-C3'	5.25	126.01	119.70
1	N	1519	A	C5'-C4'-O4'	5.25	115.41	109.10
1	N	237	G	C8-N9-C4	5.25	108.50	106.40
1	N	651	C	N3-C2-O2	5.25	125.58	121.90
1	N	1128	C	C5'-C4'-O4'	5.25	115.40	109.10
1	N	1289	A	N3-C4-N9	-5.25	123.20	127.40
1	N	1418	A	C6-N1-C2	-5.25	115.45	118.60
1	N	110	C	C6-N1-C2	-5.25	118.20	120.30
1	N	212	G	C4-C5-C6	5.25	121.95	118.80
1	N	238	A	C8-N9-C4	-5.25	103.70	105.80
1	N	366	A	C1'-O4'-C4'	5.25	114.10	109.90
1	N	865	A	P-O3'-C3'	5.25	126.00	119.70
1	N	1098	C	O5'-P-OP2	-5.25	100.97	105.70
1	N	1099	G	C4-C5-C6	5.25	121.95	118.80
1	N	1364	U	N1-C2-O2	-5.25	119.12	122.80
1	N	267	C	N3-C4-N4	5.25	121.67	118.00
1	N	438	U	C1'-O4'-C4'	-5.25	105.70	109.90
1	N	580	C	O5'-C5'-C4'	-5.25	101.73	111.70
1	N	1076	U	N1-C2-O2	5.25	126.47	122.80
1	N	1127	G	N3-C4-C5	5.25	131.22	128.60
1	N	1147	C	O4'-C1'-N1	5.25	112.40	108.20
1	N	1248	A	C6-C5-N7	-5.25	128.63	132.30
1	N	1472	U	C4-C5-C6	-5.25	116.55	119.70
1	N	293	G	O4'-C1'-N9	5.25	112.40	108.20
1	N	459	A	C5'-C4'-C3'	-5.25	107.61	116.00
1	N	717	U	C1'-O4'-C4'	5.25	114.10	109.90
1	N	1071	C	C5-C4-N4	-5.25	116.53	120.20
1	N	1357	A	O3'-P-O5'	-5.25	94.03	104.00
1	N	1500	A	C5-C6-N6	-5.25	119.50	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	586	C	C3'-C2'-C1'	-5.25	97.30	101.50
1	N	770	C	O3'-P-O5'	-5.25	94.03	104.00
1	N	101	A	C5'-C4'-O4'	5.24	115.39	109.10
1	N	639	G	C5-N7-C8	5.24	106.92	104.30
1	N	912	C	C6-N1-C2	-5.24	118.20	120.30
1	N	937	A	N1-C2-N3	5.24	131.92	129.30
1	N	1008	U	C2-N3-C4	5.24	130.15	127.00
1	N	37	U	N3-C4-O4	5.24	123.07	119.40
1	N	368	U	C3'-C2'-C1'	5.24	105.69	101.50
1	N	449	G	C3'-C2'-C1'	5.24	105.69	101.50
1	N	630	A	P-O5'-C5'	5.24	129.28	120.90
1	N	645	G	O4'-C4'-C3'	-5.24	98.76	104.00
1	N	669	G	C5'-C4'-O4'	5.24	115.39	109.10
1	N	680	C	C2-N3-C4	5.24	122.52	119.90
1	N	1386	G	N3-C4-C5	5.24	131.22	128.60
1	N	139	A	C5-C6-N6	-5.24	119.51	123.70
1	N	1103	C	C6-N1-C1'	-5.24	114.51	120.80
1	N	1216	A	C5'-C4'-C3'	5.24	124.38	116.00
1	N	1399	C	N1-C2-N3	-5.24	115.53	119.20
1	N	1424	U	N1-C2-O2	-5.24	119.13	122.80
1	N	50	A	C6-C5-N7	-5.24	128.63	132.30
1	N	680	C	P-O5'-C5'	5.24	129.28	120.90
1	N	778	G	C5'-C4'-O4'	5.24	115.38	109.10
1	N	1112	C	C6-N1-C1'	5.24	127.08	120.80
1	N	1453	G	C2-N3-C4	-5.24	109.28	111.90
1	N	209	U	C4'-C3'-C2'	-5.24	97.36	102.60
1	N	319	G	C8-N9-C1'	-5.24	120.19	127.00
1	N	319	G	N9-C1'-C2'	-5.24	106.24	112.00
1	N	538	G	N7-C8-N9	5.24	115.72	113.10
1	N	627	G	C5-N7-C8	-5.24	101.68	104.30
1	N	738	C	C5-C4-N4	-5.24	116.53	120.20
1	N	886	G	OP2-P-O3'	5.24	116.72	105.20
1	N	951	G	C5'-C4'-C3'	5.24	124.38	116.00
1	N	1049	U	C5-C4-O4	-5.24	122.76	125.90
1	N	1117	A	C6-N1-C2	-5.24	115.46	118.60
1	N	1430	A	C5-C6-N1	-5.24	115.08	117.70
1	N	1450	U	P-O5'-C5'	5.24	129.28	120.90
1	N	221	C	C6-N1-C2	-5.23	118.21	120.30
1	N	236	A	C5-C6-N6	-5.23	119.51	123.70
1	N	395	C	C4-C5-C6	5.23	120.02	117.40
1	N	452	A	P-O3'-C3'	-5.23	113.42	119.70
1	N	142	G	N9-C4-C5	5.23	107.49	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	232	G	N9-C1'-C2'	-5.23	106.25	112.00
1	N	253	A	N1-C6-N6	5.23	121.74	118.60
1	N	829	G	C4-C5-C6	5.23	121.94	118.80
1	N	960	U	O4'-C1'-C2'	-5.23	100.57	105.80
1	N	1079	G	C5'-C4'-C3'	5.23	124.37	116.00
1	N	1433	A	C3'-C2'-C1'	-5.23	97.31	101.50
1	N	1485	U	N3-C4-O4	5.23	123.06	119.40
1	N	13	U	C4-C5-C6	5.23	122.84	119.70
1	N	358	U	N3-C2-O2	5.23	125.86	122.20
1	N	434	U	C5-C6-N1	5.23	125.31	122.70
1	N	773	G	N3-C4-C5	5.23	131.22	128.60
1	N	211	G	C6-N1-C2	5.23	128.24	125.10
1	N	273	U	C2'-C3'-O3'	5.23	122.07	113.70
1	N	787	A	C5'-C4'-O4'	5.23	115.38	109.10
1	N	811	C	N1-C2-O2	5.23	122.04	118.90
1	N	1255	G	C3'-C2'-C1'	5.23	105.68	101.50
1	N	1456	A	C4-C5-C6	5.23	119.61	117.00
1	N	46	G	N3-C4-N9	-5.23	122.86	126.00
1	N	214	C	N1-C1'-C2'	-5.23	106.25	112.00
1	N	957	U	O3'-P-O5'	-5.23	94.07	104.00
1	N	1464	U	C4-C5-C6	5.23	122.84	119.70
1	N	1531	A	C6-N1-C2	-5.23	115.46	118.60
1	N	28	A	C4-C5-C6	5.23	119.61	117.00
1	N	151	A	C5'-C4'-O4'	5.23	115.37	109.10
1	N	621	A	P-O5'-C5'	5.23	129.26	120.90
1	N	718	A	N1-C6-N6	5.23	121.73	118.60
1	N	724	G	C6-C5-N7	-5.23	127.27	130.40
1	N	239	U	N3-C2-O2	5.22	125.86	122.20
1	N	250	A	C4-C5-C6	5.22	119.61	117.00
1	N	360	G	C6-C5-N7	-5.22	127.27	130.40
1	N	480	U	C3'-C2'-C1'	5.22	105.68	101.50
1	N	553	A	N3-C4-C5	-5.22	123.14	126.80
1	N	837	U	N1-C2-N3	5.22	118.03	114.90
1	N	315	A	N3-C4-C5	-5.22	123.14	126.80
1	N	504	C	O5'-C5'-C4'	-5.22	101.78	111.70
1	N	1132	C	N3-C2-O2	5.22	125.56	121.90
1	N	1327	C	N3-C4-N4	5.22	121.66	118.00
1	N	686	U	C5'-C4'-O4'	5.22	115.36	109.10
1	N	1289	A	C2-N3-C4	-5.22	107.99	110.60
1	N	315	A	N7-C8-N9	5.22	116.41	113.80
1	N	782	A	C6-C5-N7	-5.22	128.65	132.30
1	N	1094	G	C5-N7-C8	5.22	106.91	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1107	C	C4-C5-C6	5.22	120.01	117.40
1	N	1362	A	C4-C5-N7	-5.22	108.09	110.70
1	N	729	A	C8-N9-C1'	5.22	137.09	127.70
1	N	1002	G	N3-C2-N2	5.22	123.55	119.90
1	N	286	C	C2-N1-C1'	5.22	124.54	118.80
1	N	550	G	N1-C2-N3	-5.22	120.77	123.90
1	N	567	G	C3'-C2'-C1'	-5.22	97.33	101.50
1	N	924	C	N3-C4-N4	5.22	121.65	118.00
1	N	1010	U	C5'-C4'-C3'	5.22	124.34	116.00
1	N	1186	G	C1'-O4'-C4'	5.22	114.07	109.90
1	N	1379	G	N3-C2-N2	5.22	123.55	119.90
1	N	47	C	C6-N1-C2	-5.21	118.21	120.30
1	N	148	G	O5'-P-OP1	-5.21	101.01	105.70
1	N	226	G	C5-C6-O6	-5.21	125.47	128.60
1	N	474	G	C6-C5-N7	-5.21	127.27	130.40
1	N	545	C	C6-N1-C1'	-5.21	114.54	120.80
1	N	714	G	O4'-C1'-N9	5.21	112.37	108.20
1	N	538	G	N3-C2-N2	5.21	123.55	119.90
1	N	142	G	C5-C6-N1	-5.21	108.89	111.50
1	N	658	C	C1'-O4'-C4'	5.21	114.07	109.90
1	N	1076	U	P-O3'-C3'	5.21	125.95	119.70
1	N	1109	C	C5-C6-N1	-5.21	118.39	121.00
1	N	1173	U	N1-C2-N3	-5.21	111.77	114.90
1	N	1192	C	C4-C5-C6	5.21	120.00	117.40
1	N	1468	A	C5'-C4'-O4'	5.21	115.35	109.10
1	N	136	C	C5-C4-N4	-5.21	116.55	120.20
1	N	424	G	C6-N1-C2	-5.21	121.97	125.10
1	N	571	U	C5-C4-O4	-5.21	122.77	125.90
1	N	1121	U	N3-C4-C5	5.21	117.73	114.60
1	N	1154	G	C6-N1-C2	5.21	128.23	125.10
1	N	338	A	C4'-C3'-C2'	-5.21	97.39	102.60
1	N	1356	G	C8-N9-C4	5.21	108.48	106.40
1	N	1480	A	C4-C5-C6	5.21	119.61	117.00
1	N	16	A	C5'-C4'-C3'	5.21	124.33	116.00
1	N	232	G	C3'-C2'-C1'	-5.21	97.33	101.50
1	N	308	C	C5'-C4'-O4'	-5.21	102.85	109.10
1	N	317	U	C5'-C4'-C3'	-5.21	107.67	116.00
1	N	658	C	O4'-C4'-C3'	-5.21	98.79	104.00
1	N	659	U	C5-C4-O4	5.21	129.02	125.90
1	N	843	U	C2-N3-C4	-5.21	123.88	127.00
1	N	847	G	C6-N1-C2	5.21	128.22	125.10
1	N	868	C	C4'-C3'-C2'	-5.21	97.39	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	447	G	O4'-C4'-C3'	-5.21	98.80	104.00
1	N	479	U	C5'-C4'-O4'	5.21	115.35	109.10
1	N	1171	A	C8-N9-C4	-5.21	103.72	105.80
1	N	39	G	P-O5'-C5'	-5.20	112.58	120.90
1	N	122	G	N1-C6-O6	5.20	123.02	119.90
1	N	584	G	C4-N9-C1'	5.20	133.26	126.50
1	N	843	U	O4'-C4'-C3'	-5.20	98.80	104.00
1	N	870	U	C3'-C2'-C1'	5.20	105.66	101.50
1	N	974	A	C4'-C3'-C2'	5.20	107.80	102.60
1	N	1489	G	N3-C4-N9	-5.20	122.88	126.00
1	N	660	C	C4'-C3'-C2'	-5.20	97.40	102.60
1	N	749	A	N7-C8-N9	5.20	116.40	113.80
1	N	49	U	C5-C4-O4	5.20	129.02	125.90
1	N	1072	G	C8-N9-C1'	5.20	133.76	127.00
1	N	1408	A	N3-C4-C5	-5.20	123.16	126.80
1	N	87	C	C2-N3-C4	5.20	122.50	119.90
1	N	667	G	C6-N1-C2	-5.20	121.98	125.10
1	N	781	A	C8-N9-C4	-5.20	103.72	105.80
1	N	1244	G	N7-C8-N9	-5.20	110.50	113.10
1	N	1363	A	C3'-C2'-C1'	-5.20	97.34	101.50
1	N	1372	U	N3-C4-O4	5.20	123.04	119.40
1	N	862	C	C2-N3-C4	5.20	122.50	119.90
1	N	1243	C	P-O5'-C5'	5.20	129.22	120.90
1	N	375	U	C5-C4-O4	-5.20	122.78	125.90
1	N	1205	U	C6-N1-C2	-5.20	117.88	121.00
1	N	1319	A	C4-N9-C1'	5.20	135.65	126.30
1	N	1332	A	C6-N1-C2	5.20	121.72	118.60
1	N	1473	G	N7-C8-N9	5.20	115.70	113.10
1	N	1116	U	N3-C4-O4	5.19	123.04	119.40
1	N	32	A	N7-C8-N9	5.19	116.40	113.80
1	N	82	G	N1-C6-O6	5.19	123.02	119.90
1	N	90	C	O5'-P-OP2	5.19	116.93	110.70
1	N	432	A	N1-C6-N6	5.19	121.72	118.60
1	N	1153	G	N1-C2-N3	-5.19	120.78	123.90
1	N	84	U	C6-N1-C1'	-5.19	113.93	121.20
1	N	399	G	C5-C6-N1	5.19	114.09	111.50
1	N	928	G	C4'-C3'-C2'	-5.19	97.41	102.60
1	N	1286	U	N1-C2-O2	-5.19	119.17	122.80
1	N	404	G	C2-N3-C4	-5.19	109.31	111.90
1	N	541	G	C5'-C4'-O4'	5.19	115.33	109.10
1	N	699	C	P-O3'-C3'	-5.19	113.47	119.70
1	N	1496	C	C5-C4-N4	-5.19	116.57	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	107	G	C8-N9-C4	5.19	108.47	106.40
1	N	211	G	C5-C6-O6	-5.19	125.49	128.60
1	N	278	G	C4-C5-N7	-5.19	108.72	110.80
1	N	424	G	C3'-C2'-C1'	5.19	105.65	101.50
1	N	577	G	C1'-O4'-C4'	5.19	114.05	109.90
1	N	738	C	OP1-P-O3'	5.19	116.61	105.20
1	N	785	G	C5-C6-O6	-5.19	125.49	128.60
1	N	849	G	C8-N9-C4	-5.19	104.33	106.40
1	N	925	G	C5-N7-C8	5.19	106.89	104.30
1	N	1029	U	N1-C2-N3	5.19	118.01	114.90
1	N	1405	G	C5-C6-N1	-5.19	108.91	111.50
1	N	256	U	C2'-C3'-O3'	5.19	122.00	113.70
1	N	709	U	N3-C4-O4	-5.19	115.77	119.40
1	N	1020	G	C6-N1-C2	5.19	128.21	125.10
1	N	1130	A	P-O3'-C3'	-5.19	113.48	119.70
1	N	412	A	C1'-O4'-C4'	-5.18	105.75	109.90
1	N	557	G	O4'-C1'-N9	5.18	112.35	108.20
1	N	593	U	C4'-C3'-C2'	-5.18	97.42	102.60
1	N	1012	A	C6-C5-N7	-5.18	128.67	132.30
1	N	1503	A	C5-C6-N1	-5.18	115.11	117.70
1	N	880	C	C5-C4-N4	-5.18	116.57	120.20
1	N	993	G	O4'-C1'-C2'	-5.18	100.62	105.80
1	N	1032	G	O4'-C1'-C2'	5.18	112.27	107.60
1	N	1523	G	C6-N1-C2	5.18	128.21	125.10
1	N	270	A	C2-N3-C4	-5.18	108.01	110.60
1	N	427	U	O4'-C4'-C3'	-5.18	98.82	104.00
1	N	1502	A	C3'-C2'-C1'	-5.18	97.36	101.50
1	N	177	G	N3-C2-N2	5.18	123.53	119.90
1	N	696	A	C4-C5-C6	5.18	119.59	117.00
1	N	869	G	C6-C5-N7	-5.18	127.29	130.40
1	N	1193	G	N9-C4-C5	-5.18	103.33	105.40
1	N	1204	A	C6-N1-C2	5.18	121.71	118.60
1	N	846	G	C3'-C2'-C1'	5.18	105.64	101.50
1	N	929	G	N3-C2-N2	5.18	123.52	119.90
1	N	48	C	C5-C4-N4	-5.18	116.58	120.20
1	N	186	C	C5-C6-N1	5.18	123.59	121.00
1	N	760	G	N3-C4-N9	-5.18	122.89	126.00
1	N	1110	A	P-O3'-C3'	5.18	125.91	119.70
1	N	1286	U	N3-C4-O4	-5.18	115.78	119.40
1	N	41	G	C4-C5-N7	-5.17	108.73	110.80
1	N	158	G	N1-C2-N2	5.17	120.86	116.20
1	N	263	A	P-O3'-C3'	-5.17	113.49	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	390	U	C5'-C4'-C3'	-5.17	107.72	116.00
1	N	496	A	C6-C5-N7	-5.17	128.68	132.30
1	N	621	A	OP1-P-OP2	-5.17	111.84	119.60
1	N	923	A	C4-N9-C1'	5.17	135.61	126.30
1	N	935	A	C5-C6-N1	-5.17	115.11	117.70
1	N	942	G	N1-C2-N2	-5.17	111.54	116.20
1	N	1012	A	C5-C6-N1	-5.17	115.11	117.70
1	N	1082	A	C5-C6-N6	-5.17	119.56	123.70
1	N	1125	U	N3-C2-O2	5.17	125.82	122.20
1	N	1155	A	C5-C6-N6	-5.17	119.56	123.70
1	N	1294	G	O4'-C4'-C3'	-5.17	98.83	104.00
1	N	244	U	C6-N1-C2	-5.17	117.90	121.00
1	N	506	G	N1-C6-O6	5.17	123.00	119.90
1	N	1520	C	C6-N1-C2	-5.17	118.23	120.30
1	N	928	G	N7-C8-N9	5.17	115.69	113.10
1	N	1479	C	N3-C4-N4	5.17	121.62	118.00
1	N	90	C	N1-C2-O2	-5.17	115.80	118.90
1	N	677	U	C2-N1-C1'	5.17	123.91	117.70
1	N	1094	G	O4'-C1'-N9	5.17	112.34	108.20
1	N	77	A	C4-C5-N7	-5.17	108.12	110.70
1	N	801	U	C5'-C4'-C3'	5.17	124.27	116.00
1	N	90	C	N3-C2-O2	5.17	125.52	121.90
1	N	291	U	O4'-C4'-C3'	-5.17	98.83	104.00
1	N	299	G	C5-C6-N1	-5.17	108.92	111.50
1	N	413	G	C5'-C4'-O4'	5.17	115.30	109.10
1	N	631	C	C5-C4-N4	5.17	123.82	120.20
1	N	19	A	C5-N7-C8	5.17	106.48	103.90
1	N	211	G	N7-C8-N9	-5.17	110.52	113.10
1	N	850	U	C2-N3-C4	5.17	130.10	127.00
1	N	986	U	N1-C2-O2	5.17	126.42	122.80
1	N	26	A	N9-C1'-C2'	-5.16	106.32	112.00
1	N	29	U	C2'-C3'-O3'	5.16	121.96	113.70
1	N	160	A	C6-N1-C2	-5.16	115.50	118.60
1	N	307	C	O4'-C1'-N1	5.16	112.33	108.20
1	N	455	G	C6-C5-N7	-5.16	127.30	130.40
1	N	507	C	C1'-O4'-C4'	5.16	114.03	109.90
1	N	952	U	C6-N1-C1'	-5.16	113.97	121.20
1	N	1224	U	C2-N3-C4	-5.16	123.90	127.00
1	N	1233	G	N3-C4-C5	-5.16	126.02	128.60
1	N	1042	A	C4-C5-N7	-5.16	108.12	110.70
1	N	1080	A	C6-N1-C2	-5.16	115.50	118.60
1	N	763	G	C4-C5-C6	5.16	121.90	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1058	G	N9-C4-C5	5.16	107.46	105.40
1	N	1290	G	C4-N9-C1'	5.16	133.21	126.50
1	N	578	C	C4-C5-C6	-5.16	114.82	117.40
1	N	909	A	N1-C2-N3	-5.16	126.72	129.30
1	N	1040	U	N1-C2-N3	5.16	118.00	114.90
1	N	1432	G	C5-C6-N1	-5.16	108.92	111.50
1	N	99	C	C2-N1-C1'	-5.16	113.13	118.80
1	N	463	U	C5'-C4'-C3'	5.16	124.25	116.00
1	N	39	G	C5'-C4'-C3'	-5.16	107.75	116.00
1	N	43	C	C2-N3-C4	5.16	122.48	119.90
1	N	148	G	P-O5'-C5'	5.16	129.15	120.90
1	N	201	G	N1-C2-N3	-5.16	120.81	123.90
1	N	230	G	P-O3'-C3'	-5.16	113.51	119.70
1	N	668	G	C6-C5-N7	-5.16	127.31	130.40
1	N	773	G	C1'-O4'-C4'	5.16	114.03	109.90
1	N	640	A	C5-N7-C8	5.15	106.48	103.90
1	N	1455	G	C5-C6-N1	-5.15	108.92	111.50
1	N	99	C	N1-C2-N3	-5.15	115.59	119.20
1	N	255	G	N9-C1'-C2'	-5.15	106.33	112.00
1	N	906	A	P-O3'-C3'	-5.15	113.52	119.70
1	N	1411	C	C4'-C3'-C2'	-5.15	97.45	102.60
1	N	1449	C	C6-N1-C2	-5.15	118.24	120.30
1	N	250	A	C8-N9-C1'	-5.15	118.43	127.70
1	N	612	C	N1-C2-N3	-5.15	115.59	119.20
1	N	767	A	C5'-C4'-C3'	5.15	124.24	116.00
1	N	321	A	O4'-C1'-N9	5.15	112.32	108.20
1	N	371	A	C5-C6-N1	-5.15	115.13	117.70
1	N	510	A	N1-C2-N3	5.15	131.88	129.30
1	N	539	A	O4'-C1'-N9	5.15	112.32	108.20
1	N	618	C	C5-C4-N4	-5.15	116.60	120.20
1	N	838	G	N1-C6-O6	5.15	122.99	119.90
1	N	9	G	C5-C6-O6	-5.15	125.51	128.60
1	N	205	A	C2'-C3'-O3'	5.15	121.94	113.70
1	N	289	G	N3-C4-C5	-5.15	126.03	128.60
1	N	759	A	N9-C4-C5	5.15	107.86	105.80
1	N	1478	U	C6-N1-C2	5.15	124.09	121.00
1	N	115	G	N3-C4-C5	5.15	131.17	128.60
1	N	576	C	O4'-C1'-N1	5.15	112.32	108.20
1	N	695	A	C2-N3-C4	5.15	113.17	110.60
1	N	1007	U	C5'-C4'-C3'	-5.15	107.77	116.00
1	N	332	G	C3'-C2'-C1'	-5.14	97.38	101.50
1	N	573	A	C6-N1-C2	-5.14	115.51	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1275	A	C5-C6-N1	-5.14	115.13	117.70
1	N	519	C	C5'-C4'-C3'	-5.14	107.77	116.00
1	N	524	G	C5-C6-N1	-5.14	108.93	111.50
1	N	721	G	C6-C5-N7	-5.14	127.31	130.40
1	N	925	G	C8-N9-C4	-5.14	104.34	106.40
1	N	967	C	C6-N1-C2	5.14	122.36	120.30
1	N	1018	G	N3-C4-N9	5.14	129.09	126.00
1	N	1232	U	O5'-C5'-C4'	-5.14	101.93	111.70
1	N	1491	G	O4'-C1'-N9	5.14	112.31	108.20
1	N	260	G	C2-N3-C4	-5.14	109.33	111.90
1	N	1113	C	C4'-C3'-C2'	-5.14	97.46	102.60
1	N	981	U	C1'-O4'-C4'	5.14	114.01	109.90
1	N	1221	G	OP1-P-OP2	-5.14	111.89	119.60
1	N	1224	U	P-O3'-C3'	5.14	125.87	119.70
1	N	1269	A	C3'-C2'-C1'	-5.14	97.39	101.50
1	N	328	C	C5-C4-N4	-5.14	116.60	120.20
1	N	746	A	O4'-C1'-N9	5.14	112.31	108.20
1	N	914	A	C1'-O4'-C4'	5.14	114.01	109.90
1	N	1349	A	C4-C5-C6	5.14	119.57	117.00
1	N	643	C	C2-N3-C4	5.14	122.47	119.90
1	N	666	G	O4'-C1'-N9	5.14	112.31	108.20
1	N	696	A	O4'-C1'-N9	5.14	112.31	108.20
1	N	848	C	P-O5'-C5'	5.14	129.12	120.90
1	N	1106	G	C6-C5-N7	-5.14	127.32	130.40
1	N	1226	C	C3'-C2'-C1'	5.14	105.61	101.50
1	N	74	A	C5-N7-C8	5.13	106.47	103.90
1	N	492	C	P-O5'-C5'	-5.13	112.68	120.90
1	N	729	A	N3-C4-C5	-5.13	123.21	126.80
1	N	862	C	N3-C4-N4	5.13	121.59	118.00
1	N	888	G	C5-C6-N1	-5.13	108.93	111.50
1	N	906	A	O5'-C5'-C4'	-5.13	101.94	111.70
1	N	1071	C	C2-N3-C4	5.13	122.47	119.90
1	N	1402	C	N1-C2-N3	-5.13	115.61	119.20
1	N	1046	A	O4'-C1'-N9	5.13	112.31	108.20
1	N	1191	A	P-O3'-C3'	5.13	125.86	119.70
1	N	287	U	N1-C2-O2	-5.13	119.21	122.80
1	N	491	G	C1'-O4'-C4'	-5.13	105.80	109.90
1	N	560	A	N3-C4-N9	5.13	131.51	127.40
1	N	700	G	N3-C4-C5	-5.13	126.03	128.60
1	N	996	A	C4'-C3'-C2'	-5.13	97.47	102.60
1	N	1181	G	C8-N9-C4	-5.13	104.35	106.40
1	N	1276	G	N9-C4-C5	-5.13	103.35	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	117	G	N9-C1'-C2'	-5.13	106.36	112.00
1	N	738	C	C2-N3-C4	5.13	122.47	119.90
1	N	769	G	O5'-C5'-C4'	-5.13	101.95	111.70
1	N	959	A	N1-C2-N3	-5.13	126.73	129.30
1	N	1374	A	P-O3'-C3'	5.13	125.86	119.70
1	N	179	A	C5'-C4'-O4'	5.13	115.25	109.10
1	N	541	G	C6-N1-C2	5.13	128.18	125.10
1	N	696	A	N3-C4-C5	-5.13	123.21	126.80
1	N	1082	A	OP1-P-OP2	-5.13	111.91	119.60
1	N	1467	C	C5-C4-N4	-5.13	116.61	120.20
1	N	348	G	C4-N9-C1'	-5.13	119.84	126.50
1	N	374	A	P-O5'-C5'	-5.13	112.70	120.90
1	N	452	A	C6-N1-C2	-5.13	115.52	118.60
1	N	1177	G	C8-N9-C1'	-5.13	120.33	127.00
1	N	564	C	P-O3'-C3'	5.12	125.85	119.70
1	N	1170	A	O4'-C1'-C2'	-5.12	100.67	105.80
1	N	1422	G	N3-C4-N9	-5.12	122.92	126.00
1	N	208	U	N3-C4-C5	-5.12	111.53	114.60
1	N	294	U	OP1-P-OP2	-5.12	111.92	119.60
1	N	423	G	C6-C5-N7	-5.12	127.33	130.40
1	N	498	A	C5-C6-N1	-5.12	115.14	117.70
1	N	701	U	N1-C2-N3	5.12	117.97	114.90
1	N	839	C	C5-C6-N1	5.12	123.56	121.00
1	N	1035	A	C5-N7-C8	5.12	106.46	103.90
1	N	2	A	O4'-C1'-N9	5.12	112.30	108.20
1	N	446	G	C6-C5-N7	-5.12	127.33	130.40
1	N	590	U	N3-C4-C5	-5.12	111.53	114.60
1	N	1216	A	P-O3'-C3'	-5.12	113.55	119.70
1	N	769	G	C5'-C4'-C3'	5.12	124.19	116.00
1	N	28	A	N9-C4-C5	-5.12	103.75	105.80
1	N	475	C	N1-C2-O2	5.12	121.97	118.90
1	N	778	G	N1-C2-N2	-5.12	111.59	116.20
1	N	825	A	C5-N7-C8	5.12	106.46	103.90
1	N	857	C	C2'-C3'-O3'	5.12	121.89	113.70
1	N	935	A	C1'-O4'-C4'	5.12	114.00	109.90
1	N	1360	A	C4-C5-N7	-5.12	108.14	110.70
1	N	85	U	N1-C2-N3	-5.12	111.83	114.90
1	N	118	U	N3-C2-O2	5.12	125.78	122.20
1	N	809	G	C5-C6-N1	-5.12	108.94	111.50
1	N	1190	G	C4-C5-C6	5.12	121.87	118.80
1	N	154	U	C5-C6-N1	5.12	125.26	122.70
1	N	299	G	C5-C6-O6	-5.12	125.53	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	567	G	C5-C6-N1	-5.12	108.94	111.50
1	N	800	G	C6-C5-N7	-5.12	127.33	130.40
1	N	1129	C	N1-C2-N3	-5.12	115.62	119.20
1	N	1212	U	OP1-P-OP2	-5.12	111.93	119.60
1	N	1309	G	N3-C4-N9	5.12	129.07	126.00
1	N	127	G	O3'-P-O5'	-5.11	94.28	104.00
1	N	447	G	C4-C5-C6	5.11	121.87	118.80
1	N	514	C	C5-C6-N1	5.11	123.56	121.00
1	N	553	A	O4'-C1'-N9	5.11	112.29	108.20
1	N	569	C	C4'-C3'-C2'	-5.11	97.49	102.60
1	N	585	G	N1-C6-O6	5.11	122.97	119.90
1	N	665	A	C5-C6-N6	-5.11	119.61	123.70
1	N	677	U	N3-C4-O4	5.11	122.98	119.40
1	N	856	C	C2-N1-C1'	5.11	124.42	118.80
1	N	919	A	C5-N7-C8	5.11	106.46	103.90
1	N	964	A	P-O3'-C3'	5.11	125.83	119.70
1	N	1026	G	N1-C6-O6	5.11	122.97	119.90
1	N	1394	A	O4'-C1'-N9	5.11	112.29	108.20
1	N	72	A	C4'-C3'-C2'	-5.11	97.49	102.60
1	N	670	G	C6-N1-C2	5.11	128.17	125.10
1	N	1177	G	C6-N1-C2	5.11	128.17	125.10
1	N	1241	G	C6-N1-C2	5.11	128.17	125.10
1	N	463	U	C6-N1-C1'	-5.11	114.05	121.20
1	N	570	G	C8-N9-C4	-5.11	104.36	106.40
1	N	579	A	C4-C5-N7	-5.11	108.14	110.70
1	N	758	C	N1-C2-O2	5.11	121.97	118.90
1	N	888	G	O4'-C1'-N9	5.11	112.29	108.20
1	N	959	A	O4'-C1'-N9	5.11	112.29	108.20
1	N	1087	G	N3-C2-N2	5.11	123.48	119.90
1	N	1095	U	P-O3'-C3'	-5.11	113.57	119.70
1	N	1183	U	P-O3'-C3'	-5.11	113.57	119.70
1	N	1335	U	C1'-O4'-C4'	-5.11	105.81	109.90
1	N	1022	A	N1-C2-N3	5.11	131.85	129.30
1	N	123	U	P-O3'-C3'	5.11	125.83	119.70
1	N	649	A	C6-C5-N7	-5.11	128.72	132.30
1	N	906	A	P-O5'-C5'	5.11	129.07	120.90
1	N	1047	G	N7-C8-N9	-5.11	110.55	113.10
1	N	1226	C	C5-C4-N4	-5.11	116.62	120.20
1	N	1398	A	P-O5'-C5'	5.11	129.07	120.90
1	N	384	G	C2-N3-C4	-5.11	109.35	111.90
1	N	442	G	C4-C5-N7	-5.11	108.76	110.80
1	N	776	G	C8-N9-C4	-5.11	104.36	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	846	G	C5'-C4'-O4'	5.11	115.23	109.10
1	N	1056	U	O4'-C1'-N1	5.11	112.28	108.20
1	N	161	A	O4'-C4'-C3'	-5.10	98.90	104.00
1	N	266	G	C4-C5-N7	-5.10	108.76	110.80
1	N	1521	C	N1-C2-N3	-5.10	115.63	119.20
1	N	36	C	C5-C6-N1	5.10	123.55	121.00
1	N	396	C	N1-C2-O2	-5.10	115.84	118.90
1	N	455	G	O4'-C1'-N9	5.10	112.28	108.20
1	N	693	G	P-O3'-C3'	5.10	125.82	119.70
1	N	774	G	C5-C6-O6	-5.10	125.54	128.60
1	N	817	C	C2-N3-C4	5.10	122.45	119.90
1	N	1231	G	N3-C4-N9	5.10	129.06	126.00
1	N	1503	A	C5-C6-N6	-5.10	119.62	123.70
1	N	1521	C	C4-C5-C6	-5.10	114.85	117.40
1	N	64	G	C5-C6-N1	-5.10	108.95	111.50
1	N	394	G	N1-C2-N3	-5.10	120.84	123.90
1	N	922	G	N1-C2-N3	-5.10	120.84	123.90
1	N	954	G	OP1-P-OP2	-5.10	111.95	119.60
1	N	1021	A	N1-C6-N6	5.10	121.66	118.60
1	N	178	C	N3-C4-N4	5.10	121.57	118.00
1	N	201	G	C3'-C2'-C1'	5.10	105.58	101.50
1	N	447	G	N1-C2-N3	-5.10	120.84	123.90
1	N	1115	U	N1-C2-O2	-5.10	119.23	122.80
1	N	10	A	OP1-P-OP2	-5.10	111.95	119.60
1	N	34	C	OP1-P-O3'	5.10	116.41	105.20
1	N	114	U	C5-C6-N1	5.10	125.25	122.70
1	N	260	G	C4-C5-N7	-5.10	108.76	110.80
1	N	271	C	C2'-C3'-O3'	5.10	121.86	113.70
1	N	530	G	N1-C2-N3	-5.10	120.84	123.90
1	N	634	C	C5'-C4'-O4'	5.10	115.22	109.10
1	N	656	G	C4-N9-C1'	-5.10	119.87	126.50
1	N	814	A	C5-C6-N1	-5.10	115.15	117.70
1	N	1151	A	O4'-C1'-N9	5.10	112.28	108.20
1	N	1211	U	N1-C2-N3	5.10	117.96	114.90
1	N	1442	G	C2-N3-C4	5.10	114.45	111.90
1	N	296	U	N3-C2-O2	5.10	125.77	122.20
1	N	1346	A	N9-C4-C5	-5.10	103.76	105.80
1	N	108	G	C4-C5-N7	-5.09	108.76	110.80
1	N	129	A	N9-C4-C5	5.09	107.84	105.80
1	N	814	A	C5'-C4'-C3'	-5.09	107.85	116.00
1	N	953	G	C8-N9-C4	-5.09	104.36	106.40
1	N	954	G	N1-C6-O6	5.09	122.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1179	A	N7-C8-N9	5.09	116.35	113.80
1	N	1424	U	N3-C2-O2	5.09	125.77	122.20
1	N	1534	A	C2-N3-C4	-5.09	108.05	110.60
1	N	341	C	N1-C2-O2	5.09	121.95	118.90
1	N	829	G	O4'-C1'-C2'	-5.09	100.71	105.80
1	N	914	A	C4-C5-C6	5.09	119.55	117.00
1	N	951	G	C4-C5-C6	-5.09	115.75	118.80
1	N	1058	G	C4'-C3'-C2'	-5.09	97.51	102.60
1	N	1240	U	O4'-C1'-C2'	-5.09	100.71	105.80
1	N	124	C	C4-C5-C6	-5.09	114.86	117.40
1	N	148	G	C5'-C4'-O4'	5.09	115.21	109.10
1	N	346	G	C6-C5-N7	-5.09	127.35	130.40
1	N	423	G	C3'-C2'-C1'	5.09	105.57	101.50
1	N	788	U	C4'-C3'-C2'	-5.09	97.51	102.60
1	N	797	C	C3'-C2'-C1'	5.09	105.57	101.50
1	N	1105	A	N1-C2-N3	-5.09	126.75	129.30
1	N	1495	U	C2-N1-C1'	5.09	123.81	117.70
1	N	1242	G	O5'-C5'-C4'	-5.09	102.03	111.70
1	N	369	G	N9-C4-C5	5.09	107.44	105.40
1	N	573	A	C2-N3-C4	-5.09	108.06	110.60
1	N	611	C	C3'-C2'-C1'	5.09	105.57	101.50
1	N	1206	G	C8-N9-C1'	-5.09	120.39	127.00
1	N	1224	U	P-O5'-C5'	5.09	129.04	120.90
1	N	40	C	C3'-C2'-C1'	-5.08	97.43	101.50
1	N	42	G	O4'-C1'-N9	5.08	112.27	108.20
1	N	457	G	C6-C5-N7	-5.08	127.35	130.40
1	N	656	G	C6-C5-N7	5.08	133.45	130.40
1	N	766	A	N3-C4-C5	-5.08	123.24	126.80
1	N	1053	G	C1'-O4'-C4'	-5.08	105.83	109.90
1	N	1107	C	O4'-C1'-N1	5.08	112.27	108.20
1	N	1144	G	OP1-P-O3'	5.08	116.38	105.20
1	N	1300	G	C6-N1-C2	-5.08	122.05	125.10
1	N	17	U	P-O3'-C3'	5.08	125.80	119.70
1	N	322	C	C2'-C3'-O3'	5.08	121.83	113.70
1	N	365	U	N1-C2-N3	5.08	117.95	114.90
1	N	471	U	C6-N1-C2	-5.08	117.95	121.00
1	N	475	C	C5-C4-N4	-5.08	116.64	120.20
1	N	484	G	C2'-C3'-O3'	5.08	121.83	113.70
1	N	535	A	O4'-C1'-N9	5.08	112.27	108.20
1	N	655	A	C5-N7-C8	-5.08	101.36	103.90
1	N	680	C	C3'-C2'-C1'	-5.08	97.44	101.50
1	N	726	C	C6-N1-C1'	-5.08	114.70	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1310	G	P-O5'-C5'	-5.08	112.77	120.90
1	N	1433	A	C5'-C4'-C3'	5.08	124.13	116.00
1	N	719	C	N1-C1'-C2'	-5.08	106.41	112.00
1	N	1068	G	P-O3'-C3'	-5.08	113.60	119.70
1	N	371	A	C2'-C3'-O3'	5.08	121.83	113.70
1	N	565	U	C5'-C4'-C3'	5.08	124.13	116.00
1	N	904	U	O3'-P-O5'	-5.08	94.35	104.00
1	N	1007	U	C5'-C4'-O4'	5.08	115.19	109.10
1	N	1024	G	N1-C2-N3	-5.08	120.85	123.90
1	N	1343	G	C4-C5-N7	5.08	112.83	110.80
1	N	596	A	C6-C5-N7	5.08	135.85	132.30
1	N	629	A	C4-C5-C6	5.08	119.54	117.00
1	N	665	A	C5'-C4'-C3'	5.08	124.12	116.00
1	N	1420	U	O4'-C1'-N1	5.08	112.26	108.20
1	N	96	U	C6-N1-C2	-5.08	117.95	121.00
1	N	406	G	C5-N7-C8	-5.08	101.76	104.30
1	N	524	G	C4-N9-C1'	5.08	133.10	126.50
1	N	642	A	C8-N9-C4	-5.08	103.77	105.80
1	N	974	A	P-O5'-C5'	5.08	129.02	120.90
1	N	1036	A	OP2-P-O3'	5.08	116.37	105.20
1	N	1069	C	N1-C1'-C2'	-5.08	106.42	112.00
1	N	1084	G	C4'-C3'-C2'	5.08	107.67	102.60
1	N	1381	U	N1-C2-N3	-5.08	111.86	114.90
1	N	18	C	C5-C4-N4	-5.07	116.65	120.20
1	N	918	A	C8-N9-C4	-5.07	103.77	105.80
1	N	1239	A	C4'-C3'-O3'	5.07	123.15	113.00
1	N	1374	A	O4'-C1'-C2'	-5.07	100.73	105.80
1	N	339	C	C5-C6-N1	-5.07	118.46	121.00
1	N	511	C	N1-C2-N3	-5.07	115.65	119.20
1	N	1065	U	O4'-C1'-N1	5.07	112.26	108.20
1	N	1158	C	O4'-C1'-C2'	5.07	112.17	107.60
1	N	265	G	N3-C2-N2	5.07	123.45	119.90
1	N	521	G	O5'-P-OP2	5.07	116.78	110.70
1	N	682	G	N1-C2-N2	-5.07	111.64	116.20
1	N	804	U	N1-C2-O2	5.07	126.35	122.80
1	N	832	G	O5'-C5'-C4'	5.07	121.33	111.70
1	N	1247	U	N1-C2-N3	5.07	117.94	114.90
1	N	1296	C	O4'-C1'-N1	5.07	112.26	108.20
1	N	456	A	C6-C5-N7	-5.07	128.75	132.30
1	N	960	U	C5-C4-O4	-5.07	122.86	125.90
1	N	1103	C	C2-N1-C1'	5.07	124.38	118.80
1	N	365	U	C2-N3-C4	-5.07	123.96	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	453	G	C5'-C4'-O4'	5.07	115.18	109.10
1	N	858	G	N3-C4-C5	-5.07	126.07	128.60
1	N	934	C	N3-C2-O2	-5.07	118.35	121.90
1	N	1085	U	C2-N3-C4	5.07	130.04	127.00
1	N	1278	G	OP2-P-O3'	5.07	116.35	105.20
1	N	1304	G	C5-N7-C8	-5.07	101.77	104.30
1	N	6	G	O4'-C1'-N9	5.07	112.25	108.20
1	N	93	U	N3-C2-O2	5.07	125.75	122.20
1	N	212	G	N9-C4-C5	-5.07	103.37	105.40
1	N	445	G	N1-C6-O6	5.07	122.94	119.90
1	N	498	A	N3-C4-N9	-5.07	123.35	127.40
1	N	757	U	O4'-C1'-N1	5.07	112.25	108.20
1	N	867	G	C1'-O4'-C4'	5.07	113.95	109.90
1	N	969	A	P-O5'-C5'	-5.07	112.80	120.90
1	N	1207	G	P-O3'-C3'	-5.07	113.62	119.70
1	N	1238	A	C5'-C4'-O4'	5.07	115.18	109.10
1	N	1396	A	P-O3'-C3'	5.07	125.78	119.70
1	N	643	C	C5'-C4'-O4'	5.06	115.17	109.10
1	N	813	U	OP2-P-O3'	5.06	116.34	105.20
1	N	28	A	C1'-O4'-C4'	5.06	113.95	109.90
1	N	145	G	C3'-C2'-C1'	-5.06	97.45	101.50
1	N	483	C	C1'-O4'-C4'	-5.06	105.85	109.90
1	N	511	C	O4'-C1'-C2'	-5.06	100.74	105.80
1	N	568	G	C4'-C3'-C2'	-5.06	97.54	102.60
1	N	572	A	C4-N9-C1'	5.06	135.41	126.30
1	N	596	A	OP1-P-OP2	-5.06	112.01	119.60
1	N	890	G	N3-C4-N9	5.06	129.04	126.00
1	N	1249	C	P-O3'-C3'	5.06	125.77	119.70
1	N	95	C	C5'-C4'-C3'	-5.06	107.91	116.00
1	N	273	U	P-O5'-C5'	5.06	128.99	120.90
1	N	396	C	C1'-O4'-C4'	-5.06	105.85	109.90
1	N	472	U	N3-C4-O4	5.06	122.94	119.40
1	N	707	U	P-O3'-C3'	5.06	125.77	119.70
1	N	1418	A	N3-C4-N9	-5.06	123.35	127.40
1	N	491	G	N1-C2-N2	5.06	120.75	116.20
1	N	1319	A	OP1-P-O3'	5.06	116.32	105.20
1	N	1532	U	N3-C4-O4	5.06	122.94	119.40
1	N	102	G	N1-C2-N3	-5.05	120.87	123.90
1	N	383	A	N3-C4-C5	-5.05	123.26	126.80
1	N	681	A	C6-C5-N7	-5.05	128.76	132.30
1	N	849	G	C5'-C4'-C3'	-5.05	107.91	116.00
1	N	1355	G	N9-C4-C5	5.05	107.42	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	227	G	N3-C4-N9	5.05	129.03	126.00
1	N	297	G	N1-C6-O6	5.05	122.93	119.90
1	N	839	C	P-O5'-C5'	5.05	128.99	120.90
1	N	151	A	N9-C4-C5	5.05	107.82	105.80
1	N	234	C	C2-N1-C1'	5.05	124.36	118.80
1	N	1297	G	C4-C5-C6	5.05	121.83	118.80
1	N	1472	U	C5'-C4'-C3'	5.05	124.08	116.00
1	N	190	A	O4'-C1'-N9	5.05	112.24	108.20
1	N	274	A	N9-C4-C5	-5.05	103.78	105.80
1	N	637	C	N1-C2-O2	5.05	121.93	118.90
1	N	680	C	C6-N1-C2	-5.05	118.28	120.30
1	N	835	U	C3'-C2'-C1'	5.05	105.54	101.50
1	N	949	A	N7-C8-N9	5.05	116.32	113.80
1	N	1009	U	C3'-C2'-C1'	5.05	105.54	101.50
1	N	1252	A	C4'-C3'-C2'	-5.05	97.55	102.60
1	N	1341	U	C1'-O4'-C4'	5.05	113.94	109.90
1	N	1370	G	C8-N9-C1'	5.05	133.56	127.00
1	N	84	U	N3-C4-O4	5.05	122.93	119.40
1	N	155	A	C8-N9-C1'	5.05	136.79	127.70
1	N	204	G	N1-C2-N2	-5.05	111.66	116.20
1	N	665	A	C5-C6-N1	-5.05	115.18	117.70
1	N	815	A	N7-C8-N9	-5.05	111.28	113.80
1	N	340	U	P-O3'-C3'	5.05	125.76	119.70
1	N	546	A	O4'-C1'-N9	5.05	112.24	108.20
1	N	578	C	O4'-C1'-N1	5.05	112.24	108.20
1	N	742	G	N9-C4-C5	5.05	107.42	105.40
1	N	834	U	C5'-C4'-C3'	-5.05	107.92	116.00
1	N	1097	C	C6-N1-C2	-5.05	118.28	120.30
1	N	1275	A	C5'-C4'-C3'	-5.05	107.92	116.00
1	N	1311	A	C4-C5-C6	5.05	119.52	117.00
1	N	43	C	O5'-P-OP2	-5.04	101.16	105.70
1	N	862	C	C3'-C2'-C1'	-5.04	97.46	101.50
1	N	1167	A	N7-C8-N9	-5.04	111.28	113.80
1	N	1511	G	O4'-C1'-N9	5.04	112.24	108.20
1	N	1513	A	C5-N7-C8	5.04	106.42	103.90
1	N	302	G	C8-N9-C1'	5.04	133.56	127.00
1	N	371	A	C5-N7-C8	5.04	106.42	103.90
1	N	393	A	C5-C6-N1	-5.04	115.18	117.70
1	N	449	G	O3'-P-O5'	-5.04	94.42	104.00
1	N	689	C	C6-N1-C2	-5.04	118.28	120.30
1	N	1151	A	N1-C2-N3	-5.04	126.78	129.30
1	N	1175	G	N3-C2-N2	5.04	123.43	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1183	U	C5-C6-N1	5.04	125.22	122.70
1	N	1373	G	C4-C5-C6	-5.04	115.77	118.80
1	N	1442	G	C4-N9-C1'	5.04	133.06	126.50
1	N	250	A	C2-N3-C4	-5.04	108.08	110.60
1	N	299	G	N1-C2-N3	-5.04	120.88	123.90
1	N	314	C	C1'-O4'-C4'	-5.04	105.87	109.90
1	N	826	C	N1-C2-N3	-5.04	115.67	119.20
1	N	1147	C	C5-C6-N1	5.04	123.52	121.00
1	N	1336	C	C5-C4-N4	-5.04	116.67	120.20
1	N	193	C	C6-N1-C1'	-5.04	114.75	120.80
1	N	544	G	N1-C2-N3	-5.04	120.88	123.90
1	N	561	U	N3-C4-C5	-5.04	111.58	114.60
1	N	1054	C	N3-C4-C5	5.04	123.92	121.90
1	N	1499	A	C5-C6-N1	-5.04	115.18	117.70
1	N	241	G	C6-N1-C2	-5.04	122.08	125.10
1	N	1113	C	N1-C2-O2	5.04	121.92	118.90
1	N	1157	A	C8-N9-C4	5.04	107.81	105.80
1	N	1186	G	C6-C5-N7	-5.04	127.38	130.40
1	N	1318	A	N1-C2-N3	5.04	131.82	129.30
1	N	1406	U	C2-N3-C4	-5.04	123.98	127.00
1	N	1478	U	N3-C2-O2	5.04	125.73	122.20
1	N	541	G	O5'-P-OP2	-5.04	101.17	105.70
1	N	104	G	C4-C5-N7	-5.04	108.79	110.80
1	N	382	A	N9-C1'-C2'	5.04	120.55	114.00
1	N	414	A	C3'-C2'-C1'	-5.04	97.47	101.50
1	N	590	U	C5'-C4'-O4'	5.04	115.14	109.10
1	N	613	C	OP1-P-OP2	-5.04	112.05	119.60
1	N	648	A	C5-N7-C8	5.04	106.42	103.90
1	N	782	A	N9-C4-C5	-5.04	103.79	105.80
1	N	889	A	N9-C1'-C2'	-5.04	106.46	112.00
1	N	943	U	C6-N1-C1'	-5.04	114.15	121.20
1	N	974	A	C5-N7-C8	-5.04	101.38	103.90
1	N	981	U	O4'-C4'-C3'	-5.04	98.97	104.00
1	N	1299	A	C4-C5-C6	5.04	119.52	117.00
1	N	549	C	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	1166	G	N3-C4-N9	5.03	129.02	126.00
1	N	1328	C	N3-C2-O2	5.03	125.42	121.90
1	N	624	C	C5'-C4'-O4'	5.03	115.14	109.10
1	N	794	A	O5'-C5'-C4'	5.03	121.26	111.70
1	N	767	A	P-O5'-C5'	5.03	128.95	120.90
1	N	778	G	N1-C6-O6	5.03	122.92	119.90
1	N	1220	G	C5-C6-N1	-5.03	108.98	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	1340	A	P-O3'-C3'	5.03	125.74	119.70
1	N	1458	G	N9-C4-C5	-5.03	103.39	105.40
1	N	79	G	N1-C2-N2	-5.03	111.67	116.20
1	N	916	U	N1-C2-N3	-5.03	111.88	114.90
1	N	1134	G	N1-C6-O6	5.03	122.92	119.90
1	N	1280	A	C5-C6-N1	-5.03	115.19	117.70
1	N	138	G	O4'-C1'-N9	5.03	112.22	108.20
1	N	300	A	C1'-O4'-C4'	5.03	113.92	109.90
1	N	485	U	O4'-C4'-C3'	5.03	110.12	106.10
1	N	829	G	N3-C2-N2	5.03	123.42	119.90
1	N	850	U	C2-N1-C1'	5.03	123.73	117.70
1	N	1130	A	C1'-O4'-C4'	5.03	113.92	109.90
1	N	1372	U	N1-C2-O2	-5.03	119.28	122.80
1	N	1458	G	O3'-P-O5'	5.03	113.55	104.00
1	N	1527	U	N3-C4-C5	-5.03	111.58	114.60
1	N	136	C	O3'-P-O5'	-5.03	94.45	104.00
1	N	271	C	C4-C5-C6	5.03	119.91	117.40
1	N	469	C	C6-N1-C2	5.03	122.31	120.30
1	N	489	C	O4'-C1'-N1	5.03	112.22	108.20
1	N	700	G	N9-C4-C5	5.03	107.41	105.40
1	N	859	G	N3-C2-N2	5.03	123.42	119.90
1	N	867	G	O4'-C1'-C2'	-5.03	100.78	105.80
1	N	877	G	C6-C5-N7	-5.03	127.39	130.40
1	N	1428	A	P-O3'-C3'	5.03	125.73	119.70
1	N	1481	U	O4'-C4'-C3'	-5.03	98.97	104.00
1	N	733	G	C5-N7-C8	-5.02	101.79	104.30
1	N	758	C	C5'-C4'-C3'	5.02	124.04	116.00
1	N	823	C	O5'-C5'-C4'	-5.02	102.16	111.70
1	N	831	A	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	914	A	N3-C4-N9	5.02	131.42	127.40
1	N	1021	A	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	1433	A	O4'-C4'-C3'	-5.02	98.98	104.00
1	N	615	G	N1-C2-N3	-5.02	120.89	123.90
1	N	651	C	C5'-C4'-C3'	-5.02	107.96	116.00
1	N	1107	C	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	471	U	P-O5'-C5'	5.02	128.93	120.90
1	N	931	C	C4-C5-C6	5.02	119.91	117.40
1	N	1456	A	O5'-C5'-C4'	5.02	121.24	111.70
1	N	79	G	P-O5'-C5'	5.02	128.93	120.90
1	N	163	C	C4'-C3'-C2'	-5.02	97.58	102.60
1	N	382	A	O4'-C1'-N9	5.02	112.22	108.20
1	N	386	C	O4'-C1'-N1	5.02	112.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	577	G	OP1-P-OP2	-5.02	112.07	119.60
1	N	748	G	C6-N1-C2	5.02	128.11	125.10
1	N	980	C	O4'-C4'-C3'	-5.02	98.98	104.00
1	N	24	U	N3-C4-C5	-5.02	111.59	114.60
1	N	38	G	N1-C2-N3	-5.02	120.89	123.90
1	N	539	A	C5-C6-N1	-5.02	115.19	117.70
1	N	662	U	C1'-O4'-C4'	-5.02	105.89	109.90
1	N	699	C	C2'-C3'-O3'	5.02	121.73	113.70
1	N	957	U	P-O3'-C3'	5.02	125.72	119.70
1	N	1264	U	N3-C4-O4	5.02	122.91	119.40
1	N	1268	G	C5-C6-N1	-5.02	108.99	111.50
1	N	1469	C	C2'-C3'-O3'	5.02	121.73	113.70
1	N	1508	A	P-O5'-C5'	5.02	128.93	120.90
1	N	235	C	P-O5'-C5'	5.02	128.93	120.90
1	N	697	U	C5-C6-N1	5.02	125.21	122.70
1	N	803	G	C5'-C4'-O4'	5.02	115.12	109.10
1	N	875	U	N1-C2-O2	5.02	126.31	122.80
1	N	19	A	N7-C8-N9	-5.01	111.29	113.80
1	N	189	A	C4-C5-N7	-5.01	108.19	110.70
1	N	600	A	N9-C1'-C2'	-5.01	106.48	112.00
1	N	1087	G	N1-C6-O6	5.01	122.91	119.90
1	N	449	G	C5'-C4'-C3'	-5.01	107.98	116.00
1	N	702	A	N3-C4-C5	-5.01	123.29	126.80
1	N	41	G	C4'-C3'-C2'	-5.01	97.59	102.60
1	N	203	G	OP2-P-O3'	5.01	116.22	105.20
1	N	258	G	C5-C6-N1	-5.01	108.99	111.50
1	N	357	G	C5-C6-O6	-5.01	125.59	128.60
1	N	585	G	C5-C6-N1	-5.01	109.00	111.50
1	N	776	G	N3-C4-N9	-5.01	122.99	126.00
1	N	1014	A	C8-N9-C1'	5.01	136.72	127.70
1	N	1411	C	C4-C5-C6	5.01	119.91	117.40
1	N	319	G	O4'-C1'-N9	5.01	112.21	108.20
1	N	373	A	C2-N3-C4	5.01	113.11	110.60
1	N	1497	G	C8-N9-C1'	5.01	133.51	127.00
1	N	850	U	O5'-P-OP2	-5.01	101.19	105.70
1	N	1139	G	O3'-P-O5'	-5.01	94.48	104.00
1	N	1280	A	C5-N7-C8	5.01	106.40	103.90
1	N	87	C	N1-C2-O2	-5.01	115.90	118.90
1	N	246	A	N1-C2-N3	-5.01	126.80	129.30
1	N	254	G	N9-C4-C5	5.01	107.40	105.40
1	N	572	A	N3-C4-C5	-5.01	123.30	126.80
1	N	672	U	C4-C5-C6	-5.01	116.70	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	920	U	C4'-C3'-C2'	-5.01	97.59	102.60
1	N	1084	G	N3-C2-N2	5.01	123.41	119.90
1	N	1337	G	O4'-C1'-N9	5.01	112.21	108.20
1	N	121	U	C4-C5-C6	5.00	122.70	119.70
1	N	276	G	C5'-C4'-C3'	5.00	124.01	116.00
1	N	674	G	N7-C8-N9	5.00	115.60	113.10
1	N	1297	G	C5-C6-O6	-5.00	125.60	128.60
1	N	498	A	C4-C5-C6	5.00	119.50	117.00
1	N	874	G	N1-C2-N2	-5.00	111.70	116.20
1	N	918	A	C5-C6-N6	-5.00	119.70	123.70
1	N	1475	G	O4'-C1'-N9	5.00	112.20	108.20
1	N	1504	G	C5'-C4'-C3'	5.00	124.01	116.00
1	N	687	A	C8-N9-C4	-5.00	103.80	105.80
1	N	875	U	C4'-C3'-C2'	-5.00	97.60	102.60
1	N	898	G	C5-C6-N1	-5.00	109.00	111.50
1	N	956	U	C2-N1-C1'	5.00	123.70	117.70

There are no chirality outliers.

All (984) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	N	10	A	Sidechain
1	N	100	G	Sidechain
1	N	1002	G	Sidechain
1	N	1004	A	Sidechain
1	N	1005	A	Sidechain
1	N	1006	G	Sidechain
1	N	1009	U	Sidechain
1	N	101	A	Sidechain
1	N	1013	G	Sidechain
1	N	1014	A	Sidechain
1	N	1015	G	Sidechain
1	N	1016	A	Sidechain
1	N	1018	G	Sidechain
1	N	102	G	Sidechain
1	N	1022	A	Sidechain
1	N	1023	U	Sidechain
1	N	1024	G	Sidechain
1	N	1025	U	Sidechain
1	N	1026	G	Sidechain
1	N	1029	U	Sidechain
1	N	103	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1031	C	Sidechain
1	N	1033	G	Sidechain
1	N	1034	G	Sidechain
1	N	1035	A	Sidechain
1	N	1037	C	Sidechain
1	N	1039	G	Sidechain
1	N	1040	U	Sidechain
1	N	1041	G	Sidechain
1	N	1043	G	Sidechain
1	N	1045	C	Sidechain
1	N	1047	G	Sidechain
1	N	1048	G	Sidechain
1	N	1049	U	Sidechain
1	N	105	G	Sidechain
1	N	1052	U	Sidechain
1	N	1055	A	Sidechain
1	N	1056	U	Sidechain
1	N	1058	G	Sidechain
1	N	1059	C	Sidechain
1	N	1060	U	Sidechain
1	N	1061	G	Sidechain
1	N	1064	G	Sidechain
1	N	1065	U	Sidechain
1	N	1068	G	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	1080	A	Sidechain
1	N	1083	U	Sidechain
1	N	1085	U	Sidechain
1	N	1087	G	Sidechain
1	N	1089	G	Sidechain
1	N	109	A	Sidechain
1	N	1090	U	Sidechain
1	N	1091	U	Sidechain
1	N	1093	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1094	G	Sidechain
1	N	1095	U	Sidechain
1	N	1096	C	Sidechain
1	N	1097	C	Sidechain
1	N	1098	C	Sidechain
1	N	1099	G	Sidechain
1	N	11	G	Sidechain
1	N	110	C	Sidechain
1	N	1101	A	Sidechain
1	N	1102	A	Sidechain
1	N	1104	G	Sidechain
1	N	1105	A	Sidechain
1	N	1107	C	Sidechain
1	N	1108	G	Sidechain
1	N	1110	A	Sidechain
1	N	1111	A	Sidechain
1	N	1113	C	Sidechain
1	N	1114	C	Sidechain
1	N	1115	U	Sidechain
1	N	1116	U	Sidechain
1	N	1117	A	Sidechain
1	N	1119	C	Sidechain
1	N	112	G	Sidechain
1	N	1121	U	Sidechain
1	N	1122	U	Sidechain
1	N	1124	G	Sidechain
1	N	1126	U	Sidechain
1	N	1129	C	Sidechain
1	N	113	G	Sidechain
1	N	1131	G	Sidechain
1	N	1132	C	Sidechain
1	N	1134	G	Sidechain
1	N	1135	U	Sidechain
1	N	1136	C	Sidechain
1	N	1137	C	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	1147	C	Sidechain
1	N	1148	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1149	C	Sidechain
1	N	115	G	Sidechain
1	N	1150	A	Sidechain
1	N	1151	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	1167	A	Sidechain
1	N	1168	U	Sidechain
1	N	1169	A	Sidechain
1	N	117	G	Sidechain
1	N	1170	A	Sidechain
1	N	1173	U	Sidechain
1	N	1174	G	Sidechain
1	N	1175	G	Sidechain
1	N	1177	G	Sidechain
1	N	1178	G	Sidechain
1	N	118	U	Sidechain
1	N	1180	A	Sidechain
1	N	1181	G	Sidechain
1	N	1182	G	Sidechain
1	N	1183	U	Sidechain
1	N	1184	G	Sidechain
1	N	1185	G	Sidechain
1	N	1186	G	Sidechain
1	N	1187	G	Sidechain
1	N	1189	U	Sidechain
1	N	119	A	Sidechain
1	N	1190	G	Sidechain
1	N	1192	C	Sidechain
1	N	1193	G	Sidechain
1	N	1194	U	Sidechain
1	N	1195	C	Sidechain
1	N	1196	A	Sidechain
1	N	1197	A	Sidechain
1	N	12	U	Sidechain
1	N	120	A	Sidechain
1	N	1202	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1204	A	Sidechain
1	N	1205	U	Sidechain
1	N	121	U	Sidechain
1	N	1210	C	Sidechain
1	N	1211	U	Sidechain
1	N	1213	A	Sidechain
1	N	1215	G	Sidechain
1	N	1218	C	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	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	1232	U	Sidechain
1	N	1233	G	Sidechain
1	N	1238	A	Sidechain
1	N	1239	A	Sidechain
1	N	1240	U	Sidechain
1	N	1241	G	Sidechain
1	N	1245	C	Sidechain
1	N	1249	C	Sidechain
1	N	125	U	Sidechain
1	N	1250	A	Sidechain
1	N	1252	A	Sidechain
1	N	1254	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	1262	C	Sidechain
1	N	1265	C	Sidechain
1	N	1267	C	Sidechain
1	N	1268	G	Sidechain
1	N	1269	A	Sidechain
1	N	1270	G	Sidechain

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Mol	Chain	Res	Type	Group
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	128	G	Sidechain
1	N	1281	C	Sidechain
1	N	1282	C	Sidechain
1	N	1283	U	Sidechain
1	N	1287	A	Sidechain
1	N	1288	A	Sidechain
1	N	1291	U	Sidechain
1	N	1292	G	Sidechain
1	N	1293	C	Sidechain
1	N	1294	G	Sidechain
1	N	1298	U	Sidechain
1	N	1299	A	Sidechain
1	N	130	A	Sidechain
1	N	1300	G	Sidechain
1	N	1301	U	Sidechain
1	N	1302	C	Sidechain
1	N	1304	G	Sidechain
1	N	1305	G	Sidechain
1	N	1306	A	Sidechain
1	N	1308	U	Sidechain
1	N	1309	G	Sidechain
1	N	131	A	Sidechain
1	N	1310	G	Sidechain
1	N	1312	G	Sidechain
1	N	1314	C	Sidechain
1	N	1315	U	Sidechain
1	N	1316	G	Sidechain
1	N	1318	A	Sidechain
1	N	1321	U	Sidechain
1	N	1323	G	Sidechain
1	N	1327	C	Sidechain
1	N	1328	C	Sidechain
1	N	133	U	Sidechain
1	N	1330	U	Sidechain
1	N	1332	A	Sidechain
1	N	1333	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1334	G	Sidechain
1	N	1335	U	Sidechain
1	N	1337	G	Sidechain
1	N	134	G	Sidechain
1	N	1340	A	Sidechain
1	N	1341	U	Sidechain
1	N	1343	G	Sidechain
1	N	1345	U	Sidechain
1	N	1346	A	Sidechain
1	N	1347	G	Sidechain
1	N	1348	U	Sidechain
1	N	1349	A	Sidechain
1	N	135	C	Sidechain
1	N	1350	A	Sidechain
1	N	1351	U	Sidechain
1	N	1353	G	Sidechain
1	N	1354	U	Sidechain
1	N	1355	G	Sidechain
1	N	1356	G	Sidechain
1	N	1357	A	Sidechain
1	N	1359	C	Sidechain
1	N	1360	A	Sidechain
1	N	1361	G	Sidechain
1	N	1362	A	Sidechain
1	N	1364	U	Sidechain
1	N	1365	G	Sidechain
1	N	1366	C	Sidechain
1	N	1367	C	Sidechain
1	N	1368	A	Sidechain
1	N	1369	C	Sidechain
1	N	137	U	Sidechain
1	N	1370	G	Sidechain
1	N	1371	G	Sidechain
1	N	1372	U	Sidechain
1	N	1373	G	Sidechain
1	N	1375	A	Sidechain
1	N	1376	U	Sidechain
1	N	1377	A	Sidechain
1	N	1378	C	Sidechain
1	N	1380	U	Sidechain
1	N	1383	C	Sidechain
1	N	1385	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1386	G	Sidechain
1	N	1387	G	Sidechain
1	N	1388	C	Sidechain
1	N	139	A	Sidechain
1	N	1392	G	Sidechain
1	N	1393	U	Sidechain
1	N	1394	A	Sidechain
1	N	1395	C	Sidechain
1	N	1396	A	Sidechain
1	N	1397	C	Sidechain
1	N	1399	C	Sidechain
1	N	14	U	Sidechain
1	N	140	U	Sidechain
1	N	1402	C	Sidechain
1	N	1405	G	Sidechain
1	N	1406	U	Sidechain
1	N	1407	C	Sidechain
1	N	1409	C	Sidechain
1	N	141	G	Sidechain
1	N	1410	A	Sidechain
1	N	1412	C	Sidechain
1	N	1416	G	Sidechain
1	N	1417	G	Sidechain
1	N	1419	G	Sidechain
1	N	142	G	Sidechain
1	N	1420	U	Sidechain
1	N	1421	G	Sidechain
1	N	1422	G	Sidechain
1	N	1423	G	Sidechain
1	N	1424	U	Sidechain
1	N	1425	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	1437	A	Sidechain
1	N	144	G	Sidechain
1	N	1440	U	Sidechain
1	N	1441	A	Sidechain
1	N	1442	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	1443	C	Sidechain
1	N	1446	A	Sidechain
1	N	1449	C	Sidechain
1	N	1453	G	Sidechain
1	N	1456	A	Sidechain
1	N	1457	G	Sidechain
1	N	146	G	Sidechain
1	N	1460	C	Sidechain
1	N	1461	G	Sidechain
1	N	1463	U	Sidechain
1	N	1464	U	Sidechain
1	N	1465	A	Sidechain
1	N	1466	C	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	1472	U	Sidechain
1	N	1473	G	Sidechain
1	N	1474	U	Sidechain
1	N	1475	G	Sidechain
1	N	1476	A	Sidechain
1	N	1477	U	Sidechain
1	N	1479	C	Sidechain
1	N	148	G	Sidechain
1	N	1481	U	Sidechain
1	N	1482	G	Sidechain
1	N	1483	A	Sidechain
1	N	1485	U	Sidechain
1	N	1486	G	Sidechain
1	N	1487	G	Sidechain
1	N	1488	G	Sidechain
1	N	1489	G	Sidechain
1	N	1490	U	Sidechain
1	N	1491	G	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

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Mol	Chain	Res	Type	Group
1	N	15	G	Sidechain
1	N	150	U	Sidechain
1	N	1500	A	Sidechain
1	N	1502	A	Sidechain
1	N	1504	G	Sidechain
1	N	1505	G	Sidechain
1	N	1506	U	Sidechain
1	N	1507	A	Sidechain
1	N	151	A	Sidechain
1	N	1511	G	Sidechain
1	N	1512	U	Sidechain
1	N	1514	G	Sidechain
1	N	1515	G	Sidechain
1	N	1516	G	Sidechain
1	N	1517	G	Sidechain
1	N	1519	A	Sidechain
1	N	152	A	Sidechain
1	N	1523	G	Sidechain
1	N	1524	C	Sidechain
1	N	1525	G	Sidechain
1	N	1526	G	Sidechain
1	N	1529	G	Sidechain
1	N	1533	C	Sidechain
1	N	1534	A	Sidechain
1	N	154	U	Sidechain
1	N	157	U	Sidechain
1	N	159	G	Sidechain
1	N	16	A	Sidechain
1	N	160	A	Sidechain
1	N	161	A	Sidechain
1	N	167	A	Sidechain
1	N	169	C	Sidechain
1	N	170	U	Sidechain
1	N	171	A	Sidechain
1	N	174	A	Sidechain
1	N	178	C	Sidechain
1	N	179	A	Sidechain
1	N	180	U	Sidechain
1	N	181	A	Sidechain
1	N	182	A	Sidechain
1	N	183	C	Sidechain
1	N	184	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	185	U	Sidechain
1	N	188	C	Sidechain
1	N	19	A	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	198	G	Sidechain
1	N	199	A	Sidechain
1	N	2	A	Sidechain
1	N	201	G	Sidechain
1	N	202	G	Sidechain
1	N	203	G	Sidechain
1	N	204	G	Sidechain
1	N	206	C	Sidechain
1	N	208	U	Sidechain
1	N	209	U	Sidechain
1	N	21	G	Sidechain
1	N	211	G	Sidechain
1	N	212	G	Sidechain
1	N	216	U	Sidechain
1	N	217	C	Sidechain
1	N	218	U	Sidechain
1	N	220	G	Sidechain
1	N	221	C	Sidechain
1	N	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	23	C	Sidechain
1	N	231	U	Sidechain
1	N	232	G	Sidechain
1	N	233	C	Sidechain
1	N	234	C	Sidechain
1	N	236	A	Sidechain
1	N	237	G	Sidechain
1	N	238	A	Sidechain
1	N	239	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	241	G	Sidechain
1	N	243	A	Sidechain
1	N	244	U	Sidechain
1	N	245	U	Sidechain
1	N	246	A	Sidechain
1	N	247	G	Sidechain
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	261	U	Sidechain
1	N	262	A	Sidechain
1	N	265	G	Sidechain
1	N	266	G	Sidechain
1	N	267	C	Sidechain
1	N	268	U	Sidechain
1	N	269	C	Sidechain
1	N	27	G	Sidechain
1	N	270	A	Sidechain
1	N	273	U	Sidechain
1	N	274	A	Sidechain
1	N	275	G	Sidechain
1	N	276	G	Sidechain
1	N	278	G	Sidechain
1	N	279	A	Sidechain
1	N	28	A	Sidechain
1	N	281	G	Sidechain
1	N	282	A	Sidechain
1	N	283	U	Sidechain
1	N	284	C	Sidechain
1	N	285	C	Sidechain
1	N	286	C	Sidechain
1	N	287	U	Sidechain
1	N	288	A	Sidechain
1	N	29	U	Sidechain
1	N	292	G	Sidechain
1	N	293	G	Sidechain
1	N	294	U	Sidechain
1	N	295	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	296	U	Sidechain
1	N	297	G	Sidechain
1	N	298	A	Sidechain
1	N	299	G	Sidechain
1	N	30	U	Sidechain
1	N	300	A	Sidechain
1	N	301	G	Sidechain
1	N	302	G	Sidechain
1	N	305	G	Sidechain
1	N	306	A	Sidechain
1	N	307	C	Sidechain
1	N	308	C	Sidechain
1	N	309	A	Sidechain
1	N	313	A	Sidechain
1	N	315	A	Sidechain
1	N	317	U	Sidechain
1	N	319	G	Sidechain
1	N	32	A	Sidechain
1	N	320	A	Sidechain
1	N	321	A	Sidechain
1	N	322	C	Sidechain
1	N	323	U	Sidechain
1	N	324	G	Sidechain
1	N	325	A	Sidechain
1	N	326	G	Sidechain
1	N	327	A	Sidechain
1	N	329	A	Sidechain
1	N	331	G	Sidechain
1	N	333	U	Sidechain
1	N	334	C	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	34	C	Sidechain
1	N	340	U	Sidechain
1	N	341	C	Sidechain
1	N	342	C	Sidechain
1	N	343	U	Sidechain
1	N	344	A	Sidechain
1	N	347	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	348	G	Sidechain
1	N	349	A	Sidechain
1	N	35	G	Sidechain
1	N	352	C	Sidechain
1	N	353	A	Sidechain
1	N	354	G	Sidechain
1	N	355	C	Sidechain
1	N	358	U	Sidechain
1	N	359	G	Sidechain
1	N	360	G	Sidechain
1	N	362	G	Sidechain
1	N	363	A	Sidechain
1	N	365	U	Sidechain
1	N	367	U	Sidechain
1	N	369	G	Sidechain
1	N	370	C	Sidechain
1	N	371	A	Sidechain
1	N	372	C	Sidechain
1	N	373	A	Sidechain
1	N	374	A	Sidechain
1	N	376	G	Sidechain
1	N	377	G	Sidechain
1	N	378	G	Sidechain
1	N	38	G	Sidechain
1	N	381	C	Sidechain
1	N	382	A	Sidechain
1	N	387	U	Sidechain
1	N	39	G	Sidechain
1	N	391	G	Sidechain
1	N	392	C	Sidechain
1	N	393	A	Sidechain
1	N	394	G	Sidechain
1	N	395	C	Sidechain
1	N	396	C	Sidechain
1	N	397	A	Sidechain
1	N	398	U	Sidechain
1	N	4	U	Sidechain
1	N	40	C	Sidechain
1	N	403	C	Sidechain
1	N	404	G	Sidechain
1	N	405	U	Sidechain
1	N	406	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	407	U	Sidechain
1	N	408	A	Sidechain
1	N	411	A	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
1	N	419	C	Sidechain
1	N	42	G	Sidechain
1	N	421	U	Sidechain
1	N	423	G	Sidechain
1	N	424	G	Sidechain
1	N	425	G	Sidechain
1	N	426	U	Sidechain
1	N	428	G	Sidechain
1	N	429	U	Sidechain
1	N	430	A	Sidechain
1	N	432	A	Sidechain
1	N	433	G	Sidechain
1	N	436	C	Sidechain
1	N	437	U	Sidechain
1	N	439	U	Sidechain
1	N	44	A	Sidechain
1	N	446	G	Sidechain
1	N	447	G	Sidechain
1	N	449	G	Sidechain
1	N	45	G	Sidechain
1	N	450	G	Sidechain
1	N	451	A	Sidechain
1	N	452	A	Sidechain
1	N	453	G	Sidechain
1	N	454	G	Sidechain
1	N	455	G	Sidechain
1	N	457	G	Sidechain
1	N	46	G	Sidechain
1	N	462	G	Sidechain
1	N	463	U	Sidechain
1	N	464	U	Sidechain
1	N	465	A	Sidechain
1	N	466	A	Sidechain
1	N	467	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	468	A	Sidechain
1	N	47	C	Sidechain
1	N	470	C	Sidechain
1	N	473	U	Sidechain
1	N	475	C	Sidechain
1	N	477	C	Sidechain
1	N	48	C	Sidechain
1	N	480	U	Sidechain
1	N	481	G	Sidechain
1	N	482	A	Sidechain
1	N	483	C	Sidechain
1	N	485	U	Sidechain
1	N	486	U	Sidechain
1	N	488	C	Sidechain
1	N	489	C	Sidechain
1	N	490	C	Sidechain
1	N	491	G	Sidechain
1	N	492	C	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	501	C	Sidechain
1	N	503	C	Sidechain
1	N	504	C	Sidechain
1	N	508	U	Sidechain
1	N	509	A	Sidechain
1	N	510	A	Sidechain
1	N	511	C	Sidechain
1	N	512	U	Sidechain
1	N	513	C	Sidechain
1	N	514	C	Sidechain
1	N	515	G	Sidechain
1	N	516	U	Sidechain
1	N	517	G	Sidechain
1	N	519	C	Sidechain
1	N	52	C	Sidechain
1	N	522	C	Sidechain
1	N	523	A	Sidechain

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Mol	Chain	Res	Type	Group
1	N	525	C	Sidechain
1	N	526	C	Sidechain
1	N	527	G	Sidechain
1	N	529	G	Sidechain
1	N	530	G	Sidechain
1	N	531	U	Sidechain
1	N	535	A	Sidechain
1	N	536	C	Sidechain
1	N	538	G	Sidechain
1	N	54	C	Sidechain
1	N	542	G	Sidechain
1	N	543	U	Sidechain
1	N	545	C	Sidechain
1	N	547	A	Sidechain
1	N	548	G	Sidechain
1	N	55	A	Sidechain
1	N	551	U	Sidechain
1	N	552	U	Sidechain
1	N	553	A	Sidechain
1	N	556	C	Sidechain
1	N	557	G	Sidechain
1	N	558	G	Sidechain
1	N	56	U	Sidechain
1	N	563	A	Sidechain
1	N	564	C	Sidechain
1	N	566	G	Sidechain
1	N	570	G	Sidechain
1	N	573	A	Sidechain
1	N	575	G	Sidechain
1	N	579	A	Sidechain
1	N	581	G	Sidechain
1	N	582	C	Sidechain
1	N	584	G	Sidechain
1	N	585	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	591	U	Sidechain
1	N	593	U	Sidechain
1	N	594	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	595	A	Sidechain
1	N	596	A	Sidechain
1	N	597	G	Sidechain
1	N	599	C	Sidechain
1	N	60	A	Sidechain
1	N	600	A	Sidechain
1	N	601	G	Sidechain
1	N	602	A	Sidechain
1	N	603	U	Sidechain
1	N	606	G	Sidechain
1	N	608	A	Sidechain
1	N	609	A	Sidechain
1	N	61	G	Sidechain
1	N	610	U	Sidechain
1	N	611	C	Sidechain
1	N	612	C	Sidechain
1	N	613	C	Sidechain
1	N	614	C	Sidechain
1	N	616	G	Sidechain
1	N	618	C	Sidechain
1	N	620	C	Sidechain
1	N	621	A	Sidechain
1	N	625	U	Sidechain
1	N	626	G	Sidechain
1	N	628	G	Sidechain
1	N	63	C	Sidechain
1	N	630	A	Sidechain
1	N	631	C	Sidechain
1	N	632	U	Sidechain
1	N	633	G	Sidechain
1	N	634	C	Sidechain
1	N	636	U	Sidechain
1	N	638	U	Sidechain
1	N	639	G	Sidechain
1	N	64	G	Sidechain
1	N	641	U	Sidechain
1	N	643	C	Sidechain
1	N	646	G	Sidechain
1	N	647	C	Sidechain
1	N	648	A	Sidechain
1	N	649	A	Sidechain
1	N	650	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	651	C	Sidechain
1	N	652	U	Sidechain
1	N	653	U	Sidechain
1	N	654	G	Sidechain
1	N	655	A	Sidechain
1	N	656	G	Sidechain
1	N	657	U	Sidechain
1	N	66	A	Sidechain
1	N	660	C	Sidechain
1	N	661	G	Sidechain
1	N	667	G	Sidechain
1	N	668	G	Sidechain
1	N	669	G	Sidechain
1	N	672	U	Sidechain
1	N	673	A	Sidechain
1	N	676	A	Sidechain
1	N	678	U	Sidechain
1	N	679	C	Sidechain
1	N	68	G	Sidechain
1	N	680	C	Sidechain
1	N	681	A	Sidechain
1	N	682	G	Sidechain
1	N	683	G	Sidechain
1	N	684	U	Sidechain
1	N	685	G	Sidechain
1	N	686	U	Sidechain
1	N	687	A	Sidechain
1	N	69	G	Sidechain
1	N	690	G	Sidechain
1	N	691	G	Sidechain
1	N	692	U	Sidechain
1	N	693	G	Sidechain
1	N	695	A	Sidechain
1	N	698	G	Sidechain
1	N	699	C	Sidechain
1	N	7	A	Sidechain
1	N	700	G	Sidechain
1	N	701	U	Sidechain
1	N	703	G	Sidechain
1	N	704	A	Sidechain
1	N	707	U	Sidechain
1	N	709	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	71	A	Sidechain
1	N	710	G	Sidechain
1	N	711	G	Sidechain
1	N	713	G	Sidechain
1	N	714	G	Sidechain
1	N	715	A	Sidechain
1	N	720	C	Sidechain
1	N	722	G	Sidechain
1	N	723	U	Sidechain
1	N	727	G	Sidechain
1	N	728	A	Sidechain
1	N	73	C	Sidechain
1	N	730	G	Sidechain
1	N	732	C	Sidechain
1	N	734	G	Sidechain
1	N	735	C	Sidechain
1	N	736	C	Sidechain
1	N	738	C	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	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	755	G	Sidechain
1	N	757	U	Sidechain
1	N	76	G	Sidechain
1	N	760	G	Sidechain
1	N	761	G	Sidechain
1	N	762	U	Sidechain
1	N	763	G	Sidechain
1	N	765	G	Sidechain
1	N	766	A	Sidechain
1	N	769	G	Sidechain
1	N	77	A	Sidechain
1	N	770	C	Sidechain

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Mol	Chain	Res	Type	Group
1	N	771	G	Sidechain
1	N	772	U	Sidechain
1	N	773	G	Sidechain
1	N	774	G	Sidechain
1	N	775	G	Sidechain
1	N	776	G	Sidechain
1	N	777	A	Sidechain
1	N	778	G	Sidechain
1	N	78	A	Sidechain
1	N	780	A	Sidechain
1	N	781	A	Sidechain
1	N	782	A	Sidechain
1	N	784	A	Sidechain
1	N	785	G	Sidechain
1	N	788	U	Sidechain
1	N	79	G	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	8	A	Sidechain
1	N	80	A	Sidechain
1	N	803	G	Sidechain
1	N	804	U	Sidechain
1	N	805	C	Sidechain
1	N	806	C	Sidechain
1	N	807	A	Sidechain
1	N	808	C	Sidechain
1	N	81	A	Sidechain
1	N	810	C	Sidechain
1	N	811	C	Sidechain
1	N	812	G	Sidechain
1	N	814	A	Sidechain
1	N	815	A	Sidechain
1	N	816	A	Sidechain
1	N	818	G	Sidechain
1	N	82	G	Sidechain
1	N	820	U	Sidechain
1	N	822	U	Sidechain
1	N	828	U	Sidechain
1	N	829	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	83	C	Sidechain
1	N	830	G	Sidechain
1	N	831	A	Sidechain
1	N	832	G	Sidechain
1	N	833	G	Sidechain
1	N	834	U	Sidechain
1	N	835	U	Sidechain
1	N	842	U	Sidechain
1	N	844	G	Sidechain
1	N	846	G	Sidechain
1	N	847	G	Sidechain
1	N	85	U	Sidechain
1	N	850	U	Sidechain
1	N	851	G	Sidechain
1	N	852	G	Sidechain
1	N	853	C	Sidechain
1	N	854	U	Sidechain
1	N	855	U	Sidechain
1	N	857	C	Sidechain
1	N	858	G	Sidechain
1	N	859	G	Sidechain
1	N	860	A	Sidechain
1	N	861	G	Sidechain
1	N	862	C	Sidechain
1	N	864	A	Sidechain
1	N	865	A	Sidechain
1	N	866	C	Sidechain
1	N	867	G	Sidechain
1	N	869	G	Sidechain
1	N	870	U	Sidechain
1	N	871	U	Sidechain
1	N	872	A	Sidechain
1	N	873	A	Sidechain
1	N	874	G	Sidechain
1	N	877	G	Sidechain
1	N	88	U	Sidechain
1	N	881	G	Sidechain
1	N	884	U	Sidechain
1	N	885	G	Sidechain
1	N	888	G	Sidechain
1	N	892	A	Sidechain
1	N	894	G	Sidechain

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Mol	Chain	Res	Type	Group
1	N	895	G	Sidechain
1	N	896	C	Sidechain
1	N	898	G	Sidechain
1	N	899	C	Sidechain
1	N	9	G	Sidechain
1	N	90	C	Sidechain
1	N	901	A	Sidechain
1	N	902	G	Sidechain
1	N	903	G	Sidechain
1	N	904	U	Sidechain
1	N	905	U	Sidechain
1	N	906	A	Sidechain
1	N	907	A	Sidechain
1	N	908	A	Sidechain
1	N	91	U	Sidechain
1	N	911	U	Sidechain
1	N	912	C	Sidechain
1	N	914	A	Sidechain
1	N	915	A	Sidechain
1	N	916	U	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	925	G	Sidechain
1	N	927	G	Sidechain
1	N	928	G	Sidechain
1	N	929	G	Sidechain
1	N	930	C	Sidechain
1	N	931	C	Sidechain
1	N	932	C	Sidechain
1	N	933	G	Sidechain
1	N	934	C	Sidechain
1	N	937	A	Sidechain
1	N	938	A	Sidechain
1	N	939	G	Sidechain
1	N	94	G	Sidechain
1	N	940	C	Sidechain
1	N	941	G	Sidechain
1	N	943	U	Sidechain

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Mol	Chain	Res	Type	Group
1	N	944	G	Sidechain
1	N	945	G	Sidechain
1	N	946	A	Sidechain
1	N	950	U	Sidechain
1	N	951	G	Sidechain
1	N	952	U	Sidechain
1	N	954	G	Sidechain
1	N	955	U	Sidechain
1	N	957	U	Sidechain
1	N	958	A	Sidechain
1	N	959	A	Sidechain
1	N	960	U	Sidechain
1	N	961	U	Sidechain
1	N	962	C	Sidechain
1	N	963	G	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	972	C	Sidechain
1	N	973	G	Sidechain
1	N	975	A	Sidechain
1	N	976	G	Sidechain
1	N	978	A	Sidechain
1	N	980	C	Sidechain
1	N	981	U	Sidechain
1	N	982	U	Sidechain
1	N	983	A	Sidechain
1	N	984	C	Sidechain
1	N	985	C	Sidechain
1	N	987	G	Sidechain
1	N	99	C	Sidechain
1	N	991	U	Sidechain
1	N	993	G	Sidechain
1	N	995	C	Sidechain
1	N	997	U	Sidechain
1	N	998	C	Sidechain

5.2 Too-close contacts [\(i\)](#)

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	16524	547	0
All	All	32892	16554	16524	547	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 11.

All (547) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:67:C:H2'	1:N:68:G:C8	2.21	0.76
1:N:664:G:H22	1:N:741:G:H1	1.34	0.76
1:N:858:G:H1	1:N:869:G:H2'	1.50	0.75
1:N:507:C:H3'	1:N:508:U:H5"	1.70	0.74
1:N:840:C:H1'	1:N:843:U:H3	1.51	0.74
1:N:1063:C:H41	1:N:1193:G:H1	1.38	0.71
1:N:116:A:H61	1:N:313:A:H1'	1.56	0.70
1:N:1366:C:C4	1:N:1367:C:C4	2.81	0.69
1:N:1239:A:C2	1:N:1241:G:C6	2.82	0.67
1:N:301:G:C6	1:N:302:G:C5	2.85	0.65
1:N:688:G:C8	1:N:688:G:H5"	2.31	0.65
1:N:620:C:C5	1:N:621:A:C5	2.85	0.64
1:N:169:C:C4	1:N:170:U:C4	2.86	0.64
1:N:644:U:H2'	1:N:645:G:C8	2.34	0.63
1:N:596:A:H61	1:N:644:U:H3	1.47	0.63
1:N:172:A:C8	1:N:174:A:C8	2.86	0.63
1:N:859:G:C6	1:N:860:A:C6	2.87	0.63
1:N:80:A:C5	1:N:81:A:H1'	2.34	0.63
1:N:978:A:C4	1:N:1319:A:C2	2.87	0.62
1:N:61:G:H21	1:N:379:C:H4'	1.65	0.62
1:N:507:C:C3'	1:N:508:U:H5"	2.30	0.61
1:N:1255:G:H2'	1:N:1279:G:H1	1.65	0.61
1:N:803:G:C5	1:N:804:U:C5	2.88	0.61
1:N:668:G:C6	1:N:669:G:C6	2.89	0.61
1:N:50:A:H1'	1:N:52:C:C6	2.36	0.61
1:N:1394:A:H3'	1:N:1395:C:H5'	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1240:U:C6	1:N:1241:G:H5'	2.37	0.60
1:N:1076:U:H3	1:N:1081:A:H61	1.49	0.60
1:N:981:U:C2	1:N:982:U:C5	2.90	0.59
1:N:500:G:C6	1:N:501:C:C4	2.90	0.59
1:N:171:A:C2	1:N:172:A:C2	2.90	0.59
1:N:595:A:C2	1:N:596:A:N6	2.70	0.59
1:N:381:C:C5	1:N:382:A:C5	2.91	0.59
1:N:207:C:H2'	1:N:208:U:C2	2.37	0.59
1:N:60:A:H62	1:N:378:G:H1'	1.67	0.59
1:N:858:G:H1	1:N:869:G:C2'	2.16	0.59
1:N:19:A:C2	1:N:917:G:C5	2.91	0.59
1:N:1053:G:H2'	1:N:1199:U:C5	2.38	0.59
1:N:1436:U:H2'	1:N:1437:A:C8	2.38	0.59
1:N:780:A:C2	1:N:801:U:C5	2.90	0.58
1:N:14:U:H3	1:N:16:A:H3'	1.68	0.58
1:N:663:A:C2	1:N:743:A:C2	2.91	0.58
1:N:707:U:H2'	1:N:708:C:C6	2.39	0.58
1:N:65:A:H4'	1:N:66:A:H5'	1.86	0.58
1:N:372:C:H4'	1:N:373:A:OP1	2.05	0.57
1:N:603:U:H2'	1:N:604:G:C8	2.40	0.57
1:N:604:G:C5	1:N:605:U:C4	2.92	0.57
1:N:64:G:C4	1:N:99:C:C4	2.93	0.57
1:N:346:G:N2	1:N:347:G:C6	2.73	0.56
1:N:1434:A:C5	1:N:1435:G:C5	2.94	0.56
1:N:438:U:C4	1:N:494:G:C8	2.93	0.56
1:N:584:G:C6	1:N:585:G:C6	2.93	0.56
1:N:688:G:H5"	1:N:688:G:H8	1.70	0.56
1:N:1006:G:C6	1:N:1007:U:C4	2.94	0.56
1:N:1184:G:C5	1:N:1185:G:C8	2.93	0.56
1:N:1240:U:C2	1:N:1240:U:OP1	2.58	0.56
1:N:1244:G:C6	1:N:1245:C:C4	2.94	0.56
1:N:21:G:H1'	1:N:914:A:H61	1.70	0.56
1:N:50:A:C2	1:N:52:C:N3	2.74	0.55
1:N:160:A:H4'	1:N:344:A:C6	2.42	0.55
1:N:141:G:C6	1:N:223:A:C6	2.94	0.55
1:N:354:G:C6	1:N:355:C:C4	2.95	0.55
1:N:1315:U:C4	1:N:1316:G:C6	2.95	0.54
1:N:1343:G:C5	1:N:1344:C:C4	2.95	0.54
1:N:449:G:C5	1:N:450:G:C5	2.95	0.54
1:N:804:U:C5	1:N:805:C:C4	2.95	0.54
1:N:1100:C:H4'	1:N:1102:A:H4'	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:112:G:C2	1:N:330:C:C5	2.96	0.54
1:N:301:G:C2	1:N:302:G:C4	2.95	0.54
1:N:669:G:C6	1:N:670:G:C6	2.96	0.54
1:N:275:G:C8	1:N:275:G:H5"	2.43	0.54
1:N:209:U:C5	1:N:211:G:C2	2.95	0.54
1:N:1024:G:C6	1:N:1025:U:C5	2.96	0.54
1:N:482:A:C6	1:N:483:C:C2	2.96	0.54
1:N:589:U:H2'	1:N:590:U:H6	1.73	0.54
1:N:59:A:C2	1:N:331:G:C5	2.96	0.53
1:N:449:G:C6	1:N:450:G:C6	2.95	0.53
1:N:73:C:C6	1:N:73:C:H5"	2.44	0.53
1:N:131:A:H2	1:N:231:U:H3	1.56	0.53
1:N:243:A:H61	1:N:281:G:H1'	1.73	0.53
1:N:438:U:C5	1:N:494:G:C8	2.96	0.53
1:N:1219:A:C2	1:N:1220:G:C4	2.97	0.53
1:N:30:U:H3	1:N:553:A:H61	1.55	0.53
1:N:209:U:C4	1:N:211:G:N1	2.77	0.53
1:N:410:G:H2'	1:N:429:U:C4	2.44	0.53
1:N:635:A:C2	1:N:636:U:C2	2.95	0.53
1:N:936:C:C4	1:N:937:A:C5	2.97	0.53
1:N:1102:A:C2	1:N:1103:C:C2	2.96	0.53
1:N:1219:A:C6	1:N:1220:G:C6	2.96	0.53
1:N:120:A:C2	1:N:122:G:C6	2.97	0.53
1:N:197:A:C2	1:N:198:G:C4	2.97	0.53
1:N:594:U:C4	1:N:595:A:C6	2.96	0.53
1:N:203:G:H1'	1:N:465:A:H61	1.74	0.53
1:N:582:C:C2	1:N:760:G:N1	2.77	0.53
1:N:66:A:C6	1:N:67:C:C4	2.97	0.53
1:N:322:C:H3'	1:N:323:U:C6	2.44	0.53
1:N:78:A:C5	1:N:79:G:C6	2.96	0.52
1:N:942:G:H21	1:N:1231:G:H5"	1.72	0.52
1:N:1433:A:H1'	1:N:1468:A:C2	2.45	0.52
1:N:141:G:H21	1:N:182:A:H61	1.57	0.52
1:N:986:U:H2'	1:N:987:G:C8	2.44	0.52
1:N:70:U:C5	1:N:94:G:H2'	2.44	0.52
1:N:197:A:H2	1:N:198:G:C4	2.28	0.52
1:N:1149:C:H2'	1:N:1150:A:C8	2.45	0.52
1:N:1066:C:C6	1:N:1066:C:H5"	2.45	0.52
1:N:102:G:C6	1:N:103:U:C4	2.98	0.52
1:N:1006:G:C5	1:N:1007:U:C5	2.98	0.52
1:N:171:A:C5	1:N:172:A:C6	2.98	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1006:G:C6	1:N:1007:U:C5	2.98	0.52
1:N:1282:C:H2'	1:N:1283:U:C6	2.44	0.52
1:N:1495:U:N3	1:N:1496:C:C4	2.78	0.52
1:N:784:A:C6	1:N:799:G:C6	2.98	0.51
1:N:32:A:H4'	1:N:48:C:H42	1.76	0.51
1:N:840:C:C1'	1:N:843:U:H3	2.21	0.51
1:N:585:G:C6	1:N:586:C:N3	2.78	0.51
1:N:1301:U:H2'	1:N:1303:C:C5	2.45	0.51
1:N:681:A:C6	1:N:710:G:C6	2.99	0.51
1:N:1301:U:HO2'	1:N:1303:C:H6	1.56	0.51
1:N:272:C:C4	1:N:273:U:C4	2.98	0.51
1:N:749:A:C2	1:N:750:C:C2	2.99	0.51
1:N:946:A:H2'	1:N:947:G:C8	2.46	0.51
1:N:985:C:H2'	1:N:986:U:O4'	2.11	0.51
1:N:79:G:C6	1:N:80:A:C6	2.99	0.51
1:N:675:A:N1	1:N:716:A:C2	2.78	0.51
1:N:684:U:H3	1:N:706:A:H61	1.59	0.51
1:N:291:U:H3	1:N:309:A:H61	1.59	0.51
1:N:342:C:C5	1:N:343:U:C4	2.99	0.51
1:N:620:C:C5	1:N:621:A:C6	2.99	0.51
1:N:665:A:C8	1:N:733:G:C2	2.99	0.51
1:N:895:G:C6	1:N:896:C:N3	2.79	0.51
1:N:301:G:C4	1:N:302:G:C8	2.99	0.51
1:N:1072:G:C2	1:N:1073:U:C2	2.99	0.51
1:N:659:U:C4	1:N:660:C:C5	2.99	0.50
1:N:771:G:H2'	1:N:772:U:O4'	2.11	0.50
1:N:896:C:H2'	1:N:897:C:H6	1.76	0.50
1:N:1433:A:C6	1:N:1434:A:C6	2.99	0.50
1:N:115:G:C6	1:N:289:G:C6	3.00	0.50
1:N:384:G:C6	1:N:385:C:C4	2.99	0.50
1:N:978:A:C5	1:N:1319:A:C2	2.99	0.50
1:N:1266:G:N2	1:N:1269:A:C8	2.80	0.50
1:N:295:C:C4	1:N:296:U:C4	3.00	0.50
1:N:335:C:H2'	1:N:336:A:C8	2.47	0.50
1:N:260:G:H2'	1:N:261:U:C6	2.46	0.50
1:N:1468:A:H2'	1:N:1469:C:H5'	1.94	0.50
1:N:205:A:C5	1:N:206:C:C4	3.00	0.50
1:N:207:C:H2'	1:N:208:U:C5	2.46	0.50
1:N:772:U:H2'	1:N:773:G:C8	2.47	0.50
1:N:917:G:C6	1:N:918:A:C6	3.00	0.50
1:N:112:G:H22	1:N:315:A:H2	1.59	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:430:A:C2	1:N:431:A:H1'	2.47	0.50
1:N:701:U:H5"	1:N:703:G:H5'	1.94	0.50
1:N:69:G:H2'	1:N:70:U:C6	2.47	0.50
1:N:811:C:H2'	1:N:812:G:H5'	1.94	0.50
1:N:1009:U:C2	1:N:1021:A:C2	3.00	0.50
1:N:655:A:C2	1:N:656:G:C4	3.00	0.49
1:N:761:G:C6	1:N:762:U:C4	2.99	0.49
1:N:782:A:C8	1:N:783:C:C6	2.99	0.49
1:N:1104:G:C6	1:N:1105:A:C6	3.00	0.49
1:N:52:C:C6	1:N:52:C:H3'	2.47	0.49
1:N:594:U:H3'	1:N:595:A:C8	2.48	0.49
1:N:483:C:H5	1:N:484:G:HO2'	1.60	0.49
1:N:738:C:C4	1:N:739:C:C4	3.00	0.49
1:N:934:C:H2'	1:N:1344:C:C5	2.47	0.49
1:N:1135:U:H3	1:N:1138:G:H22	1.61	0.49
1:N:782:A:C6	1:N:783:C:C2	3.01	0.49
1:N:1095:U:C4	1:N:1096:C:C4	3.01	0.49
1:N:247:G:C6	1:N:278:G:C5	3.01	0.49
1:N:596:A:N6	1:N:644:U:H3	2.09	0.49
1:N:803:G:C6	1:N:804:U:C4	3.01	0.49
1:N:829:G:C6	1:N:830:G:C5	3.01	0.49
1:N:954:G:C6	1:N:955:U:C4	3.01	0.49
1:N:986:U:H3	1:N:1219:A:H61	1.59	0.49
1:N:1238:A:H4'	1:N:1336:C:H42	1.77	0.49
1:N:1483:A:C8	1:N:1484:C:C6	3.00	0.49
1:N:1511:G:C6	1:N:1512:U:C4	3.01	0.49
1:N:669:G:C5	1:N:670:G:C5	3.01	0.49
1:N:1433:A:C1'	1:N:1468:A:C2	2.96	0.49
1:N:1068:G:O6	1:N:1108:G:C6	2.66	0.49
1:N:168:G:C6	1:N:169:C:C5	3.00	0.48
1:N:424:G:C6	1:N:425:G:C6	3.00	0.48
1:N:1349:A:H1'	1:N:1374:A:C6	2.48	0.48
1:N:832:G:C5	1:N:855:U:N3	2.81	0.48
1:N:1004:A:H2	1:N:1029:U:H3	1.61	0.48
1:N:785:G:C2	1:N:786:G:C8	3.01	0.48
1:N:68:G:C4	1:N:69:G:H1'	2.48	0.48
1:N:201:G:H2'	1:N:202:G:C8	2.49	0.48
1:N:425:G:C6	1:N:426:U:N3	2.81	0.48
1:N:572:A:H2'	1:N:573:A:H62	1.79	0.48
1:N:1357:A:N1	1:N:1363:A:C6	2.82	0.48
1:N:1438:G:C6	1:N:1464:U:N3	2.82	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:936:C:N4	1:N:937:A:C6	2.81	0.48
1:N:69:G:C4	1:N:70:U:C5	3.02	0.48
1:N:80:A:C4	1:N:81:A:H1'	2.49	0.48
1:N:152:A:C6	1:N:153:C:H1'	2.49	0.48
1:N:771:G:C5	1:N:772:U:C4	3.02	0.48
1:N:1072:G:C5	1:N:1073:U:C4	3.02	0.48
1:N:211:G:N2	1:N:213:G:C8	2.82	0.48
1:N:1239:A:H4'	1:N:1240:U:OP1	2.14	0.48
1:N:1266:G:N2	1:N:1269:A:H8	2.11	0.48
1:N:171:A:C6	1:N:172:A:N1	2.81	0.48
1:N:297:G:H22	1:N:299:G:H3'	1.77	0.48
1:N:417:G:C5	1:N:418:C:C4	3.01	0.48
1:N:807:A:C2	1:N:808:C:C2	3.02	0.48
1:N:1011:C:C2	1:N:1019:A:C2	3.00	0.48
1:N:466:A:H2'	1:N:467:U:C2	2.49	0.48
1:N:820:U:H3'	1:N:821:G:C5'	2.43	0.48
1:N:771:G:C6	1:N:772:U:N3	2.82	0.47
1:N:776:G:H21	1:N:779:C:H42	1.62	0.47
1:N:1147:C:H2'	1:N:1148:U:C6	2.48	0.47
1:N:331:G:O5'	1:N:331:G:C8	2.68	0.47
1:N:462:G:O6	1:N:468:A:H5"	2.14	0.47
1:N:1420:U:H3	1:N:1480:A:H61	1.63	0.47
1:N:79:G:H2'	1:N:80:A:C8	2.50	0.47
1:N:198:G:H2'	1:N:199:A:C8	2.49	0.47
1:N:585:G:C5	1:N:586:C:C4	3.03	0.47
1:N:1144:G:C6	1:N:1145:A:C5	3.03	0.47
1:N:1511:G:C6	1:N:1525:G:C6	3.03	0.47
1:N:1400:C:H3'	1:N:1401:G:H5'	1.96	0.47
1:N:376:G:H2'	1:N:377:G:C8	2.50	0.47
1:N:409:U:C4	1:N:410:G:C6	3.02	0.47
1:N:646:G:C6	1:N:647:C:C4	3.03	0.47
1:N:914:A:C2	1:N:915:A:C8	3.03	0.47
1:N:1072:G:C6	1:N:1073:U:N3	2.83	0.47
1:N:1090:U:H2'	1:N:1091:U:C6	2.50	0.47
1:N:892:A:O2'	1:N:1485:U:H4'	2.14	0.47
1:N:980:C:H3'	1:N:981:U:C6	2.50	0.47
1:N:1244:G:C6	1:N:1245:C:N3	2.83	0.47
1:N:27:G:C5	1:N:557:G:C2	3.03	0.47
1:N:273:U:C4	1:N:274:A:C6	3.03	0.47
1:N:1032:G:C5	1:N:1033:G:H1'	2.50	0.47
1:N:17:U:H2'	1:N:18:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:160:A:H2'	1:N:161:A:C8	2.49	0.47
1:N:1400:C:H3'	1:N:1401:G:C5'	2.45	0.47
1:N:1041:G:C6	1:N:1042:A:C6	3.03	0.46
1:N:1160:G:O6	1:N:1181:G:C6	2.68	0.46
1:N:1227:A:C6	1:N:1228:C:C2	3.03	0.46
1:N:355:C:H2'	1:N:356:A:C8	2.50	0.46
1:N:460:A:H2	1:N:471:U:H3	1.62	0.46
1:N:626:G:H2'	1:N:627:G:C8	2.50	0.46
1:N:751:U:H5	1:N:752:G:C5	2.34	0.46
1:N:1068:G:C6	1:N:1069:C:C5	3.03	0.46
1:N:1383:C:C4	1:N:1384:C:C4	3.03	0.46
1:N:1385:G:C6	1:N:1386:G:C6	3.04	0.46
1:N:78:A:C6	1:N:79:G:N1	2.83	0.46
1:N:486:U:C6	1:N:486:U:H5"	2.50	0.46
1:N:582:C:C2	1:N:760:G:C6	3.04	0.46
1:N:585:G:C6	1:N:586:C:C4	3.03	0.46
1:N:610:U:H2'	1:N:612:C:H41	1.80	0.46
1:N:893:C:C4	1:N:894:G:C6	3.03	0.46
1:N:954:G:C4	1:N:955:U:C5	3.04	0.46
1:N:301:G:C6	1:N:302:G:C6	3.03	0.46
1:N:1439:G:C5	1:N:1440:U:C6	3.03	0.46
1:N:505:G:H2'	1:N:506:G:C8	2.51	0.46
1:N:804:U:H5	1:N:805:C:C4	2.34	0.46
1:N:1365:G:N1	1:N:1366:C:C2	2.84	0.46
1:N:465:A:C6	1:N:466:A:C6	3.03	0.46
1:N:1239:A:C5	1:N:1241:G:C2	3.04	0.46
1:N:1434:A:C6	1:N:1435:G:C6	3.04	0.46
1:N:136:C:C2	1:N:137:U:C6	3.04	0.46
1:N:505:G:H2'	1:N:506:G:H8	1.80	0.46
1:N:613:C:H2'	1:N:614:C:O4'	2.16	0.46
1:N:978:A:H4'	1:N:1322:C:C6	2.51	0.46
1:N:1500:A:C6	1:N:1501:C:C5	3.04	0.46
1:N:118:U:HO2'	1:N:121:U:H6	1.60	0.46
1:N:407:U:H3	1:N:435:A:H61	1.62	0.46
1:N:516:U:O4	1:N:517:G:C8	2.69	0.46
1:N:713:G:C6	1:N:714:G:C6	3.04	0.46
1:N:1283:U:H2'	1:N:1284:C:C6	2.51	0.46
1:N:39:G:C2	1:N:498:A:H2	2.34	0.45
1:N:64:G:C5	1:N:99:C:C2	3.03	0.45
1:N:363:A:C6	1:N:364:A:C6	3.04	0.45
1:N:687:A:C2	1:N:704:A:C6	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1068:G:C6	1:N:1108:G:C6	3.03	0.45
1:N:27:G:C6	1:N:557:G:C2	3.04	0.45
1:N:321:A:N7	1:N:328:C:H1'	2.31	0.45
1:N:399:G:C6	1:N:400:C:C5	3.04	0.45
1:N:403:C:H41	1:N:547:A:H5"	1.81	0.45
1:N:145:G:C2	1:N:178:C:C2	3.04	0.45
1:N:256:U:H3	1:N:270:A:H61	1.65	0.45
1:N:340:U:H2'	1:N:341:C:C6	2.51	0.45
1:N:1230:C:H2'	1:N:1231:G:H8	1.81	0.45
1:N:1342:C:H2'	1:N:1343:G:H8	1.81	0.45
1:N:105:G:N2	1:N:380:G:H5'	2.32	0.45
1:N:243:A:C2	1:N:282:A:N6	2.83	0.45
1:N:342:C:C4	1:N:343:U:C4	3.04	0.45
1:N:860:A:C5	1:N:861:G:C4	3.05	0.45
1:N:938:A:H2	1:N:1375:A:H2	1.63	0.45
1:N:947:G:H1'	1:N:1332:A:H62	1.81	0.45
1:N:981:U:C2	1:N:982:U:C6	3.04	0.45
1:N:64:G:N1	1:N:69:G:C2	2.85	0.45
1:N:424:G:C5	1:N:425:G:C5	3.05	0.45
1:N:958:A:C2	1:N:959:A:C2	3.04	0.45
1:N:113:G:H21	1:N:353:A:H2'	1.81	0.45
1:N:322:C:H3'	1:N:323:U:C5	2.51	0.45
1:N:1416:G:C6	1:N:1417:G:C4	3.05	0.45
1:N:25:C:H41	1:N:559:A:H61	1.65	0.45
1:N:94:G:H4'	1:N:95:C:H5"	1.98	0.45
1:N:219:U:H2'	1:N:220:G:C8	2.52	0.45
1:N:920:U:C4	1:N:921:U:C4	3.04	0.45
1:N:856:C:H2'	1:N:857:C:C6	2.52	0.45
1:N:1043:G:H2'	1:N:1044:A:C8	2.51	0.45
1:N:1207:G:C6	1:N:1208:C:C5	3.05	0.45
1:N:179:A:C2	1:N:180:U:C2	3.05	0.45
1:N:406:G:C6	1:N:407:U:C4	3.04	0.45
1:N:410:G:H2'	1:N:429:U:C5	2.51	0.45
1:N:44:A:H2'	1:N:45:G:C8	2.52	0.45
1:N:563:A:C2	1:N:567:G:C6	3.04	0.45
1:N:830:G:C6	1:N:831:A:C6	3.05	0.45
1:N:976:G:C8	1:N:1359:C:H1'	2.52	0.45
1:N:1068:G:C5	1:N:1108:G:C2	3.05	0.45
1:N:1076:U:H3	1:N:1081:A:N6	2.15	0.45
1:N:151:A:C2	1:N:152:A:H1'	2.52	0.44
1:N:223:A:C6	1:N:224:U:N3	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1049:U:H4'	1:N:1050:G:H5'	1.98	0.44
1:N:587:G:H22	1:N:754:C:C5'	2.30	0.44
1:N:820:U:H3'	1:N:821:G:H5"	1.99	0.44
1:N:896:C:H2'	1:N:897:C:C6	2.52	0.44
1:N:620:C:C5	1:N:621:A:C4	3.05	0.44
1:N:1130:A:H61	1:N:1144:G:H21	1.65	0.44
1:N:68:G:C6	1:N:102:G:N1	2.86	0.44
1:N:414:A:H8	1:N:428:G:H22	1.65	0.44
1:N:98:A:H2'	1:N:99:C:O4'	2.18	0.44
1:N:179:A:C5	1:N:180:U:C4	3.05	0.44
1:N:199:A:C2	1:N:219:U:O2	2.71	0.44
1:N:320:A:H2'	1:N:321:A:C8	2.52	0.44
1:N:1048:G:H1'	1:N:1215:G:H4'	1.99	0.44
1:N:1215:G:H2'	1:N:1216:A:H5'	2.00	0.44
1:N:68:G:C5	1:N:69:G:H1'	2.52	0.44
1:N:378:G:C6	1:N:379:C:C4	3.05	0.44
1:N:587:G:C2	1:N:755:G:C8	3.06	0.44
1:N:668:G:N2	1:N:739:C:H1'	2.33	0.44
1:N:921:U:C6	1:N:921:U:H3'	2.52	0.44
1:N:991:U:H4'	1:N:992:U:OP1	2.17	0.44
1:N:1071:C:H2'	1:N:1072:G:C8	2.53	0.44
1:N:1292:G:C6	1:N:1293:C:C4	3.06	0.44
1:N:255:G:C6	1:N:256:U:N3	2.86	0.44
1:N:474:G:C6	1:N:475:C:N3	2.86	0.44
1:N:1055:A:C6	1:N:1206:G:C5	3.06	0.44
1:N:69:G:C6	1:N:70:U:C4	3.05	0.44
1:N:482:A:C5	1:N:483:C:C2	3.06	0.44
1:N:516:U:O2	1:N:520:A:C2	2.71	0.44
1:N:600:A:C6	1:N:639:G:C6	3.06	0.44
1:N:829:G:C5	1:N:830:G:C8	3.06	0.44
1:N:1170:A:C5	1:N:1171:A:C4	3.06	0.44
1:N:1255:G:C6	1:N:1279:G:C5	3.06	0.44
1:N:68:G:N1	1:N:102:G:C2	2.86	0.43
1:N:197:A:C2	1:N:198:G:N9	2.86	0.43
1:N:440:C:H42	1:N:496:A:N6	2.16	0.43
1:N:575:G:C5	1:N:821:G:C8	3.06	0.43
1:N:604:G:C6	1:N:605:U:N3	2.85	0.43
1:N:1075:U:H2'	1:N:1076:U:O4'	2.18	0.43
1:N:1375:A:H2'	1:N:1376:U:O4'	2.18	0.43
1:N:160:A:C2	1:N:346:G:N1	2.86	0.43
1:N:204:G:H3'	1:N:204:G:C8	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:218:U:C4	1:N:219:U:N3	2.86	0.43
1:N:595:A:H4'	1:N:596:A:H5'	2.00	0.43
1:N:1230:C:H2'	1:N:1231:G:C8	2.52	0.43
1:N:1239:A:N3	1:N:1241:G:C6	2.85	0.43
1:N:495:A:H1'	1:N:496:A:C5	2.53	0.43
1:N:620:C:H3'	1:N:621:A:C8	2.53	0.43
1:N:719:C:H3'	1:N:719:C:C6	2.53	0.43
1:N:1074:G:C5	1:N:1075:U:C4	3.06	0.43
1:N:68:G:C2	1:N:102:G:C2	3.06	0.43
1:N:105:G:H21	1:N:380:G:H5'	1.83	0.43
1:N:703:G:H3'	1:N:704:A:H5'	2.00	0.43
1:N:719:C:H3'	1:N:719:C:H6	1.83	0.43
1:N:770:C:H2'	1:N:771:G:C8	2.54	0.43
1:N:804:U:C6	1:N:805:C:C5	3.06	0.43
1:N:1148:U:H2'	1:N:1149:C:O4'	2.18	0.43
1:N:1219:A:C5	1:N:1220:G:C5	3.05	0.43
1:N:441:A:H1'	1:N:497:G:C2	2.53	0.43
1:N:563:A:C2	1:N:567:G:C5	3.07	0.43
1:N:1075:U:HO2'	1:N:1101:A:H2	1.67	0.43
1:N:39:G:C2	1:N:498:A:C2	3.07	0.43
1:N:181:A:HO2'	1:N:193:C:N4	2.16	0.43
1:N:298:A:H3'	1:N:299:G:C8	2.53	0.43
1:N:655:A:C4	1:N:656:G:C8	3.06	0.43
1:N:665:A:C5	1:N:733:G:C5	3.06	0.43
1:N:922:G:H2'	1:N:923:A:C8	2.54	0.43
1:N:1025:U:H2'	1:N:1031:C:C5	2.54	0.43
1:N:1219:A:C6	1:N:1220:G:C5	3.06	0.43
1:N:1299:A:C2	1:N:1301:U:C2	3.07	0.43
1:N:16:A:H2'	1:N:17:U:H5'	2.01	0.43
1:N:39:G:C4	1:N:498:A:C2	3.06	0.43
1:N:64:G:C8	1:N:99:C:C5	3.06	0.43
1:N:109:A:C5	1:N:326:G:C5	3.07	0.43
1:N:323:U:C5	1:N:324:G:C5	3.06	0.43
1:N:928:G:H21	1:N:1533:C:N4	2.16	0.43
1:N:1357:A:C4	1:N:1358:U:C2	3.06	0.43
1:N:247:G:C5	1:N:278:G:C2	3.07	0.43
1:N:295:C:C2	1:N:303:A:C2	3.06	0.43
1:N:381:C:C5	1:N:382:A:C6	3.07	0.43
1:N:593:U:C2	1:N:594:U:C5	3.06	0.43
1:N:124:C:C2	1:N:238:A:C2	3.07	0.43
1:N:335:C:C2	1:N:336:A:C8	3.07	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:496:A:C2	1:N:497:G:C5	3.07	0.43
1:N:688:G:H21	1:N:704:A:H2	1.66	0.43
1:N:708:C:C4	1:N:709:U:C4	3.07	0.43
1:N:954:G:C5	1:N:955:U:C5	3.07	0.43
1:N:1500:A:C5	1:N:1501:C:C5	3.07	0.43
1:N:1502:A:H3'	1:N:1503:A:H5"	2.01	0.43
1:N:316:C:O2	1:N:338:A:C2	2.71	0.43
1:N:894:G:C6	1:N:895:G:C6	3.07	0.43
1:N:937:A:C2	1:N:1379:G:O6	2.72	0.43
1:N:946:A:C2	1:N:1236:A:C2	3.06	0.43
1:N:1100:C:H5"	1:N:1101:A:H4'	2.01	0.43
1:N:165:G:C6	1:N:166:U:C4	3.07	0.42
1:N:228:A:C2	1:N:229:U:H1'	2.54	0.42
1:N:349:A:N1	1:N:350:G:C6	2.87	0.42
1:N:461:A:H3'	1:N:462:G:C5'	2.48	0.42
1:N:503:C:O2	1:N:510:A:C2	2.72	0.42
1:N:761:G:C2	1:N:762:U:C2	3.07	0.42
1:N:904:U:C5	1:N:905:U:C4	3.07	0.42
1:N:1289:A:C8	1:N:1290:G:C8	3.07	0.42
1:N:108:G:C4	1:N:109:A:N1	2.87	0.42
1:N:782:A:C8	1:N:783:C:C5	3.07	0.42
1:N:1415:G:H2'	1:N:1416:G:C8	2.55	0.42
1:N:1423:G:C6	1:N:1424:U:C4	3.07	0.42
1:N:121:U:C4	1:N:122:G:C8	3.07	0.42
1:N:579:A:C6	1:N:763:G:C6	3.07	0.42
1:N:1314:C:C2	1:N:1315:U:C5	3.08	0.42
1:N:151:A:C6	1:N:171:A:C6	3.06	0.42
1:N:411:A:C4	1:N:429:U:C4	3.07	0.42
1:N:1249:C:H3'	1:N:1250:A:H5"	2.01	0.42
1:N:16:A:C2	1:N:920:U:O2	2.72	0.42
1:N:201:G:N2	1:N:468:A:H62	2.17	0.42
1:N:342:C:C4	1:N:343:U:N3	2.87	0.42
1:N:467:U:H3'	1:N:467:U:O2	2.20	0.42
1:N:738:C:H2'	1:N:739:C:C6	2.55	0.42
1:N:939:G:C2	1:N:1375:A:C2	3.08	0.42
1:N:296:U:H2'	1:N:297:G:C8	2.54	0.42
1:N:1184:G:C6	1:N:1185:G:C5	3.08	0.42
1:N:16:A:C2	1:N:920:U:C2	3.07	0.42
1:N:213:G:C8	1:N:214:C:C6	3.07	0.42
1:N:598:U:H3	1:N:640:A:H61	1.67	0.42
1:N:734:G:H2'	1:N:735:C:C6	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:606:G:H3'	1:N:607:A:C5'	2.49	0.42
1:N:736:C:H2'	1:N:737:C:C6	2.54	0.42
1:N:893:C:C4	1:N:894:G:C5	3.07	0.42
1:N:1423:G:C6	1:N:1424:U:N3	2.88	0.42
1:N:1444:U:C5	1:N:1455:G:OP1	2.73	0.42
1:N:1530:G:H1'	1:N:1531:A:H3'	2.01	0.42
1:N:293:G:H21	1:N:306:A:H2	1.61	0.42
1:N:408:A:C2	1:N:435:A:C5	3.08	0.42
1:N:718:A:H3'	1:N:719:C:C6	2.55	0.42
1:N:1117:A:C5	1:N:1156:G:N2	2.87	0.42
1:N:30:U:H3	1:N:553:A:N6	2.17	0.42
1:N:160:A:C6	1:N:346:G:C5	3.08	0.42
1:N:496:A:H2'	1:N:497:G:C8	2.55	0.42
1:N:604:G:C2	1:N:605:U:C2	3.08	0.42
1:N:701:U:C5'	1:N:703:G:H5'	2.50	0.42
1:N:807:A:C6	1:N:808:C:C4	3.07	0.42
1:N:1014:A:C5	1:N:1015:G:C6	3.08	0.42
1:N:1239:A:C4	1:N:1241:G:C5	3.08	0.42
1:N:1315:U:C2	1:N:1323:G:C2	3.07	0.42
1:N:1343:G:C5	1:N:1344:C:C5	3.08	0.42
1:N:1396:A:H4'	1:N:1397:C:O5'	2.20	0.42
1:N:1423:G:C5	1:N:1424:U:C4	3.08	0.42
1:N:200:G:C2	1:N:218:U:C2	3.08	0.41
1:N:695:A:C2	1:N:696:A:C4	3.08	0.41
1:N:98:A:C8	1:N:99:C:C5	3.09	0.41
1:N:202:G:H1'	1:N:468:A:H8	1.85	0.41
1:N:341:C:H2'	1:N:342:C:C6	2.56	0.41
1:N:506:G:C2	1:N:507:C:C2	3.08	0.41
1:N:659:U:C2	1:N:660:C:C6	3.08	0.41
1:N:1501:C:C4	1:N:1504:G:N3	2.88	0.41
1:N:207:C:H2'	1:N:208:U:C6	2.55	0.41
1:N:347:G:C2	1:N:348:G:H1'	2.55	0.41
1:N:509:A:C4	1:N:510:A:C2	3.08	0.41
1:N:786:G:C6	1:N:797:C:N3	2.88	0.41
1:N:1399:C:C2	1:N:1502:A:C2	3.09	0.41
1:N:145:G:N2	1:N:146:G:C4	2.89	0.41
1:N:532:A:H3'	1:N:533:A:H5'	2.02	0.41
1:N:587:G:H22	1:N:754:C:H5'	1.85	0.41
1:N:751:U:C5	1:N:752:G:C5	3.09	0.41
1:N:756:C:C4	1:N:757:U:C4	3.08	0.41
1:N:895:G:C6	1:N:896:C:C2	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:1148:U:N3	1:N:1149:C:C2	2.88	0.41
1:N:19:A:C2	1:N:917:G:C6	3.08	0.41
1:N:272:C:H2'	1:N:273:U:O4'	2.20	0.41
1:N:383:A:C5	1:N:384:G:H1'	2.55	0.41
1:N:492:C:H2'	1:N:493:A:C8	2.56	0.41
1:N:597:G:C6	1:N:598:U:C2	3.08	0.41
1:N:646:G:C5	1:N:647:C:C5	3.09	0.41
1:N:292:G:C5	1:N:293:G:H1'	2.56	0.41
1:N:373:A:C4	1:N:374:A:C8	3.09	0.41
1:N:411:A:C4	1:N:429:U:C5	3.08	0.41
1:N:830:G:C6	1:N:831:A:C5	3.09	0.41
1:N:831:A:C2	1:N:832:G:C8	3.09	0.41
1:N:98:A:C5	1:N:99:C:C4	3.08	0.41
1:N:186:C:N3	1:N:187:G:C5	2.89	0.41
1:N:229:U:C2	1:N:230:G:C8	3.09	0.41
1:N:720:C:H5"	1:N:721:G:OP2	2.21	0.41
1:N:803:G:C2	1:N:804:U:C2	3.09	0.41
1:N:1319:A:H4'	1:N:1320:C:OP1	2.21	0.41
1:N:1434:A:H2'	1:N:1435:G:O4'	2.21	0.41
1:N:150:U:O2	1:N:151:A:C8	2.73	0.41
1:N:209:U:C4	1:N:211:G:C2	3.09	0.41
1:N:939:G:N3	1:N:1375:A:C2	2.89	0.41
1:N:1129:C:C2	1:N:1144:G:C2	3.09	0.41
1:N:150:U:C2	1:N:151:A:C8	3.09	0.41
1:N:181:A:H4'	1:N:182:A:O5'	2.20	0.41
1:N:706:A:C6	1:N:707:U:N3	2.89	0.41
1:N:807:A:H2'	1:N:808:C:O4'	2.21	0.41
1:N:857:C:C6	1:N:858:G:C8	3.09	0.41
1:N:894:G:C4	1:N:895:G:C8	3.09	0.41
1:N:1094:G:H2'	1:N:1108:G:H1	1.84	0.41
1:N:1262:C:H2'	1:N:1263:C:H5'	2.03	0.41
1:N:1441:A:H62	1:N:1461:G:N2	2.19	0.41
1:N:139:A:C6	1:N:140:U:C4	3.09	0.41
1:N:340:U:H1'	1:N:350:G:N2	2.35	0.41
1:N:723:U:O2	1:N:723:U:H2'	2.20	0.41
1:N:886:G:H4'	1:N:915:A:H1'	2.03	0.41
1:N:1122:U:H3	1:N:1151:A:H2	1.69	0.41
1:N:1140:C:C2	1:N:1141:C:C5	3.09	0.41
1:N:1311:A:C2	1:N:1327:C:N3	2.89	0.41
1:N:1385:G:C5	1:N:1386:G:C5	3.09	0.41
1:N:26:A:H61	1:N:558:G:H2'	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:52:C:C6	1:N:52:C:C3'	3.03	0.40
1:N:93:U:H5	1:N:94:G:C8	2.39	0.40
1:N:405:U:H5"	1:N:495:A:C2	2.57	0.40
1:N:1239:A:C2	1:N:1241:G:O6	2.73	0.40
1:N:1360:A:H3'	1:N:1361:G:H8	1.85	0.40
1:N:329:A:H2'	1:N:332:G:N7	2.35	0.40
1:N:496:A:N1	1:N:497:G:C6	2.89	0.40
1:N:1047:G:H1	1:N:1210:C:H42	1.68	0.40
1:N:28:A:H2	1:N:555:U:H3	1.64	0.40
1:N:61:G:H21	1:N:379:C:C4'	2.34	0.40
1:N:142:G:N3	1:N:142:G:H2'	2.35	0.40
1:N:550:G:C6	1:N:551:U:C5	3.10	0.40
1:N:1017:U:H2'	1:N:1018:G:C8	2.56	0.40
1:N:1241:G:C8	1:N:1241:G:O5'	2.74	0.40
1:N:130:A:N1	1:N:233:C:O2	2.55	0.40
1:N:209:U:O4	1:N:211:G:N2	2.54	0.40
1:N:242:G:N1	1:N:285:C:C2	2.90	0.40
1:N:402:G:H1'	1:N:620:C:H42	1.87	0.40
1:N:917:G:C6	1:N:918:A:C5	3.09	0.40
1:N:1117:A:C6	1:N:1156:G:C2	3.09	0.40
1:N:1276:G:N2	1:N:1283:U:H1'	2.37	0.40
1:N:64:G:C5	1:N:99:C:N3	2.90	0.40
1:N:92:U:H2'	1:N:93:U:C6	2.56	0.40
1:N:134:G:C5	1:N:325:A:N6	2.89	0.40
1:N:145:G:C2	1:N:146:G:N9	2.90	0.40
1:N:373:A:C2	1:N:374:A:C4	3.09	0.40
1:N:494:G:C4	1:N:496:A:C8	3.09	0.40
1:N:728:A:C2	1:N:763:G:N2	2.90	0.40
1:N:950:U:H6	1:N:950:U:O5'	2.05	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%)	446 (29%)	148 (9%)

All (446) 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	7	A
1	N	8	A
1	N	9	G
1	N	14	U
1	N	22	G
1	N	31	G
1	N	32	A
1	N	39	G
1	N	47	C
1	N	48	C
1	N	49	U
1	N	50	A
1	N	51	A
1	N	52	C
1	N	60	A
1	N	61	G
1	N	65	A
1	N	66	A
1	N	70	U
1	N	71	A
1	N	72	A
1	N	73	C
1	N	74	A
1	N	75	G
1	N	76	G
1	N	77	A
1	N	79	G
1	N	80	A
1	N	81	A
1	N	82	G
1	N	83	C
1	N	85	U

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Mol	Chain	Res	Type
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	93	U
1	N	94	G
1	N	95	C
1	N	97	G
1	N	107	G
1	N	108	G
1	N	109	A
1	N	110	C
1	N	115	G
1	N	116	A
1	N	119	A
1	N	120	A
1	N	127	G
1	N	130	A
1	N	131	A
1	N	132	C
1	N	134	G
1	N	135	C
1	N	138	G
1	N	141	G
1	N	142	G
1	N	143	A
1	N	159	G
1	N	160	A
1	N	161	A
1	N	163	C
1	N	164	G
1	N	173	U
1	N	174	A
1	N	177	G
1	N	181	A
1	N	182	A
1	N	183	C
1	N	195	A
1	N	197	A
1	N	198	G

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Mol	Chain	Res	Type
1	N	202	G
1	N	205	A
1	N	207	C
1	N	208	U
1	N	209	U
1	N	210	C
1	N	211	G
1	N	212	G
1	N	214	C
1	N	219	U
1	N	232	G
1	N	240	G
1	N	243	A
1	N	244	U
1	N	245	U
1	N	247	G
1	N	251	G
1	N	252	U
1	N	258	G
1	N	266	G
1	N	267	C
1	N	273	U
1	N	274	A
1	N	275	G
1	N	279	A
1	N	281	G
1	N	285	C
1	N	289	G
1	N	305	G
1	N	306	A
1	N	308	C
1	N	316	C
1	N	320	A
1	N	321	A
1	N	328	C
1	N	329	A
1	N	330	C
1	N	332	G
1	N	344	A
1	N	345	C
1	N	346	G
1	N	347	G

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Mol	Chain	Res	Type
1	N	351	G
1	N	352	C
1	N	353	A
1	N	354	G
1	N	363	A
1	N	366	A
1	N	367	U
1	N	368	U
1	N	372	C
1	N	373	A
1	N	384	G
1	N	390	U
1	N	392	C
1	N	398	U
1	N	406	G
1	N	411	A
1	N	412	A
1	N	413	G
1	N	414	A
1	N	421	U
1	N	422	C
1	N	423	G
1	N	424	G
1	N	428	G
1	N	429	U
1	N	430	A
1	N	431	A
1	N	439	U
1	N	441	A
1	N	448	A
1	N	451	A
1	N	452	A
1	N	457	G
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

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Mol	Chain	Res	Type
1	N	470	C
1	N	481	G
1	N	482	A
1	N	485	U
1	N	486	U
1	N	496	A
1	N	497	G
1	N	498	A
1	N	499	A
1	N	500	G
1	N	508	U
1	N	509	A
1	N	511	C
1	N	512	U
1	N	518	C
1	N	523	A
1	N	527	G
1	N	531	U
1	N	532	A
1	N	533	A
1	N	534	U
1	N	535	A
1	N	536	C
1	N	537	G
1	N	548	G
1	N	556	C
1	N	559	A
1	N	560	A
1	N	562	U
1	N	563	A
1	N	564	C
1	N	566	G
1	N	567	G
1	N	572	A
1	N	573	A
1	N	574	A
1	N	575	G
1	N	576	C
1	N	579	A
1	N	588	G
1	N	595	A
1	N	596	A

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Mol	Chain	Res	Type
1	N	604	G
1	N	606	G
1	N	607	A
1	N	610	U
1	N	619	U
1	N	629	A
1	N	631	C
1	N	632	U
1	N	633	G
1	N	642	A
1	N	649	A
1	N	663	A
1	N	665	A
1	N	702	A
1	N	703	G
1	N	718	A
1	N	719	C
1	N	720	C
1	N	721	G
1	N	722	G
1	N	723	U
1	N	724	G
1	N	731	G
1	N	733	G
1	N	748	G
1	N	754	C
1	N	755	G
1	N	767	A
1	N	768	A
1	N	776	G
1	N	777	A
1	N	787	A
1	N	788	U
1	N	794	A
1	N	812	G
1	N	813	U
1	N	815	A
1	N	816	A
1	N	817	C
1	N	818	G
1	N	819	A
1	N	828	U

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Mol	Chain	Res	Type
1	N	829	G
1	N	832	G
1	N	843	U
1	N	844	G
1	N	846	G
1	N	855	U
1	N	861	G
1	N	870	U
1	N	871	U
1	N	884	U
1	N	885	G
1	N	889	A
1	N	914	A
1	N	926	G
1	N	927	G
1	N	932	C
1	N	934	C
1	N	935	A
1	N	944	G
1	N	960	U
1	N	961	U
1	N	965	U
1	N	966	G
1	N	967	C
1	N	968	A
1	N	969	A
1	N	970	C
1	N	971	G
1	N	972	C
1	N	974	A
1	N	975	A
1	N	977	A
1	N	982	U
1	N	983	A
1	N	992	U
1	N	993	G
1	N	1003	G
1	N	1004	A
1	N	1008	U
1	N	1014	A
1	N	1017	U
1	N	1018	G

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Mol	Chain	Res	Type
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	1052	U
1	N	1053	G
1	N	1054	C
1	N	1055	A
1	N	1063	C
1	N	1064	G
1	N	1065	U
1	N	1066	C
1	N	1067	A
1	N	1078	U
1	N	1079	G
1	N	1085	U
1	N	1086	U
1	N	1087	G
1	N	1091	U
1	N	1092	A
1	N	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

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Mol	Chain	Res	Type
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	1167	A
1	N	1168	U
1	N	1169	A
1	N	1181	G
1	N	1182	G
1	N	1188	A
1	N	1190	G
1	N	1191	A
1	N	1192	C
1	N	1193	G
1	N	1196	A
1	N	1197	A
1	N	1198	G
1	N	1200	C
1	N	1201	A
1	N	1202	U
1	N	1211	U
1	N	1213	A
1	N	1223	C
1	N	1224	U
1	N	1225	A
1	N	1226	C
1	N	1227	A
1	N	1228	C
1	N	1229	A
1	N	1238	A
1	N	1239	A
1	N	1240	U

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Mol	Chain	Res	Type
1	N	1241	G
1	N	1250	A
1	N	1252	A
1	N	1256	A
1	N	1258	G
1	N	1275	A
1	N	1278	G
1	N	1279	G
1	N	1280	A
1	N	1282	C
1	N	1283	U
1	N	1286	U
1	N	1287	A
1	N	1293	C
1	N	1297	G
1	N	1298	U
1	N	1299	A
1	N	1303	C
1	N	1305	G
1	N	1308	U
1	N	1315	U
1	N	1316	G
1	N	1320	C
1	N	1322	C
1	N	1323	G
1	N	1332	A
1	N	1336	C
1	N	1337	G
1	N	1346	A
1	N	1348	U
1	N	1353	G
1	N	1358	U
1	N	1359	C
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1365	G
1	N	1371	G
1	N	1380	U
1	N	1381	U
1	N	1394	A
1	N	1396	A

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Mol	Chain	Res	Type
1	N	1397	C
1	N	1398	A
1	N	1399	C
1	N	1400	C
1	N	1433	A
1	N	1440	U
1	N	1441	A
1	N	1446	A
1	N	1448	C
1	N	1453	G
1	N	1456	A
1	N	1457	G
1	N	1469	C
1	N	1470	U
1	N	1476	A
1	N	1492	A
1	N	1493	A
1	N	1494	G
1	N	1497	G
1	N	1498	U
1	N	1499	A
1	N	1502	A
1	N	1503	A
1	N	1505	G
1	N	1506	U
1	N	1507	A
1	N	1529	G
1	N	1530	G
1	N	1531	A
1	N	1532	U
1	N	1533	C
1	N	1534	A

All (148) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	N	5	U
1	N	13	U
1	N	30	U
1	N	31	G
1	N	47	C
1	N	49	U

Continued on next page...

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Mol	Chain	Res	Type
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	90	C
1	N	92	U
1	N	94	G
1	N	108	G
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	134	G
1	N	167	A
1	N	168	G
1	N	181	A
1	N	197	A
1	N	198	G
1	N	204	G
1	N	210	C
1	N	243	A
1	N	246	A
1	N	251	G
1	N	266	G
1	N	267	C
1	N	274	A
1	N	275	G
1	N	279	A
1	N	280	C
1	N	305	G
1	N	327	A
1	N	344	A
1	N	346	G
1	N	351	G
1	N	352	C

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Mol	Chain	Res	Type
1	N	366	A
1	N	372	C
1	N	373	A
1	N	412	A
1	N	421	U
1	N	428	G
1	N	429	U
1	N	430	A
1	N	432	A
1	N	438	U
1	N	451	A
1	N	467	U
1	N	481	G
1	N	484	G
1	N	485	U
1	N	495	A
1	N	496	A
1	N	499	A
1	N	500	G
1	N	508	U
1	N	511	C
1	N	531	U
1	N	532	A
1	N	535	A
1	N	536	C
1	N	547	A
1	N	548	G
1	N	559	A
1	N	563	A
1	N	566	G
1	N	575	G
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	870	U
1	N	884	U

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Mol	Chain	Res	Type
1	N	889	A
1	N	913	A
1	N	914	A
1	N	934	C
1	N	960	U
1	N	974	A
1	N	982	U
1	N	991	U
1	N	1049	U
1	N	1053	G
1	N	1064	G
1	N	1066	C
1	N	1078	U
1	N	1085	U
1	N	1087	G
1	N	1093	A
1	N	1094	G
1	N	1101	A
1	N	1129	C
1	N	1136	C
1	N	1151	A
1	N	1167	A
1	N	1168	U
1	N	1185	G
1	N	1190	G
1	N	1191	A
1	N	1197	A
1	N	1201	A
1	N	1224	U
1	N	1228	C
1	N	1239	A
1	N	1263	C
1	N	1282	C
1	N	1285	A
1	N	1298	U
1	N	1299	A
1	N	1303	C
1	N	1319	A
1	N	1331	G
1	N	1336	C
1	N	1337	G
1	N	1345	U

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Mol	Chain	Res	Type
1	N	1348	U
1	N	1358	U
1	N	1362	A
1	N	1363	A
1	N	1364	U
1	N	1380	U
1	N	1396	A
1	N	1399	C
1	N	1432	G
1	N	1440	U
1	N	1457	G
1	N	1498	U
1	N	1502	A
1	N	1506	U
1	N	1530	G
1	N	1533	C

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

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

5.5 Carbohydrates [\(i\)](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [\(i\)](#)

There are no ligands in this entry.

5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [\(i\)](#)

There are no chain breaks in this entry.

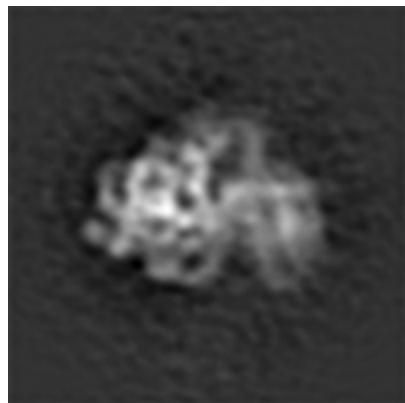
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-5501. These allow visual inspection of the internal detail of the map and identification of artifacts.

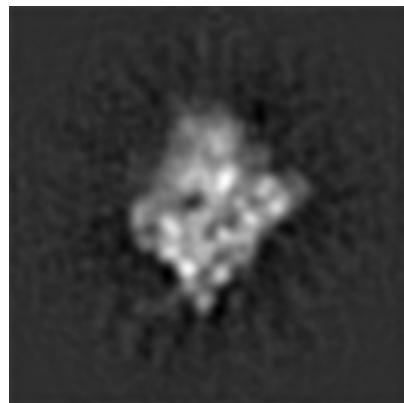
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

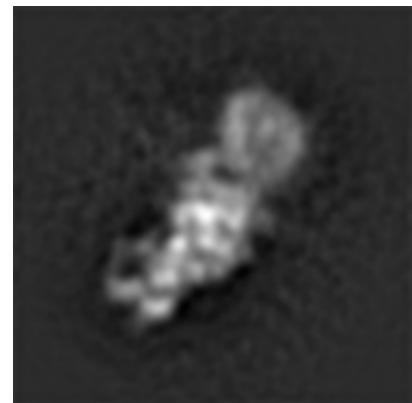
6.1.1 Primary map



X



Y

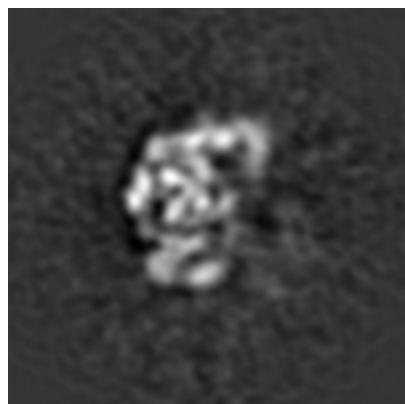


Z

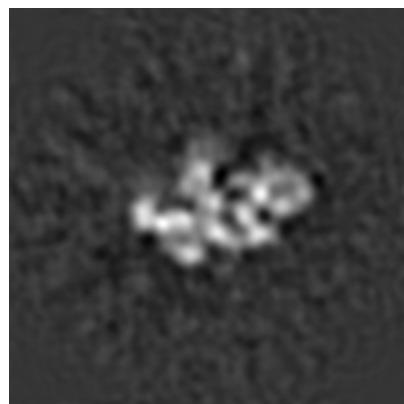
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

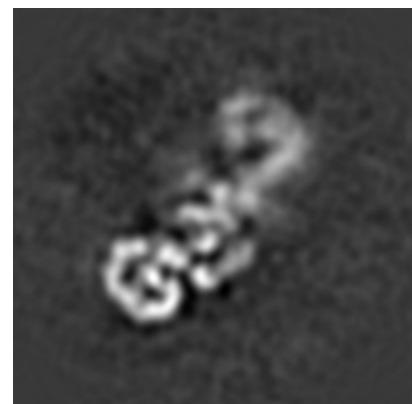
6.2.1 Primary map



X Index: 62



Y Index: 62

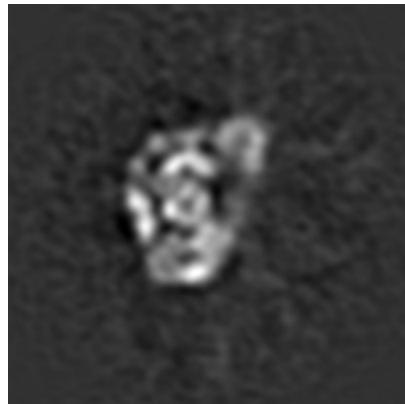


Z Index: 62

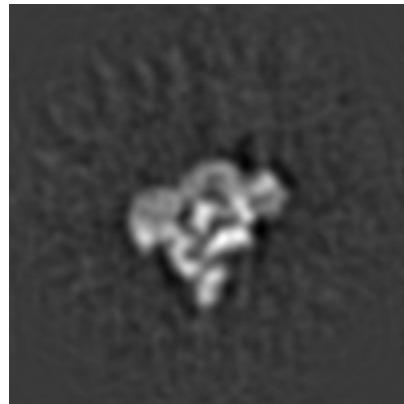
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [\(i\)](#)

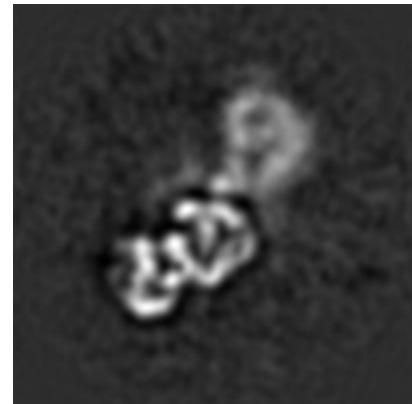
6.3.1 Primary map



X Index: 59



Y Index: 50

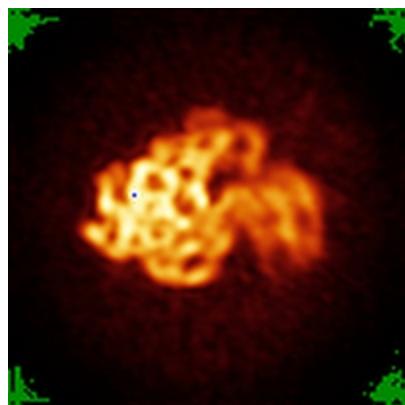


Z Index: 65

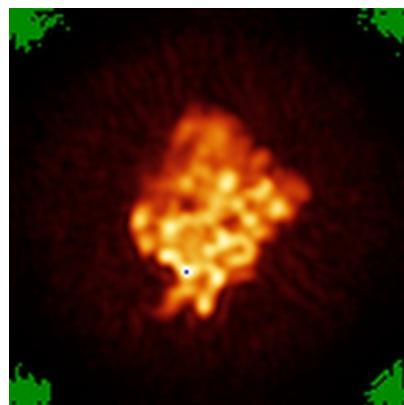
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [\(i\)](#)

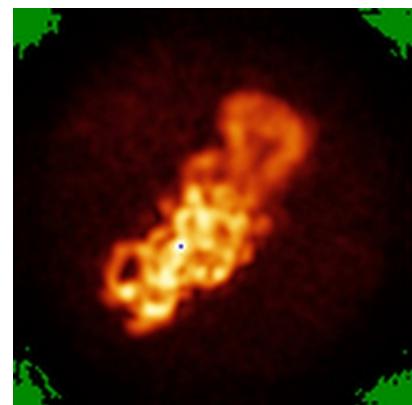
6.4.1 Primary map



X



Y

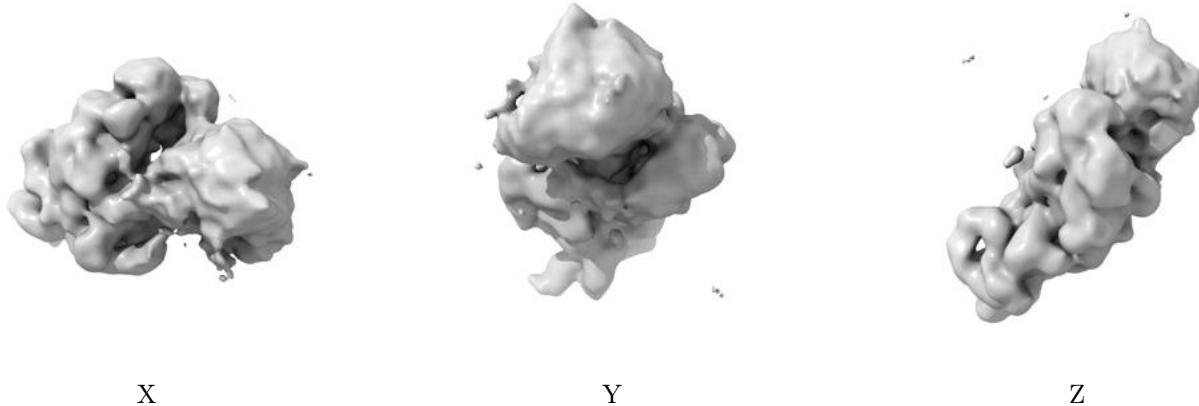


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [\(i\)](#)

6.5.1 Primary map



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

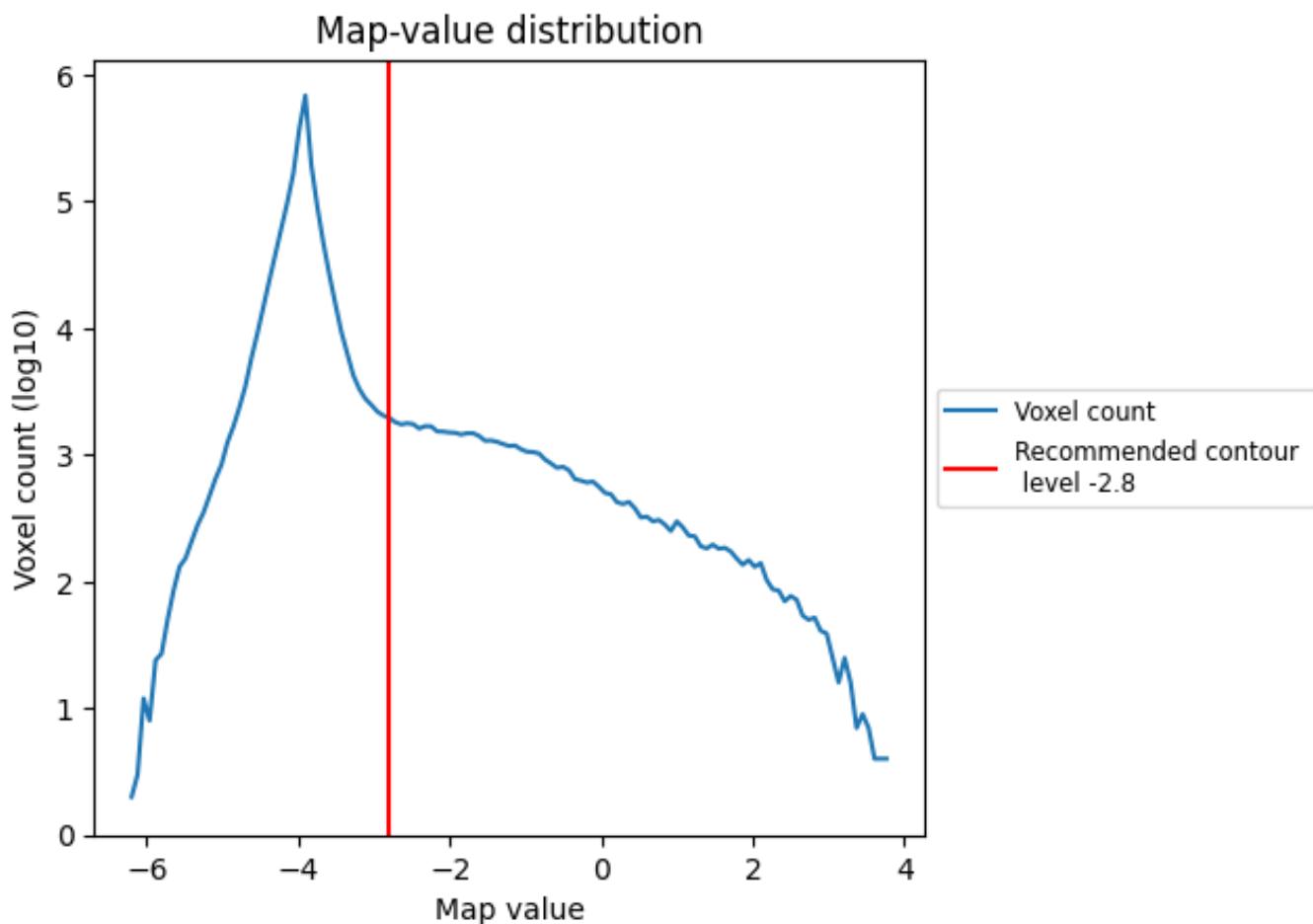
6.6 Mask visualisation [\(i\)](#)

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

7 Map analysis (i)

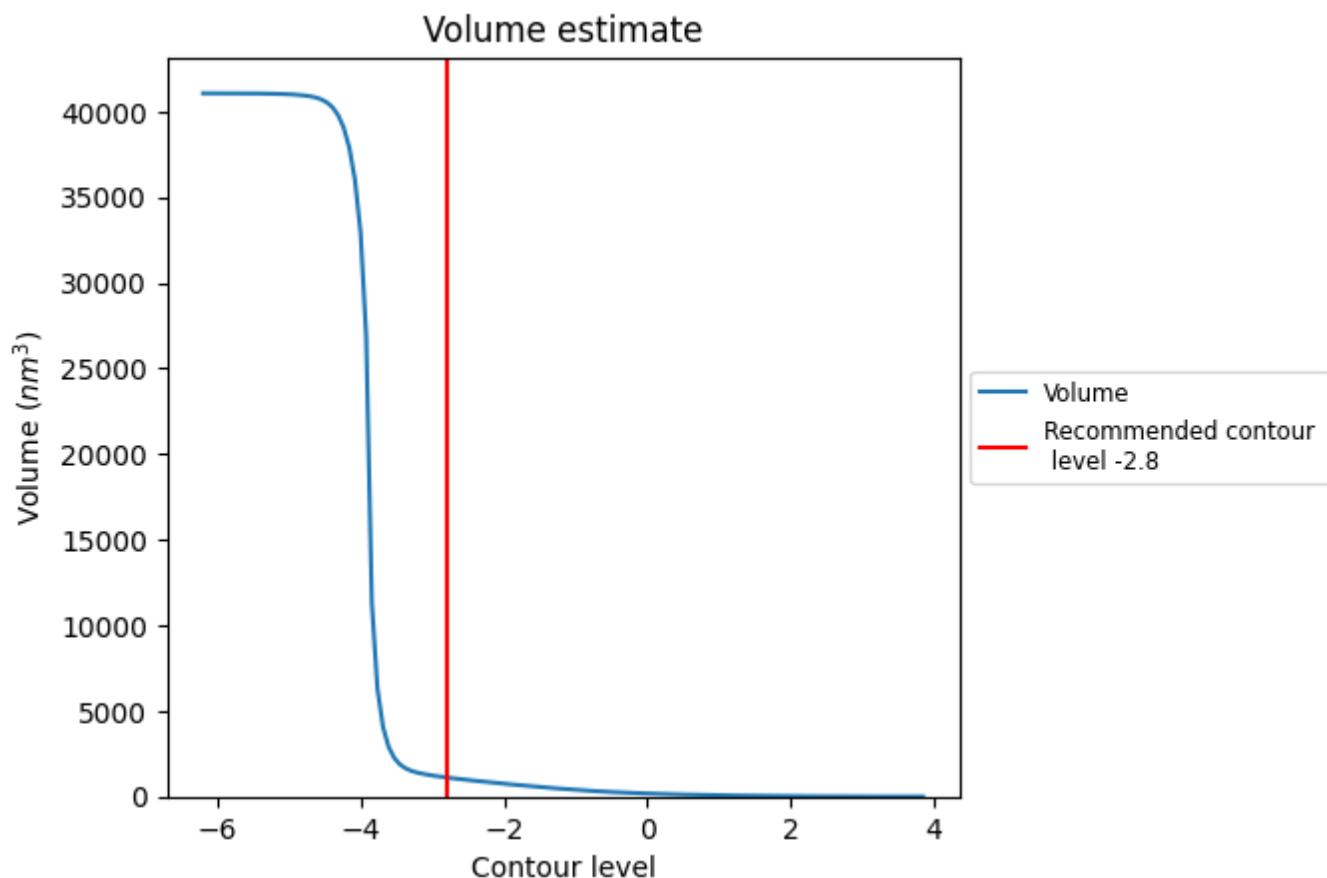
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution (i)



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

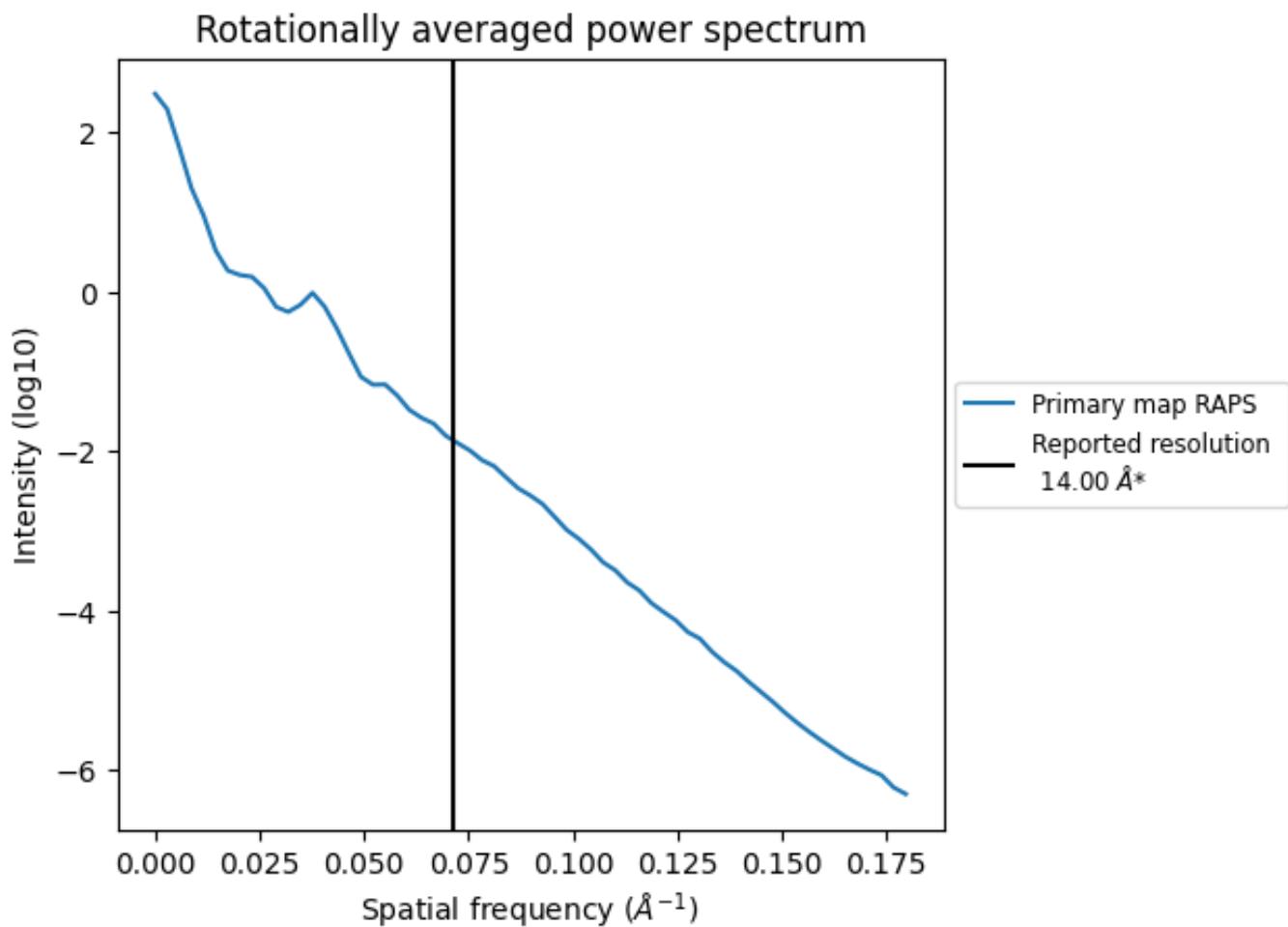
7.2 Volume estimate (i)



The volume at the recommended contour level is 1112 nm³; this corresponds to an approximate mass of 1005 kDa.

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

7.3 Rotationally averaged power spectrum [\(i\)](#)



*Reported resolution corresponds to spatial frequency of 0.071\AA^{-1}

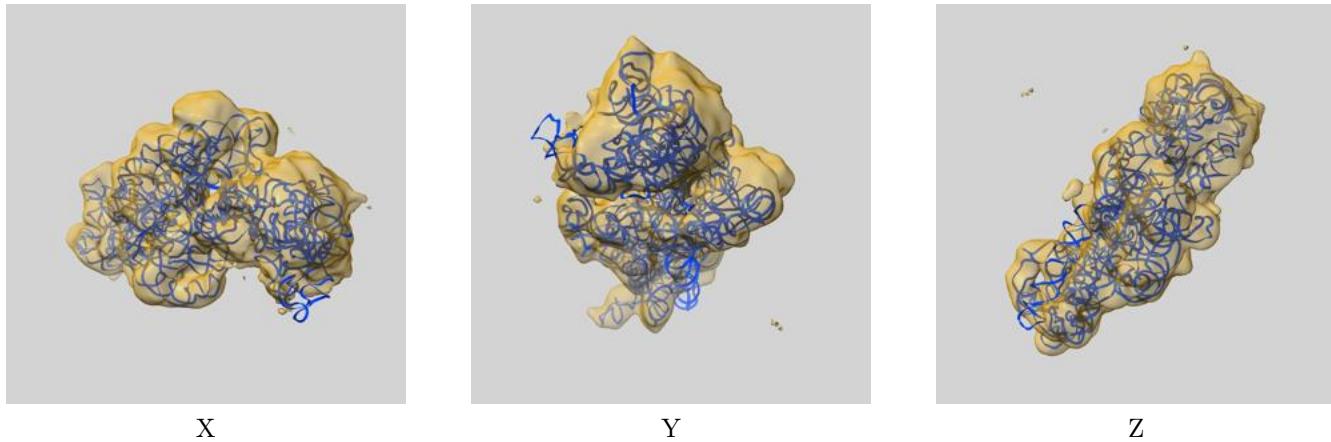
8 Fourier-Shell correlation

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

9 Map-model fit [\(i\)](#)

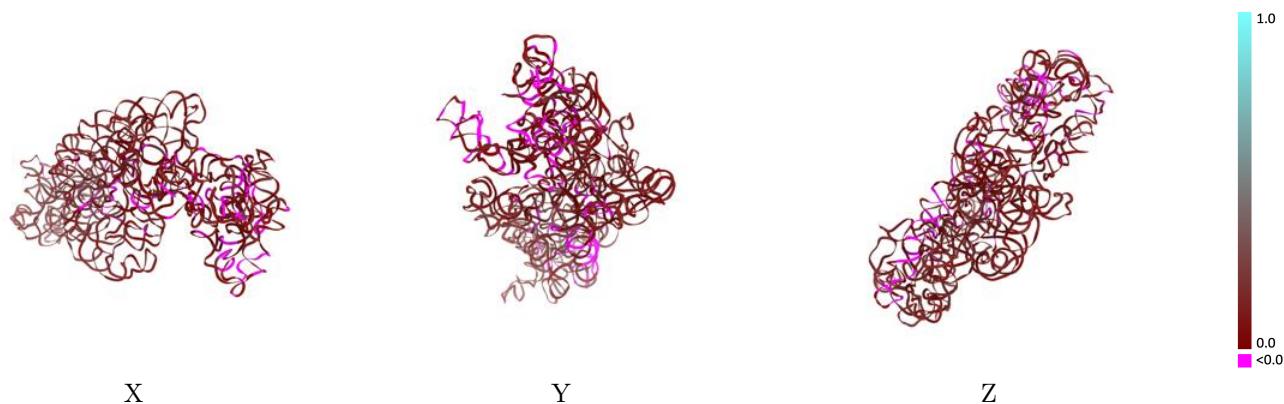
This section contains information regarding the fit between EMDB map EMD-5501 and PDB model 3J29. Per-residue inclusion information can be found in section [3](#) on page [4](#).

9.1 Map-model overlay [\(i\)](#)



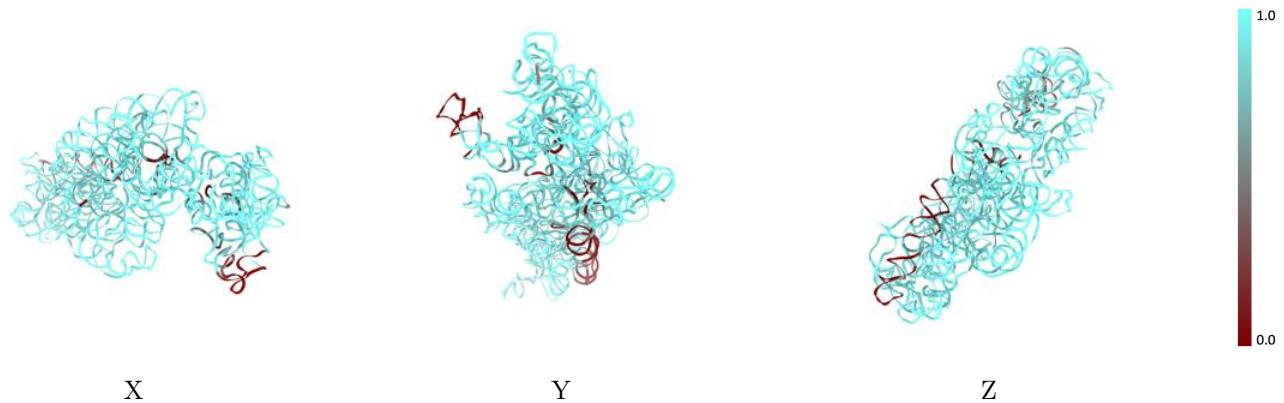
The images above show the 3D surface view of the map at the recommended contour level -2.8 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



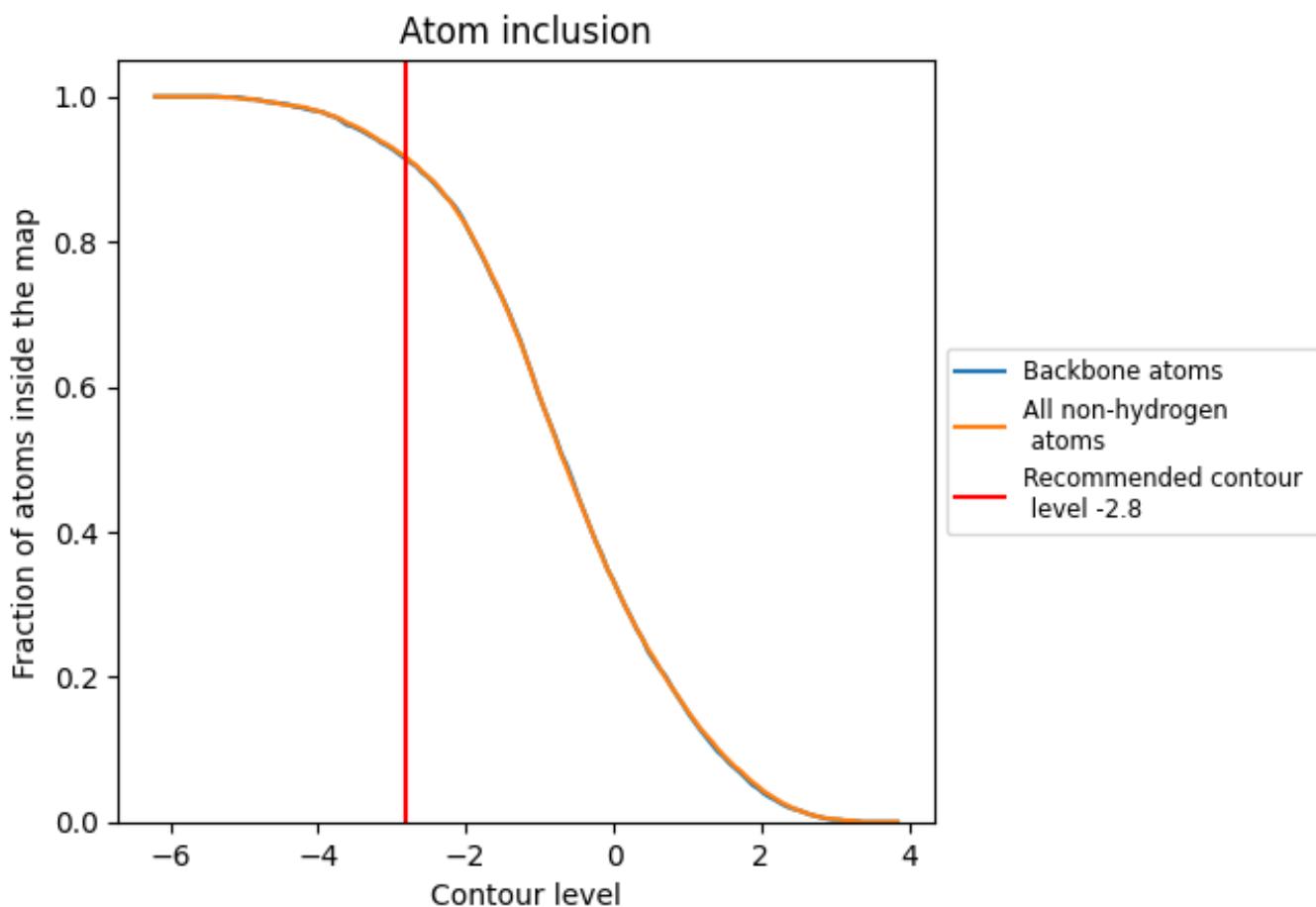
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (-2.8).

9.4 Atom inclusion [\(i\)](#)



At the recommended contour level, 91% of all backbone atoms, 92% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (-2.8) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9160	 0.0890
N	 0.9160	 0.0890

