



Full wwPDB EM Validation Report ⓘ

Dec 12, 2022 – 12:55 PM EST

PDB ID : 3J2C
EMDB ID : EMD-5504
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 : 13.20 Å (reported)
Based on initial model : 3OFA

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

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

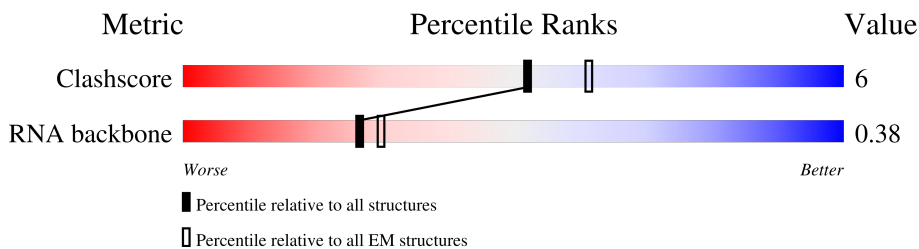
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

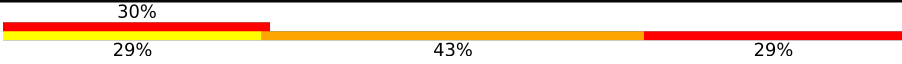
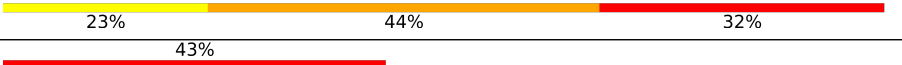
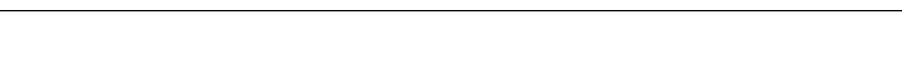
The reported resolution of this entry is 13.20 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	M	462	 <p>30% 29% 43% 29%</p>
2	N	927	 <p>23% 44% 32%</p>
3	O	144	 <p>43% 31% 48% 21%</p>

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 49444 atoms, of which 16558 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 head domain.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	M	462	Total	C	H	N	O	P	0	0
			14865	4410	4987	1793	3214	461		

- Molecule 2 is a RNA chain called 16S rRNA body domain.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	N	927	Total	C	H	N	O	P	0	0
			29941	8884	10017	3681	6433	926		

- Molecule 3 is a RNA chain called 16S rRNA body domain.

Mol	Chain	Residues	Atoms						AltConf	Trace
3	O	144	Total	C	H	N	O	P	0	0
			4638	1377	1554	562	1002	143		

G902	U842	A782	G722	U662	A602	G542	A482	C422	G362	G302	G242	A182	G122	U62	A2
G903	U843	C783	U723	A663	U603	U543	C483	G423	A363	A303	A243	C183	U123	C63	A3
U904	G844	A784	G724	G664	G604	C544	U484	G424	A364	G304	U244	U184	U125	G64	U4
U905	A845	G785	G725	G665	U605	C545	U485	G425	U365	G305	U245	U185	U125	A65	U5
A906	G846	G786	G726	G666	G606	C546	U486	U426	A366	A306	U246	G186	G127	A66	U6
A907	G847	G787	G727	G667	A607	A547	U487	U427	U367	C307	G247	G187	G128	A67	A7
A908	C848	U788	A728	G668	A608	G548	C488	G428	U368	G308	C248	C188	G129	G68	A8
A909	U849	U789	A729	G669	A609	C549	C489	U429	G369	A309	U249	A189	A129	G69	A9
U910	U850	A790	G730	G670	U610	G550	C490	U430	C370	G310	U250	G190	U130	U70	A10
U911	G851	G791	G731	G671	C611	U551	G491	A431	A371	C311	U251	G191	A131	A71	G11
C912	U852	A792	G732	U672	C612	U552	C492	A432	C372	C312	U252	G192	C132	A72	G12
A913	C853	U793	G733	A673	C613	A553	A493	G433	A373	A313	U253	G193	U133	C73	U13
A914	U854	G794	G734	G674	C614	A554	G494	U434	A374	C314	U254	C194	G134	A74	U14
A915	U855	C795	C735	A675	G615	U555	A495	A435	U375	A315	G255	A195	C135	G75	U15
C856	C856	C796	C736	U676	G616	C556	A496	A436	G376	C316	U256	A196	G136	G76	A16
G917	C857	C797	C737	U677	G617	G557	A497	U437	G377	U317	G257	A197	U137	A77	A17
A918	U858	U798	C738	U678	C618	G558	A498	U438	G378	G318	U258	A198	G138	A78	U18
A919	G859	G799	C739	C679	U619	A559	A499	U439	C379	G319	U259	A199	A139	A79	U19
U920	A860	U800	U740	C680	C620	A560	G500	C440	G380	A320	G260	G200	U140	A80	A19
U921	C861	U801	G741	A681	A621	U561	C501	A441	C381	A321	U261	G201	G141	A81	U20
G922	C862	A802	G742	G682	A622	A562	A502	G442	C382	C322	G262	G202	G142	G82	G21
A923	U863	G803	A743	G683	C623	A563	C503	G443	A383	U323	A263	G203	A143	C83	C23
C924	A864	U804	C744	U684	C624	C564	C504	G444	G384	A324	G264	G204	G144	U84	U24
G925	A865	C805	G745	G685	U625	U565	G505	G445	C385	A325	G265	A205	G145	U85	U25
C866	C866	C806	A746	U686	G626	G566	G506	G446	C386	G326	G266	C206	G146	G86	C25
G927	C867	A807	A747	A687	G627	C567	C507	G447	U387	A327	C267	C207	G147	C87	A26
C868	C868	C808	G748	G688	G628	G568	U508	A448	G388	C328	U268	U208	G148	U88	G27
G869	G869	G809	A749	C689	A629	C569	A509	G449	A389	A329	U269	U209	G149	A88	A28
U870	C810	C810	C750	G690	A630	G570	A510	G450	U390	C330	G270	C210	U150	C90	U29
U871	C811	C811	U751	G691	C631	U571	C511	A451	U391	G331	C271	G211	U151	U91	U30
A872	G812	G752	G692	U692	U632	A572	U512	A452	C392	G332	C272	G212	A152	U92	G31
A873	U813	U753	G693	G693	G633	A573	C513	G453	A393	U333	U273	G213	C153	U93	A32
A874	A814	C754	A694	C634	C634	A574	G514	G454	C394	C334	A274	C214	U154	G94	A33
U875	A815	G755	A695	A635	A635	C575	G515	A455	C395	G335	G275	C215	A155	C95	A34
C876	C816	C756	A696	U636	U636	C576	U516	A456	C396	A336	G276	U216	C156	U96	C35
C877	C817	U757	U697	C637	C637	G577	G517	G457	A397	G337	C277	C217	U157	C97	C36
A878	G818	C758	G698	U638	U638	C578	G518	U458	U398	A338	G278	U218	G158	A98	U37
C879	A819	A759	C699	G639	G639	A579	C519	A459	G399	C339	A279	U219	G159	C99	G38
C880	U820	G760	G760	A640	A640	C580	A520	A460	C400	U340	C280	G220	A160	G100	C39
G881	U821	G761	G761	U641	U641	G581	G521	A461	C401	C341	G281	C221	A161	A101	C40
C882	U822	U762	A702	A642	A642	C582	C522	G462	G402	C342	A282	C222	A162	G102	G41
C883	C823	G763	G703	C643	C643	A583	A523	U463	C403	U343	U283	A223	C163	U103	G42
U884	G824	G764	A704	U644	U644	G584	G524	A464	G404	A344	C284	U224	G164	G104	C43
C885	A825	G765	G705	G645	G645	G585	C525	A465	U405	C345	C285	C225	G165	G105	A44
G886	C826	A766	A706	G646	G646	C586	C526	A466	G406	G346	C286	G226	U166	C106	G45
G887	U827	A767	U707	C647	C647	G587	G527	U467	U407	G347	U287	G227	A167	G107	G46
G888	U828	A768	C708	A648	A648	G588	C528	U468	A408	G348	A288	A228	G168	G108	C47
A889	G829	G769	U709	A649	A649	U589	G529	C469	U409	G349	C289	U229	C169	A109	C48
G890	G830	G770	G710	G650	G650	U590	U530	C470	G410	G350	C290	G230	U170	G110	U49
U891	A831	G771	G711	C651	C651	U591	U531	U471	A411	G351	U291	U231	A171	G111	A50
A892	G832	U772	A712	U652	U652	G592	A532	U472	A412	C352	G292	G232	A172	G112	A51
C893	G773	G773	G713	A533	A533	U593	U533	U473	G413	C353	G293	C233	U173	G113	C52
G894	U834	G774	G714	C654	C654	U594	U534	G474	A414	G354	U294	C234	A174	U114	A53
C895	U835	G775	A715	A655	A655	A595	A535	G475	A415	C355	C295	C235	C175	G115	C54
C896	G836	G776	A716	G656	G656	G596	C536	U476	G416	A356	U296	G236	C176	A116	G55
C897	U837	A777	U717	U657	U657	G597	G537	C477	G417	G357	G297	G237	G177	G117	U56
G898	C838	G778	A718	C658	C658	U598	G538	A478	C418	U358	A298	A238	C178	U118	C57
C899	C839	C779	C719	U659	U659	C599	A539	U479	C419	G359	G299	U239	A179	A119	C58
A900	C840	A780	C720	G660	G660	A600	G540	U480	U420	G360	A300	G240	U180	A120	A59
G928	A901	C841	A781	G661	G661	G501	G541	G481	U421	G361	G301	G241	A181	U121	G61

● Molecule 3: 16S rRNA body domain





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	44392	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Weiner filter	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1300	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	80000	Depositor
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum map value	4.325	Depositor
Minimum map value	-6.829	Depositor
Average map value	-4.406	Depositor
Map value standard deviation	0.508	Depositor
Recommended contour level	-3.2	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

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	M	3.43	1534/11053 (13.9%)	3.80	2624/17234 (15.2%)
2	N	3.44	3141/22318 (14.1%)	3.88	5510/34825 (15.8%)
3	O	3.32	455/3452 (13.2%)	3.95	849/5383 (15.8%)
All	All	3.43	5130/36823 (13.9%)	3.86	8983/57442 (15.6%)

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	M	0	236
2	N	0	522
3	O	0	78
All	All	0	836

All (5130) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1502	A	N7-C5	-20.70	1.26	1.39
1	M	1251	A	N9-C4	18.33	1.48	1.37
2	N	124	C	N1-C6	-18.06	1.26	1.37
2	N	533	A	N7-C5	-17.64	1.28	1.39
2	N	350	G	C6-N1	17.60	1.51	1.39
2	N	530	G	N7-C5	-17.25	1.28	1.39
2	N	787	A	N7-C5	-17.04	1.29	1.39
1	M	1332	A	N7-C5	-16.95	1.29	1.39
2	N	664	G	N7-C5	-16.94	1.29	1.39
2	N	825	A	N7-C5	-16.63	1.29	1.39
2	N	478	A	N7-C5	-16.24	1.29	1.39
1	M	1054	C	N1-C6	16.20	1.46	1.37
1	M	1279	G	N7-C5	-16.05	1.29	1.39
1	M	937	A	N7-C5	-16.00	1.29	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	108	G	N7-C5	-15.91	1.29	1.39
2	N	332	G	N7-C5	-15.78	1.29	1.39
2	N	546	A	N7-C5	-15.76	1.29	1.39
1	M	1258	G	C5-C4	-15.06	1.27	1.38
3	O	1532	U	C2-N3	15.00	1.48	1.37
2	N	611	C	N1-C6	14.79	1.46	1.37
2	N	572	A	C6-N6	14.78	1.45	1.33
2	N	597	G	N7-C5	-14.75	1.30	1.39
1	M	1169	A	N7-C5	-14.74	1.30	1.39
2	N	398	U	C2-N3	14.48	1.47	1.37
2	N	648	A	C6-N6	14.40	1.45	1.33
2	N	863	U	C2-N3	14.39	1.47	1.37
1	M	1152	A	C5-C4	14.29	1.48	1.38
2	N	302	G	N7-C5	-14.27	1.30	1.39
2	N	51	A	N7-C5	-14.17	1.30	1.39
1	M	1248	A	N3-C4	-14.04	1.26	1.34
2	N	33	A	N7-C5	-14.02	1.30	1.39
2	N	910	C	C2-N3	13.96	1.47	1.35
1	M	1357	A	N7-C5	-13.94	1.30	1.39
2	N	300	A	N7-C5	-13.93	1.30	1.39
2	N	897	C	P-O5'	-13.92	1.45	1.59
2	N	885	G	N7-C5	-13.90	1.30	1.39
1	M	1171	A	C6-N6	13.86	1.45	1.33
1	M	956	U	C2-N3	13.86	1.47	1.37
1	M	971	G	C2-N3	13.81	1.43	1.32
1	M	1294	G	C4'-C3'	13.76	1.68	1.53
2	N	584	G	C6-N1	13.71	1.49	1.39
1	M	1185	G	N7-C5	-13.66	1.31	1.39
1	M	998	C	N3-C4	13.65	1.43	1.33
2	N	80	A	C8-N7	-13.60	1.22	1.31
1	M	1201	A	N7-C5	-13.57	1.31	1.39
1	M	1198	G	C5-C4	-13.51	1.28	1.38
2	N	770	C	N1-C6	13.47	1.45	1.37
2	N	415	A	N7-C5	-13.44	1.31	1.39
2	N	6	G	N7-C5	-13.43	1.31	1.39
1	M	1012	A	C5-C4	13.42	1.48	1.38
1	M	1213	A	C6-N1	13.38	1.45	1.35
2	N	882	C	N1-C6	13.28	1.45	1.37
2	N	818	G	N1-C2	13.27	1.48	1.37
2	N	262	A	N7-C5	-13.26	1.31	1.39
1	M	1294	G	N7-C5	-13.23	1.31	1.39
2	N	290	C	N3-C4	13.22	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	321	A	C6-N1	13.20	1.44	1.35
1	M	972	C	N1-C6	13.17	1.45	1.37
2	N	575	G	C6-N1	13.10	1.48	1.39
1	M	1265	C	N3-C4	13.09	1.43	1.33
1	M	1201	A	C6-N6	13.09	1.44	1.33
1	M	1306	A	N7-C5	-13.06	1.31	1.39
1	M	1112	C	N3-C4	12.99	1.43	1.33
2	N	627	G	C2-N3	12.99	1.43	1.32
1	M	1015	G	N1-C2	12.93	1.48	1.37
1	M	1152	A	N7-C5	-12.92	1.31	1.39
1	M	987	G	N9-C8	-12.90	1.28	1.37
2	N	781	A	C5-C4	12.88	1.47	1.38
2	N	819	A	C5-C4	12.88	1.47	1.38
1	M	1088	G	C6-N1	12.85	1.48	1.39
1	M	1101	A	N7-C5	-12.84	1.31	1.39
2	N	645	G	N7-C5	-12.83	1.31	1.39
1	M	1012	A	C6-N1	12.82	1.44	1.35
2	N	729	A	N7-C5	-12.80	1.31	1.39
1	M	1239	A	N7-C5	-12.74	1.31	1.39
2	N	814	A	N7-C5	-12.70	1.31	1.39
2	N	201	G	N7-C5	-12.69	1.31	1.39
2	N	103	U	C2-N3	12.65	1.46	1.37
2	N	892	A	N7-C5	-12.65	1.31	1.39
2	N	779	C	N1-C6	12.64	1.44	1.37
2	N	282	A	N7-C5	-12.60	1.31	1.39
2	N	531	U	C2-N3	12.58	1.46	1.37
2	N	500	G	N7-C5	-12.51	1.31	1.39
2	N	617	G	N7-C5	-12.50	1.31	1.39
2	N	505	G	C6-N1	12.47	1.48	1.39
2	N	71	A	N9-C4	12.45	1.45	1.37
2	N	415	A	N9-C4	12.45	1.45	1.37
2	N	125	U	P-O5'	-12.44	1.47	1.59
2	N	371	A	N7-C5	-12.43	1.31	1.39
1	M	1297	G	C2-N3	12.39	1.42	1.32
2	N	749	A	C6-N6	12.38	1.43	1.33
1	M	1182	G	C6-N1	12.37	1.48	1.39
2	N	579	A	C6-N1	12.36	1.44	1.35
2	N	146	G	C6-N1	12.35	1.48	1.39
2	N	621	A	N7-C5	-12.35	1.31	1.39
2	N	645	G	C6-N1	12.34	1.48	1.39
2	N	199	A	N7-C5	-12.27	1.31	1.39
2	N	849	G	C2-N3	12.22	1.42	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	604	G	N9-C4	-12.16	1.28	1.38
2	N	804	U	C2-N3	12.15	1.46	1.37
3	O	1471	U	N1-C6	12.14	1.48	1.38
2	N	210	C	C4-N4	12.14	1.44	1.33
2	N	495	A	N7-C5	-12.14	1.31	1.39
2	N	262	A	N9-C8	-12.13	1.28	1.37
2	N	886	G	C6-N1	12.11	1.48	1.39
2	N	550	G	N7-C5	-12.10	1.31	1.39
2	N	630	A	C6-N1	12.07	1.44	1.35
2	N	480	U	N1-C2	12.06	1.49	1.38
2	N	538	G	P-O5'	-12.05	1.47	1.59
1	M	1058	G	C8-N7	-12.04	1.23	1.30
2	N	352	C	N3-C4	12.03	1.42	1.33
1	M	1230	C	N3-C4	12.01	1.42	1.33
2	N	120	A	C6-N1	12.01	1.44	1.35
1	M	1267	C	C4-N4	12.00	1.44	1.33
2	N	794	A	C6-N6	11.99	1.43	1.33
2	N	745	G	C6-N1	11.98	1.48	1.39
2	N	829	G	C8-N7	-11.97	1.23	1.30
2	N	872	A	N7-C5	-11.94	1.32	1.39
2	N	206	C	N3-C4	11.93	1.42	1.33
1	M	1236	A	C6-N6	11.91	1.43	1.33
2	N	510	A	C6-N1	11.90	1.43	1.35
1	M	1123	U	C2-N3	11.85	1.46	1.37
1	M	1318	A	N7-C5	-11.85	1.32	1.39
2	N	433	G	N7-C5	-11.85	1.32	1.39
3	O	1444	U	C2-N3	11.81	1.46	1.37
1	M	1280	A	N3-C4	11.81	1.42	1.34
1	M	1067	A	N9-C8	11.81	1.47	1.37
2	N	588	G	N1-C2	11.79	1.47	1.37
2	N	55	A	N7-C5	-11.77	1.32	1.39
1	M	1278	G	C6-N1	11.75	1.47	1.39
2	N	659	U	P-O5'	-11.75	1.48	1.59
2	N	917	G	N1-C2	11.72	1.47	1.37
1	M	1285	A	N7-C5	-11.69	1.32	1.39
2	N	695	A	C6-N1	11.69	1.43	1.35
1	M	1243	C	P-O5'	-11.68	1.48	1.59
2	N	831	A	C6-N6	11.66	1.43	1.33
1	M	1019	A	C5-C4	11.65	1.47	1.38
1	M	933	G	N9-C4	11.65	1.47	1.38
1	M	1005	A	N9-C4	11.64	1.44	1.37
1	M	996	A	N7-C5	-11.62	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1457	G	C6-N1	11.63	1.47	1.39
2	N	329	A	C6-N6	11.62	1.43	1.33
2	N	452	A	N3-C4	-11.62	1.27	1.34
2	N	217	C	N3-C4	11.61	1.42	1.33
2	N	621	A	C6-N6	11.59	1.43	1.33
2	N	451	A	N7-C5	-11.58	1.32	1.39
2	N	812	G	C2-N3	11.58	1.42	1.32
2	N	325	A	N7-C5	-11.58	1.32	1.39
1	M	1000	A	N9-C4	-11.55	1.30	1.37
2	N	327	A	C5-C4	11.55	1.46	1.38
2	N	705	G	N7-C5	-11.55	1.32	1.39
1	M	1148	U	P-O5'	-11.55	1.48	1.59
2	N	428	G	C2-N2	11.54	1.46	1.34
2	N	358	U	C2-N3	11.54	1.45	1.37
3	O	1529	G	N7-C5	-11.54	1.32	1.39
2	N	782	A	N3-C4	-11.53	1.27	1.34
1	M	1127	G	C6-N1	11.53	1.47	1.39
1	M	1221	G	N1-C2	11.53	1.47	1.37
2	N	679	C	N1-C6	11.51	1.44	1.37
3	O	1400	C	N1-C6	11.51	1.44	1.37
3	O	1458	G	C6-N1	11.50	1.47	1.39
2	N	180	U	P-O5'	-11.48	1.48	1.59
2	N	540	G	P-O5'	-11.48	1.48	1.59
2	N	322	C	N3-C4	11.47	1.42	1.33
3	O	1434	A	N9-C4	11.46	1.44	1.37
2	N	541	G	N1-C2	11.46	1.47	1.37
2	N	242	G	N7-C5	-11.46	1.32	1.39
1	M	1227	A	N7-C5	-11.43	1.32	1.39
2	N	736	C	C4-N4	11.43	1.44	1.33
1	M	1122	U	C2-N3	11.41	1.45	1.37
2	N	273	U	C2-N3	11.41	1.45	1.37
2	N	173	U	C2-N3	11.40	1.45	1.37
2	N	329	A	N7-C5	-11.40	1.32	1.39
3	O	1458	G	N3-C4	-11.40	1.27	1.35
2	N	177	G	C6-N1	11.40	1.47	1.39
3	O	1399	C	C2'-C1'	-11.38	1.40	1.53
2	N	130	A	N7-C5	-11.36	1.32	1.39
1	M	1217	C	N3-C4	11.35	1.41	1.33
3	O	1500	A	N9-C4	11.34	1.44	1.37
1	M	1163	A	N7-C5	-11.34	1.32	1.39
2	N	410	G	N7-C5	-11.33	1.32	1.39
1	M	1226	C	N1-C6	11.31	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1168	U	C2-N3	11.30	1.45	1.37
2	N	6	G	C6-N1	11.30	1.47	1.39
2	N	399	G	N7-C5	11.29	1.46	1.39
1	M	976	G	C2-N3	11.29	1.41	1.32
1	M	1129	C	N3-C4	11.27	1.41	1.33
2	N	851	G	C6-N1	11.25	1.47	1.39
2	N	513	C	C4-C5	-11.25	1.33	1.43
1	M	1035	A	N7-C5	-11.24	1.32	1.39
1	M	1162	C	N1-C6	11.24	1.43	1.37
3	O	1405	G	N9-C8	11.24	1.45	1.37
1	M	957	U	N1-C2	11.22	1.48	1.38
2	N	228	A	P-O5'	-11.21	1.48	1.59
2	N	866	C	N3-C4	11.19	1.41	1.33
2	N	725	G	P-O5'	-11.18	1.48	1.59
3	O	1472	U	C2-N3	11.18	1.45	1.37
2	N	629	A	N3-C4	11.17	1.41	1.34
2	N	446	G	C8-N7	11.17	1.37	1.30
1	M	1021	A	C5-C4	11.16	1.46	1.38
2	N	456	A	C6-N6	11.14	1.42	1.33
2	N	204	G	C6-N1	11.11	1.47	1.39
2	N	493	A	N9-C4	11.11	1.44	1.37
2	N	716	A	C6-N1	11.11	1.43	1.35
2	N	481	G	C2-N2	11.10	1.45	1.34
2	N	359	G	C8-N7	-11.10	1.24	1.30
1	M	931	C	C4-N4	11.09	1.44	1.33
2	N	141	G	C6-N1	11.09	1.47	1.39
2	N	887	G	N7-C5	-11.07	1.32	1.39
2	N	859	G	C8-N7	-11.07	1.24	1.30
2	N	454	G	C6-N1	11.05	1.47	1.39
2	N	98	A	N3-C4	-11.05	1.28	1.34
2	N	344	A	N7-C5	-11.03	1.32	1.39
2	N	66	A	N3-C4	-11.01	1.28	1.34
2	N	8	A	N3-C4	-11.01	1.28	1.34
2	N	172	A	N7-C5	-10.99	1.32	1.39
1	M	931	C	N3-C4	10.98	1.41	1.33
2	N	411	A	N7-C5	-10.97	1.32	1.39
2	N	769	G	N7-C5	-10.97	1.32	1.39
2	N	613	C	C2'-C1'	-10.96	1.41	1.53
2	N	491	G	N1-C2	10.95	1.46	1.37
1	M	986	U	C2-N3	10.94	1.45	1.37
2	N	197	A	N7-C5	-10.92	1.32	1.39
2	N	497	G	C8-N7	10.92	1.37	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	579	A	N3-C4	10.92	1.41	1.34
2	N	384	G	C2-N3	10.92	1.41	1.32
1	M	1199	U	C2-N3	10.91	1.45	1.37
2	N	465	A	C8-N7	-10.91	1.24	1.31
2	N	302	G	N1-C2	10.91	1.46	1.37
2	N	765	G	C6-N1	10.90	1.47	1.39
2	N	31	G	N9-C8	-10.89	1.30	1.37
3	O	1458	G	C4'-C3'	10.87	1.65	1.53
2	N	188	C	C2-N3	10.86	1.44	1.35
1	M	988	G	C2'-C1'	-10.85	1.41	1.53
2	N	365	U	N3-C4	10.83	1.48	1.38
2	N	447	G	C6-N1	10.83	1.47	1.39
2	N	442	G	C6-N1	10.82	1.47	1.39
2	N	738	C	C1'-N1	10.82	1.65	1.48
2	N	826	C	N3-C4	10.80	1.41	1.33
2	N	277	C	N3-C4	10.79	1.41	1.33
2	N	81	A	C6-N1	10.77	1.43	1.35
2	N	228	A	C8-N7	-10.77	1.24	1.31
2	N	761	G	C2-N3	10.74	1.41	1.32
2	N	787	A	N3-C4	-10.74	1.28	1.34
1	M	1143	G	C4'-C3'	10.73	1.65	1.53
2	N	254	G	C2'-C1'	-10.73	1.41	1.53
2	N	457	G	C2-N3	10.72	1.41	1.32
3	O	1411	C	N1-C6	10.72	1.43	1.37
2	N	100	G	N1-C2	10.71	1.46	1.37
2	N	761	G	C8-N7	-10.71	1.24	1.30
1	M	1187	G	N7-C5	-10.70	1.32	1.39
2	N	111	G	C6-N1	10.70	1.47	1.39
1	M	937	A	C5-C4	10.69	1.46	1.38
2	N	276	G	C2-N3	10.69	1.41	1.32
2	N	292	G	C8-N7	-10.69	1.24	1.30
2	N	138	G	C2'-C1'	-10.66	1.41	1.53
2	N	120	A	C4'-C3'	10.61	1.64	1.53
2	N	425	G	C5-C4	10.61	1.45	1.38
2	N	555	U	C2-N3	10.60	1.45	1.37
2	N	517	G	C8-N7	-10.60	1.24	1.30
2	N	269	C	C4-N4	10.59	1.43	1.33
1	M	1141	C	C4'-C3'	10.57	1.64	1.53
1	M	1268	G	C5-C4	10.57	1.45	1.38
2	N	59	A	C6-N1	10.56	1.43	1.35
1	M	984	C	N3-C4	10.55	1.41	1.33
2	N	11	G	C2-N3	10.55	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	889	A	N9-C4	10.55	1.44	1.37
1	M	996	A	N9-C4	-10.54	1.31	1.37
1	M	1056	U	N3-C4	10.54	1.48	1.38
1	M	1261	A	C6-N1	10.52	1.43	1.35
2	N	295	C	N1-C2	-10.52	1.29	1.40
2	N	685	G	N9-C8	-10.52	1.30	1.37
3	O	1525	G	C6-N1	10.51	1.47	1.39
1	M	1127	G	C2-N3	10.50	1.41	1.32
1	M	1203	C	P-O5'	-10.50	1.49	1.59
1	M	1276	G	C2-N3	10.50	1.41	1.32
2	N	365	U	C2-N3	10.50	1.45	1.37
1	M	1185	G	C2-N2	10.49	1.45	1.34
1	M	947	G	N9-C4	10.46	1.46	1.38
1	M	1182	G	C8-N7	10.44	1.37	1.30
1	M	1262	C	N1-C6	10.44	1.43	1.37
2	N	23	C	N3-C4	10.43	1.41	1.33
2	N	350	G	C2-N2	10.43	1.45	1.34
1	M	1191	A	C6-N1	10.43	1.42	1.35
1	M	1227	A	C5-C4	10.43	1.46	1.38
3	O	1454	G	N1-C2	10.42	1.46	1.37
2	N	177	G	C8-N7	-10.40	1.24	1.30
2	N	624	C	N1-C6	10.39	1.43	1.37
2	N	577	G	C2-N3	10.38	1.41	1.32
2	N	308	C	N3-C4	10.38	1.41	1.33
2	N	65	A	C8-N7	-10.37	1.24	1.31
2	N	774	G	C6-N1	10.37	1.46	1.39
1	M	1387	G	C6-N1	10.37	1.46	1.39
2	N	281	G	N9-C8	10.35	1.45	1.37
1	M	1077	G	C5-C4	10.34	1.45	1.38
2	N	906	A	C5-C6	10.34	1.50	1.41
2	N	433	G	C6-N1	10.34	1.46	1.39
2	N	515	G	N7-C5	-10.34	1.33	1.39
1	M	1174	G	C6-N1	10.33	1.46	1.39
2	N	657	U	C2-N3	10.32	1.45	1.37
2	N	105	G	N3-C4	-10.32	1.28	1.35
2	N	189	A	C6-N6	10.32	1.42	1.33
2	N	690	G	N9-C4	10.31	1.46	1.38
1	M	1258	G	C2'-C1'	-10.31	1.42	1.53
2	N	848	C	N3-C4	10.31	1.41	1.33
1	M	1263	C	C4-C5	10.29	1.51	1.43
1	M	1323	G	N1-C2	10.29	1.46	1.37
1	M	1342	C	N1-C6	10.29	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1268	G	C6-N1	10.29	1.46	1.39
2	N	908	A	N7-C5	-10.29	1.33	1.39
2	N	293	G	C8-N7	-10.29	1.24	1.30
1	M	1022	A	C2'-C1'	-10.27	1.42	1.53
2	N	453	G	C8-N7	-10.27	1.24	1.30
1	M	1289	A	C6-N6	10.26	1.42	1.33
2	N	870	U	C2-N3	10.25	1.45	1.37
1	M	1321	U	C4-C5	10.25	1.52	1.43
1	M	944	G	C2-N3	10.22	1.41	1.32
2	N	35	G	P-O5'	-10.22	1.49	1.59
2	N	557	G	C2'-C1'	-10.21	1.42	1.53
1	M	1299	A	C4'-C3'	10.21	1.64	1.53
2	N	500	G	N1-C2	10.21	1.46	1.37
1	M	1063	C	C4-N4	10.20	1.43	1.33
1	M	1301	U	C5'-C4'	10.20	1.63	1.51
1	M	1261	A	N7-C5	-10.19	1.33	1.39
3	O	1427	C	C2-N3	10.18	1.43	1.35
3	O	1508	A	C2-N3	10.18	1.42	1.33
2	N	249	U	C4-C5	10.17	1.52	1.43
2	N	331	G	N1-C2	10.16	1.45	1.37
2	N	236	A	N7-C5	-10.16	1.33	1.39
2	N	360	G	N7-C5	-10.16	1.33	1.39
2	N	577	G	N1-C2	10.16	1.45	1.37
3	O	1525	G	C2-N3	10.16	1.40	1.32
1	M	1039	G	N7-C5	-10.15	1.33	1.39
2	N	566	G	N7-C5	-10.15	1.33	1.39
1	M	1150	A	C6-N1	10.15	1.42	1.35
2	N	336	A	N7-C5	10.15	1.45	1.39
2	N	85	U	C2-N3	10.14	1.44	1.37
1	M	996	A	C5-C4	10.14	1.45	1.38
2	N	728	A	N7-C5	10.13	1.45	1.39
1	M	1081	A	N7-C5	-10.13	1.33	1.39
2	N	893	C	C4-C5	10.12	1.51	1.43
2	N	650	G	N7-C5	-10.12	1.33	1.39
1	M	1318	A	C6-N6	10.12	1.42	1.33
2	N	780	A	O3'-P	-10.11	1.49	1.61
1	M	1045	C	C4-N4	10.11	1.43	1.33
2	N	657	U	C3'-C2'	-10.10	1.41	1.52
2	N	504	C	N1-C6	10.10	1.43	1.37
1	M	1072	G	C2-N3	10.09	1.40	1.32
1	M	1375	A	N7-C5	-10.09	1.33	1.39
1	M	985	C	N1-C6	-10.08	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	286	C	N1-C6	10.08	1.43	1.37
2	N	571	U	C2-N3	10.07	1.44	1.37
2	N	60	A	C8-N7	-10.06	1.24	1.31
2	N	909	A	C6-N6	10.06	1.42	1.33
2	N	155	A	N3-C4	-10.06	1.28	1.34
1	M	1048	G	N3-C4	-10.05	1.28	1.35
2	N	24	U	C2-N3	10.06	1.44	1.37
1	M	992	U	C3'-O3'	10.05	1.56	1.42
2	N	919	A	C2'-C1'	-10.05	1.42	1.53
2	N	482	A	N9-C4	10.05	1.43	1.37
2	N	535	A	N3-C4	-10.04	1.28	1.34
2	N	26	A	C6-N6	10.03	1.42	1.33
2	N	144	G	C3'-C2'	-10.02	1.41	1.52
1	M	1032	G	N7-C5	-10.02	1.33	1.39
3	O	1485	U	N3-C4	10.02	1.47	1.38
2	N	707	U	C2-N3	10.02	1.44	1.37
1	M	1127	G	N9-C8	-10.01	1.30	1.37
2	N	656	G	N9-C8	10.00	1.44	1.37
2	N	327	A	N3-C4	-10.00	1.28	1.34
2	N	524	G	C6-N1	9.99	1.46	1.39
2	N	107	G	C6-N1	9.97	1.46	1.39
2	N	821	G	C6-N1	9.96	1.46	1.39
2	N	373	A	C2'-C1'	-9.96	1.42	1.53
2	N	596	A	C8-N7	-9.96	1.24	1.31
2	N	429	U	C5-C6	9.95	1.43	1.34
2	N	410	G	C2'-C1'	-9.95	1.42	1.53
2	N	720	C	C2-O2	9.95	1.33	1.24
2	N	97	G	N9-C8	-9.94	1.30	1.37
2	N	417	G	N3-C4	9.94	1.42	1.35
1	M	1165	U	C2-N3	9.92	1.44	1.37
2	N	638	U	C2-N3	9.92	1.44	1.37
2	N	300	A	C2-N3	-9.92	1.24	1.33
1	M	1006	G	C8-N7	-9.91	1.25	1.30
1	M	968	A	N9-C4	-9.90	1.31	1.37
1	M	1063	C	C4-C5	-9.90	1.35	1.43
1	M	1104	G	C6-N1	9.90	1.46	1.39
3	O	1422	G	C6-N1	9.90	1.46	1.39
1	M	1184	G	C6-N1	9.89	1.46	1.39
2	N	136	C	C4-N4	9.89	1.42	1.33
2	N	712	A	P-O5'	-9.88	1.49	1.59
2	N	417	G	C2-N3	9.86	1.40	1.32
1	M	1022	A	C6-N6	9.85	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	110	C	C5'-C4'	9.84	1.63	1.51
1	M	1089	G	N7-C5	-9.84	1.33	1.39
2	N	479	U	N3-C4	9.84	1.47	1.38
3	O	1493	A	C6-N6	9.84	1.41	1.33
2	N	572	A	C5-C6	-9.83	1.32	1.41
2	N	894	G	C5-C4	9.82	1.45	1.38
1	M	1233	G	N3-C4	-9.82	1.28	1.35
2	N	191	G	C6-N1	9.82	1.46	1.39
2	N	920	U	C2-N3	9.81	1.44	1.37
1	M	947	G	N1-C2	9.80	1.45	1.37
1	M	929	G	C5-C4	9.80	1.45	1.38
2	N	240	G	C6-N1	9.80	1.46	1.39
1	M	1337	G	N7-C5	-9.79	1.33	1.39
2	N	134	G	C2-N3	9.78	1.40	1.32
2	N	363	A	C5-C6	9.77	1.49	1.41
2	N	826	C	C2-O2	-9.77	1.15	1.24
2	N	25	C	P-O5'	-9.76	1.50	1.59
2	N	328	C	N1-C6	9.74	1.43	1.37
2	N	14	U	C5'-C4'	9.74	1.63	1.51
2	N	79	G	N1-C2	9.74	1.45	1.37
2	N	532	A	C2'-C1'	-9.73	1.42	1.53
2	N	907	A	N7-C5	-9.72	1.33	1.39
2	N	666	G	N7-C5	-9.72	1.33	1.39
3	O	1437	A	C5-C4	9.71	1.45	1.38
1	M	1156	G	C6-N1	9.71	1.46	1.39
2	N	520	A	C6-N6	9.71	1.41	1.33
1	M	1349	A	C8-N7	-9.71	1.24	1.31
2	N	548	G	C2'-C1'	-9.69	1.42	1.53
2	N	7	A	N9-C4	-9.69	1.32	1.37
2	N	90	C	N1-C6	9.69	1.43	1.37
2	N	524	G	N9-C8	9.69	1.44	1.37
1	M	1222	G	C4'-C3'	9.68	1.63	1.53
2	N	408	A	N1-C2	-9.66	1.25	1.34
1	M	987	G	C2-N3	9.65	1.40	1.32
2	N	588	G	C5-C4	9.65	1.45	1.38
2	N	420	U	O3'-P	-9.64	1.49	1.61
2	N	367	U	N3-C4	9.64	1.47	1.38
2	N	159	G	N9-C8	-9.63	1.31	1.37
2	N	851	G	N9-C8	9.63	1.44	1.37
2	N	534	U	C3'-C2'	9.63	1.63	1.52
1	M	1265	C	C5-C6	-9.62	1.26	1.34
2	N	903	G	N7-C5	9.62	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1137	C	C4-N4	9.61	1.42	1.33
2	N	238	A	C6-N1	9.61	1.42	1.35
2	N	773	G	C2-N3	9.60	1.40	1.32
2	N	730	G	C5'-C4'	9.60	1.62	1.51
3	O	1524	C	C4'-O4'	9.60	1.58	1.45
1	M	942	G	N1-C2	9.59	1.45	1.37
2	N	805	C	C4-N4	9.59	1.42	1.33
2	N	5	U	C4'-C3'	9.59	1.63	1.53
2	N	689	C	C2-N3	9.59	1.43	1.35
2	N	900	A	C2'-C1'	-9.59	1.42	1.53
2	N	718	A	C5-C6	9.58	1.49	1.41
1	M	1257	A	C4'-C3'	9.58	1.63	1.53
2	N	7	A	C6-N1	9.57	1.42	1.35
1	M	1156	G	C8-N7	9.57	1.36	1.30
1	M	1143	G	C5-C4	-9.57	1.31	1.38
2	N	9	G	C2-N2	9.57	1.44	1.34
2	N	332	G	N9-C8	9.57	1.44	1.37
2	N	785	G	O3'-P	-9.55	1.49	1.61
3	O	1497	G	C2'-C1'	-9.54	1.42	1.53
2	N	163	C	N3-C4	9.54	1.40	1.33
2	N	704	A	N3-C4	9.53	1.40	1.34
2	N	735	C	N3-C4	9.53	1.40	1.33
2	N	343	U	P-O5'	-9.53	1.50	1.59
1	M	958	A	N1-C2	9.52	1.43	1.34
2	N	749	A	C5-C4	9.52	1.45	1.38
1	M	1145	A	N7-C5	-9.52	1.33	1.39
2	N	903	G	N1-C2	9.51	1.45	1.37
1	M	1077	G	C2-N2	9.51	1.44	1.34
2	N	847	G	C6-N1	9.50	1.46	1.39
2	N	242	G	C6-N1	9.49	1.46	1.39
1	M	1130	A	P-O5'	-9.49	1.50	1.59
2	N	421	U	C2-N3	9.49	1.44	1.37
1	M	1022	A	N7-C5	-9.49	1.33	1.39
2	N	674	G	N9-C8	9.49	1.44	1.37
2	N	315	A	N3-C4	-9.48	1.29	1.34
2	N	206	C	C5-C6	-9.47	1.26	1.34
3	O	1510	C	N1-C6	9.47	1.42	1.37
2	N	413	G	O3'-P	-9.46	1.49	1.61
1	M	1302	C	C2-N3	9.46	1.43	1.35
3	O	1430	A	N7-C5	-9.45	1.33	1.39
2	N	20	U	O3'-P	-9.44	1.49	1.61
2	N	640	A	C6-N1	9.44	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	682	G	C8-N7	-9.43	1.25	1.30
1	M	1194	U	O3'-P	-9.42	1.49	1.61
1	M	1049	U	C4'-C3'	9.42	1.63	1.53
2	N	404	G	C5-C4	9.42	1.45	1.38
3	O	1399	C	N3-C4	9.42	1.40	1.33
3	O	1525	G	N9-C8	9.42	1.44	1.37
2	N	537	G	C6-N1	9.41	1.46	1.39
2	N	784	A	N7-C5	-9.41	1.33	1.39
3	O	1432	G	C2'-C1'	-9.41	1.43	1.53
2	N	510	A	C6-N6	9.41	1.41	1.33
2	N	127	G	C5-C4	9.40	1.45	1.38
3	O	1469	C	O3'-P	-9.40	1.49	1.61
2	N	280	C	N3-C4	9.40	1.40	1.33
2	N	208	U	O4'-C1'	9.40	1.53	1.41
1	M	1133	G	C2-N3	9.40	1.40	1.32
2	N	454	G	C8-N7	9.40	1.36	1.30
1	M	1343	G	N1-C2	9.39	1.45	1.37
2	N	646	G	C2-N3	9.39	1.40	1.32
3	O	1457	G	C2-N3	9.39	1.40	1.32
2	N	462	G	C2-N3	9.39	1.40	1.32
3	O	1492	A	N9-C8	-9.39	1.30	1.37
1	M	961	U	C4-C5	9.38	1.51	1.43
2	N	88	U	C2-N3	9.38	1.44	1.37
2	N	625	U	C2-N3	9.38	1.44	1.37
1	M	1365	G	C2-N3	9.37	1.40	1.32
2	N	147	G	N9-C8	-9.37	1.31	1.37
3	O	1417	G	C2-N3	9.37	1.40	1.32
2	N	923	A	C4'-C3'	9.37	1.63	1.53
3	O	1442	G	C2-N2	9.37	1.44	1.34
2	N	156	C	N3-C4	9.36	1.40	1.33
2	N	8	A	C6-N1	9.36	1.42	1.35
1	M	1147	C	N3-C4	9.35	1.40	1.33
2	N	538	G	N7-C5	-9.35	1.33	1.39
3	O	1507	A	C6-N1	9.35	1.42	1.35
2	N	489	C	O3'-P	-9.34	1.50	1.61
2	N	223	A	C6-N1	9.33	1.42	1.35
3	O	1531	A	N9-C4	9.32	1.43	1.37
2	N	155	A	N7-C5	-9.32	1.33	1.39
2	N	762	U	N1-C6	9.32	1.46	1.38
1	M	1154	G	N3-C4	-9.32	1.28	1.35
1	M	1300	G	C2-N3	9.32	1.40	1.32
2	N	649	A	C5-C4	-9.32	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1093	A	N3-C4	9.31	1.40	1.34
2	N	542	G	C8-N7	-9.31	1.25	1.30
2	N	658	C	N3-C4	9.31	1.40	1.33
2	N	19	A	C6-N1	9.30	1.42	1.35
2	N	448	A	C6-N1	9.30	1.42	1.35
2	N	924	C	C5'-C4'	9.30	1.62	1.51
2	N	558	G	C8-N7	-9.29	1.25	1.30
2	N	628	G	C6-N1	-9.29	1.33	1.39
2	N	406	G	C2-N3	9.29	1.40	1.32
1	M	1047	G	N1-C2	9.28	1.45	1.37
2	N	606	G	C2'-C1'	-9.28	1.43	1.53
2	N	682	G	C2-N2	9.28	1.43	1.34
2	N	916	U	C2-N3	9.28	1.44	1.37
1	M	1181	G	N7-C5	-9.28	1.33	1.39
3	O	1491	G	P-O5'	-9.28	1.50	1.59
2	N	68	G	N1-C2	9.27	1.45	1.37
2	N	547	A	C5-C4	9.27	1.45	1.38
2	N	42	G	N7-C5	-9.27	1.33	1.39
1	M	1077	G	C2-N3	9.27	1.40	1.32
2	N	736	C	N1-C6	9.26	1.42	1.37
2	N	392	C	C4-N4	9.26	1.42	1.33
2	N	660	C	C4-C5	9.26	1.50	1.43
2	N	433	G	N9-C4	-9.26	1.30	1.38
2	N	126	G	C8-N7	-9.25	1.25	1.30
3	O	1476	A	C6-N6	9.24	1.41	1.33
1	M	1142	G	N7-C5	-9.24	1.33	1.39
1	M	1084	G	C6-N1	9.24	1.46	1.39
2	N	349	A	C6-N1	9.24	1.42	1.35
1	M	1104	G	N1-C2	9.23	1.45	1.37
2	N	671	G	N9-C4	9.23	1.45	1.38
1	M	1329	A	C6-N1	9.23	1.42	1.35
1	M	1348	U	N3-C4	9.22	1.46	1.38
1	M	1387	G	N9-C4	9.22	1.45	1.38
2	N	425	G	C2-N3	9.21	1.40	1.32
2	N	671	G	N1-C2	9.21	1.45	1.37
2	N	670	G	C6-N1	9.21	1.46	1.39
1	M	1018	G	C2-N2	9.21	1.43	1.34
2	N	923	A	N9-C4	-9.20	1.32	1.37
2	N	502	A	C6-N1	9.20	1.42	1.35
1	M	998	C	O4'-C1'	9.20	1.53	1.41
2	N	637	C	N1-C6	9.19	1.42	1.37
2	N	385	C	C4'-C3'	-9.19	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1231	G	C8-N7	-9.19	1.25	1.30
1	M	1371	G	C2'-C1'	-9.19	1.43	1.53
2	N	23	C	C4-N4	9.18	1.42	1.33
2	N	167	A	N3-C4	-9.18	1.29	1.34
2	N	543	U	C5'-C4'	9.18	1.62	1.51
2	N	655	A	N7-C5	-9.18	1.33	1.39
2	N	688	G	C2'-C1'	-9.18	1.43	1.53
2	N	700	G	N3-C4	-9.18	1.29	1.35
3	O	1429	A	C6-N6	9.18	1.41	1.33
2	N	259	G	C5'-C4'	9.17	1.62	1.51
2	N	683	G	C6-N1	9.17	1.46	1.39
2	N	600	A	N7-C5	-9.16	1.33	1.39
1	M	1239	A	C6-N1	9.16	1.42	1.35
2	N	144	G	N9-C8	-9.16	1.31	1.37
2	N	200	G	N7-C5	-9.16	1.33	1.39
1	M	929	G	N1-C2	9.15	1.45	1.37
3	O	1398	A	N3-C4	-9.15	1.29	1.34
1	M	1223	C	C2-N3	9.15	1.43	1.35
1	M	1256	A	O3'-P	-9.14	1.50	1.61
1	M	1229	A	N9-C8	-9.13	1.30	1.37
2	N	664	G	C2-N3	9.13	1.40	1.32
2	N	761	G	N3-C4	-9.12	1.29	1.35
2	N	160	A	N3-C4	9.12	1.40	1.34
2	N	465	A	N9-C4	-9.12	1.32	1.37
2	N	731	G	N1-C2	9.11	1.45	1.37
2	N	836	G	C2-N3	9.11	1.40	1.32
2	N	225	C	N3-C4	9.11	1.40	1.33
1	M	1198	G	C2-N3	9.10	1.40	1.32
2	N	200	G	C6-N1	9.10	1.46	1.39
2	N	635	A	N9-C4	-9.10	1.32	1.37
2	N	147	G	C2-N3	9.09	1.40	1.32
2	N	136	C	N1-C6	-9.08	1.31	1.37
2	N	158	G	P-O5'	-9.08	1.50	1.59
2	N	666	G	C6-N1	9.08	1.46	1.39
1	M	1347	G	C2-N3	9.08	1.40	1.32
1	M	1273	C	C4-C5	-9.07	1.35	1.43
2	N	513	C	P-O5'	-9.07	1.50	1.59
3	O	1419	G	C2-N3	9.07	1.40	1.32
1	M	1278	G	N9-C4	-9.06	1.30	1.38
2	N	596	A	C2-N3	9.06	1.41	1.33
3	O	1397	C	C4-C5	9.05	1.50	1.43
1	M	1309	G	C6-N1	9.05	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	497	G	C5'-C4'	9.05	1.62	1.51
1	M	1150	A	N7-C5	-9.05	1.33	1.39
3	O	1517	G	N7-C5	-9.04	1.33	1.39
1	M	1094	G	N3-C4	-9.04	1.29	1.35
2	N	549	C	O3'-P	-9.04	1.50	1.61
3	O	1397	C	N1-C6	-9.04	1.31	1.37
2	N	235	C	O4'-C1'	9.03	1.53	1.41
2	N	666	G	P-O5'	-9.03	1.50	1.59
2	N	498	A	C6-N1	9.03	1.41	1.35
1	M	1028	C	N1-C6	9.03	1.42	1.37
2	N	359	G	N1-C2	9.03	1.45	1.37
2	N	52	C	N1-C6	9.02	1.42	1.37
1	M	1051	C	N3-C4	9.01	1.40	1.33
3	O	1529	G	C2'-C1'	-9.01	1.43	1.53
2	N	387	U	C4'-C3'	-9.01	1.43	1.53
2	N	38	G	C6-N1	9.01	1.45	1.39
3	O	1533	C	C4'-C3'	9.00	1.63	1.53
3	O	1466	C	C4-N4	9.00	1.42	1.33
2	N	75	G	C6-N1	8.99	1.45	1.39
3	O	1441	A	N3-C4	8.99	1.40	1.34
2	N	394	G	C6-N1	8.98	1.45	1.39
2	N	423	G	C2-N3	8.98	1.40	1.32
2	N	832	G	N9-C4	-8.98	1.30	1.38
2	N	196	A	N1-C2	8.97	1.42	1.34
2	N	423	G	N7-C5	-8.97	1.33	1.39
2	N	602	A	N7-C5	-8.97	1.33	1.39
1	M	964	A	C6-N6	8.95	1.41	1.33
1	M	1316	G	N9-C8	8.95	1.44	1.37
1	M	1337	G	C6-N1	8.95	1.45	1.39
2	N	278	G	C2-N3	8.94	1.40	1.32
3	O	1506	U	C5-C6	8.94	1.42	1.34
1	M	1004	A	N3-C4	-8.94	1.29	1.34
2	N	269	C	N3-C4	8.93	1.40	1.33
2	N	270	A	N9-C4	-8.93	1.32	1.37
2	N	460	A	N7-C5	-8.93	1.33	1.39
2	N	701	U	C2-N3	8.93	1.44	1.37
2	N	377	G	C6-N1	8.92	1.45	1.39
2	N	928	G	C5-C4	-8.92	1.32	1.38
2	N	430	A	C6-N1	8.92	1.41	1.35
2	N	691	G	C2'-C1'	-8.92	1.43	1.53
1	M	1140	C	N3-C4	8.91	1.40	1.33
2	N	593	U	C4-C5	8.91	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	378	G	C6-N1	8.91	1.45	1.39
2	N	639	G	N9-C8	8.90	1.44	1.37
2	N	845	A	C5-C4	8.90	1.45	1.38
2	N	455	G	C2-N3	8.90	1.39	1.32
1	M	1353	G	C6-N1	8.89	1.45	1.39
2	N	495	A	N9-C4	-8.89	1.32	1.37
2	N	190	A	N7-C5	-8.89	1.33	1.39
2	N	376	G	P-O5'	-8.88	1.50	1.59
2	N	843	U	C2-N3	8.88	1.44	1.37
2	N	205	A	N3-C4	-8.88	1.29	1.34
2	N	904	U	C2-N3	8.88	1.44	1.37
3	O	1468	A	C8-N7	-8.88	1.25	1.31
1	M	1143	G	C2-N3	8.88	1.39	1.32
2	N	312	C	N1-C6	8.87	1.42	1.37
2	N	415	A	N1-C2	8.87	1.42	1.34
1	M	1188	A	C6-N1	8.87	1.41	1.35
2	N	415	A	C6-N6	8.87	1.41	1.33
2	N	745	G	N3-C4	-8.87	1.29	1.35
2	N	806	C	C3'-C2'	8.87	1.62	1.52
1	M	1354	U	N1-C6	8.87	1.46	1.38
2	N	579	A	N7-C5	-8.86	1.33	1.39
2	N	862	C	P-O5'	-8.86	1.50	1.59
2	N	898	G	O3'-P	-8.86	1.50	1.61
3	O	1420	U	C2-N3	8.86	1.44	1.37
1	M	1256	A	N7-C5	-8.85	1.33	1.39
2	N	329	A	O4'-C1'	8.85	1.53	1.41
2	N	704	A	C2'-C1'	-8.85	1.43	1.53
2	N	151	A	C6-N6	8.85	1.41	1.33
2	N	869	G	C8-N7	-8.85	1.25	1.30
2	N	913	A	N7-C5	-8.85	1.33	1.39
2	N	281	G	C8-N7	8.84	1.36	1.30
3	O	1421	G	N1-C2	8.84	1.44	1.37
2	N	47	C	C2-N3	8.83	1.42	1.35
2	N	759	A	C4'-C3'	8.83	1.62	1.53
1	M	1143	G	P-O5'	-8.82	1.50	1.59
2	N	518	C	C4-N4	8.82	1.41	1.33
2	N	711	G	C5-C4	8.82	1.44	1.38
2	N	75	G	N1-C2	8.82	1.44	1.37
2	N	319	G	C2-N3	8.82	1.39	1.32
3	O	1400	C	N3-C4	8.82	1.40	1.33
2	N	401	C	C2'-C1'	-8.82	1.43	1.53
1	M	1357	A	N3-C4	-8.81	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	232	G	N7-C5	-8.81	1.33	1.39
2	N	508	U	C2-N3	8.80	1.44	1.37
1	M	1337	G	C4'-C3'	8.80	1.62	1.53
2	N	806	C	N3-C4	8.80	1.40	1.33
1	M	1233	G	P-O5'	-8.79	1.50	1.59
1	M	1388	C	C4-N4	8.79	1.41	1.33
2	N	10	A	N7-C5	-8.79	1.33	1.39
2	N	158	G	N9-C4	-8.79	1.30	1.38
2	N	324	G	C2-N2	-8.79	1.25	1.34
2	N	617	G	C8-N7	-8.79	1.25	1.30
3	O	1517	G	C2-N2	8.79	1.43	1.34
2	N	32	A	C5-C4	8.78	1.44	1.38
2	N	76	G	N7-C5	-8.78	1.33	1.39
2	N	359	G	N7-C5	-8.78	1.33	1.39
1	M	1348	U	N1-C6	8.78	1.45	1.38
2	N	593	U	C2-N3	8.78	1.43	1.37
1	M	1115	U	C2'-C1'	-8.77	1.43	1.53
2	N	797	C	C5'-C4'	8.77	1.61	1.51
1	M	1304	G	N7-C5	8.77	1.44	1.39
2	N	195	A	N7-C5	-8.77	1.33	1.39
3	O	1469	C	P-O5'	8.77	1.68	1.59
1	M	1153	G	C6-N1	8.77	1.45	1.39
2	N	148	G	N9-C8	-8.77	1.31	1.37
2	N	720	C	C4-C5	8.77	1.50	1.43
2	N	179	A	N9-C4	-8.76	1.32	1.37
1	M	1310	G	N7-C5	8.76	1.44	1.39
1	M	1346	A	C6-N6	8.75	1.41	1.33
2	N	92	U	C2-N3	8.75	1.43	1.37
3	O	1401	G	C2-N2	8.75	1.43	1.34
2	N	617	G	C5-C6	-8.75	1.33	1.42
2	N	161	A	P-O5'	-8.74	1.51	1.59
1	M	1309	G	C2-N3	8.74	1.39	1.32
1	M	1079	G	P-O5'	-8.73	1.51	1.59
2	N	8	A	C6-N6	8.73	1.41	1.33
1	M	1175	G	N9-C4	8.72	1.45	1.38
1	M	1342	C	N3-C4	8.72	1.40	1.33
2	N	30	U	P-O5'	-8.72	1.51	1.59
2	N	350	G	N9-C8	8.72	1.44	1.37
2	N	219	U	C2-N3	8.71	1.43	1.37
2	N	715	A	C6-N6	8.71	1.41	1.33
2	N	44	A	C4'-C3'	8.71	1.62	1.53
2	N	578	C	N1-C6	8.71	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	677	U	N3-C4	8.71	1.46	1.38
1	M	1308	U	C5'-C4'	8.71	1.61	1.51
1	M	1222	G	N1-C2	8.70	1.44	1.37
2	N	263	A	C5-C4	8.70	1.44	1.38
2	N	784	A	C6-N6	8.69	1.41	1.33
2	N	398	U	C1'-N1	8.68	1.61	1.48
3	O	1531	A	C2-N3	8.68	1.41	1.33
2	N	499	A	C6-N6	8.68	1.40	1.33
2	N	688	G	N9-C8	8.68	1.44	1.37
3	O	1435	G	N9-C8	8.67	1.44	1.37
2	N	192	A	N3-C4	8.67	1.40	1.34
2	N	127	G	N9-C8	8.66	1.44	1.37
2	N	673	A	N7-C5	-8.65	1.34	1.39
2	N	768	A	P-O5'	-8.65	1.51	1.59
2	N	885	G	C2-N2	8.65	1.43	1.34
1	M	938	A	N7-C5	-8.65	1.34	1.39
1	M	966	G	N1-C2	8.64	1.44	1.37
2	N	845	A	N9-C8	8.64	1.44	1.37
2	N	115	G	C6-N1	8.64	1.45	1.39
2	N	587	G	C2-N3	8.63	1.39	1.32
1	M	966	G	C2-N3	8.63	1.39	1.32
2	N	561	U	C2'-C1'	-8.63	1.43	1.53
1	M	1331	G	N9-C8	8.63	1.43	1.37
2	N	429	U	P-O5'	8.63	1.68	1.59
3	O	1457	G	N1-C2	8.62	1.44	1.37
1	M	1388	C	N1-C6	8.62	1.42	1.37
1	M	1329	A	N9-C4	8.62	1.43	1.37
3	O	1454	G	C6-N1	8.61	1.45	1.39
1	M	1072	G	N1-C2	8.61	1.44	1.37
1	M	1218	C	C2-N3	8.61	1.42	1.35
1	M	1351	U	C2-N3	8.61	1.43	1.37
2	N	678	U	C5'-C4'	8.61	1.61	1.51
1	M	978	A	C6-N1	8.60	1.41	1.35
1	M	1307	U	C2-N3	8.60	1.43	1.37
2	N	148	G	N7-C5	-8.60	1.34	1.39
2	N	404	G	N1-C2	8.60	1.44	1.37
2	N	563	A	C6-N6	8.60	1.40	1.33
2	N	582	C	C4-N4	8.60	1.41	1.33
1	M	947	G	C6-N1	8.60	1.45	1.39
1	M	1319	A	N7-C5	-8.60	1.34	1.39
2	N	100	G	P-O5'	-8.59	1.51	1.59
2	N	451	A	P-O5'	-8.59	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1323	G	C2'-C1'	-8.59	1.44	1.53
2	N	109	A	C6-N1	8.59	1.41	1.35
2	N	356	A	N3-C4	-8.59	1.29	1.34
1	M	1170	A	N9-C4	-8.59	1.32	1.37
2	N	132	C	C4-N4	8.59	1.41	1.33
2	N	873	A	N7-C5	-8.58	1.34	1.39
2	N	629	A	C2'-C1'	-8.58	1.44	1.53
1	M	1352	C	C4-N4	8.58	1.41	1.33
2	N	32	A	N7-C5	-8.58	1.34	1.39
2	N	45	G	N9-C4	-8.58	1.31	1.38
2	N	817	C	N1-C6	8.58	1.42	1.37
1	M	1181	G	N3-C4	-8.57	1.29	1.35
2	N	663	A	C5-C4	8.57	1.44	1.38
2	N	338	A	C6-N1	8.57	1.41	1.35
2	N	763	G	N1-C2	8.57	1.44	1.37
2	N	120	A	P-O5'	-8.56	1.51	1.59
2	N	602	A	C8-N7	8.56	1.37	1.31
2	N	716	A	C3'-C2'	8.56	1.62	1.52
2	N	855	U	N3-C4	8.56	1.46	1.38
2	N	613	C	N3-C4	8.56	1.40	1.33
2	N	691	G	C6-N1	8.56	1.45	1.39
1	M	977	A	C2'-C1'	-8.55	1.44	1.53
1	M	1181	G	C5'-C4'	8.55	1.61	1.51
2	N	475	C	N3-C4	8.55	1.40	1.33
2	N	189	A	C6-N1	8.54	1.41	1.35
1	M	1126	U	C2-N3	8.53	1.43	1.37
3	O	1531	A	N7-C5	-8.54	1.34	1.39
2	N	179	A	C2'-C1'	8.53	1.62	1.53
2	N	497	G	N7-C5	-8.53	1.34	1.39
2	N	891	U	C5-C6	8.53	1.41	1.34
2	N	96	U	C2-N3	8.52	1.43	1.37
2	N	805	C	C2-N3	8.52	1.42	1.35
1	M	1061	G	N7-C5	-8.52	1.34	1.39
2	N	698	G	N9-C4	8.52	1.44	1.38
1	M	1092	A	C8-N7	8.51	1.37	1.31
2	N	151	A	N7-C5	-8.51	1.34	1.39
2	N	687	A	N7-C5	-8.51	1.34	1.39
3	O	1522	U	C2-N3	8.51	1.43	1.37
1	M	1365	G	N7-C5	-8.50	1.34	1.39
1	M	1371	G	C6-N1	8.50	1.45	1.39
1	M	1115	U	P-O5'	-8.50	1.51	1.59
1	M	1261	A	O4'-C1'	8.50	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1445	U	N3-C4	8.50	1.46	1.38
3	O	1458	G	C5-C4	8.49	1.44	1.38
2	N	854	U	C3'-C2'	-8.49	1.43	1.52
1	M	954	G	N9-C4	-8.49	1.31	1.38
1	M	1160	G	C5-C4	8.49	1.44	1.38
1	M	1387	G	N3-C4	-8.49	1.29	1.35
2	N	527	G	C6-N1	8.48	1.45	1.39
2	N	320	A	N7-C5	-8.48	1.34	1.39
2	N	687	A	N3-C4	-8.48	1.29	1.34
1	M	1340	A	C8-N7	-8.47	1.25	1.31
2	N	576	C	C4-C5	8.47	1.49	1.43
2	N	272	C	P-O5'	-8.47	1.51	1.59
1	M	1386	G	N7-C5	-8.46	1.34	1.39
2	N	756	C	C4-N4	8.46	1.41	1.33
2	N	241	G	C2-N3	8.46	1.39	1.32
1	M	1268	G	C8-N7	-8.46	1.25	1.30
1	M	1290	G	N9-C8	8.46	1.43	1.37
3	O	1433	A	N3-C4	8.46	1.40	1.34
2	N	101	A	N7-C5	-8.45	1.34	1.39
1	M	1026	G	N7-C5	-8.45	1.34	1.39
2	N	676	A	C6-N6	8.45	1.40	1.33
2	N	628	G	C5-C4	-8.44	1.32	1.38
1	M	1385	G	N7-C5	-8.44	1.34	1.39
1	M	1124	G	C2-N2	8.44	1.43	1.34
2	N	573	A	C2'-C1'	-8.44	1.44	1.53
1	M	1004	A	C6-N1	8.43	1.41	1.35
2	N	394	G	N1-C2	8.43	1.44	1.37
3	O	1494	G	N9-C8	8.43	1.43	1.37
2	N	615	G	N1-C2	8.43	1.44	1.37
2	N	885	G	C2'-C1'	-8.43	1.44	1.53
3	O	1409	C	N3-C4	8.43	1.39	1.33
1	M	1167	A	C5'-C4'	8.42	1.61	1.51
1	M	1383	C	N1-C6	8.42	1.42	1.37
2	N	331	G	N7-C5	-8.42	1.34	1.39
2	N	703	G	N9-C8	8.42	1.43	1.37
2	N	795	C	C4-C5	8.42	1.49	1.43
3	O	1454	G	P-O5'	8.42	1.68	1.59
3	O	1495	U	C2-N3	8.42	1.43	1.37
2	N	587	G	N9-C8	-8.42	1.31	1.37
2	N	926	G	C5'-C4'	8.41	1.61	1.51
1	M	1053	G	C2-N2	8.41	1.43	1.34
2	N	786	G	N3-C4	-8.41	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1468	A	C2'-C1'	-8.41	1.44	1.53
3	O	1484	C	N3-C4	8.41	1.39	1.33
1	M	1132	C	N3-C4	8.41	1.39	1.33
1	M	1170	A	C6-N1	8.41	1.41	1.35
1	M	1278	G	N1-C2	8.41	1.44	1.37
1	M	958	A	N7-C5	-8.40	1.34	1.39
3	O	1479	C	C2-N3	8.40	1.42	1.35
2	N	406	G	N7-C5	-8.40	1.34	1.39
1	M	1332	A	C8-N7	-8.40	1.25	1.31
1	M	1097	C	C4-N4	8.39	1.41	1.33
1	M	1144	G	N1-C2	8.39	1.44	1.37
1	M	1004	A	C5'-C4'	8.39	1.61	1.51
2	N	51	A	C8-N7	-8.39	1.25	1.31
1	M	1266	G	N9-C4	-8.39	1.31	1.38
2	N	534	U	C4-C5	8.39	1.51	1.43
2	N	736	C	C2-N3	8.38	1.42	1.35
1	M	1202	U	C4'-C3'	8.38	1.62	1.53
2	N	352	C	N1-C6	8.38	1.42	1.37
1	M	1138	G	C2-N3	8.38	1.39	1.32
2	N	384	G	P-O5'	-8.38	1.51	1.59
1	M	1278	G	O3'-P	-8.37	1.51	1.61
2	N	790	A	C6-N6	8.37	1.40	1.33
2	N	458	U	C2-N3	8.37	1.43	1.37
1	M	1356	G	N9-C8	8.37	1.43	1.37
1	M	1024	G	C4'-C3'	8.36	1.62	1.53
2	N	560	A	N7-C5	-8.37	1.34	1.39
1	M	1276	G	N9-C4	-8.36	1.31	1.38
1	M	1117	A	N3-C4	-8.36	1.29	1.34
2	N	883	C	C5-C6	-8.36	1.27	1.34
3	O	1447	A	C6-N6	8.36	1.40	1.33
1	M	1068	G	C2-N3	8.36	1.39	1.32
2	N	673	A	C8-N7	-8.35	1.25	1.31
2	N	185	U	C4'-C3'	8.35	1.62	1.53
1	M	1139	G	P-O5'	-8.34	1.51	1.59
2	N	217	C	C2'-C1'	-8.34	1.44	1.53
1	M	1177	G	N1-C2	8.34	1.44	1.37
2	N	775	G	C8-N7	-8.33	1.25	1.30
1	M	1343	G	C8-N7	-8.33	1.25	1.30
3	O	1413	A	N3-C4	8.33	1.39	1.34
1	M	1168	U	C4-C5	8.33	1.51	1.43
2	N	148	G	C6-N1	8.33	1.45	1.39
2	N	377	G	C8-N7	-8.32	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1001	C	C4'-C3'	8.32	1.62	1.53
2	N	149	A	P-O5'	-8.32	1.51	1.59
2	N	908	A	N9-C8	8.31	1.44	1.37
3	O	1475	G	P-O5'	8.31	1.68	1.59
1	M	1156	G	C5-C4	8.31	1.44	1.38
1	M	1056	U	P-O5'	8.31	1.68	1.59
1	M	1112	C	N1-C6	8.31	1.42	1.37
2	N	585	G	C8-N7	-8.31	1.25	1.30
2	N	230	G	C6-N1	8.30	1.45	1.39
1	M	1118	U	C4-O4	8.29	1.30	1.23
1	M	1169	A	N3-C4	-8.29	1.29	1.34
1	M	1134	G	N3-C4	-8.29	1.29	1.35
2	N	654	G	C6-N1	8.29	1.45	1.39
2	N	253	A	N9-C8	-8.29	1.31	1.37
2	N	538	G	N1-C2	8.28	1.44	1.37
1	M	951	G	N3-C4	8.28	1.41	1.35
3	O	1424	U	N1-C6	8.28	1.45	1.38
2	N	377	G	N9-C8	8.27	1.43	1.37
2	N	392	C	N3-C4	8.27	1.39	1.33
2	N	611	C	N3-C4	8.27	1.39	1.33
2	N	919	A	N3-C4	-8.27	1.29	1.34
1	M	1297	G	N7-C5	8.27	1.44	1.39
1	M	1335	U	C4-C5	8.27	1.50	1.43
1	M	1079	G	C6-N1	8.27	1.45	1.39
1	M	1344	C	C4-N4	8.27	1.41	1.33
1	M	1198	G	C8-N7	-8.26	1.25	1.30
3	O	1451	U	C3'-C2'	8.26	1.62	1.52
2	N	719	C	C5'-C4'	8.26	1.61	1.51
1	M	1317	C	C4-N4	8.26	1.41	1.33
2	N	11	G	C5-C4	8.25	1.44	1.38
1	M	1014	A	C6-N6	8.25	1.40	1.33
2	N	78	A	N9-C8	-8.24	1.31	1.37
2	N	127	G	N7-C5	8.24	1.44	1.39
2	N	643	C	C4-C5	-8.24	1.36	1.43
2	N	811	C	N3-C4	8.24	1.39	1.33
2	N	609	A	C5-C4	8.24	1.44	1.38
1	M	1079	G	N3-C4	8.24	1.41	1.35
2	N	223	A	C8-N7	-8.24	1.25	1.31
2	N	235	C	P-O5'	-8.24	1.51	1.59
2	N	809	G	C6-N1	8.24	1.45	1.39
2	N	226	G	N1-C2	8.23	1.44	1.37
2	N	351	G	C5-C4	-8.23	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	679	C	C4-C5	-8.23	1.36	1.43
2	N	156	C	C4-C5	-8.23	1.36	1.43
2	N	484	G	C2-N3	8.23	1.39	1.32
2	N	395	C	N3-C4	8.22	1.39	1.33
2	N	303	A	C6-N1	8.22	1.41	1.35
2	N	840	C	N1-C6	8.22	1.42	1.37
2	N	168	G	C6-N1	8.22	1.45	1.39
2	N	630	A	N3-C4	8.22	1.39	1.34
2	N	885	G	N9-C4	-8.21	1.31	1.38
2	N	45	G	N7-C5	-8.21	1.34	1.39
2	N	93	U	C4'-C3'	-8.21	1.44	1.53
2	N	782	A	N9-C4	8.21	1.42	1.37
3	O	1488	G	N7-C5	-8.21	1.34	1.39
3	O	1507	A	N7-C5	-8.21	1.34	1.39
1	M	945	G	C5-C4	8.21	1.44	1.38
2	N	16	A	N7-C5	-8.20	1.34	1.39
2	N	131	A	C5-C4	8.21	1.44	1.38
1	M	1215	G	C6-N1	8.20	1.45	1.39
1	M	1256	A	C2'-C1'	-8.20	1.44	1.53
2	N	764	C	N1-C2	-8.20	1.31	1.40
2	N	255	G	N9-C8	-8.20	1.32	1.37
1	M	1022	A	P-O5'	8.19	1.68	1.59
3	O	1433	A	N9-C4	8.19	1.42	1.37
3	O	1476	A	P-O5'	-8.19	1.51	1.59
1	M	1108	G	C6-N1	8.19	1.45	1.39
2	N	489	C	N3-C4	8.19	1.39	1.33
2	N	572	A	C3'-C2'	8.19	1.61	1.52
2	N	137	U	C3'-C2'	-8.18	1.43	1.52
2	N	373	A	C5-C4	-8.18	1.33	1.38
2	N	198	G	O4'-C1'	-8.17	1.31	1.41
2	N	721	G	C2'-C1'	-8.17	1.44	1.53
2	N	410	G	C5'-C4'	8.17	1.61	1.51
2	N	792	A	C5-C4	8.17	1.44	1.38
2	N	21	G	N7-C5	-8.17	1.34	1.39
2	N	129	A	N9-C8	-8.17	1.31	1.37
2	N	433	G	C5-C4	8.17	1.44	1.38
2	N	683	G	O3'-P	-8.17	1.51	1.61
2	N	837	U	N3-C4	8.17	1.45	1.38
2	N	667	G	C6-N1	8.16	1.45	1.39
2	N	546	A	C6-N6	8.16	1.40	1.33
1	M	1306	A	N9-C8	-8.16	1.31	1.37
2	N	830	G	C2-N2	8.16	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	182	A	C6-N1	8.15	1.41	1.35
1	M	1138	G	C8-N7	8.15	1.35	1.30
2	N	131	A	C6-N1	8.15	1.41	1.35
1	M	1005	A	C6-N6	8.15	1.40	1.33
2	N	500	G	C5-C4	8.15	1.44	1.38
3	O	1405	G	C2-N3	8.15	1.39	1.32
1	M	1263	C	C5-C6	8.14	1.40	1.34
2	N	350	G	N1-C2	8.14	1.44	1.37
2	N	747	A	N7-C5	-8.14	1.34	1.39
1	M	1156	G	N9-C4	8.14	1.44	1.38
2	N	834	U	N3-C4	8.14	1.45	1.38
2	N	218	U	C4-C5	-8.13	1.36	1.43
2	N	433	G	P-O5'	-8.13	1.51	1.59
2	N	919	A	C6-N6	8.13	1.40	1.33
1	M	1246	A	N7-C5	-8.13	1.34	1.39
1	M	954	G	N1-C2	8.13	1.44	1.37
2	N	527	G	C2-N3	8.12	1.39	1.32
1	M	1000	A	N9-C8	8.12	1.44	1.37
1	M	1061	G	C8-N7	8.12	1.35	1.30
1	M	1290	G	C1'-N9	8.12	1.60	1.48
2	N	605	U	C2-N3	8.12	1.43	1.37
3	O	1424	U	N3-C4	8.12	1.45	1.38
2	N	178	C	P-O5'	-8.11	1.51	1.59
3	O	1466	C	N1-C6	8.11	1.42	1.37
1	M	947	G	C5-C6	-8.10	1.34	1.42
2	N	348	G	C2-N3	8.10	1.39	1.32
1	M	968	A	N3-C4	-8.10	1.29	1.34
2	N	160	A	C6-N1	8.10	1.41	1.35
2	N	373	A	N7-C5	-8.10	1.34	1.39
2	N	131	A	C6-N6	8.10	1.40	1.33
2	N	266	G	N1-C2	8.10	1.44	1.37
2	N	28	A	C6-N6	8.09	1.40	1.33
2	N	836	G	C5-C4	8.09	1.44	1.38
2	N	338	A	N7-C5	-8.09	1.34	1.39
1	M	1091	U	C2-N3	8.09	1.43	1.37
2	N	489	C	C4-N4	8.08	1.41	1.33
3	O	1497	G	C6-N1	8.08	1.45	1.39
2	N	370	C	N1-C6	8.08	1.42	1.37
2	N	326	G	C5'-C4'	8.08	1.61	1.51
2	N	334	C	N1-C6	-8.08	1.32	1.37
2	N	401	C	P-O5'	-8.08	1.51	1.59
2	N	29	U	N1-C2	8.07	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1508	A	N9-C4	-8.07	1.33	1.37
2	N	573	A	N3-C4	-8.07	1.30	1.34
3	O	1496	C	P-O5'	-8.07	1.51	1.59
2	N	270	A	N3-C4	-8.07	1.30	1.34
1	M	1094	G	N1-C2	8.06	1.44	1.37
2	N	384	G	N7-C5	-8.06	1.34	1.39
2	N	42	G	N1-C2	8.06	1.44	1.37
2	N	656	G	N1-C2	8.06	1.44	1.37
2	N	27	G	N3-C4	-8.06	1.29	1.35
2	N	579	A	C6-N6	8.06	1.40	1.33
3	O	1398	A	N9-C4	8.06	1.42	1.37
1	M	1033	G	N9-C4	8.05	1.44	1.38
2	N	185	U	C2-N3	8.05	1.43	1.37
2	N	459	A	C5-C4	-8.05	1.33	1.38
2	N	111	G	N1-C2	8.05	1.44	1.37
3	O	1477	U	N1-C2	-8.04	1.31	1.38
2	N	216	U	C2-N3	8.04	1.43	1.37
2	N	794	A	N9-C8	8.04	1.44	1.37
2	N	735	C	C2'-C1'	-8.04	1.44	1.53
2	N	421	U	P-O5'	-8.04	1.51	1.59
1	M	958	A	N9-C8	-8.04	1.31	1.37
2	N	119	A	C2'-C1'	-8.04	1.44	1.53
2	N	697	U	C2-N3	8.04	1.43	1.37
2	N	799	G	C6-N1	8.04	1.45	1.39
1	M	988	G	C4'-C3'	-8.04	1.44	1.53
1	M	1107	C	C2-N3	8.04	1.42	1.35
2	N	629	A	O3'-P	-8.04	1.51	1.61
2	N	752	G	N9-C8	-8.04	1.32	1.37
1	M	1326	U	P-O5'	-8.04	1.51	1.59
2	N	431	A	N3-C4	8.04	1.39	1.34
2	N	662	U	O3'-P	-8.04	1.51	1.61
2	N	50	A	C6-N6	8.03	1.40	1.33
2	N	757	U	N3-C4	8.03	1.45	1.38
1	M	1147	C	O3'-P	-8.03	1.51	1.61
2	N	557	G	N7-C5	8.03	1.44	1.39
2	N	550	G	C8-N7	-8.02	1.26	1.30
2	N	550	G	N9-C8	8.02	1.43	1.37
2	N	52	C	C4-N4	8.01	1.41	1.33
2	N	596	A	C5-C4	8.01	1.44	1.38
2	N	465	A	P-O5'	-8.01	1.51	1.59
1	M	937	A	C6-N1	8.01	1.41	1.35
1	M	1241	G	N3-C4	8.01	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	940	C	C1'-N1	8.00	1.60	1.48
1	M	1105	A	C6-N1	8.00	1.41	1.35
1	M	1058	G	P-O5'	-8.00	1.51	1.59
3	O	1508	A	C6-N6	8.00	1.40	1.33
1	M	1236	A	N9-C4	-8.00	1.33	1.37
2	N	184	G	C6-N1	8.00	1.45	1.39
2	N	654	G	C5-C4	-7.99	1.32	1.38
2	N	800	G	C2-N3	7.99	1.39	1.32
1	M	1339	A	C6-N6	7.99	1.40	1.33
2	N	527	G	N9-C8	7.99	1.43	1.37
2	N	662	U	N3-C4	7.99	1.45	1.38
3	O	1477	U	C2-N3	7.99	1.43	1.37
2	N	81	A	P-O5'	-7.99	1.51	1.59
1	M	1193	G	C6-N1	7.99	1.45	1.39
1	M	1138	G	O3'-P	-7.98	1.51	1.61
2	N	571	U	N1-C6	7.98	1.45	1.38
2	N	740	U	C4'-C3'	-7.98	1.44	1.53
2	N	80	A	P-O5'	7.98	1.67	1.59
2	N	887	G	N3-C4	7.98	1.41	1.35
2	N	582	C	C2-N3	7.97	1.42	1.35
2	N	752	G	N7-C5	-7.97	1.34	1.39
1	M	1004	A	C6-N6	7.97	1.40	1.33
2	N	222	C	P-O5'	-7.97	1.51	1.59
2	N	230	G	C5-C4	7.97	1.44	1.38
2	N	839	C	C2-N3	7.97	1.42	1.35
2	N	894	G	N1-C2	7.97	1.44	1.37
2	N	237	G	P-O5'	-7.97	1.51	1.59
2	N	571	U	P-O5'	-7.97	1.51	1.59
2	N	352	C	C4-N4	7.96	1.41	1.33
2	N	492	C	N3-C4	7.96	1.39	1.33
3	O	1419	G	C5'-C4'	7.96	1.60	1.51
2	N	315	A	N7-C5	-7.96	1.34	1.39
3	O	1451	U	C4-C5	-7.96	1.36	1.43
2	N	609	A	N7-C5	-7.96	1.34	1.39
1	M	1279	G	C5-C4	7.95	1.44	1.38
1	M	1268	G	C5'-C4'	7.95	1.60	1.51
1	M	1294	G	N1-C2	7.95	1.44	1.37
2	N	918	A	N7-C5	-7.95	1.34	1.39
3	O	1430	A	C5-C4	7.95	1.44	1.38
3	O	1448	C	C5-C6	7.95	1.40	1.34
3	O	1496	C	C5'-C4'	7.95	1.60	1.51
2	N	120	A	O3'-P	-7.95	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	558	G	N9-C4	7.95	1.44	1.38
2	N	286	C	C2-N3	7.94	1.42	1.35
1	M	1180	A	N3-C4	-7.94	1.30	1.34
2	N	3	A	C8-N7	-7.94	1.25	1.31
1	M	1001	C	C2'-C1'	-7.94	1.44	1.53
1	M	1142	G	C6-N1	7.94	1.45	1.39
2	N	807	A	N7-C5	-7.94	1.34	1.39
1	M	1056	U	N1-C6	7.94	1.45	1.38
1	M	1109	C	C2-N3	7.94	1.42	1.35
1	M	1206	G	N1-C2	7.94	1.44	1.37
1	M	1003	G	N1-C2	7.93	1.44	1.37
2	N	173	U	C5'-C4'	7.93	1.60	1.51
2	N	105	G	P-O5'	-7.93	1.51	1.59
1	M	1201	A	C8-N7	7.93	1.37	1.31
2	N	168	G	N3-C4	-7.93	1.29	1.35
2	N	347	G	C4'-C3'	7.93	1.61	1.53
2	N	115	G	P-O5'	-7.92	1.51	1.59
2	N	704	A	C6-N6	7.92	1.40	1.33
1	M	961	U	C2-N3	7.92	1.43	1.37
1	M	1329	A	N3-C4	-7.92	1.30	1.34
2	N	67	C	C4-N4	7.92	1.41	1.33
2	N	119	A	O3'-P	-7.92	1.51	1.61
2	N	235	C	N1-C6	7.92	1.41	1.37
2	N	701	U	C4-C5	7.92	1.50	1.43
2	N	3	A	N9-C8	7.92	1.44	1.37
2	N	478	A	N3-C4	-7.91	1.30	1.34
2	N	493	A	N3-C4	7.91	1.39	1.34
3	O	1492	A	N7-C5	-7.91	1.34	1.39
2	N	320	A	C8-N7	-7.91	1.26	1.31
3	O	1448	C	C4-N4	7.91	1.41	1.33
3	O	1454	G	N9-C8	7.91	1.43	1.37
3	O	1492	A	C6-N1	7.91	1.41	1.35
2	N	462	G	C6-N1	7.91	1.45	1.39
1	M	1275	A	N7-C5	-7.90	1.34	1.39
2	N	174	A	C5-C4	-7.90	1.33	1.38
2	N	795	C	N3-C4	-7.90	1.28	1.33
2	N	873	A	C5-C4	-7.90	1.33	1.38
1	M	1116	U	N3-C4	7.89	1.45	1.38
1	M	1386	G	C5-C4	7.89	1.43	1.38
2	N	228	A	C6-N6	7.89	1.40	1.33
2	N	80	A	C5-C4	7.89	1.44	1.38
2	N	651	C	N1-C6	7.88	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	711	G	C8-N7	7.88	1.35	1.30
1	M	1144	G	C6-N1	7.88	1.45	1.39
2	N	746	A	N1-C2	-7.88	1.27	1.34
2	N	498	A	C5-C6	-7.88	1.33	1.41
2	N	535	A	C6-N1	7.88	1.41	1.35
1	M	1277	C	C2-O2	7.88	1.31	1.24
2	N	84	U	O3'-P	-7.88	1.51	1.61
2	N	33	A	C6-N6	7.88	1.40	1.33
3	O	1458	G	N1-C2	7.88	1.44	1.37
2	N	38	G	C8-N7	-7.87	1.26	1.30
2	N	628	G	C2-N3	7.87	1.39	1.32
2	N	550	G	C2-N3	7.87	1.39	1.32
2	N	165	G	C2-N3	7.87	1.39	1.32
1	M	1205	U	O3'-P	-7.87	1.51	1.61
3	O	1414	U	C4-C5	7.87	1.50	1.43
2	N	184	G	N9-C4	7.86	1.44	1.38
2	N	557	G	C2-N3	7.86	1.39	1.32
2	N	364	A	N7-C5	-7.86	1.34	1.39
1	M	1134	G	N7-C5	-7.86	1.34	1.39
2	N	108	G	N1-C2	7.86	1.44	1.37
2	N	602	A	P-O5'	-7.86	1.51	1.59
3	O	1527	U	C2-N3	7.86	1.43	1.37
2	N	469	C	C4-N4	7.86	1.41	1.33
2	N	809	G	N9-C4	-7.85	1.31	1.38
2	N	510	A	N9-C4	-7.85	1.33	1.37
3	O	1433	A	N9-C8	7.85	1.44	1.37
1	M	1368	A	N9-C8	7.85	1.44	1.37
1	M	1119	C	C5-C6	7.84	1.40	1.34
2	N	116	A	C2'-C1'	-7.84	1.44	1.53
3	O	1449	C	N1-C6	7.84	1.41	1.37
2	N	858	G	N9-C4	-7.84	1.31	1.38
2	N	377	G	N7-C5	-7.84	1.34	1.39
2	N	836	G	P-O5'	-7.84	1.51	1.59
1	M	1054	C	P-O5'	-7.83	1.51	1.59
2	N	217	C	N1-C6	7.83	1.41	1.37
2	N	354	G	N7-C5	7.83	1.44	1.39
2	N	401	C	C4'-O4'	-7.83	1.35	1.45
2	N	795	C	O3'-P	-7.83	1.51	1.61
1	M	1160	G	C6-N1	7.83	1.45	1.39
2	N	481	G	N1-C2	7.83	1.44	1.37
2	N	269	C	C4'-C3'	7.83	1.61	1.53
2	N	669	G	O3'-P	-7.82	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	997	U	N3-C4	7.82	1.45	1.38
2	N	786	G	N7-C5	-7.82	1.34	1.39
2	N	293	G	N7-C5	-7.81	1.34	1.39
2	N	549	C	C4-N4	7.81	1.41	1.33
1	M	1046	A	N9-C4	7.81	1.42	1.37
1	M	1024	G	N3-C4	-7.81	1.29	1.35
3	O	1458	G	C2-N3	7.81	1.39	1.32
2	N	869	G	P-O5'	-7.81	1.51	1.59
3	O	1500	A	C4'-O4'	7.81	1.55	1.45
2	N	176	C	C5'-C4'	7.81	1.60	1.51
1	M	933	G	C3'-C2'	7.80	1.61	1.52
1	M	1205	U	N3-C4	7.80	1.45	1.38
2	N	601	G	C2-N3	7.80	1.39	1.32
3	O	1467	C	C5-C6	-7.80	1.28	1.34
2	N	350	G	N3-C4	-7.80	1.29	1.35
2	N	396	C	N1-C6	7.80	1.41	1.37
1	M	937	A	N9-C4	-7.80	1.33	1.37
2	N	487	A	O3'-P	-7.80	1.51	1.61
1	M	1343	G	C2-N3	7.80	1.39	1.32
2	N	405	U	N1-C2	7.79	1.45	1.38
2	N	922	G	C2-N3	7.79	1.39	1.32
2	N	278	G	N9-C8	7.79	1.43	1.37
2	N	520	A	C5-C4	-7.79	1.33	1.38
2	N	654	G	P-O5'	-7.79	1.51	1.59
2	N	627	G	C5-C4	7.79	1.43	1.38
2	N	319	G	N9-C4	7.79	1.44	1.38
1	M	1206	G	C2-N3	7.79	1.39	1.32
1	M	1323	G	C4'-C3'	-7.78	1.44	1.53
2	N	470	C	N1-C6	-7.78	1.32	1.37
2	N	811	C	C4-N4	7.78	1.41	1.33
1	M	1104	G	C2'-C1'	-7.78	1.44	1.53
2	N	198	G	C3'-C2'	7.78	1.61	1.52
3	O	1490	U	O3'-P	-7.78	1.51	1.61
1	M	1254	A	C6-N6	7.78	1.40	1.33
1	M	969	A	N9-C8	-7.77	1.31	1.37
1	M	1325	C	C3'-C2'	7.77	1.61	1.52
2	N	305	G	N7-C5	-7.77	1.34	1.39
2	N	685	G	C2-N3	7.77	1.39	1.32
2	N	374	A	O3'-P	-7.77	1.51	1.61
2	N	47	C	C4-N4	7.77	1.41	1.33
2	N	865	A	P-O5'	7.77	1.67	1.59
1	M	1211	U	N3-C4	7.76	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	337	G	N7-C5	-7.76	1.34	1.39
1	M	1312	G	C6-N1	7.76	1.45	1.39
2	N	129	A	P-O5'	-7.76	1.51	1.59
2	N	216	U	C2'-C1'	-7.76	1.44	1.53
1	M	1291	U	C5-C6	7.76	1.41	1.34
2	N	406	G	C5'-C4'	7.76	1.60	1.51
2	N	821	G	C2-N2	-7.76	1.26	1.34
2	N	15	G	N7-C5	-7.75	1.34	1.39
3	O	1407	C	P-O5'	-7.75	1.51	1.59
2	N	739	C	N3-C4	7.75	1.39	1.33
3	O	1401	G	C2-N3	7.75	1.39	1.32
3	O	1473	G	N3-C4	-7.75	1.30	1.35
3	O	1511	G	C6-O6	-7.75	1.17	1.24
2	N	12	U	C2'-C1'	-7.75	1.44	1.53
2	N	706	A	C6-N1	7.75	1.41	1.35
2	N	273	U	C4-C5	7.75	1.50	1.43
2	N	134	G	N1-C2	7.74	1.44	1.37
2	N	292	G	C5-C6	-7.74	1.34	1.42
2	N	876	C	N3-C4	7.74	1.39	1.33
2	N	160	A	C6-N6	7.74	1.40	1.33
2	N	266	G	N7-C5	7.74	1.43	1.39
2	N	494	G	C8-N7	-7.74	1.26	1.30
2	N	799	G	N1-C2	7.74	1.44	1.37
2	N	435	A	C6-N1	7.74	1.41	1.35
2	N	682	G	C5'-C4'	7.74	1.60	1.51
2	N	893	C	C2-N3	7.74	1.42	1.35
1	M	930	C	C5'-C4'	7.74	1.60	1.51
2	N	299	G	N9-C4	-7.74	1.31	1.38
2	N	491	G	N7-C5	-7.74	1.34	1.39
2	N	237	G	C5'-C4'	7.73	1.60	1.51
2	N	251	G	N9-C4	-7.73	1.31	1.38
2	N	270	A	C5-C4	7.73	1.44	1.38
2	N	285	C	C2-N3	7.73	1.42	1.35
2	N	333	U	P-O5'	-7.73	1.52	1.59
1	M	955	U	C4-C5	7.73	1.50	1.43
1	M	1260	G	C5-C6	-7.73	1.34	1.42
2	N	642	A	P-O5'	-7.73	1.52	1.59
1	M	1070	U	C2-N3	7.73	1.43	1.37
1	M	1129	C	P-O5'	-7.73	1.52	1.59
2	N	529	G	N7-C5	-7.73	1.34	1.39
1	M	1099	G	C6-N1	-7.72	1.34	1.39
1	M	1118	U	C3'-C2'	-7.72	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1178	G	C2-N3	7.72	1.39	1.32
1	M	1328	C	C2-N3	7.72	1.42	1.35
2	N	342	C	C4-N4	7.72	1.41	1.33
2	N	498	A	C5-C4	7.72	1.44	1.38
2	N	856	C	C4-N4	7.72	1.41	1.33
1	M	1022	A	C5'-C4'	7.72	1.60	1.51
1	M	1052	U	O3'-P	-7.72	1.51	1.61
2	N	81	A	N3-C4	-7.72	1.30	1.34
2	N	408	A	C6-N1	7.71	1.41	1.35
2	N	749	A	N7-C5	-7.71	1.34	1.39
3	O	1481	U	N1-C6	7.71	1.44	1.38
1	M	1053	G	C2'-C1'	-7.71	1.44	1.53
2	N	901	A	N3-C4	7.71	1.39	1.34
1	M	1346	A	N9-C4	-7.71	1.33	1.37
2	N	892	A	C6-N6	7.71	1.40	1.33
2	N	865	A	N7-C5	-7.71	1.34	1.39
1	M	1113	C	N3-C4	7.71	1.39	1.33
2	N	566	G	N3-C4	-7.71	1.30	1.35
2	N	314	C	C4-C5	7.70	1.49	1.43
2	N	51	A	C6-N1	7.70	1.41	1.35
2	N	765	G	N9-C8	7.70	1.43	1.37
2	N	841	C	N1-C2	7.70	1.47	1.40
1	M	1285	A	C6-N1	7.70	1.41	1.35
1	M	1324	A	N9-C4	7.70	1.42	1.37
2	N	167	A	C6-N6	7.70	1.40	1.33
1	M	1272	G	C6-N1	7.69	1.45	1.39
2	N	718	A	N7-C5	-7.69	1.34	1.39
2	N	712	A	C4'-C3'	-7.69	1.44	1.53
1	M	1272	G	C2-N2	7.69	1.42	1.34
1	M	1202	U	C4-C5	7.69	1.50	1.43
2	N	577	G	C4'-C3'	7.68	1.61	1.53
2	N	97	G	C5-C4	-7.68	1.32	1.38
2	N	732	C	C5'-C4'	7.68	1.60	1.51
1	M	1259	C	N3-C4	7.68	1.39	1.33
1	M	1018	G	N1-C2	7.68	1.43	1.37
2	N	73	C	N1-C6	7.68	1.41	1.37
2	N	844	G	N7-C5	-7.68	1.34	1.39
1	M	1260	G	P-O5'	-7.67	1.52	1.59
2	N	10	A	N9-C4	7.67	1.42	1.37
2	N	30	U	C4-C5	-7.67	1.36	1.43
2	N	911	U	N3-C4	7.67	1.45	1.38
2	N	459	A	C8-N7	-7.67	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1289	A	N3-C4	-7.67	1.30	1.34
2	N	32	A	N3-C4	-7.66	1.30	1.34
2	N	894	G	C5-C6	-7.66	1.34	1.42
3	O	1476	A	N9-C8	7.66	1.43	1.37
1	M	1228	C	N3-C4	7.66	1.39	1.33
2	N	541	G	N9-C8	-7.66	1.32	1.37
2	N	301	G	N1-C2	7.65	1.43	1.37
1	M	998	C	C4-N4	7.65	1.40	1.33
1	M	1282	C	N1-C2	-7.65	1.32	1.40
1	M	1318	A	C2'-C1'	-7.65	1.45	1.53
2	N	664	G	C3'-C2'	-7.65	1.44	1.52
2	N	798	U	C4'-C3'	7.65	1.61	1.53
1	M	955	U	P-O5'	-7.64	1.52	1.59
1	M	1190	G	C2-N3	7.64	1.38	1.32
2	N	695	A	C2'-C1'	-7.64	1.45	1.53
2	N	436	C	C1'-N1	7.64	1.60	1.48
2	N	819	A	C6-N6	7.64	1.40	1.33
2	N	105	G	C6-N1	7.64	1.44	1.39
1	M	1082	A	C8-N7	-7.64	1.26	1.31
1	M	1093	A	C6-N6	7.64	1.40	1.33
1	M	1026	G	N9-C4	7.63	1.44	1.38
2	N	141	G	C2'-C1'	-7.63	1.45	1.53
2	N	356	A	C5-C4	7.63	1.44	1.38
2	N	581	G	C2-N3	7.63	1.38	1.32
2	N	875	U	N1-C2	7.63	1.45	1.38
3	O	1398	A	C6-N1	7.63	1.40	1.35
2	N	645	G	C8-N7	-7.63	1.26	1.30
1	M	1203	C	N3-C4	7.63	1.39	1.33
2	N	112	G	C5-C4	-7.63	1.33	1.38
2	N	441	A	C6-N6	7.63	1.40	1.33
2	N	523	A	N9-C4	7.63	1.42	1.37
2	N	80	A	N7-C5	-7.62	1.34	1.39
2	N	701	U	O3'-P	-7.62	1.52	1.61
3	O	1496	C	N3-C4	7.62	1.39	1.33
1	M	977	A	N7-C5	-7.62	1.34	1.39
2	N	27	G	C2-N2	7.62	1.42	1.34
1	M	1026	G	O3'-P	-7.61	1.52	1.61
2	N	136	C	P-O5'	-7.61	1.52	1.59
3	O	1431	A	C6-N6	7.61	1.40	1.33
2	N	25	C	C2'-C1'	-7.61	1.45	1.53
2	N	845	A	C5'-C4'	7.61	1.60	1.51
3	O	1402	C	N1-C6	7.61	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1024	G	C8-N7	7.60	1.35	1.30
1	M	1164	G	N1-C2	7.60	1.43	1.37
1	M	1357	A	C2-N3	7.60	1.40	1.33
2	N	807	A	N3-C4	-7.60	1.30	1.34
2	N	759	A	C6-N1	7.60	1.40	1.35
1	M	1126	U	N1-C6	7.60	1.44	1.38
2	N	547	A	N7-C5	-7.60	1.34	1.39
1	M	1306	A	C6-N6	7.60	1.40	1.33
2	N	446	G	N3-C4	-7.60	1.30	1.35
3	O	1458	G	O4'-C1'	7.60	1.51	1.41
3	O	1498	U	C4'-C3'	7.60	1.61	1.53
2	N	650	G	C3'-O3'	7.59	1.52	1.42
2	N	713	G	C8-N7	-7.59	1.26	1.30
2	N	715	A	C2-N3	7.59	1.40	1.33
3	O	1427	C	N3-C4	7.59	1.39	1.33
2	N	283	U	C2-N3	7.59	1.43	1.37
2	N	819	A	C3'-C2'	7.59	1.61	1.52
1	M	1125	U	C4-O4	-7.59	1.17	1.23
2	N	607	A	C6-N6	7.59	1.40	1.33
1	M	1315	U	C4-C5	7.59	1.50	1.43
2	N	650	G	N9-C8	-7.59	1.32	1.37
2	N	667	G	N3-C4	7.59	1.40	1.35
2	N	909	A	C2'-C1'	-7.59	1.45	1.53
1	M	1293	C	N1-C2	-7.58	1.32	1.40
2	N	154	U	N1-C2	-7.58	1.31	1.38
1	M	1270	G	C6-N1	7.58	1.44	1.39
2	N	888	G	C5-C4	-7.58	1.33	1.38
3	O	1418	A	C8-N7	-7.58	1.26	1.31
3	O	1531	A	C6-N1	7.58	1.40	1.35
1	M	1182	G	N7-C5	-7.58	1.34	1.39
1	M	1236	A	N3-C4	-7.57	1.30	1.34
2	N	297	G	N9-C8	7.57	1.43	1.37
2	N	893	C	C3'-O3'	7.57	1.52	1.42
2	N	859	G	N7-C5	-7.57	1.34	1.39
2	N	339	C	C4-N4	7.57	1.40	1.33
2	N	565	U	P-O5'	-7.57	1.52	1.59
2	N	412	A	C6-N1	7.57	1.40	1.35
2	N	762	U	C4-C5	7.56	1.50	1.43
1	M	1365	G	O3'-P	-7.56	1.52	1.61
2	N	534	U	C4'-O4'	-7.56	1.35	1.45
1	M	1127	G	C4'-C3'	7.56	1.61	1.53
2	N	91	U	C4-O4	-7.56	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	869	G	N7-C5	-7.56	1.34	1.39
2	N	903	G	C8-N7	-7.56	1.26	1.30
3	O	1442	G	N9-C8	7.56	1.43	1.37
1	M	1331	G	C3'-O3'	-7.56	1.31	1.42
2	N	732	C	C2-N3	7.56	1.41	1.35
1	M	1201	A	C2'-C1'	-7.55	1.45	1.53
2	N	298	A	N7-C5	-7.55	1.34	1.39
2	N	849	G	C2-N2	7.55	1.42	1.34
3	O	1519	A	C4'-C3'	-7.55	1.44	1.53
1	M	975	A	C8-N7	-7.55	1.26	1.31
2	N	733	G	N1-C2	7.55	1.43	1.37
1	M	1269	A	C6-N6	7.55	1.40	1.33
2	N	344	A	C5'-C4'	7.55	1.60	1.51
1	M	1242	G	N3-C4	-7.54	1.30	1.35
2	N	53	A	C3'-C2'	7.54	1.61	1.52
2	N	216	U	C4-C5	-7.54	1.36	1.43
1	M	1225	A	N7-C5	-7.54	1.34	1.39
1	M	1101	A	C8-N7	-7.54	1.26	1.31
1	M	1344	C	P-O5'	-7.54	1.52	1.59
3	O	1496	C	C4-N4	7.54	1.40	1.33
2	N	386	C	C2'-C1'	-7.53	1.45	1.53
2	N	910	C	N3-C4	7.53	1.39	1.33
2	N	610	U	C2'-C1'	-7.53	1.45	1.53
2	N	29	U	C4-C5	7.53	1.50	1.43
2	N	641	U	C5'-C4'	7.53	1.60	1.51
2	N	825	A	C6-N6	7.53	1.40	1.33
1	M	1336	C	C3'-O3'	7.53	1.52	1.42
2	N	197	A	N9-C4	-7.52	1.33	1.37
2	N	771	G	P-O5'	7.52	1.67	1.59
3	O	1450	U	O4'-C1'	-7.52	1.31	1.41
2	N	292	G	N1-C2	7.52	1.43	1.37
1	M	1346	A	O3'-P	-7.52	1.52	1.61
2	N	383	A	C6-N6	7.52	1.40	1.33
2	N	806	C	C4-N4	7.52	1.40	1.33
2	N	225	C	C3'-C2'	-7.51	1.44	1.52
2	N	62	U	C4'-C3'	-7.51	1.44	1.53
3	O	1428	A	N1-C2	7.51	1.41	1.34
1	M	939	G	N3-C4	-7.50	1.30	1.35
2	N	153	C	C5-C6	-7.50	1.28	1.34
1	M	1144	G	C5'-C4'	7.50	1.60	1.51
2	N	167	A	C5-C4	7.50	1.44	1.38
2	N	440	C	P-O5'	-7.49	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	944	G	C5-C6	7.49	1.49	1.42
2	N	875	U	P-O5'	-7.49	1.52	1.59
2	N	412	A	N3-C4	-7.49	1.30	1.34
3	O	1529	G	N1-C2	7.49	1.43	1.37
1	M	1026	G	C6-N1	7.49	1.44	1.39
2	N	95	C	C4-N4	7.49	1.40	1.33
2	N	262	A	O3'-P	-7.49	1.52	1.61
2	N	299	G	N7-C5	-7.48	1.34	1.39
1	M	1244	G	C3'-O3'	7.48	1.52	1.42
2	N	682	G	C2-N3	7.48	1.38	1.32
2	N	366	A	C4'-C3'	7.48	1.61	1.53
2	N	787	A	C6-N1	7.48	1.40	1.35
2	N	357	G	N9-C8	-7.47	1.32	1.37
2	N	374	A	C2'-C1'	-7.47	1.45	1.53
3	O	1476	A	C5-C4	7.47	1.44	1.38
2	N	259	G	N3-C4	-7.47	1.30	1.35
2	N	715	A	N9-C8	-7.47	1.31	1.37
1	M	955	U	C2-N3	7.47	1.43	1.37
2	N	600	A	C6-N1	7.47	1.40	1.35
1	M	971	G	C6-N1	7.46	1.44	1.39
1	M	1015	G	N9-C4	-7.46	1.31	1.38
2	N	147	G	N3-C4	-7.46	1.30	1.35
1	M	1023	U	N1-C2	7.46	1.45	1.38
2	N	249	U	C2-N3	7.46	1.43	1.37
2	N	393	A	C6-N1	7.46	1.40	1.35
2	N	75	G	C3'-O3'	7.46	1.52	1.42
2	N	345	C	P-O5'	7.46	1.67	1.59
2	N	809	G	C2-N3	7.46	1.38	1.32
1	M	1188	A	N7-C5	-7.46	1.34	1.39
3	O	1513	A	C5-C6	-7.46	1.34	1.41
1	M	988	G	N3-C4	-7.45	1.30	1.35
2	N	808	C	N3-C4	7.45	1.39	1.33
1	M	1071	C	N1-C2	-7.45	1.32	1.40
1	M	1299	A	N9-C4	7.45	1.42	1.37
2	N	130	A	C6-N6	7.45	1.40	1.33
2	N	251	G	C6-N1	7.45	1.44	1.39
2	N	364	A	O3'-P	-7.45	1.52	1.61
2	N	413	G	C3'-C2'	-7.45	1.44	1.52
1	M	1182	G	N1-C2	7.45	1.43	1.37
1	M	1238	A	C4'-C3'	-7.45	1.45	1.53
2	N	516	U	N1-C2	7.45	1.45	1.38
1	M	1195	C	C2'-C1'	-7.44	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1212	U	C2-O2	7.44	1.29	1.22
2	N	71	A	C8-N7	-7.44	1.26	1.31
2	N	109	A	N9-C8	7.44	1.43	1.37
2	N	767	A	N7-C5	-7.44	1.34	1.39
1	M	1323	G	N7-C5	-7.44	1.34	1.39
2	N	864	A	C6-N1	7.44	1.40	1.35
2	N	414	A	C6-N6	7.43	1.39	1.33
2	N	382	A	C4'-C3'	7.43	1.61	1.53
2	N	633	G	N3-C4	7.43	1.40	1.35
2	N	850	U	C4-C5	7.43	1.50	1.43
1	M	1242	G	N9-C8	7.43	1.43	1.37
2	N	107	G	N1-C2	7.43	1.43	1.37
2	N	238	A	C2'-C1'	7.43	1.61	1.53
1	M	1003	G	C6-N1	7.43	1.44	1.39
1	M	941	G	N9-C8	7.42	1.43	1.37
2	N	829	G	N9-C8	7.42	1.43	1.37
1	M	1370	G	N9-C8	7.42	1.43	1.37
1	M	973	G	N7-C5	-7.42	1.34	1.39
1	M	1178	G	C2'-C1'	7.42	1.61	1.53
1	M	1099	G	C4'-O4'	-7.42	1.35	1.45
2	N	52	C	N3-C4	7.42	1.39	1.33
1	M	1061	G	N1-C2	7.41	1.43	1.37
1	M	1316	G	N9-C4	7.41	1.43	1.38
1	M	1130	A	N9-C4	7.41	1.42	1.37
2	N	65	A	C6-N1	7.41	1.40	1.35
1	M	1138	G	N9-C4	-7.41	1.32	1.38
3	O	1495	U	N1-C2	7.40	1.45	1.38
2	N	517	G	N7-C5	-7.40	1.34	1.39
2	N	305	G	C5-C4	7.40	1.43	1.38
2	N	560	A	C2'-C1'	-7.40	1.45	1.53
2	N	662	U	C2-N3	7.40	1.43	1.37
3	O	1433	A	C8-N7	-7.40	1.26	1.31
2	N	382	A	N7-C5	-7.40	1.34	1.39
2	N	815	A	C5-C4	7.40	1.44	1.38
2	N	118	U	C3'-C2'	7.40	1.61	1.52
2	N	245	U	C5'-C4'	7.40	1.60	1.51
2	N	532	A	N9-C8	7.40	1.43	1.37
3	O	1418	A	C6-N6	7.40	1.39	1.33
2	N	823	C	N1-C6	7.39	1.41	1.37
2	N	9	G	N3-C4	-7.39	1.30	1.35
2	N	512	U	N3-C4	7.39	1.45	1.38
2	N	696	A	N9-C8	-7.39	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1268	G	N3-C4	-7.39	1.30	1.35
2	N	392	C	N1-C6	7.39	1.41	1.37
2	N	448	A	P-O5'	-7.39	1.52	1.59
2	N	539	A	N7-C5	-7.39	1.34	1.39
2	N	798	U	C2'-C1'	-7.39	1.45	1.53
2	N	570	G	C5'-C4'	7.38	1.60	1.51
1	M	1034	G	N1-C2	7.38	1.43	1.37
2	N	206	C	C4'-C3'	-7.38	1.45	1.53
1	M	1243	C	N1-C6	7.38	1.41	1.37
2	N	743	A	N7-C5	-7.38	1.34	1.39
2	N	462	G	C2-N2	7.38	1.42	1.34
2	N	642	A	C3'-C2'	7.38	1.61	1.52
3	O	1480	A	C6-N6	7.38	1.39	1.33
2	N	127	G	N1-C2	7.37	1.43	1.37
2	N	512	U	C2'-C1'	-7.37	1.45	1.53
1	M	945	G	N7-C5	-7.37	1.34	1.39
2	N	162	A	N9-C8	-7.37	1.31	1.37
2	N	138	G	N1-C2	7.37	1.43	1.37
2	N	508	U	N3-C4	7.37	1.45	1.38
2	N	865	A	C4'-C3'	7.37	1.61	1.53
1	M	1152	A	C6-N6	7.37	1.39	1.33
3	O	1421	G	C8-N7	7.37	1.35	1.30
3	O	1454	G	C8-N7	-7.37	1.26	1.30
1	M	1008	U	O3'-P	-7.37	1.52	1.61
1	M	1305	G	C5-C6	-7.36	1.34	1.42
1	M	1346	A	C3'-C2'	-7.36	1.44	1.52
2	N	184	G	C2-N2	7.36	1.42	1.34
2	N	221	C	P-O5'	-7.36	1.52	1.59
2	N	276	G	C6-N1	7.36	1.44	1.39
2	N	520	A	C8-N7	-7.36	1.26	1.31
2	N	114	U	C3'-C2'	7.36	1.61	1.52
1	M	1316	G	C5-C4	-7.36	1.33	1.38
1	M	1216	A	N7-C5	-7.36	1.34	1.39
2	N	552	U	O3'-P	-7.36	1.52	1.61
2	N	874	G	C8-N7	7.36	1.35	1.30
3	O	1506	U	C2-N3	7.36	1.42	1.37
1	M	1081	A	P-O5'	-7.35	1.52	1.59
2	N	693	G	C6-N1	7.35	1.44	1.39
2	N	261	U	C2-N3	7.35	1.42	1.37
2	N	264	C	N3-C4	7.35	1.39	1.33
1	M	1016	A	C6-N6	7.34	1.39	1.33
1	M	1323	G	C2-N3	7.34	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	26	A	N9-C4	7.34	1.42	1.37
2	N	269	C	N1-C6	7.34	1.41	1.37
2	N	639	G	N7-C5	-7.34	1.34	1.39
2	N	691	G	C8-N7	7.34	1.35	1.30
2	N	415	A	C5'-C4'	7.34	1.60	1.51
1	M	1371	G	C2-N3	7.34	1.38	1.32
2	N	562	U	C4'-C3'	7.34	1.61	1.53
2	N	395	C	C1'-N1	7.33	1.59	1.48
1	M	947	G	N7-C5	7.33	1.43	1.39
2	N	327	A	N9-C8	-7.33	1.31	1.37
2	N	558	G	N7-C5	-7.33	1.34	1.39
1	M	942	G	N3-C4	7.33	1.40	1.35
2	N	496	A	C3'-C2'	7.33	1.61	1.52
2	N	676	A	N7-C5	-7.33	1.34	1.39
2	N	880	C	O4'-C1'	7.32	1.51	1.41
2	N	186	C	N3-C4	7.32	1.39	1.33
2	N	202	G	C4'-O4'	7.32	1.55	1.45
2	N	379	C	C4-N4	7.32	1.40	1.33
2	N	802	A	C5'-C4'	7.32	1.60	1.51
2	N	281	G	N7-C5	-7.32	1.34	1.39
2	N	240	G	C2-N3	7.32	1.38	1.32
1	M	991	U	C2-N3	7.31	1.42	1.37
2	N	628	G	N3-C4	-7.31	1.30	1.35
2	N	925	G	C2-N2	7.31	1.41	1.34
2	N	516	U	C2'-C1'	-7.31	1.45	1.53
1	M	1072	G	O3'-P	-7.31	1.52	1.61
2	N	783	C	C5'-C4'	7.31	1.60	1.51
1	M	982	U	O3'-P	-7.31	1.52	1.61
1	M	993	G	N1-C2	7.31	1.43	1.37
2	N	538	G	C6-N1	7.30	1.44	1.39
1	M	1133	G	N3-C4	-7.30	1.30	1.35
2	N	394	G	N9-C8	7.30	1.43	1.37
3	O	1489	G	N1-C2	7.30	1.43	1.37
2	N	867	G	C6-N1	7.30	1.44	1.39
2	N	482	A	C6-N1	7.30	1.40	1.35
2	N	904	U	P-O5'	-7.30	1.52	1.59
2	N	142	G	N1-C2	7.30	1.43	1.37
2	N	747	A	N3-C4	-7.30	1.30	1.34
2	N	877	G	N1-C2	7.30	1.43	1.37
3	O	1512	U	C4-C5	7.30	1.50	1.43
2	N	138	G	N9-C4	-7.29	1.32	1.38
2	N	242	G	N3-C4	-7.29	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	540	G	N1-C2	7.29	1.43	1.37
2	N	917	G	C8-N7	-7.29	1.26	1.30
1	M	949	A	P-O5'	-7.29	1.52	1.59
2	N	223	A	C2'-C1'	-7.29	1.45	1.53
2	N	526	C	O3'-P	-7.29	1.52	1.61
1	M	1298	U	N3-C4	7.29	1.45	1.38
2	N	491	G	C2'-C1'	-7.29	1.45	1.53
2	N	800	G	N9-C4	-7.28	1.32	1.38
2	N	924	C	C1'-N1	7.28	1.59	1.48
2	N	405	U	N3-C4	7.28	1.45	1.38
2	N	838	G	N1-C2	7.28	1.43	1.37
1	M	1238	A	N9-C8	-7.28	1.31	1.37
2	N	45	G	C5-C6	-7.28	1.35	1.42
1	M	1166	G	C3'-C2'	7.27	1.60	1.52
1	M	939	G	C2-N3	7.27	1.38	1.32
2	N	284	C	N1-C6	7.27	1.41	1.37
2	N	633	G	C2-N2	7.27	1.41	1.34
1	M	1309	G	C8-N7	-7.27	1.26	1.30
2	N	785	G	N7-C5	-7.27	1.34	1.39
3	O	1432	G	N7-C5	7.27	1.43	1.39
1	M	1227	A	N9-C8	7.26	1.43	1.37
3	O	1457	G	N9-C4	-7.26	1.32	1.38
2	N	375	U	C2-N3	7.25	1.42	1.37
1	M	964	A	C5'-C4'	7.25	1.60	1.51
3	O	1429	A	C5-C6	-7.25	1.34	1.41
1	M	1266	G	C5-C4	7.25	1.43	1.38
2	N	126	G	C2-N2	7.25	1.41	1.34
1	M	1322	C	C2'-C1'	7.25	1.61	1.53
2	N	172	A	N1-C2	7.25	1.40	1.34
2	N	102	G	N3-C4	-7.25	1.30	1.35
2	N	284	C	N3-C4	7.25	1.39	1.33
2	N	876	C	C5'-C4'	7.24	1.60	1.51
1	M	1192	C	C4-N4	7.24	1.40	1.33
2	N	307	C	C2-N3	7.24	1.41	1.35
2	N	255	G	N1-C2	7.24	1.43	1.37
2	N	371	A	C6-N1	7.24	1.40	1.35
2	N	193	C	C4-C5	7.24	1.48	1.43
2	N	356	A	C2'-C1'	-7.24	1.45	1.53
2	N	580	C	N3-C4	7.24	1.39	1.33
2	N	903	G	C2-N3	7.24	1.38	1.32
2	N	897	C	C4-C5	7.23	1.48	1.43
2	N	325	A	C5'-C4'	7.23	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	563	A	C5-C4	-7.23	1.33	1.38
3	O	1470	U	C2'-C1'	-7.23	1.45	1.53
1	M	1215	G	C2-N2	7.23	1.41	1.34
2	N	458	U	P-O5'	-7.23	1.52	1.59
2	N	807	A	C3'-O3'	7.23	1.52	1.42
1	M	1093	A	N9-C4	7.23	1.42	1.37
2	N	76	G	N9-C8	7.23	1.43	1.37
2	N	425	G	N7-C5	7.23	1.43	1.39
2	N	697	U	C5-C6	-7.23	1.27	1.34
1	M	1371	G	N7-C5	-7.23	1.34	1.39
2	N	636	U	C4-O4	7.23	1.29	1.23
1	M	1007	U	N3-C4	7.23	1.45	1.38
2	N	68	G	N7-C5	-7.23	1.34	1.39
2	N	544	G	N3-C4	-7.23	1.30	1.35
1	M	1113	C	P-O5'	-7.22	1.52	1.59
2	N	265	G	N9-C8	-7.22	1.32	1.37
2	N	921	U	C4'-O4'	7.22	1.54	1.45
1	M	1067	A	C8-N7	-7.22	1.26	1.31
2	N	152	A	N9-C4	7.22	1.42	1.37
1	M	1213	A	N7-C5	-7.22	1.34	1.39
2	N	165	G	N9-C4	-7.22	1.32	1.38
2	N	218	U	C5'-C4'	7.22	1.60	1.51
1	M	1087	G	C2-N2	7.22	1.41	1.34
2	N	192	A	C1'-N9	7.22	1.59	1.48
2	N	125	U	O4'-C1'	7.22	1.51	1.41
2	N	499	A	O3'-P	-7.22	1.52	1.61
2	N	411	A	C2-N3	7.21	1.40	1.33
1	M	962	C	C5-C6	7.21	1.40	1.34
1	M	1196	A	N9-C4	-7.21	1.33	1.37
2	N	183	C	C4-C5	-7.21	1.37	1.43
2	N	85	U	C2'-C1'	-7.21	1.45	1.53
1	M	973	G	C5-C4	7.21	1.43	1.38
2	N	501	C	N3-C4	7.20	1.39	1.33
2	N	880	C	N1-C6	7.20	1.41	1.37
2	N	429	U	C2-N3	7.20	1.42	1.37
2	N	617	G	P-O5'	-7.20	1.52	1.59
1	M	1114	C	N3-C4	-7.20	1.28	1.33
1	M	1303	C	C4-C5	-7.20	1.37	1.43
2	N	82	G	C5-C4	7.20	1.43	1.38
2	N	535	A	C3'-O3'	-7.20	1.32	1.42
2	N	703	G	C2-N3	7.20	1.38	1.32
2	N	703	G	N1-C2	7.20	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	792	A	C8-N7	7.20	1.36	1.31
2	N	868	C	P-O5'	-7.20	1.52	1.59
1	M	1328	C	N3-C4	7.20	1.39	1.33
2	N	269	C	O3'-P	-7.20	1.52	1.61
3	O	1437	A	C2-N3	7.20	1.40	1.33
2	N	824	G	C2-N3	7.20	1.38	1.32
2	N	342	C	C2-N3	7.19	1.41	1.35
1	M	957	U	N1-C6	7.19	1.44	1.38
2	N	370	C	C2-N3	7.19	1.41	1.35
2	N	132	C	C2'-C1'	-7.19	1.45	1.53
3	O	1486	G	C6-N1	-7.19	1.34	1.39
2	N	640	A	N7-C5	-7.19	1.34	1.39
3	O	1480	A	N1-C2	-7.19	1.27	1.34
2	N	716	A	C6-N6	7.19	1.39	1.33
2	N	868	C	N1-C6	7.19	1.41	1.37
2	N	683	G	N7-C5	7.18	1.43	1.39
1	M	1300	G	N7-C5	-7.18	1.34	1.39
2	N	98	A	C6-N6	7.18	1.39	1.33
2	N	530	G	C6-N1	-7.18	1.34	1.39
2	N	156	C	C4-N4	7.18	1.40	1.33
2	N	158	G	N9-C8	7.18	1.42	1.37
2	N	478	A	N9-C4	-7.18	1.33	1.37
2	N	99	C	N3-C4	7.18	1.39	1.33
2	N	434	U	P-O5'	-7.18	1.52	1.59
2	N	893	C	O4'-C1'	7.18	1.50	1.41
1	M	962	C	N1-C6	7.17	1.41	1.37
1	M	1374	A	N9-C4	-7.17	1.33	1.37
2	N	449	G	N9-C4	7.17	1.43	1.38
2	N	728	A	C4'-O4'	7.17	1.54	1.45
1	M	1320	C	N1-C6	7.17	1.41	1.37
2	N	803	G	C2-N3	7.17	1.38	1.32
3	O	1443	C	N3-C4	7.17	1.39	1.33
3	O	1462	C	C4'-C3'	7.17	1.61	1.53
2	N	346	G	N1-C2	7.16	1.43	1.37
3	O	1458	G	C4'-O4'	-7.16	1.36	1.45
2	N	82	G	C2'-C1'	-7.16	1.45	1.53
2	N	335	C	N1-C6	7.16	1.41	1.37
2	N	762	U	O4'-C1'	7.16	1.50	1.41
2	N	766	A	N7-C5	-7.16	1.34	1.39
1	M	1166	G	C4'-O4'	-7.16	1.36	1.45
1	M	973	G	N9-C4	-7.15	1.32	1.38
2	N	584	G	N7-C5	-7.15	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	494	G	P-O5'	-7.15	1.52	1.59
2	N	559	A	N9-C4	-7.15	1.33	1.37
2	N	652	U	C5'-C4'	7.15	1.59	1.51
2	N	796	C	C2'-C1'	7.15	1.61	1.53
2	N	819	A	N9-C8	7.15	1.43	1.37
3	O	1488	G	N9-C4	-7.15	1.32	1.38
2	N	502	A	P-O5'	-7.15	1.52	1.59
2	N	887	G	C2'-O2'	-7.15	1.32	1.41
2	N	424	G	C4'-C3'	-7.15	1.45	1.53
1	M	1024	G	C2-N3	7.14	1.38	1.32
1	M	1160	G	C2-N3	7.14	1.38	1.32
1	M	1263	C	C2-N3	7.14	1.41	1.35
3	O	1517	G	C5-C6	7.14	1.49	1.42
2	N	928	G	O4'-C1'	7.14	1.50	1.41
2	N	463	U	N1-C2	7.14	1.45	1.38
2	N	755	G	N1-C2	7.14	1.43	1.37
1	M	1180	A	C6-N1	7.13	1.40	1.35
2	N	179	A	P-O5'	-7.13	1.52	1.59
2	N	287	U	C5-C6	7.13	1.40	1.34
2	N	673	A	C5-C4	-7.13	1.33	1.38
2	N	771	G	C2-N3	7.13	1.38	1.32
2	N	810	C	C4-N4	7.13	1.40	1.33
1	M	1026	G	C2'-C1'	-7.13	1.45	1.53
2	N	442	G	N9-C4	-7.13	1.32	1.38
2	N	641	U	P-O5'	-7.13	1.52	1.59
2	N	221	C	O3'-P	-7.13	1.52	1.61
2	N	675	A	C6-N1	7.13	1.40	1.35
2	N	782	A	C6-N6	7.13	1.39	1.33
1	M	1081	A	N9-C4	7.13	1.42	1.37
1	M	1219	A	P-O5'	-7.13	1.52	1.59
2	N	26	A	C8-N7	7.13	1.36	1.31
2	N	127	G	C2-N2	7.13	1.41	1.34
2	N	63	C	O3'-P	-7.13	1.52	1.61
2	N	623	C	N3-C4	7.13	1.39	1.33
2	N	270	A	C6-N1	7.12	1.40	1.35
2	N	163	C	N1-C6	7.12	1.41	1.37
2	N	647	C	C4-N4	7.12	1.40	1.33
3	O	1419	G	N3-C4	-7.12	1.30	1.35
2	N	643	C	O3'-P	-7.12	1.52	1.61
1	M	1064	G	N1-C2	7.12	1.43	1.37
2	N	31	G	C2'-C1'	-7.12	1.45	1.53
1	M	1086	U	C5'-C4'	7.12	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	122	G	C2-N3	7.12	1.38	1.32
2	N	804	U	C2-O2	-7.12	1.16	1.22
1	M	1052	U	C5'-C4'	7.11	1.59	1.51
1	M	1223	C	C4-N4	7.11	1.40	1.33
1	M	1283	U	N3-C4	7.11	1.44	1.38
2	N	58	C	C2-N3	-7.11	1.30	1.35
2	N	851	G	C2'-C1'	-7.11	1.45	1.53
2	N	168	G	N1-C2	7.11	1.43	1.37
1	M	1213	A	N3-C4	7.11	1.39	1.34
2	N	39	G	C2-N3	7.11	1.38	1.32
2	N	113	G	C2-N3	7.11	1.38	1.32
2	N	210	C	C5'-C4'	7.11	1.59	1.51
2	N	282	A	O3'-P	-7.11	1.52	1.61
2	N	685	G	N9-C4	-7.11	1.32	1.38
3	O	1511	G	C6-N1	7.11	1.44	1.39
1	M	965	U	P-O5'	7.11	1.66	1.59
2	N	140	U	C1'-N1	7.11	1.59	1.48
2	N	614	C	C2-N3	7.11	1.41	1.35
2	N	18	C	C3'-C2'	-7.10	1.45	1.52
2	N	159	G	P-O5'	-7.10	1.52	1.59
1	M	1034	G	N3-C4	7.10	1.40	1.35
2	N	918	A	C6-N6	7.10	1.39	1.33
1	M	1019	A	C8-N7	-7.10	1.26	1.31
1	M	1113	C	C4-N4	7.10	1.40	1.33
2	N	112	G	C3'-O3'	7.10	1.52	1.42
2	N	609	A	C6-N6	7.10	1.39	1.33
3	O	1475	G	C5'-C4'	7.10	1.59	1.51
2	N	535	A	C8-N7	-7.10	1.26	1.31
2	N	633	G	C2-N3	7.09	1.38	1.32
1	M	1108	G	P-O5'	7.09	1.66	1.59
2	N	473	U	C4-O4	-7.09	1.18	1.23
1	M	1079	G	N9-C8	7.09	1.42	1.37
1	M	1167	A	C5-C6	-7.09	1.34	1.41
2	N	548	G	C6-N1	7.09	1.44	1.39
2	N	305	G	C6-N1	7.08	1.44	1.39
1	M	1089	G	N9-C8	7.08	1.42	1.37
1	M	1111	A	N9-C4	7.08	1.42	1.37
2	N	206	C	C5'-C4'	7.08	1.59	1.51
3	O	1396	A	N3-C4	-7.08	1.30	1.34
2	N	482	A	C5'-C4'	7.08	1.59	1.51
2	N	645	G	C2-N2	7.08	1.41	1.34
2	N	853	C	N3-C4	7.08	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	877	G	N9-C8	7.08	1.42	1.37
3	O	1517	G	N9-C8	-7.08	1.32	1.37
1	M	1126	U	C3'-O3'	7.07	1.52	1.42
1	M	1242	G	C5-C4	7.07	1.43	1.38
2	N	49	U	C2'-C1'	-7.07	1.45	1.53
2	N	883	C	P-O5'	-7.07	1.52	1.59
1	M	1271	A	N7-C5	-7.07	1.35	1.39
2	N	662	U	C2'-C1'	-7.07	1.45	1.53
2	N	184	G	N7-C5	-7.07	1.35	1.39
2	N	599	C	N1-C6	7.07	1.41	1.37
2	N	917	G	C5'-C4'	7.07	1.59	1.51
3	O	1401	G	N9-C4	7.07	1.43	1.38
2	N	505	G	C3'-C2'	-7.06	1.45	1.52
3	O	1427	C	C5'-C4'	7.06	1.59	1.51
1	M	1020	G	C5-C6	-7.06	1.35	1.42
2	N	99	C	C4-N4	7.06	1.40	1.33
2	N	734	G	C4'-O4'	-7.06	1.36	1.45
2	N	864	A	C6-N6	7.06	1.39	1.33
2	N	718	A	C8-N7	7.05	1.36	1.31
2	N	768	A	N9-C4	7.05	1.42	1.37
1	M	1229	A	N1-C2	-7.05	1.28	1.34
2	N	143	A	N9-C8	-7.05	1.32	1.37
1	M	1084	G	N1-C2	7.05	1.43	1.37
1	M	1189	U	C4'-C3'	7.05	1.60	1.53
3	O	1472	U	P-O5'	-7.05	1.52	1.59
1	M	1325	C	N1-C6	7.05	1.41	1.37
1	M	1117	A	O3'-P	-7.05	1.52	1.61
2	N	732	C	N3-C4	7.05	1.38	1.33
2	N	535	A	C2-N3	7.04	1.39	1.33
1	M	1039	G	N1-C2	7.04	1.43	1.37
1	M	1077	G	N9-C8	7.04	1.42	1.37
2	N	298	A	C6-N1	7.04	1.40	1.35
2	N	783	C	N1-C6	7.04	1.41	1.37
1	M	1260	G	O3'-P	-7.04	1.52	1.61
1	M	1264	U	C4-C5	7.04	1.49	1.43
2	N	27	G	N9-C4	-7.04	1.32	1.38
1	M	1210	C	C5'-C4'	7.04	1.59	1.51
2	N	309	A	C6-N1	7.04	1.40	1.35
2	N	73	C	N3-C4	7.04	1.38	1.33
2	N	147	G	N9-C4	-7.04	1.32	1.38
2	N	149	A	N7-C5	-7.03	1.35	1.39
1	M	1172	C	C3'-C2'	7.03	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1269	A	N7-C5	-7.03	1.35	1.39
2	N	432	A	N7-C5	-7.03	1.35	1.39
1	M	971	G	C2'-C1'	-7.03	1.45	1.53
1	M	1057	G	C5-C6	-7.03	1.35	1.42
2	N	422	C	C4-N4	7.03	1.40	1.33
2	N	279	A	C5'-C4'	7.03	1.59	1.51
2	N	683	G	C5-C4	7.03	1.43	1.38
2	N	768	A	C6-N1	7.03	1.40	1.35
1	M	951	G	N9-C4	-7.02	1.32	1.38
1	M	1313	U	O3'-P	-7.02	1.52	1.61
1	M	1307	U	C3'-C2'	7.02	1.60	1.52
1	M	1360	A	C6-N1	7.02	1.40	1.35
2	N	491	G	P-O5'	7.02	1.66	1.59
2	N	691	G	N3-C4	7.02	1.40	1.35
1	M	1378	C	C2-N3	7.02	1.41	1.35
2	N	908	A	P-O5'	-7.02	1.52	1.59
2	N	144	G	N9-C4	-7.02	1.32	1.38
2	N	802	A	N9-C4	-7.02	1.33	1.37
3	O	1419	G	O4'-C1'	7.02	1.50	1.41
2	N	483	C	P-O5'	-7.01	1.52	1.59
1	M	1097	C	C2-N3	7.01	1.41	1.35
2	N	802	A	N7-C5	-7.01	1.35	1.39
1	M	1339	A	N3-C4	7.01	1.39	1.34
2	N	128	G	N9-C4	-7.01	1.32	1.38
2	N	145	G	C4'-O4'	7.01	1.54	1.45
2	N	520	A	N9-C4	7.01	1.42	1.37
2	N	773	G	N9-C4	-7.01	1.32	1.38
2	N	229	U	C4-O4	7.01	1.29	1.23
2	N	243	A	N3-C4	-7.01	1.30	1.34
1	M	1011	C	N3-C4	7.01	1.38	1.33
1	M	935	A	N3-C4	-7.00	1.30	1.34
2	N	853	C	C4-N4	7.00	1.40	1.33
2	N	22	G	C5-C6	-7.00	1.35	1.42
3	O	1492	A	C5-C4	7.00	1.43	1.38
1	M	975	A	C5-C4	-7.00	1.33	1.38
2	N	499	A	C6-N1	7.00	1.40	1.35
3	O	1449	C	N3-C4	7.00	1.38	1.33
1	M	1138	G	C2'-C1'	-7.00	1.45	1.53
1	M	1206	G	C5-C6	-7.00	1.35	1.42
2	N	235	C	C5'-C4'	7.00	1.59	1.51
3	O	1415	G	N7-C5	-7.00	1.35	1.39
2	N	536	C	C2'-C1'	-7.00	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1407	C	C4-C5	7.00	1.48	1.43
1	M	1334	G	C2-N3	6.99	1.38	1.32
2	N	200	G	N3-C4	-6.99	1.30	1.35
2	N	911	U	C4'-O4'	6.99	1.54	1.45
2	N	433	G	N3-C4	-6.99	1.30	1.35
2	N	893	C	C4-N4	6.99	1.40	1.33
2	N	330	C	P-O5'	-6.99	1.52	1.59
2	N	641	U	C2-N3	6.99	1.42	1.37
3	O	1413	A	N7-C5	-6.99	1.35	1.39
2	N	404	G	P-O5'	-6.99	1.52	1.59
3	O	1504	G	C6-N1	6.99	1.44	1.39
1	M	1272	G	N7-C5	6.98	1.43	1.39
2	N	140	U	N3-C4	6.98	1.44	1.38
2	N	671	G	C8-N7	-6.98	1.26	1.30
1	M	1308	U	N3-C4	6.98	1.44	1.38
1	M	1014	A	C5-C4	6.98	1.43	1.38
2	N	65	A	N3-C4	6.98	1.39	1.34
1	M	1207	G	N1-C2	6.98	1.43	1.37
2	N	527	G	N9-C4	-6.98	1.32	1.38
2	N	673	A	P-O5'	-6.98	1.52	1.59
1	M	931	C	C2-N3	6.97	1.41	1.35
2	N	537	G	N9-C8	6.97	1.42	1.37
2	N	577	G	N9-C8	6.97	1.42	1.37
1	M	982	U	C4'-C3'	6.97	1.60	1.53
2	N	699	C	C4-C5	6.97	1.48	1.43
2	N	812	G	C5-C6	-6.97	1.35	1.42
1	M	1374	A	N7-C5	-6.97	1.35	1.39
2	N	348	G	N1-C2	6.97	1.43	1.37
2	N	96	U	P-O5'	6.97	1.66	1.59
2	N	476	U	C2-N3	6.97	1.42	1.37
3	O	1438	G	C8-N7	-6.97	1.26	1.30
3	O	1440	U	C2-N3	6.96	1.42	1.37
3	O	1461	G	N1-C2	6.96	1.43	1.37
1	M	1061	G	C2-N3	6.96	1.38	1.32
1	M	938	A	C8-N7	6.96	1.36	1.31
1	M	1094	G	C6-N1	6.96	1.44	1.39
1	M	1045	C	C3'-C2'	6.96	1.60	1.52
2	N	80	A	N3-C4	6.96	1.39	1.34
2	N	457	G	P-O5'	6.96	1.66	1.59
2	N	274	A	C8-N7	-6.96	1.26	1.31
2	N	843	U	C4-C5	6.96	1.49	1.43
2	N	845	A	N3-C4	-6.96	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	98	A	C2'-C1'	-6.95	1.45	1.53
2	N	98	A	C5-C6	-6.95	1.34	1.41
2	N	446	G	C6-N1	6.95	1.44	1.39
1	M	953	G	C2-N2	6.95	1.41	1.34
2	N	912	C	C4-C5	-6.95	1.37	1.43
1	M	989	U	N1-C6	6.95	1.44	1.38
2	N	111	G	C8-N7	6.95	1.35	1.30
2	N	895	G	O3'-P	-6.95	1.52	1.61
2	N	115	G	C5-C4	-6.95	1.33	1.38
2	N	428	G	C2-N3	6.95	1.38	1.32
2	N	801	U	C2-N3	6.95	1.42	1.37
2	N	110	C	C4'-C3'	-6.94	1.45	1.53
2	N	559	A	C6-N6	6.94	1.39	1.33
1	M	1221	G	N9-C4	-6.94	1.32	1.38
2	N	145	G	C2-N2	6.94	1.41	1.34
2	N	889	A	C6-N1	6.94	1.40	1.35
2	N	927	G	C2-N3	6.94	1.38	1.32
2	N	802	A	C3'-C2'	6.94	1.60	1.52
1	M	1313	U	C5-C6	-6.94	1.27	1.34
2	N	444	G	N1-C2	6.94	1.43	1.37
3	O	1515	G	N1-C2	6.94	1.43	1.37
1	M	1000	A	C6-N6	6.94	1.39	1.33
2	N	35	G	N7-C5	-6.93	1.35	1.39
2	N	278	G	C5-C4	6.93	1.43	1.38
1	M	1105	A	C6-N6	6.93	1.39	1.33
3	O	1413	A	C4'-O4'	6.93	1.54	1.45
2	N	147	G	P-O5'	-6.93	1.52	1.59
2	N	180	U	C5'-C4'	6.93	1.59	1.51
2	N	107	G	C5'-C4'	6.93	1.59	1.51
2	N	220	G	N3-C4	-6.93	1.30	1.35
2	N	442	G	C6-O6	-6.93	1.18	1.24
2	N	494	G	O3'-P	-6.92	1.52	1.61
2	N	681	A	C6-N6	6.92	1.39	1.33
2	N	630	A	C3'-O3'	-6.92	1.32	1.42
3	O	1492	A	N3-C4	6.92	1.39	1.34
2	N	61	G	C3'-O3'	6.92	1.51	1.42
2	N	779	C	C5'-C4'	6.92	1.59	1.51
1	M	938	A	C6-N6	6.92	1.39	1.33
1	M	1145	A	C6-N6	6.92	1.39	1.33
1	M	1336	C	N3-C4	6.92	1.38	1.33
2	N	31	G	C8-N7	6.92	1.35	1.30
1	M	1147	C	C4-N4	6.91	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1162	C	C4-N4	6.91	1.40	1.33
3	O	1460	C	C4-N4	6.91	1.40	1.33
1	M	1338	G	C2-N3	6.91	1.38	1.32
2	N	339	C	C2'-C1'	-6.91	1.45	1.53
3	O	1482	G	N1-C2	6.91	1.43	1.37
1	M	970	C	C4-N4	6.90	1.40	1.33
2	N	160	A	O3'-P	-6.90	1.52	1.61
1	M	1088	G	C2-N3	6.90	1.38	1.32
1	M	1096	C	C1'-N1	6.90	1.59	1.48
2	N	488	C	C4'-C3'	6.90	1.60	1.53
3	O	1490	U	C4-O4	-6.90	1.18	1.23
1	M	1081	A	N3-C4	6.90	1.39	1.34
1	M	1171	A	N9-C8	6.90	1.43	1.37
1	M	1353	G	C3'-O3'	6.90	1.51	1.42
1	M	1368	A	C5-C4	6.90	1.43	1.38
2	N	577	G	C5-C4	6.90	1.43	1.38
2	N	636	U	N3-C4	6.90	1.44	1.38
1	M	1175	G	N7-C5	-6.90	1.35	1.39
2	N	388	G	C2-N3	6.90	1.38	1.32
1	M	989	U	N1-C2	6.89	1.44	1.38
1	M	1053	G	P-O5'	-6.89	1.52	1.59
2	N	812	G	N1-C2	6.89	1.43	1.37
2	N	899	C	O3'-P	-6.89	1.52	1.61
1	M	965	U	N3-C4	6.89	1.44	1.38
2	N	17	U	N3-C4	6.89	1.44	1.38
2	N	95	C	C4'-C3'	6.89	1.60	1.53
1	M	1266	G	O4'-C1'	6.89	1.50	1.41
1	M	1274	A	N7-C5	-6.89	1.35	1.39
2	N	391	G	C5-C4	-6.89	1.33	1.38
2	N	671	G	N9-C8	6.89	1.42	1.37
1	M	1314	C	N3-C4	6.88	1.38	1.33
2	N	541	G	C5-C4	6.88	1.43	1.38
2	N	521	G	N9-C8	-6.88	1.33	1.37
2	N	888	G	P-O5'	-6.88	1.52	1.59
3	O	1484	C	O3'-P	-6.88	1.52	1.61
3	O	1501	C	N3-C4	6.88	1.38	1.33
1	M	951	G	C2-N3	6.88	1.38	1.32
1	M	1095	U	N1-C2	6.88	1.44	1.38
2	N	241	G	N9-C8	6.88	1.42	1.37
2	N	678	U	C2'-C1'	-6.88	1.45	1.53
2	N	865	A	N1-C2	6.88	1.40	1.34
1	M	1048	G	C8-N7	6.88	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1100	C	C2-N3	6.88	1.41	1.35
2	N	909	A	C6-N1	6.88	1.40	1.35
1	M	959	A	C6-N1	6.88	1.40	1.35
1	M	1092	A	C6-N1	6.88	1.40	1.35
1	M	1177	G	C2-N3	6.88	1.38	1.32
2	N	715	A	C2'-C1'	-6.88	1.45	1.53
3	O	1519	A	C2'-C1'	-6.88	1.45	1.53
2	N	577	G	N3-C4	-6.87	1.30	1.35
2	N	675	A	C8-N7	-6.87	1.26	1.31
2	N	713	G	C4'-O4'	6.87	1.54	1.45
1	M	1143	G	C6-N1	6.87	1.44	1.39
2	N	498	A	O3'-P	-6.87	1.52	1.61
2	N	690	G	C6-N1	6.87	1.44	1.39
2	N	822	U	C3'-C2'	-6.87	1.45	1.52
2	N	689	C	C2'-C1'	-6.87	1.45	1.53
2	N	916	U	C5'-C4'	6.87	1.59	1.51
2	N	229	U	C2-N3	6.86	1.42	1.37
1	M	1221	G	N7-C5	-6.86	1.35	1.39
2	N	885	G	P-O5'	-6.86	1.52	1.59
1	M	1337	G	C2-N2	6.86	1.41	1.34
3	O	1468	A	C6-N6	6.86	1.39	1.33
1	M	1057	G	N9-C8	6.86	1.42	1.37
1	M	1368	A	C6-N6	6.86	1.39	1.33
2	N	895	G	C2-N3	6.86	1.38	1.32
2	N	913	A	C3'-O3'	-6.85	1.32	1.42
2	N	187	G	C5'-C4'	6.85	1.59	1.51
2	N	244	U	C4-C5	6.85	1.49	1.43
3	O	1510	C	C4-N4	6.85	1.40	1.33
2	N	468	A	N9-C8	-6.85	1.32	1.37
1	M	1185	G	C6-N1	6.85	1.44	1.39
2	N	38	G	C4'-C3'	6.84	1.60	1.53
2	N	448	A	O3'-P	-6.84	1.52	1.61
3	O	1430	A	C2'-C1'	-6.84	1.45	1.53
2	N	407	U	N3-C4	6.84	1.44	1.38
2	N	548	G	N1-C2	6.84	1.43	1.37
2	N	509	A	C6-N1	6.84	1.40	1.35
2	N	81	A	C2'-C1'	-6.84	1.45	1.53
2	N	96	U	O3'-P	-6.84	1.52	1.61
2	N	265	G	C6-N1	6.84	1.44	1.39
2	N	422	C	C5'-C4'	6.84	1.59	1.51
2	N	434	U	C2-N3	6.84	1.42	1.37
1	M	1170	A	C8-N7	-6.83	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1316	G	C2'-C1'	-6.83	1.45	1.53
2	N	327	A	O4'-C1'	6.83	1.50	1.41
2	N	354	G	N3-C4	6.83	1.40	1.35
2	N	721	G	N9-C8	6.83	1.42	1.37
1	M	1023	U	N1-C6	-6.83	1.31	1.38
2	N	362	G	N3-C4	-6.83	1.30	1.35
2	N	753	A	C6-N6	6.83	1.39	1.33
2	N	763	G	C2-N2	6.83	1.41	1.34
1	M	1187	G	N9-C8	-6.83	1.33	1.37
2	N	472	U	O5'-C5'	-6.83	1.31	1.42
1	M	1167	A	C4'-O4'	-6.83	1.36	1.45
1	M	938	A	C2'-C1'	-6.83	1.45	1.53
3	O	1429	A	O3'-P	-6.83	1.52	1.61
2	N	100	G	C5-C6	6.82	1.49	1.42
2	N	408	A	N3-C4	-6.82	1.30	1.34
1	M	929	G	C2-N3	6.82	1.38	1.32
2	N	161	A	C6-N6	6.82	1.39	1.33
2	N	858	G	C2-N3	6.82	1.38	1.32
1	M	1312	G	C2-N3	6.82	1.38	1.32
2	N	690	G	C5-C6	-6.82	1.35	1.42
2	N	777	A	N9-C8	-6.82	1.32	1.37
3	O	1436	U	N3-C4	6.82	1.44	1.38
3	O	1443	C	C4-N4	6.82	1.40	1.33
1	M	1151	A	C5-C4	6.82	1.43	1.38
2	N	350	G	C3'-C2'	6.82	1.60	1.52
2	N	419	C	N3-C4	6.82	1.38	1.33
2	N	718	A	C5'-C4'	6.82	1.59	1.51
2	N	774	G	C8-N7	6.82	1.35	1.30
2	N	851	G	C8-N7	6.82	1.35	1.30
1	M	951	G	N1-C2	6.81	1.43	1.37
2	N	250	A	N3-C4	-6.81	1.30	1.34
2	N	107	G	C2-N2	6.81	1.41	1.34
2	N	227	G	C5-C4	-6.81	1.33	1.38
2	N	419	C	C2'-C1'	-6.81	1.45	1.53
3	O	1418	A	C5-C4	-6.81	1.33	1.38
1	M	1233	G	C2-N2	6.81	1.41	1.34
2	N	718	A	C6-N6	6.81	1.39	1.33
1	M	1221	G	C5'-C4'	6.81	1.59	1.51
1	M	1159	U	C2-O2	6.80	1.28	1.22
2	N	567	G	C5'-C4'	6.80	1.59	1.51
2	N	734	G	C5'-C4'	6.80	1.59	1.51
2	N	121	U	C5'-C4'	6.80	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	53	A	C2-N3	-6.80	1.27	1.33
2	N	490	C	C4-N4	6.80	1.40	1.33
1	M	1248	A	N9-C4	-6.80	1.33	1.37
2	N	355	C	N3-C4	6.80	1.38	1.33
2	N	424	G	N1-C2	6.80	1.43	1.37
2	N	780	A	N9-C4	-6.80	1.33	1.37
2	N	456	A	C6-N1	6.80	1.40	1.35
2	N	299	G	C6-N1	6.79	1.44	1.39
2	N	510	A	N7-C5	6.79	1.43	1.39
1	M	978	A	C6-N6	6.79	1.39	1.33
1	M	1147	C	N1-C6	6.79	1.41	1.37
3	O	1426	G	C6-N1	6.79	1.44	1.39
3	O	1527	U	C5-C6	-6.79	1.28	1.34
1	M	1209	C	C4-N4	6.79	1.40	1.33
1	M	1361	G	N3-C4	6.79	1.40	1.35
2	N	525	C	C2'-C1'	6.79	1.60	1.53
1	M	1196	A	N3-C4	-6.79	1.30	1.34
2	N	122	G	C8-N7	6.79	1.35	1.30
1	M	1315	U	C3'-C2'	6.78	1.60	1.52
2	N	789	U	C4'-C3'	-6.78	1.45	1.53
1	M	958	A	N3-C4	-6.78	1.30	1.34
2	N	15	G	P-O5'	-6.78	1.52	1.59
2	N	574	A	N7-C5	-6.78	1.35	1.39
1	M	954	G	C5'-C4'	6.77	1.59	1.51
2	N	599	C	C3'-C2'	-6.77	1.45	1.52
2	N	21	G	N9-C8	-6.77	1.33	1.37
2	N	288	A	N3-C4	6.77	1.39	1.34
2	N	681	A	N9-C4	6.77	1.42	1.37
1	M	968	A	N9-C8	-6.77	1.32	1.37
2	N	207	C	C3'-C2'	-6.77	1.45	1.52
2	N	584	G	N9-C4	-6.77	1.32	1.38
1	M	1300	G	O3'-P	-6.76	1.53	1.61
2	N	314	C	C4'-C3'	6.76	1.60	1.53
2	N	709	U	C1'-N1	6.76	1.58	1.48
1	M	1297	G	C8-N7	6.76	1.35	1.30
2	N	242	G	N1-C2	6.76	1.43	1.37
2	N	532	A	O3'-P	-6.76	1.53	1.61
3	O	1450	U	C2-N3	6.76	1.42	1.37
2	N	457	G	N3-C4	6.76	1.40	1.35
2	N	633	G	C5-C6	-6.76	1.35	1.42
2	N	914	A	C4'-C3'	6.76	1.60	1.53
2	N	445	G	C2-N3	6.76	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1089	G	C4'-C3'	6.76	1.60	1.53
1	M	1131	G	C2-N2	6.76	1.41	1.34
2	N	8	A	O4'-C1'	-6.76	1.32	1.41
2	N	593	U	C1'-N1	6.76	1.58	1.48
1	M	1292	G	C5-C4	-6.75	1.33	1.38
2	N	191	G	N1-C2	6.75	1.43	1.37
2	N	558	G	C2-N2	-6.75	1.27	1.34
2	N	563	A	C5'-C4'	6.75	1.59	1.51
2	N	656	G	C5-C4	6.75	1.43	1.38
3	O	1484	C	P-O5'	6.75	1.66	1.59
1	M	1379	G	C5-C4	6.75	1.43	1.38
1	M	1324	A	C6-N6	6.75	1.39	1.33
1	M	1225	A	N9-C8	6.74	1.43	1.37
1	M	1246	A	N1-C2	6.74	1.40	1.34
2	N	832	G	N3-C4	6.74	1.40	1.35
3	O	1393	U	N1-C2	-6.74	1.32	1.38
3	O	1409	C	P-O5'	-6.74	1.53	1.59
2	N	682	G	N1-C2	6.74	1.43	1.37
2	N	772	U	C5'-C4'	6.74	1.59	1.51
2	N	162	A	C8-N7	-6.74	1.26	1.31
2	N	243	A	C5'-C4'	6.74	1.59	1.51
2	N	259	G	C8-N7	6.74	1.34	1.30
2	N	537	G	N9-C4	-6.74	1.32	1.38
2	N	25	C	N1-C6	-6.74	1.33	1.37
1	M	1270	G	C3'-O3'	6.73	1.51	1.42
2	N	503	C	C4-C5	-6.73	1.37	1.43
2	N	142	G	C2'-C1'	-6.73	1.46	1.53
2	N	498	A	N1-C2	-6.73	1.28	1.34
2	N	776	G	O3'-P	-6.73	1.53	1.61
2	N	570	G	C4'-O4'	-6.73	1.36	1.45
2	N	585	G	N1-C2	6.73	1.43	1.37
1	M	1250	A	C2-N3	6.73	1.39	1.33
2	N	285	C	N3-C4	6.73	1.38	1.33
1	M	1164	G	C5-C4	6.72	1.43	1.38
2	N	129	A	C8-N7	-6.72	1.26	1.31
2	N	714	G	C5'-C4'	6.72	1.59	1.51
1	M	1187	G	C5-C6	-6.72	1.35	1.42
1	M	1265	C	C2-N3	-6.72	1.30	1.35
2	N	436	C	C5'-C4'	-6.72	1.43	1.51
2	N	792	A	N7-C5	-6.72	1.35	1.39
1	M	1261	A	C4'-C3'	6.72	1.60	1.53
1	M	1086	U	C2-N3	6.72	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1363	A	C6-N6	6.72	1.39	1.33
2	N	247	G	N9-C4	-6.72	1.32	1.38
2	N	98	A	C8-N7	6.71	1.36	1.31
2	N	164	G	C4'-O4'	-6.71	1.36	1.45
2	N	805	C	C5'-C4'	6.71	1.59	1.51
2	N	376	G	C5-C6	-6.71	1.35	1.42
2	N	404	G	N9-C8	6.71	1.42	1.37
2	N	307	C	N3-C4	6.71	1.38	1.33
2	N	482	A	N3-C4	6.71	1.38	1.34
1	M	963	G	C6-N1	6.71	1.44	1.39
1	M	1214	C	C2-N3	6.71	1.41	1.35
1	M	1260	G	C2-N3	6.71	1.38	1.32
2	N	621	A	C8-N7	6.71	1.36	1.31
3	O	1406	U	C4'-C3'	-6.71	1.45	1.53
3	O	1447	A	N9-C4	-6.71	1.33	1.37
1	M	978	A	N1-C2	6.70	1.40	1.34
2	N	147	G	O3'-P	-6.70	1.53	1.61
1	M	985	C	C4-N4	6.70	1.40	1.33
1	M	988	G	C6-O6	-6.70	1.18	1.24
2	N	836	G	N7-C5	-6.70	1.35	1.39
1	M	972	C	C4-C5	6.70	1.48	1.43
2	N	653	U	P-O5'	-6.70	1.53	1.59
2	N	835	U	C4'-C3'	6.70	1.60	1.53
3	O	1511	G	N3-C4	-6.70	1.30	1.35
2	N	426	U	C4-C5	6.69	1.49	1.43
3	O	1482	G	N7-C5	6.69	1.43	1.39
1	M	1157	A	N3-C4	-6.69	1.30	1.34
2	N	54	C	C4'-C3'	-6.69	1.45	1.53
3	O	1430	A	O3'-P	-6.69	1.53	1.61
1	M	1059	C	C4'-C3'	-6.69	1.45	1.53
2	N	915	A	C8-N7	-6.69	1.26	1.31
1	M	933	G	C4'-C3'	-6.69	1.45	1.53
1	M	1361	G	C6-N1	6.69	1.44	1.39
1	M	1377	A	C5'-C4'	6.69	1.59	1.51
2	N	748	G	N1-C2	6.69	1.43	1.37
2	N	244	U	C5'-C4'	6.69	1.59	1.51
1	M	1071	C	C1'-N1	6.68	1.58	1.48
2	N	153	C	C2-N3	6.68	1.41	1.35
1	M	988	G	C6-N1	6.68	1.44	1.39
1	M	1079	G	N9-C4	6.68	1.43	1.38
1	M	1258	G	C5'-C4'	6.68	1.59	1.51
2	N	908	A	N1-C2	6.68	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	544	G	N1-C2	6.68	1.43	1.37
2	N	713	G	P-O5'	-6.68	1.53	1.59
2	N	220	G	C6-N1	6.68	1.44	1.39
2	N	664	G	N1-C2	6.68	1.43	1.37
2	N	810	C	N3-C4	6.68	1.38	1.33
1	M	1231	G	P-O5'	-6.67	1.53	1.59
2	N	202	G	N7-C5	-6.67	1.35	1.39
2	N	520	A	N7-C5	-6.67	1.35	1.39
2	N	725	G	C6-N1	6.67	1.44	1.39
1	M	1040	U	C2-N3	6.67	1.42	1.37
2	N	117	G	C5'-C4'	6.67	1.59	1.51
2	N	133	U	N3-C4	6.67	1.44	1.38
2	N	229	U	C4-C5	6.67	1.49	1.43
3	O	1480	A	C5-C4	6.67	1.43	1.38
3	O	1520	C	O4'-C1'	6.67	1.50	1.41
1	M	1057	G	N1-C2	6.67	1.43	1.37
1	M	1080	A	C6-N1	6.67	1.40	1.35
1	M	1287	A	N3-C4	6.67	1.38	1.34
2	N	302	G	C5-C4	6.67	1.43	1.38
1	M	970	C	C2-N3	6.66	1.41	1.35
1	M	1299	A	N3-C4	6.66	1.38	1.34
1	M	1026	G	C4'-O4'	-6.66	1.36	1.45
1	M	998	C	N1-C6	6.66	1.41	1.37
1	M	1114	C	C4-C5	6.66	1.48	1.43
2	N	478	A	N9-C8	6.66	1.43	1.37
1	M	1042	A	N7-C5	-6.66	1.35	1.39
2	N	424	G	C2-N3	6.66	1.38	1.32
1	M	1144	G	C4'-O4'	6.65	1.54	1.45
1	M	973	G	O4'-C1'	6.65	1.50	1.41
2	N	455	G	C2-N2	6.65	1.41	1.34
1	M	1000	A	N3-C4	-6.65	1.30	1.34
1	M	955	U	N1-C2	6.65	1.44	1.38
1	M	1359	C	N3-C4	6.65	1.38	1.33
2	N	825	A	N9-C4	6.65	1.41	1.37
1	M	993	G	C4'-C3'	6.64	1.60	1.53
1	M	1029	U	N1-C2	6.64	1.44	1.38
2	N	640	A	C5'-C4'	6.64	1.59	1.51
1	M	1097	C	C2'-C1'	-6.64	1.46	1.53
2	N	220	G	N9-C8	6.64	1.42	1.37
2	N	513	C	C5'-C4'	6.64	1.59	1.51
1	M	987	G	N7-C5	-6.64	1.35	1.39
2	N	30	U	C5-C6	6.64	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	625	U	N3-C4	6.64	1.44	1.38
2	N	824	G	O4'-C1'	6.64	1.50	1.41
1	M	1292	G	C8-N7	6.63	1.34	1.30
2	N	309	A	C5-C4	6.63	1.43	1.38
2	N	217	C	C5'-C4'	6.63	1.59	1.51
3	O	1516	G	N9-C8	6.63	1.42	1.37
1	M	1281	C	C2-N3	6.63	1.41	1.35
2	N	350	G	O3'-P	-6.63	1.53	1.61
2	N	512	U	C4'-C3'	-6.63	1.45	1.53
2	N	873	A	N9-C8	-6.63	1.32	1.37
3	O	1402	C	N3-C4	6.63	1.38	1.33
1	M	1005	A	C6-N1	6.63	1.40	1.35
1	M	1076	U	C2-N3	6.63	1.42	1.37
1	M	1360	A	C5'-C4'	6.63	1.59	1.51
3	O	1394	A	N9-C8	6.63	1.43	1.37
1	M	1248	A	N1-C2	6.62	1.40	1.34
2	N	71	A	N9-C8	-6.62	1.32	1.37
1	M	946	A	C6-N6	6.62	1.39	1.33
2	N	737	C	C4-N4	6.62	1.40	1.33
3	O	1484	C	N1-C6	-6.62	1.33	1.37
3	O	1500	A	C4'-C3'	6.62	1.60	1.53
2	N	158	G	C4'-C3'	6.62	1.60	1.53
2	N	569	C	C4'-C3'	6.62	1.60	1.53
3	O	1402	C	O3'-P	-6.62	1.53	1.61
3	O	1414	U	C4'-C3'	6.62	1.60	1.53
1	M	1136	C	C4-N4	6.61	1.40	1.33
1	M	1189	U	N1-C2	6.61	1.44	1.38
2	N	91	U	C2'-C1'	-6.61	1.46	1.53
2	N	328	C	C4-C5	6.61	1.48	1.43
2	N	454	G	N1-C2	6.61	1.43	1.37
2	N	829	G	C3'-C2'	-6.61	1.45	1.52
2	N	846	G	C6-N1	6.61	1.44	1.39
1	M	932	C	N3-C4	6.61	1.38	1.33
2	N	9	G	O4'-C1'	-6.61	1.33	1.41
2	N	586	C	N3-C4	6.61	1.38	1.33
2	N	714	G	N9-C8	6.61	1.42	1.37
2	N	875	U	N1-C6	6.61	1.43	1.38
2	N	143	A	N7-C5	-6.61	1.35	1.39
2	N	290	C	O4'-C1'	6.61	1.50	1.41
2	N	178	C	C5'-C4'	6.60	1.59	1.51
2	N	180	U	C4-C5	6.60	1.49	1.43
2	N	241	G	N7-C5	-6.60	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	115	G	N9-C8	6.60	1.42	1.37
2	N	519	C	C4-C5	6.60	1.48	1.43
2	N	175	C	C2-N3	6.60	1.41	1.35
2	N	572	A	N3-C4	-6.60	1.30	1.34
1	M	930	C	C2-N3	6.59	1.41	1.35
1	M	936	C	N1-C6	6.59	1.41	1.37
1	M	1185	G	N9-C4	6.59	1.43	1.38
2	N	319	G	C5-C6	-6.59	1.35	1.42
2	N	321	A	N3-C4	6.59	1.38	1.34
2	N	474	G	C8-N7	-6.59	1.26	1.30
1	M	998	C	C2-O2	6.59	1.30	1.24
1	M	1205	U	P-O5'	-6.59	1.53	1.59
2	N	633	G	C4'-C3'	6.59	1.60	1.53
2	N	597	G	O4'-C1'	6.59	1.50	1.41
2	N	355	C	N1-C6	-6.59	1.33	1.37
1	M	1073	U	N3-C4	6.58	1.44	1.38
2	N	339	C	C4-C5	6.58	1.48	1.43
2	N	65	A	C4'-C3'	6.58	1.60	1.53
2	N	254	G	C6-N1	6.58	1.44	1.39
2	N	309	A	C5-C6	-6.58	1.35	1.41
2	N	922	G	N9-C4	6.58	1.43	1.38
1	M	1071	C	C2-N3	6.58	1.41	1.35
1	M	1231	G	N1-C2	6.58	1.43	1.37
2	N	611	C	C5'-C4'	6.58	1.59	1.51
2	N	157	U	O3'-P	-6.58	1.53	1.61
3	O	1475	G	N1-C2	6.58	1.43	1.37
1	M	1111	A	O3'-P	-6.58	1.53	1.61
2	N	474	G	N9-C8	6.58	1.42	1.37
1	M	1134	G	C6-N1	6.58	1.44	1.39
2	N	899	C	N3-C4	6.58	1.38	1.33
2	N	287	U	N3-C4	6.57	1.44	1.38
2	N	733	G	C8-N7	-6.57	1.27	1.30
2	N	753	A	P-O5'	6.57	1.66	1.59
2	N	232	G	C5'-C4'	6.57	1.59	1.51
2	N	922	G	N1-C2	6.57	1.43	1.37
1	M	1065	U	N3-C4	6.57	1.44	1.38
1	M	1233	G	C6-N1	6.57	1.44	1.39
2	N	455	G	C5-C4	-6.57	1.33	1.38
2	N	734	G	N9-C4	-6.57	1.32	1.38
1	M	1047	G	C5'-C4'	6.57	1.59	1.51
2	N	441	A	P-O5'	6.57	1.66	1.59
1	M	1244	G	C6-N1	6.57	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1323	G	N3-C4	-6.57	1.30	1.35
2	N	274	A	O4'-C1'	6.57	1.50	1.41
2	N	351	G	O3'-P	-6.57	1.53	1.61
2	N	446	G	C2-N3	6.57	1.38	1.32
2	N	520	A	C2-N3	-6.57	1.27	1.33
2	N	423	G	C4'-O4'	6.56	1.54	1.45
2	N	822	U	O4'-C1'	6.56	1.50	1.41
1	M	1140	C	C4-N4	6.56	1.39	1.33
2	N	175	C	N1-C6	6.56	1.41	1.37
2	N	849	G	C2'-C1'	-6.56	1.46	1.53
1	M	1015	G	N7-C5	-6.56	1.35	1.39
2	N	926	G	N1-C2	6.56	1.43	1.37
2	N	404	G	N7-C5	-6.56	1.35	1.39
1	M	1060	U	N3-C4	6.56	1.44	1.38
1	M	1267	C	O3'-P	6.56	1.69	1.61
2	N	340	U	N3-C4	6.56	1.44	1.38
2	N	218	U	O3'-P	-6.55	1.53	1.61
2	N	741	G	C2'-C1'	-6.55	1.46	1.53
3	O	1454	G	C2'-C1'	-6.55	1.46	1.53
3	O	1520	C	N3-C4	6.55	1.38	1.33
2	N	201	G	N1-C2	6.55	1.43	1.37
2	N	719	C	C5-C6	6.55	1.39	1.34
2	N	894	G	N7-C5	-6.55	1.35	1.39
2	N	485	U	C2-N3	6.55	1.42	1.37
3	O	1435	G	C2-N2	6.55	1.41	1.34
1	M	1144	G	P-O5'	-6.55	1.53	1.59
1	M	1379	G	C6-N1	6.55	1.44	1.39
3	O	1441	A	C1'-N9	6.55	1.58	1.48
3	O	1523	G	C6-N1	6.55	1.44	1.39
1	M	1266	G	P-O5'	-6.54	1.53	1.59
1	M	1188	A	N3-C4	6.54	1.38	1.34
2	N	45	G	C2'-O2'	-6.54	1.33	1.41
2	N	505	G	C5-C4	6.54	1.43	1.38
2	N	847	G	C2-N3	6.54	1.38	1.32
2	N	351	G	C2-N3	6.54	1.38	1.32
1	M	1221	G	C8-N7	-6.54	1.27	1.30
2	N	296	U	N3-C4	6.54	1.44	1.38
1	M	1347	G	C6-N1	6.54	1.44	1.39
2	N	561	U	C2-N3	6.54	1.42	1.37
2	N	88	U	N3-C4	6.53	1.44	1.38
1	M	1058	G	C3'-C2'	-6.53	1.45	1.52
1	M	1353	G	N9-C8	6.53	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1069	C	C4'-C3'	6.53	1.60	1.53
1	M	1364	U	C4-O4	6.53	1.28	1.23
2	N	722	G	N7-C5	6.53	1.43	1.39
1	M	1361	G	C5-C4	-6.53	1.33	1.38
2	N	377	G	P-O5'	-6.53	1.53	1.59
2	N	591	U	C2'-C1'	-6.53	1.46	1.53
1	M	1140	C	O3'-P	-6.52	1.53	1.61
1	M	1048	G	C6-N1	6.52	1.44	1.39
1	M	1301	U	N1-C6	6.52	1.43	1.38
2	N	334	C	C4-N4	6.52	1.39	1.33
1	M	1220	G	C2-N3	6.52	1.38	1.32
2	N	11	G	C3'-C2'	6.52	1.60	1.52
2	N	779	C	N1-C2	6.52	1.46	1.40
1	M	1180	A	C2-N3	6.52	1.39	1.33
1	M	1060	U	C2'-C1'	-6.52	1.46	1.53
2	N	332	G	P-O5'	-6.52	1.53	1.59
2	N	797	C	C4-N4	6.52	1.39	1.33
2	N	874	G	N7-C5	6.52	1.43	1.39
2	N	18	C	N1-C2	-6.52	1.33	1.40
2	N	39	G	O3'-P	-6.52	1.53	1.61
1	M	1064	G	P-O5'	-6.51	1.53	1.59
1	M	1220	G	N9-C8	6.51	1.42	1.37
2	N	237	G	C5-C6	-6.51	1.35	1.42
2	N	610	U	O3'-P	-6.51	1.53	1.61
1	M	1357	A	C5-C4	6.51	1.43	1.38
2	N	609	A	N9-C4	6.51	1.41	1.37
1	M	1095	U	N3-C4	6.51	1.44	1.38
2	N	372	C	C2'-C1'	-6.51	1.46	1.53
2	N	21	G	C5-C6	6.51	1.48	1.42
2	N	318	G	C5-C4	-6.51	1.33	1.38
2	N	369	G	C8-N7	6.51	1.34	1.30
1	M	938	A	N3-C4	-6.50	1.30	1.34
2	N	380	G	C2'-C1'	-6.50	1.46	1.53
2	N	723	U	C4-C5	6.50	1.49	1.43
2	N	793	U	O4'-C1'	6.50	1.50	1.41
1	M	1009	U	C5-C6	6.50	1.40	1.34
2	N	869	G	C4'-C3'	-6.50	1.46	1.53
1	M	1235	U	O4'-C1'	6.50	1.50	1.41
1	M	1283	U	C1'-N1	6.50	1.58	1.48
2	N	65	A	P-O5'	-6.50	1.53	1.59
2	N	473	U	P-O5'	-6.50	1.53	1.59
3	O	1455	G	N7-C5	-6.50	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	661	G	C2-N2	6.49	1.41	1.34
1	M	1271	A	C8-N7	-6.49	1.27	1.31
2	N	285	C	C4-N4	6.49	1.39	1.33
2	N	438	U	O3'-P	-6.49	1.53	1.61
1	M	979	C	N3-C4	6.49	1.38	1.33
2	N	28	A	P-O5'	-6.49	1.53	1.59
2	N	190	A	N3-C4	6.49	1.38	1.34
1	M	1174	G	C8-N7	6.49	1.34	1.30
2	N	661	G	N3-C4	-6.49	1.30	1.35
1	M	1355	G	N1-C2	6.49	1.43	1.37
1	M	997	U	P-O5'	6.49	1.66	1.59
2	N	851	G	N7-C5	-6.49	1.35	1.39
1	M	1308	U	C5-C6	6.48	1.40	1.34
2	N	82	G	C2-N3	6.48	1.38	1.32
1	M	1036	A	P-O5'	-6.48	1.53	1.59
1	M	1342	C	C2-O2	-6.48	1.18	1.24
2	N	922	G	C6-N1	6.48	1.44	1.39
3	O	1517	G	C6-N1	6.48	1.44	1.39
1	M	1006	G	N9-C4	-6.48	1.32	1.38
1	M	1223	C	C5'-C4'	6.48	1.59	1.51
2	N	344	A	O4'-C1'	-6.48	1.33	1.41
1	M	1166	G	P-O5'	-6.48	1.53	1.59
2	N	838	G	N7-C5	-6.48	1.35	1.39
1	M	937	A	C5-C6	-6.47	1.35	1.41
2	N	253	A	N1-C2	-6.47	1.28	1.34
2	N	343	U	N1-C2	6.47	1.44	1.38
2	N	552	U	C2-N3	6.47	1.42	1.37
2	N	93	U	C1'-N1	6.47	1.58	1.48
3	O	1408	A	C6-N6	6.47	1.39	1.33
1	M	1277	C	C4-C5	-6.47	1.37	1.43
2	N	81	A	N9-C4	-6.47	1.33	1.37
2	N	919	A	O4'-C1'	-6.47	1.33	1.41
3	O	1505	G	C2-N2	6.47	1.41	1.34
2	N	122	G	N3-C4	-6.47	1.30	1.35
2	N	90	C	P-O5'	-6.46	1.53	1.59
2	N	898	G	C2-N3	6.46	1.38	1.32
2	N	465	A	C5-C4	6.46	1.43	1.38
3	O	1403	C	C5'-C4'	6.46	1.59	1.51
3	O	1423	G	N1-C2	6.46	1.43	1.37
2	N	770	C	O3'-P	-6.46	1.53	1.61
2	N	117	G	N1-C2	6.46	1.43	1.37
1	M	1084	G	P-O5'	-6.46	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	73	C	C4-C5	-6.46	1.37	1.43
3	O	1507	A	C5-C4	6.46	1.43	1.38
1	M	1244	G	C2-N2	6.46	1.41	1.34
2	N	202	G	C2-N3	6.46	1.38	1.32
2	N	506	G	N1-C2	6.46	1.43	1.37
2	N	736	C	C5-C6	-6.46	1.29	1.34
3	O	1415	G	C3'-C2'	6.46	1.60	1.52
1	M	1390	U	C2-N3	6.45	1.42	1.37
2	N	617	G	C6-N1	6.45	1.44	1.39
2	N	685	G	C4'-C3'	-6.45	1.46	1.53
1	M	1139	G	N3-C4	6.45	1.40	1.35
2	N	525	C	O4'-C1'	6.45	1.50	1.41
1	M	976	G	N7-C5	-6.45	1.35	1.39
2	N	624	C	N3-C4	6.45	1.38	1.33
1	M	1179	A	O4'-C1'	-6.45	1.33	1.41
1	M	1312	G	N9-C8	6.45	1.42	1.37
2	N	321	A	C4'-C3'	-6.45	1.46	1.53
2	N	718	A	N9-C8	-6.45	1.32	1.37
1	M	974	A	N3-C4	6.45	1.38	1.34
2	N	496	A	C8-N7	-6.45	1.27	1.31
1	M	1336	C	C2-N3	6.44	1.41	1.35
2	N	821	G	C2'-C1'	-6.44	1.46	1.53
2	N	892	A	P-O5'	-6.44	1.53	1.59
1	M	1245	C	N1-C6	6.44	1.41	1.37
1	M	1245	C	C4-N4	6.44	1.39	1.33
2	N	25	C	C2-O2	6.44	1.30	1.24
2	N	540	G	C5-C4	-6.44	1.33	1.38
2	N	850	U	C2-N3	-6.44	1.33	1.37
2	N	35	G	N3-C4	6.44	1.40	1.35
2	N	630	A	N9-C8	6.44	1.43	1.37
1	M	1231	G	N9-C8	6.44	1.42	1.37
2	N	615	G	C3'-C2'	-6.44	1.45	1.52
2	N	469	C	C4-C5	-6.43	1.37	1.43
2	N	785	G	C8-N7	6.43	1.34	1.30
3	O	1459	G	C6-N1	6.43	1.44	1.39
2	N	271	C	C3'-C2'	-6.43	1.45	1.52
2	N	897	C	C4-N4	6.43	1.39	1.33
2	N	457	G	C6-N1	6.43	1.44	1.39
3	O	1515	G	C8-N7	-6.43	1.27	1.30
2	N	572	A	C8-N7	-6.43	1.27	1.31
2	N	629	A	C8-N7	-6.43	1.27	1.31
1	M	1006	G	N1-C2	6.42	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1324	A	C6-N1	6.42	1.40	1.35
1	M	1349	A	N9-C4	-6.42	1.33	1.37
2	N	904	U	C1'-N1	6.42	1.58	1.48
1	M	1026	G	P-O5'	-6.42	1.53	1.59
3	O	1467	C	N1-C6	-6.42	1.33	1.37
2	N	343	U	C5'-C4'	6.42	1.59	1.51
2	N	525	C	C2-N3	-6.42	1.30	1.35
2	N	712	A	C5'-C4'	6.42	1.59	1.51
2	N	74	A	C5'-C4'	6.42	1.59	1.51
2	N	453	G	C3'-C2'	-6.42	1.45	1.52
2	N	666	G	N1-C2	6.42	1.42	1.37
1	M	1260	G	N9-C4	6.42	1.43	1.38
2	N	679	C	N3-C4	6.42	1.38	1.33
2	N	754	C	C5'-C4'	6.42	1.59	1.51
2	N	905	U	C2-N3	6.42	1.42	1.37
3	O	1531	A	C2'-C1'	6.42	1.60	1.53
1	M	993	G	C2-N3	6.42	1.37	1.32
1	M	1122	U	N1-C6	6.41	1.43	1.38
1	M	1253	G	C8-N7	-6.41	1.27	1.30
2	N	368	U	C3'-C2'	6.41	1.60	1.52
2	N	410	G	C8-N7	-6.41	1.27	1.30
1	M	954	G	P-O5'	-6.41	1.53	1.59
2	N	138	G	N3-C4	-6.41	1.30	1.35
2	N	239	U	C4-O4	-6.41	1.18	1.23
1	M	1243	C	C4-N4	6.41	1.39	1.33
2	N	36	C	C4-N4	6.41	1.39	1.33
2	N	435	A	N3-C4	-6.41	1.31	1.34
2	N	763	G	C5-C6	-6.41	1.35	1.42
2	N	766	A	C5'-C4'	6.41	1.59	1.51
1	M	1057	G	O3'-P	-6.41	1.53	1.61
1	M	1183	U	C4-C5	-6.41	1.37	1.43
1	M	1327	C	N3-C4	6.41	1.38	1.33
2	N	406	G	C8-N7	6.41	1.34	1.30
2	N	670	G	N7-C5	-6.41	1.35	1.39
2	N	873	A	C2-N3	-6.41	1.27	1.33
3	O	1419	G	N7-C5	-6.41	1.35	1.39
2	N	6	G	P-O5'	6.40	1.66	1.59
2	N	178	C	N3-C4	6.40	1.38	1.33
2	N	846	G	P-O5'	-6.40	1.53	1.59
2	N	921	U	C2-N3	6.40	1.42	1.37
3	O	1485	U	C2'-C1'	-6.40	1.46	1.53
1	M	1148	U	O3'-P	-6.40	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	935	A	C6-N6	6.40	1.39	1.33
1	M	979	C	N1-C6	6.40	1.41	1.37
2	N	61	G	C8-N7	6.40	1.34	1.30
2	N	834	U	C3'-C2'	6.40	1.59	1.52
2	N	916	U	C1'-N1	6.40	1.58	1.48
3	O	1484	C	C4'-C3'	-6.40	1.46	1.53
1	M	1267	C	N1-C6	6.40	1.41	1.37
2	N	142	G	C6-N1	-6.40	1.35	1.39
2	N	270	A	C2'-O2'	-6.40	1.33	1.41
3	O	1446	A	C4'-C3'	6.40	1.60	1.53
1	M	1015	G	C3'-O3'	6.39	1.51	1.42
1	M	1223	C	N1-C6	6.39	1.41	1.37
2	N	400	C	C2-N3	6.39	1.40	1.35
2	N	900	A	P-O5'	-6.39	1.53	1.59
1	M	1206	G	N7-C5	-6.39	1.35	1.39
2	N	904	U	C4-O4	-6.39	1.18	1.23
3	O	1517	G	N1-C2	6.39	1.42	1.37
2	N	535	A	C5'-C4'	6.39	1.59	1.51
1	M	993	G	C2-N2	6.38	1.41	1.34
1	M	1134	G	C6-O6	6.38	1.29	1.24
1	M	1224	U	C2-N3	-6.38	1.33	1.37
2	N	191	G	N9-C4	-6.38	1.32	1.38
2	N	331	G	C8-N7	-6.38	1.27	1.30
2	N	671	G	N3-C4	-6.38	1.30	1.35
1	M	951	G	N7-C5	-6.38	1.35	1.39
2	N	308	C	C5-C6	6.38	1.39	1.34
3	O	1503	A	C2'-C1'	-6.38	1.46	1.53
1	M	1101	A	C6-N1	6.38	1.40	1.35
1	M	1194	U	C2-N3	6.38	1.42	1.37
2	N	243	A	N7-C5	-6.38	1.35	1.39
2	N	785	G	N9-C8	-6.38	1.33	1.37
2	N	46	G	C8-N7	6.38	1.34	1.30
2	N	446	G	C5-C6	-6.38	1.35	1.42
2	N	665	A	C6-N6	6.38	1.39	1.33
1	M	945	G	C8-N7	6.38	1.34	1.30
1	M	1344	C	C2'-C1'	-6.38	1.46	1.53
2	N	627	G	P-O5'	-6.38	1.53	1.59
2	N	50	A	C4'-C3'	6.38	1.60	1.53
2	N	274	A	C6-N6	6.38	1.39	1.33
2	N	524	G	C5-C6	-6.38	1.35	1.42
3	O	1409	C	N1-C2	-6.38	1.33	1.40
2	N	5	U	C4-C5	6.37	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	15	G	C2-N3	6.37	1.37	1.32
2	N	570	G	N7-C5	-6.37	1.35	1.39
2	N	778	G	C3'-C2'	6.37	1.59	1.52
2	N	42	G	C2-N3	6.37	1.37	1.32
2	N	592	G	N1-C2	6.37	1.42	1.37
2	N	915	A	C5-C6	-6.37	1.35	1.41
2	N	538	G	C2-N3	6.37	1.37	1.32
1	M	1203	C	C5'-C4'	6.37	1.58	1.51
2	N	58	C	C2'-C1'	-6.37	1.46	1.53
2	N	174	A	O4'-C1'	6.37	1.50	1.41
2	N	570	G	N9-C4	-6.37	1.32	1.38
2	N	920	U	C3'-O3'	6.37	1.51	1.42
3	O	1525	G	C2'-C1'	-6.37	1.46	1.53
1	M	933	G	C5-C6	6.37	1.48	1.42
1	M	1263	C	C4'-O4'	6.37	1.53	1.45
1	M	1318	A	C4'-C3'	6.37	1.60	1.53
2	N	529	G	N1-C2	6.37	1.42	1.37
2	N	742	G	N9-C8	6.37	1.42	1.37
1	M	1267	C	C4-C5	-6.36	1.37	1.43
2	N	199	A	C4'-C3'	6.36	1.60	1.53
2	N	384	G	N1-C2	6.36	1.42	1.37
3	O	1441	A	N9-C4	-6.36	1.34	1.37
3	O	1500	A	C6-N1	6.36	1.40	1.35
2	N	147	G	C2-N2	6.36	1.41	1.34
2	N	170	U	N1-C2	6.36	1.44	1.38
2	N	432	A	C8-N7	6.36	1.36	1.31
2	N	188	C	C2'-C1'	6.36	1.60	1.53
2	N	379	C	C1'-N1	6.36	1.58	1.48
2	N	906	A	N7-C5	-6.36	1.35	1.39
1	M	1220	G	C6-N1	6.36	1.44	1.39
2	N	756	C	C4-C5	6.36	1.48	1.43
1	M	1159	U	C2-N3	6.36	1.42	1.37
2	N	414	A	N7-C5	-6.36	1.35	1.39
2	N	870	U	O4'-C1'	-6.36	1.33	1.41
3	O	1516	G	P-O5'	-6.36	1.53	1.59
1	M	1033	G	N7-C5	-6.35	1.35	1.39
2	N	575	G	C8-N7	-6.35	1.27	1.30
1	M	1204	A	C5-C4	6.35	1.43	1.38
2	N	413	G	N9-C8	6.35	1.42	1.37
3	O	1481	U	C4'-C3'	6.35	1.60	1.53
1	M	934	C	C4'-O4'	-6.35	1.37	1.45
2	N	108	G	C8-N7	-6.35	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	455	G	C4'-C3'	-6.35	1.46	1.53
2	N	485	U	C5-C6	6.35	1.39	1.34
2	N	865	A	C8-N7	-6.35	1.27	1.31
2	N	888	G	C6-N1	6.35	1.44	1.39
1	M	1154	G	N9-C8	6.34	1.42	1.37
2	N	91	U	C4-C5	-6.34	1.37	1.43
2	N	537	G	C5-C4	6.34	1.42	1.38
2	N	678	U	C1'-N1	6.34	1.58	1.48
2	N	915	A	P-O5'	6.34	1.66	1.59
1	M	1341	U	N3-C4	6.34	1.44	1.38
2	N	708	C	C4-C5	6.34	1.48	1.43
2	N	721	G	N1-C2	6.34	1.42	1.37
1	M	1157	A	C6-N1	6.34	1.40	1.35
2	N	202	G	O4'-C1'	-6.34	1.33	1.41
1	M	1318	A	N9-C8	-6.34	1.32	1.37
2	N	379	C	C4-C5	-6.34	1.37	1.43
1	M	1355	G	P-O5'	-6.33	1.53	1.59
3	O	1481	U	P-O5'	-6.33	1.53	1.59
3	O	1487	G	N3-C4	-6.33	1.31	1.35
3	O	1499	A	C5'-C4'	6.33	1.58	1.51
2	N	185	U	C3'-C2'	-6.33	1.45	1.52
2	N	583	A	N7-C5	6.33	1.43	1.39
2	N	694	A	C8-N7	6.33	1.35	1.31
2	N	732	C	C4-C5	6.33	1.48	1.43
2	N	840	C	P-O5'	-6.33	1.53	1.59
2	N	78	A	C2'-C1'	-6.33	1.46	1.53
2	N	196	A	N7-C5	-6.33	1.35	1.39
2	N	197	A	N1-C2	-6.33	1.28	1.34
2	N	268	U	C2-N3	6.33	1.42	1.37
2	N	782	A	N7-C5	-6.33	1.35	1.39
1	M	1009	U	C2-N3	6.33	1.42	1.37
1	M	1040	U	C4-C5	6.33	1.49	1.43
1	M	1139	G	C6-N1	6.33	1.44	1.39
1	M	1023	U	C5'-C4'	6.33	1.58	1.51
1	M	1227	A	C6-N6	6.33	1.39	1.33
2	N	131	A	C5-C6	-6.32	1.35	1.41
2	N	212	G	P-O5'	-6.32	1.53	1.59
1	M	1037	C	C4-N4	6.32	1.39	1.33
1	M	1242	G	C2-N3	-6.32	1.27	1.32
1	M	1264	U	C4'-C3'	-6.32	1.46	1.53
1	M	1281	C	N3-C4	6.32	1.38	1.33
2	N	313	A	N7-C5	-6.32	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	958	A	O3'-P	-6.32	1.53	1.61
1	M	1360	A	P-O5'	-6.32	1.53	1.59
2	N	446	G	O3'-P	-6.32	1.53	1.61
2	N	904	U	N3-C4	6.32	1.44	1.38
1	M	1332	A	C6-N6	6.32	1.39	1.33
3	O	1395	C	P-O5'	-6.32	1.53	1.59
2	N	232	G	C2-N3	6.31	1.37	1.32
1	M	1175	G	C5-C6	-6.31	1.36	1.42
2	N	543	U	C2-N3	6.31	1.42	1.37
1	M	1035	A	C5-C4	6.31	1.43	1.38
2	N	798	U	C5'-C4'	6.31	1.58	1.51
1	M	1034	G	C2-N2	6.31	1.40	1.34
1	M	1158	C	N3-C4	6.31	1.38	1.33
2	N	75	G	N9-C8	-6.31	1.33	1.37
2	N	38	G	C3'-C2'	-6.31	1.45	1.52
1	M	1007	U	C4-C5	6.31	1.49	1.43
1	M	1278	G	C5-C4	6.30	1.42	1.38
2	N	447	G	C4'-C3'	6.30	1.60	1.53
2	N	715	A	N3-C4	6.30	1.38	1.34
1	M	1299	A	C6-N1	6.30	1.40	1.35
2	N	192	A	C5'-C4'	6.30	1.58	1.51
1	M	1050	G	O3'-P	-6.30	1.53	1.61
2	N	502	A	C5-C4	6.30	1.43	1.38
2	N	773	G	N9-C8	6.30	1.42	1.37
1	M	1068	G	O3'-P	-6.30	1.53	1.61
1	M	1253	G	C3'-C2'	6.30	1.59	1.52
2	N	573	A	C5-C6	6.30	1.46	1.41
3	O	1448	C	C4-C5	-6.30	1.38	1.43
1	M	1038	C	C2-N3	-6.30	1.30	1.35
2	N	469	C	N1-C2	6.30	1.46	1.40
2	N	813	U	P-O5'	6.30	1.66	1.59
2	N	257	G	N9-C8	6.29	1.42	1.37
1	M	1300	G	N3-C4	6.29	1.39	1.35
2	N	508	U	O3'-P	-6.29	1.53	1.61
1	M	956	U	C4'-C3'	-6.29	1.46	1.53
1	M	1133	G	C6-O6	6.29	1.29	1.24
1	M	1324	A	P-O5'	-6.29	1.53	1.59
1	M	1260	G	N9-C8	6.29	1.42	1.37
1	M	963	G	C8-N7	6.29	1.34	1.30
2	N	113	G	C6-N1	6.29	1.44	1.39
2	N	768	A	C8-N7	-6.29	1.27	1.31
2	N	774	G	N9-C4	-6.29	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	227	G	N7-C5	-6.29	1.35	1.39
1	M	1007	U	N1-C2	6.28	1.44	1.38
2	N	278	G	N1-C2	6.28	1.42	1.37
2	N	461	A	N3-C4	6.28	1.38	1.34
2	N	70	U	N3-C4	6.28	1.44	1.38
2	N	16	A	C6-N1	6.28	1.40	1.35
2	N	50	A	C5-C4	6.28	1.43	1.38
2	N	559	A	C8-N7	6.28	1.35	1.31
2	N	807	A	C3'-C2'	-6.28	1.45	1.52
3	O	1514	G	N3-C4	6.28	1.39	1.35
1	M	1166	G	O3'-P	-6.28	1.53	1.61
2	N	611	C	C2-O2	6.28	1.30	1.24
2	N	634	C	N3-C4	6.28	1.38	1.33
2	N	661	G	C2-N3	6.28	1.37	1.32
2	N	49	U	C1'-N1	6.28	1.58	1.48
2	N	74	A	N7-C5	-6.28	1.35	1.39
2	N	325	A	C6-N1	6.27	1.40	1.35
2	N	752	G	C2-N3	6.27	1.37	1.32
2	N	755	G	C3'-C2'	-6.27	1.45	1.52
1	M	1043	G	N1-C2	6.27	1.42	1.37
1	M	1290	G	C2-N3	6.27	1.37	1.32
2	N	78	A	C2-N3	-6.27	1.27	1.33
1	M	1281	C	C4-N4	6.27	1.39	1.33
2	N	155	A	C5-C4	6.27	1.43	1.38
2	N	218	U	C3'-C2'	6.27	1.59	1.52
1	M	1111	A	C5'-C4'	6.26	1.58	1.51
2	N	284	C	C5-C6	6.26	1.39	1.34
2	N	531	U	C4-O4	-6.26	1.18	1.23
2	N	724	G	N1-C2	6.26	1.42	1.37
2	N	21	G	C6-N1	6.26	1.44	1.39
2	N	556	C	C3'-O3'	6.26	1.50	1.42
2	N	665	A	O4'-C1'	-6.26	1.33	1.41
2	N	428	G	O3'-P	-6.26	1.53	1.61
2	N	756	C	O3'-P	6.26	1.68	1.61
2	N	899	C	C1'-N1	6.26	1.58	1.48
3	O	1410	A	N9-C8	-6.26	1.32	1.37
1	M	933	G	N7-C5	6.26	1.43	1.39
1	M	946	A	N7-C5	-6.26	1.35	1.39
1	M	1031	C	C2'-C1'	6.26	1.60	1.53
2	N	228	A	C5-C4	6.26	1.43	1.38
2	N	299	G	C8-N7	-6.26	1.27	1.30
3	O	1513	A	C6-N1	6.26	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	575	G	N1-C2	6.25	1.42	1.37
2	N	593	U	N1-C2	-6.25	1.32	1.38
2	N	109	A	C8-N7	-6.25	1.27	1.31
1	M	998	C	O3'-P	-6.25	1.53	1.61
1	M	1274	A	C5-C4	6.25	1.43	1.38
1	M	1380	U	C4-C5	-6.25	1.38	1.43
1	M	1385	G	N9-C8	-6.25	1.33	1.37
2	N	22	G	C3'-C2'	6.25	1.59	1.52
2	N	385	C	C4-N4	6.25	1.39	1.33
2	N	643	C	C4-N4	6.25	1.39	1.33
3	O	1458	G	C6-O6	-6.25	1.18	1.24
2	N	179	A	N1-C2	6.25	1.40	1.34
2	N	402	G	O3'-P	-6.25	1.53	1.61
1	M	1230	C	C2-N3	6.25	1.40	1.35
2	N	502	A	C6-N6	6.25	1.39	1.33
2	N	819	A	N7-C5	-6.25	1.35	1.39
1	M	1014	A	C6-N1	6.24	1.40	1.35
1	M	1388	C	C1'-N1	6.24	1.58	1.48
2	N	559	A	P-O5'	-6.24	1.53	1.59
2	N	657	U	C1'-N1	6.24	1.58	1.48
2	N	797	C	N3-C4	6.24	1.38	1.33
3	O	1450	U	N1-C6	6.24	1.43	1.38
2	N	289	G	C5'-C4'	6.24	1.58	1.51
1	M	1150	A	O3'-P	-6.24	1.53	1.61
2	N	64	G	C2-N3	6.24	1.37	1.32
1	M	1183	U	C5'-C4'	6.24	1.58	1.51
2	N	97	G	N1-C2	6.24	1.42	1.37
2	N	497	G	N9-C4	-6.24	1.32	1.38
3	O	1479	C	N1-C6	6.24	1.40	1.37
2	N	397	A	O4'-C1'	-6.24	1.33	1.41
1	M	1383	C	C4'-C3'	6.24	1.60	1.53
2	N	176	C	N1-C6	-6.24	1.33	1.37
2	N	238	A	C6-N6	6.24	1.39	1.33
2	N	303	A	C6-N6	6.24	1.39	1.33
2	N	536	C	C3'-C2'	6.24	1.59	1.52
2	N	566	G	P-O5'	-6.24	1.53	1.59
1	M	1229	A	C2-N3	6.23	1.39	1.33
2	N	674	G	P-O5'	-6.23	1.53	1.59
1	M	953	G	C5'-C4'	6.23	1.58	1.51
1	M	1383	C	C4-N4	6.23	1.39	1.33
2	N	346	G	N3-C4	-6.23	1.31	1.35
2	N	250	A	C8-N7	-6.23	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	901	A	P-O5'	-6.23	1.53	1.59
2	N	269	C	C5'-C4'	6.23	1.58	1.51
1	M	970	C	C2'-C1'	-6.23	1.46	1.53
1	M	996	A	C5'-C4'	-6.23	1.43	1.51
2	N	862	C	O3'-P	-6.23	1.53	1.61
2	N	881	G	C2-N3	6.23	1.37	1.32
1	M	1284	C	C2'-C1'	-6.23	1.46	1.53
2	N	428	G	C5'-C4'	6.23	1.58	1.51
1	M	1142	G	P-O5'	6.22	1.66	1.59
2	N	608	A	N9-C8	6.22	1.42	1.37
1	M	1250	A	C6-N6	6.22	1.39	1.33
2	N	404	G	C6-N1	6.22	1.44	1.39
2	N	905	U	O3'-P	-6.22	1.53	1.61
1	M	1194	U	N1-C6	6.22	1.43	1.38
2	N	134	G	C5'-C4'	6.22	1.58	1.51
2	N	520	A	C6-N1	6.22	1.40	1.35
1	M	1202	U	N1-C2	6.22	1.44	1.38
2	N	364	A	C3'-C2'	6.22	1.59	1.52
2	N	543	U	C4'-C3'	6.22	1.59	1.53
1	M	1155	A	O3'-P	-6.22	1.53	1.61
1	M	1350	A	O4'-C1'	-6.22	1.33	1.41
2	N	492	C	C4'-C3'	-6.22	1.46	1.53
2	N	769	G	P-O5'	-6.22	1.53	1.59
1	M	935	A	N7-C5	-6.21	1.35	1.39
2	N	353	A	N9-C8	6.21	1.42	1.37
1	M	1289	A	C5'-C4'	6.21	1.58	1.51
2	N	2	A	C4'-C3'	6.21	1.59	1.53
2	N	246	A	C5-C4	-6.21	1.34	1.38
2	N	248	C	N1-C6	6.21	1.40	1.37
2	N	342	C	N1-C6	6.21	1.40	1.37
3	O	1462	C	C3'-C2'	-6.21	1.46	1.52
2	N	687	A	C6-N1	6.21	1.39	1.35
1	M	1143	G	C5-C6	-6.21	1.36	1.42
1	M	1155	A	C6-N1	6.21	1.39	1.35
2	N	33	A	N9-C4	-6.21	1.34	1.37
2	N	533	A	C4'-C3'	6.21	1.59	1.53
2	N	557	G	C8-N7	-6.21	1.27	1.30
2	N	45	G	N9-C8	6.21	1.42	1.37
2	N	777	A	N7-C5	-6.21	1.35	1.39
1	M	975	A	C2'-C1'	-6.21	1.46	1.53
1	M	1067	A	O3'-P	-6.21	1.53	1.61
1	M	1177	G	N7-C5	-6.21	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	917	G	C2-N3	6.21	1.37	1.32
1	M	1259	C	N1-C6	6.20	1.40	1.37
2	N	703	G	N9-C4	-6.20	1.32	1.38
2	N	922	G	C2-N2	6.20	1.40	1.34
2	N	411	A	C3'-O3'	6.20	1.50	1.42
2	N	531	U	P-O5'	-6.20	1.53	1.59
1	M	1314	C	C2'-C1'	-6.20	1.46	1.53
3	O	1414	U	N1-C2	6.20	1.44	1.38
3	O	1530	G	N3-C4	6.20	1.39	1.35
1	M	1033	G	N3-C4	-6.20	1.31	1.35
1	M	1036	A	C6-N6	6.20	1.39	1.33
2	N	232	G	C8-N7	6.20	1.34	1.30
1	M	986	U	C4'-O4'	6.20	1.53	1.45
2	N	509	A	C6-N6	6.20	1.39	1.33
1	M	1146	A	C4'-C3'	6.20	1.59	1.53
1	M	1340	A	C2-N3	6.20	1.39	1.33
2	N	46	G	C6-N1	6.20	1.43	1.39
2	N	765	G	N1-C2	6.20	1.42	1.37
2	N	715	A	N7-C5	6.19	1.43	1.39
1	M	1155	A	N1-C2	6.19	1.40	1.34
2	N	16	A	C3'-O3'	6.19	1.50	1.42
2	N	358	U	C3'-O3'	6.19	1.50	1.42
2	N	815	A	C4'-C3'	6.19	1.59	1.53
1	M	1229	A	N7-C5	-6.19	1.35	1.39
2	N	22	G	N7-C5	6.19	1.43	1.39
2	N	568	G	N7-C5	6.19	1.43	1.39
2	N	887	G	N9-C4	-6.19	1.32	1.38
1	M	1329	A	C8-N7	-6.19	1.27	1.31
2	N	817	C	C4-N4	6.19	1.39	1.33
2	N	528	C	N1-C6	6.19	1.40	1.37
2	N	889	A	C3'-C2'	6.19	1.59	1.52
1	M	1363	A	N9-C8	-6.19	1.32	1.37
2	N	504	C	P-O5'	-6.19	1.53	1.59
2	N	129	A	C6-N6	6.18	1.38	1.33
2	N	477	C	C4-C5	6.18	1.47	1.43
2	N	50	A	N3-C4	6.18	1.38	1.34
2	N	56	U	O4'-C1'	-6.18	1.33	1.41
2	N	160	A	C2'-C1'	-6.18	1.46	1.53
2	N	543	U	N1-C2	6.18	1.44	1.38
1	M	936	C	N3-C4	6.18	1.38	1.33
2	N	2	A	C3'-C2'	6.18	1.59	1.52
1	M	1024	G	N9-C4	6.18	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1093	A	N1-C2	6.18	1.40	1.34
1	M	1150	A	N9-C4	6.18	1.41	1.37
2	N	78	A	C3'-C2'	6.18	1.59	1.52
2	N	254	G	N9-C8	-6.18	1.33	1.37
2	N	874	G	P-O5'	-6.18	1.53	1.59
3	O	1527	U	C4-C5	6.18	1.49	1.43
2	N	226	G	C8-N7	-6.17	1.27	1.30
2	N	364	A	C2'-C1'	-6.17	1.46	1.53
1	M	940	C	N3-C4	6.17	1.38	1.33
1	M	1094	G	C5-C4	6.17	1.42	1.38
1	M	1128	C	P-O5'	-6.17	1.53	1.59
2	N	520	A	N9-C8	6.17	1.42	1.37
2	N	210	C	O4'-C1'	6.17	1.49	1.41
2	N	871	U	N3-C4	6.17	1.44	1.38
1	M	1242	G	C8-N7	6.17	1.34	1.30
1	M	1384	C	C4-N4	6.17	1.39	1.33
2	N	99	C	N1-C6	6.17	1.40	1.37
2	N	168	G	C5-C4	6.17	1.42	1.38
2	N	351	G	C5-C6	-6.17	1.36	1.42
2	N	606	G	C5'-C4'	6.17	1.58	1.51
2	N	905	U	N3-C4	6.17	1.44	1.38
2	N	804	U	C4'-C3'	-6.16	1.46	1.53
1	M	1359	C	N1-C6	6.16	1.40	1.37
1	M	987	G	C2-N2	6.16	1.40	1.34
1	M	1026	G	C2-N3	6.16	1.37	1.32
2	N	304	U	C4-C5	6.16	1.49	1.43
2	N	336	A	C5-C4	6.16	1.43	1.38
2	N	651	C	C4-N4	6.16	1.39	1.33
3	O	1494	G	O3'-P	-6.16	1.53	1.61
1	M	1352	C	C5'-C4'	6.16	1.58	1.51
2	N	558	G	O4'-C1'	6.16	1.49	1.41
2	N	601	G	C2'-C1'	-6.16	1.46	1.53
2	N	817	C	C4-C5	6.16	1.47	1.43
1	M	1246	A	C2'-O2'	6.16	1.49	1.41
2	N	40	C	C2-N3	6.16	1.40	1.35
2	N	667	G	N7-C5	-6.16	1.35	1.39
2	N	751	U	N3-C4	6.16	1.44	1.38
2	N	881	G	C6-N1	6.16	1.43	1.39
3	O	1435	G	C5-C4	6.15	1.42	1.38
3	O	1508	A	N9-C8	6.15	1.42	1.37
1	M	1204	A	C6-N6	6.15	1.38	1.33
1	M	1270	G	C4'-O4'	6.15	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1300	G	C5-C6	6.15	1.48	1.42
3	O	1528	U	C2'-C1'	-6.15	1.46	1.53
1	M	1278	G	C2-N3	6.15	1.37	1.32
2	N	670	G	C8-N7	-6.15	1.27	1.30
1	M	1033	G	C8-N7	6.15	1.34	1.30
2	N	730	G	N9-C4	6.15	1.42	1.38
1	M	1077	G	N3-C4	6.14	1.39	1.35
1	M	1189	U	C4-C5	-6.14	1.38	1.43
1	M	1276	G	C8-N7	-6.14	1.27	1.30
1	M	1311	A	N7-C5	-6.14	1.35	1.39
2	N	156	C	C2'-C1'	-6.14	1.46	1.53
2	N	275	G	N9-C4	-6.14	1.33	1.38
2	N	435	A	N9-C4	6.14	1.41	1.37
2	N	700	G	N1-C2	6.14	1.42	1.37
1	M	996	A	C8-N7	-6.14	1.27	1.31
2	N	840	C	O3'-P	-6.14	1.53	1.61
2	N	569	C	C2'-C1'	-6.14	1.46	1.53
2	N	17	U	N1-C6	-6.14	1.32	1.38
2	N	66	A	C4'-C3'	6.14	1.59	1.53
2	N	661	G	C2'-C1'	-6.14	1.46	1.53
1	M	937	A	C3'-C2'	6.14	1.59	1.52
3	O	1431	A	C6-N1	6.14	1.39	1.35
2	N	123	U	C4'-O4'	-6.14	1.37	1.45
2	N	325	A	C8-N7	-6.14	1.27	1.31
2	N	522	C	N3-C4	6.14	1.38	1.33
2	N	670	G	C2-N2	6.14	1.40	1.34
2	N	853	C	C2'-C1'	6.14	1.60	1.53
3	O	1416	G	N9-C4	-6.14	1.33	1.38
1	M	1358	U	C5-C6	6.13	1.39	1.34
2	N	164	G	N7-C5	-6.13	1.35	1.39
2	N	382	A	C5-C4	6.13	1.43	1.38
3	O	1448	C	C3'-C2'	6.13	1.59	1.52
3	O	1492	A	P-O5'	6.13	1.65	1.59
2	N	148	G	C2-N3	6.13	1.37	1.32
2	N	887	G	C5'-C4'	6.13	1.58	1.51
1	M	941	G	O4'-C1'	6.13	1.49	1.41
2	N	75	G	N3-C4	-6.13	1.31	1.35
2	N	383	A	C6-N1	6.13	1.39	1.35
2	N	329	A	C2-N3	6.12	1.39	1.33
2	N	903	G	C5-C4	6.12	1.42	1.38
2	N	856	C	N1-C6	6.12	1.40	1.37
1	M	983	A	C5'-C4'	6.12	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1048	G	C2-N3	6.12	1.37	1.32
3	O	1514	G	C3'-C2'	-6.12	1.46	1.52
1	M	1139	G	N1-C2	6.12	1.42	1.37
2	N	638	U	P-O5'	-6.12	1.53	1.59
1	M	1163	A	C6-N6	6.12	1.38	1.33
1	M	1181	G	C8-N7	6.12	1.34	1.30
1	M	1305	G	N9-C4	6.12	1.42	1.38
1	M	1319	A	N3-C4	-6.12	1.31	1.34
2	N	334	C	C4'-O4'	6.12	1.53	1.45
2	N	627	G	C2-N2	6.12	1.40	1.34
3	O	1392	G	C8-N7	-6.12	1.27	1.30
2	N	481	G	N9-C8	6.12	1.42	1.37
3	O	1478	U	N1-C2	6.12	1.44	1.38
1	M	1058	G	N7-C5	-6.11	1.35	1.39
1	M	1284	C	C3'-O3'	6.11	1.50	1.42
2	N	730	G	C2'-C1'	-6.11	1.46	1.53
3	O	1514	G	C8-N7	6.11	1.34	1.30
1	M	1362	A	N9-C8	-6.11	1.32	1.37
2	N	453	G	C2-N3	6.11	1.37	1.32
2	N	770	C	C2-N3	6.11	1.40	1.35
1	M	1303	C	C5'-C4'	6.10	1.58	1.51
2	N	726	C	N1-C6	6.10	1.40	1.37
2	N	716	A	C5-C6	6.10	1.46	1.41
2	N	903	G	C6-N1	6.10	1.43	1.39
2	N	471	U	C4-C5	6.10	1.49	1.43
3	O	1533	C	C4-N4	6.10	1.39	1.33
2	N	765	G	C2-N2	6.10	1.40	1.34
2	N	134	G	O4'-C1'	6.09	1.49	1.41
2	N	649	A	N7-C5	-6.09	1.35	1.39
2	N	683	G	C2'-O2'	-6.09	1.33	1.41
2	N	290	C	C5-C6	-6.09	1.29	1.34
2	N	805	C	C4-C5	6.09	1.47	1.43
1	M	998	C	C4'-O4'	-6.09	1.37	1.45
2	N	5	U	C5'-C4'	6.09	1.58	1.51
2	N	39	G	C6-N1	6.09	1.43	1.39
2	N	441	A	C5'-C4'	6.09	1.58	1.51
2	N	587	G	C8-N7	-6.09	1.27	1.30
2	N	583	A	C3'-O3'	6.09	1.50	1.42
2	N	679	C	P-O5'	-6.09	1.53	1.59
3	O	1440	U	C4'-C3'	6.09	1.59	1.53
1	M	1238	A	N3-C4	-6.08	1.31	1.34
2	N	72	A	C8-N7	-6.08	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	179	A	C4'-C3'	6.08	1.59	1.53
2	N	832	G	C2-N3	6.08	1.37	1.32
1	M	1025	U	N1-C6	6.08	1.43	1.38
2	N	280	C	C2'-C1'	-6.08	1.46	1.53
2	N	745	G	C8-N7	-6.08	1.27	1.30
2	N	894	G	N9-C8	6.08	1.42	1.37
2	N	918	A	C3'-C2'	-6.08	1.46	1.52
3	O	1422	G	N7-C5	-6.08	1.35	1.39
2	N	765	G	C2-N3	6.08	1.37	1.32
2	N	554	A	N7-C5	-6.08	1.35	1.39
3	O	1400	C	O3'-P	-6.08	1.53	1.61
3	O	1467	C	C4-C5	-6.08	1.38	1.43
2	N	897	C	C5'-C4'	6.08	1.58	1.51
1	M	1111	A	C2-N3	6.08	1.39	1.33
1	M	1119	C	C4-C5	6.08	1.47	1.43
2	N	57	G	C5-C6	-6.08	1.36	1.42
2	N	329	A	N3-C4	-6.08	1.31	1.34
2	N	814	A	N3-C4	-6.08	1.31	1.34
2	N	878	A	N3-C4	-6.08	1.31	1.34
2	N	898	G	C5-C4	6.08	1.42	1.38
1	M	1079	G	C5'-C4'	6.07	1.58	1.51
1	M	1279	G	C8-N7	6.07	1.34	1.30
2	N	398	U	C5-C6	6.07	1.39	1.34
2	N	797	C	C2-N3	6.07	1.40	1.35
3	O	1398	A	C2'-C1'	-6.07	1.46	1.53
1	M	1202	U	N1-C6	6.07	1.43	1.38
2	N	254	G	N1-C2	6.07	1.42	1.37
2	N	262	A	C4'-C3'	6.07	1.59	1.53
2	N	454	G	C5'-C4'	6.07	1.58	1.51
1	M	1212	U	C4-C5	6.07	1.49	1.43
1	M	1265	C	N1-C6	6.07	1.40	1.37
1	M	1285	A	C6-N6	6.07	1.38	1.33
2	N	313	A	C5-C6	6.07	1.46	1.41
2	N	411	A	O3'-P	-6.07	1.53	1.61
2	N	915	A	N7-C5	-6.07	1.35	1.39
1	M	974	A	C5'-C4'	6.07	1.58	1.51
1	M	1059	C	C3'-C2'	6.07	1.59	1.52
1	M	1255	G	C3'-C2'	6.07	1.59	1.52
2	N	33	A	O4'-C1'	6.07	1.49	1.41
2	N	267	C	C4'-C3'	-6.07	1.46	1.53
2	N	530	G	C2-N2	6.07	1.40	1.34
2	N	2	A	N9-C4	6.07	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	394	G	C5-C4	6.07	1.42	1.38
2	N	537	G	N7-C5	-6.07	1.35	1.39
2	N	810	C	C5-C6	-6.07	1.29	1.34
2	N	909	A	O3'-P	-6.07	1.53	1.61
1	M	1128	C	C4-N4	6.06	1.39	1.33
2	N	107	G	C5-C4	6.06	1.42	1.38
1	M	943	U	N3-C4	6.06	1.44	1.38
2	N	867	G	C4'-C3'	6.06	1.59	1.53
2	N	135	C	C5'-C4'	6.06	1.58	1.51
2	N	840	C	C2-N3	6.06	1.40	1.35
2	N	879	C	C4-N4	6.06	1.39	1.33
2	N	887	G	N1-C2	6.06	1.42	1.37
2	N	61	G	N9-C4	-6.06	1.33	1.38
2	N	710	G	C2-N3	6.06	1.37	1.32
2	N	818	G	C8-N7	6.06	1.34	1.30
1	M	1306	A	C6-N1	6.06	1.39	1.35
2	N	413	G	C4'-O4'	-6.06	1.37	1.45
2	N	441	A	O4'-C1'	6.06	1.49	1.41
2	N	558	G	C5-C6	-6.06	1.36	1.42
2	N	657	U	N1-C2	6.06	1.44	1.38
2	N	694	A	N1-C2	6.06	1.39	1.34
1	M	930	C	P-O5'	6.06	1.65	1.59
2	N	545	C	C3'-C2'	-6.06	1.46	1.52
2	N	808	C	C5'-C4'	6.06	1.58	1.51
2	N	890	G	C2-N2	6.06	1.40	1.34
1	M	1107	C	C4-N4	6.05	1.39	1.33
2	N	790	A	N7-C5	-6.05	1.35	1.39
2	N	498	A	C6-N6	6.05	1.38	1.33
3	O	1398	A	C8-N7	-6.05	1.27	1.31
1	M	990	C	N1-C6	6.05	1.40	1.37
2	N	11	G	P-O5'	-6.05	1.53	1.59
2	N	110	C	N3-C4	6.05	1.38	1.33
2	N	613	C	C4-C5	6.05	1.47	1.43
2	N	741	G	N1-C2	6.05	1.42	1.37
3	O	1420	U	N1-C6	6.04	1.43	1.38
2	N	699	C	C5'-C4'	6.04	1.58	1.51
1	M	1002	G	C4'-C3'	6.04	1.59	1.53
2	N	56	U	C4'-C3'	6.04	1.59	1.53
2	N	702	A	N9-C4	-6.04	1.34	1.37
2	N	322	C	C4'-O4'	-6.04	1.37	1.45
2	N	441	A	N9-C4	-6.04	1.34	1.37
1	M	1142	G	C3'-O3'	6.04	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1252	A	C8-N7	6.04	1.35	1.31
2	N	488	C	N3-C4	6.04	1.38	1.33
2	N	574	A	P-O5'	-6.04	1.53	1.59
2	N	655	A	O4'-C1'	6.04	1.49	1.41
2	N	766	A	C2'-C1'	-6.03	1.46	1.53
2	N	876	C	P-O5'	-6.03	1.53	1.59
2	N	918	A	C2'-C1'	-6.03	1.46	1.53
1	M	1069	C	P-O5'	-6.03	1.53	1.59
2	N	813	U	O3'-P	-6.03	1.53	1.61
2	N	903	G	C3'-C2'	6.03	1.59	1.52
1	M	1300	G	C4'-C3'	6.03	1.59	1.53
2	N	726	C	O3'-P	-6.03	1.53	1.61
3	O	1434	A	C5-C4	6.03	1.43	1.38
2	N	331	G	C4'-C3'	6.03	1.59	1.53
2	N	555	U	O3'-P	-6.03	1.53	1.61
2	N	20	U	C2-N3	6.03	1.42	1.37
2	N	299	G	C2'-C1'	-6.03	1.46	1.53
2	N	860	A	N9-C8	6.03	1.42	1.37
2	N	114	U	N1-C6	6.03	1.43	1.38
2	N	203	G	C5'-C4'	-6.03	1.44	1.51
2	N	237	G	O3'-P	-6.02	1.53	1.61
3	O	1423	G	C2-N3	6.02	1.37	1.32
1	M	1183	U	C1'-N1	6.02	1.57	1.48
1	M	1237	C	N1-C2	-6.02	1.34	1.40
2	N	126	G	N3-C4	6.02	1.39	1.35
2	N	471	U	P-O5'	-6.02	1.53	1.59
3	O	1482	G	C2-N3	6.02	1.37	1.32
1	M	1177	G	C8-N7	-6.02	1.27	1.30
2	N	288	A	N7-C5	6.02	1.42	1.39
1	M	1096	C	O4'-C1'	-6.02	1.33	1.41
2	N	42	G	C3'-C2'	-6.02	1.46	1.52
2	N	695	A	C6-N6	6.02	1.38	1.33
3	O	1468	A	N7-C5	-6.02	1.35	1.39
2	N	120	A	C4'-O4'	-6.02	1.37	1.45
2	N	425	G	P-O5'	-6.02	1.53	1.59
2	N	857	C	C2'-C1'	6.02	1.59	1.53
1	M	966	G	N3-C4	6.01	1.39	1.35
2	N	48	C	N1-C6	-6.01	1.33	1.37
2	N	118	U	P-O5'	-6.01	1.53	1.59
2	N	547	A	C2'-C1'	-6.01	1.46	1.53
2	N	179	A	C8-N7	-6.01	1.27	1.31
2	N	425	G	C6-N1	6.01	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	466	A	N7-C5	-6.01	1.35	1.39
2	N	780	A	C6-N1	6.01	1.39	1.35
3	O	1439	G	N9-C4	6.01	1.42	1.38
2	N	750	C	P-O5'	-6.01	1.53	1.59
2	N	253	A	C5-C4	-6.01	1.34	1.38
2	N	327	A	N7-C5	-6.01	1.35	1.39
2	N	526	C	P-O5'	6.01	1.65	1.59
2	N	772	U	N3-C4	6.00	1.43	1.38
1	M	1264	U	O3'-P	-6.00	1.53	1.61
2	N	171	A	N9-C4	-6.00	1.34	1.37
2	N	822	U	O3'-P	-6.00	1.53	1.61
1	M	1153	G	N7-C5	-6.00	1.35	1.39
2	N	27	G	C8-N7	-6.00	1.27	1.30
2	N	321	A	C8-N7	-6.00	1.27	1.31
2	N	368	U	C5'-C4'	6.00	1.58	1.51
2	N	493	A	C6-N6	6.00	1.38	1.33
2	N	513	C	C2-N3	6.00	1.40	1.35
2	N	709	U	C2-N3	6.00	1.42	1.37
2	N	66	A	N7-C5	-6.00	1.35	1.39
2	N	799	G	C5-C4	6.00	1.42	1.38
1	M	1310	G	C6-N1	6.00	1.43	1.39
1	M	1131	G	C5-C4	5.99	1.42	1.38
1	M	1184	G	C5-C4	5.99	1.42	1.38
1	M	1303	C	P-O5'	-5.99	1.53	1.59
1	M	1179	A	N9-C4	5.99	1.41	1.37
2	N	187	G	N1-C2	5.99	1.42	1.37
2	N	670	G	C2-N3	5.99	1.37	1.32
2	N	764	C	C4-N4	5.99	1.39	1.33
3	O	1532	U	C5-C6	5.99	1.39	1.34
1	M	1047	G	C3'-O3'	5.99	1.50	1.42
1	M	1287	A	N9-C4	5.99	1.41	1.37
2	N	553	A	N9-C8	-5.99	1.32	1.37
2	N	907	A	C2'-C1'	-5.99	1.46	1.53
1	M	1129	C	C3'-C2'	-5.98	1.46	1.52
1	M	1366	C	C5'-C4'	5.98	1.58	1.51
1	M	1065	U	C2-N3	5.98	1.42	1.37
2	N	361	G	C5-C4	-5.98	1.34	1.38
3	O	1397	C	C2'-C1'	-5.98	1.46	1.53
1	M	1008	U	C2-N3	-5.98	1.33	1.37
1	M	1278	G	C4'-C3'	5.98	1.59	1.53
1	M	1366	C	C1'-N1	5.98	1.57	1.48
1	M	1038	C	C4-C5	5.98	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1166	G	C2-N3	5.98	1.37	1.32
1	M	1373	G	N3-C4	-5.98	1.31	1.35
2	N	475	C	C1'-N1	5.98	1.57	1.48
2	N	574	A	C6-N1	5.98	1.39	1.35
2	N	840	C	C2'-C1'	-5.98	1.46	1.53
3	O	1482	G	O4'-C1'	5.98	1.49	1.41
2	N	142	G	C5-C4	5.98	1.42	1.38
2	N	461	A	C3'-O3'	5.98	1.50	1.42
1	M	949	A	C3'-O3'	5.97	1.50	1.42
1	M	1251	A	C2'-C1'	-5.97	1.46	1.53
1	M	1329	A	C6-N6	5.97	1.38	1.33
1	M	1358	U	O3'-P	-5.97	1.53	1.61
2	N	113	G	C2'-C1'	-5.97	1.46	1.53
2	N	195	A	C2'-C1'	5.97	1.59	1.53
2	N	413	G	C8-N7	-5.97	1.27	1.30
2	N	453	G	N1-C2	5.97	1.42	1.37
2	N	512	U	O3'-P	-5.97	1.53	1.61
2	N	630	A	C5-C4	5.97	1.43	1.38
3	O	1503	A	C2-N3	5.97	1.39	1.33
1	M	949	A	N7-C5	-5.97	1.35	1.39
1	M	1370	G	C2'-C1'	-5.97	1.46	1.53
2	N	202	G	C8-N7	5.97	1.34	1.30
3	O	1394	A	N1-C2	5.97	1.39	1.34
3	O	1414	U	O3'-P	-5.97	1.53	1.61
3	O	1434	A	N9-C8	-5.97	1.32	1.37
1	M	1214	C	C4-C5	5.97	1.47	1.43
1	M	1356	G	C5-C4	5.97	1.42	1.38
2	N	43	C	C4-N4	5.97	1.39	1.33
2	N	308	C	C2-N3	5.97	1.40	1.35
1	M	1379	G	C8-N7	5.96	1.34	1.30
2	N	679	C	C2-N3	5.96	1.40	1.35
1	M	1092	A	C3'-C2'	5.96	1.59	1.52
2	N	532	A	N7-C5	-5.96	1.35	1.39
2	N	726	C	C1'-N1	-5.96	1.38	1.46
1	M	1200	C	N1-C2	-5.96	1.34	1.40
2	N	115	G	C8-N7	-5.96	1.27	1.30
2	N	873	A	N3-C4	-5.96	1.31	1.34
3	O	1392	G	N7-C5	-5.96	1.35	1.39
1	M	979	C	C3'-C2'	-5.96	1.46	1.52
1	M	1321	U	O3'-P	-5.96	1.54	1.61
2	N	378	G	C8-N7	-5.96	1.27	1.30
3	O	1479	C	C4-N4	5.96	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	165	G	N7-C5	-5.96	1.35	1.39
1	M	1266	G	N1-C2	5.95	1.42	1.37
1	M	1358	U	C1'-N1	5.95	1.57	1.48
2	N	83	C	C2-O2	-5.95	1.19	1.24
2	N	662	U	N1-C6	5.95	1.43	1.38
2	N	804	U	C3'-O3'	5.95	1.50	1.42
1	M	950	U	C4'-C3'	5.95	1.59	1.53
2	N	445	G	C5-C6	-5.95	1.36	1.42
2	N	443	C	N1-C6	5.95	1.40	1.37
1	M	1058	G	C5'-C4'	5.95	1.58	1.51
1	M	1241	G	N9-C8	5.95	1.42	1.37
2	N	369	G	C2-N3	5.95	1.37	1.32
2	N	646	G	N9-C4	-5.95	1.33	1.38
3	O	1399	C	C5'-C4'	5.95	1.58	1.51
2	N	253	A	N3-C4	-5.94	1.31	1.34
2	N	576	C	C2-N3	5.94	1.40	1.35
2	N	694	A	N7-C5	-5.94	1.35	1.39
2	N	766	A	N3-C4	-5.94	1.31	1.34
1	M	1001	C	C4-C5	-5.94	1.38	1.43
1	M	1338	G	C3'-C2'	5.94	1.59	1.52
1	M	1385	G	C2-N3	5.94	1.37	1.32
2	N	539	A	N3-C4	5.94	1.38	1.34
2	N	558	G	C2-N3	5.94	1.37	1.32
1	M	966	G	C4'-O4'	-5.94	1.37	1.45
2	N	163	C	O4'-C1'	5.94	1.49	1.41
2	N	450	G	C8-N7	5.94	1.34	1.30
2	N	422	C	N1-C2	5.94	1.46	1.40
1	M	1133	G	C4'-O4'	5.93	1.53	1.45
2	N	598	U	C3'-C2'	-5.93	1.46	1.52
2	N	612	C	C4-N4	5.93	1.39	1.33
2	N	672	U	N1-C2	-5.93	1.33	1.38
3	O	1398	A	N9-C8	5.93	1.42	1.37
1	M	964	A	C5-C4	5.93	1.43	1.38
1	M	1170	A	C5'-C4'	5.93	1.58	1.51
2	N	832	G	C3'-O3'	5.93	1.50	1.42
3	O	1441	A	C2-N3	5.93	1.38	1.33
2	N	66	A	C5'-C4'	5.93	1.58	1.51
1	M	1057	G	P-O5'	-5.93	1.53	1.59
1	M	1218	C	C4-C5	5.93	1.47	1.43
1	M	1283	U	C3'-O3'	5.93	1.50	1.42
2	N	347	G	N9-C4	-5.93	1.33	1.38
2	N	863	U	C4-O4	5.93	1.28	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1021	A	O3'-P	-5.92	1.54	1.61
1	M	1197	A	C3'-O3'	5.92	1.50	1.42
2	N	718	A	C2'-C1'	-5.92	1.46	1.53
2	N	837	U	C1'-N1	5.92	1.57	1.48
2	N	863	U	C3'-O3'	5.92	1.50	1.42
1	M	1280	A	N9-C8	5.92	1.42	1.37
2	N	695	A	C5-C4	5.92	1.42	1.38
1	M	1282	C	C4-C5	-5.92	1.38	1.43
1	M	1365	G	N1-C2	5.92	1.42	1.37
3	O	1401	G	C8-N7	-5.92	1.27	1.30
3	O	1473	G	N1-C2	5.92	1.42	1.37
3	O	1406	U	N3-C4	5.92	1.43	1.38
1	M	1155	A	N9-C4	-5.92	1.34	1.37
2	N	312	C	N3-C4	5.92	1.38	1.33
2	N	274	A	N3-C4	-5.92	1.31	1.34
3	O	1501	C	N1-C6	5.92	1.40	1.37
1	M	1163	A	N9-C4	-5.91	1.34	1.37
2	N	606	G	N7-C5	-5.91	1.35	1.39
2	N	627	G	C2'-C1'	-5.91	1.46	1.53
2	N	796	C	P-O5'	-5.91	1.53	1.59
1	M	1209	C	C2'-C1'	-5.91	1.46	1.53
1	M	1362	A	C6-N6	5.91	1.38	1.33
2	N	436	C	C2-N3	5.91	1.40	1.35
1	M	1077	G	C6-N1	5.91	1.43	1.39
2	N	21	G	N1-C2	5.91	1.42	1.37
2	N	517	G	C2-N3	5.91	1.37	1.32
1	M	1107	C	N1-C6	5.91	1.40	1.37
2	N	649	A	C2'-O2'	-5.91	1.33	1.41
2	N	875	U	C3'-O3'	5.91	1.50	1.42
3	O	1461	G	N3-C4	-5.91	1.31	1.35
1	M	1178	G	N1-C2	5.91	1.42	1.37
2	N	112	G	N7-C5	5.91	1.42	1.39
1	M	955	U	C2'-C1'	-5.91	1.46	1.53
1	M	1337	G	N9-C4	-5.91	1.33	1.38
2	N	105	G	O3'-P	-5.91	1.54	1.61
2	N	817	C	O3'-P	-5.91	1.54	1.61
1	M	1324	A	C2-N3	5.90	1.38	1.33
1	M	1181	G	C3'-C2'	5.90	1.59	1.52
1	M	1250	A	C2'-C1'	-5.90	1.46	1.53
2	N	27	G	N1-C2	5.90	1.42	1.37
2	N	117	G	C2'-C1'	-5.90	1.46	1.53
2	N	505	G	C2-N3	5.90	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	546	A	N9-C8	-5.90	1.33	1.37
3	O	1470	U	C4-C5	-5.90	1.38	1.43
2	N	256	U	C2'-C1'	-5.90	1.46	1.53
2	N	780	A	C6-N6	5.90	1.38	1.33
1	M	1049	U	N3-C4	5.90	1.43	1.38
2	N	416	G	N9-C8	5.90	1.42	1.37
2	N	492	C	N1-C2	5.90	1.46	1.40
2	N	867	G	C2'-C1'	-5.90	1.46	1.53
2	N	108	G	C2-N3	5.90	1.37	1.32
2	N	368	U	C2-N3	-5.90	1.33	1.37
2	N	437	U	P-O5'	-5.90	1.53	1.59
2	N	633	G	O4'-C1'	5.90	1.49	1.41
3	O	1527	U	C2-O2	5.90	1.27	1.22
1	M	930	C	O3'-P	-5.89	1.54	1.61
1	M	1042	A	O3'-P	5.89	1.68	1.61
2	N	435	A	C5-C4	5.89	1.42	1.38
3	O	1480	A	N7-C5	5.89	1.42	1.39
2	N	309	A	C2'-C1'	-5.89	1.46	1.53
2	N	562	U	P-O5'	-5.89	1.53	1.59
2	N	583	A	N9-C4	-5.89	1.34	1.37
2	N	862	C	N3-C4	5.89	1.38	1.33
3	O	1413	A	C5'-C4'	5.89	1.58	1.51
1	M	1220	G	N7-C5	-5.89	1.35	1.39
2	N	139	A	C4'-O4'	-5.89	1.37	1.45
3	O	1404	C	N1-C6	5.89	1.40	1.37
2	N	616	G	N7-C5	-5.89	1.35	1.39
2	N	156	C	C5'-C4'	5.89	1.58	1.51
2	N	718	A	P-O5'	-5.89	1.53	1.59
2	N	80	A	C5'-C4'	5.88	1.58	1.51
2	N	105	G	N9-C4	-5.88	1.33	1.38
2	N	284	C	C1'-N1	5.88	1.57	1.48
3	O	1463	U	O4'-C1'	5.88	1.49	1.41
3	O	1510	C	C5'-C4'	5.88	1.58	1.51
1	M	1190	G	N7-C5	-5.88	1.35	1.39
2	N	511	C	N1-C2	5.88	1.46	1.40
2	N	685	G	N7-C5	-5.88	1.35	1.39
1	M	1080	A	C8-N7	-5.88	1.27	1.31
2	N	58	C	N1-C2	-5.88	1.34	1.40
2	N	651	C	P-O5'	-5.88	1.53	1.59
2	N	526	C	C2'-C1'	-5.88	1.46	1.53
2	N	447	G	C2'-O2'	5.88	1.49	1.41
1	M	1174	G	N9-C4	5.87	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	860	A	O4'-C1'	-5.87	1.34	1.41
2	N	926	G	N9-C8	5.87	1.42	1.37
3	O	1480	A	C2'-C1'	-5.87	1.46	1.53
2	N	844	G	C6-N1	5.87	1.43	1.39
2	N	688	G	C1'-N9	5.87	1.57	1.48
1	M	929	G	C5-C6	-5.87	1.36	1.42
1	M	1090	U	N1-C2	-5.87	1.33	1.38
1	M	1102	A	N3-C4	5.87	1.38	1.34
1	M	1351	U	C4'-O4'	-5.87	1.38	1.45
1	M	1053	G	N1-C2	5.87	1.42	1.37
1	M	1184	G	N3-C4	5.87	1.39	1.35
1	M	1279	G	C5'-C4'	5.87	1.58	1.51
2	N	207	C	C2-O2	5.87	1.29	1.24
2	N	435	A	C2'-C1'	-5.87	1.46	1.53
2	N	877	G	C6-N1	5.87	1.43	1.39
1	M	1359	C	C5'-C4'	5.86	1.58	1.51
2	N	479	U	C3'-C2'	-5.86	1.46	1.52
1	M	1247	U	C5'-C4'	5.86	1.58	1.51
1	M	1358	U	N3-C4	5.86	1.43	1.38
1	M	1368	A	O4'-C1'	5.86	1.49	1.41
2	N	98	A	C5'-C4'	5.86	1.58	1.51
2	N	100	G	N9-C4	5.86	1.42	1.38
2	N	145	G	N1-C2	5.86	1.42	1.37
2	N	567	G	N3-C4	-5.86	1.31	1.35
2	N	723	U	C4'-C3'	-5.86	1.46	1.52
2	N	796	C	C2-N3	5.86	1.40	1.35
1	M	1101	A	C6-N6	5.86	1.38	1.33
2	N	840	C	N1-C2	-5.86	1.34	1.40
1	M	1117	A	N7-C5	5.86	1.42	1.39
1	M	1182	G	N9-C8	-5.86	1.33	1.37
1	M	1305	G	C6-N1	5.86	1.43	1.39
2	N	778	G	C5-C6	-5.86	1.36	1.42
1	M	1050	G	N1-C2	5.86	1.42	1.37
2	N	25	C	C3'-C2'	5.86	1.59	1.52
2	N	259	G	O3'-P	-5.86	1.54	1.61
1	M	1153	G	C2-N3	5.85	1.37	1.32
1	M	1335	U	C4-O4	-5.85	1.19	1.23
1	M	1375	A	C5'-C4'	5.85	1.58	1.51
2	N	323	U	C4-C5	-5.85	1.38	1.43
2	N	841	C	C5'-C4'	5.85	1.58	1.51
2	N	901	A	O3'-P	-5.85	1.54	1.61
2	N	748	G	C2-N2	5.85	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	947	G	C2-N2	5.85	1.40	1.34
1	M	1198	G	N3-C4	5.85	1.39	1.35
2	N	96	U	N1-C6	5.85	1.43	1.38
2	N	347	G	C2'-C1'	-5.85	1.47	1.53
2	N	424	G	C2'-C1'	-5.85	1.47	1.53
2	N	533	A	C6-N6	5.85	1.38	1.33
2	N	791	G	C6-N1	5.85	1.43	1.39
1	M	1202	U	C1'-N1	5.85	1.57	1.48
2	N	59	A	N9-C4	5.85	1.41	1.37
2	N	138	G	C3'-O3'	5.85	1.50	1.42
2	N	557	G	O3'-P	-5.85	1.54	1.61
2	N	707	U	N1-C2	-5.85	1.33	1.38
2	N	739	C	P-O5'	-5.85	1.53	1.59
2	N	450	G	C2-N3	5.85	1.37	1.32
2	N	763	G	C4'-C3'	5.85	1.59	1.53
3	O	1460	C	C5'-C4'	5.85	1.58	1.51
1	M	1082	A	C3'-C2'	5.84	1.59	1.52
2	N	112	G	N1-C2	5.84	1.42	1.37
2	N	295	C	C4'-C3'	-5.84	1.46	1.52
2	N	663	A	N7-C5	5.84	1.42	1.39
2	N	889	A	C6-N6	5.84	1.38	1.33
3	O	1490	U	C2-N3	5.84	1.41	1.37
1	M	953	G	P-O5'	-5.84	1.53	1.59
2	N	144	G	C4'-C3'	5.84	1.59	1.53
3	O	1481	U	C4-C5	5.84	1.48	1.43
1	M	994	A	N7-C5	-5.84	1.35	1.39
2	N	115	G	N1-C2	5.84	1.42	1.37
2	N	375	U	C5'-C4'	5.84	1.58	1.51
2	N	855	U	O3'-P	-5.84	1.54	1.61
1	M	1127	G	P-O5'	-5.84	1.53	1.59
2	N	241	G	C8-N7	-5.84	1.27	1.30
2	N	855	U	C4'-O4'	-5.84	1.38	1.45
2	N	344	A	O3'-P	-5.84	1.54	1.61
2	N	772	U	C1'-N1	5.84	1.57	1.48
1	M	1190	G	C5-C6	5.84	1.48	1.42
1	M	1316	G	P-O5'	-5.83	1.53	1.59
3	O	1425	U	N3-C4	5.83	1.43	1.38
1	M	1132	C	O3'-P	-5.83	1.54	1.61
1	M	1186	G	C2-N2	5.83	1.40	1.34
2	N	288	A	C8-N7	-5.83	1.27	1.31
2	N	350	G	P-O5'	-5.83	1.53	1.59
1	M	970	C	C5-C6	5.83	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	109	A	N7-C5	-5.83	1.35	1.39
2	N	903	G	C5-C6	-5.83	1.36	1.42
2	N	399	G	C2-N2	5.83	1.40	1.34
1	M	1079	G	C4'-C3'	5.83	1.59	1.53
1	M	1094	G	C2-N3	5.83	1.37	1.32
2	N	117	G	N7-C5	-5.83	1.35	1.39
2	N	444	G	C6-N1	5.83	1.43	1.39
1	M	1253	G	N9-C8	5.82	1.42	1.37
2	N	6	G	C5-C6	5.82	1.48	1.42
2	N	409	U	O3'-P	-5.82	1.54	1.61
2	N	821	G	N1-C2	5.82	1.42	1.37
1	M	938	A	C1'-N9	5.82	1.57	1.48
1	M	1116	U	C3'-C2'	5.82	1.59	1.52
2	N	454	G	C3'-C2'	5.82	1.59	1.52
2	N	795	C	C3'-O3'	5.82	1.50	1.42
2	N	885	G	C5-C4	-5.82	1.34	1.38
2	N	921	U	C4-C5	5.82	1.48	1.43
2	N	563	A	N7-C5	-5.82	1.35	1.39
2	N	631	C	C1'-N1	5.82	1.57	1.48
1	M	964	A	C2'-O2'	5.82	1.49	1.41
1	M	1024	G	C2'-C1'	-5.82	1.47	1.53
2	N	329	A	C6-N1	5.82	1.39	1.35
2	N	444	G	C2-N3	5.82	1.37	1.32
1	M	1387	G	C2-N3	5.82	1.37	1.32
2	N	294	U	C2-N3	5.82	1.41	1.37
2	N	452	A	C6-N6	5.82	1.38	1.33
2	N	514	C	N3-C4	5.82	1.38	1.33
2	N	668	G	N9-C4	-5.82	1.33	1.38
1	M	1118	U	C4'-C3'	5.81	1.59	1.53
1	M	1166	G	N9-C8	-5.81	1.33	1.37
1	M	1193	G	C2'-C1'	-5.81	1.47	1.53
2	N	145	G	P-O5'	-5.81	1.53	1.59
2	N	185	U	N3-C4	5.81	1.43	1.38
2	N	529	G	P-O5'	5.81	1.65	1.59
1	M	1387	G	C5-C6	-5.81	1.36	1.42
2	N	46	G	C4'-C3'	5.81	1.59	1.53
2	N	605	U	C5'-C4'	5.81	1.58	1.51
2	N	680	C	C5'-C4'	5.81	1.58	1.51
2	N	902	G	N9-C4	-5.81	1.33	1.38
3	O	1521	C	C4-N4	5.81	1.39	1.33
2	N	158	G	C5'-C4'	5.81	1.58	1.51
1	M	1072	G	C6-N1	-5.81	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1355	G	C3'-C2'	-5.81	1.46	1.52
2	N	160	A	C3'-C2'	-5.81	1.46	1.52
2	N	317	U	N3-C4	5.81	1.43	1.38
2	N	504	C	C2-N3	5.81	1.40	1.35
1	M	1152	A	N9-C4	5.81	1.41	1.37
1	M	1223	C	N1-C2	5.81	1.46	1.40
2	N	878	A	C5'-C4'	5.81	1.58	1.51
1	M	970	C	N1-C6	5.81	1.40	1.37
1	M	1319	A	C6-N6	5.81	1.38	1.33
2	N	178	C	C2'-C1'	-5.81	1.47	1.53
1	M	956	U	N1-C6	-5.80	1.32	1.38
1	M	1161	C	C4'-C3'	5.80	1.59	1.53
1	M	1193	G	N9-C4	-5.80	1.33	1.38
3	O	1526	G	N3-C4	5.80	1.39	1.35
2	N	923	A	C5'-C4'	5.80	1.58	1.51
1	M	1115	U	O4'-C1'	5.80	1.49	1.41
1	M	1144	G	N9-C8	5.80	1.42	1.37
1	M	1323	G	C8-N7	-5.80	1.27	1.30
1	M	1346	A	C5'-C4'	5.80	1.58	1.51
2	N	818	G	C2'-C1'	-5.80	1.47	1.53
3	O	1402	C	C2'-C1'	5.80	1.59	1.53
2	N	342	C	C4-C5	5.80	1.47	1.43
2	N	559	A	C2'-C1'	-5.80	1.47	1.53
2	N	624	C	N1-C2	5.80	1.46	1.40
2	N	845	A	C8-N7	-5.80	1.27	1.31
1	M	1252	A	C6-N1	5.80	1.39	1.35
2	N	487	A	C5-C4	-5.80	1.34	1.38
2	N	844	G	C2'-C1'	-5.80	1.47	1.53
2	N	240	G	N7-C5	5.80	1.42	1.39
2	N	263	A	N3-C4	5.80	1.38	1.34
2	N	913	A	C5'-C4'	5.80	1.58	1.51
1	M	1085	U	C2-O2	5.79	1.27	1.22
2	N	318	G	C6-N1	5.79	1.43	1.39
2	N	567	G	C2-N2	5.79	1.40	1.34
2	N	787	A	C2'-C1'	-5.79	1.47	1.53
1	M	1323	G	C3'-C2'	5.79	1.59	1.52
2	N	542	G	N3-C4	-5.79	1.31	1.35
1	M	1277	C	C4'-O4'	5.79	1.53	1.45
2	N	286	C	O4'-C1'	5.79	1.49	1.41
2	N	518	C	N3-C4	5.79	1.38	1.33
1	M	1239	A	N3-C4	5.79	1.38	1.34
1	M	1287	A	C5-C4	-5.79	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	895	G	N7-C5	-5.79	1.35	1.39
1	M	1080	A	C5-C6	5.79	1.46	1.41
1	M	1222	G	C6-N1	5.79	1.43	1.39
2	N	437	U	C2-N3	5.79	1.41	1.37
2	N	562	U	N1-C2	5.79	1.43	1.38
2	N	677	U	P-O5'	-5.79	1.53	1.59
3	O	1401	G	C6-N1	5.79	1.43	1.39
1	M	1375	A	C6-N1	5.78	1.39	1.35
2	N	914	A	N7-C5	-5.78	1.35	1.39
1	M	1102	A	C6-N1	5.78	1.39	1.35
2	N	83	C	C4-N4	5.78	1.39	1.33
2	N	209	U	C3'-O3'	5.78	1.50	1.42
3	O	1437	A	N1-C2	5.78	1.39	1.34
3	O	1439	G	O5'-C5'	-5.78	1.33	1.42
1	M	1015	G	O3'-P	-5.78	1.54	1.61
2	N	94	G	C2'-C1'	5.78	1.59	1.53
2	N	143	A	C2'-C1'	5.78	1.59	1.53
2	N	208	U	C4-O4	5.78	1.28	1.23
2	N	780	A	N3-C4	5.78	1.38	1.34
3	O	1413	A	C6-N6	5.78	1.38	1.33
3	O	1491	G	C6-N1	5.78	1.43	1.39
2	N	848	C	C5-C6	-5.78	1.29	1.34
3	O	1478	U	C4'-C3'	5.78	1.59	1.53
2	N	143	A	C8-N7	-5.78	1.27	1.31
2	N	841	C	C5-C6	-5.78	1.29	1.34
3	O	1428	A	C6-N6	5.78	1.38	1.33
3	O	1525	G	O3'-P	-5.78	1.54	1.61
1	M	1266	G	C6-N1	5.78	1.43	1.39
2	N	135	C	N3-C4	5.78	1.38	1.33
2	N	755	G	C2-N3	5.77	1.37	1.32
2	N	351	G	P-O5'	-5.77	1.53	1.59
2	N	406	G	C4'-C3'	-5.77	1.46	1.52
2	N	128	G	C6-N1	5.77	1.43	1.39
2	N	512	U	C2-N3	5.77	1.41	1.37
2	N	250	A	N7-C5	-5.77	1.35	1.39
2	N	274	A	C2-N3	5.77	1.38	1.33
2	N	427	U	C1'-N1	5.77	1.57	1.48
2	N	766	A	N9-C4	5.77	1.41	1.37
1	M	1180	A	C8-N7	-5.77	1.27	1.31
1	M	1035	A	C6-N6	5.76	1.38	1.33
2	N	777	A	C8-N7	-5.76	1.27	1.31
1	M	1269	A	C5'-C4'	5.76	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	84	U	C2'-C1'	5.76	1.59	1.53
1	M	1039	G	C2-N2	5.76	1.40	1.34
1	M	1089	G	C2-N2	5.76	1.40	1.34
1	M	1099	G	N9-C4	-5.76	1.33	1.38
1	M	1271	A	P-O5'	-5.76	1.53	1.59
2	N	131	A	N9-C8	-5.76	1.33	1.37
2	N	156	C	C4'-C3'	-5.76	1.46	1.52
2	N	723	U	N3-C4	5.76	1.43	1.38
1	M	1368	A	C3'-O3'	-5.76	1.34	1.42
2	N	149	A	C5-C4	5.76	1.42	1.38
2	N	205	A	N9-C4	-5.76	1.34	1.37
2	N	327	A	O3'-P	-5.76	1.54	1.61
1	M	1298	U	C5'-C4'	5.76	1.58	1.51
2	N	183	C	C5'-C4'	5.76	1.58	1.51
1	M	1010	U	C5-C6	5.76	1.39	1.34
2	N	129	A	C5-C4	-5.76	1.34	1.38
2	N	297	G	C4'-C3'	-5.76	1.46	1.52
2	N	801	U	C4-O4	-5.76	1.19	1.23
2	N	906	A	C5'-C4'	5.76	1.58	1.51
1	M	1184	G	N9-C8	-5.75	1.33	1.37
1	M	1324	A	C1'-N9	-5.75	1.38	1.46
1	M	1384	C	C2'-C1'	5.75	1.59	1.53
2	N	865	A	C5-C4	5.75	1.42	1.38
1	M	1124	G	C6-N1	5.75	1.43	1.39
2	N	456	A	N7-C5	-5.75	1.35	1.39
2	N	501	C	N1-C6	5.75	1.40	1.37
2	N	604	G	C3'-C2'	-5.75	1.46	1.52
2	N	447	G	N7-C5	-5.75	1.35	1.39
2	N	484	G	O3'-P	-5.75	1.54	1.61
2	N	556	C	C4'-C3'	5.75	1.59	1.53
2	N	698	G	C2-N3	5.75	1.37	1.32
3	O	1417	G	O4'-C1'	-5.75	1.34	1.41
2	N	251	G	N7-C5	-5.75	1.35	1.39
2	N	261	U	C4'-C3'	5.75	1.59	1.53
2	N	777	A	O4'-C1'	5.75	1.49	1.41
2	N	885	G	C6-N1	5.75	1.43	1.39
2	N	164	G	C6-N1	5.74	1.43	1.39
2	N	466	A	P-O5'	-5.74	1.54	1.59
2	N	549	C	C4'-C3'	5.74	1.59	1.53
2	N	874	G	C2'-C1'	-5.74	1.47	1.53
3	O	1457	G	C8-N7	-5.74	1.27	1.30
2	N	725	G	N1-C2	5.74	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	842	U	N3-C4	5.74	1.43	1.38
3	O	1465	A	O3'-P	-5.74	1.54	1.61
1	M	1138	G	C5'-C4'	5.74	1.58	1.51
2	N	569	C	N3-C4	5.74	1.38	1.33
2	N	846	G	O4'-C1'	5.74	1.49	1.41
3	O	1423	G	C6-N1	5.74	1.43	1.39
3	O	1441	A	O3'-P	5.74	1.68	1.61
2	N	840	C	C4-N4	5.74	1.39	1.33
2	N	885	G	N3-C4	-5.74	1.31	1.35
3	O	1478	U	C2-N3	5.74	1.41	1.37
2	N	59	A	N7-C5	5.74	1.42	1.39
2	N	260	G	N1-C2	5.74	1.42	1.37
2	N	329	A	N9-C4	-5.74	1.34	1.37
2	N	317	U	C5'-C4'	5.73	1.58	1.51
2	N	887	G	C6-N1	5.73	1.43	1.39
1	M	969	A	N9-C4	-5.73	1.34	1.37
1	M	1102	A	P-O5'	-5.73	1.54	1.59
2	N	522	C	C2'-C1'	-5.73	1.47	1.53
2	N	647	C	P-O5'	5.73	1.65	1.59
2	N	772	U	P-O5'	-5.73	1.54	1.59
2	N	357	G	C1'-N9	5.73	1.57	1.48
2	N	386	C	O3'-P	-5.73	1.54	1.61
2	N	588	G	C5-C6	-5.73	1.36	1.42
1	M	1365	G	C5'-C4'	5.73	1.58	1.51
1	M	1381	U	P-O5'	5.73	1.65	1.59
2	N	327	A	C4'-O4'	5.73	1.52	1.45
2	N	592	G	C8-N7	-5.73	1.27	1.30
2	N	22	G	N3-C4	5.72	1.39	1.35
2	N	531	U	N3-C4	5.72	1.43	1.38
2	N	581	G	C6-N1	5.72	1.43	1.39
2	N	791	G	C2-N2	5.72	1.40	1.34
2	N	824	G	N1-C2	5.72	1.42	1.37
1	M	1106	G	C6-N1	5.72	1.43	1.39
1	M	1311	A	C6-N6	5.72	1.38	1.33
2	N	159	G	C2-N2	5.72	1.40	1.34
2	N	362	G	C6-N1	5.72	1.43	1.39
2	N	412	A	C8-N7	-5.72	1.27	1.31
2	N	672	U	N1-C6	5.72	1.43	1.38
2	N	655	A	C4'-C3'	5.72	1.59	1.53
3	O	1420	U	C5'-C4'	5.72	1.58	1.51
3	O	1461	G	C2-N3	5.72	1.37	1.32
2	N	460	A	C5-C4	-5.71	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	199	A	C3'-C2'	5.71	1.59	1.52
2	N	241	G	C5-C6	-5.71	1.36	1.42
2	N	632	U	C4'-C3'	5.71	1.59	1.53
2	N	915	A	C6-N6	5.71	1.38	1.33
2	N	846	G	C4'-C3'	-5.71	1.46	1.52
3	O	1423	G	C5-C4	-5.71	1.34	1.38
1	M	972	C	N3-C4	5.71	1.38	1.33
1	M	989	U	P-O5'	-5.71	1.54	1.59
2	N	79	G	C2-N3	5.71	1.37	1.32
2	N	371	A	N3-C4	5.71	1.38	1.34
2	N	710	G	N7-C5	-5.71	1.35	1.39
2	N	734	G	N1-C2	5.71	1.42	1.37
2	N	753	A	C6-N1	5.71	1.39	1.35
1	M	997	U	N1-C6	5.70	1.43	1.38
1	M	1203	C	O3'-P	-5.70	1.54	1.61
1	M	1252	A	N3-C4	5.70	1.38	1.34
2	N	33	A	O3'-P	-5.70	1.54	1.61
2	N	311	C	C4-N4	5.70	1.39	1.33
2	N	582	C	C3'-O3'	5.70	1.50	1.42
2	N	599	C	P-O5'	-5.70	1.54	1.59
2	N	826	C	C3'-C2'	-5.70	1.46	1.52
3	O	1421	G	C5-C4	-5.70	1.34	1.38
1	M	1279	G	C6-N1	5.70	1.43	1.39
2	N	9	G	C3'-C2'	5.70	1.59	1.52
2	N	16	A	C2'-C1'	-5.70	1.47	1.53
2	N	106	C	C5'-C4'	5.70	1.58	1.51
2	N	783	C	C4-N4	5.70	1.39	1.33
2	N	257	G	N1-C2	5.70	1.42	1.37
2	N	585	G	C2'-C1'	-5.70	1.47	1.53
2	N	908	A	N9-C4	-5.70	1.34	1.37
3	O	1507	A	C6-N6	5.70	1.38	1.33
1	M	934	C	C2'-C1'	-5.70	1.47	1.53
2	N	306	A	C5-C4	5.70	1.42	1.38
2	N	2	A	N3-C4	-5.70	1.31	1.34
2	N	171	A	C6-N1	5.70	1.39	1.35
1	M	1117	A	C5'-C4'	5.69	1.58	1.51
1	M	1190	G	C4'-O4'	5.69	1.52	1.45
1	M	1211	U	C4'-O4'	5.69	1.52	1.45
2	N	689	C	C3'-C2'	5.69	1.59	1.52
3	O	1533	C	N3-C4	5.69	1.38	1.33
2	N	778	G	C2-N3	5.69	1.37	1.32
1	M	990	C	N3-C4	5.69	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	275	G	C2-N3	5.69	1.37	1.32
2	N	778	G	N9-C8	-5.69	1.33	1.37
2	N	886	G	P-O5'	-5.69	1.54	1.59
1	M	1389	C	N1-C2	5.68	1.45	1.40
2	N	709	U	C4'-C3'	5.68	1.59	1.53
2	N	787	A	C4'-C3'	5.68	1.59	1.53
2	N	889	A	P-O5'	-5.68	1.54	1.59
2	N	254	G	C5'-C4'	5.68	1.58	1.51
2	N	306	A	C6-N1	5.68	1.39	1.35
2	N	690	G	C2-N2	5.68	1.40	1.34
2	N	809	G	N1-C2	5.68	1.42	1.37
2	N	873	A	C5'-C4'	5.68	1.58	1.51
1	M	1098	C	N1-C2	5.68	1.45	1.40
1	M	1093	A	P-O5'	-5.68	1.54	1.59
2	N	220	G	O4'-C1'	5.68	1.49	1.41
2	N	313	A	N3-C4	-5.68	1.31	1.34
2	N	628	G	N7-C5	-5.68	1.35	1.39
2	N	191	G	C2-N2	5.67	1.40	1.34
2	N	624	C	O4'-C1'	5.67	1.49	1.41
1	M	989	U	O3'-P	-5.67	1.54	1.61
1	M	1219	A	C2'-C1'	-5.67	1.47	1.53
1	M	1236	A	C6-N1	5.67	1.39	1.35
2	N	668	G	P-O5'	-5.67	1.54	1.59
2	N	646	G	C6-N1	5.67	1.43	1.39
1	M	1151	A	C3'-C2'	5.67	1.59	1.52
1	M	1235	U	N1-C6	5.67	1.43	1.38
1	M	1330	U	N3-C4	5.67	1.43	1.38
1	M	1370	G	N9-C4	-5.67	1.33	1.38
2	N	400	C	C5'-C4'	5.67	1.58	1.51
2	N	413	G	C2-N3	5.67	1.37	1.32
2	N	898	G	C5'-C4'	5.67	1.58	1.51
1	M	1289	A	C5-C6	-5.67	1.35	1.41
2	N	116	A	N3-C4	-5.67	1.31	1.34
3	O	1525	G	C8-N7	5.67	1.34	1.30
1	M	978	A	C2'-C1'	-5.66	1.47	1.53
1	M	1116	U	N1-C6	5.66	1.43	1.38
2	N	145	G	C6-O6	-5.66	1.19	1.24
2	N	825	A	C5-C6	5.66	1.46	1.41
2	N	511	C	O3'-P	-5.66	1.54	1.61
2	N	615	G	C5-C6	5.66	1.48	1.42
1	M	1191	A	C3'-C2'	5.66	1.59	1.52
1	M	1331	G	C6-N1	5.66	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	174	A	N7-C5	5.66	1.42	1.39
1	M	1111	A	C8-N7	5.66	1.35	1.31
2	N	362	G	N9-C4	5.66	1.42	1.38
2	N	468	A	P-O5'	-5.66	1.54	1.59
2	N	505	G	N9-C8	5.66	1.41	1.37
1	M	938	A	N9-C8	-5.66	1.33	1.37
2	N	411	A	C6-N6	5.66	1.38	1.33
2	N	460	A	C2'-C1'	5.66	1.59	1.53
1	M	1060	U	O4'-C1'	5.66	1.49	1.41
1	M	1086	U	P-O5'	5.66	1.65	1.59
2	N	74	A	O3'-P	-5.66	1.54	1.61
2	N	156	C	N1-C2	-5.66	1.34	1.40
2	N	324	G	N9-C4	-5.66	1.33	1.38
3	O	1421	G	C4'-C3'	-5.66	1.46	1.52
1	M	1195	C	N1-C6	5.65	1.40	1.37
2	N	530	G	N9-C4	-5.65	1.33	1.38
2	N	831	A	C2'-C1'	5.65	1.59	1.53
2	N	563	A	C5-C6	5.65	1.46	1.41
2	N	831	A	N7-C5	-5.65	1.35	1.39
1	M	1351	U	O4'-C1'	-5.65	1.34	1.41
2	N	213	G	C8-N7	-5.65	1.27	1.30
2	N	777	A	C6-N6	5.65	1.38	1.33
1	M	974	A	C5-C6	5.65	1.46	1.41
3	O	1393	U	C3'-C2'	5.65	1.59	1.52
1	M	942	G	C6-N1	5.65	1.43	1.39
1	M	1169	A	C5'-C4'	5.65	1.58	1.51
1	M	1257	A	N3-C4	5.65	1.38	1.34
2	N	34	C	C2-N3	-5.65	1.31	1.35
3	O	1531	A	C4'-C3'	5.65	1.59	1.53
1	M	1127	G	C2'-C1'	-5.65	1.47	1.53
1	M	1290	G	C6-N1	-5.65	1.35	1.39
2	N	305	G	C2-N3	5.65	1.37	1.32
1	M	1035	A	C5'-C4'	5.64	1.58	1.51
1	M	1279	G	N1-C2	5.64	1.42	1.37
2	N	335	C	C2'-C1'	-5.64	1.47	1.53
2	N	444	G	C5-C4	-5.64	1.34	1.38
2	N	910	C	P-O5'	-5.64	1.54	1.59
2	N	12	U	O3'-P	-5.64	1.54	1.61
2	N	586	C	C5-C6	-5.64	1.29	1.34
2	N	714	G	C4'-O4'	-5.64	1.38	1.45
3	O	1516	G	C5-C4	5.64	1.42	1.38
2	N	280	C	C4-C5	5.64	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1161	C	C2-N3	5.64	1.40	1.35
1	M	1293	C	C2'-O2'	5.64	1.49	1.41
2	N	470	C	N1-C2	5.64	1.45	1.40
2	N	643	C	N1-C6	5.64	1.40	1.37
2	N	323	U	P-O5'	-5.64	1.54	1.59
3	O	1466	C	O4'-C1'	-5.64	1.34	1.41
2	N	563	A	C8-N7	-5.64	1.27	1.31
2	N	904	U	C5'-C4'	5.64	1.58	1.51
2	N	307	C	C4'-C3'	5.63	1.59	1.53
1	M	1110	A	N9-C4	5.63	1.41	1.37
2	N	145	G	N3-C4	-5.63	1.31	1.35
2	N	199	A	C6-N6	5.63	1.38	1.33
2	N	892	A	C1'-N9	-5.63	1.39	1.46
2	N	192	A	N9-C8	5.63	1.42	1.37
1	M	990	C	C4-C5	5.63	1.47	1.43
1	M	1025	U	C2-N3	5.63	1.41	1.37
2	N	215	C	C3'-O3'	5.63	1.50	1.42
2	N	407	U	C3'-O3'	5.63	1.50	1.42
2	N	558	G	C5-C4	5.63	1.42	1.38
2	N	671	G	C4'-C3'	5.63	1.59	1.53
3	O	1489	G	N7-C5	5.63	1.42	1.39
1	M	1293	C	C2-N3	5.63	1.40	1.35
2	N	220	G	C8-N7	-5.63	1.27	1.30
2	N	601	G	C5'-C4'	5.63	1.58	1.51
2	N	767	A	O3'-P	-5.63	1.54	1.61
3	O	1511	G	N9-C8	5.63	1.41	1.37
2	N	320	A	N9-C4	-5.62	1.34	1.37
2	N	435	A	N1-C2	-5.62	1.29	1.34
2	N	353	A	C6-N6	5.62	1.38	1.33
2	N	573	A	C8-N7	-5.62	1.27	1.31
2	N	852	G	C6-N1	5.62	1.43	1.39
1	M	980	C	O4'-C1'	5.62	1.49	1.41
2	N	541	G	O3'-P	-5.62	1.54	1.61
2	N	713	G	N9-C4	-5.62	1.33	1.38
1	M	1081	A	C6-N6	5.62	1.38	1.33
2	N	487	A	C8-N7	-5.62	1.27	1.31
1	M	1094	G	O4'-C1'	-5.62	1.34	1.41
2	N	389	A	C6-N1	5.62	1.39	1.35
2	N	751	U	P-O5'	-5.62	1.54	1.59
2	N	889	A	N7-C5	-5.62	1.35	1.39
3	O	1439	G	C2'-C1'	5.62	1.59	1.53
3	O	1461	G	N9-C4	5.62	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	794	A	C5-C6	5.62	1.46	1.41
3	O	1406	U	C2-N3	5.62	1.41	1.37
3	O	1507	A	C4'-C3'	5.62	1.59	1.53
1	M	979	C	C5-C6	-5.62	1.29	1.34
1	M	1256	A	C5'-C4'	5.62	1.58	1.51
2	N	226	G	N7-C5	-5.62	1.35	1.39
2	N	439	U	C2'-C1'	-5.62	1.47	1.53
3	O	1451	U	C2-N3	-5.62	1.33	1.37
1	M	1014	A	N9-C4	5.61	1.41	1.37
2	N	444	G	N9-C4	-5.61	1.33	1.38
2	N	655	A	N9-C4	5.61	1.41	1.37
2	N	749	A	N9-C8	5.61	1.42	1.37
2	N	889	A	N3-C4	5.61	1.38	1.34
3	O	1465	A	C2-N3	5.61	1.38	1.33
3	O	1528	U	C4-C5	5.61	1.48	1.43
2	N	928	G	C2-N3	5.61	1.37	1.32
2	N	22	G	N9-C4	5.61	1.42	1.38
2	N	242	G	C5-C6	-5.61	1.36	1.42
2	N	142	G	N3-C4	-5.61	1.31	1.35
3	O	1483	A	N7-C5	-5.61	1.35	1.39
1	M	1047	G	C2-N2	5.61	1.40	1.34
2	N	235	C	C3'-O3'	-5.61	1.34	1.42
2	N	261	U	O3'-P	-5.61	1.54	1.61
2	N	621	A	O3'-P	-5.61	1.54	1.61
2	N	678	U	C2-N3	-5.61	1.33	1.37
1	M	1104	G	N9-C8	-5.61	1.33	1.37
2	N	40	C	C5'-C4'	5.61	1.58	1.51
1	M	1153	G	N1-C2	5.60	1.42	1.37
2	N	100	G	N9-C8	-5.60	1.33	1.37
2	N	585	G	N7-C5	-5.60	1.35	1.39
2	N	685	G	P-O5'	-5.60	1.54	1.59
1	M	1147	C	C2-N3	5.60	1.40	1.35
1	M	1345	U	C5'-C4'	5.60	1.58	1.51
2	N	152	A	C6-N6	5.60	1.38	1.33
2	N	784	A	N3-C4	5.60	1.38	1.34
3	O	1397	C	C2-N3	5.60	1.40	1.35
1	M	1206	G	C2-N2	5.60	1.40	1.34
1	M	1236	A	C2'-C1'	-5.60	1.47	1.53
1	M	1352	C	C1'-N1	5.60	1.57	1.48
2	N	494	G	N9-C8	5.60	1.41	1.37
1	M	1046	A	N9-C8	5.60	1.42	1.37
2	N	424	G	C6-N1	5.59	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1502	A	P-O5'	5.59	1.65	1.59
1	M	1048	G	C2-N2	5.59	1.40	1.34
2	N	126	G	C3'-C2'	5.59	1.59	1.52
2	N	892	A	C3'-C2'	-5.59	1.46	1.52
1	M	1215	G	C8-N7	-5.59	1.27	1.30
1	M	1238	A	N9-C4	-5.59	1.34	1.37
1	M	1289	A	O4'-C1'	5.59	1.49	1.41
2	N	93	U	O3'-P	5.59	1.67	1.61
2	N	130	A	O4'-C1'	-5.59	1.34	1.41
2	N	602	A	N9-C8	5.59	1.42	1.37
3	O	1519	A	N9-C4	5.59	1.41	1.37
2	N	346	G	C2-N3	5.59	1.37	1.32
1	M	1268	G	C4'-O4'	-5.59	1.38	1.45
2	N	13	U	N3-C4	5.59	1.43	1.38
2	N	147	G	C4'-O4'	-5.59	1.38	1.45
2	N	359	G	C2-N2	5.59	1.40	1.34
2	N	486	U	C4-C5	5.59	1.48	1.43
1	M	981	U	C3'-C2'	-5.58	1.46	1.52
2	N	570	G	C8-N7	-5.58	1.27	1.30
1	M	1212	U	N1-C2	5.58	1.43	1.38
1	M	1354	U	C2-N3	5.58	1.41	1.37
2	N	266	G	C5-C6	-5.58	1.36	1.42
2	N	289	G	O3'-P	-5.58	1.54	1.61
2	N	473	U	N3-C4	5.58	1.43	1.38
2	N	766	A	O3'-P	-5.58	1.54	1.61
3	O	1397	C	N3-C4	5.58	1.37	1.33
1	M	1132	C	C1'-N1	5.58	1.57	1.48
2	N	315	A	N9-C4	-5.58	1.34	1.37
2	N	521	G	C4'-C3'	-5.58	1.47	1.52
1	M	1383	C	C3'-O3'	5.58	1.50	1.42
2	N	763	G	O4'-C1'	5.58	1.49	1.41
3	O	1424	U	C2'-C1'	-5.58	1.47	1.53
1	M	1245	C	C4'-C3'	5.58	1.59	1.53
2	N	243	A	C6-N1	5.58	1.39	1.35
2	N	536	C	P-O5'	-5.58	1.54	1.59
2	N	19	A	N7-C5	-5.58	1.35	1.39
2	N	124	C	C2'-O2'	-5.58	1.34	1.41
1	M	1195	C	C4-C5	5.57	1.47	1.43
1	M	1217	C	P-O5'	-5.57	1.54	1.59
2	N	789	U	P-O5'	5.57	1.65	1.59
1	M	1239	A	C4'-C3'	5.57	1.59	1.53
1	M	1286	U	C5'-C4'	5.57	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	353	A	C2'-C1'	-5.57	1.47	1.53
2	N	556	C	C4-C5	-5.57	1.38	1.43
1	M	1028	C	C2-N3	5.57	1.40	1.35
2	N	824	G	C5'-C4'	5.57	1.58	1.51
1	M	1116	U	O3'-P	-5.57	1.54	1.61
2	N	92	U	N3-C4	5.57	1.43	1.38
2	N	583	A	N9-C8	5.57	1.42	1.37
3	O	1438	G	C2-N3	5.57	1.37	1.32
1	M	947	G	N3-C4	-5.57	1.31	1.35
1	M	1037	C	C2'-C1'	-5.57	1.47	1.53
2	N	126	G	N1-C2	5.57	1.42	1.37
2	N	604	G	O4'-C1'	-5.57	1.34	1.41
3	O	1434	A	C5'-C4'	5.57	1.58	1.51
1	M	1358	U	N1-C6	5.56	1.43	1.38
2	N	269	C	C2-N3	5.56	1.40	1.35
2	N	252	U	C4-C5	-5.56	1.38	1.43
2	N	366	A	C6-N1	5.56	1.39	1.35
2	N	407	U	C2'-C1'	-5.56	1.47	1.53
2	N	124	C	C2-N3	5.56	1.40	1.35
2	N	457	G	C2-N2	5.56	1.40	1.34
1	M	1011	C	C4-C5	5.56	1.47	1.43
1	M	1118	U	N3-C4	5.56	1.43	1.38
1	M	1386	G	P-O5'	-5.56	1.54	1.59
2	N	347	G	C5-C4	5.56	1.42	1.38
2	N	402	G	C2'-C1'	5.56	1.59	1.53
2	N	509	A	C8-N7	5.56	1.35	1.31
2	N	663	A	P-O5'	-5.56	1.54	1.59
2	N	748	G	C5-C6	5.56	1.48	1.42
3	O	1505	G	C4'-O4'	-5.56	1.38	1.45
1	M	1259	C	C2-O2	5.56	1.29	1.24
2	N	314	C	N1-C2	5.56	1.45	1.40
2	N	740	U	C2-O2	5.56	1.27	1.22
3	O	1442	G	C5-C4	5.56	1.42	1.38
2	N	185	U	O4'-C1'	5.56	1.48	1.41
1	M	1161	C	N3-C4	5.55	1.37	1.33
2	N	670	G	C5'-C4'	5.55	1.58	1.51
2	N	700	G	C2-N3	5.55	1.37	1.32
2	N	818	G	C6-N1	5.55	1.43	1.39
3	O	1407	C	C2-N3	5.55	1.40	1.35
1	M	1017	U	N1-C2	5.55	1.43	1.38
1	M	1054	C	N3-C4	5.55	1.37	1.33
2	N	104	G	N9-C8	5.55	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	602	A	C5-C4	5.55	1.42	1.38
2	N	680	C	N1-C6	5.55	1.40	1.37
1	M	1018	G	P-O5'	-5.55	1.54	1.59
2	N	833	G	C2-N2	5.55	1.40	1.34
1	M	1021	A	C5'-C4'	5.55	1.58	1.51
1	M	1271	A	C5-C4	-5.55	1.34	1.38
2	N	268	U	P-O5'	-5.55	1.54	1.59
2	N	352	C	C5-C6	-5.55	1.29	1.34
3	O	1451	U	C2-O2	5.55	1.27	1.22
1	M	1174	G	C3'-C2'	5.55	1.59	1.52
2	N	317	U	C4'-C3'	-5.55	1.47	1.52
2	N	358	U	C4-O4	5.55	1.28	1.23
2	N	409	U	C2'-C1'	-5.55	1.47	1.53
2	N	452	A	C2-N3	5.55	1.38	1.33
2	N	575	G	O3'-P	-5.55	1.54	1.61
2	N	803	G	C5-C4	-5.55	1.34	1.38
2	N	346	G	N7-C5	-5.54	1.35	1.39
1	M	1125	U	C4'-C3'	5.54	1.59	1.53
2	N	667	G	C5'-C4'	5.54	1.58	1.51
2	N	737	C	C4'-O4'	5.54	1.52	1.45
2	N	819	A	N9-C4	-5.54	1.34	1.37
1	M	1008	U	C5-C6	5.54	1.39	1.34
1	M	1067	A	C5'-C4'	5.54	1.58	1.51
2	N	858	G	O3'-P	-5.54	1.54	1.61
1	M	1309	G	C5-C6	-5.54	1.36	1.42
2	N	247	G	C2-N2	5.54	1.40	1.34
2	N	897	C	C2-N3	5.54	1.40	1.35
1	M	1092	A	C6-N6	5.54	1.38	1.33
2	N	172	A	N3-C4	-5.54	1.31	1.34
1	M	1345	U	C2-N3	5.54	1.41	1.37
2	N	539	A	N9-C8	-5.54	1.33	1.37
1	M	1185	G	C4'-C3'	-5.53	1.47	1.52
2	N	293	G	C2-N3	5.53	1.37	1.32
1	M	1120	C	C2-N3	5.53	1.40	1.35
1	M	1131	G	C2-N3	5.53	1.37	1.32
2	N	417	G	N9-C8	5.53	1.41	1.37
2	N	615	G	N3-C4	5.53	1.39	1.35
2	N	178	C	O4'-C1'	5.53	1.48	1.41
2	N	619	U	C4'-C3'	-5.53	1.47	1.52
1	M	1302	C	C5'-C4'	5.53	1.57	1.51
2	N	308	C	O4'-C1'	5.53	1.48	1.41
3	O	1414	U	C2-O2	5.53	1.27	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1260	G	C2-N2	5.52	1.40	1.34
2	N	479	U	C4'-C3'	-5.52	1.47	1.52
2	N	562	U	C2-N3	5.52	1.41	1.37
1	M	995	C	C4-N4	5.52	1.39	1.33
1	M	1035	A	C5-C6	-5.52	1.36	1.41
2	N	8	A	N9-C4	-5.52	1.34	1.37
2	N	139	A	N9-C8	5.52	1.42	1.37
2	N	417	G	C8-N7	5.52	1.34	1.30
2	N	474	G	C4'-C3'	5.52	1.59	1.53
2	N	607	A	N9-C8	5.52	1.42	1.37
2	N	834	U	C3'-O3'	5.52	1.49	1.42
2	N	875	U	C2'-C1'	5.52	1.59	1.53
3	O	1507	A	C4'-O4'	-5.52	1.38	1.45
1	M	1319	A	O3'-P	-5.52	1.54	1.61
2	N	468	A	C6-N1	5.52	1.39	1.35
2	N	203	G	C2-N3	-5.51	1.28	1.32
2	N	593	U	C3'-C2'	5.51	1.59	1.52
2	N	719	C	C1'-N1	5.51	1.57	1.48
2	N	784	A	C2-N3	5.51	1.38	1.33
3	O	1435	G	P-O5'	5.51	1.65	1.59
2	N	360	G	C5'-C4'	5.51	1.57	1.51
2	N	454	G	C5-C4	5.51	1.42	1.38
1	M	946	A	C5-C4	5.51	1.42	1.38
1	M	1217	C	C4'-O4'	5.51	1.52	1.45
1	M	1376	U	C1'-N1	5.51	1.57	1.48
2	N	58	C	C4-C5	-5.51	1.38	1.43
2	N	58	C	N1-C6	5.51	1.40	1.37
2	N	395	C	P-O5'	-5.51	1.54	1.59
2	N	528	C	C4-N4	5.51	1.39	1.33
3	O	1451	U	C5-C6	5.51	1.39	1.34
1	M	1069	C	C3'-C2'	-5.51	1.46	1.52
1	M	1103	C	C5'-C4'	5.51	1.57	1.51
1	M	1197	A	C8-N7	-5.51	1.27	1.31
1	M	1379	G	N9-C4	-5.51	1.33	1.38
2	N	79	G	N9-C8	5.51	1.41	1.37
2	N	99	C	C1'-N1	5.51	1.57	1.48
2	N	318	G	C3'-C2'	-5.51	1.46	1.52
2	N	681	A	C3'-O3'	5.51	1.49	1.42
2	N	713	G	C5-C4	5.51	1.42	1.38
2	N	768	A	N1-C2	5.51	1.39	1.34
3	O	1392	G	C4'-C3'	5.51	1.59	1.53
1	M	1321	U	C3'-O3'	5.51	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	111	G	P-O5'	-5.51	1.54	1.59
2	N	276	G	P-O5'	-5.51	1.54	1.59
1	M	1276	G	N7-C5	-5.51	1.35	1.39
1	M	1373	G	N1-C2	5.51	1.42	1.37
2	N	913	A	N9-C4	5.50	1.41	1.37
1	M	1008	U	C2'-C1'	-5.50	1.47	1.53
2	N	49	U	C2-N3	5.50	1.41	1.37
2	N	231	U	O3'-P	-5.50	1.54	1.61
2	N	303	A	N3-C4	5.50	1.38	1.34
2	N	904	U	C3'-C2'	5.50	1.59	1.52
1	M	1061	G	C2'-C1'	-5.50	1.47	1.53
3	O	1449	C	O3'-P	-5.50	1.54	1.61
1	M	1108	G	C8-N7	5.50	1.34	1.30
1	M	1171	A	N9-C4	-5.50	1.34	1.37
2	N	467	U	C2'-C1'	-5.50	1.47	1.53
2	N	855	U	P-O5'	5.50	1.65	1.59
1	M	950	U	C2-N3	5.50	1.41	1.37
1	M	1042	A	C6-N6	5.50	1.38	1.33
1	M	1242	G	N9-C4	-5.50	1.33	1.38
2	N	19	A	C5-C4	5.50	1.42	1.38
2	N	635	A	C2'-C1'	-5.50	1.47	1.53
2	N	742	G	C2-N3	5.50	1.37	1.32
1	M	1239	A	C2'-C1'	-5.50	1.47	1.53
1	M	1379	G	N7-C5	-5.50	1.35	1.39
2	N	309	A	O4'-C1'	5.50	1.48	1.41
1	M	948	C	C4-N4	5.49	1.38	1.33
2	N	450	G	C3'-C2'	-5.49	1.46	1.52
2	N	912	C	P-O5'	-5.49	1.54	1.59
3	O	1455	G	C5'-C4'	5.49	1.57	1.51
3	O	1472	U	N1-C2	5.49	1.43	1.38
2	N	262	A	C6-N6	5.49	1.38	1.33
2	N	858	G	N7-C5	-5.49	1.35	1.39
1	M	997	U	C4-C5	-5.49	1.38	1.43
1	M	1145	A	C5'-C4'	5.49	1.57	1.51
1	M	1161	C	C4-N4	5.49	1.38	1.33
2	N	47	C	C2'-C1'	-5.49	1.47	1.53
2	N	458	U	C4'-O4'	5.49	1.52	1.45
2	N	604	G	C2-N3	5.49	1.37	1.32
2	N	113	G	N3-C4	-5.49	1.31	1.35
1	M	1044	A	P-O5'	-5.49	1.54	1.59
1	M	1192	C	N1-C2	-5.49	1.34	1.40
2	N	6	G	C8-N7	5.49	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	21	G	P-O5'	-5.49	1.54	1.59
2	N	765	G	C3'-C2'	5.49	1.58	1.52
2	N	187	G	C2-N3	5.49	1.37	1.32
2	N	345	C	C4-N4	5.49	1.38	1.33
2	N	457	G	N1-C2	5.49	1.42	1.37
2	N	729	A	O3'-P	-5.49	1.54	1.61
1	M	1165	U	N3-C4	5.48	1.43	1.38
1	M	1276	G	P-O5'	-5.48	1.54	1.59
2	N	704	A	N9-C4	5.48	1.41	1.37
2	N	282	A	P-O5'	-5.48	1.54	1.59
2	N	284	C	O3'-P	-5.48	1.54	1.61
2	N	727	G	C2'-C1'	-5.48	1.47	1.53
3	O	1441	A	C8-N7	-5.48	1.27	1.31
2	N	120	A	C2-N3	5.48	1.38	1.33
2	N	869	G	C3'-O3'	5.48	1.49	1.42
1	M	1175	G	N9-C8	5.48	1.41	1.37
2	N	117	G	C2'-O2'	-5.48	1.34	1.41
2	N	895	G	C1'-N9	5.48	1.56	1.48
2	N	439	U	C4'-C3'	-5.48	1.47	1.52
1	M	1223	C	C2'-C1'	5.47	1.59	1.53
2	N	391	G	C5-C6	-5.47	1.36	1.42
2	N	737	C	C2-N3	5.47	1.40	1.35
1	M	1200	C	C2-N3	5.47	1.40	1.35
2	N	80	A	N9-C8	-5.47	1.33	1.37
2	N	928	G	C3'-C2'	5.47	1.58	1.52
1	M	1013	G	C2-N3	5.47	1.37	1.32
2	N	274	A	N9-C4	-5.47	1.34	1.37
2	N	897	C	O4'-C1'	5.47	1.48	1.41
2	N	52	C	C4-C5	-5.47	1.38	1.43
2	N	269	C	C2'-C1'	-5.47	1.47	1.53
2	N	363	A	C2'-C1'	-5.47	1.47	1.53
1	M	947	G	N9-C8	-5.46	1.34	1.37
2	N	38	G	O4'-C1'	5.46	1.48	1.41
2	N	197	A	C6-N6	5.46	1.38	1.33
2	N	303	A	C5'-C4'	5.46	1.57	1.51
2	N	808	C	C4-N4	5.46	1.38	1.33
3	O	1393	U	P-O5'	-5.46	1.54	1.59
3	O	1520	C	C1'-N1	5.46	1.56	1.48
2	N	60	A	C6-N6	5.46	1.38	1.33
2	N	363	A	N7-C5	-5.46	1.35	1.39
1	M	1130	A	C1'-N9	5.46	1.56	1.48
1	M	1332	A	C2'-C1'	-5.46	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	202	G	N3-C4	-5.46	1.31	1.35
2	N	461	A	C6-N6	5.46	1.38	1.33
2	N	655	A	N1-C2	-5.46	1.29	1.34
2	N	743	A	C3'-O3'	5.46	1.49	1.42
1	M	1010	U	C2-N3	5.46	1.41	1.37
1	M	1241	G	C5'-C4'	5.46	1.57	1.51
1	M	1330	U	C3'-C2'	-5.46	1.46	1.52
2	N	145	G	N7-C5	5.46	1.42	1.39
1	M	1000	A	N7-C5	-5.46	1.35	1.39
2	N	434	U	C4'-C3'	5.46	1.59	1.53
1	M	1178	G	O3'-P	-5.46	1.54	1.61
2	N	463	U	C2-N3	-5.46	1.33	1.37
2	N	532	A	N9-C4	-5.46	1.34	1.37
2	N	546	A	N3-C4	5.46	1.38	1.34
3	O	1505	G	N7-C5	5.46	1.42	1.39
2	N	130	A	C5-C4	-5.46	1.34	1.38
2	N	140	U	C4'-C3'	-5.46	1.47	1.52
2	N	502	A	C5-C6	-5.46	1.36	1.41
2	N	604	G	C1'-N9	5.46	1.56	1.48
2	N	635	A	C3'-O3'	-5.46	1.34	1.42
3	O	1491	G	C5'-C4'	5.46	1.57	1.51
3	O	1511	G	C8-N7	5.45	1.34	1.30
2	N	698	G	N7-C5	-5.45	1.35	1.39
2	N	849	G	C5-C4	-5.45	1.34	1.38
2	N	317	U	N1-C6	5.45	1.42	1.38
2	N	494	G	C4'-C3'	-5.45	1.47	1.52
1	M	1017	U	N1-C6	-5.45	1.33	1.38
1	M	1264	U	C3'-C2'	-5.45	1.46	1.52
2	N	236	A	C5-C6	5.45	1.46	1.41
2	N	598	U	P-O5'	-5.45	1.54	1.59
2	N	862	C	C4-C5	5.45	1.47	1.43
2	N	359	G	N3-C4	-5.45	1.31	1.35
2	N	639	G	C5-C4	5.45	1.42	1.38
1	M	1112	C	C4-N4	5.45	1.38	1.33
1	M	1265	C	C4'-C3'	5.45	1.59	1.53
1	M	1285	A	C5-C4	5.45	1.42	1.38
1	M	1290	G	C2-N2	5.45	1.40	1.34
2	N	771	G	N3-C4	-5.45	1.31	1.35
2	N	904	U	N1-C2	-5.45	1.33	1.38
3	O	1495	U	C5'-C4'	5.45	1.57	1.51
1	M	1185	G	C5-C4	-5.44	1.34	1.38
1	M	1284	C	N1-C2	5.44	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1363	A	C6-N1	5.44	1.39	1.35
2	N	17	U	C4-C5	5.44	1.48	1.43
2	N	10	A	C6-N6	5.44	1.38	1.33
2	N	207	C	P-O5'	-5.44	1.54	1.59
2	N	838	G	C2-N3	5.44	1.37	1.32
2	N	419	C	N1-C6	5.44	1.40	1.37
1	M	1074	G	O3'-P	-5.44	1.54	1.61
2	N	92	U	C4-O4	-5.44	1.19	1.23
2	N	234	C	N1-C6	-5.44	1.33	1.37
2	N	290	C	C2'-C1'	5.44	1.59	1.53
2	N	781	A	C6-N6	5.44	1.38	1.33
1	M	1326	U	N3-C4	5.44	1.43	1.38
1	M	1029	U	N3-C4	5.43	1.43	1.38
2	N	281	G	C2-N2	5.43	1.40	1.34
2	N	406	G	N1-C2	5.43	1.42	1.37
2	N	457	G	N7-C5	5.43	1.42	1.39
2	N	675	A	N9-C8	-5.43	1.33	1.37
2	N	105	G	C5-C4	5.43	1.42	1.38
2	N	197	A	C4'-C3'	5.43	1.59	1.53
2	N	539	A	C6-N6	5.43	1.38	1.33
2	N	578	C	C4-N4	5.43	1.38	1.33
2	N	755	G	C5'-C4'	5.43	1.57	1.51
2	N	499	A	C2'-C1'	5.43	1.59	1.53
1	M	1097	C	N3-C4	5.43	1.37	1.33
1	M	1268	G	C2'-C1'	-5.43	1.47	1.53
3	O	1421	G	N9-C8	5.43	1.41	1.37
1	M	1213	A	C6-N6	5.43	1.38	1.33
1	M	1226	C	O3'-P	-5.43	1.54	1.61
1	M	1231	G	C4'-C3'	5.43	1.59	1.53
2	N	185	U	P-O5'	-5.43	1.54	1.59
2	N	613	C	P-O5'	-5.43	1.54	1.59
2	N	616	G	C2-N3	5.43	1.37	1.32
1	M	1263	C	O3'-P	-5.43	1.54	1.61
2	N	251	G	N3-C4	-5.43	1.31	1.35
2	N	573	A	C4'-C3'	5.43	1.59	1.53
2	N	838	G	N3-C4	5.43	1.39	1.35
3	O	1429	A	C5-C4	5.43	1.42	1.38
2	N	295	C	N3-C4	5.42	1.37	1.33
2	N	384	G	C5-C4	-5.42	1.34	1.38
2	N	456	A	P-O5'	-5.42	1.54	1.59
2	N	574	A	N1-C2	5.42	1.39	1.34
2	N	746	A	C2-N3	5.42	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	992	U	C4'-C3'	5.42	1.59	1.53
1	M	1045	C	C5-C6	-5.42	1.30	1.34
2	N	890	G	C4'-O4'	-5.42	1.38	1.45
2	N	128	G	N1-C2	5.42	1.42	1.37
1	M	1132	C	C2-N3	5.42	1.40	1.35
2	N	269	C	P-O5'	-5.42	1.54	1.59
3	O	1405	G	C5'-C4'	5.42	1.57	1.51
1	M	1361	G	N9-C4	-5.42	1.33	1.38
2	N	155	A	C6-N6	5.42	1.38	1.33
2	N	660	C	N1-C6	5.42	1.40	1.37
2	N	536	C	N1-C6	5.42	1.40	1.37
1	M	994	A	C6-N1	-5.41	1.31	1.35
2	N	67	C	C4'-C3'	5.41	1.59	1.53
2	N	200	G	N9-C4	5.41	1.42	1.38
2	N	443	C	O3'-P	-5.41	1.54	1.61
2	N	463	U	C2-O2	5.41	1.27	1.22
2	N	685	G	C6-N1	5.41	1.43	1.39
3	O	1461	G	N9-C8	-5.41	1.34	1.37
2	N	61	G	N1-C2	5.41	1.42	1.37
2	N	142	G	N9-C8	5.41	1.41	1.37
2	N	625	U	N1-C6	-5.41	1.33	1.38
3	O	1498	U	C2'-C1'	-5.41	1.47	1.53
2	N	497	G	C6-N1	5.41	1.43	1.39
2	N	583	A	C6-N6	5.41	1.38	1.33
2	N	251	G	N9-C8	-5.41	1.34	1.37
2	N	677	U	C1'-N1	5.41	1.56	1.48
1	M	1066	C	C4-C5	-5.41	1.38	1.43
1	M	1346	A	C3'-O3'	5.41	1.49	1.42
2	N	167	A	C4'-C3'	-5.41	1.47	1.52
1	M	1120	C	C5-C6	5.41	1.38	1.34
2	N	267	C	N3-C4	5.41	1.37	1.33
2	N	560	A	C5-C6	5.41	1.46	1.41
2	N	604	G	C5'-C4'	5.41	1.57	1.51
2	N	623	C	P-O5'	5.41	1.65	1.59
2	N	653	U	C2-N3	5.40	1.41	1.37
2	N	855	U	N1-C6	5.40	1.42	1.38
1	M	1012	A	N9-C4	5.40	1.41	1.37
1	M	1041	G	N9-C8	-5.40	1.34	1.37
1	M	1170	A	N7-C5	-5.40	1.36	1.39
2	N	231	U	C5'-C4'	5.40	1.57	1.51
2	N	390	U	N3-C4	5.40	1.43	1.38
1	M	1062	U	C4-O4	5.40	1.27	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	714	G	C6-N1	5.40	1.43	1.39
2	N	725	G	N7-C5	-5.40	1.36	1.39
2	N	202	G	N9-C8	5.40	1.41	1.37
2	N	259	G	C2-N2	5.40	1.40	1.34
2	N	518	C	N1-C6	5.40	1.40	1.37
2	N	801	U	N1-C6	-5.40	1.33	1.38
2	N	844	G	O3'-P	-5.40	1.54	1.61
3	O	1432	G	C6-N1	5.40	1.43	1.39
1	M	1003	G	C4'-O4'	-5.40	1.38	1.45
2	N	286	C	C4-C5	-5.40	1.38	1.43
1	M	940	C	C4-N4	5.39	1.38	1.33
1	M	1341	U	P-O5'	-5.39	1.54	1.59
2	N	185	U	C2'-C1'	-5.39	1.47	1.53
2	N	887	G	C2-N2	5.39	1.40	1.34
2	N	480	U	C4-C5	5.39	1.48	1.43
2	N	896	C	O3'-P	-5.39	1.54	1.61
3	O	1505	G	C2-N3	5.39	1.37	1.32
2	N	98	A	N9-C8	5.39	1.42	1.37
2	N	134	G	N9-C8	-5.39	1.34	1.37
2	N	341	C	O4'-C1'	-5.39	1.34	1.41
3	O	1524	C	C2'-C1'	-5.39	1.47	1.53
1	M	1310	G	C2-N2	5.39	1.40	1.34
1	M	1319	A	C6-N1	5.39	1.39	1.35
2	N	138	G	C3'-C2'	5.39	1.58	1.52
2	N	635	A	C8-N7	-5.39	1.27	1.31
3	O	1455	G	C1'-N9	5.39	1.56	1.48
2	N	230	G	C5-C6	-5.39	1.36	1.42
2	N	596	A	C6-N1	5.39	1.39	1.35
2	N	121	U	O3'-P	-5.39	1.54	1.61
2	N	923	A	C6-N6	5.39	1.38	1.33
3	O	1471	U	C2-N3	5.39	1.41	1.37
1	M	1127	G	N7-C5	-5.38	1.36	1.39
2	N	356	A	C4'-O4'	5.38	1.52	1.45
1	M	1017	U	C1'-N1	5.38	1.56	1.48
1	M	1347	G	C2-N2	5.38	1.40	1.34
2	N	314	C	O3'-P	5.38	1.67	1.61
2	N	701	U	C1'-N1	5.38	1.56	1.48
3	O	1393	U	N3-C4	5.38	1.43	1.38
1	M	1173	U	C1'-N1	5.38	1.56	1.48
2	N	662	U	C4'-O4'	5.38	1.52	1.45
1	M	933	G	N1-C2	5.38	1.42	1.37
1	M	1329	A	N9-C8	5.38	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	784	A	C6-N1	5.38	1.39	1.35
2	N	570	G	O4'-C1'	5.38	1.48	1.41
1	M	1135	U	C5-C6	5.37	1.39	1.34
2	N	284	C	C2-O2	5.37	1.29	1.24
2	N	514	C	C5'-C4'	5.37	1.57	1.51
1	M	1012	A	C2'-O2'	-5.37	1.34	1.41
1	M	1031	C	P-O5'	-5.37	1.54	1.59
1	M	1388	C	C4'-O4'	5.37	1.52	1.45
2	N	660	C	C5'-C4'	5.37	1.57	1.51
2	N	118	U	C2'-C1'	-5.37	1.47	1.53
2	N	190	A	C5-C4	5.37	1.42	1.38
2	N	244	U	C2-N3	5.37	1.41	1.37
2	N	418	C	C4-N4	5.37	1.38	1.33
1	M	1362	A	N7-C5	-5.37	1.36	1.39
2	N	508	U	C1'-N1	5.37	1.56	1.48
2	N	603	U	C1'-N1	5.37	1.56	1.48
2	N	122	G	C5'-C4'	5.37	1.57	1.51
2	N	501	C	P-O5'	-5.37	1.54	1.59
2	N	585	G	C2-N2	5.37	1.40	1.34
2	N	818	G	C5-C4	5.37	1.42	1.38
1	M	1236	A	O3'-P	-5.36	1.54	1.61
2	N	188	C	P-O5'	5.36	1.65	1.59
2	N	572	A	C2'-C1'	-5.36	1.47	1.53
3	O	1494	G	C5'-C4'	5.36	1.57	1.51
1	M	1230	C	C4-N4	5.36	1.38	1.33
1	M	972	C	C4'-O4'	-5.36	1.38	1.45
1	M	1104	G	O3'-P	5.36	1.67	1.61
1	M	1276	G	C4'-C3'	5.36	1.59	1.53
2	N	646	G	C2-N2	5.36	1.40	1.34
2	N	204	G	O4'-C1'	5.36	1.48	1.41
2	N	255	G	N9-C4	5.36	1.42	1.38
2	N	25	C	C2'-O2'	5.36	1.48	1.41
2	N	158	G	N7-C5	-5.36	1.36	1.39
2	N	445	G	N1-C2	5.36	1.42	1.37
2	N	812	G	N3-C4	-5.36	1.31	1.35
1	M	951	G	P-O5'	-5.36	1.54	1.59
2	N	203	G	O4'-C1'	5.36	1.48	1.41
2	N	288	A	C5-C6	-5.36	1.36	1.41
2	N	380	G	C2-N3	5.36	1.37	1.32
2	N	693	G	C2-N2	5.36	1.40	1.34
2	N	810	C	C4-C5	-5.36	1.38	1.43
2	N	888	G	C2-N3	5.36	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	469	C	O4'-C1'	5.35	1.48	1.41
2	N	669	G	N9-C4	-5.35	1.33	1.38
2	N	870	U	N1-C2	5.35	1.43	1.38
1	M	932	C	C4-C5	5.35	1.47	1.43
1	M	1312	G	N3-C4	5.35	1.39	1.35
2	N	50	A	C4'-O4'	5.35	1.52	1.45
2	N	436	C	N1-C6	5.35	1.40	1.37
3	O	1459	G	O5'-C5'	-5.35	1.34	1.42
1	M	1250	A	C1'-N9	5.35	1.56	1.48
1	M	1289	A	O3'-P	-5.35	1.54	1.61
1	M	1335	U	C1'-N1	5.35	1.56	1.48
2	N	177	G	C3'-C2'	-5.35	1.46	1.52
2	N	393	A	O3'-P	5.35	1.67	1.61
2	N	65	A	C6-N6	5.35	1.38	1.33
2	N	130	A	C5'-C4'	5.35	1.57	1.51
2	N	431	A	C5-C4	-5.35	1.35	1.38
2	N	529	G	C4'-C3'	-5.35	1.47	1.52
1	M	1120	C	C2'-C1'	-5.35	1.47	1.53
2	N	236	A	N3-C4	-5.35	1.31	1.34
2	N	480	U	C3'-C2'	5.35	1.58	1.52
2	N	927	G	C2'-C1'	5.35	1.59	1.53
3	O	1493	A	C8-N7	-5.35	1.27	1.31
2	N	88	U	C5'-C4'	5.35	1.57	1.51
2	N	422	C	C4-C5	-5.34	1.38	1.43
2	N	445	G	C6-N1	5.34	1.43	1.39
2	N	493	A	P-O5'	-5.34	1.54	1.59
2	N	563	A	N3-C4	-5.34	1.31	1.34
2	N	632	U	N1-C6	-5.34	1.33	1.38
2	N	292	G	C3'-O3'	5.34	1.49	1.42
2	N	597	G	C2-N3	5.34	1.37	1.32
1	M	959	A	N7-C5	-5.34	1.36	1.39
1	M	1349	A	C6-N6	5.34	1.38	1.33
2	N	78	A	C8-N7	-5.34	1.27	1.31
2	N	191	G	N3-C4	5.34	1.39	1.35
2	N	557	G	C6-N1	5.34	1.43	1.39
2	N	645	G	N9-C4	-5.34	1.33	1.38
3	O	1485	U	C5-C6	5.34	1.39	1.34
2	N	314	C	C2'-C1'	-5.34	1.47	1.53
2	N	614	C	N1-C6	5.34	1.40	1.37
2	N	646	G	N9-C8	5.34	1.41	1.37
2	N	776	G	C6-N1	5.34	1.43	1.39
2	N	185	U	O3'-P	-5.34	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	542	G	C6-N1	5.34	1.43	1.39
2	N	885	G	C4'-C3'	5.34	1.59	1.53
3	O	1435	G	N9-C4	5.34	1.42	1.38
3	O	1443	C	N1-C2	5.34	1.45	1.40
1	M	982	U	P-O5'	5.34	1.65	1.59
1	M	1371	G	C3'-O3'	-5.34	1.34	1.42
2	N	375	U	C2'-C1'	5.34	1.59	1.53
2	N	673	A	N1-C2	5.34	1.39	1.34
1	M	964	A	N1-C2	5.33	1.39	1.34
1	M	1119	C	C2-O2	5.33	1.29	1.24
2	N	395	C	C5'-C4'	5.33	1.57	1.51
2	N	665	A	C8-N7	5.33	1.35	1.31
2	N	774	G	C2-N3	5.33	1.37	1.32
2	N	904	U	C5-C6	5.33	1.39	1.34
3	O	1519	A	N9-C8	-5.33	1.33	1.37
1	M	1055	A	N7-C5	-5.33	1.36	1.39
1	M	1235	U	N3-C4	5.33	1.43	1.38
2	N	462	G	N7-C5	5.33	1.42	1.39
2	N	778	G	C5-C4	5.33	1.42	1.38
2	N	805	C	N3-C4	5.33	1.37	1.33
2	N	912	C	N1-C6	5.33	1.40	1.37
3	O	1392	G	C5'-C4'	5.33	1.57	1.51
2	N	682	G	C3'-O3'	-5.33	1.34	1.42
1	M	996	A	C6-N6	5.33	1.38	1.33
1	M	1201	A	O3'-P	-5.33	1.54	1.61
2	N	525	C	P-O5'	-5.33	1.54	1.59
1	M	974	A	C2'-C1'	-5.32	1.47	1.53
1	M	1198	G	C5-C6	5.32	1.47	1.42
1	M	1319	A	C2-N3	5.32	1.38	1.33
2	N	71	A	C5-C6	-5.32	1.36	1.41
2	N	322	C	O4'-C1'	5.32	1.48	1.41
2	N	762	U	N3-C4	5.32	1.43	1.38
3	O	1413	A	C6-N1	5.32	1.39	1.35
1	M	1096	C	N1-C6	5.32	1.40	1.37
2	N	76	G	C5-C6	-5.32	1.37	1.42
2	N	464	U	N1-C2	-5.32	1.33	1.38
1	M	1334	G	C6-N1	5.32	1.43	1.39
2	N	82	G	C3'-C2'	5.32	1.58	1.52
2	N	77	A	C5'-C4'	5.32	1.57	1.51
1	M	1297	G	P-O5'	-5.32	1.54	1.59
2	N	380	G	C3'-C2'	-5.32	1.47	1.52
2	N	831	A	C8-N7	5.32	1.35	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	924	C	C4-N4	5.32	1.38	1.33
1	M	1082	A	N7-C5	-5.32	1.36	1.39
2	N	814	A	C6-N1	5.32	1.39	1.35
2	N	497	G	C2-N3	5.31	1.37	1.32
1	M	1322	C	C4-C5	5.31	1.47	1.43
2	N	93	U	C2-N3	5.31	1.41	1.37
2	N	816	A	C6-N6	5.31	1.38	1.33
2	N	853	C	N1-C6	-5.31	1.33	1.37
1	M	1168	U	C4'-C3'	5.31	1.58	1.53
1	M	1380	U	C2-N3	5.31	1.41	1.37
2	N	426	U	C5-C6	-5.31	1.29	1.34
2	N	479	U	N1-C6	5.31	1.42	1.38
2	N	856	C	C4'-C3'	-5.31	1.47	1.52
3	O	1484	C	C1'-N1	5.31	1.56	1.48
1	M	1335	U	N3-C4	5.31	1.43	1.38
2	N	419	C	C2-O2	5.31	1.29	1.24
2	N	665	A	P-O5'	-5.31	1.54	1.59
1	M	998	C	C4'-C3'	5.30	1.58	1.53
1	M	1088	G	C3'-C2'	-5.30	1.47	1.52
2	N	332	G	C4'-O4'	5.30	1.52	1.45
2	N	689	C	C1'-N1	5.30	1.56	1.48
2	N	898	G	N3-C4	-5.30	1.31	1.35
1	M	1164	G	C3'-C2'	5.30	1.58	1.52
2	N	776	G	N1-C2	5.30	1.42	1.37
2	N	827	U	C2-O2	5.30	1.27	1.22
3	O	1446	A	C6-N1	-5.30	1.31	1.35
3	O	1453	G	C2-N3	5.30	1.36	1.32
1	M	1216	A	C5-C4	-5.30	1.35	1.38
1	M	1277	C	C4-N4	5.30	1.38	1.33
1	M	1309	G	N7-C5	-5.30	1.36	1.39
2	N	390	U	C3'-O3'	5.30	1.49	1.42
1	M	1225	A	N3-C4	-5.30	1.31	1.34
2	N	859	G	C4'-C3'	5.30	1.58	1.53
3	O	1417	G	C6-N1	5.30	1.43	1.39
1	M	1104	G	C8-N7	5.30	1.34	1.30
1	M	1258	G	C3'-C2'	-5.30	1.47	1.52
1	M	1283	U	C2-N3	5.30	1.41	1.37
2	N	155	A	C2'-C1'	-5.30	1.47	1.53
2	N	289	G	C6-O6	5.30	1.28	1.24
2	N	754	C	N1-C6	5.30	1.40	1.37
1	M	1102	A	C2-N3	-5.29	1.28	1.33
1	M	963	G	C2'-C1'	-5.29	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1162	C	C4'-C3'	5.29	1.58	1.53
2	N	667	G	C2-N3	5.29	1.36	1.32
2	N	735	C	N1-C2	5.29	1.45	1.40
3	O	1502	A	C2'-C1'	-5.29	1.47	1.53
1	M	1173	U	N1-C2	5.29	1.43	1.38
1	M	1339	A	N9-C4	-5.29	1.34	1.37
2	N	670	G	N9-C4	5.29	1.42	1.38
2	N	454	G	C2-N2	5.29	1.39	1.34
2	N	95	C	C3'-O3'	5.29	1.49	1.42
2	N	97	G	C5-C6	-5.29	1.37	1.42
2	N	201	G	N9-C4	-5.29	1.33	1.38
2	N	717	U	C4'-C3'	-5.29	1.47	1.52
2	N	850	U	C4'-C3'	5.29	1.58	1.53
2	N	426	U	O3'-P	-5.29	1.54	1.61
2	N	447	G	C5'-C4'	5.29	1.57	1.51
2	N	384	G	N3-C4	-5.29	1.31	1.35
1	M	1110	A	C6-N1	5.28	1.39	1.35
2	N	777	A	C6-N1	5.28	1.39	1.35
2	N	211	G	N3-C4	-5.28	1.31	1.35
2	N	262	A	O4'-C1'	5.28	1.48	1.41
2	N	769	G	O4'-C1'	-5.28	1.34	1.41
1	M	1329	A	C3'-O3'	5.28	1.49	1.42
1	M	1322	C	N1-C6	5.28	1.40	1.37
2	N	470	C	N3-C4	5.28	1.37	1.33
2	N	807	A	C5'-C4'	5.28	1.57	1.51
1	M	976	G	N9-C8	5.28	1.41	1.37
1	M	1008	U	C4'-C3'	5.28	1.58	1.53
2	N	51	A	C6-N6	5.28	1.38	1.33
2	N	784	A	C2'-C1'	-5.28	1.47	1.53
2	N	826	C	C1'-N1	5.28	1.56	1.48
2	N	859	G	O4'-C1'	5.28	1.48	1.41
2	N	902	G	C5'-C4'	5.28	1.57	1.51
2	N	297	G	N3-C4	-5.28	1.31	1.35
2	N	650	G	C2-N2	5.28	1.39	1.34
2	N	825	A	N3-C4	5.28	1.38	1.34
2	N	64	G	N7-C5	-5.27	1.36	1.39
1	M	1064	G	C2-N3	5.27	1.36	1.32
1	M	1085	U	N1-C2	5.27	1.43	1.38
2	N	239	U	C4'-C3'	5.27	1.58	1.53
2	N	640	A	N9-C4	-5.27	1.34	1.37
1	M	1296	C	C5'-C4'	5.27	1.57	1.51
2	N	34	C	P-O5'	-5.27	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	81	A	C1'-N9	5.27	1.56	1.48
2	N	535	A	N9-C4	-5.27	1.34	1.37
2	N	873	A	P-O5'	5.27	1.65	1.59
1	M	1279	G	C2'-C1'	-5.27	1.47	1.53
1	M	1308	U	C1'-N1	5.27	1.56	1.48
2	N	154	U	P-O5'	-5.27	1.54	1.59
2	N	396	C	C2-N3	5.27	1.40	1.35
2	N	420	U	N3-C4	5.27	1.43	1.38
2	N	478	A	C5-C4	5.27	1.42	1.38
2	N	631	C	C2-O2	5.27	1.29	1.24
2	N	896	C	C3'-O3'	5.27	1.49	1.42
3	O	1521	C	C1'-N1	5.27	1.56	1.48
1	M	1151	A	C2-N3	5.26	1.38	1.33
2	N	138	G	C6-N1	5.26	1.43	1.39
2	N	245	U	C5-C6	5.26	1.38	1.34
2	N	362	G	C4'-C3'	5.26	1.58	1.53
1	M	1381	U	C5-C6	5.26	1.38	1.34
2	N	178	C	C2-N3	5.26	1.40	1.35
2	N	927	G	N7-C5	-5.26	1.36	1.39
1	M	1324	A	O3'-P	-5.26	1.54	1.61
2	N	830	G	P-O5'	-5.26	1.54	1.59
1	M	985	C	C3'-C2'	-5.26	1.47	1.52
2	N	90	C	N3-C4	5.26	1.37	1.33
2	N	348	G	N9-C8	5.26	1.41	1.37
2	N	526	C	C1'-N1	5.26	1.56	1.48
2	N	527	G	P-O5'	-5.26	1.54	1.59
2	N	551	U	C4'-O4'	5.26	1.52	1.45
2	N	700	G	O5'-C5'	-5.26	1.34	1.42
2	N	904	U	N1-C6	5.26	1.42	1.38
3	O	1410	A	C3'-C2'	5.26	1.58	1.52
2	N	324	G	C6-N1	5.26	1.43	1.39
2	N	764	C	C1'-N1	5.26	1.56	1.48
1	M	1182	G	C5'-C4'	5.26	1.57	1.51
1	M	1274	A	C6-N1	5.26	1.39	1.35
2	N	92	U	C2'-C1'	-5.26	1.47	1.53
2	N	92	U	N1-C2	-5.26	1.33	1.38
2	N	405	U	C2-N3	5.26	1.41	1.37
1	M	1013	G	C2-N2	5.25	1.39	1.34
1	M	1182	G	C5-C4	-5.25	1.34	1.38
2	N	60	A	N1-C2	5.25	1.39	1.34
2	N	491	G	C5'-C4'	5.25	1.57	1.51
2	N	902	G	N9-C8	5.25	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1493	A	N9-C8	-5.25	1.33	1.37
1	M	973	G	C2-N2	5.25	1.39	1.34
1	M	1032	G	C2'-C1'	-5.25	1.47	1.53
2	N	66	A	C5-C6	5.25	1.45	1.41
2	N	658	C	C5'-C4'	5.25	1.57	1.51
1	M	1309	G	C4'-C3'	5.25	1.58	1.53
2	N	381	C	C4'-C3'	5.25	1.58	1.53
2	N	405	U	P-O5'	-5.25	1.54	1.59
1	M	1297	G	N1-C2	5.25	1.42	1.37
2	N	778	G	N1-C2	5.25	1.42	1.37
1	M	1097	C	P-O5'	5.25	1.65	1.59
2	N	204	G	C8-N7	-5.25	1.27	1.30
2	N	768	A	C4'-O4'	-5.25	1.38	1.45
1	M	1060	U	C4-O4	5.25	1.27	1.23
1	M	1064	G	C6-N1	-5.25	1.35	1.39
3	O	1504	G	C8-N7	-5.25	1.27	1.30
3	O	1527	U	O4'-C1'	5.25	1.48	1.41
1	M	1057	G	N7-C5	-5.25	1.36	1.39
2	N	53	A	N1-C2	-5.25	1.29	1.34
2	N	521	G	C5-C4	-5.25	1.34	1.38
1	M	973	G	C6-N1	5.24	1.43	1.39
1	M	1270	G	N7-C5	-5.24	1.36	1.39
2	N	71	A	C4'-O4'	-5.24	1.38	1.45
2	N	228	A	C5-C6	-5.24	1.36	1.41
2	N	272	C	N3-C4	5.24	1.37	1.33
2	N	412	A	C3'-C2'	-5.24	1.47	1.52
2	N	452	A	N7-C5	-5.24	1.36	1.39
2	N	538	G	C4'-O4'	5.24	1.52	1.45
2	N	621	A	N3-C4	-5.24	1.31	1.34
2	N	826	C	O4'-C1'	5.24	1.48	1.41
2	N	886	G	C2'-C1'	-5.24	1.47	1.53
1	M	959	A	N3-C4	5.24	1.38	1.34
1	M	1181	G	C2-N3	5.24	1.36	1.32
2	N	58	C	C5'-C4'	5.24	1.57	1.51
2	N	239	U	O3'-P	-5.24	1.54	1.61
2	N	854	U	C4-C5	5.24	1.48	1.43
1	M	1338	G	C8-N7	-5.24	1.27	1.30
2	N	399	G	C6-N1	5.24	1.43	1.39
2	N	499	A	P-O5'	5.24	1.65	1.59
2	N	704	A	C8-N7	-5.24	1.27	1.31
2	N	818	G	N9-C4	5.24	1.42	1.38
2	N	52	C	C5'-C4'	5.24	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	177	G	O3'-P	-5.24	1.54	1.61
2	N	435	A	C5-C6	-5.24	1.36	1.41
2	N	446	G	C5-C4	5.24	1.42	1.38
2	N	485	U	C2'-C1'	-5.24	1.47	1.53
2	N	843	U	P-O5'	5.24	1.65	1.59
2	N	875	U	C2'-O2'	5.24	1.48	1.41
2	N	881	G	C2-N2	5.24	1.39	1.34
1	M	1105	A	C2-N3	5.24	1.38	1.33
1	M	1339	A	N7-C5	-5.24	1.36	1.39
2	N	535	A	C6-N6	5.24	1.38	1.33
1	M	1133	G	C5-C4	5.24	1.42	1.38
1	M	1261	A	C4'-O4'	5.24	1.52	1.45
2	N	9	G	C8-N7	-5.24	1.27	1.30
2	N	126	G	C5-C4	-5.24	1.34	1.38
2	N	212	G	N1-C2	5.24	1.42	1.37
2	N	469	C	O3'-P	-5.24	1.54	1.61
2	N	601	G	C6-O6	5.24	1.28	1.24
1	M	1052	U	C4'-O4'	5.23	1.52	1.45
2	N	79	G	O3'-P	5.23	1.67	1.61
3	O	1476	A	O5'-C5'	5.23	1.52	1.44
1	M	1076	U	C4'-O4'	-5.23	1.38	1.45
2	N	698	G	C4'-C3'	5.23	1.58	1.53
2	N	791	G	N1-C2	5.23	1.42	1.37
2	N	854	U	O3'-P	5.23	1.67	1.61
3	O	1416	G	O3'-P	-5.23	1.54	1.61
1	M	999	C	C2-N3	5.23	1.40	1.35
1	M	1276	G	C2-N2	5.23	1.39	1.34
2	N	3	A	N9-C4	-5.23	1.34	1.37
2	N	786	G	O3'-P	-5.23	1.54	1.61
3	O	1486	G	C2'-C1'	-5.23	1.47	1.53
1	M	949	A	C2'-C1'	5.23	1.59	1.53
1	M	1004	A	C4'-O4'	-5.23	1.38	1.45
2	N	36	C	C2'-O2'	-5.23	1.34	1.41
2	N	728	A	N9-C8	5.23	1.42	1.37
2	N	595	A	C5-C6	-5.23	1.36	1.41
2	N	608	A	C8-N7	-5.23	1.27	1.31
2	N	728	A	C5-C4	-5.23	1.35	1.38
1	M	1289	A	N9-C4	-5.23	1.34	1.37
2	N	233	C	C2-N3	5.23	1.40	1.35
1	M	1087	G	C5'-C4'	5.22	1.57	1.51
2	N	38	G	C2-N3	5.22	1.36	1.32
2	N	82	G	N1-C2	-5.22	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1426	G	C8-N7	-5.22	1.27	1.30
2	N	177	G	C5-C6	-5.22	1.37	1.42
2	N	357	G	C3'-C2'	-5.22	1.47	1.52
2	N	483	C	C2'-C1'	-5.22	1.47	1.53
2	N	82	G	C6-N1	5.22	1.43	1.39
2	N	384	G	C8-N7	5.22	1.34	1.30
2	N	928	G	C5'-C4'	5.22	1.57	1.51
3	O	1485	U	C4'-C3'	5.22	1.58	1.53
1	M	1034	G	N7-C5	-5.22	1.36	1.39
1	M	1043	G	N7-C5	-5.22	1.36	1.39
1	M	1153	G	C5'-C4'	-5.22	1.45	1.51
1	M	1206	G	C8-N7	-5.22	1.27	1.30
2	N	7	A	C2'-C1'	5.22	1.59	1.53
2	N	100	G	O5'-C5'	-5.22	1.34	1.42
2	N	424	G	C5-C6	-5.22	1.37	1.42
2	N	558	G	N1-C2	5.22	1.42	1.37
2	N	767	A	P-O5'	5.22	1.65	1.59
2	N	872	A	C5-C4	5.22	1.42	1.38
3	O	1482	G	O3'-P	5.22	1.67	1.61
1	M	1003	G	N7-C5	-5.22	1.36	1.39
2	N	481	G	C2'-C1'	-5.22	1.47	1.53
1	M	958	A	C5'-C4'	5.22	1.57	1.51
1	M	1213	A	C2'-C1'	-5.22	1.47	1.53
1	M	1291	U	C3'-C2'	-5.22	1.47	1.52
1	M	1203	C	C4'-O4'	5.21	1.52	1.45
2	N	58	C	C4'-O4'	-5.21	1.38	1.45
2	N	204	G	C2-N2	5.21	1.39	1.34
2	N	439	U	N3-C4	5.21	1.43	1.38
2	N	844	G	P-O5'	-5.21	1.54	1.59
3	O	1423	G	N9-C8	5.21	1.41	1.37
1	M	1149	C	C3'-O3'	5.21	1.49	1.42
1	M	1319	A	C2'-C1'	-5.21	1.47	1.53
2	N	894	G	P-O5'	-5.21	1.54	1.59
3	O	1512	U	C2-N3	5.21	1.41	1.37
1	M	934	C	O3'-P	-5.21	1.54	1.61
2	N	148	G	C2-N2	5.21	1.39	1.34
2	N	253	A	C2'-C1'	-5.21	1.47	1.53
2	N	301	G	C6-O6	-5.21	1.19	1.24
2	N	744	C	C5'-C4'	-5.21	1.45	1.51
2	N	792	A	C6-N6	5.21	1.38	1.33
1	M	1375	A	N3-C4	-5.21	1.31	1.34
2	N	477	C	C5-C6	5.21	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1279	G	O3'-P	-5.21	1.54	1.61
3	O	1466	C	C1'-N1	5.21	1.56	1.48
1	M	1354	U	C2'-C1'	-5.21	1.47	1.53
2	N	667	G	C3'-C2'	-5.21	1.47	1.52
2	N	813	U	C3'-C2'	5.21	1.58	1.52
2	N	892	A	C6-N1	5.21	1.39	1.35
3	O	1499	A	C6-N6	5.21	1.38	1.33
3	O	1511	G	N9-C4	5.21	1.42	1.38
1	M	1336	C	C5'-C4'	5.20	1.57	1.51
2	N	10	A	O3'-P	5.20	1.67	1.61
2	N	228	A	C2'-C1'	-5.20	1.47	1.53
2	N	426	U	C4-O4	5.20	1.27	1.23
2	N	506	G	C6-O6	-5.20	1.19	1.24
3	O	1516	G	O3'-P	5.20	1.67	1.61
1	M	1052	U	C4-C5	5.20	1.48	1.43
1	M	1168	U	N1-C2	-5.20	1.33	1.38
2	N	457	G	N9-C8	5.20	1.41	1.37
2	N	823	C	C4-N4	5.20	1.38	1.33
3	O	1401	G	O4'-C1'	5.20	1.48	1.41
3	O	1491	G	O4'-C1'	-5.20	1.34	1.41
1	M	1118	U	C2-N3	5.20	1.41	1.37
2	N	319	G	N7-C5	-5.20	1.36	1.39
2	N	601	G	O3'-P	5.20	1.67	1.61
3	O	1521	C	P-O5'	-5.20	1.54	1.59
1	M	993	G	N9-C4	-5.20	1.33	1.38
1	M	1318	A	N1-C2	5.19	1.39	1.34
2	N	101	A	C6-N6	5.19	1.38	1.33
1	M	1033	G	C5'-C4'	5.19	1.57	1.51
1	M	1178	G	C3'-C2'	-5.19	1.47	1.52
2	N	475	C	C4-N4	5.19	1.38	1.33
2	N	706	A	C6-N6	5.19	1.38	1.33
3	O	1456	A	N1-C2	5.19	1.39	1.34
3	O	1464	U	C5'-C4'	5.19	1.57	1.51
1	M	1006	G	C5'-C4'	5.19	1.57	1.51
1	M	1268	G	O4'-C1'	5.19	1.48	1.41
2	N	219	U	C2'-C1'	-5.19	1.47	1.53
3	O	1450	U	C5'-C4'	5.19	1.57	1.51
1	M	1133	G	C3'-C2'	-5.19	1.47	1.52
2	N	7	A	N1-C2	-5.19	1.29	1.34
1	M	1041	G	N3-C4	5.19	1.39	1.35
1	M	1175	G	C2-N2	5.19	1.39	1.34
2	N	157	U	C3'-C2'	5.19	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	O	1415	G	C4'-C3'	-5.19	1.47	1.52
3	O	1480	A	C4'-O4'	5.19	1.52	1.45
1	M	942	G	C5-C4	5.19	1.42	1.38
1	M	1102	A	C5-C4	-5.19	1.35	1.38
2	N	466	A	C6-N1	5.18	1.39	1.35
2	N	702	A	C2'-C1'	5.18	1.59	1.53
2	N	793	U	N1-C6	-5.18	1.33	1.38
3	O	1395	C	N3-C4	5.18	1.37	1.33
2	N	132	C	N1-C6	5.18	1.40	1.37
2	N	575	G	P-O5'	5.18	1.65	1.59
2	N	382	A	C6-N6	5.18	1.38	1.33
2	N	656	G	C6-N1	5.18	1.43	1.39
2	N	875	U	C5-C6	5.18	1.38	1.34
1	M	1164	G	N7-C5	-5.18	1.36	1.39
2	N	247	G	C4'-O4'	5.18	1.52	1.45
2	N	490	C	N3-C4	5.18	1.37	1.33
2	N	738	C	C4-C5	5.18	1.47	1.43
2	N	773	G	C1'-N9	5.18	1.56	1.48
2	N	257	G	C2'-C1'	-5.18	1.47	1.53
2	N	136	C	C2'-C1'	-5.18	1.47	1.53
2	N	198	G	C2'-C1'	-5.18	1.47	1.53
2	N	200	G	N1-C2	5.18	1.41	1.37
2	N	417	G	C5-C4	-5.18	1.34	1.38
2	N	484	G	C3'-O3'	-5.18	1.34	1.42
2	N	664	G	N9-C4	-5.18	1.33	1.38
2	N	856	C	C5-C6	-5.18	1.30	1.34
1	M	1092	A	P-O5'	-5.17	1.54	1.59
2	N	218	U	N1-C6	5.17	1.42	1.38
2	N	792	A	C3'-O3'	5.17	1.49	1.42
1	M	1193	G	C5'-C4'	5.17	1.57	1.51
1	M	990	C	C2-N3	-5.17	1.31	1.35
2	N	416	G	P-O5'	-5.17	1.54	1.59
2	N	883	C	N1-C2	-5.17	1.34	1.40
3	O	1486	G	C3'-C2'	-5.17	1.47	1.52
1	M	958	A	N9-C4	-5.17	1.34	1.37
1	M	1046	A	C2-N3	5.17	1.38	1.33
2	N	175	C	N3-C4	5.17	1.37	1.33
2	N	351	G	C2-N2	5.17	1.39	1.34
1	M	1092	A	N9-C4	5.17	1.41	1.37
1	M	1140	C	P-O5'	-5.17	1.54	1.59
2	N	81	A	C5-C4	5.17	1.42	1.38
2	N	95	C	N1-C2	5.17	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	218	U	N3-C4	5.17	1.43	1.38
2	N	529	G	N3-C4	5.17	1.39	1.35
2	N	660	C	C3'-C2'	5.17	1.58	1.52
2	N	663	A	C6-N6	5.17	1.38	1.33
2	N	770	C	O4'-C1'	5.17	1.48	1.41
3	O	1527	U	C1'-N1	5.17	1.56	1.48
1	M	1220	G	C5-C4	5.16	1.42	1.38
1	M	1252	A	C3'-O3'	5.16	1.49	1.42
2	N	907	A	C2-N3	5.16	1.38	1.33
1	M	948	C	N3-C4	5.16	1.37	1.33
1	M	1266	G	C5-C6	-5.16	1.37	1.42
2	N	70	U	C2-N3	5.16	1.41	1.37
2	N	245	U	C2-N3	-5.16	1.34	1.37
2	N	346	G	O4'-C1'	-5.16	1.34	1.41
1	M	1095	U	C2'-C1'	-5.16	1.47	1.53
2	N	285	C	P-O5'	-5.16	1.54	1.59
2	N	392	C	C4'-O4'	-5.16	1.38	1.45
2	N	915	A	C2'-C1'	-5.16	1.47	1.53
2	N	84	U	C2-N3	5.16	1.41	1.37
2	N	181	A	O3'-P	-5.16	1.54	1.61
2	N	242	G	N9-C8	-5.16	1.34	1.37
2	N	578	C	C5-C6	5.16	1.38	1.34
2	N	580	C	C4'-O4'	5.16	1.52	1.45
1	M	960	U	C5-C6	5.15	1.38	1.34
1	M	1105	A	C4'-C3'	5.15	1.58	1.53
1	M	1197	A	C5-C6	-5.15	1.36	1.41
2	N	714	G	C2'-O2'	5.15	1.48	1.41
2	N	752	G	C5'-C4'	-5.15	1.45	1.51
2	N	881	G	N3-C4	5.15	1.39	1.35
2	N	893	C	C2'-C1'	-5.15	1.47	1.53
1	M	1228	C	C2-N3	5.15	1.39	1.35
2	N	3	A	P-O5'	-5.15	1.54	1.59
2	N	421	U	C4'-C3'	5.15	1.58	1.53
2	N	523	A	C2'-C1'	-5.15	1.47	1.53
2	N	918	A	P-O5'	-5.15	1.54	1.59
1	M	986	U	P-O5'	-5.15	1.54	1.59
2	N	799	G	O3'-P	5.15	1.67	1.61
1	M	994	A	N3-C4	-5.14	1.31	1.34
1	M	1156	G	O3'-P	-5.14	1.54	1.61
2	N	725	G	O3'-P	-5.14	1.54	1.61
1	M	981	U	O3'-P	-5.14	1.54	1.61
1	M	1012	A	N7-C5	-5.14	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1358	U	C4'-C3'	5.14	1.58	1.53
2	N	30	U	N3-C4	5.14	1.43	1.38
2	N	161	A	C4'-O4'	5.14	1.52	1.45
2	N	201	G	N9-C8	5.14	1.41	1.37
2	N	239	U	C4-C5	5.14	1.48	1.43
2	N	894	G	O3'-P	-5.14	1.54	1.61
2	N	899	C	C5-C6	5.14	1.38	1.34
1	M	1041	G	O3'-P	-5.14	1.54	1.61
2	N	5	U	C4-O4	-5.14	1.19	1.23
2	N	204	G	C2-N3	5.14	1.36	1.32
2	N	204	G	C3'-C2'	-5.14	1.47	1.52
2	N	245	U	N3-C4	5.14	1.43	1.38
2	N	747	A	O5'-C5'	5.14	1.52	1.44
2	N	802	A	C8-N7	-5.14	1.27	1.31
3	O	1482	G	N9-C4	5.14	1.42	1.38
1	M	1223	C	O3'-P	-5.14	1.54	1.61
1	M	1317	C	C4'-O4'	5.14	1.52	1.45
2	N	203	G	N1-C2	5.14	1.41	1.37
2	N	847	G	N9-C8	5.14	1.41	1.37
1	M	1055	A	C5'-C4'	5.13	1.57	1.51
2	N	110	C	O3'-P	-5.13	1.54	1.61
2	N	122	G	N7-C5	-5.13	1.36	1.39
2	N	516	U	C3'-C2'	5.13	1.58	1.52
2	N	700	G	N9-C4	5.13	1.42	1.38
1	M	1366	C	N1-C2	5.13	1.45	1.40
1	M	1198	G	O3'-P	-5.13	1.54	1.61
2	N	28	A	N3-C4	5.13	1.38	1.34
2	N	207	C	C4-C5	-5.13	1.38	1.43
2	N	904	U	C4-C5	5.13	1.48	1.43
2	N	661	G	N1-C2	5.13	1.41	1.37
2	N	767	A	C6-N6	5.13	1.38	1.33
1	M	1175	G	O4'-C1'	5.13	1.48	1.41
2	N	6	G	N9-C4	5.13	1.42	1.38
2	N	97	G	C3'-O3'	5.13	1.49	1.42
1	M	1236	A	C1'-N9	5.13	1.56	1.48
1	M	1305	G	N3-C4	5.13	1.39	1.35
2	N	214	C	C5-C6	-5.13	1.30	1.34
2	N	246	A	O3'-P	-5.13	1.54	1.61
2	N	690	G	C5'-C4'	5.13	1.57	1.51
2	N	700	G	C6-N1	-5.13	1.35	1.39
3	O	1408	A	C5-C4	-5.13	1.35	1.38
3	O	1449	C	C2-N3	5.13	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1098	C	O4'-C1'	-5.12	1.34	1.41
1	M	1213	A	C3'-O3'	5.12	1.49	1.42
2	N	43	C	N1-C6	5.12	1.40	1.37
2	N	69	G	C4'-O4'	-5.12	1.38	1.45
2	N	491	G	N9-C8	-5.12	1.34	1.37
2	N	462	G	C5-C4	-5.12	1.34	1.38
2	N	802	A	O4'-C1'	5.12	1.48	1.41
1	M	976	G	C2'-O2'	-5.12	1.34	1.41
1	M	1286	U	C4-O4	5.12	1.27	1.23
1	M	1311	A	C3'-O3'	5.12	1.49	1.42
1	M	1382	C	C4-N4	5.12	1.38	1.33
2	N	172	A	C6-N1	5.12	1.39	1.35
2	N	238	A	N7-C5	-5.12	1.36	1.39
2	N	549	C	C2-N3	-5.12	1.31	1.35
3	O	1454	G	C4'-C3'	5.12	1.58	1.53
1	M	1046	A	C5-C4	5.12	1.42	1.38
2	N	503	C	C3'-C2'	-5.12	1.47	1.52
2	N	424	G	O4'-C1'	5.12	1.48	1.41
1	M	1141	C	N1-C2	-5.12	1.35	1.40
2	N	7	A	N7-C5	-5.12	1.36	1.39
2	N	229	U	O4'-C1'	-5.12	1.35	1.41
2	N	363	A	N3-C4	5.12	1.38	1.34
2	N	635	A	N7-C5	-5.12	1.36	1.39
1	M	1201	A	C3'-C2'	5.11	1.58	1.52
2	N	60	A	C4'-C3'	-5.11	1.47	1.52
2	N	74	A	N9-C8	5.11	1.41	1.37
2	N	834	U	C2'-C1'	-5.11	1.47	1.53
1	M	1003	G	C2-N3	5.11	1.36	1.32
1	M	1099	G	N3-C4	5.11	1.39	1.35
1	M	1151	A	N7-C5	-5.11	1.36	1.39
1	M	1168	U	C5'-C4'	5.11	1.57	1.51
1	M	1219	A	C2-N3	5.11	1.38	1.33
1	M	1255	G	C8-N7	5.11	1.34	1.30
1	M	1292	G	C4'-C3'	-5.11	1.47	1.52
2	N	118	U	C5'-C4'	5.11	1.57	1.51
2	N	257	G	P-O5'	5.11	1.64	1.59
2	N	488	C	C2-N3	5.11	1.39	1.35
2	N	499	A	N9-C8	-5.11	1.33	1.37
2	N	555	U	N3-C4	5.11	1.43	1.38
2	N	767	A	C5-C4	5.11	1.42	1.38
3	O	1453	G	O3'-P	-5.11	1.55	1.61
2	N	36	C	N1-C2	5.11	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	328	C	C3'-O3'	5.11	1.49	1.42
1	M	946	A	C6-N1	5.11	1.39	1.35
1	M	1312	G	C5-C4	5.11	1.42	1.38
2	N	895	G	N9-C4	-5.11	1.33	1.38
3	O	1399	C	N1-C6	5.11	1.40	1.37
3	O	1516	G	C3'-O3'	5.11	1.49	1.42
1	M	1184	G	N1-C2	5.11	1.41	1.37
2	N	419	C	C5-C6	5.11	1.38	1.34
2	N	622	A	C5-C4	-5.11	1.35	1.38
2	N	922	G	C6-O6	5.11	1.28	1.24
2	N	154	U	N1-C6	5.10	1.42	1.38
2	N	829	G	N3-C4	-5.10	1.31	1.35
2	N	779	C	O3'-P	-5.10	1.55	1.61
1	M	1264	U	C2'-O2'	5.10	1.48	1.41
2	N	814	A	C5-C4	5.10	1.42	1.38
2	N	167	A	C6-N1	5.10	1.39	1.35
2	N	320	A	C2-N3	5.10	1.38	1.33
2	N	460	A	C6-N1	5.10	1.39	1.35
2	N	715	A	N1-C2	5.10	1.39	1.34
2	N	727	G	C2-N3	5.10	1.36	1.32
2	N	57	G	C2-N3	5.10	1.36	1.32
2	N	148	G	N1-C2	5.10	1.41	1.37
2	N	266	G	N9-C8	5.10	1.41	1.37
2	N	311	C	C4-C5	5.10	1.47	1.43
2	N	753	A	C2-N3	5.10	1.38	1.33
1	M	1251	A	C6-N6	5.09	1.38	1.33
2	N	3	A	O4'-C1'	-5.09	1.35	1.41
2	N	674	G	N3-C4	-5.09	1.31	1.35
2	N	821	G	C2'-O2'	-5.09	1.35	1.41
2	N	854	U	C2'-C1'	-5.09	1.47	1.53
2	N	924	C	C2'-C1'	-5.09	1.47	1.53
2	N	408	A	C5-C4	5.09	1.42	1.38
2	N	504	C	C2'-C1'	-5.09	1.47	1.53
1	M	1144	G	N3-C4	-5.09	1.31	1.35
2	N	366	A	O4'-C1'	5.09	1.48	1.41
2	N	562	U	C3'-O3'	5.09	1.49	1.42
3	O	1500	A	C3'-O3'	5.09	1.49	1.42
2	N	812	G	C5'-C4'	5.09	1.57	1.51
1	M	1053	G	C8-N7	5.09	1.34	1.30
2	N	91	U	N1-C2	5.09	1.43	1.38
2	N	334	C	N3-C4	5.09	1.37	1.33
3	O	1462	C	C2-O2	5.09	1.29	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1119	C	C2'-O2'	5.09	1.48	1.41
1	M	1152	A	N1-C2	-5.09	1.29	1.34
1	M	1190	G	P-O5'	5.09	1.64	1.59
1	M	1236	A	N7-C5	-5.09	1.36	1.39
1	M	1309	G	C5'-C4'	5.09	1.57	1.51
2	N	821	G	C8-N7	5.09	1.34	1.30
2	N	859	G	N9-C4	5.09	1.42	1.38
3	O	1407	C	N1-C6	-5.09	1.34	1.37
3	O	1445	U	C5'-C4'	5.09	1.57	1.51
3	O	1481	U	O3'-P	-5.09	1.55	1.61
2	N	255	G	C5'-C4'	5.08	1.57	1.51
2	N	767	A	C4'-C3'	5.08	1.58	1.53
1	M	1102	A	C5-C6	-5.08	1.36	1.41
1	M	1176	A	C2'-C1'	-5.08	1.47	1.53
1	M	1206	G	C5'-C4'	-5.08	1.45	1.51
2	N	352	C	C2-N3	5.08	1.39	1.35
2	N	756	C	C5-C6	5.08	1.38	1.34
1	M	1092	A	O3'-P	-5.08	1.55	1.61
2	N	836	G	C4'-C3'	-5.08	1.47	1.52
1	M	1320	C	C3'-O3'	5.08	1.49	1.42
2	N	107	G	C3'-C2'	5.08	1.58	1.52
2	N	345	C	C2-N3	5.08	1.39	1.35
2	N	367	U	C2-N3	5.08	1.41	1.37
2	N	596	A	C2'-C1'	5.08	1.58	1.53
2	N	705	G	N3-C4	-5.08	1.31	1.35
1	M	1153	G	C3'-C2'	5.08	1.58	1.52
1	M	958	A	C3'-O3'	5.08	1.49	1.42
1	M	1115	U	C4'-O4'	-5.08	1.39	1.45
1	M	1266	G	C2'-C1'	-5.08	1.47	1.53
2	N	487	A	C6-N1	5.08	1.39	1.35
2	N	719	C	O5'-C5'	5.08	1.52	1.44
1	M	1252	A	C4'-O4'	5.07	1.52	1.45
1	M	1281	C	C3'-O3'	5.07	1.49	1.42
1	M	1376	U	C2-N3	5.07	1.41	1.37
2	N	450	G	C2-N2	5.07	1.39	1.34
2	N	637	C	C4-C5	5.07	1.47	1.43
2	N	737	C	P-O5'	-5.07	1.54	1.59
2	N	720	C	C2-N3	5.07	1.39	1.35
1	M	1166	G	N1-C2	-5.07	1.33	1.37
2	N	23	C	O4'-C1'	5.07	1.48	1.41
2	N	41	G	C6-N1	5.07	1.43	1.39
2	N	467	U	N3-C4	5.07	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	523	A	C8-N7	-5.07	1.28	1.31
2	N	617	G	N1-C2	5.07	1.41	1.37
2	N	639	G	N1-C2	5.07	1.41	1.37
2	N	915	A	C4'-C3'	5.07	1.58	1.53
2	N	18	C	C2'-C1'	-5.07	1.47	1.53
2	N	140	U	O3'-P	-5.07	1.55	1.61
1	M	1036	A	C8-N7	-5.07	1.28	1.31
1	M	1229	A	C2'-C1'	-5.07	1.47	1.53
2	N	255	G	N7-C5	-5.07	1.36	1.39
2	N	788	U	O4'-C1'	5.07	1.48	1.41
1	M	971	G	N3-C4	5.07	1.39	1.35
3	O	1443	C	O4'-C1'	5.07	1.48	1.41
3	O	1454	G	N3-C4	-5.07	1.31	1.35
1	M	1262	C	C4'-O4'	5.06	1.52	1.45
1	M	1374	A	C4'-O4'	-5.06	1.39	1.45
1	M	1382	C	C2-N3	5.06	1.39	1.35
2	N	3	A	C2'-C1'	-5.06	1.47	1.53
2	N	89	U	C4'-C3'	-5.06	1.47	1.52
1	M	1030	U	C1'-N1	5.06	1.56	1.48
1	M	1174	G	C5-C4	5.06	1.41	1.38
1	M	1302	C	O3'-P	5.06	1.67	1.61
1	M	1365	G	P-O5'	5.06	1.64	1.59
2	N	530	G	C6-O6	5.06	1.28	1.24
2	N	602	A	C3'-C2'	5.06	1.58	1.52
1	M	1101	A	C3'-C2'	5.06	1.58	1.52
1	M	1287	A	C2'-C1'	-5.06	1.47	1.53
2	N	833	G	C3'-O3'	5.06	1.49	1.42
1	M	1044	A	N3-C4	5.06	1.37	1.34
1	M	1321	U	N3-C4	5.06	1.43	1.38
2	N	305	G	N1-C2	5.06	1.41	1.37
2	N	487	A	C4'-C3'	5.06	1.58	1.53
1	M	934	C	P-O5'	-5.06	1.54	1.59
2	N	66	A	N9-C4	-5.06	1.34	1.37
2	N	99	C	C3'-C2'	5.06	1.58	1.52
2	N	273	U	N1-C6	5.06	1.42	1.38
2	N	666	G	N3-C4	5.06	1.39	1.35
2	N	914	A	C6-N6	5.06	1.38	1.33
1	M	940	C	C2-O2	5.06	1.29	1.24
1	M	1250	A	N3-C4	-5.06	1.31	1.34
2	N	179	A	N9-C8	-5.06	1.33	1.37
2	N	550	G	O3'-P	-5.06	1.55	1.61
2	N	821	G	C5-C6	-5.06	1.37	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	859	G	C2-N3	5.06	1.36	1.32
2	N	44	A	N9-C8	-5.05	1.33	1.37
2	N	51	A	C5-C6	-5.05	1.36	1.41
2	N	264	C	C4'-O4'	5.05	1.52	1.45
2	N	265	G	C2-N2	5.05	1.39	1.34
2	N	342	C	C3'-C2'	-5.05	1.47	1.52
2	N	468	A	O3'-P	-5.05	1.55	1.61
2	N	745	G	C4'-C3'	5.05	1.58	1.53
3	O	1427	C	C2'-O2'	-5.05	1.35	1.41
1	M	1256	A	N9-C8	-5.05	1.33	1.37
1	M	1299	A	N9-C8	5.05	1.41	1.37
2	N	23	C	C2-N3	5.05	1.39	1.35
2	N	437	U	C1'-N1	5.05	1.56	1.48
2	N	456	A	C2'-O2'	-5.05	1.35	1.41
1	M	1189	U	N3-C4	5.05	1.43	1.38
1	M	1084	G	C5-C6	-5.05	1.37	1.42
2	N	231	U	C4-C5	5.05	1.48	1.43
2	N	61	G	C5-C4	5.04	1.41	1.38
1	M	1352	C	N3-C4	5.04	1.37	1.33
2	N	193	C	C5-C6	-5.04	1.30	1.34
2	N	483	C	C3'-C2'	-5.04	1.47	1.52
2	N	699	C	C2-O2	-5.04	1.20	1.24
2	N	709	U	N1-C2	5.04	1.43	1.38
2	N	787	A	C1'-N9	-5.04	1.39	1.46
3	O	1475	G	N7-C5	-5.04	1.36	1.39
3	O	1479	C	C5'-C4'	5.04	1.57	1.51
2	N	450	G	C4'-C3'	5.04	1.58	1.53
2	N	482	A	N1-C2	-5.04	1.29	1.34
1	M	933	G	C3'-O3'	5.04	1.49	1.42
1	M	1075	U	N1-C2	5.04	1.43	1.38
1	M	1220	G	N3-C4	5.04	1.39	1.35
1	M	1309	G	O4'-C1'	5.04	1.48	1.41
1	M	1364	U	P-O5'	-5.04	1.54	1.59
2	N	802	A	N3-C4	-5.04	1.31	1.34
2	N	850	U	C4-O4	-5.04	1.19	1.23
3	O	1455	G	C2-N3	5.04	1.36	1.32
1	M	1056	U	C2-O2	5.04	1.26	1.22
2	N	274	A	C5-C4	-5.04	1.35	1.38
2	N	643	C	C5'-C4'	5.04	1.57	1.51
2	N	850	U	C3'-O3'	5.04	1.49	1.42
3	O	1446	A	C6-N6	5.04	1.38	1.33
1	M	1279	G	N9-C8	-5.04	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	1292	G	C6-N1	5.04	1.43	1.39
2	N	661	G	O3'-P	-5.04	1.55	1.61
3	O	1506	U	N3-C4	5.04	1.43	1.38
2	N	13	U	C3'-C2'	5.03	1.58	1.52
2	N	369	G	C5'-C4'	5.03	1.57	1.51
2	N	803	G	C5-C6	-5.03	1.37	1.42
3	O	1528	U	N1-C2	5.03	1.43	1.38
2	N	179	A	O3'-P	-5.03	1.55	1.61
2	N	34	C	C5'-C4'	5.03	1.57	1.51
2	N	406	G	N3-C4	-5.03	1.31	1.35
2	N	653	U	N1-C2	5.03	1.43	1.38
1	M	1171	A	C8-N7	-5.03	1.28	1.31
1	M	1137	C	P-O5'	-5.03	1.54	1.59
1	M	1210	C	N1-C6	-5.03	1.34	1.37
1	M	1316	G	C8-N7	5.03	1.33	1.30
2	N	908	A	C5-C4	5.03	1.42	1.38
3	O	1475	G	C6-N1	5.03	1.43	1.39
2	N	142	G	C8-N7	-5.02	1.27	1.30
2	N	648	A	C8-N7	-5.02	1.28	1.31
2	N	892	A	C8-N7	-5.02	1.28	1.31
3	O	1417	G	C5-C4	5.02	1.41	1.38
1	M	1366	C	O5'-C5'	-5.02	1.34	1.42
2	N	267	C	C5'-C4'	5.02	1.57	1.51
2	N	311	C	N3-C4	5.02	1.37	1.33
2	N	490	C	O4'-C1'	5.02	1.48	1.41
2	N	575	G	C3'-C2'	-5.02	1.47	1.52
2	N	268	U	N3-C4	-5.02	1.33	1.38
2	N	895	G	C6-N1	-5.02	1.36	1.39
3	O	1391	U	C4'-C3'	5.02	1.58	1.53
2	N	88	U	C4'-O4'	5.02	1.52	1.45
2	N	158	G	N3-C4	5.02	1.39	1.35
2	N	544	G	C3'-C2'	-5.02	1.47	1.52
2	N	784	A	N1-C2	-5.02	1.29	1.34
3	O	1392	G	C5-C4	-5.02	1.34	1.38
2	N	114	U	C5'-C4'	5.02	1.57	1.51
2	N	236	A	C2'-C1'	-5.02	1.47	1.53
2	N	333	U	C5-C6	-5.02	1.29	1.34
2	N	46	G	N9-C4	-5.01	1.33	1.38
2	N	112	G	C6-N1	5.01	1.43	1.39
2	N	349	A	N7-C5	5.01	1.42	1.39
2	N	67	C	C2'-C1'	-5.01	1.47	1.53
2	N	255	G	N3-C4	5.01	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	413	G	C2'-C1'	5.01	1.58	1.53
2	N	731	G	C2-N3	5.01	1.36	1.32
3	O	1403	C	C4-N4	5.01	1.38	1.33
1	M	965	U	C5'-C4'	5.01	1.57	1.51
1	M	1335	U	C2-N3	5.01	1.41	1.37
2	N	86	G	N9-C8	5.01	1.41	1.37
2	N	121	U	C3'-O3'	5.01	1.49	1.42
2	N	250	A	C4'-C3'	5.01	1.58	1.53
2	N	707	U	N1-C6	5.01	1.42	1.38
2	N	817	C	N3-C4	5.01	1.37	1.33
2	N	35	G	C5-C6	-5.01	1.37	1.42
2	N	589	U	C2'-C1'	-5.01	1.47	1.53
2	N	702	A	N7-C5	-5.01	1.36	1.39
3	O	1417	G	C3'-O3'	5.01	1.49	1.42
2	N	446	G	C3'-O3'	5.01	1.49	1.42
3	O	1523	G	C2-N2	5.01	1.39	1.34
1	M	1266	G	C4'-O4'	5.01	1.52	1.45
2	N	102	G	C1'-N9	5.01	1.56	1.48
2	N	126	G	N7-C5	5.01	1.42	1.39
2	N	135	C	O3'-P	-5.01	1.55	1.61
2	N	617	G	C2'-C1'	-5.01	1.47	1.53
2	N	771	G	N1-C2	5.01	1.41	1.37
2	N	897	C	C1'-N1	5.01	1.56	1.48
2	N	105	G	C5'-C4'	5.00	1.57	1.51
1	M	1103	C	C4-N4	5.00	1.38	1.33
1	M	1132	C	C2-O2	5.00	1.28	1.24
1	M	1216	A	N1-C2	-5.00	1.29	1.34
2	N	166	U	C1'-N1	5.00	1.56	1.48
2	N	448	A	C5'-C4'	5.00	1.57	1.51
2	N	786	G	C2-N3	-5.00	1.28	1.32
2	N	791	G	N9-C8	5.00	1.41	1.37
2	N	474	G	P-O5'	5.00	1.64	1.59
2	N	475	C	P-O5'	-5.00	1.54	1.59
2	N	570	G	P-O5'	-5.00	1.54	1.59

All (8983) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1253	G	N1-C6-O6	26.96	136.07	119.90
3	O	1455	G	N1-C6-O6	26.35	135.71	119.90
3	O	1458	G	N1-C6-O6	25.20	135.02	119.90
1	M	1362	A	P-O3'-C3'	24.79	149.44	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1405	G	C5-C6-O6	-24.61	113.83	128.60
3	O	1480	A	N1-C6-N6	24.40	133.24	118.60
2	N	787	A	N1-C6-N6	24.28	133.16	118.60
2	N	141	G	N1-C6-O6	24.10	134.36	119.90
3	O	1507	A	N1-C6-N6	23.95	132.97	118.60
3	O	1525	G	N1-C6-O6	23.58	134.05	119.90
2	N	499	A	N1-C6-N6	23.16	132.49	118.60
2	N	792	A	N1-C6-N6	22.91	132.34	118.60
1	M	1074	G	N1-C6-O6	22.84	133.60	119.90
2	N	655	A	N1-C6-N6	22.72	132.23	118.60
2	N	141	G	C5-C6-O6	-22.59	115.05	128.60
3	O	1455	G	C5-C6-O6	-22.49	115.11	128.60
2	N	270	A	N1-C6-N6	22.39	132.03	118.60
1	M	945	G	N1-C6-O6	22.27	133.26	119.90
2	N	682	G	C5-C6-O6	-22.22	115.27	128.60
2	N	341	C	C6-N1-C2	-22.03	111.49	120.30
2	N	223	A	N1-C6-N6	21.97	131.78	118.60
2	N	300	A	N1-C6-N6	21.88	131.73	118.60
2	N	913	A	P-O3'-C3'	21.77	145.82	119.70
2	N	881	G	N1-C6-O6	21.75	132.95	119.90
2	N	682	G	N1-C6-O6	21.63	132.88	119.90
3	O	1405	G	N1-C6-O6	21.53	132.82	119.90
2	N	77	A	N1-C6-N6	21.52	131.51	118.60
2	N	189	A	N1-C6-N6	21.38	131.43	118.60
2	N	347	G	N1-C6-O6	21.36	132.71	119.90
2	N	119	A	P-O3'-C3'	21.29	145.24	119.70
2	N	107	G	C5-C6-O6	-21.05	115.97	128.60
2	N	621	A	N1-C6-N6	20.91	131.15	118.60
2	N	749	A	N1-C6-N6	20.88	131.13	118.60
2	N	767	A	N1-C6-N6	20.76	131.06	118.60
2	N	101	A	N1-C6-N6	20.68	131.01	118.60
1	M	1157	A	N1-C6-N6	20.68	131.01	118.60
3	O	1437	A	N1-C6-N6	20.66	131.00	118.60
2	N	510	A	N1-C6-N6	20.65	130.99	118.60
1	M	964	A	N1-C6-N6	20.49	130.89	118.60
1	M	977	A	N1-C6-N6	20.48	130.89	118.60
2	N	579	A	N1-C6-N6	20.47	130.88	118.60
2	N	741	G	N1-C6-O6	20.39	132.14	119.90
2	N	468	A	N1-C6-N6	20.39	130.84	118.60
2	N	321	A	N1-C6-N6	20.36	130.82	118.60
1	M	1253	G	C5-C6-O6	-20.31	116.42	128.60
2	N	120	A	N1-C6-N6	20.27	130.76	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1334	G	N1-C6-O6	20.17	132.00	119.90
2	N	716	A	C5-C6-N1	-20.13	107.63	117.70
2	N	693	G	N1-C6-O6	20.12	131.97	119.90
2	N	174	A	N1-C6-N6	20.09	130.66	118.60
2	N	438	U	P-O3'-C3'	20.07	143.78	119.70
2	N	213	G	C5-C6-O6	-20.05	116.57	128.60
2	N	281	G	C5-C6-O6	-20.03	116.58	128.60
3	O	1530	G	P-O3'-C3'	20.02	143.73	119.70
2	N	670	G	N1-C6-O6	19.97	131.88	119.90
1	M	1196	A	N1-C6-N6	19.92	130.55	118.60
2	N	324	G	N1-C6-O6	19.82	131.79	119.90
1	M	1268	G	N1-C6-O6	19.75	131.75	119.90
2	N	260	G	N1-C6-O6	19.74	131.75	119.90
1	M	983	A	N1-C6-N6	19.65	130.39	118.60
1	M	941	G	N1-C6-O6	19.65	131.69	119.90
2	N	832	G	C5-C6-O6	-19.63	116.82	128.60
3	O	1493	A	N1-C6-N6	19.59	130.35	118.60
2	N	172	A	P-O3'-C3'	19.59	143.21	119.70
2	N	33	A	N1-C6-N6	19.58	130.35	118.60
1	M	938	A	N1-C6-N6	19.54	130.33	118.60
1	M	1042	A	N1-C6-N6	19.51	130.31	118.60
2	N	809	G	N1-C6-O6	19.46	131.58	119.90
3	O	1489	G	N1-C6-O6	19.33	131.50	119.90
3	O	1518	A	N1-C6-N6	19.25	130.15	118.60
2	N	363	A	N1-C6-N6	19.18	130.11	118.60
2	N	831	A	N1-C6-N6	19.13	130.08	118.60
1	M	1145	A	N1-C6-N6	19.10	130.06	118.60
2	N	721	G	C5-C6-O6	-18.90	117.26	128.60
2	N	663	A	N1-C6-N6	18.90	129.94	118.60
2	N	155	A	N1-C6-N6	18.88	129.93	118.60
1	M	1241	G	N1-C6-O6	18.87	131.22	119.90
1	M	948	C	N3-C4-N4	18.82	131.18	118.00
2	N	250	A	N1-C6-N6	18.80	129.88	118.60
1	M	1379	G	N1-C6-O6	18.77	131.16	119.90
2	N	670	G	C5-C6-O6	-18.76	117.34	128.60
2	N	816	A	N1-C6-N6	18.50	129.70	118.60
1	M	1045	C	N3-C4-C5	-18.48	114.51	121.90
2	N	195	A	N1-C6-N6	18.44	129.66	118.60
2	N	641	U	P-O3'-C3'	18.43	141.82	119.70
1	M	982	U	P-O3'-C3'	18.43	141.81	119.70
2	N	168	G	N1-C6-O6	18.41	130.95	119.90
2	N	730	G	N1-C6-O6	18.32	130.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	285	C	C5-C6-N1	18.25	130.12	121.00
2	N	259	G	N1-C6-O6	18.23	130.84	119.90
1	M	944	G	N1-C6-O6	18.22	130.84	119.90
1	M	949	A	N1-C6-N6	18.22	129.53	118.60
1	M	1238	A	N1-C6-N6	18.12	129.47	118.60
2	N	19	A	N1-C6-N6	18.12	129.47	118.60
2	N	285	C	C6-N1-C2	-18.08	113.07	120.30
1	M	944	G	C5-C6-O6	-18.07	117.76	128.60
2	N	127	G	C5-C6-O6	-18.02	117.79	128.60
2	N	233	C	C6-N1-C2	-17.98	113.11	120.30
3	O	1487	G	C5-C6-O6	-17.92	117.85	128.60
3	O	1458	G	C5-C6-O6	-17.92	117.85	128.60
1	M	1101	A	N1-C6-N6	17.88	129.32	118.60
2	N	120	A	O4'-C1'-N9	17.86	122.49	108.20
3	O	1487	G	N1-C6-O6	17.82	130.59	119.90
2	N	281	G	N1-C6-O6	17.79	130.57	119.90
1	M	948	C	C5-C4-N4	-17.78	107.75	120.20
1	M	1244	G	N1-C6-O6	17.75	130.55	119.90
3	O	1418	A	N1-C6-N6	17.72	129.23	118.60
2	N	258	G	N1-C6-O6	17.67	130.50	119.90
2	N	592	G	C5-C6-O6	-17.66	118.00	128.60
3	O	1433	A	C2-N3-C4	-17.66	101.77	110.60
2	N	575	G	C5-C6-N1	-17.60	102.70	111.50
2	N	656	G	N1-C6-O6	17.57	130.44	119.90
2	N	465	A	N1-C6-N6	17.55	129.13	118.60
2	N	513	C	C6-N1-C2	-17.55	113.28	120.30
1	M	1319	A	P-O3'-C3'	17.54	140.75	119.70
1	M	1258	G	N9-C4-C5	17.50	112.40	105.40
1	M	1146	A	N1-C6-N6	17.49	129.09	118.60
3	O	1419	G	C5-C6-O6	-17.49	118.11	128.60
2	N	107	G	N1-C6-O6	17.48	130.39	119.90
1	M	1108	G	N1-C6-O6	17.47	130.38	119.90
1	M	1279	G	N1-C6-O6	17.45	130.37	119.90
2	N	484	G	P-O3'-C3'	17.45	140.64	119.70
2	N	2	A	N1-C6-N6	17.42	129.05	118.60
2	N	923	A	N1-C6-N6	17.39	129.04	118.60
2	N	896	C	C6-N1-C2	-17.38	113.35	120.30
3	O	1446	A	N1-C6-N6	17.37	129.02	118.60
2	N	881	G	C5-C6-O6	-17.33	118.20	128.60
2	N	592	G	N1-C6-O6	17.29	130.28	119.90
2	N	907	A	N1-C6-N6	17.28	128.97	118.60
1	M	1046	A	N1-C6-N6	17.25	128.95	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	542	G	N1-C6-O6	17.23	130.24	119.90
2	N	31	G	N1-C6-O6	17.19	130.21	119.90
1	M	1133	G	N1-C6-O6	17.16	130.19	119.90
1	M	1346	A	N1-C6-N6	17.13	128.88	118.60
2	N	847	G	N1-C6-O6	17.13	130.18	119.90
2	N	544	G	N1-C6-O6	17.12	130.17	119.90
2	N	802	A	C5-C6-N1	-17.08	109.16	117.70
2	N	115	G	C5-C6-O6	-17.06	118.36	128.60
2	N	613	C	N3-C4-C5	-17.04	115.08	121.90
2	N	771	G	N1-C6-O6	17.03	130.12	119.90
2	N	380	G	N1-C6-O6	17.00	130.10	119.90
2	N	535	A	N1-C6-N6	17.00	128.80	118.60
1	M	941	G	C5-C6-O6	-16.98	118.41	128.60
2	N	900	A	N1-C6-N6	16.97	128.78	118.60
2	N	138	G	C5-C6-N1	-16.97	103.02	111.50
2	N	354	G	C5-C6-O6	-16.96	118.42	128.60
2	N	698	G	N1-C6-O6	16.96	130.08	119.90
2	N	298	A	N1-C6-N6	16.93	128.76	118.60
2	N	749	A	O4'-C1'-N9	16.92	121.74	108.20
2	N	147	G	N1-C6-O6	16.89	130.04	119.90
3	O	1494	G	C5-C6-O6	-16.88	118.47	128.60
2	N	666	G	C5-C6-O6	-16.87	118.48	128.60
1	M	1184	G	N1-C6-O6	16.83	130.00	119.90
2	N	192	A	N1-C6-N6	16.81	128.69	118.60
2	N	39	G	N1-C6-O6	16.81	129.99	119.90
1	M	1331	G	P-O3'-C3'	16.81	139.87	119.70
1	M	1093	A	N1-C6-N6	16.79	128.68	118.60
2	N	544	G	C5-C6-O6	-16.78	118.53	128.60
1	M	1329	A	N1-C6-N6	16.75	128.65	118.60
2	N	718	A	N1-C6-N6	16.75	128.65	118.60
2	N	781	A	N1-C6-N6	16.72	128.63	118.60
2	N	919	A	N1-C6-N6	16.71	128.63	118.60
2	N	511	C	P-O3'-C3'	16.68	139.72	119.70
1	M	1000	A	N1-C6-N6	16.66	128.60	118.60
2	N	158	G	C5-C6-O6	-16.66	118.60	128.60
2	N	303	A	N1-C6-N6	16.64	128.58	118.60
3	O	1466	C	C6-N1-C2	-16.62	113.65	120.30
2	N	310	G	N1-C6-O6	16.59	129.86	119.90
2	N	812	G	C5-C6-O6	-16.58	118.65	128.60
2	N	825	A	N1-C6-N6	16.58	128.55	118.60
2	N	172	A	N1-C6-N6	16.57	128.54	118.60
2	N	675	A	N1-C6-N6	16.57	128.54	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	41	G	C5-C6-O6	-16.56	118.66	128.60
2	N	74	A	N1-C6-N6	16.56	128.54	118.60
2	N	721	G	N1-C6-O6	16.55	129.83	119.90
2	N	807	A	N1-C6-N6	16.55	128.53	118.60
3	O	1499	A	N1-C6-N6	16.55	128.53	118.60
3	O	1516	G	N1-C6-O6	16.55	129.83	119.90
2	N	402	G	C5-C6-O6	-16.52	118.69	128.60
2	N	346	G	N1-C6-O6	16.50	129.80	119.90
2	N	540	G	C5-C6-O6	-16.48	118.71	128.60
2	N	676	A	N1-C6-N6	16.46	128.48	118.60
1	M	1204	A	N1-C6-N6	16.39	128.43	118.60
2	N	16	A	N1-C6-N6	16.39	128.43	118.60
2	N	515	G	N1-C6-O6	16.37	129.72	119.90
2	N	280	C	P-O3'-C3'	16.35	139.32	119.70
1	M	1268	G	C5-C6-N1	-16.35	103.33	111.50
1	M	1084	G	N1-C6-O6	16.34	129.71	119.90
2	N	94	G	P-O3'-C3'	16.33	139.30	119.70
1	M	1226	C	P-O3'-C3'	16.31	139.28	119.70
1	M	1244	G	C5-C6-O6	-16.31	118.81	128.60
2	N	812	G	N1-C6-O6	16.30	129.68	119.90
1	M	1201	A	P-O3'-C3'	16.29	139.25	119.70
2	N	656	G	C5-C6-O6	-16.29	118.83	128.60
1	M	1013	G	N1-C6-O6	16.28	129.67	119.90
1	M	1201	A	N1-C6-N6	16.28	128.37	118.60
1	M	945	G	C5-C6-O6	-16.28	118.83	128.60
1	M	1223	C	C6-N1-C2	-16.27	113.79	120.30
2	N	878	A	C4-C5-C6	16.25	125.13	117.00
1	M	974	A	N1-C6-N6	16.23	128.34	118.60
1	M	1271	A	C4-C5-C6	16.21	125.11	117.00
2	N	227	G	N1-C6-O6	16.21	129.63	119.90
2	N	795	C	N3-C4-C5	-16.19	115.42	121.90
2	N	716	A	N1-C6-N6	16.19	128.31	118.60
2	N	67	C	N3-C4-C5	-16.18	115.43	121.90
2	N	635	A	N1-C6-N6	16.17	128.30	118.60
2	N	570	G	C5-C6-O6	-16.13	118.92	128.60
2	N	909	A	C5-C6-N1	-16.11	109.64	117.70
2	N	482	A	N1-C6-N6	16.10	128.26	118.60
1	M	1024	G	N1-C6-O6	16.08	129.55	119.90
2	N	453	G	N1-C6-O6	16.08	129.55	119.90
2	N	334	C	C5-C6-N1	16.08	129.04	121.00
2	N	8	A	N1-C6-N6	16.04	128.23	118.60
2	N	380	G	C5-C6-O6	-16.03	118.98	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1079	G	C5-C6-O6	-15.99	119.00	128.60
2	N	336	A	N1-C2-N3	15.98	137.29	129.30
2	N	673	A	N1-C6-N6	15.96	128.18	118.60
3	O	1492	A	N1-C6-N6	15.95	128.17	118.60
2	N	147	G	C5-C6-O6	-15.93	119.04	128.60
2	N	227	G	C5-C6-O6	-15.92	119.05	128.60
2	N	211	G	N1-C6-O6	15.92	129.45	119.90
3	O	1418	A	C5-C6-N1	-15.88	109.76	117.70
2	N	54	C	C5-C6-N1	15.86	128.93	121.00
2	N	780	A	N1-C6-N6	15.86	128.11	118.60
2	N	723	U	O4'-C1'-N1	15.85	120.88	108.20
1	M	1005	A	N1-C6-N6	15.84	128.10	118.60
2	N	575	G	N1-C6-O6	15.84	129.41	119.90
3	O	1398	A	O4'-C1'-N9	15.83	120.87	108.20
1	M	1324	A	N1-C6-N6	15.81	128.08	118.60
2	N	40	C	N3-C4-C5	-15.74	115.60	121.90
2	N	148	G	N1-C6-O6	15.73	129.34	119.90
2	N	548	G	N1-C6-O6	15.73	129.34	119.90
2	N	53	A	N1-C6-N6	15.66	127.99	118.60
2	N	655	A	C5-C6-N1	-15.63	109.88	117.70
2	N	919	A	C5-N7-C8	15.61	111.70	103.90
2	N	666	G	N1-C6-O6	15.60	129.26	119.90
3	O	1518	A	C5-C6-N6	-15.59	111.22	123.70
1	M	1094	G	P-O3'-C3'	15.57	138.39	119.70
2	N	115	G	P-O3'-C3'	15.56	138.38	119.70
2	N	542	G	C5-C6-O6	-15.54	119.28	128.60
2	N	6	G	N1-C6-O6	15.53	129.22	119.90
1	M	1365	G	C8-N9-C4	-15.52	100.19	106.40
1	M	1200	C	N3-C4-C5	-15.50	115.70	121.90
2	N	73	C	O4'-C1'-N1	15.50	120.60	108.20
2	N	847	G	C5-C6-O6	-15.49	119.30	128.60
3	O	1433	A	N1-C2-N3	15.49	137.04	129.30
2	N	228	A	N1-C6-N6	15.46	127.88	118.60
1	M	959	A	N1-C6-N6	15.46	127.87	118.60
1	M	1280	A	C8-N9-C4	-15.45	99.62	105.80
2	N	753	A	N1-C6-N6	15.44	127.86	118.60
1	M	1337	G	N1-C6-O6	15.40	129.14	119.90
2	N	164	G	N1-C6-O6	15.40	129.14	119.90
2	N	708	C	O4'-C1'-N1	15.39	120.51	108.20
2	N	728	A	N1-C6-N6	15.38	127.83	118.60
3	O	1507	A	C5-C6-N6	-15.37	111.41	123.70
2	N	836	G	O4'-C1'-N9	15.36	120.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	345	C	N3-C4-C5	-15.35	115.76	121.90
2	N	615	G	N1-C6-O6	15.35	129.11	119.90
3	O	1504	G	N1-C6-O6	15.35	129.11	119.90
1	M	929	G	C5-C6-O6	-15.26	119.45	128.60
1	M	958	A	N1-C6-N6	15.25	127.75	118.60
1	M	968	A	N1-C6-N6	15.24	127.75	118.60
2	N	640	A	N1-C6-N6	15.22	127.73	118.60
2	N	263	A	C5-C6-N1	-15.21	110.09	117.70
2	N	570	G	N1-C6-O6	15.21	129.03	119.90
2	N	165	G	C5-C6-O6	-15.20	119.48	128.60
1	M	1276	G	N1-C6-O6	15.19	129.01	119.90
2	N	771	G	C5-C6-O6	-15.18	119.49	128.60
2	N	270	A	C5-C6-N6	-15.17	111.56	123.70
1	M	1318	A	N1-C6-N6	15.15	127.69	118.60
2	N	197	A	N1-C6-N6	15.15	127.69	118.60
2	N	693	G	C5-C6-O6	-15.14	119.52	128.60
2	N	256	U	O4'-C1'-N1	15.13	120.31	108.20
1	M	1169	A	N1-C6-N6	15.13	127.67	118.60
1	M	1311	A	N1-C6-N6	15.12	127.67	118.60
2	N	178	C	N3-C4-N4	15.11	128.57	118.00
2	N	493	A	N1-C6-N6	15.11	127.66	118.60
2	N	667	G	C5-C6-O6	-15.10	119.54	128.60
3	O	1454	G	N1-C6-O6	15.09	128.96	119.90
2	N	115	G	N1-C6-O6	15.08	128.95	119.90
2	N	265	G	N1-C6-O6	15.07	128.94	119.90
3	O	1419	G	N1-C6-O6	15.07	128.94	119.90
1	M	958	A	C4-C5-C6	15.05	124.53	117.00
2	N	318	G	C4-C5-N7	15.05	116.82	110.80
1	M	1004	A	N1-C6-N6	15.04	127.62	118.60
1	M	1144	G	N1-C6-O6	15.01	128.90	119.90
2	N	493	A	N9-C4-C5	-14.99	99.80	105.80
3	O	1500	A	N1-C6-N6	14.98	127.59	118.60
2	N	52	C	O4'-C1'-N1	14.96	120.17	108.20
1	M	1088	G	N1-C6-O6	14.95	128.87	119.90
1	M	1331	G	N1-C6-O6	14.95	128.87	119.90
2	N	609	A	N1-C6-N6	14.94	127.57	118.60
2	N	129	A	N1-C6-N6	14.94	127.56	118.60
2	N	535	A	C4-C5-C6	14.93	124.46	117.00
1	M	1225	A	N1-C6-N6	14.93	127.56	118.60
2	N	54	C	C6-N1-C2	-14.93	114.33	120.30
2	N	360	G	N3-C2-N2	14.89	130.32	119.90
2	N	747	A	N1-C6-N6	14.89	127.53	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	232	G	N1-C6-O6	14.84	128.81	119.90
2	N	40	C	C6-N1-C2	-14.82	114.37	120.30
2	N	896	C	N3-C4-C5	-14.80	115.98	121.90
2	N	923	A	C5-C6-N6	-14.80	111.86	123.70
2	N	919	A	C4-C5-N7	-14.77	103.31	110.70
3	O	1525	G	C5-C6-O6	-14.77	119.74	128.60
1	M	977	A	C5-C6-N1	-14.75	110.32	117.70
2	N	243	A	P-O3'-C3'	14.75	137.40	119.70
2	N	255	G	C4-C5-N7	-14.73	104.91	110.80
3	O	1406	U	O4'-C1'-N1	14.73	119.99	108.20
2	N	172	A	C5-C6-N1	-14.72	110.34	117.70
2	N	535	A	C5-C6-N1	-14.71	110.34	117.70
2	N	318	G	C6-C5-N7	-14.70	121.58	130.40
2	N	626	G	N1-C6-O6	14.70	128.72	119.90
1	M	1176	A	N1-C6-N6	14.70	127.42	118.60
2	N	389	A	N1-C6-N6	14.68	127.41	118.60
2	N	306	A	N1-C6-N6	14.67	127.40	118.60
2	N	347	G	C5-C6-O6	-14.66	119.80	128.60
2	N	711	G	N1-C6-O6	14.66	128.70	119.90
2	N	210	C	P-O3'-C3'	14.64	137.27	119.70
2	N	432	A	N1-C2-N3	14.63	136.62	129.30
2	N	912	C	C2-N3-C4	14.62	127.21	119.90
2	N	639	G	N1-C6-O6	14.62	128.67	119.90
2	N	809	G	C5-C6-O6	-14.61	119.83	128.60
1	M	1347	G	C5-C6-O6	-14.60	119.84	128.60
1	M	1039	G	C5-C6-O6	-14.57	119.86	128.60
3	O	1441	A	C8-N9-C4	-14.57	99.97	105.80
1	M	1294	G	N1-C6-O6	14.56	128.64	119.90
2	N	915	A	N1-C6-N6	14.55	127.33	118.60
1	M	1039	G	N1-C6-O6	14.54	128.62	119.90
2	N	796	C	C6-N1-C2	-14.54	114.48	120.30
2	N	499	A	C5-C6-N1	-14.52	110.44	117.70
2	N	795	C	C4-C5-C6	14.52	124.66	117.40
3	O	1433	A	N1-C6-N6	14.52	127.31	118.60
2	N	524	G	C5-C6-O6	-14.51	119.89	128.60
2	N	47	C	N3-C4-C5	-14.51	116.10	121.90
2	N	548	G	C5-C6-O6	-14.51	119.90	128.60
1	M	1347	G	P-O3'-C3'	14.50	137.10	119.70
2	N	327	A	P-O3'-C3'	14.49	137.09	119.70
1	M	1044	A	N9-C4-C5	14.48	111.59	105.80
2	N	382	A	N1-C6-N6	14.48	127.29	118.60
3	O	1421	G	N1-C6-O6	14.48	128.59	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	696	A	C2-N3-C4	-14.46	103.37	110.60
2	N	198	G	O4'-C1'-N9	14.44	119.75	108.20
1	M	1363	A	N1-C6-N6	14.43	127.26	118.60
1	M	1362	A	N1-C6-N6	14.43	127.26	118.60
2	N	621	A	C5-C6-N6	-14.43	112.16	123.70
1	M	929	G	O4'-C1'-N9	14.41	119.73	108.20
1	M	1297	G	N1-C6-O6	14.40	128.54	119.90
2	N	539	A	N1-C6-N6	14.39	127.24	118.60
1	M	1108	G	C5-C6-O6	-14.39	119.97	128.60
1	M	1219	A	N1-C6-N6	14.39	127.23	118.60
2	N	289	G	C5-C6-O6	-14.39	119.97	128.60
2	N	601	G	C5-C6-O6	-14.38	119.97	128.60
1	M	1349	A	N1-C6-N6	14.37	127.22	118.60
2	N	397	A	N1-C6-N6	14.35	127.21	118.60
3	O	1446	A	C5-C6-N6	-14.35	112.22	123.70
2	N	614	C	O4'-C1'-N1	14.34	119.67	108.20
2	N	332	G	N1-C6-O6	14.34	128.50	119.90
1	M	1180	A	N1-C6-N6	14.32	127.19	118.60
2	N	730	G	C5-C6-O6	-14.31	120.01	128.60
1	M	1380	U	P-O3'-C3'	14.30	136.86	119.70
2	N	356	A	N1-C6-N6	14.30	127.18	118.60
2	N	500	G	C5-C6-O6	-14.29	120.02	128.60
1	M	1094	G	O4'-C1'-N9	14.29	119.63	108.20
1	M	1146	A	C5-C6-N1	-14.28	110.56	117.70
2	N	732	C	N3-C4-C5	-14.27	116.19	121.90
2	N	668	G	N1-C6-O6	14.27	128.46	119.90
2	N	873	A	N1-C6-N6	14.27	127.16	118.60
2	N	444	G	C5-C6-O6	-14.26	120.04	128.60
2	N	348	G	N1-C6-O6	14.26	128.45	119.90
2	N	263	A	N1-C6-N6	14.25	127.15	118.60
2	N	748	G	N1-C6-O6	14.24	128.44	119.90
1	M	1109	C	N3-C4-C5	-14.23	116.21	121.90
1	M	1216	A	N1-C6-N6	14.20	127.12	118.60
2	N	165	G	N1-C6-O6	14.20	128.42	119.90
2	N	575	G	C4-C5-C6	14.20	127.32	118.80
2	N	654	G	N1-C6-O6	14.19	128.41	119.90
3	O	1469	C	O4'-C1'-N1	14.18	119.55	108.20
2	N	708	C	N3-C4-C5	-14.17	116.23	121.90
1	M	998	C	N3-C4-N4	14.16	127.91	118.00
2	N	775	G	N1-C6-O6	14.16	128.40	119.90
2	N	371	A	C5-C6-N1	-14.14	110.63	117.70
3	O	1422	G	C5-C6-O6	-14.14	120.12	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1278	G	C5-C6-O6	-14.13	120.12	128.60
2	N	832	G	N1-C6-O6	14.13	128.38	119.90
2	N	315	A	N1-C6-N6	14.12	127.07	118.60
1	M	1279	G	C5-C6-O6	-14.10	120.14	128.60
1	M	1077	G	N1-C6-O6	14.09	128.35	119.90
2	N	588	G	C5-C6-O6	-14.08	120.15	128.60
2	N	722	G	N1-C6-O6	14.07	128.34	119.90
3	O	1517	G	C5-C6-O6	-14.06	120.16	128.60
2	N	588	G	N1-C6-O6	14.05	128.33	119.90
2	N	630	A	N1-C2-N3	14.05	136.32	129.30
2	N	699	C	N3-C4-N4	14.05	127.83	118.00
2	N	633	G	N1-C6-O6	14.04	128.33	119.90
1	M	1252	A	C4-C5-C6	14.04	124.02	117.00
2	N	524	G	N1-C6-O6	14.03	128.32	119.90
1	M	1207	G	N1-C6-O6	14.01	128.31	119.90
2	N	777	A	N1-C6-N6	14.01	127.00	118.60
1	M	1117	A	P-O3'-C3'	14.00	136.50	119.70
2	N	117	G	N1-C6-O6	13.99	128.30	119.90
2	N	853	C	N3-C4-C5	-13.99	116.30	121.90
1	M	1051	C	O4'-C1'-N1	13.99	119.39	108.20
1	M	1181	G	N1-C6-O6	13.99	128.29	119.90
2	N	111	G	N3-C2-N2	13.99	129.69	119.90
2	N	68	G	C5-C6-O6	-13.98	120.21	128.60
1	M	1339	A	N1-C6-N6	13.98	126.99	118.60
1	M	1074	G	C5-C6-O6	-13.97	120.22	128.60
1	M	1280	A	N9-C4-C5	13.97	111.39	105.80
2	N	714	G	N1-C6-O6	13.96	128.28	119.90
2	N	868	C	O4'-C1'-N1	13.96	119.37	108.20
1	M	936	C	C2-N3-C4	13.96	126.88	119.90
2	N	547	A	P-O3'-C3'	13.95	136.44	119.70
3	O	1396	A	N1-C6-N6	13.94	126.97	118.60
2	N	266	G	P-O3'-C3'	13.93	136.41	119.70
3	O	1504	G	C5-C6-O6	-13.92	120.25	128.60
1	M	1053	G	P-O3'-C3'	13.91	136.39	119.70
2	N	126	G	N1-C6-O6	13.88	128.23	119.90
1	M	1034	G	C5-C6-O6	-13.88	120.27	128.60
2	N	867	G	C5-C6-O6	-13.87	120.28	128.60
2	N	90	C	N3-C4-C5	-13.86	116.35	121.90
2	N	630	A	N1-C6-N6	13.87	126.92	118.60
2	N	279	A	C4-C5-C6	13.86	123.93	117.00
2	N	279	A	C5-N7-C8	13.85	110.83	103.90
1	M	1251	A	N1-C6-N6	13.84	126.90	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	179	A	N1-C6-N6	13.83	126.90	118.60
2	N	667	G	N1-C6-O6	13.83	128.20	119.90
2	N	766	A	N1-C6-N6	13.83	126.89	118.60
1	M	1268	G	O4'-C1'-N9	13.82	119.26	108.20
3	O	1494	G	N1-C6-O6	13.82	128.19	119.90
1	M	1117	A	N1-C6-N6	13.81	126.89	118.60
1	M	1319	A	N1-C6-N6	13.81	126.89	118.60
1	M	1101	A	P-O3'-C3'	13.81	136.28	119.70
2	N	652	U	O4'-C1'-N1	13.81	119.25	108.20
2	N	108	G	O4'-C1'-N9	13.80	119.24	108.20
2	N	706	A	N1-C6-N6	13.77	126.86	118.60
2	N	523	A	N1-C6-N6	13.77	126.86	118.60
2	N	865	A	N1-C6-N6	13.76	126.86	118.60
1	M	1383	C	C2-N3-C4	13.75	126.78	119.90
1	M	1376	U	O4'-C1'-N1	13.74	119.19	108.20
2	N	13	U	P-O3'-C3'	13.74	136.18	119.70
2	N	265	G	C5-C6-O6	-13.73	120.36	128.60
1	M	1294	G	C5-C6-O6	-13.72	120.36	128.60
2	N	196	A	C4-C5-C6	13.71	123.86	117.00
2	N	768	A	N1-C6-N6	13.71	126.83	118.60
1	M	1292	G	C4-C5-N7	13.69	116.28	110.80
2	N	613	C	N3-C4-N4	13.69	127.58	118.00
2	N	839	C	N3-C4-N4	13.69	127.58	118.00
2	N	782	A	N1-C6-N6	13.68	126.81	118.60
1	M	1092	A	C4-C5-C6	13.68	123.84	117.00
2	N	374	A	O4'-C1'-N9	13.68	119.14	108.20
2	N	354	G	N1-C6-O6	13.65	128.09	119.90
3	O	1433	A	C5-N7-C8	13.65	110.72	103.90
1	M	975	A	N1-C6-N6	13.64	126.79	118.60
2	N	120	A	C5-C6-N6	-13.64	112.79	123.70
2	N	337	G	N1-C6-O6	13.64	128.08	119.90
2	N	406	G	C5-C6-O6	-13.64	120.42	128.60
2	N	802	A	P-O3'-C3'	13.62	136.04	119.70
3	O	1513	A	N1-C6-N6	13.62	126.77	118.60
2	N	162	A	N1-C6-N6	13.62	126.77	118.60
2	N	300	A	C5-C6-N1	-13.61	110.89	117.70
2	N	500	G	N1-C6-O6	13.61	128.06	119.90
1	M	1249	C	O4'-C1'-N1	13.60	119.08	108.20
2	N	318	G	N9-C4-C5	-13.59	99.97	105.40
3	O	1457	G	N1-C6-O6	13.58	128.05	119.90
1	M	1382	C	O4'-C1'-N1	13.57	119.06	108.20
2	N	235	C	C5-C4-N4	-13.56	110.71	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1435	G	C8-N9-C4	-13.55	100.98	106.40
1	M	1132	C	N3-C4-N4	13.54	127.48	118.00
1	M	1051	C	N3-C4-C5	-13.54	116.48	121.90
2	N	138	G	N1-C6-O6	13.54	128.02	119.90
2	N	170	U	O4'-C1'-N1	13.53	119.02	108.20
1	M	1229	A	N1-C6-N6	13.51	126.71	118.60
1	M	1227	A	O4'-C1'-N9	13.51	119.01	108.20
1	M	979	C	O4'-C1'-N1	13.50	119.00	108.20
2	N	787	A	C5-C6-N1	-13.49	110.95	117.70
2	N	6	G	C8-N9-C4	-13.49	101.00	106.40
2	N	431	A	N1-C6-N6	13.48	126.69	118.60
2	N	189	A	C5-C6-N6	-13.48	112.92	123.70
2	N	115	G	C4-C5-N7	13.48	116.19	110.80
2	N	869	G	C5-C6-O6	-13.47	120.52	128.60
1	M	1280	A	N1-C6-N6	13.45	126.67	118.60
3	O	1509	C	O4'-C1'-N1	13.44	118.95	108.20
1	M	933	G	C5-C6-O6	-13.44	120.54	128.60
3	O	1496	C	O4'-C1'-N1	13.44	118.95	108.20
1	M	1179	A	N1-C6-N6	13.44	126.66	118.60
2	N	313	A	N1-C6-N6	13.44	126.66	118.60
2	N	787	A	C8-N9-C4	-13.42	100.43	105.80
2	N	127	G	N1-C6-O6	13.42	127.95	119.90
2	N	579	A	C5-C6-N6	-13.41	112.97	123.70
1	M	1084	G	C6-C5-N7	-13.40	122.36	130.40
2	N	303	A	C4-C5-C6	13.40	123.70	117.00
1	M	1155	A	N1-C6-N6	13.39	126.63	118.60
1	M	1346	A	C5-C6-N1	-13.38	111.01	117.70
1	M	1149	C	O4'-C1'-N1	13.38	118.90	108.20
3	O	1407	C	N3-C4-N4	13.38	127.36	118.00
2	N	537	G	O4'-C1'-N9	13.38	118.90	108.20
2	N	671	G	C5-C6-O6	-13.37	120.58	128.60
3	O	1426	G	N1-C6-O6	13.37	127.92	119.90
1	M	1274	A	N1-C6-N6	13.36	126.61	118.60
2	N	350	G	N1-C6-O6	13.36	127.92	119.90
2	N	919	A	C5-C6-N1	-13.35	111.03	117.70
2	N	68	G	N1-C6-O6	13.34	127.90	119.90
2	N	628	G	C5-C6-O6	-13.34	120.60	128.60
2	N	279	A	N1-C6-N6	13.33	126.60	118.60
2	N	908	A	N1-C6-N6	13.33	126.60	118.60
2	N	206	C	C5-C6-N1	13.33	127.66	121.00
2	N	928	G	C6-C5-N7	-13.32	122.41	130.40
1	M	1145	A	C5-C6-N1	-13.31	111.04	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	597	G	C8-N9-C4	-13.31	101.08	106.40
3	O	1441	A	N9-C4-C5	13.30	111.12	105.80
1	M	1184	G	C5-C6-O6	-13.29	120.62	128.60
1	M	1161	C	N3-C4-C5	-13.29	116.59	121.90
2	N	26	A	N1-C6-N6	13.29	126.57	118.60
2	N	15	G	C8-N9-C4	-13.28	101.09	106.40
2	N	540	G	N1-C6-O6	13.28	127.87	119.90
2	N	792	A	C5-N7-C8	13.28	110.54	103.90
2	N	213	G	N1-C6-O6	13.28	127.87	119.90
2	N	511	C	C6-N1-C2	-13.26	115.00	120.30
2	N	843	U	C5-C6-N1	13.25	129.33	122.70
2	N	26	A	N9-C4-C5	13.25	111.10	105.80
1	M	942	G	O4'-C1'-N9	13.24	118.79	108.20
2	N	346	G	C5-C6-O6	-13.23	120.66	128.60
2	N	449	G	N1-C6-O6	13.20	127.82	119.90
2	N	703	G	N1-C2-N3	-13.20	115.98	123.90
2	N	402	G	N1-C6-O6	13.20	127.82	119.90
2	N	734	G	N1-C6-O6	13.20	127.82	119.90
2	N	549	C	N3-C4-C5	-13.18	116.63	121.90
2	N	462	G	C5-C6-O6	-13.18	120.69	128.60
2	N	802	A	C4-C5-C6	13.17	123.58	117.00
2	N	637	C	N3-C4-C5	-13.16	116.64	121.90
2	N	802	A	N1-C6-N6	13.14	126.49	118.60
2	N	309	A	N1-C6-N6	13.14	126.48	118.60
1	M	1043	G	N3-C2-N2	13.13	129.09	119.90
1	M	1209	C	O4'-C1'-N1	13.13	118.71	108.20
1	M	1227	A	N1-C6-N6	13.13	126.48	118.60
2	N	251	G	N1-C6-O6	13.13	127.78	119.90
3	O	1525	G	C6-C5-N7	-13.13	122.53	130.40
3	O	1411	C	N3-C4-N4	13.12	127.18	118.00
1	M	1252	A	N1-C6-N6	13.11	126.47	118.60
2	N	322	C	N3-C4-N4	13.11	127.17	118.00
2	N	617	G	C5-C6-O6	-13.11	120.74	128.60
2	N	462	G	N1-C6-O6	13.10	127.76	119.90
1	M	1251	A	C8-N9-C4	-13.10	100.56	105.80
1	M	1377	A	N1-C6-N6	13.09	126.46	118.60
1	M	934	C	P-O3'-C3'	13.08	135.40	119.70
2	N	441	A	N1-C6-N6	13.08	126.45	118.60
3	O	1503	A	N1-C6-N6	13.08	126.45	118.60
2	N	184	G	C8-N9-C4	-13.07	101.17	106.40
1	M	963	G	C2-N3-C4	13.07	118.44	111.90
3	O	1445	U	O4'-C1'-N1	13.07	118.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1407	C	N3-C4-C5	-13.06	116.67	121.90
3	O	1475	G	N1-C6-O6	13.06	127.74	119.90
1	M	1381	U	O4'-C1'-N1	13.05	118.64	108.20
1	M	1119	C	N3-C4-N4	13.03	127.12	118.00
2	N	349	A	N1-C6-N6	13.03	126.42	118.60
2	N	890	G	N1-C6-O6	13.02	127.71	119.90
2	N	263	A	C4-C5-C6	13.02	123.51	117.00
2	N	21	G	C5-C6-O6	-13.02	120.79	128.60
1	M	1289	A	N1-C6-N6	13.01	126.41	118.60
3	O	1405	G	O4'-C1'-N9	13.00	118.60	108.20
2	N	351	G	C5-C6-O6	-13.00	120.80	128.60
1	M	1013	G	C4-C5-N7	-12.99	105.60	110.80
3	O	1480	A	C5-C6-N1	-12.99	111.21	117.70
2	N	184	G	N1-C6-O6	12.98	127.69	119.90
1	M	1239	A	P-O3'-C3'	12.97	135.27	119.70
2	N	48	C	N3-C4-C5	-12.97	116.71	121.90
2	N	165	G	N1-C2-N3	-12.96	116.12	123.90
2	N	776	G	C8-N9-C4	12.96	111.58	106.40
3	O	1447	A	C5-C6-N6	-12.94	113.34	123.70
2	N	226	G	N1-C6-O6	12.94	127.67	119.90
2	N	321	A	C5-C6-N6	-12.94	113.35	123.70
3	O	1489	G	C5-C6-O6	-12.94	120.84	128.60
1	M	1325	C	N3-C4-C5	-12.92	116.73	121.90
2	N	733	G	N1-C6-O6	12.91	127.65	119.90
3	O	1399	C	P-O3'-C3'	12.90	135.19	119.70
1	M	1096	C	O4'-C1'-N1	12.90	118.52	108.20
2	N	78	A	N1-C6-N6	12.90	126.34	118.60
1	M	1233	G	N1-C6-O6	12.88	127.63	119.90
1	M	1297	G	C5-C6-O6	-12.88	120.87	128.60
3	O	1394	A	N1-C6-N6	12.86	126.32	118.60
2	N	391	G	C5-C6-O6	-12.86	120.89	128.60
2	N	223	A	C4-C5-C6	12.85	123.43	117.00
2	N	258	G	C5-C6-O6	-12.85	120.89	128.60
2	N	300	A	C4-C5-C6	12.85	123.42	117.00
1	M	1304	G	C4-C5-N7	-12.85	105.66	110.80
2	N	515	G	C5-C6-O6	-12.84	120.89	128.60
1	M	952	U	C5-C4-O4	-12.84	118.20	125.90
2	N	260	G	C5-C6-O6	-12.82	120.91	128.60
2	N	344	A	C8-N9-C4	-12.82	100.67	105.80
2	N	332	G	C5-C6-O6	-12.81	120.91	128.60
3	O	1461	G	N1-C2-N3	-12.81	116.21	123.90
1	M	1363	A	C5-C6-N1	-12.81	111.30	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	253	A	N1-C6-N6	12.80	126.28	118.60
2	N	767	A	C5-C6-N6	-12.80	113.46	123.70
1	M	1019	A	N1-C6-N6	12.80	126.28	118.60
2	N	487	A	N1-C6-N6	12.80	126.28	118.60
2	N	675	A	C5-C6-N1	-12.79	111.30	117.70
1	M	1313	U	C5-C6-N1	12.79	129.09	122.70
1	M	1017	U	O4'-C1'-N1	12.78	118.42	108.20
2	N	725	G	C2-N3-C4	12.78	118.29	111.90
2	N	51	A	P-O3'-C3'	12.77	135.03	119.70
2	N	432	A	C2-N3-C4	-12.77	104.21	110.60
2	N	600	A	O4'-C1'-N9	12.77	118.41	108.20
2	N	861	G	N3-C2-N2	12.76	128.84	119.90
2	N	688	G	N1-C6-O6	12.76	127.55	119.90
3	O	1530	G	C5-C6-O6	-12.76	120.95	128.60
2	N	101	A	C5-C6-N6	-12.75	113.50	123.70
2	N	259	G	C5-C6-O6	-12.75	120.95	128.60
2	N	41	G	N1-C6-O6	12.74	127.54	119.90
2	N	856	C	O4'-C1'-N1	12.74	118.39	108.20
1	M	1146	A	C4-C5-C6	12.73	123.37	117.00
2	N	482	A	C8-N9-C4	-12.73	100.71	105.80
2	N	335	C	O4'-C1'-N1	12.73	118.38	108.20
1	M	1387	G	C5-C6-O6	-12.72	120.97	128.60
1	M	1379	G	C5-C6-O6	-12.72	120.97	128.60
2	N	481	G	C5-C6-O6	-12.71	120.97	128.60
1	M	966	G	O4'-C1'-N9	12.70	118.36	108.20
2	N	832	G	C6-N1-C2	-12.70	117.48	125.10
2	N	17	U	O4'-C1'-N1	12.69	118.36	108.20
1	M	929	G	N1-C6-O6	12.69	127.52	119.90
1	M	1271	A	N1-C6-N6	12.69	126.22	118.60
1	M	1163	A	N1-C6-N6	12.69	126.21	118.60
2	N	518	C	N3-C4-C5	-12.68	116.83	121.90
2	N	306	A	C5-C6-N1	-12.67	111.36	117.70
2	N	764	C	C6-N1-C2	12.67	125.37	120.30
2	N	174	A	C4-C5-C6	12.67	123.33	117.00
2	N	362	G	N1-C6-O6	12.67	127.50	119.90
1	M	1091	U	O4'-C1'-N1	12.66	118.33	108.20
2	N	122	G	C5-C6-O6	-12.65	121.01	128.60
2	N	461	A	N1-C6-N6	12.65	126.19	118.60
2	N	87	C	O4'-C1'-N1	12.63	118.30	108.20
2	N	396	C	C6-N1-C2	-12.63	115.25	120.30
1	M	1089	G	C8-N9-C4	-12.62	101.35	106.40
2	N	347	G	C5-C6-N1	-12.62	105.19	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	394	G	O4'-C1'-N9	12.62	118.29	108.20
3	O	1410	A	C2-N3-C4	12.61	116.91	110.60
2	N	149	A	N1-C6-N6	12.61	126.17	118.60
2	N	274	A	P-O3'-C3'	12.61	134.83	119.70
2	N	917	G	N1-C6-O6	12.60	127.46	119.90
1	M	1218	C	O4'-C1'-N1	12.60	118.28	108.20
2	N	80	A	N1-C6-N6	12.59	126.16	118.60
2	N	763	G	C5-C6-O6	-12.57	121.06	128.60
1	M	1070	U	O4'-C1'-N1	12.57	118.25	108.20
2	N	344	A	C4-C5-C6	12.57	123.28	117.00
2	N	318	G	N1-C6-O6	12.57	127.44	119.90
2	N	909	A	N1-C6-N6	12.56	126.14	118.60
3	O	1392	G	C6-C5-N7	-12.55	122.87	130.40
1	M	935	A	C4-C5-C6	12.55	123.27	117.00
2	N	250	A	C5-C6-N1	-12.55	111.43	117.70
2	N	702	A	C5-C6-N1	-12.55	111.43	117.70
2	N	35	G	C5-C6-O6	-12.54	121.08	128.60
2	N	323	U	P-O5'-C5'	12.54	140.96	120.90
1	M	931	C	N3-C4-C5	-12.54	116.89	121.90
2	N	615	G	C4-C5-N7	-12.54	105.79	110.80
2	N	465	A	C5-C6-N6	-12.53	113.68	123.70
1	M	1333	A	N1-C6-N6	12.52	126.11	118.60
2	N	667	G	C4-C5-N7	-12.52	105.79	110.80
2	N	436	C	N3-C4-N4	12.51	126.76	118.00
2	N	708	C	N3-C4-N4	12.51	126.76	118.00
2	N	430	A	N1-C6-N6	12.51	126.10	118.60
2	N	645	G	N1-C6-O6	12.51	127.40	119.90
2	N	630	A	C5-N7-C8	12.50	110.15	103.90
2	N	890	G	C8-N9-C4	-12.48	101.41	106.40
1	M	1231	G	O4'-C1'-N9	12.48	118.18	108.20
2	N	855	U	O4'-C1'-N1	12.47	118.18	108.20
2	N	213	G	N7-C8-N9	12.47	119.33	113.10
1	M	1258	G	C8-N9-C4	-12.47	101.41	106.40
2	N	90	C	C4-C5-C6	12.46	123.63	117.40
2	N	134	G	N1-C6-O6	12.46	127.38	119.90
2	N	391	G	O4'-C1'-N9	12.45	118.16	108.20
2	N	572	A	N1-C6-N6	12.45	126.07	118.60
1	M	1207	G	C5-C6-O6	-12.44	121.13	128.60
1	M	1127	G	N1-C6-O6	12.44	127.36	119.90
1	M	1243	C	P-O5'-C5'	12.43	140.78	120.90
1	M	1322	C	C2-N3-C4	12.43	126.11	119.90
2	N	727	G	N1-C6-O6	12.42	127.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1322	C	N3-C4-C5	-12.41	116.94	121.90
2	N	27	G	N1-C6-O6	12.41	127.34	119.90
2	N	811	C	C2-N1-C1'	12.41	132.45	118.80
2	N	139	A	N1-C6-N6	12.40	126.04	118.60
1	M	1283	U	O4'-C1'-N1	12.40	118.12	108.20
2	N	912	C	N1-C2-N3	-12.39	110.52	119.20
1	M	1241	G	C5-C6-O6	-12.39	121.17	128.60
2	N	831	A	C5-C6-N6	-12.39	113.79	123.70
1	M	1254	A	N1-C6-N6	12.39	126.03	118.60
1	M	1347	G	N1-C6-O6	12.38	127.33	119.90
2	N	708	C	C2-N3-C4	12.38	126.09	119.90
2	N	622	A	C5-C6-N1	-12.37	111.52	117.70
1	M	1060	U	O4'-C1'-N1	12.37	118.09	108.20
1	M	1248	A	C4-C5-C6	12.37	123.18	117.00
2	N	262	A	N1-C6-N6	12.35	126.01	118.60
2	N	174	A	C5-C6-N6	-12.35	113.82	123.70
2	N	649	A	N1-C6-N6	12.34	126.00	118.60
2	N	399	G	C5-C6-O6	-12.34	121.20	128.60
2	N	168	G	C5-C6-N1	-12.33	105.33	111.50
1	M	1081	A	P-O5'-C5'	12.32	140.62	120.90
2	N	615	G	C5-C6-O6	-12.32	121.21	128.60
1	M	1093	A	N7-C8-N9	12.31	119.96	113.80
2	N	326	G	C5-C6-O6	-12.30	121.22	128.60
2	N	550	G	C5-C6-O6	-12.31	121.22	128.60
2	N	774	G	N1-C6-O6	12.31	127.28	119.90
3	O	1399	C	N3-C4-C5	-12.29	116.98	121.90
2	N	401	C	O4'-C1'-N1	12.29	118.03	108.20
1	M	1078	U	O4'-C1'-N1	12.29	118.03	108.20
2	N	3	A	C5-C6-N1	-12.28	111.56	117.70
2	N	816	A	C5-C6-N1	-12.28	111.56	117.70
1	M	1184	G	N3-C2-N2	12.28	128.49	119.90
2	N	183	C	N3-C4-C5	-12.27	116.99	121.90
2	N	350	G	C5-C6-N1	-12.27	105.36	111.50
1	M	1334	G	C5-C6-O6	-12.25	121.25	128.60
2	N	399	G	N1-C6-O6	12.25	127.25	119.90
2	N	296	U	C2-N3-C4	-12.23	119.66	127.00
1	M	1273	C	O4'-C1'-N1	12.23	117.98	108.20
2	N	234	C	N3-C4-N4	12.22	126.56	118.00
1	M	1006	G	C5-C6-O6	-12.22	121.27	128.60
2	N	176	C	O4'-C1'-N1	12.22	117.97	108.20
1	M	1069	C	O4'-C1'-N1	12.21	117.97	108.20
2	N	702	A	O4'-C1'-N9	12.21	117.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1411	C	C2-N3-C4	12.20	126.00	119.90
3	O	1486	G	C5-C6-O6	-12.19	121.29	128.60
1	M	1309	G	C5-C6-O6	-12.18	121.29	128.60
2	N	647	C	N3-C4-C5	-12.17	117.03	121.90
2	N	664	G	N1-C6-O6	12.17	127.20	119.90
1	M	935	A	C5-C6-N1	-12.16	111.62	117.70
1	M	1355	G	O4'-C1'-N9	12.16	117.93	108.20
2	N	481	G	N1-C6-O6	12.16	127.19	119.90
1	M	1225	A	C4-C5-C6	12.15	123.08	117.00
2	N	418	C	C6-N1-C2	12.15	125.16	120.30
1	M	1081	A	N1-C6-N6	12.14	125.89	118.60
1	M	1204	A	C4-C5-C6	12.14	123.07	117.00
3	O	1494	G	O4'-C1'-N9	12.14	117.91	108.20
1	M	1287	A	C8-N9-C4	-12.13	100.95	105.80
2	N	554	A	O4'-C1'-N9	12.13	117.90	108.20
2	N	348	G	C5-C6-O6	-12.13	121.32	128.60
1	M	1251	A	C5-C6-N6	-12.12	114.00	123.70
1	M	1188	A	N1-C6-N6	12.12	125.87	118.60
2	N	566	G	P-O3'-C3'	12.12	134.24	119.70
2	N	927	G	N1-C6-O6	12.10	127.16	119.90
1	M	1278	G	P-O3'-C3'	12.09	134.21	119.70
1	M	1229	A	O4'-C1'-N9	12.09	117.87	108.20
1	M	987	G	N1-C6-O6	12.08	127.15	119.90
2	N	100	G	N1-C6-O6	12.08	127.15	119.90
2	N	460	A	C4-C5-C6	12.08	123.04	117.00
2	N	314	C	O4'-C1'-N1	12.08	117.86	108.20
2	N	19	A	C4-C5-C6	12.07	123.04	117.00
1	M	1002	G	O4'-C1'-N9	12.07	117.86	108.20
1	M	1278	G	N1-C6-O6	12.05	127.13	119.90
2	N	163	C	O4'-C1'-N1	12.05	117.84	108.20
1	M	1136	C	O4'-C1'-N1	12.05	117.84	108.20
1	M	1332	A	C8-N9-C4	-12.05	100.98	105.80
1	M	1007	U	P-O3'-C3'	12.04	134.15	119.70
2	N	435	A	N7-C8-N9	12.04	119.82	113.80
2	N	896	C	N3-C4-N4	12.04	126.42	118.00
1	M	1195	C	N3-C4-C5	-12.03	117.09	121.90
2	N	275	G	N1-C6-O6	12.03	127.12	119.90
2	N	308	C	N3-C4-C5	-12.03	117.09	121.90
2	N	541	G	N1-C6-O6	12.03	127.11	119.90
2	N	450	G	N1-C6-O6	12.01	127.11	119.90
3	O	1422	G	C2-N3-C4	12.01	117.91	111.90
2	N	719	C	N3-C4-C5	-12.01	117.10	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	812	G	N1-C2-N3	-12.01	116.69	123.90
2	N	500	G	N3-C2-N2	12.01	128.30	119.90
2	N	435	A	C8-N9-C4	-12.00	101.00	105.80
1	M	1219	A	C5-C6-N1	-11.99	111.71	117.70
2	N	2	A	C5-C6-N6	-11.99	114.11	123.70
1	M	1133	G	N1-C2-N3	-11.98	116.71	123.90
2	N	889	A	N1-C6-N6	11.98	125.79	118.60
2	N	567	G	C5-C6-O6	-11.98	121.41	128.60
2	N	633	G	C5-C6-O6	-11.97	121.42	128.60
2	N	846	G	N1-C6-O6	11.97	127.08	119.90
2	N	423	G	N1-C6-O6	11.97	127.08	119.90
2	N	444	G	C2-N3-C4	11.96	117.88	111.90
2	N	537	G	N1-C6-O6	11.96	127.08	119.90
1	M	1044	A	N1-C6-N6	11.95	125.77	118.60
2	N	443	C	N3-C4-N4	11.95	126.37	118.00
2	N	920	U	C5-C4-O4	-11.95	118.73	125.90
1	M	1077	G	C5-C6-O6	-11.95	121.43	128.60
1	M	1144	G	O4'-C1'-N9	11.95	117.76	108.20
1	M	1195	C	O4'-C1'-N1	11.94	117.75	108.20
2	N	770	C	O4'-C1'-N1	11.93	117.75	108.20
1	M	929	G	N7-C8-N9	11.93	119.06	113.10
1	M	1084	G	C4-C5-C6	11.93	125.96	118.80
1	M	1130	A	N1-C6-N6	11.92	125.75	118.60
2	N	797	C	O4'-C1'-N1	11.92	117.73	108.20
3	O	1403	C	O4'-C1'-N1	11.91	117.73	108.20
2	N	559	A	N1-C6-N6	11.91	125.75	118.60
2	N	563	A	N1-C6-N6	11.91	125.75	118.60
1	M	1144	G	C5-C6-O6	-11.91	121.45	128.60
2	N	639	G	C6-C5-N7	-11.90	123.26	130.40
2	N	729	A	N1-C6-N6	11.90	125.74	118.60
2	N	443	C	C6-N1-C2	-11.90	115.54	120.30
3	O	1418	A	C5-N7-C8	11.90	109.85	103.90
2	N	324	G	C5-C6-O6	-11.90	121.46	128.60
1	M	983	A	C5-C6-N6	-11.89	114.19	123.70
1	M	1271	A	C5-C6-N1	-11.89	111.75	117.70
2	N	109	A	P-O3'-C3'	11.89	133.97	119.70
2	N	596	A	C4-C5-C6	11.89	122.94	117.00
2	N	412	A	N1-C6-N6	11.89	125.73	118.60
2	N	826	C	N3-C4-N4	11.89	126.32	118.00
1	M	1214	C	O4'-C1'-N1	11.88	117.70	108.20
2	N	860	A	N1-C6-N6	11.87	125.72	118.60
2	N	11	G	N1-C6-O6	11.87	127.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	303	A	C5-N7-C8	11.86	109.83	103.90
2	N	829	G	N1-C6-O6	11.85	127.01	119.90
1	M	971	G	C4-C5-N7	-11.84	106.07	110.80
3	O	1500	A	C4-C5-C6	11.83	122.92	117.00
2	N	833	G	C5-C6-O6	-11.83	121.50	128.60
1	M	1036	A	N1-C6-N6	11.83	125.70	118.60
2	N	39	G	C6-C5-N7	-11.83	123.30	130.40
2	N	414	A	C8-N9-C4	-11.82	101.07	105.80
2	N	878	A	C5-C6-N1	-11.82	111.79	117.70
2	N	826	C	C5-C4-N4	-11.82	111.92	120.20
1	M	1161	C	C2-N3-C4	11.82	125.81	119.90
2	N	829	G	C8-N9-C4	-11.82	101.67	106.40
2	N	926	G	C5-C6-O6	-11.82	121.51	128.60
1	M	1258	G	C6-C5-N7	-11.81	123.31	130.40
2	N	42	G	N1-C6-O6	11.80	126.98	119.90
3	O	1454	G	C5-C6-O6	-11.80	121.52	128.60
2	N	417	G	N1-C6-O6	11.79	126.98	119.90
1	M	1129	C	O4'-C1'-N1	11.79	117.63	108.20
1	M	1344	C	C6-N1-C2	-11.79	115.58	120.30
1	M	1325	C	C2-N3-C4	11.77	125.79	119.90
2	N	338	A	N1-C6-N6	11.77	125.67	118.60
2	N	334	C	C6-N1-C2	-11.77	115.59	120.30
2	N	39	G	C4-C5-C6	11.76	125.85	118.80
1	M	1270	G	C5-C6-O6	-11.76	121.55	128.60
1	M	1222	G	N1-C6-O6	11.75	126.95	119.90
2	N	878	A	C8-N9-C4	-11.75	101.10	105.80
2	N	750	C	N3-C4-N4	11.74	126.22	118.00
2	N	350	G	N3-C4-C5	11.74	134.47	128.60
2	N	618	C	O4'-C1'-N1	11.74	117.59	108.20
3	O	1395	C	N3-C4-C5	-11.74	117.20	121.90
3	O	1457	G	C5-C6-O6	-11.74	121.56	128.60
1	M	1385	G	N1-C6-O6	11.73	126.94	119.90
2	N	650	G	N1-C6-O6	11.73	126.94	119.90
1	M	1276	G	C5-C6-O6	-11.73	121.56	128.60
2	N	274	A	N1-C6-N6	11.73	125.64	118.60
2	N	777	A	C4-C5-C6	11.73	122.86	117.00
2	N	612	C	O4'-C1'-N1	11.72	117.58	108.20
2	N	629	A	P-O3'-C3'	11.72	133.76	119.70
2	N	365	U	C5-C6-N1	11.72	128.56	122.70
2	N	681	A	N1-C6-N6	11.71	125.63	118.60
1	M	1043	G	C5-C6-N1	-11.71	105.64	111.50
1	M	1072	G	N9-C4-C5	-11.71	100.72	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	362	G	O4'-C1'-N9	11.71	117.57	108.20
2	N	618	C	N3-C4-N4	11.71	126.20	118.00
1	M	1264	U	O4'-C1'-N1	11.70	117.56	108.20
2	N	550	G	N1-C6-O6	11.70	126.92	119.90
2	N	336	A	N1-C6-N6	11.69	125.61	118.60
2	N	612	C	N3-C4-N4	11.69	126.18	118.00
1	M	1154	G	N3-C2-N2	11.68	128.08	119.90
1	M	939	G	N1-C6-O6	11.68	126.91	119.90
2	N	901	A	N1-C6-N6	11.68	125.61	118.60
2	N	890	G	C5-C6-O6	-11.68	121.59	128.60
1	M	964	A	C5-C6-N6	-11.67	114.36	123.70
2	N	837	U	O4'-C1'-N1	11.67	117.53	108.20
2	N	821	G	O4'-C1'-N9	11.66	117.53	108.20
1	M	959	A	N1-C2-N3	11.66	135.13	129.30
3	O	1496	C	N3-C4-C5	-11.66	117.23	121.90
2	N	711	G	C5-C6-O6	-11.65	121.61	128.60
1	M	1218	C	N3-C4-C5	-11.64	117.24	121.90
2	N	116	A	N1-C6-N6	11.64	125.59	118.60
2	N	175	C	O4'-C1'-N1	11.64	117.51	108.20
2	N	675	A	C4-C5-C6	11.62	122.81	117.00
2	N	911	U	N3-C4-O4	11.62	127.54	119.40
1	M	968	A	C4-C5-C6	11.62	122.81	117.00
1	M	1013	G	C5-C6-N1	-11.62	105.69	111.50
1	M	1325	C	C6-N1-C2	-11.61	115.66	120.30
2	N	546	A	N1-C6-N6	11.61	125.57	118.60
1	M	995	C	O4'-C1'-N1	11.61	117.49	108.20
1	M	1104	G	C5-C6-O6	-11.61	121.64	128.60
2	N	702	A	N1-C6-N6	11.61	125.56	118.60
2	N	534	U	N3-C4-O4	11.60	127.52	119.40
2	N	699	C	N3-C4-C5	-11.60	117.26	121.90
2	N	510	A	C5-C6-N6	-11.58	114.44	123.70
2	N	903	G	N9-C4-C5	-11.58	100.77	105.40
3	O	1456	A	N1-C6-N6	11.58	125.55	118.60
2	N	486	U	N3-C4-O4	11.57	127.50	119.40
2	N	246	A	C5-C6-N6	-11.57	114.45	123.70
2	N	417	G	N3-C2-N2	11.57	128.00	119.90
1	M	1216	A	C5-C6-N6	-11.56	114.45	123.70
2	N	303	A	C5-C6-N1	-11.56	111.92	117.70
2	N	136	C	O4'-C1'-N1	11.56	117.44	108.20
2	N	468	A	C5-C6-N6	-11.56	114.46	123.70
2	N	912	C	C6-N1-C2	11.56	124.92	120.30
1	M	1277	C	O4'-C1'-N1	11.55	117.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1418	A	N7-C8-N9	-11.55	108.02	113.80
2	N	241	G	O4'-C1'-N9	11.55	117.44	108.20
1	M	1243	C	C6-N1-C2	-11.55	115.68	120.30
2	N	467	U	O4'-C1'-N1	11.55	117.44	108.20
2	N	493	A	C8-N9-C4	11.54	110.42	105.80
1	M	1028	C	O4'-C1'-N1	11.54	117.43	108.20
2	N	678	U	N3-C4-O4	11.54	127.47	119.40
2	N	312	C	N3-C4-C5	-11.53	117.29	121.90
1	M	1156	G	P-O3'-C3'	11.53	133.53	119.70
2	N	143	A	N1-C6-N6	11.52	125.51	118.60
2	N	444	G	N1-C2-N3	-11.51	116.99	123.90
3	O	1438	G	N1-C6-O6	11.51	126.80	119.90
2	N	529	G	N1-C6-O6	11.50	126.80	119.90
2	N	833	G	N1-C6-O6	11.50	126.80	119.90
1	M	947	G	N1-C6-O6	11.50	126.80	119.90
2	N	406	G	N1-C6-O6	11.50	126.80	119.90
2	N	888	G	N1-C6-O6	11.50	126.80	119.90
2	N	338	A	O4'-C1'-N9	11.49	117.39	108.20
3	O	1447	A	N1-C6-N6	11.49	125.50	118.60
1	M	1113	C	C6-N1-C2	-11.49	115.70	120.30
1	M	1377	A	C5-C6-N1	-11.48	111.96	117.70
1	M	1131	G	C5-C6-O6	-11.48	121.71	128.60
2	N	442	G	N1-C6-O6	11.48	126.79	119.90
2	N	525	C	N3-C4-C5	-11.47	117.31	121.90
2	N	741	G	C5-C6-O6	-11.47	121.72	128.60
2	N	289	G	N1-C6-O6	11.47	126.78	119.90
2	N	486	U	O4'-C1'-N1	11.47	117.37	108.20
1	M	1289	A	C2-N3-C4	-11.47	104.87	110.60
3	O	1453	G	C6-N1-C2	11.46	131.98	125.10
2	N	442	G	C5-C6-O6	-11.45	121.73	128.60
2	N	508	U	N3-C4-C5	-11.45	107.73	114.60
2	N	200	G	N1-C6-O6	11.45	126.77	119.90
2	N	358	U	C2-N3-C4	-11.43	120.14	127.00
1	M	1089	G	N1-C6-O6	11.43	126.76	119.90
2	N	131	A	O4'-C1'-N9	11.42	117.33	108.20
1	M	1265	C	O4'-C1'-N1	11.42	117.33	108.20
1	M	1168	U	N3-C4-C5	-11.41	107.75	114.60
1	M	1231	G	C5-C6-O6	-11.41	121.76	128.60
2	N	792	A	N7-C8-N9	-11.40	108.10	113.80
1	M	1236	A	P-O3'-C3'	11.40	133.38	119.70
2	N	76	G	C5-C6-O6	-11.40	121.76	128.60
2	N	371	A	N1-C6-N6	11.40	125.44	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1509	C	N3-C4-C5	-11.40	117.34	121.90
1	M	1350	A	C4-C5-C6	11.40	122.70	117.00
2	N	278	G	N1-C2-N3	-11.40	117.06	123.90
2	N	292	G	N9-C4-C5	-11.38	100.85	105.40
2	N	31	G	C5-C6-O6	-11.38	121.77	128.60
2	N	913	A	N1-C6-N6	11.38	125.43	118.60
2	N	443	C	O4'-C1'-N1	11.38	117.30	108.20
1	M	1131	G	N1-C6-O6	11.38	126.73	119.90
1	M	1150	A	N1-C6-N6	11.38	125.43	118.60
2	N	622	A	N1-C6-N6	11.38	125.43	118.60
2	N	882	C	N3-C4-N4	11.38	125.96	118.00
1	M	1309	G	N1-C6-O6	11.38	126.72	119.90
2	N	506	G	N1-C6-O6	11.38	126.73	119.90
2	N	301	G	N1-C6-O6	11.37	126.72	119.90
2	N	914	A	N1-C6-N6	11.37	125.42	118.60
2	N	927	G	O4'-C1'-N9	11.37	117.29	108.20
1	M	1046	A	C8-N9-C4	-11.36	101.25	105.80
1	M	1082	A	N1-C6-N6	11.36	125.42	118.60
2	N	795	C	C5-C6-N1	-11.36	115.32	121.00
2	N	181	A	P-O3'-C3'	11.36	133.33	119.70
2	N	445	G	N1-C2-N3	-11.35	117.09	123.90
2	N	24	U	O4'-C1'-N1	11.35	117.28	108.20
2	N	553	A	N1-C6-N6	11.35	125.41	118.60
1	M	1006	G	N1-C6-O6	11.34	126.70	119.90
2	N	726	C	N3-C4-N4	11.34	125.94	118.00
2	N	279	A	C2-N3-C4	11.33	116.27	110.60
2	N	872	A	O4'-C1'-N9	11.33	117.26	108.20
1	M	949	A	O4'-C1'-N9	11.32	117.26	108.20
2	N	767	A	N1-C2-N3	11.32	134.96	129.30
2	N	441	A	C5-C6-N6	-11.32	114.65	123.70
2	N	716	A	O4'-C1'-N9	11.32	117.25	108.20
2	N	857	C	N3-C4-N4	11.31	125.92	118.00
1	M	938	A	C5-C6-N6	-11.31	114.65	123.70
2	N	583	A	N1-C6-N6	11.31	125.39	118.60
2	N	647	C	C6-N1-C2	11.31	124.82	120.30
2	N	733	G	C5-C6-O6	-11.31	121.81	128.60
2	N	777	A	C5-C6-N1	-11.30	112.05	117.70
2	N	824	G	N1-C6-O6	11.30	126.68	119.90
1	M	1274	A	N1-C2-N3	11.30	134.95	129.30
2	N	569	C	O4'-C1'-N1	11.29	117.23	108.20
2	N	139	A	C4-C5-C6	11.29	122.65	117.00
2	N	328	C	C6-N1-C2	-11.29	115.78	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	459	A	N1-C6-N6	11.29	125.38	118.60
2	N	915	A	C5-N7-C8	11.29	109.54	103.90
1	M	1216	A	N7-C8-N9	-11.28	108.16	113.80
2	N	371	A	C4-C5-C6	11.28	122.64	117.00
1	M	933	G	N1-C6-O6	11.28	126.67	119.90
1	M	1079	G	N1-C6-O6	11.28	126.67	119.90
1	M	1231	G	N1-C6-O6	11.28	126.67	119.90
2	N	116	A	C5-C6-N1	-11.28	112.06	117.70
2	N	184	G	C5-C6-O6	-11.28	121.83	128.60
1	M	1274	A	C4-C5-C6	11.27	122.64	117.00
2	N	7	A	N1-C6-N6	11.27	125.36	118.60
1	M	1331	G	O4'-C1'-N9	11.27	117.22	108.20
2	N	575	G	P-O3'-C3'	11.27	133.23	119.70
2	N	468	A	O4'-C1'-N9	11.27	117.21	108.20
3	O	1421	G	C6-C5-N7	-11.27	123.64	130.40
2	N	627	G	N3-C4-C5	-11.26	122.97	128.60
1	M	1081	A	O4'-C1'-N9	11.26	117.21	108.20
2	N	373	A	O4'-C1'-N9	11.26	117.20	108.20
2	N	602	A	N1-C6-N6	11.26	125.35	118.60
2	N	238	A	N1-C6-N6	11.25	125.35	118.60
2	N	705	G	N1-C6-O6	11.25	126.65	119.90
2	N	122	G	N1-C6-O6	11.25	126.65	119.90
2	N	611	C	C6-N1-C2	-11.25	115.80	120.30
2	N	293	G	N1-C2-N3	-11.24	117.15	123.90
2	N	541	G	C5-C6-O6	-11.24	121.86	128.60
1	M	1133	G	C5-C6-N1	-11.23	105.88	111.50
3	O	1501	C	O4'-C1'-N1	11.23	117.19	108.20
1	M	1128	C	N3-C4-N4	11.23	125.86	118.00
2	N	119	A	C4-C5-C6	11.23	122.61	117.00
2	N	643	C	C5-C4-N4	-11.22	112.34	120.20
2	N	744	C	N3-C4-C5	-11.22	117.41	121.90
1	M	974	A	C5-C6-N1	-11.22	112.09	117.70
2	N	38	G	O4'-C1'-N9	11.22	117.18	108.20
2	N	295	C	N3-C4-C5	-11.22	117.41	121.90
1	M	1272	G	O4'-C1'-N9	11.22	117.17	108.20
2	N	466	A	C4-C5-C6	11.21	122.61	117.00
2	N	327	A	O4'-C1'-N9	11.21	117.17	108.20
1	M	1133	G	C6-N1-C2	11.20	131.82	125.10
2	N	38	G	C5-C6-N1	-11.21	105.90	111.50
2	N	160	A	N1-C6-N6	11.20	125.32	118.60
2	N	522	C	O4'-C1'-N1	11.20	117.16	108.20
2	N	246	A	N1-C6-N6	11.20	125.32	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	200	G	C8-N9-C4	-11.20	101.92	106.40
1	M	1320	C	O4'-C1'-N1	11.19	117.15	108.20
2	N	385	C	O4'-C1'-N1	11.19	117.15	108.20
3	O	1414	U	N1-C2-O2	-11.19	114.97	122.80
2	N	279	A	N7-C8-N9	-11.18	108.21	113.80
2	N	755	G	N1-C2-N3	-11.18	117.19	123.90
3	O	1437	A	C4-C5-C6	11.18	122.59	117.00
2	N	815	A	O4'-C1'-N9	11.17	117.14	108.20
2	N	514	C	O4'-C1'-N1	11.17	117.14	108.20
1	M	1114	C	C6-N1-C2	-11.17	115.83	120.30
1	M	1109	C	O4'-C1'-N1	11.16	117.13	108.20
2	N	583	A	N1-C2-N3	-11.16	123.72	129.30
2	N	436	C	N3-C4-C5	-11.16	117.44	121.90
2	N	538	G	C5-C6-O6	-11.15	121.91	128.60
2	N	796	C	N3-C4-C5	-11.15	117.44	121.90
2	N	330	C	O4'-C1'-N1	11.15	117.12	108.20
2	N	925	G	C5-C6-O6	-11.15	121.91	128.60
1	M	1123	U	O4'-C1'-N1	11.14	117.11	108.20
2	N	584	G	C5-C6-O6	-11.14	121.92	128.60
3	O	1428	A	C4-C5-C6	11.14	122.57	117.00
2	N	193	C	O4'-C1'-N1	11.13	117.11	108.20
1	M	1044	A	C5-C6-N1	-11.13	112.14	117.70
2	N	749	A	C5-C6-N6	-11.12	114.80	123.70
3	O	1503	A	N9-C4-C5	11.12	110.25	105.80
1	M	1332	A	C4-C5-C6	11.12	122.56	117.00
2	N	235	C	O4'-C1'-N1	11.12	117.09	108.20
2	N	584	G	N1-C6-O6	11.11	126.57	119.90
1	M	1024	G	C5-C6-O6	-11.11	121.94	128.60
3	O	1480	A	C5-C6-N6	-11.11	114.81	123.70
2	N	236	A	N1-C6-N6	11.11	125.26	118.60
2	N	460	A	C2-N3-C4	11.11	116.15	110.60
2	N	809	G	N9-C4-C5	11.10	109.84	105.40
2	N	290	C	O4'-C1'-N1	11.10	117.08	108.20
2	N	42	G	O4'-C1'-N9	11.10	117.08	108.20
1	M	1092	A	C2-N3-C4	11.09	116.15	110.60
3	O	1434	A	C5-C6-N1	-11.09	112.15	117.70
2	N	825	A	C5-C6-N6	-11.08	114.84	123.70
2	N	542	G	N7-C8-N9	11.08	118.64	113.10
2	N	839	C	C5-C4-N4	-11.08	112.45	120.20
2	N	116	A	C4-C5-C6	11.07	122.53	117.00
2	N	673	A	C5-C6-N6	-11.07	114.84	123.70
2	N	192	A	N7-C8-N9	-11.06	108.27	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	36	C	N3-C4-N4	11.06	125.74	118.00
3	O	1525	G	C5-C6-N1	-11.06	105.97	111.50
1	M	1255	G	N9-C4-C5	11.06	109.82	105.40
2	N	160	A	O4'-C1'-N9	11.06	117.05	108.20
2	N	187	G	N1-C6-O6	11.06	126.53	119.90
2	N	488	C	C6-N1-C2	11.05	124.72	120.30
2	N	686	U	P-O3'-C3'	11.05	132.97	119.70
2	N	325	A	N1-C6-N6	11.05	125.23	118.60
2	N	792	A	C5-C6-N6	-11.05	114.86	123.70
1	M	1061	G	N1-C2-N3	-11.05	117.27	123.90
2	N	710	G	O4'-C1'-N9	11.05	117.04	108.20
1	M	1263	C	N1-C2-O2	-11.04	112.27	118.90
3	O	1418	A	C4-C5-C6	11.04	122.52	117.00
3	O	1531	A	N1-C6-N6	11.04	125.22	118.60
2	N	52	C	C5-C4-N4	-11.04	112.47	120.20
2	N	325	A	C8-N9-C4	-11.04	101.39	105.80
2	N	880	C	N3-C4-C5	-11.03	117.49	121.90
3	O	1391	U	N1-C2-O2	-11.03	115.08	122.80
3	O	1426	G	C6-C5-N7	-11.03	123.78	130.40
1	M	1019	A	C5-C6-N1	-11.02	112.19	117.70
1	M	1301	U	C2-N3-C4	11.02	133.61	127.00
2	N	749	A	C4-C5-C6	11.02	122.51	117.00
3	O	1434	A	C4-C5-C6	11.02	122.51	117.00
3	O	1530	G	O4'-C1'-N9	11.01	117.01	108.20
2	N	40	C	N3-C4-N4	11.01	125.70	118.00
2	N	596	A	N1-C6-N6	11.00	125.20	118.60
2	N	798	U	N3-C4-O4	11.00	127.10	119.40
1	M	1015	G	C6-C5-N7	-10.99	123.80	130.40
1	M	936	C	C5-C6-N1	10.99	126.49	121.00
2	N	423	G	C8-N9-C4	-10.99	102.00	106.40
2	N	706	A	O4'-C1'-N9	10.98	116.98	108.20
2	N	784	A	O4'-C1'-N9	10.98	116.98	108.20
2	N	69	G	N1-C6-O6	10.98	126.49	119.90
1	M	1367	C	O4'-C1'-N1	10.97	116.97	108.20
2	N	783	C	C2-N3-C4	10.96	125.38	119.90
2	N	99	C	O4'-C1'-N1	10.96	116.97	108.20
2	N	456	A	C4-C5-C6	10.96	122.48	117.00
2	N	720	C	N3-C4-C5	-10.96	117.52	121.90
2	N	33	A	C4-C5-C6	10.95	122.48	117.00
2	N	418	C	N3-C4-N4	10.95	125.67	118.00
2	N	172	A	C6-C5-N7	-10.95	124.63	132.30
2	N	728	A	C5-C6-N6	-10.95	114.94	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	196	A	C6-C5-N7	-10.95	124.64	132.30
3	O	1459	G	N1-C6-O6	10.94	126.46	119.90
2	N	796	C	C5-C6-N1	10.94	126.47	121.00
2	N	900	A	C5-C6-N6	-10.93	114.96	123.70
2	N	917	G	C4-C5-C6	10.93	125.36	118.80
1	M	1111	A	C8-N9-C4	-10.93	101.43	105.80
2	N	106	C	O4'-C1'-N1	10.93	116.94	108.20
1	M	1341	U	C5-C6-N1	10.92	128.16	122.70
2	N	691	G	O4'-C1'-N9	10.92	116.94	108.20
1	M	1045	C	C6-N1-C2	-10.92	115.93	120.30
2	N	329	A	P-O3'-C3'	-10.92	106.60	119.70
2	N	123	U	O4'-C1'-N1	10.91	116.93	108.20
2	N	310	G	C5-C6-O6	-10.91	122.06	128.60
3	O	1508	A	N7-C8-N9	-10.91	108.35	113.80
2	N	911	U	C5-C4-O4	-10.90	119.36	125.90
3	O	1438	G	C5-C6-O6	-10.90	122.06	128.60
1	M	1215	G	N7-C8-N9	10.90	118.55	113.10
1	M	1322	C	C2-N1-C1'	10.90	130.79	118.80
1	M	987	G	C5-C6-O6	-10.88	122.07	128.60
2	N	876	C	N3-C4-C5	-10.88	117.55	121.90
2	N	337	G	N1-C2-N3	-10.88	117.37	123.90
3	O	1472	U	O4'-C1'-N1	10.88	116.90	108.20
2	N	226	G	N7-C8-N9	10.88	118.54	113.10
2	N	270	A	N1-C2-N3	10.88	134.74	129.30
1	M	1131	G	N3-C4-N9	10.87	132.52	126.00
1	M	1018	G	C5-C6-O6	-10.87	122.08	128.60
2	N	413	G	C8-N9-C4	-10.87	102.05	106.40
2	N	575	G	C6-C5-N7	-10.87	123.88	130.40
2	N	36	C	N3-C4-C5	-10.86	117.56	121.90
1	M	1352	C	O4'-C1'-N1	10.86	116.89	108.20
3	O	1455	G	N3-C2-N2	10.86	127.50	119.90
1	M	1043	G	N1-C2-N3	-10.86	117.38	123.90
1	M	1080	A	N1-C6-N6	10.86	125.12	118.60
1	M	1141	C	O4'-C1'-N1	10.86	116.89	108.20
2	N	220	G	C6-C5-N7	-10.86	123.89	130.40
3	O	1428	A	N1-C6-N6	10.85	125.11	118.60
2	N	422	C	N3-C4-N4	10.85	125.59	118.00
3	O	1408	A	N1-C6-N6	10.84	125.11	118.60
1	M	1221	G	N1-C6-O6	10.84	126.41	119.90
2	N	308	C	O4'-C1'-N1	10.84	116.87	108.20
2	N	77	A	C5-C6-N6	-10.83	115.03	123.70
1	M	985	C	O4'-C1'-N1	10.83	116.87	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1369	C	O4'-C1'-N1	10.83	116.87	108.20
3	O	1400	C	N3-C4-C5	-10.83	117.57	121.90
3	O	1465	A	N1-C6-N6	10.83	125.10	118.60
2	N	456	A	C5-C6-N1	-10.82	112.29	117.70
1	M	1270	G	N1-C6-O6	10.82	126.39	119.90
2	N	722	G	C5-C6-N1	-10.82	106.09	111.50
2	N	397	A	C5-C6-N1	-10.82	112.29	117.70
2	N	303	A	C4-C5-N7	-10.81	105.30	110.70
2	N	435	A	C5-C6-N1	-10.81	112.30	117.70
2	N	714	G	C5-C6-O6	-10.81	122.12	128.60
1	M	1235	U	O4'-C1'-N1	10.80	116.84	108.20
1	M	1369	C	N3-C4-C5	-10.80	117.58	121.90
2	N	526	C	C6-N1-C2	-10.79	115.98	120.30
2	N	815	A	C3'-C2'-C1'	10.79	110.13	101.50
2	N	197	A	P-O3'-C3'	10.79	132.64	119.70
3	O	1441	A	N7-C8-N9	10.79	119.19	113.80
1	M	1190	G	N7-C8-N9	-10.78	107.71	113.10
2	N	374	A	N1-C6-N6	10.78	125.07	118.60
2	N	147	G	O4'-C1'-N9	10.78	116.83	108.20
1	M	1066	C	C5-C6-N1	10.78	126.39	121.00
2	N	6	G	C5-C6-O6	-10.78	122.13	128.60
1	M	1319	A	O4'-C1'-N9	10.78	116.82	108.20
2	N	817	C	P-O3'-C3'	10.78	132.63	119.70
3	O	1476	A	C4-C5-C6	10.78	122.39	117.00
2	N	756	C	O4'-C1'-N1	10.77	116.82	108.20
2	N	741	G	C5-C6-N1	-10.77	106.12	111.50
1	M	1238	A	C5-C6-N6	-10.76	115.09	123.70
2	N	28	A	C5-C6-N1	-10.76	112.32	117.70
2	N	211	G	C6-N1-C2	10.76	131.56	125.10
2	N	902	G	N1-C6-O6	10.76	126.36	119.90
1	M	967	C	N3-C4-C5	-10.76	117.60	121.90
2	N	309	A	C5-C6-N1	-10.76	112.32	117.70
2	N	698	G	C5-C6-O6	-10.76	122.15	128.60
1	M	1072	G	N3-C2-N2	10.75	127.43	119.90
2	N	805	C	O4'-C1'-N1	10.75	116.80	108.20
1	M	977	A	C4-C5-C6	10.75	122.37	117.00
2	N	311	C	O4'-C1'-N1	10.75	116.80	108.20
2	N	791	G	C4-C5-C6	10.75	125.25	118.80
3	O	1526	G	N1-C6-O6	10.75	126.35	119.90
1	M	1167	A	C4-C5-C6	10.74	122.37	117.00
2	N	363	A	C5-C6-N6	-10.74	115.11	123.70
2	N	408	A	C5-N7-C8	10.74	109.27	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1044	A	C8-N9-C4	-10.73	101.51	105.80
2	N	429	U	C6-N1-C2	-10.73	114.56	121.00
2	N	617	G	N1-C6-O6	10.73	126.34	119.90
2	N	64	G	N3-C2-N2	-10.73	112.39	119.90
1	M	1287	A	N9-C4-C5	10.72	110.09	105.80
1	M	1064	G	C8-N9-C4	-10.72	102.11	106.40
2	N	495	A	P-O3'-C3'	10.72	132.56	119.70
2	N	704	A	N1-C6-N6	10.71	125.03	118.60
2	N	223	A	C8-N9-C4	-10.71	101.52	105.80
2	N	337	G	N3-C4-C5	-10.71	123.25	128.60
1	M	1074	G	C5-C6-N1	-10.70	106.15	111.50
1	M	1337	G	C5-C6-O6	-10.70	122.18	128.60
2	N	187	G	C5-C6-O6	-10.70	122.18	128.60
1	M	1139	G	N1-C6-O6	10.70	126.32	119.90
3	O	1482	G	N1-C6-O6	10.70	126.32	119.90
2	N	211	G	N1-C2-N3	-10.69	117.48	123.90
2	N	317	U	N3-C2-O2	10.69	129.68	122.20
2	N	660	C	N3-C4-C5	-10.69	117.62	121.90
2	N	695	A	N1-C6-N6	10.69	125.02	118.60
1	M	1188	A	C5-C6-N6	-10.69	115.15	123.70
2	N	343	U	N1-C2-N3	-10.69	108.49	114.90
2	N	422	C	C2-N3-C4	10.68	125.24	119.90
2	N	889	A	C5-N7-C8	10.68	109.24	103.90
2	N	291	U	O4'-C1'-N1	10.68	116.74	108.20
2	N	312	C	N3-C4-N4	10.68	125.47	118.00
1	M	947	G	C4-C5-C6	10.68	125.21	118.80
2	N	798	U	C5-C4-O4	-10.68	119.49	125.90
1	M	1070	U	C4-C5-C6	-10.67	113.30	119.70
2	N	253	A	C4-C5-C6	10.67	122.33	117.00
2	N	507	C	P-O3'-C3'	10.67	132.50	119.70
2	N	813	U	O4'-C1'-N1	10.67	116.74	108.20
3	O	1511	G	O4'-C1'-N9	10.67	116.73	108.20
2	N	302	G	O4'-C1'-N9	10.67	116.73	108.20
2	N	256	U	N3-C4-O4	10.66	126.87	119.40
2	N	867	G	N1-C6-O6	10.66	126.30	119.90
2	N	627	G	N1-C6-O6	10.65	126.29	119.90
1	M	1125	U	P-O3'-C3'	10.65	132.48	119.70
2	N	684	U	O4'-C1'-N1	10.65	116.72	108.20
2	N	880	C	C2-N3-C4	10.65	125.22	119.90
1	M	1373	G	N1-C2-N3	-10.64	117.51	123.90
2	N	726	C	C5-C4-N4	-10.64	112.75	120.20
1	M	1371	G	N1-C6-O6	10.64	126.28	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	26	A	C5-C6-N6	-10.64	115.19	123.70
2	N	21	G	N7-C8-N9	10.64	118.42	113.10
2	N	746	A	N1-C6-N6	10.64	124.98	118.60
2	N	451	A	C8-N9-C4	-10.63	101.55	105.80
2	N	81	A	O4'-C1'-N9	10.63	116.70	108.20
2	N	317	U	C5'-C4'-O4'	10.63	121.86	109.10
1	M	1072	G	C6-C5-N7	-10.63	124.02	130.40
1	M	1365	G	N7-C8-N9	10.62	118.41	113.10
2	N	139	A	N7-C8-N9	-10.62	108.49	113.80
2	N	454	G	N1-C6-O6	10.62	126.27	119.90
3	O	1436	U	O4'-C1'-N1	10.62	116.70	108.20
3	O	1412	C	N3-C4-C5	-10.62	117.65	121.90
2	N	696	A	N1-C2-N3	10.62	134.61	129.30
1	M	1068	G	N3-C2-N2	10.62	127.33	119.90
2	N	104	G	N1-C6-O6	10.61	126.27	119.90
2	N	454	G	C6-C5-N7	-10.61	124.03	130.40
2	N	329	A	C4-C5-C6	10.61	122.30	117.00
2	N	252	U	O4'-C1'-N1	10.61	116.68	108.20
2	N	16	A	C5-C6-N6	-10.60	115.22	123.70
2	N	444	G	N1-C6-O6	10.60	126.26	119.90
1	M	1259	C	O4'-C1'-N1	10.60	116.68	108.20
2	N	340	U	O4'-C1'-N1	10.60	116.68	108.20
3	O	1444	U	O4'-C1'-N1	10.60	116.68	108.20
2	N	882	C	C5-C4-N4	-10.59	112.78	120.20
3	O	1484	C	N3-C4-C5	-10.59	117.66	121.90
1	M	1272	G	N1-C6-O6	10.59	126.25	119.90
1	M	1048	G	O4'-C1'-N9	10.59	116.67	108.20
2	N	246	A	C4'-C3'-C2'	10.59	113.19	102.60
2	N	374	A	C5-C6-N6	-10.59	115.23	123.70
2	N	822	U	N3-C4-O4	10.59	126.81	119.40
1	M	1092	A	N3-C4-C5	-10.58	119.40	126.80
2	N	72	A	N9-C4-C5	-10.57	101.57	105.80
3	O	1395	C	O4'-C1'-N1	10.57	116.66	108.20
2	N	108	G	N1-C6-O6	10.57	126.24	119.90
2	N	201	G	N1-C6-O6	10.57	126.24	119.90
2	N	883	C	O4'-C1'-N1	10.57	116.66	108.20
1	M	956	U	N3-C2-O2	10.57	129.60	122.20
3	O	1400	C	N3-C4-N4	10.57	125.40	118.00
2	N	346	G	C6-C5-N7	-10.56	124.06	130.40
2	N	871	U	O4'-C1'-N1	10.56	116.65	108.20
1	M	1095	U	O4'-C1'-N1	10.56	116.65	108.20
1	M	1216	A	C5-N7-C8	10.56	109.18	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	206	C	N3-C4-C5	-10.55	117.68	121.90
2	N	358	U	C5-C4-O4	-10.55	119.57	125.90
2	N	378	G	N9-C4-C5	-10.55	101.18	105.40
1	M	1114	C	N3-C4-C5	-10.54	117.68	121.90
2	N	920	U	N3-C2-O2	10.54	129.58	122.20
1	M	1275	A	N1-C6-N6	10.54	124.92	118.60
2	N	426	U	P-O3'-C3'	10.54	132.35	119.70
2	N	758	C	N3-C4-C5	-10.54	117.69	121.90
2	N	846	G	C5-C6-O6	-10.54	122.28	128.60
2	N	874	G	N1-C6-O6	10.53	126.22	119.90
3	O	1529	G	C8-N9-C4	-10.53	102.19	106.40
1	M	1026	G	C5-C6-O6	-10.53	122.28	128.60
2	N	706	A	C5-C6-N1	-10.53	112.44	117.70
1	M	935	A	N1-C2-N3	10.52	134.56	129.30
1	M	1280	A	C4-C5-C6	10.52	122.26	117.00
2	N	230	G	N1-C6-O6	10.52	126.22	119.90
1	M	1027	C	N3-C4-C5	-10.52	117.69	121.90
2	N	54	C	N3-C4-C5	-10.52	117.69	121.90
2	N	755	G	N1-C6-O6	10.52	126.21	119.90
1	M	1171	A	O4'-C1'-N9	10.52	116.61	108.20
2	N	617	G	C5-N7-C8	10.52	109.56	104.30
3	O	1432	G	N3-C2-N2	10.52	127.26	119.90
2	N	685	G	C4-C5-N7	-10.51	106.59	110.80
2	N	891	U	O4'-C1'-N1	10.51	116.61	108.20
3	O	1466	C	N3-C4-C5	-10.51	117.70	121.90
1	M	1139	G	C5-C6-O6	-10.50	122.30	128.60
2	N	907	A	C5-C6-N6	-10.50	115.30	123.70
1	M	1201	A	C4-C5-C6	10.50	122.25	117.00
1	M	1111	A	N9-C4-C5	10.50	110.00	105.80
2	N	345	C	C6-N1-C2	-10.50	116.10	120.30
2	N	913	A	C5-C6-N1	-10.50	112.45	117.70
1	M	1306	A	N9-C4-C5	-10.50	101.60	105.80
3	O	1409	C	O4'-C1'-N1	10.49	116.59	108.20
2	N	535	A	P-O3'-C3'	10.49	132.29	119.70
2	N	627	G	C5-C6-O6	-10.49	122.31	128.60
3	O	1519	A	N1-C6-N6	10.49	124.89	118.60
2	N	237	G	C8-N9-C4	-10.49	102.20	106.40
2	N	488	C	N3-C4-C5	-10.49	117.70	121.90
3	O	1492	A	C4-C5-C6	10.49	122.24	117.00
1	M	1364	U	O4'-C1'-N1	10.49	116.59	108.20
1	M	1061	G	N1-C6-O6	10.48	126.19	119.90
2	N	411	A	N1-C6-N6	10.48	124.89	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	40	C	C2-N3-C4	10.48	125.14	119.90
2	N	233	C	C5-C6-N1	10.48	126.24	121.00
2	N	223	A	C2-N3-C4	10.48	115.84	110.60
2	N	616	G	C5-C6-O6	-10.48	122.31	128.60
1	M	1088	G	C5-C6-N1	-10.47	106.26	111.50
2	N	545	C	O4'-C1'-N1	10.47	116.58	108.20
1	M	945	G	C6-N1-C2	10.46	131.38	125.10
2	N	482	A	C5-C6-N6	-10.46	115.33	123.70
3	O	1525	G	C2-N3-C4	-10.46	106.67	111.90
2	N	235	C	C6-N1-C2	-10.46	116.12	120.30
2	N	120	A	P-O3'-C3'	10.46	132.25	119.70
2	N	207	C	C6-N1-C2	-10.45	116.12	120.30
2	N	610	U	O4'-C1'-N1	10.45	116.56	108.20
2	N	470	C	C5-C6-N1	10.45	126.23	121.00
2	N	602	A	C8-N9-C4	-10.45	101.62	105.80
1	M	1045	C	N3-C4-N4	10.45	125.31	118.00
2	N	37	U	O4'-C1'-N1	10.45	116.56	108.20
2	N	203	G	C8-N9-C4	10.45	110.58	106.40
1	M	1340	A	C5-N7-C8	10.45	109.12	103.90
1	M	1365	G	N3-C2-N2	10.44	127.21	119.90
1	M	1297	G	N9-C4-C5	10.44	109.58	105.40
1	M	1164	G	N9-C4-C5	-10.44	101.23	105.40
2	N	50	A	O4'-C1'-N9	10.44	116.55	108.20
2	N	273	U	C2-N3-C4	-10.44	120.74	127.00
2	N	140	U	N1-C2-O2	-10.43	115.50	122.80
2	N	460	A	C5-C6-N1	-10.43	112.48	117.70
2	N	461	A	C2-N3-C4	-10.43	105.39	110.60
1	M	1377	A	C4-C5-C6	10.43	122.21	117.00
1	M	968	A	C4-C5-N7	-10.43	105.49	110.70
1	M	1185	G	N1-C2-N3	-10.43	117.64	123.90
2	N	158	G	N1-C6-O6	10.43	126.16	119.90
2	N	663	A	C5-C6-N1	-10.42	112.49	117.70
2	N	93	U	O4'-C1'-N1	10.42	116.53	108.20
2	N	276	G	N1-C6-O6	10.42	126.15	119.90
1	M	1153	G	C4-C5-N7	10.42	114.97	110.80
3	O	1398	A	N1-C6-N6	10.42	124.85	118.60
2	N	522	C	C5-C4-N4	-10.41	112.91	120.20
1	M	967	C	C6-N1-C2	10.41	124.46	120.30
1	M	1252	A	N9-C4-C5	10.41	109.96	105.80
1	M	1386	G	O4'-C1'-N9	10.41	116.53	108.20
2	N	86	G	C5-C6-O6	-10.41	122.36	128.60
2	N	90	C	N3-C4-N4	10.41	125.28	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	39	G	C5-C6-N1	-10.40	106.30	111.50
2	N	554	A	N1-C2-N3	10.40	134.50	129.30
2	N	796	C	N3-C4-N4	10.40	125.28	118.00
1	M	1014	A	N1-C6-N6	10.40	124.84	118.60
2	N	44	A	N1-C2-N3	10.40	134.50	129.30
1	M	1150	A	N9-C4-C5	-10.40	101.64	105.80
3	O	1482	G	N3-C2-N2	10.40	127.18	119.90
2	N	223	A	C5-C6-N6	-10.40	115.38	123.70
2	N	493	A	C5-C6-N1	-10.40	112.50	117.70
2	N	502	A	N1-C6-N6	10.39	124.84	118.60
3	O	1493	A	C5-C6-N6	-10.39	115.39	123.70
1	M	1058	G	N1-C6-O6	10.39	126.14	119.90
1	M	1239	A	C6-C5-N7	-10.39	125.03	132.30
3	O	1399	C	O4'-C1'-N1	10.39	116.51	108.20
2	N	355	C	N3-C4-C5	-10.39	117.74	121.90
3	O	1484	C	N3-C4-N4	10.39	125.27	118.00
1	M	1210	C	N3-C4-N4	10.38	125.27	118.00
1	M	1011	C	N3-C4-C5	-10.38	117.75	121.90
2	N	539	A	C5-C6-N6	-10.38	115.39	123.70
3	O	1509	C	C4-C5-C6	10.38	122.59	117.40
1	M	1107	C	C5-C4-N4	-10.38	112.94	120.20
1	M	1261	A	C8-N9-C4	-10.38	101.65	105.80
2	N	501	C	N3-C4-C5	-10.38	117.75	121.90
3	O	1517	G	O4'-C1'-N9	10.37	116.50	108.20
1	M	1016	A	C6-N1-C2	-10.37	112.38	118.60
2	N	601	G	N1-C6-O6	10.36	126.11	119.90
2	N	404	G	C4-C5-N7	10.36	114.94	110.80
1	M	1138	G	N3-C2-N2	10.35	127.14	119.90
1	M	1253	G	N1-C2-N3	-10.35	117.69	123.90
2	N	35	G	N1-C6-O6	10.35	126.11	119.90
2	N	466	A	N1-C6-N6	10.35	124.81	118.60
2	N	723	U	C5-C4-O4	-10.34	119.69	125.90
2	N	785	G	N1-C2-N3	-10.34	117.69	123.90
2	N	149	A	C5-C6-N1	-10.34	112.53	117.70
2	N	791	G	C5-C6-N1	-10.34	106.33	111.50
2	N	878	A	N1-C6-N6	10.34	124.80	118.60
2	N	27	G	C5-C6-N1	-10.33	106.33	111.50
2	N	740	U	N3-C4-O4	10.33	126.63	119.40
2	N	746	A	O4'-C1'-N9	10.33	116.47	108.20
3	O	1396	A	P-O3'-C3'	10.33	132.10	119.70
1	M	1156	G	N1-C6-O6	10.33	126.10	119.90
1	M	1333	A	N1-C2-N3	10.33	134.46	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	60	A	P-O3'-C3'	10.32	132.09	119.70
2	N	799	G	N1-C6-O6	10.32	126.09	119.90
3	O	1412	C	C6-N1-C2	-10.32	116.17	120.30
3	O	1518	A	O4'-C1'-N9	10.32	116.46	108.20
1	M	1107	C	O4'-C1'-N1	10.32	116.46	108.20
2	N	29	U	O4'-C1'-N1	10.32	116.46	108.20
2	N	79	G	N1-C6-O6	10.32	126.09	119.90
3	O	1461	G	N1-C6-O6	10.32	126.09	119.90
2	N	235	C	N3-C4-N4	10.32	125.22	118.00
2	N	576	C	N3-C4-C5	-10.31	117.77	121.90
2	N	26	A	C5-N7-C8	10.30	109.05	103.90
2	N	344	A	N9-C4-C5	10.30	109.92	105.80
2	N	405	U	C5-C6-N1	10.30	127.85	122.70
2	N	484	G	N3-C2-N2	10.30	127.11	119.90
2	N	693	G	O4'-C1'-N9	10.30	116.44	108.20
2	N	197	A	O4'-C1'-N9	10.30	116.44	108.20
2	N	199	A	N1-C6-N6	10.30	124.78	118.60
2	N	629	A	C4-C5-C6	10.30	122.15	117.00
1	M	1263	C	N3-C4-N4	10.30	125.21	118.00
2	N	3	A	C4-C5-C6	10.29	122.15	117.00
2	N	677	U	O4'-C1'-N1	10.29	116.43	108.20
2	N	626	G	C5-C6-O6	-10.29	122.43	128.60
2	N	315	A	C5-C6-N6	-10.28	115.47	123.70
2	N	419	C	O4'-C1'-N1	10.28	116.42	108.20
1	M	1151	A	C2-N3-C4	-10.28	105.46	110.60
1	M	951	G	C5-C6-O6	-10.28	122.43	128.60
2	N	458	U	C6-N1-C2	-10.28	114.83	121.00
2	N	188	C	O4'-C1'-N1	10.28	116.42	108.20
2	N	703	G	C5-C6-O6	-10.27	122.44	128.60
2	N	554	A	C2-N3-C4	-10.27	105.47	110.60
2	N	548	G	C8-N9-C4	-10.27	102.29	106.40
2	N	807	A	O4'-C1'-N9	10.27	116.41	108.20
1	M	1170	A	C5-C6-N1	-10.26	112.57	117.70
2	N	252	U	N1-C2-O2	-10.26	115.62	122.80
2	N	264	C	P-O3'-C3'	10.26	132.02	119.70
2	N	915	A	O4'-C1'-N9	10.26	116.41	108.20
1	M	1068	G	C2-N3-C4	10.26	117.03	111.90
2	N	586	C	C5-C4-N4	-10.26	113.02	120.20
2	N	382	A	C5-C6-N6	-10.26	115.49	123.70
1	M	1000	A	C8-N9-C4	-10.25	101.70	105.80
1	M	1326	U	O4'-C1'-N1	10.25	116.40	108.20
2	N	731	G	N3-C2-N2	10.25	127.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	344	A	P-O3'-C3'	10.24	131.99	119.70
3	O	1526	G	C5-C6-O6	-10.24	122.45	128.60
1	M	1253	G	O4'-C1'-N9	10.24	116.39	108.20
1	M	1034	G	N1-C6-O6	10.24	126.04	119.90
1	M	1157	A	C5-C6-N1	-10.24	112.58	117.70
2	N	530	G	C5-C6-O6	-10.24	122.46	128.60
1	M	1309	G	N3-C2-N2	10.23	127.06	119.90
2	N	248	C	N3-C4-C5	-10.23	117.81	121.90
2	N	279	A	N3-C4-C5	-10.23	119.64	126.80
2	N	888	G	C2-N3-C4	10.23	117.02	111.90
2	N	355	C	N3-C4-N4	10.23	125.16	118.00
1	M	1081	A	C5-C6-N6	-10.23	115.52	123.70
1	M	1342	C	N3-C4-N4	10.23	125.16	118.00
2	N	794	A	C8-N9-C4	-10.22	101.71	105.80
2	N	668	G	N1-C2-N3	-10.22	117.77	123.90
1	M	1377	A	O4'-C1'-N9	10.22	116.38	108.20
2	N	511	C	C4-C5-C6	10.22	122.51	117.40
2	N	660	C	C2-N3-C4	10.22	125.01	119.90
2	N	620	C	O4'-C1'-N1	10.21	116.37	108.20
2	N	511	C	O4'-C1'-N1	10.21	116.37	108.20
2	N	808	C	N3-C4-C5	-10.21	117.81	121.90
1	M	1318	A	C4-C5-C6	10.21	122.11	117.00
1	M	1143	G	C5-C6-O6	-10.21	122.47	128.60
2	N	883	C	N3-C4-C5	-10.21	117.82	121.90
2	N	344	A	C5-C6-N1	-10.20	112.60	117.70
2	N	647	C	C2-N3-C4	10.20	125.00	119.90
1	M	951	G	N1-C6-O6	10.20	126.02	119.90
1	M	1055	A	N1-C6-N6	10.20	124.72	118.60
2	N	623	C	N3-C4-N4	10.20	125.14	118.00
2	N	681	A	C2-N3-C4	-10.20	105.50	110.60
1	M	1026	G	N1-C6-O6	10.19	126.02	119.90
2	N	112	G	N9-C4-C5	10.19	109.48	105.40
2	N	348	G	C8-N9-C4	10.19	110.47	106.40
1	M	1046	A	N9-C4-C5	10.19	109.87	105.80
2	N	721	G	P-O3'-C3'	10.19	131.92	119.70
2	N	11	G	C5-C6-O6	-10.18	122.49	128.60
2	N	178	C	N3-C4-C5	-10.18	117.83	121.90
2	N	301	G	C5-C6-N1	-10.18	106.41	111.50
2	N	178	C	C5-C4-N4	-10.18	113.08	120.20
2	N	306	A	C4-C5-C6	10.18	122.09	117.00
1	M	1182	G	N3-C2-N2	10.18	127.02	119.90
2	N	418	C	N3-C4-C5	-10.18	117.83	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	266	G	C5-C6-O6	-10.17	122.50	128.60
2	N	91	U	N3-C4-C5	10.17	120.70	114.60
3	O	1432	G	P-O3'-C3'	10.17	131.90	119.70
1	M	946	A	N1-C6-N6	10.17	124.70	118.60
2	N	19	A	C5-C6-N1	-10.17	112.62	117.70
2	N	104	G	C5-C6-O6	-10.17	122.50	128.60
2	N	581	G	C5-C6-N1	-10.17	106.42	111.50
2	N	687	A	C6-N1-C2	-10.17	112.50	118.60
2	N	764	C	O4'-C1'-N1	10.17	116.33	108.20
2	N	792	A	C5-C6-N1	-10.16	112.62	117.70
1	M	984	C	N1-C2-O2	10.16	125.00	118.90
1	M	1190	G	N1-C6-O6	10.16	125.99	119.90
2	N	816	A	O4'-C1'-N9	10.16	116.33	108.20
2	N	40	C	O4'-C1'-N1	10.15	116.32	108.20
2	N	80	A	P-O3'-C3'	-10.15	107.52	119.70
2	N	639	G	C5-C6-O6	-10.15	122.51	128.60
2	N	225	C	C2-N3-C4	10.15	124.98	119.90
2	N	225	C	C5-C6-N1	10.15	126.08	121.00
2	N	466	A	C5-C6-N1	-10.15	112.62	117.70
2	N	628	G	N1-C6-O6	10.15	125.99	119.90
2	N	507	C	O4'-C1'-N1	10.15	116.32	108.20
2	N	640	A	C5-C6-N1	-10.14	112.63	117.70
2	N	801	U	O4'-C1'-N1	10.14	116.31	108.20
2	N	517	G	C5-C6-O6	-10.14	122.52	128.60
1	M	1277	C	N3-C4-N4	10.14	125.10	118.00
2	N	79	G	C6-C5-N7	-10.14	124.32	130.40
2	N	140	U	P-O3'-C3'	10.14	131.87	119.70
2	N	719	C	N3-C4-N4	10.14	125.10	118.00
3	O	1463	U	O4'-C1'-N1	10.14	116.31	108.20
1	M	1036	A	C5-C6-N6	-10.13	115.59	123.70
1	M	1152	A	N1-C6-N6	10.13	124.68	118.60
2	N	335	C	C6-N1-C2	-10.13	116.25	120.30
1	M	1093	A	C2-N3-C4	-10.13	105.54	110.60
2	N	559	A	O4'-C1'-N9	10.13	116.30	108.20
2	N	747	A	O4'-C1'-N9	10.13	116.30	108.20
2	N	783	C	N3-C4-C5	-10.13	117.85	121.90
2	N	46	G	O4'-C1'-N9	10.12	116.30	108.20
2	N	300	A	C4-C5-N7	-10.12	105.64	110.70
2	N	432	A	C6-N1-C2	-10.12	112.53	118.60
1	M	1371	G	P-O3'-C3'	10.12	131.84	119.70
2	N	208	U	C5-C4-O4	-10.12	119.83	125.90
2	N	66	A	N1-C6-N6	10.12	124.67	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	475	C	C6-N1-C2	-10.12	116.25	120.30
3	O	1480	A	C6-N1-C2	10.12	124.67	118.60
1	M	942	G	C5-C6-O6	-10.11	122.53	128.60
2	N	420	U	P-O3'-C3'	10.11	131.84	119.70
2	N	794	A	N1-C6-N6	10.11	124.67	118.60
2	N	38	G	N1-C6-O6	10.11	125.97	119.90
2	N	712	A	N1-C2-N3	10.11	134.35	129.30
3	O	1394	A	O4'-C1'-N9	10.11	116.29	108.20
1	M	1334	G	C5-C6-N1	-10.11	106.45	111.50
1	M	1187	G	C8-N9-C4	-10.10	102.36	106.40
2	N	599	C	C2-N3-C4	10.10	124.95	119.90
2	N	802	A	N9-C4-C5	10.10	109.84	105.80
2	N	499	A	C5-C6-N6	-10.10	115.62	123.70
1	M	1000	A	N9-C4-C5	10.10	109.84	105.80
2	N	779	C	O4'-C1'-N1	10.10	116.28	108.20
2	N	151	A	N1-C6-N6	10.09	124.66	118.60
2	N	229	U	N3-C4-C5	-10.09	108.54	114.60
1	M	1132	C	C5-C4-N4	-10.09	113.14	120.20
2	N	473	U	C5-C4-O4	-10.09	119.85	125.90
1	M	1158	C	C5-C4-N4	-10.09	113.14	120.20
1	M	1302	C	N1-C2-O2	10.09	124.95	118.90
2	N	186	C	N3-C4-N4	10.08	125.06	118.00
2	N	849	G	C6-C5-N7	-10.08	124.35	130.40
2	N	394	G	N1-C6-O6	10.08	125.95	119.90
2	N	453	G	C5-C6-N1	-10.08	106.46	111.50
2	N	865	A	O4'-C1'-N9	10.08	116.26	108.20
2	N	244	U	N3-C4-O4	10.07	126.45	119.40
3	O	1488	G	C5-C6-O6	-10.07	122.56	128.60
2	N	565	U	C5-C4-O4	-10.07	119.86	125.90
1	M	954	G	N3-C2-N2	10.07	126.95	119.90
1	M	1221	G	C4-C5-C6	10.07	124.84	118.80
2	N	558	G	N1-C6-O6	10.07	125.94	119.90
2	N	688	G	C5-C6-O6	-10.07	122.56	128.60
1	M	943	U	C5-C6-N1	10.06	127.73	122.70
2	N	359	G	N3-C4-C5	10.06	133.63	128.60
1	M	1143	G	N1-C6-O6	10.06	125.94	119.90
2	N	716	A	C4-C5-C6	10.06	122.03	117.00
1	M	1230	C	C5-C6-N1	10.06	126.03	121.00
2	N	58	C	N3-C4-C5	-10.06	117.88	121.90
2	N	499	A	C4-C5-C6	10.05	122.03	117.00
2	N	148	G	C5-C6-O6	-10.05	122.57	128.60
3	O	1469	C	C5'-C4'-O4'	-10.05	97.03	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	532	A	P-O3'-C3'	10.05	131.76	119.70
2	N	676	A	C5-C6-N6	-10.05	115.66	123.70
2	N	912	C	N3-C4-C5	-10.05	117.88	121.90
1	M	1104	G	O4'-C1'-N9	10.05	116.24	108.20
2	N	241	G	C8-N9-C4	-10.04	102.38	106.40
1	M	1323	G	N1-C2-N3	-10.04	117.87	123.90
1	M	1333	A	C2-N3-C4	-10.04	105.58	110.60
2	N	63	C	P-O3'-C3'	10.04	131.75	119.70
1	M	939	G	O4'-C1'-N9	10.03	116.22	108.20
2	N	604	G	N1-C6-O6	10.03	125.92	119.90
3	O	1428	A	N9-C4-C5	10.03	109.81	105.80
3	O	1414	U	O4'-C1'-N1	10.03	116.22	108.20
1	M	980	C	O4'-C1'-N1	10.02	116.22	108.20
2	N	329	A	C6-C5-N7	-10.02	125.28	132.30
2	N	560	A	O4'-C1'-N9	10.02	116.22	108.20
1	M	1092	A	C5-C6-N1	-10.02	112.69	117.70
2	N	818	G	N1-C6-O6	10.02	125.91	119.90
2	N	874	G	C5-C6-O6	-10.02	122.59	128.60
1	M	1375	A	N1-C6-N6	10.02	124.61	118.60
2	N	498	A	N1-C2-N3	10.01	134.31	129.30
2	N	922	G	C5-C6-O6	-10.01	122.59	128.60
1	M	1050	G	C4-C5-C6	10.01	124.81	118.80
2	N	47	C	C4-C5-C6	10.01	122.40	117.40
2	N	655	A	C6-N1-C2	10.00	124.60	118.60
3	O	1476	A	N1-C6-N6	10.00	124.60	118.60
2	N	164	G	O4'-C1'-N9	10.00	116.20	108.20
1	M	1285	A	N1-C6-N6	10.00	124.60	118.60
2	N	637	C	C2-N3-C4	10.00	124.90	119.90
2	N	442	G	C5-N7-C8	-9.99	99.30	104.30
1	M	1072	G	C4-C5-N7	9.99	114.80	110.80
1	M	1101	A	C5-C6-N6	-9.99	115.71	123.70
2	N	153	C	O4'-C1'-N1	9.99	116.19	108.20
2	N	670	G	N9-C4-C5	-9.99	101.40	105.40
3	O	1437	A	C5-C6-N6	-9.99	115.71	123.70
3	O	1426	G	C4-C5-C6	9.99	124.79	118.80
1	M	1020	G	O4'-C1'-N9	9.98	116.19	108.20
2	N	846	G	C4'-C3'-C2'	9.98	112.58	102.60
1	M	1027	C	N3-C4-N4	9.98	124.98	118.00
2	N	90	C	C5-C6-N1	-9.98	116.01	121.00
2	N	440	C	O4'-C1'-N1	9.97	116.18	108.20
2	N	655	A	C4-C5-C6	9.97	121.99	117.00
2	N	109	A	C8-N9-C4	-9.97	101.81	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	275	G	O4'-C1'-N9	9.97	116.18	108.20
2	N	435	A	N1-C6-N6	9.97	124.58	118.60
2	N	460	A	N9-C4-C5	9.97	109.79	105.80
1	M	1284	C	C6-N1-C2	-9.97	116.31	120.30
2	N	671	G	N1-C6-O6	9.96	125.88	119.90
3	O	1426	G	C5-C6-N1	-9.96	106.52	111.50
2	N	36	C	C6-N1-C2	-9.96	116.32	120.30
2	N	119	A	C5-C6-N1	-9.96	112.72	117.70
1	M	1274	A	C5-C6-N1	-9.95	112.72	117.70
2	N	223	A	N3-C4-C5	-9.96	119.83	126.80
2	N	763	G	N1-C6-O6	9.95	125.87	119.90
2	N	921	U	O4'-C1'-N1	9.95	116.16	108.20
1	M	1232	U	N3-C4-O4	9.95	126.36	119.40
2	N	522	C	N3-C4-N4	9.95	124.96	118.00
2	N	559	A	C4-C5-C6	9.95	121.97	117.00
3	O	1479	C	C5-C6-N1	9.95	125.97	121.00
1	M	1215	G	N1-C6-O6	9.95	125.87	119.90
2	N	668	G	C5-C6-O6	-9.95	122.63	128.60
2	N	385	C	N3-C4-N4	9.94	124.96	118.00
2	N	397	A	C4-C5-C6	9.94	121.97	117.00
2	N	645	G	N1-C2-N3	-9.94	117.94	123.90
1	M	1366	C	C5-C4-N4	-9.94	113.25	120.20
2	N	648	A	N1-C6-N6	9.93	124.56	118.60
2	N	558	G	C5-C6-O6	-9.93	122.64	128.60
2	N	775	G	C5-C6-N1	-9.93	106.54	111.50
1	M	1300	G	P-O3'-C3'	9.93	131.61	119.70
2	N	394	G	C5-C6-O6	-9.93	122.64	128.60
1	M	1093	A	C5-C6-N1	-9.92	112.74	117.70
2	N	324	G	C5-C6-N1	-9.92	106.54	111.50
2	N	459	A	C2-N3-C4	-9.92	105.64	110.60
2	N	720	C	C2-N3-C4	9.91	124.86	119.90
3	O	1433	A	C5-C6-N1	-9.91	112.74	117.70
1	M	1388	C	C5-C4-N4	-9.91	113.26	120.20
1	M	953	G	O4'-C1'-N9	9.90	116.12	108.20
1	M	1209	C	N3-C4-C5	-9.90	117.94	121.90
2	N	297	G	O4'-C1'-N9	9.90	116.12	108.20
2	N	520	A	C5-N7-C8	9.90	108.85	103.90
2	N	889	A	C4-C5-C6	9.90	121.95	117.00
1	M	1387	G	N9-C4-C5	-9.90	101.44	105.40
2	N	195	A	C5-C6-N1	-9.90	112.75	117.70
2	N	352	C	C2-N1-C1'	9.90	129.69	118.80
1	M	1014	A	C5-C6-N1	-9.90	112.75	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1221	G	C6-C5-N7	-9.89	124.46	130.40
2	N	829	G	C5-C6-O6	-9.89	122.66	128.60
2	N	873	A	C5-C6-N6	-9.89	115.78	123.70
1	M	934	C	O4'-C1'-N1	9.89	116.11	108.20
1	M	1119	C	C5-C4-N4	-9.89	113.28	120.20
2	N	26	A	C4-C5-N7	-9.89	105.76	110.70
2	N	903	G	C8-N9-C4	9.89	110.36	106.40
2	N	290	C	N3-C4-C5	-9.89	117.94	121.90
2	N	218	U	C5-C4-O4	-9.88	119.97	125.90
1	M	988	G	N1-C6-O6	9.88	125.83	119.90
2	N	411	A	C5-N7-C8	9.88	108.84	103.90
1	M	1242	G	N1-C6-O6	9.88	125.83	119.90
1	M	1170	A	N1-C6-N6	9.88	124.53	118.60
2	N	280	C	N3-C4-C5	-9.88	117.95	121.90
1	M	1047	G	C5-C6-O6	-9.87	122.68	128.60
1	M	1184	G	N1-C2-N3	-9.87	117.98	123.90
1	M	1137	C	O4'-C1'-N1	9.87	116.10	108.20
1	M	1300	G	C4'-C3'-C2'	-9.87	92.73	102.60
2	N	366	A	C5-C6-N1	-9.87	112.77	117.70
2	N	750	C	C5-C4-N4	-9.87	113.29	120.20
1	M	1124	G	N1-C6-O6	9.87	125.82	119.90
2	N	780	A	C5-C6-N1	-9.87	112.77	117.70
2	N	633	G	C8-N9-C4	-9.86	102.45	106.40
1	M	1355	G	N1-C6-O6	9.86	125.82	119.90
2	N	232	G	C5-C6-O6	-9.86	122.68	128.60
3	O	1421	G	C4-C5-N7	9.86	114.75	110.80
1	M	983	A	C2-N3-C4	9.86	115.53	110.60
2	N	647	C	O4'-C1'-N1	9.86	116.09	108.20
1	M	1287	A	N1-C6-N6	9.86	124.51	118.60
2	N	209	U	O4'-C1'-N1	9.86	116.08	108.20
2	N	248	C	C5-C6-N1	9.86	125.93	121.00
1	M	1119	C	N3-C4-C5	-9.85	117.96	121.90
1	M	1250	A	C8-N9-C4	9.85	109.74	105.80
2	N	406	G	N1-C2-N3	-9.85	117.99	123.90
2	N	400	C	O4'-C1'-N1	9.85	116.08	108.20
2	N	928	G	C4-C5-N7	9.85	114.74	110.80
1	M	969	A	N1-C6-N6	9.84	124.50	118.60
2	N	131	A	C2-N3-C4	-9.84	105.68	110.60
2	N	300	A	C5-N7-C8	9.84	108.82	103.90
2	N	337	G	C5-C6-O6	-9.84	122.70	128.60
2	N	504	C	O4'-C1'-N1	9.83	116.07	108.20
2	N	699	C	O4'-C1'-N1	9.83	116.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1204	A	C5-C6-N1	-9.83	112.78	117.70
2	N	500	G	O4'-C1'-N9	9.83	116.06	108.20
2	N	732	C	N3-C4-N4	9.83	124.88	118.00
2	N	787	A	C5-C6-N6	-9.83	115.84	123.70
2	N	892	A	O4'-C1'-N9	9.83	116.06	108.20
2	N	893	C	N3-C4-C5	-9.83	117.97	121.90
2	N	138	G	C4-C5-C6	9.83	124.70	118.80
2	N	559	A	P-O3'-C3'	9.83	131.49	119.70
2	N	753	A	C5-C6-N1	-9.82	112.79	117.70
1	M	1148	U	O4'-C1'-N1	9.82	116.06	108.20
2	N	244	U	N3-C4-C5	-9.82	108.71	114.60
2	N	353	A	C4-C5-C6	9.82	121.91	117.00
2	N	125	U	C5-C4-O4	-9.82	120.01	125.90
3	O	1515	G	N1-C2-N3	-9.82	118.01	123.90
2	N	517	G	N1-C2-N3	-9.81	118.01	123.90
2	N	409	U	C5-C6-N1	9.81	127.61	122.70
2	N	714	G	C4-C5-N7	9.81	114.72	110.80
2	N	223	A	C5-C6-N1	-9.81	112.80	117.70
2	N	794	A	O4'-C1'-N9	9.81	116.05	108.20
2	N	34	C	O4'-C1'-N1	9.81	116.05	108.20
2	N	549	C	N3-C4-N4	9.81	124.86	118.00
3	O	1496	C	N3-C4-N4	9.81	124.86	118.00
1	M	1000	A	C5-C6-N6	-9.80	115.86	123.70
2	N	888	G	O4'-C1'-N9	9.80	116.04	108.20
3	O	1409	C	N3-C4-N4	9.80	124.86	118.00
2	N	255	G	C5-N7-C8	9.79	109.20	104.30
2	N	421	U	O4'-C1'-N1	9.79	116.04	108.20
2	N	592	G	N1-C2-N3	-9.79	118.02	123.90
2	N	489	C	N3-C4-C5	-9.79	117.98	121.90
1	M	1205	U	O4'-C1'-N1	9.79	116.03	108.20
2	N	98	A	N1-C6-N6	9.79	124.47	118.60
2	N	197	A	C5-C6-N6	-9.79	115.87	123.70
2	N	300	A	N9-C4-C5	9.79	109.72	105.80
1	M	1296	C	O4'-C1'-N1	9.78	116.03	108.20
2	N	164	G	C8-N9-C4	-9.78	102.49	106.40
2	N	527	G	C5-C6-O6	-9.78	122.73	128.60
3	O	1481	U	O4'-C1'-N1	9.78	116.03	108.20
2	N	395	C	N3-C4-N4	9.78	124.85	118.00
3	O	1430	A	N1-C6-N6	9.78	124.47	118.60
3	O	1451	U	N3-C2-O2	9.78	129.04	122.20
2	N	391	G	N1-C6-O6	9.78	125.77	119.90
2	N	322	C	N3-C4-C5	-9.77	117.99	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	57	G	C4-C5-N7	-9.77	106.89	110.80
2	N	685	G	N1-C6-O6	9.77	125.76	119.90
1	M	1158	C	O4'-C1'-N1	9.77	116.02	108.20
2	N	633	G	N1-C2-N3	-9.77	118.04	123.90
1	M	1070	U	C5-C6-N1	9.76	127.58	122.70
1	M	1352	C	N3-C4-C5	-9.76	118.00	121.90
2	N	40	C	C2-N1-C1'	9.76	129.54	118.80
2	N	668	G	C2-N3-C4	9.76	116.78	111.90
1	M	1303	C	O4'-C1'-N1	9.76	116.01	108.20
2	N	229	U	N3-C4-O4	9.76	126.23	119.40
2	N	290	C	C4-C5-C6	9.76	122.28	117.40
2	N	850	U	O4'-C1'-N1	9.76	116.00	108.20
3	O	1411	C	C5-C4-N4	-9.76	113.37	120.20
1	M	1261	A	N9-C4-C5	9.75	109.70	105.80
1	M	1314	C	O4'-C1'-N1	9.75	116.00	108.20
2	N	21	G	N1-C6-O6	9.75	125.75	119.90
3	O	1452	C	N3-C4-N4	9.75	124.83	118.00
2	N	544	G	O4'-C1'-N9	9.74	116.00	108.20
3	O	1421	G	N3-C4-N9	-9.74	120.16	126.00
1	M	1002	G	N1-C6-O6	9.74	125.74	119.90
1	M	1067	A	C6-C5-N7	-9.74	125.48	132.30
2	N	599	C	N3-C4-C5	-9.74	118.00	121.90
2	N	126	G	P-O3'-C3'	9.74	131.39	119.70
2	N	132	C	O4'-C1'-N1	9.73	115.99	108.20
2	N	172	A	C4-C5-C6	9.73	121.87	117.00
2	N	454	G	C5-C6-O6	-9.73	122.76	128.60
2	N	740	U	N3-C4-C5	-9.73	108.76	114.60
2	N	725	G	N1-C2-N3	-9.73	118.06	123.90
3	O	1473	G	N1-C6-O6	9.72	125.73	119.90
2	N	782	A	C5-N7-C8	9.72	108.76	103.90
2	N	170	U	C2-N3-C4	-9.71	121.17	127.00
2	N	256	U	C5-C4-O4	-9.71	120.07	125.90
2	N	488	C	O4'-C1'-N1	9.71	115.97	108.20
2	N	705	G	C8-N9-C4	-9.71	102.52	106.40
1	M	1046	A	C4-C5-C6	9.71	121.86	117.00
1	M	1061	G	C6-C5-N7	-9.71	124.58	130.40
1	M	1068	G	C5-C6-O6	-9.71	122.78	128.60
2	N	33	A	C5-C6-N6	-9.71	115.93	123.70
2	N	151	A	C5-C6-N1	-9.71	112.85	117.70
2	N	293	G	C6-N1-C2	9.71	130.92	125.10
2	N	807	A	C5-N7-C8	9.71	108.75	103.90
1	M	1327	C	O4'-C1'-N1	9.70	115.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1417	G	N3-C2-N2	9.70	126.69	119.90
1	M	1022	A	O4'-C1'-N9	9.70	115.96	108.20
2	N	342	C	N3-C4-C5	-9.70	118.02	121.90
2	N	514	C	N3-C4-C5	-9.70	118.02	121.90
2	N	408	A	N1-C6-N6	9.69	124.42	118.60
1	M	1201	A	N9-C4-C5	9.69	109.67	105.80
2	N	651	C	N3-C4-C5	-9.69	118.03	121.90
2	N	871	U	C6-N1-C2	-9.69	115.19	121.00
3	O	1527	U	N3-C4-O4	9.69	126.18	119.40
1	M	1357	A	P-O3'-C3'	9.68	131.32	119.70
2	N	816	A	C5-C6-N6	-9.68	115.95	123.70
1	M	1299	A	N1-C6-N6	9.68	124.41	118.60
2	N	864	A	N1-C6-N6	9.68	124.41	118.60
1	M	1269	A	N1-C6-N6	9.68	124.41	118.60
1	M	1282	C	C5'-C4'-O4'	-9.68	97.49	109.10
1	M	1331	G	C5-C6-N1	-9.68	106.66	111.50
1	M	1353	G	C5-C6-O6	-9.68	122.79	128.60
2	N	712	A	C4-C5-C6	9.68	121.84	117.00
2	N	134	G	C5-C6-O6	-9.68	122.80	128.60
2	N	904	U	C5-C6-N1	9.68	127.54	122.70
3	O	1446	A	O4'-C1'-N9	9.67	115.94	108.20
2	N	280	C	C4-C5-C6	9.67	122.23	117.40
2	N	50	A	P-O5'-C5'	9.67	136.37	120.90
2	N	282	A	C4-C5-C6	9.66	121.83	117.00
2	N	175	C	N3-C4-C5	-9.66	118.03	121.90
2	N	205	A	O4'-C1'-N9	9.66	115.93	108.20
3	O	1479	C	O4'-C1'-N1	9.66	115.93	108.20
2	N	272	C	C5-C6-N1	9.66	125.83	121.00
1	M	1055	A	C6-C5-N7	-9.66	125.54	132.30
1	M	1125	U	O4'-C1'-N1	9.65	115.92	108.20
2	N	313	A	C8-N9-C4	-9.65	101.94	105.80
1	M	1030	U	O4'-C1'-N1	9.65	115.92	108.20
1	M	1346	A	C4-C5-C6	9.65	121.83	117.00
2	N	109	A	N1-C6-N6	9.65	124.39	118.60
2	N	594	U	O4'-C1'-N1	9.65	115.92	108.20
3	O	1442	G	C5-N7-C8	-9.65	99.48	104.30
1	M	973	G	N1-C6-O6	9.64	125.69	119.90
2	N	248	C	C6-N1-C2	-9.64	116.44	120.30
2	N	508	U	P-O3'-C3'	9.64	131.27	119.70
2	N	811	C	C6-N1-C2	-9.64	116.44	120.30
3	O	1399	C	C2-N3-C4	9.64	124.72	119.90
1	M	974	A	C4-C5-C6	9.64	121.82	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	57	G	N9-C4-C5	9.64	109.26	105.40
2	N	499	A	C2-N3-C4	-9.64	105.78	110.60
2	N	919	A	C4-C5-C6	9.64	121.82	117.00
2	N	705	G	C5-C6-N1	-9.63	106.68	111.50
1	M	1288	A	O4'-C1'-N9	9.63	115.91	108.20
2	N	266	G	N1-C6-O6	9.63	125.68	119.90
2	N	799	G	C5-C6-N1	-9.63	106.68	111.50
1	M	1042	A	C5-C6-N6	-9.63	116.00	123.70
2	N	168	G	C5-C6-O6	-9.63	122.82	128.60
2	N	595	A	C8-N9-C4	9.63	109.65	105.80
1	M	1200	C	C2-N3-C4	9.62	124.71	119.90
1	M	1227	A	N9-C4-C5	-9.62	101.95	105.80
1	M	1236	A	N1-C2-N3	9.62	134.11	129.30
3	O	1414	U	C6-N1-C2	-9.62	115.23	121.00
3	O	1518	A	N9-C4-C5	-9.62	101.95	105.80
1	M	1128	C	C5-C6-N1	9.62	125.81	121.00
2	N	192	A	C4-C5-C6	9.61	121.81	117.00
2	N	906	A	N1-C6-N6	9.61	124.37	118.60
2	N	917	G	C5-C6-N1	-9.61	106.69	111.50
1	M	1249	C	C2-N3-C4	9.61	124.70	119.90
2	N	694	A	N1-C6-N6	9.61	124.36	118.60
1	M	1180	A	C5-C6-N1	-9.60	112.90	117.70
2	N	474	G	O4'-C1'-N9	9.60	115.88	108.20
1	M	1384	C	C6-N1-C2	-9.60	116.46	120.30
3	O	1422	G	N3-C4-N9	9.60	131.76	126.00
2	N	865	A	C4-C5-C6	9.60	121.80	117.00
2	N	899	C	O4'-C1'-N1	9.60	115.88	108.20
1	M	960	U	O4'-C1'-N1	9.60	115.88	108.20
2	N	567	G	N1-C6-O6	9.60	125.66	119.90
2	N	865	A	C2-N3-C4	-9.60	105.80	110.60
1	M	1324	A	C4-C5-C6	9.59	121.80	117.00
2	N	79	G	N1-C2-N3	-9.59	118.15	123.90
1	M	1295	U	C5-C6-N1	9.59	127.50	122.70
2	N	493	A	C2-N3-C4	-9.59	105.81	110.60
1	M	946	A	C8-N9-C4	-9.59	101.97	105.80
2	N	138	G	C6-C5-N7	-9.58	124.65	130.40
2	N	65	A	C5-C6-N1	-9.58	112.91	117.70
2	N	179	A	C5-C6-N1	-9.58	112.91	117.70
2	N	893	C	N3-C4-N4	9.58	124.70	118.00
2	N	773	G	N3-C2-N2	9.57	126.60	119.90
2	N	871	U	C2-N1-C1'	9.57	129.19	117.70
1	M	1196	A	C5-C6-N6	-9.57	116.05	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	849	G	N1-C2-N3	-9.57	118.16	123.90
2	N	919	A	N9-C4-C5	9.57	109.63	105.80
3	O	1502	A	P-O3'-C3'	9.57	131.18	119.70
1	M	1250	A	N1-C6-N6	9.56	124.34	118.60
2	N	226	G	C6-C5-N7	-9.56	124.66	130.40
2	N	729	A	C5-C6-N6	-9.56	116.05	123.70
3	O	1443	C	N3-C4-N4	9.56	124.70	118.00
1	M	1388	C	N3-C4-N4	9.56	124.69	118.00
2	N	808	C	N3-C4-N4	9.56	124.69	118.00
3	O	1458	G	C5-C6-N1	-9.56	106.72	111.50
1	M	1128	C	O4'-C1'-N1	9.55	115.84	108.20
2	N	664	G	C5-C6-O6	-9.55	122.87	128.60
1	M	1013	G	O4'-C1'-N9	9.55	115.84	108.20
3	O	1404	C	N3-C4-N4	9.55	124.68	118.00
2	N	545	C	C6-N1-C2	9.55	124.12	120.30
2	N	703	G	N7-C8-N9	-9.55	108.33	113.10
3	O	1396	A	O4'-C1'-N9	9.54	115.84	108.20
3	O	1516	G	C5-C6-O6	-9.55	122.87	128.60
1	M	961	U	C5-C6-N1	-9.54	117.93	122.70
2	N	459	A	C6-C5-N7	-9.54	125.62	132.30
1	M	1292	G	N7-C8-N9	-9.54	108.33	113.10
2	N	361	G	C8-N9-C4	-9.54	102.58	106.40
2	N	309	A	O4'-C1'-N9	9.54	115.83	108.20
1	M	1262	C	O4'-C1'-N1	9.53	115.83	108.20
2	N	459	A	C5-C6-N1	-9.54	112.93	117.70
2	N	576	C	P-O3'-C3'	9.54	131.14	119.70
2	N	576	C	O4'-C1'-N1	9.53	115.83	108.20
2	N	667	G	N9-C4-C5	9.54	109.21	105.40
2	N	712	A	N1-C6-N6	9.54	124.32	118.60
1	M	999	C	N3-C4-C5	-9.53	118.09	121.90
2	N	436	C	C2-N3-C4	9.53	124.67	119.90
2	N	300	A	N3-C4-C5	-9.53	120.13	126.80
2	N	727	G	O4'-C1'-N9	9.53	115.83	108.20
2	N	653	U	C6-N1-C2	-9.53	115.28	121.00
3	O	1449	C	O4'-C1'-N1	9.53	115.82	108.20
1	M	989	U	C5-C4-O4	-9.52	120.19	125.90
2	N	285	C	N3-C4-N4	9.52	124.67	118.00
2	N	372	C	P-O3'-C3'	9.52	131.13	119.70
2	N	509	A	C4-C5-C6	9.52	121.76	117.00
1	M	1359	C	N3-C4-C5	-9.52	118.09	121.90
2	N	850	U	C2-N3-C4	9.52	132.71	127.00
1	M	1297	G	N3-C2-N2	9.51	126.56	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	572	A	C5-C6-N6	-9.51	116.09	123.70
3	O	1532	U	C5-C4-O4	-9.51	120.19	125.90
1	M	1332	A	N7-C8-N9	9.51	118.55	113.80
2	N	46	G	N1-C2-N3	-9.50	118.20	123.90
1	M	1311	A	O4'-C1'-N9	9.50	115.80	108.20
2	N	195	A	C5-C6-N6	-9.50	116.10	123.70
2	N	624	C	C4-C5-C6	9.50	122.15	117.40
2	N	113	G	C5-C6-O6	-9.50	122.90	128.60
2	N	628	G	C4-C5-N7	9.50	114.60	110.80
2	N	21	G	C8-N9-C4	-9.49	102.60	106.40
2	N	869	G	N1-C6-O6	9.49	125.60	119.90
3	O	1532	U	O4'-C1'-N1	9.49	115.80	108.20
2	N	631	C	C6-N1-C1'	-9.49	109.41	120.80
2	N	640	A	C8-N9-C4	-9.49	102.00	105.80
1	M	1242	G	C5-C6-O6	-9.49	122.91	128.60
2	N	839	C	O4'-C1'-N1	9.49	115.79	108.20
2	N	784	A	C8-N9-C4	-9.48	102.01	105.80
1	M	1165	U	N3-C4-O4	9.48	126.03	119.40
2	N	117	G	C5-C6-O6	-9.48	122.91	128.60
2	N	211	G	O4'-C1'-N9	9.48	115.78	108.20
1	M	1135	U	N3-C2-O2	9.47	128.83	122.20
2	N	398	U	N3-C2-O2	9.47	128.83	122.20
2	N	93	U	P-O5'-C5'	9.47	136.05	120.90
2	N	279	A	N3-C4-N9	9.47	134.98	127.40
2	N	781	A	C5-C6-N6	-9.47	116.12	123.70
1	M	973	G	C5-C6-O6	-9.47	122.92	128.60
1	M	1116	U	P-O3'-C3'	9.47	131.06	119.70
2	N	215	C	O4'-C1'-N1	9.47	115.78	108.20
2	N	245	U	O4'-C1'-N1	9.47	115.77	108.20
2	N	685	G	C5-C6-N1	-9.47	106.77	111.50
1	M	1140	C	P-O3'-C3'	9.46	131.05	119.70
1	M	1158	C	C2-N3-C4	-9.45	115.17	119.90
2	N	74	A	C5-C6-N6	-9.45	116.14	123.70
2	N	418	C	O4'-C1'-N1	9.45	115.76	108.20
2	N	724	G	N1-C6-O6	9.45	125.57	119.90
2	N	871	U	N3-C4-C5	-9.45	108.93	114.60
2	N	168	G	C3'-C2'-C1'	-9.45	93.94	101.50
2	N	57	G	N1-C6-O6	9.45	125.57	119.90
2	N	926	G	O4'-C1'-N9	9.45	115.76	108.20
2	N	207	C	N3-C4-C5	-9.44	118.12	121.90
2	N	59	A	N1-C6-N6	9.44	124.27	118.60
2	N	663	A	C4-C5-C6	9.44	121.72	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	72	A	N1-C6-N6	9.44	124.27	118.60
1	M	1169	A	C5-C6-N6	-9.44	116.15	123.70
2	N	431	A	O4'-C1'-N9	9.44	115.75	108.20
2	N	125	U	N3-C4-O4	9.44	126.01	119.40
2	N	253	A	N7-C8-N9	-9.44	109.08	113.80
2	N	275	G	C5-C6-O6	-9.44	122.94	128.60
1	M	1080	A	C5-C6-N6	-9.44	116.15	123.70
2	N	98	A	N7-C8-N9	-9.44	109.08	113.80
2	N	742	G	O4'-C1'-N9	9.44	115.75	108.20
3	O	1500	A	O4'-C1'-N9	9.44	115.75	108.20
2	N	171	A	N1-C6-N6	9.43	124.26	118.60
1	M	1035	A	O4'-C1'-N9	9.43	115.74	108.20
2	N	655	A	C8-N9-C4	-9.43	102.03	105.80
2	N	725	G	N1-C6-O6	9.43	125.56	119.90
2	N	203	G	O4'-C1'-N9	9.43	115.74	108.20
2	N	316	C	C5'-C4'-C3'	-9.43	100.92	116.00
2	N	656	G	C4-C5-N7	9.42	114.57	110.80
1	M	1252	A	O4'-C1'-N9	9.42	115.74	108.20
3	O	1441	A	O4'-C1'-N9	9.42	115.74	108.20
2	N	548	G	N7-C8-N9	9.42	117.81	113.10
1	M	1045	C	O4'-C1'-N1	9.42	115.73	108.20
1	M	1116	U	N1-C2-N3	-9.42	109.25	114.90
1	M	1225	A	C5-C6-N1	-9.42	112.99	117.70
1	M	1203	C	O4'-C1'-N1	9.41	115.73	108.20
1	M	1233	G	C5-C6-O6	-9.41	122.95	128.60
2	N	405	U	O4'-C1'-N1	9.41	115.73	108.20
1	M	1387	G	O4'-C1'-N9	9.41	115.73	108.20
2	N	65	A	O4'-C1'-N9	9.41	115.73	108.20
1	M	1070	U	N1-C2-N3	-9.41	109.25	114.90
2	N	573	A	N9-C4-C5	-9.41	102.04	105.80
3	O	1493	A	O4'-C1'-N9	9.41	115.73	108.20
1	M	1138	G	N1-C2-N3	-9.40	118.26	123.90
1	M	1186	G	N1-C6-O6	9.40	125.54	119.90
2	N	198	G	C3'-C2'-C1'	9.40	109.02	101.50
2	N	758	C	C6-N1-C2	-9.40	116.54	120.30
1	M	1016	A	C5-C6-N6	-9.40	116.18	123.70
1	M	1179	A	N7-C8-N9	-9.40	109.10	113.80
1	M	1321	U	O4'-C1'-N1	9.40	115.72	108.20
2	N	643	C	N3-C4-N4	9.40	124.58	118.00
2	N	298	A	C4-C5-C6	9.39	121.70	117.00
2	N	201	G	C5-C6-O6	-9.39	122.97	128.60
2	N	810	C	C6-N1-C2	-9.39	116.54	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1500	A	C5-N7-C8	9.39	108.59	103.90
1	M	1132	C	P-O5'-C5'	9.39	135.92	120.90
2	N	672	U	N1-C2-O2	-9.39	116.23	122.80
3	O	1401	G	N1-C6-O6	9.39	125.53	119.90
2	N	384	G	C6-C5-N7	-9.39	124.77	130.40
2	N	85	U	O4'-C1'-N1	9.38	115.70	108.20
1	M	1076	U	C4'-C3'-C2'	-9.38	93.22	102.60
2	N	5	U	C5-C4-O4	-9.38	120.27	125.90
2	N	34	C	C6-N1-C2	-9.38	116.55	120.30
2	N	752	G	O4'-C1'-N9	9.38	115.70	108.20
2	N	780	A	C4-C5-C6	9.38	121.69	117.00
1	M	1152	A	C5-N7-C8	9.38	108.59	103.90
2	N	318	G	C5-C6-O6	-9.38	122.97	128.60
2	N	550	G	C8-N9-C4	-9.37	102.65	106.40
2	N	718	A	C5-C6-N1	-9.37	113.01	117.70
1	M	1175	G	O4'-C1'-N9	9.37	115.70	108.20
1	M	1194	U	O4'-C1'-N1	9.37	115.70	108.20
2	N	56	U	O4'-C1'-N1	9.37	115.70	108.20
2	N	411	A	N9-C4-C5	9.37	109.55	105.80
1	M	1058	G	O4'-C1'-N9	9.37	115.70	108.20
1	M	1254	A	C5-C6-N6	-9.37	116.20	123.70
2	N	164	G	N3-C2-N2	9.37	126.46	119.90
1	M	1231	G	N1-C2-N3	-9.36	118.28	123.90
2	N	45	G	N1-C6-O6	9.36	125.52	119.90
3	O	1443	C	C4-C5-C6	9.36	122.08	117.40
1	M	1261	A	N1-C6-N6	9.36	124.22	118.60
1	M	1123	U	C6-N1-C2	-9.36	115.39	121.00
2	N	76	G	N1-C6-O6	9.36	125.51	119.90
2	N	525	C	O4'-C1'-N1	9.36	115.69	108.20
1	M	1025	U	P-O3'-C3'	9.35	130.92	119.70
2	N	75	G	O4'-C1'-N9	9.35	115.68	108.20
2	N	127	G	O4'-C1'-N9	9.35	115.68	108.20
2	N	332	G	C8-N9-C4	-9.35	102.66	106.40
2	N	226	G	C5-N7-C8	-9.35	99.62	104.30
3	O	1480	A	C4-C5-N7	-9.35	106.03	110.70
3	O	1513	A	N9-C4-C5	9.35	109.54	105.80
2	N	164	G	C5-C6-N1	-9.34	106.83	111.50
1	M	949	A	C5-C6-N1	-9.34	113.03	117.70
2	N	184	G	O4'-C1'-N9	9.34	115.67	108.20
2	N	696	A	C5-C6-N1	-9.34	113.03	117.70
3	O	1498	U	P-O3'-C3'	9.34	130.90	119.70
1	M	1084	G	C5-C6-N1	-9.33	106.83	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	404	G	C6-C5-N7	-9.33	124.80	130.40
2	N	636	U	O4'-C1'-N1	9.33	115.67	108.20
2	N	802	A	C4-C5-N7	-9.33	106.03	110.70
2	N	885	G	C2-N3-C4	9.33	116.57	111.90
1	M	1218	C	N3-C4-N4	9.33	124.53	118.00
2	N	200	G	C5-C6-N1	-9.33	106.83	111.50
1	M	1282	C	O4'-C1'-N1	9.33	115.66	108.20
2	N	459	A	C5'-C4'-C3'	-9.33	101.08	116.00
3	O	1510	C	O4'-C1'-N1	9.33	115.66	108.20
1	M	963	G	N3-C4-C5	-9.32	123.94	128.60
1	M	1012	A	N9-C4-C5	-9.32	102.07	105.80
2	N	102	G	N1-C6-O6	9.32	125.49	119.90
2	N	910	C	O4'-C1'-N1	9.32	115.66	108.20
3	O	1405	G	C4-C5-N7	9.32	114.53	110.80
1	M	1140	C	O4'-C1'-N1	9.32	115.65	108.20
2	N	72	A	C8-N9-C4	9.32	109.53	105.80
2	N	450	G	N3-C2-N2	9.32	126.42	119.90
2	N	255	G	C4-C5-C6	9.32	124.39	118.80
2	N	474	G	N3-C4-C5	9.32	133.26	128.60
2	N	585	G	C6-C5-N7	-9.32	124.81	130.40
1	M	1248	A	C6-N1-C2	-9.31	113.01	118.60
2	N	33	A	C5-C6-N1	-9.31	113.04	117.70
3	O	1499	A	C6-C5-N7	-9.31	125.78	132.30
2	N	499	A	P-O3'-C3'	9.31	130.88	119.70
2	N	57	G	C4-C5-C6	9.31	124.39	118.80
2	N	217	C	O4'-C1'-N1	9.31	115.65	108.20
2	N	899	C	C5-C4-N4	-9.31	113.68	120.20
2	N	902	G	C6-N1-C2	9.31	130.68	125.10
1	M	1377	A	C2-N3-C4	-9.30	105.95	110.60
2	N	356	A	N7-C8-N9	9.30	118.45	113.80
1	M	1039	G	O4'-C1'-N9	9.29	115.64	108.20
2	N	93	U	P-O3'-C3'	-9.29	108.55	119.70
3	O	1476	A	C8-N9-C4	-9.29	102.08	105.80
3	O	1488	G	C2-N3-C4	9.29	116.55	111.90
1	M	1119	C	O4'-C1'-N1	9.29	115.63	108.20
3	O	1529	G	P-O3'-C3'	9.29	130.85	119.70
2	N	313	A	C5-C6-N1	-9.29	113.06	117.70
2	N	660	C	O4'-C1'-N1	9.29	115.63	108.20
2	N	478	A	N1-C2-N3	9.29	133.94	129.30
2	N	52	C	N3-C4-N4	9.28	124.50	118.00
1	M	1181	G	C5-C6-N1	-9.28	106.86	111.50
2	N	797	C	N3-C4-C5	-9.28	118.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1439	G	N1-C6-O6	9.28	125.47	119.90
1	M	984	C	O4'-C1'-N1	9.28	115.62	108.20
2	N	47	C	P-O3'-C3'	9.28	130.84	119.70
2	N	768	A	O4'-C1'-N9	9.28	115.62	108.20
1	M	1058	G	C5-C6-O6	-9.28	123.03	128.60
1	M	1006	G	N9-C4-C5	-9.27	101.69	105.40
2	N	165	G	C6-N1-C2	9.27	130.66	125.10
2	N	925	G	N1-C6-O6	9.27	125.46	119.90
1	M	1311	A	C5-C6-N6	-9.27	116.29	123.70
3	O	1413	A	N1-C2-N3	9.27	133.94	129.30
2	N	83	C	O4'-C1'-N1	9.27	115.61	108.20
2	N	253	A	C4-C5-N7	-9.27	106.07	110.70
2	N	342	C	C6-N1-C2	-9.27	116.59	120.30
1	M	933	G	N9-C4-C5	-9.26	101.69	105.40
2	N	449	G	C8-N9-C4	-9.26	102.69	106.40
1	M	1384	C	N3-C4-N4	9.26	124.48	118.00
3	O	1456	A	C4-C5-C6	9.26	121.63	117.00
1	M	1134	G	C2-N3-C4	9.26	116.53	111.90
1	M	1292	G	C8-N9-C4	9.26	110.10	106.40
2	N	362	G	C5-C6-O6	-9.26	123.04	128.60
2	N	875	U	C6-N1-C2	-9.26	115.44	121.00
3	O	1430	A	C5-C6-N1	-9.26	113.07	117.70
2	N	573	A	N1-C6-N6	9.26	124.15	118.60
2	N	739	C	N3-C4-C5	-9.26	118.20	121.90
2	N	741	G	C6-N1-C2	9.26	130.65	125.10
3	O	1532	U	C5-C6-N1	9.26	127.33	122.70
1	M	1194	U	N3-C2-O2	9.25	128.68	122.20
2	N	240	G	N1-C6-O6	9.25	125.45	119.90
1	M	1029	U	O4'-C1'-N1	9.25	115.60	108.20
1	M	1033	G	O4'-C1'-N9	9.25	115.60	108.20
2	N	471	U	P-O5'-C5'	9.25	135.71	120.90
2	N	747	A	C5-C6-N6	-9.25	116.30	123.70
2	N	212	G	N3-C4-N9	-9.25	120.45	126.00
1	M	1236	A	C5-C6-N1	-9.24	113.08	117.70
1	M	1353	G	N1-C2-N3	-9.24	118.35	123.90
2	N	253	A	C5-N7-C8	9.24	108.52	103.90
2	N	398	U	N3-C4-C5	-9.24	109.05	114.60
2	N	429	U	O4'-C1'-N1	9.24	115.60	108.20
1	M	1253	G	C2-N3-C4	9.24	116.52	111.90
2	N	615	G	P-O3'-C3'	9.24	130.79	119.70
2	N	149	A	C4-C5-C6	9.24	121.62	117.00
2	N	689	C	C5-C6-N1	9.24	125.62	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1066	C	O4'-C1'-N1	9.23	115.59	108.20
2	N	199	A	C8-N9-C4	-9.23	102.11	105.80
1	M	1347	G	C4-C5-N7	-9.23	107.11	110.80
3	O	1483	A	O4'-C1'-N9	9.23	115.58	108.20
1	M	1219	A	C6-N1-C2	9.23	124.14	118.60
2	N	211	G	C5-C6-O6	-9.23	123.06	128.60
1	M	1081	A	C5'-C4'-C3'	9.23	130.76	116.00
3	O	1434	A	C4'-C3'-C2'	9.23	111.83	102.60
2	N	298	A	C8-N9-C4	-9.22	102.11	105.80
2	N	785	G	N3-C2-N2	9.22	126.35	119.90
2	N	799	G	C4-C5-N7	-9.22	107.11	110.80
2	N	337	G	N3-C2-N2	9.22	126.35	119.90
1	M	1064	G	O4'-C1'-N9	9.22	115.57	108.20
2	N	27	G	C2-N3-C4	9.21	116.51	111.90
2	N	909	A	N1-C2-N3	9.21	133.91	129.30
2	N	162	A	C4-C5-C6	9.21	121.61	117.00
2	N	700	G	N1-C2-N3	-9.21	118.37	123.90
3	O	1475	G	C5-C6-O6	-9.21	123.07	128.60
1	M	1046	A	C5-N7-C8	9.21	108.50	103.90
2	N	404	G	N9-C4-C5	-9.21	101.72	105.40
1	M	1166	G	P-O3'-C3'	9.21	130.75	119.70
3	O	1475	G	C4-C5-N7	9.21	114.48	110.80
2	N	435	A	C4-C5-C6	9.20	121.60	117.00
3	O	1516	G	C4-C5-N7	-9.21	107.12	110.80
2	N	210	C	O4'-C1'-N1	9.20	115.56	108.20
2	N	337	G	C6-C5-N7	-9.20	124.88	130.40
2	N	546	A	N7-C8-N9	-9.20	109.20	113.80
2	N	560	A	C5-C6-N1	-9.20	113.10	117.70
2	N	126	G	C5-C6-O6	-9.20	123.08	128.60
2	N	759	A	O4'-C1'-N9	9.19	115.56	108.20
3	O	1453	G	C5-C6-N1	-9.19	106.90	111.50
1	M	1250	A	N7-C8-N9	-9.19	109.20	113.80
2	N	212	G	N1-C6-O6	9.19	125.42	119.90
2	N	269	C	O4'-C1'-N1	9.19	115.55	108.20
2	N	417	G	C6-N1-C2	9.19	130.61	125.10
1	M	1293	C	N3-C4-C5	-9.19	118.22	121.90
1	M	1034	G	C3'-C2'-C1'	9.19	108.85	101.50
2	N	142	G	N1-C6-O6	9.19	125.41	119.90
1	M	1074	G	C6-N1-C2	9.18	130.61	125.10
1	M	1369	C	C2-N3-C4	9.18	124.49	119.90
2	N	630	A	N7-C8-N9	-9.18	109.21	113.80
1	M	1173	U	C5-C6-N1	9.18	127.29	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1229	A	C8-N9-C4	9.18	109.47	105.80
2	N	155	A	C5-C6-N6	-9.18	116.36	123.70
3	O	1527	U	O4'-C1'-N1	9.18	115.54	108.20
1	M	1071	C	N3-C4-C5	-9.18	118.23	121.90
2	N	267	C	O4'-C1'-N1	9.18	115.54	108.20
2	N	792	A	C4-C5-C6	9.18	121.59	117.00
1	M	1327	C	N1-C2-O2	9.17	124.40	118.90
2	N	558	G	C5-N7-C8	9.17	108.89	104.30
2	N	795	C	O4'-C1'-N1	9.17	115.53	108.20
2	N	6	G	O4'-C1'-N9	9.17	115.53	108.20
1	M	939	G	C5-C6-O6	-9.16	123.10	128.60
1	M	1044	A	C4-C5-N7	-9.16	106.12	110.70
1	M	1339	A	C4-C5-C6	9.16	121.58	117.00
2	N	802	A	O4'-C1'-N9	9.16	115.53	108.20
2	N	906	A	N1-C2-N3	9.16	133.88	129.30
1	M	955	U	C5-C4-O4	-9.16	120.41	125.90
3	O	1435	G	N7-C8-N9	9.16	117.68	113.10
1	M	941	G	C6-C5-N7	-9.15	124.91	130.40
1	M	984	C	C5-C4-N4	-9.15	113.79	120.20
2	N	514	C	N3-C4-N4	9.15	124.41	118.00
2	N	581	G	C6-N1-C2	9.15	130.59	125.10
2	N	804	U	N1-C2-O2	9.15	129.21	122.80
2	N	619	U	N1-C2-N3	-9.15	109.41	114.90
1	M	1128	C	C6-N1-C2	-9.15	116.64	120.30
1	M	1232	U	C5-C4-O4	-9.15	120.41	125.90
3	O	1446	A	C4-C5-N7	-9.15	106.12	110.70
1	M	1246	A	C6-C5-N7	-9.15	125.90	132.30
2	N	16	A	C6-C5-N7	-9.15	125.90	132.30
2	N	488	C	N3-C4-N4	9.15	124.40	118.00
2	N	858	G	C5-C6-N1	-9.14	106.93	111.50
1	M	998	C	N3-C4-C5	-9.14	118.24	121.90
1	M	1006	G	C4-C5-N7	9.14	114.45	110.80
1	M	1050	G	P-O3'-C3'	-9.14	108.73	119.70
1	M	1104	G	C8-N9-C4	9.14	110.06	106.40
2	N	234	C	C5-C4-N4	-9.14	113.80	120.20
2	N	631	C	C2-N1-C1'	9.14	128.85	118.80
2	N	179	A	N7-C8-N9	9.14	118.37	113.80
1	M	1374	A	N9-C4-C5	9.13	109.45	105.80
1	M	1313	U	O4'-C1'-N1	9.13	115.50	108.20
3	O	1398	A	C4-C5-C6	9.13	121.57	117.00
2	N	611	C	N3-C4-N4	9.13	124.39	118.00
1	M	975	A	C5-C6-N6	-9.13	116.40	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1172	C	O4'-C1'-N1	9.13	115.50	108.20
2	N	337	G	C8-N9-C4	-9.13	102.75	106.40
2	N	776	G	N1-C6-O6	9.13	125.38	119.90
2	N	749	A	C5-N7-C8	9.12	108.46	103.90
1	M	937	A	O4'-C1'-N9	9.12	115.50	108.20
1	M	998	C	C5-C4-N4	-9.12	113.81	120.20
1	M	1005	A	C5-C6-N1	-9.12	113.14	117.70
2	N	121	U	C6-N1-C2	-9.12	115.53	121.00
2	N	588	G	C4-C5-N7	-9.12	107.15	110.80
1	M	985	C	P-O5'-C5'	9.12	135.49	120.90
1	M	1157	A	C5-C6-N6	-9.12	116.40	123.70
1	M	1203	C	P-O5'-C5'	9.12	135.49	120.90
1	M	932	C	O4'-C1'-N1	9.12	115.49	108.20
2	N	279	A	C4-C5-N7	-9.12	106.14	110.70
1	M	995	C	C6-N1-C2	-9.12	116.65	120.30
2	N	787	A	C4-C5-C6	9.12	121.56	117.00
2	N	609	A	C8-N9-C4	-9.11	102.16	105.80
2	N	381	C	O4'-C1'-N1	9.11	115.49	108.20
2	N	654	G	C5-C6-O6	-9.11	123.13	128.60
2	N	877	G	C4-C5-N7	9.11	114.44	110.80
2	N	239	U	O4'-C1'-N1	9.11	115.48	108.20
2	N	898	G	N3-C2-N2	9.11	126.28	119.90
2	N	349	A	C8-N9-C4	-9.10	102.16	105.80
1	M	959	A	C5-C6-N1	-9.10	113.15	117.70
1	M	1190	G	C5-N7-C8	9.10	108.85	104.30
2	N	17	U	N1-C2-O2	-9.10	116.43	122.80
2	N	177	G	O4'-C1'-N9	9.10	115.48	108.20
1	M	1210	C	C5-C6-N1	9.10	125.55	121.00
2	N	110	C	O4'-C1'-N1	9.10	115.48	108.20
2	N	260	G	C5-C6-N1	-9.10	106.95	111.50
2	N	189	A	N9-C4-C5	-9.10	102.16	105.80
2	N	608	A	N1-C6-N6	9.09	124.06	118.60
1	M	1025	U	N3-C4-O4	9.09	125.76	119.40
1	M	1044	A	C4-C5-C6	9.09	121.55	117.00
3	O	1420	U	C5-C6-N1	9.09	127.25	122.70
1	M	1309	G	O4'-C1'-N9	9.09	115.47	108.20
2	N	25	C	O4'-C1'-N1	9.09	115.47	108.20
1	M	1077	G	C6-N1-C2	9.08	130.55	125.10
2	N	723	U	N3-C4-O4	9.08	125.76	119.40
2	N	691	G	N3-C4-C5	-9.08	124.06	128.60
2	N	384	G	C6-N1-C2	-9.08	119.65	125.10
3	O	1412	C	O4'-C1'-N1	9.08	115.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1022	A	N1-C6-N6	9.07	124.05	118.60
2	N	86	G	N1-C6-O6	9.07	125.34	119.90
2	N	516	U	O4'-C1'-N1	9.07	115.46	108.20
2	N	776	G	P-O5'-C5'	9.07	135.41	120.90
2	N	348	G	N7-C8-N9	-9.07	108.57	113.10
3	O	1437	A	C5-C6-N1	-9.07	113.17	117.70
2	N	192	A	C5-N7-C8	9.06	108.43	103.90
2	N	121	U	O4'-C1'-N1	9.06	115.45	108.20
1	M	1275	A	C8-N9-C4	-9.06	102.18	105.80
2	N	125	U	C5-C6-N1	9.06	127.23	122.70
2	N	607	A	C3'-C2'-C1'	9.06	108.75	101.50
2	N	811	C	C5-C6-N1	9.06	125.53	121.00
1	M	1251	A	C5-N7-C8	9.05	108.43	103.90
2	N	78	A	C5-C6-N1	-9.05	113.17	117.70
2	N	383	A	N1-C6-N6	9.05	124.03	118.60
2	N	404	G	N1-C6-O6	9.05	125.33	119.90
1	M	1215	G	C5-C6-O6	-9.05	123.17	128.60
1	M	1333	A	O4'-C1'-N9	9.05	115.44	108.20
1	M	1313	U	C4-C5-C6	-9.05	114.27	119.70
1	M	962	C	C2-N3-C4	9.04	124.42	119.90
1	M	1038	C	N3-C4-C5	-9.04	118.28	121.90
2	N	49	U	P-O3'-C3'	-9.04	108.85	119.70
2	N	448	A	P-O5'-C5'	9.04	135.36	120.90
1	M	930	C	O4'-C1'-N1	9.04	115.43	108.20
2	N	431	A	C5-C6-N6	-9.04	116.47	123.70
3	O	1460	C	N3-C4-C5	-9.04	118.28	121.90
1	M	1366	C	N3-C4-N4	9.03	124.32	118.00
2	N	630	A	C4-C5-C6	9.03	121.52	117.00
2	N	623	C	O4'-C1'-N1	9.03	115.42	108.20
3	O	1507	A	C8-N9-C4	-9.03	102.19	105.80
2	N	117	G	C8-N9-C4	-9.03	102.79	106.40
1	M	1201	A	C8-N9-C4	-9.02	102.19	105.80
1	M	1271	A	C6-C5-N7	-9.02	125.98	132.30
2	N	298	A	N9-C4-C5	9.02	109.41	105.80
1	M	1222	G	C5-C6-O6	-9.02	123.19	128.60
2	N	517	G	N1-C6-O6	9.02	125.31	119.90
2	N	633	G	C4-C5-C6	9.02	124.21	118.80
1	M	1345	U	P-O3'-C3'	9.02	130.52	119.70
2	N	67	C	C2-N3-C4	9.02	124.41	119.90
2	N	238	A	C5-C6-N1	-9.02	113.19	117.70
2	N	685	G	N3-C2-N2	9.02	126.21	119.90
2	N	226	G	C5-C6-O6	-9.01	123.19	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	449	G	C6-C5-N7	-9.01	124.99	130.40
2	N	597	G	O4'-C1'-N9	9.01	115.41	108.20
1	M	1170	A	C4-C5-C6	9.01	121.51	117.00
2	N	600	A	N1-C6-N6	9.01	124.01	118.60
2	N	213	G	C5-N7-C8	-9.01	99.80	104.30
1	M	1304	G	N3-C2-N2	9.01	126.20	119.90
2	N	74	A	O4'-C1'-N9	9.01	115.40	108.20
1	M	959	A	C2-N3-C4	-9.00	106.10	110.60
2	N	147	G	C8-N9-C4	9.00	110.00	106.40
2	N	546	A	C5-N7-C8	9.00	108.40	103.90
1	M	935	A	C8-N9-C4	-9.00	102.20	105.80
1	M	1221	G	C5-C6-N1	-9.00	107.00	111.50
1	M	1333	A	C4-C5-C6	9.00	121.50	117.00
1	M	1189	U	O4'-C1'-N1	9.00	115.40	108.20
2	N	295	C	O4'-C1'-N1	9.00	115.40	108.20
2	N	896	C	O4'-C1'-N1	9.00	115.40	108.20
1	M	937	A	N1-C6-N6	8.99	124.00	118.60
2	N	189	A	C8-N9-C4	8.99	109.40	105.80
2	N	558	G	N9-C4-C5	-8.99	101.80	105.40
2	N	760	G	N1-C6-O6	8.99	125.30	119.90
2	N	4	U	C5-C4-O4	-8.99	120.51	125.90
2	N	624	C	C6-N1-C2	-8.99	116.70	120.30
1	M	1006	G	N1-C2-N3	-8.98	118.51	123.90
2	N	204	G	N1-C6-O6	8.98	125.29	119.90
2	N	335	C	C5-C6-N1	8.98	125.49	121.00
2	N	619	U	N3-C4-O4	8.98	125.69	119.40
1	M	1329	A	C8-N9-C4	-8.98	102.21	105.80
3	O	1401	G	O4'-C1'-N9	8.98	115.39	108.20
2	N	444	G	C4-C5-N7	8.98	114.39	110.80
2	N	500	G	N3-C4-C5	8.98	133.09	128.60
1	M	1234	C	C2-N3-C4	-8.97	115.41	119.90
1	M	1243	C	N3-C4-N4	8.97	124.28	118.00
1	M	973	G	C2-N3-C4	8.96	116.38	111.90
1	M	1201	A	C5-C6-N1	-8.96	113.22	117.70
2	N	195	A	C4-C5-C6	8.96	121.48	117.00
2	N	487	A	C5-C6-N6	-8.96	116.53	123.70
2	N	768	A	C1'-O4'-C4'	8.96	117.07	109.90
1	M	1164	G	N3-C2-N2	-8.96	113.63	119.90
2	N	755	G	C8-N9-C4	-8.96	102.82	106.40
1	M	1246	A	O4'-C1'-N9	8.96	115.37	108.20
2	N	640	A	C4-C5-C6	8.96	121.48	117.00
1	M	953	G	N1-C6-O6	8.96	125.27	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	366	A	P-O3'-C3'	8.96	130.45	119.70
1	M	1041	G	C8-N9-C4	-8.95	102.82	106.40
2	N	478	A	C8-N9-C4	-8.95	102.22	105.80
1	M	1043	G	C6-C5-N7	-8.95	125.03	130.40
1	M	1165	U	C5-C4-O4	-8.95	120.53	125.90
2	N	56	U	C3'-C2'-C1'	8.95	108.66	101.50
3	O	1460	C	C6-N1-C2	8.94	123.88	120.30
2	N	502	A	O4'-C1'-N9	8.94	115.35	108.20
2	N	255	G	N1-C6-O6	8.94	125.26	119.90
2	N	35	G	C8-N9-C4	-8.94	102.83	106.40
2	N	474	G	C2-N3-C4	-8.94	107.43	111.90
2	N	540	G	C8-N9-C4	8.93	109.97	106.40
2	N	611	C	N3-C4-C5	-8.93	118.33	121.90
3	O	1461	G	C5-N7-C8	8.93	108.77	104.30
1	M	1166	G	N7-C8-N9	8.93	117.56	113.10
2	N	292	G	C5-C6-O6	-8.93	123.25	128.60
1	M	967	C	C2-N3-C4	8.92	124.36	119.90
2	N	649	A	C5-C6-N6	-8.92	116.56	123.70
2	N	904	U	C4-C5-C6	-8.92	114.35	119.70
2	N	69	G	C5-C6-O6	-8.91	123.25	128.60
1	M	1003	G	N9-C4-C5	-8.91	101.83	105.40
1	M	1341	U	O4'-C1'-N1	8.91	115.33	108.20
2	N	910	C	C2-N3-C4	-8.91	115.44	119.90
1	M	1143	G	C4-C5-C6	8.91	124.15	118.80
1	M	1255	G	C8-N9-C4	-8.91	102.84	106.40
1	M	1040	U	O4'-C1'-N1	8.91	115.33	108.20
3	O	1462	C	C5-C6-N1	8.90	125.45	121.00
1	M	1153	G	N3-C2-N2	8.90	126.13	119.90
3	O	1484	C	C2-N3-C4	8.90	124.35	119.90
2	N	451	A	N1-C6-N6	8.90	123.94	118.60
1	M	1178	G	N9-C4-C5	8.90	108.96	105.40
2	N	606	G	P-O3'-C3'	-8.90	109.03	119.70
1	M	1365	G	N1-C6-O6	8.89	125.24	119.90
2	N	849	G	N7-C8-N9	-8.89	108.65	113.10
3	O	1491	G	C1'-O4'-C4'	8.89	117.02	109.90
2	N	574	A	N1-C6-N6	8.89	123.94	118.60
2	N	580	C	N3-C4-C5	-8.89	118.34	121.90
1	M	1138	G	P-O3'-C3'	8.89	130.37	119.70
2	N	548	G	O4'-C1'-N9	8.89	115.31	108.20
2	N	206	C	O4'-C1'-N1	8.89	115.31	108.20
2	N	798	U	C5-C6-N1	8.89	127.14	122.70
1	M	1259	C	N3-C4-C5	-8.88	118.35	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	559	A	C5-C6-N1	-8.88	113.26	117.70
2	N	414	A	C4-C5-C6	8.88	121.44	117.00
2	N	18	C	C6-N1-C2	-8.87	116.75	120.30
2	N	116	A	C6-C5-N7	-8.87	126.09	132.30
1	M	1127	G	C5-C6-O6	-8.87	123.28	128.60
1	M	1191	A	N1-C6-N6	8.87	123.92	118.60
1	M	1242	G	N3-C4-C5	-8.87	124.17	128.60
2	N	344	A	O3'-P-O5'	-8.87	87.15	104.00
2	N	506	G	C5-C6-O6	-8.87	123.28	128.60
3	O	1437	A	C4-C5-N7	-8.87	106.27	110.70
2	N	918	A	N1-C2-N3	-8.86	124.87	129.30
2	N	366	A	C5-N7-C8	8.86	108.33	103.90
1	M	1059	C	N3-C4-C5	-8.86	118.36	121.90
2	N	863	U	O4'-C1'-N1	8.86	115.29	108.20
2	N	257	G	C6-C5-N7	-8.86	125.09	130.40
2	N	381	C	N3-C4-C5	-8.86	118.36	121.90
2	N	45	G	C8-N9-C4	-8.85	102.86	106.40
2	N	838	G	C5-C6-N1	-8.85	107.07	111.50
3	O	1421	G	N3-C4-C5	8.85	133.03	128.60
2	N	690	G	C8-N9-C4	-8.85	102.86	106.40
3	O	1427	C	O4'-C1'-N1	8.85	115.28	108.20
3	O	1497	G	O4'-C1'-N9	8.85	115.28	108.20
2	N	714	G	C6-C5-N7	-8.84	125.09	130.40
2	N	558	G	C2-N3-C4	-8.84	107.48	111.90
2	N	562	U	P-O5'-C5'	8.84	135.04	120.90
2	N	351	G	N1-C6-O6	8.84	125.20	119.90
2	N	710	G	N1-C6-O6	8.84	125.20	119.90
1	M	1329	A	C5-C6-N6	-8.83	116.64	123.70
1	M	1301	U	N3-C4-C5	-8.83	109.30	114.60
2	N	517	G	C2-N3-C4	8.83	116.31	111.90
1	M	1318	A	C8-N9-C4	-8.83	102.27	105.80
2	N	440	C	P-O3'-C3'	8.83	130.29	119.70
2	N	619	U	N3-C2-O2	8.83	128.38	122.20
3	O	1505	G	P-O3'-C3'	8.83	130.29	119.70
1	M	1292	G	P-O3'-C3'	-8.82	109.11	119.70
2	N	195	A	N1-C2-N3	-8.82	124.89	129.30
2	N	581	G	C8-N9-C4	8.82	109.93	106.40
2	N	803	G	C6-C5-N7	-8.82	125.11	130.40
2	N	703	G	C1'-O4'-C4'	8.82	116.96	109.90
1	M	1010	U	O4'-C1'-N1	8.82	115.26	108.20
2	N	139	A	C5-C6-N6	-8.82	116.64	123.70
2	N	277	C	O4'-C1'-N1	8.82	115.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	316	C	P-O3'-C3'	-8.82	109.11	119.70
2	N	378	G	C6-C5-N7	-8.82	125.11	130.40
2	N	381	C	C5-C6-N1	8.82	125.41	121.00
1	M	1248	A	N1-C6-N6	8.82	123.89	118.60
2	N	466	A	C5-N7-C8	8.82	108.31	103.90
2	N	566	G	N1-C6-O6	8.82	125.19	119.90
2	N	918	A	O4'-C1'-N9	8.82	115.26	108.20
1	M	1340	A	C4-C5-N7	-8.82	106.29	110.70
1	M	1380	U	N3-C4-O4	8.82	125.57	119.40
2	N	877	G	C6-C5-N7	-8.81	125.11	130.40
2	N	606	G	N1-C6-O6	8.81	125.19	119.90
2	N	877	G	N1-C2-N3	-8.81	118.61	123.90
1	M	1043	G	P-O3'-C3'	8.80	130.26	119.70
2	N	888	G	P-O5'-C5'	8.80	134.98	120.90
1	M	936	C	N3-C4-C5	-8.79	118.38	121.90
3	O	1409	C	N1-C2-O2	-8.80	113.62	118.90
2	N	648	A	C4-C5-C6	8.79	121.40	117.00
3	O	1394	A	C5-C6-N1	-8.79	113.31	117.70
1	M	1085	U	N3-C4-O4	8.78	125.55	119.40
1	M	1164	G	C2-N3-C4	-8.78	107.51	111.90
2	N	349	A	N1-C2-N3	8.78	133.69	129.30
2	N	108	G	C5-C6-O6	-8.78	123.33	128.60
2	N	377	G	O4'-C1'-N9	8.78	115.22	108.20
2	N	463	U	O4'-C1'-N1	8.78	115.22	108.20
2	N	819	A	N1-C6-N6	8.78	123.87	118.60
3	O	1490	U	O4'-C1'-N1	8.78	115.22	108.20
1	M	1210	C	C5-C4-N4	-8.78	114.06	120.20
1	M	1340	A	C8-N9-C4	-8.78	102.29	105.80
2	N	216	U	P-O3'-C3'	8.78	130.23	119.70
2	N	512	U	O4'-C1'-N1	8.78	115.22	108.20
1	M	1139	G	P-O3'-C3'	8.77	130.22	119.70
1	M	1257	A	C8-N9-C4	-8.77	102.29	105.80
2	N	16	A	C8-N9-C4	-8.77	102.29	105.80
2	N	750	C	C4-C5-C6	-8.77	113.01	117.40
2	N	823	C	N3-C4-C5	-8.77	118.39	121.90
2	N	533	A	C5-C6-N6	-8.77	116.69	123.70
2	N	615	G	N3-C4-C5	-8.77	124.22	128.60
1	M	1105	A	P-O3'-C3'	8.77	130.22	119.70
3	O	1395	C	N3-C4-N4	8.76	124.14	118.00
1	M	1050	G	O4'-C1'-N9	8.76	115.21	108.20
2	N	241	G	C6-C5-N7	-8.76	125.14	130.40
2	N	298	A	C5-C6-N1	-8.76	113.32	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	698	G	C2-N3-C4	-8.76	107.52	111.90
1	M	1150	A	C4-C5-N7	8.75	115.08	110.70
1	M	1379	G	C5-C6-N1	-8.75	107.12	111.50
2	N	31	G	O4'-C1'-N9	8.75	115.20	108.20
2	N	358	U	O4'-C1'-N1	8.75	115.20	108.20
1	M	1092	A	N9-C4-C5	8.75	109.30	105.80
1	M	1239	A	C5-C6-N1	-8.75	113.32	117.70
2	N	798	U	O4'-C1'-N1	8.75	115.20	108.20
1	M	1163	A	C5-C6-N6	-8.75	116.70	123.70
2	N	77	A	N7-C8-N9	-8.75	109.43	113.80
3	O	1465	A	C4-C5-C6	8.75	121.37	117.00
1	M	1261	A	O4'-C4'-C3'	-8.74	95.25	104.00
2	N	279	A	N1-C2-N3	-8.74	124.93	129.30
2	N	819	A	C4-C5-C6	8.74	121.37	117.00
3	O	1525	G	C4-C5-N7	8.74	114.30	110.80
1	M	1323	G	O4'-C1'-N9	8.74	115.19	108.20
2	N	93	U	N3-C4-O4	8.74	125.52	119.40
2	N	309	A	C4-C5-C6	8.74	121.37	117.00
2	N	681	A	N1-C2-N3	8.74	133.67	129.30
3	O	1421	G	C5-C6-N1	-8.73	107.13	111.50
3	O	1488	G	N3-C4-C5	-8.73	124.23	128.60
2	N	534	U	C5-C4-O4	-8.73	120.66	125.90
3	O	1423	G	N7-C8-N9	-8.73	108.73	113.10
1	M	1375	A	C4-C5-C6	8.73	121.37	117.00
2	N	341	C	N3-C4-C5	-8.73	118.41	121.90
2	N	393	A	N1-C6-N6	8.73	123.84	118.60
3	O	1429	A	N1-C6-N6	8.73	123.84	118.60
3	O	1517	G	N1-C6-O6	8.73	125.14	119.90
1	M	1138	G	O4'-C1'-N9	8.73	115.18	108.20
2	N	542	G	N3-C4-C5	-8.73	124.24	128.60
1	M	1353	G	P-O3'-C3'	-8.73	109.23	119.70
2	N	139	A	C5-N7-C8	8.72	108.26	103.90
2	N	443	C	N3-C4-C5	-8.72	118.41	121.90
2	N	748	G	C6-C5-N7	-8.72	125.17	130.40
1	M	1388	C	P-O3'-C3'	8.72	130.16	119.70
2	N	800	G	C5-C6-O6	-8.72	123.37	128.60
3	O	1513	A	C4-C5-C6	8.72	121.36	117.00
1	M	1114	C	N3-C4-N4	8.72	124.10	118.00
1	M	1151	A	N1-C6-N6	8.72	123.83	118.60
1	M	1152	A	N1-C2-N3	8.72	133.66	129.30
2	N	466	A	N7-C8-N9	-8.72	109.44	113.80
1	M	1196	A	C5-C6-N1	-8.72	113.34	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	57	G	C5-C6-N1	-8.72	107.14	111.50
1	M	1016	A	N1-C6-N6	8.71	123.83	118.60
1	M	1172	C	C5-C4-N4	-8.71	114.10	120.20
2	N	928	G	C5-N7-C8	-8.71	99.94	104.30
2	N	89	U	O4'-C1'-N1	8.71	115.17	108.20
3	O	1530	G	C6-N1-C2	-8.71	119.88	125.10
1	M	947	G	C6-C5-N7	-8.71	125.18	130.40
2	N	770	C	P-O3'-C3'	-8.71	109.25	119.70
3	O	1529	G	N3-C2-N2	8.71	125.99	119.90
1	M	1034	G	N3-C2-N2	8.70	125.99	119.90
1	M	1382	C	C6-N1-C2	-8.70	116.82	120.30
2	N	622	A	N7-C8-N9	-8.70	109.45	113.80
1	M	1166	G	C8-N9-C4	-8.70	102.92	106.40
2	N	336	A	C4-C5-C6	8.70	121.35	117.00
1	M	1362	A	C5-C6-N6	-8.70	116.74	123.70
2	N	130	A	N1-C6-N6	8.70	123.82	118.60
2	N	8	A	C5-C6-N1	-8.69	113.35	117.70
1	M	1179	A	C8-N9-C4	8.69	109.28	105.80
2	N	39	G	C5-C6-O6	-8.69	123.39	128.60
2	N	639	G	C8-N9-C4	-8.69	102.92	106.40
2	N	811	C	C6-N1-C1'	-8.69	110.37	120.80
1	M	953	G	N3-C2-N2	8.69	125.98	119.90
2	N	345	C	O4'-C1'-N1	8.68	115.15	108.20
3	O	1424	U	P-O5'-C5'	8.68	134.79	120.90
2	N	698	G	C8-N9-C4	-8.68	102.93	106.40
1	M	1143	G	C6-C5-N7	-8.68	125.19	130.40
1	M	1310	G	O4'-C1'-N9	8.68	115.14	108.20
2	N	26	A	O4'-C1'-N9	8.68	115.14	108.20
1	M	1126	U	C5-C6-N1	8.68	127.04	122.70
3	O	1508	A	C5-C6-N6	-8.68	116.76	123.70
2	N	312	C	C2-N3-C4	8.68	124.24	119.90
1	M	988	G	N3-C2-N2	8.67	125.97	119.90
1	M	1374	A	N1-C6-N6	8.67	123.80	118.60
2	N	431	A	N1-C2-N3	-8.67	124.96	129.30
3	O	1410	A	N1-C6-N6	8.67	123.80	118.60
2	N	27	G	N1-C2-N3	-8.67	118.70	123.90
2	N	278	G	C5-C6-O6	-8.67	123.40	128.60
2	N	780	A	O4'-C1'-N9	8.67	115.14	108.20
2	N	50	A	N1-C6-N6	8.67	123.80	118.60
3	O	1531	A	O4'-C1'-N9	8.67	115.13	108.20
2	N	364	A	N1-C2-N3	8.66	133.63	129.30
2	N	517	G	O4'-C1'-N9	8.66	115.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	537	G	C6-C5-N7	-8.66	125.20	130.40
2	N	853	C	C2-N3-C4	8.66	124.23	119.90
2	N	411	A	C4-C5-N7	-8.66	106.37	110.70
3	O	1533	C	C6-N1-C1'	-8.66	110.40	120.80
2	N	42	G	N9-C1'-C2'	-8.66	102.47	112.00
2	N	656	G	N3-C4-C5	8.66	132.93	128.60
2	N	781	A	C8-N9-C4	8.66	109.27	105.80
1	M	1317	C	C1'-O4'-C4'	-8.66	102.97	109.90
3	O	1498	U	O4'-C1'-N1	8.66	115.13	108.20
2	N	878	A	C6-C5-N7	-8.66	126.24	132.30
1	M	1236	A	N1-C6-N6	8.66	123.79	118.60
1	M	1280	A	C5-C6-N6	-8.66	116.77	123.70
2	N	557	G	O4'-C1'-N9	8.66	115.12	108.20
2	N	598	U	O4'-C1'-N1	8.66	115.12	108.20
3	O	1410	A	N3-C4-C5	-8.65	120.74	126.80
2	N	352	C	C6-N1-C1'	-8.65	110.42	120.80
2	N	709	U	O4'-C1'-N1	8.65	115.12	108.20
2	N	778	G	N1-C6-O6	8.65	125.09	119.90
1	M	1067	A	N1-C6-N6	8.65	123.79	118.60
1	M	1190	G	P-O3'-C3'	8.65	130.08	119.70
2	N	301	G	C4-C5-C6	8.65	123.99	118.80
3	O	1467	C	O4'-C1'-N1	8.65	115.12	108.20
2	N	108	G	C8-N9-C4	-8.64	102.94	106.40
1	M	1219	A	C4-C5-C6	8.64	121.32	117.00
2	N	276	G	N1-C2-N3	-8.64	118.72	123.90
2	N	426	U	N1-C2-N3	8.64	120.08	114.90
3	O	1509	C	N3-C4-N4	8.64	124.05	118.00
1	M	1012	A	C3'-C2'-C1'	-8.63	94.59	101.50
1	M	1385	G	C3'-C2'-C1'	-8.63	94.59	101.50
2	N	207	C	C5'-C4'-C3'	8.63	129.81	116.00
2	N	469	C	O4'-C1'-N1	8.63	115.11	108.20
2	N	731	G	O4'-C1'-N9	8.63	115.11	108.20
2	N	267	C	C2-N3-C4	8.63	124.21	119.90
2	N	574	A	P-O5'-C5'	8.63	134.70	120.90
2	N	610	U	P-O3'-C3'	8.62	130.05	119.70
1	M	1324	A	O4'-C1'-N9	8.62	115.09	108.20
3	O	1503	A	C5-C6-N6	-8.62	116.80	123.70
3	O	1516	G	C5-C6-N1	-8.62	107.19	111.50
2	N	449	G	C5-C6-O6	-8.62	123.43	128.60
2	N	518	C	O4'-C1'-N1	8.62	115.09	108.20
2	N	793	U	O4'-C1'-N1	8.62	115.09	108.20
3	O	1395	C	C4-C5-C6	8.62	121.71	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	987	G	N1-C2-N3	-8.61	118.73	123.90
2	N	444	G	N3-C2-N2	8.61	125.93	119.90
2	N	560	A	N1-C6-N6	8.61	123.77	118.60
3	O	1398	A	C5-N7-C8	8.61	108.21	103.90
3	O	1408	A	C4-C5-C6	8.61	121.31	117.00
1	M	1390	U	N1-C2-O2	-8.61	116.78	122.80
2	N	53	A	C5-C6-N1	-8.61	113.40	117.70
2	N	540	G	N7-C8-N9	-8.61	108.80	113.10
2	N	66	A	C1'-O4'-C4'	8.61	116.78	109.90
2	N	77	A	C5-C6-N1	-8.61	113.40	117.70
2	N	907	A	P-O3'-C3'	8.61	130.03	119.70
2	N	739	C	O4'-C1'-N1	8.60	115.08	108.20
1	M	972	C	N3-C4-C5	-8.60	118.46	121.90
1	M	1068	G	N3-C4-C5	-8.60	124.30	128.60
3	O	1523	G	N1-C6-O6	8.60	125.06	119.90
2	N	411	A	C4-C5-C6	8.60	121.30	117.00
3	O	1489	G	C4-C5-N7	-8.59	107.36	110.80
2	N	562	U	N1-C2-O2	8.59	128.81	122.80
3	O	1522	U	N1-C2-N3	-8.59	109.75	114.90
1	M	1357	A	C8-N9-C4	-8.58	102.37	105.80
2	N	162	A	C4-C5-N7	-8.58	106.41	110.70
2	N	714	G	O4'-C1'-N9	8.58	115.07	108.20
2	N	169	C	N3-C4-N4	8.58	124.01	118.00
2	N	706	A	N1-C2-N3	8.58	133.59	129.30
2	N	413	G	N1-C6-O6	8.58	125.05	119.90
3	O	1392	G	C4-C5-C6	8.57	123.94	118.80
1	M	1143	G	N9-C4-C5	8.57	108.83	105.40
1	M	1206	G	C4-C5-C6	8.57	123.94	118.80
2	N	800	G	N1-C6-O6	8.57	125.04	119.90
2	N	861	G	C8-N9-C4	8.57	109.83	106.40
3	O	1480	A	C4-C5-C6	8.57	121.28	117.00
1	M	1084	G	C5-C6-O6	-8.56	123.46	128.60
1	M	1373	G	N9-C4-C5	-8.56	101.98	105.40
1	M	1379	G	C6-N1-C2	8.56	130.24	125.10
2	N	111	G	N1-C2-N3	-8.56	118.76	123.90
2	N	245	U	N1-C2-N3	8.56	120.04	114.90
2	N	609	A	C5-C6-N6	-8.56	116.85	123.70
2	N	282	A	C6-C5-N7	-8.56	126.31	132.30
2	N	336	A	C6-C5-N7	-8.56	126.31	132.30
3	O	1470	U	O4'-C1'-N1	8.56	115.05	108.20
1	M	1271	A	C8-N9-C4	-8.55	102.38	105.80
1	M	1291	U	O4'-C1'-N1	8.55	115.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	968	A	C5-C6-N1	-8.55	113.42	117.70
1	M	969	A	C4-C5-C6	8.55	121.28	117.00
1	M	1089	G	C2-N3-C4	8.55	116.17	111.90
1	M	1192	C	O4'-C1'-N1	8.55	115.04	108.20
1	M	1204	A	C6-C5-N7	-8.55	126.32	132.30
2	N	800	G	N1-C2-N3	-8.55	118.77	123.90
3	O	1483	A	C4-C5-C6	8.55	121.27	117.00
1	M	1208	C	O4'-C1'-N1	8.54	115.04	108.20
1	M	1343	G	C8-N9-C4	8.55	109.82	106.40
3	O	1427	C	C5-C4-N4	-8.55	114.22	120.20
3	O	1531	A	C2-N3-C4	-8.55	106.33	110.60
2	N	720	C	P-O3'-C3'	8.54	129.95	119.70
3	O	1474	U	O4'-C1'-N1	8.54	115.03	108.20
1	M	1228	C	C4-C5-C6	8.54	121.67	117.40
2	N	328	C	C6-N1-C1'	-8.54	110.55	120.80
1	M	963	G	C5-C6-O6	-8.54	123.48	128.60
2	N	45	G	C8-N9-C1'	8.54	138.10	127.00
2	N	887	G	C5-C6-O6	-8.53	123.48	128.60
1	M	1297	G	C4-C5-N7	-8.53	107.39	110.80
3	O	1486	G	C5-C6-N1	8.53	115.77	111.50
2	N	523	A	C5-C6-N6	-8.53	116.88	123.70
2	N	808	C	O4'-C1'-N1	8.53	115.02	108.20
3	O	1482	G	C4-C5-C6	8.52	123.91	118.80
2	N	104	G	N3-C2-N2	8.52	125.86	119.90
2	N	767	A	C2-N3-C4	-8.52	106.34	110.60
3	O	1510	C	C6-N1-C2	-8.52	116.89	120.30
2	N	488	C	C2-N3-C4	8.52	124.16	119.90
2	N	398	U	N3-C4-O4	8.52	125.36	119.40
1	M	1220	G	C4-C5-N7	8.52	114.21	110.80
1	M	1343	G	N9-C4-C5	-8.52	101.99	105.40
2	N	348	G	N9-C4-C5	-8.52	101.99	105.40
2	N	690	G	C5-C6-N1	-8.52	107.24	111.50
2	N	10	A	C5-C6-N1	-8.51	113.44	117.70
2	N	582	C	C4'-C3'-C2'	-8.51	94.09	102.60
2	N	901	A	O4'-C1'-N9	8.51	115.01	108.20
2	N	782	A	C5-C6-N1	-8.51	113.44	117.70
3	O	1522	U	C3'-C2'-C1'	-8.51	94.69	101.50
1	M	990	C	C6-N1-C2	-8.51	116.90	120.30
2	N	23	C	P-O3'-C3'	-8.51	109.49	119.70
2	N	809	G	C4-C5-C6	8.51	123.91	118.80
2	N	509	A	N1-C2-N3	8.51	133.55	129.30
2	N	538	G	N1-C6-O6	8.51	125.00	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	258	G	N1-C2-N3	-8.51	118.80	123.90
1	M	1253	G	C5-C6-N1	-8.50	107.25	111.50
2	N	423	G	C3'-C2'-C1'	8.50	108.30	101.50
2	N	609	A	N7-C8-N9	8.50	118.05	113.80
2	N	62	U	N1-C2-N3	-8.50	109.80	114.90
1	M	1049	U	P-O3'-C3'	8.50	129.90	119.70
1	M	1063	C	O4'-C1'-N1	8.50	115.00	108.20
2	N	775	G	C6-N1-C2	8.49	130.20	125.10
2	N	337	G	C2-N3-C4	8.49	116.14	111.90
2	N	627	G	N3-C4-N9	8.49	131.09	126.00
1	M	1242	G	N9-C4-C5	8.48	108.79	105.40
1	M	1249	C	N3-C4-C5	-8.48	118.51	121.90
2	N	112	G	N3-C4-N9	-8.48	120.91	126.00
2	N	326	G	C8-N9-C4	-8.48	103.01	106.40
1	M	991	U	P-O3'-C3'	8.48	129.88	119.70
2	N	156	C	O4'-C1'-N1	8.48	114.98	108.20
1	M	944	G	N7-C8-N9	-8.48	108.86	113.10
2	N	457	G	C8-N9-C4	8.48	109.79	106.40
1	M	1194	U	P-O3'-C3'	8.48	129.87	119.70
2	N	748	G	C2-N3-C4	8.48	116.14	111.90
1	M	1031	C	N1-C2-O2	8.47	123.98	118.90
1	M	1176	A	C5-C6-N6	-8.47	116.92	123.70
2	N	247	G	C8-N9-C4	8.47	109.79	106.40
2	N	752	G	C2-N3-C4	-8.47	107.66	111.90
2	N	779	C	C6-N1-C2	-8.47	116.91	120.30
2	N	898	G	O4'-C1'-N9	8.47	114.98	108.20
3	O	1392	G	C8-N9-C4	-8.47	103.01	106.40
1	M	1046	A	C5-C6-N6	-8.47	116.93	123.70
2	N	176	C	N1-C2-O2	8.46	123.98	118.90
2	N	819	A	C5-N7-C8	8.46	108.13	103.90
2	N	541	G	O4'-C1'-N9	8.46	114.97	108.20
2	N	157	U	C2-N3-C4	-8.46	121.92	127.00
2	N	535	A	C6-C5-N7	-8.46	126.38	132.30
2	N	81	A	N1-C6-N6	8.46	123.67	118.60
2	N	173	U	P-O3'-C3'	8.46	129.85	119.70
2	N	712	A	N9-C4-C5	8.46	109.18	105.80
2	N	863	U	C5-C4-O4	8.46	130.97	125.90
2	N	867	G	C4'-C3'-C2'	-8.46	94.14	102.60
1	M	1195	C	N3-C4-N4	8.46	123.92	118.00
2	N	888	G	N9-C4-C5	8.46	108.78	105.40
2	N	205	A	C4-C5-C6	8.45	121.23	117.00
2	N	551	U	C5-C6-N1	8.45	126.93	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	105	G	P-O3'-C3'	8.45	129.84	119.70
1	M	1285	A	N9-C4-C5	-8.45	102.42	105.80
2	N	361	G	C6-C5-N7	-8.45	125.33	130.40
2	N	731	G	N1-C6-O6	8.45	124.97	119.90
1	M	1299	A	C4-C5-C6	8.45	121.22	117.00
1	M	1358	U	O4'-C1'-N1	8.45	114.96	108.20
2	N	617	G	N3-C2-N2	8.44	125.81	119.90
3	O	1448	C	O4'-C1'-N1	8.44	114.95	108.20
2	N	505	G	C5-C6-N1	-8.44	107.28	111.50
2	N	854	U	O4'-C1'-N1	8.44	114.95	108.20
1	M	1319	A	C5-C6-N6	-8.44	116.95	123.70
2	N	274	A	C4-C5-C6	8.44	121.22	117.00
2	N	703	G	C2-N3-C4	8.44	116.12	111.90
1	M	1342	C	N3-C4-C5	-8.43	118.53	121.90
2	N	208	U	N3-C4-O4	8.43	125.30	119.40
2	N	514	C	C4-C5-C6	8.43	121.62	117.40
2	N	591	U	C5-C4-O4	-8.43	120.84	125.90
2	N	34	C	N3-C4-N4	8.43	123.90	118.00
2	N	292	G	C4-C5-N7	8.43	114.17	110.80
2	N	423	G	N3-C2-N2	-8.43	114.00	119.90
1	M	962	C	O4'-C1'-N1	8.43	114.94	108.20
2	N	76	G	C6-C5-N7	-8.43	125.34	130.40
1	M	1191	A	C4-C5-C6	8.42	121.21	117.00
1	M	1152	A	C5-C6-N1	-8.42	113.49	117.70
1	M	1387	G	N1-C6-O6	8.42	124.95	119.90
2	N	456	A	C5-N7-C8	8.42	108.11	103.90
2	N	823	C	N3-C4-N4	8.42	123.90	118.00
3	O	1521	C	N3-C4-C5	-8.42	118.53	121.90
3	O	1508	A	N1-C6-N6	8.42	123.65	118.60
2	N	441	A	C6-N1-C2	-8.42	113.55	118.60
1	M	1174	G	N7-C8-N9	8.42	117.31	113.10
3	O	1463	U	C6-N1-C2	-8.42	115.95	121.00
2	N	478	A	C2-N3-C4	-8.42	106.39	110.60
1	M	1014	A	C2-N3-C4	-8.41	106.39	110.60
2	N	668	G	C6-C5-N7	-8.41	125.35	130.40
2	N	160	A	C5-C6-N6	-8.41	116.97	123.70
3	O	1409	C	N3-C4-C5	-8.41	118.53	121.90
3	O	1514	G	N3-C2-N2	-8.41	114.01	119.90
1	M	1020	G	C5-C6-O6	-8.41	123.55	128.60
2	N	377	G	N1-C6-O6	8.41	124.94	119.90
1	M	1110	A	P-O3'-C3'	8.41	129.79	119.70
1	M	1128	C	N3-C4-C5	-8.41	118.54	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1473	G	C1'-O4'-C4'	-8.40	103.18	109.90
1	M	1078	U	O4'-C1'-C2'	-8.40	97.40	105.80
2	N	712	A	C4-C5-N7	-8.40	106.50	110.70
2	N	130	A	C5-C6-N6	-8.40	116.98	123.70
2	N	251	G	C5-C6-N1	-8.40	107.30	111.50
2	N	281	G	O3'-P-O5'	-8.40	88.04	104.00
2	N	243	A	O4'-C1'-N9	8.40	114.92	108.20
2	N	773	G	N1-C2-N3	-8.40	118.86	123.90
2	N	413	G	C6-C5-N7	-8.40	125.36	130.40
2	N	887	G	N9-C4-C5	8.40	108.76	105.40
2	N	45	G	C5-C6-O6	-8.39	123.56	128.60
2	N	136	C	N1-C2-O2	8.39	123.94	118.90
2	N	398	U	N1-C2-N3	-8.39	109.86	114.90
1	M	1004	A	C5-C6-N6	-8.39	116.99	123.70
2	N	88	U	C2-N3-C4	-8.39	121.97	127.00
1	M	1374	A	C4-C5-N7	-8.39	106.51	110.70
2	N	12	U	C5-C6-N1	8.39	126.89	122.70
2	N	727	G	C5-C6-O6	-8.39	123.57	128.60
2	N	763	G	O4'-C1'-N9	8.39	114.91	108.20
1	M	1349	A	O4'-C1'-N9	8.38	114.91	108.20
2	N	411	A	C5-C6-N6	-8.39	116.99	123.70
2	N	698	G	C5'-C4'-O4'	8.39	119.16	109.10
2	N	508	U	N3-C4-O4	8.38	125.27	119.40
2	N	758	C	N3-C4-N4	8.38	123.87	118.00
3	O	1422	G	N1-C6-O6	8.38	124.93	119.90
1	M	965	U	O4'-C1'-N1	8.38	114.91	108.20
2	N	199	A	C5-C6-N6	-8.38	117.00	123.70
1	M	1115	U	P-O5'-C5'	8.38	134.30	120.90
1	M	1311	A	C4-C5-C6	8.38	121.19	117.00
2	N	414	A	N7-C8-N9	8.38	117.99	113.80
2	N	461	A	N1-C2-N3	8.38	133.49	129.30
1	M	1102	A	N1-C6-N6	8.38	123.62	118.60
1	M	1231	G	P-O3'-C3'	8.37	129.75	119.70
3	O	1461	G	C4-C5-N7	-8.38	107.45	110.80
2	N	75	G	C5'-C4'-O4'	8.37	119.15	109.10
2	N	537	G	N3-C2-N2	8.37	125.76	119.90
1	M	940	C	N1-C2-O2	8.37	123.92	118.90
1	M	942	G	N1-C6-O6	8.37	124.92	119.90
1	M	1144	G	C4-C5-N7	8.37	114.15	110.80
2	N	321	A	N1-C2-N3	8.37	133.48	129.30
1	M	1182	G	C2-N3-C4	8.37	116.08	111.90
2	N	13	U	O4'-C1'-N1	8.37	114.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	237	G	C4-C5-C6	8.37	123.82	118.80
2	N	681	A	N9-C4-C5	-8.37	102.45	105.80
2	N	272	C	C6-N1-C2	-8.37	116.95	120.30
2	N	143	A	C5-C6-N6	-8.36	117.01	123.70
2	N	519	C	C5-C6-N1	8.37	125.18	121.00
2	N	666	G	O4'-C1'-N9	8.37	114.89	108.20
2	N	578	C	C6-N1-C2	-8.36	116.96	120.30
1	M	1277	C	C5-C4-N4	-8.36	114.35	120.20
2	N	658	C	O4'-C1'-N1	8.36	114.89	108.20
1	M	1251	A	N9-C4-C5	8.35	109.14	105.80
1	M	1310	G	N1-C6-O6	8.35	124.91	119.90
1	M	1351	U	C1'-O4'-C4'	8.35	116.58	109.90
2	N	841	C	C4-C5-C6	8.35	121.58	117.40
3	O	1479	C	C6-N1-C2	-8.35	116.96	120.30
2	N	38	G	C1'-O4'-C4'	-8.34	103.22	109.90
2	N	98	A	C5-C6-N6	-8.34	117.03	123.70
2	N	408	A	C5-C6-N1	-8.34	113.53	117.70
3	O	1522	U	N3-C2-O2	8.34	128.03	122.20
2	N	351	G	P-O3'-C3'	8.33	129.70	119.70
1	M	1332	A	C6-C5-N7	-8.33	126.47	132.30
2	N	809	G	C4-C5-N7	-8.33	107.47	110.80
1	M	1150	A	N1-C2-N3	8.33	133.47	129.30
1	M	1375	A	C5-N7-C8	8.33	108.06	103.90
2	N	28	A	C4-C5-C6	8.33	121.17	117.00
2	N	33	A	N1-C2-N3	8.33	133.47	129.30
2	N	80	A	N9-C4-C5	-8.33	102.47	105.80
2	N	433	G	N1-C6-O6	8.33	124.90	119.90
2	N	698	G	C5-C6-N1	-8.33	107.33	111.50
3	O	1533	C	C2-N1-C1'	8.33	127.96	118.80
1	M	1278	G	N3-C2-N2	8.33	125.73	119.90
2	N	914	A	O4'-C1'-N9	8.33	114.86	108.20
2	N	620	C	C3'-C2'-C1'	8.33	108.16	101.50
2	N	76	G	C4-N9-C1'	8.32	137.32	126.50
1	M	1019	A	N9-C4-C5	-8.32	102.47	105.80
2	N	388	G	N1-C6-O6	8.32	124.89	119.90
2	N	519	C	O4'-C1'-N1	8.32	114.86	108.20
2	N	770	C	C2-N1-C1'	8.32	127.95	118.80
2	N	327	A	N1-C6-N6	8.32	123.59	118.60
1	M	1297	G	N1-C2-N3	-8.32	118.91	123.90
1	M	1128	C	C2-N3-C4	8.31	124.06	119.90
2	N	228	A	C5-C6-N6	-8.31	117.05	123.70
2	N	529	G	C6-C5-N7	-8.31	125.41	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	554	A	N1-C6-N6	8.31	123.59	118.60
2	N	619	U	C2-N3-C4	8.31	131.99	127.00
1	M	1129	C	C5-C6-N1	8.31	125.15	121.00
3	O	1442	G	C5-C6-O6	-8.31	123.62	128.60
1	M	1374	A	C4-C5-C6	8.31	121.15	117.00
2	N	54	C	O4'-C1'-N1	8.30	114.84	108.20
2	N	349	A	N9-C4-C5	8.30	109.12	105.80
2	N	502	A	C4-C5-C6	8.30	121.15	117.00
2	N	773	G	C6-C5-N7	-8.30	125.42	130.40
2	N	748	G	C5-C6-O6	-8.30	123.62	128.60
3	O	1399	C	N3-C4-N4	8.30	123.81	118.00
1	M	1007	U	O4'-C1'-N1	8.30	114.84	108.20
1	M	1363	A	C4-C5-C6	8.30	121.15	117.00
2	N	768	A	C8-N9-C4	-8.30	102.48	105.80
2	N	203	G	C5-C6-O6	-8.30	123.62	128.60
1	M	1389	C	C5-C6-N1	8.30	125.15	121.00
2	N	470	C	C6-N1-C2	-8.30	116.98	120.30
2	N	527	G	N1-C6-O6	8.30	124.88	119.90
1	M	1186	G	N3-C2-N2	8.29	125.70	119.90
2	N	740	U	O5'-P-OP2	-8.29	98.24	105.70
2	N	805	C	N3-C4-C5	-8.29	118.58	121.90
3	O	1418	A	C6-N1-C2	8.29	123.57	118.60
2	N	511	C	N3-C4-C5	-8.29	118.58	121.90
2	N	768	A	C5-N7-C8	8.29	108.04	103.90
3	O	1402	C	N1-C2-O2	8.29	123.87	118.90
2	N	604	G	C5-C6-O6	-8.28	123.63	128.60
2	N	787	A	O4'-C1'-N9	8.28	114.83	108.20
2	N	819	A	P-O3'-C3'	8.28	129.64	119.70
2	N	247	G	N7-C8-N9	-8.28	108.96	113.10
2	N	332	G	C8-N9-C1'	8.28	137.76	127.00
2	N	413	G	C4-C5-C6	8.28	123.77	118.80
2	N	513	C	C5-C6-N1	8.28	125.14	121.00
2	N	694	A	N1-C2-N3	-8.28	125.16	129.30
2	N	908	A	C4-C5-C6	8.28	121.14	117.00
2	N	366	A	N1-C6-N6	8.28	123.56	118.60
1	M	1048	G	C6-C5-N7	-8.27	125.44	130.40
2	N	269	C	C5-C4-N4	-8.27	114.41	120.20
2	N	551	U	O4'-C1'-N1	8.27	114.82	108.20
2	N	355	C	C5-C6-N1	8.27	125.14	121.00
2	N	407	U	O4'-C1'-N1	8.27	114.81	108.20
2	N	268	U	O4'-C1'-N1	8.27	114.81	108.20
2	N	774	G	N9-C4-C5	8.27	108.71	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	549	C	C3'-C2'-C1'	8.26	108.11	101.50
2	N	754	C	C3'-C2'-C1'	8.26	108.11	101.50
2	N	320	A	N1-C6-N6	8.26	123.56	118.60
1	M	1294	G	C4'-C3'-C2'	-8.26	94.34	102.60
2	N	10	A	C4-C5-C6	8.26	121.13	117.00
2	N	493	A	N1-C2-N3	8.26	133.43	129.30
2	N	334	C	N3-C4-C5	-8.26	118.60	121.90
2	N	650	G	N3-C2-N2	8.26	125.68	119.90
3	O	1496	C	C2-N3-C4	8.26	124.03	119.90
2	N	105	G	O4'-C1'-N9	8.25	114.80	108.20
2	N	152	A	O4'-C1'-N9	8.25	114.80	108.20
2	N	821	G	C6-C5-N7	-8.25	125.45	130.40
3	O	1422	G	P-O3'-C3'	-8.25	109.80	119.70
1	M	937	A	P-O3'-C3'	-8.25	109.80	119.70
2	N	588	G	N3-C2-N2	8.25	125.67	119.90
2	N	632	U	O4'-C1'-N1	8.25	114.80	108.20
2	N	867	G	O4'-C1'-N9	8.25	114.80	108.20
3	O	1520	C	O4'-C1'-N1	8.25	114.80	108.20
2	N	4	U	O4'-C1'-N1	8.25	114.80	108.20
2	N	56	U	C4'-C3'-C2'	-8.25	94.35	102.60
2	N	112	G	N1-C6-O6	8.25	124.85	119.90
2	N	264	C	P-O5'-C5'	8.24	134.09	120.90
2	N	475	C	N3-C4-N4	8.24	123.77	118.00
2	N	554	A	C4-C5-C6	8.24	121.12	117.00
2	N	378	G	N3-C4-N9	8.24	130.94	126.00
2	N	788	U	P-O3'-C3'	8.24	129.59	119.70
1	M	1258	G	C4-C5-C6	8.24	123.74	118.80
2	N	465	A	O4'-C1'-N9	8.24	114.79	108.20
2	N	718	A	C4-C5-C6	8.24	121.12	117.00
3	O	1483	A	C5-C6-N1	-8.24	113.58	117.70
2	N	355	C	O4'-C1'-N1	8.24	114.79	108.20
2	N	678	U	C5-C4-O4	-8.24	120.96	125.90
1	M	1038	C	C2-N3-C4	8.23	124.02	119.90
2	N	122	G	C4-C5-N7	8.23	114.09	110.80
2	N	293	G	N1-C6-O6	8.23	124.84	119.90
2	N	79	G	C5-C6-O6	-8.23	123.66	128.60
1	M	1348	U	C5-C6-N1	-8.23	118.58	122.70
2	N	288	A	N1-C6-N6	8.23	123.54	118.60
2	N	669	G	C4-C5-N7	-8.23	107.51	110.80
2	N	777	A	O4'-C1'-N9	8.23	114.78	108.20
2	N	257	G	N1-C6-O6	8.23	124.84	119.90
1	M	1000	A	C2-N3-C4	8.22	114.71	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	207	C	O4'-C1'-N1	8.22	114.78	108.20
2	N	921	U	P-O5'-C5'	8.22	134.06	120.90
1	M	1082	A	C5-C6-N6	-8.22	117.12	123.70
1	M	1351	U	O4'-C1'-N1	8.22	114.78	108.20
2	N	248	C	C2-N3-C4	8.22	124.01	119.90
2	N	581	G	N1-C2-N3	-8.22	118.97	123.90
2	N	165	G	N3-C2-N2	8.22	125.65	119.90
2	N	707	U	N1-C2-N3	8.22	119.83	114.90
1	M	1263	C	N3-C4-C5	-8.22	118.61	121.90
2	N	125	U	O4'-C1'-N1	8.22	114.77	108.20
1	M	962	C	C4-C5-C6	-8.22	113.29	117.40
2	N	189	A	C4'-C3'-C2'	-8.22	94.38	102.60
1	M	1330	U	O4'-C1'-N1	8.21	114.77	108.20
1	M	1299	A	O4'-C1'-C2'	8.21	114.99	107.60
1	M	1325	C	C5-C6-N1	8.21	125.11	121.00
2	N	712	A	C8-N9-C4	-8.21	102.52	105.80
2	N	313	A	C4-C5-N7	-8.21	106.59	110.70
2	N	726	C	O4'-C1'-N1	8.21	114.77	108.20
1	M	1246	A	C4'-C3'-C2'	-8.21	94.39	102.60
2	N	587	G	O4'-C1'-N9	8.21	114.77	108.20
1	M	1115	U	O4'-C1'-N1	8.20	114.76	108.20
1	M	1316	G	N1-C6-O6	8.20	124.82	119.90
2	N	164	G	N9-C4-C5	8.20	108.68	105.40
2	N	236	A	C5-C6-N6	-8.20	117.14	123.70
2	N	224	U	O4'-C1'-N1	8.20	114.76	108.20
2	N	352	C	P-O3'-C3'	8.20	129.54	119.70
2	N	3	A	N1-C6-N6	8.20	123.52	118.60
2	N	341	C	N3-C4-N4	8.20	123.74	118.00
2	N	631	C	C1'-O4'-C4'	-8.20	103.34	109.90
3	O	1419	G	C6-C5-N7	-8.20	125.48	130.40
3	O	1499	A	C5-C6-N6	-8.20	117.14	123.70
2	N	556	C	N3-C4-N4	8.19	123.74	118.00
2	N	774	G	P-O3'-C3'	-8.19	109.87	119.70
1	M	929	G	C5-N7-C8	-8.19	100.21	104.30
1	M	1054	C	C6-N1-C2	-8.19	117.02	120.30
1	M	1366	C	C6-N1-C2	-8.19	117.02	120.30
2	N	589	U	N1-C2-O2	-8.19	117.07	122.80
1	M	1217	C	N3-C4-N4	8.19	123.73	118.00
2	N	34	C	N3-C4-C5	-8.19	118.62	121.90
2	N	887	G	C4-C5-N7	-8.19	107.52	110.80
1	M	1106	G	C5'-C4'-C3'	8.19	129.10	116.00
2	N	463	U	O4'-C1'-C2'	-8.19	97.61	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	112	G	C4-C5-N7	-8.18	107.53	110.80
2	N	498	A	N1-C6-N6	8.18	123.51	118.60
1	M	1385	G	C2-N3-C4	-8.18	107.81	111.90
2	N	536	C	O4'-C1'-N1	8.18	114.74	108.20
2	N	807	A	C5-C6-N6	-8.18	117.16	123.70
1	M	1113	C	O4'-C1'-N1	8.18	114.74	108.20
1	M	1170	A	N1-C2-N3	8.18	133.39	129.30
1	M	1015	G	C4-C5-N7	8.18	114.07	110.80
1	M	1004	A	C4-C5-C6	8.17	121.09	117.00
1	M	1376	U	N3-C4-C5	-8.17	109.70	114.60
2	N	304	U	C1'-O4'-C4'	-8.17	103.36	109.90
2	N	765	G	C6-C5-N7	-8.17	125.50	130.40
1	M	1089	G	C5-C6-O6	-8.17	123.70	128.60
1	M	1305	G	N3-C4-N9	8.17	130.90	126.00
2	N	350	G	N3-C4-N9	-8.17	121.10	126.00
2	N	563	A	O4'-C1'-N9	8.17	114.74	108.20
2	N	724	G	P-O5'-C5'	-8.17	107.83	120.90
2	N	78	A	O4'-C1'-N9	8.17	114.73	108.20
1	M	984	C	N3-C4-N4	8.17	123.72	118.00
2	N	208	U	P-O5'-C5'	-8.17	107.83	120.90
2	N	351	G	N1-C2-N3	-8.17	119.00	123.90
2	N	136	C	N3-C4-C5	-8.17	118.63	121.90
2	N	576	C	C6-N1-C2	-8.17	117.03	120.30
2	N	671	G	C4-C5-N7	8.17	114.07	110.80
3	O	1421	G	O4'-C1'-N9	8.17	114.73	108.20
1	M	1310	G	C5-C6-O6	-8.16	123.70	128.60
2	N	655	A	O4'-C1'-N9	8.16	114.73	108.20
2	N	577	G	N1-C2-N3	-8.16	119.00	123.90
1	M	1324	A	N3-C4-N9	8.16	133.93	127.40
2	N	110	C	C4-C5-C6	8.16	121.48	117.40
2	N	678	U	C2-N3-C4	8.16	131.90	127.00
1	M	1380	U	C5-C4-O4	-8.16	121.01	125.90
2	N	80	A	N3-C4-N9	8.16	133.93	127.40
2	N	181	A	O4'-C1'-N9	8.16	114.73	108.20
2	N	391	G	P-O5'-C5'	8.16	133.95	120.90
2	N	647	C	N3-C4-N4	8.16	123.71	118.00
1	M	987	G	C6-C5-N7	-8.15	125.51	130.40
1	M	1229	A	C5-C6-N6	-8.15	117.18	123.70
1	M	1266	G	C6-N1-C2	-8.15	120.21	125.10
1	M	1322	C	C6-N1-C1'	-8.15	111.02	120.80
2	N	413	G	N3-C4-C5	-8.15	124.52	128.60
1	M	1187	G	C4-C5-C6	8.15	123.69	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	433	G	N9-C4-C5	-8.15	102.14	105.40
2	N	601	G	O4'-C1'-N9	8.15	114.72	108.20
2	N	878	A	N3-C4-C5	-8.15	121.09	126.80
3	O	1484	C	N3-C2-O2	8.15	127.61	121.90
1	M	1105	A	O4'-C1'-N9	8.15	114.72	108.20
1	M	1347	G	C8-N9-C4	-8.15	103.14	106.40
2	N	341	C	C5-C6-N1	8.15	125.07	121.00
2	N	45	G	N9-C4-C5	8.15	108.66	105.40
2	N	397	A	N1-C2-N3	8.15	133.37	129.30
2	N	398	U	C2-N3-C4	8.15	131.89	127.00
2	N	596	A	N7-C8-N9	8.15	117.87	113.80
2	N	926	G	N1-C6-O6	8.15	124.79	119.90
1	M	1350	A	C8-N9-C4	-8.14	102.54	105.80
2	N	67	C	O4'-C1'-N1	8.14	114.71	108.20
2	N	211	G	C5-C6-N1	-8.14	107.43	111.50
2	N	562	U	O4'-C1'-N1	8.14	114.71	108.20
2	N	777	A	C4-C5-N7	-8.14	106.63	110.70
2	N	818	G	C5-C6-O6	-8.14	123.72	128.60
2	N	272	C	O4'-C1'-N1	8.14	114.71	108.20
2	N	640	A	N7-C8-N9	8.14	117.87	113.80
1	M	951	G	N3-C2-N2	8.13	125.59	119.90
2	N	733	G	C6-C5-N7	-8.14	125.52	130.40
1	M	1018	G	C8-N9-C4	-8.13	103.15	106.40
2	N	239	U	C5-C4-O4	-8.13	121.02	125.90
2	N	589	U	N3-C2-O2	8.13	127.89	122.20
3	O	1478	U	N3-C2-O2	8.13	127.89	122.20
1	M	1104	G	N1-C6-O6	8.13	124.78	119.90
2	N	171	A	C5-C6-N1	-8.13	113.64	117.70
2	N	533	A	N1-C6-N6	8.13	123.48	118.60
2	N	760	G	C6-C5-N7	-8.13	125.52	130.40
2	N	782	A	C4-C5-C6	8.13	121.06	117.00
1	M	1349	A	C4-C5-C6	8.12	121.06	117.00
2	N	51	A	O4'-C1'-N9	8.12	114.70	108.20
2	N	665	A	C8-N9-C4	8.13	109.05	105.80
2	N	651	C	N3-C4-N4	8.12	123.69	118.00
2	N	410	G	O4'-C1'-N9	8.12	114.70	108.20
2	N	858	G	N1-C6-O6	8.12	124.77	119.90
1	M	1168	U	C5-C6-N1	8.12	126.76	122.70
1	M	1179	A	C5-C6-N6	-8.12	117.20	123.70
2	N	411	A	C8-N9-C4	-8.12	102.55	105.80
2	N	470	C	N3-C4-N4	8.12	123.68	118.00
2	N	646	G	C3'-C2'-C1'	-8.12	95.01	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1042	A	C2-N3-C4	-8.12	106.54	110.60
1	M	1292	G	O4'-C1'-N9	8.12	114.69	108.20
2	N	532	A	N1-C6-N6	8.12	123.47	118.60
2	N	216	U	C4-C5-C6	8.11	124.57	119.70
1	M	1046	A	C4-C5-N7	-8.11	106.64	110.70
1	M	1161	C	N3-C4-N4	8.11	123.68	118.00
2	N	32	A	O4'-C1'-N9	8.11	114.69	108.20
2	N	198	G	N3-C2-N2	8.11	125.58	119.90
2	N	915	A	C5-C6-N6	-8.11	117.21	123.70
1	M	1187	G	C6-C5-N7	-8.11	125.53	130.40
1	M	1245	C	O4'-C1'-N1	8.11	114.69	108.20
2	N	564	C	O4'-C1'-N1	8.11	114.69	108.20
2	N	627	G	C4-C5-C6	8.11	123.67	118.80
2	N	896	C	C4-C5-C6	8.11	121.45	117.40
1	M	1237	C	N3-C4-C5	-8.11	118.66	121.90
2	N	3	A	C6-C5-N7	-8.11	126.63	132.30
2	N	671	G	C8-N9-C4	-8.11	103.16	106.40
1	M	1389	C	N3-C4-N4	8.10	123.67	118.00
2	N	606	G	C5-N7-C8	8.10	108.35	104.30
1	M	1375	A	O4'-C1'-N9	8.10	114.68	108.20
2	N	826	C	O4'-C1'-N1	8.10	114.68	108.20
3	O	1521	C	O4'-C1'-N1	8.10	114.68	108.20
1	M	1237	C	C6-N1-C2	8.09	123.54	120.30
2	N	734	G	C5-C6-O6	-8.09	123.74	128.60
1	M	1184	G	O4'-C1'-N9	8.09	114.67	108.20
2	N	43	C	O4'-C1'-N1	8.09	114.67	108.20
2	N	46	G	C2-N3-C4	8.09	115.94	111.90
2	N	54	C	C2-N3-C4	8.09	123.95	119.90
2	N	299	G	N9-C4-C5	8.09	108.64	105.40
2	N	327	A	C1'-O4'-C4'	-8.09	103.43	109.90
1	M	946	A	O4'-C1'-N9	8.08	114.67	108.20
2	N	168	G	N3-C2-N2	8.08	125.56	119.90
2	N	564	C	N3-C4-C5	-8.08	118.67	121.90
2	N	192	A	C6-C5-N7	-8.08	126.65	132.30
2	N	635	A	C5-C6-N6	-8.07	117.24	123.70
2	N	736	C	C4-C5-C6	8.07	121.44	117.40
2	N	917	G	C6-C5-N7	-8.07	125.56	130.40
1	M	1381	U	C6-N1-C1'	8.07	132.50	121.20
2	N	202	G	N7-C8-N9	-8.07	109.06	113.10
2	N	225	C	N3-C4-C5	-8.07	118.67	121.90
2	N	472	U	O4'-C1'-N1	8.07	114.66	108.20
2	N	629	A	C8-N9-C4	-8.07	102.57	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	869	G	O4'-C4'-C3'	8.07	112.56	106.10
1	M	1123	U	C5-C6-N1	8.07	126.73	122.70
1	M	1147	C	P-O3'-C3'	8.07	129.38	119.70
2	N	537	G	C5-C6-O6	-8.07	123.76	128.60
3	O	1435	G	N1-C6-O6	8.07	124.74	119.90
2	N	586	C	C2-N3-C4	-8.06	115.87	119.90
1	M	1024	G	N3-C2-N2	8.06	125.54	119.90
1	M	1093	A	C5-C6-N6	-8.06	117.25	123.70
1	M	1244	G	N1-C2-N2	8.06	123.45	116.20
2	N	682	G	C5-N7-C8	8.06	108.33	104.30
2	N	811	C	N3-C4-N4	8.06	123.64	118.00
1	M	946	A	C4-C5-C6	8.06	121.03	117.00
1	M	1269	A	C4-C5-C6	8.06	121.03	117.00
2	N	317	U	P-O5'-C5'	8.06	133.79	120.90
2	N	766	A	C8-N9-C4	-8.06	102.58	105.80
2	N	725	G	N3-C4-C5	-8.06	124.57	128.60
1	M	1086	U	N3-C4-C5	-8.05	109.77	114.60
1	M	1089	G	N1-C2-N3	-8.05	119.07	123.90
1	M	1261	A	C4-C5-C6	8.05	121.03	117.00
2	N	648	A	C5-C6-N1	-8.05	113.67	117.70
2	N	237	G	O4'-C1'-N9	8.05	114.64	108.20
3	O	1515	G	C2-N3-C4	8.05	115.92	111.90
1	M	1004	A	C2-N3-C4	8.05	114.62	110.60
2	N	404	G	C2-N3-C4	8.05	115.92	111.90
2	N	685	G	C4-C5-C6	8.05	123.63	118.80
3	O	1437	A	O4'-C1'-N9	8.05	114.64	108.20
1	M	970	C	N3-C4-C5	-8.04	118.68	121.90
2	N	620	C	C5-C6-N1	8.04	125.02	121.00
3	O	1400	C	P-O3'-C3'	8.04	129.35	119.70
1	M	1194	U	C6-N1-C2	8.04	125.83	121.00
1	M	1384	C	O4'-C1'-N1	8.04	114.63	108.20
1	M	1385	G	C5-C6-O6	-8.04	123.78	128.60
2	N	143	A	C4-C5-C6	8.04	121.02	117.00
2	N	237	G	C6-C5-N7	-8.04	125.58	130.40
3	O	1422	G	C6-N1-C2	-8.04	120.28	125.10
1	M	968	A	C5-N7-C8	8.04	107.92	103.90
1	M	935	A	C2-N3-C4	-8.04	106.58	110.60
2	N	481	G	O4'-C1'-N9	8.04	114.63	108.20
1	M	1207	G	P-O5'-C5'	8.03	133.75	120.90
1	M	1385	G	N9-C4-C5	-8.04	102.19	105.40
2	N	144	G	N3-C4-C5	-8.04	124.58	128.60
2	N	477	C	N3-C4-N4	8.04	123.62	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	616	G	C4'-C3'-C2'	-8.04	94.56	102.60
1	M	1018	G	N1-C6-O6	8.03	124.72	119.90
2	N	64	G	C6-C5-N7	-8.03	125.58	130.40
2	N	236	A	O4'-C1'-N9	8.03	114.63	108.20
2	N	561	U	C3'-C2'-C1'	8.03	107.92	101.50
2	N	773	G	C8-N9-C4	8.03	109.61	106.40
2	N	795	C	P-O3'-C3'	-8.03	110.06	119.70
1	M	1042	A	C5-C6-N1	-8.03	113.69	117.70
3	O	1503	A	C4-C5-N7	-8.03	106.69	110.70
2	N	253	A	C5-C6-N6	-8.02	117.28	123.70
2	N	388	G	C6-N1-C2	8.02	129.91	125.10
2	N	673	A	N1-C2-N3	-8.02	125.29	129.30
2	N	683	G	N1-C6-O6	8.02	124.71	119.90
2	N	35	G	N9-C4-C5	8.02	108.61	105.40
3	O	1457	G	C8-N9-C4	8.02	109.61	106.40
2	N	155	A	C5-C6-N1	-8.02	113.69	117.70
3	O	1517	G	N3-C2-N2	8.02	125.51	119.90
1	M	1197	A	N1-C6-N6	8.02	123.41	118.60
2	N	249	U	N3-C4-C5	-8.02	109.79	114.60
2	N	113	G	N1-C2-N3	-8.01	119.09	123.90
2	N	203	G	N1-C6-O6	8.01	124.71	119.90
1	M	1269	A	C5'-C4'-C3'	8.01	128.82	116.00
1	M	1353	G	N1-C6-O6	8.01	124.71	119.90
2	N	693	G	C5-C6-N1	-8.01	107.50	111.50
2	N	491	G	N1-C2-N3	-8.01	119.10	123.90
2	N	602	A	N9-C4-C5	8.01	109.00	105.80
1	M	1085	U	N3-C4-C5	-8.01	109.80	114.60
2	N	672	U	O4'-C1'-N1	8.01	114.61	108.20
1	M	1013	G	C6-N1-C2	8.00	129.90	125.10
1	M	1133	G	C5-C6-O6	-8.00	123.80	128.60
2	N	663	A	C6-N1-C2	8.00	123.40	118.60
2	N	804	U	O4'-C1'-N1	8.00	114.60	108.20
2	N	508	U	C1'-O4'-C4'	8.00	116.30	109.90
2	N	669	G	N1-C6-O6	8.00	124.70	119.90
1	M	1115	U	N3-C4-O4	8.00	125.00	119.40
2	N	264	C	C5-C4-N4	-8.00	114.60	120.20
2	N	701	U	C2-N3-C4	-8.00	122.20	127.00
2	N	912	C	P-O5'-C5'	8.00	133.70	120.90
2	N	321	A	C1'-O4'-C4'	8.00	116.30	109.90
1	M	1093	A	C4-C5-C6	8.00	121.00	117.00
2	N	263	A	C6-N1-C2	8.00	123.40	118.60
2	N	535	A	N1-C2-N3	-8.00	125.30	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1325	C	N3-C4-N4	7.99	123.60	118.00
2	N	233	C	C2-N1-C1'	7.99	127.59	118.80
2	N	579	A	C5-N7-C8	7.99	107.90	103.90
2	N	355	C	N1-C2-N3	-7.99	113.61	119.20
2	N	587	G	N1-C2-N3	-7.99	119.11	123.90
1	M	1292	G	N9-C4-C5	-7.99	102.20	105.40
2	N	19	A	C6-C5-N7	-7.99	126.71	132.30
2	N	460	A	N3-C4-C5	-7.99	121.21	126.80
2	N	840	C	P-O5'-C5'	7.99	133.69	120.90
2	N	909	A	C2-N3-C4	-7.99	106.61	110.60
2	N	260	G	C4-C5-N7	-7.99	107.60	110.80
2	N	443	C	N1-C2-O2	-7.99	114.11	118.90
1	M	1308	U	C5-C4-O4	-7.99	121.11	125.90
3	O	1397	C	N3-C4-N4	7.99	123.59	118.00
1	M	1229	A	N9-C4-C5	-7.99	102.61	105.80
3	O	1465	A	O4'-C1'-N9	7.99	114.59	108.20
3	O	1514	G	C5-C6-O6	-7.99	123.81	128.60
3	O	1514	G	N1-C6-O6	7.99	124.69	119.90
2	N	823	C	C4-C5-C6	7.98	121.39	117.40
1	M	1101	A	O4'-C1'-N9	7.98	114.59	108.20
3	O	1439	G	N1-C2-N3	-7.98	119.11	123.90
2	N	669	G	O4'-C1'-N9	7.98	114.58	108.20
1	M	1214	C	N3-C4-N4	7.98	123.58	118.00
1	M	1067	A	N7-C8-N9	-7.97	109.81	113.80
2	N	174	A	N9-C4-C5	7.97	108.99	105.80
2	N	526	C	N3-C4-N4	7.97	123.58	118.00
2	N	384	G	C5-C6-O6	-7.97	123.82	128.60
2	N	696	A	N7-C8-N9	7.97	117.79	113.80
3	O	1418	A	P-O3'-C3'	7.97	129.27	119.70
1	M	1344	C	C5-C6-N1	7.97	124.98	121.00
2	N	596	A	C5-C6-N1	-7.97	113.72	117.70
1	M	1374	A	O4'-C1'-N9	7.97	114.58	108.20
2	N	769	G	N1-C6-O6	7.97	124.68	119.90
1	M	1349	A	N1-C2-N3	7.97	133.28	129.30
2	N	313	A	C4-C5-C6	7.97	120.98	117.00
3	O	1423	G	C6-C5-N7	-7.96	125.62	130.40
2	N	422	C	O4'-C1'-N1	7.96	114.57	108.20
3	O	1483	A	N1-C6-N6	7.96	123.38	118.60
2	N	213	G	N9-C4-C5	-7.96	102.22	105.40
2	N	239	U	N3-C4-O4	7.95	124.97	119.40
2	N	525	C	C6-N1-C2	-7.95	117.12	120.30
1	M	1227	A	C5-C6-N6	-7.95	117.34	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	532	A	N9-C4-C5	7.95	108.98	105.80
2	N	566	G	C8-N9-C4	-7.95	103.22	106.40
1	M	991	U	C4'-C3'-C2'	7.95	110.55	102.60
2	N	657	U	C6-N1-C2	-7.95	116.23	121.00
2	N	832	G	P-O3'-C3'	-7.95	110.16	119.70
1	M	1164	G	C8-N9-C4	7.95	109.58	106.40
2	N	134	G	C4-C5-C6	7.95	123.57	118.80
2	N	899	C	N3-C4-N4	7.95	123.56	118.00
2	N	549	C	O4'-C1'-N1	7.95	114.56	108.20
2	N	561	U	O4'-C1'-N1	7.95	114.56	108.20
2	N	902	G	C5-C6-N1	-7.95	107.53	111.50
1	M	1209	C	C2-N3-C4	7.94	123.87	119.90
1	M	1273	C	C1'-O4'-C4'	-7.94	103.55	109.90
2	N	62	U	N3-C2-O2	7.94	127.76	122.20
2	N	130	A	C4'-C3'-C2'	-7.94	94.66	102.60
1	M	1156	G	C2-N3-C4	7.94	115.87	111.90
2	N	240	G	C5-C6-O6	-7.94	123.84	128.60
1	M	1043	G	C6-N1-C2	7.94	129.86	125.10
2	N	646	G	N1-C2-N3	-7.94	119.14	123.90
2	N	555	U	C5-C4-O4	-7.94	121.14	125.90
1	M	1207	G	C4'-C3'-C2'	-7.93	94.67	102.60
1	M	1251	A	C4-C5-N7	-7.93	106.73	110.70
1	M	1229	A	C2-N3-C4	-7.93	106.64	110.60
2	N	723	U	P-O3'-C3'	-7.93	110.19	119.70
2	N	239	U	P-O3'-C3'	7.93	129.21	119.70
2	N	389	A	O4'-C1'-N9	7.93	114.54	108.20
3	O	1402	C	P-O3'-C3'	7.93	129.21	119.70
2	N	313	A	P-O5'-C5'	7.92	133.58	120.90
2	N	324	G	C6-N1-C2	7.92	129.85	125.10
2	N	466	A	P-O3'-C3'	7.92	129.21	119.70
2	N	555	U	P-O3'-C3'	7.92	129.21	119.70
3	O	1493	A	C5-C6-N1	-7.92	113.74	117.70
1	M	1131	G	N3-C4-C5	-7.92	124.64	128.60
1	M	1360	A	C4-C5-C6	7.92	120.96	117.00
1	M	1135	U	O4'-C1'-N1	7.92	114.53	108.20
2	N	50	A	C4-C5-C6	7.92	120.96	117.00
2	N	377	G	C6-C5-N7	-7.92	125.65	130.40
2	N	429	U	N3-C4-C5	-7.92	109.85	114.60
2	N	658	C	C4-C5-C6	7.92	121.36	117.40
2	N	889	A	O4'-C1'-N9	7.92	114.53	108.20
2	N	279	A	C8-N9-C4	7.92	108.97	105.80
1	M	1263	C	C6-N1-C2	-7.91	117.13	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1285	A	P-O3'-C3'	7.91	129.20	119.70
2	N	237	G	N9-C4-C5	7.91	108.57	105.40
2	N	457	G	N7-C8-N9	-7.91	109.14	113.10
2	N	320	A	C4-C5-C6	7.91	120.96	117.00
2	N	630	A	C4-C5-N7	-7.91	106.75	110.70
2	N	175	C	P-O5'-C5'	7.91	133.55	120.90
2	N	837	U	N1-C2-O2	-7.91	117.26	122.80
1	M	1016	A	N1-C2-N3	7.91	133.25	129.30
1	M	1327	C	N3-C4-C5	-7.91	118.74	121.90
2	N	196	A	C5-C6-N1	-7.91	113.75	117.70
1	M	1020	G	N1-C6-O6	7.90	124.64	119.90
1	M	979	C	N3-C2-O2	7.90	127.43	121.90
1	M	1337	G	C6-C5-N7	-7.90	125.66	130.40
2	N	300	A	C5-C6-N6	-7.90	117.38	123.70
3	O	1499	A	C2-N3-C4	-7.90	106.65	110.60
1	M	1187	G	N7-C8-N9	7.90	117.05	113.10
1	M	1214	C	C5-C4-N4	-7.90	114.67	120.20
2	N	157	U	O4'-C1'-N1	7.90	114.52	108.20
2	N	331	G	O4'-C1'-N9	7.90	114.52	108.20
2	N	356	A	O4'-C1'-N9	7.90	114.52	108.20
2	N	645	G	C4-C5-N7	7.90	113.96	110.80
3	O	1516	G	N9-C4-C5	7.90	108.56	105.40
2	N	149	A	C8-N9-C4	-7.90	102.64	105.80
2	N	108	G	C6-C5-N7	-7.90	125.66	130.40
2	N	331	G	C5-C6-O6	-7.90	123.86	128.60
2	N	370	C	O4'-C1'-N1	7.90	114.52	108.20
2	N	646	G	O4'-C1'-N9	7.89	114.52	108.20
2	N	347	G	N3-C2-N2	7.89	125.42	119.90
2	N	826	C	N1-C2-N3	7.89	124.72	119.20
2	N	888	G	N1-C2-N3	-7.89	119.17	123.90
2	N	452	A	C8-N9-C4	7.89	108.96	105.80
2	N	453	G	C5-C6-O6	-7.89	123.87	128.60
2	N	665	A	N1-C6-N6	7.89	123.33	118.60
2	N	758	C	O4'-C1'-N1	7.89	114.51	108.20
1	M	1092	A	O4'-C1'-N9	7.89	114.51	108.20
2	N	203	G	N3-C4-N9	7.89	130.73	126.00
2	N	638	U	P-O3'-C3'	7.89	129.17	119.70
3	O	1491	G	O4'-C4'-C3'	-7.89	96.11	104.00
2	N	40	C	C5-C6-N1	7.88	124.94	121.00
2	N	910	C	C5-C6-N1	7.88	124.94	121.00
1	M	1305	G	O4'-C1'-N9	7.88	114.50	108.20
2	N	859	G	N1-C6-O6	7.88	124.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1427	C	N3-C4-N4	7.88	123.52	118.00
2	N	115	G	N1-C2-N3	-7.88	119.17	123.90
1	M	1086	U	C6-N1-C2	-7.88	116.27	121.00
2	N	110	C	N3-C4-C5	-7.88	118.75	121.90
2	N	491	G	P-O5'-C5'	-7.88	108.30	120.90
2	N	533	A	C2-N3-C4	7.88	114.54	110.60
1	M	949	A	C5-C6-N6	-7.88	117.40	123.70
2	N	430	A	C5-C6-N6	-7.88	117.40	123.70
2	N	505	G	N3-C2-N2	7.88	125.41	119.90
2	N	460	A	C8-N9-C4	-7.88	102.65	105.80
2	N	479	U	C2-N3-C4	-7.87	122.28	127.00
1	M	1102	A	O4'-C1'-N9	7.87	114.49	108.20
2	N	45	G	N3-C4-C5	-7.87	124.67	128.60
2	N	484	G	N7-C8-N9	-7.87	109.17	113.10
2	N	538	G	O4'-C1'-N9	7.87	114.49	108.20
1	M	967	C	N1-C2-N3	-7.87	113.69	119.20
2	N	346	G	C4-C5-N7	7.87	113.95	110.80
2	N	7	A	C5-C6-N1	-7.86	113.77	117.70
2	N	378	G	C4-C5-N7	7.86	113.94	110.80
2	N	90	C	C5'-C4'-C3'	7.86	128.58	116.00
2	N	19	A	N3-C4-C5	-7.86	121.30	126.80
2	N	606	G	C5-C6-O6	-7.86	123.89	128.60
2	N	72	A	C5-C6-N6	-7.86	117.41	123.70
2	N	205	A	N1-C6-N6	7.86	123.31	118.60
1	M	931	C	C6-N1-C2	-7.86	117.16	120.30
1	M	1376	U	N1-C1'-C2'	-7.86	103.36	112.00
2	N	369	G	N3-C2-N2	7.86	125.40	119.90
2	N	521	G	C5-N7-C8	-7.86	100.37	104.30
2	N	153	C	N1-C2-O2	7.85	123.61	118.90
2	N	44	A	C6-N1-C2	-7.85	113.89	118.60
2	N	521	G	C4-C5-N7	7.85	113.94	110.80
2	N	667	G	C8-N9-C4	-7.85	103.26	106.40
2	N	842	U	C6-N1-C1'	-7.85	110.21	121.20
2	N	734	G	C6-C5-N7	-7.85	125.69	130.40
1	M	1048	G	C6-N1-C2	-7.85	120.39	125.10
2	N	479	U	O4'-C1'-N1	7.85	114.48	108.20
2	N	528	C	O4'-C1'-N1	7.85	114.48	108.20
2	N	613	C	C2-N3-C4	7.85	123.83	119.90
3	O	1503	A	C5'-C4'-O4'	7.85	118.52	109.10
2	N	94	G	N1-C6-O6	7.85	124.61	119.90
2	N	714	G	N9-C4-C5	-7.85	102.26	105.40
2	N	906	A	C5-C6-N1	-7.85	113.78	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	695	A	C5-C6-N1	-7.84	113.78	117.70
1	M	1263	C	O4'-C1'-N1	7.84	114.47	108.20
1	M	992	U	C6-N1-C2	-7.84	116.30	121.00
1	M	1066	C	C4-C5-C6	-7.84	113.48	117.40
2	N	768	A	C5-C6-N6	-7.84	117.43	123.70
1	M	1241	G	C5-C6-N1	-7.84	107.58	111.50
1	M	1142	G	C4-C5-N7	7.83	113.93	110.80
2	N	21	G	N3-C2-N2	7.83	125.38	119.90
2	N	187	G	C3'-C2'-C1'	-7.83	95.23	101.50
2	N	851	G	C4-C5-N7	7.83	113.93	110.80
2	N	888	G	N3-C2-N2	7.83	125.38	119.90
1	M	1255	G	N3-C4-N9	-7.83	121.30	126.00
2	N	553	A	C8-N9-C4	7.83	108.93	105.80
1	M	1058	G	N9-C4-C5	-7.83	102.27	105.40
1	M	1223	C	O4'-C1'-N1	7.83	114.46	108.20
1	M	1268	G	C6-N1-C2	7.83	129.79	125.10
2	N	259	G	N3-C2-N2	7.83	125.38	119.90
2	N	479	U	N1-C2-O2	-7.83	117.32	122.80
2	N	489	C	C6-N1-C2	7.83	123.43	120.30
2	N	32	A	C5-C6-N1	-7.82	113.79	117.70
2	N	219	U	C2-N3-C4	-7.82	122.31	127.00
2	N	461	A	C6-C5-N7	-7.82	126.82	132.30
2	N	707	U	C2-N3-C4	-7.82	122.31	127.00
2	N	787	A	C5-N7-C8	7.82	107.81	103.90
2	N	815	A	N1-C2-N3	7.82	133.21	129.30
3	O	1466	C	C2-N1-C1'	7.82	127.41	118.80
2	N	878	A	N9-C4-C5	7.82	108.93	105.80
1	M	1324	A	C5-C6-N6	-7.82	117.44	123.70
1	M	1187	G	C5-C6-N1	-7.82	107.59	111.50
2	N	918	A	P-O3'-C3'	7.82	129.08	119.70
1	M	1219	A	C6-C5-N7	-7.82	126.83	132.30
2	N	305	G	C5-N7-C8	7.82	108.21	104.30
2	N	803	G	C4-C5-N7	7.82	113.93	110.80
2	N	864	A	C4-C5-C6	7.82	120.91	117.00
2	N	667	G	O4'-C1'-N9	7.81	114.45	108.20
2	N	428	G	P-O3'-C3'	7.81	129.07	119.70
2	N	91	U	O4'-C1'-N1	7.81	114.45	108.20
2	N	333	U	N3-C2-O2	7.81	127.67	122.20
2	N	408	A	N1-C2-N3	7.81	133.21	129.30
2	N	675	A	C5-N7-C8	7.81	107.81	103.90
2	N	747	A	C4-C5-C6	7.81	120.91	117.00
3	O	1531	A	N9-C4-C5	-7.81	102.68	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	645	G	O4'-C1'-N9	7.81	114.45	108.20
2	N	673	A	N7-C8-N9	-7.81	109.90	113.80
3	O	1451	U	O4'-C1'-N1	7.81	114.45	108.20
1	M	935	A	C6-C5-N7	-7.81	126.83	132.30
1	M	1090	U	O4'-C1'-N1	7.81	114.45	108.20
1	M	1354	U	C5-C6-N1	-7.81	118.80	122.70
2	N	808	C	N1-C2-O2	-7.81	114.22	118.90
2	N	848	C	C4-C5-C6	7.81	121.30	117.40
1	M	1068	G	O4'-C1'-N9	7.81	114.44	108.20
2	N	353	A	N1-C6-N6	7.81	123.28	118.60
2	N	651	C	P-O3'-C3'	-7.81	110.33	119.70
1	M	1066	C	N1-C2-O2	7.80	123.58	118.90
1	M	1212	U	C5-C4-O4	7.80	130.58	125.90
1	M	1223	C	P-O3'-C3'	7.80	129.07	119.70
2	N	740	U	O4'-C1'-N1	7.80	114.44	108.20
2	N	513	C	O4'-C1'-N1	7.80	114.44	108.20
2	N	770	C	N1-C2-O2	-7.80	114.22	118.90
1	M	968	A	N7-C8-N9	-7.80	109.90	113.80
1	M	1195	C	C2-N3-C4	7.80	123.80	119.90
1	M	1276	G	N1-C2-N3	-7.80	119.22	123.90
2	N	403	C	O4'-C1'-N1	7.80	114.44	108.20
3	O	1503	A	C8-N9-C4	-7.80	102.68	105.80
1	M	1213	A	N1-C6-N6	7.80	123.28	118.60
2	N	636	U	C5'-C4'-O4'	7.80	118.46	109.10
2	N	142	G	O4'-C1'-N9	7.80	114.44	108.20
1	M	1037	C	P-O3'-C3'	7.80	129.06	119.70
2	N	301	G	P-O5'-C5'	7.80	133.37	120.90
2	N	474	G	C5-C6-O6	-7.80	123.92	128.60
2	N	800	G	N9-C4-C5	7.80	108.52	105.40
2	N	889	A	C5-C6-N1	-7.80	113.80	117.70
1	M	1023	U	C5-C6-N1	7.79	126.60	122.70
2	N	461	A	C4-C5-C6	7.79	120.90	117.00
2	N	645	G	C5-C6-O6	-7.79	123.92	128.60
2	N	192	A	C5-C6-N1	-7.79	113.81	117.70
2	N	373	A	N1-C6-N6	7.79	123.27	118.60
2	N	727	G	N3-C2-N2	7.79	125.35	119.90
1	M	1289	A	C5-C6-N6	-7.79	117.47	123.70
2	N	430	A	O4'-C1'-N9	7.79	114.43	108.20
1	M	1161	C	N1-C2-N3	-7.79	113.75	119.20
3	O	1457	G	N3-C2-N2	7.79	125.35	119.90
2	N	625	U	C5-C6-N1	7.79	126.59	122.70
1	M	1017	U	N3-C4-O4	7.78	124.85	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	814	A	N1-C6-N6	7.78	123.27	118.60
2	N	928	G	C8-N9-C4	-7.78	103.29	106.40
1	M	994	A	C4-C5-C6	7.78	120.89	117.00
1	M	1027	C	C4-C5-C6	7.78	121.29	117.40
2	N	206	C	N3-C4-N4	7.78	123.44	118.00
2	N	225	C	C4-C5-C6	-7.77	113.51	117.40
2	N	874	G	N9-C4-C5	7.77	108.51	105.40
1	M	976	G	P-O3'-C3'	7.77	129.03	119.70
1	M	1084	G	O4'-C1'-N9	7.77	114.42	108.20
1	M	1126	U	C5-C4-O4	-7.77	121.24	125.90
2	N	37	U	C5-C4-O4	-7.77	121.24	125.90
2	N	33	A	C5-N7-C8	7.77	107.78	103.90
2	N	520	A	N7-C8-N9	-7.77	109.92	113.80
3	O	1414	U	N1-C2-N3	7.77	119.56	114.90
2	N	718	A	N9-C4-C5	7.77	108.91	105.80
2	N	790	A	N9-C4-C5	7.76	108.91	105.80
2	N	57	G	N1-C2-N3	-7.76	119.24	123.90
2	N	262	A	O4'-C1'-N9	7.76	114.41	108.20
2	N	456	A	N9-C4-C5	7.76	108.91	105.80
2	N	24	U	C6-N1-C2	-7.76	116.34	121.00
2	N	67	C	C4-C5-C6	7.76	121.28	117.40
2	N	629	A	C5-C6-N1	-7.76	113.82	117.70
3	O	1401	G	C5-C6-O6	-7.76	123.94	128.60
3	O	1478	U	C4'-C3'-C2'	-7.76	94.84	102.60
2	N	198	G	C1'-O4'-C4'	7.75	116.10	109.90
2	N	616	G	N1-C6-O6	7.75	124.55	119.90
2	N	386	C	N3-C4-N4	7.75	123.43	118.00
2	N	498	A	C8-N9-C4	-7.75	102.70	105.80
2	N	618	C	C5-C4-N4	-7.75	114.77	120.20
1	M	1225	A	N1-C2-N3	7.75	133.18	129.30
1	M	1272	G	C5-C6-O6	-7.75	123.95	128.60
2	N	176	C	N3-C4-N4	7.75	123.43	118.00
2	N	755	G	P-O3'-C3'	-7.75	110.40	119.70
2	N	818	G	O4'-C1'-N9	7.75	114.40	108.20
3	O	1492	A	C5-C6-N1	-7.75	113.82	117.70
2	N	76	G	C8-N9-C4	-7.75	103.30	106.40
2	N	815	A	N1-C6-N6	7.75	123.25	118.60
2	N	199	A	C1'-O4'-C4'	7.75	116.10	109.90
2	N	675	A	O4'-C1'-N9	7.75	114.40	108.20
3	O	1473	G	C4'-C3'-C2'	-7.75	94.86	102.60
1	M	1093	A	N1-C2-N3	7.74	133.17	129.30
2	N	642	A	C5-C6-N1	-7.74	113.83	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1338	G	C5-C6-O6	-7.74	123.95	128.60
2	N	192	A	C5-C6-N6	-7.74	117.51	123.70
1	M	945	G	C5-C6-N1	-7.74	107.63	111.50
1	M	1318	A	N9-C4-C5	7.74	108.89	105.80
2	N	226	G	C4-C5-N7	7.74	113.89	110.80
2	N	322	C	C5-C4-N4	-7.74	114.78	120.20
2	N	618	C	N3-C4-C5	-7.74	118.80	121.90
1	M	1341	U	C6-N1-C2	-7.74	116.36	121.00
1	M	1362	A	C5-N7-C8	7.74	107.77	103.90
2	N	35	G	N3-C4-C5	-7.74	124.73	128.60
2	N	65	A	N1-C6-N6	7.74	123.24	118.60
3	O	1411	C	C5-C6-N1	-7.74	117.13	121.00
2	N	505	G	C5'-C4'-O4'	7.74	118.38	109.10
2	N	612	C	C5-C4-N4	-7.74	114.78	120.20
3	O	1489	G	C5-C6-N1	-7.73	107.63	111.50
3	O	1500	A	C5-C6-N1	-7.73	113.83	117.70
3	O	1499	A	C5-N7-C8	-7.73	100.03	103.90
2	N	510	A	C5-C6-N1	-7.73	113.83	117.70
2	N	810	C	P-O3'-C3'	-7.73	110.42	119.70
2	N	826	C	C2-N3-C4	-7.73	116.03	119.90
3	O	1472	U	C5-C6-N1	7.73	126.56	122.70
2	N	381	C	C2-N3-C4	7.73	123.76	119.90
2	N	518	C	N3-C4-N4	7.73	123.41	118.00
1	M	1318	A	C5-C6-N1	-7.73	113.84	117.70
2	N	436	C	O4'-C1'-N1	7.73	114.38	108.20
2	N	616	G	N3-C2-N2	7.73	125.31	119.90
2	N	240	G	C6-C5-N7	-7.72	125.77	130.40
2	N	865	A	N9-C4-C5	-7.72	102.71	105.80
2	N	117	G	C6-C5-N7	-7.72	125.77	130.40
1	M	961	U	O4'-C1'-N1	7.72	114.38	108.20
3	O	1473	G	N1-C2-N3	-7.72	119.27	123.90
2	N	881	G	O4'-C1'-N9	7.72	114.37	108.20
2	N	433	G	O4'-C1'-N9	7.72	114.37	108.20
2	N	839	C	C6-N1-C2	-7.72	117.21	120.30
1	M	1274	A	O4'-C1'-N9	7.71	114.37	108.20
2	N	694	A	C8-N9-C4	7.71	108.89	105.80
3	O	1514	G	N1-C2-N2	7.71	123.14	116.20
1	M	1371	G	N1-C2-N3	-7.71	119.27	123.90
2	N	473	U	O4'-C1'-N1	7.71	114.37	108.20
2	N	566	G	C5-C6-O6	-7.71	123.97	128.60
2	N	668	G	C4-C5-N7	7.71	113.89	110.80
2	N	890	G	C4'-C3'-C2'	-7.71	94.89	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	944	G	C8-N9-C4	7.71	109.48	106.40
2	N	616	G	C4-C5-N7	7.71	113.88	110.80
2	N	629	A	C6-C5-N7	-7.71	126.90	132.30
2	N	735	C	O4'-C1'-N1	7.71	114.37	108.20
3	O	1416	G	N1-C6-O6	7.71	124.53	119.90
2	N	354	G	O4'-C1'-N9	7.71	114.36	108.20
2	N	663	A	C5-C6-N6	-7.71	117.53	123.70
2	N	761	G	N1-C6-O6	7.71	124.52	119.90
1	M	1252	A	C5-C6-N1	-7.70	113.85	117.70
1	M	1196	A	C4-C5-C6	7.70	120.85	117.00
1	M	1377	A	N1-C2-N3	7.70	133.15	129.30
2	N	329	A	C5-C6-N1	-7.70	113.85	117.70
2	N	596	A	C6-C5-N7	-7.70	126.91	132.30
2	N	554	A	C5-N7-C8	7.70	107.75	103.90
2	N	689	C	N3-C4-C5	-7.70	118.82	121.90
1	M	1153	G	C6-C5-N7	-7.69	125.78	130.40
1	M	1217	C	N3-C4-C5	-7.69	118.82	121.90
1	M	1038	C	N3-C4-N4	7.69	123.39	118.00
2	N	28	A	C6-C5-N7	-7.69	126.92	132.30
2	N	435	A	C6-C5-N7	-7.69	126.92	132.30
2	N	710	G	C5'-C4'-O4'	7.69	118.33	109.10
2	N	148	G	C8-N9-C4	7.69	109.48	106.40
2	N	850	U	N3-C4-C5	-7.69	109.99	114.60
1	M	943	U	N3-C2-O2	-7.69	116.82	122.20
1	M	1041	G	N1-C6-O6	7.69	124.51	119.90
2	N	78	A	N9-C4-C5	-7.69	102.72	105.80
2	N	230	G	N7-C8-N9	7.69	116.94	113.10
2	N	324	G	C2-N3-C4	-7.69	108.06	111.90
2	N	491	G	C6-C5-N7	-7.69	125.79	130.40
2	N	492	C	C2-N3-C4	7.69	123.74	119.90
2	N	316	C	C5'-C4'-O4'	7.69	118.32	109.10
2	N	625	U	O4'-C1'-N1	7.68	114.35	108.20
2	N	822	U	C5-C4-O4	-7.68	121.29	125.90
1	M	1111	A	C4-C5-C6	7.68	120.84	117.00
2	N	100	G	C5-C6-N1	-7.68	107.66	111.50
2	N	561	U	P-O3'-C3'	7.68	128.92	119.70
2	N	848	C	O4'-C1'-N1	7.68	114.34	108.20
2	N	898	G	N1-C6-O6	7.68	124.51	119.90
2	N	920	U	N3-C4-O4	7.68	124.78	119.40
2	N	132	C	C2-N3-C4	7.68	123.74	119.90
1	M	1090	U	N1-C2-O2	-7.68	117.42	122.80
2	N	85	U	C2-N1-C1'	7.68	126.91	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	131	A	N1-C6-N6	7.68	123.21	118.60
2	N	649	A	O4'-C1'-N9	7.68	114.34	108.20
2	N	286	C	O4'-C1'-N1	7.67	114.34	108.20
2	N	674	G	N1-C6-O6	7.67	124.50	119.90
2	N	830	G	N1-C6-O6	7.67	124.50	119.90
1	M	1237	C	O4'-C1'-N1	7.67	114.34	108.20
1	M	1333	A	C6-C5-N7	-7.67	126.93	132.30
2	N	311	C	C3'-C2'-C1'	-7.67	95.36	101.50
2	N	451	A	P-O3'-C3'	7.67	128.91	119.70
2	N	677	U	C5-C4-O4	-7.67	121.30	125.90
2	N	124	C	N3-C4-C5	-7.67	118.83	121.90
2	N	19	A	N3-C4-N9	7.67	133.53	127.40
2	N	193	C	N3-C4-N4	7.67	123.37	118.00
2	N	318	G	C8-N9-C4	7.67	109.47	106.40
2	N	356	A	C5'-C4'-O4'	7.67	118.30	109.10
2	N	412	A	C4-C5-C6	7.67	120.83	117.00
2	N	530	G	N1-C6-O6	7.67	124.50	119.90
1	M	1315	U	P-O5'-C5'	7.67	133.17	120.90
2	N	847	G	N1-C2-N3	-7.67	119.30	123.90
2	N	57	G	N3-C2-N2	7.67	125.27	119.90
2	N	350	G	N7-C8-N9	-7.67	109.27	113.10
1	M	1317	C	O4'-C1'-N1	7.66	114.33	108.20
2	N	167	A	C4-C5-C6	7.66	120.83	117.00
2	N	643	C	P-O3'-C3'	7.66	128.90	119.70
2	N	864	A	O4'-C1'-N9	7.66	114.33	108.20
1	M	1129	C	C4-C5-C6	-7.66	113.57	117.40
1	M	1186	G	N1-C2-N3	-7.66	119.30	123.90
1	M	1198	G	P-O5'-C5'	-7.66	108.64	120.90
2	N	10	A	C8-N9-C4	-7.66	102.74	105.80
2	N	422	C	N1-C2-N3	-7.66	113.84	119.20
2	N	58	C	N3-C4-N4	7.66	123.36	118.00
2	N	784	A	N1-C6-N6	7.66	123.19	118.60
2	N	207	C	C5-C6-N1	7.66	124.83	121.00
1	M	1072	G	N1-C2-N2	-7.65	109.31	116.20
1	M	1093	A	C5-N7-C8	-7.65	100.07	103.90
2	N	158	G	O4'-C1'-N9	7.65	114.32	108.20
2	N	164	G	C5-C6-O6	-7.65	124.01	128.60
2	N	772	U	O4'-C1'-N1	7.65	114.32	108.20
3	O	1441	A	C4-C5-C6	7.65	120.83	117.00
1	M	1355	G	C5-C6-O6	-7.65	124.01	128.60
2	N	557	G	C6-C5-N7	-7.65	125.81	130.40
3	O	1442	G	N7-C8-N9	7.65	116.92	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1299	A	C6-C5-N7	-7.64	126.95	132.30
1	M	1366	C	N1-C2-O2	-7.64	114.31	118.90
1	M	1335	U	P-O5'-C5'	7.64	133.13	120.90
2	N	354	G	C4-C5-N7	-7.64	107.74	110.80
2	N	470	C	O4'-C1'-N1	7.64	114.31	108.20
2	N	546	A	C5-C6-N1	-7.64	113.88	117.70
2	N	613	C	C6-N1-C2	-7.64	117.24	120.30
3	O	1396	A	N1-C2-N3	7.64	133.12	129.30
1	M	1318	A	C5-C6-N6	-7.64	117.59	123.70
2	N	645	G	C2-N3-C4	7.64	115.72	111.90
2	N	654	G	C6-C5-N7	-7.64	125.82	130.40
2	N	869	G	C1'-O4'-C4'	-7.64	103.79	109.90
2	N	872	A	C2-N3-C4	-7.64	106.78	110.60
2	N	364	A	N1-C6-N6	7.64	123.18	118.60
3	O	1461	G	C2-N3-C4	7.64	115.72	111.90
1	M	950	U	C6-N1-C2	-7.64	116.42	121.00
1	M	1150	A	C2-N3-C4	-7.64	106.78	110.60
2	N	880	C	O4'-C1'-N1	7.64	114.31	108.20
1	M	932	C	C5-C6-N1	7.63	124.82	121.00
2	N	525	C	N3-C4-N4	7.63	123.34	118.00
2	N	563	A	C8-N9-C4	-7.63	102.75	105.80
2	N	357	G	N7-C8-N9	7.63	116.92	113.10
1	M	1185	G	C2-N3-C4	7.63	115.72	111.90
2	N	122	G	C6-C5-N7	-7.63	125.82	130.40
2	N	487	A	O4'-C1'-N9	7.63	114.30	108.20
2	N	652	U	C2-N3-C4	-7.63	122.42	127.00
2	N	293	G	N9-C4-C5	-7.63	102.35	105.40
2	N	640	A	N1-C2-N3	7.63	133.11	129.30
3	O	1400	C	C4-C5-C6	7.63	121.21	117.40
2	N	923	A	C6-N1-C2	-7.62	114.03	118.60
2	N	629	A	N1-C6-N6	7.62	123.17	118.60
2	N	642	A	C6-C5-N7	-7.62	126.96	132.30
1	M	1098	C	O4'-C1'-N1	7.62	114.30	108.20
2	N	332	G	N9-C4-C5	7.62	108.45	105.40
2	N	573	A	C5-C6-N6	-7.62	117.61	123.70
1	M	946	A	N7-C8-N9	7.62	117.61	113.80
2	N	677	U	P-O5'-C5'	7.62	133.09	120.90
2	N	885	G	N1-C2-N3	-7.62	119.33	123.90
2	N	914	A	P-O3'-C3'	-7.62	110.56	119.70
2	N	767	A	C4-C5-C6	7.61	120.81	117.00
2	N	886	G	C5-C6-O6	-7.61	124.03	128.60
2	N	205	A	C2-N3-C4	7.61	114.41	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	359	G	C2-N3-C4	-7.61	108.09	111.90
2	N	486	U	C5'-C4'-C3'	-7.61	103.82	116.00
1	M	1260	G	C5-N7-C8	7.61	108.11	104.30
2	N	328	C	N3-C4-C5	-7.61	118.86	121.90
2	N	373	A	C4-C5-C6	7.61	120.81	117.00
1	M	1002	G	N3-C2-N2	7.61	125.22	119.90
1	M	1303	C	C5'-C4'-O4'	-7.61	99.97	109.10
2	N	70	U	P-O3'-C3'	7.60	128.82	119.70
2	N	213	G	C5-C6-N1	7.60	115.30	111.50
1	M	1257	A	N9-C4-C5	7.60	108.84	105.80
2	N	305	G	P-O3'-C3'	7.60	128.82	119.70
2	N	911	U	O4'-C1'-N1	7.60	114.28	108.20
1	M	1093	A	C6-C5-N7	-7.60	126.98	132.30
2	N	749	A	N1-C2-N3	7.60	133.10	129.30
2	N	228	A	P-O5'-C5'	7.60	133.06	120.90
2	N	328	C	C2-N1-C1'	7.60	127.16	118.80
2	N	905	U	C3'-C2'-C1'	7.60	107.58	101.50
2	N	262	A	C6-C5-N7	-7.60	126.98	132.30
3	O	1427	C	C6-N1-C2	-7.60	117.26	120.30
2	N	486	U	N3-C4-C5	-7.59	110.04	114.60
2	N	168	G	C4-C5-C6	7.59	123.36	118.80
2	N	417	G	N1-C2-N3	-7.59	119.34	123.90
2	N	82	G	C4'-C3'-C2'	-7.59	95.01	102.60
2	N	118	U	P-O5'-C5'	7.59	133.05	120.90
2	N	748	G	C4-C5-C6	7.59	123.36	118.80
1	M	1339	A	C5-C6-N6	-7.59	117.63	123.70
2	N	230	G	C5-C6-O6	-7.59	124.05	128.60
2	N	569	C	C5-C6-N1	7.59	124.79	121.00
3	O	1507	A	N9-C4-C5	7.59	108.84	105.80
2	N	443	C	C5-C4-N4	-7.59	114.89	120.20
2	N	734	G	C4-C5-C6	7.59	123.35	118.80
1	M	988	G	N1-C2-N2	-7.59	109.37	116.20
1	M	1206	G	C2-N3-C4	-7.59	108.11	111.90
2	N	693	G	N1-C2-N3	-7.59	119.35	123.90
2	N	898	G	N1-C2-N3	-7.59	119.35	123.90
2	N	903	G	N1-C6-O6	7.58	124.45	119.90
2	N	415	A	N1-C6-N6	7.58	123.15	118.60
1	M	993	G	N3-C2-N2	7.58	125.21	119.90
2	N	148	G	C4-C5-C6	7.58	123.35	118.80
2	N	169	C	C5-C4-N4	-7.58	114.89	120.20
2	N	224	U	C4-C5-C6	-7.58	115.15	119.70
2	N	892	A	C5-C6-N1	-7.58	113.91	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1455	G	C6-C5-N7	-7.58	125.85	130.40
2	N	172	A	O5'-C5'-C4'	-7.58	97.30	111.70
2	N	425	G	P-O3'-C3'	-7.58	110.61	119.70
2	N	459	A	C4-C5-C6	7.58	120.79	117.00
2	N	484	G	N1-C2-N3	-7.58	119.35	123.90
1	M	1048	G	C5-C6-O6	-7.58	124.05	128.60
2	N	860	A	O5'-C5'-C4'	-7.58	97.31	111.70
1	M	1299	A	C6-N1-C2	-7.57	114.06	118.60
1	M	1061	G	C2-N3-C4	7.57	115.69	111.90
2	N	71	A	N9-C4-C5	-7.57	102.77	105.80
2	N	384	G	N1-C2-N2	-7.57	109.39	116.20
2	N	432	A	C4-C5-N7	7.57	114.48	110.70
3	O	1403	C	N3-C4-N4	7.57	123.30	118.00
1	M	1323	G	N3-C4-C5	7.57	132.38	128.60
1	M	971	G	N3-C4-C5	-7.57	124.82	128.60
1	M	1068	G	P-O3'-C3'	-7.57	110.62	119.70
1	M	1266	G	O4'-C1'-N9	7.57	114.25	108.20
2	N	404	G	N1-C2-N3	-7.57	119.36	123.90
2	N	417	G	C5-C6-O6	-7.57	124.06	128.60
2	N	581	G	N3-C2-N2	7.57	125.20	119.90
2	N	841	C	C3'-C2'-C1'	-7.57	95.44	101.50
1	M	1068	G	N1-C6-O6	7.57	124.44	119.90
1	M	1212	U	N3-C4-C5	-7.57	110.06	114.60
2	N	288	A	O4'-C1'-N9	7.57	114.25	108.20
2	N	699	C	C5-C4-N4	-7.57	114.91	120.20
2	N	786	G	N1-C6-O6	7.57	124.44	119.90
1	M	1024	G	C5-C6-N1	-7.56	107.72	111.50
1	M	1181	G	C4-C5-C6	7.56	123.34	118.80
1	M	1355	G	OP1-P-OP2	-7.56	108.25	119.60
2	N	360	G	N1-C2-N2	-7.56	109.39	116.20
3	O	1409	C	N3-C2-O2	7.56	127.19	121.90
3	O	1459	G	C5-C6-O6	-7.56	124.06	128.60
1	M	1272	G	N3-C4-C5	7.56	132.38	128.60
1	M	1373	G	O4'-C1'-N9	7.56	114.25	108.20
1	M	1377	A	C6-C5-N7	-7.56	127.01	132.30
2	N	359	G	N3-C4-N9	-7.56	121.46	126.00
2	N	450	G	C5-C6-O6	-7.56	124.06	128.60
2	N	606	G	N7-C8-N9	-7.56	109.32	113.10
2	N	717	U	C5'-C4'-O4'	7.56	118.17	109.10
2	N	725	G	C5-C6-O6	-7.56	124.06	128.60
1	M	1100	C	N3-C2-O2	-7.56	116.61	121.90
2	N	371	A	O4'-C1'-N9	7.56	114.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	858	G	N3-C4-C5	7.56	132.38	128.60
2	N	875	U	N3-C4-C5	-7.56	110.06	114.60
2	N	702	A	P-O3'-C3'	7.55	128.76	119.70
3	O	1512	U	N1-C2-O2	-7.55	117.51	122.80
2	N	484	G	C5-C6-O6	-7.55	124.07	128.60
3	O	1524	C	O4'-C4'-C3'	-7.55	96.45	104.00
2	N	75	G	N1-C2-N3	-7.55	119.37	123.90
2	N	448	A	C4'-C3'-C2'	7.55	110.15	102.60
2	N	482	A	N1-C2-N3	7.55	133.07	129.30
1	M	1261	A	O4'-C1'-N9	7.55	114.24	108.20
2	N	161	A	P-O5'-C5'	7.55	132.98	120.90
2	N	907	A	N9-C4-C5	-7.55	102.78	105.80
2	N	44	A	N9-C4-C5	7.54	108.82	105.80
2	N	278	G	O4'-C1'-N9	7.54	114.23	108.20
2	N	410	G	N1-C6-O6	7.54	124.43	119.90
1	M	1206	G	C8-N9-C4	-7.54	103.38	106.40
2	N	248	C	C5'-C4'-O4'	7.54	118.15	109.10
2	N	687	A	C6-C5-N7	-7.54	127.02	132.30
1	M	958	A	C5-C6-N6	-7.54	117.67	123.70
2	N	361	G	C1'-O4'-C4'	7.54	115.93	109.90
2	N	374	A	C5'-C4'-O4'	-7.54	100.05	109.10
2	N	828	U	O4'-C1'-N1	7.54	114.23	108.20
1	M	1053	G	C5-C6-O6	-7.54	124.08	128.60
1	M	1069	C	N1-C2-O2	7.54	123.42	118.90
3	O	1423	G	O4'-C1'-N9	7.54	114.23	108.20
2	N	271	C	O4'-C1'-N1	7.54	114.23	108.20
2	N	604	G	C5-N7-C8	-7.54	100.53	104.30
1	M	1305	G	N3-C4-C5	-7.53	124.83	128.60
2	N	138	G	O4'-C1'-N9	7.53	114.23	108.20
2	N	423	G	C5-N7-C8	7.53	108.07	104.30
1	M	1336	C	C2-N3-C4	-7.53	116.14	119.90
1	M	1091	U	C5-C6-N1	7.53	126.46	122.70
2	N	111	G	C2-N3-C4	7.53	115.66	111.90
2	N	420	U	O4'-C1'-N1	7.53	114.22	108.20
2	N	564	C	C2-N3-C4	7.53	123.66	119.90
2	N	578	C	N3-C4-N4	7.53	123.27	118.00
1	M	1154	G	C2-N3-C4	7.53	115.66	111.90
2	N	17	U	C5-C6-N1	7.53	126.46	122.70
2	N	188	C	C2-N3-C4	-7.53	116.14	119.90
2	N	423	G	C4-C5-N7	-7.53	107.79	110.80
2	N	434	U	O4'-C1'-N1	7.53	114.22	108.20
2	N	642	A	C4-C5-C6	7.53	120.76	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	735	C	C5-C6-N1	7.53	124.76	121.00
2	N	196	A	N3-C4-N9	7.52	133.42	127.40
3	O	1463	U	P-O3'-C3'	-7.52	110.67	119.70
2	N	113	G	O4'-C1'-N9	7.52	114.22	108.20
1	M	967	C	O4'-C1'-N1	7.52	114.22	108.20
1	M	1361	G	N9-C4-C5	7.52	108.41	105.40
2	N	792	A	P-O3'-C3'	-7.52	110.68	119.70
2	N	199	A	C4-C5-C6	7.52	120.76	117.00
2	N	888	G	C4-C5-N7	-7.52	107.79	110.80
3	O	1502	A	C5-N7-C8	7.52	107.66	103.90
3	O	1502	A	C8-N9-C4	-7.52	102.79	105.80
1	M	1368	A	O4'-C1'-N9	7.52	114.21	108.20
2	N	278	G	C2-N3-C4	7.52	115.66	111.90
3	O	1458	G	C6-C5-N7	-7.52	125.89	130.40
2	N	209	U	N3-C4-C5	-7.51	110.09	114.60
2	N	55	A	N1-C6-N6	7.51	123.11	118.60
2	N	702	A	C6-N1-C2	7.51	123.11	118.60
2	N	734	G	C8-N9-C4	7.51	109.41	106.40
1	M	1070	U	C5-C4-O4	-7.51	121.39	125.90
2	N	450	G	N9-C4-C5	7.51	108.40	105.40
2	N	630	A	C5-C6-N6	-7.51	117.69	123.70
2	N	888	G	C4-C5-C6	7.51	123.31	118.80
2	N	320	A	P-O3'-C3'	7.51	128.71	119.70
2	N	523	A	O4'-C1'-N9	7.51	114.21	108.20
1	M	1233	G	O4'-C1'-N9	7.51	114.21	108.20
3	O	1503	A	O4'-C1'-N9	7.51	114.21	108.20
2	N	231	U	N1-C2-O2	-7.50	117.55	122.80
2	N	745	G	N9-C4-C5	-7.50	102.40	105.40
1	M	1237	C	N3-C4-N4	7.50	123.25	118.00
2	N	293	G	C1'-O4'-C4'	-7.50	103.90	109.90
2	N	302	G	C8-N9-C4	-7.50	103.40	106.40
1	M	1146	A	C6-C5-N7	-7.50	127.05	132.30
2	N	278	G	P-O3'-C3'	7.50	128.70	119.70
2	N	746	A	C5-C6-N6	-7.49	117.70	123.70
2	N	774	G	C5-C6-O6	-7.49	124.10	128.60
2	N	293	G	N3-C2-N2	7.49	125.14	119.90
1	M	970	C	P-O3'-C3'	7.49	128.69	119.70
2	N	314	C	C5-C4-N4	-7.49	114.96	120.20
2	N	749	A	C5-C6-N1	-7.49	113.96	117.70
2	N	336	A	C5-C6-N1	-7.49	113.96	117.70
2	N	371	A	C6-N1-C2	7.49	123.09	118.60
2	N	154	U	C4'-C3'-C2'	-7.48	95.12	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	131	A	N1-C2-N3	7.48	133.04	129.30
2	N	320	A	N1-C2-N3	7.48	133.04	129.30
2	N	891	U	C6-N1-C2	-7.48	116.51	121.00
3	O	1404	C	N3-C4-C5	-7.48	118.91	121.90
2	N	306	A	O4'-C1'-N9	7.48	114.19	108.20
3	O	1422	G	N3-C4-C5	-7.48	124.86	128.60
2	N	219	U	C5-C4-O4	-7.48	121.41	125.90
2	N	389	A	C5-C6-N6	-7.48	117.72	123.70
2	N	395	C	C5-C4-N4	-7.48	114.97	120.20
2	N	691	G	C4-C5-C6	7.48	123.29	118.80
2	N	866	C	P-O3'-C3'	7.48	128.67	119.70
1	M	1315	U	O4'-C1'-N1	7.48	114.18	108.20
2	N	694	A	O4'-C1'-N9	7.48	114.18	108.20
2	N	838	G	C6-C5-N7	-7.48	125.91	130.40
2	N	865	A	C5-C6-N1	-7.48	113.96	117.70
3	O	1513	A	C5-C6-N1	-7.48	113.96	117.70
2	N	19	A	C4'-C3'-C2'	-7.48	95.12	102.60
2	N	521	G	C6-C5-N7	-7.48	125.92	130.40
2	N	637	C	N3-C4-N4	7.47	123.23	118.00
2	N	758	C	P-O3'-C3'	7.47	128.67	119.70
1	M	1334	G	C4-C5-C6	7.47	123.28	118.80
2	N	531	U	C6-N1-C1'	-7.47	110.74	121.20
3	O	1417	G	O4'-C1'-N9	7.47	114.18	108.20
3	O	1447	A	P-O3'-C3'	7.47	128.67	119.70
2	N	22	G	C5-C6-O6	-7.47	124.12	128.60
2	N	818	G	C2-N3-C4	7.47	115.63	111.90
2	N	103	U	C4'-C3'-C2'	-7.47	95.13	102.60
2	N	719	C	C2-N3-C4	7.47	123.63	119.90
2	N	127	G	O4'-C4'-C3'	-7.46	96.54	104.00
2	N	173	U	C3'-C2'-C1'	7.46	107.47	101.50
2	N	336	A	O4'-C1'-N9	7.46	114.17	108.20
2	N	425	G	P-O5'-C5'	7.46	132.84	120.90
2	N	298	A	N1-C2-N3	7.46	133.03	129.30
1	M	1314	C	N3-C4-C5	-7.46	118.92	121.90
2	N	329	A	N1-C2-N3	7.46	133.03	129.30
2	N	851	G	P-O5'-C5'	7.46	132.84	120.90
2	N	321	A	P-O3'-C3'	7.46	128.65	119.70
2	N	357	G	N1-C6-O6	7.46	124.38	119.90
2	N	336	A	C6-N1-C2	-7.46	114.12	118.60
3	O	1456	A	C5-C6-N1	-7.46	113.97	117.70
3	O	1466	C	O4'-C1'-N1	7.46	114.16	108.20
1	M	1160	G	C5-N7-C8	-7.45	100.57	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1175	G	C6-C5-N7	-7.45	125.93	130.40
1	M	1202	U	N1-C2-O2	-7.45	117.58	122.80
2	N	301	G	C6-C5-N7	-7.45	125.93	130.40
2	N	311	C	N3-C4-N4	7.45	123.22	118.00
2	N	731	G	N9-C4-C5	-7.45	102.42	105.40
2	N	22	G	N1-C6-O6	7.45	124.37	119.90
2	N	673	A	C5-N7-C8	7.45	107.62	103.90
3	O	1534	A	C5'-C4'-C3'	7.45	127.91	116.00
2	N	276	G	C5-C6-O6	-7.45	124.13	128.60
3	O	1495	U	C5'-C4'-C3'	-7.45	104.09	116.00
2	N	243	A	C5-N7-C8	7.44	107.62	103.90
2	N	501	C	N3-C4-N4	7.44	123.21	118.00
2	N	547	A	C4-C5-C6	7.44	120.72	117.00
2	N	689	C	C6-N1-C2	-7.44	117.32	120.30
1	M	977	A	C5-N7-C8	7.44	107.62	103.90
1	M	1181	G	N7-C8-N9	-7.44	109.38	113.10
1	M	1328	C	O4'-C1'-N1	7.44	114.15	108.20
2	N	670	G	C4-C5-N7	7.44	113.78	110.80
2	N	857	C	N3-C4-C5	-7.44	118.92	121.90
1	M	1003	G	O4'-C1'-N9	7.44	114.15	108.20
2	N	42	G	N1-C2-N3	-7.44	119.44	123.90
2	N	74	A	C2-N3-C4	-7.44	106.88	110.60
1	M	1349	A	C5-C6-N1	-7.44	113.98	117.70
2	N	103	U	O4'-C1'-N1	7.44	114.15	108.20
3	O	1469	C	P-O3'-C3'	7.44	128.62	119.70
1	M	1212	U	C4'-C3'-C2'	-7.44	95.16	102.60
2	N	524	G	C8-N9-C4	-7.44	103.43	106.40
2	N	25	C	N3-C4-C5	-7.43	118.93	121.90
2	N	305	G	N9-C4-C5	-7.43	102.43	105.40
3	O	1442	G	N3-C2-N2	7.43	125.10	119.90
2	N	791	G	N3-C4-C5	-7.43	124.88	128.60
1	M	1220	G	C6-N1-C2	7.43	129.56	125.10
2	N	463	U	C5-C6-N1	7.43	126.42	122.70
1	M	1047	G	N7-C8-N9	-7.43	109.39	113.10
1	M	1075	U	O4'-C4'-C3'	-7.43	96.57	104.00
1	M	1383	C	C4-C5-C6	-7.43	113.69	117.40
1	M	1116	U	O4'-C1'-N1	7.43	114.14	108.20
1	M	1134	G	N1-C6-O6	7.43	124.36	119.90
1	M	1228	C	N3-C4-N4	7.43	123.20	118.00
1	M	1383	C	N3-C2-O2	7.43	127.10	121.90
2	N	5	U	C4-C5-C6	-7.43	115.24	119.70
2	N	517	G	N3-C2-N2	7.43	125.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1323	G	C6-N1-C2	7.42	129.56	125.10
2	N	339	C	O4'-C1'-N1	7.42	114.14	108.20
2	N	737	C	O4'-C1'-N1	7.42	114.14	108.20
1	M	945	G	N1-C2-N3	-7.42	119.45	123.90
1	M	1168	U	P-O3'-C3'	7.42	128.61	119.70
2	N	82	G	N7-C8-N9	7.42	116.81	113.10
2	N	443	C	C2-N3-C4	7.42	123.61	119.90
2	N	475	C	O4'-C1'-N1	7.42	114.14	108.20
2	N	852	G	C5-C6-N1	-7.42	107.79	111.50
2	N	66	A	C5-C6-N1	-7.42	113.99	117.70
2	N	210	C	C5-C4-N4	-7.42	115.00	120.20
3	O	1439	G	C8-N9-C4	-7.42	103.43	106.40
3	O	1534	A	O4'-C1'-N9	7.42	114.14	108.20
2	N	252	U	C2-N3-C4	-7.42	122.55	127.00
2	N	267	C	C5'-C4'-O4'	-7.42	100.20	109.10
2	N	781	A	N9-C4-C5	-7.42	102.83	105.80
2	N	809	G	N3-C4-N9	-7.42	121.55	126.00
1	M	1170	A	C8-N9-C4	-7.42	102.83	105.80
2	N	251	G	C4'-C3'-C2'	-7.42	95.18	102.60
2	N	407	U	P-O3'-C3'	-7.42	110.80	119.70
2	N	753	A	C5-N7-C8	7.42	107.61	103.90
2	N	890	G	C8-N9-C1'	7.42	136.64	127.00
1	M	1386	G	P-O5'-C5'	-7.42	109.04	120.90
3	O	1482	G	C5-C6-O6	-7.42	124.15	128.60
2	N	342	C	C5-C6-N1	7.41	124.71	121.00
2	N	709	U	C5-C4-O4	-7.41	121.45	125.90
1	M	1179	A	N9-C4-C5	-7.41	102.84	105.80
2	N	355	C	N3-C2-O2	7.41	127.09	121.90
2	N	538	G	N9-C1'-C2'	-7.41	103.85	112.00
1	M	964	A	C8-N9-C4	-7.41	102.84	105.80
1	M	968	A	C8-N9-C4	7.41	108.76	105.80
1	M	977	A	C4'-C3'-C2'	-7.41	95.19	102.60
2	N	315	A	C5-N7-C8	7.41	107.60	103.90
2	N	550	G	C5-N7-C8	7.41	108.00	104.30
1	M	1112	C	N3-C4-N4	7.41	123.18	118.00
1	M	1295	U	C6-N1-C2	-7.41	116.56	121.00
2	N	247	G	P-O3'-C3'	-7.41	110.81	119.70
3	O	1408	A	C6-C5-N7	-7.41	127.12	132.30
1	M	1143	G	P-O5'-C5'	7.40	132.75	120.90
1	M	1155	A	C5-N7-C8	-7.40	100.20	103.90
2	N	654	G	C4-C5-N7	7.40	113.76	110.80
3	O	1401	G	C5-N7-C8	7.40	108.00	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	115	G	C6-C5-N7	-7.40	125.96	130.40
2	N	607	A	O4'-C1'-N9	7.40	114.12	108.20
2	N	299	G	C8-N9-C4	-7.40	103.44	106.40
2	N	515	G	P-O5'-C5'	7.40	132.74	120.90
2	N	908	A	C6-C5-N7	-7.40	127.12	132.30
2	N	203	G	C4'-C3'-C2'	-7.40	95.20	102.60
2	N	260	G	C5-N7-C8	7.40	108.00	104.30
2	N	703	G	N3-C2-N2	7.40	125.08	119.90
3	O	1403	C	C5-C4-N4	-7.40	115.02	120.20
2	N	416	G	N1-C2-N3	-7.40	119.46	123.90
2	N	475	C	N1-C2-O2	-7.40	114.46	118.90
2	N	686	U	C5'-C4'-O4'	7.39	117.97	109.10
2	N	246	A	P-O3'-C3'	7.39	128.57	119.70
2	N	866	C	C5'-C4'-O4'	7.39	117.97	109.10
1	M	1312	G	P-O5'-C5'	-7.39	109.08	120.90
2	N	853	C	C5-C6-N1	7.39	124.69	121.00
2	N	324	G	N3-C4-C5	7.39	132.29	128.60
3	O	1464	U	C5-C6-N1	-7.39	119.01	122.70
2	N	755	G	C5-C6-O6	-7.38	124.17	128.60
2	N	303	A	N7-C8-N9	-7.38	110.11	113.80
2	N	473	U	C3'-C2'-C1'	7.38	107.41	101.50
2	N	559	A	N9-C4-C5	7.38	108.75	105.80
1	M	981	U	C5-C4-O4	-7.38	121.47	125.90
2	N	378	G	O4'-C1'-N9	7.38	114.10	108.20
2	N	846	G	C8-N9-C4	-7.38	103.45	106.40
1	M	1011	C	O4'-C1'-N1	7.38	114.10	108.20
1	M	1184	G	P-O5'-C5'	7.38	132.71	120.90
2	N	233	C	P-O3'-C3'	-7.38	110.84	119.70
2	N	722	G	C5-C6-O6	-7.38	124.17	128.60
2	N	175	C	P-O3'-C3'	-7.38	110.85	119.70
2	N	176	C	C5-C4-N4	-7.38	115.04	120.20
1	M	1229	A	N1-C2-N3	7.38	132.99	129.30
1	M	1269	A	C5-C6-N1	-7.37	114.01	117.70
1	M	1334	G	C6-C5-N7	-7.37	125.98	130.40
2	N	54	C	C2-N1-C1'	7.37	126.91	118.80
2	N	741	G	N1-C2-N3	-7.37	119.48	123.90
2	N	286	C	C5-C4-N4	-7.37	115.04	120.20
2	N	327	A	C5-C6-N6	-7.37	117.80	123.70
2	N	612	C	N3-C4-C5	-7.37	118.95	121.90
2	N	702	A	C4-C5-C6	7.37	120.69	117.00
2	N	770	C	N3-C4-N4	7.37	123.16	118.00
1	M	1131	G	C6-C5-N7	-7.37	125.98	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1180	A	C2-N3-C4	-7.37	106.92	110.60
1	M	1361	G	C4-C5-C6	7.37	123.22	118.80
2	N	10	A	O4'-C1'-N9	7.37	114.09	108.20
2	N	892	A	N1-C6-N6	7.37	123.02	118.60
3	O	1490	U	C3'-C2'-C1'	7.37	107.39	101.50
2	N	14	U	N3-C4-C5	-7.37	110.18	114.60
2	N	404	G	N3-C4-N9	7.37	130.42	126.00
1	M	1156	G	C5-C6-N1	-7.37	107.82	111.50
2	N	283	U	O4'-C1'-N1	7.37	114.09	108.20
2	N	588	G	C5-N7-C8	7.37	107.98	104.30
3	O	1455	G	C8-N9-C4	-7.37	103.45	106.40
2	N	347	G	O4'-C1'-N9	7.36	114.09	108.20
2	N	656	G	N9-C4-C5	-7.36	102.45	105.40
2	N	800	G	O4'-C1'-N9	7.36	114.09	108.20
1	M	1021	A	N1-C2-N3	7.36	132.98	129.30
1	M	1036	A	P-O3'-C3'	7.36	128.53	119.70
2	N	884	U	O4'-C1'-N1	7.36	114.09	108.20
1	M	1225	A	C8-N9-C4	-7.36	102.86	105.80
1	M	1074	G	C4-C5-C6	7.36	123.22	118.80
1	M	1198	G	C6-C5-N7	-7.36	125.99	130.40
1	M	1203	C	N3-C4-C5	-7.36	118.96	121.90
1	M	1307	U	C5-C6-N1	7.36	126.38	122.70
2	N	8	A	C5-C6-N6	-7.36	117.81	123.70
2	N	428	G	C5-C6-O6	-7.36	124.19	128.60
2	N	445	G	N3-C2-N2	7.36	125.05	119.90
2	N	109	A	O4'-C1'-N9	7.35	114.08	108.20
2	N	765	G	O4'-C1'-N9	7.35	114.08	108.20
2	N	853	C	O4'-C1'-N1	7.35	114.08	108.20
2	N	55	A	C1'-O4'-C4'	-7.35	104.02	109.90
2	N	298	A	C4-C5-N7	-7.35	107.03	110.70
2	N	414	A	N3-C4-C5	-7.35	121.66	126.80
3	O	1508	A	C4-C5-C6	7.35	120.67	117.00
1	M	1191	A	C6-C5-N7	-7.35	127.16	132.30
2	N	212	G	P-O3'-C3'	7.35	128.52	119.70
1	M	930	C	N3-C4-N4	7.35	123.14	118.00
1	M	1213	A	C4-C5-C6	7.35	120.67	117.00
2	N	655	A	C5-C6-N6	-7.35	117.82	123.70
3	O	1460	C	O4'-C1'-N1	7.34	114.08	108.20
2	N	727	G	P-O3'-C3'	7.34	128.51	119.70
1	M	1347	G	N9-C4-C5	7.34	108.34	105.40
2	N	340	U	C2-N3-C4	-7.34	122.59	127.00
3	O	1420	U	C5-C4-O4	-7.34	121.50	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1453	G	N1-C2-N3	-7.34	119.50	123.90
2	N	804	U	C5-C6-N1	7.34	126.37	122.70
3	O	1442	G	C8-N9-C4	-7.34	103.46	106.40
2	N	33	A	N7-C8-N9	-7.34	110.13	113.80
2	N	567	G	O4'-C1'-N9	7.34	114.07	108.20
3	O	1492	A	C5-C6-N6	-7.34	117.83	123.70
1	M	1043	G	N1-C6-O6	7.33	124.30	119.90
3	O	1526	G	O4'-C1'-N9	7.33	114.07	108.20
1	M	989	U	O4'-C1'-N1	7.33	114.07	108.20
1	M	1093	A	C8-N9-C4	-7.33	102.87	105.80
1	M	1175	G	C2-N3-C4	-7.33	108.23	111.90
2	N	14	U	C5-C4-O4	7.33	130.30	125.90
2	N	171	A	C2-N3-C4	-7.33	106.93	110.60
2	N	201	G	O4'-C1'-N9	7.33	114.07	108.20
2	N	480	U	O4'-C1'-N1	7.33	114.07	108.20
1	M	1155	A	C5-C6-N6	-7.33	117.83	123.70
1	M	1317	C	N3-C4-N4	7.33	123.13	118.00
2	N	113	G	C4-C5-N7	-7.33	107.87	110.80
1	M	1153	G	O4'-C1'-N9	7.33	114.06	108.20
2	N	135	C	N3-C4-N4	7.33	123.13	118.00
2	N	560	A	C4-C5-C6	7.33	120.66	117.00
2	N	690	G	N1-C2-N3	-7.33	119.50	123.90
3	O	1523	G	O4'-C1'-N9	7.33	114.06	108.20
1	M	1206	G	C6-C5-N7	-7.33	126.00	130.40
2	N	474	G	N1-C6-O6	7.33	124.30	119.90
2	N	866	C	O4'-C1'-N1	7.33	114.06	108.20
2	N	223	A	N1-C2-N3	-7.33	125.64	129.30
2	N	409	U	C6-N1-C2	-7.33	116.60	121.00
2	N	677	U	C2-N3-C4	-7.33	122.61	127.00
3	O	1414	U	C5-C6-N1	7.33	126.36	122.70
1	M	1068	G	N1-C2-N3	-7.32	119.51	123.90
2	N	188	C	C5-C4-N4	-7.32	115.07	120.20
2	N	419	C	C2-N3-C4	7.32	123.56	119.90
1	M	1340	A	N1-C6-N6	7.32	122.99	118.60
1	M	1389	C	C6-N1-C2	-7.32	117.37	120.30
2	N	791	G	C6-C5-N7	-7.32	126.01	130.40
1	M	1297	G	C6-N1-C2	7.32	129.49	125.10
2	N	601	G	C5'-C4'-O4'	7.32	117.89	109.10
3	O	1457	G	C4-C5-C6	7.32	123.19	118.80
2	N	305	G	N1-C6-O6	7.32	124.29	119.90
2	N	769	G	C1'-O4'-C4'	7.32	115.75	109.90
2	N	251	G	P-O3'-C3'	7.32	128.48	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	452	A	C5-C6-N6	-7.32	117.85	123.70
2	N	490	C	N3-C4-N4	7.32	123.12	118.00
1	M	999	C	N3-C4-N4	7.32	123.12	118.00
1	M	1103	C	N3-C4-C5	-7.32	118.97	121.90
1	M	1370	G	C8-N9-C4	7.32	109.33	106.40
2	N	122	G	O4'-C1'-N9	7.32	114.05	108.20
2	N	283	U	C5'-C4'-O4'	7.32	117.88	109.10
2	N	718	A	C5-C6-N6	-7.32	117.85	123.70
2	N	256	U	P-O5'-C5'	7.31	132.60	120.90
2	N	389	A	C4-C5-C6	7.31	120.66	117.00
1	M	1224	U	P-O3'-C3'	7.31	128.47	119.70
2	N	423	G	C4-C5-C6	7.31	123.19	118.80
1	M	1113	C	N1-C2-N3	7.31	124.32	119.20
1	M	1215	G	C5-N7-C8	-7.31	100.64	104.30
2	N	58	C	C2-N3-C4	7.31	123.56	119.90
2	N	60	A	N1-C6-N6	7.31	122.99	118.60
1	M	970	C	C2-N3-C4	7.31	123.55	119.90
1	M	1209	C	N3-C4-N4	7.31	123.11	118.00
2	N	68	G	C2-N3-C4	-7.31	108.25	111.90
2	N	94	G	N3-C4-C5	7.31	132.25	128.60
2	N	248	C	N3-C4-N4	7.31	123.11	118.00
2	N	399	G	P-O3'-C3'	-7.31	110.93	119.70
2	N	700	G	N1-C6-O6	7.31	124.28	119.90
2	N	896	C	P-O5'-C5'	7.31	132.59	120.90
3	O	1421	G	C5-C6-O6	-7.31	124.22	128.60
1	M	1027	C	C3'-C2'-C1'	7.30	107.34	101.50
1	M	942	G	N1-C2-N3	-7.30	119.52	123.90
1	M	1135	U	C5-C6-N1	-7.30	119.05	122.70
2	N	150	U	C6-N1-C2	-7.30	116.62	121.00
2	N	905	U	O4'-C1'-N1	7.30	114.04	108.20
2	N	423	G	N9-C4-C5	7.30	108.32	105.40
3	O	1439	G	C5-C6-O6	-7.30	124.22	128.60
3	O	1488	G	C6-C5-N7	-7.30	126.02	130.40
3	O	1499	A	C5-C6-N1	-7.29	114.05	117.70
2	N	75	G	N3-C2-N2	7.29	125.00	119.90
2	N	180	U	C5-C4-O4	-7.29	121.52	125.90
2	N	273	U	C5-C4-O4	-7.29	121.52	125.90
2	N	388	G	N1-C2-N3	-7.29	119.52	123.90
1	M	974	A	C5-N7-C8	7.29	107.55	103.90
1	M	1330	U	C5'-C4'-O4'	7.29	117.85	109.10
2	N	476	U	C4-C5-C6	7.29	124.08	119.70
2	N	764	C	C4-C5-C6	-7.29	113.75	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1001	C	O4'-C1'-N1	7.29	114.03	108.20
1	M	1020	G	C6-C5-N7	-7.29	126.03	130.40
1	M	1280	A	N3-C4-C5	-7.29	121.70	126.80
2	N	396	C	C5-C6-N1	7.29	124.64	121.00
1	M	1275	A	N1-C2-N3	-7.29	125.66	129.30
2	N	278	G	N1-C6-O6	7.29	124.27	119.90
1	M	956	U	N3-C4-C5	-7.28	110.23	114.60
1	M	1050	G	C5-C6-N1	-7.28	107.86	111.50
1	M	1059	C	O4'-C1'-N1	7.28	114.03	108.20
1	M	1344	C	O4'-C1'-N1	7.28	114.03	108.20
2	N	71	A	C5-C6-N6	-7.28	117.87	123.70
2	N	71	A	N1-C6-N6	7.28	122.97	118.60
2	N	64	G	C4-C5-C6	7.28	123.17	118.80
2	N	401	C	N1-C2-O2	-7.28	114.53	118.90
2	N	83	C	C2-N3-C4	7.28	123.54	119.90
2	N	610	U	C5-C4-O4	-7.28	121.53	125.90
2	N	750	C	C5-C6-N1	7.28	124.64	121.00
2	N	910	C	N3-C4-C5	7.28	124.81	121.90
2	N	674	G	O4'-C1'-N9	7.28	114.02	108.20
2	N	785	G	C6-N1-C2	7.28	129.47	125.10
1	M	1042	A	N1-C2-N3	7.28	132.94	129.30
1	M	1149	C	C6-N1-C2	-7.28	117.39	120.30
1	M	1223	C	C5-C6-N1	7.28	124.64	121.00
2	N	187	G	C5-N7-C8	7.28	107.94	104.30
2	N	500	G	N1-C2-N2	-7.28	109.65	116.20
1	M	987	G	O4'-C1'-N9	7.27	114.02	108.20
2	N	680	C	C2-N3-C4	7.27	123.54	119.90
2	N	890	G	O4'-C1'-C2'	-7.27	98.53	105.80
1	M	1331	G	C5-C6-O6	-7.27	124.24	128.60
3	O	1411	C	N1-C2-O2	7.27	123.26	118.90
1	M	1002	G	C5-C6-N1	-7.27	107.86	111.50
2	N	743	A	N1-C6-N6	7.27	122.96	118.60
1	M	1244	G	P-O5'-C5'	7.27	132.53	120.90
2	N	807	A	N7-C8-N9	-7.27	110.17	113.80
2	N	857	C	C5-C4-N4	-7.27	115.11	120.20
3	O	1475	G	C6-C5-N7	-7.27	126.04	130.40
1	M	1376	U	C5-C4-O4	7.26	130.26	125.90
2	N	307	C	N3-C4-C5	-7.26	118.99	121.90
2	N	450	G	N1-C2-N3	-7.26	119.54	123.90
2	N	556	C	N3-C4-C5	-7.26	118.99	121.90
2	N	23	C	O4'-C1'-N1	7.26	114.01	108.20
2	N	19	A	C5-C6-N6	-7.26	117.89	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	228	A	C4-C5-C6	7.26	120.63	117.00
3	O	1463	U	P-O5'-C5'	7.26	132.52	120.90
2	N	458	U	N1-C2-O2	-7.26	117.72	122.80
2	N	532	A	C5-N7-C8	7.26	107.53	103.90
3	O	1428	A	O4'-C1'-N9	7.26	114.01	108.20
1	M	1117	A	C5-C6-N6	-7.26	117.89	123.70
2	N	114	U	C1'-O4'-C4'	7.26	115.71	109.90
1	M	1250	A	N9-C4-C5	-7.26	102.90	105.80
1	M	1291	U	C2-N3-C4	7.26	131.35	127.00
1	M	1331	G	C6-N1-C2	7.26	129.45	125.10
3	O	1410	A	N1-C2-N3	-7.26	125.67	129.30
1	M	1133	G	N3-C2-N2	7.25	124.98	119.90
2	N	650	G	C5-C6-N1	-7.25	107.87	111.50
2	N	502	A	C2-N3-C4	7.25	114.23	110.60
2	N	682	G	C4-C5-C6	7.25	123.15	118.80
2	N	860	A	C5-C6-N1	-7.25	114.07	117.70
2	N	99	C	C1'-O4'-C4'	7.25	115.70	109.90
1	M	1337	G	C3'-C2'-C1'	7.25	107.30	101.50
1	M	934	C	N3-C4-C5	-7.25	119.00	121.90
1	M	984	C	C6-N1-C1'	-7.25	112.10	120.80
2	N	499	A	C6-C5-N7	-7.25	127.23	132.30
2	N	40	C	C4-C5-C6	7.25	121.02	117.40
2	N	360	G	N9-C4-C5	-7.25	102.50	105.40
1	M	1119	C	C2-N3-C4	7.25	123.52	119.90
1	M	1259	C	C6-N1-C2	-7.25	117.40	120.30
2	N	53	A	N1-C2-N3	7.25	132.92	129.30
3	O	1488	G	C5-N7-C8	-7.25	100.68	104.30
2	N	376	G	C6-C5-N7	-7.24	126.05	130.40
2	N	456	A	C2-N3-C4	7.24	114.22	110.60
3	O	1418	A	P-O5'-C5'	7.24	132.49	120.90
1	M	1375	A	N7-C8-N9	-7.24	110.18	113.80
1	M	970	C	C2-N1-C1'	7.24	126.76	118.80
2	N	186	C	N3-C4-C5	-7.24	119.00	121.90
2	N	862	C	C5-C6-N1	7.24	124.62	121.00
1	M	993	G	C2-N3-C4	7.24	115.52	111.90
1	M	1096	C	C5-C6-N1	-7.24	117.38	121.00
2	N	347	G	C4-C5-N7	-7.24	107.91	110.80
2	N	160	A	C1'-O4'-C4'	-7.24	104.11	109.90
2	N	400	C	C1'-O4'-C4'	-7.24	104.11	109.90
2	N	505	G	N1-C2-N3	-7.24	119.56	123.90
2	N	700	G	N3-C2-N2	7.24	124.97	119.90
2	N	845	A	C4'-C3'-C2'	-7.24	95.36	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	889	A	C4-C5-N7	-7.23	107.08	110.70
2	N	901	A	C6-C5-N7	-7.23	127.24	132.30
1	M	1034	G	N1-C2-N3	-7.23	119.56	123.90
2	N	212	G	O4'-C4'-C3'	-7.23	96.77	104.00
2	N	241	G	C2-N3-C4	-7.23	108.28	111.90
3	O	1398	A	P-O3'-C3'	-7.23	111.02	119.70
1	M	1013	G	C5-C6-O6	-7.23	124.26	128.60
2	N	255	G	N9-C4-C5	7.23	108.29	105.40
2	N	298	A	C5-C6-N6	-7.23	117.92	123.70
2	N	806	C	N3-C4-C5	-7.23	119.01	121.90
3	O	1452	C	N3-C4-C5	-7.23	119.01	121.90
1	M	1034	G	O4'-C1'-N9	7.23	113.98	108.20
1	M	1225	A	C3'-C2'-C1'	7.23	107.28	101.50
2	N	133	U	C5-C6-N1	-7.23	119.09	122.70
2	N	609	A	O4'-C1'-N9	7.23	113.98	108.20
2	N	683	G	N3-C4-C5	7.23	132.21	128.60
2	N	731	G	C8-N9-C4	7.23	109.29	106.40
2	N	799	G	C4-C5-C6	7.23	123.14	118.80
2	N	824	G	N3-C2-N2	7.23	124.96	119.90
2	N	916	U	N3-C4-O4	7.23	124.46	119.40
3	O	1400	C	C2-N3-C4	7.23	123.51	119.90
2	N	748	G	C5-C6-N1	-7.23	107.89	111.50
1	M	1170	A	C2-N3-C4	-7.22	106.99	110.60
2	N	502	A	C4'-C3'-C2'	-7.22	95.38	102.60
2	N	518	C	C2-N1-C1'	7.22	126.75	118.80
1	M	1145	A	C4-C5-C6	7.22	120.61	117.00
2	N	66	A	N7-C8-N9	-7.22	110.19	113.80
1	M	1046	A	C5-C6-N1	-7.22	114.09	117.70
3	O	1489	G	C1'-O4'-C4'	-7.22	104.12	109.90
2	N	578	C	O4'-C1'-N1	7.22	113.97	108.20
1	M	1384	C	N3-C4-C5	-7.22	119.01	121.90
2	N	391	G	P-O3'-C3'	7.22	128.36	119.70
1	M	1055	A	N1-C2-N3	7.21	132.91	129.30
2	N	425	G	N1-C2-N2	7.21	122.69	116.20
2	N	220	G	O4'-C1'-C2'	-7.21	98.59	105.80
2	N	380	G	N7-C8-N9	7.21	116.70	113.10
2	N	457	G	P-O5'-C5'	-7.21	109.36	120.90
2	N	533	A	C5'-C4'-C3'	-7.21	104.46	116.00
2	N	215	C	C5-C6-N1	7.21	124.61	121.00
1	M	964	A	N7-C8-N9	7.21	117.40	113.80
1	M	1241	G	P-O5'-C5'	7.21	132.43	120.90
1	M	1278	G	O4'-C1'-N9	7.21	113.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1350	A	N9-C4-C5	7.21	108.68	105.80
2	N	78	A	C1'-O4'-C4'	7.21	115.67	109.90
2	N	446	G	N1-C2-N3	-7.21	119.58	123.90
2	N	819	A	C4-C5-N7	-7.21	107.10	110.70
3	O	1423	G	N1-C6-O6	7.21	124.22	119.90
1	M	993	G	C5-C6-N1	7.20	115.10	111.50
1	M	1261	A	C6-N1-C2	-7.20	114.28	118.60
2	N	25	C	N3-C4-N4	7.20	123.04	118.00
2	N	371	A	C3'-C2'-C1'	-7.20	95.74	101.50
3	O	1529	G	N3-C4-N9	-7.20	121.68	126.00
1	M	1078	U	C1'-O4'-C4'	-7.20	104.14	109.90
3	O	1430	A	O4'-C1'-N9	7.20	113.96	108.20
2	N	148	G	C5-C6-N1	-7.20	107.90	111.50
2	N	586	C	O4'-C1'-N1	7.20	113.96	108.20
3	O	1394	A	C4-C5-C6	7.20	120.60	117.00
3	O	1512	U	C2-N3-C4	-7.20	122.68	127.00
2	N	835	U	O4'-C1'-N1	7.20	113.96	108.20
2	N	260	G	N7-C8-N9	-7.20	109.50	113.10
3	O	1426	G	N1-C2-N3	-7.20	119.58	123.90
3	O	1488	G	N1-C6-O6	7.20	124.22	119.90
3	O	1534	A	N1-C6-N6	7.20	122.92	118.60
2	N	548	G	C6-C5-N7	-7.19	126.08	130.40
1	M	1124	G	N9-C4-C5	7.19	108.28	105.40
1	M	1143	G	N3-C2-N2	7.19	124.94	119.90
1	M	1193	G	N3-C2-N2	7.19	124.93	119.90
2	N	475	C	N1-C2-N3	7.19	124.23	119.20
2	N	557	G	C4-C5-C6	7.19	123.11	118.80
3	O	1439	G	C3'-C2'-C1'	-7.19	95.75	101.50
2	N	432	A	C5-N7-C8	-7.19	100.31	103.90
2	N	744	C	C2-N3-C4	7.19	123.49	119.90
1	M	1382	C	C5-C6-N1	7.18	124.59	121.00
2	N	311	C	N3-C4-C5	-7.18	119.03	121.90
2	N	144	G	C4-C5-C6	7.18	123.11	118.80
3	O	1398	A	C6-C5-N7	-7.18	127.27	132.30
3	O	1457	G	N7-C8-N9	-7.18	109.51	113.10
2	N	92	U	N3-C4-C5	-7.18	110.29	114.60
1	M	1144	G	C6-C5-N7	-7.18	126.09	130.40
1	M	1343	G	N1-C2-N3	-7.18	119.59	123.90
1	M	1101	A	C4-C5-C6	7.17	120.59	117.00
1	M	1250	A	C5-N7-C8	7.17	107.49	103.90
2	N	791	G	N9-C4-C5	7.17	108.27	105.40
2	N	861	G	N7-C8-N9	-7.17	109.51	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1434	A	C3'-C2'-C1'	-7.17	95.76	101.50
2	N	131	A	C5-C6-N1	-7.17	114.11	117.70
2	N	294	U	C5-C6-N1	7.17	126.29	122.70
1	M	947	G	C5-C6-O6	-7.17	124.30	128.60
2	N	179	A	C4-C5-C6	7.17	120.58	117.00
2	N	208	U	C5-C6-N1	7.17	126.28	122.70
1	M	1182	G	C5-C6-O6	-7.17	124.30	128.60
2	N	439	U	O4'-C1'-N1	7.17	113.93	108.20
2	N	453	G	C6-N1-C2	7.17	129.40	125.10
2	N	507	C	C5-C6-N1	7.17	124.58	121.00
1	M	1005	A	C8-N9-C4	-7.17	102.93	105.80
3	O	1417	G	C8-N9-C1'	-7.17	117.69	127.00
2	N	23	C	C5-C4-N4	-7.17	115.19	120.20
1	M	1094	G	N9-C4-C5	-7.16	102.53	105.40
1	M	1234	C	N1-C2-O2	-7.16	114.60	118.90
1	M	1269	A	C5-N7-C8	7.16	107.48	103.90
2	N	567	G	N9-C4-C5	7.16	108.27	105.40
2	N	630	A	C2-N3-C4	-7.16	107.02	110.60
1	M	1080	A	N1-C2-N3	7.16	132.88	129.30
1	M	1342	C	C4-C5-C6	7.16	120.98	117.40
2	N	261	U	O4'-C1'-N1	7.16	113.93	108.20
2	N	335	C	N3-C4-N4	7.16	123.01	118.00
2	N	646	G	N3-C2-N2	7.16	124.91	119.90
2	N	716	A	C6-C5-N7	-7.16	127.29	132.30
2	N	836	G	C6-N1-C2	7.16	129.40	125.10
2	N	167	A	N1-C2-N3	7.16	132.88	129.30
2	N	408	A	C4-C5-N7	-7.16	107.12	110.70
2	N	732	C	C4-C5-C6	7.16	120.98	117.40
1	M	1013	G	N9-C4-C5	7.16	108.26	105.40
2	N	20	U	O4'-C1'-N1	7.16	113.92	108.20
2	N	668	G	C5-N7-C8	-7.16	100.72	104.30
2	N	223	A	N9-C4-C5	7.15	108.66	105.80
2	N	84	U	O4'-C1'-N1	7.15	113.92	108.20
1	M	1324	A	C5-C6-N1	-7.15	114.12	117.70
2	N	550	G	O4'-C1'-N9	7.15	113.92	108.20
1	M	1376	U	C1'-O4'-C4'	-7.15	104.18	109.90
2	N	231	U	O4'-C1'-N1	7.15	113.92	108.20
3	O	1448	C	C2-N3-C4	7.15	123.47	119.90
2	N	716	A	C2-N3-C4	-7.15	107.03	110.60
2	N	7	A	N9-C4-C5	7.14	108.66	105.80
3	O	1531	A	P-O3'-C3'	-7.14	111.13	119.70
1	M	1200	C	O4'-C1'-N1	7.14	113.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	977	A	N7-C8-N9	-7.14	110.23	113.80
1	M	1037	C	O4'-C1'-C2'	7.14	114.03	107.60
2	N	144	G	C4-C5-N7	-7.14	107.94	110.80
2	N	417	G	C8-N9-C4	-7.14	103.54	106.40
2	N	530	G	C4-C5-N7	7.14	113.66	110.80
2	N	871	U	N3-C4-O4	7.14	124.40	119.40
3	O	1404	C	C4-C5-C6	7.14	120.97	117.40
1	M	1356	G	N1-C6-O6	7.14	124.18	119.90
2	N	130	A	N7-C8-N9	-7.14	110.23	113.80
1	M	1304	G	O4'-C1'-N9	7.13	113.91	108.20
2	N	383	A	C4-C5-C6	7.13	120.57	117.00
1	M	1053	G	O4'-C1'-N9	7.13	113.91	108.20
1	M	1201	A	C5-C6-N6	-7.13	117.99	123.70
1	M	1274	A	C1'-O4'-C4'	7.13	115.61	109.90
2	N	719	C	O4'-C1'-N1	7.13	113.91	108.20
3	O	1432	G	C5-C6-O6	-7.13	124.32	128.60
1	M	1157	A	C4-C5-C6	7.13	120.57	117.00
2	N	80	A	C5-C6-N6	-7.13	118.00	123.70
2	N	613	C	O4'-C1'-N1	7.13	113.91	108.20
1	M	1124	G	C4-C5-C6	7.13	123.08	118.80
2	N	494	G	C6-C5-N7	-7.13	126.12	130.40
2	N	596	A	C2-N3-C4	-7.13	107.04	110.60
1	M	1371	G	C6-C5-N7	-7.12	126.12	130.40
2	N	45	G	C6-C5-N7	-7.12	126.12	130.40
2	N	93	U	C5-C4-O4	-7.12	121.63	125.90
1	M	1167	A	N1-C6-N6	7.12	122.87	118.60
1	M	1360	A	N1-C2-N3	7.12	132.86	129.30
2	N	299	G	O4'-C1'-N9	7.12	113.90	108.20
2	N	615	G	C4-C5-C6	7.12	123.07	118.80
2	N	733	G	O4'-C1'-N9	7.12	113.90	108.20
1	M	948	C	C5'-C4'-O4'	7.12	117.64	109.10
1	M	1013	G	C4-C5-C6	7.12	123.07	118.80
1	M	1027	C	C5-C6-N1	-7.12	117.44	121.00
2	N	424	G	C6-C5-N7	-7.12	126.13	130.40
2	N	887	G	C5-N7-C8	7.12	107.86	104.30
3	O	1529	G	N1-C2-N3	-7.12	119.63	123.90
1	M	1177	G	O4'-C1'-N9	7.12	113.89	108.20
2	N	31	G	C5-C6-N1	-7.12	107.94	111.50
1	M	970	C	N1-C2-O2	7.11	123.17	118.90
2	N	8	A	N7-C8-N9	-7.11	110.24	113.80
2	N	214	C	N3-C4-C5	-7.11	119.06	121.90
1	M	1191	A	P-O3'-C3'	7.11	128.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	124	C	O4'-C1'-N1	7.11	113.89	108.20
1	M	1087	G	O4'-C1'-N9	7.11	113.89	108.20
1	M	1165	U	O4'-C1'-N1	7.11	113.89	108.20
2	N	32	A	N1-C6-N6	7.11	122.86	118.60
2	N	393	A	O4'-C4'-C3'	-7.11	96.89	104.00
2	N	927	G	C5-C6-O6	-7.11	124.33	128.60
3	O	1417	G	C6-C5-N7	-7.11	126.14	130.40
1	M	1088	G	P-O5'-C5'	7.11	132.27	120.90
1	M	1185	G	N1-C2-N2	7.11	122.59	116.20
2	N	788	U	O4'-C1'-N1	7.11	113.88	108.20
1	M	1064	G	C5-C6-O6	-7.10	124.34	128.60
1	M	1301	U	N3-C4-O4	7.10	124.37	119.40
1	M	1383	C	N1-C2-N3	-7.10	114.23	119.20
2	N	11	G	N3-C2-N2	7.10	124.87	119.90
2	N	133	U	N3-C4-C5	-7.10	110.34	114.60
2	N	294	U	C6-N1-C2	-7.10	116.74	121.00
1	M	1042	A	N7-C8-N9	7.10	117.35	113.80
2	N	498	A	O4'-C1'-N9	7.10	113.88	108.20
2	N	589	U	O4'-C1'-N1	7.10	113.88	108.20
1	M	1135	U	C2-N3-C4	7.10	131.26	127.00
1	M	1363	A	N1-C2-N3	7.10	132.85	129.30
2	N	393	A	C5-C6-N6	-7.10	118.02	123.70
2	N	681	A	C5-C6-N6	-7.10	118.02	123.70
1	M	973	G	N9-C4-C5	7.10	108.24	105.40
1	M	990	C	C5-C4-N4	-7.10	115.23	120.20
2	N	769	G	C5-C6-O6	-7.10	124.34	128.60
1	M	1025	U	C5-C4-O4	-7.09	121.64	125.90
1	M	1194	U	N1-C2-N3	-7.09	110.64	114.90
2	N	69	G	C4-C5-N7	7.09	113.64	110.80
2	N	635	A	C5-C6-N1	-7.09	114.15	117.70
1	M	1168	U	C4'-C3'-C2'	-7.09	95.51	102.60
2	N	211	G	P-O3'-C3'	7.09	128.21	119.70
2	N	873	A	C5'-C4'-C3'	-7.09	104.65	116.00
2	N	903	G	N1-C2-N3	-7.09	119.64	123.90
2	N	755	G	C2-N3-C4	7.09	115.45	111.90
2	N	819	A	N1-C2-N3	7.09	132.85	129.30
2	N	24	U	C5-C6-N1	7.09	126.25	122.70
2	N	335	C	C4'-C3'-C2'	-7.09	95.51	102.60
2	N	792	A	C4-C5-N7	-7.09	107.16	110.70
3	O	1417	G	N1-C2-N3	-7.09	119.65	123.90
1	M	1108	G	C4-C5-C6	7.09	123.05	118.80
2	N	667	G	N1-C2-N3	-7.09	119.65	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	819	A	C1'-O4'-C4'	7.09	115.57	109.90
2	N	3	A	C4'-C3'-C2'	-7.09	95.51	102.60
2	N	60	A	C4-C5-C6	7.09	120.54	117.00
2	N	456	A	N1-C2-N3	-7.09	125.76	129.30
1	M	1055	A	N9-C4-C5	-7.08	102.97	105.80
2	N	361	G	N1-C2-N3	-7.08	119.65	123.90
2	N	743	A	C5-N7-C8	7.08	107.44	103.90
2	N	279	A	P-O5'-C5'	-7.08	109.57	120.90
2	N	377	G	C5-C6-O6	-7.08	124.35	128.60
3	O	1398	A	C5-C6-N1	-7.08	114.16	117.70
1	M	1168	U	C2'-C3'-O3'	7.08	125.08	109.50
1	M	1215	G	C8-N9-C4	-7.08	103.57	106.40
1	M	1256	A	N1-C6-N6	7.08	122.85	118.60
1	M	1338	G	N9-C4-C5	-7.08	102.57	105.40
2	N	423	G	N1-C2-N2	7.08	122.57	116.20
2	N	708	C	P-O3'-C3'	-7.08	111.20	119.70
3	O	1396	A	C4'-C3'-C2'	7.08	109.68	102.60
3	O	1431	A	C4-C5-C6	7.08	120.54	117.00
2	N	32	A	C4-C5-C6	7.08	120.54	117.00
2	N	645	G	N9-C4-C5	-7.08	102.57	105.40
2	N	713	G	C6-C5-N7	-7.08	126.15	130.40
1	M	1226	C	C6-N1-C2	-7.07	117.47	120.30
2	N	756	C	N3-C4-N4	7.07	122.95	118.00
3	O	1396	A	C5-C6-N1	-7.07	114.16	117.70
1	M	1150	A	C5-C6-N6	-7.07	118.04	123.70
2	N	810	C	N3-C4-N4	7.07	122.95	118.00
2	N	893	C	O4'-C1'-N1	7.07	113.86	108.20
1	M	1030	U	N3-C2-O2	7.07	127.15	122.20
2	N	21	G	O4'-C1'-N9	7.07	113.86	108.20
2	N	295	C	C5'-C4'-O4'	7.07	117.58	109.10
2	N	812	G	C4-C5-N7	-7.07	107.97	110.80
2	N	382	A	P-O3'-C3'	7.07	128.18	119.70
2	N	613	C	P-O3'-C3'	7.07	128.18	119.70
1	M	990	C	N3-C4-C5	-7.07	119.07	121.90
2	N	628	G	C6-C5-N7	-7.07	126.16	130.40
3	O	1465	A	C5-C6-N1	-7.07	114.17	117.70
1	M	1019	A	C4-C5-C6	7.06	120.53	117.00
1	M	1078	U	N3-C4-C5	-7.06	110.36	114.60
2	N	328	C	C2-N3-C4	7.06	123.43	119.90
2	N	723	U	C1'-O4'-C4'	-7.06	104.25	109.90
1	M	969	A	C5-C6-N6	-7.06	118.05	123.70
2	N	665	A	N7-C8-N9	-7.06	110.27	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1459	G	P-O5'-C5'	7.06	132.20	120.90
2	N	70	U	C2-N1-C1'	7.06	126.17	117.70
2	N	290	C	N3-C4-N4	7.06	122.94	118.00
3	O	1525	G	C4-C5-C6	7.06	123.03	118.80
2	N	468	A	C4-C5-C6	7.06	120.53	117.00
1	M	1168	U	C2-N3-C4	7.05	131.23	127.00
2	N	442	G	N7-C8-N9	7.05	116.63	113.10
2	N	633	G	N3-C4-C5	-7.05	125.07	128.60
1	M	1166	G	O4'-C1'-N9	7.05	113.84	108.20
1	M	1231	G	N3-C2-N2	7.05	124.84	119.90
1	M	971	G	C5-C6-O6	-7.05	124.37	128.60
1	M	995	C	N3-C4-N4	7.05	122.94	118.00
1	M	1138	G	N7-C8-N9	-7.05	109.58	113.10
2	N	207	C	C2-N3-C4	7.05	123.42	119.90
2	N	222	C	P-O5'-C5'	7.05	132.18	120.90
2	N	869	G	P-O3'-C3'	-7.05	111.24	119.70
2	N	307	C	N3-C4-N4	7.05	122.93	118.00
1	M	947	G	N3-C2-N2	7.05	124.83	119.90
1	M	1182	G	N7-C8-N9	-7.04	109.58	113.10
2	N	790	A	N3-C4-C5	-7.04	121.87	126.80
2	N	844	G	C5-C6-O6	7.04	132.83	128.60
2	N	236	A	C4-C5-N7	7.04	114.22	110.70
1	M	1133	G	C4-C5-C6	7.04	123.03	118.80
2	N	573	A	C4-C5-N7	7.04	114.22	110.70
2	N	463	U	C1'-O4'-C4'	7.04	115.53	109.90
2	N	526	C	O4'-C1'-N1	7.04	113.83	108.20
2	N	761	G	C2-N3-C4	-7.04	108.38	111.90
2	N	573	A	N7-C8-N9	7.04	117.32	113.80
1	M	1225	A	C5-C6-N6	-7.04	118.07	123.70
2	N	902	G	N1-C2-N3	-7.04	119.68	123.90
3	O	1420	U	O4'-C1'-N1	7.04	113.83	108.20
1	M	1200	C	C5'-C4'-O4'	-7.03	100.66	109.10
1	M	1081	A	C2-N3-C4	-7.03	107.08	110.60
2	N	274	A	C1'-O4'-C4'	-7.03	104.27	109.90
2	N	129	A	C5-C6-N6	-7.03	118.08	123.70
2	N	178	C	C3'-C2'-C1'	-7.03	95.88	101.50
2	N	456	A	C4-C5-N7	-7.03	107.19	110.70
2	N	915	A	C4-C5-C6	7.03	120.52	117.00
1	M	1042	A	C8-N9-C4	-7.03	102.99	105.80
2	N	228	A	C4-C5-N7	-7.03	107.19	110.70
2	N	458	U	C4-C5-C6	7.03	123.92	119.70
2	N	724	G	C4-C5-C6	7.03	123.02	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	805	C	P-O5'-C5'	7.03	132.14	120.90
2	N	848	C	N3-C4-C5	-7.03	119.09	121.90
2	N	9	G	N1-C6-O6	7.03	124.11	119.90
2	N	119	A	N1-C6-N6	7.03	122.81	118.60
2	N	240	G	N3-C2-N2	7.03	124.82	119.90
2	N	679	C	O4'-C1'-N1	7.03	113.82	108.20
2	N	802	A	C5-N7-C8	7.03	107.41	103.90
2	N	526	C	N3-C4-C5	-7.02	119.09	121.90
2	N	648	A	P-O3'-C3'	7.02	128.13	119.70
2	N	322	C	O4'-C1'-N1	7.02	113.82	108.20
2	N	901	A	C5-C6-N6	-7.02	118.08	123.70
1	M	1332	A	N3-C4-C5	-7.02	121.89	126.80
2	N	422	C	C5-C4-N4	-7.02	115.29	120.20
1	M	973	G	C8-N9-C4	-7.02	103.59	106.40
2	N	203	G	N9-C4-C5	-7.02	102.59	105.40
2	N	542	G	N3-C4-N9	7.02	130.21	126.00
2	N	573	A	C5-N7-C8	-7.02	100.39	103.90
2	N	682	G	C4-C5-N7	-7.02	107.99	110.80
2	N	856	C	C2-N3-C4	7.02	123.41	119.90
2	N	75	G	C5-C6-N1	-7.02	107.99	111.50
3	O	1452	C	C4-C5-C6	7.02	120.91	117.40
1	M	1242	G	C8-N9-C4	-7.01	103.59	106.40
2	N	103	U	N1-C2-N3	-7.01	110.69	114.90
2	N	176	C	N3-C2-O2	-7.01	116.99	121.90
2	N	224	U	C4'-C3'-C2'	-7.01	95.59	102.60
2	N	338	A	P-O5'-C5'	7.01	132.12	120.90
3	O	1412	C	N3-C2-O2	-7.01	116.99	121.90
3	O	1417	G	C5-C6-N1	-7.01	107.99	111.50
1	M	1092	A	C6-C5-N7	-7.01	127.39	132.30
1	M	1351	U	P-O3'-C3'	7.01	128.11	119.70
2	N	909	A	C4-C5-C6	7.01	120.50	117.00
2	N	138	G	C6-N1-C2	7.01	129.31	125.10
2	N	657	U	C5-C6-N1	7.01	126.20	122.70
1	M	1246	A	C4-C5-C6	7.00	120.50	117.00
2	N	684	U	C1'-O4'-C4'	7.00	115.50	109.90
2	N	898	G	C5-C6-O6	-7.00	124.40	128.60
1	M	1269	A	O4'-C1'-N9	7.00	113.80	108.20
1	M	1294	G	P-O3'-C3'	-7.00	111.30	119.70
2	N	185	U	N1-C2-N3	-7.00	110.70	114.90
2	N	334	C	C6-N1-C1'	7.00	129.20	120.80
2	N	540	G	N9-C4-C5	-7.00	102.60	105.40
2	N	755	G	N9-C4-C5	7.00	108.20	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1396	A	N9-C1'-C2'	-7.00	104.30	112.00
2	N	35	G	O4'-C1'-N9	7.00	113.80	108.20
2	N	255	G	O4'-C1'-N9	7.00	113.80	108.20
2	N	294	U	N3-C4-C5	-7.00	110.40	114.60
1	M	1359	C	P-O3'-C3'	7.00	128.09	119.70
2	N	64	G	C2-N3-C4	-7.00	108.40	111.90
3	O	1518	A	C4'-C3'-C2'	-7.00	95.60	102.60
1	M	1156	G	C6-C5-N7	-6.99	126.20	130.40
2	N	205	A	C5-C6-N1	-6.99	114.20	117.70
2	N	415	A	C5-C6-N1	-6.99	114.20	117.70
2	N	424	G	C5-C6-N1	-6.99	108.00	111.50
3	O	1413	A	C6-N1-C2	-6.99	114.40	118.60
2	N	223	A	C6-C5-N7	-6.99	127.41	132.30
2	N	678	U	N1-C2-N3	-6.99	110.70	114.90
1	M	959	A	O4'-C1'-N9	6.99	113.79	108.20
1	M	1250	A	O4'-C1'-N9	6.99	113.79	108.20
1	M	1254	A	C8-N9-C4	-6.99	103.00	105.80
2	N	9	G	C6-C5-N7	-6.99	126.21	130.40
2	N	314	C	N3-C4-N4	6.99	122.89	118.00
2	N	482	A	P-O3'-C3'	-6.99	111.31	119.70
2	N	489	C	O4'-C1'-N1	6.99	113.79	108.20
2	N	914	A	C5-C6-N6	-6.99	118.11	123.70
2	N	210	C	N3-C4-C5	6.99	124.69	121.90
2	N	476	U	O4'-C1'-N1	6.99	113.79	108.20
1	M	1367	C	P-O5'-C5'	6.99	132.08	120.90
1	M	1226	C	C2-N3-C4	6.99	123.39	119.90
1	M	1292	G	C6-C5-N7	-6.99	126.21	130.40
2	N	750	C	C2-N3-C4	6.99	123.39	119.90
2	N	903	G	N1-C2-N2	6.99	122.49	116.20
1	M	932	C	C2-N3-C4	6.98	123.39	119.90
2	N	285	C	C5-C4-N4	-6.98	115.31	120.20
2	N	599	C	C5-C4-N4	6.98	125.09	120.20
2	N	897	C	N3-C4-C5	-6.98	119.11	121.90
1	M	1087	G	N1-C6-O6	6.98	124.09	119.90
1	M	1212	U	C2-N1-C1'	6.98	126.08	117.70
2	N	232	G	C5-C6-N1	-6.98	108.01	111.50
2	N	558	G	O4'-C1'-N9	6.98	113.78	108.20
1	M	968	A	N3-C4-C5	-6.98	121.92	126.80
1	M	1055	A	O4'-C1'-N9	6.98	113.78	108.20
2	N	195	A	O4'-C1'-N9	6.98	113.78	108.20
2	N	897	C	O4'-C1'-N1	6.98	113.78	108.20
1	M	972	C	O4'-C1'-N1	6.98	113.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1353	G	O4'-C1'-N9	6.98	113.78	108.20
2	N	888	G	C5-C6-O6	-6.98	124.41	128.60
2	N	902	G	O4'-C1'-N9	6.98	113.78	108.20
3	O	1513	A	C4-C5-N7	-6.98	107.21	110.70
1	M	1214	C	C6-N1-C2	6.97	123.09	120.30
1	M	939	G	N7-C8-N9	-6.97	109.61	113.10
2	N	232	G	P-O3'-C3'	6.97	128.07	119.70
2	N	293	G	C5-C6-N1	-6.97	108.01	111.50
2	N	750	C	O4'-C1'-N1	6.97	113.78	108.20
1	M	1327	C	C2-N3-C4	6.97	123.39	119.90
2	N	70	U	O4'-C1'-N1	6.97	113.78	108.20
2	N	139	A	C6-C5-N7	-6.97	127.42	132.30
3	O	1418	A	C6-C5-N7	-6.97	127.42	132.30
3	O	1531	A	C5-C6-N1	-6.97	114.22	117.70
2	N	819	A	C5-C6-N1	-6.97	114.22	117.70
2	N	613	C	C5-C6-N1	6.97	124.48	121.00
1	M	958	A	C4-C5-N7	-6.96	107.22	110.70
2	N	143	A	P-O3'-C3'	-6.96	111.34	119.70
2	N	454	G	C1'-O4'-C4'	6.96	115.47	109.90
2	N	610	U	O4'-C4'-C3'	-6.96	97.04	104.00
2	N	851	G	C5-C6-O6	-6.96	124.42	128.60
2	N	230	G	O4'-C1'-N9	6.96	113.77	108.20
2	N	310	G	C8-N9-C4	-6.96	103.62	106.40
2	N	417	G	C6-C5-N7	-6.96	126.22	130.40
2	N	190	A	C6-C5-N7	-6.96	127.43	132.30
2	N	262	A	C5-C6-N1	-6.96	114.22	117.70
1	M	1309	G	N1-C2-N3	-6.96	119.73	123.90
2	N	422	C	N3-C4-C5	-6.96	119.12	121.90
2	N	626	G	C6-C5-N7	-6.96	126.23	130.40
1	M	950	U	O4'-C1'-N1	6.95	113.76	108.20
1	M	1272	G	N1-C2-N2	6.95	122.46	116.20
2	N	451	A	C5-C6-N6	-6.95	118.14	123.70
2	N	637	C	O4'-C1'-N1	6.95	113.76	108.20
2	N	677	U	C4-C5-C6	-6.95	115.53	119.70
1	M	948	C	P-O3'-C3'	-6.95	111.36	119.70
2	N	616	G	N1-C2-N3	-6.95	119.73	123.90
2	N	637	C	P-O3'-C3'	6.95	128.04	119.70
2	N	647	C	N3-C2-O2	6.95	126.76	121.90
3	O	1435	G	O4'-C1'-N9	6.95	113.76	108.20
1	M	994	A	N1-C6-N6	6.95	122.77	118.60
1	M	1295	U	C1'-O4'-C4'	-6.95	104.34	109.90
2	N	730	G	N9-C4-C5	-6.95	102.62	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1114	C	C2-N3-C4	6.94	123.37	119.90
2	N	300	A	C8-N9-C4	-6.94	103.02	105.80
2	N	514	C	O4'-C4'-C3'	-6.94	97.06	104.00
2	N	821	G	N3-C2-N2	6.94	124.76	119.90
2	N	115	G	C5-N7-C8	-6.94	100.83	104.30
2	N	385	C	N3-C4-C5	-6.94	119.12	121.90
2	N	488	C	N1-C2-N3	-6.94	114.34	119.20
2	N	918	A	C2-N3-C4	6.94	114.07	110.60
3	O	1503	A	C4-C5-C6	6.94	120.47	117.00
3	O	1504	G	C5-N7-C8	6.94	107.77	104.30
1	M	936	C	C6-N1-C2	-6.94	117.52	120.30
1	M	1118	U	C5-C4-O4	-6.94	121.74	125.90
1	M	1124	G	C5-C6-N1	-6.94	108.03	111.50
1	M	1142	G	N1-C6-O6	-6.94	115.74	119.90
1	M	998	C	C6-N1-C2	6.94	123.08	120.30
1	M	1090	U	N3-C4-C5	-6.94	110.44	114.60
2	N	773	G	P-O5'-C5'	6.94	132.00	120.90
2	N	373	A	N7-C8-N9	-6.93	110.33	113.80
2	N	645	G	N9-C1'-C2'	-6.93	104.37	112.00
2	N	730	G	P-O3'-C3'	6.93	128.02	119.70
2	N	815	A	C5-C6-N6	-6.93	118.15	123.70
1	M	1134	G	C1'-O4'-C4'	-6.93	104.36	109.90
2	N	319	G	C8-N9-C4	-6.93	103.63	106.40
2	N	344	A	C4-C5-N7	-6.93	107.23	110.70
1	M	1100	C	N1-C2-O2	6.93	123.06	118.90
1	M	1190	G	C8-N9-C4	6.93	109.17	106.40
2	N	19	A	P-O5'-C5'	-6.93	109.81	120.90
2	N	356	A	C5-C6-N6	-6.93	118.16	123.70
2	N	433	G	C4-C5-N7	6.93	113.57	110.80
2	N	474	G	C4-C5-N7	6.93	113.57	110.80
3	O	1478	U	N1-C2-N3	-6.93	110.74	114.90
2	N	229	U	O4'-C1'-N1	6.93	113.74	108.20
1	M	1033	G	C4-C5-N7	6.92	113.57	110.80
2	N	730	G	N3-C4-C5	6.92	132.06	128.60
2	N	761	G	C5-C6-O6	-6.92	124.45	128.60
2	N	204	G	C5-C6-O6	-6.92	124.45	128.60
2	N	271	C	N3-C4-N4	6.92	122.85	118.00
2	N	608	A	C4-C5-C6	6.92	120.46	117.00
2	N	776	G	N7-C8-N9	-6.92	109.64	113.10
1	M	961	U	C6-N1-C2	6.92	125.15	121.00
1	M	1028	C	C5-C4-N4	-6.92	115.36	120.20
2	N	399	G	C2-N3-C4	-6.92	108.44	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	400	C	N3-C4-N4	6.92	122.84	118.00
2	N	654	G	O4'-C1'-N9	6.92	113.74	108.20
2	N	724	G	C5-C6-O6	-6.92	124.45	128.60
2	N	738	C	N3-C4-N4	6.92	122.84	118.00
3	O	1455	G	C5-C6-N1	-6.92	108.04	111.50
3	O	1499	A	C4-C5-N7	6.92	114.16	110.70
1	M	1078	U	P-O3'-C3'	6.92	128.00	119.70
1	M	1268	G	C4-C5-C6	6.92	122.95	118.80
1	M	1317	C	C6-N1-C2	-6.92	117.53	120.30
2	N	214	C	O4'-C1'-N1	6.92	113.73	108.20
2	N	222	C	O4'-C1'-N1	6.92	113.73	108.20
2	N	875	U	C2-N3-C4	6.92	131.15	127.00
3	O	1463	U	N1-C2-N3	6.92	119.05	114.90
1	M	996	A	C5-C6-N6	-6.92	118.17	123.70
1	M	1027	C	C6-N1-C2	6.92	123.07	120.30
1	M	1293	C	C5-C4-N4	6.92	125.04	120.20
2	N	141	G	C6-C5-N7	-6.92	126.25	130.40
1	M	941	G	O4'-C1'-N9	6.92	113.73	108.20
3	O	1430	A	C4-C5-C6	6.92	120.46	117.00
1	M	1389	C	C5-C4-N4	-6.91	115.36	120.20
2	N	439	U	N3-C2-O2	6.91	127.04	122.20
1	M	1069	C	C3'-C2'-C1'	-6.91	95.97	101.50
1	M	1129	C	C4'-C3'-C2'	6.91	109.51	102.60
2	N	542	G	C8-N9-C4	-6.91	103.64	106.40
2	N	623	C	C3'-C2'-C1'	-6.91	95.97	101.50
2	N	719	C	P-O3'-C3'	6.91	127.99	119.70
1	M	1187	G	N1-C6-O6	6.91	124.04	119.90
2	N	45	G	N1-C2-N3	-6.90	119.76	123.90
3	O	1447	A	C5-C6-N1	6.90	121.15	117.70
1	M	1106	G	P-O3'-C3'	6.90	127.98	119.70
1	M	1158	C	C1'-O4'-C4'	6.90	115.42	109.90
1	M	1213	A	C8-N9-C4	-6.90	103.04	105.80
1	M	1258	G	N3-C4-C5	-6.90	125.15	128.60
2	N	583	A	C2-N3-C4	6.90	114.05	110.60
3	O	1432	G	C4-N9-C1'	-6.90	117.53	126.50
3	O	1434	A	O4'-C1'-C2'	6.90	113.81	107.60
1	M	1304	G	C2-N3-C4	6.90	115.35	111.90
2	N	266	G	N1-C2-N3	-6.90	119.76	123.90
2	N	460	A	C5-N7-C8	6.90	107.35	103.90
1	M	1191	A	C5-C6-N1	-6.90	114.25	117.70
2	N	257	G	N3-C4-N9	6.90	130.14	126.00
2	N	859	G	C5-C6-O6	-6.90	124.46	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	959	A	C6-C5-N7	-6.89	127.47	132.30
2	N	273	U	N1-C1'-C2'	6.89	122.96	114.00
2	N	858	G	N3-C4-N9	-6.89	121.86	126.00
1	M	1003	G	C4'-C3'-C2'	-6.89	95.71	102.60
1	M	1205	U	C2-N3-C4	-6.89	122.87	127.00
2	N	546	A	C4-C5-C6	6.89	120.44	117.00
1	M	1066	C	N1-C2-N3	-6.89	114.38	119.20
2	N	275	G	C5-N7-C8	-6.89	100.86	104.30
2	N	296	U	C6-N1-C2	-6.89	116.87	121.00
2	N	540	G	N3-C4-C5	6.89	132.04	128.60
2	N	608	A	C8-N9-C4	-6.89	103.04	105.80
2	N	883	C	C3'-C2'-C1'	6.89	107.01	101.50
3	O	1442	G	N1-C6-O6	6.89	124.03	119.90
3	O	1469	C	N1-C2-O2	6.89	123.03	118.90
2	N	548	G	C4-C5-C6	6.89	122.93	118.80
3	O	1421	G	C5-N7-C8	-6.89	100.86	104.30
3	O	1422	G	C5-C6-N1	6.89	114.94	111.50
1	M	1094	G	C2-N3-C4	6.89	115.34	111.90
2	N	529	G	C5-C6-O6	-6.89	124.47	128.60
1	M	1304	G	N3-C4-C5	-6.88	125.16	128.60
3	O	1507	A	N3-C4-C5	-6.88	121.98	126.80
1	M	1202	U	O4'-C1'-N1	6.88	113.70	108.20
2	N	31	G	C4-C5-C6	6.88	122.93	118.80
2	N	34	C	N1-C2-O2	-6.88	114.77	118.90
2	N	249	U	P-O3'-C3'	-6.88	111.45	119.70
2	N	540	G	N1-C2-N3	-6.88	119.77	123.90
3	O	1517	G	C6-N1-C2	-6.88	120.97	125.10
1	M	1089	G	N9-C4-C5	6.88	108.15	105.40
1	M	1153	G	N3-C4-C5	6.88	132.04	128.60
2	N	200	G	C6-C5-N7	-6.88	126.27	130.40
2	N	458	U	N3-C4-O4	6.88	124.21	119.40
2	N	799	G	C2-N3-C4	6.88	115.34	111.90
2	N	535	A	C4-C5-N7	-6.88	107.26	110.70
1	M	1131	G	N9-C4-C5	-6.87	102.65	105.40
2	N	149	A	C6-C5-N7	-6.87	127.49	132.30
2	N	594	U	C5-C6-N1	6.87	126.14	122.70
2	N	766	A	C5-C6-N6	-6.87	118.20	123.70
3	O	1420	U	N3-C4-O4	6.87	124.21	119.40
1	M	1228	C	O4'-C1'-N1	6.87	113.70	108.20
2	N	48	C	N3-C4-N4	6.87	122.81	118.00
2	N	103	U	C1'-O4'-C4'	6.87	115.40	109.90
2	N	441	A	N1-C2-N3	6.87	132.74	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	847	G	C2-N3-C4	6.87	115.34	111.90
2	N	870	U	C2-N3-C4	-6.87	122.88	127.00
2	N	282	A	C8-N9-C4	-6.87	103.05	105.80
2	N	506	G	O4'-C1'-N9	6.87	113.69	108.20
2	N	217	C	C6-N1-C2	-6.87	117.55	120.30
2	N	648	A	C4-C5-N7	-6.87	107.27	110.70
3	O	1401	G	P-O5'-C5'	6.87	131.89	120.90
3	O	1417	G	N3-C4-N9	6.87	130.12	126.00
1	M	1033	G	C4-N9-C1'	6.87	135.42	126.50
2	N	882	C	O4'-C1'-N1	6.87	113.69	108.20
3	O	1488	G	C4-C5-N7	6.87	113.55	110.80
2	N	675	A	C4'-C3'-C2'	-6.86	95.74	102.60
2	N	95	C	O4'-C1'-N1	6.86	113.69	108.20
1	M	1061	G	C4-C5-N7	6.86	113.54	110.80
1	M	1239	A	N1-C6-N6	6.86	122.72	118.60
2	N	419	C	N3-C4-C5	-6.86	119.16	121.90
2	N	534	U	P-O3'-C3'	6.86	127.93	119.70
1	M	1296	C	C6-N1-C2	6.86	123.04	120.30
1	M	979	C	C5-C6-N1	6.86	124.43	121.00
2	N	376	G	P-O3'-C3'	-6.86	111.47	119.70
2	N	411	A	N1-C2-N3	6.86	132.73	129.30
3	O	1460	C	C2-N3-C4	6.86	123.33	119.90
1	M	1134	G	O4'-C1'-N9	6.86	113.69	108.20
1	M	1181	G	C6-C5-N7	-6.86	126.29	130.40
1	M	943	U	C1'-O4'-C4'	6.85	115.38	109.90
3	O	1391	U	N1-C2-N3	6.85	119.01	114.90
3	O	1482	G	N3-C4-C5	-6.85	125.17	128.60
1	M	1261	A	N1-C2-N3	6.85	132.72	129.30
2	N	139	A	N3-C4-C5	-6.85	122.00	126.80
2	N	304	U	O4'-C1'-N1	6.85	113.68	108.20
2	N	24	U	N3-C4-C5	-6.85	110.49	114.60
3	O	1426	G	C5-C6-O6	-6.85	124.49	128.60
1	M	968	A	C5-C6-N6	-6.85	118.22	123.70
2	N	398	U	O4'-C1'-N1	6.85	113.68	108.20
1	M	1196	A	N9-C4-C5	6.85	108.54	105.80
1	M	1316	G	N7-C8-N9	-6.84	109.68	113.10
2	N	2	A	C5'-C4'-O4'	6.84	117.31	109.10
2	N	449	G	C2-N3-C4	-6.84	108.48	111.90
2	N	492	C	N1-C2-N3	-6.84	114.41	119.20
3	O	1411	C	N3-C4-C5	-6.84	119.16	121.90
2	N	849	G	C6-N1-C2	6.84	129.21	125.10
2	N	878	A	O4'-C1'-N9	6.84	113.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	131	A	C5'-C4'-O4'	-6.84	100.89	109.10
2	N	486	U	C5-C6-N1	6.84	126.12	122.70
2	N	705	G	C8-N9-C1'	6.84	135.89	127.00
3	O	1461	G	C5-C6-O6	-6.84	124.50	128.60
2	N	183	C	N3-C4-N4	6.84	122.79	118.00
2	N	260	G	C4-C5-C6	6.84	122.90	118.80
2	N	650	G	P-O3'-C3'	-6.84	111.49	119.70
2	N	721	G	O4'-C1'-N9	6.84	113.67	108.20
2	N	780	A	C2-N3-C4	-6.84	107.18	110.60
3	O	1405	G	N7-C8-N9	-6.84	109.68	113.10
1	M	955	U	O4'-C4'-C3'	-6.84	97.16	104.00
2	N	859	G	C8-N9-C4	-6.84	103.67	106.40
1	M	961	U	N3-C4-C5	-6.84	110.50	114.60
1	M	1172	C	N3-C4-N4	6.84	122.79	118.00
1	M	1368	A	C5-N7-C8	6.84	107.32	103.90
2	N	326	G	N1-C6-O6	6.84	124.00	119.90
1	M	1061	G	N1-C2-N2	6.83	122.35	116.20
2	N	250	A	C5-C6-N6	-6.83	118.23	123.70
2	N	431	A	O4'-C4'-C3'	-6.83	97.17	104.00
3	O	1526	G	C6-N1-C2	6.83	129.20	125.10
2	N	197	A	C8-N9-C4	-6.83	103.07	105.80
2	N	564	C	N3-C4-N4	6.83	122.78	118.00
2	N	711	G	C4-C5-N7	-6.83	108.07	110.80
2	N	728	A	C6-N1-C2	-6.83	114.50	118.60
1	M	1079	G	P-O3'-C3'	6.83	127.89	119.70
1	M	1187	G	N3-C2-N2	6.83	124.68	119.90
2	N	411	A	C2-N3-C4	-6.83	107.19	110.60
2	N	491	G	C5'-C4'-O4'	6.83	117.29	109.10
2	N	740	U	P-O3'-C3'	-6.83	111.51	119.70
2	N	170	U	P-O3'-C3'	6.82	127.89	119.70
2	N	310	G	C5-C6-N1	-6.82	108.09	111.50
2	N	824	G	C5-C6-N1	-6.82	108.09	111.50
1	M	933	G	C4-C5-N7	6.82	113.53	110.80
2	N	759	A	N3-C4-C5	-6.82	122.03	126.80
1	M	1077	G	N1-C2-N3	-6.82	119.81	123.90
2	N	9	G	C5-C6-O6	-6.82	124.51	128.60
2	N	58	C	O4'-C1'-N1	6.82	113.66	108.20
2	N	178	C	C5'-C4'-O4'	6.82	117.28	109.10
2	N	214	C	C5-C6-N1	6.82	124.41	121.00
2	N	817	C	O4'-C1'-N1	6.82	113.66	108.20
1	M	941	G	P-O3'-C3'	6.82	127.88	119.70
1	M	1243	C	C5-C4-N4	-6.82	115.43	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1387	G	C4-C5-N7	6.82	113.53	110.80
2	N	474	G	N9-C4-C5	-6.82	102.67	105.40
1	M	1014	A	P-O3'-C3'	6.81	127.88	119.70
1	M	1360	A	C6-N1-C2	-6.81	114.51	118.60
2	N	223	A	O4'-C1'-N9	6.81	113.65	108.20
2	N	416	G	C2-N3-C4	6.81	115.31	111.90
2	N	55	A	C6-C5-N7	-6.81	127.53	132.30
2	N	306	A	N1-C2-N3	6.81	132.71	129.30
3	O	1407	C	O4'-C1'-N1	6.81	113.65	108.20
2	N	167	A	C5-C6-N1	-6.81	114.30	117.70
1	M	931	C	O4'-C1'-N1	6.81	113.65	108.20
2	N	649	A	C8-N9-C4	-6.81	103.08	105.80
2	N	916	U	N3-C4-C5	-6.81	110.51	114.60
1	M	1061	G	C5-C6-O6	-6.81	124.52	128.60
2	N	808	C	C6-N1-C2	-6.81	117.58	120.30
1	M	1133	G	C2-N3-C4	6.81	115.30	111.90
1	M	1356	G	C8-N9-C4	-6.80	103.68	106.40
2	N	155	A	O4'-C1'-N9	6.80	113.64	108.20
2	N	447	G	C6-N1-C2	-6.80	121.02	125.10
2	N	634	C	O4'-C1'-N1	6.80	113.64	108.20
2	N	486	U	C2-N3-C4	6.80	131.08	127.00
2	N	759	A	C4-C5-C6	6.80	120.40	117.00
1	M	1240	U	P-O3'-C3'	6.80	127.86	119.70
2	N	765	G	N1-C6-O6	6.80	123.98	119.90
2	N	845	A	C5-N7-C8	6.80	107.30	103.90
3	O	1433	A	N7-C8-N9	-6.80	110.40	113.80
2	N	423	G	C5-C6-O6	-6.80	124.52	128.60
2	N	670	G	N1-C2-N3	-6.80	119.82	123.90
2	N	705	G	C6-N1-C2	6.80	129.18	125.10
2	N	177	G	N9-C4-C5	-6.80	102.68	105.40
2	N	43	C	C6-N1-C2	-6.79	117.58	120.30
2	N	59	A	C2-N3-C4	6.79	114.00	110.60
2	N	225	C	N3-C4-N4	6.79	122.76	118.00
2	N	268	U	N3-C2-O2	6.79	126.95	122.20
2	N	204	G	N3-C2-N2	6.79	124.65	119.90
2	N	919	A	N7-C8-N9	-6.79	110.40	113.80
1	M	958	A	C5-N7-C8	6.79	107.30	103.90
1	M	969	A	N7-C8-N9	6.79	117.19	113.80
1	M	1178	G	C8-N9-C4	-6.79	103.69	106.40
2	N	382	A	N9-C4-C5	-6.79	103.08	105.80
2	N	818	G	N1-C2-N3	-6.79	119.83	123.90
1	M	1299	A	C5-C6-N6	-6.79	118.27	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1338	G	N1-C6-O6	6.79	123.97	119.90
1	M	1055	A	N7-C8-N9	6.79	117.19	113.80
2	N	904	U	N3-C2-O2	6.79	126.95	122.20
2	N	255	G	N1-C2-N2	6.78	122.31	116.20
2	N	429	U	P-O3'-C3'	6.78	127.84	119.70
2	N	473	U	N3-C4-O4	6.78	124.15	119.40
1	M	953	G	N7-C8-N9	6.78	116.49	113.10
2	N	712	A	N3-C4-C5	-6.78	122.05	126.80
2	N	807	A	C5-C6-N1	-6.78	114.31	117.70
2	N	858	G	C2-N3-C4	-6.78	108.51	111.90
2	N	18	C	O4'-C1'-N1	6.78	113.62	108.20
2	N	70	U	C5-C6-N1	6.78	126.09	122.70
2	N	306	A	C5-N7-C8	6.78	107.29	103.90
1	M	1248	A	N3-C4-C5	-6.78	122.06	126.80
2	N	924	C	O4'-C1'-N1	6.78	113.62	108.20
2	N	152	A	C4'-C3'-C2'	-6.77	95.83	102.60
2	N	200	G	C4-C5-C6	6.77	122.86	118.80
2	N	448	A	C4-C5-C6	6.77	120.39	117.00
2	N	502	A	N3-C4-C5	-6.77	122.06	126.80
1	M	956	U	C4'-C3'-C2'	-6.77	95.83	102.60
2	N	344	A	C5-N7-C8	6.77	107.29	103.90
2	N	623	C	C5-C4-N4	-6.77	115.46	120.20
3	O	1492	A	C4-C5-N7	-6.77	107.31	110.70
3	O	1497	G	P-O5'-C5'	6.77	131.73	120.90
1	M	1271	A	N3-C4-C5	-6.77	122.06	126.80
2	N	741	G	C5-N7-C8	6.77	107.69	104.30
2	N	809	G	O4'-C1'-N9	6.77	113.61	108.20
3	O	1473	G	C4-C5-N7	-6.77	108.09	110.80
2	N	855	U	N1-C2-N3	-6.77	110.84	114.90
1	M	973	G	P-O5'-C5'	6.77	131.72	120.90
2	N	555	U	O4'-C1'-N1	6.77	113.61	108.20
2	N	739	C	C4'-C3'-C2'	-6.77	95.83	102.60
1	M	987	G	C4-C5-C6	6.76	122.86	118.80
2	N	8	A	C4-C5-C6	6.76	120.38	117.00
2	N	927	G	N3-C2-N2	6.76	124.64	119.90
1	M	1072	G	O4'-C1'-N9	6.76	113.61	108.20
2	N	585	G	O4'-C4'-C3'	-6.76	97.24	104.00
3	O	1431	A	C8-N9-C4	-6.76	103.09	105.80
2	N	14	U	N1-C2-O2	-6.76	118.07	122.80
2	N	148	G	O4'-C1'-N9	6.76	113.61	108.20
2	N	582	C	P-O5'-C5'	6.76	131.72	120.90
3	O	1417	G	C6-N1-C2	6.76	129.16	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1295	U	O4'-C1'-N1	6.76	113.61	108.20
1	M	1350	A	C6-C5-N7	-6.76	127.57	132.30
2	N	201	G	N1-C2-N3	-6.76	119.85	123.90
2	N	455	G	C6-C5-N7	-6.76	126.35	130.40
1	M	1040	U	N3-C4-C5	-6.75	110.55	114.60
1	M	1299	A	N1-C2-N3	6.75	132.68	129.30
2	N	299	G	C4-N9-C1'	6.75	135.28	126.50
2	N	791	G	N1-C6-O6	6.75	123.95	119.90
1	M	1053	G	C8-N9-C4	6.75	109.10	106.40
1	M	1053	G	N1-C6-O6	6.75	123.95	119.90
1	M	1257	A	C5-C6-N6	-6.75	118.30	123.70
2	N	289	G	N3-C4-C5	6.75	131.98	128.60
2	N	852	G	O5'-P-OP2	-6.75	99.62	105.70
1	M	1152	A	C8-N9-C4	-6.75	103.10	105.80
1	M	1107	C	C3'-C2'-C1'	-6.75	96.10	101.50
1	M	1263	C	N1-C2-N3	6.75	123.92	119.20
2	N	837	U	C5'-C4'-C3'	6.75	126.80	116.00
1	M	1305	G	C6-C5-N7	-6.75	126.35	130.40
2	N	69	G	P-O3'-C3'	6.75	127.80	119.70
2	N	351	G	C1'-O4'-C4'	-6.75	104.50	109.90
2	N	928	G	C4-C5-C6	6.75	122.85	118.80
1	M	1151	A	C5-N7-C8	6.74	107.27	103.90
2	N	413	G	C5-C6-O6	-6.74	124.55	128.60
2	N	94	G	C2-N3-C4	-6.74	108.53	111.90
2	N	753	A	C4-C5-C6	6.74	120.37	117.00
2	N	243	A	N9-C4-C5	6.74	108.50	105.80
2	N	831	A	O4'-C1'-N9	6.74	113.59	108.20
1	M	1015	G	C5-N7-C8	-6.74	100.93	104.30
1	M	1297	G	N3-C4-N9	-6.74	121.96	126.00
2	N	36	C	C5-C4-N4	-6.74	115.48	120.20
2	N	908	A	C5-C6-N1	-6.74	114.33	117.70
2	N	468	A	C4-C5-N7	-6.74	107.33	110.70
3	O	1446	A	C5-N7-C8	6.74	107.27	103.90
3	O	1527	U	C4-C5-C6	6.74	123.74	119.70
2	N	317	U	O4'-C1'-N1	6.73	113.59	108.20
2	N	786	G	N3-C2-N2	6.73	124.61	119.90
1	M	1266	G	N1-C2-N3	6.73	127.94	123.90
1	M	1096	C	C6-N1-C2	6.73	122.99	120.30
1	M	1257	A	N1-C6-N6	6.73	122.64	118.60
2	N	23	C	C2-N3-C4	-6.73	116.53	119.90
2	N	158	G	C4-C5-N7	6.73	113.49	110.80
2	N	479	U	N1-C2-N3	6.73	118.94	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	935	A	O4'-C1'-N9	6.73	113.58	108.20
1	M	1049	U	N3-C2-O2	6.73	126.91	122.20
1	M	1001	C	C4'-C3'-C2'	-6.73	95.87	102.60
1	M	1324	A	N3-C4-C5	-6.73	122.09	126.80
1	M	1118	U	C2-N3-C4	-6.73	122.96	127.00
3	O	1446	A	N9-C4-C5	6.72	108.49	105.80
1	M	1101	A	C8-N9-C4	-6.72	103.11	105.80
1	M	1235	U	C6-N1-C2	-6.72	116.97	121.00
2	N	142	G	C8-N9-C1'	-6.72	118.26	127.00
2	N	205	A	N3-C4-C5	-6.72	122.09	126.80
3	O	1523	G	C5-C6-N1	-6.72	108.14	111.50
2	N	335	C	C2-N1-C1'	6.72	126.19	118.80
2	N	558	G	N1-C2-N2	-6.72	110.15	116.20
2	N	825	A	C6-C5-N7	-6.72	127.60	132.30
1	M	961	U	C4-C5-C6	6.72	123.73	119.70
1	M	1022	A	C5-C6-N6	-6.72	118.32	123.70
2	N	730	G	N7-C8-N9	-6.72	109.74	113.10
2	N	904	U	C5'-C4'-C3'	6.72	126.75	116.00
3	O	1476	A	C5'-C4'-O4'	6.72	117.16	109.10
2	N	204	G	N1-C2-N3	-6.72	119.87	123.90
2	N	608	A	N3-C4-C5	-6.72	122.10	126.80
1	M	1286	U	N3-C2-O2	6.72	126.90	122.20
2	N	626	G	C4-C5-C6	6.72	122.83	118.80
1	M	1252	A	N3-C4-C5	-6.71	122.10	126.80
2	N	82	G	C5-N7-C8	-6.71	100.94	104.30
2	N	424	G	C4-C5-C6	6.71	122.83	118.80
2	N	253	A	C4'-C3'-C2'	-6.71	95.89	102.60
2	N	665	A	C5-C6-N6	-6.71	118.33	123.70
1	M	958	A	C5-C6-N1	-6.71	114.34	117.70
1	M	1272	G	C5-N7-C8	-6.71	100.94	104.30
2	N	249	U	O4'-C1'-N1	6.71	113.57	108.20
2	N	594	U	N3-C4-C5	-6.71	110.57	114.60
3	O	1469	C	C1'-O4'-C4'	-6.71	104.53	109.90
2	N	872	A	C5-C6-N1	-6.71	114.35	117.70
2	N	478	A	N1-C6-N6	6.71	122.62	118.60
2	N	627	G	O4'-C1'-N9	6.71	113.57	108.20
2	N	491	G	C5'-C4'-C3'	-6.71	105.27	116.00
2	N	568	G	C8-N9-C4	6.71	109.08	106.40
3	O	1410	A	C8-N9-C4	-6.71	103.12	105.80
1	M	1067	A	C4-C5-C6	6.70	120.35	117.00
1	M	1232	U	N3-C2-O2	6.70	126.89	122.20
2	N	31	G	P-O5'-C5'	-6.70	110.18	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	227	G	C6-C5-N7	-6.70	126.38	130.40
2	N	328	C	P-O3'-C3'	-6.70	111.66	119.70
2	N	582	C	O4'-C1'-N1	6.70	113.56	108.20
2	N	300	A	O4'-C1'-N9	6.70	113.56	108.20
2	N	533	A	N1-C2-N3	-6.70	125.95	129.30
3	O	1520	C	N3-C4-C5	-6.70	119.22	121.90
1	M	1370	G	N9-C4-C5	-6.69	102.72	105.40
2	N	458	U	C2-N1-C1'	6.69	125.73	117.70
1	M	1012	A	N1-C6-N6	6.69	122.62	118.60
1	M	1059	C	C5-C6-N1	6.69	124.35	121.00
1	M	1230	C	O4'-C1'-N1	6.69	113.55	108.20
1	M	1371	G	C5-C6-O6	-6.69	124.58	128.60
2	N	344	A	N3-C4-C5	-6.69	122.11	126.80
2	N	498	A	P-O5'-C5'	6.69	131.61	120.90
2	N	919	A	C4'-C3'-C2'	-6.69	95.91	102.60
2	N	926	G	C4-C5-N7	6.69	113.48	110.80
3	O	1500	A	C5-C6-N6	-6.69	118.35	123.70
3	O	1450	U	N1-C1'-C2'	-6.69	104.64	112.00
1	M	1214	C	N3-C2-O2	6.69	126.58	121.90
2	N	261	U	C5-C4-O4	-6.69	121.89	125.90
2	N	633	G	C8-N9-C1'	6.69	135.69	127.00
2	N	686	U	O4'-C1'-N1	6.69	113.55	108.20
1	M	1126	U	C6-N1-C2	-6.68	116.99	121.00
1	M	1257	A	N7-C8-N9	6.68	117.14	113.80
2	N	162	A	C5-C6-N1	-6.68	114.36	117.70
2	N	195	A	C6-N1-C2	6.68	122.61	118.60
2	N	262	A	N1-C2-N3	-6.68	125.96	129.30
3	O	1453	G	C4-N9-C1'	6.68	135.19	126.50
3	O	1482	G	O4'-C4'-C3'	-6.68	97.31	104.00
2	N	129	A	C5-C6-N1	-6.68	114.36	117.70
2	N	483	C	C6-N1-C2	-6.68	117.63	120.30
2	N	760	G	C5-C6-N1	-6.68	108.16	111.50
1	M	949	A	C8-N9-C4	-6.68	103.13	105.80
2	N	669	G	N9-C4-C5	6.68	108.07	105.40
2	N	768	A	C4-C5-N7	-6.68	107.36	110.70
1	M	1117	A	O4'-C1'-N9	6.68	113.54	108.20
2	N	157	U	N3-C4-C5	6.68	118.61	114.60
2	N	826	C	N1-C2-O2	-6.68	114.89	118.90
2	N	858	G	C6-N1-C2	6.68	129.11	125.10
2	N	797	C	C1'-O4'-C4'	6.68	115.24	109.90
2	N	342	C	O4'-C1'-N1	6.68	113.54	108.20
1	M	1227	A	C4-C5-N7	6.67	114.04	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	451	A	N9-C4-C5	6.67	108.47	105.80
2	N	675	A	C4-C5-N7	-6.67	107.36	110.70
2	N	13	U	C1'-O4'-C4'	-6.67	104.56	109.90
2	N	262	A	C4-C5-C6	6.67	120.34	117.00
1	M	1064	G	N9-C4-C5	6.67	108.07	105.40
1	M	1220	G	N1-C2-N3	-6.67	119.90	123.90
2	N	98	A	C5'-C4'-O4'	6.67	117.11	109.10
2	N	115	G	N9-C4-C5	-6.67	102.73	105.40
2	N	759	A	C5-C6-N1	-6.67	114.36	117.70
1	M	993	G	N1-C2-N3	-6.67	119.90	123.90
1	M	1316	G	C4-C5-N7	6.67	113.47	110.80
2	N	607	A	C8-N9-C4	-6.67	103.13	105.80
2	N	462	G	P-O3'-C3'	6.67	127.70	119.70
1	M	1267	C	O4'-C1'-N1	6.67	113.53	108.20
2	N	50	A	C5-C6-N1	-6.67	114.37	117.70
1	M	1186	G	O4'-C1'-N9	6.66	113.53	108.20
2	N	44	A	N1-C6-N6	6.66	122.60	118.60
2	N	457	G	N1-C2-N3	-6.66	119.90	123.90
3	O	1427	C	C5-C6-N1	6.66	124.33	121.00
1	M	1160	G	N9-C1'-C2'	-6.66	104.67	112.00
2	N	90	C	P-O3'-C3'	6.66	127.69	119.70
2	N	199	A	N3-C4-C5	-6.66	122.14	126.80
2	N	189	A	O4'-C1'-N9	6.66	113.53	108.20
2	N	641	U	C6-N1-C2	6.66	124.99	121.00
1	M	1132	C	N3-C4-C5	-6.66	119.24	121.90
1	M	1134	G	N3-C2-N2	6.66	124.56	119.90
2	N	299	G	C6-N1-C2	-6.66	121.11	125.10
2	N	613	C	C2-N1-C1'	6.66	126.12	118.80
2	N	675	A	C2-N3-C4	-6.66	107.27	110.60
2	N	779	C	C4-C5-C6	6.66	120.73	117.40
1	M	1285	A	O4'-C1'-N9	6.65	113.52	108.20
2	N	663	A	P-O5'-C5'	6.65	131.55	120.90
2	N	800	G	N3-C4-C5	-6.65	125.27	128.60
2	N	298	A	C5-N7-C8	6.65	107.23	103.90
2	N	761	G	N3-C4-C5	6.65	131.93	128.60
3	O	1533	C	P-O5'-C5'	6.65	131.54	120.90
1	M	1272	G	N1-C2-N3	-6.65	119.91	123.90
1	M	1323	G	C5-C6-N1	-6.65	108.17	111.50
2	N	42	G	C5-C6-O6	-6.65	124.61	128.60
2	N	691	G	C6-C5-N7	-6.65	126.41	130.40
3	O	1429	A	C1'-O4'-C4'	-6.65	104.58	109.90
3	O	1435	G	C5-C6-O6	-6.65	124.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	725	G	C4-C5-N7	-6.65	108.14	110.80
1	M	971	G	C5-N7-C8	6.65	107.62	104.30
1	M	1297	G	O4'-C1'-N9	6.65	113.52	108.20
2	N	17	U	N3-C2-O2	6.65	126.85	122.20
2	N	60	A	C5-N7-C8	6.65	107.22	103.90
2	N	95	C	C5-C4-N4	-6.65	115.55	120.20
2	N	161	A	C8-N9-C4	-6.65	103.14	105.80
2	N	335	C	N3-C4-C5	-6.65	119.24	121.90
2	N	744	C	C5-C6-N1	6.65	124.32	121.00
1	M	1055	A	C2-N3-C4	-6.65	107.28	110.60
2	N	64	G	C5-C6-N1	-6.64	108.18	111.50
2	N	279	A	C5-C6-N1	-6.64	114.38	117.70
3	O	1423	G	N3-C4-C5	6.64	131.92	128.60
1	M	1104	G	N9-C4-C5	-6.64	102.74	105.40
1	M	1121	U	O4'-C1'-N1	6.64	113.51	108.20
1	M	1213	A	C5-C6-N1	-6.64	114.38	117.70
2	N	28	A	N7-C8-N9	6.64	117.12	113.80
2	N	642	A	C1'-O4'-C4'	6.64	115.21	109.90
2	N	690	G	C6-N1-C2	6.64	129.09	125.10
2	N	705	G	C6-C5-N7	-6.64	126.41	130.40
1	M	1037	C	N3-C2-O2	6.64	126.55	121.90
1	M	1008	U	C4-C5-C6	-6.64	115.72	119.70
1	M	1185	G	C5'-C4'-C3'	6.64	126.62	116.00
2	N	664	G	C8-N9-C4	-6.64	103.74	106.40
2	N	274	A	N1-C2-N3	-6.64	125.98	129.30
2	N	756	C	N3-C4-C5	-6.64	119.25	121.90
2	N	917	G	N1-C2-N3	-6.64	119.92	123.90
1	M	967	C	N1-C2-O2	6.64	122.88	118.90
1	M	1013	G	P-O3'-C3'	6.64	127.66	119.70
1	M	1143	G	O4'-C1'-N9	6.64	113.51	108.20
1	M	1274	A	C6-C5-N7	-6.64	127.66	132.30
1	M	1318	A	C4-C5-N7	-6.64	107.38	110.70
2	N	194	C	C5'-C4'-O4'	6.63	117.06	109.10
2	N	384	G	N7-C8-N9	-6.63	109.78	113.10
2	N	622	A	C4-C5-C6	6.63	120.32	117.00
2	N	843	U	C6-N1-C2	-6.63	117.02	121.00
1	M	1190	G	C5-C6-O6	-6.63	124.62	128.60
1	M	1307	U	O4'-C4'-C3'	-6.63	97.37	104.00
2	N	162	A	P-O3'-C3'	6.63	127.66	119.70
2	N	267	C	N3-C4-C5	-6.63	119.25	121.90
2	N	497	G	C5-N7-C8	-6.63	100.98	104.30
2	N	852	G	C8-N9-C4	-6.63	103.75	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	328	C	O4'-C1'-N1	6.63	113.50	108.20
2	N	329	A	C5'-C4'-C3'	-6.63	105.39	116.00
2	N	559	A	N1-C2-N3	6.63	132.61	129.30
2	N	821	G	C4-C5-C6	6.63	122.78	118.80
2	N	895	G	N1-C6-O6	6.63	123.88	119.90
1	M	1138	G	C4-C5-N7	-6.63	108.15	110.80
2	N	7	A	C4-C5-C6	6.63	120.31	117.00
2	N	242	G	O4'-C1'-N9	6.63	113.50	108.20
2	N	888	G	N7-C8-N9	-6.63	109.79	113.10
2	N	892	A	C8-N9-C4	-6.63	103.15	105.80
1	M	1129	C	P-O5'-C5'	6.62	131.50	120.90
2	N	899	C	C4-C5-C6	-6.62	114.09	117.40
3	O	1534	A	C4-C5-C6	6.62	120.31	117.00
1	M	998	C	C2-N3-C4	6.62	123.21	119.90
2	N	150	U	O4'-C1'-N1	6.62	113.50	108.20
2	N	247	G	N1-C2-N3	-6.62	119.92	123.90
2	N	361	G	C4-C5-C6	6.62	122.77	118.80
2	N	644	U	N3-C4-O4	6.62	124.04	119.40
2	N	926	G	N3-C2-N2	6.62	124.54	119.90
1	M	947	G	C5-C6-N1	-6.62	108.19	111.50
1	M	1268	G	C4-C5-N7	-6.62	108.15	110.80
2	N	37	U	N3-C4-O4	6.62	124.03	119.40
2	N	113	G	N7-C8-N9	-6.62	109.79	113.10
2	N	651	C	C6-N1-C2	-6.62	117.65	120.30
2	N	454	G	N3-C4-N9	6.62	129.97	126.00
2	N	709	U	C2-N3-C4	-6.62	123.03	127.00
1	M	1128	C	C5-C4-N4	-6.62	115.57	120.20
2	N	298	A	N3-C4-C5	-6.62	122.17	126.80
2	N	326	G	N7-C8-N9	6.62	116.41	113.10
2	N	868	C	C4-C5-C6	-6.62	114.09	117.40
1	M	1041	G	N7-C8-N9	6.62	116.41	113.10
2	N	31	G	N1-C2-N3	-6.62	119.93	123.90
2	N	215	C	C4-C5-C6	-6.62	114.09	117.40
2	N	754	C	C2-N1-C1'	6.62	126.08	118.80
2	N	768	A	C4-C5-C6	6.62	120.31	117.00
1	M	1128	C	P-O5'-C5'	6.61	131.48	120.90
2	N	171	A	C8-N9-C4	6.61	108.45	105.80
2	N	472	U	N1-C2-O2	-6.61	118.17	122.80
2	N	802	A	C8-N9-C4	-6.61	103.15	105.80
3	O	1411	C	N1-C2-N3	-6.61	114.57	119.20
1	M	1011	C	N3-C4-N4	6.61	122.63	118.00
1	M	1141	C	C5-C4-N4	-6.61	115.57	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	248	C	O4'-C1'-N1	6.61	113.49	108.20
2	N	527	G	O4'-C1'-N9	6.61	113.49	108.20
2	N	532	A	C4-C5-C6	6.61	120.31	117.00
2	N	870	U	O4'-C1'-N1	6.61	113.49	108.20
1	M	1109	C	C6-N1-C2	-6.61	117.66	120.30
1	M	1067	A	C5'-C4'-C3'	-6.61	105.43	116.00
1	M	1208	C	C5-C6-N1	6.61	124.30	121.00
2	N	16	A	C5-N7-C8	-6.61	100.60	103.90
2	N	477	C	N1-C2-O2	-6.61	114.94	118.90
2	N	549	C	C2-N3-C4	6.61	123.20	119.90
2	N	664	G	C5-C6-N1	-6.61	108.20	111.50
3	O	1491	G	O4'-C1'-N9	6.60	113.48	108.20
1	M	1019	A	N3-C4-N9	6.60	132.68	127.40
2	N	147	G	C4'-C3'-C2'	-6.60	96.00	102.60
2	N	622	A	C6-N1-C2	6.60	122.56	118.60
2	N	842	U	C2-N1-C1'	6.60	125.62	117.70
2	N	571	U	O4'-C1'-N1	6.60	113.48	108.20
1	M	1077	G	C4-N9-C1'	6.60	135.08	126.50
1	M	1080	A	P-O5'-C5'	-6.60	110.34	120.90
2	N	259	G	C5-C6-N1	-6.60	108.20	111.50
3	O	1533	C	N3-C4-C5	-6.60	119.26	121.90
1	M	1159	U	C4'-C3'-C2'	6.60	109.20	102.60
1	M	1302	C	P-O3'-C3'	-6.60	111.78	119.70
2	N	894	G	C8-N9-C4	-6.60	103.76	106.40
3	O	1441	A	C4-C5-N7	-6.60	107.40	110.70
2	N	93	U	N1-C2-N3	-6.60	110.94	114.90
2	N	189	A	N3-C4-N9	6.60	132.68	127.40
2	N	397	A	C4-N9-C1'	6.60	138.17	126.30
1	M	1025	U	O4'-C1'-N1	6.59	113.47	108.20
2	N	448	A	C5-N7-C8	6.59	107.20	103.90
2	N	778	G	C2-N3-C4	-6.59	108.60	111.90
2	N	913	A	C4-C5-C6	6.59	120.30	117.00
2	N	721	G	P-O5'-C5'	-6.59	110.35	120.90
2	N	417	G	C1'-O4'-C4'	6.59	115.17	109.90
2	N	792	A	O4'-C1'-N9	6.59	113.47	108.20
2	N	60	A	N9-C4-C5	-6.59	103.16	105.80
2	N	498	A	C4'-C3'-C2'	6.59	109.19	102.60
2	N	677	U	N3-C4-C5	6.59	118.55	114.60
2	N	877	G	P-O5'-C5'	-6.59	110.36	120.90
1	M	1217	C	C5-C6-N1	6.59	124.29	121.00
1	M	1362	A	N7-C8-N9	-6.59	110.51	113.80
3	O	1394	A	N1-C2-N3	-6.59	126.01	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	772	U	P-O3'-C3'	6.59	127.60	119.70
1	M	1154	G	N1-C6-O6	6.58	123.85	119.90
1	M	1158	C	P-O5'-C5'	6.58	131.43	120.90
2	N	27	G	C4-C5-N7	-6.58	108.17	110.80
2	N	158	G	C5-C6-N1	6.58	114.79	111.50
2	N	448	A	N9-C4-C5	6.58	108.43	105.80
1	M	979	C	N3-C4-N4	6.58	122.61	118.00
2	N	237	G	N7-C8-N9	6.58	116.39	113.10
3	O	1468	A	C8-N9-C4	-6.58	103.17	105.80
1	M	982	U	C3'-C2'-C1'	6.58	106.76	101.50
2	N	400	C	C5-C4-N4	-6.58	115.59	120.20
1	M	986	U	P-O5'-C5'	6.58	131.42	120.90
1	M	1233	G	C4-N9-C1'	6.58	135.05	126.50
2	N	283	U	C1'-O4'-C4'	6.58	115.16	109.90
2	N	355	C	P-O3'-C3'	6.58	127.59	119.70
2	N	365	U	C6-N1-C2	-6.58	117.05	121.00
2	N	698	G	N3-C4-C5	6.58	131.89	128.60
2	N	866	C	P-O5'-C5'	6.58	131.42	120.90
1	M	995	C	C5-C6-N1	6.58	124.29	121.00
2	N	556	C	C4-C5-C6	6.58	120.69	117.40
3	O	1443	C	N3-C4-C5	-6.58	119.27	121.90
2	N	16	A	C6-N1-C2	-6.58	114.66	118.60
2	N	122	G	C4-N9-C1'	6.58	135.05	126.50
2	N	275	G	C4'-C3'-C2'	6.58	109.17	102.60
2	N	66	A	O4'-C4'-C3'	-6.57	97.43	104.00
2	N	183	C	C6-N1-C2	-6.57	117.67	120.30
1	M	998	C	N3-C2-O2	6.57	126.50	121.90
2	N	124	C	C5-C6-N1	6.57	124.29	121.00
2	N	201	G	P-O3'-C3'	6.57	127.59	119.70
2	N	212	G	N9-C4-C5	6.57	108.03	105.40
2	N	568	G	C5-C6-N1	-6.57	108.21	111.50
2	N	611	C	O4'-C1'-N1	6.57	113.46	108.20
1	M	987	G	N3-C4-N9	6.57	129.94	126.00
2	N	486	U	C5-C4-O4	-6.57	121.96	125.90
2	N	694	A	C5-C6-N6	-6.57	118.44	123.70
2	N	743	A	C4-C5-C6	6.57	120.29	117.00
2	N	531	U	O4'-C1'-N1	6.57	113.46	108.20
1	M	1086	U	C5'-C4'-O4'	6.57	116.98	109.10
1	M	1086	U	C5-C6-N1	6.57	125.98	122.70
2	N	39	G	O4'-C1'-N9	6.57	113.45	108.20
2	N	354	G	C6-C5-N7	6.57	134.34	130.40
2	N	564	C	C4-C5-C6	6.57	120.68	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1476	A	N3-C4-C5	-6.57	122.20	126.80
1	M	1066	C	C2-N3-C4	6.57	123.18	119.90
2	N	21	G	C2-N3-C4	6.57	115.18	111.90
2	N	42	G	C6-C5-N7	-6.57	126.46	130.40
2	N	266	G	C5'-C4'-O4'	6.57	116.98	109.10
2	N	576	C	C4-C5-C6	6.57	120.68	117.40
2	N	793	U	N3-C4-C5	-6.57	110.66	114.60
2	N	845	A	N1-C6-N6	6.57	122.54	118.60
2	N	430	A	C8-N9-C4	-6.56	103.17	105.80
3	O	1481	U	C2-N3-C4	6.56	130.94	127.00
1	M	937	A	C2-N3-C4	6.56	113.88	110.60
1	M	1134	G	N1-C2-N3	-6.56	119.96	123.90
1	M	1141	C	N3-C4-N4	6.56	122.59	118.00
1	M	1232	U	O4'-C1'-N1	6.56	113.45	108.20
2	N	554	A	N9-C4-C5	-6.56	103.17	105.80
3	O	1489	G	C5-N7-C8	6.56	107.58	104.30
2	N	14	U	C4-C5-C6	6.56	123.64	119.70
2	N	519	C	N1-C2-O2	6.56	122.83	118.90
2	N	761	G	N9-C4-C5	-6.56	102.78	105.40
3	O	1462	C	O4'-C1'-N1	6.56	113.45	108.20
1	M	1341	U	N1-C2-O2	-6.56	118.21	122.80
1	M	985	C	C2-N3-C4	-6.55	116.62	119.90
1	M	1045	C	C4-C5-C6	6.55	120.68	117.40
1	M	1284	C	P-O3'-C3'	-6.55	111.83	119.70
1	M	1289	A	O4'-C1'-N9	6.55	113.44	108.20
2	N	114	U	N3-C4-O4	6.55	123.99	119.40
2	N	238	A	C5-N7-C8	6.55	107.18	103.90
3	O	1519	A	C4-C5-C6	6.55	120.28	117.00
3	O	1507	A	N1-C2-N3	6.55	132.58	129.30
2	N	271	C	N3-C4-C5	-6.55	119.28	121.90
1	M	1167	A	C2-N3-C4	-6.55	107.33	110.60
1	M	1180	A	C4-C5-C6	6.55	120.27	117.00
2	N	569	C	C6-N1-C2	-6.55	117.68	120.30
1	M	1110	A	C5-C6-N1	-6.55	114.43	117.70
1	M	1221	G	C2-N3-C4	-6.55	108.63	111.90
2	N	878	A	N7-C8-N9	6.55	117.07	113.80
1	M	1133	G	C6-C5-N7	-6.55	126.47	130.40
1	M	1381	U	C2-N1-C1'	-6.55	109.84	117.70
2	N	861	G	C5-C6-O6	-6.55	124.67	128.60
1	M	1059	C	C2-N3-C4	6.54	123.17	119.90
1	M	1037	C	C1'-O4'-C4'	-6.54	104.67	109.90
1	M	1238	A	O4'-C1'-N9	6.54	113.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1368	A	N1-C6-N6	6.54	122.53	118.60
2	N	785	G	N1-C6-O6	6.54	123.83	119.90
1	M	1197	A	C5-C6-N6	-6.54	118.47	123.70
1	M	1317	C	C5-C6-N1	6.54	124.27	121.00
2	N	810	C	N3-C2-O2	6.54	126.48	121.90
1	M	1153	G	N9-C4-C5	-6.54	102.78	105.40
1	M	931	C	N3-C4-N4	6.54	122.58	118.00
2	N	53	A	O4'-C1'-N9	6.54	113.43	108.20
2	N	177	G	N3-C2-N2	6.54	124.48	119.90
2	N	454	G	C5-N7-C8	-6.54	101.03	104.30
2	N	636	U	N3-C4-O4	6.54	123.98	119.40
2	N	715	A	C8-N9-C4	6.54	108.42	105.80
2	N	748	G	N3-C2-N2	6.54	124.48	119.90
2	N	877	G	C2-N3-C4	6.54	115.17	111.90
2	N	300	A	C2-N3-C4	6.54	113.87	110.60
1	M	1006	G	N3-C4-C5	6.54	131.87	128.60
1	M	1128	C	C4'-C3'-C2'	6.54	109.14	102.60
2	N	41	G	C1'-O4'-C4'	-6.54	104.67	109.90
2	N	355	C	C2-N1-C1'	-6.54	111.61	118.80
2	N	412	A	C5-C6-N1	-6.54	114.43	117.70
3	O	1497	G	N3-C4-N9	-6.54	122.08	126.00
1	M	970	C	C6-N1-C1'	-6.53	112.96	120.80
1	M	1079	G	C8-N9-C4	-6.53	103.79	106.40
1	M	1154	G	N1-C2-N3	-6.53	119.98	123.90
1	M	1162	C	O4'-C1'-N1	6.53	113.43	108.20
2	N	268	U	N1-C2-N3	-6.53	110.98	114.90
2	N	276	G	O4'-C1'-N9	6.53	113.43	108.20
1	M	1000	A	C4-C5-C6	6.53	120.27	117.00
2	N	178	C	O4'-C1'-N1	6.53	113.42	108.20
2	N	747	A	O4'-C4'-C3'	-6.53	97.47	104.00
2	N	78	A	N7-C8-N9	6.53	117.06	113.80
2	N	434	U	C2-N3-C4	6.53	130.92	127.00
3	O	1439	G	C6-N1-C2	6.53	129.02	125.10
1	M	986	U	C2-N1-C1'	-6.53	109.87	117.70
1	M	1007	U	C3'-C2'-C1'	6.53	106.72	101.50
1	M	1138	G	N3-C4-C5	-6.53	125.34	128.60
2	N	132	C	N3-C4-C5	-6.53	119.29	121.90
2	N	622	A	O4'-C1'-N9	6.53	113.42	108.20
2	N	846	G	P-O3'-C3'	6.53	127.53	119.70
2	N	45	G	C4-C5-C6	6.53	122.72	118.80
2	N	232	G	C4-N9-C1'	-6.53	118.02	126.50
2	N	252	U	N3-C2-O2	6.53	126.77	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	457	G	C3'-C2'-C1'	-6.53	96.28	101.50
2	N	805	C	N1-C2-O2	6.53	122.81	118.90
3	O	1393	U	C6-N1-C1'	-6.53	112.06	121.20
2	N	875	U	N3-C4-O4	6.52	123.97	119.40
1	M	1220	G	N1-C6-O6	6.52	123.81	119.90
2	N	16	A	N7-C8-N9	6.52	117.06	113.80
2	N	461	A	C5-C6-N1	-6.52	114.44	117.70
1	M	939	G	C5-N7-C8	6.52	107.56	104.30
2	N	712	A	C6-N1-C2	-6.52	114.69	118.60
2	N	32	A	C8-N9-C4	-6.52	103.19	105.80
1	M	972	C	C5-C4-N4	6.52	124.76	120.20
2	N	314	C	C4'-C3'-C2'	-6.52	96.08	102.60
2	N	858	G	C4-C5-N7	6.52	113.41	110.80
2	N	874	G	C4-C5-N7	-6.52	108.19	110.80
2	N	336	A	C5-N7-C8	-6.52	100.64	103.90
1	M	1239	A	O4'-C1'-N9	6.51	113.41	108.20
1	M	1307	U	N1-C2-O2	6.51	127.36	122.80
1	M	1337	G	C4-C5-C6	6.51	122.71	118.80
2	N	184	G	N3-C4-N9	-6.51	122.09	126.00
2	N	237	G	N3-C4-C5	-6.51	125.34	128.60
2	N	326	G	C5-C6-N1	6.51	114.75	111.50
2	N	6	G	C6-C5-N7	-6.51	126.50	130.40
2	N	186	C	C5-C4-N4	-6.51	115.64	120.20
1	M	1091	U	C6-N1-C2	-6.51	117.10	121.00
1	M	1179	A	C2-N3-C4	-6.51	107.35	110.60
1	M	1306	A	N1-C6-N6	6.51	122.50	118.60
2	N	44	A	C4-C5-C6	6.51	120.25	117.00
2	N	288	A	C3'-C2'-C1'	-6.51	96.30	101.50
2	N	906	A	C2-N3-C4	-6.51	107.35	110.60
2	N	339	C	P-O5'-C5'	6.50	131.31	120.90
2	N	861	G	N9-C4-C5	-6.50	102.80	105.40
1	M	1120	C	C5-C4-N4	-6.50	115.65	120.20
1	M	1361	G	N3-C4-C5	-6.50	125.35	128.60
2	N	55	A	N1-C2-N3	6.50	132.55	129.30
2	N	81	A	N1-C2-N3	-6.50	126.05	129.30
2	N	586	C	N3-C4-C5	6.50	124.50	121.90
2	N	717	U	C2-N1-C1'	6.50	125.50	117.70
1	M	994	A	C8-N9-C4	-6.50	103.20	105.80
2	N	293	G	C6-C5-N7	-6.50	126.50	130.40
2	N	792	A	C6-N1-C2	6.50	122.50	118.60
1	M	943	U	N1-C2-O2	6.50	127.35	122.80
2	N	26	A	N7-C8-N9	-6.50	110.55	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	851	G	N3-C4-C5	6.50	131.85	128.60
1	M	1088	G	C5-C6-O6	-6.49	124.70	128.60
2	N	53	A	C5-C6-N6	-6.49	118.51	123.70
2	N	65	A	C4-C5-C6	6.49	120.25	117.00
2	N	492	C	N3-C4-N4	6.49	122.55	118.00
2	N	861	G	N1-C2-N3	-6.49	120.00	123.90
1	M	955	U	C5-C6-N1	6.49	125.94	122.70
1	M	1059	C	N3-C4-N4	6.49	122.54	118.00
1	M	1089	G	N3-C4-C5	-6.49	125.36	128.60
1	M	1124	G	N3-C2-N2	6.49	124.44	119.90
2	N	672	U	N3-C2-O2	6.49	126.74	122.20
1	M	1374	A	C4'-C3'-C2'	-6.49	96.11	102.60
2	N	623	C	N3-C2-O2	-6.49	117.36	121.90
2	N	777	A	C8-N9-C4	-6.49	103.20	105.80
2	N	843	U	O4'-C1'-N1	6.49	113.39	108.20
2	N	81	A	C8-N9-C1'	-6.49	116.03	127.70
2	N	269	C	N3-C4-N4	6.49	122.54	118.00
2	N	303	A	N9-C4-C5	6.49	108.39	105.80
2	N	860	A	C5-C6-N6	-6.49	118.51	123.70
3	O	1454	G	C8-N9-C4	-6.49	103.81	106.40
2	N	639	G	C4-C5-N7	6.48	113.39	110.80
3	O	1508	A	C8-N9-C4	6.48	108.39	105.80
1	M	1091	U	N1-C2-O2	-6.48	118.26	122.80
1	M	1255	G	O4'-C1'-N9	6.48	113.39	108.20
2	N	867	G	N3-C2-N2	6.48	124.44	119.90
3	O	1497	G	N3-C2-N2	6.48	124.44	119.90
1	M	1047	G	N1-C6-O6	6.48	123.79	119.90
1	M	1281	C	C1'-O4'-C4'	-6.48	104.72	109.90
2	N	781	A	C4'-C3'-C2'	-6.48	96.12	102.60
2	N	910	C	P-O5'-C5'	6.48	131.27	120.90
1	M	1359	C	N3-C4-N4	6.48	122.54	118.00
2	N	419	C	N3-C4-N4	6.48	122.53	118.00
3	O	1418	A	C8-N9-C4	6.48	108.39	105.80
1	M	1186	G	C4-C5-N7	6.48	113.39	110.80
1	M	1026	G	N1-C2-N3	-6.48	120.02	123.90
2	N	212	G	C8-N9-C4	-6.48	103.81	106.40
1	M	1039	G	N1-C2-N3	-6.47	120.02	123.90
2	N	258	G	C6-N1-C2	6.47	128.99	125.10
3	O	1478	U	C1'-O4'-C4'	-6.47	104.72	109.90
1	M	1239	A	C2-N3-C4	-6.47	107.36	110.60
1	M	1306	A	O4'-C1'-N9	6.47	113.38	108.20
2	N	275	G	C6-C5-N7	-6.47	126.52	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1127	G	N7-C8-N9	6.47	116.33	113.10
1	M	1182	G	N1-C2-N3	-6.47	120.02	123.90
2	N	237	G	N1-C2-N3	-6.47	120.02	123.90
2	N	332	G	C5-N7-C8	6.47	107.53	104.30
2	N	668	G	N3-C2-N2	6.47	124.43	119.90
2	N	763	G	N7-C8-N9	6.47	116.33	113.10
1	M	1050	G	C4-C5-N7	-6.47	108.21	110.80
1	M	1164	G	N3-C4-C5	6.47	131.83	128.60
2	N	885	G	O4'-C4'-C3'	-6.47	97.53	104.00
1	M	1075	U	N1-C2-O2	-6.46	118.28	122.80
2	N	31	G	C5'-C4'-O4'	6.46	116.85	109.10
2	N	155	A	O4'-C4'-C3'	-6.46	97.54	104.00
2	N	785	G	N9-C4-C5	6.46	107.98	105.40
3	O	1477	U	C4'-C3'-C2'	-6.46	96.14	102.60
2	N	515	G	C8-N9-C4	-6.46	103.82	106.40
2	N	784	A	C2-N3-C4	-6.46	107.37	110.60
3	O	1404	C	O4'-C1'-N1	6.46	113.37	108.20
1	M	1139	G	P-O5'-C5'	6.46	131.23	120.90
2	N	3	A	C1'-O4'-C4'	-6.46	104.73	109.90
2	N	84	U	C2-N1-C1'	6.46	125.45	117.70
1	M	1112	C	O4'-C1'-N1	6.46	113.37	108.20
2	N	217	C	C4'-C3'-C2'	-6.46	96.14	102.60
2	N	374	A	C5'-C4'-C3'	6.46	126.33	116.00
2	N	776	G	O4'-C1'-N9	6.46	113.36	108.20
2	N	814	A	C8-N9-C4	-6.46	103.22	105.80
2	N	853	C	N3-C4-N4	6.46	122.52	118.00
2	N	64	G	N1-C6-O6	6.46	123.77	119.90
2	N	153	C	C6-N1-C1'	-6.45	113.06	120.80
2	N	366	A	N7-C8-N9	-6.45	110.57	113.80
2	N	384	G	N3-C2-N2	6.45	124.42	119.90
2	N	76	G	C8-N9-C1'	-6.45	118.61	127.00
2	N	83	C	N3-C4-N4	6.45	122.52	118.00
2	N	211	G	N3-C2-N2	6.45	124.42	119.90
2	N	585	G	C4-C5-C6	6.45	122.67	118.80
2	N	616	G	O4'-C1'-N9	6.45	113.36	108.20
2	N	894	G	N3-C4-C5	-6.45	125.38	128.60
1	M	1168	U	O4'-C1'-N1	6.45	113.36	108.20
1	M	1243	C	C2-N3-C4	6.45	123.12	119.90
1	M	1304	G	N1-C2-N3	-6.45	120.03	123.90
2	N	41	G	C4'-C3'-C2'	-6.45	96.15	102.60
2	N	753	A	C4-C5-N7	-6.45	107.48	110.70
1	M	971	G	C4-C5-C6	6.45	122.67	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1333	A	C5-C6-N6	-6.45	118.54	123.70
2	N	95	C	N3-C4-N4	6.45	122.51	118.00
2	N	351	G	N3-C2-N2	6.45	124.41	119.90
2	N	566	G	P-O5'-C5'	6.45	131.21	120.90
2	N	582	C	N3-C4-C5	-6.45	119.32	121.90
3	O	1458	G	N3-C4-C5	6.44	131.82	128.60
1	M	1253	G	C6-N1-C2	6.44	128.97	125.10
2	N	349	A	C5-C6-N6	-6.44	118.55	123.70
2	N	866	C	C2'-C3'-O3'	6.44	124.01	113.70
1	M	964	A	O4'-C1'-N9	6.44	113.35	108.20
2	N	581	G	C6-C5-N7	-6.44	126.53	130.40
2	N	731	G	N1-C2-N3	-6.44	120.03	123.90
3	O	1399	C	C5-C6-N1	6.44	124.22	121.00
3	O	1397	C	N3-C4-C5	-6.44	119.32	121.90
1	M	1339	A	P-O3'-C3'	6.44	127.42	119.70
2	N	395	C	O4'-C1'-N1	6.44	113.35	108.20
2	N	535	A	C5-N7-C8	6.44	107.12	103.90
2	N	881	G	P-O3'-C3'	-6.44	111.98	119.70
3	O	1527	U	N3-C4-C5	-6.44	110.74	114.60
1	M	952	U	N3-C4-O4	6.43	123.90	119.40
1	M	1102	A	C5-C6-N6	-6.43	118.55	123.70
1	M	1227	A	C6-C5-N7	-6.43	127.80	132.30
2	N	119	A	O4'-C1'-N9	6.43	113.35	108.20
2	N	182	A	O4'-C1'-N9	6.43	113.35	108.20
2	N	488	C	N3-C2-O2	6.43	126.40	121.90
1	M	1283	U	N3-C4-O4	6.43	123.90	119.40
2	N	501	C	O5'-C5'-C4'	-6.43	99.48	111.70
2	N	888	G	N3-C4-C5	-6.43	125.39	128.60
1	M	1107	C	N3-C4-N4	6.43	122.50	118.00
1	M	1135	U	N1-C2-N3	-6.43	111.04	114.90
1	M	1368	A	C4-C5-C6	6.43	120.21	117.00
2	N	192	A	C6-N1-C2	6.43	122.46	118.60
2	N	645	G	C6-C5-N7	-6.43	126.54	130.40
2	N	774	G	N3-C4-N9	-6.43	122.14	126.00
3	O	1522	U	C2-N1-C1'	-6.43	109.99	117.70
1	M	1193	G	C8-N9-C4	6.42	108.97	106.40
2	N	426	U	C2'-C3'-O3'	6.42	123.98	113.70
2	N	851	G	C8-N9-C4	-6.42	103.83	106.40
1	M	1312	G	C5-N7-C8	6.42	107.51	104.30
2	N	658	C	O4'-C4'-C3'	-6.42	97.58	104.00
2	N	661	G	N1-C2-N3	-6.42	120.05	123.90
1	M	1067	A	N1-C2-N3	-6.42	126.09	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1163	A	C2-N3-C4	-6.42	107.39	110.60
2	N	241	G	N1-C6-O6	6.42	123.75	119.90
2	N	364	A	C5-N7-C8	6.42	107.11	103.90
1	M	1262	C	C5-C6-N1	-6.42	117.79	121.00
2	N	258	G	C5-C6-N1	-6.42	108.29	111.50
2	N	505	G	N1-C6-O6	6.42	123.75	119.90
1	M	1156	G	C4-C5-C6	6.42	122.65	118.80
2	N	109	A	N9-C4-C5	6.42	108.37	105.80
2	N	257	G	N9-C4-C5	-6.42	102.83	105.40
2	N	242	G	C8-N9-C4	-6.42	103.83	106.40
2	N	647	C	N1-C2-N3	-6.42	114.71	119.20
1	M	1248	A	C4-C5-N7	-6.41	107.49	110.70
2	N	107	G	N3-C2-N2	6.41	124.39	119.90
2	N	246	A	C1'-O4'-C4'	6.41	115.03	109.90
2	N	253	A	C8-N9-C4	6.41	108.37	105.80
2	N	408	A	C2-N3-C4	-6.41	107.39	110.60
2	N	541	G	C4-C5-N7	-6.41	108.23	110.80
2	N	579	A	OP1-P-OP2	-6.41	109.98	119.60
2	N	383	A	O4'-C1'-N9	6.41	113.33	108.20
1	M	1170	A	N9-C4-C5	6.41	108.36	105.80
1	M	1259	C	C5-C6-N1	6.41	124.20	121.00
2	N	504	C	O4'-C4'-C3'	-6.41	97.59	104.00
2	N	640	A	C6-C5-N7	-6.41	127.81	132.30
2	N	661	G	O4'-C1'-N9	6.41	113.33	108.20
3	O	1466	C	C5-C6-N1	6.41	124.21	121.00
2	N	705	G	C4-C5-C6	6.41	122.64	118.80
2	N	50	A	C2-N3-C4	-6.41	107.40	110.60
1	M	943	U	C6-N1-C2	-6.41	117.16	121.00
1	M	1258	G	C2-N3-C4	6.41	115.10	111.90
2	N	424	G	O4'-C1'-N9	6.41	113.32	108.20
2	N	869	G	C6-N1-C2	-6.41	121.26	125.10
3	O	1432	G	C8-N9-C1'	6.41	135.33	127.00
1	M	1374	A	C5'-C4'-C3'	-6.40	105.76	116.00
2	N	543	U	C4-C5-C6	6.40	123.54	119.70
1	M	1078	U	O5'-C5'-C4'	6.40	123.86	111.70
1	M	1079	G	C4-C5-N7	6.40	113.36	110.80
2	N	186	C	C4-C5-C6	6.40	120.60	117.40
2	N	704	A	C5-N7-C8	6.40	107.10	103.90
2	N	895	G	C5-C6-O6	-6.40	124.76	128.60
2	N	689	C	N3-C4-N4	6.40	122.48	118.00
1	M	1299	A	P-O5'-C5'	6.39	131.13	120.90
1	M	1389	C	P-O5'-C5'	-6.39	110.67	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	387	U	O4'-C1'-N1	6.39	113.32	108.20
2	N	584	G	N9-C4-C5	-6.39	102.84	105.40
3	O	1525	G	N3-C4-C5	6.39	131.80	128.60
2	N	234	C	O4'-C1'-N1	6.39	113.31	108.20
2	N	415	A	C2-N3-C4	-6.39	107.40	110.60
2	N	517	G	C5-N7-C8	6.39	107.50	104.30
2	N	906	A	O4'-C1'-N9	6.39	113.31	108.20
2	N	825	A	C8-N9-C4	-6.39	103.24	105.80
1	M	1008	U	N3-C4-C5	6.39	118.43	114.60
2	N	229	U	C2-N3-C4	6.39	130.83	127.00
3	O	1422	G	C3'-C2'-C1'	-6.39	96.39	101.50
2	N	894	G	C5-C6-O6	-6.39	124.77	128.60
1	M	1055	A	C5-N7-C8	-6.39	100.71	103.90
1	M	1134	G	C8-N9-C4	-6.39	103.85	106.40
2	N	459	A	N9-C1'-C2'	-6.39	104.98	112.00
2	N	467	U	O4'-C4'-C3'	-6.39	97.61	104.00
3	O	1408	A	C5-C6-N1	-6.39	114.51	117.70
1	M	1146	A	N9-C4-C5	6.38	108.35	105.80
2	N	126	G	C5-C6-N1	-6.38	108.31	111.50
2	N	404	G	P-O3'-C3'	-6.38	112.04	119.70
2	N	573	A	N3-C4-N9	6.38	132.51	127.40
3	O	1534	A	N3-C4-C5	-6.38	122.33	126.80
1	M	998	C	N1-C2-N3	-6.38	114.73	119.20
2	N	773	G	N7-C8-N9	-6.38	109.91	113.10
2	N	29	U	N3-C4-C5	-6.38	110.77	114.60
2	N	161	A	N1-C2-N3	6.38	132.49	129.30
2	N	230	G	C5-N7-C8	-6.38	101.11	104.30
2	N	374	A	C2-N3-C4	6.38	113.79	110.60
2	N	425	G	N9-C4-C5	-6.38	102.85	105.40
2	N	452	A	C5-N7-C8	6.38	107.09	103.90
2	N	600	A	C3'-C2'-C1'	-6.38	96.40	101.50
2	N	698	G	N3-C4-N9	-6.38	122.17	126.00
2	N	452	A	N1-C6-N6	6.38	122.43	118.60
2	N	553	A	C4-C5-C6	6.38	120.19	117.00
3	O	1457	G	N1-C2-N3	-6.38	120.07	123.90
1	M	957	U	C6-N1-C2	-6.38	117.17	121.00
1	M	1155	A	O4'-C1'-N9	6.38	113.30	108.20
2	N	443	C	C3'-C2'-C1'	-6.38	96.40	101.50
2	N	784	A	C5-C6-N6	-6.38	118.60	123.70
1	M	1145	A	C2-N3-C4	-6.38	107.41	110.60
1	M	1184	G	C6-N1-C2	6.38	128.93	125.10
2	N	423	G	C5-C6-N1	-6.38	108.31	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	211	G	N9-C4-C5	-6.37	102.85	105.40
2	N	385	C	C5-C4-N4	-6.37	115.74	120.20
2	N	607	A	C5-C6-N1	-6.37	114.51	117.70
2	N	782	A	O4'-C1'-N9	6.37	113.30	108.20
1	M	946	A	C5-C6-N1	-6.37	114.51	117.70
1	M	950	U	C5-C6-N1	6.37	125.89	122.70
1	M	1008	U	C5-C4-O4	-6.37	122.08	125.90
1	M	1077	G	C3'-C2'-C1'	-6.37	96.40	101.50
2	N	454	G	C6-N1-C2	-6.37	121.28	125.10
2	N	811	C	N3-C4-C5	-6.37	119.35	121.90
1	M	1126	U	O4'-C1'-N1	6.37	113.29	108.20
2	N	264	C	N3-C2-O2	6.37	126.36	121.90
1	M	1304	G	N9-C4-C5	6.37	107.95	105.40
2	N	82	G	C4-C5-N7	6.37	113.35	110.80
2	N	203	G	C4-N9-C1'	-6.37	118.22	126.50
2	N	403	C	C6-N1-C2	-6.37	117.75	120.30
2	N	517	G	N3-C4-N9	6.37	129.82	126.00
2	N	796	C	O4'-C1'-N1	6.36	113.29	108.20
1	M	1337	G	P-O5'-C5'	6.36	131.08	120.90
2	N	190	A	C5-C6-N1	-6.36	114.52	117.70
2	N	855	U	N3-C2-O2	6.36	126.65	122.20
2	N	89	U	P-O5'-C5'	6.36	131.08	120.90
2	N	375	U	N3-C2-O2	6.36	126.65	122.20
2	N	444	G	C5-N7-C8	-6.36	101.12	104.30
1	M	1006	G	N3-C2-N2	6.36	124.35	119.90
2	N	442	G	N3-C4-C5	6.36	131.78	128.60
2	N	924	C	N3-C4-N4	6.36	122.45	118.00
1	M	1163	A	O4'-C1'-N9	6.35	113.28	108.20
2	N	120	A	C3'-C2'-C1'	-6.35	96.42	101.50
1	M	1244	G	N1-C2-N3	-6.35	120.09	123.90
2	N	113	G	N3-C4-N9	-6.35	122.19	126.00
2	N	220	G	C4-C5-C6	6.35	122.61	118.80
2	N	414	A	O4'-C1'-N9	6.35	113.28	108.20
1	M	1020	G	P-O3'-C3'	6.35	127.32	119.70
2	N	583	A	C6-N1-C2	6.35	122.41	118.60
2	N	588	G	N1-C2-N3	-6.35	120.09	123.90
2	N	766	A	C4'-C3'-C2'	-6.35	96.25	102.60
2	N	859	G	C5-N7-C8	6.35	107.47	104.30
1	M	965	U	N3-C4-C5	-6.35	110.79	114.60
1	M	1050	G	N1-C6-O6	6.35	123.71	119.90
2	N	55	A	C4'-C3'-C2'	-6.35	96.25	102.60
2	N	247	G	C4'-C3'-C2'	-6.35	96.25	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	703	G	C5'-C4'-C3'	-6.35	105.84	116.00
3	O	1434	A	C5-N7-C8	6.35	107.07	103.90
2	N	106	C	OP1-P-OP2	-6.35	110.08	119.60
1	M	1256	A	O4'-C1'-N9	6.34	113.28	108.20
1	M	1284	C	C5-C6-N1	6.34	124.17	121.00
2	N	146	G	N1-C6-O6	6.34	123.71	119.90
2	N	744	C	P-O5'-C5'	6.34	131.05	120.90
2	N	798	U	C6-N1-C2	-6.34	117.19	121.00
1	M	1374	A	C5-N7-C8	6.34	107.07	103.90
2	N	791	G	C6-N1-C2	6.34	128.91	125.10
2	N	263	A	C6-C5-N7	-6.34	127.86	132.30
2	N	274	A	C4-C5-N7	-6.34	107.53	110.70
2	N	403	C	C2-N1-C1'	6.34	125.78	118.80
2	N	472	U	C5-C4-O4	-6.34	122.09	125.90
2	N	702	A	P-O5'-C5'	-6.34	110.75	120.90
3	O	1407	C	C5-C4-N4	-6.34	115.76	120.20
1	M	1077	G	C8-N9-C4	-6.34	103.86	106.40
2	N	73	C	C2-N3-C4	-6.34	116.73	119.90
2	N	647	C	C5-C6-N1	-6.34	117.83	121.00
2	N	671	G	C6-C5-N7	-6.34	126.60	130.40
2	N	779	C	C5'-C4'-O4'	6.34	116.71	109.10
2	N	858	G	C6-C5-N7	-6.34	126.60	130.40
2	N	316	C	O4'-C1'-N1	6.34	113.27	108.20
2	N	469	C	C4-C5-C6	6.34	120.57	117.40
1	M	1306	A	N1-C2-N3	6.34	132.47	129.30
2	N	5	U	C2-N3-C4	-6.34	123.20	127.00
2	N	588	G	P-O5'-C5'	6.34	131.04	120.90
1	M	1046	A	C4'-C3'-C2'	-6.33	96.27	102.60
2	N	450	G	P-O3'-C3'	6.33	127.30	119.70
2	N	557	G	N1-C6-O6	6.33	123.70	119.90
2	N	751	U	C3'-C2'-C1'	6.33	106.57	101.50
2	N	922	G	C4-C5-N7	6.33	113.33	110.80
3	O	1428	A	C8-N9-C4	-6.33	103.27	105.80
1	M	1212	U	C2-N3-C4	6.33	130.80	127.00
2	N	255	G	C5-C6-N1	-6.33	108.33	111.50
2	N	720	C	C5-C6-N1	6.33	124.17	121.00
1	M	1204	A	C5-C6-N6	-6.33	118.64	123.70
2	N	85	U	C6-N1-C1'	-6.33	112.34	121.20
2	N	358	U	N1-C2-N3	6.33	118.70	114.90
1	M	1296	C	P-O5'-C5'	6.33	131.02	120.90
2	N	50	A	C5-N7-C8	6.33	107.06	103.90
1	M	1140	C	N1-C2-O2	6.33	122.69	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1188	A	OP1-P-OP2	-6.33	110.11	119.60
1	M	1349	A	C5-C6-N6	-6.33	118.64	123.70
3	O	1434	A	N1-C6-N6	6.33	122.39	118.60
2	N	251	G	C6-C5-N7	-6.32	126.61	130.40
2	N	701	U	C1'-O4'-C4'	6.32	114.96	109.90
1	M	933	G	O4'-C1'-N9	6.32	113.26	108.20
1	M	1173	U	C4-C5-C6	-6.32	115.91	119.70
2	N	325	A	C5-C6-N6	-6.32	118.64	123.70
1	M	1334	G	C6-N1-C2	6.32	128.89	125.10
2	N	497	G	C6-C5-N7	-6.32	126.61	130.40
2	N	541	G	N3-C4-C5	6.32	131.76	128.60
2	N	818	G	OP1-P-OP2	-6.32	110.12	119.60
2	N	490	C	N3-C4-C5	-6.32	119.37	121.90
1	M	1020	G	N1-C2-N3	-6.32	120.11	123.90
1	M	1370	G	C6-C5-N7	-6.32	126.61	130.40
2	N	618	C	C6-N1-C2	-6.32	117.77	120.30
2	N	655	A	C5-N7-C8	6.32	107.06	103.90
2	N	847	G	N3-C2-N2	6.32	124.32	119.90
3	O	1493	A	C2-N3-C4	-6.32	107.44	110.60
1	M	1194	U	C5-C6-N1	-6.32	119.54	122.70
2	N	130	A	N9-C4-C5	-6.32	103.27	105.80
2	N	232	G	C8-N9-C1'	6.32	135.21	127.00
2	N	451	A	O4'-C1'-N9	6.32	113.25	108.20
2	N	751	U	O4'-C1'-N1	6.32	113.25	108.20
2	N	197	A	C4'-C3'-C2'	6.31	108.91	102.60
2	N	392	C	N3-C4-N4	6.31	122.42	118.00
1	M	939	G	N1-C2-N3	-6.31	120.11	123.90
2	N	139	A	O4'-C1'-N9	6.31	113.25	108.20
2	N	436	C	C5-C4-N4	-6.31	115.78	120.20
1	M	1233	G	C8-N9-C1'	-6.31	118.80	127.00
2	N	95	C	C5'-C4'-C3'	-6.31	105.90	116.00
2	N	174	A	C4-C5-N7	-6.31	107.55	110.70
2	N	604	G	C8-N9-C4	6.31	108.92	106.40
2	N	183	C	C4-C5-C6	6.31	120.55	117.40
2	N	496	A	C6-C5-N7	-6.31	127.89	132.30
3	O	1493	A	N1-C2-N3	6.31	132.45	129.30
2	N	485	U	C5-C4-O4	-6.31	122.12	125.90
1	M	1117	A	N7-C8-N9	6.30	116.95	113.80
1	M	1329	A	O4'-C1'-N9	6.30	113.24	108.20
2	N	372	C	C6-N1-C2	-6.30	117.78	120.30
2	N	575	G	C4-C5-N7	-6.30	108.28	110.80
3	O	1525	G	P-O5'-C5'	6.30	130.99	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	381	C	N3-C2-O2	6.30	126.31	121.90
3	O	1454	G	C1'-O4'-C4'	-6.30	104.86	109.90
1	M	1056	U	O4'-C1'-N1	6.30	113.24	108.20
1	M	1188	A	O4'-C1'-N9	6.30	113.24	108.20
2	N	329	A	N1-C6-N6	6.30	122.38	118.60
2	N	685	G	N1-C2-N2	-6.30	110.53	116.20
3	O	1415	G	C5-N7-C8	-6.30	101.15	104.30
3	O	1426	G	N3-C4-C5	-6.30	125.45	128.60
2	N	227	G	O4'-C1'-N9	6.30	113.24	108.20
2	N	324	G	N3-C4-N9	-6.30	122.22	126.00
2	N	602	A	C5-C6-N6	-6.30	118.66	123.70
2	N	617	G	N1-C2-N3	-6.30	120.12	123.90
2	N	916	U	C5'-C4'-O4'	6.30	116.66	109.10
1	M	1319	A	C4-C5-C6	6.30	120.15	117.00
2	N	103	U	N1-C2-O2	6.30	127.21	122.80
2	N	232	G	C5'-C4'-O4'	6.30	116.66	109.10
2	N	482	A	N7-C8-N9	6.30	116.95	113.80
1	M	1239	A	C8-N9-C4	-6.29	103.28	105.80
1	M	1322	C	O4'-C1'-N1	6.29	113.23	108.20
2	N	764	C	C3'-C2'-C1'	-6.29	96.47	101.50
2	N	191	G	C4-C5-N7	-6.29	108.28	110.80
2	N	364	A	C8-N9-C1'	6.29	139.02	127.70
2	N	375	U	O4'-C1'-N1	6.29	113.23	108.20
2	N	531	U	N3-C4-O4	6.29	123.80	119.40
2	N	744	C	C6-N1-C2	-6.29	117.78	120.30
1	M	1080	A	C6-N1-C2	-6.29	114.83	118.60
2	N	734	G	C5-C6-N1	-6.29	108.36	111.50
2	N	347	G	N3-C4-C5	-6.29	125.46	128.60
2	N	580	C	N3-C4-N4	6.29	122.40	118.00
3	O	1519	A	C5-C6-N6	-6.29	118.67	123.70
2	N	481	G	P-O3'-C3'	6.29	127.24	119.70
2	N	250	A	N1-C2-N3	6.29	132.44	129.30
2	N	511	C	N3-C4-N4	6.29	122.40	118.00
2	N	766	A	C5-N7-C8	6.29	107.04	103.90
2	N	849	G	C8-N9-C4	6.29	108.91	106.40
3	O	1446	A	C5'-C4'-O4'	6.29	116.64	109.10
1	M	1206	G	C4-N9-C1'	6.28	134.67	126.50
2	N	623	C	N3-C4-C5	-6.28	119.39	121.90
2	N	627	G	N7-C8-N9	6.28	116.24	113.10
1	M	1045	C	C2-N1-C1'	6.28	125.71	118.80
2	N	46	G	P-O3'-C3'	6.28	127.23	119.70
2	N	241	G	N3-C4-N9	-6.28	122.23	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1447	A	P-O5'-C5'	-6.28	110.85	120.90
2	N	120	A	C4-C5-N7	-6.28	107.56	110.70
2	N	742	G	N7-C8-N9	-6.28	109.96	113.10
2	N	796	C	C4'-C3'-C2'	-6.28	96.32	102.60
3	O	1526	G	C5'-C4'-C3'	-6.28	105.95	116.00
1	M	1180	A	C6-C5-N7	-6.28	127.91	132.30
1	M	1268	G	C5-C6-O6	-6.28	124.83	128.60
2	N	341	C	O4'-C4'-C3'	-6.28	97.72	104.00
3	O	1499	A	N7-C8-N9	6.28	116.94	113.80
1	M	1037	C	N1-C1'-C2'	-6.27	105.10	112.00
2	N	463	U	N1-C2-O2	6.27	127.19	122.80
3	O	1431	A	P-O3'-C3'	6.27	127.23	119.70
3	O	1495	U	O4'-C1'-N1	6.27	113.22	108.20
1	M	1031	C	O4'-C1'-N1	6.27	113.22	108.20
2	N	192	A	C8-N9-C4	6.27	108.31	105.80
2	N	206	C	C6-N1-C2	-6.27	117.79	120.30
2	N	291	U	C5-C4-O4	-6.27	122.14	125.90
2	N	740	U	C2-N3-C4	6.27	130.76	127.00
3	O	1397	C	C5-C6-N1	6.27	124.14	121.00
2	N	458	U	O4'-C1'-N1	6.27	113.22	108.20
1	M	974	A	C4-C5-N7	-6.27	107.57	110.70
2	N	737	C	C4'-C3'-C2'	-6.27	96.33	102.60
3	O	1488	G	N1-C2-N3	-6.27	120.14	123.90
1	M	1145	A	C5-N7-C8	6.27	107.03	103.90
2	N	9	G	C2-N3-C4	6.27	115.03	111.90
2	N	164	G	C6-N1-C2	6.27	128.86	125.10
2	N	295	C	C5-C6-N1	6.27	124.13	121.00
2	N	745	G	N1-C2-N3	-6.27	120.14	123.90
2	N	311	C	P-O3'-C3'	6.27	127.22	119.70
2	N	744	C	O4'-C1'-N1	6.27	113.21	108.20
1	M	994	A	C5-N7-C8	6.26	107.03	103.90
2	N	398	U	C4-C5-C6	6.26	123.46	119.70
3	O	1484	C	C5-C6-N1	6.26	124.13	121.00
1	M	1107	C	N3-C4-C5	6.26	124.41	121.90
1	M	1142	G	C5'-C4'-C3'	-6.26	105.98	116.00
1	M	1354	U	O4'-C1'-N1	6.26	113.21	108.20
2	N	355	C	C2-N3-C4	6.26	123.03	119.90
2	N	489	C	C2-N3-C4	6.26	123.03	119.90
3	O	1475	G	OP1-P-OP2	-6.26	110.21	119.60
3	O	1493	A	C6-C5-N7	-6.26	127.92	132.30
1	M	1279	G	C4-N9-C1'	6.26	134.64	126.50
2	N	113	G	C5-N7-C8	6.26	107.43	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1473	G	C5-C6-O6	-6.26	124.84	128.60
1	M	1088	G	N3-C4-N9	-6.26	122.25	126.00
1	M	1225	A	C6-C5-N7	-6.26	127.92	132.30
2	N	282	A	C5-C6-N1	-6.26	114.57	117.70
1	M	1145	A	C5-C6-N6	-6.26	118.69	123.70
2	N	19	A	C2-N3-C4	6.26	113.73	110.60
2	N	348	G	N1-C2-N3	-6.26	120.15	123.90
3	O	1412	C	C5-C4-N4	6.26	124.58	120.20
3	O	1427	C	C2-N3-C4	-6.26	116.77	119.90
3	O	1497	G	N1-C6-O6	6.26	123.65	119.90
1	M	1142	G	O4'-C1'-N9	6.25	113.20	108.20
1	M	1339	A	C8-N9-C4	-6.25	103.30	105.80
2	N	254	G	N1-C6-O6	6.25	123.65	119.90
2	N	292	G	C6-C5-N7	-6.25	126.65	130.40
2	N	599	C	O4'-C1'-N1	6.25	113.20	108.20
2	N	715	A	C2-N3-C4	-6.25	107.47	110.60
1	M	1181	G	C5-C6-O6	-6.25	124.85	128.60
2	N	861	G	C4-C5-N7	6.25	113.30	110.80
3	O	1461	G	N1-C2-N2	6.25	121.83	116.20
2	N	689	C	OP1-P-OP2	-6.25	110.22	119.60
1	M	1346	A	C6-N1-C2	6.25	122.35	118.60
2	N	913	A	C6-C5-N7	-6.25	127.92	132.30
1	M	1246	A	N1-C6-N6	6.25	122.35	118.60
1	M	1316	G	C5-C6-O6	-6.25	124.85	128.60
1	M	1380	U	O4'-C1'-N1	6.25	113.20	108.20
1	M	1094	G	C8-N9-C4	6.25	108.90	106.40
1	M	1387	G	N7-C8-N9	6.25	116.22	113.10
2	N	42	G	C4-C5-C6	6.25	122.55	118.80
2	N	266	G	C4-C5-C6	6.25	122.55	118.80
2	N	48	C	O4'-C1'-N1	6.25	113.20	108.20
3	O	1496	C	N1-C2-N3	-6.25	114.83	119.20
3	O	1396	A	OP1-P-OP2	-6.24	110.24	119.60
3	O	1509	C	C5-C6-N1	-6.24	117.88	121.00
1	M	1127	G	P-O5'-C5'	6.24	130.88	120.90
2	N	294	U	N3-C4-O4	6.24	123.77	119.40
2	N	411	A	C3'-C2'-C1'	6.24	106.49	101.50
2	N	710	G	C5-C6-O6	-6.24	124.86	128.60
2	N	144	G	N7-C8-N9	6.24	116.22	113.10
2	N	754	C	C2-N3-C4	6.24	123.02	119.90
2	N	26	A	C6-C5-N7	6.24	136.66	132.30
2	N	710	G	N1-C2-N3	-6.24	120.16	123.90
2	N	738	C	C5-C4-N4	-6.24	115.84	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	547	A	N3-C4-C5	-6.23	122.44	126.80
1	M	937	A	C5-N7-C8	6.23	107.02	103.90
1	M	1113	C	C2-N3-C4	-6.23	116.78	119.90
2	N	5	U	O4'-C4'-C3'	-6.23	97.77	104.00
2	N	62	U	C2-N3-C4	6.23	130.74	127.00
2	N	717	U	O4'-C1'-N1	6.23	113.19	108.20
2	N	840	C	C6-N1-C2	-6.23	117.81	120.30
1	M	937	A	C5'-C4'-O4'	6.23	116.58	109.10
1	M	1048	G	P-O3'-C3'	-6.23	112.22	119.70
2	N	503	C	C2-N3-C4	6.23	123.02	119.90
2	N	545	C	C3'-C2'-C1'	6.23	106.48	101.50
3	O	1481	U	N1-C2-N3	-6.23	111.16	114.90
3	O	1521	C	C2-N3-C4	6.23	123.02	119.90
2	N	117	G	C2-N3-C4	-6.23	108.79	111.90
1	M	1373	G	C4-C5-N7	6.23	113.29	110.80
2	N	131	A	N7-C8-N9	6.23	116.91	113.80
2	N	725	G	C4-C5-C6	6.23	122.54	118.80
2	N	924	C	N1-C1'-C2'	-6.23	105.15	112.00
3	O	1447	A	C6-N1-C2	-6.23	114.86	118.60
1	M	1123	U	N3-C4-C5	-6.23	110.86	114.60
2	N	86	G	N7-C8-N9	-6.23	109.99	113.10
2	N	493	A	N7-C8-N9	-6.23	110.69	113.80
3	O	1437	A	C2-N3-C4	-6.23	107.49	110.60
1	M	1081	A	C5-N7-C8	6.22	107.01	103.90
2	N	503	C	O4'-C1'-N1	6.22	113.18	108.20
2	N	827	U	P-O3'-C3'	6.22	127.17	119.70
1	M	1090	U	N3-C2-O2	6.22	126.56	122.20
1	M	1191	A	O4'-C1'-N9	6.22	113.18	108.20
2	N	446	G	O5'-P-OP2	-6.22	100.10	105.70
1	M	1033	G	C5'-C4'-C3'	-6.22	106.05	116.00
2	N	38	G	C8-N9-C4	6.22	108.89	106.40
1	M	1100	C	C6-N1-C2	-6.22	117.81	120.30
2	N	828	U	N3-C2-O2	6.22	126.55	122.20
1	M	1092	A	N1-C6-N6	6.22	122.33	118.60
2	N	112	G	C5-C6-O6	-6.22	124.87	128.60
2	N	459	A	C8-N9-C4	-6.22	103.31	105.80
2	N	489	C	C5-C6-N1	-6.22	117.89	121.00
2	N	774	G	C6-C5-N7	-6.22	126.67	130.40
2	N	874	G	C1'-O4'-C4'	6.22	114.87	109.90
2	N	877	G	O4'-C1'-N9	6.22	113.17	108.20
2	N	338	A	C5-C6-N6	-6.21	118.73	123.70
2	N	583	A	C5-C6-N6	-6.21	118.73	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1059	C	C2-N1-C1'	-6.21	111.97	118.80
2	N	818	G	C4-C5-N7	-6.21	108.31	110.80
1	M	992	U	C5-C6-N1	6.21	125.81	122.70
1	M	1225	A	P-O3'-C3'	6.21	127.15	119.70
1	M	1371	G	N9-C4-C5	-6.21	102.92	105.40
2	N	416	G	C5-C6-N1	-6.21	108.39	111.50
2	N	429	U	N1-C2-N3	6.21	118.63	114.90
2	N	459	A	C5'-C4'-O4'	6.21	116.55	109.10
2	N	493	A	N3-C4-N9	6.21	132.37	127.40
2	N	726	C	C5'-C4'-O4'	6.21	116.55	109.10
1	M	1192	C	C2-N3-C4	6.21	123.00	119.90
2	N	408	A	C4-C5-C6	6.21	120.10	117.00
2	N	650	G	C8-N9-C4	-6.21	103.92	106.40
1	M	1009	U	O4'-C1'-N1	6.20	113.16	108.20
2	N	501	C	O4'-C1'-N1	6.20	113.16	108.20
2	N	511	C	N3-C2-O2	-6.20	117.56	121.90
2	N	161	A	C4-C5-C6	6.20	120.10	117.00
2	N	508	U	C5'-C4'-C3'	-6.20	106.08	116.00
1	M	1012	A	N3-C4-N9	6.20	132.36	127.40
1	M	1228	C	C5-C4-N4	-6.20	115.86	120.20
1	M	1109	C	N3-C4-N4	6.20	122.34	118.00
1	M	1158	C	N3-C4-N4	6.20	122.34	118.00
2	N	722	G	C4-C5-C6	6.20	122.52	118.80
3	O	1431	A	N7-C8-N9	6.20	116.90	113.80
1	M	986	U	N1-C2-N3	-6.20	111.18	114.90
2	N	173	U	C2-N3-C4	-6.20	123.28	127.00
2	N	654	G	C5-C6-N1	-6.20	108.40	111.50
2	N	728	A	N1-C2-N3	6.20	132.40	129.30
2	N	741	G	C4-C5-N7	-6.20	108.32	110.80
1	M	1290	G	C8-N9-C4	-6.20	103.92	106.40
2	N	119	A	N9-C4-C5	6.20	108.28	105.80
2	N	315	A	C4-C5-N7	-6.20	107.60	110.70
2	N	618	C	OP1-P-OP2	-6.20	110.31	119.60
2	N	785	G	C8-N9-C4	-6.20	103.92	106.40
2	N	918	A	C5-C6-N6	-6.20	118.74	123.70
2	N	38	G	C4-C5-N7	-6.19	108.32	110.80
2	N	250	A	N9-C4-C5	-6.19	103.32	105.80
1	M	1253	G	N3-C2-N2	6.19	124.23	119.90
2	N	120	A	C5-N7-C8	6.19	107.00	103.90
2	N	139	A	N3-C4-N9	6.19	132.35	127.40
2	N	242	G	P-O3'-C3'	-6.19	112.27	119.70
2	N	401	C	N3-C2-O2	6.19	126.23	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1532	U	C4-C5-C6	-6.19	115.98	119.70
1	M	929	G	C8-N9-C4	-6.19	103.92	106.40
1	M	1005	A	C5-C6-N6	-6.19	118.75	123.70
1	M	1204	A	N9-C4-C5	-6.19	103.32	105.80
2	N	251	G	C8-N9-C4	6.19	108.88	106.40
2	N	448	A	C4-C5-N7	-6.19	107.60	110.70
2	N	552	U	N3-C2-O2	6.19	126.53	122.20
2	N	718	A	C8-N9-C4	-6.19	103.32	105.80
2	N	776	G	C5-C6-O6	-6.19	124.89	128.60
2	N	913	A	C5'-C4'-C3'	-6.19	106.09	116.00
1	M	1275	A	C3'-C2'-C1'	6.19	106.45	101.50
2	N	168	G	C6-C5-N7	-6.19	126.69	130.40
1	M	1247	U	N3-C4-O4	6.19	123.73	119.40
2	N	42	G	C5-C6-N1	-6.19	108.41	111.50
2	N	56	U	C1'-O4'-C4'	6.19	114.85	109.90
2	N	253	A	N3-C4-C5	-6.19	122.47	126.80
2	N	409	U	O4'-C1'-N1	6.19	113.15	108.20
2	N	830	G	C5-C6-O6	-6.19	124.89	128.60
2	N	830	G	N7-C8-N9	-6.19	110.01	113.10
3	O	1503	A	C3'-C2'-C1'	-6.19	96.55	101.50
2	N	114	U	O4'-C1'-N1	6.19	113.15	108.20
2	N	224	U	C1'-O4'-C4'	-6.19	104.95	109.90
1	M	1321	U	N3-C4-C5	-6.18	110.89	114.60
2	N	72	A	N3-C4-N9	6.18	132.35	127.40
2	N	518	C	C6-N1-C2	-6.18	117.83	120.30
2	N	549	C	C6-N1-C2	-6.18	117.83	120.30
2	N	812	G	O4'-C1'-N9	6.18	113.15	108.20
2	N	847	G	C6-C5-N7	-6.18	126.69	130.40
1	M	1387	G	N3-C2-N2	6.18	124.23	119.90
2	N	322	C	P-O5'-C5'	6.18	130.79	120.90
2	N	704	A	O4'-C1'-N9	6.18	113.15	108.20
1	M	1013	G	C5-N7-C8	6.18	107.39	104.30
1	M	1073	U	O4'-C1'-N1	6.18	113.14	108.20
1	M	1154	G	O4'-C1'-N9	6.18	113.14	108.20
2	N	450	G	C4-N9-C1'	6.18	134.53	126.50
2	N	746	A	OP1-P-OP2	-6.18	110.33	119.60
1	M	948	C	O4'-C1'-N1	6.18	113.14	108.20
2	N	158	G	C5-N7-C8	-6.18	101.21	104.30
2	N	254	G	C5-C6-O6	-6.18	124.89	128.60
2	N	554	A	P-O5'-C5'	-6.18	111.01	120.90
1	M	930	C	C5-C6-N1	6.18	124.09	121.00
2	N	726	C	P-O3'-C3'	6.18	127.11	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	907	A	N1-C2-N3	6.18	132.39	129.30
2	N	648	A	C2-N3-C4	-6.17	107.51	110.60
2	N	69	G	C2-N3-C4	6.17	114.99	111.90
2	N	220	G	N9-C4-C5	-6.17	102.93	105.40
2	N	223	A	P-O5'-C5'	6.17	130.78	120.90
2	N	226	G	C8-N9-C4	-6.17	103.93	106.40
2	N	812	G	C5-N7-C8	6.17	107.39	104.30
2	N	62	U	C6-N1-C2	6.17	124.70	121.00
2	N	647	C	C4-C5-C6	6.17	120.49	117.40
2	N	752	G	C8-N9-C1'	6.17	135.02	127.00
2	N	849	G	C4-C5-C6	6.17	122.50	118.80
2	N	898	G	C4-C5-N7	-6.17	108.33	110.80
2	N	148	G	C6-C5-N7	-6.17	126.70	130.40
1	M	977	A	C6-C5-N7	-6.17	127.98	132.30
2	N	242	G	C6-C5-N7	-6.17	126.70	130.40
2	N	265	G	N3-C2-N2	6.17	124.22	119.90
2	N	795	C	C2-N3-C4	6.17	122.98	119.90
3	O	1422	G	N7-C8-N9	-6.17	110.02	113.10
3	O	1432	G	N1-C2-N3	-6.17	120.20	123.90
1	M	932	C	N3-C4-C5	-6.17	119.43	121.90
2	N	716	A	N1-C2-N3	6.17	132.38	129.30
3	O	1475	G	N7-C8-N9	6.17	116.18	113.10
2	N	432	A	C5-C6-N6	-6.17	118.77	123.70
3	O	1500	A	C8-N9-C4	-6.17	103.33	105.80
1	M	1141	C	N3-C2-O2	-6.16	117.59	121.90
1	M	1282	C	N3-C4-C5	-6.16	119.44	121.90
2	N	164	G	C4-C5-N7	-6.16	108.33	110.80
2	N	348	G	N3-C2-N2	6.16	124.22	119.90
2	N	737	C	C2-N3-C4	-6.16	116.82	119.90
2	N	760	G	C4-C5-C6	6.16	122.50	118.80
2	N	81	A	C1'-O4'-C4'	-6.16	104.97	109.90
2	N	234	C	N3-C4-C5	-6.16	119.44	121.90
2	N	180	U	C2'-C3'-O3'	6.16	123.56	113.70
2	N	243	A	C4-C5-N7	-6.16	107.62	110.70
2	N	451	A	P-O5'-C5'	6.16	130.76	120.90
1	M	1175	G	N3-C2-N2	-6.16	115.59	119.90
2	N	337	G	C4-C5-C6	6.16	122.50	118.80
2	N	406	G	O4'-C1'-N9	6.16	113.13	108.20
2	N	412	A	C1'-O4'-C4'	-6.16	104.97	109.90
2	N	475	C	C5-C4-N4	-6.16	115.89	120.20
1	M	1266	G	C5-C6-O6	-6.16	124.91	128.60
2	N	452	A	O4'-C1'-N9	6.16	113.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	706	A	C4-C5-C6	6.16	120.08	117.00
2	N	742	G	N1-C2-N3	-6.16	120.21	123.90
1	M	1228	C	C1'-O4'-C4'	6.16	114.82	109.90
3	O	1410	A	C5-C6-N6	-6.16	118.78	123.70
2	N	545	C	N1-C2-O2	6.15	122.59	118.90
3	O	1512	U	O4'-C1'-N1	6.15	113.12	108.20
1	M	1258	G	N1-C2-N3	-6.15	120.21	123.90
1	M	1332	A	N1-C6-N6	6.15	122.29	118.60
2	N	589	U	P-O5'-C5'	6.15	130.74	120.90
2	N	638	U	C4-C5-C6	6.15	123.39	119.70
2	N	509	A	C4'-C3'-C2'	-6.15	96.45	102.60
2	N	734	G	O4'-C1'-N9	6.15	113.12	108.20
2	N	781	A	N7-C8-N9	-6.15	110.72	113.80
1	M	1143	G	N1-C2-N3	-6.15	120.21	123.90
1	M	1151	A	C5-C6-N1	-6.15	114.63	117.70
1	M	1224	U	N3-C4-O4	6.15	123.70	119.40
2	N	134	G	C6-C5-N7	-6.15	126.71	130.40
2	N	373	A	C6-C5-N7	-6.15	128.00	132.30
1	M	1024	G	C6-C5-N7	-6.15	126.71	130.40
2	N	657	U	N3-C4-C5	-6.15	110.91	114.60
1	M	1224	U	N1-C2-O2	6.14	127.10	122.80
1	M	1246	A	O4'-C1'-C2'	-6.14	99.66	105.80
1	M	1285	A	C4-C5-N7	6.14	113.77	110.70
2	N	774	G	C4-C5-C6	6.14	122.49	118.80
2	N	835	U	N1-C2-N3	6.14	118.59	114.90
1	M	992	U	N1-C2-O2	-6.14	118.50	122.80
2	N	426	U	C1'-O4'-C4'	6.14	114.81	109.90
3	O	1484	C	O4'-C1'-N1	6.14	113.11	108.20
1	M	1233	G	C6-C5-N7	-6.14	126.72	130.40
2	N	501	C	C6-N1-C2	-6.14	117.84	120.30
1	M	937	A	C4'-C3'-C2'	-6.14	96.46	102.60
1	M	1374	A	N3-C4-C5	-6.14	122.50	126.80
2	N	29	U	N3-C4-O4	6.14	123.70	119.40
2	N	383	A	N1-C2-N3	6.14	132.37	129.30
3	O	1420	U	C6-N1-C2	-6.14	117.32	121.00
3	O	1485	U	O4'-C1'-N1	6.14	113.11	108.20
2	N	342	C	C2-N3-C4	6.14	122.97	119.90
2	N	433	G	C1'-O4'-C4'	6.14	114.81	109.90
2	N	853	C	C5'-C4'-O4'	6.14	116.47	109.10
1	M	977	A	C5-C6-N6	-6.14	118.79	123.70
1	M	1359	C	C4-C5-C6	6.14	120.47	117.40
2	N	164	G	C2-N3-C4	6.14	114.97	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	220	G	N3-C4-N9	6.14	129.68	126.00
2	N	243	A	C8-N9-C4	-6.14	103.34	105.80
2	N	728	A	O4'-C1'-N9	6.14	113.11	108.20
2	N	779	C	P-O5'-C5'	-6.14	111.08	120.90
2	N	903	G	C5-C6-O6	-6.14	124.92	128.60
1	M	1054	C	C2-N3-C4	6.13	122.97	119.90
1	M	1239	A	C4-C5-C6	6.13	120.07	117.00
2	N	70	U	C6-N1-C2	-6.13	117.32	121.00
1	M	1153	G	N1-C2-N3	-6.13	120.22	123.90
2	N	122	G	P-O3'-C3'	-6.13	112.34	119.70
2	N	556	C	C3'-C2'-C1'	6.13	106.41	101.50
2	N	824	G	O4'-C1'-N9	6.13	113.11	108.20
2	N	251	G	C5-C6-O6	-6.13	124.92	128.60
2	N	405	U	C6-N1-C2	-6.13	117.32	121.00
2	N	635	A	C4-C5-C6	6.13	120.07	117.00
2	N	780	A	C6-C5-N7	-6.13	128.01	132.30
1	M	1178	G	N3-C4-N9	-6.13	122.32	126.00
1	M	1220	G	N9-C4-C5	-6.13	102.95	105.40
2	N	80	A	C5'-C4'-O4'	6.13	116.45	109.10
2	N	507	C	N3-C4-N4	6.13	122.29	118.00
2	N	621	A	O4'-C1'-N9	6.13	113.10	108.20
1	M	1348	U	OP1-P-OP2	-6.13	110.41	119.60
2	N	161	A	N7-C8-N9	6.13	116.86	113.80
2	N	26	A	C8-N9-C4	-6.12	103.35	105.80
2	N	198	G	N1-C6-O6	6.12	123.58	119.90
2	N	755	G	C4-C5-C6	6.12	122.47	118.80
3	O	1451	U	N1-C2-N3	-6.12	111.22	114.90
1	M	1091	U	C5'-C4'-O4'	6.12	116.45	109.10
2	N	877	G	C5-N7-C8	-6.12	101.24	104.30
2	N	912	C	C3'-C2'-C1'	-6.12	96.60	101.50
2	N	703	G	N1-C6-O6	6.12	123.57	119.90
1	M	1350	A	N3-C4-C5	-6.12	122.52	126.80
2	N	608	A	C6-C5-N7	-6.12	128.02	132.30
1	M	1023	U	C1'-O4'-C4'	-6.12	105.01	109.90
2	N	703	G	O4'-C1'-N9	6.12	113.09	108.20
2	N	42	G	N7-C8-N9	-6.12	110.04	113.10
2	N	137	U	C3'-C2'-C1'	-6.12	96.61	101.50
2	N	458	U	P-O5'-C5'	6.12	130.68	120.90
2	N	499	A	C1'-O4'-C4'	6.12	114.79	109.90
2	N	545	C	C4'-C3'-C2'	-6.12	96.48	102.60
1	M	1232	U	C3'-C2'-C1'	-6.11	96.61	101.50
2	N	174	A	C6-N1-C2	-6.11	114.93	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	554	A	C6-C5-N7	-6.11	128.02	132.30
3	O	1395	C	C1'-O4'-C4'	-6.11	105.01	109.90
1	M	1156	G	N1-C2-N3	-6.11	120.23	123.90
2	N	54	C	P-O3'-C3'	-6.11	112.37	119.70
1	M	969	A	P-O3'-C3'	6.11	127.03	119.70
1	M	972	C	C6-N1-C2	-6.11	117.86	120.30
1	M	1281	C	C6-N1-C1'	-6.11	113.47	120.80
1	M	1356	G	C2-N3-C4	-6.11	108.84	111.90
2	N	10	A	N1-C6-N6	6.11	122.27	118.60
3	O	1439	G	N7-C8-N9	6.11	116.16	113.10
1	M	1083	U	O4'-C1'-N1	6.11	113.09	108.20
2	N	927	G	N1-C2-N3	-6.11	120.23	123.90
1	M	973	G	C4'-C3'-C2'	-6.11	96.49	102.60
2	N	350	G	C8-N9-C4	6.11	108.84	106.40
2	N	458	U	C5'-C4'-O4'	6.11	116.43	109.10
2	N	460	A	N1-C6-N6	6.11	122.26	118.60
2	N	598	U	C5-C6-N1	6.11	125.75	122.70
3	O	1417	G	N1-C6-O6	6.11	123.56	119.90
3	O	1499	A	C4-C5-C6	6.11	120.05	117.00
2	N	87	C	C5'-C4'-C3'	-6.11	106.23	116.00
2	N	403	C	C5-C6-N1	6.11	124.05	121.00
2	N	413	G	N1-C2-N3	-6.11	120.24	123.90
2	N	428	G	C5'-C4'-O4'	-6.11	101.77	109.10
2	N	462	G	N1-C2-N3	-6.11	120.24	123.90
2	N	779	C	C2-N1-C1'	6.11	125.52	118.80
2	N	920	U	N1-C2-O2	-6.11	118.53	122.80
2	N	925	G	N9-C4-C5	6.11	107.84	105.40
1	M	1002	G	N9-C1'-C2'	-6.10	105.29	112.00
2	N	119	A	C6-C5-N7	-6.10	128.03	132.30
2	N	127	G	P-O5'-C5'	6.10	130.66	120.90
2	N	493	A	C6-C5-N7	-6.10	128.03	132.30
2	N	546	A	C6-C5-N7	-6.10	128.03	132.30
2	N	770	C	C6-N1-C2	-6.10	117.86	120.30
1	M	1024	G	N3-C4-C5	6.10	131.65	128.60
1	M	929	G	N1-C2-N3	-6.10	120.24	123.90
1	M	1386	G	N3-C2-N2	6.10	124.17	119.90
2	N	38	G	C6-N1-C2	6.10	128.76	125.10
2	N	201	G	C6-C5-N7	-6.10	126.74	130.40
2	N	333	U	N1-C2-O2	-6.10	118.53	122.80
2	N	922	G	N1-C2-N3	-6.10	120.24	123.90
3	O	1454	G	C4-C5-C6	6.10	122.46	118.80
3	O	1523	G	N3-C2-N2	6.10	124.17	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1128	C	C3'-C2'-C1'	-6.10	96.62	101.50
2	N	251	G	C4-C5-C6	6.10	122.46	118.80
2	N	356	A	C4-C5-C6	6.10	120.05	117.00
2	N	680	C	N3-C4-N4	6.10	122.27	118.00
3	O	1407	C	P-O5'-C5'	6.10	130.66	120.90
1	M	1348	U	C5'-C4'-O4'	-6.10	101.78	109.10
2	N	5	U	O4'-C1'-N1	6.10	113.08	108.20
1	M	1124	G	N1-C2-N2	-6.09	110.71	116.20
2	N	36	C	O4'-C1'-N1	6.09	113.08	108.20
2	N	204	G	C4-C5-N7	-6.09	108.36	110.80
2	N	509	A	C6-N1-C2	-6.09	114.94	118.60
2	N	704	A	C4'-C3'-C2'	-6.09	96.51	102.60
1	M	959	A	C5-C6-N6	-6.09	118.83	123.70
1	M	1139	G	O4'-C1'-N9	-6.09	103.33	108.20
2	N	100	G	O4'-C1'-N9	6.09	113.07	108.20
2	N	169	C	C6-N1-C2	-6.09	117.86	120.30
2	N	477	C	N3-C4-C5	-6.09	119.46	121.90
2	N	695	A	C4-C5-N7	-6.09	107.66	110.70
2	N	777	A	N3-C4-C5	-6.09	122.54	126.80
2	N	902	G	N3-C2-N2	6.09	124.17	119.90
1	M	986	U	C4-C5-C6	6.09	123.35	119.70
2	N	5	U	P-O5'-C5'	-6.09	111.16	120.90
3	O	1492	A	N3-C4-C5	-6.09	122.54	126.80
1	M	1028	C	C5'-C4'-O4'	6.09	116.41	109.10
1	M	1168	U	N3-C4-O4	6.09	123.66	119.40
2	N	685	G	O4'-C1'-N9	6.09	113.07	108.20
2	N	854	U	P-O5'-C5'	6.09	130.64	120.90
1	M	1263	C	C5-C4-N4	-6.09	115.94	120.20
2	N	174	A	N3-C4-C5	-6.09	122.54	126.80
2	N	330	C	P-O5'-C5'	6.09	130.64	120.90
2	N	688	G	N7-C8-N9	-6.09	110.06	113.10
3	O	1417	G	C4-N9-C1'	6.09	134.41	126.50
1	M	1055	A	C4-C5-N7	6.08	113.74	110.70
1	M	1373	G	C6-N1-C2	6.08	128.75	125.10
2	N	429	U	C5-C4-O4	6.08	129.55	125.90
1	M	981	U	C3'-C2'-C1'	6.08	106.37	101.50
1	M	1033	G	C8-N9-C1'	-6.08	119.09	127.00
1	M	1252	A	C6-C5-N7	-6.08	128.04	132.30
2	N	138	G	C5'-C4'-C3'	6.08	125.73	116.00
2	N	247	G	N3-C2-N2	6.08	124.16	119.90
2	N	261	U	P-O5'-C5'	6.08	130.63	120.90
2	N	356	A	C5-C6-N1	-6.08	114.66	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	716	A	C4'-C3'-C2'	-6.08	96.52	102.60
2	N	397	A	C8-N9-C1'	-6.08	116.75	127.70
2	N	759	A	C4'-C3'-C2'	-6.08	96.52	102.60
1	M	1111	A	C5-C6-N6	-6.08	118.84	123.70
2	N	68	G	C6-C5-N7	-6.08	126.75	130.40
2	N	184	G	N3-C2-N2	6.08	124.16	119.90
2	N	220	G	C4-C5-N7	6.08	113.23	110.80
2	N	297	G	N7-C8-N9	-6.08	110.06	113.10
3	O	1415	G	C4-C5-N7	6.08	113.23	110.80
3	O	1521	C	N3-C4-N4	6.08	122.25	118.00
3	O	1530	G	C4-N9-C1'	6.08	134.40	126.50
2	N	81	A	N9-C4-C5	-6.08	103.37	105.80
2	N	360	G	N1-C2-N3	-6.08	120.25	123.90
2	N	733	G	C4-C5-N7	6.08	113.23	110.80
2	N	812	G	C4-C5-C6	6.08	122.45	118.80
2	N	113	G	N1-C2-N2	6.08	121.67	116.20
2	N	285	C	N3-C2-O2	-6.08	117.65	121.90
2	N	767	A	C3'-C2'-C1'	6.08	106.36	101.50
1	M	941	G	N1-C2-N3	-6.07	120.26	123.90
1	M	1292	G	C5-C6-O6	-6.07	124.96	128.60
2	N	81	A	C8-N9-C4	6.07	108.23	105.80
2	N	162	A	C5-C6-N6	-6.07	118.84	123.70
2	N	281	G	C6-C5-N7	-6.07	126.76	130.40
2	N	470	C	C5-C4-N4	-6.07	115.95	120.20
1	M	1107	C	C6-N1-C2	6.07	122.73	120.30
2	N	615	G	C5-N7-C8	6.07	107.34	104.30
1	M	959	A	C4-C5-C6	6.07	120.03	117.00
1	M	1085	U	P-O3'-C3'	6.07	126.98	119.70
2	N	241	G	N3-C4-C5	6.07	131.63	128.60
2	N	462	G	N3-C4-N9	-6.07	122.36	126.00
2	N	769	G	N3-C4-C5	6.07	131.63	128.60
2	N	827	U	N1-C2-N3	6.07	118.54	114.90
3	O	1438	G	C2-N3-C4	-6.07	108.86	111.90
1	M	1160	G	N7-C8-N9	6.07	116.14	113.10
2	N	213	G	C4-C5-N7	6.07	113.23	110.80
2	N	415	A	C8-N9-C4	-6.07	103.37	105.80
1	M	1250	A	C5-C6-N6	-6.07	118.85	123.70
1	M	1378	C	N3-C4-N4	6.07	122.25	118.00
2	N	213	G	C4-N9-C1'	6.07	134.39	126.50
2	N	513	C	C3'-C2'-C1'	-6.07	96.65	101.50
2	N	832	G	C5-C6-N1	6.07	114.53	111.50
2	N	222	C	N3-C4-C5	-6.07	119.47	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	305	G	C3'-C2'-C1'	6.07	106.35	101.50
2	N	392	C	C6-N1-C2	-6.07	117.87	120.30
2	N	443	C	N3-C2-O2	6.07	126.15	121.90
2	N	509	A	C6-C5-N7	-6.07	128.05	132.30
2	N	785	G	P-O3'-C3'	6.07	126.98	119.70
3	O	1443	C	C5-C4-N4	-6.07	115.95	120.20
2	N	163	C	C1'-O4'-C4'	-6.06	105.05	109.90
2	N	422	C	N3-C2-O2	6.06	126.14	121.90
1	M	1329	A	C5-C6-N1	-6.06	114.67	117.70
3	O	1479	C	C2-N1-C1'	6.06	125.47	118.80
1	M	1020	G	N3-C4-C5	-6.06	125.57	128.60
2	N	294	U	O4'-C1'-N1	6.06	113.05	108.20
2	N	912	C	N3-C2-O2	6.06	126.14	121.90
3	O	1448	C	C4'-C3'-C2'	-6.06	96.54	102.60
3	O	1516	G	C4-C5-C6	6.06	122.44	118.80
1	M	932	C	N3-C4-N4	6.06	122.24	118.00
2	N	11	G	C6-N1-C2	6.06	128.74	125.10
2	N	287	U	N3-C4-O4	6.06	123.64	119.40
2	N	373	A	C5'-C4'-O4'	-6.06	101.83	109.10
2	N	494	G	N1-C6-O6	6.06	123.54	119.90
2	N	684	U	N1-C2-O2	-6.06	118.56	122.80
1	M	980	C	C1'-O4'-C4'	-6.06	105.06	109.90
1	M	1326	U	N3-C4-C5	-6.06	110.97	114.60
2	N	228	A	N7-C8-N9	6.06	116.83	113.80
2	N	449	G	N7-C8-N9	6.06	116.13	113.10
2	N	668	G	C5-C6-N1	-6.06	108.47	111.50
2	N	668	G	N3-C4-N9	6.06	129.63	126.00
3	O	1405	G	N1-C2-N3	-6.06	120.27	123.90
1	M	937	A	C4-C5-C6	6.06	120.03	117.00
2	N	341	C	C5'-C4'-C3'	6.06	125.69	116.00
2	N	614	C	P-O3'-C3'	6.06	126.97	119.70
2	N	663	A	C4-C5-N7	-6.06	107.67	110.70
3	O	1405	G	N9-C1'-C2'	-6.06	105.34	112.00
1	M	1216	A	N9-C4-C5	6.05	108.22	105.80
1	M	1261	A	C4-C5-N7	-6.05	107.67	110.70
1	M	1363	A	C2-N3-C4	-6.05	107.57	110.60
2	N	92	U	C5-C4-O4	6.05	129.53	125.90
2	N	382	A	O4'-C1'-N9	6.05	113.04	108.20
2	N	164	G	N1-C2-N3	-6.05	120.27	123.90
1	M	946	A	C1'-O4'-C4'	6.05	114.74	109.90
2	N	173	U	O4'-C1'-N1	6.05	113.04	108.20
2	N	215	C	P-O5'-C5'	6.05	130.58	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	587	G	OP2-P-O3'	6.05	118.51	105.20
2	N	616	G	C2-N3-C4	6.05	114.93	111.90
2	N	856	C	C5-C6-N1	6.05	124.03	121.00
1	M	1289	A	N3-C4-N9	-6.05	122.56	127.40
2	N	126	G	C6-N1-C2	6.05	128.73	125.10
2	N	213	G	C2-N3-C4	6.05	114.92	111.90
2	N	485	U	P-O3'-C3'	6.05	126.96	119.70
2	N	554	A	N9-C1'-C2'	-6.05	105.35	112.00
2	N	324	G	O4'-C1'-N9	6.05	113.04	108.20
2	N	647	C	P-O5'-C5'	6.05	130.58	120.90
2	N	842	U	C2-N3-C4	-6.05	123.37	127.00
1	M	1184	G	C1'-O4'-C4'	6.05	114.74	109.90
2	N	12	U	P-O3'-C3'	6.05	126.96	119.70
2	N	60	A	C4'-C3'-C2'	6.05	108.65	102.60
2	N	166	U	N3-C2-O2	6.05	126.43	122.20
2	N	330	C	C6-N1-C2	-6.05	117.88	120.30
2	N	619	U	N3-C4-C5	-6.05	110.97	114.60
2	N	804	U	OP1-P-OP2	-6.05	110.53	119.60
2	N	574	A	C1'-O4'-C4'	-6.04	105.06	109.90
1	M	1110	A	O4'-C1'-N9	6.04	113.03	108.20
2	N	343	U	P-O5'-C5'	6.04	130.57	120.90
2	N	752	G	C6-N1-C2	6.04	128.73	125.10
3	O	1396	A	C5-C6-N6	-6.04	118.86	123.70
3	O	1411	C	O4'-C1'-N1	6.04	113.03	108.20
1	M	1328	C	N3-C4-N4	6.04	122.23	118.00
1	M	1386	G	N1-C6-O6	6.04	123.53	119.90
2	N	398	U	O4'-C1'-C2'	-6.04	99.76	105.80
2	N	535	A	N3-C4-C5	-6.04	122.57	126.80
2	N	540	G	O4'-C1'-N9	6.04	113.03	108.20
1	M	1365	G	O4'-C1'-N9	6.04	113.03	108.20
2	N	88	U	O4'-C1'-N1	6.04	113.03	108.20
2	N	200	G	N7-C8-N9	6.04	116.12	113.10
2	N	502	A	C5-C6-N6	-6.04	118.87	123.70
2	N	584	G	C6-C5-N7	-6.04	126.78	130.40
2	N	792	A	N3-C4-C5	-6.04	122.57	126.80
1	M	1072	G	C8-N9-C4	6.04	108.81	106.40
1	M	1334	G	C5-N7-C8	6.04	107.32	104.30
1	M	1372	U	O4'-C1'-N1	6.04	113.03	108.20
2	N	167	A	C4-C5-N7	-6.04	107.68	110.70
2	N	390	U	N3-C2-O2	6.04	126.42	122.20
2	N	396	C	N3-C4-N4	6.04	122.22	118.00
2	N	547	A	C8-N9-C4	-6.04	103.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1160	G	N1-C6-O6	6.03	123.52	119.90
2	N	281	G	O4'-C1'-N9	6.03	113.03	108.20
2	N	361	G	P-O3'-C3'	6.03	126.94	119.70
2	N	425	G	N7-C8-N9	6.03	116.12	113.10
2	N	667	G	C5-N7-C8	6.03	107.32	104.30
2	N	680	C	O4'-C1'-N1	6.03	113.03	108.20
2	N	895	G	N3-C4-C5	-6.03	125.58	128.60
1	M	1241	G	O4'-C1'-N9	6.03	113.03	108.20
2	N	700	G	C6-C5-N7	-6.03	126.78	130.40
1	M	1044	A	C6-N1-C2	6.03	122.22	118.60
1	M	1341	U	N3-C4-O4	6.03	123.62	119.40
2	N	421	U	C2-N3-C4	-6.03	123.38	127.00
2	N	627	G	C4-C5-N7	-6.03	108.39	110.80
2	N	828	U	N1-C2-O2	-6.03	118.58	122.80
3	O	1458	G	C8-N9-C1'	-6.03	119.16	127.00
1	M	1169	A	N1-C2-N3	6.03	132.31	129.30
2	N	426	U	C6-N1-C2	-6.03	117.38	121.00
2	N	197	A	C5'-C4'-O4'	6.03	116.33	109.10
2	N	578	C	C5-C4-N4	-6.03	115.98	120.20
3	O	1508	A	C6-C5-N7	-6.03	128.08	132.30
2	N	203	G	C2-N3-C4	6.02	114.91	111.90
1	M	1001	C	N3-C4-C5	6.02	124.31	121.90
1	M	1205	U	P-O5'-C5'	6.02	130.54	120.90
3	O	1476	A	C5-C6-N1	-6.02	114.69	117.70
2	N	162	A	C5-N7-C8	6.02	106.91	103.90
2	N	553	A	C5-C6-N6	-6.02	118.88	123.70
1	M	958	A	C6-C5-N7	-6.02	128.09	132.30
1	M	1142	G	C5-C6-O6	6.02	132.21	128.60
2	N	156	C	C5-C6-N1	6.02	124.01	121.00
2	N	209	U	C2-N3-C4	6.02	130.61	127.00
2	N	922	G	N1-C6-O6	6.02	123.51	119.90
1	M	1122	U	P-O5'-C5'	6.02	130.53	120.90
2	N	582	C	N3-C4-N4	6.02	122.21	118.00
3	O	1521	C	C6-N1-C2	-6.02	117.89	120.30
1	M	930	C	C5-C4-N4	-6.02	115.99	120.20
2	N	865	A	C5-N7-C8	6.02	106.91	103.90
2	N	903	G	N3-C4-C5	6.02	131.61	128.60
1	M	962	C	C3'-C2'-C1'	-6.01	96.69	101.50
1	M	1136	C	P-O5'-C5'	-6.01	111.28	120.90
1	M	1368	A	P-O5'-C5'	-6.01	111.28	120.90
1	M	1379	G	O4'-C1'-N9	6.01	113.01	108.20
2	N	607	A	N9-C4-C5	6.01	108.21	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	720	C	N1-C2-N3	-6.01	114.99	119.20
2	N	719	C	C6-N1-C2	-6.01	117.89	120.30
1	M	1205	U	N1-C2-N3	6.01	118.51	114.90
1	M	1338	G	N3-C4-N9	6.01	129.61	126.00
2	N	37	U	C6-N1-C2	6.01	124.61	121.00
2	N	841	C	N1-C2-O2	6.01	122.51	118.90
2	N	907	A	C5'-C4'-C3'	-6.01	106.38	116.00
1	M	1086	U	P-O5'-C5'	-6.01	111.29	120.90
2	N	649	A	C5'-C4'-C3'	6.01	125.62	116.00
2	N	850	U	N1-C2-N3	-6.01	111.29	114.90
1	M	1033	G	C6-C5-N7	-6.01	126.80	130.40
2	N	132	C	N3-C4-N4	6.01	122.20	118.00
2	N	339	C	N3-C4-C5	-6.01	119.50	121.90
2	N	16	A	C4-C5-C6	6.00	120.00	117.00
2	N	94	G	C5-C6-O6	-6.00	125.00	128.60
1	M	953	G	N1-C2-N3	-6.00	120.30	123.90
1	M	986	U	N1-C2-O2	6.00	127.00	122.80
2	N	61	G	C6-C5-N7	-6.00	126.80	130.40
2	N	212	G	C5-C6-O6	-6.00	125.00	128.60
2	N	656	G	C2-N3-C4	-6.00	108.90	111.90
1	M	1058	G	P-O5'-C5'	6.00	130.50	120.90
2	N	511	C	C2'-C3'-O3'	6.00	123.29	113.70
1	M	1072	G	C5-N7-C8	-5.99	101.30	104.30
1	M	1175	G	C5-N7-C8	5.99	107.30	104.30
2	N	291	U	N3-C4-O4	5.99	123.59	119.40
2	N	679	C	C1'-O4'-C4'	-5.99	105.11	109.90
2	N	687	A	O4'-C1'-N9	5.99	112.99	108.20
2	N	688	G	N3-C2-N2	5.99	124.09	119.90
2	N	927	G	C5-C6-N1	-5.99	108.50	111.50
3	O	1431	A	C6-C5-N7	-5.99	128.11	132.30
2	N	171	A	N7-C8-N9	-5.99	110.81	113.80
2	N	256	U	N3-C4-C5	-5.99	111.00	114.60
2	N	305	G	C5-C6-O6	-5.99	125.00	128.60
2	N	467	U	C3'-C2'-C1'	-5.99	96.71	101.50
1	M	1005	A	O4'-C1'-N9	5.99	112.99	108.20
2	N	107	G	C5'-C4'-O4'	5.99	116.29	109.10
2	N	315	A	O4'-C1'-N9	5.99	112.99	108.20
2	N	704	A	C4-C5-C6	5.99	119.99	117.00
2	N	786	G	C5-C6-O6	-5.99	125.01	128.60
2	N	243	A	N1-C6-N6	5.99	122.19	118.60
2	N	824	G	N1-C2-N3	-5.99	120.31	123.90
1	M	989	U	N3-C4-C5	5.99	118.19	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	158	G	N3-C4-C5	-5.99	125.61	128.60
2	N	478	A	C3'-C2'-C1'	-5.99	96.71	101.50
1	M	974	A	N9-C4-C5	5.98	108.19	105.80
2	N	357	G	C6-N1-C2	5.98	128.69	125.10
2	N	633	G	N3-C2-N2	5.98	124.09	119.90
1	M	1067	A	N3-C4-N9	5.98	132.19	127.40
2	N	6	G	P-O5'-C5'	-5.98	111.33	120.90
2	N	831	A	C4-C5-N7	5.98	113.69	110.70
2	N	889	A	P-O3'-C3'	5.98	126.88	119.70
1	M	1307	U	N1-C2-N3	-5.98	111.31	114.90
2	N	349	A	C5-C6-N1	-5.98	114.71	117.70
2	N	468	A	C5-C6-N1	-5.98	114.71	117.70
2	N	755	G	N3-C4-C5	-5.98	125.61	128.60
2	N	217	C	N1-C2-O2	-5.98	115.31	118.90
2	N	563	A	C5-C6-N1	-5.98	114.71	117.70
2	N	666	G	C4-N9-C1'	5.98	134.27	126.50
3	O	1434	A	N3-C4-N9	5.98	132.18	127.40
3	O	1454	G	C2-N3-C4	5.98	114.89	111.90
2	N	198	G	C5-C6-O6	-5.98	125.02	128.60
2	N	838	G	C2-N3-C4	-5.98	108.91	111.90
2	N	286	C	N3-C4-N4	5.97	122.18	118.00
1	M	1173	U	N1-C2-N3	-5.97	111.32	114.90
2	N	852	G	C6-C5-N7	-5.97	126.82	130.40
1	M	956	U	N1-C2-N3	-5.97	111.32	114.90
1	M	1037	C	C4-C5-C6	-5.97	114.42	117.40
1	M	1079	G	C5'-C4'-C3'	5.97	125.55	116.00
1	M	1138	G	C1'-O4'-C4'	-5.97	105.12	109.90
1	M	1231	G	N9-C4-C5	-5.97	103.01	105.40
1	M	1292	G	P-O5'-C5'	5.97	130.45	120.90
2	N	158	G	O4'-C4'-C3'	-5.97	98.03	104.00
2	N	660	C	C4'-C3'-C2'	-5.97	96.63	102.60
2	N	752	G	C4-N9-C1'	-5.97	118.74	126.50
1	M	1063	C	C6-N1-C2	-5.97	117.91	120.30
1	M	1261	A	C4-N9-C1'	5.97	137.04	126.30
2	N	694	A	N7-C8-N9	-5.97	110.82	113.80
2	N	498	A	C5-C6-N6	-5.97	118.93	123.70
2	N	619	U	C5-C6-N1	5.97	125.68	122.70
2	N	146	G	N7-C8-N9	5.96	116.08	113.10
2	N	173	U	O5'-C5'-C4'	5.96	123.03	111.70
2	N	624	C	O4'-C1'-N1	5.96	112.97	108.20
2	N	724	G	N3-C4-N9	5.96	129.58	126.00
2	N	787	A	P-O5'-C5'	5.96	130.44	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	937	A	N3-C4-C5	-5.96	122.63	126.80
2	N	177	G	N1-C2-N3	-5.96	120.32	123.90
2	N	320	A	C2-N3-C4	-5.96	107.62	110.60
2	N	671	G	C6-N1-C2	-5.96	121.52	125.10
2	N	851	G	N3-C4-N9	-5.96	122.42	126.00
1	M	1205	U	N3-C4-O4	5.96	123.57	119.40
2	N	109	A	OP2-P-O3'	5.96	118.32	105.20
2	N	770	C	C6-N1-C1'	-5.96	113.64	120.80
3	O	1467	C	N3-C4-C5	-5.96	119.52	121.90
1	M	1137	C	C4'-C3'-C2'	-5.96	96.64	102.60
1	M	1280	A	C4-C5-N7	-5.96	107.72	110.70
2	N	100	G	P-O5'-C5'	5.96	130.43	120.90
2	N	357	G	N1-C2-N3	-5.96	120.32	123.90
2	N	660	C	N3-C4-N4	5.96	122.17	118.00
2	N	841	C	O4'-C1'-C2'	5.96	112.96	107.60
1	M	969	A	C5-N7-C8	-5.96	100.92	103.90
1	M	1047	G	O4'-C1'-N9	5.96	112.97	108.20
1	M	1108	G	N3-C4-C5	-5.96	125.62	128.60
1	M	1170	A	C4-C5-N7	-5.96	107.72	110.70
1	M	1335	U	C5-C4-O4	-5.96	122.33	125.90
2	N	87	C	C6-N1-C2	5.96	122.68	120.30
2	N	183	C	C2-N3-C4	5.96	122.88	119.90
2	N	298	A	P-O3'-C3'	5.96	126.85	119.70
2	N	516	U	N1-C2-N3	-5.96	111.33	114.90
2	N	645	G	C5-C6-N1	-5.96	108.52	111.50
2	N	863	U	N3-C4-C5	-5.96	111.03	114.60
1	M	965	U	C5'-C4'-C3'	-5.96	106.47	116.00
2	N	58	C	C4-C5-C6	5.96	120.38	117.40
2	N	532	A	O4'-C1'-N9	5.96	112.96	108.20
1	M	936	C	N1-C2-N3	-5.95	115.03	119.20
1	M	1130	A	C5-C6-N6	-5.95	118.94	123.70
2	N	221	C	O4'-C1'-N1	5.95	112.96	108.20
2	N	711	G	N9-C4-C5	5.95	107.78	105.40
1	M	953	G	C5-C6-O6	-5.95	125.03	128.60
2	N	156	C	N3-C4-N4	5.95	122.17	118.00
2	N	376	G	C5'-C4'-O4'	5.95	116.24	109.10
2	N	637	C	C3'-C2'-C1'	-5.95	96.74	101.50
2	N	674	G	C6-C5-N7	-5.95	126.83	130.40
2	N	168	G	C1'-O4'-C4'	-5.95	105.14	109.90
3	O	1482	G	N7-C8-N9	5.95	116.08	113.10
2	N	687	A	C5-C6-N6	-5.95	118.94	123.70
2	N	916	U	C6-N1-C2	-5.95	117.43	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1039	G	C4-C5-N7	5.95	113.18	110.80
1	M	1302	C	C5-C6-N1	5.95	123.97	121.00
2	N	650	G	C5-C6-O6	-5.95	125.03	128.60
3	O	1465	A	C2-N3-C4	-5.95	107.63	110.60
2	N	352	C	N1-C2-O2	5.94	122.47	118.90
2	N	361	G	C5-C6-N1	-5.94	108.53	111.50
2	N	458	U	C5-C6-N1	5.94	125.67	122.70
2	N	240	G	C2-N3-C4	5.94	114.87	111.90
1	M	1161	C	P-O3'-C3'	-5.94	112.57	119.70
2	N	5	U	N1-C2-N3	5.94	118.46	114.90
2	N	27	G	C5-C6-O6	-5.94	125.03	128.60
2	N	637	C	C4-C5-C6	5.94	120.37	117.40
2	N	700	G	O4'-C1'-N9	5.94	112.95	108.20
1	M	1114	C	O4'-C1'-N1	5.94	112.95	108.20
2	N	486	U	C6-N1-C2	-5.94	117.44	121.00
2	N	621	A	C8-N9-C4	-5.94	103.42	105.80
2	N	705	G	C2-N3-C4	-5.94	108.93	111.90
2	N	862	C	O4'-C1'-N1	5.94	112.95	108.20
3	O	1447	A	O4'-C1'-N9	5.94	112.95	108.20
1	M	1318	A	OP1-P-OP2	-5.94	110.70	119.60
2	N	221	C	C5-C6-N1	5.94	123.97	121.00
1	M	1000	A	N1-C2-N3	-5.93	126.33	129.30
1	M	1304	G	C6-C5-N7	5.93	133.96	130.40
2	N	328	C	C4'-C3'-C2'	-5.93	96.67	102.60
2	N	421	U	N1-C2-O2	-5.93	118.64	122.80
2	N	439	U	C5-C4-O4	-5.93	122.34	125.90
1	M	1127	G	N1-C2-N3	-5.93	120.34	123.90
2	N	267	C	C5-C6-N1	5.93	123.97	121.00
2	N	295	C	N3-C4-N4	5.93	122.15	118.00
2	N	539	A	C5-N7-C8	5.93	106.87	103.90
2	N	703	G	C8-N9-C4	5.93	108.77	106.40
2	N	731	G	C5-C6-O6	-5.93	125.04	128.60
2	N	821	G	C5-C6-N1	-5.93	108.53	111.50
2	N	662	U	O4'-C1'-N1	5.93	112.94	108.20
2	N	533	A	C8-N9-C4	-5.93	103.43	105.80
2	N	596	A	O4'-C1'-N9	5.93	112.94	108.20
2	N	778	G	C5-C6-O6	-5.93	125.04	128.60
1	M	1215	G	C6-C5-N7	-5.93	126.84	130.40
2	N	416	G	N3-C2-N2	5.93	124.05	119.90
3	O	1402	C	C6-N1-C2	5.93	122.67	120.30
1	M	988	G	C5-C6-O6	-5.92	125.05	128.60
1	M	1057	G	O4'-C1'-N9	5.92	112.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1097	C	N3-C4-N4	5.92	122.15	118.00
1	M	1265	C	N3-C4-N4	5.92	122.15	118.00
1	M	1015	G	O4'-C1'-N9	5.92	112.94	108.20
2	N	263	A	C2-N3-C4	-5.92	107.64	110.60
2	N	823	C	O4'-C1'-N1	5.92	112.94	108.20
1	M	986	U	N3-C4-C5	-5.92	111.05	114.60
1	M	1064	G	N1-C6-O6	5.92	123.45	119.90
2	N	36	C	C1'-O4'-C4'	5.92	114.64	109.90
2	N	85	U	C5-C4-O4	-5.92	122.35	125.90
2	N	127	G	N3-C2-N2	-5.92	115.75	119.90
2	N	347	G	N9-C4-C5	5.92	107.77	105.40
2	N	605	U	N3-C2-O2	5.92	126.34	122.20
2	N	57	G	C6-N1-C2	5.92	128.65	125.10
2	N	375	U	N3-C4-O4	5.92	123.54	119.40
1	M	1078	U	C3'-C2'-C1'	-5.92	96.77	101.50
1	M	1332	A	N3-C4-N9	5.92	132.13	127.40
2	N	86	G	C2-N3-C4	5.92	114.86	111.90
1	M	964	A	C5-C6-N1	-5.92	114.74	117.70
1	M	1283	U	C3'-C2'-C1'	5.92	106.23	101.50
1	M	1294	G	N7-C8-N9	-5.92	110.14	113.10
2	N	179	A	C5-N7-C8	-5.92	100.94	103.90
2	N	379	C	N1-C2-N3	-5.92	115.06	119.20
2	N	391	G	C6-N1-C2	-5.92	121.55	125.10
2	N	548	G	C5-N7-C8	-5.92	101.34	104.30
1	M	1352	C	N3-C4-N4	5.92	122.14	118.00
2	N	32	A	C2-N3-C4	-5.92	107.64	110.60
2	N	656	G	C8-N9-C1'	5.92	134.69	127.00
2	N	783	C	C6-N1-C2	-5.92	117.93	120.30
1	M	1019	A	O4'-C1'-N9	5.91	112.93	108.20
1	M	1073	U	C5-C4-O4	-5.91	122.35	125.90
2	N	11	G	C4-C5-N7	-5.91	108.44	110.80
2	N	408	A	N7-C8-N9	-5.91	110.84	113.80
2	N	829	G	C4-N9-C1'	5.91	134.19	126.50
1	M	1258	G	N3-C4-N9	-5.91	122.45	126.00
2	N	418	C	N1-C2-N3	-5.91	115.06	119.20
1	M	1043	G	C2-N3-C4	5.91	114.86	111.90
2	N	242	G	N7-C8-N9	5.91	116.06	113.10
2	N	292	G	O4'-C1'-N9	5.91	112.93	108.20
2	N	485	U	O4'-C1'-N1	5.91	112.93	108.20
2	N	747	A	C5-N7-C8	5.91	106.86	103.90
2	N	278	G	N3-C2-N2	5.91	124.04	119.90
2	N	633	G	N9-C4-C5	5.91	107.76	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	775	G	C5-C6-O6	-5.91	125.06	128.60
1	M	941	G	P-O5'-C5'	5.91	130.35	120.90
1	M	1360	A	C2-N3-C4	-5.91	107.65	110.60
1	M	1081	A	N1-C2-N3	5.91	132.25	129.30
2	N	345	C	C5-C6-N1	5.91	123.95	121.00
2	N	446	G	C6-C5-N7	-5.91	126.86	130.40
2	N	601	G	C6-N1-C2	-5.91	121.56	125.10
3	O	1434	A	N3-C4-C5	-5.91	122.67	126.80
1	M	1167	A	C4-C5-N7	-5.90	107.75	110.70
1	M	1363	A	C3'-C2'-C1'	-5.90	96.78	101.50
2	N	372	C	C4'-C3'-C2'	5.90	108.50	102.60
2	N	724	G	N3-C4-C5	-5.90	125.65	128.60
2	N	134	G	C5-C6-N1	-5.90	108.55	111.50
2	N	160	A	N9-C4-C5	5.90	108.16	105.80
2	N	250	A	C4-C5-C6	5.90	119.95	117.00
2	N	321	A	C2-N3-C4	-5.90	107.65	110.60
2	N	404	G	N3-C2-N2	5.90	124.03	119.90
2	N	785	G	O4'-C1'-N9	5.90	112.92	108.20
1	M	1150	A	O4'-C1'-N9	5.90	112.92	108.20
1	M	1198	G	N1-C2-N3	-5.90	120.36	123.90
2	N	507	C	C5-C4-N4	-5.90	116.07	120.20
2	N	537	G	N1-C2-N2	-5.90	110.89	116.20
2	N	666	G	C8-N9-C1'	-5.90	119.33	127.00
2	N	181	A	C2-N3-C4	-5.90	107.65	110.60
2	N	259	G	N1-C2-N3	-5.90	120.36	123.90
2	N	534	U	C5'-C4'-O4'	5.90	116.18	109.10
2	N	636	U	N3-C4-C5	-5.90	111.06	114.60
2	N	757	U	O4'-C1'-N1	5.90	112.92	108.20
1	M	1163	A	P-O5'-C5'	5.90	130.33	120.90
1	M	1064	G	C5'-C4'-C3'	5.89	125.43	116.00
2	N	31	G	N3-C2-N2	5.89	124.03	119.90
2	N	44	A	C4-C5-N7	-5.89	107.75	110.70
2	N	595	A	N7-C8-N9	-5.89	110.85	113.80
2	N	873	A	C5'-C4'-O4'	5.89	116.17	109.10
1	M	997	U	O4'-C1'-N1	5.89	112.91	108.20
1	M	1151	A	C1'-O4'-C4'	5.89	114.61	109.90
1	M	1304	G	C5-C6-O6	-5.89	125.06	128.60
1	M	1316	G	C6-C5-N7	-5.89	126.86	130.40
2	N	245	U	N1-C1'-C2'	-5.89	105.52	112.00
2	N	254	G	N7-C8-N9	5.89	116.05	113.10
2	N	264	C	C6-N1-C2	5.89	122.66	120.30
2	N	372	C	C2-N1-C1'	5.89	125.28	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	955	U	C6-N1-C2	-5.89	117.47	121.00
2	N	280	C	O4'-C1'-N1	5.89	112.91	108.20
3	O	1461	G	C6-N1-C2	5.89	128.63	125.10
1	M	1261	A	C5-N7-C8	5.89	106.84	103.90
2	N	424	G	C2-N3-C4	-5.89	108.95	111.90
2	N	579	A	C4-C5-C6	5.89	119.94	117.00
2	N	881	G	C3'-C2'-C1'	-5.89	96.79	101.50
1	M	1147	C	C2'-C3'-O3'	5.89	123.12	113.70
1	M	1256	A	N9-C4-C5	5.89	108.15	105.80
2	N	275	G	C1'-O4'-C4'	5.89	114.61	109.90
3	O	1520	C	C5-C6-N1	5.89	123.94	121.00
1	M	1193	G	C2-N3-C4	5.88	114.84	111.90
2	N	843	U	N3-C2-O2	-5.88	118.08	122.20
3	O	1457	G	C5'-C4'-C3'	5.88	125.41	116.00
2	N	89	U	C6-N1-C1'	-5.88	112.96	121.20
2	N	497	G	C8-N9-C4	-5.88	104.05	106.40
2	N	23	C	N3-C4-N4	5.88	122.12	118.00
2	N	302	G	C4-C5-C6	5.88	122.33	118.80
2	N	313	A	N9-C4-C5	5.88	108.15	105.80
2	N	455	G	C5'-C4'-O4'	-5.88	102.04	109.10
2	N	807	A	O4'-C4'-C3'	-5.88	98.12	104.00
1	M	1338	G	C2-N3-C4	5.88	114.84	111.90
2	N	769	G	N9-C4-C5	-5.88	103.05	105.40
1	M	1130	A	P-O3'-C3'	5.88	126.75	119.70
2	N	279	A	C5-C6-N6	-5.88	119.00	123.70
2	N	717	U	C1'-O4'-C4'	5.88	114.60	109.90
2	N	803	G	C4'-C3'-C2'	-5.88	96.72	102.60
2	N	836	G	O4'-C1'-C2'	-5.88	99.92	105.80
1	M	1202	U	N3-C2-O2	5.88	126.31	122.20
2	N	515	G	N3-C2-N2	5.88	124.01	119.90
2	N	764	C	C5-C4-N4	-5.88	116.09	120.20
2	N	844	G	C5-C6-N1	-5.88	108.56	111.50
2	N	912	C	N1-C2-O2	5.88	122.43	118.90
3	O	1396	A	P-O5'-C5'	5.88	130.30	120.90
3	O	1434	A	P-O5'-C5'	5.88	130.30	120.90
2	N	125	U	C6-N1-C2	-5.87	117.48	121.00
2	N	492	C	O5'-C5'-C4'	-5.87	100.54	111.70
2	N	805	C	C5-C6-N1	5.87	123.94	121.00
1	M	1012	A	O4'-C4'-C3'	-5.87	98.13	104.00
1	M	1367	C	N3-C4-C5	-5.87	119.55	121.90
2	N	60	A	C5-C6-N1	-5.87	114.76	117.70
2	N	386	C	N3-C4-C5	-5.87	119.55	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	463	U	C4-C5-C6	-5.87	116.18	119.70
2	N	671	G	N9-C4-C5	-5.87	103.05	105.40
3	O	1411	C	P-O5'-C5'	-5.87	111.51	120.90
2	N	79	G	C4-C5-N7	5.87	113.15	110.80
2	N	254	G	C5'-C4'-C3'	5.87	125.39	116.00
1	M	967	C	N3-C4-N4	5.87	122.11	118.00
1	M	1225	A	N9-C4-C5	5.87	108.15	105.80
2	N	121	U	C5-C6-N1	5.87	125.63	122.70
2	N	204	G	C5'-C4'-O4'	5.87	116.14	109.10
3	O	1480	A	C3'-C2'-C1'	5.87	106.19	101.50
2	N	277	C	N3-C4-N4	5.87	122.11	118.00
1	M	1099	G	C4'-C3'-C2'	-5.87	96.73	102.60
1	M	1339	A	C6-C5-N7	-5.87	128.19	132.30
2	N	119	A	O3'-P-O5'	5.87	115.14	104.00
2	N	136	C	N3-C4-N4	5.87	122.11	118.00
2	N	890	G	N7-C8-N9	5.87	116.03	113.10
2	N	269	C	C2-N1-C1'	5.86	125.25	118.80
2	N	363	A	C5-C6-N1	-5.86	114.77	117.70
2	N	535	A	P-O5'-C5'	-5.86	111.52	120.90
3	O	1500	A	C6-C5-N7	-5.86	128.19	132.30
2	N	717	U	C5'-C4'-C3'	-5.86	106.62	116.00
2	N	23	C	C1'-O4'-C4'	-5.86	105.21	109.90
2	N	91	U	C2-N3-C4	-5.86	123.48	127.00
2	N	519	C	N3-C4-N4	5.86	122.10	118.00
2	N	765	G	N3-C4-N9	-5.86	122.48	126.00
3	O	1482	G	N1-C2-N2	-5.86	110.93	116.20
2	N	404	G	C5-C6-O6	-5.86	125.08	128.60
2	N	750	C	N3-C2-O2	5.86	126.00	121.90
2	N	800	G	N3-C2-N2	5.86	124.00	119.90
1	M	1350	A	C5-C6-N1	-5.86	114.77	117.70
2	N	780	A	P-O3'-C3'	5.86	126.73	119.70
2	N	426	U	N1-C2-O2	-5.85	118.70	122.80
1	M	1186	G	C6-C5-N7	-5.85	126.89	130.40
2	N	576	C	N3-C4-N4	5.85	122.10	118.00
1	M	1379	G	C4-N9-C1'	-5.85	118.89	126.50
3	O	1518	A	N3-C4-N9	5.85	132.08	127.40
2	N	302	G	C4-N9-C1'	-5.85	118.90	126.50
2	N	846	G	N9-C4-C5	5.85	107.74	105.40
3	O	1479	C	N3-C4-N4	5.85	122.09	118.00
3	O	1500	A	C5'-C4'-C3'	5.85	125.36	116.00
1	M	1021	A	N9-C4-C5	-5.85	103.46	105.80
2	N	105	G	C4'-C3'-C2'	-5.85	96.75	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1486	G	O4'-C1'-N9	5.85	112.88	108.20
1	M	1334	G	C4-C5-N7	-5.85	108.46	110.80
2	N	633	G	C6-C5-N7	-5.85	126.89	130.40
1	M	1105	A	C8-N9-C4	-5.84	103.46	105.80
1	M	1355	G	C8-N9-C4	-5.84	104.06	106.40
2	N	519	C	O5'-P-OP2	5.84	117.71	110.70
1	M	963	G	P-O3'-C3'	-5.84	112.69	119.70
1	M	1337	G	C5-C6-N1	-5.84	108.58	111.50
1	M	937	A	N3-C4-N9	5.84	132.07	127.40
1	M	1313	U	C5-C4-O4	-5.84	122.39	125.90
2	N	49	U	N3-C4-O4	5.84	123.49	119.40
2	N	292	G	C3'-C2'-C1'	5.84	106.17	101.50
2	N	846	G	C4-N9-C1'	5.84	134.09	126.50
2	N	908	A	C5-C6-N6	-5.84	119.03	123.70
3	O	1469	C	C5-C4-N4	-5.84	116.11	120.20
1	M	1174	G	C5'-C4'-C3'	5.84	125.34	116.00
1	M	1332	A	P-O5'-C5'	-5.84	111.56	120.90
2	N	220	G	N3-C2-N2	5.84	123.99	119.90
2	N	260	G	N3-C4-N9	-5.84	122.50	126.00
2	N	424	G	N3-C4-N9	-5.84	122.50	126.00
2	N	483	C	N3-C4-N4	5.84	122.09	118.00
1	M	1385	G	C6-N1-C2	5.84	128.60	125.10
2	N	898	G	C2-N3-C4	5.84	114.82	111.90
1	M	1247	U	O4'-C1'-N1	5.84	112.87	108.20
2	N	317	U	N1-C2-O2	-5.84	118.71	122.80
2	N	346	G	P-O5'-C5'	-5.84	111.56	120.90
2	N	536	C	N3-C4-C5	5.84	124.23	121.90
1	M	1028	C	C6-N1-C2	5.83	122.63	120.30
2	N	434	U	N3-C4-C5	-5.83	111.10	114.60
2	N	486	U	O5'-P-OP2	-5.83	100.45	105.70
2	N	632	U	C5-C4-O4	5.83	129.40	125.90
2	N	912	C	OP1-P-OP2	-5.83	110.85	119.60
1	M	1308	U	O4'-C1'-N1	5.83	112.86	108.20
1	M	1361	G	O4'-C1'-N9	5.83	112.86	108.20
2	N	762	U	O4'-C1'-C2'	-5.83	99.97	105.80
2	N	196	A	N3-C4-C5	-5.83	122.72	126.80
1	M	1379	G	N1-C2-N3	-5.83	120.40	123.90
2	N	97	G	N1-C2-N3	-5.83	120.40	123.90
2	N	567	G	N3-C2-N2	5.83	123.98	119.90
3	O	1529	G	C4-N9-C1'	5.83	134.08	126.50
1	M	1223	C	C1'-O4'-C4'	-5.83	105.24	109.90
1	M	1310	G	C6-C5-N7	-5.83	126.91	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	539	A	P-O3'-C3'	-5.83	112.71	119.70
2	N	555	U	C2-N3-C4	-5.83	123.50	127.00
2	N	783	C	N3-C4-N4	5.83	122.08	118.00
2	N	868	C	C2-N1-C1'	5.83	125.21	118.80
2	N	23	C	P-O5'-C5'	5.82	130.22	120.90
2	N	33	A	C6-C5-N7	-5.82	128.22	132.30
2	N	809	G	C5-C6-N1	-5.82	108.59	111.50
2	N	912	C	C4-C5-C6	5.82	120.31	117.40
2	N	777	A	N9-C1'-C2'	-5.82	105.60	112.00
1	M	977	A	C6-N1-C2	5.82	122.09	118.60
1	M	1067	A	C5-C6-N6	-5.82	119.04	123.70
1	M	1353	G	C1'-O4'-C4'	5.82	114.56	109.90
2	N	114	U	N3-C4-C5	-5.82	111.11	114.60
2	N	247	G	OP1-P-OP2	-5.82	110.87	119.60
2	N	597	G	N3-C4-N9	-5.82	122.51	126.00
1	M	1120	C	N3-C4-N4	5.82	122.07	118.00
2	N	320	A	C6-C5-N7	-5.82	128.23	132.30
2	N	380	G	C5'-C4'-C3'	-5.82	106.69	116.00
3	O	1457	G	O4'-C1'-N9	5.82	112.86	108.20
3	O	1526	G	N1-C2-N3	-5.82	120.41	123.90
1	M	1050	G	C6-C5-N7	-5.82	126.91	130.40
1	M	1169	A	N7-C8-N9	-5.82	110.89	113.80
2	N	196	A	C8-N9-C4	5.82	108.13	105.80
2	N	266	G	N7-C8-N9	-5.82	110.19	113.10
2	N	887	G	N3-C4-C5	-5.82	125.69	128.60
3	O	1487	G	O4'-C1'-N9	5.82	112.85	108.20
1	M	1075	U	N3-C2-O2	5.81	126.27	122.20
2	N	230	G	C6-N1-C2	5.81	128.59	125.10
2	N	293	G	N3-C4-N9	5.81	129.49	126.00
2	N	418	C	C5-C4-N4	-5.81	116.13	120.20
2	N	507	C	C4-C5-C6	-5.81	114.49	117.40
2	N	332	G	N7-C8-N9	-5.81	110.19	113.10
2	N	670	G	N3-C2-N2	5.81	123.97	119.90
3	O	1471	U	N3-C4-O4	5.81	123.47	119.40
2	N	255	G	C8-N9-C4	-5.81	104.08	106.40
2	N	264	C	N3-C4-C5	5.81	124.22	121.90
2	N	426	U	C2-N3-C4	-5.81	123.51	127.00
2	N	542	G	O4'-C1'-N9	5.81	112.85	108.20
3	O	1400	C	O4'-C1'-N1	5.81	112.85	108.20
1	M	931	C	C4-C5-C6	5.81	120.31	117.40
1	M	954	G	N3-C4-N9	-5.81	122.51	126.00
1	M	1045	C	C5-C6-N1	5.81	123.91	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	88	U	C4'-C3'-C2'	-5.81	96.79	102.60
1	M	934	C	C2-N3-C4	5.81	122.80	119.90
1	M	1016	A	N3-C4-C5	-5.81	122.73	126.80
2	N	155	A	N9-C4-C5	-5.81	103.48	105.80
2	N	167	A	C2-N3-C4	-5.81	107.70	110.60
2	N	484	G	C8-N9-C4	5.81	108.72	106.40
2	N	322	C	C2-N1-C1'	5.81	125.19	118.80
2	N	360	G	N3-C4-N9	5.81	129.48	126.00
1	M	1249	C	C5-C4-N4	5.80	124.26	120.20
2	N	104	G	N1-C2-N2	-5.80	110.97	116.20
2	N	787	A	C5'-C4'-O4'	5.80	116.07	109.10
3	O	1468	A	C6-N1-C2	5.80	122.08	118.60
2	N	574	A	C5-N7-C8	5.80	106.80	103.90
1	M	957	U	C5-C4-O4	-5.80	122.42	125.90
1	M	1178	G	O4'-C1'-N9	5.80	112.84	108.20
1	M	1246	A	C4-C5-N7	5.80	113.60	110.70
2	N	66	A	C5-N7-C8	5.80	106.80	103.90
2	N	190	A	C4-C5-C6	5.80	119.90	117.00
2	N	653	U	O4'-C1'-N1	5.80	112.84	108.20
2	N	828	U	P-O5'-C5'	5.80	130.18	120.90
3	O	1415	G	N7-C8-N9	5.80	116.00	113.10
3	O	1500	A	O4'-C4'-C3'	-5.80	98.20	104.00
1	M	1296	C	N3-C4-N4	5.80	122.06	118.00
2	N	774	G	C5-C6-N1	-5.80	108.60	111.50
1	M	1106	G	C6-C5-N7	-5.80	126.92	130.40
1	M	1185	G	N1-C6-O6	5.80	123.38	119.90
2	N	105	G	N3-C4-C5	5.80	131.50	128.60
2	N	843	U	O5'-C5'-C4'	5.80	122.71	111.70
2	N	865	A	C5-C6-N6	-5.80	119.06	123.70
3	O	1391	U	O4'-C1'-N1	5.80	112.84	108.20
3	O	1452	C	C5-C4-N4	-5.80	116.14	120.20
1	M	1014	A	N7-C8-N9	5.79	116.70	113.80
1	M	1203	C	C2-N3-C4	5.79	122.80	119.90
2	N	119	A	C8-N9-C4	-5.79	103.48	105.80
2	N	395	C	N3-C4-C5	-5.79	119.58	121.90
2	N	491	G	N9-C4-C5	-5.79	103.08	105.40
2	N	819	A	OP1-P-OP2	-5.79	110.91	119.60
3	O	1500	A	N9-C1'-C2'	-5.79	105.63	112.00
1	M	1115	U	OP1-P-OP2	-5.79	110.91	119.60
1	M	1152	A	N3-C4-N9	5.79	132.03	127.40
2	N	146	G	O4'-C1'-N9	5.79	112.83	108.20
2	N	210	C	C5'-C4'-C3'	-5.79	106.73	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	366	A	C4-C5-C6	5.79	119.89	117.00
2	N	376	G	C4-C5-N7	5.79	113.12	110.80
2	N	433	G	C5-C6-O6	-5.79	125.12	128.60
2	N	617	G	N9-C4-C5	-5.79	103.08	105.40
1	M	1269	A	C6-C5-N7	-5.79	128.25	132.30
2	N	374	A	N3-C4-C5	-5.79	122.75	126.80
1	M	1352	C	C2-N3-C4	5.79	122.80	119.90
2	N	662	U	O5'-P-OP2	5.79	117.65	110.70
2	N	367	U	C2-N3-C4	-5.79	123.53	127.00
2	N	373	A	C5-C6-N1	-5.79	114.81	117.70
2	N	858	G	C3'-C2'-C1'	-5.79	96.87	101.50
1	M	1272	G	C6-N1-C2	5.79	128.57	125.10
2	N	128	G	C5-C6-O6	-5.79	125.13	128.60
2	N	130	A	C4-C5-N7	5.79	113.59	110.70
2	N	254	G	C4-C5-C6	5.79	122.27	118.80
2	N	615	G	N9-C4-C5	5.79	107.72	105.40
2	N	668	G	O4'-C1'-N9	5.79	112.83	108.20
2	N	674	G	P-O5'-C5'	5.79	130.16	120.90
2	N	921	U	N3-C4-C5	-5.79	111.13	114.60
1	M	1132	C	P-O3'-C3'	5.78	126.64	119.70
1	M	1142	G	N3-C2-N2	5.78	123.95	119.90
2	N	377	G	C4'-C3'-C2'	-5.78	96.82	102.60
2	N	867	G	C4-C5-N7	5.78	113.11	110.80
1	M	1126	U	N3-C4-O4	5.78	123.45	119.40
2	N	399	G	N3-C4-C5	5.78	131.49	128.60
2	N	290	C	C2-N3-C4	-5.78	117.01	119.90
2	N	303	A	P-O3'-C3'	-5.78	112.76	119.70
3	O	1448	C	C6-N1-C1'	-5.78	113.86	120.80
1	M	949	A	C6-N1-C2	5.78	122.07	118.60
3	O	1442	G	C4-C5-N7	5.78	113.11	110.80
2	N	914	A	C4'-C3'-C2'	5.78	108.38	102.60
2	N	228	A	C8-N9-C4	-5.78	103.49	105.80
2	N	369	G	N1-C2-N2	-5.78	111.00	116.20
2	N	493	A	C5-N7-C8	5.78	106.79	103.90
2	N	827	U	C5'-C4'-C3'	5.78	125.24	116.00
1	M	1174	G	C8-N9-C4	-5.77	104.09	106.40
2	N	55	A	C4-C5-C6	5.77	119.89	117.00
2	N	305	G	C2'-C3'-O3'	5.77	122.94	113.70
2	N	450	G	C5-C6-N1	-5.77	108.61	111.50
1	M	1220	G	C4-N9-C1'	-5.77	119.00	126.50
1	M	1387	G	C4'-C3'-C2'	-5.77	96.83	102.60
2	N	32	A	N1-C2-N3	5.77	132.19	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	481	G	O4'-C4'-C3'	-5.77	98.23	104.00
2	N	567	G	C8-N9-C4	-5.77	104.09	106.40
2	N	749	A	C4-C5-N7	-5.77	107.81	110.70
1	M	942	G	N3-C2-N2	5.77	123.94	119.90
1	M	1069	C	N3-C2-O2	-5.77	117.86	121.90
1	M	1278	G	C2-N3-C4	5.77	114.78	111.90
2	N	384	G	N1-C6-O6	5.77	123.36	119.90
2	N	736	C	O4'-C1'-N1	5.77	112.82	108.20
2	N	778	G	O4'-C1'-N9	5.77	112.82	108.20
1	M	1003	G	C8-N9-C4	5.77	108.71	106.40
1	M	1245	C	C5-C4-N4	-5.77	116.16	120.20
2	N	137	U	C4'-C3'-C2'	5.77	108.37	102.60
2	N	345	C	C2-N3-C4	5.77	122.78	119.90
2	N	364	A	C4-N9-C1'	-5.77	115.92	126.30
2	N	683	G	C5-C6-N1	-5.77	108.62	111.50
1	M	1020	G	C4-C5-C6	5.77	122.26	118.80
1	M	1360	A	N1-C6-N6	5.77	122.06	118.60
2	N	531	U	C2-N1-C1'	5.77	124.62	117.70
1	M	1146	A	C8-N9-C4	-5.76	103.49	105.80
1	M	1166	G	N3-C4-C5	-5.76	125.72	128.60
2	N	312	C	C6-N1-C2	-5.76	117.99	120.30
2	N	371	A	C6-C5-N7	-5.76	128.26	132.30
2	N	492	C	C6-N1-C1'	-5.76	113.88	120.80
2	N	727	G	C6-N1-C2	5.76	128.56	125.10
2	N	894	G	C5-C6-N1	5.76	114.38	111.50
3	O	1463	U	C5-C6-N1	5.76	125.58	122.70
1	M	1210	C	O4'-C1'-N1	5.76	112.81	108.20
1	M	1037	C	N1-C2-N3	-5.76	115.17	119.20
1	M	1211	U	C2-N1-C1'	-5.76	110.79	117.70
2	N	160	A	N1-C2-N3	5.76	132.18	129.30
2	N	270	A	C6-N1-C2	-5.76	115.14	118.60
1	M	1160	G	N3-C4-N9	5.76	129.46	126.00
1	M	1255	G	C4-C5-N7	-5.76	108.50	110.80
2	N	247	G	O4'-C1'-N9	5.76	112.81	108.20
2	N	285	C	N3-C4-C5	-5.76	119.60	121.90
2	N	351	G	C4-C5-N7	5.76	113.10	110.80
2	N	562	U	N1-C2-N3	-5.76	111.44	114.90
3	O	1443	C	O4'-C1'-N1	5.76	112.81	108.20
1	M	1207	G	C6-C5-N7	-5.76	126.95	130.40
2	N	45	G	C4-N9-C1'	-5.76	119.02	126.50
2	N	410	G	C5-C6-O6	-5.76	125.15	128.60
2	N	467	U	C5'-C4'-C3'	5.76	125.21	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1053	G	C2-N3-C4	5.75	114.78	111.90
1	M	1074	G	N1-C2-N3	-5.75	120.45	123.90
2	N	89	U	C4-C5-C6	-5.75	116.25	119.70
1	M	1015	G	N1-C6-O6	5.75	123.35	119.90
2	N	55	A	C5-C6-N6	-5.75	119.10	123.70
2	N	281	G	N7-C8-N9	-5.75	110.22	113.10
2	N	425	G	N3-C2-N2	-5.75	115.87	119.90
2	N	512	U	C5'-C4'-C3'	-5.75	106.80	116.00
1	M	1374	A	C5-C6-N6	-5.75	119.10	123.70
2	N	44	A	O4'-C1'-N9	5.75	112.80	108.20
2	N	364	A	C2-N3-C4	-5.75	107.72	110.60
2	N	605	U	N1-C2-O2	-5.75	118.77	122.80
2	N	616	G	P-O3'-C3'	-5.75	112.80	119.70
2	N	736	C	N3-C2-O2	5.75	125.93	121.90
1	M	956	U	C5-C4-O4	5.75	129.35	125.90
1	M	1208	C	C2-N3-C4	5.75	122.77	119.90
2	N	745	G	N3-C4-C5	5.75	131.47	128.60
2	N	840	C	O4'-C1'-N1	5.75	112.80	108.20
2	N	861	G	N1-C2-N2	-5.75	111.03	116.20
2	N	910	C	C4-C5-C6	-5.75	114.53	117.40
2	N	918	A	C5-C6-N1	5.75	120.57	117.70
3	O	1514	G	C6-C5-N7	-5.75	126.95	130.40
1	M	976	G	C5-C6-N1	-5.75	108.63	111.50
1	M	1022	A	P-O5'-C5'	-5.75	111.70	120.90
1	M	1048	G	N1-C6-O6	5.75	123.35	119.90
2	N	151	A	O4'-C1'-N9	5.75	112.80	108.20
2	N	456	A	O4'-C1'-N9	5.75	112.80	108.20
3	O	1524	C	O4'-C1'-N1	5.75	112.80	108.20
1	M	1347	G	O4'-C1'-N9	5.75	112.80	108.20
2	N	79	G	OP1-P-OP2	-5.75	110.98	119.60
2	N	848	C	C6-N1-C2	5.75	122.60	120.30
1	M	1061	G	O4'-C1'-N9	5.74	112.79	108.20
2	N	260	G	O4'-C1'-N9	5.74	112.80	108.20
2	N	629	A	N3-C4-C5	-5.74	122.78	126.80
2	N	863	U	C5'-C4'-C3'	-5.74	106.81	116.00
2	N	522	C	C2-N3-C4	-5.74	117.03	119.90
2	N	858	G	C5-N7-C8	-5.74	101.43	104.30
1	M	1086	U	N3-C4-O4	5.74	123.42	119.40
2	N	3	A	O4'-C1'-C2'	5.74	112.77	107.60
2	N	414	A	C1'-O4'-C4'	5.74	114.49	109.90
2	N	923	A	N1-C2-N3	5.74	132.17	129.30
1	M	1252	A	C4-C5-N7	-5.74	107.83	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	228	A	C5-C6-N1	-5.74	114.83	117.70
2	N	463	U	O4'-C4'-C3'	-5.74	98.26	104.00
2	N	483	C	O4'-C1'-N1	5.74	112.79	108.20
2	N	581	G	P-O3'-C3'	-5.74	112.81	119.70
3	O	1493	A	N9-C4-C5	-5.74	103.50	105.80
1	M	1292	G	C4'-C3'-C2'	-5.74	96.86	102.60
2	N	52	C	C4-C5-C6	-5.74	114.53	117.40
2	N	706	A	C4-C5-N7	-5.74	107.83	110.70
3	O	1426	G	C2-N3-C4	5.74	114.77	111.90
1	M	1064	G	C6-C5-N7	-5.74	126.96	130.40
1	M	1178	G	P-O3'-C3'	5.74	126.58	119.70
1	M	1220	G	N3-C4-C5	5.74	131.47	128.60
1	M	1307	U	C4-C5-C6	-5.74	116.26	119.70
2	N	101	A	C2-N3-C4	-5.74	107.73	110.60
2	N	353	A	C6-C5-N7	-5.74	128.28	132.30
2	N	780	A	C5-C6-N6	-5.74	119.11	123.70
2	N	392	C	C2-N1-C1'	5.73	125.11	118.80
2	N	491	G	C4-C5-N7	5.73	113.09	110.80
1	M	943	U	C4-C5-C6	-5.73	116.26	119.70
2	N	661	G	N9-C4-C5	-5.73	103.11	105.40
1	M	973	G	N3-C4-C5	-5.73	125.73	128.60
1	M	1373	G	N1-C6-O6	5.73	123.34	119.90
2	N	454	G	C2-N3-C4	5.73	114.77	111.90
2	N	664	G	N3-C2-N2	5.73	123.91	119.90
2	N	833	G	N3-C4-C5	-5.73	125.73	128.60
3	O	1488	G	C8-N9-C4	-5.73	104.11	106.40
2	N	779	C	N1-C2-O2	-5.73	115.46	118.90
3	O	1508	A	N1-C2-N3	-5.73	126.44	129.30
1	M	1266	G	N1-C2-N2	-5.73	111.05	116.20
1	M	1346	A	N7-C8-N9	-5.73	110.94	113.80
2	N	100	G	C5-C6-O6	-5.73	125.16	128.60
2	N	233	C	N3-C2-O2	-5.73	117.89	121.90
3	O	1432	G	C4-C5-C6	-5.73	115.36	118.80
3	O	1415	G	C6-C5-N7	-5.73	126.97	130.40
1	M	1072	G	N3-C4-N9	5.72	129.44	126.00
2	N	464	U	O4'-C1'-N1	5.72	112.78	108.20
2	N	639	G	C4-C5-C6	5.72	122.23	118.80
1	M	951	G	C1'-O4'-C4'	5.72	114.48	109.90
2	N	542	G	C6-C5-N7	-5.72	126.97	130.40
2	N	913	A	C6-N1-C2	5.72	122.03	118.60
1	M	956	U	O4'-C1'-N1	5.72	112.78	108.20
1	M	1038	C	O4'-C1'-N1	5.72	112.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	717	U	C6-N1-C2	-5.72	117.57	121.00
2	N	824	G	C5-C6-O6	-5.72	125.17	128.60
2	N	915	A	N7-C8-N9	-5.72	110.94	113.80
3	O	1444	U	C5'-C4'-O4'	5.72	115.96	109.10
1	M	969	A	C6-C5-N7	-5.72	128.30	132.30
1	M	1078	U	C4'-C3'-C2'	-5.72	96.88	102.60
2	N	430	A	OP1-P-OP2	-5.72	111.02	119.60
2	N	722	G	C6-N1-C2	5.72	128.53	125.10
1	M	1000	A	N3-C4-C5	-5.72	122.80	126.80
1	M	1100	C	O4'-C1'-N1	5.72	112.77	108.20
2	N	240	G	C4-C5-C6	5.72	122.23	118.80
2	N	302	G	C6-C5-N7	-5.72	126.97	130.40
2	N	712	A	C5-C6-N6	-5.72	119.13	123.70
3	O	1514	G	C5'-C4'-C3'	5.72	125.15	116.00
3	O	1521	C	C5-C6-N1	5.72	123.86	121.00
1	M	1232	U	C2-N3-C4	5.71	130.43	127.00
2	N	48	C	C4-C5-C6	5.71	120.26	117.40
2	N	657	U	C4-C5-C6	5.71	123.13	119.70
2	N	718	A	O4'-C1'-N9	5.71	112.77	108.20
3	O	1403	C	P-O3'-C3'	5.71	126.56	119.70
2	N	529	G	C5-C6-N1	-5.71	108.64	111.50
2	N	635	A	N9-C4-C5	5.71	108.08	105.80
3	O	1459	G	P-O3'-C3'	-5.71	112.84	119.70
1	M	931	C	C5-C6-N1	5.71	123.86	121.00
2	N	207	C	C1'-O4'-C4'	5.71	114.47	109.90
2	N	265	G	C8-N9-C4	5.71	108.69	106.40
2	N	303	A	N3-C4-C5	-5.71	122.80	126.80
2	N	554	A	C1'-O4'-C4'	-5.71	105.33	109.90
2	N	873	A	O4'-C1'-N9	5.71	112.77	108.20
2	N	894	G	N1-C2-N3	-5.71	120.47	123.90
1	M	955	U	O4'-C1'-N1	5.71	112.77	108.20
2	N	31	G	C6-C5-N7	-5.71	126.97	130.40
2	N	766	A	C5-C6-N1	-5.71	114.84	117.70
2	N	177	G	C4-N9-C1'	5.71	133.92	126.50
2	N	644	U	C5'-C4'-O4'	5.71	115.95	109.10
3	O	1426	G	N3-C4-N9	5.71	129.43	126.00
3	O	1527	U	C2-N3-C4	-5.71	123.58	127.00
1	M	1118	U	O4'-C1'-N1	5.71	112.77	108.20
1	M	1138	G	N9-C4-C5	5.71	107.68	105.40
2	N	346	G	N1-C2-N3	-5.71	120.48	123.90
2	N	490	C	P-O3'-C3'	-5.71	112.85	119.70
2	N	928	G	N1-C6-O6	5.71	123.32	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1220	G	C8-N9-C1'	5.71	134.42	127.00
2	N	547	A	C1'-O4'-C4'	-5.71	105.34	109.90
1	M	1264	U	P-O3'-C3'	5.70	126.55	119.70
2	N	6	G	C5-C6-N1	-5.70	108.65	111.50
2	N	74	A	N7-C8-N9	-5.70	110.95	113.80
2	N	337	G	C6-N1-C2	5.70	128.52	125.10
2	N	368	U	O4'-C1'-N1	5.70	112.76	108.20
2	N	423	G	O4'-C1'-N9	5.70	112.76	108.20
2	N	693	G	C4-C5-C6	5.70	122.22	118.80
3	O	1430	A	C6-N1-C2	5.70	122.02	118.60
2	N	195	A	C5-N7-C8	5.70	106.75	103.90
2	N	257	G	C4-C5-N7	5.70	113.08	110.80
2	N	461	A	C5-C6-N6	-5.70	119.14	123.70
2	N	860	A	P-O3'-C3'	5.70	126.54	119.70
3	O	1475	G	C5-N7-C8	-5.70	101.45	104.30
1	M	1087	G	C6-C5-N7	-5.70	126.98	130.40
2	N	12	U	C6-N1-C2	-5.70	117.58	121.00
2	N	16	A	C4-C5-N7	5.70	113.55	110.70
2	N	151	A	C6-C5-N7	-5.70	128.31	132.30
2	N	524	G	N3-C4-N9	-5.70	122.58	126.00
2	N	924	C	C2-N3-C4	5.70	122.75	119.90
3	O	1448	C	C5-C6-N1	-5.70	118.15	121.00
3	O	1482	G	C6-C5-N7	-5.70	126.98	130.40
3	O	1494	G	N3-C2-N2	5.70	123.89	119.90
1	M	1317	C	C5-C4-N4	-5.70	116.21	120.20
2	N	136	C	C6-N1-C2	5.70	122.58	120.30
2	N	161	A	P-O3'-C3'	-5.70	112.86	119.70
2	N	521	G	C3'-C2'-C1'	-5.70	96.94	101.50
2	N	671	G	C1'-O4'-C4'	5.70	114.46	109.90
2	N	710	G	C8-N9-C4	-5.70	104.12	106.40
2	N	802	A	C6-N1-C2	5.70	122.02	118.60
2	N	883	C	P-O5'-C5'	5.70	130.02	120.90
3	O	1391	U	C5-C4-O4	-5.70	122.48	125.90
1	M	1002	G	N7-C8-N9	-5.70	110.25	113.10
1	M	1334	G	N1-C2-N3	-5.70	120.48	123.90
1	M	1338	G	C5-N7-C8	-5.70	101.45	104.30
2	N	383	A	O4'-C4'-C3'	-5.70	98.30	104.00
2	N	731	G	C6-C5-N7	-5.70	126.98	130.40
2	N	886	G	C5'-C4'-O4'	5.70	115.94	109.10
1	M	976	G	C8-N9-C1'	5.70	134.41	127.00
1	M	1101	A	C5-C6-N1	-5.70	114.85	117.70
1	M	1281	C	C2-N3-C4	-5.70	117.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	113	G	C5'-C4'-C3'	5.70	125.11	116.00
2	N	261	U	N3-C2-O2	5.70	126.19	122.20
2	N	769	G	C4-C5-N7	5.70	113.08	110.80
1	M	1019	A	C6-N1-C2	5.69	122.02	118.60
1	M	1068	G	C5'-C4'-C3'	-5.69	106.89	116.00
1	M	979	C	N3-C4-C5	-5.69	119.62	121.90
1	M	1211	U	O4'-C1'-N1	5.69	112.75	108.20
1	M	1364	U	C4'-C3'-C2'	5.69	108.29	102.60
2	N	145	G	P-O3'-C3'	-5.69	112.87	119.70
2	N	687	A	C2-N3-C4	5.69	113.45	110.60
2	N	877	G	N3-C2-N2	5.69	123.89	119.90
2	N	920	U	O4'-C1'-N1	5.69	112.75	108.20
3	O	1405	G	C4-C5-C6	-5.69	115.39	118.80
1	M	964	A	C1'-O4'-C4'	5.69	114.45	109.90
2	N	512	U	C5-C6-N1	-5.69	119.86	122.70
2	N	548	G	C6-N1-C2	-5.69	121.69	125.10
2	N	891	U	N3-C4-C5	-5.69	111.19	114.60
3	O	1481	U	C5-C6-N1	-5.69	119.86	122.70
1	M	1335	U	N3-C4-O4	5.69	123.38	119.40
2	N	71	A	N3-C4-N9	5.69	131.95	127.40
2	N	923	A	C6-C5-N7	-5.69	128.32	132.30
1	M	1301	U	C2-N1-C1'	-5.69	110.88	117.70
3	O	1452	C	O4'-C1'-N1	5.69	112.75	108.20
1	M	1125	U	O3'-P-O5'	5.69	114.80	104.00
2	N	365	U	C3'-C2'-C1'	-5.68	96.95	101.50
2	N	801	U	C4-C5-C6	5.68	123.11	119.70
1	M	1124	G	C3'-C2'-C1'	5.68	106.05	101.50
2	N	128	G	N1-C6-O6	5.68	123.31	119.90
2	N	280	C	N3-C4-N4	5.68	121.98	118.00
1	M	1137	C	N1-C2-O2	-5.68	115.49	118.90
2	N	653	U	P-O3'-C3'	5.68	126.52	119.70
1	M	1086	U	O4'-C1'-N1	5.68	112.74	108.20
1	M	1187	G	C6-N1-C2	5.68	128.51	125.10
2	N	785	G	C2-N3-C4	5.68	114.74	111.90
2	N	893	C	C3'-C2'-C1'	5.68	106.04	101.50
3	O	1454	G	C6-C5-N7	-5.68	126.99	130.40
2	N	285	C	C6-N1-C1'	5.68	127.61	120.80
1	M	1109	C	C2-N3-C4	5.68	122.74	119.90
2	N	113	G	N1-C6-O6	5.68	123.31	119.90
2	N	185	U	C5'-C4'-C3'	-5.68	106.92	116.00
2	N	748	G	C1'-O4'-C4'	5.68	114.44	109.90
2	N	872	A	C4-C5-C6	5.68	119.84	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1442	G	O4'-C1'-N9	5.68	112.74	108.20
1	M	1343	G	OP2-P-O3'	5.67	117.69	105.20
2	N	199	A	C6-C5-N7	-5.67	128.33	132.30
2	N	751	U	OP2-P-O3'	5.67	117.69	105.20
3	O	1460	C	C5'-C4'-C3'	-5.67	106.92	116.00
3	O	1483	A	C6-C5-N7	-5.67	128.33	132.30
1	M	1197	A	P-O3'-C3'	5.67	126.51	119.70
1	M	1339	A	N9-C4-C5	5.67	108.07	105.80
2	N	171	A	C4-C5-C6	5.67	119.84	117.00
2	N	500	G	C5-N7-C8	5.67	107.14	104.30
2	N	680	C	P-O3'-C3'	5.67	126.51	119.70
1	M	983	A	N1-C2-N3	-5.67	126.46	129.30
1	M	1244	G	P-O3'-C3'	-5.67	112.89	119.70
2	N	169	C	O4'-C1'-N1	5.67	112.74	108.20
2	N	182	A	N1-C6-N6	5.67	122.00	118.60
2	N	721	G	OP1-P-OP2	-5.67	111.09	119.60
2	N	790	A	C1'-O4'-C4'	-5.67	105.36	109.90
3	O	1442	G	N1-C2-N2	-5.67	111.09	116.20
1	M	1085	U	C6-N1-C2	-5.67	117.60	121.00
1	M	1336	C	O4'-C1'-N1	5.67	112.74	108.20
2	N	122	G	N7-C8-N9	5.67	115.94	113.10
1	M	1062	U	C3'-C2'-C1'	-5.67	96.97	101.50
1	M	1241	G	C6-C5-N7	-5.67	127.00	130.40
2	N	791	G	C4-N9-C1'	5.67	133.87	126.50
2	N	274	A	C5-C6-N6	-5.67	119.17	123.70
2	N	302	G	C8-N9-C1'	5.67	134.37	127.00
2	N	389	A	C5-C6-N1	-5.67	114.87	117.70
2	N	195	A	C2-N3-C4	5.66	113.43	110.60
2	N	567	G	N3-C4-N9	-5.66	122.60	126.00
2	N	628	G	C3'-C2'-C1'	5.66	106.03	101.50
2	N	925	G	N3-C4-N9	-5.66	122.60	126.00
1	M	1022	A	C4'-C3'-C2'	-5.66	96.94	102.60
2	N	607	A	C4-C5-C6	5.66	119.83	117.00
1	M	951	G	N1-C2-N3	-5.66	120.50	123.90
1	M	971	G	OP1-P-OP2	-5.66	111.11	119.60
1	M	1169	A	C5-N7-C8	5.66	106.73	103.90
1	M	1302	C	O4'-C1'-C2'	5.66	112.69	107.60
2	N	68	G	C6-N1-C2	-5.66	121.70	125.10
2	N	640	A	C5-C6-N6	-5.66	119.17	123.70
1	M	1366	C	P-O5'-C5'	5.66	129.96	120.90
2	N	131	A	N9-C4-C5	-5.66	103.54	105.80
3	O	1475	G	N9-C4-C5	-5.66	103.14	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	449	G	C5-C6-N1	-5.66	108.67	111.50
2	N	656	G	C4-N9-C1'	-5.66	119.14	126.50
1	M	1267	C	C4-C5-C6	5.66	120.23	117.40
2	N	38	G	C4-N9-C1'	-5.66	119.15	126.50
2	N	111	G	O4'-C1'-N9	5.66	112.72	108.20
2	N	464	U	N3-C4-C5	-5.66	111.21	114.60
2	N	868	C	C5-C6-N1	5.66	123.83	121.00
2	N	652	U	N3-C4-C5	5.65	117.99	114.60
2	N	794	A	N7-C8-N9	5.65	116.63	113.80
1	M	1230	C	N3-C4-C5	-5.65	119.64	121.90
1	M	1300	G	N1-C6-O6	5.65	123.29	119.90
2	N	140	U	C2-N3-C4	-5.65	123.61	127.00
2	N	274	A	C4'-C3'-C2'	5.65	108.25	102.60
2	N	414	A	C6-C5-N7	-5.65	128.34	132.30
3	O	1498	U	N3-C2-O2	-5.65	118.24	122.20
2	N	208	U	P-O3'-C3'	5.65	126.48	119.70
2	N	208	U	C2-N3-C4	-5.65	123.61	127.00
2	N	742	G	N3-C4-N9	5.65	129.39	126.00
2	N	786	G	N9-C4-C5	-5.65	103.14	105.40
2	N	822	U	O5'-P-OP1	-5.65	100.61	105.70
3	O	1513	A	C5-C6-N6	-5.65	119.18	123.70
1	M	1286	U	C6-N1-C1'	-5.65	113.29	121.20
1	M	1385	G	N3-C4-C5	5.65	131.42	128.60
2	N	713	G	C1'-O4'-C4'	-5.65	105.38	109.90
1	M	1009	U	C5'-C4'-C3'	-5.65	106.96	116.00
1	M	1062	U	O4'-C1'-N1	5.65	112.72	108.20
2	N	145	G	C4-C5-N7	-5.65	108.54	110.80
2	N	260	G	C2-N3-C4	-5.65	109.08	111.90
2	N	592	G	N3-C2-N2	5.65	123.85	119.90
2	N	699	C	C4-C5-C6	5.65	120.22	117.40
2	N	925	G	C8-N9-C4	-5.65	104.14	106.40
1	M	1127	G	O4'-C1'-N9	5.64	112.72	108.20
1	M	1359	C	C2-N3-C4	5.64	122.72	119.90
2	N	95	C	P-O5'-C5'	-5.64	111.87	120.90
2	N	126	G	C8-N9-C1'	5.64	134.34	127.00
2	N	146	G	N1-C2-N3	-5.64	120.51	123.90
2	N	237	G	N9-C1'-C2'	-5.64	105.79	112.00
2	N	318	G	O4'-C1'-N9	5.64	112.72	108.20
2	N	861	G	C6-C5-N7	-5.64	127.01	130.40
1	M	1338	G	C4-C5-N7	5.64	113.06	110.80
2	N	505	G	C2-N3-C4	5.64	114.72	111.90
2	N	564	C	P-O3'-C3'	5.64	126.47	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	320	A	C5-C6-N1	-5.64	114.88	117.70
2	N	344	A	C4'-C3'-C2'	5.64	108.24	102.60
2	N	448	A	N7-C8-N9	-5.64	110.98	113.80
2	N	129	A	C5'-C4'-C3'	-5.64	106.98	116.00
2	N	455	G	N1-C6-O6	5.64	123.28	119.90
2	N	557	G	P-O5'-C5'	5.64	129.92	120.90
1	M	1130	A	OP1-P-OP2	-5.64	111.14	119.60
1	M	1165	U	O5'-P-OP2	5.64	117.47	110.70
3	O	1450	U	O4'-C1'-N1	5.64	112.71	108.20
1	M	1067	A	C5-N7-C8	5.64	106.72	103.90
2	N	111	G	C5'-C4'-C3'	-5.64	106.98	116.00
2	N	372	C	N3-C4-N4	5.64	121.94	118.00
2	N	455	G	OP1-P-OP2	-5.64	111.14	119.60
2	N	533	A	C5'-C4'-O4'	5.64	115.86	109.10
2	N	639	G	C5-C6-N1	-5.64	108.68	111.50
2	N	747	A	C2-N3-C4	5.64	113.42	110.60
2	N	847	G	C4-C5-C6	5.64	122.18	118.80
1	M	1248	A	C2-N3-C4	5.63	113.42	110.60
2	N	417	G	C5-C6-N1	-5.63	108.68	111.50
2	N	473	U	C5'-C4'-O4'	5.63	115.86	109.10
1	M	993	G	P-O3'-C3'	5.63	126.46	119.70
1	M	1108	G	C6-C5-N7	-5.63	127.02	130.40
2	N	257	G	C5-C6-O6	-5.63	125.22	128.60
2	N	321	A	O4'-C4'-C3'	-5.63	98.37	104.00
1	M	972	C	P-O3'-C3'	-5.63	112.94	119.70
1	M	1375	A	C5-C6-N6	-5.63	119.19	123.70
2	N	791	G	N1-C2-N3	-5.63	120.52	123.90
1	M	953	G	C8-N9-C4	-5.63	104.15	106.40
2	N	546	A	N9-C4-C5	-5.63	103.55	105.80
2	N	723	U	C2-N1-C1'	5.63	124.46	117.70
1	M	1196	A	P-O3'-C3'	5.63	126.45	119.70
2	N	207	C	P-O3'-C3'	5.63	126.45	119.70
2	N	829	G	N3-C2-N2	5.63	123.84	119.90
3	O	1511	G	N7-C8-N9	-5.63	110.29	113.10
3	O	1516	G	C5-N7-C8	5.63	107.11	104.30
2	N	241	G	N9-C1'-C2'	-5.63	105.81	112.00
2	N	624	C	O4'-C1'-C2'	-5.63	100.17	105.80
1	M	951	G	P-O3'-C3'	-5.62	112.95	119.70
2	N	50	A	N9-C1'-C2'	5.62	121.31	114.00
2	N	276	G	C6-N1-C2	5.62	128.47	125.10
2	N	291	U	N3-C2-O2	5.62	126.14	122.20
2	N	302	G	C5-C6-N1	-5.62	108.69	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	713	G	C4-C5-N7	-5.62	108.55	110.80
2	N	927	G	C6-N1-C2	5.62	128.47	125.10
2	N	337	G	C5'-C4'-O4'	5.62	115.85	109.10
2	N	608	A	C5-C6-N6	-5.62	119.20	123.70
2	N	640	A	O5'-P-OP2	5.62	117.45	110.70
1	M	1370	G	C5-C6-O6	-5.62	125.23	128.60
2	N	919	A	P-O3'-C3'	-5.62	112.95	119.70
2	N	358	U	C5-C6-N1	5.62	125.51	122.70
1	M	1184	G	N3-C4-N9	5.62	129.37	126.00
1	M	1381	U	C6-N1-C2	-5.62	117.63	121.00
2	N	245	U	C6-N1-C2	-5.62	117.63	121.00
2	N	299	G	N1-C2-N2	-5.62	111.14	116.20
2	N	650	G	C6-N1-C2	5.62	128.47	125.10
2	N	780	A	P-O5'-C5'	5.62	129.89	120.90
3	O	1450	U	C5'-C4'-C3'	5.62	124.99	116.00
1	M	1174	G	P-O3'-C3'	-5.62	112.96	119.70
2	N	653	U	C5-C6-N1	5.62	125.51	122.70
1	M	1012	A	O4'-C1'-N9	5.62	112.69	108.20
1	M	1041	G	O4'-C4'-C3'	-5.62	98.39	104.00
1	M	1214	C	N1-C2-N3	-5.62	115.27	119.20
2	N	117	G	C4-C5-C6	5.62	122.17	118.80
2	N	220	G	N1-C2-N3	-5.62	120.53	123.90
1	M	1272	G	C4'-C3'-C2'	-5.61	96.99	102.60
1	M	1322	C	C5'-C4'-C3'	5.61	124.98	116.00
2	N	22	G	N1-C2-N2	-5.61	111.15	116.20
2	N	749	A	N3-C4-C5	-5.61	122.87	126.80
3	O	1476	A	N9-C4-C5	5.61	108.05	105.80
1	M	957	U	C3'-C2'-C1'	-5.61	97.01	101.50
1	M	1137	C	N3-C2-O2	5.61	125.83	121.90
2	N	29	U	C5-C6-N1	5.61	125.50	122.70
2	N	111	G	C4'-C3'-C2'	-5.61	96.99	102.60
2	N	127	G	OP2-P-O3'	5.61	117.55	105.20
2	N	483	C	C5-C6-N1	5.61	123.81	121.00
2	N	492	C	O4'-C1'-N1	5.61	112.69	108.20
1	M	1081	A	N7-C8-N9	-5.61	111.00	113.80
2	N	293	G	N7-C8-N9	-5.61	110.30	113.10
2	N	491	G	N1-C6-O6	5.61	123.27	119.90
1	M	1140	C	C5-C6-N1	5.61	123.80	121.00
1	M	1171	A	N1-C2-N3	5.61	132.10	129.30
2	N	22	G	N3-C2-N2	5.61	123.83	119.90
2	N	332	G	N3-C4-N9	-5.61	122.64	126.00
2	N	492	C	P-O3'-C3'	5.61	126.43	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1248	A	N9-C4-C5	5.61	108.04	105.80
1	M	1298	U	C2-N1-C1'	5.61	124.42	117.70
2	N	102	G	N1-C2-N3	-5.61	120.54	123.90
2	N	688	G	O4'-C1'-N9	5.61	112.69	108.20
2	N	758	C	C5-C6-N1	5.61	123.80	121.00
2	N	777	A	C1'-O4'-C4'	-5.61	105.42	109.90
2	N	801	U	N3-C4-C5	-5.61	111.24	114.60
1	M	956	U	C5-C6-N1	5.60	125.50	122.70
1	M	1181	G	C5-N7-C8	5.60	107.10	104.30
2	N	220	G	O4'-C1'-N9	5.60	112.68	108.20
2	N	791	G	N3-C2-N2	5.60	123.82	119.90
3	O	1423	G	C4-C5-N7	5.60	113.04	110.80
2	N	56	U	C2-N1-C1'	5.60	124.42	117.70
2	N	390	U	O4'-C1'-N1	5.60	112.68	108.20
3	O	1432	G	C2-N3-C4	5.60	114.70	111.90
3	O	1457	G	C4-C5-N7	-5.60	108.56	110.80
1	M	1111	A	N1-C6-N6	5.60	121.96	118.60
2	N	189	A	N1-C2-N3	5.60	132.10	129.30
2	N	371	A	C5-N7-C8	5.60	106.70	103.90
2	N	748	G	N1-C2-N3	-5.60	120.54	123.90
2	N	789	U	C4'-C3'-C2'	-5.60	97.00	102.60
3	O	1523	G	N1-C2-N3	-5.60	120.54	123.90
1	M	1225	A	C4-N9-C1'	5.60	136.38	126.30
2	N	787	A	N9-C4-C5	5.60	108.04	105.80
2	N	55	A	C6-N1-C2	-5.60	115.24	118.60
1	M	955	U	N3-C4-O4	5.59	123.32	119.40
1	M	1009	U	C4'-C3'-C2'	-5.59	97.01	102.60
1	M	1095	U	C5-C4-O4	5.59	129.26	125.90
2	N	337	G	O4'-C1'-N9	5.59	112.67	108.20
2	N	389	A	C6-C5-N7	-5.59	128.38	132.30
2	N	450	G	N3-C4-C5	-5.59	125.80	128.60
2	N	164	G	C4-N9-C1'	5.59	133.77	126.50
2	N	656	G	C6-C5-N7	-5.59	127.04	130.40
2	N	698	G	P-O5'-C5'	5.59	129.85	120.90
2	N	863	U	C4-C5-C6	5.59	123.06	119.70
1	M	1045	C	C2-N3-C4	5.59	122.70	119.90
1	M	1073	U	C2-N3-C4	-5.59	123.64	127.00
1	M	1158	C	N1-C2-O2	-5.59	115.55	118.90
1	M	1252	A	P-O3'-C3'	-5.59	112.99	119.70
2	N	233	C	N1-C2-N3	5.59	123.11	119.20
2	N	313	A	C5-N7-C8	5.59	106.70	103.90
2	N	735	C	C2-N3-C4	5.59	122.70	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1457	G	C5-C6-N1	-5.59	108.70	111.50
1	M	960	U	C2-N1-C1'	5.59	124.41	117.70
1	M	1328	C	C2-N3-C4	-5.59	117.11	119.90
2	N	258	G	C6-C5-N7	-5.59	127.05	130.40
2	N	597	G	N9-C4-C5	5.59	107.64	105.40
2	N	883	C	C1'-O4'-C4'	5.59	114.37	109.90
1	M	1138	G	C8-N9-C4	5.59	108.64	106.40
2	N	358	U	N3-C4-C5	5.59	117.95	114.60
2	N	496	A	N1-C6-N6	5.59	121.95	118.60
3	O	1409	C	C5-C4-N4	-5.59	116.29	120.20
3	O	1475	G	O4'-C1'-N9	5.59	112.67	108.20
1	M	1258	G	C1'-O4'-C4'	-5.59	105.43	109.90
2	N	105	G	C6-C5-N7	-5.59	127.05	130.40
2	N	220	G	C5-C6-N1	-5.59	108.71	111.50
2	N	293	G	C8-N9-C4	5.59	108.64	106.40
2	N	404	G	P-O5'-C5'	5.59	129.84	120.90
2	N	414	A	C4-N9-C1'	5.59	136.35	126.30
2	N	660	C	C5-C6-N1	5.59	123.79	121.00
2	N	770	C	C5-C4-N4	-5.59	116.29	120.20
1	M	1383	C	P-O3'-C3'	-5.58	113.00	119.70
1	M	1011	C	C5'-C4'-C3'	5.58	124.93	116.00
1	M	1140	C	C2-N3-C4	5.58	122.69	119.90
1	M	1152	A	C4-C5-N7	-5.58	107.91	110.70
1	M	1257	A	N3-C4-C5	-5.58	122.89	126.80
1	M	1263	C	C4'-C3'-C2'	-5.58	97.02	102.60
1	M	1338	G	C3'-C2'-C1'	-5.58	97.03	101.50
2	N	38	G	C5-N7-C8	5.58	107.09	104.30
2	N	60	A	C2-N3-C4	-5.58	107.81	110.60
2	N	122	G	C8-N9-C4	-5.58	104.17	106.40
2	N	261	U	N3-C4-O4	5.58	123.31	119.40
2	N	785	G	N9-C1'-C2'	-5.58	105.86	112.00
1	M	983	A	N7-C8-N9	5.58	116.59	113.80
1	M	1137	C	C5'-C4'-C3'	-5.58	107.07	116.00
1	M	1346	A	C6-C5-N7	-5.58	128.39	132.30
2	N	187	G	C4-C5-N7	-5.58	108.57	110.80
2	N	778	G	C8-N9-C4	5.58	108.63	106.40
1	M	1303	C	C6-N1-C2	-5.58	118.07	120.30
3	O	1428	A	C5-C6-N6	-5.58	119.24	123.70
3	O	1525	G	O4'-C1'-N9	5.58	112.66	108.20
1	M	1286	U	C2-N1-C1'	5.58	124.39	117.70
1	M	1308	U	N3-C4-O4	5.58	123.31	119.40
2	N	133	U	N3-C4-O4	5.58	123.31	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	311	C	C1'-O4'-C4'	-5.58	105.44	109.90
2	N	779	C	N3-C2-O2	5.58	125.80	121.90
2	N	228	A	O4'-C1'-N9	5.58	112.66	108.20
3	O	1447	A	N1-C2-N3	5.58	132.09	129.30
1	M	1058	G	O4'-C1'-C2'	-5.58	100.22	105.80
1	M	1150	A	C6-C5-N7	-5.58	128.40	132.30
2	N	211	G	C6-C5-N7	-5.57	127.06	130.40
2	N	876	C	N3-C4-N4	5.57	121.90	118.00
3	O	1393	U	P-O3'-C3'	5.57	126.39	119.70
1	M	1023	U	P-O3'-C3'	5.57	126.39	119.70
1	M	1168	U	C6-N1-C2	-5.57	117.66	121.00
2	N	18	C	N1-C2-N3	5.57	123.10	119.20
2	N	185	U	P-O5'-C5'	5.57	129.81	120.90
2	N	456	A	C5'-C4'-O4'	5.57	115.79	109.10
2	N	683	G	P-O3'-C3'	5.57	126.39	119.70
2	N	686	U	C6-N1-C2	-5.57	117.66	121.00
1	M	1370	G	N7-C8-N9	-5.57	110.32	113.10
3	O	1440	U	O4'-C1'-N1	5.57	112.66	108.20
1	M	1205	U	C5-C4-O4	-5.57	122.56	125.90
2	N	494	G	C8-N9-C4	-5.57	104.17	106.40
2	N	626	G	C5-C6-N1	-5.57	108.72	111.50
2	N	667	G	C6-C5-N7	5.57	133.74	130.40
3	O	1477	U	C5-C4-O4	5.57	129.24	125.90
1	M	1252	A	C5-C6-N6	-5.57	119.25	123.70
1	M	1285	A	C5-C6-N1	-5.57	114.92	117.70
2	N	365	U	N3-C4-C5	-5.57	111.26	114.60
2	N	807	A	C4-C5-N7	-5.57	107.92	110.70
1	M	1026	G	N9-C4-C5	-5.56	103.17	105.40
2	N	352	C	C5-C4-N4	-5.56	116.31	120.20
2	N	697	U	C5-C6-N1	5.56	125.48	122.70
2	N	679	C	C4-C5-C6	5.56	120.18	117.40
1	M	1322	C	C5-C6-N1	5.56	123.78	121.00
2	N	271	C	P-O5'-C5'	5.56	129.80	120.90
1	M	1024	G	C4-C5-C6	5.56	122.14	118.80
1	M	1032	G	O4'-C1'-N9	5.56	112.65	108.20
1	M	1070	U	O4'-C1'-C2'	-5.56	100.24	105.80
2	N	67	C	C5-C4-N4	5.56	124.09	120.20
2	N	361	G	N7-C8-N9	5.56	115.88	113.10
2	N	422	C	C5'-C4'-O4'	5.56	115.77	109.10
3	O	1507	A	C4-C5-C6	5.56	119.78	117.00
1	M	1149	C	N3-C4-N4	5.56	121.89	118.00
1	M	1176	A	OP1-P-O3'	5.56	117.43	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	255	G	O5'-C5'-C4'	-5.56	101.14	111.70
2	N	345	C	P-O3'-C3'	5.56	126.37	119.70
3	O	1454	G	N1-C2-N3	-5.56	120.56	123.90
1	M	979	C	C2-N3-C4	5.56	122.68	119.90
1	M	1208	C	P-O5'-C5'	5.56	129.79	120.90
1	M	1226	C	O4'-C1'-N1	5.56	112.64	108.20
1	M	1363	A	C5'-C4'-C3'	-5.56	107.11	116.00
2	N	120	A	C6-N1-C2	-5.56	115.27	118.60
2	N	555	U	C5'-C4'-O4'	-5.56	102.43	109.10
1	M	1076	U	C5-C6-N1	5.55	125.48	122.70
1	M	1280	A	N7-C8-N9	5.55	116.58	113.80
1	M	1342	C	C5-C4-N4	-5.55	116.31	120.20
2	N	200	G	N3-C2-N2	5.55	123.79	119.90
2	N	341	C	C1'-O4'-C4'	5.55	114.34	109.90
2	N	624	C	N3-C4-C5	-5.55	119.68	121.90
2	N	774	G	O4'-C1'-N9	5.55	112.64	108.20
1	M	1298	U	C5'-C4'-O4'	5.55	115.76	109.10
2	N	75	G	N7-C8-N9	5.55	115.88	113.10
2	N	360	G	C5-C6-O6	-5.55	125.27	128.60
2	N	375	U	N1-C2-O2	-5.55	118.91	122.80
2	N	577	G	C4-C5-N7	-5.55	108.58	110.80
1	M	1275	A	C5'-C4'-O4'	5.55	115.76	109.10
2	N	189	A	C5-C6-N1	-5.55	114.92	117.70
2	N	341	C	O4'-C1'-N1	5.55	112.64	108.20
2	N	586	C	N3-C4-N4	5.55	121.89	118.00
1	M	992	U	O4'-C1'-C2'	-5.55	100.25	105.80
1	M	1188	A	P-O5'-C5'	-5.55	112.02	120.90
1	M	1290	G	N9-C4-C5	5.55	107.62	105.40
2	N	230	G	N1-C2-N3	-5.55	120.57	123.90
2	N	885	G	C4-C5-N7	5.55	113.02	110.80
2	N	36	C	C4-C5-C6	5.55	120.17	117.40
2	N	755	G	O4'-C1'-N9	5.55	112.64	108.20
2	N	913	A	O4'-C1'-N9	5.55	112.64	108.20
1	M	976	G	C6-C5-N7	-5.55	127.07	130.40
1	M	1101	A	C1'-O4'-C4'	-5.55	105.46	109.90
1	M	1112	C	N1-C2-O2	5.55	122.23	118.90
2	N	49	U	N3-C4-C5	-5.55	111.27	114.60
2	N	549	C	N1-C2-O2	-5.55	115.57	118.90
3	O	1492	A	O4'-C4'-C3'	-5.55	98.45	104.00
1	M	1092	A	N1-C2-N3	-5.54	126.53	129.30
2	N	213	G	C4'-C3'-C2'	5.54	108.14	102.60
2	N	466	A	C4-C5-N7	-5.54	107.93	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	838	G	N1-C6-O6	5.54	123.23	119.90
1	M	1262	C	C4-C5-C6	5.54	120.17	117.40
1	M	1384	C	C5-C4-N4	-5.54	116.32	120.20
2	N	428	G	C4'-C3'-C2'	5.54	108.14	102.60
2	N	671	G	C5'-C4'-O4'	5.54	115.75	109.10
3	O	1431	A	N1-C6-N6	5.54	121.93	118.60
1	M	1193	G	N7-C8-N9	-5.54	110.33	113.10
2	N	121	U	C2-N1-C1'	5.54	124.35	117.70
2	N	155	A	C6-N1-C2	5.54	121.92	118.60
2	N	771	G	C4-C5-C6	5.54	122.12	118.80
1	M	993	G	C8-N9-C1'	-5.54	119.80	127.00
1	M	1202	U	C5'-C4'-O4'	-5.54	102.45	109.10
1	M	931	C	N1-C2-O2	-5.54	115.58	118.90
1	M	1057	G	N1-C2-N3	-5.54	120.58	123.90
1	M	1222	G	O4'-C1'-N9	5.54	112.63	108.20
1	M	1041	G	O4'-C1'-N9	5.54	112.63	108.20
2	N	709	U	N3-C4-O4	5.54	123.28	119.40
2	N	923	A	N9-C1'-C2'	-5.54	105.91	112.00
3	O	1426	G	N7-C8-N9	5.54	115.87	113.10
3	O	1468	A	C5-C6-N1	-5.54	114.93	117.70
1	M	945	G	O4'-C1'-N9	5.53	112.63	108.20
1	M	1097	C	O4'-C1'-N1	5.53	112.63	108.20
1	M	1277	C	C2-N3-C4	5.53	122.67	119.90
2	N	12	U	C5-C4-O4	-5.53	122.58	125.90
2	N	53	A	O4'-C4'-C3'	-5.53	98.47	104.00
2	N	138	G	C4'-C3'-C2'	-5.53	97.07	102.60
2	N	879	C	O4'-C1'-N1	5.53	112.63	108.20
3	O	1457	G	C5-N7-C8	5.53	107.07	104.30
1	M	958	A	C6-N1-C2	-5.53	115.28	118.60
2	N	220	G	C2-N3-C4	5.53	114.67	111.90
2	N	401	C	OP2-P-O3'	5.53	117.37	105.20
2	N	723	U	C5-C6-N1	5.53	125.47	122.70
2	N	739	C	C5-C6-N1	5.53	123.77	121.00
2	N	832	G	C6-C5-N7	-5.53	127.08	130.40
1	M	1029	U	O5'-P-OP1	5.53	117.34	110.70
2	N	633	G	C4-C5-N7	-5.53	108.59	110.80
2	N	812	G	N1-C2-N2	5.53	121.18	116.20
2	N	855	U	N3-C4-C5	-5.53	111.28	114.60
3	O	1425	U	O4'-C1'-N1	5.53	112.62	108.20
3	O	1462	C	C6-N1-C2	-5.53	118.09	120.30
1	M	1234	C	O4'-C1'-N1	5.53	112.62	108.20
2	N	146	G	N3-C2-N2	5.53	123.77	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	581	G	N1-C6-O6	5.53	123.22	119.90
3	O	1423	G	C5-C6-N1	-5.53	108.74	111.50
1	M	1007	U	N3-C4-O4	5.53	123.27	119.40
1	M	1224	U	C6-N1-C1'	-5.53	113.46	121.20
2	N	108	G	C4-C5-N7	5.53	113.01	110.80
2	N	349	A	N7-C8-N9	5.53	116.56	113.80
2	N	452	A	N7-C8-N9	-5.53	111.04	113.80
2	N	471	U	N3-C2-O2	5.53	126.07	122.20
2	N	616	G	N9-C4-C5	-5.53	103.19	105.40
2	N	739	C	N3-C4-N4	5.53	121.87	118.00
2	N	866	C	C5'-C4'-C3'	-5.53	107.16	116.00
3	O	1432	G	C5'-C4'-C3'	5.53	124.85	116.00
3	O	1448	C	N3-C4-N4	5.53	121.87	118.00
3	O	1470	U	C4'-C3'-C2'	-5.53	97.07	102.60
3	O	1502	A	O5'-C5'-C4'	-5.53	101.20	111.70
2	N	452	A	N9-C4-C5	-5.53	103.59	105.80
2	N	814	A	C3'-C2'-C1'	5.53	105.92	101.50
2	N	849	G	N9-C4-C5	-5.53	103.19	105.40
1	M	1186	G	C2-N3-C4	5.52	114.66	111.90
1	M	1210	C	C6-N1-C2	-5.52	118.09	120.30
2	N	241	G	C4-C5-N7	5.52	113.01	110.80
2	N	623	C	C6-N1-C2	-5.52	118.09	120.30
2	N	703	G	C5'-C4'-O4'	5.52	115.73	109.10
3	O	1517	G	N1-C2-N2	-5.52	111.23	116.20
2	N	90	C	C4'-C3'-C2'	-5.52	97.08	102.60
2	N	111	G	N1-C2-N2	-5.52	111.23	116.20
2	N	331	G	C3'-C2'-C1'	5.52	105.92	101.50
2	N	715	A	C6-N1-C2	-5.52	115.29	118.60
3	O	1421	G	C2-N3-C4	-5.52	109.14	111.90
1	M	969	A	O4'-C1'-N9	5.52	112.61	108.20
1	M	1076	U	O4'-C1'-N1	5.52	112.62	108.20
1	M	1199	U	O4'-C1'-N1	5.52	112.61	108.20
2	N	109	A	C5-C6-N6	-5.52	119.28	123.70
2	N	241	G	C8-N9-C1'	5.52	134.18	127.00
2	N	337	G	N3-C4-N9	5.52	129.31	126.00
2	N	441	A	C5'-C4'-O4'	5.52	115.72	109.10
2	N	912	C	C5-C6-N1	-5.52	118.24	121.00
3	O	1405	G	N3-C2-N2	5.52	123.76	119.90
1	M	954	G	N1-C2-N2	-5.52	111.23	116.20
1	M	1044	A	N3-C4-N9	-5.52	122.99	127.40
1	M	1079	G	C5-C6-N1	5.52	114.26	111.50
1	M	1138	G	C6-N1-C2	5.52	128.41	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	92	U	N3-C2-O2	-5.52	118.34	122.20
2	N	410	G	C5-N7-C8	5.52	107.06	104.30
2	N	873	A	N3-C4-N9	-5.52	122.99	127.40
1	M	1057	G	C6-C5-N7	-5.52	127.09	130.40
1	M	1359	C	OP1-P-O3'	5.52	117.34	105.20
2	N	33	A	N3-C4-C5	-5.52	122.94	126.80
3	O	1425	U	N3-C2-O2	5.52	126.06	122.20
1	M	1099	G	N1-C6-O6	5.51	123.21	119.90
1	M	1166	G	C5-N7-C8	-5.51	101.54	104.30
1	M	1265	C	C4'-C3'-C2'	-5.51	97.08	102.60
2	N	103	U	O4'-C1'-C2'	-5.51	100.28	105.80
2	N	262	A	C3'-C2'-C1'	-5.51	97.09	101.50
2	N	573	A	P-O5'-C5'	-5.51	112.08	120.90
1	M	1346	A	C5-C6-N6	-5.51	119.29	123.70
2	N	165	G	C1'-O4'-C4'	-5.51	105.49	109.90
2	N	778	G	C4-C5-C6	5.51	122.11	118.80
1	M	1175	G	C8-N9-C4	-5.51	104.20	106.40
1	M	1186	G	C5-C6-N1	-5.51	108.75	111.50
1	M	1222	G	C4-C5-C6	5.51	122.11	118.80
1	M	1327	C	C6-N1-C2	-5.51	118.09	120.30
2	N	127	G	N1-C2-N2	5.51	121.16	116.20
2	N	530	G	C8-N9-C4	-5.51	104.19	106.40
2	N	556	C	P-O3'-C3'	-5.51	113.09	119.70
3	O	1458	G	C4-C5-N7	-5.51	108.59	110.80
2	N	68	G	N7-C8-N9	-5.51	110.34	113.10
2	N	126	G	C4-N9-C1'	-5.51	119.34	126.50
2	N	266	G	C2-N3-C4	5.51	114.66	111.90
2	N	640	A	N9-C4-C5	5.51	108.00	105.80
3	O	1489	G	C4'-C3'-C2'	5.51	108.11	102.60
1	M	1015	G	C4-C5-C6	5.51	122.11	118.80
2	N	317	U	N1-C2-N3	-5.51	111.60	114.90
2	N	415	A	O4'-C1'-N9	5.51	112.61	108.20
2	N	577	G	P-O5'-C5'	-5.51	112.09	120.90
1	M	1099	G	C6-N1-C2	5.50	128.40	125.10
2	N	72	A	C4'-C3'-C2'	-5.50	97.09	102.60
2	N	273	U	C1'-O4'-C4'	5.50	114.30	109.90
2	N	467	U	N3-C2-O2	-5.50	118.35	122.20
2	N	793	U	C1'-O4'-C4'	-5.50	105.50	109.90
2	N	925	G	C4-C5-N7	-5.50	108.60	110.80
2	N	872	A	C6-C5-N7	-5.50	128.45	132.30
3	O	1404	C	C5-C4-N4	-5.50	116.35	120.20
2	N	204	G	O4'-C1'-N9	5.50	112.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	398	U	C1'-O4'-C4'	5.50	114.30	109.90
1	M	1270	G	O4'-C1'-N9	5.50	112.60	108.20
2	N	540	G	C4-C5-C6	-5.50	115.50	118.80
2	N	776	G	O4'-C4'-C3'	-5.50	98.50	104.00
2	N	791	G	C4-C5-N7	-5.50	108.60	110.80
2	N	818	G	N9-C4-C5	5.50	107.60	105.40
1	M	960	U	O4'-C1'-C2'	-5.50	100.30	105.80
2	N	128	G	O4'-C1'-N9	5.50	112.60	108.20
2	N	529	G	C2-N3-C4	-5.50	109.15	111.90
2	N	642	A	N7-C8-N9	5.50	116.55	113.80
2	N	644	U	N3-C2-O2	5.50	126.05	122.20
2	N	810	C	C5-C4-N4	-5.50	116.35	120.20
3	O	1531	A	C4'-C3'-C2'	-5.50	97.10	102.60
2	N	368	U	C3'-C2'-C1'	5.50	105.90	101.50
2	N	718	A	C2-N3-C4	5.50	113.35	110.60
2	N	830	G	C5-N7-C8	5.50	107.05	104.30
2	N	844	G	C8-N9-C4	-5.50	104.20	106.40
1	M	963	G	C6-N1-C2	-5.50	121.80	125.10
2	N	232	G	N1-C2-N3	-5.50	120.60	123.90
2	N	435	A	C6-N1-C2	5.50	121.90	118.60
2	N	510	A	O4'-C1'-C2'	5.50	112.55	107.60
1	M	1331	G	N3-C2-N2	5.49	123.75	119.90
2	N	381	C	C6-N1-C2	-5.49	118.10	120.30
2	N	411	A	C5'-C4'-C3'	-5.49	107.21	116.00
2	N	613	C	C1'-O4'-C4'	5.49	114.30	109.90
2	N	674	G	C5-C6-O6	-5.49	125.30	128.60
2	N	892	A	C4-C5-C6	5.49	119.75	117.00
1	M	1160	G	N9-C4-C5	-5.49	103.20	105.40
2	N	740	U	C2-N1-C1'	-5.49	111.11	117.70
1	M	1088	G	O5'-C5'-C4'	-5.49	101.27	111.70
2	N	356	A	C8-N9-C4	-5.49	103.60	105.80
1	M	1364	U	N1-C2-O2	5.49	126.64	122.80
1	M	1365	G	C5-C6-O6	-5.49	125.31	128.60
2	N	241	G	N7-C8-N9	5.49	115.84	113.10
2	N	731	G	C4'-C3'-C2'	-5.49	97.11	102.60
1	M	1294	G	C5-N7-C8	5.49	107.04	104.30
2	N	298	A	O5'-C5'-C4'	-5.49	101.28	111.70
2	N	926	G	C4'-C3'-C2'	-5.49	97.11	102.60
1	M	1132	C	C6-N1-C2	5.48	122.49	120.30
2	N	399	G	N7-C8-N9	5.48	115.84	113.10
3	O	1493	A	C4-C5-C6	5.48	119.74	117.00
2	N	58	C	C5-C6-N1	-5.48	118.26	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	193	C	N3-C4-C5	-5.48	119.71	121.90
1	M	1301	U	C6-N1-C1'	5.48	128.87	121.20
2	N	64	G	C8-N9-C4	-5.48	104.21	106.40
2	N	256	U	C4'-C3'-C2'	-5.48	97.12	102.60
2	N	331	G	C6-N1-C2	-5.48	121.81	125.10
3	O	1419	G	N3-C4-N9	5.48	129.29	126.00
1	M	1142	G	C1'-O4'-C4'	5.48	114.28	109.90
2	N	129	A	C2-N3-C4	-5.48	107.86	110.60
2	N	264	C	N1-C1'-C2'	-5.48	105.97	112.00
2	N	406	G	C2-N3-C4	5.48	114.64	111.90
2	N	788	U	OP2-P-O3'	5.48	117.25	105.20
3	O	1465	A	C6-C5-N7	-5.48	128.47	132.30
3	O	1481	U	N3-C4-O4	5.48	123.23	119.40
1	M	1388	C	P-O5'-C5'	-5.48	112.14	120.90
2	N	32	A	C4-C5-N7	-5.48	107.96	110.70
2	N	520	A	O5'-P-OP2	5.48	117.27	110.70
1	M	1208	C	N3-C4-N4	5.47	121.83	118.00
2	N	20	U	N1-C1'-C2'	-5.47	105.98	112.00
2	N	25	C	C5-C6-N1	5.47	123.74	121.00
2	N	102	G	C5-C6-N1	-5.47	108.76	111.50
2	N	458	U	N3-C4-C5	-5.47	111.31	114.60
1	M	1072	G	C2-N3-C4	-5.47	109.16	111.90
1	M	1111	A	N3-C4-C5	-5.47	122.97	126.80
1	M	1204	A	C5-N7-C8	5.47	106.64	103.90
2	N	45	G	OP1-P-OP2	-5.47	111.39	119.60
2	N	133	U	C4-C5-C6	5.47	122.98	119.70
3	O	1430	A	N3-C4-C5	-5.47	122.97	126.80
1	M	1115	U	C5-C4-O4	-5.47	122.62	125.90
2	N	382	A	C5-N7-C8	5.47	106.64	103.90
1	M	1367	C	N3-C2-O2	5.47	125.73	121.90
2	N	48	C	C2-N3-C4	5.47	122.63	119.90
2	N	319	G	C5-N7-C8	5.47	107.03	104.30
2	N	742	G	N9-C4-C5	-5.47	103.21	105.40
2	N	844	G	C4-N9-C1'	5.47	133.61	126.50
1	M	976	G	N1-C6-O6	5.47	123.18	119.90
2	N	196	A	C5'-C4'-C3'	5.47	124.75	116.00
1	M	1117	A	C5-C6-N1	-5.47	114.97	117.70
1	M	1142	G	C5-N7-C8	-5.47	101.57	104.30
1	M	1251	A	C6-N1-C2	-5.47	115.32	118.60
2	N	89	U	N3-C2-O2	5.47	126.03	122.20
2	N	98	A	C6-N1-C2	-5.47	115.32	118.60
2	N	126	G	N3-C2-N2	5.47	123.73	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1289	A	C8-N9-C4	-5.46	103.61	105.80
1	M	1332	A	C5'-C4'-C3'	-5.46	107.26	116.00
2	N	137	U	O4'-C4'-C3'	-5.46	98.54	104.00
2	N	267	C	C4-C5-C6	-5.46	114.67	117.40
2	N	690	G	O4'-C1'-N9	5.46	112.57	108.20
1	M	1078	U	N1-C2-O2	5.46	126.62	122.80
2	N	546	A	P-O5'-C5'	-5.46	112.16	120.90
2	N	770	C	N3-C2-O2	5.46	125.72	121.90
2	N	174	A	C5-C6-N1	-5.46	114.97	117.70
2	N	205	A	C6-C5-N7	-5.46	128.48	132.30
2	N	531	U	C5'-C4'-C3'	5.46	124.74	116.00
2	N	537	G	C4-C5-N7	5.46	112.98	110.80
2	N	894	G	C4-N9-C1'	5.46	133.60	126.50
2	N	920	U	O5'-P-OP2	-5.46	100.78	105.70
3	O	1438	G	C6-C5-N7	-5.46	127.12	130.40
1	M	1158	C	N3-C4-C5	5.46	124.08	121.90
2	N	227	G	C4-C5-N7	5.46	112.98	110.80
1	M	1204	A	C8-N9-C4	5.46	107.98	105.80
1	M	1251	A	C6-C5-N7	5.46	136.12	132.30
2	N	115	G	C4'-C3'-C2'	5.46	108.06	102.60
2	N	417	G	N9-C4-C5	5.46	107.58	105.40
2	N	870	U	C4-C5-C6	5.46	122.97	119.70
2	N	140	U	N3-C2-O2	5.46	126.02	122.20
2	N	217	C	C2-N3-C4	-5.46	117.17	119.90
2	N	472	U	N3-C4-O4	5.46	123.22	119.40
2	N	569	C	N3-C4-C5	-5.46	119.72	121.90
2	N	632	U	C4-C5-C6	5.46	122.97	119.70
3	O	1499	A	N9-C4-C5	-5.46	103.62	105.80
1	M	1112	C	N3-C4-C5	-5.46	119.72	121.90
1	M	1211	U	C2-N3-C4	-5.46	123.73	127.00
1	M	1219	A	N7-C8-N9	-5.46	111.07	113.80
1	M	1234	C	C5-C4-N4	-5.46	116.38	120.20
2	N	198	G	C5'-C4'-C3'	-5.46	107.27	116.00
2	N	496	A	C5'-C4'-C3'	-5.46	107.27	116.00
2	N	798	U	C5'-C4'-C3'	5.46	124.73	116.00
1	M	1323	G	C8-N9-C4	-5.45	104.22	106.40
2	N	248	C	P-O3'-C3'	-5.45	113.16	119.70
3	O	1525	G	N3-C4-N9	-5.45	122.73	126.00
1	M	1104	G	N1-C2-N2	5.45	121.11	116.20
2	N	79	G	O4'-C1'-N9	5.45	112.56	108.20
2	N	573	A	C2-N3-C4	5.45	113.33	110.60
1	M	1017	U	C1'-O4'-C4'	5.45	114.26	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1346	A	C3'-C2'-C1'	-5.45	97.14	101.50
2	N	187	G	N7-C8-N9	-5.45	110.38	113.10
2	N	834	U	P-O5'-C5'	5.45	129.62	120.90
1	M	1324	A	C5'-C4'-C3'	5.45	124.72	116.00
2	N	381	C	O5'-C5'-C4'	-5.45	101.35	111.70
2	N	449	G	C4-C5-C6	5.45	122.07	118.80
2	N	704	A	C5-C6-N6	-5.45	119.34	123.70
2	N	718	A	N3-C4-C5	-5.45	122.98	126.80
3	O	1507	A	C4-C5-N7	-5.45	107.97	110.70
2	N	669	G	N3-C4-C5	-5.45	125.88	128.60
2	N	888	G	C5-C6-N1	-5.45	108.78	111.50
1	M	1279	G	C6-C5-N7	-5.45	127.13	130.40
1	M	1308	U	O4'-C1'-C2'	-5.45	100.36	105.80
2	N	39	G	P-O5'-C5'	-5.45	112.19	120.90
2	N	480	U	C6-N1-C2	-5.45	117.73	121.00
2	N	81	A	C5'-C4'-C3'	5.44	124.71	116.00
2	N	89	U	P-O3'-C3'	5.44	126.23	119.70
2	N	226	G	N1-C2-N3	-5.44	120.63	123.90
2	N	390	U	N3-C4-C5	-5.44	111.33	114.60
2	N	603	U	P-O5'-C5'	5.44	129.61	120.90
1	M	1075	U	O4'-C1'-N1	5.44	112.55	108.20
1	M	1080	A	O4'-C1'-N9	5.44	112.55	108.20
1	M	1322	C	C6-N1-C2	-5.44	118.12	120.30
2	N	717	U	C4-C5-C6	-5.44	116.44	119.70
3	O	1432	G	O5'-C5'-C4'	-5.44	101.36	111.70
3	O	1493	A	N7-C8-N9	5.44	116.52	113.80
2	N	784	A	N3-C4-N9	-5.44	123.05	127.40
1	M	936	C	O4'-C1'-N1	5.44	112.55	108.20
1	M	1295	U	N3-C4-O4	5.44	123.21	119.40
2	N	113	G	O4'-C4'-C3'	-5.44	98.56	104.00
2	N	842	U	C5-C4-O4	-5.44	122.64	125.90
1	M	956	U	N1-C2-O2	-5.44	119.00	122.80
2	N	75	G	C4-C5-C6	5.44	122.06	118.80
2	N	124	C	N3-C4-N4	5.44	121.81	118.00
2	N	386	C	O4'-C1'-N1	5.44	112.55	108.20
2	N	753	A	C5-C6-N6	-5.44	119.35	123.70
1	M	1040	U	C4-C5-C6	5.43	122.96	119.70
2	N	59	A	C5'-C4'-C3'	5.43	124.69	116.00
2	N	117	G	C5-C6-N1	-5.43	108.78	111.50
2	N	840	C	N3-C4-C5	-5.43	119.73	121.90
3	O	1517	G	C8-N9-C4	-5.43	104.23	106.40
1	M	963	G	N3-C4-N9	5.43	129.26	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1066	C	C4'-C3'-C2'	5.43	108.03	102.60
2	N	457	G	C5-C6-O6	-5.43	125.34	128.60
2	N	839	C	N3-C4-C5	-5.43	119.73	121.90
1	M	1342	C	O4'-C1'-N1	5.43	112.55	108.20
2	N	658	C	P-O3'-C3'	-5.43	113.18	119.70
2	N	890	G	C6-C5-N7	-5.43	127.14	130.40
1	M	947	G	O4'-C1'-N9	5.43	112.54	108.20
1	M	1075	U	C5-C4-O4	-5.43	122.64	125.90
1	M	1227	A	C8-N9-C4	-5.43	103.63	105.80
2	N	80	A	N1-C2-N3	5.43	132.01	129.30
2	N	364	A	N7-C8-N9	-5.43	111.08	113.80
2	N	631	C	C5'-C4'-O4'	5.43	115.61	109.10
2	N	639	G	N7-C8-N9	5.43	115.81	113.10
3	O	1446	A	N3-C4-C5	-5.43	123.00	126.80
1	M	965	U	C5'-C4'-O4'	5.43	115.61	109.10
1	M	1178	G	C4-C5-C6	5.43	122.06	118.80
1	M	1228	C	C2-N3-C4	-5.43	117.19	119.90
2	N	343	U	O4'-C1'-N1	5.43	112.54	108.20
2	N	650	G	N1-C2-N3	-5.43	120.64	123.90
2	N	868	C	N3-C2-O2	5.43	125.70	121.90
1	M	1319	A	C8-N9-C4	-5.43	103.63	105.80
1	M	1340	A	C5-C6-N6	-5.43	119.36	123.70
2	N	35	G	C4-C5-N7	-5.43	108.63	110.80
2	N	161	A	C6-C5-N7	-5.43	128.50	132.30
2	N	420	U	N3-C2-O2	5.43	126.00	122.20
2	N	544	G	C8-N9-C4	5.43	108.57	106.40
2	N	733	G	C5'-C4'-O4'	5.43	115.61	109.10
2	N	781	A	N3-C4-N9	5.43	131.74	127.40
2	N	804	U	N3-C2-O2	-5.43	118.40	122.20
1	M	1215	G	C8-N9-C1'	5.42	134.05	127.00
2	N	217	C	N1-C2-N3	5.42	123.00	119.20
2	N	432	A	C8-N9-C4	-5.42	103.63	105.80
1	M	1157	A	C6-C5-N7	-5.42	128.50	132.30
2	N	390	U	N3-C4-O4	5.42	123.20	119.40
2	N	769	G	C5'-C4'-C3'	5.42	124.68	116.00
2	N	923	A	C4'-C3'-C2'	-5.42	97.18	102.60
1	M	1228	C	C2-N1-C1'	5.42	124.77	118.80
2	N	275	G	C4-C5-N7	5.42	112.97	110.80
2	N	523	A	N7-C8-N9	5.42	116.51	113.80
1	M	1336	C	C2'-C3'-O3'	5.42	122.37	113.70
2	N	11	G	N3-C4-C5	-5.42	125.89	128.60
2	N	203	G	N3-C2-N2	5.42	123.69	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1471	U	N3-C2-O2	5.42	125.99	122.20
2	N	722	G	N1-C2-N3	-5.42	120.65	123.90
1	M	1024	G	O4'-C4'-C3'	-5.42	98.58	104.00
1	M	1385	G	O4'-C1'-N9	5.42	112.53	108.20
2	N	537	G	O5'-P-OP2	5.42	117.20	110.70
2	N	849	G	C4-C5-N7	5.42	112.97	110.80
3	O	1491	G	P-O5'-C5'	5.42	129.57	120.90
1	M	1313	U	C6-N1-C2	-5.42	117.75	121.00
2	N	521	G	N3-C2-N2	5.42	123.69	119.90
2	N	605	U	O4'-C1'-N1	5.42	112.53	108.20
1	M	1287	A	C5-N7-C8	5.41	106.61	103.90
2	N	226	G	C5-C6-N1	-5.41	108.79	111.50
2	N	353	A	N3-C4-C5	-5.41	123.01	126.80
2	N	506	G	C4-N9-C1'	5.41	133.54	126.50
2	N	707	U	C6-N1-C2	-5.41	117.75	121.00
2	N	717	U	C5-C6-N1	5.41	125.41	122.70
1	M	1363	A	C6-C5-N7	-5.41	128.51	132.30
2	N	149	A	O4'-C1'-N9	5.41	112.53	108.20
2	N	158	G	C6-C5-N7	-5.41	127.15	130.40
2	N	207	C	O4'-C4'-C3'	-5.41	98.59	104.00
2	N	602	A	O3'-P-O5'	-5.41	93.72	104.00
2	N	772	U	C4-C5-C6	-5.41	116.45	119.70
1	M	1065	U	C6-N1-C2	5.41	124.25	121.00
2	N	189	A	C6-C5-N7	-5.41	128.51	132.30
2	N	236	A	C5-N7-C8	-5.41	101.20	103.90
2	N	322	C	C6-N1-C1'	-5.41	114.31	120.80
3	O	1416	G	P-O3'-C3'	-5.41	113.21	119.70
2	N	90	C	N1-C2-O2	-5.41	115.66	118.90
2	N	373	A	C5-N7-C8	5.41	106.60	103.90
2	N	455	G	C5'-C4'-C3'	5.41	124.65	116.00
2	N	535	A	C5'-C4'-O4'	5.41	115.59	109.10
2	N	641	U	C3'-C2'-C1'	5.41	105.83	101.50
3	O	1523	G	N9-C4-C5	-5.41	103.24	105.40
1	M	945	G	C5'-C4'-O4'	5.41	115.59	109.10
1	M	1111	A	C4-C5-N7	-5.41	108.00	110.70
2	N	156	C	C5-C4-N4	-5.41	116.42	120.20
2	N	481	G	N3-C2-N2	5.41	123.68	119.90
2	N	683	G	C6-N1-C2	5.41	128.34	125.10
3	O	1519	A	N1-C2-N3	5.41	132.00	129.30
1	M	1159	U	C3'-C2'-C1'	-5.40	97.18	101.50
2	N	87	C	N1-C1'-C2'	-5.40	106.06	112.00
2	N	8	A	C3'-C2'-C1'	5.40	105.82	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	411	A	O4'-C1'-N9	5.40	112.52	108.20
2	N	462	G	N9-C4-C5	5.40	107.56	105.40
2	N	514	C	N1-C1'-C2'	-5.40	106.06	112.00
2	N	636	U	OP1-P-O3'	5.40	117.08	105.20
3	O	1528	U	N3-C2-O2	5.40	125.98	122.20
1	M	1040	U	N3-C4-O4	5.40	123.18	119.40
2	N	67	C	C6-N1-C2	-5.40	118.14	120.30
2	N	291	U	C5-C6-N1	5.40	125.40	122.70
2	N	309	A	C6-N1-C2	5.40	121.84	118.60
2	N	660	C	C3'-C2'-C1'	-5.40	97.18	101.50
2	N	734	G	N3-C2-N2	5.40	123.68	119.90
2	N	841	C	C6-N1-C1'	-5.40	114.32	120.80
2	N	233	C	OP1-P-OP2	-5.40	111.50	119.60
2	N	631	C	O4'-C1'-N1	5.40	112.52	108.20
2	N	835	U	N3-C2-O2	-5.40	118.42	122.20
1	M	951	G	C6-C5-N7	-5.40	127.16	130.40
1	M	1120	C	C6-N1-C2	-5.40	118.14	120.30
1	M	1160	G	N3-C2-N2	5.40	123.68	119.90
2	N	918	A	N9-C1'-C2'	-5.40	106.06	112.00
3	O	1517	G	C2-N3-C4	5.40	114.60	111.90
1	M	1047	G	N9-C1'-C2'	-5.39	106.06	112.00
2	N	858	G	N1-C2-N3	-5.39	120.66	123.90
2	N	904	U	P-O3'-C3'	5.39	126.17	119.70
3	O	1512	U	P-O3'-C3'	-5.39	113.23	119.70
1	M	933	G	N3-C4-N9	5.39	129.24	126.00
1	M	1073	U	N3-C4-O4	5.39	123.17	119.40
1	M	1285	A	O4'-C1'-C2'	5.39	112.45	107.60
2	N	194	C	C5'-C4'-C3'	-5.39	107.37	116.00
2	N	367	U	O5'-P-OP2	5.39	117.17	110.70
1	M	1182	G	N1-C6-O6	5.39	123.13	119.90
2	N	216	U	N3-C4-C5	-5.39	111.36	114.60
2	N	245	U	N3-C4-C5	-5.39	111.36	114.60
2	N	454	G	C4-C5-N7	5.39	112.96	110.80
1	M	1365	G	P-O3'-C3'	5.39	126.17	119.70
2	N	202	G	C6-C5-N7	-5.39	127.17	130.40
2	N	297	G	C5-N7-C8	5.39	106.99	104.30
2	N	907	A	C6-C5-N7	-5.39	128.53	132.30
2	N	425	G	C6-N1-C2	5.39	128.33	125.10
3	O	1453	G	C8-N9-C1'	-5.39	120.00	127.00
1	M	929	G	P-O3'-C3'	5.39	126.16	119.70
2	N	291	U	O3'-P-O5'	5.39	114.23	104.00
2	N	346	G	C3'-C2'-C1'	5.39	105.81	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	521	G	N9-C4-C5	-5.39	103.25	105.40
2	N	691	G	P-O3'-C3'	5.39	126.16	119.70
2	N	724	G	N1-C2-N3	-5.39	120.67	123.90
1	M	1228	C	C6-N1-C1'	-5.38	114.34	120.80
2	N	61	G	P-O3'-C3'	-5.38	113.24	119.70
2	N	318	G	C5-N7-C8	-5.38	101.61	104.30
2	N	922	G	C3'-C2'-C1'	5.38	105.81	101.50
3	O	1455	G	N3-C4-N9	-5.38	122.77	126.00
2	N	26	A	N3-C4-N9	-5.38	123.09	127.40
2	N	639	G	C2-N3-C4	-5.38	109.21	111.90
1	M	1367	C	C2'-C3'-O3'	5.38	122.31	113.70
2	N	829	G	N7-C8-N9	5.38	115.79	113.10
3	O	1457	G	C8-N9-C1'	-5.38	120.00	127.00
2	N	635	A	C8-N9-C4	-5.38	103.65	105.80
1	M	938	A	C5-C6-N1	-5.38	115.01	117.70
1	M	1360	A	C4'-C3'-C2'	-5.38	97.22	102.60
2	N	216	U	O4'-C1'-N1	5.38	112.50	108.20
2	N	655	A	C2'-C3'-O3'	5.38	122.31	113.70
1	M	1116	U	N3-C4-C5	-5.38	111.38	114.60
1	M	1281	C	P-O5'-C5'	5.38	129.50	120.90
2	N	49	U	C2-N3-C4	5.38	130.23	127.00
2	N	345	C	C4-C5-C6	5.38	120.09	117.40
3	O	1411	C	C4-C5-C6	5.38	120.09	117.40
3	O	1393	U	C6-N1-C2	5.38	124.22	121.00
1	M	1030	U	C6-N1-C2	5.37	124.22	121.00
1	M	1188	A	C2-N3-C4	5.37	113.29	110.60
1	M	1273	C	N1-C2-N3	-5.37	115.44	119.20
2	N	775	G	O4'-C1'-N9	5.37	112.50	108.20
1	M	1274	A	OP1-P-OP2	-5.37	111.54	119.60
1	M	1300	G	O4'-C1'-N9	5.37	112.50	108.20
2	N	506	G	C8-N9-C1'	-5.37	120.02	127.00
2	N	765	G	C4-N9-C1'	5.37	133.48	126.50
2	N	819	A	N9-C4-C5	5.37	107.95	105.80
2	N	825	A	C6-N1-C2	-5.37	115.38	118.60
1	M	1074	G	O4'-C1'-N9	5.37	112.50	108.20
1	M	965	U	OP1-P-OP2	-5.37	111.55	119.60
1	M	980	C	C5-C6-N1	5.37	123.68	121.00
1	M	1310	G	C5-N7-C8	-5.37	101.62	104.30
2	N	523	A	C8-N9-C4	-5.37	103.65	105.80
2	N	633	G	C6-N1-C2	5.37	128.32	125.10
2	N	841	C	O4'-C1'-N1	5.37	112.49	108.20
2	N	845	A	OP1-P-OP2	-5.37	111.55	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	885	G	C8-N9-C4	-5.37	104.25	106.40
3	O	1395	C	N3-C2-O2	5.37	125.66	121.90
3	O	1446	A	C6-C5-N7	5.37	136.06	132.30
1	M	1008	U	O4'-C1'-C2'	5.37	112.43	107.60
1	M	1259	C	N3-C4-N4	5.37	121.76	118.00
2	N	82	G	C3'-C2'-C1'	5.37	105.79	101.50
2	N	142	G	C5-C6-N1	-5.37	108.82	111.50
2	N	579	A	C4-C5-N7	-5.37	108.02	110.70
2	N	776	G	N9-C4-C5	-5.37	103.25	105.40
1	M	1113	C	C4'-C3'-C2'	-5.36	97.24	102.60
1	M	1162	C	C2-N3-C4	5.36	122.58	119.90
1	M	1186	G	P-O5'-C5'	-5.36	112.32	120.90
2	N	179	A	C6-C5-N7	-5.36	128.55	132.30
2	N	759	A	N3-C4-N9	5.36	131.69	127.40
2	N	821	G	C4'-C3'-C2'	-5.36	97.24	102.60
3	O	1459	G	C6-C5-N7	-5.36	127.18	130.40
1	M	1096	C	C5'-C4'-C3'	5.36	124.58	116.00
1	M	1289	A	N7-C8-N9	5.36	116.48	113.80
2	N	205	A	O4'-C4'-C3'	-5.36	98.64	104.00
2	N	211	G	O4'-C1'-C2'	5.36	112.42	107.60
2	N	846	G	C4-C5-N7	-5.36	108.66	110.80
2	N	862	C	C6-N1-C2	-5.36	118.16	120.30
3	O	1526	G	C5'-C4'-O4'	5.36	115.53	109.10
1	M	1092	A	C5'-C4'-C3'	5.36	124.57	116.00
2	N	79	G	C4-C5-C6	5.36	122.02	118.80
2	N	715	A	O4'-C1'-N9	5.36	112.49	108.20
2	N	791	G	C8-N9-C1'	-5.36	120.03	127.00
2	N	855	U	C2-N3-C4	5.36	130.22	127.00
1	M	1053	G	N7-C8-N9	-5.36	110.42	113.10
1	M	1373	G	N3-C2-N2	5.36	123.65	119.90
2	N	164	G	N3-C4-N9	-5.36	122.79	126.00
2	N	177	G	N1-C6-O6	5.36	123.11	119.90
2	N	922	G	N9-C4-C5	-5.36	103.26	105.40
3	O	1439	G	N3-C2-N2	5.36	123.65	119.90
3	O	1479	C	C5'-C4'-O4'	5.36	115.53	109.10
3	O	1495	U	O4'-C4'-C3'	5.36	110.39	106.10
1	M	1202	U	C6-N1-C2	-5.36	117.79	121.00
1	M	1248	A	C3'-C2'-C1'	5.36	105.78	101.50
2	N	9	G	P-O5'-C5'	5.36	129.47	120.90
2	N	707	U	P-O3'-C3'	5.36	126.13	119.70
3	O	1502	A	O4'-C1'-N9	5.36	112.48	108.20
1	M	1160	G	C6-C5-N7	-5.35	127.19	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	509	A	N1-C6-N6	5.35	121.81	118.60
2	N	153	C	N1-C2-N3	-5.35	115.45	119.20
2	N	667	G	C2-N3-C4	5.35	114.58	111.90
2	N	232	G	C5'-C4'-C3'	-5.35	107.44	116.00
1	M	974	A	N3-C4-C5	-5.35	123.06	126.80
1	M	1004	A	C6-N1-C2	-5.35	115.39	118.60
1	M	1090	U	O4'-C4'-C3'	-5.35	98.65	104.00
1	M	1255	G	N3-C2-N2	5.35	123.64	119.90
1	M	1277	C	N1-C2-N3	-5.35	115.46	119.20
2	N	12	U	N3-C4-O4	5.35	123.14	119.40
3	O	1499	A	O4'-C1'-N9	5.35	112.48	108.20
1	M	1331	G	C6-C5-N7	-5.35	127.19	130.40
2	N	262	A	C5-C6-N6	-5.35	119.42	123.70
3	O	1422	G	C5-N7-C8	5.35	106.97	104.30
1	M	987	G	C2-N3-C4	5.34	114.57	111.90
1	M	1124	G	C4-C5-N7	-5.34	108.66	110.80
1	M	1316	G	O4'-C1'-N9	5.34	112.48	108.20
2	N	268	U	C4'-C3'-C2'	-5.34	97.25	102.60
2	N	735	C	C6-N1-C2	-5.34	118.16	120.30
2	N	838	G	C4-C5-C6	5.34	122.01	118.80
2	N	844	G	C4-C5-C6	5.34	122.01	118.80
3	O	1398	A	C4'-C3'-C2'	-5.34	97.25	102.60
2	N	284	C	O4'-C1'-N1	5.34	112.47	108.20
1	M	973	G	C1'-O4'-C4'	-5.34	105.63	109.90
1	M	1145	A	C6-C5-N7	-5.34	128.56	132.30
1	M	1192	C	N3-C4-C5	-5.34	119.76	121.90
2	N	175	C	OP1-P-OP2	-5.34	111.59	119.60
2	N	425	G	N1-C6-O6	5.34	123.10	119.90
2	N	789	U	C1'-O4'-C4'	-5.34	105.63	109.90
1	M	1285	A	N3-C4-N9	5.34	131.67	127.40
2	N	210	C	O3'-P-O5'	-5.34	93.86	104.00
2	N	484	G	C5-N7-C8	5.34	106.97	104.30
1	M	1182	G	C5'-C4'-O4'	5.34	115.50	109.10
2	N	213	G	N1-C2-N3	-5.34	120.70	123.90
2	N	235	C	P-O3'-C3'	5.34	126.10	119.70
3	O	1455	G	N1-C2-N2	-5.34	111.40	116.20
1	M	1347	G	N7-C8-N9	5.33	115.77	113.10
1	M	1355	G	C1'-O4'-C4'	-5.33	105.63	109.90
2	N	372	C	C6-N1-C1'	-5.33	114.40	120.80
1	M	1106	G	C5-N7-C8	-5.33	101.63	104.30
1	M	1311	A	N9-C4-C5	5.33	107.93	105.80
1	M	1312	G	C2-N3-C4	-5.33	109.23	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1360	A	C5-N7-C8	5.33	106.57	103.90
2	N	153	C	P-O5'-C5'	5.33	129.43	120.90
2	N	168	G	N1-C2-N2	-5.33	111.40	116.20
2	N	388	G	N7-C8-N9	-5.33	110.43	113.10
2	N	622	A	C5-N7-C8	5.33	106.57	103.90
2	N	755	G	C4-C5-N7	-5.33	108.67	110.80
2	N	818	G	C5-N7-C8	5.33	106.97	104.30
1	M	1226	C	N3-C4-C5	-5.33	119.77	121.90
2	N	119	A	C5'-C4'-O4'	-5.33	102.70	109.10
2	N	142	G	C4-N9-C1'	5.33	133.43	126.50
2	N	144	G	C3'-C2'-C1'	5.33	105.77	101.50
2	N	511	C	C2-N3-C4	-5.33	117.23	119.90
2	N	763	G	C8-N9-C4	-5.33	104.27	106.40
2	N	63	C	N3-C4-C5	-5.33	119.77	121.90
2	N	192	A	N3-C4-C5	-5.33	123.07	126.80
2	N	553	A	N7-C8-N9	-5.33	111.14	113.80
1	M	1099	G	N3-C2-N2	5.33	123.63	119.90
2	N	65	A	C6-C5-N7	-5.33	128.57	132.30
2	N	135	C	C5-C4-N4	-5.33	116.47	120.20
2	N	418	C	P-O5'-C5'	-5.33	112.37	120.90
3	O	1410	A	P-O3'-C3'	5.33	126.09	119.70
1	M	1108	G	N1-C2-N2	-5.33	111.41	116.20
2	N	137	U	N3-C4-C5	-5.33	111.40	114.60
2	N	303	A	C5-C6-N6	-5.33	119.44	123.70
2	N	332	G	C4-N9-C1'	-5.33	119.58	126.50
2	N	696	A	C4-C5-C6	5.33	119.66	117.00
2	N	922	G	C6-C5-N7	-5.33	127.20	130.40
3	O	1397	C	C6-N1-C1'	-5.33	114.41	120.80
1	M	957	U	O4'-C1'-N1	5.33	112.46	108.20
1	M	1222	G	C4-C5-N7	-5.33	108.67	110.80
2	N	223	A	N7-C8-N9	5.33	116.46	113.80
2	N	528	C	N1-C1'-C2'	-5.33	106.14	112.00
2	N	557	G	P-O3'-C3'	5.33	126.09	119.70
2	N	598	U	N3-C4-C5	-5.33	111.40	114.60
1	M	1159	U	N3-C4-O4	5.32	123.13	119.40
2	N	397	A	C6-C5-N7	-5.32	128.57	132.30
2	N	456	A	N7-C8-N9	-5.32	111.14	113.80
2	N	519	C	C5'-C4'-C3'	-5.32	107.48	116.00
3	O	1487	G	C4-C5-C6	5.32	121.99	118.80
2	N	502	A	N3-C4-N9	5.32	131.66	127.40
2	N	529	G	C1'-O4'-C4'	-5.32	105.64	109.90
1	M	952	U	N3-C4-C5	5.32	117.79	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1144	G	N3-C4-C5	5.32	131.26	128.60
2	N	307	C	C5'-C4'-C3'	5.32	124.51	116.00
2	N	394	G	N3-C4-C5	5.32	131.26	128.60
2	N	415	A	C5'-C4'-O4'	5.32	115.48	109.10
2	N	384	G	P-O3'-C3'	-5.32	113.32	119.70
2	N	842	U	C5-C6-N1	-5.32	120.04	122.70
3	O	1473	G	O4'-C1'-N9	5.32	112.45	108.20
1	M	996	A	N1-C6-N6	5.32	121.79	118.60
1	M	1171	A	N1-C6-N6	5.32	121.79	118.60
2	N	80	A	C5-C6-N1	-5.32	115.04	117.70
2	N	189	A	C4-N9-C1'	-5.32	116.73	126.30
2	N	242	G	C2-N3-C4	5.32	114.56	111.90
2	N	712	A	C3'-C2'-C1'	-5.32	97.25	101.50
3	O	1509	C	C6-N1-C1'	-5.32	114.42	120.80
2	N	41	G	N3-C2-N2	5.32	123.62	119.90
2	N	48	C	C5'-C4'-C3'	-5.32	107.49	116.00
2	N	190	A	P-O3'-C3'	5.32	126.08	119.70
2	N	717	U	P-O5'-C5'	5.32	129.41	120.90
2	N	730	G	C8-N9-C4	5.32	108.53	106.40
2	N	862	C	C4-C5-C6	-5.32	114.74	117.40
3	O	1434	A	C4-C5-N7	-5.32	108.04	110.70
2	N	556	C	C5-C4-N4	-5.31	116.48	120.20
2	N	694	A	P-O3'-C3'	5.31	126.08	119.70
2	N	697	U	OP1-P-OP2	-5.31	111.63	119.60
2	N	815	A	C2-N3-C4	-5.31	107.94	110.60
1	M	1124	G	C1'-O4'-C4'	5.31	114.15	109.90
1	M	1274	A	C5'-C4'-C3'	-5.31	107.50	116.00
1	M	1275	A	C5-C6-N6	-5.31	119.45	123.70
2	N	146	G	C2-N3-C4	5.31	114.56	111.90
2	N	501	C	C2-N1-C1'	5.31	124.64	118.80
2	N	881	G	C5-C6-N1	-5.31	108.84	111.50
3	O	1499	A	N1-C2-N3	5.31	131.96	129.30
1	M	1239	A	N1-C2-N3	5.31	131.96	129.30
1	M	968	A	C3'-C2'-C1'	-5.31	97.25	101.50
1	M	1015	G	N9-C4-C5	-5.31	103.28	105.40
1	M	1328	C	C4-C5-C6	5.31	120.06	117.40
2	N	44	A	C5-C6-N6	-5.31	119.45	123.70
2	N	353	A	C5-N7-C8	5.31	106.56	103.90
3	O	1444	U	C5-C4-O4	5.31	129.09	125.90
3	O	1518	A	C2-N3-C4	5.31	113.25	110.60
2	N	111	G	C5-N7-C8	-5.31	101.65	104.30
2	N	211	G	C8-N9-C1'	-5.31	120.10	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	270	A	N9-C1'-C2'	-5.31	106.16	112.00
2	N	441	A	P-O5'-C5'	-5.31	112.41	120.90
2	N	538	G	C5'-C4'-O4'	5.31	115.47	109.10
2	N	577	G	C4-C5-C6	5.31	121.98	118.80
2	N	628	G	C4'-C3'-C2'	-5.31	97.29	102.60
2	N	855	U	N3-C4-O4	5.31	123.11	119.40
3	O	1394	A	C5'-C4'-O4'	5.31	115.47	109.10
2	N	11	G	N1-C2-N3	-5.31	120.72	123.90
2	N	327	A	C4-C5-N7	-5.31	108.05	110.70
2	N	20	U	C2-N1-C1'	5.30	124.07	117.70
2	N	77	A	P-O3'-C3'	5.30	126.06	119.70
2	N	424	G	N3-C4-C5	5.30	131.25	128.60
2	N	527	G	N1-C2-N3	-5.30	120.72	123.90
1	M	1124	G	C8-N9-C4	-5.30	104.28	106.40
2	N	449	G	C4-C5-N7	5.30	112.92	110.80
2	N	182	A	C5'-C4'-O4'	5.30	115.46	109.10
2	N	325	A	C4'-C3'-C2'	-5.30	97.30	102.60
2	N	551	U	C4-C5-C6	-5.30	116.52	119.70
2	N	786	G	N1-C2-N2	-5.30	111.43	116.20
2	N	811	C	C1'-O4'-C4'	-5.30	105.66	109.90
3	O	1429	A	C4-C5-C6	5.30	119.65	117.00
1	M	1177	G	C4-C5-C6	5.30	121.98	118.80
2	N	372	C	C1'-O4'-C4'	5.30	114.14	109.90
2	N	500	G	N3-C4-N9	-5.30	122.82	126.00
2	N	798	U	C2-N1-C1'	5.30	124.06	117.70
2	N	824	G	C6-N1-C2	5.30	128.28	125.10
3	O	1476	A	C5-C6-N6	-5.30	119.46	123.70
3	O	1529	G	N3-C4-C5	5.30	131.25	128.60
1	M	1106	G	C6-N1-C2	-5.30	121.92	125.10
1	M	1299	A	N3-C4-N9	5.30	131.64	127.40
2	N	181	A	N7-C8-N9	-5.30	111.15	113.80
2	N	505	G	C6-C5-N7	-5.30	127.22	130.40
2	N	898	G	C5-N7-C8	5.30	106.95	104.30
1	M	1312	G	O4'-C1'-N9	5.30	112.44	108.20
2	N	550	G	N9-C4-C5	5.30	107.52	105.40
2	N	720	C	N3-C2-O2	5.30	125.61	121.90
2	N	785	G	C4-C5-C6	5.30	121.98	118.80
2	N	861	G	N3-C4-C5	5.30	131.25	128.60
1	M	1044	A	C5'-C4'-C3'	-5.29	107.53	116.00
2	N	83	C	N3-C4-C5	-5.29	119.78	121.90
2	N	188	C	N3-C4-N4	5.29	121.71	118.00
3	O	1391	U	N3-C2-O2	5.29	125.91	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	445	G	C2-N3-C4	5.29	114.55	111.90
2	N	450	G	C6-N1-C2	5.29	128.28	125.10
2	N	898	G	OP1-P-OP2	-5.29	111.66	119.60
1	M	1022	A	OP1-P-OP2	-5.29	111.66	119.60
2	N	742	G	C6-C5-N7	-5.29	127.22	130.40
1	M	1367	C	C2-N3-C4	5.29	122.55	119.90
1	M	1108	G	P-O5'-C5'	-5.29	112.44	120.90
2	N	434	U	N1-C2-N3	-5.29	111.73	114.90
2	N	865	A	C6-C5-N7	-5.29	128.60	132.30
3	O	1457	G	O4'-C4'-C3'	-5.29	98.71	104.00
3	O	1509	C	C2-N3-C4	5.29	122.54	119.90
1	M	1362	A	C4-C5-N7	-5.29	108.06	110.70
2	N	105	G	N3-C2-N2	5.29	123.60	119.90
2	N	325	A	C2-N3-C4	5.29	113.24	110.60
2	N	692	U	C4'-C3'-C2'	-5.29	97.31	102.60
1	M	987	G	N1-C2-N2	5.29	120.96	116.20
1	M	1266	G	C1'-O4'-C4'	-5.29	105.67	109.90
1	M	1373	G	C5-N7-C8	-5.29	101.66	104.30
2	N	542	G	O5'-P-OP2	5.29	117.04	110.70
2	N	621	A	C6-C5-N7	-5.29	128.60	132.30
2	N	842	U	N3-C4-O4	5.29	123.10	119.40
3	O	1468	A	OP1-P-OP2	-5.29	111.67	119.60
1	M	1068	G	C5'-C4'-O4'	5.28	115.44	109.10
2	N	119	A	C6-N1-C2	5.28	121.77	118.60
2	N	390	U	N1-C2-O2	-5.28	119.10	122.80
3	O	1405	G	C5'-C4'-C3'	5.28	124.45	116.00
3	O	1513	A	C5'-C4'-O4'	5.28	115.44	109.10
2	N	66	A	C8-N9-C4	5.28	107.91	105.80
2	N	243	A	N1-C2-N3	5.28	131.94	129.30
2	N	730	G	C5-N7-C8	5.28	106.94	104.30
3	O	1449	C	C4'-C3'-C2'	-5.28	97.32	102.60
1	M	1032	G	OP1-P-OP2	-5.28	111.68	119.60
1	M	1109	C	N1-C2-O2	5.28	122.07	118.90
1	M	1252	A	C4'-C3'-C2'	-5.28	97.32	102.60
2	N	480	U	N3-C4-O4	5.28	123.10	119.40
2	N	505	G	P-O3'-C3'	5.28	126.04	119.70
2	N	615	G	C8-N9-C4	-5.28	104.29	106.40
2	N	842	U	C6-N1-C2	5.28	124.17	121.00
1	M	1092	A	C8-N9-C4	-5.28	103.69	105.80
2	N	372	C	O4'-C4'-C3'	-5.28	98.72	104.00
2	N	581	G	N7-C8-N9	-5.28	110.46	113.10
2	N	790	A	C4-C5-C6	5.28	119.64	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1461	G	P-O3'-C3'	-5.28	113.37	119.70
1	M	1097	C	N3-C4-C5	-5.28	119.79	121.90
2	N	233	C	OP2-P-O3'	5.28	116.81	105.20
2	N	351	G	O5'-P-OP2	5.28	117.03	110.70
2	N	372	C	P-O5'-C5'	-5.28	112.46	120.90
2	N	538	G	N1-C2-N3	-5.28	120.73	123.90
2	N	695	A	P-O3'-C3'	5.28	126.03	119.70
1	M	1166	G	C8-N9-C1'	5.27	133.86	127.00
1	M	1303	C	N3-C2-O2	-5.27	118.21	121.90
1	M	1375	A	C6-N1-C2	-5.27	115.44	118.60
2	N	317	U	C5'-C4'-C3'	-5.27	107.56	116.00
2	N	607	A	O4'-C1'-C2'	-5.27	100.53	105.80
2	N	663	A	N1-C2-N3	-5.27	126.66	129.30
1	M	990	C	N3-C4-N4	5.27	121.69	118.00
2	N	149	A	C5'-C4'-C3'	-5.27	107.57	116.00
2	N	295	C	N1-C2-O2	-5.27	115.74	118.90
2	N	716	A	C6-N1-C2	5.27	121.76	118.60
2	N	754	C	C6-N1-C1'	-5.27	114.47	120.80
1	M	1091	U	N1-C2-N3	5.27	118.06	114.90
1	M	1137	C	C6-N1-C2	-5.27	118.19	120.30
2	N	297	G	N9-C4-C5	5.27	107.51	105.40
2	N	390	U	C5-C6-N1	5.27	125.33	122.70
2	N	551	U	C2-N3-C4	5.27	130.16	127.00
2	N	648	A	N9-C1'-C2'	-5.27	106.20	112.00
2	N	845	A	C8-N9-C4	-5.27	103.69	105.80
3	O	1426	G	C5-N7-C8	-5.27	101.67	104.30
3	O	1430	A	N3-C4-N9	5.27	131.62	127.40
1	M	959	A	P-O5'-C5'	-5.27	112.47	120.90
1	M	1075	U	C3'-C2'-C1'	-5.27	97.29	101.50
1	M	1188	A	C6-N1-C2	-5.27	115.44	118.60
2	N	571	U	P-O5'-C5'	5.27	129.33	120.90
2	N	581	G	N9-C4-C5	-5.27	103.29	105.40
3	O	1520	C	C2-N3-C4	5.27	122.53	119.90
1	M	1199	U	N3-C2-O2	5.27	125.89	122.20
2	N	661	G	C6-C5-N7	-5.27	127.24	130.40
3	O	1466	C	P-O5'-C5'	5.27	129.33	120.90
3	O	1527	U	C5-C4-O4	-5.27	122.74	125.90
1	M	937	A	C5-C6-N6	-5.26	119.49	123.70
1	M	963	G	N1-C2-N3	-5.26	120.74	123.90
1	M	1063	C	N1-C2-O2	5.26	122.06	118.90
1	M	1294	G	C6-C5-N7	-5.26	127.24	130.40
2	N	477	C	C5-C4-N4	-5.26	116.52	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	554	A	N7-C8-N9	-5.26	111.17	113.80
3	O	1490	U	C4'-C3'-C2'	-5.26	97.34	102.60
1	M	1199	U	N1-C2-O2	-5.26	119.12	122.80
1	M	1235	U	C5-C6-N1	5.26	125.33	122.70
2	N	540	G	P-O5'-C5'	5.26	129.32	120.90
2	N	717	U	P-O3'-C3'	5.26	126.02	119.70
1	M	965	U	C3'-C2'-C1'	-5.26	97.29	101.50
1	M	1017	U	N3-C4-C5	-5.26	111.44	114.60
1	M	1104	G	O4'-C4'-C3'	-5.26	98.74	104.00
2	N	138	G	C5-N7-C8	-5.26	101.67	104.30
2	N	231	U	C4-C5-C6	-5.26	116.54	119.70
2	N	310	G	N3-C2-N2	5.26	123.58	119.90
2	N	315	A	C4-N9-C1'	-5.26	116.83	126.30
2	N	655	A	C2-N3-C4	-5.26	107.97	110.60
3	O	1519	A	C5-C6-N1	-5.26	115.07	117.70
1	M	935	A	C1'-O4'-C4'	5.26	114.11	109.90
1	M	1117	A	C5-N7-C8	-5.26	101.27	103.90
1	M	1258	G	O4'-C1'-N9	5.26	112.41	108.20
2	N	504	C	N3-C4-N4	5.26	121.68	118.00
3	O	1495	U	N3-C4-O4	5.26	123.08	119.40
1	M	1046	A	O4'-C1'-N9	5.26	112.41	108.20
1	M	1058	G	N1-C2-N3	-5.26	120.75	123.90
1	M	1307	U	C5-C4-O4	-5.26	122.75	125.90
2	N	350	G	O4'-C1'-N9	5.26	112.40	108.20
2	N	359	G	P-O3'-C3'	-5.26	113.39	119.70
2	N	383	A	N7-C8-N9	-5.26	111.17	113.80
2	N	686	U	C2'-C3'-O3'	5.26	122.11	113.70
2	N	700	G	N9-C4-C5	-5.26	103.30	105.40
2	N	803	G	N1-C2-N2	5.26	120.93	116.20
3	O	1462	C	OP1-P-OP2	-5.26	111.72	119.60
1	M	1189	U	P-O5'-C5'	-5.25	112.49	120.90
2	N	344	A	C6-C5-N7	-5.25	128.62	132.30
2	N	453	G	N3-C2-N2	5.25	123.58	119.90
2	N	665	A	C4'-C3'-C2'	-5.25	97.34	102.60
2	N	875	U	O4'-C1'-N1	5.25	112.40	108.20
1	M	1078	U	C6-N1-C2	-5.25	117.85	121.00
1	M	1178	G	C5-C6-O6	-5.25	125.45	128.60
1	M	1231	G	C6-C5-N7	-5.25	127.25	130.40
2	N	82	G	C8-N9-C4	-5.25	104.30	106.40
2	N	217	C	C5-C6-N1	5.25	123.63	121.00
2	N	327	A	C6-N1-C2	-5.25	115.45	118.60
2	N	492	C	C5-C4-N4	-5.25	116.52	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	686	U	O4'-C4'-C3'	-5.25	98.75	104.00
3	O	1434	A	C6-C5-N7	-5.25	128.62	132.30
1	M	1269	A	C2-N3-C4	-5.25	107.97	110.60
1	M	1386	G	C5'-C4'-C3'	5.25	124.40	116.00
2	N	339	C	C1'-O4'-C4'	-5.25	105.70	109.90
2	N	416	G	C6-C5-N7	-5.25	127.25	130.40
2	N	484	G	O4'-C1'-N9	5.25	112.40	108.20
3	O	1505	G	N3-C2-N2	5.25	123.58	119.90
1	M	937	A	C1'-O4'-C4'	5.25	114.10	109.90
2	N	157	U	C4-C5-C6	-5.25	116.55	119.70
2	N	348	G	N3-C4-C5	5.25	131.22	128.60
1	M	1083	U	C3'-C2'-C1'	5.25	105.70	101.50
1	M	1085	U	OP1-P-OP2	-5.25	111.73	119.60
1	M	1256	A	C5-C6-N6	-5.25	119.50	123.70
2	N	6	G	N1-C2-N2	-5.25	111.48	116.20
2	N	352	C	O4'-C1'-N1	5.25	112.40	108.20
2	N	399	G	C5-N7-C8	-5.25	101.68	104.30
2	N	625	U	C5'-C4'-O4'	5.25	115.40	109.10
3	O	1500	A	P-O5'-C5'	-5.25	112.50	120.90
3	O	1515	G	C5-C6-N1	5.25	114.12	111.50
1	M	983	A	C4-C5-C6	5.25	119.62	117.00
2	N	121	U	C3'-C2'-C1'	-5.25	97.30	101.50
3	O	1436	U	N3-C4-C5	-5.25	111.45	114.60
3	O	1475	G	N3-C2-N2	-5.25	116.23	119.90
1	M	973	G	O4'-C1'-N9	5.24	112.39	108.20
2	N	299	G	OP2-P-O3'	5.24	116.73	105.20
2	N	460	A	C4-C5-N7	-5.24	108.08	110.70
2	N	627	G	N3-C2-N2	5.24	123.57	119.90
2	N	914	A	C8-N9-C4	-5.24	103.70	105.80
1	M	1074	G	C6-C5-N7	-5.24	127.25	130.40
1	M	1005	A	P-O3'-C3'	5.24	125.99	119.70
1	M	1354	U	C4-C5-C6	5.24	122.84	119.70
2	N	16	A	C2-N3-C4	5.24	113.22	110.60
2	N	634	C	C5'-C4'-O4'	-5.24	102.81	109.10
2	N	844	G	C5-N7-C8	5.24	106.92	104.30
1	M	1048	G	C4-C5-N7	5.24	112.89	110.80
1	M	1067	A	C1'-O4'-C4'	5.24	114.09	109.90
1	M	1141	C	C5-C6-N1	-5.24	118.38	121.00
1	M	1274	A	C2-N3-C4	-5.24	107.98	110.60
2	N	50	A	N9-C4-C5	-5.24	103.70	105.80
2	N	436	C	O4'-C4'-C3'	-5.24	98.76	104.00
2	N	830	G	O4'-C1'-N9	5.24	112.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	859	G	N3-C2-N2	5.24	123.57	119.90
2	N	902	G	C6-C5-N7	-5.24	127.26	130.40
3	O	1447	A	C8-N9-C4	-5.24	103.70	105.80
1	M	1174	G	N1-C6-O6	5.24	123.04	119.90
3	O	1526	G	N3-C2-N2	5.24	123.57	119.90
3	O	1533	C	C1'-O4'-C4'	-5.24	105.71	109.90
1	M	1305	G	C8-N9-C4	-5.24	104.31	106.40
2	N	205	A	N3-C4-N9	5.24	131.59	127.40
2	N	698	G	P-O3'-C3'	5.24	125.98	119.70
2	N	749	A	N7-C8-N9	-5.24	111.18	113.80
2	N	847	G	N3-C4-C5	-5.24	125.98	128.60
3	O	1510	C	C2-N1-C1'	5.24	124.56	118.80
1	M	1354	U	P-O3'-C3'	-5.23	113.42	119.70
2	N	757	U	N3-C4-O4	5.23	123.06	119.40
2	N	864	A	C5-C6-N1	-5.23	115.08	117.70
1	M	1281	C	C2-N1-C1'	5.23	124.56	118.80
1	M	1305	G	C5-C6-O6	-5.23	125.46	128.60
2	N	415	A	N9-C4-C5	-5.23	103.71	105.80
2	N	889	A	N3-C4-C5	-5.23	123.14	126.80
3	O	1448	C	N3-C4-C5	-5.23	119.81	121.90
3	O	1457	G	P-O3'-C3'	5.23	125.98	119.70
3	O	1489	G	O4'-C1'-N9	5.23	112.39	108.20
1	M	1004	A	C6-C5-N7	-5.23	128.64	132.30
2	N	18	C	P-O3'-C3'	-5.23	113.42	119.70
2	N	102	G	C4-C5-N7	-5.23	108.71	110.80
2	N	288	A	C5-C6-N6	-5.23	119.52	123.70
2	N	425	G	C5-C6-O6	-5.23	125.46	128.60
2	N	752	G	C5-C6-N1	-5.23	108.89	111.50
2	N	764	C	N3-C4-C5	5.23	123.99	121.90
3	O	1489	G	C6-N1-C2	5.23	128.24	125.10
1	M	1370	G	C4-C5-N7	5.23	112.89	110.80
2	N	112	G	C2-N3-C4	5.23	114.51	111.90
2	N	613	C	C3'-C2'-C1'	5.23	105.68	101.50
2	N	786	G	OP1-P-OP2	-5.23	111.76	119.60
1	M	1212	U	C3'-C2'-C1'	5.23	105.68	101.50
2	N	141	G	C5'-C4'-C3'	-5.23	107.64	116.00
2	N	907	A	C5-C6-N1	-5.23	115.09	117.70
1	M	1151	A	O4'-C1'-N9	5.23	112.38	108.20
1	M	957	U	C2-N1-C1'	5.22	123.97	117.70
1	M	991	U	C5-C4-O4	5.22	129.03	125.90
2	N	266	G	C4'-C3'-C2'	5.22	107.82	102.60
1	M	941	G	C6-N1-C2	5.22	128.23	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	942	G	C2-N3-C4	5.22	114.51	111.90
1	M	1340	A	P-O3'-C3'	5.22	125.97	119.70
2	N	75	G	C4'-C3'-C2'	-5.22	97.38	102.60
2	N	179	A	N1-C2-N3	-5.22	126.69	129.30
2	N	198	G	OP1-P-OP2	-5.22	111.77	119.60
2	N	272	C	C4-C5-C6	-5.22	114.79	117.40
2	N	509	A	N9-C4-C5	5.22	107.89	105.80
2	N	531	U	C1'-O4'-C4'	-5.22	105.72	109.90
2	N	732	C	P-O3'-C3'	5.22	125.97	119.70
2	N	839	C	C4'-C3'-C2'	-5.22	97.38	102.60
2	N	147	G	C5-N7-C8	-5.22	101.69	104.30
2	N	532	A	C5-C6-N1	-5.22	115.09	117.70
2	N	563	A	C5-C6-N6	-5.22	119.52	123.70
1	M	1006	G	C6-C5-N7	-5.22	127.27	130.40
1	M	1342	C	N3-C2-O2	5.22	125.55	121.90
1	M	1379	G	C6-C5-N7	-5.22	127.27	130.40
2	N	211	G	C8-N9-C4	5.22	108.49	106.40
2	N	256	U	C2-N1-C1'	5.22	123.96	117.70
2	N	805	C	C3'-C2'-C1'	-5.22	97.32	101.50
1	M	1248	A	N1-C2-N3	5.22	131.91	129.30
1	M	1336	C	C2-N1-C1'	5.22	124.54	118.80
2	N	869	G	O4'-C1'-N9	5.22	112.37	108.20
1	M	1261	A	C5'-C4'-O4'	5.22	115.36	109.10
3	O	1427	C	C2-N1-C1'	5.22	124.54	118.80
1	M	1276	G	N7-C8-N9	-5.21	110.49	113.10
2	N	223	A	C1'-O4'-C4'	5.21	114.07	109.90
2	N	231	U	N3-C2-O2	5.21	125.85	122.20
2	N	559	A	C3'-C2'-C1'	5.21	105.67	101.50
2	N	920	U	N1-C2-N3	-5.21	111.77	114.90
1	M	966	G	C6-N1-C2	5.21	128.23	125.10
2	N	914	A	N1-C2-N3	5.21	131.91	129.30
1	M	1094	G	C6-C5-N7	-5.21	127.27	130.40
1	M	1095	U	C5-C6-N1	5.21	125.31	122.70
1	M	1338	G	N1-C2-N3	-5.21	120.77	123.90
2	N	129	A	C2'-C3'-O3'	5.21	122.04	113.70
2	N	214	C	P-O3'-C3'	-5.21	113.44	119.70
2	N	296	U	OP1-P-OP2	-5.21	111.78	119.60
2	N	445	G	C4-C5-C6	5.21	121.93	118.80
2	N	463	U	O5'-C5'-C4'	-5.21	101.80	111.70
2	N	587	G	C4-C5-N7	-5.21	108.72	110.80
1	M	1319	A	N9-C4-C5	5.21	107.88	105.80
1	M	1280	A	C5'-C4'-O4'	5.21	115.35	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	21	G	N1-C2-N2	-5.21	111.51	116.20
2	N	65	A	C6-N1-C2	5.21	121.72	118.60
3	O	1392	G	N1-C6-O6	5.21	123.03	119.90
1	M	1174	G	C5-N7-C8	-5.21	101.70	104.30
2	N	59	A	C5-C6-N6	-5.21	119.53	123.70
1	M	966	G	C5'-C4'-O4'	5.20	115.34	109.10
2	N	79	G	N3-C2-N2	5.20	123.54	119.90
2	N	200	G	O4'-C1'-N9	5.20	112.36	108.20
2	N	813	U	C2-N3-C4	5.20	130.12	127.00
1	M	944	G	C5'-C4'-C3'	5.20	124.32	116.00
1	M	966	G	C3'-C2'-C1'	-5.20	97.34	101.50
1	M	1325	C	O4'-C1'-N1	5.20	112.36	108.20
2	N	460	A	O4'-C1'-N9	5.20	112.36	108.20
2	N	495	A	C4'-C3'-C2'	5.20	107.80	102.60
2	N	614	C	N3-C4-C5	-5.20	119.82	121.90
2	N	709	U	N1-C1'-C2'	-5.20	106.28	112.00
1	M	946	A	N3-C4-C5	-5.20	123.16	126.80
1	M	960	U	N3-C4-O4	5.20	123.04	119.40
1	M	974	A	C5-C6-N6	-5.20	119.54	123.70
1	M	1201	A	C6-C5-N7	-5.20	128.66	132.30
1	M	1212	U	C5'-C4'-C3'	5.20	124.32	116.00
2	N	122	G	C5-N7-C8	-5.20	101.70	104.30
2	N	222	C	C6-N1-C2	-5.20	118.22	120.30
2	N	285	C	C4-C5-C6	-5.20	114.80	117.40
2	N	442	G	P-O5'-C5'	5.20	129.22	120.90
2	N	698	G	C6-C5-N7	-5.20	127.28	130.40
3	O	1440	U	C4'-C3'-C2'	-5.20	97.40	102.60
2	N	181	A	C5-N7-C8	5.20	106.50	103.90
2	N	400	C	C4'-C3'-C2'	-5.20	97.40	102.60
2	N	595	A	N9-C4-C5	-5.20	103.72	105.80
2	N	698	G	C1'-O4'-C4'	5.20	114.06	109.90
2	N	774	G	C5-N7-C8	-5.20	101.70	104.30
3	O	1423	G	P-O5'-C5'	5.20	129.22	120.90
1	M	962	C	N3-C2-O2	5.20	125.54	121.90
1	M	1066	C	C5'-C4'-C3'	-5.20	107.69	116.00
1	M	1162	C	N1-C2-O2	5.20	122.02	118.90
2	N	174	A	C5'-C4'-O4'	-5.20	102.86	109.10
2	N	542	G	C2-N3-C4	5.20	114.50	111.90
2	N	562	U	C3'-C2'-C1'	5.20	105.66	101.50
2	N	586	C	C6-N1-C2	5.20	122.38	120.30
2	N	643	C	C5'-C4'-O4'	5.20	115.34	109.10
2	N	827	U	N1-C2-O2	-5.20	119.16	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	848	C	C2-N3-C4	-5.20	117.30	119.90
2	N	861	G	C4-N9-C1'	-5.20	119.75	126.50
1	M	1274	A	N3-C4-C5	-5.19	123.16	126.80
2	N	271	C	C2-N3-C4	5.19	122.50	119.90
1	M	999	C	O4'-C1'-N1	5.19	112.35	108.20
1	M	1167	A	OP1-P-OP2	-5.19	111.81	119.60
2	N	222	C	N3-C4-N4	5.19	121.64	118.00
2	N	427	U	N1-C2-O2	-5.19	119.17	122.80
2	N	446	G	N7-C8-N9	-5.19	110.50	113.10
1	M	1187	G	C5'-C4'-O4'	5.19	115.33	109.10
1	M	1384	C	OP2-P-O3'	5.19	116.62	105.20
2	N	94	G	O4'-C1'-N9	5.19	112.35	108.20
2	N	247	G	OP2-P-O3'	5.19	116.62	105.20
2	N	415	A	N1-C2-N3	5.19	131.90	129.30
2	N	604	G	N1-C2-N2	5.19	120.87	116.20
3	O	1534	A	C1'-O4'-C4'	5.19	114.05	109.90
2	N	670	G	C5'-C4'-C3'	5.19	124.30	116.00
3	O	1400	C	C5-C4-N4	-5.19	116.57	120.20
1	M	979	C	P-O3'-C3'	5.19	125.92	119.70
1	M	1302	C	N1-C2-N3	-5.19	115.57	119.20
2	N	424	G	C3'-C2'-C1'	-5.19	97.35	101.50
2	N	887	G	N1-C6-O6	5.19	123.01	119.90
2	N	486	U	P-O3'-C3'	-5.19	113.48	119.70
2	N	787	A	C3'-C2'-C1'	5.19	105.65	101.50
1	M	1331	G	C4'-C3'-C2'	-5.18	97.42	102.60
2	N	459	A	N1-C2-N3	5.18	131.89	129.30
2	N	501	C	C5-C6-N1	5.18	123.59	121.00
2	N	842	U	C5'-C4'-O4'	5.18	115.32	109.10
2	N	896	C	N1-C2-O2	-5.18	115.79	118.90
2	N	901	A	O3'-P-O5'	-5.18	94.15	104.00
1	M	1067	A	N3-C4-C5	-5.18	123.17	126.80
1	M	1172	C	C5'-C4'-C3'	-5.18	107.71	116.00
2	N	16	A	N1-C2-N3	5.18	131.89	129.30
2	N	81	A	C5-N7-C8	-5.18	101.31	103.90
2	N	596	A	C8-N9-C4	-5.18	103.73	105.80
2	N	915	A	N1-C2-N3	-5.18	126.71	129.30
3	O	1417	G	N9-C4-C5	-5.18	103.33	105.40
1	M	1362	A	C4-C5-C6	5.18	119.59	117.00
2	N	196	A	N1-C6-N6	5.18	121.71	118.60
2	N	206	C	C3'-C2'-C1'	-5.18	97.36	101.50
2	N	535	A	C2-N3-C4	5.18	113.19	110.60
2	N	605	U	C1'-O4'-C4'	5.18	114.04	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	721	G	C6-C5-N7	-5.18	127.29	130.40
3	O	1488	G	C5'-C4'-C3'	-5.18	107.71	116.00
1	M	944	G	C5-N7-C8	5.18	106.89	104.30
1	M	1224	U	C5-C4-O4	-5.18	122.79	125.90
1	M	1243	C	P-O3'-C3'	-5.18	113.49	119.70
2	N	29	U	O4'-C4'-C3'	-5.18	98.82	104.00
3	O	1439	G	OP1-P-OP2	-5.18	111.83	119.60
1	M	1141	C	C5'-C4'-O4'	-5.18	102.89	109.10
1	M	1241	G	C4-C5-C6	5.18	121.91	118.80
1	M	1332	A	C5-C6-N1	-5.18	115.11	117.70
2	N	178	C	C1'-O4'-C4'	-5.18	105.76	109.90
2	N	345	C	C2-N1-C1'	5.18	124.49	118.80
2	N	534	U	OP1-P-OP2	-5.18	111.83	119.60
2	N	799	G	N9-C4-C5	5.18	107.47	105.40
1	M	937	A	C5'-C4'-C3'	-5.17	107.72	116.00
1	M	954	G	N1-C6-O6	5.17	123.00	119.90
1	M	1007	U	C4'-C3'-C2'	-5.17	97.42	102.60
1	M	1141	C	N1-C2-N3	5.17	122.82	119.20
1	M	1185	G	C5-C6-O6	-5.17	125.50	128.60
1	M	1369	C	N1-C2-O2	5.17	122.00	118.90
2	N	159	G	N9-C4-C5	-5.17	103.33	105.40
2	N	849	G	O4'-C1'-N9	5.17	112.34	108.20
2	N	353	A	C5-C6-N6	-5.17	119.56	123.70
2	N	357	G	N3-C4-C5	-5.17	126.01	128.60
2	N	913	A	C1'-O4'-C4'	5.17	114.04	109.90
1	M	979	C	C5'-C4'-C3'	-5.17	107.73	116.00
2	N	386	C	C6-N1-C2	-5.17	118.23	120.30
2	N	862	C	P-O3'-C3'	5.17	125.91	119.70
2	N	402	G	C6-N1-C2	-5.17	122.00	125.10
2	N	497	G	N9-C4-C5	5.17	107.47	105.40
2	N	659	U	N3-C2-O2	-5.17	118.58	122.20
1	M	940	C	O4'-C1'-N1	5.17	112.33	108.20
1	M	953	G	C4-C5-C6	5.17	121.90	118.80
1	M	1106	G	P-O5'-C5'	-5.17	112.63	120.90
1	M	1339	A	N3-C4-C5	-5.17	123.18	126.80
2	N	170	U	N3-C4-C5	5.17	117.70	114.60
2	N	221	C	C4-C5-C6	-5.17	114.82	117.40
2	N	747	A	N3-C4-C5	-5.17	123.18	126.80
2	N	906	A	P-O5'-C5'	5.17	129.17	120.90
3	O	1455	G	N9-C4-C5	5.17	107.47	105.40
3	O	1501	C	C5'-C4'-C3'	5.17	124.27	116.00
2	N	209	U	C5'-C4'-O4'	5.17	115.30	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	846	G	C5'-C4'-C3'	-5.17	107.73	116.00
1	M	1263	C	C4-C5-C6	5.17	119.98	117.40
1	M	1077	G	O4'-C1'-N9	5.16	112.33	108.20
1	M	1132	C	C4-C5-C6	5.16	119.98	117.40
1	M	1202	U	C4'-C3'-C2'	-5.16	97.44	102.60
1	M	1282	C	N3-C4-N4	5.16	121.61	118.00
1	M	1361	G	N1-C6-O6	5.16	123.00	119.90
1	M	1364	U	C3'-C2'-C1'	-5.16	97.37	101.50
2	N	265	G	C4-N9-C1'	-5.16	119.79	126.50
2	N	366	A	C4'-C3'-C2'	5.16	107.76	102.60
2	N	505	G	C6-N1-C2	5.16	128.20	125.10
2	N	828	U	C2'-C3'-O3'	5.16	121.96	113.70
2	N	192	A	N1-C2-N3	-5.16	126.72	129.30
2	N	336	A	N7-C8-N9	5.16	116.38	113.80
3	O	1398	A	N1-C2-N3	5.16	131.88	129.30
3	O	1484	C	N1-C2-N3	-5.16	115.59	119.20
1	M	1094	G	C2'-C3'-O3'	5.16	121.95	113.70
1	M	1156	G	N3-C4-C5	-5.16	126.02	128.60
2	N	82	G	O4'-C1'-N9	5.16	112.33	108.20
2	N	384	G	C2-N3-C4	-5.16	109.32	111.90
2	N	478	A	N9-C4-C5	5.16	107.86	105.80
2	N	545	C	O4'-C1'-C2'	-5.16	100.64	105.80
2	N	565	U	O4'-C1'-C2'	5.16	112.24	107.60
2	N	798	U	P-O5'-C5'	-5.16	112.64	120.90
2	N	808	C	P-O5'-C5'	-5.16	112.64	120.90
2	N	820	U	N3-C4-C5	-5.16	111.50	114.60
2	N	903	G	P-O5'-C5'	5.16	129.16	120.90
3	O	1436	U	C4-C5-C6	5.16	122.80	119.70
1	M	959	A	C5'-C4'-O4'	-5.16	102.91	109.10
1	M	1004	A	N9-C4-C5	5.16	107.86	105.80
2	N	152	A	N7-C8-N9	-5.16	111.22	113.80
2	N	246	A	N1-C2-N3	-5.16	126.72	129.30
2	N	358	U	C6-N1-C2	-5.16	117.91	121.00
2	N	459	A	C4'-C3'-C2'	-5.16	97.44	102.60
2	N	459	A	C4-N9-C1'	5.16	135.58	126.30
2	N	555	U	C4'-C3'-C2'	-5.16	97.44	102.60
2	N	741	G	C4-C5-C6	5.16	121.90	118.80
2	N	872	A	O4'-C1'-C2'	-5.16	100.64	105.80
1	M	1152	A	N3-C4-C5	-5.16	123.19	126.80
2	N	56	U	C6-N1-C1'	-5.16	113.98	121.20
2	N	159	G	C4'-C3'-C2'	5.16	107.76	102.60
2	N	265	G	C2-N3-C4	5.16	114.48	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	621	A	N1-C2-N3	5.15	131.88	129.30
2	N	721	G	O4'-C4'-C3'	-5.15	98.85	104.00
2	N	904	U	N1-C2-O2	-5.15	119.19	122.80
1	M	1111	A	P-O3'-C3'	5.15	125.88	119.70
1	M	1204	A	N7-C8-N9	-5.15	111.22	113.80
1	M	1307	U	O4'-C1'-N1	5.15	112.32	108.20
2	N	21	G	C5-N7-C8	-5.15	101.72	104.30
2	N	181	A	C5-C6-N6	-5.15	119.58	123.70
2	N	513	C	N3-C4-C5	-5.15	119.84	121.90
2	N	670	G	O4'-C4'-C3'	-5.15	98.85	104.00
3	O	1428	A	C4-C5-N7	-5.15	108.12	110.70
1	M	953	G	C6-N1-C2	5.15	128.19	125.10
1	M	1000	A	C6-C5-N7	-5.15	128.69	132.30
1	M	1297	G	P-O5'-C5'	5.15	129.14	120.90
2	N	146	G	C5'-C4'-C3'	-5.15	107.76	116.00
2	N	336	A	N3-C4-N9	5.15	131.52	127.40
2	N	539	A	C4-C5-C6	5.15	119.58	117.00
2	N	549	C	C4-C5-C6	5.15	119.97	117.40
2	N	571	U	O4'-C4'-C3'	5.15	110.22	106.10
2	N	669	G	C5-C6-O6	-5.15	125.51	128.60
2	N	871	U	C4'-C3'-C2'	5.15	107.75	102.60
1	M	949	A	C5-N7-C8	5.15	106.47	103.90
1	M	954	G	N9-C4-C5	5.15	107.46	105.40
2	N	347	G	N1-C2-N2	-5.15	111.57	116.20
2	N	429	U	C3'-C2'-C1'	-5.15	97.38	101.50
2	N	483	C	C5-C4-N4	-5.15	116.60	120.20
2	N	540	G	P-O3'-C3'	5.15	125.88	119.70
1	M	1185	G	C4-C5-N7	5.14	112.86	110.80
2	N	78	A	O5'-C5'-C4'	-5.14	101.93	111.70
2	N	112	G	O4'-C4'-C3'	-5.14	98.86	104.00
2	N	161	A	OP1-P-OP2	-5.14	111.88	119.60
2	N	258	G	C5'-C4'-C3'	-5.14	107.77	116.00
2	N	363	A	C8-N9-C4	-5.14	103.74	105.80
2	N	457	G	N1-C2-N2	5.14	120.83	116.20
2	N	516	U	N1-C2-O2	5.14	126.40	122.80
2	N	764	C	C6-N1-C1'	-5.14	114.63	120.80
3	O	1401	G	C4-C5-C6	5.14	121.89	118.80
1	M	1140	C	P-O5'-C5'	5.14	129.13	120.90
2	N	364	A	C3'-C2'-C1'	5.14	105.61	101.50
2	N	444	G	P-O3'-C3'	-5.14	113.53	119.70
2	N	519	C	N3-C4-C5	-5.14	119.84	121.90
2	N	782	A	OP1-P-OP2	-5.14	111.89	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	935	A	P-O5'-C5'	-5.14	112.67	120.90
1	M	1246	A	C5'-C4'-O4'	-5.14	102.93	109.10
2	N	568	G	OP1-P-OP2	-5.14	111.89	119.60
1	M	949	A	C4-C5-C6	5.14	119.57	117.00
1	M	1101	A	N7-C8-N9	5.14	116.37	113.80
1	M	1142	G	N1-C2-N3	-5.14	120.82	123.90
1	M	1158	C	C6-N1-C2	-5.14	118.24	120.30
1	M	1184	G	C5-C6-N1	-5.14	108.93	111.50
3	O	1450	U	C1'-O4'-C4'	5.14	114.01	109.90
2	N	142	G	C3'-C2'-C1'	5.14	105.61	101.50
2	N	218	U	O4'-C1'-N1	5.14	112.31	108.20
1	M	989	U	N1-C2-N3	-5.14	111.82	114.90
1	M	1307	U	C1'-O4'-C4'	5.14	114.01	109.90
2	N	317	U	N3-C4-O4	-5.14	115.80	119.40
2	N	559	A	C6-C5-N7	-5.14	128.70	132.30
2	N	572	A	P-O3'-C3'	5.14	125.86	119.70
2	N	593	U	P-O5'-C5'	5.14	129.12	120.90
1	M	1062	U	C4-C5-C6	5.13	122.78	119.70
2	N	65	A	P-O3'-C3'	5.13	125.86	119.70
2	N	117	G	N1-C2-N3	5.13	126.98	123.90
2	N	671	G	N7-C8-N9	5.13	115.67	113.10
2	N	744	C	C3'-C2'-C1'	-5.13	97.39	101.50
2	N	781	A	C5-C6-N1	-5.13	115.13	117.70
2	N	878	A	C4-C5-N7	-5.13	108.13	110.70
1	M	1020	G	C5'-C4'-O4'	5.13	115.26	109.10
2	N	472	U	C5'-C4'-C3'	-5.13	107.79	116.00
2	N	841	C	C2-N1-C1'	5.13	124.44	118.80
1	M	1027	C	C5-C4-N4	-5.13	116.61	120.20
2	N	491	G	N3-C2-N2	5.13	123.49	119.90
1	M	1151	A	N1-C2-N3	5.13	131.86	129.30
2	N	93	U	C6-N1-C2	5.13	124.08	121.00
2	N	326	G	C3'-C2'-C1'	5.13	105.60	101.50
2	N	704	A	C4-C5-N7	-5.13	108.14	110.70
2	N	843	U	C2-N1-C1'	5.13	123.85	117.70
1	M	1279	G	C8-N9-C1'	-5.13	120.33	127.00
2	N	336	A	C5-C6-N6	-5.13	119.60	123.70
2	N	440	C	C5'-C4'-O4'	5.13	115.25	109.10
2	N	460	A	C6-C5-N7	-5.13	128.71	132.30
2	N	480	U	O4'-C4'-C3'	-5.13	98.87	104.00
2	N	528	C	C6-N1-C2	-5.13	118.25	120.30
2	N	833	G	C4-C5-C6	5.13	121.88	118.80
3	O	1532	U	C2-N1-C1'	5.13	123.85	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	291	U	N1-C2-O2	-5.12	119.21	122.80
2	N	506	G	N9-C4-C5	-5.12	103.35	105.40
2	N	682	G	N3-C4-C5	-5.12	126.04	128.60
2	N	815	A	N7-C8-N9	5.12	116.36	113.80
1	M	1047	G	C8-N9-C4	5.12	108.45	106.40
2	N	185	U	C2-N3-C4	5.12	130.07	127.00
2	N	214	C	C5'-C4'-O4'	5.12	115.25	109.10
2	N	373	A	N9-C1'-C2'	-5.12	106.36	112.00
2	N	594	U	C6-N1-C2	-5.12	117.93	121.00
2	N	644	U	O5'-P-OP2	-5.12	101.09	105.70
3	O	1416	G	C4-C5-C6	5.12	121.87	118.80
1	M	1087	G	C4-C5-C6	5.12	121.87	118.80
1	M	1089	G	N1-C2-N2	5.12	120.81	116.20
1	M	1254	A	P-O3'-C3'	5.12	125.85	119.70
2	N	289	G	C4-C5-N7	5.12	112.85	110.80
2	N	329	A	O4'-C1'-N9	5.12	112.30	108.20
2	N	718	A	C3'-C2'-C1'	5.12	105.60	101.50
3	O	1431	A	C5-C6-N1	-5.12	115.14	117.70
2	N	129	A	C5'-C4'-O4'	5.12	115.24	109.10
2	N	602	A	C4-C5-C6	5.12	119.56	117.00
2	N	895	G	C4'-C3'-C2'	-5.12	97.48	102.60
2	N	51	A	C8-N9-C4	-5.12	103.75	105.80
1	M	1142	G	N3-C4-C5	5.12	131.16	128.60
1	M	1152	A	C4-C5-C6	5.12	119.56	117.00
1	M	1181	G	N1-C2-N2	5.12	120.80	116.20
2	N	422	C	OP2-P-O3'	5.12	116.45	105.20
2	N	429	U	C4-C5-C6	5.12	122.77	119.70
1	M	945	G	N7-C8-N9	5.11	115.66	113.10
1	M	1086	U	C4'-C3'-C2'	-5.11	97.49	102.60
2	N	105	G	C5-C6-N1	-5.11	108.94	111.50
2	N	287	U	N3-C4-C5	-5.11	111.53	114.60
2	N	658	C	N3-C4-N4	5.11	121.58	118.00
2	N	733	G	N9-C4-C5	-5.11	103.35	105.40
2	N	786	G	C3'-C2'-C1'	5.11	105.59	101.50
1	M	1252	A	C8-N9-C4	-5.11	103.75	105.80
1	M	1279	G	N7-C8-N9	5.11	115.66	113.10
1	M	1356	G	P-O5'-C5'	5.11	129.08	120.90
2	N	405	U	P-O3'-C3'	-5.11	113.57	119.70
2	N	8	A	C5'-C4'-C3'	5.11	124.18	116.00
2	N	53	A	C8-N9-C4	-5.11	103.76	105.80
2	N	181	A	N1-C6-N6	5.11	121.67	118.60
2	N	382	A	N1-C2-N3	5.11	131.85	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	454	G	P-O3'-C3'	-5.11	113.57	119.70
2	N	702	A	C1'-O4'-C4'	-5.11	105.81	109.90
2	N	886	G	P-O5'-C5'	5.11	129.08	120.90
1	M	1051	C	N3-C4-N4	5.11	121.58	118.00
2	N	95	C	N1-C1'-C2'	5.11	120.64	114.00
1	M	984	C	N1-C2-N3	-5.11	115.62	119.20
1	M	1158	C	N1-C2-N3	5.11	122.78	119.20
2	N	680	C	N3-C2-O2	5.11	125.48	121.90
2	N	791	G	C4'-C3'-C2'	-5.11	97.49	102.60
2	N	813	U	C5-C6-N1	5.11	125.25	122.70
2	N	897	C	N3-C2-O2	5.11	125.47	121.90
3	O	1420	U	N1-C2-O2	5.11	126.38	122.80
1	M	1033	G	C2'-C3'-O3'	5.11	121.87	113.70
1	M	1314	C	N3-C4-N4	5.11	121.57	118.00
1	M	1329	A	C2-N3-C4	5.11	113.15	110.60
2	N	158	G	C3'-C2'-C1'	-5.11	97.42	101.50
2	N	515	G	C3'-C2'-C1'	-5.11	97.42	101.50
2	N	632	U	C2-N1-C1'	5.11	123.83	117.70
2	N	860	A	C2'-C3'-O3'	5.11	121.87	113.70
2	N	192	A	O4'-C1'-N9	5.10	112.28	108.20
2	N	597	G	N7-C8-N9	5.10	115.65	113.10
2	N	718	A	O3'-P-O5'	5.10	113.70	104.00
1	M	990	C	O4'-C1'-N1	5.10	112.28	108.20
1	M	1248	A	OP1-P-OP2	-5.10	111.95	119.60
1	M	1304	G	C4-N9-C1'	5.10	133.13	126.50
1	M	1365	G	N1-C2-N3	-5.10	120.84	123.90
2	N	81	A	C5-C6-N6	-5.10	119.62	123.70
2	N	170	U	C5-C4-O4	-5.10	122.84	125.90
2	N	375	U	P-O5'-C5'	5.10	129.06	120.90
2	N	525	C	C1'-O4'-C4'	-5.10	105.82	109.90
2	N	654	G	C3'-C2'-C1'	5.10	105.58	101.50
2	N	725	G	C5-N7-C8	5.10	106.85	104.30
2	N	748	G	N3-C4-C5	-5.10	126.05	128.60
1	M	1166	G	N3-C2-N2	5.10	123.47	119.90
1	M	1381	U	N1-C2-N3	5.10	117.96	114.90
2	N	492	C	C4-C5-C6	-5.10	114.85	117.40
1	M	1303	C	P-O5'-C5'	5.10	129.06	120.90
2	N	55	A	P-O3'-C3'	-5.10	113.58	119.70
2	N	398	U	C3'-C2'-C1'	5.10	105.58	101.50
3	O	1437	A	C5-N7-C8	5.10	106.45	103.90
1	M	1061	G	C6-N1-C2	5.10	128.16	125.10
1	M	1144	G	P-O3'-C3'	5.10	125.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	1272	G	C4-C5-N7	5.10	112.84	110.80
2	N	343	U	N3-C2-O2	5.10	125.77	122.20
2	N	509	A	N3-C4-C5	-5.10	123.23	126.80
2	N	869	G	C6-C5-N7	-5.10	127.34	130.40
3	O	1512	U	N1-C2-N3	5.10	117.96	114.90
3	O	1513	A	N1-C2-N3	-5.10	126.75	129.30
2	N	579	A	N1-C2-N3	5.10	131.85	129.30
2	N	595	A	C4-C5-C6	5.10	119.55	117.00
2	N	598	U	N1-C2-N3	-5.10	111.84	114.90
2	N	835	U	C3'-C2'-C1'	5.10	105.58	101.50
3	O	1450	U	C6-N1-C2	-5.10	117.94	121.00
3	O	1530	G	C5-C6-N1	5.10	114.05	111.50
1	M	954	G	C5-N7-C8	-5.09	101.75	104.30
1	M	1357	A	N7-C8-N9	5.09	116.35	113.80
2	N	531	U	N1-C2-N3	-5.09	111.84	114.90
2	N	821	G	P-O5'-C5'	5.09	129.05	120.90
2	N	314	C	N1-C2-O2	-5.09	115.84	118.90
2	N	357	G	C8-N9-C4	-5.09	104.36	106.40
2	N	380	G	C8-N9-C4	-5.09	104.36	106.40
2	N	643	C	O4'-C1'-N1	5.09	112.28	108.20
1	M	1284	C	N3-C4-N4	5.09	121.56	118.00
2	N	165	G	C4-C5-N7	5.09	112.84	110.80
2	N	213	G	N3-C2-N2	5.09	123.47	119.90
2	N	452	A	C3'-C2'-C1'	-5.09	97.43	101.50
2	N	532	A	C8-N9-C4	-5.09	103.76	105.80
2	N	567	G	C4-C5-N7	-5.09	108.76	110.80
2	N	599	C	N3-C2-O2	5.09	125.46	121.90
2	N	627	G	C2-N3-C4	5.09	114.44	111.90
2	N	47	C	O4'-C1'-C2'	5.09	112.18	107.60
2	N	489	C	N3-C4-N4	5.09	121.56	118.00
2	N	594	U	N3-C4-O4	5.09	122.96	119.40
2	N	643	C	N1-C1'-C2'	-5.09	106.40	112.00
2	N	902	G	C4-C5-N7	5.09	112.84	110.80
1	M	1216	A	O4'-C4'-C3'	-5.09	98.91	104.00
1	M	1354	U	C5'-C4'-O4'	5.09	115.20	109.10
3	O	1523	G	P-O3'-C3'	-5.09	113.59	119.70
1	M	1225	A	C5-N7-C8	5.09	106.44	103.90
1	M	1369	C	N3-C4-N4	5.09	121.56	118.00
2	N	64	G	C8-N9-C1'	5.09	133.61	127.00
2	N	621	A	C6-N1-C2	-5.09	115.55	118.60
1	M	1044	A	O4'-C1'-N9	5.08	112.27	108.20
2	N	155	A	C1'-O4'-C4'	5.08	113.97	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	200	G	P-O5'-C5'	-5.08	112.76	120.90
2	N	262	A	OP1-P-OP2	-5.08	111.97	119.60
1	M	1063	C	C4'-C3'-C2'	-5.08	97.52	102.60
1	M	1249	C	P-O5'-C5'	-5.08	112.77	120.90
2	N	249	U	N3-C4-O4	5.08	122.96	119.40
2	N	472	U	N3-C2-O2	5.08	125.76	122.20
2	N	490	C	N1-C1'-C2'	-5.08	106.41	112.00
2	N	598	U	C2-N3-C4	5.08	130.05	127.00
2	N	686	U	C5-C6-N1	5.08	125.24	122.70
2	N	711	G	C6-N1-C2	5.08	128.15	125.10
2	N	898	G	C4'-C3'-C2'	-5.08	97.52	102.60
2	N	915	A	O4'-C4'-C3'	-5.08	98.92	104.00
1	M	1143	G	N3-C4-N9	-5.08	122.95	126.00
2	N	270	A	C5-N7-C8	-5.08	101.36	103.90
2	N	324	G	O4'-C4'-C3'	-5.08	98.92	104.00
2	N	596	A	P-O5'-C5'	5.08	129.03	120.90
2	N	919	A	C3'-C2'-C1'	5.08	105.56	101.50
3	O	1414	U	C4-C5-C6	-5.08	116.65	119.70
2	N	281	G	C4-C5-N7	5.08	112.83	110.80
2	N	459	A	C3'-C2'-C1'	5.08	105.56	101.50
3	O	1421	G	C8-N9-C4	-5.08	104.37	106.40
1	M	1330	U	C4-C5-C6	-5.08	116.65	119.70
2	N	5	U	OP1-P-OP2	-5.08	111.98	119.60
2	N	107	G	C5-N7-C8	5.08	106.84	104.30
2	N	136	C	N1-C2-N3	-5.08	115.64	119.20
2	N	381	C	C4'-C3'-C2'	-5.08	97.52	102.60
2	N	553	A	C5-N7-C8	5.08	106.44	103.90
2	N	903	G	C1'-O4'-C4'	5.08	113.96	109.90
2	N	914	A	O4'-C4'-C3'	-5.08	98.92	104.00
3	O	1480	A	C5-N7-C8	5.08	106.44	103.90
1	M	1101	A	C6-C5-N7	-5.08	128.75	132.30
2	N	412	A	C4-C5-N7	-5.08	108.16	110.70
2	N	609	A	O4'-C4'-C3'	-5.08	98.92	104.00
2	N	634	C	C6-N1-C2	-5.08	118.27	120.30
2	N	725	G	O4'-C1'-N9	5.08	112.26	108.20
2	N	852	G	C6-N1-C2	5.08	128.15	125.10
3	O	1418	A	N9-C4-C5	-5.08	103.77	105.80
1	M	1126	U	C2-N1-C1'	5.08	123.79	117.70
1	M	1163	A	N1-C2-N3	5.08	131.84	129.30
1	M	1204	A	N9-C1'-C2'	-5.08	106.42	112.00
1	M	1277	C	N3-C2-O2	5.08	125.45	121.90
2	N	49	U	N1-C2-N3	-5.08	111.86	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	195	A	N7-C8-N9	-5.08	111.26	113.80
2	N	282	A	O4'-C1'-N9	5.08	112.26	108.20
2	N	357	G	C5-C6-N1	-5.08	108.96	111.50
2	N	678	U	N3-C4-C5	-5.08	111.55	114.60
2	N	788	U	C6-N1-C2	5.08	124.05	121.00
2	N	900	A	C4'-C3'-C2'	-5.08	97.52	102.60
1	M	1083	U	OP1-P-OP2	-5.07	111.99	119.60
1	M	1245	C	C4'-C3'-C2'	-5.07	97.53	102.60
2	N	329	A	OP2-P-O3'	5.07	116.36	105.20
2	N	641	U	C2-N1-C1'	-5.07	111.61	117.70
2	N	875	U	C3'-C2'-C1'	-5.07	97.44	101.50
1	M	1105	A	C6-C5-N7	-5.07	128.75	132.30
1	M	1128	C	O4'-C4'-C3'	-5.07	98.93	104.00
2	N	13	U	N3-C4-O4	5.07	122.95	119.40
2	N	151	A	N9-C4-C5	-5.07	103.77	105.80
2	N	547	A	C5-C6-N1	-5.07	115.16	117.70
2	N	748	G	C5'-C4'-O4'	5.07	115.19	109.10
1	M	959	A	C1'-O4'-C4'	-5.07	105.84	109.90
1	M	1252	A	C5'-C4'-O4'	5.07	115.18	109.10
1	M	1299	A	C4'-C3'-C2'	5.07	107.67	102.60
2	N	269	C	C2-N3-C4	-5.07	117.36	119.90
2	N	299	G	N3-C4-N9	-5.07	122.96	126.00
2	N	515	G	C6-N1-C2	5.07	128.14	125.10
2	N	869	G	C5'-C4'-O4'	5.07	115.19	109.10
2	N	82	G	C4-N9-C1'	5.07	133.09	126.50
2	N	418	C	O5'-P-OP1	5.07	116.78	110.70
2	N	582	C	C6-N1-C2	5.07	122.33	120.30
2	N	724	G	N3-C2-N2	5.07	123.45	119.90
2	N	742	G	C8-N9-C4	5.07	108.43	106.40
1	M	1045	C	P-O3'-C3'	-5.07	113.62	119.70
2	N	319	G	C4-C5-C6	5.07	121.84	118.80
2	N	418	C	C4-C5-C6	5.07	119.93	117.40
3	O	1456	A	N7-C8-N9	-5.07	111.27	113.80
1	M	1149	C	C5-C6-N1	5.07	123.53	121.00
1	M	1265	C	C5-C4-N4	-5.07	116.66	120.20
2	N	36	C	C5'-C4'-C3'	5.07	124.10	116.00
2	N	533	A	N9-C4-C5	-5.07	103.77	105.80
2	N	556	C	C1'-O4'-C4'	5.07	113.95	109.90
2	N	629	A	C6-N1-C2	5.07	121.64	118.60
2	N	632	U	C1'-O4'-C4'	-5.07	105.85	109.90
2	N	657	U	P-O5'-C5'	5.07	129.01	120.90
2	N	888	G	C5-N7-C8	5.07	106.83	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	1482	G	C3'-C2'-C1'	-5.07	97.45	101.50
1	M	1034	G	N7-C8-N9	5.06	115.63	113.10
1	M	979	C	N1-C2-O2	-5.06	115.86	118.90
1	M	1249	C	C3'-C2'-C1'	-5.06	97.45	101.50
1	M	1316	G	P-O3'-C3'	5.06	125.78	119.70
2	N	193	C	C1'-O4'-C4'	5.06	113.95	109.90
2	N	281	G	C5'-C4'-O4'	5.06	115.17	109.10
2	N	392	C	P-O5'-C5'	5.06	129.00	120.90
2	N	427	U	C2-N3-C4	-5.06	123.96	127.00
2	N	601	G	O4'-C4'-C3'	-5.06	98.94	104.00
2	N	781	A	N1-C2-N3	5.06	131.83	129.30
2	N	403	C	C4-C5-C6	-5.06	114.87	117.40
2	N	479	U	C5-C4-O4	-5.06	122.86	125.90
1	M	1337	G	C5'-C4'-O4'	-5.06	103.03	109.10
2	N	226	G	N9-C4-C5	-5.06	103.38	105.40
2	N	455	G	C2-N3-C4	-5.06	109.37	111.90
2	N	489	C	N1-C2-O2	5.06	121.94	118.90
2	N	514	C	P-O3'-C3'	-5.06	113.63	119.70
2	N	794	A	C5-C6-N6	-5.06	119.65	123.70
2	N	874	G	P-O3'-C3'	-5.06	113.63	119.70
3	O	1402	C	N3-C2-O2	-5.06	118.36	121.90
1	M	1134	G	C5-C6-O6	-5.06	125.56	128.60
1	M	1156	G	N3-C4-N9	5.06	129.03	126.00
1	M	1266	G	C2-N3-C4	-5.06	109.37	111.90
1	M	1323	G	C1'-O4'-C4'	5.06	113.95	109.90
1	M	1335	U	P-O3'-C3'	5.06	125.77	119.70
2	N	58	C	C1'-O4'-C4'	5.06	113.95	109.90
2	N	208	U	C6-N1-C2	-5.06	117.97	121.00
2	N	260	G	C4'-C3'-C2'	-5.06	97.54	102.60
2	N	612	C	C4-C5-C6	5.06	119.93	117.40
3	O	1422	G	N9-C4-C5	-5.06	103.38	105.40
2	N	293	G	C5-N7-C8	5.05	106.83	104.30
2	N	406	G	N3-C4-N9	-5.05	122.97	126.00
2	N	724	G	C4-C5-N7	-5.05	108.78	110.80
3	O	1488	G	N3-C4-N9	5.05	129.03	126.00
2	N	333	U	P-O3'-C3'	-5.05	113.64	119.70
1	M	963	G	C5-C6-N1	5.05	114.03	111.50
2	N	86	G	C1'-O4'-C4'	-5.05	105.86	109.90
2	N	115	G	N3-C4-C5	5.05	131.13	128.60
2	N	119	A	N9-C1'-C2'	5.05	120.57	114.00
2	N	433	G	N1-C2-N3	-5.05	120.87	123.90
2	N	440	C	OP1-P-OP2	-5.05	112.02	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	594	U	C5'-C4'-C3'	-5.05	107.92	116.00
2	N	756	C	C5-C6-N1	-5.05	118.47	121.00
2	N	860	A	N9-C4-C5	-5.05	103.78	105.80
3	O	1482	G	C4-C5-N7	-5.05	108.78	110.80
1	M	1210	C	C2-N1-C1'	5.05	124.36	118.80
2	N	105	G	OP2-P-O3'	5.05	116.31	105.20
2	N	127	G	O3'-P-O5'	-5.05	94.41	104.00
2	N	274	A	C5-C6-N1	-5.05	115.17	117.70
2	N	587	G	N9-C1'-C2'	-5.05	106.45	112.00
3	O	1485	U	C3'-C2'-C1'	5.05	105.54	101.50
1	M	1067	A	C2-N3-C4	5.05	113.12	110.60
2	N	148	G	N9-C4-C5	-5.05	103.38	105.40
2	N	425	G	C4-N9-C1'	-5.05	119.94	126.50
1	M	978	A	C3'-C2'-C1'	5.05	105.54	101.50
1	M	1387	G	N3-C4-C5	5.05	131.12	128.60
2	N	602	A	C6-C5-N7	-5.05	128.77	132.30
2	N	837	U	C4-C5-C6	5.04	122.73	119.70
1	M	999	C	C6-N1-C2	-5.04	118.28	120.30
1	M	1116	U	C4-C5-C6	-5.04	116.67	119.70
1	M	1213	A	C6-C5-N7	-5.04	128.77	132.30
1	M	1286	U	O4'-C1'-N1	5.04	112.23	108.20
2	N	119	A	C3'-C2'-C1'	5.04	105.53	101.50
2	N	165	G	C2-N3-C4	5.04	114.42	111.90
2	N	304	U	C4-C5-C6	-5.04	116.67	119.70
2	N	839	C	C5-C6-N1	5.04	123.52	121.00
2	N	912	C	N3-C4-N4	5.04	121.53	118.00
3	O	1467	C	N3-C4-N4	5.04	121.53	118.00
3	O	1531	A	C6-C5-N7	-5.04	128.77	132.30
1	M	1050	G	N9-C4-C5	5.04	107.42	105.40
2	N	22	G	C1'-O4'-C4'	5.04	113.93	109.90
2	N	927	G	N7-C8-N9	-5.04	110.58	113.10
3	O	1530	G	C8-N9-C1'	-5.04	120.45	127.00
1	M	1003	G	N3-C4-C5	5.04	131.12	128.60
1	M	1089	G	O4'-C1'-N9	5.04	112.23	108.20
1	M	1238	A	C4-C5-C6	5.04	119.52	117.00
2	N	73	C	N3-C4-C5	5.04	123.92	121.90
2	N	180	U	C2-N3-C4	-5.04	123.98	127.00
2	N	221	C	P-O5'-C5'	5.04	128.96	120.90
1	M	1374	A	C5'-C4'-O4'	5.04	115.14	109.10
2	N	517	G	N3-C4-C5	-5.04	126.08	128.60
2	N	881	G	N9-C1'-C2'	-5.04	106.46	112.00
2	N	47	C	N3-C4-N4	5.04	121.52	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	490	C	N1-C2-N3	-5.04	115.68	119.20
2	N	803	G	OP1-P-OP2	-5.04	112.05	119.60
3	O	1504	G	OP1-P-OP2	-5.04	112.05	119.60
1	M	1021	A	O4'-C1'-N9	5.03	112.23	108.20
1	M	1130	A	C5-C6-N1	-5.03	115.18	117.70
1	M	1260	G	N3-C2-N2	5.03	123.42	119.90
2	N	192	A	N3-C4-N9	5.03	131.43	127.40
2	N	531	U	C6-N1-C2	5.03	124.02	121.00
3	O	1419	G	O4'-C1'-N9	5.03	112.23	108.20
3	O	1516	G	C8-N9-C4	-5.03	104.39	106.40
1	M	1015	G	C2-N3-C4	5.03	114.42	111.90
1	M	1103	C	C5-C4-N4	5.03	123.72	120.20
1	M	1192	C	C4-C5-C6	-5.03	114.88	117.40
1	M	1327	C	C1'-O4'-C4'	5.03	113.92	109.90
2	N	140	U	C2'-C3'-O3'	5.03	121.75	113.70
3	O	1533	C	N1-C2-N3	-5.03	115.68	119.20
1	M	954	G	C2-N3-C4	-5.03	109.39	111.90
1	M	1040	U	P-O3'-C3'	5.03	125.74	119.70
1	M	1327	C	C5-C6-N1	5.03	123.52	121.00
2	N	9	G	N9-C4-C5	-5.03	103.39	105.40
2	N	279	A	C3'-C2'-C1'	5.03	105.53	101.50
2	N	730	G	C5-C6-N1	-5.03	108.98	111.50
1	M	1299	A	N3-C4-C5	-5.03	123.28	126.80
2	N	53	A	N7-C8-N9	5.03	116.31	113.80
2	N	338	A	C1'-O4'-C4'	-5.03	105.88	109.90
2	N	446	G	O4'-C1'-N9	5.03	112.22	108.20
2	N	781	A	O5'-C5'-C4'	-5.03	102.15	111.70
2	N	445	G	C6-C5-N7	-5.03	127.38	130.40
2	N	454	G	C4-C5-C6	5.03	121.82	118.80
2	N	540	G	N9-C1'-C2'	-5.03	106.47	112.00
2	N	776	G	N1-C2-N2	5.03	120.72	116.20
2	N	819	A	N3-C4-C5	-5.03	123.28	126.80
3	O	1462	C	N3-C4-C5	-5.03	119.89	121.90
1	M	1172	C	C6-N1-C2	-5.03	118.29	120.30
1	M	1271	A	N9-C4-C5	5.03	107.81	105.80
2	N	539	A	N7-C8-N9	-5.03	111.29	113.80
2	N	680	C	N1-C2-N3	-5.03	115.68	119.20
2	N	870	U	C4'-C3'-C2'	5.03	107.62	102.60
2	N	909	A	C6-C5-N7	-5.03	128.78	132.30
3	O	1392	G	C2'-C3'-O3'	5.03	121.74	113.70
3	O	1453	G	O4'-C1'-N9	5.03	112.22	108.20
2	N	14	U	C5-C6-N1	-5.02	120.19	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	264	C	C5'-C4'-O4'	5.02	115.13	109.10
3	O	1441	A	C6-N1-C2	5.02	121.61	118.60
1	M	1285	A	C6-C5-N7	-5.02	128.78	132.30
1	M	1331	G	C2-N3-C4	-5.02	109.39	111.90
2	N	306	A	C6-C5-N7	-5.02	128.78	132.30
2	N	375	U	C5-C6-N1	5.02	125.21	122.70
2	N	417	G	O5'-C5'-C4'	-5.02	102.16	111.70
2	N	908	A	O5'-C5'-C4'	-5.02	102.16	111.70
3	O	1412	C	N1-C2-O2	5.02	121.91	118.90
1	M	987	G	N3-C4-C5	-5.02	126.09	128.60
3	O	1396	A	C2-N3-C4	-5.02	108.09	110.60
1	M	1004	A	C5-C6-N1	-5.02	115.19	117.70
2	N	71	A	C5'-C4'-O4'	-5.02	103.08	109.10
2	N	102	G	C5-C6-O6	-5.02	125.59	128.60
2	N	152	A	C6-N1-C2	-5.02	115.59	118.60
2	N	233	C	N3-C4-N4	5.02	121.51	118.00
2	N	607	A	O3'-P-O5'	-5.02	94.46	104.00
2	N	628	G	OP1-P-OP2	-5.02	112.07	119.60
3	O	1534	A	N1-C2-N3	-5.02	126.79	129.30
1	M	1091	U	C2-N1-C1'	5.02	123.72	117.70
2	N	172	A	OP1-P-OP2	-5.02	112.08	119.60
2	N	344	A	N1-C6-N6	5.02	121.61	118.60
2	N	444	G	C3'-C2'-C1'	5.02	105.51	101.50
2	N	525	C	C2-N3-C4	5.02	122.41	119.90
2	N	799	G	N1-C2-N3	-5.02	120.89	123.90
2	N	857	C	O4'-C1'-N1	5.02	112.21	108.20
1	M	1140	C	N3-C4-C5	-5.02	119.89	121.90
2	N	201	G	N7-C8-N9	-5.02	110.59	113.10
2	N	442	G	N3-C4-N9	-5.02	122.99	126.00
1	M	1233	G	C4-C5-C6	5.01	121.81	118.80
2	N	76	G	C4-C5-N7	5.01	112.81	110.80
2	N	151	A	C4'-C3'-C2'	-5.01	97.59	102.60
2	N	305	G	O4'-C1'-N9	5.01	112.21	108.20
2	N	847	G	N3-C4-N9	5.01	129.01	126.00
1	M	1024	G	N3-C4-N9	-5.01	122.99	126.00
1	M	1072	G	C5-C6-O6	-5.01	125.59	128.60
1	M	1006	G	C1'-O4'-C4'	5.01	113.91	109.90
1	M	1100	C	C5'-C4'-C3'	-5.01	107.98	116.00
1	M	1103	C	C2-N3-C4	5.01	122.41	119.90
1	M	1227	A	OP1-P-OP2	-5.01	112.08	119.60
2	N	73	C	C5-C6-N1	-5.01	118.49	121.00
2	N	498	A	N7-C8-N9	5.01	116.31	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	696	A	OP2-P-O3'	5.01	116.22	105.20
1	M	934	C	C5-C6-N1	5.01	123.50	121.00
1	M	1013	G	C4'-C3'-C2'	5.01	107.61	102.60
1	M	1346	A	C5'-C4'-O4'	-5.01	103.09	109.10
2	N	32	A	C5-N7-C8	5.01	106.41	103.90
2	N	99	C	C5-C4-N4	-5.01	116.69	120.20
2	N	363	A	O4'-C1'-N9	5.01	112.21	108.20
2	N	576	C	C5'-C4'-O4'	5.01	115.11	109.10
2	N	759	A	O5'-C5'-C4'	-5.01	102.18	111.70
2	N	348	G	C6-C5-N7	-5.01	127.39	130.40
2	N	636	U	C2-N1-C1'	-5.01	111.69	117.70
1	M	995	C	N3-C4-C5	-5.01	119.90	121.90
1	M	1114	C	C5-C6-N1	5.01	123.50	121.00
1	M	1239	A	P-O5'-C5'	-5.01	112.89	120.90
2	N	292	G	C8-N9-C1'	-5.01	120.49	127.00
2	N	417	G	C4-C5-C6	5.01	121.80	118.80
2	N	477	C	C6-N1-C2	-5.01	118.30	120.30
1	M	1068	G	C8-N9-C4	-5.00	104.40	106.40
1	M	944	G	N1-C2-N3	-5.00	120.90	123.90
1	M	983	A	N3-C4-C5	-5.00	123.30	126.80
1	M	1148	U	P-O3'-C3'	5.00	125.70	119.70
1	M	1351	U	C4'-C3'-C2'	-5.00	97.60	102.60
2	N	65	A	C8-N9-C4	-5.00	103.80	105.80
2	N	75	G	C6-C5-N7	-5.00	127.40	130.40
2	N	672	U	N3-C4-O4	5.00	122.90	119.40
1	M	992	U	C2-N3-C4	5.00	130.00	127.00
1	M	1090	U	P-O3'-C3'	5.00	125.70	119.70
1	M	1375	A	P-O5'-C5'	-5.00	112.90	120.90
1	M	1376	U	N1-C2-O2	-5.00	119.30	122.80
2	N	100	G	C4-C5-N7	-5.00	108.80	110.80
2	N	170	U	C3'-C2'-C1'	-5.00	97.50	101.50
2	N	246	A	N9-C4-C5	5.00	107.80	105.80
2	N	908	A	O4'-C1'-N9	5.00	112.20	108.20

There are no chirality outliers.

All (836) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	M	1001	C	Sidechain
1	M	1002	G	Sidechain
1	M	1003	G	Sidechain
1	M	1004	A	Sidechain

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Mol	Chain	Res	Type	Group
1	M	1005	A	Sidechain
1	M	1006	G	Sidechain
1	M	1009	U	Sidechain
1	M	1012	A	Sidechain
1	M	1013	G	Sidechain
1	M	1014	A	Sidechain
1	M	1015	G	Sidechain
1	M	1017	U	Sidechain
1	M	1018	G	Sidechain
1	M	1020	G	Sidechain
1	M	1025	U	Sidechain
1	M	1026	G	Sidechain
1	M	1027	C	Sidechain
1	M	1031	C	Sidechain
1	M	1033	G	Sidechain
1	M	1034	G	Sidechain
1	M	1035	A	Sidechain
1	M	1038	C	Sidechain
1	M	1040	U	Sidechain
1	M	1041	G	Sidechain
1	M	1043	G	Sidechain
1	M	1044	A	Sidechain
1	M	1047	G	Sidechain
1	M	1048	G	Sidechain
1	M	1049	U	Sidechain
1	M	1050	G	Sidechain
1	M	1052	U	Sidechain
1	M	1055	A	Sidechain
1	M	1058	G	Sidechain
1	M	1059	C	Sidechain
1	M	1060	U	Sidechain
1	M	1061	G	Sidechain
1	M	1067	A	Sidechain
1	M	1068	G	Sidechain
1	M	1072	G	Sidechain
1	M	1073	U	Sidechain
1	M	1074	G	Sidechain
1	M	1075	U	Sidechain
1	M	1076	U	Sidechain
1	M	1077	G	Sidechain
1	M	1078	U	Sidechain
1	M	1080	A	Sidechain

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Mol	Chain	Res	Type	Group
1	M	1082	A	Sidechain
1	M	1084	G	Sidechain
1	M	1085	U	Sidechain
1	M	1086	U	Sidechain
1	M	1087	G	Sidechain
1	M	1090	U	Sidechain
1	M	1093	A	Sidechain
1	M	1094	G	Sidechain
1	M	1095	U	Sidechain
1	M	1096	C	Sidechain
1	M	1097	C	Sidechain
1	M	1098	C	Sidechain
1	M	1102	A	Sidechain
1	M	1104	G	Sidechain
1	M	1105	A	Sidechain
1	M	1108	G	Sidechain
1	M	1110	A	Sidechain
1	M	1116	U	Sidechain
1	M	1117	A	Sidechain
1	M	1118	U	Sidechain
1	M	1121	U	Sidechain
1	M	1131	G	Sidechain
1	M	1137	C	Sidechain
1	M	1138	G	Sidechain
1	M	1141	C	Sidechain
1	M	1142	G	Sidechain
1	M	1144	G	Sidechain
1	M	1147	C	Sidechain
1	M	1148	U	Sidechain
1	M	1149	C	Sidechain
1	M	1150	A	Sidechain
1	M	1151	A	Sidechain
1	M	1153	G	Sidechain
1	M	1154	G	Sidechain
1	M	1159	U	Sidechain
1	M	1160	G	Sidechain
1	M	1162	C	Sidechain
1	M	1166	G	Sidechain
1	M	1168	U	Sidechain
1	M	1169	A	Sidechain
1	M	1170	A	Sidechain
1	M	1171	A	Sidechain

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Mol	Chain	Res	Type	Group
1	M	1173	U	Sidechain
1	M	1175	G	Sidechain
1	M	1181	G	Sidechain
1	M	1182	G	Sidechain
1	M	1183	U	Sidechain
1	M	1184	G	Sidechain
1	M	1186	G	Sidechain
1	M	1187	G	Sidechain
1	M	1190	G	Sidechain
1	M	1191	A	Sidechain
1	M	1193	G	Sidechain
1	M	1195	C	Sidechain
1	M	1197	A	Sidechain
1	M	1200	C	Sidechain
1	M	1205	U	Sidechain
1	M	1207	G	Sidechain
1	M	1208	C	Sidechain
1	M	1211	U	Sidechain
1	M	1217	C	Sidechain
1	M	1218	C	Sidechain
1	M	1220	G	Sidechain
1	M	1221	G	Sidechain
1	M	1223	C	Sidechain
1	M	1224	U	Sidechain
1	M	1225	A	Sidechain
1	M	1226	C	Sidechain
1	M	1227	A	Sidechain
1	M	1231	G	Sidechain
1	M	1233	G	Sidechain
1	M	1236	A	Sidechain
1	M	1238	A	Sidechain
1	M	1239	A	Sidechain
1	M	1240	U	Sidechain
1	M	1241	G	Sidechain
1	M	1242	G	Sidechain
1	M	1244	G	Sidechain
1	M	1245	C	Sidechain
1	M	1246	A	Sidechain
1	M	1247	U	Sidechain
1	M	1249	C	Sidechain
1	M	1250	A	Sidechain
1	M	1251	A	Sidechain

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Mol	Chain	Res	Type	Group
1	M	1253	G	Sidechain
1	M	1255	G	Sidechain
1	M	1256	A	Sidechain
1	M	1257	A	Sidechain
1	M	1258	G	Sidechain
1	M	1264	U	Sidechain
1	M	1266	G	Sidechain
1	M	1268	G	Sidechain
1	M	1269	A	Sidechain
1	M	1270	G	Sidechain
1	M	1275	A	Sidechain
1	M	1276	G	Sidechain
1	M	1278	G	Sidechain
1	M	1282	C	Sidechain
1	M	1283	U	Sidechain
1	M	1284	C	Sidechain
1	M	1288	A	Sidechain
1	M	1289	A	Sidechain
1	M	1290	G	Sidechain
1	M	1293	C	Sidechain
1	M	1294	G	Sidechain
1	M	1295	U	Sidechain
1	M	1297	G	Sidechain
1	M	1302	C	Sidechain
1	M	1303	C	Sidechain
1	M	1305	G	Sidechain
1	M	1308	U	Sidechain
1	M	1309	G	Sidechain
1	M	1310	G	Sidechain
1	M	1313	U	Sidechain
1	M	1315	U	Sidechain
1	M	1316	G	Sidechain
1	M	1317	C	Sidechain
1	M	1319	A	Sidechain
1	M	1322	C	Sidechain
1	M	1326	U	Sidechain
1	M	1327	C	Sidechain
1	M	1330	U	Sidechain
1	M	1331	G	Sidechain
1	M	1332	A	Sidechain
1	M	1334	G	Sidechain
1	M	1337	G	Sidechain

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Mol	Chain	Res	Type	Group
1	M	1339	A	Sidechain
1	M	1344	C	Sidechain
1	M	1346	A	Sidechain
1	M	1348	U	Sidechain
1	M	1350	A	Sidechain
1	M	1352	C	Sidechain
1	M	1354	U	Sidechain
1	M	1355	G	Sidechain
1	M	1356	G	Sidechain
1	M	1358	U	Sidechain
1	M	1360	A	Sidechain
1	M	1361	G	Sidechain
1	M	1362	A	Sidechain
1	M	1363	A	Sidechain
1	M	1365	G	Sidechain
1	M	1370	G	Sidechain
1	M	1372	U	Sidechain
1	M	1375	A	Sidechain
1	M	1376	U	Sidechain
1	M	1379	G	Sidechain
1	M	1383	C	Sidechain
1	M	1384	C	Sidechain
1	M	1385	G	Sidechain
1	M	1387	G	Sidechain
1	M	1388	C	Sidechain
1	M	929	G	Sidechain
1	M	933	G	Sidechain
1	M	934	C	Sidechain
1	M	935	A	Sidechain
1	M	939	G	Sidechain
1	M	940	C	Sidechain
1	M	941	G	Sidechain
1	M	945	G	Sidechain
1	M	948	C	Sidechain
1	M	950	U	Sidechain
1	M	951	G	Sidechain
1	M	952	U	Sidechain
1	M	954	G	Sidechain
1	M	955	U	Sidechain
1	M	957	U	Sidechain
1	M	959	A	Sidechain
1	M	964	A	Sidechain

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Mol	Chain	Res	Type	Group
1	M	965	U	Sidechain
1	M	967	C	Sidechain
1	M	968	A	Sidechain
1	M	971	G	Sidechain
1	M	972	C	Sidechain
1	M	974	A	Sidechain
1	M	975	A	Sidechain
1	M	976	G	Sidechain
1	M	977	A	Sidechain
1	M	978	A	Sidechain
1	M	981	U	Sidechain
1	M	982	U	Sidechain
1	M	984	C	Sidechain
1	M	985	C	Sidechain
1	M	986	U	Sidechain
1	M	990	C	Sidechain
1	M	991	U	Sidechain
1	M	992	U	Sidechain
1	M	993	G	Sidechain
1	M	994	A	Sidechain
1	M	997	U	Sidechain
1	M	999	C	Sidechain
2	N	10	A	Sidechain
2	N	100	G	Sidechain
2	N	101	A	Sidechain
2	N	102	G	Sidechain
2	N	103	U	Sidechain
2	N	104	G	Sidechain
2	N	105	G	Sidechain
2	N	106	C	Sidechain
2	N	107	G	Sidechain
2	N	108	G	Sidechain
2	N	11	G	Sidechain
2	N	110	C	Sidechain
2	N	111	G	Sidechain
2	N	112	G	Sidechain
2	N	115	G	Sidechain
2	N	118	U	Sidechain
2	N	119	A	Sidechain
2	N	12	U	Sidechain
2	N	120	A	Sidechain
2	N	123	U	Sidechain

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Mol	Chain	Res	Type	Group
2	N	125	U	Sidechain
2	N	127	G	Sidechain
2	N	128	G	Sidechain
2	N	13	U	Sidechain
2	N	130	A	Sidechain
2	N	131	A	Sidechain
2	N	132	C	Sidechain
2	N	133	U	Sidechain
2	N	134	G	Sidechain
2	N	135	C	Sidechain
2	N	137	U	Sidechain
2	N	14	U	Sidechain
2	N	140	U	Sidechain
2	N	141	G	Sidechain
2	N	144	G	Sidechain
2	N	150	U	Sidechain
2	N	152	A	Sidechain
2	N	153	C	Sidechain
2	N	154	U	Sidechain
2	N	157	U	Sidechain
2	N	161	A	Sidechain
2	N	17	U	Sidechain
2	N	170	U	Sidechain
2	N	173	U	Sidechain
2	N	174	A	Sidechain
2	N	175	C	Sidechain
2	N	178	C	Sidechain
2	N	179	A	Sidechain
2	N	18	C	Sidechain
2	N	180	U	Sidechain
2	N	182	A	Sidechain
2	N	184	G	Sidechain
2	N	186	C	Sidechain
2	N	187	G	Sidechain
2	N	188	C	Sidechain
2	N	189	A	Sidechain
2	N	190	A	Sidechain
2	N	192	A	Sidechain
2	N	193	C	Sidechain
2	N	195	A	Sidechain
2	N	197	A	Sidechain
2	N	198	G	Sidechain

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Mol	Chain	Res	Type	Group
2	N	199	A	Sidechain
2	N	200	G	Sidechain
2	N	201	G	Sidechain
2	N	202	G	Sidechain
2	N	203	G	Sidechain
2	N	204	G	Sidechain
2	N	206	C	Sidechain
2	N	208	U	Sidechain
2	N	21	G	Sidechain
2	N	212	G	Sidechain
2	N	213	G	Sidechain
2	N	216	U	Sidechain
2	N	217	C	Sidechain
2	N	218	U	Sidechain
2	N	219	U	Sidechain
2	N	22	G	Sidechain
2	N	222	C	Sidechain
2	N	223	A	Sidechain
2	N	226	G	Sidechain
2	N	228	A	Sidechain
2	N	229	U	Sidechain
2	N	230	G	Sidechain
2	N	232	G	Sidechain
2	N	233	C	Sidechain
2	N	234	C	Sidechain
2	N	235	C	Sidechain
2	N	239	U	Sidechain
2	N	243	A	Sidechain
2	N	244	U	Sidechain
2	N	246	A	Sidechain
2	N	247	G	Sidechain
2	N	249	U	Sidechain
2	N	25	C	Sidechain
2	N	251	G	Sidechain
2	N	252	U	Sidechain
2	N	254	G	Sidechain
2	N	255	G	Sidechain
2	N	256	U	Sidechain
2	N	26	A	Sidechain
2	N	260	G	Sidechain
2	N	262	A	Sidechain
2	N	263	A	Sidechain

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Mol	Chain	Res	Type	Group
2	N	264	C	Sidechain
2	N	265	G	Sidechain
2	N	267	C	Sidechain
2	N	269	C	Sidechain
2	N	27	G	Sidechain
2	N	270	A	Sidechain
2	N	273	U	Sidechain
2	N	274	A	Sidechain
2	N	275	G	Sidechain
2	N	276	G	Sidechain
2	N	28	A	Sidechain
2	N	281	G	Sidechain
2	N	285	C	Sidechain
2	N	287	U	Sidechain
2	N	288	A	Sidechain
2	N	29	U	Sidechain
2	N	291	U	Sidechain
2	N	292	G	Sidechain
2	N	294	U	Sidechain
2	N	296	U	Sidechain
2	N	299	G	Sidechain
2	N	300	A	Sidechain
2	N	302	G	Sidechain
2	N	308	C	Sidechain
2	N	310	G	Sidechain
2	N	314	C	Sidechain
2	N	315	A	Sidechain
2	N	319	G	Sidechain
2	N	321	A	Sidechain
2	N	322	C	Sidechain
2	N	323	U	Sidechain
2	N	324	G	Sidechain
2	N	325	A	Sidechain
2	N	326	G	Sidechain
2	N	328	C	Sidechain
2	N	332	G	Sidechain
2	N	333	U	Sidechain
2	N	335	C	Sidechain
2	N	336	A	Sidechain
2	N	337	G	Sidechain
2	N	338	A	Sidechain
2	N	34	C	Sidechain

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Mol	Chain	Res	Type	Group
2	N	340	U	Sidechain
2	N	341	C	Sidechain
2	N	342	C	Sidechain
2	N	343	U	Sidechain
2	N	345	C	Sidechain
2	N	347	G	Sidechain
2	N	348	G	Sidechain
2	N	349	A	Sidechain
2	N	35	G	Sidechain
2	N	350	G	Sidechain
2	N	351	G	Sidechain
2	N	357	G	Sidechain
2	N	358	U	Sidechain
2	N	36	C	Sidechain
2	N	360	G	Sidechain
2	N	361	G	Sidechain
2	N	362	G	Sidechain
2	N	364	A	Sidechain
2	N	366	A	Sidechain
2	N	367	U	Sidechain
2	N	368	U	Sidechain
2	N	369	G	Sidechain
2	N	370	C	Sidechain
2	N	372	C	Sidechain
2	N	373	A	Sidechain
2	N	374	A	Sidechain
2	N	377	G	Sidechain
2	N	378	G	Sidechain
2	N	38	G	Sidechain
2	N	380	G	Sidechain
2	N	381	C	Sidechain
2	N	383	A	Sidechain
2	N	384	G	Sidechain
2	N	385	C	Sidechain
2	N	386	C	Sidechain
2	N	391	G	Sidechain
2	N	392	C	Sidechain
2	N	394	G	Sidechain
2	N	395	C	Sidechain
2	N	396	C	Sidechain
2	N	397	A	Sidechain
2	N	399	G	Sidechain

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Mol	Chain	Res	Type	Group
2	N	400	C	Sidechain
2	N	402	G	Sidechain
2	N	404	G	Sidechain
2	N	406	G	Sidechain
2	N	41	G	Sidechain
2	N	410	G	Sidechain
2	N	413	G	Sidechain
2	N	416	G	Sidechain
2	N	418	C	Sidechain
2	N	419	C	Sidechain
2	N	422	C	Sidechain
2	N	423	G	Sidechain
2	N	424	G	Sidechain
2	N	425	G	Sidechain
2	N	426	U	Sidechain
2	N	427	U	Sidechain
2	N	428	G	Sidechain
2	N	429	U	Sidechain
2	N	430	A	Sidechain
2	N	431	A	Sidechain
2	N	432	A	Sidechain
2	N	435	A	Sidechain
2	N	437	U	Sidechain
2	N	441	A	Sidechain
2	N	444	G	Sidechain
2	N	445	G	Sidechain
2	N	446	G	Sidechain
2	N	447	G	Sidechain
2	N	449	G	Sidechain
2	N	45	G	Sidechain
2	N	450	G	Sidechain
2	N	451	A	Sidechain
2	N	452	A	Sidechain
2	N	456	A	Sidechain
2	N	457	G	Sidechain
2	N	460	A	Sidechain
2	N	462	G	Sidechain
2	N	464	U	Sidechain
2	N	465	A	Sidechain
2	N	468	A	Sidechain
2	N	47	C	Sidechain
2	N	470	C	Sidechain

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Mol	Chain	Res	Type	Group
2	N	471	U	Sidechain
2	N	474	G	Sidechain
2	N	475	C	Sidechain
2	N	478	A	Sidechain
2	N	48	C	Sidechain
2	N	480	U	Sidechain
2	N	482	A	Sidechain
2	N	483	C	Sidechain
2	N	485	U	Sidechain
2	N	486	U	Sidechain
2	N	487	A	Sidechain
2	N	491	G	Sidechain
2	N	492	C	Sidechain
2	N	494	G	Sidechain
2	N	495	A	Sidechain
2	N	496	A	Sidechain
2	N	497	G	Sidechain
2	N	498	A	Sidechain
2	N	499	A	Sidechain
2	N	5	U	Sidechain
2	N	50	A	Sidechain
2	N	505	G	Sidechain
2	N	506	G	Sidechain
2	N	508	U	Sidechain
2	N	510	A	Sidechain
2	N	511	C	Sidechain
2	N	512	U	Sidechain
2	N	513	C	Sidechain
2	N	514	C	Sidechain
2	N	516	U	Sidechain
2	N	518	C	Sidechain
2	N	519	C	Sidechain
2	N	520	A	Sidechain
2	N	522	C	Sidechain
2	N	523	A	Sidechain
2	N	524	G	Sidechain
2	N	526	C	Sidechain
2	N	527	G	Sidechain
2	N	530	G	Sidechain
2	N	531	U	Sidechain
2	N	533	A	Sidechain
2	N	534	U	Sidechain

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Mol	Chain	Res	Type	Group
2	N	535	A	Sidechain
2	N	537	G	Sidechain
2	N	539	A	Sidechain
2	N	540	G	Sidechain
2	N	541	G	Sidechain
2	N	542	G	Sidechain
2	N	543	U	Sidechain
2	N	547	A	Sidechain
2	N	548	G	Sidechain
2	N	550	G	Sidechain
2	N	551	U	Sidechain
2	N	552	U	Sidechain
2	N	555	U	Sidechain
2	N	557	G	Sidechain
2	N	558	G	Sidechain
2	N	559	A	Sidechain
2	N	56	U	Sidechain
2	N	560	A	Sidechain
2	N	565	U	Sidechain
2	N	567	G	Sidechain
2	N	568	G	Sidechain
2	N	569	C	Sidechain
2	N	57	G	Sidechain
2	N	570	G	Sidechain
2	N	571	U	Sidechain
2	N	573	A	Sidechain
2	N	575	G	Sidechain
2	N	577	G	Sidechain
2	N	578	C	Sidechain
2	N	579	A	Sidechain
2	N	581	G	Sidechain
2	N	584	G	Sidechain
2	N	585	G	Sidechain
2	N	586	C	Sidechain
2	N	587	G	Sidechain
2	N	588	G	Sidechain
2	N	591	U	Sidechain
2	N	594	U	Sidechain
2	N	595	A	Sidechain
2	N	596	A	Sidechain
2	N	598	U	Sidechain
2	N	601	G	Sidechain

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Mol	Chain	Res	Type	Group
2	N	604	G	Sidechain
2	N	606	G	Sidechain
2	N	61	G	Sidechain
2	N	611	C	Sidechain
2	N	613	C	Sidechain
2	N	614	C	Sidechain
2	N	616	G	Sidechain
2	N	617	G	Sidechain
2	N	619	U	Sidechain
2	N	621	A	Sidechain
2	N	622	A	Sidechain
2	N	625	U	Sidechain
2	N	626	G	Sidechain
2	N	627	G	Sidechain
2	N	628	G	Sidechain
2	N	629	A	Sidechain
2	N	63	C	Sidechain
2	N	631	C	Sidechain
2	N	636	U	Sidechain
2	N	639	G	Sidechain
2	N	64	G	Sidechain
2	N	640	A	Sidechain
2	N	641	U	Sidechain
2	N	642	A	Sidechain
2	N	643	C	Sidechain
2	N	646	G	Sidechain
2	N	650	G	Sidechain
2	N	651	C	Sidechain
2	N	652	U	Sidechain
2	N	653	U	Sidechain
2	N	654	G	Sidechain
2	N	655	A	Sidechain
2	N	658	C	Sidechain
2	N	660	C	Sidechain
2	N	661	G	Sidechain
2	N	662	U	Sidechain
2	N	668	G	Sidechain
2	N	669	G	Sidechain
2	N	67	C	Sidechain
2	N	671	G	Sidechain
2	N	674	G	Sidechain
2	N	677	U	Sidechain

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Mol	Chain	Res	Type	Group
2	N	678	U	Sidechain
2	N	68	G	Sidechain
2	N	681	A	Sidechain
2	N	684	U	Sidechain
2	N	685	G	Sidechain
2	N	687	A	Sidechain
2	N	688	G	Sidechain
2	N	691	G	Sidechain
2	N	693	G	Sidechain
2	N	695	A	Sidechain
2	N	697	U	Sidechain
2	N	698	G	Sidechain
2	N	70	U	Sidechain
2	N	700	G	Sidechain
2	N	701	U	Sidechain
2	N	707	U	Sidechain
2	N	708	C	Sidechain
2	N	709	U	Sidechain
2	N	71	A	Sidechain
2	N	710	G	Sidechain
2	N	711	G	Sidechain
2	N	712	A	Sidechain
2	N	713	G	Sidechain
2	N	714	G	Sidechain
2	N	719	C	Sidechain
2	N	72	A	Sidechain
2	N	724	G	Sidechain
2	N	728	A	Sidechain
2	N	73	C	Sidechain
2	N	730	G	Sidechain
2	N	733	G	Sidechain
2	N	736	C	Sidechain
2	N	739	C	Sidechain
2	N	74	A	Sidechain
2	N	740	U	Sidechain
2	N	742	G	Sidechain
2	N	744	C	Sidechain
2	N	745	G	Sidechain
2	N	746	A	Sidechain
2	N	749	A	Sidechain
2	N	75	G	Sidechain
2	N	750	C	Sidechain

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Mol	Chain	Res	Type	Group
2	N	751	U	Sidechain
2	N	752	G	Sidechain
2	N	753	A	Sidechain
2	N	755	G	Sidechain
2	N	757	U	Sidechain
2	N	759	A	Sidechain
2	N	760	G	Sidechain
2	N	761	G	Sidechain
2	N	762	U	Sidechain
2	N	763	G	Sidechain
2	N	765	G	Sidechain
2	N	767	A	Sidechain
2	N	768	A	Sidechain
2	N	769	G	Sidechain
2	N	77	A	Sidechain
2	N	770	C	Sidechain
2	N	772	U	Sidechain
2	N	773	G	Sidechain
2	N	774	G	Sidechain
2	N	775	G	Sidechain
2	N	776	G	Sidechain
2	N	777	A	Sidechain
2	N	778	G	Sidechain
2	N	779	C	Sidechain
2	N	78	A	Sidechain
2	N	783	C	Sidechain
2	N	786	G	Sidechain
2	N	787	A	Sidechain
2	N	788	U	Sidechain
2	N	789	U	Sidechain
2	N	79	G	Sidechain
2	N	791	G	Sidechain
2	N	795	C	Sidechain
2	N	796	C	Sidechain
2	N	797	C	Sidechain
2	N	799	G	Sidechain
2	N	8	A	Sidechain
2	N	800	G	Sidechain
2	N	802	A	Sidechain
2	N	803	G	Sidechain
2	N	805	C	Sidechain
2	N	808	C	Sidechain

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Mol	Chain	Res	Type	Group
2	N	81	A	Sidechain
2	N	810	C	Sidechain
2	N	811	C	Sidechain
2	N	812	G	Sidechain
2	N	813	U	Sidechain
2	N	815	A	Sidechain
2	N	816	A	Sidechain
2	N	82	G	Sidechain
2	N	824	G	Sidechain
2	N	827	U	Sidechain
2	N	828	U	Sidechain
2	N	829	G	Sidechain
2	N	830	G	Sidechain
2	N	831	A	Sidechain
2	N	832	G	Sidechain
2	N	834	U	Sidechain
2	N	835	U	Sidechain
2	N	837	U	Sidechain
2	N	840	C	Sidechain
2	N	842	U	Sidechain
2	N	847	G	Sidechain
2	N	848	C	Sidechain
2	N	851	G	Sidechain
2	N	852	G	Sidechain
2	N	854	U	Sidechain
2	N	855	U	Sidechain
2	N	856	C	Sidechain
2	N	857	C	Sidechain
2	N	858	G	Sidechain
2	N	86	G	Sidechain
2	N	860	A	Sidechain
2	N	861	G	Sidechain
2	N	864	A	Sidechain
2	N	868	C	Sidechain
2	N	869	G	Sidechain
2	N	870	U	Sidechain
2	N	871	U	Sidechain
2	N	872	A	Sidechain
2	N	873	A	Sidechain
2	N	876	C	Sidechain
2	N	877	G	Sidechain
2	N	879	C	Sidechain

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Mol	Chain	Res	Type	Group
2	N	88	U	Sidechain
2	N	881	G	Sidechain
2	N	884	U	Sidechain
2	N	886	G	Sidechain
2	N	887	G	Sidechain
2	N	888	G	Sidechain
2	N	89	U	Sidechain
2	N	890	G	Sidechain
2	N	891	U	Sidechain
2	N	893	C	Sidechain
2	N	894	G	Sidechain
2	N	895	G	Sidechain
2	N	896	C	Sidechain
2	N	897	C	Sidechain
2	N	898	G	Sidechain
2	N	899	C	Sidechain
2	N	9	G	Sidechain
2	N	900	A	Sidechain
2	N	902	G	Sidechain
2	N	904	U	Sidechain
2	N	905	U	Sidechain
2	N	906	A	Sidechain
2	N	91	U	Sidechain
2	N	910	C	Sidechain
2	N	912	C	Sidechain
2	N	915	A	Sidechain
2	N	916	U	Sidechain
2	N	919	A	Sidechain
2	N	92	U	Sidechain
2	N	920	U	Sidechain
2	N	924	C	Sidechain
2	N	926	G	Sidechain
2	N	927	G	Sidechain
2	N	928	G	Sidechain
2	N	94	G	Sidechain
2	N	95	C	Sidechain
2	N	96	U	Sidechain
2	N	97	G	Sidechain
2	N	98	A	Sidechain
2	N	99	C	Sidechain
3	O	1392	G	Sidechain
3	O	1395	C	Sidechain

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Mol	Chain	Res	Type	Group
3	O	1396	A	Sidechain
3	O	1398	A	Sidechain
3	O	1401	G	Sidechain
3	O	1403	C	Sidechain
3	O	1405	G	Sidechain
3	O	1406	U	Sidechain
3	O	1409	C	Sidechain
3	O	1410	A	Sidechain
3	O	1411	C	Sidechain
3	O	1413	A	Sidechain
3	O	1415	G	Sidechain
3	O	1417	G	Sidechain
3	O	1420	U	Sidechain
3	O	1421	G	Sidechain
3	O	1422	G	Sidechain
3	O	1424	U	Sidechain
3	O	1426	G	Sidechain
3	O	1430	A	Sidechain
3	O	1431	A	Sidechain
3	O	1432	G	Sidechain
3	O	1435	G	Sidechain
3	O	1437	A	Sidechain
3	O	1439	G	Sidechain
3	O	1440	U	Sidechain
3	O	1442	G	Sidechain
3	O	1445	U	Sidechain
3	O	1446	A	Sidechain
3	O	1447	A	Sidechain
3	O	1450	U	Sidechain
3	O	1453	G	Sidechain
3	O	1455	G	Sidechain
3	O	1457	G	Sidechain
3	O	1458	G	Sidechain
3	O	1459	G	Sidechain
3	O	1461	G	Sidechain
3	O	1462	C	Sidechain
3	O	1464	U	Sidechain
3	O	1468	A	Sidechain
3	O	1472	U	Sidechain
3	O	1473	G	Sidechain
3	O	1474	U	Sidechain
3	O	1475	G	Sidechain

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Mol	Chain	Res	Type	Group
3	O	1476	A	Sidechain
3	O	1477	U	Sidechain
3	O	1481	U	Sidechain
3	O	1482	G	Sidechain
3	O	1485	U	Sidechain
3	O	1487	G	Sidechain
3	O	1490	U	Sidechain
3	O	1491	G	Sidechain
3	O	1493	A	Sidechain
3	O	1494	G	Sidechain
3	O	1495	U	Sidechain
3	O	1499	A	Sidechain
3	O	1500	A	Sidechain
3	O	1501	C	Sidechain
3	O	1502	A	Sidechain
3	O	1504	G	Sidechain
3	O	1505	G	Sidechain
3	O	1508	A	Sidechain
3	O	1509	C	Sidechain
3	O	1511	G	Sidechain
3	O	1512	U	Sidechain
3	O	1517	G	Sidechain
3	O	1518	A	Sidechain
3	O	1522	U	Sidechain
3	O	1523	G	Sidechain
3	O	1524	C	Sidechain
3	O	1525	G	Sidechain
3	O	1527	U	Sidechain
3	O	1529	G	Sidechain
3	O	1530	G	Sidechain
3	O	1531	A	Sidechain
3	O	1532	U	Sidechain
3	O	1533	C	Sidechain
3	O	1534	A	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	M	9878	4987	4986	67	0
2	N	19924	10017	10006	206	0
3	O	3084	1554	1553	14	0
All	All	32886	16558	16545	281	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 6.

All (281) 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:M:998:C:H42	1:M:1042:A:H61	1.38	0.71
2:N:50:A:H1'	2:N:52:C:C6	2.25	0.71
2:N:664:G:H22	2:N:741:G:H1	1.38	0.70
2:N:858:G:H1	2:N:869:G:H2'	1.55	0.70
2:N:411:A:H61	2:N:428:G:H1'	1.57	0.70
2:N:67:C:H2'	2:N:68:G:C8	2.30	0.66
2:N:80:A:C5	2:N:81:A:H1'	2.32	0.65
2:N:231:U:H2'	2:N:232:G:C8	2.32	0.65
2:N:594:U:C4	2:N:595:A:C6	2.85	0.63
2:N:596:A:H61	2:N:644:U:H3	1.46	0.63
2:N:198:G:H2'	2:N:199:A:C8	2.32	0.63
2:N:120:A:C2	2:N:122:G:C6	2.87	0.62
2:N:375:U:H3	2:N:389:A:H61	1.48	0.61
2:N:595:A:H4'	2:N:596:A:H5'	1.80	0.61
2:N:512:U:H3	2:N:539:A:H61	1.49	0.60
2:N:780:A:C2	2:N:801:U:C5	2.90	0.60
3:O:1400:C:H3'	3:O:1401:G:H5'	1.83	0.59
1:M:1135:U:H3	1:M:1138:G:H22	1.49	0.59
2:N:135:C:H42	2:N:228:A:H61	1.51	0.59
2:N:300:A:C4	2:N:301:G:H1'	2.38	0.59
2:N:383:A:C5	2:N:384:G:H1'	2.37	0.59
2:N:59:A:C2	2:N:354:G:C5	2.91	0.58
2:N:199:A:C2	2:N:219:U:O2	2.57	0.58
2:N:355:C:H2'	2:N:356:A:C8	2.39	0.58
2:N:410:G:H2'	2:N:429:U:C5	2.40	0.57
1:M:1083:U:C5	1:M:1084:G:C5	2.93	0.57
2:N:738:C:C4	2:N:739:C:C4	2.93	0.57
1:M:1287:A:H2'	1:M:1288:A:C8	2.40	0.57
2:N:439:U:C5	2:N:440:C:C5	2.93	0.56
2:N:160:A:H61	2:N:347:G:H1'	1.70	0.56
2:N:761:G:C5	2:N:762:U:C4	2.93	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:79:G:H2'	2:N:80:A:C8	2.40	0.56
2:N:69:G:C4	2:N:70:U:C5	2.94	0.56
2:N:323:U:C4	2:N:324:G:C5	2.94	0.56
2:N:602:A:C2	2:N:603:U:C2	2.93	0.55
2:N:610:U:H2'	2:N:612:C:H41	1.71	0.55
1:M:1080:A:C5	2:N:922:G:C8	2.95	0.55
2:N:751:U:H5	2:N:752:G:C5	2.24	0.55
2:N:780:A:C2	2:N:803:G:N1	2.74	0.55
2:N:858:G:H1	2:N:869:G:C2'	2.20	0.55
2:N:881:G:C5	2:N:882:C:C5	2.94	0.54
2:N:507:C:H3'	2:N:508:U:H5''	1.90	0.54
1:M:1058:G:C5	1:M:1059:C:C5	2.96	0.54
2:N:59:A:H1'	2:N:354:G:C2	2.43	0.53
2:N:438:U:C4	2:N:494:G:C8	2.95	0.53
1:M:1144:G:C6	1:M:1145:A:C5	2.96	0.53
2:N:160:A:H2'	2:N:161:A:C8	2.42	0.53
2:N:413:G:H4'	2:N:428:G:C2	2.43	0.53
2:N:557:G:C6	2:N:558:G:C6	2.96	0.53
2:N:73:C:C6	2:N:73:C:H5''	2.43	0.53
2:N:832:G:C5	2:N:855:U:N3	2.76	0.53
1:M:1075:U:C4	1:M:1076:U:C4	2.96	0.53
1:M:1244:G:C6	1:M:1245:C:C4	2.97	0.52
2:N:21:G:H1'	2:N:914:A:H61	1.74	0.52
2:N:25:C:H41	2:N:559:A:H61	1.56	0.52
2:N:626:G:C6	2:N:627:G:C6	2.97	0.52
1:M:998:C:N4	1:M:1042:A:H61	2.07	0.52
2:N:372:C:H4'	2:N:373:A:OP1	2.08	0.52
2:N:451:A:C8	2:N:480:U:H2'	2.44	0.52
2:N:672:U:H2'	2:N:673:A:C8	2.44	0.52
2:N:751:U:C5	2:N:752:G:C5	2.98	0.52
1:M:991:U:H4'	1:M:992:U:OP1	2.10	0.52
2:N:112:G:H22	2:N:315:A:H2	1.58	0.51
2:N:213:G:C8	2:N:214:C:C5	2.99	0.51
2:N:460:A:C2	2:N:462:G:C8	2.99	0.51
2:N:872:A:N3	2:N:872:A:H2'	2.26	0.51
1:M:1064:G:H1	1:M:1192:C:H5	1.59	0.51
1:M:1149:C:H2'	1:M:1150:A:C8	2.46	0.51
1:M:1075:U:C4	1:M:1076:U:C5	2.99	0.50
2:N:338:A:H61	2:N:351:G:H1	1.60	0.50
2:N:512:U:H3	2:N:539:A:N6	2.09	0.50
2:N:701:U:H5''	2:N:703:G:H5'	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:668:G:C6	2:N:669:G:C6	3.00	0.50
1:M:1058:G:C6	1:M:1059:C:C4	3.00	0.50
2:N:322:C:C5	2:N:323:U:O4	2.65	0.50
2:N:32:A:H4'	2:N:48:C:H42	1.76	0.50
2:N:70:U:C4	2:N:94:G:C4	2.99	0.50
3:O:1393:U:H2'	3:O:1395:C:C5	2.46	0.50
2:N:91:U:C5	2:N:92:U:C2	3.00	0.49
2:N:131:A:H2	2:N:231:U:H3	1.60	0.49
2:N:456:A:H2	2:N:476:U:H3	1.58	0.49
2:N:684:U:C4	2:N:685:G:C5	3.00	0.49
2:N:150:U:C5	2:N:170:U:C5	3.00	0.49
2:N:782:A:C6	2:N:783:C:C2	3.01	0.49
2:N:116:A:H61	2:N:313:A:H1'	1.76	0.49
2:N:169:C:C4	2:N:170:U:C4	3.00	0.49
2:N:260:G:H2'	2:N:261:U:C6	2.47	0.49
2:N:749:A:C2	2:N:750:C:C2	3.00	0.49
1:M:1251:A:H2'	1:M:1252:A:C8	2.47	0.49
2:N:76:G:C6	2:N:77:A:C6	3.00	0.49
2:N:375:U:H3	2:N:389:A:N6	2.10	0.49
2:N:596:A:N6	2:N:644:U:H3	2.10	0.49
2:N:723:U:H3	2:N:832:G:N2	2.11	0.48
2:N:837:U:H2'	2:N:838:G:H8	1.78	0.48
2:N:751:U:C5	2:N:752:G:C4	3.01	0.48
1:M:998:C:H42	1:M:1042:A:N6	2.10	0.48
2:N:321:A:H2'	2:N:322:C:C6	2.48	0.48
2:N:50:A:C2	2:N:52:C:N3	2.82	0.48
2:N:807:A:C6	2:N:808:C:C4	3.01	0.48
2:N:889:A:H62	2:N:907:A:H5''	1.78	0.48
1:M:1084:G:C6	1:M:1085:U:C4	3.02	0.48
2:N:708:C:C4	2:N:709:U:C4	3.02	0.48
2:N:881:G:C5	2:N:882:C:C6	3.02	0.48
2:N:721:G:H4'	2:N:722:G:H5''	1.95	0.48
2:N:80:A:H61	2:N:89:U:H3	1.61	0.47
2:N:330:C:H42	2:N:354:G:H1'	1.79	0.47
1:M:1385:G:C6	1:M:1386:G:C5	3.02	0.47
2:N:322:C:C5	2:N:323:U:C4	3.03	0.47
2:N:479:U:N3	2:N:480:U:C5	2.82	0.47
2:N:588:G:C6	2:N:753:A:C8	3.03	0.47
1:M:1058:G:C4	1:M:1059:C:C6	3.03	0.47
2:N:68:G:C5	2:N:69:G:H1'	2.50	0.47
1:M:1070:U:H5	1:M:1094:G:H1	1.63	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:213:G:C8	2:N:214:C:C6	3.02	0.47
2:N:451:A:H62	2:N:481:G:H5''	1.80	0.47
2:N:761:G:C6	2:N:762:U:C4	3.03	0.47
3:O:1400:C:H3'	3:O:1401:G:C5'	2.44	0.47
1:M:1102:A:C5	1:M:1103:C:C4	3.02	0.47
2:N:123:U:H2'	2:N:124:C:H6	1.79	0.47
1:M:1287:A:C6	1:M:1288:A:C6	3.02	0.47
2:N:486:U:C2	2:N:487:A:C8	3.03	0.47
2:N:512:U:H5''	2:N:512:U:H6	1.80	0.47
1:M:1047:G:H1	1:M:1210:C:H42	1.63	0.46
1:M:1350:A:N1	1:M:1373:G:C2	2.83	0.46
2:N:95:C:C2	2:N:96:U:C4	3.03	0.46
2:N:804:U:C5	2:N:805:C:C5	3.02	0.46
1:M:1078:U:N3	3:O:1396:A:N1	2.62	0.46
1:M:1268:G:H21	1:M:1313:U:C5'	2.28	0.46
2:N:459:A:H61	2:N:472:U:H3	1.63	0.46
1:M:1161:C:N4	1:M:1182:G:H22	2.14	0.46
2:N:60:A:H62	2:N:378:G:H1'	1.80	0.46
2:N:299:G:C6	2:N:300:A:C6	3.04	0.46
2:N:65:A:H4'	2:N:66:A:H5'	1.97	0.46
1:M:1191:A:C2	1:M:1192:C:C5	3.04	0.46
2:N:208:U:C5	2:N:210:C:N1	2.84	0.46
3:O:1447:A:H3'	3:O:1448:C:H5'	1.97	0.46
1:M:1067:A:H1'	1:M:1068:G:C8	2.51	0.46
2:N:354:G:C6	2:N:355:C:C4	3.04	0.46
1:M:1066:C:H3'	1:M:1067:A:C8	2.50	0.45
3:O:1415:G:H2'	3:O:1416:G:C8	2.51	0.45
1:M:1366:C:C4	1:M:1367:C:C4	3.05	0.45
2:N:292:G:C5	2:N:293:G:H1'	2.51	0.45
2:N:901:A:C5	2:N:902:G:H1'	2.52	0.45
1:M:1161:C:H41	1:M:1182:G:H22	1.63	0.45
2:N:411:A:C4	2:N:429:U:C5	3.03	0.45
1:M:1084:G:C5	1:M:1085:U:C5	3.04	0.45
2:N:455:G:H22	2:N:478:A:H1'	1.80	0.45
2:N:881:G:C6	2:N:882:C:C5	3.05	0.45
1:M:1075:U:C5	1:M:1076:U:C5	3.05	0.45
1:M:1385:G:H2'	1:M:1386:G:O4'	2.17	0.45
2:N:373:A:C2	2:N:482:A:N6	2.85	0.45
2:N:214:C:C4	2:N:215:C:C5	3.04	0.45
2:N:243:A:C2	2:N:282:A:N6	2.85	0.45
3:O:1511:G:C5	3:O:1512:U:C4	3.05	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:1117:A:H2	1:M:1184:G:H22	1.65	0.44
1:M:1383:C:C4	1:M:1384:C:C4	3.05	0.44
2:N:496:A:C2	2:N:497:G:C5	3.05	0.44
2:N:503:C:O2	2:N:510:A:C2	2.71	0.44
1:M:1195:C:H3'	1:M:1196:A:C5'	2.47	0.44
2:N:341:C:H2'	2:N:342:C:H6	1.83	0.44
2:N:537:G:C6	2:N:538:G:C6	3.05	0.44
2:N:654:G:C4	2:N:655:A:C8	3.05	0.44
2:N:61:G:H2'	2:N:62:U:C6	2.52	0.44
2:N:135:C:N4	2:N:228:A:H61	2.16	0.44
2:N:247:G:C6	2:N:278:G:C5	3.05	0.44
3:O:1438:G:C6	3:O:1464:U:N3	2.85	0.44
2:N:197:A:H2	2:N:198:G:C4	2.36	0.44
2:N:272:C:C4	2:N:273:U:C4	3.05	0.44
2:N:372:C:C6	2:N:387:U:C5	3.05	0.44
3:O:1483:A:C8	3:O:1484:C:C6	3.06	0.44
2:N:300:A:H61	2:N:557:G:H5''	1.82	0.44
1:M:1053:G:H2'	1:M:1199:U:C5	2.53	0.44
2:N:44:A:C2	2:N:45:G:C4	3.06	0.44
2:N:598:U:H3	2:N:640:A:H61	1.66	0.44
1:M:1078:U:C2	3:O:1396:A:C2	3.06	0.44
2:N:425:G:C5	2:N:426:U:C4	3.06	0.44
2:N:654:G:C2	2:N:753:A:C4	3.06	0.44
2:N:47:C:C2	2:N:365:U:C5	3.06	0.43
2:N:57:G:C5	2:N:58:C:C5	3.06	0.43
2:N:60:A:H5'	2:N:387:U:H4'	2.00	0.43
2:N:218:U:C4	2:N:219:U:N3	2.85	0.43
2:N:143:A:H2	2:N:220:G:H1	1.65	0.43
1:M:979:C:H2'	1:M:980:C:H5'	1.99	0.43
1:M:980:C:H3'	1:M:981:U:C6	2.53	0.43
1:M:1181:G:H21	1:M:1184:G:H5'	1.82	0.43
2:N:146:G:C2	2:N:147:G:H1'	2.54	0.43
2:N:240:G:C6	2:N:241:G:C5	3.06	0.43
2:N:496:A:C2	2:N:497:G:C6	3.05	0.43
2:N:585:G:C6	2:N:586:C:C4	3.06	0.43
2:N:920:U:H2'	2:N:921:U:H6	1.83	0.43
2:N:206:C:C2	2:N:207:C:H1'	2.54	0.43
2:N:410:G:H2'	2:N:429:U:C4	2.53	0.43
2:N:208:U:H5	2:N:210:C:C2	2.37	0.43
3:O:1523:G:C6	3:O:1524:C:C4	3.07	0.43
2:N:70:U:N3	2:N:94:G:C5	2.87	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:718:A:H3'	2:N:719:C:C6	2.54	0.43
2:N:28:A:C2	2:N:555:U:N3	2.86	0.43
2:N:100:G:C4	2:N:101:A:C8	3.07	0.43
2:N:635:A:C2	2:N:636:U:C2	3.06	0.43
1:M:1138:G:H2'	1:M:1140:C:C6	2.53	0.42
2:N:61:G:H21	2:N:379:C:H4'	1.84	0.42
2:N:595:A:C2	2:N:596:A:N6	2.87	0.42
1:M:1300:G:O6	1:M:1334:G:H3'	2.20	0.42
2:N:17:U:H2'	2:N:18:C:C6	2.54	0.42
2:N:119:A:C2	2:N:240:G:C8	3.07	0.42
1:M:945:G:C6	1:M:1337:G:C5	3.08	0.42
2:N:318:G:N2	3:O:1433:A:C2	2.88	0.42
1:M:1239:A:C5	1:M:1241:G:C2	3.07	0.42
2:N:499:A:C4	2:N:546:A:C2	3.07	0.42
1:M:964:A:H1'	1:M:970:C:OP2	2.19	0.42
1:M:988:G:C6	1:M:989:U:C5	3.08	0.42
2:N:695:A:C2	2:N:696:A:C4	3.08	0.42
2:N:63:C:H4'	2:N:382:A:N6	2.35	0.42
2:N:516:U:O2	2:N:520:A:C2	2.72	0.42
2:N:707:U:H2'	2:N:708:C:C6	2.55	0.42
2:N:803:G:C5	2:N:804:U:C5	3.08	0.42
1:M:1137:C:H1'	1:M:1138:G:N2	2.34	0.42
2:N:112:G:C2	2:N:330:C:C5	3.08	0.42
2:N:494:G:C4	2:N:496:A:C8	3.08	0.42
2:N:500:G:C6	2:N:546:A:H2	2.38	0.42
2:N:373:A:H2'	2:N:374:A:C8	2.55	0.41
2:N:438:U:C5	2:N:494:G:C8	3.08	0.41
1:M:1025:U:H2'	1:M:1031:C:C5	2.55	0.41
2:N:79:G:C6	2:N:80:A:C6	3.08	0.41
2:N:459:A:N6	2:N:472:U:H3	2.18	0.41
2:N:677:U:C5	2:N:678:U:C4	3.09	0.41
1:M:1066:C:H5''	1:M:1066:C:C6	2.55	0.41
2:N:68:G:C4	2:N:69:G:H1'	2.54	0.41
2:N:80:A:C6	2:N:81:A:H1'	2.54	0.41
2:N:539:A:C6	2:N:540:G:C5	3.09	0.41
2:N:176:C:H1'	3:O:1447:A:H2'	2.01	0.41
2:N:290:C:H2'	2:N:291:U:H6	1.85	0.41
2:N:830:G:C6	2:N:831:A:C6	3.07	0.41
1:M:1023:U:H2'	1:M:1024:G:C8	2.55	0.41
1:M:1363:A:H2'	1:M:1363:A:H5''	1.93	0.41
2:N:68:G:H21	2:N:152:A:H1'	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:301:G:C6	2:N:302:G:C6	3.08	0.41
2:N:560:A:C8	2:N:566:G:C4	3.09	0.41
2:N:297:G:C2	2:N:301:G:C6	3.08	0.41
1:M:953:G:H2'	1:M:954:G:C8	2.55	0.41
2:N:146:G:C5	2:N:147:G:C8	3.09	0.41
2:N:181:A:H4'	2:N:182:A:O5'	2.21	0.41
2:N:688:G:C6	2:N:700:G:C6	3.09	0.41
1:M:1268:G:H21	1:M:1313:U:H5'	1.85	0.41
2:N:213:G:N7	2:N:214:C:C5	2.89	0.41
2:N:424:G:C6	2:N:425:G:C6	3.09	0.41
1:M:978:A:H4'	1:M:1322:C:C6	2.56	0.41
1:M:1058:G:C2	1:M:1059:C:C2	3.08	0.41
1:M:1080:A:C4	2:N:922:G:N7	2.89	0.41
2:N:94:G:H4'	2:N:95:C:O5'	2.21	0.41
2:N:123:U:H2'	2:N:124:C:C6	2.55	0.41
2:N:203:G:O6	2:N:212:G:C6	2.74	0.41
2:N:218:U:H2'	2:N:219:U:O4'	2.21	0.41
2:N:425:G:C6	2:N:426:U:N3	2.89	0.41
2:N:466:A:H2'	2:N:467:U:C2	2.55	0.41
2:N:520:A:N7	2:N:521:G:C8	2.89	0.41
2:N:575:G:C2	2:N:821:G:H1'	2.56	0.41
1:M:1174:G:OP2	1:M:1182:G:C8	2.74	0.41
1:M:1343:G:C5	1:M:1344:C:C5	3.09	0.41
2:N:688:G:C8	2:N:688:G:H5''	2.56	0.41
2:N:770:C:C5	2:N:803:G:H5''	2.55	0.41
3:O:1417:G:C6	3:O:1482:G:C6	3.09	0.41
1:M:1068:G:H4'	1:M:1388:C:H4'	2.03	0.40
2:N:292:G:C4	2:N:309:A:C2	3.09	0.40
2:N:711:G:H2'	2:N:712:A:C8	2.57	0.40
2:N:786:G:C2	2:N:797:C:C2	3.10	0.40
2:N:88:U:O2'	2:N:89:U:C6	2.74	0.40
2:N:218:U:N3	2:N:219:U:C2	2.89	0.40
2:N:579:A:C6	2:N:763:G:C6	3.09	0.40
1:M:934:C:C5	1:M:1344:C:H2'	2.57	0.40
2:N:320:A:H61	2:N:333:U:H3	1.67	0.40
2:N:377:G:C6	2:N:378:G:C5	3.10	0.40
2:N:664:G:N2	2:N:741:G:H22	2.19	0.40
1:M:1021:A:C2	1:M:1022:A:C8	3.09	0.40
1:M:1386:G:H2'	1:M:1387:G:O4'	2.22	0.40
2:N:57:G:C6	2:N:58:C:C4	3.09	0.40
1:M:1123:U:N3	1:M:1124:G:C5	2.90	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:61:G:N2	2:N:105:G:H22	2.19	0.40
2:N:337:G:C6	2:N:338:A:C6	3.09	0.40
2:N:613:C:H2'	2:N:614:C:O4'	2.21	0.40
2:N:737:C:N3	2:N:738:C:C4	2.90	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	M	461/462 (99%)	152 (32%)	41 (8%)
2	N	926/927 (99%)	255 (27%)	84 (9%)
3	O	143/144 (99%)	31 (21%)	9 (6%)
All	All	1530/1533 (99%)	438 (28%)	134 (8%)

All (438) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	M	932	C
1	M	934	C
1	M	935	A
1	M	944	G
1	M	953	G
1	M	957	U
1	M	960	U
1	M	961	U
1	M	965	U
1	M	966	G
1	M	967	C

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Mol	Chain	Res	Type
1	M	968	A
1	M	969	A
1	M	970	C
1	M	971	G
1	M	972	C
1	M	974	A
1	M	975	A
1	M	977	A
1	M	982	U
1	M	983	A
1	M	989	U
1	M	992	U
1	M	993	G
1	M	1003	G
1	M	1004	A
1	M	1008	U
1	M	1017	U
1	M	1018	G
1	M	1022	A
1	M	1028	C
1	M	1029	U
1	M	1030	U
1	M	1031	C
1	M	1032	G
1	M	1034	G
1	M	1036	A
1	M	1049	U
1	M	1050	G
1	M	1052	U
1	M	1053	G
1	M	1054	C
1	M	1064	G
1	M	1065	U
1	M	1066	C
1	M	1067	A
1	M	1078	U
1	M	1079	G
1	M	1080	A
1	M	1085	U
1	M	1086	U
1	M	1087	G
1	M	1088	G

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Mol	Chain	Res	Type
1	M	1092	A
1	M	1093	A
1	M	1094	G
1	M	1095	U
1	M	1100	C
1	M	1101	A
1	M	1102	A
1	M	1104	G
1	M	1111	A
1	M	1113	C
1	M	1117	A
1	M	1124	G
1	M	1125	U
1	M	1126	U
1	M	1127	G
1	M	1129	C
1	M	1130	A
1	M	1133	G
1	M	1135	U
1	M	1137	C
1	M	1138	G
1	M	1139	G
1	M	1140	C
1	M	1141	C
1	M	1144	G
1	M	1145	A
1	M	1146	A
1	M	1151	A
1	M	1152	A
1	M	1158	C
1	M	1159	U
1	M	1160	G
1	M	1161	C
1	M	1167	A
1	M	1168	U
1	M	1169	A
1	M	1181	G
1	M	1182	G
1	M	1191	A
1	M	1196	A
1	M	1197	A
1	M	1200	C

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Mol	Chain	Res	Type
1	M	1201	A
1	M	1202	U
1	M	1211	U
1	M	1212	U
1	M	1213	A
1	M	1223	C
1	M	1224	U
1	M	1225	A
1	M	1226	C
1	M	1227	A
1	M	1228	C
1	M	1238	A
1	M	1239	A
1	M	1240	U
1	M	1241	G
1	M	1250	A
1	M	1252	A
1	M	1256	A
1	M	1258	G
1	M	1268	G
1	M	1275	A
1	M	1279	G
1	M	1280	A
1	M	1281	C
1	M	1282	C
1	M	1283	U
1	M	1286	U
1	M	1287	A
1	M	1293	C
1	M	1297	G
1	M	1299	A
1	M	1300	G
1	M	1303	C
1	M	1305	G
1	M	1308	U
1	M	1315	U
1	M	1316	G
1	M	1320	C
1	M	1322	C
1	M	1323	G
1	M	1331	G
1	M	1332	A

Continued on next page...

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Mol	Chain	Res	Type
1	M	1336	C
1	M	1337	G
1	M	1345	U
1	M	1346	A
1	M	1348	U
1	M	1353	G
1	M	1362	A
1	M	1363	A
1	M	1364	U
1	M	1365	G
1	M	1370	G
1	M	1371	G
1	M	1380	U
1	M	1381	U
1	M	1385	G
2	N	4	U
2	N	5	U
2	N	6	G
2	N	7	A
2	N	8	A
2	N	9	G
2	N	13	U
2	N	14	U
2	N	15	G
2	N	22	G
2	N	31	G
2	N	32	A
2	N	39	G
2	N	47	C
2	N	48	C
2	N	49	U
2	N	50	A
2	N	51	A
2	N	52	C
2	N	60	A
2	N	61	G
2	N	65	A
2	N	66	A
2	N	70	U
2	N	71	A
2	N	72	A
2	N	73	C

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Mol	Chain	Res	Type
2	N	74	A
2	N	75	G
2	N	76	G
2	N	77	A
2	N	79	G
2	N	81	A
2	N	82	G
2	N	83	C
2	N	85	U
2	N	86	G
2	N	87	C
2	N	88	U
2	N	89	U
2	N	90	C
2	N	91	U
2	N	92	U
2	N	94	G
2	N	95	C
2	N	97	G
2	N	107	G
2	N	108	G
2	N	109	A
2	N	110	C
2	N	115	G
2	N	116	A
2	N	119	A
2	N	120	A
2	N	127	G
2	N	130	A
2	N	131	A
2	N	132	C
2	N	134	G
2	N	135	C
2	N	138	G
2	N	141	G
2	N	143	A
2	N	146	G
2	N	159	G
2	N	160	A
2	N	163	C
2	N	164	G
2	N	173	U

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Mol	Chain	Res	Type
2	N	174	A
2	N	177	G
2	N	181	A
2	N	182	A
2	N	195	A
2	N	197	A
2	N	198	G
2	N	199	A
2	N	202	G
2	N	205	A
2	N	207	C
2	N	208	U
2	N	209	U
2	N	210	C
2	N	211	G
2	N	212	G
2	N	214	C
2	N	219	U
2	N	232	G
2	N	240	G
2	N	243	A
2	N	244	U
2	N	245	U
2	N	247	G
2	N	250	A
2	N	251	G
2	N	252	U
2	N	258	G
2	N	266	G
2	N	267	C
2	N	273	U
2	N	274	A
2	N	275	G
2	N	280	C
2	N	281	G
2	N	285	C
2	N	289	G
2	N	306	A
2	N	308	C
2	N	316	C
2	N	320	A
2	N	321	A

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Mol	Chain	Res	Type
2	N	328	C
2	N	330	C
2	N	332	G
2	N	344	A
2	N	345	C
2	N	346	G
2	N	347	G
2	N	351	G
2	N	352	C
2	N	353	A
2	N	354	G
2	N	363	A
2	N	366	A
2	N	367	U
2	N	368	U
2	N	372	C
2	N	373	A
2	N	374	A
2	N	376	G
2	N	384	G
2	N	390	U
2	N	392	C
2	N	406	G
2	N	411	A
2	N	412	A
2	N	413	G
2	N	414	A
2	N	422	C
2	N	423	G
2	N	424	G
2	N	428	G
2	N	429	U
2	N	430	A
2	N	439	U
2	N	441	A
2	N	448	A
2	N	451	A
2	N	452	A
2	N	457	G
2	N	458	U
2	N	459	A
2	N	461	A

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Mol	Chain	Res	Type
2	N	462	G
2	N	463	U
2	N	466	A
2	N	467	U
2	N	468	A
2	N	469	C
2	N	481	G
2	N	484	G
2	N	485	U
2	N	486	U
2	N	495	A
2	N	496	A
2	N	497	G
2	N	498	A
2	N	499	A
2	N	500	G
2	N	501	C
2	N	508	U
2	N	509	A
2	N	511	C
2	N	512	U
2	N	518	C
2	N	523	A
2	N	527	G
2	N	530	G
2	N	531	U
2	N	533	A
2	N	534	U
2	N	535	A
2	N	536	C
2	N	548	G
2	N	556	C
2	N	559	A
2	N	560	A
2	N	562	U
2	N	563	A
2	N	564	C
2	N	567	G
2	N	572	A
2	N	573	A
2	N	574	A
2	N	575	G

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Mol	Chain	Res	Type
2	N	576	C
2	N	577	G
2	N	579	A
2	N	588	G
2	N	595	A
2	N	596	A
2	N	604	G
2	N	610	U
2	N	629	A
2	N	632	U
2	N	633	G
2	N	638	U
2	N	642	A
2	N	653	U
2	N	665	A
2	N	702	A
2	N	703	G
2	N	718	A
2	N	719	C
2	N	720	C
2	N	721	G
2	N	722	G
2	N	723	U
2	N	724	G
2	N	731	G
2	N	733	G
2	N	748	G
2	N	754	C
2	N	755	G
2	N	777	A
2	N	787	A
2	N	788	U
2	N	789	U
2	N	792	A
2	N	794	A
2	N	813	U
2	N	815	A
2	N	816	A
2	N	817	C
2	N	818	G
2	N	819	A
2	N	820	U

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Mol	Chain	Res	Type
2	N	828	U
2	N	829	G
2	N	832	G
2	N	842	U
2	N	843	U
2	N	844	G
2	N	845	A
2	N	846	G
2	N	849	G
2	N	855	U
2	N	861	G
2	N	871	U
2	N	884	U
2	N	885	G
2	N	913	A
2	N	914	A
2	N	925	G
2	N	927	G
3	O	1394	A
3	O	1396	A
3	O	1397	C
3	O	1399	C
3	O	1400	C
3	O	1401	G
3	O	1433	A
3	O	1441	A
3	O	1446	A
3	O	1448	C
3	O	1453	G
3	O	1469	C
3	O	1470	U
3	O	1491	G
3	O	1492	A
3	O	1493	A
3	O	1494	G
3	O	1497	G
3	O	1498	U
3	O	1499	A
3	O	1502	A
3	O	1503	A
3	O	1505	G
3	O	1506	U

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Mol	Chain	Res	Type
3	O	1507	A
3	O	1517	G
3	O	1529	G
3	O	1530	G
3	O	1531	A
3	O	1533	C
3	O	1534	A

All (134) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	M	934	C
1	M	966	G
1	M	974	A
1	M	982	U
1	M	991	U
1	M	1046	A
1	M	1053	G
1	M	1064	G
1	M	1066	C
1	M	1078	U
1	M	1079	G
1	M	1085	U
1	M	1087	G
1	M	1092	A
1	M	1093	A
1	M	1094	G
1	M	1101	A
1	M	1129	C
1	M	1136	C
1	M	1151	A
1	M	1160	G
1	M	1167	A
1	M	1168	U
1	M	1185	G
1	M	1191	A
1	M	1201	A
1	M	1224	U
1	M	1239	A
1	M	1282	C
1	M	1285	A
1	M	1299	A

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Mol	Chain	Res	Type
1	M	1319	A
1	M	1331	G
1	M	1336	C
1	M	1345	U
1	M	1346	A
1	M	1358	U
1	M	1362	A
1	M	1363	A
1	M	1364	U
1	M	1380	U
2	N	5	U
2	N	13	U
2	N	14	U
2	N	30	U
2	N	47	C
2	N	51	A
2	N	60	A
2	N	65	A
2	N	70	U
2	N	71	A
2	N	73	C
2	N	75	G
2	N	81	A
2	N	87	C
2	N	90	C
2	N	94	G
2	N	95	C
2	N	109	A
2	N	115	G
2	N	119	A
2	N	120	A
2	N	129	A
2	N	130	A
2	N	131	A
2	N	134	G
2	N	167	A
2	N	168	G
2	N	181	A
2	N	197	A
2	N	198	G
2	N	204	G
2	N	210	C

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Mol	Chain	Res	Type
2	N	243	A
2	N	246	A
2	N	250	A
2	N	251	G
2	N	266	G
2	N	267	C
2	N	274	A
2	N	280	C
2	N	305	G
2	N	327	A
2	N	328	C
2	N	331	G
2	N	344	A
2	N	345	C
2	N	346	G
2	N	351	G
2	N	366	A
2	N	372	C
2	N	412	A
2	N	428	G
2	N	429	U
2	N	438	U
2	N	451	A
2	N	467	U
2	N	480	U
2	N	484	G
2	N	485	U
2	N	495	A
2	N	496	A
2	N	499	A
2	N	500	G
2	N	508	U
2	N	511	C
2	N	535	A
2	N	547	A
2	N	548	G
2	N	559	A
2	N	563	A
2	N	566	G
2	N	575	G
2	N	631	C
2	N	632	U

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Mol	Chain	Res	Type
2	N	641	U
2	N	686	U
2	N	721	G
2	N	723	U
2	N	733	G
2	N	754	C
2	N	817	C
2	N	870	U
2	N	884	U
2	N	913	A
3	O	1396	A
3	O	1399	C
3	O	1498	U
3	O	1502	A
3	O	1506	U
3	O	1513	A
3	O	1530	G
3	O	1532	U
3	O	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.

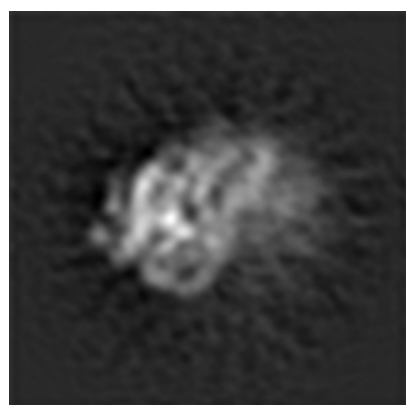
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5504. These allow visual inspection of the internal detail of the map and identification of artifacts.

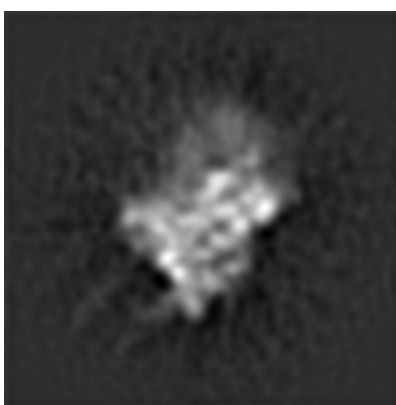
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

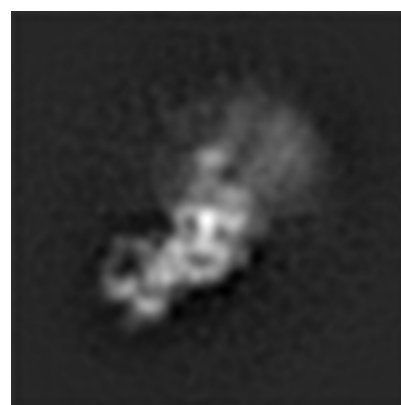
6.1.1 Primary map



X



Y

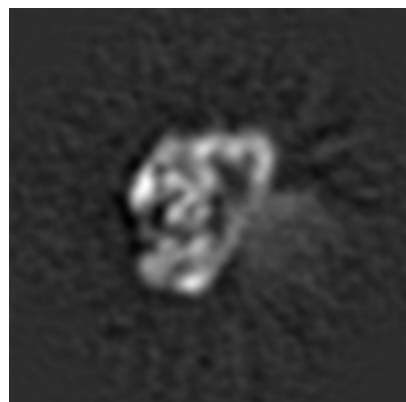


Z

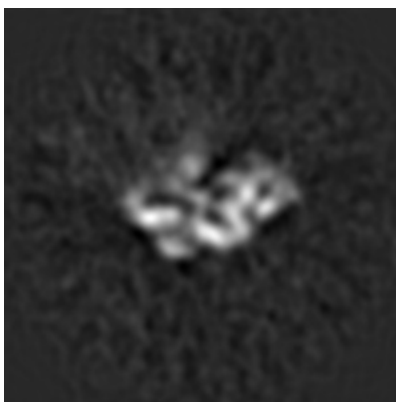
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

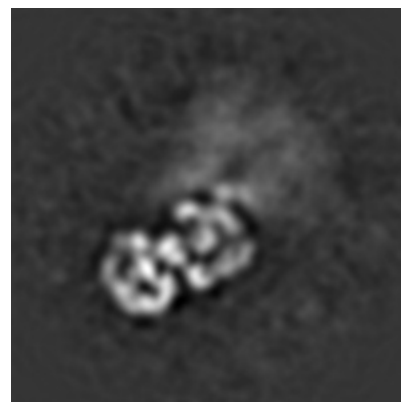
6.2.1 Primary map



X Index: 62



Y Index: 62

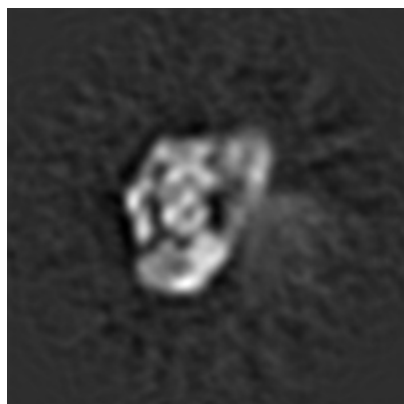


Z Index: 62

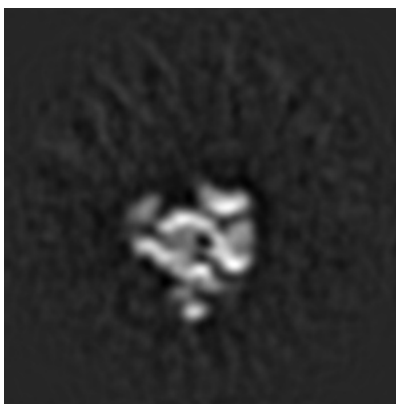
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

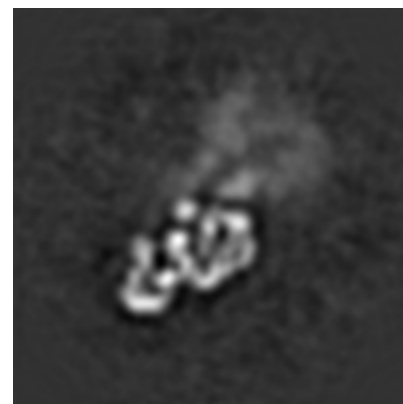
6.3.1 Primary map



X Index: 60



Y Index: 42

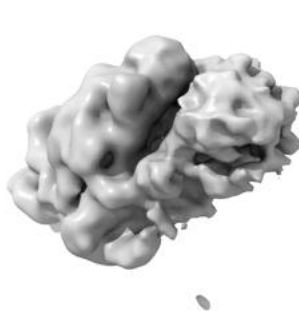


Z Index: 65

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

6.4 Orthogonal surface views [i](#)

6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level - 3.2. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

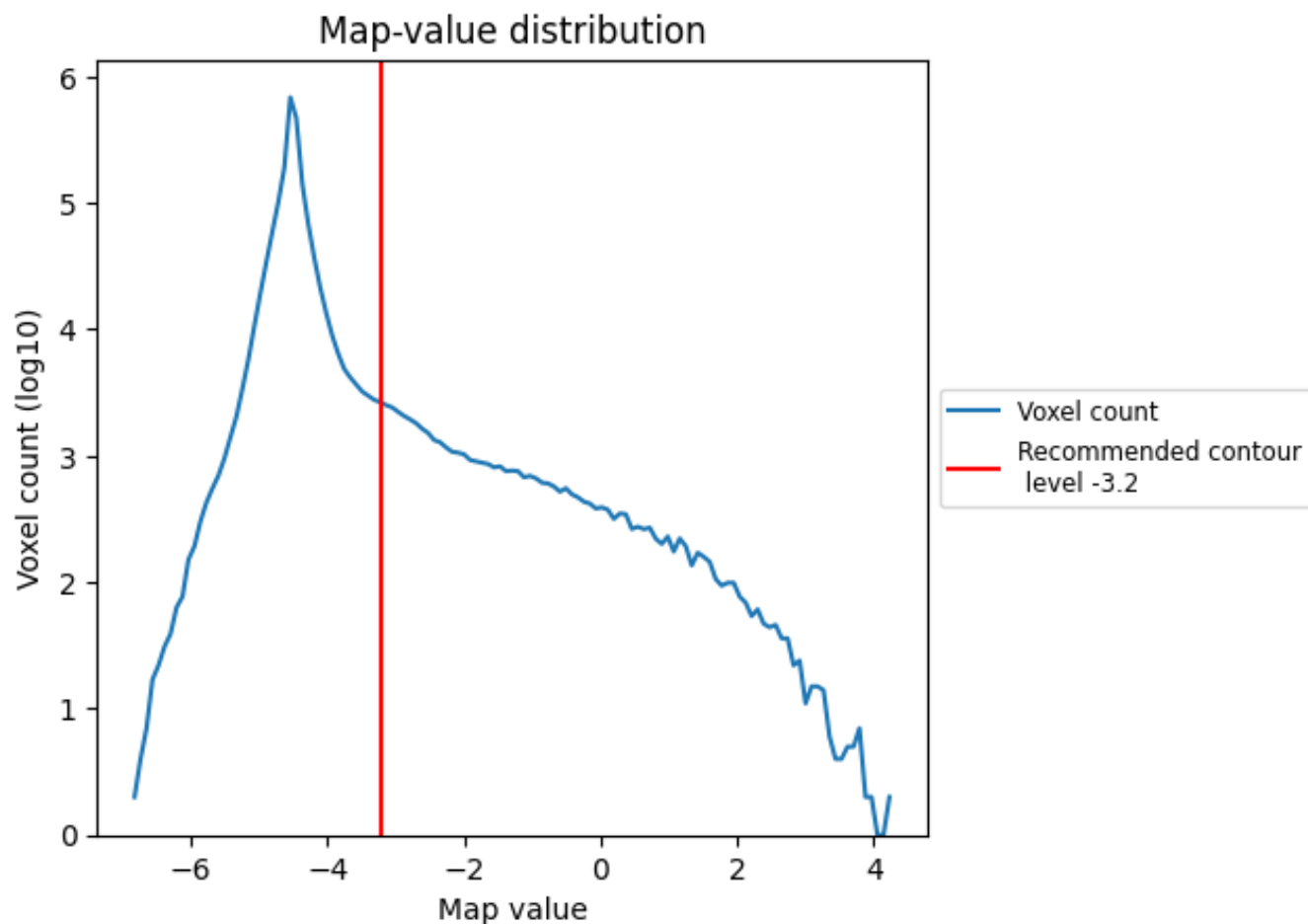
6.5 Mask visualisation

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

7 Map analysis [i](#)

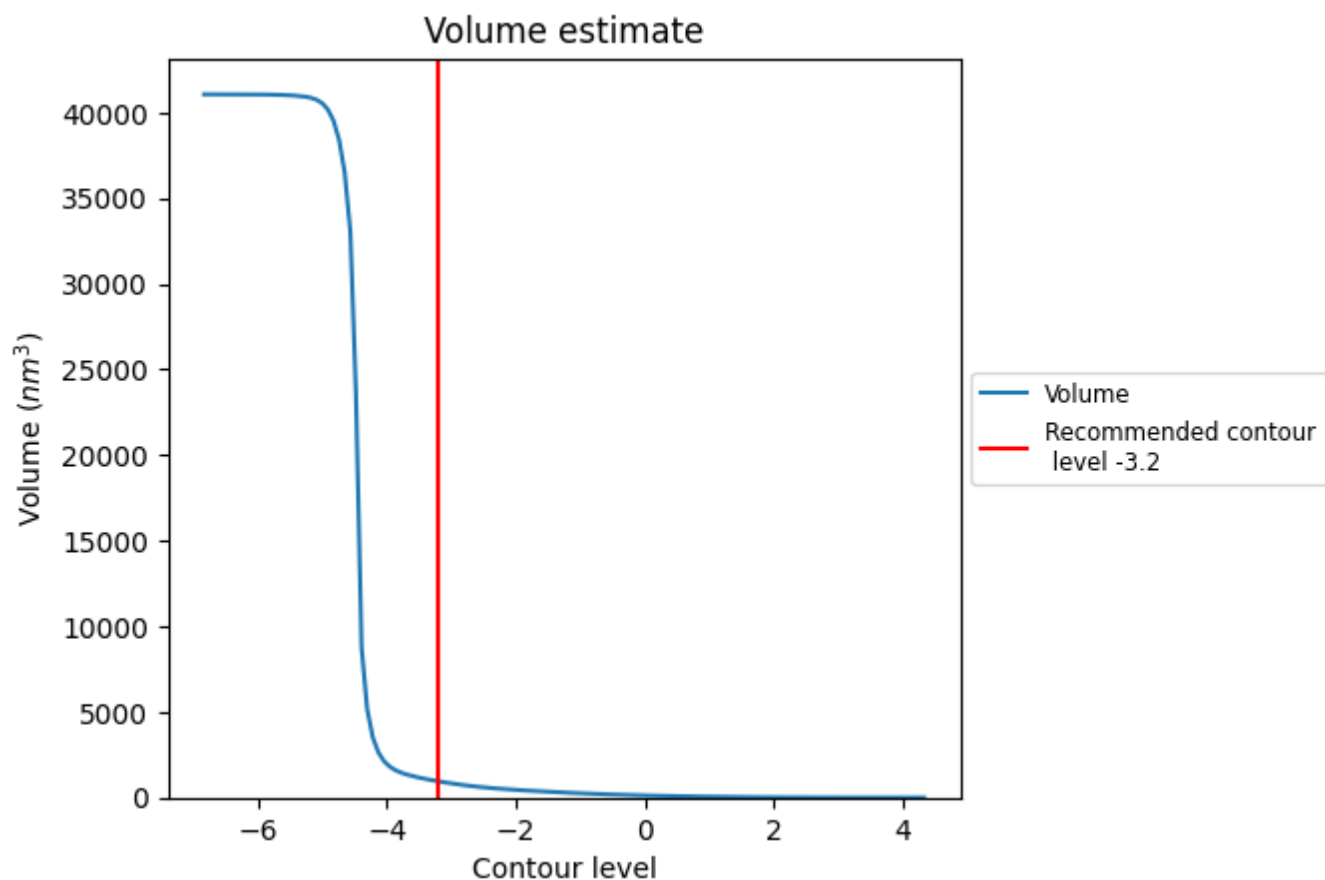
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

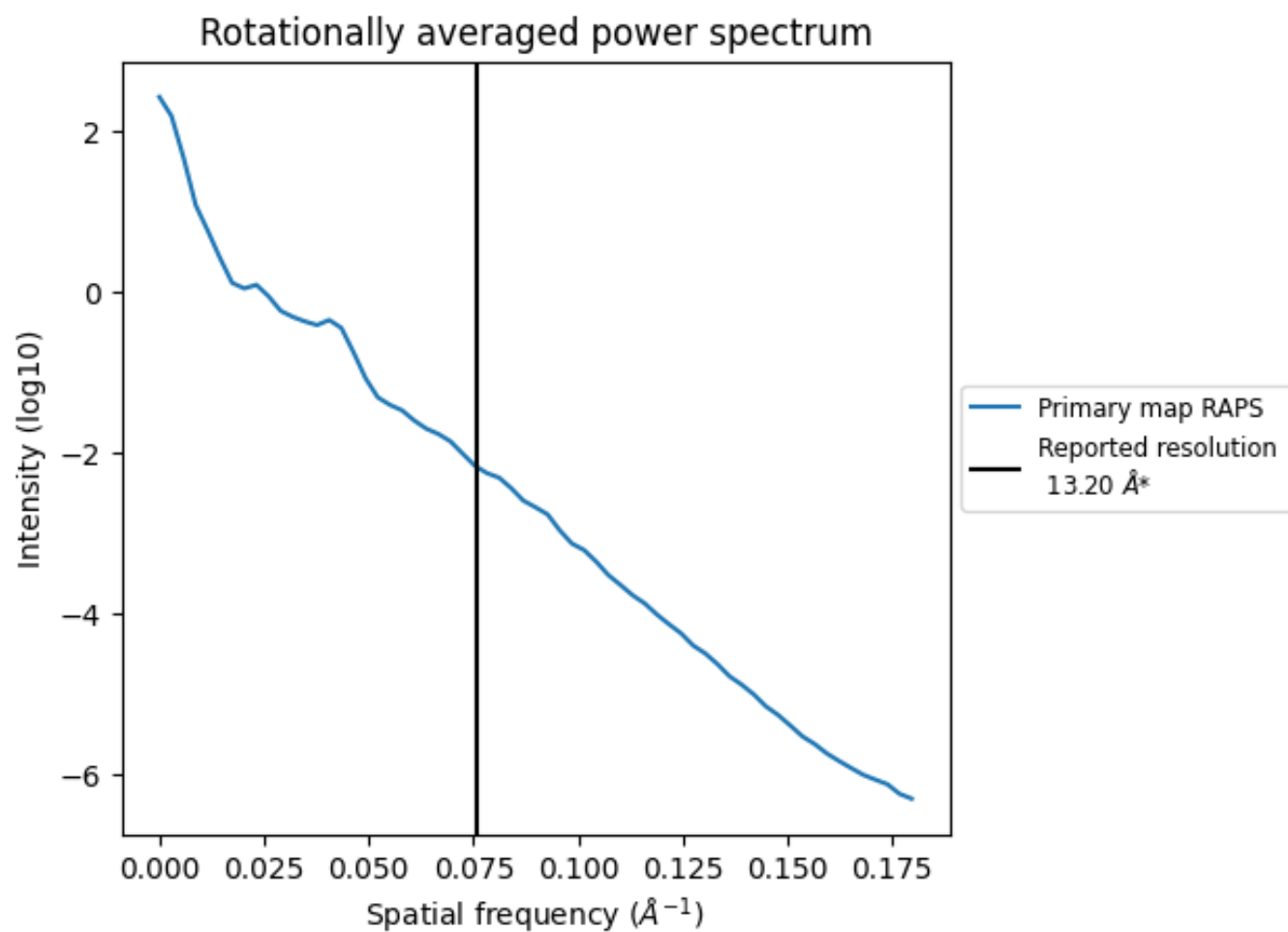
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 949 nm³; this corresponds to an approximate mass of 858 kDa.

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

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.076 Å⁻¹

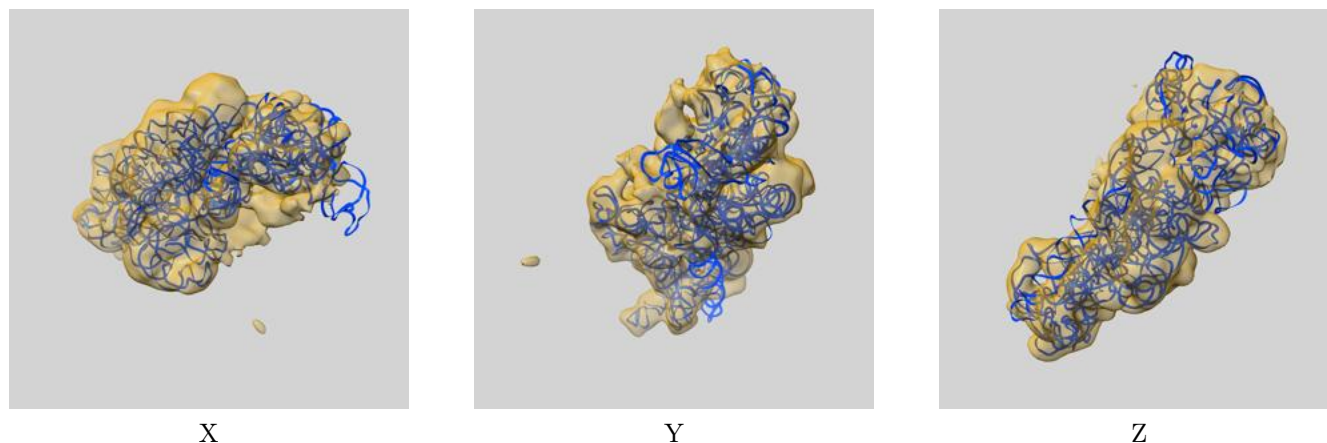
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

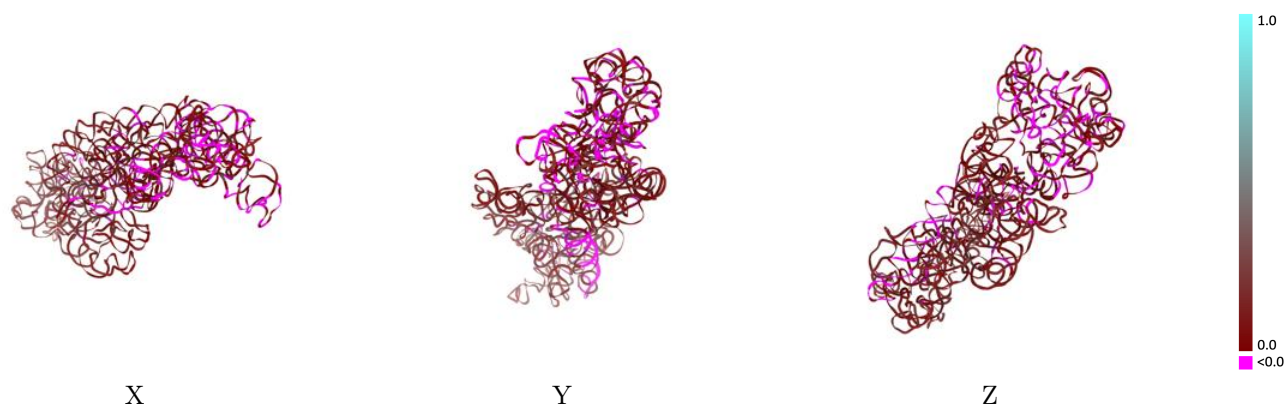
This section contains information regarding the fit between EMDB map EMD-5504 and PDB model 3J2C. Per-residue inclusion information can be found in [section 3](#) on [page 4](#).

9.1 Map-model overlay [i](#)



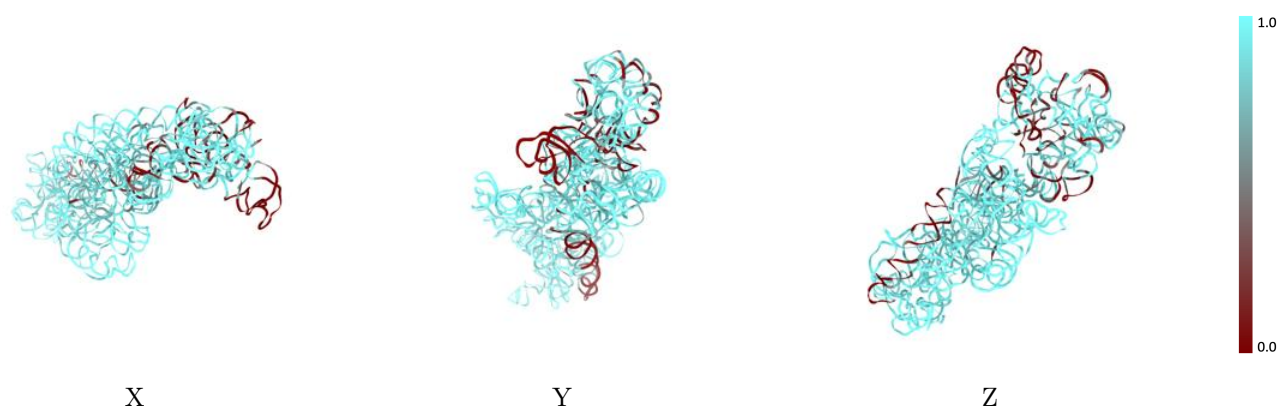
The images above show the 3D surface view of the map at the recommended contour level -3.2 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



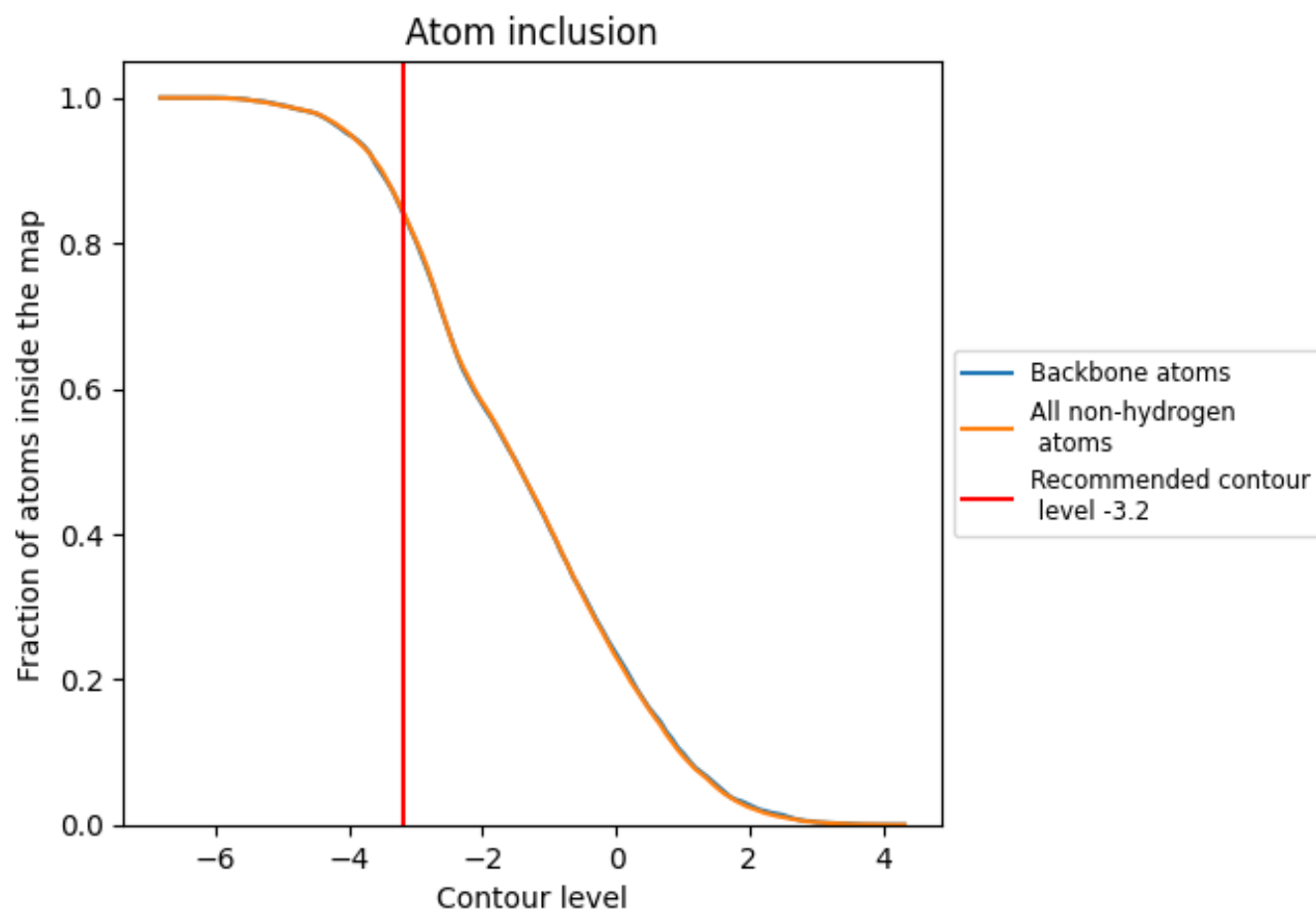
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (-3.2).

9.4 Atom inclusion [i](#)



At the recommended contour level, 84% of all backbone atoms, 84% 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 (-3.2) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div></div> 0.8448	<div></div> 0.0760
M	<div></div> 0.6651	<div></div> 0.0380
N	<div></div> 0.9862	<div></div> 0.1040
O	<div></div> 0.5347	<div></div> 0.0120

