



Full wwPDB EM Validation Report ⓘ

Oct 13, 2024 – 03:15 am BST

PDB ID : 6XU6
EMDB ID : EMD-10622
Title : Drosophila melanogaster Testis 80S ribosome
Authors : Hopes, T.; Agapiou, M.; Norris, K.; McCarthy, C.G.P.; OConnell, M.J.;
Fontana, J.; Aspden, J.L.
Deposited on : 2020-01-17
Resolution : 3.50 Å(reported)
Based on initial model : 4V6W

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.dev113
MolProbity : 4.02b-467
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

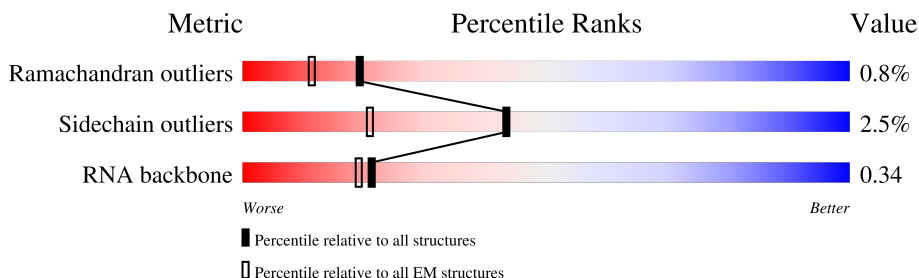
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.50 Å.

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



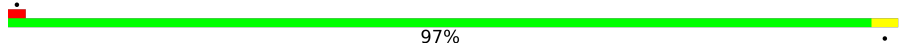
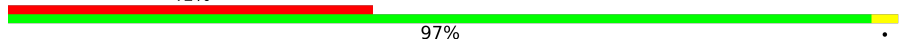
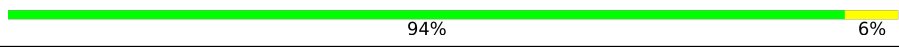
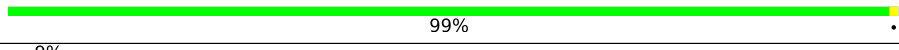
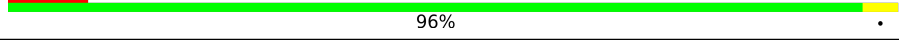
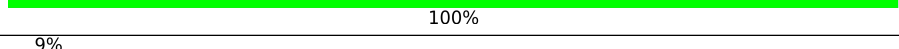
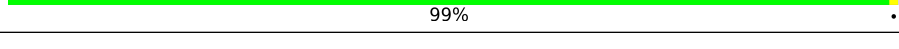
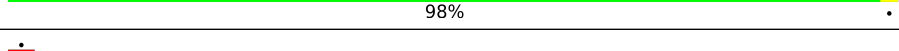
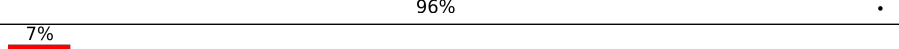
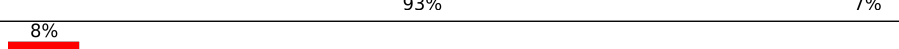
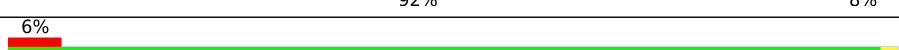
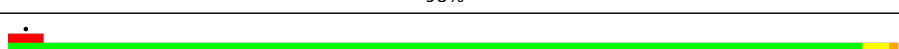
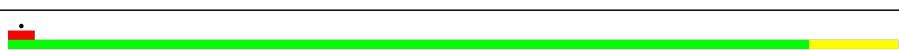
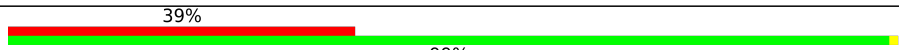
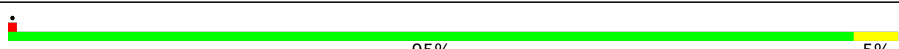


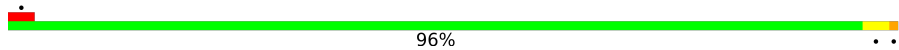
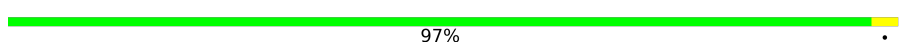

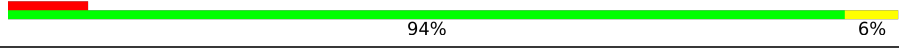
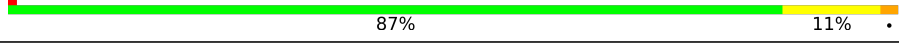



Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415
RNA backbone	6643	2191

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	AA	218	
2	CA	253	
3	AB	220	
4	CB	414	
5	AC	227	
6	CC	392	
7	Ag	318	
8	AU	102	

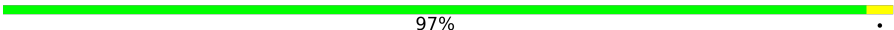
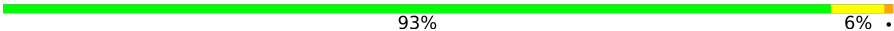
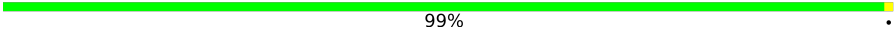

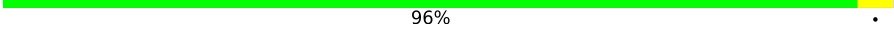

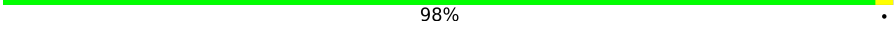



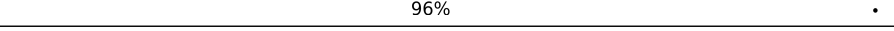
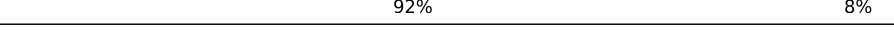
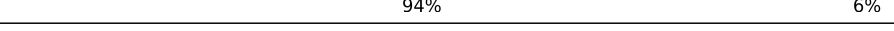


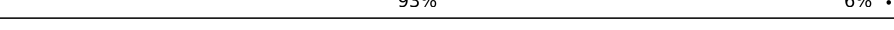
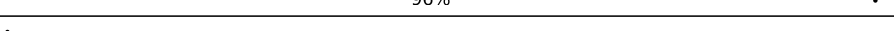
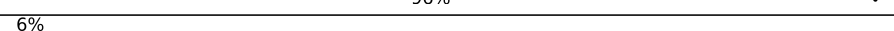

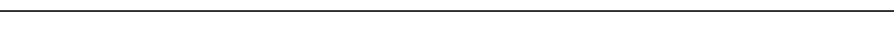

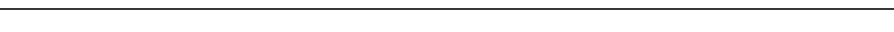



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Mol	Chain	Length	Quality of chain
9	AX	143	
10	AM	119	
11	Ad	52	
12	AN	150	
13	AL	155	
14	AR	120	
15	AP	124	
16	AV	82	
17	AY	126	
18	AZ	74	
19	Aa	107	
20	Ab	84	
21	AD	227	
22	Ae	58	
23	Af	80	
24	AJ	181	
25	Ca	149	
26	CN	203	
27	CI	217	
28	CD	290	
29	CQ	187	
30	CR	203	
31	CS	173	
32	CT	158	
33	CP	185	

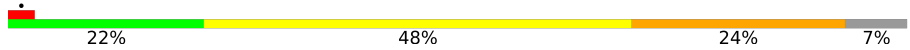
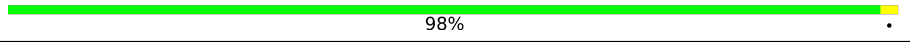
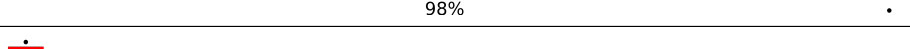
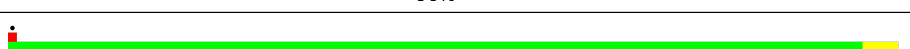
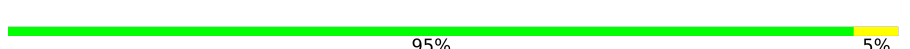


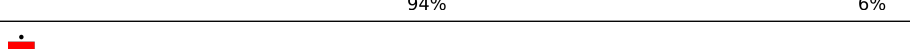
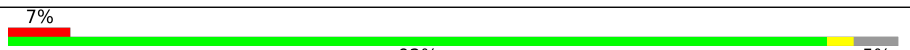
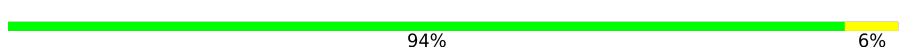

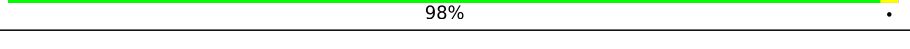
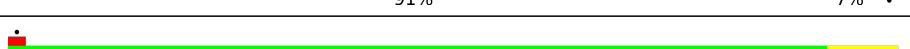
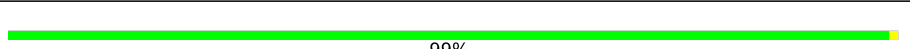


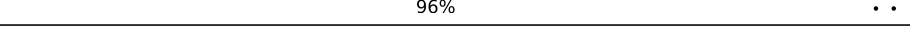


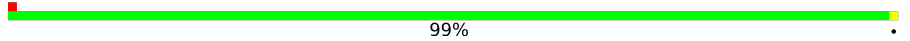




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Mol	Chain	Length	Quality of chain
34	CX	120	 97% .
35	CY	131	 93% 6% .
36	CZ	134	 99% .
37	Cr	134	 74% 22% .
38	Ch	123	 96% .
39	Cb	75	 87% 12% .
40	Cc	100	 98% .
41	Ce	132	 83% 15% .
42	Cf	157	 87% 13%
43	Ci	113	 89% 11%
44	Ck	70	 96% .
45	Cl	50	 92% 8%
46	Cm	52	 94% 6%
47	Cn	25	 88% 12%
48	Cp	91	 85% 14% .
49	Co	104	 93% 6% .
50	CJ	182	 96% .
51	CH	190	 96% . .
52	CE	228	 6% 89% 10%
53	CG	241	 6% 97% .
54	A9	30	 43% 47% 10%
55	A7	120	 42% 48% 10%
56	A8	123	 14% 57% 29%
57	Cz	217	 76% 98% .
58	B2	1995	 46% 40% 11% .

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Mol	Chain	Length	Quality of chain
59	A5	3974	
60	AE	261	
61	AG	231	
62	AH	194	
63	AI	207	
64	AQ	148	
65	CO	205	
66	CL	210	
67	CV	134	
68	CM	159	
69	DA	370	
70	AK	90	
71	AT	143	
72	AF	189	
73	AO	127	
74	Ac	62	
75	AW	129	
76	CW	58	
77	Cg	103	
78	CU	96	
79	Cj	87	
80	CF	223	
81	Cd	108	
82	AS	134	

2 Entry composition

There are 82 unique types of molecules in this entry. The entry contains 219765 atoms, of which 0 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 protein called 40S ribosomal protein SA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	218	Total	C	N	O	S	0	0
			1737	1113	298	321	5		

- Molecule 2 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	CA	253	Total	C	N	O	S	0	0
			1935	1206	395	326	8		

- Molecule 3 is a protein called 40S ribosomal protein S3a.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	AB	220	Total	C	N	O	S	0	0
			1798	1138	328	324	8		

- Molecule 4 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	CB	414	Total	C	N	O	S	0	0
			3287	2083	621	565	18		

- Molecule 5 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	AC	227	Total	C	N	O	S	0	0
			1746	1126	302	311	7		

- Molecule 6 is a protein called 60S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	CC	392	Total	C	N	O	S	0	0
			3109	1959	622	522	6		

- Molecule 7 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	Ag	318	Total	C	N	O	S	0	0
			2511	1577	444	480	10		

- Molecule 8 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AU	102	Total	C	N	O	S	0	0
			815	505	161	145	4		

- Molecule 9 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AX	143	Total	C	N	O	S	0	0
			1131	712	226	191	2		

- Molecule 10 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AM	119	Total	C	N	O	S	0	0
			924	582	165	171	6		

- Molecule 11 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	Ad	52	Total	C	N	O	S	0	0
			433	269	87	72	5		

- Molecule 12 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AN	150	Total	C	N	O	S	0	0
			1202	767	229	203	3		

- Molecule 13 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AL	155	Total	C	N	O	S	0	0
			1274	803	254	211	6		

- Molecule 14 is a protein called 40S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AR	120	Total	C	N	O	S	0	0
			981	618	183	176	4		

- Molecule 15 is a protein called GEO07301p1.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AP	124	Total	C	N	O	S	0	0
			1016	652	189	169	6		

- Molecule 16 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AV	82	Total	C	N	O	S	0	0
			617	373	114	125	5		

There are 13 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AV	2	GLN	GLU	conflict	UNP O76927
AV	8	PHE	ASN	conflict	UNP O76927
AV	25	GLY	HIS	conflict	UNP O76927
AV	32	ILE	VAL	conflict	UNP O76927
AV	34	MET	LEU	conflict	UNP O76927
AV	35	ASN	SER	conflict	UNP O76927
AV	36	VAL	ILE	conflict	UNP O76927
AV	58	ALA	GLU	conflict	UNP O76927
AV	68	SER	CYS	conflict	UNP O76927
AV	70	LEU	VAL	conflict	UNP O76927
AV	75	ALA	LYS	conflict	UNP O76927
AV	79	VAL	ILE	conflict	UNP O76927
AV	80	SER	THR	conflict	UNP O76927

- Molecule 17 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AY	126	Total	C	N	O	S	0	0
			1016	644	196	171	5		

- Molecule 18 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				AltConf	Trace
18	AZ	74	Total	C	N	O	0	0
			608	390	112	106		

- Molecule 19 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Aa	107	Total	C	N	O	S	0	0
			867	539	182	140	6		

- Molecule 20 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	Ab	84	Total	C	N	O	S	0	0
			653	412	123	110	8		

- Molecule 21 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	AD	227	Total	C	N	O	S	0	0
			1782	1127	319	326	10		

- Molecule 22 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms				AltConf	Trace
22	Ae	58	Total	C	N	O	0	0
			469	289	105	75		

- Molecule 23 is a protein called Ubiquitin-40S ribosomal protein S27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	Af	80	Total	C	N	O	S	0	0
			659	417	128	109	5		

- Molecule 24 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	AJ	181	Total	C	N	O	S	0	0
			1503	957	298	247	1		

- Molecule 25 is a protein called 60S ribosomal protein L27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Ca	149	Total	C	N	O	S	0	0
			1204	769	242	189	4		

- Molecule 26 is a protein called 60S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	CN	203	Total	C	N	O	S	0	0
			1710	1072	362	271	5		

- Molecule 27 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	CI	217	Total	C	N	O	S	0	0
			1785	1125	343	304	13		

- Molecule 28 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	CD	290	Total	C	N	O	S	0	0
			2334	1471	434	423	6		

- Molecule 29 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	CQ	187	Total	C	N	O	S	0	0
			1518	957	306	251	4		

- Molecule 30 is a protein called 60S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	CR	203	Total	C	N	O	S	0	0
			1683	1047	350	277	9		

- Molecule 31 is a protein called 60S ribosomal protein L18a.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	CS	173	Total	C	N	O	S	0	0
			1454	935	275	240	4		

- Molecule 32 is a protein called RE62581p.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	CT	158	Total	C	N	O	S	0	0
			1297	829	253	212	3		

- Molecule 33 is a protein called 60S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	CP	185	Total	C	N	O	S	0	0
			1505	928	305	263	9		

- Molecule 34 is a protein called IP17216p.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	CX	120	Total	C	N	O	S	0	0
			984	625	192	165	2		

- Molecule 35 is a protein called GEO07453p1.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	CY	131	Total	C	N	O	S	0	0
			1078	676	224	176	2		

- Molecule 36 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	CZ	134	Total	C	N	O	S	0	0
			1115	723	209	180	3		

- Molecule 37 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms				AltConf	Trace
37	Cr	134	Total	C	N	O	0	0
			1051	670	205	176		

- Molecule 38 is a protein called FI02809p.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	Ch	123	Total	C	N	O	S	0	0
			1015	646	202	164	3		

- Molecule 39 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Cb	75	Total	C	N	O	S	0	0
			619	378	133	107	1		

- Molecule 40 is a protein called RE25263p.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	Cc	100	Total	C	N	O	S	0	0
			770	486	132	147	5		

- Molecule 41 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	Ce	132	Total	C	N	O	S	0	0
			1110	698	230	177	5		

- Molecule 42 is a protein called GEO07455p1.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	Cf	157	Total	C	N	O	S	0	0
			1244	781	255	203	5		

- Molecule 43 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Ci	113	Total	C	N	O	S	0	0
			934	585	193	153	3		

- Molecule 44 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	Ck	70	Total	C	N	O	S	0	0
			576	366	108	100	2		

- Molecule 45 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms				AltConf	Trace
45	Cl	50	Total	C	N	O	0	0
			437	276	98	63		

- Molecule 46 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	Cm	52	Total	C	N	O	S	0	0
			429	267	89	67	6		

- Molecule 47 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	Cn	25	Total	C	N	O	S	0	0
			236	143	63	27	3		

- Molecule 48 is a protein called 60S ribosomal protein L37a.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	Cp	91	Total	C	N	O	S	0	0
			710	441	140	122	7		

- Molecule 49 is a protein called TA01007p.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	Co	104	Total	C	N	O	S	0	0
			874	548	180	138	8		

- Molecule 50 is a protein called 60S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	CJ	182	Total	C	N	O	S	0	0
			1468	926	278	258	6		

- Molecule 51 is a protein called 60S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	CH	190	Total	C	N	O	S	0	0
			1499	947	265	278	9		

- Molecule 52 is a protein called Ribosomal protein L6, isoform A.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	CE	228	Total	C	N	O	S	0	0
			1845	1185	351	305	4		

- Molecule 53 is a protein called 60S ribosomal protein L7a.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	CG	241	Total	C	N	O	S	0	0
			1936	1237	368	327	4		

- Molecule 54 is a RNA chain called 2S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	A9	30	Total	C	N	O	P	0	0
			639	286	111	213	29		

- Molecule 55 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	A7	120	Total	C	N	O	P	0	0
			2554	1141	456	838	119		

- Molecule 56 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	A8	123	Total	C	N	O	P	0	0
			2621	1173	474	852	122		

- Molecule 57 is a protein called 60S ribosomal protein L10a-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	Cz	217	Total	C	N	O	S	0	0
			1702	1084	303	305	10		

- Molecule 58 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	B2	1936	Total	C	N	O	P	0	0
			39355	17526	6780	13114	1935		

- Molecule 59 is a RNA chain called 28S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	A5	3707	Total	C	N	O	P	0	0
			77175	34473	13566	25431	3705		

There are 10 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A5	1301	A	U	conflict	GB NR_133562.1

Continued on next page...

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Chain	Residue	Modelled	Actual	Comment	Reference
A5	1319	A	U	conflict	GB NR_133562.1
A5	1320	U	G	conflict	GB NR_133562.1
A5	1321	G	U	conflict	GB NR_133562.1
A5	1322	U	G	conflict	GB NR_133562.1
A5	1686	A	-	insertion	GB NR_133562.1
A5	1710	G	-	insertion	GB NR_133562.1
A5	2158A	C	-	insertion	GB NR_133562.1
A5	2279	C	G	conflict	GB NR_133562.1
A5	3569	C	-	insertion	GB NR_133562.1

- Molecule 60 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	AE	261	Total	C	N	O	S	0	0
			2054	1314	380	353	7		

- Molecule 61 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	AG	231	Total	C	N	O	S	0	0
			1866	1172	372	315	7		

- Molecule 62 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	AH	194	Total	C	N	O	S	0	0
			1566	1006	278	281	1		

- Molecule 63 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	AI	207	Total	C	N	O	S	0	0
			1665	1037	329	296	3		

- Molecule 64 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	AQ	148	Total	C	N	O	S	0	0
			1183	753	223	204	3		

- Molecule 65 is a protein called 60S ribosomal protein L13a.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	CO	205	Total	C	N	O	S	0	0
			1668	1063	331	268	6		

- Molecule 66 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	CL	210	Total	C	N	O	S	0	0
			1695	1066	342	284	3		

- Molecule 67 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	CV	134	Total	C	N	O	S	0	0
			998	629	190	173	6		

- Molecule 68 is a protein called 60S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	CM	159	Total	C	N	O	S	0	0
			1302	826	256	218	2		

- Molecule 69 is a protein called LP04564p.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	DA	350	Total	C	N	O	S	0	0
			2756	1730	483	525	18		

- Molecule 70 is a protein called 40S ribosomal protein S10b.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	AK	90	Total	C	N	O	S	0	0
			760	500	130	127	3		

- Molecule 71 is a protein called 40S ribosomal protein S19a.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	AT	132	Total	C	N	O	S	0	0
			1041	659	200	179	3		

- Molecule 72 is a protein called 40S ribosomal protein S5a.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	AF	189	Total	C	N	O	S	0	0
			1490	929	284	268	9		

- Molecule 73 is a protein called 40S ribosomal protein S14a.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	AO	127	Total	C	N	O	S	0	0
			953	587	185	177	4		

- Molecule 74 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	Ac	62	Total	C	N	O	S	0	0
			498	307	100	89	2		

- Molecule 75 is a protein called 40S ribosomal protein S15Aa.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	AW	129	Total	C	N	O	S	0	0
			1028	656	189	176	7		

- Molecule 76 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	CW	58	Total	C	N	O	S	0	0
			483	314	89	76	4		

- Molecule 77 is a protein called RH48056p.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	Cg	103	Total	C	N	O	S	0	0
			844	525	176	138	5		

- Molecule 78 is a protein called Ribosomal protein L22-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	CU	96	Total	C	N	O	S	0	0
			811	531	137	139	4		

- Molecule 79 is a protein called Probable 60S ribosomal protein L37-B.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	Cj	87	Total	C	N	O	S	0	0
			696	422	154	115	5		

- Molecule 80 is a protein called 60S ribosomal protein L7.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	CF	223	Total	C	N	O	S	0	0
			1869	1199	363	304	3		

- Molecule 81 is a protein called 60S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	Cd	108	Total	C	N	O	S	0	0
			899	559	177	161	2		

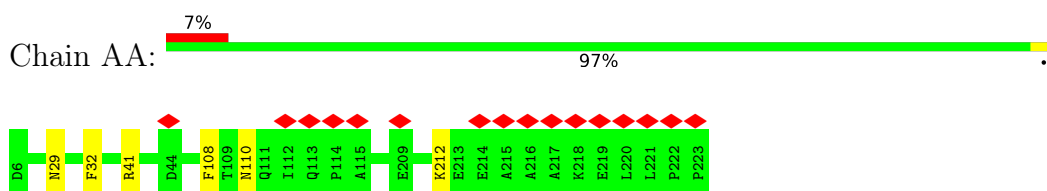
- Molecule 82 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	AS	134	Total	C	N	O	S	0	0
			1101	691	214	193	3		

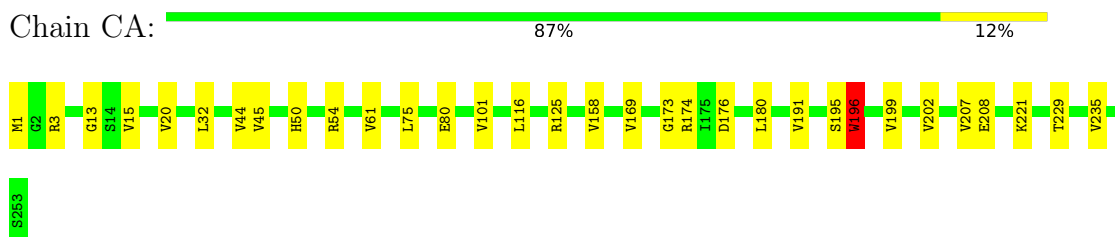
3 Residue-property plots

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

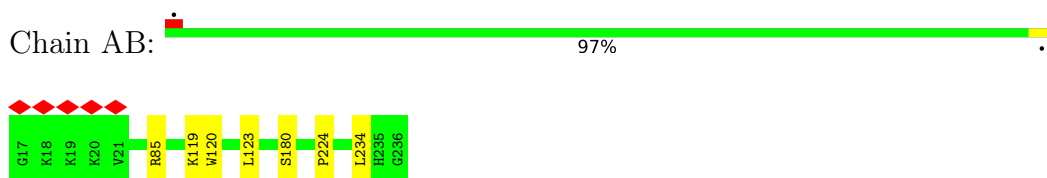
- Molecule 1: 40S ribosomal protein SA



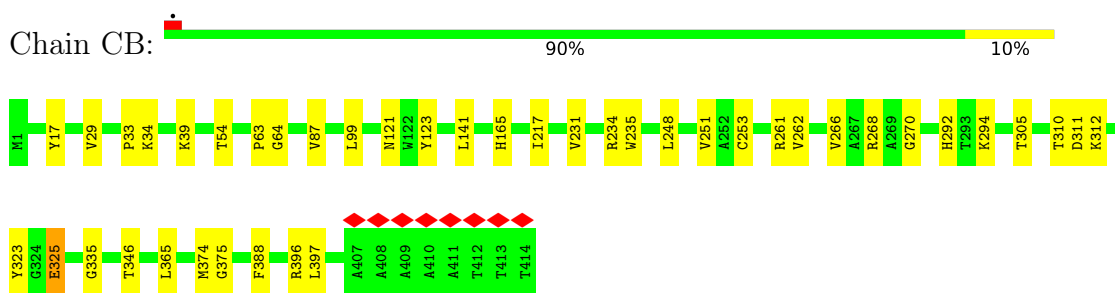
- Molecule 2: 60S ribosomal protein L8



- Molecule 3: 40S ribosomal protein S3a

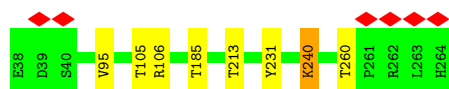


- Molecule 4: 60S ribosomal protein L3



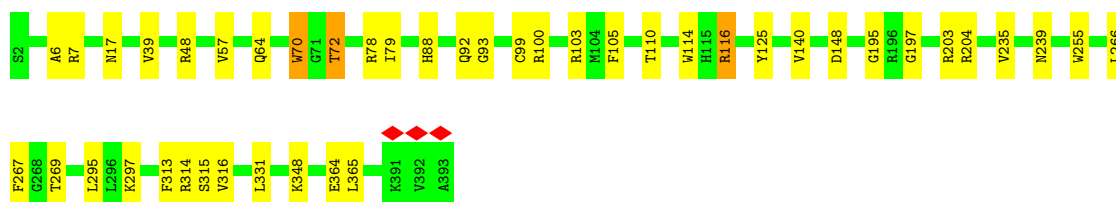
- Molecule 5: 40S ribosomal protein S2

Chain AC:  96%



- Molecule 6: 60S ribosomal protein L4

Chain CC:  89% 10%



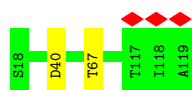
- Molecule 7: Guanine nucleotide-binding protein subunit beta-like protein

Chain Ag:  98%



- Molecule 8: 40S ribosomal protein S20

Chain AU:  98%

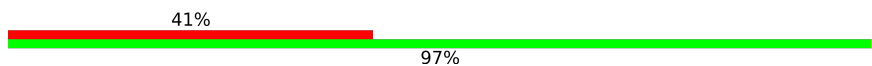


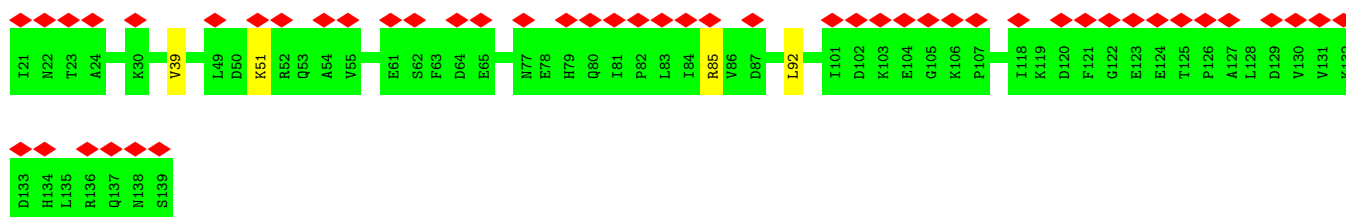
- Molecule 9: 40S ribosomal protein S23

Chain AX:  97%



- Molecule 10: 40S ribosomal protein S12

Chain AM:  41% 97%



- Molecule 11: 40S ribosomal protein S29

Chain Ad:  94% 6%



- Molecule 12: 40S ribosomal protein S13

Chain AN:  99% .



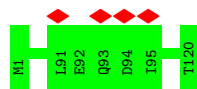
- Molecule 13: 40S ribosomal protein S11

Chain AL:  9% 96% .



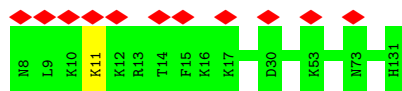
- Molecule 14: 40S ribosomal protein S17

Chain AR:  100% .



- Molecule 15: GEO07301p1

Chain AP:  9% 99% .



- Molecule 16: 40S ribosomal protein S21

Chain AV:  98% .

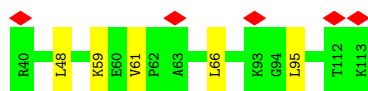


- Molecule 17: 40S ribosomal protein S24

Chain AY:  96% .



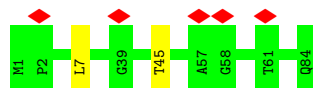
- Molecule 18: 40S ribosomal protein S25



- Molecule 19: 40S ribosomal protein S26



- Molecule 20: 40S ribosomal protein S27



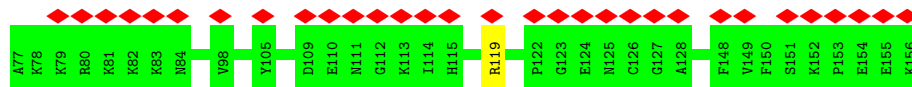
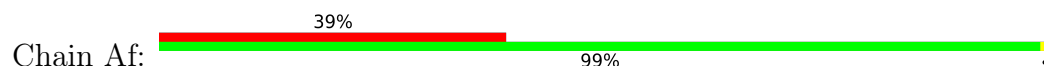
- Molecule 21: 40S ribosomal protein S3



- Molecule 22: 40S ribosomal protein S30



- Molecule 23: Ubiquitin-40S ribosomal protein S27a




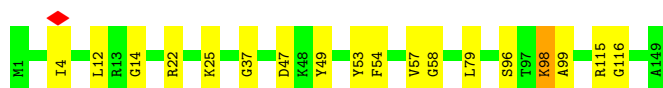
- Molecule 24: 40S ribosomal protein S9

Chain AJ:  95% 5%




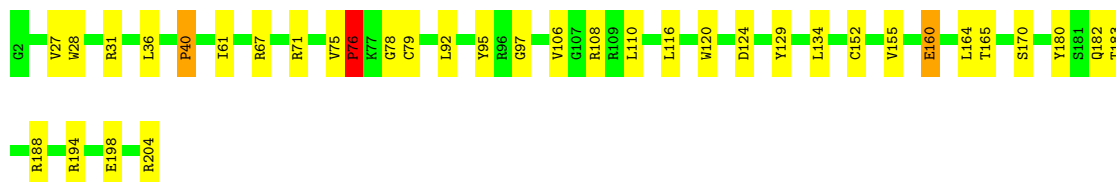
- Molecule 25: 60S ribosomal protein L27a

Chain Ca:  88% 11%



- Molecule 26: 60S ribosomal protein L15

Chain CN:  82% 16%



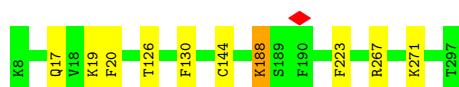
- Molecule 27: 60S ribosomal protein L10

Chain CI:  96%



- Molecule 28: 60S ribosomal protein L5

Chain CD:  97%



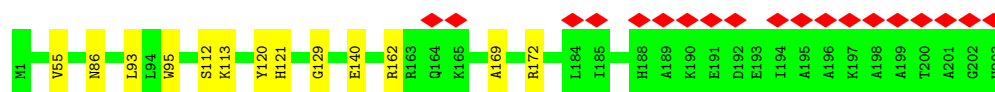
- Molecule 29: 60S ribosomal protein L18

Chain CQ:  89% 10%

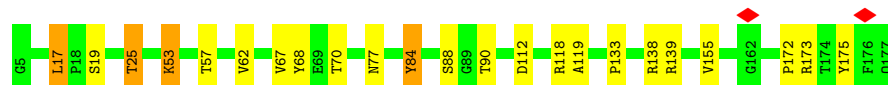
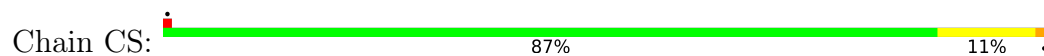


- Molecule 30: 60S ribosomal protein L19

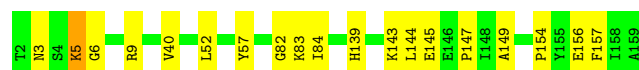
Chain CR:  94% 6% 9%



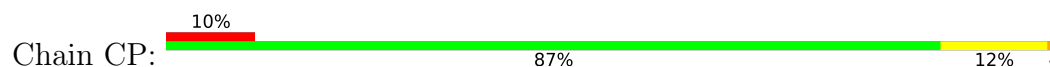
- Molecule 31: 60S ribosomal protein L18a



- Molecule 32: RE62581p



- Molecule 33: 60S ribosomal protein L17



- Molecule 34: IP17216p



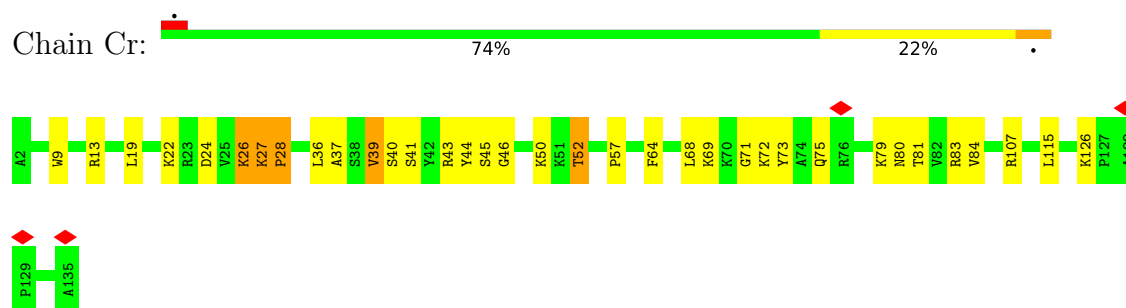
- Molecule 35: GEO07453p1



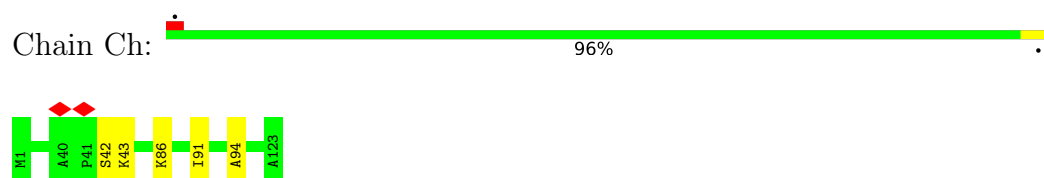
- Molecule 36: 60S ribosomal protein L27



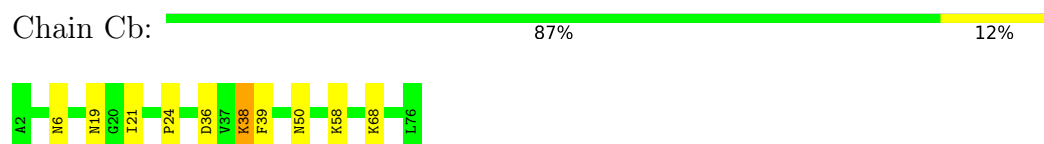
- Molecule 37: 60S ribosomal protein L28



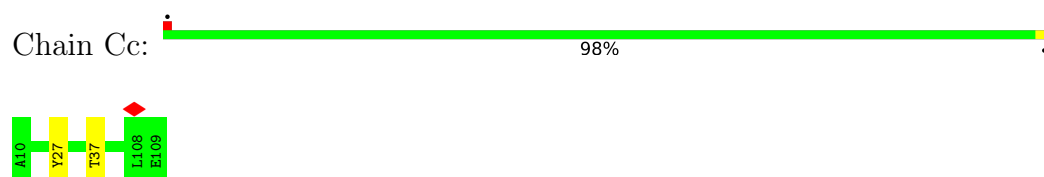
- Molecule 38: FI02809p



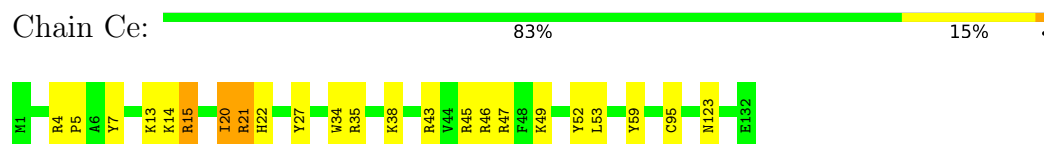
- Molecule 39: 60S ribosomal protein L29



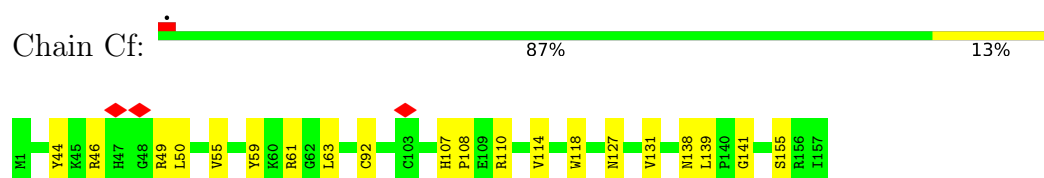
- Molecule 40: RE25263p



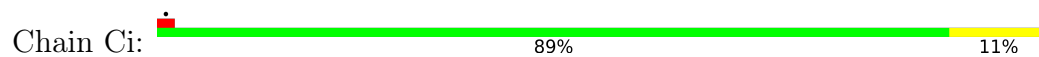
- Molecule 41: 60S ribosomal protein L32



- Molecule 42: GEO07455p1



- Molecule 43: 60S ribosomal protein L36



- Molecule 44: 60S ribosomal protein L38



- Molecule 45: 60S ribosomal protein L39



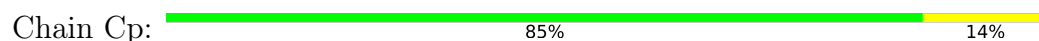
- Molecule 46: Ubiquitin-60S ribosomal protein L40



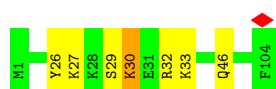
- Molecule 47: 60S ribosomal protein L41



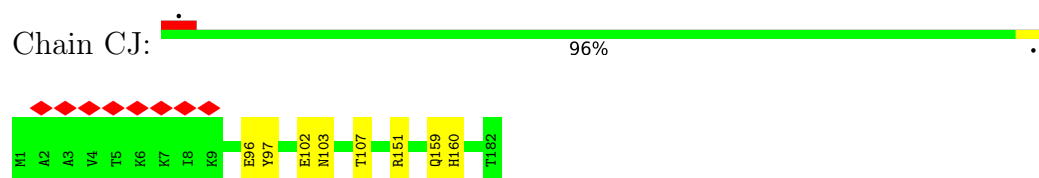
- Molecule 48: 60S ribosomal protein L37a



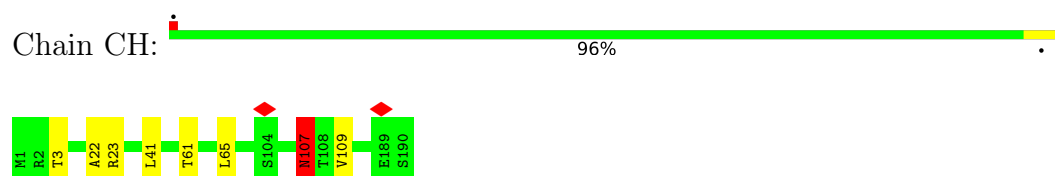
- Molecule 49: TA01007p



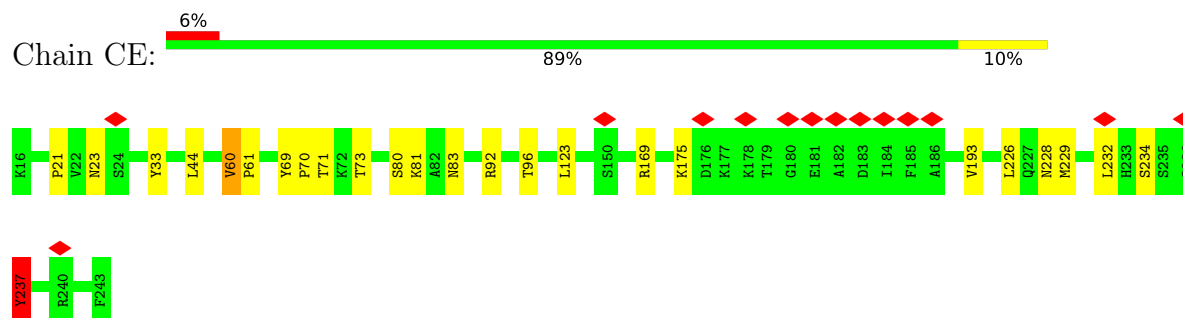
- Molecule 50: 60S ribosomal protein L11



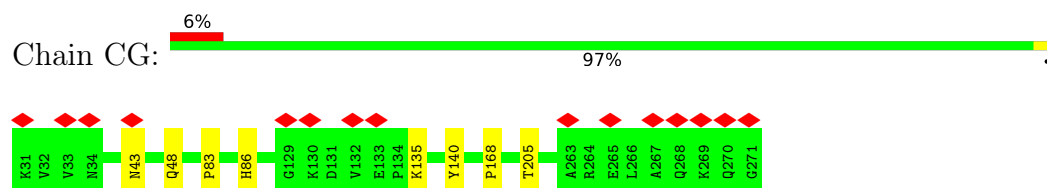
- Molecule 51: 60S ribosomal protein L9



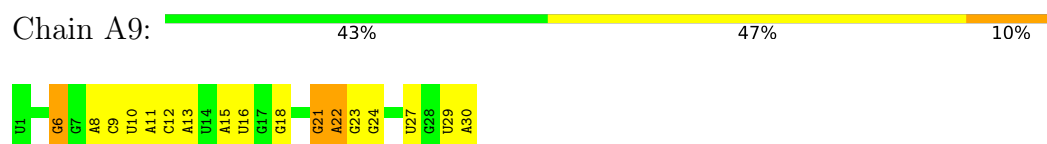
- Molecule 52: Ribosomal protein L6, isoform A



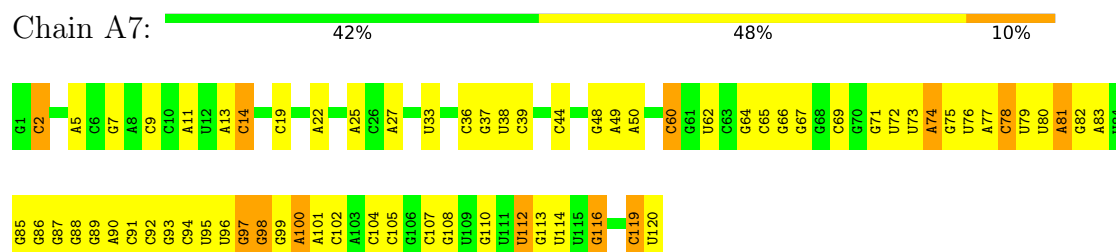
- Molecule 53: 60S ribosomal protein L7a



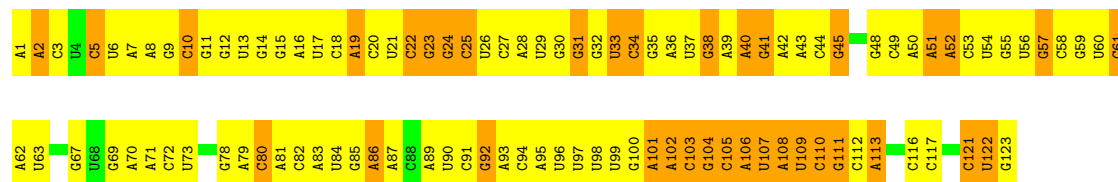

- Molecule 54: 2S ribosomal RNA



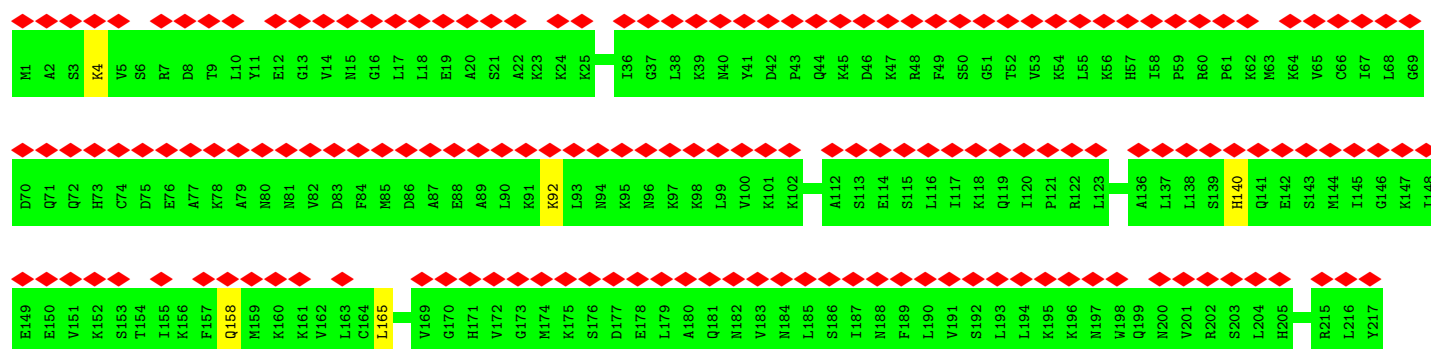
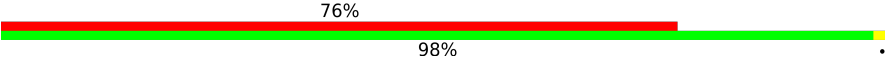
- Molecule 55: 5S ribosomal RNA



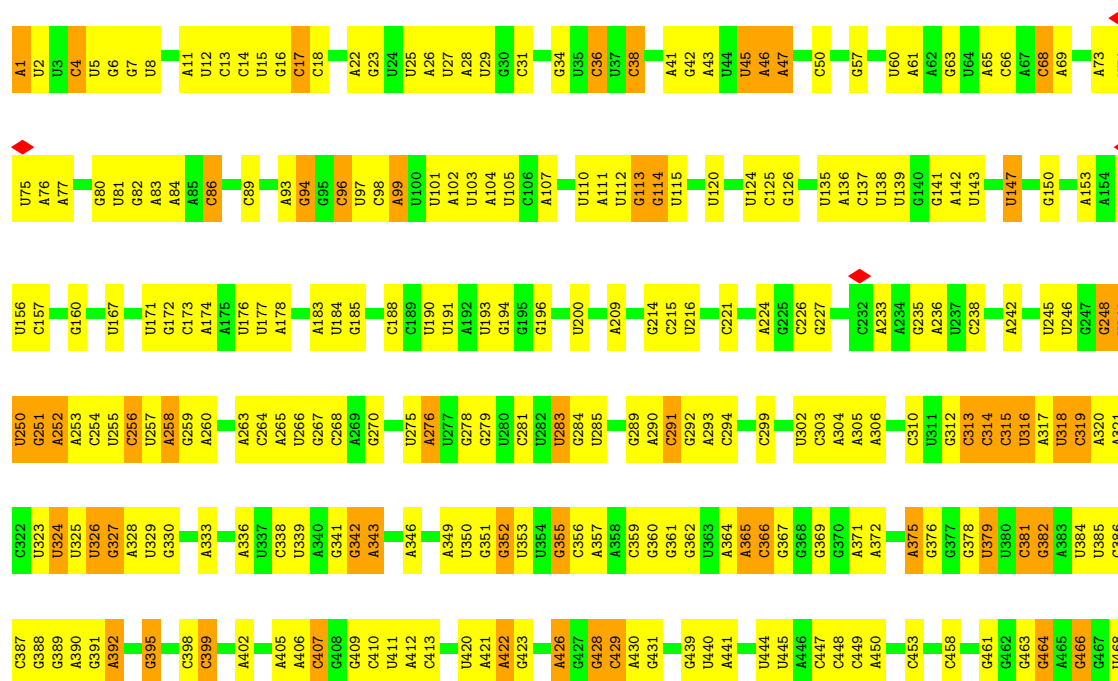
• Molecule 56: 5.8S ribosomal RNA

Chain A8: 

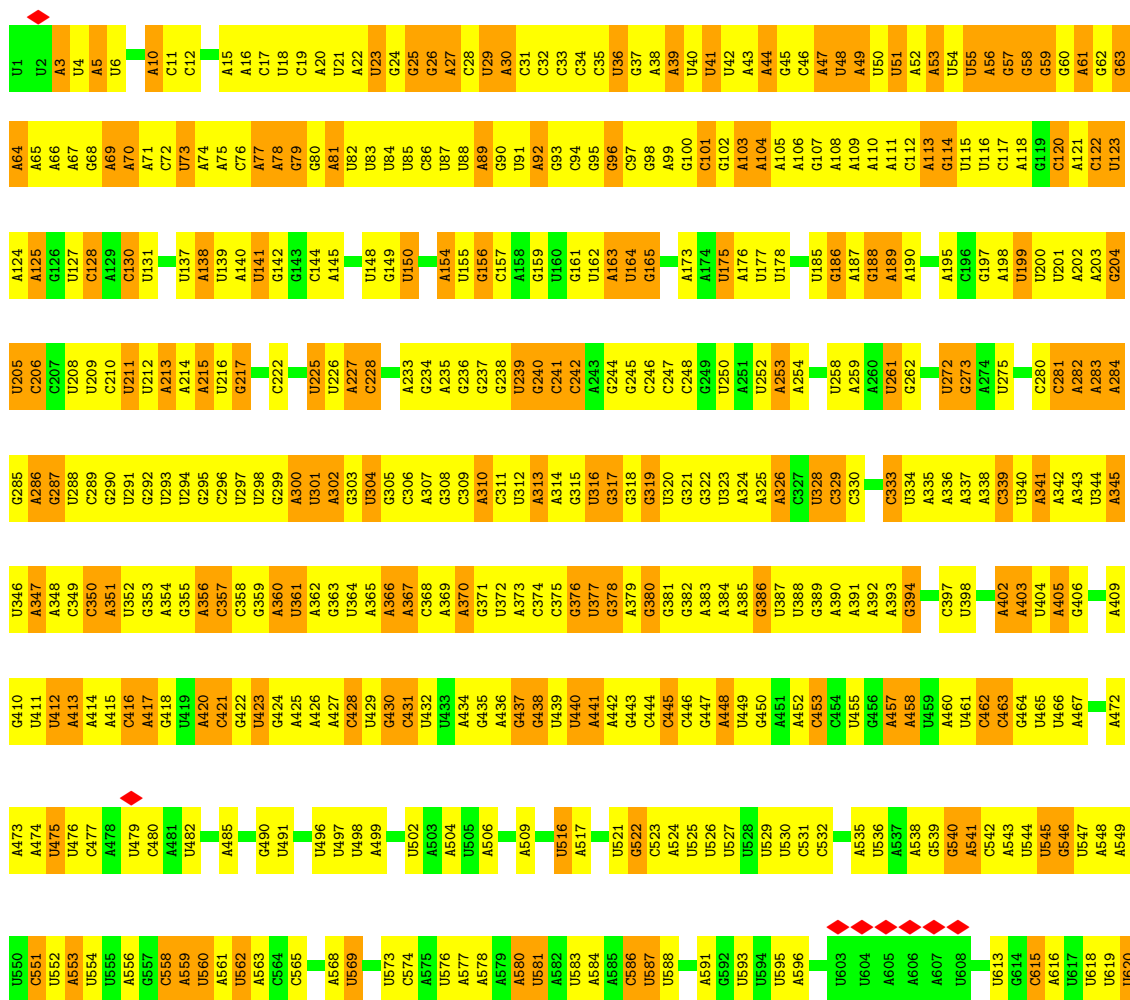
• Molecule 57: 60S ribosomal protein L10a-2

Chain Cz: 

• Molecule 58: 18S ribosomal RNA

Chain B2: 

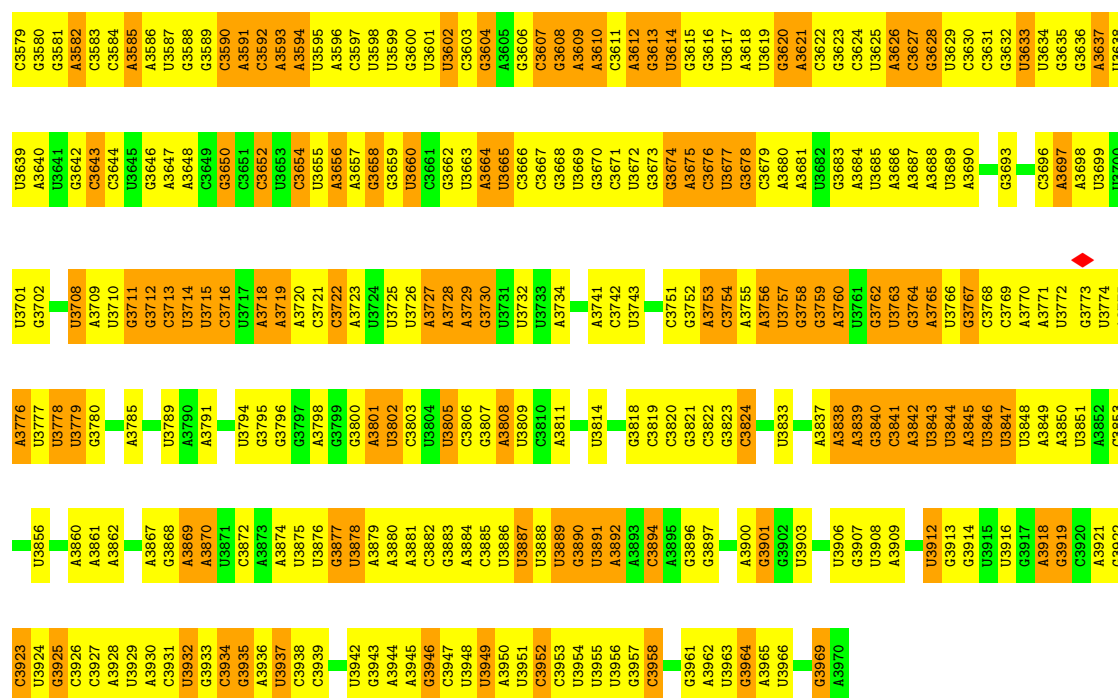




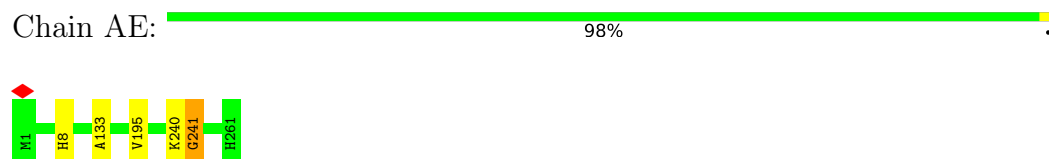




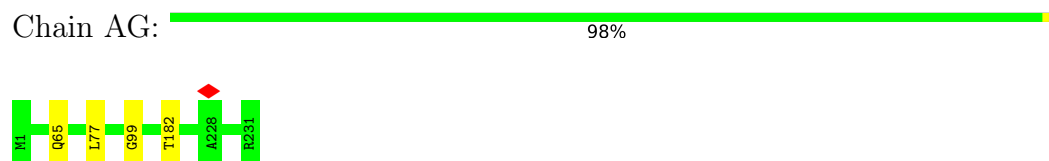




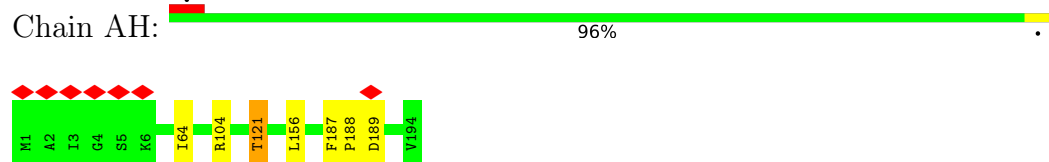
- Molecule 60: 40S ribosomal protein S4



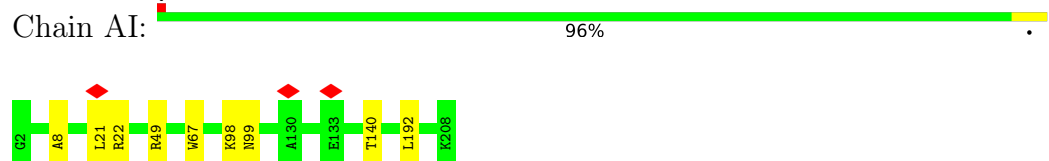
- Molecule 61: 40S ribosomal protein S6



- Molecule 62: 40S ribosomal protein S7

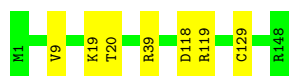


- Molecule 63: 40S ribosomal protein S8



- Molecule 64: 40S ribosomal protein S16

Chain AQ:  95% 5%




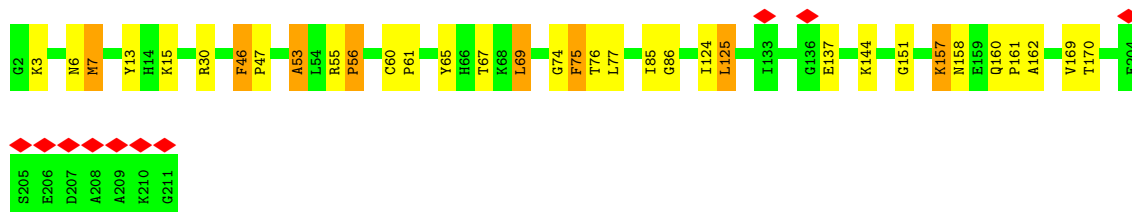
- Molecule 65: 60S ribosomal protein L13a

Chain CO:  89% 10%



- Molecule 66: 60S ribosomal protein L13

Chain CL:  5% 84% 12%



- Molecule 67: 60S ribosomal protein L23

Chain CV:  94% 6%



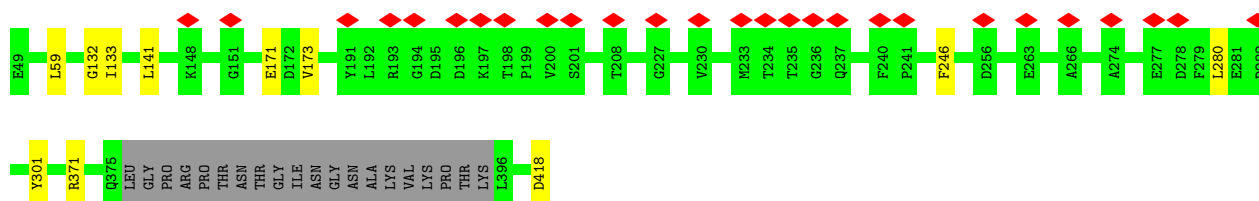
- Molecule 68: 60S ribosomal protein L14

Chain CM:  93% 7%



- Molecule 69: LP04564p

Chain DA:  7% 92% 5%




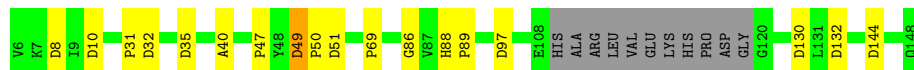
- Molecule 70: 40S ribosomal protein S10b

Chain AK:  94% 6%



- Molecule 71: 40S ribosomal protein S19a

Chain AT:  80% 12% 8%



- Molecule 72: 40S ribosomal protein S5a

Chain AF:  98%



- Molecule 73: 40S ribosomal protein S14a

Chain AO:  91% 7%



- Molecule 74: 40S ribosomal protein S28

Chain Ac:  92% 8%



- Molecule 75: 40S ribosomal protein S15Aa

Chain AW:  99%




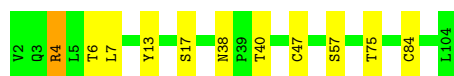
- Molecule 76: 60S ribosomal protein L24

Chain CW:  90% 9%



- Molecule 77: RH48056p

Chain Cg:  89% 10% .




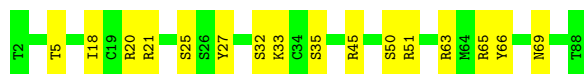
- Molecule 78: Ribosomal protein L22-like protein

Chain CU:  96% . .



- Molecule 79: Probable 60S ribosomal protein L37-B

Chain Cj:  82% 18%



- Molecule 80: 60S ribosomal protein L7

Chain CF:  94% 5%



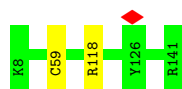
- Molecule 81: 60S ribosomal protein L31

Chain Cd:  92% 8%



- Molecule 82: 40S ribosomal protein S18

Chain AS:  99% .



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	46878	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	80	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.459	Depositor
Minimum map value	-0.223	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.014	Depositor
Recommended contour level	0.025	Depositor
Map size (\AA)	426.00003, 426.00003, 426.00003	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.065, 1.065, 1.065	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	AA	0.50	0/1777	0.68	0/2422
2	CA	1.34	14/1970 (0.7%)	1.09	13/2635 (0.5%)
3	AB	0.55	0/1825	0.70	2/2448 (0.1%)
4	CB	1.22	14/3356 (0.4%)	1.00	8/4494 (0.2%)
5	AC	0.65	0/1785	0.74	0/2415
6	CC	1.21	11/3163 (0.3%)	1.02	13/4253 (0.3%)
7	Ag	0.34	0/2574	0.59	0/3506
8	AU	0.39	0/825	0.59	0/1111
9	AX	0.80	1/1152 (0.1%)	0.83	1/1540 (0.1%)
10	AM	0.33	0/937	0.70	2/1260 (0.2%)
11	Ad	0.53	0/443	0.74	0/589
12	AN	0.75	0/1225	0.76	1/1641 (0.1%)
13	AL	0.84	2/1296 (0.2%)	0.77	0/1725
14	AR	0.36	0/993	0.64	0/1333
15	AP	0.35	0/1036	0.66	0/1383
16	AV	0.54	0/622	0.64	0/835
17	AY	0.43	0/1032	0.71	0/1373
18	AZ	0.35	0/616	0.77	3/826 (0.4%)
19	Aa	0.75	0/883	0.87	0/1184
20	Ab	0.51	0/668	0.70	1/898 (0.1%)
21	AD	0.40	0/1808	0.68	1/2427 (0.0%)
22	Ae	0.47	0/475	0.73	1/625 (0.2%)
23	Af	0.35	0/672	0.67	0/887
24	AJ	0.53	0/1526	0.76	2/2037 (0.1%)
25	Ca	1.38	9/1235 (0.7%)	1.11	8/1640 (0.5%)
26	CN	1.56	16/1750 (0.9%)	1.16	13/2335 (0.6%)
27	CI	0.68	0/1827	0.76	2/2447 (0.1%)
28	CD	0.74	0/2379	0.73	1/3196 (0.0%)
29	CQ	1.22	1/1544 (0.1%)	1.08	5/2069 (0.2%)
30	CR	0.99	3/1703 (0.2%)	0.83	1/2255 (0.0%)
31	CS	1.12	3/1491 (0.2%)	0.98	1/1998 (0.1%)
32	CT	1.07	2/1326 (0.2%)	1.04	5/1773 (0.3%)
33	CP	1.42	22/1529 (1.4%)	1.03	6/2042 (0.3%)
34	CX	0.93	1/1001 (0.1%)	0.85	4/1348 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
35	CY	0.99	1/1094 (0.1%)	0.81	0/1456
36	CZ	0.76	0/1141	0.69	0/1517
37	Cr	1.10	6/1069 (0.6%)	1.15	3/1432 (0.2%)
38	Ch	0.82	0/1024	0.81	0/1353
39	Cb	0.86	0/628	0.92	2/832 (0.2%)
40	Cc	0.95	1/779 (0.1%)	0.79	0/1048
41	Ce	1.61	15/1132 (1.3%)	1.22	13/1508 (0.9%)
42	Cf	1.21	5/1270 (0.4%)	1.06	5/1696 (0.3%)
43	Ci	0.77	0/944	0.91	0/1250
44	Ck	0.68	0/583	0.76	2/774 (0.3%)
45	Cl	1.21	2/445 (0.4%)	1.16	1/589 (0.2%)
46	Cm	0.71	0/435	0.73	0/575
47	Cn	1.30	0/237	1.26	1/300 (0.3%)
48	Cp	1.46	12/719 (1.7%)	0.90	0/954
49	Co	0.93	0/887	0.94	0/1162
50	CJ	0.56	0/1494	0.75	2/2001 (0.1%)
51	CH	0.80	0/1519	0.80	1/2042 (0.0%)
52	CE	0.74	2/1883 (0.1%)	0.92	4/2514 (0.2%)
53	CG	0.72	0/1968	0.75	0/2637
54	A9	2.12	20/714 (2.8%)	1.55	18/1112 (1.6%)
55	A7	2.11	91/2854 (3.2%)	1.61	71/4447 (1.6%)
56	A8	2.76	242/2932 (8.3%)	2.29	204/4568 (4.5%)
57	Cz	0.32	0/1727	0.68	1/2308 (0.0%)
58	B2	1.55	558/43887 (1.3%)	1.52	870/68161 (1.3%)
59	A5	2.76	7417/86239 (8.6%)	2.22	6100/134149 (4.5%)
60	AE	0.55	0/2096	0.70	0/2819
61	AG	0.41	0/1891	0.63	0/2519
62	AH	0.46	0/1593	0.69	0/2145
63	AI	0.69	0/1689	0.78	1/2250 (0.0%)
64	AQ	0.40	0/1202	0.72	2/1608 (0.1%)
65	CO	1.26	6/1700 (0.4%)	0.95	4/2277 (0.2%)
66	CL	1.02	4/1726 (0.2%)	1.11	7/2308 (0.3%)
67	CV	1.28	6/1014 (0.6%)	0.91	1/1362 (0.1%)
68	CM	0.82	0/1326	0.87	1/1780 (0.1%)
69	DA	0.45	0/2800	0.69	3/3765 (0.1%)
70	AK	0.37	0/786	0.69	3/1064 (0.3%)
71	AT	0.36	0/1060	0.88	15/1421 (1.1%)
72	AF	0.42	0/1510	0.68	1/2026 (0.0%)
73	AO	0.67	1/965 (0.1%)	0.82	1/1295 (0.1%)
74	Ac	0.46	0/502	0.77	1/670 (0.1%)
75	AW	0.81	0/1046	0.75	0/1402
76	CW	1.16	1/495 (0.2%)	0.88	0/658
77	Cg	1.26	3/855 (0.4%)	0.95	1/1142 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
78	CU	0.58	0/828	0.77	1/1110 (0.1%)
79	Cj	0.57	0/706	0.79	0/929
80	CF	1.26	6/1905 (0.3%)	0.93	2/2553 (0.1%)
81	Cd	0.44	0/914	0.48	0/1229
82	AS	0.26	0/1118	0.61	1/1498 (0.1%)
All	All	1.93	8498/235775 (3.6%)	1.66	7437/345165 (2.2%)

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	AA	0	2
2	CA	0	3
3	AB	0	2
4	CB	0	11
5	AC	0	1
6	CC	0	11
9	AX	0	1
11	Ad	0	1
13	AL	0	2
17	AY	0	1
19	Aa	0	5
21	AD	0	2
22	Ae	0	3
24	AJ	0	2
25	Ca	0	4
26	CN	0	8
27	CI	0	4
28	CD	0	4
29	CQ	0	8
30	CR	0	5
31	CS	0	10
32	CT	0	11
33	CP	0	2
35	CY	0	3
36	CZ	0	1
37	Cr	0	20
38	Ch	0	4
39	Cb	0	4
40	Cc	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
41	Ce	0	5
42	Cf	0	5
43	Ci	0	6
44	Ck	0	1
46	Cm	0	2
48	Cp	0	2
49	Co	0	3
50	CJ	0	3
51	CH	0	2
52	CE	0	13
53	CG	0	4
59	A5	0	1
60	AE	0	3
61	AG	0	1
62	AH	0	4
63	AI	0	5
64	AQ	0	2
65	CO	0	6
66	CL	0	15
67	CV	0	1
68	CM	0	6
69	DA	0	2
71	AT	0	2
73	AO	0	6
74	Ac	0	1
75	AW	0	1
76	CW	0	2
77	Cg	0	1
78	CU	0	1
80	CF	0	2
81	Cd	0	1
All	All	0	245

All (8498) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1126	A	N7-C5	-17.07	1.29	1.39
59	A5	3403	G	C5-C4	-15.78	1.27	1.38
59	A5	1006	A	N9-C4	-15.52	1.28	1.37
59	A5	445	C	N1-C6	-14.71	1.28	1.37
59	A5	815	A	N9-C4	-14.62	1.29	1.37
59	A5	811	G	C2-N3	-14.58	1.21	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2749	G	N7-C5	-14.41	1.30	1.39
59	A5	105	A	N9-C4	-14.32	1.29	1.37
59	A5	35	C	N1-C6	-14.21	1.28	1.37
59	A5	1389	C	N3-C4	-14.19	1.24	1.33
59	A5	1126	A	N9-C4	-14.07	1.29	1.37
59	A5	2731	G	N7-C5	-14.04	1.30	1.39
59	A5	2715	C	N3-C4	-13.96	1.24	1.33
59	A5	2110	A	N9-C4	-13.88	1.29	1.37
59	A5	2777	A	N9-C4	-13.82	1.29	1.37
59	A5	1686	A	N9-C4	-13.71	1.29	1.37
59	A5	2226	A	N9-C4	-13.71	1.29	1.37
59	A5	1675	G	N7-C5	-13.69	1.31	1.39
59	A5	2196	U	C2-N3	-13.57	1.28	1.37
59	A5	2657	A	N9-C4	-13.49	1.29	1.37
59	A5	798	C	N3-C4	-13.41	1.24	1.33
59	A5	2767	U	C2-N3	-13.35	1.28	1.37
59	A5	794	G	C8-N7	-13.34	1.23	1.30
59	A5	2755	G	N7-C5	-13.32	1.31	1.39
59	A5	3518	A	N9-C4	-13.31	1.29	1.37
59	A5	808	G	C5-C4	-13.22	1.29	1.38
59	A5	1140	G	N9-C8	-13.21	1.28	1.37
59	A5	2716	C	N1-C6	-13.20	1.29	1.37
59	A5	1357	C	N1-C6	-13.18	1.29	1.37
59	A5	102	G	C8-N7	-13.11	1.23	1.30
59	A5	1328	U	C2-N3	-13.10	1.28	1.37
59	A5	1073	C	N3-C4	-13.04	1.24	1.33
59	A5	1696	A	N9-C4	-13.03	1.30	1.37
59	A5	1332	C	N1-C6	-12.99	1.29	1.37
59	A5	1329	G	C8-N7	-12.94	1.23	1.30
59	A5	1392	A	N9-C4	-12.87	1.30	1.37
59	A5	1134	G	N7-C5	-12.84	1.31	1.39
59	A5	796	A	C5-C4	-12.79	1.29	1.38
59	A5	104	A	N3-C4	-12.78	1.27	1.34
59	A5	808	G	N9-C8	-12.69	1.28	1.37
59	A5	3728	A	C5-C6	-12.65	1.29	1.41
59	A5	1313	A	N9-C4	-12.64	1.30	1.37
59	A5	810	A	N9-C4	-12.61	1.30	1.37
59	A5	2649	A	N9-C4	-12.56	1.30	1.37
59	A5	787	C	N1-C6	-12.55	1.29	1.37
59	A5	2720	U	C2-N3	-12.55	1.28	1.37
59	A5	794	G	N7-C5	-12.55	1.31	1.39
59	A5	2731	G	C5-C4	-12.55	1.29	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1676	A	N9-C8	-12.53	1.27	1.37
59	A5	3346	G	C8-N7	-12.51	1.23	1.30
59	A5	1110	G	C6-N1	-12.48	1.30	1.39
59	A5	1110	G	N1-C2	-12.46	1.27	1.37
59	A5	1676	A	C5-C4	-12.45	1.30	1.38
59	A5	2784	C	N1-C6	-12.45	1.29	1.37
59	A5	1164	G	N7-C5	-12.42	1.31	1.39
59	A5	374	C	N1-C6	-12.40	1.29	1.37
59	A5	347	A	N9-C4	-12.39	1.30	1.37
59	A5	3519	C	N3-C4	-12.38	1.25	1.33
59	A5	1127	C	N3-C4	-12.38	1.25	1.33
59	A5	362	A	C5-C4	-12.38	1.30	1.38
59	A5	1626	A	N9-C4	-12.37	1.30	1.37
59	A5	1015	G	C5-C4	-12.35	1.29	1.38
59	A5	3593	A	C6-N1	-12.32	1.26	1.35
59	A5	1731	G	C2-N3	-12.31	1.23	1.32
59	A5	108	A	N9-C4	-12.23	1.30	1.37
59	A5	2736	A	N9-C4	-12.23	1.30	1.37
59	A5	3481	G	C2-N3	-12.21	1.23	1.32
59	A5	362	A	C5-C6	-12.21	1.30	1.41
59	A5	3412	U	C2-N3	-12.14	1.29	1.37
59	A5	2777	A	N3-C4	-12.13	1.27	1.34
59	A5	811	G	N9-C4	-12.12	1.28	1.38
59	A5	1689	G	C6-N1	-12.12	1.31	1.39
59	A5	381	G	C2-N3	-12.11	1.23	1.32
41	Ce	52	TYR	CD2-CE2	-12.11	1.21	1.39
59	A5	3260	G	C2-N3	-12.09	1.23	1.32
59	A5	1016	A	N3-C4	-12.08	1.27	1.34
59	A5	1075	G	N7-C5	-12.03	1.32	1.39
59	A5	1689	G	C5-C4	-12.01	1.29	1.38
59	A5	376	G	C5-C4	-12.00	1.29	1.38
59	A5	424	G	C5-C4	-12.00	1.29	1.38
59	A5	2736	A	C5-C4	-11.99	1.30	1.38
59	A5	2746	A	C5-C4	-11.99	1.30	1.38
59	A5	367	A	N9-C4	-11.96	1.30	1.37
59	A5	2516	U	N3-C4	-11.95	1.27	1.38
59	A5	2712	U	C2-N3	-11.95	1.29	1.37
59	A5	2792	G	N1-C2	-11.95	1.28	1.37
59	A5	791	C	N3-C4	-11.94	1.25	1.33
59	A5	1114	A	N7-C5	-11.92	1.32	1.39
59	A5	789	G	C5-C4	-11.92	1.30	1.38
59	A5	787	C	N3-C4	-11.90	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2750	A	N7-C5	-11.89	1.32	1.39
59	A5	1105	U	C2-N3	-11.87	1.29	1.37
59	A5	1001	A	N7-C5	-11.84	1.32	1.39
59	A5	2770	C	N3-C4	-11.79	1.25	1.33
59	A5	797	A	N3-C4	-11.75	1.27	1.34
59	A5	1329	G	C5-C4	-11.74	1.30	1.38
59	A5	3345	A	N9-C4	-11.74	1.30	1.37
59	A5	1126	A	N9-C8	-11.73	1.28	1.37
59	A5	1138	C	C4-C5	-11.70	1.33	1.43
59	A5	1369	C	C4-C5	-11.66	1.33	1.43
59	A5	1003	C	N1-C6	-11.64	1.30	1.37
59	A5	105	A	N7-C5	-11.63	1.32	1.39
59	A5	299	G	C5-C4	-11.62	1.30	1.38
59	A5	805	C	N1-C2	-11.60	1.28	1.40
59	A5	3477	A	N9-C4	-11.60	1.30	1.37
59	A5	1004	C	N3-C4	-11.55	1.25	1.33
59	A5	805	C	N1-C6	-11.55	1.30	1.37
59	A5	3138	G	C5-C4	-11.54	1.30	1.38
59	A5	1120	A	N9-C4	-11.53	1.30	1.37
59	A5	3165	U	C2-N3	-11.53	1.29	1.37
59	A5	370	A	N7-C5	-11.52	1.32	1.39
59	A5	2716	C	N3-C4	-11.51	1.25	1.33
59	A5	796	A	N9-C4	-11.49	1.30	1.37
59	A5	3403	G	N1-C2	-11.46	1.28	1.37
55	A7	83	A	N9-C4	-11.44	1.30	1.37
59	A5	2223	C	C4-C5	-11.44	1.33	1.43
59	A5	3481	G	N1-C2	-11.43	1.28	1.37
59	A5	95	G	C5-C4	-11.43	1.30	1.38
59	A5	370	A	C5-C4	-11.43	1.30	1.38
59	A5	1005	G	C5-C4	-11.43	1.30	1.38
59	A5	2772	G	C5-C4	-11.43	1.30	1.38
59	A5	2769	G	N7-C5	-11.41	1.32	1.39
59	A5	1116	G	C2-N3	-11.40	1.23	1.32
59	A5	1176	A	N9-C4	-11.38	1.31	1.37
59	A5	1124	G	C5-C4	-11.36	1.30	1.38
59	A5	2517	A	N7-C5	-11.31	1.32	1.39
59	A5	3877	G	C5-C4	-11.30	1.30	1.38
59	A5	2750	A	C5-C4	-11.30	1.30	1.38
59	A5	800	C	C4-C5	-11.30	1.33	1.43
59	A5	2770	C	N1-C6	-11.29	1.30	1.37
59	A5	1525	G	C6-N1	-11.29	1.31	1.39
59	A5	380	G	N9-C8	-11.27	1.29	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	358	C	N1-C6	-11.26	1.30	1.37
59	A5	987	G	N9-C8	-11.26	1.29	1.37
59	A5	1157	C	N3-C4	-11.26	1.26	1.33
59	A5	2734	A	C5-C6	-11.25	1.30	1.41
59	A5	1115	A	N9-C4	-11.21	1.31	1.37
59	A5	1318	A	N9-C4	-11.20	1.31	1.37
59	A5	1735	G	C5-C4	-11.20	1.30	1.38
59	A5	381	G	N1-C2	-11.20	1.28	1.37
59	A5	380	G	C8-N7	-11.19	1.24	1.30
59	A5	789	G	N9-C8	-11.19	1.30	1.37
59	A5	1778	A	C6-N1	-11.18	1.27	1.35
59	A5	1369	C	N1-C6	-11.18	1.30	1.37
59	A5	1872	A	N7-C5	-11.18	1.32	1.39
59	A5	2218	G	C8-N7	-11.18	1.24	1.30
59	A5	1018	C	N3-C4	-11.14	1.26	1.33
59	A5	2530	C	N1-C6	-11.13	1.30	1.37
59	A5	1140	G	N7-C5	-11.13	1.32	1.39
59	A5	1001	A	N9-C4	-11.12	1.31	1.37
59	A5	1029	C	C4-C5	-11.10	1.34	1.43
59	A5	3341	C	C2-N3	-11.08	1.26	1.35
59	A5	1112	G	C8-N7	-11.06	1.24	1.30
59	A5	1087	G	C8-N7	-11.06	1.24	1.30
59	A5	3478	G	N9-C8	-11.06	1.30	1.37
59	A5	2792	G	C6-N1	-11.05	1.31	1.39
59	A5	3513	A	N9-C4	-11.03	1.31	1.37
59	A5	445	C	C4-C5	-11.03	1.34	1.43
59	A5	1163	G	N7-C5	-11.02	1.32	1.39
59	A5	1084	A	N7-C5	-11.01	1.32	1.39
59	A5	1366	G	C5-C6	-11.01	1.31	1.42
59	A5	1002	C	N1-C6	-11.00	1.30	1.37
59	A5	3346	G	N7-C5	-11.00	1.32	1.39
59	A5	370	A	C5-C6	-10.98	1.31	1.41
26	CN	40	PRO	C-N	-10.92	1.08	1.34
59	A5	1111	C	N3-C4	-10.92	1.26	1.33
59	A5	1124	G	N9-C4	-10.92	1.29	1.38
59	A5	3594	A	N9-C4	-10.92	1.31	1.37
59	A5	2754	G	N7-C5	-10.92	1.32	1.39
59	A5	2512	U	N3-C4	-10.89	1.28	1.38
54	A9	15	A	N9-C4	-10.88	1.31	1.37
59	A5	789	G	N1-C2	-10.88	1.29	1.37
59	A5	1410	A	N9-C4	-10.87	1.31	1.37
59	A5	1086	C	C2-N3	-10.86	1.27	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2220	C	N3-C4	-10.86	1.26	1.33
59	A5	2789	U	C2-N3	-10.85	1.30	1.37
59	A5	1169	C	N3-C4	-10.85	1.26	1.33
59	A5	1017	A	N7-C5	-10.84	1.32	1.39
59	A5	809	G	C8-N7	-10.83	1.24	1.30
59	A5	3480	U	C2-N3	-10.83	1.30	1.37
59	A5	1126	A	C5-C4	-10.82	1.31	1.38
59	A5	1112	G	N9-C8	-10.82	1.30	1.37
59	A5	2744	C	C4-C5	-10.80	1.34	1.43
59	A5	1003	C	N3-C4	-10.80	1.26	1.33
59	A5	2541	C	C4-C5	-10.80	1.34	1.43
59	A5	3500	A	N9-C4	-10.79	1.31	1.37
59	A5	371	G	C5-C4	-10.79	1.30	1.38
59	A5	1124	G	C2-N3	-10.77	1.24	1.32
59	A5	1315	A	N9-C4	-10.77	1.31	1.37
59	A5	2770	C	C2-N3	-10.76	1.27	1.35
59	A5	3403	G	C6-N1	-10.76	1.32	1.39
59	A5	660	A	N9-C4	-10.75	1.31	1.37
59	A5	2721	C	N3-C4	-10.75	1.26	1.33
59	A5	322	G	N7-C5	-10.73	1.32	1.39
59	A5	1075	G	C5-C4	-10.73	1.30	1.38
59	A5	987	G	N7-C5	-10.72	1.32	1.39
59	A5	2732	C	N1-C6	-10.72	1.30	1.37
59	A5	1366	G	N7-C5	-10.71	1.32	1.39
59	A5	1075	G	N9-C8	-10.71	1.30	1.37
59	A5	1110	G	C5-C4	-10.70	1.30	1.38
59	A5	427	A	N7-C5	-10.69	1.32	1.39
59	A5	2155	A	N7-C5	-10.69	1.32	1.39
59	A5	1685	G	C5-C4	-10.68	1.30	1.38
59	A5	1163	G	C5-C4	-10.67	1.30	1.38
59	A5	2522	A	C5-C4	-10.67	1.31	1.38
59	A5	2740	C	C4-C5	-10.66	1.34	1.43
59	A5	793	U	C2-N3	-10.65	1.30	1.37
59	A5	2722	U	C2-N3	-10.65	1.30	1.37
59	A5	1738	U	N3-C4	-10.65	1.28	1.38
59	A5	362	A	N7-C5	-10.64	1.32	1.39
59	A5	1692	G	N9-C8	-10.63	1.30	1.37
59	A5	3479	C	C4-C5	-10.63	1.34	1.43
59	A5	26	G	N9-C4	10.63	1.46	1.38
59	A5	1102	G	C8-N7	-10.62	1.24	1.30
59	A5	2726	A	N7-C5	-10.61	1.32	1.39
59	A5	1696	A	N3-C4	-10.61	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3138	G	N7-C5	-10.61	1.32	1.39
59	A5	1735	G	C6-N1	-10.60	1.32	1.39
59	A5	1138	C	N3-C4	-10.59	1.26	1.33
59	A5	1127	C	N1-C6	-10.58	1.30	1.37
59	A5	1689	G	N1-C2	-10.58	1.29	1.37
59	A5	1167	A	C5-C4	-10.57	1.31	1.38
59	A5	2781	G	N7-C5	-10.57	1.32	1.39
59	A5	379	A	C5-C4	-10.56	1.31	1.38
59	A5	1141	G	C6-N1	-10.55	1.32	1.39
59	A5	3412	U	N3-C4	-10.54	1.28	1.38
59	A5	995	G	C2-N3	-10.54	1.24	1.32
59	A5	1756	G	N9-C8	-10.53	1.30	1.37
59	A5	2785	C	N1-C6	-10.54	1.30	1.37
59	A5	2210	U	C2-N3	-10.51	1.30	1.37
59	A5	2698	A	C5-C4	-10.51	1.31	1.38
59	A5	806	A	N7-C5	-10.51	1.32	1.39
59	A5	379	A	N7-C5	-10.51	1.32	1.39
59	A5	1066	A	C5-C4	-10.51	1.31	1.38
59	A5	2649	A	N7-C5	-10.51	1.32	1.39
59	A5	3416	C	N3-C4	-10.48	1.26	1.33
59	A5	2755	G	C8-N7	-10.47	1.24	1.30
59	A5	1683	U	C4-C5	-10.46	1.34	1.43
59	A5	1088	A	N7-C5	-10.46	1.32	1.39
59	A5	1675	G	C5-C4	-10.45	1.31	1.38
59	A5	1118	C	C4-C5	-10.44	1.34	1.43
59	A5	34	C	N3-C4	-10.43	1.26	1.33
59	A5	2771	G	N9-C4	-10.43	1.29	1.38
59	A5	2778	G	C6-N1	-10.43	1.32	1.39
59	A5	1128	C	N3-C4	-10.42	1.26	1.33
59	A5	1013	G	C8-N7	-10.41	1.24	1.30
59	A5	1366	G	N9-C4	-10.40	1.29	1.38
59	A5	2165	C	C4-C5	-10.39	1.34	1.43
59	A5	1128	C	C4-C5	-10.38	1.34	1.43
59	A5	1676	A	N9-C4	-10.37	1.31	1.37
59	A5	1084	A	C5-C6	-10.36	1.31	1.41
59	A5	2778	G	N9-C8	-10.36	1.30	1.37
59	A5	2723	A	C5-C4	-10.34	1.31	1.38
59	A5	2537	A	N9-C4	-10.34	1.31	1.37
59	A5	1611	G	C2-N3	-10.34	1.24	1.32
59	A5	3326	G	N7-C5	-10.33	1.33	1.39
59	A5	1318	A	C5-C6	-10.32	1.31	1.41
59	A5	1377	A	N9-C4	-10.32	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3346	G	N9-C8	-10.32	1.30	1.37
59	A5	2783	C	N3-C4	-10.31	1.26	1.33
59	A5	1076	A	C5-C4	-10.31	1.31	1.38
59	A5	1140	G	C5-C4	-10.30	1.31	1.38
59	A5	359	G	C6-N1	-10.29	1.32	1.39
59	A5	2747	G	N9-C8	-10.29	1.30	1.37
59	A5	995	G	C5-C4	-10.29	1.31	1.38
59	A5	1063	C	N1-C6	-10.28	1.30	1.37
59	A5	3341	C	N3-C4	-10.28	1.26	1.33
59	A5	1731	G	C5-C4	-10.28	1.31	1.38
59	A5	1624	G	C5-C4	-10.27	1.31	1.38
59	A5	1734	G	N7-C5	-10.27	1.33	1.39
59	A5	2749	G	C8-N7	-10.27	1.24	1.30
59	A5	1120	A	C5-C4	-10.26	1.31	1.38
59	A5	1684	G	C5-C4	-10.25	1.31	1.38
59	A5	1005	G	N7-C5	-10.25	1.33	1.39
59	A5	3140	G	N1-C2	-10.25	1.29	1.37
59	A5	1127	C	C4-C5	-10.23	1.34	1.43
59	A5	2768	A	N7-C5	-10.23	1.33	1.39
59	A5	3482	G	N1-C2	-10.23	1.29	1.37
59	A5	2723	A	N7-C5	-10.22	1.33	1.39
59	A5	2678	G	C5-C4	-10.22	1.31	1.38
59	A5	99	A	C6-N1	-10.22	1.28	1.35
59	A5	1134	G	C5-C4	-10.21	1.31	1.38
59	A5	1689	G	N3-C4	-10.21	1.28	1.35
59	A5	1128	C	N1-C6	-10.21	1.31	1.37
59	A5	2566	A	N9-C4	-10.21	1.31	1.37
59	A5	3478	G	N7-C5	-10.20	1.33	1.39
59	A5	817	C	N1-C6	-10.20	1.31	1.37
59	A5	365	A	C5-C4	-10.19	1.31	1.38
59	A5	3482	G	C5-C4	-10.19	1.31	1.38
59	A5	380	G	C5-C4	-10.18	1.31	1.38
59	A5	1375	G	C8-N7	-10.18	1.24	1.30
59	A5	3478	G	C5-C4	-10.18	1.31	1.38
59	A5	1696	A	C5-C4	-10.18	1.31	1.38
59	A5	2789	U	N3-C4	-10.17	1.29	1.38
59	A5	2671	C	N1-C6	-10.17	1.31	1.37
59	A5	2740	C	N1-C2	-10.17	1.29	1.40
59	A5	1756	G	C5-C4	-10.16	1.31	1.38
59	A5	1671	U	C2-N3	-10.16	1.30	1.37
59	A5	1613	A	C6-N1	-10.16	1.28	1.35
59	A5	813	C	C4-C5	-10.14	1.34	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1983	G	C5-C4	-10.13	1.31	1.38
59	A5	100	G	N1-C2	-10.13	1.29	1.37
59	A5	426	A	C5-C4	-10.13	1.31	1.38
59	A5	1371	A	N7-C5	-10.13	1.33	1.39
59	A5	2518	A	C5-C4	-10.12	1.31	1.38
59	A5	1784	A	N3-C4	-10.12	1.28	1.34
59	A5	1610	A	N7-C5	-10.12	1.33	1.39
59	A5	818	A	N9-C4	-10.11	1.31	1.37
59	A5	2716	C	C2-N3	-10.11	1.27	1.35
59	A5	2727	U	C4-C5	-10.11	1.34	1.43
59	A5	805	C	C2-N3	-10.11	1.27	1.35
59	A5	2167	G	N1-C2	-10.10	1.29	1.37
59	A5	1795	A	C6-N1	-10.10	1.28	1.35
59	A5	2224	A	N9-C4	-10.10	1.31	1.37
59	A5	1126	A	C5-C6	-10.10	1.31	1.41
59	A5	3520	U	C4-C5	-10.10	1.34	1.43
59	A5	2771	G	C5-C4	-10.09	1.31	1.38
56	A8	15	G	N9-C8	-10.09	1.30	1.37
59	A5	1695	A	C8-N7	-10.09	1.24	1.31
59	A5	1372	A	N7-C5	-10.08	1.33	1.39
59	A5	853	G	C5-C4	-10.08	1.31	1.38
59	A5	1120	A	N7-C5	-10.07	1.33	1.39
59	A5	2747	G	C5-C4	-10.07	1.31	1.38
59	A5	1013	G	N9-C8	-10.06	1.30	1.37
59	A5	3513	A	N3-C4	-10.06	1.28	1.34
2	CA	196	TRP	CB-CG	-10.05	1.32	1.50
59	A5	50	U	C2-N3	-10.05	1.30	1.37
59	A5	1015	G	C6-N1	-10.05	1.32	1.39
59	A5	853	G	N7-C5	-10.04	1.33	1.39
59	A5	806	A	N9-C8	-10.03	1.29	1.37
59	A5	1521	G	N3-C4	-10.02	1.28	1.35
59	A5	1784	A	C5-C6	-10.02	1.32	1.41
59	A5	1104	A	C5-C4	-10.02	1.31	1.38
59	A5	1116	G	C5-C4	-10.02	1.31	1.38
59	A5	1734	G	C5-C6	-10.01	1.32	1.42
59	A5	2521	A	C8-N7	-10.01	1.24	1.31
59	A5	1164	G	C5-C4	-10.01	1.31	1.38
59	A5	3481	G	C6-N1	-10.00	1.32	1.39
59	A5	438	G	N9-C4	-10.00	1.29	1.38
59	A5	2737	C	N1-C6	-9.99	1.31	1.37
59	A5	3472	A	N3-C4	-9.99	1.28	1.34
59	A5	991	A	N9-C4	-9.98	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1109	G	C2-N3	-9.98	1.24	1.32
59	A5	1613	A	N3-C4	-9.97	1.28	1.34
59	A5	1694	A	N9-C4	-9.96	1.31	1.37
59	A5	2096	C	C4-C5	-9.97	1.34	1.43
59	A5	2520	U	C2-N3	-9.96	1.30	1.37
59	A5	3587	U	C2-N3	-9.96	1.30	1.37
59	A5	815	A	N3-C4	-9.94	1.28	1.34
59	A5	2700	C	C4-C5	-9.94	1.35	1.43
59	A5	3339	U	N3-C4	-9.94	1.29	1.38
59	A5	2181	A	N9-C4	-9.93	1.31	1.37
59	A5	2518	A	N7-C5	-9.93	1.33	1.39
59	A5	295	G	C5-C4	-9.93	1.31	1.38
59	A5	370	A	N9-C4	-9.93	1.31	1.37
59	A5	425	A	N7-C5	-9.93	1.33	1.39
59	A5	2755	G	C5-C4	-9.93	1.31	1.38
59	A5	2668	C	C4-C5	-9.92	1.35	1.43
59	A5	2731	G	C5-C6	-9.92	1.32	1.42
56	A8	41	G	C5-C4	-9.92	1.31	1.38
59	A5	3625	U	C2-N3	-9.91	1.30	1.37
59	A5	2735	A	N7-C5	-9.89	1.33	1.39
59	A5	3519	C	C4-C5	-9.89	1.35	1.43
59	A5	379	A	N3-C4	-9.89	1.28	1.34
59	A5	102	G	C6-N1	-9.88	1.32	1.39
59	A5	1691	A	C6-N1	-9.88	1.28	1.35
59	A5	3413	C	N1-C6	-9.88	1.31	1.37
59	A5	992	U	C2-N3	-9.87	1.30	1.37
59	A5	2218	G	C5-C4	-9.87	1.31	1.38
59	A5	1681	G	C8-N7	-9.86	1.25	1.30
59	A5	1369	C	N3-C4	-9.86	1.27	1.33
59	A5	817	C	N3-C4	-9.85	1.27	1.33
59	A5	1142	U	C2-N3	-9.85	1.30	1.37
59	A5	1101	A	N9-C4	-9.85	1.31	1.37
59	A5	1786	G	N1-C2	-9.85	1.29	1.37
59	A5	2226	A	N3-C4	-9.84	1.28	1.34
59	A5	1610	A	C5-C4	-9.84	1.31	1.38
59	A5	2533	U	C4-C5	-9.84	1.34	1.43
59	A5	2694	G	N1-C2	-9.84	1.29	1.37
59	A5	809	G	N9-C8	-9.84	1.30	1.37
59	A5	359	G	C5-C4	-9.83	1.31	1.38
59	A5	2712	U	N3-C4	-9.83	1.29	1.38
59	A5	781	C	N1-C6	-9.82	1.31	1.37
59	A5	808	G	C2-N3	-9.82	1.24	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	987	G	C8-N7	-9.82	1.25	1.30
59	A5	995	G	C6-N1	-9.81	1.32	1.39
59	A5	1020	A	C6-N1	-9.81	1.28	1.35
59	A5	1053	G	N7-C5	-9.81	1.33	1.39
59	A5	3620	G	C2-N3	-9.80	1.25	1.32
59	A5	2559	C	C4-C5	-9.79	1.35	1.43
59	A5	3235	A	N7-C5	-9.79	1.33	1.39
59	A5	1019	U	C2-N3	-9.78	1.30	1.37
59	A5	1686	A	N7-C5	-9.79	1.33	1.39
59	A5	3149	U	C2-N3	-9.78	1.30	1.37
59	A5	2185	U	C2-N3	-9.77	1.30	1.37
59	A5	2512	U	C2-N3	-9.77	1.30	1.37
59	A5	2205	G	C5-C4	-9.76	1.31	1.38
59	A5	784	G	C2-N3	-9.76	1.25	1.32
59	A5	3348	G	C8-N7	-9.76	1.25	1.30
59	A5	808	G	N1-C2	-9.76	1.29	1.37
59	A5	424	G	N9-C8	-9.75	1.31	1.37
59	A5	1113	A	N3-C4	-9.75	1.29	1.34
59	A5	1684	G	N1-C2	-9.75	1.29	1.37
59	A5	3142	G	C6-N1	-9.75	1.32	1.39
56	A8	24	G	C5-C4	-9.74	1.31	1.38
59	A5	1107	G	N9-C4	-9.74	1.30	1.38
59	A5	3478	G	C8-N7	-9.74	1.25	1.30
59	A5	86	C	N1-C6	-9.73	1.31	1.37
59	A5	2160	C	C2-N3	-9.73	1.27	1.35
59	A5	378	G	N7-C5	-9.73	1.33	1.39
59	A5	1077	C	N1-C6	-9.73	1.31	1.37
59	A5	1157	C	C2-N3	-9.72	1.27	1.35
56	A8	17	U	C2-N3	-9.71	1.30	1.37
59	A5	298	U	N1-C2	-9.71	1.29	1.38
59	A5	805	C	N3-C4	-9.71	1.27	1.33
59	A5	2523	A	N3-C4	-9.71	1.29	1.34
59	A5	1770	C	N3-C4	-9.70	1.27	1.33
59	A5	1022	A	N7-C5	-9.70	1.33	1.39
59	A5	354	A	N3-C4	-9.70	1.29	1.34
59	A5	818	A	N3-C4	-9.70	1.29	1.34
59	A5	1784	A	N9-C4	-9.69	1.32	1.37
59	A5	2735	A	C8-N7	-9.69	1.24	1.31
59	A5	801	G	C6-N1	-9.69	1.32	1.39
59	A5	1114	A	C5-C6	-9.68	1.32	1.41
59	A5	34	C	C4-C5	-9.68	1.35	1.43
59	A5	1332	C	N3-C4	-9.68	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2500	G	C5-C4	-9.68	1.31	1.38
59	A5	2158	U	C4-C5	-9.68	1.34	1.43
59	A5	1644	C	N1-C6	-9.67	1.31	1.37
59	A5	1152	A	C6-N1	-9.66	1.28	1.35
59	A5	2154	A	N9-C4	-9.66	1.32	1.37
59	A5	429	U	C2-N3	-9.65	1.30	1.37
59	A5	3616	G	C6-N1	-9.65	1.32	1.39
59	A5	1382	U	O3'-P	9.65	1.72	1.61
59	A5	1392	A	C5-C4	-9.65	1.31	1.38
59	A5	1106	A	C5-C4	-9.64	1.31	1.38
59	A5	1328	U	N3-C4	-9.63	1.29	1.38
59	A5	1368	A	N3-C4	-9.63	1.29	1.34
59	A5	3477	A	N7-C5	-9.63	1.33	1.39
59	A5	1715	G	C2-N3	-9.62	1.25	1.32
59	A5	2733	G	C5-C4	-9.62	1.31	1.38
59	A5	553	A	N9-C4	-9.62	1.32	1.37
59	A5	95	G	N9-C8	-9.62	1.31	1.37
59	A5	1687	U	C2-N3	-9.62	1.31	1.37
59	A5	2516	U	N1-C6	-9.62	1.29	1.38
59	A5	3728	A	N7-C5	-9.62	1.33	1.39
59	A5	3166	C	C4-C5	-9.61	1.35	1.43
59	A5	1174	G	C5-C4	-9.60	1.31	1.38
59	A5	1529	C	N1-C6	-9.60	1.31	1.37
59	A5	1612	G	C6-N1	-9.59	1.32	1.39
59	A5	2542	C	N3-C4	-9.59	1.27	1.33
59	A5	3406	G	N9-C4	-9.58	1.30	1.38
59	A5	798	C	C2-N3	-9.58	1.28	1.35
59	A5	1016	A	N7-C5	-9.58	1.33	1.39
59	A5	2799	U	C2-N3	-9.58	1.31	1.37
59	A5	1108	G	N7-C5	-9.58	1.33	1.39
59	A5	1015	G	C8-N7	-9.57	1.25	1.30
59	A5	1102	G	C5-C4	-9.57	1.31	1.38
59	A5	2657	A	N3-C4	-9.57	1.29	1.34
59	A5	3495	G	C5-C4	-9.57	1.31	1.38
59	A5	1156	U	C2-N3	-9.57	1.31	1.37
59	A5	3141	A	N9-C4	-9.56	1.32	1.37
59	A5	1675	G	N9-C8	-9.56	1.31	1.37
59	A5	3524	G	C5-C4	-9.56	1.31	1.38
59	A5	1351	C	C4-C5	-9.55	1.35	1.43
59	A5	1326	A	C6-N1	-9.55	1.28	1.35
59	A5	1112	G	N7-C5	-9.54	1.33	1.39
59	A5	2549	G	C5-C4	-9.54	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2754	G	N9-C8	-9.54	1.31	1.37
59	A5	998	G	C8-N7	-9.53	1.25	1.30
59	A5	1097	A	C5-C4	-9.53	1.32	1.38
59	A5	1681	G	N1-C2	-9.53	1.30	1.37
59	A5	1614	A	C5-C6	-9.52	1.32	1.41
59	A5	382	G	C6-N1	-9.52	1.32	1.39
59	A5	1015	G	N9-C8	-9.52	1.31	1.37
59	A5	1160	U	N1-C6	-9.52	1.29	1.38
59	A5	2787	U	N1-C2	-9.52	1.29	1.38
59	A5	788	C	N1-C6	-9.52	1.31	1.37
59	A5	3609	A	N9-C4	-9.51	1.32	1.37
59	A5	1162	A	C5-C6	-9.51	1.32	1.41
59	A5	2529	G	C5-C4	-9.51	1.31	1.38
59	A5	1555	G	C5-C4	-9.50	1.31	1.38
59	A5	995	G	N1-C2	-9.50	1.30	1.37
59	A5	1778	A	N9-C4	-9.50	1.32	1.37
59	A5	1721	C	C4-C5	-9.49	1.35	1.43
59	A5	3246	G	N9-C4	-9.49	1.30	1.38
59	A5	794	G	C6-N1	-9.49	1.32	1.39
59	A5	2772	G	N9-C8	-9.49	1.31	1.37
59	A5	1151	A	N9-C4	-9.48	1.32	1.37
59	A5	1356	G	C2-N3	-9.48	1.25	1.32
59	A5	1002	C	N3-C4	-9.48	1.27	1.33
59	A5	1351	C	N3-C4	-9.48	1.27	1.33
59	A5	3155	G	C5-C4	-9.48	1.31	1.38
59	A5	989	A	C5-C4	-9.48	1.32	1.38
59	A5	1140	G	C5-C6	-9.47	1.32	1.42
59	A5	804	C	N3-C4	-9.47	1.27	1.33
59	A5	2565	G	N7-C5	-9.46	1.33	1.39
56	A8	20	C	N3-C4	-9.46	1.27	1.33
59	A5	33	C	C4-C5	-9.46	1.35	1.43
59	A5	382	G	N1-C2	-9.46	1.30	1.37
59	A5	2701	G	C5-C4	-9.46	1.31	1.38
59	A5	1001	A	N3-C4	-9.45	1.29	1.34
59	A5	1163	G	C8-N7	-9.45	1.25	1.30
59	A5	3728	A	C6-N6	-9.45	1.26	1.33
59	A5	839	A	N9-C4	-9.45	1.32	1.37
59	A5	3410	G	N9-C8	-9.44	1.31	1.37
56	A8	36	A	C5-C4	-9.44	1.32	1.38
59	A5	3400	U	C2-N3	-9.44	1.31	1.37
59	A5	3406	G	N7-C5	-9.44	1.33	1.39
59	A5	3338	U	N3-C4	-9.44	1.29	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3474	G	C6-N1	-9.44	1.32	1.39
59	A5	1619	C	N1-C6	-9.44	1.31	1.37
59	A5	2779	A	N3-C4	-9.43	1.29	1.34
59	A5	363	G	N7-C5	-9.43	1.33	1.39
59	A5	1672	A	N3-C4	-9.43	1.29	1.34
59	A5	1133	A	N9-C8	-9.42	1.30	1.37
59	A5	1152	A	C5-C4	-9.42	1.32	1.38
59	A5	811	G	N3-C4	-9.42	1.28	1.35
59	A5	2503	G	C2-N3	-9.42	1.25	1.32
59	A5	1013	G	N1-C2	-9.41	1.30	1.37
33	CP	130	TYR	CD2-CE2	-9.41	1.25	1.39
59	A5	2801	U	C2-N3	-9.41	1.31	1.37
59	A5	3476	G	C2-N3	-9.40	1.25	1.32
59	A5	367	A	N3-C4	-9.40	1.29	1.34
59	A5	1007	A	N7-C5	-9.40	1.33	1.39
59	A5	377	U	C2-N3	-9.40	1.31	1.37
59	A5	796	A	N9-C8	-9.40	1.30	1.37
59	A5	1086	C	N3-C4	-9.39	1.27	1.33
59	A5	1368	A	N9-C4	-9.39	1.32	1.37
59	A5	429	U	N3-C4	-9.39	1.29	1.38
59	A5	1016	A	C5-C4	-9.39	1.32	1.38
59	A5	1102	G	N9-C8	-9.38	1.31	1.37
59	A5	3404	A	C2-N3	-9.38	1.25	1.33
59	A5	1676	A	N3-C4	-9.38	1.29	1.34
59	A5	3166	C	N1-C6	-9.38	1.31	1.37
59	A5	2196	U	N3-C4	-9.38	1.30	1.38
59	A5	1533	A	N9-C4	-9.37	1.32	1.37
59	A5	3878	U	C2-N3	-9.37	1.31	1.37
59	A5	2216	A	N3-C4	-9.36	1.29	1.34
59	A5	3482	G	C6-N1	-9.36	1.32	1.39
59	A5	1110	G	C8-N7	-9.36	1.25	1.30
59	A5	1757	A	C5-C4	-9.36	1.32	1.38
59	A5	3326	G	C5-C4	-9.36	1.31	1.38
59	A5	382	G	C5-C4	-9.35	1.31	1.38
59	A5	794	G	C5-C4	-9.35	1.31	1.38
59	A5	2526	A	N7-C5	-9.35	1.33	1.39
59	A5	2549	G	C2-N3	-9.35	1.25	1.32
59	A5	803	A	C5-C4	-9.35	1.32	1.38
59	A5	821	U	C2-N3	-9.35	1.31	1.37
59	A5	799	A	C8-N7	-9.34	1.25	1.31
59	A5	3347	G	N7-C5	-9.34	1.33	1.39
59	A5	1329	G	N9-C8	-9.34	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	378	G	C5-C4	-9.33	1.31	1.38
59	A5	3507	A	C5-C4	-9.33	1.32	1.38
59	A5	874	G	C8-N7	-9.32	1.25	1.30
59	A5	104	A	N9-C4	-9.32	1.32	1.37
59	A5	448	A	C5-C4	-9.32	1.32	1.38
59	A5	1321	G	N9-C8	-9.32	1.31	1.37
59	A5	809	G	C5-C4	-9.32	1.31	1.38
56	A8	24	G	N3-C4	-9.31	1.28	1.35
59	A5	789	G	C2-N3	-9.31	1.25	1.32
59	A5	1149	C	N3-C4	-9.31	1.27	1.33
59	A5	1103	U	C4-C5	-9.31	1.35	1.43
59	A5	1196	A	N9-C4	-9.30	1.32	1.37
59	A5	3138	G	C2-N3	-9.29	1.25	1.32
59	A5	1788	G	C5-C4	-9.29	1.31	1.38
59	A5	3351	A	C5-C4	-9.29	1.32	1.38
59	A5	793	U	N1-C2	-9.28	1.30	1.38
59	A5	3877	G	N9-C8	-9.28	1.31	1.37
59	A5	2562	U	C2-N3	-9.28	1.31	1.37
59	A5	807	A	N9-C4	-9.27	1.32	1.37
59	A5	3596	A	N9-C4	-9.27	1.32	1.37
59	A5	374	C	N3-C4	-9.27	1.27	1.33
59	A5	3601	U	N1-C2	-9.27	1.30	1.38
55	A7	99	G	C5-C4	-9.27	1.31	1.38
59	A5	1795	A	N3-C4	-9.26	1.29	1.34
59	A5	2160	C	N3-C4	-9.26	1.27	1.33
59	A5	2203	A	C5-C4	-9.26	1.32	1.38
59	A5	2797	A	C5-C4	-9.25	1.32	1.38
59	A5	1128	C	C2-N3	-9.25	1.28	1.35
59	A5	382	G	C8-N7	-9.24	1.25	1.30
59	A5	1087	G	C5-C4	-9.24	1.31	1.38
59	A5	815	A	C5-C4	-9.24	1.32	1.38
59	A5	3348	G	C5-C4	-9.23	1.31	1.38
59	A5	807	A	C8-N7	-9.23	1.25	1.31
59	A5	1015	G	N1-C2	-9.23	1.30	1.37
59	A5	1112	G	C5-C4	-9.23	1.31	1.38
59	A5	788	C	C4-C5	-9.23	1.35	1.43
59	A5	1006	A	N3-C4	-9.23	1.29	1.34
59	A5	1076	A	C5-C6	-9.23	1.32	1.41
59	A5	1647	A	N7-C5	-9.23	1.33	1.39
59	A5	2525	C	N3-C4	-9.22	1.27	1.33
58	B2	1071	G	C5-C4	-9.22	1.31	1.38
59	A5	1678	C	N3-C4	-9.22	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2701	G	N9-C8	-9.22	1.31	1.37
59	A5	2214	G	N1-C2	-9.22	1.30	1.37
59	A5	2768	A	N9-C4	-9.22	1.32	1.37
59	A5	1612	G	C5-C6	-9.21	1.33	1.42
59	A5	1732	A	N7-C5	-9.21	1.33	1.39
59	A5	1726	G	C5-C4	-9.21	1.31	1.38
59	A5	1009	G	C8-N7	-9.20	1.25	1.30
59	A5	1357	C	N3-C4	-9.20	1.27	1.33
59	A5	2689	G	C8-N7	-9.20	1.25	1.30
58	B2	1174	A	N9-C4	-9.20	1.32	1.37
59	A5	1685	G	N9-C8	-9.20	1.31	1.37
59	A5	2492	A	N9-C8	9.19	1.45	1.37
59	A5	995	G	N9-C8	-9.19	1.31	1.37
59	A5	2623	C	N3-C4	-9.19	1.27	1.33
59	A5	3140	G	C5-C4	-9.19	1.31	1.38
59	A5	27	A	C5-C6	-9.19	1.32	1.41
59	A5	2780	A	C5-C4	-9.19	1.32	1.38
59	A5	1734	G	C2-N3	-9.19	1.25	1.32
56	A8	21	U	C4-C5	-9.19	1.35	1.43
56	A8	16	A	C6-N6	-9.18	1.26	1.33
33	CP	130	TYR	CD1-CE1	-9.18	1.25	1.39
59	A5	1129	A	N3-C4	-9.18	1.29	1.34
59	A5	1080	G	C6-N1	-9.18	1.33	1.39
59	A5	1002	C	C4-C5	-9.17	1.35	1.43
59	A5	1667	U	N3-C4	-9.17	1.30	1.38
59	A5	1005	G	C2-N3	-9.17	1.25	1.32
59	A5	2747	G	C8-N7	-9.17	1.25	1.30
59	A5	1323	C	C4-C5	-9.16	1.35	1.43
41	Ce	27	TYR	CD1-CE1	-9.16	1.25	1.39
59	A5	1163	G	C5-C6	-9.15	1.33	1.42
59	A5	1313	A	N3-C4	-9.15	1.29	1.34
59	A5	365	A	N3-C4	-9.15	1.29	1.34
59	A5	1797	A	C5-C4	-9.15	1.32	1.38
59	A5	1782	C	C4-C5	-9.14	1.35	1.43
59	A5	3138	G	N1-C2	-9.14	1.30	1.37
56	A8	23	G	C2-N3	-9.14	1.25	1.32
59	A5	2159	C	C4-C5	-9.14	1.35	1.43
59	A5	3507	A	N1-C2	-9.13	1.26	1.34
59	A5	1647	A	C5-C4	-9.13	1.32	1.38
59	A5	101	C	N3-C4	-9.13	1.27	1.33
59	A5	1413	C	C4-C5	-9.13	1.35	1.43
59	A5	2172	C	C4-C5	-9.13	1.35	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2793	C	C4-C5	-9.13	1.35	1.43
59	A5	2755	G	N9-C4	-9.13	1.30	1.38
59	A5	1121	A	C5-C4	-9.13	1.32	1.38
59	A5	103	A	N3-C4	-9.12	1.29	1.34
59	A5	1346	C	N3-C4	-9.12	1.27	1.33
59	A5	2035	C	N1-C6	-9.12	1.31	1.37
59	A5	2151	A	N7-C5	-9.12	1.33	1.39
59	A5	1531	U	C4-O4	-9.12	1.16	1.23
59	A5	3335	A	N7-C5	-9.12	1.33	1.39
59	A5	2159	C	N3-C4	-9.12	1.27	1.33
59	A5	1735	G	N1-C2	-9.11	1.30	1.37
59	A5	2773	G	C2-N3	-9.11	1.25	1.32
59	A5	1005	G	N1-C2	-9.11	1.30	1.37
59	A5	1124	G	C5-C6	-9.11	1.33	1.42
59	A5	2798	C	N3-C4	-9.11	1.27	1.33
59	A5	789	G	N3-C4	-9.11	1.29	1.35
59	A5	371	G	N1-C2	-9.11	1.30	1.37
59	A5	353	G	N7-C5	-9.10	1.33	1.39
59	A5	801	G	C5-C4	-9.10	1.31	1.38
59	A5	3490	C	N1-C2	-9.10	1.31	1.40
59	A5	998	G	C5-C4	-9.10	1.31	1.38
59	A5	1010	A	C6-N1	-9.10	1.29	1.35
59	A5	2205	G	N7-C5	-9.09	1.33	1.39
59	A5	2781	G	N9-C8	-9.09	1.31	1.37
59	A5	3877	G	N1-C2	-9.09	1.30	1.37
56	A8	23	G	C6-N1	-9.08	1.33	1.39
59	A5	64	A	C5-C4	-9.08	1.32	1.38
58	B2	1115	C	N1-C6	-9.08	1.31	1.37
59	A5	1546	U	C2-N3	-9.07	1.31	1.37
59	A5	1153	G	N9-C4	-9.07	1.30	1.38
59	A5	1364	A	N7-C5	-9.07	1.33	1.39
59	A5	1607	A	C6-N1	-9.07	1.29	1.35
59	A5	1141	G	C5-C4	-9.07	1.32	1.38
59	A5	802	G	C6-N1	-9.06	1.33	1.39
59	A5	1752	G	C5-C4	-9.06	1.32	1.38
59	A5	1015	G	C2-N3	-9.06	1.25	1.32
59	A5	1340	G	C5-C4	-9.05	1.32	1.38
59	A5	1344	A	N7-C5	-9.05	1.33	1.39
59	A5	1595	G	N3-C4	-9.05	1.29	1.35
59	A5	997	U	C2-N3	-9.04	1.31	1.37
59	A5	2715	C	N1-C6	-9.04	1.31	1.37
59	A5	2771	G	N3-C4	-9.04	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1355	C	N3-C4	-9.04	1.27	1.33
59	A5	387	U	C2-N3	-9.04	1.31	1.37
59	A5	1666	A	C5-C4	-9.04	1.32	1.38
59	A5	1082	A	C5-C4	-9.03	1.32	1.38
59	A5	2508	C	N3-C4	-9.03	1.27	1.33
56	A8	15	G	N7-C5	-9.03	1.33	1.39
59	A5	3514	C	N3-C4	-9.03	1.27	1.33
41	Ce	52	TYR	CB-CG	-9.03	1.38	1.51
59	A5	3610	A	N9-C8	-9.03	1.30	1.37
59	A5	1126	A	C8-N7	-9.02	1.25	1.31
59	A5	1684	G	C8-N7	-9.02	1.25	1.30
59	A5	3174	A	N7-C5	-9.02	1.33	1.39
59	A5	2507	C	N3-C4	-9.02	1.27	1.33
59	A5	3337	G	C8-N7	-9.02	1.25	1.30
59	A5	1144	C	N3-C4	-9.02	1.27	1.33
59	A5	2570	C	N1-C6	-9.02	1.31	1.37
59	A5	1015	G	N9-C4	-9.01	1.30	1.38
59	A5	2674	A	C5-C6	-9.01	1.32	1.41
59	A5	3519	C	C2-N3	-9.01	1.28	1.35
59	A5	438	G	C5-C4	-9.01	1.32	1.38
59	A5	819	U	C2-N3	-9.01	1.31	1.37
59	A5	1013	G	C6-N1	-9.01	1.33	1.39
59	A5	3610	A	N9-C4	-9.01	1.32	1.37
59	A5	373	A	C6-N1	-9.00	1.29	1.35
59	A5	1610	A	N9-C8	-9.00	1.30	1.37
59	A5	1702	G	N9-C4	-9.00	1.30	1.38
59	A5	2207	A	C6-N1	-9.00	1.29	1.35
59	A5	795	A	N3-C4	-9.00	1.29	1.34
59	A5	2785	C	N3-C4	-9.00	1.27	1.33
56	A8	23	G	C5-C4	-9.00	1.32	1.38
59	A5	3591	A	N9-C4	-8.99	1.32	1.37
59	A5	794	G	N9-C8	-8.99	1.31	1.37
59	A5	3869	A	N9-C4	-8.98	1.32	1.37
59	A5	377	U	N1-C6	-8.98	1.29	1.38
59	A5	2715	C	C2-N3	-8.98	1.28	1.35
59	A5	3411	C	N1-C6	-8.98	1.31	1.37
59	A5	60	G	C5-C4	-8.97	1.32	1.38
59	A5	1115	A	C8-N7	-8.97	1.25	1.31
59	A5	1383	A	P-O5'	8.97	1.68	1.59
59	A5	2570	C	N3-C4	-8.97	1.27	1.33
59	A5	3514	C	C2-O2	-8.97	1.16	1.24
59	A5	1616	G	C6-N1	-8.97	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2513	G	C2-N3	-8.97	1.25	1.32
59	A5	1667	U	C2-N3	-8.97	1.31	1.37
59	A5	797	A	N7-C5	-8.96	1.33	1.39
59	A5	3628	G	N7-C5	-8.96	1.33	1.39
59	A5	2738	C	N3-C4	-8.96	1.27	1.33
59	A5	1649	G	N7-C5	-8.96	1.33	1.39
59	A5	1696	A	C5-C6	-8.96	1.32	1.41
59	A5	3487	A	N9-C4	-8.96	1.32	1.37
59	A5	103	A	N7-C5	-8.95	1.33	1.39
59	A5	796	A	N7-C5	-8.95	1.33	1.39
59	A5	1057	G	C5-C4	-8.95	1.32	1.38
59	A5	1363	G	C5-C4	-8.95	1.32	1.38
59	A5	3754	C	N1-C6	-8.95	1.31	1.37
58	B2	1970	U	C2-N3	-8.95	1.31	1.37
58	B2	111	A	N9-C4	-8.95	1.32	1.37
59	A5	3538	G	C5-C4	-8.95	1.32	1.38
59	A5	2739	A	N9-C4	-8.94	1.32	1.37
59	A5	1083	A	N9-C4	-8.94	1.32	1.37
59	A5	3260	G	N3-C4	-8.93	1.29	1.35
59	A5	2241	U	C2-N3	-8.93	1.31	1.37
59	A5	2158	U	N1-C2	-8.92	1.30	1.38
59	A5	2529	G	C2-N3	-8.92	1.25	1.32
59	A5	2774	G	N7-C5	-8.92	1.33	1.39
59	A5	3403	G	N9-C8	-8.92	1.31	1.37
59	A5	1680	U	C2-N3	-8.91	1.31	1.37
59	A5	2755	G	N9-C8	-8.91	1.31	1.37
59	A5	3544	G	N9-C8	-8.91	1.31	1.37
59	A5	3474	G	C2-N3	-8.91	1.25	1.32
59	A5	807	A	N7-C5	-8.91	1.33	1.39
59	A5	1755	U	N1-C2	-8.91	1.30	1.38
59	A5	3583	C	N1-C6	-8.91	1.31	1.37
59	A5	378	G	C8-N7	-8.90	1.25	1.30
59	A5	1129	A	C5-C4	-8.90	1.32	1.38
59	A5	2805	C	N1-C6	-8.90	1.31	1.37
59	A5	3446	G	C5-C4	-8.90	1.32	1.38
59	A5	1795	A	C5-C6	-8.90	1.33	1.41
59	A5	2526	A	C5-C6	-8.90	1.33	1.41
59	A5	1070	G	N9-C8	-8.89	1.31	1.37
59	A5	1525	G	N1-C2	-8.89	1.30	1.37
59	A5	2564	U	C2-N3	-8.89	1.31	1.37
59	A5	3544	G	C5-C4	-8.89	1.32	1.38
58	B2	319	C	N1-C6	-8.89	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	102	G	N7-C5	-8.89	1.33	1.39
59	A5	3630	C	C4-C5	-8.89	1.35	1.43
56	A8	101	A	N9-C4	-8.88	1.32	1.37
59	A5	786	C	N3-C4	-8.88	1.27	1.33
59	A5	1029	C	N3-C4	-8.88	1.27	1.33
59	A5	2734	A	N7-C5	-8.88	1.33	1.39
59	A5	1872	A	N9-C4	-8.88	1.32	1.37
59	A5	2167	G	C8-N7	-8.88	1.25	1.30
59	A5	3628	G	N9-C8	-8.88	1.31	1.37
59	A5	308	G	N9-C8	-8.88	1.31	1.37
59	A5	49	A	N9-C4	-8.87	1.32	1.37
59	A5	3349	A	C6-N1	-8.87	1.29	1.35
59	A5	1036	A	N3-C4	-8.87	1.29	1.34
59	A5	2172	C	N1-C2	-8.86	1.31	1.40
59	A5	549	A	N9-C4	-8.86	1.32	1.37
59	A5	1353	G	C8-N7	-8.86	1.25	1.30
59	A5	807	A	C5-C4	-8.86	1.32	1.38
59	A5	3262	A	N9-C4	-8.86	1.32	1.37
59	A5	803	A	C6-N1	-8.85	1.29	1.35
59	A5	1643	G	C8-N7	-8.85	1.25	1.30
58	B2	632	G	N7-C5	-8.84	1.33	1.39
59	A5	92	A	C6-N1	-8.84	1.29	1.35
59	A5	1614	A	C5-C4	-8.84	1.32	1.38
59	A5	3480	U	N3-C4	-8.84	1.30	1.38
59	A5	1753	G	N7-C5	-8.84	1.33	1.39
59	A5	304	U	C4-C5	-8.84	1.35	1.43
59	A5	1666	A	N7-C5	-8.84	1.33	1.39
59	A5	3445	C	N3-C4	-8.84	1.27	1.33
59	A5	2243	G	C6-N1	-8.84	1.33	1.39
55	A7	93	G	C2-N3	-8.83	1.25	1.32
59	A5	1365	U	C2-N3	-8.83	1.31	1.37
58	B2	1847	A	N9-C4	-8.83	1.32	1.37
59	A5	1171	G	C8-N7	-8.83	1.25	1.30
59	A5	1356	G	C5-C4	-8.83	1.32	1.38
56	A8	36	A	C5-C6	-8.83	1.33	1.41
59	A5	1020	A	C5-C4	-8.83	1.32	1.38
56	A8	24	G	C6-N1	-8.82	1.33	1.39
59	A5	3402	C	N3-C4	-8.82	1.27	1.33
59	A5	1106	A	N3-C4	-8.82	1.29	1.34
59	A5	2516	U	C2-N3	-8.82	1.31	1.37
59	A5	3409	G	N9-C8	-8.82	1.31	1.37
59	A5	74	A	N9-C4	-8.81	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	102	G	N1-C2	-8.81	1.30	1.37
59	A5	1692	G	N7-C5	-8.81	1.33	1.39
59	A5	1790	A	N9-C4	-8.81	1.32	1.37
59	A5	1110	G	N7-C5	-8.81	1.33	1.39
59	A5	1009	G	N1-C2	-8.81	1.30	1.37
59	A5	2737	C	N3-C4	-8.81	1.27	1.33
56	A8	22	C	N1-C6	-8.81	1.31	1.37
59	A5	1699	A	C5-C6	8.81	1.49	1.41
59	A5	1622	U	C2-N3	-8.80	1.31	1.37
59	A5	1711	C	N1-C6	-8.80	1.31	1.37
59	A5	2557	C	N3-C4	-8.80	1.27	1.33
59	A5	2736	A	N3-C4	-8.80	1.29	1.34
59	A5	2208	G	C2-N3	-8.79	1.25	1.32
59	A5	1140	G	C8-N7	-8.79	1.25	1.30
59	A5	2760	G	C2-N3	-8.79	1.25	1.32
59	A5	3884	A	C5-C4	-8.79	1.32	1.38
59	A5	2206	U	C4-C5	-8.79	1.35	1.43
59	A5	380	G	N7-C5	-8.79	1.33	1.39
59	A5	1521	G	N9-C4	-8.79	1.30	1.38
59	A5	1134	G	C5-C6	-8.78	1.33	1.42
59	A5	3173	U	N3-C4	-8.78	1.30	1.38
59	A5	3520	U	C2-N3	-8.78	1.31	1.37
59	A5	365	A	N7-C5	-8.78	1.33	1.39
59	A5	457	A	N9-C4	8.78	1.43	1.37
59	A5	1036	A	N7-C5	-8.78	1.33	1.39
59	A5	67	A	C5-C6	-8.77	1.33	1.41
59	A5	1021	U	C2-N3	-8.77	1.31	1.37
59	A5	1736	G	N1-C2	-8.77	1.30	1.37
59	A5	3600	G	N7-C5	-8.77	1.33	1.39
59	A5	283	A	N9-C4	8.76	1.43	1.37
59	A5	1390	C	N1-C6	-8.76	1.31	1.37
59	A5	2548	G	C5-C4	-8.76	1.32	1.38
59	A5	2683	G	N7-C5	-8.76	1.33	1.39
59	A5	2790	G	C6-N1	-8.76	1.33	1.39
59	A5	989	A	C6-N1	-8.76	1.29	1.35
59	A5	546	G	N7-C5	-8.76	1.33	1.39
59	A5	1057	G	N7-C5	-8.76	1.33	1.39
59	A5	1670	G	C8-N7	-8.76	1.25	1.30
59	A5	1715	G	N9-C4	-8.76	1.30	1.38
59	A5	1722	U	C2-N3	-8.76	1.31	1.37
4	CB	253	CYS	CB-SG	-8.75	1.67	1.82
59	A5	1023	C	C4-C5	-8.75	1.35	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3342	C	N1-C6	-8.75	1.31	1.37
59	A5	1374	C	N3-C4	-8.75	1.27	1.33
59	A5	2173	C	N1-C6	-8.75	1.31	1.37
59	A5	3521	A	C5-C4	-8.75	1.32	1.38
59	A5	543	A	N7-C5	-8.74	1.34	1.39
59	A5	3318	A	N9-C4	-8.74	1.32	1.37
59	A5	3516	C	N3-C4	-8.74	1.27	1.33
59	A5	3597	C	C4-C5	-8.74	1.35	1.43
59	A5	818	A	C5-C4	-8.73	1.32	1.38
59	A5	1632	A	N9-C4	-8.73	1.32	1.37
59	A5	3176	C	N1-C6	-8.73	1.31	1.37
59	A5	363	G	N9-C8	-8.73	1.31	1.37
59	A5	3475	U	C2-N3	-8.73	1.31	1.37
59	A5	3234	A	N9-C4	-8.73	1.32	1.37
59	A5	102	G	C5-C4	-8.72	1.32	1.38
59	A5	2520	U	N3-C4	-8.72	1.30	1.38
59	A5	3155	G	C6-N1	-8.72	1.33	1.39
59	A5	3406	G	N3-C4	-8.72	1.29	1.35
59	A5	1271	G	C5-C4	-8.72	1.32	1.38
59	A5	1694	A	N7-C5	-8.72	1.34	1.39
59	A5	2185	U	N3-C4	-8.72	1.30	1.38
59	A5	2700	C	N1-C2	-8.72	1.31	1.40
58	B2	1971	A	N9-C4	-8.71	1.32	1.37
59	A5	2167	G	N7-C5	-8.71	1.34	1.39
59	A5	3616	G	N1-C2	-8.71	1.30	1.37
59	A5	784	G	C5-C4	-8.71	1.32	1.38
59	A5	446	C	N3-C4	-8.71	1.27	1.33
59	A5	794	G	C5-C6	-8.71	1.33	1.42
59	A5	1087	G	C2-N3	-8.71	1.25	1.32
59	A5	2199	A	C5-C4	-8.71	1.32	1.38
59	A5	1543	C	N3-C4	-8.70	1.27	1.33
59	A5	2563	G	C8-N7	-8.70	1.25	1.30
59	A5	1106	A	C6-N1	-8.70	1.29	1.35
59	A5	2214	G	C5-C4	-8.70	1.32	1.38
59	A5	3877	G	C6-N1	-8.70	1.33	1.39
59	A5	442	A	C5-C6	-8.70	1.33	1.41
59	A5	2218	G	N7-C5	-8.70	1.34	1.39
59	A5	2234	C	C4-C5	-8.70	1.35	1.43
59	A5	1141	G	C2-N3	-8.69	1.25	1.32
59	A5	1748	C	N3-C4	-8.69	1.27	1.33
59	A5	3482	G	C5-C6	-8.69	1.33	1.42
59	A5	1385	G	N7-C5	-8.69	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	24	G	N7-C5	-8.69	1.34	1.39
59	A5	789	G	C8-N7	-8.69	1.25	1.30
59	A5	1110	G	N9-C8	-8.69	1.31	1.37
59	A5	1123	C	N1-C2	-8.69	1.31	1.40
59	A5	3521	A	C6-N1	-8.69	1.29	1.35
59	A5	1071	U	N3-C4	-8.68	1.30	1.38
59	A5	379	A	N9-C4	-8.68	1.32	1.37
59	A5	1141	G	N3-C4	-8.68	1.29	1.35
59	A5	3409	G	C5-C4	-8.68	1.32	1.38
59	A5	415	A	C5-C4	-8.67	1.32	1.38
59	A5	1159	C	N1-C6	-8.67	1.31	1.37
59	A5	823	U	C2-N3	-8.67	1.31	1.37
59	A5	1060	G	N7-C5	-8.67	1.34	1.39
59	A5	1387	G	C8-N7	-8.67	1.25	1.30
59	A5	3632	G	N7-C5	-8.67	1.34	1.39
59	A5	1682	G	C5-C4	-8.67	1.32	1.38
59	A5	3619	U	C2-N3	-8.66	1.31	1.37
59	A5	1618	A	C8-N7	-8.66	1.25	1.31
59	A5	1624	G	N1-C2	-8.66	1.30	1.37
59	A5	3477	A	C5-C4	-8.66	1.32	1.38
59	A5	816	A	N9-C4	-8.66	1.32	1.37
59	A5	1174	G	N9-C8	-8.66	1.31	1.37
59	A5	2513	G	C5-C4	-8.66	1.32	1.38
59	A5	3402	C	C2-N3	-8.66	1.28	1.35
59	A5	3479	C	N1-C6	-8.66	1.31	1.37
59	A5	3591	A	C5-C6	-8.66	1.33	1.41
59	A5	3412	U	N1-C6	-8.66	1.30	1.38
59	A5	51	U	N1-C2	-8.65	1.30	1.38
59	A5	2733	G	C8-N7	-8.65	1.25	1.30
59	A5	93	G	C8-N7	-8.65	1.25	1.30
59	A5	1013	G	C5-C4	-8.65	1.32	1.38
59	A5	1075	G	C2-N3	-8.65	1.25	1.32
59	A5	1598	A	N9-C4	-8.65	1.32	1.37
59	A5	1320	U	C4-C5	-8.64	1.35	1.43
59	A5	1374	C	N1-C2	-8.64	1.31	1.40
59	A5	1733	A	N3-C4	-8.64	1.29	1.34
59	A5	3142	G	C8-N7	-8.64	1.25	1.30
59	A5	2736	A	C8-N7	-8.64	1.25	1.31
59	A5	1109	G	C5-C4	-8.64	1.32	1.38
59	A5	1774	C	N1-C6	-8.64	1.31	1.37
59	A5	3487	A	C5-C6	-8.64	1.33	1.41
59	A5	2530	C	C2-N3	-8.63	1.28	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1789	A	N9-C4	-8.63	1.32	1.37
56	A8	12	G	C5-C4	-8.63	1.32	1.38
56	A8	108	A	N7-C5	-8.63	1.34	1.39
59	A5	441	A	C5-C6	-8.62	1.33	1.41
59	A5	2655	C	C4-C5	-8.62	1.36	1.43
59	A5	2744	C	N3-C4	-8.62	1.27	1.33
59	A5	3330	C	N1-C6	-8.62	1.31	1.37
59	A5	1020	A	C6-N6	-8.62	1.27	1.33
59	A5	1368	A	C5-C4	-8.62	1.32	1.38
59	A5	1639	U	C2-N3	-8.62	1.31	1.37
59	A5	2214	G	C6-N1	-8.62	1.33	1.39
55	A7	91	C	N3-C4	-8.61	1.27	1.33
59	A5	1017	A	C6-N1	-8.61	1.29	1.35
59	A5	1068	C	C4-C5	-8.61	1.36	1.43
59	A5	2751	A	N3-C4	-8.61	1.29	1.34
59	A5	1093	C	C4-C5	-8.61	1.36	1.43
59	A5	1157	C	C4-C5	-8.61	1.36	1.43
59	A5	374	C	C4-C5	-8.61	1.36	1.43
59	A5	806	A	C5-C4	-8.61	1.32	1.38
59	A5	2111	A	N9-C4	-8.61	1.32	1.37
59	A5	3347	G	N1-C2	-8.61	1.30	1.37
59	A5	355	G	N9-C8	-8.60	1.31	1.37
58	B2	1190	G	C5-C4	-8.60	1.32	1.38
59	A5	63	G	N7-C5	-8.60	1.34	1.39
59	A5	1007	A	N9-C8	-8.60	1.30	1.37
59	A5	793	U	N1-C6	-8.60	1.30	1.38
59	A5	1691	A	N9-C4	-8.60	1.32	1.37
59	A5	2569	U	N1-C2	-8.60	1.30	1.38
41	Ce	27	TYR	CD2-CE2	-8.59	1.26	1.39
59	A5	1087	G	C6-N1	-8.59	1.33	1.39
59	A5	2785	C	C4-C5	-8.59	1.36	1.43
59	A5	22	A	N9-C4	-8.59	1.32	1.37
59	A5	39	A	C6-N1	-8.59	1.29	1.35
59	A5	2769	G	C5-C4	-8.59	1.32	1.38
25	Ca	57	VAL	CB-CG1	-8.58	1.34	1.52
59	A5	2698	A	C6-N1	-8.58	1.29	1.35
59	A5	2537	A	C5-C4	-8.58	1.32	1.38
59	A5	322	G	C8-N7	-8.58	1.25	1.30
59	A5	801	G	C8-N7	-8.58	1.25	1.30
59	A5	3499	G	C2-N3	-8.58	1.25	1.32
59	A5	2212	A	N7-C5	-8.58	1.34	1.39
59	A5	1548	C	C4-C5	-8.57	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2776	A	C8-N7	-8.57	1.25	1.31
59	A5	1614	A	N7-C5	-8.57	1.34	1.39
59	A5	2151	A	C6-N1	-8.57	1.29	1.35
59	A5	1368	A	N7-C5	-8.57	1.34	1.39
59	A5	2248	A	C5-C4	-8.57	1.32	1.38
59	A5	792	U	C4-C5	-8.57	1.35	1.43
59	A5	2687	A	C5-C4	-8.57	1.32	1.38
59	A5	1409	G	N7-C5	-8.56	1.34	1.39
59	A5	1700	U	N1-C2	-8.56	1.30	1.38
59	A5	3414	U	C2-N3	-8.56	1.31	1.37
59	A5	986	A	N9-C4	-8.56	1.32	1.37
59	A5	3413	C	C4-C5	-8.56	1.36	1.43
56	A8	23	G	N9-C8	-8.56	1.31	1.37
59	A5	1695	A	N7-C5	-8.56	1.34	1.39
59	A5	299	G	C8-N7	-8.56	1.25	1.30
59	A5	363	G	C8-N7	-8.55	1.25	1.30
59	A5	1676	A	N7-C5	-8.55	1.34	1.39
59	A5	2106	C	N3-C4	-8.55	1.27	1.33
59	A5	1353	G	C5-C4	-8.55	1.32	1.38
59	A5	2110	A	C5-C4	-8.55	1.32	1.38
59	A5	1384	C	N3-C4	-8.55	1.27	1.33
59	A5	1391	A	N9-C4	-8.55	1.32	1.37
59	A5	799	A	N7-C5	-8.54	1.34	1.39
59	A5	1082	A	N7-C5	-8.54	1.34	1.39
59	A5	1871	A	C5-C4	-8.54	1.32	1.38
59	A5	2513	G	C8-N7	-8.54	1.25	1.30
59	A5	1366	G	N3-C4	-8.54	1.29	1.35
56	A8	29	U	C4-C5	-8.54	1.35	1.43
59	A5	1718	G	N9-C4	8.54	1.44	1.38
59	A5	1788	G	N9-C8	-8.54	1.31	1.37
59	A5	322	G	C2-N3	-8.53	1.25	1.32
59	A5	2529	G	C6-N1	-8.53	1.33	1.39
59	A5	1083	A	C5-C4	-8.53	1.32	1.38
56	A8	100	G	N1-C2	-8.52	1.30	1.37
59	A5	1367	A	N9-C4	-8.52	1.32	1.37
59	A5	104	A	C6-N1	-8.52	1.29	1.35
59	A5	2567	U	C4-C5	-8.52	1.35	1.43
59	A5	1347	A	N9-C4	-8.52	1.32	1.37
59	A5	2167	G	N9-C8	-8.52	1.31	1.37
59	A5	2674	A	C5-C4	-8.51	1.32	1.38
59	A5	1361	G	C6-N1	-8.51	1.33	1.39
59	A5	3410	G	C6-N1	-8.51	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2769	G	C6-N1	-8.51	1.33	1.39
59	A5	1036	A	N9-C4	-8.50	1.32	1.37
59	A5	1548	C	C5-C6	-8.50	1.27	1.34
59	A5	1612	G	C5-C4	-8.50	1.32	1.38
56	A8	8	A	N9-C4	-8.50	1.32	1.37
59	A5	355	G	C6-N1	-8.50	1.33	1.39
59	A5	2717	C	C4-C5	-8.50	1.36	1.43
59	A5	1170	U	C2-N3	-8.50	1.31	1.37
59	A5	1392	A	N3-C4	-8.50	1.29	1.34
59	A5	1614	A	C6-N1	-8.49	1.29	1.35
59	A5	794	G	N1-C2	-8.49	1.30	1.37
59	A5	1393	A	C5-C4	-8.49	1.32	1.38
59	A5	107	G	N7-C5	-8.49	1.34	1.39
59	A5	1070	G	C8-N7	-8.49	1.25	1.30
33	CP	57	CYS	CB-SG	-8.48	1.67	1.82
59	A5	2216	A	C6-N1	-8.48	1.29	1.35
59	A5	1153	G	N1-C2	-8.48	1.30	1.37
59	A5	1149	C	C4-C5	-8.48	1.36	1.43
59	A5	1108	G	N9-C8	-8.47	1.31	1.37
59	A5	1738	U	C2-N3	-8.47	1.31	1.37
59	A5	3345	A	N7-C5	-8.47	1.34	1.39
59	A5	2524	A	N7-C5	-8.47	1.34	1.39
59	A5	3728	A	C5-C4	-8.47	1.32	1.38
59	A5	2792	G	C8-N7	-8.47	1.25	1.30
59	A5	1992	G	N7-C5	-8.47	1.34	1.39
59	A5	2208	G	N1-C2	-8.46	1.30	1.37
59	A5	59	G	C8-N7	-8.46	1.25	1.30
59	A5	805	C	C4-C5	-8.46	1.36	1.43
59	A5	2716	C	N1-C2	-8.46	1.31	1.40
26	CN	106	VAL	CB-CG2	-8.46	1.35	1.52
59	A5	299	G	N9-C8	-8.46	1.31	1.37
30	CR	120	TYR	CB-CG	-8.46	1.39	1.51
59	A5	839	A	C5-C4	-8.46	1.32	1.38
59	A5	3714	U	C4-C5	-8.45	1.35	1.43
56	A8	107	U	C4-C5	-8.45	1.35	1.43
59	A5	2781	G	C6-N1	-8.45	1.33	1.39
59	A5	1331	G	C2-N3	-8.45	1.25	1.32
59	A5	1082	A	N9-C4	-8.45	1.32	1.37
59	A5	2622	A	N7-C5	-8.45	1.34	1.39
59	A5	1735	G	C2-N3	-8.45	1.25	1.32
59	A5	3581	G	C2-N3	-8.45	1.25	1.32
58	B2	1983	G	C8-N7	-8.44	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2703	G	C5-C4	-8.44	1.32	1.38
59	A5	988	C	C4-C5	-8.44	1.36	1.43
59	A5	1150	G	N9-C8	-8.44	1.31	1.37
59	A5	2557	C	C4-C5	-8.44	1.36	1.43
59	A5	2713	G	N7-C5	-8.44	1.34	1.39
59	A5	3236	A	C5-C6	-8.44	1.33	1.41
59	A5	363	G	C2-N3	-8.44	1.26	1.32
59	A5	1027	A	C5-C6	-8.44	1.33	1.41
59	A5	1372	A	N9-C4	-8.44	1.32	1.37
59	A5	2218	G	N9-C8	-8.44	1.31	1.37
59	A5	3321	A	N9-C4	-8.44	1.32	1.37
59	A5	546	G	N9-C4	-8.43	1.31	1.38
59	A5	998	G	N1-C2	-8.43	1.31	1.37
59	A5	2800	C	N3-C4	-8.43	1.28	1.33
59	A5	3615	G	C8-N7	-8.43	1.25	1.30
59	A5	1726	G	C5-C6	-8.43	1.33	1.42
2	CA	207	VAL	CB-CG2	-8.42	1.35	1.52
59	A5	1685	G	C8-N7	-8.42	1.25	1.30
59	A5	1747	A	C6-N1	-8.42	1.29	1.35
59	A5	2731	G	C8-N7	-8.42	1.25	1.30
59	A5	2791	A	N7-C5	-8.42	1.34	1.39
59	A5	1006	A	N7-C5	-8.42	1.34	1.39
59	A5	1700	U	C4-C5	-8.42	1.35	1.43
59	A5	2767	U	N3-C4	-8.42	1.30	1.38
56	A8	26	U	C2-N3	-8.41	1.31	1.37
59	A5	363	G	N1-C2	-8.41	1.31	1.37
59	A5	300	A	N7-C5	-8.41	1.34	1.39
59	A5	1329	G	N3-C4	-8.41	1.29	1.35
59	A5	2726	A	C6-N1	-8.41	1.29	1.35
59	A5	2731	G	N9-C8	-8.41	1.31	1.37
59	A5	2744	C	C5-C6	-8.41	1.27	1.34
59	A5	3497	G	C6-N1	-8.41	1.33	1.39
59	A5	1694	A	C5-C4	-8.41	1.32	1.38
59	A5	791	C	C2-N3	-8.41	1.29	1.35
59	A5	3167	A	C8-N7	-8.41	1.25	1.31
59	A5	1142	U	C4-C5	-8.41	1.35	1.43
59	A5	3155	G	N9-C8	-8.41	1.31	1.37
59	A5	367	A	C6-N1	-8.40	1.29	1.35
59	A5	1145	C	N1-C2	-8.40	1.31	1.40
59	A5	1729	G	C5-C4	-8.40	1.32	1.38
26	CN	129	TYR	CB-CG	-8.40	1.39	1.51
59	A5	366	A	N9-C8	-8.40	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1066	A	N9-C8	-8.40	1.31	1.37
59	A5	3160	A	N9-C4	-8.40	1.32	1.37
59	A5	3347	G	C5-C6	-8.40	1.33	1.42
59	A5	2773	G	C5-C4	-8.40	1.32	1.38
59	A5	1679	U	C5-C6	-8.40	1.26	1.34
59	A5	46	C	C4-C5	-8.40	1.36	1.43
59	A5	97	C	N1-C6	-8.40	1.32	1.37
59	A5	1134	G	N1-C2	-8.40	1.31	1.37
59	A5	1138	C	N1-C6	-8.40	1.32	1.37
59	A5	1694	A	N3-C4	-8.40	1.29	1.34
59	A5	94	C	N3-C4	-8.39	1.28	1.33
59	A5	154	A	N9-C4	-8.39	1.32	1.37
59	A5	1410	A	N3-C4	-8.39	1.29	1.34
59	A5	2559	C	C5-C6	-8.39	1.27	1.34
59	A5	2739	A	C5-C6	-8.39	1.33	1.41
59	A5	1611	G	C5-C4	-8.39	1.32	1.38
59	A5	2753	G	N9-C8	-8.39	1.31	1.37
56	A8	15	G	C8-N7	-8.38	1.25	1.30
59	A5	1334	A	C5-C4	-8.38	1.32	1.38
59	A5	2698	A	N9-C4	-8.38	1.32	1.37
59	A5	1014	U	C2-N3	-8.38	1.31	1.37
56	A8	35	G	C6-N1	-8.38	1.33	1.39
59	A5	1326	A	C6-N6	-8.38	1.27	1.33
59	A5	2794	U	C2-N3	-8.38	1.31	1.37
59	A5	100	G	C6-N1	-8.38	1.33	1.39
59	A5	3166	C	N3-C4	-8.38	1.28	1.33
59	A5	3506	U	C4-C5	-8.38	1.36	1.43
59	A5	95	G	C6-N1	-8.38	1.33	1.39
59	A5	376	G	C5-C6	-8.37	1.33	1.42
59	A5	1736	G	N7-C5	-8.37	1.34	1.39
59	A5	1091	G	C5-C4	-8.37	1.32	1.38
59	A5	2213	G	N1-C2	-8.37	1.31	1.37
59	A5	352	U	C2-N3	-8.37	1.31	1.37
59	A5	1323	C	C5-C6	-8.36	1.27	1.34
59	A5	1120	A	C8-N7	-8.36	1.25	1.31
59	A5	1536	U	C4-C5	-8.36	1.36	1.43
59	A5	36	U	C2-N3	-8.35	1.31	1.37
59	A5	1164	G	C5-C6	-8.35	1.33	1.42
59	A5	3497	G	C8-N7	-8.35	1.25	1.30
59	A5	253	A	N9-C4	-8.35	1.32	1.37
59	A5	1669	G	C5-C4	-8.35	1.32	1.38
59	A5	1779	G	C5-C4	-8.35	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2528	A	N7-C5	-8.35	1.34	1.39
59	A5	1597	A	N9-C4	-8.35	1.32	1.37
59	A5	3147	A	N7-C5	-8.35	1.34	1.39
59	A5	108	A	N3-C4	-8.34	1.29	1.34
59	A5	1022	A	C8-N7	-8.34	1.25	1.31
59	A5	1674	A	N7-C5	-8.34	1.34	1.39
59	A5	3173	U	C4-O4	-8.34	1.17	1.23
59	A5	3476	G	C2-N2	-8.34	1.26	1.34
59	A5	3542	C	C4-C5	-8.34	1.36	1.43
59	A5	339	C	N1-C6	-8.34	1.32	1.37
59	A5	804	C	C2-N3	-8.34	1.29	1.35
59	A5	3510	U	C4-O4	-8.34	1.17	1.23
59	A5	1350	A	N9-C4	-8.34	1.32	1.37
59	A5	385	A	C5-C6	-8.33	1.33	1.41
59	A5	1162	A	C5-C4	-8.33	1.32	1.38
59	A5	3236	A	N3-C4	-8.33	1.29	1.34
59	A5	1092	U	C2-N3	-8.33	1.31	1.37
59	A5	108	A	N7-C5	-8.33	1.34	1.39
59	A5	3416	C	N1-C6	-8.33	1.32	1.37
59	A5	1103	U	C2-N3	-8.33	1.31	1.37
59	A5	116	U	C2-N3	-8.32	1.31	1.37
59	A5	808	G	C8-N7	-8.32	1.25	1.30
59	A5	2225	A	C5-C4	-8.32	1.32	1.38
59	A5	2711	C	N3-C4	-8.32	1.28	1.33
59	A5	3729	A	N9-C4	-8.32	1.32	1.37
59	A5	3628	G	C5-C4	-8.32	1.32	1.38
55	A7	82	G	C6-N1	-8.32	1.33	1.39
59	A5	1137	G	C5-C4	-8.32	1.32	1.38
59	A5	1603	A	N9-C4	-8.32	1.32	1.37
59	A5	35	C	N3-C4	-8.32	1.28	1.33
59	A5	2759	G	C5-C6	-8.32	1.34	1.42
59	A5	3150	G	N7-C5	-8.31	1.34	1.39
59	A5	796	A	N3-C4	-8.31	1.29	1.34
59	A5	1726	G	C2-N3	-8.31	1.26	1.32
59	A5	2730	A	N7-C5	-8.31	1.34	1.39
59	A5	1152	A	N9-C4	-8.31	1.32	1.37
59	A5	1387	G	N9-C8	-8.31	1.32	1.37
59	A5	1542	C	N1-C6	-8.31	1.32	1.37
59	A5	2098	C	N1-C6	-8.31	1.32	1.37
59	A5	2243	G	N1-C2	-8.31	1.31	1.37
59	A5	1115	A	N7-C5	-8.30	1.34	1.39
59	A5	2207	A	N7-C5	-8.30	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2531	A	N9-C4	-8.30	1.32	1.37
59	A5	828	G	C8-N7	-8.30	1.25	1.30
59	A5	1670	G	C5-C4	-8.30	1.32	1.38
59	A5	3335	A	N9-C4	-8.30	1.32	1.37
59	A5	445	C	N3-C4	-8.30	1.28	1.33
59	A5	1114	A	N3-C4	-8.30	1.29	1.34
59	A5	2161	G	C2-N3	-8.30	1.26	1.32
59	A5	2798	C	C4-C5	-8.29	1.36	1.43
59	A5	3348	G	N9-C8	-8.29	1.32	1.37
2	CA	169	VAL	CB-CG1	-8.29	1.35	1.52
56	A8	40	A	N7-C5	-8.29	1.34	1.39
59	A5	2575	C	N3-C4	-8.29	1.28	1.33
59	A5	357	C	N3-C4	-8.29	1.28	1.33
59	A5	2747	G	N9-C4	-8.29	1.31	1.38
59	A5	2700	C	N3-C4	-8.29	1.28	1.33
59	A5	3417	C	C4-C5	-8.29	1.36	1.43
59	A5	3631	C	N3-C4	-8.29	1.28	1.33
59	A5	1327	G	C2-N3	-8.28	1.26	1.32
56	A8	43	A	N7-C5	-8.28	1.34	1.39
59	A5	820	A	C8-N7	-8.28	1.25	1.31
59	A5	1672	A	C6-N1	-8.28	1.29	1.35
59	A5	1347	A	N9-C8	-8.28	1.31	1.37
58	B2	1187	U	C2-N3	-8.28	1.31	1.37
59	A5	1389	C	C2-N3	-8.28	1.29	1.35
59	A5	2214	G	C2-N3	-8.28	1.26	1.32
2	CA	199	VAL	CB-CG2	-8.27	1.35	1.52
59	A5	95	G	N1-C2	-8.27	1.31	1.37
59	A5	1136	A	C5-C4	-8.27	1.32	1.38
59	A5	3524	G	C6-N1	-8.27	1.33	1.39
59	A5	1121	A	C6-N1	-8.27	1.29	1.35
59	A5	1017	A	C5-C4	-8.27	1.32	1.38
59	A5	2777	A	C6-N1	-8.27	1.29	1.35
59	A5	799	A	C5-C6	-8.27	1.33	1.41
59	A5	2211	A	N9-C4	-8.27	1.32	1.37
59	A5	1027	A	C5-C4	-8.26	1.32	1.38
59	A5	3499	G	C5-C4	-8.26	1.32	1.38
59	A5	1094	A	C5-C4	-8.26	1.32	1.38
59	A5	2539	G	N7-C5	-8.25	1.34	1.39
56	A8	23	G	N3-C4	-8.25	1.29	1.35
59	A5	70	A	C5-C4	-8.25	1.32	1.38
59	A5	1731	G	N3-C4	-8.25	1.29	1.35
59	A5	1753	G	C8-N7	-8.25	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1155	U	C2-N3	-8.24	1.31	1.37
59	A5	2168	G	C2-N3	-8.24	1.26	1.32
59	A5	2525	C	C2-N3	-8.24	1.29	1.35
59	A5	553	A	N7-C5	-8.24	1.34	1.39
59	A5	1081	C	N3-C4	-8.24	1.28	1.33
59	A5	2723	A	C5-C6	-8.24	1.33	1.41
59	A5	3344	U	C4-O4	-8.23	1.17	1.23
59	A5	3498	A	N9-C8	-8.23	1.31	1.37
59	A5	820	A	C5-C4	-8.23	1.32	1.38
59	A5	987	G	C5-C4	-8.23	1.32	1.38
59	A5	1128	C	C5-C6	-8.23	1.27	1.34
59	A5	2514	U	C2-N3	-8.23	1.31	1.37
59	A5	442	A	N7-C5	-8.23	1.34	1.39
59	A5	2242	C	N1-C6	-8.23	1.32	1.37
59	A5	793	U	N3-C4	-8.23	1.31	1.38
59	A5	1872	A	C5-C6	-8.23	1.33	1.41
59	A5	353	G	C5-C4	-8.22	1.32	1.38
59	A5	1085	U	C4-C5	-8.22	1.36	1.43
59	A5	2687	A	N7-C5	-8.22	1.34	1.39
59	A5	784	G	N9-C8	-8.22	1.32	1.37
59	A5	295	G	C8-N7	-8.22	1.26	1.30
59	A5	1007	A	C8-N7	-8.22	1.25	1.31
59	A5	1715	G	N3-C4	-8.22	1.29	1.35
59	A5	1726	G	C6-N1	-8.22	1.33	1.39
59	A5	3615	G	N7-C5	-8.22	1.34	1.39
59	A5	1660	G	C5-C4	-8.22	1.32	1.38
59	A5	1266	A	N3-C4	-8.21	1.29	1.34
59	A5	2523	A	C6-N1	-8.21	1.29	1.35
59	A5	2786	U	C4-C5	-8.21	1.36	1.43
59	A5	3140	G	C6-N1	-8.21	1.33	1.39
59	A5	1675	G	C8-N7	-8.21	1.26	1.30
59	A5	1799	U	C4-C5	-8.21	1.36	1.43
59	A5	100	G	C5-C4	-8.20	1.32	1.38
59	A5	812	U	C4-C5	-8.20	1.36	1.43
59	A5	2711	C	N1-C6	-8.20	1.32	1.37
59	A5	3479	C	N3-C4	-8.20	1.28	1.33
59	A5	2207	A	N9-C4	-8.20	1.32	1.37
59	A5	2778	G	C8-N7	-8.20	1.26	1.30
59	A5	3477	A	N3-C4	-8.20	1.29	1.34
59	A5	106	A	C6-N1	-8.20	1.29	1.35
59	A5	1082	A	C6-N1	-8.20	1.29	1.35
59	A5	3594	A	N7-C5	-8.20	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1086	C	N1-C2	-8.19	1.31	1.40
59	A5	386	G	C5-C4	-8.19	1.32	1.38
59	A5	827	A	N7-C5	-8.19	1.34	1.39
59	A5	3446	G	N9-C8	-8.19	1.32	1.37
59	A5	1393	A	N7-C5	-8.19	1.34	1.39
59	A5	2496	A	C5-C4	-8.19	1.33	1.38
59	A5	3341	C	N1-C6	-8.19	1.32	1.37
56	A8	21	U	C2-N3	-8.19	1.32	1.37
59	A5	426	A	N7-C5	-8.19	1.34	1.39
59	A5	3141	A	C6-N1	-8.18	1.29	1.35
59	A5	1018	C	N1-C6	-8.18	1.32	1.37
59	A5	3518	A	C8-N7	-8.18	1.25	1.31
59	A5	1871	A	N9-C4	-8.17	1.32	1.37
59	A5	1875	G	C5-C4	-8.17	1.32	1.38
59	A5	1561	G	C5-C4	-8.17	1.32	1.38
59	A5	1619	C	N3-C4	-8.17	1.28	1.33
59	A5	1795	A	C6-N6	-8.17	1.27	1.33
59	A5	2220	C	N1-C6	-8.17	1.32	1.37
59	A5	2735	A	C5-C4	-8.17	1.33	1.38
59	A5	2755	G	C2-N3	-8.17	1.26	1.32
59	A5	1362	G	C2-N3	-8.16	1.26	1.32
59	A5	1623	G	C5-C4	-8.16	1.32	1.38
59	A5	2481	U	N1-C6	-8.16	1.30	1.38
59	A5	2689	G	N1-C2	-8.16	1.31	1.37
59	A5	2794	U	C4-C5	-8.16	1.36	1.43
59	A5	1608	G	C6-N1	-8.16	1.33	1.39
59	A5	2546	G	C8-N7	-8.16	1.26	1.30
59	A5	3488	G	C5-C4	-8.15	1.32	1.38
59	A5	1784	A	C5-C4	-8.15	1.33	1.38
59	A5	2201	U	N1-C2	-8.15	1.31	1.38
59	A5	2624	G	C5-C6	-8.15	1.34	1.42
59	A5	2797	A	C5-C6	-8.15	1.33	1.41
59	A5	27	A	N7-C5	-8.15	1.34	1.39
59	A5	852	C	N3-C4	-8.15	1.28	1.33
59	A5	1027	A	N7-C5	-8.15	1.34	1.39
59	A5	2254	U	C2-N3	-8.15	1.32	1.37
59	A5	2550	G	C2-N3	-8.15	1.26	1.32
56	A8	21	U	C4-O4	-8.14	1.17	1.23
56	A8	41	G	N9-C8	-8.14	1.32	1.37
59	A5	2513	G	N9-C8	-8.14	1.32	1.37
58	B2	1174	A	N3-C4	-8.14	1.29	1.34
58	B2	1211	C	N1-C6	-8.14	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1009	G	C5-C4	-8.14	1.32	1.38
59	A5	2731	G	N9-C4	-8.14	1.31	1.38
59	A5	1671	U	N1-C2	-8.14	1.31	1.38
59	A5	381	G	C5-C4	-8.14	1.32	1.38
59	A5	2703	G	N1-C2	-8.14	1.31	1.37
59	A5	2704	A	C5-C6	-8.14	1.33	1.41
59	A5	3637	A	N9-C4	-8.14	1.32	1.37
56	A8	100	G	C6-N1	-8.13	1.33	1.39
59	A5	1643	G	N7-C5	-8.13	1.34	1.39
59	A5	806	A	C8-N7	-8.13	1.25	1.31
59	A5	3519	C	N1-C2	-8.13	1.32	1.40
59	A5	1690	U	C4-O4	-8.13	1.17	1.23
59	A5	2735	A	N9-C8	-8.12	1.31	1.37
59	A5	53	A	N7-C5	-8.12	1.34	1.39
59	A5	2202	A	N7-C5	-8.12	1.34	1.39
59	A5	415	A	N3-C4	-8.12	1.29	1.34
59	A5	3476	G	N1-C2	-8.12	1.31	1.37
59	A5	99	A	N9-C4	-8.11	1.32	1.37
59	A5	2726	A	C8-N7	-8.12	1.25	1.31
59	A5	3945	A	N9-C4	-8.12	1.32	1.37
59	A5	1325	C	C5-C6	-8.11	1.27	1.34
59	A5	2695	A	N9-C4	-8.11	1.32	1.37
59	A5	2769	G	N1-C2	-8.11	1.31	1.37
59	A5	2772	G	N7-C5	-8.11	1.34	1.39
59	A5	376	G	N1-C2	-8.11	1.31	1.37
59	A5	2732	C	C2-N3	-8.11	1.29	1.35
59	A5	359	G	N1-C2	-8.10	1.31	1.37
59	A5	980	A	C6-N1	-8.10	1.29	1.35
59	A5	1259	A	N9-C4	-8.10	1.32	1.37
59	A5	1326	A	N7-C5	-8.10	1.34	1.39
59	A5	3411	C	C4-C5	-8.10	1.36	1.43
56	A8	16	A	C5-C4	-8.10	1.33	1.38
56	A8	39	A	N9-C4	-8.10	1.32	1.37
59	A5	62	G	C5-C4	-8.10	1.32	1.38
59	A5	427	A	C8-N7	-8.10	1.25	1.31
59	A5	2774	G	C5-C4	-8.10	1.32	1.38
59	A5	2784	C	C2-N3	-8.10	1.29	1.35
59	A5	1694	A	N9-C8	-8.10	1.31	1.37
59	A5	2719	A	N7-C5	-8.09	1.34	1.39
59	A5	2728	C	N3-C4	-8.09	1.28	1.33
59	A5	2775	A	C8-N7	-8.09	1.25	1.31
59	A5	360	A	N7-C5	-8.09	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1094	A	N3-C4	-8.09	1.29	1.34
59	A5	2734	A	C8-N7	-8.09	1.25	1.31
59	A5	829	U	N1-C2	-8.09	1.31	1.38
59	A5	448	A	N9-C4	-8.09	1.32	1.37
59	A5	1009	G	N7-C5	-8.09	1.34	1.39
59	A5	111	A	N9-C4	-8.08	1.33	1.37
59	A5	2160	C	N1-C6	-8.08	1.32	1.37
59	A5	2723	A	N9-C4	-8.08	1.32	1.37
59	A5	385	A	N9-C4	-8.08	1.33	1.37
59	A5	2548	G	N9-C8	-8.08	1.32	1.37
59	A5	3167	A	N9-C4	-8.08	1.33	1.37
59	A5	1684	G	C6-N1	-8.08	1.33	1.39
59	A5	2777	A	C5-C4	-8.08	1.33	1.38
59	A5	1736	G	N9-C4	-8.07	1.31	1.38
59	A5	2237	A	N9-C4	-8.07	1.33	1.37
59	A5	2717	C	N1-C6	-8.07	1.32	1.37
59	A5	3168	A	N7-C5	-8.07	1.34	1.39
59	A5	301	U	C4-O4	-8.07	1.17	1.23
59	A5	1665	C	C4-C5	-8.07	1.36	1.43
59	A5	2225	A	N7-C5	-8.07	1.34	1.39
59	A5	2500	G	N7-C5	-8.07	1.34	1.39
59	A5	3405	U	C2-N3	-8.07	1.32	1.37
59	A5	1612	G	N1-C2	-8.07	1.31	1.37
55	A7	82	G	C5-C4	-8.06	1.32	1.38
59	A5	2509	G	C8-N7	-8.06	1.26	1.30
59	A5	2621	A	N9-C4	-8.06	1.33	1.37
59	A5	425	A	N9-C8	-8.06	1.31	1.37
59	A5	1711	C	C4-C5	-8.06	1.36	1.43
59	A5	2776	A	C6-N1	-8.06	1.29	1.35
59	A5	1010	A	C5-C4	-8.06	1.33	1.38
59	A5	1066	A	C6-N1	-8.05	1.29	1.35
59	A5	1113	A	N9-C4	-8.05	1.33	1.37
59	A5	2198	G	N7-C5	-8.06	1.34	1.39
59	A5	3518	A	C6-N1	-8.06	1.29	1.35
59	A5	381	G	C6-N1	-8.05	1.33	1.39
59	A5	1162	A	C6-N1	-8.05	1.29	1.35
59	A5	1412	A	C8-N7	-8.05	1.25	1.31
59	A5	2759	G	C5-C4	-8.05	1.32	1.38
59	A5	3132	C	N1-C6	-8.05	1.32	1.37
59	A5	49	A	C8-N7	-8.05	1.25	1.31
59	A5	1116	G	N3-C4	-8.05	1.29	1.35
59	A5	3236	A	N9-C4	-8.04	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3579	C	N3-C4	-8.05	1.28	1.33
59	A5	3491	C	C4-C5	-8.04	1.36	1.43
59	A5	3883	G	C8-N7	-8.04	1.26	1.30
59	A5	1133	A	N7-C5	-8.04	1.34	1.39
59	A5	43	A	N9-C4	-8.04	1.33	1.37
59	A5	1009	G	C6-N1	-8.04	1.33	1.39
59	A5	2733	G	C6-N1	-8.04	1.33	1.39
80	CF	108	VAL	CB-CG1	-8.03	1.35	1.52
59	A5	787	C	C4-C5	-8.03	1.36	1.43
59	A5	3681	A	N9-C4	-8.03	1.33	1.37
59	A5	3403	G	N3-C4	-8.03	1.29	1.35
59	A5	3762	G	N9-C4	-8.03	1.31	1.38
59	A5	447	G	C5-C4	-8.02	1.32	1.38
59	A5	2555	G	N9-C8	-8.02	1.32	1.37
59	A5	2756	C	C4-C5	-8.02	1.36	1.43
59	A5	1000	G	C2-N3	-8.02	1.26	1.32
59	A5	1142	U	N3-C4	-8.02	1.31	1.38
59	A5	2173	C	C4-C5	-8.02	1.36	1.43
56	A8	16	A	C6-N1	-8.02	1.29	1.35
59	A5	237	G	N7-C5	-8.02	1.34	1.39
59	A5	1141	G	C8-N7	-8.02	1.26	1.30
59	A5	1644	C	C4-C5	-8.02	1.36	1.43
59	A5	986	A	N3-C4	-8.01	1.30	1.34
59	A5	2245	G	C5-C4	-8.01	1.32	1.38
59	A5	2695	A	C5-C4	-8.01	1.33	1.38
59	A5	59	G	C5-C4	-8.01	1.32	1.38
59	A5	1073	C	C2-N3	-8.01	1.29	1.35
59	A5	1330	G	C6-N1	-8.01	1.33	1.39
59	A5	1528	G	C5-C4	-8.01	1.32	1.38
59	A5	1608	G	C5-C4	-8.01	1.32	1.38
59	A5	27	A	C6-N1	-8.01	1.29	1.35
59	A5	1542	C	N3-C4	-8.01	1.28	1.33
59	A5	1414	C	C5-C6	-8.00	1.27	1.34
59	A5	1374	C	C2-N3	-8.00	1.29	1.35
59	A5	2511	C	N1-C6	-8.00	1.32	1.37
59	A5	1134	G	C8-N7	-8.00	1.26	1.30
59	A5	2560	A	C5-C4	-8.00	1.33	1.38
59	A5	3150	G	C5-C4	-8.00	1.32	1.38
59	A5	1093	C	N1-C6	-8.00	1.32	1.37
59	A5	1387	G	C5-C4	-8.00	1.32	1.38
59	A5	3474	G	N7-C5	-8.00	1.34	1.39
59	A5	803	A	N9-C4	-8.00	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3410	G	N1-C2	-8.00	1.31	1.37
59	A5	3507	A	C6-N1	-8.00	1.29	1.35
59	A5	781	C	N3-C4	-7.99	1.28	1.33
59	A5	1112	G	N1-C2	-7.99	1.31	1.37
59	A5	1154	U	C2-N3	-7.99	1.32	1.37
59	A5	1378	A	C5-C4	-7.99	1.33	1.38
59	A5	443	G	C2-N3	-7.99	1.26	1.32
59	A5	1666	A	C8-N7	-7.99	1.25	1.31
59	A5	286	A	N9-C4	-7.99	1.33	1.37
58	B2	1982	C	N3-C4	-7.99	1.28	1.33
59	A5	3628	G	C5-C6	-7.99	1.34	1.42
59	A5	1332	C	C4-C5	-7.98	1.36	1.43
56	A8	39	A	C6-N1	-7.98	1.29	1.35
59	A5	2712	U	C4-O4	-7.98	1.17	1.23
59	A5	2756	C	N3-C4	-7.98	1.28	1.33
59	A5	3338	U	C2-N3	-7.98	1.32	1.37
59	A5	2212	A	C5-C4	-7.98	1.33	1.38
59	A5	796	A	N1-C2	-7.97	1.27	1.34
59	A5	1015	G	N7-C5	-7.97	1.34	1.39
59	A5	2096	C	N3-C4	-7.97	1.28	1.33
59	A5	2202	A	N9-C4	-7.97	1.33	1.37
59	A5	2211	A	C5-C4	-7.97	1.33	1.38
59	A5	2750	A	N9-C8	-7.97	1.31	1.37
59	A5	3581	G	N3-C4	-7.97	1.29	1.35
59	A5	426	A	C5-C6	-7.97	1.33	1.41
59	A5	1695	A	N9-C8	-7.97	1.31	1.37
59	A5	2174	A	C6-N1	-7.97	1.29	1.35
59	A5	1620	A	C5-C4	-7.97	1.33	1.38
59	A5	2803	A	C5-C4	-7.96	1.33	1.38
59	A5	2674	A	C6-N1	-7.96	1.29	1.35
59	A5	2757	U	C2-N3	-7.96	1.32	1.37
59	A5	1076	A	C8-N7	-7.96	1.25	1.31
59	A5	3346	G	C5-C4	-7.96	1.32	1.38
59	A5	3506	U	N3-C4	-7.96	1.31	1.38
58	B2	1986	A	N7-C5	-7.95	1.34	1.39
59	A5	1055	U	C2-N3	-7.95	1.32	1.37
59	A5	3349	A	C5-C4	-7.95	1.33	1.38
59	A5	1658	G	N9-C4	-7.95	1.31	1.38
59	A5	820	A	N7-C5	-7.95	1.34	1.39
59	A5	98	G	N9-C8	-7.95	1.32	1.37
59	A5	3138	G	C5-C6	-7.95	1.34	1.42
59	A5	2213	G	C6-N1	-7.95	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	57	G	C5-C4	-7.94	1.32	1.38
59	A5	1675	G	N3-C4	-7.94	1.29	1.35
56	A8	111	G	C5-C4	-7.94	1.32	1.38
59	A5	3266	A	N9-C4	-7.94	1.33	1.37
59	A5	2204	U	C2-N3	-7.94	1.32	1.37
59	A5	3173	U	N1-C6	-7.94	1.30	1.38
59	A5	1164	G	C8-N7	-7.94	1.26	1.30
58	B2	1239	A	N7-C5	-7.93	1.34	1.39
59	A5	2693	G	N7-C5	-7.93	1.34	1.39
59	A5	1129	A	C8-N7	-7.93	1.25	1.31
59	A5	1386	U	N1-C2	-7.93	1.31	1.38
59	A5	2706	U	C2-N3	-7.93	1.32	1.37
59	A5	1676	A	C8-N7	-7.93	1.25	1.31
59	A5	2545	A	N3-C4	-7.93	1.30	1.34
59	A5	3470	G	N1-C2	-7.93	1.31	1.37
59	A5	369	A	N9-C4	-7.93	1.33	1.37
59	A5	1106	A	N9-C8	-7.93	1.31	1.37
59	A5	3140	G	C8-N7	-7.93	1.26	1.30
58	B2	1178	A	N9-C4	-7.93	1.33	1.37
59	A5	86	C	N3-C4	-7.93	1.28	1.33
59	A5	2173	C	C2-N3	-7.93	1.29	1.35
59	A5	3179	A	N9-C4	-7.93	1.33	1.37
59	A5	374	C	C5-C6	-7.92	1.28	1.34
59	A5	2209	G	N9-C8	-7.92	1.32	1.37
59	A5	1146	U	C2-N3	-7.92	1.32	1.37
59	A5	3587	U	N1-C2	-7.92	1.31	1.38
59	A5	62	G	N7-C5	-7.92	1.34	1.39
59	A5	2721	C	N1-C6	-7.92	1.32	1.37
59	A5	2751	A	C6-N1	-7.92	1.30	1.35
59	A5	2791	A	N9-C8	-7.92	1.31	1.37
59	A5	36	U	N1-C6	-7.92	1.30	1.38
59	A5	51	U	C2-N3	-7.91	1.32	1.37
59	A5	363	G	N3-C4	-7.91	1.29	1.35
59	A5	2183	A	N7-C5	-7.91	1.34	1.39
59	A5	2246	A	C5-C4	-7.91	1.33	1.38
59	A5	3522	A	N9-C4	-7.91	1.33	1.37
59	A5	1367	A	C8-N7	-7.91	1.26	1.31
59	A5	424	G	N9-C4	-7.91	1.31	1.38
59	A5	2529	G	N9-C8	-7.91	1.32	1.37
59	A5	3498	A	N9-C4	-7.91	1.33	1.37
59	A5	3882	C	N1-C2	-7.91	1.32	1.40
59	A5	299	G	N1-C2	-7.91	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1172	G	C8-N7	-7.91	1.26	1.30
59	A5	1973	G	C5-C4	-7.91	1.32	1.38
59	A5	2150	U	C2-N3	-7.91	1.32	1.37
59	A5	413	A	N9-C4	-7.91	1.33	1.37
59	A5	1612	G	N7-C5	-7.91	1.34	1.39
59	A5	3594	A	C5-C6	-7.91	1.33	1.41
58	B2	1107	A	C5-C6	-7.91	1.33	1.41
59	A5	2502	G	C5-C4	-7.91	1.32	1.38
59	A5	2736	A	C6-N1	-7.91	1.30	1.35
59	A5	2778	G	C5-C4	-7.90	1.32	1.38
59	A5	2173	C	N3-C4	-7.90	1.28	1.33
59	A5	853	G	C5-C6	-7.90	1.34	1.42
59	A5	1094	A	C5-C6	-7.90	1.33	1.41
59	A5	1005	G	C6-N1	-7.90	1.34	1.39
59	A5	1690	U	N1-C2	-7.90	1.31	1.38
59	A5	2154	A	N3-C4	-7.90	1.30	1.34
59	A5	3326	G	C5-C6	-7.90	1.34	1.42
59	A5	3409	G	N7-C5	-7.90	1.34	1.39
59	A5	37	G	N3-C4	-7.89	1.29	1.35
59	A5	799	A	C5-C4	-7.89	1.33	1.38
59	A5	816	A	C5-C4	-7.89	1.33	1.38
59	A5	1741	G	N1-C2	-7.89	1.31	1.37
59	A5	1748	C	C2-N3	-7.89	1.29	1.35
59	A5	2573	C	C4-C5	-7.89	1.36	1.43
59	A5	26	G	C6-O6	-7.89	1.17	1.24
59	A5	2774	G	C8-N7	-7.89	1.26	1.30
59	A5	448	A	N7-C5	-7.89	1.34	1.39
59	A5	1082	A	N3-C4	-7.89	1.30	1.34
59	A5	1121	A	N7-C5	-7.89	1.34	1.39
59	A5	1094	A	N9-C4	-7.88	1.33	1.37
59	A5	1671	U	C4-O4	-7.88	1.17	1.23
59	A5	1116	G	C8-N7	-7.88	1.26	1.30
59	A5	1645	G	N9-C8	-7.88	1.32	1.37
59	A5	1737	U	C2-N3	-7.88	1.32	1.37
59	A5	3489	A	N9-C8	-7.88	1.31	1.37
59	A5	1096	A	C5-C4	-7.88	1.33	1.38
59	A5	1697	U	C2-N3	-7.88	1.32	1.37
59	A5	3355	G	C5-C4	-7.88	1.32	1.38
59	A5	1127	C	C2-N3	-7.87	1.29	1.35
59	A5	36	U	C4-C5	-7.87	1.36	1.43
59	A5	295	G	N9-C8	-7.87	1.32	1.37
59	A5	2229	A	C5-C4	-7.86	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	297	U	C2-N3	-7.86	1.32	1.37
59	A5	2768	A	C5-C4	-7.86	1.33	1.38
59	A5	3296	C	N1-C6	-7.86	1.32	1.37
59	A5	358	C	N3-C4	-7.86	1.28	1.33
59	A5	1012	G	C2-N3	-7.86	1.26	1.32
59	A5	3522	A	N3-C4	-7.86	1.30	1.34
59	A5	1137	G	N7-C5	-7.85	1.34	1.39
59	A5	1109	G	C8-N7	-7.85	1.26	1.30
59	A5	2740	C	N3-C4	-7.85	1.28	1.33
59	A5	2785	C	C2-N3	-7.85	1.29	1.35
26	CN	198	GLU	CG-CD	-7.85	1.40	1.51
59	A5	1019	U	N3-C4	-7.85	1.31	1.38
59	A5	2568	U	C2-N3	-7.85	1.32	1.37
58	B2	1110	A	N9-C4	-7.84	1.33	1.37
59	A5	298	U	C2-N3	-7.84	1.32	1.37
59	A5	1315	A	N7-C5	-7.84	1.34	1.39
59	A5	1623	G	C2-N3	-7.84	1.26	1.32
59	A5	3142	G	N1-C2	-7.84	1.31	1.37
59	A5	1134	G	C6-N1	-7.84	1.34	1.39
59	A5	2759	G	C6-N1	-7.84	1.34	1.39
59	A5	2787	U	C2-N3	-7.84	1.32	1.37
59	A5	2789	U	N1-C6	-7.84	1.30	1.38
59	A5	3620	G	N9-C8	-7.84	1.32	1.37
59	A5	1022	A	C6-N1	-7.84	1.30	1.35
59	A5	1792	G	C5-C4	-7.84	1.32	1.38
59	A5	3760	A	N9-C4	-7.84	1.33	1.37
59	A5	1413	C	N1-C6	-7.83	1.32	1.37
59	A5	3544	G	C8-N7	-7.83	1.26	1.30
59	A5	3131	C	N1-C6	-7.83	1.32	1.37
58	B2	343	A	N7-C5	-7.83	1.34	1.39
59	A5	3139	G	C6-O6	-7.83	1.17	1.24
59	A5	2734	A	C5-C4	-7.83	1.33	1.38
59	A5	1261	A	N7-C5	-7.83	1.34	1.39
59	A5	813	C	N1-C6	-7.83	1.32	1.37
59	A5	3503	G	C8-N7	-7.83	1.26	1.30
59	A5	1313	A	C5-C6	-7.82	1.34	1.41
59	A5	2513	G	N1-C2	-7.82	1.31	1.37
59	A5	2555	G	C5-C4	-7.82	1.32	1.38
59	A5	3235	A	C5-C6	-7.82	1.34	1.41
59	A5	2683	G	N9-C8	-7.82	1.32	1.37
59	A5	1797	A	N9-C8	-7.82	1.31	1.37
58	B2	1983	G	N9-C8	-7.82	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1322	U	C4-C5	-7.82	1.36	1.43
59	A5	1358	U	N1-C6	-7.82	1.30	1.38
59	A5	2165	C	C4-N4	-7.82	1.26	1.33
59	A5	2685	G	N7-C5	-7.81	1.34	1.39
59	A5	353	G	C5-C6	-7.81	1.34	1.42
59	A5	379	A	N9-C8	-7.81	1.31	1.37
59	A5	1370	C	N3-C4	-7.81	1.28	1.33
59	A5	1885	U	C2-N3	-7.81	1.32	1.37
59	A5	2800	C	C2-N3	-7.81	1.29	1.35
59	A5	3337	G	N7-C5	-7.81	1.34	1.39
59	A5	809	G	N7-C5	-7.81	1.34	1.39
59	A5	3316	U	C2-N3	-7.81	1.32	1.37
59	A5	3524	G	N1-C2	-7.81	1.31	1.37
59	A5	3500	A	N3-C4	-7.80	1.30	1.34
59	A5	2161	G	C5-C4	-7.80	1.32	1.38
59	A5	3293	G	C5-C4	-7.80	1.32	1.38
59	A5	810	A	C6-N1	-7.80	1.30	1.35
58	B2	1201	A	N9-C4	-7.80	1.33	1.37
59	A5	1138	C	C5-C6	-7.80	1.28	1.34
59	A5	3594	A	C6-N1	-7.80	1.30	1.35
59	A5	2557	C	N1-C6	-7.80	1.32	1.37
59	A5	2769	G	C8-N7	-7.80	1.26	1.30
59	A5	376	G	C2-N3	-7.79	1.26	1.32
59	A5	805	C	C2-O2	-7.79	1.17	1.24
59	A5	3952	C	C4-C5	-7.79	1.36	1.43
59	A5	874	G	N7-C5	-7.79	1.34	1.39
59	A5	1025	U	C4-C5	-7.79	1.36	1.43
59	A5	3518	A	N3-C4	-7.79	1.30	1.34
59	A5	1141	G	N1-C2	-7.79	1.31	1.37
59	A5	1354	G	C5-C6	-7.79	1.34	1.42
59	A5	2152	C	C4-C5	-7.79	1.36	1.43
59	A5	2229	A	N7-C5	-7.78	1.34	1.39
59	A5	2734	A	C6-N1	-7.78	1.30	1.35
59	A5	2551	U	C4-C5	-7.78	1.36	1.43
59	A5	1700	U	C2-N3	-7.78	1.32	1.37
59	A5	3470	G	C5-C4	-7.78	1.32	1.38
59	A5	2739	A	N1-C2	-7.78	1.27	1.34
59	A5	36	U	N3-C4	-7.78	1.31	1.38
59	A5	95	G	N3-C4	-7.78	1.30	1.35
59	A5	1636	G	N1-C2	-7.78	1.31	1.37
4	CB	251	VAL	CB-CG2	-7.77	1.36	1.52
59	A5	1014	U	N3-C4	-7.77	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1786	G	C6-N1	-7.77	1.34	1.39
59	A5	1003	C	C5-C6	-7.77	1.28	1.34
59	A5	425	A	N9-C4	-7.77	1.33	1.37
59	A5	2036	G	C5-C4	-7.77	1.32	1.38
59	A5	2786	U	C5-C6	-7.77	1.27	1.34
54	A9	13	A	N7-C5	-7.76	1.34	1.39
59	A5	1511	C	C4-C5	-7.76	1.36	1.43
59	A5	1620	A	C6-N1	-7.76	1.30	1.35
59	A5	1359	G	N9-C8	-7.76	1.32	1.37
59	A5	1871	A	C6-N1	-7.76	1.30	1.35
59	A5	2736	A	C2-N3	-7.76	1.26	1.33
59	A5	1549	A	N9-C4	-7.76	1.33	1.37
59	A5	1129	A	N9-C8	-7.75	1.31	1.37
59	A5	3474	G	N1-C2	-7.75	1.31	1.37
59	A5	2162	C	N3-C4	-7.75	1.28	1.33
59	A5	2197	A	N3-C4	-7.75	1.30	1.34
59	A5	2716	C	C4-C5	-7.75	1.36	1.43
59	A5	2727	U	N1-C6	-7.75	1.30	1.38
59	A5	1068	C	N1-C2	-7.75	1.32	1.40
59	A5	2544	U	C4-C5	-7.75	1.36	1.43
59	A5	1196	A	N7-C5	-7.75	1.34	1.39
59	A5	3338	U	N1-C2	-7.75	1.31	1.38
55	A7	93	G	C5-C4	-7.75	1.32	1.38
59	A5	51	U	C4-C5	-7.75	1.36	1.43
59	A5	1173	U	N3-C4	-7.75	1.31	1.38
59	A5	354	A	C6-N1	-7.75	1.30	1.35
56	A8	24	G	C2-N3	-7.74	1.26	1.32
56	A8	39	A	N7-C5	-7.74	1.34	1.39
59	A5	2159	C	C2-N3	-7.74	1.29	1.35
59	A5	2536	G	N7-C5	-7.74	1.34	1.39
59	A5	2543	C	C2-N3	-7.74	1.29	1.35
59	A5	2683	G	N1-C2	-7.74	1.31	1.37
59	A5	1114	A	C5-C4	-7.74	1.33	1.38
59	A5	2708	C	N1-C2	-7.74	1.32	1.40
59	A5	3413	C	N1-C2	-7.74	1.32	1.40
59	A5	1144	C	C2-N3	-7.74	1.29	1.35
59	A5	2220	C	C2-N3	-7.74	1.29	1.35
59	A5	1792	G	C2-N3	-7.74	1.26	1.32
59	A5	2761	A	N9-C4	-7.74	1.33	1.37
59	A5	376	G	N7-C5	-7.74	1.34	1.39
59	A5	2495	G	C2-N3	-7.74	1.26	1.32
59	A5	3297	C	N3-C4	-7.74	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3844	U	C2-N3	-7.74	1.32	1.37
56	A8	13	U	N1-C6	-7.73	1.30	1.38
56	A8	42	A	C5-C4	-7.73	1.33	1.38
59	A5	1669	G	C8-N7	-7.73	1.26	1.30
59	A5	299	G	C2-N3	-7.73	1.26	1.32
59	A5	2223	C	N3-C4	-7.73	1.28	1.33
59	A5	2164	G	C5-C4	-7.73	1.32	1.38
59	A5	2542	C	C2-N3	-7.73	1.29	1.35
30	CR	120	TYR	CD2-CE2	-7.73	1.27	1.39
59	A5	2680	G	C5-C4	-7.73	1.32	1.38
59	A5	3345	A	N3-C4	-7.73	1.30	1.34
59	A5	3598	U	C2-N3	-7.73	1.32	1.37
59	A5	62	G	C5-C6	-7.73	1.34	1.42
33	CP	4	TYR	CD2-CE2	-7.72	1.27	1.39
59	A5	376	G	C6-N1	-7.72	1.34	1.39
59	A5	912	A	N7-C5	-7.72	1.34	1.39
59	A5	1391	A	N3-C4	-7.72	1.30	1.34
59	A5	1595	G	N7-C5	-7.72	1.34	1.39
59	A5	1080	G	C5-C4	-7.72	1.32	1.38
59	A5	1777	A	N9-C4	-7.72	1.33	1.37
59	A5	2624	G	N7-C5	-7.72	1.34	1.39
59	A5	46	C	N1-C6	-7.72	1.32	1.37
59	A5	2689	G	C5-C4	-7.72	1.32	1.38
59	A5	543	A	N9-C4	-7.72	1.33	1.37
59	A5	1547	A	C8-N7	-7.72	1.26	1.31
59	A5	423	U	C2-N3	-7.72	1.32	1.37
59	A5	1266	A	N9-C4	-7.72	1.33	1.37
59	A5	2549	G	N9-C8	-7.72	1.32	1.37
59	A5	389	G	C5-C4	-7.71	1.32	1.38
59	A5	1610	A	C6-N1	-7.71	1.30	1.35
59	A5	801	G	C5-C6	-7.71	1.34	1.42
59	A5	3869	A	N3-C4	-7.71	1.30	1.34
59	A5	97	C	N3-C4	-7.71	1.28	1.33
59	A5	1692	G	N9-C4	-7.71	1.31	1.38
59	A5	2720	U	N1-C2	-7.71	1.31	1.38
59	A5	71	A	C5-C4	-7.71	1.33	1.38
59	A5	334	U	N1-C2	-7.71	1.31	1.38
59	A5	2777	A	N9-C8	-7.70	1.31	1.37
59	A5	1733	A	C6-N1	-7.70	1.30	1.35
59	A5	2246	A	N7-C5	-7.70	1.34	1.39
59	A5	3510	U	N3-C4	-7.70	1.31	1.38
59	A5	1066	A	N9-C4	-7.70	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2690	A	N9-C8	-7.70	1.31	1.37
58	B2	1119	G	N7-C5	-7.70	1.34	1.39
59	A5	90	G	N1-C2	-7.70	1.31	1.37
59	A5	1072	U	C4-C5	-7.70	1.36	1.43
59	A5	2713	G	N9-C4	-7.70	1.31	1.38
59	A5	2773	G	C8-N7	-7.70	1.26	1.30
59	A5	2495	G	N1-C2	-7.69	1.31	1.37
59	A5	3356	G	N9-C8	-7.69	1.32	1.37
59	A5	3498	A	N7-C5	-7.69	1.34	1.39
59	A5	1165	A	N7-C5	-7.69	1.34	1.39
59	A5	296	C	C2-N3	-7.68	1.29	1.35
59	A5	1553	C	N1-C6	-7.68	1.32	1.37
59	A5	2754	G	C8-N7	-7.68	1.26	1.30
59	A5	286	A	N9-C8	-7.68	1.31	1.37
59	A5	3670	G	N7-C5	-7.68	1.34	1.39
59	A5	1365	U	N1-C6	-7.68	1.31	1.38
59	A5	1519	A	N3-C4	-7.68	1.30	1.34
59	A5	342	A	C5-C6	-7.67	1.34	1.41
59	A5	1726	G	N3-C4	-7.67	1.30	1.35
59	A5	3308	A	N7-C5	-7.67	1.34	1.39
33	CP	139	TYR	CD2-CE2	-7.67	1.27	1.39
59	A5	38	A	C5-C6	-7.67	1.34	1.41
59	A5	786	C	C4-C5	-7.67	1.36	1.43
59	A5	1315	A	N3-C4	-7.67	1.30	1.34
59	A5	1666	A	N9-C4	-7.66	1.33	1.37
59	A5	1710	G	N7-C5	-7.66	1.34	1.39
59	A5	2202	A	C5-C4	-7.66	1.33	1.38
59	A5	3167	A	C5-C4	-7.66	1.33	1.38
59	A5	3584	C	N1-C2	-7.66	1.32	1.40
59	A5	1321	G	N7-C5	-7.66	1.34	1.39
56	A8	39	A	N3-C4	-7.66	1.30	1.34
59	A5	375	C	N3-C4	-7.66	1.28	1.33
59	A5	2763	U	C2-N3	-7.66	1.32	1.37
59	A5	3227	A	N9-C4	-7.66	1.33	1.37
59	A5	3451	A	N9-C4	-7.66	1.33	1.37
59	A5	1000	G	N7-C5	-7.66	1.34	1.39
59	A5	346	U	C4-C5	-7.66	1.36	1.43
59	A5	424	G	C6-N1	-7.66	1.34	1.39
59	A5	1083	A	C6-N1	-7.66	1.30	1.35
59	A5	1192	A	N9-C4	-7.66	1.33	1.37
59	A5	1764	G	N7-C5	-7.65	1.34	1.39
59	A5	3588	G	N7-C5	-7.65	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	852	C	C4-C5	-7.65	1.36	1.43
59	A5	1055	U	N1-C6	-7.65	1.31	1.38
59	A5	2168	G	N1-C2	-7.65	1.31	1.37
59	A5	1100	G	N9-C8	-7.65	1.32	1.37
59	A5	2176	G	N9-C8	-7.65	1.32	1.37
59	A5	101	C	N1-C2	-7.65	1.32	1.40
59	A5	1027	A	N3-C4	-7.65	1.30	1.34
59	A5	2203	A	N9-C4	-7.65	1.33	1.37
59	A5	3145	U	N3-C4	-7.65	1.31	1.38
59	A5	1545	A	N7-C5	-7.65	1.34	1.39
59	A5	2728	C	N1-C6	-7.65	1.32	1.37
59	A5	1176	A	C6-N1	-7.64	1.30	1.35
59	A5	3288	C	N1-C6	-7.64	1.32	1.37
59	A5	1552	A	N7-C5	-7.64	1.34	1.39
59	A5	1555	G	N7-C5	-7.64	1.34	1.39
59	A5	3349	A	C8-N7	-7.64	1.26	1.31
59	A5	1389	C	C4-C5	-7.64	1.36	1.43
59	A5	1620	A	N3-C4	-7.64	1.30	1.34
59	A5	2203	A	C2-N3	-7.64	1.26	1.33
59	A5	3477	A	C8-N7	-7.64	1.26	1.31
33	CP	70	CYS	CB-SG	-7.64	1.69	1.82
6	CC	99	CYS	CB-SG	-7.64	1.69	1.82
59	A5	806	A	N9-C4	-7.64	1.33	1.37
59	A5	3139	G	C6-N1	-7.64	1.34	1.39
59	A5	3355	G	N9-C8	-7.64	1.32	1.37
59	A5	3618	A	N9-C4	-7.64	1.33	1.37
59	A5	426	A	C8-N7	-7.63	1.26	1.31
58	B2	1193	C	C4-C5	-7.63	1.36	1.43
59	A5	61	A	C5-C4	-7.63	1.33	1.38
59	A5	788	C	N3-C4	-7.63	1.28	1.33
59	A5	788	C	N1-C2	-7.63	1.32	1.40
59	A5	860	A	N9-C4	-7.63	1.33	1.37
56	A8	41	G	C2-N3	-7.63	1.26	1.32
59	A5	81	A	C5-C4	-7.63	1.33	1.38
59	A5	1726	G	N7-C5	-7.63	1.34	1.39
59	A5	2786	U	C2-N3	-7.63	1.32	1.37
59	A5	1532	A	C6-N1	-7.62	1.30	1.35
59	A5	1000	G	N1-C2	-7.62	1.31	1.37
59	A5	1134	G	N9-C8	-7.62	1.32	1.37
59	A5	1790	A	C5-C6	-7.62	1.34	1.41
59	A5	2510	A	C6-N1	-7.62	1.30	1.35
58	B2	1984	G	C8-N7	-7.62	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	426	A	N9-C8	-7.62	1.31	1.37
59	A5	818	A	C5-C6	-7.62	1.34	1.41
59	A5	94	C	C4-C5	-7.62	1.36	1.43
59	A5	1086	C	C2-O2	-7.62	1.17	1.24
59	A5	1172	G	N1-C2	-7.62	1.31	1.37
59	A5	2245	G	N1-C2	-7.62	1.31	1.37
59	A5	2798	C	N1-C6	-7.62	1.32	1.37
59	A5	1140	G	C2-N3	-7.62	1.26	1.32
59	A5	3178	G	N1-C2	-7.62	1.31	1.37
59	A5	3339	U	C4-C5	-7.62	1.36	1.43
59	A5	3500	A	C5-C4	-7.62	1.33	1.38
59	A5	443	G	C5-C4	-7.61	1.33	1.38
59	A5	1157	C	N1-C6	-7.61	1.32	1.37
59	A5	1330	G	N3-C4	-7.61	1.30	1.35
56	A8	7	A	N9-C4	-7.61	1.33	1.37
59	A5	41	U	C4-C5	-7.61	1.36	1.43
59	A5	108	A	C5-C6	-7.61	1.34	1.41
59	A5	346	U	N1-C2	-7.61	1.31	1.38
59	A5	443	G	C5-C6	-7.61	1.34	1.42
59	A5	1383	A	C5-C6	-7.61	1.34	1.41
59	A5	2747	G	N7-C5	-7.61	1.34	1.39
59	A5	3488	G	C5-C6	-7.61	1.34	1.42
59	A5	3525	A	N7-C5	-7.61	1.34	1.39
59	A5	3543	A	N9-C4	-7.61	1.33	1.37
59	A5	56	A	N7-C5	-7.61	1.34	1.39
59	A5	67	A	N7-C5	-7.61	1.34	1.39
59	A5	3468	G	C6-N1	-7.61	1.34	1.39
58	B2	1982	C	C2-N3	-7.60	1.29	1.35
59	A5	1677	U	N3-C4	-7.60	1.31	1.38
59	A5	52	A	C8-N7	-7.60	1.26	1.31
59	A5	1012	G	N1-C2	-7.60	1.31	1.37
59	A5	2159	C	N1-C6	-7.60	1.32	1.37
59	A5	2203	A	N7-C5	-7.60	1.34	1.39
59	A5	2205	G	N9-C8	-7.60	1.32	1.37
59	A5	2209	G	C5-C4	-7.60	1.33	1.38
59	A5	1326	A	C5-C6	-7.59	1.34	1.41
59	A5	2552	G	N1-C2	-7.59	1.31	1.37
59	A5	2653	A	C5-C4	-7.59	1.33	1.38
59	A5	3150	G	C2-N3	-7.59	1.26	1.32
59	A5	1104	A	C5-C6	-7.59	1.34	1.41
59	A5	1358	U	N3-C4	-7.59	1.31	1.38
59	A5	2529	G	N1-C2	-7.59	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2737	C	C2-N3	-7.59	1.29	1.35
56	A8	99	U	C2-N3	-7.59	1.32	1.37
59	A5	1146	U	N3-C4	-7.59	1.31	1.38
59	A5	2569	U	C2-O2	-7.59	1.15	1.22
59	A5	436	A	N7-C5	-7.59	1.34	1.39
59	A5	1787	C	N1-C6	-7.59	1.32	1.37
59	A5	2494	G	C5-C4	-7.59	1.33	1.38
59	A5	357	C	N1-C6	-7.58	1.32	1.37
59	A5	1624	G	C6-N1	-7.58	1.34	1.39
59	A5	2238	A	C5-C4	-7.58	1.33	1.38
59	A5	797	A	N9-C4	-7.58	1.33	1.37
59	A5	1736	G	C2-N3	-7.58	1.26	1.32
59	A5	2649	A	N3-C4	-7.58	1.30	1.34
59	A5	3134	G	C2-N3	-7.58	1.26	1.32
59	A5	779	U	C2-N3	-7.58	1.32	1.37
59	A5	2698	A	N9-C8	-7.58	1.31	1.37
59	A5	3298	U	C2-N3	-7.58	1.32	1.37
59	A5	84	U	N1-C2	-7.58	1.31	1.38
59	A5	1171	G	C5-C4	-7.58	1.33	1.38
59	A5	1397	A	N7-C5	-7.58	1.34	1.39
59	A5	3355	G	C8-N7	-7.58	1.26	1.30
59	A5	3409	G	C8-N7	-7.58	1.26	1.30
59	A5	1168	G	C8-N7	-7.58	1.26	1.30
59	A5	1147	U	C2-N3	-7.57	1.32	1.37
59	A5	1765	U	C2-N3	-7.57	1.32	1.37
59	A5	3503	G	C6-N1	-7.57	1.34	1.39
59	A5	3589	G	N9-C8	-7.57	1.32	1.37
59	A5	63	G	C5-C4	-7.57	1.33	1.38
59	A5	1103	U	C5-C6	-7.57	1.27	1.34
59	A5	1370	C	N1-C6	-7.57	1.32	1.37
59	A5	2746	A	N9-C4	-7.57	1.33	1.37
59	A5	1131	C	C5-C6	-7.57	1.28	1.34
59	A5	1892	C	C4-C5	-7.57	1.36	1.43
59	A5	3594	A	N3-C4	-7.57	1.30	1.34
58	B2	1109	C	N3-C4	-7.56	1.28	1.33
59	A5	306	C	C2-N3	-7.56	1.29	1.35
59	A5	3351	A	C5-C6	-7.56	1.34	1.41
56	A8	100	G	C5-C4	-7.56	1.33	1.38
59	A5	1006	A	C5-C6	-7.56	1.34	1.41
59	A5	2518	A	N9-C4	-7.56	1.33	1.37
59	A5	3411	C	C5-C6	-7.55	1.28	1.34
56	A8	100	G	N7-C5	-7.55	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	237	G	C5-C4	-7.55	1.33	1.38
59	A5	2205	G	C5-C6	-7.55	1.34	1.42
59	A5	2500	G	C6-N1	-7.55	1.34	1.39
59	A5	3411	C	N3-C4	-7.55	1.28	1.33
59	A5	363	G	C6-N1	-7.55	1.34	1.39
59	A5	1005	G	C8-N7	-7.55	1.26	1.30
58	B2	632	G	N9-C8	-7.55	1.32	1.37
59	A5	1266	A	C6-N1	-7.55	1.30	1.35
59	A5	3356	G	N7-C5	-7.55	1.34	1.39
59	A5	808	G	C6-N1	-7.55	1.34	1.39
59	A5	1330	G	C6-O6	-7.55	1.17	1.24
59	A5	3168	A	C5-C6	-7.55	1.34	1.41
59	A5	3542	C	N1-C6	-7.55	1.32	1.37
59	A5	3156	G	C6-N1	-7.54	1.34	1.39
59	A5	1101	A	N9-C8	-7.54	1.31	1.37
59	A5	1129	A	C6-N1	-7.54	1.30	1.35
59	A5	3492	G	N7-C5	-7.54	1.34	1.39
59	A5	3599	U	C2-N3	-7.54	1.32	1.37
59	A5	39	A	C2'-C1'	-7.54	1.45	1.53
59	A5	2689	G	C6-N1	-7.54	1.34	1.39
59	A5	2171	U	C4-C5	-7.54	1.36	1.43
59	A5	853	G	N9-C8	-7.54	1.32	1.37
59	A5	2202	A	N9-C8	-7.54	1.31	1.37
59	A5	2733	G	N7-C5	-7.54	1.34	1.39
59	A5	2702	A	C8-N7	-7.53	1.26	1.31
59	A5	2168	G	C6-N1	-7.53	1.34	1.39
59	A5	286	A	N7-C5	-7.53	1.34	1.39
59	A5	1089	U	C2-N3	-7.53	1.32	1.37
59	A5	2159	C	C5-C6	-7.53	1.28	1.34
59	A5	2207	A	C5-C4	-7.53	1.33	1.38
59	A5	3316	U	N1-C2	-7.53	1.31	1.38
59	A5	3540	G	C5-C4	-7.53	1.33	1.38
4	CB	262	VAL	CB-CG2	-7.53	1.37	1.52
59	A5	2694	G	C8-N7	-7.53	1.26	1.30
59	A5	1717	A	C6-N1	-7.52	1.30	1.35
59	A5	2230	G	C5-C4	-7.52	1.33	1.38
59	A5	2523	A	N9-C4	-7.52	1.33	1.37
59	A5	1165	A	C5-C4	-7.52	1.33	1.38
59	A5	1548	C	N1-C6	-7.52	1.32	1.37
59	A5	1610	A	N3-C4	-7.52	1.30	1.34
59	A5	1611	G	N1-C2	-7.52	1.31	1.37
59	A5	2180	A	C6-N1	-7.52	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2534	G	N9-C8	-7.52	1.32	1.37
59	A5	2802	A	N7-C5	-7.52	1.34	1.39
59	A5	1325	C	N1-C6	-7.52	1.32	1.37
59	A5	1529	C	C4-C5	-7.52	1.36	1.43
59	A5	1702	G	N7-C5	-7.52	1.34	1.39
59	A5	2535	U	C5-C6	-7.52	1.27	1.34
59	A5	2181	A	N7-C5	-7.52	1.34	1.39
59	A5	1166	U	C2-N3	-7.51	1.32	1.37
59	A5	2221	G	C6-N1	-7.51	1.34	1.39
59	A5	3341	C	C4-C5	-7.51	1.36	1.43
58	B2	1215	G	C5-C4	-7.51	1.33	1.38
59	A5	1757	A	C5-C6	-7.51	1.34	1.41
59	A5	2197	A	N7-C5	-7.51	1.34	1.39
59	A5	2755	G	C2-N2	-7.51	1.27	1.34
59	A5	3600	G	C5-C6	-7.51	1.34	1.42
59	A5	415	A	N9-C4	-7.51	1.33	1.37
59	A5	1009	G	C2-N3	-7.51	1.26	1.32
59	A5	1690	U	C4-C5	-7.51	1.36	1.43
59	A5	59	G	N7-C5	-7.51	1.34	1.39
33	CP	38	ARG	C-N	-7.50	1.16	1.34
59	A5	305	G	C5-C4	-7.50	1.33	1.38
56	A8	38	G	N7-C5	-7.50	1.34	1.39
59	A5	51	U	N1-C6	-7.50	1.31	1.38
59	A5	1617	U	C2-N3	-7.50	1.32	1.37
59	A5	1975	C	C4-C5	-7.50	1.36	1.43
59	A5	3331	A	N3-C4	-7.50	1.30	1.34
59	A5	3525	A	N9-C4	-7.50	1.33	1.37
58	B2	617	U	C2-N3	-7.50	1.32	1.37
58	B2	1191	C	N3-C4	-7.50	1.28	1.33
59	A5	1778	A	C6-N6	-7.50	1.27	1.33
59	A5	50	U	N3-C4	-7.50	1.31	1.38
59	A5	1682	G	N7-C5	-7.50	1.34	1.39
59	A5	2170	C	C2-N3	-7.50	1.29	1.35
59	A5	820	A	N9-C8	-7.49	1.31	1.37
59	A5	2560	A	N9-C4	-7.49	1.33	1.37
59	A5	2746	A	N3-C4	-7.49	1.30	1.34
59	A5	2769	G	N9-C8	-7.49	1.32	1.37
59	A5	2163	A	N9-C4	-7.49	1.33	1.37
59	A5	3680	A	N9-C4	-7.49	1.33	1.37
59	A5	1204	C	C4-C5	-7.49	1.36	1.43
59	A5	3292	C	C4-C5	-7.49	1.36	1.43
59	A5	2747	G	N3-C4	-7.48	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3470	G	C2-N3	-7.48	1.26	1.32
59	A5	340	U	N3-C4	-7.48	1.31	1.38
59	A5	1521	G	C2-N3	-7.48	1.26	1.32
59	A5	1605	U	N3-C4	-7.48	1.31	1.38
59	A5	3481	G	C5-C4	-7.48	1.33	1.38
59	A5	2219	U	N1-C6	-7.48	1.31	1.38
59	A5	2166	U	C2-N3	-7.48	1.32	1.37
59	A5	3335	A	C5-C4	-7.48	1.33	1.38
59	A5	2758	U	C2-N3	-7.48	1.32	1.37
59	A5	842	A	N7-C5	-7.47	1.34	1.39
59	A5	1348	G	N9-C8	-7.47	1.32	1.37
59	A5	548	A	N3-C4	-7.47	1.30	1.34
59	A5	841	A	N7-C5	-7.47	1.34	1.39
59	A5	3141	A	C5-C4	-7.47	1.33	1.38
48	Cp	26	VAL	CB-CG2	-7.47	1.37	1.52
59	A5	986	A	C5-C4	-7.47	1.33	1.38
59	A5	1054	A	N9-C4	-7.47	1.33	1.37
59	A5	337	A	N7-C5	-7.47	1.34	1.39
59	A5	834	G	C5-C4	-7.47	1.33	1.38
59	A5	1795	A	N9-C4	-7.47	1.33	1.37
59	A5	2709	U	C4-C5	-7.47	1.36	1.43
59	A5	1728	G	N7-C5	-7.47	1.34	1.39
59	A5	3357	C	C4-C5	-7.46	1.36	1.43
59	A5	3420	U	C2-N3	-7.46	1.32	1.37
58	B2	1971	A	C5-C4	-7.46	1.33	1.38
59	A5	111	A	C5-C6	-7.46	1.34	1.41
59	A5	2508	C	C2-N3	-7.46	1.29	1.35
59	A5	548	A	N9-C4	-7.46	1.33	1.37
58	B2	1060	A	N9-C4	-7.46	1.33	1.37
58	B2	1107	A	N3-C4	-7.46	1.30	1.34
59	A5	105	A	C5-C6	-7.46	1.34	1.41
59	A5	2550	G	N9-C8	-7.46	1.32	1.37
59	A5	3137	A	C6-N1	-7.46	1.30	1.35
56	A8	16	A	N7-C5	-7.46	1.34	1.39
59	A5	1060	G	C8-N7	-7.46	1.26	1.30
59	A5	1128	C	N1-C2	-7.46	1.32	1.40
59	A5	1330	G	N9-C4	-7.46	1.31	1.38
59	A5	1511	C	N1-C6	-7.46	1.32	1.37
59	A5	1979	A	N9-C4	-7.46	1.33	1.37
59	A5	2713	G	C8-N7	-7.46	1.26	1.30
59	A5	1071	U	C2-N3	-7.45	1.32	1.37
59	A5	1709	A	N9-C4	-7.45	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2203	A	N9-C8	-7.45	1.31	1.37
59	A5	2749	G	N9-C8	-7.45	1.32	1.37
59	A5	22	A	C5-C4	-7.45	1.33	1.38
59	A5	438	G	C2-N3	-7.45	1.26	1.32
59	A5	3482	G	N7-C5	-7.45	1.34	1.39
59	A5	66	A	N9-C4	-7.45	1.33	1.37
59	A5	1334	A	N3-C4	-7.45	1.30	1.34
59	A5	2711	C	C4-C5	-7.45	1.36	1.43
59	A5	2770	C	C4-C5	-7.45	1.36	1.43
59	A5	1023	C	C5-C6	-7.45	1.28	1.34
59	A5	1127	C	N1-C2	-7.45	1.32	1.40
59	A5	1345	G	C5-C4	-7.45	1.33	1.38
59	A5	1734	G	C6-N1	-7.45	1.34	1.39
59	A5	3400	U	C4-C5	-7.45	1.36	1.43
59	A5	3951	U	C2-N3	-7.45	1.32	1.37
55	A7	100	A	N7-C5	-7.44	1.34	1.39
59	A5	1692	G	C5-C4	-7.44	1.33	1.38
59	A5	2726	A	C5-C4	-7.44	1.33	1.38
59	A5	1786	G	N9-C8	-7.44	1.32	1.37
59	A5	990	U	C2-N3	-7.44	1.32	1.37
59	A5	1031	G	C5-C6	-7.44	1.34	1.42
59	A5	1666	A	N9-C8	-7.44	1.31	1.37
59	A5	2746	A	C8-N7	-7.44	1.26	1.31
59	A5	1075	G	N1-C2	-7.43	1.31	1.37
59	A5	1176	A	N3-C4	-7.43	1.30	1.34
59	A5	1634	A	N9-C4	-7.43	1.33	1.37
59	A5	2771	G	C8-N7	-7.43	1.26	1.30
59	A5	1075	G	C8-N7	-7.43	1.26	1.30
59	A5	3145	U	C2-N3	-7.43	1.32	1.37
59	A5	3470	G	C6-N1	-7.43	1.34	1.39
59	A5	2224	A	N3-C4	-7.43	1.30	1.34
59	A5	101	C	C4-C5	-7.43	1.37	1.43
59	A5	1633	G	C5-C4	-7.43	1.33	1.38
58	B2	627	A	N9-C4	-7.43	1.33	1.37
59	A5	1660	G	C6-N1	-7.43	1.34	1.39
59	A5	2027	A	N3-C4	-7.43	1.30	1.34
59	A5	1408	A	N9-C4	-7.43	1.33	1.37
59	A5	2761	A	N7-C5	-7.43	1.34	1.39
58	B2	1180	A	N9-C4	-7.42	1.33	1.37
59	A5	1150	G	C5-C4	-7.42	1.33	1.38
55	A7	82	G	N1-C2	-7.42	1.31	1.37
59	A5	1351	C	C2-N3	-7.42	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2164	G	N7-C5	-7.42	1.34	1.39
59	A5	1770	C	C2-N3	-7.42	1.29	1.35
59	A5	1031	G	N7-C5	-7.41	1.34	1.39
59	A5	2735	A	N9-C4	-7.41	1.33	1.37
59	A5	97	C	C5-C6	-7.41	1.28	1.34
59	A5	1004	C	C4-N4	-7.41	1.27	1.33
59	A5	3576	G	N7-C5	-7.41	1.34	1.39
59	A5	3580	G	C6-N1	-7.41	1.34	1.39
59	A5	2182	G	N3-C4	-7.41	1.30	1.35
59	A5	2510	A	C5-C4	-7.41	1.33	1.38
59	A5	2791	A	C5-C6	-7.41	1.34	1.41
59	A5	3482	G	C2-N3	-7.41	1.26	1.32
59	A5	796	A	C6-N1	-7.41	1.30	1.35
59	A5	1270	G	C5-C4	-7.41	1.33	1.38
42	Cf	118	TRP	CB-CG	-7.41	1.36	1.50
59	A5	801	G	C6-O6	-7.40	1.17	1.24
59	A5	1388	C	N1-C2	-7.40	1.32	1.40
59	A5	1100	G	N1-C2	-7.40	1.31	1.37
59	A5	1153	G	C8-N7	-7.40	1.26	1.30
59	A5	2699	A	N7-C5	-7.40	1.34	1.39
59	A5	52	A	N9-C4	-7.40	1.33	1.37
59	A5	1684	G	C2-N3	-7.40	1.26	1.32
59	A5	1795	A	C5-C4	-7.40	1.33	1.38
59	A5	2518	A	N9-C8	-7.40	1.31	1.37
59	A5	37	G	N9-C8	-7.39	1.32	1.37
59	A5	427	A	C5-C4	-7.39	1.33	1.38
59	A5	1016	A	C6-N1	-7.39	1.30	1.35
59	A5	1075	G	C6-N1	-7.39	1.34	1.39
59	A5	422	G	C2-N3	-7.39	1.26	1.32
59	A5	1120	A	N9-C8	-7.39	1.31	1.37
59	A5	1356	G	N9-C4	-7.39	1.32	1.38
59	A5	1357	C	C4-C5	-7.39	1.37	1.43
59	A5	1344	A	N9-C8	-7.39	1.31	1.37
59	A5	1685	G	N1-C2	-7.39	1.31	1.37
59	A5	1547	A	N7-C5	-7.39	1.34	1.39
59	A5	1024	U	C2-N3	-7.39	1.32	1.37
59	A5	3515	C	N3-C4	-7.39	1.28	1.33
58	B2	1847	A	C5-C4	-7.39	1.33	1.38
59	A5	803	A	N9-C8	-7.39	1.31	1.37
59	A5	1355	C	C5-C6	-7.39	1.28	1.34
59	A5	1775	C	N1-C6	-7.39	1.32	1.37
59	A5	2739	A	C6-N1	-7.38	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1152	A	C8-N7	-7.38	1.26	1.31
59	A5	1162	A	N3-C4	-7.38	1.30	1.34
59	A5	2758	U	N1-C2	-7.38	1.31	1.38
58	B2	1111	U	C2-N3	-7.38	1.32	1.37
59	A5	380	G	C5-C6	-7.38	1.34	1.42
59	A5	2222	G	C5-C4	-7.38	1.33	1.38
59	A5	2552	G	N9-C8	-7.38	1.32	1.37
59	A5	1360	U	C4-C5	-7.38	1.36	1.43
59	A5	2737	C	C5-C6	-7.38	1.28	1.34
59	A5	59	G	N9-C8	-7.38	1.32	1.37
59	A5	798	C	N1-C6	-7.38	1.32	1.37
59	A5	1158	C	C2-O2	-7.38	1.17	1.24
59	A5	2753	G	N7-C5	-7.37	1.34	1.39
58	B2	1173	A	C5-C4	-7.37	1.33	1.38
59	A5	1130	U	C2-N3	-7.37	1.32	1.37
59	A5	914	C	N1-C6	-7.37	1.32	1.37
59	A5	1112	G	C6-N1	-7.37	1.34	1.39
59	A5	3488	G	C2-N3	-7.37	1.26	1.32
59	A5	3585	A	N7-C5	-7.37	1.34	1.39
33	CP	83	TRP	CG-CD1	-7.37	1.26	1.36
59	A5	2225	A	C5-C6	-7.37	1.34	1.41
59	A5	3623	G	C6-N1	-7.37	1.34	1.39
59	A5	1374	C	N1-C6	-7.37	1.32	1.37
58	B2	1189	G	C5-C4	-7.37	1.33	1.38
59	A5	51	U	N3-C4	-7.37	1.31	1.38
59	A5	355	G	N7-C5	-7.37	1.34	1.39
59	A5	389	G	C6-N1	-7.37	1.34	1.39
59	A5	2715	C	C4-C5	-7.37	1.37	1.43
59	A5	1157	C	C5-C6	-7.36	1.28	1.34
59	A5	1175	C	N1-C2	-7.36	1.32	1.40
59	A5	1521	G	C6-N1	-7.36	1.34	1.39
59	A5	3406	G	C5-C4	-7.36	1.33	1.38
59	A5	3524	G	N9-C8	-7.36	1.32	1.37
56	A8	100	G	N9-C8	-7.36	1.32	1.37
59	A5	1149	C	C5-C6	-7.36	1.28	1.34
59	A5	1545	A	N9-C4	-7.36	1.33	1.37
59	A5	1974	U	C2-N3	-7.36	1.32	1.37
59	A5	48	U	C2-N3	-7.36	1.32	1.37
59	A5	2185	U	C4-C5	-7.36	1.36	1.43
59	A5	1371	A	N9-C8	-7.36	1.31	1.37
59	A5	2811	G	N3-C4	-7.36	1.30	1.35
59	A5	808	G	C5-C6	-7.36	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2204	U	N1-C2	-7.36	1.31	1.38
59	A5	2182	G	N9-C4	-7.36	1.32	1.38
59	A5	1018	C	C2-N3	-7.35	1.29	1.35
59	A5	3439	A	N9-C4	-7.35	1.33	1.37
58	B2	315	C	C4-C5	-7.35	1.37	1.43
59	A5	308	G	N7-C5	-7.35	1.34	1.39
59	A5	1060	G	C6-N1	-7.35	1.34	1.39
59	A5	823	U	C4-C5	-7.35	1.36	1.43
59	A5	1017	A	C8-N7	-7.35	1.26	1.31
59	A5	46	C	C5-C6	-7.35	1.28	1.34
59	A5	1736	G	N3-C4	-7.35	1.30	1.35
59	A5	2166	U	N3-C4	-7.35	1.31	1.38
59	A5	2702	A	N7-C5	-7.35	1.34	1.39
59	A5	3475	U	C2-O2	-7.35	1.15	1.22
59	A5	1159	C	N3-C4	-7.35	1.28	1.33
59	A5	1343	A	N7-C5	-7.35	1.34	1.39
59	A5	1365	U	C2-O2	-7.35	1.15	1.22
59	A5	2736	A	C5-C6	-7.35	1.34	1.41
59	A5	2733	G	N1-C2	-7.35	1.31	1.37
59	A5	767	A	N9-C4	-7.34	1.33	1.37
59	A5	1392	A	C6-N1	-7.34	1.30	1.35
59	A5	2110	A	N9-C8	-7.34	1.31	1.37
59	A5	2563	G	N9-C8	-7.34	1.32	1.37
59	A5	1162	A	N1-C2	-7.34	1.27	1.34
59	A5	1171	G	N7-C5	-7.34	1.34	1.39
59	A5	1543	C	N1-C6	-7.34	1.32	1.37
59	A5	2165	C	C5-C6	-7.34	1.28	1.34
59	A5	1154	U	C5-C6	-7.34	1.27	1.34
59	A5	2151	A	C5-C6	-7.34	1.34	1.41
59	A5	1622	U	C4-C5	-7.34	1.36	1.43
59	A5	2528	A	C5-C6	-7.34	1.34	1.41
59	A5	3337	G	N9-C8	-7.34	1.32	1.37
59	A5	3344	U	C4-C5	-7.34	1.36	1.43
59	A5	3598	U	N1-C2	-7.34	1.31	1.38
59	A5	1556	C	N1-C6	-7.33	1.32	1.37
59	A5	1748	C	N1-C6	-7.33	1.32	1.37
59	A5	1130	U	N3-C4	-7.33	1.31	1.38
59	A5	2230	G	N7-C5	-7.33	1.34	1.39
59	A5	2626	C	N1-C6	-7.33	1.32	1.37
59	A5	73	U	C2-N3	-7.33	1.32	1.37
59	A5	100	G	C8-N7	-7.33	1.26	1.30
59	A5	1554	C	N3-C4	-7.33	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	41	U	C5-C6	-7.33	1.27	1.34
58	B2	1107	A	N7-C5	-7.33	1.34	1.39
59	A5	49	A	N3-C4	-7.33	1.30	1.34
59	A5	359	G	C8-N7	-7.33	1.26	1.30
59	A5	429	U	N1-C6	-7.33	1.31	1.38
59	A5	1002	C	C5-C6	-7.33	1.28	1.34
59	A5	1066	A	N3-C4	-7.33	1.30	1.34
59	A5	3451	A	C5-C4	-7.33	1.33	1.38
59	A5	3611	C	C4-C5	-7.33	1.37	1.43
58	B2	1210	G	N9-C8	-7.33	1.32	1.37
59	A5	99	A	C5-C4	-7.33	1.33	1.38
59	A5	1106	A	N7-C5	-7.33	1.34	1.39
59	A5	2197	A	C6-N1	-7.33	1.30	1.35
59	A5	36	U	C5-C6	-7.32	1.27	1.34
59	A5	438	G	N3-C4	-7.32	1.30	1.35
59	A5	1697	U	C2-O2	-7.32	1.15	1.22
59	A5	2719	A	N3-C4	-7.32	1.30	1.34
59	A5	1000	G	C6-N1	-7.32	1.34	1.39
59	A5	1539	A	N7-C5	-7.32	1.34	1.39
58	B2	359	C	N3-C4	-7.32	1.28	1.33
59	A5	66	A	N3-C4	-7.32	1.30	1.34
59	A5	1532	A	N7-C5	-7.32	1.34	1.39
59	A5	2110	A	N7-C5	-7.32	1.34	1.39
59	A5	2509	G	N9-C4	-7.32	1.32	1.38
59	A5	91	U	C2-N3	-7.31	1.32	1.37
59	A5	1624	G	C8-N7	-7.31	1.26	1.30
59	A5	2745	A	C5-C6	-7.31	1.34	1.41
59	A5	3337	G	N1-C2	-7.31	1.31	1.37
59	A5	92	A	N9-C4	-7.31	1.33	1.37
59	A5	2027	A	C6-N1	-7.31	1.30	1.35
33	CP	83	TRP	CB-CG	-7.31	1.37	1.50
59	A5	343	A	C5-C4	-7.31	1.33	1.38
59	A5	504	A	N9-C4	-7.31	1.33	1.37
59	A5	793	U	C5-C6	-7.31	1.27	1.34
59	A5	991	A	N7-C5	-7.31	1.34	1.39
59	A5	2060	A	N9-C4	-7.31	1.33	1.37
59	A5	377	U	C5-C6	-7.30	1.27	1.34
59	A5	2221	G	C5-C4	-7.30	1.33	1.38
59	A5	2542	C	C4-C5	-7.30	1.37	1.43
59	A5	2702	A	C5-C4	-7.30	1.33	1.38
59	A5	3134	G	C5-C4	-7.30	1.33	1.38
59	A5	3870	A	N9-C4	-7.30	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	68	G	N9-C8	-7.30	1.32	1.37
59	A5	1022	A	N9-C8	-7.30	1.31	1.37
59	A5	1690	U	N3-C4	-7.30	1.31	1.38
59	A5	107	G	C5-C6	-7.30	1.35	1.42
59	A5	1616	G	C2-N3	-7.30	1.26	1.32
59	A5	2740	C	C2-O2	-7.30	1.17	1.24
59	A5	3179	A	C5-C4	-7.30	1.33	1.38
59	A5	3616	G	C5-C4	-7.30	1.33	1.38
59	A5	3874	A	N9-C4	-7.30	1.33	1.37
59	A5	823	U	N3-C4	-7.30	1.31	1.38
59	A5	1009	G	C5-C6	-7.30	1.35	1.42
59	A5	3589	G	C5-C4	-7.30	1.33	1.38
59	A5	2216	A	N9-C4	-7.30	1.33	1.37
59	A5	2566	A	C6-N1	-7.30	1.30	1.35
59	A5	1354	G	N7-C5	-7.29	1.34	1.39
59	A5	322	G	N3-C4	-7.29	1.30	1.35
59	A5	1061	A	C6-N1	-7.29	1.30	1.35
59	A5	1134	G	C2-N3	-7.29	1.26	1.32
59	A5	1769	U	N1-C2	-7.29	1.31	1.38
59	A5	1129	A	N9-C4	-7.29	1.33	1.37
59	A5	1318	A	N3-C4	-7.29	1.30	1.34
59	A5	2208	G	C5-C4	-7.29	1.33	1.38
59	A5	3141	A	C5-C6	-7.29	1.34	1.41
59	A5	354	A	C5-C4	-7.29	1.33	1.38
58	B2	1115	C	C4-C5	-7.29	1.37	1.43
59	A5	787	C	C2-N3	-7.29	1.29	1.35
59	A5	1123	C	N1-C6	-7.29	1.32	1.37
59	A5	2730	A	N9-C4	-7.29	1.33	1.37
59	A5	825	C	C2-N3	-7.28	1.29	1.35
59	A5	1527	C	N1-C6	-7.28	1.32	1.37
59	A5	1719	G	N9-C8	-7.28	1.32	1.37
59	A5	2166	U	N1-C2	-7.28	1.31	1.38
59	A5	823	U	N1-C2	-7.28	1.31	1.38
59	A5	1109	G	N9-C8	-7.28	1.32	1.37
59	A5	1004	C	C4-C5	-7.28	1.37	1.43
59	A5	2501	G	C8-N7	-7.28	1.26	1.30
59	A5	2526	A	C5-C4	-7.28	1.33	1.38
59	A5	3335	A	N9-C8	-7.28	1.31	1.37
59	A5	3521	A	N1-C2	-7.28	1.27	1.34
59	A5	818	A	C6-N1	-7.28	1.30	1.35
59	A5	3472	A	C6-N1	-7.28	1.30	1.35
59	A5	1095	G	C6-N1	-7.28	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1367	A	N7-C5	-7.28	1.34	1.39
59	A5	1661	C	N1-C6	-7.28	1.32	1.37
59	A5	1359	G	C2-N3	-7.27	1.26	1.32
59	A5	295	G	C6-N1	-7.27	1.34	1.39
59	A5	810	A	N7-C5	-7.27	1.34	1.39
59	A5	3944	A	N9-C8	-7.27	1.31	1.37
59	A5	1075	G	C5-C6	-7.27	1.35	1.42
59	A5	3150	G	N1-C2	-7.27	1.31	1.37
59	A5	3616	G	N9-C8	-7.27	1.32	1.37
59	A5	3621	A	N7-C5	-7.27	1.34	1.39
55	A7	99	G	N7-C5	-7.27	1.34	1.39
59	A5	245	G	N9-C4	-7.27	1.32	1.38
59	A5	1111	C	C4-C5	-7.27	1.37	1.43
59	A5	2730	A	C5-C4	-7.27	1.33	1.38
59	A5	425	A	C5-C4	-7.27	1.33	1.38
59	A5	425	A	C8-N7	-7.27	1.26	1.31
59	A5	2701	G	N7-C5	-7.27	1.34	1.39
56	A8	101	A	C5-C6	-7.26	1.34	1.41
59	A5	1541	A	N7-C5	-7.26	1.34	1.39
59	A5	337	A	N3-C4	-7.26	1.30	1.34
59	A5	3620	G	N3-C4	-7.26	1.30	1.35
58	B2	1104	C	C4-C5	-7.26	1.37	1.43
59	A5	98	G	N1-C2	-7.26	1.31	1.37
59	A5	1211	A	N9-C4	-7.26	1.33	1.37
59	A5	1015	G	N3-C4	-7.26	1.30	1.35
59	A5	3518	A	C5-C4	-7.26	1.33	1.38
59	A5	2773	G	N7-C5	-7.26	1.34	1.39
59	A5	3477	A	C5-C6	-7.26	1.34	1.41
59	A5	2769	G	C5-C6	-7.26	1.35	1.42
59	A5	427	A	C5-C6	-7.25	1.34	1.41
59	A5	3290	A	N7-C5	-7.25	1.34	1.39
59	A5	1691	A	C6-N6	-7.25	1.28	1.33
59	A5	3488	G	N7-C5	-7.25	1.34	1.39
55	A7	75	G	C5-C4	-7.25	1.33	1.38
56	A8	42	A	N9-C8	-7.25	1.31	1.37
59	A5	3156	G	N1-C2	-7.25	1.31	1.37
59	A5	3514	C	C2-N3	-7.25	1.29	1.35
59	A5	1723	G	C6-N1	-7.25	1.34	1.39
59	A5	3180	G	C5-C4	-7.25	1.33	1.38
59	A5	3454	G	N9-C8	-7.25	1.32	1.37
58	B2	1112	A	N9-C8	-7.25	1.31	1.37
58	B2	1119	G	N9-C8	-7.25	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1083	A	N3-C4	-7.25	1.30	1.34
59	A5	1168	G	N7-C5	-7.25	1.34	1.39
59	A5	1384	C	N1-C6	-7.25	1.32	1.37
59	A5	2778	G	N7-C5	-7.25	1.34	1.39
59	A5	2198	G	N9-C8	-7.25	1.32	1.37
59	A5	3253	G	N7-C5	-7.25	1.34	1.39
59	A5	804	C	N1-C6	-7.24	1.32	1.37
59	A5	2803	A	N3-C4	-7.24	1.30	1.34
59	A5	3519	C	C5-C6	-7.24	1.28	1.34
59	A5	1360	U	C2-N3	-7.24	1.32	1.37
59	A5	2784	C	C2-O2	-7.24	1.18	1.24
59	A5	3594	A	C5-C4	-7.24	1.33	1.38
58	B2	1980	U	C4-C5	-7.24	1.37	1.43
59	A5	322	G	N9-C4	-7.24	1.32	1.38
59	A5	810	A	C5-C6	-7.24	1.34	1.41
59	A5	376	G	N9-C8	-7.24	1.32	1.37
59	A5	2226	A	C5-C4	-7.24	1.33	1.38
59	A5	2500	G	N1-C2	-7.24	1.31	1.37
59	A5	2704	A	N7-C5	-7.24	1.34	1.39
58	B2	1940	G	C5-C4	-7.24	1.33	1.38
59	A5	1359	G	C5-C4	-7.24	1.33	1.38
59	A5	1519	A	N9-C4	-7.24	1.33	1.37
59	A5	2723	A	C8-N7	-7.24	1.26	1.31
59	A5	3499	G	N9-C8	-7.24	1.32	1.37
59	A5	3620	G	C5-C4	-7.24	1.33	1.38
59	A5	214	A	C5-C4	-7.23	1.33	1.38
59	A5	2249	A	N9-C4	-7.23	1.33	1.37
59	A5	2658	A	N9-C4	-7.23	1.33	1.37
59	A5	48	U	C4-C5	-7.23	1.37	1.43
59	A5	85	U	N1-C2	-7.23	1.32	1.38
59	A5	827	A	N3-C4	-7.23	1.30	1.34
59	A5	1114	A	C6-N1	-7.23	1.30	1.35
59	A5	1737	U	C4-C5	-7.23	1.37	1.43
59	A5	448	A	C5-C6	-7.23	1.34	1.41
59	A5	1756	G	C6-N1	-7.23	1.34	1.39
59	A5	2545	A	N9-C4	-7.23	1.33	1.37
59	A5	3546	A	N3-C4	-7.23	1.30	1.34
58	B2	1230	A	N9-C4	-7.23	1.33	1.37
59	A5	1127	C	C4-N4	-7.23	1.27	1.33
59	A5	304	U	N1-C2	-7.23	1.32	1.38
59	A5	371	G	N9-C8	-7.23	1.32	1.37
59	A5	1143	U	C2-O2	-7.23	1.15	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1137	G	C2-N3	-7.23	1.26	1.32
59	A5	803	A	C8-N7	-7.22	1.26	1.31
59	A5	1169	C	C4-C5	-7.22	1.37	1.43
59	A5	22	A	N7-C5	-7.22	1.34	1.39
59	A5	60	G	N1-C2	-7.22	1.31	1.37
59	A5	108	A	C5-C4	-7.22	1.33	1.38
59	A5	865	A	N9-C4	-7.22	1.33	1.37
59	A5	1698	A	N9-C8	-7.22	1.31	1.37
59	A5	353	G	C6-N1	-7.22	1.34	1.39
59	A5	1173	U	N1-C2	-7.22	1.32	1.38
59	A5	3135	G	N9-C8	-7.22	1.32	1.37
55	A7	85	G	N9-C8	-7.21	1.32	1.37
59	A5	1759	C	N1-C6	-7.21	1.32	1.37
59	A5	2104	A	N9-C8	-7.21	1.31	1.37
59	A5	2514	U	N1-C2	-7.21	1.32	1.38
59	A5	2149	G	N9-C8	-7.21	1.32	1.37
59	A5	1741	G	C8-N7	-7.21	1.26	1.30
59	A5	2257	C	N3-C4	-7.21	1.28	1.33
59	A5	2563	G	N9-C4	-7.21	1.32	1.38
59	A5	424	G	N3-C4	-7.21	1.30	1.35
59	A5	782	G	C5-C4	-7.21	1.33	1.38
59	A5	3405	U	N3-C4	-7.21	1.31	1.38
56	A8	19	A	N7-C5	-7.20	1.34	1.39
59	A5	1369	C	C2-N3	-7.20	1.29	1.35
59	A5	1660	G	N9-C8	-7.20	1.32	1.37
59	A5	96	G	N7-C5	-7.20	1.34	1.39
59	A5	674	A	C5-C6	-7.20	1.34	1.41
59	A5	1391	A	N7-C5	-7.20	1.34	1.39
59	A5	3593	A	N3-C4	-7.20	1.30	1.34
59	A5	1677	U	C4-O4	-7.20	1.17	1.23
59	A5	1681	G	C6-N1	-7.20	1.34	1.39
59	A5	2714	U	N1-C2	-7.20	1.32	1.38
59	A5	3512	U	C2-N3	-7.20	1.32	1.37
59	A5	3620	G	N9-C4	-7.20	1.32	1.38
58	B2	1080	A	N9-C4	-7.20	1.33	1.37
59	A5	111	A	N3-C4	-7.20	1.30	1.34
59	A5	1360	U	N1-C6	-7.20	1.31	1.38
59	A5	1729	G	C8-N7	-7.20	1.26	1.30
59	A5	2776	A	N9-C8	-7.20	1.31	1.37
59	A5	3316	U	N3-C4	-7.20	1.31	1.38
59	A5	2760	G	C5-C4	-7.19	1.33	1.38
59	A5	1169	C	C2-N3	-7.19	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2809	C	N1-C6	-7.19	1.32	1.37
59	A5	3131	C	N3-C4	-7.19	1.28	1.33
59	A5	100	G	N9-C8	-7.19	1.32	1.37
59	A5	2550	G	C6-N1	-7.19	1.34	1.39
59	A5	843	A	C5-C4	-7.19	1.33	1.38
59	A5	1133	A	C5-C4	-7.19	1.33	1.38
59	A5	1549	A	C5-C4	-7.19	1.33	1.38
59	A5	1612	G	C6-O6	-7.19	1.17	1.24
59	A5	2149	G	C5-C4	-7.19	1.33	1.38
59	A5	1383	A	N7-C5	-7.18	1.34	1.39
58	B2	632	G	N9-C4	-7.18	1.32	1.38
58	B2	1984	G	N7-C5	-7.18	1.34	1.39
59	A5	1208	U	C2-N3	-7.18	1.32	1.37
56	A8	13	U	C2-N3	-7.18	1.32	1.37
56	A8	25	C	N3-C4	-7.18	1.28	1.33
59	A5	1150	G	C8-N7	-7.18	1.26	1.30
59	A5	3521	A	C8-N7	-7.18	1.26	1.31
58	B2	1214	A	C6-N1	-7.18	1.30	1.35
59	A5	2215	G	N1-C2	-7.18	1.32	1.37
59	A5	1273	U	C2-N3	-7.18	1.32	1.37
59	A5	1414	C	N1-C6	-7.18	1.32	1.37
59	A5	1767	A	C5-C4	-7.18	1.33	1.38
59	A5	2151	A	C5-C4	-7.18	1.33	1.38
59	A5	1029	C	C2-N3	-7.17	1.30	1.35
59	A5	3610	A	N7-C5	-7.17	1.34	1.39
59	A5	422	G	C6-N1	-7.17	1.34	1.39
59	A5	1372	A	N3-C4	-7.17	1.30	1.34
59	A5	1655	A	N9-C4	-7.17	1.33	1.37
4	CB	39	LYS	C-N	7.17	1.47	1.34
58	B2	1194	C	N3-C4	-7.17	1.28	1.33
59	A5	1124	G	N1-C2	-7.17	1.32	1.37
59	A5	2148	C	N3-C4	-7.17	1.28	1.33
59	A5	3628	G	C6-N1	-7.17	1.34	1.39
59	A5	3765	A	N7-C5	-7.17	1.34	1.39
59	A5	2186	C	N1-C6	-7.17	1.32	1.37
59	A5	3601	U	C4-C5	-7.17	1.37	1.43
59	A5	1031	G	N1-C2	-7.17	1.32	1.37
59	A5	2204	U	N3-C4	-7.17	1.31	1.38
59	A5	988	C	N3-C4	-7.17	1.28	1.33
59	A5	1006	A	C5-C4	-7.17	1.33	1.38
59	A5	2163	A	N3-C4	-7.17	1.30	1.34
59	A5	793	U	C4-C5	-7.17	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1173	U	C4-O4	-7.17	1.18	1.23
59	A5	1375	G	N1-C2	-7.16	1.32	1.37
59	A5	1660	G	N1-C2	-7.16	1.32	1.37
59	A5	2085	G	N9-C4	-7.16	1.32	1.38
59	A5	427	A	N9-C8	-7.16	1.32	1.37
59	A5	1198	U	C2-N3	-7.16	1.32	1.37
59	A5	2802	A	C5-C4	-7.16	1.33	1.38
59	A5	3263	C	C4-C5	-7.16	1.37	1.43
59	A5	1076	A	N7-C5	-7.16	1.34	1.39
59	A5	2009	A	N7-C5	-7.16	1.34	1.39
59	A5	1779	G	N9-C8	-7.16	1.32	1.37
59	A5	3584	C	C4-C5	-7.16	1.37	1.43
59	A5	1003	C	C4-C5	-7.16	1.37	1.43
59	A5	1040	C	N3-C4	-7.16	1.28	1.33
59	A5	1663	G	N7-C5	-7.16	1.34	1.39
59	A5	3416	C	C2-N3	-7.16	1.30	1.35
59	A5	1056	G	N1-C2	-7.15	1.32	1.37
59	A5	1750	G	C2-N3	-7.15	1.27	1.32
59	A5	2540	G	C5-C4	-7.15	1.33	1.38
59	A5	2570	C	C2-N3	-7.15	1.30	1.35
59	A5	69	A	C5-C4	-7.15	1.33	1.38
59	A5	443	G	N3-C4	-7.15	1.30	1.35
59	A5	1610	A	N9-C4	-7.15	1.33	1.37
59	A5	1679	U	C2-N3	-7.15	1.32	1.37
56	A8	20	C	N1-C6	-7.15	1.32	1.37
59	A5	1068	C	N3-C4	-7.15	1.28	1.33
59	A5	3139	G	N9-C8	-7.15	1.32	1.37
59	A5	3356	G	C8-N7	-7.15	1.26	1.30
59	A5	1790	A	N7-C5	-7.14	1.34	1.39
59	A5	2195	A	C5-C4	-7.14	1.33	1.38
59	A5	2611	A	N9-C4	-7.14	1.33	1.37
59	A5	2673	A	N9-C4	-7.14	1.33	1.37
59	A5	3404	A	C6-N1	-7.14	1.30	1.35
59	A5	3520	U	N3-C4	-7.14	1.32	1.38
59	A5	1320	U	C2-N3	-7.14	1.32	1.37
59	A5	1679	U	N1-C6	-7.14	1.31	1.38
58	B2	632	G	C5-C4	-7.14	1.33	1.38
59	A5	2726	A	N9-C4	-7.14	1.33	1.37
59	A5	97	C	C2-N3	-7.14	1.30	1.35
59	A5	1084	A	N9-C8	-7.14	1.32	1.37
59	A5	1951	C	N3-C4	-7.14	1.28	1.33
59	A5	3403	G	C2-N3	-7.14	1.27	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	67	A	N9-C4	-7.13	1.33	1.37
59	A5	1017	A	N3-C4	-7.13	1.30	1.34
59	A5	1132	U	N1-C2	-7.13	1.32	1.38
59	A5	1636	G	C6-N1	-7.13	1.34	1.39
59	A5	2749	G	C5-C6	-7.13	1.35	1.42
59	A5	3948	U	C2-N3	-7.13	1.32	1.37
54	A9	11	A	N7-C5	-7.13	1.34	1.39
59	A5	1735	G	C8-N7	-7.13	1.26	1.30
59	A5	49	A	N7-C5	-7.13	1.34	1.39
59	A5	1167	A	C8-N7	-7.13	1.26	1.31
59	A5	1377	A	C5-C4	-7.13	1.33	1.38
59	A5	1379	U	C4-C5	-7.13	1.37	1.43
59	A5	3624	C	N3-C4	-7.13	1.28	1.33
59	A5	807	A	N9-C8	-7.13	1.32	1.37
59	A5	1127	C	C5-C6	-7.13	1.28	1.34
59	A5	2113	A	N9-C4	-7.13	1.33	1.37
59	A5	2228	U	C2-N3	-7.12	1.32	1.37
59	A5	2560	A	N7-C5	-7.12	1.34	1.39
59	A5	2701	G	C8-N7	-7.12	1.26	1.30
59	A5	3758	G	C8-N7	-7.12	1.26	1.30
59	A5	1397	A	N9-C4	-7.12	1.33	1.37
59	A5	2237	A	C5-C6	-7.12	1.34	1.41
59	A5	3267	C	C4-C5	-7.12	1.37	1.43
59	A5	44	A	C6-N1	-7.12	1.30	1.35
59	A5	1560	A	C5-C6	-7.12	1.34	1.41
59	A5	1207	G	N3-C4	-7.12	1.30	1.35
59	A5	802	G	N1-C2	-7.12	1.32	1.37
59	A5	1124	G	N3-C4	-7.12	1.30	1.35
59	A5	1347	A	N7-C5	-7.12	1.34	1.39
59	A5	235	A	C5-C4	-7.11	1.33	1.38
59	A5	289	C	N3-C4	-7.11	1.28	1.33
59	A5	802	G	C6-O6	-7.11	1.17	1.24
59	A5	1081	C	C4-C5	-7.11	1.37	1.43
55	A7	81	A	C5-C4	-7.11	1.33	1.38
59	A5	45	G	C6-N1	-7.11	1.34	1.39
59	A5	1345	G	N9-C8	-7.11	1.32	1.37
59	A5	3450	G	C6-N1	-7.11	1.34	1.39
59	A5	3539	C	N1-C6	-7.11	1.32	1.37
56	A8	57	G	N1-C2	-7.11	1.32	1.37
59	A5	1131	C	N1-C6	-7.11	1.32	1.37
59	A5	1341	G	C5-C4	-7.11	1.33	1.38
58	B2	1961	A	N9-C4	-7.10	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1520	U	C2-N3	-7.10	1.32	1.37
59	A5	3328	G	N9-C8	-7.10	1.32	1.37
59	A5	1657	G	C5-C4	-7.10	1.33	1.38
59	A5	1657	G	N9-C8	-7.10	1.32	1.37
59	A5	3546	A	N9-C4	-7.10	1.33	1.37
4	CB	266	VAL	CB-CG2	-7.10	1.38	1.52
59	A5	74	A	C5-C4	-7.10	1.33	1.38
59	A5	1325	C	C4-C5	-7.10	1.37	1.43
59	A5	1687	U	C2-O2	-7.10	1.16	1.22
59	A5	2749	G	C5-C4	-7.10	1.33	1.38
59	A5	3350	U	C2-N3	-7.10	1.32	1.37
59	A5	2726	A	N3-C4	-7.10	1.30	1.34
59	A5	2168	G	N9-C8	-7.09	1.32	1.37
59	A5	2481	U	C4-C5	-7.09	1.37	1.43
59	A5	2521	A	C5-C6	-7.09	1.34	1.41
48	Cp	18	TYR	CE2-CZ	-7.09	1.29	1.38
58	B2	7	G	C5-C4	-7.09	1.33	1.38
59	A5	1315	A	C5-C6	-7.09	1.34	1.41
59	A5	2110	A	N3-C4	-7.09	1.30	1.34
59	A5	2205	G	C8-N7	-7.09	1.26	1.30
59	A5	2678	G	N9-C8	-7.09	1.32	1.37
26	CN	110	LEU	CA-CB	-7.09	1.37	1.53
59	A5	1064	G	C8-N7	-7.09	1.26	1.30
59	A5	3488	G	C8-N7	-7.09	1.26	1.30
59	A5	816	A	N7-C5	-7.08	1.34	1.39
59	A5	1618	A	N9-C8	-7.08	1.32	1.37
59	A5	1167	A	N9-C8	-7.08	1.32	1.37
59	A5	2745	A	C6-N1	-7.08	1.30	1.35
59	A5	1022	A	C6-N6	-7.08	1.28	1.33
59	A5	3339	U	C2-N3	-7.08	1.32	1.37
59	A5	1413	C	C5-C6	-7.08	1.28	1.34
59	A5	3418	U	C2-N3	-7.08	1.32	1.37
59	A5	2036	G	C2-N3	-7.08	1.27	1.32
59	A5	2505	A	N9-C8	-7.08	1.32	1.37
59	A5	93	G	C5-C4	-7.08	1.33	1.38
59	A5	1197	A	O3'-P	7.08	1.69	1.61
59	A5	3346	G	C6-N1	-7.08	1.34	1.39
59	A5	1106	A	N9-C4	-7.07	1.33	1.37
59	A5	42	U	C4-C5	-7.07	1.37	1.43
59	A5	1609	U	C5-C6	-7.07	1.27	1.34
59	A5	2733	G	C2-N3	-7.07	1.27	1.32
59	A5	3132	C	N3-C4	-7.07	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3611	C	N3-C4	-7.07	1.29	1.33
59	A5	2725	U	C2-N3	-7.07	1.32	1.37
59	A5	2222	G	N7-C5	-7.07	1.35	1.39
59	A5	2571	U	C2-N3	-7.07	1.32	1.37
59	A5	3179	A	N7-C5	-7.07	1.35	1.39
59	A5	298	U	C2-O2	-7.06	1.16	1.22
59	A5	448	A	N3-C4	-7.06	1.30	1.34
59	A5	1071	U	C5-C6	-7.06	1.27	1.34
59	A5	1074	U	C4-C5	-7.06	1.37	1.43
59	A5	3141	A	N3-C4	-7.06	1.30	1.34
56	A8	21	U	N3-C4	-7.06	1.32	1.38
59	A5	87	U	N1-C2	-7.06	1.32	1.38
59	A5	1628	G	N7-C5	-7.06	1.35	1.39
59	A5	3583	C	N3-C4	-7.06	1.29	1.33
59	A5	3631	C	N1-C2	-7.06	1.33	1.40
80	CF	96	VAL	CB-CG1	-7.06	1.38	1.52
59	A5	27	A	N9-C4	-7.06	1.33	1.37
59	A5	355	G	C8-N7	-7.06	1.26	1.30
59	A5	826	A	N3-C4	-7.06	1.30	1.34
59	A5	2536	G	N1-C2	-7.06	1.32	1.37
59	A5	2809	C	N3-C4	-7.06	1.29	1.33
59	A5	3262	A	C8-N7	-7.06	1.26	1.31
59	A5	3351	A	N1-C2	-7.06	1.27	1.34
59	A5	3526	C	N3-C4	-7.06	1.29	1.33
59	A5	1696	A	C6-N1	-7.06	1.30	1.35
59	A5	2196	U	N1-C2	-7.06	1.32	1.38
59	A5	3428	A	N9-C4	-7.06	1.33	1.37
59	A5	3543	A	C6-N1	-7.06	1.30	1.35
59	A5	2672	U	C2-N3	-7.06	1.32	1.37
59	A5	1165	A	C2-N3	-7.05	1.27	1.33
59	A5	1784	A	C8-N7	-7.05	1.26	1.31
59	A5	986	A	C6-N1	-7.05	1.30	1.35
59	A5	3714	U	C5-C6	-7.05	1.27	1.34
33	CP	139	TYR	CG-CD1	-7.05	1.29	1.39
59	A5	1126	A	C6-N1	-7.05	1.30	1.35
59	A5	2177	G	N7-C5	-7.05	1.35	1.39
59	A5	2779	A	N9-C4	-7.05	1.33	1.37
59	A5	3153	G	N7-C5	-7.05	1.35	1.39
59	A5	3495	G	N3-C4	-7.05	1.30	1.35
59	A5	3624	C	N1-C6	-7.05	1.32	1.37
59	A5	1734	G	C5-C4	-7.05	1.33	1.38
59	A5	3906	U	C2-N3	-7.05	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	65	A	C6-N1	-7.05	1.30	1.35
59	A5	785	A	N3-C4	-7.05	1.30	1.34
59	A5	1027	A	C6-N1	-7.05	1.30	1.35
59	A5	1149	C	C2-N3	-7.05	1.30	1.35
59	A5	1757	A	C6-N1	-7.05	1.30	1.35
59	A5	1004	C	C2-N3	-7.04	1.30	1.35
59	A5	2148	C	C2-N3	-7.04	1.30	1.35
56	A8	31	G	C6-N1	-7.04	1.34	1.39
59	A5	1529	C	N3-C4	-7.04	1.29	1.33
59	A5	2104	A	C5-C4	-7.04	1.33	1.38
59	A5	103	A	N9-C4	-7.04	1.33	1.37
59	A5	295	G	N1-C2	-7.04	1.32	1.37
59	A5	1345	G	C6-N1	-7.04	1.34	1.39
55	A7	89	G	C5-C4	-7.04	1.33	1.38
59	A5	1373	A	C5-C4	-7.04	1.33	1.38
59	A5	3236	A	N7-C5	-7.04	1.35	1.39
41	Ce	35	ARG	CG-CD	-7.04	1.34	1.51
59	A5	61	A	N9-C4	-7.04	1.33	1.37
59	A5	93	G	N7-C5	-7.04	1.35	1.39
59	A5	363	G	C5-C4	-7.04	1.33	1.38
59	A5	1795	A	N9-C8	-7.04	1.32	1.37
59	A5	2545	A	C6-N1	-7.04	1.30	1.35
33	CP	139	TYR	CD1-CE1	-7.04	1.28	1.39
59	A5	357	C	C2-N3	-7.04	1.30	1.35
59	A5	2246	A	C6-N1	-7.04	1.30	1.35
59	A5	3193	C	N1-C6	-7.04	1.32	1.37
66	CL	60	CYS	CB-SG	-7.04	1.70	1.82
56	A8	8	A	N3-C4	-7.03	1.30	1.34
58	B2	360	G	N7-C5	-7.03	1.35	1.39
59	A5	2515	C	N3-C4	-7.03	1.29	1.33
59	A5	3173	U	C2-N3	-7.03	1.32	1.37
58	B2	1408	A	N9-C4	-7.03	1.33	1.37
59	A5	771	A	N7-C5	-7.03	1.35	1.39
59	A5	1775	C	N3-C4	-7.03	1.29	1.33
59	A5	2677	A	C5-C4	-7.03	1.33	1.38
59	A5	1097	A	N7-C5	-7.03	1.35	1.39
59	A5	1558	A	N9-C4	-7.03	1.33	1.37
59	A5	365	A	N9-C8	-7.03	1.32	1.37
59	A5	1012	G	C6-N1	-7.03	1.34	1.39
59	A5	1111	C	N1-C2	-7.03	1.33	1.40
59	A5	1606	G	N1-C2	-7.03	1.32	1.37
59	A5	1646	U	C2-N3	-7.03	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2785	C	C5-C6	-7.03	1.28	1.34
59	A5	814	U	C2-N3	-7.03	1.32	1.37
59	A5	1010	A	C8-N7	-7.03	1.26	1.31
59	A5	3506	U	C5-C6	-7.03	1.27	1.34
59	A5	992	U	N3-C4	-7.02	1.32	1.38
59	A5	99	A	C8-N7	-7.02	1.26	1.31
59	A5	387	U	N3-C4	-7.02	1.32	1.38
59	A5	1067	A	C5-C6	-7.02	1.34	1.41
59	A5	1392	A	N9-C8	-7.02	1.32	1.37
59	A5	3679	C	C4-C5	-7.02	1.37	1.43
59	A5	1391	A	C5-C4	-7.02	1.33	1.38
56	A8	40	A	C5-C4	-7.02	1.33	1.38
59	A5	1005	G	N9-C4	-7.02	1.32	1.38
59	A5	2164	G	C5-C6	-7.01	1.35	1.42
59	A5	2657	A	C2-N3	-7.01	1.27	1.33
59	A5	3177	G	C5-C4	-7.01	1.33	1.38
59	A5	1166	U	N1-C2	-7.01	1.32	1.38
59	A5	2525	C	N1-C2	-7.01	1.33	1.40
59	A5	2713	G	C5-C4	-7.01	1.33	1.38
59	A5	325	A	N9-C4	-7.01	1.33	1.37
59	A5	3321	A	C5-C4	-7.01	1.33	1.38
59	A5	1687	U	N3-C4	-7.01	1.32	1.38
59	A5	3260	G	N7-C5	-7.01	1.35	1.39
59	A5	2518	A	C8-N7	-7.01	1.26	1.31
59	A5	2771	G	N1-C2	-7.01	1.32	1.37
59	A5	1672	A	C5-C4	-7.01	1.33	1.38
59	A5	1793	C	N1-C2	-7.01	1.33	1.40
59	A5	978	G	N7-C5	-7.00	1.35	1.39
59	A5	1677	U	C2-N3	-7.00	1.32	1.37
59	A5	2513	G	N9-C4	-7.00	1.32	1.38
59	A5	1160	U	N3-C4	-7.00	1.32	1.38
59	A5	2533	U	C2-N3	-7.00	1.32	1.37
59	A5	1172	G	C6-N1	-7.00	1.34	1.39
59	A5	1647	A	N9-C8	-7.00	1.32	1.37
59	A5	111	A	C5-C4	-7.00	1.33	1.38
59	A5	1600	U	C4-C5	-7.00	1.37	1.43
59	A5	2089	A	N9-C4	-7.00	1.33	1.37
59	A5	2693	G	N9-C8	-7.00	1.32	1.37
58	B2	1962	G	N9-C8	-7.00	1.32	1.37
59	A5	1601	U	C4-C5	-7.00	1.37	1.43
59	A5	1692	G	C8-N7	-7.00	1.26	1.30
59	A5	1763	A	N9-C4	-7.00	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	94	C	N1-C6	-6.99	1.32	1.37
59	A5	1972	C	N3-C4	-6.99	1.29	1.33
56	A8	21	U	C5-C6	-6.99	1.27	1.34
59	A5	1020	A	N3-C4	-6.99	1.30	1.34
59	A5	1037	A	N7-C5	-6.99	1.35	1.39
59	A5	2810	A	N9-C4	-6.99	1.33	1.37
59	A5	1173	U	C4-C5	-6.99	1.37	1.43
59	A5	1356	G	N1-C2	-6.99	1.32	1.37
59	A5	1729	G	N9-C8	-6.99	1.32	1.37
59	A5	2557	C	N1-C2	-6.99	1.33	1.40
9	AX	22	TRP	CB-CG	-6.99	1.37	1.50
59	A5	38	A	C6-N1	-6.99	1.30	1.35
59	A5	2709	U	C2-N3	-6.99	1.32	1.37
59	A5	3507	A	N9-C8	-6.99	1.32	1.37
58	B2	1079	A	N3-C4	-6.99	1.30	1.34
59	A5	1693	C	C4-C5	-6.99	1.37	1.43
59	A5	1711	C	N3-C4	-6.99	1.29	1.33
59	A5	43	A	C6-N1	-6.98	1.30	1.35
59	A5	2541	C	N3-C4	-6.98	1.29	1.33
59	A5	3149	U	N3-C4	-6.98	1.32	1.38
58	B2	1110	A	C5-C4	-6.98	1.33	1.38
59	A5	447	G	N1-C2	-6.98	1.32	1.37
59	A5	1597	A	N7-C5	-6.98	1.35	1.39
59	A5	1343	A	N9-C4	-6.98	1.33	1.37
59	A5	2207	A	C5-C6	-6.98	1.34	1.41
59	A5	2208	G	N9-C8	-6.98	1.32	1.37
59	A5	2675	U	C2-N3	-6.98	1.32	1.37
59	A5	3354	U	N3-C4	-6.98	1.32	1.38
59	A5	337	A	C5-C4	-6.98	1.33	1.38
59	A5	1053	G	N9-C8	-6.98	1.32	1.37
58	B2	635	C	N1-C6	-6.97	1.32	1.37
59	A5	107	G	C5-C4	-6.97	1.33	1.38
59	A5	1779	G	C2-N3	-6.97	1.27	1.32
59	A5	2237	A	N7-C5	-6.97	1.35	1.39
59	A5	3175	A	C5-C4	-6.97	1.33	1.38
59	A5	3357	C	N3-C4	-6.97	1.29	1.33
55	A7	67	G	N9-C4	-6.97	1.32	1.38
56	A8	18	C	C2-N3	-6.97	1.30	1.35
56	A8	42	A	N9-C4	-6.97	1.33	1.37
59	A5	26	G	N3-C4	6.97	1.40	1.35
59	A5	1097	A	C8-N7	-6.97	1.26	1.31
59	A5	1144	C	C4-C5	-6.97	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1314	U	C2-N3	-6.97	1.32	1.37
59	A5	1361	G	N1-C2	-6.97	1.32	1.37
59	A5	2230	G	C8-N7	-6.97	1.26	1.30
59	A5	3152	G	N1-C2	-6.97	1.32	1.37
59	A5	1382	U	C3'-O3'	6.97	1.51	1.42
59	A5	1410	A	N7-C5	-6.97	1.35	1.39
59	A5	1867	A	N9-C4	-6.97	1.33	1.37
59	A5	2678	G	N7-C5	-6.97	1.35	1.39
59	A5	353	G	C8-N7	-6.96	1.26	1.30
59	A5	1065	A	C6-N1	-6.96	1.30	1.35
59	A5	1619	C	C4-C5	-6.96	1.37	1.43
59	A5	1732	A	C8-N7	-6.96	1.26	1.31
59	A5	2748	G	N7-C5	-6.96	1.35	1.39
59	A5	3952	C	N3-C4	-6.96	1.29	1.33
59	A5	25	G	C5-C4	-6.96	1.33	1.38
59	A5	67	A	N3-C4	-6.96	1.30	1.34
59	A5	323	U	N1-C2	-6.96	1.32	1.38
59	A5	352	U	N1-C2	-6.96	1.32	1.38
59	A5	2713	G	N1-C2	-6.96	1.32	1.37
59	A5	39	A	C6-N6	-6.96	1.28	1.33
59	A5	3336	A	N9-C8	-6.96	1.32	1.37
59	A5	3343	A	C2-N3	-6.96	1.27	1.33
58	B2	1847	A	N3-C4	-6.96	1.30	1.34
59	A5	78	A	N3-C4	-6.96	1.30	1.34
59	A5	1523	A	N9-C8	-6.96	1.32	1.37
59	A5	2714	U	C2-O2	-6.96	1.16	1.22
59	A5	3472	A	C5-C4	-6.96	1.33	1.38
59	A5	1176	A	N7-C5	-6.96	1.35	1.39
59	A5	2552	G	C5-C4	-6.96	1.33	1.38
59	A5	1527	C	C2-N3	-6.96	1.30	1.35
59	A5	837	A	N9-C4	-6.95	1.33	1.37
59	A5	2034	U	C2-N3	-6.95	1.32	1.37
59	A5	2226	A	C8-N7	-6.95	1.26	1.31
59	A5	3289	U	C2-N3	-6.95	1.32	1.37
59	A5	3341	C	C5-C6	-6.95	1.28	1.34
59	A5	3541	A	C6-N1	-6.95	1.30	1.35
59	A5	3845	A	N9-C4	-6.95	1.33	1.37
59	A5	3321	A	C5-C6	-6.95	1.34	1.41
59	A5	2244	G	C5-C6	-6.95	1.35	1.42
59	A5	1010	A	N9-C4	-6.95	1.33	1.37
56	A8	41	G	C8-N7	-6.95	1.26	1.30
59	A5	306	C	N3-C4	-6.95	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1779	G	N1-C2	-6.95	1.32	1.37
59	A5	3603	C	N3-C4	-6.95	1.29	1.33
59	A5	3335	A	N3-C4	-6.94	1.30	1.34
59	A5	3398	C	N3-C4	-6.94	1.29	1.33
59	A5	1142	U	C4'-C3'	-6.94	1.45	1.53
59	A5	3145	U	N1-C6	-6.94	1.31	1.38
59	A5	3152	G	C5-C4	-6.94	1.33	1.38
65	CO	138	CYS	CB-SG	-6.94	1.70	1.82
59	A5	341	A	C5-C4	-6.94	1.33	1.38
59	A5	3296	C	C2-N3	-6.94	1.30	1.35
41	Ce	46	ARG	CB-CG	-6.94	1.33	1.52
59	A5	846	U	C2-N3	-6.94	1.32	1.37
59	A5	1120	A	N3-C4	-6.94	1.30	1.34
59	A5	3486	U	C2-N3	-6.94	1.32	1.37
59	A5	354	A	N9-C4	-6.94	1.33	1.37
59	A5	1378	A	N7-C5	-6.94	1.35	1.39
59	A5	1680	U	N1-C2	-6.94	1.32	1.38
59	A5	1733	A	C5-C4	-6.93	1.33	1.38
59	A5	311	C	N1-C6	-6.93	1.32	1.37
59	A5	2494	G	N7-C5	-6.93	1.35	1.39
59	A5	2164	G	C8-N7	-6.93	1.26	1.30
59	A5	2801	U	N1-C2	-6.93	1.32	1.38
59	A5	3584	C	N1-C6	-6.93	1.32	1.37
56	A8	14	G	N7-C5	-6.92	1.35	1.39
59	A5	812	U	C2-N3	-6.92	1.32	1.37
59	A5	2163	A	C5-C4	-6.92	1.33	1.38
59	A5	2190	A	C6-N1	-6.92	1.30	1.35
59	A5	3490	C	C4-C5	-6.92	1.37	1.43
59	A5	3730	G	N7-C5	-6.92	1.35	1.39
59	A5	1063	C	C2-N3	-6.92	1.30	1.35
59	A5	1111	C	N1-C6	-6.92	1.32	1.37
59	A5	2036	G	N9-C8	-6.92	1.33	1.37
59	A5	3348	G	N7-C5	-6.92	1.35	1.39
59	A5	3591	A	C6-N6	-6.92	1.28	1.33
41	Ce	52	TYR	CD1-CE1	-6.92	1.28	1.39
59	A5	2245	G	N7-C5	-6.92	1.35	1.39
59	A5	2528	A	C5-C4	-6.92	1.33	1.38
59	A5	2724	C	N1-C6	-6.92	1.32	1.37
59	A5	2753	G	N1-C2	-6.92	1.32	1.37
59	A5	3251	C	C4-C5	-6.92	1.37	1.43
58	B2	1206	G	C8-N7	-6.92	1.26	1.30
59	A5	3681	A	C5-C4	-6.92	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1646	U	N1-C6	-6.91	1.31	1.38
59	A5	3398	C	N1-C6	-6.91	1.33	1.37
59	A5	1028	U	N1-C2	-6.91	1.32	1.38
59	A5	3327	U	C2-N3	-6.91	1.32	1.37
59	A5	3511	U	C4-C5	-6.91	1.37	1.43
59	A5	1630	G	C5-C4	-6.91	1.33	1.38
59	A5	2146	G	N7-C5	-6.91	1.35	1.39
59	A5	3666	C	N3-C4	-6.91	1.29	1.33
59	A5	1533	A	N7-C5	-6.91	1.35	1.39
59	A5	1608	G	N3-C4	-6.91	1.30	1.35
59	A5	2181	A	C8-N7	-6.91	1.26	1.31
59	A5	3440	C	C4-C5	-6.91	1.37	1.43
59	A5	1070	G	C2-N3	-6.91	1.27	1.32
59	A5	2180	A	C5-C6	-6.91	1.34	1.41
56	A8	27	C	N3-C4	-6.91	1.29	1.33
59	A5	105	A	C8-N7	-6.91	1.26	1.31
59	A5	1053	G	C5-C6	-6.90	1.35	1.42
59	A5	2688	U	C2-N3	-6.90	1.32	1.37
59	A5	920	G	N9-C8	-6.90	1.33	1.37
59	A5	1136	A	N9-C8	-6.90	1.32	1.37
59	A5	1327	G	C6-N1	-6.90	1.34	1.39
59	A5	2540	G	N9-C8	-6.90	1.33	1.37
59	A5	3447	U	C2-N3	-6.90	1.32	1.37
55	A7	83	A	N7-C5	-6.90	1.35	1.39
56	A8	43	A	C5-C6	-6.90	1.34	1.41
59	A5	2194	G	C2-N3	-6.90	1.27	1.32
59	A5	3497	G	N9-C8	-6.90	1.33	1.37
59	A5	1370	C	C2-N3	-6.90	1.30	1.35
59	A5	3133	A	C5-C4	-6.90	1.33	1.38
59	A5	2774	G	N3-C4	-6.90	1.30	1.35
59	A5	1116	G	N9-C8	-6.90	1.33	1.37
59	A5	317	G	N9-C8	-6.89	1.33	1.37
59	A5	3538	G	N3-C4	-6.89	1.30	1.35
59	A5	2703	G	C2-N3	-6.89	1.27	1.32
59	A5	3601	U	C2-N3	-6.89	1.32	1.37
56	A8	15	G	N9-C4	-6.89	1.32	1.38
59	A5	345	A	N7-C5	-6.89	1.35	1.39
59	A5	2206	U	C5-C6	-6.89	1.27	1.34
59	A5	3490	C	C2-N3	-6.89	1.30	1.35
59	A5	60	G	C6-N1	-6.89	1.34	1.39
59	A5	1348	G	C5-C4	-6.89	1.33	1.38
59	A5	2754	G	N1-C2	-6.89	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	825	C	C4-C5	-6.88	1.37	1.43
59	A5	1004	C	N1-C6	-6.88	1.33	1.37
59	A5	1675	G	C5-C6	-6.88	1.35	1.42
59	A5	2717	C	N3-C4	-6.88	1.29	1.33
56	A8	42	A	C8-N7	-6.88	1.26	1.31
58	B2	1850	G	N7-C5	-6.88	1.35	1.39
59	A5	1372	A	C5-C4	-6.88	1.33	1.38
59	A5	1795	A	N7-C5	-6.88	1.35	1.39
59	A5	2742	G	N9-C4	-6.88	1.32	1.38
59	A5	3601	U	N1-C6	-6.88	1.31	1.38
59	A5	308	G	C5-C4	-6.88	1.33	1.38
59	A5	309	C	N3-C4	-6.88	1.29	1.33
59	A5	812	U	N1-C2	-6.88	1.32	1.38
59	A5	1063	C	N3-C4	-6.88	1.29	1.33
59	A5	2569	U	C2-N3	-6.88	1.32	1.37
59	A5	3525	A	C5-C4	-6.88	1.33	1.38
59	A5	3588	G	C5-C4	-6.88	1.33	1.38
58	B2	635	C	N3-C4	-6.88	1.29	1.33
59	A5	1552	A	N9-C4	-6.88	1.33	1.37
59	A5	1793	C	C4-C5	-6.88	1.37	1.43
59	A5	2516	U	C5-C6	-6.88	1.27	1.34
59	A5	804	C	N1-C2	-6.88	1.33	1.40
59	A5	2153	C	N3-C4	-6.88	1.29	1.33
59	A5	1206	G	C2-N3	-6.87	1.27	1.32
59	A5	1703	A	C6-N1	-6.87	1.30	1.35
59	A5	2218	G	N9-C4	-6.87	1.32	1.38
59	A5	2775	A	N9-C8	-6.87	1.32	1.37
59	A5	3165	U	N3-C4	-6.87	1.32	1.38
59	A5	2198	G	C5-C4	-6.87	1.33	1.38
59	A5	2699	A	N9-C4	-6.87	1.33	1.37
59	A5	3440	C	N1-C6	-6.87	1.33	1.37
59	A5	1870	G	C6-N1	-6.87	1.34	1.39
59	A5	1270	G	N7-C5	-6.87	1.35	1.39
59	A5	1606	G	C2-N3	-6.87	1.27	1.32
59	A5	3530	A	N9-C4	6.87	1.42	1.37
59	A5	2203	A	N3-C4	-6.87	1.30	1.34
55	A7	96	U	C2-N3	-6.86	1.32	1.37
59	A5	1132	U	C4-C5	-6.86	1.37	1.43
59	A5	1320	U	C5-C6	-6.86	1.27	1.34
59	A5	2671	C	N3-C4	-6.86	1.29	1.33
59	A5	1344	A	N9-C4	-6.86	1.33	1.37
56	A8	15	G	C5-C4	-6.86	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1144	C	N1-C6	-6.86	1.33	1.37
59	A5	1734	G	N1-C2	-6.86	1.32	1.37
59	A5	3288	C	C4-C5	-6.86	1.37	1.43
59	A5	3621	A	C5-C6	-6.86	1.34	1.41
59	A5	2740	C	N1-C6	-6.86	1.33	1.37
59	A5	2798	C	N1-C2	-6.86	1.33	1.40
59	A5	3336	A	C8-N7	-6.86	1.26	1.31
59	A5	1645	G	C2-N3	-6.86	1.27	1.32
59	A5	3263	C	N1-C6	-6.86	1.33	1.37
59	A5	38	A	C5-C4	-6.86	1.33	1.38
59	A5	88	U	N1-C2	-6.86	1.32	1.38
59	A5	821	U	N3-C4	-6.86	1.32	1.38
59	A5	848	A	N9-C4	-6.86	1.33	1.37
59	A5	1313	A	C6-N1	-6.86	1.30	1.35
59	A5	1522	G	C8-N7	-6.86	1.26	1.30
59	A5	1891	U	N1-C2	-6.86	1.32	1.38
59	A5	2618	G	C6-N1	-6.86	1.34	1.39
59	A5	3293	G	N1-C2	-6.85	1.32	1.37
59	A5	1104	A	C6-N1	-6.85	1.30	1.35
59	A5	1681	G	N9-C8	-6.85	1.33	1.37
59	A5	1869	C	C2-N3	-6.85	1.30	1.35
59	A5	2519	U	C4-C5	-6.85	1.37	1.43
59	A5	3487	A	N3-C4	-6.85	1.30	1.34
59	A5	3673	G	C5-C4	-6.85	1.33	1.38
59	A5	445	C	C5-C6	-6.85	1.28	1.34
59	A5	1355	C	C2-N3	-6.85	1.30	1.35
59	A5	2732	C	C5-C6	-6.85	1.28	1.34
55	A7	11	A	N9-C4	-6.85	1.33	1.37
55	A7	95	U	C2-N3	-6.85	1.32	1.37
55	A7	97	G	C5-C4	-6.85	1.33	1.38
59	A5	241	C	N3-C4	-6.85	1.29	1.33
59	A5	392	A	C5-C4	-6.85	1.33	1.38
59	A5	559	A	N9-C4	-6.85	1.33	1.37
58	B2	365	A	N9-C4	-6.85	1.33	1.37
59	A5	3630	C	N1-C2	-6.85	1.33	1.40
58	B2	632	G	C8-N7	-6.85	1.26	1.30
59	A5	2251	G	N3-C4	-6.84	1.30	1.35
59	A5	3267	C	N3-C4	-6.84	1.29	1.33
59	A5	3400	U	C5-C6	-6.84	1.27	1.34
59	A5	1080	G	C5-C6	-6.84	1.35	1.42
59	A5	2517	A	C6-N1	-6.84	1.30	1.35
59	A5	3178	G	N3-C4	-6.84	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	34	C	C5-C6	-6.84	1.28	1.34
59	A5	824	G	C5-C4	-6.84	1.33	1.38
59	A5	846	U	N1-C2	-6.84	1.32	1.38
59	A5	1551	U	C4-C5	-6.84	1.37	1.43
59	A5	1552	A	C5-C4	-6.84	1.33	1.38
59	A5	1791	A	N7-C5	-6.84	1.35	1.39
59	A5	2158	U	N1-C6	-6.84	1.31	1.38
59	A5	1078	G	C5-C4	-6.84	1.33	1.38
59	A5	2104	A	N7-C5	-6.84	1.35	1.39
59	A5	2221	G	N1-C2	-6.84	1.32	1.37
59	A5	3658	G	C5-C4	-6.84	1.33	1.38
59	A5	349	C	N1-C6	-6.84	1.33	1.37
59	A5	2654	G	C5-C4	-6.84	1.33	1.38
59	A5	1414	C	N3-C4	-6.83	1.29	1.33
55	A7	78	C	C4-C5	-6.83	1.37	1.43
59	A5	1163	G	N9-C8	-6.83	1.33	1.37
59	A5	1607	A	N1-C2	-6.83	1.28	1.34
59	A5	1657	G	N9-C4	-6.83	1.32	1.38
59	A5	3520	U	C5-C6	-6.83	1.27	1.34
59	A5	853	G	N9-C4	-6.83	1.32	1.38
59	A5	1132	U	N3-C4	-6.83	1.32	1.38
59	A5	1360	U	C5-C6	-6.83	1.28	1.34
59	A5	2168	G	C5-C4	-6.83	1.33	1.38
59	A5	2559	C	C2-N3	-6.83	1.30	1.35
59	A5	2688	U	N3-C4	-6.83	1.32	1.38
59	A5	3445	C	C4-C5	-6.83	1.37	1.43
55	A7	86	G	N9-C8	-6.83	1.33	1.37
59	A5	350	C	C4-C5	-6.83	1.37	1.43
59	A5	1770	C	C4-C5	-6.83	1.37	1.43
59	A5	297	U	N1-C2	-6.83	1.32	1.38
59	A5	1178	U	C2-N3	-6.83	1.32	1.37
59	A5	1389	C	N1-C6	-6.83	1.33	1.37
59	A5	3489	A	C6-N1	-6.83	1.30	1.35
59	A5	358	C	C2-N3	-6.83	1.30	1.35
59	A5	1543	C	C2-N3	-6.83	1.30	1.35
59	A5	2246	A	N9-C8	-6.83	1.32	1.37
59	A5	3449	G	N9-C8	-6.83	1.33	1.37
58	B2	1972	G	N1-C2	-6.82	1.32	1.37
59	A5	1413	C	C2-N3	-6.82	1.30	1.35
26	CN	160	GLU	CG-CD	-6.82	1.41	1.51
59	A5	313	A	N7-C5	-6.82	1.35	1.39
59	A5	360	A	N3-C4	-6.82	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1142	U	C5-C6	-6.82	1.28	1.34
59	A5	3600	G	C8-N7	-6.82	1.26	1.30
59	A5	340	U	C2-N3	-6.82	1.32	1.37
59	A5	1685	G	C6-N1	-6.82	1.34	1.39
59	A5	2792	G	C5-C4	-6.82	1.33	1.38
59	A5	790	U	C4-C5	-6.82	1.37	1.43
59	A5	2231	A	N9-C4	-6.82	1.33	1.37
59	A5	3884	A	C6-N1	-6.82	1.30	1.35
59	A5	3884	A	N3-C4	-6.82	1.30	1.34
59	A5	1126	A	N3-C4	-6.82	1.30	1.34
59	A5	3257	U	C2-N3	-6.82	1.32	1.37
58	B2	1110	A	N3-C4	-6.81	1.30	1.34
59	A5	3845	A	N7-C5	-6.81	1.35	1.39
59	A5	31	C	N1-C6	-6.81	1.33	1.37
59	A5	2725	U	C4-C5	-6.81	1.37	1.43
59	A5	1106	A	C6-N6	-6.81	1.28	1.33
59	A5	1755	U	C4-C5	-6.81	1.37	1.43
59	A5	2174	A	C5-C6	-6.81	1.34	1.41
58	B2	1844	C	C4-C5	-6.81	1.37	1.43
59	A5	2549	G	N7-C5	-6.81	1.35	1.39
59	A5	2653	A	C6-N1	-6.81	1.30	1.35
59	A5	2734	A	N9-C4	-6.81	1.33	1.37
59	A5	3490	C	N3-C4	-6.81	1.29	1.33
58	B2	1225	A	C5-C4	-6.81	1.33	1.38
59	A5	362	A	C6-N1	-6.81	1.30	1.35
59	A5	1677	U	C4-C5	-6.81	1.37	1.43
59	A5	2105	C	C2-N3	-6.81	1.30	1.35
56	A8	14	G	N1-C2	-6.81	1.32	1.37
56	A8	41	G	N1-C2	-6.81	1.32	1.37
59	A5	1071	U	N1-C6	-6.81	1.31	1.38
59	A5	1133	A	C8-N7	-6.81	1.26	1.31
59	A5	1329	G	N7-C5	-6.81	1.35	1.39
59	A5	1663	G	C8-N7	-6.81	1.26	1.30
59	A5	2103	G	C5-C4	-6.81	1.33	1.38
59	A5	2753	G	C8-N7	-6.81	1.26	1.30
56	A8	55	G	N1-C2	-6.80	1.32	1.37
59	A5	2626	C	N3-C4	-6.80	1.29	1.33
59	A5	3406	G	N9-C8	-6.80	1.33	1.37
59	A5	2914	A	N9-C4	-6.80	1.33	1.37
59	A5	3415	U	N1-C2	-6.80	1.32	1.38
59	A5	26	G	N7-C5	-6.80	1.35	1.39
59	A5	1058	A	N9-C4	-6.80	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2154	A	C6-N1	-6.80	1.30	1.35
59	A5	3500	A	N7-C5	-6.80	1.35	1.39
56	A8	30	G	C5-C4	-6.80	1.33	1.38
59	A5	1043	G	C5-C4	-6.80	1.33	1.38
59	A5	1125	A	N9-C4	-6.80	1.33	1.37
59	A5	2748	G	N9-C8	-6.80	1.33	1.37
58	B2	47	A	N9-C4	-6.80	1.33	1.37
58	B2	609	A	N9-C4	-6.80	1.33	1.37
59	A5	1410	A	C5-C4	-6.80	1.33	1.38
59	A5	1537	G	C5-C4	-6.80	1.33	1.38
59	A5	2200	A	N9-C8	-6.80	1.32	1.37
59	A5	2212	A	C5-C6	-6.80	1.34	1.41
59	A5	3887	U	C4-C5	-6.80	1.37	1.43
59	A5	3947	C	C4-C5	-6.80	1.37	1.43
59	A5	1971	C	N1-C6	-6.79	1.33	1.37
59	A5	26	G	C5-C6	-6.79	1.35	1.42
59	A5	1019	U	N1-C2	-6.79	1.32	1.38
59	A5	1097	A	C5-C6	-6.79	1.34	1.41
59	A5	1678	C	C4-N4	-6.79	1.27	1.33
59	A5	2566	A	C5-C4	-6.79	1.33	1.38
59	A5	2573	C	N1-C6	-6.79	1.33	1.37
59	A5	2685	G	C5-C4	-6.79	1.33	1.38
59	A5	3450	G	C5-C4	-6.79	1.33	1.38
59	A5	1211	A	N7-C5	-6.79	1.35	1.39
59	A5	1655	A	N7-C5	-6.79	1.35	1.39
59	A5	1721	C	N3-C4	-6.79	1.29	1.33
59	A5	2625	G	C8-N7	-6.79	1.26	1.30
59	A5	3467	A	N9-C4	-6.79	1.33	1.37
58	B2	1210	G	C5-C4	-6.79	1.33	1.38
59	A5	375	C	N1-C6	-6.79	1.33	1.37
59	A5	2066	G	N3-C4	-6.79	1.30	1.35
59	A5	3519	C	N1-C6	-6.79	1.33	1.37
59	A5	312	U	N1-C2	-6.79	1.32	1.38
59	A5	1762	G	N7-C5	-6.79	1.35	1.39
59	A5	3261	U	C4-C5	-6.79	1.37	1.43
59	A5	549	A	N7-C5	-6.79	1.35	1.39
59	A5	1066	A	N1-C2	-6.79	1.28	1.34
59	A5	1361	G	C5-C4	-6.79	1.33	1.38
59	A5	1422	G	C5-C4	-6.79	1.33	1.38
59	A5	2566	A	N3-C4	-6.79	1.30	1.34
59	A5	1124	G	C2-N2	-6.78	1.27	1.34
59	A5	1741	G	C5-C4	-6.78	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2247	U	C2-N3	-6.78	1.33	1.37
59	A5	1069	A	N9-C8	-6.78	1.32	1.37
59	A5	1539	A	N9-C8	-6.78	1.32	1.37
59	A5	2707	C	N1-C6	-6.78	1.33	1.37
59	A5	3513	A	C5-C6	-6.78	1.34	1.41
59	A5	2170	C	C4-C5	-6.78	1.37	1.43
59	A5	2527	A	C5-C4	-6.78	1.34	1.38
59	A5	414	A	N9-C4	-6.78	1.33	1.37
59	A5	2544	U	C2-N3	-6.78	1.33	1.37
58	B2	1111	U	N3-C4	-6.78	1.32	1.38
59	A5	34	C	N1-C2	-6.78	1.33	1.40
59	A5	66	A	C6-N1	-6.78	1.30	1.35
59	A5	353	G	N9-C8	-6.78	1.33	1.37
59	A5	384	A	C8-N7	-6.78	1.26	1.31
59	A5	2249	A	C6-N6	-6.78	1.28	1.33
59	A5	1534	G	N7-C5	-6.78	1.35	1.39
59	A5	2729	U	C4-C5	-6.78	1.37	1.43
59	A5	2687	A	N9-C4	-6.77	1.33	1.37
59	A5	10	A	N9-C4	-6.77	1.33	1.37
59	A5	825	C	C5-C6	-6.77	1.28	1.34
59	A5	1056	G	C6-N1	-6.77	1.34	1.39
59	A5	1608	G	N1-C2	-6.77	1.32	1.37
59	A5	1702	G	C5-C4	-6.77	1.33	1.38
59	A5	2533	U	N1-C2	-6.77	1.32	1.38
59	A5	3520	U	N1-C6	-6.77	1.31	1.38
58	B2	1110	A	C6-N1	-6.77	1.30	1.35
59	A5	1136	A	N7-C5	-6.77	1.35	1.39
59	A5	1172	G	N9-C8	-6.77	1.33	1.37
59	A5	1347	A	C5-C4	-6.77	1.34	1.38
59	A5	2207	A	N3-C4	-6.77	1.30	1.34
59	A5	2732	C	N3-C4	-6.77	1.29	1.33
59	A5	1031	G	C5-C4	-6.77	1.33	1.38
59	A5	1362	G	C5-C4	-6.77	1.33	1.38
59	A5	1539	A	N9-C4	-6.77	1.33	1.37
59	A5	1617	U	C5-C6	-6.77	1.28	1.34
59	A5	1647	A	C8-N7	-6.77	1.26	1.31
59	A5	3594	A	N9-C8	-6.77	1.32	1.37
58	B2	355	G	N9-C4	-6.77	1.32	1.38
59	A5	99	A	N9-C8	-6.77	1.32	1.37
59	A5	2648	A	N9-C4	-6.77	1.33	1.37
59	A5	2752	C	N1-C6	-6.77	1.33	1.37
59	A5	3544	G	N1-C2	-6.77	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	Ca	53	TYR	CD1-CE1	-6.76	1.29	1.39
59	A5	1623	G	N9-C8	-6.76	1.33	1.37
59	A5	3486	U	N3-C4	-6.76	1.32	1.38
59	A5	2668	C	C5-C6	-6.76	1.28	1.34
58	B2	1944	A	N9-C4	-6.76	1.33	1.37
59	A5	1056	G	N9-C8	-6.76	1.33	1.37
59	A5	1695	A	C5-C4	-6.76	1.34	1.38
59	A5	1702	G	N3-C4	-6.76	1.30	1.35
59	A5	2105	C	N3-C4	-6.76	1.29	1.33
59	A5	3336	A	C6-N1	-6.76	1.30	1.35
59	A5	23	U	N3-C4	-6.76	1.32	1.38
59	A5	1071	U	C4-O4	-6.76	1.18	1.23
59	A5	1318	A	N7-C5	-6.76	1.35	1.39
59	A5	3673	G	C5-C6	-6.76	1.35	1.42
59	A5	2207	A	N9-C8	-6.76	1.32	1.37
59	A5	2262	A	N9-C4	-6.76	1.33	1.37
59	A5	364	U	N3-C4	-6.76	1.32	1.38
59	A5	2241	U	N3-C4	-6.76	1.32	1.38
59	A5	2712	U	C5-C6	-6.76	1.28	1.34
58	B2	1174	A	N7-C5	-6.75	1.35	1.39
59	A5	2151	A	C8-N7	-6.75	1.26	1.31
59	A5	2042	A	N7-C5	-6.75	1.35	1.39
59	A5	2150	U	N1-C2	-6.75	1.32	1.38
59	A5	2213	G	C2-N3	-6.75	1.27	1.32
59	A5	3298	U	C4-C5	-6.75	1.37	1.43
59	A5	424	G	N1-C2	-6.75	1.32	1.37
56	A8	11	G	N9-C8	-6.75	1.33	1.37
59	A5	1022	A	N9-C4	-6.75	1.33	1.37
59	A5	1421	G	C5-C6	-6.75	1.35	1.42
59	A5	1624	G	N7-C5	-6.75	1.35	1.39
59	A5	3349	A	N9-C4	-6.75	1.33	1.37
59	A5	3494	C	C4-C5	-6.75	1.37	1.43
48	Cp	8	VAL	CB-CG1	-6.75	1.38	1.52
59	A5	1046	A	C5-C6	-6.75	1.34	1.41
59	A5	2687	A	N3-C4	-6.75	1.30	1.34
59	A5	2718	U	C4-C5	-6.75	1.37	1.43
58	B2	1063	G	C2-N3	-6.75	1.27	1.32
59	A5	366	A	C5-C4	-6.75	1.34	1.38
59	A5	3471	A	C5-C4	-6.74	1.34	1.38
59	A5	285	G	N7-C5	-6.74	1.35	1.39
59	A5	3422	A	C5-C4	-6.74	1.34	1.38
56	A8	38	G	C5-C4	-6.74	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	52	A	N7-C5	-6.74	1.35	1.39
59	A5	1536	U	N1-C6	-6.74	1.31	1.38
59	A5	2678	G	C8-N7	-6.74	1.26	1.30
59	A5	3444	G	N7-C5	-6.74	1.35	1.39
59	A5	856	A	C5-C4	-6.74	1.34	1.38
59	A5	1197	A	N1-C2	-6.74	1.28	1.34
59	A5	37	G	N7-C5	-6.74	1.35	1.39
59	A5	796	A	C8-N7	-6.74	1.26	1.31
59	A5	2742	G	N7-C5	-6.74	1.35	1.39
59	A5	2801	U	N3-C4	-6.74	1.32	1.38
58	B2	1196	G	N1-C2	-6.73	1.32	1.37
59	A5	993	A	P-O5'	-6.73	1.53	1.59
59	A5	1020	A	N9-C4	-6.73	1.33	1.37
59	A5	3616	G	C8-N7	-6.73	1.26	1.30
59	A5	72	C	N3-C4	-6.73	1.29	1.33
59	A5	306	C	C2-O2	-6.73	1.18	1.24
59	A5	338	A	N9-C4	-6.73	1.33	1.37
59	A5	2502	G	N1-C2	-6.73	1.32	1.37
59	A5	2601	A	N9-C4	-6.73	1.33	1.37
59	A5	2775	A	C5-C4	-6.73	1.34	1.38
59	A5	820	A	C6-N1	-6.73	1.30	1.35
59	A5	2225	A	N9-C8	-6.73	1.32	1.37
59	A5	2788	U	N1-C2	-6.73	1.32	1.38
59	A5	3336	A	C5-C4	-6.73	1.34	1.38
59	A5	338	A	C5-C4	-6.73	1.34	1.38
59	A5	1367	A	N9-C8	-6.73	1.32	1.37
59	A5	1558	A	C6-N1	-6.73	1.30	1.35
59	A5	1741	G	C6-N1	-6.73	1.34	1.39
59	A5	2207	A	C6-N6	-6.73	1.28	1.33
59	A5	2738	C	C2-N3	-6.73	1.30	1.35
59	A5	1152	A	N3-C4	-6.73	1.30	1.34
59	A5	2732	C	N1-C2	-6.73	1.33	1.40
59	A5	3503	G	N1-C2	-6.73	1.32	1.37
59	A5	3631	C	C2-N3	-6.73	1.30	1.35
59	A5	1349	A	C6-N1	-6.72	1.30	1.35
59	A5	1771	G	N7-C5	-6.72	1.35	1.39
59	A5	3446	G	C6-N1	-6.72	1.34	1.39
59	A5	3481	G	C2-N2	-6.72	1.27	1.34
59	A5	3511	U	C2-N3	-6.72	1.33	1.37
59	A5	360	A	C8-N7	-6.72	1.26	1.31
59	A5	1118	C	C5-C6	-6.72	1.28	1.34
59	A5	3178	G	C2-N3	-6.72	1.27	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3681	A	N7-C5	-6.72	1.35	1.39
41	Ce	27	TYR	CE2-CZ	-6.72	1.29	1.38
59	A5	1087	G	N1-C2	-6.72	1.32	1.37
59	A5	1620	A	N9-C4	-6.72	1.33	1.37
59	A5	1667	U	N1-C2	-6.72	1.32	1.38
59	A5	2571	U	N3-C4	-6.72	1.32	1.38
56	A8	18	C	N3-C4	-6.72	1.29	1.33
56	A8	42	A	N7-C5	-6.72	1.35	1.39
59	A5	69	A	N7-C5	-6.72	1.35	1.39
59	A5	914	C	C2-N3	-6.72	1.30	1.35
59	A5	1067	A	N9-C4	-6.72	1.33	1.37
59	A5	1162	A	N7-C5	-6.72	1.35	1.39
59	A5	2774	G	N9-C8	-6.72	1.33	1.37
59	A5	1136	A	C8-N7	-6.71	1.26	1.31
59	A5	2039	G	N7-C5	-6.71	1.35	1.39
48	Cp	18	TYR	CD2-CE2	-6.71	1.29	1.39
59	A5	1018	C	C4-N4	-6.71	1.27	1.33
59	A5	1694	A	C8-N7	-6.71	1.26	1.31
59	A5	1301	A	N7-C5	-6.71	1.35	1.39
59	A5	1776	U	C4-C5	-6.71	1.37	1.43
59	A5	2556	A	N3-C4	-6.71	1.30	1.34
59	A5	2558	A	N7-C5	-6.71	1.35	1.39
59	A5	3167	A	C6-N1	-6.71	1.30	1.35
59	A5	3619	U	C2-O2	-6.71	1.16	1.22
59	A5	3758	G	N7-C5	-6.71	1.35	1.39
59	A5	3965	A	C5-C4	-6.71	1.34	1.38
59	A5	2168	G	N3-C4	-6.71	1.30	1.35
59	A5	2211	A	C5-C6	-6.71	1.35	1.41
59	A5	2027	A	C5-C4	-6.71	1.34	1.38
59	A5	2623	C	C4-C5	-6.70	1.37	1.43
59	A5	2781	G	N1-C2	-6.70	1.32	1.37
59	A5	3477	A	N9-C8	-6.70	1.32	1.37
59	A5	2209	G	N7-C5	-6.70	1.35	1.39
59	A5	2687	A	C5-C6	-6.70	1.35	1.41
56	A8	32	G	C5-C6	-6.70	1.35	1.42
56	A8	61	C	N3-C4	-6.70	1.29	1.33
59	A5	389	G	C8-N7	-6.70	1.26	1.30
59	A5	1011	U	N1-C6	-6.70	1.31	1.38
59	A5	2244	G	N1-C2	-6.70	1.32	1.37
59	A5	2564	U	N1-C2	-6.70	1.32	1.38
56	A8	5	C	C4-C5	-6.70	1.37	1.43
58	B2	1987	G	C5-C4	-6.70	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	62	G	C8-N7	-6.70	1.26	1.30
59	A5	360	A	N9-C4	-6.70	1.33	1.37
59	A5	1363	G	C8-N7	-6.70	1.26	1.30
59	A5	1533	A	C6-N1	-6.70	1.30	1.35
59	A5	2234	C	C5-C6	-6.70	1.28	1.34
59	A5	3512	U	N3-C4	-6.70	1.32	1.38
59	A5	3678	G	C8-N7	-6.70	1.26	1.30
59	A5	29	U	C2-N3	-6.70	1.33	1.37
59	A5	1017	A	N9-C8	-6.70	1.32	1.37
59	A5	1171	G	N9-C8	-6.70	1.33	1.37
59	A5	2511	C	C4-C5	-6.70	1.37	1.43
59	A5	3136	U	C4-C5	-6.70	1.37	1.43
59	A5	3401	U	N3-C4	-6.70	1.32	1.38
59	A5	3600	G	C5-C4	-6.70	1.33	1.38
59	A5	93	G	C2-N3	-6.69	1.27	1.32
59	A5	378	G	N9-C4	-6.69	1.32	1.38
59	A5	2242	C	C4-C5	-6.69	1.37	1.43
59	A5	2698	A	N7-C5	-6.69	1.35	1.39
59	A5	341	A	N3-C4	-6.69	1.30	1.34
59	A5	871	A	N7-C5	-6.69	1.35	1.39
59	A5	2218	G	N1-C2	-6.69	1.32	1.37
59	A5	1374	C	C2-O2	-6.69	1.18	1.24
59	A5	1752	G	N9-C8	-6.69	1.33	1.37
59	A5	2162	C	C2-N3	-6.69	1.30	1.35
59	A5	307	A	N9-C4	-6.69	1.33	1.37
59	A5	1107	G	N7-C5	-6.69	1.35	1.39
59	A5	2172	C	N1-C6	-6.69	1.33	1.37
59	A5	2541	C	C5-C6	-6.69	1.29	1.34
66	CL	65	TYR	CD1-CE1	-6.69	1.29	1.39
59	A5	1643	G	C5-C4	-6.69	1.33	1.38
59	A5	3938	C	N1-C6	-6.69	1.33	1.37
56	A8	5	C	C5-C6	-6.68	1.29	1.34
58	B2	1119	G	C8-N7	-6.68	1.26	1.30
59	A5	3252	G	N7-C5	-6.68	1.35	1.39
59	A5	3586	A	N9-C4	-6.68	1.33	1.37
59	A5	34	C	N1-C6	-6.68	1.33	1.37
59	A5	1545	A	C6-N1	-6.68	1.30	1.35
59	A5	1949	A	N9-C4	-6.68	1.33	1.37
59	A5	2171	U	N1-C6	-6.68	1.31	1.38
59	A5	3497	G	N1-C2	-6.68	1.32	1.37
55	A7	79	U	N3-C4	-6.68	1.32	1.38
59	A5	86	C	C4-C5	-6.68	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1174	G	N7-C5	-6.68	1.35	1.39
59	A5	2505	A	N7-C5	-6.68	1.35	1.39
59	A5	2562	U	N3-C4	-6.68	1.32	1.38
59	A5	3147	A	N9-C8	-6.68	1.32	1.37
58	B2	1824	C	N3-C4	-6.68	1.29	1.33
59	A5	370	A	N9-C8	-6.68	1.32	1.37
59	A5	427	A	C6-N1	-6.68	1.30	1.35
59	A5	912	A	C5-C4	-6.68	1.34	1.38
59	A5	1630	G	N7-C5	-6.68	1.35	1.39
59	A5	1674	A	N9-C4	-6.67	1.33	1.37
59	A5	3460	C	N1-C6	-6.67	1.33	1.37
58	B2	1983	G	N3-C4	-6.67	1.30	1.35
59	A5	1019	U	C5-C6	-6.67	1.28	1.34
59	A5	1070	G	N7-C5	-6.67	1.35	1.39
59	A5	1735	G	C5-C6	-6.67	1.35	1.42
59	A5	3262	A	C5-C4	-6.67	1.34	1.38
59	A5	1031	G	C6-N1	-6.67	1.34	1.39
59	A5	1070	G	C5-C4	-6.67	1.33	1.38
59	A5	1678	C	C4-C5	-6.67	1.37	1.43
59	A5	758	A	N9-C4	-6.67	1.33	1.37
59	A5	1006	A	C8-N7	-6.67	1.26	1.31
59	A5	1038	G	C5-C4	-6.67	1.33	1.38
59	A5	1698	A	N7-C5	-6.67	1.35	1.39
59	A5	2202	A	C5-C6	-6.67	1.35	1.41
59	A5	2515	C	C4-C5	-6.67	1.37	1.43
56	A8	86	A	N7-C5	-6.67	1.35	1.39
59	A5	2209	G	C5-C6	-6.67	1.35	1.42
59	A5	3585	A	C8-N7	-6.67	1.26	1.31
59	A5	1665	C	N1-C2	-6.66	1.33	1.40
59	A5	2155	A	N3-C4	-6.66	1.30	1.34
59	A5	3541	A	N3-C4	-6.66	1.30	1.34
59	A5	3402	C	N1-C2	-6.66	1.33	1.40
59	A5	97	C	C4-C5	-6.66	1.37	1.43
59	A5	305	G	C6-N1	-6.66	1.34	1.39
59	A5	827	A	C5-C4	-6.66	1.34	1.38
59	A5	1105	U	N3-C4	-6.66	1.32	1.38
59	A5	1176	A	N1-C2	-6.66	1.28	1.34
59	A5	2799	U	N3-C4	-6.66	1.32	1.38
59	A5	3401	U	N1-C2	-6.66	1.32	1.38
58	B2	1968	C	N1-C6	-6.66	1.33	1.37
59	A5	67	A	C6-N1	-6.66	1.30	1.35
59	A5	1165	A	N9-C8	-6.66	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2066	G	N7-C5	-6.66	1.35	1.39
59	A5	2113	A	C6-N1	-6.66	1.30	1.35
59	A5	3319	A	C5-C4	-6.66	1.34	1.38
55	A7	90	A	N7-C5	-6.66	1.35	1.39
59	A5	2088	G	C2-N3	-6.66	1.27	1.32
59	A5	2501	G	C5-C4	-6.66	1.33	1.38
59	A5	2755	G	N1-C2	-6.66	1.32	1.37
59	A5	1616	G	N1-C2	-6.66	1.32	1.37
59	A5	1728	G	C5-C4	-6.66	1.33	1.38
59	A5	2234	C	N1-C6	-6.66	1.33	1.37
59	A5	3174	A	N9-C8	-6.66	1.32	1.37
59	A5	285	G	N1-C2	-6.65	1.32	1.37
59	A5	386	G	N1-C2	-6.65	1.32	1.37
59	A5	284	A	N9-C4	-6.65	1.33	1.37
59	A5	386	G	C5-C6	-6.65	1.35	1.42
56	A8	22	C	N3-C4	-6.65	1.29	1.33
59	A5	1104	A	C8-N7	-6.65	1.26	1.31
59	A5	2199	A	C8-N7	-6.65	1.26	1.31
59	A5	2722	U	N3-C4	-6.65	1.32	1.38
58	B2	1988	G	N9-C8	-6.65	1.33	1.37
59	A5	1271	G	C8-N7	-6.65	1.26	1.30
59	A5	3417	C	N1-C2	-6.65	1.33	1.40
59	A5	3495	G	C2-N3	-6.65	1.27	1.32
55	A7	93	G	N1-C2	-6.64	1.32	1.37
58	B2	1942	G	N1-C2	-6.64	1.32	1.37
59	A5	234	G	N9-C8	-6.64	1.33	1.37
59	A5	1374	C	C4-C5	-6.64	1.37	1.43
59	A5	1527	C	C5-C6	-6.64	1.29	1.34
59	A5	2108	U	N1-C2	-6.64	1.32	1.38
59	A5	99	A	N1-C2	-6.64	1.28	1.34
59	A5	356	A	C5-C6	-6.64	1.35	1.41
59	A5	989	A	N7-C5	-6.64	1.35	1.39
59	A5	2192	U	N1-C2	-6.64	1.32	1.38
59	A5	2248	A	N7-C5	-6.64	1.35	1.39
59	A5	2755	G	N3-C4	-6.64	1.30	1.35
59	A5	3197	U	C2-N3	-6.64	1.33	1.37
58	B2	1068	U	N3-C4	-6.64	1.32	1.38
59	A5	234	G	C5-C4	-6.64	1.33	1.38
59	A5	782	G	N9-C8	-6.64	1.33	1.37
59	A5	1176	A	C5-C4	-6.64	1.34	1.38
59	A5	1341	G	N3-C4	-6.64	1.30	1.35
59	A5	3950	A	N3-C4	-6.64	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1359	G	C6-O6	-6.63	1.18	1.24
59	A5	1747	A	C5-C4	-6.63	1.34	1.38
59	A5	1758	U	C2-N3	-6.63	1.33	1.37
59	A5	2740	C	C2-N3	-6.63	1.30	1.35
59	A5	3164	C	C4-C5	-6.63	1.37	1.43
59	A5	3540	G	N1-C2	-6.63	1.32	1.37
58	B2	1079	A	N7-C5	-6.63	1.35	1.39
59	A5	365	A	C6-N1	-6.63	1.30	1.35
59	A5	1073	C	N1-C6	-6.63	1.33	1.37
59	A5	1330	G	N7-C5	-6.63	1.35	1.39
58	B2	1210	G	C8-N7	-6.63	1.26	1.30
59	A5	1087	G	C5-C6	-6.63	1.35	1.42
59	A5	1330	G	C5-C6	-6.63	1.35	1.42
59	A5	1559	A	N7-C5	-6.63	1.35	1.39
59	A5	1654	C	N3-C4	-6.63	1.29	1.33
59	A5	1655	A	C5-C4	-6.63	1.34	1.38
59	A5	2062	A	C5-C6	-6.63	1.35	1.41
59	A5	1102	G	N1-C2	-6.63	1.32	1.37
59	A5	3347	G	C6-N1	-6.63	1.34	1.39
59	A5	43	A	N3-C4	-6.63	1.30	1.34
59	A5	322	G	C5-C4	-6.63	1.33	1.38
59	A5	429	U	C4-C5	-6.63	1.37	1.43
59	A5	797	A	C5-C6	-6.63	1.35	1.41
59	A5	1603	A	C5-C4	-6.63	1.34	1.38
59	A5	2551	U	C5-C6	-6.62	1.28	1.34
59	A5	2573	C	N3-C4	-6.62	1.29	1.33
59	A5	3580	G	C2-N3	-6.62	1.27	1.32
59	A5	350	C	N1-C6	-6.62	1.33	1.37
59	A5	1313	A	N7-C5	-6.62	1.35	1.39
59	A5	1708	G	N7-C5	-6.62	1.35	1.39
59	A5	1062	C	C4-C5	-6.62	1.37	1.43
59	A5	3172	A	N9-C4	-6.62	1.33	1.37
58	B2	1847	A	N7-C5	-6.62	1.35	1.39
59	A5	245	G	N3-C4	-6.62	1.30	1.35
59	A5	1051	C	N3-C4	-6.62	1.29	1.33
59	A5	1691	A	C5-C4	-6.62	1.34	1.38
59	A5	1962	A	N9-C4	-6.62	1.33	1.37
59	A5	2502	G	C2-N3	-6.62	1.27	1.32
59	A5	26	G	C6-N1	-6.62	1.34	1.39
59	A5	1270	G	C8-N7	-6.62	1.26	1.30
59	A5	1552	A	C5-C6	-6.62	1.35	1.41
59	A5	2198	G	C6-N1	-6.62	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	CA	15	VAL	CB-CG2	-6.61	1.39	1.52
59	A5	1112	G	C2-N3	-6.61	1.27	1.32
59	A5	1138	C	N1-C2	-6.61	1.33	1.40
59	A5	1867	A	C5-C4	-6.61	1.34	1.38
59	A5	48	U	N3-C4	-6.61	1.32	1.38
59	A5	387	U	N1-C6	-6.61	1.31	1.38
59	A5	1399	A	N3-C4	-6.61	1.30	1.34
59	A5	1985	C	N3-C4	-6.61	1.29	1.33
2	CA	80	GLU	CG-CD	-6.61	1.42	1.51
59	A5	292	G	N9-C8	-6.61	1.33	1.37
59	A5	3137	A	C5-C4	-6.61	1.34	1.38
59	A5	44	A	C2-N3	-6.61	1.27	1.33
59	A5	355	G	C5-C4	-6.61	1.33	1.38
59	A5	1603	A	C5-C6	-6.61	1.35	1.41
59	A5	2739	A	C5-C4	-6.61	1.34	1.38
59	A5	3542	C	N3-C4	-6.61	1.29	1.33
59	A5	1349	A	N7-C5	-6.61	1.35	1.39
59	A5	1359	G	C5-C6	-6.61	1.35	1.42
59	A5	861	C	N1-C2	-6.60	1.33	1.40
59	A5	1069	A	C5-C4	-6.60	1.34	1.38
59	A5	2776	A	C2-N3	-6.60	1.27	1.33
59	A5	434	A	C5-C4	-6.60	1.34	1.38
59	A5	1043	G	C2-N3	-6.60	1.27	1.32
59	A5	1389	C	C4-N4	-6.60	1.28	1.33
59	A5	1634	A	N3-C4	-6.60	1.30	1.34
59	A5	2497	C	N1-C6	-6.60	1.33	1.37
59	A5	2563	G	C5-C4	-6.60	1.33	1.38
59	A5	3354	U	C2-N3	-6.60	1.33	1.37
59	A5	3472	A	N9-C8	-6.60	1.32	1.37
59	A5	1343	A	C5-C4	-6.60	1.34	1.38
59	A5	1790	A	C5-C4	-6.60	1.34	1.38
59	A5	2530	C	C4-C5	-6.60	1.37	1.43
42	Cf	92	CYS	CB-SG	-6.60	1.71	1.82
59	A5	1141	G	N9-C8	-6.60	1.33	1.37
59	A5	2768	A	N3-C4	-6.60	1.30	1.34
59	A5	3487	A	N7-C5	-6.60	1.35	1.39
59	A5	3511	U	N3-C4	-6.60	1.32	1.38
59	A5	3885	C	C4-C5	-6.60	1.37	1.43
59	A5	659	U	C2-N3	-6.60	1.33	1.37
59	A5	58	G	C2-N3	-6.59	1.27	1.32
59	A5	1521	G	C5-C4	-6.59	1.33	1.38
59	A5	2759	G	N7-C5	-6.59	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	80	G	N7-C5	-6.59	1.35	1.39
59	A5	860	A	C5-C4	-6.59	1.34	1.38
59	A5	2552	G	C6-N1	-6.59	1.34	1.39
59	A5	2721	C	C5-C6	-6.59	1.29	1.34
59	A5	546	G	N3-C4	-6.59	1.30	1.35
59	A5	1385	G	C5-C6	-6.59	1.35	1.42
56	A8	22	C	C4-C5	-6.59	1.37	1.43
59	A5	363	G	N9-C4	-6.59	1.32	1.38
59	A5	778	C	C4-C5	-6.59	1.37	1.43
59	A5	1551	U	C2-N3	-6.59	1.33	1.37
59	A5	1717	A	N3-C4	-6.59	1.30	1.34
59	A5	1875	G	N3-C4	-6.59	1.30	1.35
59	A5	3122	A	N9-C4	-6.59	1.33	1.37
59	A5	2702	A	C5-C6	-6.59	1.35	1.41
59	A5	72	C	C4-C5	-6.59	1.37	1.43
59	A5	349	C	N1-C2	-6.59	1.33	1.40
59	A5	1356	G	C8-N7	-6.59	1.26	1.30
59	A5	2702	A	N9-C8	-6.59	1.32	1.37
59	A5	3264	A	C5-C6	-6.59	1.35	1.41
59	A5	3578	A	N9-C4	-6.59	1.33	1.37
59	A5	3844	U	N3-C4	-6.59	1.32	1.38
41	Ce	34	TRP	CB-CG	-6.58	1.38	1.50
58	B2	1100	A	N7-C5	-6.58	1.35	1.39
59	A5	389	G	N9-C8	-6.58	1.33	1.37
59	A5	2548	G	N1-C2	-6.58	1.32	1.37
59	A5	301	U	N3-C4	-6.58	1.32	1.38
59	A5	790	U	C2-O2	-6.58	1.16	1.22
59	A5	2751	A	N1-C2	-6.58	1.28	1.34
59	A5	3516	C	N1-C2	-6.58	1.33	1.40
59	A5	3580	G	N9-C8	-6.58	1.33	1.37
58	B2	13	C	N3-C4	-6.58	1.29	1.33
59	A5	81	A	C6-N1	-6.58	1.30	1.35
59	A5	302	A	C5-C4	-6.58	1.34	1.38
59	A5	1089	U	N1-C2	-6.58	1.32	1.38
59	A5	1638	G	C5-C4	-6.58	1.33	1.38
59	A5	2152	C	N1-C6	-6.58	1.33	1.37
59	A5	3495	G	N1-C2	-6.58	1.32	1.37
56	A8	40	A	C5-C6	-6.58	1.35	1.41
58	B2	1207	G	C6-N1	-6.58	1.34	1.39
59	A5	1691	A	N3-C4	-6.58	1.30	1.34
59	A5	2668	C	N3-C4	-6.58	1.29	1.33
59	A5	770	C	C4-C5	-6.58	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	101	A	C2-N3	-6.58	1.27	1.33
58	B2	1195	G	C5-C4	-6.58	1.33	1.38
59	A5	548	A	N7-C5	-6.58	1.35	1.39
59	A5	1194	A	N9-C4	6.58	1.41	1.37
59	A5	1334	A	C6-N1	-6.58	1.30	1.35
59	A5	1369	C	N1-C2	-6.58	1.33	1.40
59	A5	1633	G	N9-C8	-6.58	1.33	1.37
59	A5	3171	A	N9-C8	-6.58	1.32	1.37
59	A5	3279	A	N9-C4	-6.58	1.33	1.37
59	A5	3671	C	C4-C5	-6.58	1.37	1.43
59	A5	3728	A	C8-N7	-6.58	1.26	1.31
58	B2	1966	U	C4-C5	-6.57	1.37	1.43
59	A5	362	A	N9-C8	-6.57	1.32	1.37
59	A5	995	G	N3-C4	-6.57	1.30	1.35
59	A5	1057	G	N9-C4	-6.57	1.32	1.38
59	A5	1131	C	N3-C4	-6.57	1.29	1.33
59	A5	1615	G	N9-C4	-6.57	1.32	1.38
59	A5	25	G	N1-C2	-6.57	1.32	1.37
59	A5	2805	C	N3-C4	-6.57	1.29	1.33
59	A5	354	A	N7-C5	-6.57	1.35	1.39
59	A5	1329	G	C2-N3	-6.57	1.27	1.32
59	A5	2545	A	N7-C5	-6.57	1.35	1.39
59	A5	2768	A	C8-N7	-6.57	1.26	1.31
59	A5	3332	G	C5-C4	-6.57	1.33	1.38
58	B2	1196	G	C6-N1	-6.57	1.34	1.39
59	A5	1157	C	N1-C2	-6.57	1.33	1.40
59	A5	556	A	N7-C5	-6.57	1.35	1.39
59	A5	2174	A	N9-C4	-6.57	1.33	1.37
59	A5	2746	A	C6-N1	-6.57	1.30	1.35
58	B2	1112	A	C6-N1	-6.57	1.30	1.35
59	A5	422	G	N1-C2	-6.57	1.32	1.37
59	A5	812	U	C2-O2	-6.57	1.16	1.22
59	A5	1056	G	N9-C4	-6.57	1.32	1.38
59	A5	1087	G	N9-C4	-6.57	1.32	1.38
59	A5	1377	A	N3-C4	-6.57	1.30	1.34
59	A5	2559	C	N3-C4	-6.57	1.29	1.33
58	B2	1922	A	N7-C5	-6.56	1.35	1.39
59	A5	2522	A	N3-C4	-6.56	1.30	1.34
59	A5	2527	A	N9-C4	-6.56	1.33	1.37
59	A5	1544	U	N1-C2	-6.56	1.32	1.38
59	A5	1756	G	C8-N7	-6.56	1.27	1.30
59	A5	3145	U	C4-C5	-6.56	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	A7	98	G	N7-C5	-6.56	1.35	1.39
59	A5	107	G	C8-N7	-6.56	1.27	1.30
59	A5	547	U	C2-N3	-6.56	1.33	1.37
59	A5	2482	C	N1-C6	-6.56	1.33	1.37
59	A5	96	G	C8-N7	-6.56	1.27	1.30
59	A5	2654	G	N9-C8	-6.56	1.33	1.37
55	A7	97	G	N9-C4	-6.56	1.32	1.38
59	A5	3399	C	C4-C5	-6.56	1.37	1.43
59	A5	36	U	N1-C2	-6.56	1.32	1.38
59	A5	89	A	C5-C4	-6.56	1.34	1.38
59	A5	816	A	C5-C6	-6.56	1.35	1.41
59	A5	818	A	N9-C8	-6.56	1.32	1.37
59	A5	1301	A	N9-C4	-6.56	1.33	1.37
59	A5	372	U	N1-C6	-6.55	1.32	1.38
59	A5	379	A	C5-C6	-6.55	1.35	1.41
59	A5	382	G	C2-N2	-6.55	1.27	1.34
59	A5	804	C	C4-C5	-6.55	1.37	1.43
59	A5	1083	A	C2-N3	-6.55	1.27	1.33
59	A5	2509	G	C5-C4	-6.55	1.33	1.38
59	A5	3413	C	C2-N3	-6.55	1.30	1.35
59	A5	1648	A	C8-N7	-6.55	1.26	1.31
59	A5	2802	A	N3-C4	-6.55	1.30	1.34
59	A5	3140	G	C2-N3	-6.55	1.27	1.32
58	B2	1981	G	N9-C8	-6.55	1.33	1.37
59	A5	3757	U	C2-N3	-6.55	1.33	1.37
59	A5	2178	U	C2-N3	-6.55	1.33	1.37
59	A5	782	G	N1-C2	-6.55	1.32	1.37
59	A5	1082	A	C2-N3	-6.55	1.27	1.33
59	A5	1385	G	C8-N7	-6.55	1.27	1.30
59	A5	1618	A	N9-C4	-6.55	1.33	1.37
59	A5	2680	G	N9-C8	-6.55	1.33	1.37
59	A5	203	A	N9-C4	-6.55	1.33	1.37
59	A5	999	U	C2-N3	-6.55	1.33	1.37
59	A5	1174	G	C8-N7	-6.55	1.27	1.30
59	A5	1208	U	C5-C6	-6.55	1.28	1.34
59	A5	1964	A	N9-C4	-6.55	1.33	1.37
59	A5	2778	G	N1-C2	-6.55	1.32	1.37
59	A5	3331	A	C5-C4	-6.55	1.34	1.38
59	A5	3496	U	C2-O2	-6.55	1.16	1.22
56	A8	36	A	N7-C5	-6.54	1.35	1.39
58	B2	627	A	N3-C4	-6.54	1.30	1.34
58	B2	1113	A	N3-C4	-6.54	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1190	G	N9-C8	-6.54	1.33	1.37
59	A5	1509	A	C5-C4	-6.54	1.34	1.38
59	A5	3234	A	C5-C4	-6.54	1.34	1.38
59	A5	3883	G	C5-C4	-6.54	1.33	1.38
56	A8	32	G	C5-C4	-6.54	1.33	1.38
59	A5	1056	G	C5-C4	-6.54	1.33	1.38
59	A5	63	G	N9-C8	-6.54	1.33	1.37
59	A5	357	C	N1-C2	-6.54	1.33	1.40
59	A5	359	G	N9-C8	-6.54	1.33	1.37
59	A5	850	A	C5-C4	-6.54	1.34	1.38
59	A5	1722	U	N1-C6	-6.54	1.32	1.38
59	A5	2199	A	C6-N1	-6.54	1.30	1.35
59	A5	3337	G	C6-N1	-6.54	1.34	1.39
59	A5	748	A	N9-C4	-6.54	1.33	1.37
59	A5	1019	U	N1-C6	-6.54	1.32	1.38
59	A5	3918	A	N9-C4	-6.54	1.33	1.37
59	A5	816	A	C6-N1	-6.54	1.30	1.35
59	A5	1059	A	N7-C5	-6.54	1.35	1.39
59	A5	1736	G	C5-C4	-6.54	1.33	1.38
59	A5	2546	G	N9-C4	-6.54	1.32	1.38
59	A5	3165	U	N1-C2	-6.54	1.32	1.38
59	A5	3192	C	N3-C4	-6.54	1.29	1.33
59	A5	1064	G	C5-C4	-6.53	1.33	1.38
59	A5	1622	U	C5-C6	-6.53	1.28	1.34
59	A5	1732	A	N9-C8	-6.53	1.32	1.37
59	A5	2167	G	C5-C6	-6.53	1.35	1.42
59	A5	847	A	N9-C4	-6.53	1.33	1.37
59	A5	1026	G	C2-N3	-6.53	1.27	1.32
59	A5	3146	G	C6-N1	-6.53	1.34	1.39
59	A5	90	G	C5-C4	-6.53	1.33	1.38
59	A5	298	U	C4-C5	-6.53	1.37	1.43
59	A5	337	A	C6-N1	-6.53	1.30	1.35
59	A5	1977	A	C5-C4	-6.53	1.34	1.38
59	A5	2733	G	N9-C8	-6.53	1.33	1.37
59	A5	3318	A	N7-C5	-6.53	1.35	1.39
59	A5	3683	G	C5-C4	-6.53	1.33	1.38
59	A5	103	A	C5-C4	-6.53	1.34	1.38
59	A5	1740	C	N1-C6	-6.53	1.33	1.37
59	A5	2095	U	N1-C2	-6.53	1.32	1.38
59	A5	2679	U	N1-C2	-6.53	1.32	1.38
59	A5	3647	A	N9-C4	-6.53	1.33	1.37
59	A5	810	A	C6-N6	-6.53	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1876	G	C5-C4	-6.53	1.33	1.38
59	A5	2526	A	C8-N7	-6.53	1.26	1.31
59	A5	3412	U	C5-C6	-6.53	1.28	1.34
59	A5	3625	U	N3-C4	-6.53	1.32	1.38
59	A5	1169	C	N1-C6	-6.53	1.33	1.37
59	A5	1562	U	N1-C2	-6.53	1.32	1.38
59	A5	2734	A	C6-N6	-6.53	1.28	1.33
59	A5	2764	A	C8-N7	-6.53	1.26	1.31
59	A5	3136	U	N3-C4	-6.53	1.32	1.38
59	A5	3341	C	N1-C2	-6.53	1.33	1.40
59	A5	3508	G	N9-C8	-6.53	1.33	1.37
59	A5	3265	C	N1-C6	-6.52	1.33	1.37
59	A5	30	A	N7-C5	-6.52	1.35	1.39
59	A5	1063	C	C5-C6	-6.52	1.29	1.34
59	A5	2524	A	C5-C6	-6.52	1.35	1.41
59	A5	2663	C	C4-C5	-6.52	1.37	1.43
59	A5	382	G	C6-O6	-6.52	1.18	1.24
59	A5	1082	A	N9-C8	-6.52	1.32	1.37
59	A5	1609	U	N1-C6	-6.52	1.32	1.38
59	A5	1661	C	C4-C5	-6.52	1.37	1.43
59	A5	1870	G	C5-C4	-6.52	1.33	1.38
59	A5	2486	A	C5-C4	-6.52	1.34	1.38
59	A5	2655	C	N3-C4	-6.52	1.29	1.33
59	A5	836	G	N7-C5	-6.52	1.35	1.39
59	A5	1777	A	C5-C6	-6.52	1.35	1.41
59	A5	3294	A	N3-C4	-6.52	1.30	1.34
59	A5	3504	G	C6-N1	-6.52	1.34	1.39
59	A5	3130	G	N7-C5	-6.52	1.35	1.39
59	A5	357	C	C4-C5	-6.51	1.37	1.43
59	A5	385	A	C6-N6	-6.51	1.28	1.33
59	A5	1107	G	N9-C8	-6.51	1.33	1.37
59	A5	1315	A	C5-C4	-6.51	1.34	1.38
59	A5	1356	G	N3-C4	-6.51	1.30	1.35
59	A5	2500	G	C5-C6	-6.51	1.35	1.42
59	A5	2788	U	C2-N3	-6.51	1.33	1.37
54	A9	16	U	N1-C2	-6.51	1.32	1.38
59	A5	364	U	C2-N3	-6.51	1.33	1.37
59	A5	1350	A	N9-C8	-6.51	1.32	1.37
59	A5	3508	G	N7-C5	-6.51	1.35	1.39
56	A8	23	G	C8-N7	-6.51	1.27	1.30
59	A5	447	G	C2-N3	-6.51	1.27	1.32
59	A5	998	G	N9-C8	-6.51	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1402	U	N1-C6	-6.51	1.32	1.38
59	A5	2515	C	C5-C6	-6.51	1.29	1.34
59	A5	2745	A	C6-N6	-6.51	1.28	1.33
59	A5	3446	G	C5-C6	-6.51	1.35	1.42
59	A5	3472	A	C2'-C1'	6.51	1.60	1.53
56	A8	32	G	N1-C2	-6.51	1.32	1.37
59	A5	2206	U	P-O5'	-6.51	1.53	1.59
59	A5	296	C	N3-C4	-6.51	1.29	1.33
59	A5	2222	G	C2-N3	-6.51	1.27	1.32
59	A5	3451	A	N9-C8	-6.51	1.32	1.37
59	A5	784	G	N1-C2	-6.50	1.32	1.37
59	A5	1417	G	N9-C8	-6.50	1.33	1.37
58	B2	1988	G	C5-C4	-6.50	1.33	1.38
59	A5	1155	U	N3-C4	-6.50	1.32	1.38
59	A5	1339	U	C2-N3	-6.50	1.33	1.37
59	A5	3483	G	N7-C5	-6.50	1.35	1.39
59	A5	841	A	C5-C4	-6.50	1.34	1.38
59	A5	1207	G	N1-C2	-6.50	1.32	1.37
59	A5	1706	G	C5-C4	-6.50	1.33	1.38
59	A5	1774	C	C4-C5	-6.50	1.37	1.43
59	A5	3136	U	C2-N3	-6.50	1.33	1.37
59	A5	35	C	C4-C5	-6.50	1.37	1.43
59	A5	989	A	N1-C2	-6.50	1.28	1.34
59	A5	1110	G	C2-N3	-6.50	1.27	1.32
59	A5	3399	C	N3-C4	-6.50	1.29	1.33
56	A8	35	G	N1-C2	-6.50	1.32	1.37
59	A5	309	C	C4-C5	-6.50	1.37	1.43
59	A5	828	G	C5-C4	-6.50	1.33	1.38
59	A5	1786	G	C5-C4	-6.50	1.33	1.38
59	A5	2223	C	N1-C6	-6.50	1.33	1.37
59	A5	2802	A	C8-N7	-6.50	1.27	1.31
59	A5	3451	A	N3-C4	-6.50	1.30	1.34
59	A5	1562	U	C2-N3	-6.50	1.33	1.37
56	A8	8	A	C5-C4	-6.49	1.34	1.38
59	A5	107	G	C6-N1	-6.49	1.35	1.39
59	A5	306	C	N1-C6	-6.49	1.33	1.37
59	A5	999	U	N1-C2	-6.49	1.32	1.38
59	A5	1629	C	N3-C4	-6.49	1.29	1.33
59	A5	2541	C	C2-N3	-6.49	1.30	1.35
59	A5	1379	U	C2-N3	-6.49	1.33	1.37
56	A8	98	U	N1-C2	-6.49	1.32	1.38
59	A5	86	C	N1-C2	-6.49	1.33	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1756	G	N1-C2	-6.49	1.32	1.37
59	A5	2794	U	C4-O4	-6.49	1.18	1.23
55	A7	96	U	N1-C6	-6.49	1.32	1.38
59	A5	1359	G	N1-C2	-6.49	1.32	1.37
59	A5	2502	G	N9-C8	-6.49	1.33	1.37
58	B2	1056	C	N3-C4	-6.49	1.29	1.33
59	A5	1201	U	C2-N3	-6.49	1.33	1.37
59	A5	2207	A	C8-N7	-6.49	1.27	1.31
59	A5	2613	C	N3-C4	-6.49	1.29	1.33
59	A5	787	C	C5-C6	-6.49	1.29	1.34
59	A5	1000	G	N9-C8	-6.49	1.33	1.37
59	A5	2180	A	N7-C5	-6.49	1.35	1.39
59	A5	2710	A	C5-C4	-6.49	1.34	1.38
59	A5	2733	G	N3-C4	-6.49	1.30	1.35
59	A5	1060	G	C5-C4	-6.48	1.33	1.38
59	A5	1950	A	C5-C4	-6.48	1.34	1.38
59	A5	3672	U	N1-C2	-6.48	1.32	1.38
2	CA	208	GLU	CB-CG	-6.48	1.39	1.52
59	A5	246	C	N3-C4	-6.48	1.29	1.33
59	A5	1788	G	C8-N7	-6.48	1.27	1.30
59	A5	3285	G	C6-N1	-6.48	1.35	1.39
59	A5	93	G	N1-C2	-6.48	1.32	1.37
59	A5	214	A	C5-C6	-6.48	1.35	1.41
59	A5	1611	G	C8-N7	-6.48	1.27	1.30
59	A5	2622	A	C5-C4	-6.48	1.34	1.38
59	A5	297	U	C2-O2	-6.48	1.16	1.22
59	A5	880	A	N7-C5	-6.48	1.35	1.39
59	A5	1011	U	C4-C5	-6.48	1.37	1.43
59	A5	1352	U	C4-C5	-6.48	1.37	1.43
59	A5	1676	A	C6-N1	-6.48	1.31	1.35
59	A5	826	A	C5-C4	-6.48	1.34	1.38
59	A5	2518	A	C6-N1	-6.48	1.31	1.35
55	A7	11	A	N7-C5	-6.47	1.35	1.39
56	A8	28	A	N7-C5	-6.47	1.35	1.39
56	A8	30	G	C6-N1	-6.47	1.35	1.39
59	A5	95	G	C2-N3	-6.47	1.27	1.32
59	A5	1129	A	N7-C5	-6.47	1.35	1.39
59	A5	1154	U	C4-C5	-6.47	1.37	1.43
59	A5	2241	U	C4-C5	-6.47	1.37	1.43
59	A5	2248	A	N9-C4	-6.47	1.33	1.37
59	A5	3618	A	C5-C4	-6.47	1.34	1.38
33	CP	144	CYS	CB-SG	-6.47	1.71	1.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	342	A	N7-C5	-6.47	1.35	1.39
59	A5	1118	C	N1-C6	-6.47	1.33	1.37
59	A5	1348	G	N7-C5	-6.47	1.35	1.39
59	A5	1613	A	C2-N3	-6.47	1.27	1.33
59	A5	2707	C	C4-C5	-6.47	1.37	1.43
59	A5	3148	C	N1-C6	-6.47	1.33	1.37
59	A5	3495	G	N9-C8	-6.47	1.33	1.37
59	A5	48	U	N1-C2	-6.47	1.32	1.38
59	A5	3906	U	N3-C4	-6.47	1.32	1.38
59	A5	1412	A	N9-C8	-6.47	1.32	1.37
59	A5	2736	A	N9-C8	-6.47	1.32	1.37
59	A5	2811	G	C2-N3	-6.47	1.27	1.32
58	B2	1228	G	N7-C5	-6.47	1.35	1.39
59	A5	1793	C	N3-C4	-6.46	1.29	1.33
59	A5	1873	A	N3-C4	-6.46	1.30	1.34
59	A5	2761	A	C5-C6	-6.46	1.35	1.41
59	A5	3493	U	C2-N3	-6.46	1.33	1.37
56	A8	98	U	C2-N3	-6.46	1.33	1.37
59	A5	1526	G	N9-C8	-6.46	1.33	1.37
58	B2	350	U	N1-C6	-6.46	1.32	1.38
59	A5	349	C	C4-C5	-6.46	1.37	1.43
59	A5	1170	U	N3-C4	-6.46	1.32	1.38
59	A5	1686	A	C8-N7	-6.46	1.27	1.31
59	A5	2633	A	N9-C4	-6.46	1.33	1.37
59	A5	2729	U	C2-N3	-6.46	1.33	1.37
59	A5	2771	G	C6-N1	-6.46	1.35	1.39
59	A5	3642	G	C5-C4	-6.46	1.33	1.38
58	B2	359	C	N1-C6	-6.46	1.33	1.37
58	B2	1078	G	N7-C5	-6.46	1.35	1.39
59	A5	1622	U	N3-C4	-6.46	1.32	1.38
59	A5	1693	C	C5-C6	-6.46	1.29	1.34
59	A5	2797	A	C2-N3	-6.46	1.27	1.33
59	A5	3233	C	N3-C4	-6.46	1.29	1.33
58	B2	988	G	N7-C5	-6.46	1.35	1.39
58	B2	1210	G	N7-C5	-6.46	1.35	1.39
59	A5	330	C	N3-C4	-6.46	1.29	1.33
59	A5	339	C	C4-C5	-6.46	1.37	1.43
59	A5	1409	G	C8-N7	-6.46	1.27	1.30
59	A5	1619	C	C2-N3	-6.46	1.30	1.35
59	A5	1660	G	N7-C5	-6.46	1.35	1.39
59	A5	1778	A	N3-C4	-6.46	1.30	1.34
59	A5	2176	G	C8-N7	-6.46	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2761	A	C8-N7	-6.46	1.27	1.31
59	A5	356	A	N9-C4	-6.46	1.33	1.37
59	A5	2156	U	N1-C2	-6.46	1.32	1.38
59	A5	2740	C	C4-N4	-6.46	1.28	1.33
59	A5	2759	G	C6-O6	-6.46	1.18	1.24
59	A5	371	G	C5-C6	-6.45	1.35	1.42
59	A5	1344	A	C5-C4	-6.45	1.34	1.38
59	A5	2503	G	N1-C2	-6.45	1.32	1.37
59	A5	1604	G	N7-C5	-6.45	1.35	1.39
59	A5	2800	C	N1-C6	-6.45	1.33	1.37
59	A5	1336	U	C2-N3	-6.45	1.33	1.37
59	A5	1717	A	C5-C4	-6.45	1.34	1.38
59	A5	2677	A	N9-C4	-6.45	1.33	1.37
59	A5	386	G	N9-C8	-6.45	1.33	1.37
59	A5	2250	G	C5-C4	-6.45	1.33	1.38
59	A5	2519	U	N3-C4	-6.45	1.32	1.38
56	A8	12	G	N1-C2	-6.44	1.32	1.37
59	A5	2738	C	C2-O2	-6.44	1.18	1.24
59	A5	3620	G	N7-C5	-6.44	1.35	1.39
56	A8	28	A	N9-C8	-6.44	1.32	1.37
59	A5	383	A	N3-C4	-6.44	1.30	1.34
59	A5	1376	U	C2-N3	-6.44	1.33	1.37
59	A5	1540	U	C2-N3	-6.44	1.33	1.37
59	A5	1590	A	N9-C4	-6.44	1.33	1.37
59	A5	1673	C	C2-N3	-6.44	1.30	1.35
59	A5	1882	G	C6-N1	-6.44	1.35	1.39
59	A5	3545	C	C4-C5	-6.44	1.37	1.43
59	A5	3618	A	N9-C8	-6.44	1.32	1.37
55	A7	92	C	C4-C5	-6.44	1.37	1.43
59	A5	1158	C	N1-C6	-6.44	1.33	1.37
59	A5	2113	A	N3-C4	-6.44	1.30	1.34
59	A5	3552	G	C5-C4	-6.44	1.33	1.38
59	A5	60	G	N9-C8	-6.44	1.33	1.37
59	A5	345	A	C5-C4	-6.44	1.34	1.38
59	A5	370	A	C6-N1	-6.44	1.31	1.35
59	A5	847	A	N3-C4	-6.44	1.30	1.34
59	A5	1078	G	C6-N1	-6.44	1.35	1.39
59	A5	1690	U	C2-O2	-6.44	1.16	1.22
59	A5	2193	C	N1-C6	-6.44	1.33	1.37
59	A5	3410	G	C8-N7	-6.44	1.27	1.30
59	A5	3461	C	N1-C6	-6.44	1.33	1.37
59	A5	1377	A	C5-C6	-6.44	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1008	A	C6-N1	-6.43	1.31	1.35
59	A5	811	G	N7-C5	-6.43	1.35	1.39
59	A5	994	U	N1-C2	-6.43	1.32	1.38
59	A5	2514	U	C4-C5	-6.43	1.37	1.43
59	A5	3612	A	C5-C4	-6.43	1.34	1.38
59	A5	3623	G	C5-C4	-6.43	1.33	1.38
58	B2	1027	A	N7-C5	-6.43	1.35	1.39
59	A5	1644	C	C5-C6	-6.43	1.29	1.34
58	B2	1957	A	N7-C5	-6.43	1.35	1.39
59	A5	1362	G	N7-C5	-6.43	1.35	1.39
59	A5	1894	G	C5-C4	-6.43	1.33	1.38
59	A5	2546	G	N1-C2	-6.43	1.32	1.37
59	A5	3367	C	N1-C6	-6.43	1.33	1.37
59	A5	1533	A	N3-C4	-6.43	1.30	1.34
59	A5	2737	C	C4-N4	-6.43	1.28	1.33
59	A5	3506	U	N1-C6	-6.43	1.32	1.38
59	A5	1684	G	N9-C8	-6.42	1.33	1.37
59	A5	3587	U	C2-O2	-6.42	1.16	1.22
59	A5	106	A	C5-C4	-6.42	1.34	1.38
59	A5	1346	C	C4-C5	-6.42	1.37	1.43
59	A5	1687	U	C4-O4	-6.42	1.18	1.23
59	A5	769	U	C2-N3	-6.42	1.33	1.37
59	A5	1035	G	N9-C4	-6.42	1.32	1.38
59	A5	1177	U	C2-N3	-6.42	1.33	1.37
59	A5	2808	G	C5-C4	-6.42	1.33	1.38
59	A5	60	G	C8-N7	-6.42	1.27	1.30
59	A5	2720	U	C2-O2	-6.42	1.16	1.22
59	A5	2732	C	C4-C5	-6.42	1.37	1.43
58	B2	1056	C	N1-C6	-6.42	1.33	1.37
58	B2	1207	G	N9-C8	-6.42	1.33	1.37
58	B2	1215	G	N1-C2	-6.42	1.32	1.37
59	A5	2651	G	N3-C4	-6.42	1.30	1.35
59	A5	3657	A	C5-C4	-6.42	1.34	1.38
59	A5	1658	G	N7-C5	-6.42	1.35	1.39
59	A5	2235	G	C2-N3	-6.42	1.27	1.32
59	A5	2736	A	N1-C2	-6.42	1.28	1.34
59	A5	1005	G	N3-C4	-6.41	1.30	1.35
59	A5	1321	G	C8-N7	-6.41	1.27	1.30
59	A5	2196	U	C2-O2	-6.41	1.16	1.22
59	A5	71	A	N7-C5	-6.41	1.35	1.39
59	A5	356	A	C6-N1	-6.41	1.31	1.35
59	A5	1028	U	C4-C5	-6.41	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3603	C	N1-C6	-6.41	1.33	1.37
59	A5	1362	G	C8-N7	-6.41	1.27	1.30
59	A5	2741	A	C6-N6	-6.41	1.28	1.33
59	A5	3167	A	N7-C5	-6.41	1.35	1.39
59	A5	3262	A	N7-C5	-6.41	1.35	1.39
59	A5	3449	G	C5-C4	-6.41	1.33	1.38
56	A8	101	A	C8-N7	-6.41	1.27	1.31
59	A5	80	G	N9-C8	-6.41	1.33	1.37
59	A5	771	A	C5-C6	-6.41	1.35	1.41
59	A5	1274	A	N9-C4	-6.41	1.34	1.37
59	A5	1649	G	C2-N3	-6.41	1.27	1.32
59	A5	993	A	N9-C4	-6.41	1.34	1.37
59	A5	2716	C	C5-C6	-6.41	1.29	1.34
59	A5	809	G	C2-N2	-6.41	1.28	1.34
59	A5	997	U	N3-C4	-6.41	1.32	1.38
59	A5	2103	G	C2-N3	-6.41	1.27	1.32
59	A5	3549	C	N1-C6	-6.41	1.33	1.37
58	B2	1961	A	C5-C4	-6.40	1.34	1.38
59	A5	372	U	C4-C5	-6.40	1.37	1.43
59	A5	1272	G	N9-C8	-6.40	1.33	1.37
55	A7	94	C	N3-C4	-6.40	1.29	1.33
56	A8	35	G	N9-C8	-6.40	1.33	1.37
56	A8	55	G	C5-C4	-6.40	1.33	1.38
58	B2	1078	G	C6-N1	-6.40	1.35	1.39
58	B2	1969	G	C5-C4	-6.40	1.33	1.38
59	A5	1053	G	C5-C4	-6.40	1.33	1.38
59	A5	1368	A	N9-C8	-6.40	1.32	1.37
59	A5	1652	U	C4-C5	-6.40	1.37	1.43
59	A5	3883	G	C2-N3	-6.40	1.27	1.32
59	A5	381	G	N3-C4	-6.40	1.30	1.35
59	A5	2726	A	C5-C6	-6.40	1.35	1.41
56	A8	23	G	N9-C4	-6.40	1.32	1.38
59	A5	813	C	N3-C4	-6.40	1.29	1.33
59	A5	1376	U	N3-C4	-6.40	1.32	1.38
59	A5	1563	A	C6-N1	6.40	1.40	1.35
59	A5	3131	C	C2-N3	-6.40	1.30	1.35
59	A5	3541	A	N9-C8	-6.40	1.32	1.37
59	A5	3657	A	N9-C4	-6.40	1.34	1.37
59	A5	81	A	N7-C5	-6.39	1.35	1.39
59	A5	783	G	C5-C4	-6.39	1.33	1.38
59	A5	812	U	N1-C6	-6.39	1.32	1.38
59	A5	3146	G	N1-C2	-6.39	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3614	U	N1-C6	-6.39	1.32	1.38
6	CC	39	VAL	CB-CG1	-6.39	1.39	1.52
59	A5	1356	G	C5-C6	-6.39	1.35	1.42
59	A5	1664	C	N3-C4	-6.39	1.29	1.33
59	A5	2774	G	C6-N1	-6.39	1.35	1.39
59	A5	1167	A	N9-C4	-6.39	1.34	1.37
59	A5	1692	G	C2-N3	-6.39	1.27	1.32
58	B2	1216	C	N3-C4	-6.39	1.29	1.33
59	A5	299	G	C6-N1	-6.39	1.35	1.39
58	B2	1970	U	N1-C2	-6.39	1.32	1.38
59	A5	1052	U	C2-N3	-6.39	1.33	1.37
59	A5	1749	A	N9-C8	-6.39	1.32	1.37
59	A5	1772	G	C5-C6	-6.39	1.35	1.42
59	A5	1894	G	N7-C5	-6.39	1.35	1.39
59	A5	2653	A	N9-C8	-6.39	1.32	1.37
59	A5	2521	A	N7-C5	-6.39	1.35	1.39
59	A5	26	G	N1-C2	-6.38	1.32	1.37
59	A5	2208	G	C2-N2	-6.38	1.28	1.34
59	A5	3337	G	C5-C4	-6.38	1.33	1.38
59	A5	92	A	N7-C5	-6.38	1.35	1.39
59	A5	381	G	C5-C6	-6.38	1.35	1.42
59	A5	1117	A	C5-C4	-6.38	1.34	1.38
59	A5	3510	U	N1-C2	-6.38	1.32	1.38
59	A5	3579	C	N1-C6	-6.38	1.33	1.37
59	A5	418	G	N7-C5	-6.38	1.35	1.39
59	A5	1025	U	C4-O4	-6.38	1.18	1.23
59	A5	1671	U	C4-C5	-6.38	1.37	1.43
59	A5	3445	C	N1-C6	-6.38	1.33	1.37
59	A5	326	A	N9-C4	-6.38	1.34	1.37
59	A5	1596	A	N9-C4	6.38	1.41	1.37
59	A5	3163	U	C2-N3	-6.38	1.33	1.37
59	A5	29	U	N3-C4	-6.38	1.32	1.38
59	A5	800	C	C5-C6	-6.38	1.29	1.34
59	A5	1661	C	N3-C4	-6.38	1.29	1.33
59	A5	3673	G	C8-N7	-6.38	1.27	1.30
59	A5	386	G	C6-N1	-6.38	1.35	1.39
59	A5	826	A	N7-C5	-6.38	1.35	1.39
59	A5	2564	U	C5-C6	-6.37	1.28	1.34
59	A5	1007	A	C5-C4	-6.37	1.34	1.38
59	A5	1533	A	C5-C6	-6.37	1.35	1.41
59	A5	1607	A	N7-C5	-6.37	1.35	1.39
59	A5	3279	A	N7-C5	-6.37	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2201	U	C2-N3	-6.37	1.33	1.37
58	B2	1857	U	C2-N3	-6.37	1.33	1.37
59	A5	1746	A	N3-C4	-6.37	1.31	1.34
59	A5	2526	A	C2'-C1'	-6.37	1.46	1.53
59	A5	3474	G	N9-C8	-6.37	1.33	1.37
59	A5	92	A	N9-C8	-6.37	1.32	1.37
59	A5	110	A	N7-C5	-6.37	1.35	1.39
59	A5	1019	U	C4-C5	-6.37	1.37	1.43
59	A5	1145	C	C2-N3	-6.37	1.30	1.35
59	A5	1152	A	N7-C5	-6.37	1.35	1.39
59	A5	2760	G	N3-C4	-6.37	1.30	1.35
59	A5	3611	C	N1-C6	-6.37	1.33	1.37
59	A5	1080	G	N1-C2	-6.36	1.32	1.37
59	A5	2714	U	C2-N3	-6.36	1.33	1.37
59	A5	3497	G	C5-C4	-6.36	1.33	1.38
58	B2	1063	G	N3-C4	-6.36	1.30	1.35
59	A5	1321	G	C5-C4	-6.36	1.33	1.38
59	A5	1675	G	C6-N1	-6.36	1.35	1.39
59	A5	1756	G	N7-C5	-6.36	1.35	1.39
59	A5	1764	G	C5-C6	-6.36	1.35	1.42
58	B2	1228	G	C5-C6	-6.36	1.35	1.42
59	A5	2500	G	N3-C4	-6.36	1.31	1.35
59	A5	2504	A	C5-C4	-6.36	1.34	1.38
59	A5	3449	G	N9-C4	-6.36	1.32	1.38
59	A5	67	A	C5-C4	-6.36	1.34	1.38
59	A5	292	G	C5-C4	-6.36	1.33	1.38
59	A5	1131	C	C4-C5	-6.36	1.37	1.43
59	A5	2239	C	C4-C5	-6.36	1.37	1.43
59	A5	3678	G	C6-N1	-6.36	1.35	1.39
56	A8	10	C	N3-C4	-6.35	1.29	1.33
59	A5	240	G	N3-C4	-6.35	1.31	1.35
59	A5	438	G	C5-C6	-6.35	1.35	1.42
59	A5	1642	G	N7-C5	-6.35	1.35	1.39
59	A5	3874	A	N7-C5	-6.35	1.35	1.39
59	A5	114	G	C6-N1	-6.35	1.35	1.39
59	A5	1094	A	C2-N3	-6.35	1.27	1.33
59	A5	2742	G	C2-N3	-6.35	1.27	1.32
59	A5	3350	U	C5-C6	-6.35	1.28	1.34
59	A5	3498	A	N3-C4	-6.35	1.31	1.34
59	A5	1658	G	C5-C4	-6.35	1.33	1.38
59	A5	2779	A	C5-C4	-6.35	1.34	1.38
59	A5	2234	C	N3-C4	-6.35	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2244	G	C6-N1	-6.35	1.35	1.39
59	A5	2722	U	N1-C2	-6.35	1.32	1.38
59	A5	794	G	C2-N3	-6.35	1.27	1.32
59	A5	1088	A	C5-C6	-6.35	1.35	1.41
59	A5	1549	A	C5-C6	-6.35	1.35	1.41
59	A5	2173	C	C5-C6	-6.35	1.29	1.34
59	A5	2239	C	N3-C4	-6.35	1.29	1.33
59	A5	3233	C	N1-C6	-6.35	1.33	1.37
59	A5	3318	A	N3-C4	-6.35	1.31	1.34
59	A5	3581	G	N1-C2	-6.35	1.32	1.37
56	A8	32	G	N7-C5	-6.35	1.35	1.39
59	A5	362	A	N1-C2	-6.35	1.28	1.34
59	A5	831	A	C5-C6	-6.35	1.35	1.41
59	A5	1109	G	N1-C2	-6.35	1.32	1.37
59	A5	1266	A	C5-C4	-6.35	1.34	1.38
58	B2	1986	A	N9-C4	-6.34	1.34	1.37
59	A5	94	C	C2-N3	-6.34	1.30	1.35
59	A5	1182	A	C5-C4	-6.34	1.34	1.38
59	A5	2711	C	C4-N4	-6.34	1.28	1.33
59	A5	2800	C	C4-C5	-6.34	1.37	1.43
56	A8	52	A	N9-C8	-6.34	1.32	1.37
58	B2	98	C	N1-C6	-6.34	1.33	1.37
58	B2	355	G	N3-C4	-6.34	1.31	1.35
58	B2	1114	A	N7-C5	-6.34	1.35	1.39
59	A5	1747	A	N3-C4	-6.34	1.31	1.34
59	A5	373	A	C5-C4	-6.34	1.34	1.38
59	A5	1081	C	C5-C6	-6.34	1.29	1.34
59	A5	1207	G	C2-N3	-6.34	1.27	1.32
59	A5	1360	U	N3-C4	-6.34	1.32	1.38
59	A5	1749	A	C5-C4	-6.34	1.34	1.38
59	A5	2707	C	C5-C6	-6.34	1.29	1.34
59	A5	2726	A	N9-C8	-6.34	1.32	1.37
59	A5	3258	C	N3-C4	-6.34	1.29	1.33
59	A5	3524	G	N3-C4	-6.34	1.31	1.35
59	A5	2509	G	N9-C8	-6.34	1.33	1.37
59	A5	1561	G	N9-C8	-6.34	1.33	1.37
59	A5	2570	C	C5-C6	-6.34	1.29	1.34
59	A5	2659	A	N9-C8	-6.34	1.32	1.37
59	A5	3623	G	N9-C8	-6.34	1.33	1.37
59	A5	2531	A	C5-C4	-6.33	1.34	1.38
59	A5	3171	A	N7-C5	-6.33	1.35	1.39
59	A5	1349	A	N3-C4	-6.33	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1734	G	N3-C4	-6.33	1.31	1.35
59	A5	2529	G	N3-C4	-6.33	1.31	1.35
59	A5	2550	G	N1-C2	-6.33	1.32	1.37
59	A5	2622	A	N9-C8	-6.33	1.32	1.37
58	B2	1187	U	N3-C4	-6.33	1.32	1.38
59	A5	1322	U	N1-C2	-6.33	1.32	1.38
59	A5	1548	C	N3-C4	-6.33	1.29	1.33
59	A5	2096	C	C5-C6	-6.33	1.29	1.34
55	A7	89	G	C5-C6	-6.33	1.36	1.42
59	A5	61	A	N7-C5	-6.33	1.35	1.39
59	A5	87	U	C2-N3	-6.33	1.33	1.37
59	A5	386	G	N7-C5	-6.33	1.35	1.39
59	A5	1003	C	C2-N3	-6.33	1.30	1.35
59	A5	1779	G	C6-N1	-6.33	1.35	1.39
59	A5	1980	G	N1-C2	-6.33	1.32	1.37
59	A5	2178	U	C4-C5	-6.33	1.37	1.43
59	A5	2200	A	C5-C4	-6.33	1.34	1.38
59	A5	2524	A	C8-N7	-6.33	1.27	1.31
59	A5	3461	C	C4-C5	-6.33	1.37	1.43
59	A5	3574	A	N9-C4	-6.33	1.34	1.37
58	B2	318	U	C2-N3	-6.33	1.33	1.37
58	B2	1191	C	C2-N3	-6.33	1.30	1.35
58	B2	1973	G	C5-C4	-6.33	1.33	1.38
59	A5	999	U	C2-O2	-6.33	1.16	1.22
59	A5	1732	A	C6-N1	-6.33	1.31	1.35
59	A5	2548	G	C6-N1	-6.33	1.35	1.39
59	A5	2685	G	C5-C6	-6.33	1.36	1.42
59	A5	3885	C	N3-C4	-6.33	1.29	1.33
59	A5	1153	G	N9-C8	-6.33	1.33	1.37
59	A5	3515	C	C2-N3	-6.33	1.30	1.35
59	A5	748	A	C6-N1	-6.32	1.31	1.35
59	A5	1414	C	C2-N3	-6.32	1.30	1.35
59	A5	1681	G	C5-C4	-6.32	1.33	1.38
59	A5	2051	A	N9-C4	-6.32	1.34	1.37
59	A5	2484	G	C8-N7	-6.32	1.27	1.30
59	A5	1643	G	C5-C6	-6.32	1.36	1.42
59	A5	3474	G	N9-C4	-6.32	1.32	1.38
58	B2	1976	A	C6-N1	-6.32	1.31	1.35
59	A5	28	C	N1-C6	-6.32	1.33	1.37
59	A5	3671	C	N1-C6	-6.32	1.33	1.37
59	A5	380	G	C6-N1	-6.32	1.35	1.39
59	A5	775	U	C2-N3	-6.32	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1060	G	C2-N3	-6.32	1.27	1.32
59	A5	1105	U	N1-C2	-6.32	1.32	1.38
59	A5	3350	U	C4-C5	-6.32	1.37	1.43
59	A5	816	A	C8-N7	-6.32	1.27	1.31
59	A5	1154	U	N3-C4	-6.32	1.32	1.38
59	A5	1534	G	N9-C8	-6.32	1.33	1.37
59	A5	2148	C	C4-C5	-6.32	1.37	1.43
59	A5	2669	A	N9-C4	-6.32	1.34	1.37
59	A5	3408	C	N3-C4	-6.32	1.29	1.33
59	A5	3946	G	C2-N3	-6.32	1.27	1.32
59	A5	156	G	C6-N1	-6.32	1.35	1.39
59	A5	389	G	N1-C2	-6.32	1.32	1.37
59	A5	1038	G	N1-C2	-6.32	1.32	1.37
59	A5	1610	A	C6-N6	-6.32	1.28	1.33
59	A5	2232	U	C4-C5	-6.32	1.37	1.43
59	A5	2581	U	N1-C2	-6.32	1.32	1.38
59	A5	2208	G	C8-N7	-6.31	1.27	1.30
59	A5	2063	A	N9-C4	-6.31	1.34	1.37
59	A5	2198	G	C5-C6	-6.31	1.36	1.42
59	A5	2714	U	C4-C5	-6.31	1.37	1.43
59	A5	3590	C	C4-C5	-6.31	1.37	1.43
59	A5	1346	C	C4-N4	-6.31	1.28	1.33
59	A5	2624	G	C5-C4	-6.31	1.33	1.38
59	A5	3335	A	C8-N7	-6.31	1.27	1.31
59	A5	984	U	C2-N3	-6.31	1.33	1.37
59	A5	1673	C	N3-C4	-6.31	1.29	1.33
59	A5	3132	C	C2-N3	-6.31	1.30	1.35
59	A5	3405	U	C2-O2	-6.31	1.16	1.22
59	A5	3666	C	C4-C5	-6.31	1.38	1.43
59	A5	3760	A	N7-C5	-6.31	1.35	1.39
56	A8	100	G	C5-C6	-6.31	1.36	1.42
59	A5	1349	A	C5-C4	-6.31	1.34	1.38
59	A5	1747	A	N9-C4	-6.31	1.34	1.37
59	A5	2251	G	N9-C4	-6.31	1.32	1.38
59	A5	3225	C	N3-C4	-6.31	1.29	1.33
59	A5	807	A	C6-N6	-6.31	1.28	1.33
59	A5	916	C	N1-C6	-6.31	1.33	1.37
59	A5	1404	A	C8-N7	-6.31	1.27	1.31
59	A5	1624	G	N9-C8	-6.31	1.33	1.37
76	CW	49	VAL	CB-CG2	-6.31	1.39	1.52
59	A5	66	A	C5-C4	-6.30	1.34	1.38
59	A5	3253	G	C8-N7	-6.30	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3881	A	N3-C4	-6.30	1.31	1.34
59	A5	3252	G	C5-C4	-6.30	1.33	1.38
58	B2	361	G	N3-C4	-6.30	1.31	1.35
59	A5	845	C	N1-C6	-6.30	1.33	1.37
59	A5	1730	A	C6-N1	-6.30	1.31	1.35
59	A5	2092	U	C4-C5	-6.30	1.37	1.43
59	A5	3451	A	N7-C5	-6.30	1.35	1.39
59	A5	1752	G	N1-C2	-6.30	1.32	1.37
58	B2	1387	A	N9-C4	-6.30	1.34	1.37
59	A5	1130	U	N1-C2	-6.30	1.32	1.38
59	A5	1312	G	N9-C8	-6.30	1.33	1.37
59	A5	2690	A	N7-C5	-6.30	1.35	1.39
59	A5	2694	G	C5-C4	-6.30	1.33	1.38
58	B2	395	G	N7-C5	-6.30	1.35	1.39
59	A5	335	A	C6-N1	-6.30	1.31	1.35
59	A5	2096	C	N1-C6	-6.30	1.33	1.37
59	A5	3518	A	N7-C5	-6.30	1.35	1.39
59	A5	1391	A	N9-C8	-6.29	1.32	1.37
59	A5	3140	G	N9-C8	-6.29	1.33	1.37
55	A7	99	G	C6-N1	-6.29	1.35	1.39
58	B2	1184	U	C4-C5	-6.29	1.37	1.43
59	A5	64	A	C2-N3	-6.29	1.27	1.33
59	A5	789	G	C4'-C3'	-6.29	1.46	1.53
59	A5	815	A	C5-C6	-6.29	1.35	1.41
59	A5	1086	C	N1-C6	-6.29	1.33	1.37
59	A5	1511	C	N3-C4	-6.29	1.29	1.33
59	A5	2206	U	N3-C4	-6.29	1.32	1.38
59	A5	3526	C	C2-N3	-6.29	1.30	1.35
2	CA	202	VAL	CB-CG2	-6.29	1.39	1.52
59	A5	450	G	C5-C4	-6.29	1.33	1.38
59	A5	859	A	C5-C4	-6.29	1.34	1.38
59	A5	444	C	N1-C6	-6.29	1.33	1.37
59	A5	1731	G	N9-C8	-6.29	1.33	1.37
56	A8	26	U	C4-C5	-6.29	1.37	1.43
58	B2	413	C	N3-C4	-6.29	1.29	1.33
59	A5	808	G	N9-C4	-6.29	1.32	1.38
59	A5	1105	U	C5-C6	-6.29	1.28	1.34
59	A5	2743	C	C4-C5	-6.29	1.38	1.43
59	A5	2770	C	C5-C6	-6.29	1.29	1.34
59	A5	1683	U	C5-C6	-6.29	1.28	1.34
55	A7	78	C	C5-C6	-6.28	1.29	1.34
59	A5	351	A	N9-C4	-6.28	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	403	A	N3-C4	-6.28	1.31	1.34
59	A5	3499	G	N7-C5	-6.28	1.35	1.39
58	B2	1215	G	N9-C8	-6.28	1.33	1.37
59	A5	1076	A	N1-C2	-6.28	1.28	1.34
59	A5	1894	G	C8-N7	-6.28	1.27	1.30
59	A5	2218	G	P-O5'	-6.28	1.53	1.59
59	A5	2223	C	C4-N4	-6.28	1.28	1.33
58	B2	1067	G	C2-N3	-6.28	1.27	1.32
58	B2	1833	C	N1-C6	-6.28	1.33	1.37
59	A5	22	A	N3-C4	-6.28	1.31	1.34
59	A5	65	A	C5-C4	-6.28	1.34	1.38
59	A5	68	G	C8-N7	-6.28	1.27	1.30
59	A5	792	U	C2-N3	-6.28	1.33	1.37
59	A5	819	U	C4-C5	-6.28	1.37	1.43
59	A5	1121	A	N3-C4	-6.28	1.31	1.34
59	A5	3139	G	C5-C6	-6.28	1.36	1.42
55	A7	94	C	N1-C6	-6.28	1.33	1.37
58	B2	1189	G	N9-C4	-6.28	1.32	1.38
59	A5	549	A	C5-C6	-6.28	1.35	1.41
59	A5	837	A	N7-C5	-6.28	1.35	1.39
59	A5	1424	G	N7-C5	-6.28	1.35	1.39
59	A5	2712	U	C4-C5	-6.28	1.38	1.43
59	A5	2781	G	C5-C4	-6.28	1.33	1.38
59	A5	3137	A	N9-C4	-6.28	1.34	1.37
59	A5	1402	U	N3-C4	-6.27	1.32	1.38
59	A5	1553	C	C5-C6	-6.27	1.29	1.34
59	A5	2211	A	N3-C4	-6.27	1.31	1.34
59	A5	3293	G	N9-C8	-6.27	1.33	1.37
59	A5	3423	U	C4-C5	-6.27	1.38	1.43
56	A8	23	G	N1-C2	-6.27	1.32	1.37
59	A5	815	A	C8-N7	-6.27	1.27	1.31
59	A5	1982	U	N1-C2	-6.27	1.32	1.38
59	A5	2530	C	C5-C6	-6.27	1.29	1.34
59	A5	2754	G	C2-N2	-6.27	1.28	1.34
59	A5	1606	G	N3-C4	-6.27	1.31	1.35
59	A5	1621	A	N7-C5	-6.27	1.35	1.39
59	A5	161	G	C6-N1	-6.27	1.35	1.39
59	A5	815	A	N7-C5	-6.27	1.35	1.39
59	A5	1513	C	N1-C2	-6.27	1.33	1.40
59	A5	2164	G	N9-C8	-6.27	1.33	1.37
59	A5	2650	G	C2-N3	-6.27	1.27	1.32
59	A5	3623	G	N3-C4	-6.27	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1193	C	N1-C2	-6.26	1.33	1.40
59	A5	1085	U	N1-C6	-6.26	1.32	1.38
59	A5	1362	G	N9-C4	-6.26	1.32	1.38
59	A5	2178	U	C5-C6	-6.26	1.28	1.34
59	A5	3588	G	C2-N3	-6.26	1.27	1.32
59	A5	1697	U	N1-C2	-6.26	1.32	1.38
59	A5	2521	A	N9-C4	-6.26	1.34	1.37
59	A5	33	C	N1-C6	-6.26	1.33	1.37
59	A5	371	G	C8-N7	-6.26	1.27	1.30
59	A5	1623	G	N3-C4	-6.26	1.31	1.35
59	A5	1698	A	C5-C4	-6.26	1.34	1.38
59	A5	3525	A	N9-C8	-6.26	1.32	1.37
59	A5	2183	A	N9-C4	-6.26	1.34	1.37
59	A5	3422	A	C6-N1	-6.26	1.31	1.35
59	A5	3478	G	C6-N1	-6.26	1.35	1.39
58	B2	1924	C	C4-C5	-6.26	1.38	1.43
59	A5	359	G	C2-N3	-6.26	1.27	1.32
59	A5	1522	G	N7-C5	-6.26	1.35	1.39
59	A5	2227	U	N1-C2	-6.26	1.32	1.38
59	A5	2756	C	N1-C6	-6.25	1.33	1.37
56	A8	8	A	C6-N1	-6.25	1.31	1.35
59	A5	2671	C	C2-O2	-6.25	1.18	1.24
59	A5	3264	A	C5-C4	-6.25	1.34	1.38
59	A5	3870	A	N7-C5	-6.25	1.35	1.39
59	A5	808	G	C2-N2	-6.25	1.28	1.34
59	A5	1036	A	C5-C4	-6.25	1.34	1.38
59	A5	1611	G	N9-C8	-6.25	1.33	1.37
59	A5	2493	C	C4-C5	-6.25	1.38	1.43
59	A5	3523	U	C2-N3	-6.25	1.33	1.37
59	A5	998	G	C6-N1	-6.25	1.35	1.39
59	A5	2579	G	N7-C5	-6.25	1.35	1.39
59	A5	3170	U	C2-N3	-6.25	1.33	1.37
56	A8	7	A	N7-C5	-6.25	1.35	1.39
58	B2	1198	G	C5-C4	-6.25	1.33	1.38
59	A5	346	U	P-O5'	-6.25	1.53	1.59
59	A5	1164	G	N1-C2	-6.25	1.32	1.37
59	A5	1312	G	N7-C5	-6.25	1.35	1.39
59	A5	2530	C	N3-C4	-6.25	1.29	1.33
58	B2	613	A	N9-C4	-6.25	1.34	1.37
59	A5	2174	A	C5-C4	-6.25	1.34	1.38
59	A5	2244	G	N7-C5	-6.25	1.35	1.39
59	A5	3190	G	C5-C4	-6.25	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3351	A	C6-N1	-6.25	1.31	1.35
59	A5	3491	C	N1-C6	-6.25	1.33	1.37
58	B2	618	G	N7-C5	-6.25	1.35	1.39
59	A5	1516	A	N9-C4	-6.25	1.34	1.37
59	A5	37	G	C6-N1	-6.24	1.35	1.39
59	A5	235	A	C5-C6	-6.24	1.35	1.41
59	A5	2243	G	C5-C4	-6.24	1.33	1.38
59	A5	3325	G	C5-C4	-6.24	1.33	1.38
40	Cc	27	TYR	CB-CG	-6.24	1.42	1.51
56	A8	24	G	N9-C8	-6.24	1.33	1.37
59	A5	859	A	N9-C8	-6.24	1.32	1.37
59	A5	2232	U	N1-C2	-6.24	1.32	1.38
59	A5	3156	G	C5-C4	-6.24	1.33	1.38
55	A7	13	A	C5-C6	-6.24	1.35	1.41
59	A5	80	G	C5-C4	-6.24	1.33	1.38
59	A5	1168	G	C6-N1	-6.24	1.35	1.39
59	A5	1677	U	N1-C2	-6.24	1.32	1.38
59	A5	2683	G	C5-C4	-6.24	1.33	1.38
59	A5	1683	U	N1-C2	-6.24	1.32	1.38
59	A5	2181	A	C5-C4	-6.24	1.34	1.38
56	A8	95	A	N9-C4	-6.24	1.34	1.37
59	A5	1316	U	N1-C6	-6.24	1.32	1.38
59	A5	1728	G	N1-C2	-6.24	1.32	1.37
59	A5	68	G	N9-C4	-6.23	1.32	1.38
59	A5	2062	A	C5-C4	-6.23	1.34	1.38
58	B2	1087	C	N3-C4	-6.23	1.29	1.33
58	B2	1967	C	C4-C5	-6.23	1.38	1.43
59	A5	1012	G	C5-C4	-6.23	1.33	1.38
59	A5	1039	U	C4-C5	-6.23	1.38	1.43
59	A5	1787	C	C2-N3	-6.23	1.30	1.35
59	A5	2690	A	C5-C4	-6.23	1.34	1.38
59	A5	98	G	C5-C4	-6.23	1.33	1.38
59	A5	290	G	C5-C4	-6.23	1.33	1.38
59	A5	1349	A	C5-C6	-6.23	1.35	1.41
59	A5	2177	G	C5-C4	-6.23	1.33	1.38
59	A5	2484	G	N7-C5	-6.23	1.35	1.39
58	B2	1409	A	N9-C4	-6.22	1.34	1.37
59	A5	98	G	C6-N1	-6.22	1.35	1.39
59	A5	791	C	N1-C6	-6.22	1.33	1.37
59	A5	920	G	N7-C5	-6.22	1.35	1.39
59	A5	2027	A	N9-C4	-6.22	1.34	1.37
59	A5	3426	U	C2-N3	-6.22	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	31	G	N1-C2	-6.22	1.32	1.37
58	B2	306	A	N7-C5	-6.22	1.35	1.39
58	B2	1971	A	N7-C5	-6.22	1.35	1.39
59	A5	89	A	C8-N7	-6.22	1.27	1.31
59	A5	1788	G	C2-N3	-6.22	1.27	1.32
59	A5	2098	C	C5-C6	-6.22	1.29	1.34
59	A5	2651	G	C5-C4	-6.22	1.33	1.38
59	A5	2674	A	C6-N6	-6.22	1.28	1.33
59	A5	863	U	C2-N3	-6.22	1.33	1.37
59	A5	982	C	N3-C4	-6.22	1.29	1.33
59	A5	3285	G	N1-C2	-6.22	1.32	1.37
59	A5	1138	C	C2-N3	-6.22	1.30	1.35
59	A5	1512	C	N3-C4	-6.22	1.29	1.33
59	A5	1558	A	N7-C5	-6.22	1.35	1.39
59	A5	1871	A	N3-C4	-6.22	1.31	1.34
59	A5	2551	U	N1-C2	-6.22	1.32	1.38
59	A5	2728	C	C4-C5	-6.22	1.38	1.43
59	A5	2789	U	N1-C2	-6.22	1.32	1.38
59	A5	1353	G	C2-N3	-6.21	1.27	1.32
59	A5	1693	C	N1-C2	-6.21	1.33	1.40
59	A5	2167	G	C5-C4	-6.21	1.33	1.38
59	A5	2730	A	C8-N7	-6.21	1.27	1.31
59	A5	3759	G	C5-C4	-6.21	1.33	1.38
59	A5	1672	A	N9-C4	-6.21	1.34	1.37
59	A5	2704	A	C5-C4	-6.21	1.34	1.38
59	A5	2741	A	N7-C5	-6.21	1.35	1.39
59	A5	385	A	N3-C4	-6.21	1.31	1.34
59	A5	1109	G	N7-C5	-6.21	1.35	1.39
59	A5	1981	A	C5-C6	-6.21	1.35	1.41
59	A5	3223	A	C5-C4	-6.21	1.34	1.38
59	A5	1528	G	N9-C8	-6.21	1.33	1.37
59	A5	3664	A	N3-C4	-6.21	1.31	1.34
59	A5	315	G	C6-N1	-6.21	1.35	1.39
59	A5	1636	G	N7-C5	-6.21	1.35	1.39
59	A5	3178	G	C6-N1	-6.21	1.35	1.39
59	A5	3269	G	C5-C4	-6.21	1.34	1.38
59	A5	3874	A	C6-N1	-6.21	1.31	1.35
58	B2	1197	G	N7-C5	-6.21	1.35	1.39
59	A5	781	C	C4-C5	-6.21	1.38	1.43
59	A5	1084	A	C8-N7	-6.21	1.27	1.31
59	A5	1103	U	N1-C2	-6.21	1.32	1.38
59	A5	1730	A	N3-C4	-6.21	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2516	U	C4-C5	-6.21	1.38	1.43
59	A5	3488	G	C6-O6	-6.21	1.18	1.24
59	A5	3624	C	C4-C5	-6.21	1.38	1.43
59	A5	227	A	C6-N6	-6.21	1.28	1.33
59	A5	373	A	C6-N6	-6.21	1.28	1.33
59	A5	1409	G	C5-C4	-6.21	1.34	1.38
58	B2	1990	U	N1-C2	-6.20	1.32	1.38
59	A5	1010	A	N3-C4	-6.20	1.31	1.34
59	A5	1276	G	N9-C4	-6.20	1.32	1.38
59	A5	2051	A	N7-C5	-6.20	1.35	1.39
59	A5	2683	G	C8-N7	-6.20	1.27	1.30
59	A5	318	G	N3-C4	-6.20	1.31	1.35
59	A5	1029	C	N1-C2	-6.20	1.33	1.40
59	A5	1674	A	C6-N1	-6.20	1.31	1.35
59	A5	2524	A	N3-C4	-6.20	1.31	1.34
59	A5	3293	G	C6-N1	-6.20	1.35	1.39
58	B2	1245	A	N9-C4	-6.20	1.34	1.37
59	A5	443	G	N9-C4	-6.20	1.32	1.38
59	A5	1057	G	C5-C6	-6.20	1.36	1.42
59	A5	1717	A	N7-C5	-6.20	1.35	1.39
59	A5	3259	A	N7-C5	-6.20	1.35	1.39
56	A8	9	G	N9-C8	-6.20	1.33	1.37
59	A5	415	A	N7-C5	-6.20	1.35	1.39
59	A5	1644	C	N3-C4	-6.20	1.29	1.33
59	A5	2510	A	N9-C4	-6.20	1.34	1.37
59	A5	2543	C	N3-C4	-6.20	1.29	1.33
59	A5	3588	G	N9-C8	-6.20	1.33	1.37
66	CL	13	TYR	CE1-CZ	-6.20	1.30	1.38
59	A5	881	G	N7-C5	-6.20	1.35	1.39
59	A5	994	U	C2-N3	-6.20	1.33	1.37
59	A5	1983	A	N7-C5	-6.20	1.35	1.39
58	B2	1017	A	N3-C4	-6.20	1.31	1.34
59	A5	51	U	C5-C6	-6.20	1.28	1.34
59	A5	445	C	C2-N3	-6.20	1.30	1.35
59	A5	1000	G	C5-C6	-6.20	1.36	1.42
59	A5	3900	A	N9-C4	-6.20	1.34	1.37
59	A5	2188	C	C4-C5	-6.19	1.38	1.43
59	A5	241	C	N1-C6	-6.19	1.33	1.37
59	A5	1608	G	C2-N3	-6.19	1.27	1.32
59	A5	2560	A	C5-C6	-6.19	1.35	1.41
59	A5	3340	A	N9-C4	-6.19	1.34	1.37
59	A5	3635	G	N7-C5	-6.19	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	A7	99	G	C5-C6	-6.19	1.36	1.42
59	A5	1021	U	N1-C6	-6.19	1.32	1.38
59	A5	1152	A	N9-C8	-6.19	1.32	1.37
59	A5	1365	U	C5-C6	-6.19	1.28	1.34
59	A5	1710	G	N9-C4	-6.19	1.32	1.38
59	A5	1712	C	C5-C6	-6.19	1.29	1.34
59	A5	1560	A	C6-N1	-6.19	1.31	1.35
59	A5	1639	U	N3-C4	-6.19	1.32	1.38
59	A5	3161	U	C2-N3	-6.19	1.33	1.37
59	A5	3160	A	N3-C4	-6.19	1.31	1.34
59	A5	2549	G	N1-C2	-6.19	1.32	1.37
59	A5	1116	G	N7-C5	-6.18	1.35	1.39
59	A5	1272	G	C5-C4	-6.18	1.34	1.38
59	A5	1795	A	N1-C2	-6.18	1.28	1.34
59	A5	318	G	C2-N3	-6.18	1.27	1.32
59	A5	809	G	C2-N3	-6.18	1.27	1.32
59	A5	987	G	C5-C6	-6.18	1.36	1.42
59	A5	1001	A	C8-N7	-6.18	1.27	1.31
59	A5	1123	C	C4-C5	-6.18	1.38	1.43
59	A5	3611	C	C2-N3	-6.18	1.30	1.35
58	B2	1206	G	C5-C4	-6.18	1.34	1.38
59	A5	3471	A	N9-C8	-6.18	1.32	1.37
42	Cf	55	VAL	CB-CG1	-6.18	1.39	1.52
58	B2	1991	C	C4-C5	-6.18	1.38	1.43
59	A5	655	C	N1-C6	-6.18	1.33	1.37
59	A5	1087	G	N9-C8	-6.18	1.33	1.37
59	A5	1162	A	C6-N6	-6.18	1.29	1.33
59	A5	2699	A	C5-C6	-6.18	1.35	1.41
59	A5	3155	G	N7-C5	-6.18	1.35	1.39
59	A5	3579	C	C4-C5	-6.18	1.38	1.43
59	A5	2656	C	N1-C6	-6.18	1.33	1.37
58	B2	1219	A	C5-C4	-6.18	1.34	1.38
59	A5	3454	G	N9-C4	-6.18	1.33	1.38
59	A5	3483	G	C5-C6	-6.18	1.36	1.42
59	A5	3522	A	N9-C8	-6.18	1.32	1.37
59	A5	3547	U	N3-C4	-6.18	1.32	1.38
59	A5	287	G	C6-N1	-6.17	1.35	1.39
59	A5	2661	G	N7-C5	-6.17	1.35	1.39
55	A7	75	G	N7-C5	-6.17	1.35	1.39
55	A7	99	G	N3-C4	-6.17	1.31	1.35
59	A5	214	A	N7-C5	-6.17	1.35	1.39
59	A5	1044	G	C5-C4	-6.17	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1161	C	C2-N3	-6.17	1.30	1.35
59	A5	2035	C	N3-C4	-6.17	1.29	1.33
59	A5	1792	G	C8-N7	-6.17	1.27	1.30
56	A8	36	A	C2-N3	-6.17	1.27	1.33
59	A5	661	G	N9-C8	-6.17	1.33	1.37
59	A5	2559	C	N1-C6	-6.17	1.33	1.37
56	A8	95	A	N7-C5	-6.17	1.35	1.39
59	A5	309	C	C2-N3	-6.17	1.30	1.35
59	A5	1117	A	C6-N1	-6.17	1.31	1.35
59	A5	1752	G	C6-N1	-6.17	1.35	1.39
59	A5	3193	C	N3-C4	-6.17	1.29	1.33
59	A5	3538	G	C8-N7	-6.17	1.27	1.30
56	A8	105	C	N1-C6	-6.17	1.33	1.37
59	A5	107	G	N9-C8	-6.17	1.33	1.37
59	A5	3468	G	N3-C4	-6.17	1.31	1.35
55	A7	85	G	C6-N1	-6.17	1.35	1.39
59	A5	989	A	C5-C6	-6.17	1.35	1.41
59	A5	1671	U	C2-O2	-6.17	1.16	1.22
59	A5	1696	A	C6-N6	-6.17	1.29	1.33
59	A5	2200	A	N7-C5	-6.17	1.35	1.39
59	A5	2222	G	C8-N7	-6.17	1.27	1.30
59	A5	2740	C	C5-C6	-6.17	1.29	1.34
59	A5	1100	G	C2-N3	-6.16	1.27	1.32
59	A5	1681	G	N7-C5	-6.16	1.35	1.39
59	A5	2490	G	C2-N3	-6.16	1.27	1.32
59	A5	374	C	C2-N3	-6.16	1.30	1.35
59	A5	1025	U	N1-C2	-6.16	1.33	1.38
59	A5	1157	C	C2-O2	-6.16	1.19	1.24
59	A5	1595	G	N9-C4	-6.16	1.33	1.38
58	B2	1987	G	N1-C2	-6.16	1.32	1.37
59	A5	1262	C	N1-C6	-6.16	1.33	1.37
59	A5	2195	A	C5-C6	-6.16	1.35	1.41
59	A5	2228	U	N1-C2	-6.16	1.33	1.38
59	A5	2572	G	C2-N3	-6.16	1.27	1.32
45	C1	23	VAL	CB-CG1	-6.16	1.40	1.52
58	B2	622	C	C4-C5	-6.16	1.38	1.43
59	A5	311	C	C4-C5	-6.16	1.38	1.43
59	A5	351	A	C5-C4	-6.16	1.34	1.38
59	A5	1029	C	N1-C6	-6.16	1.33	1.37
59	A5	1733	A	C8-N7	-6.16	1.27	1.31
59	A5	1867	A	C6-N1	-6.16	1.31	1.35
59	A5	2529	G	N7-C5	-6.16	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	43	A	C8-N7	-6.16	1.27	1.31
59	A5	3414	U	C2-O2	-6.16	1.16	1.22
59	A5	3656	A	C6-N1	-6.16	1.31	1.35
59	A5	105	A	N3-C4	-6.16	1.31	1.34
59	A5	1555	G	C6-N1	-6.16	1.35	1.39
59	A5	2167	G	C2-N3	-6.16	1.27	1.32
59	A5	2764	A	N9-C8	-6.16	1.32	1.37
56	A8	28	A	N9-C4	-6.15	1.34	1.37
59	A5	1104	A	N1-C2	-6.15	1.28	1.34
59	A5	1111	C	C2-N3	-6.15	1.30	1.35
59	A5	3234	A	N3-C4	-6.15	1.31	1.34
59	A5	3729	A	N3-C4	-6.15	1.31	1.34
59	A5	1210	A	N7-C5	-6.15	1.35	1.39
59	A5	2598	A	N9-C4	-6.15	1.34	1.37
59	A5	2772	G	C8-N7	-6.15	1.27	1.30
59	A5	3343	A	N9-C4	-6.15	1.34	1.37
59	A5	3401	U	C4-O4	-6.15	1.18	1.23
59	A5	3576	G	N9-C8	-6.15	1.33	1.37
58	B2	634	U	N1-C2	-6.15	1.33	1.38
58	B2	1054	A	C6-N1	-6.15	1.31	1.35
59	A5	378	G	C2-N3	-6.15	1.27	1.32
59	A5	756	C	N3-C4	-6.15	1.29	1.33
59	A5	851	G	N1-C2	-6.15	1.32	1.37
59	A5	1868	A	C5-C4	-6.15	1.34	1.38
59	A5	2573	C	C5-C6	-6.15	1.29	1.34
59	A5	1119	C	C5-C6	-6.15	1.29	1.34
59	A5	2659	A	C8-N7	-6.15	1.27	1.31
59	A5	2773	G	N9-C4	-6.15	1.33	1.38
59	A5	417	A	C5-C4	-6.15	1.34	1.38
59	A5	1358	U	C5-C6	-6.15	1.28	1.34
59	A5	1991	A	N7-C5	-6.15	1.35	1.39
59	A5	2760	G	N1-C2	-6.15	1.32	1.37
59	A5	1259	A	N3-C4	-6.15	1.31	1.34
59	A5	1334	A	N1-C2	-6.15	1.28	1.34
59	A5	2167	G	C2-N2	-6.15	1.28	1.34
59	A5	3169	A	N7-C5	-6.15	1.35	1.39
59	A5	457	A	N3-C4	6.14	1.38	1.34
59	A5	2558	A	C5-C4	-6.14	1.34	1.38
59	A5	2733	G	C5-C6	-6.14	1.36	1.42
59	A5	3363	G	N7-C5	-6.14	1.35	1.39
59	A5	807	A	C5-C6	-6.14	1.35	1.41
59	A5	1340	G	N1-C2	-6.14	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1379	U	N3-C4	-6.14	1.32	1.38
59	A5	1393	A	N9-C4	-6.14	1.34	1.37
59	A5	2226	A	C6-N1	-6.14	1.31	1.35
59	A5	3410	G	C6-O6	-6.14	1.18	1.24
66	CL	65	TYR	CD2-CE2	-6.14	1.30	1.39
26	CN	95	TYR	CD2-CE2	-6.14	1.30	1.39
58	B2	1064	A	C6-N1	-6.14	1.31	1.35
59	A5	1413	C	N3-C4	-6.14	1.29	1.33
59	A5	825	C	N3-C4	-6.14	1.29	1.33
59	A5	2501	G	N1-C2	-6.14	1.32	1.37
59	A5	3620	G	N1-C2	-6.14	1.32	1.37
4	CB	251	VAL	CB-CG1	-6.14	1.40	1.52
58	B2	114	G	N9-C8	-6.14	1.33	1.37
59	A5	65	A	N1-C2	-6.14	1.28	1.34
59	A5	380	G	N1-C2	-6.14	1.32	1.37
59	A5	429	U	N1-C2	-6.14	1.33	1.38
59	A5	3521	A	N3-C4	-6.14	1.31	1.34
59	A5	2495	G	C6-N1	-6.14	1.35	1.39
59	A5	3167	A	N9-C8	-6.14	1.32	1.37
56	A8	19	A	C6-N1	-6.13	1.31	1.35
56	A8	101	A	N7-C5	-6.13	1.35	1.39
58	B2	1846	G	C5-C4	-6.13	1.34	1.38
59	A5	1012	G	N3-C4	-6.13	1.31	1.35
59	A5	1612	G	C2-N3	-6.13	1.27	1.32
59	A5	3230	G	C5-C4	-6.13	1.34	1.38
59	A5	356	A	C6-N6	-6.13	1.29	1.33
59	A5	1696	A	C8-N7	-6.13	1.27	1.31
59	A5	3538	G	N9-C8	-6.13	1.33	1.37
56	A8	98	U	C2-O2	-6.13	1.16	1.22
58	B2	330	G	C5-C4	-6.13	1.34	1.38
59	A5	799	A	C6-N1	-6.13	1.31	1.35
59	A5	1689	G	N9-C4	-6.13	1.33	1.38
59	A5	3155	G	C8-N7	-6.13	1.27	1.30
59	A5	2803	A	C8-N7	-6.13	1.27	1.31
59	A5	1117	A	C8-N7	-6.13	1.27	1.31
59	A5	2524	A	C6-N1	-6.13	1.31	1.35
59	A5	2533	U	C5-C6	-6.13	1.28	1.34
59	A5	3352	A	N7-C5	-6.13	1.35	1.39
41	Ce	34	TRP	CE3-CZ3	-6.13	1.28	1.38
56	A8	25	C	C4-C5	-6.13	1.38	1.43
59	A5	302	A	N3-C4	-6.13	1.31	1.34
59	A5	1062	C	N1-C6	-6.13	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1113	A	C6-N1	-6.13	1.31	1.35
59	A5	1378	A	C6-N1	-6.13	1.31	1.35
59	A5	2255	G	C5-C6	-6.13	1.36	1.42
59	A5	3259	A	C8-N7	-6.13	1.27	1.31
59	A5	3470	G	C8-N7	-6.13	1.27	1.30
59	A5	3524	G	C8-N7	-6.13	1.27	1.30
59	A5	3758	G	N1-C2	-6.13	1.32	1.37
59	A5	1871	A	N9-C8	-6.12	1.32	1.37
59	A5	2494	G	N9-C8	-6.12	1.33	1.37
58	B2	1828	C	N1-C6	-6.12	1.33	1.37
59	A5	818	A	N7-C5	-6.12	1.35	1.39
59	A5	998	G	N7-C5	-6.12	1.35	1.39
59	A5	1096	A	N7-C5	-6.12	1.35	1.39
59	A5	1378	A	N9-C4	-6.12	1.34	1.37
59	A5	2137	U	N1-C2	-6.12	1.33	1.38
59	A5	2747	G	C2-N3	-6.12	1.27	1.32
59	A5	1008	A	N7-C5	-6.12	1.35	1.39
59	A5	1130	U	C4-O4	-6.12	1.18	1.23
59	A5	1164	G	N9-C8	-6.12	1.33	1.37
59	A5	1369	C	C5-C6	-6.12	1.29	1.34
59	A5	2248	A	N9-C8	-6.12	1.32	1.37
59	A5	2511	C	N1-C2	-6.12	1.34	1.40
59	A5	2686	C	C4-C5	-6.12	1.38	1.43
59	A5	1096	A	C6-N1	-6.12	1.31	1.35
58	B2	1942	G	C5-C4	-6.12	1.34	1.38
59	A5	1153	G	C2-N3	-6.12	1.27	1.32
59	A5	3640	A	N3-C4	-6.12	1.31	1.34
59	A5	1060	G	N1-C2	-6.12	1.32	1.37
59	A5	3512	U	C4-O4	-6.12	1.18	1.23
59	A5	3588	G	N9-C4	-6.12	1.33	1.38
59	A5	3623	G	N1-C2	-6.12	1.32	1.37
58	B2	1070	A	N7-C5	-6.11	1.35	1.39
58	B2	1173	A	N9-C4	-6.11	1.34	1.37
59	A5	305	G	N1-C2	-6.11	1.32	1.37
59	A5	312	U	C2-N3	-6.11	1.33	1.37
59	A5	824	G	C8-N7	-6.11	1.27	1.30
59	A5	1608	G	C8-N7	-6.11	1.27	1.30
59	A5	1624	G	C5-C6	-6.11	1.36	1.42
59	A5	3487	A	C5-C4	-6.11	1.34	1.38
59	A5	783	G	C2-N3	-6.11	1.27	1.32
59	A5	1556	C	C4-C5	-6.11	1.38	1.43
59	A5	3628	G	C8-N7	-6.11	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	CA	174	ARG	CB-CG	-6.11	1.36	1.52
58	B2	1173	A	N7-C5	-6.11	1.35	1.39
59	A5	1053	G	C8-N7	-6.11	1.27	1.30
59	A5	1121	A	N9-C8	-6.11	1.32	1.37
59	A5	1149	C	N1-C6	-6.11	1.33	1.37
59	A5	1526	G	N3-C4	-6.11	1.31	1.35
59	A5	1658	G	N9-C8	-6.11	1.33	1.37
59	A5	1784	A	N7-C5	-6.11	1.35	1.39
59	A5	3501	C	C4-C5	-6.11	1.38	1.43
59	A5	3504	G	N1-C2	-6.11	1.32	1.37
59	A5	3513	A	C6-N1	-6.11	1.31	1.35
59	A5	1553	C	C4-C5	-6.11	1.38	1.43
59	A5	1962	A	N3-C4	-6.11	1.31	1.34
59	A5	3410	G	C5-C4	-6.11	1.34	1.38
58	B2	1115	C	N1-C2	-6.11	1.34	1.40
58	B2	1190	G	N7-C5	-6.11	1.35	1.39
59	A5	785	A	C6-N1	-6.11	1.31	1.35
59	A5	3170	U	C4-C5	-6.11	1.38	1.43
59	A5	3174	A	C6-N1	-6.11	1.31	1.35
59	A5	3620	G	C8-N7	-6.11	1.27	1.30
59	A5	73	U	N3-C4	-6.11	1.32	1.38
59	A5	837	A	C6-N1	-6.11	1.31	1.35
59	A5	1038	G	C6-N1	-6.11	1.35	1.39
59	A5	2226	A	N7-C5	-6.11	1.35	1.39
58	B2	1084	G	C5-C4	-6.10	1.34	1.38
59	A5	294	U	N1-C2	-6.10	1.33	1.38
59	A5	854	U	N1-C2	-6.10	1.33	1.38
59	A5	1089	U	N3-C4	-6.10	1.32	1.38
59	A5	2516	U	C4-O4	-6.10	1.18	1.23
4	CB	231	VAL	CB-CG2	-6.10	1.40	1.52
41	Ce	59	TYR	CD1-CE1	-6.10	1.30	1.39
54	A9	13	A	N9-C4	-6.10	1.34	1.37
55	A7	97	G	N9-C8	-6.10	1.33	1.37
56	A8	20	C	C2-N3	-6.10	1.30	1.35
56	A8	36	A	N1-C2	-6.10	1.28	1.34
59	A5	922	G	N9-C4	-6.10	1.33	1.38
59	A5	1090	U	C2-N3	-6.10	1.33	1.37
59	A5	2169	U	C2-O2	-6.10	1.16	1.22
59	A5	2189	U	C2-N3	-6.10	1.33	1.37
25	Ca	54	PHE	CD1-CE1	-6.10	1.27	1.39
59	A5	1544	U	C4-C5	-6.10	1.38	1.43
59	A5	2157	A	N7-C5	-6.10	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2254	U	N3-C4	-6.10	1.32	1.38
59	A5	3414	U	N3-C4	-6.10	1.32	1.38
59	A5	1691	A	C5-C6	-6.10	1.35	1.41
59	A5	1722	U	C5-C6	-6.10	1.28	1.34
59	A5	2214	G	N3-C4	-6.10	1.31	1.35
59	A5	2249	A	N3-C4	-6.10	1.31	1.34
6	CC	125	TYR	CD1-CE1	-6.10	1.30	1.39
59	A5	96	G	N9-C8	-6.10	1.33	1.37
59	A5	1370	C	C4-C5	-6.10	1.38	1.43
59	A5	1648	A	N7-C5	-6.10	1.35	1.39
59	A5	2110	A	C8-N7	-6.10	1.27	1.31
59	A5	1271	G	N9-C8	-6.10	1.33	1.37
59	A5	118	A	C6-N1	-6.09	1.31	1.35
59	A5	382	G	N9-C8	-6.09	1.33	1.37
59	A5	783	G	N9-C4	-6.09	1.33	1.38
59	A5	1323	C	N1-C2	-6.09	1.34	1.40
59	A5	1696	A	N7-C5	-6.09	1.35	1.39
59	A5	2614	G	N7-C5	-6.09	1.35	1.39
59	A5	783	G	C5-C6	-6.09	1.36	1.42
59	A5	1020	A	N1-C2	-6.09	1.28	1.34
59	A5	1384	C	C2-N3	-6.09	1.30	1.35
58	B2	1241	G	C2-N3	-6.09	1.27	1.32
59	A5	1768	G	N3-C4	-6.09	1.31	1.35
58	B2	320	A	N7-C5	-6.09	1.35	1.39
59	A5	1352	U	C4-O4	-6.09	1.18	1.23
59	A5	3335	A	C6-N1	-6.09	1.31	1.35
59	A5	1123	C	C2-O2	-6.09	1.19	1.24
59	A5	2225	A	N1-C2	-6.09	1.28	1.34
59	A5	3357	C	C5-C6	-6.09	1.29	1.34
59	A5	54	U	C4-C5	-6.09	1.38	1.43
59	A5	1091	G	N7-C5	-6.09	1.35	1.39
59	A5	1897	A	C5-C4	-6.09	1.34	1.38
59	A5	2174	A	C6-N6	-6.09	1.29	1.33
59	A5	379	A	C2-N3	-6.08	1.28	1.33
59	A5	39	A	N1-C2	-6.08	1.28	1.34
59	A5	39	A	N3-C4	-6.08	1.31	1.34
59	A5	790	U	N1-C2	-6.08	1.33	1.38
59	A5	2097	U	N1-C2	-6.08	1.33	1.38
59	A5	2245	G	C6-N1	-6.08	1.35	1.39
59	A5	3668	G	N9-C8	-6.08	1.33	1.37
35	CY	79	VAL	CB-CG2	-6.08	1.40	1.52
52	CE	237	TYR	CD1-CE1	-6.08	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	11	G	C8-N7	-6.08	1.27	1.30
58	B2	1078	G	N1-C2	-6.08	1.32	1.37
59	A5	99	A	N3-C4	-6.08	1.31	1.34
59	A5	288	U	C2-N3	-6.08	1.33	1.37
59	A5	324	A	C5-C6	-6.08	1.35	1.41
59	A5	841	A	N9-C4	-6.08	1.34	1.37
59	A5	1353	G	N9-C4	-6.08	1.33	1.38
59	A5	42	U	P-O5'	-6.08	1.53	1.59
59	A5	1382	U	N3-C4	-6.08	1.32	1.38
59	A5	1663	G	C5-C4	-6.08	1.34	1.38
59	A5	2230	G	N9-C8	-6.08	1.33	1.37
59	A5	2263	A	N9-C4	-6.08	1.34	1.37
59	A5	1013	G	C6-O6	-6.08	1.18	1.24
59	A5	1140	G	C6-O6	-6.08	1.18	1.24
59	A5	2255	G	N7-C5	-6.08	1.35	1.39
59	A5	1101	A	C5-C4	-6.08	1.34	1.38
59	A5	1526	G	N9-C4	-6.08	1.33	1.38
59	A5	1665	C	C2-N3	-6.08	1.30	1.35
59	A5	1699	A	N7-C5	6.08	1.42	1.39
59	A5	1875	G	N1-C2	-6.08	1.32	1.37
59	A5	87	U	N3-C4	-6.07	1.32	1.38
59	A5	754	A	N9-C4	6.07	1.41	1.37
59	A5	1551	U	N1-C2	-6.07	1.33	1.38
59	A5	3627	C	N3-C4	-6.07	1.29	1.33
59	A5	1321	G	N9-C4	-6.07	1.33	1.38
59	A5	3546	A	N7-C5	-6.07	1.35	1.39
59	A5	1621	A	C8-N7	-6.07	1.27	1.31
59	A5	1747	A	N7-C5	-6.07	1.35	1.39
59	A5	2699	A	N3-C4	-6.07	1.31	1.34
59	A5	3600	G	N9-C8	-6.07	1.33	1.37
59	A5	3870	A	N3-C4	-6.07	1.31	1.34
58	B2	1962	G	N7-C5	-6.07	1.35	1.39
59	A5	2653	A	C8-N7	-6.07	1.27	1.31
59	A5	3150	G	C5-C6	-6.07	1.36	1.42
56	A8	24	G	N1-C2	-6.07	1.32	1.37
58	B2	1924	C	N1-C6	-6.07	1.33	1.37
59	A5	1110	G	C6-O6	-6.07	1.18	1.24
59	A5	1410	A	C6-N1	-6.07	1.31	1.35
59	A5	3265	C	C2-N3	-6.07	1.30	1.35
59	A5	3547	U	C2-N3	-6.07	1.33	1.37
59	A5	2752	C	N3-C4	-6.07	1.29	1.33
59	A5	988	C	N1-C2	-6.06	1.34	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1338	U	C2-N3	-6.06	1.33	1.37
58	B2	1078	G	N3-C4	-6.06	1.31	1.35
59	A5	1981	A	C6-N6	-6.06	1.29	1.33
59	A5	3589	G	C8-N7	-6.06	1.27	1.30
56	A8	7	A	C5-C4	-6.06	1.34	1.38
59	A5	294	U	C2-N3	-6.06	1.33	1.37
59	A5	1362	G	N9-C8	-6.06	1.33	1.37
59	A5	1533	A	C5-C4	-6.06	1.34	1.38
59	A5	1667	U	N1-C6	-6.06	1.32	1.38
59	A5	2784	C	N3-C4	-6.06	1.29	1.33
67	CV	38	TYR	CD2-CE2	-6.06	1.30	1.39
59	A5	1312	G	C5-C4	-6.06	1.34	1.38
59	A5	2088	G	N9-C4	-6.06	1.33	1.38
59	A5	2165	C	N3-C4	-6.06	1.29	1.33
59	A5	3265	C	N3-C4	-6.06	1.29	1.33
59	A5	3482	G	N9-C8	-6.06	1.33	1.37
59	A5	3576	G	C8-N7	-6.06	1.27	1.30
59	A5	97	C	N1-C2	-6.06	1.34	1.40
59	A5	666	A	N9-C4	6.06	1.41	1.37
59	A5	1111	C	C2-O2	-6.06	1.19	1.24
59	A5	3355	G	N7-C5	-6.06	1.35	1.39
58	B2	1053	A	C5-C6	-6.05	1.35	1.41
58	B2	1847	A	C5-C6	-6.05	1.35	1.41
59	A5	306	C	N1-C2	-6.05	1.34	1.40
59	A5	817	C	C2-N3	-6.05	1.30	1.35
59	A5	3387	C	N1-C6	-6.05	1.33	1.37
59	A5	3631	C	C4-C5	-6.05	1.38	1.43
48	Cp	39	CYS	CB-SG	-6.05	1.72	1.82
58	B2	1846	G	C6-N1	-6.05	1.35	1.39
59	A5	820	A	C5-C6	-6.05	1.35	1.41
59	A5	1746	A	C6-N1	-6.05	1.31	1.35
59	A5	1778	A	C5-C4	-6.05	1.34	1.38
59	A5	3253	G	N9-C8	-6.05	1.33	1.37
56	A8	16	A	C5-C6	-6.05	1.35	1.41
58	B2	964	G	C2-N3	-6.05	1.27	1.32
59	A5	782	G	N9-C4	-6.05	1.33	1.38
59	A5	1754	U	N1-C2	-6.05	1.33	1.38
59	A5	2700	C	C2-O2	-6.05	1.19	1.24
59	A5	789	G	C6-N1	-6.05	1.35	1.39
59	A5	806	A	C6-N1	-6.05	1.31	1.35
59	A5	2151	A	N3-C4	-6.05	1.31	1.34
59	A5	3349	A	N7-C5	-6.05	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3845	A	C5-C6	-6.05	1.35	1.41
59	A5	1668	U	C4-O4	-6.05	1.18	1.23
59	A5	82	U	N1-C2	-6.05	1.33	1.38
59	A5	864	G	N3-C4	-6.05	1.31	1.35
59	A5	2198	G	N1-C2	-6.05	1.32	1.37
59	A5	985	G	C2-N3	-6.04	1.27	1.32
58	B2	355	G	N7-C5	-6.04	1.35	1.39
59	A5	654	G	N7-C5	-6.04	1.35	1.39
59	A5	1718	G	C4'-C3'	-6.04	1.46	1.53
59	A5	65	A	N7-C5	-6.04	1.35	1.39
59	A5	376	G	C6-O6	-6.04	1.18	1.24
59	A5	914	C	N3-C4	-6.04	1.29	1.33
59	A5	1764	G	N3-C4	-6.04	1.31	1.35
59	A5	2245	G	N9-C8	-6.04	1.33	1.37
59	A5	85	U	C2-N3	-6.04	1.33	1.37
59	A5	1560	A	C5-C4	-6.04	1.34	1.38
59	A5	2520	U	N1-C6	-6.04	1.32	1.38
59	A5	3167	A	C6-N6	-6.04	1.29	1.33
59	A5	70	A	N9-C8	-6.04	1.32	1.37
59	A5	304	U	N1-C6	-6.04	1.32	1.38
59	A5	354	A	N9-C8	-6.04	1.32	1.37
59	A5	373	A	C8-N7	-6.04	1.27	1.31
59	A5	776	A	C5-C4	-6.04	1.34	1.38
59	A5	1899	C	N1-C6	-6.04	1.33	1.37
59	A5	2197	A	C5-C4	-6.04	1.34	1.38
59	A5	1617	U	C4-O4	-6.04	1.18	1.23
59	A5	2757	U	N1-C6	-6.04	1.32	1.38
59	A5	23	U	C2-N3	-6.04	1.33	1.37
59	A5	1054	A	N3-C4	-6.04	1.31	1.34
59	A5	1628	G	N9-C8	-6.04	1.33	1.37
59	A5	3133	A	N9-C4	-6.04	1.34	1.37
58	B2	1229	G	C5-C4	-6.03	1.34	1.38
59	A5	2679	U	C2-N3	-6.03	1.33	1.37
59	A5	802	G	C5-C4	-6.03	1.34	1.38
59	A5	834	G	C8-N7	-6.03	1.27	1.30
59	A5	3507	A	C8-N7	-6.03	1.27	1.31
56	A8	11	G	C5-C4	-6.03	1.34	1.38
58	B2	1827	A	N9-C4	-6.03	1.34	1.37
59	A5	286	A	C5-C4	-6.03	1.34	1.38
59	A5	772	G	N3-C4	-6.03	1.31	1.35
59	A5	812	U	C5-C6	-6.03	1.28	1.34
59	A5	855	A	C5-C4	-6.03	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1059	A	C5-C4	-6.03	1.34	1.38
59	A5	1096	A	N9-C8	-6.03	1.32	1.37
59	A5	1623	G	N1-C2	-6.03	1.32	1.37
59	A5	2542	C	N1-C2	-6.03	1.34	1.40
59	A5	3134	G	N7-C5	-6.03	1.35	1.39
59	A5	2522	A	N9-C8	-6.03	1.32	1.37
59	A5	2772	G	C2-N3	-6.03	1.27	1.32
59	A5	3575	G	C2-N3	-6.03	1.27	1.32
59	A5	805	C	C5-C6	-6.03	1.29	1.34
59	A5	1116	G	N9-C4	-6.03	1.33	1.38
59	A5	1403	C	C2-N3	-6.03	1.30	1.35
59	A5	1972	C	N1-C2	-6.03	1.34	1.40
59	A5	3122	A	C5-C4	-6.03	1.34	1.38
59	A5	3150	G	C8-N7	-6.03	1.27	1.30
59	A5	3883	G	N7-C5	-6.03	1.35	1.39
59	A5	318	G	C5-C4	-6.03	1.34	1.38
59	A5	324	A	N7-C5	-6.03	1.35	1.39
59	A5	651	A	N9-C4	-6.03	1.34	1.37
59	A5	1143	U	C2-N3	-6.03	1.33	1.37
59	A5	2560	A	N3-C4	-6.03	1.31	1.34
59	A5	3405	U	C4-O4	-6.03	1.18	1.23
59	A5	846	U	N3-C4	-6.02	1.33	1.38
59	A5	1636	G	C8-N7	-6.02	1.27	1.30
59	A5	1765	U	C4-O4	-6.02	1.18	1.23
59	A5	2111	A	C8-N7	-6.02	1.27	1.31
59	A5	2177	G	N9-C8	-6.02	1.33	1.37
58	B2	1066	A	N7-C5	-6.02	1.35	1.39
59	A5	238	G	N7-C5	-6.02	1.35	1.39
59	A5	1340	G	C8-N7	-6.02	1.27	1.30
59	A5	1876	G	N7-C5	-6.02	1.35	1.39
59	A5	3655	U	N1-C6	-6.02	1.32	1.38
59	A5	1368	A	C6-N1	-6.02	1.31	1.35
59	A5	3153	G	N9-C8	-6.02	1.33	1.37
59	A5	3483	G	C6-N1	-6.02	1.35	1.39
59	A5	3487	A	C6-N1	-6.02	1.31	1.35
55	A7	95	U	N1-C2	-6.02	1.33	1.38
59	A5	1383	A	N9-C4	-6.02	1.34	1.37
59	A5	1674	A	C8-N7	-6.02	1.27	1.31
67	CV	62	VAL	CB-CG1	-6.02	1.40	1.52
59	A5	337	A	N9-C4	-6.02	1.34	1.37
59	A5	796	A	C5-C6	-6.02	1.35	1.41
59	A5	1270	G	C6-N1	-6.02	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1747	A	N9-C8	-6.02	1.32	1.37
59	A5	1750	G	C8-N7	-6.02	1.27	1.30
59	A5	432	U	C2-N3	-6.01	1.33	1.37
59	A5	817	C	N1-C2	-6.01	1.34	1.40
59	A5	3620	G	C6-N1	-6.01	1.35	1.39
59	A5	3355	G	N1-C2	-6.01	1.32	1.37
59	A5	3728	A	C6-N1	-6.01	1.31	1.35
58	B2	314	C	N1-C6	-6.01	1.33	1.37
59	A5	434	A	N9-C4	-6.01	1.34	1.37
59	A5	1040	C	C4-C5	-6.01	1.38	1.43
59	A5	2627	G	C5-C4	-6.01	1.34	1.38
59	A5	2741	A	C6-N1	-6.01	1.31	1.35
59	A5	3174	A	N9-C4	-6.01	1.34	1.37
59	A5	3630	C	N3-C4	-6.01	1.29	1.33
59	A5	3876	U	N1-C2	-6.01	1.33	1.38
59	A5	2060	A	C5-C4	-6.01	1.34	1.38
59	A5	2496	A	N3-C4	-6.01	1.31	1.34
59	A5	3298	U	N3-C4	-6.01	1.33	1.38
59	A5	3754	C	N3-C4	-6.01	1.29	1.33
59	A5	1618	A	N7-C5	-6.01	1.35	1.39
59	A5	3629	U	N1-C2	-6.01	1.33	1.38
56	A8	13	U	C4-C5	-6.01	1.38	1.43
59	A5	2685	G	C2-N3	-6.01	1.27	1.32
59	A5	3543	A	N3-C4	-6.01	1.31	1.34
59	A5	1319	A	C5-C4	-6.00	1.34	1.38
59	A5	2034	U	N3-C4	-6.00	1.33	1.38
59	A5	3571	C	N1-C6	-6.00	1.33	1.37
59	A5	90	G	C6-N1	-6.00	1.35	1.39
59	A5	1026	G	C5-C4	-6.00	1.34	1.38
59	A5	3324	A	C5-C4	-6.00	1.34	1.38
59	A5	3492	G	C2-N3	-6.00	1.27	1.32
26	CN	129	TYR	CD2-CE2	-6.00	1.30	1.39
59	A5	1085	U	N3-C4	-6.00	1.33	1.38
59	A5	1973	G	C2-N3	-6.00	1.27	1.32
59	A5	3221	A	N7-C5	-6.00	1.35	1.39
58	B2	1387	A	N7-C5	-6.00	1.35	1.39
59	A5	1318	A	C2-N3	-6.00	1.28	1.33
59	A5	1630	G	N9-C8	-6.00	1.33	1.37
59	A5	1207	G	C5-C4	-6.00	1.34	1.38
59	A5	1762	G	N9-C8	-6.00	1.33	1.37
59	A5	3878	U	N1-C6	-6.00	1.32	1.38
58	B2	1973	G	N9-C8	-6.00	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2103	G	N9-C8	-6.00	1.33	1.37
59	A5	2165	C	C2-N3	-6.00	1.30	1.35
58	B2	407	C	N1-C6	-5.99	1.33	1.37
59	A5	70	A	N9-C4	-5.99	1.34	1.37
59	A5	1758	U	P-O5'	-5.99	1.53	1.59
59	A5	2225	A	C8-N7	-5.99	1.27	1.31
59	A5	1010	A	C6-N6	-5.99	1.29	1.33
59	A5	1051	C	C4-C5	-5.99	1.38	1.43
59	A5	1769	U	C2-N3	-5.99	1.33	1.37
59	A5	2111	A	N7-C5	-5.99	1.35	1.39
59	A5	2214	G	C5-C6	-5.99	1.36	1.42
59	A5	3489	A	N9-C4	-5.99	1.34	1.37
59	A5	3491	C	N3-C4	-5.99	1.29	1.33
26	CN	152	CYS	CB-SG	-5.99	1.72	1.81
56	A8	14	G	C8-N7	-5.99	1.27	1.30
59	A5	37	G	N1-C2	-5.99	1.32	1.37
59	A5	1380	G	N9-C8	-5.99	1.33	1.37
59	A5	1740	C	C4-C5	-5.99	1.38	1.43
59	A5	1764	G	N9-C4	-5.99	1.33	1.38
55	A7	89	G	N7-C5	-5.99	1.35	1.39
58	B2	430	A	C5-C6	-5.99	1.35	1.41
58	B2	948	A	N9-C4	-5.99	1.34	1.37
59	A5	246	C	N1-C6	-5.99	1.33	1.37
59	A5	653	U	C2-N3	-5.99	1.33	1.37
59	A5	661	G	C2-N3	-5.99	1.27	1.32
59	A5	784	G	C6-N1	-5.99	1.35	1.39
59	A5	2697	U	C2-N3	-5.99	1.33	1.37
59	A5	3135	G	C8-N7	-5.99	1.27	1.30
58	B2	1213	A	N7-C5	-5.99	1.35	1.39
59	A5	1870	G	C8-N7	-5.99	1.27	1.30
4	CB	262	VAL	CB-CG1	-5.99	1.40	1.52
59	A5	56	A	C6-N1	-5.99	1.31	1.35
59	A5	237	G	C5-C6	-5.99	1.36	1.42
59	A5	301	U	C2-N3	-5.99	1.33	1.37
59	A5	426	A	C6-N6	-5.99	1.29	1.33
59	A5	824	G	N7-C5	-5.99	1.35	1.39
59	A5	919	G	C5-C4	-5.99	1.34	1.38
59	A5	1207	G	C6-N1	-5.99	1.35	1.39
59	A5	1334	A	N9-C4	-5.99	1.34	1.37
59	A5	1674	A	C5-C6	-5.99	1.35	1.41
59	A5	2655	C	N1-C2	-5.99	1.34	1.40
59	A5	2790	G	C8-N7	-5.99	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1545	A	N3-C4	-5.98	1.31	1.34
59	A5	337	A	N9-C8	-5.98	1.32	1.37
59	A5	2774	G	C2-N3	-5.98	1.27	1.32
59	A5	3445	C	C2-N3	-5.98	1.30	1.35
59	A5	990	U	C5-C6	-5.98	1.28	1.34
59	A5	1391	A	C5-C6	-5.98	1.35	1.41
59	A5	1563	A	N3-C4	5.98	1.38	1.34
59	A5	3335	A	C5-C6	-5.98	1.35	1.41
67	CV	28	CYS	CB-SG	-5.98	1.72	1.81
59	A5	3585	A	C5-C4	-5.98	1.34	1.38
59	A5	910	C	C4-C5	-5.98	1.38	1.43
59	A5	997	U	C5-C6	-5.98	1.28	1.34
59	A5	1651	C	C4-C5	-5.98	1.38	1.43
59	A5	2251	G	C6-N1	-5.98	1.35	1.39
59	A5	2746	A	N9-C8	-5.98	1.32	1.37
59	A5	3278	A	N9-C4	-5.98	1.34	1.37
59	A5	3479	C	N1-C2	-5.98	1.34	1.40
59	A5	1053	G	N9-C4	-5.98	1.33	1.38
59	A5	1763	A	N3-C4	-5.98	1.31	1.34
59	A5	234	G	N1-C2	-5.97	1.32	1.37
59	A5	989	A	N9-C8	-5.97	1.32	1.37
59	A5	1153	G	N3-C4	-5.97	1.31	1.35
59	A5	2759	G	C8-N7	-5.97	1.27	1.30
59	A5	2774	G	N1-C2	-5.97	1.32	1.37
59	A5	3619	U	N1-C2	-5.97	1.33	1.38
58	B2	1971	A	N9-C8	-5.97	1.32	1.37
59	A5	1004	C	P-O5'	-5.97	1.53	1.59
59	A5	2189	U	C5-C6	-5.97	1.28	1.34
59	A5	3489	A	C8-N7	-5.97	1.27	1.31
59	A5	3491	C	N1-C2	-5.97	1.34	1.40
59	A5	3673	G	C2-N3	-5.97	1.27	1.32
56	A8	67	G	N7-C5	-5.97	1.35	1.39
59	A5	410	G	N7-C5	-5.97	1.35	1.39
59	A5	554	U	N1-C2	-5.97	1.33	1.38
59	A5	1526	G	C8-N7	-5.97	1.27	1.30
59	A5	1561	G	N9-C4	-5.97	1.33	1.38
58	B2	360	G	C6-N1	-5.97	1.35	1.39
58	B2	1073	G	C6-N1	-5.97	1.35	1.39
58	B2	1113	A	C5-C4	-5.97	1.34	1.38
59	A5	62	G	C6-N1	-5.97	1.35	1.39
59	A5	979	U	N3-C4	-5.97	1.33	1.38
59	A5	1680	U	P-OP1	-5.97	1.38	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1962	A	N9-C8	-5.97	1.32	1.37
59	A5	2221	G	N9-C8	-5.97	1.33	1.37
59	A5	3582	A	C5-C4	-5.97	1.34	1.38
59	A5	342	A	C5-C4	-5.97	1.34	1.38
59	A5	2581	U	C4-C5	-5.97	1.38	1.43
55	A7	91	C	C2-N3	-5.97	1.30	1.35
59	A5	1261	A	C8-N7	-5.97	1.27	1.31
59	A5	2692	U	N3-C4	-5.97	1.33	1.38
59	A5	2754	G	C5-C4	-5.97	1.34	1.38
59	A5	3578	A	N7-C5	-5.97	1.35	1.39
59	A5	1372	A	N9-C8	-5.96	1.32	1.37
59	A5	1612	G	C8-N7	-5.96	1.27	1.30
59	A5	2504	A	C5-C6	-5.96	1.35	1.41
59	A5	2665	C	N1-C6	-5.96	1.33	1.37
59	A5	3156	G	C8-N7	-5.96	1.27	1.30
56	A8	26	U	C2-O2	-5.96	1.17	1.22
56	A8	112	C	N3-C4	-5.96	1.29	1.33
59	A5	439	U	C2-N3	-5.96	1.33	1.37
59	A5	428	C	C2-N3	-5.96	1.30	1.35
59	A5	1401	C	N3-C4	-5.96	1.29	1.33
59	A5	2539	G	C5-C6	-5.96	1.36	1.42
59	A5	2574	C	N1-C6	-5.96	1.33	1.37
59	A5	3435	A	N9-C4	-5.96	1.34	1.37
59	A5	443	G	C8-N7	-5.96	1.27	1.30
59	A5	1326	A	C5-C4	-5.96	1.34	1.38
59	A5	2062	A	N7-C5	-5.96	1.35	1.39
59	A5	2185	U	C5-C6	-5.96	1.28	1.34
58	B2	1100	A	C5-C6	-5.96	1.35	1.41
59	A5	809	G	N1-C2	-5.96	1.32	1.37
59	A5	1331	G	C6-N1	-5.96	1.35	1.39
59	A5	2802	A	N9-C8	-5.96	1.32	1.37
59	A5	3163	U	N1-C2	-5.96	1.33	1.38
59	A5	3907	G	C6-N1	-5.96	1.35	1.39
56	A8	55	G	C6-N1	-5.96	1.35	1.39
58	B2	390	A	N9-C4	-5.96	1.34	1.37
59	A5	1113	A	C6-N6	-5.96	1.29	1.33
59	A5	1351	C	C5-C6	-5.96	1.29	1.34
59	A5	2497	C	C4-C5	-5.96	1.38	1.43
59	A5	3297	C	N1-C6	-5.96	1.33	1.37
59	A5	3966	U	C4-C5	-5.96	1.38	1.43
59	A5	294	U	N1-C6	-5.96	1.32	1.38
59	A5	2176	G	C5-C4	-5.96	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2658	A	C6-N1	-5.96	1.31	1.35
59	A5	2698	A	C8-N7	-5.96	1.27	1.31
59	A5	548	A	C6-N1	-5.95	1.31	1.35
59	A5	819	U	N3-C4	-5.95	1.33	1.38
59	A5	1065	A	C5-C4	-5.95	1.34	1.38
59	A5	1707	A	C5-C6	-5.95	1.35	1.41
59	A5	213	A	N9-C8	-5.95	1.32	1.37
59	A5	3593	A	N1-C2	-5.95	1.28	1.34
58	B2	607	A	N7-C5	-5.95	1.35	1.39
59	A5	834	G	N9-C8	-5.95	1.33	1.37
59	A5	1012	G	N7-C5	-5.95	1.35	1.39
59	A5	1168	G	N1-C2	-5.95	1.32	1.37
59	A5	1873	A	C5-C4	-5.95	1.34	1.38
59	A5	2741	A	C8-N7	-5.95	1.27	1.31
58	B2	1198	G	N1-C2	-5.95	1.32	1.37
59	A5	1033	U	N3-C4	-5.95	1.33	1.38
59	A5	3259	A	C5-C4	-5.95	1.34	1.38
55	A7	93	G	N3-C4	-5.95	1.31	1.35
56	A8	43	A	N9-C4	-5.95	1.34	1.37
59	A5	1539	A	C5-C4	-5.95	1.34	1.38
59	A5	2246	A	C5-C6	-5.95	1.35	1.41
59	A5	2252	A	N9-C4	-5.95	1.34	1.37
59	A5	2780	A	N9-C8	-5.95	1.32	1.37
59	A5	3446	G	N1-C2	-5.94	1.32	1.37
59	A5	863	U	N3-C4	-5.94	1.33	1.38
59	A5	2510	A	N7-C5	-5.94	1.35	1.39
59	A5	2566	A	C5-C6	-5.94	1.35	1.41
59	A5	2668	C	C2-N3	-5.94	1.30	1.35
59	A5	3334	A	C5-C6	-5.94	1.35	1.41
59	A5	3580	G	N1-C2	-5.94	1.32	1.37
58	B2	1972	G	N7-C5	-5.94	1.35	1.39
59	A5	50	U	C4-C5	-5.94	1.38	1.43
59	A5	1408	A	C5-C4	-5.94	1.34	1.38
59	A5	1686	A	N3-C4	-5.94	1.31	1.34
59	A5	3349	A	C2-N3	-5.94	1.28	1.33
59	A5	3728	A	N9-C4	-5.94	1.34	1.37
59	A5	414	A	C5-C6	-5.94	1.35	1.41
59	A5	561	A	N3-C4	-5.94	1.31	1.34
2	CA	61	VAL	CB-CG1	-5.94	1.40	1.52
59	A5	317	G	C5-C4	-5.94	1.34	1.38
59	A5	443	G	N7-C5	-5.94	1.35	1.39
59	A5	1527	C	N3-C4	-5.94	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1981	A	N9-C4	-5.94	1.34	1.37
59	A5	2235	G	N3-C4	-5.94	1.31	1.35
59	A5	2262	A	N7-C5	-5.94	1.35	1.39
59	A5	2706	U	N3-C4	-5.94	1.33	1.38
59	A5	3516	C	C2-N3	-5.94	1.31	1.35
48	Cp	52	VAL	CB-CG2	-5.93	1.40	1.52
54	A9	13	A	N9-C8	-5.93	1.33	1.37
59	A5	25	G	C6-N1	-5.93	1.35	1.39
59	A5	45	G	P-OP2	-5.93	1.38	1.49
59	A5	2168	G	N9-C4	-5.93	1.33	1.38
59	A5	2611	A	N3-C4	-5.93	1.31	1.34
59	A5	2702	A	C6-N1	-5.93	1.31	1.35
59	A5	3308	A	C5-C4	-5.93	1.34	1.38
55	A7	98	G	N1-C2	-5.93	1.33	1.37
58	B2	1058	A	C5-C4	-5.93	1.34	1.38
59	A5	1016	A	C5-C6	-5.93	1.35	1.41
59	A5	1080	G	N7-C5	-5.93	1.35	1.39
59	A5	2169	U	C2-N3	-5.93	1.33	1.37
59	A5	3363	G	N9-C8	-5.93	1.33	1.37
59	A5	300	A	N3-C4	-5.93	1.31	1.34
59	A5	856	A	N9-C4	-5.93	1.34	1.37
59	A5	3581	G	C2-N2	-5.93	1.28	1.34
58	B2	1238	G	N9-C4	5.93	1.42	1.38
59	A5	92	A	C8-N7	-5.93	1.27	1.31
59	A5	2784	C	C4-C5	-5.93	1.38	1.43
59	A5	1617	U	C4-C5	-5.93	1.38	1.43
58	B2	635	C	C4-C5	-5.93	1.38	1.43
58	B2	1983	G	C2-N3	-5.93	1.28	1.32
59	A5	1716	G	C5-C4	-5.93	1.34	1.38
59	A5	2158	U	C2-N3	-5.93	1.33	1.37
59	A5	2170	C	C5-C6	-5.93	1.29	1.34
56	A8	101	A	C5-C4	-5.92	1.34	1.38
59	A5	1116	G	P-O5'	-5.92	1.53	1.59
59	A5	1422	G	C2-N3	-5.92	1.28	1.32
59	A5	2240	U	N1-C2	-5.92	1.33	1.38
59	A5	2793	C	C5-C6	-5.92	1.29	1.34
59	A5	3881	A	C5-C4	-5.92	1.34	1.38
54	A9	22	A	N9-C4	-5.92	1.34	1.37
55	A7	97	G	C2-N3	-5.92	1.28	1.32
59	A5	157	C	N1-C6	-5.92	1.33	1.37
59	A5	447	G	C6-N1	-5.92	1.35	1.39
59	A5	3339	U	C4-O4	-5.92	1.19	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3843	U	C2-N3	-5.92	1.33	1.37
65	CO	35	VAL	CB-CG2	-5.92	1.40	1.52
58	B2	1982	C	N1-C6	-5.92	1.33	1.37
59	A5	1012	G	C2-N2	-5.92	1.28	1.34
59	A5	1521	G	N9-C8	-5.92	1.33	1.37
59	A5	1636	G	C5-C4	-5.92	1.34	1.38
56	A8	105	C	N3-C4	-5.92	1.29	1.33
59	A5	343	A	N7-C5	-5.92	1.35	1.39
59	A5	1777	A	C5-C4	-5.92	1.34	1.38
59	A5	2148	C	N1-C6	-5.92	1.33	1.37
59	A5	2661	G	N9-C4	-5.92	1.33	1.38
59	A5	3320	C	N1-C6	-5.92	1.33	1.37
58	B2	1055	U	N1-C2	-5.92	1.33	1.38
58	B2	1978	C	C4-C5	-5.92	1.38	1.43
59	A5	100	G	C2-N3	-5.92	1.28	1.32
59	A5	824	G	N9-C4	-5.92	1.33	1.38
59	A5	1080	G	C8-N7	-5.92	1.27	1.30
59	A5	1702	G	C5-C6	-5.92	1.36	1.42
59	A5	1869	C	N3-C4	-5.92	1.29	1.33
59	A5	2574	C	N3-C4	-5.92	1.29	1.33
59	A5	1071	U	C4-C5	-5.92	1.38	1.43
59	A5	1560	A	N3-C4	-5.92	1.31	1.34
59	A5	1331	G	C5-C6	-5.91	1.36	1.42
59	A5	1652	U	C2-N3	-5.91	1.33	1.37
59	A5	3591	A	N7-C5	-5.91	1.35	1.39
56	A8	36	A	N9-C4	-5.91	1.34	1.37
59	A5	1544	U	C5-C6	-5.91	1.28	1.34
55	A7	88	G	C8-N7	-5.91	1.27	1.30
58	B2	97	U	N1-C2	-5.91	1.33	1.38
59	A5	34	C	C2-N3	-5.91	1.31	1.35
59	A5	1137	G	N9-C4	-5.91	1.33	1.38
59	A5	1720	A	C5-C4	-5.91	1.34	1.38
59	A5	2735	A	N3-C4	-5.91	1.31	1.34
56	A8	19	A	C6-N6	-5.91	1.29	1.33
59	A5	1710	G	C8-N7	-5.91	1.27	1.30
59	A5	2219	U	N1-C2	-5.91	1.33	1.38
59	A5	2561	A	C5-C4	-5.91	1.34	1.38
59	A5	2773	G	N9-C8	-5.91	1.33	1.37
59	A5	3884	A	N9-C8	-5.91	1.33	1.37
59	A5	3308	A	N9-C4	-5.91	1.34	1.37
55	A7	88	G	C5-C4	-5.91	1.34	1.38
58	B2	1190	G	C8-N7	-5.91	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	450	G	N1-C2	-5.91	1.33	1.37
59	A5	922	G	N7-C5	-5.91	1.35	1.39
59	A5	1605	U	N1-C2	-5.91	1.33	1.38
59	A5	2677	A	N7-C5	-5.91	1.35	1.39
59	A5	291	U	C4-C5	-5.90	1.38	1.43
59	A5	1114	A	N9-C8	-5.90	1.33	1.37
59	A5	1402	U	C2-N3	-5.90	1.33	1.37
59	A5	1683	U	N1-C6	-5.90	1.32	1.38
59	A5	2175	A	N9-C4	-5.90	1.34	1.37
59	A5	2228	U	C4-O4	-5.90	1.19	1.23
58	B2	564	A	N9-C4	-5.90	1.34	1.37
59	A5	2803	A	N9-C4	-5.90	1.34	1.37
59	A5	3474	G	N3-C4	-5.90	1.31	1.35
48	Cp	11	VAL	CB-CG1	-5.90	1.40	1.52
58	B2	1079	A	C6-N1	-5.90	1.31	1.35
59	A5	864	G	N7-C5	-5.90	1.35	1.39
59	A5	2653	A	N3-C4	-5.90	1.31	1.34
58	B2	1217	U	N3-C4	-5.90	1.33	1.38
59	A5	53	A	C5-C4	-5.90	1.34	1.38
59	A5	1545	A	N9-C8	-5.90	1.33	1.37
59	A5	1647	A	N9-C4	-5.90	1.34	1.37
59	A5	3412	U	C2-O2	-5.90	1.17	1.22
59	A5	1211	A	N3-C4	-5.90	1.31	1.34
59	A5	2238	A	N9-C4	-5.90	1.34	1.37
59	A5	2504	A	C6-N1	-5.90	1.31	1.35
59	A5	2546	G	N9-C8	-5.90	1.33	1.37
59	A5	3493	U	C4-C5	-5.90	1.38	1.43
59	A5	3964	G	N3-C4	-5.90	1.31	1.35
59	A5	341	A	C6-N1	-5.90	1.31	1.35
59	A5	1553	C	N3-C4	-5.89	1.29	1.33
59	A5	1775	C	C4-C5	-5.89	1.38	1.43
59	A5	3588	G	C8-N7	-5.89	1.27	1.30
59	A5	1081	C	C4-N4	-5.89	1.28	1.33
59	A5	1112	G	N9-C4	-5.89	1.33	1.38
59	A5	1766	U	N1-C6	-5.89	1.32	1.38
59	A5	3333	A	N9-C8	-5.89	1.33	1.37
59	A5	3487	A	P-O5'	-5.89	1.53	1.59
59	A5	804	C	C5-C6	-5.89	1.29	1.34
59	A5	1014	U	C2'-C1'	-5.89	1.46	1.53
59	A5	15	A	N7-C5	-5.89	1.35	1.39
59	A5	213	A	N9-C4	-5.89	1.34	1.37
59	A5	1669	G	N9-C8	-5.89	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1685	G	C2-N3	-5.89	1.28	1.32
59	A5	2710	A	N1-C2	-5.89	1.29	1.34
56	A8	15	G	C2-N3	-5.89	1.28	1.32
58	B2	1193	C	N3-C4	-5.89	1.29	1.33
59	A5	851	G	N7-C5	-5.89	1.35	1.39
59	A5	2750	A	C6-N1	-5.89	1.31	1.35
59	A5	3886	U	C2-N3	-5.89	1.33	1.37
56	A8	53	C	N1-C6	-5.88	1.33	1.37
58	B2	305	A	N9-C4	-5.88	1.34	1.37
58	B2	1827	A	N7-C5	-5.88	1.35	1.39
59	A5	287	G	C5-C4	-5.88	1.34	1.38
59	A5	822	G	N9-C4	-5.88	1.33	1.38
59	A5	1528	G	N7-C5	-5.88	1.35	1.39
59	A5	1534	G	C6-N1	-5.88	1.35	1.39
59	A5	1543	C	C4-C5	-5.88	1.38	1.43
59	A5	2209	G	N9-C4	-5.88	1.33	1.38
59	A5	2721	C	C4-C5	-5.88	1.38	1.43
59	A5	3626	A	C8-N7	-5.88	1.27	1.31
59	A5	3636	G	N3-C4	-5.88	1.31	1.35
59	A5	3758	G	C6-N1	-5.88	1.35	1.39
59	A5	2544	U	N1-C2	-5.88	1.33	1.38
59	A5	3486	U	C4-C5	-5.88	1.38	1.43
30	CR	120	TYR	CD1-CE1	-5.88	1.30	1.39
59	A5	58	G	C5-C4	-5.88	1.34	1.38
59	A5	118	A	N3-C4	-5.88	1.31	1.34
59	A5	323	U	C4-C5	-5.88	1.38	1.43
59	A5	1386	U	C4-C5	-5.88	1.38	1.43
59	A5	410	G	C5-C4	-5.88	1.34	1.38
59	A5	1028	U	N1-C6	-5.88	1.32	1.38
59	A5	1595	G	C8-N7	-5.88	1.27	1.30
59	A5	1610	A	C5-C6	-5.88	1.35	1.41
59	A5	3170	U	N1-C2	-5.88	1.33	1.38
58	B2	46	A	N3-C4	-5.88	1.31	1.34
59	A5	821	U	N1-C2	-5.88	1.33	1.38
59	A5	1070	G	C5-C6	-5.88	1.36	1.42
59	A5	1668	U	N1-C6	-5.88	1.32	1.38
59	A5	2171	U	N1-C2	-5.88	1.33	1.38
59	A5	3340	A	C8-N7	-5.88	1.27	1.31
59	A5	3869	A	N7-C5	-5.88	1.35	1.39
4	CB	235	TRP	CE3-CZ3	-5.88	1.28	1.38
59	A5	2228	U	N3-C4	-5.88	1.33	1.38
59	A5	2245	G	C2-N3	-5.88	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2776	A	N3-C4	-5.88	1.31	1.34
59	A5	3145	U	C5-C6	-5.88	1.28	1.34
59	A5	50	U	C4-O4	-5.88	1.19	1.23
59	A5	1024	U	C4-O4	-5.88	1.19	1.23
59	A5	1206	G	N9-C4	-5.88	1.33	1.38
59	A5	3288	C	N3-C4	-5.88	1.29	1.33
59	A5	3851	U	C4-C5	-5.88	1.38	1.43
58	B2	1970	U	N3-C4	-5.87	1.33	1.38
59	A5	353	G	N1-C2	-5.87	1.33	1.37
59	A5	1168	G	C6-O6	-5.87	1.18	1.24
59	A5	2552	G	N3-C4	-5.87	1.31	1.35
59	A5	299	G	N7-C5	-5.87	1.35	1.39
59	A5	360	A	N9-C8	-5.87	1.33	1.37
59	A5	848	A	N7-C5	-5.87	1.35	1.39
59	A5	1112	G	C5-C6	-5.87	1.36	1.42
59	A5	1675	G	N9-C4	-5.87	1.33	1.38
59	A5	1704	A	N9-C4	-5.87	1.34	1.37
59	A5	1793	C	N1-C6	-5.87	1.33	1.37
59	A5	2203	A	N1-C2	-5.87	1.29	1.34
59	A5	2533	U	N1-C6	-5.87	1.32	1.38
59	A5	2754	G	C6-N1	-5.87	1.35	1.39
59	A5	1428	G	N7-C5	-5.87	1.35	1.39
59	A5	1614	A	N1-C2	-5.87	1.29	1.34
59	A5	3446	G	N7-C5	-5.87	1.35	1.39
59	A5	3626	A	N9-C4	-5.87	1.34	1.37
58	B2	99	A	N9-C4	-5.87	1.34	1.37
58	B2	1200	A	C5-C4	-5.87	1.34	1.38
59	A5	771	A	N3-C4	-5.87	1.31	1.34
59	A5	2209	G	C2-N3	-5.87	1.28	1.32
59	A5	2618	G	N1-C2	-5.87	1.33	1.37
59	A5	3546	A	C5-C4	-5.87	1.34	1.38
59	A5	1145	C	C4-C5	-5.87	1.38	1.43
59	A5	3508	G	N1-C2	-5.87	1.33	1.37
56	A8	32	G	C2-N3	-5.87	1.28	1.32
56	A8	72	C	N1-C6	-5.87	1.33	1.37
59	A5	1401	C	C4-C5	-5.87	1.38	1.43
59	A5	1870	G	N1-C2	-5.87	1.33	1.37
59	A5	2112	A	N9-C4	-5.87	1.34	1.37
59	A5	808	G	N7-C5	-5.86	1.35	1.39
59	A5	1388	C	C4-C5	-5.86	1.38	1.43
59	A5	2245	G	C8-N7	-5.86	1.27	1.30
59	A5	2504	A	N7-C5	-5.86	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3175	A	N9-C8	-5.86	1.33	1.37
59	A5	2768	A	C5-C6	-5.86	1.35	1.41
59	A5	2776	A	P-OP1	-5.86	1.39	1.49
59	A5	3133	A	C6-N1	-5.86	1.31	1.35
59	A5	297	U	C4-C5	-5.86	1.38	1.43
59	A5	778	C	N1-C2	-5.86	1.34	1.40
59	A5	992	U	C5-C6	-5.86	1.28	1.34
59	A5	1803	C	C2-N3	-5.86	1.31	1.35
59	A5	2715	C	N1-C2	-5.86	1.34	1.40
59	A5	3454	G	N7-C5	-5.86	1.35	1.39
59	A5	1197	A	C6-N1	-5.86	1.31	1.35
59	A5	1417	G	C6-N1	-5.86	1.35	1.39
59	A5	1614	A	N3-C4	-5.86	1.31	1.34
59	A5	3611	C	N1-C2	-5.86	1.34	1.40
59	A5	3635	G	C2-N3	-5.86	1.28	1.32
59	A5	66	A	N1-C2	-5.86	1.29	1.34
59	A5	1105	U	C2-O2	-5.86	1.17	1.22
59	A5	3476	G	C8-N7	-5.86	1.27	1.30
59	A5	3522	A	C5-C4	-5.86	1.34	1.38
59	A5	3760	A	C5-C4	-5.86	1.34	1.38
59	A5	1085	U	C4-O4	-5.85	1.19	1.23
59	A5	1544	U	C2-N3	-5.85	1.33	1.37
59	A5	1613	A	N9-C4	-5.85	1.34	1.37
59	A5	1778	A	C5-C6	-5.85	1.35	1.41
59	A5	2199	A	N9-C4	-5.85	1.34	1.37
59	A5	322	G	C6-N1	-5.85	1.35	1.39
59	A5	1021	U	C5-C6	-5.85	1.28	1.34
59	A5	1124	G	C8-N7	-5.85	1.27	1.30
59	A5	1626	A	C5-C6	-5.85	1.35	1.41
59	A5	1628	G	C5-C4	-5.85	1.34	1.38
59	A5	2723	A	N1-C2	-5.85	1.29	1.34
59	A5	2909	A	N9-C4	-5.85	1.34	1.37
59	A5	3628	G	N1-C2	-5.85	1.33	1.37
67	CV	97	TYR	CD1-CE1	-5.85	1.30	1.39
59	A5	367	A	C6-N6	-5.85	1.29	1.33
59	A5	1613	A	C5-C4	-5.85	1.34	1.38
58	B2	359	C	C2-N3	-5.85	1.31	1.35
58	B2	1071	G	C2-N3	-5.85	1.28	1.32
58	B2	1943	G	C5-C4	-5.85	1.34	1.38
59	A5	1161	C	N1-C2	-5.85	1.34	1.40
59	A5	1325	C	N3-C4	-5.85	1.29	1.33
59	A5	1769	U	C4-C5	-5.85	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1870	G	N7-C5	-5.85	1.35	1.39
59	A5	2170	C	N3-C4	-5.85	1.29	1.33
59	A5	2808	G	C8-N7	-5.85	1.27	1.30
41	Ce	46	ARG	CG-CD	-5.85	1.37	1.51
59	A5	814	U	N3-C4	-5.85	1.33	1.38
59	A5	1209	A	C5-C4	-5.85	1.34	1.38
59	A5	1689	G	C8-N7	-5.85	1.27	1.30
59	A5	2654	G	C8-N7	-5.85	1.27	1.30
33	CP	119	VAL	CB-CG2	-5.85	1.40	1.52
58	B2	1942	G	C2-N3	-5.85	1.28	1.32
59	A5	1317	A	C6-N6	-5.85	1.29	1.33
59	A5	1724	A	N7-C5	-5.85	1.35	1.39
56	A8	87	A	N9-C4	-5.84	1.34	1.37
58	B2	1066	A	C5-C4	-5.84	1.34	1.38
59	A5	305	G	N9-C8	-5.84	1.33	1.37
59	A5	1166	U	C2-O2	-5.84	1.17	1.22
59	A5	1635	A	C8-N7	-5.84	1.27	1.31
59	A5	1780	U	C4-C5	-5.84	1.38	1.43
59	A5	2788	U	N3-C4	-5.84	1.33	1.38
59	A5	1366	G	C8-N7	-5.84	1.27	1.30
59	A5	3506	U	C2-N3	-5.84	1.33	1.37
59	A5	3884	A	N1-C2	-5.84	1.29	1.34
59	A5	1170	U	C4-C5	-5.84	1.38	1.43
59	A5	2507	C	N1-C6	-5.84	1.33	1.37
59	A5	2552	G	N9-C4	-5.84	1.33	1.38
59	A5	3161	U	N1-C6	-5.84	1.32	1.38
55	A7	79	U	N1-C2	-5.84	1.33	1.38
58	B2	1229	G	N9-C8	-5.84	1.33	1.37
59	A5	806	A	N3-C4	-5.84	1.31	1.34
59	A5	1003	C	P-OP1	-5.84	1.39	1.49
59	A5	1047	A	N7-C5	-5.84	1.35	1.39
59	A5	1118	C	N1-C2	-5.84	1.34	1.40
59	A5	2562	U	C4-C5	-5.84	1.38	1.43
59	A5	3423	U	N3-C4	-5.84	1.33	1.38
58	B2	1058	A	C6-N1	-5.84	1.31	1.35
59	A5	64	A	C5-C6	-5.84	1.35	1.41
59	A5	367	A	C5-C4	-5.84	1.34	1.38
59	A5	2703	G	C5-C6	-5.84	1.36	1.42
59	A5	3450	G	N1-C2	-5.84	1.33	1.37
58	B2	1239	A	C5-C6	-5.84	1.35	1.41
59	A5	432	U	N3-C4	-5.84	1.33	1.38
59	A5	796	A	C2-N3	-5.84	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	819	U	C4-O4	-5.84	1.19	1.23
59	A5	1765	U	N3-C4	-5.84	1.33	1.38
59	A5	3541	A	C5-C4	-5.84	1.34	1.38
59	A5	3880	A	N3-C4	-5.84	1.31	1.34
59	A5	1534	G	C5-C4	-5.83	1.34	1.38
59	A5	3521	A	C2-N3	-5.83	1.28	1.33
55	A7	13	A	N7-C5	-5.83	1.35	1.39
59	A5	32	C	N1-C6	-5.83	1.33	1.37
59	A5	828	G	N1-C2	-5.83	1.33	1.37
59	A5	837	A	C5-C6	-5.83	1.35	1.41
59	A5	1172	G	C2-N2	-5.83	1.28	1.34
59	A5	1617	U	N1-C6	-5.83	1.32	1.38
59	A5	1776	U	N1-C6	-5.83	1.32	1.38
59	A5	2704	A	C8-N7	-5.83	1.27	1.31
59	A5	3331	A	C8-N7	-5.83	1.27	1.31
59	A5	2532	U	N1-C2	-5.83	1.33	1.38
59	A5	3264	A	N7-C5	-5.83	1.35	1.39
59	A5	3351	A	N7-C5	-5.83	1.35	1.39
56	A8	43	A	C5-C4	-5.83	1.34	1.38
59	A5	114	G	N1-C2	-5.83	1.33	1.37
56	A8	17	U	N1-C6	-5.83	1.32	1.38
59	A5	426	A	C6-N1	-5.83	1.31	1.35
59	A5	791	C	C5-C6	-5.83	1.29	1.34
59	A5	1097	A	N9-C4	-5.83	1.34	1.37
59	A5	1151	A	N9-C8	-5.83	1.33	1.37
59	A5	1163	G	P-O5'	-5.83	1.53	1.59
59	A5	1393	A	C5-C6	-5.83	1.35	1.41
59	A5	1715	G	N7-C5	-5.83	1.35	1.39
59	A5	1716	G	N7-C5	-5.83	1.35	1.39
59	A5	2111	A	N9-C8	-5.83	1.33	1.37
59	A5	2203	A	C5-C6	-5.83	1.35	1.41
59	A5	2206	U	N1-C6	-5.83	1.32	1.38
59	A5	24	G	C5-C4	-5.83	1.34	1.38
59	A5	299	G	N3-C4	-5.83	1.31	1.35
59	A5	1642	G	C6-N1	-5.83	1.35	1.39
59	A5	2486	A	C6-N1	-5.83	1.31	1.35
59	A5	57	G	N7-C5	-5.83	1.35	1.39
59	A5	1327	G	N9-C8	-5.83	1.33	1.37
59	A5	1617	U	N3-C4	-5.83	1.33	1.38
59	A5	1876	G	N9-C8	-5.83	1.33	1.37
59	A5	2693	G	C8-N7	-5.83	1.27	1.30
59	A5	1645	G	C8-N7	-5.82	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3132	C	C4-C5	-5.82	1.38	1.43
54	A9	10	U	N1-C2	-5.82	1.33	1.38
59	A5	772	G	C5-C4	-5.82	1.34	1.38
59	A5	1046	A	N7-C5	-5.82	1.35	1.39
59	A5	1746	A	N9-C4	-5.82	1.34	1.37
59	A5	3875	U	C2-N3	-5.82	1.33	1.37
56	A8	19	A	C5-C4	-5.82	1.34	1.38
58	B2	1062	C	N3-C4	-5.82	1.29	1.33
59	A5	790	U	C5-C6	-5.82	1.28	1.34
59	A5	2032	U	C2-N3	-5.82	1.33	1.37
59	A5	2783	C	N1-C6	-5.82	1.33	1.37
59	A5	3934	C	C4-C5	-5.82	1.38	1.43
59	A5	3966	U	C2-N3	-5.82	1.33	1.37
59	A5	1310	A	N9-C4	-5.82	1.34	1.37
59	A5	3176	C	N3-C4	-5.82	1.29	1.33
59	A5	3406	G	C2-N3	-5.82	1.28	1.32
59	A5	1153	G	C6-N1	-5.82	1.35	1.39
59	A5	2191	G	N9-C4	-5.82	1.33	1.38
59	A5	2707	C	N1-C2	-5.82	1.34	1.40
59	A5	3881	A	C6-N1	-5.82	1.31	1.35
58	B2	1975	G	N7-C5	-5.82	1.35	1.39
59	A5	365	A	C5-C6	-5.82	1.35	1.41
59	A5	988	C	C2-N3	-5.82	1.31	1.35
59	A5	1170	U	C2-O2	-5.82	1.17	1.22
59	A5	1734	G	C8-N7	-5.82	1.27	1.30
59	A5	1780	U	N1-C2	-5.82	1.33	1.38
59	A5	3134	G	N1-C2	-5.82	1.33	1.37
59	A5	3246	G	N3-C4	-5.82	1.31	1.35
59	A5	3307	A	N9-C4	-5.82	1.34	1.37
59	A5	92	A	C6-N6	-5.81	1.29	1.33
59	A5	832	U	C5-C6	-5.81	1.28	1.34
59	A5	1509	A	C6-N1	-5.81	1.31	1.35
59	A5	1679	U	C4-C5	-5.81	1.38	1.43
59	A5	1100	G	C8-N7	-5.81	1.27	1.30
59	A5	1626	A	C5-C4	-5.81	1.34	1.38
59	A5	3357	C	N1-C6	-5.81	1.33	1.37
58	B2	392	A	N7-C5	-5.81	1.35	1.39
59	A5	63	G	C8-N7	-5.81	1.27	1.30
59	A5	340	U	C4-C5	-5.81	1.38	1.43
58	B2	1079	A	C2-N3	-5.81	1.28	1.33
59	A5	2211	A	C6-N1	-5.81	1.31	1.35
59	A5	3133	A	N3-C4	-5.81	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3146	G	C5-C4	-5.81	1.34	1.38
59	A5	3326	G	N9-C8	-5.81	1.33	1.37
59	A5	3549	C	N3-C4	-5.81	1.29	1.33
58	B2	1027	A	C5-C6	-5.81	1.35	1.41
59	A5	1660	G	C8-N7	-5.81	1.27	1.30
59	A5	2205	G	N1-C2	-5.81	1.33	1.37
58	B2	1112	A	N7-C5	-5.81	1.35	1.39
59	A5	662	A	C5-C4	-5.81	1.34	1.38
59	A5	1079	U	N3-C4	-5.81	1.33	1.38
59	A5	1635	A	N9-C4	-5.81	1.34	1.37
59	A5	2799	U	N1-C6	-5.81	1.32	1.38
59	A5	92	A	N3-C4	-5.80	1.31	1.34
59	A5	409	A	C6-N1	-5.80	1.31	1.35
59	A5	1064	G	N3-C4	-5.80	1.31	1.35
59	A5	1716	G	C8-N7	-5.80	1.27	1.30
59	A5	2104	A	N9-C4	-5.80	1.34	1.37
59	A5	2183	A	N9-C8	-5.80	1.33	1.37
59	A5	3578	A	C5-C4	-5.80	1.34	1.38
59	A5	841	A	N3-C4	-5.80	1.31	1.34
59	A5	1632	A	C5-C4	-5.80	1.34	1.38
59	A5	3180	G	N7-C5	-5.80	1.35	1.39
59	A5	980	A	N9-C8	-5.80	1.33	1.37
59	A5	1146	U	C2-O2	-5.80	1.17	1.22
59	A5	1608	G	N9-C8	-5.80	1.33	1.37
59	A5	2161	G	N7-C5	-5.80	1.35	1.39
59	A5	3541	A	N7-C5	-5.80	1.35	1.39
58	B2	312	G	C5-C4	-5.80	1.34	1.38
58	B2	627	A	C5-C4	-5.80	1.34	1.38
59	A5	1717	A	N9-C4	-5.80	1.34	1.37
59	A5	2175	A	C5-C4	-5.80	1.34	1.38
59	A5	3597	C	C5-C6	-5.80	1.29	1.34
59	A5	3678	G	N7-C5	-5.80	1.35	1.39
59	A5	810	A	C2-N3	-5.80	1.28	1.33
59	A5	810	A	C5-C4	-5.80	1.34	1.38
59	A5	1328	U	N1-C2	-5.80	1.33	1.38
59	A5	1978	G	N7-C5	-5.80	1.35	1.39
59	A5	2144	A	N9-C4	-5.80	1.34	1.37
59	A5	1111	C	C5-C6	-5.79	1.29	1.34
58	B2	1228	G	N3-C4	-5.79	1.31	1.35
59	A5	1075	G	C2-N2	-5.79	1.28	1.34
59	A5	1076	A	C2-N3	-5.79	1.28	1.33
59	A5	1866	G	N7-C5	-5.79	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2160	C	C5-C6	-5.79	1.29	1.34
59	A5	2623	C	N1-C6	-5.79	1.33	1.37
59	A5	3328	G	C5-C4	-5.79	1.34	1.38
59	A5	1343	A	C8-N7	-5.79	1.27	1.31
59	A5	2718	U	C2-N3	-5.79	1.33	1.37
59	A5	2912	U	C2-N3	-5.79	1.33	1.37
59	A5	3521	A	N7-C5	-5.79	1.35	1.39
59	A5	3934	C	C5-C6	-5.79	1.29	1.34
59	A5	1789	A	N3-C4	-5.79	1.31	1.34
56	A8	39	A	C5-C4	-5.79	1.34	1.38
59	A5	993	A	C8-N7	-5.79	1.27	1.31
59	A5	1020	A	N9-C8	-5.79	1.33	1.37
59	A5	1081	C	N1-C6	-5.79	1.33	1.37
59	A5	2222	G	N9-C8	-5.79	1.33	1.37
59	A5	2748	G	C5-C4	-5.79	1.34	1.38
58	B2	1068	U	C2-N3	-5.79	1.33	1.37
59	A5	1006	A	C6-N6	-5.79	1.29	1.33
59	A5	1605	U	C2-N3	-5.79	1.33	1.37
59	A5	2562	U	C5-C6	-5.79	1.28	1.34
59	A5	2689	G	N9-C8	-5.79	1.33	1.37
58	B2	630	A	C5-C4	-5.79	1.34	1.38
59	A5	363	G	C4'-C3'	-5.79	1.46	1.52
59	A5	1888	A	N7-C5	-5.79	1.35	1.39
59	A5	2112	A	N3-C4	-5.79	1.31	1.34
59	A5	2698	A	N3-C4	-5.79	1.31	1.34
59	A5	2728	C	C2-N3	-5.79	1.31	1.35
59	A5	3414	U	N1-C2	-5.79	1.33	1.38
59	A5	59	G	C2-N3	-5.78	1.28	1.32
59	A5	344	U	C4-C5	-5.78	1.38	1.43
59	A5	1726	G	N1-C2	-5.78	1.33	1.37
59	A5	1801	U	N3-C4	-5.78	1.33	1.38
59	A5	1883	G	C5-C6	-5.78	1.36	1.42
59	A5	3140	G	N3-C4	-5.78	1.31	1.35
59	A5	3159	C	N1-C6	-5.78	1.33	1.37
59	A5	24	G	N9-C4	-5.78	1.33	1.38
59	A5	1034	U	N1-C2	-5.78	1.33	1.38
59	A5	3522	A	C6-N1	-5.78	1.31	1.35
59	A5	3674	G	N9-C4	-5.78	1.33	1.38
56	A8	12	G	C6-N1	-5.78	1.35	1.39
59	A5	1032	G	C5-C4	-5.78	1.34	1.38
59	A5	1372	A	C5-C6	-5.78	1.35	1.41
59	A5	2222	G	C5-C6	-5.78	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2649	A	C5-C6	-5.78	1.35	1.41
59	A5	3139	G	C5-C4	-5.78	1.34	1.38
59	A5	3312	G	C5-C4	-5.78	1.34	1.38
59	A5	3403	G	P-O5'	-5.78	1.53	1.59
59	A5	3444	G	N9-C8	-5.78	1.33	1.37
59	A5	3510	U	C4-C5	-5.78	1.38	1.43
59	A5	3950	A	C5-C4	-5.78	1.34	1.38
59	A5	1163	G	N1-C2	-5.78	1.33	1.37
59	A5	1761	C	C4-C5	-5.78	1.38	1.43
59	A5	2765	A	C6-N1	-5.78	1.31	1.35
58	B2	632	G	C5-C6	-5.78	1.36	1.42
58	B2	1074	G	C8-N7	-5.78	1.27	1.30
59	A5	74	A	C6-N1	-5.78	1.31	1.35
59	A5	1065	A	N1-C2	-5.78	1.29	1.34
59	A5	1393	A	N9-C8	-5.78	1.33	1.37
59	A5	1730	A	N7-C5	-5.78	1.35	1.39
59	A5	2564	U	N3-C4	-5.78	1.33	1.38
58	B2	97	U	C2-N3	-5.78	1.33	1.37
59	A5	211	U	C2-N3	-5.78	1.33	1.37
59	A5	441	A	N9-C4	-5.78	1.34	1.37
59	A5	1265	U	C2-N3	-5.78	1.33	1.37
59	A5	1364	A	C5-C4	-5.78	1.34	1.38
59	A5	1525	G	C5-C4	-5.78	1.34	1.38
59	A5	2155	A	C6-N1	-5.78	1.31	1.35
59	A5	2729	U	C5-C6	-5.78	1.28	1.34
56	A8	13	U	N3-C4	-5.77	1.33	1.38
56	A8	15	G	N3-C4	-5.77	1.31	1.35
59	A5	1041	A	C5-C6	-5.77	1.35	1.41
59	A5	1558	A	C5-C4	-5.77	1.34	1.38
59	A5	2187	U	C2-N3	-5.77	1.33	1.37
59	A5	2768	A	C6-N1	-5.77	1.31	1.35
58	B2	351	G	C2-N3	-5.77	1.28	1.32
59	A5	392	A	N9-C8	-5.77	1.33	1.37
56	A8	14	G	C5-C4	-5.77	1.34	1.38
58	B2	45	U	C2-N3	-5.77	1.33	1.37
59	A5	1882	G	N1-C2	-5.77	1.33	1.37
59	A5	2152	C	N3-C4	-5.77	1.29	1.33
58	B2	1051	U	C2-N3	-5.77	1.33	1.37
59	A5	343	A	N9-C8	-5.77	1.33	1.37
59	A5	792	U	P-OP1	-5.77	1.39	1.49
59	A5	1391	A	C8-N7	-5.77	1.27	1.31
59	A5	1752	G	N3-C4	-5.77	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2566	A	N7-C5	-5.77	1.35	1.39
59	A5	1026	G	N1-C2	-5.77	1.33	1.37
59	A5	1182	A	N9-C4	-5.77	1.34	1.37
59	A5	2490	G	N9-C4	5.77	1.42	1.38
59	A5	2622	A	C8-N7	-5.77	1.27	1.31
59	A5	3180	G	C5-C6	-5.77	1.36	1.42
59	A5	3540	G	C6-N1	-5.77	1.35	1.39
58	B2	361	G	N9-C8	-5.76	1.33	1.37
59	A5	290	G	C6-N1	-5.76	1.35	1.39
59	A5	990	U	N1-C6	-5.76	1.32	1.38
59	A5	2248	A	N3-C4	-5.76	1.31	1.34
59	A5	3269	G	C2-N3	-5.76	1.28	1.32
59	A5	3345	A	C8-N7	-5.76	1.27	1.31
59	A5	111	A	N7-C5	-5.76	1.35	1.39
59	A5	815	A	N9-C8	-5.76	1.33	1.37
56	A8	28	A	C8-N7	-5.76	1.27	1.31
56	A8	51	A	N7-C5	-5.76	1.35	1.39
59	A5	771	A	C5-C4	-5.76	1.34	1.38
59	A5	807	A	C6-N1	-5.76	1.31	1.35
59	A5	1137	G	C5-C6	-5.76	1.36	1.42
59	A5	30	A	C5-C6	-5.76	1.35	1.41
59	A5	3168	A	C5-C4	-5.76	1.34	1.38
56	A8	67	G	N9-C8	-5.76	1.33	1.37
59	A5	113	A	N9-C4	-5.76	1.34	1.37
59	A5	1014	U	C5-C6	-5.76	1.28	1.34
59	A5	1177	U	N1-C2	-5.76	1.33	1.38
59	A5	1523	A	N7-C5	-5.76	1.35	1.39
59	A5	1762	G	C8-N7	-5.76	1.27	1.30
59	A5	1766	U	N1-C2	-5.76	1.33	1.38
59	A5	2707	C	C2-N3	-5.76	1.31	1.35
59	A5	2753	G	C6-N1	-5.76	1.35	1.39
59	A5	1035	G	N3-C4	-5.75	1.31	1.35
59	A5	1198	U	N3-C4	-5.75	1.33	1.38
59	A5	1955	A	N9-C4	-5.75	1.34	1.37
59	A5	2023	A	N7-C5	-5.75	1.35	1.39
58	B2	1079	A	C5-C6	-5.75	1.35	1.41
59	A5	37	G	C5-C4	-5.75	1.34	1.38
59	A5	342	A	N9-C4	-5.75	1.34	1.37
59	A5	1006	A	N9-C8	-5.75	1.33	1.37
59	A5	1009	G	C6-O6	-5.75	1.19	1.24
59	A5	1520	U	N3-C4	-5.75	1.33	1.38
59	A5	1534	G	N1-C2	-5.75	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2197	A	N9-C4	-5.75	1.34	1.37
59	A5	3322	A	N9-C8	-5.75	1.33	1.37
59	A5	3339	U	N1-C2	-5.75	1.33	1.38
59	A5	3481	G	N3-C4	-5.75	1.31	1.35
56	A8	13	U	N1-C2	-5.75	1.33	1.38
58	B2	634	U	C2-N3	-5.75	1.33	1.37
58	B2	1090	A	N7-C5	-5.75	1.35	1.39
59	A5	915	C	C4-C5	-5.75	1.38	1.43
59	A5	992	U	C4-C5	-5.75	1.38	1.43
59	A5	1085	U	C5-C6	-5.75	1.28	1.34
59	A5	1510	G	N7-C5	-5.75	1.35	1.39
59	A5	1736	G	C6-N1	-5.75	1.35	1.39
59	A5	1633	G	C6-N1	-5.75	1.35	1.39
59	A5	2517	A	N9-C8	-5.75	1.33	1.37
59	A5	2734	A	N9-C8	-5.75	1.33	1.37
59	A5	2797	A	N3-C4	-5.75	1.31	1.34
56	A8	100	G	C2-N3	-5.75	1.28	1.32
59	A5	799	A	N9-C8	-5.75	1.33	1.37
59	A5	827	A	N9-C4	-5.75	1.34	1.37
59	A5	846	U	C4-C5	-5.75	1.38	1.43
59	A5	1002	C	C4-N4	-5.75	1.28	1.33
59	A5	1150	G	N1-C2	-5.75	1.33	1.37
59	A5	1380	G	C8-N7	-5.75	1.27	1.30
59	A5	1389	C	C5-C6	-5.75	1.29	1.34
59	A5	1395	U	N1-C2	-5.75	1.33	1.38
59	A5	2522	A	C8-N7	-5.75	1.27	1.31
59	A5	3505	U	N3-C4	-5.75	1.33	1.38
58	B2	1189	G	N3-C4	-5.75	1.31	1.35
59	A5	823	U	C5-C6	-5.75	1.28	1.34
32	CT	57	TYR	CD1-CE1	-5.74	1.30	1.39
48	Cp	64	VAL	CB-CG1	-5.74	1.40	1.52
59	A5	30	A	C6-N6	-5.74	1.29	1.33
59	A5	95	G	C8-N7	-5.74	1.27	1.30
59	A5	98	G	N3-C4	-5.74	1.31	1.35
59	A5	803	A	C6-N6	-5.74	1.29	1.33
59	A5	1356	G	C6-N1	-5.74	1.35	1.39
59	A5	1686	A	C5-C4	-5.74	1.34	1.38
59	A5	1690	U	C2-N3	-5.74	1.33	1.37
59	A5	2785	C	C2-O2	-5.74	1.19	1.24
59	A5	3544	G	C6-N1	-5.74	1.35	1.39
59	A5	771	A	N9-C4	-5.74	1.34	1.37
59	A5	1360	U	N1-C2	-5.74	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1562	U	N3-C4	-5.74	1.33	1.38
59	A5	2546	G	N7-C5	-5.74	1.35	1.39
59	A5	3128	U	C4-C5	-5.74	1.38	1.43
59	A5	3403	G	C8-N7	-5.74	1.27	1.30
59	A5	3662	G	N7-C5	-5.74	1.35	1.39
59	A5	3842	A	N9-C4	5.74	1.41	1.37
58	B2	1940	G	N1-C2	-5.74	1.33	1.37
59	A5	48	U	C4-O4	-5.74	1.19	1.23
59	A5	1078	G	N7-C5	-5.74	1.35	1.39
59	A5	1367	A	C5-C4	-5.74	1.34	1.38
59	A5	2661	G	C5-C4	-5.74	1.34	1.38
59	A5	3878	U	N3-C4	-5.74	1.33	1.38
59	A5	2767	U	C4-C5	-5.74	1.38	1.43
59	A5	3640	A	C5-C4	-5.74	1.34	1.38
56	A8	25	C	N1-C6	-5.74	1.33	1.37
59	A5	784	G	N3-C4	-5.74	1.31	1.35
59	A5	786	C	C4-N4	-5.74	1.28	1.33
59	A5	787	C	N1-C2	-5.74	1.34	1.40
59	A5	1408	A	N3-C4	-5.74	1.31	1.34
59	A5	2240	U	N3-C4	-5.74	1.33	1.38
59	A5	2492	A	C6-N6	-5.74	1.29	1.33
59	A5	2495	G	C5-C4	-5.74	1.34	1.38
59	A5	68	G	C5-C4	-5.73	1.34	1.38
59	A5	1327	G	C8-N7	-5.73	1.27	1.30
59	A5	1637	U	C2-N3	-5.73	1.33	1.37
59	A5	3444	G	C5-C4	-5.73	1.34	1.38
56	A8	14	G	C6-N1	-5.73	1.35	1.39
58	B2	1940	G	N9-C8	-5.73	1.33	1.37
59	A5	314	A	N7-C5	-5.73	1.35	1.39
59	A5	2531	A	N9-C8	-5.73	1.33	1.37
59	A5	2565	G	C5-C4	-5.73	1.34	1.38
55	A7	83	A	C5-C4	-5.73	1.34	1.38
59	A5	1022	A	N1-C2	-5.73	1.29	1.34
59	A5	1979	A	N3-C4	-5.73	1.31	1.34
59	A5	2181	A	N3-C4	-5.73	1.31	1.34
59	A5	2521	A	C5-C4	-5.73	1.34	1.38
59	A5	2800	C	C2-O2	-5.73	1.19	1.24
59	A5	3141	A	C6-N6	-5.73	1.29	1.33
58	B2	15	U	C2-N3	-5.73	1.33	1.37
59	A5	83	U	C2-N3	-5.73	1.33	1.37
59	A5	372	U	N1-C2	-5.73	1.33	1.38
59	A5	1027	A	N9-C4	-5.73	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2775	A	N7-C5	-5.73	1.35	1.39
59	A5	3901	G	C5-C4	-5.73	1.34	1.38
58	B2	1027	A	N9-C4	-5.73	1.34	1.37
59	A5	818	A	C8-N7	-5.73	1.27	1.31
59	A5	1537	G	N7-C5	-5.73	1.35	1.39
59	A5	2105	C	N1-C2	-5.72	1.34	1.40
54	A9	12	C	C4-C5	-5.72	1.38	1.43
56	A8	11	G	N1-C2	-5.72	1.33	1.37
58	B2	46	A	N9-C4	-5.72	1.34	1.37
58	B2	316	U	C2-N3	-5.72	1.33	1.37
58	B2	1200	A	N3-C4	-5.72	1.31	1.34
59	A5	544	U	C2-N3	-5.72	1.33	1.37
59	A5	1528	G	N1-C2	-5.72	1.33	1.37
59	A5	1615	G	C6-N1	-5.72	1.35	1.39
59	A5	1645	G	C2-N2	-5.72	1.28	1.34
59	A5	1747	A	C5-C6	-5.72	1.35	1.41
59	A5	1756	G	N9-C4	-5.72	1.33	1.38
59	A5	2474	A	N9-C4	-5.72	1.34	1.37
59	A5	2657	A	C6-N1	-5.72	1.31	1.35
59	A5	3588	G	N3-C4	-5.72	1.31	1.35
56	A8	39	A	N9-C8	-5.72	1.33	1.37
58	B2	623	G	C6-N1	-5.72	1.35	1.39
58	B2	1828	C	N1-C2	-5.72	1.34	1.40
55	A7	79	U	N1-C6	-5.72	1.32	1.38
59	A5	116	U	N3-C4	-5.72	1.33	1.38
59	A5	1375	G	C6-N1	-5.72	1.35	1.39
59	A5	2661	G	C2-N3	-5.72	1.28	1.32
59	A5	3516	C	C4-C5	-5.72	1.38	1.43
59	A5	1531	U	C4-C5	-5.72	1.38	1.43
58	B2	388	G	C5-C4	-5.72	1.34	1.38
58	B2	1821	G	C5-C4	-5.72	1.34	1.38
59	A5	1353	G	N9-C8	-5.72	1.33	1.37
59	A5	1594	U	N1-C2	-5.72	1.33	1.38
59	A5	1689	G	O4'-C1'	-5.72	1.34	1.41
59	A5	2503	G	N3-C4	-5.72	1.31	1.35
59	A5	2716	C	P-O5'	-5.72	1.54	1.59
59	A5	2747	G	N1-C2	-5.72	1.33	1.37
56	A8	90	U	C4-C5	-5.71	1.38	1.43
59	A5	864	G	C2-N3	-5.71	1.28	1.32
59	A5	922	G	C5-C4	-5.71	1.34	1.38
59	A5	1032	G	C2-N3	-5.71	1.28	1.32
59	A5	1549	A	N9-C8	-5.71	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1689	G	C2-N3	-5.71	1.28	1.32
59	A5	3296	C	N3-C4	-5.71	1.29	1.33
59	A5	3439	A	N7-C5	-5.71	1.35	1.39
59	A5	3588	G	N1-C2	-5.71	1.33	1.37
59	A5	864	G	N9-C8	-5.71	1.33	1.37
59	A5	1091	G	N1-C2	-5.71	1.33	1.37
56	A8	18	C	N1-C2	-5.71	1.34	1.40
58	B2	1850	G	C8-N7	-5.71	1.27	1.30
59	A5	435	G	N7-C5	-5.71	1.35	1.39
59	A5	3302	G	C6-N1	-5.71	1.35	1.39
59	A5	3318	A	C5-C4	-5.71	1.34	1.38
59	A5	1051	C	C2-N3	-5.71	1.31	1.35
59	A5	1340	G	N9-C8	-5.71	1.33	1.37
59	A5	995	G	C8-N7	-5.71	1.27	1.30
59	A5	1151	A	C6-N1	-5.71	1.31	1.35
59	A5	1327	G	C5-C4	-5.71	1.34	1.38
59	A5	2041	G	C5-C4	-5.71	1.34	1.38
59	A5	2731	G	C6-O6	-5.71	1.19	1.24
59	A5	674	A	N7-C5	-5.71	1.35	1.39
59	A5	2153	C	N1-C6	-5.71	1.33	1.37
59	A5	2599	G	C5-C4	-5.71	1.34	1.38
59	A5	3166	C	C5-C6	-5.71	1.29	1.34
59	A5	3522	A	N7-C5	-5.71	1.35	1.39
59	A5	3882	C	C4-C5	-5.71	1.38	1.43
55	A7	75	G	N9-C8	-5.70	1.33	1.37
55	A7	81	A	N7-C5	-5.70	1.35	1.39
56	A8	101	A	C6-N1	-5.70	1.31	1.35
59	A5	22	A	C5-C6	-5.70	1.35	1.41
59	A5	364	U	C4-C5	-5.70	1.38	1.43
59	A5	1510	G	C5-C4	-5.70	1.34	1.38
59	A5	1774	C	N3-C4	-5.70	1.29	1.33
59	A5	2661	G	N1-C2	-5.70	1.33	1.37
59	A5	3264	A	C6-N1	-5.70	1.31	1.35
59	A5	3759	G	C6-N1	-5.70	1.35	1.39
59	A5	3896	G	C6-N1	-5.70	1.35	1.39
65	CO	28	TYR	CD2-CE2	-5.70	1.30	1.39
59	A5	993	A	N7-C5	-5.70	1.35	1.39
59	A5	351	A	N7-C5	-5.70	1.35	1.39
59	A5	1030	A	C6-N1	-5.70	1.31	1.35
59	A5	1723	G	C5-C4	-5.70	1.34	1.38
59	A5	2158	U	C4-O4	-5.70	1.19	1.23
59	A5	2618	G	C5-C4	-5.70	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3165	U	C2-O2	-5.70	1.17	1.22
59	A5	3662	G	C8-N7	-5.70	1.27	1.30
59	A5	1005	G	C5-C6	-5.70	1.36	1.42
59	A5	1707	A	N9-C8	-5.70	1.33	1.37
59	A5	1981	A	C5-C4	-5.70	1.34	1.38
59	A5	2167	G	N9-C4	-5.70	1.33	1.38
59	A5	3632	G	N9-C8	-5.70	1.33	1.37
58	B2	1206	G	N7-C5	-5.70	1.35	1.39
59	A5	50	U	N1-C2	-5.70	1.33	1.38
59	A5	860	A	N3-C4	-5.70	1.31	1.34
59	A5	1104	A	N9-C4	-5.70	1.34	1.37
59	A5	2742	G	C6-N1	-5.70	1.35	1.39
6	CC	140	VAL	CB-CG1	-5.70	1.40	1.52
56	A8	37	U	C2-N3	-5.70	1.33	1.37
59	A5	415	A	C8-N7	-5.70	1.27	1.31
59	A5	776	A	C6-N1	-5.70	1.31	1.35
59	A5	2535	U	N1-C6	-5.70	1.32	1.38
59	A5	3416	C	C4-C5	-5.70	1.38	1.43
4	CB	231	VAL	CB-CG1	-5.69	1.40	1.52
58	B2	1117	A	N7-C5	-5.69	1.35	1.39
59	A5	810	A	N9-C8	-5.69	1.33	1.37
59	A5	2176	G	N9-C4	-5.69	1.33	1.38
59	A5	2626	C	C2-N3	-5.69	1.31	1.35
58	B2	319	C	N3-C4	-5.69	1.29	1.33
58	B2	1943	G	C6-N1	-5.69	1.35	1.39
59	A5	24	G	C2-N3	-5.69	1.28	1.32
59	A5	1100	G	C2-N2	-5.69	1.28	1.34
59	A5	1382	U	C4'-C3'	5.69	1.59	1.53
59	A5	1730	A	C5-C4	-5.69	1.34	1.38
59	A5	2768	A	N9-C8	-5.69	1.33	1.37
59	A5	2724	C	P-O5'	-5.69	1.54	1.59
59	A5	200	U	C2-N3	-5.69	1.33	1.37
59	A5	839	A	N3-C4	-5.69	1.31	1.34
59	A5	1656	U	C2-N3	-5.69	1.33	1.37
59	A5	2658	A	C5-C4	-5.69	1.34	1.38
59	A5	3294	A	N7-C5	-5.69	1.35	1.39
59	A5	3639	U	C2-N3	-5.69	1.33	1.37
59	A5	3763	U	C4-C5	-5.69	1.38	1.43
59	A5	381	G	C2-N2	-5.69	1.28	1.34
59	A5	409	A	C5-C4	-5.69	1.34	1.38
59	A5	1177	U	C4-C5	-5.69	1.38	1.43
59	A5	1968	A	N9-C8	-5.69	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2161	G	N9-C4	-5.69	1.33	1.38
59	A5	2655	C	N1-C6	-5.69	1.33	1.37
59	A5	3727	A	C6-N1	-5.69	1.31	1.35
59	A5	370	A	C2-N3	-5.68	1.28	1.33
59	A5	442	A	C6-N6	-5.68	1.29	1.33
59	A5	1649	G	C5-C4	-5.68	1.34	1.38
59	A5	1651	C	N1-C6	-5.68	1.33	1.37
59	A5	1725	A	C5-C6	-5.68	1.35	1.41
59	A5	2104	A	C8-N7	-5.68	1.27	1.31
59	A5	2194	G	C6-N1	-5.68	1.35	1.39
59	A5	989	A	N3-C4	-5.68	1.31	1.34
59	A5	1024	U	C4-C5	-5.68	1.38	1.43
59	A5	1108	G	C8-N7	-5.68	1.27	1.30
59	A5	1874	G	C2-N3	-5.68	1.28	1.32
59	A5	2168	G	C2-N2	-5.68	1.28	1.34
59	A5	375	C	C4-C5	-5.68	1.38	1.43
59	A5	3493	U	N3-C4	-5.68	1.33	1.38
59	A5	1268	A	C5-C4	-5.68	1.34	1.38
59	A5	1970	G	C5-C4	-5.68	1.34	1.38
59	A5	2167	G	C6-N1	-5.68	1.35	1.39
59	A5	2699	A	C6-N1	-5.68	1.31	1.35
41	Ce	52	TYR	CE2-CZ	-5.68	1.31	1.38
59	A5	1611	G	N3-C4	-5.68	1.31	1.35
59	A5	2085	G	N3-C4	-5.68	1.31	1.35
58	B2	1023	G	C5-C4	-5.68	1.34	1.38
59	A5	803	A	C2'-C1'	-5.68	1.47	1.53
59	A5	977	C	C4-C5	-5.68	1.38	1.43
59	A5	1319	A	N9-C4	-5.68	1.34	1.37
59	A5	3139	G	N7-C5	-5.68	1.35	1.39
59	A5	3180	G	N1-C2	-5.68	1.33	1.37
55	A7	101	A	N7-C5	-5.67	1.35	1.39
59	A5	1271	G	C5-C6	-5.67	1.36	1.42
59	A5	1272	G	C8-N7	-5.67	1.27	1.30
59	A5	1364	A	N9-C8	-5.67	1.33	1.37
59	A5	1950	A	N7-C5	-5.67	1.35	1.39
59	A5	2496	A	C6-N1	-5.67	1.31	1.35
59	A5	2593	A	N9-C4	-5.67	1.34	1.37
59	A5	2595	U	C4-C5	-5.67	1.38	1.43
59	A5	3261	U	C2-N3	-5.67	1.33	1.37
59	A5	92	A	C5-C4	-5.67	1.34	1.38
59	A5	1033	U	N1-C2	-5.67	1.33	1.38
59	A5	1658	G	N3-C4	-5.67	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2771	G	C2-N3	-5.67	1.28	1.32
59	A5	3949	U	C4-O4	-5.67	1.19	1.23
55	A7	81	A	C6-N1	-5.67	1.31	1.35
59	A5	1095	G	C5-C6	-5.67	1.36	1.42
59	A5	1675	G	N1-C2	-5.67	1.33	1.37
59	A5	2247	U	N1-C2	-5.67	1.33	1.38
59	A5	2653	A	N7-C5	-5.67	1.35	1.39
59	A5	3166	C	N1-C2	-5.67	1.34	1.40
59	A5	3523	U	N3-C4	-5.67	1.33	1.38
80	CF	96	VAL	CB-CG2	-5.67	1.41	1.52
58	B2	1970	U	N1-C6	-5.67	1.32	1.38
59	A5	106	A	N3-C4	-5.67	1.31	1.34
59	A5	213	A	C5-C4	-5.67	1.34	1.38
59	A5	753	U	C2-N3	-5.67	1.33	1.37
59	A5	1172	G	C2-N3	-5.67	1.28	1.32
59	A5	2088	G	N3-C4	-5.67	1.31	1.35
59	A5	2250	G	N1-C2	-5.67	1.33	1.37
59	A5	3228	A	C5-C4	-5.67	1.34	1.38
59	A5	3493	U	C4-O4	-5.67	1.19	1.23
59	A5	3549	C	C4-C5	-5.67	1.38	1.43
48	Cp	18	TYR	CD1-CE1	-5.67	1.30	1.39
58	B2	1846	G	N1-C2	-5.67	1.33	1.37
58	B2	1939	A	N9-C4	-5.67	1.34	1.37
59	A5	348	A	C5-C4	-5.67	1.34	1.38
59	A5	1707	A	C5-C4	-5.67	1.34	1.38
59	A5	1873	A	C6-N1	-5.67	1.31	1.35
59	A5	2039	G	N9-C4	-5.67	1.33	1.38
59	A5	3147	A	C5-C6	-5.67	1.35	1.41
59	A5	286	A	N3-C4	-5.67	1.31	1.34
59	A5	428	C	N3-C4	-5.67	1.29	1.33
59	A5	1117	A	N9-C4	-5.67	1.34	1.37
59	A5	1176	A	N9-C8	-5.67	1.33	1.37
59	A5	2811	G	C5-C4	-5.67	1.34	1.38
59	A5	3627	C	N1-C6	-5.67	1.33	1.37
58	B2	1196	G	C5-C4	-5.66	1.34	1.38
59	A5	1094	A	C6-N1	-5.66	1.31	1.35
59	A5	1555	G	C2-N3	-5.66	1.28	1.32
59	A5	1636	G	N9-C8	-5.66	1.33	1.37
59	A5	31	C	C2-N3	-5.66	1.31	1.35
59	A5	310	A	N7-C5	-5.66	1.35	1.39
59	A5	2048	G	C5-C4	-5.66	1.34	1.38
59	A5	2681	A	N7-C5	-5.66	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	434	A	N7-C5	-5.66	1.35	1.39
59	A5	1730	A	N9-C4	-5.66	1.34	1.37
59	A5	2200	A	C8-N7	-5.66	1.27	1.31
59	A5	2780	A	N1-C2	-5.66	1.29	1.34
29	CQ	3	ILE	CB-CG2	-5.66	1.35	1.52
34	CX	258	TYR	CD1-CE1	-5.66	1.30	1.39
59	A5	27	A	C5-C4	-5.66	1.34	1.38
59	A5	1025	U	N1-C6	-5.66	1.32	1.38
59	A5	1724	A	C5-C4	-5.66	1.34	1.38
59	A5	2191	G	C2-N3	-5.66	1.28	1.32
59	A5	2777	A	C8-N7	-5.66	1.27	1.31
59	A5	3347	G	C8-N7	-5.66	1.27	1.30
59	A5	3512	U	N1-C6	-5.66	1.32	1.38
59	A5	1708	G	C6-N1	-5.66	1.35	1.39
59	A5	1967	G	N9-C4	-5.66	1.33	1.38
59	A5	2539	G	C5-C4	-5.66	1.34	1.38
55	A7	5	A	N9-C4	-5.66	1.34	1.37
58	B2	635	C	C5-C6	-5.66	1.29	1.34
59	A5	1268	A	N9-C8	-5.66	1.33	1.37
59	A5	1728	G	C5-C6	-5.66	1.36	1.42
59	A5	2654	G	N7-C5	-5.66	1.35	1.39
59	A5	2698	A	C5-C6	-5.66	1.35	1.41
59	A5	2711	C	N1-C2	-5.66	1.34	1.40
59	A5	3474	G	C5-C4	-5.66	1.34	1.38
56	A8	20	C	C4-C5	-5.65	1.38	1.43
58	B2	1942	G	N7-C5	-5.65	1.35	1.39
59	A5	1268	A	C6-N1	-5.65	1.31	1.35
59	A5	1785	G	N9-C8	-5.65	1.33	1.37
59	A5	235	A	N7-C5	-5.65	1.35	1.39
59	A5	1356	G	N9-C8	-5.65	1.33	1.37
59	A5	1897	A	C6-N1	-5.65	1.31	1.35
59	A5	3509	U	N1-C2	-5.65	1.33	1.38
59	A5	3629	U	C2-N3	-5.65	1.33	1.37
58	B2	1227	A	C6-N1	-5.65	1.31	1.35
59	A5	88	U	C4-C5	-5.65	1.38	1.43
59	A5	1613	A	C8-N7	-5.65	1.27	1.31
59	A5	1665	C	N3-C4	-5.65	1.29	1.33
59	A5	2161	G	C8-N7	-5.65	1.27	1.30
59	A5	2195	A	N7-C5	-5.65	1.35	1.39
59	A5	2611	A	C6-N1	-5.65	1.31	1.35
58	B2	1969	G	C5-C6	-5.65	1.36	1.42
59	A5	813	C	N1-C2	-5.65	1.34	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2495	G	N7-C5	-5.65	1.35	1.39
55	A7	11	A	N9-C8	-5.65	1.33	1.37
59	A5	26	G	P-O5'	5.65	1.65	1.59
59	A5	42	U	N1-C2	-5.65	1.33	1.38
59	A5	1327	G	N1-C2	-5.65	1.33	1.37
59	A5	2526	A	C2-N3	-5.65	1.28	1.33
59	A5	2789	U	C4-C5	-5.65	1.38	1.43
59	A5	1003	C	P-O5'	-5.65	1.54	1.59
59	A5	2168	G	N7-C5	-5.65	1.35	1.39
59	A5	3673	G	N7-C5	-5.65	1.35	1.39
59	A5	3879	A	C5-C4	-5.65	1.34	1.38
59	A5	800	C	N1-C2	-5.64	1.34	1.40
59	A5	1078	G	N1-C2	-5.64	1.33	1.37
59	A5	1733	A	N9-C8	-5.64	1.33	1.37
59	A5	3290	A	C5-C6	-5.64	1.35	1.41
59	A5	3877	G	C8-N7	-5.64	1.27	1.30
6	CC	70	TRP	CB-CG	-5.64	1.40	1.50
56	A8	57	G	C6-N1	-5.64	1.35	1.39
59	A5	45	G	P-O5'	-5.64	1.54	1.59
59	A5	1671	U	N3-C4	-5.64	1.33	1.38
59	A5	1776	U	C2-N3	-5.64	1.33	1.37
59	A5	3348	G	C5-C6	-5.64	1.36	1.42
59	A5	3614	U	N3-C4	-5.64	1.33	1.38
59	A5	116	U	N1-C2	-5.64	1.33	1.38
59	A5	371	G	C6-O6	-5.64	1.19	1.24
59	A5	851	G	N9-C8	-5.64	1.33	1.37
59	A5	1611	G	N9-C4	-5.64	1.33	1.38
59	A5	3635	G	C5-C4	-5.64	1.34	1.38
55	A7	81	A	C5-C6	-5.64	1.35	1.41
59	A5	33	C	C5-C6	-5.64	1.29	1.34
59	A5	366	A	C6-N1	-5.64	1.31	1.35
59	A5	1550	U	C4-C5	-5.64	1.38	1.43
59	A5	1886	C	N3-C4	-5.64	1.30	1.33
59	A5	3234	A	N9-C8	-5.64	1.33	1.37
59	A5	3279	A	C5-C6	-5.64	1.35	1.41
59	A5	421	C	N1-C6	-5.64	1.33	1.37
59	A5	3164	C	C2-N3	-5.64	1.31	1.35
59	A5	1264	U	C4-C5	-5.64	1.38	1.43
59	A5	2233	C	C4-C5	-5.64	1.38	1.43
59	A5	3295	U	C2-N3	-5.64	1.33	1.37
59	A5	3617	U	C4-C5	-5.64	1.38	1.43
55	A7	85	G	C5-C4	-5.63	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	250	U	N1-C2	-5.63	1.33	1.38
59	A5	369	A	C5-C4	-5.63	1.34	1.38
59	A5	431	C	C4-C5	-5.63	1.38	1.43
59	A5	2797	A	N1-C2	-5.63	1.29	1.34
58	B2	1109	C	C2-N3	-5.63	1.31	1.35
59	A5	2687	A	C8-N7	-5.63	1.27	1.31
56	A8	16	A	N9-C8	-5.63	1.33	1.37
56	A8	42	A	N3-C4	-5.63	1.31	1.34
59	A5	368	C	N1-C6	-5.63	1.33	1.37
59	A5	1074	U	N1-C6	-5.63	1.32	1.38
59	A5	1086	C	C4-C5	-5.63	1.38	1.43
59	A5	1096	A	N1-C2	-5.63	1.29	1.34
59	A5	1121	A	C8-N7	-5.63	1.27	1.31
59	A5	1343	A	C5-C6	-5.63	1.35	1.41
59	A5	3151	G	N1-C2	-5.63	1.33	1.37
59	A5	3472	A	N1-C2	-5.63	1.29	1.34
59	A5	1621	A	C5-C6	-5.63	1.35	1.41
58	B2	1096	C	C4-C5	-5.63	1.38	1.43
59	A5	237	G	C8-N7	-5.63	1.27	1.30
59	A5	1674	A	N9-C8	-5.63	1.33	1.37
59	A5	2199	A	N3-C4	-5.63	1.31	1.34
59	A5	2203	A	C8-N7	-5.63	1.27	1.31
59	A5	2668	C	N1-C6	-5.63	1.33	1.37
59	A5	2776	A	N9-C4	-5.63	1.34	1.37
59	A5	3180	G	N9-C8	-5.63	1.33	1.37
59	A5	3332	G	N9-C8	-5.63	1.33	1.37
59	A5	3494	C	N3-C4	-5.63	1.30	1.33
59	A5	3586	A	C5-C4	-5.63	1.34	1.38
37	Cr	44	TYR	CD1-CE1	-5.63	1.30	1.39
56	A8	14	G	N9-C4	-5.63	1.33	1.38
59	A5	908	C	N3-C4	-5.63	1.30	1.33
59	A5	2542	C	N1-C6	-5.63	1.33	1.37
56	A8	42	A	C5-C6	-5.62	1.35	1.41
59	A5	1789	A	N7-C5	-5.62	1.35	1.39
59	A5	2555	G	N7-C5	-5.62	1.35	1.39
59	A5	3259	A	N9-C4	-5.62	1.34	1.37
6	CC	255	TRP	CB-CG	-5.62	1.40	1.50
59	A5	1313	A	C2-N3	-5.62	1.28	1.33
59	A5	1526	G	C5-C4	-5.62	1.34	1.38
59	A5	2106	C	N1-C6	-5.62	1.33	1.37
59	A5	3685	U	N1-C6	-5.62	1.32	1.38
59	A5	50	U	C4'-C3'	-5.62	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1206	G	C5-C4	-5.62	1.34	1.38
59	A5	3513	A	N7-C5	-5.62	1.35	1.39
59	A5	3540	G	C2-N3	-5.62	1.28	1.32
58	B2	1254	A	N9-C4	-5.62	1.34	1.37
59	A5	1000	G	C5-C4	-5.62	1.34	1.38
59	A5	1412	A	C5-C4	-5.62	1.34	1.38
59	A5	2244	G	C5-C4	-5.62	1.34	1.38
59	A5	3163	U	N3-C4	-5.62	1.33	1.38
59	A5	3507	A	N3-C4	-5.62	1.31	1.34
59	A5	998	G	C5-C6	-5.62	1.36	1.42
59	A5	1357	C	N1-C2	-5.62	1.34	1.40
59	A5	1365	U	N1-C2	-5.62	1.33	1.38
59	A5	2523	A	C6-N6	-5.62	1.29	1.33
59	A5	2524	A	C6-N6	-5.62	1.29	1.33
56	A8	12	G	N9-C8	-5.62	1.33	1.37
58	B2	1851	A	N9-C4	-5.62	1.34	1.37
58	B2	1979	C	N3-C4	-5.62	1.30	1.33
59	A5	1771	G	C5-C4	-5.62	1.34	1.38
59	A5	2519	U	C4-O4	-5.62	1.19	1.23
59	A5	3349	A	C6-N6	-5.62	1.29	1.33
48	Cp	69	TRP	CE3-CZ3	-5.62	1.28	1.38
58	B2	618	G	C6-N1	-5.62	1.35	1.39
58	B2	1827	A	C5-C6	-5.62	1.35	1.41
59	A5	439	U	N1-C2	-5.62	1.33	1.38
59	A5	1158	C	N3-C4	-5.62	1.30	1.33
59	A5	1312	G	N9-C4	-5.62	1.33	1.38
59	A5	1976	G	C2-N3	-5.62	1.28	1.32
59	A5	2163	A	C8-N7	-5.62	1.27	1.31
59	A5	2505	A	N9-C4	-5.62	1.34	1.37
59	A5	61	A	C5-C6	-5.61	1.35	1.41
59	A5	1778	A	N7-C5	-5.61	1.35	1.39
59	A5	3492	G	N9-C8	-5.61	1.33	1.37
59	A5	3583	C	C4-C5	-5.61	1.38	1.43
59	A5	3887	U	N1-C2	-5.61	1.33	1.38
56	A8	24	G	C5-C6	-5.61	1.36	1.42
58	B2	1018	C	N1-C6	-5.61	1.33	1.37
59	A5	437	G	C8-N7	-5.61	1.27	1.30
59	A5	1028	U	C2-N3	-5.61	1.33	1.37
59	A5	1324	C	P-OP1	-5.61	1.39	1.49
59	A5	2548	G	C2-N3	-5.61	1.28	1.32
59	A5	362	A	N3-C4	-5.61	1.31	1.34
59	A5	875	G	N7-C5	-5.61	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1083	A	C8-N7	-5.61	1.27	1.31
59	A5	1104	A	N9-C8	-5.61	1.33	1.37
59	A5	1800	U	C4-C5	-5.61	1.38	1.43
59	A5	2109	G	C5-C4	-5.61	1.34	1.38
59	A5	2174	A	N3-C4	-5.61	1.31	1.34
59	A5	2730	A	P-O5'	-5.61	1.54	1.59
56	A8	7	A	C5-C6	-5.61	1.36	1.41
59	A5	52	A	N9-C8	-5.61	1.33	1.37
59	A5	2163	A	C6-N1	-5.61	1.31	1.35
59	A5	3228	A	C6-N1	-5.61	1.31	1.35
59	A5	1402	U	C4-C5	-5.61	1.38	1.43
59	A5	2221	G	C6-O6	-5.61	1.19	1.24
59	A5	2621	A	C5-C4	-5.61	1.34	1.38
59	A5	3447	U	N1-C2	-5.61	1.33	1.38
26	CN	95	TYR	CD1-CE1	-5.61	1.30	1.39
59	A5	64	A	N3-C4	-5.61	1.31	1.34
59	A5	305	G	C2-N3	-5.61	1.28	1.32
59	A5	837	A	C5-C4	-5.61	1.34	1.38
59	A5	1000	G	C8-N7	-5.61	1.27	1.30
59	A5	1117	A	N9-C8	-5.61	1.33	1.37
59	A5	2738	C	C4-N4	-5.61	1.28	1.33
59	A5	3368	C	N1-C6	-5.61	1.33	1.37
59	A5	3626	A	C5-C4	-5.61	1.34	1.38
59	A5	3730	G	N9-C8	-5.61	1.33	1.37
80	CF	108	VAL	CB-CG2	-5.61	1.41	1.52
58	B2	1181	G	N1-C2	-5.60	1.33	1.37
59	A5	426	A	N9-C4	-5.60	1.34	1.37
59	A5	914	C	N1-C2	-5.60	1.34	1.40
59	A5	1593	U	C2-N3	-5.60	1.33	1.37
59	A5	1682	G	N1-C2	-5.60	1.33	1.37
58	B2	1989	A	N7-C5	-5.60	1.35	1.39
59	A5	1062	C	C2-O2	-5.60	1.19	1.24
59	A5	1962	A	C5-C4	-5.60	1.34	1.38
59	A5	2742	G	C5-C4	-5.60	1.34	1.38
59	A5	2787	U	N1-C6	-5.60	1.32	1.38
59	A5	3174	A	C6-N6	-5.60	1.29	1.33
58	B2	361	G	C5-C4	-5.60	1.34	1.38
59	A5	88	U	N3-C4	-5.60	1.33	1.38
59	A5	3945	A	N7-C5	-5.60	1.35	1.39
59	A5	996	C	C2-O2	-5.60	1.19	1.24
59	A5	2192	U	N3-C4	-5.60	1.33	1.38
59	A5	2236	U	N1-C2	-5.60	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2680	G	N7-C5	-5.60	1.35	1.39
37	Cr	84	VAL	CB-CG1	-5.60	1.41	1.52
56	A8	105	C	N1-C2	-5.60	1.34	1.40
59	A5	1267	A	C2-N3	-5.60	1.28	1.33
59	A5	1603	A	C6-N1	-5.60	1.31	1.35
59	A5	1748	C	C4-C5	-5.60	1.38	1.43
59	A5	2530	C	N1-C2	-5.60	1.34	1.40
59	A5	2565	G	C8-N7	-5.60	1.27	1.30
59	A5	3474	G	C2-N2	-5.60	1.28	1.34
59	A5	2250	G	C2-N3	-5.60	1.28	1.32
59	A5	3410	G	N7-C5	-5.60	1.35	1.39
56	A8	23	G	N7-C5	-5.59	1.35	1.39
59	A5	39	A	N9-C4	-5.59	1.34	1.37
59	A5	91	U	N1-C6	-5.59	1.32	1.38
59	A5	369	A	C5-C6	-5.59	1.36	1.41
59	A5	552	U	C2-N3	-5.59	1.33	1.37
59	A5	801	G	N3-C4	-5.59	1.31	1.35
59	A5	1117	A	N7-C5	-5.59	1.35	1.39
59	A5	2709	U	N1-C2	-5.59	1.33	1.38
59	A5	3237	U	C2-N3	-5.59	1.33	1.37
59	A5	792	U	C5-C6	-5.59	1.29	1.34
59	A5	802	G	N9-C4	-5.59	1.33	1.38
59	A5	1601	U	C2-N3	-5.59	1.33	1.37
59	A5	3615	G	C5-C4	-5.59	1.34	1.38
59	A5	3711	G	N9-C4	5.59	1.42	1.38
58	B2	1823	A	N7-C5	-5.59	1.35	1.39
59	A5	376	G	C8-N7	-5.59	1.27	1.30
59	A5	391	A	N9-C4	-5.59	1.34	1.37
59	A5	1368	A	N1-C2	-5.59	1.29	1.34
59	A5	1377	A	N7-C5	-5.59	1.35	1.39
59	A5	1378	A	N9-C8	-5.59	1.33	1.37
59	A5	1383	A	O3'-P	5.59	1.67	1.61
59	A5	1395	U	N1-C6	-5.59	1.32	1.38
59	A5	1636	G	C2-N3	-5.59	1.28	1.32
59	A5	1768	G	C5-C4	-5.59	1.34	1.38
59	A5	1976	G	N9-C4	-5.59	1.33	1.38
59	A5	2746	A	N1-C2	-5.59	1.29	1.34
59	A5	3345	A	N9-C8	-5.59	1.33	1.37
33	CP	24	VAL	CB-CG2	-5.59	1.41	1.52
59	A5	1648	A	N3-C4	-5.59	1.31	1.34
59	A5	2620	C	N3-C4	-5.59	1.30	1.33
59	A5	3664	A	N7-C5	-5.59	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	41	G	N7-C5	-5.59	1.35	1.39
58	B2	1963	G	C5-C4	-5.59	1.34	1.38
59	A5	3513	A	C6-N6	-5.59	1.29	1.33
58	B2	1973	G	N9-C4	-5.59	1.33	1.38
59	A5	1371	A	C5-C4	-5.59	1.34	1.38
59	A5	1535	U	N1-C2	-5.59	1.33	1.38
59	A5	2548	G	N7-C5	-5.59	1.35	1.39
59	A5	3463	U	N1-C2	-5.59	1.33	1.38
59	A5	3623	G	C2-N3	-5.59	1.28	1.32
56	A8	34	C	N3-C4	-5.58	1.30	1.33
59	A5	157	C	C4-C5	-5.58	1.38	1.43
59	A5	801	G	N9-C4	-5.58	1.33	1.38
59	A5	1556	C	N3-C4	-5.58	1.30	1.33
59	A5	3468	G	C8-N7	-5.58	1.27	1.30
59	A5	3950	A	C6-N1	-5.58	1.31	1.35
58	B2	1958	A	N7-C5	-5.58	1.35	1.39
59	A5	27	A	C6-N6	-5.58	1.29	1.33
59	A5	102	G	N3-C4	-5.58	1.31	1.35
59	A5	1014	U	N1-C6	-5.58	1.32	1.38
59	A5	1178	U	C4-C5	-5.58	1.38	1.43
59	A5	1536	U	N1-C2	-5.58	1.33	1.38
59	A5	2240	U	C2-N3	-5.58	1.33	1.37
56	A8	2	A	C6-N1	-5.58	1.31	1.35
58	B2	964	G	C5-C4	-5.58	1.34	1.38
59	A5	834	G	N1-C2	-5.58	1.33	1.37
59	A5	1094	A	N7-C5	-5.58	1.35	1.39
59	A5	1682	G	C2-N3	-5.58	1.28	1.32
59	A5	2520	U	N1-C2	-5.58	1.33	1.38
59	A5	2753	G	C2-N3	-5.58	1.28	1.32
59	A5	2768	A	C2-N3	-5.58	1.28	1.33
59	A5	3506	U	C4-O4	-5.58	1.19	1.23
59	A5	3524	G	C2-N3	-5.58	1.28	1.32
59	A5	3618	A	C6-N1	-5.58	1.31	1.35
59	A5	3903	U	C2-N3	-5.58	1.33	1.37
58	B2	1845	C	N1-C2	-5.58	1.34	1.40
59	A5	1119	C	N1-C6	-5.58	1.33	1.37
59	A5	1171	G	C2-N3	-5.58	1.28	1.32
59	A5	2108	U	C2-N3	-5.58	1.33	1.37
56	A8	33	U	N1-C2	-5.58	1.33	1.38
58	B2	1943	G	N1-C2	-5.58	1.33	1.37
58	B2	1979	C	C4-C5	-5.58	1.38	1.43
59	A5	1051	C	N1-C2	-5.58	1.34	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1065	A	N3-C4	-5.58	1.31	1.34
59	A5	1088	A	C8-N7	-5.58	1.27	1.31
59	A5	1146	U	C4-C5	-5.58	1.38	1.43
59	A5	1175	C	N1-C6	-5.58	1.33	1.37
59	A5	1767	A	C6-N1	-5.58	1.31	1.35
59	A5	2757	U	C4-C5	-5.58	1.38	1.43
59	A5	3507	A	N9-C4	-5.58	1.34	1.37
32	CT	57	TYR	CD2-CE2	-5.58	1.30	1.39
59	A5	799	A	C2-N3	-5.58	1.28	1.33
59	A5	3625	U	N1-C2	-5.58	1.33	1.38
59	A5	1022	A	C5-C6	-5.58	1.36	1.41
59	A5	1095	G	N3-C4	-5.58	1.31	1.35
59	A5	2525	C	N1-C6	-5.58	1.33	1.37
59	A5	3255	G	N7-C5	-5.58	1.35	1.39
58	B2	1231	A	N3-C4	-5.57	1.31	1.34
59	A5	423	U	C2-O2	-5.57	1.17	1.22
59	A5	810	A	N3-C4	-5.57	1.31	1.34
59	A5	1061	A	C5-C4	-5.57	1.34	1.38
59	A5	1375	G	C2-N3	-5.57	1.28	1.32
59	A5	1523	A	C5-C4	-5.57	1.34	1.38
59	A5	2171	U	N3-C4	-5.57	1.33	1.38
59	A5	2745	A	N7-C5	-5.57	1.35	1.39
58	B2	1107	A	N9-C4	-5.57	1.34	1.37
58	B2	1211	C	C4-C5	-5.57	1.38	1.43
59	A5	1511	C	N1-C2	-5.57	1.34	1.40
59	A5	3326	G	C8-N7	-5.57	1.27	1.30
56	A8	30	G	N9-C8	-5.57	1.33	1.37
59	A5	1146	U	N1-C2	-5.57	1.33	1.38
59	A5	1181	A	N3-C4	-5.57	1.31	1.34
59	A5	1528	G	C8-N7	-5.57	1.27	1.30
59	A5	1554	C	N1-C6	-5.57	1.33	1.37
59	A5	3175	A	N7-C5	-5.57	1.35	1.39
59	A5	3420	U	N1-C6	-5.57	1.32	1.38
59	A5	3874	A	N3-C4	-5.57	1.31	1.34
59	A5	290	G	N9-C8	-5.57	1.33	1.37
59	A5	2149	G	N1-C2	-5.57	1.33	1.37
59	A5	3538	G	C2-N3	-5.57	1.28	1.32
58	B2	15	U	N1-C2	-5.57	1.33	1.38
58	B2	624	G	C2-N3	-5.57	1.28	1.32
58	B2	1228	G	N1-C2	-5.57	1.33	1.37
58	B2	1943	G	N3-C4	-5.57	1.31	1.35
59	A5	63	G	C5-C6	-5.57	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1363	G	N9-C8	-5.57	1.33	1.37
59	A5	1790	A	N9-C8	-5.57	1.33	1.37
59	A5	2257	C	N1-C6	-5.57	1.33	1.37
59	A5	3538	G	N1-C2	-5.57	1.33	1.37
59	A5	3625	U	C4-C5	-5.57	1.38	1.43
58	B2	1859	A	N9-C4	-5.57	1.34	1.37
59	A5	348	A	N9-C8	-5.57	1.33	1.37
59	A5	397	C	N3-C4	-5.57	1.30	1.33
59	A5	1091	G	N9-C8	-5.57	1.33	1.37
59	A5	1409	G	C6-N1	-5.57	1.35	1.39
59	A5	1554	C	C2-N3	-5.57	1.31	1.35
59	A5	2218	G	C2-N3	-5.57	1.28	1.32
59	A5	2560	A	N9-C8	-5.57	1.33	1.37
59	A5	3148	C	N3-C4	-5.57	1.30	1.33
59	A5	3309	A	N7-C5	-5.57	1.35	1.39
59	A5	405	A	N3-C4	-5.56	1.31	1.34
58	B2	111	A	C5-C6	-5.56	1.36	1.41
58	B2	1196	G	C8-N7	-5.56	1.27	1.30
59	A5	241	C	C4-C5	-5.56	1.38	1.43
59	A5	1362	G	C5-C6	-5.56	1.36	1.42
59	A5	1383	A	C4'-C3'	5.56	1.59	1.53
59	A5	1521	G	N1-C2	-5.56	1.33	1.37
59	A5	2787	U	C5-C6	-5.56	1.29	1.34
59	A5	3262	A	N9-C8	-5.56	1.33	1.37
59	A5	3657	A	N3-C4	-5.56	1.31	1.34
58	B2	1214	A	C5-C4	-5.56	1.34	1.38
59	A5	561	A	N9-C4	-5.56	1.34	1.37
59	A5	1633	G	N7-C5	-5.56	1.35	1.39
59	A5	2253	U	C2-N3	-5.56	1.33	1.37
59	A5	3190	G	C6-N1	-5.56	1.35	1.39
56	A8	40	A	N9-C4	-5.56	1.34	1.37
58	B2	1823	A	C5-C6	-5.56	1.36	1.41
58	B2	1844	C	N3-C4	-5.56	1.30	1.33
59	A5	296	C	C2-O2	-5.56	1.19	1.24
59	A5	1603	A	N7-C5	-5.56	1.35	1.39
59	A5	2501	G	N3-C4	-5.56	1.31	1.35
59	A5	2757	U	C2-O2	-5.56	1.17	1.22
59	A5	3478	G	C6-O6	-5.56	1.19	1.24
55	A7	88	G	C2-N3	-5.56	1.28	1.32
59	A5	35	C	C5-C6	-5.56	1.29	1.34
59	A5	1537	G	N1-C2	-5.56	1.33	1.37
59	A5	3230	G	N9-C4	-5.56	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3296	C	N1-C2	-5.56	1.34	1.40
59	A5	3332	G	N7-C5	-5.56	1.35	1.39
59	A5	3598	U	N1-C6	-5.56	1.32	1.38
58	B2	1200	A	N7-C5	-5.55	1.35	1.39
59	A5	34	C	C4-N4	-5.55	1.28	1.33
59	A5	61	A	C8-N7	-5.55	1.27	1.31
59	A5	1012	G	N9-C4	-5.55	1.33	1.38
59	A5	2528	A	C6-N1	-5.55	1.31	1.35
59	A5	3534	U	C2-N3	-5.55	1.33	1.37
59	A5	3587	U	N3-C4	-5.55	1.33	1.38
59	A5	1174	G	C5-C6	-5.55	1.36	1.42
59	A5	2512	U	N1-C6	-5.55	1.32	1.38
59	A5	2710	A	N3-C4	-5.55	1.31	1.34
58	B2	1115	C	C5-C6	-5.55	1.29	1.34
59	A5	240	G	C2-N3	-5.55	1.28	1.32
59	A5	333	C	N3-C4	-5.55	1.30	1.33
59	A5	361	U	N1-C2	-5.55	1.33	1.38
59	A5	455	U	C4-C5	-5.55	1.38	1.43
59	A5	794	G	O3'-P	-5.55	1.54	1.61
59	A5	797	A	C6-N1	-5.55	1.31	1.35
59	A5	1093	C	C5-C6	-5.55	1.29	1.34
59	A5	1153	G	C5-C4	-5.55	1.34	1.38
59	A5	1789	A	C8-N7	-5.55	1.27	1.31
59	A5	2499	U	C4-C5	-5.55	1.38	1.43
58	B2	1062	C	N1-C6	-5.55	1.33	1.37
59	A5	118	A	C5-C6	-5.55	1.36	1.41
59	A5	205	U	N1-C6	-5.55	1.32	1.38
59	A5	305	G	N9-C4	-5.55	1.33	1.38
59	A5	371	G	C6-N1	-5.55	1.35	1.39
59	A5	794	G	P-O5'	-5.55	1.54	1.59
59	A5	1114	A	C2-N3	-5.55	1.28	1.33
59	A5	3147	A	N9-C4	-5.55	1.34	1.37
59	A5	3330	C	C5-C6	-5.55	1.29	1.34
59	A5	3356	G	C5-C4	-5.55	1.34	1.38
55	A7	13	A	C5-C4	-5.55	1.34	1.38
59	A5	345	A	N9-C4	-5.55	1.34	1.37
59	A5	548	A	C5-C4	-5.55	1.34	1.38
59	A5	1657	G	C6-N1	-5.55	1.35	1.39
59	A5	3520	U	C4-O4	-5.55	1.19	1.23
59	A5	118	A	C5-C4	-5.55	1.34	1.38
59	A5	237	G	N9-C8	-5.55	1.33	1.37
59	A5	1597	A	C5-C4	-5.55	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2674	A	N1-C2	-5.55	1.29	1.34
59	A5	2694	G	N3-C4	-5.55	1.31	1.35
59	A5	2757	U	N1-C2	-5.55	1.33	1.38
59	A5	3255	G	N9-C8	-5.55	1.33	1.37
59	A5	3267	C	N1-C6	-5.55	1.33	1.37
59	A5	3528	A	N3-C4	-5.55	1.31	1.34
59	A5	1555	G	N1-C2	-5.54	1.33	1.37
59	A5	1756	G	C2-N3	-5.54	1.28	1.32
59	A5	2204	U	C4-C5	-5.54	1.38	1.43
59	A5	3658	G	C5-C6	-5.54	1.36	1.42
58	B2	1054	A	N9-C4	-5.54	1.34	1.37
59	A5	322	G	C5-C6	-5.54	1.36	1.42
59	A5	1619	C	C5-C6	-5.54	1.29	1.34
59	A5	1731	G	N7-C5	-5.54	1.35	1.39
59	A5	1731	G	N9-C4	-5.54	1.33	1.38
59	A5	2209	G	C8-N7	-5.54	1.27	1.30
59	A5	2539	G	C8-N7	-5.54	1.27	1.30
59	A5	2800	C	N1-C2	-5.54	1.34	1.40
59	A5	3259	A	C6-N1	-5.54	1.31	1.35
6	CC	125	TYR	CD2-CE2	-5.54	1.31	1.39
41	Ce	49	LYS	CB-CG	-5.54	1.37	1.52
59	A5	244	G	C5-C4	-5.54	1.34	1.38
59	A5	1329	G	C6-N1	-5.54	1.35	1.39
59	A5	1380	G	C5-C4	-5.54	1.34	1.38
59	A5	1787	C	N3-C4	-5.54	1.30	1.33
59	A5	3138	G	C8-N7	-5.54	1.27	1.30
59	A5	3499	G	C8-N7	-5.54	1.27	1.30
59	A5	3681	A	N3-C4	-5.54	1.31	1.34
59	A5	3886	U	N1-C2	-5.54	1.33	1.38
59	A5	1520	U	N1-C2	-5.54	1.33	1.38
58	B2	623	G	C5-C6	-5.54	1.36	1.42
59	A5	824	G	N9-C8	-5.54	1.33	1.37
59	A5	1010	A	C2-N3	-5.54	1.28	1.33
59	A5	1023	C	C2-N3	-5.54	1.31	1.35
59	A5	1080	G	C6-O6	-5.54	1.19	1.24
59	A5	1373	A	C2-N3	-5.54	1.28	1.33
59	A5	1536	U	N3-C4	-5.54	1.33	1.38
59	A5	3187	C	N1-C6	-5.54	1.33	1.37
59	A5	374	C	N1-C2	-5.54	1.34	1.40
56	A8	98	U	N3-C4	-5.54	1.33	1.38
59	A5	994	U	N1-C6	-5.54	1.32	1.38
59	A5	3354	U	C4-C5	-5.54	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3420	U	N3-C4	-5.54	1.33	1.38
59	A5	3666	C	C2-N3	-5.54	1.31	1.35
33	CP	58	VAL	CB-CG1	-5.53	1.41	1.52
59	A5	1964	A	N7-C5	-5.53	1.35	1.39
59	A5	2248	A	C5-C6	-5.53	1.36	1.41
59	A5	2694	G	C2-N3	-5.53	1.28	1.32
59	A5	3294	A	N9-C4	-5.53	1.34	1.37
13	AL	108	VAL	CB-CG1	-5.53	1.41	1.52
59	A5	1008	A	C5-C6	-5.53	1.36	1.41
59	A5	1208	U	N1-C6	-5.53	1.32	1.38
59	A5	1635	A	C5-C4	-5.53	1.34	1.38
59	A5	2506	U	N3-C4	-5.53	1.33	1.38
59	A5	2534	G	C6-N1	-5.53	1.35	1.39
59	A5	3534	U	N3-C4	-5.53	1.33	1.38
59	A5	3539	C	C2-N3	-5.53	1.31	1.35
59	A5	3602	U	N1-C2	-5.53	1.33	1.38
58	B2	1830	G	N7-C5	-5.53	1.35	1.39
59	A5	415	A	C6-N1	-5.53	1.31	1.35
59	A5	1174	G	C6-N1	-5.53	1.35	1.39
59	A5	1262	C	C4-C5	-5.53	1.38	1.43
59	A5	2764	A	N7-C5	-5.53	1.35	1.39
59	A5	2791	A	C6-N6	-5.53	1.29	1.33
59	A5	3471	A	C5-C6	-5.53	1.36	1.41
59	A5	298	U	N1-C6	-5.53	1.32	1.38
59	A5	1728	G	C2-N3	-5.53	1.28	1.32
59	A5	2494	G	C6-N1	-5.53	1.35	1.39
59	A5	3289	U	C4-C5	-5.53	1.38	1.43
59	A5	75	A	C5-C4	-5.53	1.34	1.38
59	A5	125	A	C5-C4	-5.53	1.34	1.38
59	A5	309	C	N1-C2	-5.53	1.34	1.40
59	A5	359	G	C5-C6	-5.53	1.36	1.42
59	A5	1692	G	N1-C2	-5.53	1.33	1.37
59	A5	1703	A	C5-C4	-5.53	1.34	1.38
59	A5	2566	A	N1-C2	-5.53	1.29	1.34
59	A5	3662	G	N3-C4	-5.53	1.31	1.35
25	Ca	54	PHE	CD2-CE2	-5.52	1.28	1.39
58	B2	1114	A	N9-C8	-5.52	1.33	1.37
59	A5	1771	G	N9-C8	-5.52	1.33	1.37
59	A5	2498	U	C4-C5	-5.52	1.38	1.43
56	A8	38	G	N9-C8	-5.52	1.33	1.37
59	A5	654	G	C8-N7	-5.52	1.27	1.30
59	A5	757	A	N9-C4	-5.52	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1669	G	C2-N3	-5.52	1.28	1.32
59	A5	3402	C	C2-O2	-5.52	1.19	1.24
59	A5	1386	U	C2-N3	-5.52	1.33	1.37
59	A5	2723	A	C6-N6	-5.52	1.29	1.33
59	A5	3954	U	C2-N3	-5.52	1.33	1.37
58	B2	343	A	N3-C4	-5.52	1.31	1.34
58	B2	1053	A	N7-C5	-5.52	1.35	1.39
59	A5	59	G	P-OP1	-5.52	1.39	1.49
59	A5	2202	A	C8-N7	-5.52	1.27	1.31
59	A5	2549	G	N3-C4	-5.52	1.31	1.35
59	A5	2720	U	C5-C6	-5.52	1.29	1.34
59	A5	3483	G	C6-O6	-5.52	1.19	1.24
59	A5	3901	G	N7-C5	-5.52	1.35	1.39
59	A5	1318	A	C6-N1	-5.52	1.31	1.35
59	A5	1341	G	N7-C5	-5.52	1.35	1.39
59	A5	1409	G	N1-C2	-5.52	1.33	1.37
59	A5	1663	G	C5-C6	-5.52	1.36	1.42
59	A5	3146	G	C8-N7	-5.52	1.27	1.30
59	A5	1132	U	C4-O4	-5.52	1.19	1.23
59	A5	1767	A	N9-C4	-5.52	1.34	1.37
56	A8	112	C	N1-C6	-5.51	1.33	1.37
58	B2	617	U	N1-C6	-5.51	1.32	1.38
59	A5	40	U	C4-C5	-5.51	1.38	1.43
59	A5	852	C	N1-C6	-5.51	1.33	1.37
59	A5	1314	U	C5-C6	-5.51	1.29	1.34
59	A5	2195	A	C6-N1	-5.51	1.31	1.35
59	A5	2657	A	C5-C6	-5.51	1.36	1.41
59	A5	2735	A	C6-N6	-5.51	1.29	1.33
59	A5	3180	G	C2-N3	-5.51	1.28	1.32
55	A7	81	A	C2-N3	-5.51	1.28	1.33
59	A5	1899	C	N3-C4	-5.51	1.30	1.33
59	A5	2541	C	N1-C6	-5.51	1.33	1.37
58	B2	620	U	C2-N3	-5.51	1.33	1.37
58	B2	1054	A	N3-C4	-5.51	1.31	1.34
58	B2	1112	A	C5-C4	-5.51	1.34	1.38
59	A5	1095	G	N1-C2	-5.51	1.33	1.37
59	A5	1660	G	N3-C4	-5.51	1.31	1.35
59	A5	1693	C	N1-C6	-5.51	1.33	1.37
59	A5	2253	U	N1-C2	-5.51	1.33	1.38
59	A5	3147	A	C5-C4	-5.51	1.34	1.38
59	A5	3248	U	C2-N3	-5.51	1.33	1.37
59	A5	3365	G	C2-N3	-5.51	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	238	G	C5-C6	-5.51	1.36	1.42
59	A5	769	U	N3-C4	-5.51	1.33	1.38
59	A5	803	A	N3-C4	-5.51	1.31	1.34
59	A5	2753	G	C2-N2	-5.51	1.29	1.34
59	A5	2767	U	C5-C6	-5.51	1.29	1.34
59	A5	386	G	C2-N3	-5.51	1.28	1.32
59	A5	490	G	N9-C4	-5.51	1.33	1.38
59	A5	1319	A	C5-C6	-5.51	1.36	1.41
59	A5	1363	G	C6-N1	-5.51	1.35	1.39
59	A5	3674	G	C5-C4	-5.51	1.34	1.38
58	B2	1207	G	N1-C2	-5.51	1.33	1.37
59	A5	386	G	C8-N7	-5.51	1.27	1.30
59	A5	1030	A	C6-N6	-5.51	1.29	1.33
59	A5	1130	U	C2-O2	-5.51	1.17	1.22
59	A5	1691	A	C8-N7	-5.51	1.27	1.31
59	A5	2156	U	C2-N3	-5.51	1.33	1.37
59	A5	2527	A	N7-C5	-5.51	1.35	1.39
59	A5	2693	G	N3-C4	-5.51	1.31	1.35
59	A5	2750	A	C6-N6	-5.51	1.29	1.33
59	A5	2795	U	N1-C6	-5.51	1.32	1.38
59	A5	3234	A	C5-C6	-5.51	1.36	1.41
59	A5	3535	G	C6-N1	-5.51	1.35	1.39
59	A5	318	G	C6-N1	-5.50	1.35	1.39
59	A5	1001	A	N9-C8	-5.50	1.33	1.37
59	A5	1339	U	N1-C2	-5.50	1.33	1.38
58	B2	1221	A	N7-C5	-5.50	1.35	1.39
58	B2	1344	A	N9-C4	5.50	1.41	1.37
59	A5	506	A	N9-C4	-5.50	1.34	1.37
59	A5	1616	G	C2-N2	-5.50	1.29	1.34
59	A5	3179	A	N3-C4	-5.50	1.31	1.34
59	A5	3880	A	N9-C4	-5.50	1.34	1.37
56	A8	97	U	C4-C5	-5.50	1.38	1.43
59	A5	63	G	N1-C2	-5.50	1.33	1.37
59	A5	811	G	C6-N1	-5.50	1.35	1.39
59	A5	1354	G	C2-N3	-5.50	1.28	1.32
59	A5	1790	A	C8-N7	-5.50	1.27	1.31
59	A5	2178	U	N1-C2	-5.50	1.33	1.38
59	A5	2745	A	C4'-C3'	-5.50	1.47	1.52
59	A5	3135	G	N1-C2	-5.50	1.33	1.37
59	A5	3255	G	C8-N7	-5.50	1.27	1.30
58	B2	1983	G	N7-C5	-5.50	1.35	1.39
59	A5	3127	A	N7-C5	-5.50	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3543	A	C5-C4	-5.50	1.34	1.38
58	B2	339	U	C2-N3	-5.50	1.33	1.37
58	B2	1847	A	N9-C8	-5.50	1.33	1.37
59	A5	361	U	N1-C6	-5.50	1.33	1.38
59	A5	450	G	N9-C8	-5.50	1.34	1.37
59	A5	1638	G	N7-C5	-5.50	1.35	1.39
59	A5	1970	G	C5-C6	-5.50	1.36	1.42
59	A5	2693	G	N9-C4	-5.50	1.33	1.38
59	A5	2764	A	N3-C4	5.50	1.38	1.34
59	A5	3441	C	N3-C4	-5.50	1.30	1.33
56	A8	40	A	C8-N7	-5.50	1.27	1.31
58	B2	1049	C	N1-C6	-5.50	1.33	1.37
59	A5	1253	A	N9-C4	-5.50	1.34	1.37
59	A5	2695	A	N9-C8	-5.50	1.33	1.37
59	A5	3525	A	C5-C6	-5.50	1.36	1.41
59	A5	3629	U	C4-C5	-5.50	1.38	1.43
59	A5	20	A	N9-C4	-5.50	1.34	1.37
59	A5	1023	C	N1-C6	-5.50	1.33	1.37
59	A5	1780	U	C2-N3	-5.50	1.33	1.37
59	A5	2260	U	C2-N3	-5.50	1.33	1.37
58	B2	1948	A	N9-C4	-5.49	1.34	1.37
59	A5	442	A	C6-N1	-5.49	1.31	1.35
59	A5	1144	C	C2-O2	-5.49	1.19	1.24
59	A5	1354	G	N1-C2	-5.49	1.33	1.37
59	A5	1733	A	N1-C2	-5.49	1.29	1.34
59	A5	2620	C	C4-C5	-5.49	1.38	1.43
59	A5	2705	U	C2-N3	-5.49	1.33	1.37
59	A5	3137	A	N9-C8	-5.49	1.33	1.37
58	B2	1204	A	N3-C4	-5.49	1.31	1.34
59	A5	1400	A	C6-N1	-5.49	1.31	1.35
59	A5	2487	C	N3-C4	-5.49	1.30	1.33
59	A5	2549	G	C5-C6	-5.49	1.36	1.42
59	A5	3884	A	N9-C4	-5.49	1.34	1.37
59	A5	205	U	C2-N3	-5.49	1.33	1.37
59	A5	772	G	N7-C5	-5.49	1.35	1.39
59	A5	1634	A	C5-C4	-5.49	1.34	1.38
59	A5	1725	A	N7-C5	-5.49	1.35	1.39
59	A5	1733	A	C2-N3	-5.49	1.28	1.33
59	A5	2769	G	C2-N3	-5.49	1.28	1.32
59	A5	3179	A	N9-C8	-5.49	1.33	1.37
59	A5	3180	G	C8-N7	-5.49	1.27	1.30
59	A5	3272	A	N9-C4	-5.49	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	CP	4	TYR	CD1-CE1	-5.49	1.31	1.39
56	A8	24	G	N9-C4	-5.49	1.33	1.38
58	B2	1225	A	C5-C6	-5.49	1.36	1.41
58	B2	1241	G	N3-C4	-5.49	1.31	1.35
59	A5	1872	A	C8-N7	-5.49	1.27	1.31
59	A5	3759	G	N1-C2	-5.49	1.33	1.37
59	A5	2004	G	C8-N7	-5.49	1.27	1.30
59	A5	2251	G	C5-C4	-5.49	1.34	1.38
59	A5	783	G	N7-C5	-5.49	1.35	1.39
59	A5	1620	A	N9-C8	-5.49	1.33	1.37
59	A5	2616	G	N7-C5	-5.49	1.35	1.39
59	A5	2717	C	C5-C6	-5.49	1.29	1.34
59	A5	3401	U	C4-C5	-5.49	1.38	1.43
59	A5	3514	C	N1-C6	-5.49	1.33	1.37
59	A5	3576	G	C5-C4	-5.49	1.34	1.38
56	A8	17	U	C5-C6	-5.48	1.29	1.34
58	B2	1231	A	C5-C6	-5.48	1.36	1.41
59	A5	319	G	N7-C5	-5.48	1.35	1.39
59	A5	3908	U	C2-N3	-5.48	1.33	1.37
55	A7	99	G	N1-C2	-5.48	1.33	1.37
59	A5	548	A	N9-C8	-5.48	1.33	1.37
59	A5	1537	G	N3-C4	-5.48	1.31	1.35
59	A5	2719	A	N9-C4	-5.48	1.34	1.37
59	A5	3130	G	C5-C6	-5.48	1.36	1.42
59	A5	3447	U	C5-C6	-5.48	1.29	1.34
58	B2	258	A	N7-C5	-5.48	1.35	1.39
58	B2	578	A	N9-C4	-5.48	1.34	1.37
58	B2	1226	A	N9-C4	-5.48	1.34	1.37
59	A5	991	A	C8-N7	-5.48	1.27	1.31
59	A5	1022	A	C5-C4	-5.48	1.34	1.38
59	A5	1662	U	C2-N3	-5.48	1.33	1.37
59	A5	1755	U	C2-N3	-5.48	1.33	1.37
59	A5	3427	G	C5-C4	-5.48	1.34	1.38
59	A5	3453	U	C2-N3	-5.48	1.33	1.37
59	A5	3614	U	C4-O4	-5.48	1.19	1.23
59	A5	3615	G	N9-C8	-5.48	1.34	1.37
58	B2	1061	A	C6-N1	-5.48	1.31	1.35
58	B2	1061	A	N3-C4	-5.48	1.31	1.34
58	B2	1104	C	C5-C6	-5.48	1.29	1.34
58	B2	361	G	C6-N1	-5.48	1.35	1.39
58	B2	1111	U	C4-C5	-5.48	1.38	1.43
59	A5	348	A	N3-C4	-5.48	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	441	A	P-O5'	-5.48	1.54	1.59
59	A5	822	G	C5-C4	-5.48	1.34	1.38
59	A5	2210	U	C2-O2	-5.48	1.17	1.22
59	A5	2776	A	C5-C4	-5.48	1.34	1.38
59	A5	851	G	C6-N1	-5.48	1.35	1.39
59	A5	1757	A	N3-C4	-5.48	1.31	1.34
59	A5	2651	G	C2-N3	-5.48	1.28	1.32
59	A5	3493	U	N1-C2	-5.48	1.33	1.38
59	A5	3889	U	C4-C5	-5.48	1.38	1.43
59	A5	378	G	C5-C6	-5.47	1.36	1.42
59	A5	1962	A	N7-C5	-5.47	1.35	1.39
59	A5	3306	U	C4-C5	-5.47	1.38	1.43
59	A5	417	A	N9-C4	-5.47	1.34	1.37
59	A5	837	A	N3-C4	-5.47	1.31	1.34
59	A5	864	G	N1-C2	-5.47	1.33	1.37
59	A5	1061	A	N3-C4	-5.47	1.31	1.34
59	A5	1618	A	C5-C4	-5.47	1.34	1.38
59	A5	1690	U	N1-C6	-5.47	1.33	1.38
59	A5	2164	G	N9-C4	-5.47	1.33	1.38
59	A5	3290	A	C5-C4	-5.47	1.34	1.38
59	A5	3679	C	N3-C4	-5.47	1.30	1.33
59	A5	78	A	C6-N1	-5.47	1.31	1.35
59	A5	313	A	C8-N7	-5.47	1.27	1.31
59	A5	1669	G	N7-C5	-5.47	1.35	1.39
59	A5	1700	U	C5-C6	-5.47	1.29	1.34
59	A5	1969	A	N7-C5	-5.47	1.35	1.39
59	A5	2009	A	C5-C4	-5.47	1.34	1.38
59	A5	3236	A	C2-N3	-5.47	1.28	1.33
59	A5	3319	A	N7-C5	-5.47	1.35	1.39
26	CN	27	VAL	CB-CG1	-5.47	1.41	1.52
59	A5	1728	G	C8-N7	-5.47	1.27	1.30
59	A5	2041	G	C5-C6	-5.47	1.36	1.42
59	A5	2489	G	N9-C4	-5.47	1.33	1.38
59	A5	2810	A	N3-C4	-5.47	1.31	1.34
59	A5	3261	U	C5-C6	-5.47	1.29	1.34
59	A5	3939	C	N1-C6	-5.47	1.33	1.37
59	A5	50	U	C2-O2	-5.47	1.17	1.22
59	A5	1635	A	N7-C5	-5.47	1.35	1.39
59	A5	234	G	N7-C5	-5.47	1.35	1.39
59	A5	1150	G	N9-C4	-5.47	1.33	1.38
59	A5	1164	G	N3-C4	-5.47	1.31	1.35
59	A5	2235	G	N9-C4	-5.47	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2561	A	C8-N7	-5.47	1.27	1.31
59	A5	326	A	N7-C5	-5.46	1.35	1.39
59	A5	796	A	O3'-P	-5.46	1.54	1.61
59	A5	1171	G	N3-C4	-5.46	1.31	1.35
59	A5	1757	A	N1-C2	-5.46	1.29	1.34
59	A5	2525	C	C2-O2	-5.46	1.19	1.24
59	A5	3131	C	C5-C6	-5.46	1.29	1.34
59	A5	3448	U	C2-N3	-5.46	1.33	1.37
58	B2	615	G	C5-C6	-5.46	1.36	1.42
59	A5	1966	A	C6-N1	-5.46	1.31	1.35
59	A5	2007	U	N1-C2	-5.46	1.33	1.38
59	A5	2224	A	N7-C5	-5.46	1.35	1.39
59	A5	361	U	C2-N3	-5.46	1.33	1.37
59	A5	1780	U	N1-C6	-5.46	1.33	1.38
59	A5	2539	G	N9-C8	-5.46	1.34	1.37
59	A5	290	G	N1-C2	-5.46	1.33	1.37
59	A5	794	G	P-OP1	-5.46	1.39	1.49
59	A5	860	A	C6-N1	-5.46	1.31	1.35
59	A5	1613	A	N7-C5	-5.46	1.35	1.39
59	A5	3387	C	N3-C4	-5.46	1.30	1.33
59	A5	3944	A	N7-C5	-5.46	1.35	1.39
58	B2	1213	A	C5-C6	-5.46	1.36	1.41
59	A5	2528	A	N9-C8	-5.46	1.33	1.37
55	A7	11	A	N3-C4	-5.46	1.31	1.34
58	B2	1978	C	N3-C4	-5.46	1.30	1.33
59	A5	1114	A	C8-N7	-5.46	1.27	1.31
59	A5	1621	A	N9-C4	-5.46	1.34	1.37
59	A5	1748	C	C5-C6	-5.46	1.29	1.34
59	A5	1966	A	C5-C4	-5.46	1.34	1.38
59	A5	2775	A	P-O5'	-5.46	1.54	1.59
59	A5	3727	A	N9-C4	5.46	1.41	1.37
58	B2	45	U	N1-C6	-5.46	1.33	1.38
59	A5	1042	G	C6-N1	-5.46	1.35	1.39
59	A5	1555	G	C5-C6	-5.46	1.36	1.42
59	A5	1769	U	N1-C6	-5.46	1.33	1.38
59	A5	2659	A	C5-C4	-5.46	1.34	1.38
58	B2	1231	A	C5-C4	-5.45	1.34	1.38
59	A5	1098	U	N1-C6	-5.45	1.33	1.38
59	A5	1199	C	N1-C6	-5.45	1.33	1.37
59	A5	1796	A	C6-N1	-5.45	1.31	1.35
59	A5	1889	A	N7-C5	-5.45	1.35	1.39
59	A5	1973	G	N1-C2	-5.45	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2544	U	N3-C4	-5.45	1.33	1.38
59	A5	3598	U	C2-O2	-5.45	1.17	1.22
59	A5	3666	C	N1-C6	-5.45	1.33	1.37
59	A5	3888	U	N1-C2	-5.45	1.33	1.38
56	A8	15	G	C6-N1	-5.45	1.35	1.39
58	B2	1834	G	N7-C5	-5.45	1.35	1.39
59	A5	405	A	N9-C4	-5.45	1.34	1.37
59	A5	3410	G	N9-C4	-5.45	1.33	1.38
59	A5	3590	C	N3-C4	-5.45	1.30	1.33
58	B2	1977	A	C6-N1	-5.45	1.31	1.35
59	A5	240	G	C5-C6	-5.45	1.36	1.42
59	A5	1874	G	N1-C2	-5.45	1.33	1.37
59	A5	2249	A	C6-N1	-5.45	1.31	1.35
59	A5	3423	U	C4-O4	-5.45	1.19	1.23
56	A8	10	C	N1-C6	-5.45	1.33	1.37
59	A5	108	A	N9-C8	-5.45	1.33	1.37
59	A5	443	G	P-O5'	-5.45	1.54	1.59
59	A5	1322	U	C2-N3	-5.45	1.33	1.37
59	A5	1387	G	N9-C4	-5.45	1.33	1.38
59	A5	1508	U	C2-N3	-5.45	1.33	1.37
59	A5	1649	G	N1-C2	-5.45	1.33	1.37
59	A5	3518	A	C5-C6	-5.45	1.36	1.41
59	A5	3637	A	N7-C5	-5.45	1.35	1.39
59	A5	1680	U	C4-C5	-5.45	1.38	1.43
58	B2	1071	G	N3-C4	-5.45	1.31	1.35
59	A5	1182	A	N7-C5	-5.45	1.35	1.39
59	A5	1628	G	C6-N1	-5.45	1.35	1.39
59	A5	1704	A	N9-C8	-5.45	1.33	1.37
59	A5	2667	U	C2-N3	-5.45	1.33	1.37
59	A5	2706	U	C2-O2	-5.45	1.17	1.22
59	A5	2745	A	C8-N7	-5.45	1.27	1.31
59	A5	3331	A	N7-C5	-5.45	1.35	1.39
59	A5	3364	C	N1-C6	-5.45	1.33	1.37
59	A5	1983	A	C5-C6	-5.44	1.36	1.41
59	A5	2804	U	C2-N3	-5.44	1.33	1.37
59	A5	988	C	N1-C6	-5.44	1.33	1.37
59	A5	3173	U	C4-C5	-5.44	1.38	1.43
59	A5	3500	A	C5-C6	-5.44	1.36	1.41
59	A5	3657	A	C5-C6	-5.44	1.36	1.41
59	A5	3944	A	C5-C4	-5.44	1.34	1.38
59	A5	3947	C	N1-C2	-5.44	1.34	1.40
77	Cg	57	SER	C-N	-5.44	1.21	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	327	G	C5-C4	-5.44	1.34	1.38
59	A5	1054	A	N7-C5	-5.44	1.35	1.39
59	A5	1060	G	C6-O6	-5.44	1.19	1.24
59	A5	1412	A	N7-C5	-5.44	1.35	1.39
59	A5	1783	A	C6-N1	5.44	1.39	1.35
59	A5	1975	C	C5-C6	-5.44	1.29	1.34
59	A5	2150	U	C2-O2	-5.44	1.17	1.22
59	A5	2787	U	N3-C4	-5.44	1.33	1.38
59	A5	3488	G	N9-C8	-5.44	1.34	1.37
59	A5	384	A	N9-C4	-5.44	1.34	1.37
59	A5	998	G	N9-C4	-5.44	1.33	1.38
59	A5	1692	G	C6-N1	-5.44	1.35	1.39
59	A5	1716	G	N1-C2	-5.44	1.33	1.37
59	A5	2188	C	C5-C6	-5.44	1.29	1.34
59	A5	2254	U	C4-C5	-5.44	1.38	1.43
59	A5	2677	A	C5-C6	-5.44	1.36	1.41
58	B2	1181	G	C6-N1	-5.44	1.35	1.39
59	A5	814	U	P-OP1	-5.44	1.39	1.49
59	A5	828	G	N7-C5	-5.44	1.35	1.39
59	A5	1686	A	C2-N3	-5.44	1.28	1.33
59	A5	2508	C	C2-O2	-5.44	1.19	1.24
59	A5	2690	A	C6-N1	-5.44	1.31	1.35
59	A5	3286	G	C5-C4	-5.44	1.34	1.38
59	A5	3546	A	C8-N7	-5.44	1.27	1.31
59	A5	3669	U	C2-N3	-5.44	1.33	1.37
58	B2	968	A	C5-C6	-5.44	1.36	1.41
58	B2	1241	G	C5-C6	-5.44	1.36	1.42
59	A5	1606	G	C5-C4	-5.44	1.34	1.38
59	A5	2206	U	C4-O4	-5.44	1.19	1.23
59	A5	2698	A	N1-C2	-5.44	1.29	1.34
59	A5	2790	G	C5-C4	-5.44	1.34	1.38
48	Cp	11	VAL	CB-CG2	-5.43	1.41	1.52
56	A8	22	C	N1-C2	-5.43	1.34	1.40
58	B2	389	G	C5-C4	-5.43	1.34	1.38
58	B2	1174	A	C5-C4	-5.43	1.34	1.38
59	A5	296	C	N1-C2	-5.43	1.34	1.40
59	A5	912	A	C5-C6	-5.43	1.36	1.41
59	A5	1335	C	N3-C4	-5.43	1.30	1.33
59	A5	1337	U	N1-C6	-5.43	1.33	1.38
59	A5	2231	A	C5-C6	-5.43	1.36	1.41
59	A5	2591	A	C5-C4	-5.43	1.34	1.38
59	A5	563	A	N9-C4	-5.43	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	A8	38	G	C5-C6	-5.43	1.36	1.42
58	B2	1066	A	C5-C6	-5.43	1.36	1.41
58	B2	1984	G	C5-C6	-5.43	1.36	1.42
59	A5	104	A	C5-C6	-5.43	1.36	1.41
59	A5	394	G	C5-C4	-5.43	1.34	1.38
59	A5	1270	G	C2-N3	-5.43	1.28	1.32
59	A5	2517	A	C5-C4	-5.43	1.34	1.38
59	A5	2565	G	N9-C8	-5.43	1.34	1.37
59	A5	2757	U	N3-C4	-5.43	1.33	1.38
59	A5	3480	U	C5-C6	-5.43	1.29	1.34
58	B2	349	A	N7-C5	-5.43	1.35	1.39
58	B2	1101	G	C5-C6	-5.43	1.36	1.42
59	A5	1009	G	N9-C8	-5.43	1.34	1.37
59	A5	1332	C	C5-C6	-5.43	1.30	1.34
59	A5	1866	G	C8-N7	-5.43	1.27	1.30
37	Cr	13	ARG	CB-CG	-5.43	1.37	1.52
56	A8	28	A	P-O5'	-5.43	1.54	1.59
58	B2	1220	A	N7-C5	-5.43	1.35	1.39
59	A5	1016	A	N9-C4	-5.43	1.34	1.37
59	A5	1061	A	C5-C6	-5.43	1.36	1.41
59	A5	1085	U	N1-C2	-5.43	1.33	1.38
59	A5	1421	G	N7-C5	-5.43	1.35	1.39
59	A5	1533	A	C6-N6	-5.43	1.29	1.33
59	A5	2772	G	N3-C4	-5.43	1.31	1.35
59	A5	3164	C	N1-C2	-5.43	1.34	1.40
59	A5	3487	A	C6-N6	-5.43	1.29	1.33
58	B2	1845	C	N1-C6	-5.42	1.33	1.37
59	A5	46	C	C2-N3	-5.42	1.31	1.35
59	A5	379	A	C8-N7	-5.42	1.27	1.31
59	A5	2165	C	N1-C6	-5.42	1.33	1.37
59	A5	2184	G	C6-N1	-5.42	1.35	1.39
59	A5	3406	G	C8-N7	-5.42	1.27	1.30
59	A5	3600	G	C6-N1	-5.42	1.35	1.39
59	A5	3907	G	N1-C2	-5.42	1.33	1.37
56	A8	29	U	C5-C6	-5.42	1.29	1.34
59	A5	2043	G	N9-C8	-5.42	1.34	1.37
59	A5	2149	G	C6-N1	-5.42	1.35	1.39
59	A5	2680	G	C8-N7	-5.42	1.27	1.30
59	A5	3487	A	C2-N3	-5.42	1.28	1.33
55	A7	88	G	N9-C4	-5.42	1.33	1.38
59	A5	663	U	C5-C6	-5.42	1.29	1.34
59	A5	1120	A	C2-N3	-5.42	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1606	G	C6-N1	-5.42	1.35	1.39
59	A5	2249	A	C2-N3	-5.42	1.28	1.33
59	A5	2707	C	N3-C4	-5.42	1.30	1.33
59	A5	3883	G	N1-C2	-5.42	1.33	1.37
58	B2	1960	A	N7-C5	-5.42	1.35	1.39
59	A5	990	U	N1-C2	-5.42	1.33	1.38
59	A5	1774	C	C5-C6	-5.42	1.30	1.34
59	A5	2101	C	N3-C4	-5.42	1.30	1.33
59	A5	429	U	C2-O2	-5.42	1.17	1.22
59	A5	1163	G	P-OP2	-5.42	1.39	1.49
59	A5	2705	U	C4-C5	-5.42	1.38	1.43
59	A5	3159	C	C4-C5	-5.42	1.38	1.43
59	A5	3518	A	N9-C8	-5.42	1.33	1.37
58	B2	636	G	N9-C8	-5.42	1.34	1.37
59	A5	203	A	C5-C4	-5.42	1.34	1.38
59	A5	1136	A	C6-N6	-5.42	1.29	1.33
59	A5	1698	A	C6-N1	-5.42	1.31	1.35
59	A5	1711	C	C2-N3	-5.42	1.31	1.35
59	A5	2201	U	N3-C4	-5.42	1.33	1.38
59	A5	2506	U	C4-C5	-5.42	1.38	1.43
59	A5	3483	G	C5-C4	-5.42	1.34	1.38
58	B2	360	G	C5-C4	-5.42	1.34	1.38
59	A5	430	G	N1-C2	-5.42	1.33	1.37
59	A5	815	A	N1-C2	-5.42	1.29	1.34
59	A5	1345	G	N1-C2	-5.42	1.33	1.37
59	A5	1650	C	C5-C6	-5.42	1.30	1.34
59	A5	3482	G	C6-O6	-5.42	1.19	1.24
59	A5	118	A	N7-C5	-5.41	1.36	1.39
59	A5	827	A	C5-C6	-5.41	1.36	1.41
59	A5	1372	A	C8-N7	-5.41	1.27	1.31
59	A5	1772	G	N7-C5	-5.41	1.36	1.39
59	A5	2159	C	N1-C2	-5.41	1.34	1.40
59	A5	3595	U	C4-C5	-5.41	1.38	1.43
59	A5	2552	G	C2-N3	-5.41	1.28	1.32
59	A5	2678	G	C5-C6	-5.41	1.36	1.42
59	A5	366	A	N9-C4	-5.41	1.34	1.37
59	A5	1424	G	C5-C6	-5.41	1.36	1.42
59	A5	1725	A	C8-N7	-5.41	1.27	1.31
58	B2	349	A	N9-C4	-5.41	1.34	1.37
59	A5	216	U	N1-C2	-5.41	1.33	1.38
59	A5	1150	G	C2-N3	-5.41	1.28	1.32
59	A5	1548	C	N1-C2	-5.41	1.34	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1672	A	C2-N3	-5.41	1.28	1.33
59	A5	2555	G	N1-C2	-5.41	1.33	1.37
59	A5	3513	A	C2-N3	-5.41	1.28	1.33
59	A5	3580	G	C5-C6	-5.41	1.36	1.42
59	A5	217	G	C5-C4	-5.41	1.34	1.38
59	A5	1024	U	N3-C4	-5.41	1.33	1.38
59	A5	1072	U	N1-C6	-5.41	1.33	1.38
59	A5	1080	G	C2-N3	-5.41	1.28	1.32
59	A5	1366	G	C6-O6	-5.41	1.19	1.24
59	A5	1558	A	N9-C8	-5.41	1.33	1.37
59	A5	2149	G	N3-C4	-5.41	1.31	1.35
59	A5	3140	G	C2'-C1'	-5.41	1.47	1.53
59	A5	3448	U	C4-C5	-5.41	1.38	1.43
59	A5	3491	C	C5-C6	-5.41	1.30	1.34
59	A5	801	G	N7-C5	-5.41	1.36	1.39
59	A5	1165	A	C5-C6	-5.41	1.36	1.41
59	A5	1531	U	C2-N3	-5.41	1.33	1.37
59	A5	1531	U	C5-C6	-5.41	1.29	1.34
59	A5	1548	C	C2-N3	-5.41	1.31	1.35
59	A5	2760	G	N9-C4	-5.41	1.33	1.38
59	A5	3470	G	N9-C8	-5.41	1.34	1.37
58	B2	369	G	N9-C8	-5.40	1.34	1.37
59	A5	1036	A	C5-C6	-5.40	1.36	1.41
59	A5	1539	A	C5-C6	-5.40	1.36	1.41
59	A5	3525	A	C6-N1	-5.40	1.31	1.35
56	A8	30	G	C2-N3	-5.40	1.28	1.32
58	B2	1200	A	N9-C4	-5.40	1.34	1.37
59	A5	359	G	N3-C4	-5.40	1.31	1.35
59	A5	1085	U	C2'-C1'	-5.40	1.47	1.53
59	A5	1110	G	C5-C6	-5.40	1.36	1.42
59	A5	1259	A	C5-C4	-5.40	1.34	1.38
59	A5	2218	G	C6-N1	-5.40	1.35	1.39
59	A5	2691	A	N7-C5	-5.40	1.36	1.39
59	A5	3636	G	C5-C4	-5.40	1.34	1.38
58	B2	1097	C	N3-C4	-5.40	1.30	1.33
58	B2	1204	A	N9-C4	-5.40	1.34	1.37
59	A5	382	G	N7-C5	-5.40	1.36	1.39
59	A5	660	A	N7-C5	-5.40	1.36	1.39
59	A5	3350	U	N1-C6	-5.40	1.33	1.38
59	A5	3423	U	C5-C6	-5.40	1.29	1.34
80	CF	232	VAL	CB-CG2	-5.40	1.41	1.52
31	CS	155	VAL	CB-CG1	-5.40	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	252	A	N7-C5	-5.40	1.36	1.39
58	B2	638	A	C5-C4	-5.40	1.34	1.38
59	A5	2735	A	C4'-C3'	-5.40	1.47	1.52
59	A5	3355	G	C6-N1	-5.40	1.35	1.39
55	A7	90	A	N9-C8	-5.40	1.33	1.37
58	B2	1217	U	C2-N3	-5.40	1.33	1.37
59	A5	799	A	C6-N6	-5.40	1.29	1.33
59	A5	1683	U	C4-O4	-5.40	1.19	1.23
59	A5	3885	C	C5-C6	-5.40	1.30	1.34
59	A5	375	C	C4'-C3'	-5.40	1.47	1.52
59	A5	1696	A	C2-N3	-5.40	1.28	1.33
59	A5	1752	G	N7-C5	-5.40	1.36	1.39
59	A5	1883	G	N7-C5	-5.40	1.36	1.39
59	A5	2749	G	N1-C2	-5.40	1.33	1.37
59	A5	3144	U	C2-N3	-5.40	1.33	1.37
59	A5	3875	U	N3-C4	-5.40	1.33	1.38
56	A8	72	C	N3-C4	-5.39	1.30	1.33
58	B2	360	G	C5-C6	-5.39	1.36	1.42
58	B2	1084	G	C5-C6	-5.39	1.36	1.42
58	B2	1111	U	N1-C6	-5.39	1.33	1.38
59	A5	99	A	C6-N6	-5.39	1.29	1.33
59	A5	1639	U	N1-C6	-5.39	1.33	1.38
59	A5	1779	G	N7-C5	-5.39	1.36	1.39
59	A5	2714	U	N3-C4	-5.39	1.33	1.38
59	A5	3147	A	C6-N1	-5.39	1.31	1.35
6	CC	70	TRP	CG-CD1	-5.39	1.29	1.36
59	A5	412	U	N1-C2	-5.39	1.33	1.38
59	A5	450	G	N7-C5	-5.39	1.36	1.39
59	A5	792	U	N3-C4	-5.39	1.33	1.38
59	A5	1394	U	C4-O4	-5.39	1.19	1.23
59	A5	1509	A	N3-C4	-5.39	1.31	1.34
59	A5	1552	A	C8-N7	-5.39	1.27	1.31
59	A5	1559	A	C5-C6	-5.39	1.36	1.41
59	A5	1598	A	N3-C4	-5.39	1.31	1.34
59	A5	1793	C	C2-O2	-5.39	1.19	1.24
59	A5	2026	G	N9-C4	-5.39	1.33	1.38
59	A5	2779	A	C2-N3	-5.39	1.28	1.33
59	A5	3492	G	C8-N7	-5.39	1.27	1.30
25	Ca	22	ARG	CB-CG	-5.39	1.38	1.52
54	A9	12	C	N3-C4	-5.39	1.30	1.33
54	A9	15	A	C5-C4	-5.39	1.34	1.38
58	B2	610	U	C2-N3	-5.39	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	838	A	C5-C4	-5.39	1.34	1.38
59	A5	43	A	C8-N7	-5.39	1.27	1.31
59	A5	287	G	N1-C2	-5.39	1.33	1.37
59	A5	1017	A	C5-C6	-5.39	1.36	1.41
59	A5	1093	C	N3-C4	-5.39	1.30	1.33
59	A5	1632	A	N7-C5	-5.39	1.36	1.39
59	A5	1710	G	N9-C8	-5.39	1.34	1.37
59	A5	1711	C	C5-C6	-5.39	1.30	1.34
59	A5	1975	C	C2-N3	-5.39	1.31	1.35
59	A5	3685	U	C2-N3	-5.39	1.33	1.37
59	A5	3882	C	C5-C6	-5.39	1.30	1.34
58	B2	479	A	N9-C4	-5.39	1.34	1.37
59	A5	59	G	N1-C2	-5.39	1.33	1.37
59	A5	1159	C	C4-C5	-5.39	1.38	1.43
55	A7	99	G	N9-C8	-5.39	1.34	1.37
59	A5	2623	C	C2-N3	-5.39	1.31	1.35
59	A5	3615	G	C2-N2	-5.39	1.29	1.34
58	B2	1855	A	C5-C6	-5.38	1.36	1.41
59	A5	1542	C	N1-C2	-5.38	1.34	1.40
59	A5	2052	G	N3-C4	-5.38	1.31	1.35
59	A5	2483	A	N7-C5	-5.38	1.36	1.39
59	A5	2514	U	C2-O2	-5.38	1.17	1.22
59	A5	2787	U	C4-C5	-5.38	1.38	1.43
59	A5	3451	A	C8-N7	-5.38	1.27	1.31
59	A5	3591	A	C2-N3	-5.38	1.28	1.33
59	A5	3612	A	C6-N1	-5.38	1.31	1.35
56	A8	108	A	C8-N7	-5.38	1.27	1.31
55	A7	94	C	C4-C5	-5.38	1.38	1.43
58	B2	1234	G	N7-C5	-5.38	1.36	1.39
59	A5	1037	A	N9-C8	-5.38	1.33	1.37
59	A5	1321	G	N3-C4	-5.38	1.31	1.35
59	A5	1709	A	N3-C4	-5.38	1.31	1.34
59	A5	2776	A	P-OP2	-5.38	1.39	1.49
59	A5	3259	A	C5-C6	-5.38	1.36	1.41
59	A5	3600	G	C6-O6	-5.38	1.19	1.24
58	B2	1238	G	C2-N3	-5.38	1.28	1.32
59	A5	307	A	N3-C4	-5.38	1.31	1.34
59	A5	978	G	N9-C8	-5.38	1.34	1.37
59	A5	2650	G	C5-C4	-5.38	1.34	1.38
59	A5	861	C	N1-C6	-5.38	1.33	1.37
59	A5	1074	U	N1-C2	-5.38	1.33	1.38
59	A5	1626	A	N7-C5	-5.38	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2550	G	C8-N7	-5.38	1.27	1.30
59	A5	2909	A	N9-C8	-5.38	1.33	1.37
59	A5	3965	A	N7-C5	-5.38	1.36	1.39
42	Cf	59	TYR	CB-CG	-5.38	1.43	1.51
58	B2	1187	U	C2-O2	-5.38	1.17	1.22
59	A5	367	A	C5-C6	-5.38	1.36	1.41
59	A5	981	C	N3-C4	-5.38	1.30	1.33
59	A5	1011	U	C5-C6	-5.38	1.29	1.34
59	A5	1338	U	N3-C4	-5.38	1.33	1.38
59	A5	3235	A	C8-N7	-5.38	1.27	1.31
59	A5	3554	G	C5-C4	-5.38	1.34	1.38
59	A5	2245	G	N9-C4	-5.38	1.33	1.38
59	A5	3610	A	C5-C4	-5.38	1.34	1.38
56	A8	44	C	N3-C4	-5.37	1.30	1.33
58	B2	1989	A	C5-C4	-5.37	1.34	1.38
59	A5	33	C	C2-N3	-5.37	1.31	1.35
59	A5	1698	A	C8-N7	-5.37	1.27	1.31
59	A5	2800	C	C4-N4	-5.37	1.29	1.33
59	A5	3145	U	C4-O4	-5.37	1.19	1.23
59	A5	3325	G	C2-N3	-5.37	1.28	1.32
59	A5	3901	G	C8-N7	-5.37	1.27	1.30
56	A8	112	C	C4-C5	-5.37	1.38	1.43
59	A5	303	G	C6-N1	-5.37	1.35	1.39
59	A5	352	U	N1-C6	-5.37	1.33	1.38
59	A5	809	G	C6-O6	-5.37	1.19	1.24
59	A5	1000	G	C2-N2	-5.37	1.29	1.34
59	A5	1752	G	C2-N3	-5.37	1.28	1.32
59	A5	2034	U	N1-C6	-5.37	1.33	1.38
59	A5	2208	G	C5-C6	-5.37	1.36	1.42
59	A5	2510	A	N9-C8	-5.37	1.33	1.37
59	A5	2532	U	C4-C5	-5.37	1.38	1.43
59	A5	2793	C	N3-C4	-5.37	1.30	1.33
59	A5	3342	C	C2-O2	-5.37	1.19	1.24
59	A5	1522	G	N1-C2	-5.37	1.33	1.37
58	B2	330	G	N9-C8	-5.37	1.34	1.37
59	A5	339	C	N1-C2	-5.37	1.34	1.40
59	A5	389	G	N9-C4	-5.37	1.33	1.38
59	A5	1174	G	N3-C4	-5.37	1.31	1.35
59	A5	2748	G	C8-N7	-5.37	1.27	1.30
59	A5	3141	A	N7-C5	-5.37	1.36	1.39
58	B2	1064	A	N3-C4	-5.37	1.31	1.34
59	A5	1424	G	C5-C4	-5.37	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3496	U	C4-C5	-5.37	1.38	1.43
59	A5	3590	C	N1-C6	-5.37	1.33	1.37
59	A5	3680	A	N3-C4	-5.37	1.31	1.34
58	B2	1074	G	N9-C8	-5.37	1.34	1.37
59	A5	2748	G	C2-N3	-5.37	1.28	1.32
59	A5	3411	C	N1-C2	-5.37	1.34	1.40
59	A5	49	A	N9-C8	-5.36	1.33	1.37
59	A5	68	G	N7-C5	-5.36	1.36	1.39
59	A5	1173	U	N1-C6	-5.36	1.33	1.38
59	A5	1737	U	C5-C6	-5.36	1.29	1.34
59	A5	2026	G	C5-C4	-5.36	1.34	1.38
59	A5	2758	U	C4-C5	-5.36	1.38	1.43
59	A5	3321	A	N9-C8	-5.36	1.33	1.37
59	A5	1602	U	C4-C5	-5.36	1.38	1.43
59	A5	2223	C	C4'-C3'	-5.36	1.47	1.52
59	A5	2772	G	C5-C6	-5.36	1.36	1.42
59	A5	64	A	N1-C2	-5.36	1.29	1.34
59	A5	95	G	N7-C5	-5.36	1.36	1.39
59	A5	1208	U	N3-C4	-5.36	1.33	1.38
59	A5	1799	U	C5-C6	-5.36	1.29	1.34
59	A5	2205	G	C6-N1	-5.36	1.35	1.39
59	A5	2503	G	C5-C4	-5.36	1.34	1.38
59	A5	2549	G	N9-C4	-5.36	1.33	1.38
59	A5	3261	U	N1-C2	-5.36	1.33	1.38
59	A5	3469	G	C5-C4	-5.36	1.34	1.38
59	A5	3501	C	N1-C2	-5.36	1.34	1.40
59	A5	3646	G	C5-C4	-5.36	1.34	1.38
59	A5	985	G	N3-C4	-5.36	1.31	1.35
58	B2	1074	G	C5-C4	-5.36	1.34	1.38
58	B2	1198	G	C6-N1	-5.36	1.35	1.39
59	A5	2095	U	C4-C5	-5.36	1.38	1.43
59	A5	2213	G	C5-C4	-5.36	1.34	1.38
55	A7	82	G	C8-N7	-5.36	1.27	1.30
58	B2	361	G	N7-C5	-5.36	1.36	1.39
58	B2	1023	G	N7-C5	-5.36	1.36	1.39
59	A5	1163	G	C2-N3	-5.36	1.28	1.32
59	A5	2715	C	C5-C6	-5.36	1.30	1.34
59	A5	3417	C	N1-C6	-5.36	1.33	1.37
59	A5	3635	G	N9-C4	-5.36	1.33	1.38
45	C1	21	ARG	CB-CG	-5.35	1.38	1.52
59	A5	2493	C	C2-N3	-5.35	1.31	1.35
59	A5	3638	U	C2-N3	-5.35	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3727	A	C5-C4	-5.35	1.35	1.38
56	A8	52	A	N7-C5	-5.35	1.36	1.39
59	A5	320	U	N1-C2	-5.35	1.33	1.38
59	A5	1024	U	N1-C2	-5.35	1.33	1.38
59	A5	1665	C	C5-C6	-5.35	1.30	1.34
59	A5	1715	G	C5-C6	-5.35	1.36	1.42
59	A5	1889	A	C5-C4	-5.35	1.35	1.38
59	A5	2115	U	N1-C6	-5.35	1.33	1.38
59	A5	2505	A	C6-N1	-5.35	1.31	1.35
59	A5	3159	C	C2-N3	-5.35	1.31	1.35
59	A5	3306	U	N3-C4	-5.35	1.33	1.38
59	A5	3308	A	N3-C4	-5.35	1.31	1.34
58	B2	1220	A	N9-C4	-5.35	1.34	1.37
59	A5	308	G	C8-N7	-5.35	1.27	1.30
59	A5	881	G	C5-C4	-5.35	1.34	1.38
59	A5	1890	U	N3-C4	-5.35	1.33	1.38
59	A5	1898	C	N1-C6	-5.35	1.33	1.37
59	A5	3444	G	C8-N7	-5.35	1.27	1.30
59	A5	3492	G	N9-C4	-5.35	1.33	1.38
59	A5	3951	U	N3-C4	-5.35	1.33	1.38
59	A5	352	U	C4-C5	-5.35	1.38	1.43
59	A5	832	U	N3-C4	-5.35	1.33	1.38
59	A5	853	G	C2-N3	-5.35	1.28	1.32
59	A5	877	A	C5-C6	-5.35	1.36	1.41
59	A5	1137	G	C6-O6	-5.35	1.19	1.24
59	A5	1170	U	C4-O4	-5.35	1.19	1.23
59	A5	1211	A	N9-C8	-5.35	1.33	1.37
59	A5	1394	U	C2-N3	-5.35	1.34	1.37
59	A5	1735	G	N3-C4	-5.35	1.31	1.35
59	A5	1780	U	N3-C4	-5.35	1.33	1.38
59	A5	2245	G	C5-C6	-5.35	1.37	1.42
59	A5	3174	A	C5-C4	-5.35	1.35	1.38
59	A5	3583	C	C2-N3	-5.35	1.31	1.35
59	A5	3654	C	N3-C4	-5.35	1.30	1.33
54	A9	13	A	C5-C4	-5.35	1.35	1.38
56	A8	9	G	C5-C4	-5.35	1.34	1.38
58	B2	1717	A	N9-C4	-5.35	1.34	1.37
59	A5	552	U	N3-C4	-5.35	1.33	1.38
59	A5	1137	G	N3-C4	-5.35	1.31	1.35
59	A5	1791	A	C5-C6	-5.35	1.36	1.41
59	A5	2219	U	C5-C6	-5.35	1.29	1.34
59	A5	3347	G	C5-C4	-5.35	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3578	A	N3-C4	-5.35	1.31	1.34
59	A5	1623	G	N7-C5	-5.35	1.36	1.39
59	A5	2735	A	P-O5'	-5.35	1.54	1.59
59	A5	3921	A	C5-C6	-5.35	1.36	1.41
56	A8	111	G	C6-N1	-5.34	1.35	1.39
59	A5	352	U	C5-C6	-5.34	1.29	1.34
59	A5	355	G	N1-C2	-5.34	1.33	1.37
59	A5	365	A	N1-C2	-5.34	1.29	1.34
59	A5	1322	U	C5-C6	-5.34	1.29	1.34
59	A5	1364	A	N9-C4	-5.34	1.34	1.37
59	A5	2483	A	C5-C4	-5.34	1.35	1.38
59	A5	3913	G	N7-C5	-5.34	1.36	1.39
2	CA	20	VAL	CB-CG2	-5.34	1.41	1.52
59	A5	21	U	C2-N3	-5.34	1.34	1.37
59	A5	443	G	C6-N1	-5.34	1.35	1.39
59	A5	782	G	C2-N3	-5.34	1.28	1.32
59	A5	1119	C	N3-C4	-5.34	1.30	1.33
59	A5	2023	A	C5-C6	-5.34	1.36	1.41
59	A5	2178	U	P-O5'	-5.34	1.54	1.59
59	A5	2795	U	C2-N3	-5.34	1.34	1.37
59	A5	3368	C	C4-C5	-5.34	1.38	1.43
58	B2	1828	C	C4-C5	-5.34	1.38	1.43
59	A5	806	A	C5-C6	-5.34	1.36	1.41
59	A5	1684	G	N7-C5	-5.34	1.36	1.39
59	A5	1721	C	C4-N4	-5.34	1.29	1.33
59	A5	2204	U	C2-O2	-5.34	1.17	1.22
59	A5	2561	A	C2-N3	-5.34	1.28	1.33
59	A5	2625	G	C6-N1	-5.34	1.35	1.39
59	A5	2791	A	C5-C4	-5.34	1.35	1.38
59	A5	3499	G	N1-C2	-5.34	1.33	1.37
59	A5	3667	C	N3-C4	-5.34	1.30	1.33
6	CC	48	ARG	CG-CD	-5.34	1.38	1.51
58	B2	1987	G	C6-N1	-5.34	1.35	1.39
59	A5	754	A	N1-C2	-5.34	1.29	1.34
59	A5	1175	C	C2-N3	-5.34	1.31	1.35
59	A5	1768	G	C6-N1	-5.34	1.35	1.39
59	A5	2051	A	C5-C4	-5.34	1.35	1.38
59	A5	2257	C	C2-N3	-5.34	1.31	1.35
59	A5	2510	A	N1-C2	-5.34	1.29	1.34
59	A5	2535	U	C2-N3	-5.34	1.34	1.37
59	A5	2726	A	C6-N6	-5.34	1.29	1.33
59	A5	3965	A	N3-C4	-5.34	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1101	G	C2-N3	-5.34	1.28	1.32
55	A7	92	C	C5-C6	-5.34	1.30	1.34
58	B2	1071	G	N9-C8	-5.34	1.34	1.37
59	A5	83	U	N3-C4	-5.34	1.33	1.38
59	A5	2110	A	C5-C6	-5.34	1.36	1.41
59	A5	2694	G	N9-C4	-5.34	1.33	1.38
59	A5	234	G	C8-N7	-5.33	1.27	1.30
59	A5	2189	U	N3-C4	-5.33	1.33	1.38
59	A5	2212	A	N3-C4	-5.33	1.31	1.34
59	A5	3505	U	C2-N3	-5.33	1.34	1.37
59	A5	322	G	N9-C8	-5.33	1.34	1.37
59	A5	822	G	N9-C8	-5.33	1.34	1.37
59	A5	864	G	C5-C4	-5.33	1.34	1.38
59	A5	2019	U	C2-N3	-5.33	1.34	1.37
59	A5	2184	G	N1-C2	-5.33	1.33	1.37
59	A5	2246	A	C8-N7	-5.33	1.27	1.31
59	A5	3311	A	C5-C4	-5.33	1.35	1.38
58	B2	1081	G	C5-C4	-5.33	1.34	1.38
58	B2	1220	A	C5-C6	-5.33	1.36	1.41
59	A5	991	A	C6-N6	-5.33	1.29	1.33
59	A5	1328	U	N1-C6	-5.33	1.33	1.38
59	A5	2044	A	N9-C4	-5.33	1.34	1.37
59	A5	2502	G	N7-C5	-5.33	1.36	1.39
59	A5	2720	U	N3-C4	-5.33	1.33	1.38
59	A5	3179	A	C5-C6	-5.33	1.36	1.41
59	A5	3461	C	N3-C4	-5.33	1.30	1.33
59	A5	3508	G	C2-N2	-5.33	1.29	1.34
67	CV	38	TYR	CE2-CZ	-5.33	1.31	1.38
25	Ca	53	TYR	CE1-CZ	-5.33	1.31	1.38
55	A7	98	G	C8-N7	-5.33	1.27	1.30
58	B2	13	C	C2-N3	-5.33	1.31	1.35
59	A5	417	A	N3-C4	-5.33	1.31	1.34
59	A5	1409	G	C5-C6	-5.33	1.37	1.42
59	A5	2191	G	C5-C4	-5.33	1.34	1.38
59	A5	2744	C	N1-C6	-5.33	1.33	1.37
59	A5	3616	G	C5-C6	-5.33	1.37	1.42
59	A5	3658	G	N7-C5	-5.33	1.36	1.39
59	A5	853	G	C6-N1	-5.33	1.35	1.39
59	A5	1601	U	N1-C6	-5.33	1.33	1.38
59	A5	2625	G	N9-C8	-5.33	1.34	1.37
59	A5	2686	C	N1-C6	-5.33	1.33	1.37
58	B2	951	A	N7-C5	-5.33	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	108	A	C8-N7	-5.33	1.27	1.31
59	A5	650	A	C5-C6	-5.33	1.36	1.41
59	A5	1016	A	P-O5'	-5.33	1.54	1.59
59	A5	1722	U	C4-C5	-5.33	1.38	1.43
59	A5	1757	A	N7-C5	-5.33	1.36	1.39
59	A5	1778	A	N1-C2	-5.33	1.29	1.34
59	A5	2180	A	C5-C4	-5.33	1.35	1.38
59	A5	2564	U	N1-C6	-5.33	1.33	1.38
59	A5	2682	C	N1-C2	-5.33	1.34	1.40
59	A5	3270	G	C5-C4	-5.33	1.34	1.38
58	B2	8	U	C2-N3	-5.32	1.34	1.37
58	B2	964	G	N1-C2	-5.32	1.33	1.37
59	A5	42	U	C4-O4	-5.32	1.19	1.23
59	A5	1027	A	C8-N7	-5.32	1.27	1.31
59	A5	1144	C	N1-C2	-5.32	1.34	1.40
59	A5	1173	U	C5-C6	-5.32	1.29	1.34
59	A5	1341	G	N9-C4	-5.32	1.33	1.38
59	A5	1595	G	C5-C4	-5.32	1.34	1.38
59	A5	2175	A	N3-C4	-5.32	1.31	1.34
59	A5	3166	C	C2-N3	-5.32	1.31	1.35
59	A5	3474	G	C5-C6	-5.32	1.37	1.42
59	A5	3606	G	C2-N3	-5.32	1.28	1.32
56	A8	38	G	C8-N7	-5.32	1.27	1.30
59	A5	76	C	N1-C2	-5.32	1.34	1.40
59	A5	1416	U	C4-O4	-5.32	1.19	1.23
59	A5	1609	U	C4-C5	-5.32	1.38	1.43
59	A5	388	U	C4-C5	-5.32	1.38	1.43
59	A5	1175	C	C4-C5	-5.32	1.38	1.43
59	A5	1732	A	C5-C4	-5.32	1.35	1.38
59	A5	2154	A	C5-C4	-5.32	1.35	1.38
59	A5	2265	A	N9-C4	-5.32	1.34	1.37
59	A5	2773	G	N3-C4	-5.32	1.31	1.35
59	A5	3168	A	C6-N1	-5.32	1.31	1.35
55	A7	75	G	N3-C4	-5.32	1.31	1.35
59	A5	388	U	C2-N3	-5.32	1.34	1.37
59	A5	1595	G	C5-C6	-5.32	1.37	1.42
59	A5	1873	A	C8-N7	-5.32	1.27	1.31
59	A5	3126	C	N1-C6	-5.32	1.33	1.37
59	A5	82	U	C2-N3	-5.32	1.34	1.37
59	A5	1001	A	C5-C6	-5.32	1.36	1.41
59	A5	1376	U	C5-C6	-5.32	1.29	1.34
59	A5	1752	G	N9-C4	-5.32	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3159	C	N3-C4	-5.32	1.30	1.33
59	A5	3257	U	N1-C6	-5.32	1.33	1.38
58	B2	962	G	N3-C4	-5.32	1.31	1.35
58	B2	1228	G	C6-N1	-5.32	1.35	1.39
58	B2	1231	A	N9-C4	-5.32	1.34	1.37
59	A5	1028	U	C5-C6	-5.32	1.29	1.34
59	A5	1032	G	N7-C5	-5.32	1.36	1.39
59	A5	1177	U	C5-C6	-5.32	1.29	1.34
59	A5	2228	U	C4-C5	-5.32	1.38	1.43
59	A5	2233	C	N1-C2	-5.32	1.34	1.40
59	A5	2501	G	N7-C5	-5.32	1.36	1.39
59	A5	3156	G	N9-C8	-5.31	1.34	1.37
59	A5	65	A	C6-N6	-5.31	1.29	1.33
59	A5	842	A	C5-C6	-5.31	1.36	1.41
59	A5	1152	A	C5-C6	-5.31	1.36	1.41
59	A5	1662	U	C4-C5	-5.31	1.38	1.43
59	A5	1709	A	N7-C5	-5.31	1.36	1.39
59	A5	2163	A	C5-C6	-5.31	1.36	1.41
58	B2	967	C	C4-C5	-5.31	1.38	1.43
58	B2	1230	A	N3-C4	-5.31	1.31	1.34
59	A5	442	A	N3-C4	-5.31	1.31	1.34
58	B2	28	A	N7-C5	-5.31	1.36	1.39
59	A5	785	A	C5-C4	-5.31	1.35	1.38
59	A5	1044	G	N1-C2	-5.31	1.33	1.37
59	A5	2687	A	N9-C8	-5.31	1.33	1.37
59	A5	3143	U	C4'-C3'	-5.31	1.47	1.52
59	A5	3417	C	N3-C4	-5.31	1.30	1.33
41	Ce	95	CYS	CB-SG	-5.31	1.73	1.81
59	A5	104	A	C5-C4	-5.31	1.35	1.38
59	A5	909	A	C5-C4	-5.31	1.35	1.38
59	A5	1615	G	C8-N7	-5.31	1.27	1.30
59	A5	2149	G	N7-C5	-5.31	1.36	1.39
59	A5	3462	A	N9-C4	-5.31	1.34	1.37
58	B2	963	G	C5-C4	-5.30	1.34	1.38
59	A5	773	G	C2-N3	-5.30	1.28	1.32
59	A5	1512	C	C4-C5	-5.30	1.38	1.43
59	A5	3397	U	C4-C5	-5.30	1.38	1.43
59	A5	3640	A	N7-C5	-5.30	1.36	1.39
58	B2	1969	G	N7-C5	-5.30	1.36	1.39
59	A5	102	G	N9-C8	-5.30	1.34	1.37
59	A5	238	G	N9-C8	-5.30	1.34	1.37
59	A5	1723	G	N9-C8	-5.30	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2012	G	C5-C4	-5.30	1.34	1.38
59	A5	3140	G	C2-N2	-5.30	1.29	1.34
59	A5	664	U	C4-C5	-5.30	1.38	1.43
59	A5	1508	U	N1-C2	-5.30	1.33	1.38
59	A5	2545	A	N9-C8	-5.30	1.33	1.37
59	A5	2566	A	C2-N3	-5.30	1.28	1.33
59	A5	3427	G	N3-C4	-5.30	1.31	1.35
58	B2	315	C	N3-C4	-5.30	1.30	1.33
59	A5	355	G	N3-C4	-5.30	1.31	1.35
59	A5	989	A	C6-N6	-5.30	1.29	1.33
59	A5	1387	G	N7-C5	-5.30	1.36	1.39
59	A5	3411	C	C2-N3	-5.30	1.31	1.35
59	A5	3918	A	N3-C4	-5.30	1.31	1.34
58	B2	1038	A	N9-C4	-5.30	1.34	1.37
58	B2	1202	G	N3-C4	-5.30	1.31	1.35
59	A5	826	A	N9-C8	-5.30	1.33	1.37
59	A5	1535	U	C2-N3	-5.30	1.34	1.37
59	A5	2579	G	C8-N7	-5.30	1.27	1.30
59	A5	2747	G	C6-N1	-5.30	1.35	1.39
59	A5	2762	A	N3-C4	-5.30	1.31	1.34
59	A5	816	A	C6-N6	-5.30	1.29	1.33
59	A5	1555	G	N9-C8	-5.30	1.34	1.37
59	A5	1875	G	C6-N1	-5.30	1.35	1.39
59	A5	2180	A	N9-C4	-5.30	1.34	1.37
59	A5	2241	U	C5-C6	-5.30	1.29	1.34
59	A5	2256	G	N1-C2	-5.30	1.33	1.37
59	A5	2505	A	C6-N6	-5.30	1.29	1.33
59	A5	3401	U	P-OP2	-5.30	1.40	1.49
59	A5	3550	C	N1-C6	-5.30	1.33	1.37
31	CS	62	VAL	CB-CG2	-5.29	1.41	1.52
59	A5	1536	U	C2-N3	-5.29	1.34	1.37
59	A5	2041	G	C8-N7	-5.29	1.27	1.30
59	A5	3141	A	P-OP1	-5.29	1.40	1.49
59	A5	3525	A	N3-C4	-5.29	1.31	1.34
59	A5	3881	A	C8-N7	-5.29	1.27	1.31
58	B2	1215	G	C6-N1	-5.29	1.35	1.39
59	A5	315	G	C5-C4	-5.29	1.34	1.38
59	A5	820	A	C4'-C3'	-5.29	1.47	1.52
59	A5	1056	G	C8-N7	-5.29	1.27	1.30
59	A5	1354	G	C2-N2	-5.29	1.29	1.34
59	A5	1724	A	C5-C6	-5.29	1.36	1.41
59	A5	1736	G	C5-C6	-5.29	1.37	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2202	A	N3-C4	-5.29	1.31	1.34
59	A5	975	A	C5-C4	-5.29	1.35	1.38
59	A5	1782	C	C2-N3	-5.29	1.31	1.35
58	B2	1073	G	C5-C4	-5.29	1.34	1.38
59	A5	845	C	C4-C5	-5.29	1.38	1.43
59	A5	3872	C	C2-N3	-5.29	1.31	1.35
55	A7	77	A	N7-C5	-5.29	1.36	1.39
59	A5	3444	G	N1-C2	-5.29	1.33	1.37
59	A5	3632	G	C8-N7	-5.29	1.27	1.30
59	A5	3954	U	N1-C2	-5.29	1.33	1.38
59	A5	64	A	N7-C5	-5.29	1.36	1.39
59	A5	3443	A	C5-C4	-5.29	1.35	1.38
56	A8	100	G	C8-N7	-5.29	1.27	1.30
59	A5	553	A	C8-N7	-5.29	1.27	1.31
59	A5	2146	G	C5-C4	-5.29	1.34	1.38
59	A5	2584	G	N7-C5	-5.29	1.36	1.39
59	A5	3298	U	N1-C6	-5.29	1.33	1.38
59	A5	852	C	C2-N3	-5.28	1.31	1.35
59	A5	1694	A	C6-N1	-5.28	1.31	1.35
59	A5	1722	U	N3-C4	-5.28	1.33	1.38
59	A5	2115	U	N3-C4	-5.28	1.33	1.38
59	A5	3408	C	C2-N3	-5.28	1.31	1.35
58	B2	1051	U	N3-C4	-5.28	1.33	1.38
59	A5	1623	G	C8-N7	-5.28	1.27	1.30
59	A5	1634	A	C6-N1	-5.28	1.31	1.35
59	A5	2144	A	C5-C4	-5.28	1.35	1.38
59	A5	2621	A	N3-C4	-5.28	1.31	1.34
59	A5	3577	U	C4-C5	-5.28	1.38	1.43
59	A5	3637	A	C5-C4	-5.28	1.35	1.38
59	A5	71	A	N9-C8	-5.28	1.33	1.37
59	A5	1628	G	C8-N7	-5.28	1.27	1.30
59	A5	2060	A	N3-C4	-5.28	1.31	1.34
59	A5	2809	C	C2-N3	-5.28	1.31	1.35
58	B2	1216	C	C5-C6	-5.28	1.30	1.34
59	A5	295	G	C2-N3	-5.28	1.28	1.32
59	A5	1167	A	N3-C4	-5.28	1.31	1.34
59	A5	2737	C	C4-C5	-5.28	1.38	1.43
59	A5	2781	G	N3-C4	-5.28	1.31	1.35
59	A5	3144	U	N3-C4	-5.28	1.33	1.38
59	A5	3510	U	C2-N3	-5.28	1.34	1.37
59	A5	307	A	C6-N6	-5.28	1.29	1.33
59	A5	363	G	C5-C6	-5.28	1.37	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3429	A	C5-C4	-5.28	1.35	1.38
58	B2	1067	G	N1-C2	-5.28	1.33	1.37
59	A5	287	G	N9-C8	-5.28	1.34	1.37
59	A5	1361	G	C8-N7	-5.28	1.27	1.30
59	A5	1735	G	N7-C5	-5.28	1.36	1.39
59	A5	2251	G	N7-C5	-5.28	1.36	1.39
59	A5	2533	U	N3-C4	-5.28	1.33	1.38
59	A5	2558	A	C6-N6	-5.28	1.29	1.33
59	A5	3331	A	C6-N1	-5.28	1.31	1.35
59	A5	3495	G	N7-C5	-5.28	1.36	1.39
59	A5	3640	A	C6-N1	-5.28	1.31	1.35
58	B2	1195	G	C2-N3	-5.27	1.28	1.32
59	A5	54	U	C5-C6	-5.27	1.29	1.34
59	A5	1032	G	N1-C2	-5.27	1.33	1.37
59	A5	1399	A	C6-N1	-5.27	1.31	1.35
59	A5	2522	A	C6-N1	-5.27	1.31	1.35
59	A5	3363	G	C8-N7	-5.27	1.27	1.30
59	A5	3622	C	C2-N3	-5.27	1.31	1.35
56	A8	17	U	C4-C5	-5.27	1.38	1.43
58	B2	329	U	C2-N3	-5.27	1.34	1.37
59	A5	390	A	C6-N1	-5.27	1.31	1.35
59	A5	1331	G	N1-C2	-5.27	1.33	1.37
59	A5	1645	G	N1-C2	-5.27	1.33	1.37
59	A5	2510	A	C8-N7	-5.27	1.27	1.31
59	A5	2761	A	C5-C4	-5.27	1.35	1.38
59	A5	3342	C	C4-C5	-5.27	1.38	1.43
59	A5	3758	G	C5-C4	-5.27	1.34	1.38
59	A5	3889	U	N1-C6	-5.27	1.33	1.38
58	B2	1965	U	C2-N3	-5.27	1.34	1.37
59	A5	778	C	N3-C4	-5.27	1.30	1.33
59	A5	817	C	C4-C5	-5.27	1.38	1.43
59	A5	1642	G	N9-C8	-5.27	1.34	1.37
59	A5	2180	A	C8-N7	-5.27	1.27	1.31
59	A5	2198	G	C8-N7	-5.27	1.27	1.30
59	A5	2786	U	N1-C2	-5.27	1.33	1.38
54	A9	15	A	N3-C4	-5.27	1.31	1.34
59	A5	1039	U	C2-N3	-5.27	1.34	1.37
59	A5	1112	G	C2-N2	-5.27	1.29	1.34
59	A5	1737	U	N3-C4	-5.27	1.33	1.38
59	A5	2704	A	C6-N6	-5.27	1.29	1.33
59	A5	3487	A	C8-N7	-5.27	1.27	1.31
58	B2	623	G	N7-C5	-5.27	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	37	G	C8-N7	-5.27	1.27	1.30
59	A5	52	A	C2'-C1'	-5.27	1.47	1.53
59	A5	323	U	N3-C4	-5.27	1.33	1.38
59	A5	1040	C	N1-C6	-5.27	1.33	1.37
59	A5	1527	C	C2-O2	-5.27	1.19	1.24
59	A5	1545	A	C5-C4	-5.27	1.35	1.38
59	A5	2114	U	C4-C5	-5.27	1.38	1.43
59	A5	3510	U	C2'-C1'	-5.27	1.47	1.53
59	A5	3575	G	N1-C2	-5.27	1.33	1.37
59	A5	3595	U	C2-N3	-5.27	1.34	1.37
59	A5	3888	U	C4-C5	-5.27	1.38	1.43
58	B2	1133	G	N7-C5	-5.27	1.36	1.39
58	B2	1196	G	C2-N3	-5.27	1.28	1.32
58	B2	1207	G	C8-N7	-5.27	1.27	1.30
58	B2	615	G	C5-C4	-5.26	1.34	1.38
59	A5	106	A	N9-C4	-5.26	1.34	1.37
59	A5	653	U	N3-C4	-5.26	1.33	1.38
59	A5	919	G	N7-C5	-5.26	1.36	1.39
59	A5	1218	G	N9-C4	-5.26	1.33	1.38
59	A5	1753	G	C5-C6	-5.26	1.37	1.42
59	A5	3879	A	C8-N7	-5.26	1.27	1.31
59	A5	76	C	C5-C6	-5.26	1.30	1.34
59	A5	832	U	C4-C5	-5.26	1.38	1.43
59	A5	1766	U	C2-N3	-5.26	1.34	1.37
59	A5	3298	U	C5-C6	-5.26	1.29	1.34
58	B2	22	A	N9-C4	-5.26	1.34	1.37
59	A5	33	C	N1-C2	-5.26	1.34	1.40
59	A5	69	A	N3-C4	-5.26	1.31	1.34
59	A5	429	U	C4-O4	-5.26	1.19	1.23
59	A5	755	A	C5-C6	5.26	1.45	1.41
59	A5	836	G	N1-C2	-5.26	1.33	1.37
59	A5	1146	U	C4-O4	-5.26	1.19	1.23
59	A5	1172	G	C5-C4	-5.26	1.34	1.38
59	A5	1393	A	C8-N7	-5.26	1.27	1.31
59	A5	1762	G	C6-N1	-5.26	1.35	1.39
59	A5	2092	U	N1-C2	-5.26	1.33	1.38
59	A5	2112	A	C5-C6	-5.26	1.36	1.41
59	A5	3507	A	N7-C5	-5.26	1.36	1.39
33	CP	139	TYR	CE1-CZ	-5.26	1.31	1.38
42	Cf	127	ASN	CB-CG	-5.26	1.39	1.51
58	B2	617	U	N3-C4	-5.26	1.33	1.38
59	A5	56	A	C5-C6	-5.26	1.36	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1155	U	N1-C2	-5.26	1.33	1.38
59	A5	1520	U	C5-C6	-5.26	1.29	1.34
59	A5	1614	A	N9-C8	-5.26	1.33	1.37
59	A5	2025	G	C5-C4	-5.26	1.34	1.38
59	A5	2708	C	N3-C4	-5.26	1.30	1.33
80	CF	111	VAL	CB-CG1	-5.26	1.41	1.52
58	B2	1060	A	N7-C5	-5.26	1.36	1.39
59	A5	312	U	C4-C5	-5.26	1.38	1.43
59	A5	1604	G	C8-N7	-5.26	1.27	1.30
59	A5	2215	G	C6-N1	-5.26	1.35	1.39
59	A5	24	G	N3-C4	-5.26	1.31	1.35
59	A5	323	U	C2-N3	-5.26	1.34	1.37
59	A5	403	A	N9-C4	-5.26	1.34	1.37
59	A5	1340	G	C2-N3	-5.26	1.28	1.32
59	A5	1347	A	C6-N1	-5.26	1.31	1.35
59	A5	2520	U	C2-O2	-5.26	1.17	1.22
59	A5	3267	C	C2-N3	-5.26	1.31	1.35
59	A5	3444	G	C5-C6	-5.26	1.37	1.42
59	A5	1373	A	N1-C2	-5.25	1.29	1.34
54	A9	12	C	N1-C2	-5.25	1.34	1.40
59	A5	826	A	C5-C6	-5.25	1.36	1.41
59	A5	1301	A	N9-C8	-5.25	1.33	1.37
59	A5	1385	G	C6-N1	-5.25	1.35	1.39
59	A5	1675	G	C2-N3	-5.25	1.28	1.32
59	A5	1695	A	C6-N1	-5.25	1.31	1.35
59	A5	3220	U	C4-C5	-5.25	1.38	1.43
59	A5	3554	G	C6-N1	-5.25	1.35	1.39
59	A5	103	A	N9-C8	-5.25	1.33	1.37
59	A5	370	A	C6-N6	-5.25	1.29	1.33
59	A5	827	A	C6-N1	-5.25	1.31	1.35
59	A5	1026	G	C6-N1	-5.25	1.35	1.39
59	A5	1165	A	C8-N7	-5.25	1.27	1.31
59	A5	2090	U	C2-N3	-5.25	1.34	1.37
59	A5	3683	G	C5-C6	-5.25	1.37	1.42
59	A5	798	C	C4-N4	-5.25	1.29	1.33
59	A5	1326	A	N9-C4	-5.25	1.34	1.37
59	A5	2701	G	C6-N1	-5.25	1.35	1.39
59	A5	2719	A	C5-C6	-5.25	1.36	1.41
59	A5	3139	G	C8-N7	-5.25	1.27	1.30
58	B2	1213	A	C6-N1	-5.25	1.31	1.35
58	B2	1921	G	N9-C4	-5.25	1.33	1.38
59	A5	27	A	N3-C4	-5.25	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	360	A	C5-C4	-5.25	1.35	1.38
59	A5	1402	U	N1-C2	-5.25	1.33	1.38
59	A5	1753	G	C6-N1	-5.25	1.35	1.39
59	A5	1870	G	C6-O6	-5.25	1.19	1.24
59	A5	1875	G	N9-C8	-5.25	1.34	1.37
59	A5	2049	G	C2-N3	-5.25	1.28	1.32
59	A5	2190	A	N3-C4	-5.25	1.31	1.34
59	A5	2243	G	N9-C8	-5.25	1.34	1.37
59	A5	2524	A	C5-C4	-5.25	1.35	1.38
59	A5	2775	A	N1-C2	-5.25	1.29	1.34
58	B2	1021	A	N7-C5	-5.25	1.36	1.39
58	B2	1952	G	N7-C5	-5.25	1.36	1.39
59	A5	809	G	P-O5'	-5.25	1.54	1.59
59	A5	1048	A	N7-C5	-5.25	1.36	1.39
59	A5	2229	A	N3-C4	-5.25	1.31	1.34
59	A5	2494	G	C8-N7	-5.25	1.27	1.30
59	A5	3145	U	C2-O2	-5.25	1.17	1.22
59	A5	3231	G	C2-N3	-5.25	1.28	1.32
59	A5	3949	U	N3-C4	-5.25	1.33	1.38
58	B2	1976	A	N3-C4	-5.25	1.31	1.34
59	A5	338	A	C6-N1	-5.25	1.31	1.35
59	A5	982	C	C4-C5	-5.25	1.38	1.43
59	A5	1049	C	N3-C4	-5.25	1.30	1.33
65	CO	9	VAL	CB-CG1	-5.25	1.41	1.52
58	B2	1940	G	C8-N7	-5.24	1.27	1.30
59	A5	366	A	C6-N6	-5.24	1.29	1.33
59	A5	852	C	C5-C6	-5.24	1.30	1.34
59	A5	1614	A	C8-N7	-5.24	1.27	1.31
59	A5	1777	A	C8-N7	-5.24	1.27	1.31
59	A5	2564	U	C2-O2	-5.24	1.17	1.22
59	A5	3149	U	N1-C6	-5.24	1.33	1.38
59	A5	1067	A	N7-C5	-5.24	1.36	1.39
59	A5	3230	G	N1-C2	-5.24	1.33	1.37
59	A5	783	G	C8-N7	-5.24	1.27	1.30
59	A5	1338	U	C4-O4	-5.24	1.19	1.23
59	A5	1373	A	C6-N1	-5.24	1.31	1.35
59	A5	2208	G	N7-C5	-5.24	1.36	1.39
59	A5	2535	U	C4-C5	-5.24	1.38	1.43
59	A5	3151	G	C5-C4	-5.24	1.34	1.38
59	A5	3869	A	C5-C4	-5.24	1.35	1.38
55	A7	82	G	N9-C8	-5.24	1.34	1.37
58	B2	617	U	C4-C5	-5.24	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	393	A	N9-C4	-5.24	1.34	1.37
59	A5	1108	G	P-O5'	-5.24	1.54	1.59
59	A5	2699	A	C5-C4	-5.24	1.35	1.38
59	A5	79	G	N9-C8	-5.24	1.34	1.37
59	A5	1981	A	N7-C5	-5.24	1.36	1.39
59	A5	2231	A	C6-N1	-5.24	1.31	1.35
58	B2	352	G	N7-C5	-5.24	1.36	1.39
59	A5	815	A	C6-N1	-5.24	1.31	1.35
59	A5	856	A	N3-C4	-5.24	1.31	1.34
59	A5	1546	U	C2-O2	-5.24	1.17	1.22
59	A5	1633	G	N3-C4	-5.24	1.31	1.35
59	A5	2558	A	C8-N7	-5.24	1.27	1.31
58	B2	1053	A	N9-C4	-5.23	1.34	1.37
59	A5	314	A	C5-C4	-5.23	1.35	1.38
59	A5	1671	U	C5-C6	-5.23	1.29	1.34
59	A5	1871	A	C5-C6	-5.23	1.36	1.41
59	A5	2649	A	C8-N7	-5.23	1.27	1.31
59	A5	3152	G	C6-N1	-5.23	1.35	1.39
59	A5	3885	C	N1-C6	-5.23	1.34	1.37
56	A8	104	G	N9-C8	-5.23	1.34	1.37
58	B2	1231	A	C6-N1	-5.23	1.31	1.35
59	A5	52	A	C6-N1	-5.23	1.31	1.35
59	A5	248	C	C4-C5	-5.23	1.38	1.43
59	A5	790	U	C2-N3	-5.23	1.34	1.37
59	A5	1389	C	C2-O2	-5.23	1.19	1.24
59	A5	1390	C	C2-N3	-5.23	1.31	1.35
59	A5	2197	A	N1-C2	-5.23	1.29	1.34
59	A5	2535	U	N3-C4	-5.23	1.33	1.38
59	A5	2548	G	N3-C4	-5.23	1.31	1.35
26	CN	155	VAL	CB-CG2	-5.23	1.41	1.52
56	A8	113	A	N9-C4	-5.23	1.34	1.37
58	B2	1059	G	C5-C4	-5.23	1.34	1.38
58	B2	1939	A	C5-C6	-5.23	1.36	1.41
59	A5	244	G	N3-C4	-5.23	1.31	1.35
59	A5	780	U	N1-C2	-5.23	1.33	1.38
59	A5	1202	A	N9-C4	-5.23	1.34	1.37
59	A5	3333	A	C6-N1	-5.23	1.31	1.35
59	A5	3449	G	N7-C5	-5.23	1.36	1.39
58	B2	14	C	N1-C6	-5.23	1.34	1.37
59	A5	32	C	N1-C2	-5.23	1.34	1.40
59	A5	1630	G	C8-N7	-5.23	1.27	1.30
58	B2	1229	G	N7-C5	-5.23	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1940	G	N7-C5	-5.23	1.36	1.39
59	A5	802	G	N9-C8	-5.23	1.34	1.37
59	A5	1033	U	N1-C6	-5.23	1.33	1.38
59	A5	1109	G	C6-N1	-5.23	1.35	1.39
59	A5	1114	A	N9-C4	-5.23	1.34	1.37
59	A5	1347	A	C2-N3	-5.23	1.28	1.33
56	A8	104	G	C5-C4	-5.23	1.34	1.38
59	A5	1967	G	C2-N3	-5.23	1.28	1.32
59	A5	1972	C	C4-C5	-5.23	1.38	1.43
59	A5	3149	U	C5-C6	-5.23	1.29	1.34
59	A5	3443	A	C6-N6	-5.23	1.29	1.33
59	A5	3637	A	N3-C4	-5.23	1.31	1.34
58	B2	1045	U	C2-N3	-5.22	1.34	1.37
58	B2	1206	G	N9-C8	-5.22	1.34	1.37
59	A5	248	C	N3-C4	-5.22	1.30	1.33
59	A5	861	C	C4-C5	-5.22	1.38	1.43
59	A5	1012	G	C8-N7	-5.22	1.27	1.30
59	A5	1374	C	C5-C6	-5.22	1.30	1.34
59	A5	1547	A	N9-C8	-5.22	1.33	1.37
59	A5	1984	U	C4-C5	-5.22	1.38	1.43
59	A5	2661	G	C6-N1	-5.22	1.35	1.39
59	A5	2730	A	N9-C8	-5.22	1.33	1.37
59	A5	2909	A	C5-C4	-5.22	1.35	1.38
59	A5	3658	G	C2-N3	-5.22	1.28	1.32
59	A5	2208	G	C6-N1	-5.22	1.35	1.39
59	A5	3504	G	C5-C4	-5.22	1.34	1.38
58	B2	391	G	N9-C8	-5.22	1.34	1.37
58	B2	1018	C	C2-N3	-5.22	1.31	1.35
59	A5	661	G	C6-N1	-5.22	1.35	1.39
59	A5	2261	G	N3-C4	-5.22	1.31	1.35
59	A5	3297	C	C5-C6	-5.22	1.30	1.34
59	A5	161	G	N3-C4	-5.22	1.31	1.35
59	A5	2036	G	N7-C5	-5.22	1.36	1.39
59	A5	2708	C	C2-O2	-5.22	1.19	1.24
59	A5	3626	A	N7-C5	-5.22	1.36	1.39
59	A5	865	A	N7-C5	-5.22	1.36	1.39
59	A5	1104	A	N7-C5	-5.22	1.36	1.39
59	A5	1119	C	C4-C5	-5.22	1.38	1.43
59	A5	1630	G	C2-N3	-5.22	1.28	1.32
59	A5	1737	U	N1-C2	-5.22	1.33	1.38
59	A5	415	A	C5-C6	-5.22	1.36	1.41
59	A5	792	U	C4-O4	-5.22	1.19	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1341	G	C2-N3	-5.22	1.28	1.32
59	A5	2775	A	N3-C4	-5.22	1.31	1.34
58	B2	625	U	C2-N3	-5.21	1.34	1.37
58	B2	1191	C	N1-C6	-5.21	1.34	1.37
58	B2	1972	G	C6-N1	-5.21	1.35	1.39
59	A5	341	A	N9-C4	-5.21	1.34	1.37
59	A5	740	G	N7-C5	-5.21	1.36	1.39
59	A5	1270	G	N9-C8	-5.21	1.34	1.37
59	A5	2025	G	C6-N1	-5.21	1.35	1.39
59	A5	2673	A	N3-C4	-5.21	1.31	1.34
59	A5	2804	U	N1-C2	-5.21	1.33	1.38
37	Cr	9	TRP	CB-CG	-5.21	1.40	1.50
59	A5	128	C	C4-C5	-5.21	1.38	1.43
59	A5	285	G	C5-C4	-5.21	1.34	1.38
59	A5	1196	A	N9-C8	-5.21	1.33	1.37
26	CN	129	TYR	CD1-CE1	-5.21	1.31	1.39
56	A8	37	U	N3-C4	-5.21	1.33	1.38
58	B2	638	A	N9-C8	-5.21	1.33	1.37
59	A5	440	U	C2-N3	-5.21	1.34	1.37
59	A5	1149	C	C4-N4	-5.21	1.29	1.33
59	A5	1371	A	C5-C6	-5.21	1.36	1.41
59	A5	2247	U	C4-C5	-5.21	1.38	1.43
59	A5	1078	G	N9-C4	-5.21	1.33	1.38
59	A5	1355	C	C2'-C1'	-5.21	1.47	1.53
59	A5	3283	U	N1-C2	-5.21	1.33	1.38
56	A8	36	A	C6-N1	-5.21	1.31	1.35
58	B2	1099	U	C2-N3	-5.21	1.34	1.37
59	A5	1319	A	C8-N7	-5.21	1.27	1.31
59	A5	2501	G	C2-N3	-5.21	1.28	1.32
59	A5	3400	U	N3-C4	-5.21	1.33	1.38
59	A5	3472	A	C4'-C3'	5.21	1.58	1.53
59	A5	3543	A	C8-N7	-5.21	1.27	1.31
59	A5	3644	C	C4-C5	-5.21	1.38	1.43
58	B2	1179	A	N7-C5	-5.21	1.36	1.39
59	A5	334	U	C2-N3	-5.21	1.34	1.37
59	A5	1373	A	N7-C5	-5.21	1.36	1.39
59	A5	1554	C	C5-C6	-5.21	1.30	1.34
59	A5	3523	U	C4-O4	-5.21	1.19	1.23
59	A5	88	U	C4-O4	-5.21	1.19	1.23
59	A5	406	G	C5-C4	-5.21	1.34	1.38
59	A5	546	G	C5-C4	-5.21	1.34	1.38
59	A5	851	G	C8-N7	-5.21	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	1393	A	C6-N1	-5.21	1.31	1.35
59	A5	2563	G	C2-N3	-5.21	1.28	1.32
6	CC	235	VAL	CB-CG2	-5.20	1.42	1.52
59	A5	1335	C	C2-N3	-5.20	1.31	1.35
59	A5	1604	G	C6-N1	-5.20	1.35	1.39
59	A5	1708	G	N9-C8	-5.20	1.34	1.37
59	A5	2177	G	N1-C2	-5.20	1.33	1.37
59	A5	853	G	C8-N7	-5.20	1.27	1.30
2	CA	61	VAL	CB-CG2	-5.20	1.42	1.52
2	CA	191	VAL	CB-CG1	-5.20	1.42	1.52
33	CP	139	TYR	CB-CG	-5.20	1.43	1.51
58	B2	974	A	N9-C4	-5.20	1.34	1.37
58	B2	1197	G	C5-C4	-5.20	1.34	1.38
58	B2	1990	U	C2-N3	-5.20	1.34	1.37
59	A5	833	U	C5-C6	-5.20	1.29	1.34
59	A5	2016	U	C4-O4	-5.20	1.19	1.23
56	A8	61	C	N1-C6	-5.20	1.34	1.37
58	B2	607	A	N9-C8	-5.20	1.33	1.37
58	B2	1064	A	N7-C5	-5.20	1.36	1.39
58	B2	1975	G	C5-C4	-5.20	1.34	1.38
59	A5	546	G	C8-N7	-5.20	1.27	1.30
59	A5	1033	U	C2-N3	-5.20	1.34	1.37
59	A5	1366	G	C6-N1	-5.20	1.35	1.39
59	A5	1703	A	N3-C4	-5.20	1.31	1.34
59	A5	2492	A	C5-C6	-5.20	1.36	1.41
59	A5	2567	U	C5-C6	-5.20	1.29	1.34
59	A5	3125	A	C5-C4	-5.20	1.35	1.38
59	A5	3454	G	C8-N7	-5.20	1.27	1.30
59	A5	3587	U	N1-C6	-5.20	1.33	1.38
48	Cp	30	GLU	CG-CD	-5.20	1.44	1.51
59	A5	247	C	C4-C5	-5.20	1.38	1.43
59	A5	1663	G	N9-C8	-5.20	1.34	1.37
59	A5	2519	U	N1-C6	-5.20	1.33	1.38
56	A8	104	G	N7-C5	-5.20	1.36	1.39
58	B2	328	A	N3-C4	-5.20	1.31	1.34
58	B2	349	A	C5-C4	-5.20	1.35	1.38
58	B2	629	A	C5-C4	-5.20	1.35	1.38
59	A5	52	A	C6-N6	-5.20	1.29	1.33
59	A5	84	U	C4-C5	-5.20	1.38	1.43
59	A5	291	U	N1-C2	-5.20	1.33	1.38
59	A5	1209	A	N9-C8	-5.20	1.33	1.37
59	A5	2004	G	N7-C5	-5.20	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2060	A	N7-C5	-5.20	1.36	1.39
59	A5	3901	G	C6-N1	-5.20	1.35	1.39
73	AO	150	ARG	CG-CD	-5.20	1.39	1.51
59	A5	1062	C	N1-C2	-5.19	1.34	1.40
59	A5	1674	A	C5-C4	-5.19	1.35	1.38
59	A5	2544	U	C5-C6	-5.19	1.29	1.34
59	A5	3539	C	N3-C4	-5.19	1.30	1.33
58	B2	1175	A	C6-N1	-5.19	1.31	1.35
59	A5	823	U	N1-C6	-5.19	1.33	1.38
59	A5	1041	A	N9-C4	-5.19	1.34	1.37
59	A5	1045	G	N3-C4	-5.19	1.31	1.35
59	A5	1164	G	C6-N1	-5.19	1.35	1.39
59	A5	1519	A	C5-C4	-5.19	1.35	1.38
59	A5	2808	G	N1-C2	-5.19	1.33	1.37
59	A5	3321	A	N7-C5	-5.19	1.36	1.39
59	A5	3548	U	C2-N3	-5.19	1.34	1.37
2	CA	44	VAL	CB-CG1	-5.19	1.42	1.52
58	B2	1062	C	N1-C2	-5.19	1.34	1.40
58	B2	1072	A	N9-C8	-5.19	1.33	1.37
59	A5	68	G	N1-C2	-5.19	1.33	1.37
59	A5	836	G	C2-N3	-5.19	1.28	1.32
59	A5	851	G	C2-N2	-5.19	1.29	1.34
59	A5	2715	C	C2-O2	-5.19	1.19	1.24
59	A5	3410	G	C2-N3	-5.19	1.28	1.32
59	A5	3673	G	N1-C2	-5.19	1.33	1.37
58	B2	1078	G	C8-N7	-5.19	1.27	1.30
58	B2	1241	G	C5-C4	-5.19	1.34	1.38
59	A5	305	G	N7-C5	-5.19	1.36	1.39
59	A5	307	A	C5-C4	-5.19	1.35	1.38
59	A5	2497	C	C2-N3	-5.19	1.31	1.35
59	A5	2801	U	C2-O2	-5.19	1.17	1.22
56	A8	13	U	C5-C6	-5.19	1.29	1.34
59	A5	317	G	C8-N7	-5.19	1.27	1.30
59	A5	363	G	C2-N2	-5.19	1.29	1.34
59	A5	1528	G	N9-C4	-5.19	1.33	1.38
59	A5	1691	A	C2-N3	-5.19	1.28	1.33
59	A5	1764	G	C8-N7	-5.19	1.27	1.30
59	A5	2245	G	N3-C4	-5.19	1.31	1.35
59	A5	3298	U	N1-C2	-5.19	1.33	1.38
59	A5	3524	G	N7-C5	-5.19	1.36	1.39
59	A5	3888	U	C5-C6	-5.19	1.29	1.34
59	A5	3906	U	N1-C6	-5.19	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	A7	95	U	N1-C6	-5.19	1.33	1.38
59	A5	341	A	C2-N3	-5.19	1.28	1.33
59	A5	1198	U	P-O5'	5.19	1.65	1.59
59	A5	3133	A	C4'-C3'	-5.19	1.47	1.52
59	A5	3182	U	C2-N3	-5.19	1.34	1.37
6	CC	100	ARG	CB-CG	-5.18	1.38	1.52
59	A5	1525	G	C6-O6	-5.18	1.19	1.24
59	A5	1753	G	C5-C4	-5.18	1.34	1.38
59	A5	2714	U	N1-C6	-5.18	1.33	1.38
56	A8	12	G	C2-N3	-5.18	1.28	1.32
58	B2	624	G	N3-C4	-5.18	1.31	1.35
59	A5	69	A	N9-C4	-5.18	1.34	1.37
59	A5	359	G	N9-C4	-5.18	1.33	1.38
59	A5	994	U	C2-O2	-5.18	1.17	1.22
59	A5	1051	C	N1-C6	-5.18	1.34	1.37
59	A5	1725	A	C6-N6	-5.18	1.29	1.33
59	A5	1788	G	N9-C4	-5.18	1.33	1.38
59	A5	2012	G	N7-C5	-5.18	1.36	1.39
59	A5	2591	A	C5-C6	-5.18	1.36	1.41
59	A5	2656	C	C4-C5	-5.18	1.38	1.43
59	A5	3194	A	N7-C5	-5.18	1.36	1.39
59	A5	305	G	C8-N7	-5.18	1.27	1.30
59	A5	2160	C	C4-C5	-5.18	1.38	1.43
59	A5	2260	U	N3-C4	-5.18	1.33	1.38
59	A5	79	G	C8-N7	-5.18	1.27	1.30
59	A5	321	G	N9-C8	-5.18	1.34	1.37
59	A5	839	A	C5-C6	-5.18	1.36	1.41
59	A5	1757	A	C2-N3	-5.18	1.28	1.33
59	A5	2995	U	C2-N3	-5.18	1.34	1.37
59	A5	3400	U	P-OP2	-5.18	1.40	1.49
59	A5	3580	G	C5-C4	-5.18	1.34	1.38
59	A5	3647	A	C5-C4	-5.18	1.35	1.38
59	A5	3674	G	C2-N3	-5.18	1.28	1.32
65	CO	151	TYR	CB-CG	-5.18	1.43	1.51
58	B2	351	G	N1-C2	-5.18	1.33	1.37
59	A5	2186	C	N3-C4	-5.18	1.30	1.33
58	B2	406	A	C5-C6	-5.18	1.36	1.41
59	A5	1161	C	N3-C4	-5.18	1.30	1.33
59	A5	1206	G	N3-C4	-5.18	1.31	1.35
59	A5	1413	C	N1-C2	-5.18	1.34	1.40
59	A5	1625	U	C2-N3	-5.18	1.34	1.37
59	A5	3139	G	P-O5'	-5.18	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3488	G	N9-C4	-5.18	1.33	1.38
56	A8	61	C	C2-N3	-5.17	1.31	1.35
58	B2	1222	C	C4-C5	-5.17	1.38	1.43
58	B2	1846	G	N9-C8	-5.17	1.34	1.37
59	A5	328	U	C4-C5	-5.17	1.38	1.43
59	A5	829	U	C2-N3	-5.17	1.34	1.37
59	A5	1388	C	N3-C4	-5.17	1.30	1.33
59	A5	1649	G	C5-C6	-5.17	1.37	1.42
59	A5	1977	A	N9-C4	-5.17	1.34	1.37
59	A5	1992	G	C8-N7	-5.17	1.27	1.30
59	A5	2518	A	N3-C4	-5.17	1.31	1.34
59	A5	2677	A	N9-C8	-5.17	1.33	1.37
59	A5	3270	G	N9-C8	-5.17	1.34	1.37
59	A5	3327	U	C2-O2	-5.17	1.17	1.22
59	A5	3535	G	N7-C5	-5.17	1.36	1.39
59	A5	3593	A	C6-N6	-5.17	1.29	1.33
59	A5	3618	A	C8-N7	-5.17	1.27	1.31
59	A5	3878	U	C2-O2	-5.17	1.17	1.22
56	A8	87	A	C5-C6	-5.17	1.36	1.41
58	B2	1194	C	N1-C6	-5.17	1.34	1.37
59	A5	1419	A	C5-C4	-5.17	1.35	1.38
59	A5	3127	A	N9-C4	-5.17	1.34	1.37
58	B2	1779	A	N9-C4	-5.17	1.34	1.37
59	A5	770	C	N1-C2	-5.17	1.34	1.40
59	A5	1404	A	N7-C5	-5.17	1.36	1.39
59	A5	1419	A	C6-N1	-5.17	1.31	1.35
59	A5	3346	G	C4'-C3'	-5.17	1.47	1.52
59	A5	3503	G	C5-C4	-5.17	1.34	1.38
58	B2	327	G	C6-N1	-5.17	1.35	1.39
58	B2	441	A	N3-C4	-5.17	1.31	1.34
59	A5	44	A	C5-C6	-5.17	1.36	1.41
59	A5	914	C	C5-C6	-5.17	1.30	1.34
59	A5	999	U	C5-C6	-5.17	1.29	1.34
59	A5	1318	A	C6-N6	-5.17	1.29	1.33
59	A5	1558	A	N3-C4	-5.17	1.31	1.34
59	A5	2115	U	C2-N3	-5.17	1.34	1.37
58	B2	965	G	C2-N3	-5.17	1.28	1.32
59	A5	350	C	N1-C2	-5.17	1.34	1.40
59	A5	856	A	N7-C5	-5.17	1.36	1.39
59	A5	2738	C	C5-C6	-5.17	1.30	1.34
58	B2	629	A	N3-C4	-5.17	1.31	1.34
58	B2	1070	A	C5-C6	-5.17	1.36	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	102	G	C4'-C3'	-5.17	1.47	1.52
59	A5	228	C	N1-C6	-5.17	1.34	1.37
59	A5	373	A	C2-N3	-5.17	1.28	1.33
59	A5	1348	G	N9-C4	-5.17	1.33	1.38
59	A5	1876	G	C8-N7	-5.17	1.27	1.30
59	A5	2529	G	C8-N7	-5.17	1.27	1.30
59	A5	2666	G	C8-N7	-5.17	1.27	1.30
58	B2	1113	A	C6-N1	-5.17	1.31	1.35
59	A5	843	A	C5-C6	-5.17	1.36	1.41
59	A5	1218	G	N3-C4	-5.17	1.31	1.35
59	A5	2618	G	N3-C4	-5.17	1.31	1.35
56	A8	92	G	N9-C8	-5.16	1.34	1.37
58	B2	107	A	C5-C4	-5.16	1.35	1.38
59	A5	27	A	C2'-C1'	-5.16	1.47	1.53
59	A5	828	G	C5-C6	-5.16	1.37	1.42
59	A5	1005	G	C6-O6	-5.16	1.19	1.24
59	A5	2561	A	C5-C6	-5.16	1.36	1.41
59	A5	2662	C	N3-C4	-5.16	1.30	1.33
59	A5	2765	A	C5-C4	-5.16	1.35	1.38
59	A5	3257	U	N3-C4	-5.16	1.33	1.38
59	A5	413	A	N7-C5	-5.16	1.36	1.39
59	A5	794	G	N3-C4	-5.16	1.31	1.35
59	A5	1635	A	N3-C4	-5.16	1.31	1.34
59	A5	1749	A	C6-N1	-5.16	1.31	1.35
59	A5	2601	A	N7-C5	-5.16	1.36	1.39
59	A5	2749	G	N9-C4	-5.16	1.33	1.38
59	A5	3679	C	N1-C6	-5.16	1.34	1.37
56	A8	19	A	N9-C8	-5.16	1.33	1.37
59	A5	989	A	C8-N7	-5.16	1.27	1.31
59	A5	1537	G	C8-N7	-5.16	1.27	1.30
59	A5	1666	A	N3-C4	-5.16	1.31	1.34
59	A5	1952	A	N9-C4	-5.16	1.34	1.37
59	A5	2581	U	N1-C6	-5.16	1.33	1.38
59	A5	3540	G	N3-C4	-5.16	1.31	1.35
54	A9	23	G	C5-C4	-5.16	1.34	1.38
59	A5	845	C	N3-C4	-5.16	1.30	1.33
59	A5	1363	G	N1-C2	-5.16	1.33	1.37
59	A5	1654	C	C2-N3	-5.16	1.31	1.35
59	A5	2158	U	C2-O2	-5.16	1.17	1.22
59	A5	2496	A	N1-C2	-5.16	1.29	1.34
59	A5	2500	G	C2-N3	-5.16	1.28	1.32
59	A5	2510	A	N3-C4	-5.16	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3131	C	C4-C5	-5.16	1.38	1.43
59	A5	3870	A	C5-C4	-5.16	1.35	1.38
59	A5	203	A	N3-C4	-5.16	1.31	1.34
59	A5	986	A	N7-C5	-5.16	1.36	1.39
59	A5	2566	A	C8-N7	-5.16	1.27	1.31
59	A5	3254	U	C2-N3	-5.16	1.34	1.37
59	A5	3466	A	N9-C4	5.16	1.41	1.37
59	A5	3672	U	C2-N3	-5.16	1.34	1.37
55	A7	98	G	C5-C4	-5.16	1.34	1.38
59	A5	297	U	C5-C6	-5.16	1.29	1.34
59	A5	1068	C	N1-C6	-5.16	1.34	1.37
59	A5	1171	G	N9-C4	-5.16	1.33	1.38
59	A5	1670	G	C6-N1	-5.16	1.35	1.39
59	A5	2237	A	C8-N7	-5.16	1.27	1.31
59	A5	2254	U	N1-C2	-5.16	1.33	1.38
59	A5	2681	A	C5-C6	-5.16	1.36	1.41
59	A5	2682	C	N3-C4	-5.16	1.30	1.33
59	A5	2151	A	N1-C2	-5.15	1.29	1.34
59	A5	3892	A	N9-C4	5.15	1.41	1.37
58	B2	1217	U	C4-C5	-5.15	1.39	1.43
59	A5	56	A	C6-N6	-5.15	1.29	1.33
59	A5	111	A	C2-N3	-5.15	1.28	1.33
59	A5	1177	U	N3-C4	-5.15	1.33	1.38
59	A5	1534	G	N3-C4	-5.15	1.31	1.35
59	A5	1946	G	C6-N1	-5.15	1.35	1.39
59	A5	3164	C	N1-C6	-5.15	1.34	1.37
59	A5	3311	A	N9-C4	-5.15	1.34	1.37
59	A5	3441	C	N1-C6	-5.15	1.34	1.37
13	AL	135	VAL	CB-CG1	-5.15	1.42	1.52
58	B2	7	G	N1-C2	-5.15	1.33	1.37
59	A5	1171	G	N1-C2	-5.15	1.33	1.37
59	A5	1594	U	C5-C6	-5.15	1.29	1.34
59	A5	1711	C	N1-C2	-5.15	1.34	1.40
59	A5	2579	G	N9-C8	-5.15	1.34	1.37
59	A5	2757	U	C5-C6	-5.15	1.29	1.34
58	B2	1228	G	N9-C4	-5.15	1.33	1.38
59	A5	1027	A	C6-N6	-5.15	1.29	1.33
59	A5	1111	C	C4-N4	-5.15	1.29	1.33
59	A5	3319	A	C5-C6	-5.15	1.36	1.41
59	A5	3658	G	N9-C4	-5.15	1.33	1.38
59	A5	2218	G	N3-C4	-5.15	1.31	1.35
59	A5	2226	A	N1-C2	-5.15	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2513	G	C6-N1	-5.15	1.35	1.39
59	A5	2561	A	N9-C4	-5.15	1.34	1.37
59	A5	2580	C	C4-C5	-5.15	1.38	1.43
59	A5	2784	C	N1-C2	-5.15	1.35	1.40
59	A5	3138	G	C6-N1	-5.15	1.35	1.39
59	A5	3252	G	C2-N3	-5.15	1.28	1.32
59	A5	3501	C	N3-C4	-5.15	1.30	1.33
59	A5	1882	G	C5-C4	-5.15	1.34	1.38
59	A5	2039	G	N9-C8	-5.15	1.34	1.37
55	A7	104	C	N3-C4	-5.14	1.30	1.33
58	B2	1446	G	N7-C5	-5.14	1.36	1.39
59	A5	38	A	C8-N7	-5.14	1.27	1.31
59	A5	291	U	C2-N3	-5.14	1.34	1.37
59	A5	1102	G	N7-C5	-5.14	1.36	1.39
59	A5	1383	A	N3-C4	-5.14	1.31	1.34
59	A5	2519	U	C5-C6	-5.14	1.29	1.34
59	A5	2550	G	C5-C4	-5.14	1.34	1.38
59	A5	2570	C	N1-C2	-5.14	1.35	1.40
59	A5	3418	U	C4-C5	-5.14	1.39	1.43
56	A8	9	G	N1-C2	-5.14	1.33	1.37
59	A5	81	A	C5-C6	-5.14	1.36	1.41
59	A5	206	C	N1-C6	-5.14	1.34	1.37
59	A5	1096	A	C5-C6	-5.14	1.36	1.41
59	A5	1178	U	N3-C4	-5.14	1.33	1.38
59	A5	1632	A	N3-C4	-5.14	1.31	1.34
59	A5	2184	G	C2-N2	-5.14	1.29	1.34
59	A5	2238	A	N7-C5	-5.14	1.36	1.39
54	A9	22	A	C5-C4	-5.14	1.35	1.38
56	A8	56	U	N1-C6	-5.14	1.33	1.38
58	B2	600	A	N9-C4	-5.14	1.34	1.37
59	A5	310	A	N9-C8	-5.14	1.33	1.37
59	A5	522	G	N7-C5	-5.14	1.36	1.39
59	A5	1170	U	C5-C6	-5.14	1.29	1.34
59	A5	1658	G	C2-N3	-5.14	1.28	1.32
59	A5	3602	U	C2-N3	-5.14	1.34	1.37
59	A5	245	G	N7-C5	-5.14	1.36	1.39
59	A5	987	G	N1-C2	-5.14	1.33	1.37
59	A5	1126	A	P-O5'	-5.14	1.54	1.59
59	A5	2536	G	C6-N1	-5.14	1.35	1.39
59	A5	2700	C	C2-N3	-5.14	1.31	1.35
59	A5	2786	U	N1-C6	-5.14	1.33	1.38
59	A5	3365	G	C5-C4	-5.14	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3460	C	C4-C5	-5.14	1.38	1.43
59	A5	1026	G	N9-C4	-5.14	1.33	1.38
59	A5	1271	G	N7-C5	-5.14	1.36	1.39
26	CN	180	TYR	CG-CD2	-5.14	1.32	1.39
59	A5	843	A	C8-N7	-5.14	1.27	1.31
59	A5	865	A	N3-C4	-5.14	1.31	1.34
59	A5	1122	U	N1-C6	-5.14	1.33	1.38
59	A5	2210	U	N3-C4	-5.14	1.33	1.38
59	A5	2239	C	N1-C6	-5.14	1.34	1.37
59	A5	3302	G	N7-C5	-5.14	1.36	1.39
59	A5	854	U	C2-N3	-5.13	1.34	1.37
59	A5	995	G	C2-N2	-5.13	1.29	1.34
59	A5	1271	G	N1-C2	-5.13	1.33	1.37
59	A5	1387	G	N3-C4	-5.13	1.31	1.35
59	A5	2049	G	C5-C4	-5.13	1.34	1.38
59	A5	2193	C	C2-N3	-5.13	1.31	1.35
59	A5	2686	C	N1-C2	-5.13	1.35	1.40
59	A5	2717	C	C2-N3	-5.13	1.31	1.35
59	A5	3334	A	C5-C4	-5.13	1.35	1.38
59	A5	3519	C	P-OP1	-5.13	1.40	1.49
59	A5	2241	U	N1-C6	-5.13	1.33	1.38
59	A5	2560	A	C6-N6	-5.13	1.29	1.33
59	A5	3404	A	C8-N7	-5.13	1.27	1.31
56	A8	30	G	N1-C2	-5.13	1.33	1.37
58	B2	1819	U	C2-N3	-5.13	1.34	1.37
58	B2	1982	C	C5-C6	-5.13	1.30	1.34
59	A5	551	C	C2-N3	-5.13	1.31	1.35
59	A5	856	A	N9-C8	-5.13	1.33	1.37
59	A5	1145	C	N1-C6	-5.13	1.34	1.37
59	A5	1347	A	C8-N7	-5.13	1.27	1.31
59	A5	1377	A	C2-N3	-5.13	1.28	1.33
59	A5	1724	A	N3-C4	-5.13	1.31	1.34
59	A5	2489	G	N7-C5	-5.13	1.36	1.39
59	A5	368	C	N3-C4	-5.13	1.30	1.33
59	A5	1765	U	C4-C5	-5.13	1.39	1.43
59	A5	2580	C	N3-C4	-5.13	1.30	1.33
58	B2	1065	A	C5-C4	-5.13	1.35	1.38
59	A5	1109	G	N9-C4	-5.13	1.33	1.38
59	A5	1382	U	P-O5'	5.13	1.64	1.59
59	A5	1397	A	N3-C4	-5.13	1.31	1.34
59	A5	1599	C	C4-C5	-5.13	1.38	1.43
59	A5	1675	G	P-O5'	-5.13	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2494	G	C6-O6	-5.13	1.19	1.24
59	A5	3138	G	N3-C4	-5.13	1.31	1.35
59	A5	3328	G	N1-C2	-5.13	1.33	1.37
59	A5	3502	A	N9-C4	5.13	1.41	1.37
59	A5	300	A	N9-C8	-5.13	1.33	1.37
59	A5	790	U	N1-C6	-5.13	1.33	1.38
59	A5	1410	A	N9-C8	-5.13	1.33	1.37
59	A5	1514	U	N1-C2	-5.13	1.33	1.38
59	A5	2142	A	N7-C5	-5.13	1.36	1.39
59	A5	2184	G	C2-N3	-5.13	1.28	1.32
59	A5	2482	C	N3-C4	-5.13	1.30	1.33
59	A5	3642	G	N7-C5	-5.13	1.36	1.39
77	Cg	13	TYR	CD1-CE1	-5.13	1.31	1.39
54	A9	18	G	N7-C5	-5.12	1.36	1.39
58	B2	1160	A	N9-C4	-5.12	1.34	1.37
59	A5	354	A	C8-N7	-5.12	1.27	1.31
59	A5	1155	U	P-OP1	-5.12	1.40	1.49
59	A5	2237	A	C6-N1	-5.12	1.31	1.35
59	A5	2612	G	N7-C5	-5.12	1.36	1.39
59	A5	3468	G	C5-C6	-5.12	1.37	1.42
59	A5	46	C	N3-C4	-5.12	1.30	1.33
59	A5	59	G	N9-C4	-5.12	1.33	1.38
59	A5	286	A	C6-N1	-5.12	1.31	1.35
59	A5	425	A	C5-C6	-5.12	1.36	1.41
59	A5	810	A	C4'-C3'	-5.12	1.47	1.52
59	A5	1335	C	C4-C5	-5.12	1.38	1.43
59	A5	1655	A	C8-N7	-5.12	1.27	1.31
59	A5	2523	A	C5-C4	-5.12	1.35	1.38
59	A5	3126	C	N3-C4	-5.12	1.30	1.33
59	A5	3291	U	N1-C2	-5.12	1.33	1.38
59	A5	3801	A	C5-C4	-5.12	1.35	1.38
58	B2	1106	A	C5-C4	-5.12	1.35	1.38
58	B2	1175	A	C5-C4	-5.12	1.35	1.38
59	A5	771	A	C6-N1	-5.12	1.31	1.35
59	A5	1036	A	N9-C8	-5.12	1.33	1.37
59	A5	1046	A	N3-C4	-5.12	1.31	1.34
59	A5	1510	G	P-O5'	-5.12	1.54	1.59
59	A5	1542	C	C2-N3	-5.12	1.31	1.35
59	A5	1736	G	P-OP1	-5.12	1.40	1.49
59	A5	2021	C	C4-C5	-5.12	1.38	1.43
59	A5	2211	A	C8-N7	-5.12	1.27	1.31
59	A5	3293	G	N7-C5	-5.12	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3594	A	C6-N6	-5.12	1.29	1.33
59	A5	3628	G	N9-C4	-5.12	1.33	1.38
37	Cr	9	TRP	CE3-CZ3	-5.12	1.29	1.38
59	A5	1115	A	C5-C6	-5.12	1.36	1.41
59	A5	1320	U	N1-C6	-5.12	1.33	1.38
59	A5	3233	C	N1-C2	-5.12	1.35	1.40
55	A7	83	A	C6-N1	-5.12	1.31	1.35
58	B2	1202	G	C2-N3	-5.12	1.28	1.32
59	A5	448	A	C8-N7	-5.12	1.27	1.31
59	A5	811	G	C5-C4	-5.12	1.34	1.38
59	A5	1197	A	C3'-O3'	5.12	1.49	1.42
59	A5	1706	G	N7-C5	-5.12	1.36	1.39
59	A5	3161	U	C5-C6	-5.12	1.29	1.34
59	A5	3604	G	C2-N3	-5.12	1.28	1.32
59	A5	289	C	C4-C5	-5.12	1.38	1.43
59	A5	1698	A	N3-C4	-5.12	1.31	1.34
59	A5	2148	C	C5-C6	-5.12	1.30	1.34
59	A5	2190	A	N9-C4	-5.12	1.34	1.37
59	A5	2621	A	C2-N3	-5.12	1.28	1.33
59	A5	2672	U	N1-C2	-5.12	1.33	1.38
59	A5	3228	A	N9-C8	-5.12	1.33	1.37
59	A5	3291	U	C2-N3	-5.12	1.34	1.37
59	A5	3325	G	N1-C2	-5.12	1.33	1.37
59	A5	289	C	N1-C6	-5.12	1.34	1.37
59	A5	1729	G	N7-C5	-5.12	1.36	1.39
59	A5	2195	A	C8-N7	-5.12	1.27	1.31
59	A5	2530	C	C2-O2	-5.12	1.19	1.24
58	B2	209	A	N9-C4	-5.11	1.34	1.37
58	B2	1980	U	N1-C2	-5.11	1.33	1.38
59	A5	125	A	N9-C4	-5.11	1.34	1.37
59	A5	980	A	C6-N6	-5.11	1.29	1.33
59	A5	1010	A	P-O5'	-5.11	1.54	1.59
59	A5	1026	G	C8-N7	-5.11	1.27	1.30
59	A5	1348	G	P-OP1	-5.11	1.40	1.49
59	A5	1543	C	C2-O2	-5.11	1.19	1.24
59	A5	1721	C	C5-C6	-5.11	1.30	1.34
59	A5	1725	A	C5-C4	-5.11	1.35	1.38
59	A5	2723	A	C6-N1	-5.11	1.31	1.35
59	A5	2813	G	C5-C4	-5.11	1.34	1.38
59	A5	1560	A	N7-C5	-5.11	1.36	1.39
59	A5	1761	C	N1-C2	-5.11	1.35	1.40
59	A5	2739	A	N7-C5	-5.11	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2793	C	C4'-C3'	-5.11	1.47	1.52
59	A5	3716	C	C4-C5	-5.11	1.38	1.43
58	B2	888	G	N9-C4	-5.11	1.33	1.38
59	A5	80	G	N9-C4	-5.11	1.33	1.38
59	A5	793	U	C2-O2	-5.11	1.17	1.22
59	A5	1163	G	C6-N1	-5.11	1.35	1.39
59	A5	1165	A	C6-N1	-5.11	1.31	1.35
59	A5	2683	G	C2-N2	-5.11	1.29	1.34
59	A5	3346	G	C2-N2	-5.11	1.29	1.34
59	A5	3534	U	C4-C5	-5.11	1.39	1.43
59	A5	1390	C	C5-C6	-5.11	1.30	1.34
59	A5	2042	A	C5-C4	-5.11	1.35	1.38
59	A5	3276	C	N3-C4	-5.11	1.30	1.33
59	A5	2183	A	C5-C4	-5.11	1.35	1.38
59	A5	2598	A	C5-C6	-5.11	1.36	1.41
59	A5	2795	U	C2-O2	-5.11	1.17	1.22
59	A5	2914	A	N7-C5	-5.11	1.36	1.39
59	A5	3233	C	C2-N3	-5.11	1.31	1.35
59	A5	3323	G	N9-C8	-5.11	1.34	1.37
59	A5	52	A	C5-C6	-5.11	1.36	1.41
59	A5	985	G	C5-C4	-5.11	1.34	1.38
59	A5	1068	C	C2-N3	-5.11	1.31	1.35
59	A5	1106	A	C2-N3	-5.11	1.28	1.33
59	A5	1275	A	N7-C5	-5.11	1.36	1.39
59	A5	2534	G	N7-C5	-5.11	1.36	1.39
59	A5	2558	A	C5-C6	-5.11	1.36	1.41
59	A5	2682	C	N1-C6	-5.11	1.34	1.37
59	A5	2724	C	N3-C4	-5.11	1.30	1.33
59	A5	3322	A	N7-C5	-5.11	1.36	1.39
59	A5	3512	U	C4-C5	-5.11	1.39	1.43
59	A5	3878	U	C5-C6	-5.11	1.29	1.34
59	A5	29	U	C2-O2	-5.10	1.17	1.22
59	A5	1403	C	N3-C4	-5.10	1.30	1.33
59	A5	2637	A	N9-C4	-5.10	1.34	1.37
67	CV	38	TYR	CG-CD1	-5.10	1.32	1.39
56	A8	10	C	C4-C5	-5.10	1.38	1.43
56	A8	45	G	C5-C4	-5.10	1.34	1.38
58	B2	1219	A	N3-C4	-5.10	1.31	1.34
59	A5	60	G	N7-C5	-5.10	1.36	1.39
59	A5	785	A	N9-C4	-5.10	1.34	1.37
59	A5	1122	U	N3-C4	-5.10	1.33	1.38
59	A5	2250	G	C6-N1	-5.10	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3513	A	C5-C4	-5.10	1.35	1.38
59	A5	377	U	C2-O2	-5.10	1.17	1.22
59	A5	358	C	C5-C6	-5.10	1.30	1.34
59	A5	1659	A	N7-C5	-5.10	1.36	1.39
59	A5	1879	U	C2-N3	-5.10	1.34	1.37
59	A5	2112	A	N7-C5	-5.10	1.36	1.39
59	A5	2217	A	C2-N3	-5.10	1.28	1.33
59	A5	3481	G	P-O5'	-5.10	1.54	1.59
52	CE	237	TYR	CD2-CE2	-5.10	1.31	1.39
56	A8	31	G	C2-N3	-5.10	1.28	1.32
58	B2	395	G	C5-C4	-5.10	1.34	1.38
59	A5	228	C	N3-C4	-5.10	1.30	1.33
59	A5	800	C	N1-C6	-5.10	1.34	1.37
59	A5	874	G	C5-C6	-5.10	1.37	1.42
59	A5	1147	U	C4-C5	-5.10	1.39	1.43
59	A5	1953	G	C6-N1	-5.10	1.35	1.39
59	A5	2715	C	C4-N4	-5.10	1.29	1.33
59	A5	3241	G	C6-N1	-5.10	1.35	1.39
59	A5	3488	G	P-O5'	-5.10	1.54	1.59
59	A5	161	G	C5-C4	-5.10	1.34	1.38
59	A5	309	C	C5-C6	-5.10	1.30	1.34
59	A5	2531	A	N7-C5	-5.10	1.36	1.39
55	A7	11	A	C5-C4	-5.09	1.35	1.38
58	B2	1113	A	N1-C2	-5.09	1.29	1.34
59	A5	285	G	N9-C4	-5.09	1.33	1.38
59	A5	1422	G	C6-N1	-5.09	1.35	1.39
59	A5	1766	U	N3-C4	-5.09	1.33	1.38
59	A5	2159	C	C2-O2	-5.09	1.19	1.24
59	A5	2258	U	N1-C2	-5.09	1.33	1.38
59	A5	2502	G	C8-N7	-5.09	1.27	1.30
59	A5	2653	A	C2-N3	-5.09	1.28	1.33
59	A5	3281	G	N3-C4	-5.09	1.31	1.35
59	A5	3655	U	N1-C2	-5.09	1.33	1.38
59	A5	3921	A	C5-C4	-5.09	1.35	1.38
33	CP	83	TRP	CD2-CE2	-5.09	1.35	1.41
55	A7	87	G	N9-C8	-5.09	1.34	1.37
58	B2	1216	C	C4-C5	-5.09	1.38	1.43
58	B2	1843	A	N9-C4	-5.09	1.34	1.37
59	A5	82	U	C5-C6	-5.09	1.29	1.34
25	Ca	96	SER	CA-CB	-5.09	1.45	1.52
55	A7	102	C	N3-C4	-5.09	1.30	1.33
58	B2	1080	A	C5-C4	-5.09	1.35	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	390	A	C5-C6	-5.09	1.36	1.41
59	A5	853	G	N3-C4	-5.09	1.31	1.35
59	A5	978	G	C5-C4	-5.09	1.34	1.38
59	A5	1025	U	N3-C4	-5.09	1.33	1.38
59	A5	1139	U	N1-C2	-5.09	1.33	1.38
59	A5	1301	A	C8-N7	-5.09	1.27	1.31
59	A5	1311	U	C2-N3	-5.09	1.34	1.37
59	A5	1383	A	C5-C4	-5.09	1.35	1.38
59	A5	2098	C	C4-C5	-5.09	1.38	1.43
59	A5	2203	A	C6-N1	-5.09	1.31	1.35
59	A5	2786	U	C4'-C3'	-5.09	1.47	1.52
59	A5	3421	C	N1-C2	-5.09	1.35	1.40
56	A8	14	G	C5-C6	-5.09	1.37	1.42
59	A5	919	G	C8-N7	-5.09	1.27	1.30
59	A5	1215	A	C5-C6	-5.09	1.36	1.41
59	A5	1612	G	N9-C8	-5.09	1.34	1.37
33	CP	130	TYR	CE1-CZ	-5.09	1.31	1.38
58	B2	642	G	N9-C4	-5.09	1.33	1.38
58	B2	1193	C	C5-C6	-5.09	1.30	1.34
59	A5	43	A	N9-C8	-5.09	1.33	1.37
59	A5	1206	G	N1-C2	-5.09	1.33	1.37
58	B2	1988	G	N7-C5	-5.09	1.36	1.39
59	A5	846	U	C4-O4	-5.09	1.19	1.23
59	A5	1047	A	N9-C4	-5.09	1.34	1.37
59	A5	1349	A	N9-C8	-5.09	1.33	1.37
59	A5	1599	C	C5-C6	-5.09	1.30	1.34
59	A5	2799	U	C5-C6	-5.09	1.29	1.34
59	A5	3189	A	C5-C4	-5.09	1.35	1.38
59	A5	3418	U	N3-C4	-5.09	1.33	1.38
59	A5	3618	A	C4'-C3'	-5.09	1.47	1.52
59	A5	3619	U	C5-C6	-5.09	1.29	1.34
55	A7	83	A	C5-C6	-5.08	1.36	1.41
59	A5	881	G	C6-N1	-5.08	1.35	1.39
59	A5	1085	U	C2-N3	-5.08	1.34	1.37
59	A5	1775	C	C2-N3	-5.08	1.31	1.35
58	B2	263	A	N9-C4	-5.08	1.34	1.37
59	A5	89	A	N9-C8	-5.08	1.33	1.37
59	A5	1009	G	C2-N2	-5.08	1.29	1.34
59	A5	1016	A	C2'-C1'	-5.08	1.47	1.53
59	A5	1871	A	C8-N7	-5.08	1.27	1.31
59	A5	2710	A	C8-N7	-5.08	1.27	1.31
59	A5	2711	C	C5-C6	-5.08	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2783	C	C4-C5	-5.08	1.38	1.43
59	A5	3451	A	C6-N1	-5.08	1.31	1.35
59	A5	3603	C	C2-N3	-5.08	1.31	1.35
4	CB	268	ARG	CG-CD	-5.08	1.39	1.51
55	A7	13	A	N9-C4	-5.08	1.34	1.37
58	B2	1833	C	C2-N3	-5.08	1.31	1.35
59	A5	10	A	N7-C5	-5.08	1.36	1.39
59	A5	239	U	N1-C2	-5.08	1.33	1.38
59	A5	540	G	N1-C2	-5.08	1.33	1.37
59	A5	1411	U	P-O5'	-5.08	1.54	1.59
59	A5	1967	G	N3-C4	-5.08	1.31	1.35
59	A5	3264	A	C6-N6	-5.08	1.29	1.33
59	A5	3268	A	N9-C4	-5.08	1.34	1.37
58	B2	1216	C	N1-C6	-5.08	1.34	1.37
59	A5	993	A	C5-C6	-5.08	1.36	1.41
59	A5	1039	U	N1-C6	-5.08	1.33	1.38
31	CS	84	TYR	CD2-CE2	-5.08	1.31	1.39
58	B2	839	A	N9-C4	-5.08	1.34	1.37
59	A5	2052	G	C5-C4	-5.08	1.34	1.38
59	A5	2060	A	C5-C6	-5.08	1.36	1.41
59	A5	2806	U	C2-N3	-5.08	1.34	1.37
59	A5	3183	G	N1-C2	-5.08	1.33	1.37
56	A8	23	G	C5-C6	-5.08	1.37	1.42
59	A5	242	C	N3-C4	-5.08	1.30	1.33
59	A5	300	A	C4'-C3'	-5.08	1.47	1.52
59	A5	1623	G	C5-C6	-5.08	1.37	1.42
59	A5	2794	U	N3-C4	-5.08	1.33	1.38
59	A5	3219	A	N9-C4	-5.08	1.34	1.37
59	A5	3532	G	C6-N1	-5.08	1.35	1.39
58	B2	365	A	C5-C6	-5.08	1.36	1.41
58	B2	1837	G	N7-C5	-5.08	1.36	1.39
59	A5	1029	C	C5-C6	-5.08	1.30	1.34
59	A5	1131	C	P-O5'	-5.08	1.54	1.59
59	A5	1204	C	N3-C4	-5.08	1.30	1.33
59	A5	1340	G	N9-C4	-5.08	1.33	1.38
59	A5	1770	C	N1-C2	-5.08	1.35	1.40
59	A5	2243	G	C2-N3	-5.08	1.28	1.32
59	A5	2526	A	N9-C4	-5.08	1.34	1.37
59	A5	2682	C	C2-N3	-5.08	1.31	1.35
59	A5	3252	G	N1-C2	-5.08	1.33	1.37
59	A5	3310	G	C8-N7	-5.08	1.27	1.30
59	A5	3328	G	C8-N7	-5.08	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	Cg	84	CYS	CB-SG	-5.08	1.73	1.81
58	B2	323	U	N1-C2	-5.07	1.33	1.38
59	A5	919	G	C6-N1	-5.07	1.35	1.39
59	A5	1763	A	N7-C5	-5.07	1.36	1.39
59	A5	1868	A	N9-C4	-5.07	1.34	1.37
59	A5	2696	U	N3-C4	-5.07	1.33	1.38
59	A5	2773	G	P-O5'	-5.07	1.54	1.59
59	A5	413	A	C5-C4	-5.07	1.35	1.38
59	A5	1056	G	N3-C4	-5.07	1.31	1.35
59	A5	1613	A	N1-C2	-5.07	1.29	1.34
59	A5	1680	U	N1-C6	-5.07	1.33	1.38
59	A5	2148	C	N1-C2	-5.07	1.35	1.40
59	A5	3411	C	C4-N4	-5.07	1.29	1.33
55	A7	67	G	N7-C5	-5.07	1.36	1.39
59	A5	239	U	C2-N3	-5.07	1.34	1.37
59	A5	308	G	N1-C2	-5.07	1.33	1.37
59	A5	996	C	N1-C6	-5.07	1.34	1.37
59	A5	1267	A	N3-C4	-5.07	1.31	1.34
59	A5	1526	G	N7-C5	-5.07	1.36	1.39
59	A5	1726	G	C5'-C4'	-5.07	1.45	1.51
59	A5	3133	A	C6-N6	-5.07	1.29	1.33
58	B2	11	A	N9-C4	-5.07	1.34	1.37
59	A5	781	C	C2-N3	-5.07	1.31	1.35
59	A5	1385	G	N3-C4	-5.07	1.31	1.35
59	A5	47	A	N9-C8	-5.07	1.33	1.37
59	A5	81	A	N1-C2	-5.07	1.29	1.34
59	A5	244	G	N7-C5	-5.07	1.36	1.39
59	A5	348	A	N7-C5	-5.07	1.36	1.39
59	A5	370	A	C8-N7	-5.07	1.28	1.31
59	A5	1362	G	C6-O6	-5.07	1.19	1.24
59	A5	2713	G	C2-N2	-5.07	1.29	1.34
59	A5	3181	G	C5-C4	-5.07	1.34	1.38
59	A5	3269	G	N7-C5	-5.07	1.36	1.39
59	A5	3310	G	N7-C5	-5.07	1.36	1.39
33	CP	31	GLU	CD-OE1	-5.07	1.20	1.25
59	A5	64	A	C8-N7	-5.07	1.28	1.31
59	A5	779	U	N3-C4	-5.07	1.33	1.38
59	A5	1082	A	C5-C6	-5.07	1.36	1.41
59	A5	1593	U	N1-C6	-5.07	1.33	1.38
59	A5	1765	U	N1-C2	-5.07	1.33	1.38
59	A5	2191	G	N9-C8	-5.07	1.34	1.37
59	A5	2732	C	C2'-C1'	-5.07	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2721	C	C4-N4	-5.06	1.29	1.33
59	A5	3654	C	N1-C6	-5.06	1.34	1.37
59	A5	3851	U	C5-C6	-5.06	1.29	1.34
58	B2	330	G	C6-N1	-5.06	1.36	1.39
59	A5	1014	U	C4-C5	-5.06	1.39	1.43
59	A5	1701	C	N1-C6	-5.06	1.34	1.37
59	A5	1870	G	C5-C6	-5.06	1.37	1.42
59	A5	2727	U	C5-C6	-5.06	1.29	1.34
59	A5	3169	A	N9-C8	-5.06	1.33	1.37
59	A5	3312	G	N9-C8	-5.06	1.34	1.37
59	A5	11	C	N3-C4	-5.06	1.30	1.33
59	A5	302	A	N7-C5	-5.06	1.36	1.39
59	A5	317	G	N1-C2	-5.06	1.33	1.37
59	A5	654	G	N9-C8	-5.06	1.34	1.37
59	A5	1400	A	C8-N7	-5.06	1.28	1.31
59	A5	1895	U	N1-C2	-5.06	1.33	1.38
59	A5	2154	A	C8-N7	-5.06	1.28	1.31
59	A5	2703	G	C2-N2	-5.06	1.29	1.34
37	Cr	52	THR	CA-CB	-5.06	1.40	1.53
56	A8	18	C	C4-C5	-5.06	1.39	1.43
56	A8	52	A	N9-C4	-5.06	1.34	1.37
58	B2	356	C	N3-C4	-5.06	1.30	1.33
59	A5	1077	C	C2-O2	-5.06	1.19	1.24
59	A5	1553	C	N1-C2	-5.06	1.35	1.40
59	A5	1732	A	C6-N6	-5.06	1.29	1.33
59	A5	2741	A	N3-C4	-5.06	1.31	1.34
59	A5	3445	C	C5-C6	-5.06	1.30	1.34
55	A7	100	A	N9-C8	-5.06	1.33	1.37
56	A8	71	A	N9-C4	-5.06	1.34	1.37
58	B2	426	A	N7-C5	-5.06	1.36	1.39
59	A5	108	A	C2-N3	-5.06	1.28	1.33
59	A5	294	U	C4-C5	-5.06	1.39	1.43
59	A5	647	A	N7-C5	-5.06	1.36	1.39
59	A5	1343	A	C6-N1	-5.06	1.32	1.35
59	A5	2566	A	N9-C8	-5.06	1.33	1.37
59	A5	3508	G	C6-N1	-5.06	1.36	1.39
59	A5	3517	U	C4'-C3'	-5.06	1.47	1.52
58	B2	346	A	N9-C4	-5.06	1.34	1.37
59	A5	783	G	N1-C2	-5.06	1.33	1.37
59	A5	2568	U	C5-C6	-5.06	1.29	1.34
59	A5	3412	U	C4'-C3'	-5.06	1.47	1.52
59	A5	3413	C	C5-C6	-5.06	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3840	G	C2-N3	-5.06	1.28	1.32
58	B2	360	G	N3-C4	-5.05	1.31	1.35
58	B2	1069	U	C4-C5	-5.05	1.39	1.43
58	B2	1202	G	N1-C2	-5.05	1.33	1.37
59	A5	38	A	N9-C8	-5.05	1.33	1.37
59	A5	824	G	N1-C2	-5.05	1.33	1.37
59	A5	1896	A	N3-C4	-5.05	1.31	1.34
59	A5	2002	C	N3-C4	-5.05	1.30	1.33
59	A5	2730	A	N3-C4	-5.05	1.31	1.34
59	A5	3516	C	N1-C6	-5.05	1.34	1.37
59	A5	3583	C	N1-C2	-5.05	1.35	1.40
26	CN	120	TRP	CE3-CZ3	-5.05	1.29	1.38
58	B2	102	A	C5-C4	-5.05	1.35	1.38
59	A5	1208	U	C4-C5	-5.05	1.39	1.43
59	A5	1385	G	N9-C4	-5.05	1.33	1.38
59	A5	2108	U	N1-C6	-5.05	1.33	1.38
55	A7	89	G	N9-C4	-5.05	1.33	1.38
58	B2	1225	A	N9-C4	-5.05	1.34	1.37
58	B2	1980	U	N3-C4	-5.05	1.33	1.38
59	A5	42	U	P-OP2	-5.05	1.40	1.49
59	A5	383	A	N9-C4	-5.05	1.34	1.37
59	A5	384	A	C6-N6	-5.05	1.29	1.33
59	A5	789	G	C2-N2	-5.05	1.29	1.34
59	A5	997	U	C4-C5	-5.05	1.39	1.43
59	A5	2591	A	N9-C4	-5.05	1.34	1.37
54	A9	6	G	C8-N7	-5.05	1.27	1.30
58	B2	582	G	C5-C4	-5.05	1.34	1.38
59	A5	206	C	N3-C4	-5.05	1.30	1.33
59	A5	828	G	C6-N1	-5.05	1.36	1.39
59	A5	1090	U	N3-C4	-5.05	1.33	1.38
59	A5	2722	U	C2-O2	-5.05	1.17	1.22
59	A5	3495	G	C6-N1	-5.05	1.36	1.39
59	A5	3672	U	C4-C5	-5.05	1.39	1.43
59	A5	382	G	C2-N3	-5.05	1.28	1.32
59	A5	752	U	C4-C5	-5.05	1.39	1.43
59	A5	3289	U	N3-C4	-5.05	1.33	1.38
59	A5	3655	U	C2-N3	-5.05	1.34	1.37
59	A5	335	A	N3-C4	-5.05	1.31	1.34
59	A5	1086	C	C5-C6	-5.05	1.30	1.34
59	A5	1653	G	C5-C4	-5.05	1.34	1.38
59	A5	2678	G	N1-C2	-5.05	1.33	1.37
58	B2	1827	A	N3-C4	-5.04	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	244	G	C6-N1	-5.04	1.36	1.39
59	A5	452	A	C5-C4	-5.04	1.35	1.38
59	A5	1626	A	C6-N6	-5.04	1.29	1.33
4	CB	29	VAL	CB-CG2	-5.04	1.42	1.52
54	A9	6	G	N7-C5	-5.04	1.36	1.39
59	A5	1031	G	C8-N7	-5.04	1.27	1.30
59	A5	1610	A	C8-N7	-5.04	1.28	1.31
59	A5	1611	G	C2-N2	-5.04	1.29	1.34
59	A5	2612	G	C8-N7	-5.04	1.27	1.30
59	A5	2805	C	C4-C5	-5.04	1.39	1.43
59	A5	3581	G	C5-C4	-5.04	1.34	1.38
59	A5	3610	A	C8-N7	-5.04	1.28	1.31
4	CB	123	TYR	CE1-CZ	-5.04	1.31	1.38
33	CP	136	ILE	CB-CG2	-5.04	1.37	1.52
56	A8	86	A	N3-C4	-5.04	1.31	1.34
59	A5	1215	A	N9-C4	-5.04	1.34	1.37
59	A5	1354	G	C5-C4	-5.04	1.34	1.38
59	A5	1770	C	C5-C6	-5.04	1.30	1.34
59	A5	2708	C	N1-C6	-5.04	1.34	1.37
59	A5	70	A	N3-C4	-5.04	1.31	1.34
59	A5	2658	A	C5-C6	-5.04	1.36	1.41
59	A5	3164	C	C2-O2	-5.04	1.20	1.24
59	A5	44	A	C5-C4	-5.04	1.35	1.38
59	A5	293	U	C4-C5	-5.04	1.39	1.43
59	A5	1109	G	C5-C6	-5.04	1.37	1.42
59	A5	1200	U	C4-C5	-5.04	1.39	1.43
59	A5	1296	U	C2-N3	-5.04	1.34	1.37
59	A5	2514	U	C4'-C3'	-5.04	1.47	1.52
59	A5	2760	G	C6-N1	-5.04	1.36	1.39
59	A5	3335	A	C6-N6	-5.04	1.29	1.33
58	B2	1067	G	C2-N2	-5.04	1.29	1.34
59	A5	922	G	C8-N7	-5.04	1.27	1.30
59	A5	1001	A	C5-C4	-5.04	1.35	1.38
59	A5	1140	G	N9-C4	-5.04	1.33	1.38
59	A5	2677	A	N3-C4	-5.04	1.31	1.34
58	B2	333	A	N9-C4	-5.03	1.34	1.37
58	B2	371	A	N9-C4	-5.03	1.34	1.37
58	B2	1940	G	C6-N1	-5.03	1.36	1.39
59	A5	294	U	N3-C4	-5.03	1.33	1.38
59	A5	310	A	C8-N7	-5.03	1.28	1.31
59	A5	427	A	N9-C4	-5.03	1.34	1.37
59	A5	1791	A	C6-N6	-5.03	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	2779	A	C5-C6	-5.03	1.36	1.41
25	Ca	49	TYR	CD1-CE1	-5.03	1.31	1.39
56	A8	28	A	C5-C4	-5.03	1.35	1.38
59	A5	2532	U	C2-N3	-5.03	1.34	1.37
59	A5	2556	A	C6-N1	-5.03	1.32	1.35
59	A5	2671	C	C2-N3	-5.03	1.31	1.35
56	A8	11	G	N3-C4	-5.03	1.31	1.35
58	B2	988	G	C5-C6	-5.03	1.37	1.42
59	A5	302	A	C6-N1	-5.03	1.32	1.35
59	A5	792	U	P-OP2	-5.03	1.40	1.49
59	A5	986	A	N1-C2	-5.03	1.29	1.34
59	A5	1045	G	C5-C4	-5.03	1.34	1.38
59	A5	2195	A	N9-C8	-5.03	1.33	1.37
59	A5	3346	G	N1-C2	-5.03	1.33	1.37
59	A5	3626	A	C6-N1	-5.03	1.32	1.35
4	CB	123	TYR	CD1-CE1	-5.03	1.31	1.39
59	A5	545	U	N3-C4	-5.03	1.33	1.38
59	A5	2508	C	N1-C2	-5.03	1.35	1.40
58	B2	1107	A	C6-N1	-5.03	1.32	1.35
58	B2	1851	A	C5-C6	-5.03	1.36	1.41
59	A5	238	G	C5-C4	-5.03	1.34	1.38
59	A5	1173	U	C2-N3	-5.03	1.34	1.37
59	A5	1392	A	N7-C5	-5.03	1.36	1.39
59	A5	2120	G	C5-C4	-5.03	1.34	1.38
59	A5	2224	A	P-O5'	-5.03	1.54	1.59
59	A5	3463	U	C4-C5	-5.03	1.39	1.43
65	CO	151	TYR	CD2-CE2	-5.03	1.31	1.39
58	B2	1204	A	C5-C4	-5.03	1.35	1.38
59	A5	453	C	C2-N3	-5.03	1.31	1.35
59	A5	554	U	C2-N3	-5.03	1.34	1.37
59	A5	989	A	N9-C4	-5.03	1.34	1.37
59	A5	3263	C	N3-C4	-5.03	1.30	1.33
59	A5	3479	C	C4-N4	-5.03	1.29	1.33
59	A5	3601	U	C2-O2	-5.03	1.17	1.22
59	A5	3877	G	C2-N3	-5.03	1.28	1.32
58	B2	343	A	N9-C4	-5.02	1.34	1.37
59	A5	1117	A	N1-C2	-5.02	1.29	1.34
59	A5	1151	A	C6-N6	-5.02	1.29	1.33
59	A5	1363	G	C2-N3	-5.02	1.28	1.32
59	A5	2192	U	C4-C5	-5.02	1.39	1.43
59	A5	2486	A	N3-C4	-5.02	1.31	1.34
59	A5	3187	C	N1-C2	-5.02	1.35	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	A5	3897	G	C5-C4	-5.02	1.34	1.38
59	A5	318	G	N1-C2	-5.02	1.33	1.37
59	A5	856	A	C5-C6	-5.02	1.36	1.41
59	A5	1680	U	C2-O2	-5.02	1.17	1.22
59	A5	1949	A	N7-C5	-5.02	1.36	1.39
59	A5	2149	G	C8-N7	-5.02	1.27	1.30
59	A5	3841	C	N3-C4	-5.02	1.30	1.33
58	B2	1992	A	N9-C4	-5.02	1.34	1.37
59	A5	1010	A	N9-C8	-5.02	1.33	1.37
59	A5	1523	A	C8-N7	-5.02	1.28	1.31
59	A5	1875	G	N9-C4	-5.02	1.33	1.38
59	A5	2670	U	C4-C5	-5.02	1.39	1.43
59	A5	2705	U	N1-C2	-5.02	1.34	1.38
59	A5	3881	A	N7-C5	-5.02	1.36	1.39
55	A7	79	U	C4-C5	-5.02	1.39	1.43
59	A5	50	U	C5-C6	-5.02	1.29	1.34
59	A5	385	A	C6-N1	-5.02	1.32	1.35
59	A5	786	C	C2-N3	-5.02	1.31	1.35
59	A5	1345	G	C6-O6	-5.02	1.19	1.24
59	A5	2591	A	N7-C5	-5.02	1.36	1.39
59	A5	3173	U	N1-C2	-5.02	1.34	1.38
25	Ca	53	TYR	CD2-CE2	-5.02	1.31	1.39
58	B2	1175	A	N3-C4	-5.02	1.31	1.34
58	B2	1216	C	C2-N3	-5.02	1.31	1.35
59	A5	236	G	N9-C4	-5.02	1.33	1.38
59	A5	1761	C	C5-C6	-5.02	1.30	1.34
59	A5	1771	G	C2-N3	-5.02	1.28	1.32
59	A5	2028	A	N9-C4	-5.02	1.34	1.37
59	A5	2557	C	C2-N3	-5.02	1.31	1.35
59	A5	2688	U	C5-C6	-5.02	1.29	1.34
59	A5	3155	G	C6-O6	-5.02	1.19	1.24
59	A5	205	U	N1-C2	-5.02	1.34	1.38
59	A5	413	A	N3-C4	-5.02	1.31	1.34
59	A5	3463	U	N1-C6	-5.02	1.33	1.38
55	A7	95	U	C4-C5	-5.01	1.39	1.43
58	B2	626	U	C2-N3	-5.01	1.34	1.37
59	A5	91	U	C2-O2	-5.01	1.17	1.22
59	A5	432	U	C5-C6	-5.01	1.29	1.34
59	A5	2679	U	C2-O2	-5.01	1.17	1.22
59	A5	2734	A	N1-C2	-5.01	1.29	1.34
59	A5	3647	A	N3-C4	-5.01	1.31	1.34
58	B2	5	U	C2-N3	-5.01	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1231	A	N7-C5	-5.01	1.36	1.39
58	B2	1985	A	N9-C4	-5.01	1.34	1.37
59	A5	288	U	N3-C4	-5.01	1.33	1.38
59	A5	659	U	N3-C4	-5.01	1.33	1.38
59	A5	977	C	N3-C4	-5.01	1.30	1.33
59	A5	1275	A	N9-C4	-5.01	1.34	1.37
59	A5	1590	A	N7-C5	-5.01	1.36	1.39
59	A5	2535	U	N1-C2	-5.01	1.34	1.38
59	A5	2674	A	N7-C5	-5.01	1.36	1.39
59	A5	2680	G	N9-C4	-5.01	1.33	1.38
59	A5	2762	A	N1-C2	-5.01	1.29	1.34
59	A5	3333	A	C5-C4	-5.01	1.35	1.38
59	A5	3679	C	C5-C6	-5.01	1.30	1.34
26	CN	71	ARG	CB-CG	-5.01	1.39	1.52
58	B2	388	G	N9-C8	-5.01	1.34	1.37
58	B2	1050	A	N9-C4	-5.01	1.34	1.37
58	B2	1063	G	C5-C4	-5.01	1.34	1.38
59	A5	118	A	N9-C4	-5.01	1.34	1.37
59	A5	1034	U	C2-N3	-5.01	1.34	1.37
59	A5	2506	U	C4-O4	-5.01	1.19	1.23
59	A5	2625	G	N1-C2	-5.01	1.33	1.37
59	A5	3410	G	C2-N2	-5.01	1.29	1.34
54	A9	8	A	N9-C4	-5.01	1.34	1.37
58	B2	1986	A	N9-C8	-5.01	1.33	1.37
59	A5	2202	A	N1-C2	-5.01	1.29	1.34
59	A5	3639	U	N3-C4	-5.01	1.33	1.38
59	A5	159	G	N7-C5	-5.01	1.36	1.39
59	A5	1066	A	C8-N7	-5.01	1.28	1.31
59	A5	1089	U	C4-C5	-5.01	1.39	1.43
59	A5	1973	G	N9-C8	-5.01	1.34	1.37
59	A5	2254	U	C5-C6	-5.01	1.29	1.34
59	A5	3711	G	N3-C4	5.01	1.39	1.35
59	A5	1777	A	N7-C5	-5.00	1.36	1.39
59	A5	2215	G	N9-C8	-5.00	1.34	1.37
59	A5	3354	U	C4-O4	-5.00	1.19	1.23
59	A5	3402	C	N1-C6	-5.00	1.34	1.37
56	A8	104	G	C6-N1	-5.00	1.36	1.39
59	A5	31	C	N3-C4	-5.00	1.30	1.33
59	A5	411	U	C2-N3	-5.00	1.34	1.37
59	A5	2216	A	C6-N6	-5.00	1.29	1.33
59	A5	2675	U	C4-C5	-5.00	1.39	1.43
55	A7	87	G	C5-C4	-5.00	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	B2	1056	C	C2-N3	-5.00	1.31	1.35
58	B2	1983	G	N1-C2	-5.00	1.33	1.37
59	A5	203	A	C6-N1	-5.00	1.32	1.35
59	A5	1074	U	C2-N3	-5.00	1.34	1.37
59	A5	1134	G	C2-N2	-5.00	1.29	1.34
59	A5	2036	G	N3-C4	-5.00	1.31	1.35
59	A5	2067	C	N1-C6	-5.00	1.34	1.37
59	A5	3415	U	C4-C5	-5.00	1.39	1.43

All (7437) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3593	A	N1-C6-N6	-25.27	103.44	118.60
56	A8	34	C	C6-N1-C2	-24.08	110.67	120.30
59	A5	1718	G	C8-N9-C4	-23.61	96.96	106.40
59	A5	2783	C	C6-N1-C2	-20.66	112.04	120.30
59	A5	1718	G	N3-C4-C5	-20.41	118.39	128.60
59	A5	811	G	N3-C4-N9	-19.54	114.28	126.00
59	A5	445	C	C6-N1-C2	-19.48	112.51	120.30
59	A5	26	G	N3-C4-N9	19.12	137.47	126.00
59	A5	3351	A	O5'-P-OP2	-18.87	88.06	110.70
56	A8	101	A	O5'-P-OP2	18.53	132.93	110.70
59	A5	1797	A	C8-N9-C4	18.53	113.21	105.80
59	A5	1366	G	C4-C5-N7	18.36	118.14	110.80
59	A5	1738	U	N3-C2-O2	-18.30	109.39	122.20
59	A5	811	G	N3-C4-C5	17.95	137.57	128.60
59	A5	1784	A	N1-C6-N6	17.91	129.35	118.60
59	A5	3594	A	O5'-P-OP1	-17.88	89.24	110.70
59	A5	3728	A	C5-N7-C8	-17.88	94.96	103.90
59	A5	2155	A	C8-N9-C4	-17.86	98.66	105.80
59	A5	1108	G	N3-C4-C5	-17.82	119.69	128.60
59	A5	440	U	N3-C2-O2	-17.79	109.75	122.20
59	A5	1366	G	C5-N7-C8	-17.78	95.41	104.30
59	A5	1332	C	O5'-P-OP2	-17.75	89.40	110.70
56	A8	102	A	O5'-P-OP2	-17.70	89.46	110.70
59	A5	1699	A	N1-C6-N6	-17.59	108.05	118.60
56	A8	100	G	OP2-P-O3'	-17.55	66.58	105.20
59	A5	2521	A	N9-C4-C5	-17.52	98.79	105.80
59	A5	1689	G	N1-C6-O6	-17.33	109.50	119.90
56	A8	103	C	C6-N1-C2	-17.31	113.38	120.30
59	A5	1784	A	C5-C6-N6	-17.17	109.97	123.70
59	A5	1115	A	N7-C8-N9	17.04	122.32	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1683	U	C5-C4-O4	-17.03	115.68	125.90
59	A5	1144	C	N1-C2-O2	16.90	129.04	118.90
59	A5	3260	G	C8-N9-C4	-16.79	99.69	106.40
59	A5	1687	U	N3-C2-O2	-16.76	110.47	122.20
59	A5	788	C	C6-N1-C2	-16.63	113.65	120.30
59	A5	798	C	N3-C2-O2	-16.63	110.26	121.90
59	A5	800	C	C5-C6-N1	16.57	129.29	121.00
59	A5	3676	C	C6-N1-C2	-16.30	113.78	120.30
59	A5	26	G	N3-C4-C5	-16.22	120.49	128.60
59	A5	1718	G	N7-C8-N9	16.16	121.18	113.10
59	A5	3593	A	N9-C4-C5	16.04	112.22	105.80
59	A5	2700	C	C6-N1-C2	-15.98	113.91	120.30
59	A5	2492	A	C8-N9-C4	-15.91	99.44	105.80
59	A5	3728	A	C4-C5-N7	15.91	118.65	110.70
59	A5	1108	G	C8-N9-C4	-15.90	100.04	106.40
59	A5	3593	A	C8-N9-C4	-15.75	99.50	105.80
59	A5	1084	A	N1-C6-N6	15.75	128.05	118.60
59	A5	800	C	C6-N1-C2	-15.69	114.03	120.30
59	A5	1113	A	O5'-P-OP1	-15.66	91.61	105.70
59	A5	802	G	N1-C6-O6	-15.64	110.51	119.90
59	A5	1144	C	N3-C2-O2	-15.62	110.97	121.90
59	A5	1325	C	N1-C2-O2	15.58	128.25	118.90
59	A5	1115	A	C5-N7-C8	-15.44	96.18	103.90
59	A5	813	C	C6-N1-C2	-15.41	114.14	120.30
59	A5	3354	U	N1-C2-O2	15.32	133.53	122.80
59	A5	53	A	O5'-P-OP1	-15.32	91.92	105.70
59	A5	3728	A	N7-C8-N9	15.28	121.44	113.80
59	A5	2205	G	O5'-P-OP2	-15.22	92.00	105.70
59	A5	1108	G	C4-N9-C1'	15.19	146.25	126.50
59	A5	296	C	O5'-P-OP1	-15.19	92.03	105.70
59	A5	2700	C	C5-C6-N1	15.09	128.55	121.00
59	A5	371	G	C8-N9-C4	15.08	112.43	106.40
59	A5	2684	C	N1-C2-O2	15.08	127.95	118.90
59	A5	2481	U	C5-C6-N1	15.06	130.23	122.70
59	A5	3514	C	N3-C2-O2	-15.04	111.38	121.90
59	A5	3412	U	N3-C2-O2	-14.89	111.77	122.20
59	A5	1803	C	N1-C2-O2	14.89	127.83	118.90
56	A8	101	A	C4-C5-N7	14.88	118.14	110.70
59	A5	754	A	C2-N3-C4	14.81	118.00	110.60
59	A5	3479	C	C6-N1-C2	-14.67	114.43	120.30
56	A8	20	C	N1-C2-O2	14.64	127.68	118.90
59	A5	1366	G	C6-C5-N7	-14.64	121.62	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3519	C	C6-N1-C2	-14.64	114.45	120.30
59	A5	3728	A	C5-C6-N6	-14.55	112.06	123.70
59	A5	811	G	N3-C2-N2	-14.51	109.74	119.90
59	A5	2649	A	N7-C8-N9	14.49	121.05	113.80
59	A5	3591	A	C2-N3-C4	-14.43	103.39	110.60
59	A5	3499	G	O5'-P-OP2	-14.42	92.73	105.70
59	A5	3354	U	N3-C2-O2	-14.38	112.13	122.20
56	A8	107	U	O5'-P-OP2	-14.34	92.80	105.70
59	A5	798	C	N1-C2-O2	14.32	127.49	118.90
59	A5	2790	G	N1-C6-O6	-14.30	111.32	119.90
58	B2	313	C	N1-C2-O2	14.28	127.47	118.90
59	A5	3511	U	N1-C2-O2	14.26	132.78	122.80
56	A8	101	A	C5-N7-C8	-14.25	96.77	103.90
59	A5	1784	A	N9-C4-C5	-14.25	100.10	105.80
59	A5	2155	A	N7-C8-N9	14.24	120.92	113.80
59	A5	2684	C	N3-C2-O2	-14.21	111.95	121.90
59	A5	3260	G	N3-C2-N2	-14.21	109.95	119.90
59	A5	2763	U	N1-C2-O2	14.20	132.74	122.80
59	A5	1086	C	C6-N1-C2	-14.17	114.63	120.30
59	A5	1683	U	N3-C4-O4	14.12	129.28	119.40
58	B2	1968	C	C6-N1-C2	-14.11	114.66	120.30
59	A5	2521	A	C8-N9-C4	14.07	111.43	105.80
59	A5	3481	G	N1-C6-O6	-14.07	111.46	119.90
59	A5	2206	U	O5'-P-OP1	-14.07	93.04	105.70
59	A5	1084	A	N9-C4-C5	-14.06	100.18	105.80
59	A5	3481	G	C5-C6-O6	14.06	137.04	128.60
59	A5	445	C	N3-C2-O2	-14.03	112.08	121.90
59	A5	1018	C	N3-C4-C5	14.02	127.51	121.90
59	A5	440	U	N1-C2-O2	13.98	132.59	122.80
59	A5	3714	U	C5-C6-N1	13.98	129.69	122.70
59	A5	2521	A	N1-C6-N6	13.93	126.96	118.60
56	A8	103	C	C5-C6-N1	13.92	127.96	121.00
59	A5	1797	A	N7-C8-N9	-13.89	106.85	113.80
59	A5	2567	U	C5-C6-N1	13.89	129.65	122.70
59	A5	1785	G	C5-N7-C8	13.85	111.22	104.30
59	A5	2511	C	C6-N1-C2	-13.84	114.76	120.30
59	A5	2671	C	C6-N1-C2	-13.83	114.77	120.30
59	A5	33	C	C5-C6-N1	13.76	127.88	121.00
59	A5	3405	U	O5'-P-OP1	-13.70	93.37	105.70
59	A5	1784	A	C4-C5-N7	13.69	117.55	110.70
59	A5	2492	A	N7-C8-N9	13.63	120.61	113.80
59	A5	2004	G	C6-C5-N7	-13.62	122.23	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3671	C	C5-C6-N1	13.62	127.81	121.00
59	A5	1366	G	N7-C8-N9	13.61	119.91	113.10
59	A5	866	C	N1-C2-O2	13.61	127.07	118.90
59	A5	2764	A	C2-N3-C4	13.59	117.39	110.60
59	A5	3714	U	C2-N1-C1'	13.58	134.00	117.70
59	A5	1734	G	C4-C5-N7	13.57	116.23	110.80
59	A5	1801	U	O4'-C1'-N1	13.50	119.00	108.20
59	A5	621	A	O5'-P-OP2	-13.49	93.56	105.70
59	A5	2727	U	C5-C6-N1	13.47	129.43	122.70
59	A5	3349	A	N1-C6-N6	-13.43	110.54	118.60
59	A5	3711	G	N3-C4-N9	13.40	134.04	126.00
59	A5	1062	C	C6-N1-C2	-13.39	114.94	120.30
59	A5	1803	C	N3-C2-O2	-13.37	112.54	121.90
59	A5	3473	C	OP1-P-OP2	-13.37	99.54	119.60
59	A5	3593	A	C5-C6-N6	13.36	134.39	123.70
59	A5	813	C	C5-C6-N1	13.36	127.68	121.00
59	A5	3472	A	C2-N3-C4	13.34	117.27	110.60
59	A5	485	A	N1-C6-N6	-13.34	110.60	118.60
59	A5	2165	C	N1-C2-O2	13.32	126.89	118.90
58	B2	313	C	C2-N1-C1'	13.31	133.45	118.80
59	A5	803	A	N1-C6-N6	-13.22	110.67	118.60
59	A5	1799	U	C5-C6-N1	13.18	129.29	122.70
56	A8	103	C	O4'-C1'-N1	13.16	118.73	108.20
59	A5	2649	A	C5-N7-C8	-13.15	97.33	103.90
59	A5	26	G	C5-C6-O6	-13.14	120.71	128.60
59	A5	1785	G	N7-C8-N9	-13.14	106.53	113.10
59	A5	2793	C	C5-C6-N1	13.13	127.57	121.00
59	A5	1782	C	C2-N1-C1'	13.11	133.22	118.80
59	A5	755	A	O4'-C1'-N9	13.06	118.65	108.20
59	A5	1382	U	N3-C2-O2	-13.06	113.06	122.20
59	A5	761	C	C6-N1-C2	-13.06	115.08	120.30
59	A5	654	G	C8-N9-C4	-13.05	101.18	106.40
59	A5	3631	C	C6-N1-C2	-13.05	115.08	120.30
59	A5	3676	C	C5-C6-N1	13.04	127.52	121.00
59	A5	3490	C	C4-C5-C6	-13.04	110.88	117.40
59	A5	2512	U	N3-C2-O2	-13.00	113.10	122.20
59	A5	2542	C	C6-N1-C2	-12.98	115.11	120.30
59	A5	1195	U	N3-C2-O2	-12.97	113.12	122.20
59	A5	1322	U	C5-C6-N1	12.97	129.18	122.70
59	A5	3343	A	N1-C2-N3	-12.95	122.83	129.30
59	A5	1738	U	C5-C4-O4	12.89	133.64	125.90
59	A5	3569	C	C6-N1-C2	-12.89	115.14	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1115	A	C8-N9-C4	-12.89	100.64	105.80
59	A5	811	G	C2-N3-C4	-12.89	105.45	111.90
56	A8	34	C	C5-C6-N1	12.87	127.44	121.00
59	A5	1678	C	O5'-P-OP2	-12.87	94.12	105.70
59	A5	1796	A	N1-C6-N6	-12.87	110.88	118.60
59	A5	1718	G	C2-N3-C4	12.85	118.32	111.90
59	A5	2165	C	N3-C4-C5	12.83	127.03	121.90
59	A5	1384	C	O5'-P-OP1	-12.83	94.15	105.70
59	A5	1143	U	C6-N1-C2	-12.79	113.32	121.00
59	A5	2763	U	N3-C2-O2	-12.78	113.25	122.20
59	A5	3497	G	O5'-P-OP1	-12.76	94.22	105.70
59	A5	457	A	C2-N3-C4	12.76	116.98	110.60
59	A5	440	U	C2-N1-C1'	12.74	132.99	117.70
59	A5	1671	U	C4-C5-C6	-12.71	112.07	119.70
59	A5	2684	C	C2-N1-C1'	12.69	132.76	118.80
59	A5	789	G	C4-C5-N7	-12.67	105.73	110.80
59	A5	3403	G	N1-C6-O6	-12.66	112.31	119.90
59	A5	1595	G	O5'-P-OP1	-12.63	94.33	105.70
59	A5	445	C	N1-C2-O2	12.63	126.48	118.90
59	A5	565	C	C6-N1-C2	-12.63	115.25	120.30
59	A5	1139	U	O5'-P-OP1	-12.63	94.33	105.70
59	A5	2209	G	C5-C6-O6	-12.63	121.02	128.60
59	A5	1095	G	C6-C5-N7	-12.62	122.83	130.40
59	A5	791	C	N3-C2-O2	-12.60	113.08	121.90
59	A5	1687	U	C5-C6-N1	-12.60	116.40	122.70
58	B2	1211	C	N1-C2-O2	12.59	126.45	118.90
59	A5	1358	U	C4-C5-C6	12.58	127.25	119.70
59	A5	1778	A	N1-C6-N6	-12.58	111.05	118.60
59	A5	798	C	N3-C4-N4	-12.57	109.20	118.00
59	A5	1688	A	C8-N9-C4	-12.55	100.78	105.80
59	A5	3932	U	N3-C2-O2	-12.54	113.42	122.20
59	A5	3487	A	O5'-P-OP1	-12.54	94.42	105.70
59	A5	3472	A	N1-C6-N6	-12.52	111.09	118.60
59	A5	2550	G	O5'-P-OP1	-12.51	94.44	105.70
59	A5	3246	G	N3-C4-C5	12.51	134.85	128.60
59	A5	1158	C	C6-N1-C2	-12.51	115.30	120.30
59	A5	3545	C	C5-C6-N1	12.50	127.25	121.00
59	A5	380	G	N3-C4-N9	12.49	133.49	126.00
59	A5	371	G	N9-C4-C5	-12.48	100.41	105.40
59	A5	1687	U	N1-C2-N3	12.47	122.38	114.90
58	B2	1108	C	N1-C2-O2	12.43	126.36	118.90
59	A5	1149	C	O5'-P-OP1	-12.42	94.52	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	105	A	C5-N7-C8	-12.41	97.69	103.90
59	A5	2170	C	C4-C5-C6	-12.41	111.19	117.40
59	A5	800	C	O5'-P-OP1	-12.39	94.55	105.70
59	A5	1332	C	C6-N1-C2	-12.37	115.35	120.30
59	A5	3490	C	C5-C6-N1	12.36	127.18	121.00
59	A5	1352	U	C5-C6-N1	12.35	128.88	122.70
59	A5	2797	A	O5'-P-OP1	-12.34	94.59	105.70
59	A5	3260	G	N7-C8-N9	12.34	119.27	113.10
59	A5	1355	C	N1-C2-O2	12.34	126.30	118.90
59	A5	1689	G	N9-C4-C5	12.34	110.33	105.40
59	A5	2770	C	N1-C2-O2	12.33	126.30	118.90
56	A8	16	A	O5'-P-OP1	-12.32	94.61	105.70
59	A5	1316	U	N3-C2-O2	-12.31	113.58	122.20
58	B2	1111	U	N3-C2-O2	-12.30	113.59	122.20
59	A5	2184	G	O5'-P-OP1	-12.30	94.63	105.70
59	A5	1108	G	C4-C5-C6	12.29	126.17	118.80
59	A5	3841	C	C6-N1-C2	-12.29	115.38	120.30
59	A5	1872	A	C5-N7-C8	-12.29	97.76	103.90
59	A5	1975	C	C5-C6-N1	12.28	127.14	121.00
59	A5	1352	U	C4-C5-C6	-12.28	112.33	119.70
59	A5	3728	A	C5-C6-N1	12.26	123.83	117.70
58	B2	1182	C	N1-C2-O2	12.24	126.25	118.90
58	B2	1824	C	N3-C2-O2	-12.24	113.33	121.90
59	A5	3401	U	O5'-P-OP1	-12.23	94.69	105.70
59	A5	1738	U	N1-C2-N3	12.23	122.24	114.90
59	A5	101	C	C5-C6-N1	12.21	127.10	121.00
59	A5	2764	A	N1-C2-N3	-12.21	123.20	129.30
59	A5	1664	C	O5'-P-OP1	-12.20	94.72	105.70
59	A5	2091	A	N1-C6-N6	-12.20	111.28	118.60
59	A5	1689	G	O5'-P-OP1	-12.19	94.73	105.70
59	A5	2786	U	C5-C6-N1	12.18	128.79	122.70
59	A5	301	U	N3-C2-O2	-12.16	113.69	122.20
59	A5	371	G	C5-C6-N1	12.15	117.58	111.50
59	A5	2220	C	N1-C2-O2	12.15	126.19	118.90
59	A5	3507	A	C5-C6-N1	12.15	123.77	117.70
59	A5	3591	A	C5-N7-C8	-12.14	97.83	103.90
59	A5	1785	G	C4-C5-N7	-12.14	105.94	110.80
59	A5	3292	C	C5-C6-N1	12.14	127.07	121.00
59	A5	380	G	C5-C6-O6	-12.10	121.34	128.60
59	A5	1085	U	O5'-P-OP2	-12.10	94.81	105.70
59	A5	2724	C	O5'-P-OP1	-12.10	94.81	105.70
59	A5	1062	C	C5-C6-N1	12.08	127.04	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	370	A	N1-C2-N3	-12.07	123.26	129.30
59	A5	445	C	C5-C6-N1	12.07	127.03	121.00
59	A5	2663	C	C5-C6-N1	12.06	127.03	121.00
59	A5	3511	U	N3-C2-O2	-12.06	113.76	122.20
58	B2	1211	C	N3-C2-O2	-12.03	113.48	121.90
59	A5	761	C	C5-C6-N1	12.01	127.01	121.00
59	A5	2731	G	C5-C6-O6	-12.01	121.39	128.60
59	A5	55	U	C5-C6-N1	12.00	128.70	122.70
59	A5	2160	C	N3-C2-O2	-11.99	113.50	121.90
59	A5	3246	G	N3-C4-N9	-11.99	118.81	126.00
59	A5	2088	G	N3-C4-N9	-11.98	118.81	126.00
59	A5	776	A	N1-C6-N6	-11.98	111.41	118.60
59	A5	1960	C	N1-C2-O2	11.98	126.09	118.90
59	A5	1175	C	C5-C6-N1	11.97	126.99	121.00
59	A5	2727	U	C6-N1-C2	-11.97	113.82	121.00
59	A5	2066	G	C8-N9-C4	-11.96	101.61	106.40
59	A5	2492	A	C5-N7-C8	-11.96	97.92	103.90
59	A5	1144	C	C6-N1-C2	-11.95	115.52	120.30
59	A5	3142	G	N1-C6-O6	-11.95	112.73	119.90
59	A5	2170	C	C5-C6-N1	11.94	126.97	121.00
59	A5	1782	C	N1-C2-O2	11.94	126.06	118.90
56	A8	22	C	C6-N1-C2	-11.93	115.53	120.30
58	B2	1108	C	N3-C2-O2	-11.92	113.56	121.90
59	A5	3671	C	C6-N1-C2	-11.92	115.53	120.30
59	A5	72	C	C6-N1-C2	-11.90	115.54	120.30
59	A5	2193	C	C6-N1-C2	-11.89	115.54	120.30
59	A5	41	U	C5-C6-N1	11.88	128.64	122.70
59	A5	1801	U	C5-C4-O4	11.88	133.03	125.90
58	B2	1182	C	N3-C2-O2	-11.87	113.59	121.90
59	A5	2511	C	C5-C6-N1	11.87	126.94	121.00
58	B2	1109	C	N3-C4-N4	-11.86	109.70	118.00
59	A5	2620	C	C6-N1-C2	-11.84	115.56	120.30
56	A8	20	C	N3-C2-O2	-11.83	113.62	121.90
59	A5	2782	A	O4'-C1'-N9	11.80	117.64	108.20
59	A5	2054	U	N3-C2-O2	-11.79	113.94	122.20
59	A5	2659	A	C2-N3-C4	11.78	116.49	110.60
59	A5	1719	G	O5'-P-OP1	-11.77	95.11	105.70
59	A5	2196	U	N3-C4-O4	-11.76	111.17	119.40
59	A5	1108	G	C2-N3-C4	11.76	117.78	111.90
59	A5	2135	C	N1-C2-O2	11.75	125.95	118.90
59	A5	1566	U	C2-N1-C1'	11.74	131.79	117.70
59	A5	300	A	C8-N9-C4	-11.74	101.10	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1872	A	N7-C8-N9	11.74	119.67	113.80
59	A5	2517	A	C8-N9-C4	-11.74	101.11	105.80
59	A5	755	A	N1-C6-N6	-11.72	111.57	118.60
59	A5	2798	C	C6-N1-C2	-11.70	115.62	120.30
59	A5	788	C	C5-C6-N1	11.69	126.84	121.00
59	A5	1715	G	N3-C4-N9	-11.69	118.99	126.00
59	A5	2223	C	C6-N1-C2	-11.68	115.63	120.30
59	A5	59	G	O5'-P-OP1	-11.68	95.19	105.70
59	A5	2220	C	N3-C2-O2	-11.68	113.73	121.90
59	A5	1521	G	O5'-P-OP1	-11.65	95.22	105.70
59	A5	58	G	C4-N9-C1'	-11.64	111.36	126.50
59	A5	3569	C	C5-C6-N1	11.64	126.82	121.00
59	A5	1366	G	C2-N3-C4	-11.63	106.08	111.90
59	A5	1357	C	O5'-P-OP2	-11.62	95.24	105.70
59	A5	1197	A	N1-C6-N6	-11.61	111.63	118.60
59	A5	2655	C	C5-C6-N1	11.60	126.80	121.00
59	A5	1183	U	C5-C6-N1	11.57	128.49	122.70
58	B2	1238	G	C8-N9-C4	-11.56	101.78	106.40
59	A5	2763	U	C2-N1-C1'	11.55	131.56	117.70
59	A5	301	U	N1-C2-O2	11.55	130.88	122.80
59	A5	2744	C	C5-C6-N1	11.54	126.77	121.00
59	A5	654	G	N7-C8-N9	11.54	118.87	113.10
59	A5	1790	A	C5-N7-C8	-11.54	98.13	103.90
59	A5	1689	G	C8-N9-C4	-11.53	101.79	106.40
59	A5	3153	G	O5'-P-OP2	-11.52	95.33	105.70
59	A5	1108	G	N7-C8-N9	11.51	118.86	113.10
58	B2	1083	C	C5-C6-N1	11.51	126.75	121.00
59	A5	1699	A	C2-N3-C4	11.51	116.36	110.60
59	A5	806	A	O5'-P-OP1	-11.50	95.35	105.70
59	A5	1013	G	N3-C2-N2	11.50	127.95	119.90
59	A5	747	U	O5'-P-OP1	11.49	124.49	110.70
59	A5	3480	U	N3-C2-O2	-11.49	114.16	122.20
59	A5	3479	C	C5-C6-N1	11.48	126.74	121.00
59	A5	1651	C	N1-C2-O2	11.48	125.78	118.90
59	A5	2778	G	N1-C6-O6	-11.47	113.02	119.90
59	A5	3728	A	C8-N9-C4	-11.47	101.21	105.80
59	A5	1892	C	C5-C6-N1	11.45	126.73	121.00
59	A5	808	G	C8-N9-C4	11.45	110.98	106.40
59	A5	1782	C	C6-N1-C2	-11.42	115.73	120.30
59	A5	350	C	C5-C6-N1	11.42	126.71	121.00
59	A5	3763	U	C5-C6-N1	11.42	128.41	122.70
59	A5	2750	A	N1-C6-N6	-11.40	111.76	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3727	A	C2-N3-C4	11.39	116.30	110.60
59	A5	3534	U	N1-C2-O2	11.39	130.77	122.80
59	A5	431	C	C6-N1-C2	-11.37	115.75	120.30
59	A5	440	U	C6-N1-C2	-11.37	114.18	121.00
58	B2	1817	C	C5-C6-N1	11.37	126.69	121.00
59	A5	802	G	C5-C6-N1	11.37	117.18	111.50
59	A5	2172	C	C5-C6-N1	11.36	126.68	121.00
59	A5	1086	C	C5-C6-N1	11.35	126.68	121.00
59	A5	3348	G	C8-N9-C4	11.35	110.94	106.40
59	A5	1143	U	C5-C6-N1	11.34	128.37	122.70
56	A8	34	C	N3-C2-O2	-11.34	113.96	121.90
59	A5	1644	C	C6-N1-C2	-11.33	115.77	120.30
59	A5	1782	C	C5-C6-N1	11.33	126.67	121.00
59	A5	52	A	O5'-P-OP1	-11.32	95.51	105.70
59	A5	438	G	N3-C4-C5	11.32	134.26	128.60
59	A5	839	A	P-O3'-C3'	11.31	133.27	119.70
59	A5	1172	G	O5'-P-OP2	-11.31	95.53	105.70
59	A5	1180	U	C6-N1-C2	-11.30	114.22	121.00
59	A5	446	C	O5'-P-OP1	-11.30	95.53	105.70
59	A5	663	U	C5-C4-O4	-11.30	119.12	125.90
59	A5	1137	G	C5-C6-O6	-11.29	121.83	128.60
59	A5	1111	C	C6-N1-C2	-11.28	115.79	120.30
59	A5	26	G	N3-C2-N2	11.28	127.79	119.90
59	A5	2096	C	O5'-P-OP1	-11.28	95.55	105.70
59	A5	1296	U	N3-C2-O2	-11.27	114.31	122.20
59	A5	2127	C	N1-C2-O2	11.27	125.66	118.90
59	A5	3138	G	C4-C5-N7	11.26	115.30	110.80
59	A5	3519	C	C5-C6-N1	11.26	126.63	121.00
59	A5	866	C	N3-C2-O2	-11.25	114.02	121.90
59	A5	839	A	C8-N9-C4	11.22	110.29	105.80
59	A5	2551	U	C5-C4-O4	-11.22	119.17	125.90
59	A5	1355	C	N3-C2-O2	-11.22	114.05	121.90
59	A5	2657	A	C5-N7-C8	-11.21	98.30	103.90
59	A5	1330	G	C8-N9-C4	-11.21	101.92	106.40
59	A5	1793	C	C6-N1-C2	-11.19	115.83	120.30
59	A5	57	G	C8-N9-C4	-11.18	101.93	106.40
59	A5	1736	G	C8-N9-C4	-11.18	101.93	106.40
59	A5	45	G	N1-C6-O6	-11.18	113.19	119.90
59	A5	825	C	N1-C2-O2	11.18	125.61	118.90
58	B2	1382	G	C4-N9-C1'	-11.17	111.97	126.50
59	A5	3934	C	C6-N1-C2	-11.14	115.84	120.30
59	A5	2514	U	C5-C6-N1	11.14	128.27	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2099	C	C6-N1-C2	-11.13	115.85	120.30
59	A5	1728	G	C4-C5-N7	11.12	115.25	110.80
59	A5	1318	A	C2-N3-C4	-11.12	105.04	110.60
59	A5	2096	C	C6-N1-C2	-11.12	115.85	120.30
59	A5	2641	C	C5-C6-N1	11.12	126.56	121.00
59	A5	2734	A	N9-C4-C5	-11.12	101.35	105.80
59	A5	1799	U	C2-N1-C1'	11.12	131.04	117.70
59	A5	1325	C	C2-N1-C1'	11.10	131.01	118.80
59	A5	1701	C	C6-N1-C2	-11.09	115.86	120.30
58	B2	1228	G	C4-C5-N7	11.08	115.23	110.80
59	A5	2153	C	N1-C2-O2	11.08	125.55	118.90
58	B2	313	C	C6-N1-C1'	-11.07	107.51	120.80
59	A5	26	G	C6-C5-N7	-11.07	123.76	130.40
59	A5	1153	G	C8-N9-C4	11.06	110.83	106.40
59	A5	1671	U	N3-C4-O4	-11.06	111.66	119.40
59	A5	2004	G	N7-C8-N9	11.06	118.63	113.10
59	A5	3597	C	C5-C6-N1	11.06	126.53	121.00
59	A5	445	C	N3-C4-C5	-11.05	117.48	121.90
59	A5	3417	C	C5-C6-N1	11.05	126.52	121.00
59	A5	2649	A	C8-N9-C4	-11.04	101.38	105.80
59	A5	2697	U	N3-C2-O2	-11.04	114.47	122.20
59	A5	3614	U	N3-C2-O2	-11.05	114.47	122.20
59	A5	1136	A	C5-C6-N1	11.02	123.21	117.70
59	A5	1595	G	C5-N7-C8	-11.02	98.79	104.30
59	A5	1690	U	N3-C2-O2	-11.01	114.49	122.20
59	A5	794	G	O5'-P-OP1	-11.01	95.79	105.70
58	B2	328	A	O5'-P-OP2	-11.01	95.80	105.70
59	A5	995	G	N1-C6-O6	-11.01	113.30	119.90
59	A5	868	A	C5-C6-N1	11.00	123.20	117.70
59	A5	90	G	N1-C6-O6	-11.00	113.30	119.90
59	A5	105	A	C4-C5-N7	11.00	116.20	110.70
59	A5	2785	C	C6-N1-C2	-10.98	115.91	120.30
59	A5	2541	C	C4-C5-C6	-10.97	111.92	117.40
59	A5	3135	G	N3-C4-N9	10.95	132.57	126.00
59	A5	3480	U	N3-C4-O4	-10.95	111.74	119.40
59	A5	3453	U	O5'-P-OP1	-10.94	95.86	105.70
59	A5	1388	C	C5-C6-N1	10.93	126.46	121.00
59	A5	2160	C	N1-C2-O2	10.93	125.46	118.90
56	A8	80	C	O5'-P-OP2	-10.92	95.87	105.70
59	A5	58	G	O4'-C1'-N9	10.92	116.94	108.20
59	A5	2569	U	C5-C6-N1	10.92	128.16	122.70
56	A8	45	G	O5'-P-OP2	-10.91	95.88	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	754	A	C5-C6-N1	10.88	123.14	117.70
56	A8	116	C	N1-C2-O2	10.86	125.42	118.90
59	A5	3591	A	N3-C4-C5	10.85	134.40	126.80
59	A5	2744	C	C6-N1-C2	-10.85	115.96	120.30
59	A5	3727	A	C5-C6-N1	10.84	123.12	117.70
59	A5	1799	U	N1-C2-O2	10.84	130.39	122.80
59	A5	2723	A	N1-C2-N3	-10.84	123.88	129.30
59	A5	2098	C	N1-C2-O2	10.83	125.40	118.90
59	A5	1076	A	C4-C5-N7	10.83	116.11	110.70
59	A5	2205	G	O5'-P-OP1	10.82	123.69	110.70
59	A5	3515	C	N3-C4-N4	-10.82	110.42	118.00
59	A5	1180	U	C5-C6-N1	10.82	128.11	122.70
59	A5	2096	C	N1-C2-O2	10.82	125.39	118.90
59	A5	46	C	N1-C2-O2	10.82	125.39	118.90
59	A5	3844	U	O4'-C1'-N1	10.82	116.85	108.20
59	A5	120	C	O4'-C1'-N1	10.81	116.85	108.20
59	A5	1690	U	C6-N1-C2	-10.81	114.51	121.00
59	A5	1699	A	C4-C5-N7	-10.81	105.29	110.70
59	A5	1960	C	N3-C2-O2	-10.79	114.35	121.90
59	A5	3591	A	P-O3'-C3'	10.79	132.65	119.70
59	A5	1687	U	C2-N3-C4	-10.79	120.53	127.00
58	B2	313	C	N3-C2-O2	-10.79	114.35	121.90
59	A5	1084	A	C4-C5-N7	10.79	116.09	110.70
59	A5	2532	U	C5-C6-N1	10.78	128.09	122.70
59	A5	45	G	C5-C6-O6	10.78	135.07	128.60
59	A5	1318	A	C4-C5-N7	10.76	116.08	110.70
59	A5	1204	C	C5-C6-N1	10.76	126.38	121.00
59	A5	1084	A	C5-C6-N6	-10.74	115.11	123.70
59	A5	3676	C	C2-N1-C1'	10.73	130.60	118.80
59	A5	2196	U	N3-C2-O2	-10.70	114.71	122.20
59	A5	1097	A	O5'-P-OP1	-10.70	96.07	105.70
59	A5	2708	C	C6-N1-C2	-10.69	116.02	120.30
59	A5	3149	U	N3-C2-O2	-10.70	114.71	122.20
59	A5	1384	C	C2-N3-C4	-10.69	114.56	119.90
59	A5	2734	A	N1-C6-N6	10.69	125.01	118.60
59	A5	3478	G	N3-C4-C5	-10.68	123.26	128.60
59	A5	1318	A	C5-N7-C8	-10.67	98.56	103.90
59	A5	1031	G	C4-C5-N7	10.67	115.07	110.80
59	A5	26	G	O4'-C1'-N9	10.66	116.73	108.20
58	B2	1169	C	C6-N1-C2	-10.66	116.04	120.30
58	B2	1083	C	C6-N1-C2	-10.65	116.04	120.30
59	A5	1125	A	C8-N9-C4	10.65	110.06	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1988	A	N1-C6-N6	-10.64	112.22	118.60
58	B2	1966	U	C5-C6-N1	10.63	128.02	122.70
59	A5	3729	A	C8-N9-C4	-10.63	101.55	105.80
59	A5	1311	U	N3-C2-O2	-10.63	114.76	122.20
59	A5	3350	U	C5-C6-N1	10.62	128.01	122.70
58	B2	988	G	C6-C5-N7	-10.60	124.04	130.40
59	A5	1018	C	O5'-P-OP1	-10.59	96.17	105.70
59	A5	1803	C	N3-C4-C5	10.59	126.14	121.90
59	A5	58	G	C8-N9-C1'	10.58	140.75	127.00
59	A5	120	C	C5-C4-N4	-10.57	112.80	120.20
59	A5	1010	A	O5'-P-OP1	-10.57	96.19	105.70
59	A5	2657	A	C2-N3-C4	-10.57	105.32	110.60
59	A5	809	G	OP2-P-O3'	10.56	128.43	105.20
59	A5	2217	A	N1-C6-N6	-10.56	112.26	118.60
59	A5	2749	G	C4-C5-N7	10.56	115.02	110.80
59	A5	817	C	N1-C2-O2	10.56	125.23	118.90
59	A5	1354	G	C4-C5-N7	10.54	115.02	110.80
59	A5	117	C	N1-C2-O2	10.54	125.22	118.90
59	A5	1715	G	N3-C4-C5	10.54	133.87	128.60
59	A5	1688	A	N7-C8-N9	10.53	119.06	113.80
59	A5	1755	U	C5-C6-N1	10.52	127.96	122.70
59	A5	1147	U	N1-C2-O2	10.51	130.16	122.80
59	A5	1374	C	O5'-P-OP1	-10.50	96.25	105.70
59	A5	3472	A	N3-C4-C5	-10.50	119.45	126.80
59	A5	3729	A	N7-C8-N9	10.50	119.05	113.80
59	A5	921	C	C6-N1-C2	-10.50	116.10	120.30
59	A5	791	C	N1-C2-O2	10.49	125.20	118.90
56	A8	107	U	OP1-P-OP2	10.49	135.33	119.60
59	A5	445	C	C2-N1-C1'	10.48	130.33	118.80
59	A5	1359	G	C5-C6-O6	-10.47	122.32	128.60
58	B2	86	C	N1-C2-O2	10.45	125.17	118.90
58	B2	1228	G	C6-C5-N7	-10.45	124.13	130.40
59	A5	362	A	C5-C6-N6	-10.45	115.34	123.70
59	A5	1731	G	N3-C2-N2	-10.45	112.59	119.90
59	A5	475	U	N1-C2-O2	10.44	130.11	122.80
59	A5	3347	G	N7-C8-N9	10.44	118.32	113.10
59	A5	3753	A	O4'-C1'-N9	10.44	116.55	108.20
59	A5	1018	C	N3-C4-N4	-10.44	110.69	118.00
59	A5	2789	U	N3-C2-O2	-10.43	114.90	122.20
59	A5	1869	C	N3-C2-O2	-10.43	114.60	121.90
59	A5	3877	G	C8-N9-C4	10.43	110.57	106.40
56	A8	36	A	N1-C2-N3	-10.42	124.09	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1824	C	N1-C2-O2	10.42	125.15	118.90
59	A5	1318	A	N1-C6-N6	10.41	124.85	118.60
56	A8	107	U	N3-C4-O4	10.41	126.69	119.40
59	A5	1076	A	C5-C6-N6	-10.40	115.38	123.70
59	A5	2518	A	N1-C6-N6	-10.39	112.37	118.60
59	A5	33	C	N1-C2-O2	10.39	125.13	118.90
59	A5	2508	C	N3-C4-N4	-10.38	110.73	118.00
59	A5	2801	U	N3-C2-O2	-10.38	114.93	122.20
59	A5	1718	G	N9-C4-C5	10.37	109.55	105.40
59	A5	1325	C	N3-C2-O2	-10.37	114.64	121.90
59	A5	3354	U	C2-N1-C1'	10.37	130.14	117.70
59	A5	1721	C	C5-C6-N1	10.36	126.18	121.00
59	A5	995	G	C5-C6-O6	10.36	134.81	128.60
59	A5	3260	G	N1-C2-N2	10.36	125.52	116.20
59	A5	3607	C	C6-N1-C2	-10.35	116.16	120.30
59	A5	3592	C	C6-N1-C2	-10.35	116.16	120.30
59	A5	1777	A	N9-C4-C5	-10.35	101.66	105.80
59	A5	1784	A	C6-C5-N7	-10.34	125.06	132.30
59	A5	2481	U	C2-N1-C1'	10.34	130.11	117.70
59	A5	3347	G	C5-N7-C8	-10.34	99.13	104.30
59	A5	1068	C	O5'-P-OP2	-10.33	96.40	105.70
59	A5	3515	C	N1-C2-O2	10.33	125.10	118.90
59	A5	1785	G	C8-N9-C4	10.33	110.53	106.40
59	A5	3347	G	C4-C5-N7	10.33	114.93	110.80
59	A5	1798	A	O4'-C1'-N9	10.33	116.46	108.20
59	A5	1995	U	C2-N1-C1'	10.32	130.09	117.70
59	A5	1175	C	C4-C5-C6	-10.32	112.24	117.40
59	A5	1607	A	C8-N9-C4	-10.32	101.67	105.80
59	A5	1366	G	N1-C6-O6	10.31	126.09	119.90
58	B2	1831	C	C6-N1-C2	-10.31	116.18	120.30
59	A5	2016	U	C5-C4-O4	-10.31	119.72	125.90
59	A5	1124	G	N3-C4-C5	10.30	133.75	128.60
59	A5	2016	U	O4'-C1'-N1	10.30	116.44	108.20
59	A5	1370	C	N1-C2-O2	10.30	125.08	118.90
59	A5	1687	U	C4-C5-C6	10.29	125.88	119.70
59	A5	2492	A	C4-C5-N7	10.29	115.85	110.70
59	A5	2694	G	C4-C5-N7	10.28	114.91	110.80
59	A5	1077	C	N3-C2-O2	-10.27	114.71	121.90
59	A5	2533	U	C6-N1-C2	-10.27	114.83	121.00
59	A5	797	A	C8-N9-C4	-10.27	101.69	105.80
59	A5	1066	A	N1-C6-N6	-10.25	112.45	118.60
59	A5	2197	A	C8-N9-C4	-10.24	101.70	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2781	G	C8-N9-C4	-10.24	102.31	106.40
59	A5	3623	G	N9-C4-C5	10.23	109.49	105.40
59	A5	2196	U	C5-C4-O4	10.23	132.04	125.90
59	A5	1108	G	C8-N9-C1'	-10.22	113.71	127.00
59	A5	2541	C	N1-C2-O2	10.22	125.03	118.90
59	A5	1384	C	C5-C6-N1	-10.22	115.89	121.00
59	A5	2554	U	N1-C2-O2	10.22	129.95	122.80
59	A5	1168	G	N3-C4-N9	10.22	132.13	126.00
59	A5	1124	G	C4-C5-N7	10.21	114.88	110.80
59	A5	2777	A	N1-C6-N6	-10.21	112.47	118.60
59	A5	122	C	N1-C2-O2	10.20	125.02	118.90
59	A5	1013	G	C5-C6-N1	10.21	116.60	111.50
59	A5	1089	U	C6-N1-C2	-10.21	114.88	121.00
59	A5	371	G	C5-C6-O6	-10.20	122.48	128.60
58	B2	622	C	C6-N1-C2	-10.19	116.22	120.30
59	A5	3471	A	N1-C2-N3	-10.19	124.20	129.30
55	A7	92	C	C5-C6-N1	10.19	126.09	121.00
59	A5	2744	C	N1-C2-O2	10.18	125.01	118.90
59	A5	1022	A	N7-C8-N9	10.17	118.89	113.80
59	A5	281	C	C5-C6-N1	10.17	126.08	121.00
59	A5	755	A	C8-N9-C4	-10.16	101.73	105.80
59	A5	2004	G	N3-C4-N9	10.16	132.10	126.00
59	A5	2783	C	N3-C2-O2	-10.16	114.79	121.90
59	A5	2557	C	C2-N3-C4	10.15	124.98	119.90
59	A5	2712	U	N3-C4-O4	-10.15	112.29	119.40
59	A5	1108	G	N3-C4-N9	10.15	132.09	126.00
58	B2	1109	C	N1-C2-O2	10.15	124.99	118.90
59	A5	2085	G	N3-C4-N9	-10.15	119.91	126.00
59	A5	3593	A	C2-N3-C4	10.14	115.67	110.60
59	A5	2758	U	O5'-P-OP1	-10.14	96.57	105.70
59	A5	1700	U	C5-C6-N1	10.14	127.77	122.70
59	A5	3947	C	C5-C6-N1	10.14	126.07	121.00
59	A5	1144	C	C2-N3-C4	10.13	124.97	119.90
59	A5	801	G	C5-C6-N1	10.13	116.57	111.50
59	A5	1316	U	C4-C5-C6	10.13	125.78	119.70
58	B2	988	G	C4-C5-N7	10.13	114.85	110.80
59	A5	350	C	C4-C5-C6	-10.13	112.34	117.40
59	A5	3614	U	C2-N1-C1'	10.13	129.85	117.70
59	A5	1970	G	C4-C5-N7	10.12	114.85	110.80
59	A5	1180	U	N3-C2-O2	-10.12	115.12	122.20
59	A5	1104	A	N1-C2-N3	-10.12	124.24	129.30
59	A5	3485	U	O5'-P-OP1	-10.11	96.60	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1643	G	C4-C5-N7	10.11	114.84	110.80
59	A5	3729	A	C5-N7-C8	-10.10	98.85	103.90
56	A8	5	C	C5-C6-N1	10.10	126.05	121.00
59	A5	1181	A	O4'-C1'-N9	10.10	116.28	108.20
56	A8	109	U	O5'-P-OP1	-10.09	96.61	105.70
59	A5	2096	C	C5-C6-N1	10.09	126.05	121.00
59	A5	777	C	N1-C2-O2	10.09	124.95	118.90
59	A5	2797	A	N1-C2-N3	-10.09	124.26	129.30
59	A5	289	C	N3-C2-O2	-10.08	114.84	121.90
59	A5	811	G	C8-N9-C1'	10.08	140.10	127.00
59	A5	3727	A	O5'-P-OP1	-10.07	96.64	105.70
59	A5	2764	A	O5'-P-OP1	-10.07	96.64	105.70
59	A5	3418	U	N3-C2-O2	-10.07	115.15	122.20
59	A5	2700	C	C4-C5-C6	-10.07	112.37	117.40
59	A5	3545	C	C4-C5-C6	-10.06	112.37	117.40
59	A5	1083	A	O5'-P-OP2	-10.06	96.65	105.70
59	A5	2559	C	C5-C6-N1	10.05	126.03	121.00
59	A5	868	A	C2-N3-C4	10.05	115.62	110.60
59	A5	1197	A	C4-C5-C6	-10.04	111.98	117.00
59	A5	1684	G	N1-C6-O6	-10.04	113.88	119.90
59	A5	1718	G	N3-C4-N9	10.03	132.02	126.00
59	A5	3592	C	N3-C2-O2	-10.03	114.88	121.90
59	A5	1031	G	O5'-P-OP2	-10.03	96.68	105.70
59	A5	1099	U	N3-C2-O2	-10.03	115.18	122.20
59	A5	1731	G	N1-C2-N2	10.03	125.22	116.20
59	A5	3363	G	N7-C8-N9	10.03	118.11	113.10
59	A5	3503	G	N1-C6-O6	-10.03	113.89	119.90
59	A5	1084	A	C6-C5-N7	-10.02	125.29	132.30
59	A5	1143	U	N3-C2-O2	-10.02	115.19	122.20
58	B2	1984	G	C6-C5-N7	-10.01	124.39	130.40
59	A5	1358	U	C5-C6-N1	-10.00	117.70	122.70
59	A5	26	G	C5-C6-N1	10.00	116.50	111.50
59	A5	1390	C	C2-N1-C1'	10.00	129.80	118.80
59	A5	289	C	N1-C2-O2	9.99	124.90	118.90
59	A5	2753	G	O5'-P-OP1	-9.99	96.70	105.70
59	A5	1204	C	C6-N1-C2	-9.99	116.30	120.30
4	CB	234	ARG	NE-CZ-NH2	9.99	125.30	120.30
59	A5	1296	U	N1-C2-O2	9.98	129.79	122.80
59	A5	863	U	N3-C2-O2	-9.98	115.22	122.20
59	A5	3714	U	C5-C4-O4	-9.98	119.91	125.90
59	A5	1083	A	N1-C6-N6	-9.97	112.62	118.60
56	A8	16	A	C5-C6-N1	9.97	122.68	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	97	U	C5-C6-N1	9.97	127.68	122.70
59	A5	2749	G	C6-C5-N7	-9.96	124.42	130.40
59	A5	3630	C	C5-C6-N1	9.96	125.98	121.00
59	A5	3727	A	N1-C6-N6	-9.96	112.62	118.60
59	A5	1313	A	C5-N7-C8	-9.96	98.92	103.90
59	A5	790	U	O5'-P-OP1	-9.94	96.75	105.70
59	A5	1337	U	O5'-P-OP2	-9.95	96.75	105.70
59	A5	1180	U	C2-N1-C1'	9.93	129.62	117.70
59	A5	2543	C	N1-C2-O2	9.93	124.86	118.90
59	A5	1644	C	C5-C6-N1	9.91	125.96	121.00
59	A5	2734	A	C5-C6-N6	-9.91	115.77	123.70
59	A5	1314	U	N3-C2-O2	-9.91	115.26	122.20
59	A5	1715	G	N3-C2-N2	-9.90	112.97	119.90
59	A5	3412	U	C5-C4-O4	9.90	131.84	125.90
59	A5	1699	A	C6-C5-N7	9.90	139.23	132.30
59	A5	3591	A	C4-C5-N7	9.90	115.65	110.70
59	A5	1995	U	C6-N1-C2	-9.89	115.06	121.00
59	A5	794	G	N7-C8-N9	9.88	118.04	113.10
59	A5	3542	C	C6-N1-C2	-9.88	116.35	120.30
59	A5	816	A	O5'-P-OP1	-9.87	96.81	105.70
59	A5	1758	U	O5'-P-OP2	-9.87	96.82	105.70
59	A5	3473	C	N1-C2-O2	9.87	124.82	118.90
59	A5	2770	C	N3-C2-O2	-9.86	115.00	121.90
59	A5	3480	U	N1-C2-O2	9.86	129.70	122.80
59	A5	3510	U	O5'-P-OP1	-9.85	96.83	105.70
59	A5	1736	G	N7-C8-N9	9.85	118.03	113.10
59	A5	2737	C	N3-C4-C5	9.84	125.84	121.90
56	A8	116	C	N3-C2-O2	-9.84	115.01	121.90
59	A5	362	A	O5'-P-OP1	-9.83	96.85	105.70
59	A5	3309	A	N7-C8-N9	9.83	118.72	113.80
59	A5	1753	G	C6-C5-N7	-9.83	124.50	130.40
59	A5	101	C	C4-C5-C6	-9.82	112.49	117.40
59	A5	420	A	O4'-C1'-N9	9.82	116.06	108.20
59	A5	425	A	O5'-P-OP2	-9.82	96.86	105.70
59	A5	1180	U	N1-C2-O2	9.82	129.67	122.80
59	A5	1738	U	C5-C6-N1	-9.81	117.79	122.70
59	A5	2756	C	N1-C2-O2	9.81	124.79	118.90
59	A5	1013	G	N3-C4-N9	9.81	131.89	126.00
59	A5	1093	C	O5'-P-OP2	-9.81	96.87	105.70
59	A5	3343	A	C4-C5-C6	-9.80	112.10	117.00
59	A5	776	A	C2-N3-C4	9.79	115.50	110.60
59	A5	3477	A	C5-N7-C8	-9.79	99.01	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2688	U	N3-C2-O2	-9.78	115.35	122.20
59	A5	3418	U	O4'-C1'-N1	9.78	116.02	108.20
59	A5	1123	C	C6-N1-C2	-9.78	116.39	120.30
59	A5	2127	C	N3-C2-O2	-9.77	115.06	121.90
58	B2	1211	C	C6-N1-C2	-9.76	116.39	120.30
59	A5	1595	G	N7-C8-N9	9.76	117.98	113.10
59	A5	2663	C	C4-C5-C6	-9.76	112.52	117.40
59	A5	2709	U	C5-C6-N1	9.76	127.58	122.70
59	A5	443	G	C4-C5-N7	9.75	114.70	110.80
58	B2	1176	C	N3-C2-O2	-9.75	115.08	121.90
59	A5	1867	A	N1-C6-N6	-9.74	112.75	118.60
59	A5	2516	U	C5-C6-N1	-9.74	117.83	122.70
59	A5	1095	G	C8-N9-C1'	-9.74	114.34	127.00
59	A5	1115	A	C4-C5-N7	9.74	115.57	110.70
59	A5	1595	G	C4-C5-N7	9.74	114.70	110.80
59	A5	1385	G	C6-C5-N7	-9.74	124.56	130.40
59	A5	3623	G	C5-C6-O6	9.73	134.44	128.60
59	A5	1675	G	C8-N9-C4	-9.73	102.51	106.40
59	A5	794	G	C8-N9-C4	-9.73	102.51	106.40
59	A5	1108	G	C6-C5-N7	-9.73	124.56	130.40
59	A5	777	C	O5'-P-OP1	9.72	122.37	110.70
59	A5	2170	C	C6-N1-C2	-9.72	116.41	120.30
59	A5	3676	C	O4'-C1'-N1	9.72	115.98	108.20
59	A5	1063	C	N3-C2-O2	-9.72	115.10	121.90
59	A5	1266	A	N1-C6-N6	-9.71	112.77	118.60
59	A5	1510	G	O5'-P-OP2	-9.72	96.95	105.70
59	A5	1163	G	C5-C6-O6	-9.71	122.77	128.60
59	A5	1872	A	C4-C5-N7	9.71	115.56	110.70
59	A5	1951	C	N1-C2-O2	9.71	124.73	118.90
59	A5	2097	U	C5-C6-N1	9.71	127.56	122.70
59	A5	3498	A	N7-C8-N9	9.71	118.66	113.80
59	A5	1975	C	C4-C5-C6	-9.70	112.55	117.40
59	A5	58	G	O5'-P-OP1	9.69	122.33	110.70
59	A5	431	C	C5-C6-N1	9.69	125.85	121.00
59	A5	2041	G	C4-C5-N7	9.69	114.68	110.80
59	A5	3877	G	N7-C8-N9	-9.69	108.25	113.10
59	A5	798	C	N3-C4-C5	9.69	125.77	121.90
59	A5	1689	G	C5-C6-O6	9.69	134.41	128.60
59	A5	2731	G	C4-C5-N7	9.68	114.67	110.80
59	A5	3351	A	C5-C6-N1	9.68	122.54	117.70
59	A5	41	U	C5-C4-O4	-9.67	120.10	125.90
59	A5	3221	A	N7-C8-N9	9.66	118.63	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1975	C	N1-C2-O2	9.66	124.70	118.90
59	A5	382	G	O5'-P-OP2	-9.66	97.01	105.70
59	A5	785	A	N1-C6-N6	-9.65	112.81	118.60
59	A5	1192	A	C8-N9-C4	9.65	109.66	105.80
59	A5	3882	C	C4-C5-C6	-9.65	112.58	117.40
56	A8	110	C	O5'-P-OP1	-9.65	97.02	105.70
59	A5	1073	C	C5-C4-N4	9.64	126.95	120.20
59	A5	2739	A	O5'-P-OP2	-9.63	97.03	105.70
59	A5	1020	A	C5-C6-N1	9.63	122.52	117.70
59	A5	3292	C	C4-C5-C6	-9.62	112.59	117.40
59	A5	1782	C	C5-C4-N4	-9.62	113.47	120.20
59	A5	33	C	C2-N3-C4	9.61	124.70	119.90
59	A5	1003	C	N1-C2-O2	9.61	124.66	118.90
59	A5	1079	U	O5'-P-OP2	-9.61	97.05	105.70
59	A5	2767	U	N3-C2-O2	-9.61	115.48	122.20
59	A5	225	U	N1-C2-O2	9.60	129.52	122.80
59	A5	1367	A	P-O3'-C3'	9.60	131.22	119.70
59	A5	1566	U	O5'-P-OP2	-9.60	97.06	105.70
59	A5	2521	A	C4-C5-N7	9.60	115.50	110.70
59	A5	3496	U	C5-C4-O4	-9.59	120.15	125.90
59	A5	441	A	N1-C6-N6	9.59	124.35	118.60
59	A5	866	C	C6-N1-C2	-9.59	116.47	120.30
59	A5	2734	A	C4-C5-N7	9.59	115.49	110.70
59	A5	2740	C	C5-C6-N1	9.59	125.79	121.00
59	A5	1040	C	C6-N1-C2	-9.58	116.47	120.30
59	A5	2792	G	N1-C6-O6	-9.58	114.15	119.90
59	A5	1103	U	C5-C6-N1	9.58	127.49	122.70
59	A5	2541	C	C5-C6-N1	9.58	125.79	121.00
59	A5	3138	G	C2-N3-C4	9.57	116.69	111.90
59	A5	2542	C	N3-C2-O2	-9.57	115.20	121.90
59	A5	375	C	N1-C2-O2	9.57	124.64	118.90
59	A5	552	U	N3-C2-O2	-9.57	115.50	122.20
59	A5	854	U	C5-C6-N1	9.56	127.48	122.70
59	A5	774	A	OP2-P-O3'	9.56	126.24	105.20
59	A5	1095	G	N3-C4-N9	9.56	131.74	126.00
59	A5	1886	C	N1-C2-O2	9.56	124.64	118.90
59	A5	28	C	C6-N1-C2	-9.56	116.48	120.30
59	A5	1643	G	C6-C5-N7	-9.56	124.66	130.40
59	A5	3491	C	C5-C6-N1	9.56	125.78	121.00
59	A5	1135	U	C5-C6-N1	9.56	127.48	122.70
59	A5	1023	C	C5-C6-N1	9.55	125.78	121.00
59	A5	1665	C	C5-C6-N1	9.55	125.77	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2657	A	N3-C4-C5	9.54	133.48	126.80
58	B2	1087	C	N1-C2-O2	9.54	124.63	118.90
59	A5	2784	C	N3-C2-O2	-9.54	115.22	121.90
59	A5	1330	G	N7-C8-N9	9.54	117.87	113.10
59	A5	2783	C	N3-C4-C5	-9.54	118.08	121.90
59	A5	3403	G	C5-C6-N1	9.54	116.27	111.50
56	A8	21	U	C5-C4-O4	-9.54	120.18	125.90
58	B2	1109	C	C5-C4-N4	9.53	126.87	120.20
59	A5	784	G	N3-C2-N2	-9.53	113.23	119.90
59	A5	2515	C	C4-C5-C6	-9.53	112.64	117.40
58	B2	1967	C	C5-C6-N1	9.53	125.76	121.00
59	A5	1531	U	N3-C4-C5	9.53	120.31	114.60
59	A5	1554	C	N1-C2-O2	9.53	124.62	118.90
59	A5	1736	G	C5-N7-C8	-9.53	99.54	104.30
59	A5	2526	A	N1-C2-N3	-9.53	124.54	129.30
59	A5	3591	A	N7-C8-N9	9.53	118.56	113.80
59	A5	3934	C	C5-C6-N1	9.53	125.76	121.00
59	A5	3614	U	N1-C2-O2	9.52	129.47	122.80
59	A5	2515	C	N3-C4-C5	9.51	125.70	121.90
59	A5	2790	G	C6-C5-N7	9.51	136.10	130.40
59	A5	3591	A	O4'-C1'-N9	9.50	115.80	108.20
59	A5	2234	C	C5-C6-N1	9.50	125.75	121.00
59	A5	1116	G	O5'-P-OP2	-9.50	97.15	105.70
59	A5	1158	C	N1-C2-N3	9.49	125.84	119.20
59	A5	1089	U	C2-N3-C4	9.49	132.69	127.00
59	A5	2727	U	C2-N1-C1'	9.49	129.08	117.70
59	A5	3403	G	C2-N3-C4	9.48	116.64	111.90
58	B2	1831	C	C5-C6-N1	9.47	125.73	121.00
59	A5	1595	G	C6-C5-N7	-9.47	124.72	130.40
59	A5	2781	G	N9-C4-C5	9.47	109.19	105.40
59	A5	3478	G	OP1-P-OP2	-9.46	105.40	119.60
59	A5	1330	G	C5-N7-C8	-9.46	99.57	104.30
59	A5	2216	A	N1-C6-N6	-9.46	112.92	118.60
59	A5	2164	G	C5-C6-O6	-9.46	122.92	128.60
59	A5	2232	U	O5'-P-OP1	-9.46	97.19	105.70
59	A5	3611	C	C6-N1-C2	-9.46	116.52	120.30
59	A5	3514	C	C2-N1-C1'	9.45	129.20	118.80
58	B2	1193	C	C6-N1-C2	-9.45	116.52	120.30
59	A5	1801	U	C6-N1-C2	-9.45	115.33	121.00
59	A5	3473	C	N3-C2-O2	-9.45	115.29	121.90
59	A5	866	C	C2-N1-C1'	9.44	129.19	118.80
59	A5	789	G	C2-N3-C4	9.44	116.62	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1063	C	N3-C4-C5	-9.44	118.12	121.90
59	A5	1313	A	C2-N3-C4	-9.44	105.88	110.60
59	A5	462	C	N1-C2-O2	9.43	124.56	118.90
59	A5	1671	U	C5-C6-N1	9.43	127.42	122.70
59	A5	1358	U	C5-C4-O4	9.43	131.56	125.90
59	A5	1753	G	C4-C5-N7	9.43	114.57	110.80
59	A5	3342	C	N3-C4-C5	-9.43	118.13	121.90
59	A5	1776	U	O5'-P-OP2	-9.42	97.22	105.70
59	A5	2183	A	N1-C2-N3	-9.42	124.59	129.30
59	A5	1516	A	O4'-C1'-N9	-9.41	100.67	108.20
59	A5	2218	G	O5'-P-OP1	-9.41	97.23	105.70
59	A5	1099	U	N1-C2-O2	9.41	129.39	122.80
59	A5	3400	U	O5'-P-OP2	-9.41	97.23	105.70
59	A5	2002	C	C6-N1-C2	-9.40	116.54	120.30
59	A5	1136	A	C5-N7-C8	9.40	108.60	103.90
59	A5	3413	C	C4-C5-C6	-9.40	112.70	117.40
59	A5	3418	U	N1-C2-O2	9.40	129.38	122.80
59	A5	2790	G	C5-C6-O6	9.40	134.24	128.60
59	A5	2153	C	N3-C2-O2	-9.39	115.33	121.90
59	A5	2529	G	N3-C4-C5	-9.39	123.90	128.60
59	A5	2691	A	C8-N9-C4	-9.38	102.05	105.80
59	A5	2706	U	N3-C2-O2	-9.38	115.63	122.20
59	A5	2738	C	N3-C2-O2	-9.38	115.33	121.90
59	A5	2641	C	C6-N1-C2	-9.37	116.55	120.30
59	A5	3164	C	C5-C6-N1	9.37	125.69	121.00
59	A5	1013	G	N9-C4-C5	-9.37	101.65	105.40
59	A5	1176	A	C6-N1-C2	9.37	124.22	118.60
59	A5	1389	C	N3-C2-O2	-9.37	115.34	121.90
59	A5	3512	U	N3-C2-O2	-9.37	115.64	122.20
58	B2	883	C	C6-N1-C2	-9.37	116.55	120.30
59	A5	1157	C	C6-N1-C2	-9.36	116.56	120.30
59	A5	2728	C	N1-C2-O2	9.36	124.52	118.90
58	B2	1176	C	N1-C2-O2	9.36	124.52	118.90
58	B2	1066	A	N1-C2-N3	-9.35	124.62	129.30
59	A5	2135	C	N3-C2-O2	-9.35	115.36	121.90
59	A5	2518	A	O5'-P-OP1	-9.35	97.29	105.70
59	A5	375	C	N3-C2-O2	-9.34	115.36	121.90
59	A5	788	C	N3-C4-C5	-9.33	118.17	121.90
59	A5	347	A	O5'-P-OP2	-9.33	97.31	105.70
59	A5	3142	G	N3-C4-C5	-9.32	123.94	128.60
58	B2	1825	A	C8-N9-C4	-9.32	102.07	105.80
59	A5	2649	A	C2-N3-C4	-9.32	105.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3413	C	C5-C6-N1	9.32	125.66	121.00
58	B2	1037	C	C6-N1-C2	-9.32	116.57	120.30
59	A5	817	C	C2-N3-C4	9.32	124.56	119.90
59	A5	2568	U	C4-C5-C6	-9.32	114.11	119.70
59	A5	3722	C	C6-N1-C2	-9.32	116.57	120.30
59	A5	1316	U	N1-C2-O2	9.31	129.32	122.80
59	A5	1715	G	C5-N7-C8	-9.31	99.64	104.30
59	A5	2243	G	N1-C6-O6	-9.31	114.31	119.90
59	A5	3261	U	C5-C6-N1	9.31	127.36	122.70
59	A5	2657	A	N3-C4-N9	-9.31	119.95	127.40
59	A5	549	A	C5-N7-C8	-9.31	99.25	103.90
59	A5	1118	C	C5-C6-N1	9.31	125.65	121.00
59	A5	1162	A	C4-C5-N7	9.30	115.35	110.70
59	A5	1319	A	N9-C4-C5	-9.30	102.08	105.80
59	A5	2155	A	C5-N7-C8	-9.30	99.25	103.90
59	A5	3882	C	C5-C6-N1	9.29	125.65	121.00
59	A5	3759	G	N1-C6-O6	-9.29	114.33	119.90
59	A5	458	A	C5-C6-N1	9.28	122.34	117.70
59	A5	1168	G	N3-C4-C5	-9.28	123.96	128.60
59	A5	3514	C	N1-C2-O2	9.28	124.47	118.90
59	A5	2098	C	N3-C2-O2	-9.28	115.41	121.90
59	A5	53	A	C8-N9-C4	-9.27	102.09	105.80
59	A5	1388	C	C4-C5-C6	-9.27	112.77	117.40
59	A5	3716	C	C5-C6-N1	9.27	125.64	121.00
59	A5	3393	U	C2-N1-C1'	9.27	128.82	117.70
59	A5	546	G	C5-N7-C8	-9.27	99.67	104.30
59	A5	1083	A	N1-C2-N3	-9.27	124.67	129.30
59	A5	825	C	C5-C6-N1	9.26	125.63	121.00
59	A5	2004	G	C4-C5-N7	9.26	114.50	110.80
59	A5	2543	C	N3-C2-O2	-9.26	115.42	121.90
59	A5	657	G	C5-C6-O6	9.25	134.15	128.60
56	A8	58	C	N1-C2-O2	9.25	124.45	118.90
59	A5	3675	A	C8-N9-C4	-9.24	102.10	105.80
59	A5	2581	U	O5'-P-OP1	-9.24	97.38	105.70
58	B2	38	C	N1-C2-O2	9.24	124.44	118.90
59	A5	2223	C	C5-C6-N1	9.24	125.62	121.00
59	A5	3756	A	C5-N7-C8	9.23	108.52	103.90
59	A5	3932	U	N1-C2-O2	9.23	129.26	122.80
59	A5	3347	G	C8-N9-C4	-9.23	102.71	106.40
59	A5	1156	U	N1-C2-O2	9.22	129.25	122.80
59	A5	380	G	N3-C4-C5	-9.21	123.99	128.60
59	A5	760	G	N3-C4-N9	9.21	131.53	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1886	C	C6-N1-C2	-9.21	116.62	120.30
59	A5	2794	U	N1-C2-O2	9.21	129.25	122.80
59	A5	2743	C	C5-C6-N1	9.21	125.61	121.00
59	A5	3499	G	O5'-P-OP1	9.20	121.74	110.70
58	B2	1382	G	C8-N9-C4	9.20	110.08	106.40
56	A8	27	C	N1-C2-O2	9.20	124.42	118.90
59	A5	2508	C	N3-C2-O2	-9.20	115.46	121.90
58	B2	550	C	C2-N1-C1'	9.19	128.91	118.80
59	A5	2763	U	C6-N1-C1'	-9.19	108.33	121.20
59	A5	1156	U	N3-C2-O2	-9.19	115.77	122.20
59	A5	1181	A	C2-N3-C4	9.19	115.19	110.60
59	A5	2507	C	N3-C2-O2	-9.19	115.47	121.90
59	A5	1775	C	N1-C2-O2	9.19	124.41	118.90
59	A5	2185	U	N3-C2-O2	-9.19	115.77	122.20
59	A5	2773	G	O5'-P-OP1	-9.19	97.43	105.70
56	A8	101	A	C4-C5-C6	-9.19	112.41	117.00
37	Cr	36	LEU	CA-CB-CG	9.18	136.42	115.30
59	A5	787	C	C6-N1-C2	-9.18	116.63	120.30
59	A5	1023	C	C4-C5-C6	-9.18	112.81	117.40
59	A5	2684	C	C6-N1-C1'	-9.18	109.78	120.80
59	A5	2160	C	C6-N1-C2	-9.17	116.63	120.30
59	A5	2795	U	O5'-P-OP1	-9.16	97.45	105.70
59	A5	2798	C	O5'-P-OP1	-9.16	97.45	105.70
58	B2	1111	U	N1-C2-O2	9.16	129.21	122.80
58	B2	1214	A	N1-C6-N6	-9.16	113.11	118.60
59	A5	2778	G	N3-C2-N2	9.15	126.31	119.90
59	A5	3629	U	C5-C6-N1	9.15	127.27	122.70
59	A5	1689	G	C5-C6-N1	9.15	116.07	111.50
59	A5	1790	A	C4-C5-N7	9.14	115.27	110.70
59	A5	1799	U	C6-N1-C2	-9.14	115.51	121.00
59	A5	2655	C	C6-N1-C2	-9.14	116.64	120.30
59	A5	2790	G	O5'-P-OP2	-9.14	97.47	105.70
59	A5	3728	A	N1-C6-N6	9.14	124.08	118.60
59	A5	1095	G	C4-C5-N7	9.14	114.45	110.80
59	A5	2771	G	C5-N7-C8	-9.14	99.73	104.30
59	A5	2533	U	C5-C6-N1	9.13	127.27	122.70
59	A5	984	U	N3-C2-O2	-9.13	115.81	122.20
58	B2	1991	C	C6-N1-C2	-9.13	116.65	120.30
59	A5	1951	C	N3-C2-O2	-9.12	115.51	121.90
59	A5	3730	G	N3-C4-C5	-9.12	124.04	128.60
59	A5	1089	U	N3-C2-O2	-9.12	115.82	122.20
59	A5	3411	C	C6-N1-C2	-9.12	116.65	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1205	U	C5-C6-N1	9.11	127.26	122.70
59	A5	1699	A	N9-C4-C5	9.11	109.44	105.80
56	A8	58	C	N3-C2-O2	-9.11	115.52	121.90
59	A5	59	G	OP1-P-OP2	-9.11	105.94	119.60
59	A5	809	G	C5-C6-N1	9.11	116.05	111.50
59	A5	2750	A	N1-C2-N3	-9.11	124.75	129.30
59	A5	3472	A	C6-N1-C2	-9.11	113.14	118.60
67	CV	68	GLY	C-N-CA	9.11	144.47	121.70
59	A5	3487	A	C5-N7-C8	-9.10	99.35	103.90
59	A5	3711	G	N3-C2-N2	9.10	126.27	119.90
59	A5	1799	U	C5-C4-O4	-9.10	120.44	125.90
59	A5	2715	C	C6-N1-C2	-9.09	116.66	120.30
59	A5	26	G	C4-N9-C1'	9.09	138.31	126.50
59	A5	801	G	O5'-P-OP1	-9.09	97.52	105.70
59	A5	549	A	N1-C6-N6	9.09	124.05	118.60
59	A5	64	A	N1-C2-N3	-9.08	124.76	129.30
59	A5	1621	A	C4-C5-N7	9.08	115.24	110.70
56	A8	5	C	C6-N1-C2	-9.08	116.67	120.30
55	A7	78	C	C5-C6-N1	9.07	125.53	121.00
59	A5	3670	G	N7-C8-N9	9.06	117.63	113.10
59	A5	2170	C	O5'-P-OP1	-9.06	97.55	105.70
58	B2	1984	G	C4-C5-N7	9.06	114.42	110.80
59	A5	2205	G	C5-C6-O6	-9.06	123.17	128.60
59	A5	1110	G	C5-C6-N1	9.06	116.03	111.50
59	A5	3677	U	C6-N1-C1'	-9.06	108.52	121.20
59	A5	1076	A	N1-C6-N6	9.06	124.03	118.60
59	A5	1095	G	N9-C4-C5	-9.05	101.78	105.40
59	A5	1072	U	C5-C6-N1	9.05	127.23	122.70
59	A5	3756	A	O5'-P-OP1	9.05	121.56	110.70
59	A5	1083	A	C4-C5-C6	-9.05	112.47	117.00
59	A5	1375	G	C4-C5-N7	9.05	114.42	110.80
59	A5	1013	G	N1-C2-N2	-9.04	108.06	116.20
59	A5	1563	A	N9-C4-C5	-9.04	102.18	105.80
59	A5	774	A	OP1-P-O3'	-9.04	85.32	105.20
56	A8	112	C	C6-N1-C2	-9.04	116.69	120.30
59	A5	2512	U	N1-C2-O2	9.04	129.13	122.80
59	A5	93	G	C4-C5-N7	9.03	114.41	110.80
58	B2	1228	G	C5-N7-C8	-9.03	99.79	104.30
58	B2	632	G	C5-C6-O6	-9.02	123.19	128.60
59	A5	2219	U	N3-C4-C5	-9.02	109.19	114.60
59	A5	2491	C	N1-C2-O2	9.02	124.31	118.90
59	A5	3348	G	N9-C4-C5	-9.02	101.79	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1335	C	C6-N1-C2	-9.02	116.69	120.30
58	B2	1408	A	C8-N9-C4	9.01	109.41	105.80
59	A5	2054	U	C2-N1-C1'	9.01	128.51	117.70
59	A5	2671	C	N1-C2-N3	9.01	125.50	119.20
59	A5	3843	U	N1-C2-O2	9.00	129.10	122.80
59	A5	3351	A	N1-C2-N3	-9.00	124.80	129.30
59	A5	1326	A	C5-C6-N1	8.99	122.20	117.70
59	A5	2516	U	C4-C5-C6	8.99	125.10	119.70
59	A5	1786	G	N1-C6-O6	-8.99	114.51	119.90
59	A5	831	A	C5-C6-N6	-8.99	116.51	123.70
58	B2	355	G	C5-N7-C8	-8.99	99.81	104.30
58	B2	932	U	C2-N1-C1'	8.99	128.48	117.70
58	B2	1077	C	C6-N1-C2	-8.98	116.71	120.30
59	A5	1008	A	O5'-P-OP2	-8.98	97.61	105.70
59	A5	2002	C	N3-C2-O2	-8.98	115.61	121.90
59	A5	1197	A	C6-C5-N7	8.98	138.59	132.30
59	A5	1702	G	N3-C4-N9	-8.98	120.61	126.00
59	A5	3672	U	C5-C6-N1	8.98	127.19	122.70
59	A5	3198	C	N3-C2-O2	-8.97	115.62	121.90
71	AT	47	PRO	CA-N-CD	-8.97	98.94	111.50
58	B2	959	U	N3-C2-O2	-8.97	115.92	122.20
59	A5	2041	G	N9-C4-C5	-8.97	101.81	105.40
59	A5	2995	U	N3-C2-O2	-8.97	115.92	122.20
59	A5	2127	C	C6-N1-C2	-8.97	116.71	120.30
59	A5	1611	G	N3-C2-N2	-8.96	113.63	119.90
58	B2	1193	C	C5-C6-N1	8.96	125.48	121.00
59	A5	3711	G	N3-C4-C5	-8.96	124.12	128.60
59	A5	1095	G	C4-N9-C1'	8.95	138.14	126.50
59	A5	1131	C	N3-C4-C5	8.95	125.48	121.90
59	A5	3711	G	C6-C5-N7	-8.95	125.03	130.40
59	A5	3714	U	C6-N1-C1'	-8.95	108.67	121.20
59	A5	1185	U	C5'-C4'-C3'	8.95	130.32	116.00
59	A5	2780	A	C5-C6-N1	8.95	122.17	117.70
59	A5	3176	C	C6-N1-C2	-8.95	116.72	120.30
59	A5	1127	C	N1-C2-O2	8.94	124.27	118.90
59	A5	1160	U	O4'-C1'-N1	8.94	115.35	108.20
59	A5	1804	A	N1-C6-N6	-8.94	113.24	118.60
59	A5	3393	U	C5-C6-N1	8.94	127.17	122.70
59	A5	1383	A	C4-C5-N7	8.93	115.17	110.70
59	A5	1801	U	N1-C2-N3	8.93	120.26	114.90
59	A5	3472	A	C4-C5-N7	-8.93	106.23	110.70
59	A5	3515	C	C5-C4-N4	8.93	126.45	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	107	U	C6-N1-C2	-8.92	115.64	121.00
58	B2	1924	C	N1-C2-O2	8.92	124.25	118.90
56	A8	101	A	C5-C6-N1	8.91	122.16	117.70
58	B2	1076	U	C5-C6-N1	8.91	127.16	122.70
59	A5	3711	G	N9-C4-C5	-8.91	101.83	105.40
59	A5	999	U	C5-C6-N1	8.91	127.16	122.70
59	A5	2717	C	C6-N1-C2	-8.91	116.74	120.30
59	A5	1149	C	C6-N1-C2	-8.91	116.74	120.30
59	A5	3616	G	N3-C4-N9	8.91	131.34	126.00
59	A5	2573	C	C5-C4-N4	-8.91	113.97	120.20
59	A5	789	G	N9-C4-C5	8.90	108.96	105.40
59	A5	3592	C	C2-N1-C1'	8.90	128.59	118.80
59	A5	3714	U	N1-C2-O2	8.90	129.03	122.80
59	A5	1002	C	N1-C2-O2	8.90	124.24	118.90
59	A5	1401	C	C5-C6-N1	8.90	125.45	121.00
59	A5	97	C	N3-C4-C5	8.89	125.46	121.90
59	A5	1555	G	C5-C6-N1	8.89	115.95	111.50
59	A5	296	C	C4-C5-C6	-8.89	112.95	117.40
59	A5	1738	U	C4-C5-C6	8.88	125.03	119.70
59	A5	3364	C	C5-C6-N1	8.88	125.44	121.00
59	A5	2568	U	O5'-P-OP1	-8.88	97.71	105.70
59	A5	1995	U	N3-C2-O2	-8.88	115.99	122.20
59	A5	752	U	OP1-P-O3'	8.88	124.73	105.20
59	A5	1782	C	N3-C4-N4	8.87	124.21	118.00
59	A5	3133	A	C5-C6-N1	8.87	122.14	117.70
59	A5	3497	G	N9-C4-C5	-8.87	101.85	105.40
59	A5	812	U	O5'-P-OP1	-8.87	97.72	105.70
59	A5	1738	U	N3-C4-O4	-8.86	113.20	119.40
59	A5	1382	U	OP1-P-O3'	8.86	124.69	105.20
59	A5	2749	G	N7-C8-N9	8.86	117.53	113.10
58	B2	1788	C	N1-C2-O2	8.86	124.21	118.90
59	A5	1678	C	C5-C6-N1	8.86	125.43	121.00
59	A5	1358	U	N1-C2-O2	8.85	129.00	122.80
59	A5	1070	G	N9-C4-C5	-8.85	101.86	105.40
56	A8	33	U	C5-C4-O4	-8.85	120.59	125.90
59	A5	3673	G	C4-C5-N7	8.85	114.34	110.80
59	A5	475	U	N3-C2-O2	-8.85	116.01	122.20
59	A5	997	U	O5'-P-OP2	-8.84	97.74	105.70
59	A5	3496	U	N3-C4-O4	8.84	125.59	119.40
59	A5	3193	C	N3-C2-O2	-8.84	115.71	121.90
58	B2	550	C	N1-C2-O2	8.84	124.20	118.90
59	A5	3515	C	N3-C2-O2	-8.84	115.72	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	225	U	C2-N1-C1'	8.83	128.30	117.70
59	A5	2164	G	C4-C5-N7	8.83	114.33	110.80
56	A8	101	A	N9-C4-C5	-8.83	102.27	105.80
59	A5	1093	C	C5-C6-N1	8.83	125.41	121.00
59	A5	3162	C	N1-C2-O2	8.82	124.19	118.90
59	A5	2701	G	C5-N7-C8	8.82	108.71	104.30
59	A5	3504	G	N1-C6-O6	-8.82	114.61	119.90
59	A5	747	U	O5'-P-OP2	-8.82	97.76	105.70
59	A5	1076	A	N9-C4-C5	-8.81	102.28	105.80
59	A5	2641	C	N1-C2-O2	8.81	124.19	118.90
59	A5	2624	G	C4-C5-N7	8.81	114.32	110.80
58	B2	1184	U	C6-N1-C2	-8.80	115.72	121.00
59	A5	84	U	C5-C6-N1	8.80	127.10	122.70
59	A5	1063	C	C6-N1-C2	-8.80	116.78	120.30
59	A5	839	A	N7-C8-N9	-8.80	109.40	113.80
59	A5	3606	G	N3-C4-C5	-8.80	124.20	128.60
59	A5	2537	A	N1-C6-N6	-8.79	113.33	118.60
59	A5	2572	G	O5'-P-OP1	-8.79	97.79	105.70
59	A5	103	A	C8-N9-C4	-8.79	102.28	105.80
58	B2	355	G	C2-N3-C4	-8.79	107.51	111.90
59	A5	1069	A	C2-N3-C4	8.79	114.99	110.60
59	A5	1784	A	C8-N9-C4	8.79	109.31	105.80
59	A5	1398	C	C6-N1-C2	-8.78	116.79	120.30
59	A5	3843	U	C4-C5-C6	-8.78	114.43	119.70
59	A5	29	U	N3-C2-O2	-8.78	116.06	122.20
59	A5	910	C	C5-C6-N1	8.77	125.39	121.00
59	A5	1413	C	C5-C6-N1	8.77	125.38	121.00
59	A5	1995	U	C5-C6-N1	8.77	127.08	122.70
59	A5	3606	G	C2-N3-C4	8.76	116.28	111.90
59	A5	3412	U	O5'-P-OP1	-8.76	97.82	105.70
59	A5	3937	U	N1-C2-O2	8.76	128.93	122.80
59	A5	2720	U	N3-C2-O2	-8.76	116.07	122.20
59	A5	3198	C	N1-C2-O2	8.76	124.15	118.90
58	B2	1184	U	C5-C6-N1	8.75	127.08	122.70
59	A5	817	C	C5-C4-N4	8.75	126.32	120.20
59	A5	1154	U	N3-C4-O4	-8.75	113.28	119.40
59	A5	2750	A	P-O3'-C3'	8.75	130.20	119.70
59	A5	3402	C	N3-C4-N4	-8.75	111.88	118.00
59	A5	2753	G	N9-C4-C5	-8.75	101.90	105.40
59	A5	3593	A	C5-C6-N1	8.74	122.07	117.70
59	A5	3918	A	O4'-C1'-N9	8.74	115.19	108.20
59	A5	330	C	C6-N1-C2	-8.74	116.80	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1207	G	N3-C4-C5	-8.74	124.23	128.60
59	A5	1070	G	C8-N9-C4	8.74	109.89	106.40
59	A5	1777	A	C5-C6-N6	-8.73	116.71	123.70
59	A5	283	A	N3-C4-C5	-8.73	120.69	126.80
59	A5	2728	C	N3-C2-O2	-8.73	115.79	121.90
58	B2	1030	C	O5'-P-OP1	-8.73	97.84	105.70
59	A5	545	U	N3-C2-O2	-8.73	116.09	122.20
59	A5	1750	G	O5'-P-OP2	-8.73	97.85	105.70
59	A5	1130	U	N3-C4-O4	-8.72	113.29	119.40
59	A5	546	G	C4-C5-N7	8.72	114.29	110.80
59	A5	2189	U	O5'-P-OP1	-8.72	97.85	105.70
59	A5	3934	C	N1-C2-O2	8.72	124.13	118.90
33	CP	136	ILE	CG1-CB-CG2	-8.72	92.22	111.40
59	A5	1013	G	C8-N9-C4	8.72	109.89	106.40
59	A5	3114	C	N1-C2-O2	8.72	124.13	118.90
59	A5	3623	G	N1-C6-O6	-8.72	114.67	119.90
59	A5	285	G	N3-C2-N2	8.72	126.00	119.90
59	A5	2751	A	N1-C6-N6	-8.72	113.37	118.60
59	A5	1886	C	N3-C2-O2	-8.71	115.80	121.90
59	A5	128	C	C6-N1-C2	-8.71	116.81	120.30
59	A5	1784	A	C5-N7-C8	-8.71	99.54	103.90
58	B2	366	C	C6-N1-C2	-8.71	116.82	120.30
59	A5	1316	U	C2-N1-C1'	8.71	128.15	117.70
59	A5	296	C	N1-C2-O2	8.71	124.12	118.90
59	A5	3348	G	N7-C8-N9	-8.71	108.75	113.10
59	A5	2537	A	C4-C5-C6	-8.70	112.65	117.00
59	A5	163	A	C4-C5-C6	-8.70	112.65	117.00
59	A5	1268	A	N1-C6-N6	-8.70	113.38	118.60
59	A5	3152	G	O5'-P-OP2	-8.70	97.87	105.70
59	A5	3338	U	C6-N1-C2	-8.70	115.78	121.00
59	A5	1323	C	C5-C6-N1	8.70	125.35	121.00
59	A5	2783	C	C5-C6-N1	8.70	125.35	121.00
59	A5	2754	G	C4-N9-C1'	8.69	137.80	126.50
59	A5	3851	U	C5-C6-N1	8.69	127.05	122.70
59	A5	2643	C	C6-N1-C2	-8.69	116.82	120.30
59	A5	999	U	C4-C5-C6	-8.69	114.49	119.70
59	A5	3450	G	N1-C6-O6	-8.69	114.69	119.90
56	A8	39	A	N1-C6-N6	-8.69	113.39	118.60
58	B2	1024	C	N1-C2-O2	8.69	124.11	118.90
59	A5	3472	A	N9-C4-C5	8.69	109.27	105.80
59	A5	3851	U	N3-C4-O4	8.68	125.47	119.40
59	A5	984	U	N1-C2-O2	8.67	128.87	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1605	U	N3-C4-O4	-8.67	113.33	119.40
59	A5	1417	G	N3-C4-C5	-8.67	124.26	128.60
59	A5	1699	A	C5-C6-N6	8.67	130.64	123.70
59	A5	659	U	N3-C2-O2	-8.67	116.13	122.20
58	B2	615	G	C4-C5-N7	8.67	114.27	110.80
59	A5	475	U	C2-N1-C1'	8.67	128.10	117.70
59	A5	1777	A	O5'-P-OP1	-8.67	97.90	105.70
59	A5	2212	A	C8-N9-C4	-8.67	102.33	105.80
59	A5	1055	U	N3-C2-O2	-8.66	116.14	122.20
59	A5	1798	A	O5'-P-OP1	8.66	121.09	110.70
59	A5	2717	C	C2-N1-C1'	8.66	128.32	118.80
58	B2	1822	U	C5-C6-N1	8.66	127.03	122.70
59	A5	2209	G	N1-C6-O6	8.66	125.09	119.90
58	B2	14	C	C6-N1-C2	-8.66	116.84	120.30
59	A5	1091	G	O5'-P-OP2	-8.66	97.91	105.70
59	A5	301	U	N3-C4-O4	-8.65	113.34	119.40
59	A5	1330	G	N9-C4-C5	8.65	108.86	105.40
59	A5	1354	G	O5'-P-OP2	-8.65	97.91	105.70
59	A5	1566	U	C6-N1-C1'	-8.65	109.09	121.20
59	A5	2481	U	C6-N1-C2	-8.65	115.81	121.00
59	A5	371	G	N7-C8-N9	-8.65	108.78	113.10
59	A5	2793	C	C2-N3-C4	8.65	124.22	119.90
59	A5	3339	U	N3-C4-O4	-8.65	113.35	119.40
59	A5	300	A	C6-N1-C2	-8.65	113.41	118.60
59	A5	1060	G	C2-N3-C4	8.65	116.22	111.90
58	B2	324	U	N1-C2-O2	8.64	128.85	122.80
58	B2	1572	C	N1-C2-O2	8.64	124.08	118.90
59	A5	53	A	C5-C6-N1	8.64	122.02	117.70
59	A5	2037	C	C2-N3-C4	8.64	124.22	119.90
59	A5	3221	A	C8-N9-C4	-8.64	102.34	105.80
59	A5	3590	C	C5-C6-N1	8.64	125.32	121.00
59	A5	3338	U	C5-C4-O4	8.63	131.08	125.90
59	A5	813	C	C2-N3-C4	8.63	124.22	119.90
59	A5	1260	A	N1-C6-N6	-8.63	113.42	118.60
59	A5	2775	A	N9-C4-C5	-8.63	102.35	105.80
59	A5	1095	G	N1-C2-N3	8.62	129.07	123.90
59	A5	1366	G	N3-C4-C5	8.62	132.91	128.60
59	A5	2691	A	N7-C8-N9	8.62	118.11	113.80
59	A5	3478	G	C4-C5-N7	-8.62	107.35	110.80
59	A5	306	C	C6-N1-C2	-8.62	116.85	120.30
59	A5	443	G	C5-N7-C8	-8.62	99.99	104.30
59	A5	1352	U	N3-C4-C5	8.62	119.77	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1060	G	C5-C6-N1	8.62	115.81	111.50
59	A5	3490	C	O5'-P-OP1	-8.62	97.94	105.70
59	A5	1123	C	C5-C6-N1	8.62	125.31	121.00
59	A5	1673	C	N3-C4-N4	-8.62	111.97	118.00
59	A5	3880	A	C5-N7-C8	-8.61	99.59	103.90
59	A5	3675	A	O5'-P-OP1	-8.61	97.95	105.70
59	A5	1888	A	N9-C4-C5	-8.61	102.36	105.80
59	A5	57	G	C5-N7-C8	-8.60	100.00	104.30
59	A5	57	G	N7-C8-N9	8.60	117.40	113.10
59	A5	1960	C	C2-N1-C1'	8.60	128.26	118.80
59	A5	485	A	C5-C6-N6	8.60	130.58	123.70
59	A5	1102	G	C5-C6-N1	8.60	115.80	111.50
59	A5	1777	A	C8-N9-C4	8.60	109.24	105.80
59	A5	2015	G	C8-N9-C4	-8.60	102.96	106.40
58	B2	86	C	N3-C2-O2	-8.59	115.88	121.90
58	B2	1404	C	N1-C2-O2	8.59	124.06	118.90
59	A5	26	G	N9-C4-C5	-8.59	101.96	105.40
59	A5	1088	A	C8-N9-C4	-8.59	102.36	105.80
59	A5	674	A	C4-C5-N7	8.59	114.99	110.70
59	A5	1616	G	N7-C8-N9	8.59	117.39	113.10
59	A5	1869	C	N1-C2-O2	8.59	124.05	118.90
59	A5	76	C	C5-C6-N1	8.58	125.29	121.00
59	A5	1642	G	C5-C6-O6	8.58	133.75	128.60
59	A5	1334	A	C5-C6-N1	8.58	121.99	117.70
59	A5	3631	C	C5-C6-N1	8.58	125.29	121.00
59	A5	1787	C	N1-C2-O2	8.58	124.05	118.90
59	A5	1176	A	N1-C2-N3	-8.58	125.01	129.30
59	A5	3545	C	C6-N1-C2	-8.58	116.87	120.30
58	B2	1238	G	N3-C4-C5	-8.57	124.31	128.60
59	A5	2004	G	N1-C2-N2	-8.57	108.48	116.20
59	A5	812	U	C5-C6-N1	8.57	126.99	122.70
59	A5	1197	A	N1-C2-N3	-8.57	125.02	129.30
58	B2	355	G	N7-C8-N9	8.56	117.38	113.10
58	B2	1109	C	N3-C2-O2	-8.56	115.91	121.90
59	A5	347	A	N3-C4-C5	8.56	132.79	126.80
59	A5	1149	C	N3-C4-C5	8.56	125.32	121.90
59	A5	1675	G	C6-C5-N7	-8.56	125.27	130.40
59	A5	1796	A	C5-C6-N6	8.56	130.54	123.70
59	A5	2267	U	N3-C2-O2	-8.56	116.21	122.20
59	A5	1958	G	C4-N9-C1'	8.55	137.62	126.50
59	A5	3168	A	C8-N9-C4	-8.55	102.38	105.80
59	A5	3393	U	N1-C2-O2	8.55	128.79	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1311	U	N1-C2-O2	8.55	128.78	122.80
59	A5	344	U	C5-C6-N1	8.55	126.97	122.70
59	A5	1607	A	N1-C6-N6	-8.55	113.47	118.60
59	A5	3591	A	N3-C4-N9	-8.54	120.56	127.40
59	A5	1566	U	C5-C6-N1	8.54	126.97	122.70
59	A5	874	G	C6-C5-N7	-8.54	125.28	130.40
71	AT	31	PRO	CA-N-CD	-8.54	99.55	111.50
59	A5	1023	C	N3-C4-C5	8.54	125.31	121.90
59	A5	657	G	N1-C6-O6	-8.53	114.78	119.90
59	A5	1746	A	N7-C8-N9	8.53	118.06	113.80
59	A5	791	C	N3-C4-N4	-8.52	112.03	118.00
59	A5	1002	C	N3-C2-O2	-8.52	115.94	121.90
71	AT	69	PRO	CA-N-CD	-8.52	99.57	111.50
59	A5	1162	A	C5-N7-C8	-8.52	99.64	103.90
59	A5	2581	U	C5-C6-N1	8.52	126.96	122.70
59	A5	1358	U	N3-C2-O2	-8.52	116.24	122.20
59	A5	2686	C	C6-N1-C2	-8.52	116.89	120.30
59	A5	3297	C	C6-N1-C2	-8.52	116.89	120.30
58	B2	1811	C	N1-C2-O2	8.52	124.01	118.90
59	A5	2726	A	C8-N9-C4	-8.52	102.39	105.80
59	A5	1525	G	N1-C6-O6	-8.51	114.79	119.90
59	A5	371	G	N3-C4-N9	8.51	131.11	126.00
59	A5	3608	G	C5-C6-N1	-8.51	107.25	111.50
59	A5	1511	C	C5-C6-N1	8.51	125.25	121.00
71	AT	50	PRO	CA-N-CD	-8.51	99.59	111.50
59	A5	2167	G	N9-C4-C5	-8.50	102.00	105.40
59	A5	2533	U	C5-C4-O4	-8.50	120.80	125.90
59	A5	1168	G	N1-C2-N2	-8.50	108.55	116.20
59	A5	1323	C	C5-C4-N4	-8.50	114.25	120.20
59	A5	1619	C	N1-C2-O2	8.50	124.00	118.90
56	A8	10	C	C6-N1-C2	-8.49	116.90	120.30
59	A5	2729	U	N1-C2-O2	8.49	128.74	122.80
59	A5	3457	C	C5-C6-N1	8.49	125.25	121.00
59	A5	1133	A	O5'-P-OP2	-8.49	98.06	105.70
59	A5	3894	C	C6-N1-C2	-8.48	116.91	120.30
58	B2	324	U	N3-C2-O2	-8.48	116.26	122.20
59	A5	1734	G	C6-C5-N7	-8.48	125.31	130.40
59	A5	1115	A	C2-N3-C4	-8.48	106.36	110.60
59	A5	1379	U	N1-C2-O2	8.48	128.73	122.80
59	A5	1163	G	C4-C5-N7	8.47	114.19	110.80
59	A5	2529	G	C8-N9-C4	-8.47	103.01	106.40
59	A5	1715	G	C8-N9-C1'	8.47	138.01	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	96	U	C5-C6-N1	8.46	126.93	122.70
59	A5	2234	C	C6-N1-C2	-8.47	116.91	120.30
59	A5	3593	A	OP1-P-O3'	8.46	123.82	105.20
59	A5	3595	U	N1-C2-O2	8.47	128.73	122.80
59	A5	3718	A	O5'-P-OP2	-8.46	98.08	105.70
58	B2	1191	C	N3-C4-N4	-8.46	112.08	118.00
59	A5	72	C	C5-C6-N1	8.46	125.23	121.00
59	A5	2567	U	C5-C4-O4	-8.46	120.82	125.90
59	A5	3446	G	C8-N9-C4	8.46	109.78	106.40
58	B2	1217	U	N3-C2-O2	-8.46	116.28	122.20
59	A5	1712	C	C6-N1-C2	-8.46	116.92	120.30
59	A5	2740	C	C4-C5-C6	-8.45	113.17	117.40
59	A5	3236	A	C5-N7-C8	-8.45	99.67	103.90
2	CA	3	ARG	NE-CZ-NH1	8.45	124.53	120.30
59	A5	428	C	N3-C2-O2	-8.45	115.99	121.90
59	A5	1813	A	C8-N9-C4	-8.45	102.42	105.80
59	A5	1549	A	C8-N9-C4	8.45	109.18	105.80
59	A5	1799	U	N3-C2-O2	-8.45	116.29	122.20
59	A5	3448	U	N1-C2-O2	8.45	128.71	122.80
59	A5	73	U	N3-C2-O2	-8.44	116.29	122.20
59	A5	1621	A	N9-C4-C5	-8.44	102.42	105.80
59	A5	3448	U	C5-C6-N1	8.44	126.92	122.70
56	A8	107	U	C5-C6-N1	8.44	126.92	122.70
59	A5	2671	C	N3-C2-O2	-8.44	115.99	121.90
59	A5	2738	C	C6-N1-C2	-8.44	116.92	120.30
59	A5	754	A	N3-C4-C5	-8.44	120.89	126.80
59	A5	1086	C	N3-C2-O2	-8.43	116.00	121.90
59	A5	1091	G	C2-N3-C4	8.43	116.12	111.90
59	A5	2209	G	N3-C2-N2	-8.43	114.00	119.90
59	A5	2756	C	C5-C6-N1	8.43	125.22	121.00
59	A5	1613	A	N1-C6-N6	-8.43	113.54	118.60
59	A5	120	C	N3-C4-N4	8.42	123.89	118.00
56	A8	20	C	C5-C4-N4	8.42	126.09	120.20
59	A5	227	A	C5-C6-N1	8.42	121.91	117.70
59	A5	3507	A	C6-N1-C2	-8.42	113.55	118.60
59	A5	3665	U	C2-N1-C1'	8.42	127.80	117.70
58	B2	1087	C	N3-C2-O2	-8.42	116.01	121.90
59	A5	1364	A	C8-N9-C4	-8.42	102.43	105.80
32	CT	144	LEU	CA-CB-CG	8.41	134.65	115.30
59	A5	1151	A	C5-N7-C8	-8.41	99.70	103.90
59	A5	1511	C	C6-N1-C2	-8.41	116.94	120.30
59	A5	1690	U	C2-N1-C1'	8.41	127.79	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2267	U	N1-C2-O2	8.41	128.69	122.80
59	A5	2559	C	N1-C2-O2	8.40	123.94	118.90
59	A5	2568	U	N3-C4-C5	8.40	119.64	114.60
58	B2	1976	A	O5'-P-OP2	-8.40	98.14	105.70
59	A5	1667	U	C5-C4-O4	8.40	130.94	125.90
58	B2	1079	A	C8-N9-C4	-8.40	102.44	105.80
59	A5	305	G	O5'-P-OP1	-8.40	98.14	105.70
59	A5	2088	G	N9-C4-C5	8.39	108.76	105.40
59	A5	1144	C	N3-C4-C5	-8.39	118.55	121.90
59	A5	1154	U	O5'-P-OP2	-8.39	98.15	105.70
59	A5	2489	G	O4'-C1'-N9	8.39	114.91	108.20
58	B2	1382	G	C8-N9-C1'	8.38	137.90	127.00
59	A5	1543	C	C6-N1-C2	-8.38	116.95	120.30
59	A5	2212	A	N1-C2-N3	-8.38	125.11	129.30
59	A5	3843	U	N3-C4-C5	8.38	119.63	114.60
59	A5	3236	A	C2-N3-C4	-8.38	106.41	110.60
59	A5	26	G	N1-C2-N2	-8.38	108.66	116.20
59	A5	322	G	N7-C8-N9	8.38	117.29	113.10
58	B2	856	A	C5-C6-N6	-8.38	117.00	123.70
59	A5	1370	C	C4-C5-C6	-8.38	113.21	117.40
59	A5	1554	C	N3-C2-O2	-8.38	116.03	121.90
59	A5	1678	C	C2-N3-C4	8.38	124.09	119.90
2	CA	195	SER	C-N-CA	8.37	142.63	121.70
59	A5	33	C	C6-N1-C2	-8.37	116.95	120.30
59	A5	1146	U	N3-C2-O2	-8.36	116.35	122.20
59	A5	1619	C	N3-C2-O2	-8.36	116.05	121.90
59	A5	3590	C	C6-N1-C2	-8.36	116.96	120.30
59	A5	1707	A	C8-N9-C4	8.35	109.14	105.80
56	A8	41	G	O5'-P-OP1	-8.35	98.19	105.70
59	A5	857	U	C5-C6-N1	8.35	126.88	122.70
59	A5	1114	A	N1-C6-N6	8.35	123.61	118.60
59	A5	1790	A	N7-C8-N9	8.35	117.97	113.80
59	A5	2085	G	N3-C4-C5	8.35	132.77	128.60
59	A5	3497	G	C8-N9-C4	8.35	109.74	106.40
59	A5	3762	G	N3-C4-N9	-8.35	120.99	126.00
59	A5	1068	C	C5-C6-N1	8.34	125.17	121.00
58	B2	1846	G	N1-C6-O6	-8.34	114.89	119.90
59	A5	874	G	N3-C4-N9	8.34	131.00	126.00
58	B2	1128	C	C6-N1-C2	-8.34	116.97	120.30
59	A5	1643	G	N9-C4-C5	-8.34	102.07	105.40
59	A5	1801	U	N3-C2-O2	-8.34	116.37	122.20
59	A5	26	G	C4-C5-N7	8.33	114.13	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3677	U	C2-N1-C1'	8.33	127.70	117.70
59	A5	1682	G	C8-N9-C4	-8.33	103.07	106.40
59	A5	2731	G	C5-C6-N1	8.33	115.67	111.50
59	A5	3173	U	C5-C6-N1	-8.33	118.53	122.70
56	A8	101	A	N7-C8-N9	8.32	117.96	113.80
59	A5	120	C	C6-N1-C2	-8.32	116.97	120.30
59	A5	1389	C	C6-N1-C2	-8.32	116.97	120.30
59	A5	2516	U	N1-C2-N3	8.32	119.89	114.90
56	A8	32	G	C4-C5-N7	8.32	114.13	110.80
59	A5	1098	U	O5'-P-OP2	-8.31	98.22	105.70
59	A5	2004	G	C5-N7-C8	-8.31	100.14	104.30
59	A5	1136	A	C2-N3-C4	8.31	114.75	110.60
59	A5	2722	U	N3-C2-O2	-8.31	116.38	122.20
59	A5	2812	U	N1-C2-O2	8.31	128.62	122.80
59	A5	3464	G	C4-C5-N7	8.30	114.12	110.80
59	A5	2782	A	N1-C6-N6	-8.30	113.62	118.60
59	A5	428	C	N3-C4-N4	-8.30	112.19	118.00
59	A5	3137	A	N1-C6-N6	-8.30	113.62	118.60
59	A5	1004	C	O5'-P-OP1	-8.29	98.23	105.70
59	A5	104	A	C5-N7-C8	-8.29	99.75	103.90
59	A5	373	A	N1-C6-N6	-8.29	113.63	118.60
59	A5	1907	U	C5-C6-N1	8.29	126.84	122.70
59	A5	1089	U	O5'-P-OP1	8.29	120.64	110.70
59	A5	3448	U	N3-C2-O2	-8.29	116.40	122.20
59	A5	2697	U	N1-C2-O2	8.28	128.60	122.80
59	A5	343	A	C5-C6-N1	8.28	121.84	117.70
59	A5	346	U	C5-C6-N1	8.28	126.84	122.70
59	A5	3606	G	C8-N9-C4	-8.28	103.09	106.40
59	A5	3363	G	C5-N7-C8	-8.28	100.16	104.30
59	A5	2517	A	N1-C6-N6	-8.27	113.64	118.60
59	A5	1721	C	C4-C5-C6	-8.27	113.26	117.40
59	A5	3414	U	O5'-P-OP1	-8.27	98.26	105.70
59	A5	838	U	N1-C2-O2	8.27	128.59	122.80
59	A5	3711	G	N1-C2-N2	-8.27	108.76	116.20
58	B2	1404	C	C2-N1-C1'	8.26	127.89	118.80
59	A5	449	U	C5-C6-N1	8.26	126.83	122.70
58	B2	1854	U	N3-C2-O2	-8.26	116.42	122.20
59	A5	322	G	C8-N9-C4	-8.26	103.09	106.40
59	A5	1414	C	N3-C4-C5	8.26	125.20	121.90
59	A5	1884	U	N3-C2-O2	-8.26	116.42	122.20
59	A5	2668	C	C4-C5-C6	-8.25	113.28	117.40
59	A5	2623	C	C6-N1-C2	-8.25	117.00	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	14	G	N3-C2-N2	8.24	125.67	119.90
59	A5	1607	A	OP2-P-O3'	8.24	123.34	105.20
56	A8	22	C	C5-C6-N1	8.24	125.12	121.00
59	A5	1651	C	N3-C2-O2	-8.24	116.13	121.90
59	A5	1753	G	N7-C8-N9	8.24	117.22	113.10
59	A5	34	C	N3-C4-C5	8.24	125.20	121.90
59	A5	3351	A	C2-N3-C4	8.24	114.72	110.60
59	A5	38	A	N9-C4-C5	-8.24	102.50	105.80
59	A5	1322	U	C5-C4-O4	-8.23	120.96	125.90
59	A5	1707	A	N9-C4-C5	-8.23	102.51	105.80
59	A5	2537	A	C8-N9-C4	8.23	109.09	105.80
71	AT	89	PRO	CA-N-CD	-8.23	99.97	111.50
59	A5	3607	C	C5-C6-N1	8.23	125.11	121.00
59	A5	58	G	N3-C4-C5	8.23	132.71	128.60
59	A5	977	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	1366	G	C8-N9-C4	-8.23	103.11	106.40
59	A5	1715	G	C8-N9-C4	-8.23	103.11	106.40
59	A5	1960	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	1975	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	2756	C	C6-N1-C2	-8.23	117.01	120.30
59	A5	3534	U	N3-C2-O2	-8.23	116.44	122.20
59	A5	3877	G	N1-C6-O6	-8.23	114.96	119.90
59	A5	815	A	C5-N7-C8	-8.22	99.79	103.90
59	A5	1899	C	C6-N1-C2	-8.22	117.01	120.30
59	A5	2529	G	C2-N3-C4	8.22	116.01	111.90
59	A5	2655	C	C4-C5-C6	-8.22	113.29	117.40
58	B2	1834	G	C8-N9-C4	-8.22	103.11	106.40
59	A5	458	A	C2-N3-C4	8.22	114.71	110.60
58	B2	1968	C	N3-C4-C5	-8.22	118.61	121.90
59	A5	458	A	N1-C2-N3	-8.22	125.19	129.30
59	A5	3260	G	C5-N7-C8	-8.22	100.19	104.30
56	A8	107	U	N3-C4-C5	-8.21	109.67	114.60
58	B2	1110	A	N1-C6-N6	-8.21	113.67	118.60
59	A5	795	A	N1-C2-N3	8.21	133.41	129.30
59	A5	2243	G	C5-C6-O6	8.21	133.53	128.60
58	B2	458	C	C6-N1-C2	-8.21	117.02	120.30
59	A5	1168	G	C6-C5-N7	-8.21	125.48	130.40
59	A5	3342	C	C2-N1-C1'	8.20	127.82	118.80
59	A5	458	A	C4-C5-N7	8.20	114.80	110.70
59	A5	58	G	N3-C4-N9	-8.20	121.08	126.00
59	A5	378	G	C4-C5-N7	8.20	114.08	110.80
59	A5	101	C	C6-N1-C2	-8.19	117.02	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	863	U	N1-C2-O2	8.19	128.53	122.80
59	A5	1203	U	C5-C6-N1	8.19	126.80	122.70
58	B2	1054	A	N1-C6-N6	-8.19	113.69	118.60
59	A5	1109	G	C2-N3-C4	8.19	115.99	111.90
59	A5	1563	A	N1-C6-N6	8.19	123.51	118.60
59	A5	2769	G	N3-C2-N2	8.19	125.63	119.90
59	A5	811	G	N1-C2-N2	8.18	123.56	116.20
59	A5	3490	C	C6-N1-C2	-8.18	117.03	120.30
59	A5	1163	G	N1-C6-O6	8.18	124.81	119.90
59	A5	1731	G	C2-N3-C4	8.18	115.99	111.90
59	A5	2513	G	O5'-P-OP2	-8.18	98.34	105.70
59	A5	2812	U	C2-N1-C1'	8.18	127.51	117.70
59	A5	3342	C	C6-N1-C2	-8.18	117.03	120.30
59	A5	362	A	C5-C6-N1	8.17	121.79	117.70
59	A5	3514	C	C4-C5-C6	8.17	121.49	117.40
59	A5	1168	G	N3-C2-N2	8.17	125.62	119.90
59	A5	1390	C	N3-C2-O2	-8.17	116.18	121.90
59	A5	3333	A	N1-C6-N6	-8.17	113.70	118.60
70	AK	55	LEU	CA-CB-CG	8.17	134.09	115.30
58	B2	86	C	C2-N1-C1'	8.17	127.78	118.80
59	A5	1013	G	N1-C6-O6	-8.17	115.00	119.90
59	A5	349	C	C5-C6-N1	8.17	125.08	121.00
59	A5	1782	C	N3-C2-O2	-8.17	116.18	121.90
59	A5	235	A	C5-C6-N6	-8.16	117.17	123.70
59	A5	652	G	N1-C2-N3	8.16	128.80	123.90
59	A5	2520	U	N1-C2-N3	8.16	119.80	114.90
59	A5	3617	U	C6-N1-C2	-8.16	116.10	121.00
59	A5	1616	G	C5-N7-C8	-8.16	100.22	104.30
59	A5	2794	U	N3-C2-O2	-8.16	116.49	122.20
59	A5	3593	A	N7-C8-N9	8.16	117.88	113.80
59	A5	2066	G	N9-C4-C5	8.16	108.66	105.40
59	A5	1797	A	N9-C4-C5	-8.15	102.54	105.80
58	B2	615	G	C5-C6-O6	-8.15	123.71	128.60
59	A5	1351	C	C4-C5-C6	-8.15	113.32	117.40
59	A5	3542	C	C5-C6-N1	8.15	125.08	121.00
59	A5	2743	C	C6-N1-C2	-8.15	117.04	120.30
59	A5	3344	U	O5'-P-OP1	-8.15	98.37	105.70
58	B2	1949	A	P-O3'-C3'	8.14	129.47	119.70
59	A5	1782	C	C6-N1-C1'	-8.14	111.03	120.80
59	A5	3168	A	C5-N7-C8	-8.14	99.83	103.90
59	A5	1340	G	C5-C6-N1	8.14	115.57	111.50
59	A5	752	U	N1-C2-O2	8.14	128.50	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	808	G	N3-C2-N2	-8.14	114.20	119.90
59	A5	1014	U	N3-C2-O2	-8.14	116.50	122.20
59	A5	1328	U	N3-C4-O4	-8.14	113.70	119.40
59	A5	1563	A	C5-C6-N6	-8.14	117.19	123.70
56	A8	53	C	C5-C6-N1	8.13	125.07	121.00
59	A5	1089	U	C5-C6-N1	8.13	126.77	122.70
59	A5	3521	A	N1-C6-N6	-8.13	113.72	118.60
59	A5	441	A	C2-N3-C4	-8.13	106.53	110.60
59	A5	2770	C	O5'-P-OP2	-8.13	98.38	105.70
59	A5	1154	U	N1-C2-O2	8.13	128.49	122.80
58	B2	1234	G	N3-C4-N9	8.13	130.88	126.00
59	A5	1959	A	C4-C5-N7	8.12	114.76	110.70
58	B2	1382	G	N3-C4-C5	8.12	132.66	128.60
59	A5	1764	G	C4-C5-N7	8.12	114.05	110.80
59	A5	1329	G	C2-N3-C4	8.11	115.96	111.90
59	A5	1682	G	C2-N3-C4	8.12	115.96	111.90
59	A5	2473	C	C5-C6-N1	8.12	125.06	121.00
59	A5	679	G	N3-C4-C5	-8.11	124.54	128.60
59	A5	3260	G	O5'-P-OP1	-8.11	98.40	105.70
58	B2	1968	C	C5-C6-N1	8.11	125.05	121.00
58	B2	1978	C	C6-N1-C2	-8.11	117.06	120.30
59	A5	1351	C	N1-C2-O2	8.11	123.76	118.90
59	A5	3164	C	C6-N1-C2	-8.11	117.06	120.30
59	A5	2167	G	C4-C5-N7	8.10	114.04	110.80
59	A5	2238	A	N1-C6-N6	-8.10	113.74	118.60
59	A5	28	C	C2-N1-C1'	8.10	127.71	118.80
59	A5	330	C	N3-C2-O2	-8.10	116.23	121.90
59	A5	377	U	N3-C4-C5	-8.10	109.74	114.60
59	A5	831	A	C4-C5-N7	8.10	114.75	110.70
59	A5	1777	A	N1-C6-N6	8.10	123.46	118.60
59	A5	2532	U	C6-N1-C2	-8.10	116.14	121.00
59	A5	1060	G	O5'-P-OP1	-8.10	98.41	105.70
59	A5	1089	U	N3-C4-C5	-8.10	109.74	114.60
59	A5	3756	A	N7-C8-N9	-8.10	109.75	113.80
58	B2	1381	G	C8-N9-C4	-8.09	103.16	106.40
59	A5	1089	U	C5-C4-O4	8.09	130.75	125.90
59	A5	3346	G	N3-C4-C5	-8.09	124.55	128.60
59	A5	105	A	N7-C8-N9	8.09	117.84	113.80
59	A5	1596	A	O4'-C1'-N9	8.09	114.67	108.20
59	A5	1898	C	C6-N1-C2	-8.09	117.06	120.30
59	A5	2135	C	C2-N1-C1'	8.09	127.69	118.80
59	A5	1723	G	N1-C6-O6	-8.09	115.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1419	A	N1-C6-N6	-8.08	113.75	118.60
59	A5	3412	U	N1-C2-O2	8.08	128.46	122.80
58	B2	1967	C	N1-C2-O2	8.08	123.75	118.90
59	A5	105	A	C6-C5-N7	-8.08	126.64	132.30
59	A5	3473	C	C6-N1-C2	-8.08	117.07	120.30
59	A5	3263	C	N1-C2-O2	8.08	123.75	118.90
59	A5	3484	U	N3-C2-O2	-8.08	116.55	122.20
59	A5	3945	A	C5-N7-C8	-8.08	99.86	103.90
59	A5	1605	U	C5-C4-O4	8.07	130.75	125.90
59	A5	2569	U	C6-N1-C2	-8.07	116.16	121.00
58	B2	1167	U	C5-C6-N1	8.07	126.74	122.70
59	A5	3236	A	C4-C5-N7	8.07	114.73	110.70
59	A5	3730	G	C8-N9-C4	-8.07	103.17	106.40
56	A8	34	C	N1-C2-O2	8.07	123.74	118.90
59	A5	1166	U	C5-C6-N1	8.07	126.73	122.70
59	A5	120	C	C2-N1-C1'	8.06	127.67	118.80
59	A5	1022	A	C8-N9-C4	-8.06	102.57	105.80
59	A5	2712	U	N3-C4-C5	8.06	119.44	114.60
59	A5	549	A	C4-C5-N7	8.06	114.73	110.70
58	B2	1404	C	C5-C6-N1	8.05	125.03	121.00
59	A5	1202	A	N1-C6-N6	-8.05	113.77	118.60
59	A5	2104	A	N1-C2-N3	-8.05	125.27	129.30
59	A5	3400	U	C4-C5-C6	-8.05	114.87	119.70
59	A5	3405	U	N3-C2-O2	-8.05	116.56	122.20
59	A5	3483	G	O5'-P-OP1	-8.05	98.45	105.70
59	A5	3763	U	C2-N1-C1'	8.05	127.36	117.70
59	A5	2792	G	C5-C6-N1	8.05	115.52	111.50
59	A5	3514	C	C6-N1-C2	-8.05	117.08	120.30
58	B2	1979	C	C6-N1-C2	-8.05	117.08	120.30
59	A5	522	G	C8-N9-C4	-8.04	103.18	106.40
59	A5	1355	C	N3-C4-N4	-8.04	112.37	118.00
58	B2	489	C	C6-N1-C2	-8.04	117.08	120.30
59	A5	1326	A	C5-N7-C8	-8.04	99.88	103.90
59	A5	2135	C	C6-N1-C2	-8.04	117.08	120.30
59	A5	3711	G	C4-N9-C1'	8.04	136.95	126.50
59	A5	3892	A	C5-C6-N1	8.04	121.72	117.70
59	A5	3135	G	N9-C4-C5	-8.04	102.19	105.40
58	B2	1673	U	C5-C6-N1	8.03	126.72	122.70
59	A5	387	U	N3-C2-O2	-8.03	116.58	122.20
59	A5	522	G	C6-C5-N7	-8.03	125.58	130.40
59	A5	1289	C	C6-N1-C2	-8.03	117.09	120.30
59	A5	2220	C	N3-C4-N4	-8.03	112.38	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	264	C	C6-N1-C2	-8.03	117.09	120.30
59	A5	3412	U	N1-C2-N3	8.03	119.72	114.90
59	A5	1531	U	C6-N1-C2	8.03	125.82	121.00
59	A5	3309	A	C8-N9-C4	-8.03	102.59	105.80
58	B2	1111	U	O4'-C1'-N1	8.03	114.62	108.20
59	A5	1162	A	C5-C6-N1	8.02	121.71	117.70
59	A5	2764	A	C5-C6-N1	8.02	121.71	117.70
59	A5	2709	U	N3-C2-O2	-8.02	116.58	122.20
59	A5	380	G	C5-C6-N1	8.02	115.51	111.50
59	A5	1351	C	N3-C4-C5	8.02	125.11	121.90
59	A5	2092	U	C5-C6-N1	8.01	126.71	122.70
59	A5	423	U	C2-N1-C1'	8.01	127.31	117.70
59	A5	789	G	C5-C6-O6	8.01	133.41	128.60
59	A5	105	A	O5'-P-OP1	-8.01	98.49	105.70
59	A5	385	A	N1-C6-N6	8.01	123.41	118.60
59	A5	2541	C	N3-C4-C5	8.01	125.10	121.90
59	A5	3511	U	C2-N3-C4	8.01	131.81	127.00
59	A5	225	U	N3-C2-O2	-8.01	116.59	122.20
59	A5	3656	A	N1-C6-N6	-8.00	113.80	118.60
59	A5	1517	A	C8-N9-C4	-8.00	102.60	105.80
59	A5	1751	U	N3-C4-C5	-8.00	109.80	114.60
59	A5	2668	C	N3-C4-C5	8.00	125.10	121.90
59	A5	3166	C	C6-N1-C2	-8.00	117.10	120.30
55	A7	69	C	N1-C2-O2	8.00	123.70	118.90
59	A5	1524	U	O5'-P-OP2	-8.00	98.50	105.70
59	A5	3309	A	C5-N7-C8	-8.00	99.90	103.90
59	A5	3844	U	C5-C6-N1	-8.00	118.70	122.70
59	A5	1522	G	O4'-C1'-N9	8.00	114.60	108.20
59	A5	1675	G	N7-C8-N9	8.00	117.10	113.10
59	A5	2190	A	N1-C6-N6	-8.00	113.80	118.60
59	A5	811	G	C5-N7-C8	-7.99	100.30	104.30
59	A5	1723	G	O4'-C1'-N9	7.99	114.59	108.20
59	A5	3622	C	N3-C4-N4	-7.99	112.41	118.00
59	A5	101	C	C2-N3-C4	7.99	123.90	119.90
59	A5	1136	A	N1-C6-N6	-7.99	113.81	118.60
59	A5	1375	G	N9-C4-C5	-7.99	102.20	105.40
59	A5	2753	G	C4-C5-N7	7.99	114.00	110.80
59	A5	1684	G	C5-C6-N1	7.99	115.49	111.50
59	A5	1091	G	C5-C6-N1	7.99	115.49	111.50
59	A5	1332	C	C5-C6-N1	7.99	124.99	121.00
59	A5	1370	C	N3-C4-N4	-7.99	112.41	118.00
59	A5	2529	G	N9-C4-C5	7.99	108.59	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1131	C	O5'-P-OP2	-7.98	98.51	105.70
59	A5	1144	C	C5-C6-N1	7.98	124.99	121.00
58	B2	880	G	N1-C6-O6	-7.98	115.11	119.90
59	A5	2564	U	N3-C2-O2	-7.98	116.61	122.20
59	A5	2656	C	C5-C6-N1	7.98	124.99	121.00
59	A5	777	C	OP1-P-OP2	-7.98	107.63	119.60
58	B2	1002	A	N1-C6-N6	-7.98	113.81	118.60
58	B2	1752	U	C2-N1-C1'	7.98	127.27	117.70
56	A8	35	G	N1-C6-O6	-7.98	115.11	119.90
59	A5	423	U	N3-C2-O2	-7.98	116.62	122.20
59	A5	1338	U	O5'-P-OP1	-7.98	98.52	105.70
58	B2	1788	C	C2-N1-C1'	7.97	127.57	118.80
59	A5	1016	A	O5'-P-OP2	-7.97	98.52	105.70
59	A5	3343	A	C6-N1-C2	7.97	123.38	118.60
59	A5	3472	A	P-O3'-C3'	7.97	129.27	119.70
58	B2	631	C	N1-C2-O2	7.97	123.68	118.90
59	A5	825	C	C4-C5-C6	-7.97	113.42	117.40
58	B2	1077	C	C5-C6-N1	7.96	124.98	121.00
58	B2	1090	A	O4'-C1'-N9	7.96	114.57	108.20
59	A5	3145	U	N3-C2-O2	-7.96	116.62	122.20
59	A5	2088	G	C8-N9-C1'	7.96	137.35	127.00
59	A5	808	G	C5-C6-N1	7.96	115.48	111.50
59	A5	1738	U	N1-C2-O2	7.96	128.37	122.80
59	A5	2793	C	C6-N1-C2	-7.96	117.12	120.30
58	B2	1090	A	N7-C8-N9	7.96	117.78	113.80
59	A5	2750	A	C2-N3-C4	7.96	114.58	110.60
59	A5	3507	A	O5'-P-OP1	-7.96	98.54	105.70
59	A5	385	A	C4-C5-N7	7.96	114.68	110.70
59	A5	3623	G	C4-C5-N7	-7.96	107.62	110.80
59	A5	2749	G	C5-N7-C8	-7.96	100.32	104.30
58	B2	1073	G	C6-N1-C2	-7.95	120.33	125.10
59	A5	828	G	C4-C5-N7	7.95	113.98	110.80
59	A5	1681	G	N3-C4-N9	7.95	130.77	126.00
59	A5	2792	G	N3-C2-N2	7.95	125.47	119.90
59	A5	2473	C	N1-C2-O2	7.95	123.67	118.90
59	A5	3392	U	N3-C2-O2	-7.95	116.63	122.20
59	A5	1641	U	O5'-P-OP2	-7.95	98.55	105.70
59	A5	1785	G	C5-C6-O6	7.95	133.37	128.60
59	A5	558	C	N1-C2-O2	7.94	123.67	118.90
59	A5	3477	A	C4-C5-N7	7.94	114.67	110.70
59	A5	3509	U	O5'-P-OP2	-7.94	98.55	105.70
59	A5	3591	A	C8-N9-C1'	7.94	142.00	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2554	U	C2-N1-C1'	7.94	127.22	117.70
59	A5	2728	C	C6-N1-C2	-7.94	117.12	120.30
59	A5	3150	G	C8-N9-C4	-7.94	103.22	106.40
58	B2	258	A	N7-C8-N9	7.93	117.77	113.80
59	A5	1183	U	C6-N1-C2	-7.93	116.24	121.00
59	A5	2822	C	C6-N1-C2	-7.93	117.13	120.30
55	A7	92	C	C4-C5-C6	-7.93	113.44	117.40
59	A5	2737	C	N3-C2-O2	-7.93	116.35	121.90
59	A5	1552	A	N1-C2-N3	-7.92	125.34	129.30
59	A5	3518	A	N1-C6-N6	-7.92	113.84	118.60
59	A5	992	U	OP2-P-O3'	7.92	122.63	105.20
58	B2	1991	C	C5-C6-N1	7.92	124.96	121.00
59	A5	1785	G	N1-C6-O6	-7.92	115.15	119.90
59	A5	2095	U	C5-C6-N1	7.92	126.66	122.70
59	A5	1167	A	O5'-P-OP1	-7.91	98.58	105.70
59	A5	699	U	N1-C2-O2	7.91	128.34	122.80
59	A5	1018	C	N3-C2-O2	-7.91	116.36	121.90
59	A5	1783	A	C5-C6-N1	-7.91	113.75	117.70
59	A5	1770	C	N3-C4-N4	-7.91	112.46	118.00
59	A5	94	C	C5-C6-N1	7.91	124.95	121.00
59	A5	1005	G	C8-N9-C4	-7.91	103.24	106.40
59	A5	1686	A	C5-N7-C8	-7.91	99.95	103.90
58	B2	1382	G	C6-C5-N7	7.90	135.14	130.40
59	A5	93	G	C5-N7-C8	-7.90	100.35	104.30
59	A5	3341	C	N3-C2-O2	-7.90	116.37	121.90
59	A5	426	A	N9-C4-C5	-7.90	102.64	105.80
59	A5	813	C	N3-C4-C5	-7.90	118.74	121.90
58	B2	1211	C	C5-C6-N1	7.90	124.95	121.00
59	A5	3464	G	C5-N7-C8	-7.90	100.35	104.30
59	A5	1325	C	C6-N1-C1'	-7.90	111.32	120.80
59	A5	1692	G	O5'-P-OP2	-7.90	98.59	105.70
59	A5	1521	G	N3-C4-N9	-7.89	121.26	126.00
59	A5	1690	U	C5-C6-N1	7.89	126.65	122.70
59	A5	1018	C	N1-C2-O2	7.89	123.64	118.90
59	A5	1718	G	C4-N9-C1'	7.89	136.76	126.50
59	A5	3498	A	C5-N7-C8	-7.89	99.95	103.90
59	A5	1123	C	N3-C4-C5	-7.89	118.74	121.90
55	A7	80	U	N1-C2-O2	7.89	128.32	122.80
56	A8	107	U	O5'-P-OP1	-7.89	98.60	105.70
59	A5	760	G	N3-C4-C5	-7.89	124.66	128.60
58	B2	634	U	O5'-P-OP2	-7.89	98.60	105.70
59	A5	2224	A	C5-N7-C8	-7.89	99.96	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2694	G	N9-C4-C5	-7.89	102.25	105.40
59	A5	2799	U	N3-C2-O2	-7.89	116.68	122.20
59	A5	3139	G	C5-C6-N1	7.89	115.44	111.50
59	A5	2521	A	C5-C6-N6	-7.88	117.39	123.70
59	A5	3519	C	C2-N3-C4	7.88	123.84	119.90
55	A7	74	A	N1-C6-N6	-7.88	113.87	118.60
59	A5	2170	C	N3-C4-C5	7.88	125.05	121.90
59	A5	2729	U	C5-C6-N1	7.88	126.64	122.70
55	A7	2	C	N3-C2-O2	-7.88	116.39	121.90
58	B2	1817	C	C6-N1-C2	-7.88	117.15	120.30
58	B2	249	U	C6-N1-C2	-7.88	116.28	121.00
59	A5	3338	U	N3-C2-O2	-7.88	116.69	122.20
59	A5	2754	G	N1-C2-N2	-7.87	109.11	116.20
59	A5	3679	C	C5-C6-N1	7.87	124.94	121.00
59	A5	1018	C	C2-N3-C4	-7.87	115.96	119.90
58	B2	1087	C	C2-N1-C1'	7.87	127.46	118.80
59	A5	2165	C	N3-C2-O2	-7.87	116.39	121.90
59	A5	281	C	C6-N1-C2	-7.87	117.15	120.30
58	B2	12	U	N1-C2-O2	7.86	128.30	122.80
59	A5	428	C	N1-C2-O2	7.86	123.62	118.90
59	A5	1174	G	C8-N9-C1'	-7.86	116.78	127.00
59	A5	1419	A	O5'-P-OP1	-7.86	98.62	105.70
59	A5	2004	G	N3-C4-C5	-7.86	124.67	128.60
58	B2	1978	C	C5-C6-N1	7.86	124.93	121.00
59	A5	2694	G	C5-N7-C8	-7.86	100.37	104.30
59	A5	341	A	O5'-P-OP1	-7.86	98.63	105.70
59	A5	2739	A	C4-C5-C6	-7.86	113.07	117.00
59	A5	1020	A	N1-C6-N6	-7.86	113.89	118.60
59	A5	93	G	N7-C8-N9	7.86	117.03	113.10
59	A5	1783	A	C6-N1-C2	7.85	123.31	118.60
58	B2	849	U	C2-N1-C1'	7.85	127.12	117.70
59	A5	3627	C	N3-C4-C5	7.85	125.04	121.90
59	A5	1607	A	O5'-P-OP1	-7.85	98.63	105.70
59	A5	3221	A	C5-N7-C8	-7.85	99.97	103.90
59	A5	62	G	C4-C5-N7	7.85	113.94	110.80
59	A5	2172	C	C4-C5-C6	-7.85	113.47	117.40
59	A5	2093	U	C2-N1-C1'	-7.85	108.28	117.70
55	A7	2	C	N1-C2-O2	7.85	123.61	118.90
59	A5	1174	G	N7-C8-N9	-7.85	109.18	113.10
58	B2	856	A	N1-C6-N6	7.84	123.31	118.60
59	A5	1532	A	N1-C6-N6	-7.84	113.89	118.60
59	A5	365	A	C6-N1-C2	-7.84	113.89	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3321	A	C8-N9-C4	7.84	108.94	105.80
59	A5	359	G	N1-C6-O6	-7.84	115.20	119.90
59	A5	1082	A	N1-C6-N6	-7.84	113.90	118.60
59	A5	3934	C	C2-N1-C1'	7.84	127.42	118.80
59	A5	42	U	C6-N1-C2	-7.83	116.30	121.00
59	A5	443	G	O5'-P-OP1	-7.83	98.65	105.70
59	A5	3845	A	C4-C5-N7	7.83	114.62	110.70
59	A5	811	G	C4-N9-C1'	-7.83	116.32	126.50
59	A5	3499	G	C2-N3-C4	7.83	115.82	111.90
59	A5	424	G	C8-N9-C4	7.83	109.53	106.40
59	A5	2514	U	C6-N1-C2	-7.83	116.30	121.00
59	A5	1566	U	N1-C2-O2	7.83	128.28	122.80
59	A5	2695	A	N1-C2-N3	-7.83	125.39	129.30
59	A5	2096	C	N3-C2-O2	-7.83	116.42	121.90
59	A5	3711	G	C8-N9-C1'	-7.82	116.83	127.00
59	A5	2187	U	N3-C2-O2	-7.82	116.73	122.20
59	A5	3808	A	P-O3'-C3'	7.82	129.08	119.70
59	A5	46	C	C5-C6-N1	7.81	124.91	121.00
59	A5	3418	U	C2-N1-C1'	7.81	127.07	117.70
59	A5	3472	A	OP1-P-O3'	7.81	122.39	105.20
59	A5	343	A	C2-N3-C4	7.81	114.50	110.60
59	A5	1147	U	N3-C2-O2	-7.81	116.73	122.20
59	A5	1384	C	N3-C2-O2	-7.81	116.43	121.90
59	A5	1370	C	O5'-P-OP2	-7.81	98.67	105.70
56	A8	18	C	C6-N1-C2	-7.80	117.18	120.30
59	A5	1015	G	N1-C6-O6	-7.80	115.22	119.90
59	A5	1061	A	O5'-P-OP1	-7.80	98.68	105.70
59	A5	2668	C	C5-C6-N1	7.80	124.90	121.00
59	A5	3603	C	N3-C2-O2	-7.80	116.44	121.90
55	A7	83	A	N3-C4-N9	-7.80	121.16	127.40
56	A8	97	U	C6-N1-C2	-7.80	116.32	121.00
58	B2	1984	G	N9-C4-C5	-7.80	102.28	105.40
59	A5	99	A	O5'-P-OP1	-7.80	98.68	105.70
59	A5	2172	C	C6-N1-C2	-7.80	117.18	120.30
59	A5	3135	G	C8-N9-C1'	-7.80	116.86	127.00
59	A5	3670	G	C8-N9-C4	-7.80	103.28	106.40
59	A5	442	A	C4-C5-N7	7.80	114.60	110.70
59	A5	806	A	N7-C8-N9	7.80	117.70	113.80
59	A5	1144	C	C2-N1-C1'	7.80	127.38	118.80
59	A5	2737	C	N1-C2-O2	7.79	123.58	118.90
59	A5	3633	U	N3-C2-O2	-7.79	116.74	122.20
59	A5	3168	A	N7-C8-N9	7.79	117.70	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1118	C	N3-C4-N4	7.79	123.45	118.00
59	A5	1383	A	C5-N7-C8	-7.79	100.00	103.90
59	A5	866	C	C5-C6-N1	7.79	124.89	121.00
59	A5	2217	A	C5-C6-N6	7.79	129.93	123.70
59	A5	996	C	N1-C2-N3	7.79	124.65	119.20
59	A5	1276	G	N3-C4-C5	7.79	132.49	128.60
59	A5	1387	G	C8-N9-C1'	-7.79	116.88	127.00
59	A5	797	A	C5-N7-C8	-7.78	100.01	103.90
59	A5	1017	A	C8-N9-C4	-7.78	102.69	105.80
59	A5	833	U	C5-C6-N1	7.78	126.59	122.70
58	B2	618	G	C4-N9-C1'	7.78	136.62	126.50
59	A5	1073	C	N3-C2-O2	-7.78	116.45	121.90
2	CA	180	LEU	CA-CB-CG	7.78	133.19	115.30
58	B2	1414	C	C6-N1-C2	-7.78	117.19	120.30
59	A5	1068	C	O5'-P-OP1	7.78	120.03	110.70
59	A5	812	U	C5-C4-O4	-7.77	121.24	125.90
59	A5	1629	C	C6-N1-C2	-7.77	117.19	120.30
59	A5	1156	U	N3-C4-O4	-7.77	113.96	119.40
59	A5	1401	C	C4-C5-C6	-7.77	113.51	117.40
59	A5	1534	G	C6-N1-C2	-7.77	120.44	125.10
59	A5	2041	G	N3-C4-N9	7.77	130.66	126.00
59	A5	2088	G	C4-N9-C1'	-7.77	116.40	126.50
59	A5	385	A	C5-N7-C8	-7.77	100.02	103.90
59	A5	1053	G	C4-C5-N7	7.77	113.91	110.80
59	A5	3132	C	N3-C2-O2	-7.77	116.46	121.90
59	A5	871	A	C8-N9-C4	-7.77	102.69	105.80
59	A5	34	C	C4-C5-C6	-7.76	113.52	117.40
58	B2	622	C	C5-C6-N1	7.76	124.88	121.00
59	A5	2128	A	N7-C8-N9	7.76	117.68	113.80
59	A5	3593	A	C6-C5-N7	7.76	137.73	132.30
59	A5	1025	U	O5'-P-OP1	7.76	120.01	110.70
59	A5	56	A	O5'-P-OP2	-7.75	98.72	105.70
59	A5	967	C	N3-C4-C5	7.75	125.00	121.90
59	A5	1329	G	C4-N9-C1'	7.75	136.58	126.50
59	A5	3728	A	C6-C5-N7	-7.75	126.87	132.30
59	A5	3448	U	C2-N1-C1'	7.75	127.00	117.70
59	A5	3885	C	C5-C6-N1	7.75	124.88	121.00
58	B2	299	C	C6-N1-C2	-7.75	117.20	120.30
59	A5	797	A	N7-C8-N9	7.75	117.67	113.80
59	A5	1984	U	C5-C6-N1	7.75	126.57	122.70
59	A5	1679	U	N3-C2-O2	-7.74	116.78	122.20
59	A5	552	U	N1-C2-N3	7.74	119.55	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1000	G	C4-C5-N7	7.74	113.90	110.80
56	A8	103	C	O5'-P-OP2	-7.74	98.73	105.70
59	A5	1621	A	C5-N7-C8	-7.74	100.03	103.90
59	A5	1678	C	C6-N1-C2	-7.74	117.20	120.30
59	A5	2486	A	N1-C6-N6	-7.73	113.96	118.60
59	A5	1025	U	O5'-P-OP2	-7.73	98.74	105.70
59	A5	3715	U	N3-C2-O2	-7.73	116.79	122.20
59	A5	1086	C	C4-C5-C6	-7.73	113.53	117.40
59	A5	2221	G	O5'-P-OP1	-7.73	98.74	105.70
59	A5	76	C	C4-C5-C6	-7.73	113.54	117.40
59	A5	1778	A	C4-C5-C6	-7.73	113.14	117.00
59	A5	2493	C	C4-C5-C6	-7.73	113.54	117.40
59	A5	1390	C	C6-N1-C1'	-7.72	111.53	120.80
59	A5	1631	U	N3-C2-O2	-7.72	116.79	122.20
59	A5	1753	G	C5-N7-C8	-7.72	100.44	104.30
59	A5	2210	U	N3-C2-O2	-7.72	116.80	122.20
59	A5	3678	G	C4-N9-C1'	7.72	136.53	126.50
59	A5	1764	G	C6-C5-N7	-7.71	125.77	130.40
59	A5	1091	G	N9-C4-C5	7.71	108.48	105.40
59	A5	382	G	C5-C6-N1	7.71	115.36	111.50
59	A5	1157	C	N3-C2-O2	-7.71	116.50	121.90
59	A5	1524	U	N3-C2-O2	-7.70	116.81	122.20
58	B2	381	C	N3-C2-O2	-7.70	116.51	121.90
59	A5	1409	G	C8-N9-C4	-7.70	103.32	106.40
59	A5	1724	A	O5'-P-OP2	7.70	119.94	110.70
56	A8	102	A	O5'-P-OP1	7.70	119.94	110.70
59	A5	789	G	N3-C4-C5	-7.70	124.75	128.60
59	A5	755	A	C5-C6-N6	7.70	129.86	123.70
59	A5	1314	U	N1-C2-O2	7.70	128.19	122.80
59	A5	28	C	C5-C6-N1	7.69	124.85	121.00
59	A5	300	A	N7-C8-N9	7.69	117.65	113.80
56	A8	98	U	N1-C2-N3	7.69	119.51	114.90
59	A5	1643	G	C5-C6-O6	-7.69	123.99	128.60
59	A5	3677	U	N1-C1'-C2'	7.69	124.00	114.00
59	A5	3335	A	O5'-P-OP1	-7.69	98.78	105.70
59	A5	1540	U	N1-C2-O2	7.69	128.18	122.80
6	CC	365	LEU	CA-CB-CG	7.68	132.97	115.30
59	A5	41	U	C4-C5-C6	-7.68	115.09	119.70
59	A5	2096	C	C2-N1-C1'	7.68	127.25	118.80
59	A5	3349	A	C5-C6-N6	7.68	129.85	123.70
58	B2	1021	A	N7-C8-N9	7.68	117.64	113.80
59	A5	777	C	C5-C6-N1	7.68	124.84	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	986	A	N1-C6-N6	-7.68	113.99	118.60
59	A5	2151	A	C8-N9-C4	-7.68	102.73	105.80
59	A5	1031	G	N3-C2-N2	7.68	125.28	119.90
56	A8	27	C	N3-C2-O2	-7.67	116.53	121.90
58	B2	632	G	O5'-P-OP2	-7.67	98.80	105.70
59	A5	1347	A	N1-C2-N3	-7.67	125.46	129.30
59	A5	2723	A	C5-C6-N1	7.67	121.53	117.70
59	A5	3487	A	C4-C5-N7	7.67	114.53	110.70
59	A5	3339	U	C5-C4-O4	7.67	130.50	125.90
59	A5	2578	U	C5-C6-N1	7.66	126.53	122.70
59	A5	2659	A	N3-C4-C5	-7.66	121.44	126.80
59	A5	1163	G	C6-C5-N7	-7.66	125.80	130.40
59	A5	2710	A	C2-N3-C4	7.66	114.43	110.60
59	A5	1596	A	N1-C6-N6	-7.66	114.00	118.60
59	A5	3936	A	C5-N7-C8	-7.66	100.07	103.90
59	A5	1078	G	OP1-P-O3'	7.66	122.05	105.20
59	A5	921	C	C5-C6-N1	7.66	124.83	121.00
58	B2	1067	G	O5'-P-OP2	-7.66	98.81	105.70
59	A5	1031	G	C6-C5-N7	-7.66	125.81	130.40
59	A5	2702	A	C5-C6-N6	-7.66	117.58	123.70
58	B2	632	G	C4-C5-N7	7.65	113.86	110.80
59	A5	770	C	C5-C6-N1	7.65	124.83	121.00
59	A5	2088	G	N3-C4-C5	7.65	132.43	128.60
56	A8	97	U	N3-C4-O4	7.65	124.76	119.40
59	A5	53	A	N7-C8-N9	7.65	117.62	113.80
59	A5	26	G	C8-N9-C1'	-7.65	117.06	127.00
59	A5	1195	U	N1-C2-N3	7.64	119.49	114.90
59	A5	3727	A	C5-N7-C8	7.64	107.72	103.90
58	B2	1238	G	C4-N9-C1'	7.64	136.43	126.50
59	A5	102	G	N3-C4-C5	-7.64	124.78	128.60
59	A5	1073	C	N1-C2-O2	7.64	123.48	118.90
59	A5	434	A	C5-C6-N1	7.64	121.52	117.70
56	A8	53	C	C6-N1-C2	-7.63	117.25	120.30
59	A5	358	C	O5'-P-OP2	-7.63	98.83	105.70
59	A5	790	U	C5-C6-N1	7.63	126.52	122.70
59	A5	2773	G	N3-C2-N2	-7.63	114.56	119.90
59	A5	3464	G	N7-C8-N9	7.63	116.92	113.10
58	B2	1053	A	N1-C6-N6	7.63	123.18	118.60
59	A5	2241	U	OP2-P-O3'	7.63	121.98	105.20
59	A5	3350	U	C6-N1-C2	-7.63	116.42	121.00
59	A5	3833	U	N1-C2-O2	7.62	128.14	122.80
59	A5	1372	A	C4-C5-N7	7.62	114.51	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1401	C	C6-N1-C2	-7.62	117.25	120.30
59	A5	2652	U	N3-C2-O2	-7.62	116.87	122.20
59	A5	3762	G	C4-N9-C1'	-7.62	116.60	126.50
59	A5	587	U	N1-C2-O2	7.62	128.13	122.80
59	A5	1777	A	C4-C5-N7	7.61	114.51	110.70
59	A5	789	G	C5-N7-C8	7.61	108.11	104.30
59	A5	3400	U	C5-C6-N1	7.61	126.51	122.70
56	A8	107	U	C2-N3-C4	7.61	131.57	127.00
59	A5	3258	C	C2-N1-C1'	7.61	127.17	118.80
59	A5	385	A	C5-C6-N6	-7.61	117.61	123.70
58	B2	1167	U	C6-N1-C2	-7.61	116.44	121.00
59	A5	808	G	N9-C4-C5	-7.61	102.36	105.40
59	A5	1009	G	C8-N9-C4	-7.61	103.36	106.40
59	A5	1128	C	O5'-P-OP1	-7.61	98.85	105.70
59	A5	2754	G	C8-N9-C1'	-7.61	117.11	127.00
59	A5	3130	G	C4-C5-N7	7.61	113.84	110.80
59	A5	2736	A	N1-C2-N3	-7.60	125.50	129.30
58	B2	1104	C	C4-C5-C6	-7.60	113.60	117.40
59	A5	1095	G	N1-C2-N2	-7.60	109.36	116.20
59	A5	3138	G	C5-C6-N1	7.60	115.30	111.50
59	A5	3776	A	N1-C2-N3	-7.60	125.50	129.30
59	A5	3417	C	C4-C5-C6	-7.60	113.60	117.40
59	A5	3880	A	N7-C8-N9	7.60	117.60	113.80
59	A5	1346	C	N1-C2-O2	7.60	123.46	118.90
59	A5	1775	C	N3-C2-O2	-7.60	116.58	121.90
59	A5	457	A	N3-C4-N9	7.59	133.48	127.40
59	A5	1352	U	N1-C2-O2	7.59	128.12	122.80
59	A5	3344	U	N1-C2-O2	7.59	128.12	122.80
59	A5	1081	C	N1-C2-O2	7.59	123.45	118.90
59	A5	1115	A	OP1-P-O3'	7.59	121.90	105.20
59	A5	1626	A	C4-C5-C6	-7.59	113.20	117.00
59	A5	3167	A	N1-C6-N6	-7.59	114.05	118.60
59	A5	811	G	C8-N9-C4	-7.59	103.36	106.40
59	A5	1124	G	C5-C6-O6	-7.59	124.05	128.60
59	A5	1354	G	C5-C6-O6	-7.59	124.05	128.60
59	A5	3620	G	C6-N1-C2	7.59	129.65	125.10
59	A5	1296	U	C2-N1-C1'	7.58	126.80	117.70
59	A5	3630	C	C6-N1-C2	-7.58	117.27	120.30
59	A5	90	G	C5-C6-N1	7.58	115.29	111.50
59	A5	1332	C	N3-C2-O2	-7.58	116.59	121.90
59	A5	2492	A	C5-C6-N6	-7.58	117.63	123.70
59	A5	2589	U	N3-C2-O2	-7.58	116.89	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3296	C	C6-N1-C2	-7.58	117.27	120.30
59	A5	1358	U	O5'-P-OP1	-7.58	98.88	105.70
59	A5	1728	G	N9-C4-C5	-7.58	102.37	105.40
59	A5	2702	A	N9-C4-C5	-7.58	102.77	105.80
59	A5	449	U	C6-N1-C2	-7.58	116.45	121.00
59	A5	3348	G	O5'-P-OP2	-7.58	98.88	105.70
59	A5	2484	G	C6-C5-N7	-7.57	125.86	130.40
59	A5	3168	A	C4-C5-N7	7.57	114.49	110.70
59	A5	128	C	C5-C6-N1	7.57	124.78	121.00
59	A5	977	C	C5-C6-N1	7.57	124.79	121.00
59	A5	2516	U	C2-N3-C4	-7.57	122.46	127.00
59	A5	1515	U	O5'-P-OP1	-7.57	98.89	105.70
59	A5	2165	C	C2-N1-C1'	7.57	127.12	118.80
59	A5	333	C	C6-N1-C2	-7.57	117.27	120.30
59	A5	1087	G	C6-N1-C2	7.57	129.64	125.10
59	A5	1734	G	C2-N3-C4	-7.57	108.12	111.90
59	A5	3625	U	N1-C2-O2	7.57	128.10	122.80
59	A5	3722	C	N1-C2-O2	7.57	123.44	118.90
59	A5	81	A	C5-C6-N1	7.56	121.48	117.70
59	A5	2221	G	C5-C6-N1	7.56	115.28	111.50
59	A5	3363	G	N1-C6-O6	7.56	124.44	119.90
59	A5	2567	U	C6-N1-C2	-7.56	116.46	121.00
59	A5	3466	A	C8-N9-C4	-7.56	102.78	105.80
59	A5	1069	A	C8-N9-C4	7.56	108.82	105.80
59	A5	586	C	N1-C2-O2	7.55	123.43	118.90
58	B2	1844	C	C5-C6-N1	7.55	124.78	121.00
59	A5	3417	C	C2-N3-C4	7.55	123.67	119.90
59	A5	346	U	C6-N1-C2	-7.55	116.47	121.00
59	A5	776	A	N9-C4-C5	7.55	108.82	105.80
59	A5	799	A	N9-C4-C5	-7.55	102.78	105.80
59	A5	2754	G	C6-C5-N7	-7.55	125.87	130.40
59	A5	309	C	C4-C5-C6	-7.55	113.63	117.40
59	A5	3257	U	N3-C2-O2	-7.55	116.92	122.20
59	A5	371	G	C4-C5-N7	7.55	113.82	110.80
59	A5	1370	C	C5-C6-N1	7.55	124.77	121.00
59	A5	2708	C	C5-C6-N1	7.55	124.77	121.00
59	A5	1382	U	N1-C2-O2	7.54	128.08	122.80
59	A5	3519	C	N3-C2-O2	-7.54	116.62	121.90
59	A5	1689	G	N3-C4-N9	-7.54	121.48	126.00
59	A5	1398	C	C5-C6-N1	7.54	124.77	121.00
56	A8	36	A	C2-N3-C4	7.54	114.37	110.60
59	A5	92	A	N1-C6-N6	-7.54	114.08	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1174	G	C8-N9-C4	7.54	109.42	106.40
59	A5	1194	A	C4-N9-C1'	7.54	139.87	126.30
59	A5	188	G	N3-C4-C5	-7.54	124.83	128.60
59	A5	1689	G	C6-N1-C2	-7.54	120.58	125.10
59	A5	2676	U	O4'-C1'-N1	7.54	114.23	108.20
59	A5	2688	U	N1-C2-O2	7.54	128.07	122.80
59	A5	1068	C	C6-N1-C2	-7.53	117.29	120.30
59	A5	2193	C	C5-C6-N1	7.53	124.77	121.00
59	A5	2194	G	C2-N3-C4	7.53	115.67	111.90
59	A5	1074	U	C5-C6-N1	7.53	126.47	122.70
59	A5	3149	U	C2-N1-C1'	7.53	126.74	117.70
59	A5	3511	U	C2-N1-C1'	7.53	126.74	117.70
58	B2	627	A	N1-C6-N6	-7.53	114.08	118.60
59	A5	1671	U	N3-C4-C5	7.53	119.12	114.60
59	A5	74	A	C4-C5-C6	-7.53	113.24	117.00
59	A5	1797	A	C4-N9-C1'	-7.53	112.75	126.30
59	A5	3947	C	C4-C5-C6	-7.53	113.64	117.40
59	A5	285	G	N1-C2-N2	-7.53	109.43	116.20
59	A5	2783	C	N1-C2-N3	7.53	124.47	119.20
59	A5	1077	C	C2-N3-C4	-7.52	116.14	119.90
26	CN	31	ARG	NE-CZ-NH2	-7.52	116.54	120.30
59	A5	242	C	C2-N1-C1'	7.52	127.07	118.80
59	A5	1892	C	C5-C4-N4	-7.52	114.93	120.20
59	A5	35	C	N1-C2-O2	7.52	123.41	118.90
59	A5	1087	G	N1-C2-N3	-7.52	119.39	123.90
59	A5	3636	G	N9-C4-C5	7.52	108.41	105.40
59	A5	2658	A	C4-C5-C6	-7.52	113.24	117.00
59	A5	1689	G	C8-N9-C1'	7.52	136.77	127.00
58	B2	878	C	N1-C2-O2	7.51	123.41	118.90
59	A5	100	G	N3-C2-N2	7.51	125.16	119.90
59	A5	2181	A	C5-N7-C8	-7.51	100.14	103.90
59	A5	3716	C	C6-N1-C2	-7.51	117.30	120.30
58	B2	1404	C	C6-N1-C2	-7.51	117.30	120.30
59	A5	296	C	N3-C2-O2	-7.51	116.64	121.90
59	A5	1652	U	C5-C6-N1	7.51	126.45	122.70
59	A5	2562	U	N3-C2-O2	-7.51	116.94	122.20
54	A9	12	C	C5-C6-N1	7.51	124.75	121.00
59	A5	2520	U	C5-C4-O4	7.51	130.41	125.90
59	A5	188	G	C4-N9-C1'	7.51	136.26	126.50
59	A5	1095	G	N1-C6-O6	7.50	124.40	119.90
59	A5	1727	U	N1-C2-O2	7.50	128.05	122.80
59	A5	1886	C	C2-N1-C1'	7.50	127.05	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1899	C	N3-C2-O2	-7.50	116.65	121.90
59	A5	94	C	N1-C2-O2	7.50	123.40	118.90
59	A5	301	U	C2-N1-C1'	7.50	126.70	117.70
59	A5	3266	A	C8-N9-C4	7.50	108.80	105.80
56	A8	1	A	C8-N9-C4	7.50	108.80	105.80
59	A5	832	U	OP2-P-O3'	7.50	121.69	105.20
59	A5	2501	G	O5'-P-OP1	-7.50	98.95	105.70
59	A5	2736	A	O5'-P-OP1	-7.50	98.95	105.70
59	A5	2169	U	O5'-P-OP1	-7.49	98.96	105.70
59	A5	2676	U	C6-N1-C1'	-7.49	110.71	121.20
59	A5	2551	U	N3-C4-O4	7.49	124.64	119.40
59	A5	3331	A	OP1-P-O3'	7.49	121.68	105.20
59	A5	3526	C	N3-C4-C5	7.49	124.90	121.90
59	A5	1087	G	N9-C4-C5	-7.49	102.41	105.40
59	A5	1784	A	O4'-C1'-N9	-7.49	102.21	108.20
59	A5	2002	C	N1-C2-O2	7.48	123.39	118.90
58	B2	315	C	C6-N1-C2	-7.48	117.31	120.30
59	A5	1195	U	C2-N1-C1'	7.48	126.68	117.70
59	A5	1995	U	N1-C2-O2	7.48	128.04	122.80
59	A5	2567	U	N3-C4-O4	7.48	124.64	119.40
59	A5	95	G	N7-C8-N9	-7.48	109.36	113.10
59	A5	2775	A	C6-N1-C2	-7.48	114.11	118.60
59	A5	984	U	C2-N1-C1'	7.48	126.67	117.70
59	A5	2099	C	C5-C6-N1	7.47	124.74	121.00
59	A5	3611	C	C5-C6-N1	7.47	124.74	121.00
59	A5	1334	A	C4-C5-C6	-7.47	113.27	117.00
59	A5	3495	G	O5'-P-OP1	-7.47	98.98	105.70
55	A7	119	C	C5-C6-N1	7.47	124.73	121.00
59	A5	1548	C	C5-C6-N1	7.47	124.73	121.00
59	A5	2569	U	O5'-P-OP1	-7.47	98.98	105.70
59	A5	3228	A	N1-C6-N6	-7.47	114.12	118.60
59	A5	3349	A	C4-C5-C6	-7.47	113.27	117.00
58	B2	988	G	C4-N9-C1'	7.46	136.20	126.50
59	A5	380	G	C6-C5-N7	-7.46	125.92	130.40
59	A5	1021	U	N3-C2-O2	-7.46	116.97	122.20
47	Cn	9	ARG	NE-CZ-NH2	7.46	124.03	120.30
59	A5	58	G	C5'-C4'-O4'	-7.46	100.15	109.10
59	A5	3337	G	N1-C6-O6	-7.46	115.42	119.90
59	A5	2161	G	O5'-P-OP2	-7.46	98.99	105.70
59	A5	1958	G	C8-N9-C1'	-7.46	117.30	127.00
59	A5	993	A	O5'-P-OP1	-7.46	98.99	105.70
58	B2	988	G	C5-N7-C8	-7.45	100.57	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	610	U	N1-C2-O2	7.45	128.01	122.80
59	A5	1385	G	C4-C5-N7	7.45	113.78	110.80
59	A5	2778	G	N1-C2-N2	-7.45	109.49	116.20
58	B2	631	C	N3-C2-O2	-7.45	116.69	121.90
59	A5	1143	U	N1-C2-N3	7.45	119.37	114.90
59	A5	2004	G	C4-C5-C6	7.45	123.27	118.80
59	A5	3887	U	C5-C4-O4	-7.45	121.43	125.90
59	A5	1009	G	C5-C6-N1	7.45	115.22	111.50
59	A5	3415	U	C4-C5-C6	-7.45	115.23	119.70
59	A5	1022	A	O5'-P-OP1	-7.44	99.00	105.70
59	A5	1699	A	C5-N7-C8	7.44	107.62	103.90
59	A5	2249	A	O5'-P-OP1	-7.44	99.00	105.70
59	A5	3282	C	C5-C6-N1	7.44	124.72	121.00
59	A5	283	A	C6-N1-C2	-7.44	114.14	118.60
59	A5	587	U	OP1-P-O3'	7.44	121.57	105.20
59	A5	1149	C	C5-C6-N1	7.44	124.72	121.00
59	A5	2004	G	C8-N9-C4	-7.44	103.42	106.40
59	A5	2657	A	C4-C5-N7	7.44	114.42	110.70
59	A5	1364	A	N7-C8-N9	7.44	117.52	113.80
44	Ck	42	LEU	CB-CG-CD2	7.44	123.64	111.00
59	A5	2702	A	N1-C6-N6	7.44	123.06	118.60
59	A5	1135	U	C4-C5-C6	-7.44	115.24	119.70
59	A5	1003	C	N3-C4-C5	-7.43	118.93	121.90
59	A5	1322	U	C4-C5-C6	-7.43	115.24	119.70
59	A5	3679	C	C6-N1-C2	-7.43	117.33	120.30
59	A5	3592	C	OP1-P-OP2	-7.43	108.45	119.60
59	A5	1181	A	C8-N9-C4	-7.43	102.83	105.80
59	A5	1546	U	O5'-P-OP2	-7.42	99.02	105.70
58	B2	849	U	N1-C2-O2	7.42	128.00	122.80
59	A5	322	G	C5-N7-C8	-7.42	100.59	104.30
59	A5	1110	G	N1-C6-O6	-7.42	115.45	119.90
59	A5	1532	A	C8-N9-C4	-7.42	102.83	105.80
59	A5	1696	A	C4-C5-N7	7.42	114.41	110.70
59	A5	1888	A	C6-C5-N7	-7.42	127.11	132.30
59	A5	3624	C	C6-N1-C2	-7.42	117.33	120.30
58	B2	356	C	C6-N1-C2	-7.42	117.33	120.30
59	A5	2164	G	C5-N7-C8	-7.42	100.59	104.30
59	A5	2793	C	C4-C5-C6	-7.42	113.69	117.40
59	A5	1648	A	C8-N9-C4	-7.42	102.83	105.80
59	A5	2744	C	O5'-P-OP2	-7.42	99.03	105.70
56	A8	86	A	C8-N9-C4	-7.42	102.83	105.80
59	A5	1313	A	N3-C4-C5	7.42	131.99	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	819	U	N1-C2-O2	7.41	127.99	122.80
59	A5	1137	G	C5-C6-N1	7.41	115.21	111.50
59	A5	1057	G	C4-C5-N7	7.41	113.76	110.80
59	A5	3478	G	C5-N7-C8	7.41	108.00	104.30
59	A5	1801	U	N3-C4-O4	-7.41	114.21	119.40
59	A5	1875	G	C8-N9-C4	7.41	109.36	106.40
59	A5	2008	U	N1-C2-O2	7.41	127.99	122.80
59	A5	2495	G	N1-C6-O6	-7.41	115.45	119.90
59	A5	996	C	N3-C2-O2	-7.41	116.72	121.90
59	A5	1073	C	C6-N1-C2	-7.40	117.34	120.30
59	A5	283	A	C2-N3-C4	7.40	114.30	110.60
59	A5	3246	G	C2-N3-C4	-7.40	108.20	111.90
59	A5	79	G	N9-C4-C5	-7.39	102.44	105.40
59	A5	322	G	C6-C5-N7	-7.39	125.96	130.40
59	A5	3762	G	N3-C4-C5	7.39	132.30	128.60
59	A5	522	G	N7-C8-N9	7.39	116.80	113.10
59	A5	100	G	N1-C6-O6	-7.39	115.47	119.90
58	B2	1849	U	P-O3'-C3'	7.39	128.57	119.70
59	A5	1793	C	N3-C4-C5	-7.39	118.94	121.90
59	A5	3623	G	C8-N9-C4	-7.39	103.44	106.40
58	B2	1913	C	N1-C2-O2	7.39	123.33	118.90
59	A5	2632	U	C5-C6-N1	7.39	126.39	122.70
56	A8	13	U	O5'-P-OP1	-7.39	99.05	105.70
58	B2	448	C	C6-N1-C2	-7.39	117.35	120.30
59	A5	2215	G	O5'-P-OP1	-7.39	99.05	105.70
58	B2	1104	C	C5-C6-N1	7.38	124.69	121.00
59	A5	1106	A	N1-C6-N6	-7.38	114.17	118.60
59	A5	1164	G	C4-C5-N7	7.38	113.75	110.80
59	A5	1333	C	N1-C2-O2	7.38	123.33	118.90
59	A5	2037	C	N3-C4-C5	-7.38	118.95	121.90
59	A5	295	G	C8-N9-C4	7.38	109.35	106.40
59	A5	298	U	C5-C6-N1	7.38	126.39	122.70
59	A5	1907	U	C6-N1-C2	-7.38	116.57	121.00
59	A5	3339	U	O5'-P-OP2	-7.38	99.06	105.70
58	B2	1090	A	C5-N7-C8	-7.38	100.21	103.90
59	A5	1138	C	O5'-P-OP2	7.38	119.55	110.70
59	A5	546	G	C6-C5-N7	-7.38	125.97	130.40
59	A5	989	A	C5-C6-N1	7.38	121.39	117.70
59	A5	1105	U	C5-C4-O4	7.38	130.33	125.90
59	A5	1110	G	N3-C4-C5	-7.38	124.91	128.60
59	A5	2624	G	C2-N3-C4	-7.38	108.21	111.90
59	A5	2090	U	C5-C6-N1	7.38	126.39	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3000	G	C5-N7-C8	-7.38	100.61	104.30
59	A5	3880	A	O4'-C1'-N9	7.38	114.10	108.20
55	A7	67	G	C5-N7-C8	-7.37	100.61	104.30
59	A5	1115	A	N3-C4-C5	7.37	131.96	126.80
59	A5	2773	G	N1-C2-N2	7.37	122.83	116.20
59	A5	3166	C	C5-C6-N1	7.37	124.69	121.00
59	A5	52	A	N9-C4-C5	-7.37	102.85	105.80
59	A5	77	A	N1-C2-N3	-7.37	125.61	129.30
59	A5	3151	G	N1-C6-O6	-7.37	115.48	119.90
59	A5	3260	G	N9-C4-C5	7.37	108.35	105.40
59	A5	1081	C	N3-C4-N4	-7.37	112.84	118.00
59	A5	3235	A	C6-C5-N7	-7.37	127.14	132.30
59	A5	1665	C	C4-C5-C6	-7.37	113.72	117.40
59	A5	3932	U	C2-N1-C1'	7.37	126.54	117.70
59	A5	1016	A	C8-N9-C4	-7.37	102.85	105.80
59	A5	1721	C	N3-C4-C5	7.36	124.84	121.90
59	A5	1721	C	C6-N1-C2	-7.36	117.36	120.30
59	A5	1116	G	N3-C2-N2	-7.36	114.75	119.90
59	A5	2197	A	N7-C8-N9	7.36	117.48	113.80
58	B2	38	C	N3-C2-O2	-7.36	116.75	121.90
59	A5	1932	C	C5-C6-N1	7.36	124.68	121.00
59	A5	2781	G	O4'-C1'-N9	7.36	114.09	108.20
59	A5	3762	G	C8-N9-C1'	7.36	136.56	127.00
59	A5	1147	U	C5-C6-N1	7.36	126.38	122.70
59	A5	2739	A	N1-C2-N3	-7.36	125.62	129.30
59	A5	754	A	N1-C2-N3	-7.35	125.62	129.30
59	A5	831	A	N1-C6-N6	7.35	123.01	118.60
59	A5	1793	C	C5-C6-N1	7.35	124.67	121.00
59	A5	91	U	O5'-P-OP1	-7.35	99.09	105.70
59	A5	3632	G	N7-C8-N9	7.35	116.77	113.10
59	A5	3934	C	N3-C2-O2	-7.34	116.76	121.90
32	CT	144	LEU	C-N-CA	7.34	140.05	121.70
59	A5	857	U	O5'-P-OP1	-7.34	99.09	105.70
59	A5	1365	U	N3-C2-O2	-7.34	117.06	122.20
59	A5	1372	A	C5-N7-C8	-7.34	100.23	103.90
59	A5	1985	C	C6-N1-C1'	7.34	129.61	120.80
59	A5	3000	G	C4-C5-N7	7.34	113.74	110.80
59	A5	1094	A	O5'-P-OP1	-7.34	99.09	105.70
58	B2	1188	G	O5'-P-OP1	-7.34	99.10	105.70
59	A5	558	C	N3-C2-O2	-7.34	116.77	121.90
59	A5	1140	G	N9-C4-C5	-7.34	102.47	105.40
59	A5	2749	G	N3-C2-N2	7.34	125.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2260	U	C5-C4-O4	7.33	130.30	125.90
59	A5	2620	C	C5-C6-N1	7.33	124.67	121.00
59	A5	3486	U	OP1-P-O3'	7.33	121.33	105.20
58	B2	1683	U	C2-N1-C1'	7.33	126.50	117.70
58	B2	1844	C	C6-N1-C2	-7.33	117.37	120.30
59	A5	1959	A	N9-C4-C5	-7.33	102.87	105.80
59	A5	3491	C	C6-N1-C2	-7.33	117.37	120.30
59	A5	357	C	N1-C2-O2	7.33	123.30	118.90
59	A5	796	A	C2-N3-C4	7.33	114.26	110.60
59	A5	1631	U	C2-N1-C1'	7.33	126.49	117.70
59	A5	1959	A	N1-C2-N3	-7.33	125.64	129.30
59	A5	2517	A	N9-C4-C5	7.33	108.73	105.80
56	A8	5	C	C2-N3-C4	7.32	123.56	119.90
59	A5	1689	G	OP2-P-O3'	7.32	121.31	105.20
59	A5	2771	G	C4-C5-N7	7.32	113.73	110.80
58	B2	1159	C	C6-N1-C2	-7.32	117.37	120.30
59	A5	3488	G	C5-C6-O6	-7.32	124.21	128.60
59	A5	1007	A	O5'-P-OP1	-7.32	99.11	105.70
59	A5	2128	A	C5-N7-C8	-7.32	100.24	103.90
59	A5	1101	A	N1-C6-N6	-7.32	114.21	118.60
59	A5	1319	A	N1-C6-N6	7.32	122.99	118.60
56	A8	14	G	N1-C6-O6	-7.31	115.51	119.90
59	A5	3337	G	N3-C2-N2	7.31	125.02	119.90
65	CO	131	LEU	CB-CG-CD1	-7.31	98.57	111.00
59	A5	790	U	N3-C2-O2	-7.31	117.08	122.20
59	A5	2780	A	C4-C5-C6	-7.31	113.34	117.00
59	A5	838	U	C5-C6-N1	7.31	126.35	122.70
59	A5	2008	U	C5-C6-N1	7.31	126.35	122.70
59	A5	2188	C	N1-C2-O2	7.31	123.28	118.90
59	A5	3132	C	C6-N1-C2	-7.31	117.38	120.30
59	A5	457	A	N3-C4-C5	-7.30	121.69	126.80
59	A5	1090	U	N3-C2-O2	-7.30	117.09	122.20
59	A5	1615	G	C5-C6-O6	7.30	132.98	128.60
58	B2	12	U	N3-C2-O2	-7.30	117.09	122.20
59	A5	2212	A	C2-N3-C4	7.30	114.25	110.60
59	A5	227	A	C2-N3-C4	7.30	114.25	110.60
59	A5	346	U	O5'-P-OP2	-7.30	99.13	105.70
59	A5	1514	U	C5-C4-O4	7.30	130.28	125.90
59	A5	1670	G	C5-C6-N1	7.30	115.15	111.50
59	A5	2054	U	N1-C2-O2	7.30	127.91	122.80
59	A5	3363	G	C8-N9-C4	-7.30	103.48	106.40
59	A5	3399	C	N1-C2-O2	7.30	123.28	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	293	U	C5-C6-N1	7.29	126.35	122.70
59	A5	1559	A	C8-N9-C4	-7.29	102.88	105.80
59	A5	2725	U	O5'-P-OP1	-7.29	99.14	105.70
59	A5	767	A	C5-N7-C8	-7.29	100.25	103.90
59	A5	998	G	N3-C2-N2	7.29	125.00	119.90
59	A5	1888	A	C4-C5-N7	7.29	114.35	110.70
59	A5	2796	G	O4'-C1'-N9	-7.29	102.37	108.20
59	A5	3673	G	N9-C4-C5	-7.29	102.48	105.40
58	B2	1194	C	C6-N1-C2	-7.29	117.38	120.30
59	A5	3932	U	C6-N1-C2	-7.29	116.63	121.00
59	A5	2255	G	C6-C5-N7	-7.29	126.03	130.40
59	A5	3523	U	N3-C2-O2	-7.29	117.10	122.20
58	B2	113	G	C5-C6-O6	-7.29	124.23	128.60
59	A5	754	A	C8-N9-C4	-7.29	102.89	105.80
59	A5	1372	A	N1-C6-N6	7.29	122.97	118.60
59	A5	347	A	C5-N7-C8	-7.28	100.26	103.90
59	A5	429	U	N3-C2-O2	-7.28	117.10	122.20
59	A5	2215	G	N7-C8-N9	7.28	116.74	113.10
59	A5	2233	C	C5-C6-N1	7.28	124.64	121.00
59	A5	2533	U	N3-C4-O4	7.28	124.50	119.40
58	B2	1980	U	C5-C6-N1	7.28	126.34	122.70
59	A5	1548	C	C6-N1-C2	-7.28	117.39	120.30
59	A5	3154	C	C2-N3-C4	-7.28	116.26	119.90
59	A5	810	A	C5-N7-C8	-7.28	100.26	103.90
59	A5	1368	A	O5'-P-OP1	-7.28	99.15	105.70
59	A5	2110	A	C5-N7-C8	-7.28	100.26	103.90
59	A5	2729	U	C4-C5-C6	-7.28	115.33	119.70
59	A5	2777	A	C5-C6-N6	7.28	129.52	123.70
58	B2	1344	A	C2-N3-C4	7.28	114.24	110.60
59	A5	805	C	C5-C6-N1	7.28	124.64	121.00
59	A5	300	A	N9-C4-C5	7.27	108.71	105.80
59	A5	2727	U	N3-C4-O4	7.27	124.49	119.40
59	A5	1607	A	C5-C6-N1	7.27	121.34	117.70
59	A5	2186	C	N3-C2-O2	-7.27	116.81	121.90
59	A5	2759	G	C4-C5-N7	7.27	113.71	110.80
59	A5	58	G	N1-C2-N3	-7.27	119.54	123.90
59	A5	1648	A	N7-C8-N9	7.27	117.44	113.80
58	B2	1159	C	C5-C6-N1	7.27	124.63	121.00
59	A5	2767	U	N1-C2-O2	7.27	127.89	122.80
59	A5	3945	A	N7-C8-N9	7.27	117.43	113.80
59	A5	1595	G	C8-N9-C4	-7.26	103.49	106.40
59	A5	1757	A	N1-C2-N3	-7.26	125.67	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3503	G	C5-C6-O6	7.26	132.96	128.60
55	A7	14	C	C6-N1-C2	-7.26	117.39	120.30
59	A5	2169	U	C6-N1-C2	-7.26	116.64	121.00
59	A5	377	U	N3-C4-O4	7.26	124.48	119.40
59	A5	775	U	OP1-P-O3'	7.26	121.17	105.20
59	A5	2191	G	C6-C5-N7	7.26	134.76	130.40
59	A5	2678	G	C2-N3-C4	7.26	115.53	111.90
59	A5	2796	G	C4-N9-C1'	7.26	135.94	126.50
59	A5	3541	A	N9-C4-C5	7.26	108.70	105.80
59	A5	828	G	N9-C4-C5	-7.26	102.50	105.40
59	A5	1781	U	O4'-C1'-N1	7.26	114.01	108.20
59	A5	2753	G	OP1-P-OP2	7.26	130.49	119.60
59	A5	549	A	C5-C6-N6	-7.26	117.90	123.70
59	A5	2676	U	C2-N1-C1'	7.26	126.41	117.70
59	A5	1605	U	O5'-P-OP1	-7.25	99.17	105.70
58	B2	1980	U	C6-N1-C2	-7.25	116.65	121.00
59	A5	58	G	C6-C5-N7	7.25	134.75	130.40
59	A5	808	G	N1-C2-N2	7.25	122.73	116.20
55	A7	105	C	N3-C2-O2	-7.25	116.83	121.90
59	A5	1681	G	N3-C2-N2	7.25	124.97	119.90
59	A5	3608	G	C8-N9-C4	-7.25	103.50	106.40
59	A5	2015	G	N7-C8-N9	7.24	116.72	113.10
59	A5	2762	A	C5-C6-N1	7.24	121.32	117.70
59	A5	444	C	N3-C2-O2	-7.24	116.83	121.90
59	A5	2641	C	C2-N1-C1'	7.24	126.77	118.80
59	A5	3296	C	O5'-P-OP1	-7.24	99.18	105.70
59	A5	3403	G	N7-C8-N9	-7.24	109.48	113.10
59	A5	235	A	C5-C6-N1	7.24	121.32	117.70
59	A5	815	A	C4-C5-C6	-7.24	113.38	117.00
59	A5	1646	U	N3-C2-O2	-7.24	117.13	122.20
59	A5	57	G	OP2-P-O3'	7.24	121.12	105.20
59	A5	1081	C	N3-C2-O2	-7.24	116.83	121.90
59	A5	1647	A	N1-C2-N3	-7.23	125.68	129.30
59	A5	2723	A	C2-N3-C4	7.23	114.22	110.60
58	B2	111	A	O5'-P-OP2	-7.23	99.19	105.70
58	B2	1223	U	N3-C2-O2	-7.23	117.14	122.20
59	A5	562	U	N1-C2-O2	7.23	127.86	122.80
59	A5	1008	A	C2-N3-C4	-7.23	106.98	110.60
59	A5	2661	G	C5-N7-C8	-7.23	100.69	104.30
59	A5	3570	C	C6-N1-C2	-7.23	117.41	120.30
59	A5	2766	U	C2-N3-C4	7.23	131.34	127.00
59	A5	1148	C	N1-C2-O2	7.22	123.23	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3591	A	C8-N9-C4	-7.22	102.91	105.80
59	A5	3477	A	C5-C6-N6	-7.22	117.92	123.70
59	A5	3670	G	C6-C5-N7	-7.22	126.07	130.40
55	A7	67	G	N3-C4-C5	7.22	132.21	128.60
58	B2	883	C	C5-C6-N1	7.22	124.61	121.00
59	A5	95	G	C8-N9-C4	7.22	109.29	106.40
59	A5	1751	U	C2-N1-C1'	7.22	126.36	117.70
59	A5	3176	C	C2-N1-C1'	7.22	126.74	118.80
59	A5	1981	A	C4-C5-C6	-7.22	113.39	117.00
59	A5	380	G	N9-C4-C5	-7.22	102.51	105.40
59	A5	295	G	N7-C8-N9	-7.21	109.49	113.10
59	A5	1073	C	N3-C4-N4	-7.21	112.95	118.00
59	A5	3341	C	N1-C2-O2	7.21	123.23	118.90
59	A5	186	G	P-O3'-C3'	7.21	128.36	119.70
59	A5	1388	C	C6-N1-C2	-7.21	117.42	120.30
56	A8	21	U	N3-C4-C5	7.21	118.93	114.60
59	A5	1121	A	C5-C6-N1	7.21	121.31	117.70
59	A5	2723	A	C5-N7-C8	-7.21	100.30	103.90
59	A5	2798	C	C5-C6-N1	7.21	124.61	121.00
58	B2	1858	U	N3-C2-O2	-7.21	117.15	122.20
59	A5	3414	U	N3-C2-O2	-7.21	117.15	122.20
59	A5	1276	G	N3-C4-N9	-7.21	121.68	126.00
59	A5	1421	G	C8-N9-C4	-7.21	103.52	106.40
59	A5	3464	G	C2-N3-C4	-7.21	108.30	111.90
59	A5	3519	C	N1-C2-O2	7.21	123.22	118.90
59	A5	1097	A	N1-C2-N3	-7.21	125.70	129.30
59	A5	1317	A	C8-N9-C4	-7.20	102.92	105.80
58	B2	249	U	C5-C6-N1	7.20	126.30	122.70
58	B2	317	A	C2-N3-C4	7.20	114.20	110.60
59	A5	1384	C	C4-C5-C6	7.20	121.00	117.40
59	A5	384	A	C5-C6-N1	7.20	121.30	117.70
59	A5	438	G	C4-C5-N7	7.20	113.68	110.80
59	A5	74	A	C5-C6-N1	7.20	121.30	117.70
59	A5	1114	A	C6-C5-N7	-7.20	127.26	132.30
59	A5	1003	C	C6-N1-C2	-7.19	117.42	120.30
59	A5	1160	U	C4-C5-C6	7.19	124.02	119.70
59	A5	1624	G	C5-C6-N1	7.19	115.10	111.50
59	A5	2626	C	N1-C2-O2	7.19	123.22	118.90
59	A5	3420	U	C5-C6-N1	-7.19	119.10	122.70
58	B2	1227	A	N1-C6-N6	-7.19	114.28	118.60
59	A5	1794	G	O4'-C1'-N9	7.19	113.95	108.20
58	B2	1596	C	N1-C2-O2	7.19	123.21	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	442	A	O5'-P-OP2	-7.19	99.23	105.70
59	A5	448	A	C4-C5-N7	7.19	114.29	110.70
59	A5	1409	G	N7-C8-N9	7.19	116.69	113.10
59	A5	1137	G	N3-C2-N2	-7.18	114.87	119.90
59	A5	1319	A	N1-C2-N3	-7.18	125.71	129.30
59	A5	1404	A	C4-C5-N7	7.18	114.29	110.70
59	A5	3282	C	C6-N1-C2	-7.18	117.43	120.30
56	A8	26	U	N1-C2-O2	7.18	127.83	122.80
59	A5	112	C	N3-C2-O2	-7.18	116.87	121.90
59	A5	1369	C	C6-N1-C2	-7.18	117.43	120.30
58	B2	381	C	C6-N1-C2	-7.18	117.43	120.30
59	A5	258	U	N3-C2-O2	-7.18	117.17	122.20
59	A5	2721	C	N3-C4-N4	-7.18	112.98	118.00
59	A5	1003	C	C2-N3-C4	7.18	123.49	119.90
58	B2	1080	A	O5'-P-OP1	-7.17	99.24	105.70
59	A5	2554	U	C5-C6-N1	7.17	126.29	122.70
59	A5	2183	A	N1-C6-N6	-7.17	114.30	118.60
59	A5	2550	G	C5-C6-O6	7.17	132.90	128.60
26	CN	116	LEU	CB-CG-CD2	-7.17	98.81	111.00
59	A5	3165	U	N3-C2-O2	-7.17	117.18	122.20
59	A5	3541	A	N1-C6-N6	-7.17	114.30	118.60
59	A5	2205	G	C6-C5-N7	-7.17	126.10	130.40
59	A5	1892	C	N3-C4-N4	7.17	123.02	118.00
74	Ac	55	LEU	CA-CB-CG	7.17	131.79	115.30
58	B2	1167	U	N3-C2-O2	-7.17	117.18	122.20
56	A8	20	C	N3-C4-N4	-7.17	112.98	118.00
56	A8	102	A	C8-N9-C4	-7.17	102.93	105.80
59	A5	3490	C	C6-N1-C1'	7.17	129.40	120.80
59	A5	3943	G	C6-C5-N7	-7.17	126.10	130.40
59	A5	320	U	C5-C6-N1	7.16	126.28	122.70
59	A5	1004	C	C6-N1-C2	-7.16	117.43	120.30
59	A5	1078	G	O5'-P-OP1	-7.16	99.25	105.70
59	A5	1146	U	C6-N1-C2	-7.16	116.70	121.00
59	A5	1169	C	N3-C2-O2	-7.16	116.89	121.90
59	A5	1389	C	N1-C2-O2	7.16	123.20	118.90
59	A5	1751	U	C6-N1-C2	-7.16	116.70	121.00
59	A5	3675	A	N1-C6-N6	-7.16	114.30	118.60
59	A5	1699	A	C5-C6-N1	7.16	121.28	117.70
59	A5	2778	G	C5-C6-O6	7.16	132.90	128.60
59	A5	794	G	C5-C6-O6	-7.16	124.31	128.60
59	A5	1192	A	N9-C4-C5	-7.16	102.94	105.80
59	A5	3519	C	O5'-P-OP1	-7.16	99.26	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3579	C	C6-N1-C2	-7.16	117.44	120.30
59	A5	2066	G	N3-C4-N9	-7.16	121.71	126.00
59	A5	258	U	N1-C2-O2	7.16	127.81	122.80
59	A5	755	A	N9-C4-C5	7.16	108.66	105.80
59	A5	438	G	N3-C4-N9	-7.15	121.71	126.00
59	A5	920	G	C6-C5-N7	-7.15	126.11	130.40
59	A5	2799	U	N3-C4-O4	-7.15	114.39	119.40
56	A8	42	A	N9-C4-C5	-7.15	102.94	105.80
59	A5	65	A	C2-N3-C4	7.15	114.18	110.60
59	A5	2701	G	N7-C8-N9	-7.15	109.52	113.10
59	A5	1168	G	N7-C8-N9	7.15	116.67	113.10
59	A5	2744	C	C2-N3-C4	7.15	123.47	119.90
59	A5	2790	G	N9-C4-C5	7.15	108.26	105.40
59	A5	1898	C	N3-C2-O2	-7.14	116.90	121.90
59	A5	1866	G	C6-C5-N7	-7.14	126.11	130.40
59	A5	2021	C	C6-N1-C2	-7.14	117.44	120.30
59	A5	1340	G	C2-N3-C4	7.14	115.47	111.90
59	A5	3235	A	C4-C5-N7	7.14	114.27	110.70
59	A5	1563	A	C8-N9-C4	7.14	108.66	105.80
59	A5	1701	C	C5-C6-N1	7.14	124.57	121.00
59	A5	3510	U	O4'-C1'-N1	7.14	113.91	108.20
59	A5	413	A	O5'-P-OP2	-7.14	99.28	105.70
59	A5	800	C	C2-N3-C4	7.14	123.47	119.90
59	A5	2782	A	C2-N3-C4	7.14	114.17	110.60
59	A5	3285	G	N1-C2-N2	-7.14	109.78	116.20
59	A5	1319	A	C4-C5-N7	7.13	114.27	110.70
59	A5	3663	U	O5'-P-OP1	-7.13	99.28	105.70
59	A5	2131	C	C4-C5-C6	7.13	120.97	117.40
59	A5	3666	C	O5'-P-OP2	-7.13	99.28	105.70
59	A5	2195	A	N1-C2-N3	-7.13	125.73	129.30
59	A5	2753	G	N3-C4-N9	7.13	130.28	126.00
59	A5	858	U	C5-C6-N1	7.13	126.27	122.70
59	A5	1289	C	C6-N1-C1'	7.13	129.35	120.80
59	A5	1617	U	N3-C4-C5	7.13	118.88	114.60
59	A5	1131	C	C5-C4-N4	-7.13	115.21	120.20
59	A5	1318	A	C6-C5-N7	-7.13	127.31	132.30
59	A5	1347	A	N1-C6-N6	-7.13	114.32	118.60
59	A5	2766	U	N3-C4-C5	-7.13	110.32	114.60
59	A5	2260	U	N3-C2-O2	-7.12	117.21	122.20
59	A5	2684	C	C6-N1-C2	-7.12	117.45	120.30
59	A5	3132	C	N1-C2-O2	7.12	123.17	118.90
59	A5	440	U	C5-C6-N1	7.12	126.26	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1271	G	N9-C4-C5	-7.12	102.55	105.40
59	A5	1710	G	N7-C8-N9	7.12	116.66	113.10
58	B2	1073	G	C5-C6-N1	7.12	115.06	111.50
59	A5	1169	C	C6-N1-C2	-7.12	117.45	120.30
59	A5	3841	C	N3-C2-O2	-7.12	116.92	121.90
59	A5	679	G	N3-C4-N9	7.12	130.27	126.00
59	A5	1143	U	C5-C4-O4	7.12	130.17	125.90
59	A5	2689	G	N1-C6-O6	-7.12	115.63	119.90
59	A5	3678	G	C8-N9-C1'	-7.12	117.75	127.00
59	A5	783	G	C4-C5-N7	7.11	113.65	110.80
59	A5	3634	U	C5-C6-N1	7.11	126.26	122.70
59	A5	371	G	C4-C5-C6	-7.11	114.53	118.80
59	A5	437	G	C5-N7-C8	-7.11	100.75	104.30
59	A5	3544	G	C8-N9-C4	7.11	109.24	106.40
59	A5	3730	G	N7-C8-N9	7.11	116.66	113.10
41	Ce	43	ARG	NE-CZ-NH2	-7.11	116.75	120.30
59	A5	439	U	C2-N1-C1'	-7.11	109.17	117.70
59	A5	2185	U	C6-N1-C2	-7.11	116.74	121.00
59	A5	2761	A	N1-C2-N3	-7.11	125.75	129.30
58	B2	1133	G	C5-C6-O6	-7.10	124.34	128.60
59	A5	1318	A	C5-C6-N6	-7.10	118.02	123.70
58	B2	621	G	O4'-C1'-N9	-7.10	102.52	108.20
59	A5	3193	C	C2-N1-C1'	7.10	126.61	118.80
59	A5	3548	U	C5-C6-N1	7.10	126.25	122.70
59	A5	1095	G	C2-N3-C4	-7.10	108.35	111.90
58	B2	640	U	C5-C6-N1	7.10	126.25	122.70
59	A5	825	C	N3-C2-O2	-7.10	116.93	121.90
59	A5	1366	G	C5-C6-O6	-7.10	124.34	128.60
59	A5	2750	A	O5'-P-OP2	-7.10	99.31	105.70
58	B2	251	G	O5'-P-OP2	-7.10	99.31	105.70
59	A5	2781	G	C5-C6-O6	7.10	132.86	128.60
59	A5	2158	U	C5-C4-O4	-7.09	121.64	125.90
59	A5	1003	C	N3-C2-O2	-7.09	116.94	121.90
59	A5	3415	U	C5-C6-N1	7.09	126.25	122.70
59	A5	1718	G	C4-C5-C6	7.09	123.06	118.80
59	A5	2761	A	N9-C4-C5	-7.09	102.96	105.80
59	A5	1081	C	O5'-P-OP2	-7.09	99.32	105.70
59	A5	2704	A	N1-C6-N6	7.09	122.85	118.60
59	A5	3943	G	C8-N9-C1'	-7.09	117.78	127.00
59	A5	3330	C	C6-N1-C2	7.09	123.14	120.30
59	A5	3593	A	C4-C5-N7	-7.09	107.16	110.70
56	A8	38	G	C4-C5-N7	7.09	113.64	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1421	G	C4-C5-N7	7.09	113.63	110.80
59	A5	350	C	N1-C2-O2	7.08	123.15	118.90
59	A5	3509	U	C5-C4-O4	-7.08	121.65	125.90
59	A5	28	C	N3-C2-O2	-7.08	116.94	121.90
59	A5	1557	U	OP1-P-OP2	-7.08	108.97	119.60
59	A5	787	C	OP2-P-O3'	7.08	120.78	105.20
59	A5	1607	A	N7-C8-N9	7.08	117.34	113.80
59	A5	1060	G	N1-C6-O6	-7.08	115.66	119.90
59	A5	3304	U	C2-N1-C1'	7.08	126.19	117.70
55	A7	80	U	N3-C2-O2	-7.07	117.25	122.20
59	A5	350	C	C2-N1-C1'	7.07	126.58	118.80
59	A5	1611	G	C5-C6-N1	7.07	115.04	111.50
59	A5	874	G	N9-C4-C5	-7.07	102.57	105.40
59	A5	1792	G	C8-N9-C4	7.07	109.23	106.40
59	A5	2624	G	C6-C5-N7	-7.07	126.16	130.40
59	A5	3479	C	C2-N3-C4	7.07	123.44	119.90
59	A5	3408	C	N3-C2-O2	-7.07	116.95	121.90
55	A7	67	G	C2-N3-C4	-7.07	108.37	111.90
58	B2	838	A	C5-C6-N1	7.07	121.23	117.70
58	B2	1234	G	C5-C6-O6	-7.07	124.36	128.60
59	A5	679	G	C2-N3-C4	7.07	115.43	111.90
59	A5	1301	A	N7-C8-N9	7.07	117.33	113.80
59	A5	2520	U	C6-N1-C1'	7.07	131.09	121.20
59	A5	3616	G	N9-C4-C5	-7.07	102.57	105.40
59	A5	3722	C	N3-C2-O2	-7.07	116.95	121.90
59	A5	437	G	N7-C8-N9	7.07	116.63	113.10
59	A5	3265	C	N3-C2-O2	-7.07	116.95	121.90
58	B2	1029	G	N1-C6-O6	-7.06	115.66	119.90
59	A5	1036	A	C5-N7-C8	-7.06	100.37	103.90
59	A5	1375	G	C5-N7-C8	-7.06	100.77	104.30
59	A5	1516	A	C8-N9-C4	7.06	108.62	105.80
58	B2	1683	U	N1-C2-O2	7.06	127.74	122.80
59	A5	1121	A	C6-N1-C2	-7.06	114.37	118.60
59	A5	2687	A	C5-C6-N6	-7.06	118.05	123.70
59	A5	1391	A	O5'-P-OP2	-7.06	99.35	105.70
59	A5	1974	U	N3-C2-O2	-7.06	117.26	122.20
59	A5	2769	G	N1-C2-N2	-7.06	109.85	116.20
59	A5	3251	C	C5-C6-N1	7.05	124.53	121.00
59	A5	799	A	OP1-P-OP2	-7.05	109.02	119.60
59	A5	872	A	C2-N3-C4	7.05	114.13	110.60
59	A5	1006	A	N1-C2-N3	-7.05	125.77	129.30
59	A5	1522	G	N1-C2-N3	7.05	128.13	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2920	U	C2-N1-C1'	7.05	126.16	117.70
59	A5	2990	C	C6-N1-C2	-7.05	117.48	120.30
59	A5	1313	A	C4-C5-N7	7.05	114.23	110.70
59	A5	1872	A	C6-C5-N7	-7.05	127.36	132.30
59	A5	3212	A	O4'-C1'-N9	7.05	113.84	108.20
64	AQ	118	ASP	CB-CG-OD1	7.05	124.65	118.30
59	A5	1522	G	O5'-P-OP2	-7.05	99.36	105.70
59	A5	1549	A	N1-C2-N3	-7.05	125.78	129.30
59	A5	73	U	N1-C2-O2	7.05	127.73	122.80
59	A5	2686	C	C5-C6-N1	7.05	124.52	121.00
59	A5	1181	A	O5'-P-OP1	-7.04	99.36	105.70
59	A5	2557	C	C5-C6-N1	7.04	124.52	121.00
59	A5	440	U	OP1-P-O3'	7.04	120.69	105.20
59	A5	1066	A	C2-N3-C4	7.04	114.12	110.60
59	A5	1108	G	N9-C4-C5	7.04	108.22	105.40
59	A5	2641	C	C4-C5-C6	-7.04	113.88	117.40
59	A5	65	A	C5-C6-N1	7.04	121.22	117.70
59	A5	821	U	O5'-P-OP1	-7.04	99.36	105.70
59	A5	1872	A	C8-N9-C4	-7.04	102.98	105.80
58	B2	355	G	C5-C6-N1	-7.04	107.98	111.50
59	A5	1116	G	N3-C4-N9	-7.04	121.78	126.00
59	A5	839	A	C4-C5-C6	-7.04	113.48	117.00
59	A5	1727	U	N3-C2-O2	-7.04	117.28	122.20
59	A5	1969	A	N7-C8-N9	7.04	117.32	113.80
59	A5	2493	C	N3-C4-C5	7.04	124.71	121.90
58	B2	36	C	C6-N1-C2	-7.03	117.49	120.30
59	A5	120	C	N1-C2-O2	7.03	123.12	118.90
59	A5	812	U	N3-C4-O4	7.03	124.32	119.40
59	A5	1631	U	N1-C2-O2	7.03	127.72	122.80
59	A5	796	A	N1-C2-N3	-7.03	125.78	129.30
59	A5	1545	A	OP1-P-OP2	7.03	130.15	119.60
59	A5	3404	A	C4-C5-C6	-7.03	113.48	117.00
59	A5	3763	U	C5-C4-O4	-7.03	121.68	125.90
56	A8	2	A	N1-C6-N6	-7.03	114.38	118.60
59	A5	285	G	N1-C6-O6	-7.03	115.68	119.90
59	A5	1323	C	N3-C4-N4	7.03	122.92	118.00
59	A5	1383	A	OP1-P-O3'	7.03	120.67	105.20
59	A5	1715	G	C4-C5-N7	7.03	113.61	110.80
58	B2	1169	C	C5-C6-N1	7.03	124.51	121.00
59	A5	338	A	O5'-P-OP1	-7.03	99.38	105.70
59	A5	2520	U	N3-C4-O4	-7.03	114.48	119.40
59	A5	3592	C	N1-C2-O2	7.03	123.12	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3936	A	C4-C5-N7	7.03	114.21	110.70
58	B2	1182	C	C6-N1-C2	-7.03	117.49	120.30
59	A5	3265	C	C6-N1-C2	-7.03	117.49	120.30
58	B2	275	U	N1-C2-O2	7.02	127.72	122.80
59	A5	1961	C	C6-N1-C2	-7.02	117.49	120.30
56	A8	98	U	C6-N1-C2	-7.02	116.79	121.00
59	A5	1679	U	N1-C2-O2	7.02	127.72	122.80
59	A5	1411	U	C5-C6-N1	7.02	126.21	122.70
59	A5	1795	A	C5-C6-N1	7.02	121.21	117.70
58	B2	1984	G	N3-C4-N9	7.02	130.21	126.00
59	A5	2146	G	C8-N9-C4	-7.02	103.59	106.40
59	A5	1162	A	C5-C6-N6	-7.02	118.09	123.70
59	A5	3805	U	C5-C6-N1	7.02	126.21	122.70
58	B2	1238	G	C2-N3-C4	7.02	115.41	111.90
58	B2	1090	A	C4-C5-N7	7.01	114.21	110.70
58	B2	1167	U	N1-C2-O2	7.01	127.71	122.80
59	A5	1642	G	O5'-P-OP1	-7.01	99.39	105.70
59	A5	998	G	C4-C5-N7	7.01	113.61	110.80
59	A5	2555	G	N1-C6-O6	-7.01	115.69	119.90
59	A5	58	G	OP2-P-O3'	7.01	120.62	105.20
59	A5	805	C	C6-N1-C2	-7.01	117.50	120.30
55	A7	14	C	C5-C6-N1	7.01	124.50	121.00
59	A5	322	G	N3-C2-N2	-7.01	115.00	119.90
59	A5	1734	G	N9-C4-C5	-7.01	102.60	105.40
59	A5	1428	G	C4-C5-N7	7.01	113.60	110.80
59	A5	1724	A	C8-N9-C4	-7.01	103.00	105.80
59	A5	2736	A	C8-N9-C4	7.01	108.60	105.80
26	CN	134	LEU	CB-CG-CD1	-7.00	99.09	111.00
59	A5	801	G	C6-N1-C2	-7.00	120.90	125.10
59	A5	3600	G	C5-C6-O6	-7.00	124.40	128.60
59	A5	754	A	N3-C4-N9	7.00	133.00	127.40
59	A5	2496	A	O5'-P-OP2	-7.00	99.40	105.70
58	B2	1069	U	C5-C6-N1	7.00	126.20	122.70
58	B2	1681	U	C2-N1-C1'	7.00	126.10	117.70
59	A5	769	U	C5-C6-N1	-7.00	119.20	122.70
59	A5	868	A	N1-C6-N6	-7.00	114.40	118.60
59	A5	2135	C	C5-C6-N1	7.00	124.50	121.00
59	A5	2194	G	N3-C4-C5	-7.00	125.10	128.60
59	A5	3261	U	C4-C5-C6	-7.00	115.50	119.70
58	B2	468	U	N3-C2-O2	-6.99	117.31	122.20
59	A5	674	A	C5-N7-C8	-6.99	100.40	103.90
59	A5	1105	U	N3-C4-O4	-6.99	114.50	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2539	G	C4-C5-N7	6.99	113.60	110.80
58	B2	375	A	N1-C2-N3	-6.99	125.81	129.30
58	B2	381	C	N1-C2-O2	6.99	123.09	118.90
59	A5	509	A	N1-C2-N3	-6.99	125.81	129.30
59	A5	666	A	C2-N3-C4	6.98	114.09	110.60
59	A5	1404	A	N9-C4-C5	-6.98	103.01	105.80
59	A5	1011	U	C5-C6-N1	6.98	126.19	122.70
59	A5	748	A	C6-N1-C2	6.98	122.79	118.60
59	A5	1370	C	N3-C2-O2	-6.98	117.02	121.90
59	A5	424	G	N3-C2-N2	6.98	124.78	119.90
59	A5	436	A	C8-N9-C4	-6.98	103.01	105.80
56	A8	27	C	N3-C4-N4	-6.97	113.12	118.00
58	B2	631	C	C2-N1-C1'	6.97	126.47	118.80
59	A5	1356	G	C5-N7-C8	-6.97	100.81	104.30
59	A5	1563	A	N1-C2-N3	-6.97	125.81	129.30
2	CA	180	LEU	CB-CG-CD1	-6.97	99.15	111.00
59	A5	1124	G	C4-N9-C1'	-6.97	117.44	126.50
59	A5	1543	C	N3-C2-O2	-6.97	117.02	121.90
59	A5	1680	U	C5-C6-N1	6.97	126.19	122.70
58	B2	355	G	C6-C5-N7	-6.97	126.22	130.40
59	A5	377	U	O5'-P-OP2	-6.97	99.43	105.70
59	A5	652	G	C2-N3-C4	-6.97	108.41	111.90
59	A5	1124	G	C5-N7-C8	-6.97	100.81	104.30
59	A5	2008	U	C2-N1-C1'	6.97	126.06	117.70
59	A5	53	A	OP1-P-OP2	6.97	130.06	119.60
59	A5	1172	G	N1-C6-O6	-6.97	115.72	119.90
59	A5	1180	U	C2-N3-C4	6.97	131.18	127.00
59	A5	1787	C	N3-C2-O2	-6.97	117.02	121.90
59	A5	3633	U	N1-C2-O2	6.97	127.68	122.80
59	A5	1369	C	C5-C6-N1	6.97	124.48	121.00
56	A8	11	G	O5'-P-OP1	-6.97	99.43	105.70
59	A5	375	C	C5-C4-N4	6.97	125.08	120.20
58	B2	1394	U	C2-N1-C1'	6.96	126.06	117.70
59	A5	1000	G	N3-C4-N9	6.96	130.18	126.00
59	A5	3921	A	C5-C6-N6	-6.96	118.13	123.70
58	B2	823	C	C2-N1-C1'	6.96	126.46	118.80
59	A5	1290	U	C5-C6-N1	-6.96	119.22	122.70
59	A5	1952	A	O5'-P-OP1	-6.96	99.43	105.70
59	A5	108	A	C5-N7-C8	-6.96	100.42	103.90
59	A5	1027	A	C8-N9-C4	-6.96	103.02	105.80
59	A5	2173	C	N1-C2-O2	6.96	123.08	118.90
59	A5	3244	U	N1-C2-O2	6.96	127.67	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3597	C	C6-N1-C2	-6.96	117.52	120.30
59	A5	94	C	C6-N1-C2	-6.96	117.52	120.30
59	A5	1335	C	OP2-P-O3'	6.96	120.51	105.20
59	A5	2230	G	O5'-P-OP1	-6.96	99.44	105.70
58	B2	306	A	C8-N9-C4	-6.96	103.02	105.80
58	B2	1119	G	C4-N9-C1'	6.96	135.54	126.50
59	A5	90	G	O5'-P-OP1	6.96	119.05	110.70
59	A5	920	G	N3-C4-N9	6.96	130.17	126.00
59	A5	1080	G	O4'-C1'-N9	6.96	113.77	108.20
59	A5	3364	C	N1-C2-O2	6.96	123.07	118.90
59	A5	1066	A	C5-C6-N1	6.96	121.18	117.70
58	B2	1182	C	C2-N1-C1'	6.95	126.45	118.80
59	A5	1063	C	N1-C2-O2	6.95	123.07	118.90
59	A5	1668	U	O5'-P-OP2	-6.95	99.44	105.70
59	A5	1688	A	P-O3'-C3'	6.95	128.04	119.70
59	A5	2749	G	C8-N9-C4	-6.95	103.62	106.40
59	A5	3947	C	C6-N1-C2	-6.95	117.52	120.30
59	A5	3	A	O4'-C1'-N9	6.95	113.76	108.20
59	A5	1023	C	N1-C2-O2	6.95	123.07	118.90
59	A5	1148	C	N3-C2-O2	-6.95	117.03	121.90
59	A5	1974	U	N1-C2-O2	6.95	127.67	122.80
59	A5	542	C	C6-N1-C2	-6.95	117.52	120.30
59	A5	1724	A	C2-N3-C4	6.95	114.07	110.60
59	A5	1887	C	N3-C4-C5	6.95	124.68	121.90
59	A5	3757	U	C4-C5-C6	-6.95	115.53	119.70
59	A5	2754	G	N7-C8-N9	6.95	116.57	113.10
59	A5	1888	A	N1-C6-N6	6.95	122.77	118.60
59	A5	3143	U	N3-C2-O2	-6.95	117.34	122.20
59	A5	441	A	N9-C4-C5	-6.94	103.02	105.80
59	A5	90	G	C6-C5-N7	6.94	134.56	130.40
59	A5	778	C	O5'-P-OP1	-6.94	99.45	105.70
59	A5	1073	C	C2-N3-C4	6.94	123.37	119.90
59	A5	429	U	N1-C2-N3	6.94	119.06	114.90
59	A5	1084	A	OP1-P-OP2	-6.94	109.19	119.60
59	A5	2180	A	C4-C5-N7	6.94	114.17	110.70
59	A5	3142	G	C5-C6-N1	6.94	114.97	111.50
59	A5	3488	G	C8-N9-C4	6.94	109.18	106.40
58	B2	1217	U	N1-C2-O2	6.94	127.66	122.80
59	A5	1326	A	N7-C8-N9	6.94	117.27	113.80
59	A5	1690	U	N1-C2-N3	6.94	119.06	114.90
59	A5	2796	G	OP1-P-O3'	6.94	120.47	105.20
59	A5	362	A	N1-C6-N6	6.94	122.76	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	383	A	C5-C6-N1	6.94	121.17	117.70
59	A5	1024	U	N1-C2-O2	6.94	127.66	122.80
59	A5	1088	A	N7-C8-N9	6.94	117.27	113.80
59	A5	3457	C	N1-C2-O2	6.94	123.06	118.90
59	A5	3591	A	OP1-P-O3'	6.94	120.46	105.20
56	A8	18	C	C5-C6-N1	6.93	124.47	121.00
56	A8	37	U	N3-C2-O2	-6.93	117.35	122.20
59	A5	2484	G	C4-N9-C1'	6.93	135.51	126.50
59	A5	33	C	C4-C5-C6	-6.93	113.93	117.40
59	A5	53	A	C2-N3-C4	6.93	114.07	110.60
59	A5	1084	A	O5'-P-OP1	-6.93	99.46	105.70
59	A5	3762	G	OP2-P-O3'	6.93	120.45	105.20
59	A5	3413	C	O5'-P-OP1	-6.93	99.46	105.70
59	A5	3463	U	C5-C6-N1	6.93	126.17	122.70
59	A5	831	A	C5-N7-C8	-6.93	100.44	103.90
56	A8	44	C	C6-N1-C2	-6.92	117.53	120.30
59	A5	79	G	C4-C5-N7	6.92	113.57	110.80
59	A5	2775	A	N1-C2-N3	6.92	132.76	129.30
59	A5	3299	U	N1-C2-O2	6.92	127.65	122.80
58	B2	1969	G	N1-C2-N3	-6.92	119.75	123.90
59	A5	46	C	N3-C2-O2	-6.92	117.06	121.90
59	A5	426	A	C8-N9-C4	6.92	108.57	105.80
59	A5	3120	C	C6-N1-C2	-6.92	117.53	120.30
59	A5	3879	A	C5-C6-N1	6.92	121.16	117.70
59	A5	2659	A	N3-C4-N9	6.92	132.93	127.40
59	A5	3438	C	C6-N1-C2	-6.92	117.53	120.30
59	A5	1313	A	N3-C4-N9	-6.92	121.87	127.40
59	A5	1329	G	C8-N9-C1'	-6.91	118.01	127.00
59	A5	2231	A	C8-N9-C4	6.91	108.56	105.80
59	A5	3595	U	C5-C6-N1	6.91	126.16	122.70
59	A5	1000	G	C4-N9-C1'	6.91	135.48	126.50
59	A5	1354	G	N9-C4-C5	-6.91	102.64	105.40
59	A5	1643	G	N3-C4-N9	6.91	130.15	126.00
59	A5	35	C	N3-C2-O2	-6.91	117.06	121.90
59	A5	640	U	N3-C2-O2	-6.91	117.37	122.20
59	A5	1774	C	C6-N1-C2	-6.91	117.54	120.30
59	A5	3160	A	C5-N7-C8	-6.91	100.45	103.90
59	A5	1644	C	C2-N1-C1'	6.90	126.39	118.80
59	A5	3185	C	C5-C6-N1	6.90	124.45	121.00
59	A5	3730	G	C4-N9-C1'	6.90	135.47	126.50
59	A5	2205	G	N1-C6-O6	6.90	124.04	119.90
59	A5	1382	U	C5'-C4'-O4'	-6.90	100.82	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2786	U	C4-C5-C6	-6.90	115.56	119.70
59	A5	258	U	C2-N1-C1'	6.90	125.98	117.70
59	A5	2034	U	N3-C2-O2	-6.90	117.37	122.20
59	A5	2182	G	N3-C4-C5	6.90	132.05	128.60
59	A5	2551	U	C5-C6-N1	6.90	126.15	122.70
59	A5	3631	C	C6-N1-C1'	6.90	129.07	120.80
58	B2	1120	C	C5-C6-N1	6.89	124.45	121.00
59	A5	353	G	C6-C5-N7	-6.89	126.26	130.40
66	CL	7	MET	CG-SD-CE	-6.89	89.17	100.20
59	A5	1712	C	N3-C2-O2	-6.89	117.08	121.90
59	A5	2756	C	N3-C2-O2	-6.89	117.08	121.90
58	B2	1752	U	N3-C2-O2	-6.89	117.38	122.20
59	A5	424	G	N7-C8-N9	-6.89	109.66	113.10
59	A5	587	U	N3-C2-O2	-6.89	117.38	122.20
59	A5	2769	G	N3-C4-N9	6.89	130.13	126.00
58	B2	1582	C	C2-N1-C1'	6.88	126.37	118.80
59	A5	662	A	C2-N3-C4	6.88	114.04	110.60
59	A5	2021	C	C5-C6-N1	6.88	124.44	121.00
59	A5	3127	A	C5-N7-C8	-6.88	100.46	103.90
59	A5	1046	A	C4-C5-N7	6.88	114.14	110.70
59	A5	2554	U	N3-C2-O2	-6.88	117.38	122.20
59	A5	1610	A	C5-C6-N1	6.88	121.14	117.70
59	A5	1688	A	N1-C6-N6	-6.88	114.47	118.60
59	A5	1736	G	N9-C4-C5	6.88	108.15	105.40
59	A5	2041	G	C6-C5-N7	-6.88	126.27	130.40
59	A5	3155	G	N3-C4-C5	-6.88	125.16	128.60
59	A5	3608	G	N3-C2-N2	-6.88	115.08	119.90
59	A5	3753	A	C8-N9-C4	-6.88	103.05	105.80
59	A5	3880	A	C4-C5-N7	6.88	114.14	110.70
59	A5	3608	G	C2-N3-C4	-6.88	108.46	111.90
59	A5	798	C	C5-C4-N4	6.88	125.01	120.20
59	A5	1260	A	C5-C6-N6	6.88	129.20	123.70
59	A5	1892	C	C4-C5-C6	-6.88	113.96	117.40
55	A7	92	C	N1-C2-O2	6.87	123.02	118.90
59	A5	1089	U	N1-C2-O2	6.87	127.61	122.80
59	A5	3586	A	N1-C6-N6	-6.87	114.48	118.60
2	CA	196	TRP	CA-CB-CG	6.87	126.75	113.70
58	B2	1681	U	N1-C2-O2	6.87	127.61	122.80
59	A5	1143	U	O5'-P-OP1	-6.87	99.52	105.70
59	A5	3258	C	O5'-P-OP1	-6.87	99.52	105.70
59	A5	344	U	C6-N1-C2	-6.87	116.88	121.00
59	A5	1138	C	O5'-P-OP1	-6.87	99.52	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2566	A	C5-N7-C8	-6.87	100.47	103.90
59	A5	2569	U	C4-C5-C6	-6.87	115.58	119.70
59	A5	36	U	OP1-P-O3'	6.86	120.30	105.20
42	Cf	63	LEU	CB-CG-CD2	6.86	122.67	111.00
59	A5	667	U	N1-C2-N3	-6.86	110.78	114.90
59	A5	1105	U	N3-C2-O2	-6.86	117.40	122.20
59	A5	1799	U	N3-C4-O4	6.86	124.20	119.40
59	A5	3634	U	N3-C2-O2	-6.86	117.40	122.20
58	B2	468	U	N1-C2-O2	6.86	127.60	122.80
59	A5	3318	A	O5'-P-OP1	-6.86	99.53	105.70
59	A5	1985	C	C5-C4-N4	6.86	125.00	120.20
59	A5	2171	U	O5'-P-OP2	-6.86	99.53	105.70
59	A5	1140	G	C8-N9-C4	6.86	109.14	106.40
78	CU	226	LEU	CA-CB-CG	6.86	131.07	115.30
58	B2	1187	U	N3-C4-O4	-6.86	114.60	119.40
59	A5	1093	C	C2-N1-C1'	6.86	126.34	118.80
58	B2	1967	C	C6-N1-C2	-6.85	117.56	120.30
58	B2	624	G	N3-C2-N2	-6.85	115.10	119.90
59	A5	1985	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	3808	A	C8-N9-C4	-6.85	103.06	105.80
59	A5	996	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	2545	A	C8-N9-C4	-6.85	103.06	105.80
59	A5	2569	U	N1-C2-N3	6.85	119.01	114.90
58	B2	631	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	429	U	C6-N1-C2	-6.85	116.89	121.00
59	A5	3417	C	C6-N1-C2	-6.85	117.56	120.30
59	A5	3514	C	N1-C2-N3	6.85	124.00	119.20
58	B2	1111	U	C6-N1-C2	-6.85	116.89	121.00
59	A5	58	G	N1-C2-N2	6.85	122.36	116.20
59	A5	1786	G	C5-C6-N1	6.85	114.92	111.50
59	A5	3764	G	C4-N9-C1'	6.85	135.40	126.50
59	A5	3391	U	C5-C6-N1	6.85	126.12	122.70
59	A5	3922	G	C4-C5-N7	6.84	113.54	110.80
56	A8	99	U	O5'-P-OP1	-6.84	99.54	105.70
59	A5	300	A	P-O3'-C3'	6.84	127.91	119.70
59	A5	414	A	N1-C2-N3	-6.84	125.88	129.30
59	A5	2226	A	C5-N7-C8	-6.84	100.48	103.90
59	A5	1784	A	N3-C4-N9	6.84	132.87	127.40
59	A5	3149	U	N1-C2-O2	6.84	127.59	122.80
59	A5	39	A	N1-C6-N6	-6.84	114.50	118.60
59	A5	1780	U	O5'-P-OP1	-6.84	99.55	105.70
58	B2	1108	C	C2-N1-C1'	6.84	126.32	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	105	A	N1-C6-N6	6.84	122.70	118.60
56	A8	3	C	N3-C4-C5	6.83	124.63	121.90
59	A5	1335	C	N3-C2-O2	-6.83	117.12	121.90
59	A5	3402	C	C4-C5-C6	-6.83	113.98	117.40
58	B2	1404	C	N3-C2-O2	-6.83	117.12	121.90
59	A5	282	A	N3-C4-N9	6.83	132.87	127.40
59	A5	1103	U	N1-C2-O2	6.83	127.58	122.80
59	A5	1159	C	N3-C2-O2	-6.83	117.12	121.90
59	A5	2498	U	C5-C6-N1	6.83	126.12	122.70
55	A7	94	C	C6-N1-C2	-6.83	117.57	120.30
58	B2	1207	G	N3-C4-N9	6.83	130.10	126.00
59	A5	2795	U	N3-C2-O2	-6.83	117.42	122.20
59	A5	3406	G	C5-N7-C8	-6.83	100.89	104.30
55	A7	83	A	C4-C5-C6	-6.83	113.59	117.00
59	A5	3403	G	C6-C5-N7	6.83	134.50	130.40
58	B2	1382	G	C4-C5-C6	-6.83	114.70	118.80
59	A5	2753	G	N3-C2-N2	6.83	124.68	119.90
59	A5	3493	U	C5-C6-N1	6.82	126.11	122.70
59	A5	2733	G	C6-N1-C2	-6.82	121.01	125.10
59	A5	442	A	C5-C6-N6	-6.82	118.24	123.70
59	A5	752	U	N3-C2-O2	-6.82	117.43	122.20
59	A5	3600	G	C4-C5-N7	6.82	113.53	110.80
59	A5	1168	G	C4-N9-C1'	6.82	135.37	126.50
59	A5	99	A	N1-C6-N6	-6.82	114.51	118.60
59	A5	3590	C	N1-C2-O2	6.82	122.99	118.90
59	A5	3665	U	N1-C2-O2	6.82	127.57	122.80
59	A5	1626	A	N3-C4-C5	6.82	131.57	126.80
59	A5	3482	G	C5-C6-N1	6.82	114.91	111.50
59	A5	3524	G	N1-C6-O6	-6.82	115.81	119.90
59	A5	1370	C	N3-C4-C5	6.81	124.63	121.90
59	A5	2182	G	N3-C4-N9	-6.81	121.91	126.00
59	A5	872	A	C5-C6-N1	6.81	121.11	117.70
59	A5	2219	U	C5-C4-O4	6.81	129.99	125.90
59	A5	2473	C	C6-N1-C2	-6.81	117.58	120.30
59	A5	3472	A	C5-C6-N1	6.81	121.11	117.70
55	A7	83	A	N3-C4-C5	6.81	131.57	126.80
58	B2	1648	C	N3-C2-O2	-6.81	117.13	121.90
59	A5	1681	G	N7-C8-N9	6.81	116.50	113.10
59	A5	2115	U	N3-C2-O2	-6.81	117.43	122.20
59	A5	2776	A	N9-C4-C5	-6.81	103.08	105.80
58	B2	1966	U	N3-C4-O4	6.81	124.17	119.40
59	A5	438	G	C8-N9-C4	6.81	109.12	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1596	A	C8-N9-C4	-6.81	103.08	105.80
59	A5	2796	G	C8-N9-C1'	-6.81	118.15	127.00
59	A5	2492	A	C5-C6-N1	6.81	121.10	117.70
58	B2	1572	C	N3-C2-O2	-6.80	117.14	121.90
59	A5	811	G	N9-C4-C5	6.80	108.12	105.40
59	A5	3446	G	N9-C4-C5	-6.80	102.68	105.40
59	A5	1365	U	N1-C2-N3	6.80	118.98	114.90
59	A5	358	C	OP2-P-O3'	6.80	120.16	105.20
59	A5	3632	G	C8-N9-C4	-6.80	103.68	106.40
58	B2	550	C	C6-N1-C1'	-6.80	112.64	120.80
58	B2	591	C	N1-C2-O2	6.80	122.98	118.90
58	B2	1228	G	N9-C4-C5	-6.80	102.68	105.40
59	A5	3400	U	N3-C4-C5	6.80	118.68	114.60
58	B2	1096	C	C5-C6-N1	6.80	124.40	121.00
55	A7	69	C	N3-C2-O2	-6.79	117.14	121.90
59	A5	2066	G	N7-C8-N9	6.79	116.50	113.10
59	A5	3354	U	C6-N1-C1'	-6.79	111.69	121.20
59	A5	3727	A	N3-C4-C5	-6.79	122.04	126.80
58	B2	258	A	C5-N7-C8	-6.79	100.50	103.90
58	B2	589	U	N3-C2-O2	-6.79	117.44	122.20
59	A5	99	A	C5-C6-N1	6.79	121.10	117.70
59	A5	397	C	N1-C2-O2	6.79	122.98	118.90
59	A5	546	G	N7-C8-N9	6.79	116.50	113.10
59	A5	3570	C	N1-C2-O2	6.79	122.98	118.90
59	A5	2709	U	N1-C2-O2	6.79	127.55	122.80
58	B2	384	U	C5-C6-N1	6.79	126.09	122.70
58	B2	1333	C	C2-N1-C1'	6.79	126.27	118.80
59	A5	2027	A	N1-C6-N6	-6.79	114.53	118.60
59	A5	2727	U	N3-C2-O2	-6.79	117.45	122.20
59	A5	3410	G	N1-C2-N2	-6.79	110.09	116.20
59	A5	1596	A	C2-N3-C4	6.79	113.99	110.60
59	A5	383	A	OP2-P-O3'	6.78	120.12	105.20
59	A5	3521	A	C5-C6-N1	6.78	121.09	117.70
58	B2	856	A	N9-C4-C5	-6.78	103.09	105.80
51	CH	65	LEU	CB-CG-CD2	-6.78	99.47	111.00
58	B2	1228	G	C4-N9-C1'	6.78	135.31	126.50
58	B2	1572	C	C2-N1-C1'	6.78	126.26	118.80
59	A5	458	A	C5-C6-N6	-6.78	118.28	123.70
59	A5	2533	U	N1-C2-N3	6.78	118.97	114.90
59	A5	3293	G	N3-C2-N2	6.78	124.65	119.90
56	A8	36	A	C4-C5-N7	6.78	114.09	110.70
59	A5	1883	G	C4-C5-N7	6.78	113.51	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	670	G	C8-N9-C1'	6.78	135.81	127.00
59	A5	1642	G	N1-C6-O6	-6.78	115.83	119.90
59	A5	53	A	C6-N1-C2	-6.78	114.53	118.60
59	A5	1022	A	C5-N7-C8	-6.78	100.51	103.90
59	A5	1315	A	N3-C4-C5	6.78	131.54	126.80
59	A5	1524	U	N1-C2-O2	6.78	127.54	122.80
59	A5	1531	U	N3-C4-O4	-6.78	114.66	119.40
58	B2	38	C	C6-N1-C2	-6.77	117.59	120.30
58	B2	1199	G	C4-C5-N7	6.77	113.51	110.80
59	A5	3504	G	C5-C6-O6	6.77	132.66	128.60
59	A5	3912	U	N3-C2-O2	-6.77	117.46	122.20
59	A5	85	U	C2-N3-C4	6.77	131.06	127.00
59	A5	2715	C	N3-C4-N4	-6.77	113.26	118.00
59	A5	380	G	C4-C5-N7	6.77	113.51	110.80
59	A5	874	G	C4-N9-C1'	6.77	135.30	126.50
59	A5	1384	C	N3-C4-C5	6.77	124.61	121.90
59	A5	1715	G	N7-C8-N9	6.77	116.48	113.10
59	A5	2204	U	C6-N1-C2	-6.77	116.94	121.00
58	B2	1053	A	C4-C5-N7	6.77	114.08	110.70
58	B2	1596	C	C2-N1-C1'	6.77	126.24	118.80
59	A5	746	G	C4-C5-N7	6.77	113.51	110.80
59	A5	2537	A	N7-C8-N9	-6.76	110.42	113.80
59	A5	2772	G	C2-N3-C4	6.76	115.28	111.90
59	A5	3477	A	N7-C8-N9	6.76	117.18	113.80
59	A5	3482	G	N3-C4-N9	6.76	130.06	126.00
58	B2	1228	G	C8-N9-C1'	-6.76	118.21	127.00
59	A5	779	U	N3-C2-O2	-6.76	117.47	122.20
59	A5	1731	G	N9-C4-C5	6.76	108.11	105.40
59	A5	432	U	N3-C2-O2	-6.76	117.47	122.20
59	A5	540	G	C5-C6-N1	6.76	114.88	111.50
59	A5	811	G	C4-C5-C6	-6.76	114.74	118.80
59	A5	2559	C	C4-C5-C6	-6.76	114.02	117.40
59	A5	2760	G	C6-C5-N7	6.76	134.46	130.40
59	A5	3408	C	N1-C2-O2	6.76	122.96	118.90
59	A5	3570	C	N3-C2-O2	-6.76	117.17	121.90
59	A5	3888	U	C4-C5-C6	-6.76	115.64	119.70
59	A5	123	U	O4'-C1'-N1	-6.76	102.79	108.20
59	A5	1959	A	C2-N3-C4	6.76	113.98	110.60
59	A5	2491	C	O5'-P-OP2	6.76	118.81	110.70
59	A5	2126	A	O5'-P-OP2	-6.76	99.62	105.70
59	A5	3149	U	C6-N1-C1'	-6.76	111.74	121.20
59	A5	3403	G	C6-N1-C2	-6.76	121.05	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3480	U	C5-C4-O4	6.76	129.95	125.90
59	A5	804	C	N3-C4-N4	-6.75	113.27	118.00
59	A5	910	C	C4-C5-C6	-6.75	114.02	117.40
59	A5	1413	C	C4-C5-C6	-6.75	114.02	117.40
59	A5	103	A	N7-C8-N9	6.75	117.18	113.80
59	A5	1526	G	O5'-P-OP2	-6.75	99.62	105.70
42	Cf	110	ARG	NE-CZ-NH1	6.75	123.68	120.30
59	A5	1622	U	O5'-P-OP1	-6.75	99.62	105.70
59	A5	2995	U	N1-C2-O2	6.75	127.53	122.80
59	A5	103	A	C2-N3-C4	6.75	113.97	110.60
59	A5	2183	A	C2-N3-C4	6.75	113.97	110.60
59	A5	2748	G	OP2-P-O3'	6.75	120.05	105.20
59	A5	3274	A	N1-C6-N6	-6.75	114.55	118.60
59	A5	144	C	N1-C2-O2	6.75	122.95	118.90
59	A5	1127	C	C4-C5-C6	-6.75	114.03	117.40
59	A5	1774	C	C2-N1-C1'	6.75	126.22	118.80
59	A5	2484	G	C8-N9-C1'	-6.75	118.23	127.00
59	A5	2801	U	N1-C2-O2	6.75	127.52	122.80
59	A5	2235	G	C5-C6-O6	6.75	132.65	128.60
59	A5	841	A	C8-N9-C4	-6.74	103.10	105.80
59	A5	1785	G	O5'-P-OP2	-6.74	99.63	105.70
55	A7	91	C	N1-C2-O2	6.74	122.94	118.90
59	A5	289	C	C6-N1-C2	-6.74	117.60	120.30
56	A8	24	G	N9-C4-C5	6.74	108.10	105.40
56	A8	105	C	O5'-P-OP1	-6.74	99.64	105.70
58	B2	360	G	C6-C5-N7	-6.74	126.36	130.40
59	A5	1715	G	C2-N3-C4	-6.74	108.53	111.90
59	A5	2762	A	C5-N7-C8	-6.74	100.53	103.90
59	A5	3589	G	C5-N7-C8	6.74	107.67	104.30
59	A5	3609	A	C4-C5-C6	-6.74	113.63	117.00
59	A5	2512	U	C5-C4-O4	6.74	129.94	125.90
59	A5	2751	A	C5-C6-N6	6.74	129.09	123.70
59	A5	3135	G	N3-C4-C5	-6.74	125.23	128.60
42	Cf	50	LEU	CA-CB-CG	6.74	130.79	115.30
58	B2	1949	A	N1-C6-N6	-6.74	114.56	118.60
59	A5	2508	C	C5-C4-N4	6.74	124.92	120.20
59	A5	2651	G	O4'-C1'-N9	6.74	113.59	108.20
59	A5	2712	U	N1-C2-O2	6.74	127.52	122.80
59	A5	3938	C	N1-C2-O2	6.74	122.94	118.90
56	A8	43	A	C4-C5-N7	6.73	114.07	110.70
59	A5	1009	G	O5'-P-OP2	6.73	118.78	110.70
59	A5	1367	A	OP2-P-O3'	6.73	120.01	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2004	G	N3-C2-N2	6.73	124.61	119.90
59	A5	2155	A	N1-C6-N6	-6.73	114.56	118.60
59	A5	3757	U	N3-C4-O4	-6.73	114.69	119.40
59	A5	3921	A	N1-C2-N3	-6.73	125.93	129.30
59	A5	839	A	C4-N9-C1'	-6.73	114.19	126.30
59	A5	2198	G	C6-C5-N7	-6.73	126.36	130.40
59	A5	3368	C	C2-N1-C1'	6.73	126.20	118.80
59	A5	371	G	C2-N3-C4	6.73	115.26	111.90
59	A5	1318	A	N3-C4-C5	6.73	131.51	126.80
56	A8	35	G	C5-C6-O6	6.72	132.63	128.60
59	A5	802	G	C4-C5-C6	-6.72	114.77	118.80
59	A5	1747	A	OP2-P-O3'	6.72	119.99	105.20
59	A5	3246	G	C5-N7-C8	-6.72	100.94	104.30
59	A5	3912	U	N1-C2-O2	6.72	127.50	122.80
59	A5	122	C	C5-C6-N1	6.72	124.36	121.00
59	A5	540	G	C2-N3-C4	6.72	115.26	111.90
59	A5	1557	U	O5'-P-OP1	6.72	118.77	110.70
59	A5	3715	U	N1-C2-O2	6.72	127.50	122.80
59	A5	1076	A	C5-N7-C8	-6.72	100.54	103.90
59	A5	1595	G	C4-N9-C1'	6.72	135.24	126.50
59	A5	2065	A	C8-N9-C4	6.72	108.49	105.80
56	A8	71	A	C5-N7-C8	-6.71	100.54	103.90
59	A5	1690	U	O5'-P-OP1	-6.71	99.66	105.70
58	B2	879	U	C5-C6-N1	6.71	126.06	122.70
58	B2	1683	U	N3-C2-O2	-6.71	117.50	122.20
59	A5	1892	C	C6-N1-C2	-6.71	117.62	120.30
59	A5	806	A	C8-N9-C4	-6.71	103.12	105.80
59	A5	1870	G	O5'-P-OP2	-6.71	99.66	105.70
59	A5	3302	G	C8-N9-C4	-6.71	103.72	106.40
59	A5	58	G	C4-C5-C6	-6.70	114.78	118.80
59	A5	1643	G	N1-C6-O6	6.70	123.92	119.90
58	B2	836	C	C5-C6-N1	6.70	124.35	121.00
59	A5	1647	A	C2-N3-C4	6.70	113.95	110.60
58	B2	1087	C	C6-N1-C1'	-6.70	112.76	120.80
59	A5	1618	A	N9-C4-C5	-6.70	103.12	105.80
59	A5	3937	U	N3-C2-O2	-6.70	117.51	122.20
59	A5	285	G	C4-C5-N7	6.70	113.48	110.80
59	A5	562	U	N3-C2-O2	-6.70	117.51	122.20
59	A5	839	A	OP1-P-O3'	6.70	119.93	105.20
59	A5	1363	G	N1-C6-O6	-6.70	115.88	119.90
59	A5	3629	U	C6-N1-C2	-6.70	116.98	121.00
58	B2	615	G	N9-C4-C5	-6.70	102.72	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	402	A	C5-C6-N1	6.70	121.05	117.70
59	A5	2723	A	C4-C5-N7	6.70	114.05	110.70
59	A5	3921	A	C4-C5-N7	6.70	114.05	110.70
59	A5	1265	U	N3-C2-O2	-6.69	117.51	122.20
58	B2	1068	U	N3-C2-O2	-6.69	117.52	122.20
59	A5	1178	U	O4'-C1'-N1	6.69	113.55	108.20
59	A5	303	G	N1-C6-O6	-6.69	115.89	119.90
59	A5	543	A	C5-N7-C8	-6.69	100.56	103.90
59	A5	2187	U	N1-C2-O2	6.69	127.48	122.80
59	A5	2726	A	N7-C8-N9	6.69	117.14	113.80
56	A8	43	A	C5-C6-N6	-6.69	118.35	123.70
58	B2	303	C	C6-N1-C2	-6.68	117.63	120.30
59	A5	1063	C	C5-C4-N4	6.68	124.88	120.20
59	A5	1317	A	C5-C6-N1	6.68	121.04	117.70
59	A5	1319	A	C8-N9-C4	6.68	108.47	105.80
59	A5	2155	A	N9-C4-C5	6.68	108.47	105.80
59	A5	796	A	C5-C6-N1	6.68	121.04	117.70
59	A5	2267	U	C2-N1-C1'	6.68	125.72	117.70
59	A5	3446	G	N3-C4-N9	6.68	130.01	126.00
59	A5	3603	C	N1-C2-O2	6.68	122.91	118.90
32	CT	82	GLY	N-CA-C	-6.68	96.40	113.10
59	A5	2205	G	C4-N9-C1'	6.68	135.19	126.50
29	CQ	152	PHE	C-N-CA	6.68	136.33	122.30
58	B2	1665	U	C2-N1-C1'	6.68	125.72	117.70
59	A5	2181	A	O5'-P-OP1	-6.68	99.69	105.70
59	A5	2779	A	O4'-C1'-N9	6.68	113.54	108.20
58	B2	1648	C	C2-N1-C1'	6.68	126.14	118.80
59	A5	1158	C	C2-N3-C4	-6.68	116.56	119.90
59	A5	1599	C	N3-C4-C5	6.68	124.57	121.90
59	A5	1969	A	C8-N9-C4	-6.68	103.13	105.80
59	A5	3697	A	P-O3'-C3'	6.68	127.71	119.70
58	B2	1582	C	N1-C2-O2	6.68	122.91	118.90
59	A5	214	A	N1-C2-N3	-6.68	125.96	129.30
59	A5	761	C	N1-C2-O2	6.68	122.91	118.90
59	A5	2004	G	C4-N9-C1'	6.68	135.18	126.50
59	A5	2567	U	C2-N1-C1'	6.68	125.71	117.70
58	B2	458	C	C2-N1-C1'	6.67	126.14	118.80
58	B2	458	C	N3-C2-O2	-6.67	117.23	121.90
59	A5	439	U	N3-C4-O4	-6.67	114.73	119.40
59	A5	2058	C	N1-C2-O2	6.67	122.91	118.90
59	A5	1137	G	N1-C2-N2	6.67	122.20	116.20
59	A5	1326	A	C4-C5-N7	6.67	114.04	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1071	U	OP2-P-O3'	6.67	119.88	105.20
55	A7	65	C	N3-C2-O2	-6.67	117.23	121.90
59	A5	804	C	C4-C5-C6	-6.67	114.06	117.40
59	A5	1746	A	C8-N9-C4	-6.67	103.13	105.80
59	A5	3000	G	O4'-C1'-N9	6.67	113.53	108.20
59	A5	38	A	C4-C5-N7	6.67	114.03	110.70
59	A5	3266	A	N9-C4-C5	-6.67	103.13	105.80
59	A5	3485	U	N1-C1'-C2'	6.67	122.67	114.00
59	A5	3654	C	N1-C2-O2	6.67	122.90	118.90
59	A5	1007	A	N9-C4-C5	-6.67	103.13	105.80
59	A5	994	U	O5'-P-OP1	-6.66	99.70	105.70
59	A5	1409	G	C6-C5-N7	-6.66	126.40	130.40
59	A5	2589	U	C2-N1-C1'	6.66	125.69	117.70
59	A5	872	A	P-O3'-C3'	6.66	127.69	119.70
59	A5	1384	C	O5'-P-OP2	-6.66	99.71	105.70
32	CT	52	LEU	CB-CG-CD1	-6.66	99.68	111.00
58	B2	471	U	C5-C6-N1	6.66	126.03	122.70
58	B2	1234	G	C2-N3-C4	6.66	115.23	111.90
59	A5	382	G	N1-C6-O6	-6.66	115.91	119.90
59	A5	1170	U	N3-C2-O2	-6.66	117.54	122.20
59	A5	789	G	C6-C5-N7	6.66	134.39	130.40
59	A5	1796	A	C8-N9-C4	-6.66	103.14	105.80
59	A5	2731	G	C6-N1-C2	-6.66	121.11	125.10
59	A5	2767	U	N3-C4-C5	6.66	118.59	114.60
58	B2	967	C	C6-N1-C2	-6.65	117.64	120.30
58	B2	1078	G	N7-C8-N9	6.65	116.43	113.10
59	A5	438	G	C4-N9-C1'	-6.65	117.85	126.50
59	A5	2107	U	N3-C4-O4	-6.65	114.74	119.40
59	A5	3258	C	C6-N1-C2	-6.65	117.64	120.30
59	A5	1069	A	N1-C2-N3	-6.65	125.97	129.30
59	A5	2632	U	N1-C2-O2	6.65	127.45	122.80
59	A5	3609	A	N1-C6-N6	-6.65	114.61	118.60
59	A5	3931	C	C5-C6-N1	6.65	124.33	121.00
58	B2	96	C	N1-C2-O2	6.65	122.89	118.90
59	A5	2546	G	C5-N7-C8	-6.65	100.97	104.30
59	A5	2789	U	N1-C2-O2	6.65	127.45	122.80
58	B2	291	C	C2-N3-C4	6.65	123.22	119.90
58	B2	1681	U	N3-C2-O2	-6.65	117.55	122.20
59	A5	1619	C	C6-N1-C2	-6.65	117.64	120.30
58	B2	448	C	N1-C2-O2	6.65	122.89	118.90
59	A5	2215	G	C8-N9-C4	-6.65	103.74	106.40
59	A5	1354	G	C5-N7-C8	-6.64	100.98	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1751	U	O5'-P-OP1	-6.64	99.72	105.70
59	A5	1972	C	C6-N1-C1'	6.64	128.77	120.80
59	A5	2147	C	C6-N1-C2	-6.64	117.64	120.30
59	A5	3236	A	N1-C6-N6	6.64	122.59	118.60
59	A5	3309	A	C4-C5-N7	6.64	114.02	110.70
59	A5	1612	G	C5-C6-N1	6.64	114.82	111.50
59	A5	1614	A	C5-C6-N1	6.64	121.02	117.70
37	Cr	68	LEU	CA-CB-CG	6.64	130.57	115.30
58	B2	1361	C	N1-C2-O2	6.64	122.88	118.90
59	A5	1516	A	N1-C2-N3	-6.64	125.98	129.30
59	A5	1803	C	C2-N3-C4	-6.64	116.58	119.90
59	A5	2016	U	N3-C4-O4	6.64	124.05	119.40
59	A5	3581	G	N3-C2-N2	-6.64	115.25	119.90
58	B2	1979	C	C5-C6-N1	6.64	124.32	121.00
59	A5	2781	G	C4-C5-N7	-6.64	108.14	110.80
59	A5	311	C	C5-C6-N1	6.63	124.32	121.00
59	A5	860	A	C8-N9-C4	6.63	108.45	105.80
59	A5	1000	G	C8-N9-C1'	-6.63	118.38	127.00
59	A5	1711	C	C5-C6-N1	6.63	124.32	121.00
56	A8	24	G	C8-N9-C4	-6.63	103.75	106.40
58	B2	1381	G	N7-C8-N9	6.63	116.42	113.10
59	A5	1077	C	C6-N1-C2	-6.63	117.65	120.30
39	Cb	39	PHE	N-CA-C	6.63	128.91	111.00
58	B2	399	C	C4-C5-C6	-6.63	114.08	117.40
58	B2	1382	G	N7-C8-N9	-6.63	109.78	113.10
59	A5	2160	C	N3-C4-N4	-6.63	113.36	118.00
59	A5	2621	A	O5'-P-OP1	-6.63	99.73	105.70
59	A5	3678	G	C6-C5-N7	-6.63	126.42	130.40
59	A5	1174	G	C5-C6-O6	-6.63	124.62	128.60
59	A5	457	A	N1-C2-N3	-6.63	125.99	129.30
59	A5	540	G	N1-C6-O6	-6.63	115.92	119.90
59	A5	1130	U	N3-C2-O2	-6.63	117.56	122.20
58	B2	1211	C	C2-N1-C1'	6.62	126.09	118.80
58	B2	1816	C	N3-C4-C5	6.62	124.55	121.90
59	A5	1016	A	N3-C4-N9	-6.62	122.10	127.40
58	B2	458	C	N1-C2-O2	6.62	122.87	118.90
59	A5	2676	U	N1-C2-O2	6.62	127.43	122.80
59	A5	1346	C	N3-C4-N4	-6.62	113.37	118.00
59	A5	1712	C	C4'-C3'-O3'	6.62	126.23	113.00
59	A5	1776	U	N1-C2-O2	6.62	127.43	122.80
56	A8	122	U	N3-C2-O2	-6.62	117.57	122.20
58	B2	1191	C	C2-N1-C1'	-6.62	111.52	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1409	A	C4-C5-C6	-6.62	113.69	117.00
58	B2	1572	C	C6-N1-C2	-6.62	117.65	120.30
58	B2	1788	C	N3-C2-O2	-6.62	117.27	121.90
59	A5	297	U	C5-C6-N1	6.62	126.01	122.70
59	A5	1124	G	O4'-C1'-N9	-6.62	102.91	108.20
59	A5	3477	A	OP2-P-O3'	6.62	119.75	105.20
59	A5	3714	U	N3-C4-O4	6.62	124.03	119.40
58	B2	1190	G	C5-C6-O6	-6.61	124.63	128.60
59	A5	2255	G	C4-C5-N7	6.61	113.44	110.80
59	A5	1130	U	C5-C4-O4	6.61	129.87	125.90
55	A7	91	C	N3-C2-O2	-6.61	117.27	121.90
59	A5	2166	U	C5-C4-O4	6.61	129.87	125.90
59	A5	3475	U	N3-C2-O2	-6.61	117.57	122.20
59	A5	3495	G	O5'-P-OP2	-6.61	99.75	105.70
59	A5	3757	U	C2-N1-C1'	-6.61	109.77	117.70
56	A8	99	U	N3-C2-O2	-6.61	117.57	122.20
58	B2	1083	C	C2-N3-C4	6.61	123.20	119.90
59	A5	1549	A	N9-C4-C5	-6.61	103.16	105.80
59	A5	3496	U	C5-C6-N1	6.61	126.00	122.70
58	B2	988	G	C8-N9-C1'	-6.61	118.41	127.00
59	A5	367	A	C5-N7-C8	-6.61	100.60	103.90
59	A5	2088	G	C6-C5-N7	6.61	134.36	130.40
59	A5	3339	U	O5'-P-OP1	6.61	118.63	110.70
59	A5	3878	U	N3-C2-O2	-6.61	117.58	122.20
59	A5	322	G	C5-C6-N1	-6.61	108.20	111.50
59	A5	359	G	OP2-P-O3'	6.61	119.73	105.20
59	A5	1782	C	C2-N3-C4	6.61	123.20	119.90
59	A5	2775	A	C8-N9-C4	6.61	108.44	105.80
59	A5	165	G	C6-C5-N7	-6.60	126.44	130.40
59	A5	991	A	N7-C8-N9	6.60	117.10	113.80
59	A5	1149	C	C4-C5-C6	-6.60	114.10	117.40
59	A5	2781	G	N3-C4-C5	-6.60	125.30	128.60
59	A5	2784	C	OP1-P-O3'	6.60	119.73	105.20
59	A5	3607	C	C2-N3-C4	6.60	123.20	119.90
59	A5	377	U	C4-C5-C6	6.60	123.66	119.70
59	A5	821	U	C5-C4-O4	6.60	129.86	125.90
59	A5	3136	U	C5-C6-N1	6.60	126.00	122.70
59	A5	3292	C	C6-N1-C2	-6.60	117.66	120.30
58	B2	880	G	C5-C6-O6	6.60	132.56	128.60
59	A5	328	U	C6-N1-C2	-6.60	117.04	121.00
59	A5	353	G	C4-C5-N7	6.60	113.44	110.80
59	A5	1385	G	C8-N9-C1'	-6.60	118.42	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2595	U	C5-C6-N1	6.60	126.00	122.70
59	A5	3150	G	C4-C5-N7	6.60	113.44	110.80
59	A5	805	C	C4-C5-C6	-6.59	114.10	117.40
59	A5	1005	G	N1-C6-O6	-6.59	115.94	119.90
59	A5	1735	G	N1-C6-O6	-6.59	115.94	119.90
59	A5	3925	G	N3-C4-N9	6.59	129.96	126.00
59	A5	670	G	C5-C6-N1	6.59	114.80	111.50
58	B2	484	C	N1-C2-O2	6.59	122.86	118.90
59	A5	3616	G	N3-C2-N2	6.59	124.52	119.90
58	B2	1234	G	C4-C5-N7	6.59	113.44	110.80
59	A5	699	U	N3-C2-O2	-6.59	117.59	122.20
59	A5	964	C	N1-C2-O2	6.59	122.85	118.90
59	A5	1382	U	N1-C2-N3	6.59	118.85	114.90
59	A5	1734	G	C5-N7-C8	-6.59	101.01	104.30
59	A5	2100	U	N3-C2-O2	-6.59	117.59	122.20
58	B2	1594	A	C2-N3-C4	6.59	113.89	110.60
59	A5	1320	U	C5-C6-N1	6.59	125.99	122.70
59	A5	1325	C	C6-N1-C2	-6.59	117.67	120.30
59	A5	3133	A	N1-C6-N6	-6.59	114.65	118.60
59	A5	2688	U	C2-N1-C1'	6.58	125.60	117.70
59	A5	2783	C	C5-C4-N4	6.58	124.81	120.20
59	A5	339	C	C5-C6-N1	6.58	124.29	121.00
59	A5	1106	A	C2-N3-C4	6.58	113.89	110.60
59	A5	1421	G	C5-C6-O6	-6.58	124.65	128.60
59	A5	2782	A	C8-N9-C4	-6.58	103.17	105.80
58	B2	366	C	C5-C6-N1	6.58	124.29	121.00
58	B2	1752	U	N1-C2-O2	6.58	127.41	122.80
59	A5	436	A	N7-C8-N9	6.58	117.09	113.80
59	A5	852	C	N1-C2-O2	6.58	122.85	118.90
59	A5	1036	A	C8-N9-C4	-6.58	103.17	105.80
59	A5	1730	A	N1-C6-N6	-6.58	114.65	118.60
59	A5	2613	C	O5'-P-OP1	-6.58	99.78	105.70
59	A5	3625	U	N3-C2-O2	-6.58	117.59	122.20
58	B2	836	C	C6-N1-C2	-6.58	117.67	120.30
59	A5	1093	C	C6-N1-C2	-6.58	117.67	120.30
59	A5	1317	A	O4'-C1'-N9	6.58	113.46	108.20
59	A5	3949	U	C2-N1-C1'	-6.58	109.80	117.70
66	CL	74	GLY	N-CA-C	6.58	129.55	113.10
59	A5	1697	U	N1-C2-N3	6.58	118.85	114.90
59	A5	397	C	N3-C4-C5	6.58	124.53	121.90
59	A5	1608	G	OP2-P-O3'	6.58	119.67	105.20
59	A5	770	C	C4-C5-C6	-6.57	114.11	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2789	U	C5-C4-O4	6.57	129.84	125.90
59	A5	2792	G	N1-C2-N2	-6.57	110.28	116.20
59	A5	2599	G	C5-C6-N1	6.57	114.79	111.50
59	A5	3730	G	N3-C4-N9	6.57	129.94	126.00
59	A5	1576	U	N1-C2-O2	6.57	127.40	122.80
59	A5	2129	C	P-O3'-C3'	6.57	127.58	119.70
59	A5	3590	C	C2-N3-C4	6.57	123.18	119.90
58	B2	1824	C	C6-N1-C2	-6.57	117.67	120.30
59	A5	2785	C	O5'-P-OP1	-6.57	99.79	105.70
59	A5	3589	G	C5-C6-O6	6.57	132.54	128.60
59	A5	778	C	C5-C6-N1	6.56	124.28	121.00
59	A5	2234	C	C2-N1-C1'	6.56	126.02	118.80
58	B2	1388	U	C5-C6-N1	6.56	125.98	122.70
59	A5	1024	U	C4-C5-C6	-6.56	115.77	119.70
59	A5	1417	G	N3-C4-N9	6.56	129.94	126.00
59	A5	3149	U	C2-N3-C4	-6.56	123.06	127.00
59	A5	3583	C	N1-C2-O2	6.56	122.84	118.90
59	A5	108	A	C4-C5-N7	6.56	113.98	110.70
59	A5	1114	A	C4-C5-N7	6.56	113.98	110.70
59	A5	1365	U	OP2-P-O3'	6.56	119.63	105.20
59	A5	3851	U	C6-N1-C2	-6.56	117.06	121.00
59	A5	2760	G	N9-C4-C5	6.56	108.02	105.40
59	A5	3329	U	N3-C2-O2	-6.56	117.61	122.20
58	B2	315	C	C5-C6-N1	6.55	124.28	121.00
59	A5	383	A	N7-C8-N9	6.55	117.08	113.80
59	A5	386	G	N3-C2-N2	6.55	124.49	119.90
59	A5	1101	A	C4-C5-C6	-6.55	113.72	117.00
41	Ce	21	ARG	NE-CZ-NH2	6.55	123.58	120.30
59	A5	1195	U	N1-C2-O2	6.55	127.39	122.80
59	A5	1693	C	C5-C6-N1	6.55	124.28	121.00
58	B2	317	A	N1-C6-N6	-6.55	114.67	118.60
59	A5	383	A	C5-N7-C8	-6.55	100.62	103.90
59	A5	1051	C	C5-C6-N1	6.55	124.28	121.00
59	A5	1197	A	C5-C6-N6	6.55	128.94	123.70
59	A5	1398	C	N3-C2-O2	-6.55	117.31	121.90
59	A5	3627	C	P-O3'-C3'	6.55	127.56	119.70
59	A5	3918	A	C5-N7-C8	-6.55	100.62	103.90
58	B2	448	C	C5-C6-N1	6.55	124.27	121.00
59	A5	372	U	N1-C2-O2	6.55	127.38	122.80
59	A5	2486	A	C5-C6-N1	6.55	120.97	117.70
66	CL	69	LEU	CB-CG-CD2	-6.55	99.87	111.00
58	B2	399	C	N3-C4-C5	6.55	124.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1037	C	C5-C6-N1	6.55	124.27	121.00
59	A5	3540	G	O5'-P-OP1	-6.55	99.81	105.70
55	A7	94	C	C5-C6-N1	6.55	124.27	121.00
59	A5	1093	C	OP1-P-O3'	6.55	119.60	105.20
59	A5	1529	C	N3-C2-O2	-6.55	117.32	121.90
59	A5	3767	G	C4-C5-N7	6.54	113.42	110.80
58	B2	18	C	C6-N1-C2	-6.54	117.68	120.30
58	B2	312	G	O5'-P-OP2	-6.54	99.81	105.70
58	B2	1967	C	C2-N3-C4	6.54	123.17	119.90
59	A5	370	A	C4-C5-N7	6.54	113.97	110.70
59	A5	1681	G	N3-C4-C5	-6.54	125.33	128.60
59	A5	2718	U	O5'-P-OP2	-6.54	99.81	105.70
59	A5	2753	G	N1-C2-N2	-6.54	110.31	116.20
58	B2	604	C	C5-C6-N1	6.54	124.27	121.00
58	B2	962	G	O5'-P-OP1	-6.54	99.81	105.70
59	A5	272	U	OP2-P-O3'	6.54	119.59	105.20
59	A5	874	G	C8-N9-C1'	-6.54	118.50	127.00
59	A5	2160	C	C5-C6-N1	6.54	124.27	121.00
59	A5	3378	U	C2-N1-C1'	6.54	125.55	117.70
59	A5	3526	C	N3-C4-N4	-6.54	113.42	118.00
59	A5	3595	U	N3-C2-O2	-6.54	117.62	122.20
59	A5	3918	A	N7-C8-N9	6.54	117.07	113.80
56	A8	101	A	OP1-P-O3'	6.54	119.58	105.20
56	A8	106	A	O3'-P-O5'	6.54	116.42	104.00
59	A5	102	G	N3-C4-N9	6.54	129.92	126.00
59	A5	228	C	N3-C2-O2	-6.54	117.32	121.90
59	A5	398	U	N1-C2-O2	6.54	127.38	122.80
59	A5	1209	A	N1-C6-N6	-6.54	114.68	118.60
59	A5	1325	C	C5-C6-N1	6.54	124.27	121.00
59	A5	3334	A	C5-C6-N1	6.54	120.97	117.70
59	A5	3478	G	C2-N3-C4	6.54	115.17	111.90
59	A5	3671	C	C2-N3-C4	6.54	123.17	119.90
59	A5	872	A	N3-C4-N9	6.54	132.63	127.40
59	A5	1411	U	C4-C5-C6	-6.54	115.78	119.70
58	B2	355	G	C8-N9-C4	-6.54	103.79	106.40
58	B2	550	C	N3-C2-O2	-6.54	117.33	121.90
59	A5	2920	U	N3-C2-O2	-6.54	117.62	122.20
59	A5	3128	U	C5-C6-N1	6.54	125.97	122.70
59	A5	3154	C	O5'-P-OP1	-6.54	99.82	105.70
4	CB	248	LEU	CA-CB-CG	6.53	130.33	115.30
54	A9	12	C	C2-N3-C4	6.53	123.17	119.90
59	A5	1071	U	C2-N3-C4	-6.53	123.08	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2754	G	N3-C4-N9	6.53	129.92	126.00
59	A5	2799	U	C5-C4-O4	6.53	129.82	125.90
59	A5	3498	A	C8-N9-C4	-6.53	103.19	105.80
59	A5	2211	A	C8-N9-C4	6.53	108.41	105.80
59	A5	2822	C	N1-C2-O2	6.53	122.82	118.90
59	A5	890	C	C6-N1-C2	-6.53	117.69	120.30
59	A5	2723	A	C8-N9-C4	-6.53	103.19	105.80
59	A5	3234	A	C8-N9-C4	6.53	108.41	105.80
59	A5	3908	U	O5'-P-OP1	-6.53	99.82	105.70
58	B2	1825	A	C2-N3-C4	6.53	113.86	110.60
69	DA	301	TYR	CA-CB-CG	6.53	125.80	113.40
59	A5	105	A	N9-C4-C5	-6.53	103.19	105.80
59	A5	1095	G	C4-C5-C6	6.53	122.72	118.80
59	A5	2205	G	N3-C4-N9	6.53	129.92	126.00
59	A5	3411	C	C5-C6-N1	6.53	124.26	121.00
59	A5	811	G	C5-C6-N1	-6.52	108.24	111.50
59	A5	1206	G	O5'-P-OP1	-6.52	99.83	105.70
59	A5	2217	A	OP1-P-O3'	6.52	119.55	105.20
59	A5	3921	A	C5-C6-N1	6.52	120.96	117.70
59	A5	2499	U	N1-C2-O2	6.52	127.36	122.80
59	A5	3341	C	N3-C4-C5	6.52	124.51	121.90
59	A5	442	A	C5-N7-C8	-6.52	100.64	103.90
59	A5	1110	G	N3-C4-N9	6.52	129.91	126.00
59	A5	2108	U	O5'-P-OP1	-6.52	99.83	105.70
59	A5	2559	C	C6-N1-C2	-6.52	117.69	120.30
59	A5	3003	C	N1-C2-O2	6.52	122.81	118.90
59	A5	1155	U	N3-C4-O4	-6.52	114.84	119.40
59	A5	2096	C	C2-N3-C4	6.52	123.16	119.90
59	A5	3438	C	C5-C6-N1	6.52	124.26	121.00
58	B2	1333	C	C6-N1-C2	-6.52	117.69	120.30
59	A5	1016	A	OP1-P-OP2	6.52	129.38	119.60
59	A5	1886	C	C5-C6-N1	6.52	124.26	121.00
58	B2	250	U	N1-C2-O2	6.51	127.36	122.80
59	A5	776	A	OP2-P-O3'	-6.51	90.87	105.20
59	A5	1131	C	OP1-P-OP2	6.51	129.37	119.60
59	A5	1158	C	N1-C2-O2	-6.51	114.99	118.90
59	A5	1392	A	N1-C6-N6	-6.51	114.69	118.60
59	A5	2089	A	C2-N3-C4	-6.51	107.34	110.60
59	A5	3257	U	N1-C2-O2	6.51	127.36	122.80
59	A5	824	G	C5-C6-N1	6.51	114.76	111.50
56	A8	109	U	C2-N1-C1'	6.51	125.51	117.70
58	B2	849	U	C6-N1-C1'	-6.51	112.09	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1184	U	N1-C2-O2	-6.51	118.24	122.80
58	B2	1217	U	C6-N1-C2	-6.51	117.09	121.00
58	B2	1648	C	N1-C2-O2	6.51	122.81	118.90
59	A5	3476	G	N1-C2-N2	-6.51	110.34	116.20
59	A5	2812	U	C6-N1-C1'	-6.51	112.09	121.20
59	A5	60	G	C5-C6-N1	6.51	114.75	111.50
59	A5	640	U	N1-C2-O2	6.51	127.35	122.80
59	A5	3464	G	C8-N9-C4	-6.51	103.80	106.40
59	A5	3722	C	C5-C6-N1	6.51	124.25	121.00
58	B2	1207	G	C4-N9-C1'	6.50	134.96	126.50
58	B2	1854	U	C5-C4-O4	6.50	129.80	125.90
59	A5	675	C	C6-N1-C2	-6.50	117.70	120.30
59	A5	1114	A	C5-N7-C8	-6.50	100.65	103.90
59	A5	2169	U	C5-C6-N1	6.50	125.95	122.70
59	A5	2742	G	C5-N7-C8	-6.50	101.05	104.30
59	A5	3614	U	C6-N1-C1'	-6.50	112.10	121.20
59	A5	235	A	C4-C5-N7	6.50	113.95	110.70
59	A5	318	G	N3-C4-N9	-6.50	122.10	126.00
59	A5	1118	C	C2-N3-C4	6.50	123.15	119.90
59	A5	1689	G	N9-C1'-C2'	6.50	122.45	114.00
59	A5	1970	G	C5-N7-C8	-6.50	101.05	104.30
59	A5	446	C	N3-C4-N4	-6.50	113.45	118.00
59	A5	1594	U	C5-C6-N1	6.50	125.95	122.70
59	A5	2229	A	C8-N9-C4	-6.50	103.20	105.80
58	B2	1107	A	C4-C5-N7	6.50	113.95	110.70
59	A5	1699	A	N3-C4-C5	-6.50	122.25	126.80
59	A5	3454	G	N3-C2-N2	-6.50	115.35	119.90
59	A5	3472	A	C4-N9-C1'	6.50	138.00	126.30
59	A5	3877	G	C5-C6-N1	6.50	114.75	111.50
59	A5	2242	C	O5'-P-OP2	-6.50	99.85	105.70
59	A5	3844	U	C1'-O4'-C4'	-6.50	104.70	109.90
59	A5	778	C	C6-N1-C2	-6.49	117.70	120.30
59	A5	1759	C	O5'-P-OP1	-6.49	99.86	105.70
59	A5	3763	U	N3-C4-O4	6.49	123.95	119.40
59	A5	3808	A	N7-C8-N9	6.49	117.05	113.80
59	A5	1141	G	N1-C6-O6	-6.49	116.00	119.90
59	A5	2173	C	N3-C2-O2	-6.49	117.36	121.90
59	A5	28	C	N1-C2-O2	6.49	122.80	118.90
59	A5	188	G	N3-C4-N9	6.49	129.89	126.00
59	A5	1003	C	C5-C6-N1	6.49	124.25	121.00
59	A5	3969	G	N3-C4-C5	6.49	131.85	128.60
59	A5	165	G	C4-C5-N7	6.49	113.39	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3931	C	C5-C4-N4	-6.49	115.66	120.20
59	A5	2186	C	N1-C2-O2	6.49	122.79	118.90
59	A5	3478	G	C6-N1-C2	-6.49	121.21	125.10
59	A5	3517	U	C5-C6-N1	6.49	125.94	122.70
59	A5	1271	G	C4-C5-N7	6.48	113.39	110.80
59	A5	1674	A	O4'-C1'-N9	-6.48	103.02	108.20
59	A5	1320	U	N1-C2-O2	6.48	127.33	122.80
59	A5	2560	A	C5-C6-N6	-6.48	118.52	123.70
59	A5	3297	C	N3-C4-C5	-6.48	119.31	121.90
58	B2	883	C	N3-C2-O2	-6.48	117.37	121.90
59	A5	1145	C	C5-C6-N1	6.47	124.24	121.00
59	A5	3463	U	N3-C4-O4	6.47	123.93	119.40
59	A5	3620	G	C5-C6-N1	-6.47	108.26	111.50
59	A5	247	C	C5-C6-N1	6.47	124.24	121.00
59	A5	1016	A	N9-C4-C5	6.47	108.39	105.80
59	A5	2165	C	C6-N1-C1'	-6.47	113.03	120.80
59	A5	2580	C	C6-N1-C2	-6.47	117.71	120.30
59	A5	2793	C	OP1-P-O3'	6.47	119.44	105.20
59	A5	3370	A	C8-N9-C4	6.47	108.39	105.80
59	A5	3512	U	N1-C2-O2	6.47	127.33	122.80
59	A5	3634	U	C6-N1-C2	-6.47	117.12	121.00
59	A5	899	G	N3-C2-N2	-6.47	115.37	119.90
59	A5	3839	A	C8-N9-C4	-6.47	103.21	105.80
58	B2	1956	U	P-O3'-C3'	6.47	127.46	119.70
59	A5	64	A	C2-N3-C4	6.47	113.83	110.60
59	A5	3301	U	C6-N1-C2	-6.47	117.12	121.00
59	A5	3638	U	C4-C5-C6	-6.47	115.82	119.70
59	A5	3754	C	C5-C6-N1	-6.47	117.77	121.00
59	A5	1723	G	OP2-P-O3'	-6.47	90.97	105.20
59	A5	2205	G	C8-N9-C1'	-6.47	118.59	127.00
58	B2	878	C	N3-C2-O2	-6.47	117.37	121.90
59	A5	69	A	N1-C2-N3	-6.47	126.07	129.30
59	A5	1122	U	N3-C2-O2	-6.47	117.67	122.20
58	B2	1066	A	C2-N3-C4	6.46	113.83	110.60
59	A5	47	A	O5'-P-OP1	-6.46	99.88	105.70
59	A5	1387	G	N9-C4-C5	-6.46	102.81	105.40
59	A5	1970	G	C5-C6-O6	-6.46	124.72	128.60
59	A5	2058	C	C5-C6-N1	6.46	124.23	121.00
59	A5	2190	A	C5-C6-N6	6.46	128.87	123.70
59	A5	2230	G	N3-C4-N9	6.46	129.88	126.00
59	A5	3846	U	O4'-C1'-N1	6.46	113.37	108.20
59	A5	227	A	C4-C5-N7	6.46	113.93	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	988	G	N1-C6-O6	6.46	123.78	119.90
59	A5	90	G	C6-N1-C2	-6.46	121.22	125.10
59	A5	561	A	N1-C2-N3	6.46	132.53	129.30
59	A5	1159	C	N1-C2-O2	6.46	122.78	118.90
59	A5	2197	A	N9-C4-C5	6.46	108.39	105.80
58	B2	627	A	N9-C4-C5	6.46	108.38	105.80
59	A5	306	C	N3-C2-O2	-6.46	117.38	121.90
59	A5	1702	G	N9-C4-C5	6.46	107.98	105.40
59	A5	2901	C	C5-C6-N1	6.46	124.23	121.00
58	B2	1187	U	N1-C2-N3	6.46	118.77	114.90
59	A5	1698	A	O5'-P-OP2	-6.46	99.89	105.70
59	A5	496	U	N3-C2-O2	-6.46	117.68	122.20
59	A5	821	U	N3-C2-O2	-6.46	117.68	122.20
59	A5	1015	G	C5-C6-O6	6.45	132.47	128.60
59	A5	1316	U	N3-C4-C5	-6.45	110.73	114.60
59	A5	3621	A	C4-C5-N7	6.45	113.93	110.70
58	B2	1090	A	N9-C1'-C2'	6.45	122.39	114.00
59	A5	1358	U	N3-C4-C5	-6.45	110.73	114.60
59	A5	1735	G	N7-C8-N9	-6.45	109.87	113.10
59	A5	2493	C	C5-C6-N1	6.45	124.23	121.00
58	B2	1361	C	C2-N1-C1'	6.45	125.90	118.80
59	A5	3620	G	C5-C6-O6	6.45	132.47	128.60
59	A5	3755	A	C2-N3-C4	-6.45	107.38	110.60
59	A5	498	U	C5-C6-N1	6.45	125.92	122.70
59	A5	2562	U	N1-C2-O2	6.45	127.31	122.80
59	A5	3470	G	O5'-P-OP1	-6.45	99.90	105.70
59	A5	57	G	OP1-P-OP2	6.45	129.27	119.60
59	A5	1009	G	N7-C8-N9	6.45	116.32	113.10
59	A5	1012	G	O5'-P-OP1	-6.45	99.90	105.70
59	A5	1137	G	C2-N3-C4	6.45	115.12	111.90
59	A5	25	G	N1-C6-O6	-6.44	116.03	119.90
59	A5	2147	C	C5-C6-N1	6.44	124.22	121.00
26	CN	92	LEU	CA-CB-CG	6.44	130.12	115.30
55	A7	102	C	N1-C2-O2	6.44	122.77	118.90
59	A5	2172	C	C5-C4-N4	-6.44	115.69	120.20
59	A5	915	C	N1-C2-O2	6.44	122.76	118.90
59	A5	995	G	C6-C5-N7	6.44	134.26	130.40
59	A5	1194	A	N7-C8-N9	6.44	117.02	113.80
59	A5	2230	G	OP2-P-O3'	6.44	119.37	105.20
59	A5	3520	U	C5-C4-O4	-6.44	122.04	125.90
58	B2	1090	A	C8-N9-C4	-6.44	103.22	105.80
59	A5	12	C	C5-C6-N1	6.44	124.22	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1725	A	N9-C4-C5	-6.44	103.22	105.80
59	A5	3755	A	C8-N9-C4	6.43	108.37	105.80
59	A5	398	U	N3-C2-O2	-6.43	117.70	122.20
59	A5	1006	A	C5-N7-C8	-6.43	100.68	103.90
59	A5	1036	A	N7-C8-N9	6.43	117.02	113.80
59	A5	2543	C	N3-C4-N4	-6.43	113.50	118.00
59	A5	2658	A	N3-C4-N9	-6.43	122.26	127.40
59	A5	63	G	C5-C6-O6	-6.43	124.74	128.60
59	A5	92	A	O5'-P-OP1	-6.43	99.92	105.70
59	A5	1129	A	N1-C6-N6	-6.43	114.74	118.60
58	B2	420	U	N3-C2-O2	-6.43	117.70	122.20
59	A5	1421	G	C4-N9-C1'	6.43	134.85	126.50
59	A5	1803	C	C6-N1-C1'	-6.43	113.09	120.80
59	A5	339	C	C6-N1-C2	-6.42	117.73	120.30
59	A5	3501	C	C5-C6-N1	6.42	124.21	121.00
59	A5	924	U	O5'-P-OP1	-6.42	99.92	105.70
59	A5	1382	U	P-O3'-C3'	6.42	127.41	119.70
59	A5	2717	C	N3-C2-O2	-6.42	117.40	121.90
59	A5	2734	A	C6-C5-N7	-6.42	127.81	132.30
59	A5	3593	A	N3-C4-C5	-6.42	122.31	126.80
59	A5	1027	A	C5-N7-C8	-6.42	100.69	103.90
58	B2	1105	U	N1-C2-O2	6.42	127.29	122.80
59	A5	3540	G	N1-C6-O6	-6.42	116.05	119.90
59	A5	1118	C	C5-C4-N4	-6.42	115.71	120.20
59	A5	2712	U	N3-C2-O2	-6.42	117.71	122.20
59	A5	3239	C	N3-C2-O2	-6.42	117.41	121.90
59	A5	3516	C	N1-C2-O2	6.42	122.75	118.90
59	A5	1024	U	C5-C6-N1	6.42	125.91	122.70
18	AZ	48	LEU	CA-CB-CG	6.41	130.05	115.30
58	B2	1090	A	C4-N9-C1'	6.41	137.84	126.30
59	A5	102	G	N1-C2-N2	-6.41	110.43	116.20
59	A5	800	C	C4-C5-C6	-6.41	114.19	117.40
59	A5	1578	C	C6-N1-C2	-6.41	117.73	120.30
59	A5	1764	G	C5-N7-C8	-6.41	101.09	104.30
59	A5	1960	C	C5-C6-N1	6.41	124.21	121.00
59	A5	2769	G	C4-C5-N7	6.41	113.36	110.80
59	A5	2759	G	C5-C6-N1	6.41	114.71	111.50
59	A5	32	C	N3-C4-C5	-6.41	119.34	121.90
59	A5	658	A	N1-C2-N3	-6.41	126.09	129.30
59	A5	2537	A	C6-C5-N7	6.41	136.79	132.30
30	CR	129	GLY	N-CA-C	-6.41	97.08	113.10
56	A8	14	G	C4-C5-N7	6.41	113.36	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	638	A	N1-C6-N6	-6.41	114.75	118.60
59	A5	2783	C	O5'-P-OP1	-6.41	99.93	105.70
59	A5	739	U	N1-C2-O2	6.41	127.28	122.80
59	A5	988	C	C5-C6-N1	6.41	124.20	121.00
59	A5	1336	U	OP1-P-O3'	6.41	119.29	105.20
59	A5	3172	A	O5'-P-OP2	-6.41	99.94	105.70
58	B2	1203	U	N1-C2-O2	6.40	127.28	122.80
59	A5	2217	A	C2-N3-C4	6.40	113.80	110.60
59	A5	349	C	C4-C5-C6	-6.40	114.20	117.40
59	A5	662	A	C5-C6-N1	6.40	120.90	117.70
59	A5	2194	G	N3-C2-N2	-6.40	115.42	119.90
59	A5	3138	G	N3-C4-N9	6.40	129.84	126.00
59	A5	803	A	C5-C6-N6	6.40	128.82	123.70
59	A5	1651	C	O5'-P-OP1	-6.40	99.94	105.70
58	B2	1765	U	P-O3'-C3'	6.40	127.38	119.70
59	A5	2066	G	C8-N9-C1'	6.40	135.32	127.00
59	A5	3457	C	C4-C5-C6	-6.40	114.20	117.40
59	A5	2799	U	N1-C2-O2	6.40	127.28	122.80
58	B2	111	A	C2-N3-C4	-6.39	107.40	110.60
59	A5	2035	C	N1-C2-O2	6.39	122.74	118.90
59	A5	2652	U	C2-N1-C1'	6.39	125.37	117.70
59	A5	1020	A	C6-N1-C2	-6.39	114.76	118.60
59	A5	1328	U	O5'-P-OP1	-6.39	99.95	105.70
59	A5	3155	G	C5-C6-N1	6.39	114.70	111.50
59	A5	3943	G	C4-N9-C1'	6.39	134.81	126.50
59	A5	2679	U	C6-N1-C2	-6.39	117.17	121.00
59	A5	2692	U	N1-C2-O2	6.39	127.27	122.80
58	B2	1356	U	N3-C2-O2	-6.39	117.73	122.20
59	A5	2704	A	O5'-P-OP1	-6.39	99.95	105.70
56	A8	94	C	C6-N1-C2	-6.39	117.75	120.30
59	A5	3678	G	O5'-P-OP1	-6.39	99.95	105.70
59	A5	3966	U	C5-C6-N1	6.39	125.89	122.70
58	B2	372	A	N9-C4-C5	-6.39	103.25	105.80
59	A5	37	G	OP1-P-O3'	6.39	119.25	105.20
59	A5	227	A	C8-N9-C4	-6.39	103.25	105.80
59	A5	1767	A	N1-C6-N6	-6.39	114.77	118.60
59	A5	2249	A	C4-C5-C6	-6.39	113.81	117.00
59	A5	2801	U	C5-C4-O4	6.39	129.73	125.90
59	A5	281	C	C4-C5-C6	-6.38	114.21	117.40
59	A5	372	U	C5-C6-N1	6.38	125.89	122.70
59	A5	920	G	C8-N9-C1'	-6.38	118.70	127.00
59	A5	1559	A	N7-C8-N9	6.38	116.99	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2516	U	N3-C2-O2	-6.38	117.73	122.20
59	A5	2536	G	C4-C5-N7	6.38	113.35	110.80
59	A5	1066	A	C6-C5-N7	6.38	136.77	132.30
59	A5	1182	A	C2-N3-C4	6.38	113.79	110.60
59	A5	3628	G	O5'-P-OP2	-6.38	99.95	105.70
59	A5	163	A	O4'-C1'-N9	6.38	113.31	108.20
59	A5	245	G	N3-C2-N2	-6.38	115.43	119.90
59	A5	1540	U	N3-C2-O2	-6.38	117.73	122.20
59	A5	2541	C	N1-C2-N3	-6.38	114.73	119.20
59	A5	2760	G	C5-C6-O6	6.38	132.43	128.60
59	A5	337	A	N1-C6-N6	-6.38	114.77	118.60
59	A5	1194	A	C8-N9-C4	-6.38	103.25	105.80
59	A5	3938	C	N3-C2-O2	-6.38	117.44	121.90
59	A5	2701	G	C4-C5-N7	-6.38	108.25	110.80
59	A5	3139	G	C5-C6-O6	-6.38	124.77	128.60
58	B2	604	C	N1-C2-O2	6.37	122.72	118.90
59	A5	117	C	N3-C2-O2	-6.37	117.44	121.90
59	A5	485	A	C4-C5-C6	-6.37	113.81	117.00
59	A5	2155	A	N1-C2-N3	6.37	132.49	129.30
59	A5	2769	G	C6-C5-N7	-6.37	126.58	130.40
59	A5	1023	C	C5-C4-N4	-6.37	115.74	120.20
59	A5	2771	G	OP1-P-O3'	6.37	119.21	105.20
59	A5	2788	U	O5'-P-OP1	6.37	118.34	110.70
59	A5	3624	C	C5-C6-N1	6.37	124.19	121.00
59	A5	3624	C	N1-C2-O2	6.37	122.72	118.90
59	A5	789	G	N1-C6-O6	-6.37	116.08	119.90
59	A5	1280	C	N1-C2-O2	6.37	122.72	118.90
59	A5	1684	G	C2-N3-C4	6.37	115.08	111.90
59	A5	1192	A	OP1-P-OP2	-6.37	110.05	119.60
59	A5	1554	C	N3-C4-N4	-6.37	113.54	118.00
59	A5	2625	G	N9-C4-C5	-6.37	102.85	105.40
56	A8	34	C	C5-C4-N4	6.36	124.65	120.20
58	B2	291	C	N1-C2-O2	6.36	122.72	118.90
58	B2	1913	C	N3-C2-O2	-6.36	117.44	121.90
59	A5	367	A	OP2-P-O3'	6.36	119.20	105.20
59	A5	1089	U	O5'-P-OP2	-6.36	99.97	105.70
59	A5	1342	U	N3-C2-O2	-6.36	117.75	122.20
59	A5	2721	C	N1-C2-O2	6.36	122.72	118.90
56	A8	1	A	N7-C8-N9	-6.36	110.62	113.80
58	B2	978	C	C6-N1-C2	-6.36	117.76	120.30
59	A5	1381	U	N3-C2-O2	-6.36	117.75	122.20
59	A5	2754	G	N3-C4-C5	-6.36	125.42	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2779	A	C4-C5-C6	-6.36	113.82	117.00
59	A5	373	A	C5-C6-N1	6.36	120.88	117.70
59	A5	3344	U	C2-N1-C1'	6.36	125.33	117.70
58	B2	1076	U	C6-N1-C2	-6.36	117.19	121.00
59	A5	2035	C	N3-C2-O2	-6.36	117.45	121.90
59	A5	3601	U	O5'-P-OP1	-6.36	99.98	105.70
59	A5	804	C	OP1-P-O3'	-6.35	91.22	105.20
58	B2	908	G	N3-C4-C5	-6.35	125.42	128.60
59	A5	1197	A	C6-N1-C2	6.35	122.41	118.60
59	A5	1790	A	N1-C2-N3	-6.35	126.12	129.30
59	A5	2678	G	N1-C2-N3	-6.35	120.09	123.90
59	A5	2733	G	C5-C6-O6	-6.35	124.79	128.60
59	A5	3943	G	N9-C4-C5	-6.35	102.86	105.40
58	B2	1811	C	C2-N1-C1'	6.35	125.78	118.80
58	B2	1827	A	O4'-C1'-N9	6.35	113.28	108.20
59	A5	777	C	N3-C2-O2	-6.35	117.46	121.90
59	A5	816	A	C5-C6-N1	6.35	120.87	117.70
59	A5	1387	G	C4-N9-C1'	6.35	134.75	126.50
59	A5	2599	G	N1-C6-O6	-6.35	116.09	119.90
59	A5	3491	C	C2-N3-C4	6.35	123.08	119.90
59	A5	3758	G	N3-C4-N9	6.35	129.81	126.00
58	B2	509	C	P-O3'-C3'	6.35	127.32	119.70
59	A5	299	G	OP1-P-O3'	6.35	119.17	105.20
59	A5	1644	C	C5-C4-N4	-6.35	115.76	120.20
59	A5	247	C	C6-N1-C2	-6.35	117.76	120.30
59	A5	1002	C	OP1-P-O3'	6.35	119.16	105.20
59	A5	1616	G	OP1-P-OP2	6.35	129.12	119.60
58	B2	1603	G	C4-N9-C1'	6.34	134.75	126.50
59	A5	2233	C	C6-N1-C2	-6.34	117.76	120.30
59	A5	2760	G	N1-C6-O6	-6.34	116.09	119.90
59	A5	3445	C	C6-N1-C2	-6.34	117.76	120.30
59	A5	1339	U	C5-C6-N1	6.34	125.87	122.70
59	A5	3471	A	C8-N9-C4	6.34	108.34	105.80
59	A5	3514	C	C5-C4-N4	6.34	124.64	120.20
59	A5	3670	G	C5-N7-C8	-6.34	101.13	104.30
59	A5	2529	G	N1-C6-O6	-6.34	116.09	119.90
59	A5	3120	C	C6-N1-C1'	6.34	128.41	120.80
59	A5	3258	C	N3-C2-O2	-6.34	117.46	121.90
59	A5	3362	G	N1-C6-O6	-6.34	116.10	119.90
59	A5	3505	U	N3-C2-O2	-6.34	117.76	122.20
59	A5	1797	A	C5-N7-C8	6.34	107.07	103.90
59	A5	2812	U	N3-C2-O2	-6.34	117.76	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	94	C	C2-N3-C4	6.34	123.07	119.90
59	A5	795	A	C6-N1-C2	-6.34	114.80	118.60
59	A5	798	C	C2-N3-C4	-6.34	116.73	119.90
59	A5	112	C	N1-C2-O2	6.34	122.70	118.90
59	A5	543	A	N7-C8-N9	6.34	116.97	113.80
59	A5	1784	A	O5'-P-OP2	-6.34	100.00	105.70
59	A5	2525	C	C6-N1-C2	-6.34	117.77	120.30
59	A5	273	G	N3-C4-C5	6.33	131.77	128.60
59	A5	999	U	N3-C4-C5	6.33	118.40	114.60
58	B2	878	C	C6-N1-C2	-6.33	117.77	120.30
58	B2	1177	C	C5-C6-N1	6.33	124.17	121.00
58	B2	1856	U	C5-C6-N1	6.33	125.87	122.70
59	A5	2194	G	C8-N9-C4	-6.33	103.87	106.40
65	CO	112	SER	C-N-CD	-6.33	106.67	120.60
59	A5	287	G	O4'-C1'-N9	6.33	113.27	108.20
59	A5	1055	U	N1-C2-O2	6.33	127.23	122.80
59	A5	2513	G	C8-N9-C1'	-6.33	118.77	127.00
59	A5	2787	U	OP2-P-O3'	6.33	119.13	105.20
59	A5	3316	U	C6-N1-C2	-6.33	117.20	121.00
59	A5	3589	G	N1-C6-O6	-6.33	116.10	119.90
41	Ce	20	ILE	CG1-CB-CG2	-6.33	97.47	111.40
59	A5	1555	G	C4-C5-N7	6.33	113.33	110.80
59	A5	1751	U	N3-C2-O2	-6.33	117.77	122.20
58	B2	932	U	C6-N1-C1'	-6.33	112.34	121.20
59	A5	1315	A	C4-C5-N7	6.33	113.86	110.70
59	A5	1605	U	C2-N1-C1'	-6.33	110.11	117.70
59	A5	1678	C	C5-C4-N4	6.33	124.63	120.20
59	A5	388	U	C6-N1-C2	-6.33	117.20	121.00
59	A5	664	U	C5-C6-N1	6.33	125.86	122.70
59	A5	2778	G	N3-C4-N9	6.33	129.79	126.00
59	A5	3763	U	N1-C2-N3	-6.33	111.11	114.90
59	A5	1086	C	C5-C4-N4	6.32	124.63	120.20
59	A5	2800	C	N3-C2-O2	-6.32	117.47	121.90
58	B2	618	G	C8-N9-C1'	-6.32	118.78	127.00
59	A5	347	A	C2-N3-C4	-6.32	107.44	110.60
59	A5	1718	G	C6-N1-C2	-6.32	121.31	125.10
59	A5	2151	A	O5'-P-OP1	-6.32	100.01	105.70
59	A5	3185	C	C6-N1-C2	-6.32	117.77	120.30
59	A5	3251	C	C4-C5-C6	-6.32	114.24	117.40
59	A5	1428	G	C6-C5-N7	-6.32	126.61	130.40
58	B2	1447	G	C8-N9-C4	-6.32	103.87	106.40
59	A5	1529	C	C2-N1-C1'	6.32	125.75	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2166	U	C2-N1-C1'	-6.32	110.12	117.70
59	A5	751	A	O5'-P-OP2	-6.32	100.02	105.70
59	A5	1276	G	C4-N9-C1'	-6.32	118.29	126.50
59	A5	2674	A	C5-C6-N1	6.32	120.86	117.70
59	A5	2753	G	C6-C5-N7	-6.32	126.61	130.40
59	A5	3401	U	C5-C6-N1	6.32	125.86	122.70
59	A5	3235	A	N1-C6-N6	6.32	122.39	118.60
56	A8	86	A	N7-C8-N9	6.31	116.96	113.80
59	A5	1100	G	O5'-P-OP2	6.31	118.28	110.70
55	A7	105	C	N1-C2-O2	6.31	122.69	118.90
58	B2	1796	C	C6-N1-C2	-6.31	117.78	120.30
59	A5	1385	G	N1-C6-O6	6.31	123.69	119.90
59	A5	3479	C	N3-C4-C5	-6.31	119.38	121.90
59	A5	1114	A	N7-C8-N9	6.31	116.96	113.80
59	A5	1616	G	C4-C5-N7	6.31	113.33	110.80
59	A5	1945	U	C5-C6-N1	6.31	125.86	122.70
58	B2	1186	U	C5-C4-O4	-6.31	122.11	125.90
58	B2	1238	G	N7-C8-N9	6.31	116.25	113.10
59	A5	458	A	C4-C5-C6	-6.31	113.84	117.00
59	A5	541	A	N1-C6-N6	-6.31	114.81	118.60
59	A5	3258	C	O4'-C1'-N1	6.31	113.25	108.20
59	A5	3497	G	N3-C4-N9	6.31	129.79	126.00
59	A5	366	A	C8-N9-C4	6.31	108.32	105.80
59	A5	1077	C	C2-N1-C1'	6.31	125.74	118.80
59	A5	1101	A	N1-C2-N3	-6.31	126.15	129.30
59	A5	1710	G	C6-C5-N7	-6.31	126.61	130.40
59	A5	1746	A	C5-N7-C8	-6.31	100.75	103.90
59	A5	1781	U	OP2-P-O3'	6.31	119.08	105.20
59	A5	1981	A	C5-C6-N1	6.31	120.85	117.70
59	A5	2180	A	N9-C4-C5	-6.31	103.28	105.80
59	A5	2508	C	N1-C2-O2	6.31	122.69	118.90
56	A8	96	U	C6-N1-C2	-6.31	117.22	121.00
59	A5	39	A	C5-C6-N1	6.31	120.85	117.70
59	A5	1346	C	N3-C4-C5	6.31	124.42	121.90
59	A5	1688	A	O4'-C1'-N9	6.31	113.25	108.20
59	A5	2520	U	C2-N1-C1'	-6.31	110.13	117.70
59	A5	3708	U	OP1-P-O3'	6.31	119.07	105.20
55	A7	90	A	N7-C8-N9	6.30	116.95	113.80
58	B2	583	C	N3-C2-O2	-6.30	117.49	121.90
59	A5	1087	G	C4-C5-N7	6.30	113.32	110.80
59	A5	2514	U	N3-C2-O2	-6.30	117.79	122.20
59	A5	3516	C	C4-C5-C6	-6.30	114.25	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1001	A	C8-N9-C4	-6.30	103.28	105.80
59	A5	1073	C	P-O3'-C3'	6.30	127.26	119.70
59	A5	1124	G	N3-C4-N9	-6.30	122.22	126.00
58	B2	1207	G	N1-C6-O6	-6.30	116.12	119.90
59	A5	90	G	N9-C4-C5	6.30	107.92	105.40
59	A5	3630	C	C4-C5-C6	-6.30	114.25	117.40
59	A5	1684	G	C4-C5-C6	-6.30	115.02	118.80
59	A5	2688	U	C6-N1-C2	-6.30	117.22	121.00
58	B2	1817	C	C4-C5-C6	-6.30	114.25	117.40
59	A5	2657	A	C4-C5-C6	-6.30	113.85	117.00
59	A5	3472	A	C5-N7-C8	6.30	107.05	103.90
58	B2	1225	A	C5-C6-N6	-6.30	118.66	123.70
59	A5	301	U	C4-C5-C6	-6.30	115.92	119.70
59	A5	1084	A	O5'-P-OP2	6.30	118.25	110.70
59	A5	2088	G	C4-C5-N7	-6.30	108.28	110.80
59	A5	3399	C	OP1-P-O3'	6.30	119.05	105.20
59	A5	3887	U	C5-C6-N1	6.30	125.85	122.70
59	A5	1380	G	C5-C6-N1	6.29	114.65	111.50
56	A8	15	G	N3-C2-N2	-6.29	115.50	119.90
59	A5	1046	A	N1-C6-N6	6.29	122.38	118.60
59	A5	1332	C	N3-C4-C5	-6.29	119.38	121.90
59	A5	2822	C	C2-N1-C1'	6.29	125.72	118.80
59	A5	3293	G	N1-C6-O6	-6.29	116.12	119.90
59	A5	3633	U	C6-N1-C2	-6.29	117.22	121.00
58	B2	101	U	O5'-P-OP2	-6.29	100.04	105.70
59	A5	1000	G	C6-C5-N7	-6.29	126.63	130.40
59	A5	377	U	N3-C2-O2	-6.29	117.80	122.20
59	A5	569	U	N3-C2-O2	-6.29	117.80	122.20
59	A5	3530	A	C2-N3-C4	6.29	113.74	110.60
59	A5	822	G	O5'-P-OP2	-6.28	100.05	105.70
59	A5	1138	C	N3-C4-N4	6.28	122.40	118.00
59	A5	1144	C	C5-C4-N4	6.28	124.60	120.20
55	A7	92	C	C6-N1-C2	-6.28	117.79	120.30
59	A5	1622	U	N1-C2-O2	6.28	127.20	122.80
59	A5	2090	U	N1-C2-O2	6.28	127.20	122.80
59	A5	2649	A	C4-C5-N7	6.28	113.84	110.70
59	A5	3263	C	C5-C6-N1	6.28	124.14	121.00
59	A5	2750	A	OP2-P-O3'	6.28	119.01	105.20
59	A5	51	U	OP2-P-O3'	6.28	119.01	105.20
59	A5	1382	U	OP2-P-O3'	-6.28	91.39	105.20
59	A5	3346	G	C4-N9-C1'	6.28	134.66	126.50
59	A5	3346	G	N3-C4-N9	6.28	129.77	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3935	G	OP2-P-O3'	6.28	119.01	105.20
59	A5	123	U	P-O3'-C3'	6.28	127.23	119.70
59	A5	1778	A	C6-C5-N7	6.28	136.69	132.30
59	A5	2164	G	C6-C5-N7	-6.28	126.64	130.40
59	A5	3617	U	C5-C6-N1	6.28	125.84	122.70
59	A5	309	C	C5-C6-N1	6.27	124.14	121.00
59	A5	1873	A	OP2-P-O3'	6.27	119.00	105.20
59	A5	3342	C	N3-C4-N4	6.27	122.39	118.00
59	A5	3755	A	N3-C4-C5	6.27	131.19	126.80
55	A7	67	G	C4-C5-N7	6.27	113.31	110.80
58	B2	903	C	N1-C2-O2	6.27	122.66	118.90
59	A5	1513	C	C5-C6-N1	6.27	124.14	121.00
59	A5	2067	C	C5-C4-N4	-6.27	115.81	120.20
59	A5	3150	G	N7-C8-N9	6.27	116.23	113.10
59	A5	3412	U	N3-C4-O4	-6.27	115.01	119.40
69	DA	280	LEU	CA-CB-CG	6.27	129.72	115.30
58	B2	86	C	C6-N1-C1'	-6.27	113.28	120.80
59	A5	994	U	N3-C4-C5	-6.27	110.84	114.60
59	A5	1774	C	N3-C2-O2	-6.27	117.51	121.90
59	A5	2255	G	N3-C4-N9	6.27	129.76	126.00
59	A5	3466	A	N7-C8-N9	6.27	116.93	113.80
59	A5	1788	G	O5'-P-OP1	-6.27	100.06	105.70
56	A8	105	C	C6-N1-C1'	6.26	128.32	120.80
59	A5	792	U	O5'-P-OP1	-6.26	100.06	105.70
56	A8	43	A	C5-N7-C8	-6.26	100.77	103.90
58	B2	509	C	OP1-P-O3'	6.26	118.98	105.20
58	B2	1078	G	C8-N9-C4	-6.26	103.90	106.40
59	A5	1151	A	N7-C8-N9	6.26	116.93	113.80
59	A5	1192	A	N1-C6-N6	6.26	122.36	118.60
59	A5	1379	U	N3-C2-O2	-6.26	117.82	122.20
59	A5	1599	C	C4-C5-C6	-6.26	114.27	117.40
59	A5	2196	U	C2-N1-C1'	-6.26	110.19	117.70
59	A5	2657	A	N7-C8-N9	6.26	116.93	113.80
59	A5	2786	U	C6-N1-C2	-6.26	117.24	121.00
59	A5	3457	C	C6-N1-C2	-6.26	117.80	120.30
58	B2	589	U	C2-N1-C1'	6.26	125.21	117.70
59	A5	920	G	N9-C4-C5	-6.26	102.90	105.40
59	A5	2197	A	N1-C6-N6	-6.26	114.84	118.60
56	A8	34	C	N3-C4-C5	-6.26	119.40	121.90
59	A5	383	A	C6-N1-C2	-6.26	114.84	118.60
59	A5	1712	C	C6-N1-C1'	6.26	128.31	120.80
59	A5	2643	C	N3-C2-O2	-6.26	117.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3446	G	N7-C8-N9	-6.26	109.97	113.10
18	AZ	95	LEU	CA-CB-CG	6.26	129.69	115.30
59	A5	1114	A	C8-N9-C4	-6.26	103.30	105.80
59	A5	1945	U	C2-N1-C1'	6.26	125.21	117.70
59	A5	1084	A	N3-C4-N9	6.25	132.40	127.40
59	A5	1195	U	C4-C5-C6	6.25	123.45	119.70
59	A5	3630	C	C2-N3-C4	6.25	123.03	119.90
59	A5	83	U	O5'-P-OP2	-6.25	100.07	105.70
59	A5	1053	G	C5-C6-O6	-6.25	124.85	128.60
59	A5	1167	A	N1-C2-N3	-6.25	126.17	129.30
59	A5	2625	G	N3-C2-N2	6.25	124.28	119.90
59	A5	2707	C	N3-C4-C5	6.25	124.40	121.90
59	A5	3619	U	N3-C2-O2	-6.25	117.82	122.20
56	A8	10	C	N3-C4-C5	-6.25	119.40	121.90
59	A5	383	A	C2-N3-C4	6.25	113.72	110.60
59	A5	1152	A	N1-C6-N6	-6.25	114.85	118.60
59	A5	1801	U	C6-N1-C1'	6.25	129.95	121.20
59	A5	2720	U	N1-C2-O2	6.25	127.17	122.80
54	A9	29	U	N3-C4-O4	-6.25	115.03	119.40
58	B2	1360	G	C8-N9-C4	6.25	108.90	106.40
59	A5	998	G	N3-C4-N9	6.25	129.75	126.00
59	A5	2701	G	N3-C4-C5	-6.25	125.48	128.60
59	A5	1733	A	C8-N9-C4	6.25	108.30	105.80
59	A5	2768	A	N1-C2-N3	-6.25	126.18	129.30
59	A5	3711	G	C4-C5-N7	6.25	113.30	110.80
56	A8	72	C	N3-C2-O2	-6.24	117.53	121.90
58	B2	838	A	C2-N3-C4	6.24	113.72	110.60
59	A5	427	A	C6-C5-N7	-6.24	127.93	132.30
59	A5	445	C	N3-C4-N4	6.24	122.37	118.00
59	A5	1166	U	OP1-P-O3'	6.24	118.94	105.20
59	A5	3176	C	N3-C2-O2	-6.24	117.53	121.90
59	A5	1593	U	O5'-P-OP2	-6.24	100.08	105.70
59	A5	3576	G	O5'-P-OP1	-6.24	100.08	105.70
59	A5	3541	A	C8-N9-C4	-6.24	103.30	105.80
59	A5	3486	U	C6-N1-C2	-6.24	117.26	121.00
59	A5	342	A	C4-C5-N7	6.24	113.82	110.70
59	A5	752	U	C2-N1-C1'	6.24	125.18	117.70
25	Ca	47	ASP	C-N-CA	6.24	137.29	121.70
59	A5	1084	A	C5-N7-C8	-6.24	100.78	103.90
59	A5	1366	G	OP1-P-OP2	-6.24	110.25	119.60
59	A5	1721	C	O5'-P-OP1	-6.24	100.09	105.70
56	A8	29	U	C5-C6-N1	6.23	125.82	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1197	A	O5'-P-OP2	6.23	118.18	110.70
59	A5	1681	G	N1-C2-N2	-6.23	110.59	116.20
59	A5	2255	G	C4-N9-C1'	6.23	134.60	126.50
59	A5	2767	U	N3-C4-O4	-6.23	115.04	119.40
59	A5	874	G	C4-C5-N7	6.23	113.29	110.80
59	A5	1156	U	N3-C4-C5	6.23	118.34	114.60
59	A5	3299	U	N3-C2-O2	-6.23	117.84	122.20
59	A5	2761	A	C4-C5-N7	6.23	113.81	110.70
59	A5	2920	U	N1-C2-O2	6.23	127.16	122.80
59	A5	3591	A	C4-N9-C1'	-6.23	115.09	126.30
58	B2	1966	U	C5-C4-O4	-6.23	122.16	125.90
59	A5	851	G	N7-C8-N9	6.23	116.21	113.10
59	A5	1156	U	O5'-P-OP2	-6.23	100.09	105.70
59	A5	3948	U	N3-C2-O2	-6.23	117.84	122.20
59	A5	1290	U	O4'-C1'-N1	6.23	113.18	108.20
59	A5	1611	G	C6-N1-C2	-6.23	121.36	125.10
6	CC	295	LEU	CA-CB-CG	6.22	129.62	115.30
54	A9	11	A	C8-N9-C4	-6.22	103.31	105.80
58	B2	1191	C	C6-N1-C1'	6.22	128.27	120.80
59	A5	206	C	N1-C2-O2	6.22	122.63	118.90
59	A5	3890	G	P-O3'-C3'	6.22	127.17	119.70
59	A5	1162	A	O5'-P-OP2	-6.22	100.10	105.70
59	A5	1710	G	C5-N7-C8	-6.22	101.19	104.30
59	A5	3594	A	C5-N7-C8	-6.22	100.79	103.90
59	A5	1414	C	C2-N3-C4	-6.22	116.79	119.90
59	A5	2515	C	N1-C2-N3	-6.22	114.85	119.20
58	B2	1161	G	O5'-P-OP2	-6.22	100.10	105.70
58	B2	1170	G	C4-C5-N7	6.22	113.29	110.80
58	B2	1854	U	N1-C2-O2	6.22	127.15	122.80
59	A5	2737	C	C2-N3-C4	-6.22	116.79	119.90
59	A5	890	C	C5-C6-N1	6.22	124.11	121.00
59	A5	1083	A	C6-C5-N7	6.22	136.65	132.30
59	A5	1170	U	N3-C4-C5	6.22	118.33	114.60
59	A5	1682	G	N1-C2-N3	-6.22	120.17	123.90
59	A5	1774	C	N1-C2-O2	6.22	122.63	118.90
59	A5	2067	C	N3-C2-O2	-6.22	117.55	121.90
59	A5	2173	C	OP2-P-O3'	6.22	118.88	105.20
59	A5	2209	G	N9-C4-C5	-6.22	102.91	105.40
59	A5	3851	U	C2-N1-C1'	6.22	125.16	117.70
58	B2	1083	C	N1-C2-O2	6.21	122.63	118.90
59	A5	62	G	C5-C6-O6	-6.21	124.87	128.60
59	A5	858	U	C6-N1-C2	-6.21	117.27	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3506	U	N1-C2-O2	6.21	127.15	122.80
59	A5	2671	C	N3-C4-C5	-6.21	119.42	121.90
59	A5	3872	C	C6-N1-C2	-6.21	117.81	120.30
59	A5	2525	C	OP1-P-O3'	6.21	118.87	105.20
59	A5	2658	A	N1-C6-N6	-6.21	114.87	118.60
59	A5	2720	U	N3-C4-O4	-6.21	115.05	119.40
59	A5	3303	G	P-O3'-C3'	6.21	127.15	119.70
58	B2	1788	C	C6-N1-C1'	-6.21	113.35	120.80
59	A5	1861	A	N1-C6-N6	-6.21	114.87	118.60
59	A5	3221	A	C6-C5-N7	-6.21	127.95	132.30
59	A5	981	C	C6-N1-C2	-6.21	117.82	120.30
59	A5	2787	U	C5-C4-O4	-6.21	122.17	125.90
59	A5	1030	A	C5-C6-N1	6.21	120.80	117.70
59	A5	1688	A	N9-C4-C5	6.21	108.28	105.80
59	A5	1868	A	N1-C6-N6	-6.21	114.88	118.60
59	A5	2191	G	N3-C4-N9	-6.21	122.28	126.00
52	CE	44	LEU	CA-CB-CG	6.21	129.57	115.30
55	A7	67	G	N3-C4-N9	-6.21	122.28	126.00
58	B2	258	A	C8-N9-C4	-6.21	103.32	105.80
58	B2	355	G	C4-C5-N7	6.21	113.28	110.80
59	A5	2209	G	O5'-P-OP1	-6.21	100.12	105.70
59	A5	2223	C	N1-C2-O2	6.21	122.62	118.90
59	A5	2229	A	N1-C2-N3	-6.21	126.20	129.30
58	B2	1858	U	N1-C2-O2	6.20	127.14	122.80
59	A5	1945	U	N1-C2-O2	6.20	127.14	122.80
58	B2	932	U	N1-C2-O2	6.20	127.14	122.80
59	A5	3616	G	C8-N9-C1'	-6.20	118.94	127.00
55	A7	100	A	O5'-P-OP1	-6.20	100.12	105.70
58	B2	1333	C	C5-C6-N1	6.20	124.10	121.00
59	A5	463	C	C5-C6-N1	6.20	124.10	121.00
59	A5	2570	C	N3-C2-O2	-6.20	117.56	121.90
59	A5	2731	G	C6-C5-N7	-6.20	126.68	130.40
59	A5	3173	U	C2-N3-C4	-6.20	123.28	127.00
59	A5	3613	G	C4-C5-N7	6.20	113.28	110.80
58	B2	1822	U	C6-N1-C2	-6.20	117.28	121.00
59	A5	1514	U	OP2-P-O3'	6.20	118.83	105.20
59	A5	1765	U	N3-C4-C5	6.20	118.32	114.60
59	A5	3135	G	C8-N9-C4	6.20	108.88	106.40
59	A5	3260	G	C4-N9-C1'	6.20	134.55	126.50
59	A5	3648	A	N7-C8-N9	6.20	116.90	113.80
59	A5	3755	A	N9-C4-C5	-6.20	103.32	105.80
59	A5	1019	U	N1-C2-N3	6.19	118.62	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3334	A	O4'-C1'-N9	6.19	113.16	108.20
59	A5	3894	C	C5-C6-N1	6.19	124.10	121.00
59	A5	2760	G	N3-C4-N9	-6.19	122.28	126.00
59	A5	3341	C	O5'-P-OP1	-6.19	100.13	105.70
59	A5	3620	G	N3-C4-C5	6.19	131.70	128.60
12	AN	135	LEU	CA-CB-CG	6.19	129.54	115.30
59	A5	833	U	N1-C2-O2	6.19	127.13	122.80
59	A5	3353	C	N1-C2-O2	6.19	122.61	118.90
59	A5	1136	A	N7-C8-N9	-6.19	110.71	113.80
59	A5	1682	G	C5-C6-O6	-6.19	124.89	128.60
59	A5	2521	A	C6-C5-N7	-6.19	127.97	132.30
55	A7	78	C	C4-C5-C6	-6.19	114.31	117.40
59	A5	910	C	C6-N1-C2	-6.19	117.83	120.30
59	A5	2041	G	C8-N9-C1'	-6.19	118.96	127.00
59	A5	2209	G	OP1-P-OP2	6.19	128.88	119.60
59	A5	2781	G	N1-C6-O6	-6.19	116.19	119.90
58	B2	939	G	N3-C4-C5	-6.18	125.51	128.60
59	A5	813	C	N1-C2-O2	6.18	122.61	118.90
59	A5	2518	A	C5-N7-C8	6.18	106.99	103.90
56	A8	111	G	C5-C6-N1	6.18	114.59	111.50
58	B2	120	U	N3-C2-O2	-6.18	117.87	122.20
59	A5	306	C	C5-C6-N1	6.18	124.09	121.00
59	A5	3491	C	N1-C2-O2	6.18	122.61	118.90
59	A5	3842	A	O5'-P-OP2	-6.18	100.14	105.70
66	CL	86	GLY	N-CA-C	-6.18	97.64	113.10
59	A5	3800	G	N3-C4-N9	6.18	129.71	126.00
59	A5	41	U	N1-C2-O2	6.18	127.13	122.80
59	A5	1534	G	C5-C6-N1	6.18	114.59	111.50
59	A5	1959	A	C4-C5-C6	-6.18	113.91	117.00
59	A5	2695	A	C4-C5-C6	-6.18	113.91	117.00
59	A5	3474	G	OP2-P-O3'	6.18	118.79	105.20
59	A5	3665	U	N3-C2-O2	-6.18	117.88	122.20
59	A5	43	A	N7-C8-N9	6.18	116.89	113.80
59	A5	1385	G	N9-C4-C5	-6.18	102.93	105.40
33	CP	27	LYS	CD-CE-NZ	-6.17	97.50	111.70
58	B2	89	C	N3-C2-O2	-6.17	117.58	121.90
58	B2	1671	U	N1-C2-O2	6.17	127.12	122.80
59	A5	283	A	C5-C6-N1	6.17	120.79	117.70
59	A5	1685	G	N9-C4-C5	-6.17	102.93	105.40
59	A5	1785	G	C6-C5-N7	6.17	134.10	130.40
59	A5	2805	C	OP1-P-OP2	6.17	128.86	119.60
59	A5	3127	A	N7-C8-N9	6.17	116.89	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3309	A	C6-C5-N7	-6.17	127.98	132.30
58	B2	632	G	N1-C6-O6	6.17	123.60	119.90
59	A5	587	U	C2-N1-C1'	6.17	125.11	117.70
59	A5	1722	U	N1-C2-O2	6.17	127.12	122.80
59	A5	3892	A	C5-C6-N6	-6.17	118.76	123.70
59	A5	2756	C	C2-N3-C4	6.17	122.98	119.90
59	A5	3471	A	C2-N3-C4	6.17	113.69	110.60
59	A5	3770	A	C2-N3-C4	6.17	113.69	110.60
58	B2	1968	C	N3-C4-N4	6.17	122.32	118.00
58	B2	1954	C	C6-N1-C2	-6.17	117.83	120.30
59	A5	2165	C	C4-C5-C6	-6.17	114.32	117.40
59	A5	3149	U	OP1-P-OP2	6.17	128.85	119.60
59	A5	3487	A	N7-C8-N9	6.17	116.89	113.80
56	A8	111	G	N1-C6-O6	-6.17	116.20	119.90
59	A5	1355	C	C5-C4-N4	6.17	124.52	120.20
59	A5	1880	A	N1-C6-N6	-6.17	114.90	118.60
59	A5	29	U	N1-C2-O2	6.17	127.11	122.80
59	A5	2098	C	C2-N1-C1'	6.17	125.58	118.80
59	A5	3130	G	C5-C6-O6	-6.17	124.90	128.60
59	A5	3142	G	C5-C6-O6	6.17	132.30	128.60
58	B2	250	U	OP1-P-O3'	6.16	118.76	105.20
59	A5	1273	U	O5'-P-OP2	-6.16	100.15	105.70
59	A5	2507	C	N1-C2-O2	6.16	122.60	118.90
59	A5	1517	A	N7-C8-N9	6.16	116.88	113.80
59	A5	3144	U	N1-C2-O2	6.16	127.11	122.80
59	A5	3447	U	C5-C6-N1	6.16	125.78	122.70
52	CE	237	TYR	N-CA-C	6.16	127.63	111.00
59	A5	804	C	N1-C2-O2	6.16	122.60	118.90
59	A5	2124	G	C6-C5-N7	-6.16	126.70	130.40
59	A5	3142	G	C8-N9-C4	-6.16	103.94	106.40
59	A5	3670	G	N1-C6-O6	6.16	123.60	119.90
34	CX	186	VAL	C-N-CD	-6.16	107.05	120.60
59	A5	934	U	N1-C2-O2	6.16	127.11	122.80
59	A5	3402	C	C5-C4-N4	6.16	124.51	120.20
58	B2	1825	A	N7-C8-N9	6.16	116.88	113.80
59	A5	2130	G	N1-C6-O6	-6.16	116.21	119.90
59	A5	2728	C	C5-C6-N1	6.16	124.08	121.00
59	A5	802	G	C5-C6-O6	6.16	132.29	128.60
56	A8	35	G	N1-C2-N2	-6.15	110.66	116.20
58	B2	908	G	C4-N9-C1'	6.15	134.50	126.50
58	B2	1344	A	N3-C4-N9	6.15	132.32	127.40
59	A5	1166	U	N3-C2-O2	-6.15	117.89	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1593	U	N1-C2-O2	6.15	127.11	122.80
59	A5	2491	C	N3-C2-O2	-6.15	117.59	121.90
58	B2	111	A	N3-C4-C5	6.15	131.11	126.80
58	B2	1671	U	N3-C2-O2	-6.15	117.89	122.20
59	A5	423	U	N1-C2-O2	6.15	127.11	122.80
59	A5	1782	C	C4-C5-C6	-6.15	114.32	117.40
59	A5	2775	A	C5-C6-N1	6.15	120.78	117.70
59	A5	163	A	P-O3'-C3'	6.15	127.08	119.70
59	A5	2196	U	C6-N1-C1'	6.15	129.81	121.20
59	A5	3143	U	O5'-P-OP2	-6.15	100.16	105.70
59	A5	3418	U	C6-N1-C1'	-6.15	112.59	121.20
59	A5	1204	C	C4-C5-C6	-6.15	114.33	117.40
59	A5	2704	A	C4-C5-N7	6.15	113.78	110.70
58	B2	823	C	N1-C2-O2	6.15	122.59	118.90
59	A5	1644	C	N3-C2-O2	-6.15	117.60	121.90
59	A5	2053	A	C2-N3-C4	6.15	113.67	110.60
59	A5	2174	A	O4'-C1'-N9	6.15	113.12	108.20
59	A5	761	C	N3-C2-O2	-6.15	117.60	121.90
59	A5	3376	C	C5-C6-N1	6.15	124.07	121.00
58	B2	330	G	O5'-P-OP1	-6.14	100.17	105.70
59	A5	485	A	C6-C5-N7	6.14	136.60	132.30
59	A5	991	A	C5-N7-C8	-6.14	100.83	103.90
59	A5	1322	U	N3-C4-O4	6.14	123.70	119.40
59	A5	1538	U	C5-C4-O4	6.14	129.59	125.90
59	A5	2226	A	O5'-P-OP1	-6.14	100.17	105.70
59	A5	2694	G	N3-C4-N9	6.14	129.69	126.00
59	A5	3363	G	N3-C2-N2	-6.14	115.60	119.90
59	A5	744	U	N3-C2-O2	-6.14	117.90	122.20
59	A5	2219	U	C6-N1-C2	-6.14	117.31	121.00
59	A5	3758	G	N3-C2-N2	6.14	124.20	119.90
59	A5	1350	A	O5'-P-OP2	-6.14	100.17	105.70
59	A5	1512	C	OP1-P-OP2	6.14	128.81	119.60
59	A5	2641	C	N3-C2-O2	-6.14	117.60	121.90
59	A5	691	C	C6-N1-C2	-6.14	117.84	120.30
59	A5	1093	C	N1-C2-O2	6.14	122.58	118.90
59	A5	1696	A	C8-N9-C4	6.14	108.25	105.80
59	A5	2704	A	N9-C4-C5	-6.14	103.34	105.80
56	A8	51	A	N1-C6-N6	6.14	122.28	118.60
59	A5	1403	C	N3-C4-N4	-6.14	113.70	118.00
59	A5	1793	C	N1-C1'-C2'	-6.14	105.25	112.00
59	A5	3272	A	C8-N9-C4	6.14	108.25	105.80
58	B2	314	C	N3-C2-O2	-6.13	117.61	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1616	G	O5'-P-OP1	-6.13	100.18	105.70
59	A5	2091	A	C5-C6-N6	6.13	128.61	123.70
59	A5	2507	C	O5'-P-OP2	-6.13	100.18	105.70
59	A5	3299	U	C5-C6-N1	6.13	125.77	122.70
59	A5	3488	G	C4-N9-C1'	-6.13	118.53	126.50
59	A5	3758	G	C6-C5-N7	-6.13	126.72	130.40
55	A7	49	A	N1-C2-N3	-6.13	126.23	129.30
59	A5	85	U	C5-C6-N1	6.13	125.77	122.70
59	A5	261	U	N3-C2-O2	-6.13	117.91	122.20
59	A5	2715	C	N1-C2-N3	6.13	123.49	119.20
59	A5	3000	G	C6-C5-N7	-6.13	126.72	130.40
59	A5	1403	C	C6-N1-C2	6.13	122.75	120.30
59	A5	2212	A	N7-C8-N9	6.13	116.86	113.80
25	Ca	98	LYS	C-N-CA	6.13	137.02	121.70
58	B2	1078	G	C6-C5-N7	-6.13	126.72	130.40
59	A5	104	A	N7-C8-N9	6.13	116.86	113.80
59	A5	1665	C	C6-N1-C2	-6.13	117.85	120.30
59	A5	2088	G	N3-C2-N2	-6.13	115.61	119.90
59	A5	3396	A	N1-C2-N3	-6.13	126.24	129.30
59	A5	3943	G	C4-C5-N7	6.13	113.25	110.80
58	B2	1107	A	C5-N7-C8	-6.13	100.84	103.90
58	B2	1982	C	C6-N1-C2	-6.13	117.85	120.30
59	A5	3514	C	N3-C4-C5	-6.13	119.45	121.90
59	A5	416	C	N3-C4-C5	6.12	124.35	121.90
59	A5	3548	U	C6-N1-C2	-6.12	117.33	121.00
59	A5	3626	A	N1-C6-N6	-6.12	114.93	118.60
59	A5	1162	A	C2-N3-C4	6.12	113.66	110.60
59	A5	3148	C	N1-C2-O2	6.12	122.57	118.90
59	A5	552	U	C6-N1-C2	-6.12	117.33	121.00
59	A5	1546	U	C4-C5-C6	-6.12	116.03	119.70
59	A5	2516	U	C5-C4-O4	6.12	129.57	125.90
59	A5	290	G	C8-N9-C4	6.12	108.85	106.40
59	A5	1009	G	O5'-P-OP1	-6.12	100.19	105.70
59	A5	2194	G	C4-N9-C1'	6.12	134.45	126.50
59	A5	3507	A	C2-N3-C4	6.12	113.66	110.60
59	A5	3599	U	N1-C2-O2	6.12	127.08	122.80
59	A5	3727	A	N7-C8-N9	-6.12	110.74	113.80
59	A5	83	U	N3-C2-O2	-6.12	117.92	122.20
59	A5	1059	A	C8-N9-C4	-6.12	103.35	105.80
59	A5	3714	U	C6-N1-C2	-6.12	117.33	121.00
59	A5	3842	A	C8-N9-C4	-6.12	103.35	105.80
59	A5	532	C	N1-C2-O2	6.12	122.57	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1174	G	C5-N7-C8	6.12	107.36	104.30
59	A5	1728	G	C6-C5-N7	-6.12	126.73	130.40
59	A5	3170	U	C5-C6-N1	6.12	125.76	122.70
59	A5	667	U	OP2-P-O3'	6.11	118.65	105.20
59	A5	1106	A	N1-C2-N3	-6.11	126.24	129.30
59	A5	1404	A	C5-N7-C8	-6.11	100.84	103.90
59	A5	2170	C	C6-N1-C1'	6.11	128.13	120.80
58	B2	410	C	C5-C6-N1	6.11	124.06	121.00
59	A5	1014	U	N1-C2-O2	6.11	127.08	122.80
59	A5	1665	C	C2-N3-C4	6.11	122.95	119.90
59	A5	2224	A	N7-C8-N9	6.11	116.86	113.80
59	A5	3472	A	C8-N9-C1'	-6.11	116.70	127.70
59	A5	1029	C	C6-N1-C2	-6.11	117.86	120.30
59	A5	1961	C	C5-C6-N1	6.11	124.05	121.00
59	A5	2625	G	C8-N9-C1'	-6.11	119.06	127.00
59	A5	1115	A	N1-C6-N6	6.11	122.26	118.60
59	A5	2495	G	C2-N3-C4	6.11	114.95	111.90
59	A5	2501	G	N3-C2-N2	6.11	124.17	119.90
59	A5	2539	G	C6-C5-N7	-6.11	126.74	130.40
59	A5	1723	G	OP1-P-O3'	6.10	118.63	105.20
59	A5	3615	G	C4-C5-N7	6.10	113.24	110.80
55	A7	76	U	C5-C6-N1	6.10	125.75	122.70
58	B2	1170	G	C6-C5-N7	-6.10	126.74	130.40
59	A5	920	G	N1-C2-N2	-6.10	110.71	116.20
59	A5	3405	U	C2-N1-C1'	6.10	125.02	117.70
59	A5	2625	G	N1-C2-N2	-6.10	110.71	116.20
59	A5	3167	A	C4-C5-C6	-6.10	113.95	117.00
59	A5	3842	A	N1-C6-N6	-6.10	114.94	118.60
26	CN	183	THR	N-CA-C	6.10	127.47	111.00
58	B2	711	G	C8-N9-C4	-6.10	103.96	106.40
58	B2	1812	C	OP2-P-O3'	6.10	118.62	105.20
59	A5	2709	U	C4-C5-C6	-6.10	116.04	119.70
59	A5	3390	U	C5-C6-N1	6.10	125.75	122.70
58	B2	445	U	N3-C2-O2	-6.10	117.93	122.20
58	B2	589	U	N1-C2-O2	6.10	127.07	122.80
59	A5	1208	U	N3-C2-O2	-6.10	117.93	122.20
59	A5	1938	C	N3-C2-O2	-6.10	117.63	121.90
58	B2	1727	U	C5-C4-O4	-6.10	122.24	125.90
59	A5	2127	C	C2-N1-C1'	6.10	125.51	118.80
59	A5	426	A	N1-C2-N3	-6.09	126.25	129.30
59	A5	2180	A	C5-N7-C8	-6.09	100.85	103.90
58	B2	372	A	C4-C5-N7	6.09	113.75	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1173	A	C5-C6-N1	6.09	120.75	117.70
59	A5	1088	A	O5'-P-OP2	6.09	118.01	110.70
59	A5	1147	U	C4-C5-C6	-6.09	116.05	119.70
59	A5	1786	G	N3-C4-N9	6.09	129.66	126.00
59	A5	2581	U	C6-N1-C2	-6.09	117.34	121.00
20	Ab	7	LEU	CA-CB-CG	6.09	129.30	115.30
58	B2	616	U	N1-C2-O2	6.09	127.06	122.80
59	A5	1675	G	C5-N7-C8	-6.09	101.25	104.30
59	A5	1863	U	C6-N1-C2	-6.09	117.35	121.00
59	A5	2093	U	C6-N1-C1'	6.09	129.72	121.20
59	A5	3352	A	C8-N9-C4	-6.09	103.36	105.80
59	A5	3416	C	N3-C2-O2	-6.09	117.64	121.90
59	A5	3516	C	C5-C6-N1	6.09	124.05	121.00
59	A5	703	A	N9-C4-C5	-6.09	103.36	105.80
59	A5	1408	A	O5'-P-OP2	-6.09	100.22	105.70
59	A5	2183	A	C8-N9-C4	-6.09	103.36	105.80
59	A5	3474	G	C2-N3-C4	-6.09	108.86	111.90
59	A5	868	A	C4-C5-C6	-6.09	113.96	117.00
59	A5	921	C	N3-C4-C5	-6.09	119.47	121.90
59	A5	3637	A	C5-N7-C8	-6.09	100.86	103.90
24	AJ	6	ILE	CG1-CB-CG2	-6.08	98.02	111.40
59	A5	1417	G	N1-C6-O6	-6.08	116.25	119.90
59	A5	2234	C	N1-C2-O2	6.08	122.55	118.90
59	A5	3754	C	C2-N3-C4	-6.08	116.86	119.90
58	B2	908	G	N3-C4-N9	6.08	129.65	126.00
59	A5	826	A	C8-N9-C1'	-6.08	116.75	127.70
59	A5	1414	C	C6-N1-C2	6.08	122.73	120.30
59	A5	2158	U	N3-C4-O4	6.08	123.66	119.40
59	A5	3292	C	C5-C4-N4	-6.08	115.94	120.20
59	A5	1931	C	N1-C2-O2	6.08	122.55	118.90
59	A5	2510	A	OP1-P-O3'	6.08	118.57	105.20
59	A5	3763	U	C6-N1-C1'	-6.08	112.69	121.20
58	B2	1406	A	N7-C8-N9	6.08	116.84	113.80
59	A5	439	U	C4-C5-C6	-6.08	116.05	119.70
59	A5	838	U	N3-C2-O2	-6.08	117.95	122.20
58	B2	883	C	N1-C2-O2	6.08	122.55	118.90
58	B2	1215	G	N7-C8-N9	-6.08	110.06	113.10
59	A5	1687	U	N1-C2-O2	6.08	127.05	122.80
59	A5	3407	U	C6-N1-C1'	6.08	129.71	121.20
58	B2	1177	C	C4-C5-C6	-6.07	114.36	117.40
59	A5	551	C	N1-C2-O2	6.07	122.55	118.90
59	A5	1712	C	C5-C6-N1	6.07	124.04	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2995	U	C2-N1-C1'	6.07	124.99	117.70
58	B2	940	U	N3-C2-O2	-6.07	117.95	122.20
59	A5	1419	A	C8-N9-C4	-6.07	103.37	105.80
56	A8	106	A	N3-C4-N9	6.07	132.26	127.40
59	A5	108	A	N1-C6-N6	6.07	122.24	118.60
59	A5	206	C	N3-C2-O2	-6.07	117.65	121.90
59	A5	811	G	O5'-P-OP1	-6.07	100.24	105.70
59	A5	1086	C	C2-N3-C4	6.07	122.94	119.90
59	A5	2990	C	N3-C2-O2	-6.07	117.65	121.90
59	A5	3843	U	N3-C4-O4	-6.07	115.15	119.40
59	A5	1689	G	C6-C5-N7	6.07	134.04	130.40
59	A5	2209	G	C4-C5-N7	6.07	113.23	110.80
58	B2	1225	A	C5-C6-N1	6.07	120.73	117.70
59	A5	57	G	C4-C5-N7	6.07	113.23	110.80
59	A5	1104	A	C5-C6-N1	6.07	120.73	117.70
59	A5	1331	G	OP2-P-O3'	6.07	118.55	105.20
58	B2	633	U	C5-C6-N1	6.06	125.73	122.70
59	A5	299	G	N7-C8-N9	-6.06	110.07	113.10
59	A5	857	U	N1-C2-O2	6.06	127.04	122.80
59	A5	1126	A	C5-N7-C8	-6.06	100.87	103.90
59	A5	1166	U	C6-N1-C2	-6.06	117.36	121.00
59	A5	3114	C	N3-C2-O2	-6.06	117.66	121.90
55	A7	91	C	N3-C4-C5	6.06	124.32	121.90
59	A5	808	G	N7-C8-N9	-6.06	110.07	113.10
55	A7	82	G	N3-C2-N2	6.06	124.14	119.90
56	A8	36	A	C5-C6-N1	6.06	120.73	117.70
59	A5	2191	G	N1-C6-O6	-6.06	116.27	119.90
59	A5	3544	G	N9-C4-C5	-6.06	102.98	105.40
58	B2	932	U	N3-C2-O2	-6.06	117.96	122.20
58	B2	1198	G	C5-C6-N1	6.06	114.53	111.50
59	A5	2512	U	N3-C4-O4	-6.06	115.16	119.40
59	A5	3408	C	C6-N1-C2	-6.06	117.88	120.30
59	A5	3632	G	C5-N7-C8	-6.06	101.27	104.30
58	B2	1823	A	N1-C6-N6	6.06	122.23	118.60
59	A5	995	G	C4-C5-N7	-6.06	108.38	110.80
2	CA	174	ARG	CG-CD-NE	-6.05	99.09	111.80
58	B2	15	U	N1-C2-N3	6.05	118.53	114.90
59	A5	63	G	OP1-P-O3'	6.05	118.52	105.20
59	A5	102	G	N3-C2-N2	6.05	124.14	119.90
59	A5	440	U	C6-N1-C1'	-6.05	112.72	121.20
59	A5	1170	U	C6-N1-C2	-6.05	117.37	121.00
59	A5	2196	U	N1-C2-O2	6.05	127.04	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3755	A	C6-N1-C2	6.05	122.23	118.60
56	A8	55	G	N1-C6-O6	-6.05	116.27	119.90
59	A5	375	C	C6-N1-C2	-6.05	117.88	120.30
58	B2	1090	A	C6-C5-N7	-6.05	128.06	132.30
59	A5	163	A	C4-N9-C1'	-6.05	115.41	126.30
59	A5	225	U	C5-C6-N1	6.05	125.73	122.70
59	A5	981	C	N3-C2-O2	-6.05	117.66	121.90
58	B2	489	C	C5-C6-N1	6.05	124.03	121.00
58	B2	604	C	C6-N1-C2	-6.05	117.88	120.30
59	A5	2241	U	C4-C5-C6	-6.05	116.07	119.70
59	A5	1726	G	C2-N3-C4	-6.05	108.88	111.90
59	A5	3851	U	C5-C4-O4	-6.05	122.27	125.90
59	A5	3943	G	N1-C6-O6	6.05	123.53	119.90
59	A5	1087	G	C8-N9-C4	6.04	108.82	106.40
59	A5	2185	U	N1-C2-O2	6.04	127.03	122.80
59	A5	246	C	N3-C2-O2	-6.04	117.67	121.90
59	A5	1331	G	C4-C5-N7	6.04	113.22	110.80
59	A5	2501	G	N1-C6-O6	-6.04	116.27	119.90
59	A5	3460	C	C5-C6-N1	6.04	124.02	121.00
59	A5	3728	A	O5'-P-OP1	6.04	117.95	110.70
59	A5	3847	U	OP2-P-O3'	6.04	118.50	105.20
58	B2	1811	C	N3-C2-O2	-6.04	117.67	121.90
59	A5	304	U	N3-C4-O4	6.04	123.63	119.40
59	A5	739	U	C2-N1-C1'	6.04	124.95	117.70
59	A5	1764	G	C2-N3-C4	-6.04	108.88	111.90
59	A5	2790	G	C8-N9-C4	-6.04	103.98	106.40
59	A5	3844	U	C2-N1-C1'	-6.04	110.45	117.70
59	A5	227	A	N1-C2-N3	-6.04	126.28	129.30
59	A5	2920	U	C5-C6-N1	6.04	125.72	122.70
59	A5	3461	C	C5-C6-N1	6.04	124.02	121.00
58	B2	942	A	O4'-C1'-N9	6.04	113.03	108.20
59	A5	3486	U	C5-C6-N1	6.04	125.72	122.70
59	A5	6	U	N3-C2-O2	-6.04	117.98	122.20
59	A5	367	A	C4-C5-C6	-6.04	113.98	117.00
59	A5	2701	G	N1-C6-O6	-6.04	116.28	119.90
59	A5	2780	A	C2-N3-C4	6.04	113.62	110.60
59	A5	3316	U	N1-C2-N3	6.04	118.52	114.90
59	A5	3919	G	C4-C5-N7	6.04	113.21	110.80
59	A5	330	C	N1-C2-O2	6.03	122.52	118.90
59	A5	2085	G	N3-C2-N2	-6.03	115.68	119.90
59	A5	2668	C	N1-C2-O2	6.03	122.52	118.90
59	A5	3364	C	C4-C5-C6	-6.03	114.38	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	979	U	P-O3'-C3'	6.03	126.94	119.70
59	A5	1142	U	O5'-P-OP1	-6.03	100.27	105.70
59	A5	2260	U	N3-C4-O4	-6.03	115.18	119.40
59	A5	2573	C	N3-C4-C5	6.03	124.31	121.90
59	A5	3480	U	N3-C4-C5	6.03	118.22	114.60
58	B2	1176	C	C6-N1-C2	-6.03	117.89	120.30
59	A5	674	A	C5-C6-N6	-6.03	118.88	123.70
59	A5	1175	C	C2-N3-C4	6.03	122.92	119.90
59	A5	2210	U	N1-C2-N3	6.03	118.52	114.90
58	B2	1132	U	C5-C6-N1	6.03	125.71	122.70
59	A5	1328	U	O5'-P-OP2	6.03	117.94	110.70
58	B2	1920	U	N1-C2-O2	6.03	127.02	122.80
59	A5	424	G	O4'-C1'-N9	6.03	113.02	108.20
59	A5	1005	G	C5-C6-N1	6.03	114.51	111.50
59	A5	1099	U	C5-C4-O4	6.03	129.52	125.90
59	A5	1124	G	C4-C5-C6	-6.03	115.18	118.80
59	A5	830	U	C2-N1-C1'	-6.02	110.47	117.70
59	A5	3525	A	C5-N7-C8	-6.02	100.89	103.90
33	CP	127	ARG	NE-CZ-NH1	-6.02	117.29	120.30
59	A5	23	U	N3-C2-O2	-6.02	117.98	122.20
59	A5	33	C	OP1-P-O3'	6.02	118.45	105.20
59	A5	1544	U	C5-C6-N1	6.02	125.71	122.70
59	A5	1656	U	N3-C2-O2	-6.02	117.98	122.20
59	A5	1661	C	C6-N1-C2	-6.02	117.89	120.30
59	A5	1715	G	N1-C2-N2	6.02	121.62	116.20
59	A5	3148	C	N3-C2-O2	-6.02	117.68	121.90
59	A5	3496	U	C2-N1-C1'	6.02	124.93	117.70
59	A5	105	A	O4'-C1'-N9	6.02	113.02	108.20
59	A5	927	A	C8-N9-C4	6.02	108.21	105.80
59	A5	1295	A	O5'-P-OP1	-6.02	100.28	105.70
59	A5	1512	C	C6-N1-C2	-6.02	117.89	120.30
59	A5	2792	G	C4-C5-C6	-6.02	115.19	118.80
33	CP	27	LYS	CA-CB-CG	6.02	126.64	113.40
58	B2	448	C	N3-C2-O2	-6.02	117.69	121.90
58	B2	1582	C	C6-N1-C1'	-6.02	113.58	120.80
59	A5	358	C	N3-C4-C5	-6.02	119.49	121.90
59	A5	1117	A	N1-C2-N3	-6.02	126.29	129.30
59	A5	1559	A	C5-N7-C8	-6.02	100.89	103.90
59	A5	1624	G	O5'-P-OP2	-6.02	100.28	105.70
59	A5	3708	U	C5-C6-N1	-6.02	119.69	122.70
59	A5	3721	C	O4'-C1'-N1	6.02	113.01	108.20
26	CN	164	LEU	CA-CB-CG	6.02	129.14	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	940	U	N1-C2-O2	6.02	127.01	122.80
59	A5	791	C	N3-C4-C5	6.02	124.31	121.90
58	B2	1053	A	N9-C4-C5	-6.01	103.39	105.80
59	A5	305	G	N1-C6-O6	-6.01	116.29	119.90
59	A5	2508	C	N3-C4-C5	6.01	124.31	121.90
59	A5	1958	G	C6-C5-N7	-6.01	126.79	130.40
59	A5	775	U	C5-C4-O4	6.01	129.51	125.90
59	A5	2521	A	N7-C8-N9	-6.01	110.79	113.80
59	A5	3845	A	N9-C4-C5	-6.01	103.39	105.80
2	CA	169	VAL	CG1-CB-CG2	-6.01	101.28	110.90
58	B2	958	G	C4-N9-C1'	6.01	134.31	126.50
58	B2	1096	C	C6-N1-C2	-6.01	117.90	120.30
59	A5	362	A	C4-C5-N7	6.01	113.70	110.70
59	A5	1194	A	C8-N9-C1'	-6.01	116.88	127.70
59	A5	2571	U	N3-C2-O2	-6.01	117.99	122.20
59	A5	2649	A	O4'-C1'-N9	6.01	113.01	108.20
59	A5	3133	A	C6-N1-C2	-6.01	114.99	118.60
59	A5	3378	U	N3-C2-O2	-6.01	117.99	122.20
56	A8	109	U	C6-N1-C1'	-6.01	112.79	121.20
58	B2	1053	A	C5-C6-N6	-6.01	118.89	123.70
58	B2	1133	G	C4-C5-N7	6.01	113.20	110.80
58	B2	1228	G	N1-C6-O6	6.01	123.50	119.90
58	B2	1834	G	N7-C8-N9	6.01	116.10	113.10
59	A5	1032	G	C8-N9-C4	-6.01	104.00	106.40
59	A5	1320	U	O5'-P-OP1	-6.01	100.29	105.70
59	A5	1323	C	OP1-P-O3'	-6.01	91.98	105.20
59	A5	1350	A	OP1-P-OP2	6.01	128.61	119.60
59	A5	1689	G	P-O3'-C3'	6.01	126.91	119.70
59	A5	2065	A	P-O3'-C3'	6.01	126.91	119.70
59	A5	2178	U	C4-C5-C6	-6.01	116.10	119.70
58	B2	1215	G	N1-C6-O6	-6.00	116.30	119.90
59	A5	57	G	C6-C5-N7	-6.00	126.80	130.40
59	A5	1139	U	O5'-P-OP2	6.00	117.91	110.70
59	A5	1344	A	N1-C2-N3	-6.00	126.30	129.30
59	A5	1544	U	C4-C5-C6	-6.00	116.10	119.70
59	A5	2225	A	C5-C6-N6	-6.00	118.90	123.70
59	A5	2498	U	C5-C4-O4	-6.00	122.30	125.90
58	B2	1850	G	C4-N9-C1'	6.00	134.30	126.50
59	A5	663	U	C2-N3-C4	-6.00	123.40	127.00
59	A5	999	U	C6-N1-C2	-6.00	117.40	121.00
59	A5	1022	A	C5-C6-N1	6.00	120.70	117.70
59	A5	2233	C	O5'-P-OP2	-6.00	100.30	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2723	A	C4-C5-C6	-6.00	114.00	117.00
59	A5	3883	G	C2-N3-C4	6.00	114.90	111.90
59	A5	1076	A	N1-C2-N3	-6.00	126.30	129.30
59	A5	1290	U	C2-N1-C1'	-6.00	110.50	117.70
59	A5	1707	A	C5-C6-N6	-6.00	118.90	123.70
59	A5	3407	U	C2-N1-C1'	-6.00	110.50	117.70
59	A5	3410	G	N3-C2-N2	6.00	124.10	119.90
58	B2	967	C	C5-C6-N1	6.00	124.00	121.00
58	B2	1850	G	C6-C5-N7	-6.00	126.80	130.40
59	A5	289	C	C2-N1-C1'	6.00	125.40	118.80
59	A5	2707	C	C4-C5-C6	-6.00	114.40	117.40
22	Ae	116	ASN	C-N-CA	6.00	136.69	121.70
59	A5	2209	G	N1-C2-N2	6.00	121.59	116.20
59	A5	3398	C	N3-C2-O2	-5.99	117.70	121.90
59	A5	272	U	P-O3'-C3'	5.99	126.89	119.70
56	A8	39	A	C8-N9-C4	-5.99	103.40	105.80
58	B2	856	A	C4-C5-N7	5.99	113.70	110.70
59	A5	810	A	C2-N3-C4	-5.99	107.60	110.60
59	A5	1126	A	N7-C8-N9	5.99	116.80	113.80
59	A5	1140	G	C5-C6-O6	-5.99	125.00	128.60
59	A5	1390	C	N1-C2-O2	5.99	122.49	118.90
59	A5	1720	A	C2-N3-C4	5.99	113.59	110.60
59	A5	3337	G	N3-C4-N9	5.99	129.59	126.00
2	CA	32	LEU	CA-CB-CG	5.99	129.07	115.30
58	B2	1237	G	C5-C6-O6	5.99	132.19	128.60
59	A5	819	U	N3-C2-O2	-5.99	118.01	122.20
59	A5	1642	G	C8-N9-C4	-5.99	104.00	106.40
59	A5	1677	U	O5'-P-OP1	5.99	117.89	110.70
59	A5	2530	C	O5'-P-OP1	-5.99	100.31	105.70
59	A5	2786	U	N3-C2-O2	-5.99	118.01	122.20
59	A5	3148	C	O5'-P-OP1	-5.99	100.31	105.70
59	A5	813	C	N3-C2-O2	-5.99	117.71	121.90
59	A5	3824	C	O5'-P-OP1	5.99	117.89	110.70
56	A8	17	U	N3-C4-C5	5.99	118.19	114.60
59	A5	522	G	N1-C6-O6	5.99	123.49	119.90
59	A5	1734	G	N3-C4-C5	5.99	131.59	128.60
59	A5	3309	A	C2-N3-C4	5.99	113.59	110.60
59	A5	3398	C	O5'-P-OP2	-5.99	100.31	105.70
58	B2	1823	A	C4-C5-N7	5.98	113.69	110.70
59	A5	1092	U	N1-C2-O2	5.98	126.99	122.80
59	A5	457	A	C5-C6-N1	5.98	120.69	117.70
59	A5	1402	U	N3-C2-O2	-5.98	118.01	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1614	A	C5-C6-N6	-5.98	118.91	123.70
59	A5	1884	U	N1-C2-O2	5.98	126.99	122.80
59	A5	1980	G	N1-C6-O6	-5.98	116.31	119.90
55	A7	119	C	C4-C5-C6	-5.98	114.41	117.40
58	B2	1073	G	N3-C4-C5	-5.98	125.61	128.60
59	A5	1127	C	N3-C4-N4	-5.98	113.81	118.00
59	A5	1154	U	C5-C4-O4	5.98	129.49	125.90
59	A5	2656	C	OP1-P-O3'	5.98	118.36	105.20
66	CL	125	LEU	C-N-CA	-5.98	106.75	121.70
70	AK	54	GLY	C-N-CA	5.98	136.65	121.70
59	A5	26	G	C8-N9-C4	-5.98	104.01	106.40
59	A5	783	G	C5-N7-C8	-5.98	101.31	104.30
59	A5	1667	U	N3-C2-O2	-5.98	118.01	122.20
59	A5	1686	A	C2-N3-C4	-5.98	107.61	110.60
56	A8	71	A	C4-C5-N7	5.98	113.69	110.70
59	A5	2545	A	N7-C8-N9	5.98	116.79	113.80
59	A5	2549	G	N1-C2-N2	5.98	121.58	116.20
59	A5	3478	G	C4-C5-C6	5.98	122.39	118.80
59	A5	3922	G	N9-C4-C5	-5.98	103.01	105.40
59	A5	3936	A	O4'-C1'-N9	5.98	112.98	108.20
59	A5	1023	C	C2-N1-C1'	5.98	125.37	118.80
59	A5	2161	G	N1-C2-N2	5.98	121.58	116.20
56	A8	24	G	N3-C2-N2	-5.97	115.72	119.90
59	A5	1412	A	O5'-P-OP1	-5.97	100.32	105.70
59	A5	3162	C	N3-C2-O2	-5.97	117.72	121.90
59	A5	861	C	C5-C6-N1	5.97	123.99	121.00
59	A5	982	C	N1-C2-O2	5.97	122.48	118.90
59	A5	1005	G	N9-C4-C5	5.97	107.79	105.40
59	A5	2012	G	C4-C5-N7	5.97	113.19	110.80
59	A5	2161	G	C2-N3-C4	5.97	114.89	111.90
59	A5	2622	A	N1-C2-N3	-5.97	126.31	129.30
59	A5	3267	C	N1-C2-O2	5.97	122.48	118.90
54	A9	11	A	N7-C8-N9	5.97	116.79	113.80
56	A8	27	C	C5-C4-N4	5.97	124.38	120.20
59	A5	1530	U	O5'-P-OP1	-5.97	100.33	105.70
59	A5	105	A	N3-C4-C5	5.97	130.98	126.80
59	A5	355	G	N1-C2-N3	5.97	127.48	123.90
59	A5	2738	C	C2-N1-C1'	5.97	125.36	118.80
59	A5	2775	A	OP1-P-OP2	-5.97	110.65	119.60
59	A5	3000	G	C4-N9-C1'	5.97	134.26	126.50
59	A5	2687	A	C5-C6-N1	5.97	120.68	117.70
59	A5	3497	G	N3-C2-N2	5.97	124.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3652	C	N1-C2-O2	5.97	122.48	118.90
59	A5	347	A	C4-C5-C6	-5.97	114.02	117.00
59	A5	1413	C	C5-C4-N4	-5.97	116.02	120.20
59	A5	1534	G	C5-C6-O6	-5.97	125.02	128.60
59	A5	1556	C	C5-C6-N1	5.96	123.98	121.00
59	A5	1790	A	C5-C6-N6	-5.96	118.93	123.70
58	B2	1594	A	N3-C4-N9	5.96	132.17	127.40
59	A5	43	A	C5-N7-C8	-5.96	100.92	103.90
59	A5	2153	C	N3-C4-N4	-5.96	113.83	118.00
58	B2	988	G	N7-C8-N9	5.96	116.08	113.10
58	B2	1024	C	N3-C2-O2	-5.96	117.73	121.90
58	B2	1394	U	N1-C2-O2	5.96	126.97	122.80
59	A5	285	G	C5-N7-C8	-5.96	101.32	104.30
59	A5	320	U	C6-N1-C2	-5.96	117.42	121.00
59	A5	565	C	C5-C6-N1	5.96	123.98	121.00
59	A5	1873	A	C6-N1-C2	-5.96	115.02	118.60
59	A5	2750	A	C5-N7-C8	5.96	106.88	103.90
58	B2	1217	U	C5-C6-N1	5.96	125.68	122.70
58	B2	314	C	C2-N1-C1'	5.96	125.35	118.80
59	A5	1031	G	C5-N7-C8	-5.96	101.32	104.30
59	A5	1143	U	C4-C5-C6	-5.96	116.12	119.70
59	A5	3779	U	C5-C6-N1	5.96	125.68	122.70
58	B2	989	G	C4-C5-N7	5.96	113.18	110.80
59	A5	58	G	P-O3'-C3'	5.96	126.85	119.70
59	A5	1116	G	N9-C4-C5	5.96	107.78	105.40
59	A5	1751	U	N3-C4-O4	5.96	123.57	119.40
59	A5	1741	G	N3-C4-N9	5.96	129.57	126.00
59	A5	1786	G	N3-C2-N2	5.95	124.07	119.90
59	A5	2733	G	O5'-P-OP2	5.95	117.84	110.70
59	A5	2790	G	C4-C5-N7	-5.95	108.42	110.80
59	A5	3599	U	N3-C2-O2	-5.95	118.03	122.20
59	A5	543	A	N1-C6-N6	5.95	122.17	118.60
59	A5	2670	U	C5-C6-N1	5.95	125.68	122.70
59	A5	122	C	C4-C5-C6	-5.95	114.42	117.40
59	A5	283	A	N3-C4-N9	5.95	132.16	127.40
59	A5	1164	G	N1-C2-N3	-5.95	120.33	123.90
59	A5	1874	G	C4-C5-N7	5.95	113.18	110.80
59	A5	2267	U	C5-C6-N1	5.95	125.68	122.70
59	A5	2689	G	N3-C2-N2	5.95	124.07	119.90
55	A7	90	A	C8-N9-C4	-5.95	103.42	105.80
59	A5	1784	A	C5-C6-N1	5.95	120.67	117.70
59	A5	2625	G	N3-C4-N9	5.95	129.57	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	CX	223	LEU	CB-CG-CD2	-5.95	100.89	111.00
58	B2	94	G	O5'-P-OP2	-5.95	100.35	105.70
59	A5	1650	C	N3-C4-N4	5.95	122.16	118.00
59	A5	3450	G	C5-C6-O6	5.95	132.17	128.60
56	A8	54	U	C5-C6-N1	5.95	125.67	122.70
59	A5	436	A	C5-N7-C8	-5.95	100.93	103.90
59	A5	776	A	C4-C5-N7	-5.95	107.73	110.70
59	A5	810	A	N3-C4-N9	-5.95	122.64	127.40
59	A5	2054	U	C6-N1-C2	-5.95	117.43	121.00
59	A5	3853	C	N3-C2-O2	-5.95	117.74	121.90
59	A5	3187	C	C6-N1-C2	5.94	122.68	120.30
59	A5	3301	U	C5-C6-N1	5.94	125.67	122.70
58	B2	583	C	C6-N1-C2	-5.94	117.92	120.30
59	A5	154	A	C2-N3-C4	-5.94	107.63	110.60
59	A5	380	G	C2-N3-C4	5.94	114.87	111.90
59	A5	1728	G	C5-N7-C8	-5.94	101.33	104.30
59	A5	2691	A	N1-C2-N3	-5.94	126.33	129.30
59	A5	3489	A	C6-N1-C2	5.94	122.17	118.60
58	B2	1111	U	C2-N1-C1'	5.94	124.83	117.70
59	A5	39	A	OP1-P-O3'	5.94	118.27	105.20
59	A5	825	C	C6-N1-C2	-5.94	117.92	120.30
59	A5	1021	U	N1-C2-O2	5.94	126.96	122.80
59	A5	1705	U	C5-C6-N1	5.94	125.67	122.70
59	A5	2168	G	C5-N7-C8	-5.94	101.33	104.30
59	A5	1082	A	OP2-P-O3'	5.94	118.27	105.20
59	A5	3499	G	OP2-P-O3'	5.94	118.27	105.20
59	A5	3648	A	C8-N9-C4	-5.94	103.42	105.80
58	B2	888	G	N3-C4-C5	5.94	131.57	128.60
59	A5	802	G	C6-N1-C2	-5.94	121.54	125.10
59	A5	1512	C	C5-C6-N1	5.94	123.97	121.00
56	A8	26	U	N3-C2-O2	-5.93	118.05	122.20
59	A5	1888	A	C8-N9-C1'	-5.93	117.02	127.70
59	A5	1883	G	C6-C5-N7	-5.93	126.84	130.40
59	A5	2786	U	N1-C2-O2	5.93	126.95	122.80
59	A5	3480	U	C5-C6-N1	-5.93	119.73	122.70
59	A5	3519	C	O5'-P-OP2	5.93	117.82	110.70
58	B2	61	A	O4'-C1'-N9	5.93	112.94	108.20
59	A5	100	G	C5-C6-O6	5.93	132.16	128.60
59	A5	49	A	N9-C4-C5	-5.93	103.43	105.80
59	A5	1727	U	C2-N1-C1'	5.93	124.82	117.70
59	A5	3000	G	N7-C8-N9	5.93	116.06	113.10
59	A5	3405	U	N1-C2-N3	5.93	118.46	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1394	U	C5-C6-N1	5.93	125.66	122.70
59	A5	1094	A	N3-C4-C5	5.93	130.95	126.80
59	A5	1145	C	C4-C5-C6	-5.93	114.44	117.40
59	A5	2511	C	N3-C4-C5	-5.93	119.53	121.90
59	A5	3155	G	N1-C6-O6	-5.93	116.34	119.90
59	A5	3759	G	C4-C5-N7	-5.93	108.43	110.80
54	A9	12	C	C6-N1-C2	-5.92	117.93	120.30
59	A5	93	G	C5-C6-N1	5.92	114.46	111.50
59	A5	1333	C	C5-C4-N4	5.92	124.35	120.20
59	A5	1672	A	OP1-P-OP2	-5.92	110.71	119.60
59	A5	1127	C	N3-C4-C5	5.92	124.27	121.90
59	A5	3882	C	C2-N3-C4	5.92	122.86	119.90
59	A5	1175	C	C6-N1-C2	-5.92	117.93	120.30
59	A5	1570	U	C5-C6-N1	5.92	125.66	122.70
59	A5	2503	G	OP1-P-O3'	5.92	118.22	105.20
59	A5	50	U	N3-C4-O4	-5.92	115.26	119.40
59	A5	1385	G	C4-N9-C1'	5.92	134.19	126.50
59	A5	1421	G	C6-C5-N7	-5.92	126.85	130.40
59	A5	1803	C	C2-N1-C1'	5.92	125.31	118.80
59	A5	2085	G	C8-N9-C1'	5.92	134.69	127.00
58	B2	4	C	C5-C6-N1	5.92	123.96	121.00
58	B2	1250	C	P-O3'-C3'	5.92	126.80	119.70
59	A5	1404	A	OP2-P-O3'	5.92	118.22	105.20
59	A5	1543	C	O5'-P-OP1	-5.92	100.38	105.70
59	A5	1556	C	C6-N1-C2	-5.92	117.93	120.30
59	A5	1712	C	P-O3'-C3'	-5.92	112.60	119.70
59	A5	3393	U	C6-N1-C1'	-5.92	112.92	121.20
59	A5	3569	C	C4-C5-C6	-5.92	114.44	117.40
59	A5	3877	G	C5-N7-C8	5.92	107.26	104.30
59	A5	3885	C	C6-N1-C2	-5.92	117.93	120.30
26	CN	31	ARG	NE-CZ-NH1	5.92	123.26	120.30
59	A5	58	G	OP1-P-O3'	5.92	118.21	105.20
59	A5	3135	G	C4-N9-C1'	5.92	134.19	126.50
59	A5	3872	C	C5-C6-N1	5.92	123.96	121.00
29	CQ	46	ILE	CG1-CB-CG2	-5.91	98.39	111.40
59	A5	1729	G	C5-C6-N1	5.91	114.46	111.50
59	A5	2219	U	C5-C6-N1	5.91	125.66	122.70
59	A5	2515	C	OP1-P-O3'	5.91	118.21	105.20
59	A5	1652	U	N1-C2-O2	5.91	126.94	122.80
59	A5	2255	G	C8-N9-C1'	-5.91	119.31	127.00
59	A5	3342	C	C5-C6-N1	5.91	123.96	121.00
59	A5	1981	A	N1-C2-N3	-5.91	126.34	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2172	C	N3-C4-N4	5.91	122.14	118.00
59	A5	3514	C	C6-N1-C1'	-5.91	113.71	120.80
59	A5	3619	U	C5-C6-N1	5.91	125.66	122.70
59	A5	99	A	C4-C5-C6	-5.91	114.05	117.00
59	A5	281	C	C5-C4-N4	-5.91	116.06	120.20
59	A5	670	G	N1-C6-O6	-5.91	116.36	119.90
59	A5	2793	C	N1-C2-O2	5.91	122.44	118.90
59	A5	322	G	C4-C5-N7	5.91	113.16	110.80
59	A5	3650	G	C4-N9-C1'	5.91	134.18	126.50
66	CL	60	CYS	CA-CB-SG	-5.91	103.37	114.00
59	A5	2679	U	N3-C4-C5	-5.90	111.06	114.60
59	A5	665	U	C5-C4-O4	5.90	129.44	125.90
59	A5	2621	A	C4-C5-C6	-5.90	114.05	117.00
59	A5	41	U	C2-N1-C1'	5.90	124.78	117.70
59	A5	777	C	C2-N3-C4	5.90	122.85	119.90
59	A5	1741	G	N3-C2-N2	5.90	124.03	119.90
59	A5	2706	U	C6-N1-C2	-5.90	117.46	121.00
59	A5	755	A	C4-C5-N7	-5.90	107.75	110.70
59	A5	2239	C	N3-C4-C5	5.90	124.26	121.90
59	A5	3293	G	C5-C6-N1	5.90	114.45	111.50
59	A5	3764	G	N3-C4-N9	5.90	129.54	126.00
59	A5	347	A	N3-C4-N9	-5.90	122.68	127.40
59	A5	2546	G	C4-C5-N7	5.90	113.16	110.80
59	A5	2683	G	N3-C4-C5	-5.90	125.65	128.60
59	A5	3630	C	C6-N1-C1'	5.90	127.88	120.80
58	B2	355	G	N3-C4-C5	5.90	131.55	128.60
58	B2	1187	U	O5'-P-OP2	-5.90	100.39	105.70
58	B2	1940	G	C5-C6-N1	5.90	114.45	111.50
59	A5	1680	U	C4-C5-C6	-5.90	116.16	119.70
59	A5	2808	G	C5-C6-N1	5.90	114.45	111.50
59	A5	3155	G	C5-N7-C8	5.90	107.25	104.30
56	A8	98	U	N3-C2-O2	-5.89	118.07	122.20
59	A5	836	G	C8-N9-C4	-5.89	104.04	106.40
59	A5	1714	U	C5-C6-N1	5.89	125.65	122.70
59	A5	2699	A	C5-N7-C8	-5.89	100.95	103.90
59	A5	3758	G	N1-C2-N2	-5.89	110.89	116.20
58	B2	1241	G	N3-C4-N9	-5.89	122.46	126.00
59	A5	225	U	P-O3'-C3'	5.89	126.77	119.70
59	A5	1060	G	N3-C4-C5	-5.89	125.65	128.60
59	A5	1113	A	C8-N9-C4	-5.89	103.44	105.80
59	A5	1369	C	C2-N1-C1'	5.89	125.28	118.80
59	A5	1538	U	C5-C6-N1	5.89	125.65	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2143	C	N3-C2-O2	-5.89	117.78	121.90
59	A5	2155	A	O5'-P-OP2	-5.89	100.40	105.70
59	A5	868	A	O4'-C1'-N9	5.89	112.91	108.20
59	A5	3615	G	C6-C5-N7	-5.89	126.87	130.40
58	B2	1054	A	C5-C6-N6	5.89	128.41	123.70
59	A5	355	G	C8-N9-C4	-5.89	104.04	106.40
59	A5	475	U	C5-C6-N1	5.89	125.64	122.70
59	A5	1007	A	N1-C2-N3	-5.89	126.36	129.30
59	A5	1958	G	N3-C4-N9	5.89	129.53	126.00
59	A5	1593	U	O4'-C1'-N1	-5.89	103.49	108.20
58	B2	4	C	C6-N1-C2	-5.89	117.94	120.30
59	A5	84	U	C6-N1-C2	-5.89	117.47	121.00
59	A5	586	C	N3-C2-O2	-5.89	117.78	121.90
59	A5	924	U	N3-C2-O2	-5.89	118.08	122.20
59	A5	1150	G	N1-C6-O6	-5.88	116.37	119.90
59	A5	2058	C	C6-N1-C2	-5.88	117.95	120.30
59	A5	2661	G	N7-C8-N9	5.88	116.04	113.10
58	B2	36	C	C5-C6-N1	5.88	123.94	121.00
59	A5	138	A	C2-N3-C4	5.88	113.54	110.60
59	A5	3764	G	C8-N9-C1'	-5.88	119.35	127.00
59	A5	296	C	N3-C4-N4	-5.88	113.88	118.00
59	A5	979	U	OP1-P-O3'	5.88	118.14	105.20
59	A5	1163	G	C8-N9-C4	-5.88	104.05	106.40
59	A5	1718	G	C2'-C3'-O3'	5.88	123.11	113.70
59	A5	2822	C	N3-C2-O2	-5.88	117.78	121.90
82	AS	59	CYS	CA-CB-SG	5.88	124.59	114.00
59	A5	1104	A	C4-C5-C6	-5.88	114.06	117.00
59	A5	1107	G	N3-C4-N9	-5.88	122.47	126.00
59	A5	1218	G	N3-C4-N9	-5.88	122.47	126.00
59	A5	1342	U	N1-C2-O2	5.88	126.92	122.80
59	A5	1792	G	N7-C8-N9	-5.88	110.16	113.10
77	Cg	47	CYS	CA-CB-SG	5.88	124.58	114.00
59	A5	120	C	N3-C2-O2	-5.88	117.78	121.90
59	A5	851	G	C4-N9-C1'	5.88	134.14	126.50
59	A5	851	G	N3-C4-C5	-5.88	125.66	128.60
59	A5	2520	U	N3-C2-O2	-5.88	118.08	122.20
58	B2	1392	U	N3-C2-O2	-5.88	118.09	122.20
59	A5	561	A	C2-N3-C4	-5.88	107.66	110.60
59	A5	581	U	O5'-P-OP2	-5.88	100.41	105.70
59	A5	993	A	C6-N1-C2	5.88	122.13	118.60
59	A5	1863	U	N3-C2-O2	-5.88	118.09	122.20
59	A5	2263	A	O5'-P-OP1	-5.88	100.41	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2788	U	C2-N1-C1'	-5.88	110.65	117.70
58	B2	637	U	C6-N1-C2	-5.88	117.47	121.00
59	A5	109	A	N7-C8-N9	5.87	116.74	113.80
59	A5	373	A	C4-C5-C6	-5.87	114.06	117.00
59	A5	914	C	N3-C4-C5	5.87	124.25	121.90
59	A5	1380	G	N1-C6-O6	-5.87	116.38	119.90
59	A5	1694	A	N1-C6-N6	-5.87	115.08	118.60
59	A5	2161	G	N1-C2-N3	-5.87	120.38	123.90
59	A5	2166	U	C5-C6-N1	-5.87	119.76	122.70
59	A5	3922	G	C6-C5-N7	-5.87	126.88	130.40
80	CF	174	ASP	CB-CG-OD1	5.87	123.59	118.30
33	CP	94	LEU	CB-CG-CD1	-5.87	101.02	111.00
58	B2	1382	G	N3-C4-N9	-5.87	122.48	126.00
59	A5	301	U	N3-C4-C5	5.87	118.12	114.60
59	A5	1174	G	N1-C6-O6	5.87	123.42	119.90
59	A5	2790	G	C5-C6-N1	5.87	114.44	111.50
59	A5	3151	G	C2-N3-C4	5.87	114.83	111.90
59	A5	3471	A	C4-C5-C6	-5.87	114.06	117.00
56	A8	109	U	O4'-C1'-N1	5.87	112.89	108.20
58	B2	1104	C	N3-C4-C5	5.87	124.25	121.90
58	B2	1169	C	N3-C2-O2	-5.87	117.79	121.90
59	A5	1051	C	C6-N1-C2	-5.87	117.95	120.30
59	A5	1164	G	C4-N9-C1'	5.87	134.13	126.50
59	A5	3402	C	C6-N1-C1'	5.87	127.84	120.80
55	A7	60	C	N1-C2-O2	5.87	122.42	118.90
56	A8	106	A	C2-N3-C4	5.87	113.53	110.60
59	A5	1404	A	C4-N9-C1'	5.87	136.86	126.30
59	A5	2513	G	C8-N9-C4	5.87	108.75	106.40
59	A5	2621	A	N3-C4-C5	5.87	130.91	126.80
59	A5	2701	G	C2-N3-C4	5.87	114.83	111.90
59	A5	1185	U	P-O5'-C5'	5.86	130.28	120.90
59	A5	1292	G	C8-N9-C4	5.86	108.75	106.40
59	A5	1715	G	C4-N9-C1'	-5.86	118.88	126.50
59	A5	1734	G	N3-C2-N2	5.86	124.00	119.90
59	A5	2664	U	C6-N1-C2	-5.86	117.48	121.00
59	A5	1383	A	P-O5'-C5'	5.86	130.28	120.90
59	A5	1667	U	N3-C4-O4	-5.86	115.30	119.40
59	A5	3833	U	N3-C2-O2	-5.86	118.10	122.20
58	B2	342	G	C8-N9-C4	5.86	108.74	106.40
59	A5	446	C	C5-C4-N4	5.86	124.30	120.20
59	A5	1749	A	C5-C6-N1	5.86	120.63	117.70
59	A5	2066	G	N3-C2-N2	-5.86	115.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2777	A	N9-C4-C5	5.86	108.14	105.80
59	A5	3618	A	C8-N9-C4	5.86	108.14	105.80
59	A5	62	G	C6-C5-N7	-5.86	126.89	130.40
59	A5	1060	G	N3-C4-N9	5.86	129.51	126.00
59	A5	1806	G	N3-C2-N2	-5.86	115.80	119.90
59	A5	2720	U	C4-C5-C6	-5.86	116.19	119.70
59	A5	3448	U	C6-N1-C2	-5.86	117.48	121.00
58	B2	1215	G	C8-N9-C4	5.86	108.74	106.40
59	A5	199	U	C5-C6-N1	5.86	125.63	122.70
59	A5	1970	G	N9-C4-C5	-5.86	103.06	105.40
59	A5	2718	U	C5-C6-N1	5.86	125.63	122.70
59	A5	304	U	C5-C6-N1	5.86	125.63	122.70
59	A5	1078	G	C5-C6-N1	5.86	114.43	111.50
59	A5	1105	U	N1-C2-O2	5.86	126.90	122.80
59	A5	1611	G	C4-C5-C6	-5.86	115.29	118.80
59	A5	2762	A	C4-C5-N7	5.86	113.63	110.70
59	A5	3841	C	O5'-P-OP2	-5.86	100.43	105.70
58	B2	1067	G	N3-C2-N2	-5.85	115.80	119.90
59	A5	1618	A	N1-C2-N3	-5.85	126.37	129.30
59	A5	1734	G	N1-C2-N2	-5.85	110.93	116.20
59	A5	1803	C	OP2-P-O3'	5.85	118.08	105.20
59	A5	3444	G	O5'-P-OP1	-5.85	100.43	105.70
59	A5	1313	A	O5'-P-OP2	-5.85	100.43	105.70
59	A5	123	U	OP1-P-O3'	5.85	118.07	105.20
59	A5	1195	U	C6-N1-C2	-5.85	117.49	121.00
59	A5	1992	G	C6-C5-N7	-5.85	126.89	130.40
59	A5	2550	G	C6-C5-N7	5.85	133.91	130.40
59	A5	46	C	C4-C5-C6	-5.85	114.48	117.40
59	A5	809	G	P-O3'-C3'	5.85	126.72	119.70
59	A5	1060	G	C4-N9-C1'	5.85	134.10	126.50
59	A5	2525	C	C4-C5-C6	-5.85	114.47	117.40
59	A5	3318	A	C5-N7-C8	-5.85	100.97	103.90
59	A5	3484	U	N1-C2-O2	5.85	126.89	122.80
24	AJ	5	ARG	C-N-CA	5.85	136.32	121.70
59	A5	1088	A	O5'-P-OP1	-5.85	100.44	105.70
59	A5	1090	U	N1-C2-O2	5.85	126.89	122.80
59	A5	1120	A	C2-N3-C4	5.85	113.52	110.60
59	A5	2231	A	N3-C4-C5	5.85	130.89	126.80
59	A5	52	A	C4-C5-N7	5.84	113.62	110.70
59	A5	1162	A	N7-C8-N9	5.84	116.72	113.80
59	A5	3264	A	OP2-P-O3'	5.84	118.06	105.20
59	A5	3344	U	N3-C2-O2	-5.84	118.11	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1988	A	C5-C6-N6	5.84	128.37	123.70
59	A5	3616	G	N1-C2-N2	-5.84	110.94	116.20
59	A5	40	U	N3-C2-O2	-5.84	118.11	122.20
59	A5	427	A	C5-C6-N6	-5.84	119.03	123.70
59	A5	3582	A	C5-C6-N1	5.84	120.62	117.70
59	A5	3759	G	C5-N7-C8	5.84	107.22	104.30
58	B2	899	A	C2-N3-C4	5.84	113.52	110.60
58	B2	1227	A	C6-C5-N7	5.84	136.39	132.30
59	A5	365	A	C5-C6-N1	5.84	120.62	117.70
59	A5	2622	A	N1-C6-N6	-5.84	115.10	118.60
58	B2	1205	U	C4-C5-C6	-5.84	116.20	119.70
58	B2	1827	A	C5-N7-C8	-5.84	100.98	103.90
59	A5	1006	A	C4-C5-N7	5.84	113.62	110.70
59	A5	2495	G	C8-N9-C4	-5.84	104.06	106.40
58	B2	1066	A	C5-C6-N1	5.83	120.62	117.70
59	A5	1036	A	OP1-P-O3'	5.83	118.04	105.20
58	B2	1020	U	N1-C2-O2	5.83	126.88	122.80
59	A5	109	A	C5-N7-C8	-5.83	100.98	103.90
59	A5	1038	G	N1-C6-O6	-5.83	116.40	119.90
59	A5	1387	G	C5-C6-O6	-5.83	125.10	128.60
59	A5	1696	A	C5-N7-C8	-5.83	100.98	103.90
2	CA	116	LEU	CA-CB-CG	5.83	128.71	115.30
58	B2	342	G	N9-C4-C5	-5.83	103.07	105.40
58	B2	1180	A	C5-N7-C8	-5.83	100.98	103.90
58	B2	1954	C	C5-C6-N1	5.83	123.92	121.00
59	A5	1364	A	C5-N7-C8	-5.83	100.98	103.90
59	A5	1730	A	N9-C4-C5	5.83	108.13	105.80
59	A5	282	A	N9-C4-C5	-5.83	103.47	105.80
59	A5	794	G	C5-N7-C8	-5.83	101.39	104.30
59	A5	1529	C	C6-N1-C2	-5.83	117.97	120.30
59	A5	1641	U	N3-C4-C5	5.83	118.10	114.60
59	A5	2267	U	C6-N1-C2	-5.83	117.50	121.00
59	A5	2571	U	OP1-P-O3'	5.83	118.03	105.20
58	B2	959	U	N1-C2-O2	5.83	126.88	122.80
59	A5	1931	C	N3-C2-O2	-5.83	117.82	121.90
59	A5	2181	A	C4-C5-N7	5.83	113.61	110.70
59	A5	3525	A	N7-C8-N9	5.83	116.72	113.80
59	A5	2078	C	C6-N1-C2	-5.83	117.97	120.30
59	A5	2584	G	N3-C2-N2	-5.83	115.82	119.90
55	A7	107	C	C6-N1-C2	-5.83	117.97	120.30
59	A5	2738	C	OP2-P-O3'	5.83	118.02	105.20
59	A5	3936	A	N7-C8-N9	5.83	116.71	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1603	G	C8-N9-C1'	-5.82	119.43	127.00
59	A5	1356	G	C4-C5-N7	5.82	113.13	110.80
59	A5	1996	U	C5-C6-N1	5.82	125.61	122.70
59	A5	3339	U	C6-N1-C1'	5.82	129.35	121.20
59	A5	3721	C	C6-N1-C2	-5.82	117.97	120.30
59	A5	163	A	N1-C6-N6	-5.82	115.11	118.60
59	A5	615	C	C5-C6-N1	5.82	123.91	121.00
59	A5	2796	G	N9-C1'-C2'	5.82	121.57	114.00
54	A9	15	A	N3-C4-C5	5.82	130.88	126.80
59	A5	357	C	N3-C2-O2	-5.82	117.83	121.90
59	A5	1170	U	C4-C5-C6	-5.82	116.21	119.70
59	A5	2584	G	N7-C8-N9	5.82	116.01	113.10
59	A5	2522	A	C2-N3-C4	5.82	113.51	110.60
59	A5	2546	G	N1-C2-N2	-5.82	110.96	116.20
59	A5	3149	U	N3-C4-O4	-5.82	115.33	119.40
56	A8	43	A	C6-C5-N7	-5.82	128.23	132.30
58	B2	1115	C	C4-C5-C6	-5.82	114.49	117.40
59	A5	762	G	N7-C8-N9	5.82	116.01	113.10
59	A5	1365	U	C4-C5-C6	5.82	123.19	119.70
59	A5	1616	G	C8-N9-C4	-5.82	104.07	106.40
59	A5	3578	A	C8-N9-C4	-5.82	103.47	105.80
9	AX	7	LEU	CA-CB-CG	5.82	128.67	115.30
56	A8	34	C	C2-N3-C4	5.82	122.81	119.90
59	A5	971	C	O4'-C1'-N1	5.82	112.85	108.20
59	A5	1271	G	C8-N9-C4	5.82	108.73	106.40
59	A5	1388	C	C6-N1-C1'	5.82	127.78	120.80
59	A5	1402	U	C6-N1-C2	-5.82	117.51	121.00
59	A5	1601	U	N1-C2-O2	5.82	126.87	122.80
59	A5	2093	U	C5-C4-O4	5.82	129.39	125.90
59	A5	3542	C	N1-C2-O2	5.82	122.39	118.90
59	A5	1779	G	N1-C6-O6	-5.81	116.41	119.90
59	A5	3256	U	C6-N1-C2	5.81	124.49	121.00
59	A5	3802	U	N1-C2-N3	5.81	118.39	114.90
58	B2	823	C	C5-C6-N1	5.81	123.91	121.00
59	A5	225	U	C6-N1-C1'	-5.81	113.06	121.20
59	A5	2755	G	C5-N7-C8	-5.81	101.39	104.30
2	CA	3	ARG	NE-CZ-NH2	-5.81	117.39	120.30
59	A5	769	U	N3-C4-O4	-5.81	115.33	119.40
58	B2	458	C	C5-C6-N1	5.81	123.91	121.00
59	A5	2550	G	N1-C6-O6	-5.81	116.42	119.90
59	A5	3875	U	N3-C2-O2	-5.81	118.13	122.20
56	A8	19	A	O4'-C1'-N9	5.81	112.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1030	C	OP1-P-O3'	5.81	117.98	105.20
59	A5	1484	U	C2-N1-C1'	5.81	124.67	117.70
59	A5	1686	A	N7-C8-N9	5.81	116.70	113.80
59	A5	3762	G	N9-C1'-C2'	5.81	121.55	114.00
59	A5	397	C	N3-C2-O2	-5.81	117.83	121.90
58	B2	1203	U	N3-C2-O2	-5.80	118.14	122.20
59	A5	296	C	N3-C4-C5	5.80	124.22	121.90
59	A5	998	G	C2-N3-C4	5.80	114.80	111.90
59	A5	3589	G	C4-C5-N7	-5.80	108.48	110.80
59	A5	3894	C	N3-C2-O2	-5.80	117.84	121.90
59	A5	665	U	C2-N1-C1'	-5.80	110.74	117.70
59	A5	2689	G	N1-C2-N2	-5.80	110.98	116.20
26	CN	61	ILE	CG1-CB-CG2	-5.80	98.64	111.40
59	A5	1686	A	N3-C4-C5	5.80	130.86	126.80
59	A5	2660	U	OP1-P-OP2	-5.80	110.90	119.60
59	A5	3426	U	N3-C2-O2	-5.80	118.14	122.20
56	A8	43	A	N1-C6-N6	5.80	122.08	118.60
56	A8	103	C	N1-C1'-C2'	5.80	121.54	114.00
59	A5	79	G	C8-N9-C1'	-5.80	119.47	127.00
59	A5	93	G	C8-N9-C4	-5.80	104.08	106.40
59	A5	301	U	C6-N1-C1'	-5.80	113.08	121.20
59	A5	2709	U	C6-N1-C2	-5.80	117.52	121.00
59	A5	3309	A	N1-C2-N3	-5.80	126.40	129.30
59	A5	3600	G	C6-C5-N7	-5.80	126.92	130.40
59	A5	1035	G	O5'-P-OP1	-5.79	100.48	105.70
59	A5	382	G	N3-C4-N9	5.79	129.48	126.00
59	A5	448	A	C5-C6-N1	5.79	120.60	117.70
59	A5	2791	A	C5-C6-N6	-5.79	119.06	123.70
59	A5	1071	U	N3-C4-C5	5.79	118.08	114.60
59	A5	1077	C	N1-C2-O2	5.79	122.38	118.90
59	A5	1260	A	C6-C5-N7	5.79	136.35	132.30
59	A5	1671	U	N1-C2-O2	5.79	126.85	122.80
59	A5	2027	A	C5-C6-N1	5.79	120.60	117.70
59	A5	2778	G	C8-N9-C4	5.79	108.72	106.40
59	A5	3503	G	N1-C2-N2	-5.79	110.99	116.20
56	A8	26	U	C4-C5-C6	-5.79	116.23	119.70
59	A5	27	A	C5-N7-C8	-5.79	101.00	103.90
59	A5	615	C	P-O3'-C3'	5.79	126.65	119.70
59	A5	1631	U	C6-N1-C1'	-5.79	113.09	121.20
55	A7	93	G	C4-C5-C6	-5.79	115.33	118.80
58	B2	1003	C	C5-C6-N1	5.79	123.89	121.00
59	A5	315	G	C5-C6-N1	5.79	114.39	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	316	U	N3-C2-O2	-5.79	118.15	122.20
59	A5	387	U	N1-C2-O2	5.79	126.85	122.80
59	A5	1159	C	O5'-P-OP2	-5.79	100.49	105.70
59	A5	2191	G	C4-N9-C1'	-5.79	118.98	126.50
59	A5	2701	G	C5-C6-N1	5.79	114.39	111.50
58	B2	1752	U	O4'-C1'-N1	5.79	112.83	108.20
59	A5	32	C	C6-N1-C2	-5.79	117.98	120.30
59	A5	2212	A	C5-C6-N1	5.79	120.59	117.70
58	B2	1001	G	O4'-C1'-N9	5.79	112.83	108.20
59	A5	346	U	C6-N1-C1'	5.79	129.30	121.20
59	A5	984	U	C6-N1-C1'	-5.79	113.10	121.20
59	A5	1685	G	N3-C4-N9	5.79	129.47	126.00
59	A5	2554	U	C6-N1-C1'	-5.79	113.10	121.20
59	A5	3304	U	N1-C2-O2	5.79	126.85	122.80
59	A5	3800	G	N3-C4-C5	-5.79	125.71	128.60
59	A5	3842	A	N9-C4-C5	5.79	108.11	105.80
58	B2	1238	G	OP1-P-OP2	-5.78	110.92	119.60
59	A5	1696	A	N9-C4-C5	-5.78	103.49	105.80
59	A5	1702	G	C8-N9-C1'	5.78	134.52	127.00
59	A5	2605	C	C5-C6-N1	5.78	123.89	121.00
59	A5	3440	C	C5-C6-N1	5.78	123.89	121.00
59	A5	2668	C	C5-C4-N4	-5.78	116.15	120.20
59	A5	1384	C	N1-C2-N3	5.78	123.25	119.20
59	A5	2059	U	C4-C5-C6	-5.78	116.23	119.70
59	A5	2519	U	C6-N1-C2	-5.78	117.53	121.00
59	A5	2764	A	N7-C8-N9	5.78	116.69	113.80
59	A5	3906	U	N3-C2-O2	-5.78	118.15	122.20
59	A5	3476	G	C4-C5-N7	5.78	113.11	110.80
59	A5	3481	G	C6-C5-N7	5.78	133.87	130.40
59	A5	3484	U	OP1-P-O3'	5.78	117.91	105.20
6	CC	116	ARG	CG-CD-NE	5.78	123.93	111.80
59	A5	795	A	OP1-P-OP2	5.78	128.27	119.60
59	A5	1778	A	C5-C6-N1	5.78	120.59	117.70
59	A5	2740	C	C6-N1-C2	-5.78	117.99	120.30
59	A5	2769	G	C4-N9-C1'	5.78	134.01	126.50
59	A5	3883	G	C4-N9-C1'	5.78	134.01	126.50
58	B2	939	G	N3-C4-N9	5.78	129.47	126.00
59	A5	67	A	OP2-P-O3'	5.78	117.90	105.20
59	A5	587	U	P-O3'-C3'	5.78	126.63	119.70
59	A5	1117	A	C2-N3-C4	5.78	113.49	110.60
59	A5	3499	G	N1-C2-N2	5.78	121.40	116.20
59	A5	1404	A	C8-N9-C1'	-5.77	117.31	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1749	A	OP2-P-O3'	5.77	117.90	105.20
59	A5	2714	U	N3-C2-O2	-5.77	118.16	122.20
59	A5	3759	G	C5-C6-O6	5.77	132.06	128.60
58	B2	428	G	N3-C4-N9	-5.77	122.54	126.00
58	B2	1073	G	C8-N9-C4	-5.77	104.09	106.40
58	B2	1982	C	N3-C2-O2	-5.77	117.86	121.90
59	A5	40	U	OP1-P-O3'	5.77	117.90	105.20
59	A5	1091	G	C6-C5-N7	5.77	133.86	130.40
59	A5	1174	G	N3-C4-N9	5.77	129.46	126.00
59	A5	1611	G	C5-C6-O6	-5.77	125.14	128.60
59	A5	2015	G	C5-N7-C8	-5.77	101.41	104.30
58	B2	489	C	C6-N1-C1'	5.77	127.72	120.80
58	B2	360	G	C8-N9-C4	-5.77	104.09	106.40
59	A5	1359	G	N1-C6-O6	5.77	123.36	119.90
59	A5	2517	A	N7-C8-N9	5.77	116.69	113.80
59	A5	1778	A	C5-C6-N6	5.77	128.31	123.70
59	A5	1076	A	C5-C6-N1	5.77	120.58	117.70
59	A5	1150	G	OP1-P-O3'	5.77	117.88	105.20
59	A5	2613	C	N3-C2-O2	-5.77	117.86	121.90
59	A5	3606	G	C4-N9-C1'	5.77	134.00	126.50
42	Cf	61	ARG	NE-CZ-NH1	-5.76	117.42	120.30
55	A7	98	G	C4-C5-N7	5.76	113.11	110.80
59	A5	1159	C	C2-N1-C1'	5.76	125.14	118.80
59	A5	2518	A	N9-C4-C5	5.76	108.11	105.80
59	A5	2529	G	N3-C2-N2	-5.76	115.86	119.90
59	A5	755	A	N7-C8-N9	5.76	116.68	113.80
59	A5	1177	U	O4'-C1'-N1	5.76	112.81	108.20
59	A5	1594	U	C5-C4-O4	-5.76	122.44	125.90
59	A5	3677	U	O5'-C5'-C4'	5.76	122.65	111.70
58	B2	1182	C	O5'-P-OP2	-5.76	100.52	105.70
58	B2	1940	G	O5'-P-OP1	-5.76	100.51	105.70
59	A5	380	G	C4-N9-C1'	5.76	133.99	126.50
59	A5	678	U	N1-C2-O2	5.76	126.83	122.80
59	A5	750	G	N3-C2-N2	-5.76	115.87	119.90
59	A5	2092	U	N3-C4-O4	5.76	123.43	119.40
59	A5	2510	A	C2-N3-C4	5.76	113.48	110.60
58	B2	1821	G	C2-N3-C4	5.76	114.78	111.90
59	A5	50	U	N3-C4-C5	5.76	118.06	114.60
59	A5	1415	A	C5-C6-N1	5.76	120.58	117.70
59	A5	1622	U	C5-C4-O4	-5.76	122.44	125.90
59	A5	3193	C	C6-N1-C1'	-5.76	113.89	120.80
59	A5	3338	U	C5-C6-N1	5.76	125.58	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1130	U	N1-C2-N3	5.76	118.35	114.90
59	A5	1170	U	C5-C6-N1	5.76	125.58	122.70
59	A5	2721	C	C5-C4-N4	5.76	124.23	120.20
59	A5	3330	C	N3-C4-C5	5.76	124.20	121.90
58	B2	1244	C	N3-C4-N4	-5.75	113.97	118.00
59	A5	441	A	C5-C6-N6	-5.75	119.10	123.70
59	A5	2547	C	O5'-P-OP2	-5.75	100.52	105.70
58	B2	38	C	C5-C6-N1	5.75	123.88	121.00
59	A5	670	G	C4-N9-C1'	-5.75	119.02	126.50
59	A5	1133	A	N1-C2-N3	-5.75	126.42	129.30
59	A5	1365	U	N3-C4-C5	-5.75	111.15	114.60
59	A5	1607	A	N9-C4-C5	5.75	108.10	105.80
59	A5	1654	C	N3-C4-N4	-5.75	113.97	118.00
59	A5	1681	G	C5-N7-C8	-5.75	101.42	104.30
59	A5	1784	A	OP1-P-O3'	5.75	117.86	105.20
59	A5	2109	G	C4-C5-N7	5.75	113.10	110.80
59	A5	3193	C	N1-C2-O2	5.75	122.35	118.90
59	A5	458	A	C5-N7-C8	-5.75	101.02	103.90
59	A5	1042	G	C5-C6-N1	5.75	114.38	111.50
59	A5	1154	U	OP1-P-OP2	5.75	128.23	119.60
59	A5	1340	G	C4-C5-C6	-5.75	115.35	118.80
59	A5	1621	A	N1-C6-N6	5.75	122.05	118.60
59	A5	2097	U	C6-N1-C2	-5.75	117.55	121.00
59	A5	1141	G	C8-N9-C1'	-5.75	119.53	127.00
59	A5	2541	C	C2-N3-C4	5.75	122.78	119.90
59	A5	99	A	C5-N7-C8	-5.75	101.03	103.90
59	A5	188	G	C8-N9-C1'	-5.75	119.53	127.00
59	A5	540	G	N3-C4-C5	-5.75	125.72	128.60
59	A5	1011	U	C6-N1-C2	-5.75	117.55	121.00
59	A5	1550	U	C5-C6-N1	5.75	125.57	122.70
59	A5	1696	A	N3-C4-C5	5.75	130.82	126.80
59	A5	2510	A	C5-C6-N1	5.75	120.57	117.70
59	A5	3901	G	C4-C5-N7	5.75	113.10	110.80
59	A5	666	A	C4-N9-C1'	5.75	136.64	126.30
59	A5	817	C	N3-C4-N4	-5.75	113.98	118.00
59	A5	2202	A	N1-C2-N3	-5.75	126.43	129.30
59	A5	2771	G	OP2-P-O3'	-5.75	92.56	105.20
59	A5	3326	G	C5-C6-O6	-5.75	125.15	128.60
58	B2	1734	G	C2-N3-C4	-5.75	109.03	111.90
59	A5	1529	C	N1-C2-O2	5.75	122.35	118.90
59	A5	1608	G	N1-C6-O6	-5.75	116.45	119.90
59	A5	1797	A	C4-C5-C6	-5.75	114.13	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	423	U	C5-C4-O4	-5.74	122.45	125.90
59	A5	549	A	N7-C8-N9	5.74	116.67	113.80
59	A5	2161	G	C8-N9-C1'	5.74	134.47	127.00
59	A5	2197	A	O5'-P-OP1	-5.74	100.53	105.70
59	A5	423	U	C6-N1-C1'	-5.74	113.16	121.20
59	A5	1010	A	C4-C5-C6	-5.74	114.13	117.00
59	A5	1387	G	C4-C5-N7	5.74	113.10	110.80
59	A5	3126	C	N1-C2-O2	5.74	122.34	118.90
59	A5	3488	G	N7-C8-N9	-5.74	110.23	113.10
56	A8	116	C	C6-N1-C2	-5.74	118.00	120.30
59	A5	34	C	C5-C6-N1	5.74	123.87	121.00
59	A5	57	G	C5'-C4'-O4'	-5.74	102.22	109.10
59	A5	678	U	N3-C2-O2	-5.74	118.19	122.20
59	A5	767	A	C4-C5-N7	5.74	113.57	110.70
59	A5	1084	A	C8-N9-C1'	-5.74	117.38	127.70
59	A5	1770	C	C6-N1-C2	-5.74	118.01	120.30
59	A5	1868	A	N1-C2-N3	-5.74	126.43	129.30
55	A7	76	U	C6-N1-C2	-5.73	117.56	121.00
59	A5	357	C	C5-C6-N1	5.73	123.87	121.00
58	B2	316	U	N3-C2-O2	-5.73	118.19	122.20
58	B2	1094	C	C5-C6-N1	5.73	123.87	121.00
58	B2	1849	U	C2-N1-C1'	-5.73	110.82	117.70
59	A5	42	U	C5-C6-N1	5.73	125.57	122.70
59	A5	1347	A	C4-C5-C6	-5.73	114.13	117.00
59	A5	2568	U	C5-C6-N1	5.73	125.57	122.70
59	A5	2611	A	N1-C6-N6	-5.73	115.16	118.60
59	A5	3596	A	N3-C4-C5	5.73	130.81	126.80
58	B2	1604	A	C2-N3-C4	5.73	113.47	110.60
59	A5	2231	A	C2-N3-C4	-5.73	107.73	110.60
59	A5	2811	G	N3-C4-N9	-5.73	122.56	126.00
55	A7	89	G	C4-C5-N7	5.73	113.09	110.80
59	A5	774	A	N9-C1'-C2'	5.73	121.45	114.00
59	A5	790	U	C6-N1-C2	-5.73	117.56	121.00
59	A5	3129	U	O5'-P-OP1	-5.73	100.54	105.70
33	CP	135	ARG	NE-CZ-NH1	-5.73	117.44	120.30
58	B2	1237	G	N1-C6-O6	-5.73	116.46	119.90
59	A5	97	C	O5'-P-OP2	-5.73	100.55	105.70
59	A5	258	U	C5-C6-N1	5.73	125.56	122.70
58	B2	1234	G	N3-C2-N2	5.73	123.91	119.90
59	A5	1783	A	O5'-P-OP1	-5.73	100.55	105.70
59	A5	2518	A	C4-C5-N7	-5.73	107.84	110.70
59	A5	3805	U	N1-C2-O2	5.73	126.81	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	367	G	N3-C4-C5	-5.72	125.74	128.60
59	A5	1670	G	O4'-C1'-N9	-5.72	103.62	108.20
59	A5	2223	C	C2-N1-C1'	5.72	125.10	118.80
59	A5	3347	G	C6-C5-N7	-5.72	126.97	130.40
55	A7	114	U	C6-N1-C2	-5.72	117.57	121.00
59	A5	1206	G	N3-C4-N9	-5.72	122.57	126.00
59	A5	3455	U	C5-C4-O4	5.72	129.33	125.90
59	A5	3473	C	C2-N1-C1'	5.72	125.09	118.80
59	A5	3881	A	N7-C8-N9	5.72	116.66	113.80
59	A5	2494	G	C5-C6-N1	5.72	114.36	111.50
59	A5	1328	U	C5-C6-N1	-5.72	119.84	122.70
59	A5	1757	A	C5-C6-N1	5.72	120.56	117.70
59	A5	2161	G	N9-C4-C5	5.72	107.69	105.40
59	A5	2822	C	C5-C6-N1	5.72	123.86	121.00
59	A5	3378	U	N1-C2-O2	5.72	126.80	122.80
59	A5	3650	G	N3-C4-N9	5.72	129.43	126.00
59	A5	2194	G	OP1-P-O3'	5.72	117.78	105.20
59	A5	3665	U	C6-N1-C1'	-5.72	113.19	121.20
59	A5	776	A	C5-C6-N1	5.72	120.56	117.70
59	A5	988	C	C4-C5-C6	-5.72	114.54	117.40
59	A5	1168	G	C4-C5-N7	5.72	113.09	110.80
59	A5	1639	U	O5'-P-OP2	-5.72	100.56	105.70
59	A5	3142	G	C6-N1-C2	-5.72	121.67	125.10
59	A5	808	G	N3-C4-N9	5.71	129.43	126.00
59	A5	998	G	N9-C4-C5	-5.71	103.11	105.40
59	A5	1266	A	O5'-P-OP1	-5.71	100.56	105.70
59	A5	3488	G	N9-C4-C5	-5.71	103.11	105.40
59	A5	3516	C	N3-C2-O2	-5.71	117.90	121.90
56	A8	12	G	N1-C6-O6	-5.71	116.47	119.90
58	B2	315	C	N1-C2-O2	5.71	122.33	118.90
59	A5	1007	A	OP2-P-O3'	5.71	117.77	105.20
59	A5	3017	U	P-O3'-C3'	5.71	126.56	119.70
59	A5	1010	A	OP1-P-O3'	5.71	117.76	105.20
59	A5	2788	U	C6-N1-C1'	5.71	129.20	121.20
59	A5	3151	G	C5-C6-N1	5.71	114.36	111.50
59	A5	3399	C	C2-N3-C4	5.71	122.76	119.90
59	A5	3549	C	C6-N1-C2	-5.71	118.02	120.30
58	B2	1356	U	C2-N1-C1'	5.71	124.55	117.70
58	B2	1603	G	N3-C4-N9	5.71	129.43	126.00
59	A5	61	A	C4-C5-N7	5.71	113.56	110.70
59	A5	1025	U	C5-C6-N1	5.71	125.56	122.70
59	A5	1595	G	N1-C6-O6	5.71	123.33	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	39	A	N7-C8-N9	5.71	116.65	113.80
58	B2	1408	A	C4-N9-C1'	-5.71	116.03	126.30
59	A5	1101	A	C8-N9-C4	5.71	108.08	105.80
59	A5	1322	U	C6-N1-C2	-5.71	117.58	121.00
59	A5	3336	A	N1-C6-N6	-5.71	115.17	118.60
58	B2	988	G	N9-C4-C5	-5.71	103.12	105.40
58	B2	1234	G	N3-C4-C5	-5.71	125.75	128.60
59	A5	295	G	C5-N7-C8	5.71	107.15	104.30
59	A5	1725	A	N1-C2-N3	-5.71	126.45	129.30
59	A5	1758	U	OP2-P-O3'	5.71	117.76	105.20
59	A5	2257	C	C6-N1-C2	-5.71	118.02	120.30
25	Ca	37	GLY	N-CA-C	-5.70	98.84	113.10
55	A7	78	C	C5-C4-N4	-5.70	116.21	120.20
59	A5	1145	C	C6-N1-C1'	5.70	127.64	120.80
59	A5	3136	U	N1-C2-O2	5.70	126.79	122.80
59	A5	1959	A	C5-N7-C8	-5.70	101.05	103.90
56	A8	122	U	N1-C2-O2	5.70	126.79	122.80
58	B2	1827	A	C4-C5-N7	5.70	113.55	110.70
59	A5	1128	C	C5-C6-N1	5.70	123.85	121.00
59	A5	1357	C	O4'-C1'-N1	-5.70	103.64	108.20
59	A5	1380	G	O5'-P-OP2	-5.70	100.57	105.70
59	A5	2622	A	C2-N3-C4	5.70	113.45	110.60
59	A5	2698	A	C4-C5-C6	-5.70	114.15	117.00
59	A5	3172	A	O5'-P-OP1	-5.70	100.57	105.70
59	A5	120	C	C5-C6-N1	5.70	123.85	121.00
59	A5	209	U	N3-C2-O2	-5.70	118.21	122.20
50	CJ	160	HIS	N-CA-C	5.70	126.38	111.00
59	A5	109	A	OP1-P-O3'	5.70	117.73	105.20
58	B2	1860	G	C8-N9-C4	5.69	108.68	106.40
59	A5	2523	A	N1-C6-N6	-5.69	115.18	118.60
58	B2	1880	C	C5-C6-N1	5.69	123.85	121.00
59	A5	1071	U	N3-C2-O2	-5.69	118.22	122.20
59	A5	1972	C	C2-N3-C4	5.69	122.75	119.90
59	A5	2160	C	C5-C4-N4	5.69	124.19	120.20
59	A5	2756	C	C2-N1-C1'	5.69	125.06	118.80
59	A5	3399	C	OP1-P-OP2	5.69	128.14	119.60
58	B2	1665	U	N1-C2-O2	5.69	126.78	122.80
58	B2	1979	C	C2-N3-C4	5.69	122.75	119.90
59	A5	378	G	C6-C5-N7	-5.69	126.99	130.40
59	A5	387	U	C2-N1-C1'	5.69	124.53	117.70
59	A5	3356	G	C4-N9-C1'	5.69	133.90	126.50
59	A5	242	C	C6-N1-C1'	-5.69	113.97	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	785	A	C5-C6-N6	5.69	128.25	123.70
59	A5	1793	C	C2-N3-C4	5.69	122.75	119.90
59	A5	2721	C	O5'-P-OP1	-5.69	100.58	105.70
56	A8	57	G	C5-C6-N1	5.69	114.34	111.50
59	A5	1522	G	N7-C8-N9	5.69	115.94	113.10
59	A5	1680	U	N3-C2-O2	-5.69	118.22	122.20
59	A5	2750	A	C5-C6-N6	5.69	128.25	123.70
59	A5	3840	G	N1-C2-N2	5.69	121.32	116.20
59	A5	1377	A	N1-C2-N3	-5.68	126.46	129.30
59	A5	2724	C	N3-C4-N4	-5.68	114.02	118.00
59	A5	3443	A	O5'-P-OP1	-5.68	100.58	105.70
59	A5	300	A	C5-C6-N1	5.68	120.54	117.70
59	A5	1377	A	OP2-P-O3'	5.68	117.70	105.20
58	B2	997	C	N1-C2-O2	5.68	122.31	118.90
58	B2	1596	C	C6-N1-C1'	-5.68	113.98	120.80
58	B2	1843	A	C5-N7-C8	-5.68	101.06	103.90
54	A9	12	C	C4-C5-C6	-5.68	114.56	117.40
54	A9	16	U	C2-N1-C1'	-5.68	110.89	117.70
59	A5	1027	A	N7-C8-N9	5.68	116.64	113.80
59	A5	1682	G	C5-C6-N1	5.68	114.34	111.50
58	B2	111	A	C4-C5-N7	5.68	113.54	110.70
59	A5	380	G	C8-N9-C1'	-5.68	119.62	127.00
59	A5	2749	G	N9-C1'-C2'	-5.68	105.75	112.00
59	A5	3150	G	C5-N7-C8	-5.68	101.46	104.30
58	B2	1099	U	C2-N3-C4	5.68	130.41	127.00
59	A5	1967	G	N3-C4-N9	-5.68	122.59	126.00
59	A5	2990	C	P-O3'-C3'	5.68	126.51	119.70
56	A8	21	U	C4-C5-C6	-5.67	116.30	119.70
58	B2	1107	A	C6-C5-N7	-5.67	128.33	132.30
59	A5	1009	G	N3-C4-C5	-5.67	125.76	128.60
59	A5	2589	U	N1-C2-O2	5.67	126.77	122.80
59	A5	2620	C	OP1-P-O3'	5.67	117.68	105.20
59	A5	26	G	N7-C8-N9	5.67	115.94	113.10
59	A5	356	A	C4-C5-C6	-5.67	114.16	117.00
58	B2	375	A	C6-N1-C2	5.67	122.00	118.60
59	A5	25	G	C5-C6-N1	5.67	114.33	111.50
59	A5	754	A	N7-C8-N9	5.67	116.64	113.80
59	A5	1316	U	C6-N1-C1'	-5.67	113.26	121.20
59	A5	345	A	N1-C6-N6	-5.67	115.20	118.60
59	A5	720	G	N3-C4-N9	-5.67	122.60	126.00
59	A5	106	A	N1-C6-N6	-5.67	115.20	118.60
59	A5	843	A	OP1-P-OP2	-5.67	111.10	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1674	A	OP1-P-O3'	5.67	117.67	105.20
59	A5	2194	G	C5-C6-N1	5.67	114.33	111.50
59	A5	2725	U	C5-C4-O4	-5.67	122.50	125.90
59	A5	2729	U	N1-C2-N3	-5.67	111.50	114.90
59	A5	3714	U	C4-C5-C6	-5.67	116.30	119.70
56	A8	7	A	O5'-P-OP1	-5.67	100.60	105.70
57	Cz	165	LEU	CA-CB-CG	5.67	128.33	115.30
58	B2	45	U	C5-C6-N1	-5.67	119.87	122.70
58	B2	840	U	C5-C6-N1	5.67	125.53	122.70
59	A5	189	A	O5'-P-OP1	-5.67	100.60	105.70
59	A5	776	A	N3-C4-C5	-5.67	122.83	126.80
59	A5	2056	G	C4-C5-N7	5.67	113.07	110.80
59	A5	2150	U	N1-C2-N3	5.67	118.30	114.90
59	A5	2193	C	O5'-P-OP2	-5.67	100.60	105.70
59	A5	2775	A	P-O3'-C3'	5.67	126.50	119.70
59	A5	3404	A	C6-N1-C2	5.67	122.00	118.60
59	A5	3654	C	N3-C2-O2	-5.67	117.93	121.90
6	CC	78	ARG	CB-CG-CD	-5.67	96.87	111.60
59	A5	345	A	OP2-P-O3'	5.67	117.66	105.20
59	A5	362	A	N1-C2-N3	-5.67	126.47	129.30
59	A5	1009	G	N3-C4-N9	5.67	129.40	126.00
59	A5	1753	G	OP2-P-O3'	5.67	117.66	105.20
59	A5	2492	A	C8-N9-C1'	5.67	137.90	127.70
58	B2	7	G	C5-C6-N1	5.66	114.33	111.50
59	A5	412	U	C5-C6-N1	5.66	125.53	122.70
59	A5	428	C	N3-C4-C5	5.66	124.17	121.90
59	A5	769	U	C5-C4-O4	5.66	129.30	125.90
59	A5	799	A	N1-C2-N3	-5.66	126.47	129.30
59	A5	1137	G	O5'-P-OP1	-5.66	100.60	105.70
59	A5	1325	C	N3-C4-C5	-5.66	119.63	121.90
59	A5	1409	G	C5-N7-C8	-5.66	101.47	104.30
59	A5	1763	A	N1-C6-N6	-5.66	115.20	118.60
59	A5	1806	G	C2-N3-C4	5.66	114.73	111.90
59	A5	2546	G	N7-C8-N9	5.66	115.93	113.10
59	A5	3650	G	C6-C5-N7	-5.66	127.00	130.40
55	A7	102	C	N3-C2-O2	-5.66	117.94	121.90
59	A5	777	C	C6-N1-C2	-5.66	118.03	120.30
59	A5	1204	C	N1-C2-O2	5.66	122.30	118.90
59	A5	2492	A	C2'-C3'-O3'	5.66	122.76	113.70
59	A5	1593	U	N3-C2-O2	-5.66	118.24	122.20
59	A5	3159	C	N1-C2-O2	5.66	122.30	118.90
59	A5	1260	A	C4-C5-N7	-5.66	107.87	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2703	G	C5-C6-N1	5.66	114.33	111.50
29	CQ	173	LYS	CA-CB-CG	5.66	125.84	113.40
58	B2	1084	G	C5-C6-O6	-5.66	125.21	128.60
59	A5	867	U	OP1-P-O3'	5.66	117.64	105.20
59	A5	1332	C	N1-C2-O2	5.65	122.29	118.90
59	A5	3321	A	N9-C4-C5	-5.65	103.54	105.80
59	A5	3633	U	C5-C6-N1	5.65	125.53	122.70
58	B2	387	C	N1-C2-O2	5.65	122.29	118.90
58	B2	1580	G	C8-N9-C4	5.65	108.66	106.40
58	B2	1966	U	C6-N1-C2	-5.65	117.61	121.00
59	A5	117	C	O5'-P-OP1	-5.65	100.61	105.70
59	A5	668	A	O5'-P-OP1	-5.65	100.61	105.70
59	A5	1004	C	N3-C2-O2	-5.65	117.94	121.90
59	A5	2156	U	O5'-P-OP2	-5.65	100.61	105.70
59	A5	3503	G	N3-C2-N2	5.65	123.86	119.90
59	A5	3620	G	O5'-P-OP1	-5.65	100.61	105.70
3	AB	123	LEU	CA-CB-CG	5.65	128.30	115.30
4	CB	397	LEU	CA-CB-CG	5.65	128.29	115.30
58	B2	328	A	O5'-P-OP1	5.65	117.48	110.70
58	B2	1572	C	C5-C6-N1	5.65	123.83	121.00
58	B2	1665	U	C5-C6-N1	5.65	125.53	122.70
59	A5	199	U	C6-N1-C1'	5.65	129.11	121.20
59	A5	2092	U	C5-C4-O4	-5.65	122.51	125.90
59	A5	2511	C	N3-C2-O2	-5.65	117.94	121.90
59	A5	2586	A	O4'-C1'-N9	5.65	112.72	108.20
59	A5	234	G	O5'-P-OP1	-5.65	100.61	105.70
59	A5	854	U	C4-C5-C6	-5.65	116.31	119.70
59	A5	1138	C	C5-C4-N4	-5.65	116.25	120.20
59	A5	1545	A	O5'-P-OP1	-5.65	100.62	105.70
58	B2	610	U	N3-C2-O2	-5.65	118.25	122.20
59	A5	403	A	N1-C6-N6	-5.65	115.21	118.60
59	A5	3334	A	C5-C6-N6	-5.65	119.18	123.70
59	A5	3395	G	C5-C6-O6	5.65	131.99	128.60
59	A5	1115	A	N3-C4-N9	-5.65	122.88	127.40
59	A5	1152	A	N1-C2-N3	-5.65	126.48	129.30
59	A5	1301	A	C5-N7-C8	-5.64	101.08	103.90
59	A5	2780	A	C5-C6-N6	-5.64	119.19	123.70
59	A5	3333	A	C5-C6-N6	5.64	128.22	123.70
59	A5	3457	C	C2-N3-C4	5.64	122.72	119.90
59	A5	3585	A	C5-C6-N6	-5.64	119.18	123.70
58	B2	639	G	N1-C6-O6	-5.64	116.51	119.90
59	A5	1012	G	C8-N9-C4	-5.64	104.14	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1522	G	C8-N9-C4	-5.64	104.14	106.40
59	A5	1678	C	N3-C4-N4	-5.64	114.05	118.00
59	A5	1813	A	N1-C6-N6	-5.64	115.21	118.60
59	A5	2507	C	C6-N1-C2	-5.64	118.04	120.30
59	A5	3398	C	N1-C2-O2	5.64	122.28	118.90
59	A5	3418	U	N1-C1'-C2'	5.64	121.34	114.00
59	A5	199	U	C6-N1-C2	-5.64	117.61	121.00
59	A5	1396	A	C5-C6-N1	5.64	120.52	117.70
59	A5	2745	A	N9-C4-C5	-5.64	103.54	105.80
58	B2	1885	U	C5-C6-N1	5.64	125.52	122.70
59	A5	27	A	C4-C5-N7	5.64	113.52	110.70
59	A5	1011	U	N3-C2-O2	-5.64	118.25	122.20
59	A5	1678	C	C4-C5-C6	-5.64	114.58	117.40
59	A5	2481	U	N3-C4-O4	5.64	123.35	119.40
59	A5	2755	G	C4-C5-N7	5.64	113.06	110.80
59	A5	3517	U	C2-N3-C4	5.64	130.38	127.00
59	A5	3597	C	C4-C5-C6	-5.64	114.58	117.40
29	CQ	9	TYR	N-CA-C	-5.64	95.78	111.00
59	A5	1992	G	N3-C4-C5	-5.64	125.78	128.60
59	A5	2008	U	N3-C2-O2	-5.64	118.25	122.20
59	A5	2204	U	C5-C6-N1	5.64	125.52	122.70
56	A8	106	A	C5-C6-N1	5.64	120.52	117.70
59	A5	329	C	C5-C6-N1	5.64	123.82	121.00
59	A5	2224	A	C4-C5-C6	-5.64	114.18	117.00
58	B2	958	G	N3-C4-N9	5.63	129.38	126.00
59	A5	428	C	O4'-C1'-N1	5.63	112.71	108.20
59	A5	1092	U	C5-C6-N1	5.63	125.52	122.70
59	A5	1167	A	C2-N3-C4	5.63	113.42	110.60
59	A5	1409	G	C4-C5-N7	5.63	113.05	110.80
58	B2	1083	C	C4-C5-C6	-5.63	114.58	117.40
59	A5	883	U	C5-C6-N1	5.63	125.52	122.70
59	A5	1091	G	N1-C6-O6	-5.63	116.52	119.90
59	A5	1863	U	N3-C4-C5	-5.63	111.22	114.60
59	A5	2543	C	C5-C4-N4	5.63	124.14	120.20
59	A5	2723	A	N7-C8-N9	5.63	116.62	113.80
59	A5	1192	A	C5-C6-N6	-5.63	119.19	123.70
59	A5	2001	U	O5'-P-OP1	-5.63	100.63	105.70
59	A5	2215	G	C5-N7-C8	-5.63	101.48	104.30
58	B2	310	C	C2-N3-C4	-5.63	117.08	119.90
59	A5	1730	A	C8-N9-C4	-5.63	103.55	105.80
59	A5	2511	C	O5'-P-OP2	-5.63	100.63	105.70
58	B2	1098	C	C5-C4-N4	5.63	124.14	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1105	U	C5-C6-N1	5.63	125.51	122.70
58	B2	1409	A	N1-C2-N3	-5.63	126.49	129.30
59	A5	1359	G	C5-C6-N1	5.63	114.31	111.50
59	A5	3767	G	C6-C5-N7	-5.63	127.02	130.40
80	CF	99	ARG	NE-CZ-NH1	-5.63	117.49	120.30
59	A5	49	A	C5-N7-C8	-5.63	101.09	103.90
59	A5	485	A	N1-C2-N3	-5.63	126.49	129.30
59	A5	920	G	C4-N9-C1'	5.63	133.81	126.50
59	A5	1681	G	C4-C5-N7	5.63	113.05	110.80
59	A5	1981	A	C4-C5-N7	5.63	113.51	110.70
59	A5	3403	G	N3-C4-C5	-5.63	125.79	128.60
59	A5	3583	C	C5-C6-N1	5.63	123.81	121.00
59	A5	3600	G	N9-C4-C5	-5.63	103.15	105.40
59	A5	3675	A	N9-C4-C5	5.63	108.05	105.80
59	A5	1050	C	C5-C6-N1	5.62	123.81	121.00
59	A5	2784	C	N1-C2-N3	5.62	123.14	119.20
59	A5	3327	U	N3-C2-O2	-5.62	118.26	122.20
59	A5	3412	U	C6-N1-C2	-5.62	117.62	121.00
58	B2	1659	C	C6-N1-C2	-5.62	118.05	120.30
59	A5	1000	G	N9-C4-C5	-5.62	103.15	105.40
59	A5	1087	G	N3-C4-C5	5.62	131.41	128.60
59	A5	1101	A	C6-C5-N7	5.62	136.24	132.30
59	A5	1382	U	C2-N1-C1'	5.62	124.45	117.70
59	A5	3362	G	N3-C4-C5	-5.62	125.79	128.60
59	A5	3474	G	N1-C2-N3	5.62	127.27	123.90
59	A5	3583	C	C4-C5-C6	-5.62	114.59	117.40
41	Ce	52	TYR	OH-CZ-CE2	-5.62	104.92	120.10
59	A5	164	U	C6-N1-C2	-5.62	117.63	121.00
59	A5	1313	A	N7-C8-N9	5.62	116.61	113.80
59	A5	2089	A	C5-N7-C8	-5.62	101.09	103.90
59	A5	12	C	C6-N1-C2	-5.62	118.05	120.30
59	A5	1418	A	C5-C6-N1	5.62	120.51	117.70
59	A5	2626	C	N3-C2-O2	-5.62	117.97	121.90
59	A5	3894	C	N1-C2-O2	5.62	122.27	118.90
59	A5	998	G	C5-C6-N1	5.62	114.31	111.50
59	A5	1014	U	O5'-P-OP2	-5.62	100.64	105.70
59	A5	1699	A	C6-N1-C2	-5.62	115.23	118.60
59	A5	1700	U	C6-N1-C2	-5.62	117.63	121.00
59	A5	1894	G	C6-C5-N7	-5.62	127.03	130.40
59	A5	2716	C	O5'-P-OP1	-5.62	100.64	105.70
59	A5	3610	A	O5'-P-OP2	-5.62	100.64	105.70
58	B2	849	U	N3-C2-O2	-5.62	118.27	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1324	C	OP1-P-OP2	-5.62	111.18	119.60
59	A5	1421	G	N7-C8-N9	5.62	115.91	113.10
59	A5	3949	U	C6-N1-C1'	5.62	129.06	121.20
58	B2	1115	C	C5-C6-N1	5.61	123.81	121.00
59	A5	814	U	N3-C2-O2	-5.61	118.27	122.20
59	A5	1022	A	C4-C5-C6	-5.61	114.19	117.00
59	A5	1145	C	C2-N3-C4	5.61	122.71	119.90
59	A5	1682	G	N1-C2-N2	5.61	121.25	116.20
58	B2	160	G	C4-N9-C1'	5.61	133.80	126.50
59	A5	285	G	C5-C6-N1	5.61	114.31	111.50
59	A5	744	U	C2-N1-C1'	5.61	124.44	117.70
59	A5	1628	G	C8-N9-C1'	-5.61	119.70	127.00
59	A5	1682	G	C4-C5-N7	5.61	113.05	110.80
59	A5	1992	G	N3-C4-N9	5.61	129.37	126.00
25	Ca	99	ALA	N-CA-C	5.61	126.15	111.00
58	B2	1394	U	O4'-C1'-N1	5.61	112.69	108.20
59	A5	1156	U	C4-C5-C6	-5.61	116.33	119.70
59	A5	1168	G	C8-N9-C4	-5.61	104.16	106.40
59	A5	3343	A	C2-N3-C4	5.61	113.41	110.60
59	A5	3487	A	C5-C6-N6	-5.61	119.21	123.70
59	A5	1985	C	N3-C4-N4	-5.61	114.07	118.00
59	A5	3730	G	C6-C5-N7	-5.61	127.03	130.40
59	A5	1116	G	N1-C2-N2	5.61	121.25	116.20
59	A5	1721	C	N1-C2-O2	5.61	122.27	118.90
59	A5	3762	G	N1-C6-O6	-5.61	116.53	119.90
59	A5	3776	A	C4-C5-N7	5.61	113.50	110.70
58	B2	648	G	C6-C5-N7	-5.61	127.04	130.40
58	B2	976	U	N1-C2-O2	5.61	126.72	122.80
59	A5	925	C	N1-C2-O2	5.61	122.26	118.90
59	A5	1613	A	C5-C6-N1	5.61	120.50	117.70
59	A5	2733	G	N1-C2-N3	5.61	127.26	123.90
56	A8	30	G	O5'-P-OP1	-5.60	100.66	105.70
59	A5	913	U	C6-N1-C2	-5.60	117.64	121.00
59	A5	1672	A	O5'-P-OP2	5.60	117.42	110.70
59	A5	3404	A	C5-N7-C8	-5.60	101.10	103.90
59	A5	380	G	C6-N1-C2	-5.60	121.74	125.10
59	A5	424	G	N1-C6-O6	-5.60	116.54	119.90
59	A5	786	C	N3-C4-C5	5.60	124.14	121.90
59	A5	2578	U	C6-N1-C2	-5.60	117.64	121.00
59	A5	3368	C	C5-C6-N1	5.60	123.80	121.00
59	A5	562	U	C2-N1-C1'	5.60	124.42	117.70
59	A5	1315	A	C5-N7-C8	-5.60	101.10	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1133	G	N1-C6-O6	5.60	123.26	119.90
59	A5	1388	C	C2-N3-C4	5.60	122.70	119.90
59	A5	1998	U	N3-C2-O2	-5.60	118.28	122.20
59	A5	3413	C	C2-N3-C4	5.60	122.70	119.90
73	AO	99	ALA	C-N-CA	5.60	135.70	121.70
59	A5	1122	U	C4-C5-C6	5.60	123.06	119.70
59	A5	1883	G	C5-C6-O6	-5.60	125.24	128.60
59	A5	3464	G	N1-C2-N3	5.60	127.26	123.90
59	A5	3574	A	N1-C6-N6	-5.60	115.24	118.60
58	B2	580	C	C6-N1-C2	-5.60	118.06	120.30
59	A5	760	G	C4-N9-C1'	5.60	133.78	126.50
59	A5	1907	U	N3-C2-O2	-5.60	118.28	122.20
59	A5	3650	G	C8-N9-C1'	-5.60	119.72	127.00
58	B2	1167	U	C2-N3-C4	5.59	130.36	127.00
59	A5	781	C	N3-C2-O2	-5.59	117.98	121.90
59	A5	803	A	C5-C6-N1	5.59	120.50	117.70
59	A5	2661	G	C4-C5-N7	5.59	113.04	110.80
59	A5	3246	G	O4'-C1'-N9	-5.59	103.72	108.20
59	A5	66	A	C2-N3-C4	5.59	113.40	110.60
59	A5	66	A	N1-C6-N6	-5.59	115.24	118.60
58	B2	1333	C	N1-C2-O2	5.59	122.25	118.90
59	A5	2181	A	N7-C8-N9	5.59	116.60	113.80
59	A5	2706	U	N1-C2-O2	5.59	126.72	122.80
59	A5	3296	C	N3-C2-O2	-5.59	117.99	121.90
58	B2	632	G	C5-N7-C8	-5.59	101.50	104.30
59	A5	1425	U	C6-N1-C2	-5.59	117.65	121.00
59	A5	1702	G	N3-C4-C5	5.59	131.40	128.60
59	A5	3764	G	N3-C4-C5	-5.59	125.81	128.60
58	B2	447	C	N1-C2-O2	5.59	122.25	118.90
59	A5	1975	C	N3-C2-O2	-5.59	117.99	121.90
54	A9	12	C	O5'-P-OP1	-5.59	100.67	105.70
58	B2	583	C	N1-C2-O2	5.59	122.25	118.90
58	B2	1069	U	O5'-P-OP1	-5.59	100.67	105.70
59	A5	378	G	C5-N7-C8	-5.59	101.51	104.30
59	A5	1266	A	C5-C6-N6	5.59	128.17	123.70
59	A5	2540	G	C5-C6-N1	5.59	114.29	111.50
56	A8	72	C	N1-C2-O2	5.58	122.25	118.90
59	A5	1629	C	C5-C6-N1	5.58	123.79	121.00
59	A5	2811	G	N9-C4-C5	5.58	107.63	105.40
59	A5	3340	A	C5-N7-C8	-5.58	101.11	103.90
59	A5	3351	A	C4-C5-C6	-5.58	114.21	117.00
58	B2	1830	G	C8-N9-C4	-5.58	104.17	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	238	G	N1-C6-O6	5.58	123.25	119.90
59	A5	1863	U	C4-C5-C6	5.58	123.05	119.70
59	A5	2809	C	N3-C2-O2	-5.58	117.99	121.90
58	B2	1103	U	N1-C2-O2	5.58	126.71	122.80
59	A5	1521	G	N3-C4-C5	5.58	131.39	128.60
59	A5	2095	U	O5'-P-OP1	5.58	117.40	110.70
59	A5	3402	C	C2-N1-C1'	-5.58	112.66	118.80
59	A5	3931	C	C2-N1-C1'	5.58	124.94	118.80
58	B2	1957	A	O5'-P-OP1	-5.58	100.68	105.70
50	CJ	103	ASN	N-CA-C	5.58	126.06	111.00
58	B2	1217	U	C2-N1-C1'	5.58	124.39	117.70
59	A5	350	C	C6-N1-C2	-5.58	118.07	120.30
59	A5	760	G	C5-C6-N1	5.58	114.29	111.50
59	A5	781	C	C6-N1-C2	-5.58	118.07	120.30
59	A5	996	C	C2-N3-C4	-5.58	117.11	119.90
59	A5	1522	G	C6-N1-C2	-5.58	121.75	125.10
59	A5	2697	U	OP2-P-O3'	5.58	117.47	105.20
59	A5	3351	A	C5-C6-N6	-5.58	119.24	123.70
59	A5	3477	A	C5-C6-N1	5.58	120.49	117.70
59	A5	3883	G	N3-C4-N9	5.58	129.34	126.00
58	B2	1021	A	C5-N7-C8	-5.57	101.11	103.90
59	A5	984	U	O5'-P-OP2	-5.57	100.68	105.70
59	A5	1181	A	N9-C1'-C2'	5.57	121.25	114.00
59	A5	1932	C	C6-N1-C2	-5.57	118.07	120.30
59	A5	2687	A	C4-C5-N7	5.57	113.49	110.70
59	A5	2790	G	N3-C4-N9	-5.57	122.66	126.00
59	A5	3509	U	N3-C2-O2	5.57	126.10	122.20
59	A5	3511	U	N3-C4-C5	-5.57	111.26	114.60
6	CC	195	GLY	C-N-CA	5.57	135.63	121.70
58	B2	353	U	C5-C6-N1	5.57	125.49	122.70
59	A5	2225	A	N1-C2-N3	-5.57	126.51	129.30
59	A5	2735	A	N1-C6-N6	-5.57	115.26	118.60
58	B2	38	C	C2-N1-C1'	5.57	124.93	118.80
59	A5	502	U	N3-C2-O2	-5.57	118.30	122.20
59	A5	1096	A	C2-N3-C4	5.57	113.39	110.60
59	A5	2082	U	N1-C2-O2	5.57	126.70	122.80
59	A5	2536	G	C6-C5-N7	-5.57	127.06	130.40
59	A5	188	G	C8-N9-C4	-5.57	104.17	106.40
59	A5	1555	G	C6-N1-C2	-5.57	121.76	125.10
59	A5	1796	A	N9-C4-C5	5.57	108.03	105.80
59	A5	2110	A	C5-C6-N1	5.57	120.48	117.70
59	A5	3521	A	C4-C5-C6	-5.57	114.22	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1108	C	C6-N1-C2	-5.57	118.07	120.30
59	A5	52	A	C5-N7-C8	-5.57	101.12	103.90
59	A5	2492	A	C4-C5-C6	-5.57	114.22	117.00
59	A5	2529	G	C4-C5-N7	-5.57	108.57	110.80
59	A5	2774	G	O5'-P-OP2	-5.57	100.69	105.70
59	A5	665	U	C6-N1-C1'	5.56	128.99	121.20
59	A5	817	C	N3-C4-C5	-5.56	119.67	121.90
59	A5	2501	G	C5-C6-O6	5.56	131.94	128.60
59	A5	2540	G	C4-C5-N7	-5.56	108.57	110.80
59	A5	3598	U	N3-C2-O2	-5.56	118.31	122.20
2	CA	173	GLY	N-CA-C	-5.56	99.19	113.10
56	A8	8	A	O5'-P-OP2	5.56	117.37	110.70
58	B2	326	U	P-O3'-C3'	5.56	126.37	119.70
58	B2	627	A	N3-C4-N9	-5.56	122.95	127.40
59	A5	856	A	N1-C2-N3	-5.56	126.52	129.30
59	A5	1020	A	OP1-P-OP2	5.56	127.94	119.60
59	A5	2653	A	O5'-P-OP1	-5.56	100.69	105.70
52	CE	232	LEU	CA-CB-CG	5.56	128.09	115.30
59	A5	358	C	N3-C2-O2	-5.56	118.01	121.90
59	A5	1060	G	C8-N9-C4	-5.56	104.18	106.40
59	A5	2794	U	C2-N1-C1'	5.56	124.37	117.70
58	B2	463	G	N9-C4-C5	5.56	107.62	105.40
59	A5	475	U	C6-N1-C1'	-5.56	113.42	121.20
59	A5	1330	G	N1-C6-O6	-5.56	116.56	119.90
59	A5	3392	U	C6-N1-C2	-5.56	117.67	121.00
59	A5	3638	U	N3-C4-C5	5.56	117.94	114.60
59	A5	3931	C	N3-C4-N4	5.56	121.89	118.00
58	B2	7	G	C5-C6-O6	-5.56	125.27	128.60
59	A5	2214	G	C4-C5-C6	-5.56	115.47	118.80
59	A5	3757	U	N3-C4-C5	5.56	117.94	114.60
56	A8	103	C	C2-N3-C4	5.56	122.68	119.90
58	B2	948	A	C4-C5-N7	5.55	113.48	110.70
58	B2	1225	A	C8-N9-C4	5.55	108.02	105.80
59	A5	580	A	P-O3'-C3'	5.55	126.36	119.70
59	A5	2526	A	C8-N9-C4	-5.55	103.58	105.80
59	A5	3420	U	C6-N1-C2	5.55	124.33	121.00
59	A5	3504	G	OP1-P-O3'	5.55	117.42	105.20
58	B2	939	G	C2-N3-C4	5.55	114.68	111.90
59	A5	373	A	C6-C5-N7	5.55	136.19	132.30
59	A5	833	U	N3-C2-O2	-5.55	118.31	122.20
58	B2	632	G	N9-C4-C5	-5.55	103.18	105.40
59	A5	2196	U	N1-C2-N3	5.55	118.23	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1311	U	C5-C6-N1	-5.55	119.93	122.70
59	A5	1542	C	OP1-P-O3'	5.55	117.41	105.20
59	A5	2194	G	O5'-P-OP1	-5.55	100.71	105.70
59	A5	2663	C	O5'-P-OP1	-5.55	100.71	105.70
59	A5	3800	G	C8-N9-C1'	-5.55	119.79	127.00
59	A5	391	A	O5'-P-OP1	-5.55	100.71	105.70
59	A5	1140	G	N1-C2-N3	-5.55	120.57	123.90
59	A5	3525	A	N1-C2-N3	-5.55	126.53	129.30
56	A8	3	C	C5-C4-N4	-5.55	116.32	120.20
58	B2	1084	G	C4-C5-N7	5.55	113.02	110.80
58	B2	1190	G	C6-N1-C2	-5.55	121.77	125.10
58	B2	1828	C	N1-C2-O2	-5.55	115.57	118.90
59	A5	94	C	OP1-P-O3'	5.55	117.40	105.20
59	A5	227	A	N7-C8-N9	5.55	116.57	113.80
59	A5	356	A	O4'-C1'-N9	-5.55	103.76	108.20
59	A5	1367	A	N7-C8-N9	5.55	116.57	113.80
59	A5	2536	G	N1-C2-N2	-5.55	111.21	116.20
59	A5	2674	A	C5-C6-N6	-5.55	119.26	123.70
59	A5	3478	G	O4'-C1'-N9	5.54	112.64	108.20
10	AM	92	LEU	CA-CB-CG	5.54	128.05	115.30
58	B2	1	A	P-O3'-C3'	5.54	126.35	119.70
58	B2	1961	A	N1-C6-N6	-5.54	115.27	118.60
59	A5	385	A	N9-C4-C5	-5.54	103.58	105.80
59	A5	1144	C	O5'-P-OP2	-5.54	100.71	105.70
59	A5	2790	G	C4-C5-C6	-5.54	115.47	118.80
45	C1	49	LEU	CB-CG-CD1	5.54	120.42	111.00
58	B2	1356	U	N1-C2-O2	5.54	126.68	122.80
59	A5	777	C	C4-C5-C6	-5.54	114.63	117.40
59	A5	1018	C	C5-C6-N1	-5.54	118.23	121.00
59	A5	1799	U	C6-N1-C1'	-5.54	113.44	121.20
59	A5	2698	A	C5-C6-N1	5.54	120.47	117.70
59	A5	3608	G	N1-C2-N3	5.54	127.22	123.90
31	CS	17	LEU	CA-CB-CG	5.54	128.04	115.30
58	B2	1119	G	C8-N9-C1'	-5.54	119.80	127.00
59	A5	65	A	C8-N9-C4	-5.54	103.58	105.80
59	A5	300	A	C2'-C3'-O3'	5.54	122.56	113.70
59	A5	2754	G	N1-C2-N3	5.54	127.22	123.90
59	A5	2766	U	C5-C6-N1	5.54	125.47	122.70
4	CB	323	TYR	CA-CB-CG	5.54	123.92	113.40
58	B2	1849	U	C5-C4-O4	5.54	129.22	125.90
59	A5	385	A	OP1-P-OP2	5.54	127.91	119.60
59	A5	965	C	C6-N1-C2	-5.54	118.08	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1359	G	N3-C4-N9	5.54	129.32	126.00
59	A5	1404	A	N3-C4-N9	5.54	131.83	127.40
59	A5	2672	U	N1-C2-N3	5.54	118.22	114.90
59	A5	3510	U	C5-C6-N1	-5.54	119.93	122.70
56	A8	121	C	C6-N1-C2	-5.54	118.08	120.30
59	A5	3236	A	N3-C4-C5	5.54	130.68	126.80
59	A5	831	A	C5-C6-N1	5.54	120.47	117.70
59	A5	1628	G	C4-N9-C1'	5.54	133.70	126.50
59	A5	1657	G	C8-N9-C4	5.54	108.61	106.40
59	A5	1671	U	C5-C4-O4	5.54	129.22	125.90
56	A8	49	C	O5'-P-OP1	-5.53	100.72	105.70
59	A5	227	A	C5-N7-C8	-5.53	101.13	103.90
59	A5	823	U	O5'-P-OP1	-5.53	100.72	105.70
59	A5	1959	A	C5-C6-N1	5.53	120.47	117.70
59	A5	3631	C	C4-C5-C6	-5.53	114.63	117.40
59	A5	851	G	C8-N9-C4	-5.53	104.19	106.40
59	A5	1333	C	N3-C4-N4	-5.53	114.13	118.00
59	A5	1375	G	N7-C8-N9	5.53	115.87	113.10
59	A5	2736	A	N9-C4-C5	-5.53	103.59	105.80
56	A8	18	C	O4'-C1'-N1	5.53	112.62	108.20
59	A5	125	A	C5-C6-N1	5.53	120.47	117.70
59	A5	1753	G	C8-N9-C4	-5.53	104.19	106.40
59	A5	2085	G	N1-C2-N2	5.53	121.18	116.20
59	A5	3728	A	C6-N1-C2	-5.53	115.28	118.60
59	A5	3800	G	C4-N9-C1'	5.53	133.69	126.50
59	A5	64	A	C4-C5-C6	-5.53	114.23	117.00
58	B2	367	G	N3-C4-N9	5.53	129.32	126.00
59	A5	24	G	C8-N9-C4	5.53	108.61	106.40
59	A5	679	G	C4-N9-C1'	5.53	133.69	126.50
59	A5	1027	A	C4-C5-N7	5.53	113.46	110.70
59	A5	1383	A	C4'-C3'-O3'	5.53	124.05	113.00
59	A5	1647	A	C5-C6-N1	5.53	120.46	117.70
59	A5	1813	A	N7-C8-N9	5.53	116.56	113.80
59	A5	3423	U	N3-C4-C5	5.53	117.92	114.60
41	Ce	45	ARG	NE-CZ-NH1	5.53	123.06	120.30
55	A7	82	G	N1-C2-N2	-5.53	111.23	116.20
58	B2	1030	C	P-O3'-C3'	5.53	126.33	119.70
58	B2	1977	A	O5'-P-OP1	-5.53	100.73	105.70
59	A5	1338	U	N1-C2-O2	5.53	126.67	122.80
59	A5	1612	G	C4-C5-N7	5.52	113.01	110.80
59	A5	2779	A	N3-C4-N9	-5.52	122.98	127.40
59	A5	3171	A	N1-C6-N6	-5.52	115.29	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3712	G	C2-N3-C4	-5.52	109.14	111.90
59	A5	1011	U	C2-N1-C1'	5.52	124.33	117.70
59	A5	1338	U	N3-C4-C5	5.52	117.91	114.60
59	A5	2605	C	C4-C5-C6	-5.52	114.64	117.40
59	A5	3221	A	C4-C5-N7	5.52	113.46	110.70
59	A5	3730	G	C6-N1-C2	-5.52	121.79	125.10
59	A5	2755	G	N3-C2-N2	-5.52	116.03	119.90
59	A5	3404	A	N7-C8-N9	5.52	116.56	113.80
58	B2	880	G	N9-C4-C5	5.52	107.61	105.40
58	B2	1104	C	C6-N1-C1'	5.52	127.42	120.80
58	B2	1200	A	C5-C6-N1	5.52	120.46	117.70
58	B2	1975	G	C4-C5-N7	5.52	113.01	110.80
59	A5	509	A	C4-C5-C6	-5.52	114.24	117.00
59	A5	1383	A	O5'-P-OP1	-5.52	100.73	105.70
59	A5	1795	A	C5-N7-C8	-5.52	101.14	103.90
59	A5	2484	G	N3-C4-N9	5.52	129.31	126.00
59	A5	3149	U	C5-C6-N1	-5.52	119.94	122.70
59	A5	3256	U	N3-C4-C5	5.52	117.91	114.60
59	A5	3452	U	C4-C5-C6	-5.52	116.39	119.70
59	A5	3844	U	C5'-C4'-O4'	5.52	115.72	109.10
58	B2	1408	A	N7-C8-N9	-5.52	111.04	113.80
59	A5	1106	A	N9-C4-C5	5.52	108.01	105.80
59	A5	1152	A	N9-C4-C5	5.52	108.01	105.80
59	A5	1417	G	C8-N9-C1'	-5.52	119.83	127.00
59	A5	1985	C	C2-N1-C1'	-5.52	112.73	118.80
59	A5	2649	A	N3-C4-N9	-5.52	122.99	127.40
59	A5	3678	G	OP1-P-OP2	5.52	127.88	119.60
59	A5	1111	C	C5-C6-N1	5.52	123.76	121.00
59	A5	1615	G	C6-N1-C2	5.52	128.41	125.10
59	A5	1626	A	C8-N9-C4	5.52	108.01	105.80
55	A7	97	G	C8-N9-C4	5.51	108.61	106.40
58	B2	275	U	N3-C2-O2	-5.51	118.34	122.20
59	A5	283	A	C8-N9-C4	-5.51	103.59	105.80
59	A5	293	U	C6-N1-C2	-5.51	117.69	121.00
59	A5	1053	G	C6-C5-N7	-5.51	127.09	130.40
59	A5	1161	C	O5'-P-OP2	5.51	117.32	110.70
59	A5	2072	C	N1-C2-O2	5.51	122.21	118.90
59	A5	2268	G	C4-N9-C1'	5.51	133.67	126.50
59	A5	2673	A	O5'-P-OP2	-5.51	100.74	105.70
59	A5	1333	C	C2-N3-C4	5.51	122.66	119.90
59	A5	1552	A	N1-C6-N6	5.51	121.91	118.60
55	A7	48	G	C2-N3-C4	5.51	114.66	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	107	U	C5'-C4'-O4'	5.51	115.71	109.10
59	A5	3713	C	C5-C6-N1	5.51	123.76	121.00
58	B2	1028	A	OP1-P-O3'	5.51	117.32	105.20
58	B2	1344	A	N3-C4-C5	-5.51	122.94	126.80
59	A5	144	C	N3-C2-O2	-5.51	118.04	121.90
59	A5	664	U	C2-N1-C1'	5.51	124.31	117.70
59	A5	1367	A	O5'-P-OP1	-5.51	100.74	105.70
59	A5	2151	A	N7-C8-N9	5.51	116.56	113.80
59	A5	2201	U	O5'-P-OP1	-5.51	100.74	105.70
58	B2	591	C	N3-C2-O2	-5.51	118.04	121.90
58	B2	1046	U	C2-N1-C1'	5.51	124.31	117.70
58	B2	1962	G	O5'-P-OP1	-5.51	100.74	105.70
59	A5	2061	G	O5'-P-OP2	-5.51	100.74	105.70
59	A5	3591	A	C6-N1-C2	5.51	121.91	118.60
55	A7	93	G	O5'-P-OP1	-5.51	100.74	105.70
59	A5	90	G	C4-C5-N7	-5.51	108.60	110.80
59	A5	435	G	C8-N9-C4	-5.51	104.20	106.40
59	A5	988	C	C6-N1-C2	-5.51	118.10	120.30
59	A5	1103	U	C6-N1-C2	-5.51	117.70	121.00
59	A5	1217	U	N3-C2-O2	-5.51	118.35	122.20
59	A5	2608	G	C4-C5-N7	5.51	113.00	110.80
59	A5	2686	C	N3-C4-C5	-5.51	119.70	121.90
59	A5	3181	G	C8-N9-C4	-5.51	104.20	106.40
55	A7	114	U	C5-C6-N1	5.50	125.45	122.70
58	B2	1191	C	N3-C2-O2	-5.50	118.05	121.90
59	A5	2191	G	C8-N9-C1'	5.50	134.16	127.00
59	A5	53	A	C5-C6-N6	-5.50	119.30	123.70
59	A5	448	A	C5-C6-N6	-5.50	119.30	123.70
59	A5	645	U	N1-C2-O2	5.50	126.65	122.80
59	A5	2161	G	C6-C5-N7	5.50	133.70	130.40
59	A5	2166	U	N3-C4-O4	-5.50	115.55	119.40
59	A5	2239	C	C4-C5-C6	-5.50	114.65	117.40
26	CN	188	ARG	NE-CZ-NH2	5.50	123.05	120.30
58	B2	111	A	C5-N7-C8	-5.50	101.15	103.90
59	A5	1328	U	N3-C2-O2	-5.50	118.35	122.20
59	A5	3408	C	OP1-P-O3'	5.50	117.30	105.20
59	A5	752	U	N3-C4-O4	5.50	123.25	119.40
59	A5	2161	G	N1-C6-O6	-5.50	116.60	119.90
59	A5	3143	U	N1-C2-O2	5.50	126.65	122.80
59	A5	3671	C	O5'-P-OP1	-5.50	100.75	105.70
59	A5	41	U	O5'-P-OP1	5.50	117.30	110.70
59	A5	784	G	C5-C6-O6	-5.50	125.30	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1096	A	C5-C6-N1	5.50	120.45	117.70
59	A5	2719	A	C8-N9-C4	-5.50	103.60	105.80
59	A5	283	A	N1-C6-N6	-5.50	115.30	118.60
59	A5	2041	G	C5-C6-O6	-5.50	125.30	128.60
59	A5	2055	G	C5-C6-N1	5.50	114.25	111.50
59	A5	2542	C	N1-C2-O2	5.50	122.20	118.90
59	A5	2700	C	C2-N3-C4	5.50	122.65	119.90
59	A5	2734	A	C5-N7-C8	-5.50	101.15	103.90
59	A5	3142	G	N1-C2-N2	-5.50	111.25	116.20
59	A5	3757	U	C6-N1-C1'	5.50	128.89	121.20
58	B2	355	G	N3-C4-N9	-5.50	122.70	126.00
59	A5	2757	U	OP1-P-O3'	5.50	117.29	105.20
59	A5	3165	U	C5-C4-O4	5.50	129.20	125.90
59	A5	3341	C	N3-C4-N4	-5.50	114.15	118.00
58	B2	611	U	C6-N1-C2	-5.49	117.70	121.00
59	A5	839	A	C5-C6-N1	5.49	120.45	117.70
59	A5	2481	U	N3-C2-O2	-5.49	118.35	122.20
59	A5	2713	G	OP1-P-O3'	5.49	117.29	105.20
58	B2	160	G	C8-N9-C1'	-5.49	119.86	127.00
59	A5	104	A	C2-N3-C4	-5.49	107.85	110.60
59	A5	375	C	C2-N1-C1'	5.49	124.84	118.80
59	A5	1997	C	C6-N1-C2	-5.49	118.10	120.30
2	CA	1	MET	CB-CG-SD	5.49	128.87	112.40
56	A8	105	C	C2-N1-C1'	-5.49	112.76	118.80
58	B2	29	U	C5-C6-N1	5.49	125.44	122.70
58	B2	1412	A	C4-C5-N7	5.49	113.44	110.70
59	A5	1319	A	C5-C6-N6	-5.49	119.31	123.70
59	A5	2769	G	C8-N9-C1'	-5.49	119.86	127.00
59	A5	3134	G	C4-C5-N7	5.49	113.00	110.80
59	A5	3501	C	C4-C5-C6	-5.49	114.65	117.40
59	A5	3845	A	C5-N7-C8	-5.49	101.16	103.90
59	A5	1204	C	C2-N3-C4	5.49	122.64	119.90
59	A5	2127	C	C5-C6-N1	5.49	123.75	121.00
56	A8	39	A	C5-C6-N6	5.49	128.09	123.70
59	A5	1162	A	N1-C2-N3	-5.49	126.56	129.30
59	A5	1566	U	N3-C2-O2	-5.49	118.36	122.20
58	B2	1408	A	N3-C4-C5	5.49	130.64	126.80
59	A5	1143	U	N3-C4-O4	-5.49	115.56	119.40
59	A5	2521	A	O4'-C1'-N9	-5.49	103.81	108.20
59	A5	3220	U	C5-C6-N1	5.49	125.44	122.70
59	A5	3471	A	C5-C6-N1	5.49	120.44	117.70
58	B2	950	U	N3-C2-O2	-5.48	118.36	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	109	A	C8-N9-C4	-5.48	103.61	105.80
59	A5	1154	U	OP2-P-O3'	5.48	117.26	105.20
59	A5	2769	G	N9-C4-C5	-5.48	103.21	105.40
58	B2	1048	U	C5-C6-N1	5.48	125.44	122.70
58	B2	1228	G	N7-C8-N9	5.48	115.84	113.10
59	A5	1081	C	N3-C4-C5	5.48	124.09	121.90
59	A5	1424	G	C5-C6-O6	-5.48	125.31	128.60
58	B2	856	A	N3-C4-N9	5.48	131.78	127.40
58	B2	1934	U	N3-C2-O2	-5.48	118.36	122.20
59	A5	787	C	C5-C6-N1	5.48	123.74	121.00
59	A5	992	U	N3-C2-O2	-5.48	118.36	122.20
59	A5	2215	G	C5-C6-N1	5.48	114.24	111.50
56	A8	21	U	O4'-C1'-N1	5.48	112.58	108.20
59	A5	2614	G	C6-C5-N7	-5.48	127.11	130.40
58	B2	1013	A	C8-N9-C4	5.48	107.99	105.80
59	A5	991	A	C8-N9-C4	-5.48	103.61	105.80
59	A5	1085	U	C5-C6-N1	5.48	125.44	122.70
59	A5	2993	G	P-O3'-C3'	5.48	126.27	119.70
59	A5	3349	A	C6-C5-N7	5.48	136.13	132.30
59	A5	3727	A	C6-C5-N7	5.48	136.13	132.30
54	A9	6	G	C4-C5-N7	5.48	112.99	110.80
58	B2	988	G	O4'-C1'-N9	5.48	112.58	108.20
59	A5	441	A	C8-N9-C4	5.48	107.99	105.80
59	A5	821	U	N1-C2-O2	5.48	126.63	122.80
59	A5	1528	G	C4-C5-N7	5.48	112.99	110.80
18	AZ	66	LEU	CA-CB-CG	5.47	127.89	115.30
59	A5	26	G	C2-N3-C4	5.47	114.64	111.90
59	A5	154	A	N3-C4-C5	5.47	130.63	126.80
59	A5	1276	G	C8-N9-C1'	5.47	134.12	127.00
58	B2	1241	G	N3-C4-C5	5.47	131.34	128.60
59	A5	214	A	C5-C6-N6	-5.47	119.32	123.70
59	A5	441	A	C4-C5-N7	5.47	113.44	110.70
59	A5	1367	A	C5-N7-C8	-5.47	101.16	103.90
59	A5	1796	A	C2-N3-C4	5.47	113.34	110.60
59	A5	2183	A	N7-C8-N9	5.47	116.54	113.80
59	A5	2257	C	N1-C2-N3	5.47	123.03	119.20
59	A5	2659	A	C4-N9-C1'	5.47	136.15	126.30
59	A5	3262	A	O5'-P-OP1	-5.47	100.78	105.70
59	A5	3607	C	N3-C4-C5	-5.47	119.71	121.90
59	A5	3714	U	N3-C2-O2	-5.47	118.37	122.20
56	A8	79	A	O4'-C1'-N9	5.47	112.58	108.20
59	A5	1739	U	C5-C4-O4	5.47	129.18	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2574	C	N3-C2-O2	-5.47	118.07	121.90
26	CN	108	ARG	NE-CZ-NH2	-5.47	117.56	120.30
58	B2	1409	A	C6-N1-C2	5.47	121.88	118.60
59	A5	991	A	N3-C4-N9	-5.47	123.02	127.40
59	A5	1614	A	C4-C5-N7	5.47	113.44	110.70
59	A5	2126	A	O5'-P-OP1	5.47	117.26	110.70
59	A5	2699	A	O5'-P-OP1	-5.47	100.78	105.70
59	A5	1169	C	N3-C4-N4	-5.47	114.17	118.00
6	CC	266	LEU	CB-CG-CD2	-5.47	101.71	111.00
58	B2	1199	G	N3-C4-N9	5.47	129.28	126.00
59	A5	58	G	OP1-P-OP2	-5.47	111.40	119.60
59	A5	1127	C	N3-C2-O2	-5.47	118.07	121.90
59	A5	1172	G	N3-C4-C5	-5.47	125.87	128.60
59	A5	1336	U	O5'-P-OP2	-5.47	100.78	105.70
59	A5	2058	C	N3-C2-O2	-5.47	118.07	121.90
59	A5	2798	C	C6-N1-C1'	5.47	127.36	120.80
59	A5	3516	C	N3-C4-N4	-5.47	114.17	118.00
59	A5	3776	A	C2-N3-C4	5.47	113.33	110.60
55	A7	2	C	C2-N1-C1'	5.46	124.81	118.80
59	A5	800	C	N3-C4-N4	5.46	121.83	118.00
59	A5	1155	U	OP2-P-O3'	5.46	117.22	105.20
59	A5	1387	G	C6-C5-N7	-5.46	127.12	130.40
59	A5	1711	C	C6-N1-C2	-5.46	118.11	120.30
59	A5	2152	C	N1-C2-O2	5.46	122.18	118.90
59	A5	2158	U	C5-C6-N1	5.46	125.43	122.70
59	A5	3471	A	N9-C4-C5	-5.46	103.61	105.80
58	B2	463	G	C4-C5-N7	-5.46	108.61	110.80
59	A5	839	A	N1-C2-N3	-5.46	126.57	129.30
59	A5	1596	A	N3-C4-C5	-5.46	122.98	126.80
58	B2	420	U	N1-C2-O2	5.46	126.62	122.80
59	A5	228	C	N1-C2-O2	5.46	122.18	118.90
59	A5	1700	U	C4-C5-C6	-5.46	116.42	119.70
59	A5	3315	U	N3-C2-O2	-5.46	118.38	122.20
59	A5	1198	U	N3-C2-O2	-5.46	118.38	122.20
59	A5	3921	A	C4-C5-C6	-5.46	114.27	117.00
59	A5	389	G	N1-C6-O6	-5.46	116.62	119.90
59	A5	996	C	O4'-C1'-N1	5.46	112.57	108.20
59	A5	1894	G	C4-C5-N7	5.46	112.98	110.80
59	A5	2744	C	N3-C2-O2	-5.46	118.08	121.90
59	A5	3376	C	C5-C4-N4	-5.46	116.38	120.20
59	A5	3741	A	N7-C8-N9	5.46	116.53	113.80
58	B2	1053	A	C6-C5-N7	-5.46	128.48	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	444	C	N1-C2-O2	5.46	122.17	118.90
59	A5	1113	A	N9-C4-C5	5.46	107.98	105.80
59	A5	1180	U	O4'-C1'-N1	-5.46	103.83	108.20
59	A5	1417	G	C4-N9-C1'	5.46	133.59	126.50
59	A5	1621	A	C6-C5-N7	-5.46	128.48	132.30
59	A5	1791	A	N7-C8-N9	5.46	116.53	113.80
59	A5	3763	U	C4-C5-C6	-5.46	116.43	119.70
32	CT	149	ALA	C-N-CA	5.46	135.34	121.70
59	A5	247	C	C4-C5-C6	-5.46	114.67	117.40
56	A8	20	C	C2-N3-C4	5.45	122.63	119.90
59	A5	55	U	C6-N1-C2	-5.45	117.73	121.00
59	A5	1984	U	C6-N1-C2	-5.45	117.73	121.00
59	A5	2649	A	N3-C4-C5	5.45	130.62	126.80
59	A5	3356	G	N3-C4-N9	5.45	129.27	126.00
21	AD	206	LEU	CA-CB-CG	5.45	127.84	115.30
27	CI	91	LEU	C-N-CA	5.45	135.33	121.70
41	Ce	46	ARG	NE-CZ-NH2	5.45	123.03	120.30
59	A5	1613	A	C6-N1-C2	-5.45	115.33	118.60
59	A5	1684	G	OP1-P-O3'	5.45	117.19	105.20
59	A5	2099	C	N3-C2-O2	-5.45	118.08	121.90
59	A5	3525	A	C8-N9-C4	-5.45	103.62	105.80
59	A5	3644	C	C6-N1-C2	-5.45	118.12	120.30
59	A5	3728	A	N9-C4-C5	-5.45	103.62	105.80
59	A5	463	C	C6-N1-C2	-5.45	118.12	120.30
59	A5	799	A	OP2-P-O3'	5.45	117.19	105.20
59	A5	1057	G	C5-C6-O6	-5.45	125.33	128.60
59	A5	1778	A	N3-C4-N9	-5.45	123.04	127.40
59	A5	2251	G	O5'-P-OP2	-5.45	100.80	105.70
59	A5	3619	U	C4-C5-C6	-5.45	116.43	119.70
59	A5	3629	U	C4-C5-C6	-5.45	116.43	119.70
59	A5	3673	G	C5-C6-O6	-5.45	125.33	128.60
59	A5	3776	A	O4'-C1'-N9	-5.45	103.84	108.20
56	A8	49	C	N3-C2-O2	-5.45	118.09	121.90
58	B2	68	C	N1-C2-O2	5.45	122.17	118.90
59	A5	739	U	C6-N1-C1'	-5.45	113.57	121.20
59	A5	1105	U	O5'-P-OP1	-5.45	100.80	105.70
59	A5	1979	A	N1-C6-N6	-5.45	115.33	118.60
59	A5	2220	C	C5-C4-N4	5.45	124.01	120.20
59	A5	2500	G	C8-N9-C4	-5.45	104.22	106.40
59	A5	2561	A	C8-N9-C4	5.45	107.98	105.80
59	A5	2755	G	C6-C5-N7	-5.45	127.13	130.40
59	A5	905	U	N3-C2-O2	-5.45	118.39	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1875	G	N9-C4-C5	-5.45	103.22	105.40
59	A5	2494	G	C2-N3-C4	5.45	114.62	111.90
59	A5	2736	A	C4-C5-C6	-5.45	114.28	117.00
58	B2	1409	A	C8-N9-C4	5.45	107.98	105.80
59	A5	100	G	O5'-P-OP1	-5.45	100.80	105.70
59	A5	240	G	C5-N7-C8	-5.45	101.58	104.30
59	A5	819	U	C4-C5-C6	-5.45	116.43	119.70
59	A5	1208	U	N1-C2-O2	5.45	126.61	122.80
59	A5	1795	A	N1-C6-N6	-5.45	115.33	118.60
59	A5	2042	A	O5'-P-OP2	-5.45	100.80	105.70
59	A5	3294	A	C5-N7-C8	-5.45	101.18	103.90
56	A8	69	G	N1-C6-O6	5.44	123.17	119.90
59	A5	1035	G	O4'-C1'-N9	5.44	112.55	108.20
59	A5	1755	U	C4-C5-C6	-5.44	116.44	119.70
59	A5	2205	G	C4-C5-N7	5.44	112.98	110.80
59	A5	3343	A	C8-N9-C4	5.44	107.98	105.80
59	A5	655	C	N3-C2-O2	-5.44	118.09	121.90
59	A5	790	U	N1-C2-O2	5.44	126.61	122.80
59	A5	1079	U	C2-N1-C1'	-5.44	111.17	117.70
59	A5	1739	U	N1-C2-O2	5.44	126.61	122.80
59	A5	2481	U	N1-C2-O2	5.44	126.61	122.80
59	A5	3239	C	N1-C2-O2	5.44	122.17	118.90
59	A5	3765	A	C6-C5-N7	-5.44	128.49	132.30
25	Ca	116	GLY	N-CA-C	5.44	126.70	113.10
59	A5	105	A	N1-C2-N3	-5.44	126.58	129.30
59	A5	2755	G	N7-C8-N9	5.44	115.82	113.10
59	A5	3244	U	C2-N1-C1'	5.44	124.23	117.70
58	B2	1216	C	N1-C2-O2	5.44	122.16	118.90
58	B2	1344	A	C4-N9-C1'	5.44	136.09	126.30
59	A5	427	A	C5-C6-N1	5.44	120.42	117.70
59	A5	1087	G	C4-C5-C6	-5.44	115.54	118.80
59	A5	1181	A	N1-C2-N3	-5.44	126.58	129.30
59	A5	1326	A	C8-N9-C4	-5.44	103.62	105.80
59	A5	1516	A	C4-C5-C6	-5.44	114.28	117.00
59	A5	1555	G	O5'-P-OP2	-5.44	100.81	105.70
59	A5	1577	A	N1-C6-N6	5.44	121.86	118.60
59	A5	3594	A	C4-C5-N7	5.44	113.42	110.70
59	A5	1163	G	N7-C8-N9	5.44	115.82	113.10
59	A5	2222	G	N7-C8-N9	5.44	115.82	113.10
59	A5	2704	A	C6-C5-N7	-5.44	128.50	132.30
59	A5	3840	G	N3-C2-N2	-5.44	116.09	119.90
58	B2	372	A	C8-N9-C4	5.43	107.97	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1842	U	N1-C2-O2	5.43	126.60	122.80
58	B2	1957	A	C8-N9-C4	-5.43	103.63	105.80
59	A5	448	A	C5-N7-C8	-5.43	101.18	103.90
59	A5	1174	G	C4-N9-C1'	5.43	133.56	126.50
59	A5	1525	G	O5'-P-OP2	-5.43	100.81	105.70
59	A5	2666	G	C4-C5-N7	5.43	112.97	110.80
59	A5	3150	G	C2-N3-C4	5.43	114.62	111.90
56	A8	33	U	N3-C4-O4	5.43	123.20	119.40
58	B2	105	U	N1-C2-O2	5.43	126.60	122.80
59	A5	776	A	C8-N9-C4	-5.43	103.63	105.80
59	A5	1685	G	C4-C5-N7	5.43	112.97	110.80
59	A5	1988	A	C2-N3-C4	5.43	113.32	110.60
59	A5	2037	C	OP2-P-O3'	5.43	117.15	105.20
59	A5	3824	C	O5'-P-OP2	-5.43	100.81	105.70
56	A8	18	C	C4-C5-C6	-5.43	114.68	117.40
59	A5	1075	G	O5'-P-OP2	-5.43	100.81	105.70
59	A5	1604	G	C4-C5-N7	5.43	112.97	110.80
59	A5	2072	C	C5-C6-N1	5.43	123.72	121.00
59	A5	81	A	N1-C6-N6	-5.43	115.34	118.60
59	A5	664	U	C6-N1-C2	-5.43	117.74	121.00
59	A5	1146	U	N1-C2-N3	5.43	118.16	114.90
59	A5	1271	G	C6-C5-N7	-5.43	127.14	130.40
59	A5	1739	U	N3-C2-O2	-5.43	118.40	122.20
59	A5	1804	A	N9-C4-C5	5.43	107.97	105.80
59	A5	3263	C	C2-N1-C1'	5.43	124.77	118.80
59	A5	3303	G	OP1-P-O3'	5.43	117.15	105.20
59	A5	755	A	C4-N9-C1'	5.43	136.07	126.30
55	A7	9	C	C5-C6-N1	5.43	123.71	121.00
59	A5	2195	A	N9-C4-C5	-5.43	103.63	105.80
59	A5	2925	C	N1-C2-O2	5.43	122.16	118.90
59	A5	3721	C	N3-C4-C5	5.43	124.07	121.90
59	A5	620	U	OP2-P-O3'	5.42	117.13	105.20
58	B2	306	A	N7-C8-N9	5.42	116.51	113.80
58	B2	1053	A	C5-N7-C8	-5.42	101.19	103.90
59	A5	992	U	P-O3'-C3'	5.42	126.21	119.70
56	A8	36	A	C4-C5-C6	-5.42	114.29	117.00
56	A8	91	C	C5-C6-N1	5.42	123.71	121.00
58	B2	1921	G	N3-C4-C5	5.42	131.31	128.60
59	A5	375	C	N3-C4-N4	-5.42	114.20	118.00
59	A5	653	U	N3-C2-O2	-5.42	118.41	122.20
59	A5	1031	G	N1-C2-N2	-5.42	111.32	116.20
59	A5	1698	A	OP2-P-O3'	5.42	117.13	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2069	U	N3-C2-O2	-5.42	118.40	122.20
59	A5	2517	A	C5-C6-N6	5.42	128.04	123.70
59	A5	2537	A	N3-C4-C5	5.42	130.59	126.80
59	A5	3802	U	N1-C2-O2	-5.42	119.00	122.80
58	B2	1384	G	N3-C4-N9	-5.42	122.75	126.00
59	A5	462	C	C2-N1-C1'	5.42	124.76	118.80
59	A5	2222	G	C8-N9-C4	-5.42	104.23	106.40
59	A5	3519	C	C4-C5-C6	-5.42	114.69	117.40
58	B2	112	U	O4'-C1'-N1	5.42	112.53	108.20
59	A5	997	U	N3-C2-O2	-5.42	118.41	122.20
59	A5	1009	G	C2-N3-C4	5.42	114.61	111.90
59	A5	1111	C	N1-C2-N3	5.42	122.99	119.20
59	A5	2209	G	C8-N9-C4	5.42	108.57	106.40
59	A5	2497	C	C5-C6-N1	5.42	123.71	121.00
59	A5	2782	A	N9-C4-C5	5.42	107.97	105.80
59	A5	3322	A	C5-C6-N1	5.42	120.41	117.70
59	A5	3512	U	OP2-P-O3'	5.42	117.12	105.20
55	A7	67	G	N7-C8-N9	5.42	115.81	113.10
56	A8	5	C	N3-C4-C5	-5.42	119.73	121.90
58	B2	1167	U	C2-N1-C1'	5.42	124.20	117.70
58	B2	1222	C	C5-C6-N1	5.42	123.71	121.00
58	B2	1361	C	C6-N1-C1'	-5.42	114.30	120.80
59	A5	116	U	N3-C2-O2	-5.42	118.41	122.20
59	A5	235	A	C5-N7-C8	-5.42	101.19	103.90
59	A5	1058	A	O5'-P-OP1	-5.42	100.83	105.70
59	A5	1528	G	N9-C4-C5	-5.42	103.23	105.40
59	A5	1752	G	C2-N3-C4	5.42	114.61	111.90
59	A5	2168	G	N1-C2-N3	5.42	127.15	123.90
59	A5	2531	A	O5'-P-OP1	-5.42	100.83	105.70
59	A5	3353	C	N3-C2-O2	-5.42	118.11	121.90
59	A5	1343	A	N9-C4-C5	-5.42	103.63	105.80
59	A5	3393	U	C2-N3-C4	5.42	130.25	127.00
56	A8	42	A	C8-N9-C4	5.41	107.97	105.80
59	A5	355	G	N3-C4-C5	-5.41	125.89	128.60
59	A5	776	A	C5-C6-N6	5.41	128.03	123.70
59	A5	818	A	OP2-P-O3'	5.41	117.11	105.20
59	A5	1145	C	C2-N1-C1'	-5.41	112.84	118.80
59	A5	1867	A	C6-C5-N7	5.41	136.09	132.30
58	B2	1921	G	N3-C4-N9	-5.41	122.75	126.00
59	A5	1323	C	C4-C5-C6	-5.41	114.69	117.40
59	A5	2004	G	N9-C4-C5	-5.41	103.23	105.40
58	B2	1225	A	N9-C4-C5	-5.41	103.64	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1600	U	C5-C4-O4	-5.41	122.65	125.90
59	A5	1671	U	OP1-P-OP2	-5.41	111.48	119.60
59	A5	3770	A	C4-N9-C1'	5.41	136.04	126.30
59	A5	3958	C	C6-N1-C2	-5.41	118.14	120.30
56	A8	67	G	C5-C6-O6	5.41	131.84	128.60
59	A5	54	U	N1-C2-O2	5.41	126.59	122.80
59	A5	1032	G	C5-C6-N1	5.41	114.20	111.50
59	A5	1320	U	C4-C5-C6	-5.41	116.45	119.70
59	A5	1730	A	C5-C6-N1	5.41	120.40	117.70
59	A5	2154	A	C2-N3-C4	-5.41	107.90	110.60
59	A5	3596	A	C2-N3-C4	-5.41	107.90	110.60
59	A5	2149	G	N3-C4-C5	-5.41	125.90	128.60
59	A5	2241	U	C5-C6-N1	5.41	125.40	122.70
59	A5	3730	G	C4-C5-C6	5.41	122.04	118.80
59	A5	3872	C	N3-C2-O2	-5.41	118.11	121.90
56	A8	57	G	C2-N3-C4	5.41	114.60	111.90
58	B2	991	G	O5'-P-OP2	-5.41	100.83	105.70
58	B2	1686	C	N1-C2-O2	5.41	122.14	118.90
58	B2	1924	C	N3-C2-O2	-5.41	118.12	121.90
59	A5	359	G	C5-C6-O6	5.41	131.84	128.60
59	A5	817	C	N3-C2-O2	-5.41	118.12	121.90
59	A5	1615	G	N3-C4-C5	5.41	131.30	128.60
58	B2	1191	C	C5-C4-N4	5.40	123.98	120.20
59	A5	1024	U	N3-C2-O2	-5.40	118.42	122.20
59	A5	2054	U	N1-C2-N3	5.40	118.14	114.90
59	A5	3473	C	C5-C6-N1	5.40	123.70	121.00
58	B2	939	G	C4-N9-C1'	5.40	133.52	126.50
58	B2	1024	C	O5'-P-OP1	-5.40	100.84	105.70
58	B2	1234	G	C5-C6-N1	5.40	114.20	111.50
59	A5	1068	C	C4-C5-C6	-5.40	114.70	117.40
59	A5	1268	A	C5-C6-N6	5.40	128.02	123.70
59	A5	2723	A	C5-C6-N6	-5.40	119.38	123.70
59	A5	3519	C	OP1-P-OP2	-5.40	111.50	119.60
56	A8	20	C	C6-N1-C2	-5.40	118.14	120.30
58	B2	1406	A	C8-N9-C4	-5.40	103.64	105.80
59	A5	664	U	O5'-P-OP2	-5.40	100.84	105.70
59	A5	1076	A	C6-C5-N7	-5.40	128.52	132.30
59	A5	1137	G	C6-N1-C2	-5.40	121.86	125.10
59	A5	2161	G	N3-C4-N9	-5.40	122.76	126.00
59	A5	2558	A	C5-C6-N6	-5.40	119.38	123.70
59	A5	3567	A	P-O3'-C3'	5.40	126.18	119.70
59	A5	3894	C	C2-N1-C1'	5.40	124.74	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	948	A	P-O3'-C3'	5.40	126.18	119.70
59	A5	866	C	C6-N1-C1'	-5.40	114.32	120.80
59	A5	1865	U	C5-C6-N1	5.40	125.40	122.70
59	A5	2248	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	3493	U	C4-C5-C6	-5.40	116.46	119.70
59	A5	3593	A	P-O3'-C3'	5.40	126.18	119.70
56	A8	92	G	N3-C4-N9	5.40	129.24	126.00
58	B2	1414	C	N3-C2-O2	-5.40	118.12	121.90
59	A5	130	C	P-O3'-C3'	5.40	126.18	119.70
59	A5	322	G	N1-C2-N2	5.40	121.06	116.20
59	A5	2521	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	2669	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	3489	A	N1-C2-N3	-5.40	126.60	129.30
59	A5	3142	G	N3-C4-N9	5.40	129.24	126.00
59	A5	3348	G	C5-N7-C8	5.40	107.00	104.30
27	CI	107	GLY	N-CA-C	5.39	126.59	113.10
58	B2	314	C	N1-C2-O2	5.39	122.14	118.90
58	B2	1450	U	N1-C2-O2	5.39	126.58	122.80
59	A5	53	A	C5-N7-C8	-5.39	101.20	103.90
59	A5	851	G	N3-C4-N9	5.39	129.24	126.00
59	A5	1748	C	N3-C2-O2	-5.39	118.12	121.90
59	A5	2754	G	C8-N9-C4	-5.39	104.24	106.40
59	A5	3214	C	N1-C2-O2	5.39	122.14	118.90
59	A5	3606	G	C5-C6-N1	5.39	114.20	111.50
58	B2	994	A	N1-C6-N6	-5.39	115.36	118.60
59	A5	26	G	C4-C5-C6	5.39	122.04	118.80
59	A5	404	U	N3-C2-O2	-5.39	118.43	122.20
59	A5	1160	U	C1'-O4'-C4'	-5.39	105.59	109.90
59	A5	2164	G	N1-C6-O6	5.39	123.14	119.90
59	A5	2515	C	N3-C4-N4	-5.39	114.23	118.00
58	B2	1198	G	N1-C6-O6	-5.39	116.67	119.90
59	A5	105	A	C6-N1-C2	5.39	121.83	118.60
59	A5	388	U	N3-C2-O2	-5.39	118.43	122.20
59	A5	1064	G	O5'-P-OP2	5.39	117.17	110.70
59	A5	1199	C	O5'-P-OP1	-5.39	100.85	105.70
59	A5	2723	A	O5'-P-OP1	5.39	117.17	110.70
59	A5	1334	A	C6-N1-C2	-5.39	115.37	118.60
59	A5	2658	A	C6-C5-N7	5.39	136.07	132.30
59	A5	3164	C	OP1-P-O3'	5.39	117.05	105.20
59	A5	3316	U	N3-C2-O2	-5.39	118.43	122.20
3	AB	234	LEU	CA-CB-CG	5.39	127.69	115.30
59	A5	675	C	C5-C6-N1	5.39	123.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1121	A	N1-C6-N6	-5.39	115.37	118.60
59	A5	1972	C	C2-N1-C1'	-5.39	112.88	118.80
59	A5	2237	A	C4-C5-N7	5.39	113.39	110.70
59	A5	3164	C	C2-N3-C4	5.39	122.59	119.90
41	Ce	15	ARG	CG-CD-NE	5.38	123.11	111.80
58	B2	1199	G	C5-C6-N1	5.38	114.19	111.50
58	B2	1933	U	C5-C6-N1	5.38	125.39	122.70
59	A5	120	C	C6-N1-C1'	-5.38	114.34	120.80
59	A5	810	A	N3-C4-C5	5.38	130.57	126.80
59	A5	826	A	C4-N9-C1'	5.38	135.99	126.30
59	A5	1113	A	N7-C8-N9	5.38	116.49	113.80
59	A5	1660	G	OP1-P-O3'	5.38	117.05	105.20
59	A5	1660	G	N1-C6-O6	-5.38	116.67	119.90
59	A5	3347	G	N3-C2-N2	5.38	123.67	119.90
59	A5	3912	U	C2-N1-C1'	5.38	124.16	117.70
26	CN	164	LEU	CB-CG-CD1	-5.38	101.85	111.00
59	A5	108	A	N3-C4-C5	5.38	130.57	126.80
59	A5	3253	G	N7-C8-N9	5.38	115.79	113.10
59	A5	3404	A	OP2-P-O3'	5.38	117.04	105.20
58	B2	717	C	N1-C2-O2	5.38	122.13	118.90
58	B2	1036	C	C6-N1-C2	-5.38	118.15	120.30
58	B2	1227	A	C4-C5-C6	-5.38	114.31	117.00
59	A5	980	A	N1-C6-N6	-5.38	115.37	118.60
59	A5	1797	A	N9-C1'-C2'	5.38	121.00	114.00
59	A5	3406	G	N7-C8-N9	5.38	115.79	113.10
59	A5	369	A	N3-C4-C5	5.38	130.57	126.80
59	A5	1094	A	C8-N9-C4	5.38	107.95	105.80
59	A5	1527	C	N3-C4-C5	5.38	124.05	121.90
59	A5	1616	G	C2-N3-C4	-5.38	109.21	111.90
59	A5	3478	G	N3-C4-N9	5.38	129.23	126.00
58	B2	1024	C	C5-C6-N1	5.38	123.69	121.00
58	B2	1752	U	C6-N1-C1'	-5.38	113.67	121.20
59	A5	1611	G	C6-C5-N7	5.38	133.63	130.40
59	A5	2148	C	C4-C5-C6	-5.38	114.71	117.40
59	A5	3322	A	N1-C6-N6	-5.38	115.37	118.60
55	A7	91	C	N3-C4-N4	-5.38	114.24	118.00
59	A5	1150	G	O5'-P-OP1	-5.38	100.86	105.70
59	A5	2150	U	C6-N1-C2	-5.38	117.78	121.00
59	A5	2159	C	N1-C2-O2	5.38	122.13	118.90
59	A5	2735	A	O5'-P-OP1	-5.38	100.86	105.70
59	A5	2785	C	N3-C2-O2	-5.38	118.14	121.90
59	A5	3343	A	C5-N7-C8	-5.38	101.21	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	836	G	N7-C8-N9	5.38	115.79	113.10
59	A5	1163	G	C5-N7-C8	-5.38	101.61	104.30
59	A5	2584	G	C8-N9-C4	-5.38	104.25	106.40
59	A5	2652	U	N1-C2-O2	5.38	126.56	122.80
59	A5	3520	U	N1-C2-O2	5.38	126.56	122.80
58	B2	950	U	N1-C2-O2	5.37	126.56	122.80
59	A5	233	A	C5-C6-N1	5.37	120.39	117.70
59	A5	245	G	N1-C6-O6	5.37	123.12	119.90
59	A5	1641	U	C2-N3-C4	-5.37	123.78	127.00
59	A5	2715	C	C5-C4-N4	5.37	123.96	120.20
59	A5	3145	U	C2-N1-C1'	5.37	124.15	117.70
59	A5	3152	G	C5-C6-N1	5.37	114.19	111.50
59	A5	3326	G	C6-C5-N7	-5.37	127.18	130.40
59	A5	3597	C	N1-C2-O2	5.37	122.12	118.90
58	B2	448	C	C2-N1-C1'	5.37	124.71	118.80
58	B2	632	G	C6-C5-N7	-5.37	127.18	130.40
59	A5	435	G	N1-C2-N2	-5.37	111.36	116.20
59	A5	1536	U	O5'-P-OP2	-5.37	100.86	105.70
59	A5	3288	C	C6-N1-C2	-5.37	118.15	120.30
59	A5	1675	G	C2-N3-C4	5.37	114.58	111.90
59	A5	1872	A	C2-N3-C4	-5.37	107.92	110.60
59	A5	83	U	C6-N1-C2	-5.37	117.78	121.00
59	A5	1068	C	C2-N3-C4	5.37	122.58	119.90
59	A5	1351	C	C5-C6-N1	5.37	123.68	121.00
58	B2	1607	U	N3-C2-O2	-5.37	118.44	122.20
59	A5	3517	U	O5'-P-OP1	-5.37	100.87	105.70
59	A5	542	C	C6-N1-C1'	5.37	127.24	120.80
59	A5	1052	U	N3-C2-O2	-5.37	118.44	122.20
59	A5	2260	U	N1-C2-O2	5.37	126.56	122.80
59	A5	2516	U	N3-C4-O4	-5.37	115.64	119.40
59	A5	2760	G	C8-N9-C1'	5.37	133.97	127.00
59	A5	3938	C	N3-C4-C5	-5.37	119.75	121.90
58	B2	1079	A	N7-C8-N9	5.36	116.48	113.80
58	B2	1874	C	N3-C4-C5	5.36	124.05	121.90
59	A5	38	A	C8-N9-C4	5.36	107.94	105.80
59	A5	1086	C	N1-C2-O2	5.36	122.12	118.90
59	A5	2741	A	N1-C6-N6	-5.36	115.38	118.60
59	A5	2762	A	C4-C5-C6	-5.36	114.32	117.00
59	A5	3139	G	C8-N9-C4	5.36	108.55	106.40
59	A5	3488	G	N1-C6-O6	5.36	123.12	119.90
59	A5	3759	G	C6-C5-N7	5.36	133.62	130.40
59	A5	240	G	C4-C5-N7	5.36	112.94	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2506	U	N1-C2-O2	5.36	126.55	122.80
59	A5	3887	U	C4-C5-C6	-5.36	116.48	119.70
58	B2	1283	C	N1-C2-O2	5.36	122.12	118.90
59	A5	316	U	N1-C2-O2	5.36	126.55	122.80
59	A5	1017	A	N7-C8-N9	5.36	116.48	113.80
59	A5	1062	C	N3-C2-O2	-5.36	118.15	121.90
59	A5	1111	C	N3-C2-O2	-5.36	118.15	121.90
59	A5	3131	C	N3-C2-O2	-5.36	118.15	121.90
58	B2	1976	A	N1-C6-N6	-5.36	115.39	118.60
59	A5	108	A	C2-N3-C4	-5.36	107.92	110.60
59	A5	855	A	C6-C5-N7	5.36	136.05	132.30
59	A5	1285	C	C6-N1-C2	-5.36	118.16	120.30
59	A5	2211	A	C5-C6-N6	-5.36	119.41	123.70
59	A5	2692	U	C2-N1-C1'	5.36	124.13	117.70
59	A5	3410	G	N1-C6-O6	-5.36	116.69	119.90
64	AQ	129	CYS	C-N-CA	5.36	135.09	121.70
58	B2	1257	G	C6-C5-N7	-5.36	127.19	130.40
59	A5	1137	G	N9-C4-C5	5.36	107.54	105.40
59	A5	1167	A	N1-C6-N6	-5.36	115.39	118.60
59	A5	1790	A	O5'-P-OP2	-5.36	100.88	105.70
59	A5	2658	A	N3-C4-C5	5.36	130.55	126.80
59	A5	3892	A	C2-N3-C4	5.36	113.28	110.60
59	A5	780	U	C5-C6-N1	5.35	125.38	122.70
59	A5	1335	C	N3-C4-C5	5.35	124.04	121.90
59	A5	2759	G	C5-C6-O6	-5.35	125.39	128.60
59	A5	3729	A	N3-C4-N9	-5.35	123.12	127.40
4	CB	325	GLU	CA-CB-CG	5.35	125.18	113.40
59	A5	560	U	N3-C2-O2	-5.35	118.45	122.20
59	A5	855	A	C4-C5-C6	-5.35	114.32	117.00
59	A5	1099	U	N3-C4-O4	-5.35	115.65	119.40
59	A5	1126	A	C8-N9-C4	-5.35	103.66	105.80
59	A5	1160	U	N3-C2-O2	-5.35	118.45	122.20
59	A5	2085	G	C4-N9-C1'	-5.35	119.54	126.50
59	A5	2599	G	C6-C5-N7	5.35	133.61	130.40
58	B2	299	C	C5-C6-N1	5.35	123.68	121.00
59	A5	3881	A	C5-N7-C8	-5.35	101.22	103.90
59	A5	1182	A	C5-C6-N1	5.35	120.38	117.70
59	A5	1892	C	C2-N1-C1'	5.35	124.68	118.80
59	A5	2772	G	N1-C2-N2	5.35	121.01	116.20
59	A5	3326	G	C4-C5-N7	5.35	112.94	110.80
55	A7	79	U	N1-C2-N3	5.35	118.11	114.90
59	A5	125	A	C5-C6-N6	-5.35	119.42	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	920	G	C4-C5-N7	5.35	112.94	110.80
59	A5	1012	G	N7-C8-N9	5.35	115.77	113.10
59	A5	2137	U	N1-C2-O2	-5.35	119.06	122.80
59	A5	2514	U	C4-C5-C6	-5.35	116.49	119.70
59	A5	2785	C	N1-C2-N3	5.35	122.94	119.20
59	A5	3257	U	OP2-P-O3'	5.35	116.96	105.20
41	Ce	53	LEU	C-N-CA	5.35	135.06	121.70
55	A7	119	C	C6-N1-C2	-5.35	118.16	120.30
59	A5	654	G	O4'-C1'-N9	5.35	112.48	108.20
59	A5	825	C	C2-N3-C4	5.35	122.57	119.90
59	A5	2038	A	N1-C2-N3	-5.35	126.63	129.30
59	A5	3891	U	P-O3'-C3'	5.35	126.11	119.70
58	B2	422	A	P-O3'-C3'	5.34	126.11	119.70
59	A5	1053	G	N9-C4-C5	-5.34	103.26	105.40
59	A5	1217	U	N1-C2-O2	5.34	126.54	122.80
59	A5	2574	C	O5'-P-OP1	-5.34	100.89	105.70
59	A5	2646	U	C5-C6-N1	5.34	125.37	122.70
59	A5	3883	G	OP1-P-O3'	5.34	116.96	105.20
59	A5	44	A	N7-C8-N9	-5.34	111.13	113.80
59	A5	1484	U	N1-C2-O2	5.34	126.54	122.80
59	A5	1603	A	C4-C5-N7	5.34	113.37	110.70
59	A5	1790	A	C4-C5-C6	-5.34	114.33	117.00
58	B2	336	A	N1-C6-N6	-5.34	115.39	118.60
58	B2	958	G	C8-N9-C1'	-5.34	120.06	127.00
58	B2	1207	G	OP1-P-O3'	5.34	116.95	105.20
58	B2	1223	U	C2-N1-C1'	5.34	124.11	117.70
59	A5	1125	A	N9-C4-C5	-5.34	103.66	105.80
59	A5	2479	A	C2-N3-C4	5.34	113.27	110.60
59	A5	2661	G	C8-N9-C4	-5.34	104.26	106.40
59	A5	3376	C	C6-N1-C2	-5.34	118.16	120.30
6	CC	78	ARG	CG-CD-NE	5.34	123.01	111.80
58	B2	638	A	C2-N3-C4	5.34	113.27	110.60
59	A5	204	G	C6-C5-N7	-5.34	127.20	130.40
59	A5	859	A	OP1-P-O3'	5.34	116.95	105.20
59	A5	1129	A	C2-N3-C4	5.34	113.27	110.60
59	A5	1325	C	C2-N3-C4	5.34	122.57	119.90
59	A5	1400	A	N9-C4-C5	-5.34	103.66	105.80
59	A5	1607	A	N3-C4-C5	-5.34	123.06	126.80
59	A5	2178	U	N3-C4-C5	5.34	117.80	114.60
59	A5	3660	U	C5-C6-N1	5.34	125.37	122.70
59	A5	3877	G	C6-C5-N7	5.34	133.60	130.40
58	B2	819	G	C5-C6-O6	-5.34	125.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	828	G	N3-C4-N9	5.34	129.20	126.00
59	A5	1083	A	OP1-P-O3'	5.34	116.94	105.20
59	A5	1124	G	C2-N3-C4	-5.34	109.23	111.90
59	A5	1359	G	N3-C2-N2	-5.34	116.17	119.90
59	A5	1795	A	P-O3'-C3'	5.34	126.10	119.70
59	A5	2244	G	C4-C5-N7	5.34	112.93	110.80
59	A5	3167	A	N1-C2-N3	-5.34	126.63	129.30
59	A5	3518	A	C5-C6-N6	5.34	127.97	123.70
59	A5	3655	U	N1-C2-N3	5.34	118.10	114.90
59	A5	3723	A	C2-N3-C4	5.34	113.27	110.60
59	A5	102	G	C8-N9-C4	-5.33	104.27	106.40
59	A5	810	A	N7-C8-N9	5.33	116.47	113.80
59	A5	3346	G	C6-N1-C2	-5.33	121.90	125.10
58	B2	1247	C	C6-N1-C2	-5.33	118.17	120.30
58	B2	1954	C	N1-C2-O2	5.33	122.10	118.90
59	A5	357	C	C4-C5-C6	-5.33	114.73	117.40
59	A5	1141	G	C4-N9-C1'	5.33	133.43	126.50
59	A5	2546	G	C5-C6-N1	5.33	114.17	111.50
59	A5	2780	A	N1-C2-N3	-5.33	126.63	129.30
58	B2	1245	A	N1-C6-N6	-5.33	115.40	118.60
59	A5	1009	G	C4-C5-N7	5.33	112.93	110.80
59	A5	1317	A	N7-C8-N9	5.33	116.47	113.80
59	A5	1410	A	N1-C6-N6	-5.33	115.40	118.60
59	A5	1603	A	O5'-P-OP1	-5.33	100.90	105.70
59	A5	2785	C	C5-C6-N1	5.33	123.67	121.00
56	A8	30	G	OP1-P-OP2	5.33	127.59	119.60
59	A5	23	U	C5-C4-O4	5.33	129.10	125.90
59	A5	2239	C	C5-C6-N1	5.33	123.67	121.00
59	A5	2513	G	C5-C6-O6	5.33	131.80	128.60
59	A5	3363	G	C6-C5-N7	-5.33	127.20	130.40
59	A5	3608	G	C4-C5-C6	5.33	122.00	118.80
59	A5	3758	G	N9-C4-C5	-5.33	103.27	105.40
41	Ce	46	ARG	NE-CZ-NH1	-5.33	117.64	120.30
59	A5	1054	A	C2-N3-C4	-5.33	107.94	110.60
59	A5	1329	G	N1-C2-N2	5.33	121.00	116.20
59	A5	1382	U	C5'-C4'-C3'	5.33	124.53	116.00
59	A5	2567	U	OP1-P-OP2	-5.33	111.61	119.60
59	A5	3547	U	C5-C4-O4	5.33	129.10	125.90
59	A5	448	A	N1-C2-N3	-5.33	126.64	129.30
59	A5	2041	G	C8-N9-C4	5.33	108.53	106.40
58	B2	249	U	O4'-C1'-N1	5.33	112.46	108.20
59	A5	767	A	C2-N3-C4	-5.33	107.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	864	G	C8-N9-C4	-5.33	104.27	106.40
59	A5	1534	G	N3-C4-C5	-5.33	125.94	128.60
59	A5	1967	G	N3-C4-C5	5.33	131.26	128.60
59	A5	2162	C	N3-C4-N4	-5.33	114.27	118.00
59	A5	2198	G	C8-N9-C1'	-5.33	120.08	127.00
59	A5	2521	A	N3-C4-C5	5.33	130.53	126.80
59	A5	2620	C	N3-C2-O2	-5.33	118.17	121.90
59	A5	3000	G	C8-N9-C1'	-5.33	120.08	127.00
59	A5	311	C	C4-C5-C6	-5.32	114.74	117.40
59	A5	1169	C	N1-C2-O2	5.32	122.09	118.90
59	A5	1736	G	N1-C6-O6	-5.32	116.71	119.90
59	A5	3349	A	OP2-P-O3'	5.32	116.91	105.20
59	A5	3919	G	N9-C4-C5	-5.32	103.27	105.40
59	A5	2155	A	C4-N9-C1'	5.32	135.88	126.30
58	B2	591	C	C2-N1-C1'	5.32	124.65	118.80
59	A5	103	A	C5-N7-C8	-5.32	101.24	103.90
59	A5	130	C	C5-C6-N1	5.32	123.66	121.00
59	A5	1295	A	O5'-P-OP2	5.32	117.08	110.70
59	A5	1386	U	C5-C6-N1	5.32	125.36	122.70
59	A5	1616	G	N1-C2-N2	-5.32	111.41	116.20
59	A5	2194	G	N1-C2-N2	5.32	120.99	116.20
59	A5	2550	G	OP1-P-OP2	5.32	127.58	119.60
59	A5	3675	A	N7-C8-N9	5.32	116.46	113.80
59	A5	3677	U	C3'-C2'-C1'	-5.32	97.24	101.50
54	A9	6	G	C6-C5-N7	-5.32	127.21	130.40
59	A5	1288	U	O4'-C1'-N1	-5.32	103.94	108.20
58	B2	31	C	N3-C2-O2	-5.32	118.18	121.90
59	A5	2009	A	C5-C6-N1	5.32	120.36	117.70
59	A5	2525	C	N3-C2-O2	-5.32	118.18	121.90
59	A5	2573	C	C5-C6-N1	5.32	123.66	121.00
59	A5	3327	U	C6-N1-C2	-5.32	117.81	121.00
59	A5	3616	G	C4-C5-N7	5.32	112.93	110.80
41	Ce	47	ARG	NE-CZ-NH1	5.32	122.96	120.30
56	A8	103	C	P-O5'-C5'	5.32	129.40	120.90
59	A5	915	C	C5-C6-N1	5.32	123.66	121.00
59	A5	1131	C	OP1-P-O3'	5.32	116.89	105.20
59	A5	1888	A	C4-N9-C1'	5.32	135.87	126.30
59	A5	3143	U	C5-C4-O4	-5.32	122.71	125.90
59	A5	3883	G	C8-N9-C1'	-5.31	120.09	127.00
58	B2	1199	G	N9-C4-C5	-5.31	103.28	105.40
59	A5	32	C	C2-N3-C4	5.31	122.56	119.90
59	A5	819	U	C5-C6-N1	5.31	125.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1543	C	N1-C2-N3	5.31	122.92	119.20
59	A5	2586	A	C8-N9-C4	-5.31	103.67	105.80
59	A5	3293	G	N3-C4-N9	5.31	129.19	126.00
59	A5	103	A	N1-C2-N3	-5.31	126.64	129.30
59	A5	3602	U	N3-C2-O2	-5.31	118.48	122.20
41	Ce	45	ARG	CG-CD-NE	5.31	122.95	111.80
58	B2	1147	U	C2-N1-C1'	5.31	124.07	117.70
58	B2	1864	G	C8-N9-C4	-5.31	104.28	106.40
59	A5	342	A	C5-N7-C8	-5.31	101.25	103.90
59	A5	1607	A	C2-N3-C4	5.31	113.25	110.60
59	A5	282	A	C2-N3-C4	5.31	113.25	110.60
59	A5	1620	A	N1-C6-N6	-5.31	115.42	118.60
59	A5	1675	G	O5'-P-OP2	-5.31	100.92	105.70
59	A5	1884	U	C6-N1-C2	-5.31	117.81	121.00
59	A5	1890	U	C5-C6-N1	-5.31	120.05	122.70
59	A5	2084	U	N1-C2-O2	5.31	126.52	122.80
59	A5	2520	U	OP2-P-O3'	5.31	116.88	105.20
59	A5	3446	G	C8-N9-C1'	-5.31	120.10	127.00
59	A5	3466	A	C2-N3-C4	5.31	113.25	110.60
58	B2	398	C	C6-N1-C2	-5.31	118.18	120.30
58	B2	464	G	C8-N9-C4	5.31	108.52	106.40
59	A5	3838	A	N1-C6-N6	5.31	121.78	118.60
59	A5	318	G	N9-C4-C5	5.30	107.52	105.40
59	A5	621	A	C8-N9-C4	-5.30	103.68	105.80
59	A5	760	G	C8-N9-C1'	-5.30	120.10	127.00
59	A5	1122	U	O4'-C1'-N1	5.30	112.44	108.20
59	A5	1140	G	N1-C6-O6	5.30	123.08	119.90
59	A5	1976	G	N3-C4-C5	5.30	131.25	128.60
59	A5	2550	G	C8-N9-C4	5.30	108.52	106.40
59	A5	2573	C	N3-C4-N4	5.30	121.71	118.00
59	A5	3413	C	OP1-P-OP2	5.30	127.56	119.60
59	A5	3617	U	N3-C2-O2	-5.30	118.49	122.20
59	A5	2779	A	N3-C4-C5	5.30	130.51	126.80
55	A7	13	A	C4-C5-N7	5.30	113.35	110.70
59	A5	823	U	C5-C6-N1	5.30	125.35	122.70
59	A5	3517	U	N1-C2-O2	5.30	126.51	122.80
2	CA	75	LEU	CB-CG-CD2	-5.30	101.99	111.00
56	A8	108	A	OP1-P-O3'	5.30	116.86	105.20
58	B2	1594	A	C4-N9-C1'	5.30	135.84	126.30
59	A5	63	G	C5-C6-N1	5.30	114.15	111.50
59	A5	747	U	C5-C6-N1	5.30	125.35	122.70
59	A5	1348	G	N9-C4-C5	5.30	107.52	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1713	U	O4'-C1'-N1	5.30	112.44	108.20
59	A5	3930	A	C6-C5-N7	5.30	136.01	132.30
41	Ce	7	TYR	CA-CB-CG	5.30	123.47	113.40
58	B2	1361	C	N3-C2-O2	-5.30	118.19	121.90
59	A5	150	U	C5-C6-N1	5.30	125.35	122.70
59	A5	1049	C	C5-C6-N1	5.30	123.65	121.00
59	A5	1971	C	C5-C6-N1	5.30	123.65	121.00
41	Ce	38	LYS	CD-CE-NZ	-5.30	99.52	111.70
59	A5	783	G	C5-C6-O6	-5.30	125.42	128.60
59	A5	1797	A	N1-C2-N3	-5.30	126.65	129.30
59	A5	237	G	C4-C5-N7	5.29	112.92	110.80
59	A5	300	A	N3-C4-C5	-5.29	123.09	126.80
59	A5	779	U	N1-C2-O2	5.29	126.50	122.80
59	A5	2540	G	N1-C6-O6	-5.29	116.72	119.90
59	A5	2743	C	OP2-P-O3'	5.29	116.85	105.20
59	A5	3171	A	C5-C6-N6	5.29	127.94	123.70
59	A5	3447	U	C4-C5-C6	-5.29	116.52	119.70
6	CC	72	THR	C-N-CA	5.29	133.41	122.30
59	A5	1003	C	C5-C4-N4	5.29	123.90	120.20
59	A5	1065	A	N1-C6-N6	-5.29	115.42	118.60
59	A5	1738	U	C6-N1-C2	-5.29	117.83	121.00
59	A5	1975	C	C2-N3-C4	5.29	122.55	119.90
59	A5	3343	A	N9-C4-C5	-5.29	103.68	105.80
59	A5	3758	G	C8-N9-C1'	-5.29	120.12	127.00
58	B2	413	C	C6-N1-C2	-5.29	118.18	120.30
59	A5	981	C	N1-C2-O2	5.29	122.07	118.90
58	B2	1985	A	C4-C5-N7	5.29	113.34	110.70
59	A5	871	A	O5'-P-OP2	5.29	117.05	110.70
59	A5	1323	C	OP2-P-O3'	5.29	116.83	105.20
59	A5	1722	U	N3-C2-O2	-5.29	118.50	122.20
59	A5	2225	A	O5'-P-OP2	-5.29	100.94	105.70
59	A5	3285	G	N3-C2-N2	5.29	123.60	119.90
58	B2	1414	C	C5-C6-N1	5.29	123.64	121.00
59	A5	1077	C	N1-C2-N3	5.29	122.90	119.20
59	A5	1872	A	P-O3'-C3'	5.29	126.04	119.70
59	A5	2116	U	N3-C2-O2	-5.29	118.50	122.20
59	A5	2170	C	N3-C4-N4	-5.29	114.30	118.00
59	A5	2743	C	C4-C5-C6	-5.29	114.76	117.40
59	A5	2754	G	N3-C2-N2	5.29	123.60	119.90
59	A5	2787	U	N3-C4-O4	5.29	123.10	119.40
59	A5	3453	U	OP2-P-O3'	5.29	116.83	105.20
28	CD	188	LYS	C-N-CA	5.28	134.91	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	A8	26	U	C5-C4-O4	-5.28	122.73	125.90
58	B2	1815	C	C6-N1-C2	-5.28	118.19	120.30
59	A5	1026	G	O5'-P-OP2	-5.28	100.94	105.70
59	A5	1260	A	N9-C4-C5	5.28	107.91	105.80
59	A5	1338	U	N3-C2-O2	-5.28	118.50	122.20
59	A5	2097	U	N3-C4-O4	5.28	123.10	119.40
59	A5	2760	G	C4-C5-N7	-5.28	108.69	110.80
59	A5	3297	C	N3-C2-O2	-5.28	118.20	121.90
59	A5	830	U	C6-N1-C1'	5.28	128.59	121.20
59	A5	1413	C	C6-N1-C2	-5.28	118.19	120.30
59	A5	1675	G	C4-C5-C6	5.28	121.97	118.80
59	A5	1715	G	N1-C6-O6	5.28	123.07	119.90
59	A5	423	U	C5-C6-N1	5.28	125.34	122.70
59	A5	435	G	N1-C6-O6	-5.28	116.73	119.90
59	A5	1120	A	N1-C2-N3	-5.28	126.66	129.30
59	A5	1331	G	C5-N7-C8	-5.28	101.66	104.30
59	A5	3763	U	C2-N3-C4	5.28	130.17	127.00
58	B2	362	G	C4-C5-N7	5.28	112.91	110.80
58	B2	461	G	C4-C5-N7	5.28	112.91	110.80
59	A5	808	G	C8-N9-C1'	-5.28	120.14	127.00
59	A5	1318	A	N9-C4-C5	-5.28	103.69	105.80
55	A7	36	C	C6-N1-C2	-5.28	118.19	120.30
58	B2	381	C	C5-C6-N1	5.28	123.64	121.00
59	A5	93	G	C2-N3-C4	5.28	114.54	111.90
59	A5	462	C	N3-C2-O2	-5.28	118.21	121.90
59	A5	921	C	O5'-P-OP2	-5.28	100.95	105.70
59	A5	1102	G	C6-N1-C2	-5.28	121.93	125.10
59	A5	1609	U	OP2-P-O3'	5.28	116.81	105.20
59	A5	1695	A	N9-C4-C5	-5.28	103.69	105.80
59	A5	2549	G	N3-C2-N2	-5.28	116.20	119.90
59	A5	2702	A	O5'-P-OP2	-5.28	100.95	105.70
59	A5	3236	A	C6-C5-N7	-5.28	128.61	132.30
59	A5	3404	A	C4-C5-N7	5.28	113.34	110.70
34	CX	223	LEU	CA-CB-CG	5.28	127.43	115.30
54	A9	21	G	P-O3'-C3'	5.28	126.03	119.70
56	A8	32	G	N9-C4-C5	-5.28	103.29	105.40
58	B2	1128	C	O4'-C1'-N1	5.28	112.42	108.20
59	A5	1352	U	N1-C2-N3	-5.28	111.73	114.90
59	A5	1702	G	N1-C2-N2	5.28	120.95	116.20
59	A5	3478	G	N9-C4-C5	5.28	107.51	105.40
59	A5	3488	G	N3-C2-N2	-5.28	116.21	119.90
58	B2	1201	A	C2-N3-C4	-5.27	107.96	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2110	A	C4-C5-N7	5.27	113.34	110.70
58	B2	171	U	N3-C2-O2	-5.27	118.51	122.20
59	A5	163	A	C6-C5-N7	5.27	135.99	132.30
58	B2	1978	C	C2-N1-C1'	5.27	124.60	118.80
59	A5	820	A	N9-C4-C5	-5.27	103.69	105.80
59	A5	1101	A	OP1-P-O3'	5.27	116.80	105.20
59	A5	2082	U	C2-N1-C1'	5.27	124.03	117.70
59	A5	2210	U	C6-N1-C2	-5.27	117.84	121.00
58	B2	1161	G	C4-C5-N7	5.27	112.91	110.80
59	A5	333	C	C5-C6-N1	5.27	123.63	121.00
59	A5	815	A	C4-C5-N7	5.27	113.33	110.70
59	A5	1382	U	C4'-C3'-O3'	5.27	123.54	113.00
59	A5	1759	C	N3-C2-O2	-5.27	118.21	121.90
59	A5	2221	G	C6-N1-C2	-5.27	121.94	125.10
59	A5	3305	U	N3-C2-O2	-5.27	118.51	122.20
59	A5	3758	G	C4-N9-C1'	5.27	133.35	126.50
59	A5	3853	C	N1-C2-O2	5.27	122.06	118.90
56	A8	60	U	O5'-P-OP1	-5.27	100.96	105.70
58	B2	360	G	C4-C5-N7	5.27	112.91	110.80
58	B2	1047	U	N3-C2-O2	-5.27	118.51	122.20
59	A5	863	U	C6-N1-C2	-5.27	117.84	121.00
59	A5	3221	A	C4-N9-C1'	5.27	135.78	126.30
59	A5	3921	A	N9-C4-C5	-5.27	103.69	105.80
59	A5	796	A	C4-C5-C6	-5.27	114.37	117.00
59	A5	1703	A	C5-C6-N1	5.27	120.33	117.70
59	A5	3918	A	C8-N9-C4	-5.27	103.69	105.80
58	B2	1024	C	C6-N1-C2	-5.26	118.19	120.30
58	B2	1188	G	C8-N9-C4	5.26	108.51	106.40
58	B2	1811	C	C5-C6-N1	5.26	123.63	121.00
59	A5	370	A	C5-N7-C8	-5.26	101.27	103.90
59	A5	810	A	N1-C6-N6	-5.26	115.44	118.60
59	A5	1055	U	C2-N1-C1'	5.26	124.02	117.70
59	A5	1884	U	C2-N1-C1'	5.26	124.02	117.70
59	A5	2205	G	N3-C4-C5	-5.26	125.97	128.60
59	A5	2494	G	OP1-P-OP2	-5.26	111.70	119.60
59	A5	3507	A	C4-C5-C6	-5.26	114.37	117.00
58	B2	1092	A	N1-C2-N3	-5.26	126.67	129.30
58	B2	1194	C	N3-C2-O2	-5.26	118.22	121.90
59	A5	300	A	OP2-P-O3'	5.26	116.78	105.20
59	A5	1190	U	P-O5'-C5'	5.26	129.32	120.90
59	A5	2703	G	OP1-P-OP2	5.26	127.50	119.60
59	A5	2793	C	C2-N1-C1'	5.26	124.59	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3716	C	C4-C5-C6	-5.26	114.77	117.40
58	B2	1772	C	C6-N1-C2	-5.26	118.19	120.30
59	A5	384	A	C6-N1-C2	-5.26	115.44	118.60
59	A5	663	U	N3-C4-O4	5.26	123.08	119.40
59	A5	872	A	OP2-P-O3'	5.26	116.77	105.20
59	A5	886	U	C2-N1-C1'	-5.26	111.39	117.70
59	A5	1109	G	N1-C2-N2	5.26	120.94	116.20
59	A5	1164	G	C6-C5-N7	-5.26	127.24	130.40
56	A8	94	C	C5-C6-N1	5.26	123.63	121.00
58	B2	976	U	C5-C6-N1	5.26	125.33	122.70
59	A5	37	G	C8-N9-C4	-5.26	104.30	106.40
59	A5	49	A	C4-C5-N7	5.26	113.33	110.70
59	A5	383	A	C4-N9-C1'	5.26	135.77	126.30
59	A5	427	A	C4-C5-N7	5.26	113.33	110.70
59	A5	1091	G	OP1-P-OP2	5.26	127.49	119.60
59	A5	2230	G	N3-C4-C5	-5.26	125.97	128.60
59	A5	2717	C	C5-C4-N4	-5.26	116.52	120.20
58	B2	23	G	C8-N9-C4	5.26	108.50	106.40
59	A5	496	U	C6-N1-C2	-5.26	117.84	121.00
59	A5	1644	C	N3-C4-N4	5.26	121.68	118.00
56	A8	73	U	C5-C4-O4	-5.26	122.75	125.90
56	A8	95	A	N7-C8-N9	5.26	116.43	113.80
58	B2	484	C	N3-C2-O2	-5.26	118.22	121.90
58	B2	1028	A	N1-C6-N6	-5.26	115.45	118.60
58	B2	1924	C	C2-N1-C1'	5.26	124.58	118.80
59	A5	438	G	C4-C5-C6	-5.26	115.65	118.80
59	A5	1346	C	C4-C5-C6	-5.26	114.77	117.40
59	A5	1615	G	N3-C2-N2	5.26	123.58	119.90
59	A5	1726	G	N3-C4-C5	5.26	131.23	128.60
59	A5	2257	C	C6-N1-C1'	5.26	127.11	120.80
58	B2	1205	U	C6-N1-C2	-5.25	117.85	121.00
56	A8	116	C	C2-N1-C1'	5.25	124.58	118.80
59	A5	1104	A	C2-N3-C4	5.25	113.23	110.60
59	A5	1347	A	O5'-P-OP1	-5.25	100.97	105.70
59	A5	2516	U	O4'-C1'-N1	5.25	112.40	108.20
59	A5	3504	G	N3-C4-C5	-5.25	125.97	128.60
58	B2	1961	A	C4-C5-C6	-5.25	114.37	117.00
59	A5	285	G	O4'-C1'-N9	-5.25	104.00	108.20
59	A5	443	G	N7-C8-N9	5.25	115.72	113.10
59	A5	1410	A	N9-C4-C5	5.25	107.90	105.80
59	A5	3252	G	OP1-P-O3'	5.25	116.75	105.20
58	B2	314	C	C6-N1-C2	-5.25	118.20	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	1222	C	C6-N1-C2	-5.25	118.20	120.30
59	A5	1012	G	C5-N7-C8	-5.25	101.67	104.30
59	A5	1611	G	C8-N9-C4	5.25	108.50	106.40
59	A5	2758	U	C5-C6-N1	5.25	125.33	122.70
59	A5	3309	A	C4-N9-C1'	5.25	135.75	126.30
59	A5	3397	U	OP1-P-O3'	5.25	116.75	105.20
59	A5	3414	U	C5-C4-O4	5.25	129.05	125.90
59	A5	3888	U	C5-C6-N1	5.25	125.33	122.70
58	B2	1823	A	N9-C4-C5	-5.25	103.70	105.80
59	A5	634	U	C5-C4-O4	-5.25	122.75	125.90
59	A5	831	A	N7-C8-N9	5.25	116.42	113.80
59	A5	874	G	OP1-P-OP2	-5.25	111.73	119.60
59	A5	1576	U	N3-C2-O2	-5.25	118.53	122.20
59	A5	1944	C	N1-C2-O2	5.25	122.05	118.90
59	A5	3199	A	C8-N9-C4	5.25	107.90	105.80
59	A5	94	C	C4-C5-C6	-5.25	114.78	117.40
59	A5	322	G	N1-C6-O6	5.25	123.05	119.90
59	A5	652	G	C8-N9-C4	5.25	108.50	106.40
59	A5	1536	U	C5-C6-N1	5.25	125.32	122.70
59	A5	2511	C	O5'-P-OP1	5.25	117.00	110.70
59	A5	2782	A	C5-C6-N6	5.25	127.90	123.70
26	CN	36	LEU	CB-CG-CD1	-5.25	102.08	111.00
59	A5	1090	U	C2-N1-C1'	5.25	123.99	117.70
59	A5	1784	A	C6-N1-C2	-5.25	115.45	118.60
58	B2	622	C	C2-N1-C1'	5.24	124.57	118.80
59	A5	104	A	C8-N9-C4	-5.24	103.70	105.80
59	A5	380	G	N1-C6-O6	5.24	123.05	119.90
59	A5	788	C	C2-N3-C4	5.24	122.52	119.90
59	A5	993	A	C4-C5-C6	-5.24	114.38	117.00
59	A5	1393	A	OP2-P-O3'	5.24	116.74	105.20
59	A5	1536	U	C6-N1-C2	-5.24	117.85	121.00
59	A5	2198	G	C4-N9-C1'	5.24	133.32	126.50
59	A5	2513	G	N9-C4-C5	-5.24	103.30	105.40
59	A5	3127	A	O4'-C1'-N9	5.24	112.39	108.20
59	A5	3393	U	N3-C2-O2	-5.24	118.53	122.20
59	A5	375	C	OP1-P-OP2	5.24	127.46	119.60
59	A5	775	U	O5'-P-OP1	-5.24	100.98	105.70
59	A5	3805	U	C6-N1-C2	-5.24	117.86	121.00
58	B2	903	C	C2-N3-C4	5.24	122.52	119.90
59	A5	32	C	C5-C6-N1	5.24	123.62	121.00
59	A5	1046	A	C5-C6-N6	-5.24	119.51	123.70
59	A5	1398	C	O5'-P-OP2	-5.24	100.98	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1616	G	N1-C2-N3	5.24	127.05	123.90
58	B2	598	C	N1-C2-O2	5.24	122.04	118.90
58	B2	941	A	N1-C6-N6	-5.24	115.46	118.60
58	B2	1842	U	N3-C2-O2	-5.24	118.53	122.20
58	B2	1845	C	N3-C4-C5	-5.24	119.80	121.90
59	A5	1565	A	C2-N3-C4	5.24	113.22	110.60
59	A5	2521	A	C6-N1-C2	5.24	121.74	118.60
58	B2	7	G	C4-C5-N7	5.24	112.89	110.80
58	B2	1991	C	C2-N1-C1'	5.24	124.56	118.80
59	A5	1178	U	C5'-C4'-O4'	5.24	115.38	109.10
59	A5	1713	U	OP1-P-OP2	-5.24	111.75	119.60
59	A5	2153	C	C5-C4-N4	5.24	123.86	120.20
59	A5	2473	C	N3-C2-O2	-5.24	118.23	121.90
72	AF	126	LEU	CA-CB-CG	5.24	127.34	115.30
59	A5	2517	A	OP1-P-O3'	5.23	116.72	105.20
59	A5	3294	A	N7-C8-N9	5.23	116.42	113.80
58	B2	1941	A	N1-C6-N6	-5.23	115.46	118.60
59	A5	658	A	N9-C4-C5	-5.23	103.71	105.80
59	A5	817	C	C5-C6-N1	5.23	123.62	121.00
59	A5	2230	G	C6-C5-N7	-5.23	127.26	130.40
59	A5	2625	G	C4-N9-C1'	5.23	133.30	126.50
59	A5	2667	U	N1-C2-O2	5.23	126.46	122.80
59	A5	3306	U	C6-N1-C2	-5.23	117.86	121.00
56	A8	29	U	C5-C4-O4	-5.23	122.76	125.90
58	B2	595	C	N1-C2-O2	5.23	122.04	118.90
58	B2	1205	U	C5-C4-O4	-5.23	122.76	125.90
58	B2	1955	G	C4-C5-N7	5.23	112.89	110.80
59	A5	453	C	C4-C5-C6	-5.23	114.78	117.40
59	A5	1112	G	C4-N9-C1'	5.23	133.30	126.50
59	A5	3172	A	C4-C5-C6	-5.23	114.39	117.00
59	A5	3622	C	C4-C5-C6	-5.23	114.78	117.40
58	B2	248	G	OP1-P-O3'	5.23	116.70	105.20
58	B2	880	G	C8-N9-C4	-5.23	104.31	106.40
59	A5	2205	G	OP2-P-O3'	5.23	116.70	105.20
59	A5	3306	U	N3-C2-O2	-5.23	118.54	122.20
59	A5	3637	A	C4-C5-N7	5.23	113.31	110.70
58	B2	1924	C	C5-C6-N1	5.23	123.61	121.00
59	A5	242	C	N3-C2-O2	-5.23	118.24	121.90
59	A5	625	C	C6-N1-C2	-5.23	118.21	120.30
59	A5	2678	G	C5-C6-N1	5.23	114.11	111.50
59	A5	3246	G	C8-N9-C1'	5.23	133.79	127.00
59	A5	3969	G	C4-C5-N7	5.23	112.89	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	12	U	C2-N1-C1'	5.23	123.97	117.70
58	B2	1223	U	N1-C2-O2	5.23	126.46	122.80
59	A5	372	U	C2-N1-C1'	5.23	123.97	117.70
59	A5	687	U	N1-C2-O2	5.23	126.46	122.80
59	A5	3486	U	N3-C2-O2	-5.23	118.54	122.20
58	B2	1066	A	O5'-P-OP1	-5.22	101.00	105.70
59	A5	241	C	C2-N1-C1'	5.22	124.55	118.80
59	A5	261	U	N1-C2-O2	5.22	126.46	122.80
59	A5	1383	A	C5'-C4'-C3'	5.22	124.36	116.00
59	A5	1723	G	N9-C4-C5	5.22	107.49	105.40
59	A5	1951	C	N3-C4-N4	-5.22	114.34	118.00
59	A5	2687	A	C6-N1-C2	-5.22	115.47	118.60
59	A5	3912	U	C5-C6-N1	5.22	125.31	122.70
71	AT	51	ASP	CB-CG-OD2	5.22	123.00	118.30
58	B2	1228	G	C5-C6-O6	-5.22	125.47	128.60
59	A5	770	C	C6-N1-C2	-5.22	118.21	120.30
59	A5	3329	U	C6-N1-C2	-5.22	117.87	121.00
59	A5	3407	U	C5-C6-N1	5.22	125.31	122.70
59	A5	1962	A	N1-C6-N6	-5.22	115.47	118.60
55	A7	98	G	N3-C4-N9	5.22	129.13	126.00
56	A8	109	U	P-O3'-C3'	5.22	125.96	119.70
58	B2	429	C	C5-C6-N1	5.22	123.61	121.00
59	A5	1411	U	N1-C2-N3	-5.22	111.77	114.90
59	A5	2255	G	N9-C4-C5	-5.22	103.31	105.40
59	A5	2679	U	C6-N1-C1'	5.22	128.51	121.20
59	A5	3197	U	O4'-C1'-N1	-5.22	104.02	108.20
59	A5	3667	C	OP2-P-O3'	5.22	116.68	105.20
56	A8	39	A	OP2-P-O3'	5.22	116.68	105.20
59	A5	993	A	N1-C2-N3	-5.22	126.69	129.30
59	A5	1277	A	P-O3'-C3'	5.22	125.96	119.70
59	A5	3624	C	C2-N3-C4	5.22	122.51	119.90
70	AK	35	LEU	CA-CB-CG	5.22	127.30	115.30
55	A7	19	C	N3-C4-C5	5.22	123.99	121.90
58	B2	959	U	O4'-C1'-N1	5.22	112.37	108.20
58	B2	1104	C	C2-N1-C1'	-5.22	113.06	118.80
59	A5	663	U	N3-C4-C5	5.22	117.73	114.60
59	A5	1132	U	C6-N1-C1'	5.22	128.50	121.20
59	A5	1673	C	N3-C4-C5	5.22	123.99	121.90
59	A5	3650	G	O5'-P-OP2	-5.22	101.00	105.70
71	AT	130	ASP	CB-CG-OD2	5.22	123.00	118.30
26	CN	76	PRO	C-N-CA	5.21	134.74	121.70
59	A5	79	G	C6-C5-N7	-5.21	127.27	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	93	G	C5-C6-O6	-5.21	125.47	128.60
59	A5	3567	A	C3'-C2'-C1'	-5.21	97.33	101.50
59	A5	3570	C	C2-N1-C1'	5.21	124.53	118.80
59	A5	3625	U	O5'-P-OP1	-5.21	101.01	105.70
56	A8	86	A	C5-N7-C8	-5.21	101.29	103.90
58	B2	1147	U	N3-C2-O2	-5.21	118.55	122.20
58	B2	1234	G	C6-C5-N7	-5.21	127.27	130.40
59	A5	349	C	C5-C4-N4	-5.21	116.55	120.20
59	A5	427	A	N3-C4-N9	5.21	131.57	127.40
59	A5	986	A	N9-C4-C5	5.21	107.89	105.80
59	A5	2742	G	N7-C8-N9	5.21	115.71	113.10
59	A5	3930	A	N1-C6-N6	-5.21	115.47	118.60
58	B2	379	U	C4-C5-C6	-5.21	116.57	119.70
59	A5	757	A	C8-N9-C4	-5.21	103.72	105.80
59	A5	1046	A	C5-N7-C8	-5.21	101.29	103.90
59	A5	1969	A	C5-N7-C8	-5.21	101.29	103.90
59	A5	1975	C	O5'-P-OP1	-5.21	101.01	105.70
59	A5	2000	U	C2-N1-C1'	-5.21	111.45	117.70
59	A5	2693	G	N1-C2-N3	5.21	127.03	123.90
59	A5	3243	C	C6-N1-C2	-5.21	118.22	120.30
59	A5	3403	G	C8-N9-C4	5.21	108.48	106.40
71	AT	132	ASP	CB-CG-OD2	5.21	122.99	118.30
59	A5	1690	U	OP2-P-O3'	5.21	116.66	105.20
59	A5	2703	G	C2-N3-C4	5.21	114.50	111.90
59	A5	3581	G	N1-C2-N3	5.21	127.03	123.90
25	Ca	12	LEU	CB-CG-CD1	-5.21	102.14	111.00
58	B2	17	C	N3-C4-N4	5.21	121.64	118.00
59	A5	522	G	C4-C5-C6	5.21	121.93	118.80
59	A5	549	A	C6-C5-N7	-5.21	128.65	132.30
59	A5	1735	G	C8-N9-C4	5.21	108.48	106.40
59	A5	1775	C	C2-N1-C1'	5.21	124.53	118.80
59	A5	1882	G	N1-C6-O6	-5.21	116.78	119.90
59	A5	2218	G	OP1-P-OP2	-5.21	111.79	119.60
59	A5	2724	C	OP2-P-O3'	5.21	116.66	105.20
59	A5	3153	G	O5'-P-OP1	5.21	116.95	110.70
59	A5	3198	C	C6-N1-C2	-5.21	118.22	120.30
59	A5	3808	A	C4-N9-C1'	5.21	135.68	126.30
56	A8	94	C	N3-C2-O2	-5.21	118.25	121.90
59	A5	329	C	C6-N1-C2	-5.21	118.22	120.30
59	A5	425	A	N1-C6-N6	5.21	121.72	118.60
59	A5	1259	A	O5'-P-OP1	-5.21	101.02	105.70
59	A5	1326	A	C5-C6-N6	-5.21	119.53	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2115	U	N1-C2-O2	5.21	126.44	122.80
59	A5	2665	C	O5'-P-OP2	-5.21	101.01	105.70
59	A5	1751	U	C4-C5-C6	5.21	122.82	119.70
58	B2	81	U	C5-C6-N1	5.20	125.30	122.70
58	B2	988	G	C5-C6-O6	-5.20	125.48	128.60
58	B2	1601	A	C8-N9-C4	5.20	107.88	105.80
59	A5	2201	U	OP1-P-OP2	5.20	127.41	119.60
69	DA	141	LEU	CA-CB-CG	5.20	127.27	115.30
71	AT	32	ASP	CB-CG-OD2	5.20	122.98	118.30
59	A5	753	U	N1-C2-O2	5.20	126.44	122.80
59	A5	791	C	C6-N1-C2	-5.20	118.22	120.30
59	A5	796	A	C8-N9-C4	5.20	107.88	105.80
59	A5	994	U	C6-N1-C2	-5.20	117.88	121.00
59	A5	2481	U	C6-N1-C1'	-5.20	113.92	121.20
55	A7	112	U	N1-C2-O2	5.20	126.44	122.80
59	A5	56	A	C8-N9-C4	-5.20	103.72	105.80
59	A5	371	G	N1-C2-N3	-5.20	120.78	123.90
59	A5	1040	C	C5-C6-N1	5.20	123.60	121.00
59	A5	2565	G	C8-N9-C4	-5.20	104.32	106.40
59	A5	3170	U	OP2-P-O3'	5.20	116.64	105.20
59	A5	3678	G	O5'-P-OP2	-5.20	101.02	105.70
59	A5	307	A	C5-C6-N1	5.20	120.30	117.70
59	A5	1280	C	N3-C2-O2	-5.20	118.26	121.90
59	A5	3345	A	OP1-P-OP2	-5.20	111.80	119.60
56	A8	38	G	N9-C4-C5	-5.20	103.32	105.40
58	B2	1131	U	N3-C2-O2	-5.20	118.56	122.20
59	A5	1323	C	C6-N1-C2	-5.20	118.22	120.30
59	A5	1339	U	C5-C4-O4	5.20	129.02	125.90
59	A5	1387	G	N1-C6-O6	5.20	123.02	119.90
59	A5	1629	C	C5-C4-N4	5.20	123.84	120.20
59	A5	1909	U	C5-C6-N1	5.20	125.30	122.70
58	B2	890	U	N3-C2-O2	-5.19	118.56	122.20
71	AT	49	ASP	CB-CG-OD2	5.19	122.97	118.30
59	A5	764	A	P-O3'-C3'	5.19	125.93	119.70
59	A5	1373	A	O4'-C1'-N9	5.19	112.35	108.20
59	A5	1686	A	C4-C5-N7	5.19	113.30	110.70
59	A5	3613	G	C5-C6-O6	-5.19	125.48	128.60
58	B2	1110	A	C6-C5-N7	5.19	135.93	132.30
59	A5	414	A	N3-C4-C5	5.19	130.43	126.80
59	A5	1146	U	C5-C4-O4	5.19	129.01	125.90
59	A5	2563	G	C5-N7-C8	-5.19	101.70	104.30
59	A5	3890	G	OP1-P-O3'	5.19	116.62	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	871	A	N7-C8-N9	5.19	116.39	113.80
59	A5	1001	A	N7-C8-N9	5.19	116.39	113.80
59	A5	1589	A	OP1-P-O3'	5.19	116.61	105.20
59	A5	2564	U	N1-C2-O2	5.19	126.43	122.80
59	A5	3280	A	C8-N9-C4	5.19	107.88	105.80
59	A5	3387	C	N3-C2-O2	-5.19	118.27	121.90
56	A8	91	C	C4-C5-C6	-5.19	114.81	117.40
58	B2	1563	C	C5-C6-N1	5.19	123.59	121.00
59	A5	328	U	C5-C6-N1	5.19	125.29	122.70
59	A5	1664	C	N3-C4-N4	-5.19	114.37	118.00
59	A5	1689	G	C5'-C4'-O4'	-5.19	102.88	109.10
59	A5	1782	C	C5'-C4'-O4'	5.19	115.33	109.10
59	A5	995	G	N7-C8-N9	-5.19	110.51	113.10
59	A5	1115	A	C6-C5-N7	-5.19	128.67	132.30
59	A5	1598	A	C5-N7-C8	-5.19	101.31	103.90
59	A5	2705	U	C4-C5-C6	-5.19	116.59	119.70
59	A5	2775	A	C5-C6-N6	-5.19	119.55	123.70
59	A5	3130	G	C6-C5-N7	-5.19	127.29	130.40
4	CB	335	GLY	N-CA-C	5.18	126.06	113.10
58	B2	619	U	C5-C6-N1	5.18	125.29	122.70
59	A5	1183	U	C2-N3-C4	5.18	130.11	127.00
59	A5	1619	C	C5-C6-N1	5.18	123.59	121.00
59	A5	1661	C	C5-C6-N1	5.18	123.59	121.00
59	A5	1757	A	C2-N3-C4	5.18	113.19	110.60
59	A5	2167	G	N3-C4-N9	5.18	129.11	126.00
59	A5	3411	C	C2-N3-C4	-5.18	117.31	119.90
59	A5	3770	A	C8-N9-C1'	-5.18	118.37	127.70
59	A5	3923	C	C6-N1-C2	-5.18	118.23	120.30
59	A5	303	G	C6-C5-N7	5.18	133.51	130.40
59	A5	640	U	P-O3'-C3'	5.18	125.92	119.70
59	A5	2165	C	OP2-P-O3'	5.18	116.60	105.20
59	A5	3726	U	P-O3'-C3'	5.18	125.92	119.70
71	AT	8	ASP	CB-CG-OD2	5.18	122.96	118.30
71	AT	144	ASP	CB-CG-OD2	5.18	122.97	118.30
58	B2	1078	G	C5-N7-C8	-5.18	101.71	104.30
59	A5	1405	U	O4'-C1'-N1	5.18	112.34	108.20
59	A5	2155	A	C3'-C2'-C1'	5.18	105.64	101.50
58	B2	1911	C	O4'-C1'-N1	5.18	112.34	108.20
59	A5	546	G	O5'-P-OP1	-5.18	101.04	105.70
59	A5	3518	A	C4-C5-C6	-5.18	114.41	117.00
37	Cr	26	LYS	N-CA-C	5.18	124.98	111.00
59	A5	1783	A	N1-C2-N3	-5.18	126.71	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2194	G	N7-C8-N9	5.18	115.69	113.10
59	A5	2489	G	N9-C1'-C2'	-5.18	106.31	112.00
58	B2	1214	A	C5-C6-N6	5.17	127.84	123.70
58	B2	1243	G	C5-C6-O6	-5.17	125.50	128.60
59	A5	283	A	C5-N7-C8	5.17	106.49	103.90
59	A5	713	U	C5-C6-N1	5.17	125.29	122.70
59	A5	776	A	O4'-C1'-N9	5.17	112.34	108.20
59	A5	859	A	N1-C6-N6	-5.17	115.50	118.60
59	A5	1610	A	OP1-P-OP2	-5.17	111.84	119.60
59	A5	3279	A	C4-C5-N7	5.17	113.29	110.70
58	B2	1587	U	N3-C2-O2	-5.17	118.58	122.20
59	A5	828	G	C6-C5-N7	-5.17	127.30	130.40
59	A5	1760	A	C5-C6-N1	5.17	120.29	117.70
59	A5	3708	U	O4'-C1'-N1	5.17	112.34	108.20
25	Ca	57	VAL	C-N-CA	-5.17	111.44	122.30
58	B2	18	C	C5-C6-N1	5.17	123.58	121.00
59	A5	1348	G	OP1-P-O3'	5.17	116.58	105.20
59	A5	1545	A	C8-N9-C4	-5.17	103.73	105.80
59	A5	1724	A	C5-C6-N1	5.17	120.28	117.70
59	A5	1897	A	C5-C6-N1	5.17	120.29	117.70
59	A5	2230	G	C4-N9-C1'	5.17	133.22	126.50
59	A5	2778	G	C5-C6-N1	5.17	114.09	111.50
59	A5	2784	C	C2-N1-C1'	5.17	124.49	118.80
59	A5	3346	G	C4-C5-C6	5.17	121.90	118.80
59	A5	3476	G	N3-C2-N2	5.17	123.52	119.90
58	B2	1073	G	N1-C6-O6	-5.17	116.80	119.90
59	A5	2248	A	OP1-P-O3'	5.17	116.57	105.20
59	A5	3526	C	N3-C2-O2	-5.17	118.28	121.90
59	A5	3643	C	N1-C2-O2	5.17	122.00	118.90
58	B2	375	A	N9-C4-C5	-5.17	103.73	105.80
58	B2	1994	U	C6-N1-C2	-5.17	117.90	121.00
59	A5	1650	C	C5-C4-N4	-5.17	116.58	120.20
59	A5	1770	C	C6-N1-C1'	5.17	127.00	120.80
59	A5	2001	U	N3-C4-O4	-5.17	115.78	119.40
59	A5	2493	C	O5'-P-OP2	-5.17	101.05	105.70
58	B2	315	C	N3-C2-O2	-5.17	118.28	121.90
58	B2	399	C	C5-C6-N1	5.17	123.58	121.00
58	B2	835	A	N1-C2-N3	-5.17	126.72	129.30
59	A5	303	G	O5'-P-OP1	-5.17	101.05	105.70
59	A5	1972	C	C5-C4-N4	5.17	123.82	120.20
59	A5	2797	A	C4-C5-C6	-5.17	114.42	117.00
59	A5	3509	U	O4'-C1'-N1	5.17	112.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	426	A	N1-C6-N6	5.17	121.70	118.60
58	B2	636	G	C2-N3-C4	-5.17	109.32	111.90
59	A5	163	A	C8-N9-C1'	5.17	137.00	127.70
59	A5	2227	U	C5-C6-N1	5.17	125.28	122.70
59	A5	2571	U	C6-N1-C2	-5.17	117.90	121.00
59	A5	2805	C	N3-C4-C5	-5.17	119.83	121.90
71	AT	35	ASP	CB-CG-OD2	5.17	122.95	118.30
58	B2	430	A	C4-C5-N7	5.16	113.28	110.70
58	B2	1560	G	N1-C6-O6	-5.16	116.80	119.90
59	A5	367	A	O4'-C1'-N9	-5.16	104.07	108.20
59	A5	811	G	C5-C6-O6	5.16	131.70	128.60
59	A5	1673	C	C2-N3-C4	-5.16	117.32	119.90
59	A5	1738	U	C2-N3-C4	-5.16	123.90	127.00
59	A5	3296	C	N3-C4-C5	-5.16	119.83	121.90
59	A5	3342	C	N3-C2-O2	-5.16	118.28	121.90
59	A5	2604	U	C5-C6-N1	5.16	125.28	122.70
59	A5	3623	G	C6-C5-N7	5.16	133.50	130.40
56	A8	6	U	C5-C6-N1	5.16	125.28	122.70
56	A8	31	G	N1-C6-O6	-5.16	116.80	119.90
59	A5	1071	U	OP1-P-O3'	-5.16	93.85	105.20
59	A5	1675	G	N3-C4-C5	-5.16	126.02	128.60
59	A5	1753	G	P-O3'-C3'	5.16	125.89	119.70
59	A5	1973	G	C5-C6-N1	5.16	114.08	111.50
59	A5	2901	C	C6-N1-C2	-5.16	118.24	120.30
59	A5	3235	A	C5-C6-N6	-5.16	119.57	123.70
59	A5	3764	G	C6-C5-N7	-5.16	127.30	130.40
71	AT	10	ASP	CB-CG-OD2	5.16	122.94	118.30
6	CC	79	ILE	CG1-CB-CG2	-5.16	100.05	111.40
59	A5	96	G	O4'-C1'-N9	5.16	112.33	108.20
59	A5	402	A	N1-C6-N6	-5.16	115.50	118.60
59	A5	522	G	C5-C6-O6	-5.16	125.50	128.60
59	A5	595	U	C5-C6-N1	5.16	125.28	122.70
59	A5	1425	U	O5'-P-OP2	-5.16	101.06	105.70
59	A5	2222	G	C5-N7-C8	-5.16	101.72	104.30
59	A5	2247	U	C5-C4-O4	-5.16	122.81	125.90
59	A5	2542	C	C5-C6-N1	5.16	123.58	121.00
59	A5	2564	U	OP1-P-O3'	5.16	116.55	105.20
59	A5	2663	C	C6-N1-C2	-5.16	118.24	120.30
59	A5	2749	G	N1-C2-N2	-5.16	111.56	116.20
59	A5	3628	G	N9-C4-C5	-5.16	103.34	105.40
71	AT	97	ASP	CB-CG-OD2	5.16	122.94	118.30
59	A5	1107	G	N1-C2-N2	5.16	120.84	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1677	U	C4-C5-C6	-5.16	116.61	119.70
59	A5	1869	C	N3-C4-N4	-5.16	114.39	118.00
59	A5	3526	C	C6-N1-C2	-5.16	118.24	120.30
59	A5	3953	C	C5-C6-N1	5.16	123.58	121.00
56	A8	69	G	C4-C5-N7	5.16	112.86	110.80
56	A8	80	C	C2-N1-C1'	5.16	124.47	118.80
58	B2	4	C	N1-C2-O2	5.16	121.99	118.90
58	B2	316	U	N1-C2-O2	5.16	126.41	122.80
59	A5	99	A	N7-C8-N9	5.16	116.38	113.80
59	A5	545	U	N1-C2-N3	5.16	117.99	114.90
59	A5	1210	A	O5'-P-OP1	-5.16	101.06	105.70
59	A5	1292	G	C4-N9-C1'	-5.16	119.80	126.50
59	A5	1545	A	N7-C8-N9	5.16	116.38	113.80
59	A5	1694	A	C6-N1-C2	-5.16	115.51	118.60
59	A5	3340	A	C5-C6-N6	-5.16	119.58	123.70
59	A5	3401	U	C4-C5-C6	-5.16	116.61	119.70
59	A5	3540	G	O4'-C1'-N9	5.16	112.33	108.20
59	A5	3638	U	N1-C2-O2	5.16	126.41	122.80
59	A5	441	A	N3-C4-C5	5.15	130.41	126.80
59	A5	2670	U	C4-C5-C6	-5.15	116.61	119.70
59	A5	2771	G	O4'-C1'-N9	5.15	112.32	108.20
29	CQ	35	LEU	CB-CG-CD1	-5.15	102.24	111.00
58	B2	1207	G	C8-N9-C1'	-5.15	120.30	127.00
58	B2	1409	A	N3-C4-C5	5.15	130.41	126.80
59	A5	516	U	N3-C2-O2	-5.15	118.59	122.20
59	A5	673	U	C6-N1-C1'	5.15	128.41	121.20
59	A5	1624	G	C4-C5-N7	5.15	112.86	110.80
59	A5	1749	A	O5'-P-OP2	-5.15	101.06	105.70
59	A5	3347	G	OP2-P-O3'	5.15	116.53	105.20
59	A5	3517	U	N1-C2-N3	-5.15	111.81	114.90
59	A5	3708	U	P-O3'-C3'	5.15	125.88	119.70
34	CX	186	VAL	C-N-CA	5.15	143.63	122.00
59	A5	367	A	N3-C4-N9	-5.15	123.28	127.40
59	A5	1259	A	C8-N9-C4	5.15	107.86	105.80
59	A5	1349	A	OP1-P-OP2	-5.15	111.88	119.60
59	A5	1798	A	OP1-P-OP2	-5.15	111.87	119.60
59	A5	2659	A	C8-N9-C1'	-5.15	118.43	127.70
54	A9	15	A	N3-C4-N9	-5.15	123.28	127.40
58	B2	1107	A	N1-C6-N6	5.15	121.69	118.60
59	A5	2167	G	C5-N7-C8	-5.15	101.73	104.30
56	A8	109	U	N1-C2-O2	5.15	126.40	122.80
58	B2	1843	A	C4-C5-N7	5.15	113.27	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	104	A	C4-C5-N7	5.15	113.27	110.70
59	A5	238	G	C5-C6-O6	-5.15	125.51	128.60
59	A5	412	U	OP2-P-O3'	5.15	116.53	105.20
59	A5	1675	G	P-O3'-C3'	5.15	125.88	119.70
59	A5	2125	G	C4-N9-C1'	5.15	133.19	126.50
59	A5	2659	A	N1-C2-N3	-5.15	126.73	129.30
59	A5	3468	G	C5-N7-C8	-5.15	101.73	104.30
25	Ca	4	ILE	CG1-CB-CG2	-5.15	100.08	111.40
58	B2	1187	U	C5-C4-O4	5.14	128.99	125.90
58	B2	1851	A	C4-C5-N7	5.14	113.27	110.70
59	A5	37	G	N7-C8-N9	5.14	115.67	113.10
59	A5	105	A	C5-C6-N1	-5.14	115.13	117.70
59	A5	305	G	C5-C6-O6	5.14	131.69	128.60
59	A5	442	A	C6-C5-N7	-5.14	128.70	132.30
59	A5	490	G	N3-C4-C5	5.14	131.17	128.60
59	A5	2228	U	OP2-P-O3'	5.14	116.52	105.20
59	A5	2700	C	C6-N1-C1'	5.14	126.97	120.80
59	A5	3841	C	O4'-C1'-N1	5.14	112.31	108.20
59	A5	33	C	N3-C2-O2	-5.14	118.30	121.90
59	A5	104	A	N3-C4-N9	-5.14	123.28	127.40
59	A5	1716	G	C6-C5-N7	-5.14	127.31	130.40
59	A5	1872	A	C4-N9-C1'	5.14	135.56	126.30
59	A5	2702	A	OP1-P-OP2	5.14	127.31	119.60
59	A5	3392	U	C5-C4-O4	5.14	128.99	125.90
59	A5	3543	A	C5-C6-N1	5.14	120.27	117.70
59	A5	3646	G	C4-C5-N7	5.14	112.86	110.80
58	B2	1098	C	N3-C2-O2	-5.14	118.30	121.90
59	A5	615	C	C6-N1-C2	-5.14	118.24	120.30
59	A5	96	G	N9-C4-C5	-5.14	103.34	105.40
59	A5	1265	U	N3-C4-O4	-5.14	115.80	119.40
59	A5	1294	U	OP2-P-O3'	5.14	116.51	105.20
59	A5	1692	G	O5'-P-OP1	5.14	116.87	110.70
59	A5	1871	A	OP2-P-O3'	5.14	116.51	105.20
59	A5	3316	U	C5-C4-O4	5.14	128.98	125.90
58	B2	1169	C	N1-C2-O2	5.14	121.98	118.90
59	A5	1361	G	C5-C6-N1	5.14	114.07	111.50
59	A5	2685	G	OP2-P-O3'	5.14	116.50	105.20
59	A5	3621	A	N9-C4-C5	-5.14	103.75	105.80
54	A9	16	U	C6-N1-C1'	5.14	128.39	121.20
56	A8	43	A	N9-C4-C5	-5.14	103.75	105.80
59	A5	574	C	N1-C2-O2	5.14	121.98	118.90
59	A5	811	G	N7-C8-N9	5.14	115.67	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1528	G	C8-N9-C4	5.14	108.45	106.40
59	A5	2610	A	C4-C5-C6	-5.14	114.43	117.00
59	A5	2738	C	N1-C2-N3	5.14	122.80	119.20
59	A5	3285	G	C4-N9-C1'	5.14	133.18	126.50
59	A5	3357	C	C5-C6-N1	5.14	123.57	121.00
59	A5	3372	C	C6-N1-C2	-5.14	118.25	120.30
56	A8	100	G	OP1-P-O3'	-5.13	93.91	105.20
59	A5	1155	U	C5-C4-O4	5.13	128.98	125.90
59	A5	3628	G	C4-C5-N7	5.13	112.85	110.80
59	A5	64	A	C4-C5-N7	5.13	113.27	110.70
59	A5	74	A	N1-C6-N6	-5.13	115.52	118.60
59	A5	372	U	N3-C2-O2	-5.13	118.61	122.20
59	A5	665	U	N1-C2-N3	5.13	117.98	114.90
59	A5	756	C	N3-C2-O2	-5.13	118.31	121.90
59	A5	1868	A	C4-C5-C6	-5.13	114.43	117.00
59	A5	2560	A	C5-C6-N1	5.13	120.27	117.70
59	A5	2771	G	C5-C6-N1	5.13	114.07	111.50
56	A8	19	A	C8-N9-C4	-5.13	103.75	105.80
59	A5	72	C	C6-N1-C1'	5.13	126.96	120.80
59	A5	1755	U	C6-N1-C2	-5.13	117.92	121.00
59	A5	2682	C	C6-N1-C2	-5.13	118.25	120.30
59	A5	3263	C	N3-C2-O2	-5.13	118.31	121.90
59	A5	3354	U	C6-N1-C2	-5.13	117.92	121.00
56	A8	93	A	N1-C6-N6	-5.13	115.52	118.60
59	A5	991	A	C4-C5-C6	-5.13	114.44	117.00
59	A5	2223	C	N3-C2-O2	-5.13	118.31	121.90
59	A5	2760	G	O5'-P-OP2	-5.13	101.08	105.70
56	A8	112	C	O5'-P-OP2	-5.13	101.08	105.70
59	A5	253	A	N3-C4-C5	5.13	130.39	126.80
59	A5	1797	A	C5-C6-N1	5.13	120.26	117.70
59	A5	2736	A	C4-C5-N7	5.13	113.26	110.70
59	A5	2801	U	C6-N1-C2	-5.13	117.92	121.00
59	A5	3623	G	N3-C4-N9	-5.13	122.92	126.00
59	A5	442	A	N1-C6-N6	5.13	121.68	118.60
59	A5	760	G	C2-N3-C4	5.13	114.46	111.90
59	A5	1311	U	O5'-P-OP2	5.13	116.85	110.70
59	A5	2062	A	C4-C5-N7	5.13	113.26	110.70
59	A5	2720	U	C5-C4-O4	5.13	128.98	125.90
59	A5	3346	G	C8-N9-C1'	-5.13	120.34	127.00
65	CO	43	LEU	CA-CB-CG	5.13	127.09	115.30
58	B2	1126	A	O4'-C1'-N9	5.12	112.30	108.20
59	A5	1136	A	N3-C4-C5	-5.12	123.21	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1387	G	N3-C4-N9	5.12	129.07	126.00
59	A5	2761	A	N1-C6-N6	5.12	121.67	118.60
59	A5	3564	A	C5-N7-C8	-5.12	101.34	103.90
6	CC	364	GLU	C-N-CA	5.12	134.50	121.70
55	A7	116	G	C6-C5-N7	-5.12	127.33	130.40
58	B2	147	U	N3-C2-O2	-5.12	118.61	122.20
58	B2	1092	A	C2-N3-C4	5.12	113.16	110.60
59	A5	5	A	C2-N3-C4	5.12	113.16	110.60
59	A5	1658	G	N3-C2-N2	-5.12	116.31	119.90
59	A5	2789	U	C6-N1-C2	-5.12	117.93	121.00
59	A5	3276	C	N3-C4-C5	5.12	123.95	121.90
59	A5	3801	A	N7-C8-N9	-5.12	111.24	113.80
58	B2	614	A	O5'-P-OP2	-5.12	101.09	105.70
59	A5	1140	G	N1-C2-N2	5.12	120.81	116.20
59	A5	1710	G	C5-C6-N1	-5.12	108.94	111.50
59	A5	2138	C	N3-C2-O2	-5.12	118.32	121.90
59	A5	2214	G	C4-N9-C1'	-5.12	119.84	126.50
58	B2	640	U	C6-N1-C2	-5.12	117.93	121.00
59	A5	79	G	C8-N9-C4	5.12	108.45	106.40
59	A5	242	C	O5'-P-OP2	-5.12	101.09	105.70
59	A5	696	U	N3-C2-O2	-5.12	118.62	122.20
59	A5	816	A	C4-C5-C6	-5.12	114.44	117.00
59	A5	1005	G	C8-N9-C1'	5.12	133.65	127.00
59	A5	1563	A	O5'-P-OP2	-5.12	101.09	105.70
59	A5	2626	C	C5-C4-N4	5.12	123.78	120.20
59	A5	2702	A	N3-C4-N9	5.12	131.50	127.40
59	A5	2745	A	O5'-P-OP1	-5.12	101.09	105.70
59	A5	2764	A	N3-C4-N9	5.12	131.49	127.40
59	A5	3004	A	N9-C4-C5	-5.12	103.75	105.80
59	A5	1118	C	C6-N1-C2	-5.12	118.25	120.30
59	A5	1421	G	C5-N7-C8	-5.12	101.74	104.30
59	A5	2499	U	C5-C6-N1	5.12	125.26	122.70
59	A5	3222	G	C4-N9-C1'	5.12	133.15	126.50
58	B2	1090	A	C8-N9-C1'	-5.12	118.49	127.70
59	A5	47	A	C4-C5-C6	-5.12	114.44	117.00
59	A5	54	U	O5'-P-OP2	-5.12	101.10	105.70
59	A5	2058	C	C4-C5-C6	-5.12	114.84	117.40
59	A5	2165	C	P-O3'-C3'	5.12	125.84	119.70
59	A5	2770	C	N3-C4-N4	-5.12	114.42	118.00
59	A5	3420	U	C2-N3-C4	-5.12	123.93	127.00
59	A5	3516	C	O5'-P-OP2	-5.12	101.10	105.70
59	A5	3945	A	C8-N9-C4	-5.12	103.75	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	26	G	N9-C1'-C2'	5.11	120.65	114.00
59	A5	1007	A	N1-C6-N6	5.11	121.67	118.60
59	A5	1686	A	N3-C4-N9	-5.11	123.31	127.40
59	A5	458	A	N9-C4-C5	-5.11	103.75	105.80
59	A5	2790	G	OP2-P-O3'	5.11	116.45	105.20
59	A5	2795	U	C2-N1-C1'	5.11	123.83	117.70
58	B2	411	U	C5-C6-N1	5.11	125.25	122.70
58	B2	1061	A	C5-C6-N1	5.11	120.25	117.70
58	B2	1954	C	C2-N3-C4	5.11	122.45	119.90
59	A5	210	C	C4-C5-C6	-5.11	114.84	117.40
59	A5	295	G	OP1-P-O3'	5.11	116.44	105.20
59	A5	443	G	C6-C5-N7	-5.11	127.33	130.40
59	A5	831	A	C6-C5-N7	-5.11	128.72	132.30
59	A5	1380	G	C6-N1-C2	-5.11	122.03	125.10
59	A5	2530	C	C5-C4-N4	-5.11	116.62	120.20
58	B2	1234	G	N1-C2-N3	-5.11	120.83	123.90
59	A5	2675	U	C2-N3-C4	-5.11	123.94	127.00
6	CC	331	LEU	CB-CG-CD1	-5.11	102.32	111.00
55	A7	104	C	C6-N1-C2	-5.11	118.26	120.30
56	A8	35	G	N3-C2-N2	5.11	123.48	119.90
58	B2	1191	C	O4'-C1'-N1	5.11	112.29	108.20
58	B2	1408	A	C4-C5-C6	-5.11	114.45	117.00
59	A5	248	C	C6-N1-C2	-5.11	118.26	120.30
59	A5	1422	G	N3-C4-C5	5.11	131.15	128.60
59	A5	1685	G	C8-N9-C1'	-5.11	120.36	127.00
59	A5	1795	A	C8-N9-C4	-5.11	103.76	105.80
59	A5	1873	A	C5-C6-N1	5.11	120.25	117.70
59	A5	2208	G	N9-C4-C5	-5.11	103.36	105.40
59	A5	2666	G	OP2-P-O3'	5.11	116.44	105.20
59	A5	2696	U	N3-C2-O2	-5.11	118.62	122.20
59	A5	3530	A	N3-C4-N9	5.11	131.49	127.40
65	CO	63	ARG	CG-CD-NE	5.11	122.53	111.80
58	B2	1824	C	C2-N1-C1'	5.11	124.42	118.80
59	A5	103	A	N9-C4-C5	5.11	107.84	105.80
59	A5	386	G	C4-C5-N7	5.11	112.84	110.80
59	A5	1382	U	C6-N1-C2	-5.11	117.94	121.00
59	A5	2107	U	C5-C4-O4	5.11	128.96	125.90
59	A5	2131	C	N3-C4-C5	-5.11	119.86	121.90
59	A5	2510	A	N1-C6-N6	-5.11	115.54	118.60
59	A5	3608	G	N9-C4-C5	5.11	107.44	105.40
56	A8	51	A	N9-C4-C5	-5.10	103.76	105.80
59	A5	752	U	C2-N3-C4	5.10	130.06	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2714	U	C6-N1-C2	-5.10	117.94	121.00
59	A5	2752	C	C5-C4-N4	5.10	123.77	120.20
59	A5	3352	A	N7-C8-N9	5.10	116.35	113.80
58	B2	268	C	C6-N1-C2	-5.10	118.26	120.30
58	B2	283	U	N1-C2-O2	5.10	126.37	122.80
58	B2	445	U	N1-C2-O2	5.10	126.37	122.80
58	B2	1007	C	C5-C6-N1	5.10	123.55	121.00
58	B2	1583	A	O5'-P-OP2	-5.10	101.11	105.70
59	A5	1258	C	C2-N1-C1'	5.10	124.41	118.80
59	A5	2054	U	C6-N1-C1'	-5.10	114.06	121.20
59	A5	2161	G	C8-N9-C4	-5.10	104.36	106.40
59	A5	2730	A	N1-C2-N3	-5.10	126.75	129.30
59	A5	3472	A	C5-C6-N6	5.10	127.78	123.70
59	A5	3648	A	C5-N7-C8	-5.10	101.35	103.90
58	B2	31	C	N1-C2-O2	5.10	121.96	118.90
58	B2	68	C	N3-C2-O2	-5.10	118.33	121.90
58	B2	1934	U	N1-C2-O2	5.10	126.37	122.80
59	A5	991	A	N3-C4-C5	5.10	130.37	126.80
59	A5	1594	U	C4-C5-C6	-5.10	116.64	119.70
59	A5	1780	U	N3-C2-O2	-5.10	118.63	122.20
59	A5	3145	U	N1-C2-O2	5.10	126.37	122.80
59	A5	3675	A	C2-N3-C4	5.10	113.15	110.60
58	B2	1068	U	N1-C2-N3	5.10	117.96	114.90
58	B2	1563	C	N1-C2-O2	5.10	121.96	118.90
59	A5	175	U	P-O3'-C3'	5.10	125.82	119.70
59	A5	662	A	N1-C2-N3	-5.10	126.75	129.30
59	A5	934	U	N3-C2-O2	-5.10	118.63	122.20
59	A5	1382	U	O3'-P-O5'	5.10	113.68	104.00
59	A5	1521	G	N1-C6-O6	-5.10	116.84	119.90
59	A5	2124	G	C8-N9-C1'	-5.10	120.37	127.00
59	A5	3304	U	N3-C2-O2	-5.10	118.63	122.20
59	A5	3716	C	C5-C4-N4	-5.10	116.63	120.20
58	B2	1085	A	N9-C4-C5	-5.10	103.76	105.80
59	A5	210	C	C5-C6-N1	5.10	123.55	121.00
59	A5	431	C	C4-C5-C6	-5.10	114.85	117.40
59	A5	2072	C	C2-N1-C1'	5.10	124.41	118.80
59	A5	2757	U	C2-N1-C1'	5.10	123.81	117.70
42	Cf	110	ARG	NE-CZ-NH2	-5.09	117.75	120.30
59	A5	111	A	N1-C2-N3	-5.09	126.75	129.30
59	A5	1011	U	N3-C4-O4	5.09	122.97	119.40
59	A5	1754	U	C4-C5-C6	-5.09	116.64	119.70
59	A5	2571	U	O5'-P-OP1	-5.09	101.11	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	3309	A	C3'-C2'-C1'	5.09	105.58	101.50
59	A5	3714	U	P-O3'-C3'	5.09	125.81	119.70
59	A5	2704	A	C5-C6-N6	-5.09	119.62	123.70
59	A5	543	A	C5-C6-N6	-5.09	119.63	123.70
59	A5	1711	C	C4-C5-C6	-5.09	114.85	117.40
59	A5	1877	A	C5-C6-N1	5.09	120.25	117.70
59	A5	3452	U	C5-C6-N1	5.09	125.25	122.70
59	A5	3765	A	C4-C5-N7	5.09	113.25	110.70
58	B2	1975	G	N9-C4-C5	-5.09	103.36	105.40
59	A5	2155	A	C6-C5-N7	-5.09	128.74	132.30
59	A5	2721	C	C2-N1-C1'	-5.09	113.20	118.80
56	A8	17	U	N1-C2-O2	5.09	126.36	122.80
59	A5	141	U	OP2-P-O3'	5.09	116.39	105.20
59	A5	3524	G	N9-C4-C5	5.09	107.44	105.40
58	B2	6	G	C8-N9-C4	-5.09	104.37	106.40
58	B2	1191	C	N3-C4-C5	5.09	123.93	121.90
59	A5	402	A	C2-N3-C4	5.09	113.14	110.60
59	A5	558	C	C2-N1-C1'	5.09	124.39	118.80
59	A5	1676	A	OP2-P-O3'	-5.09	94.01	105.20
59	A5	1688	A	C4-N9-C1'	5.09	135.45	126.30
59	A5	3279	A	N1-C6-N6	5.09	121.65	118.60
59	A5	3778	U	N3-C2-O2	-5.09	118.64	122.20
58	B2	276	A	N7-C8-N9	5.08	116.34	113.80
59	A5	347	A	C4-C5-N7	5.08	113.24	110.70
59	A5	432	U	N1-C2-O2	5.08	126.36	122.80
58	B2	1170	G	C5-N7-C8	-5.08	101.76	104.30
59	A5	70	A	C5-C6-N1	5.08	120.24	117.70
59	A5	423	U	C4-C5-C6	-5.08	116.65	119.70
59	A5	1021	U	O5'-P-OP1	-5.08	101.12	105.70
59	A5	1329	G	N3-C2-N2	-5.08	116.34	119.90
59	A5	2187	U	N3-C4-O4	-5.08	115.84	119.40
59	A5	2800	C	N1-C2-O2	5.08	121.95	118.90
59	A5	3728	A	C4-C5-C6	-5.08	114.46	117.00
59	A5	3762	G	C5-C6-O6	5.08	131.65	128.60
59	A5	406	G	C8-N9-C4	5.08	108.43	106.40
59	A5	1316	U	C6-N1-C2	-5.08	117.95	121.00
59	A5	1534	G	N1-C2-N3	5.08	126.95	123.90
59	A5	1777	A	O5'-P-OP2	5.08	116.80	110.70
59	A5	2623	C	OP2-P-O3'	5.08	116.38	105.20
59	A5	3155	G	N3-C4-N9	5.08	129.05	126.00
4	CB	217	ILE	CG1-CB-CG2	-5.08	100.22	111.40
58	B2	1967	C	C4-C5-C6	-5.08	114.86	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1324	C	C2-N1-C1'	5.08	124.39	118.80
59	A5	1344	A	N1-C6-N6	5.08	121.65	118.60
59	A5	1345	G	C5-C6-N1	5.08	114.04	111.50
59	A5	1609	U	N3-C4-O4	5.08	122.96	119.40
59	A5	89	A	O5'-P-OP2	-5.08	101.13	105.70
59	A5	299	G	C5-N7-C8	5.08	106.84	104.30
59	A5	300	A	N1-C2-N3	5.08	131.84	129.30
59	A5	438	G	C5-C6-O6	-5.08	125.55	128.60
59	A5	748	A	P-O3'-C3'	5.08	125.79	119.70
59	A5	1422	G	N7-C8-N9	-5.08	110.56	113.10
59	A5	1690	U	N1-C2-O2	5.08	126.36	122.80
59	A5	3419	A	OP2-P-O3'	5.08	116.37	105.20
59	A5	3616	G	C8-N9-C4	5.08	108.43	106.40
59	A5	3622	C	N3-C4-C5	5.08	123.93	121.90
59	A5	3676	C	O3'-P-O5'	5.08	113.65	104.00
59	A5	666	A	N3-C4-C5	-5.08	123.25	126.80
59	A5	1193	A	C2-N3-C4	-5.08	108.06	110.60
59	A5	1639	U	N3-C2-O2	-5.08	118.65	122.20
59	A5	1770	C	C5-C4-N4	5.08	123.75	120.20
59	A5	2218	G	C4-C5-N7	5.08	112.83	110.80
59	A5	3512	U	C6-N1-C2	-5.08	117.95	121.00
56	A8	14	G	C5-C6-O6	5.08	131.65	128.60
58	B2	250	U	N3-C2-O2	-5.08	118.65	122.20
59	A5	214	A	C4-C5-N7	5.08	113.24	110.70
59	A5	654	G	N9-C4-C5	5.08	107.43	105.40
59	A5	857	U	C4-C5-C6	-5.08	116.65	119.70
59	A5	1635	A	N1-C2-N3	-5.08	126.76	129.30
59	A5	2214	G	C5-C6-N1	5.08	114.04	111.50
59	A5	3444	G	C5-C6-O6	-5.08	125.55	128.60
59	A5	3518	A	OP2-P-O3'	5.08	116.37	105.20
59	A5	1897	A	N1-C6-N6	-5.07	115.56	118.60
59	A5	1956	A	N7-C8-N9	5.07	116.34	113.80
59	A5	2760	G	C4-N9-C1'	-5.07	119.90	126.50
59	A5	3354	U	C2-N3-C4	5.07	130.04	127.00
59	A5	3482	G	N3-C4-C5	-5.07	126.06	128.60
59	A5	2166	U	O5'-P-OP1	-5.07	101.14	105.70
59	A5	2662	C	N1-C2-O2	5.07	121.94	118.90
59	A5	3640	A	C8-N9-C4	-5.07	103.77	105.80
59	A5	3754	C	C6-N1-C2	5.07	122.33	120.30
59	A5	36	U	OP2-P-O3'	-5.07	94.05	105.20
59	A5	1006	A	N3-C4-C5	5.07	130.35	126.80
59	A5	1960	C	C6-N1-C1'	-5.07	114.72	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2518	A	C6-C5-N7	5.07	135.85	132.30
59	A5	2522	A	N7-C8-N9	-5.07	111.27	113.80
59	A5	3142	G	N1-C2-N3	5.07	126.94	123.90
59	A5	3341	C	C4-C5-C6	-5.07	114.86	117.40
59	A5	3485	U	OP2-P-O3'	-5.07	94.05	105.20
59	A5	3558	U	C5-C6-N1	5.07	125.23	122.70
66	CL	15	LYS	CD-CE-NZ	-5.07	100.04	111.70
58	B2	1601	A	C4-C5-C6	-5.07	114.47	117.00
59	A5	1713	U	C6-N1-C2	-5.07	117.96	121.00
59	A5	2691	A	C5-N7-C8	-5.07	101.36	103.90
59	A5	3949	U	N3-C4-O4	-5.07	115.85	119.40
55	A7	75	G	O4'-C1'-N9	5.07	112.25	108.20
58	B2	948	A	C5-N7-C8	-5.07	101.37	103.90
58	B2	1333	C	N3-C2-O2	-5.07	118.35	121.90
58	B2	1392	U	N1-C2-O2	5.07	126.35	122.80
59	A5	794	G	C4-C5-N7	5.07	112.83	110.80
59	A5	843	A	N9-C4-C5	-5.07	103.77	105.80
59	A5	1335	C	C2-N1-C1'	5.07	124.37	118.80
59	A5	1645	G	O5'-P-OP2	-5.07	101.14	105.70
59	A5	2203	A	N1-C2-N3	-5.07	126.77	129.30
59	A5	2510	A	O5'-P-OP2	-5.07	101.14	105.70
59	A5	2731	G	N1-C6-O6	5.07	122.94	119.90
59	A5	3674	G	N3-C4-N9	-5.07	122.96	126.00
58	B2	1214	A	O5'-P-OP1	-5.07	101.14	105.70
59	A5	1577	A	C5-C6-N6	-5.07	119.65	123.70
59	A5	1716	G	C4-C5-N7	5.07	112.83	110.80
59	A5	2155	A	C5-C6-N6	5.07	127.75	123.70
59	A5	2650	G	O5'-P-OP1	-5.07	101.14	105.70
59	A5	3156	G	C8-N9-C4	5.07	108.43	106.40
59	A5	3264	A	C5-C6-N1	5.07	120.23	117.70
59	A5	3674	G	N3-C4-C5	5.07	131.13	128.60
59	A5	157	C	N3-C4-N4	5.06	121.55	118.00
59	A5	2674	A	C4-C5-C6	-5.06	114.47	117.00
59	A5	3256	U	C5-C6-N1	-5.06	120.17	122.70
10	AM	39	VAL	C-N-CA	5.06	134.36	121.70
58	B2	1029	G	C5-C6-N1	5.06	114.03	111.50
58	B2	1229	G	OP2-P-O3'	5.06	116.34	105.20
59	A5	846	U	C6-N1-C2	5.06	124.04	121.00
59	A5	1570	U	N1-C2-O2	5.06	126.34	122.80
59	A5	3713	C	C2-N3-C4	5.06	122.43	119.90
59	A5	811	G	OP1-P-O3'	5.06	116.33	105.20
59	A5	2080	G	C5-C6-O6	-5.06	125.56	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	215	A	N9-C4-C5	-5.06	103.78	105.80
59	A5	2497	C	C6-N1-C2	-5.06	118.28	120.30
59	A5	2526	A	C6-N1-C2	5.06	121.64	118.60
58	B2	705	G	N3-C4-N9	5.06	129.03	126.00
58	B2	1234	G	N9-C4-C5	-5.06	103.38	105.40
58	B2	1404	C	C6-N1-C1'	-5.06	114.73	120.80
58	B2	1854	U	N3-C4-O4	-5.06	115.86	119.40
59	A5	2733	G	C5-C6-N1	5.06	114.03	111.50
59	A5	2796	G	N3-C4-N9	5.06	129.03	126.00
59	A5	3255	G	N7-C8-N9	5.06	115.63	113.10
59	A5	987	G	N1-C2-N3	-5.06	120.87	123.90
59	A5	1693	C	OP1-P-O3'	5.06	116.32	105.20
59	A5	2000	U	C6-N1-C1'	5.06	128.28	121.20
59	A5	3508	G	C5-C6-N1	5.06	114.03	111.50
55	A7	108	G	C6-N1-C2	5.05	128.13	125.10
59	A5	363	G	N7-C8-N9	5.05	115.63	113.10
59	A5	855	A	N1-C6-N6	-5.05	115.57	118.60
59	A5	1383	A	N1-C2-N3	-5.05	126.77	129.30
59	A5	2734	A	O4'-C1'-N9	-5.05	104.16	108.20
59	A5	3930	A	C5-C6-N6	5.05	127.74	123.70
63	AI	192	LEU	CA-CB-CG	5.05	126.93	115.30
58	B2	953	A	O5'-P-OP1	-5.05	101.15	105.70
59	A5	421	C	C5-C6-N1	-5.05	118.47	121.00
59	A5	1046	A	N9-C4-C5	-5.05	103.78	105.80
58	B2	628	A	OP2-P-O3'	5.05	116.31	105.20
59	A5	283	A	N1-C2-N3	5.05	131.83	129.30
59	A5	443	G	N3-C4-C5	5.05	131.12	128.60
59	A5	994	U	N1-C2-N3	5.05	117.93	114.90
59	A5	1127	C	O5'-P-OP1	-5.05	101.15	105.70
59	A5	1634	A	C5-N7-C8	-5.05	101.37	103.90
59	A5	2676	U	N3-C4-C5	5.05	117.63	114.60
59	A5	2904	U	P-O3'-C3'	5.05	125.76	119.70
59	A5	3729	A	C2-N3-C4	-5.05	108.07	110.60
58	B2	1093	C	N1-C2-O2	5.05	121.93	118.90
58	B2	1239	A	N1-C6-N6	5.05	121.63	118.60
58	B2	1849	U	N3-C4-O4	-5.05	115.86	119.40
59	A5	365	A	O5'-P-OP2	-5.05	101.16	105.70
59	A5	462	C	N3-C4-N4	-5.05	114.47	118.00
59	A5	1137	G	N1-C6-O6	5.05	122.93	119.90
59	A5	1289	C	O4'-C1'-N1	5.05	112.24	108.20
59	A5	1791	A	C5-N7-C8	-5.05	101.38	103.90
59	A5	2150	U	N3-C4-C5	-5.05	111.57	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2184	G	N1-C6-O6	-5.05	116.87	119.90
59	A5	3330	C	C2-N3-C4	-5.05	117.38	119.90
59	A5	3476	G	C5-N7-C8	-5.05	101.78	104.30
59	A5	1521	G	C5-C6-O6	5.05	131.63	128.60
59	A5	2760	G	O4'-C1'-N9	5.05	112.24	108.20
59	A5	3327	U	N1-C2-N3	5.05	117.93	114.90
59	A5	3679	C	C4-C5-C6	-5.05	114.88	117.40
4	CB	99	LEU	CA-CB-CG	5.05	126.91	115.30
39	Cb	38	LYS	C-N-CA	5.05	134.32	121.70
58	B2	413	C	C6-N1-C1'	5.05	126.86	120.80
59	A5	291	U	C4-C5-C6	-5.05	116.67	119.70
59	A5	1373	A	C2-N3-C4	5.05	113.12	110.60
59	A5	1674	A	C2-N3-C4	-5.05	108.08	110.60
59	A5	2509	G	O5'-P-OP1	-5.05	101.16	105.70
59	A5	3149	U	N3-C4-C5	5.05	117.63	114.60
59	A5	3254	U	C5-C6-N1	5.05	125.22	122.70
59	A5	3340	A	N7-C8-N9	5.05	116.32	113.80
6	CC	48	ARG	NE-CZ-NH1	-5.04	117.78	120.30
59	A5	215	A	N1-C6-N6	5.04	121.63	118.60
59	A5	491	U	N1-C2-O2	5.04	126.33	122.80
59	A5	1081	C	C6-N1-C2	-5.04	118.28	120.30
59	A5	1883	G	N9-C4-C5	-5.04	103.38	105.40
59	A5	2103	G	N1-C2-N2	5.04	120.74	116.20
59	A5	3350	U	OP2-P-O3'	5.04	116.30	105.20
59	A5	3596	A	N3-C4-N9	-5.04	123.36	127.40
59	A5	3671	C	N3-C4-C5	-5.04	119.88	121.90
59	A5	3780	G	N9-C4-C5	-5.04	103.38	105.40
6	CC	197	GLY	N-CA-C	-5.04	100.49	113.10
54	A9	29	U	C5-C4-O4	5.04	128.93	125.90
58	B2	365	A	C5-N7-C8	-5.04	101.38	103.90
58	B2	598	C	N3-C2-O2	-5.04	118.37	121.90
58	B2	1074	G	C2-N3-C4	5.04	114.42	111.90
58	B2	1977	A	C8-N9-C4	5.04	107.82	105.80
59	A5	1198	U	C5'-C4'-C3'	5.04	124.07	116.00
59	A5	3138	G	N1-C2-N3	-5.04	120.87	123.90
59	A5	3719	A	P-O3'-C3'	5.04	125.75	119.70
68	CM	135	LYS	N-CA-C	5.04	124.62	111.00
59	A5	1112	G	C8-N9-C1'	-5.04	120.45	127.00
59	A5	1770	C	C4-C5-C6	-5.04	114.88	117.40
59	A5	2525	C	C5-C6-N1	5.04	123.52	121.00
59	A5	1742	U	C5-C6-N1	5.04	125.22	122.70
59	A5	1875	G	O5'-P-OP2	5.04	116.75	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	2036	G	N3-C2-N2	-5.04	116.37	119.90
59	A5	2242	C	O4'-C1'-N1	5.04	112.23	108.20
59	A5	3468	G	C4-C5-N7	5.04	112.82	110.80
59	A5	3616	G	N3-C4-C5	-5.04	126.08	128.60
56	A8	105	C	C5-C6-N1	5.04	123.52	121.00
58	B2	591	C	C6-N1-C2	-5.04	118.28	120.30
59	A5	130	C	C6-N1-C2	-5.04	118.28	120.30
59	A5	1053	G	C5-N7-C8	-5.04	101.78	104.30
59	A5	1153	G	N9-C4-C5	-5.04	103.39	105.40
59	A5	2736	A	C6-N1-C2	5.04	121.62	118.60
59	A5	3498	A	N1-C6-N6	5.04	121.62	118.60
55	A7	65	C	N1-C2-O2	5.04	121.92	118.90
58	B2	1569	C	N1-C2-O2	5.04	121.92	118.90
59	A5	346	U	OP1-P-O3'	5.04	116.28	105.20
59	A5	1687	U	OP1-P-O3'	5.04	116.28	105.20
59	A5	1761	C	C4-C5-C6	-5.04	114.88	117.40
59	A5	2664	U	N1-C2-N3	5.04	117.92	114.90
58	B2	365	A	C4-C5-N7	5.03	113.22	110.70
59	A5	233	A	C2-N3-C4	5.03	113.12	110.60
59	A5	356	A	C5-C6-N1	5.03	120.22	117.70
59	A5	1168	G	C8-N9-C1'	-5.03	120.46	127.00
59	A5	2136	U	N3-C2-O2	5.03	125.72	122.20
59	A5	2796	G	N7-C8-N9	5.03	115.62	113.10
59	A5	1959	A	O5'-P-OP1	-5.03	101.17	105.70
59	A5	2737	C	C2-N1-C1'	5.03	124.33	118.80
59	A5	3349	A	N3-C4-N9	-5.03	123.37	127.40
59	A5	3515	C	O5'-P-OP1	-5.03	101.17	105.70
59	A5	3591	A	C4-C5-C6	-5.03	114.48	117.00
59	A5	55	U	C4-C5-C6	-5.03	116.68	119.70
59	A5	64	A	O5'-P-OP1	-5.03	101.17	105.70
59	A5	1083	A	C2-N3-C4	5.03	113.11	110.60
59	A5	1428	G	C4-N9-C1'	5.03	133.04	126.50
59	A5	1530	U	C4-C5-C6	-5.03	116.68	119.70
59	A5	2558	A	C5-C6-N1	5.03	120.22	117.70
59	A5	2796	G	N3-C4-C5	-5.03	126.08	128.60
59	A5	3199	A	N9-C4-C5	-5.03	103.79	105.80
59	A5	3630	C	O5'-P-OP1	-5.03	101.17	105.70
59	A5	767	A	N3-C4-C5	5.03	130.32	126.80
59	A5	1702	G	N3-C2-N2	-5.03	116.38	119.90
59	A5	2194	G	N3-C4-N9	5.03	129.02	126.00
59	A5	3168	A	N1-C2-N3	-5.03	126.79	129.30
54	A9	27	U	N1-C2-O2	5.03	126.32	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	B2	464	G	N3-C4-C5	5.03	131.11	128.60
58	B2	604	C	N3-C2-O2	-5.03	118.38	121.90
58	B2	1213	A	OP2-P-O3'	5.03	116.26	105.20
58	B2	1725	C	N1-C2-O2	5.03	121.92	118.90
59	A5	428	C	C6-N1-C2	-5.03	118.29	120.30
59	A5	3625	U	C4-C5-C6	-5.03	116.68	119.70
58	B2	1197	G	C4-C5-N7	5.03	112.81	110.80
59	A5	439	U	N3-C4-C5	5.03	117.62	114.60
59	A5	1373	A	OP1-P-O3'	5.03	116.26	105.20
59	A5	1562	U	C5-C4-O4	5.03	128.91	125.90
59	A5	2109	G	C6-C5-N7	-5.03	127.39	130.40
59	A5	2216	A	C5-C6-N6	5.03	127.72	123.70
59	A5	3285	G	N3-C4-N9	5.03	129.01	126.00
58	B2	1838	C	C5-C6-N1	5.02	123.51	121.00
59	A5	1278	A	O5'-P-OP1	-5.02	101.18	105.70
59	A5	2206	U	C5-C6-N1	5.02	125.21	122.70
58	B2	1984	G	N1-C2-N2	-5.02	111.68	116.20
59	A5	104	A	N3-C4-C5	5.02	130.32	126.80
59	A5	802	G	C6-C5-N7	5.02	133.41	130.40
59	A5	1011	U	C5-C4-O4	-5.02	122.89	125.90
59	A5	1051	C	C4-C5-C6	-5.02	114.89	117.40
59	A5	1289	C	N1-C2-O2	-5.02	115.89	118.90
59	A5	1357	C	N3-C4-C5	-5.02	119.89	121.90
59	A5	1688	A	OP1-P-OP2	5.02	127.13	119.60
59	A5	2640	A	OP1-P-O3'	5.02	116.25	105.20
56	A8	95	A	C8-N9-C4	-5.02	103.79	105.80
54	A9	27	U	N3-C2-O2	-5.02	118.69	122.20
58	B2	1550	C	C6-N1-C2	-5.02	118.29	120.30
59	A5	414	A	C4-C5-C6	-5.02	114.49	117.00
59	A5	2693	G	C6-C5-N7	-5.02	127.39	130.40
59	A5	3677	U	C5-C4-O4	-5.02	122.89	125.90
59	A5	3760	A	C5-C6-N1	5.02	120.21	117.70
59	A5	3763	U	N1-C2-O2	5.02	126.31	122.80
59	A5	3765	A	N1-C6-N6	5.02	121.61	118.60
56	A8	19	A	N1-C6-N6	-5.02	115.59	118.60
59	A5	245	G	N3-C4-N9	-5.02	122.99	126.00
59	A5	1124	G	C8-N9-C1'	5.02	133.52	127.00
59	A5	2678	G	OP1-P-OP2	5.02	127.13	119.60
59	A5	3168	A	C5-C6-N1	5.02	120.21	117.70
59	A5	3539	C	C6-N1-C2	-5.02	118.29	120.30
58	B2	466	G	C6-C5-N7	-5.02	127.39	130.40
59	A5	375	C	O5'-P-OP2	-5.02	101.19	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1263	U	O5'-P-OP2	-5.02	101.19	105.70
59	A5	1385	G	C2-N3-C4	-5.02	109.39	111.90
59	A5	3887	U	OP1-P-O3'	5.02	116.23	105.20
56	A8	43	A	OP1-P-O3'	5.01	116.23	105.20
58	B2	510	U	O5'-P-OP2	-5.01	101.19	105.70
59	A5	986	A	C8-N9-C4	-5.01	103.79	105.80
59	A5	1077	C	C5-C6-N1	5.01	123.51	121.00
59	A5	1351	C	OP1-P-O3'	5.01	116.23	105.20
59	A5	1552	A	C4-C5-N7	5.01	113.21	110.70
59	A5	2212	A	C5-N7-C8	-5.01	101.39	103.90
59	A5	2237	A	C5-N7-C8	-5.01	101.39	103.90
59	A5	2717	C	C6-N1-C1'	-5.01	114.78	120.80
59	A5	3511	U	OP1-P-OP2	5.01	127.12	119.60
58	B2	624	G	N9-C4-C5	5.01	107.41	105.40
59	A5	1658	G	N3-C4-N9	-5.01	122.99	126.00
59	A5	2491	C	OP1-P-OP2	-5.01	112.08	119.60
59	A5	3144	U	C5-C6-N1	5.01	125.20	122.70
59	A5	3585	A	C5-C6-N1	5.01	120.21	117.70
58	B2	382	G	N3-C4-N9	-5.01	122.99	126.00
59	A5	93	G	N3-C4-N9	5.01	129.01	126.00
59	A5	364	U	C6-N1-C1'	5.01	128.21	121.20
59	A5	2067	C	N1-C2-O2	5.01	121.91	118.90
59	A5	3505	U	N1-C2-O2	5.01	126.31	122.80
59	A5	3617	U	N3-C4-O4	5.01	122.91	119.40
59	A5	3729	A	P-O3'-C3'	-5.01	113.69	119.70
59	A5	3759	G	N9-C4-C5	5.01	107.40	105.40
59	A5	3878	U	C2-N1-C1'	5.01	123.71	117.70
58	B2	372	A	C4-C5-C6	-5.01	114.50	117.00
52	CE	123	LEU	CB-CG-CD2	-5.01	102.49	111.00
55	A7	98	G	C5-C6-N1	5.01	114.00	111.50
58	B2	275	U	C2-N1-C1'	5.01	123.71	117.70
58	B2	1287	G	N3-C2-N2	-5.01	116.39	119.90
59	A5	1888	A	C5-N7-C8	-5.01	101.40	103.90
59	A5	2162	C	N3-C2-O2	-5.01	118.39	121.90
59	A5	3013	C	C6-N1-C2	-5.01	118.30	120.30
59	A5	3196	C	C6-N1-C2	-5.01	118.30	120.30
59	A5	3636	G	C8-N9-C4	-5.01	104.40	106.40
44	Ck	59	SER	N-CA-C	5.00	124.51	111.00
58	B2	256	C	N1-C2-O2	5.00	121.90	118.90
58	B2	326	U	OP2-P-O3'	5.00	116.21	105.20
58	B2	1209	U	C5-C6-N1	5.00	125.20	122.70
58	B2	1970	U	N1-C2-O2	5.00	126.30	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	A5	1062	C	C2-N3-C4	5.00	122.40	119.90
56	A8	106	A	N3-C4-C5	-5.00	123.30	126.80
58	B2	258	A	C6-C5-N7	-5.00	128.80	132.30
58	B2	1235	A	O4'-C1'-N9	5.00	112.20	108.20
59	A5	309	C	N3-C4-C5	5.00	123.90	121.90
59	A5	462	C	C4-C5-C6	-5.00	114.90	117.40
59	A5	2724	C	N1-C2-O2	5.00	121.90	118.90
58	B2	413	C	N3-C4-N4	-5.00	114.50	118.00
58	B2	989	G	C5-N7-C8	-5.00	101.80	104.30
58	B2	1168	C	O4'-C1'-N1	5.00	112.20	108.20
59	A5	633	A	C4-C5-N7	5.00	113.20	110.70
59	A5	783	G	OP2-P-O3'	5.00	116.20	105.20
59	A5	1295	A	OP1-P-OP2	-5.00	112.10	119.60
59	A5	2643	C	C5-C6-N1	5.00	123.50	121.00
59	A5	2656	C	N3-C4-N4	5.00	121.50	118.00

There are no chirality outliers.

All (245) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
59	A5	2489	G	Sidechain
1	AA	108	PHE	Peptide
1	AA	29	ASN	Peptide
3	AB	119	LYS	Peptide
3	AB	180	SER	Peptide
5	AC	240	LYS	Peptide
21	AD	181	GLN	Peptide
21	AD	196	PRO	Peptide
60	AE	133	ALA	Peptide
60	AE	240	LYS	Peptide
60	AE	241	GLY	Peptide
61	AG	99	GLY	Peptide
62	AH	121	THR	Peptide
62	AH	156	LEU	Peptide
62	AH	187	PHE	Peptide
62	AH	64	ILE	Peptide
63	AI	21	LEU	Peptide
63	AI	22	ARG	Peptide
63	AI	49	ARG	Peptide
63	AI	8	ALA	Peptide
63	AI	98	LYS	Peptide
24	AJ	148	PHE	Peptide

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Mol	Chain	Res	Type	Group
24	AJ	9	VAL	Peptide
13	AL	116	ASP	Peptide
13	AL	152	PHE	Peptide
73	AO	102	GLY	Peptide
73	AO	127	GLY	Peptide
73	AO	140	THR	Peptide
73	AO	147	ARG	Peptide
73	AO	98	ARG	Peptide
73	AO	99	ALA	Peptide
64	AQ	19	LYS	Peptide
64	AQ	9	VAL	Peptide
71	AT	86	GLY	Peptide
71	AT	88	HIS	Peptide
75	AW	9	ASP	Peptide
9	AX	29	LYS	Peptide
17	AY	86	PHE	Peptide
19	Aa	10	ARG	Peptide
19	Aa	46	GLU	Peptide
19	Aa	62	TYR	Peptide
19	Aa	85	ARG	Peptide
19	Aa	98	PRO	Peptide
74	Ac	18	GLY	Peptide
11	Ad	33	LYS	Peptide
22	Ae	101	THR	Peptide
22	Ae	113	ARG	Peptide
22	Ae	96	LYS	Peptide
2	CA	13	GLY	Peptide
2	CA	196	TRP	Peptide
2	CA	229	THR	Peptide
4	CB	165	HIS	Peptide
4	CB	17	TYR	Peptide
4	CB	270	GLY	Peptide
4	CB	292	HIS	Peptide
4	CB	294	LYS	Peptide
4	CB	310	THR	Peptide
4	CB	311	ASP	Peptide
4	CB	325	GLU	Peptide
4	CB	33	PRO	Peptide
4	CB	374	MET	Peptide
4	CB	54	THR	Peptide
6	CC	105	PHE	Peptide
6	CC	17	ASN	Peptide

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Mol	Chain	Res	Type	Group
6	CC	203	ARG	Peptide
6	CC	204	ARG	Peptide
6	CC	267	PHE	Peptide
6	CC	297	LYS	Peptide
6	CC	315	SER	Peptide
6	CC	316	VAL	Peptide
6	CC	64	GLN	Peptide
6	CC	88	HIS	Peptide
6	CC	92	GLN	Peptide
28	CD	188	LYS	Peptide
28	CD	19	LYS	Peptide
28	CD	223	PHE	Peptide
28	CD	271	LYS	Peptide
52	CE	175	LYS	Peptide
52	CE	226	LEU	Peptide
52	CE	228	ASN	Peptide
52	CE	23	ASN	Peptide
52	CE	237	TYR	Peptide
52	CE	60	VAL	Peptide
52	CE	69	TYR	Peptide
52	CE	70	PRO	Peptide
52	CE	71	THR	Peptide
52	CE	73	THR	Peptide
52	CE	80	SER	Peptide
52	CE	81	LYS	Peptide
52	CE	83	ASN	Peptide
80	CF	235	GLY	Peptide
80	CF	99	ARG	Peptide
53	CG	43	ASN	Peptide
53	CG	48	GLN	Peptide
53	CG	83	PRO	Peptide
53	CG	86	HIS	Peptide
51	CH	107	ASN	Peptide
51	CH	22	ALA	Peptide
27	CI	111	LEU	Peptide
27	CI	114	GLY	Peptide
27	CI	15	LYS	Peptide
27	CI	74	LYS	Peptide
50	CJ	102	GLU	Peptide
50	CJ	159	GLN	Peptide
50	CJ	96	GLU	Peptide
66	CL	124	ILE	Peptide

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Mol	Chain	Res	Type	Group
66	CL	151	GLY	Peptide
66	CL	157	LYS	Peptide
66	CL	158	ASN	Peptide
66	CL	160	GLN	Peptide
66	CL	162	ALA	Peptide
66	CL	169	VAL	Peptide
66	CL	170	THR	Peptide
66	CL	46	PHE	Peptide
66	CL	53	ALA	Peptide
66	CL	56	PRO	Peptide
66	CL	6	ASN	Peptide
66	CL	69	LEU	Peptide
66	CL	75	PHE	Peptide
66	CL	85	ILE	Peptide
68	CM	103	SER	Peptide
68	CM	106	ASP	Peptide
68	CM	127	PHE	Peptide
68	CM	134	THR	Peptide
68	CM	16	SER	Peptide
68	CM	96	GLN	Peptide
26	CN	124	ASP	Peptide
26	CN	182	GLN	Peptide
26	CN	28	TRP	Peptide
26	CN	75	VAL	Peptide
26	CN	76	PRO	Peptide
26	CN	78	GLY	Peptide
26	CN	79	CYS	Peptide
26	CN	97	GLY	Peptide
65	CO	111	PRO	Peptide
65	CO	112	SER	Peptide
65	CO	192	GLU	Peptide
65	CO	32	GLY	Peptide
65	CO	4	LEU	Peptide
65	CO	59	TYR	Peptide
33	CP	141	SER	Peptide
33	CP	7	GLU	Peptide
29	CQ	12	LYS	Peptide
29	CQ	153	GLY	Peptide
29	CQ	163	THR	Peptide
29	CQ	5	ILE	Peptide
29	CQ	55	LYS	Peptide
29	CQ	72	ALA	Peptide

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Mol	Chain	Res	Type	Group
29	CQ	8	LYS	Peptide
29	CQ	9	TYR	Peptide
30	CR	112	SER	Peptide
30	CR	121	HIS	Peptide
30	CR	140	GLU	Peptide
30	CR	162	ARG	Peptide
30	CR	169	ALA	Peptide
31	CS	118	ARG	Peptide
31	CS	138	ARG	Peptide
31	CS	17	LEU	Peptide
31	CS	172	PRO	Peptide
31	CS	19	SER	Peptide
31	CS	25	THR	Peptide
31	CS	53	LYS	Peptide
31	CS	57	THR	Peptide
31	CS	67	VAL	Peptide
31	CS	88	SER	Peptide
32	CT	139	HIS	Peptide
32	CT	143	LYS	Peptide
32	CT	145	GLU	Peptide
32	CT	147	PRO	Peptide
32	CT	154	PRO	Peptide
32	CT	156	GLU	Peptide
32	CT	157	PHE	Peptide
32	CT	3	ASN	Peptide
32	CT	5	LYS	Peptide
32	CT	6	GLY	Peptide
32	CT	83	LYS	Peptide
78	CU	226	LEU	Peptide
67	CV	44	GLY	Peptide
76	CW	16	GLY	Peptide
76	CW	25	ASP	Peptide
35	CY	2	LYS	Peptide
35	CY	64	GLY	Peptide
35	CY	83	GLU	Peptide
36	CZ	31	ASP	Peptide
25	Ca	115	ARG	Peptide
25	Ca	14	GLY	Peptide
25	Ca	58	GLY	Peptide
25	Ca	98	LYS	Peptide
39	Cb	19	ASN	Peptide
39	Cb	21	ILE	Peptide

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Mol	Chain	Res	Type	Group
39	Cb	38	LYS	Peptide
39	Cb	50	ASN	Peptide
40	Cc	37	THR	Peptide
81	Cd	39	ALA	Peptide
41	Ce	123	ASN	Peptide
41	Ce	13	LYS	Peptide
41	Ce	14	LYS	Peptide
41	Ce	20	ILE	Peptide
41	Ce	5	PRO	Peptide
42	Cf	107	HIS	Peptide
42	Cf	108	PRO	Peptide
42	Cf	141	GLY	Peptide
42	Cf	155	SER	Peptide
42	Cf	49	ARG	Peptide
77	Cg	4	ARG	Peptide
38	Ch	42	SER	Peptide
38	Ch	43	LYS	Peptide
38	Ch	86	LYS	Peptide
38	Ch	94	ALA	Peptide
43	Ci	15	HIS	Peptide
43	Ci	21	ARG	Peptide
43	Ci	4	ARG	Peptide
43	Ci	7	LEU	Peptide
43	Ci	73	VAL	Peptide
43	Ci	87	LEU	Peptide
44	Ck	58	GLN	Peptide
46	Cm	114	LYS	Peptide
46	Cm	125	LYS	Peptide
49	Co	26	TYR	Peptide
49	Co	30	LYS	Peptide
49	Co	46	GLN	Peptide
48	Cp	14	TYR	Peptide
48	Cp	60	CYS	Peptide
37	Cr	107	ARG	Peptide
37	Cr	126	LYS	Peptide
37	Cr	22	LYS	Peptide
37	Cr	24	ASP	Peptide
37	Cr	26	LYS	Peptide
37	Cr	27	LYS	Peptide
37	Cr	28	PRO	Peptide
37	Cr	37	ALA	Peptide
37	Cr	41	SER	Peptide

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Mol	Chain	Res	Type	Group
37	Cr	43	ARG	Peptide
37	Cr	45	SER	Peptide
37	Cr	46	GLY	Peptide
37	Cr	50	LYS	Peptide
37	Cr	57	PRO	Peptide
37	Cr	64	PHE	Peptide
37	Cr	69	LYS	Peptide
37	Cr	71	GLY	Peptide
37	Cr	79	LYS	Peptide
37	Cr	81	THR	Peptide
37	Cr	83	ARG	Peptide
69	DA	132	GLY	Peptide
69	DA	171	GLU	Peptide

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AA	216/218 (99%)	187 (87%)	28 (13%)	1 (0%)	25	59
2	CA	251/253 (99%)	214 (85%)	36 (14%)	1 (0%)	30	64
3	AB	218/220 (99%)	178 (82%)	38 (17%)	2 (1%)	14	49
4	CB	412/414 (100%)	339 (82%)	68 (16%)	5 (1%)	11	43
5	AC	225/227 (99%)	198 (88%)	27 (12%)	0	100	100
6	CC	390/392 (100%)	323 (83%)	65 (17%)	2 (0%)	25	59
7	Ag	316/318 (99%)	276 (87%)	40 (13%)	0	100	100
8	AU	100/102 (98%)	92 (92%)	8 (8%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	AX	141/143 (99%)	117 (83%)	23 (16%)	1 (1%)	19	53
10	AM	117/119 (98%)	93 (80%)	24 (20%)	0	100	100
11	Ad	50/52 (96%)	28 (56%)	21 (42%)	1 (2%)	6	33
12	AN	148/150 (99%)	138 (93%)	10 (7%)	0	100	100
13	AL	153/155 (99%)	125 (82%)	28 (18%)	0	100	100
14	AR	118/120 (98%)	105 (89%)	13 (11%)	0	100	100
15	AP	122/124 (98%)	102 (84%)	20 (16%)	0	100	100
16	AV	80/82 (98%)	65 (81%)	15 (19%)	0	100	100
17	AY	124/126 (98%)	102 (82%)	22 (18%)	0	100	100
18	AZ	72/74 (97%)	65 (90%)	7 (10%)	0	100	100
19	Aa	105/107 (98%)	78 (74%)	26 (25%)	1 (1%)	13	46
20	Ab	82/84 (98%)	63 (77%)	19 (23%)	0	100	100
21	AD	225/227 (99%)	191 (85%)	30 (13%)	4 (2%)	7	35
22	Ae	56/58 (97%)	38 (68%)	18 (32%)	0	100	100
23	Af	78/80 (98%)	62 (80%)	16 (20%)	0	100	100
24	AJ	179/181 (99%)	148 (83%)	28 (16%)	3 (2%)	7	36
25	Ca	147/149 (99%)	118 (80%)	27 (18%)	2 (1%)	9	40
26	CN	201/203 (99%)	159 (79%)	40 (20%)	2 (1%)	13	46
27	CI	215/217 (99%)	182 (85%)	32 (15%)	1 (0%)	25	59
28	CD	288/290 (99%)	244 (85%)	43 (15%)	1 (0%)	37	68
29	CQ	185/187 (99%)	164 (89%)	21 (11%)	0	100	100
30	CR	201/203 (99%)	179 (89%)	22 (11%)	0	100	100
31	CS	171/173 (99%)	121 (71%)	43 (25%)	7 (4%)	2	20
32	CT	156/158 (99%)	128 (82%)	26 (17%)	2 (1%)	10	41
33	CP	183/185 (99%)	153 (84%)	30 (16%)	0	100	100
34	CX	118/120 (98%)	95 (80%)	22 (19%)	1 (1%)	16	51
35	CY	129/131 (98%)	115 (89%)	14 (11%)	0	100	100
36	CZ	132/134 (98%)	113 (86%)	18 (14%)	1 (1%)	16	51
37	Cr	132/134 (98%)	95 (72%)	31 (24%)	6 (4%)	2	18
38	Ch	121/123 (98%)	108 (89%)	13 (11%)	0	100	100
39	Cb	73/75 (97%)	57 (78%)	15 (20%)	1 (1%)	9	40

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	Cc	98/100 (98%)	92 (94%)	6 (6%)	0	100	100
41	Ce	130/132 (98%)	112 (86%)	15 (12%)	3 (2%)	5	31
42	Cf	155/157 (99%)	121 (78%)	32 (21%)	2 (1%)	10	41
43	Ci	111/113 (98%)	82 (74%)	27 (24%)	2 (2%)	7	35
44	Ck	68/70 (97%)	61 (90%)	7 (10%)	0	100	100
45	Cl	48/50 (96%)	37 (77%)	11 (23%)	0	100	100
46	Cm	50/52 (96%)	38 (76%)	12 (24%)	0	100	100
47	Cn	23/25 (92%)	23 (100%)	0	0	100	100
48	Cp	89/91 (98%)	78 (88%)	11 (12%)	0	100	100
49	Co	102/104 (98%)	77 (76%)	22 (22%)	3 (3%)	3	27
50	CJ	180/182 (99%)	148 (82%)	31 (17%)	1 (1%)	22	56
51	CH	188/190 (99%)	162 (86%)	23 (12%)	3 (2%)	8	38
52	CE	226/228 (99%)	167 (74%)	55 (24%)	4 (2%)	7	35
53	CG	239/241 (99%)	207 (87%)	31 (13%)	1 (0%)	30	64
57	Cz	215/217 (99%)	196 (91%)	19 (9%)	0	100	100
60	AE	259/261 (99%)	217 (84%)	40 (15%)	2 (1%)	16	51
61	AG	229/231 (99%)	207 (90%)	22 (10%)	0	100	100
62	AH	192/194 (99%)	156 (81%)	35 (18%)	1 (0%)	25	59
63	AI	205/207 (99%)	157 (77%)	47 (23%)	1 (0%)	25	59
64	AQ	146/148 (99%)	123 (84%)	23 (16%)	0	100	100
65	CO	203/205 (99%)	172 (85%)	27 (13%)	4 (2%)	6	33
66	CL	208/210 (99%)	147 (71%)	49 (24%)	12 (6%)	1	13
67	CV	132/134 (98%)	120 (91%)	12 (9%)	0	100	100
68	CM	157/159 (99%)	130 (83%)	26 (17%)	1 (1%)	22	56
69	DA	346/370 (94%)	308 (89%)	37 (11%)	1 (0%)	37	68
70	AK	88/90 (98%)	72 (82%)	16 (18%)	0	100	100
71	AT	128/143 (90%)	100 (78%)	26 (20%)	2 (2%)	8	38
72	AF	187/189 (99%)	145 (78%)	41 (22%)	1 (0%)	25	59
73	AO	125/127 (98%)	100 (80%)	25 (20%)	0	100	100
74	Ac	60/62 (97%)	51 (85%)	9 (15%)	0	100	100
75	AW	127/129 (98%)	116 (91%)	11 (9%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
76	CW	56/58 (97%)	47 (84%)	7 (12%)	2 (4%)	3	22
77	Cg	101/103 (98%)	88 (87%)	13 (13%)	0	100	100
78	CU	94/96 (98%)	71 (76%)	23 (24%)	0	100	100
79	Cj	83/87 (95%)	67 (81%)	14 (17%)	2 (2%)	5	30
80	CF	221/223 (99%)	191 (86%)	26 (12%)	4 (2%)	7	35
81	Cd	106/108 (98%)	92 (87%)	14 (13%)	0	100	100
82	AS	132/134 (98%)	116 (88%)	16 (12%)	0	100	100
All	All	11937/12128 (98%)	9952 (83%)	1888 (16%)	97 (1%)	19	51

All (97) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	CA	196	TRP
3	AB	120	TRP
25	Ca	79	LEU
63	AI	99	ASN
65	CO	112	SER
65	CO	113	PRO
66	CL	3	LYS
66	CL	77	LEU
71	AT	40	ALA
1	AA	32	PHE
4	CB	34	LYS
4	CB	312	LYS
6	CC	6	ALA
6	CC	93	GLY
28	CD	20	PHE
32	CT	5	LYS
32	CT	84	ILE
37	Cr	28	PRO
37	Cr	73	TYR
41	Ce	21	ARG
43	Ci	44	THR
49	Co	27	LYS
49	Co	30	LYS
50	CJ	97	TYR
60	AE	241	GLY
66	CL	53	ALA
66	CL	76	THR
79	Cj	5	THR

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Mol	Chain	Res	Type
80	CF	171	PRO
80	CF	236	ASP
9	AX	88	ASP
21	AD	202	PRO
31	CS	119	ALA
31	CS	139	ARG
31	CS	175	TYR
37	Cr	27	LYS
66	CL	7	MET
66	CL	161	PRO
68	CM	104	LEU
79	Cj	25	SER
19	Aa	63	VAL
25	Ca	25	LYS
26	CN	165	THR
31	CS	53	LYS
31	CS	173	ARG
37	Cr	40	SER
37	Cr	72	LYS
39	Cb	24	PRO
41	Ce	15	ARG
41	Ce	22	HIS
49	Co	29	SER
51	CH	23	ARG
52	CE	21	PRO
52	CE	229	MET
53	CG	168	PRO
65	CO	202	GLY
66	CL	125	LEU
80	CF	173	THR
80	CF	237	PHE
4	CB	375	GLY
11	Ad	40	ARG
21	AD	181	GLN
21	AD	182	GLY
24	AJ	7	PRO
26	CN	40	PRO
31	CS	68	TYR
31	CS	133	PRO
43	Ci	43	GLN
51	CH	107	ASN
52	CE	60	VAL

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Mol	Chain	Res	Type
69	DA	133	ILE
76	CW	25	ASP
4	CB	64	GLY
24	AJ	10	PHE
37	Cr	39	VAL
42	Cf	138	ASN
60	AE	195	VAL
65	CO	193	PRO
66	CL	61	PRO
24	AJ	149	VAL
36	CZ	97	PRO
72	AF	129	GLY
21	AD	207	PRO
42	Cf	139	LEU
51	CH	109	VAL
52	CE	61	PRO
71	AT	49	ASP
3	AB	224	PRO
34	CX	165	VAL
66	CL	47	PRO
66	CL	56	PRO
4	CB	63	PRO
66	CL	46	PHE
66	CL	55	ARG
76	CW	26	GLY
62	AH	188	PRO
27	CI	205	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	AA	190/190 (100%)	187 (98%)	3 (2%)	58 76
2	CA	195/195 (100%)	186 (95%)	9 (5%)	23 52
3	AB	199/199 (100%)	198 (100%)	1 (0%)	86 93

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	CB	349/349 (100%)	340 (97%)	9 (3%)	41	66
5	AC	188/188 (100%)	180 (96%)	8 (4%)	25	54
6	CC	323/323 (100%)	309 (96%)	14 (4%)	25	54
7	Ag	280/280 (100%)	274 (98%)	6 (2%)	48	71
8	AU	95/95 (100%)	93 (98%)	2 (2%)	48	71
9	AX	116/116 (100%)	115 (99%)	1 (1%)	75	86
10	AM	104/104 (100%)	102 (98%)	2 (2%)	52	73
11	Ad	45/45 (100%)	44 (98%)	1 (2%)	47	70
12	AN	130/130 (100%)	130 (100%)	0	100	100
13	AL	138/138 (100%)	136 (99%)	2 (1%)	62	79
14	AR	108/108 (100%)	108 (100%)	0	100	100
15	AP	111/111 (100%)	110 (99%)	1 (1%)	75	86
16	AV	67/67 (100%)	65 (97%)	2 (3%)	36	63
17	AY	105/106 (99%)	101 (96%)	4 (4%)	28	57
18	AZ	67/67 (100%)	65 (97%)	2 (3%)	36	63
19	Aa	94/94 (100%)	91 (97%)	3 (3%)	34	62
20	Ab	72/72 (100%)	71 (99%)	1 (1%)	62	79
21	AD	192/192 (100%)	188 (98%)	4 (2%)	48	71
22	Ae	47/47 (100%)	45 (96%)	2 (4%)	25	54
23	Af	70/70 (100%)	69 (99%)	1 (1%)	62	79
24	AJ	161/161 (100%)	159 (99%)	2 (1%)	67	82
25	Ca	122/122 (100%)	122 (100%)	0	100	100
26	CN	174/174 (100%)	168 (97%)	6 (3%)	32	60
27	CI	187/187 (100%)	183 (98%)	4 (2%)	48	71
28	CD	241/241 (100%)	236 (98%)	5 (2%)	48	71
29	CQ	164/164 (100%)	154 (94%)	10 (6%)	15	43
30	CR	176/176 (100%)	170 (97%)	6 (3%)	32	60
31	CS	156/156 (100%)	150 (96%)	6 (4%)	28	57
32	CT	137/137 (100%)	135 (98%)	2 (2%)	60	77
33	CP	160/160 (100%)	154 (96%)	6 (4%)	28	57
34	CX	106/106 (100%)	106 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	CY	116/116 (100%)	110 (95%)	6 (5%)	19	47
36	CZ	121/121 (100%)	121 (100%)	0	100	100
37	Cr	112/112 (100%)	106 (95%)	6 (5%)	18	46
38	Ch	112/112 (100%)	111 (99%)	1 (1%)	75	86
39	Cb	67/67 (100%)	63 (94%)	4 (6%)	16	43
40	Cc	84/84 (100%)	84 (100%)	0	100	100
41	Ce	120/120 (100%)	119 (99%)	1 (1%)	79	88
42	Cf	123/123 (100%)	119 (97%)	4 (3%)	33	61
43	Ci	100/100 (100%)	96 (96%)	4 (4%)	27	56
44	Ck	65/65 (100%)	65 (100%)	0	100	100
45	Cl	45/45 (100%)	44 (98%)	1 (2%)	47	70
46	Cm	48/48 (100%)	47 (98%)	1 (2%)	48	71
47	Cn	23/23 (100%)	21 (91%)	2 (9%)	8	31
48	Cp	74/74 (100%)	70 (95%)	4 (5%)	18	46
49	Co	94/94 (100%)	92 (98%)	2 (2%)	48	71
50	CJ	155/155 (100%)	153 (99%)	2 (1%)	65	81
51	CH	169/169 (100%)	165 (98%)	4 (2%)	44	68
52	CE	197/197 (100%)	190 (96%)	7 (4%)	30	59
53	CG	210/210 (100%)	207 (99%)	3 (1%)	62	79
57	Cz	190/190 (100%)	186 (98%)	4 (2%)	48	71
60	AE	220/220 (100%)	219 (100%)	1 (0%)	86	93
61	AG	200/200 (100%)	197 (98%)	3 (2%)	60	77
62	AH	175/175 (100%)	172 (98%)	3 (2%)	56	75
63	AI	175/175 (100%)	173 (99%)	2 (1%)	70	83
64	AQ	122/122 (100%)	119 (98%)	3 (2%)	42	67
65	CO	175/175 (100%)	169 (97%)	6 (3%)	32	60
66	CL	173/173 (100%)	167 (96%)	6 (4%)	31	59
67	CV	101/101 (100%)	99 (98%)	2 (2%)	50	72
68	CM	138/138 (100%)	135 (98%)	3 (2%)	47	70
69	DA	294/310 (95%)	289 (98%)	5 (2%)	56	75
70	AK	81/81 (100%)	79 (98%)	2 (2%)	42	67

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
71	AT	107/116 (92%)	107 (100%)	0	100	100
72	AF	160/160 (100%)	158 (99%)	2 (1%)	65	81
73	AO	98/98 (100%)	93 (95%)	5 (5%)	20	48
74	Ac	54/54 (100%)	51 (94%)	3 (6%)	17	45
75	AW	113/113 (100%)	113 (100%)	0	100	100
76	CW	52/52 (100%)	50 (96%)	2 (4%)	28	57
77	Cg	95/95 (100%)	88 (93%)	7 (7%)	11	36
78	CU	90/90 (100%)	87 (97%)	3 (3%)	33	61
79	Cj	71/71 (100%)	57 (80%)	14 (20%)	1	6
80	CF	197/197 (100%)	195 (99%)	2 (1%)	73	84
81	Cd	100/100 (100%)	92 (92%)	8 (8%)	10	34
82	AS	120/120 (100%)	119 (99%)	1 (1%)	79	88
All	All	10405/10431 (100%)	10141 (98%)	264 (2%)	43	67

All (264) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AA	41	ARG
1	AA	110	ASN
1	AA	212	LYS
2	CA	45	VAL
2	CA	50	HIS
2	CA	54	ARG
2	CA	101	VAL
2	CA	125	ARG
2	CA	158	VAL
2	CA	176	ASP
2	CA	221	LYS
2	CA	235	VAL
3	AB	85	ARG
4	CB	87	VAL
4	CB	121	ASN
4	CB	141	LEU
4	CB	261	ARG
4	CB	305	THR
4	CB	346	THR
4	CB	365	LEU
4	CB	388	PHE

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Mol	Chain	Res	Type
4	CB	396	ARG
5	AC	95	VAL
5	AC	105	THR
5	AC	106	ARG
5	AC	185	THR
5	AC	213	THR
5	AC	231	TYR
5	AC	240	LYS
5	AC	260	THR
6	CC	7	ARG
6	CC	57	VAL
6	CC	70	TRP
6	CC	72	THR
6	CC	103	ARG
6	CC	110	THR
6	CC	114	TRP
6	CC	116	ARG
6	CC	148	ASP
6	CC	239	ASN
6	CC	269	THR
6	CC	313	PHE
6	CC	314	ARG
6	CC	348	LYS
7	Ag	65	HIS
7	Ag	100	ARG
7	Ag	163	ASN
7	Ag	173	ARG
7	Ag	187	ASN
7	Ag	298	THR
8	AU	40	ASP
8	AU	67	THR
9	AX	119	ARG
10	AM	51	LYS
10	AM	85	ARG
11	Ad	16	GLN
13	AL	42	LYS
13	AL	43	THR
15	AP	11	LYS
16	AV	9	VAL
16	AV	32	ILE
17	AY	50	LYS
17	AY	63	THR

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Mol	Chain	Res	Type
17	AY	71	THR
17	AY	103	GLN
18	AZ	59	LYS
18	AZ	61	VAL
19	Aa	15	ARG
19	Aa	30	VAL
19	Aa	96	THR
20	Ab	45	THR
21	AD	64	LYS
21	AD	180	ARG
21	AD	197	LYS
21	AD	206	LEU
22	Ae	112	ARG
22	Ae	130	ASN
23	Af	119	ARG
24	AJ	40	ASN
24	AJ	122	LYS
26	CN	67	ARG
26	CN	76	PRO
26	CN	160	GLU
26	CN	170	SER
26	CN	194	ARG
26	CN	204	ARG
27	CI	82	LYS
27	CI	91	LEU
27	CI	111	LEU
27	CI	126	VAL
28	CD	17	GLN
28	CD	126	THR
28	CD	130	PHE
28	CD	144	CYS
28	CD	267	ARG
29	CQ	4	ASP
29	CQ	8	LYS
29	CQ	13	VAL
29	CQ	65	ARG
29	CQ	99	THR
29	CQ	115	LYS
29	CQ	161	SER
29	CQ	163	THR
29	CQ	172	ARG
29	CQ	176	ARG

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Mol	Chain	Res	Type
30	CR	55	VAL
30	CR	86	ASN
30	CR	93	LEU
30	CR	95	TRP
30	CR	113	LYS
30	CR	172	ARG
31	CS	25	THR
31	CS	70	THR
31	CS	77	ASN
31	CS	84	TYR
31	CS	90	THR
31	CS	112	ASP
32	CT	9	ARG
32	CT	40	VAL
33	CP	22	LEU
33	CP	61	ARG
33	CP	64	ASN
33	CP	116	HIS
33	CP	144	CYS
33	CP	181	LYS
35	CY	49	ILE
35	CY	50	ARG
35	CY	55	VAL
35	CY	61	HIS
35	CY	79	VAL
35	CY	80	VAL
37	Cr	19	LEU
37	Cr	39	VAL
37	Cr	52	THR
37	Cr	75	GLN
37	Cr	80	ASN
37	Cr	115	LEU
38	Ch	91	ILE
39	Cb	6	ASN
39	Cb	36	ASP
39	Cb	58	LYS
39	Cb	68	LYS
41	Ce	4	ARG
42	Cf	44	TYR
42	Cf	46	ARG
42	Cf	114	VAL
42	Cf	131	VAL

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Mol	Chain	Res	Type
43	Ci	41	ASN
43	Ci	58	VAL
43	Ci	71	LEU
43	Ci	108	ARG
45	Cl	28	ARG
46	Cm	118	THR
47	Cn	18	ARG
47	Cn	25	LYS
48	Cp	49	ARG
48	Cp	54	ILE
48	Cp	64	VAL
48	Cp	84	ARG
49	Co	32	ARG
49	Co	33	LYS
50	CJ	107	THR
50	CJ	151	ARG
51	CH	3	THR
51	CH	41	LEU
51	CH	61	THR
51	CH	107	ASN
52	CE	33	TYR
52	CE	92	ARG
52	CE	96	THR
52	CE	169	ARG
52	CE	193	VAL
52	CE	234	SER
52	CE	237	TYR
53	CG	135	LYS
53	CG	140	TYR
53	CG	205	THR
57	Cz	4	LYS
57	Cz	92	LYS
57	Cz	140	HIS
57	Cz	158	GLN
60	AE	8	HIS
61	AG	65	GLN
61	AG	77	LEU
61	AG	182	THR
62	AH	104	ARG
62	AH	121	THR
62	AH	189	ASP
63	AI	67	TRP

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Mol	Chain	Res	Type
63	AI	140	THR
64	AQ	20	THR
64	AQ	39	ARG
64	AQ	119	ARG
65	CO	25	VAL
65	CO	76	ARG
65	CO	119	ARG
65	CO	131	LEU
65	CO	134	ASP
65	CO	174	ARG
66	CL	30	ARG
66	CL	67	THR
66	CL	75	PHE
66	CL	137	GLU
66	CL	144	LYS
66	CL	157	LYS
67	CV	48	ARG
67	CV	101	ASN
68	CM	50	TYR
68	CM	64	PHE
68	CM	109	ARG
69	DA	59	LEU
69	DA	173	VAL
69	DA	246	PHE
69	DA	371	ARG
69	DA	418	ASP
70	AK	32	HIS
70	AK	57	LYS
72	AF	154	ARG
72	AF	217	LYS
73	AO	55	ARG
73	AO	105	THR
73	AO	133	THR
73	AO	142	ARG
73	AO	150	ARG
74	Ac	22	GLN
74	Ac	23	CYS
74	Ac	41	ASN
76	CW	20	THR
76	CW	30	THR
77	Cg	4	ARG
77	Cg	6	THR

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Mol	Chain	Res	Type
77	Cg	7	LEU
77	Cg	17	SER
77	Cg	38	ASN
77	Cg	40	THR
77	Cg	75	THR
78	CU	239	LYS
78	CU	251	PHE
78	CU	285	MET
79	Cj	18	ILE
79	Cj	20	ARG
79	Cj	21	ARG
79	Cj	27	TYR
79	Cj	32	SER
79	Cj	33	LYS
79	Cj	35	SER
79	Cj	45	ARG
79	Cj	50	SER
79	Cj	51	ARG
79	Cj	63	ARG
79	Cj	65	ARG
79	Cj	66	TYR
79	Cj	69	ASN
80	CF	166	ASN
80	CF	194	LEU
81	Cd	15	ASN
81	Cd	25	HIS
81	Cd	28	LYS
81	Cd	31	HIS
81	Cd	62	ASP
81	Cd	85	LEU
81	Cd	116	THR
81	Cd	117	GLU
82	AS	118	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (11) such sidechains are listed below:

Mol	Chain	Res	Type
18	AZ	46	GLN
31	CS	159	HIS
33	CP	64	ASN
33	CP	80	GLN
57	Cz	205	HIS

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Mol	Chain	Res	Type
71	AT	63	HIS
71	AT	85	ASN
79	Cj	16	HIS
82	AS	10	GLN
82	AS	102	ASN
82	AS	135	HIS

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
54	A9	29/30 (96%)	6 (20%)	1 (3%)
55	A7	119/120 (99%)	30 (25%)	1 (0%)
56	A8	122/123 (99%)	51 (41%)	5 (4%)
58	B2	1793/1995 (89%)	674 (37%)	37 (2%)
59	A5	3566/3974 (89%)	1380 (38%)	108 (3%)
All	All	5629/6242 (90%)	2141 (38%)	152 (2%)

All (2141) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
54	A9	6	G
54	A9	9	C
54	A9	21	G
54	A9	22	A
54	A9	24	G
54	A9	30	A
55	A7	2	C
55	A7	7	G
55	A7	14	C
55	A7	22	A
55	A7	25	A
55	A7	27	A
55	A7	33	U
55	A7	37	G
55	A7	38	U
55	A7	39	C
55	A7	44	C
55	A7	50	A
55	A7	60	C
55	A7	62	U
55	A7	64	G

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Mol	Chain	Res	Type
55	A7	66	G
55	A7	71	G
55	A7	72	U
55	A7	73	U
55	A7	74	A
55	A7	78	C
55	A7	81	A
55	A7	97	G
55	A7	98	G
55	A7	100	A
55	A7	110	G
55	A7	112	U
55	A7	113	G
55	A7	116	G
55	A7	120	U
56	A8	2	A
56	A8	5	C
56	A8	10	C
56	A8	19	A
56	A8	22	C
56	A8	23	G
56	A8	24	G
56	A8	25	C
56	A8	31	G
56	A8	33	U
56	A8	34	C
56	A8	38	G
56	A8	40	A
56	A8	41	G
56	A8	45	G
56	A8	48	G
56	A8	50	A
56	A8	51	A
56	A8	52	A
56	A8	57	G
56	A8	59	G
56	A8	61	C
56	A8	62	A
56	A8	63	U
56	A8	70	A
56	A8	78	G
56	A8	80	C

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Mol	Chain	Res	Type
56	A8	81	A
56	A8	82	C
56	A8	83	A
56	A8	84	U
56	A8	85	G
56	A8	86	A
56	A8	89	A
56	A8	92	G
56	A8	101	A
56	A8	102	A
56	A8	103	C
56	A8	104	G
56	A8	105	C
56	A8	106	A
56	A8	107	U
56	A8	108	A
56	A8	109	U
56	A8	110	C
56	A8	111	G
56	A8	113	A
56	A8	117	C
56	A8	121	C
56	A8	122	U
56	A8	123	G
58	B2	2	U
58	B2	4	C
58	B2	16	G
58	B2	17	C
58	B2	25	U
58	B2	26	A
58	B2	27	U
58	B2	34	G
58	B2	36	C
58	B2	38	C
58	B2	41	A
58	B2	42	G
58	B2	43	A
58	B2	45	U
58	B2	46	A
58	B2	47	A
58	B2	50	C
58	B2	57	G

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Mol	Chain	Res	Type
58	B2	60	U
58	B2	63	G
58	B2	65	A
58	B2	66	C
58	B2	68	C
58	B2	69	A
58	B2	73	A
58	B2	74	U
58	B2	75	U
58	B2	76	A
58	B2	77	A
58	B2	80	G
58	B2	82	G
58	B2	83	A
58	B2	84	A
58	B2	86	C
58	B2	93	A
58	B2	94	G
58	B2	96	C
58	B2	99	A
58	B2	103	U
58	B2	104	A
58	B2	110	U
58	B2	113	G
58	B2	114	G
58	B2	115	U
58	B2	124	U
58	B2	125	C
58	B2	126	G
58	B2	135	U
58	B2	136	A
58	B2	137	C
58	B2	138	U
58	B2	139	U
58	B2	141	G
58	B2	142	A
58	B2	143	U
58	B2	147	U
58	B2	150	G
58	B2	153	A
58	B2	155	U
58	B2	156	U

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Mol	Chain	Res	Type
58	B2	157	C
58	B2	167	U
58	B2	172	G
58	B2	173	C
58	B2	174	A
58	B2	176	U
58	B2	177	U
58	B2	178	A
58	B2	183	A
58	B2	184	U
58	B2	185	G
58	B2	188	C
58	B2	190	U
58	B2	191	U
58	B2	193	U
58	B2	194	G
58	B2	196	G
58	B2	200	U
58	B2	214	G
58	B2	215	C
58	B2	216	U
58	B2	221	C
58	B2	224	A
58	B2	226	C
58	B2	227	G
58	B2	233	A
58	B2	235	G
58	B2	236	A
58	B2	238	C
58	B2	242	A
58	B2	245	U
58	B2	246	U
58	B2	249	U
58	B2	250	U
58	B2	251	G
58	B2	252	A
58	B2	253	A
58	B2	254	C
58	B2	255	U
58	B2	257	U
58	B2	258	A
58	B2	259	G

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Mol	Chain	Res	Type
58	B2	260	A
58	B2	265	A
58	B2	266	U
58	B2	267	G
58	B2	270	G
58	B2	276	A
58	B2	279	G
58	B2	281	C
58	B2	283	U
58	B2	284	G
58	B2	285	U
58	B2	289	G
58	B2	290	A
58	B2	291	C
58	B2	292	G
58	B2	293	A
58	B2	294	C
58	B2	302	U
58	B2	304	A
58	B2	313	C
58	B2	314	C
58	B2	315	C
58	B2	316	U
58	B2	318	U
58	B2	319	C
58	B2	321	A
58	B2	324	U
58	B2	325	U
58	B2	326	U
58	B2	327	G
58	B2	338	C
58	B2	341	G
58	B2	342	G
58	B2	343	A
58	B2	352	G
58	B2	355	G
58	B2	357	A
58	B2	364	A
58	B2	365	A
58	B2	366	C
58	B2	375	A
58	B2	376	G

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Mol	Chain	Res	Type
58	B2	379	U
58	B2	382	G
58	B2	385	U
58	B2	386	C
58	B2	392	A
58	B2	395	G
58	B2	399	C
58	B2	402	A
58	B2	405	A
58	B2	407	C
58	B2	409	G
58	B2	412	A
58	B2	421	A
58	B2	422	A
58	B2	423	G
58	B2	426	A
58	B2	428	G
58	B2	429	C
58	B2	431	G
58	B2	439	G
58	B2	440	U
58	B2	444	U
58	B2	449	C
58	B2	450	A
58	B2	453	C
58	B2	464	G
58	B2	466	G
58	B2	473	A
58	B2	482	A
58	B2	489	C
58	B2	490	A
58	B2	501	C
58	B2	506	G
58	B2	507	C
58	B2	509	C
58	B2	510	U
58	B2	511	G
58	B2	512	U
58	B2	513	A
58	B2	514	A
58	B2	515	U
58	B2	516	U

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Mol	Chain	Res	Type
58	B2	517	G
58	B2	519	A
58	B2	521	U
58	B2	522	G
58	B2	523	A
58	B2	527	C
58	B2	529	C
58	B2	531	U
58	B2	541	U
58	B2	542	A
58	B2	544	C
58	B2	546	A
58	B2	547	G
58	B2	548	G
58	B2	549	A
58	B2	550	C
58	B2	553	A
58	B2	554	U
58	B2	557	G
58	B2	559	G
58	B2	562	C
58	B2	564	A
58	B2	565	G
58	B2	573	C
58	B2	576	G
58	B2	585	G
58	B2	587	A
58	B2	588	A
58	B2	593	A
58	B2	600	A
58	B2	602	A
58	B2	603	G
58	B2	605	G
58	B2	613	A
58	B2	614	A
58	B2	617	U
58	B2	618	G
58	B2	619	U
58	B2	627	A
58	B2	628	A
58	B2	631	C
58	B2	632	G

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Mol	Chain	Res	Type
58	B2	637	U
58	B2	642	G
58	B2	643	A
58	B2	646	U
58	B2	647	U
58	B2	648	G
58	B2	655	A
58	B2	656	U
58	B2	702	U
58	B2	705	G
58	B2	706	U
58	B2	713	A
58	B2	714	U
58	B2	715	U
58	B2	716	A
58	B2	717	C
58	B2	719	G
58	B2	720	G
58	B2	819	G
58	B2	824	U
58	B2	825	A
58	B2	833	G
58	B2	837	A
58	B2	838	A
58	B2	843	G
58	B2	847	G
58	B2	848	C
58	B2	853	A
58	B2	856	A
58	B2	857	G
58	B2	858	G
58	B2	860	U
58	B2	861	U
58	B2	862	C
58	B2	863	A
58	B2	864	A
58	B2	865	A
58	B2	866	U
58	B2	867	G
58	B2	868	C
58	B2	869	C
58	B2	871	G

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Mol	Chain	Res	Type
58	B2	873	A
58	B2	875	A
58	B2	876	U
58	B2	878	C
58	B2	879	U
58	B2	892	A
58	B2	895	A
58	B2	896	A
58	B2	897	A
58	B2	898	U
58	B2	899	A
58	B2	900	A
58	B2	901	G
58	B2	902	A
58	B2	903	C
58	B2	905	U
58	B2	906	C
58	B2	907	U
58	B2	908	G
58	B2	909	U
58	B2	910	U
58	B2	911	C
58	B2	913	G
58	B2	915	U
58	B2	916	U
58	B2	918	C
58	B2	919	A
58	B2	922	G
58	B2	929	A
58	B2	930	G
58	B2	933	C
58	B2	935	A
58	B2	936	G
58	B2	937	A
58	B2	938	G
58	B2	939	G
58	B2	940	U
58	B2	941	A
58	B2	942	A
58	B2	943	U
58	B2	944	G
58	B2	949	A

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Mol	Chain	Res	Type
58	B2	950	U
58	B2	957	A
58	B2	958	G
58	B2	959	U
58	B2	960	U
58	B2	963	G
58	B2	970	U
58	B2	972	G
58	B2	973	U
58	B2	976	U
58	B2	984	G
58	B2	991	G
58	B2	993	A
58	B2	999	U
58	B2	1000	G
58	B2	1001	G
58	B2	1002	A
58	B2	1005	G
58	B2	1019	U
58	B2	1020	U
58	B2	1022	A
58	B2	1031	A
58	B2	1047	U
58	B2	1052	U
58	B2	1053	A
58	B2	1055	U
58	B2	1057	A
58	B2	1058	A
58	B2	1061	A
58	B2	1064	A
58	B2	1073	G
58	B2	1079	A
58	B2	1080	A
58	B2	1090	A
58	B2	1091	U
58	B2	1092	A
58	B2	1098	C
58	B2	1099	U
58	B2	1100	A
58	B2	1101	G
58	B2	1102	U
58	B2	1107	A

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Mol	Chain	Res	Type
58	B2	1109	C
58	B2	1110	A
58	B2	1111	U
58	B2	1113	A
58	B2	1115	C
58	B2	1116	G
58	B2	1117	A
58	B2	1118	U
58	B2	1119	G
58	B2	1127	G
58	B2	1130	A
58	B2	1138	U
58	B2	1139	A
58	B2	1140	G
58	B2	1144	C
58	B2	1145	U
58	B2	1147	U
58	B2	1148	U
58	B2	1151	G
58	B2	1161	G
58	B2	1167	U
58	B2	1168	C
58	B2	1169	C
58	B2	1170	G
58	B2	1173	A
58	B2	1179	A
58	B2	1180	A
58	B2	1183	U
58	B2	1184	U
58	B2	1185	U
58	B2	1186	U
58	B2	1187	U
58	B2	1188	G
58	B2	1190	G
58	B2	1194	C
58	B2	1196	G
58	B2	1197	G
58	B2	1199	G
58	B2	1201	A
58	B2	1212	A
58	B2	1213	A
58	B2	1216	C

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Mol	Chain	Res	Type
58	B2	1217	U
58	B2	1226	A
58	B2	1235	A
58	B2	1236	C
58	B2	1238	G
58	B2	1240	A
58	B2	1243	G
58	B2	1244	C
58	B2	1246	C
58	B2	1248	A
58	B2	1249	C
58	B2	1251	A
58	B2	1252	G
58	B2	1255	G
58	B2	1263	U
58	B2	1266	G
58	B2	1269	U
58	B2	1273	U
58	B2	1274	U
58	B2	1275	U
58	B2	1282	A
58	B2	1283	C
58	B2	1284	A
58	B2	1287	G
58	B2	1288	G
58	B2	1289	A
58	B2	1290	A
58	B2	1295	U
58	B2	1301	G
58	B2	1305	A
58	B2	1306	A
58	B2	1307	C
58	B2	1310	A
58	B2	1311	A
58	B2	1313	U
58	B2	1314	G
58	B2	1315	U
58	B2	1316	G
58	B2	1317	U
58	B2	1318	A
58	B2	1321	A
58	B2	1323	A

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Mol	Chain	Res	Type
58	B2	1324	G
58	B2	1325	A
58	B2	1327	U
58	B2	1328	G
58	B2	1329	A
58	B2	1330	U
58	B2	1332	G
58	B2	1337	U
58	B2	1339	C
58	B2	1341	C
58	B2	1342	G
58	B2	1343	A
58	B2	1346	C
58	B2	1347	U
58	B2	1348	A
58	B2	1349	U
58	B2	1351	G
58	B2	1352	G
58	B2	1356	U
58	B2	1357	G
58	B2	1361	C
58	B2	1363	U
58	B2	1371	C
58	B2	1372	U
58	B2	1373	U
58	B2	1379	G
58	B2	1380	U
58	B2	1382	G
58	B2	1384	G
58	B2	1385	U
58	B2	1389	U
58	B2	1393	C
58	B2	1394	U
58	B2	1399	A
58	B2	1401	U
58	B2	1402	U
58	B2	1404	C
58	B2	1406	A
58	B2	1407	U
58	B2	1408	A
58	B2	1409	A
58	B2	1410	C

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Mol	Chain	Res	Type
58	B2	1411	G
58	B2	1412	A
58	B2	1424	A
58	B2	1425	U
58	B2	1426	A
58	B2	1427	U
58	B2	1428	A
58	B2	1430	U
58	B2	1432	A
58	B2	1433	A
58	B2	1436	G
58	B2	1438	U
58	B2	1442	U
58	B2	1448	A
58	B2	1449	U
58	B2	1450	U
58	B2	1451	A
58	B2	1452	U
58	B2	1457	C
58	B2	1458	U
58	B2	1460	A
58	B2	1529	G
58	B2	1530	A
58	B2	1531	G
58	B2	1541	U
58	B2	1544	G
58	B2	1545	U
58	B2	1546	U
58	B2	1547	U
58	B2	1548	G
58	B2	1551	C
58	B2	1552	C
58	B2	1555	U
58	B2	1558	A
58	B2	1561	G
58	B2	1565	C
58	B2	1566	U
58	B2	1567	A
58	B2	1569	C
58	B2	1570	U
58	B2	1571	U
58	B2	1572	C

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Mol	Chain	Res	Type
58	B2	1573	U
58	B2	1577	A
58	B2	1578	U
58	B2	1579	G
58	B2	1580	G
58	B2	1581	A
58	B2	1582	C
58	B2	1584	A
58	B2	1585	A
58	B2	1588	G
58	B2	1589	C
58	B2	1591	U
58	B2	1593	U
58	B2	1594	A
58	B2	1595	G
58	B2	1596	C
58	B2	1597	A
58	B2	1599	U
58	B2	1601	A
58	B2	1602	U
58	B2	1604	A
58	B2	1605	G
58	B2	1617	A
58	B2	1619	A
58	B2	1620	G
58	B2	1623	C
58	B2	1627	G
58	B2	1628	A
58	B2	1636	A
58	B2	1637	G
58	B2	1638	A
58	B2	1639	U
58	B2	1640	G
58	B2	1643	C
58	B2	1645	G
58	B2	1651	C
58	B2	1659	C
58	B2	1663	A
58	B2	1665	U
58	B2	1666	G
58	B2	1668	A
58	B2	1669	A

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Mol	Chain	Res	Type
58	B2	1670	G
58	B2	1671	U
58	B2	1673	U
58	B2	1674	C
58	B2	1675	A
58	B2	1678	G
58	B2	1682	A
58	B2	1683	U
58	B2	1684	U
58	B2	1685	U
58	B2	1688	U
58	B2	1691	A
58	B2	1695	A
58	B2	1698	G
58	B2	1702	C
58	B2	1706	U
58	B2	1708	A
58	B2	1709	A
58	B2	1713	C
58	B2	1715	G
58	B2	1716	A
58	B2	1718	C
58	B2	1719	C
58	B2	1720	A
58	B2	1726	A
58	B2	1727	U
58	B2	1728	G
58	B2	1729	C
58	B2	1732	G
58	B2	1734	G
58	B2	1742	A
58	B2	1743	C
58	B2	1747	A
58	B2	1748	A
58	B2	1749	C
58	B2	1750	U
58	B2	1751	G
58	B2	1755	A
58	B2	1758	A
58	B2	1765	U
58	B2	1766	G
58	B2	1769	A

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Mol	Chain	Res	Type
58	B2	1771	U
58	B2	1775	A
58	B2	1776	G
58	B2	1782	G
58	B2	1788	C
58	B2	1789	A
58	B2	1790	U
58	B2	1793	A
58	B2	1794	C
58	B2	1797	G
58	B2	1811	C
58	B2	1812	C
58	B2	1813	U
58	B2	1814	G
58	B2	1815	C
58	B2	1816	C
58	B2	1817	C
58	B2	1822	U
58	B2	1823	A
58	B2	1824	C
58	B2	1825	A
58	B2	1826	C
58	B2	1827	A
58	B2	1830	G
58	B2	1831	C
58	B2	1834	G
58	B2	1848	U
58	B2	1849	U
58	B2	1850	G
58	B2	1851	A
58	B2	1865	G
58	B2	1873	A
58	B2	1874	C
58	B2	1875	G
58	B2	1876	U
58	B2	1882	C
58	B2	1886	G
58	B2	1903	G
58	B2	1905	U
58	B2	1906	U
58	B2	1907	G
58	B2	1909	U

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Mol	Chain	Res	Type
58	B2	1911	C
58	B2	1912	G
58	B2	1926	A
58	B2	1930	U
58	B2	1942	G
58	B2	1949	A
58	B2	1950	A
58	B2	1952	G
58	B2	1955	G
58	B2	1956	U
58	B2	1957	A
58	B2	1961	A
58	B2	1962	G
58	B2	1964	U
58	B2	1965	U
58	B2	1975	G
58	B2	1977	A
58	B2	1978	C
58	B2	1986	A
58	B2	1987	G
58	B2	1988	G
58	B2	1989	A
58	B2	1991	C
58	B2	1992	A
58	B2	1994	U
58	B2	1995	A
59	A5	3	A
59	A5	4	U
59	A5	5	A
59	A5	10	A
59	A5	16	A
59	A5	17	C
59	A5	18	U
59	A5	19	C
59	A5	23	U
59	A5	25	G
59	A5	26	G
59	A5	27	A
59	A5	30	A
59	A5	36	U
59	A5	39	A
59	A5	41	U

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Mol	Chain	Res	Type
59	A5	44	A
59	A5	47	A
59	A5	48	U
59	A5	49	A
59	A5	51	U
59	A5	53	A
59	A5	55	U
59	A5	56	A
59	A5	57	G
59	A5	58	G
59	A5	59	G
59	A5	61	A
59	A5	63	G
59	A5	64	A
59	A5	69	A
59	A5	70	A
59	A5	73	U
59	A5	77	A
59	A5	78	A
59	A5	79	G
59	A5	81	A
59	A5	89	A
59	A5	92	A
59	A5	96	G
59	A5	101	C
59	A5	103	A
59	A5	104	A
59	A5	113	A
59	A5	114	G
59	A5	115	U
59	A5	120	C
59	A5	121	A
59	A5	122	C
59	A5	123	U
59	A5	124	A
59	A5	125	A
59	A5	127	U
59	A5	128	C
59	A5	130	C
59	A5	131	U
59	A5	137	U
59	A5	138	A

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Mol	Chain	Res	Type
59	A5	139	U
59	A5	140	A
59	A5	141	U
59	A5	142	G
59	A5	145	A
59	A5	148	U
59	A5	149	G
59	A5	150	U
59	A5	154	A
59	A5	155	U
59	A5	156	G
59	A5	162	U
59	A5	163	A
59	A5	164	U
59	A5	165	G
59	A5	173	A
59	A5	176	A
59	A5	177	U
59	A5	178	U
59	A5	185	U
59	A5	186	G
59	A5	187	A
59	A5	188	G
59	A5	189	A
59	A5	190	A
59	A5	195	A
59	A5	197	G
59	A5	198	A
59	A5	199	U
59	A5	201	U
59	A5	202	A
59	A5	204	G
59	A5	205	U
59	A5	206	C
59	A5	208	U
59	A5	211	U
59	A5	212	U
59	A5	213	A
59	A5	215	A
59	A5	217	G
59	A5	222	C
59	A5	225	U

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Mol	Chain	Res	Type
59	A5	226	U
59	A5	227	A
59	A5	228	C
59	A5	239	U
59	A5	240	G
59	A5	241	C
59	A5	242	C
59	A5	252	U
59	A5	253	A
59	A5	254	A
59	A5	259	A
59	A5	261	U
59	A5	262	G
59	A5	273	G
59	A5	275	U
59	A5	280	C
59	A5	281	C
59	A5	282	A
59	A5	283	A
59	A5	284	A
59	A5	286	A
59	A5	287	G
59	A5	301	U
59	A5	302	A
59	A5	304	U
59	A5	310	A
59	A5	313	A
59	A5	317	G
59	A5	319	G
59	A5	326	A
59	A5	328	U
59	A5	329	C
59	A5	333	C
59	A5	336	A
59	A5	339	C
59	A5	341	A
59	A5	345	A
59	A5	347	A
59	A5	350	C
59	A5	351	A
59	A5	356	A
59	A5	357	C

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Mol	Chain	Res	Type
59	A5	360	A
59	A5	361	U
59	A5	366	A
59	A5	367	A
59	A5	370	A
59	A5	376	G
59	A5	377	U
59	A5	378	G
59	A5	380	G
59	A5	386	G
59	A5	394	G
59	A5	402	A
59	A5	403	A
59	A5	405	A
59	A5	412	U
59	A5	413	A
59	A5	416	C
59	A5	417	A
59	A5	420	A
59	A5	421	C
59	A5	423	U
59	A5	428	C
59	A5	430	G
59	A5	431	C
59	A5	437	G
59	A5	438	G
59	A5	440	U
59	A5	441	A
59	A5	445	C
59	A5	448	A
59	A5	453	C
59	A5	457	A
59	A5	458	A
59	A5	460	A
59	A5	461	U
59	A5	462	C
59	A5	464	G
59	A5	465	U
59	A5	466	U
59	A5	467	A
59	A5	472	A
59	A5	473	A

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Mol	Chain	Res	Type
59	A5	474	A
59	A5	475	U
59	A5	476	U
59	A5	477	C
59	A5	479	U
59	A5	480	C
59	A5	482	U
59	A5	497	U
59	A5	499	A
59	A5	516	U
59	A5	517	A
59	A5	521	U
59	A5	522	G
59	A5	523	C
59	A5	524	A
59	A5	525	U
59	A5	526	U
59	A5	527	U
59	A5	529	U
59	A5	530	U
59	A5	531	C
59	A5	535	A
59	A5	536	U
59	A5	538	A
59	A5	539	G
59	A5	540	G
59	A5	541	A
59	A5	545	U
59	A5	546	G
59	A5	551	C
59	A5	553	A
59	A5	558	C
59	A5	559	A
59	A5	560	U
59	A5	562	U
59	A5	568	A
59	A5	569	U
59	A5	573	U
59	A5	576	U
59	A5	577	A
59	A5	578	A
59	A5	580	A

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Mol	Chain	Res	Type
59	A5	581	U
59	A5	583	U
59	A5	584	A
59	A5	586	C
59	A5	587	U
59	A5	588	U
59	A5	591	A
59	A5	593	U
59	A5	596	A
59	A5	613	U
59	A5	616	A
59	A5	618	U
59	A5	619	U
59	A5	620	U
59	A5	621	A
59	A5	622	A
59	A5	623	C
59	A5	625	C
59	A5	626	A
59	A5	632	A
59	A5	640	U
59	A5	641	A
59	A5	642	A
59	A5	643	U
59	A5	644	U
59	A5	646	G
59	A5	649	A
59	A5	652	G
59	A5	653	U
59	A5	654	G
59	A5	655	C
59	A5	657	G
59	A5	658	A
59	A5	665	U
59	A5	666	A
59	A5	667	U
59	A5	668	A
59	A5	669	U
59	A5	670	G
59	A5	671	A
59	A5	672	U
59	A5	673	U

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Mol	Chain	Res	Type
59	A5	675	C
59	A5	676	A
59	A5	678	U
59	A5	679	G
59	A5	680	C
59	A5	681	G
59	A5	682	U
59	A5	685	A
59	A5	690	U
59	A5	691	C
59	A5	692	G
59	A5	695	A
59	A5	696	U
59	A5	697	U
59	A5	698	A
59	A5	699	U
59	A5	700	A
59	A5	701	U
59	A5	702	A
59	A5	703	A
59	A5	704	U
59	A5	705	G
59	A5	715	U
59	A5	718	U
59	A5	719	U
59	A5	720	G
59	A5	726	U
59	A5	733	A
59	A5	740	G
59	A5	742	A
59	A5	745	U
59	A5	746	G
59	A5	747	U
59	A5	749	U
59	A5	750	G
59	A5	751	A
59	A5	752	U
59	A5	753	U
59	A5	754	A
59	A5	755	A
59	A5	756	C
59	A5	761	C

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Mol	Chain	Res	Type
59	A5	762	G
59	A5	763	A
59	A5	765	A
59	A5	766	G
59	A5	768	U
59	A5	774	A
59	A5	775	U
59	A5	776	A
59	A5	778	C
59	A5	785	A
59	A5	787	C
59	A5	789	G
59	A5	795	A
59	A5	797	A
59	A5	798	C
59	A5	799	A
59	A5	803	A
59	A5	804	C
59	A5	805	C
59	A5	807	A
59	A5	810	A
59	A5	812	U
59	A5	813	C
59	A5	815	A
59	A5	818	A
59	A5	820	A
59	A5	827	A
59	A5	830	U
59	A5	831	A
59	A5	832	U
59	A5	833	U
59	A5	834	G
59	A5	838	U
59	A5	839	A
59	A5	840	U
59	A5	841	A
59	A5	842	A
59	A5	848	A
59	A5	849	U
59	A5	858	U
59	A5	859	A
59	A5	860	A

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Mol	Chain	Res	Type
59	A5	861	C
59	A5	862	U
59	A5	866	C
59	A5	868	A
59	A5	869	A
59	A5	870	U
59	A5	871	A
59	A5	872	A
59	A5	873	U
59	A5	877	A
59	A5	879	U
59	A5	882	U
59	A5	888	A
59	A5	892	A
59	A5	894	U
59	A5	895	U
59	A5	896	A
59	A5	897	U
59	A5	899	G
59	A5	901	U
59	A5	902	A
59	A5	909	A
59	A5	912	A
59	A5	917	G
59	A5	928	U
59	A5	929	A
59	A5	930	U
59	A5	931	A
59	A5	966	U
59	A5	967	C
59	A5	968	U
59	A5	969	A
59	A5	979	U
59	A5	980	A
59	A5	985	G
59	A5	986	A
59	A5	999	U
59	A5	1001	A
59	A5	1005	G
59	A5	1006	A
59	A5	1007	A
59	A5	1008	A

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Mol	Chain	Res	Type
59	A5	1012	G
59	A5	1013	G
59	A5	1016	A
59	A5	1017	A
59	A5	1022	A
59	A5	1024	U
59	A5	1031	G
59	A5	1032	G
59	A5	1034	U
59	A5	1037	A
59	A5	1049	C
59	A5	1052	U
59	A5	1061	A
59	A5	1064	G
59	A5	1067	A
59	A5	1074	U
59	A5	1079	U
59	A5	1080	G
59	A5	1081	C
59	A5	1084	A
59	A5	1087	G
59	A5	1089	U
59	A5	1090	U
59	A5	1094	A
59	A5	1095	G
59	A5	1096	A
59	A5	1097	A
59	A5	1099	U
59	A5	1100	G
59	A5	1103	U
59	A5	1106	A
59	A5	1107	G
59	A5	1108	G
59	A5	1111	C
59	A5	1114	A
59	A5	1115	A
59	A5	1116	G
59	A5	1120	A
59	A5	1121	A
59	A5	1122	U
59	A5	1123	C
59	A5	1124	G

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Mol	Chain	Res	Type
59	A5	1125	A
59	A5	1126	A
59	A5	1132	U
59	A5	1133	A
59	A5	1135	U
59	A5	1137	G
59	A5	1141	G
59	A5	1144	C
59	A5	1145	C
59	A5	1146	U
59	A5	1153	G
59	A5	1155	U
59	A5	1159	C
59	A5	1160	U
59	A5	1162	A
59	A5	1167	A
59	A5	1178	U
59	A5	1179	U
59	A5	1180	U
59	A5	1181	A
59	A5	1182	A
59	A5	1183	U
59	A5	1192	A
59	A5	1193	A
59	A5	1194	A
59	A5	1197	A
59	A5	1198	U
59	A5	1199	C
59	A5	1202	A
59	A5	1207	G
59	A5	1215	A
59	A5	1223	G
59	A5	1226	G
59	A5	1227	C
59	A5	1228	C
59	A5	1229	U
59	A5	1230	U
59	A5	1231	A
59	A5	1232	G
59	A5	1233	G
59	A5	1234	G
59	A5	1240	A

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Mol	Chain	Res	Type
59	A5	1242	G
59	A5	1245	C
59	A5	1247	U
59	A5	1248	A
59	A5	1249	A
59	A5	1254	U
59	A5	1258	C
59	A5	1260	A
59	A5	1262	C
59	A5	1263	U
59	A5	1268	A
59	A5	1270	G
59	A5	1271	G
59	A5	1276	G
59	A5	1277	A
59	A5	1278	A
59	A5	1279	C
59	A5	1281	U
59	A5	1284	A
59	A5	1288	U
59	A5	1289	C
59	A5	1290	U
59	A5	1291	U
59	A5	1293	A
59	A5	1294	U
59	A5	1295	A
59	A5	1296	U
59	A5	1297	G
59	A5	1300	G
59	A5	1301	A
59	A5	1307	G
59	A5	1308	U
59	A5	1309	U
59	A5	1310	A
59	A5	1311	U
59	A5	1316	U
59	A5	1317	A
59	A5	1321	G
59	A5	1324	C
59	A5	1326	A
59	A5	1330	G
59	A5	1331	G

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Mol	Chain	Res	Type
59	A5	1332	C
59	A5	1335	C
59	A5	1342	U
59	A5	1343	A
59	A5	1345	G
59	A5	1348	G
59	A5	1353	G
59	A5	1357	C
59	A5	1358	U
59	A5	1359	G
59	A5	1360	U
59	A5	1367	A
59	A5	1368	A
59	A5	1369	C
59	A5	1370	C
59	A5	1373	A
59	A5	1374	C
59	A5	1375	G
59	A5	1376	U
59	A5	1383	A
59	A5	1384	C
59	A5	1385	G
59	A5	1387	G
59	A5	1390	C
59	A5	1391	A
59	A5	1393	A
59	A5	1394	U
59	A5	1395	U
59	A5	1396	A
59	A5	1397	A
59	A5	1398	C
59	A5	1400	A
59	A5	1405	U
59	A5	1407	C
59	A5	1411	U
59	A5	1413	C
59	A5	1415	A
59	A5	1416	U
59	A5	1420	A
59	A5	1424	G
59	A5	1427	G
59	A5	1428	G

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Mol	Chain	Res	Type
59	A5	1432	C
59	A5	1435	A
59	A5	1436	A
59	A5	1437	A
59	A5	1438	A
59	A5	1442	C
59	A5	1443	A
59	A5	1447	C
59	A5	1449	G
59	A5	1451	G
59	A5	1452	A
59	A5	1453	U
59	A5	1454	C
59	A5	1458	G
59	A5	1459	A
59	A5	1460	A
59	A5	1461	G
59	A5	1463	C
59	A5	1465	A
59	A5	1468	U
59	A5	1470	C
59	A5	1477	G
59	A5	1478	A
59	A5	1480	U
59	A5	1481	G
59	A5	1482	U
59	A5	1483	G
59	A5	1484	U
59	A5	1485	A
59	A5	1486	A
59	A5	1492	C
59	A5	1500	G
59	A5	1502	A
59	A5	1510	G
59	A5	1514	U
59	A5	1516	A
59	A5	1517	A
59	A5	1520	U
59	A5	1522	G
59	A5	1523	A
59	A5	1524	U
59	A5	1531	U

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Mol	Chain	Res	Type
59	A5	1532	A
59	A5	1540	U
59	A5	1541	A
59	A5	1546	U
59	A5	1547	A
59	A5	1555	G
59	A5	1558	A
59	A5	1559	A
59	A5	1564	G
59	A5	1565	A
59	A5	1566	U
59	A5	1567	G
59	A5	1570	U
59	A5	1572	A
59	A5	1575	U
59	A5	1576	U
59	A5	1578	C
59	A5	1580	U
59	A5	1581	G
59	A5	1591	U
59	A5	1592	U
59	A5	1593	U
59	A5	1594	U
59	A5	1595	G
59	A5	1596	A
59	A5	1597	A
59	A5	1598	A
59	A5	1607	A
59	A5	1609	U
59	A5	1613	A
59	A5	1614	A
59	A5	1620	A
59	A5	1621	A
59	A5	1627	U
59	A5	1628	G
59	A5	1633	G
59	A5	1640	U
59	A5	1641	U
59	A5	1658	G
59	A5	1662	U
59	A5	1667	U
59	A5	1668	U

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Mol	Chain	Res	Type
59	A5	1671	U
59	A5	1672	A
59	A5	1675	G
59	A5	1678	C
59	A5	1679	U
59	A5	1680	U
59	A5	1687	U
59	A5	1688	A
59	A5	1689	G
59	A5	1690	U
59	A5	1692	G
59	A5	1693	C
59	A5	1695	A
59	A5	1696	A
59	A5	1697	U
59	A5	1705	U
59	A5	1706	G
59	A5	1709	A
59	A5	1711	C
59	A5	1712	C
59	A5	1713	U
59	A5	1714	U
59	A5	1716	G
59	A5	1723	G
59	A5	1724	A
59	A5	1725	A
59	A5	1726	G
59	A5	1728	G
59	A5	1731	G
59	A5	1736	G
59	A5	1737	U
59	A5	1738	U
59	A5	1740	C
59	A5	1741	G
59	A5	1743	G
59	A5	1745	G
59	A5	1746	A
59	A5	1751	U
59	A5	1754	U
59	A5	1763	A
59	A5	1770	C
59	A5	1772	G

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Mol	Chain	Res	Type
59	A5	1774	C
59	A5	1779	G
59	A5	1781	U
59	A5	1782	C
59	A5	1783	A
59	A5	1784	A
59	A5	1785	G
59	A5	1786	G
59	A5	1787	C
59	A5	1789	A
59	A5	1794	G
59	A5	1795	A
59	A5	1796	A
59	A5	1797	A
59	A5	1798	A
59	A5	1799	U
59	A5	1800	U
59	A5	1801	U
59	A5	1802	U
59	A5	1803	C
59	A5	1804	A
59	A5	1805	A
59	A5	1806	G
59	A5	1807	U
59	A5	1808	A
59	A5	1809	A
59	A5	1810	A
59	A5	1812	C
59	A5	1813	A
59	A5	1861	A
59	A5	1862	U
59	A5	1863	U
59	A5	1865	U
59	A5	1866	G
59	A5	1867	A
59	A5	1871	A
59	A5	1872	A
59	A5	1873	A
59	A5	1877	A
59	A5	1879	U
59	A5	1880	A
59	A5	1881	C

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Mol	Chain	Res	Type
59	A5	1887	C
59	A5	1889	A
59	A5	1907	U
59	A5	1908	A
59	A5	1909	U
59	A5	1910	C
59	A5	1911	C
59	A5	1912	G
59	A5	1913	U
59	A5	1914	U
59	A5	1921	U
59	A5	1922	A
59	A5	1925	U
59	A5	1927	U
59	A5	1928	G
59	A5	1930	G
59	A5	1933	U
59	A5	1934	C
59	A5	1935	G
59	A5	1936	U
59	A5	1937	G
59	A5	1941	A
59	A5	1943	C
59	A5	1944	C
59	A5	1945	U
59	A5	1954	G
59	A5	1955	A
59	A5	1956	A
59	A5	1957	C
59	A5	1958	G
59	A5	1959	A
59	A5	1960	C
59	A5	1961	C
59	A5	1968	A
59	A5	1969	A
59	A5	1970	G
59	A5	1975	C
59	A5	1976	G
59	A5	1981	A
59	A5	1984	U
59	A5	1987	G
59	A5	1988	A

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Mol	Chain	Res	Type
59	A5	1989	A
59	A5	1994	U
59	A5	1995	U
59	A5	1996	U
59	A5	2000	U
59	A5	2001	U
59	A5	2003	U
59	A5	2005	U
59	A5	2009	A
59	A5	2010	U
59	A5	2011	A
59	A5	2016	U
59	A5	2018	C
59	A5	2019	U
59	A5	2020	A
59	A5	2027	A
59	A5	2029	G
59	A5	2030	U
59	A5	2031	C
59	A5	2032	U
59	A5	2033	U
59	A5	2037	C
59	A5	2038	A
59	A5	2044	A
59	A5	2049	G
59	A5	2054	U
59	A5	2055	G
59	A5	2056	G
59	A5	2059	U
59	A5	2061	G
59	A5	2062	A
59	A5	2063	A
59	A5	2064	G
59	A5	2065	A
59	A5	2066	G
59	A5	2071	A
59	A5	2072	C
59	A5	2075	A
59	A5	2076	U
59	A5	2078	C
59	A5	2079	U
59	A5	2082	U

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Mol	Chain	Res	Type
59	A5	2086	U
59	A5	2088	G
59	A5	2089	A
59	A5	2092	U
59	A5	2093	U
59	A5	2094	U
59	A5	2095	U
59	A5	2101	C
59	A5	2102	G
59	A5	2106	C
59	A5	2110	A
59	A5	2113	A
59	A5	2114	U
59	A5	2122	G
59	A5	2125	G
59	A5	2126	A
59	A5	2127	C
59	A5	2128	A
59	A5	2129	C
59	A5	2130	G
59	A5	2131	C
59	A5	2132	A
59	A5	2134	A
59	A5	2135	C
59	A5	2136	U
59	A5	2137	U
59	A5	2142	A
59	A5	2150	U
59	A5	2155	A
59	A5	2156	U
59	A5	2158	U
59	A5	2159	C
59	A5	2162	C
59	A5	2163	A
59	A5	2166	U
59	A5	2167	G
59	A5	2171	U
59	A5	2173	C
59	A5	2174	A
59	A5	2182	G
59	A5	2183	A
59	A5	2185	U

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Mol	Chain	Res	Type
59	A5	2187	U
59	A5	2194	G
59	A5	2195	A
59	A5	2196	U
59	A5	2197	A
59	A5	2200	A
59	A5	2201	U
59	A5	2202	A
59	A5	2205	G
59	A5	2216	A
59	A5	2217	A
59	A5	2219	U
59	A5	2220	C
59	A5	2222	G
59	A5	2223	C
59	A5	2238	A
59	A5	2239	C
59	A5	2249	A
59	A5	2251	G
59	A5	2255	G
59	A5	2264	G
59	A5	2268	G
59	A5	2269	A
59	A5	2273	A
59	A5	2466	C
59	A5	2467	A
59	A5	2468	A
59	A5	2469	U
59	A5	2470	U
59	A5	2471	A
59	A5	2472	A
59	A5	2473	C
59	A5	2474	A
59	A5	2476	U
59	A5	2480	U
59	A5	2490	G
59	A5	2491	C
59	A5	2492	A
59	A5	2493	C
59	A5	2494	G
59	A5	2496	A
59	A5	2500	G

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Mol	Chain	Res	Type
59	A5	2501	G
59	A5	2504	A
59	A5	2505	A
59	A5	2510	A
59	A5	2513	G
59	A5	2518	A
59	A5	2519	U
59	A5	2521	A
59	A5	2523	A
59	A5	2524	A
59	A5	2527	A
59	A5	2537	A
59	A5	2539	G
59	A5	2542	C
59	A5	2545	A
59	A5	2548	G
59	A5	2549	G
59	A5	2552	G
59	A5	2553	U
59	A5	2554	U
59	A5	2556	A
59	A5	2562	U
59	A5	2570	C
59	A5	2573	C
59	A5	2583	U
59	A5	2585	A
59	A5	2586	A
59	A5	2587	U
59	A5	2588	G
59	A5	2591	A
59	A5	2603	U
59	A5	2619	U
59	A5	2622	A
59	A5	2623	C
59	A5	2624	G
59	A5	2627	G
59	A5	2628	G
59	A5	2633	A
59	A5	2634	A
59	A5	2636	U
59	A5	2641	C
59	A5	2646	U

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Mol	Chain	Res	Type
59	A5	2650	G
59	A5	2651	G
59	A5	2654	G
59	A5	2655	C
59	A5	2657	A
59	A5	2659	A
59	A5	2660	U
59	A5	2663	C
59	A5	2664	U
59	A5	2673	A
59	A5	2674	A
59	A5	2676	U
59	A5	2677	A
59	A5	2684	C
59	A5	2685	G
59	A5	2686	C
59	A5	2687	A
59	A5	2688	U
59	A5	2691	A
59	A5	2693	G
59	A5	2694	G
59	A5	2696	U
59	A5	2702	A
59	A5	2703	G
59	A5	2705	U
59	A5	2709	U
59	A5	2712	U
59	A5	2714	U
59	A5	2717	C
59	A5	2723	A
59	A5	2726	A
59	A5	2733	G
59	A5	2742	G
59	A5	2749	G
59	A5	2750	A
59	A5	2751	A
59	A5	2752	C
59	A5	2753	G
59	A5	2754	G
59	A5	2757	U
59	A5	2759	G
59	A5	2763	U

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Mol	Chain	Res	Type
59	A5	2766	U
59	A5	2769	G
59	A5	2771	G
59	A5	2775	A
59	A5	2779	A
59	A5	2780	A
59	A5	2781	G
59	A5	2782	A
59	A5	2783	C
59	A5	2784	C
59	A5	2789	U
59	A5	2790	G
59	A5	2793	C
59	A5	2794	U
59	A5	2796	G
59	A5	2797	A
59	A5	2800	C
59	A5	2801	U
59	A5	2807	G
59	A5	2812	U
59	A5	2813	G
59	A5	2815	A
59	A5	2821	A
59	A5	2824	U
59	A5	2825	A
59	A5	2828	A
59	A5	2831	U
59	A5	2832	G
59	A5	2833	U
59	A5	2834	A
59	A5	2836	A
59	A5	2837	A
59	A5	2838	U
59	A5	2839	A
59	A5	2840	A
59	A5	2842	U
59	A5	2843	G
59	A5	2847	G
59	A5	2869	U
59	A5	2870	C
59	A5	2876	U
59	A5	2877	G

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Mol	Chain	Res	Type
59	A5	2880	A
59	A5	2881	U
59	A5	2888	A
59	A5	2891	C
59	A5	2899	U
59	A5	2900	U
59	A5	2901	C
59	A5	2905	A
59	A5	2908	U
59	A5	2909	A
59	A5	2915	U
59	A5	2917	A
59	A5	2919	A
59	A5	2920	U
59	A5	2925	C
59	A5	2927	U
59	A5	2989	G
59	A5	2991	A
59	A5	2992	A
59	A5	2994	C
59	A5	2995	U
59	A5	2996	U
59	A5	2997	C
59	A5	2998	U
59	A5	2999	U
59	A5	3000	G
59	A5	3002	U
59	A5	3003	C
59	A5	3004	A
59	A5	3005	A
59	A5	3011	C
59	A5	3013	C
59	A5	3101	A
59	A5	3103	U
59	A5	3109	A
59	A5	3112	A
59	A5	3115	C
59	A5	3117	A
59	A5	3118	U
59	A5	3123	G
59	A5	3125	A
59	A5	3134	G

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Mol	Chain	Res	Type
59	A5	3135	G
59	A5	3137	A
59	A5	3138	G
59	A5	3144	U
59	A5	3151	G
59	A5	3158	A
59	A5	3164	C
59	A5	3166	C
59	A5	3167	A
59	A5	3168	A
59	A5	3169	A
59	A5	3170	U
59	A5	3174	A
59	A5	3177	G
59	A5	3183	G
59	A5	3184	U
59	A5	3188	A
59	A5	3189	A
59	A5	3190	G
59	A5	3204	G
59	A5	3206	A
59	A5	3208	A
59	A5	3209	G
59	A5	3210	A
59	A5	3211	A
59	A5	3212	A
59	A5	3213	C
59	A5	3220	U
59	A5	3221	A
59	A5	3223	A
59	A5	3226	A
59	A5	3228	A
59	A5	3231	G
59	A5	3234	A
59	A5	3235	A
59	A5	3236	A
59	A5	3237	U
59	A5	3239	C
59	A5	3241	G
59	A5	3246	G
59	A5	3252	G
59	A5	3259	A

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Mol	Chain	Res	Type
59	A5	3260	G
59	A5	3261	U
59	A5	3274	A
59	A5	3279	A
59	A5	3285	G
59	A5	3287	C
59	A5	3288	C
59	A5	3294	A
59	A5	3301	U
59	A5	3303	G
59	A5	3304	U
59	A5	3305	U
59	A5	3309	A
59	A5	3310	G
59	A5	3311	A
59	A5	3312	G
59	A5	3328	G
59	A5	3331	A
59	A5	3332	G
59	A5	3333	A
59	A5	3334	A
59	A5	3337	G
59	A5	3341	C
59	A5	3342	C
59	A5	3346	G
59	A5	3348	G
59	A5	3349	A
59	A5	3350	U
59	A5	3354	U
59	A5	3368	C
59	A5	3374	U
59	A5	3377	A
59	A5	3385	G
59	A5	3390	U
59	A5	3391	U
59	A5	3392	U
59	A5	3393	U
59	A5	3394	U
59	A5	3395	G
59	A5	3396	A
59	A5	3400	U
59	A5	3403	G

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Mol	Chain	Res	Type
59	A5	3404	A
59	A5	3405	U
59	A5	3408	C
59	A5	3418	U
59	A5	3419	A
59	A5	3421	C
59	A5	3430	G
59	A5	3431	C
59	A5	3443	A
59	A5	3444	G
59	A5	3455	U
59	A5	3456	U
59	A5	3458	A
59	A5	3465	C
59	A5	3466	A
59	A5	3467	A
59	A5	3468	G
59	A5	3469	G
59	A5	3473	C
59	A5	3474	G
59	A5	3477	A
59	A5	3478	G
59	A5	3482	G
59	A5	3486	U
59	A5	3489	A
59	A5	3491	C
59	A5	3497	G
59	A5	3499	G
59	A5	3502	A
59	A5	3511	U
59	A5	3514	C
59	A5	3516	C
59	A5	3520	U
59	A5	3521	A
59	A5	3527	A
59	A5	3530	A
59	A5	3531	C
59	A5	3532	G
59	A5	3535	G
59	A5	3546	A
59	A5	3547	U
59	A5	3554	G

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Mol	Chain	Res	Type
59	A5	3556	A
59	A5	3558	U
59	A5	3563	G
59	A5	3568	A
59	A5	3569	C
59	A5	3582	A
59	A5	3585	A
59	A5	3590	C
59	A5	3591	A
59	A5	3592	C
59	A5	3593	A
59	A5	3594	A
59	A5	3602	U
59	A5	3604	G
59	A5	3607	C
59	A5	3608	G
59	A5	3609	A
59	A5	3610	A
59	A5	3612	A
59	A5	3613	G
59	A5	3614	U
59	A5	3620	G
59	A5	3621	A
59	A5	3626	A
59	A5	3627	C
59	A5	3628	G
59	A5	3633	U
59	A5	3637	A
59	A5	3643	C
59	A5	3650	G
59	A5	3652	C
59	A5	3654	C
59	A5	3656	A
59	A5	3658	G
59	A5	3659	G
59	A5	3660	U
59	A5	3664	A
59	A5	3665	U
59	A5	3674	G
59	A5	3675	A
59	A5	3676	C
59	A5	3677	U

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Mol	Chain	Res	Type
59	A5	3678	G
59	A5	3684	A
59	A5	3686	A
59	A5	3687	A
59	A5	3688	A
59	A5	3689	U
59	A5	3690	A
59	A5	3693	G
59	A5	3696	C
59	A5	3697	A
59	A5	3698	A
59	A5	3699	U
59	A5	3701	U
59	A5	3702	G
59	A5	3709	A
59	A5	3710	U
59	A5	3711	G
59	A5	3712	G
59	A5	3713	C
59	A5	3715	U
59	A5	3716	C
59	A5	3718	A
59	A5	3719	A
59	A5	3720	A
59	A5	3722	C
59	A5	3725	U
59	A5	3727	A
59	A5	3728	A
59	A5	3729	A
59	A5	3730	G
59	A5	3732	U
59	A5	3734	A
59	A5	3742	C
59	A5	3743	U
59	A5	3751	C
59	A5	3752	G
59	A5	3753	A
59	A5	3754	C
59	A5	3756	A
59	A5	3757	U
59	A5	3758	G
59	A5	3759	G

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Mol	Chain	Res	Type
59	A5	3760	A
59	A5	3762	G
59	A5	3763	U
59	A5	3764	G
59	A5	3765	A
59	A5	3766	U
59	A5	3767	G
59	A5	3768	C
59	A5	3769	C
59	A5	3771	A
59	A5	3772	U
59	A5	3773	G
59	A5	3774	U
59	A5	3775	A
59	A5	3776	A
59	A5	3777	U
59	A5	3778	U
59	A5	3779	U
59	A5	3785	A
59	A5	3789	U
59	A5	3791	A
59	A5	3794	U
59	A5	3795	G
59	A5	3796	G
59	A5	3798	A
59	A5	3801	A
59	A5	3802	U
59	A5	3803	C
59	A5	3805	U
59	A5	3806	C
59	A5	3807	G
59	A5	3808	A
59	A5	3809	U
59	A5	3811	A
59	A5	3814	U
59	A5	3818	G
59	A5	3819	C
59	A5	3820	C
59	A5	3821	G
59	A5	3822	C
59	A5	3823	G
59	A5	3824	C

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Mol	Chain	Res	Type
59	A5	3837	A
59	A5	3838	A
59	A5	3839	A
59	A5	3840	G
59	A5	3841	C
59	A5	3842	A
59	A5	3843	U
59	A5	3844	U
59	A5	3845	A
59	A5	3846	U
59	A5	3847	U
59	A5	3848	U
59	A5	3849	A
59	A5	3850	A
59	A5	3856	U
59	A5	3860	A
59	A5	3861	A
59	A5	3862	A
59	A5	3867	A
59	A5	3868	G
59	A5	3869	A
59	A5	3870	A
59	A5	3877	G
59	A5	3878	U
59	A5	3887	U
59	A5	3889	U
59	A5	3890	G
59	A5	3891	U
59	A5	3892	A
59	A5	3894	C
59	A5	3901	G
59	A5	3909	A
59	A5	3912	U
59	A5	3914	G
59	A5	3916	U
59	A5	3918	A
59	A5	3919	G
59	A5	3923	C
59	A5	3924	U
59	A5	3925	G
59	A5	3926	C
59	A5	3927	C

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Mol	Chain	Res	Type
59	A5	3928	A
59	A5	3929	U
59	A5	3932	U
59	A5	3933	G
59	A5	3934	C
59	A5	3935	G
59	A5	3937	U
59	A5	3942	U
59	A5	3946	G
59	A5	3949	U
59	A5	3952	C
59	A5	3955	U
59	A5	3956	U
59	A5	3957	G
59	A5	3958	C
59	A5	3961	G
59	A5	3962	A
59	A5	3963	U
59	A5	3964	G
59	A5	3969	G

All (152) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
54	A9	21	G
55	A7	119	C
56	A8	33	U
56	A8	38	G
56	A8	59	G
56	A8	106	A
56	A8	109	U
58	B2	1	A
58	B2	2	U
58	B2	172	G
58	B2	248	G
58	B2	250	U
58	B2	251	G
58	B2	256	C
58	B2	278	G
58	B2	378	G
58	B2	381	C
58	B2	422	A

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Mol	Chain	Res	Type
58	B2	488	A
58	B2	511	G
58	B2	563	A
58	B2	878	C
58	B2	899	A
58	B2	948	A
58	B2	959	U
58	B2	1030	C
58	B2	1046	U
58	B2	1091	U
58	B2	1138	U
58	B2	1186	U
58	B2	1239	A
58	B2	1250	C
58	B2	1310	A
58	B2	1331	A
58	B2	1448	A
58	B2	1547	U
58	B2	1591	U
58	B2	1594	A
58	B2	1673	U
58	B2	1765	U
58	B2	1849	U
58	B2	1881	A
58	B2	1949	A
58	B2	1956	U
59	A5	17	C
59	A5	26	G
59	A5	29	U
59	A5	44	A
59	A5	57	G
59	A5	58	G
59	A5	69	A
59	A5	120	C
59	A5	123	U
59	A5	130	C
59	A5	163	A
59	A5	175	U
59	A5	186	G
59	A5	188	G
59	A5	225	U
59	A5	272	U

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Mol	Chain	Res	Type
59	A5	286	A
59	A5	300	A
59	A5	316	U
59	A5	360	A
59	A5	457	A
59	A5	463	C
59	A5	580	A
59	A5	615	C
59	A5	620	U
59	A5	640	U
59	A5	641	A
59	A5	667	U
59	A5	671	A
59	A5	752	U
59	A5	795	A
59	A5	839	A
59	A5	872	A
59	A5	979	U
59	A5	1095	G
59	A5	1096	A
59	A5	1137	G
59	A5	1160	U
59	A5	1178	U
59	A5	1179	U
59	A5	1182	A
59	A5	1231	A
59	A5	1277	A
59	A5	1306	G
59	A5	1310	A
59	A5	1324	C
59	A5	1368	A
59	A5	1374	C
59	A5	1382	U
59	A5	1394	U
59	A5	1546	U
59	A5	1594	U
59	A5	1596	A
59	A5	1608	G
59	A5	1627	U
59	A5	1640	U
59	A5	1689	G
59	A5	1713	U

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Mol	Chain	Res	Type
59	A5	1736	G
59	A5	1784	A
59	A5	1793	C
59	A5	1794	G
59	A5	1798	A
59	A5	1801	U
59	A5	1879	U
59	A5	1956	A
59	A5	1958	G
59	A5	1960	C
59	A5	2001	U
59	A5	2002	C
59	A5	2037	C
59	A5	2126	A
59	A5	2129	C
59	A5	2155	A
59	A5	2162	C
59	A5	2166	U
59	A5	2750	A
59	A5	2752	C
59	A5	2781	G
59	A5	2796	G
59	A5	2868	A
59	A5	2904	U
59	A5	2919	A
59	A5	2990	C
59	A5	2993	G
59	A5	3017	U
59	A5	3235	A
59	A5	3236	A
59	A5	3309	A
59	A5	3362	G
59	A5	3514	C
59	A5	3567	A
59	A5	3568	A
59	A5	3591	A
59	A5	3593	A
59	A5	3627	C
59	A5	3675	A
59	A5	3677	U
59	A5	3697	A
59	A5	3708	U

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Mol	Chain	Res	Type
59	A5	3714	U
59	A5	3719	A
59	A5	3759	G
59	A5	3808	A
59	A5	3844	U
59	A5	3890	G
59	A5	3891	U
59	A5	3961	G

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 oligosaccharides 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](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
59	A5	2
58	B2	2
79	Cj	1
33	CP	1
26	CN	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	A5	2896:U	O3'	2897:G	P	6.34
1	B2	1236:C	O3'	1237:G	P	6.15
1	B2	1817:C	O3'	1818:U	P	4.73
1	Cj	29:LEU	C	30:GLN	N	4.63
1	A5	2819:A	O3'	2820:G	P	3.28
1	CP	38:ARG	C	39:MET	N	1.16
1	CN	40:PRO	C	41:ARG	N	1.08

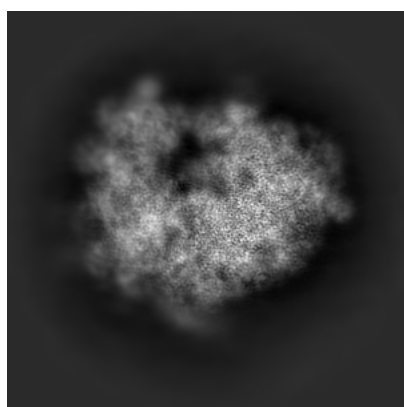
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-10622. These allow visual inspection of the internal detail of the map and identification of artifacts.

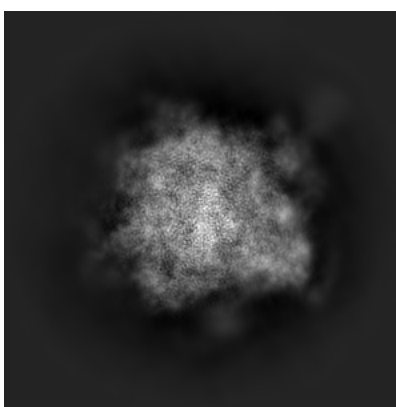
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

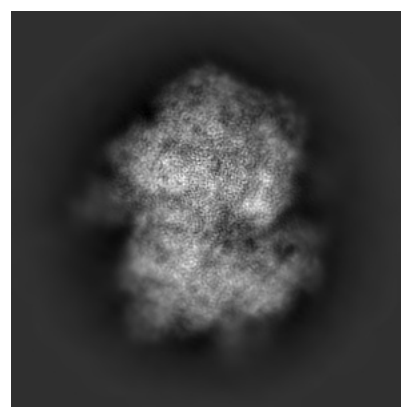
6.1.1 Primary map



X



Y

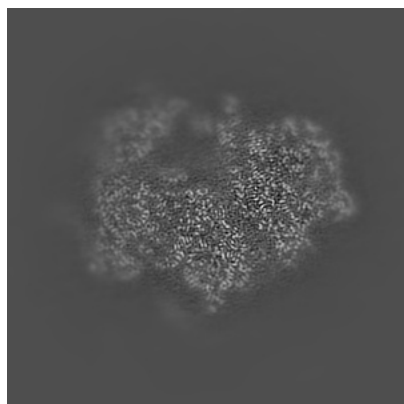


Z

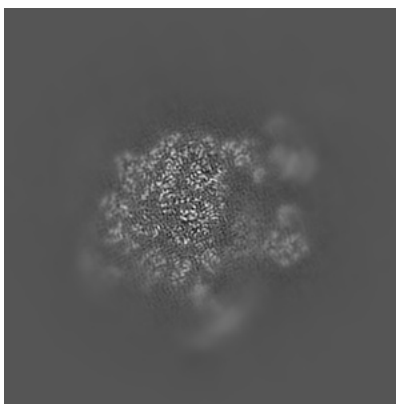
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

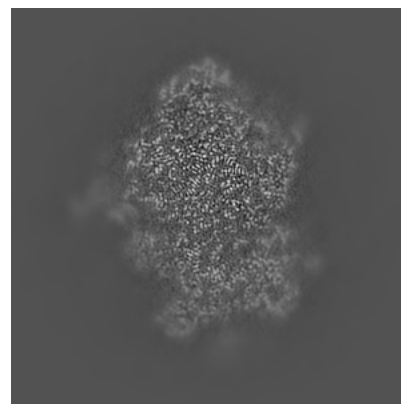
6.2.1 Primary map



X Index: 200



Y Index: 200

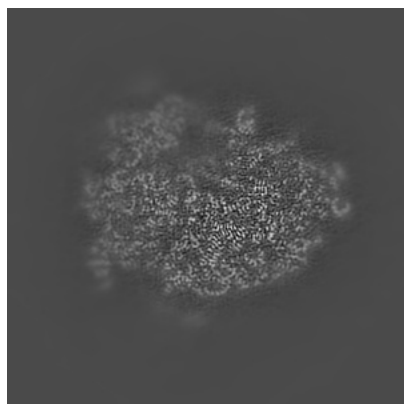


Z Index: 200

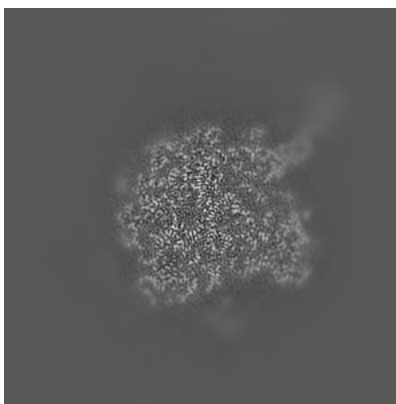
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

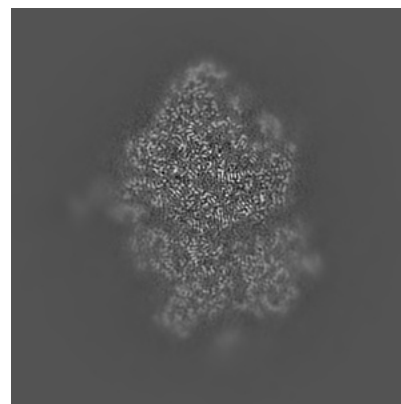
6.3.1 Primary map



X Index: 182



Y Index: 233

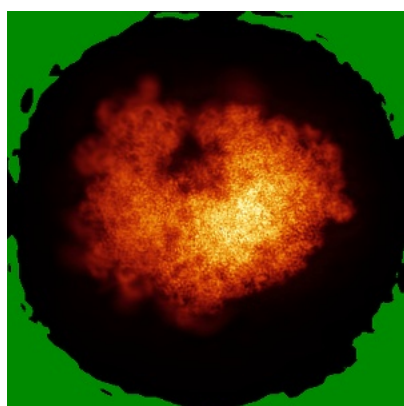


Z Index: 195

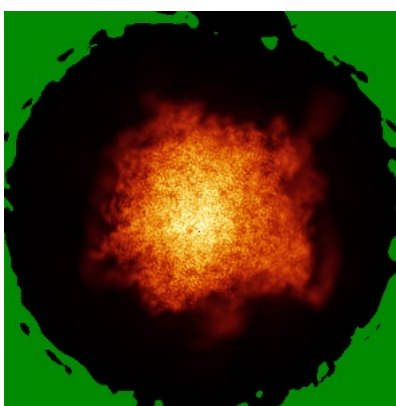
The images above show the largest variance slices of the map in three orthogonal directions.

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

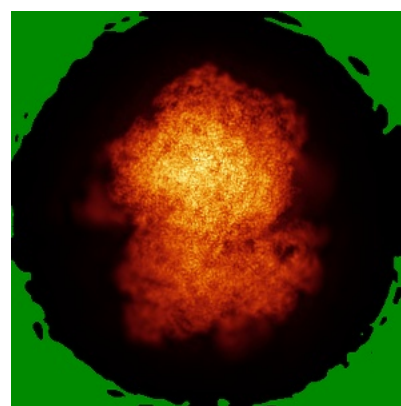
6.4.1 Primary map



X



Y

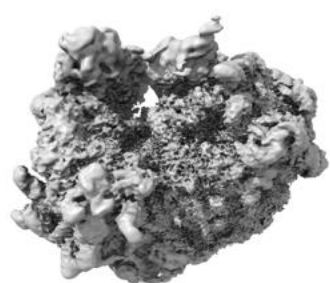


Z

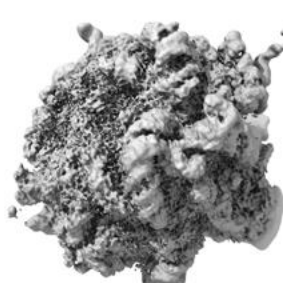
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

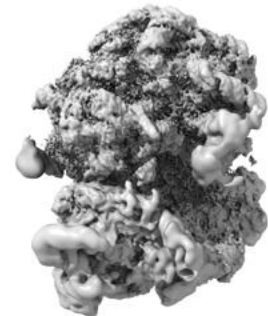
6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.025. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

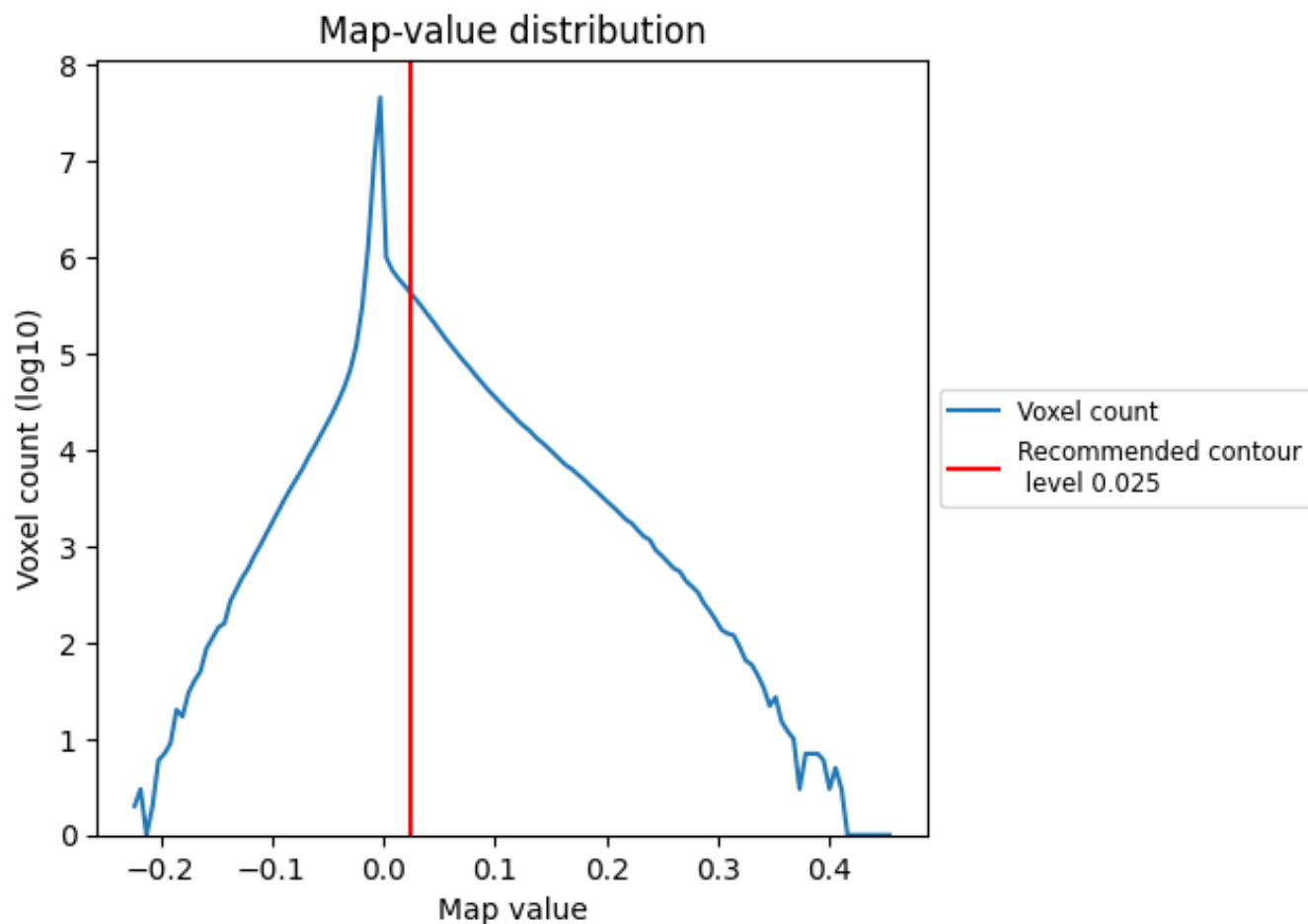
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

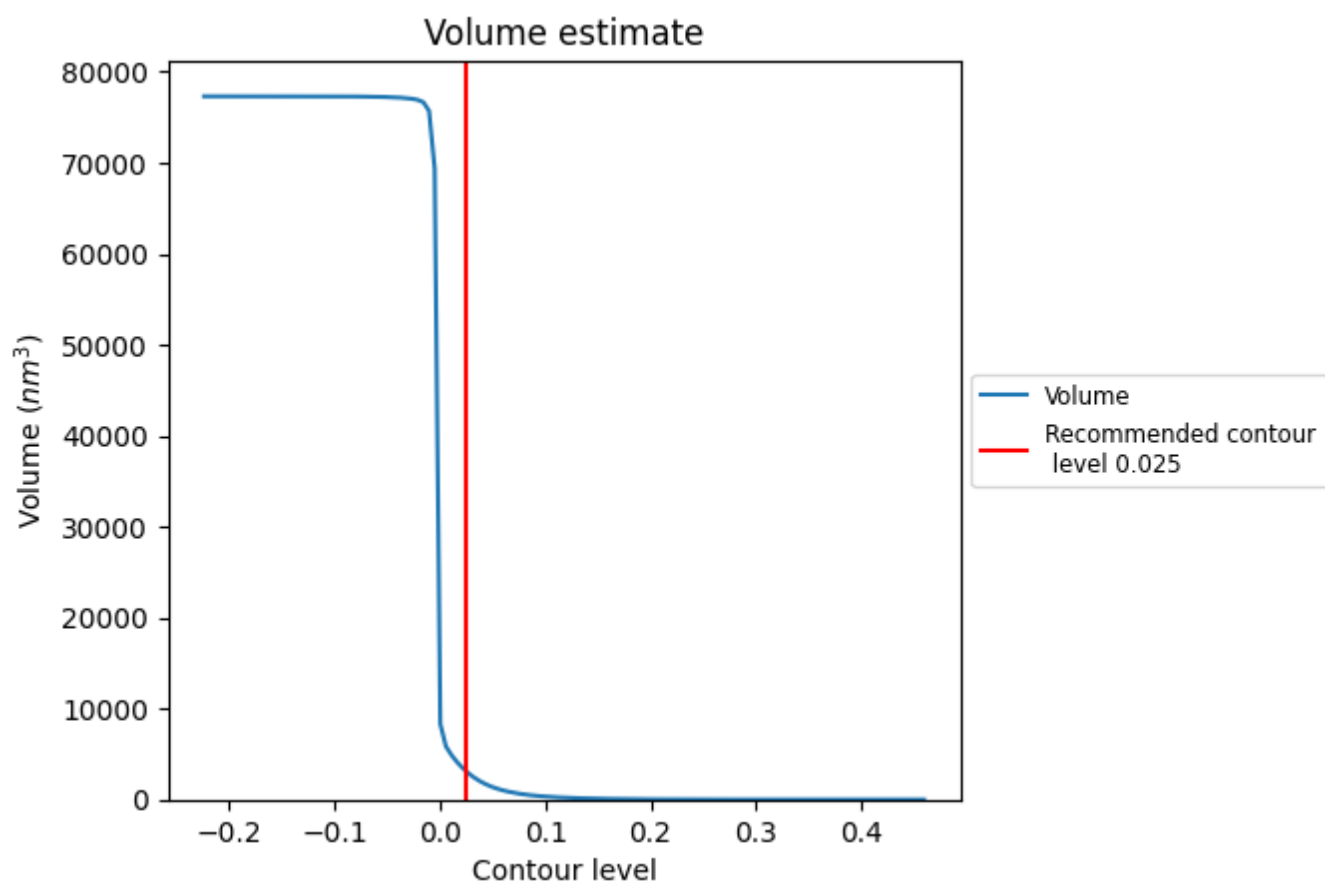
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

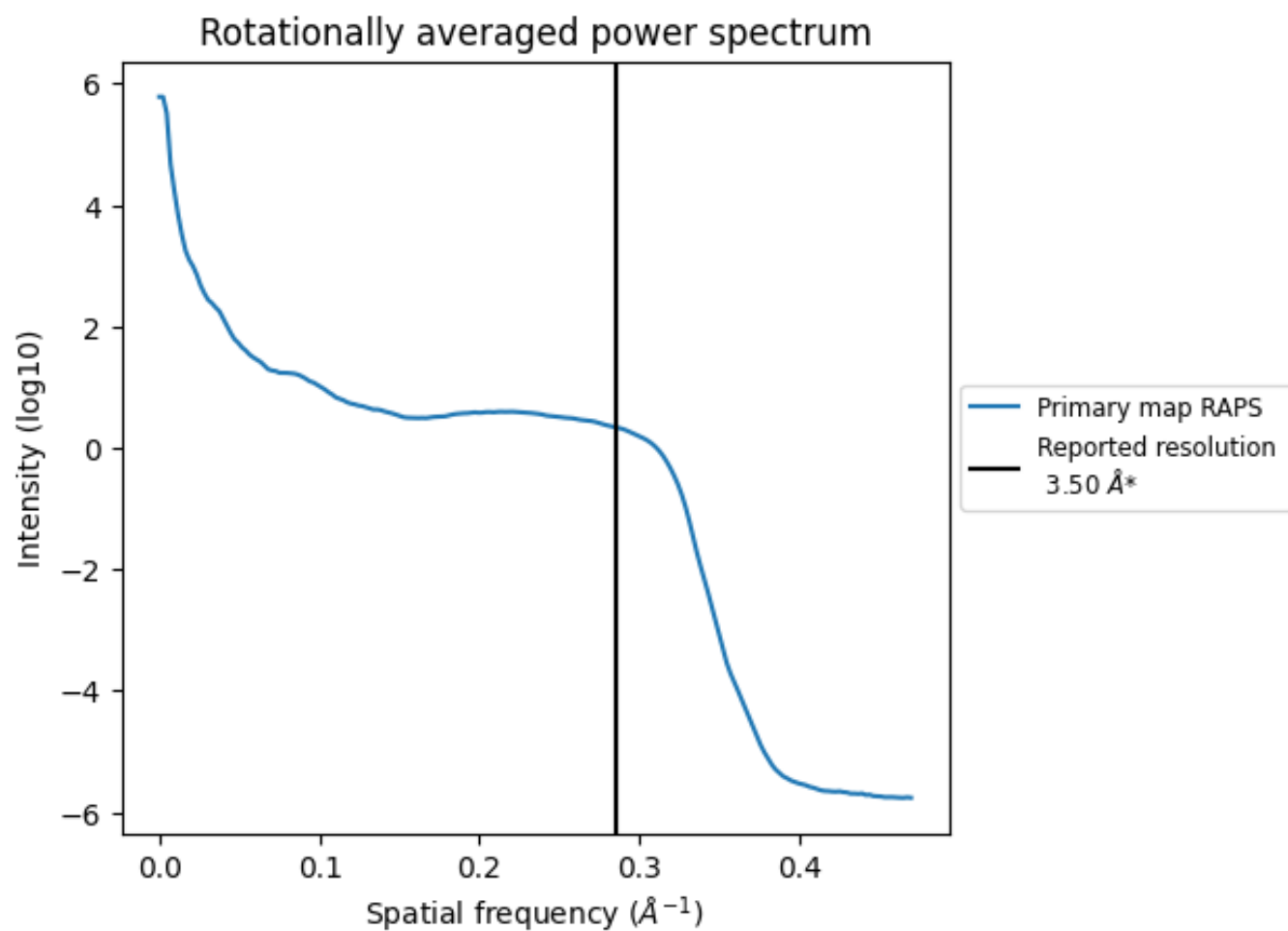
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 3140 nm³; this corresponds to an approximate mass of 2836 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 ⓘ

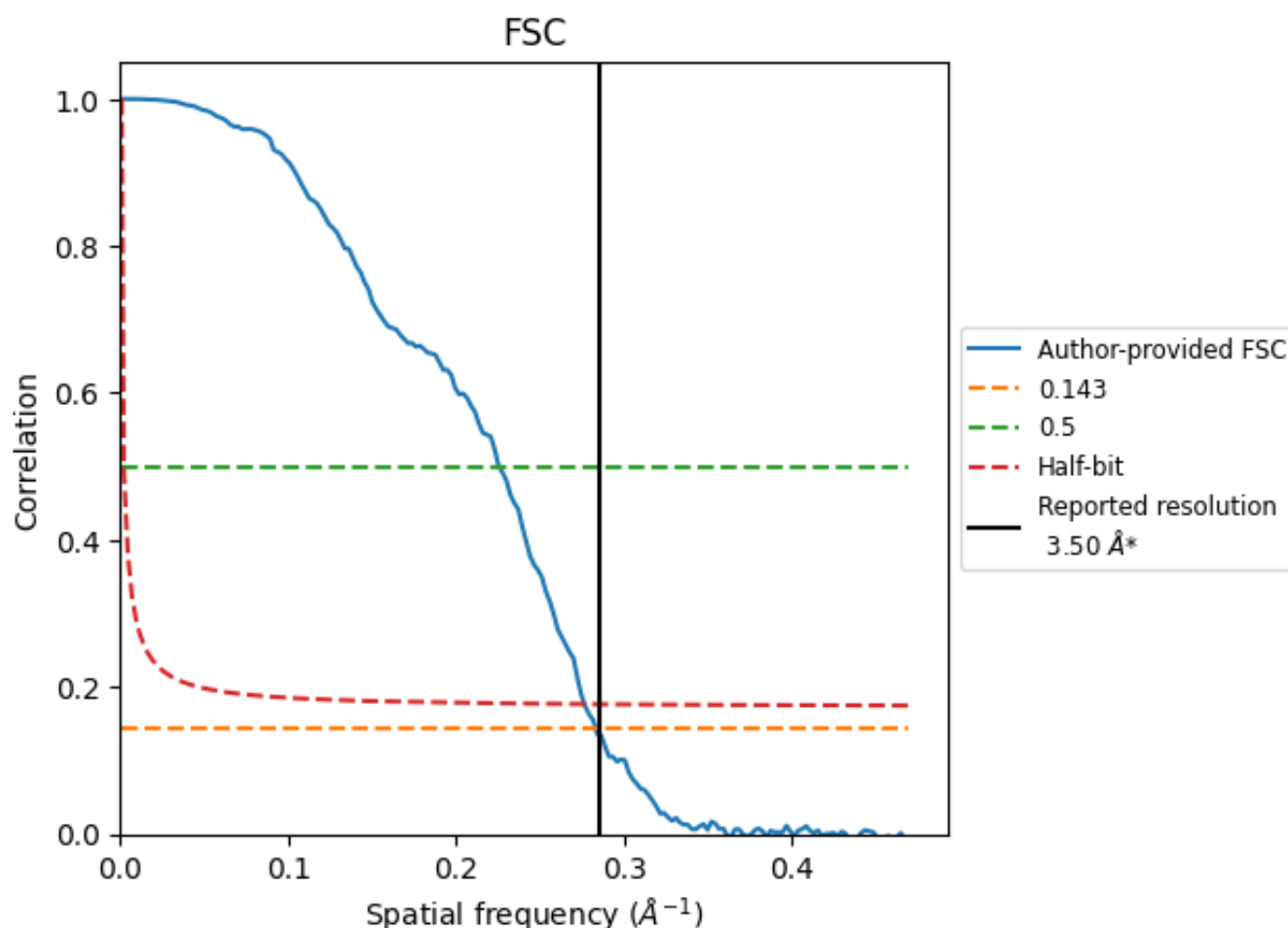


*Reported resolution corresponds to spatial frequency of 0.286 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.286 Å⁻¹

8.2 Resolution estimates [i](#)

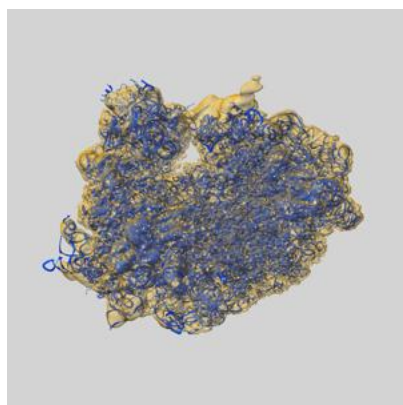
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.50	-	-
Author-provided FSC curve	3.53	4.43	3.62
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

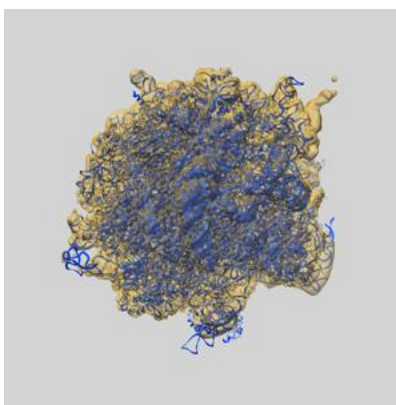
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-10622 and PDB model 6XU6. Per-residue inclusion information can be found in section [3](#) on page [19](#).

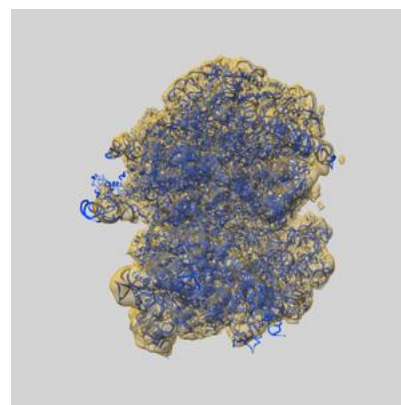
9.1 Map-model overlay [i](#)



X



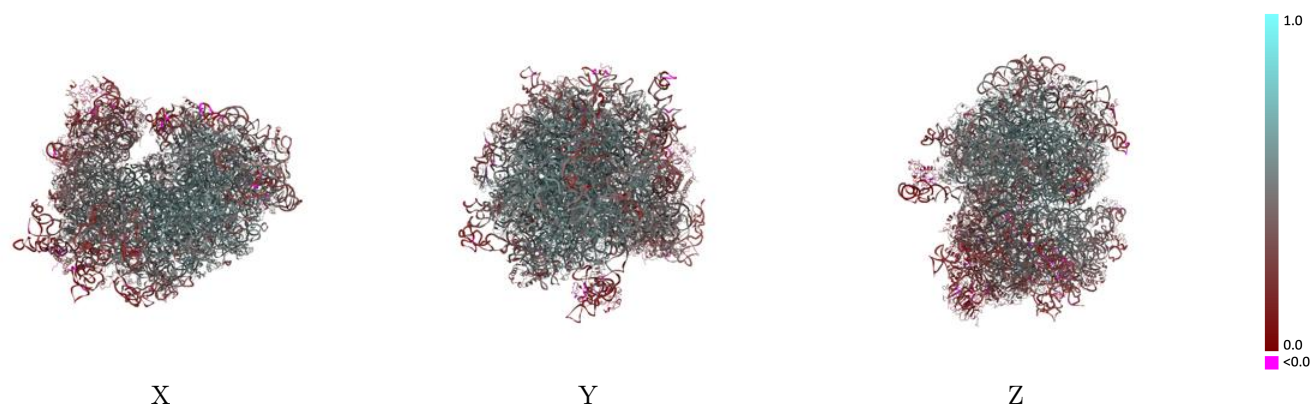
Y



Z

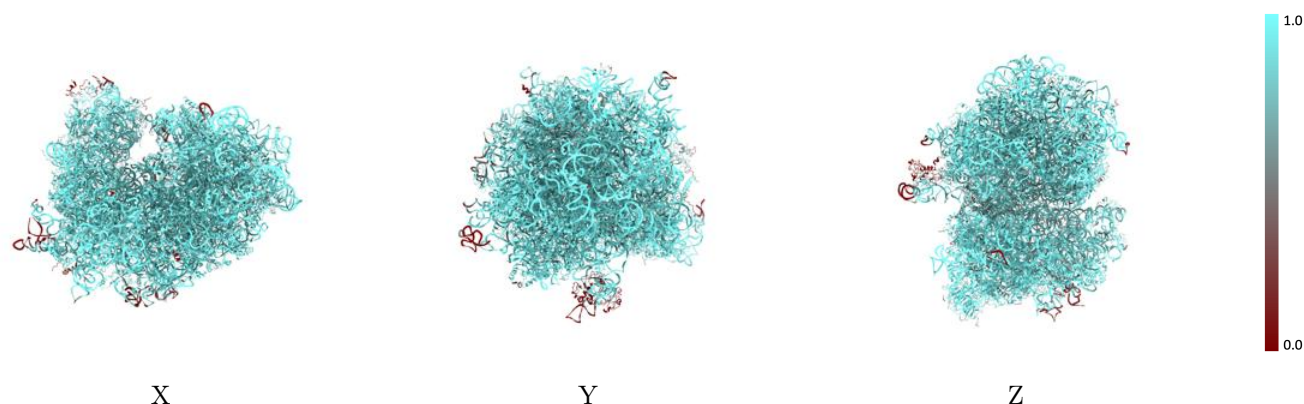
The images above show the 3D surface view of the map at the recommended contour level 0.025 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



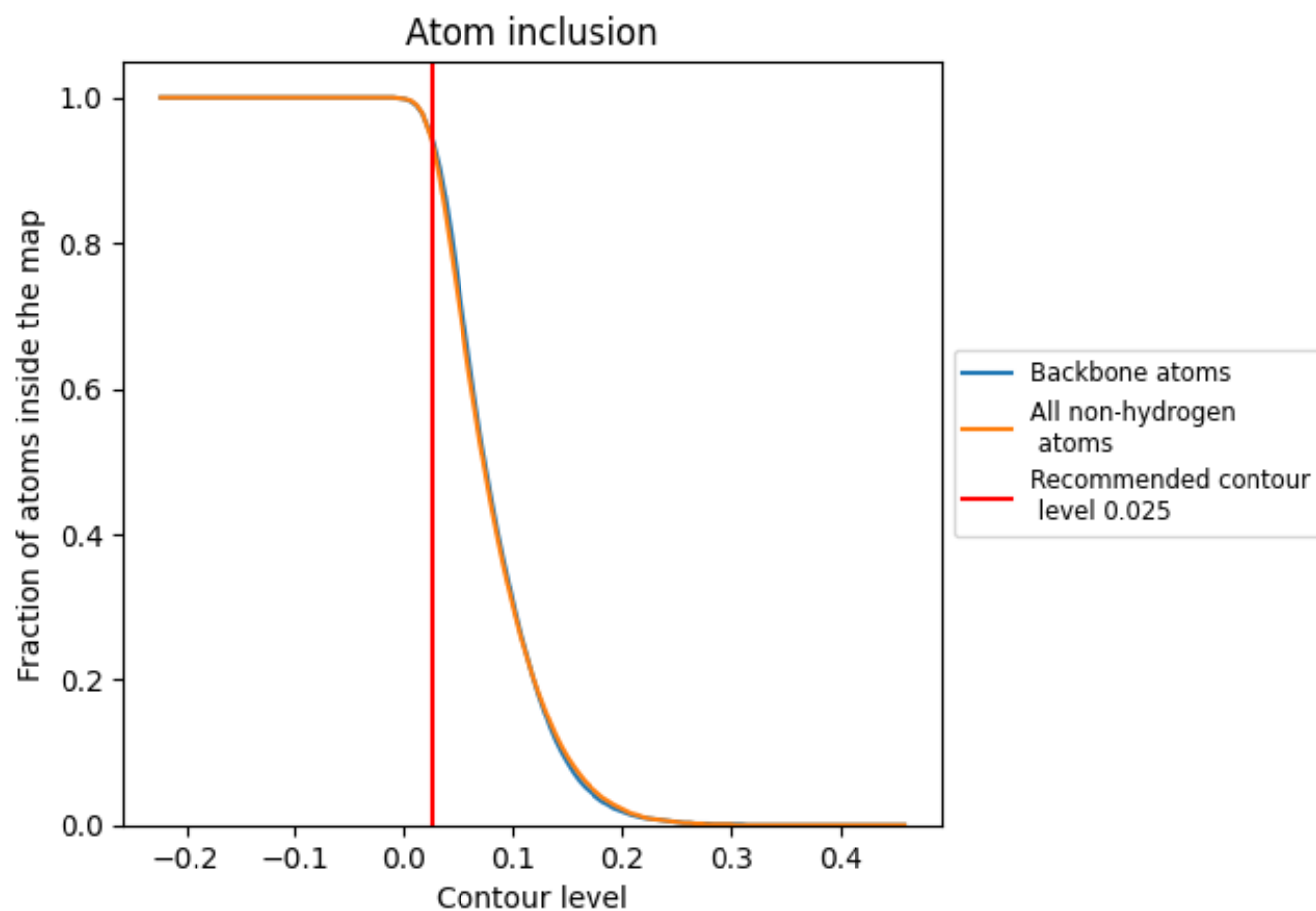
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.025).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 95% of all backbone atoms, 94% 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 (0.025) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9440	 0.4410
A5	 0.9640	 0.4840
A7	 0.9990	 0.4850
A8	 0.9870	 0.5210
A9	 0.9940	 0.4940
AA	 0.8870	 0.3470
AB	 0.9190	 0.4380
AC	 0.9360	 0.4480
AD	 0.8880	 0.2990
AE	 0.9630	 0.4490
AF	 0.9160	 0.2840
AG	 0.9540	 0.3220
AH	 0.9030	 0.3240
AI	 0.9390	 0.4290
AJ	 0.9450	 0.3940
AK	 0.9340	 0.2060
AL	 0.8610	 0.4770
AM	 0.5280	 0.1170
AN	 0.9620	 0.5010
AO	 0.9670	 0.4680
AP	 0.8310	 0.2200
AQ	 0.9470	 0.2530
AR	 0.9110	 0.2830
AS	 0.9310	 0.2540
AT	 0.9130	 0.2040
AU	 0.9270	 0.2790
AV	 0.9520	 0.4260
AW	 0.9770	 0.5070
AX	 0.9350	 0.5100
AY	 0.9360	 0.3400
AZ	 0.8780	 0.2170
Aa	 0.8890	 0.4820
Ab	 0.9080	 0.3750
Ac	 0.9080	 0.3330
Ad	 0.9690	 0.3290















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Chain	Atom inclusion	Q-score
Ae	 0.9310	 0.3510
Af	 0.5690	 0.1060
Ag	 0.9310	 0.1580
B2	 0.9700	 0.3840
CA	 0.9710	 0.5730
CB	 0.9560	 0.5360
CC	 0.9660	 0.5180
CD	 0.9700	 0.4290
CE	 0.8890	 0.3810
CF	 0.9920	 0.5550
CG	 0.9070	 0.4440
CH	 0.9580	 0.4830
CI	 0.8790	 0.4360
CJ	 0.9260	 0.3830
CL	 0.9140	 0.4660
CM	 0.9270	 0.4120
CN	 0.9830	 0.5740
CO	 0.9610	 0.5380
CP	 0.8780	 0.5160
CQ	 0.9790	 0.5650
CR	 0.8830	 0.4670
CS	 0.9550	 0.5180
CT	 0.9640	 0.5210
CU	 0.9420	 0.3730
CV	 0.9770	 0.5750
CW	 0.9810	 0.5670
CX	 0.9630	 0.5110
CY	 0.9830	 0.5240
CZ	 0.9640	 0.4670
Ca	 0.9790	 0.5580
Cb	 0.9670	 0.4480
Cc	 0.9640	 0.4970
Cd	 0.9180	 0.4220
Ce	 0.9740	 0.5700
Cf	 0.9480	 0.4770
Cg	 0.9830	 0.5590
Ch	 0.9700	 0.5100
Ci	 0.9360	 0.4540
Cj	 0.9130	 0.4700
Ck	 0.9500	 0.4440
Cl	 0.9760	 0.5700
Cm	 0.9640	 0.4880

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Chain	Atom inclusion	Q-score
Cn	 0.9670	 0.5820
Co	 0.9470	 0.5330
Cp	 0.9690	 0.5670
Cr	 0.9060	 0.4720
Cz	 0.2310	 0.0950
DA	 0.7690	 0.4250