



Full wwPDB EM Validation Report ⓘ

Sep 8, 2025 – 05:09 PM JST

PDB ID : 7VZG / pdb_00007vzg
EMDB ID : EMD-32228
Title : Structure of the Acidobacteria homodimeric reaction center bound with cytochrome c (the larger form)
Authors : Huang, G.Q.; Dong, S.S.; Qin, X.C.; Sui, S.F.
Deposited on : 2021-11-16
Resolution : 2.61 Å(reported)

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.dev126
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4-5-2 with Phenix2.0rc1
buster-report : 1.1.7 (2018)
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) : 2.45.1

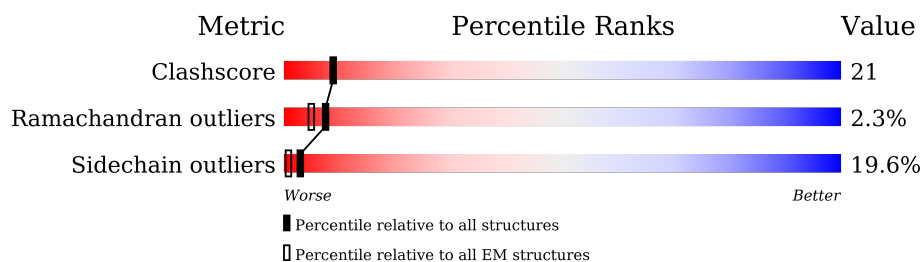
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

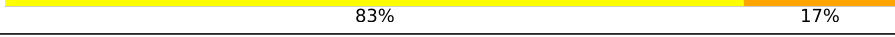
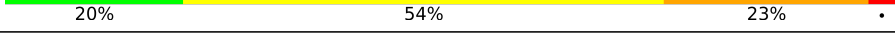
The reported resolution of this entry is 2.61 Å.

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



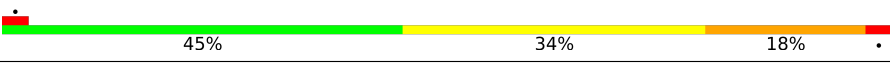
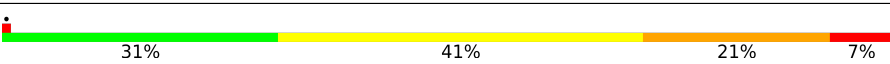
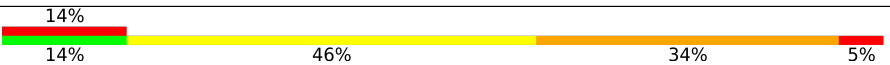
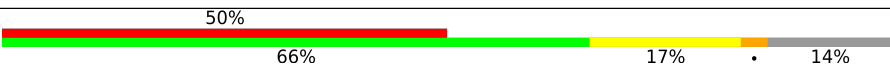
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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	A	858	
1	a	858	
2	C	204	
3	E	35	
3	e	35	
4	F	35	
4	f	35	
5	G	38	

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Mol	Chain	Length	Quality of chain
5	g	38	
6	H	19	
6	h	19	
7	c	145	
8	B	76	
9	D	70	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
12	CLA	A	910	X	-	-	-
12	CLA	A	911	X	-	-	-
13	LYC	c	201	-	X	-	-
15	85I	A	916	X	-	-	-
16	UNL	A	922	-	-	X	-
16	UNL	A	923	-	-	X	-
16	UNL	A	927	-	-	X	-
16	UNL	C	302	-	-	X	-
16	UNL	a	926	-	-	X	-
16	UNL	a	930	-	-	X	-
16	UNL	a	931	-	-	X	-
20	SF4	B	201	-	-	X	-
20	SF4	B	202	-	-	X	-
20	SF4	a	917	-	-	X	-

2 Entry composition [i](#)

There are 21 unique types of molecules in this entry. The entry contains 22458 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 PscA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	854	Total	C	N	O	S	0	0
			6960	4602	1155	1170	33		
1	a	858	Total	C	N	O	S	0	0
			6984	4616	1160	1175	33		

- Molecule 2 is a protein called Cytochrome c, mono-and diheme variants.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	C	193	Total	C	N	O	S	0	0
			1474	900	277	288	9		

- Molecule 3 is a protein called PscE.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	E	35	Total	C	N	O	S	0	0
			258	174	40	42	2		
3	e	35	Total	C	N	O	S	0	0
			258	174	40	42	2		

- Molecule 4 is a protein called PscF.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	F	35	Total	C	N	O	S	0	0
			273	185	43	43	2		
4	f	35	Total	C	N	O	S	0	0
			273	185	43	43	2		

- Molecule 5 is a protein called PscG.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	G	38	Total	C	N	O	S	0	0
			302	210	45	44	3		

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Mol	Chain	Residues	Atoms					AltConf	Trace
5	g	38	Total	C	N	O	S	0	0
			302	210	45	44	3		

- Molecule 6 is a protein called undefined polypeptide.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	H	19	Total	C	N	O		0	0
			95	57	19	19			
6	h	19	Total	C	N	O		0	0
			95	57	19	19			

- Molecule 7 is a protein called Cytochrome c domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	c	145	Total	C	N	O	S	0	0
			1096	679	200	210	7		

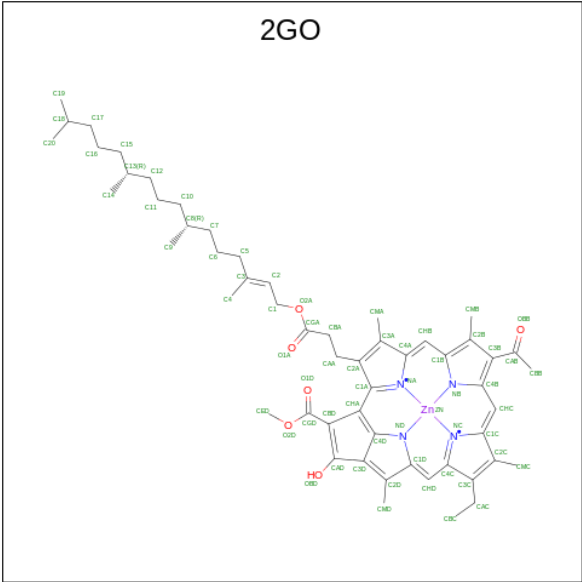
- Molecule 8 is a protein called Photosystem P840 reaction center iron-sulfur protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	B	76	Total	C	N	O	S	0	0
			568	356	90	114	8		

- Molecule 9 is a protein called PscD'.

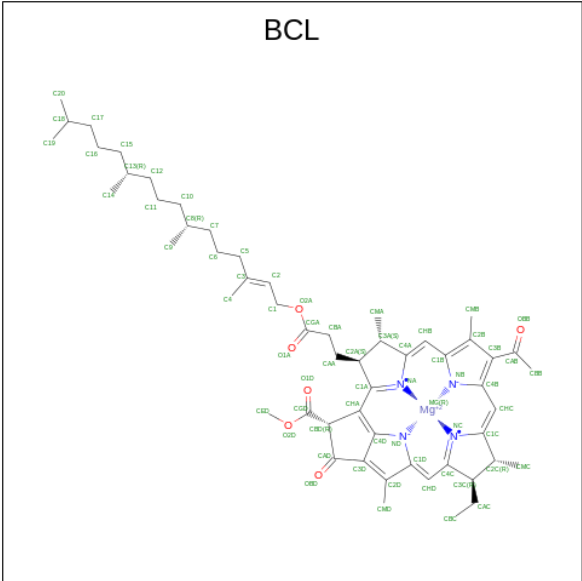
Mol	Chain	Residues	Atoms					AltConf	Trace
9	D	60	Total	C	N	O	S	0	0
			520	330	92	96	2		

- Molecule 10 is [methyl 9-acetyl-14-ethyl-20-hydroxy-4,8,13,18-tetramethyl-3-{3-oxo-3-[(3,7,11,15-tetramethylhexadec-2-en-1-yl)oxy]propyl}-3,4,20,21-tetradehydrophorbine-21-carboxylato(2-)-kappa 4 N 23 ,N 24 ,N 25 ,N 26]zinc (CCD ID: 2GO) (formula: C₅₅H₇₀N₄O₆Zn) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
10	A	1	Total	C	N	O	Zn	0
			66	55	4	6	1	
10	a	1	Total	C	N	O	Zn	0
			66	55	4	6	1	

- Molecule 11 is BACTERIOCHLOROPHYLL A (CCD ID: BCL) (formula: $C_{55}H_{74}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



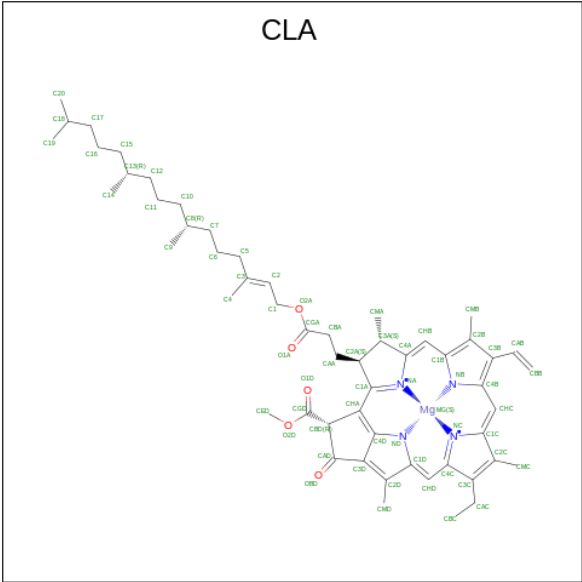
Mol	Chain	Residues	Atoms					AltConf
11	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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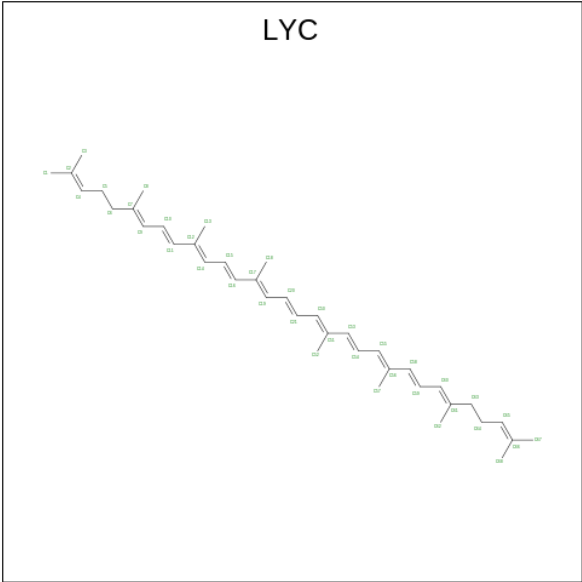
Mol	Chain	Residues	Atoms					AltConf
11	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	A	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
11	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	A	1	Total	C	Mg	N	O	0
			52	41	1	4	6	
11	A	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
11	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
11	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 12 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
12	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
12	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
12	A	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
12	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
12	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
12	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
12	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
12	a	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
12	a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

- Molecule 13 is LYCOPENE (CCD ID: LYC) (formula: C₄₀H₅₆).

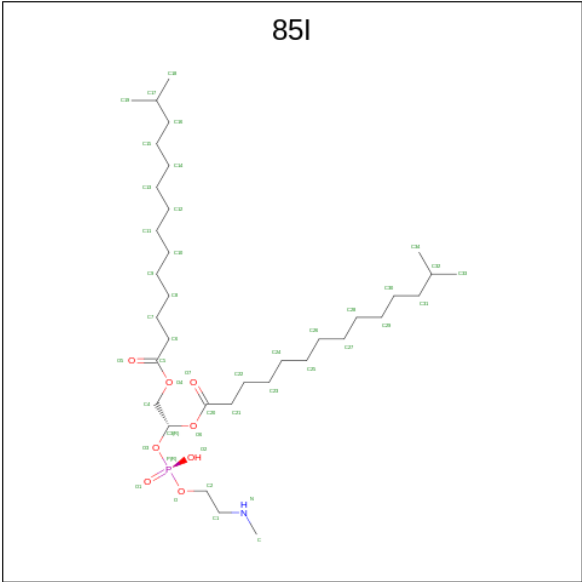


Mol	Chain	Residues	Atoms		AltConf
13	A	1	Total	C	0
			40	40	
13	c	1	Total	C	0
			40	40	

- Molecule 14 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		AltConf
14	A	1	Total	Ca	0
			1	1	
14	a	1	Total	Ca	0
			1	1	

- Molecule 15 is [(2 {R})-2-[2-(methylamino)ethoxy-oxidanyl-phosphoryl]oxy-2-(13-methyltetradecanoyloxy)ethyl] 13-methyltetradecanoate (CCD ID: 85I) (formula: C₃₅H₇₀NO₈P) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
15	A	1	Total	C	N	O	P	0
			45	35	1	8	1	
15	A	1	Total	C	N	O	P	0
			45	35	1	8	1	
15	A	1	Total	C	N	O	P	0
			45	35	1	8	1	
15	a	1	Total	C	N	O	P	0
			45	35	1	8	1	
15	a	1	Total	C	N	O	P	0
			45	35	1	8	1	
15	a	1	Total	C	N	O	P	0
			45	35	1	8	1	

- Molecule 16 is UNKNOWN LIGAND (CCD ID: UNL) (formula:) (labeled as "Ligand of Interest" by depositor).

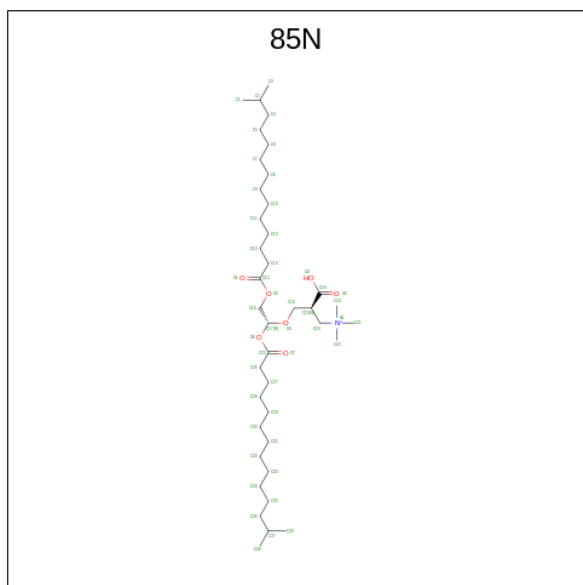
Mol	Chain	Residues	Atoms		AltConf
16	A	13	Total	C	0
			240	240	
16	C	1	Total	C	0
			18	18	
16	E	2	Total	C	0
			26	26	
16	a	13	Total	C	0
			243	243	
16	c	1	Total	C	0
			8	8	

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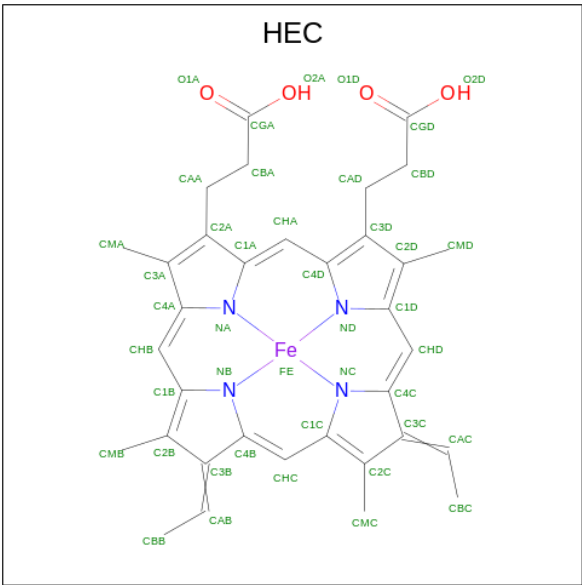
Mol	Chain	Residues	Atoms		AltConf
16	e	2	Total	C	0
			26	26	

- Molecule 17 is [(2 {S})-2-[(1 {R})-1,2-bis(13-methyltetradecanoyloxy)ethoxy]methyl]-3-oxidanyl-3-oxidanylidene-propyl]-trimethyl-azanium (CCD ID: 85N) (formula: C₃₉H₇₆NO₇) (labeled as "Ligand of Interest" by depositor).



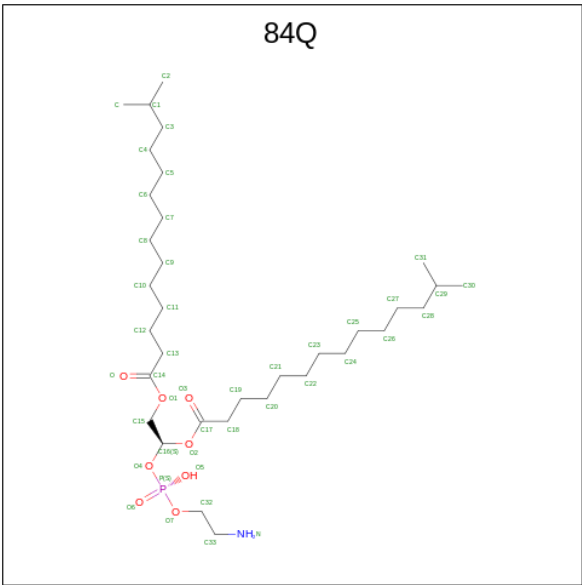
Mol	Chain	Residues	Atoms				AltConf
17	A	1	Total	C	N	O	0
			47	39	1	7	
17	G	1	Total	C	N	O	0
			38	30	1	7	
17	a	1	Total	C	N	O	0
			47	39	1	7	
17	g	1	Total	C	N	O	0
			38	30	1	7	

- Molecule 18 is HEME C (CCD ID: HEC) (formula: C₃₄H₃₄FeN₄O₄) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
18	C	1	Total 43	C 34	Fe 1	N 4	O 4	0
18	c	1	Total 43	C 34	Fe 1	N 4	O 4	0

- Molecule 19 is [(2S)-2-[2-azanylethoxy(oxidanyl)phosphoryl]oxy-2-(13-methyltetradecanoyloxy)ethyl] 13-methyltetradecanoate (CCD ID: 84Q) (formula: C₃₄H₆₈NO₈P) (labeled as "Ligand of Interest" by depositor).



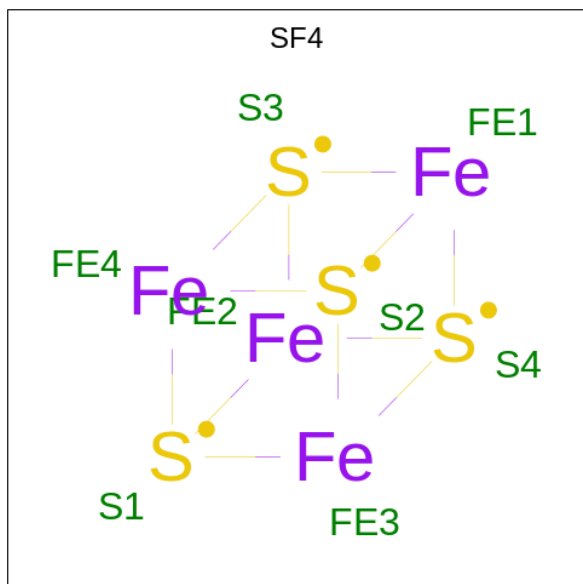
Mol	Chain	Residues	Atoms					AltConf
19	E	1	Total	C	N	O	P	0
			44	34	1	8	1	

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Mol	Chain	Residues	Atoms					AltConf
19	a	1	Total	C	N	O	P	0
			44	34	1	8	1	

- Molecule 20 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms			AltConf
20	a	1	Total	Fe	S	0
			8	4	4	
20	B	1	Total	Fe	S	0
			8	4	4	
20	B	1	Total	Fe	S	0
			8	4	4	

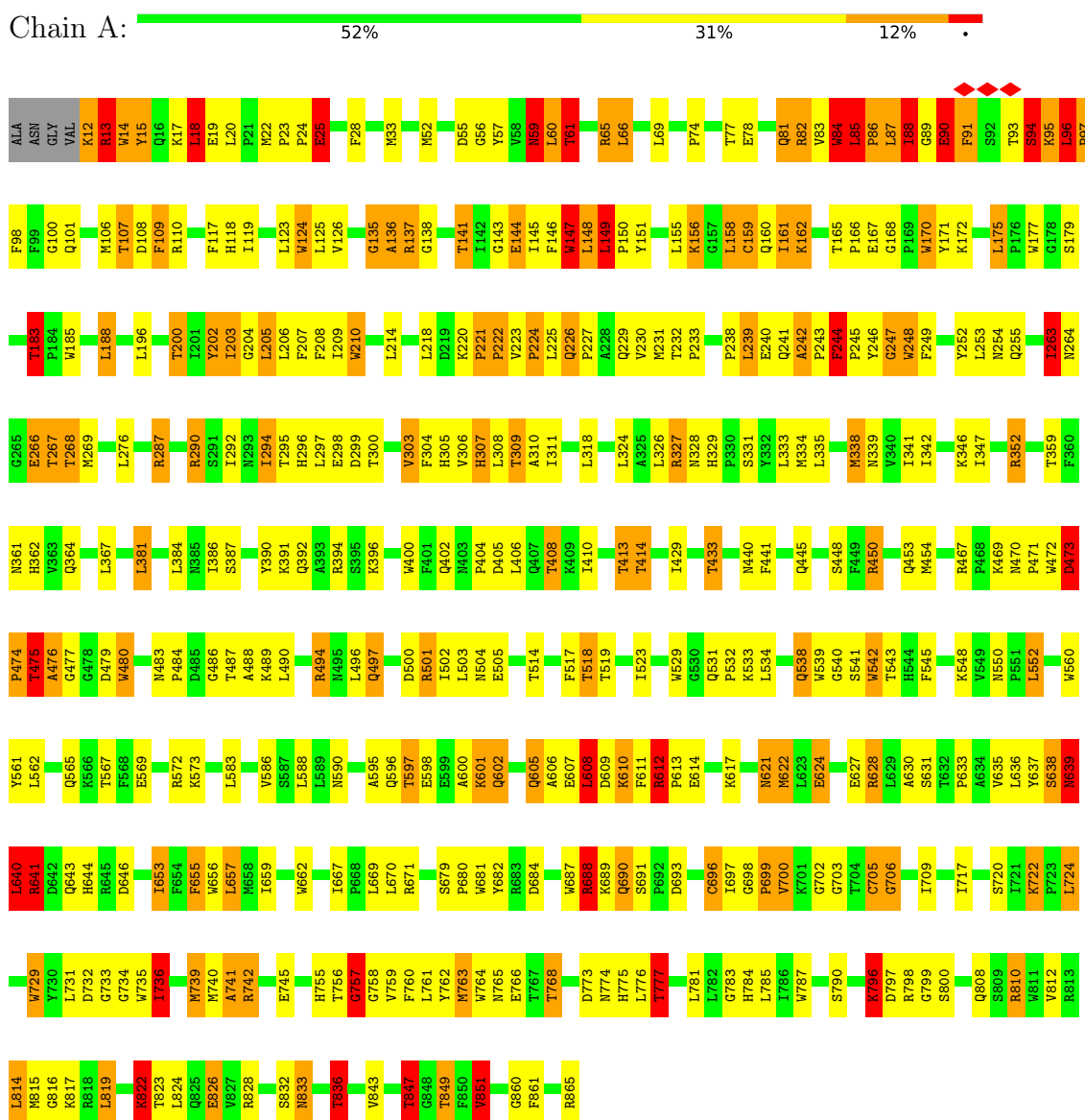
- Molecule 21 is water.

Mol	Chain	Residues	Atoms		AltConf
21	A	3	Total	O	0
			3	3	
21	a	3	Total	O	0
			3	3	

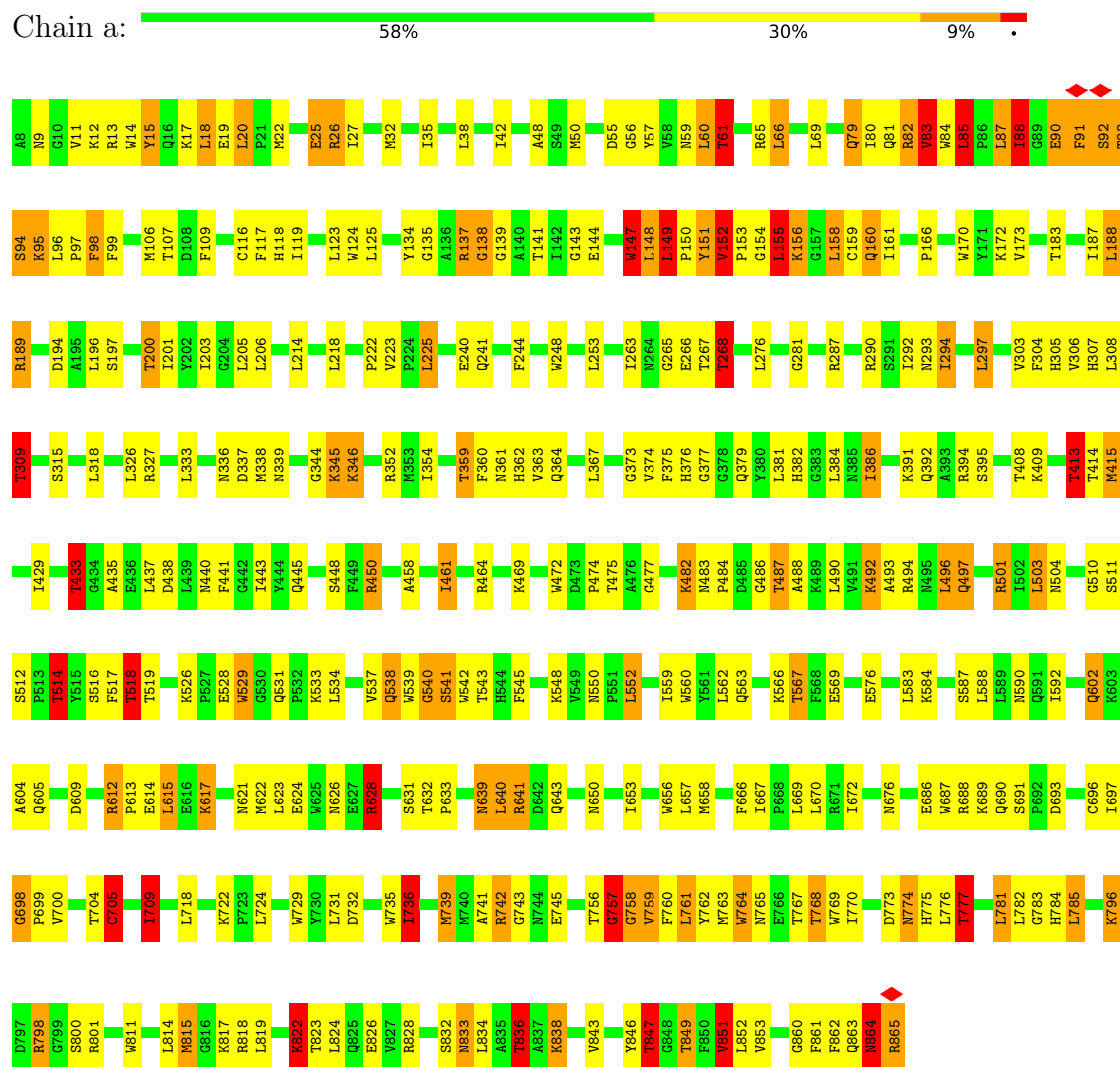
3 Residue-property plots

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.

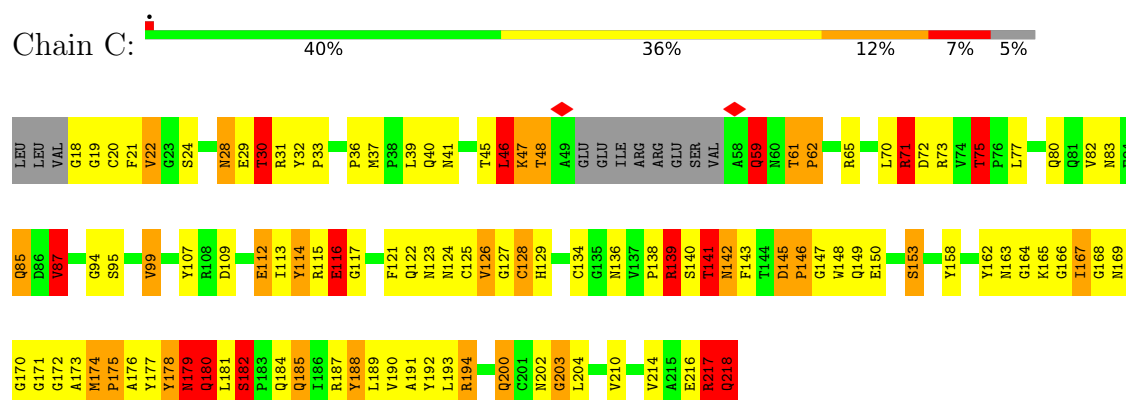
• Molecule 1: PscA



• Molecule 1: PscA



• Molecule 2: Cytochrome c, mono- and di-heme variants

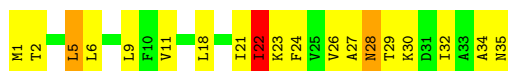


• Molecule 3: PscE

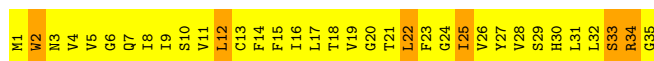
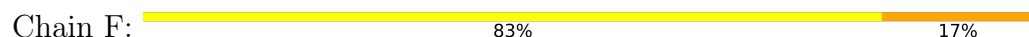




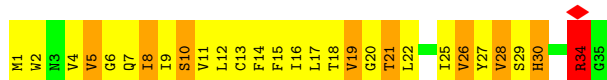
- Molecule 3: PscE



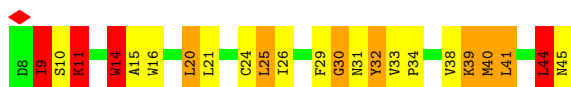
- Molecule 4: PscF



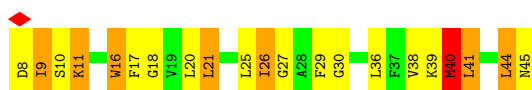
- Molecule 4: PscF



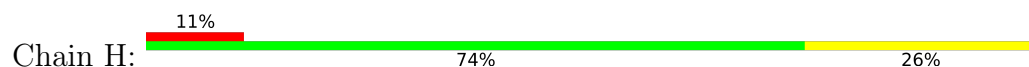
- Molecule 5: PscG



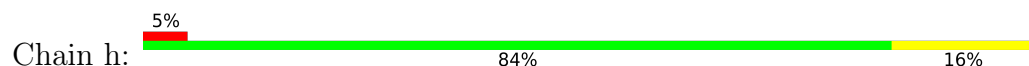
- Molecule 5: PscG



- Molecule 6: undefined polypeptide

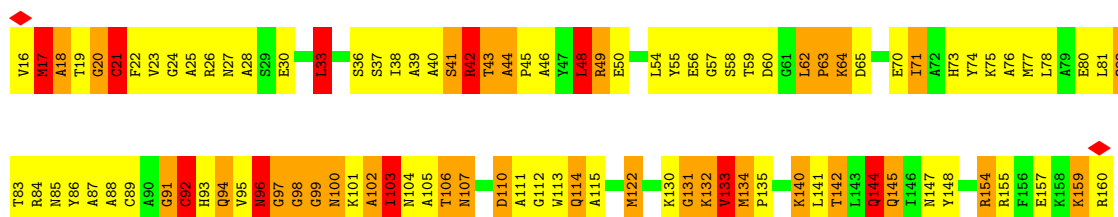


- Molecule 6: undefined polypeptide

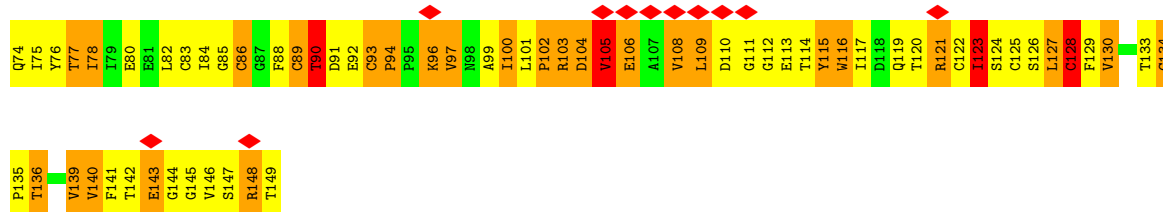
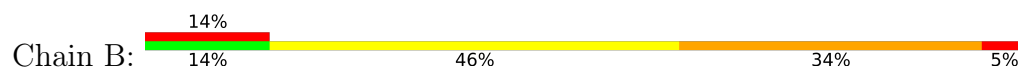




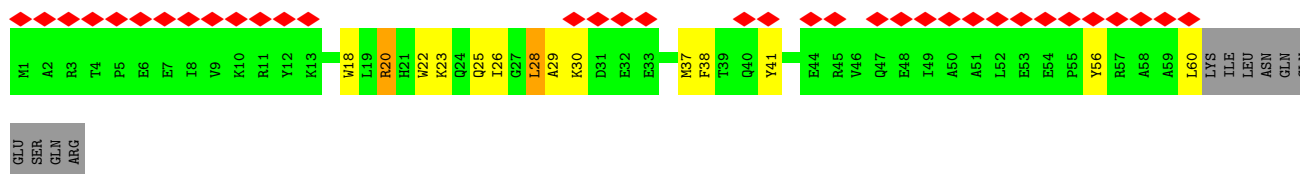
• Molecule 7: Cytochrome c domain-containing protein



• Molecule 8: Photosystem P840 reaction center iron-sulfur protein



• Molecule 9: PscD'



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	52612	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	2.381	Depositor
Minimum map value	-1.010	Depositor
Average map value	0.008	Depositor
Map value standard deviation	0.094	Depositor
Recommended contour level	0.3	Depositor
Map size (Å)	238.15, 238.15, 238.15	wwPDB
Map dimensions	220, 220, 220	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.0825, 1.0825, 1.0825	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 85I, 84Q, CA, 85N, CLA, BCL, UNL, LYC, 2GO, SF4, HEC

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	A	2.28	246/7209 (3.4%)	1.57	111/9827 (1.1%)
1	a	2.04	177/7233 (2.4%)	1.42	93/9860 (0.9%)
2	C	3.01	111/1503 (7.4%)	2.06	65/2037 (3.2%)
3	E	3.18	25/262 (9.5%)	1.95	7/356 (2.0%)
3	e	2.23	9/262 (3.4%)	1.83	3/356 (0.8%)
4	F	3.37	34/279 (12.2%)	1.79	8/379 (2.1%)
4	f	2.88	22/279 (7.9%)	1.79	9/379 (2.4%)
5	G	2.13	13/311 (4.2%)	1.93	9/421 (2.1%)
5	g	1.68	1/311 (0.3%)	1.56	7/421 (1.7%)
7	c	3.24	127/1115 (11.4%)	2.20	53/1506 (3.5%)
8	B	1.13	1/578 (0.2%)	1.72	18/789 (2.3%)
9	D	0.74	0/531	1.24	2/714 (0.3%)
All	All	2.30	766/19873 (3.9%)	1.62	385/27045 (1.4%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	a	0	4
2	C	0	2
7	c	0	1
All	All	0	8

All (766) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	539	TRP	C-O	-23.05	0.94	1.23
2	C	141	THR	C-O	-18.99	1.01	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	305	HIS	C-O	-15.87	1.05	1.24
2	C	179	ASN	C-O	-15.84	1.04	1.24
1	a	852	LEU	C-O	-15.81	1.04	1.24
4	F	4	VAL	C-O	-15.43	1.06	1.24
7	c	106	THR	C-O	-15.40	1.05	1.23
1	a	376	HIS	C-O	-15.38	1.04	1.24
1	A	731	LEU	C-O	-15.26	1.06	1.24
3	E	13	GLY	C-O	-15.24	1.05	1.24
2	C	140	SER	C-O	-15.15	1.04	1.23
1	a	759	VAL	C-O	-15.13	1.06	1.24
1	A	306	VAL	C-O	-15.06	1.06	1.24
1	A	758	GLY	C-O	-14.88	1.03	1.23
1	A	125	LEU	C-O	-14.61	1.06	1.24
1	A	709	ILE	C-O	-14.43	1.06	1.24
1	A	638	SER	C-O	-14.39	1.05	1.23
1	a	783	GLY	C-O	-14.23	1.06	1.23
1	a	346	LYS	C-O	-14.07	1.06	1.24
2	C	176	ALA	C-O	-14.06	1.05	1.23
2	C	178	TYR	C-O	-14.03	1.06	1.24
2	C	190	VAL	C-O	-13.74	1.08	1.24
2	C	126	VAL	C-O	-13.61	1.07	1.24
1	a	796	LYS	C-O	-13.60	1.06	1.24
7	c	130	LYS	C-O	-13.46	1.08	1.23
1	a	811	TRP	C-O	-13.32	1.08	1.24
2	C	123	ASN	C-O	-13.27	1.08	1.24
2	C	175	PRO	C-O	-13.26	1.08	1.23
1	A	764	TRP	C-O	-13.18	1.08	1.24
1	A	309	THR	CB-CG2	-13.18	1.09	1.52
1	A	245	PRO	C-O	-13.17	1.08	1.24
1	A	238	PRO	C-O	-13.07	1.10	1.23
1	A	796	LYS	C-O	-13.07	1.09	1.23
1	A	655	PHE	C-O	-13.07	1.09	1.24
1	a	537	VAL	C-O	-13.04	1.11	1.24
1	A	560	TRP	C-O	-13.03	1.08	1.24
2	C	121	PHE	C-O	-12.93	1.09	1.24
1	a	26	ARG	C-O	-12.89	1.08	1.24
1	A	362	HIS	C-O	-12.88	1.08	1.24
1	A	542	TRP	C-O	-12.87	1.07	1.24
2	C	30	THR	C-O	-12.85	1.07	1.23
2	C	188	TYR	C-O	-12.84	1.08	1.24
7	c	96	ASN	C-O	-12.83	1.06	1.24
7	c	112	GLY	C-O	-12.73	1.08	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	731	LEU	C-O	-12.66	1.09	1.24
1	a	860	GLY	C-O	-12.66	1.06	1.23
2	C	147	GLY	C-O	-12.63	1.08	1.23
1	A	294	ILE	C-O	-12.58	1.09	1.24
7	c	26	ARG	C-O	-12.52	1.08	1.23
1	A	311	ILE	C-O	-12.48	1.10	1.24
1	a	758	GLY	C-O	-12.43	1.07	1.23
2	C	165	LYS	CA-C	-12.42	1.38	1.52
1	A	209	ILE	C-O	-12.41	1.10	1.24
1	a	763	MET	C-O	-12.33	1.09	1.24
1	A	543	THR	C-O	-12.32	1.08	1.24
7	c	20	GLY	C-O	-12.26	1.07	1.23
1	A	541	SER	C-O	-12.24	1.07	1.24
1	A	860	GLY	C-O	-12.24	1.10	1.23
4	F	25	ILE	C-O	-12.22	1.09	1.24
2	C	143	PHE	C-O	-12.20	1.08	1.24
1	A	297	LEU	C-O	-12.12	1.08	1.24
7	c	106	THR	CB-CG2	-12.09	1.12	1.52
7	c	56	GLU	C-O	-12.08	1.08	1.24
4	F	10	SER	C-O	-12.06	1.10	1.24
1	A	210	TRP	C-O	-12.00	1.09	1.24
4	f	17	LEU	C-O	-11.98	1.10	1.24
1	A	126	VAL	C-O	-11.97	1.10	1.24
1	a	757	GLY	C-O	-11.91	1.07	1.23
1	A	124	TRP	C-O	-11.90	1.09	1.24
1	A	640	LEU	C-O	-11.90	1.08	1.24
1	A	861	PHE	C-O	-11.90	1.10	1.24
2	C	189	LEU	C-O	-11.87	1.10	1.24
2	C	146	PRO	C-O	-11.84	1.09	1.24
7	c	18	ALA	CA-C	-11.84	1.37	1.52
1	a	765	ASN	C-O	-11.83	1.10	1.24
2	C	173	ALA	C-O	-11.76	1.09	1.24
1	A	776	LEU	C-O	-11.73	1.09	1.24
1	A	203	ILE	C-O	-11.65	1.10	1.24
2	C	148	TRP	C-O	-11.59	1.10	1.24
1	A	656	TRP	C-O	-11.58	1.09	1.24
2	C	180	GLN	C-O	-11.54	1.09	1.24
3	E	2	THR	C-O	-11.51	1.10	1.24
1	A	699	PRO	C-O	-11.47	1.08	1.24
1	A	741	ALA	C-O	-11.45	1.09	1.23
7	c	43	THR	C-O	-11.35	1.10	1.23
7	c	113	TRP	C-O	-11.31	1.11	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	c	46	ALA	C-O	-11.30	1.10	1.23
7	c	42	ARG	C-O	-11.29	1.09	1.24
1	A	742	ARG	C-O	-11.26	1.10	1.23
2	C	163	ASN	C-O	-11.26	1.09	1.24
1	a	116	CYS	C-O	-11.16	1.11	1.24
2	C	72	ASP	C-O	-11.15	1.09	1.24
2	C	167	ILE	C-O	-11.13	1.09	1.24
2	C	128	CYS	C-O	-11.07	1.09	1.24
7	c	93	HIS	C-O	-11.03	1.09	1.24
1	A	539	TRP	C-O	-11.03	1.09	1.24
2	C	181	LEU	C-O	-11.02	1.09	1.23
2	C	142	ASN	N-CA	11.02	1.61	1.46
1	a	697	ILE	C-O	-10.98	1.11	1.24
1	a	375	PHE	C-O	-10.96	1.11	1.24
1	A	207	PHE	C-O	-10.92	1.11	1.24
1	a	631	SER	C-O	-10.92	1.09	1.24
1	A	740	MET	C-O	-10.86	1.09	1.24
2	C	165	LYS	C-O	-10.86	1.11	1.23
2	C	214	VAL	C-O	-10.86	1.09	1.24
1	A	307	HIS	C-O	-10.81	1.10	1.24
7	c	105	ALA	C-O	-10.73	1.11	1.24
2	C	19	GLY	C-O	-10.72	1.09	1.23
1	a	764	TRP	C-O	-10.61	1.10	1.24
1	A	361	ASN	C-O	-10.58	1.11	1.24
7	c	91	GLY	C-O	-10.50	1.09	1.23
1	A	308	LEU	C-O	-10.49	1.11	1.24
7	c	98	GLY	CA-C	-10.49	1.37	1.51
1	A	682	TYR	C-O	-10.48	1.11	1.24
1	A	480	TRP	C-O	-10.42	1.10	1.23
1	A	248	TRP	C-O	-10.39	1.09	1.23
1	A	119	ILE	C-O	-10.37	1.11	1.24
1	A	775	HIS	C-O	-10.37	1.11	1.24
1	A	208	PHE	C-O	-10.36	1.12	1.24
1	a	307	HIS	C-O	-10.30	1.12	1.24
1	A	118	HIS	C-O	-10.28	1.11	1.24
1	A	733	GLY	C-O	-10.28	1.09	1.24
3	e	28	ASN	C-O	-10.27	1.10	1.24
1	A	117	PHE	C-O	-10.26	1.12	1.24
1	A	756	THR	C-O	-10.25	1.09	1.24
2	C	124	ASN	C-O	-10.24	1.10	1.24
3	E	25	VAL	C-O	-10.23	1.12	1.24
7	c	21	CYS	C-O	-10.23	1.11	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	305	HIS	C-O	-10.21	1.12	1.24
4	F	15	PHE	C-O	-10.14	1.12	1.24
2	C	177	TYR	C-O	-10.11	1.10	1.24
2	C	20	CYS	C-O	-10.10	1.11	1.24
1	A	561	TYR	C-O	-10.09	1.12	1.24
1	A	108	ASP	C-O	-10.08	1.12	1.24
1	A	739	MET	C-O	-10.08	1.11	1.24
1	A	338	MET	C-N	-10.02	1.21	1.33
1	A	538	GLN	CD-NE2	-10.00	1.12	1.33
2	C	182	SER	C-O	-10.00	1.08	1.23
1	A	774	ASN	C-O	-9.98	1.11	1.24
1	a	27	ILE	C-O	-9.97	1.12	1.24
2	C	142	ASN	CG-ND2	-9.96	1.12	1.33
1	a	560	TRP	C-O	-9.95	1.12	1.24
1	A	246	TYR	C-O	-9.94	1.12	1.24
1	A	299	ASP	C-O	-9.89	1.11	1.24
2	C	21	PHE	C-O	-9.88	1.11	1.23
1	A	109	PHE	C-O	-9.77	1.12	1.24
4	F	6	GLY	C-O	-9.77	1.11	1.23
1	a	756	THR	C-O	-9.77	1.10	1.24
1	A	249	PHE	C-O	-9.76	1.12	1.24
1	A	310	ALA	C-O	-9.74	1.12	1.24
1	a	134	TYR	C-O	-9.74	1.11	1.24
2	C	179	ASN	CG-OD1	-9.71	1.05	1.23
2	C	166	GLY	C-O	-9.68	1.11	1.23
2	C	185	GLN	C-O	-9.67	1.12	1.24
7	c	19	THR	CA-C	-9.67	1.43	1.53
1	A	501	ARG	C-O	-9.66	1.12	1.24
1	a	118	HIS	C-O	-9.65	1.12	1.24
4	f	20	GLY	C-O	-9.64	1.12	1.23
2	C	114	TYR	C-O	-9.63	1.12	1.24
3	E	17	ALA	C-O	-9.63	1.13	1.24
7	c	43	THR	CB-CG2	-9.59	1.21	1.52
4	f	15	PHE	C-O	-9.55	1.12	1.24
3	e	26	VAL	C-O	-9.54	1.12	1.24
1	A	810	ARG	C-O	-9.53	1.13	1.24
7	c	56	GLU	CA-C	-9.49	1.40	1.52
2	C	174	MET	C-O	-9.47	1.12	1.24
1	a	512	SER	C-O	-9.41	1.12	1.24
2	C	185	GLN	CD-NE2	-9.39	1.13	1.33
1	a	742	ARG	C-O	-9.39	1.12	1.23
1	a	696	CYS	C-O	-9.38	1.12	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	864	ASN	CA-C	-9.37	1.39	1.52
1	A	231	MET	C-O	-9.37	1.12	1.23
2	C	31	ARG	C-O	-9.37	1.11	1.23
4	F	29	SER	C-O	-9.36	1.13	1.24
1	a	364	GLN	CD-NE2	-9.34	1.13	1.33
7	c	49	ARG	C-O	-9.34	1.12	1.24
7	c	135	PRO	C-O	-9.32	1.13	1.23
1	A	759	VAL	C-O	-9.30	1.13	1.24
3	E	10	PHE	C-O	-9.30	1.12	1.24
1	A	631	SER	C-O	-9.28	1.11	1.24
4	F	22	LEU	C-O	-9.28	1.13	1.24
3	E	15	TYR	C-O	-9.24	1.12	1.24
2	C	192	TYR	C-O	-9.22	1.12	1.24
1	A	137	ARG	C-O	-9.18	1.11	1.24
1	A	681	TRP	C-O	-9.18	1.13	1.24
1	A	812	VAL	C-O	-9.17	1.13	1.24
4	F	8	ILE	C-O	-9.17	1.13	1.24
1	a	541	SER	C-O	-9.15	1.11	1.23
1	A	222	PRO	C-O	-9.13	1.13	1.23
2	C	70	LEU	C-O	-9.12	1.13	1.24
4	F	21	THR	C-O	-9.09	1.13	1.24
1	A	828	ARG	C-O	-9.09	1.13	1.24
1	A	309	THR	C-O	-9.05	1.13	1.24
4	F	18	THR	C-O	-9.04	1.13	1.24
7	c	41	SER	C-O	-9.02	1.11	1.24
3	E	18	LEU	C-O	-9.02	1.13	1.24
7	c	74	TYR	C-O	-9.02	1.13	1.24
7	c	154	ARG	C-O	-9.01	1.12	1.24
1	A	202	TYR	C-O	-9.00	1.13	1.24
1	A	774	ASN	CG-ND2	-8.96	1.14	1.33
1	A	110	ARG	C-O	-8.94	1.13	1.24
1	A	680	PRO	C-O	-8.94	1.13	1.24
1	A	679	SER	C-O	-8.93	1.16	1.24
1	a	612	ARG	N-CA	-8.93	1.38	1.46
4	f	14	PHE	C-O	-8.92	1.13	1.24
1	a	633	PRO	C-O	-8.90	1.13	1.23
4	f	12	LEU	C-O	-8.89	1.13	1.24
1	a	542	TRP	C-O	-8.89	1.13	1.24
1	A	23	PRO	C-O	-8.88	1.14	1.24
1	A	688	ARG	C-O	-8.85	1.12	1.24
1	a	18	LEU	C-O	-8.83	1.11	1.23
7	c	75	LYS	C-O	-8.83	1.13	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	225	LEU	C-O	-8.82	1.12	1.24
1	a	339	ASN	C-O	-8.80	1.12	1.24
7	c	99	GLY	C-O	-8.77	1.12	1.23
7	c	145	GLN	C-O	-8.75	1.13	1.24
1	a	79	GLN	C-O	-8.74	1.13	1.23
7	c	76	ALA	C-O	-8.74	1.13	1.24
7	c	87	ALA	C-O	-8.72	1.13	1.24
1	a	338	MET	C-O	-8.72	1.12	1.24
2	C	115	ARG	C-O	-8.71	1.14	1.24
7	c	74	TYR	CA-C	-8.71	1.41	1.52
1	A	123	LEU	C-O	-8.69	1.13	1.24
1	A	630	ALA	C-O	-8.66	1.11	1.24
1	a	19	GLU	C-O	-8.65	1.12	1.23
1	A	20	LEU	C-O	-8.64	1.12	1.23
1	A	61	THR	CB-CG2	-8.61	1.24	1.52
1	A	538	GLN	C-O	-8.61	1.13	1.24
1	a	632	THR	C-O	-8.59	1.13	1.23
1	A	734	GLY	C-O	-8.57	1.11	1.23
1	a	528	GLU	C-O	-8.56	1.13	1.24
3	E	12	LEU	C-O	-8.56	1.13	1.24
7	c	97	GLY	N-CA	8.56	1.54	1.45
1	a	777	THR	CB-CG2	-8.55	1.24	1.52
4	f	13	CYS	C-O	-8.54	1.14	1.24
1	a	222	PRO	C-O	-8.52	1.14	1.23
1	A	205	LEU	C-O	-8.51	1.14	1.24
7	c	89	CYS	C-O	-8.50	1.13	1.24
1	A	501	ARG	CA-C	-8.49	1.42	1.52
1	A	242	ALA	C-O	-8.49	1.13	1.24
4	F	20	GLY	C-O	-8.47	1.13	1.23
2	C	191	ALA	C-O	-8.45	1.13	1.24
7	c	77	MET	C-O	-8.45	1.14	1.24
1	A	639	ASN	CG-OD1	-8.45	1.07	1.23
2	C	122	GLN	C-O	-8.45	1.13	1.24
1	A	479	ASP	CA-C	-8.43	1.41	1.52
4	F	9	ILE	C-O	-8.41	1.14	1.24
4	F	27	TYR	C-O	-8.39	1.14	1.24
1	A	735	TRP	C-O	-8.38	1.13	1.24
3	E	15	TYR	CA-C	-8.36	1.41	1.52
1	A	233	PRO	C-O	-8.36	1.13	1.24
7	c	100	ASN	N-CA	-8.30	1.36	1.46
1	A	639	ASN	C-O	-8.30	1.12	1.23
1	A	266	GLU	C-O	-8.28	1.13	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	123	ASN	CG-ND2	-8.27	1.15	1.33
1	a	377	GLY	C-O	-8.27	1.14	1.23
2	C	125	CYS	C-O	-8.27	1.13	1.24
1	A	611	PHE	C-O	-8.24	1.13	1.24
1	A	165	THR	C-O	-8.24	1.12	1.24
1	a	20	LEU	C-O	-8.23	1.12	1.24
4	F	26	VAL	C-O	-8.21	1.14	1.24
1	a	61	THR	CB-CG2	-8.21	1.25	1.52
7	c	44	ALA	C-O	-8.19	1.13	1.24
2	C	169	ASN	CG-OD1	-8.18	1.08	1.23
2	C	140	SER	CA-C	-8.18	1.42	1.52
3	E	9	LEU	C-O	-8.15	1.13	1.24
4	F	5	VAL	C-O	-8.15	1.14	1.24
1	A	241	GLN	C-O	-8.12	1.13	1.24
4	F	7	GLN	C-O	-8.11	1.14	1.24
2	C	164	GLY	C-O	-8.11	1.11	1.23
7	c	144	GLN	C-O	-8.11	1.14	1.24
1	a	364	GLN	CD-OE1	-8.10	1.08	1.23
1	A	690	GLN	C-O	-8.09	1.13	1.24
2	C	71	ARG	C-O	-8.09	1.13	1.24
1	a	25	GLU	C-O	-8.06	1.13	1.24
1	a	488	ALA	C-O	-8.04	1.13	1.23
7	c	80	GLU	C-O	-8.03	1.13	1.24
1	a	119	ILE	C-O	-8.03	1.14	1.24
1	a	346	LYS	N-CA	8.02	1.56	1.46
7	c	45	PRO	C-O	-8.01	1.13	1.24
7	c	40	ALA	C-O	-7.99	1.14	1.24
1	A	849	THR	CB-CG2	-7.99	1.26	1.52
7	c	26	ARG	CZ-NH1	-7.97	1.21	1.32
4	F	24	GLY	C-O	-7.96	1.14	1.23
1	A	540	GLY	C-O	-7.95	1.12	1.24
1	a	709	ILE	CG1-CD1	-7.92	1.20	1.51
1	a	765	ASN	CG-OD1	-7.92	1.08	1.23
1	a	863	GLN	C-O	-7.92	1.14	1.24
7	c	39	ALA	C-O	-7.89	1.15	1.24
1	a	656	TRP	C-O	-7.88	1.14	1.24
1	A	22	MET	C-O	-7.88	1.14	1.24
1	a	511	SER	C-O	-7.88	1.13	1.24
7	c	105	ALA	CA-C	-7.87	1.42	1.52
1	a	757	GLY	CA-C	-7.86	1.40	1.51
7	c	38	ILE	C-O	-7.86	1.14	1.24
1	A	204	GLY	C-O	-7.85	1.14	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	776	LEU	C-O	-7.84	1.14	1.24
1	a	732	ASP	CB-CG	-7.84	1.32	1.52
1	a	864	ASN	C-O	-7.83	1.13	1.23
1	A	783	GLY	C-O	-7.83	1.14	1.24
4	f	10	SER	C-O	-7.83	1.15	1.24
2	C	162	TYR	C-O	-7.83	1.15	1.24
1	a	613	PRO	C-O	-7.83	1.13	1.24
5	G	20	LEU	C-O	-7.81	1.13	1.24
1	A	298	GLU	C-O	-7.80	1.14	1.24
7	c	140	LYS	C-O	-7.80	1.11	1.23
4	F	17	LEU	C-O	-7.79	1.14	1.24
1	A	244	PHE	CA-C	-7.79	1.43	1.52
1	A	784	HIS	C-O	-7.78	1.13	1.24
7	c	111	ALA	C-O	-7.75	1.14	1.24
1	a	784	HIS	C-O	-7.75	1.14	1.24
1	A	221	PRO	C-O	-7.74	1.15	1.24
1	A	657	LEU	C-O	-7.74	1.14	1.24
1	A	697	ILE	C-O	-7.74	1.14	1.24
2	C	182	SER	CA-C	7.73	1.61	1.52
1	A	488	ALA	C-O	-7.70	1.15	1.24
7	c	25	ALA	C-O	-7.68	1.14	1.23
1	A	243	PRO	C-O	-7.67	1.14	1.23
1	a	117	PHE	C-O	-7.66	1.15	1.24
7	c	99	GLY	CA-C	-7.66	1.41	1.51
1	a	765	ASN	CG-ND2	-7.64	1.17	1.33
7	c	83	THR	C-O	-7.64	1.13	1.24
2	C	192	TYR	CA-C	-7.63	1.42	1.52
7	c	130	LYS	CA-C	-7.63	1.43	1.52
3	E	8	CYS	C-O	-7.63	1.15	1.24
1	a	769	TRP	C-O	-7.62	1.14	1.24
2	C	114	TYR	N-CA	-7.60	1.37	1.46
2	C	170	GLY	C-O	-7.60	1.12	1.24
5	G	44	LEU	CA-CB	-7.60	1.41	1.53
1	A	364	GLN	N-CA	-7.59	1.37	1.46
1	a	732	ASP	C-O	-7.59	1.13	1.24
2	C	149	GLN	C-O	-7.59	1.15	1.24
3	E	22	ILE	C-O	-7.58	1.15	1.24
1	a	739	MET	C-O	-7.56	1.14	1.24
4	f	22	LEU	C-O	-7.56	1.15	1.24
1	A	639	ASN	CG-ND2	-7.56	1.17	1.33
1	A	327	ARG	C-O	-7.55	1.15	1.24
1	a	363	VAL	C-O	-7.55	1.15	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	f	7	GLN	C-O	-7.54	1.15	1.24
4	F	16	ILE	C-O	-7.51	1.14	1.24
7	c	142	THR	C-O	-7.50	1.13	1.23
7	c	114	GLN	C-O	-7.47	1.15	1.24
1	A	732	ASP	CG-OD2	-7.47	1.11	1.25
1	a	433	THR	CB-CG2	-7.46	1.27	1.52
1	a	548	LYS	C-O	-7.46	1.14	1.24
7	c	23	VAL	C-O	-7.45	1.15	1.24
1	a	22	MET	C-O	-7.43	1.16	1.24
3	E	29	THR	C-O	-7.43	1.14	1.24
4	f	21	THR	C-O	-7.43	1.15	1.24
1	a	639	ASN	CB-CG	-7.42	1.33	1.52
7	c	134	MET	C-O	-7.42	1.14	1.24
3	E	16	ALA	C-O	-7.40	1.14	1.24
1	A	239	LEU	C-O	-7.40	1.15	1.24
1	A	745	GLU	CB-CG	-7.37	1.30	1.52
1	a	698	GLY	CA-C	-7.35	1.41	1.51
3	E	34	ALA	N-CA	7.33	1.55	1.46
1	A	653	ILE	CG1-CD1	-7.33	1.23	1.51
1	a	615	LEU	C-O	-7.31	1.14	1.24
1	a	362	HIS	C-O	-7.31	1.14	1.24
7	c	141	LEU	C-O	-7.29	1.14	1.23
1	A	20	LEU	CA-C	-7.28	1.44	1.53
7	c	28	ALA	C-O	-7.27	1.14	1.24
1	A	814	LEU	C-O	-7.26	1.15	1.24
1	a	139	GLY	C-O	-7.26	1.16	1.23
1	a	414	THR	CB-CG2	-7.25	1.28	1.52
1	A	166	PRO	C-O	-7.22	1.15	1.24
1	A	329	HIS	C-O	-7.22	1.14	1.24
7	c	110	ASP	CG-OD2	-7.22	1.11	1.25
7	c	107	ASN	CG-ND2	-7.22	1.18	1.33
7	c	133	VAL	C-O	-7.22	1.15	1.23
1	a	487	THR	C-O	-7.21	1.15	1.23
2	C	179	ASN	C-N	-7.21	1.23	1.33
1	a	852	LEU	N-CA	-7.20	1.37	1.46
1	A	785	LEU	C-O	-7.19	1.15	1.24
2	C	217	ARG	CA-C	-7.19	1.43	1.52
7	c	37	SER	C-O	-7.18	1.14	1.24
4	F	30	HIS	C-O	-7.15	1.15	1.24
2	C	172	GLY	C-O	-7.15	1.14	1.23
4	F	17	LEU	N-CA	-7.14	1.37	1.46
2	C	124	ASN	CA-C	-7.12	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	364	GLN	N-CA	-7.10	1.37	1.46
2	C	216	GLU	CA-CB	-7.08	1.42	1.53
1	A	640	LEU	CA-C	-7.07	1.43	1.52
1	A	700	VAL	CA-C	-7.06	1.44	1.52
1	A	304	PHE	C-O	-7.05	1.15	1.24
1	A	328	ASN	CG-OD1	-7.04	1.10	1.23
1	a	514	THR	CB-CG2	-7.04	1.29	1.52
1	a	394	ARG	CA-C	-7.04	1.43	1.52
2	C	112	GLU	N-CA	-7.04	1.37	1.46
7	c	103	ILE	C-O	-7.03	1.14	1.24
7	c	26	ARG	CZ-NH2	-7.03	1.24	1.33
1	a	518	THR	CB-CG2	-7.02	1.29	1.52
1	a	699	PRO	C-O	-7.02	1.09	1.23
1	a	847	THR	CB-CG2	-7.02	1.29	1.52
3	e	11	VAL	C-O	6.99	1.32	1.24
3	E	23	LYS	C-O	-6.98	1.15	1.24
4	f	11	VAL	C-O	-6.98	1.16	1.24
4	F	14	PHE	C-O	-6.96	1.16	1.24
1	A	836	THR	CB-CG2	-6.96	1.29	1.52
1	A	742	ARG	CZ-NH1	-6.93	1.23	1.32
4	f	5	VAL	C-O	-6.93	1.15	1.24
1	a	764	TRP	N-CA	-6.93	1.37	1.46
1	a	266	GLU	CD-OE2	-6.92	1.12	1.25
1	A	136	ALA	C-O	-6.91	1.15	1.24
7	c	36	SER	C-O	-6.90	1.15	1.24
7	c	18	ALA	C-O	-6.89	1.16	1.24
3	E	21	ILE	C-O	-6.86	1.16	1.24
1	a	413	THR	CB-CG2	-6.86	1.29	1.52
2	C	129	HIS	C-O	-6.85	1.14	1.24
1	a	666	PHE	C-O	-6.85	1.14	1.24
7	c	82	GLN	C-O	-6.83	1.15	1.24
2	C	171	GLY	C-O	-6.81	1.15	1.23
7	c	73	HIS	C-O	-6.80	1.15	1.24
1	a	732	ASP	C-N	-6.79	1.24	1.33
1	A	541	SER	CB-OG	-6.79	1.28	1.42
2	C	142	ASN	CG-OD1	-6.78	1.10	1.23
2	C	187	ARG	C-O	-6.78	1.15	1.24
1	a	689	LYS	C-O	-6.78	1.16	1.24
7	c	55	TYR	CD1-CE1	-6.76	1.18	1.38
7	c	88	ALA	C-O	-6.74	1.14	1.23
2	C	29	GLU	C-O	-6.71	1.14	1.23
3	e	22	ILE	C-O	-6.71	1.16	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	28	ASN	C-O	-6.70	1.15	1.24
1	A	232	THR	C-O	-6.68	1.15	1.24
5	G	14	TRP	CA-C	-6.68	1.44	1.52
1	a	308	LEU	N-CA	-6.68	1.38	1.46
1	a	775	HIS	C-O	-6.68	1.15	1.24
4	F	3	ASN	CA-C	-6.67	1.44	1.52
1	A	328	ASN	C-O	-6.66	1.14	1.23
7	c	48	LEU	C-O	-6.66	1.15	1.24
1	a	134	TYR	CA-C	-6.63	1.43	1.52
1	a	732	ASP	N-CA	-6.61	1.37	1.46
2	C	163	ASN	CG-OD1	-6.61	1.10	1.23
7	c	122	MET	SD-CE	-6.61	1.63	1.79
2	C	124	ASN	CG-OD1	-6.60	1.11	1.23
1	a	364	GLN	C-O	-6.59	1.15	1.24
5	G	25	LEU	C-O	-6.59	1.16	1.24
2	C	149	GLN	CD-NE2	-6.58	1.19	1.33
1	A	487	THR	C-O	-6.56	1.15	1.23
1	a	759	VAL	CA-CB	6.56	1.63	1.54
2	C	162	TYR	CZ-OH	-6.56	1.24	1.38
4	F	19	VAL	C-O	-6.56	1.16	1.24
1	A	268	THR	CB-CG2	-6.54	1.30	1.52
7	c	131	GLY	C-O	-6.54	1.15	1.23
1	a	541	SER	N-CA	-6.52	1.37	1.46
7	c	81	LEU	C-O	-6.50	1.15	1.24
1	A	810	ARG	CZ-NH1	-6.50	1.23	1.32
3	E	24	PHE	C-O	-6.49	1.16	1.24
7	c	107	ASN	CG-OD1	-6.48	1.11	1.23
4	f	26	VAL	C-O	-6.48	1.16	1.24
1	A	135	GLY	C-O	-6.47	1.15	1.23
1	a	394	ARG	CA-CB	-6.47	1.44	1.54
1	a	811	TRP	N-CA	-6.46	1.38	1.46
1	A	224	PRO	C-O	-6.46	1.10	1.23
2	C	31	ARG	CZ-NH2	-6.46	1.25	1.33
1	A	702	GLY	C-O	-6.46	1.15	1.24
1	A	691	SER	C-N	-6.45	1.28	1.33
7	c	141	LEU	CA-C	-6.45	1.45	1.52
1	a	785	LEU	C-O	-6.44	1.15	1.24
1	A	25	GLU	C-O	-6.44	1.15	1.24
1	a	225	LEU	N-CA	-6.43	1.39	1.46
1	a	612	ARG	CA-CB	-6.42	1.46	1.53
1	A	732	ASP	N-CA	-6.42	1.37	1.46
2	C	28	ASN	C-O	-6.42	1.15	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	529	TRP	CB-CG	-6.42	1.30	1.50
1	A	223	VAL	C-O	-6.41	1.16	1.24
1	A	226	GLN	C-O	-6.41	1.15	1.23
7	c	55	TYR	CD2-CE2	-6.41	1.19	1.38
1	a	308	LEU	C-O	-6.39	1.16	1.24
1	A	732	ASP	CG-OD1	-6.38	1.13	1.25
1	a	50	MET	SD-CE	-6.38	1.63	1.79
1	A	763	MET	SD-CE	-6.35	1.63	1.79
1	a	339	ASN	CG-ND2	-6.35	1.20	1.33
1	A	299	ASP	N-CA	-6.34	1.38	1.46
7	c	142	THR	CB-CG2	-6.34	1.31	1.52
1	a	137	ARG	C-O	-6.33	1.16	1.24
7	c	97	GLY	C-O	-6.33	1.16	1.23
1	A	91	PHE	N-CA	6.32	1.54	1.46
1	A	628	ARG	CB-CG	-6.31	1.33	1.52
1	a	248	TRP	C-O	-6.31	1.15	1.24
7	c	55	TYR	CZ-OH	-6.30	1.24	1.38
1	A	364	GLN	C-O	-6.30	1.16	1.24
2	C	46	LEU	C-O	-6.29	1.16	1.24
5	G	26	ILE	C-O	-6.28	1.17	1.24
7	c	154	ARG	CZ-NH2	-6.27	1.25	1.33
2	C	178	TYR	CZ-OH	-6.27	1.24	1.38
5	G	31	ASN	C-O	-6.26	1.16	1.24
1	A	689	LYS	C-O	-6.26	1.16	1.24
1	a	540	GLY	N-CA	6.25	1.54	1.45
1	A	700	VAL	C-O	-6.25	1.16	1.24
1	a	768	THR	CB-CG2	-6.25	1.31	1.52
3	e	26	VAL	N-CA	-6.24	1.38	1.46
1	A	172	LYS	C-O	-6.24	1.17	1.24
1	a	732	ASP	CG-OD2	-6.23	1.13	1.25
7	c	103	ILE	N-CA	-6.22	1.37	1.46
1	a	756	THR	CA-C	-6.22	1.44	1.52
1	a	815	MET	C-O	-6.21	1.16	1.24
7	c	71	ILE	C-O	-6.21	1.16	1.24
4	f	8	ILE	C-O	-6.21	1.17	1.24
1	A	706	GLY	C-O	-6.20	1.16	1.24
2	C	116	GLU	C-O	-6.20	1.16	1.24
1	a	309	THR	CB-CG2	-6.19	1.32	1.52
1	a	742	ARG	CA-C	-6.19	1.44	1.52
1	A	225	LEU	C-O	-6.18	1.15	1.23
2	C	123	ASN	N-CA	-6.18	1.39	1.46
1	A	659	ILE	CG1-CD1	-6.17	1.27	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	7	GLN	N-CA	-6.16	1.38	1.46
7	c	58	SER	CA-C	-6.16	1.45	1.52
2	C	115	ARG	CD-NE	-6.16	1.37	1.46
7	c	59	THR	C-O	-6.16	1.15	1.23
1	a	742	ARG	CZ-NH1	-6.15	1.24	1.32
1	a	268	THR	CB-CG2	-6.15	1.32	1.52
1	A	18	LEU	C-O	-6.14	1.16	1.23
7	c	93	HIS	CA-C	-6.14	1.44	1.52
1	A	633	PRO	C-O	-6.14	1.16	1.23
7	c	98	GLY	C-O	-6.13	1.15	1.23
1	A	705	CYS	C-O	-6.13	1.16	1.23
1	A	657	LEU	N-CA	-6.13	1.38	1.46
1	A	246	TYR	CA-C	-6.12	1.45	1.52
7	c	27	ASN	C-O	-6.12	1.16	1.23
1	A	144	GLU	C-O	-6.12	1.16	1.23
1	a	529	TRP	C-O	-6.12	1.16	1.24
1	A	638	SER	CB-OG	-6.11	1.29	1.42
1	a	861	PHE	C-O	-6.09	1.16	1.24
3	e	27	ALA	C-O	-6.09	1.16	1.24
1	a	376	HIS	CA-C	-6.09	1.44	1.52
1	A	471	PRO	C-O	-6.09	1.16	1.24
7	c	20	GLY	N-CA	-6.09	1.36	1.45
1	a	697	ILE	N-CA	-6.08	1.38	1.46
5	G	15	ALA	C-O	-6.08	1.16	1.24
1	A	172	LYS	N-CA	-6.07	1.40	1.46
7	c	39	ALA	CA-C	-6.07	1.45	1.52
4	f	6	GLY	C-O	-6.06	1.16	1.23
1	A	639	ASN	CB-CG	-6.05	1.36	1.52
1	A	470	ASN	CA-C	-6.05	1.45	1.52
2	C	127	GLY	C-O	-6.05	1.15	1.23
3	E	11	VAL	C-O	-6.05	1.16	1.24
1	A	816	GLY	C-O	-6.04	1.16	1.23
1	A	170	TRP	C-O	-6.04	1.16	1.24
7	c	94	GLN	C-O	-6.03	1.16	1.24
1	a	223	VAL	C-O	-6.03	1.17	1.25
1	A	637	TYR	C-O	-6.03	1.16	1.24
1	A	479	ASP	C-O	-6.02	1.16	1.23
1	a	538	GLN	CD-NE2	-6.02	1.20	1.33
2	C	115	ARG	N-CA	-6.01	1.39	1.46
1	a	352	ARG	CZ-NH2	-6.01	1.25	1.33
2	C	181	LEU	CA-C	-6.01	1.45	1.52
1	A	671	ARG	CZ-NH2	-5.99	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	497	GLN	CB-CG	-5.99	1.34	1.52
1	a	732	ASP	CA-CB	-5.99	1.43	1.53
1	A	817	LYS	C-O	-5.98	1.17	1.24
1	A	295	THR	CB-CG2	-5.98	1.32	1.52
1	A	497	GLN	CB-CG	-5.98	1.34	1.52
1	a	541	SER	CB-OG	-5.98	1.30	1.42
1	A	295	THR	C-O	-5.98	1.16	1.24
1	A	606	ALA	C-O	-5.97	1.16	1.24
1	A	610	LYS	C-O	-5.97	1.16	1.24
5	G	31	ASN	CG-OD1	-5.96	1.12	1.23
5	G	24	CYS	C-O	-5.96	1.17	1.24
1	A	470	ASN	C-O	-5.96	1.16	1.24
5	G	33	VAL	C-O	-5.94	1.17	1.24
4	F	13	CYS	C-O	-5.93	1.17	1.24
1	a	306	VAL	C-O	-5.93	1.17	1.24
1	A	502	ILE	C-O	-5.93	1.17	1.24
7	c	49	ARG	N-CA	-5.92	1.39	1.46
4	F	7	GLN	CD-OE1	-5.91	1.12	1.23
1	A	183	THR	CB-CG2	-5.90	1.33	1.52
1	A	266	GLU	CD-OE2	-5.90	1.14	1.25
1	a	361	ASN	C-O	-5.89	1.16	1.24
1	A	732	ASP	C-O	-5.89	1.16	1.24
4	f	10	SER	CB-OG	-5.89	1.30	1.42
1	a	200	THR	CB-CG2	-5.88	1.33	1.52
7	c	95	VAL	C-O	-5.87	1.16	1.24
1	A	249	PHE	N-CA	-5.85	1.39	1.46
1	a	538	GLN	C-O	-5.85	1.17	1.24
5	g	41	LEU	C-O	-5.84	1.16	1.24
1	A	202	TYR	N-CA	-5.83	1.39	1.46
2	C	71	ARG	CA-C	-5.83	1.44	1.52
2	C	116	GLU	CA-CB	-5.83	1.44	1.53
4	f	16	ILE	C-O	-5.83	1.17	1.24
1	A	777	THR	CB-CG2	-5.82	1.33	1.52
7	c	78	LEU	C-O	-5.82	1.17	1.24
1	a	705	CYS	CB-SG	5.81	2.00	1.81
4	f	19	VAL	C-O	-5.80	1.16	1.24
1	A	774	ASN	CG-OD1	-5.80	1.12	1.23
2	C	31	ARG	CZ-NH1	-5.79	1.24	1.32
2	C	168	GLY	C-O	-5.79	1.15	1.23
4	F	8	ILE	N-CA	-5.79	1.39	1.46
1	A	860	GLY	C-N	-5.78	1.25	1.33
7	c	96	ASN	CG-OD1	-5.78	1.12	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	G	41	LEU	C-O	-5.77	1.15	1.24
2	C	182	SER	CB-OG	-5.77	1.30	1.42
1	A	414	THR	CB-CG2	-5.75	1.33	1.52
1	A	763	MET	C-N	-5.75	1.26	1.33
1	A	759	VAL	C-N	-5.74	1.26	1.33
1	a	836	THR	CB-CG2	-5.74	1.33	1.52
1	a	415	MET	SD-CE	-5.72	1.65	1.79
1	a	759	VAL	C-N	-5.71	1.26	1.33
4	f	28	VAL	C-O	-5.71	1.17	1.24
1	A	107	THR	CB-CG2	-5.70	1.33	1.52
1	A	476	ALA	C-O	-5.70	1.16	1.24
3	E	17	ALA	CA-C	-5.70	1.45	1.52
1	a	732	ASP	CG-OD1	-5.70	1.14	1.25
1	A	822	LYS	C-O	-5.69	1.17	1.24
1	A	145	ILE	N-CA	-5.68	1.39	1.46
1	A	548	LYS	C-O	-5.68	1.16	1.24
3	E	21	ILE	N-CA	-5.68	1.40	1.46
7	c	85	ASN	C-O	-5.68	1.16	1.23
3	e	26	VAL	CA-C	-5.67	1.45	1.52
2	C	112	GLU	CA-CB	-5.66	1.44	1.53
5	G	30	GLY	C-O	-5.66	1.17	1.23
1	A	560	TRP	N-CA	-5.65	1.39	1.46
1	A	847	THR	CB-CG2	-5.65	1.33	1.52
7	c	114	GLN	CD-NE2	-5.65	1.21	1.33
1	A	766	GLU	CD-OE2	-5.64	1.14	1.25
2	C	164	GLY	C-N	-5.64	1.26	1.33
1	a	621	ASN	CB-CG	-5.62	1.38	1.52
7	c	97	GLY	C-N	-5.62	1.25	1.33
1	A	230	VAL	CA-C	-5.61	1.45	1.52
7	c	38	ILE	CA-C	-5.61	1.45	1.52
1	A	606	ALA	CA-C	-5.60	1.45	1.52
1	a	379	GLN	CG-CD	-5.60	1.38	1.52
7	c	114	GLN	CD-OE1	-5.58	1.12	1.23
2	C	71	ARG	CZ-NH1	-5.58	1.25	1.32
1	a	394	ARG	C-O	-5.58	1.17	1.23
1	A	361	ASN	CG-ND2	-5.56	1.21	1.33
1	a	537	VAL	CA-C	-5.56	1.45	1.52
2	C	73	ARG	C-O	-5.56	1.16	1.24
4	F	23	PHE	C-O	-5.55	1.16	1.24
1	a	486	GLY	C-O	-5.55	1.16	1.24
2	C	139	ARG	C-O	-5.55	1.14	1.24
1	a	15	TYR	C-O	-5.55	1.16	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	631	SER	CA-C	-5.55	1.45	1.52
7	c	75	LYS	N-CA	-5.55	1.39	1.46
4	F	11	VAL	C-O	-5.54	1.17	1.24
1	A	810	ARG	CA-CB	-5.54	1.44	1.53
7	c	107	ASN	C-O	-5.53	1.16	1.23
1	a	757	GLY	C-N	-5.52	1.25	1.33
7	c	100	ASN	C-O	-5.52	1.17	1.24
3	e	9	LEU	C-O	-5.52	1.17	1.24
1	a	438	ASP	CB-CG	-5.52	1.38	1.52
1	A	328	ASN	N-CA	-5.50	1.39	1.46
7	c	104	ASN	C-O	-5.50	1.15	1.23
1	a	337	ASP	C-O	-5.50	1.16	1.24
1	a	363	VAL	N-CA	-5.50	1.39	1.46
2	C	142	ASN	C-O	-5.50	1.15	1.23
1	A	703	GLY	C-O	-5.49	1.16	1.23
1	A	138	GLY	C-O	-5.49	1.17	1.24
1	A	657	LEU	CA-C	-5.49	1.45	1.52
7	c	107	ASN	N-CA	5.48	1.53	1.46
1	a	18	LEU	CA-C	-5.47	1.44	1.53
7	c	132	LYS	C-O	-5.47	1.17	1.24
1	A	757	GLY	CA-C	-5.47	1.44	1.51
7	c	22	PHE	C-O	-5.47	1.16	1.23
2	C	147	GLY	N-CA	-5.47	1.39	1.45
1	A	538	GLN	CD-OE1	-5.46	1.13	1.23
7	c	154	ARG	CZ-NH1	-5.45	1.25	1.32
7	c	110	ASP	C-O	-5.45	1.17	1.24
7	c	58	SER	C-O	-5.44	1.17	1.23
4	f	29	SER	C-O	-5.44	1.16	1.24
1	A	24	PRO	C-O	-5.44	1.17	1.24
1	A	740	MET	CA-C	-5.44	1.45	1.52
1	A	294	ILE	CB-CG1	-5.43	1.42	1.53
7	c	57	GLY	C-O	-5.43	1.16	1.23
7	c	63	PRO	C-O	-5.42	1.17	1.24
7	c	145	GLN	CA-C	5.42	1.60	1.52
1	A	311	ILE	N-CA	-5.42	1.40	1.46
1	A	22	MET	C-N	-5.42	1.26	1.33
3	E	32	ILE	C-O	-5.41	1.18	1.24
1	a	359	THR	CB-CG2	-5.41	1.34	1.52
1	A	143	GLY	C-O	-5.40	1.18	1.24
2	C	189	LEU	N-CA	-5.40	1.40	1.46
1	A	609	ASP	C-O	-5.38	1.17	1.24
1	A	622	MET	CB-CG	-5.38	1.36	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	757	GLY	N-CA	-5.38	1.37	1.45
1	a	364	GLN	C-N	-5.38	1.27	1.33
1	a	774	ASN	C-O	-5.38	1.17	1.24
1	A	230	VAL	C-O	-5.37	1.18	1.23
1	A	202	TYR	CZ-OH	-5.37	1.26	1.38
1	A	341	ILE	CG1-CD1	-5.35	1.30	1.51
2	C	187	ARG	CZ-NH2	-5.34	1.26	1.33
5	G	29	PHE	C-O	-5.33	1.18	1.24
1	a	482	LYS	C-O	-5.33	1.16	1.23
1	a	482	LYS	CA-CB	-5.33	1.46	1.53
1	a	305	HIS	CD2-NE2	-5.33	1.31	1.37
1	a	691	SER	C-O	-5.33	1.17	1.24
7	c	100	ASN	CG-ND2	-5.32	1.22	1.33
1	A	177	TRP	C-O	-5.32	1.16	1.23
7	c	80	GLU	CA-C	-5.32	1.45	1.52
7	c	86	TYR	C-O	-5.32	1.17	1.23
4	f	9	ILE	C-O	-5.32	1.18	1.24
2	C	169	ASN	C-O	-5.31	1.17	1.24
2	C	180	GLN	CD-NE2	-5.31	1.22	1.33
3	E	24	PHE	N-CA	-5.30	1.39	1.46
3	E	20	GLY	C-N	-5.30	1.27	1.33
7	c	42	ARG	CZ-NH2	-5.30	1.26	1.33
1	a	542	TRP	CD1-NE1	-5.29	1.26	1.37
1	A	742	ARG	CZ-NH2	-5.29	1.26	1.33
2	C	109	ASP	C-N	-5.28	1.27	1.34
1	A	108	ASP	N-CA	-5.28	1.40	1.46
4	F	28	VAL	C-O	-5.27	1.17	1.24
1	A	631	SER	CB-OG	-5.27	1.31	1.42
4	F	10	SER	CB-OG	-5.26	1.31	1.42
1	A	200	THR	CB-CG2	-5.26	1.35	1.52
2	C	124	ASN	CA-CB	-5.26	1.45	1.53
7	c	48	LEU	CB-CG	-5.26	1.43	1.53
1	A	757	GLY	C-O	-5.25	1.16	1.23
2	C	48	THR	C-O	-5.25	1.17	1.24
1	a	612	ARG	C-O	-5.25	1.19	1.24
1	A	612	ARG	C-O	-5.24	1.19	1.24
7	c	97	GLY	CA-C	5.24	1.59	1.52
7	c	24	GLY	C-O	-5.24	1.15	1.23
1	A	606	ALA	N-CA	-5.23	1.39	1.46
2	C	113	ILE	C-O	-5.22	1.18	1.24
1	A	679	SER	CA-CB	-5.22	1.46	1.53
1	a	135	GLY	C-O	-5.22	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	12	LEU	C-O	-5.22	1.18	1.24
1	A	542	TRP	C-N	-5.19	1.26	1.33
1	a	614	GLU	C-O	-5.19	1.17	1.24
1	A	764	TRP	N-CA	-5.19	1.40	1.46
1	a	116	CYS	CA-C	-5.18	1.46	1.52
1	a	510	GLY	C-O	-5.18	1.17	1.23
7	c	21	CYS	CA-C	-5.18	1.45	1.52
1	A	247	GLY	C-O	-5.17	1.13	1.23
1	A	735	TRP	C-N	-5.17	1.27	1.33
2	C	184	GLN	CB-CG	-5.16	1.36	1.52
1	a	307	HIS	CA-C	-5.16	1.46	1.52
2	C	188	TYR	CB-CG	-5.14	1.40	1.51
1	a	315	SER	CB-OG	-5.14	1.31	1.42
2	C	149	GLN	CD-OE1	-5.14	1.13	1.23
7	c	84	ARG	CA-CB	-5.13	1.46	1.53
1	A	177	TRP	CA-C	-5.13	1.45	1.52
1	A	19	GLU	C-O	-5.13	1.17	1.23
1	a	838	LYS	CB-CG	-5.12	1.37	1.52
2	C	31	ARG	NE-CZ	-5.12	1.27	1.33
1	a	774	ASN	CA-C	-5.11	1.45	1.52
1	A	655	PHE	N-CA	-5.11	1.40	1.46
2	C	162	TYR	N-CA	-5.10	1.40	1.46
1	a	138	GLY	C-O	-5.09	1.16	1.24
7	c	155	ARG	C-O	-5.09	1.17	1.24
7	c	19	THR	CB-CG2	-5.08	1.35	1.52
4	F	31	LEU	C-O	-5.08	1.18	1.24
1	a	346	LYS	CA-C	-5.08	1.46	1.52
3	e	29	THR	N-CA	-5.07	1.39	1.46
4	f	18	THR	CA-C	-5.07	1.46	1.52
1	a	628	ARG	CB-CG	-5.06	1.37	1.52
2	C	122	GLN	C-N	-5.06	1.27	1.33
1	A	448	SER	CB-OG	-5.05	1.32	1.42
7	c	41	SER	CB-OG	-5.04	1.32	1.42
7	c	94	GLN	N-CA	5.04	1.52	1.46
1	A	25	GLU	CA-C	-5.03	1.45	1.52
1	a	764	TRP	CZ3-CH2	-5.03	1.27	1.40
1	A	136	ALA	CA-C	-5.03	1.46	1.52
2	C	114	TYR	CZ-OH	-5.03	1.27	1.38
1	a	567	THR	CB-CG2	-5.03	1.35	1.52
1	A	621	ASN	CB-CG	-5.03	1.39	1.52
1	A	605	GLN	C-O	-5.03	1.17	1.24
1	a	828	ARG	CA-C	-5.03	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	227	PRO	C-O	-5.02	1.17	1.23
8	B	86	CYS	CA-C	-5.02	1.46	1.53
1	A	246	TYR	CZ-OH	-5.02	1.27	1.38
1	A	328	ASN	CA-CB	5.01	1.60	1.53
1	A	762	TYR	CZ-OH	-5.01	1.27	1.38
1	a	134	TYR	CB-CG	-5.00	1.40	1.51
7	c	41	SER	CA-CB	-5.00	1.45	1.53
7	c	102	ALA	C-O	-5.00	1.17	1.24

All (385) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	96	LEU	CA-C-N	22.17	147.55	119.84
1	A	96	LEU	C-N-CA	22.17	147.55	119.84
1	A	473	ASP	CA-C-N	17.02	136.88	120.03
1	A	473	ASP	C-N-CA	17.02	136.88	120.03
2	C	141	THR	CA-C-O	-14.92	104.52	120.63
2	C	141	THR	N-CA-C	14.45	128.81	111.33
8	B	140	VAL	N-CA-C	14.09	124.89	110.23
3	e	24	PHE	N-CA-C	-13.79	96.92	113.88
7	c	133	VAL	N-CA-C	12.97	122.71	111.56
1	A	13	ARG	N-CA-C	12.73	130.93	113.37
7	c	106	THR	CA-C-O	12.61	134.70	120.96
2	C	179	ASN	O-C-N	-11.50	107.30	122.59
1	A	757	GLY	N-CA-C	11.24	139.81	113.18
1	A	244	PHE	CA-C-N	-11.11	107.41	119.19
1	A	244	PHE	C-N-CA	-11.11	107.41	119.19
7	c	106	THR	O-C-N	-10.86	110.03	123.06
2	C	142	ASN	N-CA-C	10.64	123.36	110.91
1	a	85	LEU	CA-C-N	10.60	133.09	119.84
1	a	85	LEU	C-N-CA	10.60	133.09	119.84
1	a	539	TRP	O-C-N	-10.43	109.43	122.68
7	c	60	ASP	N-CA-C	10.35	123.61	111.71
1	A	700	VAL	CB-CA-C	-10.02	97.46	111.28
1	A	221	PRO	CA-C-N	9.93	129.69	119.76
1	A	221	PRO	C-N-CA	9.93	129.69	119.76
1	a	346	LYS	N-CA-CB	9.80	127.06	110.49
1	A	687	TRP	N-CA-C	9.55	125.39	112.68
1	A	88	ILE	N-CA-C	9.46	129.02	109.34
7	c	91	GLY	CA-C-N	9.45	139.59	121.54
7	c	91	GLY	C-N-CA	9.45	139.59	121.54
3	E	33	ALA	N-CA-C	9.35	124.01	112.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	537	VAL	N-CA-C	9.32	122.35	108.46
2	C	22	VAL	CA-C-N	-9.28	113.08	122.27
2	C	22	VAL	C-N-CA	-9.28	113.08	122.27
7	c	19	THR	N-CA-C	-9.07	96.93	109.71
1	a	327	ARG	CA-C-N	-9.06	108.02	122.79
1	a	327	ARG	C-N-CA	-9.06	108.02	122.79
1	A	706	GLY	N-CA-C	8.97	127.77	115.30
2	C	116	GLU	N-CA-C	8.85	122.19	111.40
1	a	757	GLY	N-CA-C	8.81	134.07	113.18
7	c	159	LYS	CA-C-O	-8.77	111.85	121.94
7	c	96	ASN	N-CA-C	8.75	123.68	112.92
1	A	96	LEU	C-N-CD	-8.75	89.14	125.00
1	A	475	THR	N-CA-C	-8.64	99.42	111.52
1	A	85	LEU	CA-C-N	8.63	130.62	119.84
1	A	85	LEU	C-N-CA	8.63	130.62	119.84
2	C	124	ASN	N-CA-C	8.57	124.13	112.90
1	A	338	MET	CA-C-N	-8.57	109.32	123.37
1	A	338	MET	C-N-CA	-8.57	109.32	123.37
1	a	344	GLY	CA-C-N	-8.54	109.02	122.17
1	a	344	GLY	C-N-CA	-8.54	109.02	122.17
5	g	16	TRP	N-CA-C	-8.46	101.43	112.68
8	B	90	THR	N-CA-C	-8.44	102.08	112.38
1	A	501	ARG	NE-CZ-NH2	8.40	126.76	119.20
1	a	705	CYS	N-CA-C	8.39	121.24	109.15
2	C	202	ASN	CB-CA-C	8.30	125.68	109.33
4	f	2	TRP	N-CA-C	-8.30	103.17	113.38
1	A	167	GLU	N-CA-CB	-8.26	98.41	110.47
1	A	135	GLY	N-CA-C	-8.25	93.62	113.18
7	c	21	CYS	N-CA-CB	8.24	124.41	110.49
1	a	364	GLN	N-CA-CB	-8.24	97.62	110.30
1	A	639	ASN	CB-CA-C	-8.23	92.94	111.30
1	a	861	PHE	CB-CA-C	8.21	124.17	110.79
7	c	92	CYS	N-CA-C	-8.20	93.34	110.80
8	B	105	VAL	N-CA-C	8.09	126.16	109.34
7	c	98	GLY	O-C-N	8.08	133.20	122.70
7	c	106	THR	N-CA-CB	8.03	121.93	109.48
2	C	142	ASN	N-CA-CB	8.03	124.85	111.53
1	A	156	LYS	N-CA-C	-7.98	102.07	112.68
1	a	18	LEU	CA-CB-CG	7.94	144.09	116.30
1	a	528	GLU	N-CA-C	-7.89	98.20	109.96
1	a	482	LYS	N-CA-C	7.87	120.36	109.18
7	c	101	LYS	N-CA-C	-7.85	97.23	109.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	178	TYR	N-CA-C	7.84	122.53	112.34
7	c	98	GLY	CA-C-N	7.79	136.68	121.41
7	c	98	GLY	C-N-CA	7.79	136.68	121.41
1	A	167	GLU	N-CA-C	7.78	122.91	113.41
7	c	131	GLY	N-CA-C	7.78	131.62	113.18
4	f	18	THR	N-CA-C	7.77	119.83	111.36
1	A	295	THR	N-CA-C	7.77	122.44	112.34
7	c	111	ALA	CA-C-N	7.75	128.39	119.94
7	c	111	ALA	C-N-CA	7.75	128.39	119.94
8	B	109	LEU	N-CA-C	-7.68	94.45	110.80
1	a	345	LYS	N-CA-C	7.66	122.38	112.12
1	a	22	MET	CA-C-N	7.66	125.25	119.66
1	a	22	MET	C-N-CA	7.66	125.25	119.66
8	B	134	CYS	CA-C-N	7.61	129.35	119.84
8	B	134	CYS	C-N-CA	7.61	129.35	119.84
1	A	638	SER	CA-C-N	7.59	134.50	121.29
1	A	638	SER	C-N-CA	7.59	134.50	121.29
1	A	361	ASN	CA-C-N	7.56	131.03	120.29
1	A	361	ASN	C-N-CA	7.56	131.03	120.29
7	c	134	MET	CA-C-N	7.48	127.41	119.85
7	c	134	MET	C-N-CA	7.48	127.41	119.85
1	A	475	THR	N-CA-CB	7.47	123.27	111.91
8	B	109	LEU	CA-C-N	7.45	133.18	121.56
8	B	109	LEU	C-N-CA	7.45	133.18	121.56
7	c	133	VAL	CA-C-O	-7.44	113.59	120.73
7	c	62	LEU	CA-C-N	7.43	129.12	119.84
7	c	62	LEU	C-N-CA	7.43	129.12	119.84
1	a	759	VAL	N-CA-C	7.38	124.70	109.34
7	c	26	ARG	CG-CD-NE	-7.38	95.76	112.00
7	c	96	ASN	CA-C-O	-7.38	110.93	119.56
5	g	44	LEU	N-CA-C	7.37	120.91	110.23
5	G	11	LYS	N-CA-C	-7.34	103.21	111.14
3	E	32	ILE	N-CA-C	-7.32	96.88	107.78
1	A	245	PRO	CA-C-O	-7.26	108.67	119.34
5	G	44	LEU	N-CA-CB	-7.22	99.15	110.06
1	a	154	GLY	N-CA-C	-7.21	96.09	113.18
2	C	180	GLN	N-CA-C	7.20	126.12	110.80
1	a	690	GLN	N-CA-C	7.19	121.88	113.18
1	A	641	ARG	CA-C-N	-7.18	110.92	122.62
1	A	641	ARG	C-N-CA	-7.18	110.92	122.62
1	a	782	LEU	CA-C-N	7.09	127.67	119.94
1	a	782	LEU	C-N-CA	7.09	127.67	119.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	732	ASP	CA-C-N	7.09	131.33	121.26
1	a	732	ASP	C-N-CA	7.09	131.33	121.26
2	C	202	ASN	N-CA-C	-7.09	98.38	109.72
9	D	29	ALA	CA-C-N	7.07	134.10	121.66
9	D	29	ALA	C-N-CA	7.07	134.10	121.66
1	A	91	PHE	CA-CB-CG	7.05	120.85	113.80
1	a	612	ARG	N-CA-C	7.05	122.41	113.25
1	A	145	ILE	N-CA-C	-7.02	103.82	110.42
1	a	88	ILE	N-CA-C	6.96	123.82	109.34
4	F	10	SER	CA-C-N	6.95	130.28	120.42
4	F	10	SER	C-N-CA	6.95	130.28	120.42
1	a	18	LEU	CB-CG-CD1	-6.95	89.86	110.70
2	C	141	THR	O-C-N	-6.92	114.78	122.12
1	A	166	PRO	CA-C-N	6.91	134.46	122.09
1	A	166	PRO	C-N-CA	6.91	134.46	122.09
5	g	26	ILE	N-CA-C	-6.87	95.05	109.34
1	A	682	TYR	N-CA-C	6.87	119.64	111.33
1	A	732	ASP	N-CA-C	6.86	121.50	113.20
1	A	698	GLY	N-CA-C	6.84	126.30	112.34
7	c	92	CYS	N-CA-CB	6.81	122.00	110.49
7	c	106	THR	N-CA-C	6.81	120.25	110.24
7	c	20	GLY	N-CA-C	-6.79	97.09	113.18
1	A	147	TRP	N-CA-C	6.77	125.21	110.80
7	c	132	LYS	N-CA-CB	6.76	121.92	110.49
2	C	141	THR	N-CA-CB	6.75	120.19	110.06
1	A	501	ARG	CD-NE-CZ	6.74	133.84	124.40
1	A	736	ILE	CA-CB-CG2	6.73	121.93	110.50
3	e	28	ASN	N-CA-C	6.70	120.76	112.59
5	G	40	MET	N-CA-C	-6.65	102.30	111.28
1	A	709	ILE	CA-C-O	-6.64	113.81	120.85
1	A	90	GLU	O-C-N	-6.62	114.62	122.96
1	a	83	VAL	N-CA-C	6.61	123.08	109.34
1	A	327	ARG	N-CA-C	6.60	119.32	111.33
1	a	759	VAL	CA-C-N	6.58	129.39	120.44
1	a	759	VAL	C-N-CA	6.58	129.39	120.44
8	B	115	TYR	N-CA-C	6.58	119.34	108.49
2	C	190	VAL	CA-C-O	-6.57	114.26	121.29
2	C	48	THR	N-CA-C	6.57	124.79	110.80
1	a	732	ASP	N-CA-CB	-6.53	101.03	110.56
1	A	170	TRP	N-CA-C	6.52	124.69	110.80
1	A	688	ARG	CB-CG-CD	-6.51	96.33	111.30
2	C	202	ASN	CA-C-O	-6.50	113.76	121.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	739	MET	CA-CB-CG	6.49	127.07	114.10
1	a	14	TRP	N-CA-C	-6.48	105.39	113.55
1	A	608	LEU	N-CA-C	-6.47	104.07	112.23
1	a	147	TRP	N-CA-C	6.46	124.56	110.80
1	a	197	SER	N-CA-C	6.45	121.00	112.35
2	C	218	GLN	N-CA-CB	-6.43	99.57	110.50
2	C	216	GLU	CB-CA-C	-6.42	99.70	110.81
1	A	690	GLN	N-CA-C	6.42	120.37	112.54
1	a	336	ASN	O-C-N	-6.41	113.90	122.43
1	A	638	SER	CB-CA-C	-6.40	96.67	109.79
1	A	741	ALA	N-CA-C	6.39	119.64	110.24
1	a	686	GLU	CA-C-N	-6.39	111.93	122.79
1	a	686	GLU	C-N-CA	-6.39	111.93	122.79
1	a	137	ARG	CB-CG-CD	-6.37	96.66	111.30
2	C	179	ASN	N-CA-C	-6.33	97.31	110.80
1	A	244	PHE	N-CA-C	6.33	123.79	109.81
2	C	117	GLY	CA-C-O	-6.32	113.96	120.66
2	C	71	ARG	CG-CD-NE	-6.29	98.17	112.00
1	a	852	LEU	CA-C-O	-6.28	113.00	120.10
1	a	851	VAL	CA-CB-CG2	6.27	121.06	110.40
2	C	125	CYS	CA-C-N	6.26	129.30	120.42
2	C	125	CYS	C-N-CA	6.26	129.30	120.42
1	A	734	GLY	N-CA-C	6.25	120.54	112.54
1	a	822	LYS	N-CA-C	6.25	120.00	112.38
1	a	537	VAL	CB-CA-C	-6.24	100.89	110.50
2	C	121	PHE	CA-C-N	6.23	129.26	120.28
2	C	121	PHE	C-N-CA	6.23	129.26	120.28
1	A	94	SER	N-CA-C	6.23	124.07	110.80
1	a	698	GLY	CA-C-O	-6.21	116.44	122.46
5	g	36	LEU	N-CA-C	6.19	119.30	111.69
4	f	5	VAL	CA-C-N	6.16	126.65	119.94
4	f	5	VAL	C-N-CA	6.16	126.65	119.94
1	a	731	LEU	N-CA-C	6.15	117.98	111.28
1	a	762	TYR	CA-C-N	6.15	128.44	120.44
1	a	762	TYR	C-N-CA	6.15	128.44	120.44
1	a	394	ARG	CB-CA-C	-6.15	98.75	109.07
1	A	310	ALA	CA-C-N	6.13	128.29	120.56
1	A	310	ALA	C-N-CA	6.13	128.29	120.56
2	C	191	ALA	N-CA-C	6.12	118.75	111.71
2	C	129	HIS	CA-C-N	6.11	131.90	121.87
2	C	129	HIS	C-N-CA	6.11	131.90	121.87
1	A	65	ARG	NE-CZ-NH1	6.08	127.58	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	539	TRP	CA-C-O	-6.07	114.61	120.92
1	A	59	ASN	CA-CB-CG	6.07	118.67	112.60
1	A	501	ARG	NE-CZ-NH1	-6.06	115.44	121.50
1	A	136	ALA	N-CA-C	-6.06	97.90	110.80
1	a	633	PRO	N-CA-C	6.05	120.58	111.14
1	A	548	LYS	CA-C-O	6.05	126.64	119.56
8	B	104	ASP	N-CA-C	6.04	119.51	110.14
2	C	216	GLU	N-CA-CB	-6.04	102.23	110.56
7	c	26	ARG	CD-NE-CZ	6.04	132.85	124.40
7	c	48	LEU	CA-CB-CG	6.02	137.37	116.30
1	a	160	GLN	N-CA-C	-6.01	105.50	114.64
8	B	136	THR	N-CA-C	6.01	119.44	111.75
1	a	196	LEU	CA-C-N	-5.99	112.35	119.78
1	a	196	LEU	C-N-CA	-5.99	112.35	119.78
1	A	640	LEU	CA-C-N	5.99	132.99	121.54
1	A	640	LEU	C-N-CA	5.99	132.99	121.54
2	C	146	PRO	CA-C-N	5.98	126.58	120.00
2	C	146	PRO	C-N-CA	5.98	126.58	120.00
1	A	239	LEU	N-CA-C	5.98	121.24	111.37
1	A	763	MET	CB-CG-SD	-5.98	94.77	112.70
2	C	47	LYS	CA-C-N	5.96	132.93	121.54
2	C	47	LYS	C-N-CA	5.96	132.93	121.54
1	A	633	PRO	N-CA-C	5.92	120.37	111.14
2	C	75	THR	N-CA-CB	5.92	118.64	110.01
1	a	377	GLY	CA-C-N	5.90	127.51	120.14
1	a	377	GLY	C-N-CA	5.90	127.51	120.14
1	a	736	ILE	CA-CB-CG2	5.89	120.52	110.50
1	a	339	ASN	CB-CA-C	5.88	122.13	110.42
7	c	100	ASN	N-CA-CB	-5.88	101.72	110.90
1	A	167	GLU	CB-CA-C	-5.88	98.96	109.24
8	B	94	PRO	CA-C-N	5.87	127.17	119.84
8	B	94	PRO	C-N-CA	5.87	127.17	119.84
2	C	22	VAL	O-C-N	-5.86	115.24	122.57
2	C	141	THR	CA-C-N	-5.84	114.11	122.93
2	C	141	THR	C-N-CA	-5.84	114.11	122.93
2	C	218	GLN	N-CA-C	5.83	127.33	111.00
2	C	163	ASN	N-CA-C	5.83	119.57	112.23
1	A	413	THR	CA-C-N	-5.82	110.78	120.68
1	A	413	THR	C-N-CA	-5.82	110.78	120.68
1	A	196	LEU	CA-C-N	-5.81	107.63	121.80
1	A	196	LEU	C-N-CA	-5.81	107.63	121.80
1	A	294	ILE	CA-CB-CG2	5.81	120.37	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	309	THR	OG1-CB-CG2	-5.80	97.69	109.30
8	B	136	THR	O-C-N	5.80	128.82	122.20
1	a	852	LEU	CA-C-N	5.79	129.80	120.30
1	a	852	LEU	C-N-CA	5.79	129.80	120.30
5	G	16	TRP	N-CA-C	-5.77	105.07	111.36
5	G	32	TYR	N-CA-C	5.75	120.41	113.17
1	A	851	VAL	CA-CB-CG1	5.74	120.16	110.40
1	a	374	VAL	CA-C-N	5.74	128.24	120.38
1	a	374	VAL	C-N-CA	5.74	128.24	120.38
5	g	40	MET	CA-C-N	5.72	128.74	120.38
5	g	40	MET	C-N-CA	5.72	128.74	120.38
2	C	145	ASP	CA-C-N	5.72	125.40	119.05
2	C	145	ASP	C-N-CA	5.72	125.40	119.05
7	c	106	THR	CA-CB-OG1	5.71	118.17	109.60
1	A	486	GLY	N-CA-C	5.71	124.14	115.63
1	a	437	LEU	CA-C-N	5.71	130.23	122.07
1	a	437	LEU	C-N-CA	5.71	130.23	122.07
1	a	362	HIS	CA-C-N	5.71	128.52	120.42
1	a	362	HIS	C-N-CA	5.71	128.52	120.42
1	a	472	TRP	CA-C-N	-5.70	114.22	121.74
1	a	472	TRP	C-N-CA	-5.70	114.22	121.74
1	a	757	GLY	CA-C-O	-5.69	110.67	120.57
2	C	112	GLU	N-CA-C	5.68	117.55	111.36
7	c	43	THR	OG1-CB-CG2	-5.67	97.97	109.30
7	c	115	ALA	CA-C-N	-5.66	113.61	122.73
7	c	115	ALA	C-N-CA	-5.66	113.61	122.73
1	A	501	ARG	CG-CD-NE	-5.66	99.56	112.00
1	a	698	GLY	CA-C-N	5.65	140.56	127.00
1	a	698	GLY	C-N-CA	5.65	140.56	127.00
2	C	45	THR	N-CA-C	-5.64	105.75	113.30
1	a	709	ILE	CA-CB-CG2	5.64	120.08	110.50
7	c	48	LEU	CB-CG-CD2	-5.63	93.80	110.70
1	A	611	PHE	N-CA-C	-5.63	106.41	113.72
5	G	44	LEU	CB-CG-CD1	5.62	127.57	110.70
1	A	722	LYS	N-CA-C	5.62	120.39	112.75
7	c	26	ARG	N-CA-C	5.62	118.39	109.96
2	C	71	ARG	N-CA-CB	5.61	118.98	110.28
7	c	102	ALA	N-CA-CB	5.61	119.97	110.49
7	c	130	LYS	CA-C-N	5.61	132.41	121.41
7	c	130	LYS	C-N-CA	5.61	132.41	121.41
3	E	11	VAL	N-CA-C	-5.60	104.90	111.00
1	A	729	TRP	CA-CB-CG	5.60	124.24	113.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	g	11	LYS	N-CA-C	-5.59	105.09	111.07
2	C	20	CYS	N-CA-CB	5.58	119.92	110.49
7	c	26	ARG	NE-CZ-NH2	-5.58	114.18	119.20
2	C	129	HIS	N-CA-C	5.57	119.77	112.92
1	a	801	ARG	NE-CZ-NH2	-5.56	114.20	119.20
1	A	539	TRP	CA-C-N	5.55	129.62	120.25
1	A	539	TRP	C-N-CA	5.55	129.62	120.25
5	G	9	ILE	N-CA-C	5.53	120.83	109.34
1	A	263	ILE	CB-CA-C	-5.51	103.33	112.26
1	a	308	LEU	CA-C-O	-5.51	115.02	120.70
4	F	29	SER	N-CA-C	-5.50	105.19	111.07
1	A	244	PHE	N-CA-CB	5.50	120.16	110.37
2	C	30	THR	N-CA-CB	5.50	118.08	110.17
1	A	238	PRO	CA-C-O	-5.49	115.23	121.98
1	a	364	GLN	CB-CA-C	5.46	121.52	110.38
1	a	764	TRP	CA-C-N	5.45	128.03	120.29
1	a	764	TRP	C-N-CA	5.45	128.03	120.29
2	C	164	GLY	O-C-N	-5.43	116.86	122.68
1	A	759	VAL	N-CA-C	5.43	120.63	109.34
1	A	641	ARG	NE-CZ-NH2	-5.41	114.33	119.20
7	c	81	LEU	CA-CB-CG	5.38	135.15	116.30
1	A	822	LYS	N-CA-C	5.37	118.63	111.75
4	f	14	PHE	CA-C-N	5.37	127.92	120.29
4	f	14	PHE	C-N-CA	5.37	127.92	120.29
7	c	112	GLY	CA-C-O	-5.37	114.89	120.90
1	A	287	ARG	CA-C-N	5.37	125.91	120.38
1	A	287	ARG	C-N-CA	5.37	125.91	120.38
8	B	123	ILE	CB-CA-C	-5.36	102.50	111.29
3	e	29	THR	N-CA-C	-5.35	104.04	110.88
1	A	474	PRO	N-CA-C	-5.34	103.40	111.41
3	E	33	ALA	CA-C-O	-5.34	113.49	119.79
1	a	19	GLU	N-CA-C	5.34	118.69	110.42
1	a	367	LEU	CA-CB-CG	-5.34	97.62	116.30
4	f	15	PHE	CA-C-N	5.33	128.00	120.42
4	f	15	PHE	C-N-CA	5.33	128.00	120.42
2	C	174	MET	N-CA-C	-5.33	98.02	109.81
1	A	785	LEU	CA-C-N	5.33	127.27	120.56
1	A	785	LEU	C-N-CA	5.33	127.27	120.56
7	c	33	LEU	N-CA-C	5.33	118.04	110.10
1	a	152	VAL	N-CA-C	-5.31	97.41	108.88
7	c	26	ARG	CB-CG-CD	5.31	123.50	111.30
2	C	216	GLU	CA-C-N	5.30	131.67	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	216	GLU	C-N-CA	5.30	131.67	121.54
2	C	73	ARG	CB-CA-C	-5.30	99.97	109.24
1	a	305	HIS	CA-C-O	-5.30	114.81	120.42
2	C	30	THR	CB-CA-C	-5.29	99.80	109.54
4	F	5	VAL	CA-C-N	5.28	126.75	120.14
4	F	5	VAL	C-N-CA	5.28	126.75	120.14
1	A	91	PHE	CA-C-N	5.28	128.35	120.90
1	A	91	PHE	C-N-CA	5.28	128.35	120.90
2	C	194	ARG	NE-CZ-NH2	-5.28	114.45	119.20
1	A	709	ILE	N-CA-CB	5.27	118.49	110.58
3	E	34	ALA	N-CA-CB	5.27	119.39	110.49
1	a	851	VAL	CA-CB-CG1	5.24	119.31	110.40
3	E	27	ALA	N-CA-C	5.23	116.98	111.28
2	C	179	ASN	CB-CA-C	5.23	120.83	110.42
2	C	48	THR	N-CA-CB	5.22	119.32	110.49
2	C	71	ARG	N-CA-C	5.22	117.88	111.82
8	B	103	ARG	N-CA-C	-5.22	101.91	109.59
2	C	19	GLY	CA-C-N	5.22	131.52	121.54
2	C	19	GLY	C-N-CA	5.22	131.52	121.54
1	A	242	ALA	CA-C-N	5.21	125.15	119.78
1	A	242	ALA	C-N-CA	5.21	125.15	119.78
1	A	500	ASP	N-CA-C	5.20	117.83	110.50
1	A	65	ARG	CG-CD-NE	5.20	123.43	112.00
7	c	131	GLY	CA-C-O	-5.18	111.56	120.57
1	A	84	TRP	N-CA-C	-5.18	107.03	113.55
2	C	174	MET	CG-SD-CE	5.18	112.29	100.90
7	c	103	ILE	N-CA-CB	-5.17	103.39	112.08
8	B	116	TRP	N-CA-C	5.17	117.93	110.28
4	F	25	ILE	CA-C-N	5.16	127.06	120.56
4	F	25	ILE	C-N-CA	5.16	127.06	120.56
1	a	768	THR	CA-CB-OG1	5.16	117.34	109.60
7	c	41	SER	N-CA-C	5.16	119.44	113.20
1	a	528	GLU	CA-C-O	-5.15	114.77	120.70
1	a	698	GLY	C-N-CD	-5.15	109.28	120.60
2	C	87	VAL	CA-CB-CG1	5.14	119.15	110.40
1	a	188	LEU	CA-CB-CG	5.13	134.25	116.30
2	C	203	GLY	N-CA-C	5.12	125.31	113.18
1	a	742	ARG	NE-CZ-NH2	5.11	123.80	119.20
8	B	106	GLU	N-CA-C	-5.11	100.15	109.56
1	a	798	ARG	CG-CD-NE	-5.09	100.80	112.00
4	f	13	CYS	N-CA-C	-5.09	105.81	111.36
4	F	3	ASN	N-CA-C	-5.08	105.44	111.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	860	GLY	O-C-N	-5.08	117.17	123.21
2	C	59	GLN	CB-CA-C	-5.07	100.33	110.42
1	A	168	GLY	N-CA-C	5.07	122.67	112.34
7	c	26	ARG	NE-CZ-NH1	5.07	126.57	121.50
1	a	775	HIS	N-CA-C	-5.06	105.41	112.45
1	A	472	TRP	N-CA-C	5.06	118.55	112.38
1	a	65	ARG	CG-CD-NE	5.05	123.12	112.00
1	A	529	TRP	N-CA-C	5.05	121.55	110.80
5	G	41	LEU	N-CA-C	5.04	119.19	113.19
7	c	135	PRO	N-CA-C	5.04	119.39	111.38
1	a	697	ILE	CA-C-N	5.04	129.35	121.64
1	a	697	ILE	C-N-CA	5.04	129.35	121.64
3	E	31	ASP	N-CA-C	5.03	119.37	113.23
1	A	736	ILE	CB-CG1-CD1	-5.03	103.24	113.80
1	A	706	GLY	CA-C-N	5.02	128.87	120.64
1	A	706	GLY	C-N-CA	5.02	128.87	120.64
7	c	48	LEU	CB-CG-CD1	-5.01	95.67	110.70
1	a	170	TRP	N-CA-C	5.01	121.47	110.80
5	G	40	MET	CB-CA-C	5.01	119.42	112.11

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	639	ASN	Mainchain
2	C	141	THR	Mainchain
2	C	179	ASN	Mainchain
1	a	360	PHE	Mainchain
1	a	698	GLY	Peptide
1	a	92	SER	Peptide
1	a	93	THR	Peptide
7	c	97	GLY	Mainchain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	6960	0	6807	271	0
1	a	6984	0	6830	241	0
2	C	1474	0	1403	55	0
3	E	258	0	279	6	0
3	e	258	0	279	14	0
4	F	273	0	290	8	0
4	f	273	0	290	12	0
5	G	302	0	318	23	0
5	g	302	0	318	27	0
6	H	95	0	23	8	0
6	h	95	0	24	6	0
7	c	1096	0	1079	51	0
8	B	568	0	543	132	0
9	D	520	0	510	22	0
10	A	66	0	68	3	0
10	a	66	0	69	1	0
11	A	489	0	507	44	0
11	a	508	0	553	42	0
12	A	292	0	285	30	0
12	a	292	0	284	16	0
13	A	40	0	56	7	0
13	c	40	0	55	5	0
14	A	1	0	0	0	0
14	a	1	0	0	0	0
15	A	135	0	0	5	0
15	a	135	0	0	5	0
16	A	240	0	0	15	0
16	C	18	0	0	2	0
16	E	26	0	0	0	0
16	a	243	0	0	10	0
16	c	8	0	0	1	0
16	e	26	0	0	1	0
17	A	47	0	0	8	0
17	G	38	0	0	7	0
17	a	47	0	0	3	0
17	g	38	0	0	1	0
18	C	43	0	31	9	0
18	c	43	0	31	5	0
19	E	44	0	0	0	0
19	a	44	0	0	0	0
20	B	16	0	0	13	0
20	a	8	0	0	5	0
21	A	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	a	3	0	0	0	0
All	All	22458	0	20932	893	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 21.

All (893) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:85:LEU:HD12	1:A:86:PRO:CD	1.38	1.46
5:G:40:MET:HE1	17:G:101:85N:C22	1.47	1.41
5:G:40:MET:CE	17:G:101:85N:C22	1.95	1.41
1:a:150:PRO:HA	1:a:156:LYS:NZ	1.27	1.40
1:a:150:PRO:CA	1:a:156:LYS:NZ	1.84	1.40
2:C:128:CYS:SG	18:C:301:HEC:CAC	2.09	1.39
1:a:150:PRO:CA	1:a:156:LYS:HZ1	1.34	1.39
8:B:90:THR:HG21	8:B:115:TYR:CE2	1.56	1.38
1:A:826:GLU:OE1	17:A:932:85N:C22	1.78	1.32
8:B:97:VAL:HG11	8:B:123:ILE:CD1	1.59	1.30
1:a:700:VAL:HG12	8:B:111:GLY:N	1.43	1.30
8:B:89:CYS:SG	20:B:201:SF4:FE4	1.25	1.28
1:a:150:PRO:C	1:a:156:LYS:HZ1	1.39	1.27
1:a:700:VAL:HG12	8:B:111:GLY:CA	1.63	1.26
8:B:97:VAL:CG1	8:B:123:ILE:HD11	1.65	1.26
1:A:85:LEU:CD1	1:A:86:PRO:HD2	1.66	1.25
8:B:90:THR:HG21	8:B:115:TYR:CD2	1.70	1.25
7:c:98:GLY:HA2	7:c:107:ASN:CA	1.66	1.24
1:a:12:LYS:NZ	1:a:693:ASP:OD2	1.69	1.24
8:B:140:VAL:CG1	8:B:146:VAL:CG1	2.16	1.23
2:C:128:CYS:SG	18:C:301:HEC:HAC	1.76	1.21
8:B:80:GLU:OE2	8:B:116:TRP:HB3	1.34	1.20
1:a:149:LEU:O	1:a:156:LYS:NZ	1.75	1.19
8:B:140:VAL:CG1	8:B:146:VAL:HG11	1.73	1.19
1:a:700:VAL:CG1	8:B:111:GLY:HA2	1.74	1.18
11:A:908:BCL:HBA1	11:A:908:BCL:HBD	1.21	1.17
12:A:910:CLA:HED3	1:a:760:PHE:CZ	1.79	1.17
8:B:140:VAL:HG12	8:B:146:VAL:CG1	1.73	1.17
1:A:94:SER:HB2	1:A:97:PRO:HA	1.19	1.16
11:a:904:BCL:H203	7:c:16:VAL:CG2	1.77	1.15
1:A:88:ILE:HA	1:A:95:LYS:NZ	1.62	1.12
8:B:97:VAL:HG11	8:B:123:ILE:HD11	1.14	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:G:34:PRO:HB3	5:G:44:LEU:HD22	1.22	1.11
1:A:88:ILE:HA	1:A:95:LYS:HZ3	1.09	1.11
1:A:85:LEU:CD1	1:A:86:PRO:CD	2.25	1.10
7:c:49:ARG:HH11	7:c:63:PRO:HG2	1.06	1.10
1:a:700:VAL:CG1	8:B:111:GLY:CA	2.29	1.09
8:B:90:THR:CG2	8:B:115:TYR:CD2	2.35	1.09
7:c:98:GLY:CA	7:c:107:ASN:HA	1.83	1.09
8:B:140:VAL:HG12	8:B:146:VAL:HG13	1.36	1.07
8:B:89:CYS:SG	20:B:201:SF4:S3	2.55	1.05
7:c:98:GLY:HA3	7:c:107:ASN:OD1	1.57	1.05
1:A:66:LEU:HD13	12:A:911:CLA:CED	1.85	1.05
1:A:83:VAL:HG21	1:A:106:MET:HE1	1.37	1.02
8:B:97:VAL:HG21	8:B:123:ILE:HD12	1.36	1.02
1:a:152:VAL:HB	1:a:155:LEU:HD21	1.39	1.02
1:a:640:LEU:H	1:a:865:ARG:HG3	1.25	1.01
8:B:77:THR:CG2	9:D:25:GLN:OE1	2.09	1.01
11:a:904:BCL:H203	7:c:16:VAL:HG21	1.42	1.01
8:B:77:THR:HG21	9:D:25:GLN:OE1	1.61	1.00
8:B:97:VAL:CB	8:B:123:ILE:HD11	1.91	1.00
4:f:4:VAL:O	4:f:8:ILE:HD12	1.62	0.99
11:A:903:BCL:HAA1	11:A:903:BCL:HBD	1.42	0.99
1:A:865:ARG:NH1	2:C:83:ASN:OD1	1.95	0.98
7:c:18:ALA:HB2	13:c:201:LYC:H622	1.42	0.98
8:B:83:CYS:HG	20:B:201:SF4:FE2	0.72	0.98
1:A:639:ASN:HD22	1:A:643:GLN:HB2	1.29	0.97
11:A:902:BCL:HBB3	13:A:913:LYC:H62	1.43	0.97
1:A:91:PHE:HB3	1:A:95:LYS:HB3	1.46	0.97
1:a:445:GLN:HE22	1:a:514:THR:HG22	1.28	0.96
1:A:28:PHE:CE2	11:A:905:BCL:HED2	2.01	0.95
1:a:475:THR:HA	5:g:39:LYS:HG2	1.46	0.95
8:B:134:CYS:HG	20:B:201:SF4:FE3	0.70	0.95
5:G:40:MET:HE2	17:G:101:85N:C22	1.93	0.94
8:B:140:VAL:HG11	8:B:146:VAL:HG11	1.45	0.94
8:B:97:VAL:HG11	8:B:123:ILE:HD13	1.49	0.94
1:A:85:LEU:HD12	1:A:86:PRO:HD3	1.50	0.93
11:A:906:BCL:HMB1	11:A:906:BCL:HBB3	1.49	0.93
12:A:910:CLA:HED3	1:a:760:PHE:CE2	2.04	0.92
1:A:699:PRO:HD2	8:B:86:CYS:O	1.70	0.92
1:A:149:LEU:H	1:A:150:PRO:CD	1.82	0.92
8:B:128:CYS:SG	20:B:202:SF4:S4	2.67	0.92
5:G:41:LEU:HG	5:G:44:LEU:HD23	1.52	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:700:VAL:HG11	8:B:111:GLY:HA2	1.51	0.91
11:A:908:BCL:HBA1	11:A:908:BCL:CBD	1.99	0.91
5:G:34:PRO:HB3	5:G:44:LEU:CD2	2.00	0.91
1:a:700:VAL:HG12	8:B:111:GLY:H	1.14	0.91
1:A:483:ASN:HB3	1:A:484:PRO:HD2	1.51	0.91
8:B:76:TYR:CE1	8:B:141:PHE:CD1	2.58	0.91
8:B:128:CYS:SG	20:B:202:SF4:FE3	1.62	0.91
5:G:34:PRO:CB	5:G:44:LEU:HD22	2.01	0.90
5:g:30:GLY:HA3	17:g:101:85N:O4	1.70	0.90
1:A:66:LEU:CD1	12:A:911:CLA:CED	2.50	0.90
1:A:88:ILE:CA	1:A:95:LYS:NZ	2.36	0.89
7:c:98:GLY:HA2	7:c:107:ASN:HA	0.93	0.89
1:A:477:GLY:H	5:G:41:LEU:HD13	1.38	0.88
1:A:696:CYS:HG	20:a:917:SF4:FE4	0.84	0.88
5:G:32:TYR:OH	6:H:6:UNK:O	1.91	0.88
7:c:98:GLY:HA2	7:c:107:ASN:CB	2.05	0.87
1:A:13:ARG:HH11	1:A:13:ARG:HB2	1.38	0.87
11:a:908:BCL:H193	3:e:5:LEU:HD21	1.55	0.87
7:c:49:ARG:NH1	7:c:63:PRO:HG2	1.89	0.87
11:a:908:BCL:C19	3:e:5:LEU:HD21	2.04	0.86
1:A:94:SER:CB	1:A:97:PRO:HA	2.06	0.86
1:A:85:LEU:CD1	1:A:86:PRO:HD3	2.04	0.86
1:A:109:PHE:CD1	16:A:922:UNL:C16	2.59	0.86
1:A:94:SER:HB2	1:A:97:PRO:CA	2.03	0.85
7:c:33:LEU:O	7:c:33:LEU:HD23	1.76	0.85
1:a:149:LEU:C	1:a:156:LYS:HZ3	1.84	0.85
1:A:88:ILE:CA	1:A:95:LYS:HZ3	1.89	0.85
11:a:904:BCL:H203	7:c:16:VAL:HG23	1.59	0.84
8:B:104:ASP:OD1	8:B:113:GLU:HB3	1.77	0.84
7:c:98:GLY:CA	7:c:107:ASN:OD1	2.24	0.84
1:A:433:THR:HG21	1:A:739:MET:HG2	1.59	0.84
4:F:34:ARG:HA	4:F:34:ARG:NE	1.93	0.84
8:B:97:VAL:HG21	8:B:123:ILE:CD1	2.07	0.83
1:A:613:PRO:O	1:A:614:GLU:HB3	1.79	0.83
8:B:75:ILE:HG13	9:D:37:MET:HE1	1.58	0.83
1:A:156:LYS:HD2	1:A:156:LYS:O	1.79	0.82
1:a:149:LEU:C	1:a:156:LYS:NZ	2.36	0.82
1:a:501:ARG:HD2	5:g:44:LEU:HD23	1.59	0.82
1:A:149:LEU:N	1:A:150:PRO:CD	2.41	0.82
1:A:158:LEU:HD22	1:A:158:LEU:O	1.78	0.82
1:a:445:GLN:HE22	1:a:514:THR:CG2	1.91	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:88:ILE:C	1:A:95:LYS:NZ	2.38	0.82
12:A:910:CLA:CED	1:a:760:PHE:CE2	2.62	0.82
1:A:765:ASN:O	1:A:768:THR:HG23	1.79	0.81
11:A:907:BCL:HBB3	11:A:907:BCL:HMB1	1.61	0.81
8:B:146:VAL:HG21	9:D:22:TRP:HZ2	1.45	0.81
1:a:150:PRO:HA	1:a:156:LYS:HZ2	0.99	0.81
1:a:150:PRO:CA	1:a:156:LYS:HZ2	1.74	0.81
1:a:149:LEU:N	1:a:150:PRO:CD	2.44	0.81
1:a:641:ARG:HD3	1:a:865:ARG:HH11	1.46	0.81
8:B:104:ASP:OD1	8:B:113:GLU:CB	2.29	0.80
1:a:149:LEU:H	1:a:150:PRO:CD	1.93	0.80
1:A:66:LEU:HD13	12:A:911:CLA:HED1	1.62	0.80
1:A:83:VAL:HG12	1:A:88:ILE:HD12	1.63	0.80
1:A:307:HIS:ND1	11:A:902:BCL:HBB1	1.96	0.80
7:c:18:ALA:CB	13:c:201:LYC:H622	2.11	0.80
1:a:641:ARG:CG	1:a:865:ARG:HH11	1.94	0.80
11:A:903:BCL:HAA1	11:A:903:BCL:CBD	2.04	0.79
8:B:101:LEU:O	8:B:115:TYR:CD2	2.35	0.79
1:a:641:ARG:CD	1:a:865:ARG:HH11	1.94	0.79
5:G:34:PRO:CB	5:G:44:LEU:CD2	2.61	0.79
1:a:641:ARG:HD3	1:a:865:ARG:NH1	1.96	0.79
1:a:12:LYS:HZ1	1:a:693:ASP:CG	1.88	0.79
1:a:150:PRO:C	1:a:156:LYS:NZ	2.26	0.78
8:B:77:THR:HG22	9:D:25:GLN:OE1	1.83	0.78
8:B:97:VAL:CG1	8:B:123:ILE:CD1	2.39	0.78
1:A:141:THR:HG22	1:A:162:LYS:HG2	1.64	0.78
1:A:78:GLU:CD	2:C:62:PRO:HG2	2.09	0.78
1:a:641:ARG:CD	1:a:865:ARG:NH1	2.46	0.78
1:A:82:ARG:HA	1:A:88:ILE:HG13	1.66	0.77
16:A:926:UNL:C2	16:A:927:UNL:C	2.63	0.77
8:B:75:ILE:CG1	9:D:37:MET:HE1	2.14	0.77
1:A:641:ARG:HG2	2:C:39:LEU:CD1	2.14	0.77
1:a:501:ARG:CD	5:g:44:LEU:HD23	2.15	0.77
1:a:440:ASN:HB2	1:a:514:THR:HG21	1.67	0.77
1:A:760:PHE:CE2	12:A:931:CLA:HED3	2.20	0.76
8:B:90:THR:CG2	8:B:115:TYR:CE2	2.53	0.76
1:a:700:VAL:CG1	8:B:111:GLY:H	1.97	0.76
1:A:13:ARG:HB2	1:A:13:ARG:NH1	2.00	0.75
1:a:639:ASN:HB3	1:a:641:ARG:H	1.51	0.75
2:C:128:CYS:SG	18:C:301:HEC:CBC	2.75	0.74
1:A:149:LEU:H	1:A:150:PRO:HD3	1.51	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:B:129:PHE:HA	8:B:139:VAL:HG21	1.70	0.74
8:B:86:CYS:SG	20:B:201:SF4:FE1	1.78	0.74
5:g:40:MET:HG3	5:g:40:MET:O	1.88	0.73
1:A:85:LEU:HD12	1:A:86:PRO:HD2	0.73	0.73
1:A:833:ASN:C	1:A:833:ASN:HD22	1.97	0.73
1:a:493:ALA:HA	1:a:496:LEU:HD22	1.71	0.73
1:A:429:ILE:O	1:A:433:THR:HG23	1.89	0.73
8:B:90:THR:HG22	8:B:115:TYR:CD2	2.24	0.72
1:a:158:LEU:HD13	1:a:158:LEU:C	2.14	0.72
4:F:2:TRP:HA	4:F:2:TRP:CE3	2.24	0.72
7:c:33:LEU:HD23	7:c:33:LEU:C	2.12	0.72
12:A:910:CLA:O1A	12:A:910:CLA:H3A	1.90	0.72
1:a:475:THR:HA	5:g:39:LYS:CG	2.19	0.72
1:a:705:CYS:HB3	20:a:917:SF4:S4	2.29	0.72
2:C:87:VAL:HG22	2:C:179:ASN:O	1.89	0.72
1:A:826:GLU:OE1	17:A:932:85N:C19	2.38	0.71
1:A:627:GLU:HB3	2:C:46:LEU:HD22	1.72	0.71
11:a:909:BCL:HBB3	11:a:909:BCL:HMB1	1.72	0.71
1:A:148:LEU:H	1:A:148:LEU:HD23	1.55	0.71
2:C:87:VAL:CG2	2:C:179:ASN:O	2.39	0.71
8:B:80:GLU:HG2	8:B:114:THR:HG21	1.72	0.71
8:B:97:VAL:HB	8:B:123:ILE:HD11	1.73	0.71
7:c:133:VAL:HG22	18:c:202:HEC:HMD2	1.72	0.71
11:A:904:BCL:HMB1	11:A:904:BCL:HBB3	1.72	0.70
11:a:905:BCL:H92	16:a:931:UNL:C	2.22	0.70
8:B:97:VAL:CB	8:B:123:ILE:CD1	2.67	0.70
1:a:55:ASP:OD1	7:c:42:ARG:NH2	2.23	0.70
2:C:107:TYR:CG	2:C:218:GLN:HB2	2.27	0.70
1:a:13:ARG:O	1:a:17:LYS:HE2	1.91	0.70
1:a:149:LEU:H	1:a:150:PRO:HD3	1.55	0.70
16:a:932:UNL:C16	16:a:933:UNL:C17	2.69	0.70
8:B:92:GLU:OE2	8:B:92:GLU:HA	1.91	0.70
1:a:155:LEU:HD23	1:a:155:LEU:O	1.91	0.70
1:a:294:ILE:HG13	1:a:297:LEU:HD23	1.74	0.69
1:A:627:GLU:HB3	2:C:46:LEU:CD2	2.22	0.69
1:a:641:ARG:HG3	1:a:865:ARG:NH1	2.07	0.69
1:A:87:LEU:O	1:A:87:LEU:HD12	1.93	0.69
1:a:152:VAL:CG1	1:a:155:LEU:HD11	2.23	0.69
1:A:57:TYR:O	1:A:61:THR:HG22	1.92	0.69
1:A:88:ILE:C	1:A:95:LYS:HZ1	1.99	0.69
1:A:741:ALA:O	1:A:757:GLY:O	2.10	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:494:ARG:HD2	1:A:586:VAL:HG13	1.75	0.69
4:F:2:TRP:HA	4:F:2:TRP:HE3	1.57	0.69
8:B:76:TYR:HE1	8:B:141:PHE:CG	2.11	0.69
11:A:905:BCL:HBB2	11:A:905:BCL:HMB3	1.74	0.69
1:A:287:ARG:NH1	1:A:287:ARG:HG3	2.06	0.68
11:a:904:BCL:C20	7:c:16:VAL:HG23	2.22	0.68
7:c:98:GLY:HA3	7:c:107:ASN:CG	2.16	0.68
1:a:12:LYS:NZ	1:a:693:ASP:CG	2.49	0.68
1:a:640:LEU:HD22	1:a:865:ARG:HB2	1.76	0.68
1:A:641:ARG:HG2	2:C:39:LEU:HD12	1.75	0.68
8:B:124:SER:HA	20:B:202:SF4:S2	2.33	0.68
2:C:59:GLN:CD	2:C:59:GLN:H	2.02	0.68
8:B:82:LEU:O	8:B:136:THR:HG21	1.94	0.68
1:A:141:THR:HB	1:A:161:ILE:O	1.94	0.68
1:a:88:ILE:O	1:a:95:LYS:HD2	1.94	0.67
11:A:902:BCL:CBB	13:A:913:LYC:H62	2.19	0.67
1:a:150:PRO:N	1:a:156:LYS:NZ	2.43	0.67
8:B:129:PHE:HA	8:B:139:VAL:CG2	2.25	0.67
1:a:705:CYS:CB	20:a:917:SF4:S4	2.83	0.67
8:B:75:ILE:HG13	9:D:37:MET:CE	2.24	0.67
1:A:135:GLY:O	1:A:175:LEU:HD22	1.94	0.67
1:A:597:THR:HG22	1:A:600:ALA:H	1.60	0.67
1:A:84:TRP:HE3	1:A:84:TRP:O	1.78	0.66
1:A:763:MET:HE1	12:A:931:CLA:HED2	1.77	0.66
11:A:906:BCL:HBB3	11:A:906:BCL:CMB	2.23	0.66
8:B:146:VAL:HG21	9:D:22:TRP:CZ2	2.29	0.66
7:c:98:GLY:CA	7:c:107:ASN:CG	2.69	0.66
4:f:34:ARG:HG3	4:f:34:ARG:O	1.94	0.66
1:A:109:PHE:HD1	16:A:922:UNL:C16	2.05	0.66
1:A:810:ARG:HG2	3:e:35:ASN:HA	1.75	0.66
1:A:66:LEU:CD1	12:A:911:CLA:HED3	2.23	0.66
1:A:88:ILE:C	1:A:95:LYS:HZ3	2.01	0.66
2:C:107:TYR:CD1	2:C:218:GLN:HB2	2.31	0.66
18:c:202:HEC:HMB3	18:c:202:HEC:HBB3	1.77	0.66
1:a:152:VAL:HB	1:a:155:LEU:CD2	2.23	0.66
1:a:440:ASN:O	6:h:5:UNK:CB	2.44	0.66
8:B:76:TYR:HE1	8:B:141:PHE:CD1	2.14	0.66
6:H:2:UNK:CB	16:c:203:UNL:C4	2.73	0.65
8:B:89:CYS:SG	20:B:201:SF4:S2	2.85	0.65
1:A:441:PHE:CE2	6:H:3:UNK:CB	2.80	0.65
11:a:905:BCL:CHB	11:a:905:BCL:H11	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:487:THR:HB	6:h:17:UNK:O	1.97	0.65
1:a:658:MET:HE2	1:a:658:MET:HA	1.77	0.65
1:A:826:GLU:CD	17:A:932:85N:C22	2.69	0.65
1:A:149:LEU:N	1:A:150:PRO:HD2	2.09	0.65
2:C:134:CYS:HA	2:C:142:ASN:OD1	1.97	0.65
8:B:97:VAL:CG2	8:B:123:ILE:CD1	2.74	0.65
1:A:342:ILE:HD12	1:A:347:ILE:HG13	1.79	0.64
1:A:135:GLY:O	1:A:175:LEU:CD2	2.45	0.64
1:A:28:PHE:CD2	11:A:905:BCL:HED2	2.32	0.64
1:A:531:GLN:HE21	1:A:533:LYS:HE3	1.61	0.64
1:a:864:ASN:C	1:a:864:ASN:HD22	2.06	0.64
7:c:144:GLN:NE2	7:c:147:ASN:HD22	1.95	0.64
11:A:902:BCL:HHC	11:A:902:BCL:HBB2	1.79	0.64
1:a:155:LEU:HD22	1:a:155:LEU:N	2.11	0.64
7:c:96:ASN:C	7:c:96:ASN:HD22	2.06	0.64
8:B:80:GLU:OE2	8:B:116:TRP:CB	2.29	0.64
1:A:158:LEU:HD22	1:A:158:LEU:C	2.20	0.63
2:C:71:ARG:HB2	2:C:75:THR:HG23	1.79	0.63
1:a:700:VAL:CG1	8:B:111:GLY:N	2.39	0.63
8:B:129:PHE:HD1	8:B:139:VAL:HG22	1.62	0.63
1:a:641:ARG:CG	1:a:865:ARG:NH1	2.58	0.63
3:e:18:LEU:HD23	16:e:101:UNL:C4	2.29	0.63
1:A:696:CYS:SG	20:a:917:SF4:FE4	1.89	0.63
1:a:150:PRO:O	1:a:156:LYS:NZ	2.30	0.63
1:A:392:GLN:O	1:A:394:ARG:NH1	2.31	0.63
2:C:128:CYS:SG	18:C:301:HEC:C3C	2.86	0.63
1:A:109:PHE:CD1	16:A:922:UNL:C15	2.81	0.63
8:B:97:VAL:CG2	8:B:123:ILE:HD12	2.22	0.63
1:A:13:ARG:HH11	1:A:13:ARG:CB	2.09	0.62
11:a:905:BCL:CBB	11:a:905:BCL:HMB3	2.30	0.62
1:A:843:VAL:O	1:A:847:THR:HG23	1.99	0.62
1:a:109:PHE:HD1	16:a:926:UNL:C7	2.12	0.62
12:A:910:CLA:HED3	1:a:760:PHE:CE1	2.33	0.62
5:G:34:PRO:HB2	5:G:44:LEU:CG	2.30	0.62
1:a:158:LEU:HD22	1:a:158:LEU:O	2.00	0.62
15:A:917:85I:C33	12:a:901:CLA:H141	2.30	0.62
1:A:160:GLN:O	1:A:160:GLN:HG3	2.00	0.62
1:A:156:LYS:HD2	1:A:156:LYS:C	2.21	0.61
1:A:220:LYS:O	1:A:267:THR:HG21	2.00	0.61
5:G:30:GLY:CA	17:G:101:85N:O5	2.48	0.61
8:B:80:GLU:HG2	8:B:114:THR:CG2	2.31	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:85:LEU:H	1:a:85:LEU:CD2	2.13	0.61
1:a:773:ASP:O	1:a:777:THR:HG22	2.00	0.61
1:A:94:SER:CB	1:A:97:PRO:CA	2.73	0.61
1:a:158:LEU:HD13	1:a:158:LEU:O	2.00	0.61
1:a:309:THR:HG22	1:a:373:GLY:HA3	1.80	0.61
8:B:89:CYS:HG	20:B:201:SF4:FE4	1.03	0.61
1:A:66:LEU:HD13	12:A:911:CLA:HED2	1.77	0.61
1:A:83:VAL:CG2	1:A:106:MET:HE1	2.23	0.61
1:a:415:MET:HG2	1:a:667:ILE:HD13	1.82	0.61
1:a:615:LEU:HG	1:a:615:LEU:O	1.99	0.61
4:f:4:VAL:O	4:f:4:VAL:HG12	2.01	0.60
1:A:87:LEU:HD12	1:A:95:LYS:HG3	1.81	0.60
1:A:729:TRP:HB3	1:A:736:ILE:HD11	1.83	0.60
1:A:78:GLU:OE2	2:C:62:PRO:HG2	2.01	0.60
1:a:501:ARG:NH1	5:g:44:LEU:O	2.34	0.60
8:B:142:THR:OG1	8:B:145:GLY:C	2.45	0.60
1:A:33:MET:HB3	11:A:902:BCL:C9	2.31	0.60
1:a:155:LEU:HD22	1:a:155:LEU:H	1.65	0.60
1:a:474:PRO:O	1:a:475:THR:OG1	2.15	0.60
1:A:252:TYR:CE1	2:C:36:PRO:HB3	2.37	0.59
1:A:445:GLN:NE2	1:A:514:THR:OG1	2.34	0.59
1:A:550:ASN:HD21	1:A:552:LEU:HB2	1.67	0.59
11:a:904:BCL:C20	7:c:16:VAL:CG2	2.66	0.59
1:A:532:PRO:HB2	1:A:622:MET:HE1	1.83	0.59
1:a:93:THR:O	1:a:97:PRO:HA	2.01	0.59
1:a:445:GLN:NE2	1:a:514:THR:HG22	2.08	0.59
5:g:38:VAL:HG12	5:g:38:VAL:O	2.01	0.59
8:B:76:TYR:CD1	8:B:141:PHE:HA	2.37	0.59
1:A:242:ALA:HB3	1:A:247:GLY:HA3	1.82	0.59
16:A:923:UNL:C10	2:C:22:VAL:O	2.50	0.59
8:B:76:TYR:CE1	8:B:141:PHE:CG	2.89	0.59
1:A:148:LEU:H	1:A:148:LEU:CD2	2.14	0.59
1:A:156:LYS:NZ	1:A:160:GLN:HB3	2.17	0.59
1:a:487:THR:CB	6:h:17:UNK:O	2.50	0.59
8:B:76:TYR:CE1	8:B:141:PHE:HB2	2.38	0.59
11:A:908:BCL:HBA1	11:A:908:BCL:CHA	2.31	0.58
2:C:116:GLU:HG2	2:C:188:TYR:CD2	2.38	0.58
1:a:458:ALA:HA	1:a:461:ILE:HD12	1.85	0.58
1:A:88:ILE:O	1:A:88:ILE:HG22	2.03	0.58
8:B:142:THR:OG1	8:B:145:GLY:O	2.19	0.58
1:A:826:GLU:O	17:A:932:85N:C18	2.52	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:133:VAL:HG22	18:c:202:HEC:CMD	2.34	0.58
1:A:610:LYS:O	1:A:610:LYS:HG2	2.04	0.58
1:a:94:SER:C	1:a:96:LEU:H	2.12	0.58
1:a:61:THR:HG21	11:a:910:BCL:HAA2	1.86	0.58
1:A:82:ARG:HG3	1:A:82:ARG:O	1.99	0.58
1:a:149:LEU:HA	1:a:152:VAL:HG23	1.85	0.58
1:A:696:CYS:SG	20:a:917:SF4:S1	3.01	0.58
8:B:94:PRO:HB2	8:B:97:VAL:HG13	1.84	0.57
11:A:907:BCL:HBB3	11:A:907:BCL:CMB	2.33	0.57
7:c:44:ALA:O	7:c:48:LEU:HD22	2.04	0.57
11:a:905:BCL:HHD	11:a:909:BCL:HBB2	1.85	0.57
12:a:913:CLA:HBD	12:a:913:CLA:HAA1	1.85	0.57
1:a:203:ILE:HD12	11:a:909:BCL:HED2	1.86	0.57
12:A:910:CLA:HAA2	12:A:910:CLA:HBD	1.87	0.57
5:G:34:PRO:HB2	5:G:44:LEU:CD1	2.35	0.57
1:a:843:VAL:O	1:a:847:THR:HG23	2.04	0.57
1:A:85:LEU:HD13	1:A:86:PRO:HD3	1.86	0.56
11:a:904:BCL:HED3	12:a:914:CLA:HMB1	1.87	0.56
16:a:930:UNL:C	16:a:931:UNL:C8	2.83	0.56
8:B:140:VAL:HG13	8:B:146:VAL:CG1	2.27	0.56
12:A:910:CLA:HED1	1:a:760:PHE:CE2	2.39	0.56
11:A:908:BCL:HMB1	11:A:908:BCL:HBB3	1.87	0.56
8:B:129:PHE:HD1	8:B:139:VAL:O	1.88	0.56
2:C:107:TYR:CG	2:C:218:GLN:CB	2.89	0.56
1:a:143:GLY:O	1:a:147:TRP:HA	2.04	0.56
1:a:531:GLN:HE21	1:a:533:LYS:HE2	1.70	0.56
5:g:9:ILE:CD1	5:g:9:ILE:H	2.18	0.56
1:a:443:ILE:O	5:g:27:GLY:C	2.49	0.56
1:a:818:ARG:HG3	1:a:818:ARG:HH11	1.71	0.56
1:A:595:ALA:HB3	1:A:601:LYS:HG2	1.88	0.56
11:A:907:BCL:CMB	11:A:907:BCL:CBB	2.83	0.56
1:A:147:TRP:CD1	1:A:147:TRP:C	2.83	0.56
5:G:9:ILE:HD12	5:G:9:ILE:H	1.70	0.56
16:a:929:UNL:C9	16:a:929:UNL:C13	2.83	0.56
4:f:30:HIS:C	4:f:30:HIS:CD2	2.84	0.56
8:B:93:CYS:SG	8:B:99:ALA:HB3	2.46	0.55
1:A:88:ILE:CG2	1:A:109:PHE:HZ	2.18	0.55
12:A:910:CLA:CED	1:a:760:PHE:CZ	2.69	0.55
1:a:640:LEU:H	1:a:865:ARG:CG	2.10	0.55
8:B:121:ARG:HD2	8:B:121:ARG:O	2.05	0.55
1:a:672:ILE:HG12	1:a:709:ILE:HG13	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:149:LEU:H	1:A:150:PRO:HD2	1.64	0.55
17:A:932:85N:C8	17:A:932:85N:C4	2.85	0.55
16:C:302:UNL:C19	16:C:302:UNL:C14	2.84	0.55
1:a:494:ARG:NH1	1:a:590:ASN:OD1	2.39	0.55
1:A:185:TRP:HB2	1:A:188:LEU:HD22	1.89	0.55
1:A:441:PHE:CD2	6:H:3:UNK:CB	2.90	0.55
17:A:932:85N:C18	17:A:932:85N:C21	2.85	0.55
1:A:309:THR:HG23	11:A:903:BCL:HMC1	1.88	0.55
1:A:450:ARG:HH21	1:A:518:THR:HG22	1.72	0.55
1:a:441:PHE:CE2	6:h:3:UNK:CB	2.89	0.55
1:A:826:GLU:OE1	17:A:932:85N:C21	2.53	0.55
2:C:59:GLN:H	2:C:59:GLN:NE2	2.05	0.55
8:B:90:THR:CG2	8:B:115:TYR:HD2	2.14	0.55
9:D:25:GLN:HE21	9:D:25:GLN:N	2.03	0.55
11:A:906:BCL:CMB	11:A:906:BCL:CBB	2.85	0.55
16:a:931:UNL:C	16:a:931:UNL:C5	2.85	0.55
8:B:76:TYR:CE1	8:B:141:PHE:HD1	2.24	0.55
8:B:96:LYS:NZ	8:B:96:LYS:HB3	2.18	0.55
15:A:915:85I:C4	15:A:915:85I:C21	2.85	0.55
1:a:559:ILE:O	1:a:563:GLN:HG3	2.07	0.55
1:a:735:TRP:O	1:a:758:GLY:HA2	2.06	0.55
1:A:89:GLY:O	1:A:95:LYS:HE2	2.07	0.55
1:A:156:LYS:HZ2	1:A:160:GLN:HB3	1.71	0.55
1:A:636:LEU:HD21	15:A:915:85I:O7	2.07	0.55
1:A:14:TRP:CD1	1:A:14:TRP:C	2.85	0.54
1:A:847:THR:O	1:A:851:VAL:HG13	2.06	0.54
2:C:37:MET:HE1	2:C:80:GLN:HB3	1.89	0.54
8:B:148:ARG:NH2	9:D:18:TRP:HZ2	2.05	0.54
1:a:433:THR:HG21	1:a:739:MET:HG2	1.89	0.54
4:f:25:ILE:HG22	4:f:25:ILE:O	2.07	0.54
8:B:108:VAL:HG21	8:B:112:GLY:O	2.06	0.54
1:A:755:HIS:HD2	1:A:757:GLY:H	1.55	0.54
17:G:101:85N:C22	17:G:101:85N:C24	2.85	0.54
1:a:147:TRP:CD1	1:a:147:TRP:C	2.85	0.54
8:B:141:PHE:CD1	8:B:141:PHE:C	2.86	0.54
1:A:826:GLU:OE1	17:A:932:85N:N1	2.39	0.54
5:G:30:GLY:HA3	17:G:101:85N:O5	2.07	0.54
1:a:85:LEU:N	1:a:85:LEU:HD23	2.22	0.54
1:a:409:LYS:O	1:a:413:THR:HG23	2.07	0.54
8:B:129:PHE:CD1	8:B:139:VAL:O	2.61	0.54
1:A:501:ARG:HB3	1:A:517:PHE:HB3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:639:ASN:ND2	1:A:643:GLN:HE21	2.04	0.54
16:A:918:UNL:C8	16:A:918:UNL:C12	2.86	0.54
1:A:158:LEU:C	1:A:158:LEU:HD13	2.33	0.54
1:A:814:LEU:HD13	3:e:34:ALA:HA	1.89	0.54
2:C:182:SER:H	2:C:185:GLN:HE21	1.56	0.54
1:A:519:THR:H	1:A:538:GLN:HE21	1.55	0.54
1:a:382:HIS:CE1	1:a:386:ILE:HD13	2.43	0.54
8:B:146:VAL:CG2	9:D:22:TRP:HZ2	2.19	0.54
12:A:911:CLA:HAA1	12:A:911:CLA:HBD	1.90	0.54
1:a:151:TYR:N	1:a:151:TYR:CD1	2.72	0.54
17:a:902:85N:C27	17:a:902:85N:C16	2.86	0.54
16:A:919:UNL:C10	16:A:919:UNL:C6	2.85	0.53
1:a:48:ALA:HB2	7:c:20:GLY:CA	2.38	0.53
2:C:116:GLU:HG2	2:C:188:TYR:CE2	2.43	0.53
12:A:910:CLA:C1C	1:a:722:LYS:HD3	2.38	0.53
1:A:720:SER:O	1:A:724:LEU:HD22	2.09	0.53
9:D:25:GLN:HB3	9:D:38:PHE:CE2	2.44	0.53
1:a:641:ARG:HG3	1:a:865:ARG:HH11	1.67	0.53
1:a:676:ASN:HA	1:a:709:ILE:CD1	2.38	0.53
1:A:13:ARG:HG3	1:A:13:ARG:O	2.09	0.53
11:a:905:BCL:HMB3	11:a:905:BCL:HBB2	1.90	0.53
7:c:98:GLY:HA2	7:c:107:ASN:CG	2.34	0.53
1:A:94:SER:CB	1:A:98:PHE:N	2.72	0.53
1:a:849:THR:O	1:a:853:VAL:HG23	2.08	0.53
4:F:33:SER:HB2	15:a:920:85I:O3	2.09	0.53
1:a:832:SER:HA	15:a:920:85I:O2	2.09	0.53
8:B:76:TYR:CE1	8:B:141:PHE:CB	2.92	0.53
8:B:101:LEU:O	8:B:115:TYR:CG	2.61	0.53
11:a:908:BCL:H191	3:e:5:LEU:HD21	1.91	0.53
1:a:526:LYS:NZ	1:a:626:ASN:HD21	2.07	0.53
1:A:148:LEU:HD23	1:A:148:LEU:N	2.24	0.52
1:A:287:ARG:HG3	1:A:287:ARG:HH11	1.73	0.52
1:A:612:ARG:HB3	1:A:613:PRO:HD3	1.91	0.52
11:A:908:BCL:HHC	11:A:908:BCL:OBB	2.10	0.52
3:e:21:ILE:C	3:e:23:LYS:H	2.16	0.52
5:G:14:TRP:HA	5:G:14:TRP:CE3	2.43	0.52
4:f:26:VAL:HG12	4:f:26:VAL:O	2.08	0.52
7:c:114:GLN:HG3	7:c:157:GLU:HG3	1.91	0.52
5:g:9:ILE:CD1	5:g:9:ILE:N	2.72	0.52
8:B:101:LEU:HD22	8:B:102:PRO:HD3	1.91	0.52
8:B:103:ARG:HH21	8:B:116:TRP:CD1	2.26	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:33:MET:HB3	11:A:902:BCL:H92	1.92	0.52
1:A:151:TYR:N	1:A:151:TYR:CD1	2.74	0.52
1:A:287:ARG:HH11	1:A:287:ARG:CG	2.23	0.52
7:c:100:ASN:C	7:c:100:ASN:HD22	2.16	0.52
5:g:16:TRP:C	5:g:18:GLY:H	2.17	0.52
8:B:101:LEU:HB3	8:B:102:PRO:CD	2.39	0.52
1:A:148:LEU:CD2	1:A:148:LEU:N	2.73	0.52
1:A:612:ARG:HB3	1:A:613:PRO:CD	2.39	0.52
1:a:609:ASP:HA	1:a:612:ARG:NH1	2.24	0.52
7:c:98:GLY:CA	7:c:107:ASN:CB	2.81	0.52
8:B:84:ILE:O	8:B:111:GLY:O	2.26	0.52
1:A:269:MET:HB2	11:A:906:BCL:HED2	1.90	0.52
1:A:688:ARG:CG	1:A:688:ARG:HH11	2.21	0.52
10:a:903:2GO:H21	10:a:903:2GO:H25	1.91	0.52
2:C:59:GLN:HB2	2:C:61:THR:HG22	1.90	0.52
1:a:85:LEU:CD2	1:a:85:LEU:N	2.73	0.52
1:a:149:LEU:N	1:a:150:PRO:HD2	2.21	0.52
1:a:155:LEU:CD2	1:a:155:LEU:N	2.72	0.52
9:D:22:TRP:HA	9:D:22:TRP:CE3	2.45	0.52
1:a:293:ASN:HA	1:a:395:SER:HB2	1.91	0.52
1:A:171:TYR:CD1	1:A:171:TYR:C	2.86	0.52
5:G:40:MET:HE3	17:G:101:85N:C22	2.24	0.51
7:c:49:ARG:HD3	7:c:70:GLU:OE2	2.10	0.51
9:D:20:ARG:HG2	9:D:20:ARG:HH11	1.75	0.51
2:C:167:ILE:HB	1:a:345:LYS:HE3	1.92	0.51
1:A:25:GLU:CD	1:A:25:GLU:H	2.19	0.51
1:A:640:LEU:HB2	1:A:865:ARG:HA	1.91	0.51
1:a:687:TRP:O	1:a:688:ARG:HB2	2.10	0.51
1:a:729:TRP:HB2	1:a:736:ILE:HD11	1.92	0.51
1:A:151:TYR:N	1:A:151:TYR:HD1	2.06	0.51
1:A:639:ASN:ND2	1:A:643:GLN:HB2	2.11	0.51
12:A:933:CLA:HAB	6:h:3:UNK:CB	2.41	0.51
2:C:136:ASN:HD22	1:a:743:GLY:H	1.59	0.51
1:A:89:GLY:C	1:A:95:LYS:HE2	2.36	0.51
1:A:612:ARG:HH11	1:A:612:ARG:CG	2.24	0.51
1:A:624:GLU:OE2	1:A:628:ARG:NH1	2.38	0.51
1:A:742:ARG:HG3	1:A:761:LEU:CD2	2.40	0.51
1:A:440:ASN:O	6:H:5:UNK:CB	2.58	0.51
1:A:483:ASN:HB3	1:A:484:PRO:CD	2.33	0.51
1:A:639:ASN:HB3	1:A:641:ARG:H	1.74	0.51
15:A:916:85I:C11	15:A:917:85I:C14	2.88	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:676:ASN:HA	1:a:709:ILE:HD13	1.93	0.51
7:c:63:PRO:C	7:c:65:ASP:H	2.18	0.51
8:B:85:GLY:HA3	8:B:113:GLU:O	2.11	0.51
1:A:440:ASN:ND2	6:H:5:UNK:CB	2.74	0.51
2:C:87:VAL:HG21	2:C:179:ASN:O	2.11	0.51
1:a:93:THR:HB	1:a:98:PHE:N	2.26	0.51
3:e:23:LYS:O	3:e:23:LYS:HG2	2.10	0.50
1:a:141:THR:OG1	1:a:144:GLU:HG3	2.10	0.50
8:B:89:CYS:C	8:B:91:ASP:N	2.64	0.50
1:A:693:ASP:OD1	1:A:693:ASP:N	2.44	0.50
7:c:48:LEU:HD22	7:c:48:LEU:H	1.76	0.50
8:B:148:ARG:HH21	9:D:18:TRP:HZ2	1.60	0.50
1:A:244:PHE:CD1	1:A:244:PHE:O	2.63	0.50
12:A:910:CLA:NC	1:a:722:LYS:HD3	2.27	0.50
8:B:103:ARG:NH2	8:B:116:TRP:CD1	2.80	0.50
16:C:302:UNL:C14	16:C:302:UNL:C18	2.85	0.50
1:a:57:TYR:O	1:a:61:THR:CG2	2.59	0.50
1:a:150:PRO:HA	1:a:156:LYS:CE	2.33	0.50
12:a:901:CLA:H191	4:f:21:THR:HG22	1.93	0.50
1:A:179:SER:O	1:A:183:THR:HG22	2.12	0.50
1:A:221:PRO:CB	1:A:222:PRO:HD2	2.42	0.50
8:B:130:VAL:O	8:B:130:VAL:HG13	2.11	0.50
15:A:917:85I:C25	4:f:26:VAL:HG22	2.42	0.49
1:a:38:LEU:HD23	12:a:913:CLA:HBC1	1.93	0.49
1:a:94:SER:O	1:a:96:LEU:N	2.40	0.49
1:A:381:LEU:HD21	11:A:903:BCL:HAA2	1.94	0.49
1:A:226:GLN:O	1:A:226:GLN:HG2	2.12	0.49
7:c:41:SER:HB2	7:c:148:TYR:OH	2.12	0.49
7:c:142:THR:H	7:c:145:GLN:HE21	1.60	0.49
1:A:441:PHE:HE2	6:H:3:UNK:CB	2.26	0.49
1:a:833:ASN:C	1:a:833:ASN:HD22	2.19	0.49
12:A:931:CLA:H142	12:A:931:CLA:H12	1.93	0.49
5:g:29:PHE:CD1	5:g:29:PHE:C	2.90	0.49
13:A:913:LYC:H10	13:A:913:LYC:H81	1.54	0.49
1:a:152:VAL:HB	1:a:155:LEU:HD11	1.94	0.49
1:a:592:ILE:HD11	1:a:605:GLN:HA	1.95	0.49
8:B:76:TYR:HE1	8:B:141:PHE:CB	2.25	0.49
1:a:94:SER:C	1:a:96:LEU:N	2.71	0.49
9:D:25:GLN:NE2	9:D:25:GLN:HA	2.28	0.49
1:A:15:TYR:CD1	1:A:15:TYR:N	2.80	0.49
1:A:56:GLY:H	1:A:59:ASN:ND2	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:156:LYS:NZ	1:A:160:GLN:OE1	2.44	0.49
1:A:605:GLN:O	1:A:605:GLN:HG3	2.13	0.49
1:a:158:LEU:C	1:a:158:LEU:CD1	2.85	0.49
11:a:911:BCL:H3A	11:a:911:BCL:H12	1.94	0.49
1:A:597:THR:O	1:A:600:ALA:N	2.46	0.48
1:a:592:ILE:HG13	1:a:604:ALA:HB1	1.95	0.48
1:A:148:LEU:HG	1:A:148:LEU:O	2.12	0.48
1:A:706:GLY:O	1:a:800:SER:HB2	2.14	0.48
1:a:109:PHE:CD1	16:a:926:UNL:C7	2.94	0.48
8:B:129:PHE:CD1	8:B:139:VAL:HG22	2.47	0.48
1:A:81:GLN:HG3	1:A:89:GLY:HA2	1.93	0.48
3:E:32:ILE:CD1	1:a:818:ARG:HD3	2.44	0.48
1:a:25:GLU:CD	1:a:25:GLU:H	2.22	0.48
3:e:21:ILE:C	3:e:23:LYS:N	2.70	0.48
8:B:125:CYS:SG	8:B:127:LEU:HB2	2.53	0.48
9:D:25:GLN:NE2	9:D:25:GLN:CA	2.77	0.48
16:A:927:UNL:C9	16:A:927:UNL:C5	2.85	0.48
2:C:178:TYR:CD1	2:C:178:TYR:C	2.91	0.48
1:a:450:ARG:NH2	1:a:504:ASN:OD1	2.47	0.48
8:B:140:VAL:O	8:B:147:SER:O	2.31	0.48
1:A:74:PRO:HB3	1:A:338:MET:HE3	1.96	0.48
2:C:128:CYS:HG	1:a:764:TRP:HH2	1.61	0.48
8:B:139:VAL:HG22	8:B:139:VAL:O	2.12	0.48
1:A:324:LEU:O	1:A:327:ARG:HG2	2.13	0.48
2:C:217:ARG:HA	2:C:217:ARG:NE	2.29	0.48
1:a:42:ILE:HG13	12:a:913:CLA:HMD3	1.95	0.48
1:a:98:PHE:CD1	1:a:98:PHE:C	2.92	0.48
1:A:94:SER:CB	1:A:98:PHE:H	2.27	0.48
1:a:152:VAL:HG11	1:a:155:LEU:HD11	1.96	0.48
1:a:152:VAL:CB	1:a:155:LEU:HD21	2.21	0.48
1:a:440:ASN:CB	1:a:514:THR:HG21	2.42	0.48
1:a:440:ASN:HB2	1:a:514:THR:CG2	2.40	0.48
1:A:635:VAL:O	3:E:3:ALA:HB2	2.13	0.48
2:C:30:THR:HB	2:C:32:TYR:H	1.79	0.48
1:a:156:LYS:HA	1:a:156:LYS:HD3	1.46	0.48
8:B:113:GLU:CD	8:B:113:GLU:N	2.72	0.48
1:A:253:LEU:HD23	1:A:255:GLN:HE22	1.79	0.47
1:A:255:GLN:HE21	1:A:255:GLN:HB2	1.32	0.47
11:a:909:BCL:HAA1	11:a:909:BCL:HBD	1.95	0.47
1:A:729:TRP:CB	1:A:736:ILE:HD11	2.44	0.47
4:f:27:TYR:O	4:f:27:TYR:CG	2.68	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:B:97:VAL:O	8:B:121:ARG:HD3	2.13	0.47
1:A:66:LEU:CD1	12:A:911:CLA:HED2	2.40	0.47
11:a:911:BCL:O1A	12:a:913:CLA:HMD1	2.14	0.47
1:a:85:LEU:H	1:a:85:LEU:HD23	1.79	0.47
8:B:76:TYR:HE1	8:B:141:PHE:HB2	1.77	0.47
9:D:56:TYR:CZ	9:D:60:LEU:HD11	2.49	0.47
1:A:454:MET:HE1	1:A:523:ILE:HB	1.96	0.47
1:A:655:PHE:C	1:A:655:PHE:CD2	2.93	0.47
1:a:304:PHE:HA	11:a:904:BCL:HBB3	1.97	0.47
11:a:905:BCL:H12	16:a:931:UNL:C1	2.45	0.47
5:g:16:TRP:C	5:g:18:GLY:N	2.70	0.47
1:A:221:PRO:CB	1:A:222:PRO:CD	2.90	0.47
1:A:300:THR:HA	1:A:303:VAL:HG23	1.97	0.47
1:A:799:GLY:HA3	1:a:704:THR:C	2.39	0.47
2:C:175:PRO:HD3	18:C:301:HEC:HBC2	1.96	0.47
1:a:35:ILE:HD11	13:c:201:LYC:H131	1.97	0.47
1:a:501:ARG:HD3	5:g:44:LEU:HD23	1.93	0.47
7:c:103:ILE:HD13	7:c:103:ILE:HA	1.55	0.47
8:B:123:ILE:HG22	8:B:123:ILE:O	2.14	0.47
1:A:612:ARG:NH1	1:A:612:ARG:HG3	2.30	0.47
1:A:644:HIS:HE1	1:A:646:ASP:OD1	1.98	0.47
4:f:5:VAL:O	4:f:5:VAL:HG12	2.15	0.47
1:A:88:ILE:HA	1:A:95:LYS:HZ2	1.71	0.47
1:a:543:THR:HB	1:a:545:PHE:CE2	2.50	0.47
1:A:85:LEU:HD13	1:A:85:LEU:HA	1.54	0.47
11:a:910:BCL:H43	11:a:910:BCL:H12	1.72	0.47
1:A:202:TYR:HE2	11:A:905:BCL:H192	1.80	0.46
1:A:473:ASP:HA	1:A:474:PRO:HD2	1.40	0.46
1:A:480:TRP:CE2	6:H:15:UNK:HA	2.51	0.46
1:A:815:MET:O	1:A:819:LEU:HB2	2.14	0.46
11:A:904:BCL:HMB1	11:A:904:BCL:CBB	2.43	0.46
1:a:818:ARG:HG3	1:a:818:ARG:NH1	2.27	0.46
17:a:902:85N:C3	15:a:920:85I:C33	2.93	0.46
1:A:612:ARG:CG	1:A:612:ARG:NH1	2.77	0.46
1:A:688:ARG:CG	1:A:688:ARG:NH1	2.72	0.46
16:A:918:UNL:C17	16:A:918:UNL:C6	2.94	0.46
7:c:144:GLN:HA	7:c:144:GLN:HE21	1.79	0.46
8:B:101:LEU:HD23	8:B:101:LEU:HA	1.62	0.46
1:A:405:ASP:OD1	3:E:33:ALA:O	2.33	0.46
1:A:595:ALA:CB	1:A:601:LYS:HG2	2.46	0.46
1:a:429:ILE:O	1:a:433:THR:HG22	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:639:ASN:HB2	1:a:643:GLN:H	1.79	0.46
1:A:96:LEU:HA	1:A:97:PRO:HD2	1.52	0.46
1:A:696:CYS:HB3	1:A:705:CYS:HA	1.98	0.46
1:a:477:GLY:HA2	5:g:41:LEU:HD11	1.98	0.46
7:c:144:GLN:HE21	7:c:147:ASN:HD22	1.62	0.46
13:c:201:LYC:H54	13:c:201:LYC:H521	1.64	0.46
1:A:264:ASN:HA	1:A:267:THR:HG23	1.98	0.46
16:A:923:UNL:C7	16:A:923:UNL:C11	2.94	0.46
2:C:94:GLY:HA2	2:C:99:VAL:HG13	1.97	0.46
1:a:503:LEU:HD13	1:a:517:PHE:CE1	2.50	0.46
1:a:550:ASN:HD21	1:a:552:LEU:HB2	1.80	0.46
1:a:640:LEU:HB2	1:a:865:ARG:CB	2.46	0.46
1:A:12:LYS:HE2	1:A:12:LYS:HB3	1.69	0.46
1:A:220:LYS:HD2	1:A:263:ILE:HD13	1.97	0.46
5:G:34:PRO:HB2	5:G:44:LEU:CD2	2.41	0.46
4:F:34:ARG:NE	4:F:34:ARG:CA	2.71	0.46
1:a:147:TRP:CD1	1:a:147:TRP:O	2.69	0.46
11:a:907:BCL:H172	11:a:907:BCL:H13	1.73	0.46
5:g:9:ILE:N	5:g:9:ILE:HD12	2.29	0.46
8:B:90:THR:HG22	8:B:100:ILE:HG21	1.98	0.46
1:A:760:PHE:CD2	12:A:931:CLA:HED3	2.51	0.46
3:e:22:ILE:HG21	3:e:22:ILE:HD13	1.61	0.46
4:f:19:VAL:O	4:f:19:VAL:HG12	2.16	0.46
8:B:142:THR:HG21	8:B:146:VAL:HG22	1.98	0.46
9:D:28:LEU:N	9:D:28:LEU:HD23	2.31	0.46
1:A:773:ASP:O	1:A:777:THR:HG23	2.15	0.46
8:B:104:ASP:CG	8:B:113:GLU:HB3	2.40	0.46
1:A:90:GLU:HB2	1:A:100:GLY:O	2.16	0.45
2:C:41:ASN:ND2	2:C:85:GLN:HG3	2.31	0.45
1:a:639:ASN:ND2	1:a:643:GLN:HE21	2.14	0.45
1:a:847:THR:O	1:a:851:VAL:HG13	2.15	0.45
1:A:55:ASP:HA	1:A:59:ASN:HD21	1.80	0.45
1:A:406:LEU:O	1:A:410:ILE:HG13	2.15	0.45
5:G:10:SER:OG	17:a:902:85N:C18	2.65	0.45
1:a:90:GLU:HB2	1:a:94:SER:HB2	1.97	0.45
1:A:14:TRP:CD1	1:A:14:TRP:O	2.69	0.45
1:A:796:LYS:HE2	1:a:838:LYS:HE2	1.99	0.45
2:C:114:TYR:HB2	2:C:210:VAL:HG21	1.98	0.45
1:A:722:LYS:HE2	12:A:931:CLA:NB	2.31	0.45
1:a:150:PRO:O	1:a:156:LYS:CE	2.65	0.45
1:a:519:THR:H	1:a:538:GLN:HE21	1.65	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:832:SER:HA	15:a:920:85I:C4	2.46	0.45
1:a:15:TYR:O	1:a:15:TYR:CD2	2.69	0.45
1:A:688:ARG:HH11	1:A:688:ARG:HG2	1.82	0.45
1:A:742:ARG:HG3	1:A:761:LEU:HD21	1.98	0.45
1:a:189:ARG:CG	1:a:194:ASP:HB3	2.46	0.45
5:g:29:PHE:CD1	5:g:29:PHE:O	2.69	0.45
8:B:113:GLU:CD	8:B:113:GLU:H	2.25	0.45
1:A:98:PHE:CG	1:A:98:PHE:O	2.70	0.45
1:A:475:THR:HA	5:G:39:LYS:HG2	1.98	0.45
13:A:913:LYC:H20	13:A:913:LYC:H181	1.57	0.45
12:a:912:CLA:H92	12:a:912:CLA:H52	1.98	0.45
12:a:915:CLA:C6	7:c:17:MET:HG2	2.47	0.45
7:c:134:MET:HB2	18:c:202:HEC:C4D	2.47	0.45
8:B:78:ILE:HD13	20:B:201:SF4:S1	2.56	0.45
8:B:129:PHE:CA	8:B:139:VAL:HG21	2.42	0.45
1:A:171:TYR:CD1	1:A:171:TYR:O	2.70	0.45
1:A:819:LEU:HA	1:A:819:LEU:HD12	1.69	0.45
1:A:833:ASN:C	1:A:833:ASN:ND2	2.70	0.45
1:a:189:ARG:HG2	1:a:194:ASP:HB3	1.98	0.45
11:a:908:BCL:H171	3:e:1:MET:HE2	1.99	0.45
5:g:17:PHE:O	5:g:17:PHE:CG	2.69	0.45
1:A:94:SER:C	1:A:96:LEU:H	2.26	0.45
1:A:504:ASN:OD1	1:A:518:THR:HG22	2.17	0.45
1:a:602:GLN:HE21	1:a:602:GLN:N	2.15	0.45
1:a:822:LYS:H	1:a:822:LYS:HG2	1.33	0.45
7:c:18:ALA:HB2	13:c:201:LYC:C62	2.30	0.45
5:g:17:PHE:O	5:g:17:PHE:CD2	2.70	0.45
1:A:109:PHE:CE1	16:A:922:UNL:C16	2.97	0.44
1:A:610:LYS:HB3	1:A:610:LYS:HE3	1.44	0.44
1:a:152:VAL:CB	1:a:155:LEU:HD11	2.46	0.44
1:a:818:ARG:HA	1:a:818:ARG:HD2	1.63	0.44
2:C:145:ASP:HA	2:C:146:PRO:HD3	1.78	0.44
1:a:201:ILE:HG13	1:a:281:GLY:HA3	1.98	0.44
1:A:396:LYS:HE3	1:A:400:TRP:CZ2	2.53	0.44
1:A:729:TRP:HB3	1:A:736:ILE:CD1	2.46	0.44
11:A:909:BCL:H162	11:A:909:BCL:H141	1.62	0.44
5:G:34:PRO:HB2	5:G:44:LEU:HD13	1.99	0.44
1:a:38:LEU:HD23	12:a:913:CLA:CBC	2.47	0.44
11:a:911:BCL:CBB	11:a:911:BCL:HMB1	2.47	0.44
7:c:63:PRO:C	7:c:65:ASP:N	2.74	0.44
1:A:98:PHE:O	1:A:98:PHE:CD1	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:220:LYS:HD2	1:A:263:ILE:CD1	2.47	0.44
1:A:644:HIS:CE1	1:A:646:ASP:OD1	2.70	0.44
1:A:822:LYS:HB3	1:A:822:LYS:HE2	1.62	0.44
1:a:628:ARG:HH11	1:a:628:ARG:HB2	1.83	0.44
12:a:915:CLA:C5	7:c:17:MET:HG2	2.48	0.44
8:B:90:THR:HG22	8:B:115:TYR:HD2	1.79	0.44
1:A:85:LEU:HA	1:A:86:PRO:HD3	1.75	0.44
12:A:933:CLA:ND	2:C:18:GLY:HA3	2.33	0.44
11:a:907:BCL:HBB2	11:a:907:BCL:HMB3	1.99	0.44
8:B:121:ARG:HE	8:B:121:ARG:HB3	1.57	0.44
1:A:643:GLN:HB2	1:A:643:GLN:HE21	1.55	0.44
1:A:833:ASN:ND2	1:A:836:THR:CG2	2.81	0.44
1:a:700:VAL:HG11	8:B:84:ILE:HB	1.99	0.44
1:A:28:PHE:CZ	11:A:905:BCL:HED2	2.49	0.44
1:A:88:ILE:HG21	1:A:109:PHE:CZ	2.53	0.44
1:A:494:ARG:NH1	1:A:590:ASN:OD1	2.51	0.44
11:a:908:BCL:H41	11:a:908:BCL:H62	1.29	0.44
11:a:909:BCL:HBB3	11:a:909:BCL:CMB	2.43	0.44
8:B:134:CYS:HB2	20:B:201:SF4:S2	2.58	0.44
1:A:607:GLU:O	1:A:607:GLU:HG2	2.17	0.44
1:a:609:ASP:HA	1:a:612:ARG:HH12	1.81	0.44
12:a:912:CLA:H162	12:a:912:CLA:H202	1.67	0.44
12:a:914:CLA:HAA1	12:a:914:CLA:HBD	2.00	0.44
8:B:133:THR:O	8:B:133:THR:OG1	2.24	0.44
2:C:138:PRO:HB3	1:a:862:PHE:HB3	2.00	0.43
4:F:22:LEU:HD13	12:a:912:CLA:H172	2.00	0.43
11:a:908:BCL:H71	16:a:930:UNL:C21	2.48	0.43
7:c:82:GLN:O	7:c:82:GLN:HG3	2.17	0.43
7:c:98:GLY:CA	7:c:107:ASN:CA	2.62	0.43
8:B:109:LEU:HB3	8:B:110:ASP:H	1.64	0.43
1:A:57:TYR:O	1:A:61:THR:CG2	2.64	0.43
11:A:905:BCL:HBB2	11:A:905:BCL:CMB	2.47	0.43
1:a:155:LEU:HD23	1:a:155:LEU:C	2.43	0.43
1:a:475:THR:HG22	5:g:39:LYS:HD3	2.01	0.43
8:B:140:VAL:HG13	8:B:146:VAL:HG11	1.84	0.43
1:A:266:GLU:HB2	11:A:906:BCL:C1D	2.49	0.43
3:E:32:ILE:HG22	1:a:814:LEU:HD12	2.00	0.43
1:a:640:LEU:HB2	1:a:865:ARG:CG	2.48	0.43
1:a:761:LEU:HD23	1:a:761:LEU:HA	1.85	0.43
1:A:367:LEU:HD13	1:A:662:TRP:HZ3	1.82	0.43
11:A:908:BCL:HHD	11:A:908:BCL:HAC1	1.68	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:95:SER:O	2:C:99:VAL:HG22	2.18	0.43
3:E:32:ILE:CG2	1:a:817:LYS:HE3	2.48	0.43
1:a:409:LYS:O	1:a:413:THR:CG2	2.67	0.43
8:B:122:CYS:C	8:B:124:SER:H	2.26	0.43
1:A:87:LEU:O	1:A:95:LYS:HG3	2.19	0.43
1:A:239:LEU:HD21	1:A:248:TRP:CE2	2.53	0.43
1:A:787:TRP:CG	10:A:901:2GO:H27	2.53	0.43
1:a:822:LYS:HE3	1:a:822:LYS:HB3	1.87	0.43
1:a:152:VAL:N	1:a:153:PRO:HD3	2.34	0.43
18:C:301:HEC:CMB	18:C:301:HEC:HBB3	2.48	0.43
1:a:244:PHE:CD1	1:a:244:PHE:C	2.90	0.43
1:a:475:THR:HA	5:g:39:LYS:CD	2.48	0.43
1:a:700:VAL:CG1	8:B:111:GLY:C	2.92	0.43
1:a:833:ASN:ND2	1:a:836:THR:HG23	2.33	0.43
8:B:144:GLY:HA2	9:D:41:TYR:OH	2.19	0.43
1:A:59:ASN:HD22	1:A:60:LEU:N	2.16	0.43
2:C:153:SER:HB2	18:c:202:HEC:O2D	2.18	0.43
1:a:93:THR:HB	1:a:98:PHE:H	1.83	0.43
1:a:138:GLY:O	1:a:166:PRO:HD3	2.18	0.43
1:A:808:GLN:HG3	1:a:415:MET:HE1	2.00	0.43
1:a:48:ALA:HB2	7:c:20:GLY:HA3	2.00	0.43
1:a:143:GLY:HA3	1:a:159:CYS:SG	2.59	0.43
1:a:150:PRO:HB2	1:a:151:TYR:CE1	2.53	0.43
11:a:907:BCL:H141	11:a:907:BCL:H161	1.50	0.43
1:A:202:TYR:CE2	11:A:905:BCL:H192	2.54	0.43
1:A:494:ARG:CD	1:A:586:VAL:HG13	2.48	0.43
1:A:797:ASP:HA	1:a:705:CYS:O	2.19	0.43
5:g:9:ILE:H	5:g:9:ILE:HD13	1.84	0.43
8:B:110:ASP:C	8:B:112:GLY:H	2.26	0.43
8:B:119:GLN:C	8:B:121:ARG:H	2.27	0.43
1:A:290:ARG:H	16:A:920:UNL:C21	2.32	0.42
11:A:903:BCL:HAC1	11:A:903:BCL:HHD	1.78	0.42
11:a:910:BCL:HHD	11:a:910:BCL:HAC1	1.81	0.42
8:B:108:VAL:HG12	8:B:110:ASP:OD1	2.19	0.42
1:a:435:ALA:HB2	1:a:541:SER:HB2	2.01	0.42
11:a:905:BCL:CBB	11:a:905:BCL:CMB	2.93	0.42
1:A:78:GLU:HG3	2:C:62:PRO:HB2	2.02	0.42
1:A:159:CYS:SG	1:A:159:CYS:O	2.77	0.42
1:a:48:ALA:HB2	7:c:20:GLY:HA2	2.01	0.42
1:a:265:GLY:O	1:a:268:THR:HG23	2.19	0.42
1:a:718:LEU:H	1:a:718:LEU:HG	1.79	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:847:THR:HB	11:a:910:BCL:H91	2.01	0.42
12:a:901:CLA:C19	4:f:21:THR:HG22	2.49	0.42
1:A:124:TRP:NE1	16:A:924:UNL:C10	2.83	0.42
2:C:139:ARG:HA	2:C:139:ARG:HD2	1.84	0.42
8:B:129:PHE:CA	8:B:139:VAL:CG2	2.96	0.42
9:D:23:LYS:HA	9:D:26:ILE:HD12	2.02	0.42
1:A:390:TYR:CZ	1:A:402:GLN:HG2	2.54	0.42
10:A:901:2GO:H52	10:A:901:2GO:H47	1.74	0.42
12:A:931:CLA:H62	12:A:931:CLA:H41	1.82	0.42
2:C:128:CYS:CB	18:C:301:HEC:CAC	2.94	0.42
1:a:477:GLY:C	5:g:41:LEU:HD12	2.44	0.42
3:e:22:ILE:O	3:e:22:ILE:CG2	2.67	0.42
1:A:292:ILE:HD12	1:A:292:ILE:H	1.84	0.42
1:A:352:ARG:HA	1:A:352:ARG:HD3	1.88	0.42
13:A:913:LYC:H131	13:A:913:LYC:H15	1.60	0.42
1:a:742:ARG:HB2	1:a:745:GLU:HG3	2.01	0.42
7:c:71:ILE:HG23	7:c:71:ILE:HD12	1.72	0.42
1:A:88:ILE:HG21	1:A:109:PHE:HZ	1.85	0.42
1:A:137:ARG:HH21	1:A:137:ARG:HD2	1.72	0.42
1:A:469:LYS:HE2	1:A:477:GLY:C	2.45	0.42
1:a:96:LEU:HB2	1:a:99:PHE:HB2	2.00	0.42
7:c:48:LEU:HD22	7:c:48:LEU:N	2.33	0.42
8:B:116:TRP:CD1	8:B:116:TRP:H	2.37	0.42
1:A:146:PHE:O	1:A:148:LEU:HD22	2.19	0.42
1:A:595:ALA:O	1:A:596:GLN:HB2	2.20	0.42
12:A:910:CLA:HBA2	1:a:760:PHE:CZ	2.54	0.42
12:A:910:CLA:H41	12:A:910:CLA:H62	1.47	0.42
5:G:11:LYS:HA	5:G:11:LYS:HD2	1.63	0.42
1:a:149:LEU:H	1:a:150:PRO:HD2	1.80	0.42
1:a:475:THR:CA	5:g:39:LYS:HG2	2.33	0.42
9:D:20:ARG:HG2	9:D:20:ARG:NH1	2.35	0.42
1:A:573:LYS:HE3	1:A:573:LYS:HB2	1.42	0.42
12:A:931:CLA:H52	1:a:781:LEU:HD23	2.02	0.42
2:C:141:THR:O	2:C:141:THR:CG2	2.66	0.42
4:F:25:ILE:HD13	15:a:919:85I:C29	2.50	0.42
1:a:150:PRO:HB2	1:a:151:TYR:CD1	2.55	0.42
1:a:617:LYS:HZ3	1:a:617:LYS:HG2	1.60	0.42
1:A:221:PRO:HA	1:A:222:PRO:HD3	1.81	0.41
1:A:608:LEU:HD11	1:A:612:ARG:HH21	1.83	0.41
2:C:85:GLN:H	2:C:85:GLN:HG2	1.51	0.41
2:C:99:VAL:HG11	2:C:158:TYR:CZ	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:32:MET:HB2	11:a:907:BCL:HED1	2.02	0.41
1:a:475:THR:HA	5:g:39:LYS:HD3	2.01	0.41
11:a:904:BCL:HBC3	11:a:911:BCL:H91	2.02	0.41
11:a:908:BCL:H161	11:a:908:BCL:H141	1.49	0.41
11:a:908:BCL:O1D	11:a:908:BCL:H12	2.20	0.41
1:A:266:GLU:HG3	11:A:906:BCL:HED3	2.02	0.41
11:A:908:BCL:H41	11:A:908:BCL:H61	1.73	0.41
11:A:909:BCL:C2B	11:A:909:BCL:H52	2.51	0.41
2:C:71:ARG:HB2	2:C:75:THR:CG2	2.48	0.41
4:F:34:ARG:HB3	4:F:35:GLY:H	1.52	0.41
1:a:85:LEU:H	1:a:85:LEU:HD22	1.85	0.41
1:a:147:TRP:NE1	1:a:148:LEU:HD22	2.34	0.41
8:B:140:VAL:CG1	8:B:146:VAL:HG12	2.33	0.41
10:A:901:2GO:H21	10:A:901:2GO:H25	2.03	0.41
11:A:902:BCL:H43	11:A:902:BCL:H12	1.89	0.41
2:C:174:MET:HB2	18:C:301:HEC:C4D	2.50	0.41
1:a:56:GLY:O	1:a:60:LEU:HB2	2.20	0.41
1:a:57:TYR:O	1:a:61:THR:HG23	2.20	0.41
1:a:492:LYS:H	1:a:492:LYS:HG2	1.53	0.41
1:a:741:ALA:O	1:a:757:GLY:O	2.39	0.41
1:A:91:PHE:HB3	1:A:95:LYS:CB	2.33	0.41
1:a:66:LEU:HD13	12:a:913:CLA:HED1	2.03	0.41
8:B:134:CYS:CB	20:B:201:SF4:S2	3.08	0.41
1:A:296:HIS:H	1:A:296:HIS:CD2	2.39	0.41
1:A:404:PRO:O	1:A:408:THR:HG22	2.20	0.41
2:C:128:CYS:CB	18:C:301:HEC:HAC	2.48	0.41
1:a:91:PHE:H	1:a:94:SER:CB	2.33	0.41
1:a:354:ILE:HD13	1:a:354:ILE:HA	1.89	0.41
1:a:487:THR:HG22	6:h:17:UNK:O	2.21	0.41
1:a:729:TRP:CB	1:a:736:ILE:HD11	2.51	0.41
8:B:121:ARG:O	8:B:121:ARG:CG	2.68	0.41
1:A:171:TYR:O	1:A:171:TYR:HD1	2.03	0.41
8:B:76:TYR:CD1	8:B:141:PHE:HB2	2.54	0.41
1:A:545:PHE:HB2	16:A:928:UNL:C17	2.51	0.41
1:A:640:LEU:HB3	1:A:865:ARG:HG3	2.02	0.41
11:A:907:BCL:HAA1	11:A:907:BCL:HBD	2.02	0.41
13:A:913:LYC:H59	13:A:913:LYC:H571	1.45	0.41
1:a:483:ASN:HB3	1:a:484:PRO:CD	2.51	0.41
1:a:92:SER:O	1:a:93:THR:C	2.63	0.41
1:a:159:CYS:SG	1:a:159:CYS:O	2.78	0.41
7:c:91:GLY:H	7:c:94:GLN:H	1.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:B:110:ASP:O	8:B:112:GLY:N	2.54	0.41
1:A:146:PHE:O	1:A:148:LEU:CD2	2.69	0.41
1:A:429:ILE:O	1:A:433:THR:CG2	2.65	0.41
1:A:453:GLN:NE2	1:A:533:LYS:HD3	2.36	0.41
1:A:477:GLY:H	5:G:41:LEU:CD1	2.20	0.41
1:A:610:LYS:O	1:A:610:LYS:CG	2.68	0.41
1:A:796:LYS:HG3	1:a:796:LYS:CG	2.50	0.41
11:A:902:BCL:HAA1	11:A:902:BCL:HBD	2.03	0.41
1:a:91:PHE:HB2	1:a:95:LYS:H	1.85	0.41
1:a:526:LYS:HZ3	1:a:626:ASN:HD21	1.68	0.41
1:a:774:ASN:HA	1:a:777:THR:HG23	2.03	0.41
7:c:160:ARG:HD3	7:c:160:ARG:HA	1.89	0.41
3:e:23:LYS:O	3:e:23:LYS:CG	2.69	0.41
8:B:119:GLN:C	8:B:121:ARG:N	2.79	0.41
1:a:504:ASN:OD1	1:a:518:THR:HG22	2.21	0.41
1:A:210:TRP:CH2	12:A:911:CLA:HBA1	2.55	0.40
13:A:913:LYC:H54	13:A:913:LYC:H521	1.82	0.40
1:a:846:TYR:CD1	11:a:910:BCL:H162	2.55	0.40
3:E:32:ILE:CG2	1:a:814:LEU:HD12	2.52	0.40
11:a:909:BCL:H192	11:a:909:BCL:H162	1.53	0.40
8:B:90:THR:HG21	8:B:115:TYR:HE2	1.56	0.40
8:B:122:CYS:C	8:B:124:SER:N	2.79	0.40
1:A:602:GLN:HE21	1:A:602:GLN:HB3	1.40	0.40
11:A:908:BCL:HBD	11:A:908:BCL:CBA	2.15	0.40
2:C:32:TYR:HA	2:C:33:PRO:HD3	1.86	0.40
2:C:200:GLN:HE21	2:C:200:GLN:HB2	1.39	0.40
1:a:82:ARG:O	1:a:82:ARG:HG2	2.12	0.40
1:a:639:ASN:HD22	1:a:643:GLN:HE21	1.69	0.40
1:a:767:THR:HA	1:a:770:ILE:HB	2.04	0.40
11:a:906:BCL:HAC1	11:a:906:BCL:HHD	1.78	0.40
1:A:18:LEU:O	12:A:912:CLA:HAA2	2.21	0.40
11:A:903:BCL:H2	16:A:927:UNL:C9	2.51	0.40
11:A:905:BCL:CMB	11:A:905:BCL:CBB	2.98	0.40
3:e:5:LEU:HD12	3:e:5:LEU:HA	1.84	0.40
1:A:742:ARG:HG3	1:A:761:LEU:HD22	2.04	0.40
1:A:796:LYS:HE3	1:a:834:LEU:HD22	2.03	0.40
2:C:37:MET:HE1	2:C:80:GLN:CB	2.50	0.40
1:a:650:ASN:HB2	1:a:735:TRP:CE3	2.57	0.40
11:a:908:BCL:H12	11:a:908:BCL:HBA1	1.85	0.40
16:a:922:UNL:C1	16:a:922:UNL:C18	3.00	0.40
5:g:21:LEU:HA	5:g:21:LEU:HD12	1.65	0.40

There are no symmetry-related clashes.

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	A	852/858 (99%)	792 (93%)	42 (5%)	18 (2%)	5	10
1	a	856/858 (100%)	798 (93%)	46 (5%)	12 (1%)	9	18
2	C	189/204 (93%)	174 (92%)	9 (5%)	6 (3%)	3	5
3	E	33/35 (94%)	31 (94%)	2 (6%)	0	100	100
3	e	33/35 (94%)	32 (97%)	0	1 (3%)	3	5
4	F	33/35 (94%)	31 (94%)	2 (6%)	0	100	100
4	f	33/35 (94%)	30 (91%)	2 (6%)	1 (3%)	3	5
5	G	36/38 (95%)	32 (89%)	3 (8%)	1 (3%)	4	6
5	g	36/38 (95%)	32 (89%)	4 (11%)	0	100	100
7	c	143/145 (99%)	127 (89%)	8 (6%)	8 (6%)	1	1
8	B	74/76 (97%)	43 (58%)	24 (32%)	7 (10%)	0	0
9	D	58/70 (83%)	58 (100%)	0	0	100	100
All	All	2376/2427 (98%)	2180 (92%)	142 (6%)	54 (2%)	7	9

All (54) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	86	PRO
1	A	97	PRO
1	A	147	TRP
1	A	170	TRP
1	A	346	LYS
2	C	48	THR
2	C	62	PRO
2	C	180	GLN
2	C	203	GLY

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Mol	Chain	Res	Type
1	a	83	VAL
1	a	759	VAL
7	c	99	GLY
7	c	102	ALA
7	c	132	LYS
8	B	102	PRO
8	B	105	VAL
1	A	87	LEU
1	A	136	ALA
1	a	137	ARG
1	a	155	LEU
1	a	346	LYS
7	c	17	MET
7	c	21	CYS
7	c	131	GLY
8	B	128	CYS
1	A	688	ARG
1	a	9	ASN
1	a	87	LEU
7	c	92	CYS
8	B	123	ILE
1	A	94	SER
1	A	155	LEU
1	A	244	PHE
1	A	476	ALA
1	A	542	TRP
5	G	9	ILE
1	a	147	TRP
4	f	34	ARG
8	B	88	PHE
1	A	13	ARG
1	A	96	LEU
1	A	757	GLY
2	C	59	GLN
2	C	217	ARG
7	c	64	LYS
8	B	143	GLU
1	A	149	LEU
1	A	696	CYS
1	a	529	TRP
8	B	135	PRO
1	a	540	GLY

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Mol	Chain	Res	Type
1	a	757	GLY
1	a	149	LEU
3	e	22	ILE

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	A	718/720 (100%)	582 (81%)	136 (19%)	1	2
1	a	720/720 (100%)	583 (81%)	137 (19%)	1	2
2	C	155/166 (93%)	126 (81%)	29 (19%)	1	2
3	E	25/25 (100%)	20 (80%)	5 (20%)	1	1
3	e	25/25 (100%)	18 (72%)	7 (28%)	0	0
4	F	31/31 (100%)	25 (81%)	6 (19%)	1	1
4	f	31/31 (100%)	26 (84%)	5 (16%)	2	3
5	G	31/31 (100%)	22 (71%)	9 (29%)	0	0
5	g	31/31 (100%)	21 (68%)	10 (32%)	0	0
7	c	112/112 (100%)	90 (80%)	22 (20%)	1	1
8	B	65/65 (100%)	42 (65%)	23 (35%)	0	0
9	D	52/62 (84%)	49 (94%)	3 (6%)	17	34
All	All	1996/2019 (99%)	1604 (80%)	392 (20%)	3	1

All (392) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	12	LYS
1	A	13	ARG
1	A	14	TRP
1	A	15	TYR
1	A	17	LYS
1	A	18	LEU
1	A	25	GLU

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Mol	Chain	Res	Type
1	A	52	MET
1	A	59	ASN
1	A	60	LEU
1	A	61	THR
1	A	65	ARG
1	A	66	LEU
1	A	69	LEU
1	A	77	THR
1	A	81	GLN
1	A	82	ARG
1	A	84	TRP
1	A	85	LEU
1	A	88	ILE
1	A	90	GLU
1	A	93	THR
1	A	95	LYS
1	A	96	LEU
1	A	101	GLN
1	A	107	THR
1	A	141	THR
1	A	144	GLU
1	A	147	TRP
1	A	148	LEU
1	A	149	LEU
1	A	158	LEU
1	A	159	CYS
1	A	161	ILE
1	A	162	LYS
1	A	175	LEU
1	A	183	THR
1	A	188	LEU
1	A	200	THR
1	A	203	ILE
1	A	205	LEU
1	A	206	LEU
1	A	214	LEU
1	A	218	LEU
1	A	224	PRO
1	A	229	GLN
1	A	240	GLU
1	A	254	ASN
1	A	263	ILE

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Mol	Chain	Res	Type
1	A	267	THR
1	A	268	THR
1	A	276	LEU
1	A	290	ARG
1	A	294	ILE
1	A	303	VAL
1	A	318	LEU
1	A	326	LEU
1	A	331	SER
1	A	333	LEU
1	A	334	MET
1	A	335	LEU
1	A	339	ASN
1	A	352	ARG
1	A	359	THR
1	A	381	LEU
1	A	384	LEU
1	A	386	ILE
1	A	387	SER
1	A	391	LYS
1	A	408	THR
1	A	413	THR
1	A	414	THR
1	A	433	THR
1	A	450	ARG
1	A	467	ARG
1	A	473	ASP
1	A	475	THR
1	A	489	LYS
1	A	490	LEU
1	A	494	ARG
1	A	496	LEU
1	A	497	GLN
1	A	503	LEU
1	A	505	GLU
1	A	518	THR
1	A	534	LEU
1	A	552	LEU
1	A	562	LEU
1	A	565	GLN
1	A	567	THR
1	A	569	GLU

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Mol	Chain	Res	Type
1	A	572	ARG
1	A	583	LEU
1	A	588	LEU
1	A	597	THR
1	A	598	GLU
1	A	601	LYS
1	A	602	GLN
1	A	608	LEU
1	A	612	ARG
1	A	617	LYS
1	A	621	ASN
1	A	624	GLU
1	A	638	SER
1	A	640	LEU
1	A	641	ARG
1	A	653	ILE
1	A	657	LEU
1	A	667	ILE
1	A	669	LEU
1	A	670	LEU
1	A	684	ASP
1	A	688	ARG
1	A	690	GLN
1	A	700	VAL
1	A	717	ILE
1	A	724	LEU
1	A	736	ILE
1	A	768	THR
1	A	777	THR
1	A	781	LEU
1	A	790	SER
1	A	796	LYS
1	A	798	ARG
1	A	800	SER
1	A	819	LEU
1	A	822	LYS
1	A	823	THR
1	A	824	LEU
1	A	826	GLU
1	A	832	SER
1	A	833	ASN
1	A	836	THR

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Mol	Chain	Res	Type
1	A	847	THR
1	A	849	THR
1	A	851	VAL
2	C	24	SER
2	C	28	ASN
2	C	30	THR
2	C	40	GLN
2	C	46	LEU
2	C	47	LYS
2	C	61	THR
2	C	65	ARG
2	C	71	ARG
2	C	75	THR
2	C	77	LEU
2	C	82	VAL
2	C	85	GLN
2	C	87	VAL
2	C	99	VAL
2	C	112	GLU
2	C	116	GLU
2	C	126	VAL
2	C	139	ARG
2	C	150	GLU
2	C	153	SER
2	C	180	GLN
2	C	182	SER
2	C	193	LEU
2	C	194	ARG
2	C	200	GLN
2	C	204	LEU
2	C	217	ARG
2	C	218	GLN
3	E	9	LEU
3	E	18	LEU
3	E	23	LYS
3	E	30	LYS
3	E	31	ASP
4	F	1	MET
4	F	2	TRP
4	F	12	LEU
4	F	32	LEU
4	F	33	SER

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Mol	Chain	Res	Type
4	F	34	ARG
5	G	11	LYS
5	G	14	TRP
5	G	20	LEU
5	G	21	LEU
5	G	25	LEU
5	G	38	VAL
5	G	39	LYS
5	G	44	LEU
5	G	45	ASN
1	a	11	VAL
1	a	18	LEU
1	a	20	LEU
1	a	26	ARG
1	a	59	ASN
1	a	60	LEU
1	a	61	THR
1	a	66	LEU
1	a	69	LEU
1	a	79	GLN
1	a	80	ILE
1	a	81	GLN
1	a	82	ARG
1	a	83	VAL
1	a	84	TRP
1	a	85	LEU
1	a	87	LEU
1	a	88	ILE
1	a	90	GLU
1	a	91	PHE
1	a	94	SER
1	a	95	LYS
1	a	98	PHE
1	a	106	MET
1	a	107	THR
1	a	123	LEU
1	a	124	TRP
1	a	125	LEU
1	a	147	TRP
1	a	148	LEU
1	a	149	LEU
1	a	151	TYR

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Mol	Chain	Res	Type
1	a	152	VAL
1	a	155	LEU
1	a	156	LYS
1	a	158	LEU
1	a	160	GLN
1	a	161	ILE
1	a	172	LYS
1	a	173	VAL
1	a	183	THR
1	a	187	ILE
1	a	188	LEU
1	a	189	ARG
1	a	200	THR
1	a	205	LEU
1	a	206	LEU
1	a	214	LEU
1	a	218	LEU
1	a	225	LEU
1	a	240	GLU
1	a	241	GLN
1	a	253	LEU
1	a	263	ILE
1	a	267	THR
1	a	268	THR
1	a	276	LEU
1	a	287	ARG
1	a	290	ARG
1	a	292	ILE
1	a	294	ILE
1	a	297	LEU
1	a	303	VAL
1	a	309	THR
1	a	318	LEU
1	a	326	LEU
1	a	333	LEU
1	a	359	THR
1	a	381	LEU
1	a	384	LEU
1	a	386	ILE
1	a	391	LYS
1	a	392	GLN
1	a	408	THR

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Mol	Chain	Res	Type
1	a	413	THR
1	a	433	THR
1	a	448	SER
1	a	450	ARG
1	a	461	ILE
1	a	464	ARG
1	a	469	LYS
1	a	482	LYS
1	a	490	LEU
1	a	492	LYS
1	a	496	LEU
1	a	497	GLN
1	a	501	ARG
1	a	503	LEU
1	a	514	THR
1	a	516	SER
1	a	518	THR
1	a	534	LEU
1	a	552	LEU
1	a	562	LEU
1	a	566	LYS
1	a	567	THR
1	a	569	GLU
1	a	576	GLU
1	a	583	LEU
1	a	584	LYS
1	a	587	SER
1	a	588	LEU
1	a	602	GLN
1	a	617	LYS
1	a	622	MET
1	a	623	LEU
1	a	624	GLU
1	a	628	ARG
1	a	640	LEU
1	a	641	ARG
1	a	653	ILE
1	a	657	LEU
1	a	669	LEU
1	a	670	LEU
1	a	705	CYS
1	a	709	ILE

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Mol	Chain	Res	Type
1	a	724	LEU
1	a	736	ILE
1	a	761	LEU
1	a	768	THR
1	a	777	THR
1	a	781	LEU
1	a	785	LEU
1	a	798	ARG
1	a	815	MET
1	a	819	LEU
1	a	822	LYS
1	a	823	THR
1	a	824	LEU
1	a	826	GLU
1	a	833	ASN
1	a	836	THR
1	a	847	THR
1	a	849	THR
1	a	851	VAL
1	a	864	ASN
1	a	865	ARG
7	c	17	MET
7	c	21	CYS
7	c	30	GLU
7	c	33	LEU
7	c	42	ARG
7	c	43	THR
7	c	48	LEU
7	c	50	GLU
7	c	54	LEU
7	c	62	LEU
7	c	64	LYS
7	c	92	CYS
7	c	96	ASN
7	c	103	ILE
7	c	106	THR
7	c	110	ASP
7	c	122	MET
7	c	133	VAL
7	c	140	LYS
7	c	144	GLN
7	c	154	ARG

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Mol	Chain	Res	Type
7	c	159	LYS
3	e	2	THR
3	e	5	LEU
3	e	6	LEU
3	e	22	ILE
3	e	28	ASN
3	e	30	LYS
3	e	32	ILE
4	f	1	MET
4	f	10	SER
4	f	28	VAL
4	f	30	HIS
4	f	34	ARG
5	g	8	ASP
5	g	9	ILE
5	g	10	SER
5	g	11	LYS
5	g	20	LEU
5	g	21	LEU
5	g	25	LEU
5	g	26	ILE
5	g	40	MET
5	g	45	ASN
8	B	74	GLN
8	B	77	THR
8	B	78	ILE
8	B	89	CYS
8	B	90	THR
8	B	93	CYS
8	B	96	LYS
8	B	97	VAL
8	B	100	ILE
8	B	105	VAL
8	B	106	GLU
8	B	108	VAL
8	B	117	ILE
8	B	120	THR
8	B	121	ARG
8	B	126	SER
8	B	127	LEU
8	B	128	CYS
8	B	130	VAL

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Mol	Chain	Res	Type
8	B	139	VAL
8	B	143	GLU
8	B	148	ARG
8	B	149	THR
9	D	20	ARG
9	D	28	LEU
9	D	30	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (81) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	59	ASN
1	A	79	GLN
1	A	81	GLN
1	A	101	GLN
1	A	241	GLN
1	A	255	GLN
1	A	261	ASN
1	A	296	HIS
1	A	339	ASN
1	A	362	HIS
1	A	364	GLN
1	A	379	GLN
1	A	392	GLN
1	A	445	GLN
1	A	460	ASN
1	A	470	ASN
1	A	531	GLN
1	A	538	GLN
1	A	550	ASN
1	A	565	GLN
1	A	602	GLN
1	A	639	ASN
1	A	643	GLN
1	A	644	HIS
1	A	675	HIS
1	A	755	HIS
1	A	808	GLN
1	A	825	GLN
1	A	833	ASN
2	C	40	GLN
2	C	59	GLN

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Mol	Chain	Res	Type
2	C	78	ASN
2	C	81	GLN
2	C	85	GLN
2	C	122	GLN
2	C	123	ASN
2	C	136	ASN
2	C	149	GLN
2	C	169	ASN
2	C	180	GLN
2	C	185	GLN
2	C	200	GLN
2	C	202	ASN
3	E	28	ASN
5	G	45	ASN
1	a	16	GLN
1	a	59	ASN
1	a	81	GLN
1	a	160	GLN
1	a	254	ASN
1	a	296	HIS
1	a	329	HIS
1	a	362	HIS
1	a	364	GLN
1	a	382	HIS
1	a	445	GLN
1	a	531	GLN
1	a	538	GLN
1	a	550	ASN
1	a	602	GLN
1	a	619	HIS
1	a	621	ASN
1	a	626	ASN
1	a	643	GLN
1	a	644	HIS
1	a	744	ASN
1	a	755	HIS
1	a	765	ASN
1	a	825	GLN
1	a	833	ASN
1	a	864	ASN
7	c	52	GLN
7	c	82	GLN

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Mol	Chain	Res	Type
7	c	94	GLN
7	c	96	ASN
7	c	100	ASN
7	c	109	GLN
7	c	144	GLN
7	c	145	GLN
4	f	30	HIS
5	g	45	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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](#)

Of 81 ligands modelled in this entry, 2 are monoatomic and 32 are unknown - leaving 47 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
17	85N	a	902	-	45,46,46	0.59	0	50,55,55	0.43	0
12	CLA	A	931	-	65,73,73	3.13	25 (38%)	76,113,113	4.31	38 (50%)
12	CLA	a	913	-	65,73,73	2.62	20 (30%)	76,113,113	4.02	34 (44%)
15	85I	a	919	-	43,44,44	1.41	2 (4%)	47,51,51	1.66	3 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
11	BCL	A	904	-	44,54,74	2.53	20 (45%)	54,91,115	3.07	24 (44%)
15	85I	a	920	-	43,44,44	2.22	2 (4%)	47,51,51	2.04	3 (6%)
11	BCL	A	907	-	59,69,74	3.30	26 (44%)	72,109,115	4.67	38 (52%)
11	BCL	A	903	-	64,74,74	2.81	21 (32%)	78,115,115	3.82	33 (42%)
11	BCL	a	904	-	64,74,74	2.65	18 (28%)	78,115,115	3.43	26 (33%)
11	BCL	a	910	-	64,74,74	3.34	19 (29%)	78,115,115	4.08	38 (48%)
12	CLA	A	912	-	46,54,73	2.76	15 (32%)	53,90,113	4.13	29 (54%)
12	CLA	a	915	-	51,59,73	2.93	17 (33%)	59,96,113	3.55	34 (57%)
11	BCL	A	902	-	64,74,74	2.74	22 (34%)	78,115,115	3.23	31 (39%)
11	BCL	A	906	1	50,60,74	2.79	14 (28%)	61,98,115	4.91	25 (40%)
17	85N	G	101	-	36,37,46	0.72	0	40,45,55	0.77	2 (5%)
20	SF4	B	201	-	0,12,12	-	-	-	-	-
15	85I	a	918	-	43,44,44	1.05	2 (4%)	47,51,51	1.69	4 (8%)
11	BCL	A	905	-	64,74,74	2.65	20 (31%)	78,115,115	3.84	32 (41%)
11	BCL	A	908	-	64,74,74	2.50	28 (43%)	78,115,115	2.66	27 (34%)
17	85N	g	101	-	36,37,46	0.79	1 (2%)	40,45,55	0.58	0
15	85I	A	916	-	43,44,44	2.15	3 (6%)	47,51,51	2.32	7 (14%)
11	BCL	a	905	-	64,74,74	2.75	17 (26%)	78,115,115	3.68	31 (39%)
12	CLA	a	914	-	46,54,73	2.87	19 (41%)	53,90,113	3.60	27 (50%)
12	CLA	a	912	21	65,73,73	2.79	17 (26%)	76,113,113	3.23	38 (50%)
11	BCL	a	911	-	64,74,74	2.79	22 (34%)	78,115,115	3.46	33 (42%)
13	LYC	c	201	-	39,39,39	1.65	9 (23%)	44,46,46	5.76	28 (63%)
13	LYC	A	913	-	39,39,39	2.05	11 (28%)	44,46,46	2.49	18 (40%)
19	84Q	a	921	-	42,43,43	1.35	2 (4%)	47,50,50	1.04	2 (4%)
12	CLA	a	901	21	65,73,73	2.66	21 (32%)	76,113,113	3.57	32 (42%)
11	BCL	A	909	-	64,74,74	3.24	27 (42%)	78,115,115	4.30	34 (43%)
15	85I	A	915	-	43,44,44	2.29	10 (23%)	47,51,51	2.44	7 (14%)
18	HEC	c	202	7	32,50,50	2.84	14 (43%)	24,82,82	3.87	11 (45%)
20	SF4	B	202	8	0,12,12	-	-	-	-	-
20	SF4	a	917	1	0,12,12	-	-	-	-	-
11	BCL	a	907	-	64,74,74	2.56	23 (35%)	78,115,115	3.69	27 (34%)
17	85N	A	932	-	45,46,46	1.04	1 (2%)	50,55,55	1.82	4 (8%)
19	84Q	E	101	-	42,43,43	2.09	10 (23%)	47,50,50	1.90	8 (17%)
12	CLA	A	933	-	51,59,73	2.87	18 (35%)	59,96,113	3.90	32 (54%)
11	BCL	a	906	-	44,54,74	2.85	19 (43%)	54,91,115	3.11	24 (44%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
12	CLA	A	911	-	65,73,73	2.71	22 (33%)	76,113,113	3.34	28 (36%)
12	CLA	A	910	-	65,73,73	2.10	21 (32%)	76,113,113	3.13	31 (40%)
10	2GO	A	901	1	65,74,74	3.57	18 (27%)	76,115,115	3.49	29 (38%)
11	BCL	a	909	-	64,74,74	2.48	22 (34%)	78,115,115	3.89	28 (35%)
11	BCL	a	908	1	64,74,74	2.87	24 (37%)	78,115,115	4.43	34 (43%)
10	2GO	a	903	1	65,74,74	3.45	20 (30%)	76,115,115	3.41	28 (36%)
18	HEC	C	301	2	32,50,50	2.95	17 (53%)	24,82,82	3.49	12 (50%)
15	85I	A	917	-	43,44,44	1.57	2 (4%)	47,51,51	2.42	3 (6%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	85N	a	902	-	-	24/51/51/51	-
12	CLA	A	931	-	-	18/37/115/115	-
12	CLA	a	913	-	-	11/37/115/115	-
15	85I	a	919	-	-	36/47/48/48	-
11	BCL	A	904	-	-	6/13/113/137	-
15	85I	a	920	-	-	29/47/48/48	-
11	BCL	A	907	-	-	16/31/131/137	-
11	BCL	A	903	-	-	21/37/137/137	-
11	BCL	a	904	-	-	12/37/137/137	-
11	BCL	a	910	-	-	11/37/137/137	-
12	CLA	A	912	-	-	2/15/93/115	-
12	CLA	a	915	-	-	7/21/99/115	-
11	BCL	A	902	-	-	16/37/137/137	-
11	BCL	A	906	1	-	6/21/121/137	-
17	85N	G	101	-	-	18/42/42/51	-
20	SF4	B	201	-	-	-	0/6/5/5
15	85I	a	918	-	-	21/47/48/48	-
11	BCL	A	905	-	-	16/37/137/137	-
11	BCL	A	908	-	-	14/37/137/137	-
17	85N	g	101	-	-	19/42/42/51	-
15	85I	A	916	-	1/1/6/7	29/47/48/48	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
11	BCL	a	905	-	-	17/37/137/137	-
12	CLA	a	914	-	-	4/15/93/115	-
12	CLA	a	912	21	-	12/37/115/115	-
11	BCL	a	911	-	-	5/37/137/137	-
13	LYC	c	201	-	-	16/43/43/43	-
13	LYC	A	913	-	-	1/43/43/43	-
19	84Q	a	921	-	-	32/46/47/47	-
12	CLA	a	901	21	-	24/37/115/115	-
11	BCL	A	909	-	-	12/37/137/137	-
15	85I	A	915	-	-	19/47/48/48	-
18	HEC	c	202	7	-	3/10/54/54	-
20	SF4	B	202	8	-	-	0/6/5/5
20	SF4	a	917	1	-	-	0/6/5/5
11	BCL	a	907	-	-	12/37/137/137	-
17	85N	A	932	-	-	18/51/51/51	-
19	84Q	E	101	-	-	27/46/47/47	-
12	CLA	A	933	-	-	4/21/99/115	-
12	CLA	A	911	-	1/1/15/20	11/37/115/115	-
11	BCL	a	906	-	-	6/13/113/137	-
12	CLA	A	910	-	1/1/15/20	13/37/115/115	-
10	2GO	A	901	1	-	4/37/97/97	-
11	BCL	a	909	-	-	13/37/137/137	-
11	BCL	a	908	1	-	20/37/137/137	-
10	2GO	a	903	1	-	9/37/97/97	-
18	HEC	C	301	2	-	3/10/54/54	-
15	85I	A	917	-	-	29/47/48/48	-

All (661) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	a	910	BCL	C4B-NB	-15.65	1.21	1.35
10	A	901	2GO	C4D-ND	-14.73	1.18	1.37
10	A	901	2GO	C2A-C3A	14.60	1.67	1.36
15	a	920	85I	O6-C3	-14.03	1.20	1.44
10	a	903	2GO	C3C-C2C	11.92	1.62	1.36
12	A	931	CLA	C4B-NB	-11.72	1.24	1.35
11	A	909	BCL	C4B-NB	-10.82	1.25	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	903	BCL	C4B-NB	-10.29	1.26	1.35
12	a	912	CLA	C3D-C4D	-10.27	1.21	1.44
15	A	915	85I	C4-C3	-9.77	1.29	1.51
11	a	904	BCL	C3D-C4D	-9.71	1.22	1.44
11	a	910	BCL	C3D-C4D	-9.67	1.22	1.44
11	A	907	BCL	C1B-NB	-9.44	1.26	1.35
11	a	910	BCL	C1B-NB	-9.40	1.26	1.35
15	A	916	85I	P-O3	9.37	1.85	1.60
12	A	933	CLA	C4B-NB	-9.34	1.26	1.35
12	A	912	CLA	C4B-NB	-9.33	1.26	1.35
10	a	903	2GO	C1D-ND	-9.25	1.25	1.37
12	a	913	CLA	C4B-NB	-9.24	1.27	1.35
10	a	903	2GO	C4D-ND	-9.06	1.25	1.37
11	a	907	BCL	C1D-ND	-9.05	1.26	1.37
12	a	914	CLA	C3D-C4D	-8.99	1.23	1.44
12	A	931	CLA	C3D-C4D	-8.88	1.24	1.44
12	a	915	CLA	C1B-NB	-8.86	1.27	1.35
10	a	903	2GO	C4B-NB	8.81	1.48	1.35
11	a	905	BCL	C3D-C4D	-8.80	1.24	1.44
12	A	911	CLA	C1D-ND	8.80	1.48	1.37
19	E	101	84Q	P-O4	8.62	1.83	1.60
11	A	907	BCL	O2A-CGA	8.60	1.58	1.33
11	a	905	BCL	C4B-NB	-8.51	1.27	1.35
10	a	903	2GO	OBD-CAD	-8.49	1.09	1.33
11	a	908	BCL	C3D-C4D	-8.46	1.25	1.44
11	A	903	BCL	C3D-C4D	-8.44	1.25	1.44
12	A	912	CLA	C3D-C4D	-8.44	1.25	1.44
10	A	901	2GO	C3C-C2C	8.41	1.54	1.36
12	A	933	CLA	C3D-C4D	-8.35	1.25	1.44
11	a	907	BCL	C3D-C4D	-8.31	1.25	1.44
11	A	902	BCL	C3D-C4D	-8.27	1.25	1.44
11	A	909	BCL	C3D-C4D	-8.24	1.25	1.44
11	a	911	BCL	C4B-NB	-8.22	1.27	1.35
12	A	933	CLA	C4D-ND	-8.21	1.26	1.37
12	a	901	CLA	C1C-NC	-8.21	1.25	1.37
12	A	931	CLA	O1D-CGD	-8.17	1.00	1.21
11	a	911	BCL	C1B-NB	-8.04	1.28	1.35
10	a	903	2GO	C2A-C3A	8.01	1.53	1.36
11	A	905	BCL	CAA-C2A	-8.00	1.39	1.54
12	a	913	CLA	C1B-NB	-7.96	1.28	1.35
11	A	909	BCL	C1B-NB	-7.93	1.28	1.35
19	a	921	84Q	O2-C16	-7.90	1.31	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	907	BCL	C4B-NB	-7.90	1.28	1.35
11	A	906	BCL	C3D-C4D	-7.88	1.26	1.44
12	a	915	CLA	C3D-C4D	-7.83	1.26	1.44
15	a	919	85I	O6-C3	7.82	1.57	1.44
10	A	901	2GO	OBD-CAD	-7.80	1.11	1.33
11	A	908	BCL	C4B-NB	-7.79	1.28	1.35
12	a	901	CLA	C3D-C4D	-7.69	1.26	1.44
11	a	909	BCL	C3D-C4D	-7.69	1.26	1.44
12	a	901	CLA	C1B-NB	-7.69	1.28	1.35
11	a	906	BCL	C3D-C4D	-7.68	1.26	1.44
10	A	901	2GO	C1A-NA	-7.63	1.22	1.38
11	A	902	BCL	C1D-ND	-7.62	1.28	1.37
11	A	906	BCL	C1D-ND	-7.62	1.28	1.37
12	a	914	CLA	C1B-NB	-7.55	1.28	1.35
12	A	911	CLA	C1C-NC	-7.52	1.26	1.37
12	a	914	CLA	C4B-NB	-7.48	1.28	1.35
11	A	905	BCL	C3D-C4D	-7.47	1.27	1.44
11	A	904	BCL	C3D-C4D	-7.39	1.27	1.44
11	a	904	BCL	C3C-C4C	-7.32	1.42	1.51
11	A	909	BCL	C4D-ND	-7.29	1.27	1.37
10	a	903	2GO	C1A-NA	-7.28	1.23	1.38
11	a	911	BCL	C3D-C4D	-7.26	1.27	1.44
12	a	901	CLA	C4B-NB	-7.25	1.28	1.35
11	a	908	BCL	CAA-C2A	-7.23	1.40	1.54
15	A	916	85I	C4-C3	7.23	1.68	1.51
11	a	908	BCL	C4D-ND	-7.22	1.27	1.37
11	a	908	BCL	C1D-ND	-7.15	1.29	1.37
11	A	902	BCL	C1B-NB	-7.12	1.28	1.35
15	A	917	85I	C4-C3	7.11	1.68	1.51
12	a	915	CLA	CHC-C1C	7.08	1.53	1.35
12	a	912	CLA	C1C-NC	-7.07	1.27	1.37
11	A	902	BCL	C4B-NB	-7.01	1.29	1.35
11	A	907	BCL	C4D-ND	-7.00	1.28	1.37
12	a	912	CLA	C9-C8	-6.99	1.30	1.52
11	A	907	BCL	C3D-C4D	-6.88	1.28	1.44
15	A	917	85I	O6-C3	-6.84	1.33	1.44
11	A	908	BCL	C3D-C4D	-6.82	1.28	1.44
11	a	905	BCL	C1D-ND	-6.81	1.29	1.37
12	A	911	CLA	C3D-C4D	-6.80	1.28	1.44
18	c	202	HEC	O2A-CGA	-6.79	1.07	1.30
11	a	910	BCL	C3C-C4C	-6.78	1.43	1.51
11	a	911	BCL	C1D-ND	-6.71	1.29	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	a	913	CLA	C3D-C4D	-6.69	1.29	1.44
13	A	913	LYC	C14-C12	-6.64	1.27	1.35
12	A	910	CLA	C3D-C4D	-6.59	1.29	1.44
11	A	909	BCL	O1A-CGA	-6.58	1.03	1.22
12	A	931	CLA	C1D-ND	6.56	1.45	1.37
11	A	907	BCL	O1D-CGD	-6.49	1.04	1.21
11	A	907	BCL	C1D-ND	-6.48	1.29	1.37
11	a	904	BCL	C1D-ND	-6.40	1.29	1.37
11	a	906	BCL	C4B-NB	-6.36	1.29	1.35
12	a	915	CLA	C4B-NB	-6.31	1.29	1.35
12	a	912	CLA	C4B-NB	-6.30	1.29	1.35
11	a	908	BCL	C2A-C1A	-6.29	1.38	1.52
12	a	913	CLA	C1D-ND	6.26	1.45	1.37
11	a	905	BCL	C4D-ND	-6.14	1.29	1.37
12	A	931	CLA	C4D-ND	-6.14	1.29	1.37
11	A	909	BCL	C3C-C4C	-6.12	1.43	1.51
12	A	933	CLA	O1D-CGD	-6.12	1.05	1.21
11	A	909	BCL	OBB-CAB	-6.12	1.03	1.22
12	a	913	CLA	C1C-NC	-6.09	1.28	1.37
11	A	903	BCL	OBB-CAB	-6.08	1.03	1.22
11	a	904	BCL	C1B-NB	-6.07	1.29	1.35
12	A	911	CLA	C4D-ND	-6.07	1.29	1.37
10	a	903	2GO	OBB-CAB	-6.06	1.04	1.22
11	A	906	BCL	C4B-NB	-6.03	1.29	1.35
11	A	905	BCL	C2A-C1A	-6.01	1.38	1.52
12	a	912	CLA	OBD-CAD	-5.99	1.12	1.22
11	a	908	BCL	C4B-NB	-5.95	1.29	1.35
11	a	910	BCL	OBB-CAB	-5.91	1.04	1.22
11	A	905	BCL	C1D-ND	-5.90	1.30	1.37
11	A	905	BCL	C4B-NB	-5.87	1.30	1.35
11	A	904	BCL	C4B-NB	-5.83	1.30	1.35
11	a	909	BCL	O1D-CGD	-5.79	1.06	1.21
15	a	918	85I	O6-C3	-5.77	1.34	1.44
12	a	912	CLA	C1B-NB	-5.77	1.30	1.35
11	A	906	BCL	O2D-CED	-5.74	1.31	1.45
17	A	932	85N	O3-C17	-5.72	1.21	1.40
11	a	905	BCL	C3C-C4C	-5.69	1.44	1.51
12	A	931	CLA	O2D-CED	-5.64	1.32	1.45
11	a	911	BCL	C3C-C4C	-5.61	1.44	1.51
10	A	901	2GO	C1D-ND	-5.58	1.30	1.37
18	C	301	HEC	O2A-CGA	-5.57	1.12	1.30
12	a	915	CLA	C4D-ND	-5.53	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	a	907	BCL	C4D-ND	-5.52	1.30	1.37
11	a	909	BCL	C1D-ND	-5.52	1.31	1.37
11	a	909	BCL	C4B-NB	-5.50	1.30	1.35
11	A	909	BCL	C1D-ND	-5.50	1.31	1.37
11	a	910	BCL	C1D-ND	-5.49	1.31	1.37
15	A	916	85I	O6-C3	5.46	1.53	1.44
12	a	912	CLA	CHC-C1C	5.46	1.49	1.35
11	A	908	BCL	C3C-C4C	-5.39	1.44	1.51
19	E	101	84Q	C15-C16	5.39	1.64	1.51
11	A	903	BCL	C1B-NB	-5.39	1.30	1.35
12	A	911	CLA	C4B-NB	-5.38	1.30	1.35
11	a	909	BCL	C1B-NB	-5.36	1.30	1.35
11	a	906	BCL	C4D-ND	-5.35	1.30	1.37
11	A	906	BCL	C1B-NB	-5.33	1.30	1.35
11	A	903	BCL	C3C-C4C	-5.29	1.44	1.51
12	a	914	CLA	C1C-NC	-5.28	1.29	1.37
12	A	910	CLA	C1D-ND	5.28	1.44	1.37
12	a	912	CLA	C1D-ND	5.28	1.44	1.37
10	A	901	2GO	C3D-C2D	-5.26	1.30	1.39
11	A	903	BCL	C1D-ND	-5.19	1.31	1.37
11	A	905	BCL	C4D-ND	-5.18	1.30	1.37
11	A	908	BCL	C1D-ND	-5.16	1.31	1.37
11	a	906	BCL	C1D-ND	-5.14	1.31	1.37
11	a	911	BCL	C4D-ND	-5.13	1.30	1.37
11	A	907	BCL	C5-C3	5.12	1.61	1.51
11	A	903	BCL	O1A-CGA	-5.11	1.07	1.22
11	a	909	BCL	O2D-CED	-5.10	1.33	1.45
11	a	908	BCL	C1B-NB	-5.10	1.30	1.35
12	A	911	CLA	C9-C8	5.07	1.68	1.52
11	a	905	BCL	O1D-CGD	-5.06	1.08	1.21
11	A	902	BCL	C2A-C1A	-5.06	1.40	1.52
11	A	906	BCL	C4D-ND	-5.03	1.30	1.37
11	A	907	BCL	C2-C3	5.03	1.45	1.33
11	A	909	BCL	OBD-CAD	-5.01	1.13	1.22
18	c	202	HEC	CAD-C3D	-5.00	1.44	1.52
10	A	901	2GO	C2D-C1D	-4.99	1.31	1.42
12	A	911	CLA	MG-NC	4.98	2.18	2.06
12	A	931	CLA	O2D-CGD	4.98	1.45	1.33
11	a	911	BCL	OBB-CAB	-4.97	1.07	1.22
11	A	902	BCL	C4D-ND	-4.95	1.30	1.37
18	c	202	HEC	C4B-C3B	-4.94	1.34	1.43
12	A	912	CLA	C1B-NB	-4.94	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	C	301	HEC	CBB-CAB	-4.89	1.31	1.49
11	a	906	BCL	CAA-C2A	-4.89	1.45	1.54
11	a	904	BCL	C4B-NB	-4.85	1.30	1.35
11	a	906	BCL	C1B-NB	-4.83	1.30	1.35
18	C	301	HEC	O2D-CGD	-4.80	1.14	1.30
12	A	911	CLA	C1B-NB	-4.78	1.30	1.35
10	a	903	2GO	C4C-C3C	4.78	1.53	1.45
11	A	906	BCL	O1D-CGD	-4.76	1.09	1.21
12	a	915	CLA	C1C-NC	-4.75	1.30	1.37
18	C	301	HEC	C1B-NB	-4.74	1.26	1.36
11	A	905	BCL	C3C-C4C	-4.71	1.45	1.51
12	A	910	CLA	C4B-NB	-4.71	1.31	1.35
18	C	301	HEC	CBC-CAC	-4.70	1.31	1.49
11	a	909	BCL	C3C-C4C	-4.70	1.45	1.51
11	a	904	BCL	C4D-ND	-4.69	1.31	1.37
11	a	906	BCL	C3C-C4C	-4.68	1.45	1.51
11	a	904	BCL	O1A-CGA	-4.67	1.08	1.22
11	A	902	BCL	C3C-C4C	-4.67	1.45	1.51
11	a	907	BCL	C2A-C1A	-4.64	1.41	1.52
11	a	905	BCL	O2A-CGA	4.57	1.46	1.33
11	A	903	BCL	O1D-CGD	-4.56	1.09	1.21
11	A	904	BCL	O2A-CGA	4.56	1.46	1.30
11	A	906	BCL	CBB-CAB	-4.56	1.36	1.49
11	a	910	BCL	O1D-CGD	-4.55	1.09	1.21
12	a	912	CLA	O2D-CED	-4.54	1.34	1.45
11	a	908	BCL	CBB-CAB	-4.54	1.36	1.49
12	A	931	CLA	O2A-CGA	4.53	1.46	1.33
18	C	301	HEC	C3A-C4A	4.53	1.52	1.42
11	A	906	BCL	O1A-CGA	-4.52	1.09	1.22
12	A	912	CLA	C1C-NC	-4.52	1.31	1.37
15	A	915	85I	P-O3	4.49	1.72	1.60
12	A	931	CLA	O1A-CGA	-4.49	1.09	1.22
11	A	908	BCL	C1B-NB	-4.47	1.31	1.35
12	a	915	CLA	C1D-ND	4.47	1.43	1.37
11	a	907	BCL	C4B-NB	-4.47	1.31	1.35
11	A	902	BCL	O2D-CED	-4.43	1.34	1.45
11	A	905	BCL	C1B-NB	-4.42	1.31	1.35
11	a	905	BCL	OBB-CAB	-4.42	1.09	1.22
11	A	909	BCL	MG-NA	4.40	2.16	2.06
18	C	301	HEC	C4B-C3B	-4.39	1.35	1.43
11	a	911	BCL	OBD-CAD	-4.39	1.14	1.22
18	c	202	HEC	O2D-CGD	-4.38	1.16	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	a	914	CLA	O1D-CGD	-4.38	1.10	1.21
12	A	911	CLA	C7-C8	-4.35	1.29	1.52
12	A	912	CLA	MG-NC	4.35	2.16	2.06
12	a	913	CLA	CHC-C1C	4.34	1.46	1.35
12	A	912	CLA	O1D-CGD	-4.33	1.10	1.21
11	a	911	BCL	O2D-CED	-4.32	1.35	1.45
11	A	907	BCL	OBD-CAD	-4.30	1.15	1.22
12	a	901	CLA	O2A-CGA	4.29	1.45	1.33
11	A	903	BCL	C2A-C1A	-4.27	1.42	1.52
18	c	202	HEC	O1A-CGA	-4.26	1.08	1.22
12	a	901	CLA	CHC-C1C	4.26	1.45	1.35
11	a	904	BCL	O2A-CGA	4.25	1.45	1.33
11	A	907	BCL	O2D-CED	-4.24	1.35	1.45
12	A	933	CLA	C1C-NC	-4.20	1.31	1.37
12	a	912	CLA	O1D-CGD	-4.20	1.10	1.21
18	c	202	HEC	C4D-ND	-4.18	1.27	1.36
10	A	901	2GO	OBB-CAB	-4.15	1.09	1.22
12	A	910	CLA	C1B-NB	-4.15	1.31	1.35
11	A	905	BCL	OBB-CAB	-4.15	1.09	1.22
11	a	910	BCL	O1A-CGA	-4.12	1.10	1.22
11	a	906	BCL	C3B-C2B	4.08	1.46	1.39
11	A	905	BCL	O2D-CED	-4.07	1.35	1.45
11	a	904	BCL	O2D-CED	-4.07	1.35	1.45
12	A	911	CLA	CHC-C1C	4.07	1.45	1.35
11	a	904	BCL	O1D-CGD	-4.04	1.11	1.21
18	C	301	HEC	C3C-C4C	-4.02	1.35	1.43
15	a	919	85I	C4-C3	-4.00	1.42	1.51
11	a	911	BCL	O2A-C1	-4.00	1.34	1.46
10	a	903	2GO	C2D-C1D	-3.99	1.33	1.42
10	A	901	2GO	ZN-NC	3.98	2.25	2.01
11	A	905	BCL	C3A-C2A	-3.98	1.43	1.54
11	a	908	BCL	O1D-CGD	-3.97	1.11	1.21
11	a	908	BCL	O2D-CED	-3.97	1.36	1.45
15	A	915	85I	O4-C5	-3.95	1.21	1.33
11	a	909	BCL	O1A-CGA	-3.94	1.10	1.22
11	A	908	BCL	O1D-CGD	-3.93	1.11	1.21
10	A	901	2GO	ZN-NA	3.92	2.24	2.01
18	c	202	HEC	C1B-NB	-3.92	1.28	1.36
11	A	904	BCL	CAA-C2A	-3.92	1.46	1.54
13	A	913	LYC	C55-C56	-3.91	1.30	1.35
11	a	907	BCL	OBB-CAB	-3.91	1.10	1.22
12	A	933	CLA	O2A-C1	-3.90	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	a	915	CLA	C3C-C2C	3.88	1.45	1.36
11	a	911	BCL	O1A-CGA	-3.86	1.11	1.22
12	a	901	CLA	O2D-CED	-3.85	1.36	1.45
11	A	904	BCL	C4D-ND	-3.85	1.32	1.37
11	A	904	BCL	C2A-C1A	-3.85	1.43	1.52
11	A	905	BCL	O1D-CGD	-3.83	1.11	1.21
13	c	201	LYC	C14-C12	-3.83	1.30	1.35
11	A	902	BCL	CAA-C2A	-3.82	1.47	1.54
11	A	909	BCL	C4B-CHC	3.81	1.51	1.41
12	a	913	CLA	C3B-C2B	3.81	1.45	1.40
11	a	905	BCL	OBD-CAD	-3.81	1.15	1.22
12	a	914	CLA	O2A-CGA	3.80	1.45	1.33
11	a	910	BCL	C4D-ND	-3.80	1.32	1.37
11	a	911	BCL	CHD-C1D	3.79	1.45	1.38
11	A	902	BCL	O2D-CGD	3.79	1.42	1.33
12	A	931	CLA	OBD-CAD	-3.79	1.15	1.22
11	a	910	BCL	O2D-CGD	3.78	1.42	1.33
11	a	905	BCL	O2D-CED	-3.77	1.36	1.45
12	a	915	CLA	MG-NC	3.77	2.15	2.06
12	A	912	CLA	CHC-C1C	3.76	1.44	1.35
11	a	909	BCL	C3B-C2B	3.76	1.46	1.39
12	a	912	CLA	MG-NC	3.75	2.15	2.06
12	a	901	CLA	O1D-CGD	-3.74	1.11	1.21
11	a	910	BCL	O2D-CED	-3.74	1.36	1.45
11	A	907	BCL	C6-C5	3.73	1.65	1.52
12	a	913	CLA	C4D-ND	-3.72	1.32	1.37
10	a	903	2GO	C1C-C2C	3.72	1.51	1.44
13	A	913	LYC	C9-C7	-3.71	1.30	1.34
15	A	915	85I	P-O	-3.70	1.44	1.59
18	C	301	HEC	C1D-ND	-3.69	1.28	1.36
12	a	901	CLA	CHD-C4C	3.68	1.47	1.39
12	a	901	CLA	MG-NC	3.67	2.15	2.06
11	A	908	BCL	C3A-C2A	-3.66	1.44	1.54
11	A	902	BCL	O1A-CGA	-3.65	1.11	1.22
11	A	907	BCL	OBB-CAB	-3.65	1.11	1.22
11	A	909	BCL	C2-C3	3.65	1.41	1.33
11	a	908	BCL	CAA-CBA	-3.65	1.41	1.52
11	A	909	BCL	MG-ND	-3.65	1.98	2.05
12	A	912	CLA	C4D-ND	-3.65	1.32	1.37
11	a	909	BCL	C4D-ND	-3.65	1.32	1.37
18	C	301	HEC	C3D-C2D	3.64	1.48	1.37
13	c	201	LYC	C19-C17	-3.62	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	a	906	BCL	C2A-C1A	-3.62	1.44	1.52
12	a	914	CLA	MG-NC	3.61	2.14	2.06
11	A	909	BCL	C3A-C2A	-3.61	1.44	1.54
11	A	909	BCL	O1D-CGD	-3.60	1.12	1.21
12	a	915	CLA	O1A-CGA	-3.59	1.11	1.22
12	a	913	CLA	CAA-C2A	3.59	1.60	1.54
11	A	903	BCL	C3A-C2A	-3.59	1.44	1.54
12	a	912	CLA	O2A-CGA	3.56	1.43	1.33
10	a	903	2GO	ZN-NC	3.56	2.22	2.01
11	a	906	BCL	O2A-CGA	3.55	1.42	1.30
11	a	907	BCL	O2A-CGA	3.55	1.43	1.33
11	A	909	BCL	CAA-CBA	-3.55	1.41	1.52
15	A	915	85I	P-O1	-3.54	1.38	1.50
11	A	904	BCL	C3B-C2B	3.52	1.45	1.39
11	a	908	BCL	C3B-C2B	3.50	1.45	1.39
11	A	904	BCL	C4B-CHC	3.49	1.50	1.41
11	A	903	BCL	C4D-ND	-3.47	1.32	1.37
12	A	933	CLA	CAA-C2A	-3.47	1.47	1.54
12	a	915	CLA	O1D-CGD	-3.46	1.12	1.21
12	A	933	CLA	O1A-CGA	-3.45	1.12	1.22
18	C	301	HEC	CAD-C3D	-3.45	1.47	1.52
12	A	933	CLA	CHC-C1C	3.44	1.43	1.35
12	a	901	CLA	C1D-C2D	3.43	1.52	1.45
11	A	903	BCL	O2A-CGA	3.43	1.43	1.33
11	a	905	BCL	CBB-CAB	-3.43	1.39	1.49
11	a	905	BCL	O1A-CGA	-3.43	1.12	1.22
11	a	907	BCL	O2A-C1	-3.41	1.36	1.46
12	A	910	CLA	O2A-CGA	3.41	1.43	1.33
11	a	907	BCL	CAA-C2A	-3.40	1.47	1.54
11	A	909	BCL	CBD-CGD	-3.40	1.41	1.52
12	A	911	CLA	O1A-CGA	-3.39	1.12	1.22
13	A	913	LYC	C13-C12	-3.39	1.43	1.50
11	a	904	BCL	C3B-C2B	3.38	1.45	1.39
12	A	911	CLA	O2D-CED	-3.37	1.37	1.45
10	a	903	2GO	C1B-NB	3.37	1.40	1.35
11	A	903	BCL	CBB-CAB	-3.37	1.39	1.49
13	c	201	LYC	C13-C12	-3.37	1.43	1.50
18	c	202	HEC	C2B-C3B	3.36	1.44	1.40
12	A	912	CLA	O2A-CGA	3.35	1.43	1.33
12	A	931	CLA	CHC-C1C	3.35	1.43	1.35
11	a	906	BCL	OBB-CAB	-3.35	1.12	1.22
11	A	903	BCL	O2D-CGD	3.34	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	a	907	BCL	CHD-C1D	3.34	1.44	1.38
11	A	905	BCL	CBA-CGA	-3.32	1.41	1.50
11	A	908	BCL	C4D-ND	-3.32	1.33	1.37
11	a	908	BCL	CBA-CGA	-3.30	1.41	1.50
12	A	931	CLA	C4D-CHA	3.30	1.50	1.38
12	A	911	CLA	O2A-C1	-3.30	1.36	1.46
18	c	202	HEC	CBA-CGA	-3.29	1.42	1.50
12	a	901	CLA	C7-C8	-3.29	1.35	1.52
11	a	905	BCL	CAC-C3C	-3.28	1.47	1.54
12	a	914	CLA	C3C-C2C	3.28	1.43	1.36
11	a	908	BCL	C5-C3	-3.28	1.44	1.51
10	a	903	2GO	O1D-CGD	-3.25	1.14	1.21
18	c	202	HEC	CAA-C2A	-3.23	1.46	1.52
11	A	902	BCL	C3B-C2B	3.23	1.45	1.39
11	A	907	BCL	CMD-C2D	-3.22	1.44	1.50
13	A	913	LYC	C19-C17	-3.22	1.31	1.35
11	a	907	BCL	O1D-CGD	-3.20	1.13	1.21
12	a	913	CLA	O1A-CGA	-3.20	1.13	1.22
11	a	907	BCL	MG-NA	-3.19	1.98	2.06
12	a	914	CLA	CHC-C1C	3.19	1.43	1.35
11	A	908	BCL	CAA-C2A	-3.19	1.48	1.54
11	a	910	BCL	CMB-C2B	-3.18	1.45	1.51
11	A	908	BCL	MG-NC	-3.18	1.98	2.06
13	A	913	LYC	C10-C11	-3.17	1.26	1.34
11	A	908	BCL	CMA-C3A	-3.17	1.46	1.53
11	A	908	BCL	O2A-CGA	3.16	1.42	1.33
11	A	902	BCL	O2A-CGA	3.15	1.42	1.33
11	A	907	BCL	CBB-CAB	-3.13	1.40	1.49
12	A	910	CLA	C7-C8	-3.12	1.36	1.52
11	a	910	BCL	O2A-CGA	3.11	1.42	1.33
11	A	902	BCL	C1B-CHB	3.10	1.49	1.41
18	c	202	HEC	CBC-CAC	-3.10	1.37	1.49
11	A	907	BCL	C2C-C3C	-3.09	1.45	1.54
11	A	908	BCL	C3B-CAB	-3.09	1.41	1.49
12	a	915	CLA	O2D-CED	-3.08	1.38	1.45
12	A	931	CLA	C10-C8	-3.08	1.36	1.52
11	a	911	BCL	C1D-C2D	-3.08	1.39	1.45
12	a	901	CLA	O2D-CGD	3.07	1.40	1.33
19	E	101	84Q	C3-C1	-3.07	1.30	1.51
11	a	910	BCL	MG-NA	3.06	2.13	2.06
11	a	909	BCL	C3A-C2A	-3.06	1.45	1.54
12	A	931	CLA	C1D-C2D	-3.04	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	A	910	CLA	C3A-C2A	-3.03	1.46	1.54
11	a	907	BCL	C2C-C3C	-3.02	1.46	1.54
11	A	902	BCL	CHD-C1D	3.02	1.44	1.38
10	A	901	2GO	CHA-C1A	3.02	1.51	1.41
18	C	301	HEC	C1C-NC	-3.02	1.29	1.36
12	A	931	CLA	C3D-C2D	3.02	1.47	1.39
12	A	911	CLA	C3B-C2B	3.02	1.44	1.40
10	a	903	2GO	C3D-C2D	-3.01	1.34	1.39
12	a	914	CLA	C2A-C1A	-3.01	1.45	1.52
12	A	910	CLA	C3C-C2C	3.01	1.43	1.36
12	A	910	CLA	C10-C8	-3.01	1.36	1.52
12	a	913	CLA	O1D-CGD	-3.00	1.13	1.21
11	a	904	BCL	OBB-CAB	-3.00	1.13	1.22
11	a	908	BCL	OBB-CAB	-2.99	1.13	1.22
11	A	909	BCL	CHD-C1D	2.99	1.44	1.38
11	A	902	BCL	O1D-CGD	-2.98	1.13	1.21
12	A	910	CLA	CHC-C1C	2.97	1.42	1.35
18	c	202	HEC	CMD-C2D	-2.96	1.45	1.51
11	a	911	BCL	C3A-C2A	-2.96	1.46	1.54
11	A	902	BCL	CMB-C2B	-2.96	1.45	1.51
11	A	906	BCL	CHD-C1D	2.96	1.44	1.38
11	A	905	BCL	CAA-CBA	-2.95	1.43	1.52
11	A	909	BCL	CBB-CAB	-2.95	1.40	1.49
12	A	911	CLA	O1D-CGD	-2.95	1.13	1.21
12	A	931	CLA	CHD-C1D	2.95	1.44	1.38
12	a	913	CLA	C10-C8	2.94	1.68	1.52
11	A	903	BCL	O2D-CED	-2.92	1.38	1.45
11	A	902	BCL	C3A-C2A	-2.92	1.46	1.54
12	A	931	CLA	CMA-C3A	-2.92	1.46	1.53
11	A	904	BCL	O2D-CGD	2.91	1.40	1.33
11	A	903	BCL	C3B-CAB	-2.91	1.41	1.49
12	A	931	CLA	C1C-C2C	-2.91	1.38	1.44
11	a	908	BCL	O2D-CGD	2.90	1.40	1.33
12	A	910	CLA	O1D-CGD	-2.89	1.14	1.21
11	a	905	BCL	O2D-CGD	2.89	1.40	1.33
11	A	908	BCL	O2D-CGD	2.88	1.40	1.33
11	A	904	BCL	CMB-C2B	-2.88	1.45	1.51
11	a	905	BCL	C2C-C3C	-2.87	1.46	1.54
13	A	913	LYC	C59-C58	-2.87	1.27	1.34
11	A	908	BCL	C2C-C3C	-2.86	1.46	1.54
12	a	913	CLA	MG-NC	2.86	2.13	2.06
12	A	910	CLA	C1C-NC	-2.86	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	A	933	CLA	C3A-C2A	-2.85	1.46	1.54
12	a	914	CLA	C3A-C2A	-2.84	1.46	1.54
11	a	904	BCL	C2C-C3C	-2.84	1.46	1.54
11	A	902	BCL	OBB-CAB	-2.84	1.14	1.22
12	a	901	CLA	CAA-C2A	-2.84	1.48	1.54
11	a	909	BCL	C2C-C3C	-2.83	1.46	1.54
11	a	910	BCL	C4B-CHC	2.82	1.48	1.41
11	a	907	BCL	O1A-CGA	-2.82	1.14	1.22
10	A	901	2GO	CBC-CAC	-2.82	1.38	1.51
12	a	901	CLA	C3C-C2C	2.80	1.42	1.36
19	E	101	84Q	C7-C6	-2.80	1.35	1.51
11	a	908	BCL	O1A-CGA	-2.79	1.14	1.22
11	A	904	BCL	OBB-CAB	-2.78	1.14	1.22
11	A	903	BCL	CMD-C2D	-2.77	1.44	1.50
10	A	901	2GO	C4B-NB	2.77	1.39	1.35
12	A	910	CLA	CMB-C2B	-2.76	1.45	1.51
12	A	912	CLA	C3B-C2B	2.76	1.44	1.40
12	A	912	CLA	C1D-C2D	-2.75	1.39	1.45
11	a	911	BCL	C3D-C2D	2.75	1.46	1.39
11	A	908	BCL	MG-NA	-2.74	1.99	2.06
12	A	931	CLA	C1B-NB	2.74	1.37	1.35
15	A	915	85I	O5-C5	-2.74	1.14	1.22
12	A	933	CLA	O2D-CED	-2.74	1.38	1.45
11	a	907	BCL	C3C-C4C	-2.74	1.48	1.51
11	A	906	BCL	OBB-CAB	-2.74	1.14	1.22
11	A	902	BCL	C2C-C3C	-2.73	1.46	1.54
12	a	915	CLA	O2D-CGD	2.72	1.39	1.33
11	A	907	BCL	C1B-CHB	2.71	1.48	1.41
15	A	915	85I	O6-C3	-2.71	1.40	1.44
11	A	907	BCL	O2A-C1	2.71	1.53	1.46
19	E	101	84Q	C9-C8	-2.71	1.36	1.51
11	a	907	BCL	C1D-C2D	-2.70	1.40	1.45
12	A	911	CLA	CHD-C1D	2.69	1.43	1.38
12	A	912	CLA	C2A-C1A	-2.69	1.46	1.52
10	a	903	2GO	CHA-C1A	2.69	1.50	1.41
11	a	906	BCL	O1D-CGD	-2.68	1.14	1.21
12	A	912	CLA	C3C-C2C	2.68	1.42	1.36
18	C	301	HEC	CAA-C2A	-2.68	1.47	1.52
12	A	933	CLA	CBA-CGA	-2.68	1.42	1.50
15	A	915	85I	P-O2	-2.68	1.42	1.55
18	C	301	HEC	O1A-CGA	-2.68	1.13	1.22
11	A	908	BCL	O1A-CGA	-2.67	1.14	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	907	BCL	C3A-C2A	-2.67	1.47	1.54
12	A	910	CLA	CAA-C2A	-2.67	1.49	1.54
18	C	301	HEC	CBA-CGA	-2.67	1.44	1.50
11	a	909	BCL	C5-C3	-2.66	1.45	1.51
11	a	906	BCL	CHD-C1D	2.66	1.43	1.38
12	A	931	CLA	MG-NC	2.66	2.12	2.06
12	A	911	CLA	CMC-C2C	-2.65	1.45	1.50
11	A	907	BCL	C2A-C1A	-2.65	1.46	1.52
11	a	909	BCL	CMD-C2D	-2.63	1.45	1.50
15	A	915	85I	C33-C32	-2.63	1.37	1.51
11	a	909	BCL	O2D-CGD	2.63	1.39	1.33
19	E	101	84Q	C9-C10	-2.62	1.36	1.51
12	a	914	CLA	O1A-CGA	-2.61	1.14	1.22
12	a	901	CLA	O1A-CGA	-2.61	1.14	1.22
12	A	910	CLA	CHD-C1D	2.60	1.43	1.38
12	A	912	CLA	C1B-CHB	2.59	1.48	1.41
11	A	908	BCL	CBD-CGD	-2.59	1.44	1.52
11	A	905	BCL	O2A-CGA	2.58	1.40	1.33
11	a	909	BCL	CBB-CAB	-2.57	1.42	1.49
11	A	902	BCL	CBB-CAB	-2.56	1.42	1.49
12	a	901	CLA	C5-C3	-2.56	1.46	1.51
12	A	931	CLA	MG-NA	2.55	2.12	2.06
12	A	933	CLA	MG-ND	2.55	2.10	2.05
10	A	901	2GO	C4C-C3C	-2.55	1.40	1.45
11	A	905	BCL	O2A-C1	-2.55	1.39	1.46
13	c	201	LYC	C1-C2	-2.54	1.43	1.50
11	A	907	BCL	C3C-C4C	-2.54	1.48	1.51
11	a	907	BCL	O2D-CED	-2.54	1.39	1.45
13	c	201	LYC	C15-C16	-2.54	1.28	1.34
19	a	921	84Q	P-O4	2.54	1.67	1.60
18	c	202	HEC	C2A-C3A	2.54	1.45	1.37
12	A	931	CLA	C3A-C4A	-2.53	1.43	1.51
12	a	901	CLA	C2-C3	-2.53	1.26	1.33
18	C	301	HEC	CMB-C2B	-2.52	1.45	1.51
12	A	911	CLA	C10-C8	-2.52	1.39	1.52
13	A	913	LYC	C11-C12	-2.52	1.40	1.45
11	a	911	BCL	CBA-CGA	-2.51	1.43	1.50
11	A	906	BCL	C2A-C1A	-2.51	1.46	1.52
10	A	901	2GO	C3B-C2B	-2.50	1.34	1.39
12	A	910	CLA	C3B-C2B	2.50	1.43	1.40
15	a	920	85I	C4-C3	-2.50	1.46	1.51
11	a	908	BCL	C3D-C2D	2.50	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	a	910	BCL	C3A-C2A	-2.49	1.47	1.54
12	A	910	CLA	O2D-CGD	2.49	1.39	1.33
12	a	912	CLA	CHD-C4C	2.49	1.44	1.39
11	a	907	BCL	C3B-CAB	-2.49	1.42	1.49
19	E	101	84Q	C6-C5	-2.48	1.37	1.51
11	a	909	BCL	C3A-C4A	-2.48	1.43	1.51
10	a	903	2GO	O1A-CGA	-2.48	1.15	1.22
11	A	905	BCL	C2C-C3C	-2.47	1.47	1.54
11	a	908	BCL	MG-ND	2.47	2.10	2.05
11	a	910	BCL	CBB-CAB	-2.47	1.42	1.49
11	a	907	BCL	C1B-CHB	2.47	1.47	1.41
10	A	901	2GO	O1D-CGD	-2.46	1.16	1.21
19	E	101	84Q	C8-C7	-2.45	1.37	1.51
12	a	913	CLA	C5-C3	-2.45	1.46	1.51
11	A	905	BCL	CMB-C2B	-2.45	1.46	1.51
15	a	918	85I	C4-C3	2.45	1.57	1.51
12	A	911	CLA	C3B-CAB	-2.44	1.43	1.47
11	a	911	BCL	MG-NA	2.43	2.12	2.06
11	A	907	BCL	O1A-CGA	-2.43	1.15	1.22
11	A	904	BCL	C3A-C2A	-2.43	1.47	1.54
12	A	910	CLA	CBD-CGD	-2.42	1.44	1.52
10	a	903	2GO	C3B-C2B	-2.42	1.35	1.39
11	a	909	BCL	C2C-C1C	-2.41	1.44	1.51
12	A	933	CLA	C2A-C1A	-2.41	1.46	1.52
19	E	101	84Q	C5-C4	-2.40	1.38	1.51
11	A	908	BCL	C3D-C2D	2.40	1.45	1.39
11	A	903	BCL	C1B-CHB	2.40	1.47	1.41
11	A	906	BCL	MG-ND	2.40	2.10	2.05
12	a	913	CLA	C2A-C1A	-2.39	1.46	1.52
12	a	901	CLA	CMC-C2C	-2.39	1.45	1.50
12	a	914	CLA	C4D-CHA	2.39	1.46	1.38
11	a	911	BCL	C2C-C3C	-2.38	1.47	1.54
11	a	906	BCL	CAA-CBA	-2.38	1.45	1.52
17	g	101	85N	O4-C24	-2.37	1.22	1.30
11	a	906	BCL	C3D-C2D	2.37	1.45	1.39
12	A	910	CLA	CMA-C3A	-2.37	1.48	1.53
13	A	913	LYC	C52-C51	-2.36	1.46	1.50
11	a	904	BCL	CAA-CBA	-2.36	1.45	1.52
13	c	201	LYC	C62-C61	-2.36	1.44	1.50
11	a	906	BCL	C3A-C4A	-2.36	1.44	1.51
12	A	910	CLA	C2A-C1A	-2.36	1.46	1.52
11	a	911	BCL	O1D-CGD	-2.35	1.15	1.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	A	910	CLA	O2D-CED	-2.35	1.39	1.45
19	E	101	84Q	O-C14	-2.35	1.15	1.22
11	A	907	BCL	CHD-C1D	2.35	1.42	1.38
11	A	904	BCL	CMA-C3A	-2.35	1.48	1.53
11	A	905	BCL	C4B-CHC	2.34	1.47	1.41
11	A	908	BCL	C3A-C4A	-2.34	1.44	1.51
11	a	904	BCL	C2A-C1A	-2.34	1.47	1.52
11	a	905	BCL	C3D-C2D	2.33	1.45	1.39
12	A	931	CLA	C4C-C3C	-2.33	1.41	1.45
18	C	301	HEC	C4D-ND	-2.33	1.31	1.36
10	a	903	2GO	C1A-C2A	2.33	1.50	1.45
12	a	913	CLA	C3A-C2A	-2.32	1.48	1.54
12	A	911	CLA	O2A-CGA	2.32	1.40	1.33
12	A	931	CLA	CBD-CGD	2.31	1.59	1.52
12	a	913	CLA	O2A-CGA	2.31	1.40	1.33
12	a	914	CLA	C4C-C3C	-2.31	1.41	1.45
15	A	915	85I	O7-C20	-2.31	1.15	1.22
11	A	908	BCL	O2D-CED	-2.31	1.39	1.45
12	a	914	CLA	C3D-C2D	2.29	1.45	1.39
11	a	904	BCL	CMA-C3A	-2.29	1.48	1.53
11	A	903	BCL	C4B-CHC	2.29	1.47	1.41
11	a	908	BCL	C4-C3	-2.28	1.44	1.50
11	A	904	BCL	C1D-ND	-2.28	1.35	1.37
12	a	915	CLA	O2A-CGA	2.28	1.40	1.33
11	A	908	BCL	CAC-C3C	-2.28	1.49	1.54
12	A	931	CLA	O2A-C1	-2.27	1.39	1.46
11	a	911	BCL	C2A-C1A	-2.26	1.47	1.52
12	a	913	CLA	O2A-C1	-2.26	1.39	1.46
11	A	908	BCL	OB- CAB	-2.25	1.15	1.22
11	a	907	BCL	C3A-C4A	-2.24	1.44	1.51
11	a	906	BCL	CBD-CGD	-2.24	1.45	1.52
12	a	914	CLA	C3B-CAB	2.24	1.52	1.47
13	c	201	LYC	C21-C20	-2.23	1.30	1.36
11	A	904	BCL	CAA-CBA	-2.23	1.45	1.52
11	A	904	BCL	C1B-CHB	2.23	1.47	1.41
11	a	907	BCL	CBA-CGA	-2.23	1.44	1.50
11	a	909	BCL	C4-C3	-2.23	1.45	1.50
12	a	913	CLA	C3C-C2C	2.22	1.41	1.36
11	A	909	BCL	CMD-C2D	-2.21	1.46	1.50
13	A	913	LYC	C18-C17	-2.21	1.46	1.50
11	a	909	BCL	CMA-C3A	-2.21	1.48	1.53
11	a	908	BCL	O2A-CGA	2.20	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	a	915	CLA	C3A-C2A	-2.20	1.48	1.54
11	A	909	BCL	C2A-C1A	-2.20	1.47	1.52
11	A	908	BCL	CHD-C1D	2.20	1.42	1.38
10	a	903	2GO	ZN-NA	2.20	2.14	2.01
10	A	901	2GO	C1C-NC	-2.19	1.34	1.38
11	A	909	BCL	C9-C8	-2.19	1.45	1.52
11	A	908	BCL	CHD-C4C	2.18	1.45	1.39
12	A	933	CLA	C1B-NB	-2.18	1.33	1.35
11	a	905	BCL	C3A-C2A	-2.18	1.48	1.54
11	A	908	BCL	CMB-C2B	-2.18	1.47	1.51
12	a	912	CLA	C2A-C1A	-2.17	1.47	1.52
11	a	906	BCL	C3A-C2A	-2.17	1.48	1.54
11	A	909	BCL	O2D-CED	2.17	1.50	1.45
12	a	901	CLA	C1D-ND	2.17	1.40	1.37
11	A	909	BCL	CBA-CGA	-2.16	1.44	1.50
11	A	908	BCL	CMC-C2C	-2.16	1.48	1.53
13	c	201	LYC	C18-C17	-2.16	1.46	1.50
11	A	904	BCL	C4D-CHA	2.15	1.46	1.38
12	a	913	CLA	C4B-CHC	2.15	1.47	1.41
11	A	904	BCL	CHD-C1D	2.15	1.42	1.38
12	a	915	CLA	C4B-CHC	2.15	1.47	1.41
12	A	933	CLA	MG-NC	2.14	2.11	2.06
12	a	912	CLA	C3D-C2D	2.14	1.45	1.39
12	a	914	CLA	CBD-CGD	-2.14	1.45	1.52
11	a	908	BCL	C4B-CHC	2.14	1.46	1.41
11	a	907	BCL	CAA-CBA	-2.14	1.46	1.52
12	A	912	CLA	CHD-C1D	2.14	1.42	1.38
11	a	906	BCL	C4B-CHC	2.12	1.46	1.41
11	A	906	BCL	O2A-C1	-2.12	1.40	1.46
11	a	909	BCL	CHD-C1D	2.12	1.42	1.38
12	A	933	CLA	C3D-C2D	2.11	1.44	1.39
12	a	912	CLA	C4C-C3C	-2.11	1.41	1.45
13	A	913	LYC	C5-C4	-2.11	1.43	1.50
11	A	905	BCL	C3B-CAB	-2.11	1.43	1.49
11	A	903	BCL	C2C-C3C	-2.10	1.48	1.54
11	A	903	BCL	CAA-CBA	-2.10	1.46	1.52
12	a	914	CLA	CHD-C1D	2.09	1.42	1.38
12	A	933	CLA	C2-C3	-2.09	1.28	1.33
11	A	909	BCL	C2C-C3C	-2.08	1.48	1.54
11	a	908	BCL	C3C-C4C	-2.08	1.49	1.51
12	A	911	CLA	CHD-C4C	2.08	1.44	1.39
11	A	909	BCL	O2A-CGA	2.08	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	902	BCL	OBD-CAD	-2.07	1.18	1.22
12	a	912	CLA	O1A-CGA	-2.07	1.16	1.22
11	a	910	BCL	CHD-C4C	2.07	1.45	1.39
11	A	908	BCL	C5-C3	-2.06	1.47	1.51
11	a	911	BCL	CAC-C3C	-2.06	1.49	1.54
11	a	909	BCL	C2-C3	-2.06	1.28	1.33
12	a	915	CLA	CHD-C1D	2.06	1.42	1.38
18	c	202	HEC	CAA-CBA	-2.06	1.42	1.52
11	A	907	BCL	C1-C2	2.05	1.55	1.49
11	A	904	BCL	CBA-CGA	-2.05	1.45	1.50
11	A	909	BCL	CMB-C2B	-2.05	1.47	1.51
13	c	201	LYC	C63-C64	-2.05	1.46	1.53
11	a	911	BCL	CHD-C4C	2.04	1.44	1.39
11	a	907	BCL	CMD-C2D	-2.04	1.46	1.50
12	a	901	CLA	O2A-C1	-2.04	1.40	1.46
12	A	911	CLA	C2A-C1A	-2.03	1.47	1.52
11	A	907	BCL	C6-C7	2.03	1.60	1.52
11	a	904	BCL	C1B-CHB	2.03	1.46	1.41
11	A	907	BCL	C3A-C4A	-2.03	1.45	1.51
11	a	910	BCL	C4D-CHA	2.02	1.45	1.38
12	a	914	CLA	O2D-CED	-2.01	1.40	1.45
11	A	904	BCL	C3D-C2D	2.01	1.44	1.39
11	a	908	BCL	CMC-C2C	-2.01	1.48	1.53
11	a	904	BCL	CAC-C3C	-2.00	1.50	1.54

All (977) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	909	BCL	O2D-CGD-CBD	20.86	148.34	111.27
11	a	908	BCL	C4A-NA-C1A	18.75	115.13	106.71
11	A	906	BCL	O2D-CGD-CBD	18.23	143.66	111.27
12	A	931	CLA	O2D-CGD-CBD	18.08	143.39	111.27
11	a	907	BCL	C4A-NA-C1A	16.51	114.13	106.71
12	a	913	CLA	C1D-ND-C4D	-15.70	95.18	106.33
11	A	906	BCL	O2D-CGD-O1D	-15.50	93.54	123.84
11	a	909	BCL	O2D-CGD-CBD	15.31	138.47	111.27
12	A	912	CLA	C2C-C1C-NC	15.05	124.07	109.97
11	A	905	BCL	O2D-CGD-CBD	14.79	137.54	111.27
13	c	201	LYC	C21-C50-C51	14.72	148.32	127.31
11	A	907	BCL	C4A-NA-C1A	14.54	113.25	106.71
11	A	907	BCL	O2D-CGD-CBD	14.51	137.06	111.27
11	A	903	BCL	O2D-CGD-CBD	14.33	136.73	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	a	913	CLA	O2D-CGD-CBD	14.11	136.34	111.27
11	a	910	BCL	O2D-CGD-CBD	13.94	136.04	111.27
11	a	904	BCL	O2D-CGD-CBD	13.80	135.79	111.27
11	a	905	BCL	O2D-CGD-CBD	13.73	135.66	111.27
13	c	201	LYC	C53-C51-C50	13.54	139.72	118.94
11	A	906	BCL	CHD-C1D-ND	-13.48	112.06	124.45
11	A	906	BCL	C2D-C1D-ND	13.28	119.89	110.10
11	a	910	BCL	C1C-NC-C4C	13.20	112.64	106.71
12	a	913	CLA	O2D-CGD-O1D	-13.12	98.18	123.84
11	a	908	BCL	O2D-CGD-CBD	12.97	134.31	111.27
15	A	917	85I	O4-C4-C3	12.72	142.19	109.54
10	A	901	2GO	CMA-C3A-C4A	-12.61	105.83	125.04
11	A	902	BCL	O2D-CGD-CBD	12.44	133.38	111.27
10	a	903	2GO	CMA-C3A-C4A	-12.44	106.10	125.04
11	A	903	BCL	O2D-CGD-O1D	-12.41	99.57	123.84
12	A	931	CLA	O2D-CGD-O1D	-11.91	100.55	123.84
11	a	911	BCL	C2D-C1D-ND	11.82	118.82	110.10
11	a	907	BCL	O2D-CGD-CBD	11.80	132.25	111.27
13	c	201	LYC	C15-C14-C12	11.80	144.16	127.31
15	A	916	85I	O4-C4-C3	11.67	139.49	109.54
12	A	911	CLA	C1D-ND-C4D	-11.55	98.13	106.33
11	A	909	BCL	O2A-C1-C2	11.44	138.71	108.64
11	a	908	BCL	CBA-CAA-C2A	-11.23	80.73	113.86
10	A	901	2GO	C4A-C3A-C2A	-10.95	95.44	106.96
11	a	907	BCL	C1C-NC-C4C	-10.94	101.79	106.71
11	a	909	BCL	O2D-CGD-O1D	-10.84	102.65	123.84
11	A	909	BCL	O2A-CGA-CBA	10.83	145.89	111.91
10	a	903	2GO	CAD-C3D-C4D	-10.81	102.44	108.47
12	A	933	CLA	O2D-CGD-CBD	10.71	130.29	111.27
12	A	931	CLA	C2D-C1D-ND	-10.66	102.25	110.10
11	a	910	BCL	O2A-CGA-CBA	10.60	145.16	111.91
12	A	933	CLA	O2D-CGD-O1D	-10.55	103.22	123.84
11	a	905	BCL	O2D-CGD-O1D	-10.51	103.29	123.84
13	c	201	LYC	C21-C20-C19	10.48	144.94	123.47
12	a	901	CLA	O2D-CGD-CBD	10.42	129.78	111.27
13	c	201	LYC	C20-C19-C17	10.31	142.03	127.31
12	a	915	CLA	O2D-CGD-CBD	10.31	129.59	111.27
11	A	907	BCL	O2D-CGD-O1D	-10.21	103.87	123.84
15	a	920	85I	O4-C4-C3	10.19	135.69	109.54
17	A	932	85N	C18-O3-C17	10.16	133.48	113.80
11	A	909	BCL	O1D-CGD-CBD	-10.13	103.75	124.48
15	A	917	85I	P-O3-C3	10.12	161.93	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	908	BCL	O2D-CGD-CBD	10.09	129.19	111.27
12	a	914	CLA	O2D-CGD-CBD	10.06	129.14	111.27
11	a	909	BCL	C4A-NA-C1A	9.86	111.14	106.71
11	a	908	BCL	O2D-CGD-O1D	-9.74	104.80	123.84
11	a	910	BCL	O2A-CGA-O1A	-9.72	99.07	123.59
11	A	906	BCL	C4A-NA-C1A	9.67	111.06	106.71
12	A	931	CLA	CED-O2D-CGD	9.66	137.80	115.94
12	A	912	CLA	C3C-C4C-NC	9.60	121.33	110.57
11	A	907	BCL	C6-C5-C3	9.58	138.58	113.45
15	a	918	85I	O4-C4-C3	9.53	134.01	109.54
18	C	301	HEC	C1D-C2D-C3D	-9.47	100.41	107.00
11	a	904	BCL	C4A-NA-C1A	9.46	110.96	106.71
11	A	905	BCL	O2D-CGD-O1D	-9.34	105.57	123.84
11	a	906	BCL	CMD-C2D-C1D	9.32	141.14	124.71
11	A	907	BCL	O2A-CGA-CBA	9.32	141.15	111.91
12	A	931	CLA	C1D-ND-C4D	9.31	112.95	106.33
11	a	904	BCL	O2D-CGD-O1D	-9.27	105.70	123.84
11	a	905	BCL	CHD-C1D-ND	-9.27	115.93	124.45
12	A	910	CLA	C2C-C1C-NC	9.21	118.60	109.97
12	a	914	CLA	C3B-C4B-NB	9.19	121.09	109.21
11	a	910	BCL	O2A-C1-C2	9.13	132.62	108.64
10	A	901	2GO	CAC-C3C-C2C	-9.12	111.94	127.53
11	a	909	BCL	CHD-C1D-ND	-9.11	116.08	124.45
12	A	911	CLA	C3C-C4C-NC	9.07	120.74	110.57
13	c	201	LYC	C13-C12-C14	-9.06	110.23	122.92
11	A	906	BCL	C3D-C2D-C1D	-9.06	93.47	105.83
11	A	905	BCL	CHD-C1D-ND	-9.02	116.16	124.45
11	a	908	BCL	C1-C2-C3	9.01	141.63	126.04
12	A	933	CLA	C4-C3-C5	8.99	126.27	115.98
12	a	912	CLA	O2D-CGD-O1D	-8.97	106.30	123.84
12	A	910	CLA	O2D-CGD-CBD	8.96	127.19	111.27
11	a	911	BCL	C3D-C2D-C1D	-8.94	93.64	105.83
12	a	901	CLA	C3C-C4C-NC	8.92	120.57	110.57
11	a	909	BCL	C1-C2-C3	8.88	141.40	126.04
10	A	901	2GO	C1A-NA-C4A	8.85	120.05	106.80
11	A	907	BCL	C3D-C2D-C1D	-8.80	93.82	105.83
11	a	904	BCL	CHD-C1D-ND	-8.76	116.40	124.45
11	A	903	BCL	O2A-CGA-CBA	8.75	139.35	111.91
12	A	911	CLA	C2C-C1C-NC	8.72	118.14	109.97
11	A	906	BCL	C1D-ND-C4D	-8.65	100.19	106.33
11	a	910	BCL	C1-O2A-CGA	8.56	138.90	116.44
11	A	903	BCL	CMD-C2D-C1D	8.54	139.77	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	905	BCL	C2D-C1D-ND	8.51	116.37	110.10
11	A	902	BCL	C1-O2A-CGA	8.50	138.74	116.44
12	a	901	CLA	C1D-ND-C4D	-8.43	100.34	106.33
15	A	915	85I	O6-C3-C4	-8.41	75.44	107.08
18	c	202	HEC	CMC-C2C-C3C	8.39	135.69	125.82
11	A	907	BCL	C2D-C1D-ND	8.35	116.26	110.10
11	A	907	BCL	C7-C6-C5	8.34	136.00	113.36
11	A	909	BCL	O2D-CGD-O1D	-8.28	107.65	123.84
12	A	933	CLA	CED-O2D-CGD	8.25	134.59	115.94
11	A	904	BCL	C1C-NC-C4C	-8.24	103.00	106.71
11	A	907	BCL	C1C-NC-C4C	-8.24	103.00	106.71
11	A	905	BCL	CMD-C2D-C1D	8.23	139.22	124.71
12	a	901	CLA	O2A-CGA-CBA	8.22	137.70	111.91
11	a	905	BCL	O2A-CGA-CBA	8.19	137.61	111.91
15	A	915	85I	P-O3-C3	8.17	154.00	120.90
11	a	910	BCL	O2D-CGD-O1D	-8.17	107.87	123.84
11	A	903	BCL	O2A-C1-C2	8.14	130.02	108.64
15	A	915	85I	O4-C4-C3	8.13	130.42	109.54
11	A	905	BCL	C3D-C2D-C1D	-8.13	94.73	105.83
11	a	909	BCL	O2A-C1-C2	-8.11	87.33	108.64
10	a	903	2GO	C4C-C3C-C2C	-8.08	95.13	106.90
15	a	919	85I	O3-C3-C4	8.06	137.40	107.08
12	A	910	CLA	CMD-C2D-C1D	8.04	138.88	124.71
12	A	931	CLA	CMC-C2C-C1C	8.03	137.26	125.04
11	A	907	BCL	CMD-C2D-C1D	7.98	138.78	124.71
11	a	908	BCL	OBB-CAB-CBB	-7.97	102.22	120.17
11	a	909	BCL	CMD-C2D-C1D	7.97	138.76	124.71
12	a	901	CLA	C6-C7-C8	7.96	141.65	115.92
11	A	903	BCL	CHD-C1D-ND	-7.95	117.14	124.45
11	a	911	BCL	O2A-C1-C2	7.95	129.53	108.64
11	a	911	BCL	C1-C2-C3	7.93	139.77	126.04
12	a	913	CLA	CMD-C2D-C1D	7.87	138.57	124.71
12	a	915	CLA	O2D-CGD-O1D	-7.83	108.53	123.84
11	a	910	BCL	C4A-NA-C1A	-7.83	103.19	106.71
13	c	201	LYC	C16-C17-C19	7.83	130.96	118.94
11	A	904	BCL	CMD-C2D-C1D	7.82	138.50	124.71
12	a	914	CLA	O2D-CGD-O1D	-7.81	108.58	123.84
18	c	202	HEC	C1D-C2D-C3D	-7.80	101.57	107.00
12	A	931	CLA	C4A-NA-C1A	7.79	110.21	106.71
13	c	201	LYC	C52-C51-C50	-7.74	112.08	122.92
11	a	909	BCL	O2A-CGA-O1A	-7.73	104.08	123.59
11	a	908	BCL	CHD-C1D-ND	-7.70	117.38	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	933	CLA	C4A-NA-C1A	7.67	110.15	106.71
11	a	911	BCL	C1-O2A-CGA	7.65	136.52	116.44
11	a	905	BCL	CMD-C2D-C1D	7.63	138.16	124.71
12	A	911	CLA	C4A-NA-C1A	7.62	110.13	106.71
15	a	920	85I	O6-C3-C4	7.60	135.66	107.08
11	a	906	BCL	CHD-C1D-ND	-7.59	117.48	124.45
11	a	908	BCL	C3A-C2A-C1A	7.52	112.60	101.34
10	A	901	2GO	C2A-C1A-NA	-7.46	105.19	109.01
11	A	905	BCL	C4A-NA-C1A	7.45	110.06	106.71
15	A	916	85I	P-O3-C3	7.44	151.08	120.90
11	A	909	BCL	C4A-NA-C1A	-7.44	103.36	106.71
18	C	301	HEC	C4C-C3C-C2C	7.42	114.36	106.35
11	A	907	BCL	C1-O2A-CGA	7.42	135.90	116.44
12	a	912	CLA	C1D-ND-C4D	-7.36	101.10	106.33
12	a	901	CLA	C2C-C1C-NC	7.36	116.87	109.97
11	a	905	BCL	C3D-C2D-C1D	-7.36	95.79	105.83
13	c	201	LYC	C15-C16-C17	7.30	146.92	126.42
12	a	901	CLA	C11-C10-C8	-7.27	92.41	115.92
11	A	905	BCL	CBA-CAA-C2A	-7.27	92.40	113.86
12	A	910	CLA	C1D-ND-C4D	-7.23	101.20	106.33
10	a	903	2GO	C4C-CHD-C1D	7.21	132.07	122.56
11	A	907	BCL	CED-O2D-CGD	7.20	132.22	115.94
11	a	910	BCL	C1-C2-C3	-7.17	113.63	126.04
18	c	202	HEC	O2A-CGA-O1A	-7.16	105.45	123.30
12	a	913	CLA	C11-C10-C8	-7.16	92.78	115.92
11	a	908	BCL	C3D-C2D-C1D	-7.15	96.07	105.83
15	a	919	85I	P-O3-C3	7.14	149.84	120.90
12	A	912	CLA	C1C-C2C-C3C	-7.14	99.45	106.96
11	a	911	BCL	O2A-CGA-CBA	7.14	134.30	111.91
12	a	912	CLA	O2D-CGD-CBD	7.13	123.93	111.27
12	A	912	CLA	C1D-ND-C4D	-7.11	101.28	106.33
12	A	912	CLA	O2D-CGD-O1D	-7.11	109.94	123.84
11	a	907	BCL	C1-C2-C3	-7.10	113.76	126.04
12	a	912	CLA	CMD-C2D-C1D	7.07	137.18	124.71
11	A	907	BCL	C1-C2-C3	7.07	138.27	126.04
11	A	908	BCL	CHD-C1D-ND	-7.01	118.01	124.45
11	A	909	BCL	C3D-C2D-C1D	-7.00	96.28	105.83
12	A	911	CLA	CMD-C2D-C1D	6.99	137.04	124.71
11	a	906	BCL	C3D-C2D-C1D	-6.99	96.30	105.83
12	A	931	CLA	C1-O2A-CGA	6.97	134.72	116.44
19	E	101	84Q	O1-C15-C16	6.95	127.38	109.54
12	a	914	CLA	C3C-C4C-NC	6.88	118.29	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	903	BCL	C1-O2A-CGA	6.87	134.47	116.44
10	A	901	2GO	C1C-NC-C4C	6.86	115.78	106.49
12	A	911	CLA	CHD-C4C-C3C	-6.86	114.76	124.84
11	A	903	BCL	O1A-CGA-CBA	-6.85	97.03	123.73
12	a	913	CLA	C3D-C2D-C1D	-6.84	96.50	105.83
12	a	901	CLA	CMD-C2D-C1D	6.84	136.76	124.71
11	a	908	BCL	OBB-CAB-C3B	6.78	132.02	119.99
11	A	902	BCL	O2D-CGD-O1D	-6.76	110.61	123.84
11	a	911	BCL	CED-O2D-CGD	6.75	131.20	115.94
11	A	905	BCL	C3A-C2A-C1A	6.75	111.44	101.34
11	a	904	BCL	O2A-CGA-CBA	6.74	133.07	111.91
12	A	931	CLA	CHD-C4C-C3C	-6.73	114.95	124.84
11	a	911	BCL	CHD-C1D-ND	-6.73	118.27	124.45
13	c	201	LYC	C18-C17-C16	-6.73	107.48	118.08
12	a	915	CLA	C4-C3-C5	6.72	123.67	115.98
11	a	908	BCL	CMD-C2D-C1D	6.66	136.45	124.71
11	A	904	BCL	C3D-C2D-C1D	-6.62	96.79	105.83
11	A	902	BCL	C4A-NA-C1A	6.56	109.66	106.71
12	A	911	CLA	C3D-C2D-C1D	-6.54	96.91	105.83
10	a	903	2GO	CHA-CBD-CAD	-6.53	100.71	107.17
12	A	912	CLA	O2D-CGD-CBD	6.53	122.87	111.27
10	a	903	2GO	C1A-NA-C4A	6.52	116.56	106.80
10	a	903	2GO	CAC-C3C-C4C	-6.52	116.36	124.81
11	a	911	BCL	CMD-C2D-C1D	6.48	136.13	124.71
12	A	912	CLA	CAC-C3C-C4C	6.48	133.21	124.81
12	a	914	CLA	CHD-C4C-C3C	-6.47	115.33	124.84
11	a	907	BCL	O2D-CGD-O1D	-6.46	111.21	123.84
11	a	907	BCL	CBA-CAA-C2A	-6.45	94.82	113.86
11	A	907	BCL	CHD-C1D-ND	-6.44	118.53	124.45
11	a	904	BCL	CED-O2D-CGD	6.44	130.50	115.94
12	a	915	CLA	C4A-NA-C1A	-6.43	103.81	106.71
11	A	909	BCL	C4-C3-C5	-6.42	104.47	115.27
13	A	913	LYC	C18-C17-C19	-6.41	113.94	122.92
13	c	201	LYC	C11-C12-C14	6.40	128.77	118.94
11	a	905	BCL	C4A-NA-C1A	6.40	109.58	106.71
12	a	912	CLA	C2C-C1C-NC	6.40	115.96	109.97
11	a	905	BCL	CHD-C4C-NC	6.39	132.18	125.08
10	a	903	2GO	C1A-C2A-C3A	-6.38	98.20	106.61
11	A	906	BCL	OBB-CAB-C3B	6.35	131.27	119.99
12	A	931	CLA	C2C-C1C-NC	6.33	115.90	109.97
11	A	905	BCL	C1D-ND-C4D	-6.32	101.85	106.33
12	A	912	CLA	CMA-C3A-C4A	6.31	128.73	111.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	A	901	2GO	CMC-C2C-C1C	-6.29	115.46	125.04
13	c	201	LYC	C20-C21-C50	-6.28	110.61	123.47
11	A	903	BCL	C4A-NA-C1A	6.27	109.53	106.71
12	a	912	CLA	O2A-CGA-CBA	6.27	131.59	111.91
13	c	201	LYC	C52-C51-C53	-6.27	108.20	118.08
11	A	905	BCL	CAA-C2A-C3A	-6.25	95.66	112.78
11	a	905	BCL	C4-C3-C2	-6.25	107.65	123.68
11	A	902	BCL	CHD-C1D-ND	-6.24	118.72	124.45
12	A	933	CLA	C3D-C2D-C1D	-6.24	97.31	105.83
12	a	915	CLA	CMD-C2D-C1D	6.23	135.70	124.71
11	A	907	BCL	O1A-CGA-CBA	-6.22	99.48	123.73
12	a	913	CLA	CAC-C3C-C4C	6.20	132.86	124.81
12	A	910	CLA	O2D-CGD-O1D	-6.19	111.73	123.84
11	a	911	BCL	O2D-CGD-CBD	6.18	122.25	111.27
11	a	904	BCL	CHD-C4C-NC	6.17	131.92	125.08
11	a	911	BCL	C1C-NC-C4C	6.16	109.48	106.71
18	c	202	HEC	C4C-C3C-C2C	6.14	112.99	106.35
12	a	915	CLA	C3C-C4C-NC	6.14	117.46	110.57
11	a	907	BCL	C16-C15-C13	-6.13	96.12	115.92
12	a	901	CLA	CHD-C4C-C3C	-6.11	115.85	124.84
12	A	911	CLA	C4C-C3C-C2C	-6.10	98.00	106.90
11	a	910	BCL	CMD-C2D-C1D	6.09	135.44	124.71
11	a	904	BCL	CMD-C2D-C1D	6.07	135.40	124.71
10	a	903	2GO	CMC-C2C-C1C	-6.05	115.82	125.04
10	a	903	2GO	C16-C15-C13	6.02	135.38	115.92
11	A	902	BCL	CMD-C2D-C1D	5.97	135.23	124.71
12	a	901	CLA	O2D-CGD-O1D	-5.96	112.19	123.84
11	a	907	BCL	CMD-C2D-C1D	5.94	135.19	124.71
18	c	202	HEC	CMB-C2B-C3B	5.94	132.80	125.82
11	A	909	BCL	C1C-NC-C4C	5.91	109.36	106.71
11	a	909	BCL	C4-C3-C2	-5.90	108.53	123.68
12	A	933	CLA	CMB-C2B-C1B	5.90	137.53	128.46
11	A	907	BCL	C4-C3-C2	-5.90	108.55	123.68
11	a	908	BCL	C2A-C3A-C4A	-5.88	92.37	101.87
12	a	901	CLA	CHD-C1D-ND	-5.87	119.06	124.45
10	A	901	2GO	CAC-C3C-C4C	-5.86	117.20	124.81
11	A	909	BCL	CMD-C2D-C1D	5.85	135.02	124.71
11	A	906	BCL	CED-O2D-CGD	5.84	129.14	115.94
11	A	906	BCL	O2A-CGA-O1A	-5.84	108.86	123.59
11	a	909	BCL	C1-O2A-CGA	5.82	131.72	116.44
12	A	933	CLA	O2A-C1-C2	-5.82	93.34	108.64
13	A	913	LYC	C57-C56-C55	5.80	131.04	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	a	910	BCL	CED-O2D-CGD	5.78	129.01	115.94
11	a	906	BCL	CAC-C3C-C4C	-5.78	99.76	112.58
12	A	931	CLA	O2A-CGA-CBA	5.78	130.04	111.91
12	a	915	CLA	O2A-CGA-O1A	-5.77	109.02	123.59
11	a	904	BCL	C3C-C4C-CHD	-5.77	111.06	123.39
11	a	908	BCL	C5-C3-C2	5.75	132.75	121.12
11	A	909	BCL	O2A-CGA-O1A	-5.73	109.12	123.59
12	a	912	CLA	CED-O2D-CGD	5.72	128.86	115.94
11	a	905	BCL	CED-O2D-CGD	5.70	128.83	115.94
12	a	912	CLA	C3B-C4B-NB	5.69	116.56	109.21
11	A	904	BCL	CHD-C1D-ND	-5.67	119.24	124.45
12	a	912	CLA	C3C-C4C-NC	5.65	116.91	110.57
12	a	915	CLA	C3D-C2D-C1D	-5.65	98.12	105.83
12	A	910	CLA	C3C-C4C-NC	5.62	116.88	110.57
11	a	906	BCL	C1C-NC-C4C	-5.62	104.18	106.71
18	C	301	HEC	CMC-C2C-C3C	5.62	132.43	125.82
12	A	933	CLA	C3B-C4B-NB	5.62	116.47	109.21
12	A	933	CLA	C2C-C1C-NC	5.61	115.23	109.97
11	a	909	BCL	C3D-C2D-C1D	-5.61	98.17	105.83
11	a	908	BCL	C2D-C1D-ND	5.61	114.23	110.10
13	c	201	LYC	C1-C2-C4	-5.59	106.48	122.65
12	a	901	CLA	C4C-C3C-C2C	-5.55	98.81	106.90
11	A	902	BCL	C3C-C4C-CHD	-5.55	111.54	123.39
12	a	914	CLA	C2C-C1C-NC	5.53	115.16	109.97
12	A	912	CLA	C4A-NA-C1A	5.53	109.19	106.71
12	a	915	CLA	CMC-C2C-C1C	5.52	133.45	125.04
11	A	902	BCL	CHD-C4C-NC	5.51	131.20	125.08
12	a	914	CLA	CED-O2D-CGD	5.50	128.38	115.94
11	A	909	BCL	C9-C8-C10	-5.49	91.39	111.29
11	A	904	BCL	C4A-NA-C1A	5.48	109.17	106.71
11	A	905	BCL	C1C-NC-C4C	5.47	109.17	106.71
11	A	905	BCL	CAA-C2A-C1A	-5.46	94.09	111.97
12	a	914	CLA	CHD-C1D-ND	-5.45	119.45	124.45
11	a	905	BCL	C1-C2-C3	5.43	135.43	126.04
15	a	920	85I	P-O3-C3	-5.41	98.96	120.90
11	a	904	BCL	C1-C2-C3	-5.41	116.69	126.04
12	A	910	CLA	C1C-C2C-C3C	-5.39	101.29	106.96
12	A	911	CLA	O2D-CGD-O1D	-5.36	113.35	123.84
12	a	913	CLA	C2D-C1D-ND	5.35	114.05	110.10
19	E	101	84Q	P-O4-C16	5.35	142.59	120.90
11	a	908	BCL	CAA-C2A-C1A	-5.34	94.47	111.97
13	c	201	LYC	C3-C2-C4	5.34	138.07	122.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	a	914	CLA	CBA-CAA-C2A	-5.31	98.19	113.86
11	a	909	BCL	CED-O2D-CGD	5.30	127.92	115.94
11	a	906	BCL	C3C-C4C-CHD	-5.28	112.10	123.39
18	c	202	HEC	O2A-CGA-CBA	5.28	131.00	114.03
11	a	904	BCL	C3D-C2D-C1D	-5.27	98.64	105.83
11	a	908	BCL	CED-O2D-CGD	5.26	127.83	115.94
11	A	904	BCL	C3C-C4C-CHD	-5.22	112.25	123.39
13	c	201	LYC	C8-C7-C9	-5.21	109.15	122.59
11	A	906	BCL	C1-O2A-CGA	5.20	130.10	116.44
11	a	910	BCL	C5-C3-C2	5.20	131.64	121.12
11	a	905	BCL	C5-C3-C2	5.20	131.64	121.12
12	A	911	CLA	O2A-CGA-CBA	5.19	128.21	111.91
11	A	903	BCL	CBA-CAA-C2A	5.19	129.18	113.86
12	a	913	CLA	C3C-C4C-NC	5.19	116.39	110.57
12	a	915	CLA	O2A-CGA-CBA	5.16	128.12	111.91
11	A	908	BCL	C3D-C2D-C1D	-5.16	98.78	105.83
11	a	909	BCL	C5-C3-C2	5.16	131.55	121.12
12	A	910	CLA	CHD-C1D-ND	-5.14	119.73	124.45
11	A	905	BCL	CMA-C3A-C4A	5.13	125.56	111.77
12	a	901	CLA	C3D-C4D-ND	5.12	118.53	110.24
11	A	903	BCL	C3C-C4C-CHD	-5.12	112.46	123.39
12	A	910	CLA	C6-C7-C8	5.11	132.44	115.92
11	a	906	BCL	O2D-CGD-O1D	-5.11	113.85	123.84
11	A	908	BCL	CAA-C2A-C3A	-5.11	98.80	112.78
11	a	909	BCL	O2A-CGA-CBA	5.10	127.93	111.91
11	a	906	BCL	C4A-NA-C1A	5.09	108.99	106.71
10	A	901	2GO	C1-O2A-CGA	5.08	129.78	116.44
11	A	906	BCL	CMD-C2D-C1D	5.08	133.67	124.71
11	a	907	BCL	CHD-C1D-ND	-5.08	119.79	124.45
11	a	907	BCL	C1D-ND-C4D	5.06	109.93	106.33
11	a	905	BCL	C3C-C4C-CHD	-5.05	112.59	123.39
11	A	902	BCL	O2A-CGA-CBA	5.05	127.75	111.91
12	A	911	CLA	CAC-C3C-C4C	5.03	131.34	124.81
11	a	911	BCL	C4A-NA-C1A	5.02	108.96	106.71
13	A	913	LYC	C13-C12-C11	4.99	125.93	118.08
10	a	903	2GO	CAA-C2A-C3A	-4.98	118.60	127.88
13	c	201	LYC	C14-C15-C16	-4.98	107.67	123.22
12	A	931	CLA	CHD-C4C-NC	4.97	132.03	124.20
11	A	903	BCL	C3D-C2D-C1D	-4.94	99.09	105.83
10	A	901	2GO	CHC-C1C-NC	4.91	130.90	124.68
12	A	910	CLA	C4A-NA-C1A	-4.90	104.50	106.71
11	A	902	BCL	CED-O2D-CGD	4.89	127.00	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	931	CLA	C1C-C2C-C3C	-4.89	101.81	106.96
19	a	921	84Q	O1-C15-C16	4.86	122.03	109.54
12	a	913	CLA	CHD-C4C-C3C	-4.86	117.70	124.84
10	A	901	2GO	C4C-CHD-C1D	4.85	128.97	122.56
12	a	915	CLA	CAC-C3C-C4C	4.85	131.10	124.81
13	c	201	LYC	C5-C4-C2	4.85	144.33	127.75
12	a	913	CLA	O2A-CGA-CBA	4.85	127.12	111.91
11	a	908	BCL	CAA-C2A-C3A	-4.85	99.51	112.78
12	A	933	CLA	CAC-C3C-C4C	4.84	131.10	124.81
11	A	903	BCL	OBb-CAB-CBB	-4.83	109.29	120.17
12	A	933	CLA	CMC-C2C-C1C	4.83	132.39	125.04
11	a	904	BCL	C1-O2A-CGA	4.82	129.09	116.44
11	A	909	BCL	O1A-CGA-CBA	-4.82	104.93	123.73
12	a	915	CLA	C3B-C4B-NB	4.81	115.43	109.21
12	a	901	CLA	C3D-C2D-C1D	-4.81	99.27	105.83
12	A	910	CLA	C11-C10-C8	4.80	131.42	115.92
11	A	904	BCL	CED-O2D-CGD	4.80	126.78	115.94
11	A	904	BCL	O2D-CGD-CBD	4.80	119.79	111.27
12	a	914	CLA	C4C-C3C-C2C	-4.79	99.91	106.90
13	c	201	LYC	C57-C56-C55	-4.78	116.23	122.92
11	a	907	BCL	O2A-CGA-CBA	4.77	126.89	111.91
18	c	202	HEC	O2D-CGD-O1D	-4.76	111.44	123.30
13	c	201	LYC	C10-C11-C12	4.75	139.77	126.42
11	a	905	BCL	OBb-CAB-CBB	-4.75	109.48	120.17
12	a	913	CLA	CHD-C1D-ND	-4.75	120.09	124.45
19	E	101	84Q	O4-C16-C15	4.74	124.93	107.08
17	A	932	85N	O3-C17-O6	4.74	124.04	110.72
12	A	912	CLA	CHD-C4C-C3C	-4.74	117.87	124.84
11	A	905	BCL	C3C-C4C-CHD	-4.73	113.28	123.39
18	C	301	HEC	C3C-C4C-NC	-4.73	102.01	110.94
12	a	913	CLA	C3D-C4D-ND	4.73	117.89	110.24
11	A	908	BCL	C2D-C1D-ND	4.73	113.59	110.10
12	A	910	CLA	C3D-C2D-C1D	-4.73	99.38	105.83
11	a	911	BCL	OBb-CAB-C3B	-4.71	111.63	119.99
11	A	909	BCL	CHD-C1D-ND	-4.70	120.13	124.45
10	a	903	2GO	C3A-C4A-NA	-4.70	102.95	109.07
12	A	933	CLA	C1-O2A-CGA	4.70	128.77	116.44
11	a	904	BCL	C1D-ND-C4D	-4.69	103.00	106.33
11	A	904	BCL	CBC-CAC-C3C	4.69	123.91	113.47
11	A	908	BCL	CMD-C2D-C1D	4.69	132.97	124.71
12	a	913	CLA	C1-O2A-CGA	4.67	128.70	116.44
11	A	902	BCL	CBC-CAC-C3C	4.67	123.86	113.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	912	CLA	CMD-C2D-C1D	4.66	132.92	124.71
11	A	908	BCL	C1-C2-C3	-4.64	118.02	126.04
11	a	907	BCL	CED-O2D-CGD	4.63	126.41	115.94
19	a	921	84Q	O4-C16-C15	4.61	124.42	107.08
12	A	912	CLA	CED-O2D-CGD	4.60	126.35	115.94
11	a	908	BCL	CHD-C4C-NC	4.60	130.19	125.08
11	A	907	BCL	C4-C3-C5	4.59	122.98	115.27
18	C	301	HEC	O2A-CGA-O1A	-4.58	111.87	123.30
11	A	909	BCL	C1-O2A-CGA	4.58	128.45	116.44
11	A	908	BCL	O2A-CGA-CBA	4.57	126.25	111.91
13	A	913	LYC	C8-C7-C6	4.57	122.95	115.27
11	A	908	BCL	CMB-C2B-C3B	4.57	133.22	124.68
12	a	912	CLA	O2A-CGA-O1A	-4.56	112.07	123.59
11	a	905	BCL	O1A-CGA-CBA	-4.54	106.03	123.73
12	A	933	CLA	O2A-CGA-O1A	-4.53	112.16	123.59
12	a	912	CLA	C1C-C2C-C3C	-4.53	102.20	106.96
11	A	905	BCL	CED-O2D-CGD	4.52	126.16	115.94
12	A	931	CLA	O1D-CGD-CBD	-4.52	115.24	124.48
12	A	911	CLA	O2A-CGA-O1A	-4.51	112.20	123.59
11	A	909	BCL	OBb-CAB-C3B	-4.51	111.99	119.99
11	A	902	BCL	CAA-CBA-CGA	-4.50	100.09	113.25
11	A	908	BCL	O1D-CGD-CBD	-4.50	115.28	124.48
15	a	918	85I	P-O3-C3	4.48	139.07	120.90
10	a	903	2GO	CHB-C4A-NA	4.47	130.35	124.68
11	A	904	BCL	CAC-C3C-C2C	4.47	125.42	114.26
12	A	931	CLA	C3D-C2D-C1D	-4.46	99.75	105.83
12	A	931	CLA	C3D-C4D-ND	-4.46	103.03	110.24
10	a	903	2GO	C4A-C3A-C2A	-4.46	102.27	106.96
10	A	901	2GO	CHB-C4A-NA	4.45	130.32	124.68
12	a	915	CLA	CED-O2D-CGD	4.44	125.98	115.94
11	a	909	BCL	C2D-C1D-ND	4.43	113.37	110.10
11	a	906	BCL	CAA-C2A-C1A	-4.43	97.46	111.97
11	A	903	BCL	C1-C2-C3	4.43	133.70	126.04
12	A	933	CLA	C1C-C2C-C3C	-4.41	102.32	106.96
13	A	913	LYC	C13-C12-C14	-4.39	116.77	122.92
12	a	913	CLA	C2A-C1A-CHA	-4.39	116.18	123.86
11	a	906	BCL	OBb-CAB-CBB	-4.39	110.30	120.17
12	A	912	CLA	C3D-C4D-ND	4.38	117.33	110.24
11	A	909	BCL	CAA-C2A-C1A	4.37	126.31	111.97
12	a	913	CLA	C4C-C3C-C2C	-4.37	100.53	106.90
12	A	931	CLA	C4D-C3D-CAD	-4.37	102.94	108.10
12	a	914	CLA	O2A-CGA-CBA	4.36	129.48	112.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	A	901	2GO	C1A-C2A-C3A	-4.36	100.86	106.61
12	a	912	CLA	C3D-C4D-ND	4.35	117.28	110.24
11	a	911	BCL	CMB-C2B-C3B	4.35	132.81	124.68
10	A	901	2GO	CMC-C2C-C3C	-4.34	114.34	126.12
11	a	908	BCL	CMB-C2B-C3B	4.32	132.77	124.68
12	A	910	CLA	CHD-C4C-C3C	-4.32	118.49	124.84
11	A	903	BCL	CBB-CAB-C3B	4.31	133.15	120.34
11	A	908	BCL	O2D-CGD-O1D	-4.29	115.46	123.84
11	a	910	BCL	OBB-CAB-CBB	-4.28	110.53	120.17
11	a	904	BCL	O1A-CGA-CBA	-4.28	107.02	123.73
12	a	915	CLA	C4C-C3C-C2C	-4.26	100.69	106.90
12	A	912	CLA	C4C-C3C-C2C	-4.26	100.69	106.90
11	A	907	BCL	O2A-C1-C2	4.25	119.80	108.64
12	a	915	CLA	CMB-C2B-C1B	4.25	134.99	128.46
12	A	911	CLA	O2D-CGD-CBD	4.24	118.80	111.27
11	a	910	BCL	C2A-C1A-CHA	-4.24	116.45	123.86
12	A	931	CLA	C4D-CHA-C1A	-4.23	116.11	121.25
12	a	914	CLA	CMC-C2C-C1C	4.20	131.43	125.04
11	A	902	BCL	O1D-CGD-CBD	-4.20	115.90	124.48
11	a	910	BCL	CHD-C4C-NC	4.19	129.73	125.08
12	A	911	CLA	CHC-C1C-NC	-4.17	117.88	124.20
12	A	933	CLA	CHD-C1D-ND	-4.16	120.63	124.45
11	A	907	BCL	OBB-CAB-C3B	4.16	127.37	119.99
12	A	931	CLA	C4-C3-C5	4.15	122.26	115.27
12	A	911	CLA	C10-C8-C7	4.14	133.92	112.13
11	A	903	BCL	CED-O2D-CGD	4.14	125.30	115.94
12	a	901	CLA	C9-C8-C7	4.13	126.26	111.29
11	A	908	BCL	C3C-C4C-CHD	-4.13	114.56	123.39
12	a	914	CLA	CMB-C2B-C3B	4.13	132.40	124.68
12	a	913	CLA	C4-C3-C5	4.12	122.21	115.27
12	a	912	CLA	C6-C7-C8	-4.12	102.59	115.92
13	c	201	LYC	C9-C10-C11	4.11	136.03	123.22
12	a	901	CLA	O2A-CGA-O1A	-4.10	113.23	123.59
11	a	910	BCL	O1D-CGD-CBD	-4.10	116.09	124.48
12	A	912	CLA	CMC-C2C-C1C	4.10	131.28	125.04
12	a	913	CLA	CED-O2D-CGD	4.10	125.21	115.94
10	A	901	2GO	CAA-C2A-C3A	-4.10	120.25	127.88
11	a	905	BCL	CMB-C2B-C1B	4.09	134.75	128.46
12	a	913	CLA	CMC-C2C-C1C	4.08	131.26	125.04
12	a	912	CLA	C4-C3-C2	-4.08	113.21	123.68
12	A	910	CLA	O2A-CGA-CBA	4.08	124.70	111.91
12	a	915	CLA	CHB-C4A-NA	4.07	130.14	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	a	904	BCL	CMC-C2C-C1C	4.06	122.68	111.77
11	a	911	BCL	O2D-CGD-O1D	-4.06	115.90	123.84
11	a	907	BCL	CMC-C2C-C1C	4.06	122.68	111.77
11	A	905	BCL	CHD-C4C-NC	4.06	129.58	125.08
12	A	910	CLA	C3B-C4B-NB	4.05	114.44	109.21
12	A	911	CLA	C6-C7-C8	4.04	128.97	115.92
15	A	915	85I	O3-P-O1	4.04	124.61	109.47
13	c	201	LYC	C57-C56-C58	4.03	124.43	118.08
12	A	912	CLA	CHC-C1C-C2C	-4.03	115.58	126.72
11	A	903	BCL	CHD-C4C-NC	4.03	129.55	125.08
11	a	907	BCL	O1D-CGD-CBD	-4.01	116.28	124.48
11	a	906	BCL	CED-O2D-CGD	4.01	125.01	115.94
11	a	907	BCL	C3C-C4C-CHD	-4.01	114.83	123.39
18	c	202	HEC	CBA-CAA-C2A	-4.00	105.86	112.60
15	A	916	85I	O2-P-O	-4.00	89.16	107.75
12	a	912	CLA	CMB-C2B-C1B	4.00	134.61	128.46
11	A	906	BCL	O2A-CGA-CBA	4.00	124.45	111.91
11	A	905	BCL	C1-O2A-CGA	3.99	126.91	116.44
11	A	905	BCL	O2A-C1-C2	3.98	119.10	108.64
12	a	912	CLA	CAC-C3C-C4C	3.97	129.97	124.81
11	A	902	BCL	O2A-C1-C2	3.97	119.07	108.64
11	a	907	BCL	C4-C3-C5	3.97	121.94	115.27
12	a	914	CLA	CAC-C3C-C4C	3.94	129.93	124.81
11	A	902	BCL	C9-C8-C10	-3.94	97.01	111.29
11	A	904	BCL	CMB-C2B-C1B	3.94	134.52	128.46
12	A	911	CLA	CHD-C1D-ND	-3.93	120.84	124.45
11	a	909	BCL	C6-C5-C3	-3.92	103.17	113.45
11	a	911	BCL	C1D-ND-C4D	-3.92	103.55	106.33
11	A	906	BCL	C1-C2-C3	-3.92	119.26	126.04
19	E	101	84Q	O2-C16-C15	-3.91	92.36	107.08
17	A	932	85N	O3-C17-C16	3.91	122.01	107.06
12	A	912	CLA	CAA-CBA-CGA	3.91	124.67	113.25
11	A	905	BCL	O1D-CGD-CBD	-3.89	116.52	124.48
11	a	908	BCL	C3C-C4C-CHD	-3.89	115.08	123.39
11	A	908	BCL	CAA-CBA-CGA	-3.88	101.90	113.25
11	a	909	BCL	CMB-C2B-C3B	3.87	131.93	124.68
11	A	909	BCL	CMB-C2B-C3B	3.87	131.92	124.68
11	a	910	BCL	C4D-C3D-CAD	3.87	112.65	108.10
11	A	908	BCL	CHD-C4C-NC	3.86	129.36	125.08
12	a	901	CLA	C1C-C2C-C3C	-3.85	102.90	106.96
12	a	912	CLA	C12-C11-C10	-3.85	95.56	113.24
10	A	901	2GO	C3D-C4D-ND	-3.85	104.57	116.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	931	CLA	CMB-C2B-C3B	3.83	131.85	124.68
12	a	915	CLA	C2D-C1D-ND	-3.83	107.28	110.10
11	a	907	BCL	C1-O2A-CGA	3.82	126.48	116.44
12	a	912	CLA	C1-C2-C3	-3.82	119.43	126.04
12	a	912	CLA	CHD-C1D-ND	-3.82	120.94	124.45
11	A	907	BCL	C3C-C4C-CHD	-3.82	115.24	123.39
11	a	910	BCL	CAA-C2A-C1A	3.82	124.48	111.97
12	a	913	CLA	C4D-CHA-C1A	-3.81	116.61	121.25
13	c	201	LYC	C6-C7-C9	3.80	133.48	121.98
12	a	901	CLA	O1A-CGA-CBA	-3.80	108.91	123.73
11	A	904	BCL	O1A-CGA-CBA	-3.79	110.89	123.08
11	A	902	BCL	C11-C12-C13	3.78	128.12	115.92
11	a	911	BCL	O1A-CGA-CBA	-3.77	109.01	123.73
18	C	301	HEC	O2A-CGA-CBA	3.77	126.14	114.03
11	a	904	BCL	C2D-C1D-ND	3.77	112.88	110.10
11	A	902	BCL	C14-C13-C12	3.76	124.92	111.29
12	a	912	CLA	C3D-C2D-C1D	-3.76	100.70	105.83
11	A	908	BCL	CAC-C3C-C4C	-3.75	104.26	112.58
11	a	907	BCL	CHB-C4A-NA	3.75	129.70	124.51
12	A	933	CLA	C1D-ND-C4D	-3.74	103.68	106.33
11	a	904	BCL	C3D-C4D-ND	3.73	116.27	110.24
11	a	906	BCL	CAA-CBA-CGA	-3.72	102.63	112.51
12	a	914	CLA	C1D-ND-C4D	-3.71	103.70	106.33
11	A	907	BCL	CAA-CBA-CGA	3.71	124.09	113.25
11	A	904	BCL	O2A-CGA-CBA	3.71	125.95	114.03
11	a	907	BCL	CMB-C2B-C3B	3.70	131.60	124.68
12	a	913	CLA	O2A-CGA-O1A	-3.70	114.27	123.59
12	a	915	CLA	C1-O2A-CGA	3.69	126.12	116.44
11	A	907	BCL	C9-C8-C10	-3.69	97.94	111.29
10	A	901	2GO	C2C-C1C-NC	-3.68	104.28	109.07
12	A	910	CLA	C4D-CHA-C1A	-3.68	116.77	121.25
11	a	905	BCL	O2A-C1-C2	3.68	118.30	108.64
11	A	902	BCL	C3D-C2D-C1D	-3.68	100.81	105.83
12	A	911	CLA	CED-O2D-CGD	3.67	124.24	115.94
11	a	907	BCL	C3D-C2D-C1D	-3.67	100.82	105.83
11	a	908	BCL	C16-C17-C18	-3.67	98.71	115.98
11	A	902	BCL	C2A-C1A-CHA	-3.66	117.45	123.86
11	a	904	BCL	CMB-C2B-C3B	3.66	131.53	124.68
12	a	901	CLA	CAC-C3C-C2C	3.66	133.79	127.53
15	a	918	85I	O3-C3-C4	3.66	120.84	107.08
12	a	913	CLA	C9-C8-C7	3.65	124.50	111.29
12	A	911	CLA	C1-O2A-CGA	3.64	126.00	116.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	910	CLA	CGD-CBD-CAD	-3.62	98.99	110.73
11	A	902	BCL	CMA-C3A-C2A	-3.62	99.23	113.83
11	A	907	BCL	C5-C3-C2	3.61	128.43	121.12
12	a	912	CLA	CHD-C4C-C3C	-3.61	119.53	124.84
12	A	911	CLA	C2A-C1A-CHA	-3.61	117.55	123.86
12	a	914	CLA	C3D-C4D-ND	3.61	116.08	110.24
11	A	903	BCL	C6-C7-C8	3.61	127.58	115.92
12	A	933	CLA	CHB-C4A-NA	3.60	129.49	124.51
11	A	903	BCL	C3A-C2A-C1A	3.60	106.73	101.34
10	A	901	2GO	OBB-CAB-CBB	-3.60	112.07	120.17
12	A	933	CLA	C1-C2-C3	-3.60	119.82	126.04
11	a	909	BCL	C3C-C4C-CHD	-3.60	115.70	123.39
12	A	933	CLA	C3C-C4C-NC	3.57	114.58	110.57
11	A	902	BCL	C3A-C2A-C1A	3.57	106.69	101.34
11	a	905	BCL	CHB-C4A-NA	3.55	129.43	124.51
11	a	905	BCL	CBC-CAC-C3C	-3.54	105.58	113.47
11	a	906	BCL	C2D-C1D-ND	3.54	112.71	110.10
11	A	903	BCL	C6-C5-C3	3.54	122.73	113.45
11	a	909	BCL	OBB-CAB-C3B	3.53	126.26	119.99
11	A	907	BCL	C9-C8-C7	3.52	124.03	111.29
11	a	911	BCL	C3C-C4C-CHD	-3.51	115.88	123.39
12	a	901	CLA	CED-O2D-CGD	3.51	123.88	115.94
10	a	903	2GO	O2D-CGD-CBD	3.50	118.16	111.80
12	A	910	CLA	C1-O2A-CGA	3.50	125.61	116.44
12	A	933	CLA	C6-C5-C3	-3.49	96.56	113.58
11	A	903	BCL	C1D-ND-C4D	-3.49	103.86	106.33
12	a	912	CLA	C4-C3-C5	3.48	121.13	115.27
11	a	906	BCL	OBD-CAD-C3D	-3.48	120.16	128.52
12	A	933	CLA	CBA-CAA-C2A	-3.47	103.62	113.86
12	A	912	CLA	C2A-C1A-CHA	-3.47	117.80	123.86
12	a	912	CLA	C9-C8-C10	-3.46	98.76	111.29
11	A	909	BCL	CED-O2D-CGD	3.45	123.74	115.94
12	A	910	CLA	CHC-C1C-C2C	-3.45	117.19	126.72
11	A	905	BCL	CMB-C2B-C3B	3.45	131.13	124.68
11	A	909	BCL	C4D-C3D-CAD	3.44	112.14	108.10
12	a	901	CLA	C4-C3-C5	3.42	121.03	115.27
13	A	913	LYC	C64-C65-C66	-3.42	116.07	127.75
11	a	905	BCL	OBB-CAB-C3B	3.42	126.06	119.99
11	A	905	BCL	C2A-C3A-C4A	-3.42	96.35	101.87
12	a	912	CLA	C4A-NA-C1A	-3.41	105.17	106.71
11	a	910	BCL	C16-C15-C13	3.41	126.93	115.92
18	C	301	HEC	CMA-C3A-C2A	3.41	131.37	124.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	a	909	BCL	C1C-NC-C4C	-3.40	105.18	106.71
11	A	903	BCL	C2D-C1D-ND	3.40	112.61	110.10
18	C	301	HEC	CMD-C2D-C3D	3.38	131.31	124.94
12	A	931	CLA	CHA-C4D-ND	3.37	139.56	132.50
11	a	907	BCL	C6-C7-C8	-3.37	105.02	115.92
12	A	931	CLA	O1A-CGA-CBA	-3.37	110.59	123.73
11	A	909	BCL	CMA-C3A-C4A	3.36	120.80	111.77
11	A	902	BCL	CAC-C3C-C4C	-3.36	105.13	112.58
11	A	903	BCL	CAC-C3C-C2C	3.35	122.63	114.26
11	a	910	BCL	C4B-CHC-C1C	3.35	136.74	130.12
11	a	906	BCL	O2D-CGD-CBD	3.35	117.22	111.27
18	c	202	HEC	O2D-CGD-CBD	3.34	124.76	114.03
13	A	913	LYC	C20-C21-C50	3.34	130.31	123.47
12	a	912	CLA	C4D-C3D-CAD	-3.33	104.17	108.10
12	A	931	CLA	C3B-C4B-NB	3.33	113.51	109.21
10	a	903	2GO	C3D-C4D-ND	-3.33	106.13	116.21
11	A	905	BCL	C3D-C4D-ND	3.33	115.62	110.24
12	A	910	CLA	C2A-C1A-CHA	-3.33	118.04	123.86
12	a	914	CLA	CHB-C4A-NA	3.33	129.11	124.51
13	A	913	LYC	C16-C17-C19	3.32	124.03	118.94
11	a	911	BCL	CHD-C4C-NC	3.31	128.76	125.08
11	a	908	BCL	C9-C8-C10	-3.31	99.31	111.29
11	a	907	BCL	C7-C6-C5	-3.30	104.40	113.36
11	A	909	BCL	CHA-C1A-NA	-3.30	118.85	126.40
12	A	912	CLA	C1D-CHD-C4C	-3.29	118.95	126.06
12	a	912	CLA	CHC-C1C-NC	-3.29	119.21	124.20
11	a	904	BCL	O1D-CGD-CBD	-3.28	117.77	124.48
12	a	915	CLA	CMA-C3A-C4A	3.28	120.59	111.77
12	A	912	CLA	O2A-CGA-O1A	-3.27	112.88	123.14
12	A	931	CLA	C6-C7-C8	3.27	126.49	115.92
11	A	902	BCL	C4-C3-C2	-3.26	115.32	123.68
12	a	901	CLA	O1D-CGD-CBD	-3.26	117.82	124.48
11	A	905	BCL	C16-C15-C13	-3.25	105.40	115.92
13	A	913	LYC	C58-C56-C55	-3.23	113.98	118.94
12	a	915	CLA	C2A-C1A-CHA	-3.23	118.21	123.86
12	A	912	CLA	C1-O2A-CGA	3.22	126.73	116.11
10	a	903	2GO	OBb-CAB-CBB	-3.22	112.92	120.17
12	A	911	CLA	C2D-C1D-ND	3.22	112.47	110.10
11	A	902	BCL	C1-C2-C3	-3.21	120.49	126.04
11	a	910	BCL	C3D-C2D-C1D	-3.21	101.45	105.83
18	c	202	HEC	CBD-CAD-C3D	-3.21	107.14	112.62
11	a	905	BCL	C4D-CHA-C1A	3.20	125.14	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	931	CLA	C11-C10-C8	3.19	126.23	115.92
12	a	912	CLA	CAA-CBA-CGA	-3.19	103.94	113.25
12	a	912	CLA	C4C-C3C-C2C	-3.18	102.26	106.90
11	A	905	BCL	O2A-CGA-CBA	3.18	121.87	111.91
18	C	301	HEC	O2D-CGD-O1D	-3.17	115.39	123.30
13	A	913	LYC	C1-C2-C4	-3.17	113.49	122.65
12	a	914	CLA	CMD-C2D-C1D	3.17	130.29	124.71
11	a	907	BCL	OB B-CAB-C3B	-3.16	114.39	119.99
12	A	933	CLA	CMD-C2D-C1D	3.15	130.27	124.71
11	A	909	BCL	C3C-C4C-CHD	-3.15	116.67	123.39
11	a	909	BCL	O1D-CGD-CBD	-3.15	118.05	124.48
11	A	909	BCL	C10-C8-C7	3.14	128.67	112.13
11	a	905	BCL	C4-C3-C5	3.14	120.55	115.27
12	a	915	CLA	C4D-CHA-C1A	-3.14	117.43	121.25
11	A	906	BCL	CMC-C2C-C1C	3.13	120.19	111.77
11	A	903	BCL	CMB-C2B-C3B	3.13	130.53	124.68
12	a	901	CLA	CMB-C2B-C1B	3.13	133.27	128.46
11	a	910	BCL	C11-C12-C13	3.12	126.00	115.92
12	A	931	CLA	CHD-C1D-C2D	3.11	132.01	125.48
12	A	931	CLA	C1D-CHD-C4C	-3.11	119.34	126.06
12	A	912	CLA	CMB-C2B-C3B	3.10	130.48	124.68
11	A	904	BCL	O2D-CGD-O1D	-3.09	117.80	123.84
12	a	913	CLA	C4A-NA-C1A	-3.07	105.32	106.71
11	a	905	BCL	C2D-C1D-ND	3.07	112.36	110.10
11	a	910	BCL	C4D-CHA-C1A	-3.07	117.52	121.25
12	a	901	CLA	C7-C6-C5	-3.05	105.07	113.36
12	a	915	CLA	C1C-C2C-C3C	-3.04	103.76	106.96
11	A	902	BCL	O1A-CGA-CBA	-3.04	111.88	123.73
11	a	908	BCL	OBD-CAD-C3D	-3.03	121.23	128.52
11	a	905	BCL	C11-C12-C13	3.03	125.70	115.92
15	A	915	85I	O2-P-O	-3.03	93.69	107.75
13	A	913	LYC	C59-C58-C56	-3.02	117.93	126.42
11	a	909	BCL	CHC-C1C-NC	3.00	128.66	124.51
12	a	912	CLA	C17-C16-C15	-3.00	99.47	113.24
10	a	903	2GO	CHA-CBD-CGD	-2.99	115.51	125.12
12	a	914	CLA	C3D-C2D-C1D	-2.98	101.76	105.83
12	a	915	CLA	CHC-C1C-NC	-2.98	119.68	124.20
11	A	909	BCL	C5-C3-C2	2.97	127.14	121.12
12	A	910	CLA	CMA-C3A-C4A	-2.97	103.80	111.77
11	a	904	BCL	CAC-C3C-C2C	-2.95	106.88	114.26
12	a	913	CLA	CAA-CBA-CGA	2.94	121.86	113.25
10	A	901	2GO	C4C-C3C-C2C	-2.94	102.61	106.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	a	905	BCL	CHD-C1D-C2D	2.94	131.64	125.48
13	c	201	LYC	C54-C55-C56	2.94	131.50	127.31
11	A	906	BCL	OBb-CAB-CBB	-2.93	113.57	120.17
12	A	912	CLA	CAA-C2A-C1A	2.92	121.55	111.97
12	a	901	CLA	C14-C13-C15	-2.92	100.71	111.29
11	a	905	BCL	CMA-C3A-C4A	2.91	119.60	111.77
11	A	907	BCL	O1D-CGD-CBD	-2.91	118.53	124.48
10	A	901	2GO	O2A-C1-C2	-2.91	101.00	108.64
11	A	903	BCL	C3D-C4D-ND	2.89	114.92	110.24
11	A	904	BCL	CHD-C4C-NC	2.89	128.29	125.08
10	a	903	2GO	C3C-C4C-NC	2.89	115.94	110.14
11	a	910	BCL	C3D-C4D-ND	2.88	114.90	110.24
11	A	904	BCL	CMA-C3A-C2A	-2.88	102.21	113.83
11	A	906	BCL	C3D-C4D-ND	2.88	114.89	110.24
11	A	903	BCL	CMD-C2D-C3D	-2.87	121.00	127.61
11	a	907	BCL	O1A-CGA-CBA	-2.87	112.53	123.73
15	a	919	85I	O4-C4-C3	2.87	116.91	109.54
11	a	905	BCL	O2A-CGA-O1A	-2.87	116.35	123.59
12	a	912	CLA	CMC-C2C-C1C	2.87	129.41	125.04
10	A	901	2GO	CHA-C1A-C2A	2.86	132.93	128.18
11	a	911	BCL	C3A-C2A-C1A	2.86	105.62	101.34
12	a	915	CLA	CHD-C4C-C3C	-2.86	120.64	124.84
10	A	901	2GO	CHA-CBD-CAD	-2.85	104.35	107.17
19	E	101	84Q	O7-P-O6	-2.85	97.92	109.07
11	A	908	BCL	OBb-CAB-C3B	-2.85	114.94	119.99
12	a	901	CLA	C6-C5-C3	2.84	120.91	113.45
11	a	907	BCL	CBB-CAB-C3B	2.83	128.75	120.34
11	A	903	BCL	CMC-C2C-C1C	2.83	119.39	111.77
10	A	901	2GO	CBB-CAB-C3B	2.83	128.73	120.34
11	a	904	BCL	CMC-C2C-C3C	-2.82	102.44	113.83
11	A	908	BCL	O2A-C1-C2	2.82	116.04	108.64
11	a	911	BCL	CMA-C3A-C4A	2.81	119.33	111.77
11	a	908	BCL	C4-C3-C5	-2.81	110.55	115.27
11	A	907	BCL	C6-C7-C8	2.81	124.99	115.92
10	a	903	2GO	CMC-C2C-C3C	-2.80	118.53	126.12
11	a	910	BCL	C3A-C2A-C1A	-2.79	97.16	101.34
10	a	903	2GO	O1D-CGD-CBD	-2.78	119.49	124.62
12	a	912	CLA	C2A-C1A-CHA	-2.78	119.00	123.86
11	A	908	BCL	CED-O2D-CGD	2.77	122.20	115.94
12	A	933	CLA	C3D-C4D-ND	2.77	114.72	110.24
11	a	908	BCL	C3D-C4D-ND	2.76	114.70	110.24
11	a	905	BCL	CMC-C2C-C1C	2.76	119.18	111.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	a	911	BCL	O2A-CGA-O1A	-2.76	116.64	123.59
11	A	903	BCL	CAA-C2A-C3A	2.75	120.31	112.78
12	a	915	CLA	CBC-CAC-C3C	-2.75	104.86	112.43
12	A	912	CLA	CHC-C1C-NC	-2.74	120.04	124.20
12	a	912	CLA	C9-C8-C7	2.74	121.22	111.29
11	a	911	BCL	CAA-C2A-C1A	2.74	120.96	111.97
19	E	101	84Q	O4-P-O6	2.73	119.70	109.47
12	A	910	CLA	C10-C8-C7	2.73	126.47	112.13
12	a	914	CLA	C1D-CHD-C4C	-2.73	120.18	126.06
12	A	931	CLA	CMD-C2D-C1D	2.73	129.52	124.71
10	A	901	2GO	CAA-C2A-C1A	-2.73	120.55	128.29
12	a	913	CLA	CHA-C4D-ND	-2.72	126.80	132.50
11	a	908	BCL	C4-C3-C2	-2.72	116.69	123.68
11	a	909	BCL	CMA-C3A-C4A	2.72	119.09	111.77
11	A	909	BCL	C2D-C1D-ND	2.72	112.11	110.10
12	a	901	CLA	CAA-C2A-C3A	-2.72	105.32	112.78
11	a	910	BCL	C4-C3-C2	-2.72	116.69	123.68
12	a	913	CLA	C2C-C1C-NC	2.72	112.52	109.97
11	A	903	BCL	C1C-NC-C4C	-2.71	105.49	106.71
10	A	901	2GO	C1-C2-C3	2.70	130.71	126.04
13	A	913	LYC	C5-C4-C2	2.68	136.92	127.75
10	A	901	2GO	C3A-C4A-NA	-2.68	105.58	109.07
12	a	914	CLA	CHD-C1D-C2D	2.68	131.10	125.48
12	A	910	CLA	CMA-C3A-C2A	-2.67	103.05	113.83
11	a	910	BCL	CMB-C2B-C1B	2.67	132.57	128.46
11	a	911	BCL	C4D-CHA-C1A	-2.67	118.00	121.25
11	a	911	BCL	C6-C5-C3	2.67	120.45	113.45
10	a	903	2GO	CMB-C2B-C1B	-2.66	124.37	128.46
11	A	902	BCL	CHD-C1D-C2D	2.66	131.07	125.48
11	A	902	BCL	C4-C3-C5	2.66	119.75	115.27
12	A	931	CLA	CHB-C4A-NA	2.66	128.19	124.51
11	A	904	BCL	C4D-CHA-C1A	-2.66	118.01	121.25
12	a	914	CLA	CMA-C3A-C2A	-2.65	103.12	113.83
12	A	931	CLA	C16-C15-C13	-2.65	107.37	115.92
12	a	901	CLA	C1-C2-C3	-2.64	121.48	126.04
12	A	931	CLA	C11-C12-C13	-2.64	107.39	115.92
12	a	913	CLA	CMB-C2B-C3B	2.64	129.61	124.68
11	A	905	BCL	C1B-CHB-C4A	-2.63	124.90	130.12
11	A	908	BCL	CHB-C4A-NA	2.63	128.16	124.51
11	A	903	BCL	CBC-CAC-C3C	2.63	119.32	113.47
11	a	905	BCL	OBD-CAD-C3D	-2.63	122.20	128.52
12	A	933	CLA	CHA-C4D-ND	-2.62	127.03	132.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	908	BCL	CMA-C3A-C2A	-2.61	103.29	113.83
12	A	933	CLA	C4D-C3D-CAD	-2.61	105.02	108.10
11	a	908	BCL	O2A-CGA-O1A	2.61	130.17	123.59
10	A	901	2GO	CHA-CBD-CGD	-2.60	116.76	125.12
11	a	908	BCL	C4B-C3B-CAB	2.60	132.15	127.13
12	a	915	CLA	C4D-C3D-CAD	-2.60	105.03	108.10
12	a	915	CLA	OBD-CAD-C3D	-2.60	122.27	128.52
12	A	911	CLA	CMB-C2B-C3B	2.59	129.52	124.68
15	A	915	85I	O-P-O1	-2.58	98.97	109.07
12	A	911	CLA	C3D-C4D-ND	2.58	114.42	110.24
12	A	910	CLA	CMD-C2D-C3D	-2.58	121.67	127.61
11	A	908	BCL	OB B-CAB-CBB	2.58	125.98	120.17
11	A	909	BCL	CAC-C3C-C4C	-2.58	106.86	112.58
12	a	915	CLA	C2C-C1C-NC	2.58	112.39	109.97
11	A	905	BCL	C14-C13-C12	2.58	120.62	111.29
11	A	907	BCL	C15-C13-C14	-2.58	98.63	110.51
11	A	907	BCL	C2C-C3C-C4C	-2.57	97.49	101.34
13	c	201	LYC	C5-C6-C7	2.57	121.43	112.98
11	A	904	BCL	C2D-C1D-ND	2.57	112.00	110.10
11	A	904	BCL	OBD-CAD-C3D	-2.56	122.35	128.52
11	A	906	BCL	CBC-CAC-C3C	2.56	119.17	113.47
11	A	909	BCL	C15-C13-C12	2.56	125.60	112.13
11	A	908	BCL	C7-C6-C5	-2.56	106.40	113.36
12	A	910	CLA	C4C-C3C-C2C	-2.56	103.17	106.90
12	a	912	CLA	CMD-C2D-C3D	-2.56	121.74	127.61
12	A	912	CLA	C3A-C2A-C1A	-2.55	97.52	101.34
11	a	910	BCL	CBA-CAA-C2A	2.54	121.37	113.86
11	A	907	BCL	C1D-ND-C4D	-2.54	104.53	106.33
11	A	907	BCL	OB B-CAB-CBB	-2.54	114.45	120.17
12	A	910	CLA	C6-C5-C3	-2.54	106.79	113.45
11	A	908	BCL	C3D-C4D-ND	2.54	114.35	110.24
11	A	902	BCL	C9-C8-C7	-2.54	102.09	111.29
11	A	903	BCL	C2A-C1A-CHA	-2.54	119.42	123.86
11	A	906	BCL	C4-C3-C5	2.54	118.88	115.98
12	a	912	CLA	O1D-CGD-CBD	2.53	129.66	124.48
11	a	904	BCL	O2A-C1-C2	2.53	115.28	108.64
11	a	910	BCL	C3C-C4C-CHD	-2.52	118.00	123.39
11	a	905	BCL	C1D-ND-C4D	2.52	108.12	106.33
11	a	909	BCL	C4-C3-C5	2.52	119.51	115.27
11	A	904	BCL	CAA-C2A-C1A	-2.51	103.76	111.97
12	a	913	CLA	C9-C8-C10	-2.51	102.21	111.29
11	A	906	BCL	CBA-CAA-C2A	2.51	121.26	113.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	a	908	BCL	CAC-C3C-C2C	-2.50	108.00	114.26
13	A	913	LYC	C18-C17-C16	2.50	122.01	118.08
11	a	904	BCL	CHD-C1D-C2D	2.50	130.72	125.48
11	A	906	BCL	CHD-C4C-NC	2.49	127.84	125.08
12	A	911	CLA	C1-C2-C3	-2.49	121.74	126.04
12	A	911	CLA	C6-C5-C3	2.49	119.98	113.45
10	a	903	2GO	C15-C13-C12	-2.48	99.06	112.13
18	c	202	HEC	CMA-C3A-C2A	2.47	129.60	124.94
19	E	101	84Q	C19-C18-C17	2.47	122.61	113.62
12	A	931	CLA	OBD-CAD-C3D	-2.47	122.57	128.52
11	A	907	BCL	C11-C10-C8	2.46	123.86	115.92
11	A	906	BCL	C4D-CHA-C1A	2.45	124.24	121.25
12	A	911	CLA	CHB-C4A-NA	2.45	127.90	124.51
12	A	912	CLA	CHD-C4C-NC	-2.45	120.34	124.20
11	a	906	BCL	CBC-CAC-C3C	2.44	118.91	113.47
11	a	911	BCL	C16-C15-C13	2.44	123.82	115.92
10	a	903	2GO	CAC-C3C-C2C	-2.44	123.35	127.53
11	a	911	BCL	C4-C3-C2	2.44	129.94	123.68
11	a	908	BCL	C16-C15-C13	-2.44	108.04	115.92
18	C	301	HEC	CBD-CAD-C3D	-2.43	108.47	112.62
12	a	915	CLA	CAA-CBA-CGA	2.43	120.36	113.25
11	a	910	BCL	C1D-CHD-C4C	-2.43	120.76	126.62
12	a	913	CLA	CMA-C3A-C4A	2.43	118.30	111.77
11	A	906	BCL	C3C-C4C-CHD	-2.43	118.21	123.39
13	A	913	LYC	C20-C19-C17	-2.42	123.86	127.31
11	a	909	BCL	CHD-C1D-C2D	2.42	130.55	125.48
15	A	917	85I	O3-C3-C4	2.41	116.16	107.08
11	A	908	BCL	O1A-CGA-CBA	-2.41	114.33	123.73
11	a	909	BCL	C1D-ND-C4D	-2.41	104.62	106.33
11	a	906	BCL	CMD-C2D-C3D	-2.41	122.08	127.61
11	A	908	BCL	C1-O2A-CGA	2.40	122.75	116.44
19	E	101	84Q	O5-P-O4	-2.40	97.31	106.78
12	A	931	CLA	C9-C8-C10	2.39	119.96	111.29
13	c	201	LYC	C62-C61-C60	-2.39	116.42	122.59
11	a	904	BCL	C6-C5-C3	2.39	119.73	113.45
12	A	910	CLA	CMC-C2C-C3C	2.39	132.61	126.12
11	a	911	BCL	C4-C3-C5	-2.39	111.25	115.27
11	A	909	BCL	CBA-CAA-C2A	2.38	120.89	113.86
15	A	916	85I	O2-P-O3	2.37	116.14	106.78
12	a	913	CLA	CHC-C1C-NC	-2.37	120.61	124.20
11	A	904	BCL	C2A-C1A-CHA	-2.37	119.72	123.86
11	a	910	BCL	CAC-C3C-C2C	2.36	120.17	114.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	A	931	CLA	CHD-C1D-ND	-2.36	122.29	124.45
11	A	909	BCL	CAC-C3C-C2C	2.36	120.15	114.26
11	a	907	BCL	CHD-C1D-C2D	2.35	130.41	125.48
12	a	901	CLA	CBA-CAA-C2A	2.35	120.80	113.86
12	a	901	CLA	C3B-C4B-NB	2.34	112.24	109.21
11	A	909	BCL	C4B-C3B-CAB	-2.34	122.60	127.13
12	A	933	CLA	C5-C3-C2	-2.34	114.71	120.50
17	A	932	85N	O5-C24-C19	-2.34	117.20	122.93
13	A	913	LYC	C55-C54-C53	-2.33	115.93	123.22
13	c	201	LYC	C59-C58-C56	-2.33	119.86	126.42
15	A	915	85I	O6-C20-C21	2.33	116.53	111.50
11	a	910	BCL	CMC-C2C-C1C	2.33	118.04	111.77
12	A	931	CLA	CAA-C2A-C3A	2.33	119.16	112.78
11	A	909	BCL	C11-C12-C13	2.33	123.45	115.92
12	a	914	CLA	O1A-CGA-CBA	-2.33	114.64	123.73
12	a	915	CLA	CHD-C1D-ND	-2.33	122.31	124.45
12	a	914	CLA	O2A-CGA-O1A	-2.33	115.85	123.14
11	A	905	BCL	CHB-C4A-NA	2.32	127.72	124.51
11	a	910	BCL	CAA-CBA-CGA	2.32	120.02	113.25
10	A	901	2GO	C4B-C3B-CAB	-2.32	122.66	127.13
11	a	908	BCL	C11-C10-C8	-2.31	108.44	115.92
11	A	902	BCL	C1D-CHD-C4C	-2.31	121.04	126.62
12	a	901	CLA	O2A-C1-C2	-2.31	102.57	108.64
11	a	905	BCL	C6-C5-C3	2.29	119.47	113.45
12	a	912	CLA	C7-C6-C5	2.29	119.58	113.36
12	A	911	CLA	CMA-C3A-C4A	2.29	117.93	111.77
12	a	915	CLA	CBA-CAA-C2A	-2.28	107.12	113.86
15	A	916	85I	C7-C6-C5	-2.28	105.34	113.62
12	A	910	CLA	C1D-CHD-C4C	-2.28	121.15	126.06
11	a	906	BCL	CMC-C2C-C1C	2.27	117.89	111.77
12	a	913	CLA	C4-C3-C2	-2.27	117.85	123.68
11	A	903	BCL	CHD-C1D-C2D	2.27	130.24	125.48
17	G	101	85N	O2-C16-C17	-2.27	103.72	109.54
12	a	915	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
11	A	907	BCL	C11-C12-C13	2.26	126.62	115.98
11	A	905	BCL	C9-C8-C10	-2.25	103.14	111.29
11	A	902	BCL	C1B-CHB-C4A	2.25	134.56	130.12
11	A	904	BCL	CAC-C3C-C4C	-2.23	107.63	112.58
11	a	911	BCL	CBB-CAB-C3B	2.23	126.95	120.34
12	a	912	CLA	C5-C3-C2	2.22	125.62	121.12
12	a	913	CLA	CBC-CAC-C3C	2.22	118.56	112.43
12	a	914	CLA	C1C-C2C-C3C	-2.22	104.62	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	908	BCL	C1D-ND-C4D	-2.21	104.76	106.33
11	a	906	BCL	O2A-CGA-CBA	2.21	121.14	114.03
11	a	910	BCL	O1A-CGA-CBA	-2.21	115.11	123.73
11	A	905	BCL	O1A-CGA-CBA	-2.21	115.12	123.73
15	a	918	85I	O6-C3-C4	2.20	115.36	107.08
12	a	915	CLA	C4-C3-C2	-2.20	118.03	123.68
11	a	906	BCL	OBB-CAB-C3B	2.20	123.90	119.99
11	A	907	BCL	CMA-C3A-C4A	2.20	117.68	111.77
12	A	933	CLA	O2A-CGA-CBA	2.19	118.79	111.91
12	a	901	CLA	CMD-C2D-C3D	-2.19	122.57	127.61
11	a	910	BCL	C4-C3-C5	-2.19	111.59	115.27
12	A	931	CLA	C3C-C4C-NC	2.18	113.02	110.57
12	A	912	CLA	CMB-C2B-C1B	2.18	131.82	128.46
11	A	907	BCL	C4D-C3D-CAD	-2.18	105.53	108.10
11	A	907	BCL	CBA-CAA-C2A	2.17	120.28	113.86
11	A	907	BCL	C4D-CHA-C1A	2.17	123.89	121.25
10	a	903	2GO	C1C-C2C-C3C	-2.17	104.68	106.96
11	A	904	BCL	C1B-CHB-C4A	-2.17	125.82	130.12
12	A	933	CLA	CHD-C4C-C3C	-2.17	121.66	124.84
11	a	909	BCL	C9-C8-C7	2.16	119.13	111.29
12	A	912	CLA	O2A-CGA-CBA	2.16	120.77	112.23
12	a	912	CLA	C6-C5-C3	2.16	119.11	113.45
12	A	933	CLA	C4C-C3C-C2C	-2.15	103.76	106.90
13	c	201	LYC	C63-C61-C60	2.15	128.49	121.98
17	G	101	85N	O3-C17-O6	2.15	116.76	110.72
11	a	908	BCL	CHA-C1A-NA	2.15	131.32	126.40
11	a	904	BCL	C4-C3-C2	-2.15	118.17	123.68
12	A	931	CLA	C5-C3-C2	-2.14	116.78	121.12
12	a	914	CLA	C4D-CHA-C1A	2.14	123.85	121.25
11	a	907	BCL	O2A-C1-C2	-2.13	103.03	108.64
11	A	906	BCL	CAC-C3C-C4C	2.13	117.31	112.58
15	A	916	85I	O3-C3-C4	2.12	115.07	107.08
11	a	908	BCL	C1D-CHD-C4C	-2.12	121.51	126.62
11	a	904	BCL	C1D-CHD-C4C	-2.11	121.52	126.62
12	a	912	CLA	C2D-C1D-ND	-2.10	108.56	110.10
11	a	910	BCL	C20-C18-C17	2.10	124.52	111.54
12	a	913	CLA	C2A-C3A-C4A	-2.10	98.48	101.87
13	A	913	LYC	C15-C14-C12	-2.09	124.32	127.31
11	a	906	BCL	CMB-C2B-C3B	2.09	128.59	124.68
10	a	903	2GO	CMD-C2D-C3D	2.09	128.59	124.68
11	a	911	BCL	C15-C13-C12	-2.09	101.15	112.13
11	A	909	BCL	CBB-CAB-C3B	2.09	126.53	120.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	A	906	BCL	CMD-C2D-C3D	2.08	132.41	127.61
11	a	910	BCL	C14-C13-C15	2.08	118.84	111.29
11	a	910	BCL	CMD-C2D-C3D	-2.08	122.82	127.61
11	A	907	BCL	C4B-C3B-CAB	2.08	131.14	127.13
12	A	910	CLA	CBA-CAA-C2A	2.08	120.01	113.86
11	a	911	BCL	OBD-CAD-C3D	-2.07	123.54	128.52
10	a	903	2GO	C6-C7-C8	2.06	122.58	115.92
11	a	906	BCL	CHD-C4C-NC	2.06	127.36	125.08
18	C	301	HEC	CAA-C2A-C3A	-2.05	121.35	127.25
11	a	906	BCL	CAC-C3C-C2C	2.05	119.39	114.26
18	C	301	HEC	CAD-C3D-C2D	-2.05	121.36	127.25
11	a	909	BCL	CMD-C2D-C3D	-2.05	122.90	127.61
11	a	908	BCL	C1-O2A-CGA	-2.04	111.09	116.44
12	A	931	CLA	CMC-C2C-C3C	-2.04	120.58	126.12
12	A	910	CLA	CMB-C2B-C3B	2.04	128.49	124.68
12	a	914	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
12	A	933	CLA	C2A-C1A-CHA	-2.04	120.30	123.86
11	A	909	BCL	C12-C11-C10	2.03	122.56	113.24
10	a	903	2GO	CAA-C2A-C1A	-2.03	122.53	128.29
13	A	913	LYC	C57-C56-C58	-2.03	114.89	118.08
12	A	910	CLA	CAC-C3C-C2C	2.02	130.98	127.53
11	A	904	BCL	C2C-C3C-C4C	-2.02	98.32	101.34
11	A	908	BCL	C4D-C3D-CAD	-2.02	105.72	108.10
10	A	901	2GO	CAD-C3D-C4D	2.02	109.59	108.47
11	a	906	BCL	O1D-CGD-CBD	2.02	128.61	124.48
11	A	903	BCL	C12-C11-C10	-2.01	103.99	113.24
13	A	913	LYC	C3-C2-C1	2.01	119.05	114.60
12	a	915	CLA	C1-C2-C3	-2.01	122.56	126.04
11	a	911	BCL	CAA-C2A-C3A	2.01	118.28	112.78
11	A	905	BCL	C12-C11-C10	2.01	122.47	113.24
11	A	907	BCL	CAC-C3C-C4C	-2.01	108.13	112.58
12	A	933	CLA	CMD-C2D-C3D	2.01	132.23	127.61
11	a	911	BCL	C4B-C3B-CAB	2.01	131.00	127.13
12	A	911	CLA	C15-C13-C12	2.01	122.69	112.13
11	A	902	BCL	C6-C5-C3	2.00	118.71	113.45
12	a	913	CLA	C1C-C2C-C3C	-2.00	104.85	106.96
12	A	912	CLA	CBC-CAC-C3C	-2.00	106.91	112.43
11	A	905	BCL	CMC-C2C-C3C	-2.00	105.76	113.83
15	A	916	85I	O6-C20-C21	2.00	115.81	111.50

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
12	A	910	CLA	C8
12	A	911	CLA	C8
15	A	916	85I	C3

All (646) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
10	a	903	2GO	C1A-C2A-CAA-CBA
11	A	902	BCL	C3A-C2A-CAA-CBA
11	A	902	BCL	C11-C12-C13-C14
11	A	903	BCL	C1A-C2A-CAA-CBA
11	A	903	BCL	C2-C3-C5-C6
11	A	903	BCL	C4-C3-C5-C6
11	A	904	BCL	C1A-C2A-CAA-CBA
11	A	904	BCL	CHA-CBD-CGD-O1D
11	A	905	BCL	C1A-C2A-CAA-CBA
11	A	905	BCL	CBA-CGA-O2A-C1
11	A	905	BCL	O1A-CGA-O2A-C1
11	A	905	BCL	CBD-CGD-O2D-CED
11	A	905	BCL	C2-C3-C5-C6
11	A	905	BCL	C4-C3-C5-C6
11	A	906	BCL	CBD-CGD-O2D-CED
11	A	906	BCL	O1D-CGD-O2D-CED
11	A	907	BCL	C2C-C3C-CAC-CBC
11	A	907	BCL	C4C-C3C-CAC-CBC
11	A	907	BCL	CBD-CGD-O2D-CED
11	A	907	BCL	C2-C3-C5-C6
11	A	907	BCL	C4-C3-C5-C6
11	a	904	BCL	C4C-C3C-CAC-CBC
11	a	904	BCL	CBD-CGD-O2D-CED
11	a	905	BCL	C1A-C2A-CAA-CBA
11	a	905	BCL	C3A-C2A-CAA-CBA
11	a	906	BCL	C1A-C2A-CAA-CBA
11	a	907	BCL	C2A-CAA-CBA-CGA
11	a	908	BCL	C1A-C2A-CAA-CBA
11	a	908	BCL	CBD-CGD-O2D-CED
11	a	908	BCL	C2-C3-C5-C6
11	a	908	BCL	C4-C3-C5-C6
11	a	911	BCL	C1A-C2A-CAA-CBA
11	a	911	BCL	C3A-C2A-CAA-CBA
12	A	910	CLA	C2-C3-C5-C6
12	A	910	CLA	C4-C3-C5-C6
12	A	933	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
12	a	912	CLA	CBD-CGD-O2D-CED
12	a	913	CLA	CBD-CGD-O2D-CED
12	a	913	CLA	C6-C7-C8-C9
12	a	915	CLA	C2-C3-C5-C6
12	a	915	CLA	C4-C3-C5-C6
13	c	201	LYC	C4-C5-C6-C7
13	c	201	LYC	C5-C6-C7-C8
13	c	201	LYC	C5-C6-C7-C9
13	c	201	LYC	C57-C56-C58-C59
15	A	915	85I	C4-C3-O3-P
15	A	915	85I	O7-C20-O6-C3
15	A	915	85I	C21-C20-O6-C3
15	A	916	85I	N-C1-C2-O
15	A	916	85I	O6-C3-C4-O4
15	A	916	85I	C4-C3-O3-P
15	A	916	85I	C4-C3-O6-C20
15	A	916	85I	O3-C3-O6-C20
15	A	916	85I	O7-C20-O6-C3
15	A	917	85I	C4-C3-O6-C20
15	A	917	85I	C2-O-P-O3
15	A	917	85I	O7-C20-O6-C3
15	a	918	85I	O3-C3-C4-O4
15	a	918	85I	O6-C3-C4-O4
15	a	918	85I	C4-C3-O6-C20
15	a	918	85I	O7-C20-O6-C3
15	a	919	85I	O6-C3-C4-O4
15	a	919	85I	C4-C3-O3-P
15	a	919	85I	O3-C3-O6-C20
15	a	919	85I	C6-C5-O4-C4
15	a	919	85I	C2-O-P-O1
15	a	920	85I	C2-C1-N-C
15	a	920	85I	O3-C3-C4-O4
15	a	920	85I	O6-C3-C4-O4
15	a	920	85I	C4-C3-O6-C20
15	a	920	85I	C2-O-P-O1
15	a	920	85I	C2-O-P-O2
15	a	920	85I	C2-O-P-O3
15	a	920	85I	O7-C20-O6-C3
17	A	932	85N	O3-C17-O6-C25
17	A	932	85N	O2-C16-C17-O6
17	A	932	85N	C16-C17-O3-C18
17	A	932	85N	C20-C19-C24-O4

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Mol	Chain	Res	Type	Atoms
17	A	932	85N	C20-C19-C24-O5
17	G	101	85N	C19-C20-N1-C21
17	G	101	85N	C19-C20-N1-C22
17	G	101	85N	C19-C20-N1-C23
17	G	101	85N	O3-C18-C19-C20
17	G	101	85N	O3-C18-C19-C24
17	G	101	85N	C20-C19-C24-O4
17	G	101	85N	C20-C19-C24-O5
17	a	902	85N	O7-C25-O6-C17
17	a	902	85N	C26-C25-O6-C17
17	a	902	85N	O2-C16-C17-O3
17	g	101	85N	C16-C17-O6-C25
17	g	101	85N	O7-C25-O6-C17
17	g	101	85N	O2-C16-C17-O6
19	E	101	84Q	O3-C17-O2-C16
19	E	101	84Q	O7-C32-C33-N
19	E	101	84Q	O1-C15-C16-O2
19	E	101	84Q	O1-C15-C16-O4
19	a	921	84Q	O4-C16-O2-C17
19	a	921	84Q	O3-C17-O2-C16
19	a	921	84Q	C32-O7-P-O6
19	a	921	84Q	C32-O7-P-O5
19	a	921	84Q	C32-O7-P-O4
19	a	921	84Q	C16-O4-P-O7
19	a	921	84Q	C15-C16-O4-P
19	a	921	84Q	O1-C15-C16-O4
11	a	904	BCL	O1D-CGD-O2D-CED
11	A	902	BCL	O1D-CGD-O2D-CED
11	A	905	BCL	O1D-CGD-O2D-CED
11	a	909	BCL	O1D-CGD-O2D-CED
11	A	902	BCL	CBD-CGD-O2D-CED
11	A	903	BCL	CBD-CGD-O2D-CED
11	a	905	BCL	CBD-CGD-O2D-CED
11	a	909	BCL	CBD-CGD-O2D-CED
12	A	910	CLA	CBD-CGD-O2D-CED
11	A	907	BCL	O1A-CGA-O2A-C1
11	a	907	BCL	O1A-CGA-O2A-C1
11	a	911	BCL	O1A-CGA-O2A-C1
15	a	919	85I	O5-C5-O4-C4
11	A	903	BCL	O1D-CGD-O2D-CED
11	A	907	BCL	O1D-CGD-O2D-CED
12	a	913	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
12	A	911	CLA	C3-C5-C6-C7
12	a	913	CLA	C3-C5-C6-C7
11	A	907	BCL	CBA-CGA-O2A-C1
11	a	907	BCL	CBA-CGA-O2A-C1
10	a	903	2GO	C4C-C3C-CAC-CBC
11	a	908	BCL	O1A-CGA-O2A-C1
11	a	908	BCL	O1D-CGD-O2D-CED
12	a	901	CLA	CBD-CGD-O2D-CED
12	A	910	CLA	C3-C5-C6-C7
11	a	908	BCL	CBA-CGA-O2A-C1
11	a	911	BCL	CBA-CGA-O2A-C1
12	A	911	CLA	CBD-CGD-O2D-CED
11	A	903	BCL	C2A-CAA-CBA-CGA
11	a	910	BCL	C2A-CAA-CBA-CGA
12	a	912	CLA	C2A-CAA-CBA-CGA
11	a	905	BCL	O1D-CGD-O2D-CED
12	a	912	CLA	O1D-CGD-O2D-CED
11	a	909	BCL	C3-C5-C6-C7
17	g	101	85N	C14-C15-O2-C16
10	A	901	2GO	C1A-C2A-CAA-CBA
10	A	901	2GO	C4C-C3C-CAC-CBC
12	A	910	CLA	O1D-CGD-O2D-CED
15	A	917	85I	O5-C5-O4-C4
17	G	101	85N	O1-C15-O2-C16
17	a	902	85N	C11-C10-C9-C8
11	A	909	BCL	CBD-CGD-O2D-CED
12	a	914	CLA	CBD-CGD-O2D-CED
12	a	915	CLA	CBD-CGD-O2D-CED
17	G	101	85N	C14-C15-O2-C16
15	a	918	85I	C21-C20-O6-C3
12	a	914	CLA	CBA-CGA-O2A-C1
15	A	915	85I	C12-C13-C14-C15
15	A	917	85I	C7-C8-C9-C10
15	A	917	85I	C25-C26-C27-C28
15	A	917	85I	C10-C11-C12-C13
15	A	917	85I	C6-C5-O4-C4
17	g	101	85N	O1-C15-O2-C16
11	A	902	BCL	C4-C3-C5-C6
11	A	902	BCL	C2-C3-C5-C6
12	a	901	CLA	C2A-CAA-CBA-CGA
11	A	902	BCL	CBA-CGA-O2A-C1
19	E	101	84Q	C13-C14-O1-C15

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Mol	Chain	Res	Type	Atoms
19	a	921	84Q	C13-C14-O1-C15
12	a	914	CLA	O1A-CGA-O2A-C1
15	A	917	85I	C3-O3-P-O
19	E	101	84Q	C16-O4-P-O7
12	A	910	CLA	C13-C15-C16-C17
19	a	921	84Q	C1-C3-C4-C5
19	a	921	84Q	C11-C12-C13-C14
19	E	101	84Q	O-C14-O1-C15
19	a	921	84Q	O-C14-O1-C15
11	A	903	BCL	C11-C10-C8-C9
11	A	903	BCL	C14-C13-C15-C16
11	A	907	BCL	C11-C10-C8-C9
11	A	908	BCL	C11-C10-C8-C9
11	a	908	BCL	C14-C13-C15-C16
11	a	910	BCL	C14-C13-C15-C16
12	A	911	CLA	C6-C7-C8-C9
12	A	931	CLA	C6-C7-C8-C9
12	a	901	CLA	C6-C7-C8-C9
13	c	201	LYC	C15-C16-C17-C19
13	c	201	LYC	C55-C56-C58-C59
11	a	908	BCL	C5-C6-C7-C8
12	a	901	CLA	C15-C16-C17-C18
11	a	905	BCL	C15-C16-C17-C18
11	a	909	BCL	C15-C16-C17-C18
15	a	919	85I	C14-C15-C16-C17
17	A	932	85N	C34-C35-C36-C37
17	a	902	85N	C25-C26-C27-C28
15	a	918	85I	C2-C1-N-C
12	A	910	CLA	C8-C10-C11-C12
11	A	909	BCL	C2-C1-O2A-CGA
11	a	907	BCL	C5-C6-C7-C8
11	a	909	BCL	C10-C11-C12-C13
19	E	101	84Q	C18-C17-O2-C16
12	A	911	CLA	C15-C16-C17-C18
11	A	909	BCL	C6-C7-C8-C10
11	a	907	BCL	C11-C12-C13-C15
12	A	910	CLA	C6-C7-C8-C10
12	A	931	CLA	C11-C12-C13-C15
11	A	909	BCL	C3-C5-C6-C7
15	A	915	85I	O5-C5-O4-C4
11	A	905	BCL	C2A-CAA-CBA-CGA
12	A	910	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
15	A	917	85I	C29-C30-C31-C32
15	a	920	85I	C29-C30-C31-C32
13	A	913	LYC	C4-C5-C6-C7
11	A	902	BCL	C13-C15-C16-C17
11	a	907	BCL	C10-C11-C12-C13
11	a	909	BCL	C5-C6-C7-C8
12	a	912	CLA	C8-C10-C11-C12
12	A	931	CLA	O1D-CGD-O2D-CED
12	a	901	CLA	C5-C6-C7-C8
10	a	903	2GO	C15-C16-C17-C18
12	A	931	CLA	C8-C10-C11-C12
12	A	931	CLA	C13-C15-C16-C17
12	a	901	CLA	C13-C15-C16-C17
15	a	920	85I	C14-C15-C16-C17
15	a	919	85I	C2-O-P-O3
15	A	915	85I	C6-C5-O4-C4
10	a	903	2GO	C13-C15-C16-C17
11	A	905	BCL	C10-C11-C12-C13
12	A	931	CLA	C15-C16-C17-C18
11	A	908	BCL	C2A-CAA-CBA-CGA
12	A	931	CLA	C2A-CAA-CBA-CGA
15	a	919	85I	C15-C16-C17-C19
11	a	905	BCL	C13-C15-C16-C17
15	A	917	85I	C11-C10-C9-C8
17	A	932	85N	C31-C32-C33-C34
19	E	101	84Q	C7-C8-C9-C10
19	a	921	84Q	C9-C10-C11-C12
12	A	931	CLA	C16-C17-C18-C20
17	a	902	85N	C1-C2-C4-C5
15	a	919	85I	C6-C7-C8-C9
15	a	919	85I	C12-C13-C14-C15
15	a	920	85I	C11-C12-C13-C14
17	A	932	85N	C27-C28-C29-C30
19	a	921	84Q	C4-C5-C6-C7
15	a	919	85I	C21-C22-C23-C24
15	A	916	85I	C25-C26-C27-C28
15	a	920	85I	C9-C10-C11-C12
15	A	915	85I	C22-C23-C24-C25
15	A	916	85I	C22-C23-C24-C25
15	a	918	85I	C26-C27-C28-C29
15	a	920	85I	C20-C21-C22-C23
19	E	101	84Q	C17-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
11	a	909	BCL	C1-C2-C3-C5
15	a	919	85I	C9-C10-C11-C12
11	A	902	BCL	O1A-CGA-O2A-C1
11	A	903	BCL	C16-C17-C18-C20
15	A	917	85I	C30-C31-C32-C34
15	A	915	85I	C10-C11-C12-C13
15	a	919	85I	C11-C10-C9-C8
17	G	101	85N	C10-C11-C12-C13
17	a	902	85N	C26-C27-C28-C29
17	g	101	85N	C5-C6-C7-C8
11	A	909	BCL	C11-C10-C8-C9
12	A	911	CLA	O1D-CGD-O2D-CED
15	A	915	85I	C26-C27-C28-C29
15	A	917	85I	C26-C27-C28-C29
17	a	902	85N	C7-C8-C9-C10
19	a	921	84Q	C19-C20-C21-C22
13	c	201	LYC	C15-C16-C17-C18
15	A	916	85I	C27-C28-C29-C30
11	a	908	BCL	C3-C5-C6-C7
15	a	918	85I	C21-C22-C23-C24
15	a	919	85I	C22-C23-C24-C25
17	a	902	85N	C5-C6-C7-C8
15	A	916	85I	C7-C8-C9-C10
15	a	918	85I	C22-C23-C24-C25
15	a	920	85I	C7-C8-C9-C10
17	G	101	85N	C26-C27-C28-C29
19	E	101	84Q	C10-C11-C12-C13
11	a	910	BCL	C16-C17-C18-C19
12	A	931	CLA	C16-C17-C18-C19
19	E	101	84Q	C-C1-C3-C4
12	a	913	CLA	C15-C16-C17-C18
15	A	917	85I	C12-C13-C14-C15
15	a	919	85I	C25-C26-C27-C28
15	a	919	85I	C13-C14-C15-C16
17	a	902	85N	C11-C12-C13-C14
17	g	101	85N	C11-C12-C13-C14
15	A	917	85I	C20-C21-C22-C23
11	a	910	BCL	C10-C11-C12-C13
12	A	931	CLA	C5-C6-C7-C8
15	a	920	85I	C25-C26-C27-C28
17	g	101	85N	C27-C28-C29-C30
19	E	101	84Q	C19-C20-C21-C22

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Mol	Chain	Res	Type	Atoms
11	a	909	BCL	CBA-CGA-O2A-C1
15	a	919	85I	C10-C11-C12-C13
11	A	904	BCL	C3A-C2A-CAA-CBA
11	A	905	BCL	C3A-C2A-CAA-CBA
11	A	909	BCL	C3A-C2A-CAA-CBA
11	a	906	BCL	C3A-C2A-CAA-CBA
11	a	908	BCL	C3A-C2A-CAA-CBA
12	a	901	CLA	C3A-C2A-CAA-CBA
13	c	201	LYC	C17-C19-C20-C21
15	a	919	85I	C7-C8-C9-C10
17	a	902	85N	C10-C11-C12-C13
11	a	910	BCL	C16-C17-C18-C20
15	A	916	85I	C30-C31-C32-C33
15	A	917	85I	C15-C16-C17-C19
19	E	101	84Q	C2-C1-C3-C4
15	A	916	85I	C24-C25-C26-C27
15	A	916	85I	C13-C14-C15-C16
15	a	919	85I	C11-C12-C13-C14
19	E	101	84Q	C20-C21-C22-C23
15	A	916	85I	C20-C21-C22-C23
17	a	902	85N	C12-C13-C14-C15
12	A	931	CLA	C4-C3-C5-C6
17	g	101	85N	C26-C27-C28-C29
15	A	916	85I	C11-C10-C9-C8
19	a	921	84Q	C3-C4-C5-C6
12	a	901	CLA	O1D-CGD-O2D-CED
15	a	919	85I	C30-C31-C32-C34
17	a	902	85N	C28-C29-C30-C31
15	A	917	85I	C22-C23-C24-C25
19	a	921	84Q	C6-C7-C8-C9
15	A	916	85I	C12-C13-C14-C15
19	a	921	84Q	C25-C26-C27-C28
15	A	916	85I	C21-C20-O6-C3
15	A	917	85I	C28-C29-C30-C31
12	a	901	CLA	C8-C10-C11-C12
15	A	916	85I	C5-C6-C7-C8
15	a	920	85I	C26-C27-C28-C29
11	A	909	BCL	C11-C10-C8-C7
12	A	911	CLA	C11-C12-C13-C15
12	A	931	CLA	C11-C10-C8-C7
11	a	908	BCL	C13-C15-C16-C17
11	A	903	BCL	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
15	A	917	85I	C30-C31-C32-C33
15	a	918	85I	C20-C21-C22-C23
11	a	904	BCL	C2A-CAA-CBA-CGA
15	A	917	85I	C21-C22-C23-C24
17	a	902	85N	C17-C16-O2-C15
19	E	101	84Q	C11-C12-C13-C14
19	a	921	84Q	C5-C6-C7-C8
15	a	920	85I	C21-C20-O6-C3
17	g	101	85N	C26-C25-O6-C17
11	a	904	BCL	CBA-CGA-O2A-C1
15	A	917	85I	C5-C6-C7-C8
15	a	918	85I	C5-C6-C7-C8
15	A	915	85I	C7-C8-C9-C10
15	a	920	85I	C21-C22-C23-C24
17	a	902	85N	C29-C30-C31-C32
19	E	101	84Q	C3-C4-C5-C6
17	G	101	85N	C1-C2-C4-C5
17	a	902	85N	C3-C2-C4-C5
11	A	903	BCL	C10-C11-C12-C13
11	A	908	BCL	C8-C10-C11-C12
11	a	907	BCL	C11-C12-C13-C14
12	A	912	CLA	CBD-CGD-O2D-CED
19	a	921	84Q	C23-C24-C25-C26
17	A	932	85N	C29-C30-C31-C32
10	a	903	2GO	C2C-C3C-CAC-CBC
11	A	902	BCL	C1A-C2A-CAA-CBA
11	A	908	BCL	C1A-C2A-CAA-CBA
11	A	909	BCL	C1A-C2A-CAA-CBA
11	a	910	BCL	C1A-C2A-CAA-CBA
15	a	919	85I	C30-C31-C32-C33
15	a	920	85I	C30-C31-C32-C33
17	a	902	85N	C30-C31-C32-C33
11	A	905	BCL	C5-C6-C7-C8
12	a	914	CLA	O1D-CGD-O2D-CED
11	A	909	BCL	C15-C16-C17-C18
19	E	101	84Q	C16-C15-O1-C14
15	A	917	85I	C15-C16-C17-C18
11	A	908	BCL	C3-C5-C6-C7
15	A	917	85I	C6-C7-C8-C9
19	a	921	84Q	C10-C11-C12-C13
12	a	901	CLA	CBA-CGA-O2A-C1
11	a	904	BCL	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
17	G	101	85N	C7-C8-C9-C10
12	a	912	CLA	C13-C15-C16-C17
15	a	919	85I	C23-C24-C25-C26
11	a	909	BCL	O1A-CGA-O2A-C1
15	a	918	85I	C30-C31-C32-C34
15	A	916	85I	C6-C7-C8-C9
12	A	933	CLA	O1D-CGD-O2D-CED
11	A	909	BCL	C8-C10-C11-C12
12	a	913	CLA	C16-C17-C18-C19
19	a	921	84Q	C18-C17-O2-C16
15	a	919	85I	C28-C29-C30-C31
17	G	101	85N	C11-C12-C13-C14
19	E	101	84Q	C22-C23-C24-C25
12	A	912	CLA	O1D-CGD-O2D-CED
11	a	908	BCL	C15-C16-C17-C18
15	A	916	85I	C14-C15-C16-C17
11	A	905	BCL	C2-C1-O2A-CGA
15	A	915	85I	C25-C26-C27-C28
17	a	902	85N	C18-C19-C24-O4
11	a	905	BCL	CBA-CGA-O2A-C1
11	A	908	BCL	C12-C13-C15-C16
11	a	908	BCL	C12-C13-C15-C16
11	a	910	BCL	C11-C12-C13-C15
11	a	910	BCL	C12-C13-C15-C16
12	a	901	CLA	C6-C7-C8-C10
12	a	913	CLA	C11-C10-C8-C7
11	A	903	BCL	C6-C7-C8-C9
11	A	905	BCL	C11-C10-C8-C9
11	a	908	BCL	C6-C7-C8-C9
12	A	931	CLA	C11-C12-C13-C14
12	a	912	CLA	C6-C7-C8-C9
12	a	915	CLA	O1D-CGD-O2D-CED
12	a	912	CLA	CBA-CGA-O2A-C1
19	E	101	84Q	C16-O4-P-O5
12	a	913	CLA	C16-C17-C18-C20
17	G	101	85N	C6-C7-C8-C9
11	a	905	BCL	C10-C11-C12-C13
17	a	902	85N	O2-C16-C17-O6
17	g	101	85N	O2-C16-C17-O3
19	a	921	84Q	O1-C15-C16-O2
11	A	903	BCL	C3A-C2A-CAA-CBA
11	A	908	BCL	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
15	a	919	85I	C3-O3-P-O
13	c	201	LYC	C58-C59-C60-C61
17	A	932	85N	C28-C29-C30-C31
15	A	916	85I	C30-C31-C32-C34
11	a	904	BCL	C8-C10-C11-C12
17	G	101	85N	C3-C2-C4-C5
19	E	101	84Q	C6-C7-C8-C9
15	A	915	85I	C2-O-P-O3
11	a	905	BCL	O1A-CGA-O2A-C1
15	A	915	85I	C30-C31-C32-C33
15	a	919	85I	C15-C16-C17-C18
11	a	908	BCL	C10-C11-C12-C13
17	a	902	85N	C2-C4-C5-C6
10	a	903	2GO	C3A-C2A-CAA-CBA
17	A	932	85N	C25-C26-C27-C28
15	a	920	85I	C30-C31-C32-C34
15	a	918	85I	C11-C12-C13-C14
15	a	918	85I	C12-C13-C14-C15
11	a	911	BCL	C2-C1-O2A-CGA
11	a	905	BCL	C11-C12-C13-C14
19	E	101	84Q	C1-C3-C4-C5
15	A	917	85I	C21-C20-O6-C3
15	a	918	85I	C30-C31-C32-C33
19	a	921	84Q	C2-C1-C3-C4
12	A	911	CLA	C10-C11-C12-C13
15	A	915	85I	C24-C25-C26-C27
11	a	905	BCL	C3-C5-C6-C7
15	a	920	85I	C27-C28-C29-C30
10	A	901	2GO	C10-C11-C12-C13
15	a	919	85I	C29-C30-C31-C32
15	A	915	85I	C21-C22-C23-C24
11	A	902	BCL	C11-C12-C13-C15
11	A	902	BCL	C12-C13-C15-C16
11	A	903	BCL	C6-C7-C8-C10
11	A	903	BCL	C11-C10-C8-C7
11	A	905	BCL	C11-C10-C8-C7
11	a	905	BCL	C11-C12-C13-C15
11	a	908	BCL	C6-C7-C8-C10
12	A	910	CLA	C11-C10-C8-C7
12	A	911	CLA	C11-C10-C8-C7
12	a	901	CLA	C11-C10-C8-C7
11	a	909	BCL	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
12	A	911	CLA	C16-C17-C18-C19
11	A	902	BCL	C2A-CAA-CBA-CGA
12	a	912	CLA	C3-C5-C6-C7
12	A	910	CLA	C10-C11-C12-C13
12	A	911	CLA	C5-C6-C7-C8
11	a	909	BCL	CAD-CBD-CGD-O2D
12	A	931	CLA	CAD-CBD-CGD-O2D
12	a	912	CLA	CAD-CBD-CGD-O2D
15	A	916	85I	C23-C24-C25-C26
15	a	920	85I	C13-C14-C15-C16
17	a	902	85N	C33-C34-C35-C36
19	E	101	84Q	C24-C25-C26-C27
11	A	906	BCL	CHA-CBD-CGD-O2D
11	a	905	BCL	CHA-CBD-CGD-O2D
12	A	933	CLA	CHA-CBD-CGD-O1D
12	a	915	CLA	CHA-CBD-CGD-O1D
12	a	915	CLA	CHA-CBD-CGD-O2D
11	a	904	BCL	O1A-CGA-O2A-C1
12	a	901	CLA	O1A-CGA-O2A-C1
11	A	903	BCL	C5-C6-C7-C8
15	a	919	85I	O7-C20-O6-C3
11	A	908	BCL	C14-C13-C15-C16
15	A	916	85I	C10-C11-C12-C13
15	A	917	85I	C3-O3-P-O1
19	a	921	84Q	C16-O4-P-O6
17	A	932	85N	C1-C2-C4-C5
15	a	919	85I	N-C1-C2-O
19	E	101	84Q	C32-O7-P-O4
15	a	918	85I	C27-C28-C29-C30
15	A	915	85I	C2-O-P-O1
15	A	917	85I	C2-O-P-O2
15	a	919	85I	C2-O-P-O2
19	E	101	84Q	C27-C28-C29-C31
11	a	905	BCL	C5-C6-C7-C8
11	a	908	BCL	CAD-CBD-CGD-O1D
15	a	920	85I	C1-C2-O-P
19	a	921	84Q	C33-C32-O7-P
15	a	919	85I	C20-C21-C22-C23
15	a	918	85I	C7-C8-C9-C10
19	a	921	84Q	C-C1-C3-C4
11	A	905	BCL	C12-C13-C15-C16
11	A	907	BCL	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
11	A	907	BCL	C11-C10-C8-C7
11	A	908	BCL	C11-C10-C8-C7
11	a	907	BCL	C11-C10-C8-C7
17	A	932	85N	C19-C18-O3-C17
15	a	918	85I	C23-C24-C25-C26
11	A	907	BCL	C8-C10-C11-C12
11	a	909	BCL	CAA-CBA-CGA-O2A
19	a	921	84Q	C7-C8-C9-C10
11	a	904	BCL	C10-C11-C12-C13
10	a	903	2GO	C14-C13-C15-C16
11	A	902	BCL	C14-C13-C15-C16
11	a	907	BCL	C6-C7-C8-C9
11	a	910	BCL	C11-C12-C13-C14
12	A	911	CLA	C11-C12-C13-C14
12	a	913	CLA	C11-C10-C8-C9
17	G	101	85N	C25-C26-C27-C28
12	a	912	CLA	O1A-CGA-O2A-C1
13	c	201	LYC	C9-C10-C11-C12
11	A	908	BCL	C16-C17-C18-C19
17	g	101	85N	C1-C2-C4-C5
15	a	920	85I	C6-C7-C8-C9
11	A	906	BCL	O1A-CGA-O2A-C1
17	A	932	85N	C3-C2-C4-C5
11	a	904	BCL	C2-C1-O2A-CGA
17	a	902	85N	C18-C19-C24-O5
17	g	101	85N	C7-C8-C9-C10
11	A	902	BCL	CAA-CBA-CGA-O2A
15	a	920	85I	C22-C23-C24-C25
15	a	919	85I	C21-C20-O6-C3
15	a	920	85I	C10-C11-C12-C13
10	a	903	2GO	C11-C12-C13-C15
12	a	901	CLA	C11-C12-C13-C14
13	c	201	LYC	C52-C51-C53-C54
10	a	903	2GO	C8-C10-C11-C12
15	A	916	85I	C26-C27-C28-C29
15	a	919	85I	C24-C25-C26-C27
18	c	202	HEC	CAD-CBD-CGD-O2D
15	A	915	85I	C6-C7-C8-C9
12	a	901	CLA	C16-C17-C18-C20
15	a	918	85I	C9-C10-C11-C12
11	a	906	BCL	CAA-CBA-CGA-O1A
15	A	915	85I	O3-C3-C4-O4

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Mol	Chain	Res	Type	Atoms
15	a	920	85I	C12-C13-C14-C15
12	a	901	CLA	C14-C13-C15-C16
11	a	908	BCL	C2A-CAA-CBA-CGA
19	E	101	84Q	C23-C24-C25-C26
11	A	904	BCL	CAA-CBA-CGA-O2A
11	a	909	BCL	C13-C15-C16-C17
12	a	912	CLA	C4-C3-C5-C6
12	a	901	CLA	C1A-C2A-CAA-CBA
11	A	903	BCL	C12-C13-C15-C16
12	A	931	CLA	C6-C7-C8-C10
12	a	901	CLA	C12-C13-C15-C16
18	C	301	HEC	CAD-CBD-CGD-O2D
15	A	916	85I	C15-C16-C17-C19
11	A	904	BCL	CAA-CBA-CGA-O1A
12	A	910	CLA	C16-C17-C18-C20
11	a	906	BCL	CAA-CBA-CGA-O2A
13	c	201	LYC	C21-C50-C51-C53
12	a	901	CLA	C2-C1-O2A-CGA
19	a	921	84Q	C27-C28-C29-C30
11	a	904	BCL	CAA-CBA-CGA-O2A
15	a	918	85I	C28-C29-C30-C31
17	g	101	85N	C3-C2-C4-C5
18	C	301	HEC	CAD-CBD-CGD-O1D
15	A	917	85I	C23-C24-C25-C26
12	A	931	CLA	CBD-CGD-O2D-CED
11	A	909	BCL	O1D-CGD-O2D-CED
17	g	101	85N	C11-C10-C9-C8
12	a	901	CLA	CAA-CBA-CGA-O2A
10	A	901	2GO	C16-C17-C18-C20
13	c	201	LYC	C13-C12-C14-C15
13	c	201	LYC	C21-C50-C51-C52
15	A	915	85I	C5-C6-C7-C8
11	A	902	BCL	C8-C10-C11-C12
12	A	931	CLA	C2-C3-C5-C6
12	a	912	CLA	C2-C3-C5-C6
11	A	903	BCL	CAA-CBA-CGA-O2A
11	A	907	BCL	C6-C7-C8-C9
11	A	908	BCL	C6-C7-C8-C9
11	A	909	BCL	C11-C12-C13-C14
11	a	907	BCL	C11-C10-C8-C9
12	a	901	CLA	C11-C10-C8-C9
11	A	903	BCL	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
11	A	907	BCL	CAD-CBD-CGD-O2D
12	a	901	CLA	CAD-CBD-CGD-O2D
15	a	918	85I	C24-C25-C26-C27
15	a	920	85I	C11-C10-C9-C8
15	a	919	85I	C26-C27-C28-C29
18	c	202	HEC	CAD-CBD-CGD-O1D
11	A	904	BCL	CHA-CBD-CGD-O2D
11	A	906	BCL	CHA-CBD-CGD-O1D
11	a	904	BCL	CHA-CBD-CGD-O2D
11	a	905	BCL	CHA-CBD-CGD-O1D
11	a	906	BCL	CHA-CBD-CGD-O1D
11	a	908	BCL	CHA-CBD-CGD-O2D
12	a	913	CLA	CHA-CBD-CGD-O2D
13	c	201	LYC	C11-C12-C14-C15
15	a	919	85I	O4-C5-C6-C7
17	a	902	85N	C13-C14-C15-O2
11	a	910	BCL	CAA-CBA-CGA-O2A
11	a	907	BCL	C6-C7-C8-C10
11	A	907	BCL	C11-C12-C13-C14
12	a	901	CLA	C16-C17-C18-C19
15	A	916	85I	O4-C5-C6-C7
18	C	301	HEC	CAA-CBA-CGA-O2A
12	a	901	CLA	CAA-CBA-CGA-O1A
19	a	921	84Q	C22-C23-C24-C25
15	A	917	85I	N-C1-C2-O
17	g	101	85N	C18-C19-C20-N1
19	a	921	84Q	C27-C28-C29-C31
17	A	932	85N	C4-C5-C6-C7
11	a	907	BCL	C13-C15-C16-C17
12	A	910	CLA	C2A-CAA-CBA-CGA
15	a	919	85I	O5-C5-C6-C7
19	a	921	84Q	C11-C10-C9-C8
18	c	202	HEC	CAA-CBA-CGA-O2A
17	A	932	85N	C2-C4-C5-C6
11	A	903	BCL	CAA-CBA-CGA-O1A
17	g	101	85N	C13-C14-C15-O2
17	a	902	85N	C13-C14-C15-O1
17	g	101	85N	C2-C4-C5-C6
11	a	910	BCL	CAA-CBA-CGA-O1A
11	A	906	BCL	CAD-CBD-CGD-O1D
11	A	908	BCL	CAD-CBD-CGD-O1D
11	a	906	BCL	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
12	A	933	CLA	CAD-CBD-CGD-O1D
12	a	915	CLA	CAD-CBD-CGD-O1D
19	E	101	84Q	C33-C32-O7-P
17	g	101	85N	C13-C14-C15-O1
15	a	920	85I	O4-C5-C6-C7
11	A	905	BCL	C14-C13-C15-C16
11	a	905	BCL	C6-C7-C8-C9
11	A	908	BCL	CAA-CBA-CGA-O2A
15	A	916	85I	O6-C20-C21-C22
11	A	908	BCL	C6-C7-C8-C10
11	a	905	BCL	C6-C7-C8-C10
12	a	913	CLA	C6-C7-C8-C10
15	A	916	85I	O5-C5-C6-C7
17	A	932	85N	O7-C25-C26-C27
12	A	931	CLA	C3-C5-C6-C7
13	c	201	LYC	C50-C51-C53-C54
11	A	907	BCL	CAA-CBA-CGA-O2A
17	A	932	85N	O6-C25-C26-C27
17	G	101	85N	C13-C14-C15-O2
15	A	917	85I	C14-C15-C16-C17
11	A	903	BCL	O1A-CGA-O2A-C1
15	A	916	85I	O7-C20-C21-C22

There are no ring outliers.

44 monomers are involved in 203 short contacts:

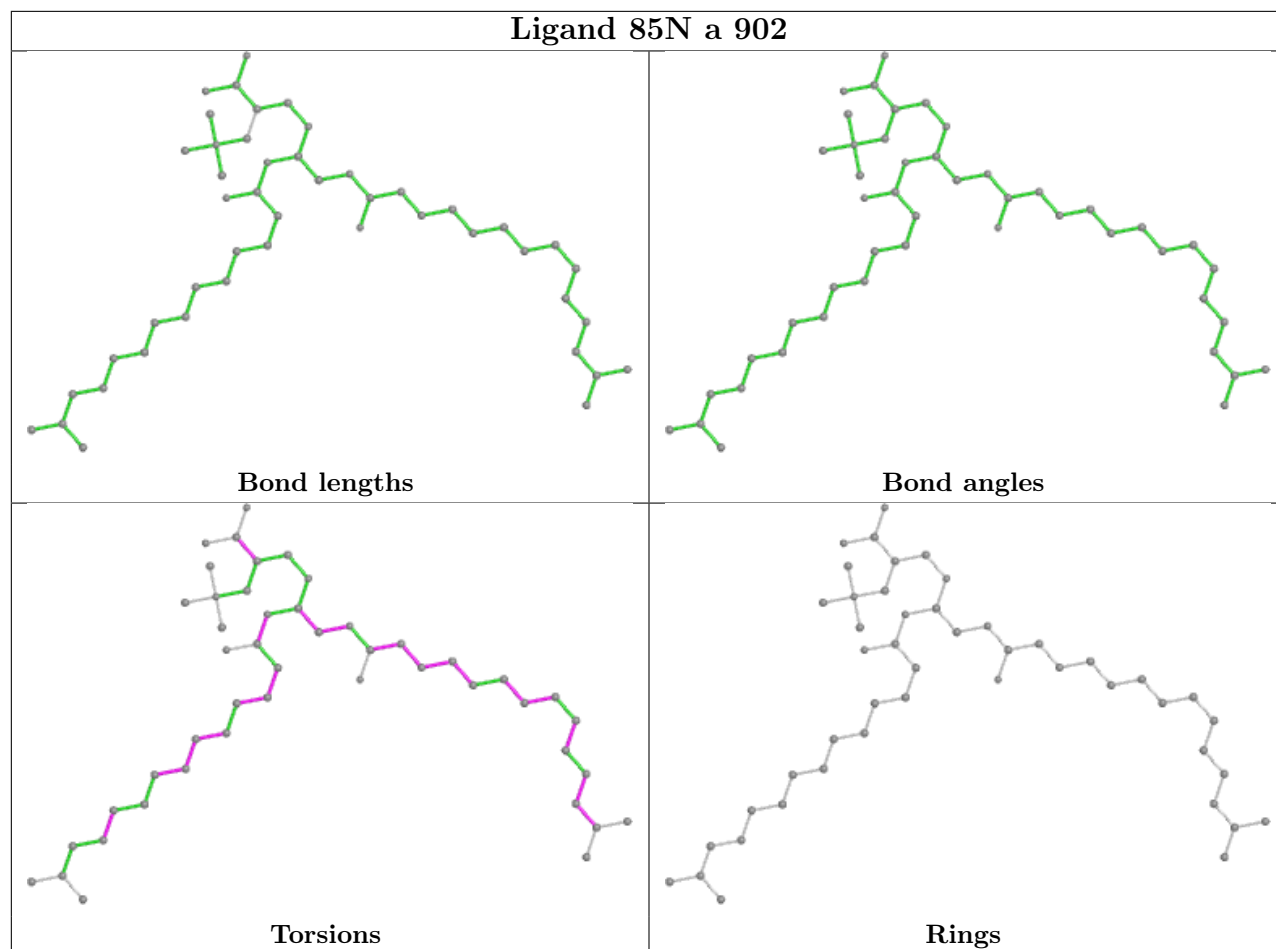
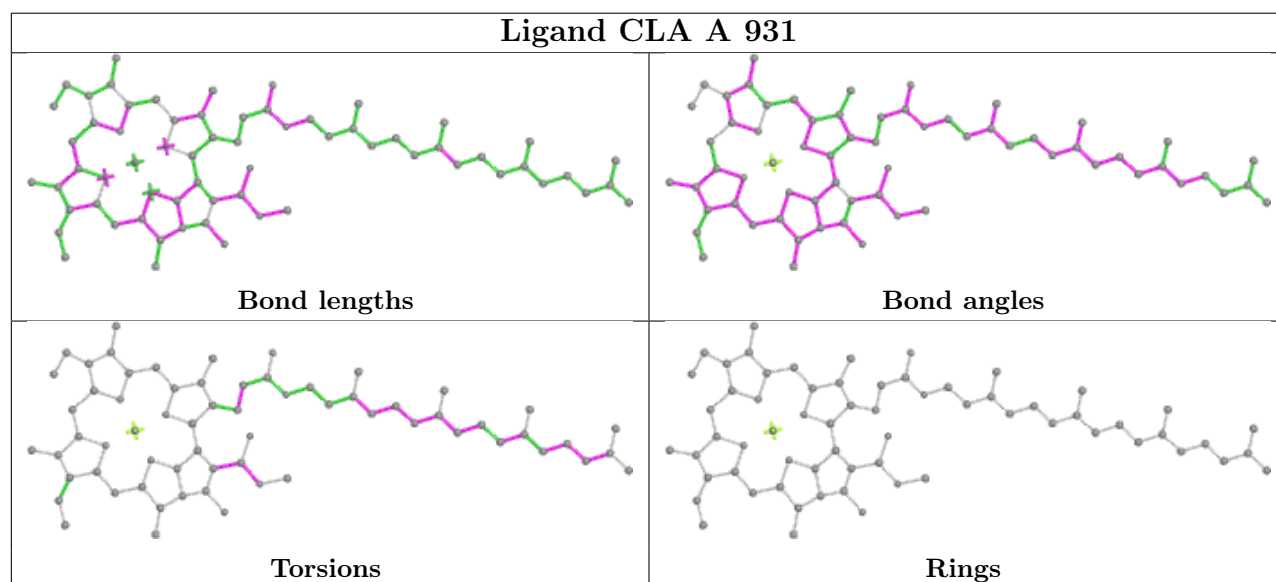
Mol	Chain	Res	Type	Clashes	Symm-Clashes
17	a	902	85N	3	0
12	A	931	CLA	7	0
12	a	913	CLA	6	0
15	a	919	85I	1	0
11	A	904	BCL	2	0
15	a	920	85I	4	0
11	A	907	BCL	4	0
11	A	903	BCL	6	0
11	a	904	BCL	8	0
11	a	910	BCL	5	0
12	A	912	CLA	1	0
12	a	915	CLA	2	0
11	A	902	BCL	8	0
11	A	906	BCL	6	0
17	G	101	85N	7	0

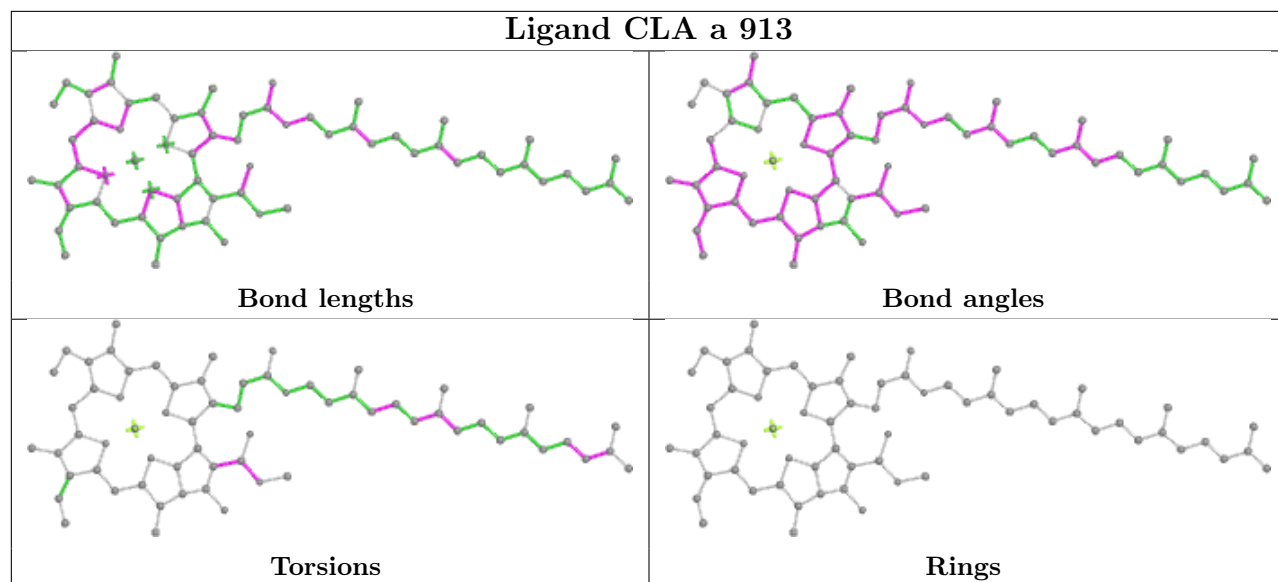
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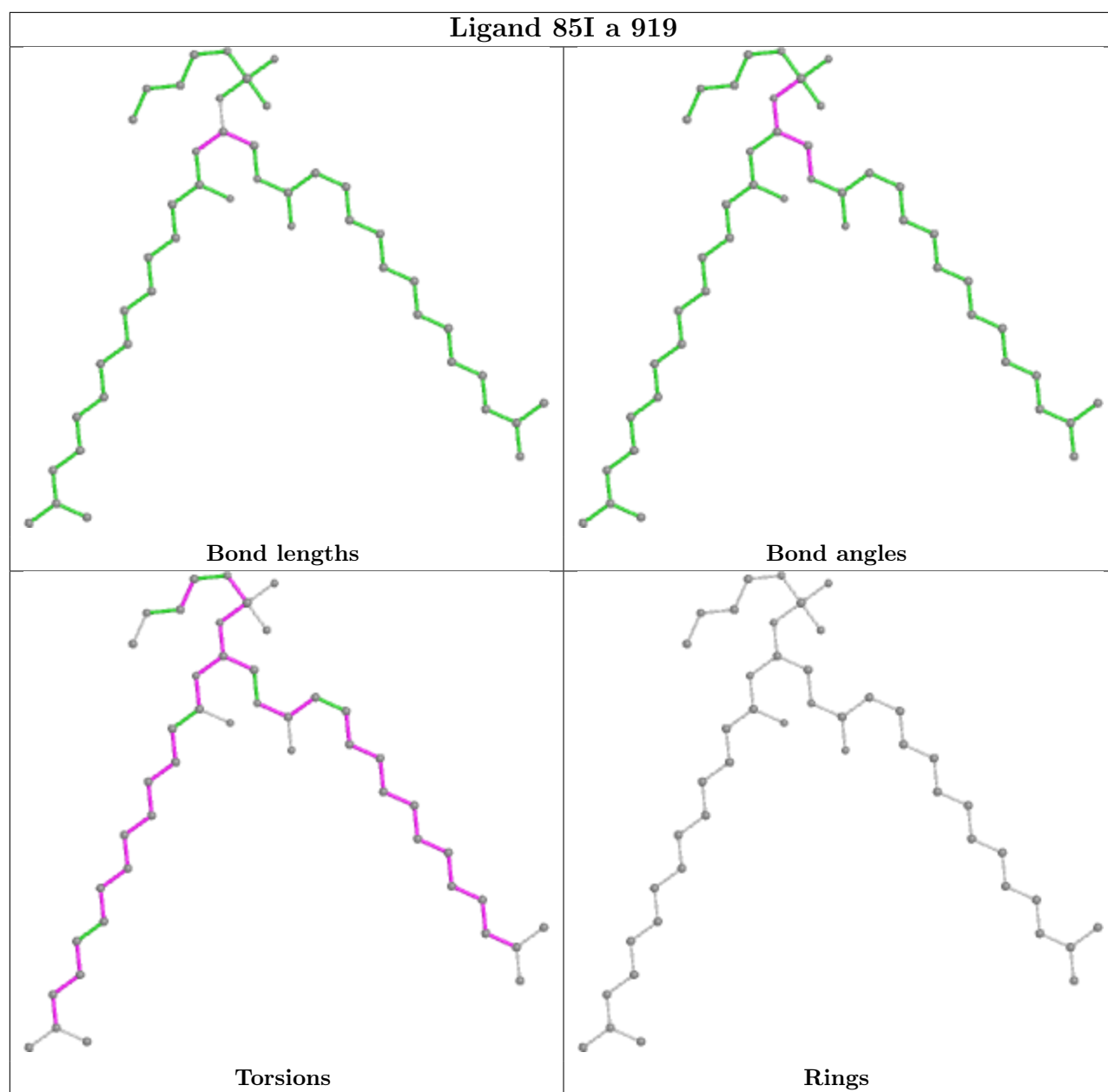
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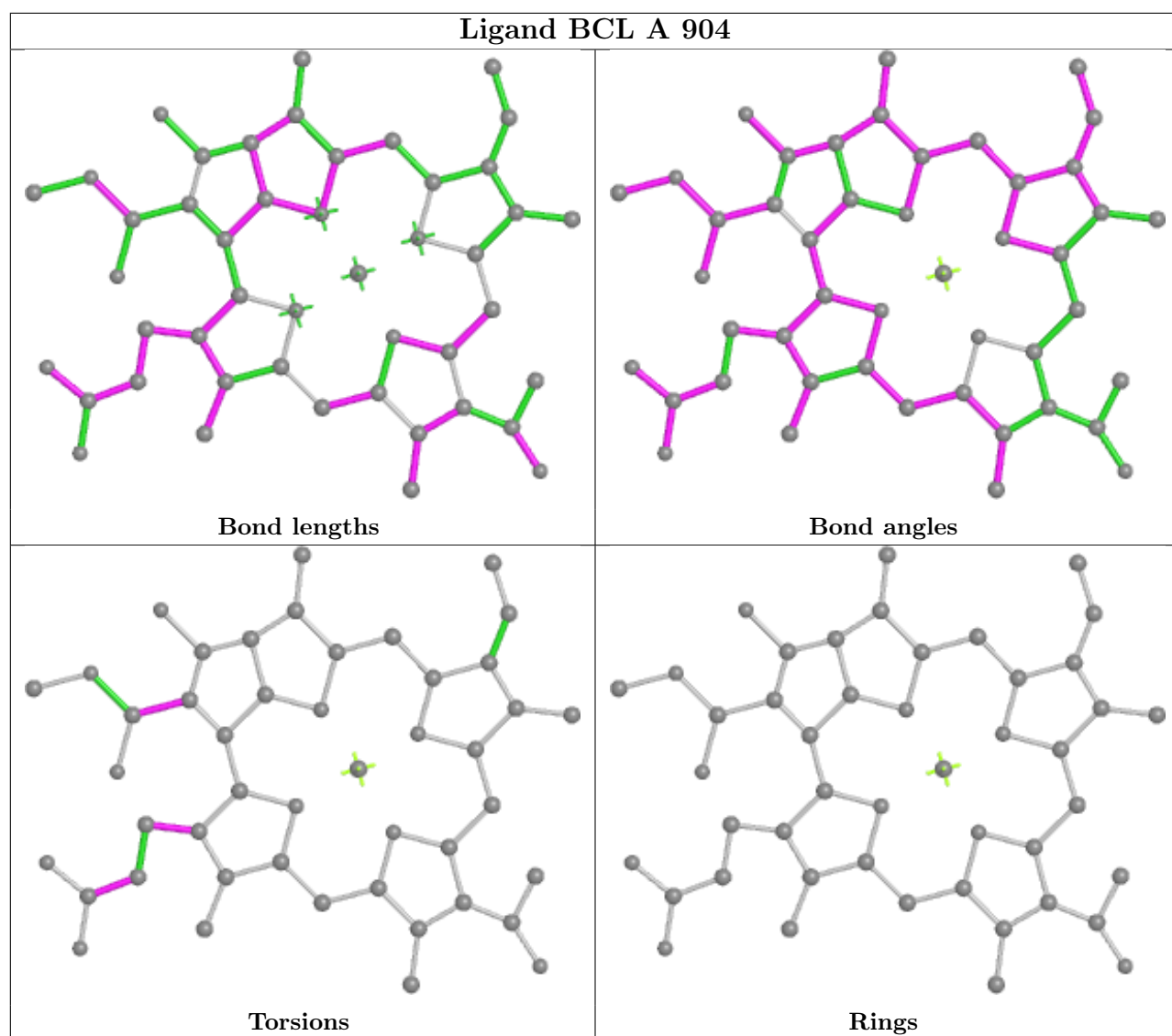
Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	B	201	SF4	10	0
11	A	905	BCL	8	0
11	A	908	BCL	8	0
17	g	101	85N	1	0
15	A	916	85I	1	0
11	a	905	BCL	7	0
12	a	914	CLA	2	0
12	a	912	CLA	3	0
11	a	911	BCL	4	0
13	c	201	LYC	5	0
13	A	913	LYC	7	0
12	a	901	CLA	3	0
11	A	909	BCL	2	0
15	A	915	85I	2	0
18	c	202	HEC	5	0
20	B	202	SF4	3	0
20	a	917	SF4	5	0
11	a	907	BCL	4	0
17	A	932	85N	8	0
12	A	933	CLA	2	0
11	a	906	BCL	1	0
12	A	911	CLA	8	0
12	A	910	CLA	12	0
10	A	901	2GO	3	0
11	a	909	BCL	6	0
11	a	908	BCL	9	0
10	a	903	2GO	1	0
18	C	301	HEC	9	0
15	A	917	85I	3	0

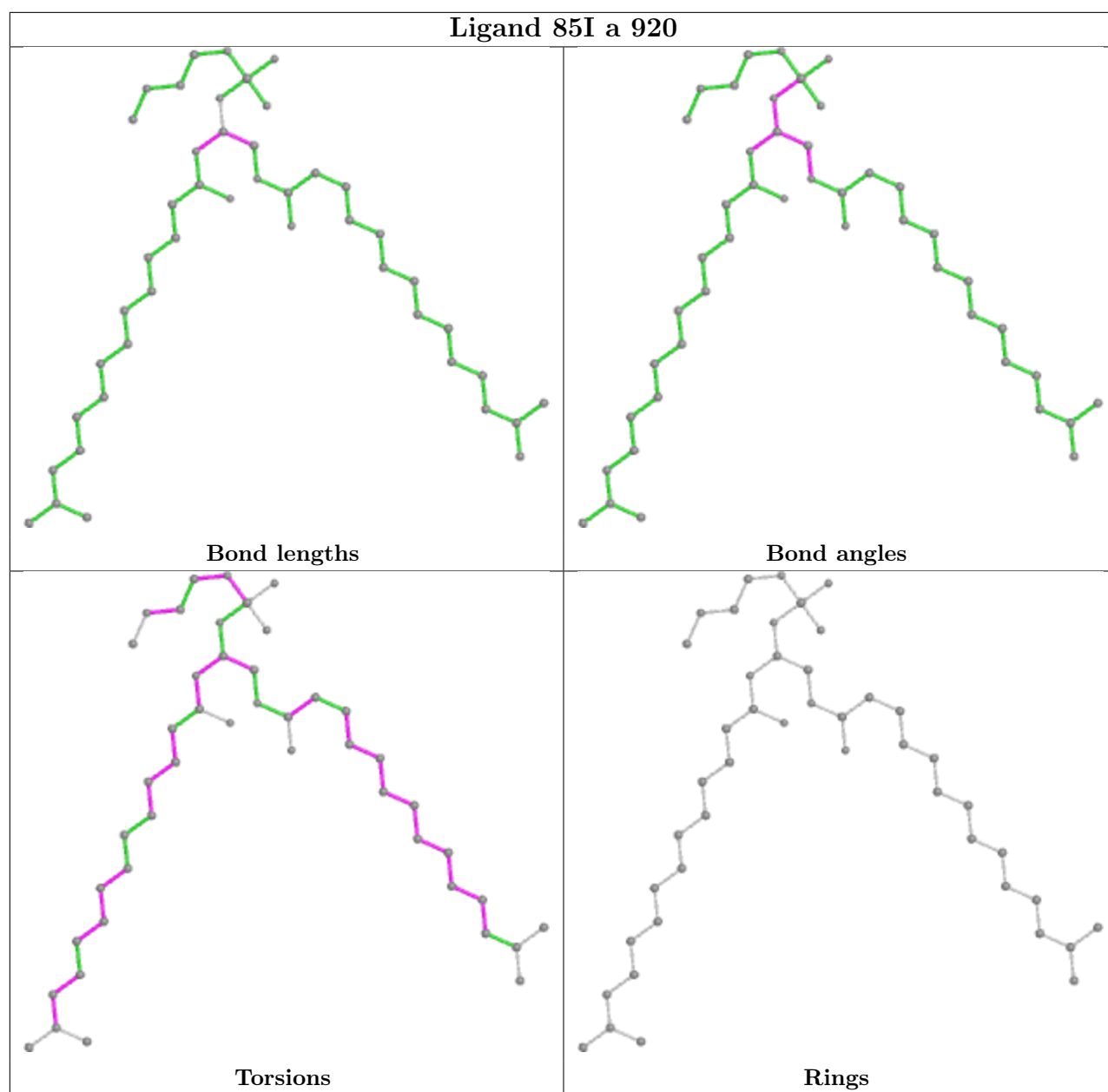
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

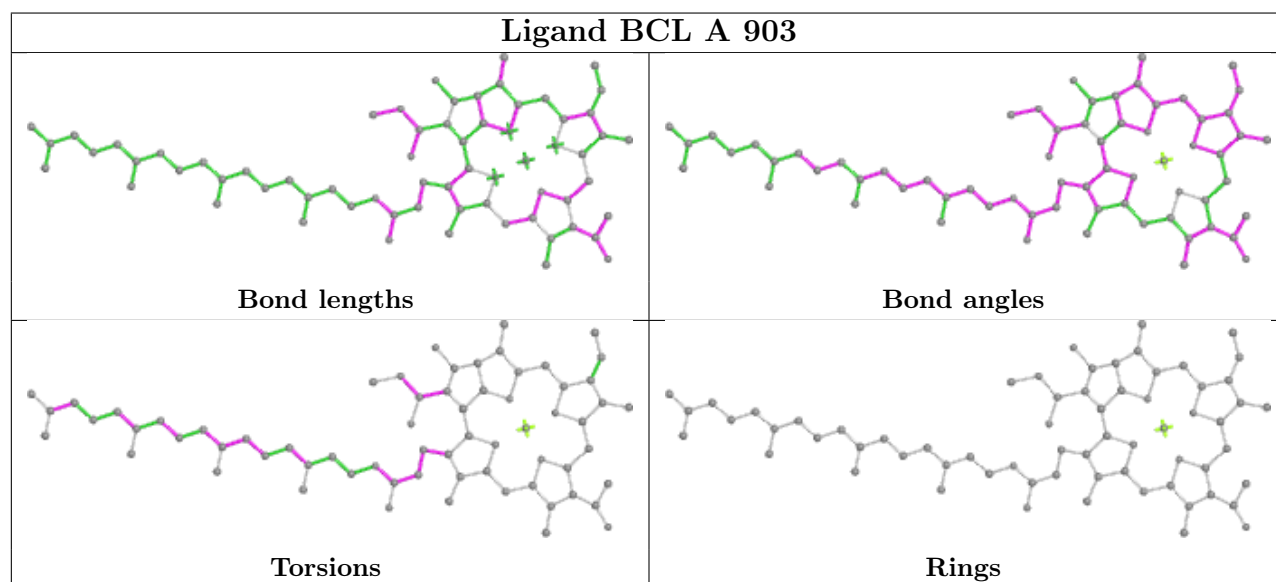
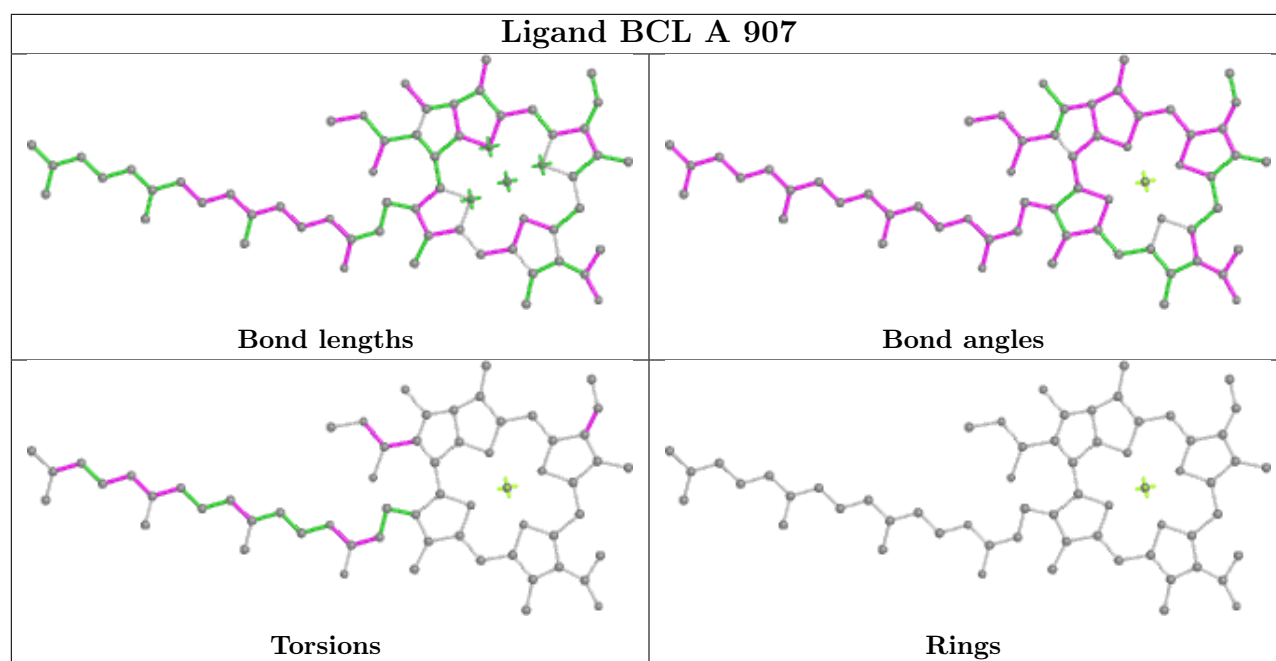
Ligand 85N a 902**Ligand CLA A 931**

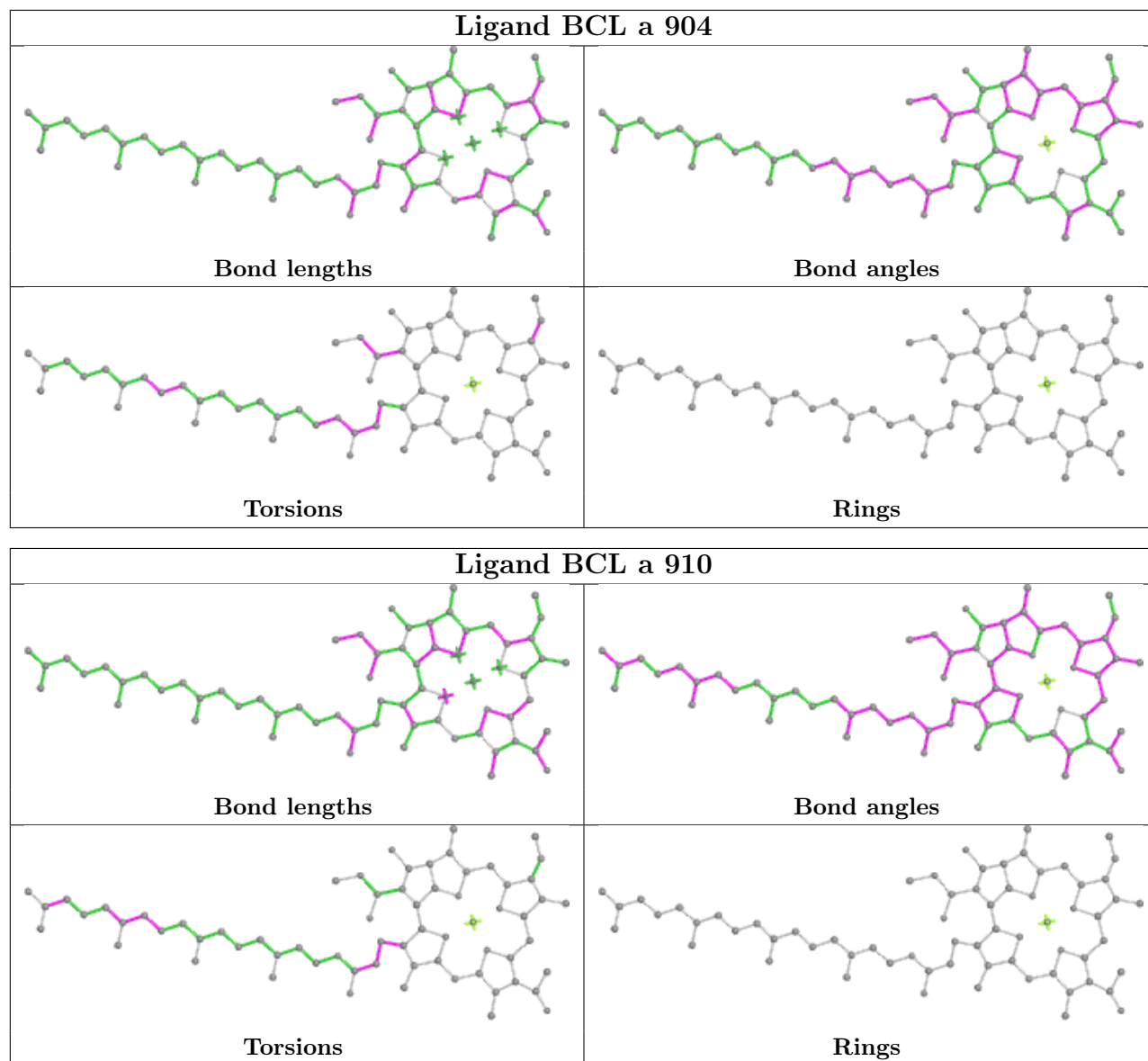




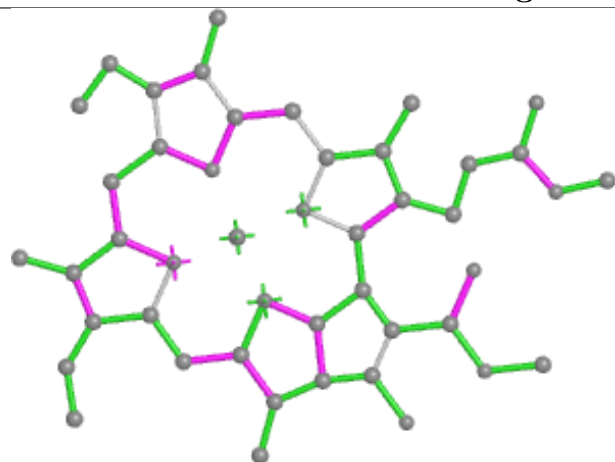




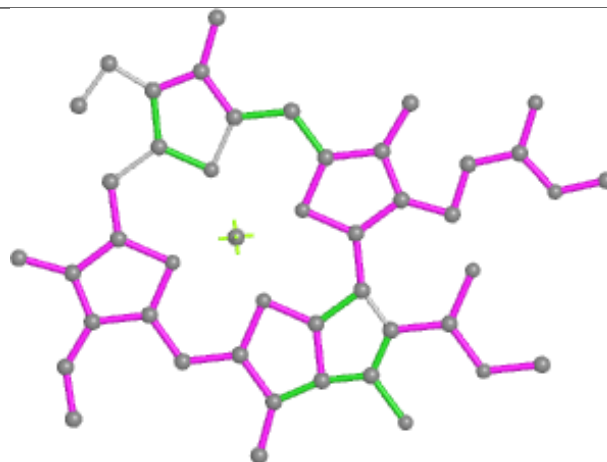




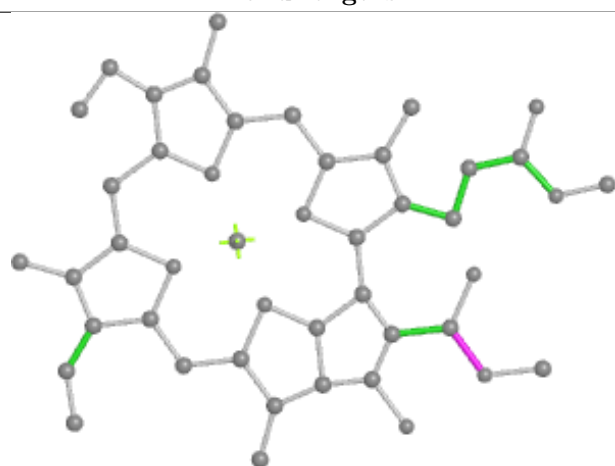
Ligand CLA A 912



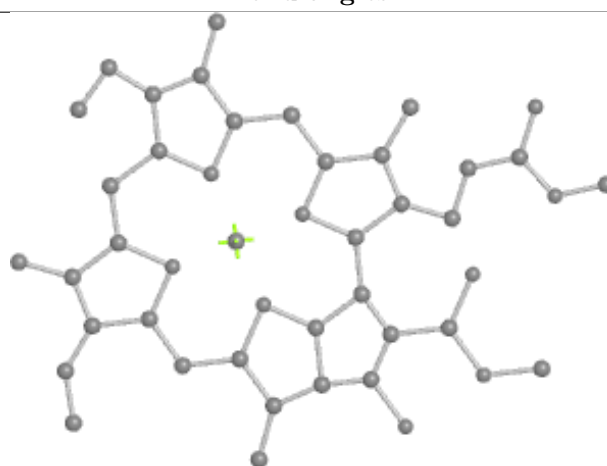
Bond lengths



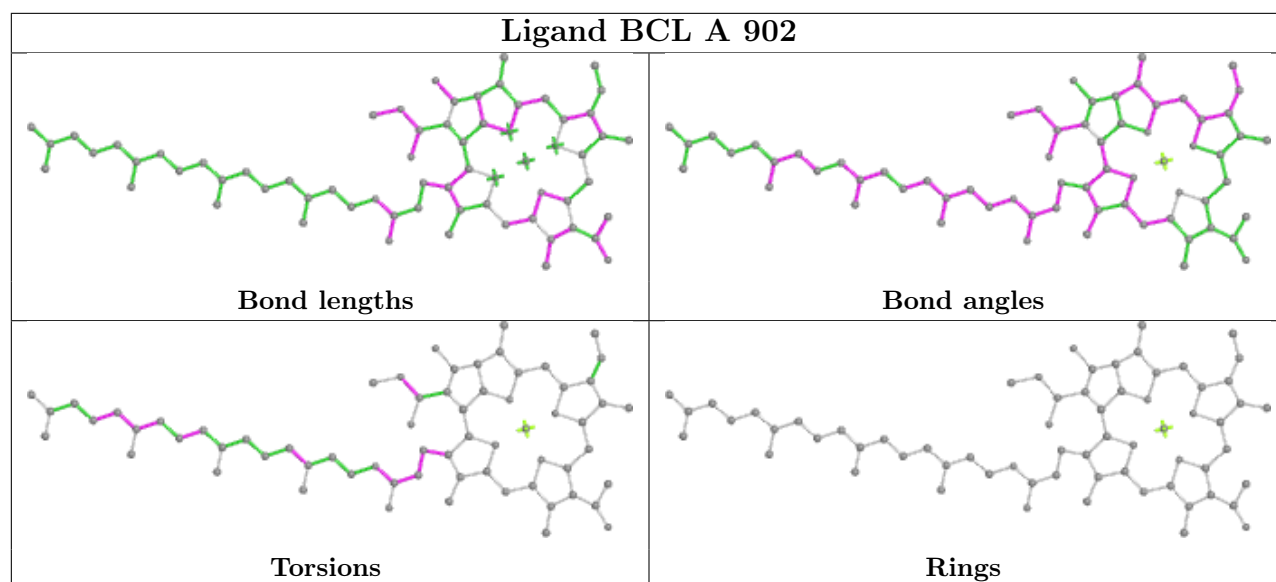
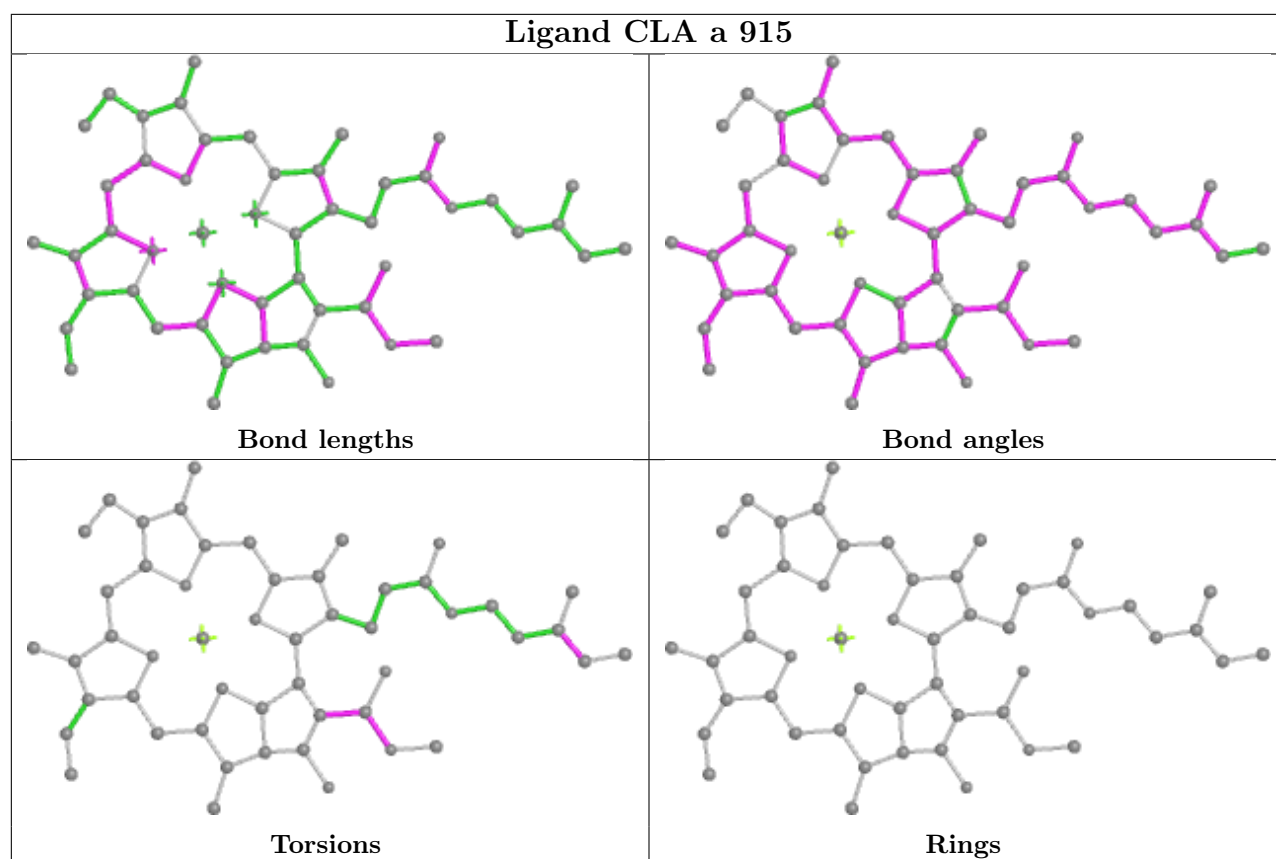
Bond angles



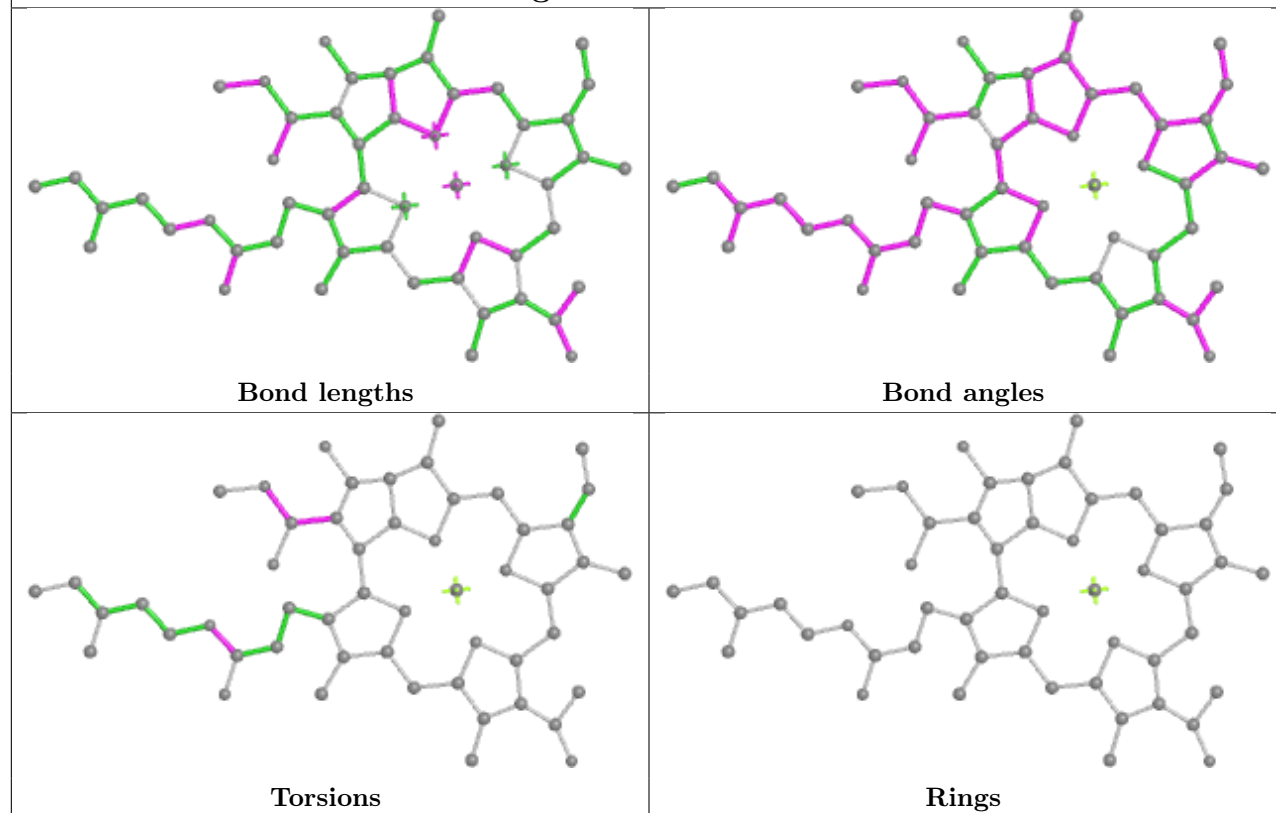
Torsions



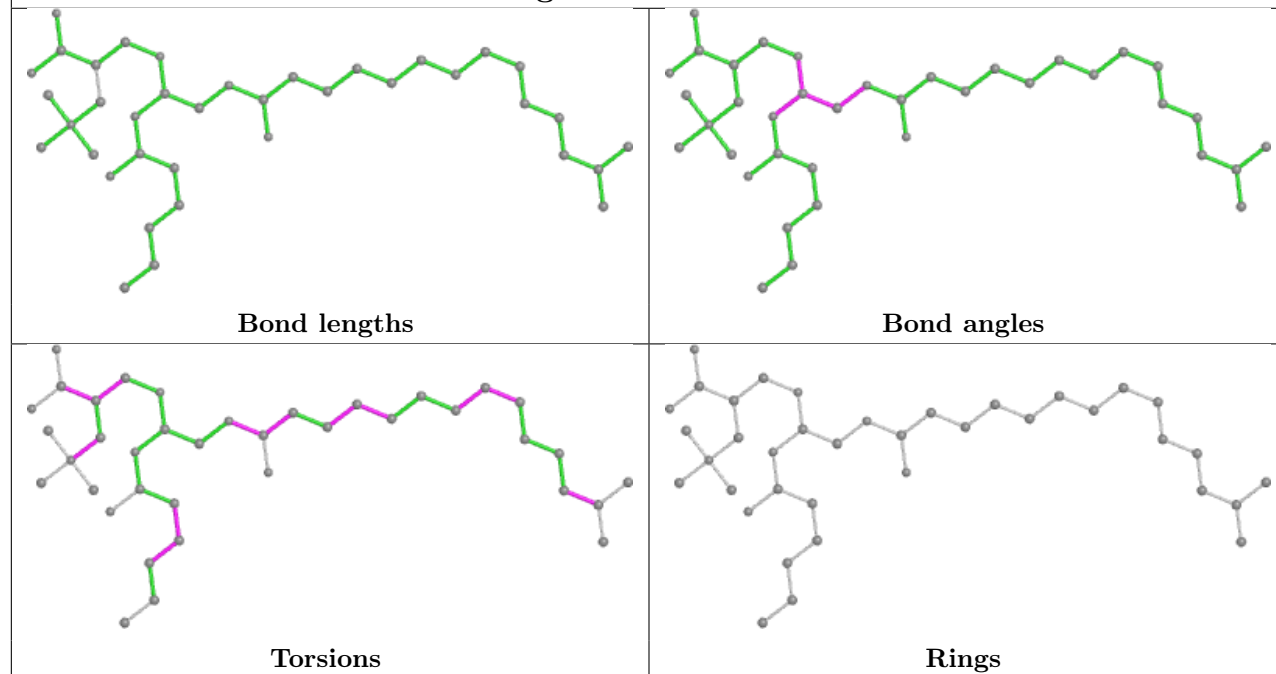
Rings

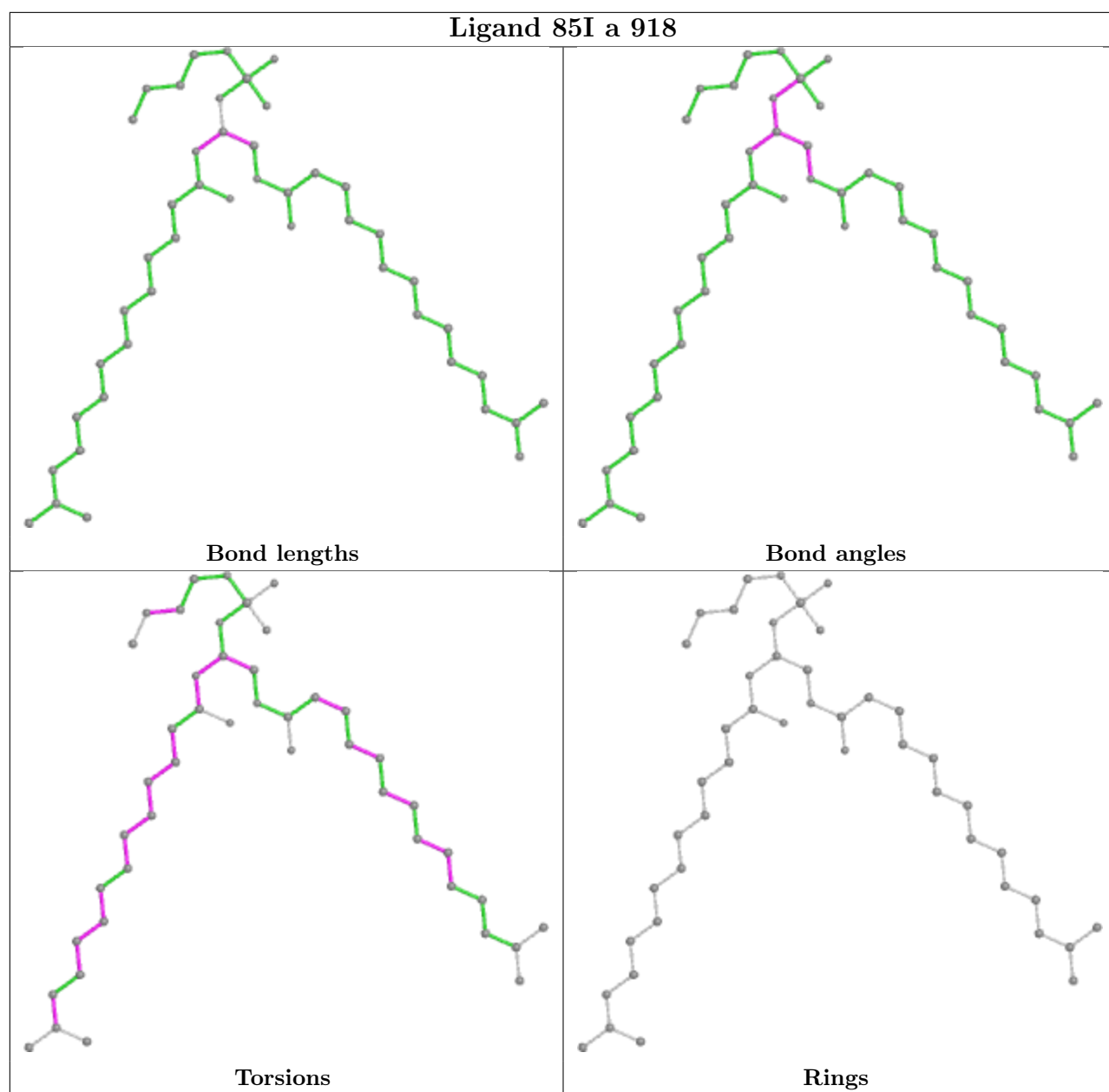


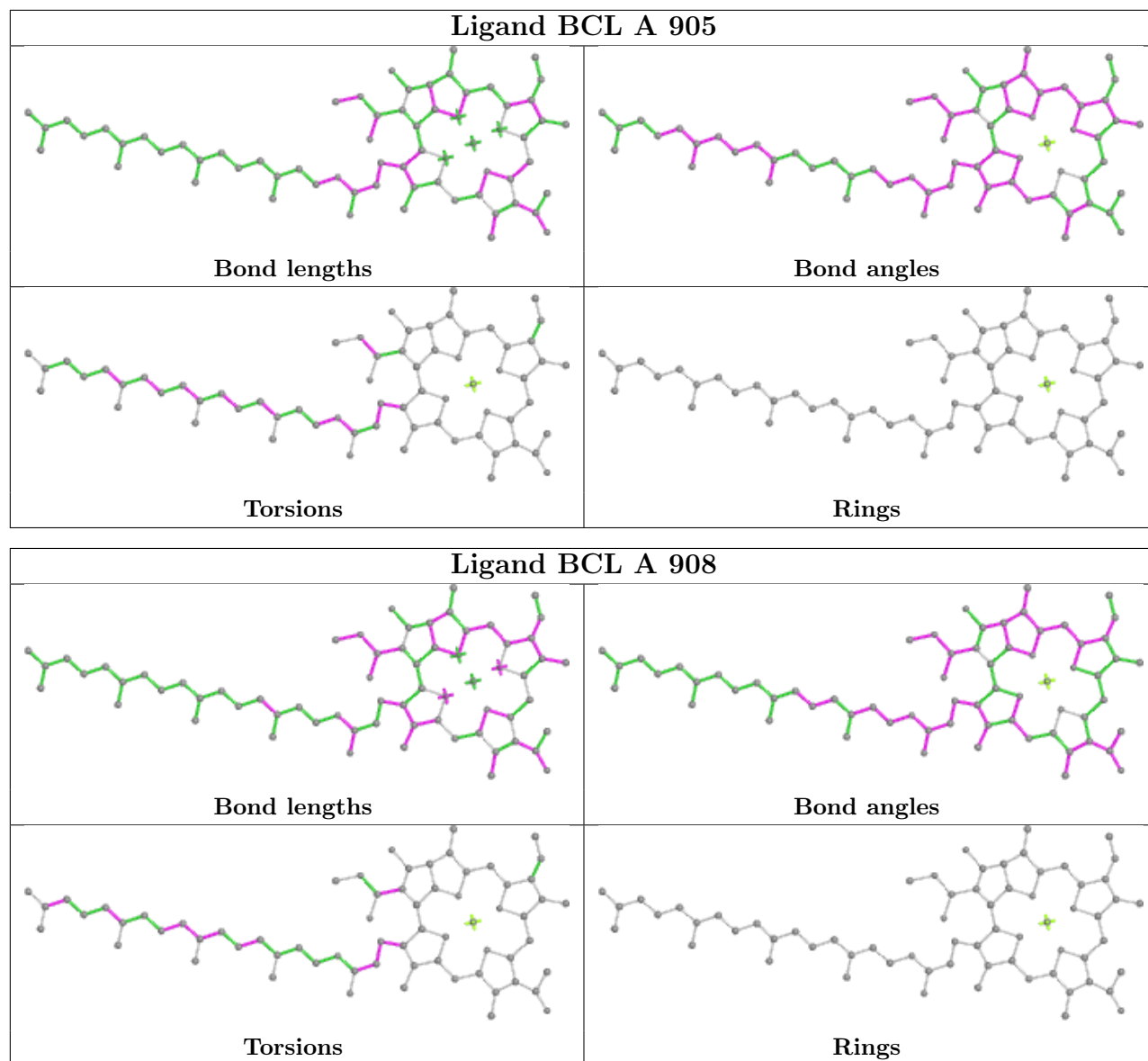
Ligand BCL A 906

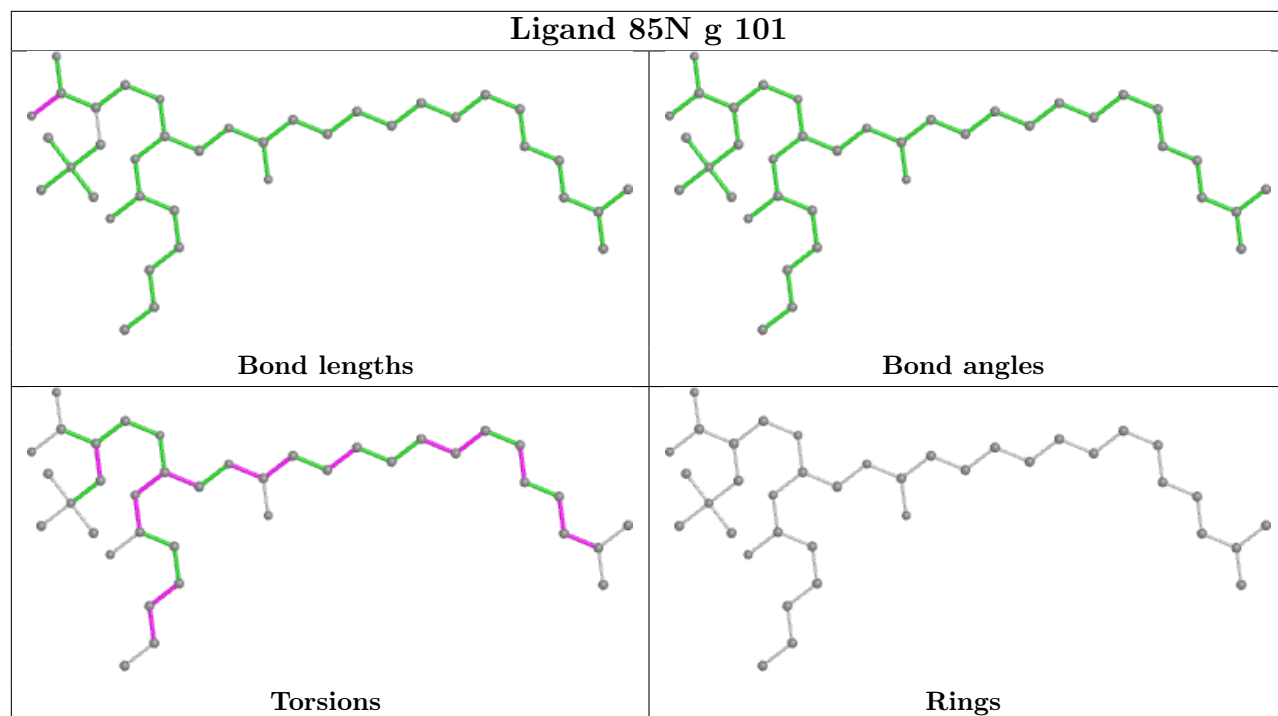


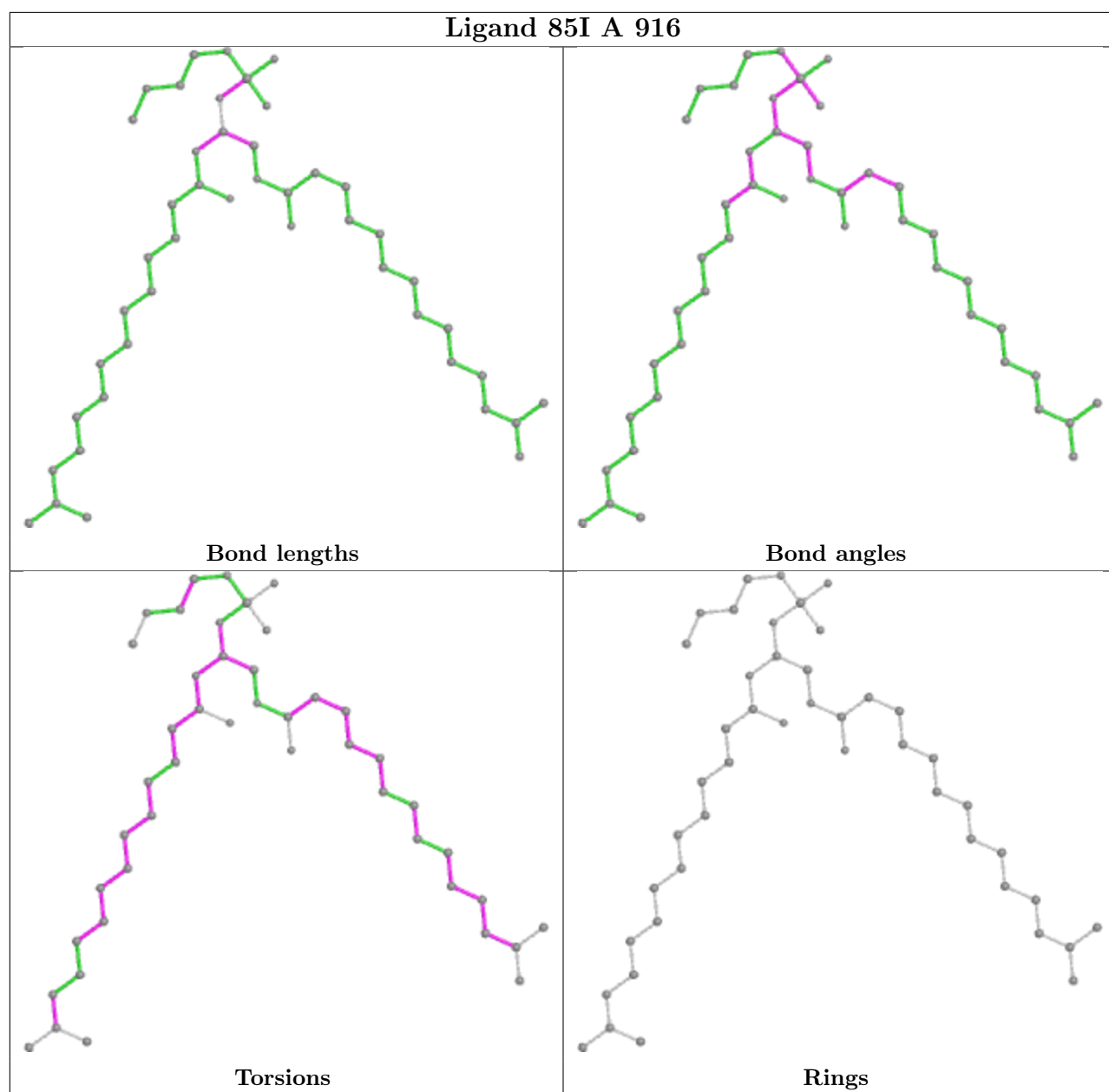
Ligand 85N G 101



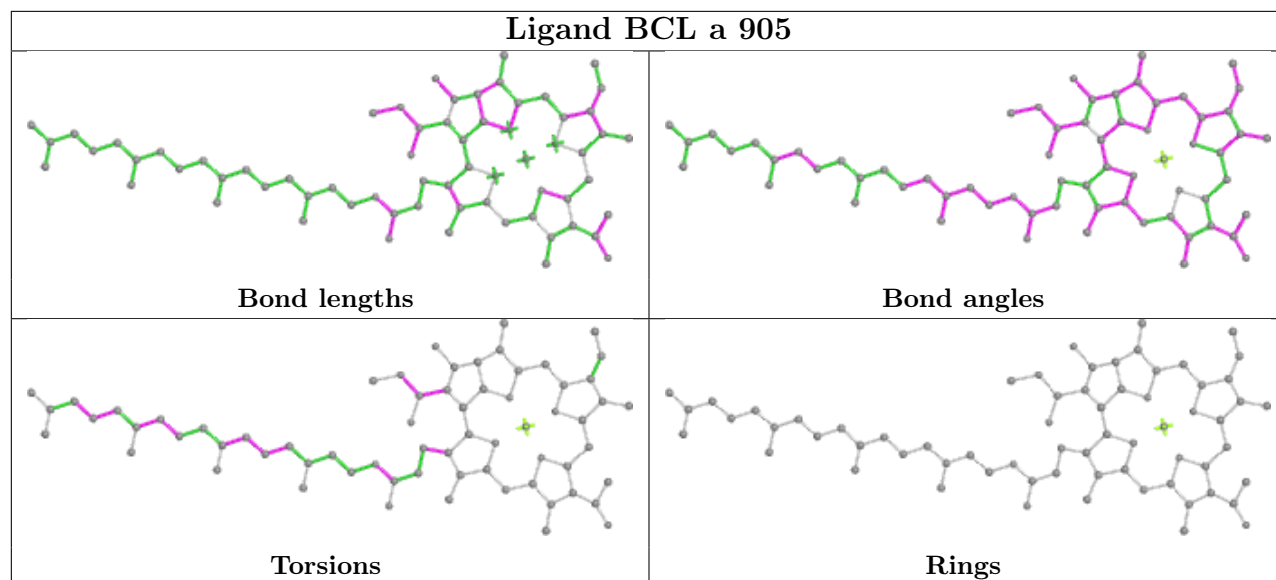




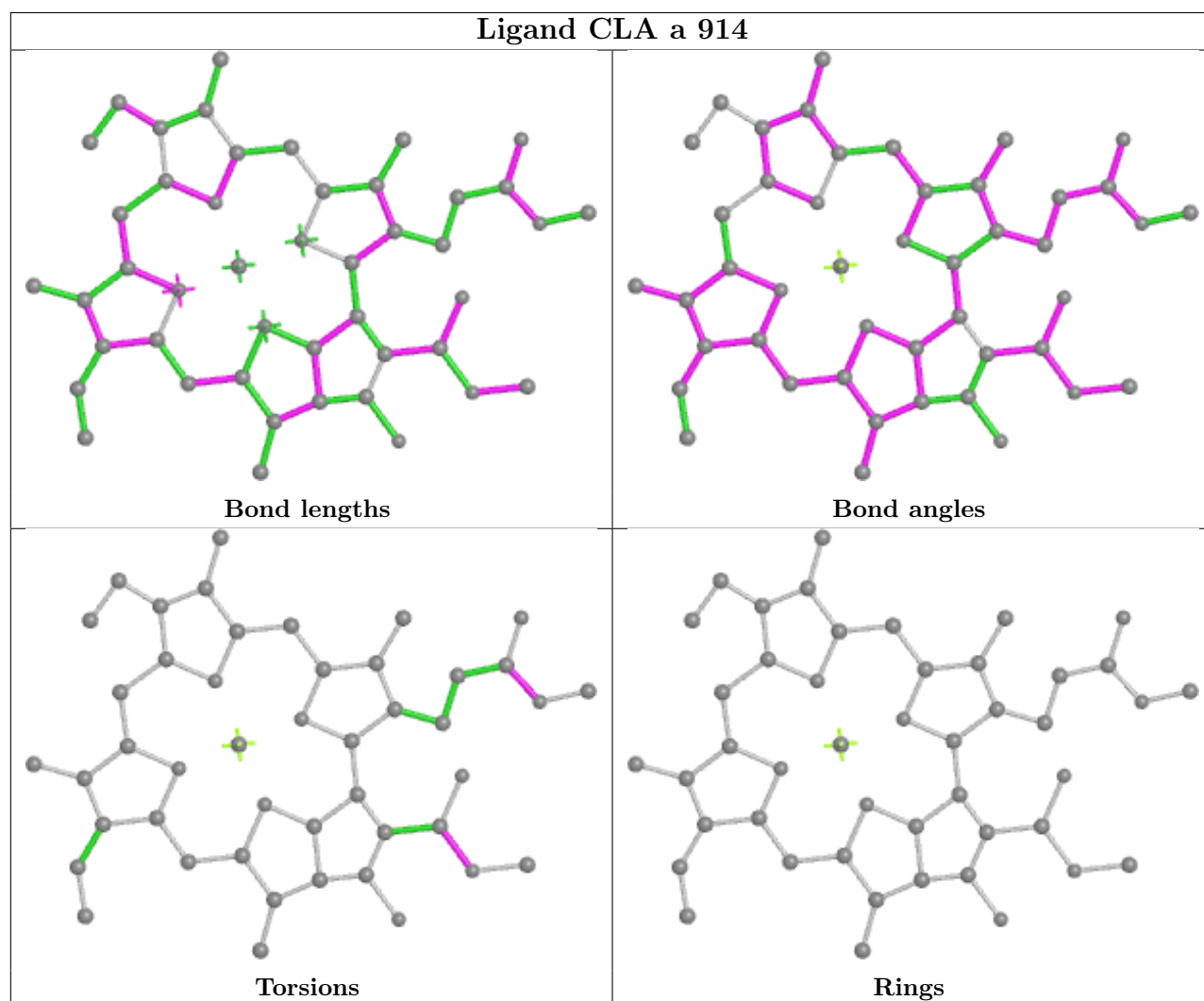


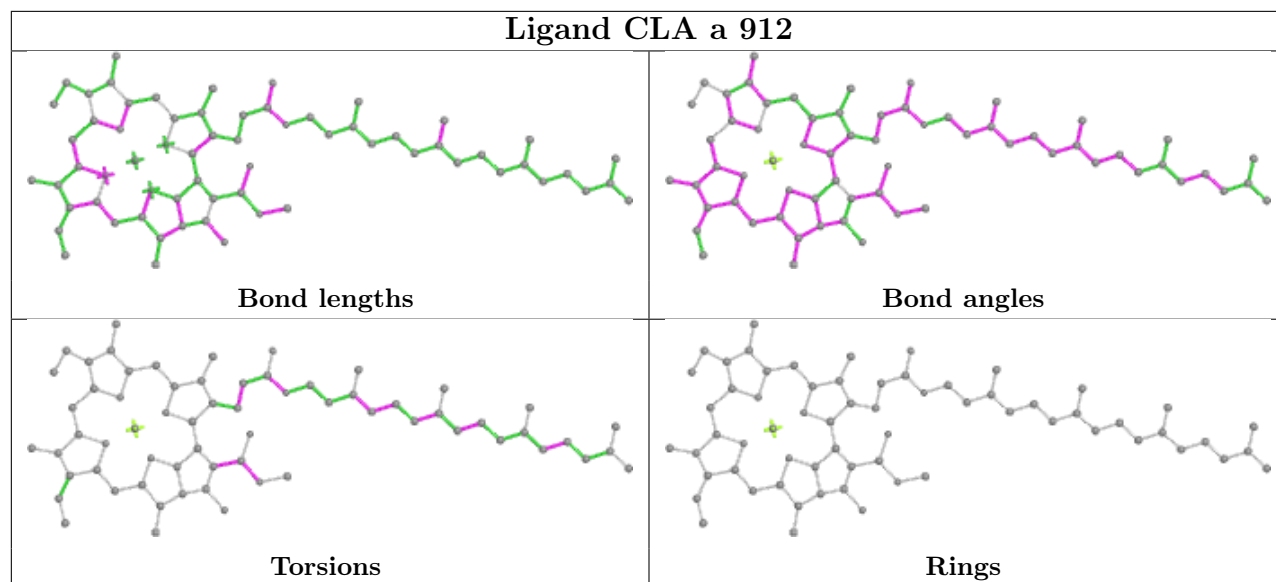
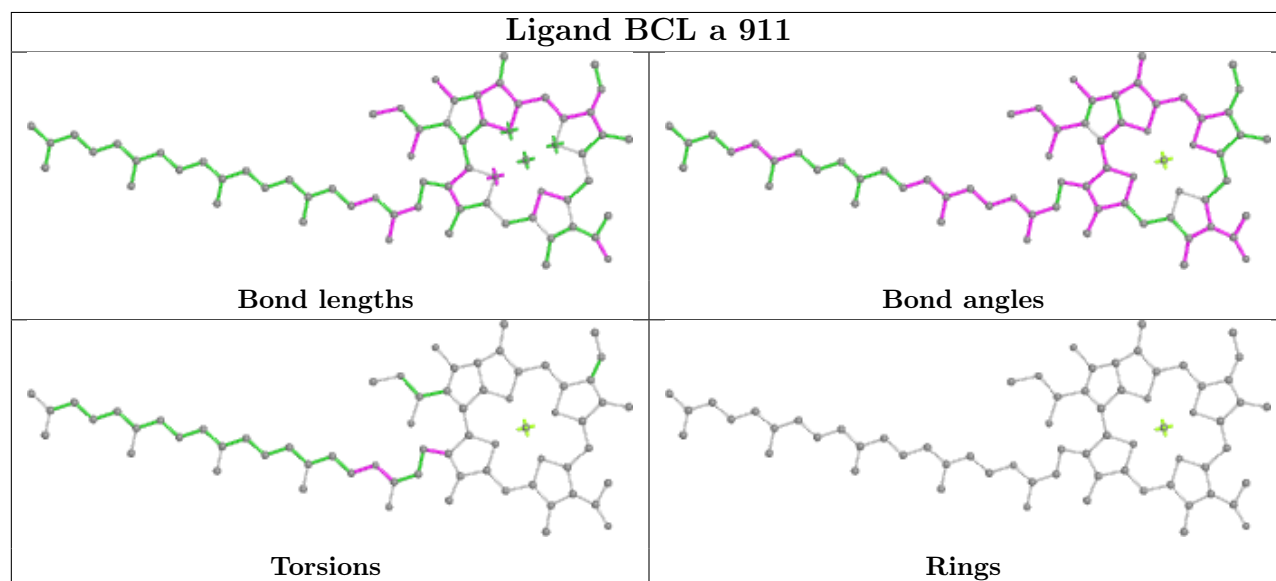
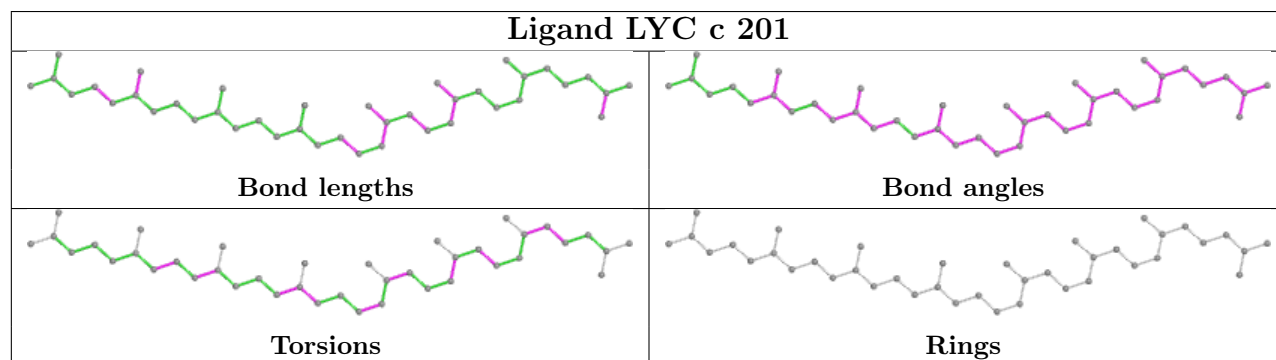


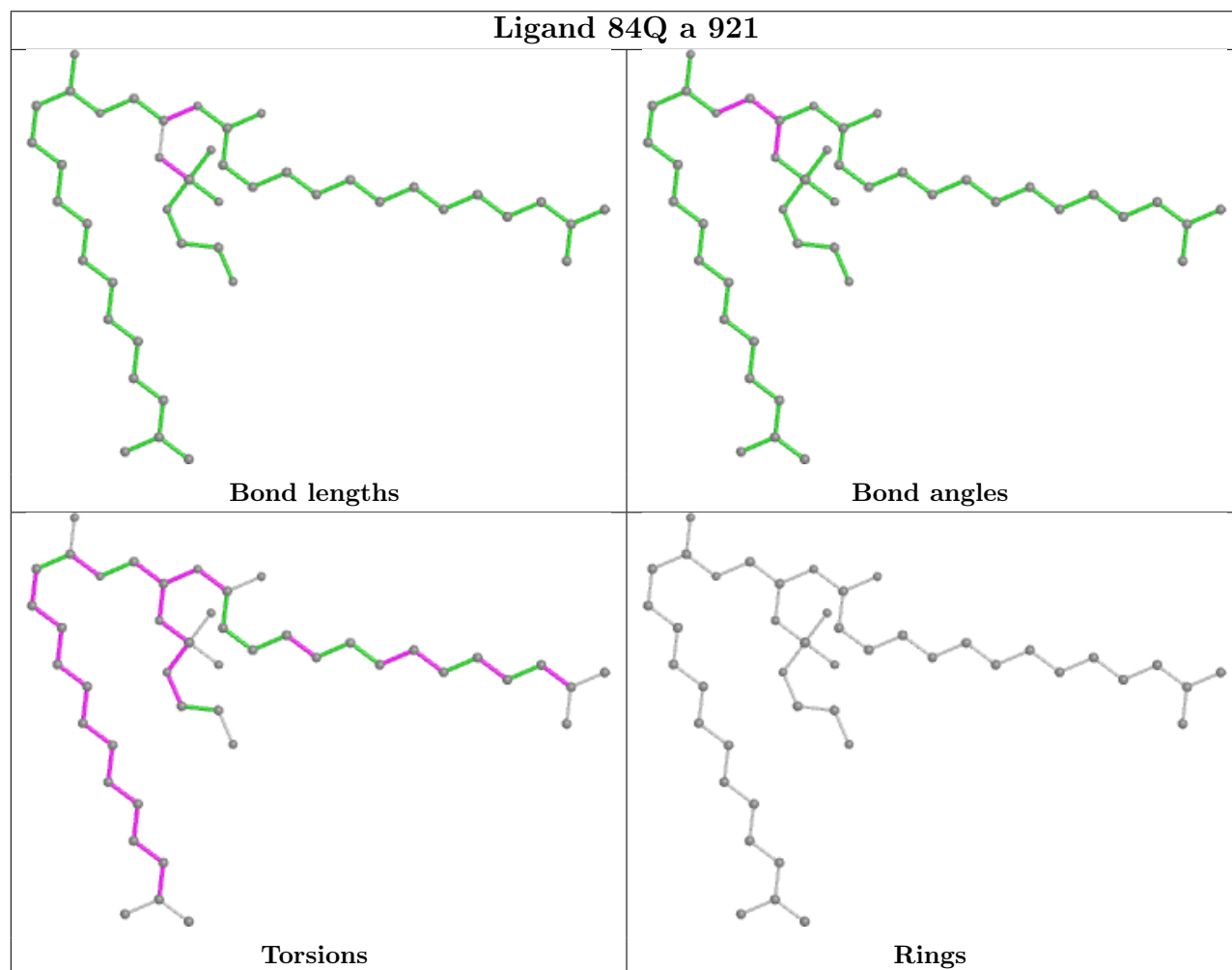
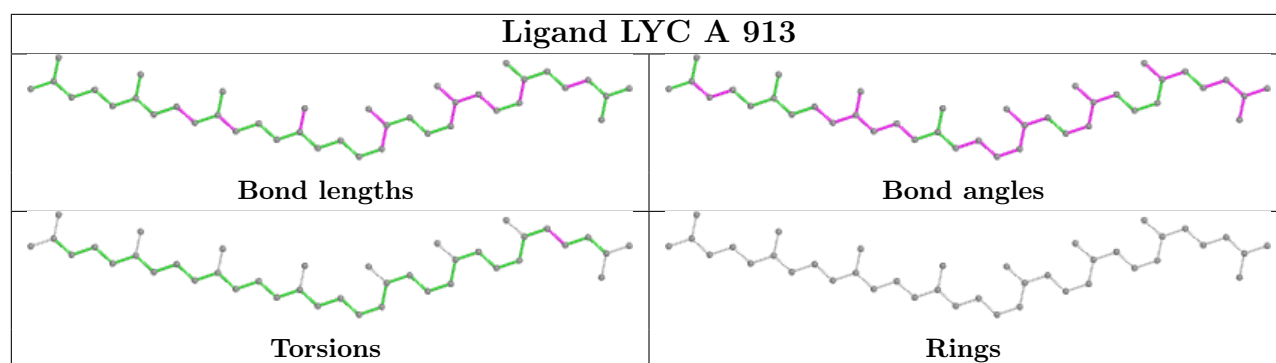
Ligand BCL a 905

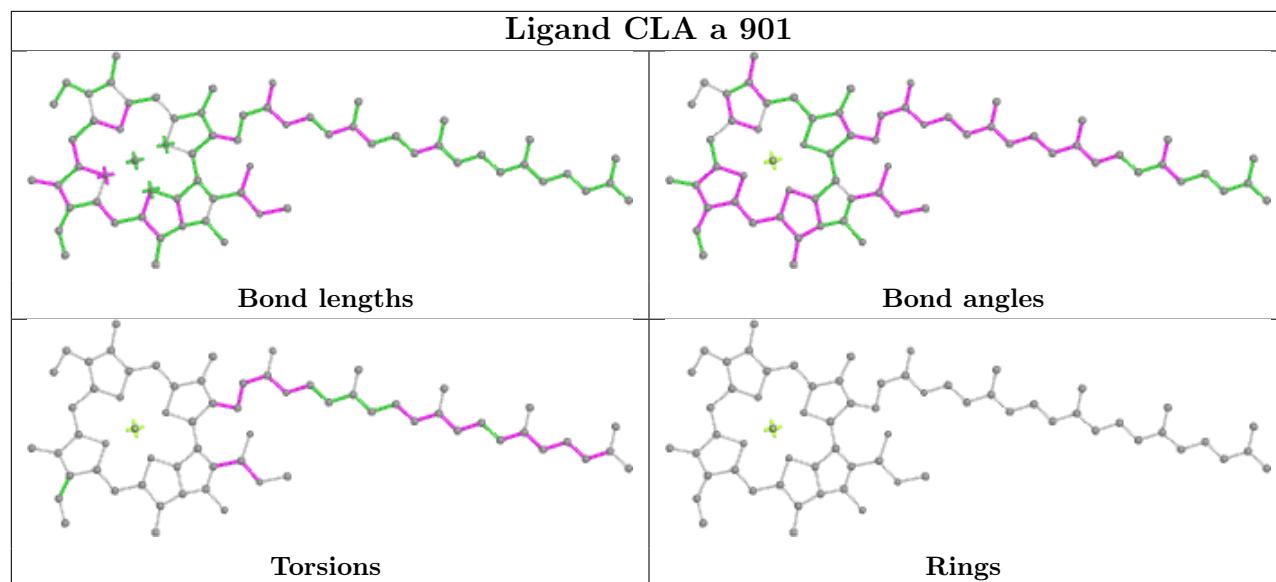
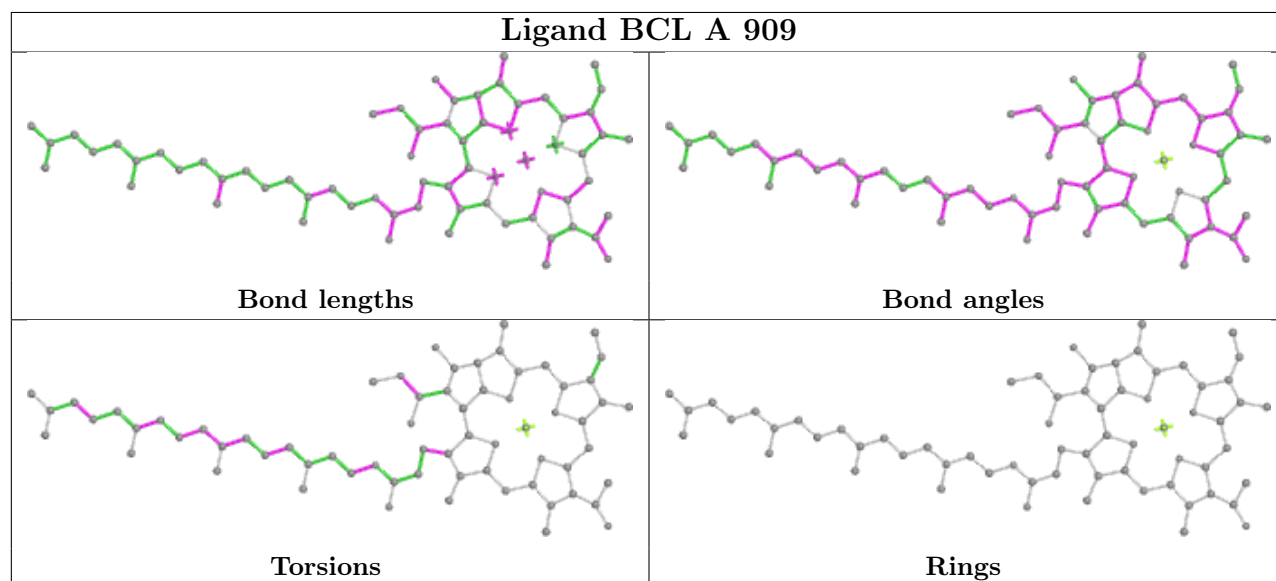


Ligand CLA a 914

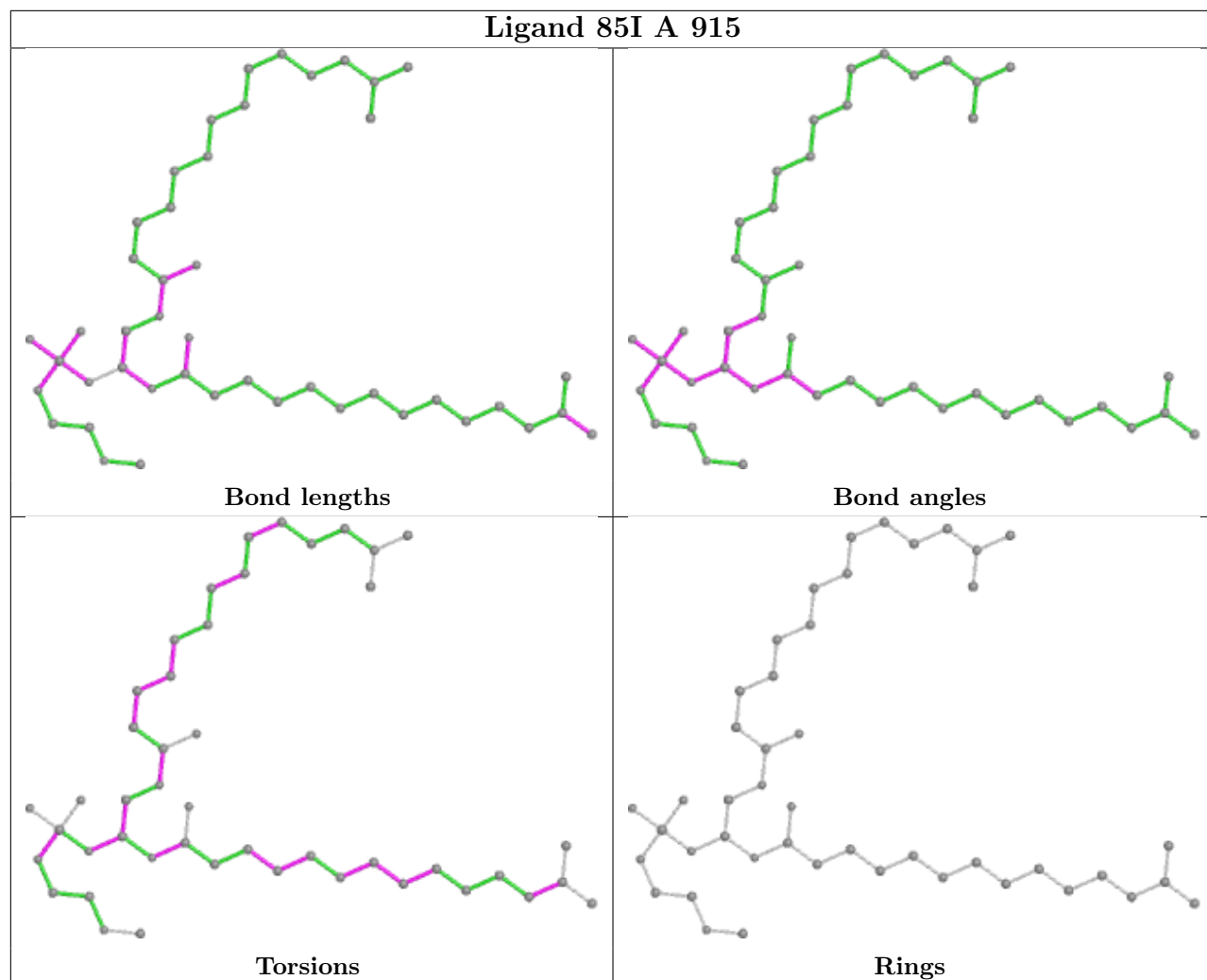


Ligand CLA a 912**Ligand BCL a 911****Ligand LYC c 201**

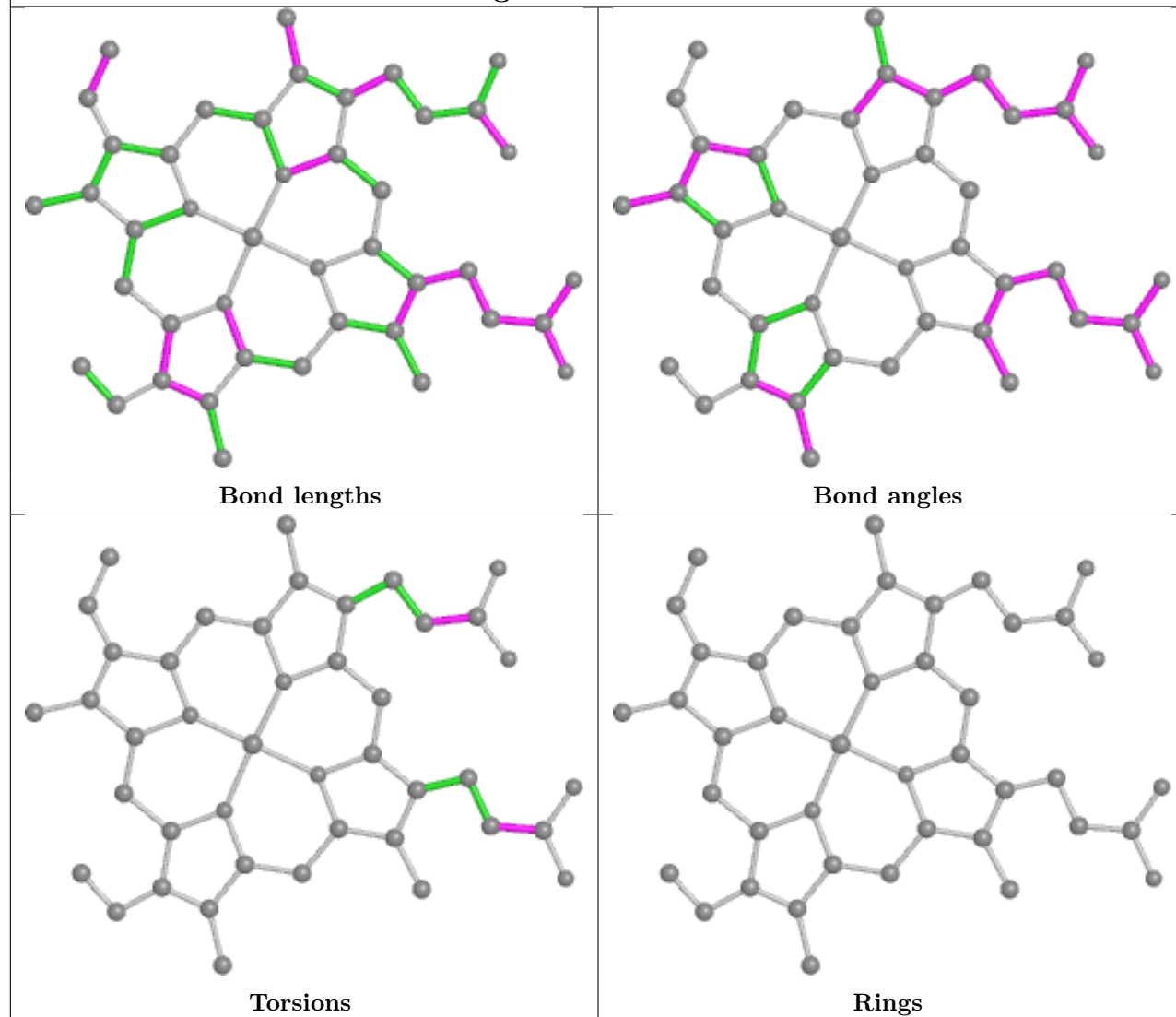


Ligand CLA a 901**Ligand BCL A 909**

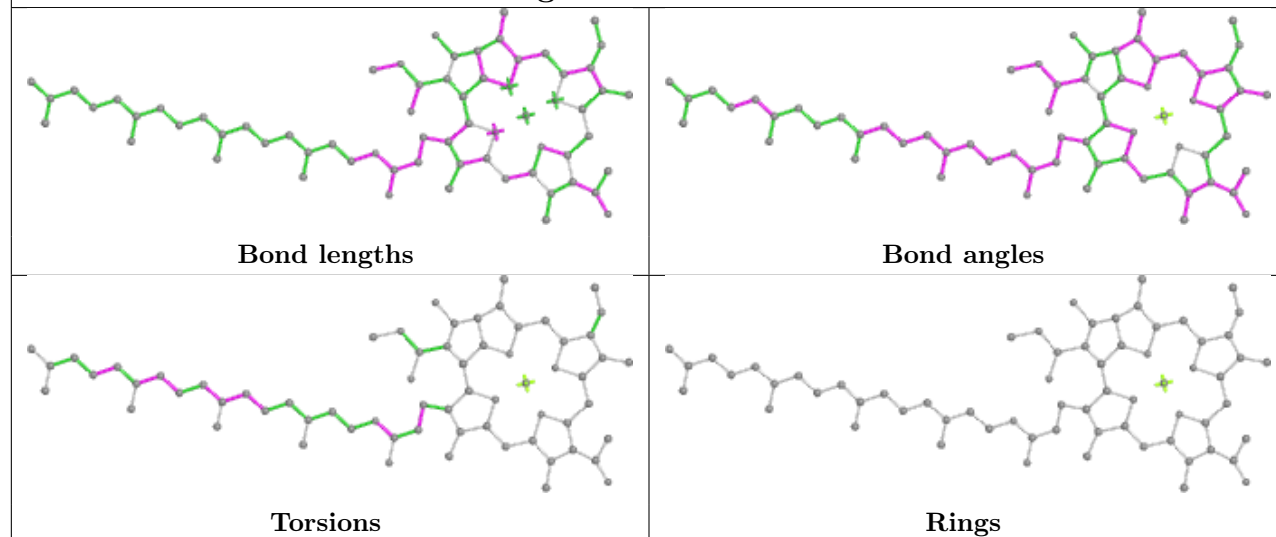
Ligand 85I A 915

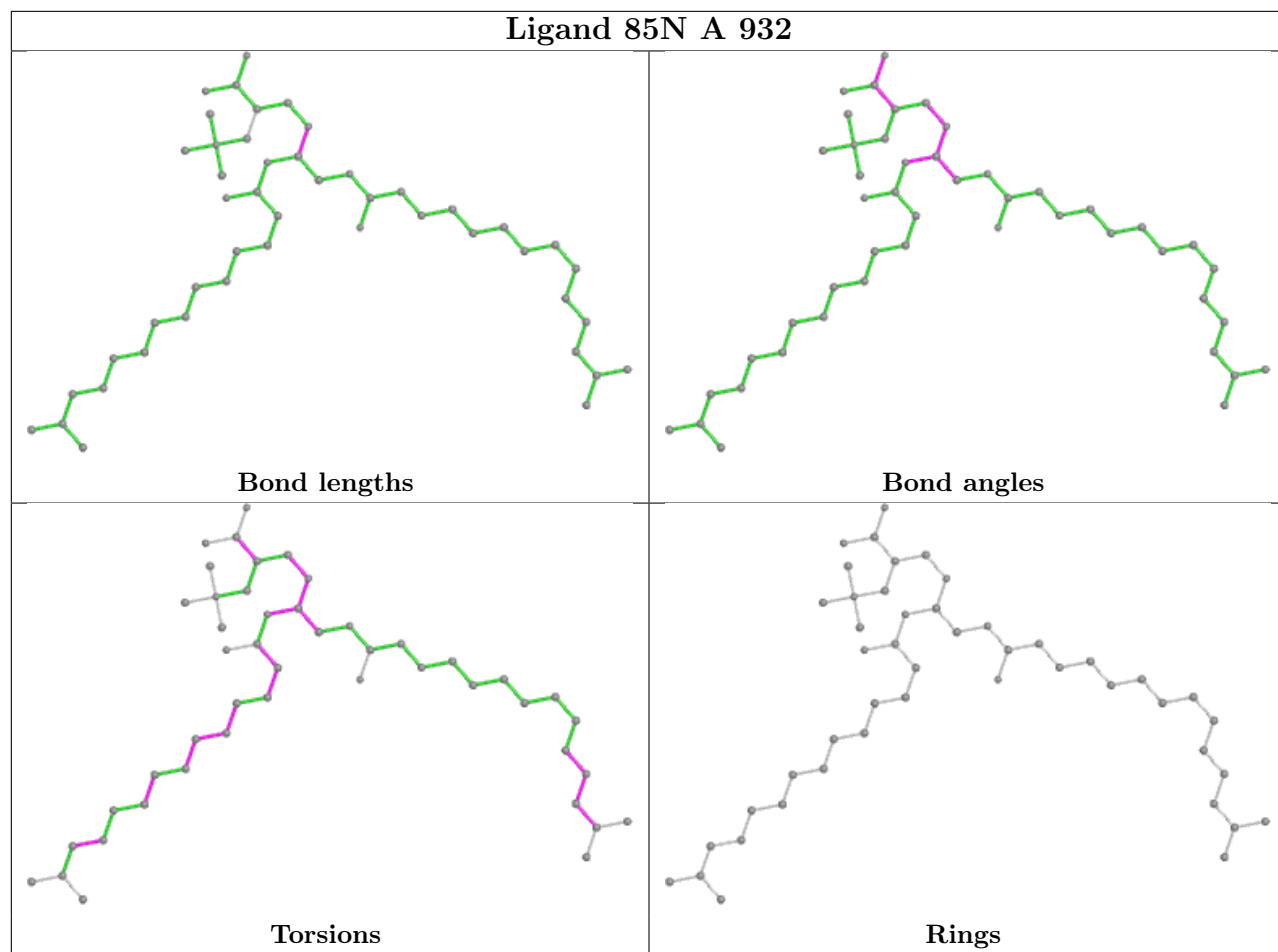


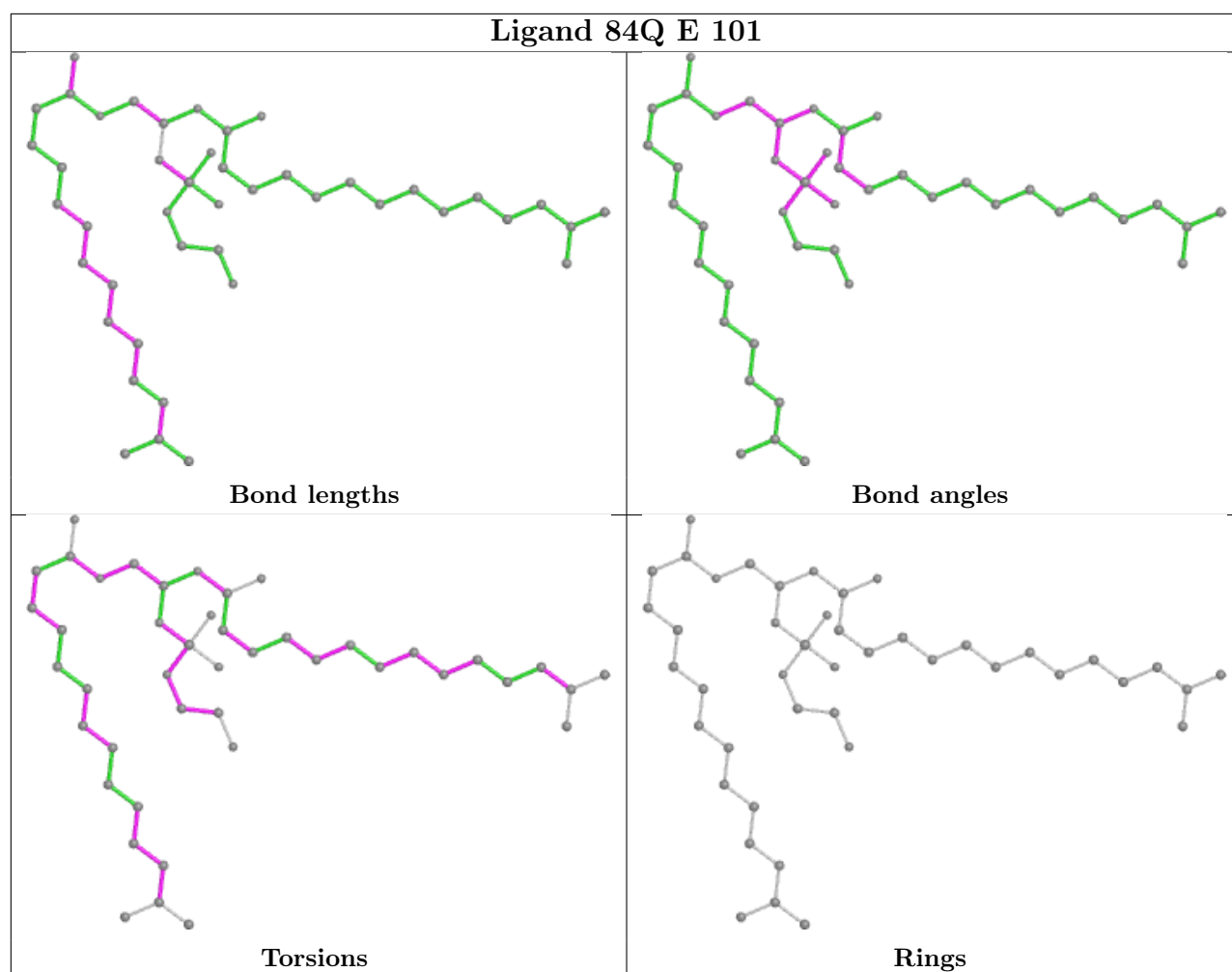
Ligand HEC c 202

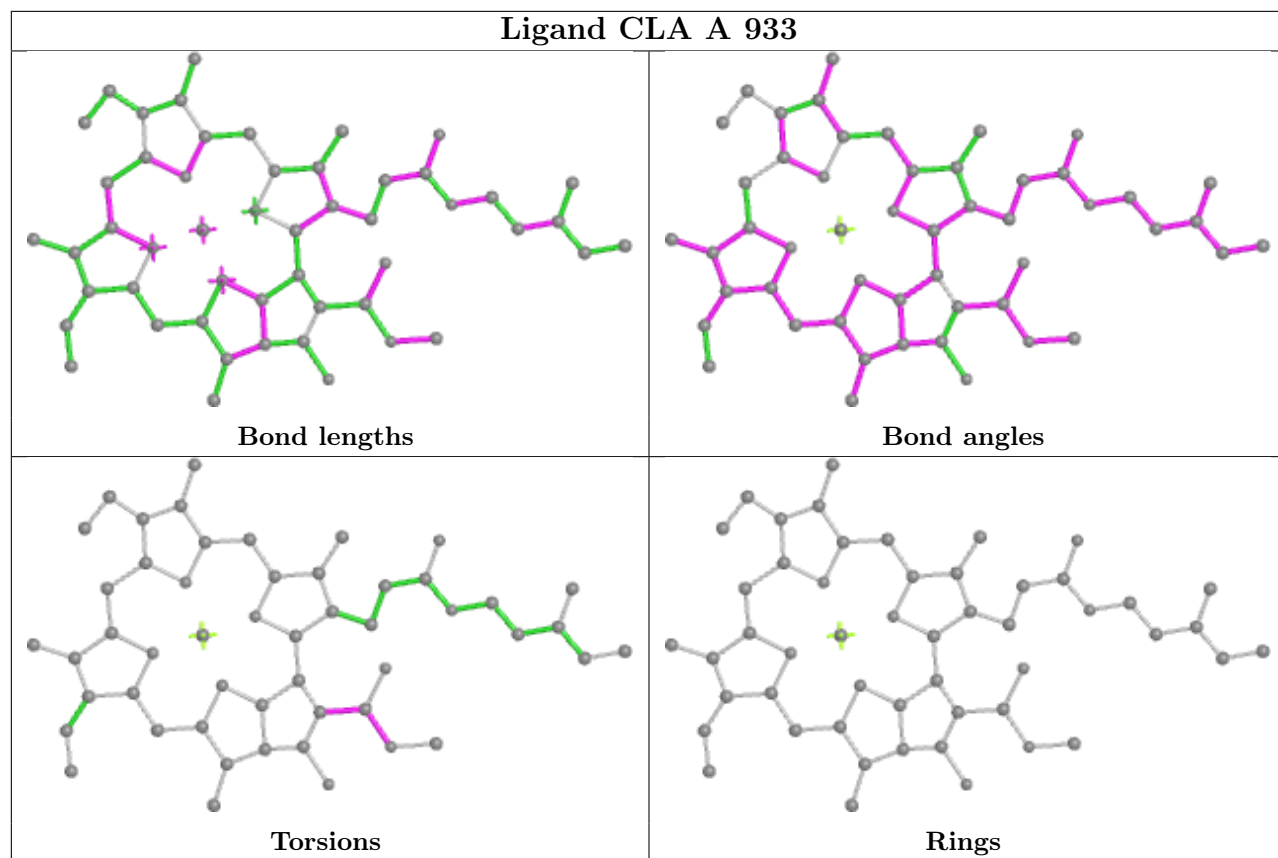


Ligand BCL a 907

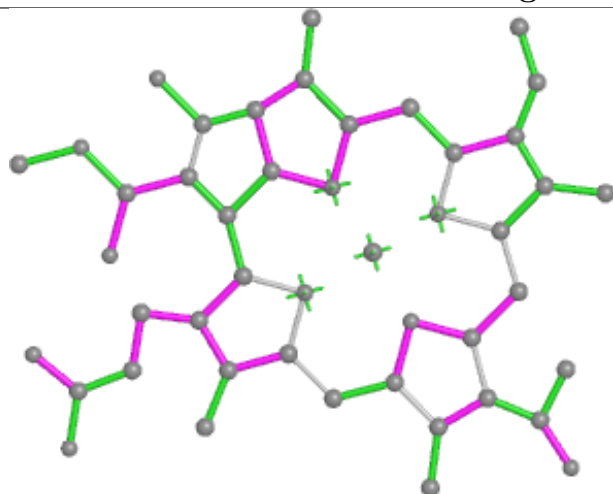




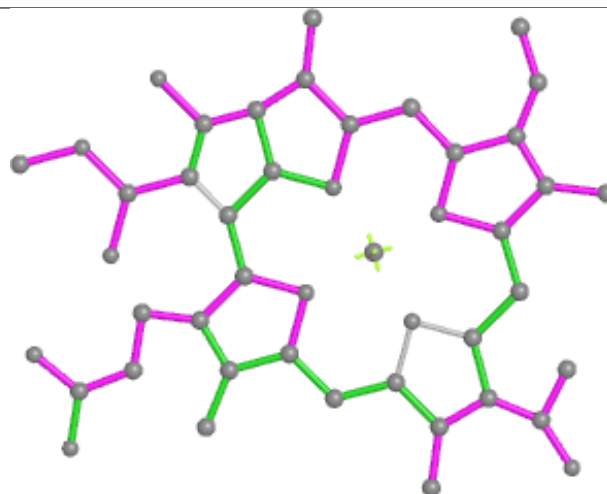




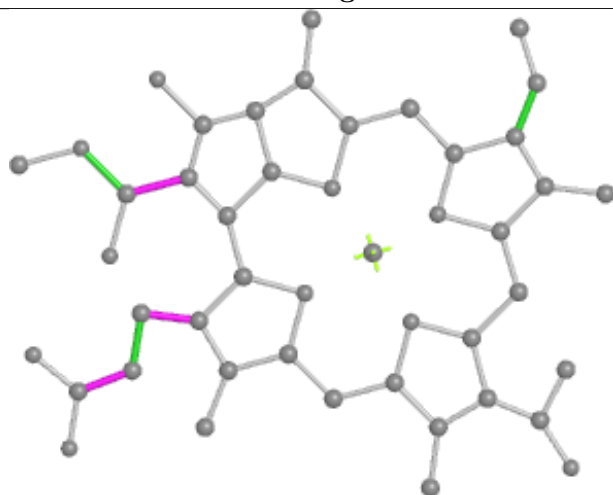
Ligand BCL a 906



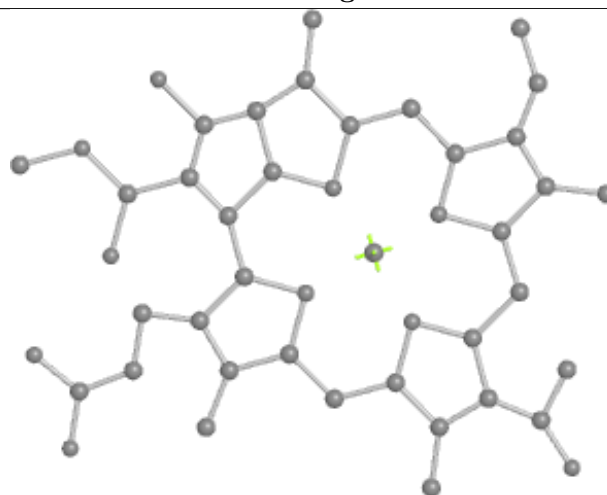
Bond lengths



Bond angles

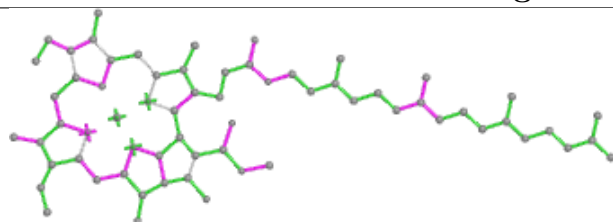


Torsions

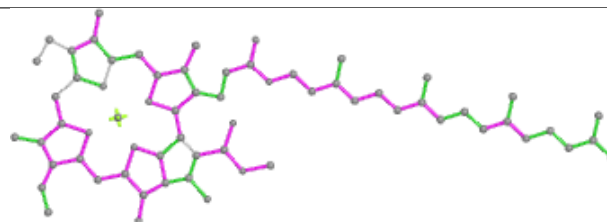


Rings

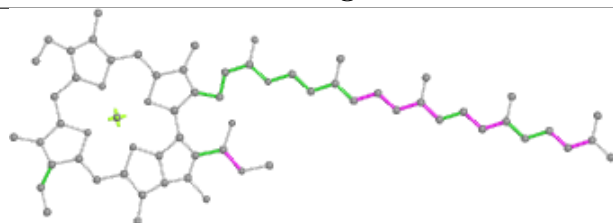
Ligand CLA A 911



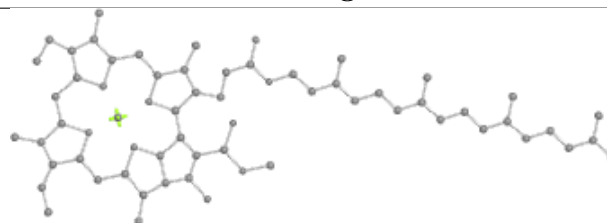
Bond lengths



Bond angles

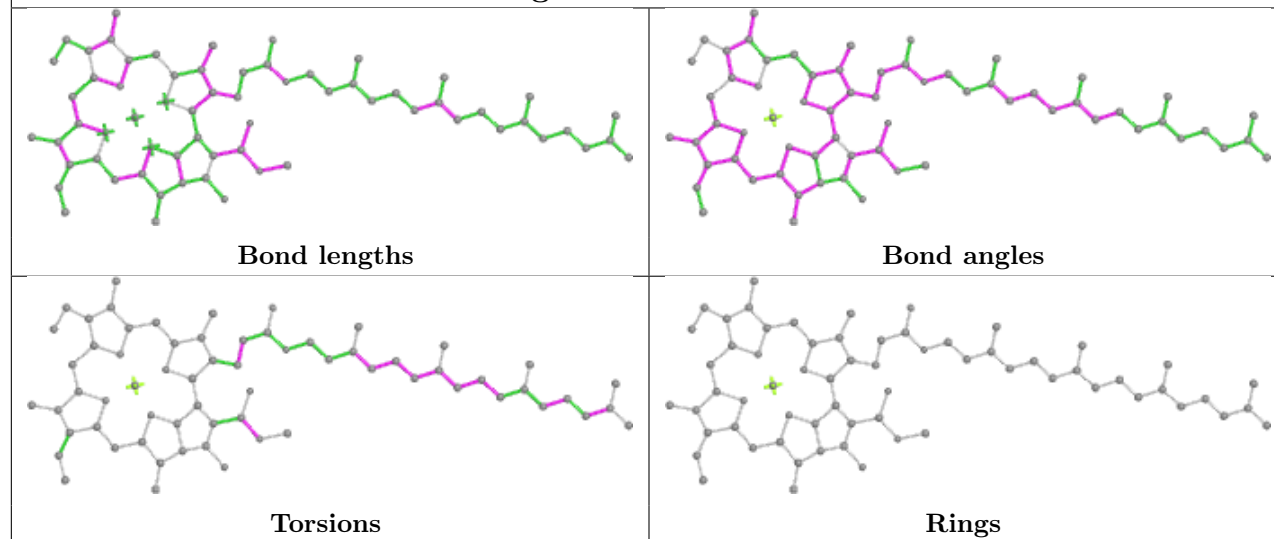


Torsions

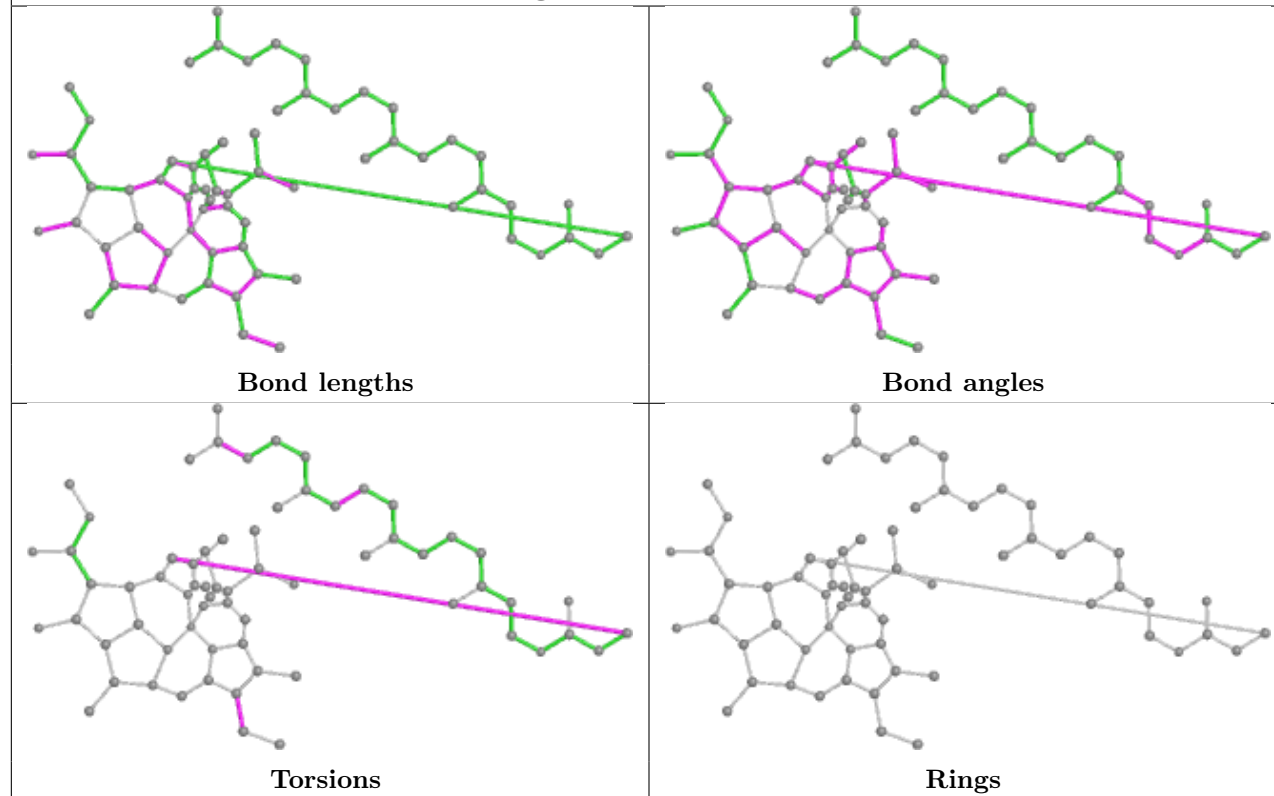


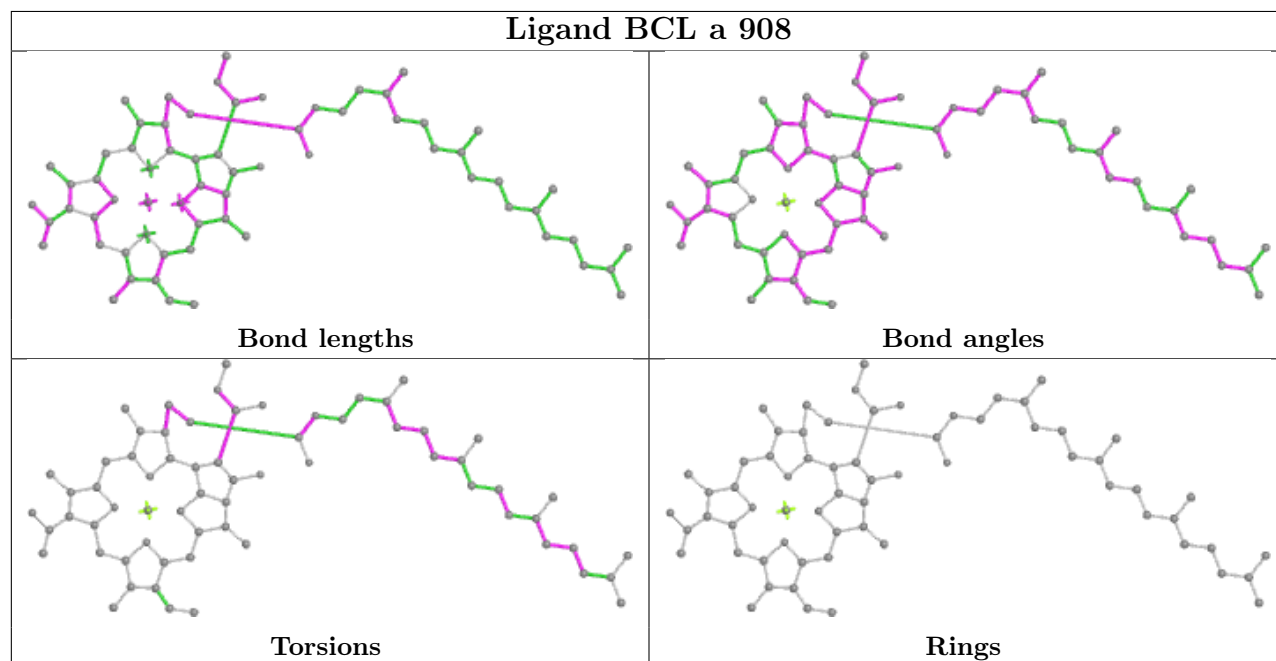
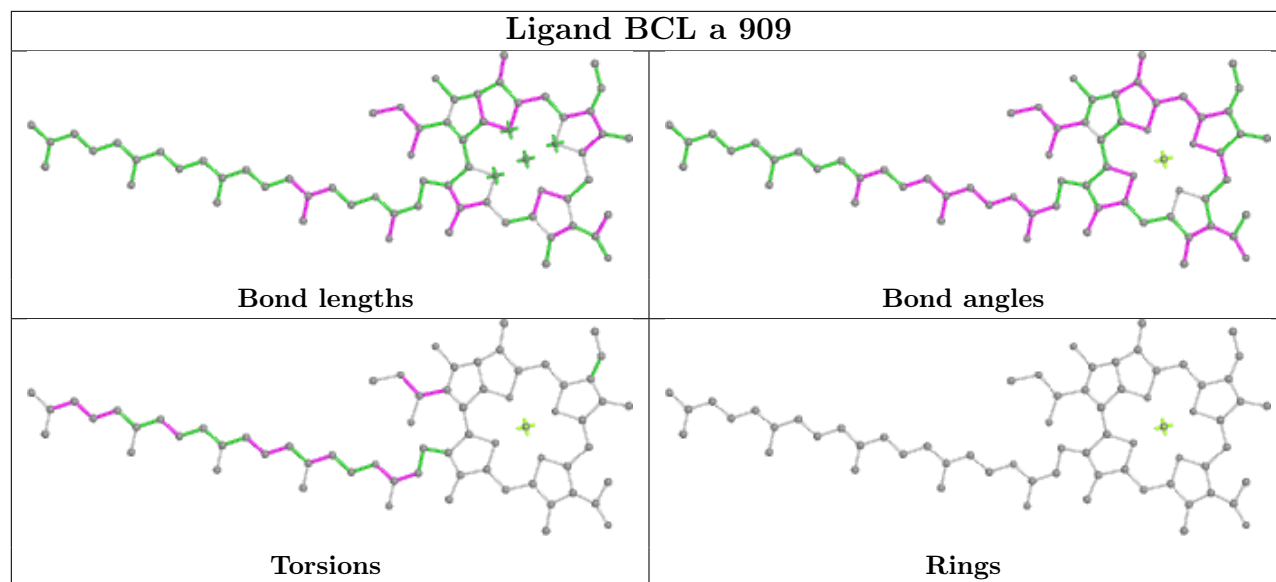
Rings

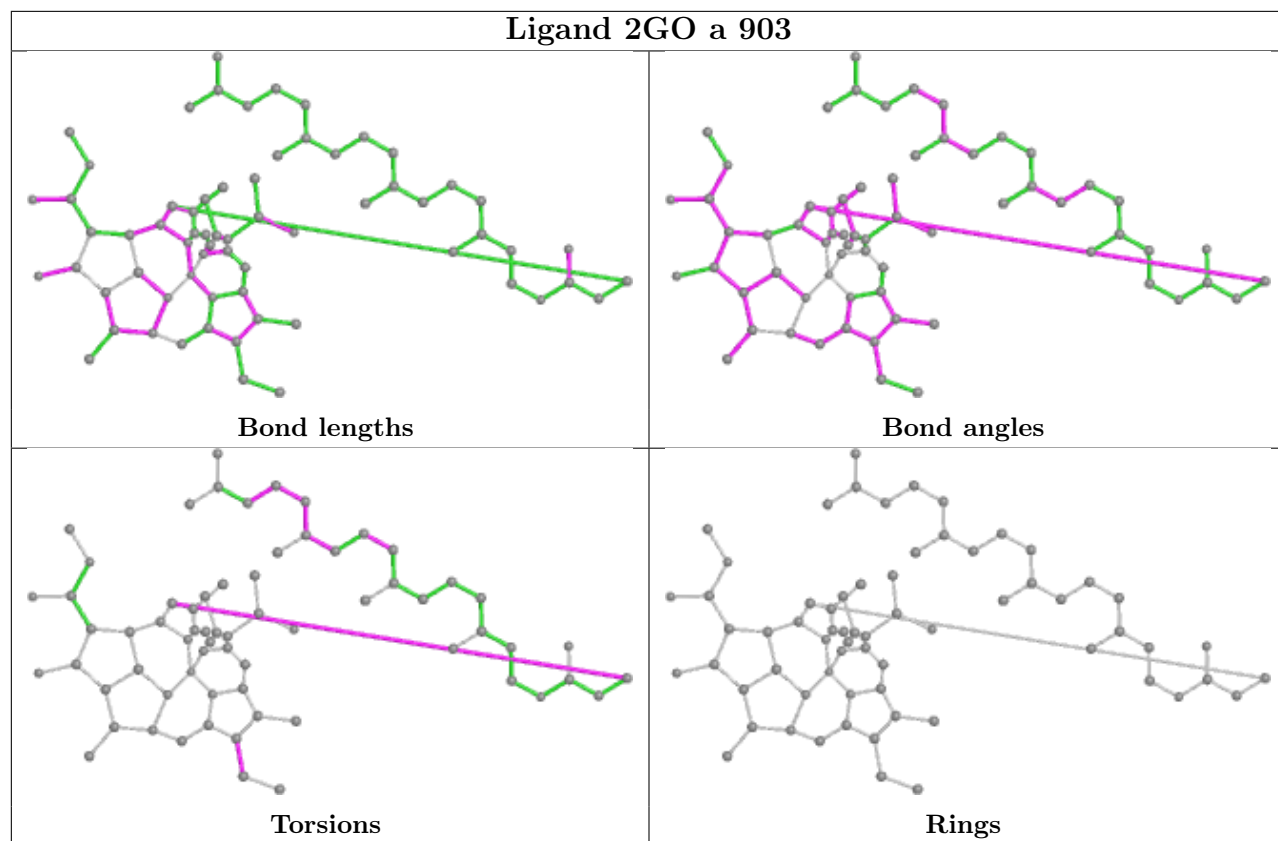
Ligand CLA A 910



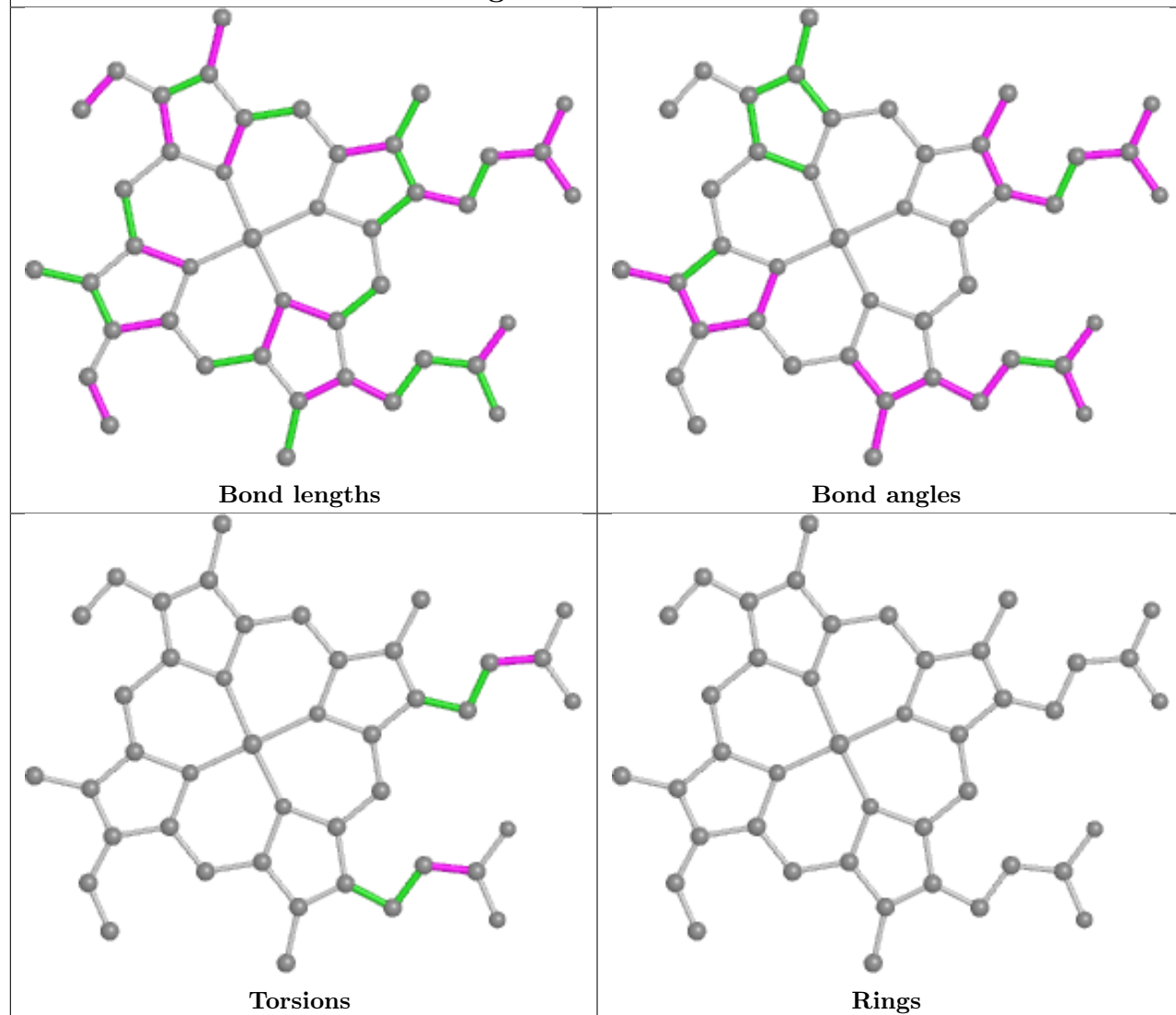
Ligand 2GO A 901

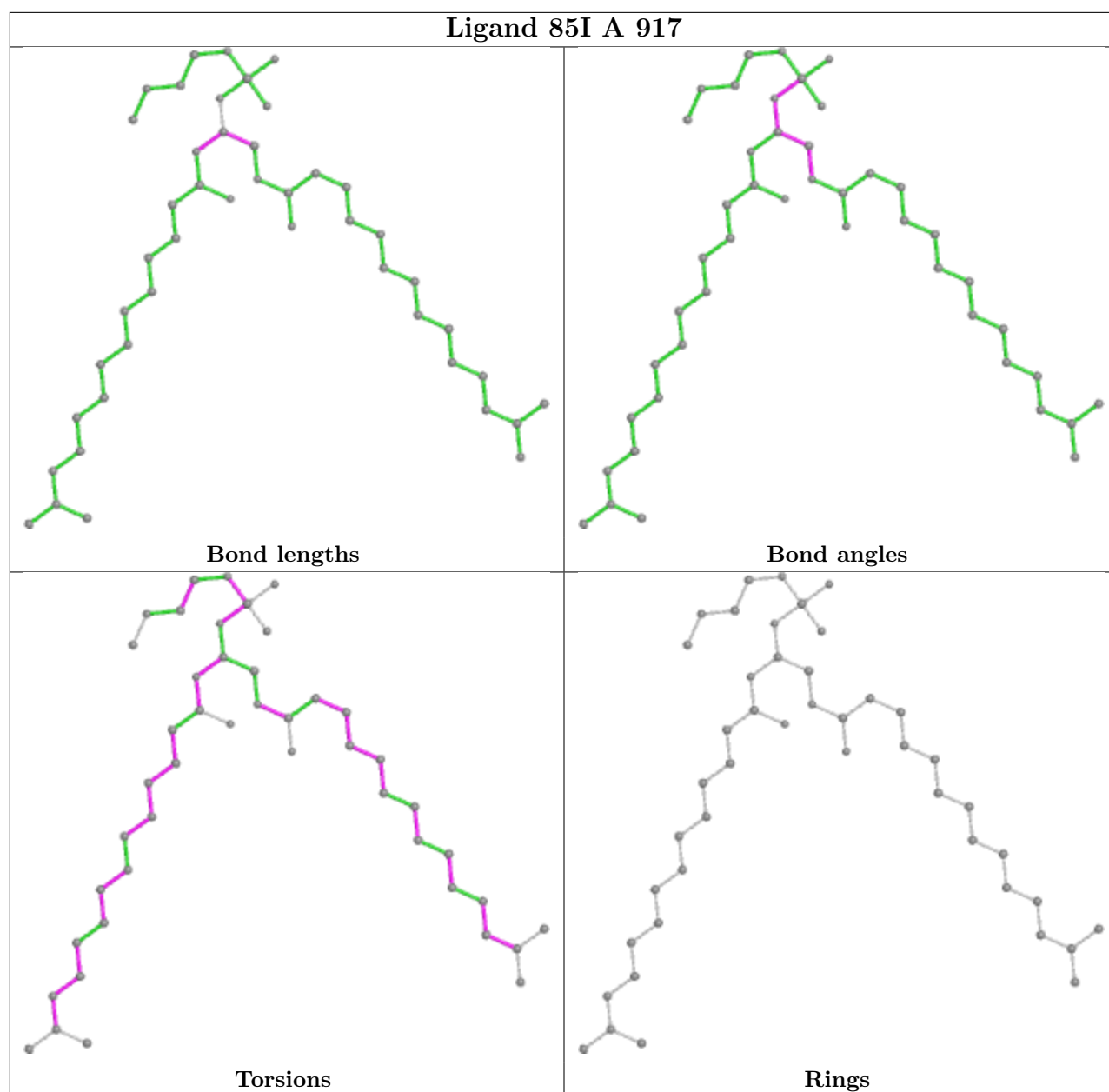






Ligand HEC C 301





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

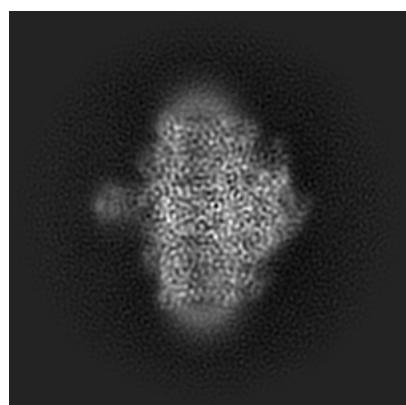
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-32228. These allow visual inspection of the internal detail of the map and identification of artifacts.

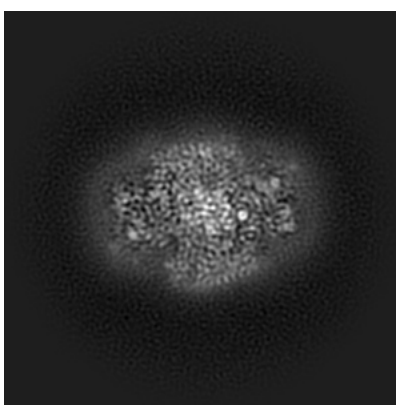
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

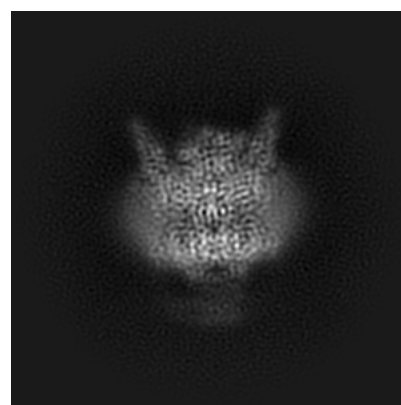
6.1.1 Primary map



X



Y

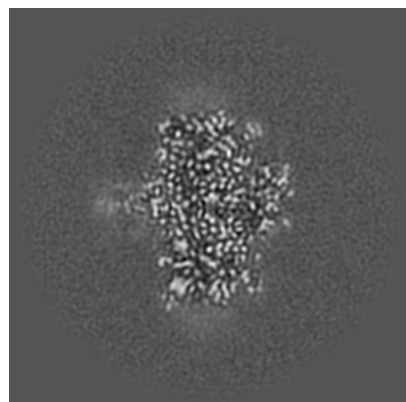


Z

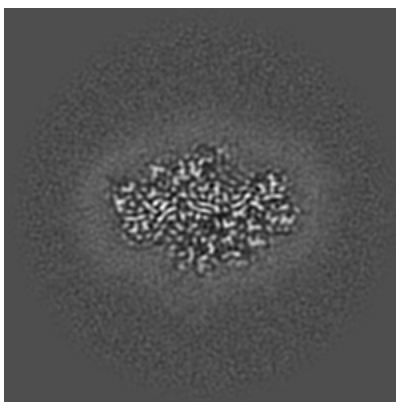
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

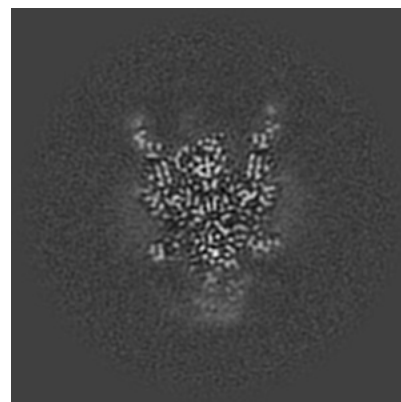
6.2.1 Primary map



X Index: 110



Y Index: 110

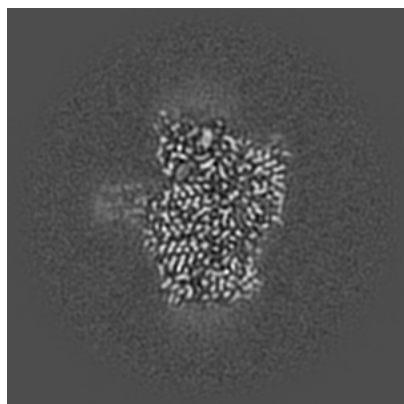


Z Index: 110

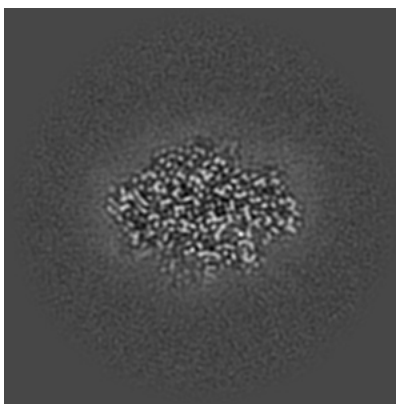
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

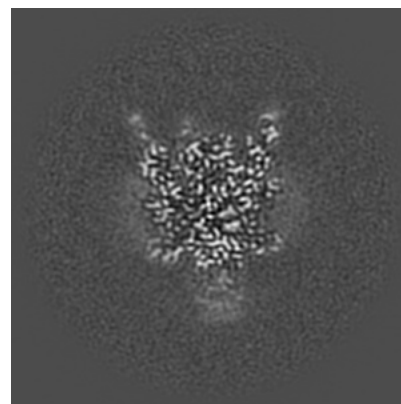
6.3.1 Primary map



X Index: 116



Y Index: 118

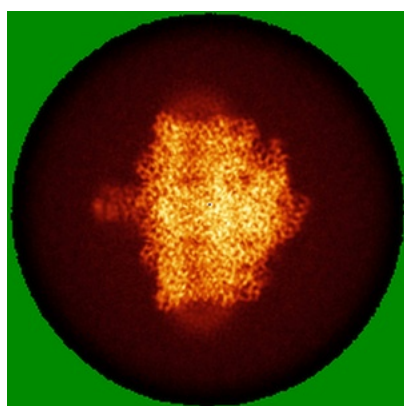


Z Index: 107

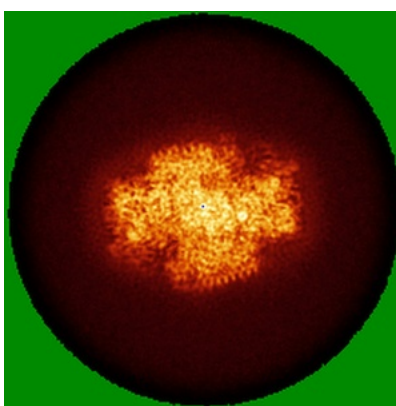
The images above show the largest variance slices of the map in three orthogonal directions.

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

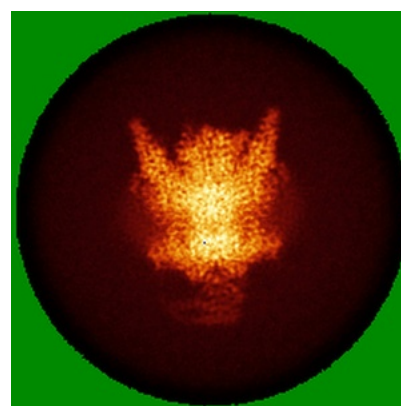
6.4.1 Primary map



X



Y

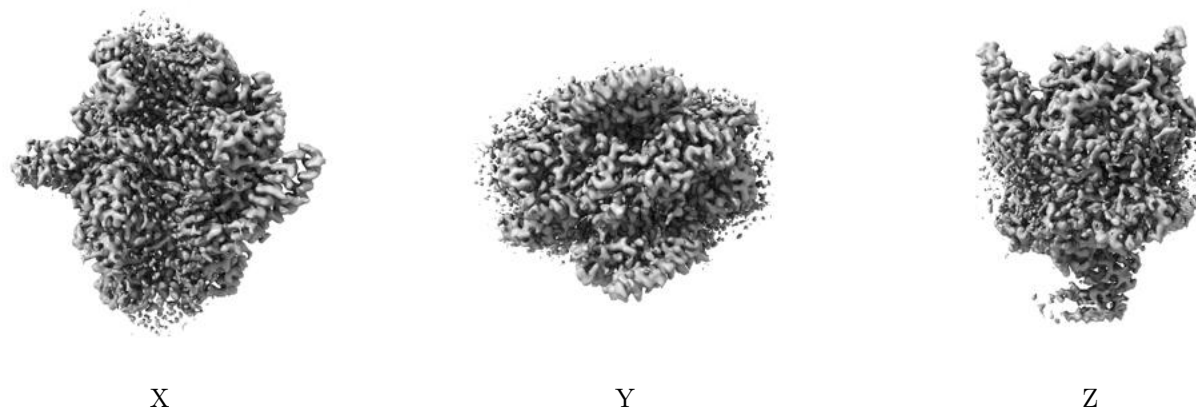


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

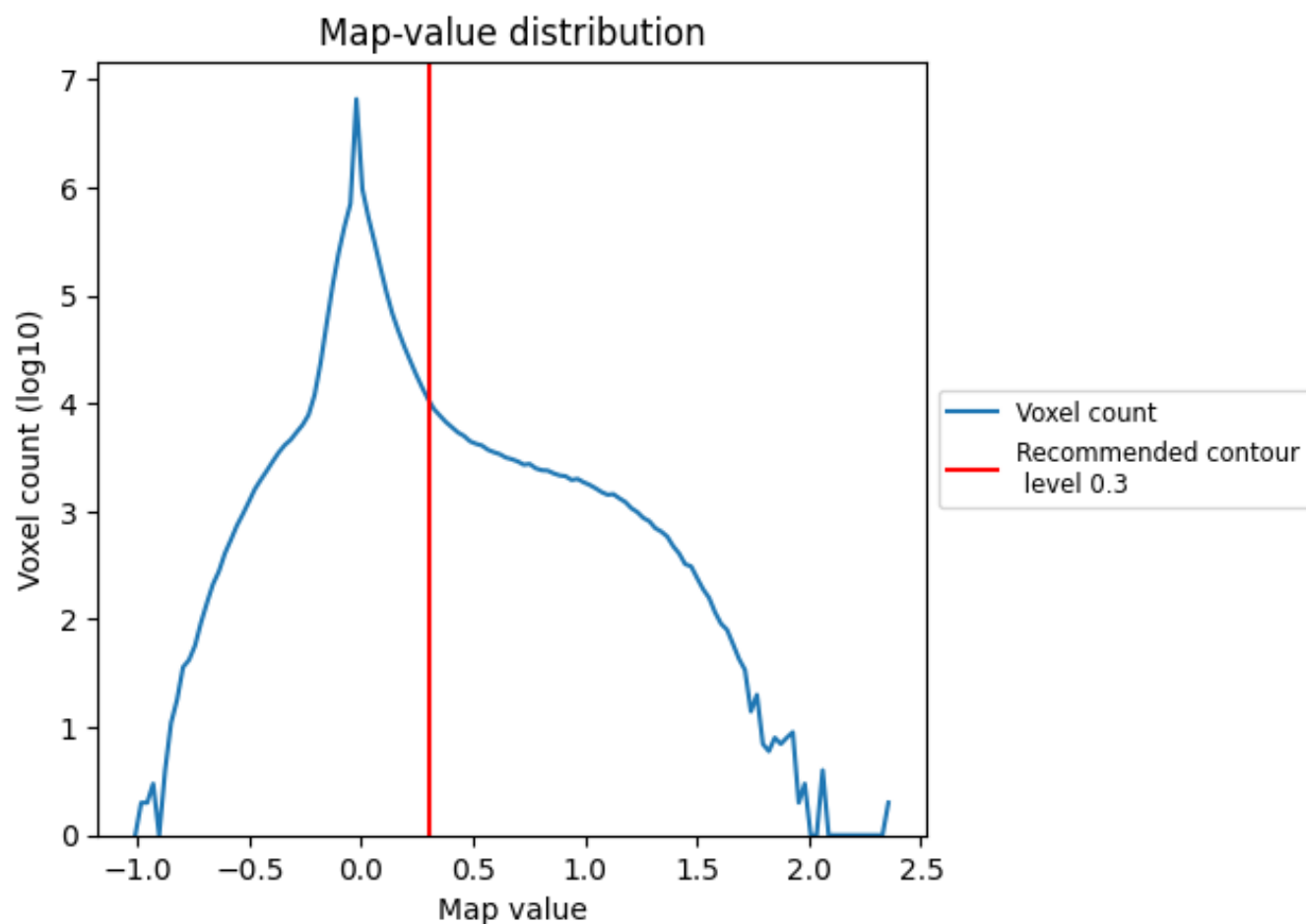
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

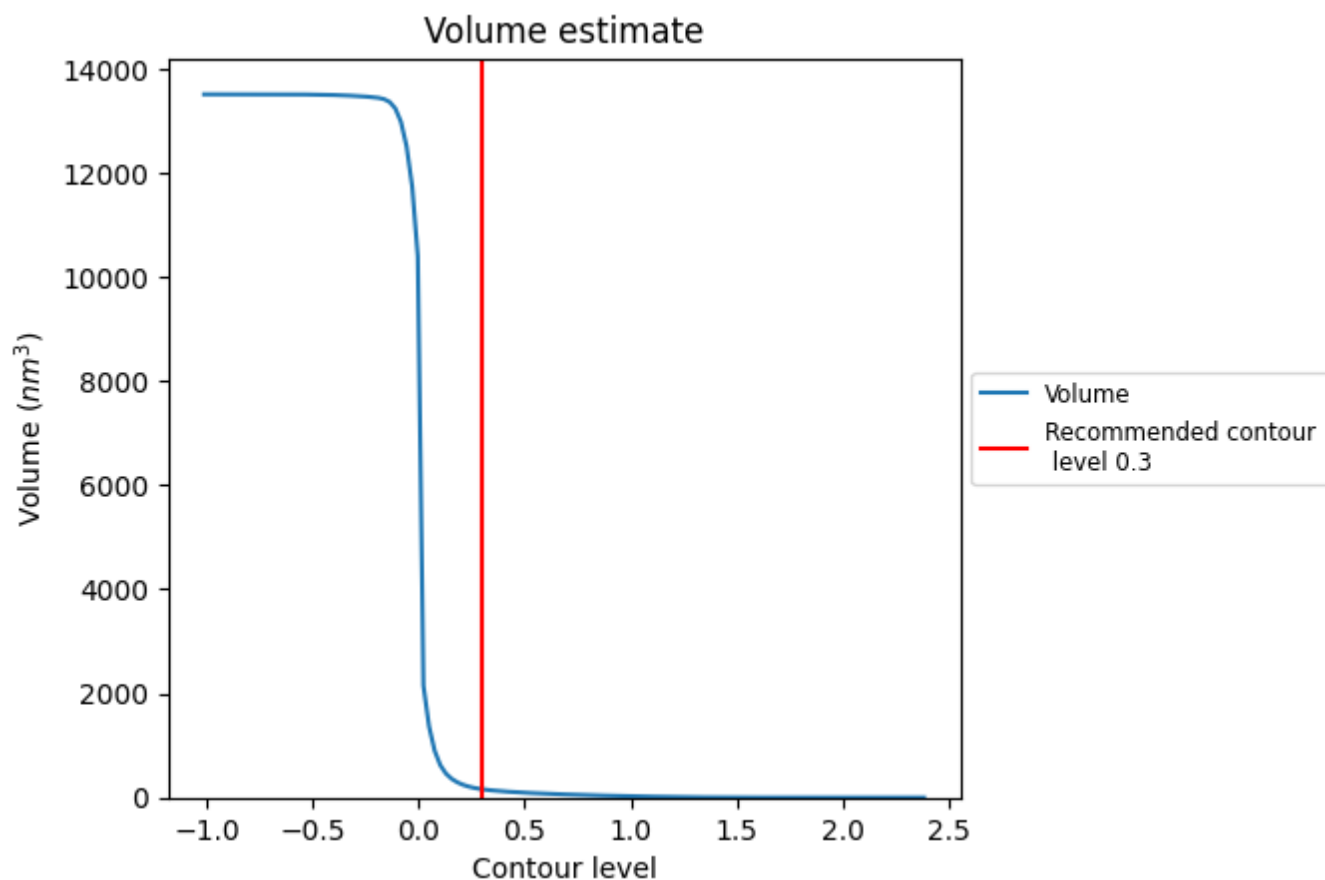
This section contains the results of statistical analysis of the map.

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.

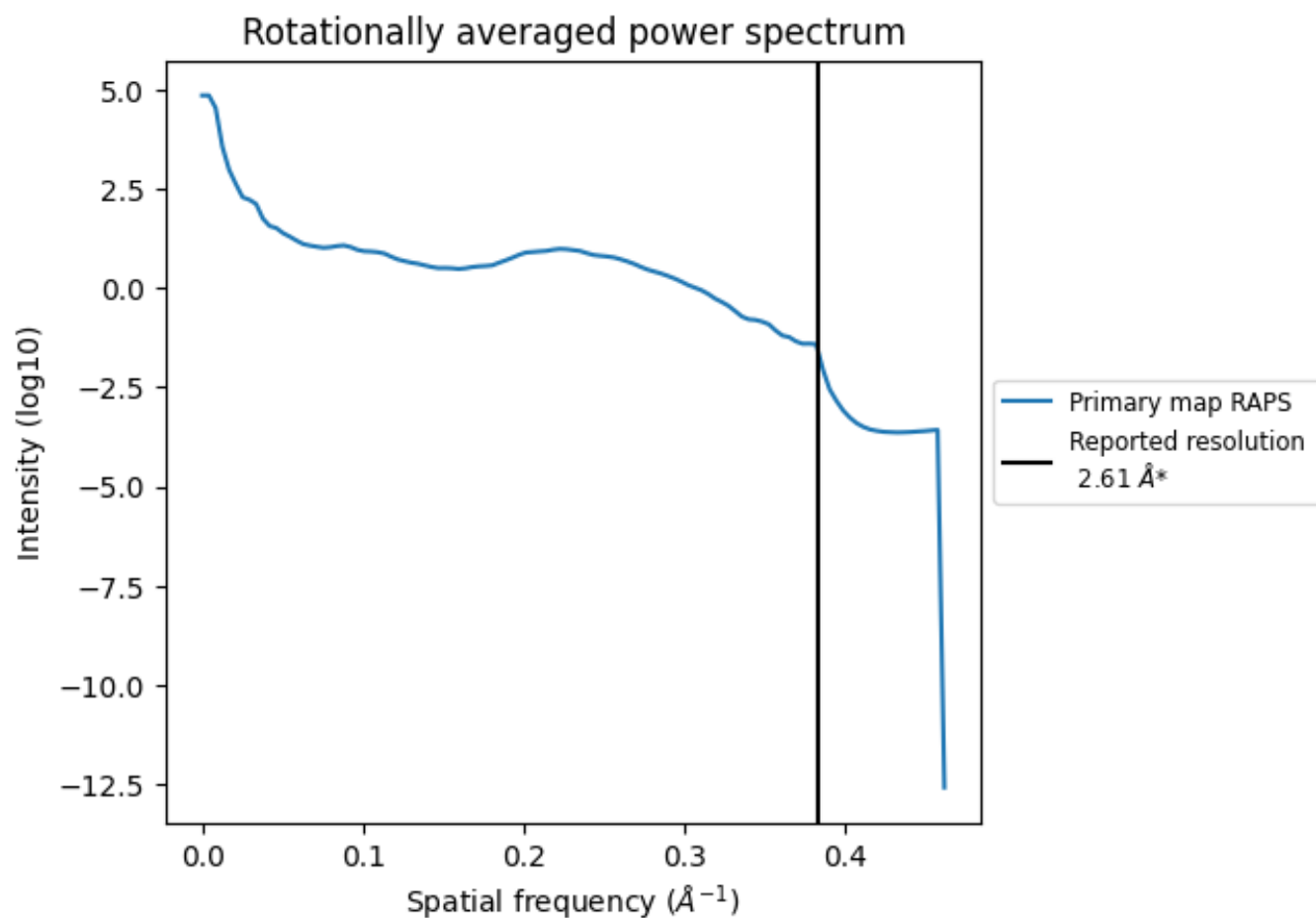
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 160 nm³; this corresponds to an approximate mass of 144 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 0.383 Å⁻¹

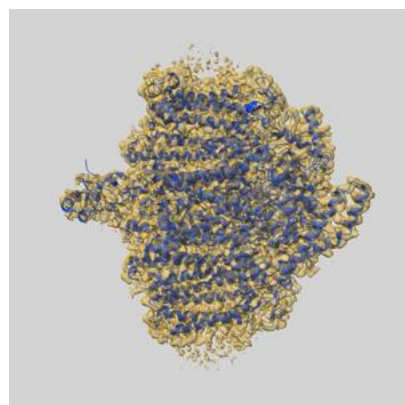
8 Fourier-Shell correlation

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

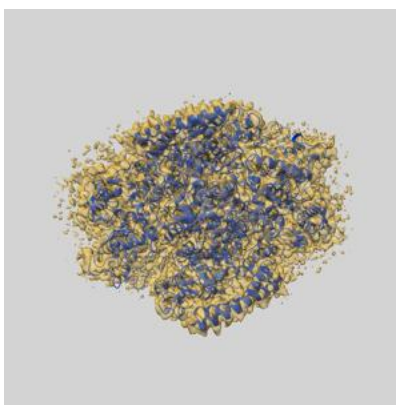
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-32228 and PDB model 7VZG. Per-residue inclusion information can be found in section 3 on page 14.

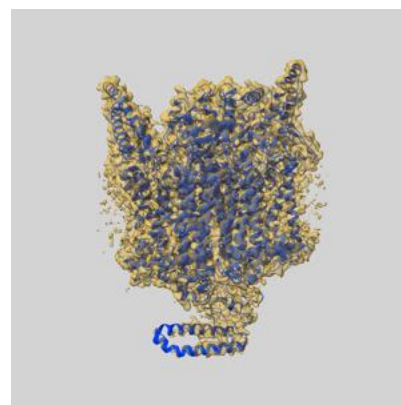
9.1 Map-model overlay [i](#)



X



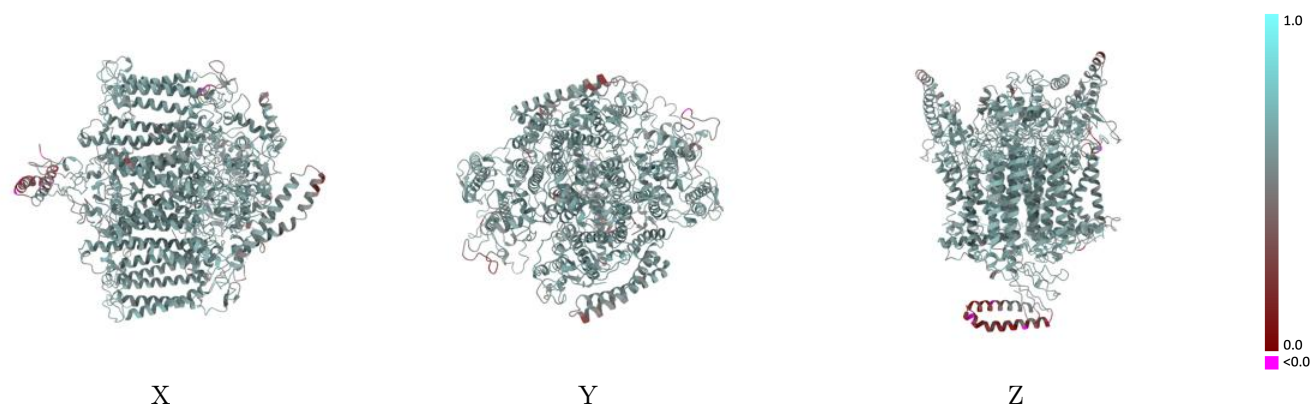
Y



Z

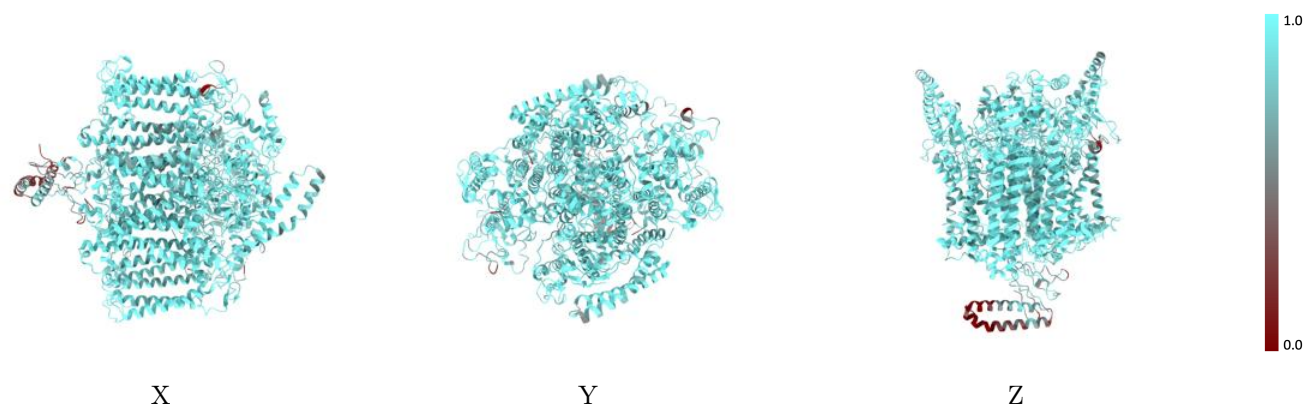
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



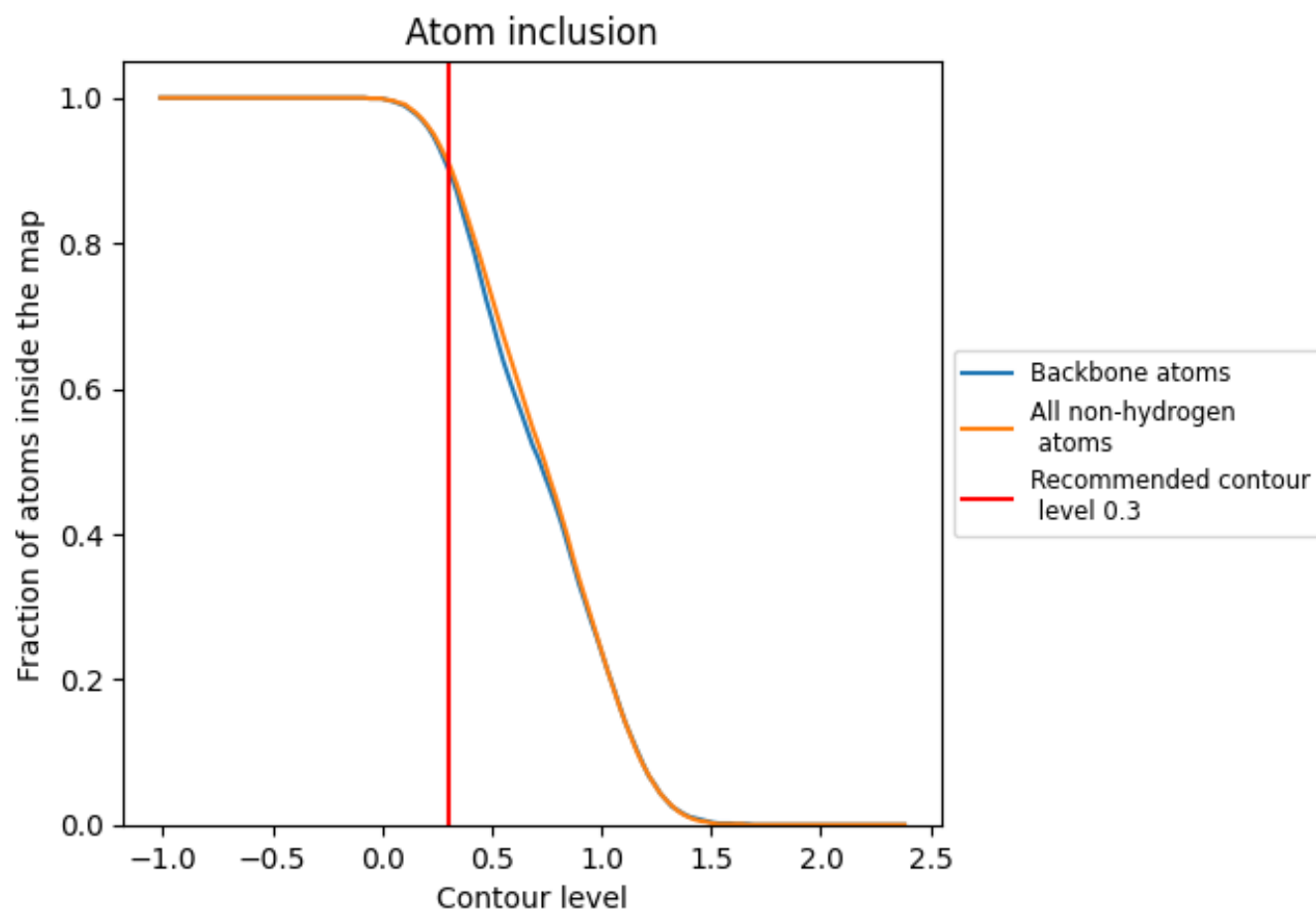
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.3).

9.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 91% 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 (0.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9120	0.5780
A	0.9440	0.5910
B	0.6700	0.5210
C	0.9320	0.5780
D	0.3570	0.2470
E	0.9080	0.5740
F	0.9330	0.5960
G	0.7090	0.5340
H	0.8420	0.5600
a	0.9440	0.5910
c	0.9260	0.5760
e	0.8900	0.5780
f	0.9440	0.5880
g	0.8310	0.5940
h	0.8530	0.5780

