



Full wwPDB EM Validation Report ⓘ

Sep 28, 2026 – 12:32 PM JST

PDB ID : 9XK9 / pdb_00009xk9
EMDB ID : EMD-66952
Title : In situ C2S2M2L4-type PSII-LHCII supercomplex, moderately bound (M-) LHCII trimer with CP29 and CP24, protomer 2
Authors : Li, J.; Elias, E.; Zhang, K.; Croce, R.; Zhu, J.
Deposited on : 2025-11-05
Resolution : 3.64 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:

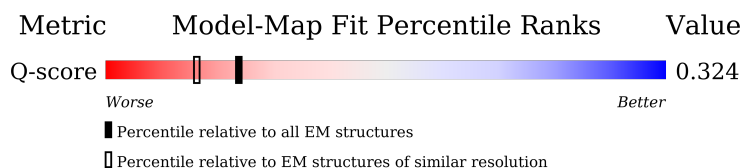
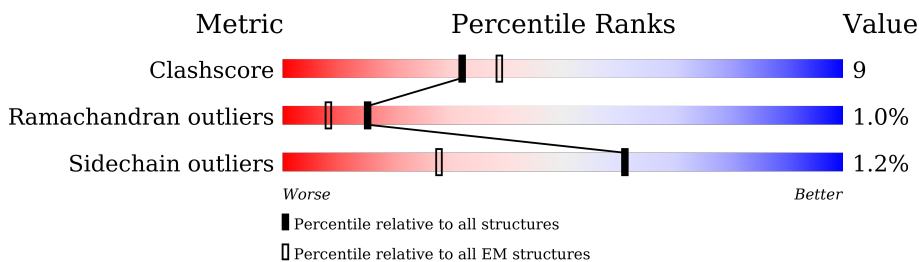
EMDB validation analysis : 0.0.1.dev133
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4-5-2 with Phenix2.2
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.51

1 Overall quality at a glance

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

The reported resolution of this entry is 3.64 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)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	11633 (3.14 - 4.14)

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	05	219	 11% 77% 18% 5%
1	06	219	 7% 78% 16% 5%
2	07	220	 6% 81% 18% 5%
3	08	205	 6% 78% 21% 5%

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Mol	Chain	Length	Quality of chain
4	1r	234	

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
5	CLA	06	602	X	-	-	-
5	CLA	1r	306	X	-	-	-
6	CHL	05	305	X	-	-	-

2 Entry composition

There are 9 unique types of molecules in this entry. The entry contains 10982 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 Chlorophyll a-b binding protein 2, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	05	210	Total	C	N	O	S	0	0
			1555	1003	258	289	5		
1	06	207	Total	C	N	O	S	0	0
			1450	927	242	276	5		

- Molecule 2 is a protein called Chlorophyll a/b-binding protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	07	220	Total	C	N	O	S	0	0
			1648	1070	273	300	5		

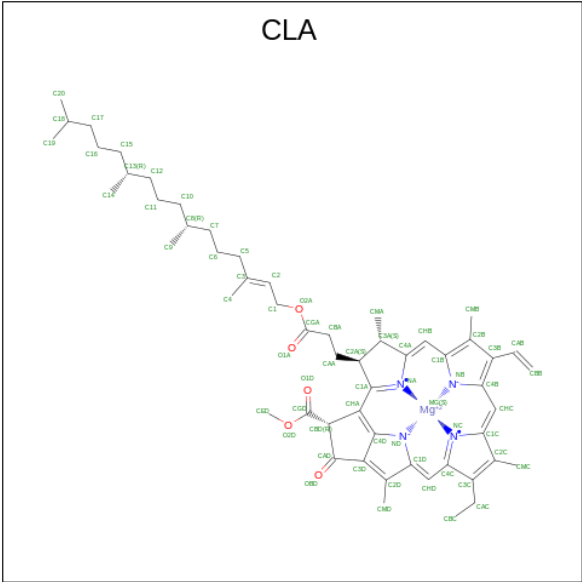
- Molecule 3 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	08	205	Total	C	N	O	S	0	0
			1570	1029	255	282	4		

- Molecule 4 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	1r	234	Total	C	N	O	S	0	0
			1837	1193	299	342	3		

- Molecule 5 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
5	05	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	05	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
5	05	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
5	05	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	05	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	05	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	05	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	06	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
5	06	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	06	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	06	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	06	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	06	1	Total	C	Mg	N	O	0
			40	32	1	4	3	

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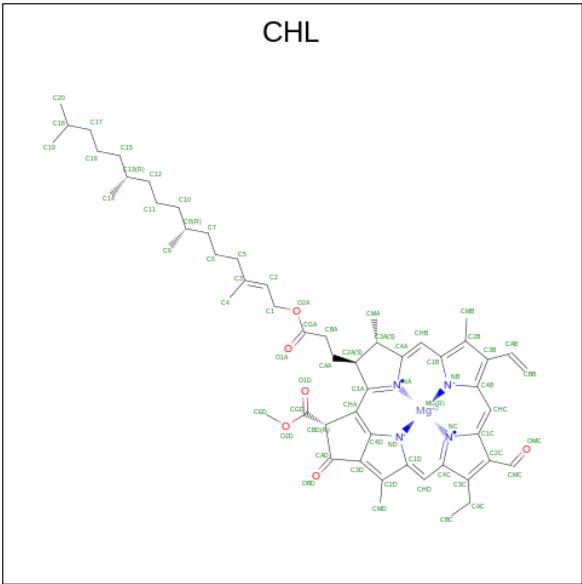
Mol	Chain	Residues	Atoms					AltConf
5	07	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	07	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	07	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	07	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	07	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
5	07	1	Total	C	Mg	N	O	0
			39	31	1	4	3	
5	07	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
5	08	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	08	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	08	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	08	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	08	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
5	08	1	Total	C	Mg	N	O	0
			40	32	1	4	3	
5	08	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
5	1r	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
5	1r	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
5	1r	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
5	1r	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
5	1r	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
5	1r	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
5	1r	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
5	1r	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
5	1r	1	Total	C	Mg	N	O	0
			46	36	1	4	5	

- Molecule 6 is CHLOROPHYLL B (CCD ID: CHL) (formula: C₅₅H₇₀MgN₄O₆) (labeled as "Ligand of Interest" by depositor).



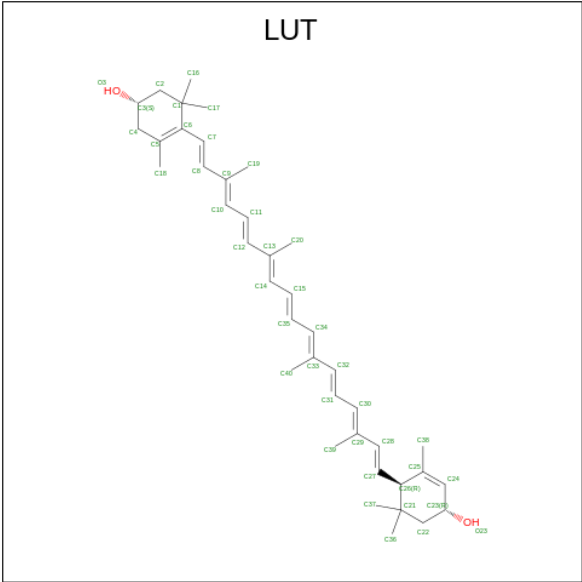
Mol	Chain	Residues	Atoms					AltConf
6	05	1	Total	C	Mg	N	O	0
			45	34	1	4	6	
6	05	1	Total	C	Mg	N	O	0
			63	52	1	4	6	
6	05	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	05	1	Total	C	Mg	N	O	0
			42	33	1	4	4	
6	05	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	05	1	Total	C	Mg	N	O	0
			42	33	1	4	4	
6	06	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
6	06	1	Total	C	Mg	N	O	0
			40	31	1	4	4	
6	06	1	Total	C	Mg	N	O	0
			41	32	1	4	4	

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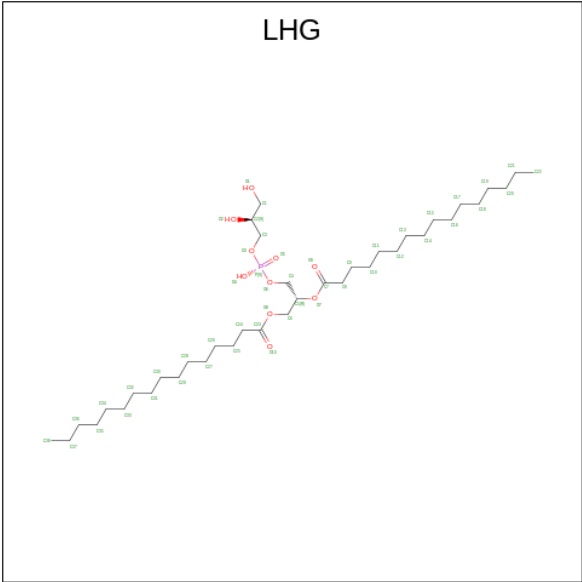
Mol	Chain	Residues	Atoms					AltConf
6	06	1	Total	C	Mg	N	O	0
			45	34	1	4	6	
6	06	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
6	07	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	07	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	07	1	Total	C	Mg	N	O	0
			39	32	1	4	2	
6	07	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	07	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	08	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	08	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	08	1	Total	C	Mg	N	O	0
			45	34	1	4	6	
6	08	1	Total	C	Mg	N	O	0
			41	32	1	4	4	
6	08	1	Total	C	Mg	N	O	0
			39	32	1	4	2	
6	1r	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
6	1r	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
6	1r	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
6	1r	1	Total	C	Mg	N	O	0
			47	36	1	4	6	

- Molecule 7 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (CCD ID: LUT) (formula: C₄₀H₅₆O₂) (labeled as "Ligand of Interest" by depositor).



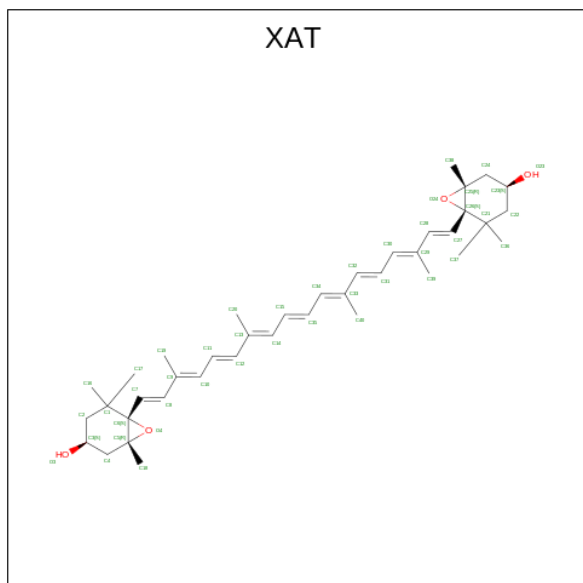
Mol	Chain	Residues	Atoms			AltConf
7	05	1	Total	C	O	0
			42	40	2	
7	07	1	Total	C	O	0
			42	40	2	
7	1r	1	Total	C	O	0
			42	40	2	

- Molecule 8 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
8	07	1	Total	C	O	P	0
			49	38	10	1	
8	1r	1	Total	C	O	P	0
			29	20	8	1	

- Molecule 9 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'-TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (CCD ID: XAT) (formula: C₄₀H₅₆O₄) (labeled as "Ligand of Interest" by depositor).

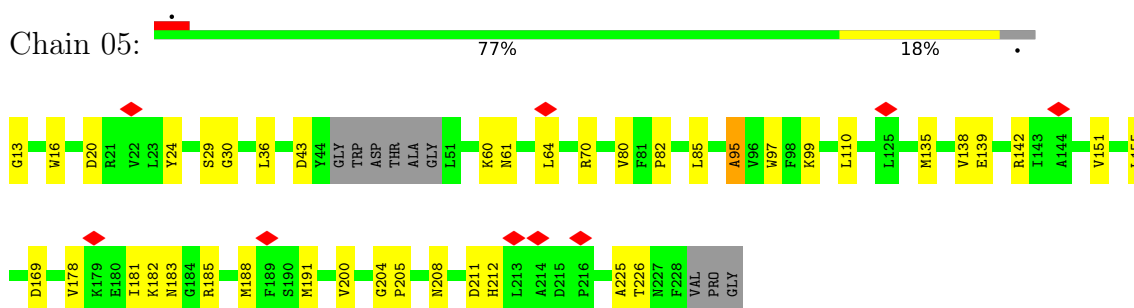


Mol	Chain	Residues	Atoms			AltConf
9	1r	1	Total	C	O	0
			44	40	4	

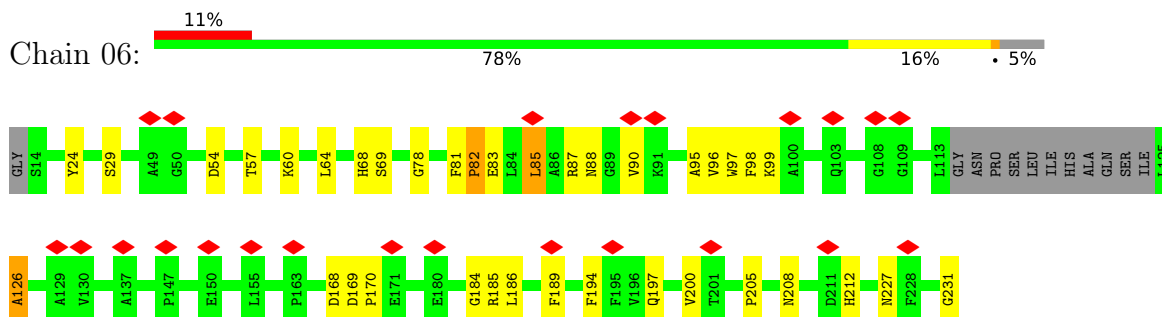
3 Residue-property plots

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.

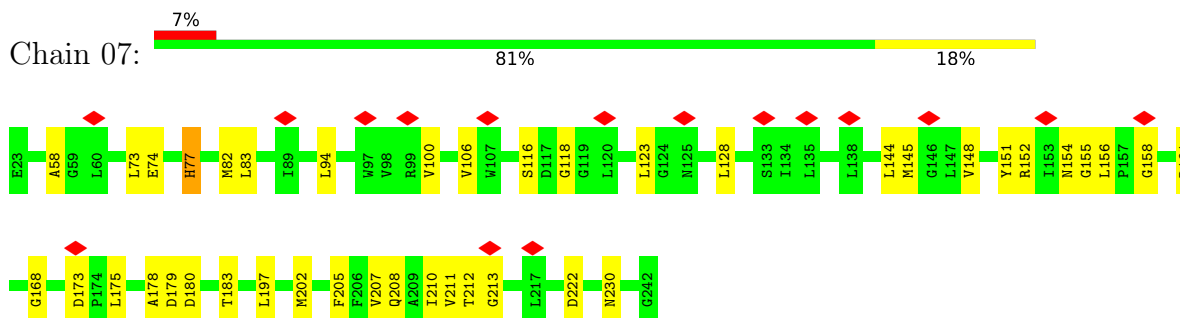
- Molecule 1: Chlorophyll a-b binding protein 2, chloroplastic



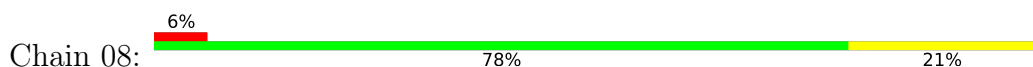
- Molecule 1: Chlorophyll a-b binding protein 2, chloroplastic

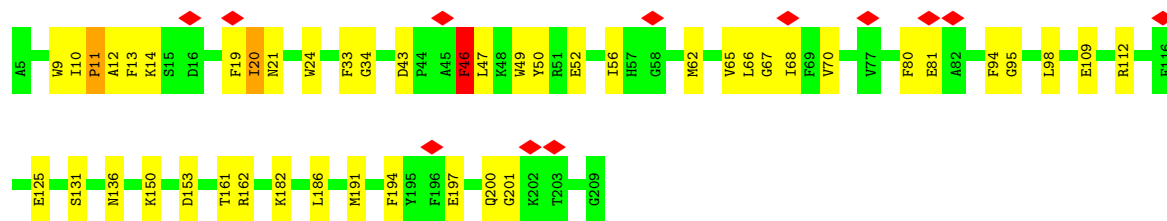


- Molecule 2: Chlorophyll a/b-binding protein

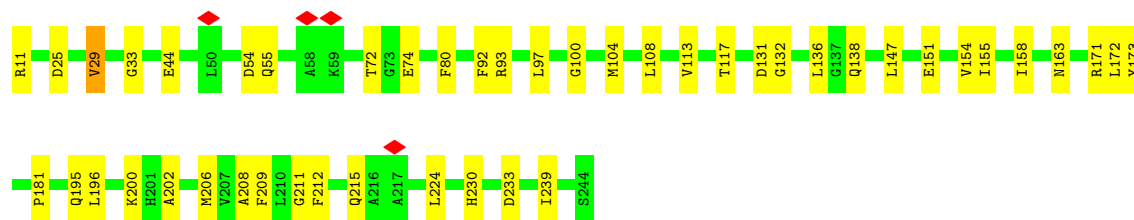
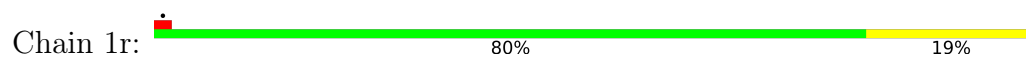


- Molecule 3: Chlorophyll a-b binding protein, chloroplastic





- Molecule 4: Chlorophyll a-b binding protein, chloroplastic



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	172752	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	1.375	Depositor
Minimum defocus (nm)	1400	Depositor
Maximum defocus (nm)	2200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.671	Depositor
Minimum map value	-0.420	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.02	Depositor
Map size ($\text{\AA}$)	419.84, 419.84, 419.84	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	0.82, 0.82, 0.82	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: CLA, LHG, XAT, CHL, LUT

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	05	0.26	0/1597	0.67	0/2176
1	06	0.35	1/1485 (0.1%)	0.71	5/2030 (0.2%)
2	07	0.28	0/1696	0.69	1/2312 (0.0%)
3	08	0.32	0/1626	0.69	1/2217 (0.0%)
4	1r	0.22	0/1890	0.54	0/2574
All	All	0.29	1/8294 (0.0%)	0.66	7/11309 (0.1%)

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	05	0	1
1	06	0	1
All	All	0	2

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	06	170	PRO	CG-CD	-9.05	1.20	1.50

All (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	06	170	PRO	N-CD-CG	-10.77	87.04	103.20
1	06	170	PRO	CA-N-CD	-10.40	97.44	112.00
1	06	170	PRO	CA-CB-CG	-6.97	91.26	104.50
3	08	46	PHE	N-CA-C	-6.64	105.31	113.41
2	07	77	HIS	N-CA-CB	5.57	118.41	110.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	06	78	GLY	CA-C-N	5.49	129.88	120.71
1	06	78	GLY	C-N-CA	5.49	129.88	120.71

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	05	95	ALA	Peptide
1	06	189	PHE	Peptide

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	05	1555	0	1473	31	0
1	06	1450	0	1320	28	0
2	07	1648	0	1561	31	0
3	08	1570	0	1469	31	0
4	1r	1837	0	1785	36	0
5	05	331	0	224	7	0
5	06	257	0	183	8	0
5	07	292	0	198	4	0
5	08	282	0	191	8	0
5	1r	425	0	329	16	0
6	05	274	0	191	10	0
6	06	218	0	137	1	0
6	07	203	0	120	3	0
6	08	207	0	125	1	0
6	1r	185	0	124	4	0
7	05	42	0	56	5	0
7	07	42	0	56	7	0
7	1r	42	0	56	6	0
8	07	49	0	74	1	0
8	1r	29	0	29	1	0
9	1r	44	0	56	2	0
All	All	10982	0	9757	179	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 9.

All (179) 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)
1:06:68:HIS:HE1	5:06:602:CLA:NC	1.81	0.78
1:06:97:TRP:H	1:06:205:PRO:HG3	1.51	0.75
4:1r:108:LEU:HD21	5:1r:308:CLA:HAB	1.72	0.72
4:1r:97:LEU:HD21	4:1r:172:LEU:HD12	1.72	0.71
1:05:70:ARG:NH2	1:05:155:LEU:O	2.27	0.68
2:07:144:LEU:O	2:07:148:VAL:N	2.27	0.68
6:05:304:CHL:HBB2	6:05:305:CHL:HBB1	1.77	0.67
2:07:83:LEU:HB3	5:07:310:CLA:HBB2	1.79	0.65
2:07:207:VAL:HA	2:07:210:ILE:HD12	1.80	0.64
1:05:43:ASP:H	5:05:301:CLA:HED3	1.63	0.63
1:05:183:ASN:ND2	5:05:309:CLA:OBD	2.32	0.62
1:05:60:LYS:HB3	2:07:58:ALA:HA	1.82	0.61
4:1r:173:TYR:HB3	5:1r:306:CLA:HED2	1.83	0.60
4:1r:215:GLN:NE2	5:1r:309:CLA:C4D	2.62	0.60
1:05:61:ASN:HA	1:05:64:LEU:HB2	1.84	0.60
3:08:10:ILE:HG23	3:08:11:PRO:HD3	1.85	0.59
3:08:46:PHE:O	3:08:49:TRP:N	2.36	0.58
2:07:82:MET:HG2	7:07:313:LUT:H34	1.83	0.58
3:08:112:ARG:NH2	6:08:304:CHL:O1D	2.35	0.58
2:07:197:LEU:HD12	5:07:307:CLA:HHD	1.84	0.57
1:05:204:GLY:O	1:05:208:ASN:ND2	2.36	0.57
4:1r:92:PHE:HB3	5:1r:301:CLA:HHB	1.86	0.57
1:06:68:HIS:HE1	5:06:602:CLA:C1C	2.18	0.57
3:08:191:MET:N	3:08:191:MET:SD	2.78	0.57
5:08:310:CLA:HBB1	5:08:310:CLA:HHC	1.87	0.56
1:06:126:ALA:HB1	6:06:603:CHL:HMC	1.87	0.56
1:06:186:LEU:HD11	5:06:609:CLA:HHD	1.86	0.56
3:08:34:GLY:N	5:08:311:CLA:OBD	2.39	0.55
1:05:13:GLY:N	1:05:20:ASP:OD2	2.39	0.55
3:08:50:TYR:HB3	5:08:311:CLA:H3A	1.89	0.55
5:05:311:CLA:HHC	5:05:311:CLA:HBB1	1.89	0.54
2:07:222:ASP:HB3	2:07:230:ASN:HD22	1.71	0.54
1:06:96:VAL:HG12	1:06:98:PHE:H	1.73	0.54
5:07:307:CLA:H3A	3:08:131:SER:HA	1.90	0.53
1:05:29:SER:OG	1:05:30:GLY:N	2.40	0.53
2:07:207:VAL:HG21	5:07:308:CLA:HAC2	1.90	0.53
1:05:110:LEU:HD13	6:05:304:CHL:HAC1	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:05:212:HIS:HE1	5:05:312:CLA:C4D	2.21	0.52
6:1r:302:CHL:HBB2	6:1r:303:CHL:HBB1	1.91	0.52
4:1r:93:ARG:NH2	5:1r:301:CLA:O1D	2.41	0.52
1:05:99:LYS:HA	6:05:305:CHL:HED2	1.90	0.52
3:08:95:GLY:HA2	3:08:98:LEU:HB2	1.92	0.52
4:1r:100:GLY:HA3	4:1r:202:ALA:HB1	1.91	0.52
4:1r:113:VAL:O	4:1r:117:THR:OG1	2.24	0.52
4:1r:208:ALA:O	4:1r:211:GLY:N	2.43	0.52
1:05:80:VAL:HG11	5:05:310:CLA:HBB2	1.90	0.52
1:06:200:VAL:HG22	1:06:227:ASN:HD21	1.74	0.52
1:05:135:MET:HA	1:05:138:VAL:HG22	1.92	0.51
3:08:191:MET:HA	3:08:194:PHE:HB2	1.92	0.51
1:06:208:ASN:OD1	1:06:212:HIS:ND1	2.44	0.51
2:07:175:LEU:O	7:07:313:LUT:O23	2.29	0.51
1:05:135:MET:HE2	6:05:304:CHL:HMA1	1.91	0.51
1:05:200:VAL:HG21	1:05:226:THR:HA	1.92	0.51
4:1r:230:HIS:CD2	6:1r:312:CHL:NC	2.78	0.51
1:06:96:VAL:HB	1:06:99:LYS:HG2	1.93	0.50
3:08:125:GLU:N	3:08:125:GLU:OE1	2.43	0.50
3:08:70:VAL:HG21	5:08:307:CLA:HBC3	1.92	0.50
3:08:47:LEU:HA	3:08:50:TYR:HD2	1.76	0.50
1:05:142:ARG:NH2	6:05:307:CHL:O1D	2.42	0.50
2:07:205:PHE:HA	2:07:208:GLN:HE21	1.76	0.50
4:1r:239:ILE:HD11	5:1r:309:CLA:H11	1.94	0.49
1:06:169:ASP:OD1	1:06:169:ASP:N	2.41	0.49
6:07:304:CHL:HMB1	6:07:311:CHL:HMC	1.94	0.49
1:05:191:MET:HE1	7:05:314:LUT:H12	1.93	0.49
1:06:81:PHE:O	1:06:82:PRO:C	2.54	0.49
3:08:12:ALA:O	3:08:14:LYS:N	2.46	0.49
3:08:81:GLU:HG3	3:08:201:GLY:HA2	1.95	0.49
4:1r:72:THR:OG1	4:1r:74:GLU:OE1	2.31	0.49
1:05:169:ASP:OD1	1:05:169:ASP:N	2.38	0.49
3:08:9:TRP:HB2	3:08:12:ALA:HA	1.95	0.48
4:1r:29:VAL:HG21	4:1r:195:GLN:HB3	1.95	0.48
4:1r:100:GLY:O	4:1r:104:MET:HG3	2.13	0.48
1:06:82:PRO:O	1:06:83:GLU:C	2.56	0.48
1:05:185:ARG:HH12	5:05:301:CLA:C1D	2.26	0.48
1:06:168:ASP:N	1:06:168:ASP:OD1	2.47	0.48
1:06:82:PRO:HA	1:06:85:LEU:HD23	1.95	0.48
1:06:194:PHE:HA	1:06:197:GLN:HG2	1.95	0.48
2:07:151:TYR:O	2:07:154:ASN:ND2	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:07:183:THR:HG21	3:08:161:THR:HG21	1.96	0.48
3:08:52:GLU:O	3:08:56:ILE:HG12	2.14	0.48
4:1r:233:ASP:OD1	4:1r:233:ASP:N	2.42	0.48
1:05:110:LEU:HD11	6:05:304:CHL:HHD	1.95	0.47
3:08:153:ASP:N	3:08:153:ASP:OD1	2.46	0.47
3:08:67:GLY:HA2	3:08:70:VAL:HG22	1.97	0.47
4:1r:163:ASN:O	4:1r:171:ARG:NH1	2.48	0.47
1:06:24:TYR:O	1:06:29:SER:OG	2.27	0.47
3:08:186:LEU:HD11	5:08:310:CLA:HBC3	1.97	0.47
5:1r:305:CLA:H62	5:1r:305:CLA:H41	1.56	0.47
2:07:208:GLN:HE22	7:07:313:LUT:H182	1.80	0.47
1:05:139:GLU:OE1	6:05:307:CHL:C4B	2.40	0.47
6:05:304:CHL:CBB	6:05:305:CHL:HBB1	2.45	0.47
2:07:73:LEU:O	2:07:77:HIS:ND1	2.42	0.46
2:07:178:ALA:O	2:07:180:ASP:N	2.47	0.46
9:1r:315:XAT:H191	9:1r:315:XAT:H11	1.44	0.46
2:07:156:LEU:HD12	2:07:158:GLY:H	1.80	0.46
4:1r:131:ASP:OD1	4:1r:132:GLY:N	2.48	0.46
4:1r:212:PHE:CZ	7:1r:314:LUT:H8	2.50	0.46
1:05:16:TRP:HB3	1:05:178:VAL:HG11	1.97	0.46
3:08:21:ASN:HD21	3:08:24:TRP:HB2	1.81	0.46
4:1r:196:LEU:O	4:1r:200:LYS:HG3	2.16	0.45
5:1r:306:CLA:HBB1	7:1r:314:LUT:H32	1.96	0.45
3:08:136:ASN:HB3	3:08:150:LYS:HB2	1.98	0.45
1:05:24:TYR:HE2	1:05:182:LYS:HE3	1.81	0.45
4:1r:108:LEU:HD12	5:1r:311:CLA:HBC2	1.99	0.45
4:1r:202:ALA:O	4:1r:206:MET:HG2	2.17	0.45
1:05:208:ASN:HA	1:05:211:ASP:OD1	2.17	0.45
7:05:314:LUT:H372	5:06:602:CLA:HED3	1.99	0.45
3:08:65:VAL:HA	3:08:68:ILE:HB	1.99	0.45
1:06:60:LYS:O	1:06:64:LEU:HG	2.17	0.45
1:06:208:ASN:O	1:06:212:HIS:ND1	2.50	0.45
2:07:128:LEU:HD13	2:07:128:LEU:HA	1.90	0.44
2:07:197:LEU:HD22	7:07:313:LUT:H203	1.98	0.44
3:08:197:GLU:HA	3:08:200:GLN:HB2	1.98	0.44
1:06:185:ARG:NH2	5:06:607:CLA:O2D	2.50	0.44
3:08:19:PHE:HB3	3:08:20:ILE:H	1.57	0.44
4:1r:155:ILE:HD13	4:1r:158:ILE:HD11	1.99	0.44
2:07:82:MET:HE2	2:07:82:MET:HB2	1.89	0.44
1:06:81:PHE:O	1:06:85:LEU:N	2.50	0.44
4:1r:33:GLY:N	5:1r:301:CLA:OBD	2.40	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:05:314:LUT:H35	7:05:314:LUT:H401	1.89	0.44
4:1r:154:VAL:O	4:1r:158:ILE:HG12	2.17	0.44
1:05:82:PRO:HA	1:05:85:LEU:HD12	2.00	0.44
1:05:178:VAL:HA	1:05:181:ILE:HG12	2.00	0.44
2:07:208:GLN:O	2:07:212:THR:OG1	2.35	0.43
1:05:188:MET:HA	1:05:191:MET:HG3	2.00	0.43
2:07:152:ARG:HH22	6:07:311:CHL:C4D	2.31	0.43
5:05:301:CLA:CBB	7:05:314:LUT:H32	2.48	0.43
7:05:314:LUT:H191	7:05:314:LUT:H11	1.72	0.43
2:07:173:ASP:HA	7:07:313:LUT:H23	2.00	0.43
4:1r:206:MET:HG3	5:1r:301:CLA:HMC2	2.00	0.43
1:06:231:GLY:HA2	2:07:213:GLY:HA3	2.01	0.43
3:08:62:MET:HA	3:08:65:VAL:HG22	1.99	0.43
3:08:109:GLU:OE1	3:08:112:ARG:NH1	2.52	0.43
3:08:182:LYS:HD2	5:08:309:CLA:C4D	2.49	0.43
1:06:87:ARG:HA	1:06:90:VAL:O	2.18	0.43
3:08:43:ASP:O	3:08:47:LEU:N	2.44	0.43
1:06:69:SER:HB2	1:06:184:GLY:HA3	1.99	0.43
1:06:81:PHE:N	1:06:82:PRO:HD2	2.33	0.43
4:1r:54:ASP:OD1	4:1r:55:GLN:N	2.52	0.43
4:1r:147:LEU:O	4:1r:151:GLU:HB2	2.18	0.43
7:1r:314:LUT:H401	7:1r:314:LUT:H35	1.88	0.43
2:07:145:MET:HB3	6:07:311:CHL:HBB2	2.00	0.42
2:07:155:GLY:HA2	2:07:161:ASP:HA	2.01	0.42
2:07:94:LEU:HD23	2:07:100:VAL:HG21	2.01	0.42
2:07:202:MET:HA	2:07:205:PHE:HB2	2.01	0.42
1:05:97:TRP:HD1	1:05:205:PRO:HD3	1.85	0.42
6:05:315:CHL:HBB2	5:06:602:CLA:HAC2	2.00	0.42
6:05:305:CHL:H61	6:05:305:CHL:H41	1.79	0.42
2:07:116:SER:O	2:07:118:GLY:N	2.52	0.42
1:05:36:LEU:HD23	1:05:36:LEU:HA	1.85	0.42
7:07:313:LUT:H31	7:07:313:LUT:H391	1.80	0.42
5:1r:305:CLA:HBB1	5:1r:305:CLA:HHC	2.01	0.42
4:1r:224:LEU:HD23	4:1r:224:LEU:HA	1.86	0.42
1:05:181:ILE:O	1:05:185:ARG:HG3	2.20	0.41
4:1r:80:PHE:CE2	5:1r:313:CLA:HBB1	2.56	0.41
4:1r:136:LEU:HD12	4:1r:136:LEU:HA	1.95	0.41
4:1r:209:PHE:CD2	9:1r:315:XAT:H32	2.55	0.41
4:1r:11:ARG:NH1	4:1r:25:ASP:O	2.54	0.41
1:06:87:ARG:O	1:06:88:ASN:C	2.63	0.41
5:1r:306:CLA:H52	7:1r:314:LUT:H30	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:06:185:ARG:HB3	5:06:607:CLA:HBC3	2.03	0.41
3:08:33:PHE:HD2	5:08:311:CLA:HMD2	1.86	0.41
1:06:54:ASP:HB3	1:06:57:THR:HG22	2.02	0.41
2:07:168:GLY:HA2	2:07:173:ASP:HB3	2.03	0.41
3:08:46:PHE:CE1	3:08:49:TRP:HD1	2.39	0.41
4:1r:44:GLU:OE1	4:1r:44:GLU:N	2.54	0.41
4:1r:208:ALA:HB1	4:1r:212:PHE:HE1	1.85	0.41
1:06:208:ASN:HA	1:06:212:HIS:CE1	2.56	0.41
2:07:207:VAL:O	2:07:211:VAL:HG12	2.21	0.41
2:07:123:LEU:H	2:07:128:LEU:HG	1.86	0.40
6:1r:303:CHL:HAB	5:1r:310:CLA:HMC1	2.03	0.40
5:1r:309:CLA:HHB	7:1r:314:LUT:H162	2.01	0.40
5:06:611:CLA:HBB1	5:06:611:CLA:HHC	2.03	0.40
1:05:135:MET:O	1:05:139:GLU:HG3	2.21	0.40
7:07:313:LUT:H11	7:07:313:LUT:H191	1.92	0.40
8:07:314:LHG:HC82	8:07:314:LHG:HC5	1.67	0.40
5:08:312:CLA:C4D	8:1r:316:LHG:H112	2.50	0.40
4:1r:181:PRO:HD2	7:1r:314:LUT:H23	2.03	0.40
4:1r:155:ILE:HD11	6:1r:302:CHL:HMA1	2.03	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	05	206/219 (94%)	175 (85%)	29 (14%)	2 (1%)	12	41
1	06	203/219 (93%)	167 (82%)	33 (16%)	3 (2%)	8	33
2	07	218/220 (99%)	188 (86%)	29 (13%)	1 (0%)	24	55
3	08	203/205 (99%)	170 (84%)	28 (14%)	5 (2%)	4	24
4	1r	232/234 (99%)	216 (93%)	16 (7%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
All	All	1062/1097 (97%)	916 (86%)	135 (13%)	11 (1%)	15	41

All (11) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	08	13	PHE
1	05	95	ALA
1	06	126	ALA
2	07	179	ASP
3	08	20	ILE
1	05	225	ALA
3	08	94	PHE
1	06	95	ALA
1	06	82	PRO
3	08	11	PRO
3	08	162	ARG

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	05	150/166 (90%)	149 (99%)	1 (1%)	76	75
1	06	129/166 (78%)	128 (99%)	1 (1%)	73	74
2	07	159/172 (92%)	157 (99%)	2 (1%)	61	69
3	08	149/157 (95%)	146 (98%)	3 (2%)	48	63
4	1r	191/191 (100%)	189 (99%)	2 (1%)	68	72
All	All	778/852 (91%)	769 (99%)	9 (1%)	61	70

All (9) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	05	151	VAL
1	06	85	LEU
2	07	74	GLU

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Mol	Chain	Res	Type
2	07	106	VAL
3	08	46	PHE
3	08	66	LEU
3	08	80	PHE
4	1r	29	VAL
4	1r	138	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (9) such sidechains are listed below:

Mol	Chain	Res	Type
1	05	103	GLN
1	05	208	ASN
1	06	61	ASN
2	07	40	GLN
2	07	141	GLN
2	07	208	GLN
2	07	230	ASN
4	1r	163	ASN
4	1r	225	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](#)

68 ligands are modelled in this entry.

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
5	CLA	1r	308	-	49,53,73	2.53	19 (38%)	59,89,113	3.33	26 (44%)
6	CHL	07	303	2	44,49,74	2.33	17 (38%)	48,84,114	3.33	21 (43%)
6	CHL	05	313	1	44,49,74	2.34	15 (34%)	48,84,114	3.31	21 (43%)
5	CLA	08	307	-	43,48,73	2.64	20 (46%)	51,83,113	3.46	27 (52%)
6	CHL	06	605	-	48,53,74	2.29	15 (31%)	53,89,114	3.16	21 (39%)
6	CHL	05	315	-	46,50,74	2.35	16 (34%)	51,85,114	3.30	24 (47%)
6	CHL	1r	303	-	50,54,74	2.23	18 (36%)	56,90,114	3.18	24 (42%)
9	XAT	1r	315	-	39,47,47	0.88	0	54,74,74	3.46	24 (44%)
5	CLA	05	302	1	47,52,73	2.57	19 (40%)	56,88,113	3.40	27 (48%)
5	CLA	05	301	1	45,49,73	2.64	20 (44%)	54,84,113	3.41	28 (51%)
5	CLA	1r	313	4	50,54,73	2.47	20 (40%)	60,90,113	3.36	28 (46%)
7	LUT	05	314	-	42,43,43	1.70	9 (21%)	51,60,60	1.97	14 (27%)
5	CLA	07	302	2	43,48,73	2.75	21 (48%)	51,83,113	4.04	29 (56%)
8	LHG	07	314	-	48,48,48	0.29	0	51,54,54	0.67	1 (1%)
5	CLA	06	609	-	44,49,73	2.56	19 (43%)	52,84,113	3.47	26 (50%)
6	CHL	1r	302	-	50,54,74	2.24	18 (36%)	56,90,114	3.11	23 (41%)
5	CLA	06	611	-	43,48,73	2.66	20 (46%)	51,83,113	3.52	26 (50%)
5	CLA	08	310	3	41,46,73	2.65	19 (46%)	51,80,113	3.55	27 (52%)
5	CLA	1r	310	-	49,53,73	2.51	18 (36%)	59,89,113	3.34	27 (45%)
6	CHL	06	601	-	50,54,74	2.27	15 (30%)	56,90,114	3.15	21 (37%)
5	CLA	07	310	-	41,47,73	2.64	19 (46%)	49,81,113	3.57	27 (55%)
5	CLA	1r	311	-	50,54,73	2.46	19 (38%)	60,90,113	3.25	29 (48%)
5	CLA	1r	306	4	60,64,73	2.30	19 (31%)	72,102,113	3.03	33 (45%)
8	LHG	1r	316	5	28,28,48	0.36	0	31,33,54	0.77	2 (6%)
6	CHL	08	303	-	48,53,74	2.23	17 (35%)	53,89,114	3.14	20 (37%)
6	CHL	1r	304	-	50,54,74	2.23	18 (36%)	56,90,114	3.17	20 (35%)
6	CHL	05	307	1	46,50,74	2.32	14 (30%)	51,85,114	3.26	24 (47%)
5	CLA	06	602	1	59,63,73	2.35	22 (37%)	71,101,113	3.15	31 (43%)
5	CLA	07	308	-	45,49,73	2.59	20 (44%)	54,84,113	3.46	28 (51%)
6	CHL	07	311	-	44,49,74	2.31	17 (38%)	48,84,114	3.23	21 (43%)
5	CLA	08	312	-	46,50,73	2.53	18 (39%)	55,85,113	3.41	29 (52%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	CLA	05	308	1	45,49,73	2.67	19 (42%)	54,84,113	3.46	31 (57%)
5	CLA	1r	305	4	56,60,73	2.32	20 (35%)	67,97,113	3.14	31 (46%)
5	CLA	05	309	-	43,48,73	2.62	20 (46%)	51,83,113	3.53	26 (50%)
6	CHL	1r	312	4	51,55,74	2.21	17 (33%)	57,91,114	3.13	23 (40%)
5	CLA	08	309	3	43,48,73	2.74	19 (44%)	51,83,113	3.50	27 (52%)
5	CLA	1r	301	4	45,49,73	2.62	19 (42%)	54,84,113	3.42	29 (53%)
5	CLA	07	307	-	43,48,73	2.64	19 (44%)	51,83,113	3.53	27 (52%)
5	CLA	07	309	2	52,56,73	2.48	19 (36%)	62,92,113	3.29	27 (43%)
5	CLA	05	303	-	47,52,73	2.55	19 (40%)	56,88,113	3.27	27 (48%)
5	CLA	07	301	-	43,48,73	2.61	20 (46%)	51,83,113	3.45	28 (54%)
5	CLA	08	311	-	43,48,73	2.69	19 (44%)	51,83,113	3.51	28 (54%)
5	CLA	07	312	-	47,52,73	2.56	20 (42%)	56,88,113	3.34	26 (46%)
5	CLA	05	311	-	43,48,73	2.62	19 (44%)	51,83,113	3.60	30 (58%)
5	CLA	06	608	-	43,48,73	2.66	20 (46%)	51,83,113	3.48	27 (52%)
5	CLA	08	306	-	44,49,73	2.55	17 (38%)	52,84,113	3.49	26 (50%)
6	CHL	05	305	-	67,71,74	1.93	18 (26%)	76,110,114	2.79	27 (35%)
5	CLA	08	308	3	44,49,73	2.57	18 (40%)	52,84,113	3.38	26 (50%)
6	CHL	07	306	-	44,49,74	2.35	16 (36%)	48,84,114	3.32	22 (45%)
5	CLA	05	310	1	44,49,73	2.56	19 (43%)	52,84,113	3.46	26 (50%)
6	CHL	08	305	-	44,47,74	2.11	14 (31%)	48,80,114	3.29	21 (43%)
5	CLA	1r	309	4	56,60,73	2.36	20 (35%)	67,97,113	3.20	31 (46%)
6	CHL	05	306	-	44,49,74	2.37	19 (43%)	48,84,114	3.35	21 (43%)
6	CHL	06	603	-	42,48,74	2.32	15 (35%)	46,82,114	3.38	23 (50%)
5	CLA	06	607	1	43,48,73	2.68	20 (46%)	51,83,113	3.47	28 (54%)
6	CHL	07	305	-	42,47,74	2.30	16 (38%)	48,81,114	3.33	21 (43%)
5	CLA	06	610	-	44,49,73	2.58	19 (43%)	52,84,113	3.44	26 (50%)
6	CHL	05	304	-	48,53,74	2.21	15 (31%)	53,89,114	2.77	19 (35%)
6	CHL	06	606	-	50,54,74	2.25	16 (32%)	56,90,114	3.13	22 (39%)
6	CHL	08	302	-	44,49,74	2.36	18 (40%)	48,84,114	3.36	22 (45%)
5	CLA	05	312	1	43,48,73	2.74	21 (48%)	51,83,113	3.62	28 (54%)
5	CLA	1r	307	8	46,50,73	2.52	19 (41%)	55,85,113	3.41	26 (47%)
6	CHL	08	301	-	44,49,74	2.38	16 (36%)	48,84,114	3.23	22 (45%)
6	CHL	08	304	3	44,49,74	2.36	17 (38%)	48,84,114	3.35	22 (45%)
7	LUT	07	313	-	42,43,43	1.59	7 (16%)	51,60,60	1.91	13 (25%)
6	CHL	06	604	-	44,49,74	2.36	16 (36%)	48,84,114	3.32	22 (45%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
6	CHL	07	304	2	44,49,74	2.36	16 (36%)	48,84,114	3.31	22 (45%)
7	LUT	1r	314	-	42,43,43	1.68	8 (19%)	51,60,60	1.72	11 (21%)

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
5	CLA	1r	308	-	-	4/15/91/115	-
6	CHL	07	303	2	-	6/10/86/117	-
6	CHL	05	313	1	-	6/10/86/117	-
5	CLA	08	307	-	-	1/8/84/115	-
6	CHL	06	605	-	-	7/15/91/117	-
6	CHL	05	315	-	-	7/12/88/117	-
6	CHL	1r	303	-	-	9/17/93/117	-
9	XAT	1r	315	-	-	5/31/93/93	0/4/4/4
5	CLA	05	302	1	-	4/13/89/115	-
5	CLA	05	301	1	-	5/10/86/115	-
5	CLA	1r	313	4	-	8/17/93/115	-
7	LUT	05	314	-	-	2/29/67/67	0/2/2/2
5	CLA	07	302	2	-	1/8/84/115	-
8	LHG	07	314	-	-	13/53/53/53	-
5	CLA	06	609	-	-	0/10/86/115	-
6	CHL	1r	302	-	-	9/17/93/117	-
5	CLA	06	611	-	-	0/8/84/115	-
5	CLA	08	310	3	-	0/4/80/115	-
5	CLA	1r	310	-	-	3/15/91/115	-
6	CHL	06	601	-	-	11/17/93/117	-
5	CLA	07	310	-	-	2/8/80/115	-
5	CLA	1r	311	-	-	4/17/93/115	-
5	CLA	1r	306	4	1/1/13/20	5/29/105/115	-
8	LHG	1r	316	5	-	4/32/32/53	-
6	CHL	08	303	-	-	8/15/91/117	-
6	CHL	1r	304	-	-	7/17/93/117	-
6	CHL	05	307	1	-	6/12/88/117	-
5	CLA	06	602	1	1/1/13/20	6/27/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
5	CLA	07	308	-	-	4/10/86/115	-
6	CHL	07	311	-	-	8/10/86/117	-
5	CLA	08	312	-	-	9/12/88/115	-
5	CLA	05	308	1	-	2/10/86/115	-
5	CLA	1r	305	4	-	9/24/100/115	-
5	CLA	05	309	-	-	2/8/84/115	-
6	CHL	1r	312	4	-	8/19/95/117	-
5	CLA	08	309	3	-	3/8/84/115	-
5	CLA	1r	301	4	-	2/10/86/115	-
5	CLA	07	307	-	-	1/8/84/115	-
5	CLA	07	309	2	-	7/19/95/115	-
5	CLA	05	303	-	-	6/13/89/115	-
5	CLA	07	301	-	-	2/8/84/115	-
5	CLA	08	311	-	-	1/8/84/115	-
5	CLA	07	312	-	-	2/13/89/115	-
5	CLA	05	311	-	-	0/8/84/115	-
5	CLA	06	608	-	-	1/8/84/115	-
6	CHL	05	305	-	1/1/14/21	18/38/114/117	-
5	CLA	08	306	-	-	2/10/86/115	-
5	CLA	08	308	3	-	4/10/86/115	-
6	CHL	07	306	-	-	4/10/86/117	-
5	CLA	05	310	1	-	2/10/86/115	-
6	CHL	08	305	-	-	5/8/80/117	-
5	CLA	1r	309	4	-	7/24/100/115	-
6	CHL	05	306	-	-	2/10/86/117	-
6	CHL	06	603	-	-	6/10/82/117	-
5	CLA	06	607	1	-	0/8/84/115	-
6	CHL	07	305	-	-	4/6/82/117	-
5	CLA	06	610	-	-	0/10/86/115	-
6	CHL	05	304	-	-	9/15/91/117	-
6	CHL	06	606	-	-	10/17/93/117	-
6	CHL	08	302	-	-	2/10/86/117	-
5	CLA	05	312	1	-	0/8/84/115	-
5	CLA	1r	307	8	-	3/12/88/115	-
6	CHL	08	301	-	-	4/10/86/117	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
6	CHL	08	304	3	-	6/10/86/117	-
7	LUT	07	313	-	-	0/29/67/67	0/2/2/2
6	CHL	06	604	-	-	3/10/86/117	-
6	CHL	07	304	2	-	4/10/86/117	-
7	LUT	1r	314	-	-	0/29/67/67	0/2/2/2

All (1150) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	08	309	CLA	C1D-ND	8.80	1.48	1.37
5	08	306	CLA	C1D-ND	8.77	1.48	1.37
5	07	309	CLA	C1D-ND	8.68	1.48	1.37
5	06	610	CLA	C1D-ND	8.68	1.48	1.37
5	07	312	CLA	C1D-ND	8.67	1.48	1.37
5	08	310	CLA	C1D-ND	8.65	1.48	1.37
5	1r	308	CLA	C1D-ND	8.64	1.48	1.37
5	05	312	CLA	C1D-ND	8.61	1.48	1.37
5	05	309	CLA	C1D-ND	8.61	1.48	1.37
5	06	607	CLA	C1D-ND	8.61	1.48	1.37
5	06	609	CLA	C1D-ND	8.60	1.48	1.37
5	07	307	CLA	C1D-ND	8.55	1.48	1.37
5	05	302	CLA	C1D-ND	8.55	1.48	1.37
5	07	310	CLA	C1D-ND	8.55	1.48	1.37
5	06	602	CLA	C1D-ND	8.55	1.48	1.37
5	06	608	CLA	C1D-ND	8.55	1.48	1.37
5	06	611	CLA	C1D-ND	8.54	1.48	1.37
5	05	310	CLA	C1D-ND	8.53	1.48	1.37
5	1r	307	CLA	C1D-ND	8.52	1.48	1.37
5	08	312	CLA	C1D-ND	8.51	1.48	1.37
5	08	307	CLA	C1D-ND	8.50	1.48	1.37
5	08	308	CLA	C1D-ND	8.50	1.48	1.37
5	05	301	CLA	C1D-ND	8.49	1.48	1.37
5	05	308	CLA	C1D-ND	8.49	1.48	1.37
5	1r	306	CLA	C1D-ND	8.48	1.48	1.37
5	07	308	CLA	C1D-ND	8.47	1.48	1.37
5	08	311	CLA	C1D-ND	8.46	1.48	1.37
5	1r	301	CLA	C1D-ND	8.45	1.48	1.37
5	05	303	CLA	C1D-ND	8.44	1.48	1.37
5	1r	311	CLA	C1D-ND	8.37	1.48	1.37
5	1r	310	CLA	C1D-ND	8.36	1.48	1.37
5	1r	309	CLA	C1D-ND	8.32	1.48	1.37
5	1r	313	CLA	C1D-ND	8.29	1.48	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	05	311	CLA	C1D-ND	8.28	1.48	1.37
5	07	301	CLA	C1D-ND	8.24	1.47	1.37
5	07	302	CLA	C1D-ND	8.16	1.47	1.37
5	1r	305	CLA	C1D-ND	8.07	1.47	1.37
6	05	315	CHL	O2D-CGD	5.35	1.46	1.33
5	05	308	CLA	C3A-C2A	-5.29	1.49	1.54
5	07	308	CLA	O2D-CGD	5.24	1.46	1.33
6	1r	303	CHL	O2D-CGD	5.23	1.46	1.33
5	08	312	CLA	O2D-CGD	5.22	1.45	1.33
6	06	601	CHL	O2D-CGD	5.21	1.45	1.33
5	05	308	CLA	O2D-CGD	5.20	1.45	1.33
5	1r	306	CLA	O2D-CGD	5.19	1.45	1.33
5	05	301	CLA	O2D-CGD	5.19	1.45	1.33
5	1r	311	CLA	O2D-CGD	5.18	1.45	1.33
5	1r	309	CLA	O2D-CGD	5.18	1.45	1.33
6	05	307	CHL	O2D-CGD	5.18	1.45	1.33
6	06	606	CHL	O2D-CGD	5.17	1.45	1.33
5	1r	307	CLA	O2D-CGD	5.17	1.45	1.33
5	06	602	CLA	O2D-CGD	5.15	1.45	1.33
6	1r	302	CHL	O2D-CGD	5.15	1.45	1.33
6	05	305	CHL	O2D-CGD	5.14	1.45	1.33
5	1r	308	CLA	O2D-CGD	5.13	1.45	1.33
5	07	309	CLA	O2D-CGD	5.13	1.45	1.33
6	1r	312	CHL	O2D-CGD	5.11	1.45	1.33
5	07	302	CLA	CHB-C1B	5.11	1.50	1.39
5	08	311	CLA	C3A-C2A	-5.11	1.49	1.54
6	1r	304	CHL	O2D-CGD	5.11	1.45	1.33
5	1r	313	CLA	O2D-CGD	5.11	1.45	1.33
5	08	309	CLA	C3C-C2C	5.11	1.47	1.36
5	1r	310	CLA	O2D-CGD	5.09	1.45	1.33
5	1r	305	CLA	O2D-CGD	5.07	1.45	1.33
5	1r	301	CLA	O2D-CGD	5.04	1.45	1.33
5	05	312	CLA	C3A-C2A	-5.03	1.49	1.54
5	05	312	CLA	C3C-C2C	4.95	1.47	1.36
6	08	304	CHL	C3A-C2A	-4.92	1.49	1.54
5	06	602	CLA	CHC-C1C	4.87	1.48	1.38
6	08	301	CHL	C2C-C3C	4.78	1.47	1.36
5	05	312	CLA	C3D-C4D	-4.77	1.33	1.44
5	1r	301	CLA	C3A-C2A	-4.76	1.50	1.54
5	08	308	CLA	CHC-C1C	4.75	1.48	1.38
5	1r	309	CLA	C3C-C2C	4.73	1.46	1.36
6	08	302	CHL	C3A-C2A	-4.73	1.50	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	1r	306	CLA	CHC-C1C	4.73	1.48	1.38
5	07	302	CLA	MG-NA	-4.72	1.95	2.06
6	05	315	CHL	C3A-C2A	-4.71	1.50	1.54
5	05	311	CLA	O2D-CGD	4.70	1.46	1.30
6	07	303	CHL	O2D-CGD	4.70	1.46	1.30
5	07	310	CLA	O2D-CGD	4.70	1.46	1.30
6	1r	303	CHL	C3D-C4D	-4.70	1.33	1.44
6	06	603	CHL	O2D-CGD	4.69	1.45	1.30
5	07	302	CLA	O2D-CGD	4.69	1.45	1.30
6	08	301	CHL	C3A-C2A	-4.69	1.50	1.54
5	08	308	CLA	O2D-CGD	4.68	1.45	1.30
6	06	605	CHL	O2D-CGD	4.68	1.45	1.30
5	06	609	CLA	O2D-CGD	4.68	1.45	1.30
6	05	313	CHL	O2D-CGD	4.68	1.45	1.30
6	08	304	CHL	C3D-C4D	-4.67	1.33	1.44
5	06	607	CLA	O2D-CGD	4.67	1.45	1.30
5	08	309	CLA	O2D-CGD	4.66	1.45	1.30
6	08	302	CHL	O2D-CGD	4.66	1.45	1.30
6	05	306	CHL	C3A-C2A	-4.66	1.50	1.54
5	05	302	CLA	O2D-CGD	4.66	1.45	1.30
6	08	303	CHL	O2D-CGD	4.66	1.45	1.30
6	07	304	CHL	O2D-CGD	4.66	1.45	1.30
5	06	610	CLA	O2D-CGD	4.65	1.45	1.30
6	1r	302	CHL	C3D-C4D	-4.65	1.33	1.44
5	08	306	CLA	O2D-CGD	4.65	1.45	1.30
6	1r	312	CHL	C2C-C3C	4.65	1.46	1.36
5	05	310	CLA	O2D-CGD	4.65	1.45	1.30
5	06	611	CLA	O2D-CGD	4.65	1.45	1.30
6	06	604	CHL	O2D-CGD	4.64	1.45	1.30
6	08	304	CHL	O2D-CGD	4.64	1.45	1.30
6	08	301	CHL	O2D-CGD	4.64	1.45	1.30
5	1r	301	CLA	CHC-C1C	4.63	1.47	1.38
5	05	302	CLA	CHC-C1C	4.63	1.47	1.38
6	07	306	CHL	O2D-CGD	4.63	1.45	1.30
6	05	304	CHL	C3D-C4D	-4.62	1.33	1.44
6	05	306	CHL	O2D-CGD	4.62	1.45	1.30
5	06	608	CLA	O2D-CGD	4.62	1.45	1.30
5	07	301	CLA	C3A-C2A	-4.62	1.50	1.54
5	08	311	CLA	C3D-C4D	-4.62	1.33	1.44
5	05	312	CLA	O2D-CGD	4.62	1.45	1.30
5	1r	306	CLA	C3D-C4D	-4.62	1.33	1.44
6	07	305	CHL	C3D-C4D	-4.62	1.33	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	08	307	CLA	O2D-CGD	4.62	1.45	1.30
5	08	310	CLA	C3C-C2C	4.62	1.46	1.36
6	07	311	CHL	C3D-C4D	-4.62	1.33	1.44
6	08	305	CHL	C2C-C3C	4.61	1.46	1.36
6	06	605	CHL	C2C-C3C	4.61	1.46	1.36
5	07	307	CLA	O2D-CGD	4.61	1.45	1.30
6	05	307	CHL	C2C-C3C	4.60	1.46	1.36
6	06	606	CHL	C3D-C4D	-4.60	1.33	1.44
6	05	306	CHL	C3D-C4D	-4.60	1.33	1.44
5	05	303	CLA	O2D-CGD	4.60	1.45	1.30
6	05	307	CHL	C3A-C2A	-4.59	1.50	1.54
5	07	312	CLA	O2D-CGD	4.59	1.45	1.30
5	08	311	CLA	O2D-CGD	4.59	1.45	1.30
6	07	311	CHL	O2D-CGD	4.58	1.45	1.30
5	06	607	CLA	C3C-C2C	4.58	1.46	1.36
5	07	301	CLA	O2D-CGD	4.58	1.45	1.30
6	06	601	CHL	C3D-C4D	-4.58	1.33	1.44
6	07	306	CHL	C3A-C2A	-4.57	1.50	1.54
5	08	312	CLA	C3C-C2C	4.57	1.46	1.36
5	1r	301	CLA	C3D-C4D	-4.57	1.33	1.44
5	06	607	CLA	C3A-C2A	-4.57	1.50	1.54
6	08	301	CHL	C3D-C4D	-4.57	1.33	1.44
6	07	304	CHL	C3D-C4D	-4.57	1.33	1.44
6	07	311	CHL	C2C-C3C	4.56	1.46	1.36
6	06	603	CHL	C3D-C4D	-4.56	1.33	1.44
5	05	309	CLA	O2D-CGD	4.56	1.45	1.30
6	05	304	CHL	CHD-C1D	4.56	1.47	1.38
6	06	605	CHL	C3D-C4D	-4.56	1.33	1.44
6	06	604	CHL	C3D-C4D	-4.56	1.33	1.44
7	05	314	LUT	C34-C33	4.55	1.41	1.35
6	06	601	CHL	C2C-C3C	4.55	1.46	1.36
5	08	311	CLA	C3C-C2C	4.55	1.46	1.36
5	05	301	CLA	CHC-C1C	4.55	1.47	1.38
6	05	315	CHL	C2C-C3C	4.54	1.46	1.36
6	08	304	CHL	C2C-C3C	4.54	1.46	1.36
6	07	306	CHL	C3D-C4D	-4.54	1.33	1.44
6	08	305	CHL	C3D-C4D	-4.54	1.33	1.44
5	1r	308	CLA	C3C-C2C	4.54	1.46	1.36
6	08	303	CHL	C3D-C4D	-4.53	1.33	1.44
5	05	303	CLA	C3D-C4D	-4.53	1.33	1.44
6	08	302	CHL	C2C-C3C	4.53	1.46	1.36
6	05	307	CHL	C3D-C4D	-4.52	1.34	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	07	304	CHL	C3A-C2A	-4.52	1.50	1.54
6	1r	312	CHL	C3D-C4D	-4.52	1.34	1.44
6	05	313	CHL	C3D-C4D	-4.52	1.34	1.44
5	1r	313	CLA	C3C-C2C	4.51	1.46	1.36
6	06	605	CHL	O2A-CGA	4.51	1.45	1.30
5	07	301	CLA	C3D-C4D	-4.51	1.34	1.44
5	05	303	CLA	C3C-C2C	4.51	1.46	1.36
5	08	312	CLA	C3D-C4D	-4.51	1.34	1.44
6	05	304	CHL	O2A-CGA	4.51	1.45	1.30
5	06	608	CLA	C3C-C2C	4.51	1.46	1.36
6	07	304	CHL	C2C-C3C	4.51	1.46	1.36
6	06	603	CHL	C2C-C3C	4.50	1.46	1.36
6	1r	304	CHL	C2C-C3C	4.50	1.46	1.36
6	1r	304	CHL	O2A-CGA	4.50	1.45	1.30
6	07	305	CHL	C3A-C2A	-4.50	1.50	1.54
5	05	308	CLA	CHC-C1C	4.50	1.47	1.38
6	06	601	CHL	O2A-CGA	4.50	1.45	1.30
6	07	303	CHL	C3D-C4D	-4.50	1.34	1.44
5	05	301	CLA	C3C-C2C	4.50	1.46	1.36
6	05	304	CHL	O2D-CGD	4.50	1.45	1.30
5	05	302	CLA	O2A-CGA	4.50	1.45	1.30
5	1r	311	CLA	CHC-C1C	4.49	1.47	1.38
6	06	604	CHL	C3A-C2A	-4.49	1.50	1.54
6	06	604	CHL	C2C-C3C	4.49	1.46	1.36
6	1r	302	CHL	O2A-CGA	4.49	1.45	1.30
6	08	302	CHL	C3D-C4D	-4.49	1.34	1.44
5	1r	307	CLA	C3C-C2C	4.49	1.46	1.36
5	05	311	CLA	C3D-C4D	-4.49	1.34	1.44
5	05	301	CLA	C3D-C4D	-4.49	1.34	1.44
5	1r	310	CLA	C3C-C2C	4.48	1.46	1.36
5	06	611	CLA	C3C-C2C	4.48	1.46	1.36
6	05	315	CHL	C3D-C4D	-4.48	1.34	1.44
6	06	606	CHL	O2A-CGA	4.48	1.45	1.30
5	06	610	CLA	C3C-C2C	4.48	1.46	1.36
5	1r	308	CLA	O2A-CGA	4.48	1.45	1.30
5	05	303	CLA	O2A-CGA	4.47	1.45	1.30
6	06	606	CHL	C2C-C3C	4.47	1.46	1.36
5	05	303	CLA	CHC-C1C	4.47	1.47	1.38
6	05	305	CHL	C3D-C4D	-4.47	1.34	1.44
5	07	310	CLA	C3C-C2C	4.47	1.46	1.36
6	1r	304	CHL	C3D-C4D	-4.47	1.34	1.44
5	05	308	CLA	C3D-C4D	-4.46	1.34	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	1r	310	CLA	O2A-CGA	4.46	1.45	1.30
6	1r	312	CHL	CHC-C1C	4.46	1.47	1.38
5	06	602	CLA	C3C-C2C	4.46	1.46	1.36
5	08	307	CLA	C3C-C2C	4.46	1.46	1.36
6	07	306	CHL	C2C-C3C	4.45	1.46	1.36
6	07	303	CHL	C2C-C3C	4.45	1.46	1.36
5	08	311	CLA	CHC-C1C	4.45	1.47	1.38
5	07	312	CLA	O2A-CGA	4.45	1.45	1.30
5	08	308	CLA	C3D-C4D	-4.44	1.34	1.44
5	05	301	CLA	C3A-C2A	-4.44	1.50	1.54
5	07	309	CLA	C3D-C4D	-4.44	1.34	1.44
6	1r	303	CHL	O2A-CGA	4.43	1.45	1.30
5	08	309	CLA	C3D-C4D	-4.43	1.34	1.44
5	05	309	CLA	C3C-C2C	4.43	1.46	1.36
6	08	303	CHL	O2A-CGA	4.43	1.45	1.30
6	08	302	CHL	CHC-C1C	4.43	1.47	1.38
5	1r	311	CLA	C3C-C2C	4.43	1.46	1.36
5	07	309	CLA	C3C-C2C	4.42	1.46	1.36
6	05	306	CHL	C2C-C3C	4.42	1.46	1.36
6	05	306	CHL	CHC-C1C	4.42	1.47	1.38
5	05	309	CLA	CHC-C1C	4.41	1.47	1.38
5	06	607	CLA	CHC-C1C	4.41	1.47	1.38
5	05	310	CLA	C3C-C2C	4.41	1.46	1.36
5	1r	311	CLA	C3D-C4D	-4.41	1.34	1.44
5	1r	313	CLA	C3D-C4D	-4.41	1.34	1.44
6	05	307	CHL	CHC-C1C	4.41	1.47	1.38
6	1r	303	CHL	CHC-C1C	4.41	1.47	1.38
6	05	305	CHL	CHC-C1C	4.41	1.47	1.38
5	06	607	CLA	C3D-C4D	-4.40	1.34	1.44
5	08	306	CLA	C3D-C4D	-4.40	1.34	1.44
5	06	608	CLA	C3D-C4D	-4.40	1.34	1.44
5	06	608	CLA	CHC-C1C	4.40	1.47	1.38
6	06	606	CHL	CHC-C1C	4.40	1.47	1.38
6	06	601	CHL	CHD-C1D	4.40	1.46	1.38
5	07	307	CLA	C3C-C2C	4.40	1.46	1.36
6	05	313	CHL	C3A-C2A	-4.40	1.50	1.54
6	08	303	CHL	C2C-C3C	4.40	1.46	1.36
5	06	610	CLA	CHC-C1C	4.39	1.47	1.38
5	08	307	CLA	C3D-C4D	-4.39	1.34	1.44
6	06	605	CHL	CHC-C1C	4.39	1.47	1.38
5	1r	305	CLA	C3D-C4D	-4.39	1.34	1.44
6	07	305	CHL	C2C-C3C	4.39	1.46	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	05	308	CLA	C3C-C2C	4.39	1.46	1.36
6	07	311	CHL	C3A-C2A	-4.39	1.50	1.54
6	08	301	CHL	CHD-C1D	4.39	1.46	1.38
6	1r	303	CHL	C2C-C3C	4.39	1.46	1.36
5	1r	305	CLA	C3C-C2C	4.38	1.46	1.36
5	06	611	CLA	C3D-C4D	-4.38	1.34	1.44
5	07	312	CLA	C3C-C2C	4.38	1.46	1.36
5	07	301	CLA	C3C-C2C	4.38	1.46	1.36
5	08	308	CLA	C3C-C2C	4.38	1.46	1.36
5	1r	306	CLA	O2A-CGA	4.38	1.46	1.33
5	07	310	CLA	C3D-C4D	-4.38	1.34	1.44
5	1r	310	CLA	C3D-C4D	-4.37	1.34	1.44
6	07	304	CHL	CHC-C1C	4.37	1.47	1.38
5	07	312	CLA	CHC-C1C	4.36	1.47	1.38
5	08	310	CLA	C3D-C4D	-4.36	1.34	1.44
5	05	312	CLA	CHC-C1C	4.36	1.47	1.38
6	06	603	CHL	CHC-C1C	4.36	1.47	1.38
5	1r	306	CLA	C3C-C2C	4.36	1.46	1.36
5	1r	307	CLA	C3D-C4D	-4.36	1.34	1.44
5	05	311	CLA	CHC-C1C	4.36	1.47	1.38
5	07	307	CLA	C3D-C4D	-4.36	1.34	1.44
5	1r	308	CLA	C3D-C4D	-4.36	1.34	1.44
6	07	303	CHL	CHC-C1C	4.35	1.47	1.38
5	08	312	CLA	CHC-C1C	4.35	1.47	1.38
6	05	313	CHL	C2C-C3C	4.35	1.46	1.36
5	1r	309	CLA	O2A-CGA	4.35	1.46	1.33
6	07	305	CHL	CHC-C1C	4.35	1.47	1.38
5	1r	309	CLA	C3D-C4D	-4.35	1.34	1.44
6	05	305	CHL	C2C-C3C	4.35	1.46	1.36
5	06	610	CLA	C3D-C4D	-4.35	1.34	1.44
5	1r	310	CLA	CHC-C1C	4.34	1.47	1.38
6	06	604	CHL	CHC-C1C	4.34	1.47	1.38
5	06	609	CLA	C3C-C2C	4.34	1.45	1.36
5	08	307	CLA	CHC-C1C	4.34	1.47	1.38
5	07	312	CLA	C3D-C4D	-4.33	1.34	1.44
6	06	605	CHL	CHD-C1D	4.33	1.46	1.38
5	07	308	CLA	C3D-C4D	-4.32	1.34	1.44
6	07	304	CHL	CHD-C1D	4.32	1.46	1.38
6	06	603	CHL	CHD-C1D	4.31	1.46	1.38
6	06	601	CHL	CHC-C1C	4.31	1.47	1.38
6	08	305	CHL	CHD-C1D	4.31	1.46	1.38
5	07	302	CLA	OBD-CAD	4.31	1.29	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	05	315	CHL	CHC-C1C	4.31	1.47	1.38
5	08	310	CLA	CHC-C1C	4.31	1.47	1.38
6	08	304	CHL	CHC-C1C	4.30	1.47	1.38
5	07	309	CLA	CHC-C1C	4.30	1.47	1.38
5	1r	313	CLA	CHC-C1C	4.30	1.47	1.38
6	1r	304	CHL	CHC-C1C	4.30	1.47	1.38
5	05	302	CLA	C3D-C4D	-4.30	1.34	1.44
5	07	309	CLA	O2A-CGA	4.30	1.45	1.33
5	05	310	CLA	C3D-C4D	-4.30	1.34	1.44
5	05	311	CLA	C3C-C2C	4.29	1.45	1.36
5	1r	307	CLA	CHC-C1C	4.29	1.47	1.38
5	05	309	CLA	C3D-C4D	-4.29	1.34	1.44
5	08	309	CLA	CHC-C1C	4.29	1.47	1.38
6	05	313	CHL	CHD-C1D	4.29	1.46	1.38
6	07	306	CHL	CHD-C1D	4.29	1.46	1.38
5	07	308	CLA	CHC-C1C	4.29	1.47	1.38
5	08	306	CLA	C3C-C2C	4.29	1.45	1.36
6	1r	302	CHL	C2C-C3C	4.29	1.45	1.36
6	08	303	CHL	CHC-C1C	4.28	1.47	1.38
6	07	305	CHL	CHD-C1D	4.28	1.46	1.38
5	06	609	CLA	C3D-C4D	-4.28	1.34	1.44
6	06	606	CHL	CHD-C1D	4.28	1.46	1.38
5	06	611	CLA	CHC-C1C	4.28	1.47	1.38
6	08	305	CHL	CHC-C1C	4.28	1.47	1.38
6	07	306	CHL	CHC-C1C	4.28	1.47	1.38
5	1r	305	CLA	O2A-CGA	4.27	1.45	1.33
5	05	302	CLA	C3C-C2C	4.27	1.45	1.36
6	1r	304	CHL	CHD-C1D	4.27	1.46	1.38
5	06	609	CLA	CHC-C1C	4.27	1.47	1.38
5	07	302	CLA	CHC-C1C	4.27	1.47	1.38
6	05	315	CHL	CHD-C1D	4.27	1.46	1.38
5	1r	301	CLA	C3C-C2C	4.27	1.45	1.36
5	07	301	CLA	CHC-C1C	4.27	1.47	1.38
6	07	311	CHL	CHD-C1D	4.26	1.46	1.38
6	05	313	CHL	CHC-C1C	4.26	1.47	1.38
7	1r	314	LUT	C34-C33	4.26	1.41	1.35
5	1r	308	CLA	CHC-C1C	4.24	1.47	1.38
6	05	305	CHL	O2A-CGA	4.23	1.45	1.33
6	1r	312	CHL	CHD-C1D	4.23	1.46	1.38
6	06	604	CHL	CHD-C1D	4.23	1.46	1.38
5	05	310	CLA	CHC-C1C	4.23	1.47	1.38
6	05	306	CHL	CHD-C1D	4.23	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	1r	302	CHL	CHD-C1D	4.23	1.46	1.38
5	06	602	CLA	O2A-CGA	4.23	1.45	1.33
5	06	602	CLA	C3D-C4D	-4.23	1.34	1.44
6	07	303	CHL	CHD-C1D	4.22	1.46	1.38
7	1r	314	LUT	C10-C9	4.22	1.41	1.35
6	08	301	CHL	CHC-C1C	4.20	1.47	1.38
5	07	308	CLA	C3C-C2C	4.20	1.45	1.36
5	07	310	CLA	CHC-C1C	4.20	1.47	1.38
5	08	310	CLA	C3A-C2A	-4.19	1.50	1.54
5	07	307	CLA	CHC-C1C	4.19	1.47	1.38
5	08	306	CLA	CHC-C1C	4.18	1.47	1.38
5	1r	309	CLA	CHC-C1C	4.18	1.47	1.38
5	08	307	CLA	C3A-C2A	-4.18	1.50	1.54
6	08	303	CHL	CHD-C1D	4.16	1.46	1.38
6	08	304	CHL	CHD-C1D	4.16	1.46	1.38
5	06	611	CLA	C3A-C2A	-4.15	1.50	1.54
6	08	302	CHL	CHD-C1D	4.14	1.46	1.38
5	1r	305	CLA	CHC-C1C	4.14	1.46	1.38
6	07	303	CHL	C3A-C2A	-4.14	1.50	1.54
5	08	309	CLA	C3A-C2A	-4.13	1.50	1.54
5	07	302	CLA	C4B-NB	-4.12	1.32	1.37
5	07	308	CLA	C3A-C2A	-4.12	1.50	1.54
5	06	602	CLA	CHB-C1B	4.12	1.48	1.39
7	05	314	LUT	C14-C13	4.11	1.41	1.35
6	1r	302	CHL	CHC-C1C	4.11	1.46	1.38
5	06	608	CLA	C3A-C2A	-4.10	1.50	1.54
6	05	307	CHL	CHD-C1D	4.09	1.46	1.38
7	05	314	LUT	C30-C29	4.09	1.41	1.35
5	1r	313	CLA	O2A-CGA	4.05	1.45	1.33
6	05	305	CHL	CHD-C1D	4.05	1.46	1.38
7	1r	314	LUT	C14-C13	4.05	1.41	1.35
6	05	304	CHL	C2C-C3C	4.01	1.45	1.36
6	1r	312	CHL	O2A-CGA	4.00	1.45	1.33
5	05	302	CLA	CHB-C1B	4.00	1.48	1.39
6	05	304	CHL	CHD-C4C	4.00	1.48	1.39
5	1r	311	CLA	O2A-CGA	4.00	1.45	1.33
6	06	603	CHL	CHD-C4C	3.98	1.48	1.39
5	05	311	CLA	CHB-C1B	3.96	1.48	1.39
6	06	601	CHL	CHD-C4C	3.96	1.48	1.39
6	08	301	CHL	CHD-C4C	3.96	1.48	1.39
6	06	605	CHL	CHD-C4C	3.93	1.48	1.39
6	07	311	CHL	CHC-C1C	3.93	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	05	313	CHL	CHD-C4C	3.92	1.48	1.39
6	1r	302	CHL	CHD-C4C	3.92	1.48	1.39
6	05	315	CHL	CHD-C4C	3.92	1.48	1.39
6	08	302	CHL	CHD-C4C	3.92	1.48	1.39
6	05	306	CHL	CHD-C4C	3.91	1.48	1.39
6	08	305	CHL	CHD-C4C	3.91	1.48	1.39
6	07	306	CHL	CHD-C4C	3.91	1.48	1.39
6	1r	303	CHL	CHD-C1D	3.91	1.46	1.38
6	06	604	CHL	CHD-C4C	3.91	1.48	1.39
5	05	311	CLA	OBD-CAD	3.91	1.29	1.22
6	07	305	CHL	CHD-C4C	3.90	1.48	1.39
6	07	304	CHL	CHD-C4C	3.90	1.48	1.39
6	07	303	CHL	CHD-C4C	3.88	1.48	1.39
6	1r	312	CHL	CHD-C4C	3.88	1.48	1.39
5	07	302	CLA	C3D-C4D	-3.87	1.35	1.44
6	06	606	CHL	CHD-C4C	3.87	1.48	1.39
5	07	302	CLA	C3C-C2C	3.86	1.44	1.36
5	05	312	CLA	CHD-C1D	3.85	1.45	1.38
5	08	306	CLA	CHB-C1B	3.85	1.48	1.39
6	1r	304	CHL	CHD-C4C	3.84	1.48	1.39
7	1r	314	LUT	C30-C29	3.84	1.40	1.35
7	07	313	LUT	C14-C13	3.82	1.40	1.35
5	07	307	CLA	C3A-C2A	-3.82	1.51	1.54
6	05	306	CHL	OBD-CAD	3.81	1.29	1.22
5	07	309	CLA	OBD-CAD	3.80	1.29	1.22
6	05	313	CHL	OBD-CAD	3.80	1.29	1.22
5	05	309	CLA	C3A-C2A	-3.80	1.51	1.54
6	05	307	CHL	CHD-C4C	3.80	1.47	1.39
6	07	311	CHL	CHD-C4C	3.79	1.47	1.39
5	05	311	CLA	C3A-C2A	-3.79	1.51	1.54
5	07	312	CLA	CHB-C1B	3.78	1.47	1.39
6	05	307	CHL	CHC-C4B	3.78	1.47	1.39
5	06	608	CLA	OBD-CAD	3.77	1.29	1.22
6	08	304	CHL	CHD-C4C	3.77	1.47	1.39
6	07	304	CHL	OBD-CAD	3.77	1.29	1.22
5	07	308	CLA	OBD-CAD	3.76	1.29	1.22
5	06	610	CLA	OBD-CAD	3.76	1.29	1.22
5	08	312	CLA	OBD-CAD	3.76	1.29	1.22
6	06	604	CHL	OBD-CAD	3.75	1.28	1.22
6	08	303	CHL	CHD-C4C	3.75	1.47	1.39
6	07	303	CHL	OBD-CAD	3.75	1.28	1.22
5	05	310	CLA	CHB-C1B	3.74	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	05	310	CLA	OBD-CAD	3.74	1.28	1.22
5	07	308	CLA	CHB-C1B	3.74	1.47	1.39
5	1r	308	CLA	OBD-CAD	3.74	1.28	1.22
5	06	610	CLA	CHB-C1B	3.74	1.47	1.39
7	07	313	LUT	C34-C33	3.73	1.40	1.35
6	06	605	CHL	OBD-CAD	3.73	1.28	1.22
5	08	311	CLA	CHB-C1B	3.73	1.47	1.39
5	08	309	CLA	OBD-CAD	3.73	1.28	1.22
5	1r	313	CLA	OBD-CAD	3.73	1.28	1.22
6	06	603	CHL	OBD-CAD	3.73	1.28	1.22
5	06	611	CLA	OBD-CAD	3.72	1.28	1.22
6	05	315	CHL	OBD-CAD	3.72	1.28	1.22
6	07	305	CHL	OBD-CAD	3.71	1.28	1.22
6	05	304	CHL	OBD-CAD	3.71	1.28	1.22
6	1r	302	CHL	OBD-CAD	3.71	1.28	1.22
6	06	601	CHL	OBD-CAD	3.71	1.28	1.22
5	08	306	CLA	OBD-CAD	3.71	1.28	1.22
5	06	608	CLA	CHB-C1B	3.71	1.47	1.39
5	06	609	CLA	OBD-CAD	3.71	1.28	1.22
6	08	301	CHL	OBD-CAD	3.71	1.28	1.22
5	1r	307	CLA	OBD-CAD	3.71	1.28	1.22
5	08	310	CLA	OBD-CAD	3.71	1.28	1.22
5	08	307	CLA	OBD-CAD	3.70	1.28	1.22
5	07	312	CLA	OBD-CAD	3.70	1.28	1.22
5	1r	310	CLA	CHB-C1B	3.70	1.47	1.39
6	05	305	CHL	CHD-C4C	3.69	1.47	1.39
5	1r	309	CLA	CHB-C1B	3.69	1.47	1.39
5	05	301	CLA	OBD-CAD	3.69	1.28	1.22
5	1r	309	CLA	OBD-CAD	3.69	1.28	1.22
5	06	602	CLA	OBD-CAD	3.69	1.28	1.22
6	05	307	CHL	OBD-CAD	3.69	1.28	1.22
5	06	611	CLA	CHB-C1B	3.69	1.47	1.39
5	07	310	CLA	CHB-C1B	3.69	1.47	1.39
5	1r	305	CLA	OBD-CAD	3.68	1.28	1.22
5	07	307	CLA	OBD-CAD	3.68	1.28	1.22
6	06	606	CHL	OBD-CAD	3.68	1.28	1.22
5	08	308	CLA	OBD-CAD	3.68	1.28	1.22
5	07	307	CLA	CHB-C1B	3.68	1.47	1.39
5	06	607	CLA	OBD-CAD	3.68	1.28	1.22
5	06	607	CLA	CHB-C1B	3.67	1.47	1.39
5	05	308	CLA	OBD-CAD	3.67	1.28	1.22
5	06	609	CLA	CHB-C1B	3.67	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	08	308	CLA	CHB-C1B	3.67	1.47	1.39
5	05	309	CLA	CHB-C1B	3.67	1.47	1.39
5	1r	308	CLA	CHB-C1B	3.67	1.47	1.39
7	07	313	LUT	C10-C9	3.66	1.40	1.35
6	05	305	CHL	OBD-CAD	3.66	1.28	1.22
5	1r	310	CLA	OBD-CAD	3.66	1.28	1.22
5	05	302	CLA	OBD-CAD	3.65	1.28	1.22
6	08	303	CHL	OBD-CAD	3.65	1.28	1.22
6	07	311	CHL	OBD-CAD	3.64	1.28	1.22
6	08	302	CHL	OBD-CAD	3.64	1.28	1.22
6	1r	304	CHL	OBD-CAD	3.63	1.28	1.22
6	08	304	CHL	OBD-CAD	3.62	1.28	1.22
5	05	312	CLA	OBD-CAD	3.62	1.28	1.22
6	1r	312	CHL	OBD-CAD	3.62	1.28	1.22
5	07	310	CLA	OBD-CAD	3.61	1.28	1.22
6	07	306	CHL	OBD-CAD	3.61	1.28	1.22
6	1r	303	CHL	CHD-C4C	3.60	1.47	1.39
5	07	309	CLA	CHB-C1B	3.59	1.47	1.39
7	07	313	LUT	C30-C29	3.59	1.40	1.35
5	1r	301	CLA	CHB-C1B	3.59	1.47	1.39
5	08	310	CLA	CHB-C1B	3.59	1.47	1.39
6	05	305	CHL	CHC-C4B	3.59	1.47	1.39
6	1r	312	CHL	CHC-C4B	3.59	1.47	1.39
6	1r	303	CHL	CHC-C4B	3.59	1.47	1.39
6	06	604	CHL	CHC-C4B	3.57	1.47	1.39
5	08	307	CLA	CHB-C1B	3.57	1.47	1.39
5	05	312	CLA	CHD-C4C	3.57	1.47	1.39
5	1r	305	CLA	CHB-C1B	3.56	1.47	1.39
5	08	309	CLA	CHD-C1D	3.56	1.45	1.38
5	1r	311	CLA	OBD-CAD	3.55	1.28	1.22
5	1r	307	CLA	CHB-C1B	3.53	1.47	1.39
5	05	308	CLA	CHB-C1B	3.53	1.47	1.39
5	08	309	CLA	CHB-C1B	3.52	1.47	1.39
6	06	606	CHL	CHC-C4B	3.52	1.47	1.39
6	08	303	CHL	CHC-C4B	3.52	1.47	1.39
6	05	306	CHL	CHC-C4B	3.51	1.47	1.39
5	05	302	CLA	CHC-C4B	3.51	1.47	1.39
5	05	303	CLA	OBD-CAD	3.51	1.28	1.22
5	1r	311	CLA	CHB-C1B	3.51	1.47	1.39
6	08	305	CHL	CHC-C4B	3.50	1.47	1.39
5	06	602	CLA	CHC-C4B	3.49	1.47	1.39
6	06	605	CHL	CHC-C4B	3.49	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	1r	303	CHL	OBD-CAD	3.48	1.28	1.22
5	07	301	CLA	CHB-C1B	3.48	1.47	1.39
6	07	304	CHL	CHC-C4B	3.48	1.47	1.39
6	07	306	CHL	CHC-C4B	3.47	1.47	1.39
6	06	603	CHL	CHC-C4B	3.47	1.47	1.39
5	08	311	CLA	OBD-CAD	3.46	1.28	1.22
5	1r	306	CLA	OBD-CAD	3.46	1.28	1.22
6	08	302	CHL	CHC-C4B	3.46	1.47	1.39
5	08	312	CLA	CHD-C1D	3.45	1.45	1.38
6	06	601	CHL	CHC-C4B	3.45	1.47	1.39
6	05	315	CHL	CHC-C4B	3.45	1.47	1.39
5	1r	306	CLA	CHC-C4B	3.45	1.47	1.39
5	05	311	CLA	CHC-C4B	3.44	1.47	1.39
6	05	307	CHL	CHB-C1B	3.44	1.47	1.39
6	07	303	CHL	CHC-C4B	3.44	1.47	1.39
5	1r	306	CLA	CHB-C1B	3.43	1.47	1.39
5	08	312	CLA	CHB-C1B	3.43	1.47	1.39
6	1r	304	CHL	CHC-C4B	3.43	1.47	1.39
5	05	301	CLA	CHB-C1B	3.43	1.47	1.39
6	08	304	CHL	CHC-C4B	3.42	1.47	1.39
5	05	312	CLA	CHC-C4B	3.40	1.47	1.39
5	08	309	CLA	CHD-C4C	3.40	1.47	1.39
5	05	309	CLA	OBD-CAD	3.40	1.28	1.22
5	1r	313	CLA	CHB-C1B	3.39	1.47	1.39
5	08	308	CLA	CHC-C4B	3.39	1.47	1.39
5	05	303	CLA	CHB-C1B	3.38	1.47	1.39
5	1r	301	CLA	OBD-CAD	3.36	1.28	1.22
5	08	312	CLA	CHD-C4C	3.36	1.46	1.39
5	05	308	CLA	CHC-C4B	3.36	1.46	1.39
5	05	303	CLA	CHD-C1D	3.35	1.44	1.38
6	07	305	CHL	CHC-C4B	3.35	1.46	1.39
6	05	313	CHL	CHC-C4B	3.34	1.46	1.39
5	07	310	CLA	CHD-C1D	3.33	1.44	1.38
5	07	309	CLA	CHD-C1D	3.33	1.44	1.38
6	08	301	CHL	CHC-C4B	3.33	1.46	1.39
5	08	311	CLA	CHC-C4B	3.33	1.46	1.39
5	05	312	CLA	C1D-C2D	3.32	1.51	1.45
5	08	310	CLA	CHC-C4B	3.32	1.46	1.39
6	1r	302	CHL	CHC-C4B	3.32	1.46	1.39
5	07	301	CLA	C4B-NB	-3.31	1.33	1.37
5	1r	301	CLA	CHC-C4B	3.31	1.46	1.39
5	07	312	CLA	CHC-C4B	3.30	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	05	301	CLA	CHC-C4B	3.30	1.46	1.39
5	05	303	CLA	CHD-C4C	3.29	1.46	1.39
5	06	607	CLA	CHC-C4B	3.29	1.46	1.39
5	08	310	CLA	CHD-C1D	3.28	1.44	1.38
7	05	314	LUT	C10-C9	3.28	1.40	1.35
5	1r	307	CLA	CHC-C4B	3.28	1.46	1.39
6	08	301	CHL	CHB-C1B	3.28	1.46	1.39
5	06	610	CLA	CHD-C1D	3.27	1.44	1.38
5	07	309	CLA	CHD-C4C	3.27	1.46	1.39
5	1r	311	CLA	CHC-C4B	3.27	1.46	1.39
5	06	610	CLA	CHC-C4B	3.27	1.46	1.39
7	05	314	LUT	C8-C9	-3.27	1.38	1.45
5	1r	309	CLA	CHD-C1D	3.27	1.44	1.38
5	06	611	CLA	CHC-C4B	3.26	1.46	1.39
5	06	609	CLA	CHC-C4B	3.26	1.46	1.39
6	07	311	CHL	CHB-C1B	3.25	1.46	1.39
6	05	304	CHL	CHC-C1C	3.25	1.45	1.38
5	1r	305	CLA	CHC-C4B	3.25	1.46	1.39
6	08	304	CHL	CHB-C1B	3.23	1.46	1.39
5	07	308	CLA	CHC-C4B	3.23	1.46	1.39
5	06	608	CLA	CHC-C4B	3.23	1.46	1.39
5	07	301	CLA	OBD-CAD	3.23	1.28	1.22
5	07	309	CLA	CHC-C4B	3.23	1.46	1.39
5	08	312	CLA	CHC-C4B	3.23	1.46	1.39
5	06	608	CLA	CHD-C1D	3.23	1.44	1.38
5	1r	310	CLA	CHC-C4B	3.22	1.46	1.39
5	08	307	CLA	CHD-C1D	3.22	1.44	1.38
5	07	307	CLA	CHD-C1D	3.22	1.44	1.38
5	05	308	CLA	CHD-C4C	3.22	1.46	1.39
5	06	609	CLA	CHD-C1D	3.21	1.44	1.38
5	07	301	CLA	CHC-C4B	3.21	1.46	1.39
5	05	303	CLA	CHC-C4B	3.21	1.46	1.39
5	05	308	CLA	CHD-C1D	3.21	1.44	1.38
6	1r	302	CHL	CHB-C1B	3.20	1.46	1.39
5	08	307	CLA	CHC-C4B	3.20	1.46	1.39
5	1r	309	CLA	CHC-C4B	3.20	1.46	1.39
6	06	601	CHL	CHB-C1B	3.20	1.46	1.39
6	05	304	CHL	CHB-C1B	3.19	1.46	1.39
5	1r	309	CLA	CHD-C4C	3.19	1.46	1.39
5	06	608	CLA	CHD-C4C	3.19	1.46	1.39
5	06	609	CLA	CHD-C4C	3.19	1.46	1.39
6	07	306	CHL	CHB-C1B	3.19	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	1r	308	CLA	CHD-C1D	3.18	1.44	1.38
5	06	607	CLA	CHD-C1D	3.18	1.44	1.38
6	06	606	CHL	CHB-C1B	3.18	1.46	1.39
5	1r	306	CLA	CHD-C4C	3.18	1.46	1.39
5	1r	306	CLA	CHD-C1D	3.17	1.44	1.38
5	07	310	CLA	CHC-C4B	3.17	1.46	1.39
5	06	610	CLA	CHD-C4C	3.17	1.46	1.39
6	05	306	CHL	CHB-C1B	3.17	1.46	1.39
5	1r	307	CLA	CHD-C1D	3.16	1.44	1.38
6	07	311	CHL	CHC-C4B	3.16	1.46	1.39
5	1r	313	CLA	CHD-C1D	3.16	1.44	1.38
5	05	309	CLA	CHC-C4B	3.16	1.46	1.39
5	1r	310	CLA	CHD-C4C	3.16	1.46	1.39
6	07	303	CHL	CHB-C1B	3.15	1.46	1.39
6	07	304	CHL	CHB-C1B	3.15	1.46	1.39
5	05	301	CLA	CHD-C1D	3.15	1.44	1.38
6	08	305	CHL	CHB-C1B	3.15	1.46	1.39
5	07	310	CLA	CHD-C4C	3.15	1.46	1.39
6	06	604	CHL	CHB-C1B	3.15	1.46	1.39
5	1r	313	CLA	CHC-C4B	3.15	1.46	1.39
6	1r	303	CHL	CHB-C1B	3.15	1.46	1.39
5	08	309	CLA	C4C-C3C	3.14	1.50	1.45
6	05	305	CHL	CHB-C1B	3.14	1.46	1.39
5	08	308	CLA	CHD-C4C	3.14	1.46	1.39
5	05	310	CLA	CHD-C1D	3.14	1.44	1.38
5	06	611	CLA	CHD-C1D	3.14	1.44	1.38
5	06	607	CLA	CHD-C4C	3.13	1.46	1.39
6	05	313	CHL	CHB-C1B	3.13	1.46	1.39
6	06	605	CHL	CHB-C1B	3.13	1.46	1.39
5	05	310	CLA	CHC-C4B	3.13	1.46	1.39
5	05	301	CLA	CHD-C4C	3.13	1.46	1.39
5	08	307	CLA	CHD-C4C	3.13	1.46	1.39
6	06	603	CHL	CHB-C1B	3.12	1.46	1.39
5	08	310	CLA	CHD-C4C	3.12	1.46	1.39
5	07	307	CLA	CHC-C4B	3.12	1.46	1.39
6	1r	312	CHL	CHB-C1B	3.12	1.46	1.39
6	08	303	CHL	CHB-C1B	3.12	1.46	1.39
6	1r	304	CHL	CHB-C1B	3.12	1.46	1.39
5	08	306	CLA	CHC-C4B	3.12	1.46	1.39
5	1r	308	CLA	CHD-C4C	3.12	1.46	1.39
5	07	302	CLA	MG-NC	3.11	2.13	2.06
6	05	315	CHL	CHB-C1B	3.11	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	05	301	CLA	C4B-NB	-3.11	1.34	1.37
6	05	304	CHL	C1B-NB	-3.10	1.34	1.37
5	05	309	CLA	CHD-C1D	3.10	1.44	1.38
5	07	301	CLA	CHD-C4C	3.10	1.46	1.39
5	08	311	CLA	CHD-C4C	3.10	1.46	1.39
5	08	311	CLA	CHD-C1D	3.09	1.44	1.38
5	08	309	CLA	CHC-C4B	3.09	1.46	1.39
5	05	312	CLA	C3D-C2D	3.09	1.47	1.39
5	1r	308	CLA	CHC-C4B	3.09	1.46	1.39
5	07	307	CLA	CHD-C4C	3.08	1.46	1.39
5	05	310	CLA	C4B-NB	-3.08	1.34	1.37
5	1r	310	CLA	CHD-C1D	3.08	1.44	1.38
5	07	308	CLA	CHD-C4C	3.07	1.46	1.39
5	08	308	CLA	CHD-C1D	3.07	1.44	1.38
5	05	309	CLA	CHD-C4C	3.07	1.46	1.39
5	1r	313	CLA	CHD-C4C	3.07	1.46	1.39
6	08	302	CHL	CHB-C1B	3.06	1.46	1.39
5	1r	307	CLA	CHD-C4C	3.05	1.46	1.39
5	05	302	CLA	C4B-NB	-3.05	1.34	1.37
5	06	611	CLA	CHD-C4C	3.05	1.46	1.39
6	07	305	CHL	CHB-C1B	3.05	1.46	1.39
5	05	310	CLA	CHD-C4C	3.05	1.46	1.39
5	08	310	CLA	C3B-C4B	3.04	1.49	1.42
5	07	301	CLA	CHD-C1D	3.04	1.44	1.38
5	08	312	CLA	C3D-C2D	3.03	1.47	1.39
5	1r	311	CLA	CHD-C1D	3.03	1.44	1.38
5	05	303	CLA	C3D-C2D	3.03	1.47	1.39
5	08	309	CLA	C3D-C2D	3.03	1.47	1.39
5	08	306	CLA	CHD-C4C	3.03	1.46	1.39
5	05	310	CLA	C3D-C2D	3.03	1.47	1.39
5	07	312	CLA	CHD-C4C	3.02	1.46	1.39
5	1r	301	CLA	CHD-C4C	3.02	1.46	1.39
5	07	301	CLA	C3D-C2D	3.02	1.47	1.39
5	07	312	CLA	CHD-C1D	3.02	1.44	1.38
5	07	308	CLA	CHD-C1D	3.01	1.44	1.38
5	1r	301	CLA	CHD-C1D	3.01	1.44	1.38
5	07	302	CLA	C1D-C2D	3.00	1.51	1.45
5	1r	308	CLA	C4B-NB	-3.00	1.34	1.37
6	05	304	CHL	C3D-C2D	3.00	1.47	1.39
5	06	602	CLA	CHD-C4C	3.00	1.46	1.39
5	08	306	CLA	CHD-C1D	3.00	1.44	1.38
5	08	308	CLA	C3D-C2D	2.99	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	1r	310	CLA	C3D-C2D	2.99	1.47	1.39
6	05	315	CHL	C1D-C2D	2.99	1.51	1.45
5	1r	311	CLA	CHD-C4C	2.98	1.46	1.39
5	1r	307	CLA	C3D-C2D	2.98	1.47	1.39
6	06	601	CHL	C3D-C2D	2.98	1.47	1.39
6	07	304	CHL	C1D-C2D	2.98	1.51	1.45
5	07	307	CLA	C4B-NB	-2.98	1.34	1.37
6	06	606	CHL	C3D-C2D	2.97	1.47	1.39
5	07	310	CLA	C3D-C2D	2.97	1.47	1.39
5	07	302	CLA	C3A-C2A	-2.97	1.51	1.54
7	07	313	LUT	C8-C9	-2.97	1.39	1.45
5	08	306	CLA	C3D-C2D	2.96	1.47	1.39
5	06	611	CLA	C3B-C4B	2.96	1.49	1.42
5	08	310	CLA	C3D-C2D	2.96	1.47	1.39
5	1r	301	CLA	C4B-NB	-2.96	1.34	1.37
6	08	304	CHL	C3D-C2D	2.95	1.47	1.39
5	07	307	CLA	C3D-C2D	2.95	1.47	1.39
5	08	307	CLA	C3D-C2D	2.95	1.47	1.39
5	05	311	CLA	C3B-C4B	2.95	1.49	1.42
5	05	301	CLA	C3D-C2D	2.95	1.47	1.39
5	1r	309	CLA	C3D-C2D	2.95	1.47	1.39
6	06	605	CHL	C1D-C2D	2.94	1.51	1.45
6	06	603	CHL	C1D-C2D	2.94	1.51	1.45
5	1r	305	CLA	C4B-NB	-2.94	1.34	1.37
6	05	315	CHL	C3D-C2D	2.94	1.47	1.39
5	1r	308	CLA	C3D-C2D	2.94	1.47	1.39
6	05	306	CHL	C1D-C2D	2.94	1.51	1.45
5	06	610	CLA	C3D-C2D	2.94	1.47	1.39
6	08	305	CHL	C1D-C2D	2.93	1.51	1.45
6	08	305	CHL	C3D-C2D	2.93	1.47	1.39
5	07	302	CLA	C3D-C2D	2.93	1.47	1.39
6	06	604	CHL	C1D-C2D	2.93	1.51	1.45
6	08	301	CHL	C3D-C2D	2.93	1.47	1.39
5	05	308	CLA	C3D-C2D	2.93	1.47	1.39
5	05	312	CLA	CHB-C1B	2.93	1.46	1.39
5	06	607	CLA	C3D-C2D	2.93	1.47	1.39
6	08	301	CHL	C1D-C2D	2.93	1.51	1.45
5	06	611	CLA	C3D-C2D	2.93	1.47	1.39
6	06	605	CHL	C3D-C2D	2.93	1.47	1.39
5	1r	313	CLA	C3D-C2D	2.92	1.47	1.39
6	1r	312	CHL	C1D-C2D	2.92	1.51	1.45
5	1r	305	CLA	CHD-C4C	2.92	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	06	609	CLA	C3D-C2D	2.92	1.47	1.39
5	06	608	CLA	C3D-C2D	2.92	1.47	1.39
6	07	311	CHL	C3D-C2D	2.92	1.47	1.39
6	07	305	CHL	C3D-C2D	2.91	1.47	1.39
6	1r	312	CHL	C3D-C2D	2.91	1.47	1.39
5	05	309	CLA	C3D-C2D	2.91	1.47	1.39
6	06	601	CHL	C1D-C2D	2.90	1.51	1.45
5	07	309	CLA	C1D-C2D	2.90	1.51	1.45
6	06	603	CHL	C3D-C2D	2.90	1.47	1.39
5	05	311	CLA	MG-NA	-2.90	1.99	2.06
6	07	305	CHL	C1D-C2D	2.90	1.51	1.45
5	07	309	CLA	C3D-C2D	2.90	1.47	1.39
6	08	302	CHL	C1D-C2D	2.90	1.51	1.45
5	05	311	CLA	CHD-C1D	2.90	1.44	1.38
7	1r	314	LUT	C8-C9	-2.90	1.39	1.45
5	08	306	CLA	C4B-NB	-2.90	1.34	1.37
5	07	312	CLA	C3D-C2D	2.89	1.47	1.39
5	07	312	CLA	C4B-NB	-2.89	1.34	1.37
5	08	311	CLA	C3D-C2D	2.89	1.47	1.39
6	07	304	CHL	C3D-C2D	2.88	1.47	1.39
6	07	306	CHL	C1D-C2D	2.88	1.51	1.45
6	05	313	CHL	C3D-C2D	2.88	1.47	1.39
5	1r	305	CLA	C3B-C4B	2.88	1.49	1.42
6	08	305	CHL	OBD-CAD	2.88	1.28	1.23
6	1r	302	CHL	C1D-C2D	2.88	1.51	1.45
5	08	309	CLA	C1D-C2D	2.88	1.51	1.45
6	05	305	CHL	C3B-C4B	2.87	1.49	1.42
6	05	313	CHL	C1D-C2D	2.87	1.51	1.45
5	08	309	CLA	C4B-NB	-2.87	1.34	1.37
5	07	308	CLA	C3D-C2D	2.87	1.47	1.39
5	1r	307	CLA	C4B-NB	-2.87	1.34	1.37
5	1r	311	CLA	C3D-C2D	2.86	1.46	1.39
5	05	303	CLA	C1D-C2D	2.86	1.51	1.45
5	08	311	CLA	C4B-NB	-2.86	1.34	1.37
6	05	307	CHL	C1D-C2D	2.86	1.51	1.45
6	05	305	CHL	C3D-C2D	2.85	1.46	1.39
5	06	602	CLA	C3B-C4B	2.85	1.49	1.42
6	07	303	CHL	C3D-C2D	2.85	1.46	1.39
5	08	307	CLA	C4B-NB	-2.85	1.34	1.37
6	05	307	CHL	C3D-C2D	2.85	1.46	1.39
5	06	608	CLA	C1D-C2D	2.85	1.50	1.45
5	08	308	CLA	C4B-NB	-2.85	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	1r	306	CLA	C3D-C2D	2.84	1.46	1.39
6	06	606	CHL	C1D-C2D	2.84	1.50	1.45
5	1r	305	CLA	C3D-C2D	2.84	1.46	1.39
5	1r	306	CLA	C4B-NB	-2.83	1.34	1.37
5	1r	305	CLA	CHD-C1D	2.83	1.43	1.38
6	07	306	CHL	C3D-C2D	2.83	1.46	1.39
6	1r	304	CHL	C1D-C2D	2.83	1.50	1.45
5	06	611	CLA	C1D-C2D	2.83	1.50	1.45
5	06	607	CLA	C1D-C2D	2.83	1.50	1.45
5	05	302	CLA	CHD-C4C	2.82	1.45	1.39
6	06	604	CHL	C3D-C2D	2.82	1.46	1.39
6	05	304	CHL	C4C-C3C	2.82	1.49	1.45
5	08	307	CLA	C1D-C2D	2.82	1.50	1.45
6	07	303	CHL	C1D-C2D	2.82	1.50	1.45
5	06	609	CLA	C4B-NB	-2.82	1.34	1.37
5	05	308	CLA	C1D-C2D	2.81	1.50	1.45
5	06	602	CLA	C3D-C2D	2.81	1.46	1.39
5	05	302	CLA	CHD-C1D	2.81	1.43	1.38
5	06	609	CLA	C1D-C2D	2.81	1.50	1.45
6	1r	302	CHL	C3D-C2D	2.81	1.46	1.39
6	08	302	CHL	C3D-C2D	2.81	1.46	1.39
5	1r	306	CLA	C1D-C2D	2.80	1.50	1.45
5	06	610	CLA	C1D-C2D	2.80	1.50	1.45
5	06	602	CLA	CHD-C1D	2.80	1.43	1.38
5	08	312	CLA	C1D-C2D	2.79	1.50	1.45
5	07	308	CLA	C4B-NB	-2.79	1.34	1.37
5	08	311	CLA	C3B-C4B	2.79	1.49	1.42
5	05	302	CLA	C3D-C2D	2.79	1.46	1.39
5	1r	301	CLA	C3D-C2D	2.79	1.46	1.39
6	07	311	CHL	C1D-C2D	2.79	1.50	1.45
5	1r	310	CLA	C4B-NB	-2.78	1.34	1.37
5	1r	306	CLA	C3B-C4B	2.78	1.49	1.42
5	08	311	CLA	MG-NA	-2.78	1.99	2.06
5	08	310	CLA	C1D-C2D	2.77	1.50	1.45
5	07	309	CLA	C4B-NB	-2.77	1.34	1.37
5	07	309	CLA	C3B-C4B	2.77	1.49	1.42
6	05	305	CHL	C1D-C2D	2.77	1.50	1.45
5	07	302	CLA	CHD-C4C	2.77	1.45	1.39
6	06	604	CHL	C3B-C4B	2.77	1.49	1.42
5	07	310	CLA	C1D-C2D	2.77	1.50	1.45
5	1r	309	CLA	C1D-C2D	2.77	1.50	1.45
6	1r	304	CHL	C3D-C2D	2.76	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	08	303	CHL	C3D-C2D	2.76	1.46	1.39
6	08	303	CHL	C3B-C4B	2.76	1.49	1.42
5	07	302	CLA	CHC-C4B	2.76	1.45	1.39
5	06	602	CLA	C4B-NB	-2.76	1.34	1.37
6	05	304	CHL	C1D-C2D	2.75	1.50	1.45
5	06	610	CLA	C3B-C4B	2.75	1.49	1.42
5	06	608	CLA	C4B-NB	-2.75	1.34	1.37
5	06	602	CLA	MG-NA	-2.75	1.99	2.06
5	05	311	CLA	CHD-C4C	2.74	1.45	1.39
5	1r	313	CLA	C1D-C2D	2.74	1.50	1.45
5	05	312	CLA	C3B-C4B	2.74	1.49	1.42
5	07	307	CLA	C3B-C4B	2.74	1.49	1.42
5	05	309	CLA	C4B-NB	-2.74	1.34	1.37
5	06	608	CLA	C3B-C4B	2.74	1.49	1.42
5	1r	307	CLA	C3B-C4B	2.74	1.49	1.42
5	05	303	CLA	C4B-NB	-2.73	1.34	1.37
5	1r	311	CLA	C4B-NB	-2.73	1.34	1.37
5	05	302	CLA	MG-NA	-2.73	1.99	2.06
5	05	302	CLA	C3B-C4B	2.73	1.49	1.42
5	05	309	CLA	C1D-C2D	2.72	1.50	1.45
5	07	312	CLA	C3B-C4B	2.72	1.49	1.42
6	05	306	CHL	C3D-C2D	2.72	1.46	1.39
5	1r	309	CLA	C3B-C4B	2.72	1.49	1.42
5	07	310	CLA	C4B-NB	-2.72	1.34	1.37
5	1r	313	CLA	C3B-C4B	2.71	1.49	1.42
5	08	309	CLA	C3B-C4B	2.71	1.49	1.42
6	1r	303	CHL	C1D-C2D	2.71	1.50	1.45
5	06	607	CLA	C3B-C4B	2.71	1.49	1.42
5	07	307	CLA	C1D-C2D	2.70	1.50	1.45
5	06	610	CLA	C4B-NB	-2.70	1.34	1.37
5	1r	313	CLA	C4B-NB	-2.70	1.34	1.37
6	08	301	CHL	C3B-C4B	2.70	1.49	1.42
5	1r	308	CLA	C1D-C2D	2.70	1.50	1.45
5	05	301	CLA	C3B-C4B	2.69	1.49	1.42
5	05	309	CLA	C3B-C4B	2.69	1.49	1.42
6	06	605	CHL	C3B-C4B	2.69	1.49	1.42
6	08	304	CHL	C1D-C2D	2.69	1.50	1.45
5	05	308	CLA	C3B-C4B	2.69	1.49	1.42
5	05	308	CLA	MG-NA	-2.69	1.99	2.06
5	1r	313	CLA	MG-NA	-2.69	1.99	2.06
6	08	302	CHL	C3B-C4B	2.68	1.49	1.42
6	1r	303	CHL	C3B-C4B	2.68	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	06	602	CLA	C1D-C2D	2.68	1.50	1.45
6	1r	303	CHL	C3D-C2D	2.68	1.46	1.39
6	07	303	CHL	C3B-C4B	2.68	1.49	1.42
6	06	601	CHL	C3B-C4B	2.67	1.49	1.42
5	08	306	CLA	C1D-C2D	2.67	1.50	1.45
6	08	303	CHL	C1D-C2D	2.67	1.50	1.45
5	05	310	CLA	C1D-C2D	2.67	1.50	1.45
5	06	609	CLA	C3B-C4B	2.66	1.49	1.42
5	06	607	CLA	C4B-NB	-2.66	1.34	1.37
5	06	611	CLA	C4B-NB	-2.66	1.34	1.37
5	1r	310	CLA	C3B-C4B	2.66	1.49	1.42
6	1r	304	CHL	C3B-C4B	2.66	1.49	1.42
6	05	307	CHL	C3B-C4B	2.66	1.49	1.42
5	08	308	CLA	C1D-C2D	2.66	1.50	1.45
5	05	308	CLA	C4B-NB	-2.66	1.34	1.37
5	05	311	CLA	C3D-C2D	2.65	1.46	1.39
5	08	311	CLA	C1B-NB	-2.65	1.34	1.37
5	1r	306	CLA	MG-NA	-2.65	2.00	2.06
6	08	301	CHL	C4C-C3C	2.65	1.49	1.45
5	08	310	CLA	C4B-NB	-2.64	1.34	1.37
5	1r	301	CLA	MG-NA	-2.64	2.00	2.06
5	05	310	CLA	MG-NA	-2.64	2.00	2.06
5	1r	305	CLA	MG-NA	-2.64	2.00	2.06
5	07	312	CLA	C1D-C2D	2.63	1.50	1.45
6	05	306	CHL	C3B-C4B	2.63	1.48	1.42
5	1r	310	CLA	C1D-C2D	2.63	1.50	1.45
6	1r	312	CHL	C3B-C4B	2.63	1.48	1.42
5	1r	310	CLA	MG-NA	-2.63	2.00	2.06
6	06	603	CHL	C3B-C4B	2.62	1.48	1.42
5	07	307	CLA	C1B-NB	-2.62	1.34	1.37
5	08	311	CLA	C1D-C2D	2.62	1.50	1.45
5	05	301	CLA	MG-NA	-2.62	2.00	2.06
5	05	311	CLA	C4B-NB	-2.62	1.34	1.37
6	07	306	CHL	C3B-C4B	2.62	1.48	1.42
6	05	313	CHL	C3B-C4B	2.61	1.48	1.42
5	08	312	CLA	C4B-NB	-2.61	1.34	1.37
5	08	306	CLA	MG-NA	-2.61	2.00	2.06
6	06	605	CHL	C1B-C2B	2.60	1.49	1.43
6	07	304	CHL	C3B-C4B	2.60	1.48	1.42
5	07	312	CLA	MG-NA	-2.60	2.00	2.06
5	07	301	CLA	MG-NA	-2.60	2.00	2.06
5	05	303	CLA	MG-NA	-2.60	2.00	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	07	308	CLA	C1D-C2D	2.60	1.50	1.45
6	08	305	CHL	C3B-C4B	2.59	1.48	1.42
5	1r	307	CLA	C1D-C2D	2.59	1.50	1.45
5	08	308	CLA	C3B-C4B	2.59	1.48	1.42
6	07	305	CHL	C3B-C4B	2.59	1.48	1.42
5	1r	305	CLA	C1B-NB	-2.59	1.34	1.37
5	05	301	CLA	C1D-C2D	2.59	1.50	1.45
5	08	306	CLA	C3B-C4B	2.59	1.48	1.42
5	1r	301	CLA	C1D-C2D	2.59	1.50	1.45
5	08	307	CLA	C3B-C4B	2.58	1.48	1.42
5	1r	309	CLA	C1B-C2B	2.58	1.49	1.43
5	1r	301	CLA	C3B-C4B	2.58	1.48	1.42
5	1r	311	CLA	C1D-C2D	2.58	1.50	1.45
5	06	610	CLA	MG-NA	-2.58	2.00	2.06
5	1r	308	CLA	MG-NA	-2.57	2.00	2.06
5	06	610	CLA	C1B-C2B	2.57	1.49	1.43
5	08	307	CLA	MG-NA	-2.57	2.00	2.06
5	08	306	CLA	C1B-C2B	2.57	1.49	1.43
6	07	311	CHL	C1B-C2B	2.56	1.49	1.43
6	08	304	CHL	C3B-C4B	2.56	1.48	1.42
5	08	308	CLA	MG-NA	-2.56	2.00	2.06
6	06	606	CHL	C3B-C4B	2.56	1.48	1.42
5	06	607	CLA	MG-NA	-2.56	2.00	2.06
5	1r	310	CLA	C1B-C2B	2.56	1.49	1.43
6	08	304	CHL	C1B-C2B	2.55	1.49	1.43
5	07	308	CLA	C1B-C2B	2.55	1.49	1.43
6	05	304	CHL	CHC-C4B	2.55	1.45	1.39
5	06	611	CLA	MG-NA	-2.55	2.00	2.06
5	1r	311	CLA	MG-NA	-2.55	2.00	2.06
5	05	302	CLA	C1D-C2D	2.54	1.50	1.45
5	1r	311	CLA	C3B-C4B	2.54	1.48	1.42
5	1r	308	CLA	C1B-C2B	2.54	1.49	1.43
6	05	315	CHL	C3B-C4B	2.54	1.48	1.42
6	06	603	CHL	C1B-C2B	2.54	1.49	1.43
5	08	309	CLA	C1B-C2B	2.54	1.49	1.43
5	05	303	CLA	C3B-C4B	2.54	1.48	1.42
5	07	310	CLA	C3B-C4B	2.53	1.48	1.42
5	06	608	CLA	MG-NA	-2.52	2.00	2.06
5	08	310	CLA	MG-NA	-2.52	2.00	2.06
5	1r	301	CLA	C1B-NB	-2.52	1.34	1.37
5	07	308	CLA	C3B-C4B	2.52	1.48	1.42
6	06	601	CHL	C1B-C2B	2.52	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	07	302	CLA	C1B-NB	-2.52	1.34	1.37
5	05	311	CLA	C1B-NB	-2.52	1.34	1.37
7	07	313	LUT	C32-C33	-2.52	1.40	1.45
6	06	604	CHL	C1B-C2B	2.51	1.49	1.43
5	07	307	CLA	MG-NA	-2.51	2.00	2.06
6	05	313	CHL	C1B-C2B	2.51	1.49	1.43
5	05	302	CLA	C1B-NB	-2.51	1.34	1.37
5	05	309	CLA	C1B-C2B	2.51	1.49	1.43
5	06	608	CLA	C1B-C2B	2.51	1.49	1.43
5	06	609	CLA	C1B-C2B	2.51	1.49	1.43
5	07	309	CLA	C1B-C2B	2.51	1.49	1.43
5	1r	309	CLA	MG-NA	-2.51	2.00	2.06
6	1r	304	CHL	C1B-C2B	2.51	1.49	1.43
5	07	301	CLA	C1D-C2D	2.50	1.50	1.45
6	06	601	CHL	C4C-C3C	2.50	1.49	1.45
5	1r	313	CLA	C1B-C2B	2.50	1.49	1.43
5	05	309	CLA	MG-NA	-2.50	2.00	2.06
5	07	310	CLA	MG-NA	-2.50	2.00	2.06
5	06	609	CLA	MG-NA	-2.50	2.00	2.06
6	07	305	CHL	C1B-C2B	2.49	1.49	1.43
6	07	306	CHL	C1B-C2B	2.49	1.49	1.43
5	08	310	CLA	C1B-NB	-2.49	1.34	1.37
5	1r	310	CLA	C1B-NB	-2.49	1.34	1.37
6	1r	302	CHL	C1B-C2B	2.49	1.49	1.43
5	08	312	CLA	C3B-C4B	2.49	1.48	1.42
6	1r	302	CHL	C3B-C4B	2.48	1.48	1.42
5	07	307	CLA	C1B-C2B	2.48	1.49	1.43
6	05	306	CHL	C1B-C2B	2.48	1.49	1.43
5	1r	313	CLA	C1B-NB	-2.48	1.34	1.37
5	06	608	CLA	C1B-NB	-2.48	1.34	1.37
5	05	310	CLA	C1B-NB	-2.47	1.34	1.37
5	07	312	CLA	C1B-C2B	2.47	1.49	1.43
5	1r	308	CLA	C3B-C4B	2.47	1.48	1.42
6	06	605	CHL	C4C-C3C	2.47	1.49	1.45
5	1r	311	CLA	C1B-NB	-2.47	1.34	1.37
6	07	311	CHL	C4C-C3C	2.47	1.49	1.45
5	08	309	CLA	MG-NA	-2.46	2.00	2.06
5	07	308	CLA	MG-NA	-2.46	2.00	2.06
6	06	606	CHL	C1B-C2B	2.46	1.49	1.43
6	08	305	CHL	C1B-C2B	2.46	1.49	1.43
6	1r	303	CHL	C1B-C2B	2.45	1.49	1.43
5	07	302	CLA	C1B-C2B	2.45	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	07	304	CHL	C1B-C2B	2.45	1.49	1.43
5	05	310	CLA	C3B-C4B	2.45	1.48	1.42
5	1r	309	CLA	C4B-NB	-2.45	1.34	1.37
7	07	313	LUT	C12-C13	-2.45	1.40	1.45
5	05	308	CLA	C1B-C2B	2.45	1.49	1.43
6	07	303	CHL	C1B-C2B	2.45	1.49	1.43
5	08	307	CLA	C1B-NB	-2.44	1.34	1.37
5	1r	305	CLA	C1B-C2B	2.44	1.49	1.43
5	07	308	CLA	C1B-NB	-2.44	1.34	1.37
5	05	310	CLA	C1B-C2B	2.44	1.49	1.43
5	05	311	CLA	C1D-C2D	2.43	1.50	1.45
5	06	611	CLA	C1B-C2B	2.43	1.49	1.43
6	07	306	CHL	C4C-C3C	2.43	1.49	1.45
5	1r	308	CLA	C1B-NB	-2.43	1.34	1.37
6	05	315	CHL	C1B-C2B	2.43	1.49	1.43
6	07	305	CHL	C4C-C3C	2.43	1.49	1.45
5	06	607	CLA	C1B-C2B	2.43	1.49	1.43
5	07	312	CLA	C1B-NB	-2.43	1.34	1.37
5	1r	307	CLA	C1B-NB	-2.43	1.34	1.37
5	1r	307	CLA	MG-NA	-2.42	2.00	2.06
5	07	310	CLA	C1B-C2B	2.42	1.49	1.43
5	05	311	CLA	C1B-C2B	2.42	1.49	1.43
6	05	307	CHL	C1B-C2B	2.42	1.48	1.43
5	06	611	CLA	C1B-NB	-2.41	1.34	1.37
5	05	303	CLA	C1B-NB	-2.41	1.34	1.37
5	08	307	CLA	C1B-C2B	2.41	1.48	1.43
5	1r	307	CLA	C1B-C2B	2.41	1.48	1.43
5	07	309	CLA	C4C-C3C	2.40	1.49	1.45
6	05	313	CHL	C4C-C3C	2.40	1.49	1.45
5	08	311	CLA	C1B-C2B	2.40	1.48	1.43
6	1r	312	CHL	C1B-C2B	2.40	1.48	1.43
5	05	312	CLA	C4B-NB	-2.40	1.34	1.37
5	1r	306	CLA	C1B-NB	-2.40	1.34	1.37
6	07	304	CHL	C4C-C3C	2.39	1.49	1.45
5	05	301	CLA	C1B-NB	-2.39	1.34	1.37
5	05	312	CLA	C4C-C3C	2.39	1.49	1.45
5	06	602	CLA	C1B-C2B	2.38	1.48	1.43
6	06	603	CHL	C4C-C3C	2.38	1.49	1.45
5	06	609	CLA	C1B-NB	-2.38	1.34	1.37
5	05	309	CLA	C1B-NB	-2.38	1.34	1.37
5	08	308	CLA	C1B-C2B	2.38	1.48	1.43
5	07	309	CLA	MG-NA	-2.37	2.00	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	05	302	CLA	C1B-C2B	2.37	1.48	1.43
5	08	308	CLA	C1C-C2C	2.37	1.49	1.44
5	07	310	CLA	C1B-NB	-2.37	1.34	1.37
6	05	305	CHL	C1B-C2B	2.37	1.48	1.43
6	08	303	CHL	C1B-C2B	2.37	1.48	1.43
6	08	301	CHL	C1B-C2B	2.37	1.48	1.43
7	1r	314	LUT	C28-C29	-2.36	1.40	1.45
7	1r	314	LUT	C32-C33	-2.36	1.40	1.45
6	1r	303	CHL	C4C-C3C	2.36	1.49	1.45
5	08	312	CLA	C1B-C2B	2.36	1.48	1.43
5	1r	306	CLA	C1C-C2C	2.35	1.49	1.44
6	05	315	CHL	C4C-C3C	2.35	1.49	1.45
6	08	305	CHL	C4C-C3C	2.35	1.49	1.45
6	08	302	CHL	C1B-C2B	2.34	1.48	1.43
5	05	301	CLA	C1C-C2C	2.34	1.49	1.44
5	07	309	CLA	C1B-NB	-2.34	1.34	1.37
6	1r	302	CHL	C4C-C3C	2.34	1.49	1.45
5	05	312	CLA	C1B-NB	-2.34	1.34	1.37
5	06	602	CLA	C1B-NB	-2.33	1.34	1.37
5	08	312	CLA	C1B-NB	-2.33	1.34	1.37
6	1r	304	CHL	C4C-C3C	2.33	1.49	1.45
5	07	301	CLA	C1B-C2B	2.33	1.48	1.43
7	05	314	LUT	C12-C13	-2.32	1.41	1.45
5	1r	305	CLA	C1D-C2D	2.32	1.49	1.45
5	08	310	CLA	C1B-C2B	2.31	1.48	1.43
5	06	609	CLA	C4C-C3C	2.31	1.49	1.45
5	1r	309	CLA	C4C-C3C	2.31	1.49	1.45
5	06	607	CLA	C1B-NB	-2.29	1.35	1.37
5	1r	307	CLA	C1C-C2C	2.29	1.49	1.44
5	1r	301	CLA	C1B-C2B	2.29	1.48	1.43
5	1r	311	CLA	C1C-C2C	2.29	1.49	1.44
5	1r	309	CLA	C1B-NB	-2.28	1.35	1.37
5	05	312	CLA	C1C-C2C	2.28	1.49	1.44
6	08	304	CHL	C4C-C3C	2.27	1.49	1.45
6	1r	312	CHL	C4C-C3C	2.27	1.48	1.45
5	07	302	CLA	C4C-C3C	2.27	1.48	1.45
7	05	314	LUT	C32-C33	-2.27	1.41	1.45
5	08	309	CLA	C1B-NB	-2.27	1.35	1.37
6	06	604	CHL	C4C-C3C	2.26	1.48	1.45
6	08	302	CHL	C4C-C3C	2.26	1.48	1.45
5	05	303	CLA	C4C-C3C	2.25	1.48	1.45
6	05	305	CHL	C4C-C3C	2.25	1.48	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	07	301	CLA	C1B-NB	-2.25	1.35	1.37
5	05	308	CLA	C1C-C2C	2.24	1.48	1.44
5	05	303	CLA	C1B-C2B	2.24	1.48	1.43
6	05	306	CHL	C4C-C3C	2.24	1.48	1.45
5	05	308	CLA	C1B-NB	-2.24	1.35	1.37
6	07	303	CHL	C4C-C3C	2.24	1.48	1.45
5	06	608	CLA	C4C-C3C	2.23	1.48	1.45
6	06	606	CHL	C4C-C3C	2.23	1.48	1.45
5	07	310	CLA	C4C-C3C	2.22	1.48	1.45
5	08	312	CLA	MG-NA	-2.22	2.01	2.06
5	07	307	CLA	C4C-C3C	2.21	1.48	1.45
5	05	301	CLA	C1B-C2B	2.20	1.48	1.43
5	06	611	CLA	C4C-C3C	2.20	1.48	1.45
5	08	308	CLA	C1B-NB	-2.19	1.35	1.37
5	1r	311	CLA	C1B-C2B	2.19	1.48	1.43
5	07	302	CLA	MG-NB	-2.19	2.01	2.05
7	05	314	LUT	C28-C29	-2.19	1.41	1.45
5	06	610	CLA	C1C-C2C	2.19	1.48	1.44
5	06	610	CLA	C1B-NB	-2.18	1.35	1.37
5	07	301	CLA	C3B-C4B	2.18	1.47	1.42
6	08	304	CHL	MG-NA	-2.17	2.01	2.06
6	05	305	CHL	C2C-C1C	2.17	1.49	1.44
5	07	308	CLA	C4C-C3C	2.17	1.48	1.45
5	07	308	CLA	C1C-C2C	2.17	1.48	1.44
7	05	314	LUT	C19-C9	-2.16	1.46	1.50
5	1r	309	CLA	C1C-C2C	2.16	1.48	1.44
5	06	610	CLA	C4C-C3C	2.16	1.48	1.45
5	1r	301	CLA	C1C-C2C	2.16	1.48	1.44
5	05	310	CLA	C4C-C3C	2.16	1.48	1.45
6	08	303	CHL	C4C-C3C	2.15	1.48	1.45
6	05	305	CHL	C1B-NB	-2.15	1.35	1.37
5	06	607	CLA	C1C-C2C	2.15	1.48	1.44
5	1r	308	CLA	C4C-C3C	2.15	1.48	1.45
5	08	306	CLA	C1B-NB	-2.15	1.35	1.37
6	05	304	CHL	C1D-ND	-2.15	1.35	1.37
5	07	301	CLA	C1C-C2C	2.15	1.48	1.44
5	06	607	CLA	C4C-C3C	2.15	1.48	1.45
5	08	307	CLA	C4C-C3C	2.14	1.48	1.45
6	1r	302	CHL	C1B-NB	-2.14	1.35	1.37
7	1r	314	LUT	C12-C13	-2.13	1.41	1.45
5	06	602	CLA	C4D-ND	2.13	1.40	1.37
6	08	301	CHL	C1B-NB	-2.13	1.35	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	08	310	CLA	C4C-C3C	2.12	1.48	1.45
6	07	311	CHL	C3B-C4B	2.12	1.47	1.42
5	06	602	CLA	C4C-C3C	2.12	1.48	1.45
6	05	306	CHL	C2C-C1C	2.12	1.49	1.44
5	05	309	CLA	C4C-C3C	2.11	1.48	1.45
5	08	310	CLA	C1C-C2C	2.11	1.48	1.44
6	1r	303	CHL	C1B-NB	-2.11	1.35	1.37
5	05	301	CLA	C4C-C3C	2.11	1.48	1.45
6	08	303	CHL	C2C-C1C	2.11	1.49	1.44
6	08	302	CHL	C1B-NB	-2.11	1.35	1.37
5	1r	307	CLA	C4C-C3C	2.10	1.48	1.45
5	1r	305	CLA	C1C-C2C	2.10	1.48	1.44
5	07	302	CLA	CHD-C1D	2.10	1.42	1.38
6	05	305	CHL	CHB-C4A	-2.10	1.32	1.37
6	06	604	CHL	C2C-C1C	2.10	1.49	1.44
5	06	611	CLA	C1C-C2C	2.09	1.48	1.44
5	08	307	CLA	C1C-C2C	2.09	1.48	1.44
5	1r	306	CLA	C1B-C2B	2.09	1.48	1.43
5	05	312	CLA	C1B-C2B	2.09	1.48	1.43
5	06	608	CLA	C1C-C2C	2.09	1.48	1.44
5	07	312	CLA	C1C-C2C	2.09	1.48	1.44
5	05	310	CLA	C1C-C2C	2.08	1.48	1.44
5	07	312	CLA	C4C-C3C	2.08	1.48	1.45
6	05	306	CHL	C1B-NB	-2.08	1.35	1.37
5	1r	313	CLA	C4C-C3C	2.08	1.48	1.45
5	06	609	CLA	C1C-C2C	2.07	1.48	1.44
6	1r	302	CHL	MG-NA	-2.07	2.01	2.06
5	05	312	CLA	CHB-C4A	-2.07	1.32	1.37
5	06	602	CLA	MG-NC	2.07	2.11	2.06
5	07	310	CLA	C1C-C2C	2.07	1.48	1.44
6	1r	312	CHL	CHB-C4A	-2.06	1.32	1.37
6	08	303	CHL	C1B-NB	-2.06	1.35	1.37
5	05	311	CLA	C1C-C2C	2.06	1.48	1.44
6	1r	303	CHL	C2C-C1C	2.06	1.49	1.44
5	05	302	CLA	C4D-ND	2.05	1.40	1.37
6	07	311	CHL	MG-NA	-2.05	2.01	2.06
6	05	315	CHL	C2C-C1C	2.05	1.49	1.44
6	07	303	CHL	C2C-C1C	2.05	1.49	1.44
6	05	306	CHL	CHB-C4A	-2.05	1.32	1.37
6	1r	303	CHL	CHB-C4A	-2.04	1.32	1.37
6	08	302	CHL	CHB-C4A	-2.04	1.32	1.37
6	07	305	CHL	C1B-NB	-2.04	1.35	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	07	311	CHL	C4B-NB	-2.04	1.35	1.37
6	1r	304	CHL	C1B-NB	-2.04	1.35	1.37
6	1r	304	CHL	C2C-C1C	2.04	1.48	1.44
6	07	303	CHL	C1B-NB	-2.04	1.35	1.37
5	1r	305	CLA	C4C-C3C	2.04	1.48	1.45
5	05	312	CLA	MG-NA	-2.03	2.01	2.06
5	05	309	CLA	C1C-C2C	2.03	1.48	1.44
5	1r	313	CLA	C1C-C2C	2.03	1.48	1.44
6	07	306	CHL	C1B-NB	-2.03	1.35	1.37
6	07	304	CHL	C2C-C1C	2.03	1.48	1.44
5	06	602	CLA	C1C-C2C	2.03	1.48	1.44
6	08	302	CHL	C2C-C1C	2.03	1.48	1.44
6	07	305	CHL	CHB-C4A	-2.02	1.32	1.37
5	08	312	CLA	C4C-C3C	2.02	1.48	1.45
5	07	301	CLA	C4C-C3C	2.02	1.48	1.45
6	08	304	CHL	CHB-C4A	-2.02	1.32	1.37
6	06	603	CHL	MG-NA	-2.02	2.01	2.06
5	07	302	CLA	C4D-CHA	2.01	1.45	1.38
6	08	305	CHL	CHB-C4A	-2.01	1.32	1.37
6	1r	304	CHL	CHB-C4A	-2.01	1.32	1.37
5	08	311	CLA	C1C-C2C	2.01	1.48	1.44
6	06	606	CHL	C1B-NB	-2.01	1.35	1.37
6	1r	302	CHL	C4B-NB	-2.01	1.35	1.37
6	1r	312	CHL	C2C-C1C	2.00	1.48	1.44
6	05	306	CHL	MG-NA	-2.00	2.01	2.06

All (1643) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	05	311	CLA	C1D-ND-C4D	-10.88	98.61	106.33
5	07	302	CLA	C2C-C1C-NC	10.78	120.07	109.97
6	1r	304	CHL	C2B-C1B-NB	10.60	117.34	110.23
5	07	302	CLA	C4A-NA-C1A	10.58	111.46	106.71
6	08	302	CHL	C2B-C1B-NB	10.52	117.28	110.23
6	1r	312	CHL	C2B-C1B-NB	10.47	117.25	110.23
6	08	303	CHL	C2B-C1B-NB	10.41	117.21	110.23
6	07	303	CHL	C2B-C1B-NB	10.35	117.17	110.23
6	07	304	CHL	C2B-C1B-NB	10.35	117.17	110.23
6	08	305	CHL	C2B-C1B-NB	10.34	117.17	110.23
6	05	306	CHL	C2B-C1B-NB	10.32	117.15	110.23
6	05	305	CHL	C2B-C1B-NB	10.30	117.14	110.23
5	05	312	CLA	C2B-C1B-NB	10.29	117.13	110.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	05	313	CHL	C2B-C1B-NB	10.29	117.13	110.23
6	07	306	CHL	C2B-C1B-NB	10.28	117.12	110.23
6	06	605	CHL	C2B-C1B-NB	10.27	117.12	110.23
6	05	315	CHL	C2B-C1B-NB	10.25	117.10	110.23
6	06	604	CHL	C2B-C1B-NB	10.22	117.09	110.23
6	06	606	CHL	C2B-C1B-NB	10.21	117.07	110.23
6	07	305	CHL	C2B-C1B-NB	10.19	117.06	110.23
6	06	601	CHL	C2B-C1B-NB	10.18	117.06	110.23
6	06	603	CHL	C2B-C1B-NB	10.10	117.00	110.23
6	1r	303	CHL	C2B-C1B-NB	10.08	116.99	110.23
5	07	302	CLA	C1D-ND-C4D	-10.02	99.22	106.33
6	08	304	CHL	C2B-C1B-NB	9.99	116.93	110.23
6	1r	302	CHL	C2B-C1B-NB	9.84	116.83	110.23
5	08	311	CLA	C1D-ND-C4D	-9.80	99.37	106.33
5	05	302	CLA	C1D-ND-C4D	-9.66	99.47	106.33
5	1r	301	CLA	C1D-ND-C4D	-9.63	99.50	106.33
5	06	611	CLA	C1D-ND-C4D	-9.53	99.56	106.33
6	05	307	CHL	C2B-C1B-NB	9.51	116.61	110.23
5	06	607	CLA	C1D-ND-C4D	-9.50	99.59	106.33
6	08	301	CHL	C2B-C1B-NB	9.47	116.58	110.23
5	08	310	CLA	C1D-ND-C4D	-9.46	99.61	106.33
5	08	306	CLA	C1D-ND-C4D	-9.42	99.64	106.33
5	07	312	CLA	C1D-ND-C4D	-9.38	99.67	106.33
5	06	610	CLA	C1D-ND-C4D	-9.35	99.69	106.33
5	1r	305	CLA	C1D-ND-C4D	-9.34	99.70	106.33
5	07	308	CLA	C1D-ND-C4D	-9.34	99.70	106.33
5	1r	306	CLA	C1D-ND-C4D	-9.27	99.75	106.33
5	06	602	CLA	C1D-ND-C4D	-9.26	99.76	106.33
5	08	308	CLA	C1D-ND-C4D	-9.24	99.77	106.33
5	06	608	CLA	C1D-ND-C4D	-9.24	99.77	106.33
5	05	308	CLA	C1D-ND-C4D	-9.24	99.77	106.33
6	07	311	CHL	C2B-C1B-NB	9.23	116.42	110.23
5	1r	309	CLA	C1D-ND-C4D	-9.20	99.80	106.33
5	07	309	CLA	C1D-ND-C4D	-9.19	99.81	106.33
5	08	307	CLA	C1D-ND-C4D	-9.18	99.81	106.33
5	06	609	CLA	C1D-ND-C4D	-9.18	99.82	106.33
5	05	309	CLA	C1D-ND-C4D	-9.15	99.83	106.33
5	1r	311	CLA	C1D-ND-C4D	-9.15	99.83	106.33
5	1r	313	CLA	C1D-ND-C4D	-9.15	99.83	106.33
5	05	301	CLA	C1D-ND-C4D	-9.12	99.85	106.33
5	07	307	CLA	C1D-ND-C4D	-9.11	99.87	106.33
5	07	301	CLA	C1D-ND-C4D	-9.11	99.87	106.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	05	310	CLA	C1D-ND-C4D	-9.09	99.88	106.33
9	1r	315	XAT	C11-C10-C9	-9.08	114.35	127.31
5	1r	308	CLA	C1D-ND-C4D	-9.02	99.93	106.33
5	1r	310	CLA	C1D-ND-C4D	-9.00	99.94	106.33
5	05	312	CLA	C1D-ND-C4D	-8.99	99.95	106.33
5	05	303	CLA	C1D-ND-C4D	-8.98	99.96	106.33
5	08	309	CLA	C2B-C1B-NB	8.88	116.19	110.23
5	1r	307	CLA	C1D-ND-C4D	-8.87	100.03	106.33
5	1r	313	CLA	C2B-C1B-NB	8.84	116.16	110.23
5	1r	306	CLA	C2B-C1B-NB	8.83	116.15	110.23
5	05	303	CLA	C2B-C1B-NB	8.77	116.11	110.23
5	07	310	CLA	C1D-ND-C4D	-8.76	100.11	106.33
5	08	312	CLA	C1D-ND-C4D	-8.74	100.13	106.33
5	08	310	CLA	C2B-C1B-NB	8.68	116.05	110.23
5	1r	309	CLA	C2B-C1B-NB	8.68	116.05	110.23
5	08	312	CLA	C2B-C1B-NB	8.68	116.05	110.23
5	05	309	CLA	C2B-C1B-NB	8.67	116.05	110.23
5	07	309	CLA	C2B-C1B-NB	8.65	116.03	110.23
5	06	609	CLA	C2B-C1B-NB	8.63	116.02	110.23
5	07	301	CLA	C2B-C1B-NB	8.62	116.01	110.23
5	1r	307	CLA	C2B-C1B-NB	8.62	116.01	110.23
5	08	309	CLA	C2C-C1C-NC	8.61	118.04	109.97
6	05	306	CHL	CMD-C2D-C1D	8.60	139.88	124.71
5	07	307	CLA	C2B-C1B-NB	8.58	115.98	110.23
5	08	309	CLA	C1D-ND-C4D	-8.57	100.25	106.33
5	05	308	CLA	C2B-C1B-NB	8.56	115.97	110.23
5	08	308	CLA	C2B-C1B-NB	8.56	115.97	110.23
5	07	307	CLA	C2C-C1C-NC	8.54	117.98	109.97
5	05	310	CLA	C2C-C1C-NC	8.53	117.96	109.97
5	1r	310	CLA	C2B-C1B-NB	8.52	115.95	110.23
5	06	602	CLA	C2C-C1C-NC	8.52	117.95	109.97
5	05	312	CLA	CMD-C2D-C1D	8.46	139.63	124.71
5	05	301	CLA	C2B-C1B-NB	8.46	115.90	110.23
5	06	611	CLA	C2C-C1C-NC	8.44	117.88	109.97
6	08	304	CHL	C2C-C3C-C4C	-8.44	100.47	106.49
5	1r	308	CLA	C2C-C1C-NC	8.42	117.86	109.97
5	1r	305	CLA	C2C-C1C-NC	8.41	117.85	109.97
5	08	306	CLA	C2C-C1C-NC	8.38	117.82	109.97
5	1r	310	CLA	C2C-C1C-NC	8.38	117.82	109.97
6	08	302	CHL	CMD-C2D-C1D	8.35	139.43	124.71
5	07	309	CLA	CMD-C2D-C1D	8.35	139.42	124.71
5	05	310	CLA	C2B-C1B-NB	8.34	115.82	110.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	1r	302	CHL	CMD-C2D-C1D	8.33	139.40	124.71
5	06	611	CLA	C2B-C1B-NB	8.32	115.81	110.23
5	06	608	CLA	C2B-C1B-NB	8.31	115.81	110.23
5	06	610	CLA	C2B-C1B-NB	8.31	115.81	110.23
5	08	311	CLA	C2B-C1B-NB	8.31	115.81	110.23
6	07	306	CHL	CMD-C2D-C1D	8.31	139.36	124.71
5	05	309	CLA	C2C-C1C-NC	8.30	117.75	109.97
6	06	604	CHL	CMD-C2D-C1D	8.30	139.34	124.71
6	1r	303	CHL	CMD-C2D-C1D	8.30	139.34	124.71
5	05	302	CLA	C2C-C1C-NC	8.30	117.75	109.97
6	1r	303	CHL	C2C-C3C-C4C	-8.30	100.57	106.49
6	07	305	CHL	CMD-C2D-C1D	8.28	139.31	124.71
6	07	304	CHL	CMD-C2D-C1D	8.28	139.30	124.71
5	07	310	CLA	C2B-C1B-NB	8.27	115.78	110.23
5	1r	309	CLA	C2C-C1C-NC	8.27	117.72	109.97
5	1r	305	CLA	C2B-C1B-NB	8.26	115.77	110.23
6	05	307	CHL	CMD-C2D-C1D	8.26	139.27	124.71
6	06	605	CHL	CMD-C2D-C1D	8.26	139.27	124.71
6	07	303	CHL	CMD-C2D-C1D	8.25	139.25	124.71
6	05	315	CHL	CMD-C2D-C1D	8.24	139.23	124.71
5	08	310	CLA	C2C-C1C-NC	8.23	117.68	109.97
5	06	609	CLA	C2C-C1C-NC	8.23	117.68	109.97
6	06	601	CHL	CMD-C2D-C1D	8.22	139.21	124.71
5	07	309	CLA	C2C-C1C-NC	8.22	117.67	109.97
5	08	307	CLA	C2C-C1C-NC	8.22	117.67	109.97
6	1r	304	CHL	CMD-C2D-C1D	8.22	139.19	124.71
5	07	312	CLA	C2C-C1C-NC	8.21	117.67	109.97
5	1r	308	CLA	C2B-C1B-NB	8.20	115.73	110.23
5	06	608	CLA	C2C-C1C-NC	8.20	117.65	109.97
5	07	302	CLA	CMD-C2D-C1D	8.20	139.16	124.71
6	06	603	CHL	CMD-C2D-C1D	8.20	139.16	124.71
6	08	301	CHL	CMD-C2D-C1D	8.19	139.15	124.71
6	05	313	CHL	CMD-C2D-C1D	8.19	139.15	124.71
5	1r	307	CLA	C2C-C1C-NC	8.17	117.62	109.97
5	06	610	CLA	C2C-C1C-NC	8.16	117.62	109.97
6	08	305	CHL	CMD-C2D-C1D	8.16	139.09	124.71
5	07	310	CLA	C2C-C1C-NC	8.14	117.60	109.97
6	05	305	CHL	CMD-C2D-C1D	8.10	138.99	124.71
5	07	308	CLA	C2B-C1B-NB	8.10	115.66	110.23
5	08	310	CLA	CMD-C2D-C1D	8.09	138.98	124.71
5	08	312	CLA	C2C-C1C-NC	8.09	117.55	109.97
5	06	602	CLA	CMD-C2D-C1D	8.08	138.96	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	1r	312	CHL	CMD-C2D-C1D	8.07	138.94	124.71
5	1r	313	CLA	C2C-C1C-NC	8.06	117.53	109.97
9	1r	315	XAT	C15-C14-C13	-8.06	115.81	127.31
5	1r	311	CLA	CMD-C2D-C1D	8.06	138.92	124.71
5	1r	306	CLA	CMD-C2D-C1D	8.04	138.88	124.71
5	08	306	CLA	CMD-C2D-C1D	8.04	138.88	124.71
5	06	609	CLA	CMD-C2D-C1D	8.04	138.88	124.71
5	05	302	CLA	CMD-C2D-C1D	8.03	138.87	124.71
5	06	607	CLA	C2B-C1B-NB	8.03	115.61	110.23
5	08	306	CLA	C2B-C1B-NB	8.03	115.61	110.23
5	06	608	CLA	CMD-C2D-C1D	8.02	138.84	124.71
5	1r	313	CLA	CMD-C2D-C1D	8.01	138.84	124.71
5	06	611	CLA	CMD-C2D-C1D	8.01	138.83	124.71
5	08	307	CLA	C2B-C1B-NB	8.01	115.60	110.23
5	06	607	CLA	CMD-C2D-C1D	8.01	138.83	124.71
5	1r	301	CLA	CMD-C2D-C1D	8.01	138.82	124.71
5	07	308	CLA	C2C-C1C-NC	8.01	117.47	109.97
5	05	309	CLA	CMD-C2D-C1D	8.01	138.82	124.71
5	08	307	CLA	CMD-C2D-C1D	7.99	138.80	124.71
5	07	312	CLA	C2B-C1B-NB	7.99	115.59	110.23
5	05	311	CLA	CMD-C2D-C1D	7.99	138.79	124.71
5	06	610	CLA	CMD-C2D-C1D	7.99	138.79	124.71
6	08	304	CHL	CMD-C2D-C1D	7.98	138.77	124.71
5	07	308	CLA	CMD-C2D-C1D	7.98	138.77	124.71
5	08	309	CLA	CMD-C2D-C1D	7.97	138.76	124.71
6	06	606	CHL	CMD-C2D-C1D	7.97	138.76	124.71
5	05	303	CLA	CMD-C2D-C1D	7.97	138.75	124.71
6	05	304	CHL	CMD-C2D-C1D	7.95	138.73	124.71
6	08	303	CHL	CMD-C2D-C1D	7.95	138.72	124.71
5	08	312	CLA	CMD-C2D-C1D	7.94	138.71	124.71
5	1r	311	CLA	C2B-C1B-NB	7.94	115.55	110.23
5	07	301	CLA	C2C-C1C-NC	7.92	117.39	109.97
5	07	307	CLA	CMD-C2D-C1D	7.92	138.67	124.71
5	1r	308	CLA	CMD-C2D-C1D	7.92	138.67	124.71
6	07	311	CHL	CMD-C2D-C1D	7.92	138.67	124.71
5	05	308	CLA	CMD-C2D-C1D	7.91	138.66	124.71
5	07	312	CLA	CMD-C2D-C1D	7.89	138.62	124.71
5	06	607	CLA	C2C-C1C-NC	7.89	117.36	109.97
5	1r	309	CLA	CMD-C2D-C1D	7.88	138.60	124.71
5	07	302	CLA	C3C-C4C-NC	7.85	119.38	110.57
6	08	301	CHL	C2C-C3C-C4C	-7.85	100.89	106.49
5	07	310	CLA	CMD-C2D-C1D	7.83	138.51	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1r	310	CLA	CMD-C2D-C1D	7.82	138.50	124.71
5	08	311	CLA	CMD-C2D-C1D	7.81	138.47	124.71
5	1r	301	CLA	C2B-C1B-NB	7.77	115.44	110.23
5	05	301	CLA	CMD-C2D-C1D	7.77	138.40	124.71
5	06	602	CLA	C2B-C1B-NB	7.76	115.44	110.23
5	08	311	CLA	C2C-C1C-NC	7.74	117.22	109.97
5	05	303	CLA	C2C-C1C-NC	7.73	117.22	109.97
5	05	312	CLA	C2C-C1C-NC	7.73	117.21	109.97
5	05	302	CLA	C2B-C1B-NB	7.71	115.40	110.23
5	1r	311	CLA	C2C-C1C-NC	7.70	117.19	109.97
6	05	305	CHL	C2C-C3C-C4C	-7.64	101.04	106.49
5	05	301	CLA	C2C-C1C-NC	7.62	117.11	109.97
5	08	308	CLA	CMD-C2D-C1D	7.58	138.07	124.71
5	1r	307	CLA	CMD-C2D-C1D	7.58	138.06	124.71
5	05	310	CLA	CMD-C2D-C1D	7.57	138.05	124.71
6	1r	304	CHL	C2C-C3C-C4C	-7.49	101.15	106.49
5	05	311	CLA	C2C-C1C-NC	7.48	116.98	109.97
5	05	311	CLA	C2B-C1B-NB	7.45	115.22	110.23
6	08	303	CHL	C2C-C3C-C4C	-7.44	101.19	106.49
6	06	605	CHL	C2C-C3C-C4C	-7.44	101.19	106.49
5	07	301	CLA	CMD-C2D-C1D	7.44	137.82	124.71
6	07	305	CHL	C2C-C3C-C4C	-7.41	101.20	106.49
6	05	315	CHL	C2C-C3C-C4C	-7.40	101.21	106.49
6	06	603	CHL	C2C-C3C-C4C	-7.37	101.24	106.49
6	06	601	CHL	C2C-C3C-C4C	-7.35	101.25	106.49
6	06	604	CHL	C2C-C3C-C4C	-7.34	101.26	106.49
6	1r	312	CHL	C2C-C3C-C4C	-7.33	101.26	106.49
6	07	306	CHL	C2C-C3C-C4C	-7.33	101.27	106.49
6	07	304	CHL	C2C-C3C-C4C	-7.32	101.27	106.49
6	08	305	CHL	C2C-C3C-C4C	-7.32	101.27	106.49
5	05	308	CLA	C2C-C1C-NC	7.31	116.82	109.97
6	08	302	CHL	C2C-C3C-C4C	-7.30	101.28	106.49
5	08	308	CLA	C2C-C1C-NC	7.28	116.79	109.97
6	07	311	CHL	C2C-C3C-C4C	-7.24	101.33	106.49
5	1r	305	CLA	CMD-C2D-C1D	7.22	137.44	124.71
5	1r	301	CLA	C2C-C1C-NC	7.18	116.70	109.97
6	05	313	CHL	C2C-C3C-C4C	-7.17	101.38	106.49
6	07	303	CHL	C2C-C3C-C4C	-7.14	101.40	106.49
6	05	307	CHL	C2C-C3C-C4C	-7.13	101.41	106.49
6	06	606	CHL	C2C-C3C-C4C	-7.09	101.43	106.49
9	1r	315	XAT	O24-C25-C24	7.06	118.69	113.38
6	05	306	CHL	C2C-C3C-C4C	-7.03	101.48	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	07	302	CLA	CHD-C4C-C3C	-6.93	114.65	124.84
5	1r	306	CLA	C2C-C1C-NC	6.91	116.44	109.97
6	1r	302	CHL	C2C-C3C-C4C	-6.84	101.61	106.49
5	06	602	CLA	C3C-C4C-NC	6.74	118.13	110.57
6	05	304	CHL	C2B-C1B-NB	6.68	114.71	110.23
9	1r	315	XAT	C31-C30-C29	-6.50	118.04	127.31
5	05	302	CLA	C3C-C4C-NC	6.46	117.82	110.57
5	08	309	CLA	C3C-C4C-NC	6.32	117.66	110.57
5	1r	305	CLA	C3C-C4C-NC	6.29	117.62	110.57
5	06	602	CLA	CHD-C4C-C3C	-6.28	115.61	124.84
5	05	310	CLA	C3C-C4C-NC	6.26	117.60	110.57
5	1r	307	CLA	C3C-C4C-NC	6.26	117.59	110.57
6	05	306	CHL	CHD-C1D-ND	-6.25	118.71	124.45
5	05	311	CLA	C3C-C4C-NC	6.22	117.55	110.57
5	08	312	CLA	O2D-CGD-CBD	6.17	122.23	111.27
5	06	611	CLA	C3C-C4C-NC	6.17	117.48	110.57
5	1r	311	CLA	C3C-C4C-NC	6.15	117.47	110.57
9	1r	315	XAT	C7-C8-C9	-6.14	116.00	125.53
9	1r	315	XAT	C15-C35-C34	-6.14	110.91	123.47
5	1r	308	CLA	C3C-C4C-NC	6.13	117.45	110.57
6	06	603	CHL	CHD-C1D-ND	-6.13	118.83	124.45
5	1r	309	CLA	C3C-C4C-NC	6.12	117.44	110.57
6	06	605	CHL	CHD-C1D-ND	-6.12	118.83	124.45
7	05	314	LUT	C8-C9-C10	6.10	128.30	118.94
5	07	301	CLA	C3B-C2B-C1B	-6.10	99.80	107.16
6	08	302	CHL	CHD-C1D-ND	-6.08	118.87	124.45
5	07	312	CLA	C3C-C4C-NC	6.08	117.39	110.57
6	05	307	CHL	CHD-C1D-ND	-6.07	118.87	124.45
5	1r	310	CLA	C3C-C4C-NC	6.06	117.37	110.57
6	07	306	CHL	CHD-C1D-ND	-6.06	118.89	124.45
5	05	302	CLA	CHD-C4C-C3C	-6.05	115.94	124.84
6	06	604	CHL	CHD-C1D-ND	-6.05	118.90	124.45
5	05	309	CLA	C3C-C4C-NC	6.04	117.35	110.57
5	08	306	CLA	C3C-C4C-NC	6.03	117.34	110.57
5	08	310	CLA	C3C-C4C-NC	6.03	117.34	110.57
6	1r	302	CHL	CHD-C1D-ND	-6.03	118.92	124.45
6	05	304	CHL	C2C-C3C-C4C	-6.02	102.20	106.49
5	1r	313	CLA	C3C-C4C-NC	6.00	117.30	110.57
5	08	307	CLA	C3C-C4C-NC	6.00	117.30	110.57
5	07	301	CLA	C3C-C4C-NC	6.00	117.30	110.57
6	06	601	CHL	CHD-C1D-ND	-6.00	118.94	124.45
5	06	607	CLA	C3C-C4C-NC	5.99	117.29	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	07	307	CLA	C3C-C4C-NC	5.99	117.28	110.57
5	07	308	CLA	C3C-C4C-NC	5.98	117.28	110.57
5	1r	301	CLA	C3C-C4C-NC	5.97	117.27	110.57
6	1r	312	CHL	CHD-C1D-ND	-5.97	118.97	124.45
5	06	610	CLA	C3C-C4C-NC	5.96	117.25	110.57
6	05	313	CHL	CHD-C1D-ND	-5.96	118.98	124.45
5	06	609	CLA	C3C-C4C-NC	5.96	117.25	110.57
5	08	308	CLA	C3C-C4C-NC	5.95	117.25	110.57
5	05	301	CLA	C3C-C4C-NC	5.93	117.22	110.57
6	07	304	CHL	CHD-C1D-ND	-5.93	119.00	124.45
5	08	311	CLA	C3C-C4C-NC	5.93	117.22	110.57
6	08	305	CHL	CHD-C1D-ND	-5.92	119.01	124.45
6	07	311	CHL	CHD-C1D-ND	-5.92	119.01	124.45
5	06	608	CLA	C3C-C4C-NC	5.92	117.20	110.57
6	05	315	CHL	CHD-C1D-ND	-5.91	119.02	124.45
6	07	303	CHL	CHD-C1D-ND	-5.90	119.04	124.45
6	1r	304	CHL	CHD-C1D-ND	-5.89	119.04	124.45
5	08	306	CLA	CHD-C4C-C3C	-5.89	116.19	124.84
6	07	305	CHL	CHD-C1D-ND	-5.88	119.05	124.45
5	1r	311	CLA	CHD-C4C-C3C	-5.86	116.22	124.84
9	1r	315	XAT	C38-C25-C26	-5.85	112.45	122.26
6	05	304	CHL	CHD-C1D-ND	-5.84	119.08	124.45
5	07	310	CLA	C3C-C4C-NC	5.84	117.12	110.57
6	08	301	CHL	CHD-C1D-ND	-5.83	119.10	124.45
5	1r	301	CLA	CHD-C4C-C3C	-5.82	116.28	124.84
6	06	606	CHL	CHD-C1D-ND	-5.82	119.10	124.45
7	1r	314	LUT	C15-C35-C34	5.82	135.40	123.47
5	1r	307	CLA	CHD-C4C-C3C	-5.82	116.29	124.84
5	05	310	CLA	CHD-C4C-C3C	-5.78	116.35	124.84
5	1r	306	CLA	C3C-C4C-NC	5.76	117.04	110.57
5	05	311	CLA	CHD-C4C-C3C	-5.76	116.37	124.84
5	08	308	CLA	CHD-C4C-C3C	-5.75	116.38	124.84
5	05	312	CLA	C3B-C2B-C1B	-5.75	100.22	107.16
6	1r	303	CHL	C3C-C4C-NC	5.75	117.02	110.57
6	05	305	CHL	CHD-C1D-ND	-5.75	119.17	124.45
5	06	607	CLA	CHD-C4C-C3C	-5.75	116.39	124.84
5	1r	310	CLA	CHD-C4C-C3C	-5.73	116.42	124.84
6	08	303	CHL	CHD-C1D-ND	-5.72	119.19	124.45
5	07	312	CLA	CHD-C4C-C3C	-5.71	116.44	124.84
6	08	304	CHL	CHD-C1D-ND	-5.71	119.21	124.45
5	05	312	CLA	CHD-C1D-ND	-5.64	119.27	124.45
5	05	301	CLA	CHD-C4C-C3C	-5.63	116.57	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1r	308	CLA	CHD-C4C-C3C	-5.62	116.57	124.84
5	06	610	CLA	CHD-C4C-C3C	-5.62	116.57	124.84
5	1r	307	CLA	O2D-CGD-CBD	5.62	121.26	111.27
5	05	309	CLA	CHD-C4C-C3C	-5.62	116.58	124.84
5	1r	306	CLA	CHD-C4C-C3C	-5.61	116.60	124.84
5	08	308	CLA	C3B-C2B-C1B	-5.59	100.41	107.16
5	07	309	CLA	C3C-C4C-NC	5.59	116.84	110.57
5	07	301	CLA	CHD-C4C-C3C	-5.59	116.62	124.84
5	05	303	CLA	C3C-C4C-NC	5.59	116.84	110.57
6	05	305	CHL	C3C-C4C-NC	5.59	116.84	110.57
6	1r	304	CHL	C3B-C2B-C1B	-5.58	100.42	107.16
5	08	310	CLA	CHD-C4C-C3C	-5.57	116.66	124.84
6	1r	303	CHL	CHD-C1D-ND	-5.56	119.34	124.45
5	05	308	CLA	C3C-C4C-NC	5.56	116.81	110.57
5	08	307	CLA	CHD-C4C-C3C	-5.56	116.67	124.84
5	1r	313	CLA	O2D-CGD-CBD	5.55	121.14	111.27
9	1r	315	XAT	O4-C5-C18	5.52	121.67	115.06
6	05	306	CHL	C3B-C2B-C1B	-5.52	100.50	107.16
5	06	609	CLA	CHD-C4C-C3C	-5.51	116.74	124.84
6	1r	312	CHL	C3B-C2B-C1B	-5.50	100.52	107.16
6	08	301	CHL	C3C-C4C-NC	5.50	116.74	110.57
5	1r	313	CLA	CHD-C4C-C3C	-5.50	116.75	124.84
5	08	312	CLA	C3C-C4C-NC	5.50	116.74	110.57
6	05	315	CHL	C3B-C2B-C1B	-5.50	100.53	107.16
6	06	605	CHL	C3B-C2B-C1B	-5.49	100.53	107.16
5	1r	305	CLA	CHD-C4C-C3C	-5.48	116.78	124.84
5	1r	309	CLA	CHD-C4C-C3C	-5.48	116.78	124.84
5	1r	306	CLA	C3B-C2B-C1B	-5.48	100.55	107.16
6	07	304	CHL	C3B-C2B-C1B	-5.47	100.56	107.16
6	08	303	CHL	C3C-C4C-NC	5.47	116.70	110.57
6	08	305	CHL	C3B-C2B-C1B	-5.46	100.57	107.16
5	05	308	CLA	CHD-C4C-C3C	-5.45	116.82	124.84
5	06	608	CLA	CHD-C4C-C3C	-5.45	116.83	124.84
5	08	311	CLA	CHD-C4C-C3C	-5.45	116.83	124.84
6	07	305	CHL	C3B-C2B-C1B	-5.45	100.59	107.16
6	06	606	CHL	C3B-C2B-C1B	-5.44	100.60	107.16
6	07	303	CHL	C3B-C2B-C1B	-5.44	100.60	107.16
5	07	308	CLA	CHD-C4C-C3C	-5.43	116.86	124.84
5	06	611	CLA	CHD-C4C-C3C	-5.42	116.87	124.84
6	08	304	CHL	C3C-C4C-NC	5.42	116.65	110.57
5	05	308	CLA	C3B-C2B-C1B	-5.42	100.62	107.16
6	07	306	CHL	C3B-C2B-C1B	-5.42	100.62	107.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	06	603	CHL	C3B-C2B-C1B	-5.42	100.62	107.16
6	08	302	CHL	C3B-C2B-C1B	-5.41	100.63	107.16
5	05	310	CLA	C3B-C2B-C1B	-5.40	100.65	107.16
7	07	313	LUT	C39-C29-C28	5.40	126.58	118.08
6	08	304	CHL	C3B-C2B-C1B	-5.39	100.65	107.16
6	05	313	CHL	C3B-C2B-C1B	-5.38	100.66	107.16
6	08	303	CHL	C3B-C2B-C1B	-5.37	100.68	107.16
6	1r	303	CHL	C3B-C2B-C1B	-5.37	100.68	107.16
6	05	304	CHL	CAC-C3C-C4C	5.36	131.76	124.81
5	05	309	CLA	C3B-C2B-C1B	-5.36	100.69	107.16
6	06	601	CHL	C3B-C2B-C1B	-5.36	100.70	107.16
5	08	309	CLA	C3B-C2B-C1B	-5.35	100.71	107.16
5	07	307	CLA	CHD-C4C-C3C	-5.34	116.98	124.84
6	05	307	CHL	C3C-C4C-NC	5.34	116.56	110.57
6	1r	304	CHL	C3C-C4C-NC	5.33	116.55	110.57
5	05	301	CLA	C3B-C2B-C1B	-5.33	100.72	107.16
5	1r	308	CLA	C3B-C2B-C1B	-5.33	100.72	107.16
5	05	303	CLA	C3B-C2B-C1B	-5.33	100.73	107.16
5	1r	307	CLA	C3B-C2B-C1B	-5.33	100.73	107.16
6	06	604	CHL	C3B-C2B-C1B	-5.32	100.74	107.16
5	07	310	CLA	CHD-C4C-C3C	-5.31	117.04	124.84
5	06	609	CLA	C3B-C2B-C1B	-5.30	100.76	107.16
5	07	302	CLA	CHC-C1C-C2C	-5.30	112.00	126.73
5	1r	310	CLA	C3B-C2B-C1B	-5.30	100.76	107.16
5	05	303	CLA	CHD-C4C-C3C	-5.30	117.05	124.84
6	05	315	CHL	C3C-C4C-NC	5.30	116.51	110.57
6	1r	302	CHL	C3B-C2B-C1B	-5.30	100.77	107.16
5	1r	313	CLA	C3B-C2B-C1B	-5.29	100.78	107.16
6	07	303	CHL	C3C-C4C-NC	5.27	116.49	110.57
5	08	312	CLA	C3B-C2B-C1B	-5.27	100.80	107.16
6	06	604	CHL	C3C-C4C-NC	5.26	116.47	110.57
6	1r	312	CHL	C3C-C4C-NC	5.25	116.46	110.57
6	08	302	CHL	C3C-C4C-NC	5.25	116.46	110.57
5	07	309	CLA	C3B-C2B-C1B	-5.25	100.83	107.16
6	07	311	CHL	C3C-C4C-NC	5.25	116.46	110.57
6	05	305	CHL	C3B-C2B-C1B	-5.24	100.83	107.16
5	07	302	CLA	C2D-C1D-ND	5.23	113.96	110.10
5	07	307	CLA	C3B-C2B-C1B	-5.23	100.85	107.16
6	08	305	CHL	C3C-C4C-NC	5.23	116.44	110.57
5	08	312	CLA	CHD-C4C-C3C	-5.23	117.15	124.84
5	06	602	CLA	C3B-C2B-C1B	-5.22	100.86	107.16
5	06	610	CLA	C3B-C2B-C1B	-5.20	100.89	107.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	1r	315	XAT	C18-C5-C6	-5.19	113.56	122.26
5	08	306	CLA	C3B-C2B-C1B	-5.19	100.89	107.16
5	06	608	CLA	C3B-C2B-C1B	-5.19	100.90	107.16
5	07	308	CLA	C3B-C2B-C1B	-5.19	100.90	107.16
6	06	606	CHL	C3C-C4C-NC	5.19	116.39	110.57
6	06	601	CHL	O2D-CGD-CBD	5.18	120.48	111.27
6	05	306	CHL	C3C-C4C-NC	5.18	116.38	110.57
5	07	310	CLA	C3B-C2B-C1B	-5.18	100.91	107.16
5	1r	309	CLA	C3B-C2B-C1B	-5.18	100.91	107.16
5	05	311	CLA	C3D-C4D-ND	5.18	118.61	110.24
6	06	605	CHL	C3C-C4C-NC	5.17	116.37	110.57
6	07	311	CHL	C3B-C2B-C1B	-5.17	100.92	107.16
5	1r	301	CLA	O2D-CGD-CBD	5.17	120.45	111.27
6	06	606	CHL	O2D-CGD-CBD	5.17	120.45	111.27
5	08	311	CLA	C3B-C2B-C1B	-5.16	100.94	107.16
6	07	304	CHL	C3C-C4C-NC	5.15	116.35	110.57
9	1r	315	XAT	O4-C5-C4	5.15	117.25	113.38
6	07	305	CHL	C3C-C4C-NC	5.15	116.34	110.57
5	05	302	CLA	C3B-C2B-C1B	-5.14	100.95	107.16
6	1r	312	CHL	O2D-CGD-CBD	5.13	120.39	111.27
6	07	306	CHL	C3C-C4C-NC	5.13	116.32	110.57
6	06	601	CHL	C3C-C4C-NC	5.13	116.32	110.57
5	07	309	CLA	CHD-C4C-C3C	-5.12	117.31	124.84
6	05	307	CHL	C3B-C2B-C1B	-5.12	100.98	107.16
5	05	311	CLA	C4D-CHA-C1A	-5.12	115.02	121.25
6	1r	302	CHL	O2D-CGD-CBD	5.11	120.36	111.27
6	06	603	CHL	C3C-C4C-NC	5.10	116.29	110.57
7	07	313	LUT	C39-C29-C30	-5.08	115.80	122.92
5	05	312	CLA	C1C-C2C-C3C	-5.06	101.63	106.96
5	07	302	CLA	C1D-CHD-C4C	-5.06	115.13	126.06
9	1r	315	XAT	C11-C12-C13	-5.06	112.20	126.42
6	05	313	CHL	C3C-C4C-NC	5.06	116.24	110.57
5	1r	301	CLA	C3B-C2B-C1B	-5.05	101.06	107.16
5	07	312	CLA	C3B-C2B-C1B	-5.05	101.07	107.16
5	1r	305	CLA	C3B-C2B-C1B	-5.04	101.07	107.16
5	07	309	CLA	O2D-CGD-CBD	5.03	120.21	111.27
6	1r	303	CHL	C3D-C2D-C1D	-5.03	98.97	105.83
5	06	607	CLA	C3B-C2B-C1B	-5.02	101.10	107.16
5	08	307	CLA	C3B-C2B-C1B	-4.98	101.15	107.16
5	08	310	CLA	C3B-C2B-C1B	-4.98	101.15	107.16
5	06	611	CLA	C3B-C2B-C1B	-4.98	101.15	107.16
5	05	312	CLA	C3D-C4D-ND	4.96	118.26	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1r	311	CLA	C3B-C2B-C1B	-4.95	101.18	107.16
5	08	311	CLA	C3D-C4D-ND	4.94	118.23	110.24
6	05	304	CHL	C3B-C4B-NB	4.93	115.09	110.52
5	1r	310	CLA	O2D-CGD-CBD	4.91	119.99	111.27
6	1r	302	CHL	C3C-C4C-NC	4.88	116.05	110.57
5	1r	308	CLA	O2D-CGD-CBD	4.87	119.91	111.27
5	05	303	CLA	CHD-C1D-ND	-4.87	119.98	124.45
7	05	314	LUT	C19-C9-C10	-4.85	116.14	122.92
5	07	302	CLA	C3D-C2D-C1D	-4.84	99.22	105.83
6	05	307	CHL	CHD-C4C-C3C	-4.81	117.76	124.84
6	05	315	CHL	O2D-CGD-CBD	4.81	119.81	111.27
6	05	307	CHL	C3D-C2D-C1D	-4.80	99.28	105.83
6	05	304	CHL	C3C-C4C-NC	4.79	115.95	110.57
5	07	302	CLA	CHC-C4B-NB	-4.79	119.19	124.26
5	05	312	CLA	C3C-C4C-NC	4.79	115.94	110.57
6	05	305	CHL	C3D-C2D-C1D	-4.78	99.31	105.83
5	05	311	CLA	C3B-C2B-C1B	-4.77	101.40	107.16
5	05	308	CLA	O2D-CGD-CBD	4.76	119.72	111.27
5	1r	313	CLA	CHD-C1D-ND	-4.76	120.08	124.45
5	07	302	CLA	C1C-C2C-C3C	-4.76	101.95	106.96
7	05	314	LUT	C15-C35-C34	4.76	133.22	123.47
5	05	312	CLA	CHD-C4C-C3C	-4.74	117.87	124.84
6	1r	304	CHL	C3D-C2D-C1D	-4.73	99.38	105.83
6	08	301	CHL	C3B-C2B-C1B	-4.72	101.47	107.16
6	08	302	CHL	C3D-C2D-C1D	-4.72	99.39	105.83
6	07	305	CHL	C3D-C2D-C1D	-4.71	99.40	105.83
6	07	303	CHL	C3D-C2D-C1D	-4.71	99.40	105.83
5	1r	301	CLA	C3D-C4D-ND	4.70	117.84	110.24
5	06	607	CLA	C3D-C4D-ND	4.69	117.82	110.24
6	07	306	CHL	C3D-C2D-C1D	-4.68	99.44	105.83
5	08	312	CLA	C1C-C2C-C3C	-4.68	102.04	106.96
5	06	602	CLA	C4A-NA-C1A	4.67	108.81	106.71
6	05	305	CHL	CHD-C4C-C3C	-4.67	117.98	124.84
6	05	306	CHL	C3D-C2D-C1D	-4.67	99.46	105.83
6	05	307	CHL	O2D-CGD-CBD	4.67	119.56	111.27
6	05	307	CHL	C2D-C1D-ND	4.67	113.54	110.10
6	07	304	CHL	C3D-C2D-C1D	-4.66	99.47	105.83
6	08	304	CHL	C3D-C2D-C1D	-4.65	99.48	105.83
5	08	308	CLA	C3D-C4D-ND	4.64	117.74	110.24
5	05	308	CLA	CHD-C1D-ND	-4.64	120.19	124.45
5	07	309	CLA	CHD-C1D-ND	-4.64	120.19	124.45
6	06	604	CHL	C3D-C2D-C1D	-4.64	99.50	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	05	303	CLA	C3D-C4D-ND	4.64	117.74	110.24
6	08	303	CHL	C3D-C2D-C1D	-4.63	99.51	105.83
5	07	301	CLA	C3D-C4D-ND	4.63	117.72	110.24
6	1r	312	CHL	C3D-C2D-C1D	-4.62	99.52	105.83
6	08	305	CHL	C3D-C2D-C1D	-4.62	99.53	105.83
6	05	313	CHL	C3D-C2D-C1D	-4.61	99.54	105.83
6	06	606	CHL	C3D-C2D-C1D	-4.61	99.54	105.83
5	05	301	CLA	O2D-CGD-CBD	4.60	119.44	111.27
6	06	601	CHL	C3D-C2D-C1D	-4.60	99.55	105.83
6	05	315	CHL	C3D-C2D-C1D	-4.59	99.57	105.83
5	07	310	CLA	CBD-CHA-C1A	4.58	133.90	128.50
6	06	605	CHL	C3D-C2D-C1D	-4.58	99.58	105.83
6	08	303	CHL	CHD-C4C-C3C	-4.58	118.11	124.84
5	1r	305	CLA	C1C-C2C-C3C	-4.57	102.15	106.96
5	1r	306	CLA	O2D-CGD-CBD	4.57	119.39	111.27
5	07	310	CLA	C4D-CHA-C1A	-4.57	115.69	121.25
9	1r	315	XAT	O24-C25-C38	4.57	120.53	115.06
5	08	309	CLA	CHD-C4C-C3C	-4.56	118.13	124.84
5	07	309	CLA	C3D-C4D-ND	4.56	117.62	110.24
5	1r	310	CLA	C1C-C2C-C3C	-4.56	102.17	106.96
5	1r	309	CLA	C3D-C4D-ND	4.56	117.61	110.24
5	06	611	CLA	C3D-C4D-ND	4.55	117.60	110.24
6	06	603	CHL	C3D-C2D-C1D	-4.55	99.63	105.83
5	05	308	CLA	C3D-C4D-ND	4.54	117.58	110.24
5	07	307	CLA	C1C-C2C-C3C	-4.53	102.19	106.96
5	08	310	CLA	C3D-C4D-ND	4.53	117.57	110.24
6	05	306	CHL	CHD-C4C-C3C	-4.53	118.18	124.84
5	1r	306	CLA	C3D-C4D-ND	4.52	117.55	110.24
6	07	311	CHL	C3D-C2D-C1D	-4.52	99.66	105.83
6	08	301	CHL	C3D-C2D-C1D	-4.52	99.67	105.83
5	06	611	CLA	C1C-C2C-C3C	-4.52	102.21	106.96
5	06	607	CLA	CHD-C1D-ND	-4.51	120.31	124.45
5	05	310	CLA	C1C-C2C-C3C	-4.51	102.22	106.96
5	07	312	CLA	C3D-C4D-ND	4.50	117.52	110.24
5	08	307	CLA	CHD-C1D-ND	-4.50	120.32	124.45
5	06	610	CLA	C3D-C4D-ND	4.49	117.50	110.24
5	06	608	CLA	C3D-C4D-ND	4.49	117.50	110.24
5	08	306	CLA	C1C-C2C-C3C	-4.49	102.24	106.96
5	08	310	CLA	C1C-C2C-C3C	-4.49	102.24	106.96
5	05	301	CLA	C3D-C4D-ND	4.47	117.47	110.24
5	08	307	CLA	C3D-C4D-ND	4.47	117.47	110.24
6	07	303	CHL	CHD-C4C-C3C	-4.47	118.27	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	06	611	CLA	CHD-C1D-ND	-4.47	120.35	124.45
5	07	308	CLA	C3D-C4D-ND	4.47	117.47	110.24
5	06	602	CLA	C1C-C2C-C3C	-4.46	102.27	106.96
6	1r	303	CHL	C2D-C1D-ND	4.45	113.39	110.10
6	08	304	CHL	CHD-C4C-C3C	-4.45	118.29	124.84
5	1r	306	CLA	CHD-C1D-ND	-4.45	120.36	124.45
5	08	309	CLA	C3D-C4D-ND	4.44	117.43	110.24
6	1r	304	CHL	O2D-CGD-CBD	4.44	119.16	111.27
6	1r	303	CHL	CHD-C4C-C3C	-4.44	118.31	124.84
6	08	303	CHL	C2D-C1D-ND	4.44	113.38	110.10
5	08	307	CLA	C1C-C2C-C3C	-4.44	102.29	106.96
5	05	312	CLA	C4D-CHA-C1A	-4.44	115.85	121.25
5	06	610	CLA	C1C-C2C-C3C	-4.43	102.30	106.96
6	06	604	CHL	CHD-C4C-C3C	-4.43	118.33	124.84
6	1r	302	CHL	C3D-C2D-C1D	-4.42	99.79	105.83
5	1r	313	CLA	C1C-C2C-C3C	-4.42	102.31	106.96
5	1r	309	CLA	CHD-C1D-ND	-4.42	120.39	124.45
5	08	311	CLA	C4D-CHA-C1A	-4.42	115.87	121.25
6	05	305	CHL	C2D-C1D-ND	4.41	113.35	110.10
5	1r	309	CLA	C1C-C2C-C3C	-4.41	102.32	106.96
5	1r	308	CLA	C3D-C4D-ND	4.41	117.37	110.24
5	1r	313	CLA	C3D-C4D-ND	4.40	117.36	110.24
5	08	312	CLA	C3D-C4D-ND	4.40	117.36	110.24
5	07	309	CLA	C1C-C2C-C3C	-4.39	102.34	106.96
5	1r	310	CLA	C3D-C4D-ND	4.39	117.34	110.24
5	05	309	CLA	C1C-C2C-C3C	-4.38	102.35	106.96
5	08	306	CLA	C3D-C4D-ND	4.38	117.33	110.24
6	05	304	CHL	C1C-C2C-C3C	-4.38	103.64	107.11
5	1r	305	CLA	C3D-C4D-ND	4.38	117.32	110.24
6	1r	304	CHL	CHD-C4C-C3C	-4.37	118.41	124.84
5	06	608	CLA	C1C-C2C-C3C	-4.37	102.36	106.96
5	08	310	CLA	CHD-C1D-ND	-4.37	120.44	124.45
6	07	311	CHL	C3B-C4B-NB	4.37	114.57	110.52
6	07	303	CHL	CAA-C2A-C3A	-4.37	105.91	116.10
5	07	310	CLA	C1C-C2C-C3C	-4.37	102.37	106.96
6	1r	312	CHL	CHD-C4C-C3C	-4.36	118.42	124.84
5	06	609	CLA	C3D-C4D-ND	4.36	117.30	110.24
5	1r	307	CLA	C1C-C2C-C3C	-4.36	102.37	106.96
5	07	312	CLA	C1C-C2C-C3C	-4.34	102.39	106.96
5	05	310	CLA	C3D-C4D-ND	4.34	117.25	110.24
5	1r	309	CLA	C4D-CHA-C1A	-4.33	115.97	121.25
5	08	310	CLA	CHC-C4B-NB	-4.33	119.67	124.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1r	311	CLA	C4D-CHA-C1A	-4.33	115.98	121.25
5	06	609	CLA	CHD-C1D-ND	-4.32	120.48	124.45
5	05	302	CLA	C3D-C4D-ND	4.32	117.22	110.24
6	1r	304	CHL	C2D-C1D-ND	4.32	113.28	110.10
6	05	313	CHL	C3B-C4B-NB	4.31	114.52	110.52
6	1r	303	CHL	CAC-C3C-C4C	4.31	130.41	124.81
5	07	302	CLA	C3D-C4D-ND	4.31	117.21	110.24
6	08	305	CHL	CHD-C4C-C3C	-4.31	118.51	124.84
5	07	307	CLA	C3D-C4D-ND	4.31	117.20	110.24
5	05	302	CLA	C1C-C2C-C3C	-4.31	102.43	106.96
5	1r	308	CLA	C1C-C2C-C3C	-4.31	102.43	106.96
5	06	609	CLA	C1C-C2C-C3C	-4.30	102.43	106.96
9	1r	315	XAT	C40-C33-C34	-4.30	116.90	122.92
5	07	308	CLA	CHD-C1D-ND	-4.30	120.50	124.45
6	06	606	CHL	CHD-C4C-C3C	-4.30	118.53	124.84
5	06	607	CLA	C1C-C2C-C3C	-4.29	102.45	106.96
6	08	302	CHL	CHD-C4C-C3C	-4.29	118.54	124.84
5	06	610	CLA	CHD-C1D-ND	-4.28	120.52	124.45
5	1r	305	CLA	C4D-CHA-C1A	-4.28	116.04	121.25
5	1r	311	CLA	C3D-C2D-C1D	-4.27	100.00	105.83
5	05	309	CLA	C3D-C4D-ND	4.27	117.15	110.24
5	08	309	CLA	C4C-C3C-C2C	-4.27	100.68	106.90
6	05	307	CHL	C1D-ND-C4D	-4.26	103.31	106.33
6	08	302	CHL	C2D-C1D-ND	4.25	113.24	110.10
5	1r	301	CLA	CHD-C1D-ND	-4.25	120.55	124.45
5	05	308	CLA	C1C-C2C-C3C	-4.25	102.49	106.96
6	05	315	CHL	CHD-C4C-C3C	-4.25	118.60	124.84
5	07	301	CLA	C1C-C2C-C3C	-4.25	102.49	106.96
6	06	603	CHL	CHD-C4C-C3C	-4.24	118.61	124.84
5	07	307	CLA	CHD-C1D-ND	-4.24	120.56	124.45
6	07	306	CHL	CHD-C4C-C3C	-4.24	118.61	124.84
5	1r	310	CLA	CHD-C1D-ND	-4.24	120.56	124.45
5	08	312	CLA	CHD-C1D-ND	-4.24	120.56	124.45
6	05	304	CHL	C3D-C2D-C1D	-4.23	100.05	105.83
6	07	306	CHL	C2D-C1D-ND	4.23	113.22	110.10
5	1r	306	CLA	C4D-CHA-C1A	-4.23	116.10	121.25
6	06	606	CHL	C2D-C1D-ND	4.23	113.22	110.10
5	05	311	CLA	CHC-C4B-NB	-4.23	119.78	124.26
6	07	304	CHL	CHD-C4C-C3C	-4.23	118.63	124.84
5	1r	307	CLA	C3D-C4D-ND	4.22	117.07	110.24
5	08	306	CLA	CHD-C1D-ND	-4.22	120.58	124.45
6	06	605	CHL	CHD-C4C-C3C	-4.22	118.64	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	07	303	CHL	C2D-C1D-ND	4.21	113.21	110.10
5	1r	311	CLA	C3D-C4D-ND	4.21	117.05	110.24
5	08	312	CLA	C4D-CHA-C1A	-4.21	116.12	121.25
6	05	305	CHL	O2D-CGD-CBD	4.20	118.74	111.27
6	05	306	CHL	C2D-C1D-ND	4.20	113.20	110.10
6	07	305	CHL	CAC-C3C-C4C	4.20	130.26	124.81
5	07	308	CLA	O2D-CGD-CBD	4.20	118.73	111.27
5	06	608	CLA	CHD-C1D-ND	-4.20	120.60	124.45
5	07	310	CLA	C3D-C4D-ND	4.20	117.03	110.24
5	1r	311	CLA	C1C-C2C-C3C	-4.19	102.55	106.96
5	1r	306	CLA	C3D-C2D-C1D	-4.19	100.12	105.83
5	1r	313	CLA	C4D-CHA-C1A	-4.19	116.16	121.25
6	08	301	CHL	C3B-C4B-NB	4.19	114.40	110.52
6	07	311	CHL	CHD-C4C-C3C	-4.18	118.69	124.84
5	08	311	CLA	CHD-C1D-ND	-4.17	120.62	124.45
5	07	308	CLA	C1C-C2C-C3C	-4.17	102.57	106.96
6	06	601	CHL	CHD-C4C-C3C	-4.17	118.71	124.84
5	07	308	CLA	CAC-C3C-C4C	4.17	130.22	124.81
5	08	306	CLA	C3D-C2D-C1D	-4.17	100.15	105.83
5	05	302	CLA	CHC-C4B-NB	-4.16	119.85	124.26
6	1r	312	CHL	C2D-C1D-ND	4.16	113.17	110.10
5	05	301	CLA	C1C-C2C-C3C	-4.16	102.58	106.96
6	07	305	CHL	CHD-C4C-C3C	-4.16	118.73	124.84
6	08	301	CHL	CHD-C4C-C3C	-4.15	118.74	124.84
5	08	311	CLA	C1C-C2C-C3C	-4.15	102.60	106.96
5	1r	309	CLA	O2D-CGD-CBD	4.14	118.63	111.27
6	08	304	CHL	C3B-C4B-NB	4.14	114.36	110.52
9	1r	315	XAT	C26-C27-C28	-4.14	117.24	125.99
6	08	304	CHL	C2D-C1D-ND	4.14	113.15	110.10
6	06	604	CHL	C2D-C1D-ND	4.13	113.15	110.10
5	1r	311	CLA	O2D-CGD-CBD	4.13	118.61	111.27
5	05	309	CLA	C3D-C2D-C1D	-4.13	100.19	105.83
5	06	602	CLA	C3D-C4D-ND	4.13	116.92	110.24
5	05	303	CLA	C1C-C2C-C3C	-4.13	102.61	106.96
6	05	313	CHL	CHD-C4C-C3C	-4.13	118.78	124.84
5	1r	311	CLA	CHD-C1D-ND	-4.13	120.66	124.45
7	07	313	LUT	C19-C9-C10	-4.12	117.15	122.92
5	06	602	CLA	O2D-CGD-CBD	4.12	118.59	111.27
5	05	308	CLA	C4D-CHA-C1A	-4.12	116.24	121.25
6	1r	302	CHL	C3B-C4B-NB	4.11	114.33	110.52
5	06	607	CLA	C3D-C2D-C1D	-4.11	100.22	105.83
5	05	310	CLA	C3D-C2D-C1D	-4.11	100.22	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	07	310	CLA	CHD-C1D-ND	-4.11	120.68	124.45
6	08	303	CHL	C1D-ND-C4D	-4.09	103.43	106.33
5	06	611	CLA	C3D-C2D-C1D	-4.09	100.25	105.83
6	07	305	CHL	C2D-C1D-ND	4.09	113.11	110.10
6	06	605	CHL	C2D-C1D-ND	4.08	113.11	110.10
5	06	609	CLA	C3D-C2D-C1D	-4.08	100.27	105.83
6	06	601	CHL	C2D-C1D-ND	4.08	113.11	110.10
5	05	301	CLA	CHD-C1D-ND	-4.08	120.71	124.45
6	05	313	CHL	C2D-C1D-ND	4.07	113.11	110.10
5	08	308	CLA	CHD-C1D-ND	-4.07	120.71	124.45
5	1r	305	CLA	CHC-C4B-NB	-4.06	119.95	124.26
5	06	611	CLA	CHC-C4B-NB	-4.06	119.96	124.26
5	05	301	CLA	C3D-C2D-C1D	-4.04	100.32	105.83
5	06	602	CLA	C3D-C2D-C1D	-4.04	100.32	105.83
6	08	305	CHL	C2D-C1D-ND	4.04	113.08	110.10
5	08	310	CLA	C3D-C2D-C1D	-4.04	100.32	105.83
6	07	304	CHL	C3B-C4B-NB	4.03	114.25	110.52
6	07	306	CHL	C3B-C4B-NB	4.03	114.25	110.52
6	07	305	CHL	C3B-C4B-NB	4.03	114.25	110.52
6	06	601	CHL	C3B-C4B-NB	4.03	114.25	110.52
5	05	302	CLA	C3D-C2D-C1D	-4.02	100.34	105.83
6	06	603	CHL	C3B-C4B-NB	4.02	114.25	110.52
6	1r	304	CHL	C3B-C4B-NB	4.02	114.25	110.52
5	1r	301	CLA	C4D-CHA-C1A	-4.02	116.35	121.25
6	08	302	CHL	C3B-C4B-NB	4.02	114.25	110.52
5	06	602	CLA	CHC-C4B-NB	-4.02	120.00	124.26
6	06	605	CHL	C3B-C4B-NB	4.02	114.24	110.52
5	08	309	CLA	CHD-C1D-ND	-4.02	120.76	124.45
5	08	307	CLA	C3D-C2D-C1D	-4.02	100.35	105.83
6	07	303	CHL	C3B-C4B-NB	4.02	114.24	110.52
6	07	304	CHL	C2D-C1D-ND	4.02	113.06	110.10
6	08	305	CHL	C3B-C4B-NB	4.01	114.24	110.52
5	06	608	CLA	C3D-C2D-C1D	-4.01	100.35	105.83
5	07	301	CLA	C3D-C2D-C1D	-4.00	100.37	105.83
5	06	610	CLA	C3D-C2D-C1D	-4.00	100.38	105.83
5	1r	310	CLA	C3D-C2D-C1D	-4.00	100.38	105.83
5	05	308	CLA	C3D-C2D-C1D	-4.00	100.38	105.83
5	1r	308	CLA	CHD-C1D-ND	-4.00	120.78	124.45
6	05	306	CHL	C1D-ND-C4D	-3.99	103.50	106.33
6	1r	302	CHL	CHD-C4C-C3C	-3.99	118.97	124.84
5	07	307	CLA	C3D-C2D-C1D	-3.99	100.39	105.83
5	1r	313	CLA	C3D-C2D-C1D	-3.98	100.39	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	07	301	CLA	CHD-C1D-ND	-3.98	120.79	124.45
5	05	310	CLA	CHD-C1D-ND	-3.98	120.80	124.45
5	07	310	CLA	C3D-C2D-C1D	-3.98	100.40	105.83
5	08	310	CLA	C4D-CHA-C1A	-3.98	116.41	121.25
5	06	611	CLA	C4D-CHA-C1A	-3.98	116.41	121.25
5	08	308	CLA	C1C-C2C-C3C	-3.98	102.78	106.96
6	06	606	CHL	C3B-C4B-NB	3.97	114.20	110.52
5	07	312	CLA	C4D-CHA-C1A	-3.97	116.42	121.25
6	06	604	CHL	C3B-C4B-NB	3.97	114.20	110.52
5	1r	307	CLA	C4D-CHA-C1A	-3.96	116.42	121.25
6	06	603	CHL	C2D-C1D-ND	3.96	113.02	110.10
6	07	311	CHL	CMB-C2B-C1B	3.96	131.40	125.37
5	1r	307	CLA	C3D-C2D-C1D	-3.96	100.43	105.83
5	05	309	CLA	CHD-C1D-ND	-3.96	120.82	124.45
6	05	315	CHL	C2D-C1D-ND	3.95	113.02	110.10
5	1r	309	CLA	C3D-C2D-C1D	-3.95	100.45	105.83
5	1r	308	CLA	C3D-C2D-C1D	-3.94	100.45	105.83
5	08	309	CLA	CHC-C1C-C2C	-3.94	115.78	126.73
5	1r	301	CLA	C3D-C2D-C1D	-3.94	100.45	105.83
5	05	303	CLA	C3D-C2D-C1D	-3.94	100.46	105.83
5	06	608	CLA	C4D-CHA-C1A	-3.93	116.46	121.25
5	07	308	CLA	C3D-C2D-C1D	-3.93	100.47	105.83
5	05	309	CLA	C4D-CHA-C1A	-3.93	116.47	121.25
5	08	308	CLA	C3D-C2D-C1D	-3.92	100.48	105.83
5	07	312	CLA	C3D-C2D-C1D	-3.92	100.49	105.83
6	1r	302	CHL	CAC-C3C-C4C	3.91	129.88	124.81
5	06	610	CLA	C4D-CHA-C1A	-3.90	116.50	121.25
5	1r	305	CLA	O2D-CGD-CBD	3.90	118.19	111.27
5	07	308	CLA	C4D-CHA-C1A	-3.89	116.52	121.25
6	05	315	CHL	C3B-C4B-NB	3.89	114.12	110.52
6	1r	312	CHL	C3B-C4B-NB	3.89	114.12	110.52
6	06	604	CHL	C1D-ND-C4D	-3.89	103.58	106.33
6	07	311	CHL	C2D-C1D-ND	3.88	112.97	110.10
6	05	313	CHL	CAC-C3C-C4C	3.88	129.85	124.81
5	08	308	CLA	C4D-CHA-C1A	-3.88	116.53	121.25
6	05	306	CHL	C3B-C4B-NB	3.88	114.11	110.52
6	07	306	CHL	C1D-ND-C4D	-3.88	103.58	106.33
5	05	302	CLA	C1D-CHD-C4C	-3.88	117.69	126.06
5	07	307	CLA	C4D-CHA-C1A	-3.88	116.53	121.25
6	06	605	CHL	C1D-ND-C4D	-3.88	103.58	106.33
6	06	603	CHL	C1D-ND-C4D	-3.88	103.58	106.33
5	1r	308	CLA	C4D-CHA-C1A	-3.86	116.55	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	1r	312	CHL	C1D-ND-C4D	-3.85	103.60	106.33
5	08	307	CLA	C4D-CHA-C1A	-3.85	116.56	121.25
5	08	309	CLA	C4D-CHA-C1A	-3.85	116.57	121.25
6	06	606	CHL	C1D-ND-C4D	-3.85	103.60	106.33
5	05	311	CLA	C1C-C2C-C3C	-3.84	102.92	106.96
5	1r	306	CLA	C1C-C2C-C3C	-3.84	102.92	106.96
5	07	312	CLA	CHD-C1D-ND	-3.84	120.92	124.45
6	1r	304	CHL	C1D-ND-C4D	-3.84	103.61	106.33
5	05	303	CLA	C4D-CHA-C1A	-3.83	116.58	121.25
5	08	311	CLA	CHC-C4B-NB	-3.83	120.20	124.26
6	08	302	CHL	CAA-C2A-C3A	-3.83	107.16	116.10
5	08	311	CLA	C3D-C2D-C1D	-3.83	100.61	105.83
6	05	305	CHL	CAC-C3C-C4C	3.82	129.77	124.81
6	08	302	CHL	C1D-ND-C4D	-3.82	103.62	106.33
5	05	311	CLA	C2D-C1D-ND	3.82	112.92	110.10
6	06	601	CHL	C1D-ND-C4D	-3.81	103.63	106.33
5	07	309	CLA	C4D-CHA-C1A	-3.81	116.61	121.25
6	08	303	CHL	C3B-C4B-NB	3.80	114.04	110.52
5	07	301	CLA	C4D-CHA-C1A	-3.80	116.62	121.25
5	08	312	CLA	C3D-C2D-C1D	-3.80	100.65	105.83
6	05	305	CHL	C1D-ND-C4D	-3.80	103.64	106.33
5	1r	310	CLA	C4D-CHA-C1A	-3.79	116.64	121.25
6	07	303	CHL	C1D-ND-C4D	-3.78	103.65	106.33
5	06	602	CLA	C4D-CHA-C1A	-3.77	116.66	121.25
5	07	309	CLA	C3D-C2D-C1D	-3.77	100.68	105.83
5	06	602	CLA	C1D-CHD-C4C	-3.77	117.93	126.06
5	05	302	CLA	C2D-C1D-ND	3.77	112.88	110.10
6	05	315	CHL	CAC-C3C-C4C	3.77	129.70	124.81
6	1r	302	CHL	C2D-C1D-ND	3.75	112.87	110.10
9	1r	315	XAT	C8-C9-C10	3.75	124.70	118.94
5	06	607	CLA	C4D-CHA-C1A	-3.75	116.68	121.25
6	05	313	CHL	C1D-ND-C4D	-3.75	103.67	106.33
6	08	305	CHL	C1D-ND-C4D	-3.75	103.67	106.33
5	07	309	CLA	CAC-C3C-C4C	3.74	129.66	124.81
6	08	304	CHL	C1D-ND-C4D	-3.74	103.68	106.33
6	05	313	CHL	CAA-C2A-C3A	-3.73	107.39	116.10
5	1r	307	CLA	CHD-C1D-ND	-3.73	121.03	124.45
5	05	302	CLA	C4D-CHA-C1A	-3.73	116.72	121.25
6	08	301	CHL	C2D-C1D-ND	3.72	112.85	110.10
5	08	309	CLA	CHC-C4B-NB	-3.72	120.32	124.26
6	1r	303	CHL	C3B-C4B-NB	3.72	113.97	110.52
5	05	302	CLA	C4A-NA-C1A	3.72	108.38	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	07	307	CLA	CHC-C1C-C2C	-3.71	116.41	126.73
5	1r	301	CLA	C1C-C2C-C3C	-3.71	103.05	106.96
5	06	602	CLA	CHD-C1D-ND	-3.71	121.04	124.45
5	07	302	CLA	C3B-C2B-C1B	-3.71	102.68	107.16
6	1r	302	CHL	C1D-ND-C4D	-3.71	103.70	106.33
5	1r	305	CLA	C3D-C2D-C1D	-3.70	100.78	105.83
5	05	311	CLA	C3D-C2D-C1D	-3.70	100.79	105.83
5	07	302	CLA	CHD-C1D-ND	-3.69	121.06	124.45
5	06	609	CLA	CAC-C3C-C4C	3.68	129.59	124.81
5	08	309	CLA	C3D-C2D-C1D	-3.68	100.81	105.83
5	05	308	CLA	CHB-C4A-NA	3.68	129.60	124.51
6	05	305	CHL	C3B-C4B-NB	3.67	113.92	110.52
5	1r	308	CLA	CHC-C1C-C2C	-3.67	116.54	126.73
9	1r	315	XAT	C31-C32-C33	-3.67	116.12	126.42
6	08	302	CHL	CAC-C3C-C4C	3.66	129.56	124.81
7	1r	314	LUT	C19-C9-C10	-3.66	117.79	122.92
6	06	601	CHL	CAC-C3C-C4C	3.66	129.56	124.81
5	08	306	CLA	C4D-CHA-C1A	-3.66	116.79	121.25
5	05	301	CLA	C4D-CHA-C1A	-3.66	116.79	121.25
5	07	307	CLA	CHB-C1B-NB	-3.66	120.38	124.26
5	05	310	CLA	C4D-CHA-C1A	-3.66	116.80	121.25
5	07	312	CLA	CHC-C4B-NB	-3.65	120.39	124.26
6	05	306	CHL	CAA-C2A-C3A	-3.65	107.59	116.10
5	06	609	CLA	C4D-CHA-C1A	-3.65	116.81	121.25
6	07	305	CHL	CAA-C2A-C3A	-3.64	107.60	116.10
5	08	306	CLA	CHC-C1C-C2C	-3.64	116.61	126.73
6	07	305	CHL	C1D-ND-C4D	-3.64	103.75	106.33
6	07	304	CHL	CAC-C3C-C4C	3.64	129.53	124.81
6	1r	303	CHL	C1D-ND-C4D	-3.64	103.75	106.33
5	05	311	CLA	CHD-C1D-ND	-3.64	121.11	124.45
5	05	302	CLA	CHC-C1C-C2C	-3.63	116.64	126.73
5	05	310	CLA	CHC-C1C-C2C	-3.63	116.66	126.73
5	05	312	CLA	CHB-C4A-NA	3.62	129.51	124.51
6	08	301	CHL	CAA-C2A-C3A	-3.62	107.66	116.10
5	05	312	CLA	CMD-C2D-C3D	-3.61	119.31	127.61
5	08	309	CLA	C3B-C4B-NB	3.61	113.86	110.52
5	05	302	CLA	CHD-C1D-ND	-3.61	121.14	124.45
6	07	304	CHL	C1D-ND-C4D	-3.59	103.78	106.33
7	05	314	LUT	C39-C29-C30	-3.58	117.90	122.92
6	05	315	CHL	C1D-ND-C4D	-3.58	103.79	106.33
6	06	605	CHL	CAC-C3C-C4C	3.58	129.46	124.81
5	07	312	CLA	C1D-CHD-C4C	-3.57	118.35	126.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	08	305	CHL	CAC-C3C-C4C	3.57	129.44	124.81
5	1r	305	CLA	CHB-C4A-NA	3.56	129.43	124.51
6	06	604	CHL	CAA-C2A-C3A	-3.56	107.80	116.10
7	1r	314	LUT	C39-C29-C30	-3.55	117.95	122.92
5	07	312	CLA	CHC-C1C-C2C	-3.55	116.87	126.73
5	1r	310	CLA	CHC-C1C-C2C	-3.55	116.87	126.73
6	08	304	CHL	CAC-C3C-C4C	3.54	129.40	124.81
6	07	311	CHL	CHB-C1B-NB	-3.54	120.51	124.26
5	05	309	CLA	CHC-C1C-C2C	-3.53	116.91	126.73
5	06	602	CLA	CHC-C1C-C2C	-3.53	116.92	126.73
5	06	602	CLA	C2D-C1D-ND	3.53	112.70	110.10
6	1r	303	CHL	O2D-CGD-CBD	3.53	117.53	111.27
6	07	311	CHL	C1D-ND-C4D	-3.53	103.83	106.33
5	08	306	CLA	C1D-CHD-C4C	-3.53	118.45	126.06
5	08	310	CLA	CBD-CHA-C1A	3.52	133.07	127.43
5	07	307	CLA	CAC-C3C-C4C	3.52	129.38	124.81
5	1r	311	CLA	C2D-C1D-ND	3.52	112.70	110.10
6	06	603	CHL	C3D-C4D-ND	3.52	115.93	110.24
5	1r	309	CLA	C3B-C4B-NB	3.51	113.77	110.52
6	07	306	CHL	CAC-C3C-C4C	3.50	129.35	124.81
5	07	309	CLA	CHC-C4B-NB	-3.50	120.55	124.26
5	05	312	CLA	C3D-C2D-C1D	-3.50	101.06	105.83
5	06	609	CLA	CHC-C1C-C2C	-3.49	117.02	126.73
6	08	301	CHL	C1D-ND-C4D	-3.49	103.85	106.33
6	05	304	CHL	CMB-C2B-C1B	3.49	130.69	125.37
5	06	611	CLA	CHC-C1C-C2C	-3.49	117.03	126.73
6	06	604	CHL	CAC-C3C-C4C	3.49	129.34	124.81
5	1r	309	CLA	CHB-C1B-NB	-3.49	120.56	124.26
5	07	309	CLA	CHC-C1C-C2C	-3.49	117.03	126.73
5	06	608	CLA	CHC-C1C-C2C	-3.49	117.03	126.73
5	05	301	CLA	CHC-C4B-NB	-3.49	120.57	124.26
5	07	310	CLA	CHC-C1C-C2C	-3.49	117.05	126.73
5	05	309	CLA	CHC-C4B-NB	-3.48	120.57	124.26
8	07	314	LHG	O7-C7-C8	3.48	119.01	111.50
5	1r	313	CLA	CHB-C4A-NA	3.48	129.33	124.51
5	08	307	CLA	CHC-C1C-C2C	-3.48	117.06	126.73
5	08	312	CLA	CHC-C1C-C2C	-3.47	117.08	126.73
6	07	311	CHL	CAA-C2A-C3A	-3.47	108.00	116.10
5	06	610	CLA	CHC-C1C-C2C	-3.46	117.11	126.73
5	1r	309	CLA	CHC-C1C-C2C	-3.46	117.11	126.73
5	05	311	CLA	C1D-CHD-C4C	-3.46	118.59	126.06
6	1r	302	CHL	C3D-C4D-ND	3.46	115.83	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	08	309	CLA	C1C-C2C-C3C	-3.45	103.33	106.96
5	05	310	CLA	C1D-CHD-C4C	-3.45	118.61	126.06
6	05	307	CHL	C3B-C4B-NB	3.45	113.71	110.52
6	06	603	CHL	CAC-C3C-C4C	3.45	129.28	124.81
5	07	307	CLA	CHC-C4B-NB	-3.45	120.61	124.26
5	1r	310	CLA	CHC-C4B-NB	-3.45	120.61	124.26
5	08	306	CLA	CHB-C1B-NB	-3.44	120.61	124.26
5	05	309	CLA	CHB-C1B-NB	-3.44	120.61	124.26
5	08	310	CLA	CHC-C1C-C2C	-3.44	117.18	126.73
6	1r	304	CHL	CAC-C3C-C4C	3.44	129.27	124.81
7	07	313	LUT	C35-C15-C14	3.43	130.50	123.47
5	1r	313	CLA	CHC-C4B-NB	-3.43	120.62	124.26
5	08	311	CLA	CMA-C3A-C2A	-3.43	108.09	116.10
5	1r	313	CLA	CHC-C1C-C2C	-3.43	117.20	126.73
5	1r	301	CLA	CAC-C3C-C4C	3.43	129.26	124.81
5	1r	305	CLA	CHC-C1C-C2C	-3.43	117.21	126.73
6	06	605	CHL	C3D-C4D-ND	3.43	115.78	110.24
5	05	310	CLA	C2D-C1D-ND	3.43	112.63	110.10
5	07	308	CLA	CHC-C1C-C2C	-3.43	117.22	126.73
6	05	307	CHL	CAA-C2A-C3A	-3.42	108.12	116.10
5	08	306	CLA	C2D-C1D-ND	3.42	112.62	110.10
6	06	601	CHL	C3D-C4D-ND	3.42	115.77	110.24
5	08	306	CLA	CHC-C4B-NB	-3.42	120.64	124.26
6	06	606	CHL	CAC-C3C-C4C	3.42	129.24	124.81
6	1r	312	CHL	C3D-C4D-ND	3.41	115.75	110.24
5	1r	307	CLA	CHC-C1C-C2C	-3.41	117.27	126.73
5	05	303	CLA	CHC-C1C-C2C	-3.40	117.28	126.73
5	1r	308	CLA	C1D-CHD-C4C	-3.40	118.72	126.06
6	07	311	CHL	CAC-C3C-C4C	3.40	129.22	124.81
5	06	609	CLA	CHC-C4B-NB	-3.40	120.66	124.26
6	06	606	CHL	C3D-C4D-ND	3.40	115.73	110.24
5	08	309	CLA	CHB-C1B-NB	-3.39	120.66	124.26
6	07	306	CHL	CAA-C2A-C3A	-3.39	108.19	116.10
5	06	610	CLA	CHC-C4B-NB	-3.39	120.67	124.26
5	1r	301	CLA	C1D-CHD-C4C	-3.38	118.76	126.06
5	1r	313	CLA	C3B-C4B-NB	3.38	113.66	110.52
5	07	302	CLA	C2B-C1B-NB	3.38	112.50	110.23
6	08	305	CHL	CHB-C4A-NA	3.38	129.19	124.51
6	06	604	CHL	C3D-C4D-ND	3.38	115.70	110.24
5	07	310	CLA	CAC-C3C-C4C	3.38	129.19	124.81
6	08	305	CHL	C3D-C4D-ND	3.37	115.69	110.24
6	05	306	CHL	C3D-C4D-ND	3.37	115.69	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	07	303	CHL	CAC-C3C-C4C	3.37	129.18	124.81
5	1r	309	CLA	CHC-C4B-NB	-3.36	120.70	124.26
6	08	304	CHL	C3D-C4D-ND	3.36	115.68	110.24
7	07	313	LUT	C1-C6-C7	3.36	125.29	115.78
5	07	307	CLA	CAA-C2A-C3A	-3.36	108.25	116.10
5	06	609	CLA	C3B-C4B-NB	3.36	113.63	110.52
6	05	307	CHL	C3D-C4D-ND	3.36	115.68	110.24
6	08	304	CHL	CHB-C4A-NA	3.36	129.16	124.51
5	07	309	CLA	CMD-C2D-C3D	-3.36	119.88	127.61
5	05	301	CLA	C1D-CHD-C4C	-3.36	118.81	126.06
5	07	309	CLA	C3B-C4B-NB	3.36	113.63	110.52
5	06	610	CLA	CHB-C1B-NB	-3.36	120.70	124.26
5	05	301	CLA	CAC-C3C-C4C	3.36	129.16	124.81
5	05	309	CLA	C1D-CHD-C4C	-3.36	118.82	126.06
6	07	306	CHL	C3D-C4D-ND	3.35	115.66	110.24
5	1r	309	CLA	C4C-C3C-C2C	-3.35	102.01	106.90
5	06	611	CLA	C2D-C1D-ND	3.35	112.57	110.10
5	08	308	CLA	CAC-C3C-C4C	3.35	129.15	124.81
6	07	304	CHL	CAA-C2A-C3A	-3.34	108.29	116.10
5	1r	307	CLA	C1D-CHD-C4C	-3.34	118.86	126.06
5	08	306	CLA	C3B-C4B-NB	3.34	113.61	110.52
6	08	301	CHL	C3D-C4D-ND	3.34	115.63	110.24
5	05	309	CLA	CAC-C3C-C4C	3.33	129.14	124.81
5	06	602	CLA	CHB-C4A-NA	3.33	129.12	124.51
5	05	311	CLA	C4C-C3C-C2C	-3.33	102.04	106.90
6	1r	312	CHL	CHB-C4A-NA	3.33	129.11	124.51
6	05	313	CHL	C3D-C4D-ND	3.32	115.61	110.24
5	06	607	CLA	CHC-C1C-C2C	-3.32	117.50	126.73
6	07	311	CHL	C3D-C4D-ND	3.32	115.61	110.24
6	08	303	CHL	CHB-C4A-NA	3.32	129.10	124.51
5	1r	305	CLA	CHB-C1B-NB	-3.32	120.74	124.26
5	1r	308	CLA	CHB-C1B-NB	-3.32	120.74	124.26
6	08	303	CHL	C3D-C4D-ND	3.32	115.61	110.24
5	08	311	CLA	CHB-C1B-NB	-3.32	120.75	124.26
6	08	302	CHL	C3D-C4D-ND	3.32	115.60	110.24
5	08	312	CLA	C3B-C4B-NB	3.31	113.59	110.52
5	05	309	CLA	CHB-C4A-NA	3.31	129.09	124.51
5	06	607	CLA	C2D-C1D-ND	3.31	112.54	110.10
7	1r	314	LUT	C39-C29-C28	3.31	123.29	118.08
5	1r	310	CLA	CHB-C1B-NB	-3.31	120.76	124.26
6	1r	304	CHL	CHB-C4A-NA	3.31	129.08	124.51
5	07	309	CLA	CHB-C1B-NB	-3.31	120.76	124.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	07	313	LUT	C20-C13-C14	-3.31	118.29	122.92
5	07	307	CLA	C3B-C4B-NB	3.30	113.58	110.52
5	05	308	CLA	CMA-C3A-C2A	-3.30	108.39	116.10
9	1r	315	XAT	C10-C11-C12	3.30	133.51	123.22
5	07	301	CLA	C1D-CHD-C4C	-3.30	118.95	126.06
5	1r	310	CLA	C3B-C4B-NB	3.30	113.57	110.52
6	05	315	CHL	C3D-C4D-ND	3.29	115.57	110.24
5	1r	306	CLA	CHC-C4B-NB	-3.29	120.77	124.26
6	06	605	CHL	CHB-C4A-NA	3.29	129.06	124.51
6	07	303	CHL	CHB-C4A-NA	3.29	129.06	124.51
5	05	309	CLA	C2D-C1D-ND	3.29	112.53	110.10
5	08	311	CLA	CHC-C1C-C2C	-3.28	117.61	126.73
5	08	308	CLA	C1D-CHD-C4C	-3.28	118.98	126.06
6	06	601	CHL	CHB-C4A-NA	3.28	129.05	124.51
6	07	304	CHL	C3D-C4D-ND	3.28	115.54	110.24
6	07	305	CHL	C3D-C4D-ND	3.27	115.53	110.24
5	05	302	CLA	CHB-C4A-NA	3.27	129.04	124.51
5	1r	310	CLA	C1D-CHD-C4C	-3.27	119.00	126.06
6	08	304	CHL	CHB-C1B-NB	-3.27	120.79	124.26
5	1r	308	CLA	C3B-C4B-NB	3.27	113.55	110.52
5	1r	313	CLA	CHB-C1B-NB	-3.27	120.80	124.26
6	07	311	CHL	CHB-C4A-NA	3.27	129.03	124.51
6	08	302	CHL	CHB-C4A-NA	3.27	129.03	124.51
5	07	302	CLA	CAC-C3C-C4C	3.26	129.04	124.81
5	06	609	CLA	CHB-C1B-NB	-3.26	120.81	124.26
5	07	312	CLA	C2D-C1D-ND	3.26	112.50	110.10
5	08	311	CLA	C4C-C3C-C2C	-3.26	102.15	106.90
5	1r	305	CLA	CHD-C1D-ND	-3.25	121.46	124.45
5	1r	308	CLA	C4C-C3C-C2C	-3.25	102.16	106.90
5	07	309	CLA	CHB-C4A-NA	3.25	129.01	124.51
5	07	308	CLA	C2D-C1D-ND	3.25	112.50	110.10
5	1r	307	CLA	CHC-C4B-NB	-3.25	120.82	124.26
5	06	610	CLA	C1D-CHD-C4C	-3.25	119.05	126.06
5	06	607	CLA	CHC-C4B-NB	-3.25	120.82	124.26
5	07	301	CLA	CAC-C3C-C4C	3.25	129.02	124.81
6	05	313	CHL	CHB-C4A-NA	3.25	129.00	124.51
6	1r	303	CHL	CHB-C4A-NA	3.25	129.00	124.51
6	07	303	CHL	C3D-C4D-ND	3.24	115.49	110.24
5	05	302	CLA	CHB-C1B-NB	-3.24	120.82	124.26
5	08	306	CLA	CAC-C3C-C4C	3.24	129.01	124.81
5	1r	311	CLA	CHC-C1C-C2C	-3.24	117.74	126.73
5	06	608	CLA	CAC-C3C-C4C	3.23	129.01	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	05	310	CLA	C3B-C4B-NB	3.23	113.52	110.52
6	05	313	CHL	CHB-C1B-NB	-3.23	120.83	124.26
5	05	312	CLA	CAA-C2A-C3A	-3.23	108.56	116.10
6	1r	304	CHL	CHB-C1B-NB	-3.23	120.84	124.26
5	08	310	CLA	C2D-C1D-ND	3.23	112.48	110.10
5	1r	301	CLA	C4C-C3C-C2C	-3.23	102.19	106.90
5	05	311	CLA	CHC-C1C-C2C	-3.23	117.76	126.73
5	05	311	CLA	CAC-C3C-C4C	3.23	129.00	124.81
5	07	301	CLA	C2D-C1D-ND	3.23	112.48	110.10
5	06	608	CLA	CHC-C4B-NB	-3.23	120.84	124.26
5	06	607	CLA	C1D-CHD-C4C	-3.22	119.11	126.06
5	05	303	CLA	CAC-C3C-C4C	3.22	128.99	124.81
5	1r	305	CLA	C4-C3-C5	3.22	120.69	115.27
5	06	609	CLA	C1D-CHD-C4C	-3.22	119.12	126.06
5	08	311	CLA	C1D-CHD-C4C	-3.22	119.12	126.06
5	06	609	CLA	C2D-C1D-ND	3.21	112.47	110.10
5	1r	305	CLA	C1D-CHD-C4C	-3.21	119.14	126.06
5	06	610	CLA	C3B-C4B-NB	3.21	113.49	110.52
6	05	305	CHL	C3D-C4D-ND	3.21	115.43	110.24
5	07	301	CLA	CHC-C1C-C2C	-3.21	117.82	126.73
5	07	312	CLA	CHB-C1B-NB	-3.21	120.86	124.26
6	07	305	CHL	CHB-C4A-NA	3.21	128.94	124.51
5	05	309	CLA	C3B-C4B-NB	3.20	113.49	110.52
5	08	307	CLA	C3B-C4B-NB	3.20	113.49	110.52
5	1r	311	CLA	C1D-CHD-C4C	-3.20	119.15	126.06
5	07	308	CLA	CHB-C1B-NB	-3.20	120.87	124.26
5	05	309	CLA	CAA-C2A-C3A	-3.20	108.62	116.10
6	07	303	CHL	CHB-C1B-NB	-3.20	120.87	124.26
5	05	311	CLA	CHB-C1B-NB	-3.20	120.87	124.26
5	07	308	CLA	C3B-C4B-NB	3.20	113.48	110.52
5	06	608	CLA	C1D-CHD-C4C	-3.20	119.16	126.06
5	1r	307	CLA	C4C-C3C-C2C	-3.20	102.24	106.90
7	07	313	LUT	C40-C33-C34	-3.19	118.45	122.92
5	08	310	CLA	C1D-CHD-C4C	-3.19	119.17	126.06
5	05	311	CLA	CHB-C4A-NA	3.19	128.93	124.51
5	06	608	CLA	CHB-C1B-NB	-3.19	120.88	124.26
5	05	312	CLA	CHC-C1C-C2C	-3.19	117.87	126.73
5	08	307	CLA	CHC-C4B-NB	-3.19	120.88	124.26
5	05	312	CLA	C2A-C1A-CHA	-3.19	118.29	123.85
5	07	307	CLA	C1D-CHD-C4C	-3.19	119.19	126.06
5	1r	301	CLA	C2D-C1D-ND	3.18	112.45	110.10
6	05	306	CHL	CAC-C3C-C4C	3.18	128.94	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	07	311	CHL	C1C-C2C-C3C	-3.18	104.59	107.11
5	07	302	CLA	C4C-C3C-C2C	-3.18	102.26	106.90
5	06	610	CLA	C2D-C1D-ND	3.18	112.45	110.10
5	05	301	CLA	C2D-C1D-ND	3.18	112.45	110.10
5	08	306	CLA	CHB-C4A-NA	3.18	128.91	124.51
5	1r	313	CLA	C4C-C3C-C2C	-3.18	102.27	106.90
5	06	607	CLA	C4C-C3C-C2C	-3.17	102.28	106.90
5	07	308	CLA	CMC-C2C-C1C	3.17	129.87	125.04
6	08	305	CHL	CHB-C1B-NB	-3.17	120.91	124.26
6	1r	304	CHL	C3D-C4D-ND	3.17	115.36	110.24
5	07	310	CLA	CHB-C4A-NA	3.16	128.89	124.51
6	05	305	CHL	C4-C3-C5	3.16	120.59	115.27
6	08	303	CHL	CAC-C3C-C4C	3.16	128.91	124.81
5	1r	307	CLA	CHB-C4A-NA	3.16	128.88	124.51
5	05	310	CLA	CHB-C1B-NB	-3.16	120.91	124.26
5	05	310	CLA	CHB-C4A-NA	3.16	128.88	124.51
5	08	308	CLA	CHB-C4A-NA	3.16	128.88	124.51
5	07	312	CLA	CAC-C3C-C4C	3.16	128.91	124.81
6	05	305	CHL	CHB-C4A-NA	3.16	128.88	124.51
5	06	611	CLA	C4C-C3C-C2C	-3.15	102.30	106.90
5	1r	308	CLA	CHB-C4A-NA	3.15	128.87	124.51
5	07	310	CLA	CMB-C2B-C1B	3.15	130.17	125.37
6	05	315	CHL	CHB-C4A-NA	3.15	128.87	124.51
5	05	301	CLA	CHB-C4A-NA	3.15	128.87	124.51
6	1r	312	CHL	CAC-C3C-C4C	3.15	128.90	124.81
5	07	310	CLA	CHB-C1B-NB	-3.15	120.92	124.26
5	1r	309	CLA	C2D-C1D-ND	3.15	112.42	110.10
6	07	306	CHL	CHB-C4A-NA	3.15	128.86	124.51
5	08	309	CLA	CHB-C4A-NA	3.15	128.86	124.51
5	07	301	CLA	C4C-C3C-C2C	-3.14	102.31	106.90
6	07	304	CHL	CHB-C4A-NA	3.14	128.86	124.51
5	1r	311	CLA	C4C-C3C-C2C	-3.14	102.32	106.90
5	1r	311	CLA	CMB-C2B-C1B	3.14	130.15	125.37
6	06	606	CHL	CHB-C4A-NA	3.14	128.85	124.51
5	1r	301	CLA	CHC-C1C-C2C	-3.14	118.01	126.73
5	1r	306	CLA	C1D-CHD-C4C	-3.14	119.29	126.06
7	05	314	LUT	C40-C33-C34	-3.14	118.53	122.92
5	1r	305	CLA	C4C-C3C-C2C	-3.14	102.33	106.90
5	05	310	CLA	CHC-C4B-NB	-3.14	120.94	124.26
5	1r	310	CLA	CHB-C4A-NA	3.14	128.85	124.51
5	07	308	CLA	CMB-C2B-C1B	3.13	130.14	125.37
5	07	307	CLA	C2D-C1D-ND	3.13	112.41	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	05	308	CLA	CMC-C2C-C1C	3.13	129.81	125.04
5	05	311	CLA	CMD-C2D-C3D	-3.13	120.41	127.61
5	05	301	CLA	C4C-C3C-C2C	-3.13	102.33	106.90
5	05	312	CLA	C4A-NA-C1A	-3.13	105.30	106.71
6	07	306	CHL	CHB-C1B-NB	-3.13	120.94	124.26
5	08	309	CLA	CMD-C2D-C3D	-3.13	120.42	127.61
5	08	310	CLA	C4C-C3C-C2C	-3.13	102.34	106.90
5	08	308	CLA	CMC-C2C-C1C	3.12	129.80	125.04
5	05	303	CLA	C4C-C3C-C2C	-3.12	102.34	106.90
5	1r	308	CLA	CHC-C4B-NB	-3.12	120.95	124.26
5	1r	305	CLA	C2D-C1D-ND	3.12	112.41	110.10
5	08	312	CLA	CHB-C4A-NA	3.12	128.83	124.51
5	08	311	CLA	CHB-C4A-NA	3.12	128.83	124.51
5	07	310	CLA	C3B-C4B-NB	3.12	113.41	110.52
5	07	307	CLA	CHB-C4A-NA	3.12	128.82	124.51
7	07	313	LUT	C15-C35-C34	3.12	129.86	123.47
9	1r	315	XAT	C32-C33-C34	3.11	123.72	118.94
5	06	602	CLA	CHB-C1B-NB	-3.11	120.96	124.26
5	08	308	CLA	C4C-C3C-C2C	-3.11	102.36	106.90
5	1r	306	CLA	C4C-C3C-C2C	-3.11	102.37	106.90
5	1r	308	CLA	CAC-C3C-C4C	3.11	128.84	124.81
5	1r	307	CLA	CHB-C1B-NB	-3.11	120.97	124.26
6	07	304	CHL	CHB-C1B-NB	-3.11	120.97	124.26
6	05	315	CHL	CAA-C2A-C3A	-3.10	108.85	116.10
5	07	312	CLA	C3B-C4B-NB	3.10	113.39	110.52
5	05	309	CLA	C4C-C3C-C2C	-3.10	102.38	106.90
6	05	306	CHL	CHB-C4A-NA	3.10	128.80	124.51
5	1r	301	CLA	CMA-C3A-C2A	-3.10	108.86	116.10
5	05	310	CLA	C4C-C3C-C2C	-3.10	102.38	106.90
5	1r	306	CLA	CHB-C4A-NA	3.10	128.79	124.51
5	1r	305	CLA	C3B-C4B-NB	3.10	113.39	110.52
5	1r	306	CLA	C2D-C1D-ND	3.09	112.38	110.10
5	1r	306	CLA	CAC-C3C-C4C	3.09	128.82	124.81
5	07	301	CLA	CHB-C4A-NA	3.09	128.78	124.51
6	08	302	CHL	CHB-C1B-NB	-3.09	120.99	124.26
5	05	301	CLA	CMC-C2C-C1C	3.09	129.74	125.04
5	07	301	CLA	CHB-C1B-NB	-3.09	120.99	124.26
5	1r	309	CLA	CMB-C2B-C1B	3.09	130.07	125.37
5	08	307	CLA	C4C-C3C-C2C	-3.08	102.40	106.90
5	08	307	CLA	CAC-C3C-C4C	3.08	128.81	124.81
9	1r	315	XAT	C35-C15-C14	3.08	129.79	123.47
5	07	308	CLA	C4C-C3C-C2C	-3.08	102.41	106.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	06	609	CLA	C4C-C3C-C2C	-3.08	102.41	106.90
5	08	310	CLA	C3B-C4B-NB	3.08	113.37	110.52
5	1r	310	CLA	C2D-C1D-ND	3.08	112.37	110.10
7	1r	314	LUT	C20-C13-C14	-3.08	118.61	122.92
5	08	307	CLA	C1D-CHD-C4C	-3.07	119.43	126.06
6	06	601	CHL	CHB-C1B-NB	-3.07	121.00	124.26
5	06	611	CLA	CHB-C1B-NB	-3.07	121.00	124.26
5	06	608	CLA	C4C-C3C-C2C	-3.07	102.42	106.90
5	08	307	CLA	CMB-C2B-C1B	3.07	130.05	125.37
5	07	310	CLA	C4C-C3C-C2C	-3.07	102.42	106.90
5	07	308	CLA	C1D-CHD-C4C	-3.07	119.43	126.06
6	06	606	CHL	CHB-C1B-NB	-3.07	121.01	124.26
5	08	307	CLA	C2D-C1D-ND	3.07	112.36	110.10
5	05	310	CLA	CAC-C3C-C4C	3.06	128.78	124.81
5	05	308	CLA	CAC-C3C-C4C	3.06	128.78	124.81
5	1r	306	CLA	O2A-CGA-CBA	3.06	121.52	111.91
5	06	609	CLA	CHB-C4A-NA	3.06	128.75	124.51
5	07	312	CLA	C4C-C3C-C2C	-3.06	102.44	106.90
5	06	608	CLA	C2D-C1D-ND	3.06	112.36	110.10
5	05	308	CLA	CHC-C4B-NB	-3.06	121.02	124.26
5	05	301	CLA	CHC-C1C-C2C	-3.06	118.23	126.73
5	06	602	CLA	C4-C3-C5	3.06	120.42	115.27
6	07	305	CHL	CHB-C1B-NB	-3.06	121.02	124.26
6	1r	303	CHL	CED-O2D-CGD	3.06	122.85	115.94
5	07	308	CLA	CHC-C4B-NB	-3.06	121.02	124.26
5	08	311	CLA	C2D-C1D-ND	3.05	112.35	110.10
5	08	312	CLA	O2D-CGD-O1D	-3.05	117.87	123.84
5	06	608	CLA	CHB-C4A-NA	3.05	128.73	124.51
5	06	611	CLA	CAC-C3C-C4C	3.05	128.76	124.81
6	1r	302	CHL	C1C-C2C-C3C	-3.05	104.69	107.11
6	1r	303	CHL	CHB-C1B-NB	-3.05	121.03	124.26
5	05	308	CLA	CHC-C1C-C2C	-3.05	118.27	126.73
5	1r	309	CLA	CHB-C4A-NA	3.04	128.72	124.51
6	1r	302	CHL	CHB-C4A-NA	3.04	128.72	124.51
6	06	604	CHL	CHB-C4A-NA	3.04	128.72	124.51
5	08	308	CLA	C2D-C1D-ND	3.04	112.34	110.10
5	06	611	CLA	C3B-C4B-NB	3.04	113.34	110.52
5	06	610	CLA	C4C-C3C-C2C	-3.04	102.47	106.90
5	08	312	CLA	CMD-C2D-C3D	-3.03	120.64	127.61
5	08	308	CLA	CHB-C1B-NB	-3.03	121.05	124.26
5	07	307	CLA	CMB-C2B-C1B	3.03	129.98	125.37
6	08	303	CHL	CHB-C1B-NB	-3.03	121.05	124.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	06	611	CLA	CHB-C4A-NA	3.03	128.70	124.51
5	1r	313	CLA	C2D-C1D-ND	3.02	112.33	110.10
5	07	307	CLA	C4C-C3C-C2C	-3.02	102.49	106.90
6	05	304	CHL	CHD-C4C-C3C	-3.02	120.40	124.84
5	07	310	CLA	O2D-CGD-O1D	-3.02	117.23	124.09
5	05	311	CLA	C2A-C1A-CHA	-3.02	118.58	123.85
6	05	306	CHL	CMD-C2D-C3D	-3.02	120.66	127.61
5	1r	311	CLA	CHC-C4B-NB	-3.02	121.06	124.26
5	06	610	CLA	CHB-C4A-NA	3.02	128.69	124.51
5	07	310	CLA	C1D-CHD-C4C	-3.02	119.54	126.06
6	06	605	CHL	CHB-C1B-NB	-3.02	121.06	124.26
5	06	608	CLA	C3B-C4B-NB	3.02	113.31	110.52
5	07	308	CLA	CAA-C2A-C3A	-3.02	109.06	116.10
5	1r	310	CLA	C4C-C3C-C2C	-3.01	102.50	106.90
5	1r	307	CLA	C2D-C1D-ND	3.01	112.32	110.10
5	06	602	CLA	CMD-C2D-C3D	-3.01	120.69	127.61
5	08	310	CLA	CMD-C2D-C3D	-3.01	120.69	127.61
6	08	301	CHL	CAC-C3C-C4C	3.01	128.71	124.81
5	08	307	CLA	CHB-C1B-NB	-3.01	121.07	124.26
5	08	310	CLA	CHB-C4A-NA	3.01	128.67	124.51
6	05	307	CHL	CHB-C4A-NA	3.01	128.67	124.51
5	08	306	CLA	C4C-C3C-C2C	-3.01	102.52	106.90
5	1r	307	CLA	C3B-C4B-NB	3.01	113.30	110.52
5	1r	301	CLA	CMD-C2D-C3D	-3.00	120.71	127.61
5	1r	301	CLA	CHC-C4B-NB	-3.00	121.08	124.26
5	06	611	CLA	C1D-CHD-C4C	-2.99	119.60	126.06
7	1r	314	LUT	C40-C33-C34	-2.99	118.73	122.92
5	07	312	CLA	CHB-C4A-NA	2.99	128.65	124.51
6	06	603	CHL	CHB-C1B-NB	-2.99	121.09	124.26
5	08	311	CLA	C2A-C1A-CHA	-2.99	118.64	123.85
6	05	315	CHL	CHB-C1B-NB	-2.98	121.10	124.26
6	1r	303	CHL	C3D-C4D-ND	2.98	115.06	110.24
5	05	302	CLA	CAC-C3C-C4C	2.98	128.68	124.81
9	1r	315	XAT	C20-C13-C14	-2.98	118.75	122.92
5	07	308	CLA	CMD-C2D-C3D	-2.98	120.76	127.61
6	06	604	CHL	CHB-C1B-NB	-2.98	121.10	124.26
6	05	306	CHL	CHB-C1B-NB	-2.98	121.10	124.26
5	07	309	CLA	C1D-CHD-C4C	-2.98	119.63	126.06
5	1r	311	CLA	CHB-C4A-NA	2.98	128.63	124.51
5	1r	313	CLA	CMD-C2D-C3D	-2.98	120.76	127.61
5	06	607	CLA	C3B-C4B-NB	2.98	113.28	110.52
5	1r	308	CLA	C2D-C1D-ND	2.98	112.30	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	06	603	CHL	CHB-C4A-NA	2.98	128.63	124.51
5	05	302	CLA	CMD-C2D-C3D	-2.97	120.78	127.61
6	05	305	CHL	CHB-C1B-NB	-2.97	121.11	124.26
5	08	308	CLA	CHC-C1C-C2C	-2.97	118.47	126.73
5	05	303	CLA	CMD-C2D-C3D	-2.97	120.78	127.61
5	05	308	CLA	C1D-CHD-C4C	-2.97	119.65	126.06
7	07	313	LUT	C1-C6-C5	-2.97	118.43	122.61
5	07	308	CLA	CHB-C4A-NA	2.97	128.62	124.51
5	07	310	CLA	CHC-C4B-NB	-2.97	121.12	124.26
7	07	313	LUT	C32-C33-C34	2.96	123.49	118.94
5	06	608	CLA	CMD-C2D-C3D	-2.96	120.80	127.61
5	07	309	CLA	C4C-C3C-C2C	-2.96	102.58	106.90
5	05	302	CLA	C4C-C3C-C2C	-2.96	102.58	106.90
6	1r	302	CHL	CMD-C2D-C3D	-2.96	120.81	127.61
5	08	307	CLA	CHB-C4A-NA	2.96	128.60	124.51
6	08	304	CHL	CMA-C3A-C2A	-2.96	109.20	116.10
5	08	310	CLA	CHB-C1B-NB	-2.95	121.13	124.26
7	05	314	LUT	C39-C29-C28	2.95	122.73	118.08
5	06	602	CLA	C4C-C3C-C2C	-2.95	102.59	106.90
5	06	610	CLA	CMD-C2D-C3D	-2.95	120.83	127.61
5	08	307	CLA	CMD-C2D-C3D	-2.95	120.84	127.61
5	06	610	CLA	CAC-C3C-C4C	2.94	128.63	124.81
5	07	302	CLA	C4D-CHA-C1A	-2.94	117.67	121.25
5	06	609	CLA	CMD-C2D-C3D	-2.94	120.85	127.61
6	05	304	CHL	C3B-C2B-C1B	-2.94	103.61	107.16
6	1r	302	CHL	CMB-C2B-C1B	2.94	129.84	125.37
5	1r	308	CLA	CMD-C2D-C3D	-2.93	120.87	127.61
5	06	607	CLA	CHB-C4A-NA	2.93	128.56	124.51
5	07	312	CLA	CMD-C2D-C3D	-2.93	120.88	127.61
5	05	308	CLA	C2D-C1D-ND	2.93	112.26	110.10
5	05	312	CLA	C3B-C4B-NB	2.93	113.23	110.52
5	08	312	CLA	CHB-C1B-NB	-2.93	121.16	124.26
5	08	309	CLA	C1D-CHD-C4C	-2.92	119.75	126.06
6	1r	312	CHL	CHB-C1B-NB	-2.92	121.17	124.26
5	08	311	CLA	CMD-C2D-C3D	-2.92	120.90	127.61
5	06	611	CLA	CMD-C2D-C3D	-2.92	120.91	127.61
6	1r	302	CHL	CHB-C1B-NB	-2.92	121.17	124.26
5	1r	306	CLA	CHC-C1C-C2C	-2.91	118.65	126.73
5	07	307	CLA	CMD-C2D-C3D	-2.91	120.93	127.61
6	05	315	CHL	CMB-C2B-C1B	2.90	129.79	125.37
6	08	304	CHL	CAA-C2A-C3A	-2.90	109.32	116.10
6	1r	304	CHL	CMB-C2B-C1B	2.90	129.79	125.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	08	301	CHL	C1C-C2C-C3C	-2.90	104.81	107.11
6	07	305	CHL	CBD-CHA-C1A	2.90	132.07	127.43
6	05	313	CHL	CMB-C2B-C1B	2.90	129.79	125.37
5	1r	309	CLA	C1D-CHD-C4C	-2.90	119.80	126.06
5	06	607	CLA	CMD-C2D-C3D	-2.90	120.94	127.61
5	1r	309	CLA	CMD-C2D-C3D	-2.90	120.95	127.61
5	1r	305	CLA	C1-C2-C3	-2.90	121.03	126.04
6	05	305	CHL	O2A-CGA-CBA	2.90	121.00	111.91
5	06	607	CLA	CHB-C1B-NB	-2.90	121.19	124.26
5	08	312	CLA	C1D-CHD-C4C	-2.90	119.81	126.06
5	05	308	CLA	CMD-C2D-C3D	-2.89	120.96	127.61
5	1r	311	CLA	CAC-C3C-C4C	2.89	128.56	124.81
5	05	308	CLA	CHB-C1B-NB	-2.89	121.20	124.26
5	1r	309	CLA	O2A-CGA-CBA	2.89	120.98	111.91
5	08	306	CLA	CMD-C2D-C3D	-2.89	120.96	127.61
6	07	303	CHL	C1C-C2C-C3C	-2.89	104.82	107.11
5	05	303	CLA	CHB-C4A-NA	2.89	128.51	124.51
5	08	311	CLA	C3B-C4B-NB	2.89	113.19	110.52
5	05	309	CLA	CMD-C2D-C3D	-2.89	120.97	127.61
6	05	306	CHL	C1C-C2C-C3C	-2.88	104.83	107.11
6	06	605	CHL	CMB-C2B-C1B	2.88	129.76	125.37
5	05	311	CLA	CAA-C2A-C1A	-2.88	104.69	111.81
5	08	308	CLA	CHC-C4B-NB	-2.88	121.21	124.26
6	05	307	CHL	C1C-C2C-C3C	-2.88	104.83	107.11
5	1r	306	CLA	CMD-C2D-C3D	-2.88	120.99	127.61
5	05	303	CLA	C3B-C4B-NB	2.88	113.18	110.52
5	1r	308	CLA	CMB-C2B-C1B	2.87	129.75	125.37
6	05	305	CHL	CMB-C2B-C1B	2.87	129.75	125.37
6	07	306	CHL	CMB-C2B-C1B	2.87	129.75	125.37
6	06	606	CHL	CMB-C2B-C1B	2.87	129.74	125.37
6	1r	303	CHL	CMB-C2B-C1B	2.87	129.74	125.37
5	1r	307	CLA	CAC-C3C-C4C	2.87	128.53	124.81
9	1r	315	XAT	C24-C23-C22	-2.87	105.23	110.77
5	08	308	CLA	CMB-C2B-C1B	2.87	129.74	125.37
5	1r	309	CLA	C6-C5-C3	-2.87	109.93	114.62
5	05	303	CLA	CHC-C4B-NB	-2.86	121.22	124.26
5	08	309	CLA	CMB-C2B-C1B	2.86	129.73	125.37
5	05	312	CLA	CMB-C2B-C1B	2.86	129.73	125.37
5	05	303	CLA	C1D-CHD-C4C	-2.86	119.89	126.06
5	08	310	CLA	CAC-C3C-C4C	2.86	128.52	124.81
6	08	303	CHL	CMB-C2B-C1B	2.86	129.72	125.37
9	1r	315	XAT	C12-C13-C14	2.85	123.32	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1r	307	CLA	O2D-CGD-O1D	-2.85	118.26	123.84
7	07	313	LUT	C12-C13-C14	2.85	123.32	118.94
5	06	608	CLA	CMB-C2B-C1B	2.85	129.71	125.37
6	07	303	CHL	CMB-C2B-C1B	2.85	129.71	125.37
5	1r	301	CLA	CMC-C2C-C1C	2.84	129.37	125.04
6	08	304	CHL	CMB-C2B-C1B	2.84	129.70	125.37
5	07	301	CLA	CMB-C2B-C1B	2.84	129.70	125.37
5	1r	311	CLA	CMD-C2D-C3D	-2.84	121.08	127.61
5	07	310	CLA	C2D-C1D-ND	2.84	112.20	110.10
5	07	310	CLA	CMD-C2D-C3D	-2.84	121.08	127.61
6	08	302	CHL	CMB-C2B-C1B	2.84	129.69	125.37
5	06	609	CLA	CMB-C2B-C1B	2.84	129.69	125.37
6	07	304	CHL	CMB-C2B-C1B	2.84	129.69	125.37
5	05	308	CLA	C4C-C3C-C2C	-2.83	102.78	106.90
5	1r	310	CLA	CMD-C2D-C3D	-2.83	121.11	127.61
6	06	606	CHL	C1C-C2C-C3C	-2.83	104.87	107.11
5	1r	305	CLA	CAC-C3C-C4C	2.82	128.47	124.81
5	05	309	CLA	CMB-C2B-C1B	2.82	129.67	125.37
5	1r	310	CLA	CAC-C3C-C4C	2.82	128.47	124.81
6	08	305	CHL	C1C-C2C-C3C	-2.82	104.88	107.11
6	05	304	CHL	C3D-C4D-ND	2.82	114.79	110.24
5	05	308	CLA	C3B-C4B-NB	2.82	113.13	110.52
6	06	604	CHL	CMB-C2B-C1B	2.81	129.65	125.37
6	07	305	CHL	CMB-C2B-C1B	2.81	129.65	125.37
6	05	306	CHL	CMB-C2B-C1B	2.81	129.65	125.37
6	08	305	CHL	CMB-C2B-C1B	2.81	129.65	125.37
6	06	604	CHL	CMD-C2D-C3D	-2.81	121.15	127.61
5	06	602	CLA	CMB-C2B-C1B	2.81	129.65	125.37
6	06	605	CHL	CMD-C2D-C3D	-2.81	121.16	127.61
5	08	306	CLA	CMB-C2B-C1B	2.81	129.64	125.37
5	06	607	CLA	CAC-C3C-C4C	2.81	128.45	124.81
7	05	314	LUT	C31-C30-C29	2.80	131.31	127.31
5	05	312	CLA	CHB-C1B-NB	-2.80	121.29	124.26
5	08	312	CLA	C4C-C3C-C2C	-2.80	102.81	106.90
5	08	312	CLA	CAC-C3C-C4C	2.80	128.44	124.81
6	08	301	CHL	CHB-C4A-NA	2.80	128.38	124.51
6	08	302	CHL	CMD-C2D-C3D	-2.80	121.18	127.61
6	08	301	CHL	CMD-C2D-C3D	-2.80	121.18	127.61
6	07	306	CHL	CMD-C2D-C3D	-2.79	121.19	127.61
6	05	315	CHL	CMD-C2D-C3D	-2.79	121.20	127.61
6	06	603	CHL	CMB-C2B-C1B	2.78	129.61	125.37
6	05	304	CHL	CMD-C2D-C3D	-2.78	121.22	127.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	08	310	CLA	CAA-C2A-C3A	-2.78	109.61	116.10
6	06	603	CHL	CMD-C2D-C3D	-2.78	121.22	127.61
5	05	303	CLA	CMB-C2B-C1B	2.78	129.60	125.37
9	1r	315	XAT	C4-C3-C2	-2.77	105.42	110.77
6	07	304	CHL	CMD-C2D-C3D	-2.77	121.23	127.61
5	07	302	CLA	O2D-CGD-O1D	-2.77	117.79	124.09
6	08	302	CHL	C1C-C2C-C3C	-2.77	104.92	107.11
8	1r	316	LHG	O7-C7-C8	2.77	117.47	111.50
5	08	309	CLA	CAC-C3C-C4C	2.77	128.40	124.81
6	06	601	CHL	CMD-C2D-C3D	-2.77	121.24	127.61
5	05	310	CLA	C4A-NA-C1A	2.77	107.95	106.71
5	06	610	CLA	CMB-C2B-C1B	2.76	129.58	125.37
5	07	312	CLA	O2D-CGD-O1D	-2.76	117.83	124.09
5	05	312	CLA	CHC-C4B-NB	-2.76	121.34	124.26
5	05	301	CLA	CMD-C2D-C3D	-2.75	121.28	127.61
6	05	304	CHL	C2D-C1D-ND	2.75	112.13	110.10
5	1r	313	CLA	C1D-CHD-C4C	-2.75	120.12	126.06
5	1r	311	CLA	CHB-C1B-NB	-2.75	121.35	124.26
6	07	305	CHL	CMD-C2D-C3D	-2.75	121.29	127.61
6	05	315	CHL	C1C-C2C-C3C	-2.75	104.93	107.11
6	06	601	CHL	CMB-C2B-C1B	2.75	129.56	125.37
5	06	602	CLA	O2A-CGA-CBA	2.75	120.53	111.91
5	1r	306	CLA	CMC-C2C-C1C	2.75	129.22	125.04
5	1r	310	CLA	CMB-C2B-C1B	2.74	129.55	125.37
5	1r	311	CLA	CMC-C2C-C1C	2.74	129.22	125.04
5	07	301	CLA	CAA-C2A-C3A	-2.74	109.70	116.10
5	08	307	CLA	CAA-C2A-C3A	-2.74	109.70	116.10
6	05	313	CHL	CMD-C2D-C3D	-2.74	121.31	127.61
6	07	304	CHL	C1C-C2C-C3C	-2.74	104.94	107.11
5	1r	301	CLA	C3B-C4B-NB	2.73	113.05	110.52
6	06	601	CHL	C1C-C2C-C3C	-2.73	104.95	107.11
5	07	301	CLA	CMC-C2C-C1C	2.73	129.20	125.04
5	05	301	CLA	CHB-C1B-NB	-2.73	121.37	124.26
6	06	603	CHL	C3A-C4A-CHB	-2.73	116.83	124.01
6	07	303	CHL	CMD-C2D-C3D	-2.72	121.35	127.61
5	07	302	CLA	CMB-C2B-C1B	2.72	129.51	125.37
7	05	314	LUT	C20-C13-C14	-2.72	119.11	122.92
5	06	607	CLA	CMA-C3A-C2A	-2.72	109.75	116.10
5	06	611	CLA	CMB-C2B-C1B	2.71	129.50	125.37
5	05	303	CLA	C2D-C1D-ND	2.71	112.10	110.10
5	06	609	CLA	CMC-C2C-C1C	2.71	129.16	125.04
6	08	305	CHL	CMD-C2D-C3D	-2.71	121.39	127.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	08	309	CLA	CAA-C2A-C3A	-2.71	109.78	116.10
5	08	311	CLA	CMB-C2B-C1B	2.71	129.49	125.37
5	07	309	CLA	CMB-C2B-C1B	2.70	129.49	125.37
6	08	301	CHL	CHB-C1B-NB	-2.70	121.40	124.26
6	05	307	CHL	CHB-C1B-NB	-2.70	121.40	124.26
5	05	312	CLA	CAC-C3C-C4C	2.70	128.31	124.81
5	06	611	CLA	CAA-C2A-C3A	-2.69	109.81	116.10
7	05	314	LUT	C7-C8-C9	2.69	130.31	126.23
6	1r	304	CHL	CMD-C2D-C3D	-2.69	121.42	127.61
5	1r	313	CLA	CMB-C2B-C1B	2.69	129.46	125.37
5	05	312	CLA	CMC-C2C-C1C	2.68	129.12	125.04
5	08	308	CLA	CMD-C2D-C3D	-2.68	121.45	127.61
6	05	307	CHL	CMD-C2D-C3D	-2.68	121.45	127.61
5	1r	313	CLA	CAC-C3C-C4C	2.68	128.28	124.81
5	1r	301	CLA	CHB-C4A-NA	2.66	128.20	124.51
5	08	312	CLA	CHC-C4B-NB	-2.66	121.44	124.26
6	05	313	CHL	C1C-C2C-C3C	-2.66	105.00	107.11
6	06	603	CHL	CBD-CHA-C1A	2.66	131.64	128.50
5	1r	307	CLA	CMD-C2D-C3D	-2.66	121.49	127.61
5	05	303	CLA	CHB-C1B-NB	-2.66	121.44	124.26
5	07	302	CLA	CMC-C2C-C1C	2.66	129.08	125.04
5	05	311	CLA	C4A-NA-C1A	2.66	107.90	106.71
6	06	603	CHL	C2A-C1A-CHA	-2.65	118.60	122.71
5	1r	301	CLA	CHB-C1B-NB	-2.65	121.45	124.26
5	06	607	CLA	CMB-C2B-C1B	2.65	129.40	125.37
6	05	307	CHL	CMB-C2B-C1B	2.65	129.40	125.37
5	07	309	CLA	CMC-C2C-C1C	2.65	129.07	125.04
6	1r	304	CHL	C1C-C2C-C3C	-2.65	105.01	107.11
5	06	608	CLA	CAA-C2A-C3A	-2.65	109.92	116.10
5	07	302	CLA	C3B-C4B-NB	2.65	112.97	110.52
6	1r	312	CHL	CMD-C2D-C3D	-2.64	121.54	127.61
5	07	302	CLA	C4D-C3D-CAD	2.63	111.20	108.10
7	05	314	LUT	C32-C33-C34	2.63	122.98	118.94
5	1r	309	CLA	CAC-C3C-C4C	2.63	128.22	124.81
5	08	312	CLA	C2D-C1D-ND	2.63	112.04	110.10
5	07	302	CLA	CMD-C2D-C3D	-2.62	121.58	127.61
6	1r	312	CHL	CMB-C2B-C1B	2.62	129.35	125.37
7	1r	314	LUT	C31-C30-C29	2.61	131.04	127.31
5	08	306	CLA	CMC-C2C-C1C	2.61	129.02	125.04
5	1r	311	CLA	C3B-C4B-NB	2.61	112.94	110.52
6	08	301	CHL	CMB-C2B-C1B	2.61	129.35	125.37
6	07	306	CHL	C1C-C2C-C3C	-2.61	105.04	107.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	08	311	CLA	CAC-C3C-C4C	2.61	128.20	124.81
6	06	604	CHL	C1C-C2C-C3C	-2.61	105.04	107.11
6	06	605	CHL	C1C-C2C-C3C	-2.61	105.04	107.11
6	1r	312	CHL	C1C-C2C-C3C	-2.61	105.04	107.11
5	07	309	CLA	C2D-C1D-ND	2.60	112.02	110.10
5	05	311	CLA	CMB-C2B-C1B	2.59	129.31	125.37
6	07	311	CHL	CMD-C2D-C3D	-2.59	121.67	127.61
6	08	303	CHL	C1C-C2C-C3C	-2.58	105.06	107.11
5	05	312	CLA	C4C-C3C-C2C	-2.58	103.14	106.90
5	05	302	CLA	O2A-CGA-CBA	2.57	122.30	114.03
5	05	303	CLA	C2A-C1A-CHA	-2.57	119.36	123.86
6	1r	303	CHL	CMD-C2D-C3D	-2.57	121.69	127.61
6	05	305	CHL	CMD-C2D-C3D	-2.57	121.70	127.61
6	06	603	CHL	C1C-C2C-C3C	-2.57	105.07	107.11
6	06	606	CHL	CMD-C2D-C3D	-2.57	121.70	127.61
5	1r	309	CLA	C2A-C1A-CHA	-2.57	119.37	123.86
5	05	308	CLA	CMB-C2B-C1B	2.57	129.28	125.37
5	05	301	CLA	C3B-C4B-NB	2.57	112.89	110.52
5	07	312	CLA	CMC-C2C-C1C	2.56	128.94	125.04
5	05	310	CLA	CMD-C2D-C3D	-2.56	121.72	127.61
5	1r	305	CLA	CMC-C2C-C1C	2.56	128.94	125.04
5	1r	313	CLA	O2D-CGD-O1D	-2.56	118.84	123.84
5	08	312	CLA	CMB-C2B-C1B	2.55	129.26	125.37
9	1r	315	XAT	C19-C9-C10	-2.55	119.35	122.92
6	08	304	CHL	CMD-C2D-C3D	-2.55	121.75	127.61
5	06	602	CLA	CAC-C3C-C4C	2.55	128.12	124.81
5	1r	306	CLA	C1-C2-C3	-2.55	121.64	126.04
5	1r	309	CLA	C4-C3-C5	2.54	119.55	115.27
5	05	301	CLA	CAA-C2A-C3A	-2.54	110.17	116.10
5	05	311	CLA	CMC-C2C-C1C	2.54	128.91	125.04
5	08	310	CLA	CMB-C2B-C1B	2.54	129.24	125.37
6	08	303	CHL	CMD-C2D-C3D	-2.54	121.77	127.61
5	1r	305	CLA	CMD-C2D-C3D	-2.54	121.78	127.61
5	07	312	CLA	CMB-C2B-C1B	2.53	129.23	125.37
5	08	306	CLA	C4A-NA-C1A	2.53	107.84	106.71
5	07	301	CLA	CMD-C2D-C3D	-2.52	121.81	127.61
6	07	305	CHL	C1C-C2C-C3C	-2.52	105.11	107.11
5	1r	305	CLA	CMB-C2B-C1B	2.52	129.20	125.37
5	07	310	CLA	CMC-C2C-C1C	2.52	128.87	125.04
7	1r	314	LUT	C1-C6-C5	-2.51	119.08	122.61
5	07	309	CLA	O2D-CGD-O1D	-2.51	118.94	123.84
5	08	308	CLA	C3B-C4B-NB	2.50	112.84	110.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	05	309	CLA	CMC-C2C-C1C	2.50	128.85	125.04
5	05	311	CLA	CAA-C2A-C3A	-2.50	110.26	116.10
5	1r	307	CLA	CMB-C2B-C1B	2.50	129.18	125.37
5	1r	306	CLA	CMB-C2B-C1B	2.49	129.17	125.37
5	06	608	CLA	CMC-C2C-C1C	2.49	128.83	125.04
5	1r	301	CLA	C2A-C1A-CHA	-2.49	119.51	123.85
5	05	301	CLA	CMB-C2B-C1B	2.49	129.15	125.37
5	1r	311	CLA	O2D-CGD-O1D	-2.48	118.99	123.84
5	05	311	CLA	C3B-C4B-NB	2.48	112.81	110.52
6	05	307	CHL	C2A-C1A-CHA	-2.48	119.53	123.85
6	05	305	CHL	C1C-C2C-C3C	-2.48	105.15	107.11
6	06	601	CHL	O2D-CGD-O1D	-2.48	119.00	123.84
7	1r	314	LUT	C12-C13-C14	2.47	122.74	118.94
5	05	310	CLA	CMC-C2C-C1C	2.47	128.80	125.04
5	05	302	CLA	CMB-C2B-C1B	2.47	129.13	125.37
6	1r	302	CHL	C2A-C1A-CHA	-2.47	119.55	123.86
5	07	310	CLA	C3A-C4A-CHB	-2.46	117.52	124.01
6	08	301	CHL	C2A-C1A-CHA	-2.46	119.55	123.85
5	08	309	CLA	CMC-C2C-C3C	2.46	132.79	126.12
5	07	307	CLA	CMC-C2C-C1C	2.46	128.78	125.04
7	05	314	LUT	C35-C15-C14	2.46	128.51	123.47
5	07	302	CLA	CHB-C4A-NA	2.46	127.91	124.51
6	05	315	CHL	CED-O2D-CGD	2.46	121.49	115.94
5	1r	309	CLA	C1-C2-C3	-2.45	121.80	126.04
5	06	607	CLA	CMC-C2C-C1C	2.45	128.77	125.04
6	05	307	CHL	CAC-C3C-C4C	2.45	127.99	124.81
6	06	606	CHL	O2D-CGD-O1D	-2.44	119.06	123.84
5	1r	310	CLA	O2D-CGD-O1D	-2.44	119.06	123.84
6	08	305	CHL	CAD-CBD-CHA	-2.44	102.39	105.14
5	1r	305	CLA	O2A-CGA-CBA	2.44	119.55	111.91
5	06	610	CLA	CMC-C2C-C1C	2.43	128.75	125.04
5	07	301	CLA	C2A-C1A-CHA	-2.43	119.61	123.85
5	08	312	CLA	CMC-C2C-C1C	2.43	128.74	125.04
5	07	302	CLA	CHC-C1C-NC	2.42	127.87	124.20
5	06	607	CLA	CAA-C2A-C3A	-2.41	110.47	116.10
6	08	302	CHL	C2A-C1A-CHA	-2.41	119.65	123.85
5	1r	307	CLA	CMC-C2C-C1C	2.41	128.71	125.04
5	1r	301	CLA	O2D-CGD-O1D	-2.41	119.13	123.84
7	1r	314	LUT	C32-C33-C34	2.40	122.62	118.94
5	1r	306	CLA	C2A-C1A-CHA	-2.39	119.67	123.86
5	05	302	CLA	C3B-C4B-NB	2.39	112.73	110.52
6	06	604	CHL	C2A-C1A-CHA	-2.38	119.69	123.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	1r	310	CLA	CMC-C2C-C1C	2.38	128.67	125.04
6	1r	312	CHL	O2D-CGD-O1D	-2.37	119.21	123.84
5	05	308	CLA	CAA-C2A-C3A	-2.37	110.58	116.10
5	06	602	CLA	C1-C2-C3	-2.37	121.95	126.04
6	05	304	CHL	CHB-C4A-NA	2.36	127.77	124.51
5	05	302	CLA	CMC-C2C-C1C	2.36	128.63	125.04
5	06	607	CLA	C2A-C1A-CHA	-2.36	119.74	123.85
6	05	307	CHL	O2D-CGD-O1D	-2.35	119.24	123.84
5	1r	306	CLA	C4-C3-C5	2.35	119.22	115.27
5	07	309	CLA	O2A-CGA-CBA	2.35	119.27	111.91
6	06	605	CHL	C2A-C1A-CHA	-2.34	119.76	123.86
6	08	304	CHL	C2A-C1A-CHA	-2.34	119.76	123.85
5	08	307	CLA	CMC-C2C-C1C	2.34	128.60	125.04
6	05	307	CHL	C4D-CHA-C1A	-2.34	118.40	121.25
6	07	304	CHL	C2A-C1A-CHA	-2.33	119.78	123.85
6	05	306	CHL	C2A-C1A-CHA	-2.33	119.78	123.85
5	1r	313	CLA	C2A-C1A-CHA	-2.33	119.78	123.86
6	07	306	CHL	C2A-C1A-CHA	-2.33	119.79	123.85
6	07	305	CHL	C2A-C1A-CHA	-2.32	119.80	123.85
7	07	313	LUT	C8-C9-C10	2.32	122.50	118.94
6	06	601	CHL	C2A-C1A-CHA	-2.32	119.81	123.86
5	05	308	CLA	CMA-C3A-C4A	-2.31	105.56	111.77
5	1r	308	CLA	O2D-CGD-O1D	-2.31	119.32	123.84
6	08	305	CHL	CAA-C2A-C3A	-2.31	108.50	114.26
7	05	314	LUT	C3-C4-C5	2.31	116.45	111.85
5	07	301	CLA	C3B-C4B-NB	2.30	112.65	110.52
5	07	307	CLA	C4A-NA-C1A	2.30	107.74	106.71
6	08	301	CHL	CMA-C3A-C2A	-2.29	110.75	116.10
5	05	312	CLA	CMA-C3A-C2A	-2.29	110.75	116.10
7	07	313	LUT	C7-C6-C5	-2.29	115.92	121.46
5	05	301	CLA	O2D-CGD-O1D	-2.29	119.37	123.84
5	07	301	CLA	CMA-C3A-C2A	-2.28	110.78	116.10
5	07	301	CLA	CHC-C4B-NB	-2.28	121.84	124.26
5	1r	301	CLA	CAA-C2A-C3A	-2.28	110.78	116.10
5	1r	306	CLA	O2A-CGA-O1A	-2.28	117.84	123.59
5	08	309	CLA	C2D-C1D-ND	2.28	111.78	110.10
6	1r	312	CHL	C2A-C1A-CHA	-2.27	119.88	123.86
6	06	603	CHL	O2D-CGD-O1D	-2.27	118.93	124.09
5	06	611	CLA	CMC-C2C-C1C	2.27	128.50	125.04
6	08	304	CHL	O2D-CGD-O1D	-2.27	118.94	124.09
6	05	305	CHL	CED-O2D-CGD	2.27	121.07	115.94
5	08	308	CLA	C2A-C1A-CHA	-2.26	119.91	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	08	301	CHL	O2D-CGD-O1D	-2.26	118.97	124.09
5	1r	306	CLA	CHB-C1B-NB	-2.25	121.88	124.26
5	1r	308	CLA	C4A-NA-C1A	2.25	107.72	106.71
5	06	609	CLA	CAA-C2A-C3A	-2.25	108.64	114.26
5	06	607	CLA	O2D-CGD-O1D	-2.25	118.99	124.09
5	08	312	CLA	O1D-CGD-CBD	-2.24	119.90	124.48
5	08	312	CLA	C2A-C1A-CHA	-2.24	119.94	123.86
6	08	305	CHL	C2A-C1A-CHA	-2.24	119.94	123.86
6	1r	303	CHL	C2A-C1A-CHA	-2.24	119.94	123.86
5	08	310	CLA	CMC-C2C-C1C	2.23	128.44	125.04
6	06	606	CHL	C2A-C1A-CHA	-2.23	119.96	123.86
6	06	605	CHL	O2D-CGD-O1D	-2.23	119.03	124.09
5	08	311	CLA	O2D-CGD-O1D	-2.23	119.03	124.09
6	05	315	CHL	C2A-C1A-CHA	-2.22	119.98	123.85
5	06	602	CLA	CMC-C2C-C1C	2.21	128.41	125.04
6	05	313	CHL	C2A-C1A-CHA	-2.21	120.00	123.85
5	05	310	CLA	O2D-CGD-O1D	-2.21	119.08	124.09
6	1r	302	CHL	O1D-CGD-CBD	-2.20	119.97	124.48
6	05	304	CHL	O2D-CGD-O1D	-2.20	119.09	124.09
6	07	304	CHL	O2D-CGD-O1D	-2.20	119.09	124.09
5	08	307	CLA	C2A-C1A-CHA	-2.20	120.01	123.85
6	08	304	CHL	C4D-CHA-C1A	-2.20	118.58	121.25
5	05	312	CLA	CHB-C1B-C2B	-2.19	121.04	127.24
5	06	609	CLA	O2D-CGD-O1D	-2.19	119.11	124.09
7	05	314	LUT	C18-C5-C6	2.19	126.99	124.53
5	1r	313	CLA	O1D-CGD-CBD	-2.19	120.01	124.48
5	06	608	CLA	O2D-CGD-O1D	-2.19	119.13	124.09
5	07	308	CLA	C2A-C1A-CHA	-2.19	120.04	123.85
6	07	311	CHL	C2A-C1A-CHA	-2.18	120.04	123.85
5	07	301	CLA	O2D-CGD-O1D	-2.18	119.13	124.09
7	05	314	LUT	C18-C5-C4	-2.18	110.32	114.36
5	06	610	CLA	O2D-CGD-O1D	-2.18	119.15	124.09
6	1r	303	CHL	C4D-CHA-C1A	-2.18	118.60	121.25
6	05	304	CHL	C2A-C1A-CHA	-2.17	120.06	123.86
5	1r	305	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
5	08	309	CLA	C2A-C1A-CHA	-2.17	120.07	123.85
5	1r	306	CLA	O2D-CGD-O1D	-2.17	119.60	123.84
6	1r	304	CHL	O2D-CGD-O1D	-2.17	119.60	123.84
5	1r	309	CLA	CED-O2D-CGD	2.17	120.83	115.94
6	05	313	CHL	O2D-CGD-O1D	-2.16	119.18	124.09
6	07	303	CHL	O2D-CGD-O1D	-2.16	119.19	124.09
5	05	302	CLA	O2D-CGD-O1D	-2.16	119.19	124.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	1r	314	LUT	C35-C15-C14	2.16	127.89	123.47
5	08	311	CLA	CMC-C2C-C1C	2.16	128.32	125.04
6	05	305	CHL	C1-C2-C3	-2.16	122.31	126.04
5	06	608	CLA	C2A-C1A-CHA	-2.16	120.09	123.85
5	06	602	CLA	O2A-CGA-O1A	-2.16	118.15	123.59
5	1r	306	CLA	C3B-C4B-NB	2.15	112.51	110.52
6	06	604	CHL	O2D-CGD-O1D	-2.15	119.20	124.09
5	07	307	CLA	O2D-CGD-O1D	-2.15	119.20	124.09
5	08	311	CLA	CAA-C2A-C3A	-2.15	111.09	116.10
6	05	315	CHL	O1D-CGD-CBD	-2.15	120.09	124.48
5	06	610	CLA	C2A-C1A-CHA	-2.14	120.11	123.86
6	07	306	CHL	O2D-CGD-O1D	-2.14	119.23	124.09
5	1r	311	CLA	O2A-CGA-CBA	2.14	120.68	112.23
5	06	611	CLA	C2A-C1A-CHA	-2.14	120.12	123.85
6	08	302	CHL	O2D-CGD-O1D	-2.14	119.24	124.09
5	07	302	CLA	C3D-C4D-CHA	-2.13	107.84	112.72
5	08	306	CLA	O2D-CGD-O1D	-2.13	119.25	124.09
6	1r	302	CHL	O2D-CGD-O1D	-2.13	119.67	123.84
5	08	307	CLA	O2D-CGD-O1D	-2.13	119.25	124.09
6	08	302	CHL	C4D-CHA-C1A	-2.13	118.66	121.25
6	07	304	CHL	C4D-CHA-C1A	-2.13	118.66	121.25
6	1r	302	CHL	C4D-CHA-C1A	-2.13	118.66	121.25
5	05	308	CLA	C2A-C1A-CHA	-2.12	120.15	123.85
6	05	307	CHL	CMA-C3A-C2A	-2.12	111.15	116.10
6	05	306	CHL	O2D-CGD-O1D	-2.12	119.28	124.09
5	05	303	CLA	O2A-CGA-CBA	2.12	120.84	114.03
5	08	309	CLA	CBC-CAC-C3C	2.12	118.27	112.43
5	08	310	CLA	C2A-C1A-CHA	-2.11	120.16	123.85
6	05	305	CHL	CHC-C4B-NB	-2.11	122.02	124.26
5	08	312	CLA	CED-O2D-CGD	2.11	120.71	115.94
5	1r	311	CLA	C2A-C1A-CHA	-2.11	120.17	123.86
6	1r	303	CHL	OBD-CAD-C3D	-2.11	123.44	128.52
6	05	305	CHL	C2A-C1A-CHA	-2.11	120.17	123.86
5	05	303	CLA	O2D-CGD-O1D	-2.11	119.30	124.09
6	07	303	CHL	C2A-C1A-CHA	-2.11	120.18	123.85
5	06	602	CLA	CED-O2D-CGD	2.10	120.69	115.94
5	05	308	CLA	CED-O2D-CGD	2.10	120.69	115.94
5	05	301	CLA	C2A-C1A-CHA	-2.10	120.19	123.85
5	07	308	CLA	CED-O2D-CGD	2.10	120.68	115.94
5	1r	301	CLA	CMB-C2B-C1B	2.10	128.56	125.37
5	05	312	CLA	C1D-CHD-C4C	-2.09	121.54	126.06
5	05	308	CLA	O1D-CGD-CBD	-2.09	120.20	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	06	602	CLA	O2D-CGD-O1D	-2.09	119.75	123.84
5	1r	305	CLA	C6-C5-C3	-2.09	111.21	114.62
6	05	305	CHL	CAA-C2A-C3A	-2.08	107.08	112.78
5	1r	313	CLA	CMC-C2C-C1C	2.08	128.20	125.04
5	05	303	CLA	CMC-C2C-C1C	2.07	128.19	125.04
6	05	304	CHL	C4D-CHA-C1A	-2.07	118.73	121.25
5	1r	305	CLA	C4A-NA-C1A	2.07	107.64	106.71
6	07	306	CHL	C4D-CHA-C1A	-2.06	118.74	121.25
5	07	302	CLA	CAA-C2A-C3A	-2.06	111.28	116.10
5	1r	306	CLA	CED-O2D-CGD	2.06	120.60	115.94
6	08	303	CHL	O2D-CGD-O1D	-2.06	119.41	124.09
6	08	303	CHL	CHC-C4B-NB	-2.06	122.08	124.26
5	1r	309	CLA	O2D-CGD-O1D	-2.06	119.82	123.84
6	1r	303	CHL	C1C-C2C-C3C	-2.05	105.48	107.11
6	05	305	CHL	O2A-CGA-O1A	-2.05	118.41	123.59
8	1r	316	LHG	O7-C7-O9	-2.05	118.74	123.70
5	05	311	CLA	O2D-CGD-O1D	-2.05	119.44	124.09
5	1r	311	CLA	CED-O2D-CGD	2.05	120.57	115.94
5	1r	310	CLA	C4A-NA-C1A	2.05	107.63	106.71
6	06	603	CHL	C4D-CHA-C1A	-2.04	118.76	121.25
6	07	311	CHL	O2D-CGD-O1D	-2.04	119.46	124.09
5	05	310	CLA	CMB-C2B-C1B	2.03	128.46	125.37
6	06	604	CHL	C4D-CHA-C1A	-2.03	118.78	121.25
5	05	311	CLA	C4D-C3D-CAD	2.03	110.48	108.10
6	05	315	CHL	C4D-CHA-C1A	-2.03	118.78	121.25
6	1r	312	CHL	O2A-CGA-CBA	2.02	120.23	112.23
5	07	312	CLA	C2A-C1A-CHA	-2.02	120.32	123.86
5	1r	306	CLA	CHB-C1B-C2B	-2.01	121.55	127.24
6	06	605	CHL	C4D-CHA-C1A	-2.01	118.80	121.25
6	1r	303	CHL	O2A-CGA-CBA	2.01	120.48	114.03
5	05	309	CLA	C4A-NA-C1A	2.01	107.61	106.71
6	1r	312	CHL	CHB-C1B-C2B	-2.00	121.58	127.24
5	08	308	CLA	O2D-CGD-O1D	-2.00	119.54	124.09
6	06	606	CHL	C4D-CHA-C1A	-2.00	118.81	121.25

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
5	06	602	CLA	C8
5	1r	306	CLA	C8
6	05	305	CHL	C8

All (305) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	05	301	CLA	C2B-C3B-CAB-CBB
5	05	301	CLA	C4B-C3B-CAB-CBB
5	05	303	CLA	C4B-C3B-CAB-CBB
5	06	602	CLA	C4-C3-C5-C6
5	07	309	CLA	C1A-C2A-CAA-CBA
5	07	309	CLA	C3A-C2A-CAA-CBA
5	08	308	CLA	C2B-C3B-CAB-CBB
5	08	308	CLA	C4B-C3B-CAB-CBB
5	08	312	CLA	C1A-C2A-CAA-CBA
5	08	312	CLA	C3A-C2A-CAA-CBA
5	1r	305	CLA	C1A-C2A-CAA-CBA
5	1r	305	CLA	C3A-C2A-CAA-CBA
5	1r	305	CLA	CBD-CGD-O2D-CED
5	1r	305	CLA	C2-C3-C5-C6
5	1r	305	CLA	C4-C3-C5-C6
5	1r	311	CLA	C2B-C3B-CAB-CBB
5	1r	311	CLA	C4B-C3B-CAB-CBB
5	1r	313	CLA	CHA-CBD-CGD-O1D
5	1r	313	CLA	CHA-CBD-CGD-O2D
6	05	307	CHL	C3C-C2C-CMC-OMC
6	05	313	CHL	C3C-C2C-CMC-OMC
6	05	315	CHL	C3C-C2C-CMC-OMC
6	05	315	CHL	CBD-CGD-O2D-CED
6	06	601	CHL	C3C-C2C-CMC-OMC
6	06	603	CHL	C3C-C2C-CMC-OMC
6	06	603	CHL	CAD-CBD-CGD-O2D
6	06	605	CHL	C3C-C2C-CMC-OMC
6	06	606	CHL	C3C-C2C-CMC-OMC
6	07	303	CHL	C3C-C2C-CMC-OMC
6	07	304	CHL	C3C-C2C-CMC-OMC
6	07	305	CHL	C3C-C2C-CMC-OMC
6	07	306	CHL	C3C-C2C-CMC-OMC
6	07	311	CHL	C2B-C3B-CAB-CBB
6	07	311	CHL	C4B-C3B-CAB-CBB
6	07	311	CHL	C1C-C2C-CMC-OMC
6	07	311	CHL	C3C-C2C-CMC-OMC
6	08	301	CHL	C1C-C2C-CMC-OMC
6	08	301	CHL	C3C-C2C-CMC-OMC
6	08	303	CHL	C3C-C2C-CMC-OMC
6	08	304	CHL	C1C-C2C-CMC-OMC
6	08	304	CHL	C3C-C2C-CMC-OMC
6	08	305	CHL	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
6	08	305	CHL	C3C-C2C-CMC-OMC
6	1r	303	CHL	C3C-C2C-CMC-OMC
6	1r	304	CHL	C3C-C2C-CMC-OMC
6	1r	304	CHL	CBD-CGD-O2D-CED
6	1r	312	CHL	C3C-C2C-CMC-OMC
8	07	314	LHG	O9-C7-O7-C5
8	07	314	LHG	C8-C7-O7-C5
8	07	314	LHG	O10-C23-O8-C6
8	07	314	LHG	C24-C23-O8-C6
8	1r	316	LHG	O9-C7-O7-C5
8	1r	316	LHG	C8-C7-O7-C5
9	1r	315	XAT	C27-C28-C29-C30
9	1r	315	XAT	C27-C28-C29-C39
5	1r	305	CLA	O1D-CGD-O2D-CED
5	06	602	CLA	CBD-CGD-O2D-CED
6	1r	303	CHL	CBD-CGD-O2D-CED
5	1r	305	CLA	O1A-CGA-O2A-C1
6	05	315	CHL	O1D-CGD-O2D-CED
6	1r	304	CHL	O1D-CGD-O2D-CED
5	1r	305	CLA	CBA-CGA-O2A-C1
6	05	305	CHL	CBD-CGD-O2D-CED
6	1r	302	CHL	CBD-CGD-O2D-CED
5	08	309	CLA	C2C-C3C-CAC-CBC
5	06	602	CLA	O1D-CGD-O2D-CED
5	1r	305	CLA	C3-C5-C6-C7
6	05	305	CHL	C4-C3-C5-C6
5	06	602	CLA	C2-C3-C5-C6
6	05	305	CHL	C2-C3-C5-C6
6	05	307	CHL	CBD-CGD-O2D-CED
5	08	309	CLA	C4C-C3C-CAC-CBC
5	07	308	CLA	CBD-CGD-O2D-CED
6	06	606	CHL	CBD-CGD-O2D-CED
6	06	601	CHL	CBD-CGD-O2D-CED
6	05	304	CHL	C2A-CAA-CBA-CGA
6	05	305	CHL	C2A-CAA-CBA-CGA
6	06	605	CHL	C2A-CAA-CBA-CGA
6	08	303	CHL	C2A-CAA-CBA-CGA
6	1r	303	CHL	C2A-CAA-CBA-CGA
6	1r	303	CHL	O1D-CGD-O2D-CED
5	1r	309	CLA	C3-C5-C6-C7
7	05	314	LUT	C7-C8-C9-C19
7	05	314	LUT	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
6	05	305	CHL	C5-C6-C7-C8
6	1r	302	CHL	O1D-CGD-O2D-CED
5	1r	313	CLA	CBD-CGD-O2D-CED
6	05	305	CHL	O1D-CGD-O2D-CED
5	05	301	CLA	CBD-CGD-O2D-CED
6	05	305	CHL	C13-C15-C16-C17
6	1r	302	CHL	C2A-CAA-CBA-CGA
6	1r	304	CHL	C2A-CAA-CBA-CGA
6	1r	312	CHL	C2A-CAA-CBA-CGA
6	06	601	CHL	C2A-CAA-CBA-CGA
6	05	307	CHL	O1D-CGD-O2D-CED
8	07	314	LHG	C26-C27-C28-C29
5	07	308	CLA	O1D-CGD-O2D-CED
5	1r	313	CLA	CBA-CGA-O2A-C1
5	1r	301	CLA	C4B-C3B-CAB-CBB
5	1r	306	CLA	C4B-C3B-CAB-CBB
6	06	606	CHL	O1D-CGD-O2D-CED
6	05	305	CHL	C3A-C2A-CAA-CBA
6	06	601	CHL	C3A-C2A-CAA-CBA
6	06	606	CHL	C3A-C2A-CAA-CBA
5	05	303	CLA	C2B-C3B-CAB-CBB
5	1r	301	CLA	C2B-C3B-CAB-CBB
5	1r	306	CLA	C2B-C3B-CAB-CBB
6	05	304	CHL	C2B-C3B-CAB-CBB
6	08	301	CHL	C2C-C3C-CAC-CBC
6	06	601	CHL	O1D-CGD-O2D-CED
6	05	305	CHL	C8-C10-C11-C12
5	05	303	CLA	C1A-C2A-CAA-CBA
6	06	601	CHL	C1A-C2A-CAA-CBA
6	06	606	CHL	C1A-C2A-CAA-CBA
6	05	305	CHL	C10-C11-C12-C13
8	07	314	LHG	C9-C10-C11-C12
5	08	312	CLA	CBD-CGD-O2D-CED
6	1r	312	CHL	CBA-CGA-O2A-C1
6	08	301	CHL	C4C-C3C-CAC-CBC
6	05	304	CHL	C4B-C3B-CAB-CBB
5	1r	313	CLA	O1A-CGA-O2A-C1
6	05	304	CHL	C3C-C2C-CMC-OMC
6	05	305	CHL	C3C-C2C-CMC-OMC
6	06	604	CHL	C3C-C2C-CMC-OMC
6	1r	302	CHL	C3C-C2C-CMC-OMC
5	1r	313	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
5	05	301	CLA	O1D-CGD-O2D-CED
6	05	305	CHL	C6-C7-C8-C10
6	05	305	CHL	C12-C13-C15-C16
6	05	305	CHL	CAD-CBD-CGD-O2D
6	05	315	CHL	CAD-CBD-CGD-O2D
6	1r	302	CHL	CAD-CBD-CGD-O2D
6	1r	312	CHL	CAD-CBD-CGD-O2D
5	07	309	CLA	CHA-CBD-CGD-O1D
5	07	309	CLA	CHA-CBD-CGD-O2D
5	08	312	CLA	CHA-CBD-CGD-O1D
5	08	312	CLA	CHA-CBD-CGD-O2D
5	1r	307	CLA	CHA-CBD-CGD-O1D
5	1r	307	CLA	CHA-CBD-CGD-O2D
8	07	314	LHG	C11-C10-C9-C8
5	05	309	CLA	CHA-CBD-CGD-O2D
5	1r	306	CLA	C1A-C2A-CAA-CBA
6	05	305	CHL	C1A-C2A-CAA-CBA
6	08	303	CHL	CHA-CBD-CGD-O2D
5	05	308	CLA	C4B-C3B-CAB-CBB
5	05	310	CLA	C4B-C3B-CAB-CBB
5	07	301	CLA	C4B-C3B-CAB-CBB
5	07	308	CLA	C4B-C3B-CAB-CBB
6	05	306	CHL	C4B-C3B-CAB-CBB
6	05	307	CHL	C4B-C3B-CAB-CBB
6	05	313	CHL	C4B-C3B-CAB-CBB
6	05	315	CHL	C4B-C3B-CAB-CBB
6	06	601	CHL	C4B-C3B-CAB-CBB
6	06	603	CHL	C4B-C3B-CAB-CBB
6	06	605	CHL	C4B-C3B-CAB-CBB
6	06	606	CHL	C4B-C3B-CAB-CBB
6	07	303	CHL	C4B-C3B-CAB-CBB
6	07	304	CHL	C4B-C3B-CAB-CBB
6	07	305	CHL	C4B-C3B-CAB-CBB
6	07	306	CHL	C4B-C3B-CAB-CBB
6	08	304	CHL	C4B-C3B-CAB-CBB
6	08	305	CHL	C4B-C3B-CAB-CBB
6	1r	304	CHL	C4B-C3B-CAB-CBB
6	1r	312	CHL	C4B-C3B-CAB-CBB
5	08	312	CLA	O1D-CGD-O2D-CED
5	07	309	CLA	CAD-CBD-CGD-O1D
6	07	311	CHL	CAD-CBD-CGD-O2D
8	1r	316	LHG	O8-C23-C24-C25

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Mol	Chain	Res	Type	Atoms
6	08	304	CHL	C2C-C3C-CAC-CBC
6	05	304	CHL	C1C-C2C-CMC-OMC
6	05	304	CHL	CAD-CBD-CGD-O1D
6	05	305	CHL	C1C-C2C-CMC-OMC
6	05	307	CHL	C1C-C2C-CMC-OMC
6	05	313	CHL	C1C-C2C-CMC-OMC
6	05	315	CHL	C1C-C2C-CMC-OMC
6	06	601	CHL	C1C-C2C-CMC-OMC
6	06	603	CHL	C1C-C2C-CMC-OMC
6	06	603	CHL	CAD-CBD-CGD-O1D
6	06	604	CHL	C1C-C2C-CMC-OMC
6	06	605	CHL	C1C-C2C-CMC-OMC
6	06	606	CHL	C1C-C2C-CMC-OMC
6	07	303	CHL	C1C-C2C-CMC-OMC
6	07	304	CHL	C1C-C2C-CMC-OMC
6	07	305	CHL	C1C-C2C-CMC-OMC
6	07	306	CHL	C1C-C2C-CMC-OMC
6	08	303	CHL	C1C-C2C-CMC-OMC
6	08	305	CHL	C1C-C2C-CMC-OMC
6	1r	302	CHL	C1C-C2C-CMC-OMC
6	1r	303	CHL	C1C-C2C-CMC-OMC
6	1r	304	CHL	C1C-C2C-CMC-OMC
6	1r	312	CHL	C1C-C2C-CMC-OMC
6	05	305	CHL	C14-C13-C15-C16
5	05	308	CLA	C2B-C3B-CAB-CBB
6	05	315	CHL	C2B-C3B-CAB-CBB
8	07	314	LHG	C3-O3-P-O6
6	05	305	CHL	C6-C7-C8-C9
6	1r	312	CHL	O1A-CGA-O2A-C1
5	1r	306	CLA	C2-C1-O2A-CGA
8	07	314	LHG	O7-C5-C6-O8
6	1r	303	CHL	C3A-C2A-CAA-CBA
9	1r	315	XAT	C40-C33-C34-C35
5	1r	309	CLA	C2C-C3C-CAC-CBC
6	06	601	CHL	CAA-CBA-CGA-O1A
6	08	303	CHL	C1A-C2A-CAA-CBA
6	1r	303	CHL	C1A-C2A-CAA-CBA
5	1r	306	CLA	C2A-CAA-CBA-CGA
5	1r	310	CLA	C2A-CAA-CBA-CGA
8	1r	316	LHG	C9-C10-C11-C12
5	05	310	CLA	C2B-C3B-CAB-CBB
5	07	301	CLA	C2B-C3B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
5	07	308	CLA	C2B-C3B-CAB-CBB
5	08	307	CLA	C2B-C3B-CAB-CBB
5	08	312	CLA	C2B-C3B-CAB-CBB
5	1r	308	CLA	C2B-C3B-CAB-CBB
6	05	306	CHL	C2B-C3B-CAB-CBB
6	05	307	CHL	C2B-C3B-CAB-CBB
6	05	313	CHL	C2B-C3B-CAB-CBB
6	06	601	CHL	C2B-C3B-CAB-CBB
6	06	603	CHL	C2B-C3B-CAB-CBB
6	06	605	CHL	C2B-C3B-CAB-CBB
6	06	606	CHL	C2B-C3B-CAB-CBB
6	07	303	CHL	C2B-C3B-CAB-CBB
6	07	304	CHL	C2B-C3B-CAB-CBB
6	07	305	CHL	C2B-C3B-CAB-CBB
6	07	306	CHL	C2B-C3B-CAB-CBB
6	08	302	CHL	C2B-C3B-CAB-CBB
6	08	304	CHL	C2B-C3B-CAB-CBB
6	08	305	CHL	C2B-C3B-CAB-CBB
6	1r	304	CHL	C2B-C3B-CAB-CBB
6	1r	312	CHL	C2B-C3B-CAB-CBB
5	05	303	CLA	CAA-CBA-CGA-O1A
5	07	309	CLA	O2A-C1-C2-C3
9	1r	315	XAT	C32-C33-C34-C35
5	05	303	CLA	CAA-CBA-CGA-O2A
6	08	303	CHL	CAA-CBA-CGA-O1A
6	08	303	CHL	CAA-CBA-CGA-O2A
6	06	601	CHL	CAA-CBA-CGA-O2A
5	06	602	CLA	C2A-CAA-CBA-CGA
6	06	606	CHL	C2A-CAA-CBA-CGA
6	08	304	CHL	C4C-C3C-CAC-CBC
5	1r	309	CLA	C4-C3-C5-C6
6	1r	302	CHL	CAA-CBA-CGA-O2A
5	08	312	CLA	C4B-C3B-CAB-CBB
5	1r	310	CLA	CAA-CBA-CGA-O2A
6	07	311	CHL	C2C-C3C-CAC-CBC
5	05	302	CLA	C3A-C2A-CAA-CBA
6	08	303	CHL	C3A-C2A-CAA-CBA
5	05	301	CLA	CAD-CBD-CGD-O2D
5	06	602	CLA	CAD-CBD-CGD-O2D
6	05	304	CHL	CAA-CBA-CGA-O2A
6	06	605	CHL	CAA-CBA-CGA-O2A
5	1r	310	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
8	07	314	LHG	C4-C5-C6-O8
9	1r	315	XAT	O24-C26-C27-C28
5	1r	308	CLA	CAA-CBA-CGA-O2A
6	1r	302	CHL	CAA-CBA-CGA-O1A
5	1r	309	CLA	CAA-CBA-CGA-O2A
5	07	312	CLA	CAA-CBA-CGA-O1A
5	07	312	CLA	CAA-CBA-CGA-O2A
8	07	314	LHG	C7-C8-C9-C10
5	1r	308	CLA	CAA-CBA-CGA-O1A
6	06	605	CHL	CAA-CBA-CGA-O1A
6	1r	303	CHL	CHA-CBD-CGD-O1D
6	1r	303	CHL	CHA-CBD-CGD-O2D
6	05	304	CHL	CAA-CBA-CGA-O1A
5	1r	309	CLA	C2-C3-C5-C6
5	08	306	CLA	C2B-C3B-CAB-CBB
8	07	314	LHG	C14-C15-C16-C17
5	05	302	CLA	CAA-CBA-CGA-O2A
5	05	302	CLA	C1A-C2A-CAA-CBA
5	08	308	CLA	CHA-CBD-CGD-O2D
5	1r	311	CLA	C1A-C2A-CAA-CBA
6	05	313	CHL	CHA-CBD-CGD-O2D
6	07	303	CHL	CHA-CBD-CGD-O2D
5	07	309	CLA	O1A-CGA-O2A-C1
5	06	608	CLA	C4B-C3B-CAB-CBB
5	07	302	CLA	C4B-C3B-CAB-CBB
5	07	310	CLA	C4B-C3B-CAB-CBB
5	08	306	CLA	C4B-C3B-CAB-CBB
5	08	309	CLA	C4B-C3B-CAB-CBB
5	1r	307	CLA	C4B-C3B-CAB-CBB
5	1r	308	CLA	C4B-C3B-CAB-CBB
6	06	604	CHL	C4B-C3B-CAB-CBB
6	08	302	CHL	C4B-C3B-CAB-CBB
6	1r	302	CHL	C4B-C3B-CAB-CBB
8	07	314	LHG	C3-O3-P-O5
5	1r	309	CLA	C4C-C3C-CAC-CBC
5	1r	309	CLA	CAA-CBA-CGA-O1A
5	1r	313	CLA	C2A-CAA-CBA-CGA
5	08	312	CLA	CAD-CBD-CGD-O1D
5	05	302	CLA	CAD-CBD-CGD-O2D
5	05	303	CLA	CAD-CBD-CGD-O2D
5	05	309	CLA	CHA-CBD-CGD-O1D
5	07	307	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
5	07	310	CLA	CAD-CBD-CGD-O2D
5	08	308	CLA	CAD-CBD-CGD-O2D
5	08	311	CLA	CAD-CBD-CGD-O2D
6	05	304	CHL	CAD-CBD-CGD-O2D
6	05	313	CHL	CAD-CBD-CGD-O2D
6	07	303	CHL	CAD-CBD-CGD-O2D
6	07	311	CHL	CHA-CBD-CGD-O1D
5	1r	311	CLA	CAA-CBA-CGA-O2A
5	1r	313	CLA	CAA-CBA-CGA-O2A
6	07	311	CHL	C4C-C3C-CAC-CBC
6	06	606	CHL	CAA-CBA-CGA-O2A

There are no ring outliers.

42 monomers are involved in 76 short contacts:

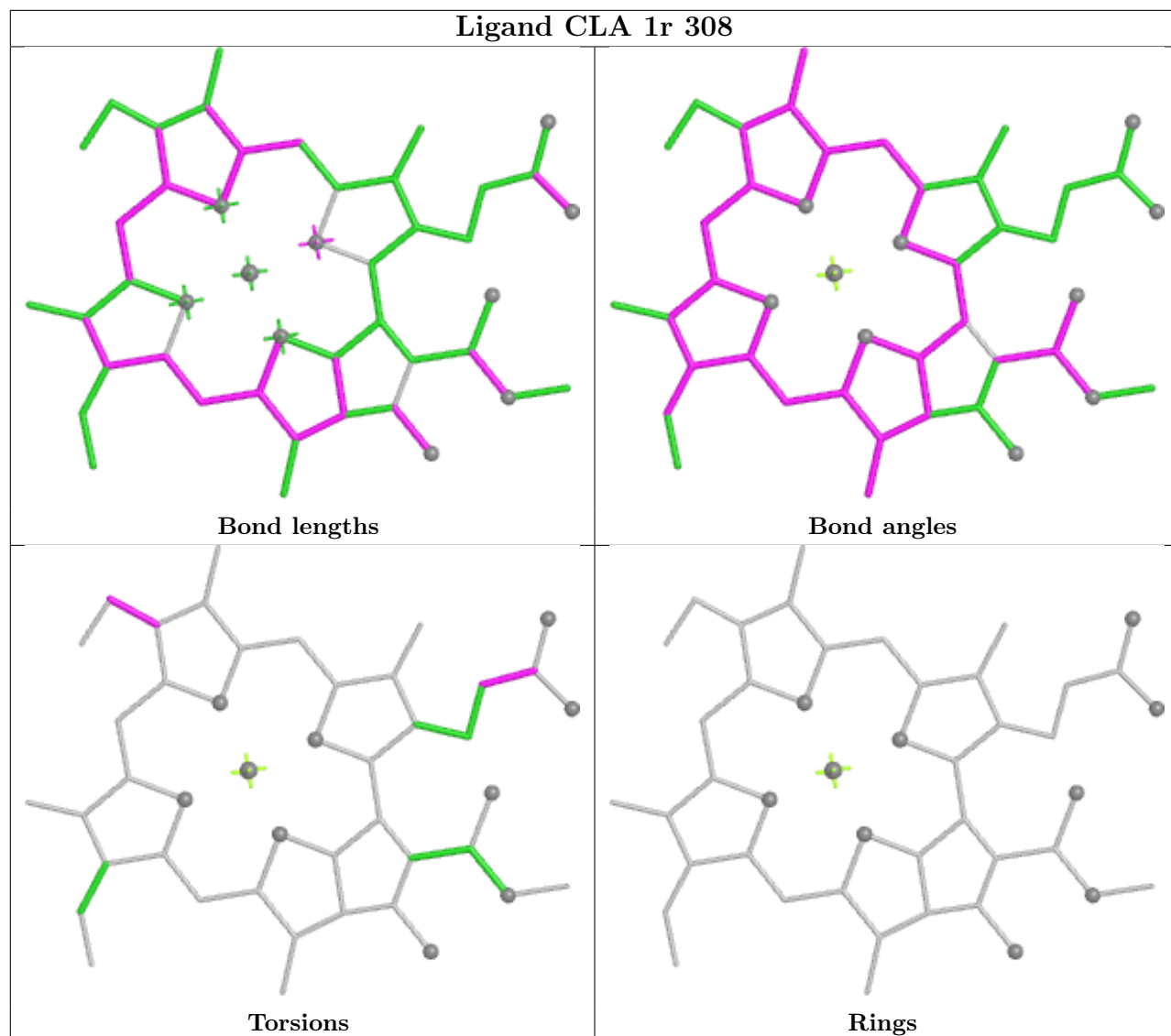
Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	1r	308	CLA	1	0
5	08	307	CLA	1	0
6	05	315	CHL	1	0
6	1r	303	CHL	2	0
9	1r	315	XAT	2	0
5	05	301	CLA	3	0
5	1r	313	CLA	1	0
7	05	314	LUT	5	0
8	07	314	LHG	1	0
5	06	609	CLA	1	0
6	1r	302	CHL	2	0
5	06	611	CLA	1	0
5	08	310	CLA	2	0
5	1r	310	CLA	1	0
5	07	310	CLA	1	0
5	1r	311	CLA	1	0
5	1r	306	CLA	3	0
8	1r	316	LHG	1	0
6	05	307	CHL	2	0
5	06	602	CLA	4	0
5	07	308	CLA	1	0
6	07	311	CHL	3	0
5	08	312	CLA	1	0
5	1r	305	CLA	2	0
5	05	309	CLA	1	0
6	1r	312	CHL	1	0

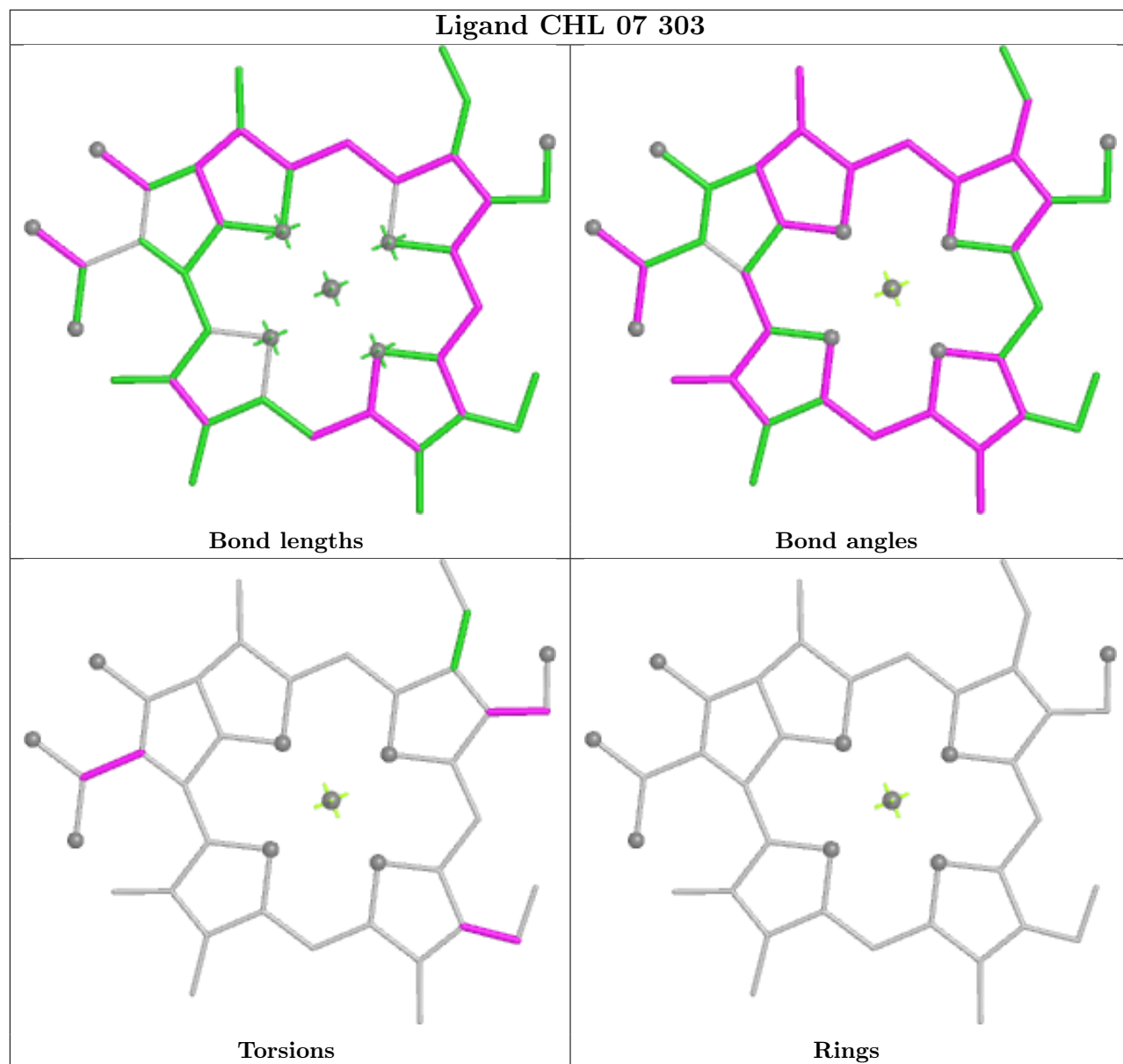
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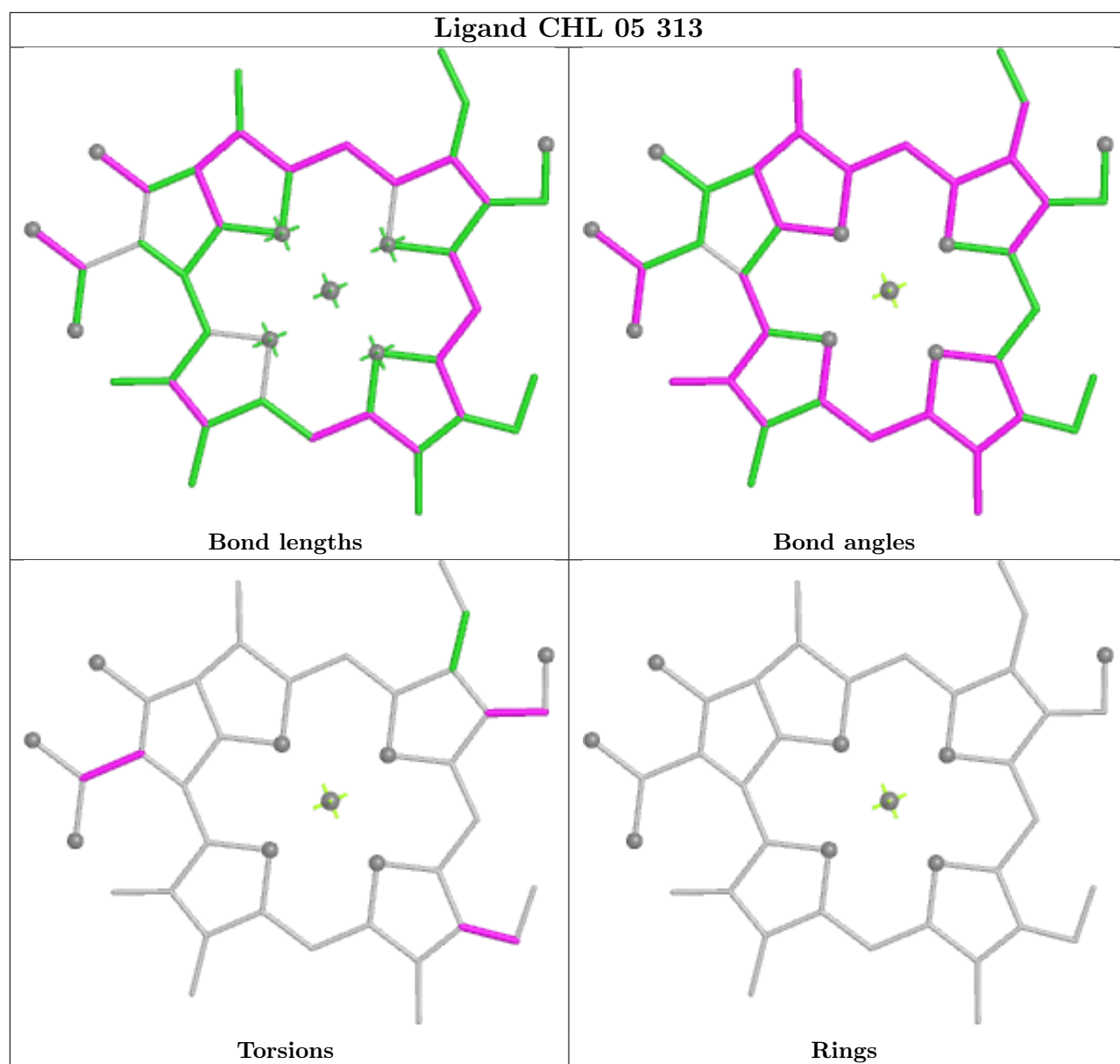
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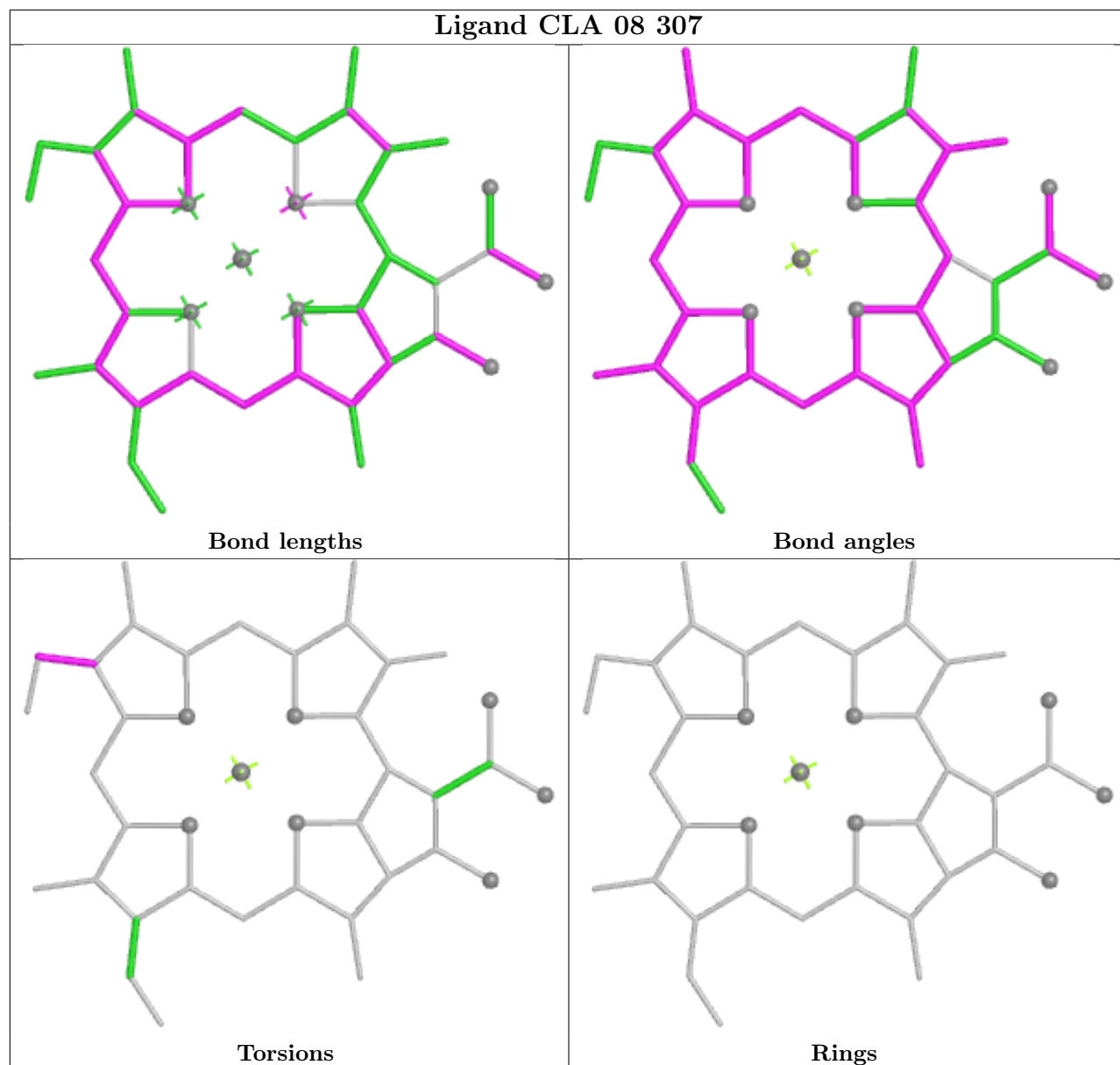
Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	08	309	CLA	1	0
5	1r	301	CLA	4	0
5	07	307	CLA	2	0
5	08	311	CLA	3	0
5	05	311	CLA	1	0
6	05	305	CHL	4	0
5	05	310	CLA	1	0
5	1r	309	CLA	3	0
6	06	603	CHL	1	0
5	06	607	CLA	2	0
6	05	304	CHL	5	0
5	05	312	CLA	1	0
6	08	304	CHL	1	0
7	07	313	LUT	7	0
6	07	304	CHL	1	0
7	1r	314	LUT	6	0

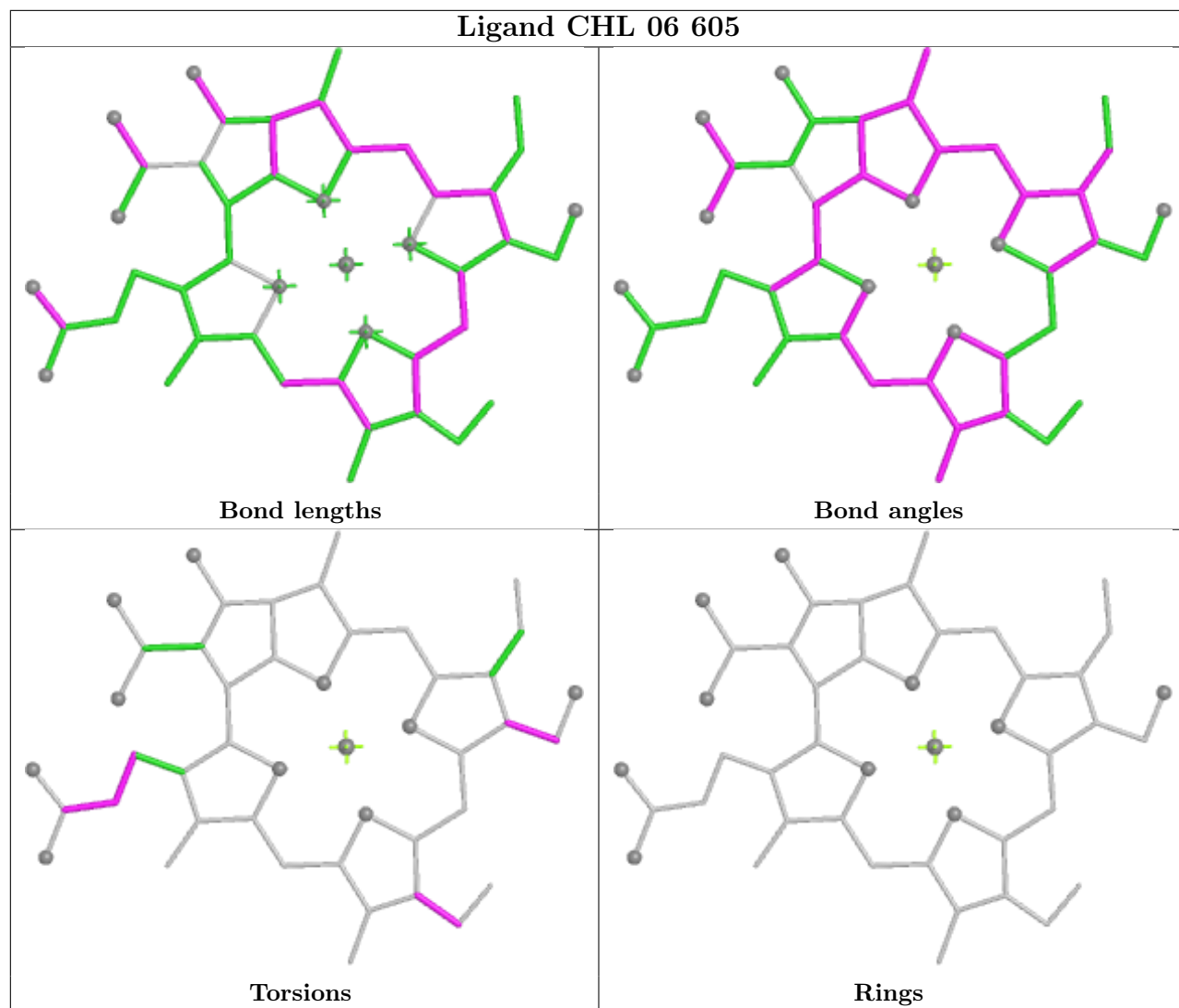
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.

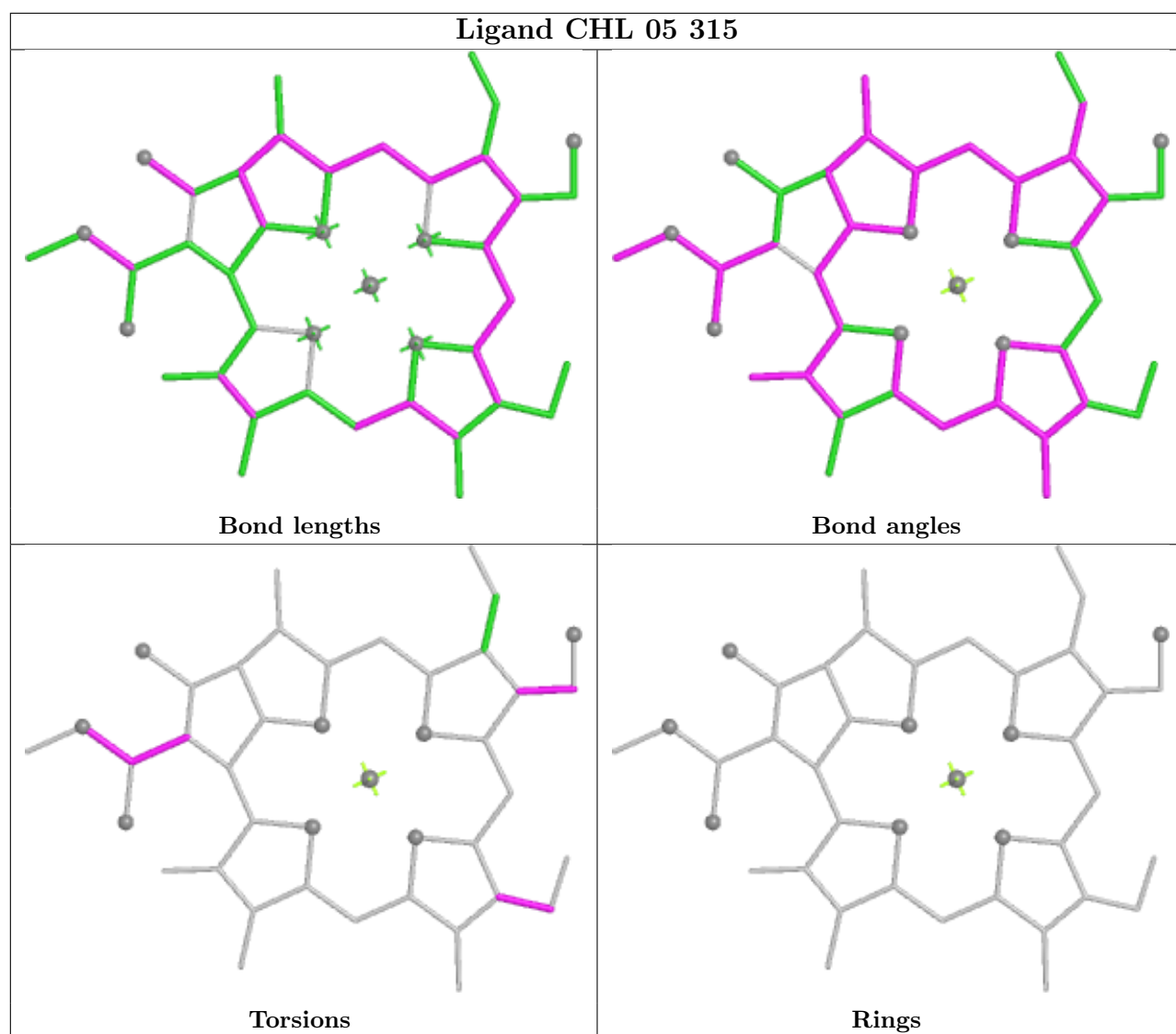


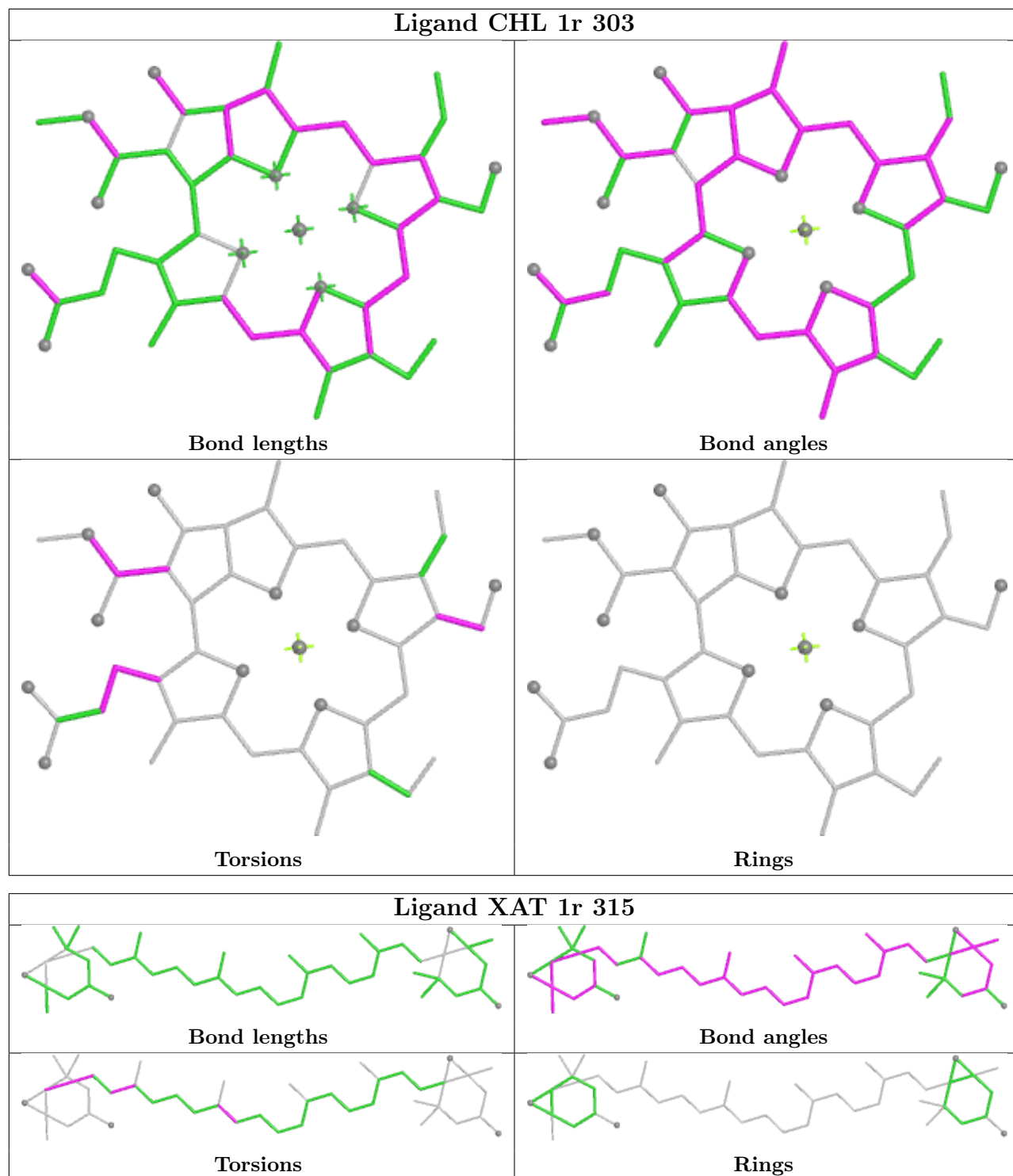


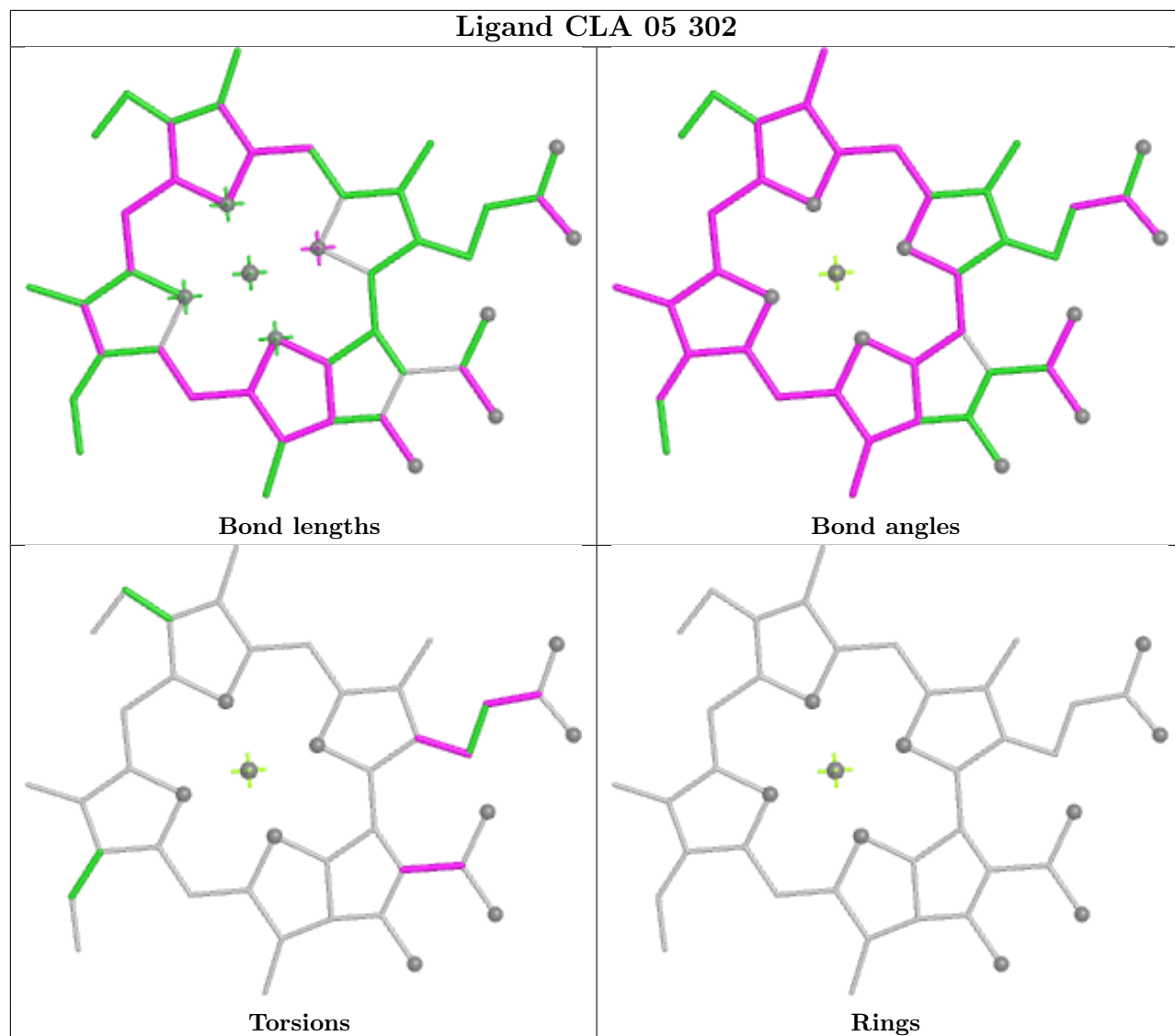


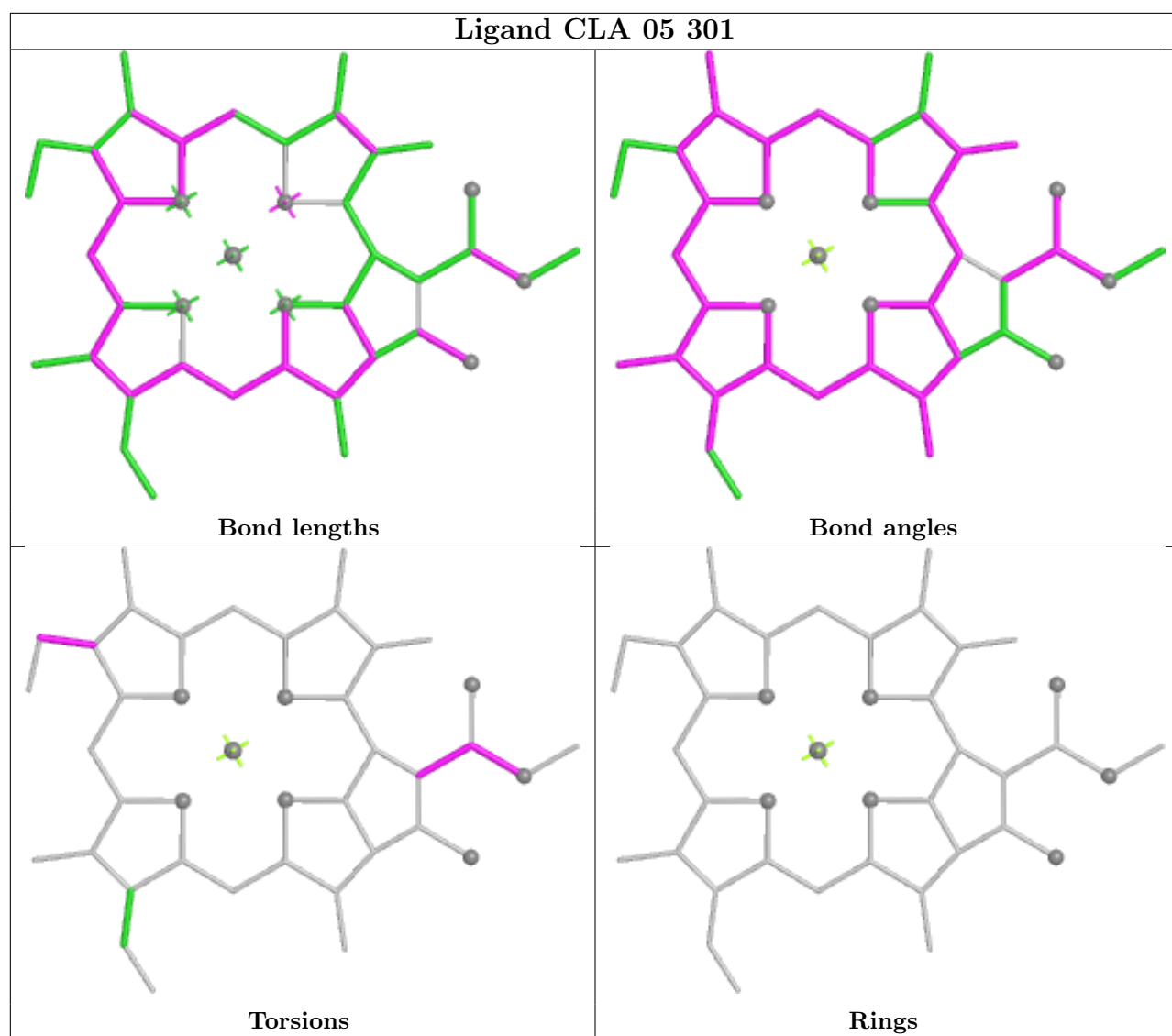


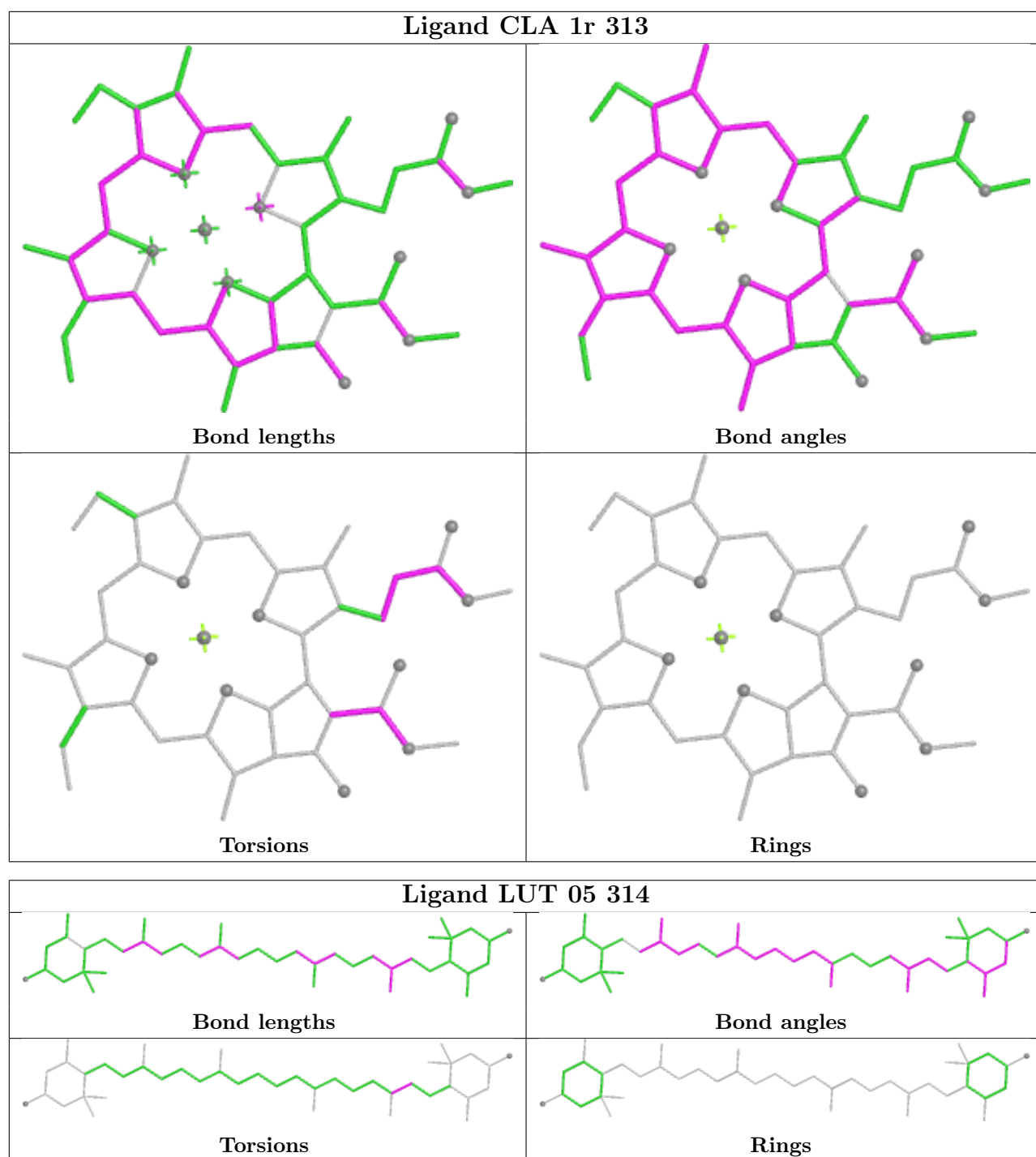


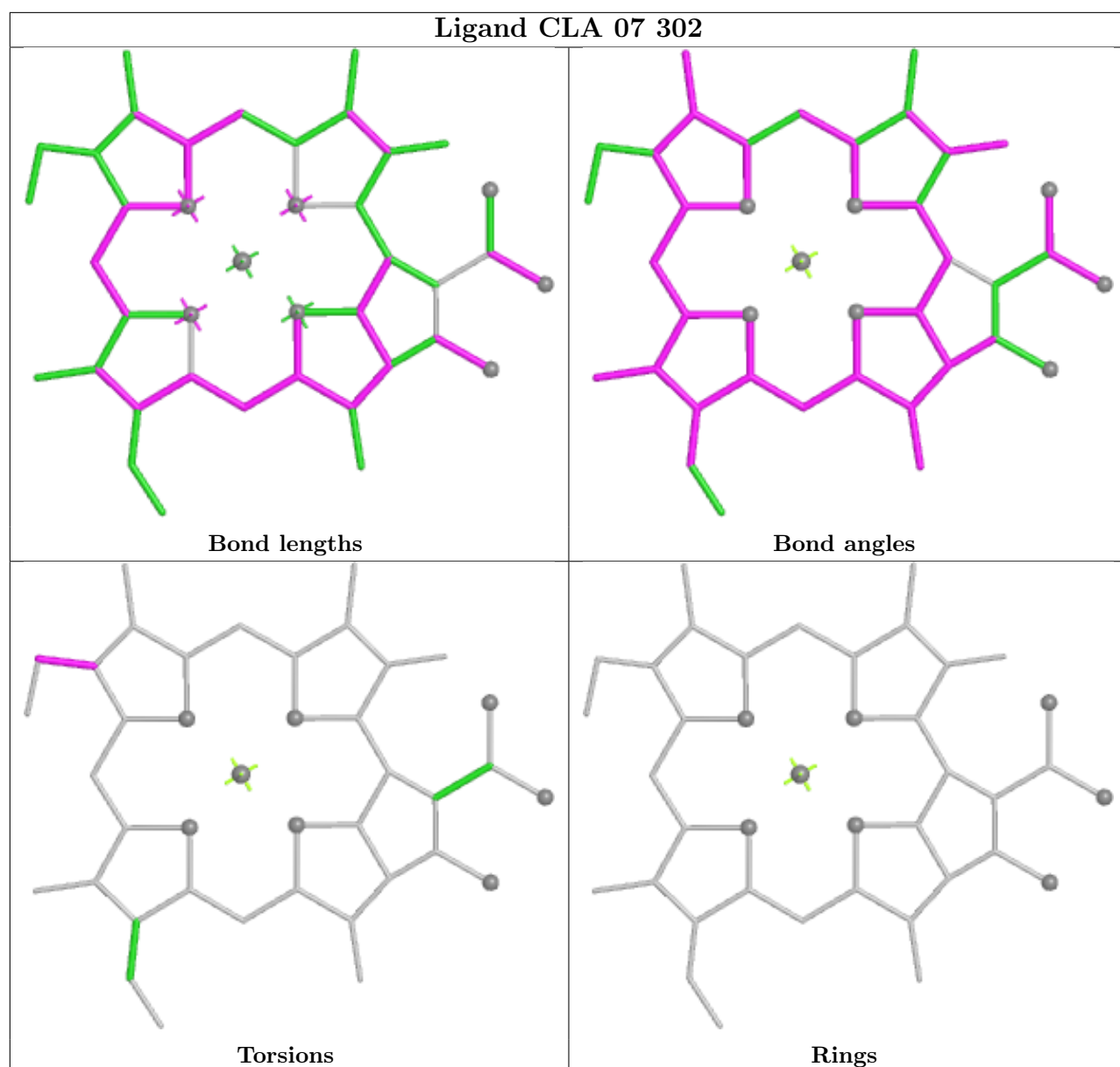


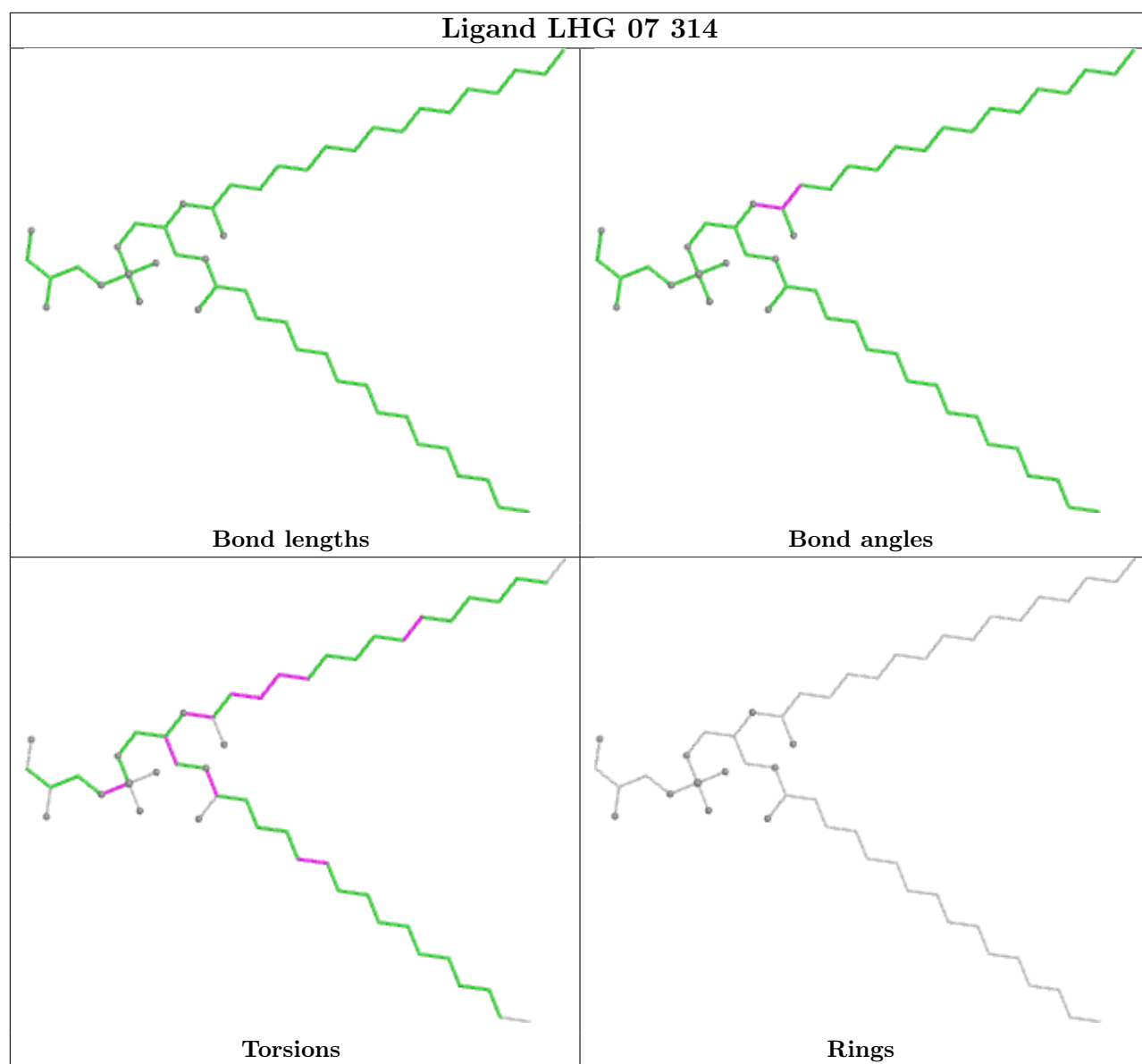


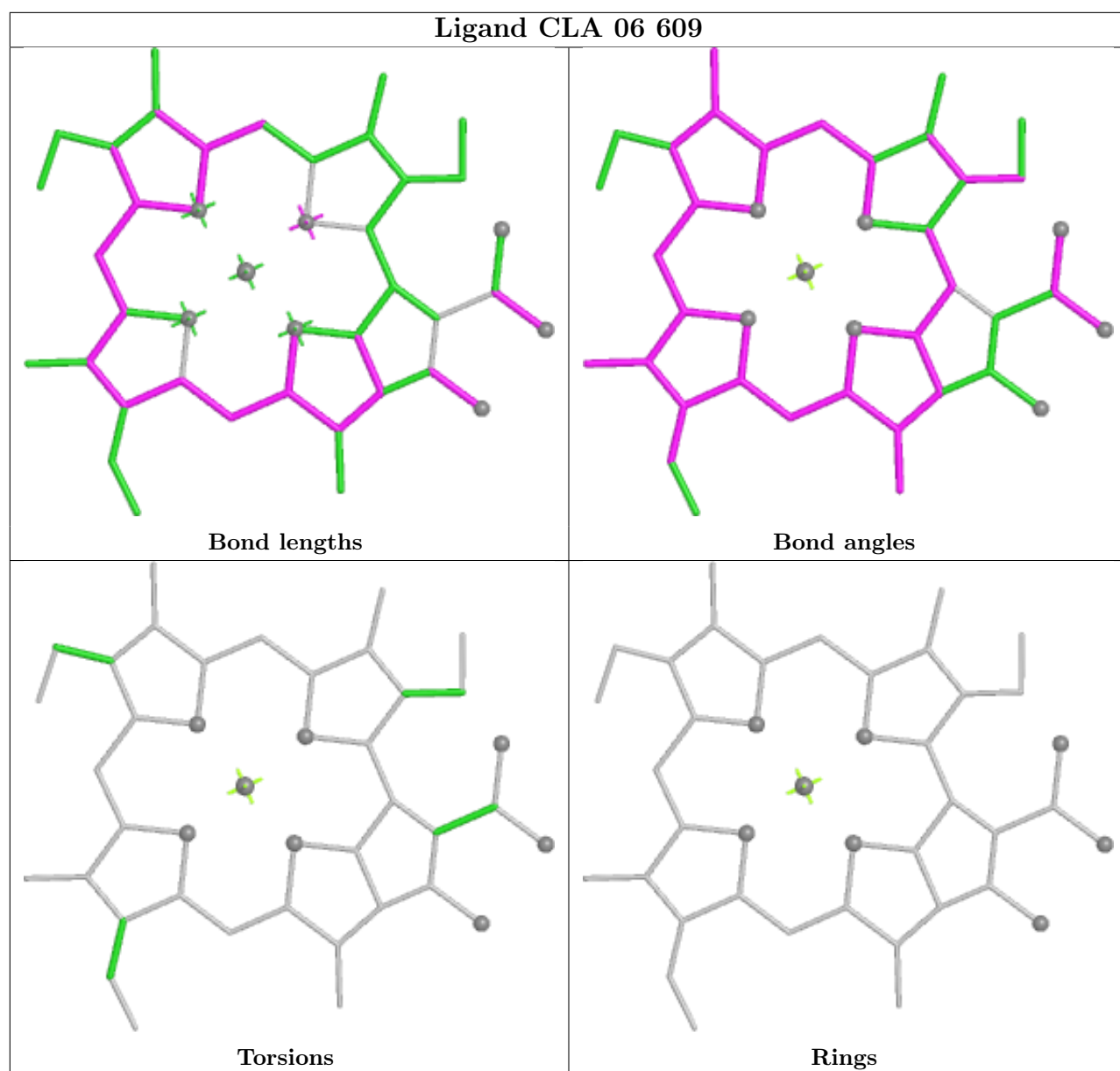


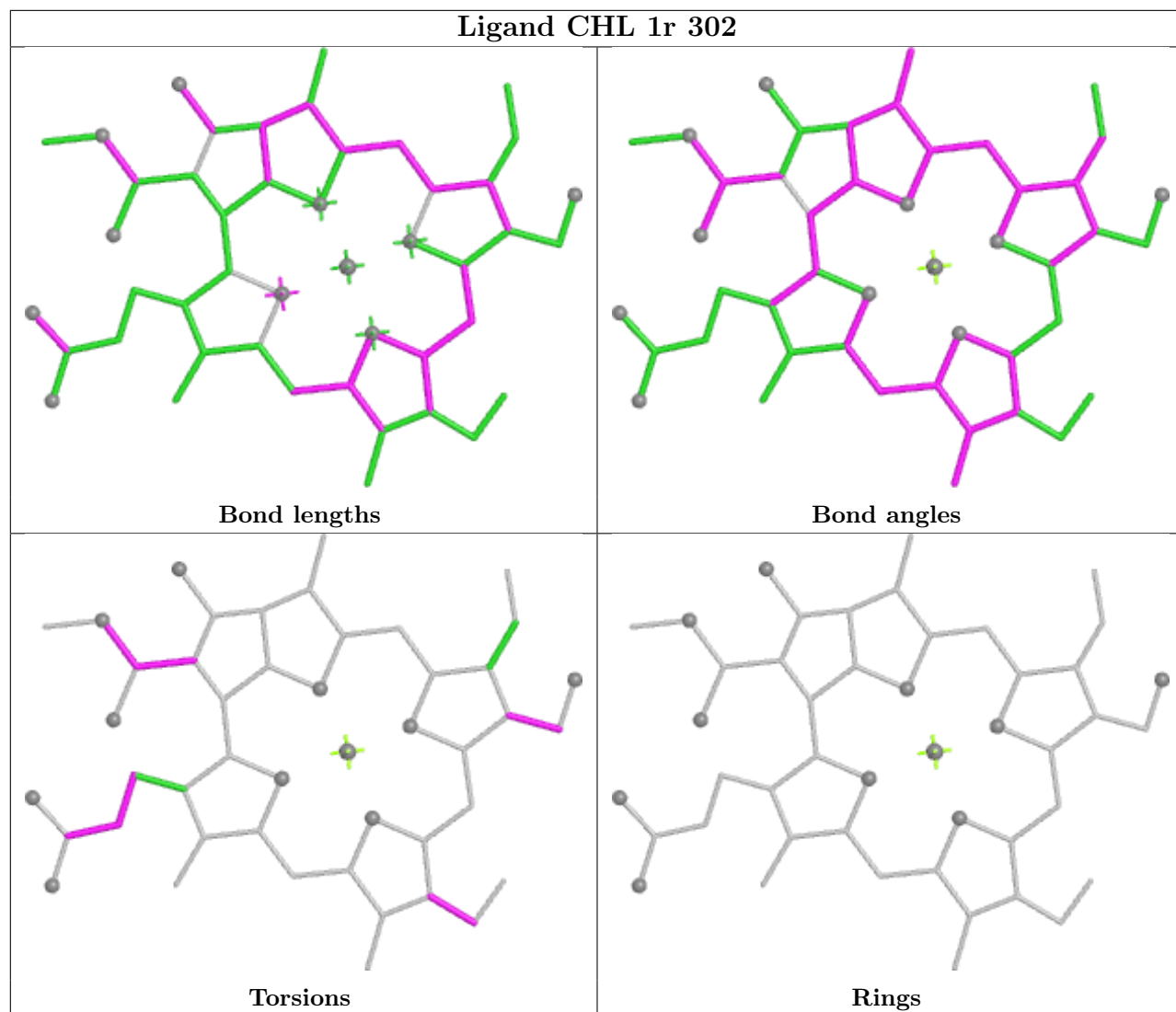


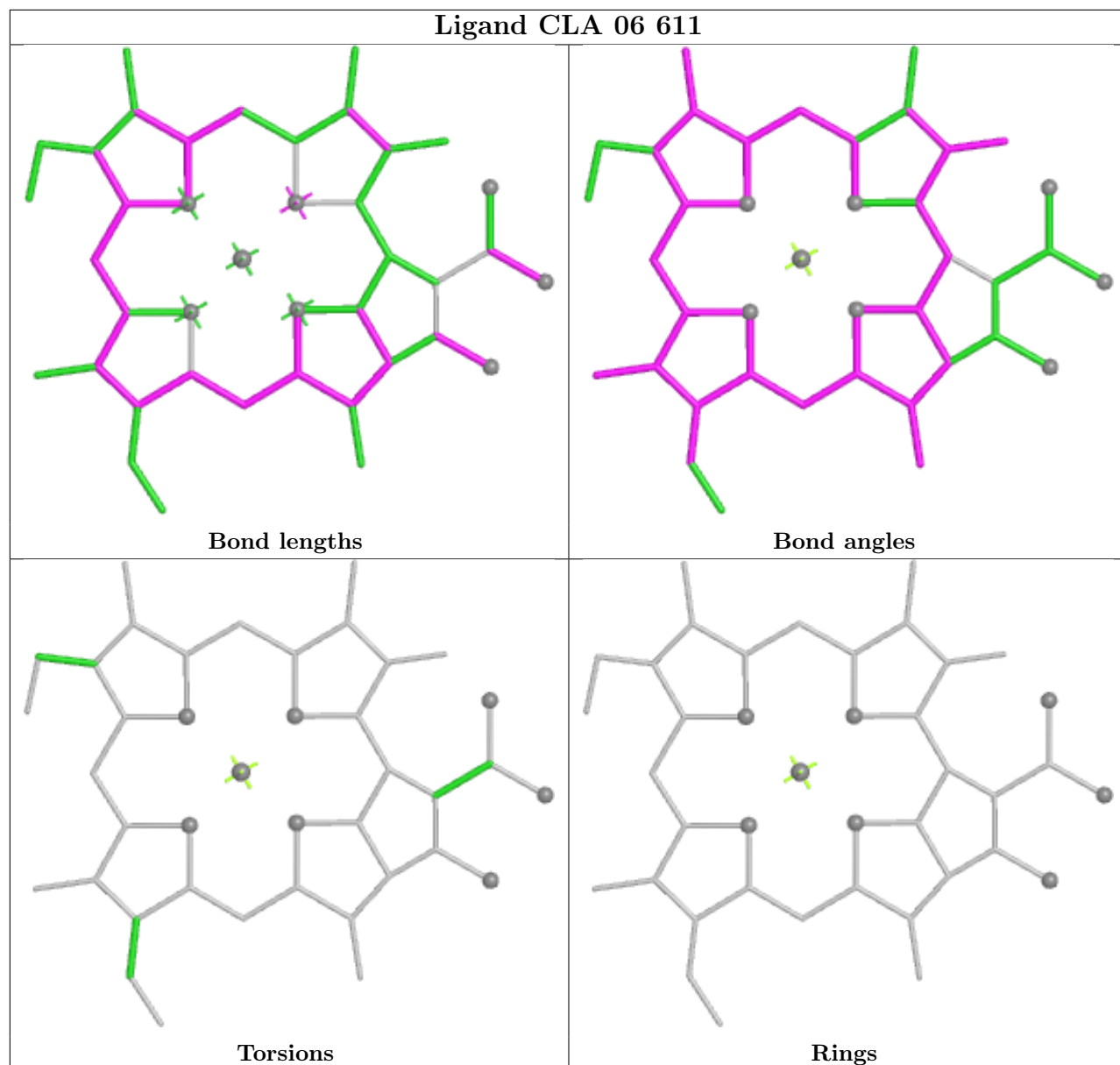


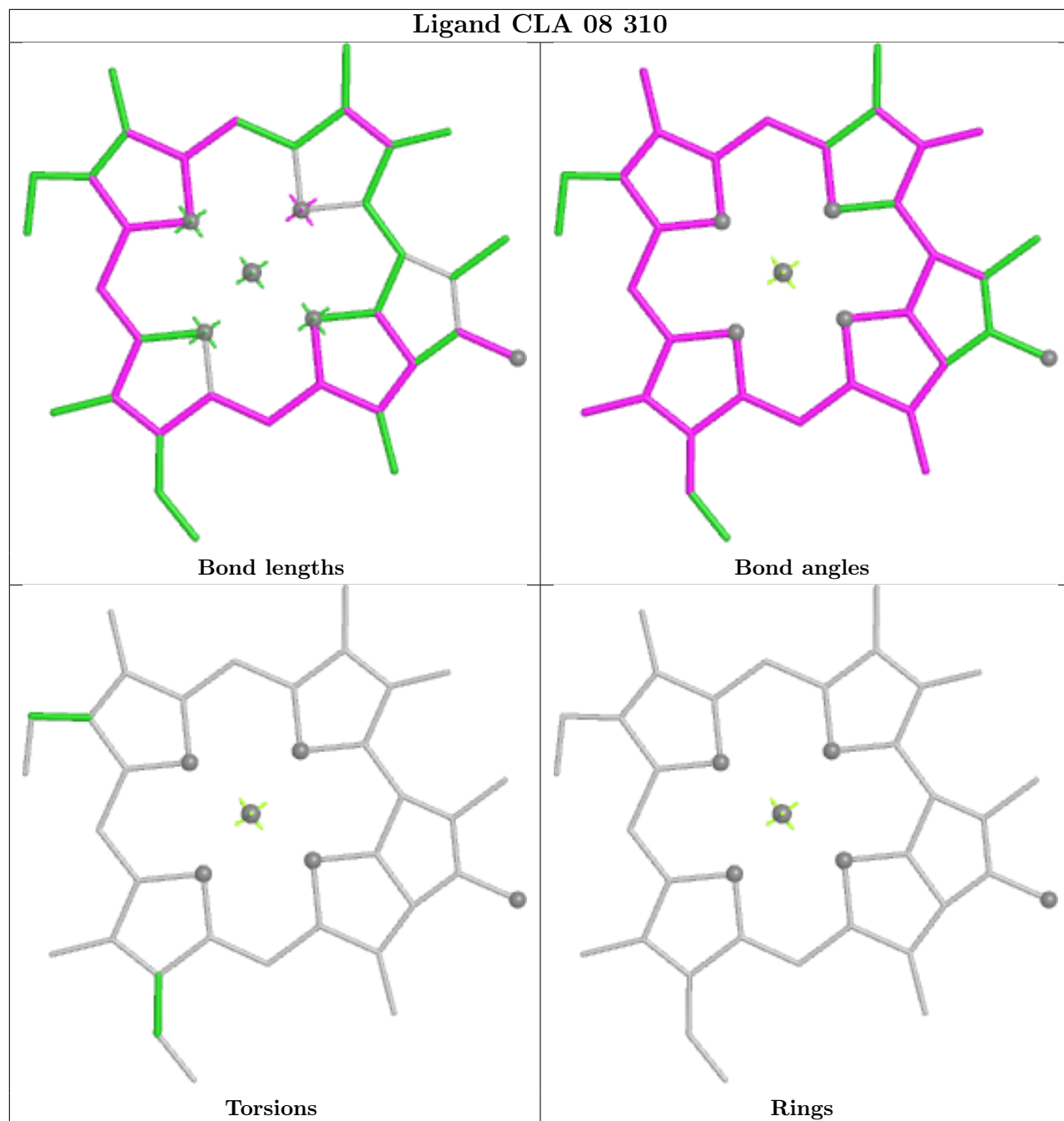


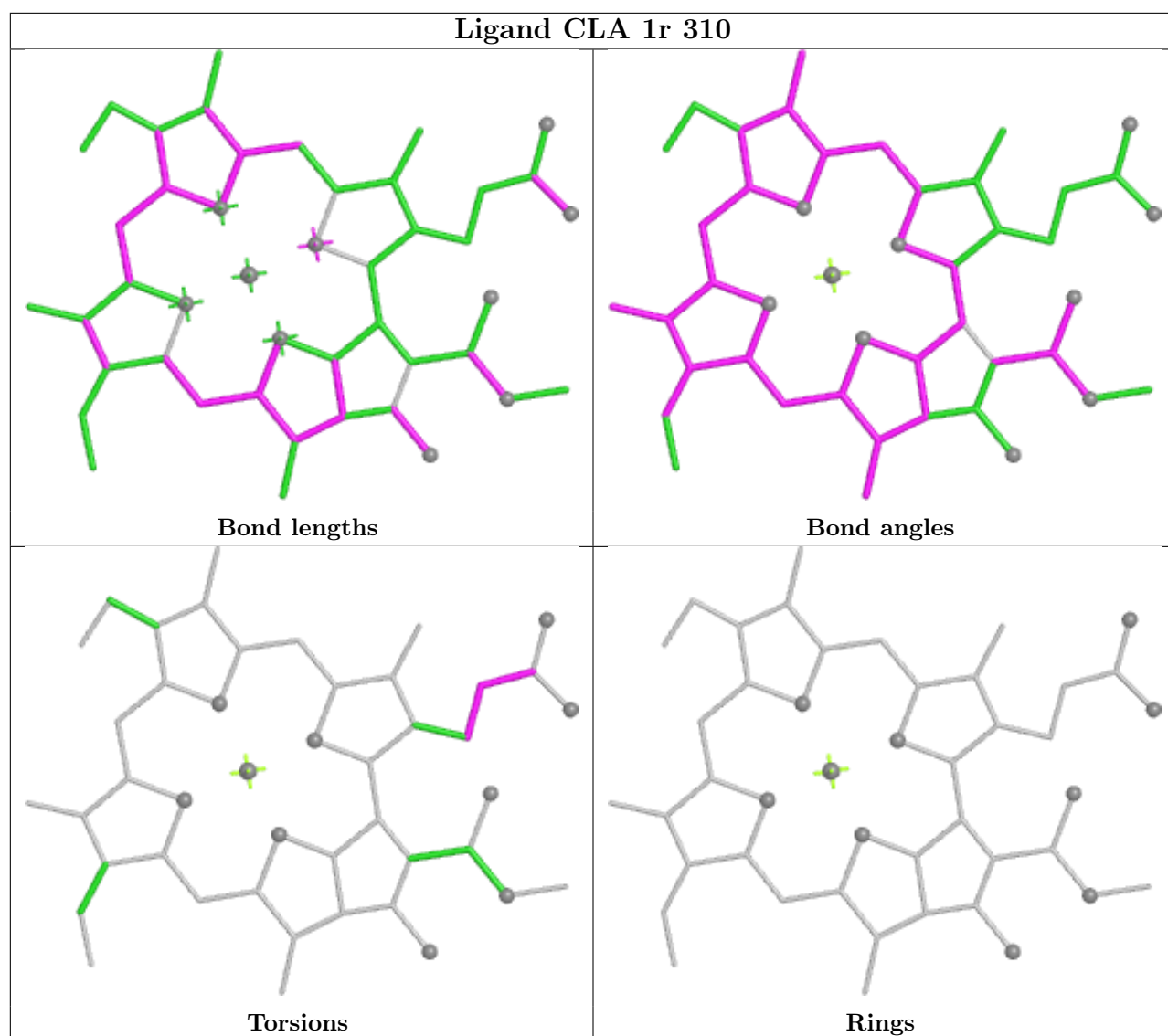


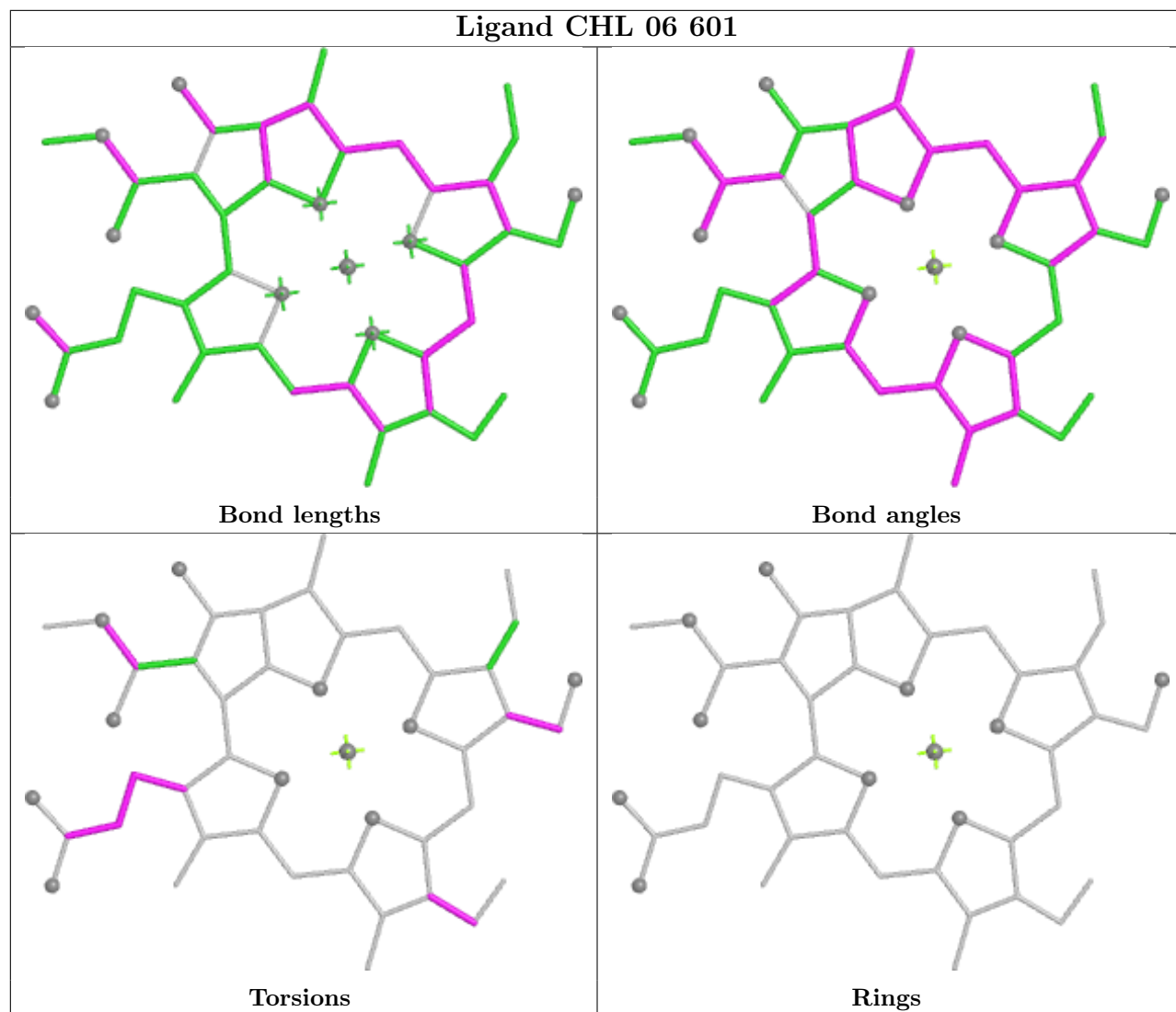


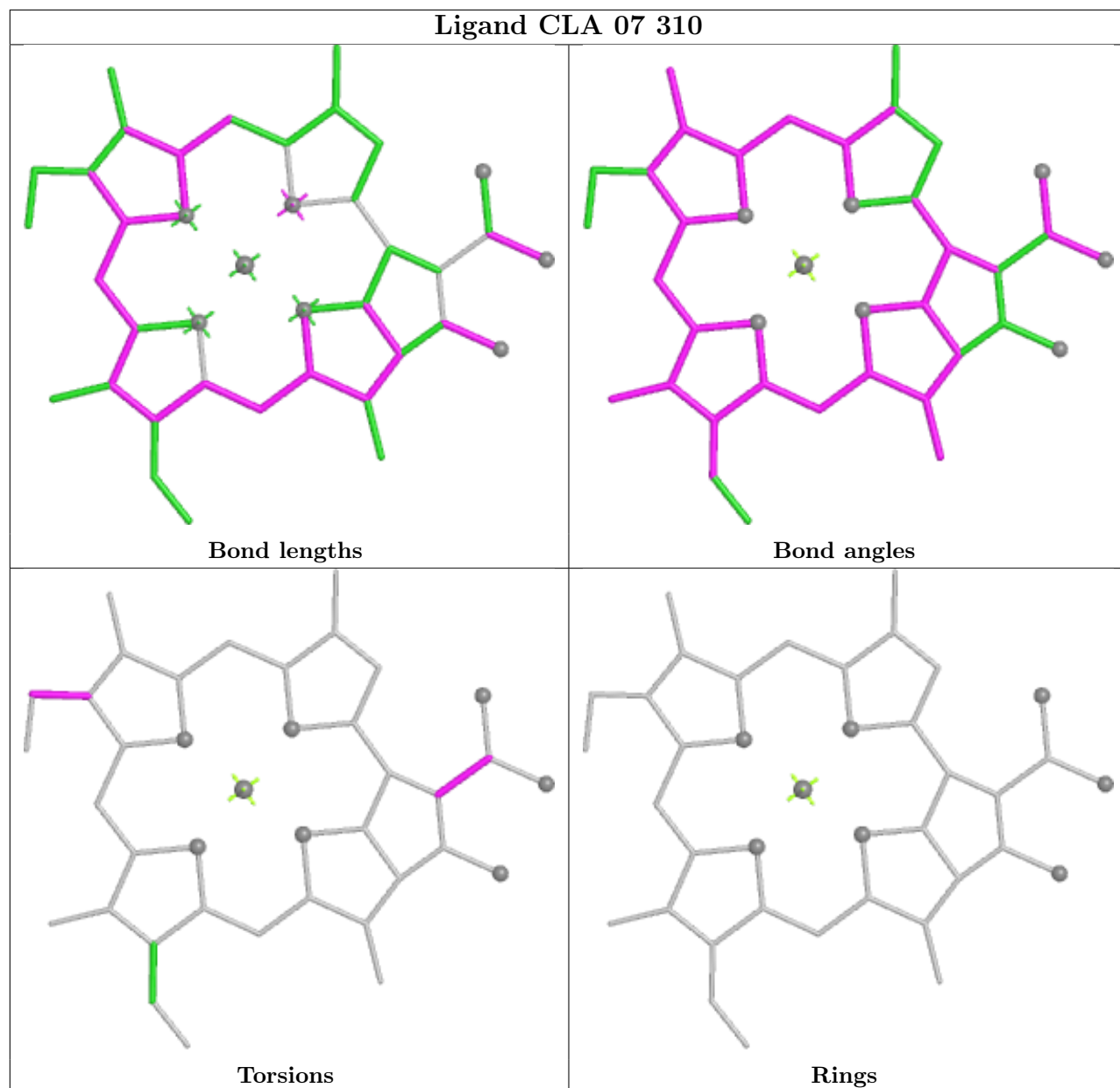


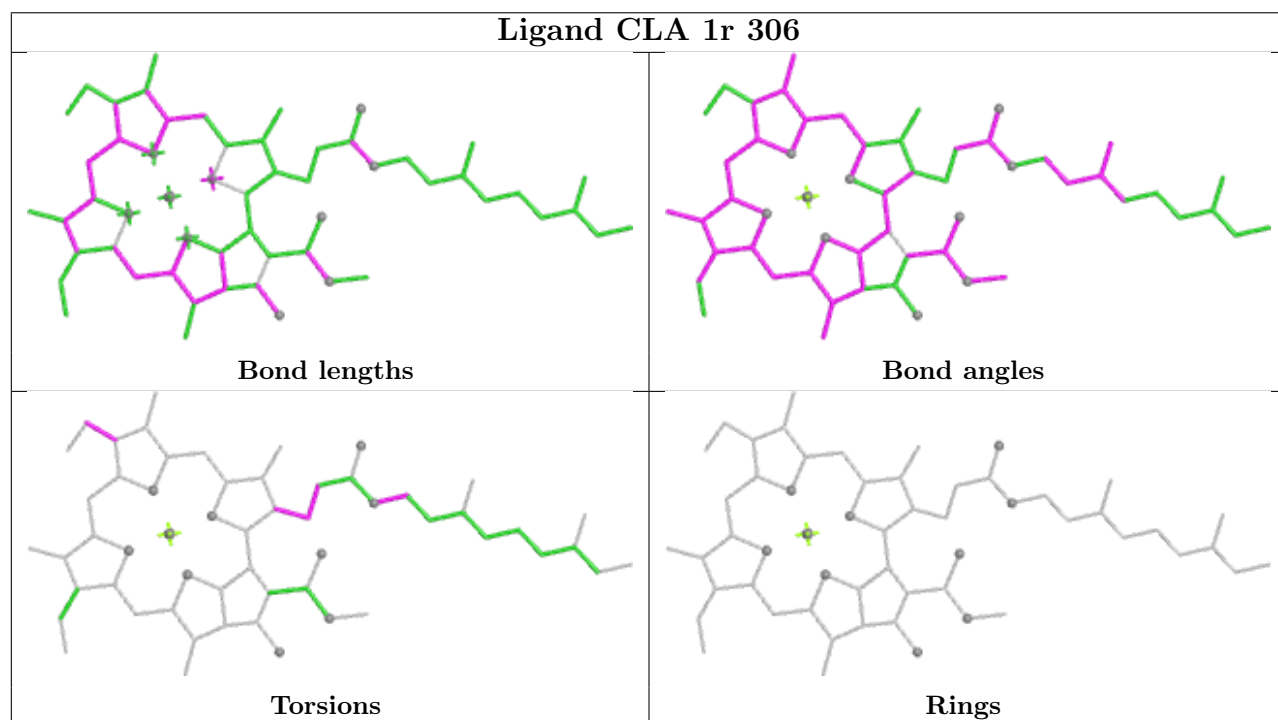
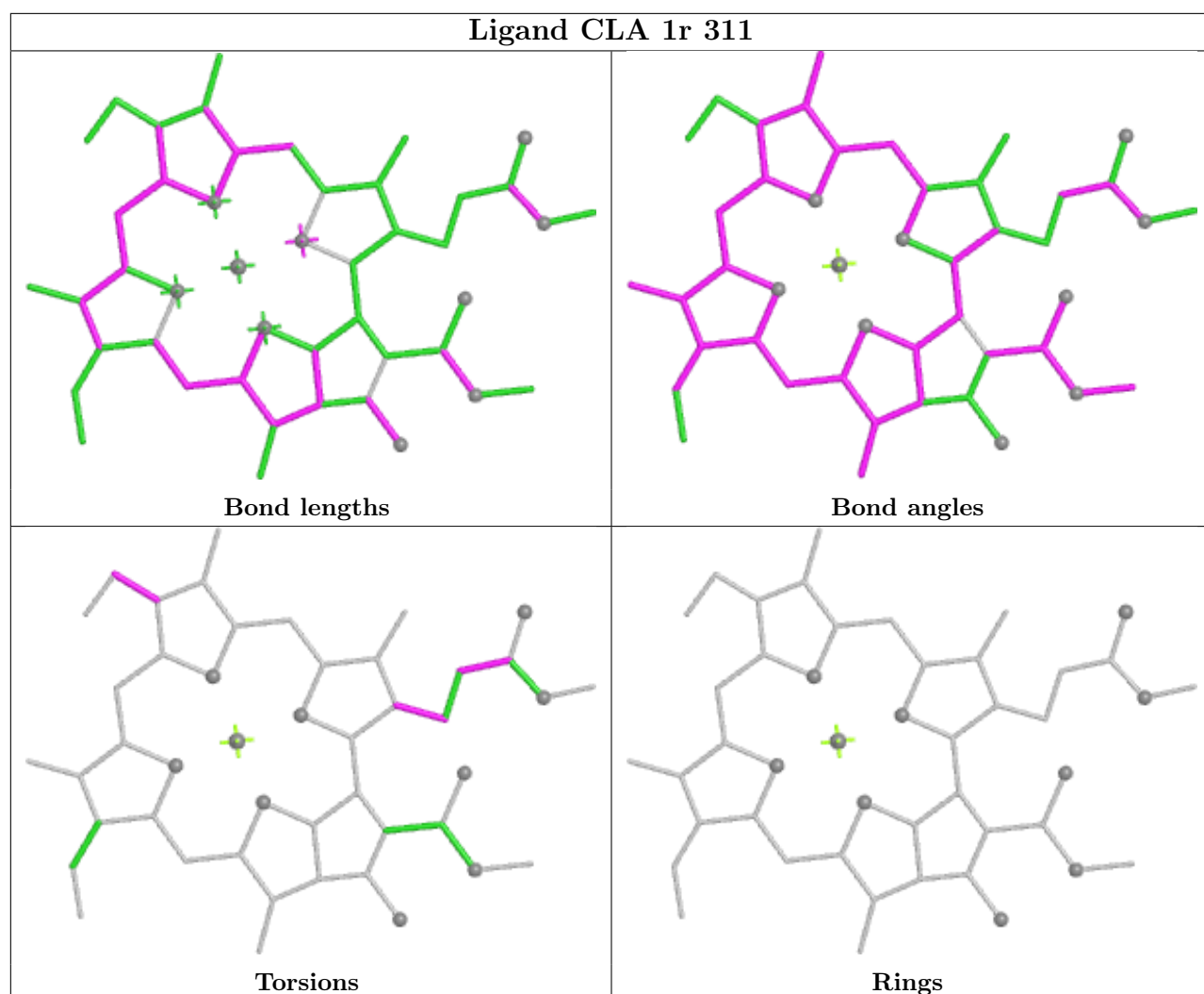


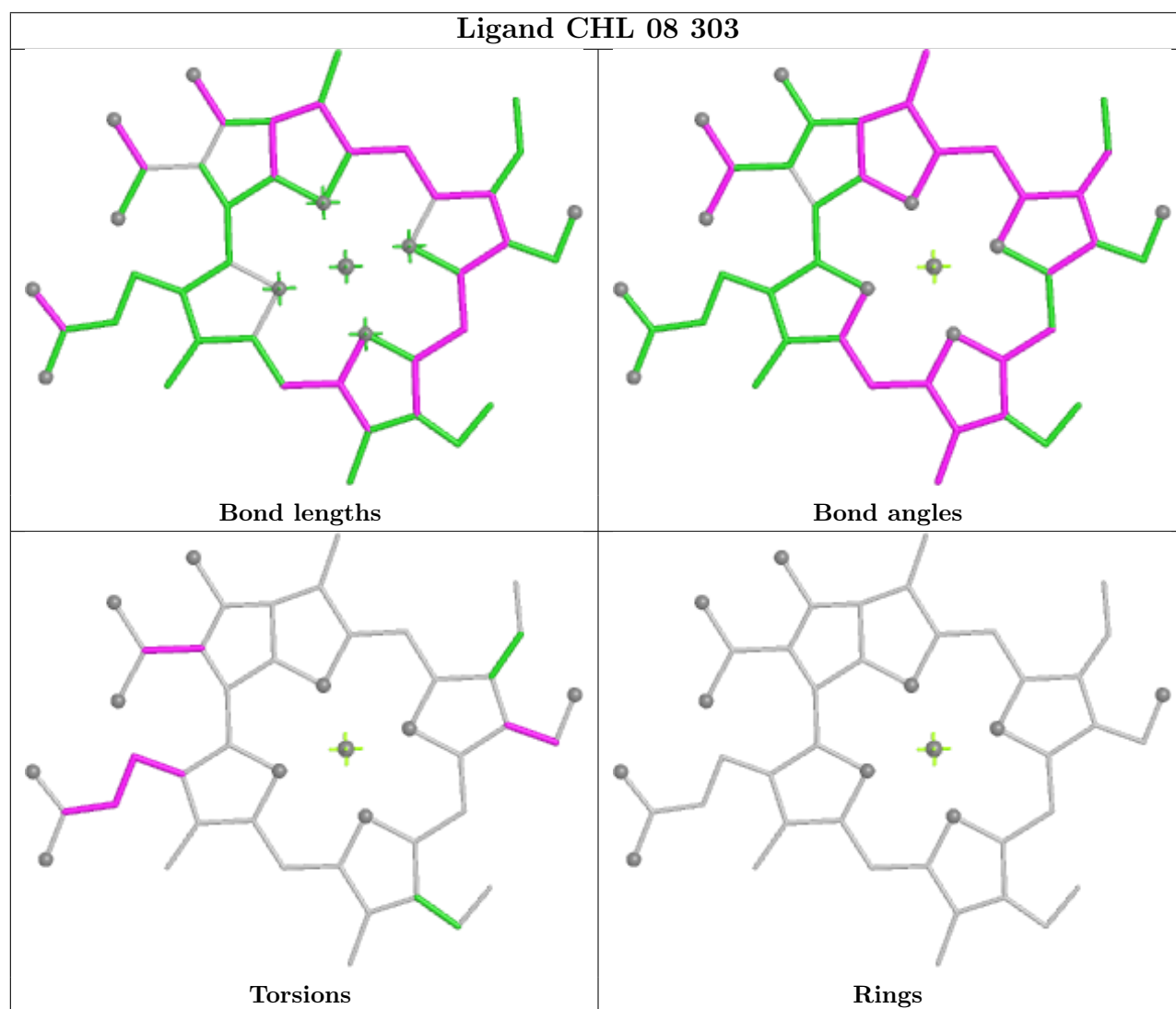
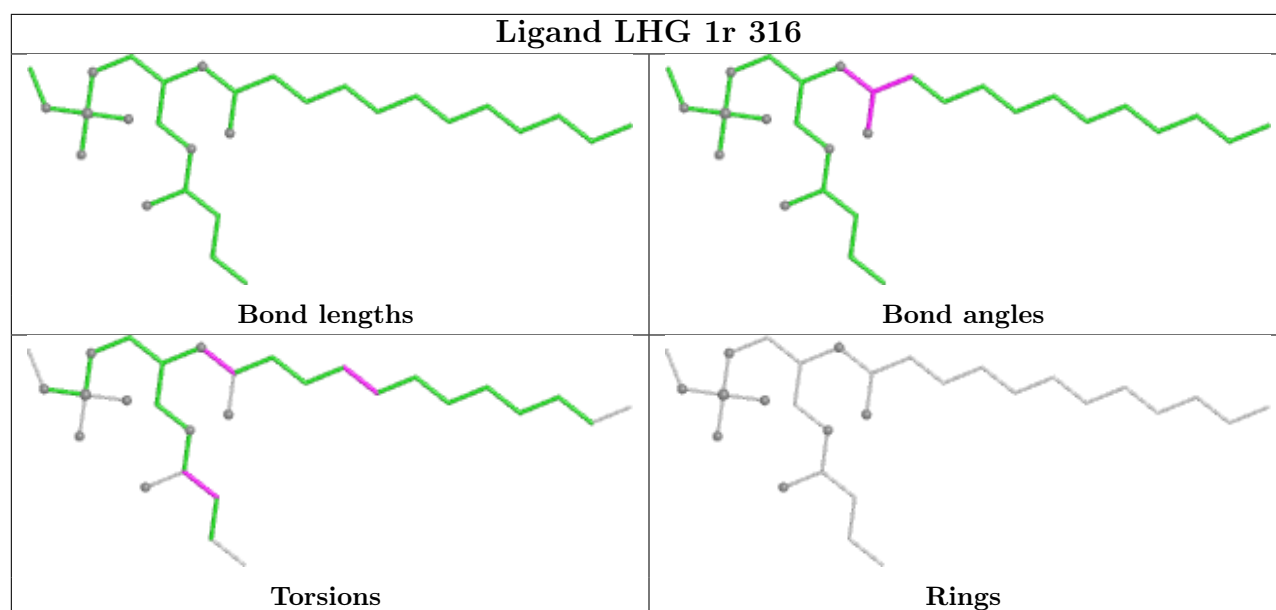


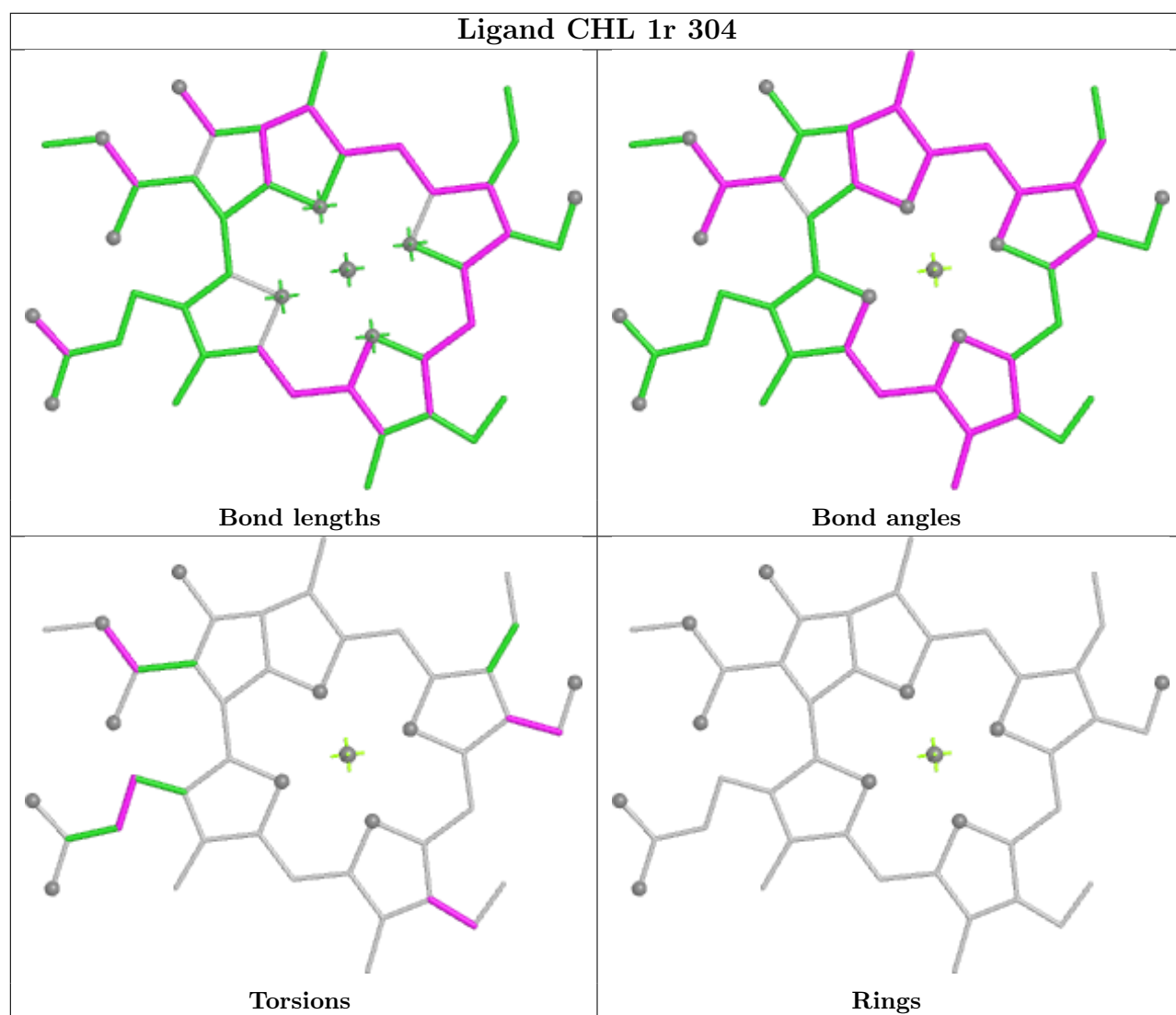


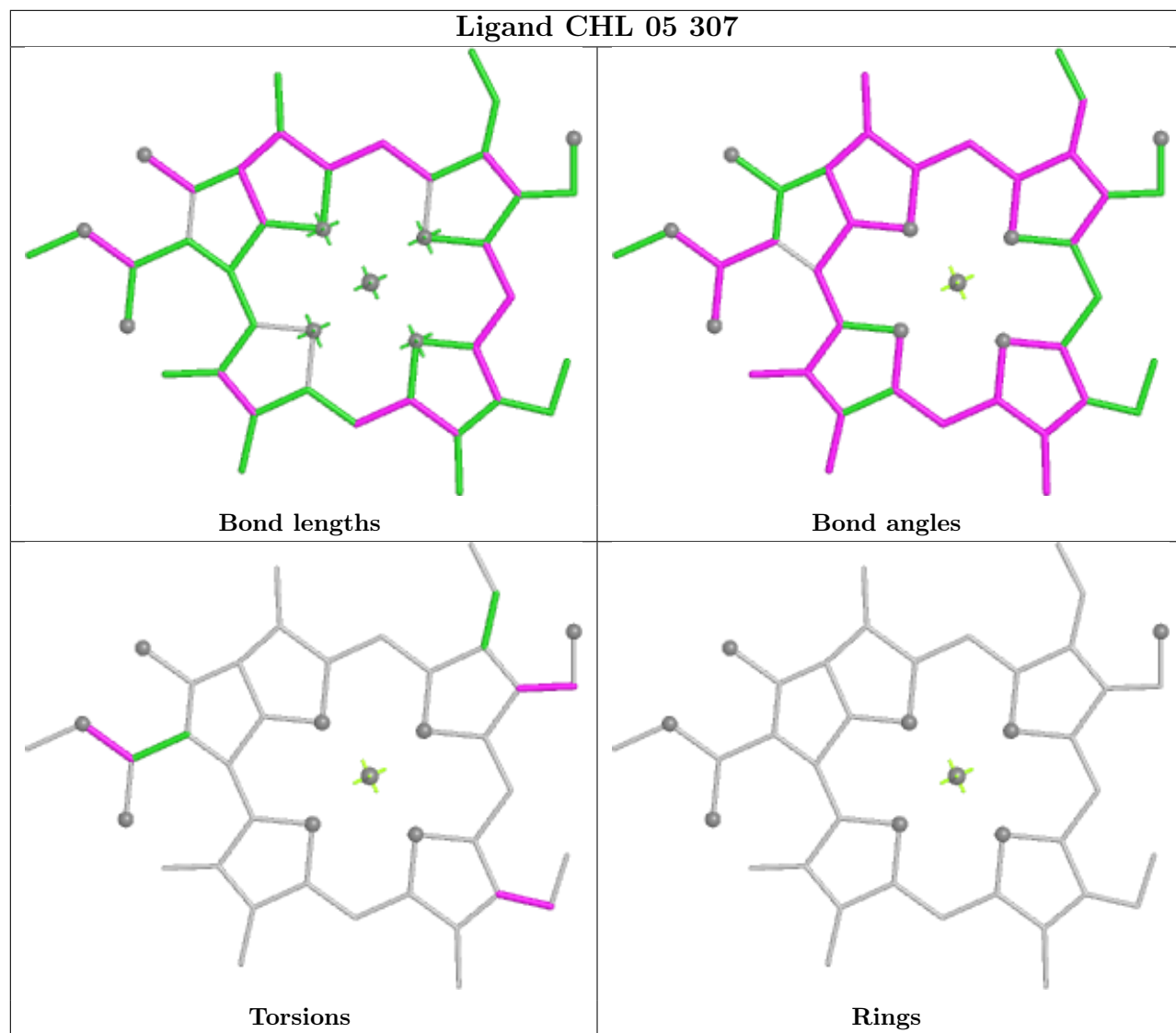


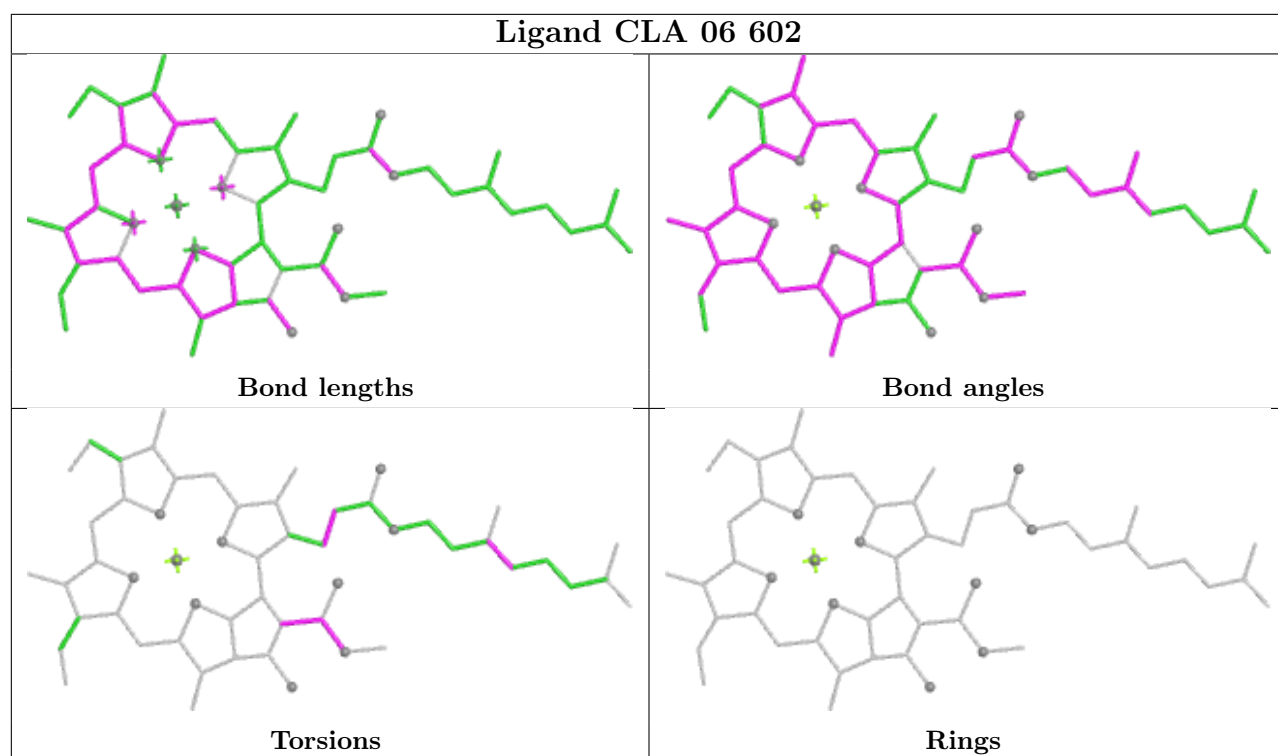


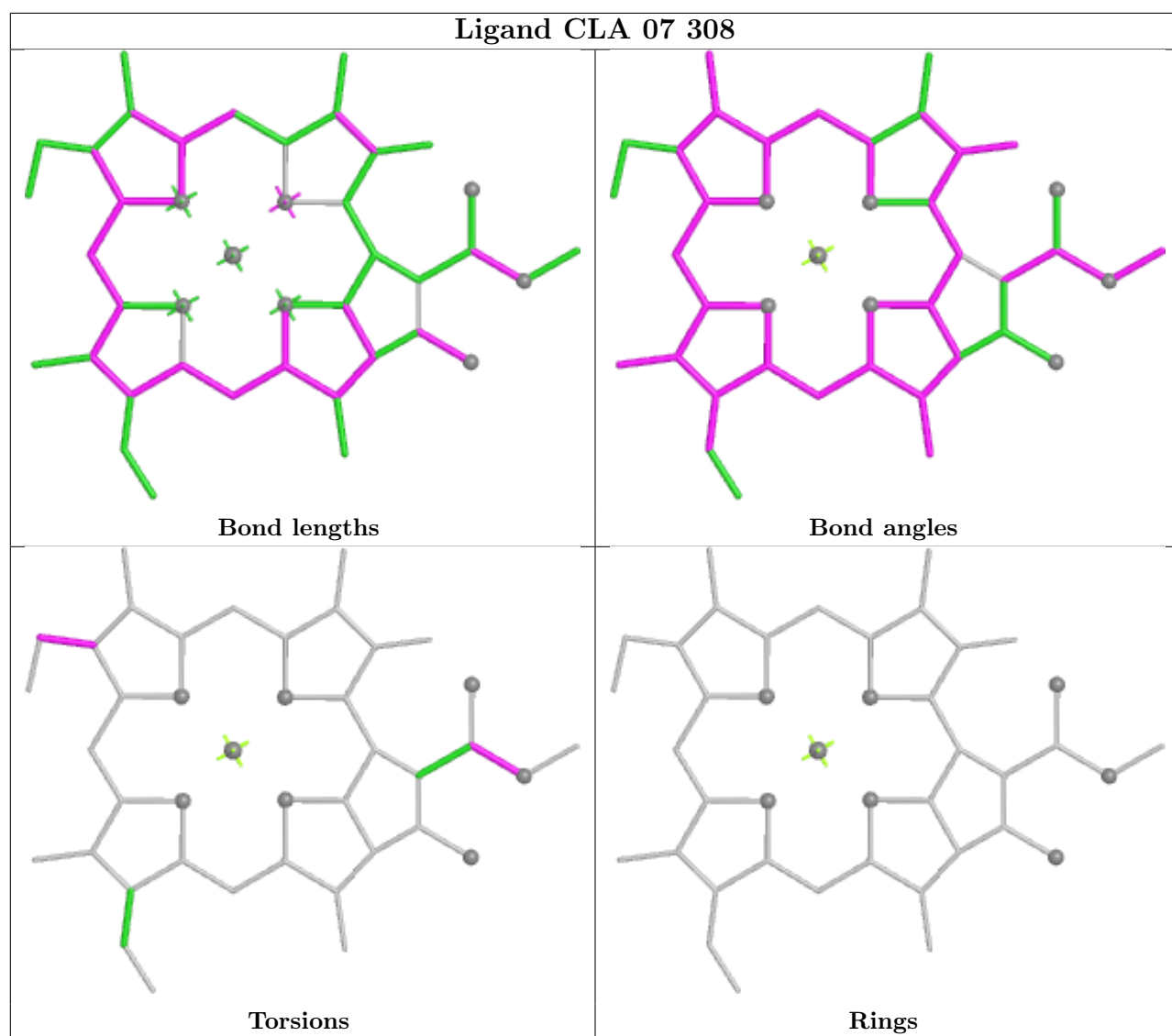


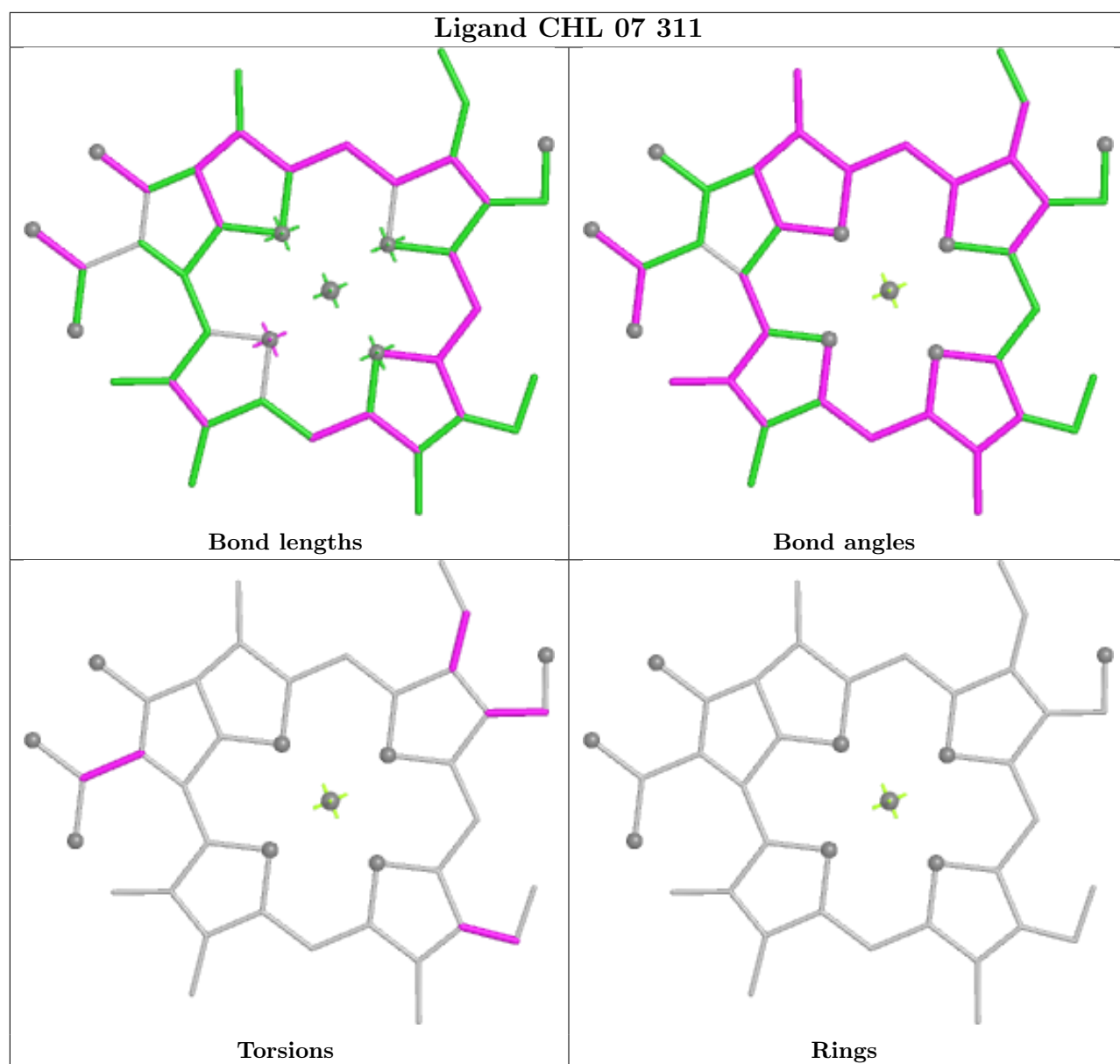


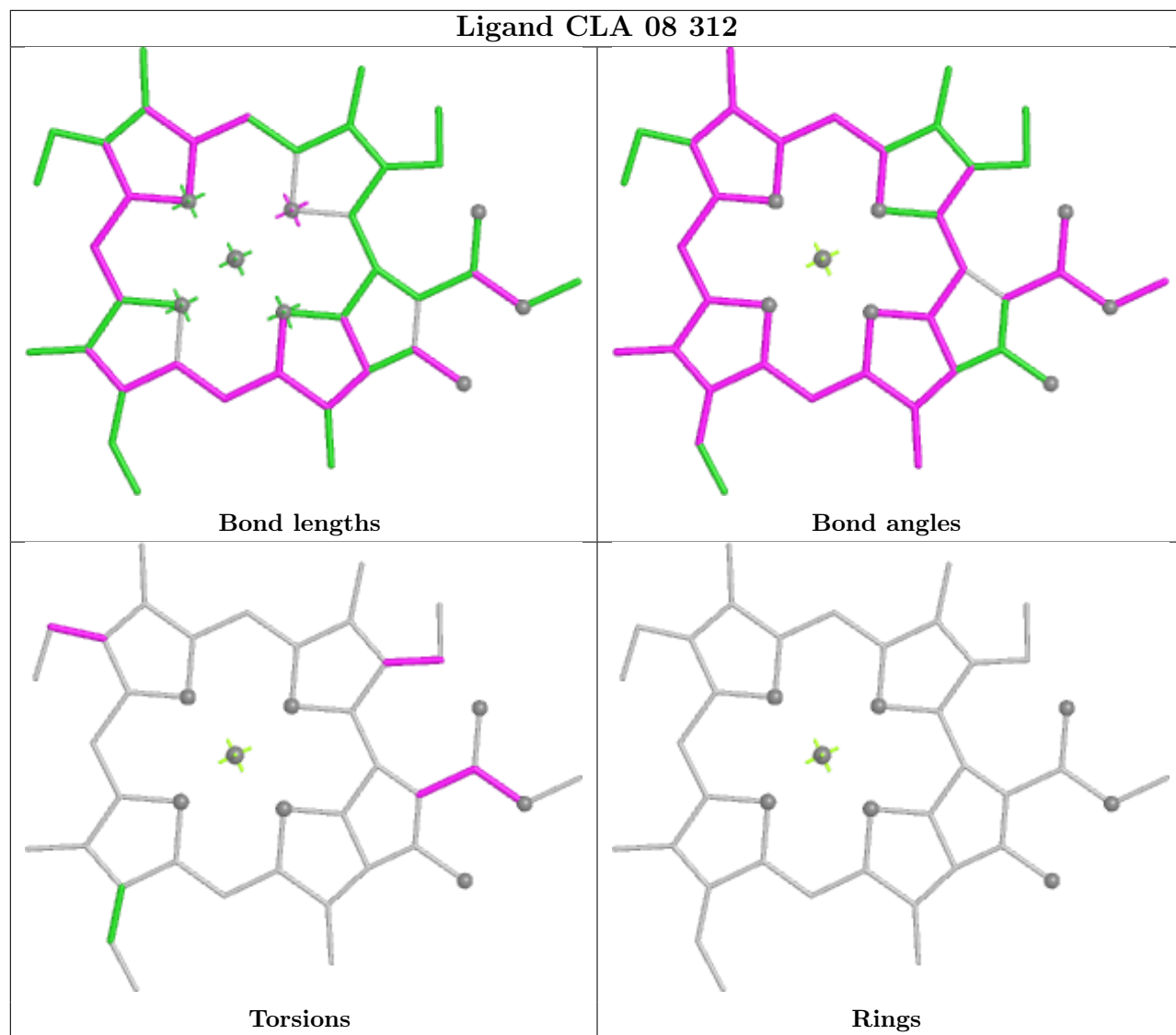


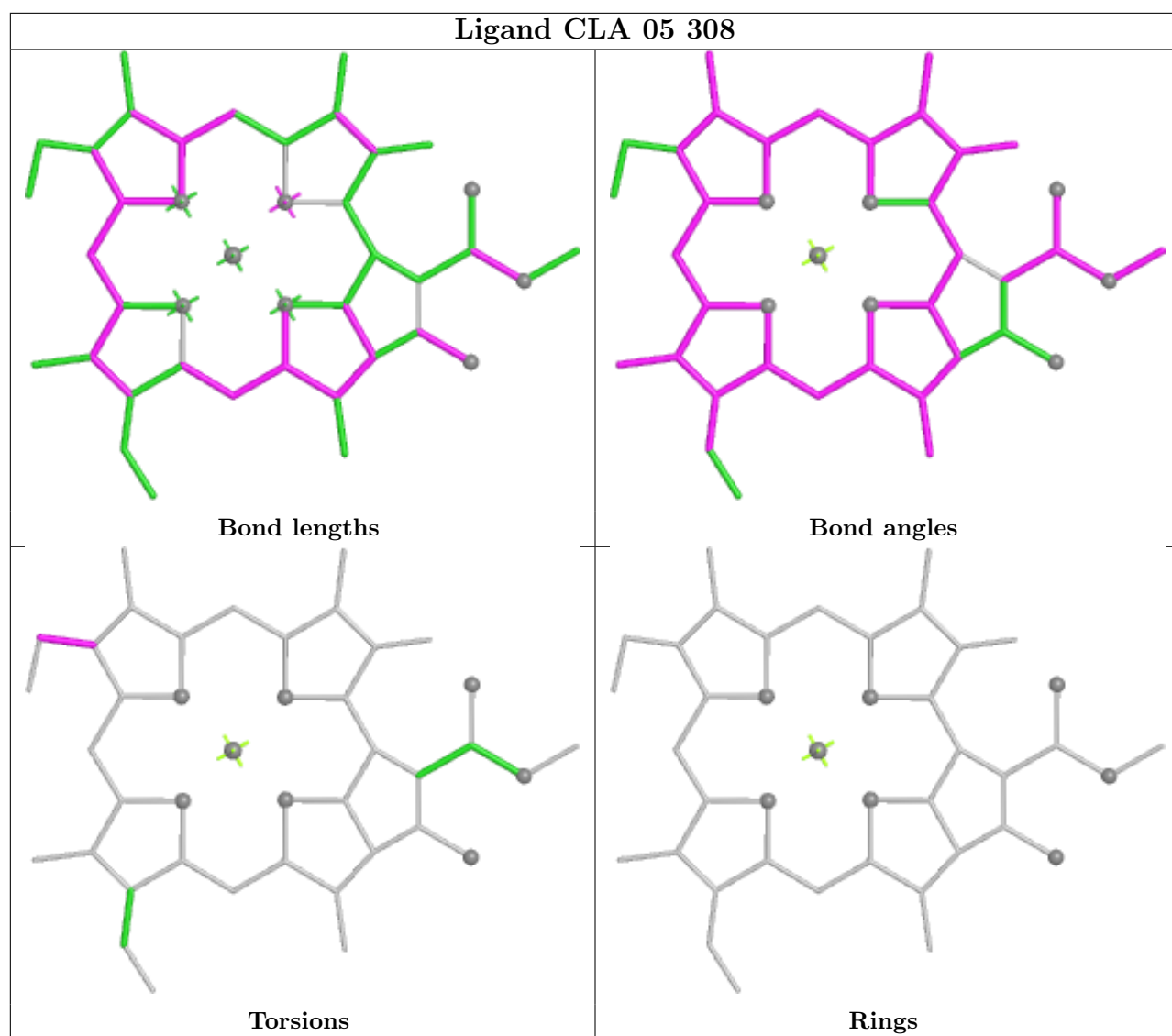


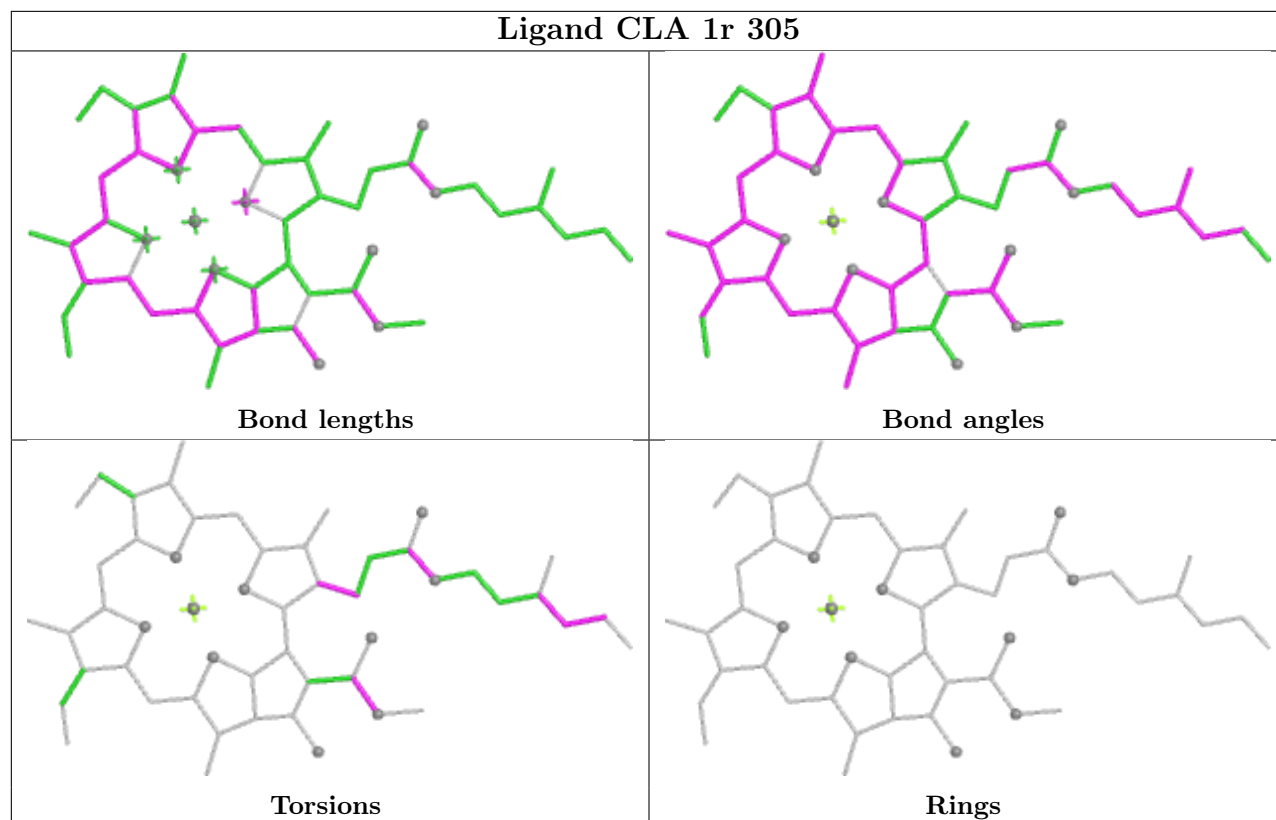


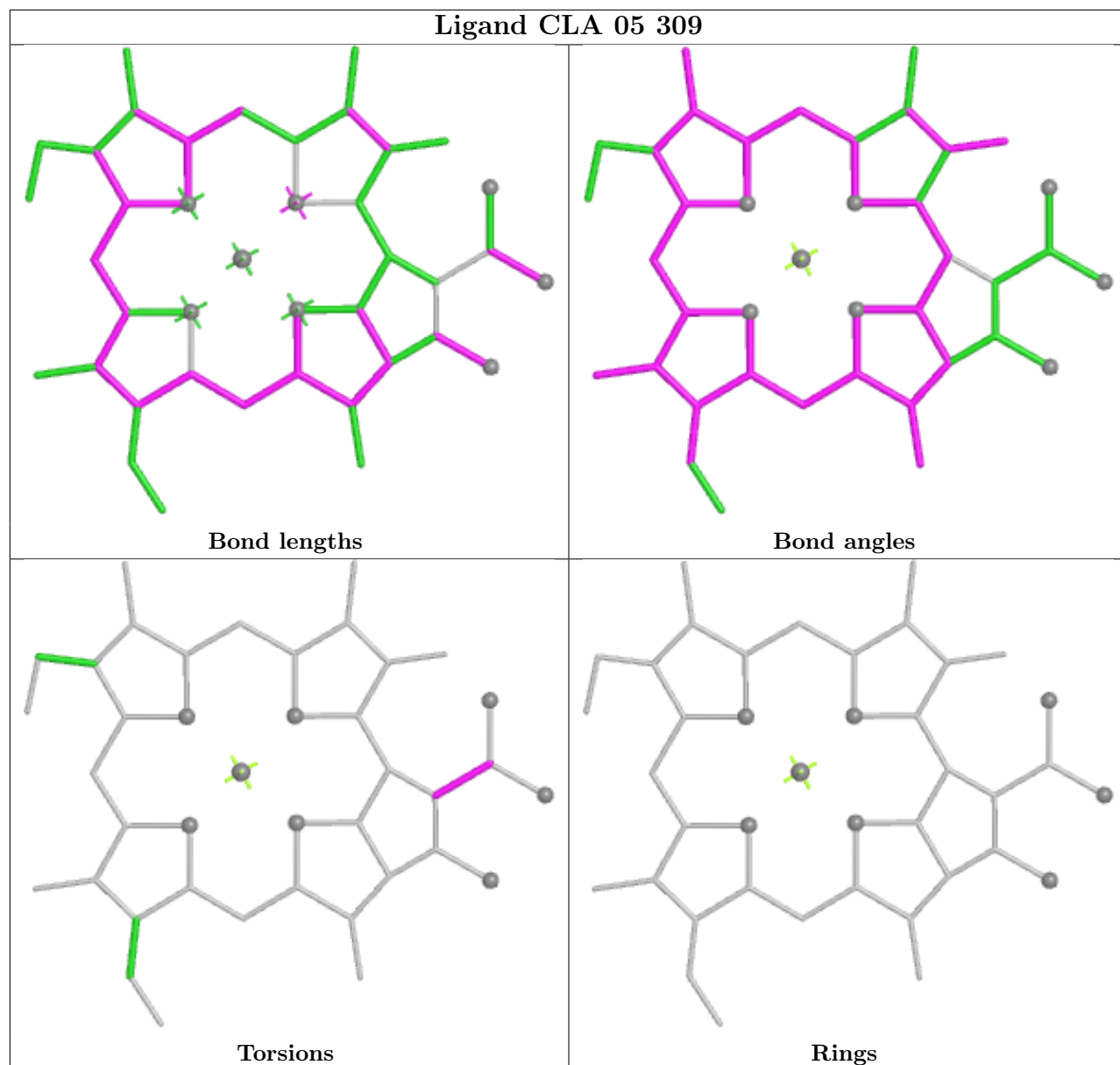


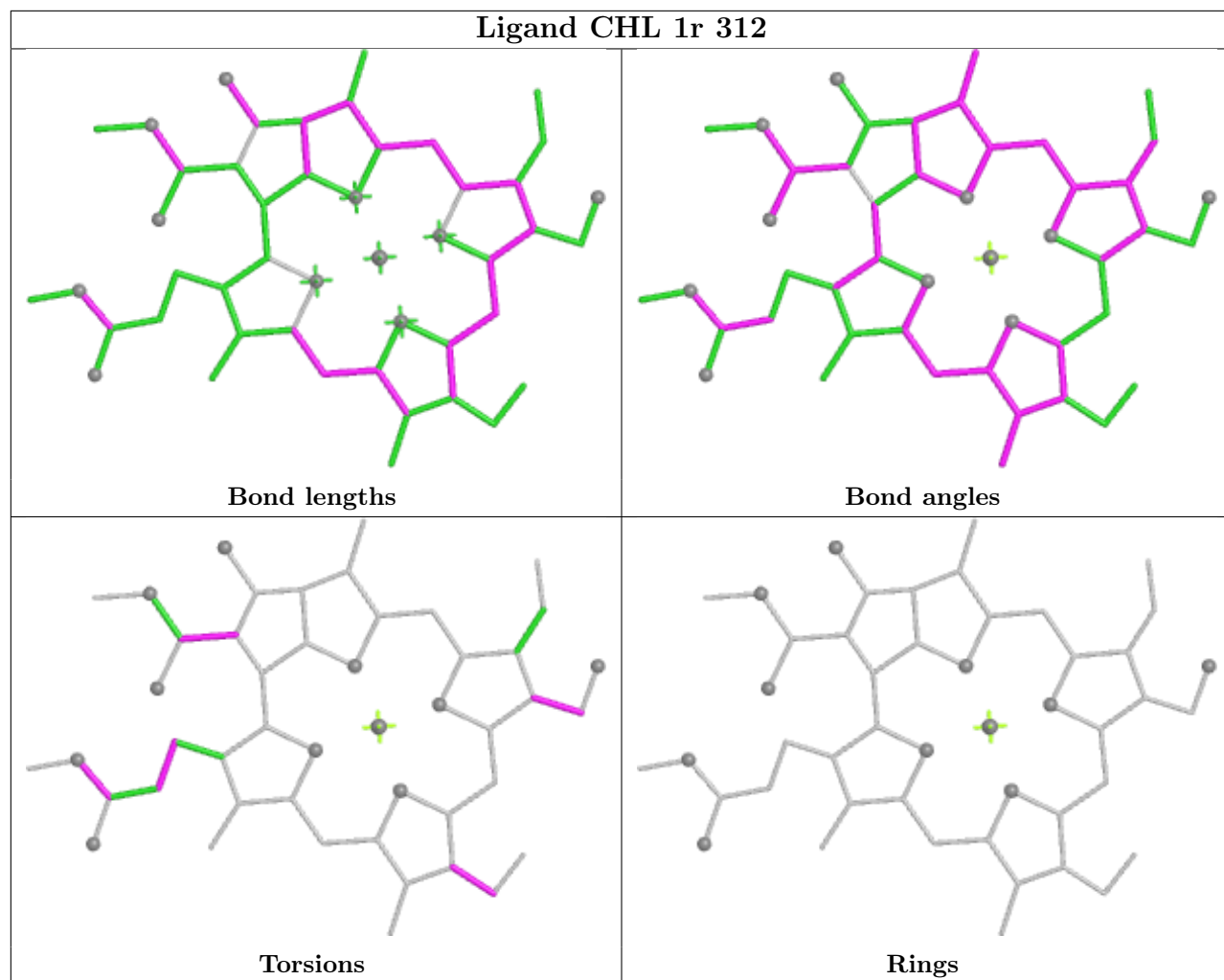


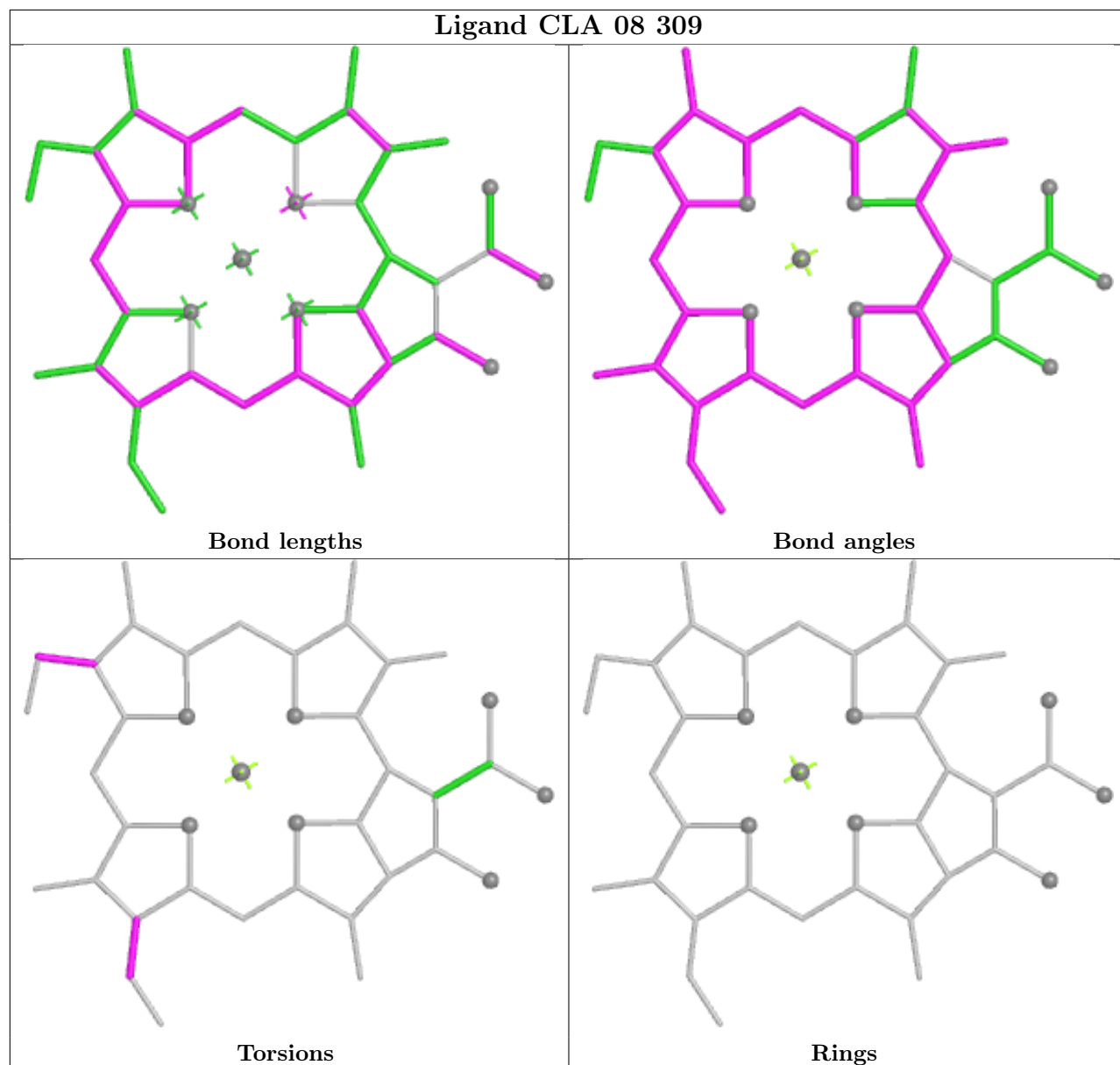


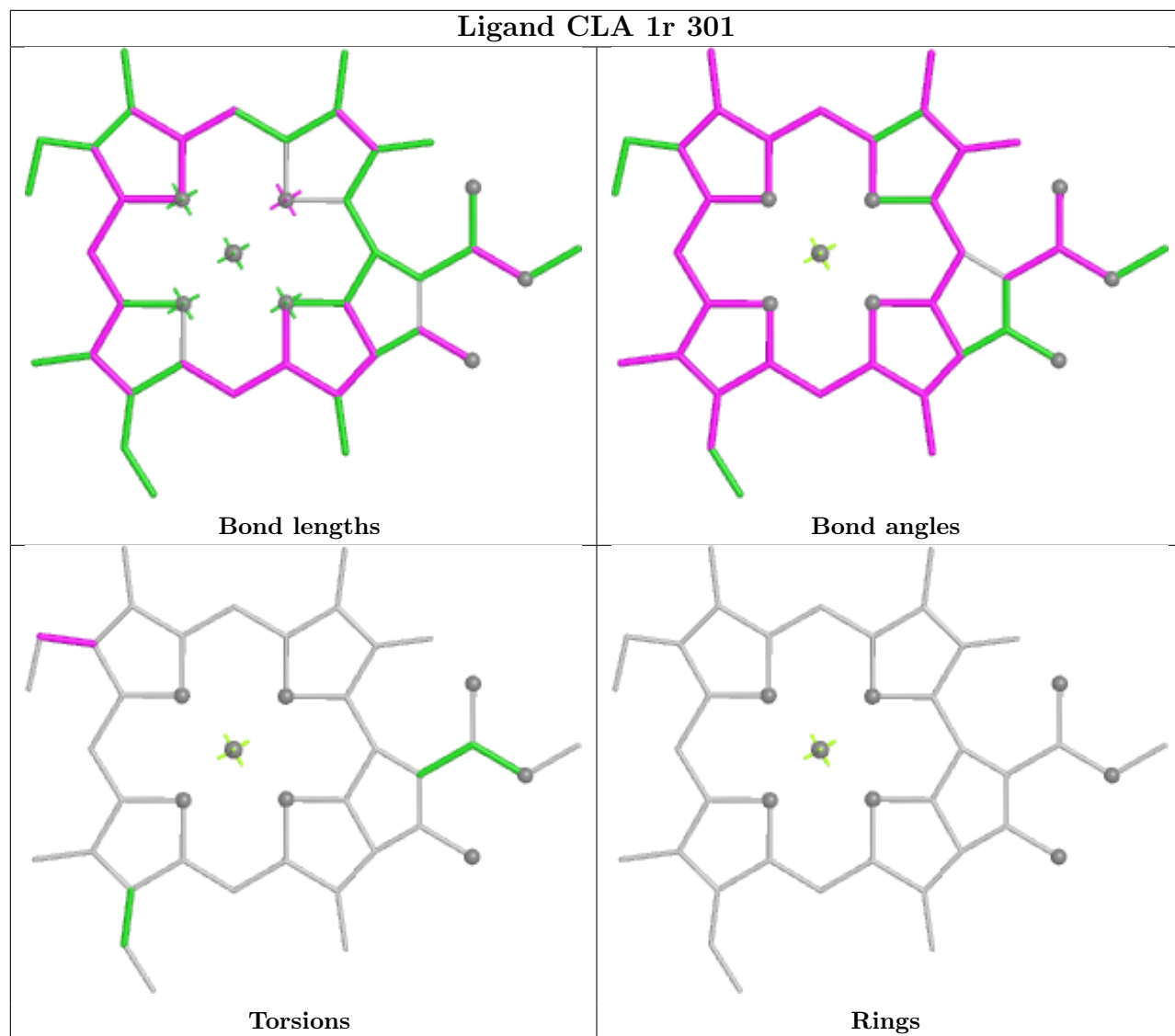


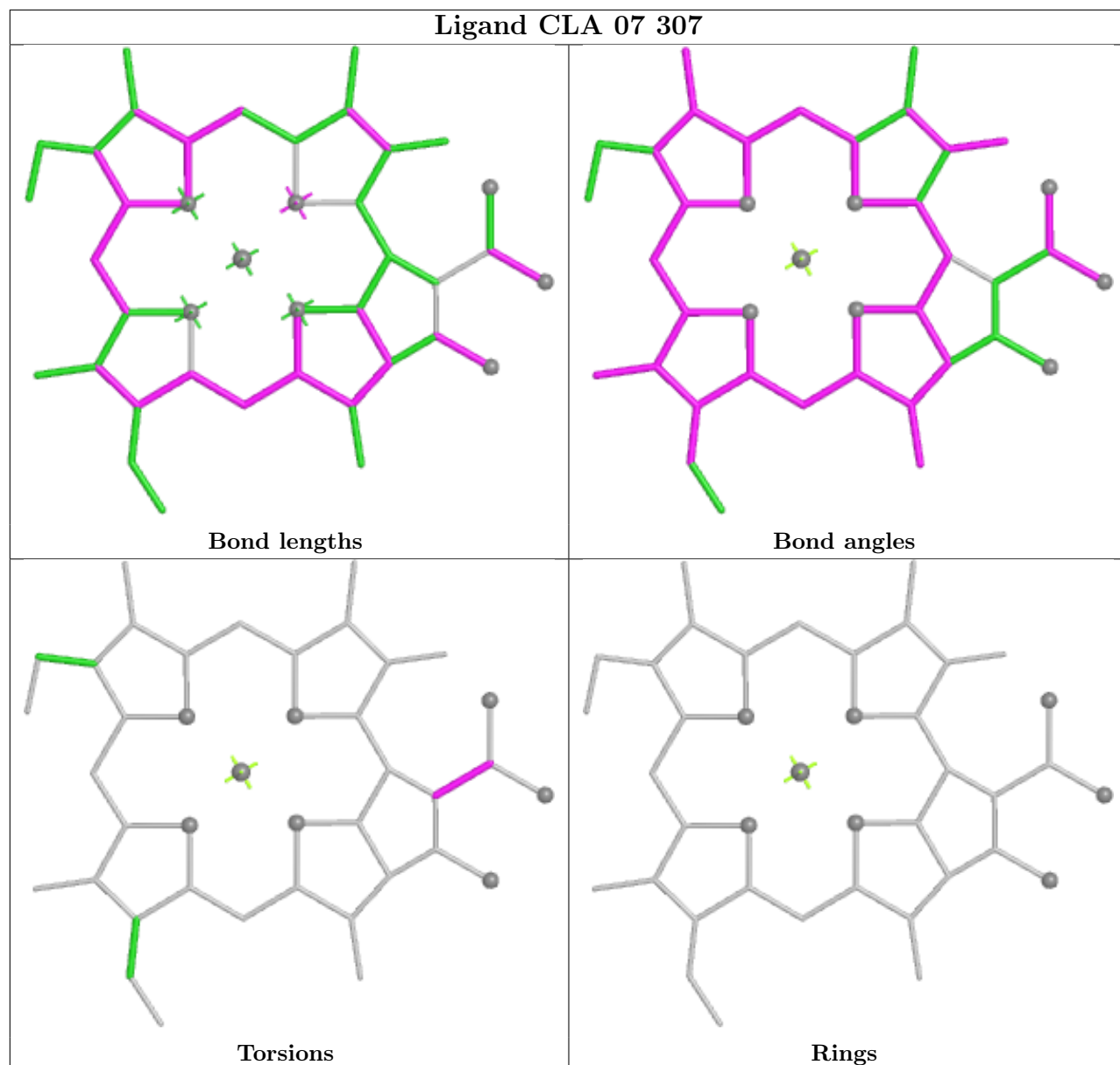


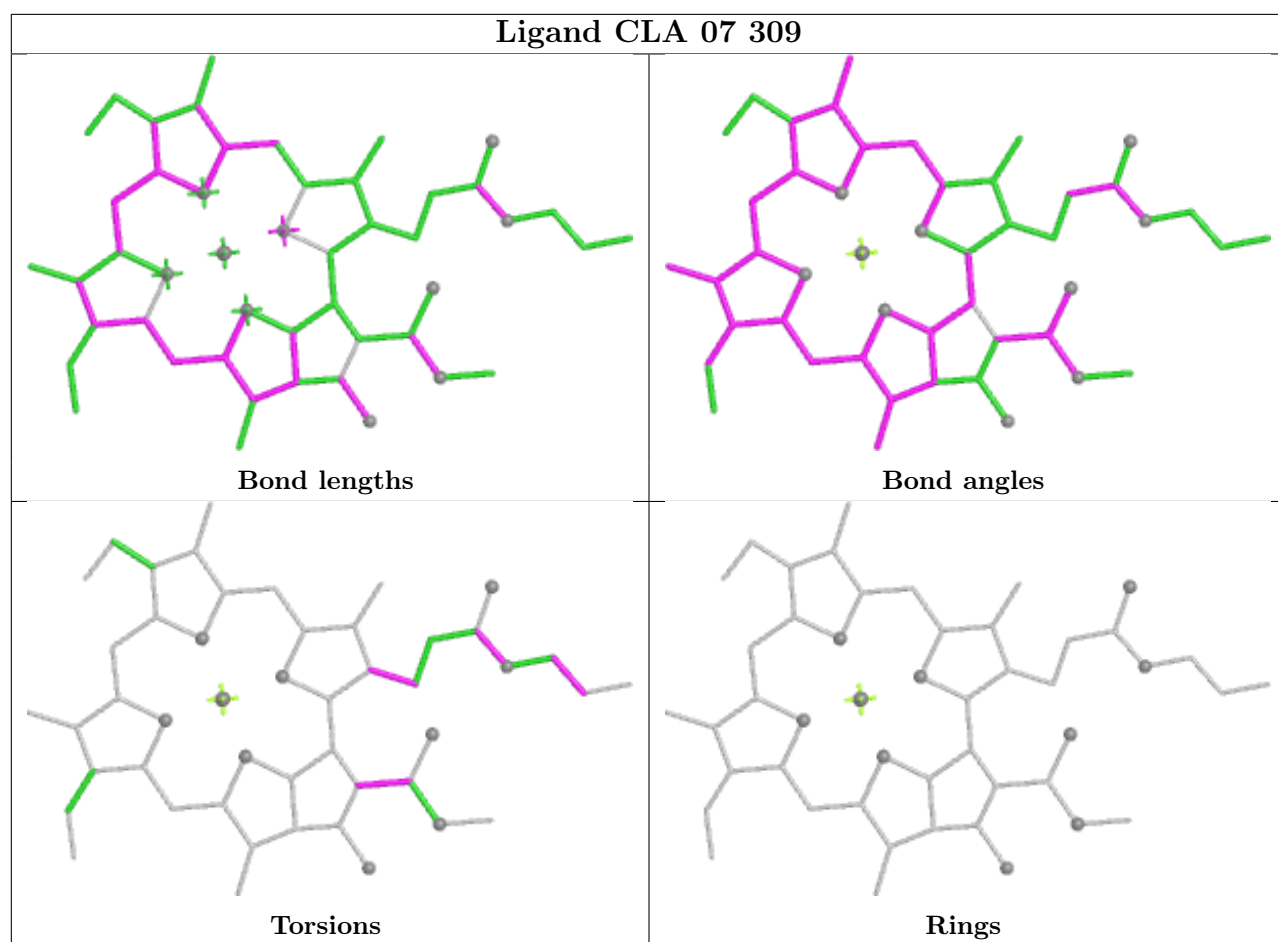


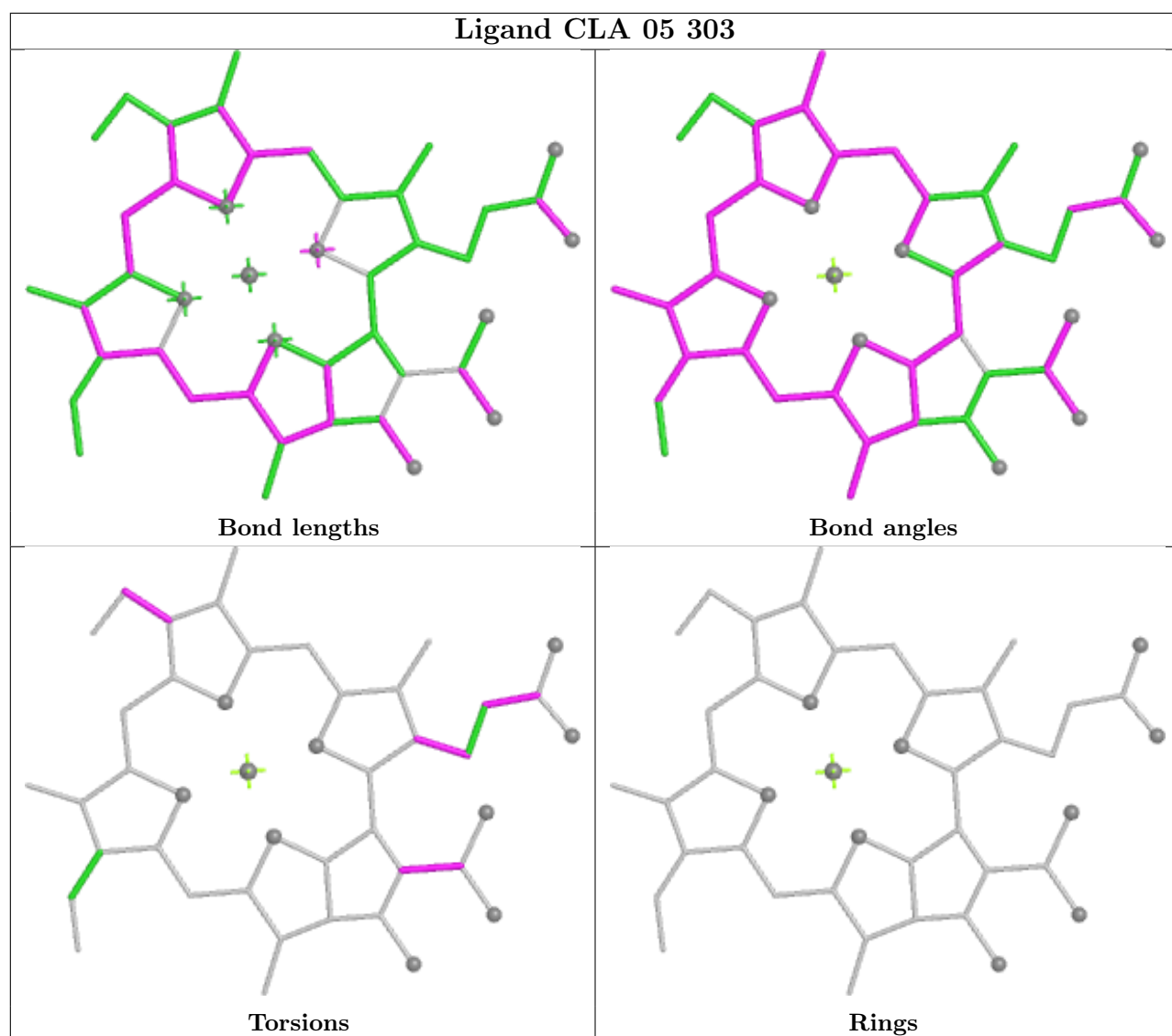


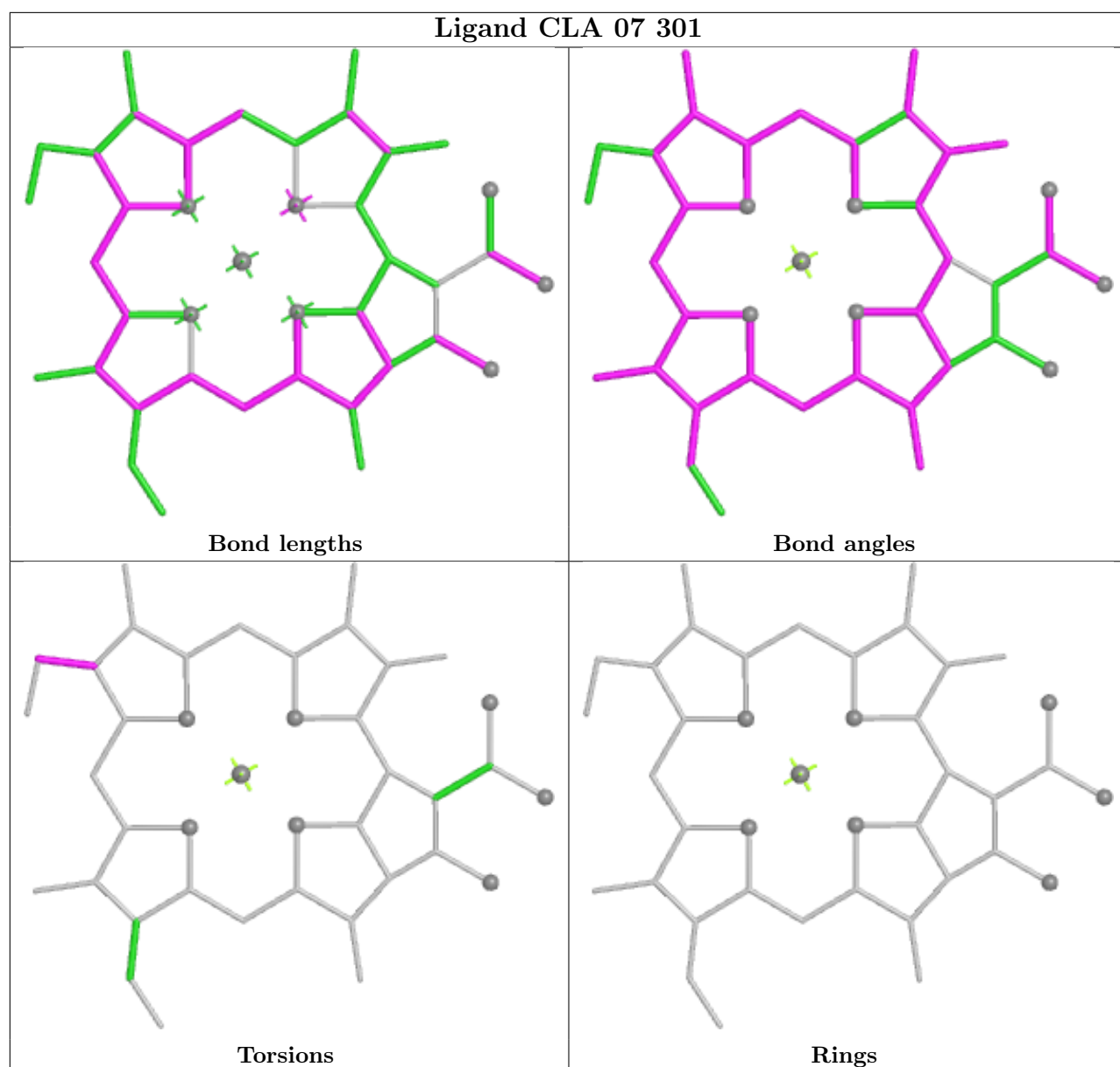


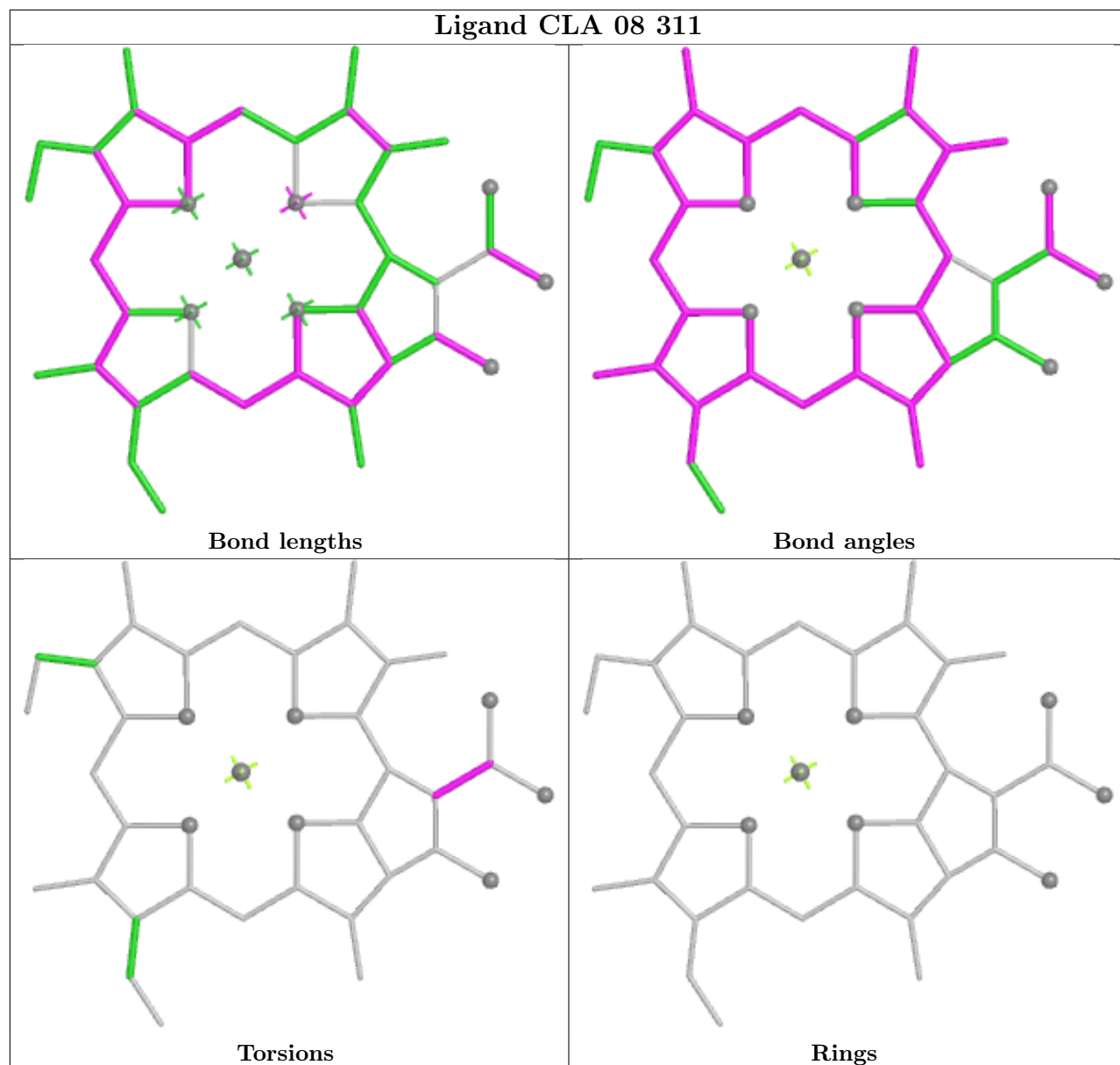


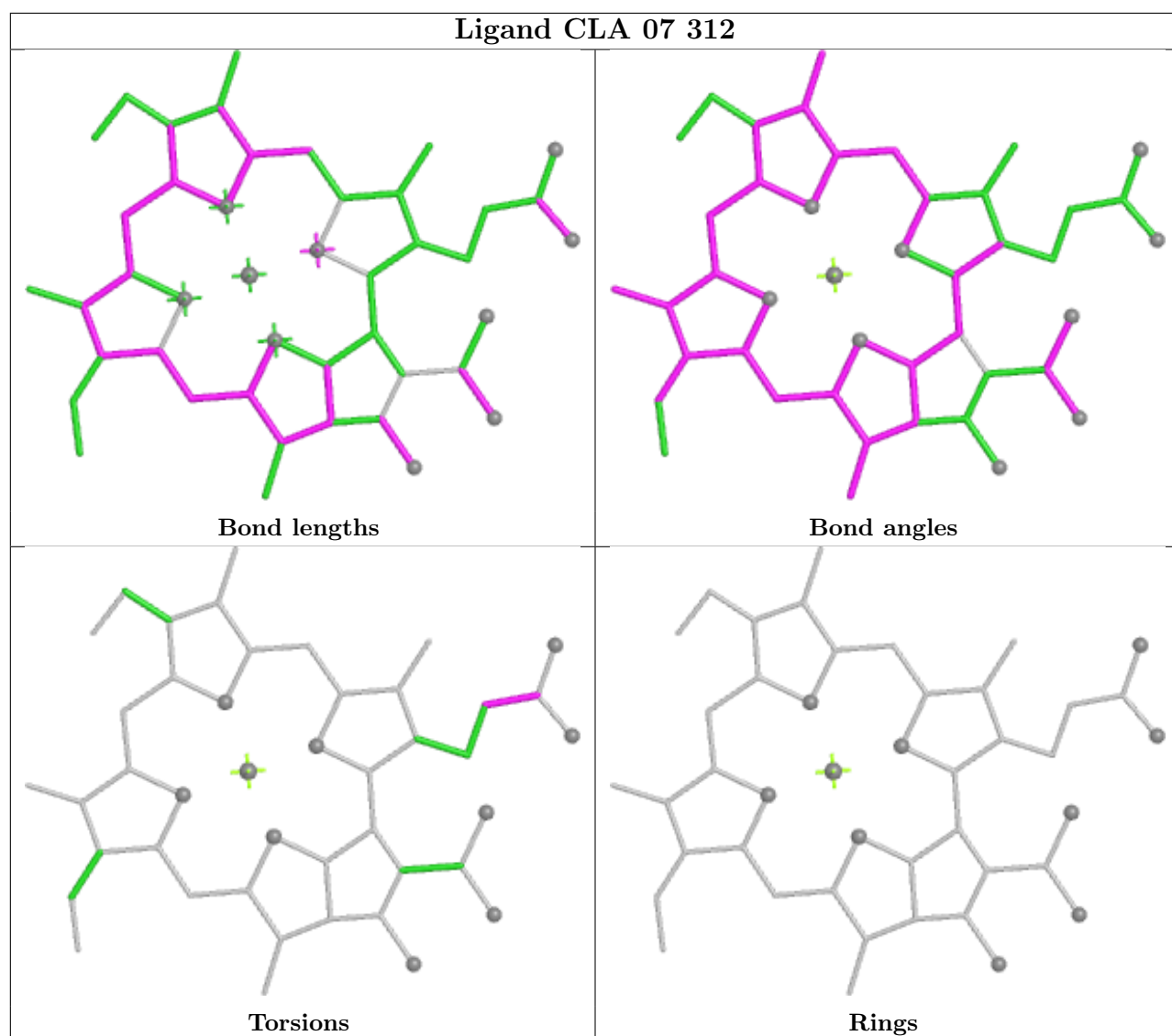


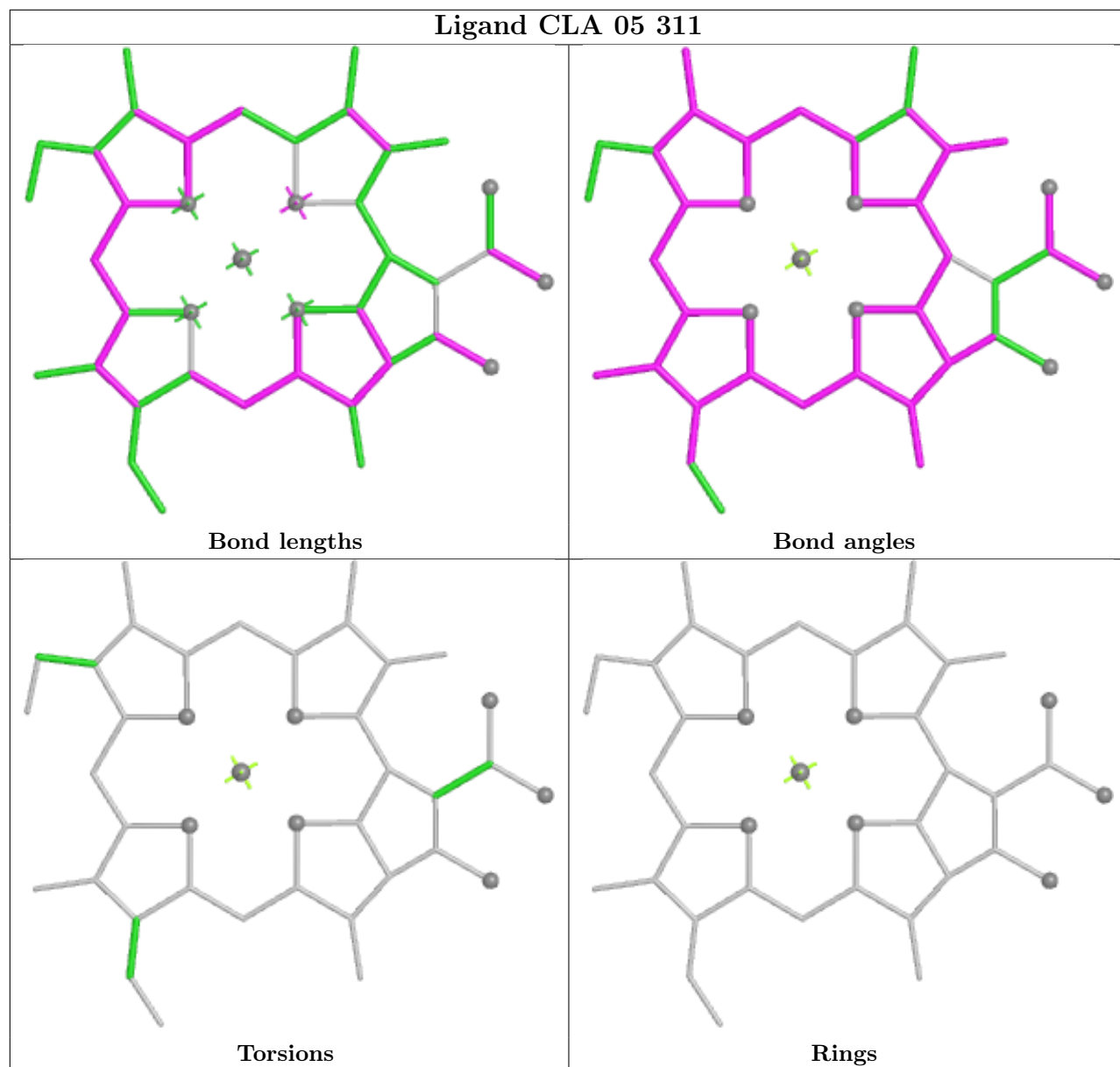


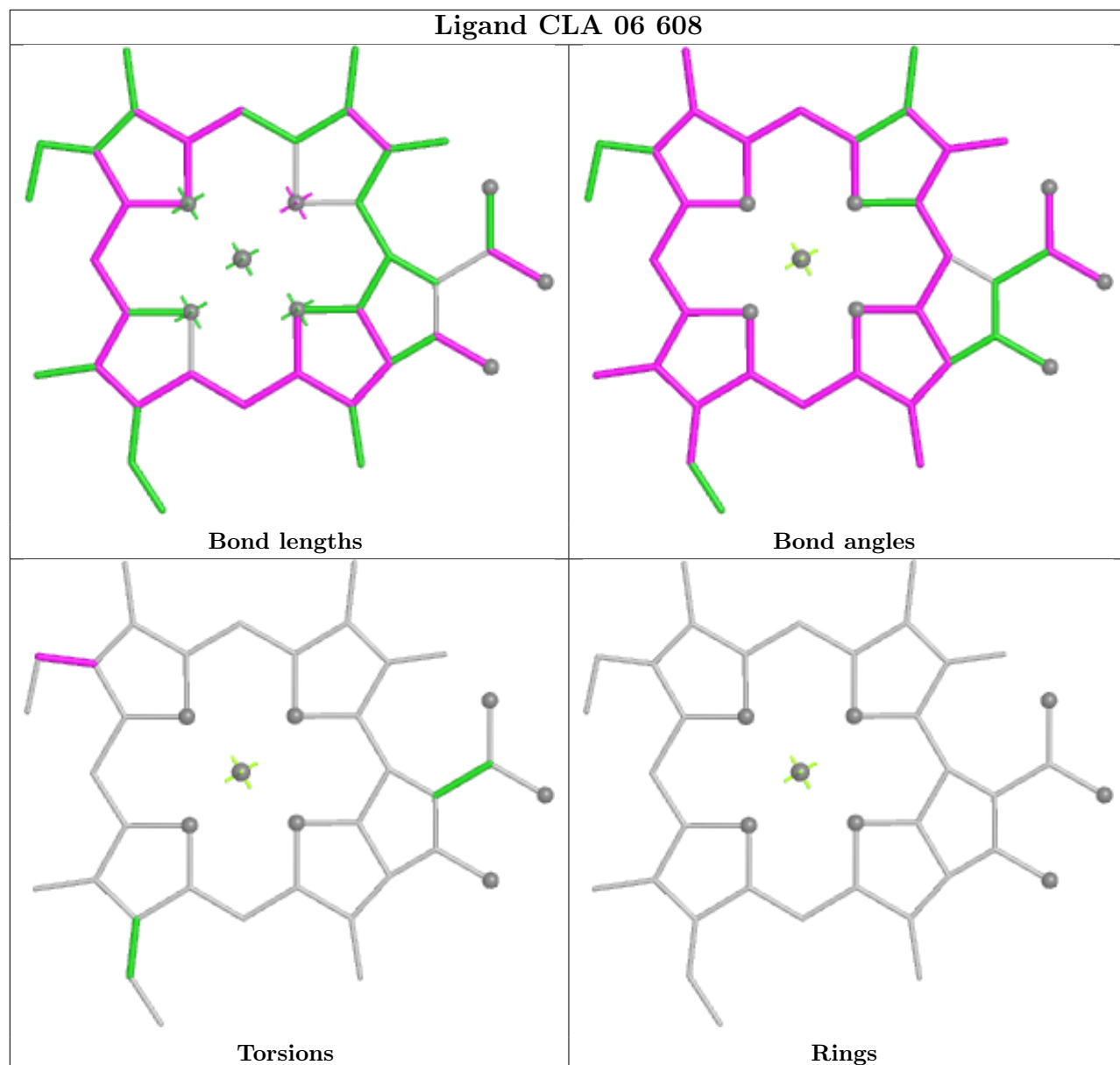


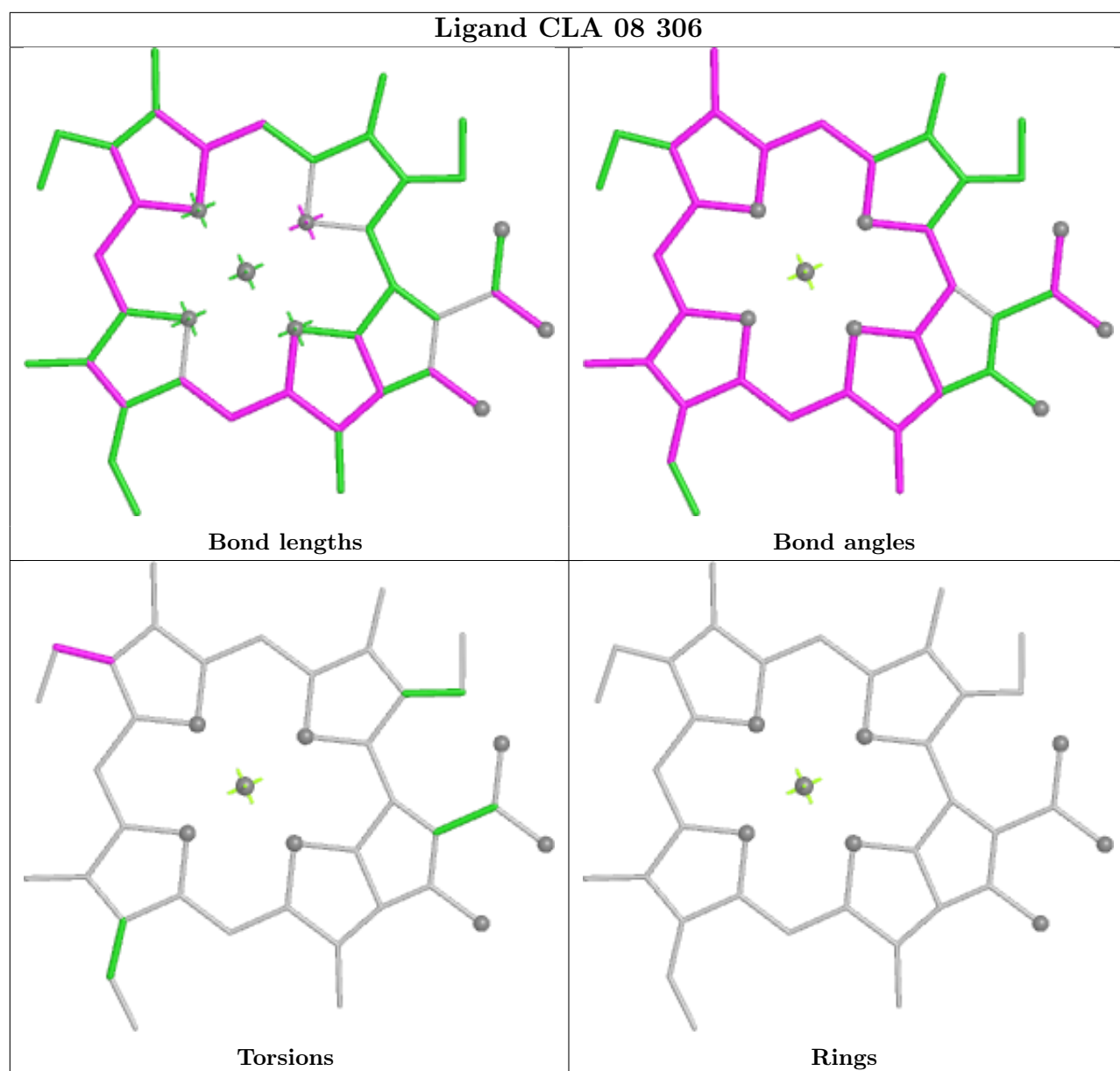


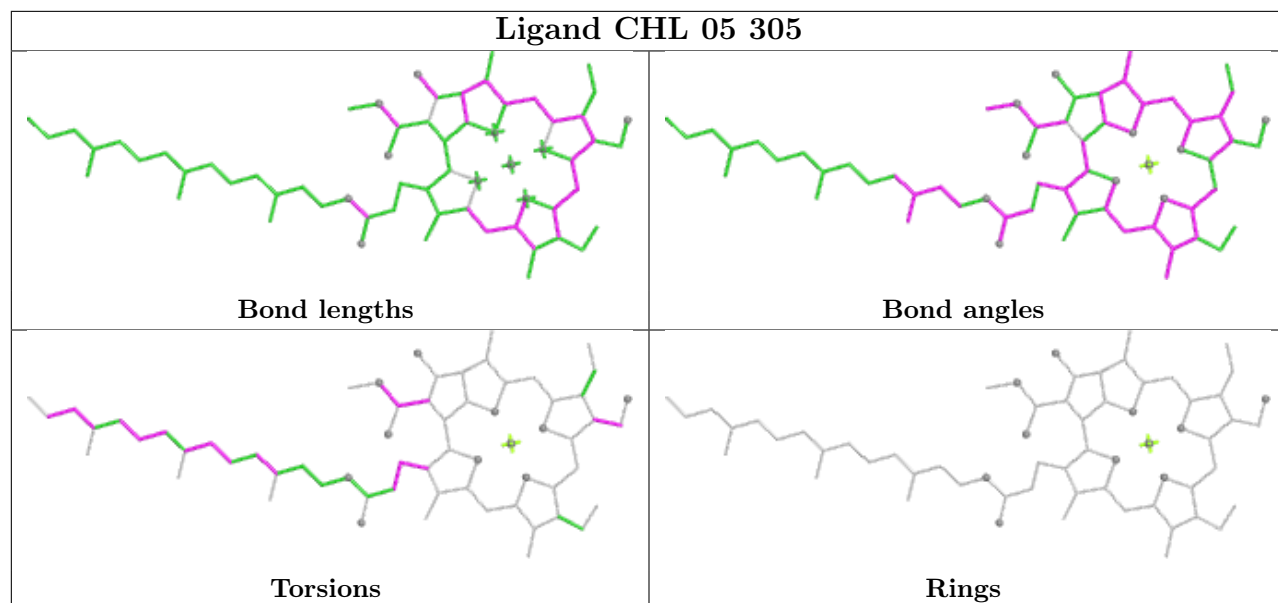


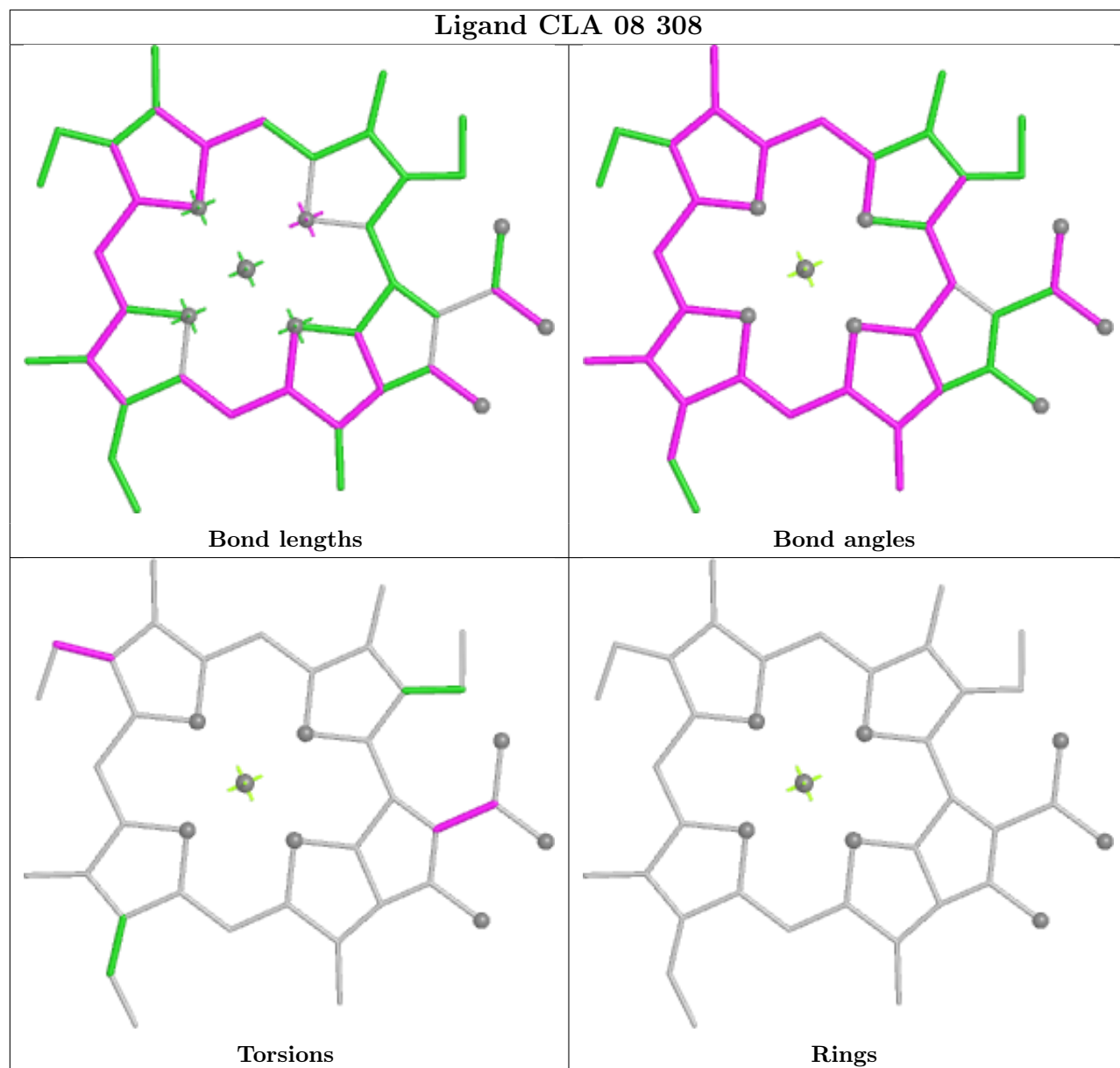


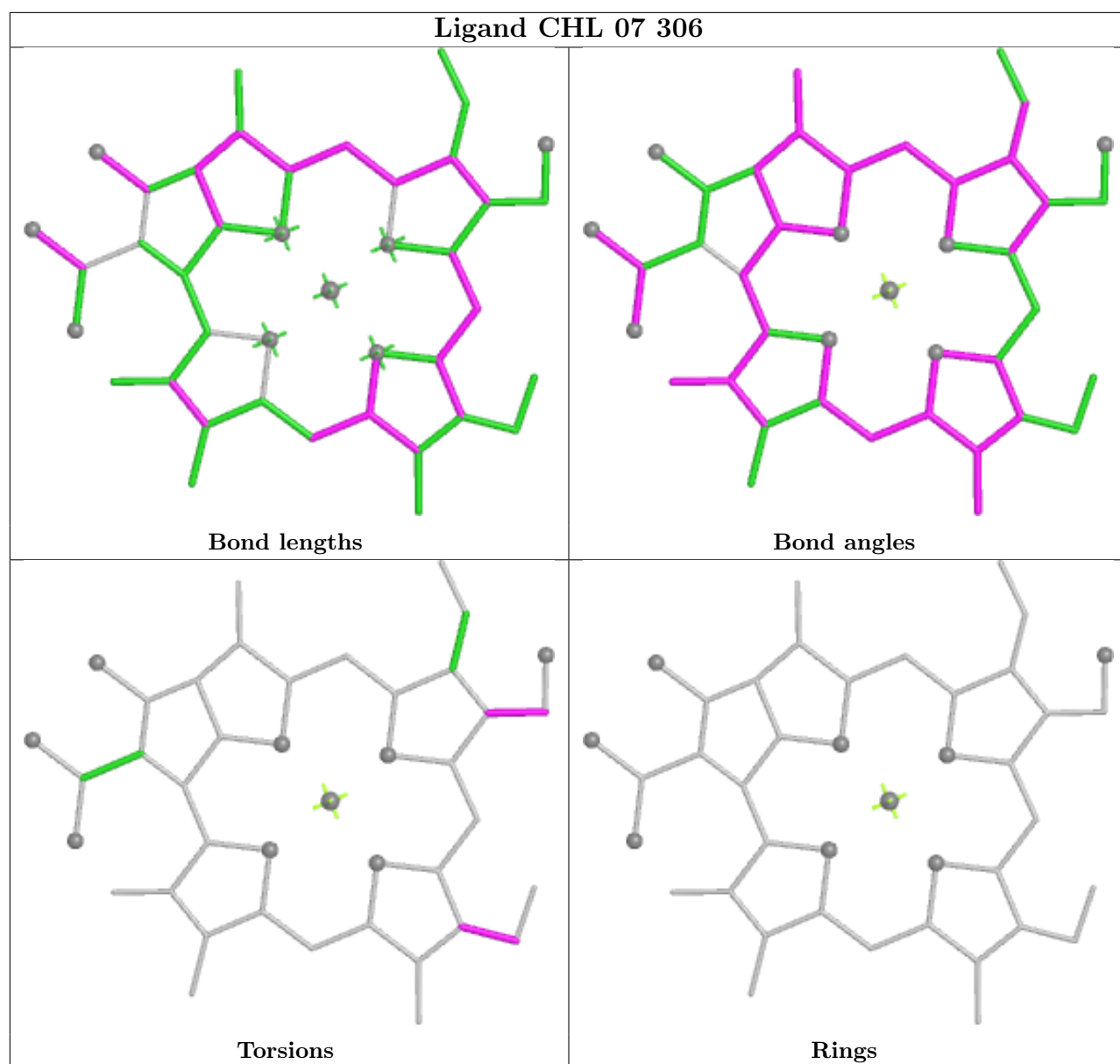


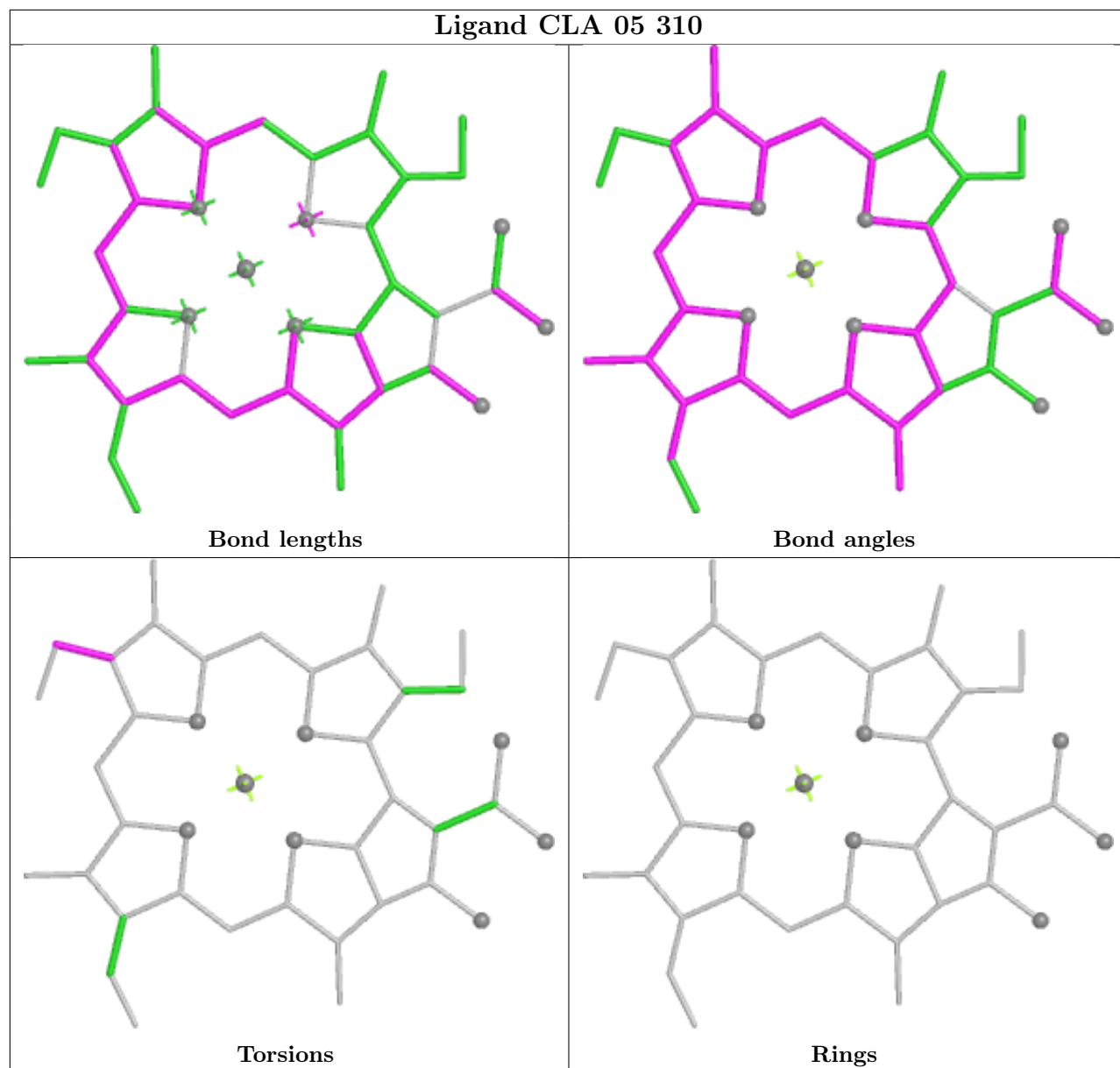


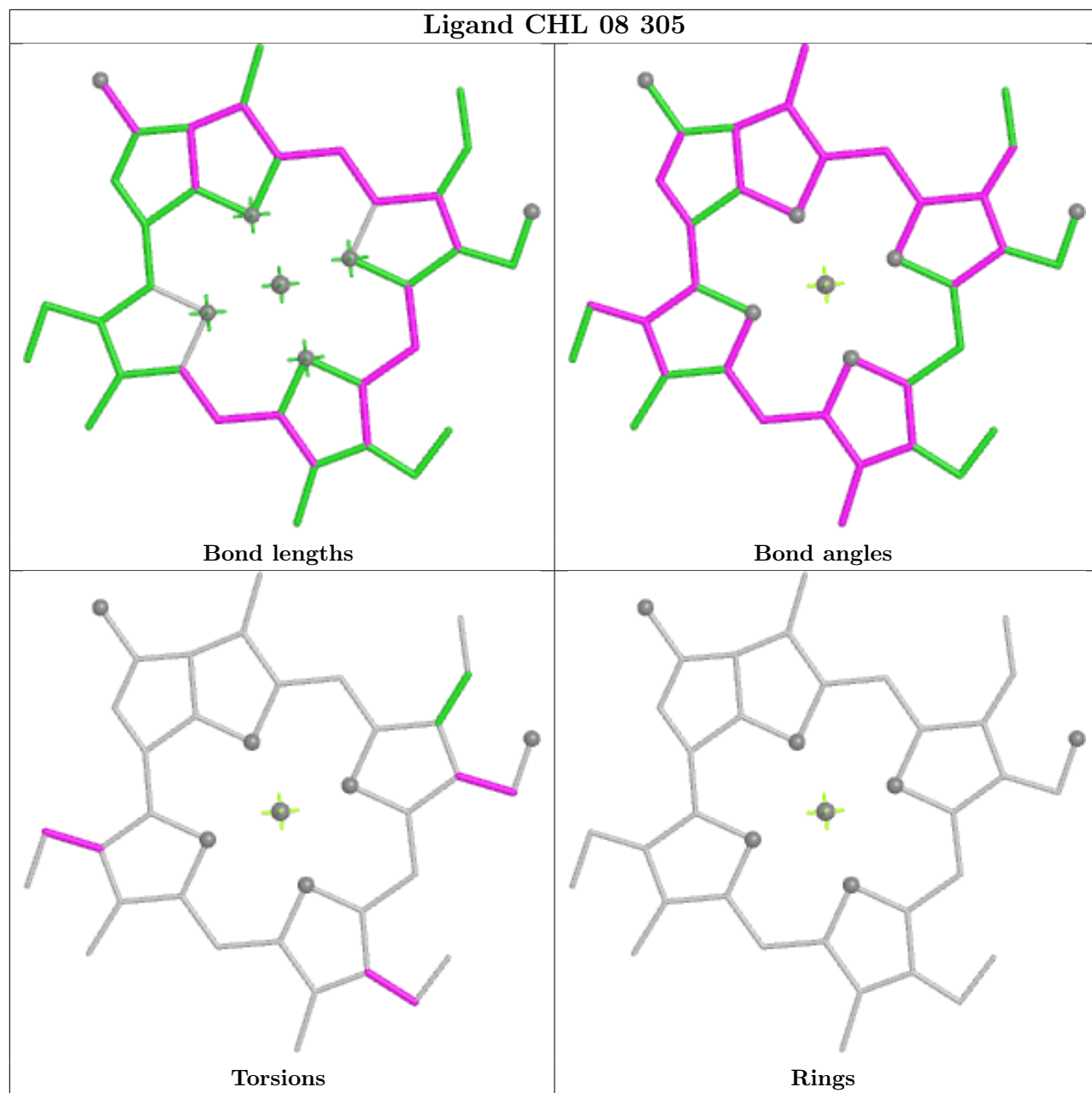


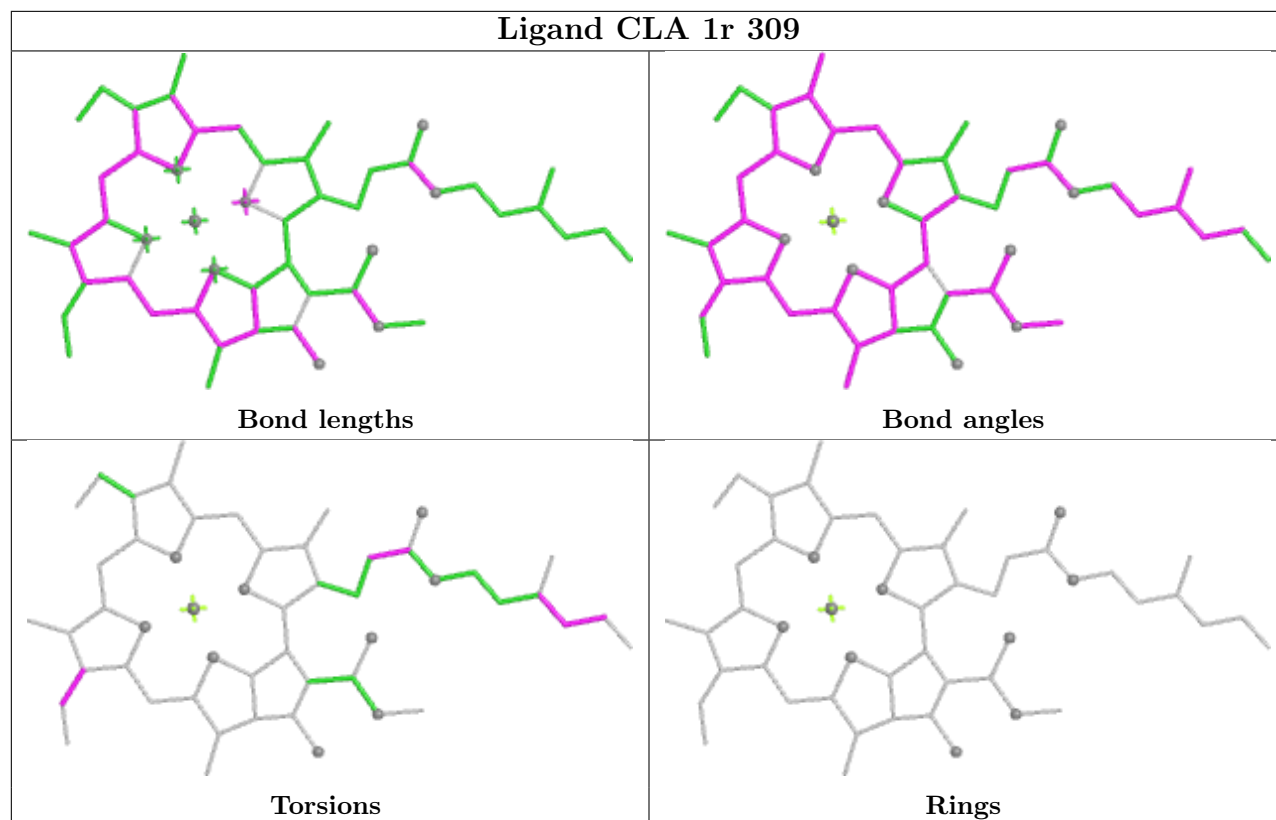


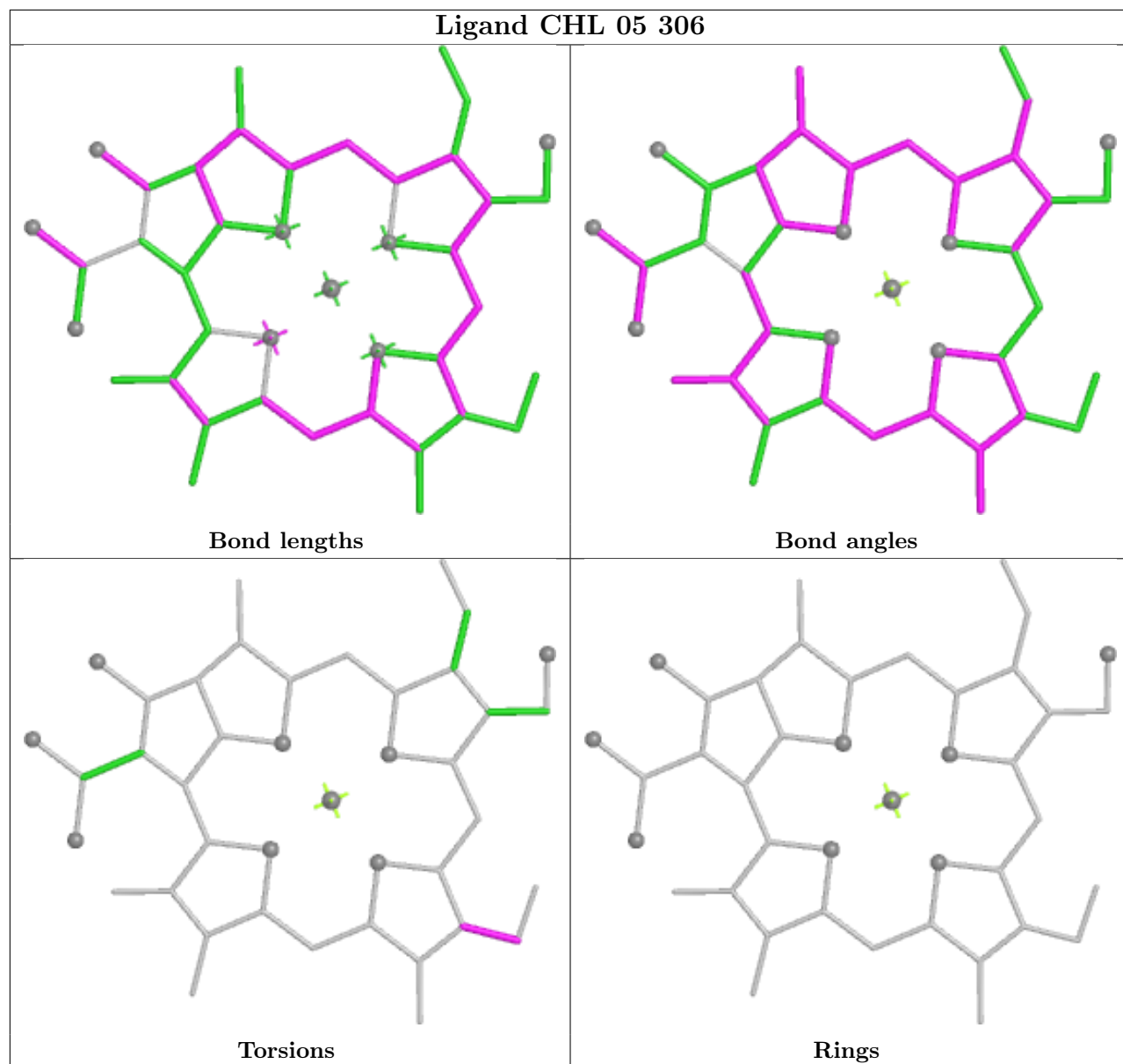


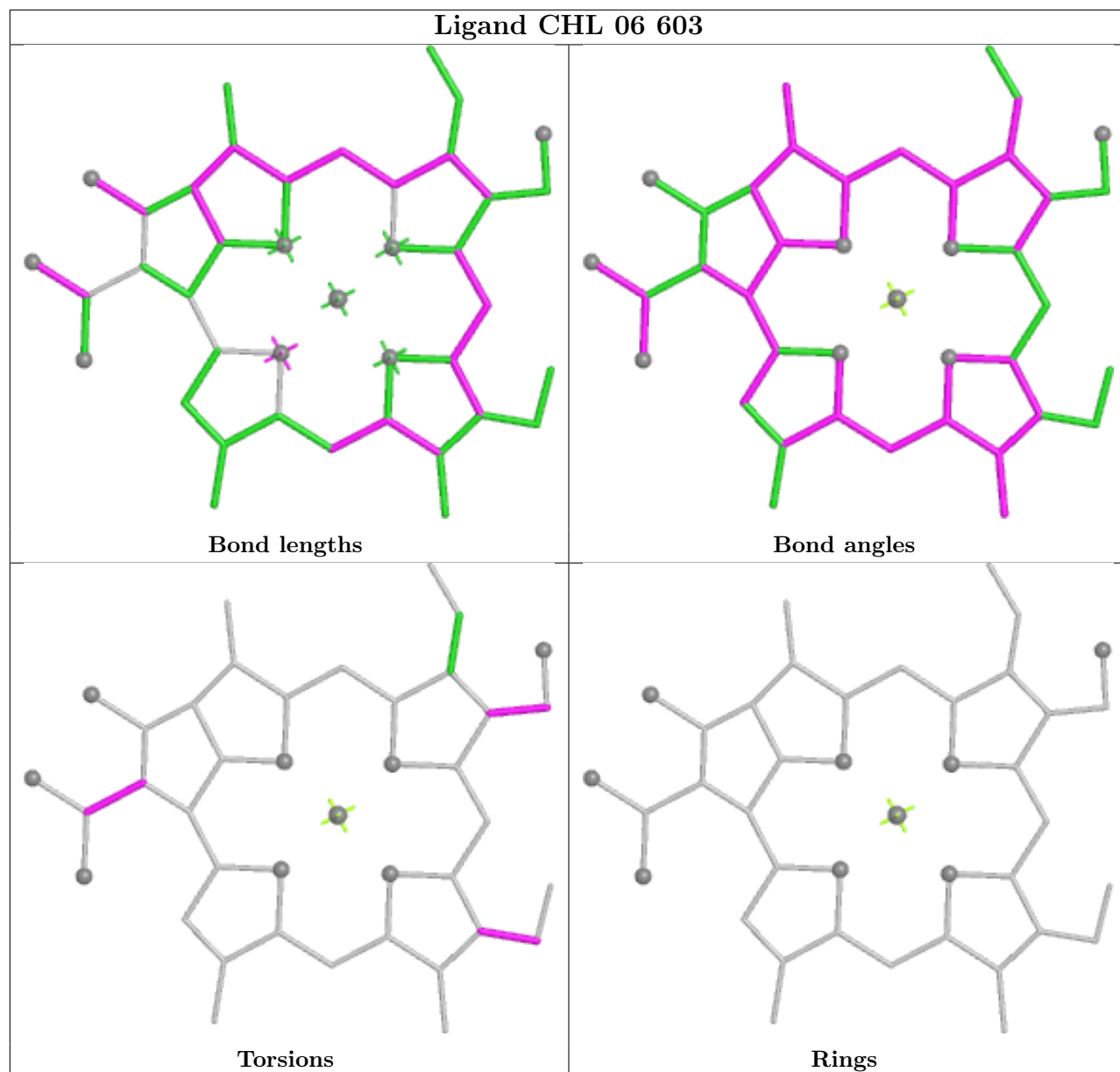


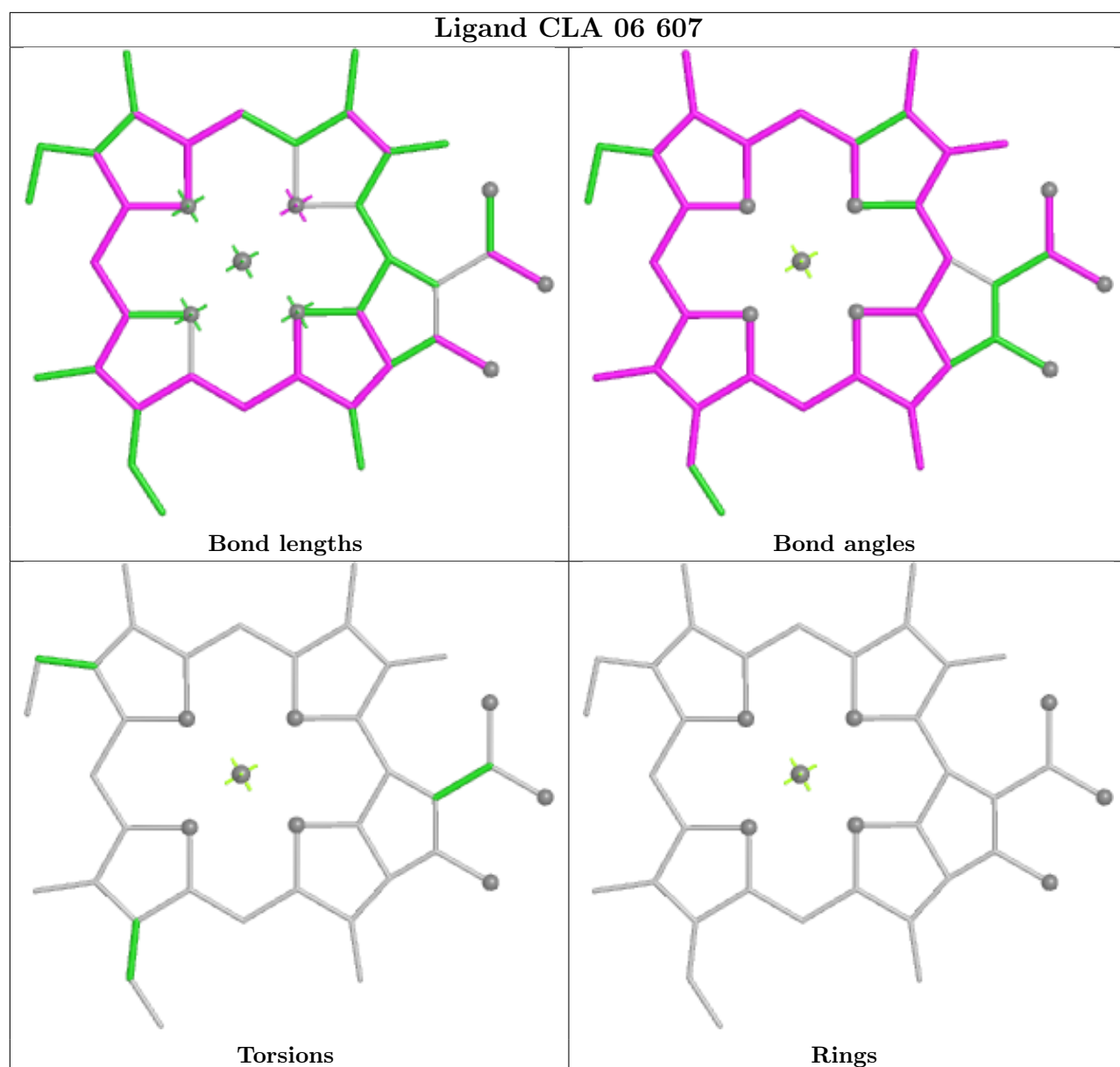


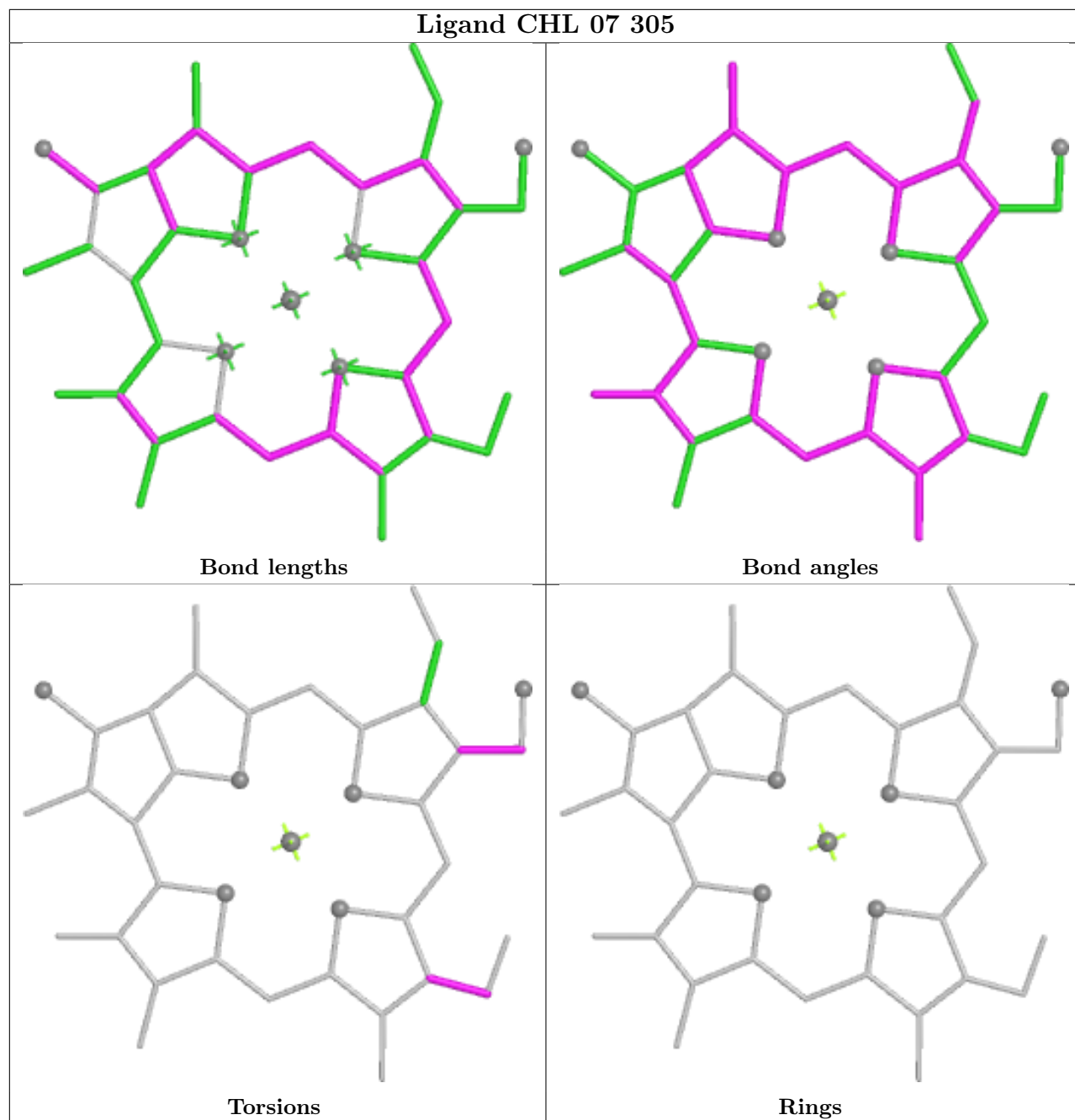


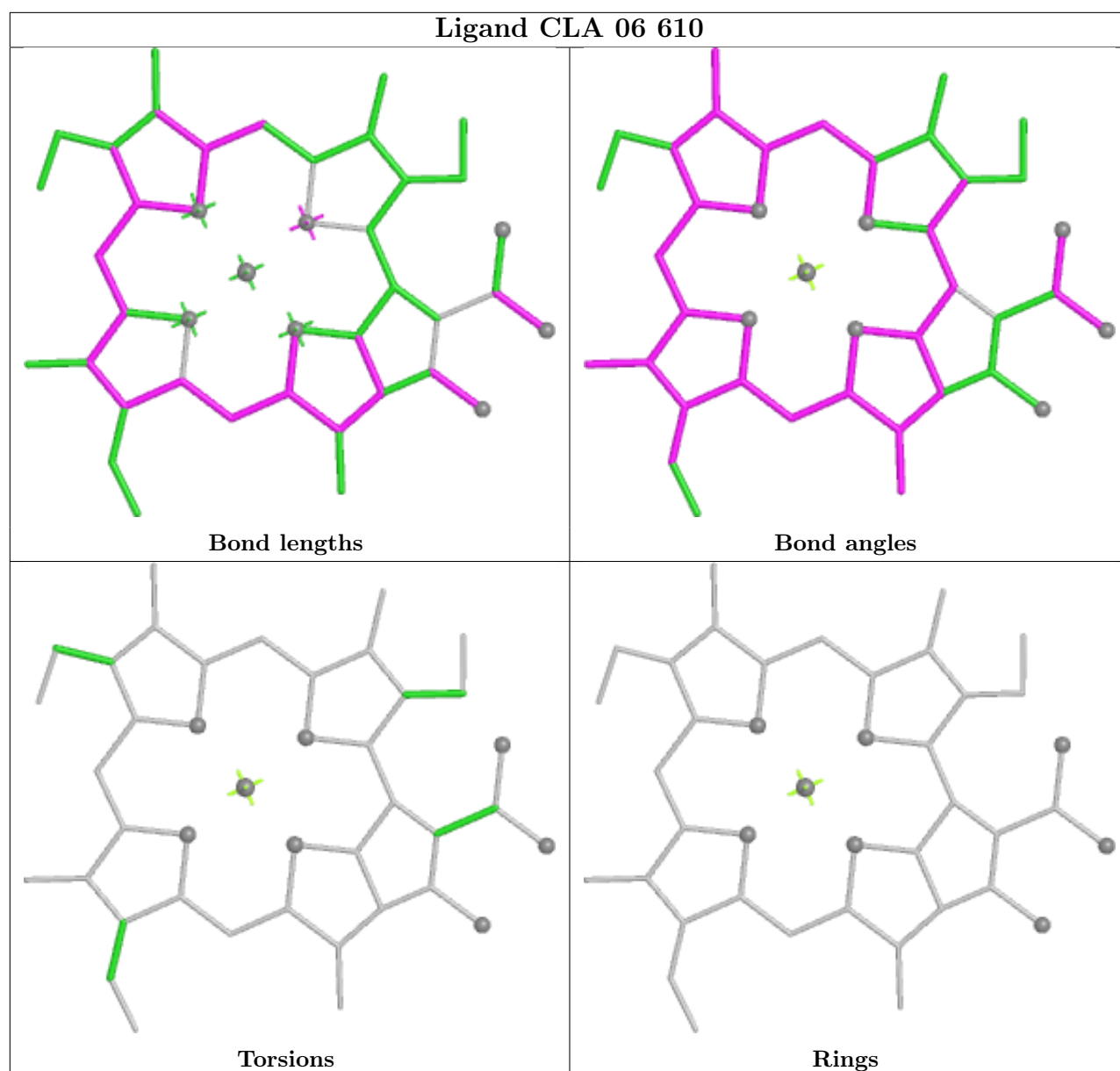


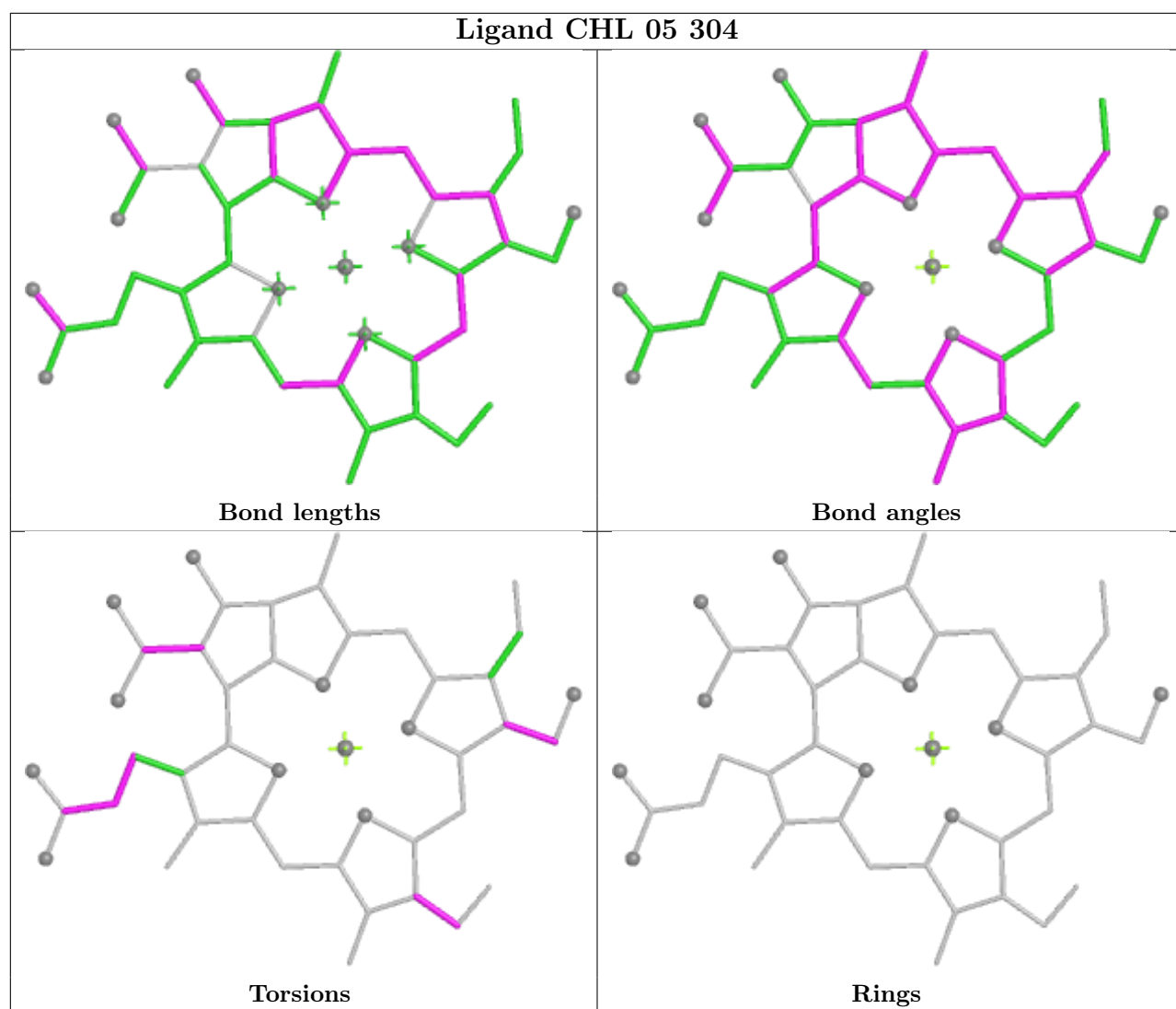


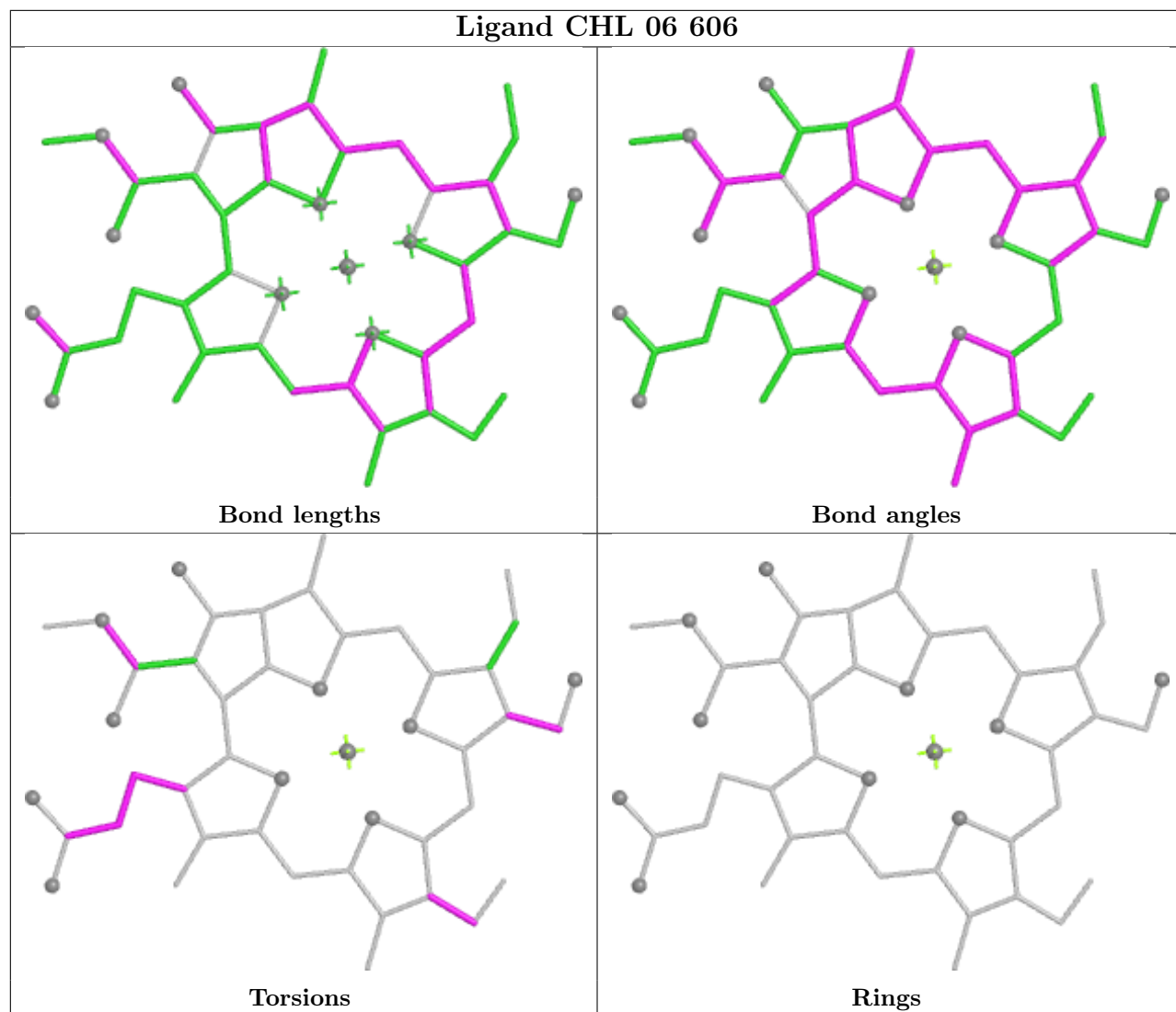


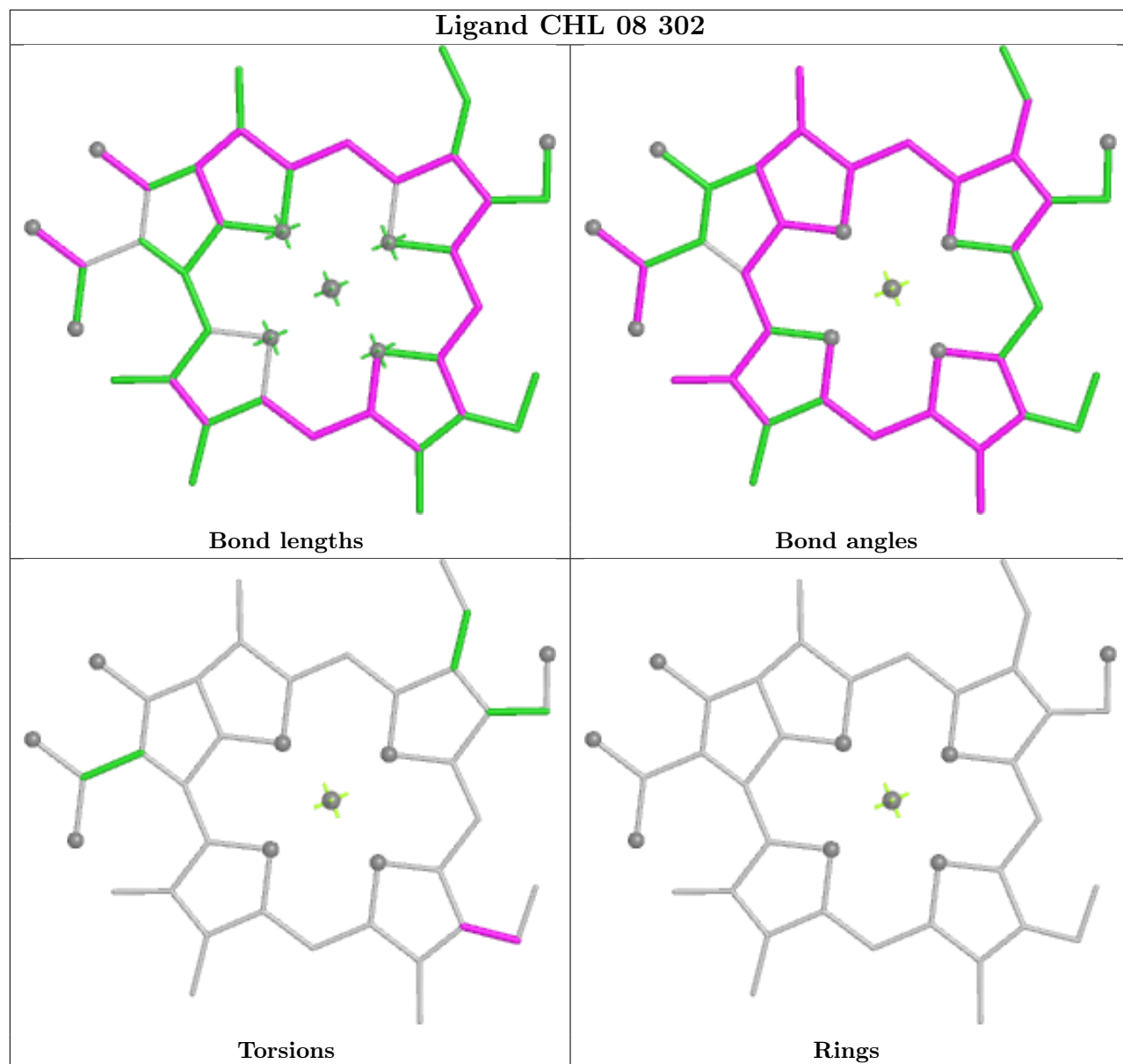


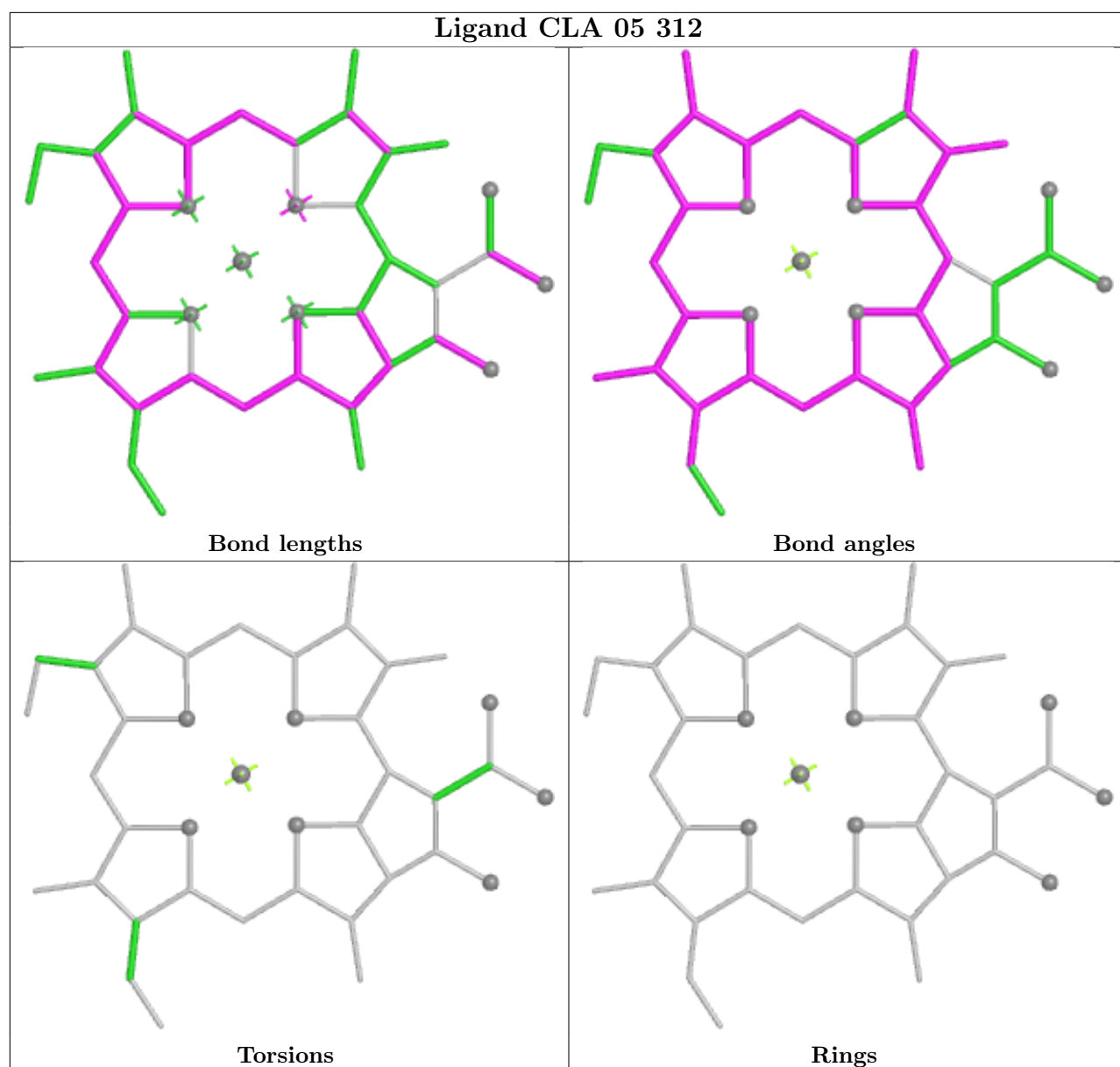


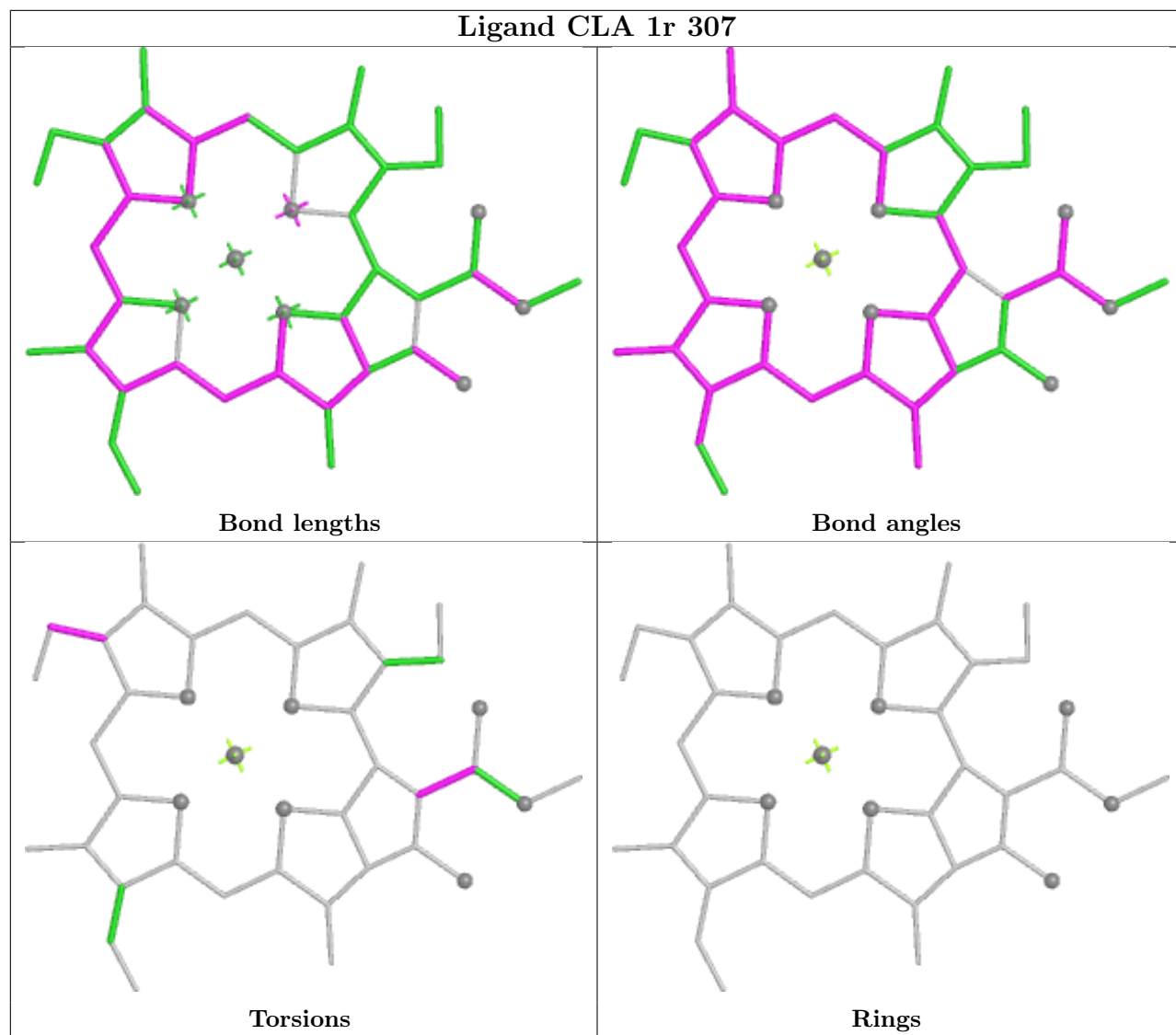


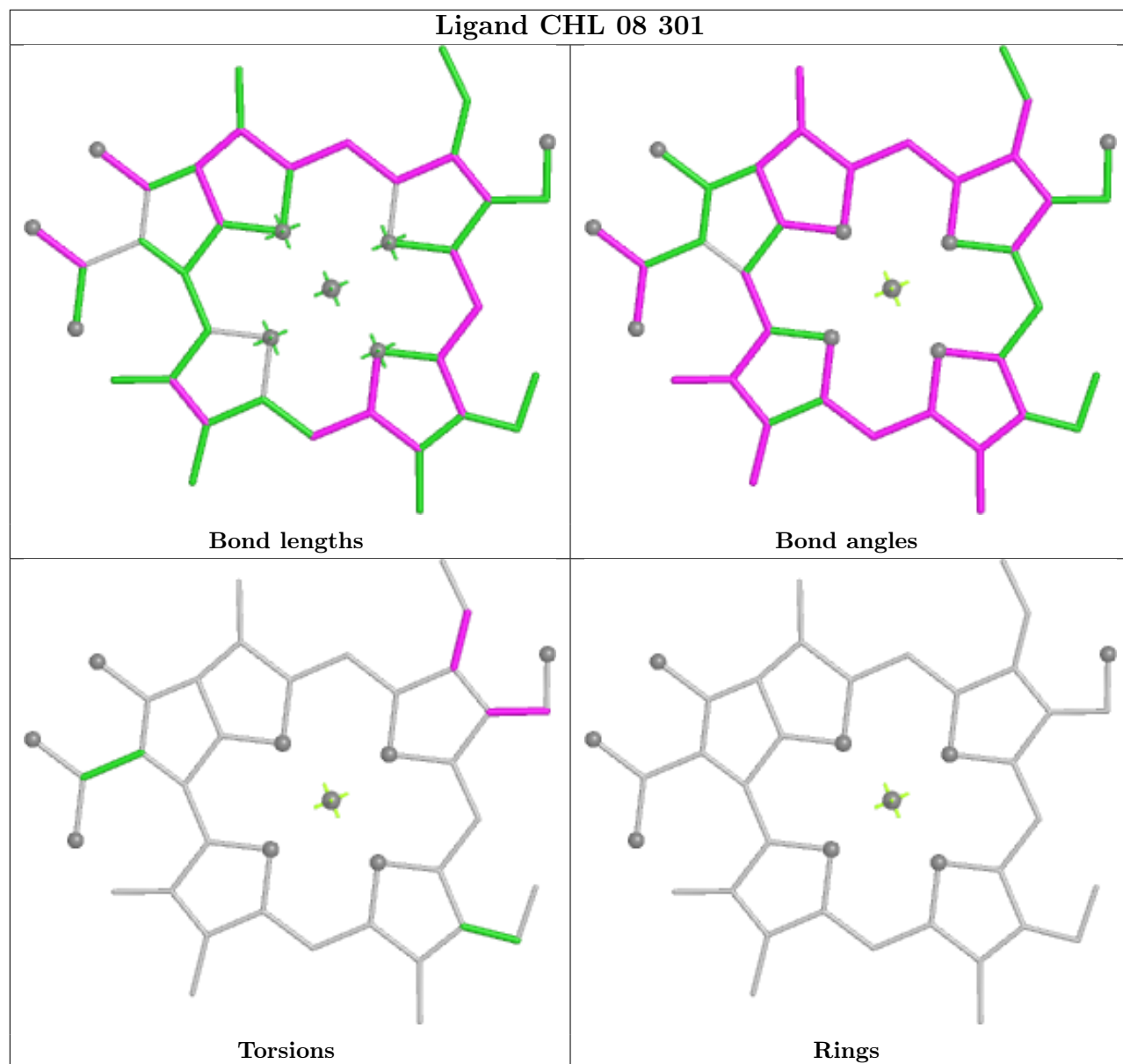


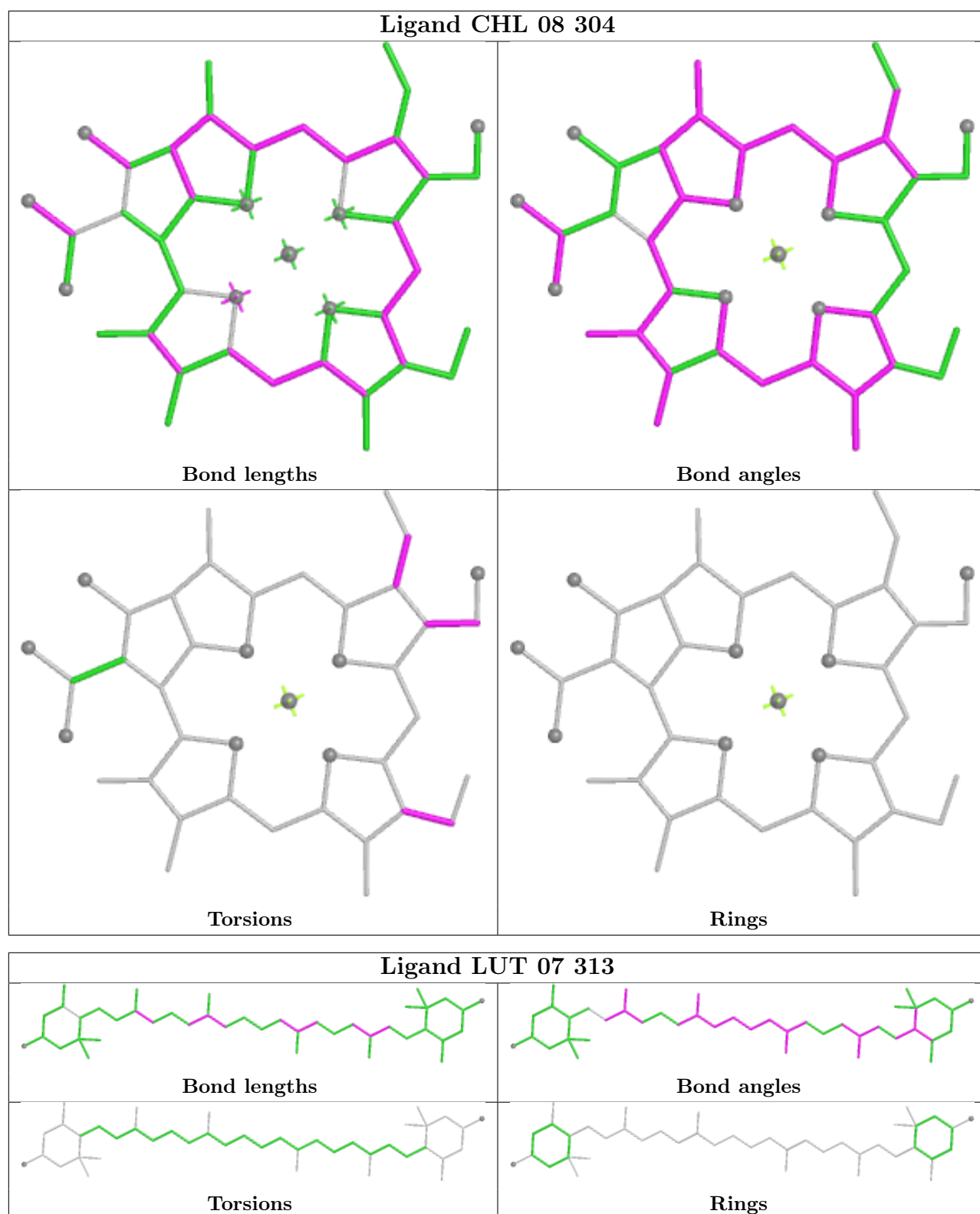


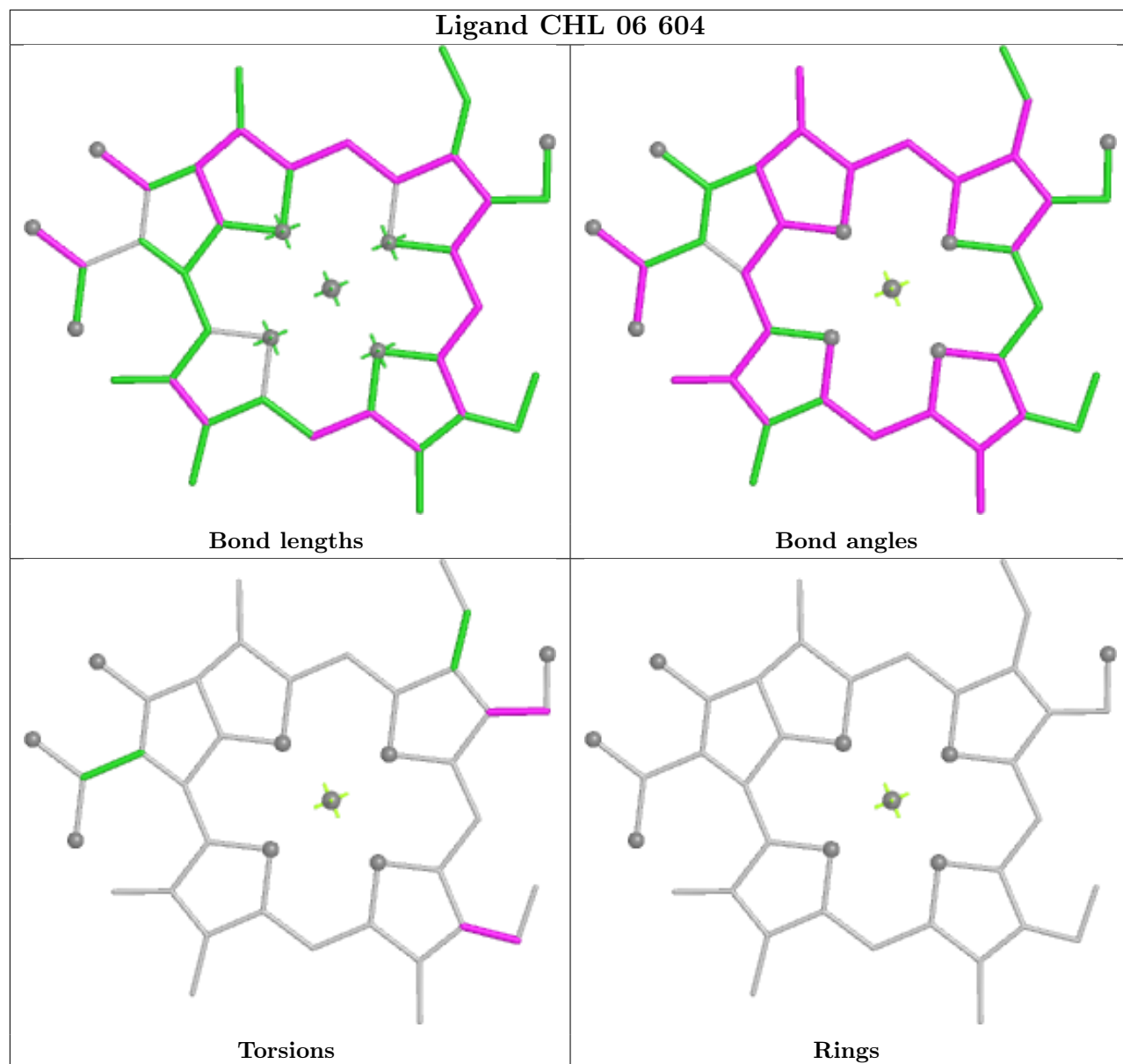


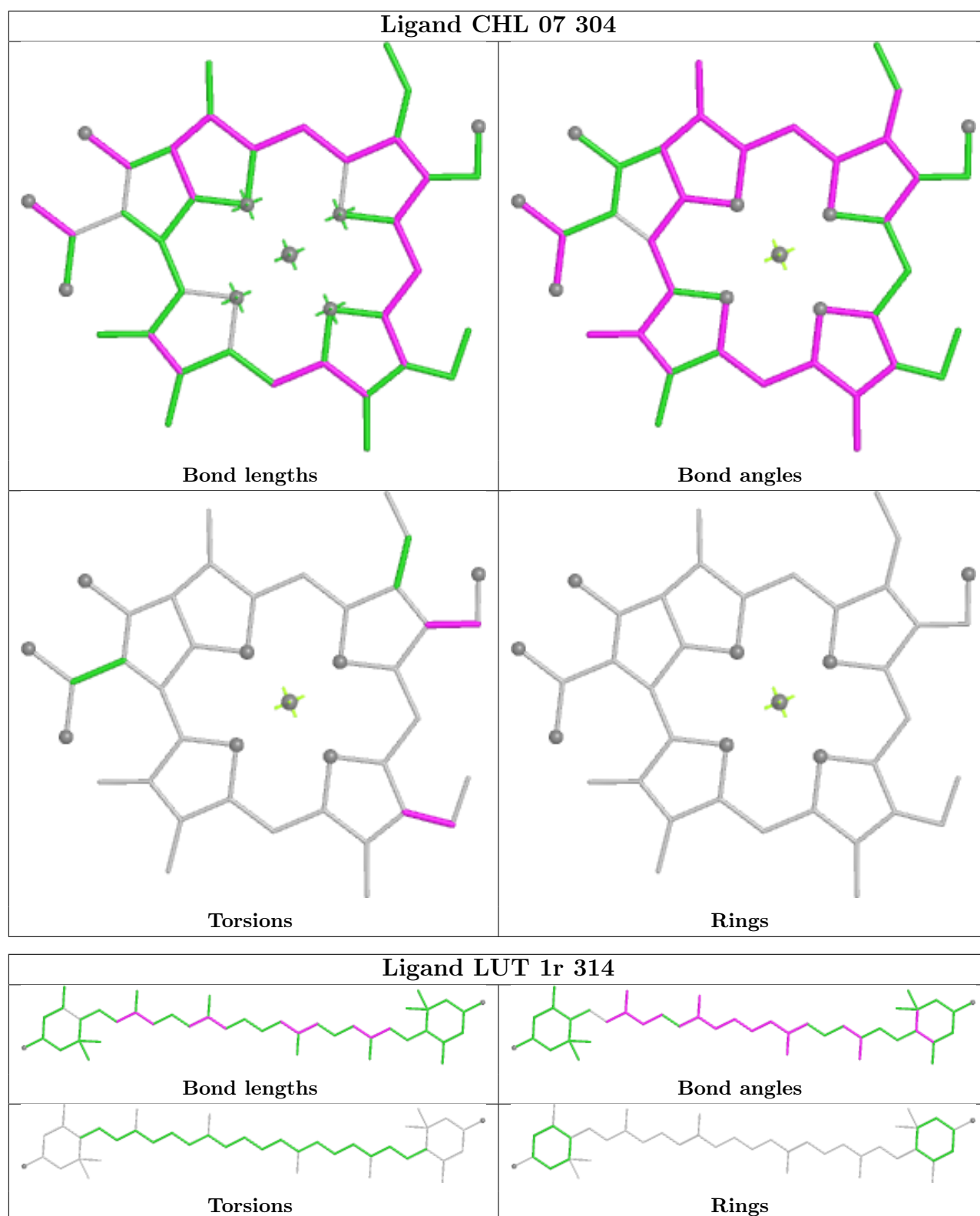












5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

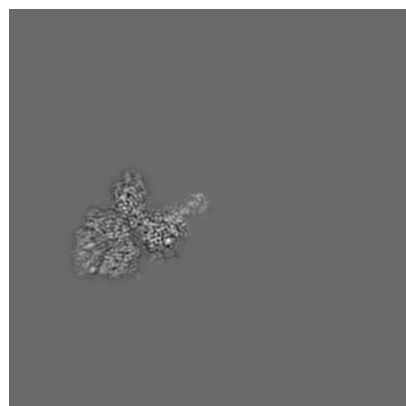
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-66952. These allow visual inspection of the internal detail of the map and identification of artifacts.

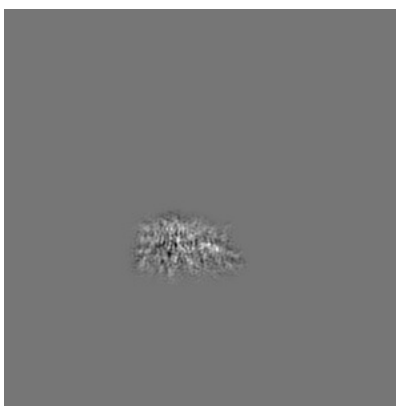
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



X

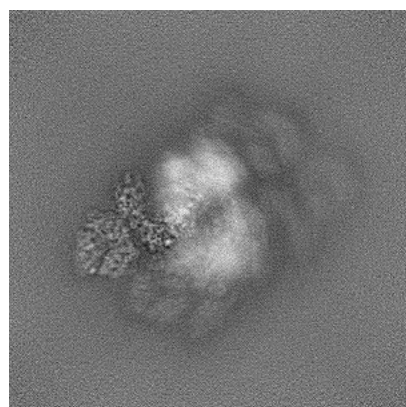


Y

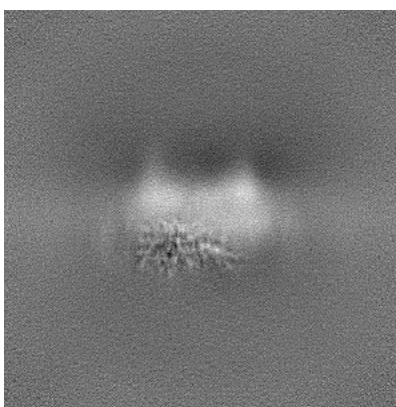


Z

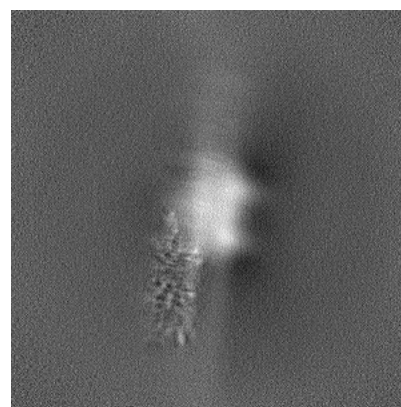
6.1.2 Raw map



X



Y

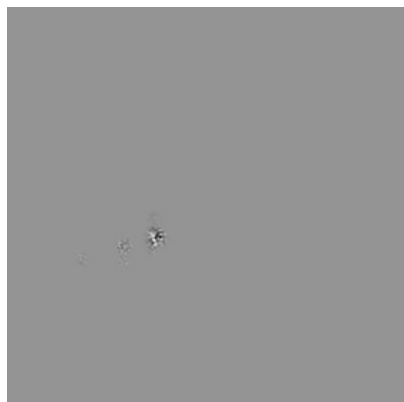


Z

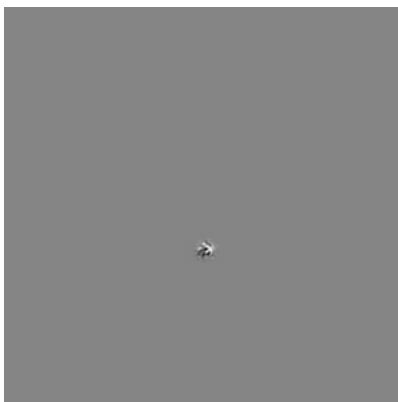
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

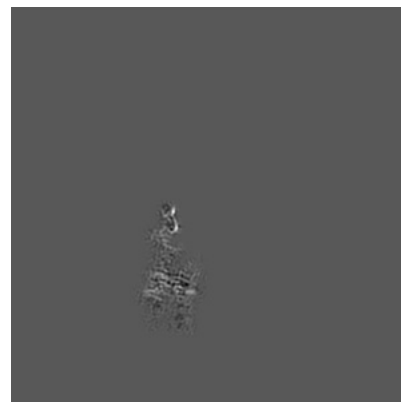
6.2.1 Primary map



X Index: 256

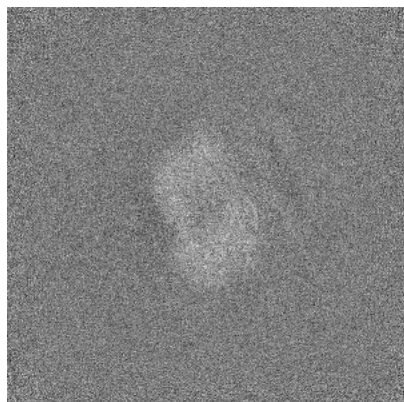


Y Index: 256



Z Index: 256

6.2.2 Raw map



X Index: 256



Y Index: 256

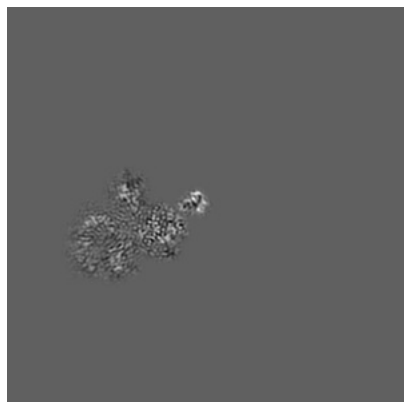


Z Index: 256

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

6.3 Largest variance slices [i](#)

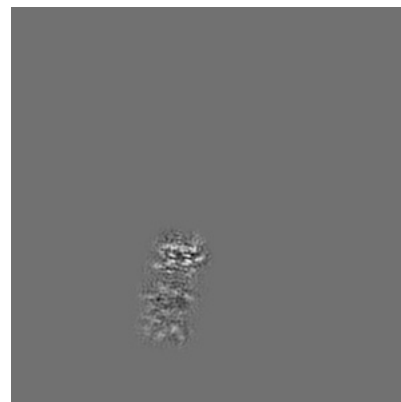
6.3.1 Primary map



X Index: 205

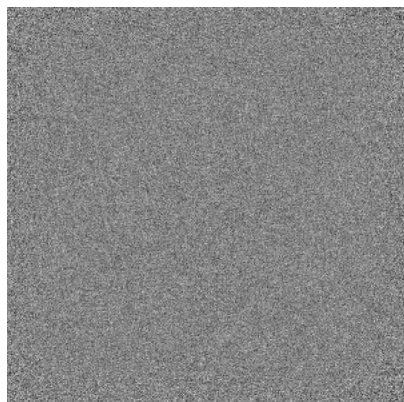


Y Index: 149

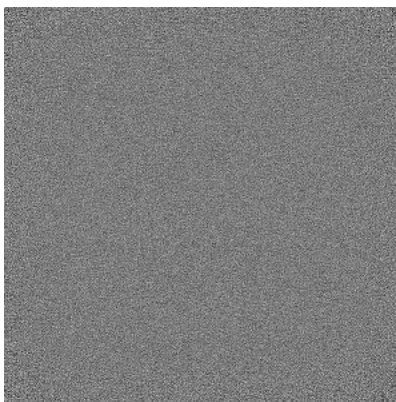


Z Index: 216

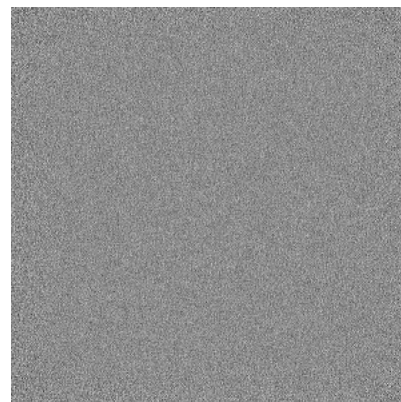
6.3.2 Raw map



X Index: 0



Y Index: 0

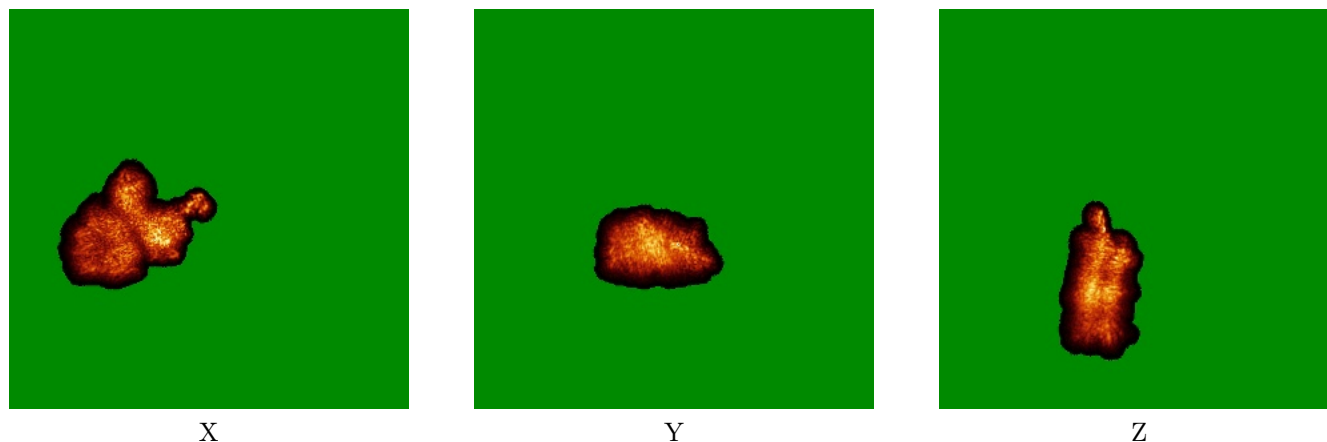


Z Index: 0

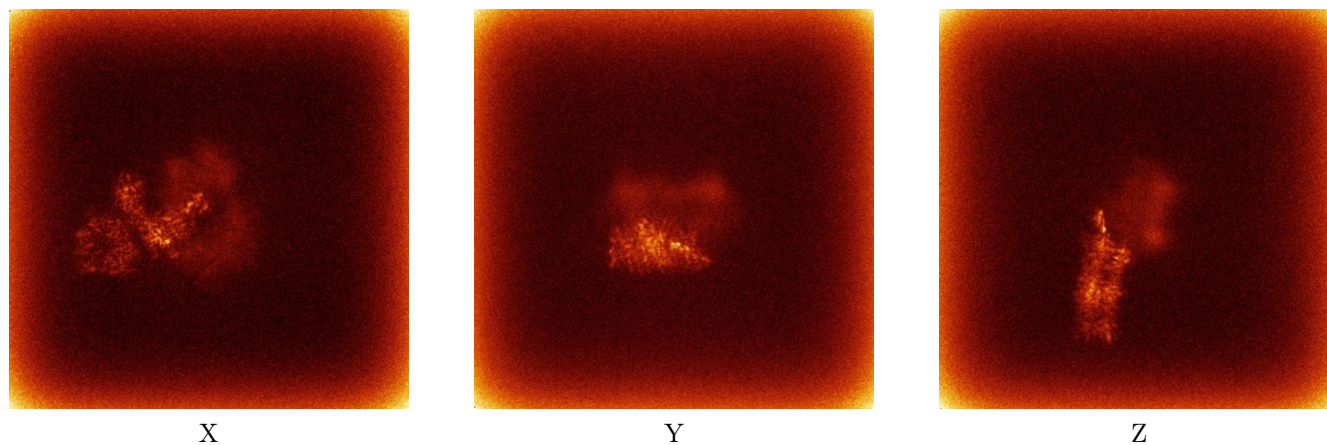
The images above show the largest variance slices of the map in three orthogonal directions.

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

6.4.1 Primary map



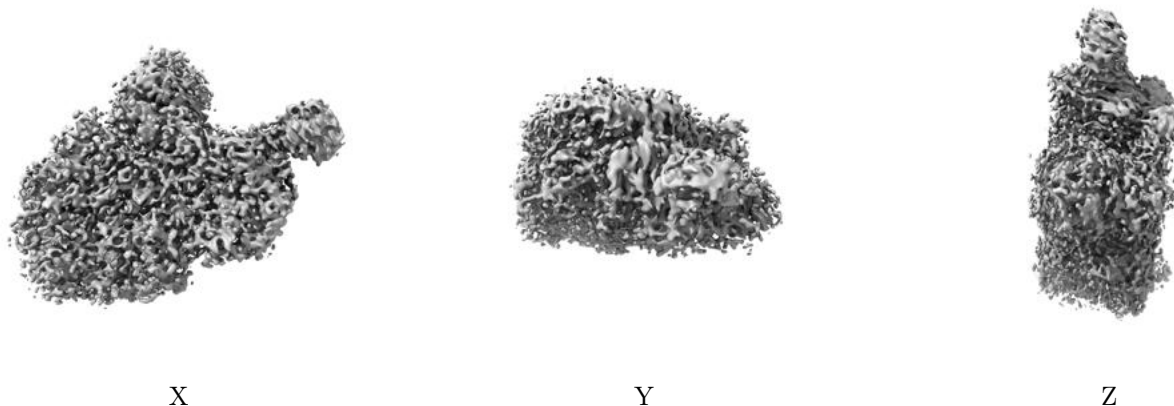
6.4.2 Raw map



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.

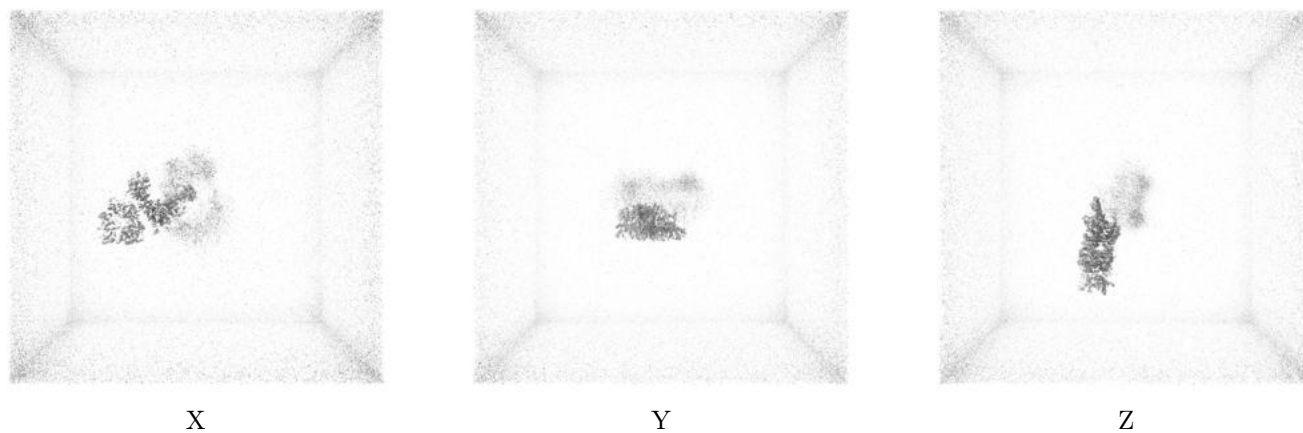
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.02. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

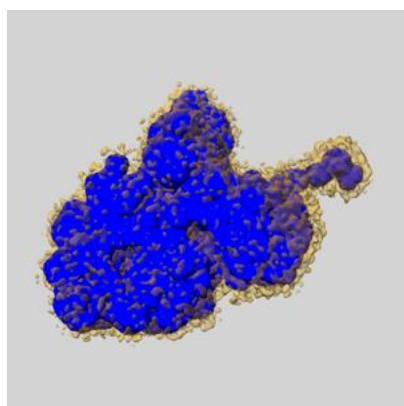
6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

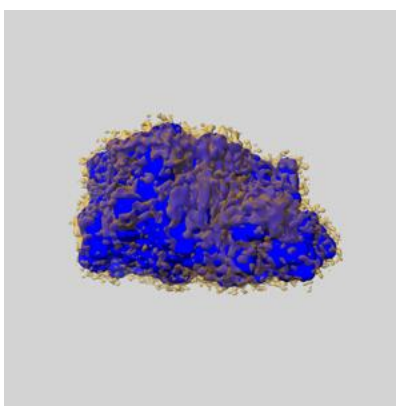
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

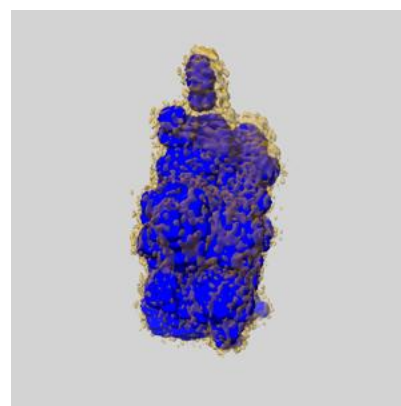
6.6.1 emd_66952_msk_1.map [i](#)



X



Y

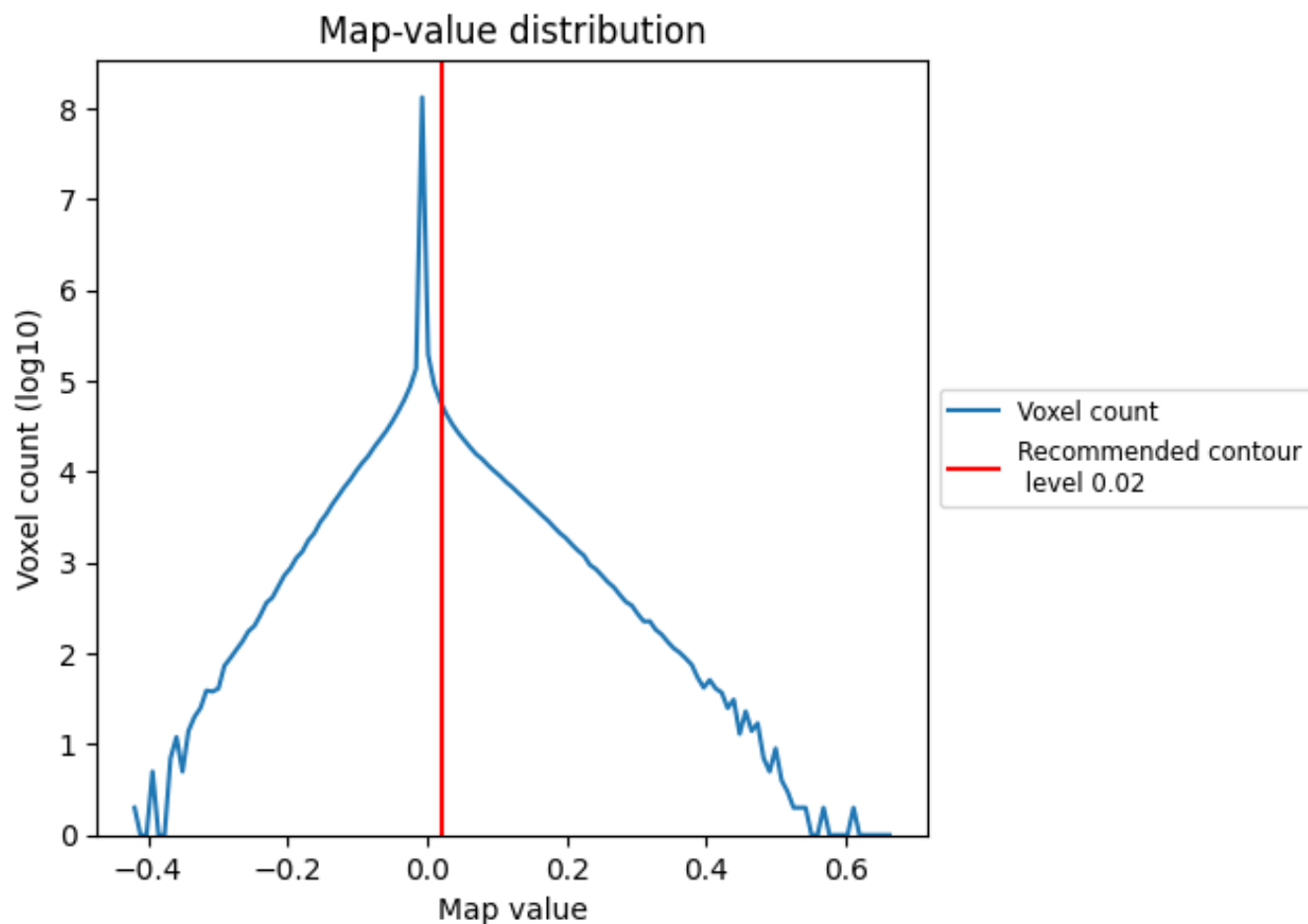


Z

7 Map analysis [i](#)

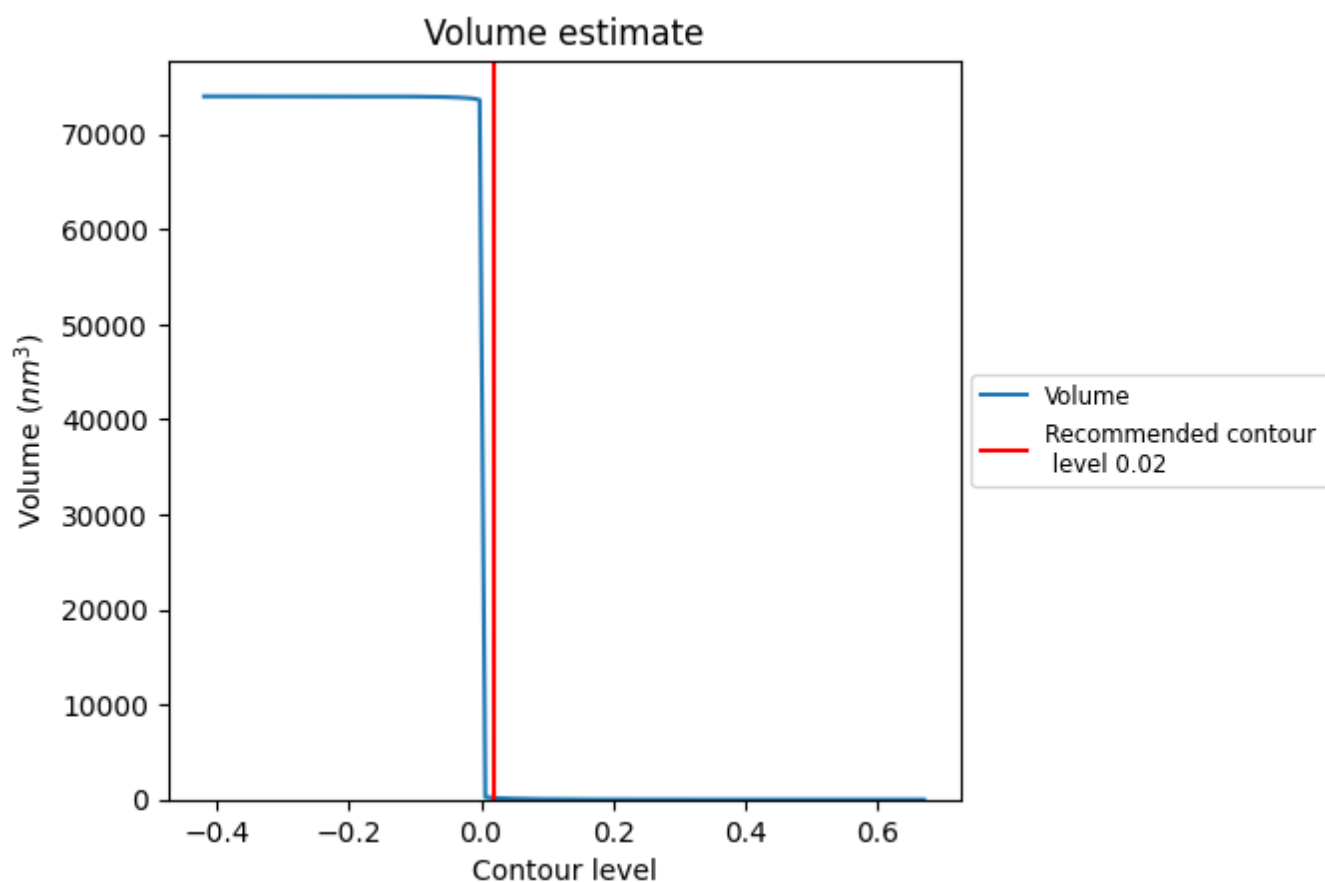
This section contains the results of statistical analysis of the map.

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.

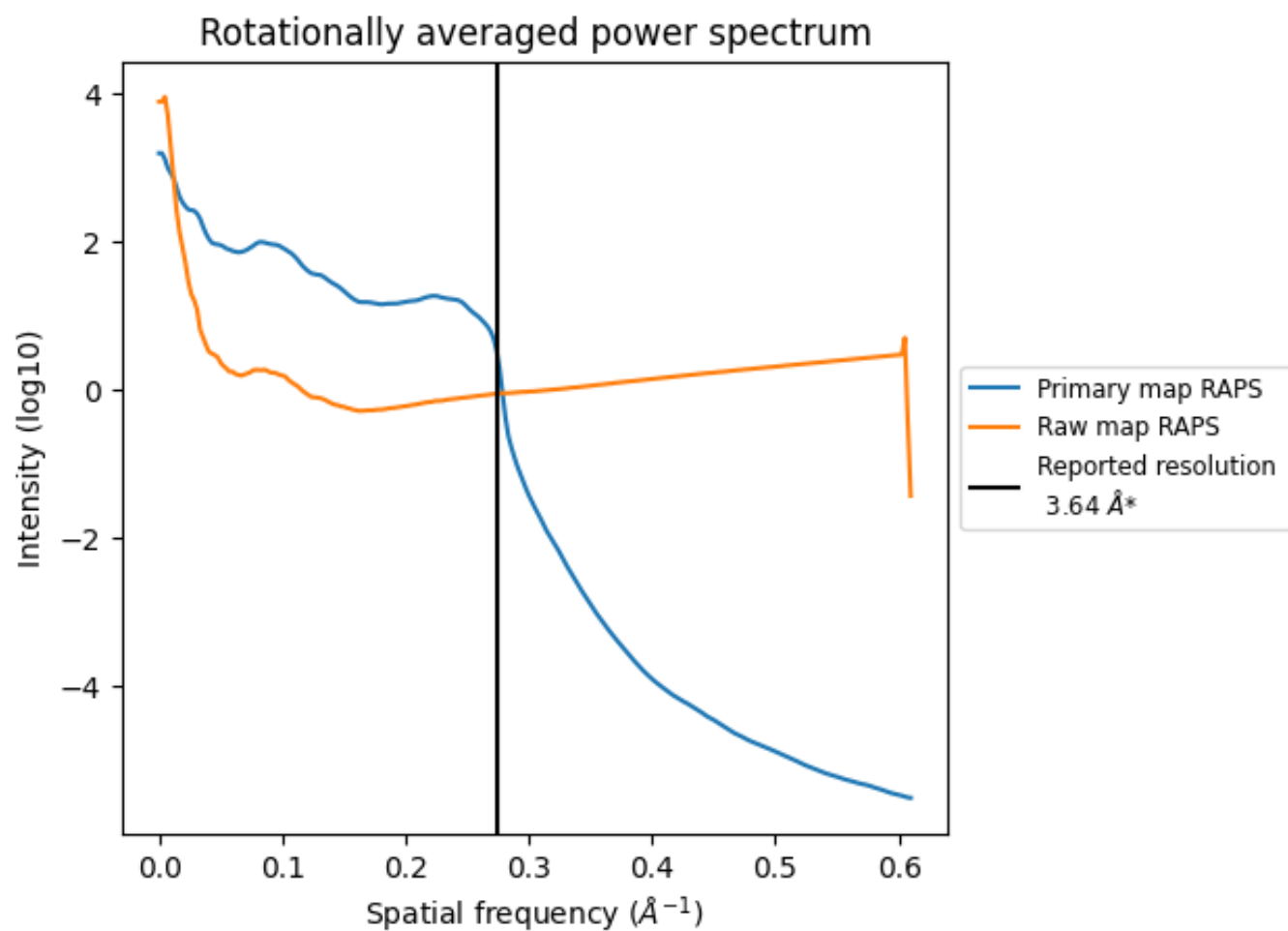
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 174 nm³; this corresponds to an approximate mass of 157 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 ⓘ

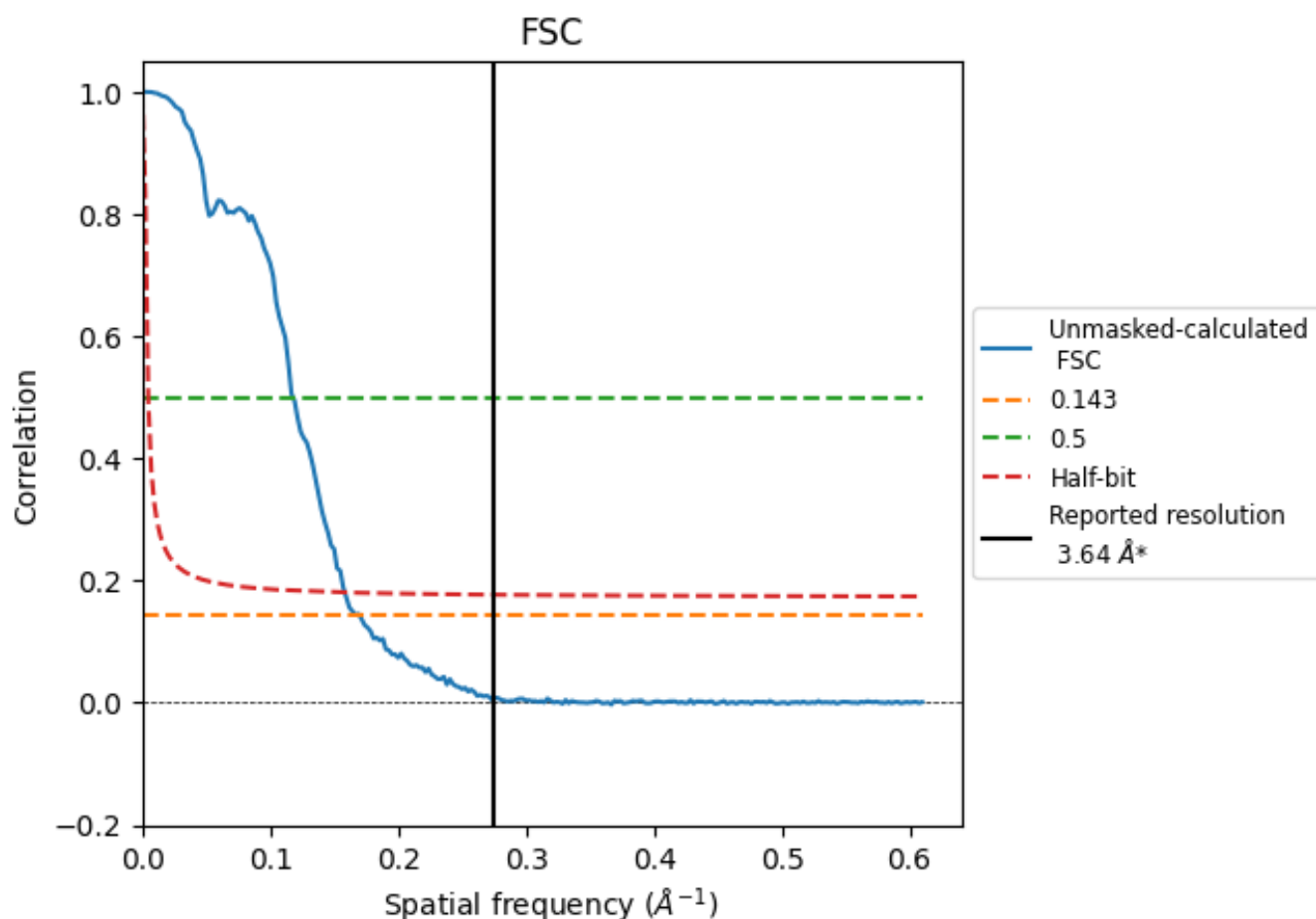


*Reported resolution corresponds to spatial frequency of 0.275 Å⁻¹

8 Fourier-Shell correlation [i](#)

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

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.275 $\text{\AA}^{-1}$

8.2 Resolution estimates [i](#)

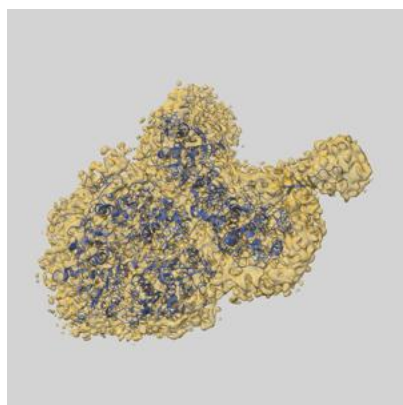
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.64	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	5.89	8.49	6.31

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 5.89 differs from the reported value 3.64 by more than 10 %

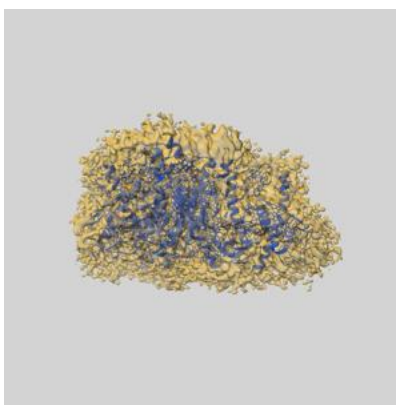
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-66952 and PDB model 9XK9. Per-residue inclusion information can be found in [section 3](#) on [page 11](#).

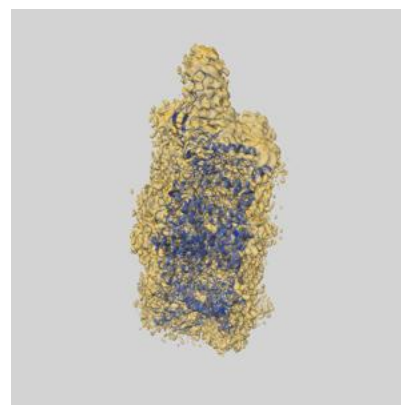
9.1 Map-model overlay [i](#)



X



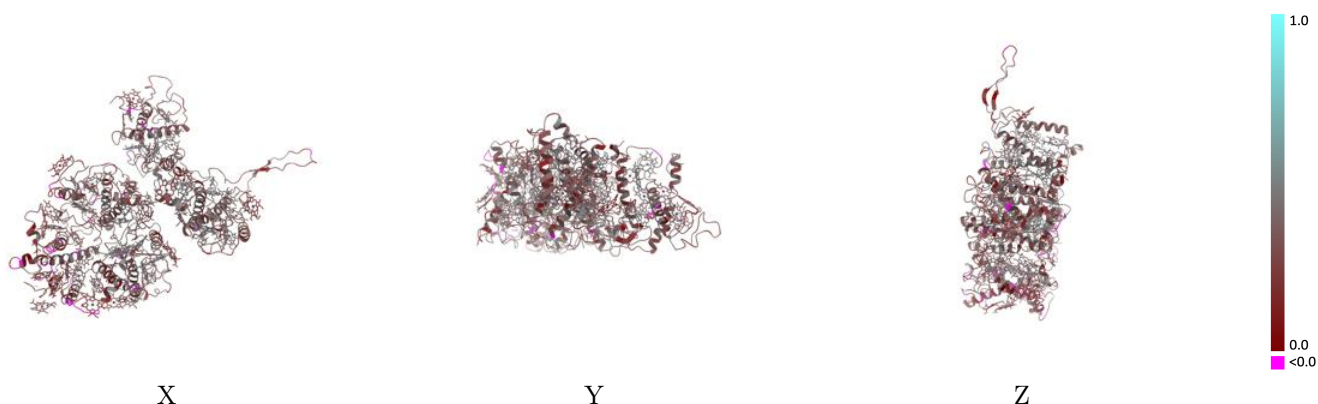
Y



Z

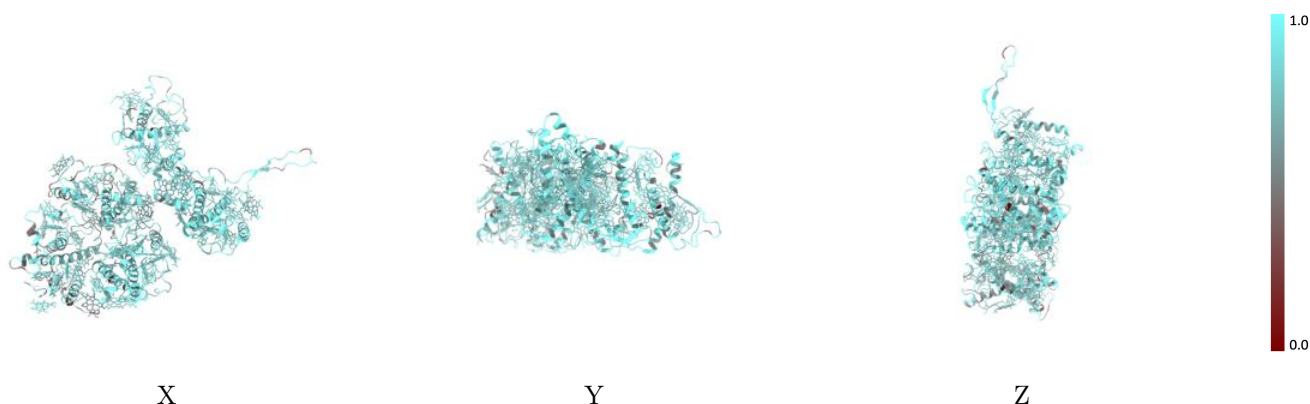
The images above show the 3D surface view of the map at the recommended contour level 0.02 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



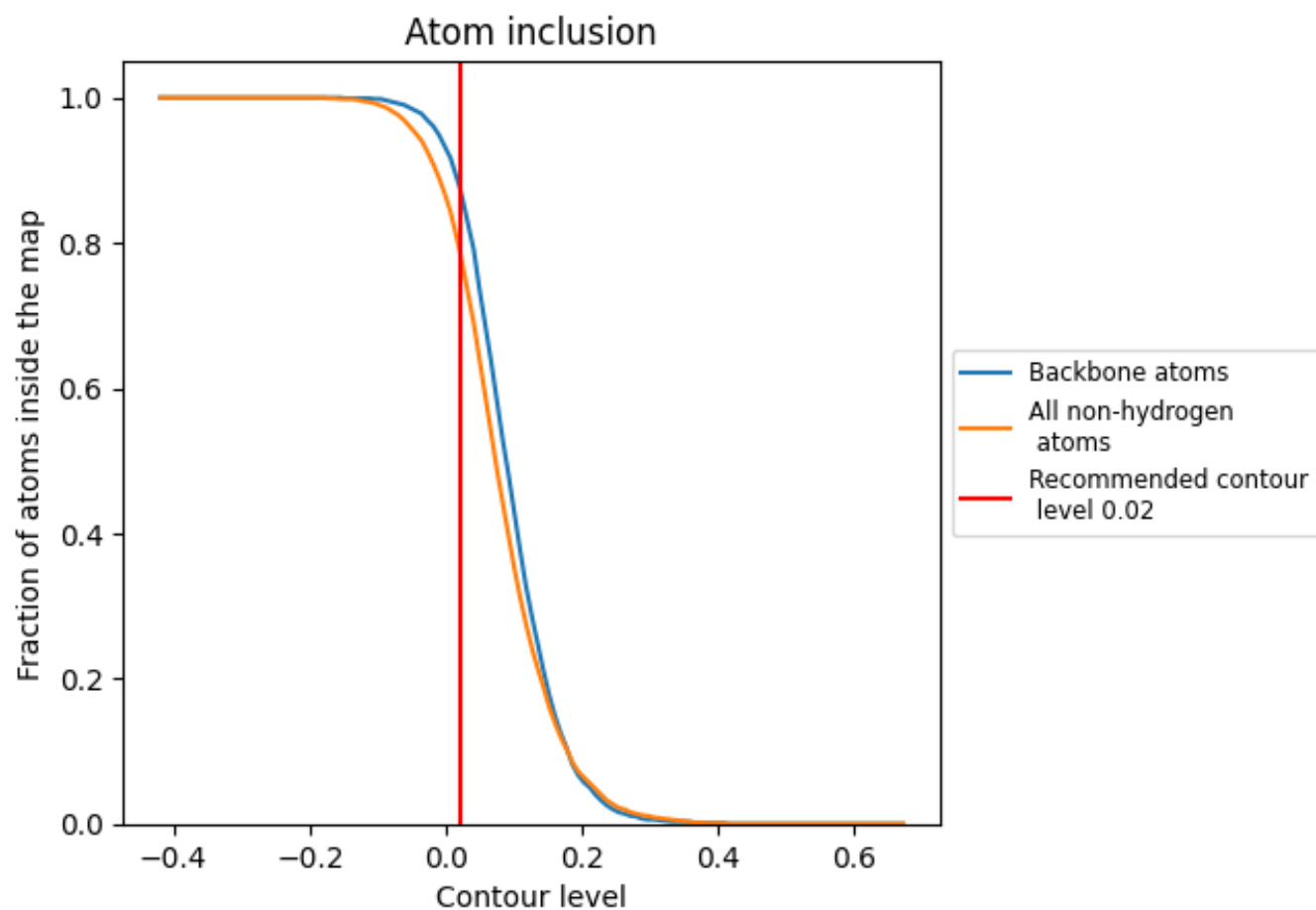
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.02).

9.4 Atom inclusion [i](#)



At the recommended contour level, 88% of all backbone atoms, 79% 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 (0.02) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7900	0.3240
05	0.7960	0.3290
06	0.7470	0.2650
07	0.7610	0.3240
08	0.8140	0.3370
1r	0.8220	0.3540

