



Full wwPDB EM Validation Report ⓘ

Nov 15, 2022 – 08:43 PM JST

PDB ID : 7XXF
EMDB ID : EMD-33501
Title : Structure of photosynthetic LH1-RC super-complex of Rhodospila globiformis
Authors : Tani, K.; Kanno, R.; Kurosawa, K.; Takaichi, S.; Nagashima, K.V.P.; Hall, M.; Yu, L.-J.; Kimura, Y.; Madigan, M.T.; Mizoguchi, A.; Humbel, B.M.; Wang-Otomo, Z.-Y.
Deposited on : 2022-05-30
Resolution : 2.24 Å (reported)
Based on initial model : 5Y5S

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

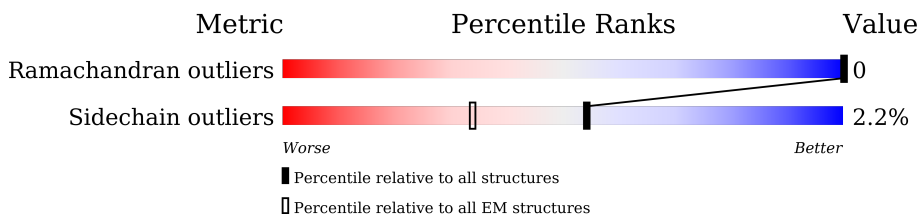
EMDB validation analysis : 0.0.1.dev43
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

1 Overall quality at a glance

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

The reported resolution of this entry is 2.24 Å.

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













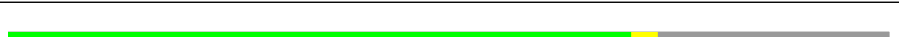


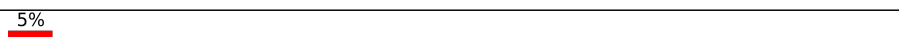
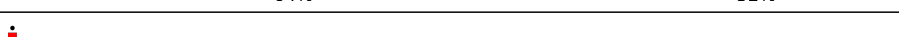
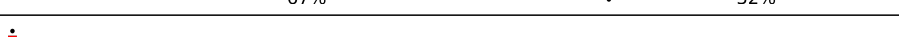



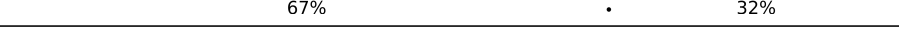





Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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	C	344	
2	L	275	
3	M	326	
4	H	258	
5	1	61	
5	3	61	
5	5	61	
5	7	61	
5	9	61	

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Mol	Chain	Length	Quality of chain
5	A	61	 72% 26%
5	D	61	 72% 26%
5	F	61	 72% 26%
5	I	61	 74% 25%
5	K	61	 70% 26%
5	O	61	 70% 26%
5	Q	61	 69% 5% 26%
5	S	61	 93% 5%
5	U	61	 85% 13%
5	W	61	 7% 92% 7%
5	Y	61	 70% 26%
6	0	73	 67% 32%
6	2	73	 5% 66% 32%
6	4	73	 5% 64% 32%
6	6	73	 67% 32%
6	8	73	 67% 32%
6	B	73	 67% 32%
6	E	73	 5% 67% 32%
6	G	73	 5% 67% 32%
6	J	73	 67% 32%
6	N	73	 7% 66% 32%
6	P	73	 67% 32%
6	R	73	 67% 32%
6	T	73	 8% 67% 32%
6	V	73	 10% 67% 32%

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Mol	Chain	Length	Quality of chain
6	X	73	
6	Z	73	
7	a	22	
7	b	22	
7	c	22	
7	d	22	
7	e	22	
7	f	22	
7	g	22	
7	h	22	
7	i	22	
7	j	22	
7	k	22	

2 Entry composition [i](#)

There are 19 unique types of molecules in this entry. The entry contains 29826 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 Photosynthetic reaction center cytochrome c subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	C	343	2655	1683	471	481	20	0	0

- Molecule 2 is a protein called Reaction center protein L chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	L	274	2177	1469	353	347	8	0	0

- Molecule 3 is a protein called Reaction center protein M chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	M	320	2550	1714	421	404	11	1	0

- Molecule 4 is a protein called Photosynthetic reaction center H subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	H	258	2000	1284	332	376	8	0	0

- Molecule 5 is a protein called Light-harvesting protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	A	45	384	264	63	55	2	0	0
5	D	45	384	264	63	55	2	0	0
5	F	45	384	264	63	55	2	0	0
5	I	46	394	270	66	56	2	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
5	K	45	Total	C	N	O	S	0	0
			384	264	63	55	2		
5	O	45	Total	C	N	O	S	0	0
			389	267	65	55	2		
5	Q	45	Total	C	N	O	S	0	0
			389	267	65	55	2		
5	S	58	Total	C	N	O	S	0	0
			475	321	82	69	3		
5	U	53	Total	C	N	O	S	0	0
			443	299	77	64	3		
5	W	57	Total	C	N	O	S	0	0
			470	318	81	68	3		
5	Y	45	Total	C	N	O	S	0	0
			384	264	63	55	2		
5	1	46	Total	C	N	O	S	0	0
			395	270	67	56	2		
5	3	57	Total	C	N	O	S	0	0
			472	321	79	69	3		
5	5	45	Total	C	N	O	S	0	0
			389	267	65	55	2		
5	7	45	Total	C	N	O	S	0	0
			389	267	65	55	2		
5	9	45	Total	C	N	O	S	1	0
			392	270	64	56	2		

- Molecule 6 is a protein called Light-harvesting protein.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	B	50	Total	C	N	O	0	0
			396	268	62	66		
6	E	50	Total	C	N	O	0	0
			396	268	62	66		
6	G	50	Total	C	N	O	0	0
			396	268	62	66		
6	J	50	Total	C	N	O	0	0
			396	268	62	66		
6	N	50	Total	C	N	O	0	0
			396	268	62	66		
6	P	50	Total	C	N	O	0	0
			396	268	62	66		
6	R	50	Total	C	N	O	0	0
			396	268	62	66		

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Mol	Chain	Residues	Atoms				AltConf	Trace
6	T	50	Total 396	C 268	N 62	O 66	0	0
6	V	50	Total 396	C 268	N 62	O 66	0	0
6	X	50	Total 396	C 268	N 62	O 66	0	0
6	Z	50	Total 396	C 268	N 62	O 66	0	0
6	2	50	Total 396	C 268	N 62	O 66	0	0
6	4	50	Total 396	C 268	N 62	O 66	0	0
6	6	50	Total 396	C 268	N 62	O 66	0	0
6	8	50	Total 396	C 268	N 62	O 66	0	0
6	0	50	Total 396	C 268	N 62	O 66	0	0

- Molecule 7 is a protein called Light-harvesting protein LH1 Gamma-like.

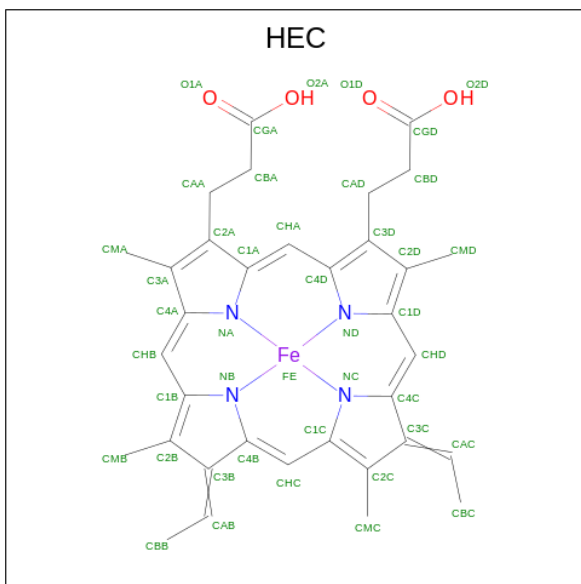
Mol	Chain	Residues	Atoms					AltConf	Trace
7	a	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	b	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	c	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	d	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	e	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	f	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	g	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	h	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	i	22	Total 177	C 120	N 28	O 26	S 3	0	0
7	j	22	Total 177	C 120	N 28	O 26	S 3	0	0

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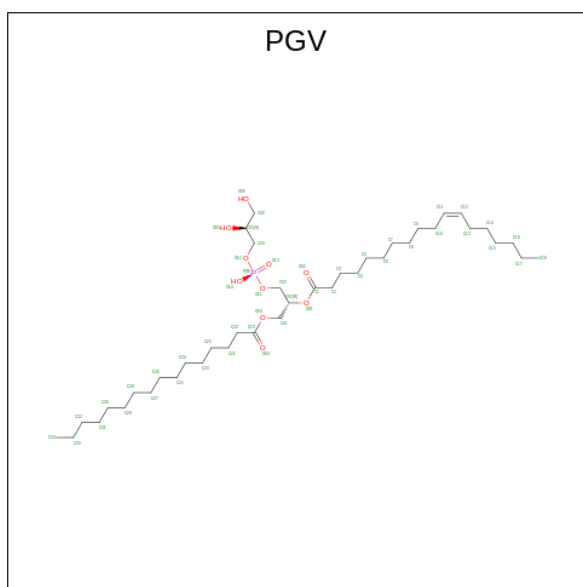
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	k	22	177	120	28	26	3	0	0

- Molecule 8 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	Fe	N	O	
8	C	1	172	136	4	16	16	0
8	C	1	172	136	4	16	16	0
8	C	1	172	136	4	16	16	0
8	C	1	172	136	4	16	16	0

- Molecule 9 is (1R)-2-[[[(2S)-2,3-DIHYDROXYPROPYL]OXY](HYDROXY)PHOSPHORYL]OXY]-1-[(PALMITOYLOXY)METHYL]ETHYL (11E)-OCTADEC-11-ENOATE (three-letter code: PGV) (formula: $C_{40}H_{77}O_{10}P$).



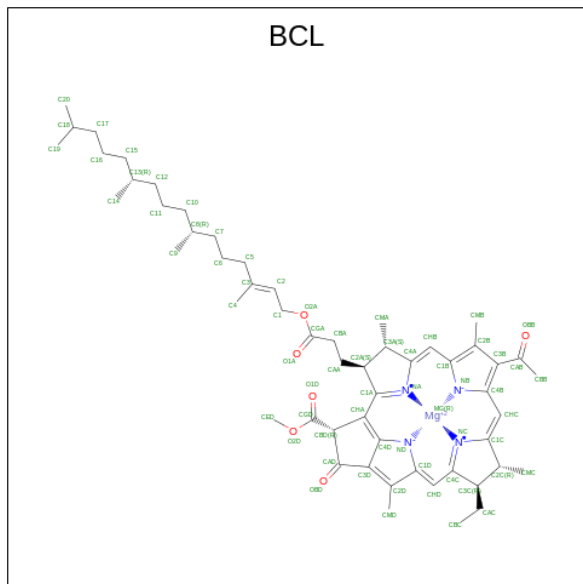
Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
9	C	1	Total 124	C 93	O 28	P 3	0
9	C	1	Total 124	C 93	O 28	P 3	0
9	C	1	Total 124	C 93	O 28	P 3	0
9	L	1	Total 191	C 136	O 50	P 5	0
9	L	1	Total 191	C 136	O 50	P 5	0
9	L	1	Total 191	C 136	O 50	P 5	0
9	L	1	Total 191	C 136	O 50	P 5	0
9	L	1	Total 191	C 136	O 50	P 5	0
9	M	1	Total 84	C 62	O 20	P 2	0
9	M	1	Total 84	C 62	O 20	P 2	0
9	H	1	Total 72	C 50	O 20	P 2	0
9	H	1	Total 72	C 50	O 20	P 2	0
9	D	1	Total 33	C 22	O 10	P 1	0
9	F	1	Total 39	C 29	O 9	P 1	0

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Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
9	K	1	Total	C	O	P	0
			39	28	10	1	
9	5	1	Total	C	O	P	0
			111	82	26	3	
9	5	1	Total	C	O	P	0
			111	82	26	3	
9	5	1	Total	C	O	P	0
			111	82	26	3	

- Molecule 10 is BACTERIOCHLOROPHYLL A (three-letter code: BCL) (formula: C₅₅H₇₄MgN₄O₆) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
10	L	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
10	L	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
10	M	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
10	M	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
10	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
10	B	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
10	D	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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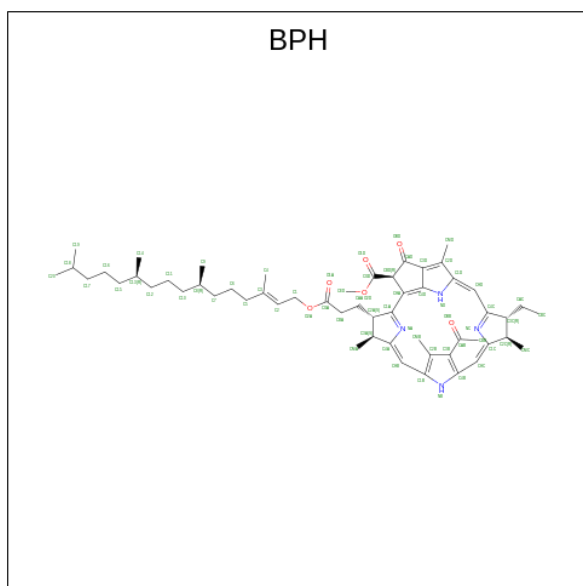
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
10	E	1	66	55	1	4	6	0
10	F	1	66	55	1	4	6	0
10	G	1	66	55	1	4	6	0
10	I	1	66	55	1	4	6	0
10	J	1	66	55	1	4	6	0
10	K	1	66	55	1	4	6	0
10	N	1	66	55	1	4	6	0
10	O	1	66	55	1	4	6	0
10	P	1	66	55	1	4	6	0
10	Q	1	66	55	1	4	6	0
10	R	1	66	55	1	4	6	0
10	S	1	66	55	1	4	6	0
10	T	1	66	55	1	4	6	0
10	U	1	66	55	1	4	6	0
10	V	1	66	55	1	4	6	0
10	W	1	66	55	1	4	6	0
10	X	1	66	55	1	4	6	0
10	Y	1	66	55	1	4	6	0
10	Z	1	66	55	1	4	6	0
10	1	1	66	55	1	4	6	0
10	2	1	66	55	1	4	6	0

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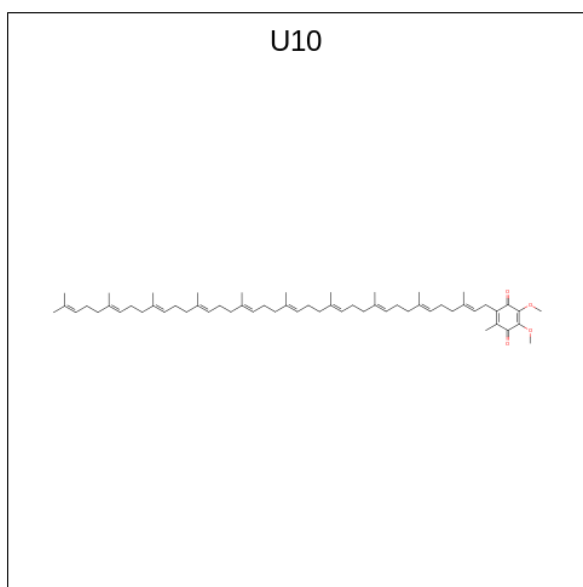
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
10	3	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	4	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	5	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	6	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	7	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	8	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	9	1	Total 66	C 55	Mg 1	N 4	O 6	0
10	0	1	Total 66	C 55	Mg 1	N 4	O 6	0

- Molecule 11 is BACTERIOPHEOPHYTIN A (three-letter code: BPH) (formula: $C_{55}H_{76}N_4O_6$).



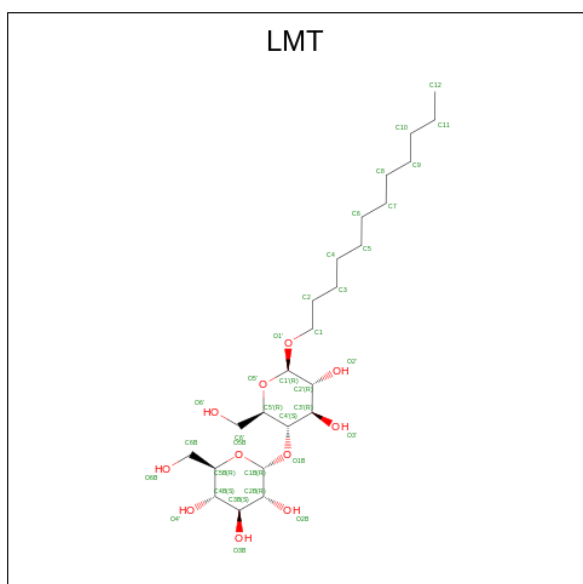
Mol	Chain	Residues	Atoms				AltConf
			Total	C	N	O	
11	L	1	Total 65	C 55	N 4	O 6	0
11	M	1	Total 65	C 55	N 4	O 6	0

- Molecule 12 is UBIQUINONE-10 (three-letter code: U10) (formula: $C_{59}H_{90}O_4$).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
12	L	1	86	74	12	0
12	L	1	86	74	12	0
12	L	1	86	74	12	0
12	7	1	63	59	4	0

- Molecule 13 is DODECYL-BETA-D-MALTOSE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).

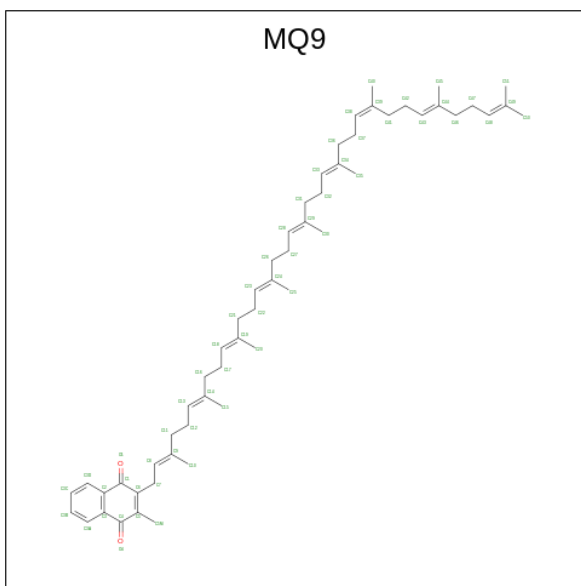


Mol	Chain	Residues	Atoms			AltConf
13	L	1	Total	C	O	0
			65	43	22	
13	L	1	Total	C	O	0
			65	43	22	
13	I	1	Total	C	O	0
			33	22	11	
13	1	1	Total	C	O	0
			35	24	11	
13	3	1	Total	C	O	0
			31	20	11	

- Molecule 14 is FE (III) ION (three-letter code: FE) (formula: Fe).

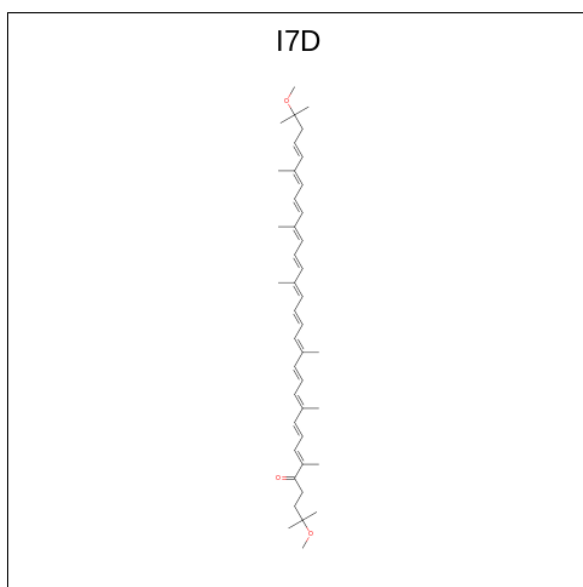
Mol	Chain	Residues	Atoms		AltConf
14	M	1	Total	Fe	0
			1	1	

- Molecule 15 is MENAQUINONE-9 (three-letter code: MQ9) (formula: C₅₆H₈₀O₂).



Mol	Chain	Residues	Atoms			AltConf
15	M	1	Total	C	O	0
			39	37	2	

- Molecule 16 is (6 {E},8 {E},10 {E},12 {E},14 {E},16 {E},18 {E},20 {E},22 {E},24 {E},26 {E},28 {E})-2,31-dimethoxy-2,6,10,14,19,23,27,31-octamethyl-dotriaconta-6,8,10,12,14,16,18,20,22,24,26,28-dodecaen-5-one (three-letter code: I7D) (formula: C₄₂H₆₀O₃) (labeled as "Ligand of Interest" by depositor).



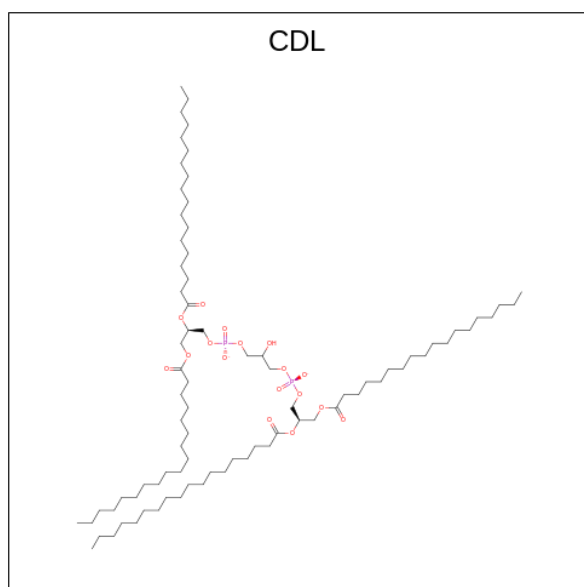
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
16	M	1	45	42	3	0
16	A	1	45	42	3	0
16	D	1	45	42	3	0
16	E	1	45	42	3	0
16	I	1	45	42	3	0
16	K	1	45	42	3	0
16	N	1	45	42	3	0
16	Q	1	45	42	3	0
16	R	1	45	42	3	0
16	T	1	45	42	3	0
16	V	1	45	42	3	0
16	X	1	45	42	3	0
16	1	1	45	42	3	0
16	3	1	45	42	3	0

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Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
16	4	1	45	42	3	0
16	6	1	45	42	3	0
16	8	1	45	42	3	0

- Molecule 17 is CARDIOLIPIN (three-letter code: CDL) (formula: $C_{81}H_{156}O_{17}P_2$).



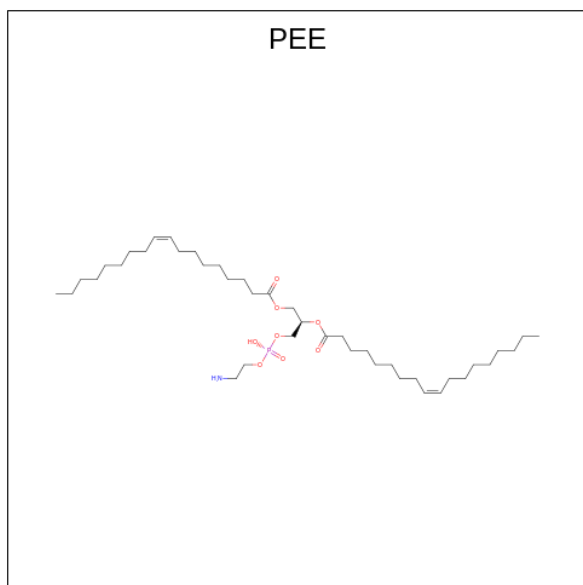
Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
17	M	1	104	67	33	4	0
17	M	1	104	67	33	4	0
17	H	1	72	53	17	2	0
17	A	1	58	39	17	2	0
17	T	1	72	53	17	2	0
17	2	1	72	53	17	2	0
17	6	1	132	94	34	4	0
17	6	1	132	94	34	4	0

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Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
17	0	1	63	44	17	2	0

- Molecule 18 is 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (three-letter code: PEE) (formula: $C_{41}H_{78}NO_8P$).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
18	M	1	44	34	1	8	1	0

- Molecule 19 is water.

Mol	Chain	Residues	Atoms		AltConf
			Total	O	
19	C	136	136	136	0
19	L	65	65	65	0
19	M	81	81	81	0
19	H	81	81	81	0
19	A	4	4	4	0
19	B	7	7	7	0
19	D	3	3	3	0

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Mol	Chain	Residues	Atoms		AltConf
19	E	3	Total 3	O 3	0
19	F	4	Total 4	O 4	0
19	G	2	Total 2	O 2	0
19	I	6	Total 6	O 6	0
19	J	3	Total 3	O 3	0
19	K	3	Total 3	O 3	0
19	N	4	Total 4	O 4	0
19	O	7	Total 7	O 7	0
19	P	5	Total 5	O 5	0
19	Q	9	Total 9	O 9	0
19	R	12	Total 12	O 12	0
19	S	16	Total 16	O 16	0
19	T	6	Total 6	O 6	0
19	U	8	Total 8	O 8	0
19	V	5	Total 5	O 5	0
19	W	11	Total 11	O 11	0
19	X	3	Total 3	O 3	0
19	Y	6	Total 6	O 6	0
19	Z	3	Total 3	O 3	0
19	1	2	Total 2	O 2	0
19	2	4	Total 4	O 4	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		AltConf
19	3	7	Total 7	O 7	0
19	4	7	Total 7	O 7	0
19	5	3	Total 3	O 3	0
19	6	4	Total 4	O 4	0
19	7	7	Total 7	O 7	0
19	8	2	Total 2	O 2	0
19	9	7	Total 7	O 7	0
19	0	1	Total 1	O 1	0
19	b	1	Total 1	O 1	0

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: Photosynthetic reaction center cytochrome c subunit

Chain C:  99%



- Molecule 2: Reaction center protein L chain

Chain L:  98%



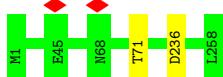
- Molecule 3: Reaction center protein M chain

Chain M:  97%



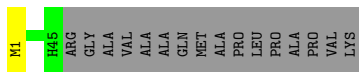
- Molecule 4: Photosynthetic reaction center H subunit

Chain H:  99%



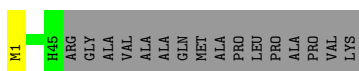
- Molecule 5: Light-harvesting protein

Chain A:  72% 26%



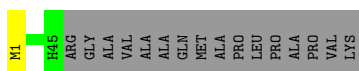
- Molecule 5: Light-harvesting protein

Chain D:  72% 26%



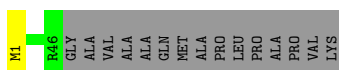
- Molecule 5: Light-harvesting protein

Chain F:  72% 26%



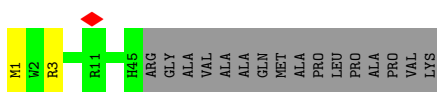
- Molecule 5: Light-harvesting protein

Chain I:  74% 25%



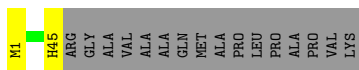
- Molecule 5: Light-harvesting protein

Chain K:  70% 26%



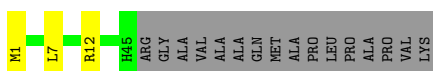
- Molecule 5: Light-harvesting protein

Chain O:  70% 26%



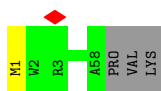
- Molecule 5: Light-harvesting protein

Chain Q:  69% 26%




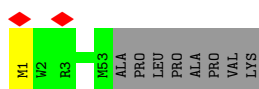
- Molecule 5: Light-harvesting protein

Chain S:  93% 5%



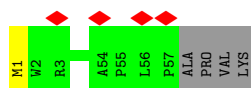
- Molecule 5: Light-harvesting protein

Chain U:  85% 13%



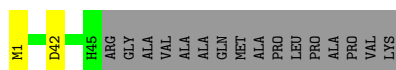
- Molecule 5: Light-harvesting protein

Chain W:  92% 7%



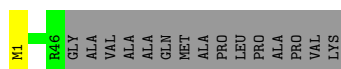
- Molecule 5: Light-harvesting protein

Chain Y:  70% 26%



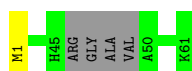
- Molecule 5: Light-harvesting protein

Chain 1:  74% 25%



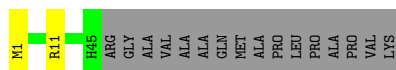
- Molecule 5: Light-harvesting protein

Chain 3:  92% 7%



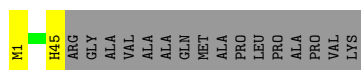
- Molecule 5: Light-harvesting protein

Chain 5:  70% 26%

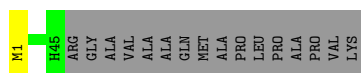


- Molecule 5: Light-harvesting protein

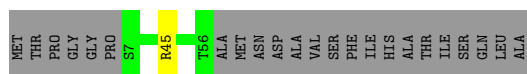
Chain 7:  70% 26%



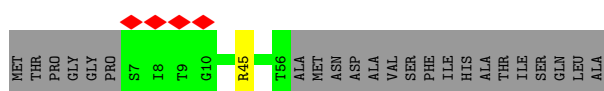
- Molecule 5: Light-harvesting protein



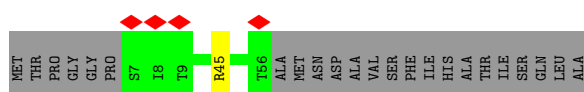
• Molecule 6: Light-harvesting protein



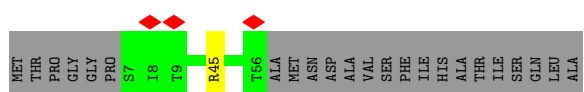
• Molecule 6: Light-harvesting protein



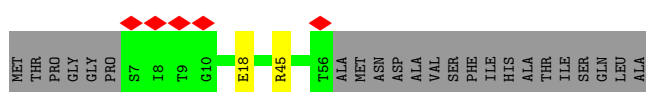
• Molecule 6: Light-harvesting protein



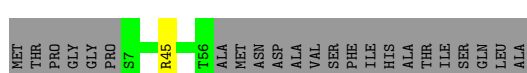
• Molecule 6: Light-harvesting protein



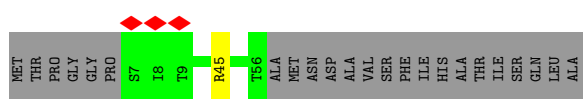
• Molecule 6: Light-harvesting protein



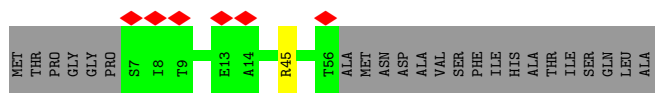
• Molecule 6: Light-harvesting protein



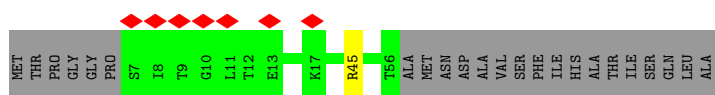
• Molecule 6: Light-harvesting protein



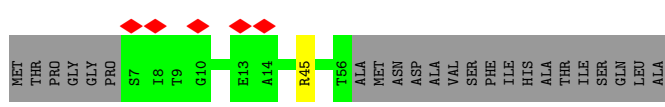
• Molecule 6: Light-harvesting protein



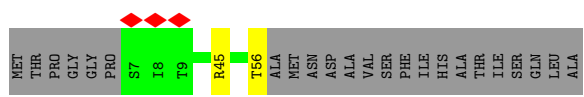
• Molecule 6: Light-harvesting protein



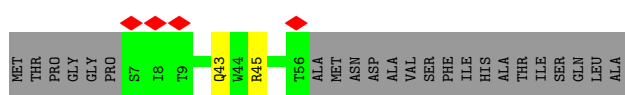
• Molecule 6: Light-harvesting protein



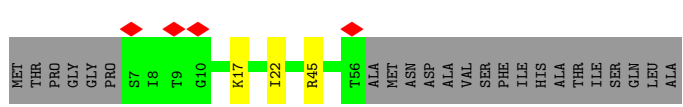
• Molecule 6: Light-harvesting protein



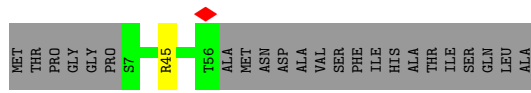
• Molecule 6: Light-harvesting protein



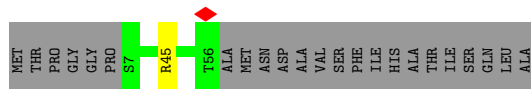
• Molecule 6: Light-harvesting protein



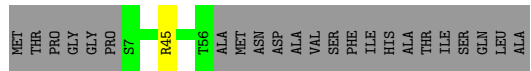
• Molecule 6: Light-harvesting protein



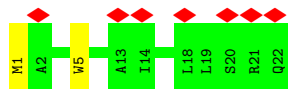
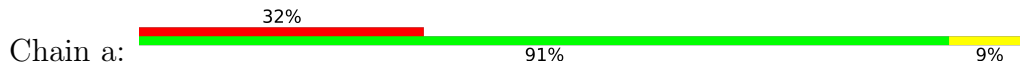
• Molecule 6: Light-harvesting protein



• Molecule 6: Light-harvesting protein



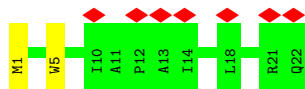
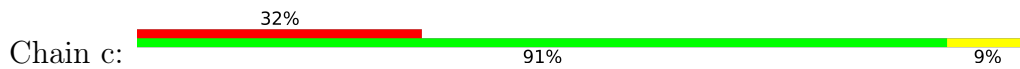
• Molecule 7: Light-harvesting protein LH1 Gamma-like



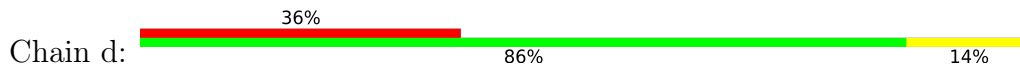
• Molecule 7: Light-harvesting protein LH1 Gamma-like



• Molecule 7: Light-harvesting protein LH1 Gamma-like

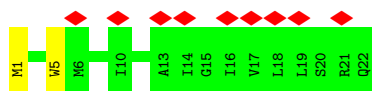
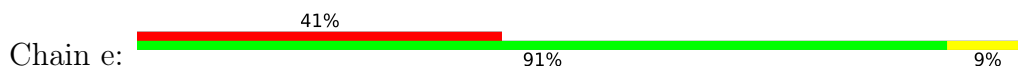


• Molecule 7: Light-harvesting protein LH1 Gamma-like

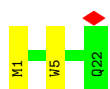
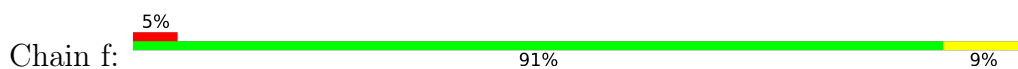




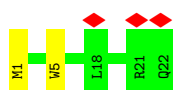
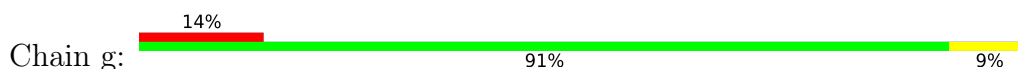
- Molecule 7: Light-harvesting protein LH1 Gamma-like



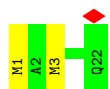
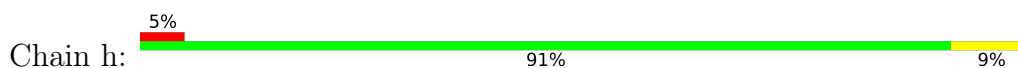
- Molecule 7: Light-harvesting protein LH1 Gamma-like



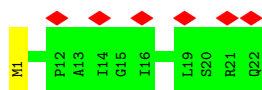
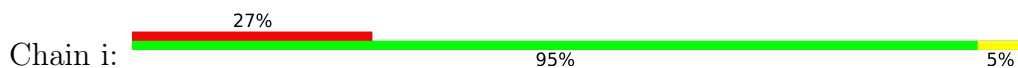
- Molecule 7: Light-harvesting protein LH1 Gamma-like



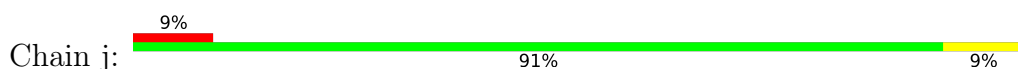
- Molecule 7: Light-harvesting protein LH1 Gamma-like



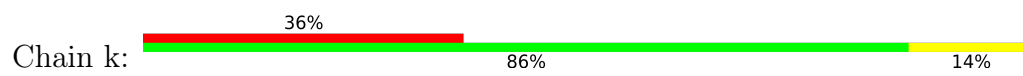
- Molecule 7: Light-harvesting protein LH1 Gamma-like



- Molecule 7: Light-harvesting protein LH1 Gamma-like



- Molecule 7: Light-harvesting protein LH1 Gamma-like



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	128119	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	40	Depositor
Minimum defocus (nm)	600	Depositor
Maximum defocus (nm)	2800	Depositor
Magnification	Not provided	
Image detector	FEI FALCON III (4k x 4k)	Depositor
Maximum map value	0.316	Depositor
Minimum map value	-0.105	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.007	Depositor
Recommended contour level	0.03	Depositor
Map size (\AA)	328.0, 328.0, 328.0	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	0.82, 0.82, 0.82	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: LMT, I7D, BCL, PEE, CDL, PGV, MQ9, HEC, FE, BPH, U10, FME

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	C	0.26	0/2730	0.46	0/3730
2	L	0.26	0/2266	0.44	0/3102
3	M	0.26	0/2652	0.45	0/3624
4	H	0.26	0/2053	0.49	0/2800
5	1	0.24	0/398	0.46	0/542
5	3	0.24	0/478	0.44	0/651
5	5	0.25	0/393	0.45	0/536
5	7	0.24	0/393	0.44	0/536
5	9	0.25	0/395	0.48	0/539
5	A	0.24	0/387	0.46	0/528
5	D	0.24	0/387	0.45	0/528
5	F	0.24	0/387	0.44	0/528
5	I	0.24	0/398	0.45	0/543
5	K	0.24	0/387	0.45	0/528
5	O	0.24	0/393	0.44	0/536
5	Q	0.25	0/393	0.47	0/536
5	S	0.25	0/481	0.47	0/657
5	U	0.25	0/447	0.48	0/608
5	W	0.24	0/476	0.47	0/650
5	Y	0.24	0/387	0.46	0/528
6	0	0.24	0/410	0.40	0/563
6	2	0.24	0/410	0.40	0/563
6	4	0.24	0/410	0.39	0/563
6	6	0.25	0/410	0.39	0/563
6	8	0.25	0/410	0.39	0/563
6	B	0.24	0/410	0.40	0/563
6	E	0.25	0/410	0.39	0/563
6	G	0.24	0/410	0.41	0/563
6	J	0.25	0/410	0.40	0/563
6	N	0.25	0/410	0.40	0/563
6	P	0.24	0/410	0.40	0/563
6	R	0.24	0/410	0.39	0/563

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
6	T	0.25	0/410	0.40	0/563
6	V	0.24	0/410	0.40	0/563
6	X	0.24	0/410	0.39	0/563
6	Z	0.24	0/410	0.40	0/563
7	a	0.22	0/171	0.44	0/232
7	b	0.21	0/171	0.43	0/232
7	c	0.22	0/171	0.44	0/232
7	d	0.22	0/171	0.47	0/232
7	e	0.22	0/171	0.45	0/232
7	f	0.22	0/171	0.42	0/232
7	g	0.22	0/171	0.42	0/232
7	h	0.22	0/171	0.44	0/232
7	i	0.22	0/171	0.46	0/232
7	j	0.22	0/171	0.41	0/232
7	k	0.23	0/171	0.45	0/232
All	All	0.25	0/24722	0.44	0/33790

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

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

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	C	341/344 (99%)	332 (97%)	9 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	L	272/275 (99%)	268 (98%)	4 (2%)	0	100	100
3	M	319/326 (98%)	313 (98%)	6 (2%)	0	100	100
4	H	256/258 (99%)	248 (97%)	8 (3%)	0	100	100
5	1	44/61 (72%)	43 (98%)	1 (2%)	0	100	100
5	3	53/61 (87%)	52 (98%)	1 (2%)	0	100	100
5	5	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	7	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	9	44/61 (72%)	43 (98%)	1 (2%)	0	100	100
5	A	43/61 (70%)	41 (95%)	2 (5%)	0	100	100
5	D	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	F	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	I	44/61 (72%)	43 (98%)	1 (2%)	0	100	100
5	K	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	O	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	Q	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
5	S	56/61 (92%)	55 (98%)	1 (2%)	0	100	100
5	U	51/61 (84%)	49 (96%)	2 (4%)	0	100	100
5	W	55/61 (90%)	53 (96%)	2 (4%)	0	100	100
5	Y	43/61 (70%)	42 (98%)	1 (2%)	0	100	100
6	0	48/73 (66%)	45 (94%)	3 (6%)	0	100	100
6	2	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	4	48/73 (66%)	45 (94%)	3 (6%)	0	100	100
6	6	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	8	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	B	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	E	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	G	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	J	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	N	48/73 (66%)	45 (94%)	3 (6%)	0	100	100
6	P	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	R	48/73 (66%)	46 (96%)	2 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	T	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	V	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	X	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
6	Z	48/73 (66%)	46 (96%)	2 (4%)	0	100	100
7	a	20/22 (91%)	20 (100%)	0	0	100	100
7	b	20/22 (91%)	20 (100%)	0	0	100	100
7	c	20/22 (91%)	20 (100%)	0	0	100	100
7	d	20/22 (91%)	19 (95%)	1 (5%)	0	100	100
7	e	20/22 (91%)	20 (100%)	0	0	100	100
7	f	20/22 (91%)	20 (100%)	0	0	100	100
7	g	20/22 (91%)	20 (100%)	0	0	100	100
7	h	20/22 (91%)	19 (95%)	1 (5%)	0	100	100
7	i	20/22 (91%)	20 (100%)	0	0	100	100
7	j	20/22 (91%)	20 (100%)	0	0	100	100
7	k	20/22 (91%)	20 (100%)	0	0	100	100
All	All	2910/3589 (81%)	2827 (97%)	83 (3%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains [i](#)

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	C	283/284 (100%)	280 (99%)	3 (1%)	73	80
2	L	214/215 (100%)	209 (98%)	5 (2%)	50	57
3	M	251/254 (99%)	247 (98%)	4 (2%)	62	70
4	H	212/212 (100%)	210 (99%)	2 (1%)	78	84
5	1	40/50 (80%)	40 (100%)	0	100	100
5	3	48/50 (96%)	48 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	5	40/50 (80%)	39 (98%)	1 (2%)	47	54
5	7	40/50 (80%)	39 (98%)	1 (2%)	47	54
5	9	40/50 (80%)	40 (100%)	0	100	100
5	A	39/50 (78%)	39 (100%)	0	100	100
5	D	39/50 (78%)	39 (100%)	0	100	100
5	F	39/50 (78%)	39 (100%)	0	100	100
5	I	40/50 (80%)	40 (100%)	0	100	100
5	K	39/50 (78%)	38 (97%)	1 (3%)	46	52
5	O	40/50 (80%)	39 (98%)	1 (2%)	47	54
5	Q	40/50 (80%)	38 (95%)	2 (5%)	24	24
5	S	47/50 (94%)	47 (100%)	0	100	100
5	U	44/50 (88%)	44 (100%)	0	100	100
5	W	47/50 (94%)	47 (100%)	0	100	100
5	Y	39/50 (78%)	38 (97%)	1 (3%)	46	52
6	0	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	2	40/57 (70%)	38 (95%)	2 (5%)	24	24
6	4	40/57 (70%)	37 (92%)	3 (8%)	13	10
6	6	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	8	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	B	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	E	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	G	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	J	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	N	40/57 (70%)	38 (95%)	2 (5%)	24	24
6	P	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	R	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	T	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	V	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	X	40/57 (70%)	39 (98%)	1 (2%)	47	54
6	Z	40/57 (70%)	38 (95%)	2 (5%)	24	24
7	a	17/17 (100%)	16 (94%)	1 (6%)	19	17

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	b	17/17 (100%)	17 (100%)	0	100	100
7	c	17/17 (100%)	16 (94%)	1 (6%)	19	17
7	d	17/17 (100%)	15 (88%)	2 (12%)	5	2
7	e	17/17 (100%)	16 (94%)	1 (6%)	19	17
7	f	17/17 (100%)	16 (94%)	1 (6%)	19	17
7	g	17/17 (100%)	16 (94%)	1 (6%)	19	17
7	h	17/17 (100%)	16 (94%)	1 (6%)	19	17
7	i	17/17 (100%)	17 (100%)	0	100	100
7	j	17/17 (100%)	16 (94%)	1 (6%)	19	17
7	k	17/17 (100%)	15 (88%)	2 (12%)	5	2
All	All	2448/2864 (86%)	2395 (98%)	53 (2%)	54	59

All (53) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	C	51	ARG
1	C	108	GLN
1	C	242	TYR
2	L	48	LEU
2	L	62	ILE
2	L	134	VAL
2	L	166	LEU
2	L	248	CYS
3	M	216	PHE
3	M	243	THR
3	M	262	PHE
3	M	287	THR
4	H	71	THR
4	H	236	ASP
6	B	45	ARG
6	E	45	ARG
6	G	45	ARG
6	J	45	ARG
5	K	3	ARG
6	N	18	GLU
6	N	45	ARG
5	O	45	HIS
6	P	45	ARG

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Mol	Chain	Res	Type
5	Q	7	LEU
5	Q	12	ARG
6	R	45	ARG
6	T	45	ARG
6	V	45	ARG
6	X	45	ARG
5	Y	42	ASP
6	Z	45	ARG
6	Z	56	THR
6	2	43	GLN
6	2	45	ARG
6	4	17	LYS
6	4	22	ILE
6	4	45	ARG
5	5	11	ARG
6	6	45	ARG
5	7	45	HIS
6	8	45	ARG
6	0	45	ARG
7	a	5	TRP
7	c	5	TRP
7	d	5	TRP
7	d	21	ARG
7	e	5	TRP
7	f	5	TRP
7	g	5	TRP
7	h	3	MET
7	j	5	TRP
7	k	3	MET
7	k	5	TRP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
1	C	171	ASN
4	H	69	GLN
4	H	229	GLN
6	G	43	GLN
6	J	43	GLN
6	Z	20	HIS
6	Z	43	GLN
6	8	43	GLN

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Mol	Chain	Res	Type
7	c	22	GLN
7	g	22	GLN
7	h	22	GLN
7	k	22	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

27 non-standard protein/DNA/RNA residues 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	FME	D	1	5	8,9,10	0.50	0	7,9,11	1.19	1 (14%)
5	FME	Y	1	5	8,9,10	0.53	0	7,9,11	0.91	1 (14%)
5	FME	3	1	5	8,9,10	0.51	0	7,9,11	0.99	1 (14%)
7	FME	e	1	7	8,9,10	0.53	0	7,9,11	0.99	1 (14%)
7	FME	b	1	7	8,9,10	0.52	0	7,9,11	0.93	1 (14%)
7	FME	h	1	7	8,9,10	0.50	0	7,9,11	0.98	1 (14%)
5	FME	K	1	5	8,9,10	0.50	0	7,9,11	1.11	1 (14%)
5	FME	F	1	5	8,9,10	0.52	0	7,9,11	0.97	1 (14%)
7	FME	a	1	7	8,9,10	0.51	0	7,9,11	0.99	1 (14%)
7	FME	d	1	7	8,9,10	0.52	0	7,9,11	0.93	1 (14%)
5	FME	Q	1	5	8,9,10	0.46	0	7,9,11	1.22	1 (14%)
7	FME	k	1	7	8,9,10	0.53	0	7,9,11	0.95	1 (14%)
5	FME	7	1	5	8,9,10	0.51	0	7,9,11	1.09	1 (14%)
5	FME	W	1	5	8,9,10	0.51	0	7,9,11	0.92	1 (14%)
5	FME	U	1	5	8,9,10	0.53	0	7,9,11	0.93	1 (14%)
7	FME	c	1	7	8,9,10	0.52	0	7,9,11	1.18	1 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	FME	9	1	5	8,9,10	0.49	0	7,9,11	0.94	1 (14%)
5	FME	1	1	5	8,9,10	0.50	0	7,9,11	1.08	1 (14%)
5	FME	A	1	5	8,9,10	0.49	0	7,9,11	0.98	1 (14%)
5	FME	5	1	5	8,9,10	0.52	0	7,9,11	0.91	1 (14%)
7	FME	j	1	7	8,9,10	0.51	0	7,9,11	1.04	1 (14%)
7	FME	i	1	7	8,9,10	0.51	0	7,9,11	1.08	1 (14%)
7	FME	g	1	7	8,9,10	0.51	0	7,9,11	0.95	1 (14%)
5	FME	O	1	5	8,9,10	0.53	0	7,9,11	0.98	1 (14%)
5	FME	S	1	5	8,9,10	0.49	0	7,9,11	0.97	1 (14%)
5	FME	I	1	5	8,9,10	0.51	0	7,9,11	1.16	1 (14%)
7	FME	f	1	7	8,9,10	0.50	0	7,9,11	0.96	1 (14%)

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	FME	D	1	5	-	1/7/9/11	-
5	FME	Y	1	5	-	2/7/9/11	-
5	FME	3	1	5	-	0/7/9/11	-
7	FME	e	1	7	-	1/7/9/11	-
7	FME	b	1	7	-	3/7/9/11	-
7	FME	h	1	7	-	2/7/9/11	-
5	FME	K	1	5	-	3/7/9/11	-
5	FME	F	1	5	-	1/7/9/11	-
7	FME	a	1	7	-	3/7/9/11	-
7	FME	d	1	7	-	2/7/9/11	-
5	FME	Q	1	5	-	1/7/9/11	-
7	FME	k	1	7	-	0/7/9/11	-
5	FME	7	1	5	-	4/7/9/11	-
5	FME	W	1	5	-	2/7/9/11	-
5	FME	U	1	5	-	1/7/9/11	-
7	FME	c	1	7	-	2/7/9/11	-
5	FME	9	1	5	-	1/7/9/11	-
5	FME	1	1	5	-	2/7/9/11	-
5	FME	A	1	5	-	1/7/9/11	-
5	FME	5	1	5	-	3/7/9/11	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
7	FME	j	1	7	-	1/7/9/11	-
7	FME	i	1	7	-	0/7/9/11	-
7	FME	g	1	7	-	4/7/9/11	-
5	FME	O	1	5	-	0/7/9/11	-
5	FME	S	1	5	-	1/7/9/11	-
5	FME	I	1	5	-	0/7/9/11	-
7	FME	f	1	7	-	1/7/9/11	-

There are no bond length outliers.

All (27) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	Q	1	FME	O-C-CA	-2.84	117.33	124.78
5	D	1	FME	O-C-CA	-2.76	117.54	124.78
5	I	1	FME	O-C-CA	-2.75	117.58	124.78
5	K	1	FME	O-C-CA	-2.67	117.79	124.78
5	1	1	FME	O-C-CA	-2.64	117.86	124.78
5	7	1	FME	O-C-CA	-2.63	117.88	124.78
7	i	1	FME	O-C-CA	-2.60	117.95	124.78
7	j	1	FME	O-C-CA	-2.58	118.02	124.78
7	a	1	FME	O-C-CA	-2.50	118.24	124.78
5	3	1	FME	O-C-CA	-2.49	118.24	124.78
7	h	1	FME	O-C-CA	-2.49	118.25	124.78
5	O	1	FME	O-C-CA	-2.49	118.25	124.78
5	A	1	FME	O-C-CA	-2.48	118.28	124.78
7	e	1	FME	O-C-CA	-2.45	118.36	124.78
5	F	1	FME	O-C-CA	-2.45	118.36	124.78
7	g	1	FME	O-C-CA	-2.44	118.38	124.78
5	S	1	FME	O-C-CA	-2.43	118.42	124.78
7	d	1	FME	O-C-CA	-2.41	118.47	124.78
5	9	1	FME	O-C-CA	-2.39	118.51	124.78
5	U	1	FME	O-C-CA	-2.38	118.54	124.78
7	k	1	FME	O-C-CA	-2.37	118.56	124.78
7	b	1	FME	O-C-CA	-2.36	118.59	124.78
7	f	1	FME	O-C-CA	-2.35	118.62	124.78
5	W	1	FME	O-C-CA	-2.34	118.64	124.78
7	c	1	FME	O-C-CA	-2.32	118.69	124.78
5	Y	1	FME	O-C-CA	-2.32	118.69	124.78
5	5	1	FME	O-C-CA	-2.23	118.93	124.78

There are no chirality outliers.

All (42) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	K	1	FME	O1-CN-N-CA
5	K	1	FME	CB-CA-N-CN
5	U	1	FME	O1-CN-N-CA
5	Y	1	FME	O1-CN-N-CA
5	Y	1	FME	CB-CA-N-CN
5	1	1	FME	O1-CN-N-CA
5	1	1	FME	CB-CA-N-CN
5	5	1	FME	O1-CN-N-CA
5	7	1	FME	O1-CN-N-CA
5	7	1	FME	C-CA-CB-CG
5	9	1	FME	O1-CN-N-CA
7	a	1	FME	O1-CN-N-CA
7	a	1	FME	CB-CA-N-CN
7	a	1	FME	C-CA-CB-CG
7	b	1	FME	O1-CN-N-CA
7	b	1	FME	CB-CA-N-CN
7	c	1	FME	CB-CA-N-CN
7	d	1	FME	O1-CN-N-CA
7	d	1	FME	O-C-CA-CB
7	e	1	FME	O1-CN-N-CA
7	f	1	FME	O1-CN-N-CA
7	g	1	FME	O1-CN-N-CA
7	g	1	FME	CB-CA-N-CN
7	g	1	FME	O-C-CA-CB
7	h	1	FME	O1-CN-N-CA
7	h	1	FME	O-C-CA-CB
5	5	1	FME	N-CA-CB-CG
5	D	1	FME	C-CA-CB-CG
5	Q	1	FME	C-CA-CB-CG
5	W	1	FME	N-CA-CB-CG
5	5	1	FME	CB-CG-SD-CE
5	S	1	FME	N-CA-CB-CG
7	b	1	FME	N-CA-CB-CG
5	F	1	FME	N-CA-CB-CG
5	K	1	FME	C-CA-CB-CG
5	7	1	FME	N-CA-CB-CG
7	c	1	FME	N-CA-CB-CG
7	g	1	FME	C-CA-CB-CG
5	A	1	FME	CA-CB-CG-SD
5	W	1	FME	CB-CA-N-CN
5	7	1	FME	CB-CA-N-CN
7	j	1	FME	CB-CA-N-CN

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 98 ligands modelled in this entry, 1 is monoatomic - leaving 97 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
16	I7D	A	103	-	43,44,44	1.97	10 (23%)	51,56,56	1.89	11 (21%)
8	HEC	C	401	1	32,50,50	1.60	4 (12%)	24,82,82	1.66	3 (12%)
10	BCL	E	102	-	58,74,74	1.63	10 (17%)	69,115,115	1.70	14 (20%)
16	I7D	X	101	-	43,44,44	2.03	10 (23%)	51,56,56	1.94	11 (21%)
13	LMT	3	103	-	32,32,36	0.40	0	43,43,47	0.85	1 (2%)
16	I7D	Q	101	-	43,44,44	1.97	10 (23%)	51,56,56	1.84	11 (21%)
10	BCL	8	102	-	58,74,74	1.63	10 (17%)	69,115,115	1.65	15 (21%)
9	PGV	H	302	-	35,35,50	1.08	2 (5%)	38,41,56	1.18	4 (10%)
9	PGV	5	101	-	36,36,50	1.08	2 (5%)	39,41,56	1.18	4 (10%)
17	CDL	T	103	-	71,71,99	1.08	4 (5%)	77,83,111	1.15	6 (7%)
10	BCL	X	102	-	58,74,74	1.64	10 (17%)	69,115,115	1.66	13 (18%)
9	PGV	C	405	-	43,43,50	1.00	2 (4%)	45,49,56	1.12	3 (6%)
17	CDL	6	104	-	62,62,99	1.16	4 (6%)	68,74,111	1.26	6 (8%)
10	BCL	K	102	-	58,74,74	1.66	8 (13%)	69,115,115	1.80	15 (21%)
10	BCL	O	101	-	58,74,74	1.65	8 (13%)	69,115,115	1.78	15 (21%)
16	I7D	N	101	-	43,44,44	1.98	10 (23%)	51,56,56	1.90	13 (25%)
9	PGV	M	411	-	32,32,50	1.14	2 (6%)	35,38,56	1.22	3 (8%)
16	I7D	M	406	-	43,44,44	1.95	11 (25%)	51,56,56	1.74	8 (15%)
10	BCL	J	101	-	58,74,74	1.62	10 (17%)	69,115,115	1.69	13 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
9	PGV	H	301	-	35,35,50	1.10	2 (5%)	38,41,56	1.17	3 (7%)
16	I7D	3	101	-	43,44,44	1.98	10 (23%)	51,56,56	1.86	11 (21%)
11	BPH	M	404	-	51,70,70	0.53	1 (1%)	52,101,101	0.64	0
9	PGV	L	305	-	43,43,50	0.97	2 (4%)	46,49,56	1.01	2 (4%)
10	BCL	P	101	-	58,74,74	1.62	10 (17%)	69,115,115	1.70	14 (20%)
10	BCL	L	309	-	58,74,74	1.61	9 (15%)	69,115,115	1.67	15 (21%)
10	BCL	T	102	-	58,74,74	1.63	10 (17%)	69,115,115	1.66	14 (20%)
17	CDL	0	101	-	62,62,99	1.16	4 (6%)	68,74,111	1.18	6 (8%)
9	PGV	L	311	-	32,32,50	1.15	2 (6%)	35,38,56	1.27	4 (11%)
8	HEC	C	404	1	32,50,50	1.56	4 (12%)	24,82,82	1.30	2 (8%)
10	BCL	N	102	-	58,74,74	1.63	10 (17%)	69,115,115	1.69	14 (20%)
10	BCL	S	101	-	58,74,74	1.66	9 (15%)	69,115,115	1.75	15 (21%)
10	BCL	D	102	-	58,74,74	1.66	8 (13%)	69,115,115	1.71	15 (21%)
16	I7D	K	101	-	43,44,44	1.97	10 (23%)	51,56,56	1.85	11 (21%)
17	CDL	2	101	-	71,71,99	1.10	4 (5%)	77,83,111	1.08	5 (6%)
12	U10	L	306	-	15,15,63	1.15	2 (13%)	19,21,79	0.87	0
10	BCL	1	102	-	58,74,74	1.64	8 (13%)	69,115,115	1.75	18 (26%)
10	BCL	F	101	-	58,74,74	1.63	8 (13%)	69,115,115	1.82	16 (23%)
10	BCL	Y	101	-	58,74,74	1.66	9 (15%)	69,115,115	1.74	15 (21%)
10	BCL	M	403	-	58,74,74	1.63	10 (17%)	69,115,115	1.68	13 (18%)
16	I7D	1	101	-	43,44,44	2.03	10 (23%)	51,56,56	1.89	12 (23%)
10	BCL	I	102	-	58,74,74	1.64	10 (17%)	69,115,115	1.66	16 (23%)
10	BCL	9	101	-	58,74,74	1.66	10 (17%)	69,115,115	1.69	16 (23%)
12	U10	L	303	-	36,36,63	0.77	2 (5%)	43,46,79	0.58	0
10	BCL	W	101	-	58,74,74	1.65	10 (17%)	69,115,115	1.67	15 (21%)
10	BCL	L	301	-	58,74,74	1.63	9 (15%)	69,115,115	1.63	14 (20%)
9	PGV	L	312	-	33,33,50	1.11	2 (6%)	36,39,56	1.22	3 (8%)
10	BCL	7	402	-	58,74,74	1.64	11 (18%)	69,115,115	1.62	13 (18%)
10	BCL	A	102	-	58,74,74	1.66	10 (17%)	69,115,115	1.69	15 (21%)
8	HEC	C	402	1	32,50,50	1.56	4 (12%)	24,82,82	1.39	2 (8%)
10	BCL	3	102	-	58,74,74	1.65	10 (17%)	69,115,115	1.65	17 (24%)
9	PGV	D	103	-	32,32,50	1.13	2 (6%)	35,38,56	1.20	3 (8%)
10	BCL	Q	102	-	58,74,74	1.65	9 (15%)	69,115,115	1.74	15 (21%)
10	BCL	4	102	-	58,74,74	1.63	9 (15%)	69,115,115	1.67	14 (20%)
10	BCL	6	103	-	58,74,74	1.64	10 (17%)	69,115,115	1.66	13 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
10	BCL	5	102	-	58,74,74	1.67	11 (18%)	69,115,115	1.65	15 (21%)
9	PGV	M	410	-	50,50,50	0.90	2 (4%)	53,56,56	1.06	3 (5%)
16	I7D	4	101	-	43,44,44	1.99	10 (23%)	51,56,56	1.85	12 (23%)
12	U10	7	401	-	63,63,63	0.59	2 (3%)	76,79,79	0.54	0
17	CDL	6	101	-	68,68,99	1.12	4 (5%)	74,80,111	1.11	5 (6%)
9	PGV	C	406	-	41,41,50	1.02	2 (4%)	44,47,56	1.20	3 (6%)
10	BCL	0	102	-	58,74,74	1.64	10 (17%)	69,115,115	1.67	14 (20%)
10	BCL	Z	101	-	58,74,74	1.64	10 (17%)	69,115,115	1.68	13 (18%)
11	BPH	L	302	-	51,70,70	0.52	0	52,101,101	0.64	0
13	LMT	L	308	-	31,31,36	0.38	0	42,42,47	0.68	0
9	PGV	C	407	-	37,37,50	1.09	2 (5%)	41,42,56	1.22	4 (9%)
10	BCL	M	402	-	58,74,74	1.64	9 (15%)	69,115,115	1.70	13 (18%)
10	BCL	U	101	-	58,74,74	1.66	11 (18%)	69,115,115	1.68	14 (20%)
9	PGV	L	304	-	42,42,50	0.96	2 (4%)	45,48,56	1.14	4 (8%)
13	LMT	1	103	-	36,36,36	0.37	0	47,47,47	0.74	1 (2%)
10	BCL	G	101	-	58,74,74	1.62	10 (17%)	69,115,115	1.67	14 (20%)
18	PEE	M	409	-	43,43,50	0.78	2 (4%)	46,48,55	0.57	0
15	MQ9	M	405	-	40,40,59	0.40	0	49,52,75	0.38	0
8	HEC	C	403	1	32,50,50	1.59	4 (12%)	24,82,82	1.36	2 (8%)
16	I7D	R	101	-	43,44,44	1.99	10 (23%)	51,56,56	1.86	12 (23%)
10	BCL	B	101	-	58,74,74	1.64	9 (15%)	69,115,115	1.69	14 (20%)
16	I7D	I	101	-	43,44,44	2.01	10 (23%)	51,56,56	1.87	11 (21%)
16	I7D	T	101	-	43,44,44	1.99	11 (25%)	51,56,56	1.91	12 (23%)
9	PGV	5	103	-	36,36,50	1.07	2 (5%)	39,41,56	1.10	3 (7%)
9	PGV	5	104	-	36,36,50	1.08	2 (5%)	39,42,56	1.01	2 (5%)
16	I7D	V	101	-	43,44,44	1.98	10 (23%)	51,56,56	1.84	11 (21%)
16	I7D	8	101	-	43,44,44	2.01	10 (23%)	51,56,56	2.27	14 (27%)
16	I7D	E	101	-	43,44,44	2.00	10 (23%)	51,56,56	1.88	11 (21%)
10	BCL	R	102	-	58,74,74	1.63	10 (17%)	69,115,115	1.71	14 (20%)
17	CDL	A	101	-	57,57,99	1.12	4 (7%)	63,69,111	1.27	7 (11%)
17	CDL	H	303	-	71,71,99	1.08	4 (5%)	77,83,111	1.08	5 (6%)
17	CDL	M	407	-	34,34,99	1.42	3 (8%)	39,45,111	1.49	5 (12%)
9	PGV	F	102	-	38,38,50	1.05	2 (5%)	41,43,56	1.01	2 (4%)
16	I7D	6	102	-	43,44,44	2.04	10 (23%)	51,56,56	2.00	13 (25%)
17	CDL	M	408	-	68,68,99	1.10	4 (5%)	74,80,111	1.09	4 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
12	U10	L	307	-	35,35,63	0.79	2 (5%)	42,45,79	0.71	0
16	I7D	D	101	-	43,44,44	1.96	11 (25%)	51,56,56	1.84	11 (21%)
9	PGV	K	103	-	38,38,50	1.06	2 (5%)	41,44,56	1.04	2 (4%)
13	LMT	L	313	-	36,36,36	0.36	0	47,47,47	0.74	2 (4%)
9	PGV	L	310	-	36,36,50	1.07	2 (5%)	39,42,56	1.12	3 (7%)
10	BCL	V	102	-	58,74,74	1.63	9 (15%)	69,115,115	1.69	15 (21%)
13	LMT	I	103	-	34,34,36	0.38	0	45,45,47	0.74	1 (2%)
10	BCL	2	102	-	58,74,74	1.63	10 (17%)	69,115,115	1.71	15 (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
16	I7D	A	103	-	-	4/54/54/54	-
8	HEC	C	401	1	-	4/10/54/54	-
10	BCL	E	102	-	-	17/37/137/137	-
16	I7D	X	101	-	-	5/54/54/54	-
13	LMT	3	103	-	-	4/17/57/61	0/2/2/2
16	I7D	Q	101	-	-	4/54/54/54	-
10	BCL	8	102	-	-	16/37/137/137	-
9	PGV	H	302	-	-	13/40/40/55	-
9	PGV	5	101	-	-	13/40/40/55	-
17	CDL	T	103	-	-	25/82/82/110	-
10	BCL	X	102	-	-	13/37/137/137	-
9	PGV	C	405	-	-	6/48/48/55	-
17	CDL	6	104	-	-	28/73/73/110	-
10	BCL	K	102	-	-	8/37/137/137	-
10	BCL	O	101	-	-	15/37/137/137	-
16	I7D	N	101	-	-	8/54/54/54	-
9	PGV	M	411	-	-	11/37/37/55	-
16	I7D	M	406	-	-	3/54/54/54	-
10	BCL	J	101	-	-	15/37/137/137	-
9	PGV	H	301	-	-	10/40/40/55	-
16	I7D	3	101	-	-	5/54/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
11	BPH	M	404	-	-	1/37/105/105	0/5/6/6
9	PGV	L	305	-	-	10/48/48/55	-
10	BCL	P	101	-	-	12/37/137/137	-
10	BCL	L	309	-	-	15/37/137/137	-
10	BCL	T	102	-	-	8/37/137/137	-
17	CDL	0	101	-	-	32/73/73/110	-
9	PGV	L	311	-	-	12/37/37/55	-
8	HEC	C	404	1	-	2/10/54/54	-
10	BCL	N	102	-	-	14/37/137/137	-
10	BCL	S	101	-	-	11/37/137/137	-
10	BCL	D	102	-	-	13/37/137/137	-
16	I7D	K	101	-	-	6/54/54/54	-
17	CDL	2	101	-	-	22/82/82/110	-
12	U10	L	306	-	-	1/6/30/87	0/1/1/1
10	BCL	1	102	-	-	4/37/137/137	-
10	BCL	F	101	-	-	14/37/137/137	-
10	BCL	Y	101	-	-	13/37/137/137	-
10	BCL	M	403	-	-	5/37/137/137	-
16	I7D	1	101	-	-	4/54/54/54	-
10	BCL	I	102	-	-	11/37/137/137	-
10	BCL	9	101	-	-	13/37/137/137	-
12	U10	L	303	-	-	5/31/55/87	0/1/1/1
10	BCL	W	101	-	-	10/37/137/137	-
10	BCL	L	301	-	-	9/37/137/137	-
9	PGV	L	312	-	-	12/38/38/55	-
10	BCL	7	402	-	-	10/37/137/137	-
10	BCL	A	102	-	-	14/37/137/137	-
8	HEC	C	402	1	-	4/10/54/54	-
10	BCL	3	102	-	-	9/37/137/137	-
9	PGV	D	103	-	-	10/37/37/55	-
10	BCL	Q	102	-	-	8/37/137/137	-
10	BCL	4	102	-	-	17/37/137/137	-
10	BCL	6	103	-	-	8/37/137/137	-
10	BCL	5	102	-	-	12/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
9	PGV	M	410	-	-	15/55/55/55	-
16	I7D	4	101	-	-	5/54/54/54	-
12	U10	7	401	-	-	15/63/87/87	0/1/1/1
17	CDL	6	101	-	-	29/79/79/110	-
9	PGV	C	406	-	-	14/46/46/55	-
10	BCL	0	102	-	-	17/37/137/137	-
10	BCL	Z	101	-	-	15/37/137/137	-
11	BPH	L	302	-	-	4/37/105/105	0/5/6/6
13	LMT	L	308	-	-	4/16/56/61	0/2/2/2
9	PGV	C	407	-	-	7/39/39/55	-
10	BCL	M	402	-	-	6/37/137/137	-
10	BCL	U	101	-	-	10/37/137/137	-
9	PGV	L	304	-	-	15/47/47/55	-
13	LMT	1	103	-	-	2/21/61/61	0/2/2/2
10	BCL	G	101	-	-	14/37/137/137	-
18	PEE	M	409	-	-	9/47/47/54	-
15	MQ9	M	405	-	-	0/31/51/73	0/2/2/2
8	HEC	C	403	1	-	2/10/54/54	-
16	I7D	R	101	-	-	1/54/54/54	-
10	BCL	B	101	-	-	10/37/137/137	-
16	I7D	I	101	-	-	5/54/54/54	-
16	I7D	T	101	-	-	5/54/54/54	-
9	PGV	5	103	-	-	11/40/40/55	-
9	PGV	5	104	-	-	11/41/41/55	-
16	I7D	V	101	-	-	6/54/54/54	-
16	I7D	8	101	-	-	10/54/54/54	-
16	I7D	E	101	-	-	3/54/54/54	-
10	BCL	R	102	-	-	13/37/137/137	-
17	CDL	A	101	-	-	19/67/67/110	-
17	CDL	H	303	-	-	31/82/82/110	-
17	CDL	M	407	-	-	12/43/43/110	-
9	PGV	F	102	-	-	6/42/42/55	-
16	I7D	6	102	-	-	2/54/54/54	-
17	CDL	M	408	-	-	25/79/79/110	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
12	U10	L	307	-	-	3/30/54/87	0/1/1/1
16	I7D	D	101	-	-	3/54/54/54	-
9	PGV	K	103	-	-	7/43/43/55	-
13	LMT	L	313	-	-	4/21/61/61	0/2/2/2
9	PGV	L	310	-	-	8/41/41/55	-
10	BCL	V	102	-	-	13/37/137/137	-
13	LMT	I	103	-	-	9/19/59/61	0/2/2/2
10	BCL	2	102	-	-	15/37/137/137	-

All (615) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	X	101	I7D	C35-C36	7.06	1.50	1.32
16	6	102	I7D	C35-C36	7.02	1.50	1.32
16	8	101	I7D	C35-C36	6.94	1.50	1.32
16	I	101	I7D	C35-C36	6.92	1.50	1.32
16	E	101	I7D	C35-C36	6.91	1.50	1.32
16	1	101	I7D	C35-C36	6.91	1.50	1.32
16	3	101	I7D	C35-C36	6.90	1.50	1.32
16	N	101	I7D	C35-C36	6.90	1.50	1.32
16	R	101	I7D	C35-C36	6.88	1.50	1.32
16	4	101	I7D	C35-C36	6.86	1.49	1.32
16	K	101	I7D	C35-C36	6.84	1.49	1.32
16	A	103	I7D	C35-C36	6.84	1.49	1.32
16	T	101	I7D	C35-C36	6.83	1.49	1.32
16	Q	101	I7D	C35-C36	6.82	1.49	1.32
16	V	101	I7D	C35-C36	6.77	1.49	1.32
16	D	101	I7D	C35-C36	6.73	1.49	1.32
16	M	406	I7D	C35-C36	6.72	1.49	1.32
10	L	301	BCL	O2D-CGD	5.22	1.45	1.33
10	M	403	BCL	O2D-CGD	5.20	1.45	1.33
10	1	102	BCL	O2D-CGD	5.13	1.45	1.33
10	9	101	BCL	O2D-CGD	5.12	1.45	1.33
10	3	102	BCL	O2D-CGD	5.11	1.45	1.33
10	0	102	BCL	O2D-CGD	5.11	1.45	1.33
10	6	103	BCL	O2D-CGD	5.10	1.45	1.33
10	O	101	BCL	O2D-CGD	5.08	1.45	1.33
10	W	101	BCL	O2D-CGD	5.08	1.45	1.33
10	T	102	BCL	O2D-CGD	5.08	1.45	1.33
10	A	102	BCL	O2D-CGD	5.08	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	8	102	BCL	O2D-CGD	5.07	1.45	1.33
10	5	102	BCL	O2D-CGD	5.07	1.45	1.33
10	B	101	BCL	O2D-CGD	5.06	1.45	1.33
10	K	102	BCL	O2D-CGD	5.06	1.45	1.33
10	V	102	BCL	O2D-CGD	5.06	1.45	1.33
10	Y	101	BCL	O2D-CGD	5.06	1.45	1.33
10	X	102	BCL	O2D-CGD	5.05	1.45	1.33
10	E	102	BCL	O2D-CGD	5.05	1.45	1.33
10	7	402	BCL	O2D-CGD	5.05	1.45	1.33
10	2	102	BCL	O2D-CGD	5.05	1.45	1.33
10	I	102	BCL	O2D-CGD	5.04	1.45	1.33
10	G	101	BCL	O2D-CGD	5.04	1.45	1.33
10	S	101	BCL	O2D-CGD	5.04	1.45	1.33
10	R	102	BCL	O2D-CGD	5.03	1.45	1.33
10	M	402	BCL	O2D-CGD	5.02	1.45	1.33
10	U	101	BCL	O2D-CGD	5.02	1.45	1.33
10	Z	101	BCL	O2D-CGD	5.02	1.45	1.33
10	Q	102	BCL	C3B-C2B	5.01	1.48	1.39
10	4	102	BCL	O2D-CGD	5.00	1.45	1.33
10	D	102	BCL	O2D-CGD	5.00	1.45	1.33
10	N	102	BCL	O2D-CGD	4.99	1.45	1.33
10	S	101	BCL	C3B-C2B	4.99	1.48	1.39
10	9	101	BCL	C3B-C2B	4.99	1.48	1.39
10	P	101	BCL	O2D-CGD	4.99	1.45	1.33
10	Q	102	BCL	O2D-CGD	4.99	1.45	1.33
10	Y	101	BCL	C3B-C2B	4.98	1.48	1.39
10	F	101	BCL	O2D-CGD	4.98	1.45	1.33
10	J	101	BCL	O2D-CGD	4.96	1.45	1.33
10	W	101	BCL	C3B-C2B	4.95	1.48	1.39
10	D	102	BCL	C3B-C2B	4.94	1.48	1.39
10	M	403	BCL	C3B-C2B	4.93	1.48	1.39
10	O	101	BCL	C3B-C2B	4.93	1.48	1.39
10	U	101	BCL	C3B-C2B	4.91	1.48	1.39
10	B	101	BCL	C3B-C2B	4.90	1.48	1.39
10	5	102	BCL	C3B-C2B	4.89	1.48	1.39
10	A	102	BCL	C3B-C2B	4.89	1.48	1.39
10	M	402	BCL	C3B-C2B	4.88	1.48	1.39
10	F	101	BCL	C3B-C2B	4.85	1.48	1.39
10	L	309	BCL	O2D-CGD	4.85	1.45	1.33
10	X	102	BCL	C3B-C2B	4.83	1.48	1.39
10	V	102	BCL	C3B-C2B	4.82	1.48	1.39
10	7	402	BCL	C3B-C2B	4.82	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	P	101	BCL	C3B-C2B	4.82	1.48	1.39
10	I	102	BCL	C3B-C2B	4.82	1.48	1.39
10	L	301	BCL	C3B-C2B	4.81	1.48	1.39
10	Z	101	BCL	C3B-C2B	4.80	1.48	1.39
10	3	102	BCL	C3B-C2B	4.79	1.48	1.39
10	6	103	BCL	C3B-C2B	4.78	1.48	1.39
10	1	102	BCL	C3B-C2B	4.77	1.48	1.39
17	M	407	CDL	OB6-CB5	4.76	1.46	1.35
10	G	101	BCL	C3B-C2B	4.76	1.48	1.39
10	0	102	BCL	C3B-C2B	4.76	1.48	1.39
10	K	102	BCL	C3B-C2B	4.76	1.48	1.39
10	E	102	BCL	C3B-C2B	4.75	1.47	1.39
10	R	102	BCL	C3B-C2B	4.75	1.47	1.39
10	J	101	BCL	C3B-C2B	4.73	1.47	1.39
10	2	102	BCL	C3B-C2B	4.72	1.47	1.39
10	N	102	BCL	C3B-C2B	4.70	1.47	1.39
10	8	102	BCL	C3B-C2B	4.69	1.47	1.39
10	4	102	BCL	C3B-C2B	4.69	1.47	1.39
10	T	102	BCL	C3B-C2B	4.68	1.47	1.39
10	L	309	BCL	C3B-C2B	4.60	1.47	1.39
10	2	102	BCL	OBD-CAD	4.59	1.28	1.22
10	0	102	BCL	OBD-CAD	4.58	1.28	1.22
10	5	102	BCL	OBD-CAD	4.57	1.28	1.22
10	X	102	BCL	OBD-CAD	4.55	1.28	1.22
10	3	102	BCL	OBD-CAD	4.54	1.28	1.22
10	V	102	BCL	OBD-CAD	4.54	1.28	1.22
10	9	101	BCL	OBD-CAD	4.54	1.28	1.22
10	I	102	BCL	OBD-CAD	4.53	1.28	1.22
10	B	101	BCL	OBD-CAD	4.51	1.28	1.22
10	0	102	BCL	C3D-C2D	4.50	1.47	1.39
10	O	101	BCL	OBD-CAD	4.49	1.28	1.22
10	4	102	BCL	OBD-CAD	4.48	1.28	1.22
10	E	102	BCL	OBD-CAD	4.48	1.28	1.22
10	R	102	BCL	OBD-CAD	4.48	1.28	1.22
10	M	402	BCL	C3D-C2D	4.48	1.47	1.39
10	Y	101	BCL	OBD-CAD	4.47	1.28	1.22
10	6	103	BCL	OBD-CAD	4.47	1.28	1.22
10	A	102	BCL	OBD-CAD	4.47	1.28	1.22
10	Z	101	BCL	OBD-CAD	4.47	1.28	1.22
10	1	102	BCL	OBD-CAD	4.46	1.28	1.22
10	M	402	BCL	OBD-CAD	4.46	1.28	1.22
10	J	101	BCL	OBD-CAD	4.46	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	T	102	BCL	OBD-CAD	4.44	1.28	1.22
10	S	101	BCL	OBD-CAD	4.44	1.28	1.22
10	F	101	BCL	OBD-CAD	4.44	1.28	1.22
10	P	101	BCL	OBD-CAD	4.43	1.28	1.22
10	7	402	BCL	OBD-CAD	4.43	1.28	1.22
10	D	102	BCL	OBD-CAD	4.43	1.28	1.22
10	K	102	BCL	OBD-CAD	4.43	1.28	1.22
10	N	102	BCL	OBD-CAD	4.43	1.28	1.22
10	8	102	BCL	OBD-CAD	4.42	1.28	1.22
10	U	101	BCL	OBD-CAD	4.41	1.28	1.22
10	G	101	BCL	OBD-CAD	4.40	1.28	1.22
10	R	102	BCL	C3D-C2D	4.40	1.47	1.39
10	W	101	BCL	OBD-CAD	4.40	1.28	1.22
10	L	301	BCL	OBD-CAD	4.39	1.28	1.22
17	M	408	CDL	OA6-CA5	4.39	1.46	1.34
10	X	102	BCL	C3D-C2D	4.39	1.47	1.39
17	2	101	CDL	OA6-CA5	4.38	1.46	1.34
8	C	403	HEC	C2B-C3B	-4.38	1.36	1.40
10	L	309	BCL	OBD-CAD	4.37	1.28	1.22
10	L	309	BCL	C3D-C2D	4.37	1.47	1.39
10	Q	102	BCL	OBD-CAD	4.37	1.28	1.22
8	C	401	HEC	C2B-C3B	-4.35	1.36	1.40
10	P	101	BCL	C3D-C2D	4.34	1.47	1.39
10	V	102	BCL	C3D-C2D	4.34	1.47	1.39
10	6	103	BCL	C3D-C2D	4.34	1.47	1.39
10	J	101	BCL	C3D-C2D	4.34	1.47	1.39
10	N	102	BCL	C3D-C2D	4.34	1.47	1.39
8	C	404	HEC	CBC-CAC	-4.34	1.33	1.49
10	U	101	BCL	C3D-C2D	4.33	1.47	1.39
10	2	102	BCL	C3D-C2D	4.33	1.47	1.39
17	H	303	CDL	OA8-CA7	4.33	1.46	1.33
10	T	102	BCL	C3D-C2D	4.33	1.47	1.39
10	A	102	BCL	O2A-CGA	4.33	1.46	1.33
9	L	311	PGV	O03-C19	4.32	1.46	1.33
10	M	402	BCL	O2A-CGA	4.32	1.46	1.33
10	B	101	BCL	O2A-CGA	4.32	1.46	1.33
8	C	401	HEC	CBC-CAC	-4.32	1.33	1.49
10	Y	101	BCL	C3D-C2D	4.32	1.47	1.39
10	8	102	BCL	O2A-CGA	4.32	1.46	1.33
8	C	404	HEC	CBB-CAB	-4.32	1.33	1.49
8	C	403	HEC	CBC-CAC	-4.31	1.33	1.49
8	C	403	HEC	CBB-CAB	-4.31	1.33	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	J	101	BCL	O2A-CGA	4.31	1.45	1.33
17	6	101	CDL	OA6-CA5	4.31	1.46	1.34
8	C	402	HEC	CBC-CAC	-4.30	1.33	1.49
9	C	405	PGV	O03-C19	4.30	1.45	1.33
10	5	102	BCL	C3D-C2D	4.30	1.47	1.39
10	Y	101	BCL	O2A-CGA	4.30	1.45	1.33
9	5	104	PGV	O01-C1	4.30	1.46	1.34
8	C	401	HEC	CBB-CAB	-4.29	1.33	1.49
8	C	402	HEC	CBB-CAB	-4.29	1.33	1.49
10	X	102	BCL	O2A-CGA	4.29	1.45	1.33
10	D	102	BCL	O2A-CGA	4.29	1.45	1.33
10	Z	101	BCL	O2A-CGA	4.28	1.45	1.33
17	0	101	CDL	OA8-CA7	4.28	1.45	1.33
10	E	102	BCL	C3D-C2D	4.28	1.47	1.39
10	Z	101	BCL	C3D-C2D	4.27	1.47	1.39
9	C	406	PGV	O01-C1	4.27	1.46	1.34
10	F	101	BCL	O2A-CGA	4.27	1.45	1.33
10	6	103	BCL	O2A-CGA	4.26	1.45	1.33
10	7	402	BCL	C3D-C2D	4.26	1.47	1.39
10	B	101	BCL	C3D-C2D	4.26	1.47	1.39
10	G	101	BCL	C3D-C2D	4.26	1.47	1.39
9	C	407	PGV	O03-C19	4.26	1.45	1.33
10	K	102	BCL	C3D-C2D	4.26	1.47	1.39
10	D	102	BCL	C3D-C2D	4.26	1.47	1.39
9	5	101	PGV	O03-C19	4.26	1.45	1.33
10	3	102	BCL	C3D-C2D	4.26	1.47	1.39
10	8	102	BCL	C3D-C2D	4.26	1.47	1.39
10	F	101	BCL	C3D-C2D	4.26	1.47	1.39
17	6	101	CDL	OA8-CA7	4.26	1.45	1.33
10	Q	102	BCL	C3D-C2D	4.26	1.47	1.39
9	H	301	PGV	O03-C19	4.25	1.45	1.33
10	K	102	BCL	O2A-CGA	4.25	1.45	1.33
17	6	104	CDL	OA8-CA7	4.25	1.45	1.33
17	T	103	CDL	OA8-CA7	4.25	1.45	1.33
10	9	101	BCL	C3D-C2D	4.25	1.47	1.39
17	2	101	CDL	OA8-CA7	4.24	1.45	1.33
9	L	312	PGV	O03-C19	4.24	1.45	1.33
17	0	101	CDL	OB8-CB7	4.24	1.45	1.33
17	6	104	CDL	OB8-CB7	4.24	1.45	1.33
10	I	102	BCL	C3D-C2D	4.24	1.47	1.39
10	9	101	BCL	O2A-CGA	4.23	1.45	1.33
9	5	103	PGV	O03-C19	4.23	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	6	101	CDL	OB8-CB7	4.23	1.45	1.33
17	T	103	CDL	OB8-CB7	4.23	1.45	1.33
17	2	101	CDL	OB8-CB7	4.23	1.45	1.33
17	H	303	CDL	OB8-CB7	4.23	1.45	1.33
10	O	101	BCL	O2A-CGA	4.22	1.45	1.33
9	M	411	PGV	O03-C19	4.22	1.45	1.33
9	K	103	PGV	O03-C19	4.22	1.45	1.33
10	U	101	BCL	O2A-CGA	4.22	1.45	1.33
17	A	101	CDL	OB8-CB7	4.21	1.45	1.33
9	L	310	PGV	O03-C19	4.21	1.45	1.33
10	7	402	BCL	O2A-CGA	4.21	1.45	1.33
10	T	102	BCL	O2A-CGA	4.21	1.45	1.33
9	H	302	PGV	O03-C19	4.21	1.45	1.33
10	W	101	BCL	C3D-C2D	4.21	1.47	1.39
17	6	104	CDL	OA6-CA5	4.20	1.46	1.34
9	K	103	PGV	O01-C1	4.20	1.46	1.34
10	A	102	BCL	C3D-C2D	4.20	1.47	1.39
10	4	102	BCL	C3D-C2D	4.20	1.47	1.39
10	W	101	BCL	O2A-CGA	4.20	1.45	1.33
10	1	102	BCL	O2A-CGA	4.20	1.45	1.33
16	1	101	I7D	C19-C17	4.20	1.41	1.35
17	0	101	CDL	OA6-CA5	4.19	1.46	1.34
10	2	102	BCL	O2A-CGA	4.19	1.45	1.33
9	5	104	PGV	O03-C19	4.19	1.45	1.33
16	6	102	I7D	C19-C17	4.19	1.41	1.35
17	2	101	CDL	OB6-CB5	4.18	1.46	1.34
17	H	303	CDL	OA6-CA5	4.18	1.46	1.34
9	D	103	PGV	O03-C19	4.18	1.45	1.33
10	S	101	BCL	C3D-C2D	4.18	1.46	1.39
17	6	101	CDL	OB6-CB5	4.18	1.46	1.34
16	8	101	I7D	C14-C12	4.18	1.41	1.35
10	0	102	BCL	O2A-CGA	4.17	1.45	1.33
9	F	102	PGV	O03-C19	4.17	1.45	1.33
10	Q	102	BCL	O2A-CGA	4.17	1.45	1.33
17	M	407	CDL	OA8-CA7	4.17	1.45	1.33
16	6	102	I7D	C22-C23	4.17	1.41	1.35
9	C	406	PGV	O03-C19	4.17	1.45	1.33
9	L	311	PGV	O01-C1	4.17	1.46	1.34
17	M	407	CDL	OA6-CA5	4.17	1.46	1.34
16	X	101	I7D	C19-C17	4.16	1.41	1.35
9	H	301	PGV	O01-C1	4.16	1.46	1.34
17	M	408	CDL	OA8-CA7	4.16	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	L	301	BCL	O2A-CGA	4.16	1.45	1.33
9	M	410	PGV	O03-C19	4.16	1.45	1.33
17	A	101	CDL	OA6-CA5	4.15	1.46	1.34
10	L	309	BCL	O2A-CGA	4.14	1.45	1.33
16	8	101	I7D	C19-C17	4.14	1.41	1.35
10	5	102	BCL	O2A-CGA	4.14	1.45	1.33
9	5	103	PGV	O01-C1	4.14	1.46	1.34
10	N	102	BCL	O2A-CGA	4.14	1.45	1.33
10	V	102	BCL	O2A-CGA	4.14	1.45	1.33
16	1	101	I7D	C22-C23	4.13	1.41	1.35
10	O	101	BCL	C3D-C2D	4.13	1.46	1.39
10	M	403	BCL	OBD-CAD	4.13	1.28	1.22
9	F	102	PGV	O01-C1	4.13	1.45	1.34
9	M	411	PGV	O01-C1	4.12	1.45	1.34
17	6	104	CDL	OB6-CB5	4.12	1.45	1.34
10	3	102	BCL	O2A-CGA	4.12	1.45	1.33
10	M	403	BCL	O2A-CGA	4.12	1.45	1.33
9	C	405	PGV	O01-C1	4.12	1.45	1.34
17	T	103	CDL	OA6-CA5	4.12	1.45	1.34
8	C	404	HEC	C2B-C3B	-4.12	1.36	1.40
10	4	102	BCL	O2A-CGA	4.11	1.45	1.33
10	M	403	BCL	C3D-C2D	4.11	1.46	1.39
17	M	408	CDL	OB6-CB5	4.11	1.45	1.34
17	0	101	CDL	OB6-CB5	4.10	1.45	1.34
17	T	103	CDL	OB6-CB5	4.10	1.45	1.34
9	C	407	PGV	O01-C1	4.10	1.45	1.34
9	D	103	PGV	O01-C1	4.10	1.45	1.34
10	G	101	BCL	O2A-CGA	4.10	1.45	1.33
16	6	102	I7D	C27-C28	4.10	1.41	1.35
10	1	102	BCL	C3D-C2D	4.09	1.46	1.39
17	M	408	CDL	OB8-CB7	4.09	1.45	1.33
9	L	305	PGV	O03-C19	4.09	1.45	1.33
10	E	102	BCL	O2A-CGA	4.08	1.45	1.33
8	C	402	HEC	C2B-C3B	-4.07	1.36	1.40
9	5	101	PGV	O01-C1	4.07	1.45	1.34
10	P	101	BCL	O2A-CGA	4.07	1.45	1.33
10	L	301	BCL	C3D-C2D	4.07	1.46	1.39
10	I	102	BCL	O2A-CGA	4.06	1.45	1.33
10	S	101	BCL	O2A-CGA	4.06	1.45	1.33
16	1	101	I7D	C27-C28	4.06	1.41	1.35
9	L	310	PGV	O01-C1	4.05	1.45	1.34
16	X	101	I7D	C22-C23	4.04	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	A	101	CDL	OB6-CB5	4.04	1.45	1.34
16	X	101	I7D	C27-C28	4.04	1.41	1.35
10	R	102	BCL	O2A-CGA	4.03	1.45	1.33
9	L	312	PGV	O01-C1	4.02	1.45	1.34
9	L	304	PGV	O03-C19	4.02	1.45	1.33
17	H	303	CDL	OB6-CB5	3.99	1.45	1.34
9	L	304	PGV	O01-C1	3.99	1.45	1.34
9	L	305	PGV	O01-C1	3.99	1.45	1.34
16	X	101	I7D	C14-C12	3.98	1.41	1.35
16	6	102	I7D	C14-C12	3.98	1.41	1.35
16	E	101	I7D	C27-C28	3.98	1.41	1.35
16	E	101	I7D	C19-C17	3.98	1.41	1.35
16	I	101	I7D	C19-C17	3.96	1.41	1.35
16	1	101	I7D	C14-C12	3.95	1.41	1.35
16	4	101	I7D	C19-C17	3.95	1.41	1.35
9	M	410	PGV	O01-C1	3.94	1.45	1.34
16	I	101	I7D	C22-C23	3.94	1.41	1.35
16	I	101	I7D	C14-C12	3.93	1.41	1.35
16	8	101	I7D	C27-C28	3.93	1.41	1.35
16	T	101	I7D	C19-C17	3.93	1.41	1.35
16	V	101	I7D	C22-C23	3.93	1.41	1.35
9	H	302	PGV	O01-C1	3.92	1.45	1.34
16	8	101	I7D	C22-C23	3.92	1.41	1.35
16	E	101	I7D	C22-C23	3.91	1.41	1.35
16	4	101	I7D	C22-C23	3.90	1.41	1.35
16	T	101	I7D	C22-C23	3.90	1.41	1.35
16	N	101	I7D	C19-C17	3.90	1.41	1.35
16	R	101	I7D	C22-C23	3.89	1.40	1.35
16	M	406	I7D	C14-C12	3.89	1.40	1.35
16	T	101	I7D	C27-C28	3.88	1.40	1.35
16	R	101	I7D	C14-C12	3.88	1.40	1.35
16	N	101	I7D	C22-C23	3.84	1.40	1.35
16	R	101	I7D	C19-C17	3.83	1.40	1.35
16	V	101	I7D	C14-C12	3.83	1.40	1.35
16	V	101	I7D	C19-C17	3.83	1.40	1.35
16	A	103	I7D	C19-C17	3.83	1.40	1.35
16	R	101	I7D	C27-C28	3.81	1.40	1.35
16	N	101	I7D	C27-C28	3.81	1.40	1.35
16	4	101	I7D	C27-C28	3.81	1.40	1.35
16	I	101	I7D	C27-C28	3.80	1.40	1.35
16	V	101	I7D	C27-C28	3.80	1.40	1.35
16	A	103	I7D	C27-C28	3.78	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	Q	101	I7D	C19-C17	3.76	1.40	1.35
16	K	101	I7D	C22-C23	3.74	1.40	1.35
16	K	101	I7D	C27-C28	3.73	1.40	1.35
16	3	101	I7D	C22-C23	3.71	1.40	1.35
16	Q	101	I7D	C27-C28	3.71	1.40	1.35
16	4	101	I7D	C14-C12	3.71	1.40	1.35
16	E	101	I7D	C14-C12	3.70	1.40	1.35
16	A	103	I7D	C22-C23	3.69	1.40	1.35
16	K	101	I7D	C19-C17	3.69	1.40	1.35
16	A	103	I7D	C14-C12	3.68	1.40	1.35
16	3	101	I7D	C19-C17	3.68	1.40	1.35
16	3	101	I7D	C27-C28	3.68	1.40	1.35
16	3	101	I7D	C14-C12	3.68	1.40	1.35
16	T	101	I7D	C14-C12	3.67	1.40	1.35
16	D	101	I7D	C27-C28	3.66	1.40	1.35
16	N	101	I7D	C14-C12	3.63	1.40	1.35
10	7	402	BCL	C2D-C1D	3.62	1.50	1.42
16	Q	101	I7D	C14-C12	3.62	1.40	1.35
10	I	102	BCL	C2D-C1D	3.61	1.50	1.42
16	M	406	I7D	C19-C17	3.60	1.40	1.35
16	D	101	I7D	C22-C23	3.59	1.40	1.35
10	O	101	BCL	C2D-C1D	3.59	1.50	1.42
10	S	101	BCL	C2D-C1D	3.57	1.50	1.42
16	Q	101	I7D	C22-C23	3.57	1.40	1.35
16	K	101	I7D	C14-C12	3.57	1.40	1.35
10	5	102	BCL	C2D-C1D	3.56	1.50	1.42
10	W	101	BCL	C2D-C1D	3.55	1.50	1.42
10	M	403	BCL	C2D-C1D	3.54	1.50	1.42
16	D	101	I7D	C19-C17	3.53	1.40	1.35
10	1	102	BCL	C2D-C1D	3.53	1.50	1.42
10	3	102	BCL	C2D-C1D	3.52	1.50	1.42
16	D	101	I7D	C14-C12	3.52	1.40	1.35
10	A	102	BCL	C2D-C1D	3.50	1.50	1.42
16	M	406	I7D	C22-C23	3.49	1.40	1.35
10	K	102	BCL	C2D-C1D	3.48	1.50	1.42
10	D	102	BCL	C2D-C1D	3.48	1.50	1.42
16	M	406	I7D	C27-C28	3.48	1.40	1.35
10	L	301	BCL	C2D-C1D	3.48	1.50	1.42
10	U	101	BCL	C2D-C1D	3.47	1.50	1.42
10	Q	102	BCL	C2D-C1D	3.45	1.50	1.42
10	Y	101	BCL	C2D-C1D	3.44	1.50	1.42
10	9	101	BCL	C2D-C1D	3.44	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	4	102	BCL	C2D-C1D	3.44	1.50	1.42
10	F	101	BCL	C2D-C1D	3.40	1.50	1.42
10	L	309	BCL	C2D-C1D	3.37	1.50	1.42
18	M	409	PEE	C39-C38	3.35	1.51	1.31
10	M	402	BCL	C2D-C1D	3.33	1.50	1.42
18	M	409	PEE	C18-C19	3.32	1.51	1.31
10	N	102	BCL	C2D-C1D	3.31	1.50	1.42
10	G	101	BCL	C2D-C1D	3.26	1.49	1.42
10	E	102	BCL	C2D-C1D	3.26	1.49	1.42
10	T	102	BCL	C2D-C1D	3.25	1.49	1.42
10	8	102	BCL	C2D-C1D	3.23	1.49	1.42
10	Z	101	BCL	C2D-C1D	3.22	1.49	1.42
10	6	103	BCL	C2D-C1D	3.22	1.49	1.42
10	X	102	BCL	C2D-C1D	3.19	1.49	1.42
10	2	102	BCL	C2D-C1D	3.19	1.49	1.42
10	0	102	BCL	C2D-C1D	3.18	1.49	1.42
10	B	101	BCL	C2D-C1D	3.16	1.49	1.42
10	R	102	BCL	C2D-C1D	3.15	1.49	1.42
10	V	102	BCL	C2D-C1D	3.14	1.49	1.42
10	P	101	BCL	C2D-C1D	3.12	1.49	1.42
10	J	101	BCL	C2D-C1D	3.11	1.49	1.42
8	C	401	HEC	C4B-C3B	2.80	1.48	1.43
10	K	102	BCL	MG-NA	-2.74	1.99	2.06
12	L	307	U10	C3-C2	-2.69	1.41	1.48
8	C	402	HEC	C4B-C3B	2.66	1.47	1.43
12	L	306	U10	C4-C5	-2.65	1.41	1.48
10	S	101	BCL	MG-NA	-2.64	2.00	2.06
8	C	404	HEC	C4B-C3B	2.63	1.47	1.43
16	M	406	I7D	C25-C23	-2.62	1.40	1.45
12	L	303	U10	C4-C5	-2.61	1.41	1.48
16	Q	101	I7D	C25-C23	-2.59	1.40	1.45
12	7	401	U10	C3-C2	-2.59	1.41	1.48
16	D	101	I7D	C25-C23	-2.56	1.40	1.45
16	K	101	I7D	C16-C17	-2.56	1.40	1.45
17	A	101	CDL	OA8-CA7	2.55	1.46	1.33
16	D	101	I7D	C11-C12	-2.55	1.40	1.45
10	D	102	BCL	MG-NA	-2.52	2.00	2.06
16	K	101	I7D	C11-C12	-2.52	1.40	1.45
8	C	403	HEC	C4B-C3B	2.52	1.47	1.43
16	D	101	I7D	C16-C17	-2.52	1.40	1.45
10	Q	102	BCL	MG-NA	-2.51	2.00	2.06
10	O	101	BCL	MG-NA	-2.50	2.00	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	3	101	I7D	C11-C12	-2.49	1.40	1.45
16	M	406	I7D	C30-C28	-2.49	1.40	1.45
10	A	102	BCL	MG-NA	-2.48	2.00	2.06
10	K	102	BCL	C1B-CHB	2.48	1.47	1.41
16	D	101	I7D	C30-C28	-2.48	1.40	1.45
16	Q	101	I7D	C30-C28	-2.48	1.40	1.45
16	Q	101	I7D	C16-C17	-2.48	1.40	1.45
16	3	101	I7D	C16-C17	-2.47	1.40	1.45
16	6	102	I7D	C35-C33	2.46	1.51	1.45
12	L	307	U10	C4-C5	-2.46	1.41	1.48
10	W	101	BCL	MG-NA	-2.46	2.00	2.06
16	K	101	I7D	C25-C23	-2.46	1.40	1.45
10	5	102	BCL	MG-NA	-2.46	2.00	2.06
16	3	101	I7D	C25-C23	-2.45	1.40	1.45
16	X	101	I7D	C35-C33	2.45	1.51	1.45
16	A	103	I7D	C25-C23	-2.44	1.40	1.45
16	3	101	I7D	C35-C33	2.44	1.51	1.45
16	T	101	I7D	C16-C17	-2.44	1.40	1.45
10	F	101	BCL	C1B-CHB	2.43	1.47	1.41
10	S	101	BCL	C1B-CHB	2.42	1.47	1.41
16	M	406	I7D	C35-C33	2.42	1.51	1.45
16	8	101	I7D	C35-C33	2.42	1.51	1.45
10	U	101	BCL	MG-NA	-2.42	2.00	2.06
16	4	101	I7D	C35-C33	2.41	1.51	1.45
16	I	101	I7D	C35-C33	2.41	1.51	1.45
16	K	101	I7D	C35-C33	2.41	1.51	1.45
16	V	101	I7D	C25-C23	-2.41	1.40	1.45
16	N	101	I7D	C35-C33	2.41	1.51	1.45
16	1	101	I7D	C35-C33	2.41	1.51	1.45
16	T	101	I7D	C35-C33	2.41	1.51	1.45
16	E	101	I7D	C35-C33	2.41	1.51	1.45
16	N	101	I7D	C16-C17	-2.40	1.40	1.45
10	1	102	BCL	MG-NA	-2.40	2.00	2.06
16	V	101	I7D	C30-C28	-2.40	1.40	1.45
16	R	101	I7D	C35-C33	2.40	1.51	1.45
16	T	101	I7D	C11-C12	-2.40	1.40	1.45
16	Q	101	I7D	C35-C33	2.40	1.51	1.45
16	I	101	I7D	C16-C17	-2.40	1.40	1.45
16	4	101	I7D	C16-C17	-2.39	1.40	1.45
16	Q	101	I7D	C11-C12	-2.39	1.40	1.45
10	3	102	BCL	MG-NA	-2.39	2.00	2.06
16	D	101	I7D	C35-C33	2.39	1.51	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	M	406	I7D	C16-C17	-2.39	1.40	1.45
16	R	101	I7D	C30-C28	-2.39	1.40	1.45
16	4	101	I7D	C11-C12	-2.39	1.40	1.45
16	I	101	I7D	C25-C23	-2.38	1.40	1.45
16	A	103	I7D	C30-C28	-2.38	1.40	1.45
16	X	101	I7D	C16-C17	-2.38	1.40	1.45
16	A	103	I7D	C35-C33	2.37	1.51	1.45
10	Y	101	BCL	MG-NA	-2.37	2.00	2.06
10	F	101	BCL	MG-NA	-2.36	2.00	2.06
16	V	101	I7D	C35-C33	2.36	1.51	1.45
10	Q	102	BCL	C1B-CHB	2.36	1.47	1.41
16	M	406	I7D	C11-C12	-2.36	1.40	1.45
16	R	101	I7D	C25-C23	-2.36	1.40	1.45
16	4	101	I7D	C25-C23	-2.36	1.40	1.45
10	I	102	BCL	MG-NA	-2.35	2.00	2.06
16	N	101	I7D	C25-C23	-2.35	1.40	1.45
16	E	101	I7D	C16-C17	-2.35	1.40	1.45
16	E	101	I7D	C11-C12	-2.35	1.40	1.45
16	K	101	I7D	C30-C28	-2.35	1.40	1.45
10	Y	101	BCL	C1B-CHB	2.35	1.47	1.41
16	R	101	I7D	C16-C17	-2.34	1.40	1.45
16	A	103	I7D	C16-C17	-2.34	1.40	1.45
16	N	101	I7D	C11-C12	-2.34	1.40	1.45
16	I	101	I7D	C11-C12	-2.33	1.40	1.45
10	D	102	BCL	C1B-CHB	2.33	1.47	1.41
10	O	101	BCL	C1B-CHB	2.32	1.47	1.41
10	A	102	BCL	C1B-CHB	2.32	1.47	1.41
10	9	101	BCL	C1B-CHB	2.32	1.47	1.41
16	V	101	I7D	C16-C17	-2.31	1.41	1.45
16	E	101	I7D	C25-C23	-2.31	1.41	1.45
16	E	101	I7D	C30-C28	-2.31	1.41	1.45
16	I	101	I7D	C30-C28	-2.31	1.41	1.45
16	T	101	I7D	C30-C28	-2.31	1.41	1.45
16	A	103	I7D	C11-C12	-2.30	1.41	1.45
16	1	101	I7D	C16-C17	-2.29	1.41	1.45
10	W	101	BCL	C1B-CHB	2.28	1.47	1.41
10	9	101	BCL	MG-NA	-2.28	2.00	2.06
16	V	101	I7D	C11-C12	-2.27	1.41	1.45
16	X	101	I7D	C11-C12	-2.27	1.41	1.45
10	1	102	BCL	C1B-CHB	2.27	1.47	1.41
16	3	101	I7D	C30-C28	-2.27	1.41	1.45
16	1	101	I7D	C11-C12	-2.26	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	1	101	I7D	C25-C23	-2.26	1.41	1.45
16	6	102	I7D	C30-C28	-2.26	1.41	1.45
16	6	102	I7D	C11-C12	-2.25	1.41	1.45
10	7	402	BCL	C1B-CHB	2.25	1.47	1.41
10	U	101	BCL	C1B-CHB	2.25	1.47	1.41
16	8	101	I7D	C11-C12	-2.25	1.41	1.45
12	7	401	U10	C4-C5	-2.25	1.42	1.48
16	T	101	I7D	C25-C23	-2.25	1.41	1.45
12	L	306	U10	C3-C2	-2.25	1.42	1.48
16	N	101	I7D	C30-C28	-2.23	1.41	1.45
10	6	103	BCL	C1B-CHB	2.23	1.47	1.41
10	5	102	BCL	C1B-CHB	2.23	1.47	1.41
10	Z	101	BCL	C1B-CHB	2.23	1.47	1.41
11	M	404	BPH	C3A-C2A	-2.23	1.52	1.54
16	6	102	I7D	C16-C17	-2.22	1.41	1.45
10	M	402	BCL	MG-NA	-2.22	2.01	2.06
10	L	309	BCL	MG-NA	-2.22	2.01	2.06
16	R	101	I7D	C11-C12	-2.21	1.41	1.45
12	L	303	U10	C3-C2	-2.21	1.42	1.48
16	6	102	I7D	C25-C23	-2.21	1.41	1.45
10	M	402	BCL	C1B-CHB	2.20	1.47	1.41
10	Z	101	BCL	MG-NC	-2.20	2.01	2.06
10	7	402	BCL	MG-NC	-2.19	2.01	2.06
10	L	309	BCL	C1B-CHB	2.19	1.47	1.41
10	7	402	BCL	MG-NA	-2.18	2.01	2.06
10	3	102	BCL	C1B-CHB	2.18	1.47	1.41
16	4	101	I7D	C30-C28	-2.17	1.41	1.45
10	V	102	BCL	C1B-CHB	2.17	1.47	1.41
16	X	101	I7D	C25-C23	-2.16	1.41	1.45
16	8	101	I7D	C25-C23	-2.16	1.41	1.45
10	U	101	BCL	MG-NC	-2.16	2.01	2.06
10	L	301	BCL	C1B-CHB	2.16	1.47	1.41
10	I	102	BCL	C1B-CHB	2.15	1.47	1.41
10	G	101	BCL	MG-NC	-2.15	2.01	2.06
10	X	102	BCL	MG-NC	-2.14	2.01	2.06
10	G	101	BCL	C1B-CHB	2.14	1.46	1.41
10	T	102	BCL	C1B-CHB	2.14	1.46	1.41
10	E	102	BCL	MG-NC	-2.13	2.01	2.06
10	8	102	BCL	C1B-CHB	2.13	1.46	1.41
10	U	101	BCL	C4B-CHC	2.13	1.46	1.41
10	4	102	BCL	C1B-CHB	2.12	1.46	1.41
10	M	403	BCL	C4B-CHC	2.12	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	8	101	I7D	C30-C28	-2.12	1.41	1.45
10	6	103	BCL	MG-NA	-2.12	2.01	2.06
10	V	102	BCL	MG-NC	-2.12	2.01	2.06
10	6	103	BCL	MG-NC	-2.11	2.01	2.06
10	Z	101	BCL	MG-NA	-2.11	2.01	2.06
10	J	101	BCL	C1B-CHB	2.11	1.46	1.41
10	M	403	BCL	C1B-CHB	2.11	1.46	1.41
10	N	102	BCL	MG-NC	-2.11	2.01	2.06
10	4	102	BCL	MG-NC	-2.11	2.01	2.06
10	3	102	BCL	MG-NC	-2.11	2.01	2.06
10	N	102	BCL	C1B-CHB	2.11	1.46	1.41
10	N	102	BCL	C4B-CHC	2.11	1.46	1.41
10	X	102	BCL	MG-NA	-2.11	2.01	2.06
10	2	102	BCL	C1B-CHB	2.10	1.46	1.41
16	8	101	I7D	C16-C17	-2.10	1.41	1.45
10	P	101	BCL	C4B-CHC	2.10	1.46	1.41
10	P	101	BCL	C1B-CHB	2.10	1.46	1.41
10	B	101	BCL	MG-NC	-2.10	2.01	2.06
10	5	102	BCL	MG-NC	-2.10	2.01	2.06
10	X	102	BCL	C4B-CHC	2.10	1.46	1.41
10	R	102	BCL	MG-NA	-2.10	2.01	2.06
10	2	102	BCL	MG-NC	-2.09	2.01	2.06
10	T	102	BCL	MG-NA	-2.09	2.01	2.06
10	B	101	BCL	C1B-CHB	2.09	1.46	1.41
10	R	102	BCL	C4B-CHC	2.09	1.46	1.41
10	8	102	BCL	MG-NC	-2.09	2.01	2.06
10	0	102	BCL	C1B-CHB	2.09	1.46	1.41
10	P	101	BCL	MG-NC	-2.09	2.01	2.06
10	G	101	BCL	C4B-CHC	2.09	1.46	1.41
10	A	102	BCL	C4B-CHC	2.09	1.46	1.41
10	9	101	BCL	MG-NC	-2.08	2.01	2.06
10	4	102	BCL	MG-NA	-2.08	2.01	2.06
10	T	102	BCL	MG-NC	-2.08	2.01	2.06
10	5	102	BCL	C4B-CHC	2.08	1.46	1.41
10	Z	101	BCL	C4B-CHC	2.08	1.46	1.41
10	R	102	BCL	C1B-CHB	2.08	1.46	1.41
10	E	102	BCL	MG-NA	-2.07	2.01	2.06
10	E	102	BCL	C1B-CHB	2.07	1.46	1.41
10	7	402	BCL	CHD-C4C	2.07	1.47	1.41
10	L	301	BCL	MG-NC	-2.07	2.01	2.06
10	J	101	BCL	MG-NC	-2.07	2.01	2.06
10	0	102	BCL	MG-NC	-2.06	2.01	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	N	102	BCL	MG-NA	-2.06	2.01	2.06
10	M	403	BCL	MG-NC	-2.06	2.01	2.06
10	9	101	BCL	C4B-CHC	2.06	1.46	1.41
10	M	403	BCL	MG-NA	-2.06	2.01	2.06
10	2	102	BCL	MG-NA	-2.06	2.01	2.06
10	8	102	BCL	MG-NA	-2.06	2.01	2.06
10	I	102	BCL	MG-NC	-2.06	2.01	2.06
10	X	102	BCL	C1B-CHB	2.06	1.46	1.41
10	R	102	BCL	MG-NC	-2.06	2.01	2.06
10	2	102	BCL	C4B-CHC	2.06	1.46	1.41
16	X	101	I7D	C30-C28	-2.05	1.41	1.45
10	7	402	BCL	C4B-CHC	2.05	1.46	1.41
10	I	102	BCL	C4B-CHC	2.05	1.46	1.41
10	J	101	BCL	MG-NA	-2.05	2.01	2.06
10	B	101	BCL	MG-NA	-2.04	2.01	2.06
10	A	102	BCL	CHD-C4C	2.04	1.47	1.41
10	3	102	BCL	C4B-CHC	2.04	1.46	1.41
10	V	102	BCL	MG-NA	-2.04	2.01	2.06
10	S	101	BCL	C4B-CHC	2.04	1.46	1.41
10	M	402	BCL	MG-NC	-2.04	2.01	2.06
10	6	103	BCL	C4B-CHC	2.03	1.46	1.41
10	E	102	BCL	C4B-CHC	2.03	1.46	1.41
10	J	101	BCL	C4B-CHC	2.03	1.46	1.41
10	8	102	BCL	C4B-CHC	2.03	1.46	1.41
10	P	101	BCL	MG-NA	-2.03	2.01	2.06
10	0	102	BCL	MG-NA	-2.03	2.01	2.06
10	L	301	BCL	C4B-CHC	2.02	1.46	1.41
16	1	101	I7D	C30-C28	-2.02	1.41	1.45
10	G	101	BCL	MG-NA	-2.02	2.01	2.06
16	M	406	I7D	C32-C33	-2.02	1.33	1.35
10	U	101	BCL	CHD-C4C	2.02	1.47	1.41
10	L	309	BCL	MG-NC	-2.01	2.01	2.06
10	5	102	BCL	CHD-C4C	2.01	1.47	1.41
10	0	102	BCL	C4B-CHC	2.01	1.46	1.41
10	T	102	BCL	C4B-CHC	2.01	1.46	1.41
10	W	101	BCL	CHD-C4C	2.01	1.47	1.41
10	Y	101	BCL	CHD-C4C	2.01	1.47	1.41
10	Q	102	BCL	MG-NC	-2.01	2.01	2.06
10	W	101	BCL	MG-NC	-2.01	2.01	2.06
16	T	101	I7D	C32-C33	-2.00	1.33	1.35
16	D	101	I7D	C32-C33	-2.00	1.33	1.35

All (836) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	8	101	I7D	C36-C35-C33	-8.98	112.33	125.89
16	T	101	I7D	C36-C35-C33	-8.58	112.92	125.89
16	K	101	I7D	C36-C35-C33	-8.39	113.22	125.89
16	6	102	I7D	C36-C35-C33	-8.35	113.27	125.89
16	3	101	I7D	C36-C35-C33	-8.35	113.28	125.89
16	Q	101	I7D	C36-C35-C33	-8.34	113.29	125.89
16	D	101	I7D	C36-C35-C33	-8.33	113.31	125.89
16	A	103	I7D	C36-C35-C33	-8.30	113.36	125.89
16	E	101	I7D	C36-C35-C33	-8.22	113.47	125.89
16	X	101	I7D	C36-C35-C33	-8.17	113.55	125.89
16	V	101	I7D	C36-C35-C33	-8.14	113.60	125.89
16	4	101	I7D	C36-C35-C33	-8.11	113.64	125.89
16	I	101	I7D	C36-C35-C33	-8.10	113.66	125.89
16	1	101	I7D	C36-C35-C33	-7.98	113.84	125.89
16	N	101	I7D	C36-C35-C33	-7.70	114.25	125.89
16	R	101	I7D	C36-C35-C33	-7.65	114.34	125.89
16	M	406	I7D	C36-C35-C33	-7.62	114.37	125.89
10	L	309	BCL	O2D-CGD-CBD	5.80	121.57	111.27
10	M	402	BCL	O2D-CGD-CBD	5.29	120.67	111.27
10	D	102	BCL	O2D-CGD-CBD	5.06	120.27	111.27
10	U	101	BCL	O2D-CGD-CBD	5.06	120.25	111.27
10	F	101	BCL	C4A-NA-C1A	5.00	108.95	106.71
9	C	406	PGV	O01-C1-C2	4.95	122.18	111.50
17	M	407	CDL	OB6-CB5-C51	4.94	120.18	111.09
10	S	101	BCL	O2D-CGD-CBD	4.88	119.95	111.27
10	O	101	BCL	O2D-CGD-CBD	4.87	119.92	111.27
10	Q	102	BCL	O2D-CGD-CBD	4.87	119.91	111.27
10	K	102	BCL	C4A-NA-C1A	4.86	108.89	106.71
10	J	101	BCL	O2D-CGD-CBD	4.81	119.81	111.27
10	F	101	BCL	O2D-CGD-CBD	4.80	119.79	111.27
10	7	402	BCL	O2D-CGD-CBD	4.79	119.78	111.27
10	W	101	BCL	O2D-CGD-CBD	4.75	119.71	111.27
10	O	101	BCL	CHD-C4C-NC	4.70	130.30	125.08
9	L	312	PGV	O01-C1-C2	4.68	121.59	111.50
10	2	102	BCL	O2D-CGD-CBD	4.67	119.56	111.27
10	Y	101	BCL	O2D-CGD-CBD	4.65	119.53	111.27
10	5	102	BCL	O2D-CGD-CBD	4.65	119.53	111.27
10	M	403	BCL	CMB-C2B-C3B	4.64	133.37	124.68
10	B	101	BCL	CMB-C2B-C3B	4.62	133.32	124.68
10	A	102	BCL	O2D-CGD-CBD	4.61	119.46	111.27
10	M	403	BCL	CHD-C4C-NC	4.59	130.18	125.08
10	1	102	BCL	CHD-C4C-NC	4.59	130.17	125.08
10	B	101	BCL	CHD-C4C-NC	4.56	130.15	125.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	9	101	BCL	O2D-CGD-CBD	4.56	119.38	111.27
10	M	402	BCL	CMB-C2B-C3B	4.52	133.14	124.68
10	6	103	BCL	O2D-CGD-CBD	4.52	119.30	111.27
10	K	102	BCL	CHD-C4C-NC	4.52	130.10	125.08
10	E	102	BCL	O2D-CGD-CBD	4.51	119.28	111.27
10	S	101	BCL	CMB-C2B-C3B	4.51	133.12	124.68
10	Z	101	BCL	O2D-CGD-CBD	4.51	119.28	111.27
10	X	102	BCL	O2D-CGD-CBD	4.50	119.26	111.27
10	2	102	BCL	CMB-C2B-C3B	4.49	133.07	124.68
10	Z	101	BCL	CHD-C4C-NC	4.49	130.06	125.08
10	I	102	BCL	O2D-CGD-CBD	4.48	119.23	111.27
10	Y	101	BCL	CMB-C2B-C3B	4.48	133.06	124.68
10	P	101	BCL	CHD-C4C-NC	4.48	130.05	125.08
10	O	101	BCL	C3C-C4C-CHD	-4.48	113.83	123.39
10	V	102	BCL	C3C-C4C-CHD	-4.47	113.85	123.39
10	P	101	BCL	C3C-C4C-CHD	-4.47	113.85	123.39
10	R	102	BCL	CHD-C4C-NC	4.46	130.03	125.08
10	U	101	BCL	CMB-C2B-C3B	4.46	133.02	124.68
10	N	102	BCL	CHD-C4C-NC	4.45	130.02	125.08
10	F	101	BCL	C4C-CHD-C1D	-4.44	119.32	125.88
10	F	101	BCL	C1C-NC-C4C	-4.44	104.71	106.71
10	B	101	BCL	C3C-C4C-CHD	-4.44	113.91	123.39
10	J	101	BCL	CMB-C2B-C3B	4.44	132.98	124.68
9	L	304	PGV	O01-C1-C2	4.44	121.06	111.50
10	6	103	BCL	CHD-C4C-NC	4.43	130.00	125.08
10	M	403	BCL	C3C-C4C-CHD	-4.43	113.93	123.39
9	L	311	PGV	O01-C1-C2	4.43	121.04	111.50
10	P	101	BCL	O2D-CGD-CBD	4.42	119.13	111.27
10	D	102	BCL	CMB-C2B-C3B	4.42	132.95	124.68
10	Z	101	BCL	C3C-C4C-CHD	-4.41	113.97	123.39
10	8	102	BCL	CHD-C4C-NC	4.41	129.97	125.08
10	L	301	BCL	CMB-C2B-C3B	4.41	132.92	124.68
10	W	101	BCL	CMB-C2B-C3B	4.40	132.92	124.68
10	E	102	BCL	CMB-C2B-C3B	4.40	132.92	124.68
10	M	402	BCL	CHD-C4C-NC	4.40	129.97	125.08
10	V	102	BCL	CHD-C4C-NC	4.40	129.96	125.08
10	X	102	BCL	CMB-C2B-C3B	4.40	132.91	124.68
10	9	101	BCL	CMB-C2B-C3B	4.39	132.90	124.68
10	2	102	BCL	CHD-C4C-NC	4.39	129.95	125.08
10	P	101	BCL	CMB-C2B-C3B	4.38	132.88	124.68
10	K	102	BCL	O2D-CGD-CBD	4.38	119.05	111.27
17	6	104	CDL	OA6-CA5-C11	4.38	120.94	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	0	102	BCL	CMB-C2B-C3B	4.37	132.86	124.68
10	R	102	BCL	C3C-C4C-CHD	-4.37	114.06	123.39
10	3	102	BCL	O2D-CGD-CBD	4.37	119.03	111.27
10	4	102	BCL	O2D-CGD-CBD	4.37	119.03	111.27
10	R	102	BCL	CMB-C2B-C3B	4.37	132.85	124.68
10	0	102	BCL	C3C-C4C-CHD	-4.36	114.07	123.39
10	J	101	BCL	C3C-C4C-CHD	-4.36	114.07	123.39
10	B	101	BCL	O2D-CGD-CBD	4.36	119.01	111.27
10	N	102	BCL	C3C-C4C-CHD	-4.36	114.08	123.39
17	A	101	CDL	OA6-CA5-C11	4.36	120.89	111.50
10	N	102	BCL	CMB-C2B-C3B	4.35	132.81	124.68
10	8	102	BCL	C3C-C4C-CHD	-4.35	114.10	123.39
10	G	101	BCL	CMB-C2B-C3B	4.34	132.81	124.68
10	L	309	BCL	CHD-C4C-NC	4.34	129.90	125.08
10	6	103	BCL	C3C-C4C-CHD	-4.34	114.13	123.39
10	J	101	BCL	CHD-C4C-NC	4.33	129.89	125.08
10	G	101	BCL	C3C-C4C-CHD	-4.33	114.14	123.39
10	R	102	BCL	O2D-CGD-CBD	4.33	118.95	111.27
10	A	102	BCL	CMB-C2B-C3B	4.32	132.77	124.68
10	8	102	BCL	O2D-CGD-CBD	4.32	118.94	111.27
10	T	102	BCL	CHD-C4C-NC	4.31	129.86	125.08
10	Y	101	BCL	CHD-C4C-NC	4.31	129.86	125.08
10	4	102	BCL	CHD-C4C-NC	4.30	129.85	125.08
10	T	102	BCL	C3C-C4C-CHD	-4.30	114.21	123.39
10	S	101	BCL	C4A-NA-C1A	4.30	108.64	106.71
10	S	101	BCL	C4C-CHD-C1D	-4.29	119.55	125.88
10	X	102	BCL	CHD-C4C-NC	4.29	129.84	125.08
10	X	102	BCL	C3C-C4C-CHD	-4.28	114.24	123.39
10	T	102	BCL	O2D-CGD-CBD	4.28	118.87	111.27
17	6	104	CDL	OB6-CB5-C51	4.27	120.71	111.50
10	G	101	BCL	CHD-C4C-NC	4.27	129.82	125.08
10	0	102	BCL	CHD-C4C-NC	4.27	129.82	125.08
10	4	102	BCL	CMB-C2B-C3B	4.27	132.66	124.68
10	E	102	BCL	CHD-C4C-NC	4.26	129.81	125.08
17	M	408	CDL	OB6-CB5-C51	4.26	120.68	111.50
10	N	102	BCL	O2D-CGD-CBD	4.26	118.83	111.27
10	2	102	BCL	C3C-C4C-CHD	-4.26	114.30	123.39
10	V	102	BCL	O2D-CGD-CBD	4.25	118.81	111.27
17	A	101	CDL	OB6-CB5-C51	4.25	120.65	111.50
10	Q	102	BCL	CMB-C2B-C3B	4.24	132.62	124.68
10	I	102	BCL	CHD-C4C-NC	4.24	129.78	125.08
9	C	405	PGV	O01-C1-C2	4.24	120.63	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	H	301	PGV	O01-C1-C2	4.22	120.59	111.50
10	V	102	BCL	CMB-C2B-C3B	4.22	132.57	124.68
10	I	102	BCL	CMB-C2B-C3B	4.22	132.57	124.68
10	Z	101	BCL	CMB-C2B-C3B	4.21	132.56	124.68
10	O	101	BCL	CMB-C2B-C3B	4.21	132.55	124.68
10	K	102	BCL	C1C-NC-C4C	-4.21	104.81	106.71
10	E	102	BCL	C3C-C4C-CHD	-4.20	114.42	123.39
9	H	302	PGV	O01-C1-C2	4.20	120.54	111.50
10	1	102	BCL	O2D-CGD-CBD	4.19	118.72	111.27
10	L	301	BCL	CHD-C4C-NC	4.19	129.73	125.08
10	M	402	BCL	C3C-C4C-CHD	-4.18	114.45	123.39
10	T	102	BCL	CMB-C2B-C3B	4.17	132.49	124.68
10	7	402	BCL	CMB-C2B-C3B	4.17	132.48	124.68
9	M	411	PGV	O01-C1-C2	4.17	120.48	111.50
17	T	103	CDL	OB6-CB5-C51	4.17	120.48	111.50
10	L	301	BCL	C3C-C4C-CHD	-4.16	114.49	123.39
10	4	102	BCL	C3C-C4C-CHD	-4.16	114.50	123.39
10	5	102	BCL	CMB-C2B-C3B	4.16	132.46	124.68
10	5	102	BCL	CHD-C4C-NC	4.15	129.69	125.08
10	0	102	BCL	O2D-CGD-CBD	4.15	118.64	111.27
10	3	102	BCL	CHD-C4C-NC	4.15	129.68	125.08
9	L	310	PGV	O01-C1-C2	4.14	120.43	111.50
9	C	407	PGV	O01-C1-C2	4.14	120.43	111.50
10	8	102	BCL	CMB-C2B-C3B	4.14	132.42	124.68
8	C	401	HEC	CBD-CAD-C3D	-4.13	105.57	112.62
10	G	101	BCL	O2D-CGD-CBD	4.13	118.60	111.27
17	0	101	CDL	OA6-CA5-C11	4.12	120.39	111.50
10	K	102	BCL	C4C-CHD-C1D	-4.12	119.80	125.88
16	1	101	I7D	C21-C20-C19	4.12	131.91	123.47
10	W	101	BCL	CHD-C4C-NC	4.11	129.65	125.08
16	I	101	I7D	C21-C20-C19	4.11	131.90	123.47
10	2	102	BCL	C1-C2-C3	-4.11	118.94	126.04
17	T	103	CDL	OA6-CA5-C11	4.09	120.31	111.50
10	K	102	BCL	C3C-C4C-CHD	-4.06	114.72	123.39
10	E	102	BCL	C1-C2-C3	-4.06	119.02	126.04
10	F	101	BCL	CMB-C2B-C3B	4.06	132.27	124.68
10	7	402	BCL	CHD-C4C-NC	4.05	129.57	125.08
17	0	101	CDL	OB6-CB5-C51	4.05	120.22	111.50
8	C	401	HEC	CBA-CAA-C2A	-4.05	105.78	112.60
9	M	410	PGV	O01-C1-C2	4.04	120.21	111.50
9	5	101	PGV	O01-C1-C2	4.04	120.21	111.50
10	Q	102	BCL	C4A-NA-C1A	4.04	108.52	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	L	309	BCL	C3C-C4C-CHD	-4.04	114.77	123.39
16	R	101	I7D	C21-C20-C19	4.03	131.73	123.47
17	H	303	CDL	OB6-CB5-C51	4.02	120.17	111.50
10	D	102	BCL	CHD-C4C-NC	4.02	129.54	125.08
10	L	309	BCL	CMB-C2B-C3B	4.00	132.17	124.68
10	6	103	BCL	CMB-C2B-C3B	4.00	132.17	124.68
10	M	403	BCL	O2D-CGD-CBD	4.00	118.38	111.27
9	5	103	PGV	O01-C1-C2	3.99	120.11	111.50
17	2	101	CDL	OB6-CB5-C51	3.97	120.06	111.50
10	Q	102	BCL	CHD-C4C-NC	3.97	129.48	125.08
10	1	102	BCL	C3C-C4C-CHD	-3.96	114.94	123.39
10	3	102	BCL	CMB-C2B-C3B	3.94	132.06	124.68
16	8	101	I7D	C21-C20-C19	3.94	131.56	123.47
10	1	102	BCL	CMB-C2B-C3B	3.94	132.05	124.68
10	U	101	BCL	C4C-CHD-C1D	-3.94	120.07	125.88
10	F	101	BCL	CHD-C4C-NC	3.92	129.43	125.08
10	K	102	BCL	CMB-C2B-C3B	3.91	132.00	124.68
10	S	101	BCL	CHD-C4C-NC	3.91	129.42	125.08
10	A	102	BCL	C4C-CHD-C1D	-3.91	120.11	125.88
10	D	102	BCL	C4C-CHD-C1D	-3.90	120.12	125.88
10	X	102	BCL	C1-C2-C3	-3.90	119.29	126.04
10	9	101	BCL	CHD-C4C-NC	3.90	129.41	125.08
10	V	102	BCL	C1-C2-C3	-3.90	119.31	126.04
9	D	103	PGV	O01-C1-C2	3.89	119.89	111.50
16	8	101	I7D	C25-C23-C22	3.88	124.90	118.94
10	Y	101	BCL	C3C-C4C-CHD	-3.88	115.11	123.39
10	Z	101	BCL	C1-C2-C3	-3.88	119.34	126.04
17	6	101	CDL	OA6-CA5-C11	3.87	119.83	111.50
10	9	101	BCL	C4C-CHD-C1D	-3.86	120.19	125.88
16	8	101	I7D	C30-C28-C27	3.86	124.86	118.94
16	8	101	I7D	C29-C28-C27	-3.85	117.53	122.92
10	Q	102	BCL	C4C-CHD-C1D	-3.84	120.21	125.88
9	K	103	PGV	O01-C1-C2	3.84	119.77	111.50
10	U	101	BCL	CHD-C4C-NC	3.83	129.33	125.08
10	1	102	BCL	C1-C2-C3	-3.83	119.42	126.04
10	A	102	BCL	CHD-C4C-NC	3.78	129.28	125.08
10	L	301	BCL	O2D-CGD-CBD	3.78	117.99	111.27
16	8	101	I7D	C24-C23-C22	-3.78	117.62	122.92
16	K	101	I7D	C21-C20-C19	3.78	131.21	123.47
16	A	103	I7D	C21-C20-C19	3.75	131.16	123.47
10	M	402	BCL	C4C-CHD-C1D	-3.75	120.34	125.88
16	D	101	I7D	C21-C20-C19	3.75	131.15	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	I	102	BCL	C3C-C4C-CHD	-3.75	115.39	123.39
10	3	102	BCL	C4C-CHD-C1D	-3.74	120.36	125.88
16	X	101	I7D	C21-C20-C19	3.74	131.14	123.47
16	8	101	I7D	C20-C21-C22	3.73	131.12	123.47
17	2	101	CDL	OA6-CA5-C11	3.71	119.50	111.50
10	R	102	BCL	C1-C2-C3	-3.69	119.65	126.04
16	4	101	I7D	C21-C20-C19	3.69	131.03	123.47
16	6	102	I7D	C21-C20-C19	3.69	131.03	123.47
16	3	101	I7D	C21-C20-C19	3.69	131.03	123.47
9	5	104	PGV	O01-C1-C2	3.68	119.44	111.50
16	N	101	I7D	C21-C20-C19	3.67	130.99	123.47
17	6	101	CDL	OB6-CB5-C51	3.66	119.39	111.50
10	1	102	BCL	C4C-CHD-C1D	-3.65	120.50	125.88
10	Y	101	BCL	C4C-CHD-C1D	-3.65	120.50	125.88
17	M	408	CDL	OA6-CA5-C11	3.63	119.32	111.50
10	3	102	BCL	C3C-C4C-CHD	-3.62	115.65	123.39
10	W	101	BCL	C3C-C4C-CHD	-3.62	115.66	123.39
10	Y	101	BCL	C4-C3-C5	3.61	121.34	115.27
10	W	101	BCL	C4C-CHD-C1D	-3.61	120.56	125.88
10	5	102	BCL	C4C-CHD-C1D	-3.60	120.57	125.88
10	Q	102	BCL	C3C-C4C-CHD	-3.60	115.70	123.39
10	5	102	BCL	C3C-C4C-CHD	-3.59	115.72	123.39
10	F	101	BCL	C3C-C4C-CHD	-3.58	115.75	123.39
10	D	102	BCL	C3C-C4C-CHD	-3.57	115.76	123.39
16	V	101	I7D	C21-C20-C19	3.56	130.78	123.47
10	Q	102	BCL	C1C-NC-C4C	-3.56	105.11	106.71
10	0	102	BCL	C1-C2-C3	-3.53	119.93	126.04
10	U	101	BCL	C1-C2-C3	-3.52	119.95	126.04
17	H	303	CDL	OA6-CA5-C11	3.51	119.08	111.50
10	P	101	BCL	C1-C2-C3	-3.50	119.98	126.04
10	7	402	BCL	C3C-C4C-CHD	-3.50	115.92	123.39
10	L	309	BCL	C1-C2-C3	-3.48	120.03	126.04
16	8	101	I7D	C18-C17-C19	-3.48	118.06	122.92
16	T	101	I7D	C21-C20-C19	3.47	130.59	123.47
10	I	102	BCL	C4C-CHD-C1D	-3.45	120.79	125.88
17	M	407	CDL	OA6-CA5-C11	3.45	120.43	110.80
10	S	101	BCL	C3C-C4C-CHD	-3.43	116.07	123.39
9	L	305	PGV	O01-C1-C2	3.42	118.88	111.50
10	A	102	BCL	C1-C2-C3	-3.42	120.13	126.04
16	X	101	I7D	C29-C28-C27	-3.42	118.14	122.92
10	6	103	BCL	C1-C2-C3	-3.42	120.14	126.04
10	I	102	BCL	C1-C2-C3	-3.41	120.15	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	9	101	BCL	C3C-C4C-CHD	-3.40	116.13	123.39
10	4	102	BCL	C1-C2-C3	-3.39	120.18	126.04
16	E	101	I7D	C20-C21-C22	3.39	130.41	123.47
9	F	102	PGV	O01-C1-C2	3.38	118.79	111.50
17	M	407	CDL	OA8-CA7-C31	3.36	120.19	111.38
16	8	101	I7D	C13-C12-C14	-3.36	118.22	122.92
16	Q	101	I7D	C21-C20-C19	3.35	130.34	123.47
16	8	101	I7D	C31-C32-C33	-3.35	122.53	127.31
16	N	101	I7D	C29-C28-C27	-3.34	118.24	122.92
16	6	102	I7D	C20-C21-C22	3.34	130.31	123.47
9	M	410	PGV	C02-O01-C1	-3.32	109.61	117.79
10	J	101	BCL	C4C-CHD-C1D	-3.32	120.98	125.88
16	M	406	I7D	C13-C12-C14	-3.32	118.28	122.92
10	D	102	BCL	C4A-NA-C1A	3.31	108.20	106.71
10	S	101	BCL	C1C-NC-C4C	-3.31	105.22	106.71
10	A	102	BCL	C4A-NA-C1A	3.31	108.19	106.71
16	E	101	I7D	C21-C20-C19	3.31	130.25	123.47
10	M	402	BCL	C1-C2-C3	-3.29	120.35	126.04
10	K	102	BCL	C1-C2-C3	-3.27	120.38	126.04
16	X	101	I7D	C20-C21-C22	3.27	130.17	123.47
16	R	101	I7D	C18-C17-C19	-3.27	118.34	122.92
10	Z	101	BCL	C4C-CHD-C1D	-3.26	121.07	125.88
16	1	101	I7D	C18-C17-C19	-3.26	118.36	122.92
10	O	101	BCL	C4C-CHD-C1D	-3.26	121.07	125.88
10	A	102	BCL	C3C-C4C-CHD	-3.25	116.44	123.39
16	I	101	I7D	C18-C17-C19	-3.24	118.38	122.92
10	O	101	BCL	C1-C2-C3	-3.24	120.44	126.04
10	B	101	BCL	C4C-CHD-C1D	-3.24	121.10	125.88
16	D	101	I7D	C18-C17-C19	-3.23	118.39	122.92
16	A	103	I7D	C29-C28-C27	-3.23	118.40	122.92
16	6	102	I7D	C13-C12-C14	-3.23	118.40	122.92
10	3	102	BCL	C1-C2-C3	-3.22	120.48	126.04
10	G	101	BCL	C1-C2-C3	-3.21	120.49	126.04
16	K	101	I7D	C18-C17-C19	-3.21	118.43	122.92
16	E	101	I7D	C29-C28-C27	-3.20	118.44	122.92
10	J	101	BCL	C1-C2-C3	-3.20	120.51	126.04
16	R	101	I7D	C13-C12-C14	-3.20	118.44	122.92
16	X	101	I7D	C24-C23-C22	-3.20	118.44	122.92
16	X	101	I7D	C18-C17-C19	-3.20	118.45	122.92
10	Q	102	BCL	C1-C2-C3	-3.19	120.53	126.04
16	8	101	I7D	C16-C17-C19	3.18	123.82	118.94
16	6	102	I7D	C24-C23-C22	-3.18	118.47	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	U	101	BCL	C3C-C4C-CHD	-3.18	116.60	123.39
10	F	101	BCL	O2A-CGA-CBA	3.18	121.88	111.91
16	M	406	I7D	C18-C17-C19	-3.17	118.48	122.92
10	9	101	BCL	C1-C2-C3	-3.17	120.56	126.04
10	L	301	BCL	C4C-CHD-C1D	-3.17	121.20	125.88
10	2	102	BCL	C4C-CHD-C1D	-3.17	121.21	125.88
10	N	102	BCL	C1-C2-C3	-3.16	120.57	126.04
16	Q	101	I7D	C18-C17-C19	-3.16	118.50	122.92
16	N	101	I7D	C18-C17-C19	-3.16	118.50	122.92
10	X	102	BCL	C4C-CHD-C1D	-3.16	121.22	125.88
16	3	101	I7D	C18-C17-C19	-3.15	118.51	122.92
16	V	101	I7D	C13-C12-C14	-3.15	118.52	122.92
16	N	101	I7D	C13-C12-C14	-3.14	118.52	122.92
16	A	103	I7D	C18-C17-C19	-3.14	118.52	122.92
10	G	101	BCL	C4C-CHD-C1D	-3.14	121.25	125.88
16	Q	101	I7D	C13-C12-C14	-3.14	118.53	122.92
16	6	102	I7D	C18-C17-C19	-3.13	118.54	122.92
10	0	102	BCL	C4C-CHD-C1D	-3.12	121.27	125.88
16	V	101	I7D	C18-C17-C19	-3.12	118.55	122.92
10	V	102	BCL	C4C-CHD-C1D	-3.11	121.29	125.88
10	B	101	BCL	C1-C2-C3	-3.11	120.66	126.04
10	R	102	BCL	C4C-CHD-C1D	-3.11	121.29	125.88
10	7	402	BCL	C4C-CHD-C1D	-3.11	121.30	125.88
10	M	403	BCL	C4C-CHD-C1D	-3.10	121.30	125.88
16	I	101	I7D	C13-C12-C14	-3.10	118.58	122.92
16	X	101	I7D	C13-C12-C14	-3.09	118.59	122.92
16	E	101	I7D	C24-C23-C22	-3.09	118.59	122.92
16	4	101	I7D	C18-C17-C19	-3.09	118.59	122.92
10	Y	101	BCL	C4A-NA-C1A	3.09	108.09	106.71
16	A	103	I7D	C13-C12-C14	-3.09	118.60	122.92
10	9	101	BCL	C4A-NA-C1A	3.08	108.09	106.71
10	L	301	BCL	O2A-CGA-CBA	3.08	121.57	111.91
16	T	101	I7D	C18-C17-C19	-3.08	118.61	122.92
10	8	102	BCL	C4-C3-C5	3.08	120.45	115.27
10	T	102	BCL	O2A-CGA-CBA	3.07	121.55	111.91
10	D	102	BCL	C1-C2-C3	-3.07	120.73	126.04
16	T	101	I7D	C20-C21-C22	3.07	129.76	123.47
10	E	102	BCL	O2A-CGA-CBA	3.07	121.53	111.91
16	T	101	I7D	C24-C23-C22	-3.06	118.63	122.92
16	3	101	I7D	C29-C28-C27	-3.06	118.63	122.92
17	A	101	CDL	CB4-OB6-CB5	-3.06	110.25	117.79
10	O	101	BCL	C4A-NA-C1A	3.06	108.08	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	P	101	BCL	C4C-CHD-C1D	-3.06	121.37	125.88
16	A	103	I7D	C24-C23-C22	-3.05	118.65	122.92
10	8	102	BCL	C4C-CHD-C1D	-3.04	121.39	125.88
17	M	407	CDL	CB4-OB6-CB5	-3.04	112.23	117.90
16	1	101	I7D	C13-C12-C14	-3.03	118.67	122.92
16	D	101	I7D	C13-C12-C14	-3.03	118.68	122.92
10	4	102	BCL	C4C-CHD-C1D	-3.02	121.43	125.88
8	C	402	HEC	CBA-CAA-C2A	-3.01	107.52	112.60
10	7	402	BCL	C1-C2-C3	-3.00	120.85	126.04
10	F	101	BCL	C1-C2-C3	-3.00	120.85	126.04
9	L	311	PGV	O03-C19-C20	3.00	121.32	111.91
10	E	102	BCL	C4C-CHD-C1D	-3.00	121.46	125.88
16	Q	101	I7D	C24-C23-C22	-3.00	118.72	122.92
10	6	103	BCL	C4-C3-C5	3.00	120.31	115.27
16	E	101	I7D	C18-C17-C19	-3.00	118.73	122.92
10	T	102	BCL	C4C-CHD-C1D	-2.99	121.47	125.88
16	T	101	I7D	C13-C12-C14	-2.99	118.74	122.92
16	8	101	I7D	C32-C31-C30	2.98	132.53	123.22
10	N	102	BCL	C4C-CHD-C1D	-2.98	121.48	125.88
16	1	101	I7D	C24-C23-C22	-2.98	118.75	122.92
10	6	103	BCL	C4C-CHD-C1D	-2.97	121.49	125.88
10	V	102	BCL	O2A-CGA-CBA	2.97	121.24	111.91
10	O	101	BCL	CHC-C1C-NC	2.97	128.62	124.51
9	5	101	PGV	O03-C19-C20	2.97	121.22	111.91
16	N	101	I7D	C24-C23-C22	-2.96	118.77	122.92
10	N	102	BCL	O2A-CGA-CBA	2.96	121.20	111.91
16	6	102	I7D	C29-C28-C27	-2.96	118.78	122.92
10	N	102	BCL	C4-C3-C5	2.96	120.24	115.27
16	4	101	I7D	C29-C28-C27	-2.95	118.78	122.92
16	R	101	I7D	C24-C23-C22	-2.95	118.78	122.92
10	2	102	BCL	O2A-CGA-CBA	2.95	121.17	111.91
10	B	101	BCL	O2A-CGA-CBA	2.95	121.16	111.91
16	1	101	I7D	C29-C28-C27	-2.95	118.80	122.92
10	9	101	BCL	O2A-CGA-CBA	2.95	121.15	111.91
16	X	101	I7D	C30-C28-C27	2.94	123.46	118.94
10	L	309	BCL	C4C-CHD-C1D	-2.94	121.54	125.88
10	4	102	BCL	O2A-CGA-CBA	2.94	121.14	111.91
10	N	102	BCL	C2A-C1A-CHA	-2.94	118.71	123.86
16	8	101	I7D	C11-C12-C14	2.94	123.46	118.94
10	X	102	BCL	O2A-CGA-CBA	2.94	121.14	111.91
16	I	101	I7D	C24-C23-C22	-2.94	118.80	122.92
10	8	102	BCL	C1-C2-C3	-2.93	120.97	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	3	101	I7D	C13-C12-C14	-2.93	118.82	122.92
16	3	101	I7D	C24-C23-C22	-2.93	118.82	122.92
9	D	103	PGV	C02-O01-C1	-2.93	110.59	117.79
16	D	101	I7D	C24-C23-C22	-2.93	118.83	122.92
17	0	101	CDL	OA8-CA7-C31	2.93	121.09	111.91
16	M	406	I7D	C11-C12-C14	2.92	123.43	118.94
16	K	101	I7D	C13-C12-C14	-2.92	118.83	122.92
17	6	104	CDL	CA6-CA4-CA3	-2.92	104.89	111.79
16	4	101	I7D	C24-C23-C22	-2.91	118.84	122.92
10	9	101	BCL	C4-C3-C5	2.91	120.17	115.27
10	7	402	BCL	C4-C3-C5	2.91	120.17	115.27
16	T	101	I7D	C29-C28-C27	-2.90	118.86	122.92
10	T	102	BCL	C4-C3-C5	2.90	120.15	115.27
16	D	101	I7D	C29-C28-C27	-2.90	118.86	122.92
16	4	101	I7D	C13-C12-C14	-2.89	118.87	122.92
10	P	101	BCL	O2A-CGA-CBA	2.89	120.98	111.91
10	Y	101	BCL	C1-C2-C3	-2.89	121.05	126.04
10	W	101	BCL	C1-C2-C3	-2.89	121.05	126.04
10	L	309	BCL	O2A-CGA-CBA	2.89	120.97	111.91
10	1	102	BCL	C4A-NA-C1A	2.88	108.00	106.71
16	N	101	I7D	C30-C28-C27	2.88	123.36	118.94
10	G	101	BCL	O2A-CGA-CBA	2.88	120.95	111.91
16	V	101	I7D	C24-C23-C22	-2.88	118.89	122.92
10	R	102	BCL	O2A-CGA-CBA	2.88	120.94	111.91
16	N	101	I7D	C20-C21-C22	2.88	129.37	123.47
10	J	101	BCL	O2A-CGA-CBA	2.87	120.93	111.91
16	Q	101	I7D	C29-C28-C27	-2.87	118.90	122.92
9	L	312	PGV	O03-C19-C20	2.87	120.90	111.91
16	K	101	I7D	C29-C28-C27	-2.86	118.91	122.92
10	V	102	BCL	C4-C3-C5	2.86	120.08	115.27
16	E	101	I7D	C13-C12-C14	-2.85	118.92	122.92
16	V	101	I7D	C29-C28-C27	-2.85	118.93	122.92
10	V	102	BCL	C2A-C1A-CHA	-2.84	118.89	123.86
17	H	303	CDL	OA8-CA7-C31	2.84	120.83	111.91
10	Z	101	BCL	O2A-CGA-CBA	2.84	120.83	111.91
13	I	103	LMT	C1B-O1B-C4'	-2.84	110.94	117.96
10	Y	101	BCL	C1C-NC-C4C	-2.84	105.43	106.71
9	C	405	PGV	O03-C19-C20	2.84	120.81	111.91
10	D	102	BCL	C1C-NC-C4C	-2.83	105.43	106.71
10	1	102	BCL	CHB-C4A-NA	2.83	128.43	124.51
17	6	101	CDL	OA8-CA7-C31	2.83	120.79	111.91
10	2	102	BCL	C4-C3-C5	2.83	120.02	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	L	305	PGV	O03-C19-C20	2.82	120.76	111.91
10	E	102	BCL	C2A-C1A-CHA	-2.82	118.93	123.86
10	8	102	BCL	O2A-CGA-CBA	2.82	120.75	111.91
10	P	101	BCL	C4-C3-C5	2.82	120.01	115.27
10	6	103	BCL	O2A-CGA-CBA	2.82	120.75	111.91
16	K	101	I7D	C24-C23-C22	-2.81	118.98	122.92
10	R	102	BCL	CHB-C4A-NA	2.81	128.40	124.51
10	U	101	BCL	C4A-NA-C1A	2.81	107.97	106.71
16	4	101	I7D	C20-C21-C22	2.81	129.23	123.47
10	G	101	BCL	C2A-C1A-CHA	-2.81	118.95	123.86
10	5	102	BCL	C4B-CHC-C1C	-2.80	124.58	130.12
10	0	102	BCL	C4-C3-C5	2.79	119.97	115.27
16	I	101	I7D	C16-C17-C19	2.79	123.23	118.94
10	Z	101	BCL	CHB-C4A-NA	2.79	128.38	124.51
16	I	101	I7D	C29-C28-C27	-2.79	119.01	122.92
10	W	101	BCL	C4A-NA-C1A	2.79	107.96	106.71
10	T	102	BCL	C1-C2-C3	-2.79	121.22	126.04
16	M	406	I7D	C29-C28-C27	-2.79	119.02	122.92
10	R	102	BCL	C4-C3-C5	2.79	119.96	115.27
13	3	103	LMT	C1B-O1B-C4'	-2.78	111.09	117.96
10	S	101	BCL	C1-C2-C3	-2.78	121.24	126.04
16	8	101	I7D	C27-C26-C25	2.78	131.88	123.22
16	6	102	I7D	C11-C12-C14	2.77	123.20	118.94
10	4	102	BCL	C4-C3-C5	2.77	119.94	115.27
10	O	101	BCL	CAD-C3D-C4D	2.77	110.02	108.47
10	3	102	BCL	C4B-CHC-C1C	-2.77	124.63	130.12
10	K	102	BCL	C4B-CHC-C1C	-2.77	124.63	130.12
16	1	101	I7D	C16-C17-C19	2.77	123.19	118.94
10	G	101	BCL	C4-C3-C5	2.77	119.93	115.27
16	A	103	I7D	C30-C28-C27	2.77	123.19	118.94
10	4	102	BCL	C2A-C1A-CHA	-2.76	119.03	123.86
16	Q	101	I7D	C20-C21-C22	2.76	129.14	123.47
10	B	101	BCL	C4-C3-C5	2.76	119.92	115.27
10	0	102	BCL	O2A-CGA-CBA	2.76	120.56	111.91
10	4	102	BCL	CHB-C4A-NA	2.76	128.32	124.51
17	A	101	CDL	CA4-OA6-CA5	-2.75	111.01	117.79
16	E	101	I7D	C30-C28-C27	2.75	123.17	118.94
10	U	101	BCL	O2A-CGA-CBA	2.75	120.55	111.91
16	R	101	I7D	C29-C28-C27	-2.75	119.07	122.92
10	A	102	BCL	O2A-CGA-CBA	2.75	120.54	111.91
10	T	102	BCL	CHB-C4A-NA	2.75	128.32	124.51
10	M	403	BCL	CED-O2D-CGD	2.75	122.15	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	M	411	PGV	C02-O01-C1	-2.74	111.05	117.79
10	I	102	BCL	CHB-C4A-NA	2.73	128.29	124.51
10	L	301	BCL	CED-O2D-CGD	2.73	122.12	115.94
10	5	102	BCL	C1-C2-C3	-2.73	121.32	126.04
10	M	403	BCL	O2A-CGA-CBA	2.73	120.48	111.91
10	4	102	BCL	CHC-C1C-NC	2.73	128.28	124.51
10	P	101	BCL	C2A-C1A-CHA	-2.73	119.09	123.86
9	D	103	PGV	O03-C19-C20	2.72	120.44	111.91
16	D	101	I7D	C16-C17-C19	2.71	123.11	118.94
10	L	301	BCL	C4-C3-C5	2.71	119.83	115.27
10	B	101	BCL	CHC-C1C-NC	2.71	128.26	124.51
9	L	311	PGV	C02-O01-C1	-2.70	111.14	117.79
10	Y	101	BCL	CHC-C1C-NC	2.70	128.25	124.51
10	A	102	BCL	C1C-NC-C4C	-2.70	105.49	106.71
10	8	102	BCL	CHB-C4A-NA	2.70	128.25	124.51
16	R	101	I7D	C16-C17-C19	2.70	123.08	118.94
9	M	411	PGV	O03-C19-C20	2.70	120.37	111.91
10	B	101	BCL	CHB-C4A-NA	2.69	128.23	124.51
10	E	102	BCL	CHB-C4A-NA	2.69	128.23	124.51
16	K	101	I7D	C16-C17-C19	2.69	123.06	118.94
8	C	403	HEC	CBA-CAA-C2A	-2.68	108.08	112.60
10	Y	101	BCL	O2A-CGA-CBA	2.68	120.31	111.91
16	6	102	I7D	C25-C23-C22	2.68	123.05	118.94
10	E	102	BCL	C4-C3-C5	2.68	119.77	115.27
17	A	101	CDL	OB8-CB7-C71	2.68	120.31	111.91
10	J	101	BCL	CHB-C4A-NA	2.68	128.21	124.51
16	1	101	I7D	C20-C21-C22	2.67	128.95	123.47
10	L	309	BCL	O2D-CGD-O1D	-2.67	118.61	123.84
10	M	402	BCL	O2D-CGD-O1D	-2.67	118.62	123.84
16	V	101	I7D	C20-C21-C22	2.67	128.94	123.47
10	O	101	BCL	C1C-NC-C4C	-2.67	105.51	106.71
9	H	301	PGV	O03-C19-C20	2.67	120.28	111.91
9	L	310	PGV	C02-O01-C1	-2.66	111.23	117.79
10	5	102	BCL	C4-C3-C5	2.66	119.75	115.27
10	M	402	BCL	CHC-C1C-NC	2.66	128.19	124.51
10	D	102	BCL	CHC-C1C-NC	2.66	128.19	124.51
10	N	102	BCL	CHC-C1C-NC	2.65	128.18	124.51
10	E	102	BCL	CHC-C1C-NC	2.65	128.18	124.51
10	L	309	BCL	CHC-C1C-NC	2.65	128.18	124.51
10	D	102	BCL	C4-C3-C5	2.65	119.73	115.27
16	X	101	I7D	C25-C23-C22	2.65	123.00	118.94
10	R	102	BCL	C2A-C1A-CHA	-2.64	119.23	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	L	301	BCL	CHC-C1C-NC	2.64	128.16	124.51
9	H	302	PGV	C02-O01-C1	-2.64	111.29	117.79
10	I	102	BCL	C4-C3-C5	2.64	119.71	115.27
10	T	102	BCL	C2A-C1A-CHA	-2.64	119.25	123.86
10	X	102	BCL	CHB-C4A-NA	2.64	128.16	124.51
16	M	406	I7D	C16-C17-C19	2.64	122.99	118.94
16	6	102	I7D	C16-C17-C19	2.63	122.98	118.94
10	X	102	BCL	CHC-C1C-NC	2.63	128.15	124.51
10	0	102	BCL	C2A-C1A-CHA	-2.62	119.27	123.86
10	0	102	BCL	CHC-C1C-NC	2.62	128.14	124.51
9	C	406	PGV	O03-C19-C20	2.62	120.12	111.91
10	1	102	BCL	O2A-CGA-CBA	2.61	120.11	111.91
17	2	101	CDL	OB8-CB7-C71	2.61	120.11	111.91
10	F	101	BCL	CHC-C1C-NC	2.61	128.12	124.51
16	N	101	I7D	C31-C32-C33	-2.61	123.58	127.31
10	M	402	BCL	C4-C3-C5	2.61	119.66	115.27
10	1	102	BCL	CAD-C3D-C4D	2.61	109.92	108.47
10	U	101	BCL	O2D-CGD-O1D	-2.60	118.75	123.84
10	5	102	BCL	C4A-NA-C1A	2.60	107.88	106.71
10	M	403	BCL	CAA-C2A-C3A	-2.60	105.66	112.78
10	O	101	BCL	CHB-C4A-NA	2.60	128.10	124.51
10	0	102	BCL	CHB-C4A-NA	2.60	128.10	124.51
10	V	102	BCL	C1C-NC-C4C	-2.60	105.54	106.71
10	D	102	BCL	O2A-CGA-CBA	2.59	120.05	111.91
10	Q	102	BCL	O2A-CGA-CBA	2.59	120.05	111.91
10	D	102	BCL	O2D-CGD-O1D	-2.59	118.77	123.84
10	2	102	BCL	CHC-C1C-NC	2.59	128.09	124.51
10	G	101	BCL	CHC-C1C-NC	2.59	128.09	124.51
10	J	101	BCL	C4-C3-C5	2.59	119.62	115.27
10	Z	101	BCL	C4-C3-C5	2.58	119.62	115.27
10	V	102	BCL	CHB-C4A-NA	2.58	128.08	124.51
10	6	103	BCL	CHB-C4A-NA	2.58	128.08	124.51
10	J	101	BCL	CHC-C1C-NC	2.58	128.08	124.51
10	T	102	BCL	CHC-C1C-NC	2.58	128.08	124.51
10	W	101	BCL	O2A-CGA-CBA	2.58	119.99	111.91
10	M	403	BCL	C1-C2-C3	-2.57	121.59	126.04
10	9	101	BCL	C1C-NC-C4C	-2.57	105.55	106.71
10	W	101	BCL	CHC-C1C-NC	2.57	128.07	124.51
16	X	101	I7D	C16-C17-C19	2.57	122.88	118.94
17	6	101	CDL	OB8-CB7-C71	2.57	119.97	111.91
9	L	304	PGV	C02-O01-C1	-2.57	111.47	117.79
10	L	301	BCL	CAD-C3D-C4D	2.57	109.90	108.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	3	101	I7D	C20-C21-C22	2.57	128.73	123.47
10	N	102	BCL	CHB-C4A-NA	2.57	128.06	124.51
16	N	101	I7D	C16-C17-C19	2.56	122.88	118.94
10	Z	101	BCL	C2A-C1A-CHA	-2.56	119.38	123.86
10	J	101	BCL	C1C-NC-C4C	-2.56	105.55	106.71
17	2	101	CDL	OA8-CA7-C31	2.56	119.95	111.91
10	J	101	BCL	O2D-CGD-O1D	-2.56	118.84	123.84
10	7	402	BCL	O2A-CGA-CBA	2.56	119.93	111.91
16	R	101	I7D	C20-C21-C22	2.56	128.71	123.47
10	G	101	BCL	CHB-C4A-NA	2.55	128.04	124.51
10	7	402	BCL	CHC-C1C-NC	2.55	128.04	124.51
10	8	102	BCL	CHC-C1C-NC	2.55	128.04	124.51
9	C	407	PGV	C02-O01-C1	-2.55	111.50	117.79
16	A	103	I7D	C16-C17-C19	2.55	122.86	118.94
10	2	102	BCL	C2A-C1A-CHA	-2.55	119.40	123.86
16	M	406	I7D	C24-C23-C22	-2.55	119.35	122.92
10	1	102	BCL	C1C-NC-C4C	-2.55	105.56	106.71
17	2	101	CDL	CB4-OB6-CB5	-2.55	111.52	117.79
10	3	102	BCL	CHB-C4A-NA	2.54	128.03	124.51
10	S	101	BCL	C4B-CHC-C1C	-2.54	125.08	130.12
9	L	310	PGV	O03-C19-C20	2.54	119.88	111.91
16	Q	101	I7D	C11-C12-C14	2.54	122.84	118.94
17	6	104	CDL	CB4-OB6-CB5	-2.54	111.54	117.79
10	I	102	BCL	O2A-CGA-CBA	2.54	119.87	111.91
10	3	102	BCL	C4A-NA-C1A	2.54	107.85	106.71
8	C	403	HEC	CBD-CAD-C3D	-2.53	108.29	112.62
10	X	102	BCL	C2A-C1A-CHA	-2.53	119.43	123.86
10	S	101	BCL	O2A-CGA-CBA	2.53	119.85	111.91
10	Q	102	BCL	O2D-CGD-O1D	-2.53	118.89	123.84
10	O	101	BCL	C4-C3-C5	2.53	119.52	115.27
10	F	101	BCL	CHB-C4A-NA	2.53	128.00	124.51
16	A	103	I7D	C20-C21-C22	2.53	128.65	123.47
16	I	101	I7D	C20-C21-C22	2.53	128.65	123.47
16	3	101	I7D	C16-C17-C19	2.52	122.81	118.94
10	Q	102	BCL	C4-C3-C5	2.52	119.51	115.27
16	V	101	I7D	C16-C17-C19	2.52	122.81	118.94
16	4	101	I7D	C16-C17-C19	2.52	122.80	118.94
10	8	102	BCL	C2A-C1A-CHA	-2.52	119.46	123.86
10	1	102	BCL	CHC-C1C-NC	2.52	127.99	124.51
10	M	403	BCL	C4-C3-C5	2.51	119.50	115.27
10	V	102	BCL	CHC-C1C-NC	2.51	127.99	124.51
16	R	101	I7D	C11-C12-C14	2.51	122.80	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	O	101	BCL	O2D-CGD-O1D	-2.51	118.93	123.84
10	K	102	BCL	C4-C3-C5	2.51	119.49	115.27
16	T	101	I7D	C16-C17-C19	2.51	122.79	118.94
10	2	102	BCL	CHB-C4A-NA	2.51	127.98	124.51
9	5	101	PGV	C02-O01-C1	-2.50	111.64	117.79
9	H	302	PGV	O03-C19-C20	2.50	119.75	111.91
10	X	102	BCL	C4-C3-C5	2.50	119.47	115.27
10	B	101	BCL	C2A-C1A-CHA	-2.50	119.50	123.86
17	0	101	CDL	OB8-CB7-C71	2.49	119.74	111.91
17	M	408	CDL	OA8-CA7-C31	2.49	119.73	111.91
16	Q	101	I7D	C16-C17-C19	2.49	122.76	118.94
10	M	403	BCL	CHC-C1C-NC	2.49	127.95	124.51
10	K	102	BCL	CHC-C1C-NC	2.49	127.95	124.51
16	V	101	I7D	C11-C12-C14	2.48	122.75	118.94
10	A	102	BCL	CHC-C1C-NC	2.48	127.95	124.51
10	Q	102	BCL	CHC-C1C-NC	2.48	127.94	124.51
10	N	102	BCL	O2D-CGD-O1D	-2.48	118.99	123.84
9	5	104	PGV	O03-C19-C20	2.48	119.69	111.91
10	P	101	BCL	CHB-C4A-NA	2.48	127.94	124.51
10	Z	101	BCL	CHC-C1C-NC	2.48	127.94	124.51
10	6	103	BCL	CHC-C1C-NC	2.48	127.94	124.51
10	F	101	BCL	O2D-CGD-O1D	-2.48	119.00	123.84
10	K	102	BCL	O2A-CGA-CBA	2.48	119.68	111.91
16	D	101	I7D	C20-C21-C22	2.47	128.54	123.47
17	T	103	CDL	OA8-CA7-C31	2.47	119.66	111.91
16	K	101	I7D	C20-C21-C22	2.47	128.53	123.47
17	6	104	CDL	OA8-CA7-C31	2.46	119.62	111.91
10	L	301	BCL	C2A-C1A-CHA	-2.46	119.56	123.86
16	X	101	I7D	C11-C12-C14	2.46	122.71	118.94
10	P	101	BCL	CHC-C1C-NC	2.46	127.91	124.51
10	0	102	BCL	C1C-NC-C4C	-2.46	105.60	106.71
16	E	101	I7D	C25-C23-C22	2.45	122.71	118.94
10	M	402	BCL	O2A-CGA-CBA	2.45	119.60	111.91
10	S	101	BCL	O2D-CGD-O1D	-2.45	119.05	123.84
10	F	101	BCL	CAD-C3D-C4D	2.45	109.84	108.47
10	1	102	BCL	C4-C3-C5	2.44	119.38	115.27
16	A	103	I7D	C25-C23-C22	2.43	122.67	118.94
17	6	104	CDL	OB8-CB7-C71	2.43	119.54	111.91
10	O	101	BCL	O2A-CGA-CBA	2.43	119.52	111.91
10	9	101	BCL	CHB-C4A-NA	2.43	127.87	124.51
10	E	102	BCL	O2D-CGD-O1D	-2.42	119.11	123.84
10	B	101	BCL	O2D-CGD-O1D	-2.42	119.11	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	L	301	BCL	CHB-C4A-NA	2.42	127.85	124.51
10	4	102	BCL	O2D-CGD-O1D	-2.41	119.12	123.84
10	Z	101	BCL	O2D-CGD-O1D	-2.41	119.12	123.84
17	T	103	CDL	OB8-CB7-C71	2.41	119.47	111.91
10	3	102	BCL	CAD-C3D-C4D	2.41	109.81	108.47
17	T	103	CDL	CB4-OB6-CB5	-2.41	111.86	117.79
10	6	103	BCL	O2D-CGD-O1D	-2.41	119.13	123.84
16	E	101	I7D	C16-C17-C19	2.41	122.64	118.94
16	I	101	I7D	C11-C12-C14	2.40	122.63	118.94
10	R	102	BCL	CHC-C1C-NC	2.40	127.83	124.51
10	L	309	BCL	C4-C3-C5	2.40	119.31	115.27
16	N	101	I7D	C11-C12-C14	2.40	122.62	118.94
10	L	301	BCL	C1-C2-C3	-2.39	121.90	126.04
16	A	103	I7D	C11-C12-C14	2.39	122.61	118.94
10	X	102	BCL	O2D-CGD-O1D	-2.39	119.16	123.84
10	M	403	BCL	CHB-C4A-NA	2.39	127.81	124.51
10	6	103	BCL	C2A-C1A-CHA	-2.39	119.68	123.86
10	U	101	BCL	CHC-C1C-NC	2.39	127.81	124.51
9	F	102	PGV	O03-C19-C20	2.39	119.40	111.91
9	5	103	PGV	O03-C19-C20	2.39	119.39	111.91
10	2	102	BCL	O2D-CGD-O1D	-2.38	119.18	123.84
10	7	402	BCL	O2D-CGD-O1D	-2.38	119.18	123.84
10	8	102	BCL	O2D-CGD-O1D	-2.38	119.18	123.84
10	P	101	BCL	O2D-CGD-O1D	-2.38	119.19	123.84
10	J	101	BCL	C2A-C1A-CHA	-2.37	119.71	123.86
10	A	102	BCL	CAD-C3D-C4D	2.37	109.79	108.47
10	V	102	BCL	O2D-CGD-O1D	-2.37	119.20	123.84
10	S	101	BCL	CAD-C3D-C4D	2.37	109.79	108.47
10	T	102	BCL	O2D-CGD-O1D	-2.37	119.21	123.84
13	1	103	LMT	C1-O1'-C1'	-2.36	109.92	113.84
10	M	402	BCL	C1C-NC-C4C	-2.36	105.64	106.71
10	9	101	BCL	CHC-C1C-NC	2.36	127.78	124.51
9	L	304	PGV	O03-C19-C20	2.36	119.33	111.91
10	1	102	BCL	C4B-CHC-C1C	-2.36	125.44	130.12
10	D	102	BCL	CHB-C4A-NA	2.36	127.78	124.51
10	F	101	BCL	C4B-CHC-C1C	-2.36	125.44	130.12
10	Q	102	BCL	CHB-C4A-NA	2.36	127.78	124.51
16	D	101	I7D	C11-C12-C14	2.36	122.56	118.94
10	W	101	BCL	CHB-C4A-NA	2.36	127.78	124.51
10	5	102	BCL	CHB-C4A-NA	2.36	127.77	124.51
10	R	102	BCL	O2D-CGD-O1D	-2.36	119.23	123.84
10	B	101	BCL	C1C-NC-C4C	-2.36	105.65	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	1	101	I7D	C11-C12-C14	2.35	122.55	118.94
10	U	101	BCL	CHB-C4A-NA	2.35	127.77	124.51
10	K	102	BCL	CHB-C4A-NA	2.35	127.76	124.51
10	3	102	BCL	O2A-CGA-CBA	2.35	119.27	111.91
16	3	101	I7D	C30-C28-C27	2.35	122.54	118.94
10	9	101	BCL	C4B-CHC-C1C	-2.34	125.47	130.12
10	I	102	BCL	O2D-CGD-O1D	-2.34	119.26	123.84
16	6	102	I7D	C30-C28-C27	2.34	122.54	118.94
16	T	101	I7D	C25-C23-C22	2.34	122.53	118.94
17	0	101	CDL	CB4-OB6-CB5	-2.34	112.03	117.79
10	A	102	BCL	O2D-CGD-O1D	-2.34	119.27	123.84
9	C	407	PGV	O14-P-O13	2.34	119.83	110.68
10	I	102	BCL	CHC-C1C-NC	2.33	127.74	124.51
10	9	101	BCL	O2D-CGD-O1D	-2.33	119.28	123.84
16	T	101	I7D	C11-C12-C14	2.32	122.51	118.94
17	T	103	CDL	CA4-OA6-CA5	-2.32	112.08	117.79
9	K	103	PGV	O03-C19-C20	2.32	119.19	111.91
10	I	102	BCL	CAD-C3D-C4D	2.32	109.76	108.47
10	W	101	BCL	CAD-C3D-C4D	2.32	109.76	108.47
17	H	303	CDL	OB8-CB7-C71	2.31	119.17	111.91
10	Y	101	BCL	CHB-C4A-NA	2.31	127.70	124.51
10	Y	101	BCL	O2D-CGD-O1D	-2.31	119.33	123.84
13	L	313	LMT	C1B-O1B-C4'	-2.30	112.27	117.96
10	S	101	BCL	C4-C3-C5	2.30	119.14	115.27
10	A	102	BCL	CHB-C4A-NA	2.30	127.69	124.51
10	Y	101	BCL	CAD-C3D-C4D	2.30	109.75	108.47
10	4	102	BCL	CAD-C3D-C4D	2.30	109.75	108.47
10	5	102	BCL	O2D-CGD-O1D	-2.29	119.35	123.84
10	U	101	BCL	C4B-CHC-C1C	-2.29	125.58	130.12
10	9	101	BCL	CAD-C3D-C4D	2.29	109.75	108.47
10	0	102	BCL	O2D-CGD-O1D	-2.29	119.36	123.84
10	W	101	BCL	C4-C3-C5	2.29	119.12	115.27
10	P	101	BCL	C1C-NC-C4C	-2.28	105.68	106.71
10	3	102	BCL	O2D-CGD-O1D	-2.28	119.38	123.84
10	L	309	BCL	O1D-CGD-CBD	-2.28	119.82	124.48
10	W	101	BCL	O2D-CGD-O1D	-2.28	119.39	123.84
10	A	102	BCL	C4B-CHC-C1C	-2.27	125.62	130.12
10	8	102	BCL	C1C-NC-C4C	-2.27	105.69	106.71
10	1	102	BCL	O2D-CGD-O1D	-2.27	119.41	123.84
16	6	102	I7D	O6-C6-C5	-2.27	116.19	121.20
10	G	101	BCL	O2D-CGD-O1D	-2.26	119.41	123.84
16	1	101	I7D	C30-C28-C27	2.26	122.41	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	S	101	BCL	CHC-C1C-NC	2.26	127.64	124.51
16	K	101	I7D	C11-C12-C14	2.26	122.41	118.94
16	1	101	I7D	C25-C23-C22	2.26	122.41	118.94
10	I	102	BCL	C4A-NA-C1A	2.26	107.72	106.71
10	A	102	BCL	C4-C3-C5	2.26	119.07	115.27
10	0	102	BCL	CED-O2D-CGD	2.26	121.04	115.94
10	I	102	BCL	C2A-C1A-CHA	-2.25	119.92	123.86
16	6	102	I7D	C9-C10-C11	2.25	130.24	123.22
10	1	102	BCL	CED-O2D-CGD	2.24	121.01	115.94
10	B	101	BCL	CAD-C3D-C4D	2.24	109.72	108.47
10	L	301	BCL	O2A-CGA-O1A	-2.24	117.94	123.59
10	R	102	BCL	C6-C5-C3	-2.24	107.58	113.45
10	5	102	BCL	O2A-CGA-CBA	2.24	118.93	111.91
9	5	103	PGV	C02-O01-C1	-2.24	112.28	117.79
10	Z	101	BCL	C1C-NC-C4C	-2.24	105.70	106.71
10	S	101	BCL	CHB-C4A-NA	2.24	127.61	124.51
9	L	312	PGV	O01-C1-O02	-2.24	118.30	123.70
16	3	101	I7D	C11-C12-C14	2.24	122.37	118.94
16	4	101	I7D	C25-C23-C22	2.23	122.36	118.94
10	M	403	BCL	C1C-NC-C4C	-2.23	105.70	106.71
10	Y	101	BCL	C4B-CHC-C1C	-2.23	125.70	130.12
10	K	102	BCL	CAD-C3D-C4D	2.23	109.71	108.47
10	I	102	BCL	C4B-CHC-C1C	-2.22	125.71	130.12
10	E	102	BCL	CAD-C3D-C4D	2.22	109.71	108.47
17	M	408	CDL	OB8-CB7-C71	2.22	118.87	111.91
10	F	101	BCL	O2A-CGA-O1A	-2.22	118.00	123.59
10	W	101	BCL	C1C-NC-C4C	-2.22	105.71	106.71
16	4	101	I7D	C30-C28-C27	2.22	122.34	118.94
16	T	101	I7D	C30-C28-C27	2.22	122.34	118.94
10	K	102	BCL	O2D-CGD-O1D	-2.22	119.51	123.84
10	3	102	BCL	C2A-C1A-CHA	-2.21	119.99	123.86
10	L	309	BCL	CHB-C4A-NA	2.21	127.57	124.51
10	T	102	BCL	CAD-C3D-C4D	2.21	109.70	108.47
10	D	102	BCL	C4B-CHC-C1C	-2.21	125.74	130.12
10	7	402	BCL	CHB-C4A-NA	2.21	127.56	124.51
16	N	101	I7D	C25-C23-C22	2.20	122.32	118.94
10	L	309	BCL	O2A-CGA-O1A	-2.20	118.04	123.59
10	5	102	BCL	CAD-C3D-C4D	2.20	109.70	108.47
9	C	407	PGV	O03-C19-C20	2.19	118.79	111.91
16	I	101	I7D	C25-C23-C22	2.19	122.30	118.94
13	L	313	LMT	C1-O1'-C1'	-2.19	110.21	113.84
16	Q	101	I7D	C25-C23-C22	2.19	122.30	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	R	101	I7D	C26-C27-C28	2.19	130.43	127.31
16	N	101	I7D	C32-C31-C30	2.18	130.03	123.22
10	Q	102	BCL	C4B-CHC-C1C	-2.18	125.79	130.12
10	1	102	BCL	C2A-C1A-CHA	-2.18	120.04	123.86
10	O	101	BCL	C2A-C1A-CHA	-2.18	120.04	123.86
10	U	101	BCL	C4-C3-C5	2.18	118.94	115.27
10	D	102	BCL	CAD-C3D-C4D	2.18	109.69	108.47
10	3	102	BCL	CBA-CAA-C2A	-2.18	107.43	113.86
10	Q	102	BCL	CAD-C3D-C4D	2.17	109.68	108.47
10	N	102	BCL	CAD-C3D-C4D	2.17	109.68	108.47
10	9	101	BCL	O2A-CGA-O1A	-2.17	118.12	123.59
10	L	309	BCL	C4B-CHC-C1C	-2.16	125.83	130.12
16	V	101	I7D	C25-C23-C22	2.16	122.26	118.94
16	I	101	I7D	C26-C27-C28	2.16	130.40	127.31
9	M	410	PGV	O03-C19-C20	2.16	118.69	111.91
10	T	102	BCL	C1C-NC-C4C	-2.16	105.73	106.71
10	2	102	BCL	C1C-NC-C4C	-2.16	105.73	106.71
17	H	303	CDL	CB4-OB6-CB5	-2.16	112.47	117.79
10	G	101	BCL	CAD-C3D-C4D	2.15	109.67	108.47
10	M	402	BCL	C2A-C1A-CHA	-2.15	120.10	123.86
16	M	406	I7D	C21-C22-C23	2.14	130.37	127.31
10	M	402	BCL	CHB-C4A-NA	2.14	127.48	124.51
16	4	101	I7D	C11-C12-C14	2.14	122.23	118.94
10	3	102	BCL	CHC-C1C-NC	2.14	127.47	124.51
10	1	102	BCL	C6-C5-C3	-2.14	107.84	113.45
10	L	309	BCL	C2A-C1A-CHA	-2.14	120.12	123.86
10	6	103	BCL	CAD-C3D-C4D	2.14	109.66	108.47
10	5	102	BCL	CHC-C1C-NC	2.13	127.46	124.51
16	R	101	I7D	C25-C23-C22	2.13	122.21	118.94
16	3	101	I7D	C25-C23-C22	2.13	122.21	118.94
16	V	101	I7D	C30-C28-C27	2.13	122.21	118.94
10	3	102	BCL	C6-C5-C3	-2.13	107.88	113.45
10	R	102	BCL	CAD-C3D-C4D	2.12	109.65	108.47
16	K	101	I7D	C30-C28-C27	2.12	122.19	118.94
10	7	402	BCL	CAD-C3D-C4D	2.11	109.65	108.47
16	Q	101	I7D	C30-C28-C27	2.11	122.18	118.94
9	C	405	PGV	C02-O01-C1	-2.11	112.60	117.79
16	D	101	I7D	C25-C23-C22	2.10	122.17	118.94
16	E	101	I7D	C11-C12-C14	2.10	122.16	118.94
9	C	406	PGV	C3-C2-C1	-2.09	106.00	113.62
10	V	102	BCL	CAD-C3D-C4D	2.09	109.64	108.47
16	D	101	I7D	C30-C28-C27	2.09	122.16	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	H	301	PGV	C02-O01-C1	-2.09	112.64	117.79
10	W	101	BCL	C4B-CHC-C1C	-2.09	125.97	130.12
8	C	402	HEC	CMC-C2C-C1C	-2.09	125.25	128.46
10	2	102	BCL	C4B-CHC-C1C	-2.09	125.98	130.12
9	5	101	PGV	O03-C19-O04	-2.09	118.32	123.59
9	L	311	PGV	O01-C1-O02	-2.09	118.66	123.70
10	I	102	BCL	CBA-CAA-C2A	-2.08	107.73	113.86
9	L	304	PGV	O01-C1-O02	-2.07	118.69	123.70
17	6	101	CDL	CB4-OB6-CB5	-2.07	112.69	117.79
10	U	101	BCL	C6-C5-C3	-2.07	108.02	113.45
9	H	302	PGV	O01-C1-O02	-2.07	118.70	123.70
16	1	101	I7D	C26-C27-C28	2.07	130.26	127.31
16	R	101	I7D	C31-C32-C33	2.06	130.26	127.31
10	E	102	BCL	O2A-CGA-O1A	-2.06	118.39	123.59
10	2	102	BCL	O2A-CGA-O1A	-2.06	118.39	123.59
10	7	402	BCL	C2A-C1A-CHA	-2.05	120.27	123.86
10	F	101	BCL	C6-C5-C3	-2.05	108.08	113.45
17	A	101	CDL	OA6-CA5-OA7	-2.05	118.75	123.70
10	8	102	BCL	CED-O2D-CGD	2.05	120.56	115.94
10	G	101	BCL	C1C-NC-C4C	-2.04	105.79	106.71
10	N	102	BCL	C6-C7-C8	-2.04	109.32	115.92
16	K	101	I7D	C25-C23-C22	2.04	122.07	118.94
8	C	401	HEC	O2D-CGD-CBD	2.04	120.58	114.03
10	8	102	BCL	CAD-C3D-C4D	2.04	109.61	108.47
17	M	407	CDL	CA4-OA6-CA5	-2.04	112.78	117.79
10	3	102	BCL	C4-C3-C5	2.04	118.69	115.27
10	4	102	BCL	O2A-CGA-O1A	-2.03	118.46	123.59
10	X	102	BCL	O2A-CGA-O1A	-2.03	118.46	123.59
17	0	101	CDL	OA8-CA7-OA9	-2.03	118.47	123.59
8	C	404	HEC	CBA-CAA-C2A	-2.02	109.19	112.60
17	A	101	CDL	OB6-CB5-OB7	-2.02	118.82	123.70
10	V	102	BCL	O2A-CGA-O1A	-2.02	118.50	123.59
10	5	102	BCL	CED-O2D-CGD	2.01	120.49	115.94
16	T	101	I7D	C26-C27-C28	2.01	130.18	127.31
16	4	101	I7D	C26-C27-C28	2.01	130.18	127.31
8	C	404	HEC	O2A-CGA-CBA	2.00	120.46	114.03
10	P	101	BCL	C6-C5-C3	-2.00	108.21	113.45

There are no chirality outliers.

All (993) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
9	C	405	PGV	C03-O11-P-O14
9	C	406	PGV	C2-C1-O01-C02
9	L	304	PGV	C03-O11-P-O12
9	L	304	PGV	C03-O11-P-O14
9	L	304	PGV	C04-O12-P-O11
9	L	304	PGV	C04-O12-P-O13
9	L	310	PGV	C03-O11-P-O14
9	L	312	PGV	C03-O11-P-O14
9	L	312	PGV	C2-C1-O01-C02
9	M	410	PGV	C04-O12-P-O14
9	H	301	PGV	C04-O12-P-O13
9	H	302	PGV	C03-O11-P-O13
9	H	302	PGV	C04-O12-P-O13
9	D	103	PGV	C2-C1-O01-C02
9	5	101	PGV	C2-C1-O01-C02
9	5	101	PGV	O04-C19-O03-C01
9	5	101	PGV	C20-C19-O03-C01
9	5	103	PGV	C03-O11-P-O13
9	5	104	PGV	C03-O11-P-O14
10	A	102	BCL	C2-C3-C5-C6
10	A	102	BCL	C4-C3-C5-C6
10	B	101	BCL	C2C-C3C-CAC-CBC
10	B	101	BCL	C4C-C3C-CAC-CBC
10	G	101	BCL	C2C-C3C-CAC-CBC
10	G	101	BCL	C4C-C3C-CAC-CBC
10	G	101	BCL	C11-C10-C8-C9
10	K	102	BCL	C2-C3-C5-C6
10	K	102	BCL	C4-C3-C5-C6
10	N	102	BCL	C2C-C3C-CAC-CBC
10	N	102	BCL	C4C-C3C-CAC-CBC
10	N	102	BCL	C2-C3-C5-C6
10	N	102	BCL	C4-C3-C5-C6
10	O	101	BCL	C2C-C3C-CAC-CBC
10	O	101	BCL	C4C-C3C-CAC-CBC
10	O	101	BCL	C4-C3-C5-C6
10	T	102	BCL	C4C-C3C-CAC-CBC
10	V	102	BCL	C2C-C3C-CAC-CBC
10	V	102	BCL	C4C-C3C-CAC-CBC
10	X	102	BCL	C2C-C3C-CAC-CBC
10	X	102	BCL	C4C-C3C-CAC-CBC
10	Z	101	BCL	C2C-C3C-CAC-CBC
10	Z	101	BCL	C4C-C3C-CAC-CBC
10	Z	101	BCL	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
10	4	102	BCL	C2C-C3C-CAC-CBC
10	4	102	BCL	C4C-C3C-CAC-CBC
10	5	102	BCL	C1A-C2A-CAA-CBA
10	5	102	BCL	C3A-C2A-CAA-CBA
10	8	102	BCL	C2C-C3C-CAC-CBC
10	8	102	BCL	C4C-C3C-CAC-CBC
10	8	102	BCL	C4-C3-C5-C6
10	8	102	BCL	C11-C10-C8-C9
10	0	102	BCL	C4C-C3C-CAC-CBC
10	0	102	BCL	C2-C3-C5-C6
10	0	102	BCL	C4-C3-C5-C6
12	7	401	U10	C12-C11-C9-C8
12	7	401	U10	C12-C11-C9-C10
12	7	401	U10	C22-C23-C24-C25
12	7	401	U10	C22-C23-C24-C26
13	L	308	LMT	C2-C1-O1'-C1'
16	M	406	I7D	C35-C36-C37-C38
16	A	103	I7D	C35-C36-C37-C38
16	D	101	I7D	C35-C36-C37-C38
16	E	101	I7D	C35-C36-C37-C38
16	I	101	I7D	C35-C36-C37-C38
16	K	101	I7D	C35-C36-C37-C38
16	N	101	I7D	C32-C33-C35-C36
16	N	101	I7D	C34-C33-C35-C36
16	N	101	I7D	C33-C35-C36-C37
16	Q	101	I7D	C35-C36-C37-C38
16	T	101	I7D	C2-C1-C4-C5
16	T	101	I7D	C3-C1-C4-C5
16	T	101	I7D	C34-C33-C35-C36
16	T	101	I7D	C35-C36-C37-C38
16	V	101	I7D	C35-C36-C37-C38
16	X	101	I7D	C35-C36-C37-C38
16	1	101	I7D	C35-C36-C37-C38
16	3	101	I7D	C32-C33-C35-C36
16	3	101	I7D	C34-C33-C35-C36
16	3	101	I7D	C35-C36-C37-C38
16	4	101	I7D	C35-C36-C37-C38
16	8	101	I7D	C35-C36-C37-C38
17	M	407	CDL	O1-C1-CB2-OB2
17	M	407	CDL	CA2-OA2-PA1-OA3
17	M	407	CDL	CA2-OA2-PA1-OA5
17	M	408	CDL	CA2-OA2-PA1-OA5

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Mol	Chain	Res	Type	Atoms
17	M	408	CDL	CA3-OA5-PA1-OA3
17	M	408	CDL	CB3-OB5-PB2-OB4
17	M	408	CDL	C51-CB5-OB6-CB4
17	H	303	CDL	CB2-OB2-PB2-OB3
17	H	303	CDL	CB2-OB2-PB2-OB4
17	H	303	CDL	CB2-OB2-PB2-OB5
17	A	101	CDL	CA2-OA2-PA1-OA5
17	A	101	CDL	CA3-OA5-PA1-OA3
17	A	101	CDL	CA3-OA5-PA1-OA4
17	A	101	CDL	CB2-OB2-PB2-OB3
17	A	101	CDL	CB3-OB5-PB2-OB3
17	T	103	CDL	CA2-OA2-PA1-OA4
17	T	103	CDL	CB2-OB2-PB2-OB3
17	2	101	CDL	CA2-C1-CB2-OB2
17	2	101	CDL	C11-CA5-OA6-CA4
17	6	101	CDL	CA2-OA2-PA1-OA5
17	6	101	CDL	CA3-OA5-PA1-OA3
17	6	101	CDL	CB3-OB5-PB2-OB3
17	6	104	CDL	CA2-OA2-PA1-OA3
17	6	104	CDL	CA2-OA2-PA1-OA4
17	6	104	CDL	CA2-OA2-PA1-OA5
17	6	104	CDL	CA3-OA5-PA1-OA2
17	6	104	CDL	CA3-OA5-PA1-OA3
17	6	104	CDL	CA3-OA5-PA1-OA4
17	6	104	CDL	CB2-OB2-PB2-OB3
17	6	104	CDL	OB7-CB5-OB6-CB4
17	6	104	CDL	C51-CB5-OB6-CB4
17	0	101	CDL	CA2-OA2-PA1-OA3
17	0	101	CDL	CA2-OA2-PA1-OA5
17	0	101	CDL	CA3-OA5-PA1-OA2
17	0	101	CDL	CA3-OA5-PA1-OA3
17	0	101	CDL	CB3-OB5-PB2-OB4
10	L	301	BCL	CBD-CGD-O2D-CED
9	C	406	PGV	O02-C1-O01-C02
9	L	312	PGV	O02-C1-O01-C02
9	D	103	PGV	O02-C1-O01-C02
9	5	101	PGV	O02-C1-O01-C02
17	M	408	CDL	OB7-CB5-OB6-CB4
17	2	101	CDL	OA7-CA5-OA6-CA4
17	6	101	CDL	OA7-CA5-OA6-CA4
10	G	101	BCL	C3-C5-C6-C7
10	S	101	BCL	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
10	8	102	BCL	C3-C5-C6-C7
17	6	101	CDL	C11-CA5-OA6-CA4
17	6	104	CDL	C11-CA5-OA6-CA4
10	O	101	BCL	C8-C10-C11-C12
10	O	101	BCL	C2-C3-C5-C6
10	8	102	BCL	C2-C3-C5-C6
10	W	101	BCL	C3-C5-C6-C7
12	L	307	U10	C22-C23-C24-C25
12	L	307	U10	C22-C23-C24-C26
10	Z	101	BCL	C5-C6-C7-C8
9	L	305	PGV	O12-C04-C05-O05
9	M	410	PGV	O12-C04-C05-O05
17	H	303	CDL	O1-C1-CB2-OB2
17	2	101	CDL	O1-C1-CB2-OB2
17	0	101	CDL	O1-C1-CA2-OA2
10	F	101	BCL	C3-C5-C6-C7
10	I	102	BCL	C3-C5-C6-C7
10	Q	102	BCL	C3-C5-C6-C7
10	V	102	BCL	C3-C5-C6-C7
10	1	102	BCL	C3-C5-C6-C7
13	L	313	LMT	O5'-C5'-C6'-O6'
10	E	102	BCL	C5-C6-C7-C8
17	6	104	CDL	OA7-CA5-OA6-CA4
10	D	102	BCL	C4-C3-C5-C6
10	6	103	BCL	C4-C3-C5-C6
10	9	101	BCL	C4-C3-C5-C6
12	7	401	U10	C15-C14-C16-C17
12	7	401	U10	C35-C34-C36-C37
10	D	102	BCL	C2-C3-C5-C6
10	6	103	BCL	C2-C3-C5-C6
10	9	101	BCL	C2-C3-C5-C6
12	7	401	U10	C13-C14-C16-C17
12	7	401	U10	C33-C34-C36-C37
10	R	102	BCL	C2A-CAA-CBA-CGA
12	7	401	U10	C39-C41-C42-C43
9	M	410	PGV	O12-C04-C05-C06
17	A	101	CDL	CB2-C1-CA2-OA2
13	I	103	LMT	C4'-C5'-C6'-O6'
10	E	102	BCL	C3-C5-C6-C7
10	3	102	BCL	C3-C5-C6-C7
10	5	102	BCL	C3-C5-C6-C7
17	6	101	CDL	C31-CA7-OA8-CA6

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Mol	Chain	Res	Type	Atoms
17	0	101	CDL	C31-CA7-OA8-CA6
10	2	102	BCL	C5-C6-C7-C8
10	3	102	BCL	C13-C15-C16-C17
17	A	101	CDL	O1-C1-CA2-OA2
17	0	101	CDL	OA9-CA7-OA8-CA6
10	L	309	BCL	C6-C7-C8-C9
10	T	102	BCL	C11-C10-C8-C9
10	V	102	BCL	C11-C10-C8-C9
10	4	102	BCL	C14-C13-C15-C16
10	6	103	BCL	C11-C10-C8-C9
10	7	402	BCL	C11-C10-C8-C9
10	9	101	BCL	C6-C7-C8-C9
10	9	101	BCL	C11-C12-C13-C14
10	8	102	BCL	C2A-CAA-CBA-CGA
10	0	102	BCL	C2A-CAA-CBA-CGA
16	A	103	I7D	C34-C33-C35-C36
16	K	101	I7D	C34-C33-C35-C36
16	V	101	I7D	C34-C33-C35-C36
16	6	102	I7D	C34-C33-C35-C36
16	8	101	I7D	C34-C33-C35-C36
16	A	103	I7D	C32-C33-C35-C36
16	T	101	I7D	C32-C33-C35-C36
16	6	102	I7D	C32-C33-C35-C36
16	8	101	I7D	C32-C33-C35-C36
13	I	103	LMT	O5B-C5B-C6B-O6B
17	H	303	CDL	CB5-C51-C52-C53
17	A	101	CDL	CB5-C51-C52-C53
17	6	101	CDL	OA9-CA7-OA8-CA6
10	N	102	BCL	C15-C16-C17-C18
10	X	102	BCL	C15-C16-C17-C18
17	H	303	CDL	C71-CB7-OB8-CB6
10	E	102	BCL	C15-C16-C17-C18
9	D	103	PGV	C1-C2-C3-C4
10	J	101	BCL	C10-C11-C12-C13
10	T	102	BCL	C5-C6-C7-C8
10	2	102	BCL	C10-C11-C12-C13
10	2	102	BCL	C13-C15-C16-C17
9	L	304	PGV	C19-C20-C21-C22
9	M	410	PGV	C1-C2-C3-C4
17	6	101	CDL	CB5-C51-C52-C53
10	E	102	BCL	CBD-CGD-O2D-CED
10	4	102	BCL	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
10	B	101	BCL	C2A-CAA-CBA-CGA
10	L	301	BCL	O1D-CGD-O2D-CED
10	Q	102	BCL	C15-C16-C17-C18
10	S	101	BCL	C15-C16-C17-C18
10	V	102	BCL	C5-C6-C7-C8
10	X	102	BCL	C5-C6-C7-C8
13	L	313	LMT	C4'-C5'-C6'-O6'
13	3	103	LMT	O5'-C1'-O1'-C1
10	R	102	BCL	C10-C11-C12-C13
10	R	102	BCL	C13-C15-C16-C17
10	X	102	BCL	C13-C15-C16-C17
16	8	101	I7D	C23-C25-C26-C27
10	G	101	BCL	C13-C15-C16-C17
10	T	102	BCL	C15-C16-C17-C18
10	4	102	BCL	C10-C11-C12-C13
10	5	102	BCL	C13-C15-C16-C17
10	N	102	BCL	C13-C15-C16-C17
10	P	101	BCL	C15-C16-C17-C18
13	I	103	LMT	O5'-C5'-C6'-O6'
9	5	104	PGV	C2-C1-O01-C02
17	H	303	CDL	C11-CA5-OA6-CA4
10	B	101	BCL	C8-C10-C11-C12
10	0	102	BCL	C8-C10-C11-C12
9	C	406	PGV	C03-O11-P-O12
9	L	310	PGV	C03-O11-P-O12
9	L	311	PGV	C03-O11-P-O12
9	H	302	PGV	C03-O11-P-O12
9	K	103	PGV	C03-O11-P-O12
9	5	104	PGV	C03-O11-P-O12
17	M	407	CDL	CA3-OA5-PA1-OA2
17	M	408	CDL	CB3-OB5-PB2-OB2
17	A	101	CDL	CA3-OA5-PA1-OA2
17	T	103	CDL	CA2-OA2-PA1-OA5
17	T	103	CDL	CB3-OB5-PB2-OB2
17	2	101	CDL	CB2-OB2-PB2-OB5
17	2	101	CDL	CB3-OB5-PB2-OB2
17	6	104	CDL	CB2-OB2-PB2-OB5
17	6	104	CDL	CB3-OB5-PB2-OB2
17	0	101	CDL	CB3-OB5-PB2-OB2
9	C	407	PGV	C1-C2-C3-C4
10	Z	101	BCL	CBA-CGA-O2A-C1
10	E	102	BCL	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
10	Q	102	BCL	C13-C15-C16-C17
10	4	102	BCL	C15-C16-C17-C18
17	M	407	CDL	CA2-C1-CB2-OB2
9	5	104	PGV	O02-C1-O01-C02
17	H	303	CDL	OA7-CA5-OA6-CA4
10	B	101	BCL	C15-C16-C17-C18
10	R	102	BCL	C5-C6-C7-C8
10	G	101	BCL	C2A-CAA-CBA-CGA
10	N	102	BCL	C2A-CAA-CBA-CGA
10	P	101	BCL	C2A-CAA-CBA-CGA
10	T	102	BCL	C2A-CAA-CBA-CGA
10	V	102	BCL	C2A-CAA-CBA-CGA
10	Y	101	BCL	C16-C17-C18-C19
9	H	302	PGV	C1-C2-C3-C4
17	0	101	CDL	C11-CA5-OA6-CA4
16	N	101	I7D	C31-C32-C33-C34
16	8	101	I7D	C26-C27-C28-C29
9	L	312	PGV	C21-C22-C23-C24
17	2	101	CDL	CA6-CA4-OA6-CA5
17	0	101	CDL	OA7-CA5-OA6-CA4
9	C	406	PGV	C20-C21-C22-C23
17	M	408	CDL	C51-C52-C53-C54
9	M	411	PGV	C20-C21-C22-C23
10	M	403	BCL	C5-C6-C7-C8
17	H	303	CDL	C51-C52-C53-C54
17	T	103	CDL	C35-C36-C37-C38
17	6	101	CDL	CA5-C11-C12-C13
13	3	103	LMT	C2'-C1'-O1'-C1
16	N	101	I7D	C31-C32-C33-C35
16	8	101	I7D	C26-C27-C28-C30
9	L	305	PGV	C6-C7-C8-C9
10	L	309	BCL	C16-C17-C18-C19
9	L	311	PGV	C21-C22-C23-C24
10	L	301	BCL	C11-C10-C8-C9
10	D	102	BCL	C11-C10-C8-C9
10	I	102	BCL	C14-C13-C15-C16
10	S	101	BCL	C14-C13-C15-C16
10	U	101	BCL	C14-C13-C15-C16
10	9	101	BCL	C14-C13-C15-C16
10	6	103	BCL	C2A-CAA-CBA-CGA
10	Z	101	BCL	O1A-CGA-O2A-C1
17	H	303	CDL	OB9-CB7-OB8-CB6

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Mol	Chain	Res	Type	Atoms
16	D	101	I7D	C34-C33-C35-C36
16	E	101	I7D	C34-C33-C35-C36
16	I	101	I7D	C34-C33-C35-C36
16	Q	101	I7D	C34-C33-C35-C36
16	X	101	I7D	C34-C33-C35-C36
16	1	101	I7D	C34-C33-C35-C36
16	4	101	I7D	C34-C33-C35-C36
9	L	304	PGV	C04-C05-C06-O06
9	L	312	PGV	C04-C05-C06-O06
16	D	101	I7D	C32-C33-C35-C36
16	E	101	I7D	C32-C33-C35-C36
16	I	101	I7D	C32-C33-C35-C36
16	K	101	I7D	C32-C33-C35-C36
16	Q	101	I7D	C32-C33-C35-C36
16	V	101	I7D	C32-C33-C35-C36
16	X	101	I7D	C32-C33-C35-C36
16	1	101	I7D	C32-C33-C35-C36
16	4	101	I7D	C32-C33-C35-C36
17	T	103	CDL	C11-CA5-OA6-CA4
9	C	406	PGV	C22-C23-C24-C25
9	M	411	PGV	C23-C24-C25-C26
9	F	102	PGV	C19-C20-C21-C22
17	T	103	CDL	CA5-C11-C12-C13
9	D	103	PGV	C21-C22-C23-C24
17	T	103	CDL	C33-C34-C35-C36
9	L	305	PGV	C29-C30-C31-C32
9	5	101	PGV	C1-C2-C3-C4
17	T	103	CDL	CB5-C51-C52-C53
17	6	104	CDL	CB7-C71-C72-C73
9	5	101	PGV	C12-C13-C14-C15
10	Z	101	BCL	C3-C5-C6-C7
10	X	102	BCL	CBA-CGA-O2A-C1
10	A	102	BCL	C3A-C2A-CAA-CBA
10	8	102	BCL	C3A-C2A-CAA-CBA
9	C	405	PGV	O03-C01-C02-C03
10	W	101	BCL	C15-C16-C17-C18
9	L	312	PGV	O05-C05-C06-O06
9	L	305	PGV	C5-C6-C7-C8
9	5	103	PGV	C26-C27-C28-C29
17	T	103	CDL	C51-C52-C53-C54
9	5	101	PGV	C11-C10-C9-C8
9	K	103	PGV	O12-C04-C05-O05

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Mol	Chain	Res	Type	Atoms
10	Y	101	BCL	C3-C5-C6-C7
9	L	304	PGV	O12-C04-C05-C06
17	H	303	CDL	CA2-C1-CB2-OB2
17	0	101	CDL	CB2-C1-CA2-OA2
17	T	103	CDL	OA7-CA5-OA6-CA4
13	L	313	LMT	C1-C2-C3-C4
9	5	103	PGV	C3-C4-C5-C6
17	H	303	CDL	C12-C13-C14-C15
10	G	101	BCL	C8-C10-C11-C12
10	X	102	BCL	O1A-CGA-O2A-C1
10	A	102	BCL	C13-C15-C16-C17
17	0	101	CDL	C51-CB5-OB6-CB4
10	L	301	BCL	C11-C10-C8-C7
10	D	102	BCL	C12-C13-C15-C16
10	S	101	BCL	C12-C13-C15-C16
10	W	101	BCL	C12-C13-C15-C16
10	7	402	BCL	C11-C10-C8-C7
10	9	101	BCL	C11-C12-C13-C15
10	9	101	BCL	C12-C13-C15-C16
10	0	102	BCL	C12-C13-C15-C16
10	7	402	BCL	C3-C5-C6-C7
17	6	104	CDL	C51-C52-C53-C54
10	J	101	BCL	C13-C15-C16-C17
17	2	101	CDL	OB7-CB5-OB6-CB4
9	5	104	PGV	C19-C20-C21-C22
10	B	101	BCL	CBA-CGA-O2A-C1
10	V	102	BCL	CBA-CGA-O2A-C1
10	2	102	BCL	CBA-CGA-O2A-C1
10	0	102	BCL	CBA-CGA-O2A-C1
10	E	102	BCL	C2A-CAA-CBA-CGA
10	X	102	BCL	C2A-CAA-CBA-CGA
10	Z	101	BCL	C2A-CAA-CBA-CGA
10	2	102	BCL	C2A-CAA-CBA-CGA
9	L	305	PGV	C1-C2-C3-C4
10	N	102	BCL	C10-C11-C12-C13
10	2	102	BCL	C3-C5-C6-C7
10	P	101	BCL	C16-C17-C18-C19
10	D	102	BCL	C10-C11-C12-C13
10	I	102	BCL	C15-C16-C17-C18
13	1	103	LMT	C3-C4-C5-C6
17	2	101	CDL	C51-CB5-OB6-CB4
9	M	410	PGV	C20-C21-C22-C23

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Mol	Chain	Res	Type	Atoms
9	5	104	PGV	C24-C25-C26-C27
17	H	303	CDL	OB6-CB4-CB6-OB8
10	L	309	BCL	C16-C17-C18-C20
10	D	102	BCL	C14-C13-C15-C16
10	N	102	BCL	C11-C10-C8-C9
10	W	101	BCL	C14-C13-C15-C16
10	X	102	BCL	C11-C10-C8-C9
10	4	102	BCL	C6-C7-C8-C9
10	0	102	BCL	C14-C13-C15-C16
13	L	308	LMT	O1'-C1-C2-C3
10	D	102	BCL	C15-C16-C17-C18
10	B	101	BCL	O1A-CGA-O2A-C1
10	V	102	BCL	O1A-CGA-O2A-C1
10	8	102	BCL	C1A-C2A-CAA-CBA
10	P	101	BCL	C16-C17-C18-C20
10	8	102	BCL	C16-C17-C18-C19
17	0	101	CDL	OB7-CB5-OB6-CB4
17	H	303	CDL	C72-C73-C74-C75
10	G	101	BCL	C15-C16-C17-C18
10	U	101	BCL	C15-C16-C17-C18
9	C	405	PGV	C03-O11-P-O12
9	M	410	PGV	C04-O12-P-O11
9	H	301	PGV	C04-O12-P-O11
17	0	101	CDL	CB2-OB2-PB2-OB5
10	Z	101	BCL	C15-C16-C17-C18
9	H	302	PGV	C01-C02-C03-O11
9	F	102	PGV	C01-C02-C03-O11
17	2	101	CDL	OA5-CA3-CA4-CA6
17	6	104	CDL	OA5-CA3-CA4-CA6
10	5	102	BCL	C8-C10-C11-C12
10	7	402	BCL	C8-C10-C11-C12
10	Y	101	BCL	C16-C17-C18-C20
10	T	102	BCL	C2C-C3C-CAC-CBC
10	0	102	BCL	C2C-C3C-CAC-CBC
13	I	103	LMT	C3-C4-C5-C6
9	D	103	PGV	C20-C21-C22-C23
9	F	102	PGV	C2-C1-O01-C02
10	2	102	BCL	O1A-CGA-O2A-C1
10	0	102	BCL	O1A-CGA-O2A-C1
10	F	101	BCL	C15-C16-C17-C18
13	3	103	LMT	O5'-C5'-C6'-O6'
9	L	312	PGV	O03-C01-C02-C03

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Mol	Chain	Res	Type	Atoms
17	M	408	CDL	CB3-CB4-CB6-OB8
17	6	101	CDL	CA3-CA4-CA6-OA8
10	U	101	BCL	C13-C15-C16-C17
10	8	102	BCL	C15-C16-C17-C18
13	L	313	LMT	O5B-C5B-C6B-O6B
17	6	104	CDL	C37-C38-C39-C40
17	0	101	CDL	C55-C56-C57-C58
10	7	402	BCL	C4-C3-C5-C6
12	L	303	U10	C15-C14-C16-C17
10	7	402	BCL	C2-C3-C5-C6
9	C	406	PGV	C19-C20-C21-C22
9	M	411	PGV	C1-C2-C3-C4
17	M	408	CDL	CB7-C71-C72-C73
9	M	411	PGV	C25-C26-C27-C28
17	H	303	CDL	C55-C56-C57-C58
9	L	312	PGV	C01-C02-O01-C1
17	6	101	CDL	CA6-CA4-OA6-CA5
10	X	102	BCL	C3-C5-C6-C7
9	L	311	PGV	C20-C21-C22-C23
17	M	408	CDL	OA5-CA3-CA4-OA6
17	T	103	CDL	OA5-CA3-CA4-OA6
10	8	102	BCL	C16-C17-C18-C20
9	M	411	PGV	C19-C20-C21-C22
17	2	101	CDL	C54-C55-C56-C57
9	L	304	PGV	O12-C04-C05-O05
10	E	102	BCL	O1D-CGD-O2D-CED
17	A	101	CDL	CA5-C11-C12-C13
17	6	104	CDL	CB5-C51-C52-C53
17	M	407	CDL	OA6-CA4-CA6-OA8
16	X	101	I7D	C36-C37-C38-C40
10	4	102	BCL	C4-C3-C5-C6
10	L	309	BCL	C6-C7-C8-C10
10	M	403	BCL	C12-C13-C15-C16
10	I	102	BCL	C12-C13-C15-C16
10	N	102	BCL	C11-C10-C8-C7
10	P	101	BCL	C6-C7-C8-C10
10	P	101	BCL	C11-C10-C8-C7
10	R	102	BCL	C11-C10-C8-C7
10	S	101	BCL	C11-C10-C8-C7
10	T	102	BCL	C11-C10-C8-C7
10	U	101	BCL	C12-C13-C15-C16
10	V	102	BCL	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
10	X	102	BCL	C11-C10-C8-C7
10	Y	101	BCL	C6-C7-C8-C10
10	Z	101	BCL	C6-C7-C8-C10
10	1	102	BCL	C6-C7-C8-C10
10	2	102	BCL	C11-C10-C8-C7
10	2	102	BCL	C12-C13-C15-C16
10	3	102	BCL	C11-C10-C8-C7
10	4	102	BCL	C2-C3-C5-C6
10	4	102	BCL	C6-C7-C8-C10
10	5	102	BCL	C6-C7-C8-C10
10	9	101	BCL	C6-C7-C8-C10
10	9	101	BCL	C11-C10-C8-C7
12	L	303	U10	C13-C14-C16-C17
10	U	101	BCL	C3-C5-C6-C7
10	M	403	BCL	C14-C13-C15-C16
10	B	101	BCL	C6-C7-C8-C9
10	I	102	BCL	C11-C10-C8-C9
10	O	101	BCL	C11-C10-C8-C9
10	P	101	BCL	C11-C10-C8-C9
10	Q	102	BCL	C11-C10-C8-C9
10	R	102	BCL	C11-C10-C8-C9
10	S	101	BCL	C11-C10-C8-C9
10	V	102	BCL	C6-C7-C8-C9
10	W	101	BCL	C11-C10-C8-C9
10	Y	101	BCL	C6-C7-C8-C9
10	2	102	BCL	C11-C10-C8-C9
10	3	102	BCL	C11-C10-C8-C9
10	5	102	BCL	C11-C10-C8-C9
10	7	402	BCL	C6-C7-C8-C9
10	9	101	BCL	C11-C10-C8-C9
17	6	104	CDL	CA7-C31-C32-C33
10	L	309	BCL	CBA-CGA-O2A-C1
17	0	101	CDL	C54-C55-C56-C57
9	H	301	PGV	C04-C05-C06-O06
9	L	305	PGV	O12-C04-C05-C06
10	K	102	BCL	C15-C16-C17-C18
9	L	304	PGV	C2-C1-O01-C02
9	M	410	PGV	C2-C1-O01-C02
10	P	101	BCL	C10-C11-C12-C13
10	S	101	BCL	C13-C15-C16-C17
9	L	304	PGV	C01-C02-C03-O11
9	L	305	PGV	C01-C02-C03-O11

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Mol	Chain	Res	Type	Atoms
17	T	103	CDL	C55-C56-C57-C58
9	5	104	PGV	C20-C19-O03-C01
10	2	102	BCL	C4-C3-C5-C6
10	2	102	BCL	C2-C3-C5-C6
10	F	101	BCL	CBA-CGA-O2A-C1
9	F	102	PGV	C5-C6-C7-C8
10	9	101	BCL	C8-C10-C11-C12
16	A	103	I7D	C2-C1-C4-C5
16	I	101	I7D	C3-C1-C4-C5
16	K	101	I7D	C2-C1-C4-C5
16	K	101	I7D	C3-C1-C4-C5
16	N	101	I7D	C2-C1-C4-C5
16	Q	101	I7D	C2-C1-C4-C5
16	R	101	I7D	C2-C1-C4-C5
16	1	101	I7D	C2-C1-C4-C5
16	3	101	I7D	C2-C1-C4-C5
16	4	101	I7D	C2-C1-C4-C5
17	H	303	CDL	CA3-CA4-CA6-OA8
17	H	303	CDL	CB3-CB4-CB6-OB8
17	0	101	CDL	CA3-CA4-CA6-OA8
9	F	102	PGV	O02-C1-O01-C02
9	L	312	PGV	C03-O11-P-O12
9	M	410	PGV	C03-O11-P-O12
9	H	302	PGV	C04-O12-P-O11
17	6	101	CDL	CB3-OB5-PB2-OB2
10	J	101	BCL	C2A-CAA-CBA-CGA
9	H	302	PGV	O01-C02-C03-O11
17	H	303	CDL	OA5-CA3-CA4-OA6
17	6	104	CDL	OA5-CA3-CA4-OA6
9	M	411	PGV	C20-C19-O03-C01
10	F	101	BCL	C16-C17-C18-C19
10	L	309	BCL	C8-C10-C11-C12
10	L	309	BCL	O1A-CGA-O2A-C1
9	D	103	PGV	O03-C01-C02-O01
17	H	303	CDL	OA6-CA4-CA6-OA8
12	7	401	U10	C34-C36-C37-C38
17	6	101	CDL	CA2-C1-CB2-OB2
9	L	304	PGV	O02-C1-O01-C02
10	E	102	BCL	C2-C1-O2A-CGA
10	G	101	BCL	C5-C6-C7-C8
10	M	402	BCL	C11-C10-C8-C9
10	M	403	BCL	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
10	D	102	BCL	C6-C7-C8-C9
10	F	101	BCL	C11-C10-C8-C9
10	K	102	BCL	C11-C10-C8-C9
10	U	101	BCL	C11-C10-C8-C9
10	1	102	BCL	C6-C7-C8-C9
10	4	102	BCL	C11-C10-C8-C9
10	L	309	BCL	C15-C16-C17-C18
10	I	102	BCL	C13-C15-C16-C17
9	H	302	PGV	C02-C03-O11-P
13	1	103	LMT	C1-C2-C3-C4
18	M	409	PEE	C18-C19-C20-C21
9	M	410	PGV	O02-C1-O01-C02
9	C	407	PGV	C2-C1-O01-C02
17	A	101	CDL	C11-CA5-OA6-CA4
17	M	408	CDL	OA5-CA3-CA4-CA6
17	6	101	CDL	OA5-CA3-CA4-CA6
17	0	101	CDL	OB5-CB3-CB4-CB6
13	3	103	LMT	C2-C3-C4-C5
10	B	101	BCL	C6-C7-C8-C10
10	D	102	BCL	C11-C10-C8-C7
10	G	101	BCL	C11-C10-C8-C7
10	I	102	BCL	C6-C7-C8-C10
10	I	102	BCL	C11-C10-C8-C7
10	J	101	BCL	C6-C7-C8-C10
10	J	101	BCL	C11-C10-C8-C7
10	K	102	BCL	C11-C10-C8-C7
10	N	102	BCL	C6-C7-C8-C10
10	O	101	BCL	C11-C10-C8-C7
10	Q	102	BCL	C6-C7-C8-C10
10	Q	102	BCL	C11-C10-C8-C7
10	U	101	BCL	C11-C10-C8-C7
10	W	101	BCL	C11-C10-C8-C7
10	Y	101	BCL	C11-C10-C8-C7
10	5	102	BCL	C11-C10-C8-C7
10	7	402	BCL	C6-C7-C8-C10
10	8	102	BCL	C11-C10-C8-C7
10	0	102	BCL	C11-C10-C8-C7
9	L	311	PGV	C22-C23-C24-C25
17	6	101	CDL	C72-C73-C74-C75
10	J	101	BCL	C16-C17-C18-C19
10	5	102	BCL	C2A-CAA-CBA-CGA
10	T	102	BCL	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
10	P	101	BCL	CBA-CGA-O2A-C1
10	4	102	BCL	C13-C15-C16-C17
9	5	104	PGV	C01-C02-O01-C1
10	L	301	BCL	CAD-CBD-CGD-O2D
10	L	309	BCL	CAD-CBD-CGD-O2D
17	6	104	CDL	CA6-CA4-OA6-CA5
10	3	102	BCL	C10-C11-C12-C13
9	C	407	PGV	C20-C19-O03-C01
12	L	303	U10	C12-C11-C9-C10
10	J	101	BCL	C8-C10-C11-C12
10	W	101	BCL	C13-C15-C16-C17
17	6	104	CDL	C1-CA2-OA2-PA1
9	H	301	PGV	O01-C02-C03-O11
17	M	408	CDL	OB5-CB3-CB4-OB6
17	6	101	CDL	OA5-CA3-CA4-OA6
17	0	101	CDL	OB5-CB3-CB4-OB6
10	R	102	BCL	CBA-CGA-O2A-C1
9	C	407	PGV	O02-C1-O01-C02
17	A	101	CDL	OA7-CA5-OA6-CA4
10	M	403	BCL	CHA-CBD-CGD-O1D
10	F	101	BCL	O1A-CGA-O2A-C1
10	1	102	BCL	C15-C16-C17-C18
9	C	407	PGV	O03-C01-C02-O01
9	L	312	PGV	O03-C01-C02-O01
17	M	408	CDL	OB6-CB4-CB6-OB8
17	2	101	CDL	OA6-CA4-CA6-OA8
17	0	101	CDL	OA6-CA4-CA6-OA8
10	J	101	BCL	C5-C6-C7-C8
9	5	104	PGV	O04-C19-O03-C01
9	D	103	PGV	C22-C23-C24-C25
17	2	101	CDL	CA7-C31-C32-C33
10	J	101	BCL	C6-C7-C8-C9
10	J	101	BCL	C11-C10-C8-C9
10	N	102	BCL	C6-C7-C8-C9
9	C	406	PGV	C21-C22-C23-C24
17	H	303	CDL	C15-C16-C17-C18
10	P	101	BCL	O1A-CGA-O2A-C1
17	6	104	CDL	C11-C12-C13-C14
17	T	103	CDL	C71-C72-C73-C74
10	A	102	BCL	C1A-C2A-CAA-CBA
10	K	102	BCL	C1A-C2A-CAA-CBA
10	M	402	BCL	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
9	5	103	PGV	C25-C26-C27-C28
9	5	103	PGV	C03-O11-P-O12
17	A	101	CDL	CB3-OB5-PB2-OB2
17	T	103	CDL	CA3-OA5-PA1-OA2
17	T	103	CDL	CB2-OB2-PB2-OB5
17	6	101	CDL	CA3-OA5-PA1-OA2
17	M	408	CDL	C14-C15-C16-C17
17	T	103	CDL	C72-C73-C74-C75
9	C	405	PGV	C03-O11-P-O13
9	C	406	PGV	C03-O11-P-O13
9	L	304	PGV	C03-O11-P-O13
9	L	310	PGV	C03-O11-P-O13
9	L	311	PGV	C03-O11-P-O13
9	L	311	PGV	C03-O11-P-O14
9	L	312	PGV	C03-O11-P-O13
9	M	410	PGV	C04-O12-P-O13
9	H	302	PGV	C03-O11-P-O14
9	K	103	PGV	C03-O11-P-O13
17	M	407	CDL	CA3-OA5-PA1-OA3
17	M	408	CDL	CA2-OA2-PA1-OA4
17	A	101	CDL	CA2-OA2-PA1-OA4
17	T	103	CDL	CB3-OB5-PB2-OB3
17	2	101	CDL	CB2-OB2-PB2-OB3
17	2	101	CDL	CB3-OB5-PB2-OB3
17	6	101	CDL	CA2-OA2-PA1-OA4
17	6	104	CDL	CB2-OB2-PB2-OB4
17	6	104	CDL	CB3-OB5-PB2-OB3
17	0	101	CDL	CB2-OB2-PB2-OB4
10	6	103	BCL	C10-C11-C12-C13
10	E	102	BCL	CBA-CGA-O2A-C1
9	L	310	PGV	C01-C02-C03-O11
9	H	301	PGV	C01-C02-C03-O11
17	M	408	CDL	OB5-CB3-CB4-CB6
17	A	101	CDL	OB5-CB3-CB4-CB6
10	J	101	BCL	C3-C5-C6-C7
17	0	101	CDL	C56-C57-C58-C59
9	M	411	PGV	O04-C19-O03-C01
10	D	102	BCL	C16-C17-C18-C19
10	7	402	BCL	C5-C6-C7-C8
9	5	103	PGV	C1-C2-C3-C4
9	L	305	PGV	O01-C02-C03-O11
9	L	310	PGV	O01-C02-C03-O11

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Mol	Chain	Res	Type	Atoms
9	M	410	PGV	O01-C02-C03-O11
9	F	102	PGV	O01-C02-C03-O11
10	M	402	BCL	C6-C7-C8-C10
10	E	102	BCL	C11-C10-C8-C7
10	F	101	BCL	C2C-C3C-CAC-CBC
10	O	101	BCL	C11-C12-C13-C15
10	S	101	BCL	C6-C7-C8-C10
10	W	101	BCL	C6-C7-C8-C10
10	3	102	BCL	C6-C7-C8-C10
10	4	102	BCL	C3A-C2A-CAA-CBA
10	0	102	BCL	C6-C7-C8-C10
17	A	101	CDL	OB5-CB3-CB4-OB6
17	2	101	CDL	OA5-CA3-CA4-OA6
10	Y	101	BCL	C13-C15-C16-C17
10	R	102	BCL	O1A-CGA-O2A-C1
17	M	407	CDL	CA3-CA4-CA6-OA8
17	2	101	CDL	CA3-CA4-CA6-OA8
9	C	405	PGV	O03-C01-C02-O01
17	6	101	CDL	OA6-CA4-CA6-OA8
11	L	302	BPH	O2A-C1-C2-C3
9	H	302	PGV	C7-C8-C9-C10
10	L	301	BCL	C3-C5-C6-C7
10	A	102	BCL	C3-C5-C6-C7
9	C	407	PGV	O04-C19-O03-C01
10	7	402	BCL	C10-C11-C12-C13
10	N	102	BCL	CBA-CGA-O2A-C1
10	A	102	BCL	C11-C10-C8-C9
10	A	102	BCL	C11-C12-C13-C14
10	Q	102	BCL	C6-C7-C8-C9
10	Y	101	BCL	C11-C10-C8-C9
10	0	102	BCL	C11-C10-C8-C9
10	E	102	BCL	O1A-CGA-O2A-C1
9	L	312	PGV	C5-C6-C7-C8
17	M	408	CDL	CA5-C11-C12-C13
16	V	101	I7D	C4-C5-C6-C7
17	6	101	CDL	C52-C53-C54-C55
13	I	103	LMT	C6-C7-C8-C9
10	N	102	BCL	O1A-CGA-O2A-C1
12	L	303	U10	C12-C11-C9-C8
9	L	305	PGV	C23-C24-C25-C26
9	C	407	PGV	C2-C3-C4-C5
17	H	303	CDL	CA6-CA4-OA6-CA5

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Mol	Chain	Res	Type	Atoms
17	0	101	CDL	CA6-CA4-OA6-CA5
9	M	410	PGV	C01-C02-C03-O11
17	T	103	CDL	OA5-CA3-CA4-CA6
17	6	101	CDL	OB7-CB5-OB6-CB4
10	D	102	BCL	C2-C1-O2A-CGA
10	O	101	BCL	C2-C1-O2A-CGA
10	V	102	BCL	C2-C1-O2A-CGA
10	8	102	BCL	C2-C1-O2A-CGA
9	L	304	PGV	O01-C02-C03-O11
9	D	103	PGV	O01-C02-C03-O11
10	R	102	BCL	C16-C17-C18-C19
17	6	101	CDL	C51-CB5-OB6-CB4
18	M	409	PEE	C16-C17-C18-C19
16	8	101	I7D	C16-C17-C19-C20
9	C	406	PGV	C04-O12-P-O11
9	H	301	PGV	C03-O11-P-O12
9	5	101	PGV	C03-O11-P-O12
9	5	104	PGV	C04-O12-P-O11
17	M	407	CDL	CB2-OB2-PB2-OB5
17	M	407	CDL	CB3-OB5-PB2-OB2
17	M	408	CDL	CB2-OB2-PB2-OB5
17	H	303	CDL	CA2-OA2-PA1-OA5
17	H	303	CDL	CA3-OA5-PA1-OA2
17	H	303	CDL	CB3-OB5-PB2-OB2
17	A	101	CDL	CB2-OB2-PB2-OB5
17	2	101	CDL	CA2-OA2-PA1-OA5
17	2	101	CDL	CA3-OA5-PA1-OA2
18	M	409	PEE	C4-O4P-P-O3P
9	5	103	PGV	C04-O12-P-O13
10	L	301	BCL	C15-C16-C17-C18
11	L	302	BPH	CHA-CBD-CGD-O2D
9	C	406	PGV	O03-C01-C02-C03
9	D	103	PGV	O03-C01-C02-C03
17	T	103	CDL	C54-C55-C56-C57
10	F	101	BCL	C11-C10-C8-C7
10	6	103	BCL	C11-C10-C8-C7
10	M	402	BCL	C6-C7-C8-C9
10	E	102	BCL	C11-C10-C8-C9
10	I	102	BCL	C6-C7-C8-C9
10	P	101	BCL	C6-C7-C8-C9
10	S	101	BCL	C6-C7-C8-C9
10	Z	101	BCL	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
10	5	102	BCL	C6-C7-C8-C9
10	0	102	BCL	C6-C7-C8-C9
17	T	103	CDL	C31-CA7-OA8-CA6
10	Z	101	BCL	C8-C10-C11-C12
12	L	306	U10	C5-C4-O4-C4M
17	6	104	CDL	C35-C36-C37-C38
13	I	103	LMT	O1'-C1-C2-C3
17	T	103	CDL	OA9-CA7-OA8-CA6
11	L	302	BPH	C16-C17-C18-C20
10	J	101	BCL	CBA-CGA-O2A-C1
17	0	101	CDL	CB4-CB3-OB5-PB2
9	K	103	PGV	O03-C19-C20-C21
18	M	409	PEE	C36-C37-C38-C39
18	M	409	PEE	C38-C39-C40-C41
10	L	309	BCL	C10-C11-C12-C13
10	A	102	BCL	C15-C16-C17-C18
10	0	102	BCL	C15-C16-C17-C18
11	M	404	BPH	C3-C5-C6-C7
17	M	408	CDL	CB2-C1-CA2-OA2
10	A	102	BCL	C16-C17-C18-C19
17	2	101	CDL	C55-C56-C57-C58
10	D	102	BCL	C5-C6-C7-C8
10	D	102	BCL	C16-C17-C18-C20
17	6	104	CDL	C71-C72-C73-C74
9	L	304	PGV	C22-C23-C24-C25
9	H	301	PGV	C4-C5-C6-C7
9	5	103	PGV	C21-C22-C23-C24
17	H	303	CDL	C13-C14-C15-C16
9	K	103	PGV	C19-C20-C21-C22
9	5	103	PGV	C5-C6-C7-C8
10	J	101	BCL	O1A-CGA-O2A-C1
17	6	101	CDL	C32-C33-C34-C35
10	Y	101	BCL	C2-C1-O2A-CGA
10	0	102	BCL	C2-C1-O2A-CGA
9	L	310	PGV	C28-C29-C30-C31
10	F	101	BCL	C16-C17-C18-C20
10	K	102	BCL	C3A-C2A-CAA-CBA
8	C	401	HEC	CAA-CBA-CGA-O1A
8	C	402	HEC	CAA-CBA-CGA-O1A
8	C	404	HEC	CAD-CBD-CGD-O1D
9	5	101	PGV	C2-C3-C4-C5
16	I	101	I7D	C2-C1-C4-C5

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Mol	Chain	Res	Type	Atoms
17	0	101	CDL	CA2-C1-CB2-OB2
9	K	103	PGV	C20-C21-C22-C23
17	M	408	CDL	O1-C1-CA2-OA2
17	0	101	CDL	C53-C54-C55-C56
10	2	102	BCL	C8-C10-C11-C12
8	C	401	HEC	CAA-CBA-CGA-O2A
17	M	408	CDL	CA6-CA4-OA6-CA5
17	T	103	CDL	CA6-CA4-OA6-CA5
18	M	409	PEE	C3-C2-O2-C10
10	G	101	BCL	C1A-C2A-CAA-CBA
10	O	101	BCL	C1A-C2A-CAA-CBA
10	4	102	BCL	C1A-C2A-CAA-CBA
10	A	102	BCL	C11-C10-C8-C7
10	O	101	BCL	C5-C6-C7-C8
8	C	404	HEC	CAD-CBD-CGD-O2D
9	L	305	PGV	C30-C31-C32-C33
9	C	406	PGV	C1-C2-C3-C4
9	L	311	PGV	C02-C03-O11-P
9	M	411	PGV	C22-C23-C24-C25
9	5	101	PGV	O01-C02-C03-O11
9	D	103	PGV	C01-C02-C03-O11
17	H	303	CDL	OA5-CA3-CA4-CA6
16	M	406	I7D	C4-C5-C6-O6
16	V	101	I7D	C4-C5-C6-O6
8	C	402	HEC	CAA-CBA-CGA-O2A
17	6	101	CDL	C12-C13-C14-C15
10	4	102	BCL	C3-C5-C6-C7
9	L	311	PGV	O02-C1-O01-C02
16	N	101	I7D	C35-C36-C37-C38
9	5	103	PGV	C4-C5-C6-C7
18	M	409	PEE	C17-C18-C19-C20
12	L	307	U10	C9-C11-C12-C13
10	J	101	BCL	C2-C1-O2A-CGA
10	U	101	BCL	C2-C1-O2A-CGA
10	6	103	BCL	C2-C1-O2A-CGA
10	9	101	BCL	C2-C1-O2A-CGA
10	2	102	BCL	C2C-C3C-CAC-CBC
10	L	309	BCL	C11-C12-C13-C14
10	E	102	BCL	C11-C12-C13-C14
10	O	101	BCL	C6-C7-C8-C9
17	6	104	CDL	C32-C33-C34-C35
10	F	101	BCL	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
13	I	103	LMT	C4-C5-C6-C7
17	0	101	CDL	C36-C37-C38-C39
10	M	402	BCL	C15-C16-C17-C18
9	M	410	PGV	C14-C15-C16-C17
17	0	101	CDL	C51-C52-C53-C54
10	E	102	BCL	C4-C3-C5-C6
10	R	102	BCL	C4-C3-C5-C6
16	8	101	I7D	C27-C28-C30-C31
10	A	102	BCL	C8-C10-C11-C12
10	G	101	BCL	C16-C17-C18-C19
10	R	102	BCL	C16-C17-C18-C20
10	F	101	BCL	C13-C15-C16-C17
10	F	101	BCL	C2A-CAA-CBA-CGA
12	L	303	U10	C5-C4-O4-C4M
9	H	301	PGV	C21-C22-C23-C24
9	H	302	PGV	C3-C4-C5-C6
10	X	102	BCL	C4-C3-C5-C6
17	6	101	CDL	C31-C32-C33-C34
9	L	310	PGV	C31-C32-C33-C34
17	6	101	CDL	C73-C74-C75-C76
9	L	311	PGV	O03-C01-C02-O01
17	T	103	CDL	OA6-CA4-CA6-OA8
13	L	308	LMT	C1-C2-C3-C4
10	K	102	BCL	C8-C10-C11-C12
10	8	102	BCL	CAA-CBA-CGA-O2A
16	V	101	I7D	C31-C32-C33-C34
16	8	101	I7D	C18-C17-C19-C20
10	P	101	BCL	C4-C3-C5-C6
10	V	102	BCL	C4-C3-C5-C6
10	E	102	BCL	C2-C3-C5-C6
10	O	101	BCL	C11-C12-C13-C14
10	W	101	BCL	C6-C7-C8-C9
10	3	102	BCL	C6-C7-C8-C9
10	G	101	BCL	C3A-C2A-CAA-CBA
17	6	101	CDL	C72-C71-CB7-OB8
10	M	402	BCL	CAD-CBD-CGD-O2D
10	9	101	BCL	C15-C16-C17-C18
9	C	405	PGV	C4-C5-C6-C7
10	G	101	BCL	C4-C3-C5-C6
10	Y	101	BCL	C4-C3-C5-C6
10	Z	101	BCL	C4-C3-C5-C6
12	7	401	U10	C30-C29-C31-C32

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Mol	Chain	Res	Type	Atoms
9	5	101	PGV	O03-C19-C20-C21
10	L	309	BCL	CAA-CBA-CGA-O2A
17	0	101	CDL	C12-C11-CA5-OA6
8	C	402	HEC	CAD-CBD-CGD-O2D
10	Y	101	BCL	C5-C6-C7-C8
10	S	101	BCL	O2A-C1-C2-C3
10	W	101	BCL	O2A-C1-C2-C3
10	3	102	BCL	O2A-C1-C2-C3
10	5	102	BCL	O2A-C1-C2-C3
9	H	301	PGV	C5-C6-C7-C8
10	O	101	BCL	O1D-CGD-O2D-CED
10	L	301	BCL	C16-C17-C18-C19
10	4	102	BCL	C16-C17-C18-C19
17	6	101	CDL	O1-C1-CB2-OB2
10	X	102	BCL	C2-C3-C5-C6
16	M	406	I7D	C3-C1-O1-C1M
8	C	402	HEC	CAD-CBD-CGD-O1D
9	L	310	PGV	C30-C31-C32-C33
9	M	411	PGV	O03-C19-C20-C21
9	H	302	PGV	O03-C01-C02-O01
9	5	103	PGV	C2-C3-C4-C5
17	H	303	CDL	C18-C19-C20-C21
10	L	301	BCL	C2A-CAA-CBA-CGA
9	L	304	PGV	O05-C05-C06-O06
9	H	301	PGV	O05-C05-C06-O06
16	X	101	I7D	C36-C37-C38-C39
9	L	311	PGV	C20-C19-O03-C01
12	7	401	U10	C40-C39-C41-C42
10	L	309	BCL	C11-C12-C13-C15
10	F	101	BCL	C6-C7-C8-C10
10	Y	101	BCL	C12-C13-C15-C16
10	Z	101	BCL	C11-C10-C8-C7
10	A	102	BCL	C16-C17-C18-C20
17	H	303	CDL	C32-C31-CA7-OA8
8	C	403	HEC	CAA-CBA-CGA-O2A
16	K	101	I7D	C1-C4-C5-C6
16	N	101	I7D	C1-C4-C5-C6
16	3	101	I7D	C1-C4-C5-C6
16	4	101	I7D	C1-C4-C5-C6
17	H	303	CDL	OA9-CA7-OA8-CA6
9	L	311	PGV	C2-C1-O01-C02
12	7	401	U10	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
9	M	411	PGV	C2-C3-C4-C5
17	H	303	CDL	C31-CA7-OA8-CA6
16	8	101	I7D	C29-C28-C30-C31
10	Q	102	BCL	C8-C10-C11-C12
13	L	308	LMT	C4'-C5'-C6'-O6'
10	F	101	BCL	C1A-C2A-CAA-CBA
10	R	102	BCL	C1A-C2A-CAA-CBA
10	U	101	BCL	C1A-C2A-CAA-CBA
10	L	309	BCL	CAA-CBA-CGA-O1A
10	8	102	BCL	CAA-CBA-CGA-O1A
17	0	101	CDL	C12-C11-CA5-OA7
18	M	409	PEE	O2-C10-C11-C12
10	4	102	BCL	C2A-CAA-CBA-CGA
17	M	408	CDL	CA3-OA5-PA1-OA2
10	J	101	BCL	C16-C17-C18-C20
17	6	101	CDL	C72-C71-CB7-OB9
10	0	102	BCL	C13-C15-C16-C17
9	M	411	PGV	O04-C19-C20-C21
9	5	101	PGV	O04-C19-C20-C21
9	M	410	PGV	C03-O11-P-O13
17	M	407	CDL	CB2-OB2-PB2-OB3
17	M	407	CDL	CB3-OB5-PB2-OB3
17	M	408	CDL	CB2-OB2-PB2-OB3
17	2	101	CDL	CA2-OA2-PA1-OA3
17	2	101	CDL	CA3-OA5-PA1-OA3
9	5	101	PGV	C01-C02-C03-O11
10	V	102	BCL	C8-C10-C11-C12
9	K	103	PGV	O02-C1-O01-C02
17	M	408	CDL	C53-C54-C55-C56
10	E	102	BCL	C13-C15-C16-C17
8	C	401	HEC	CAD-CBD-CGD-O2D
12	7	401	U10	C45-C44-C46-C47
12	7	401	U10	C2-C3-O3-C3M
10	R	102	BCL	C2-C3-C5-C6
17	A	101	CDL	C53-C54-C55-C56
9	C	406	PGV	C01-C02-O01-C1
9	C	406	PGV	C03-C02-O01-C1
10	E	102	BCL	CAD-CBD-CGD-O1D
10	U	101	BCL	CAD-CBD-CGD-O1D
10	2	102	BCL	CAD-CBD-CGD-O1D
17	T	103	CDL	C34-C35-C36-C37
17	0	101	CDL	O1-C1-CB2-OB2

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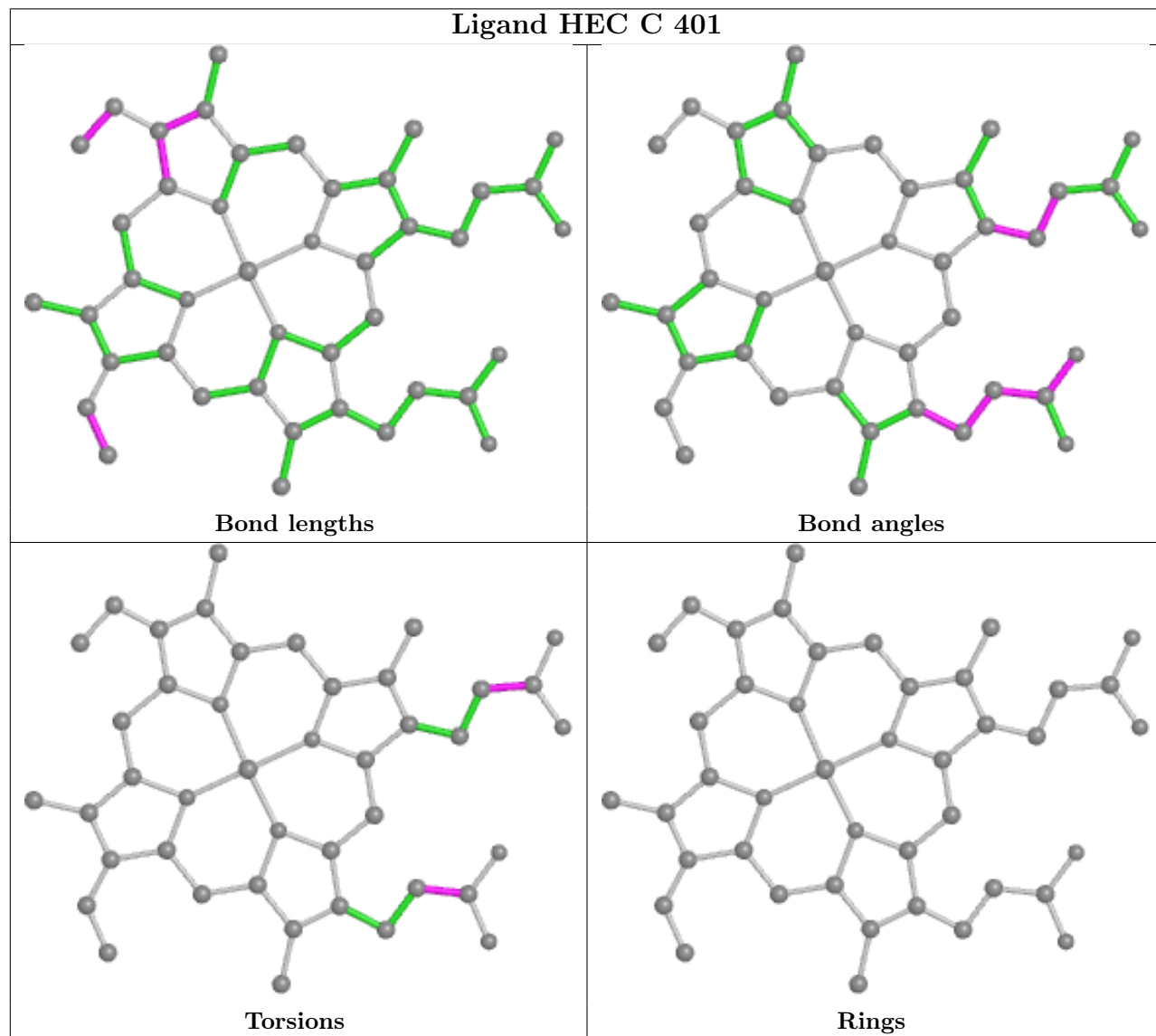
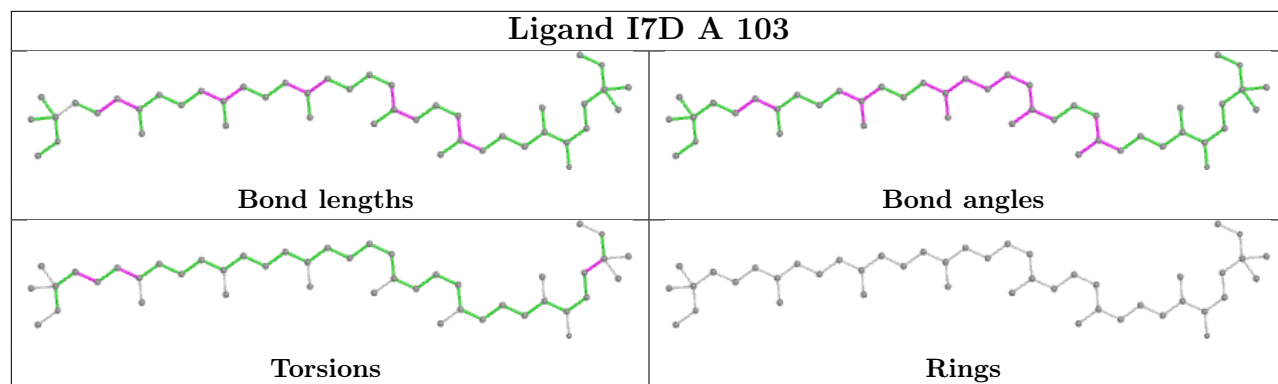
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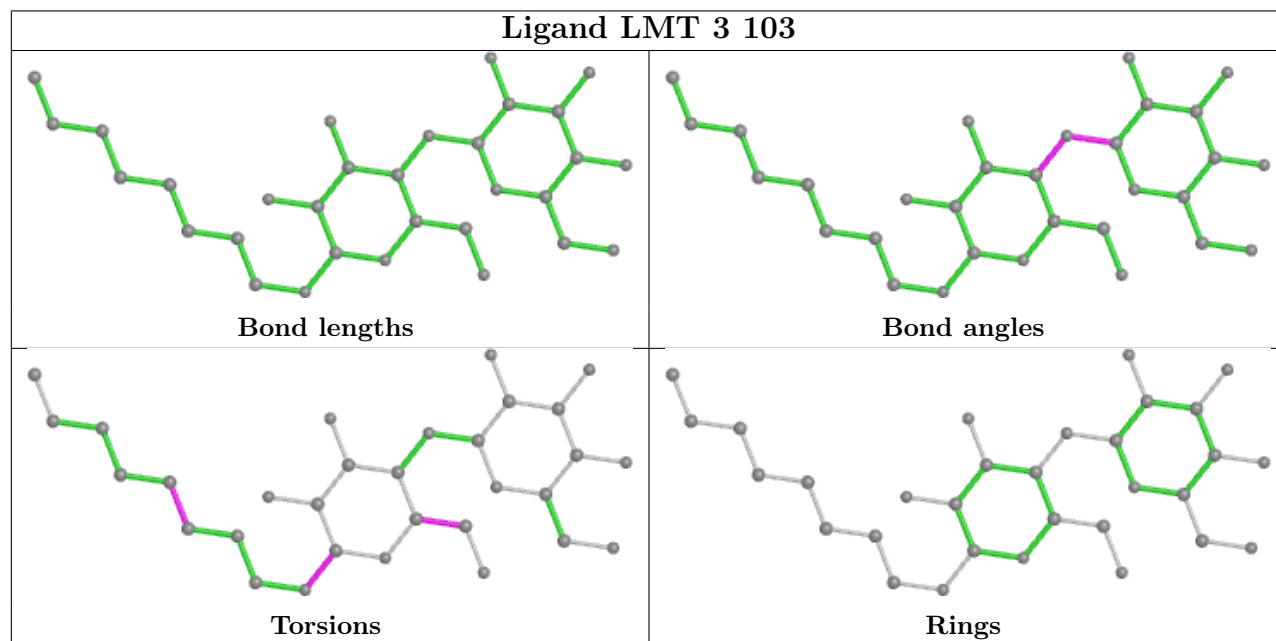
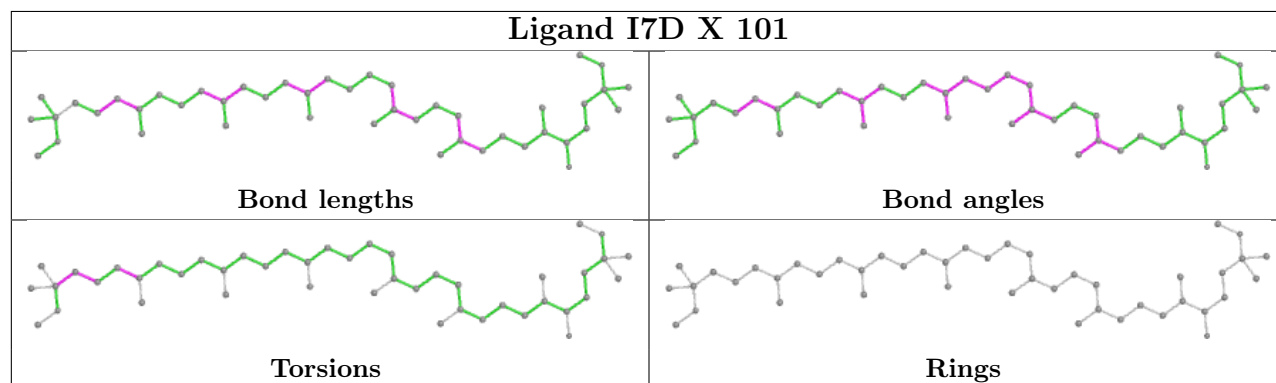
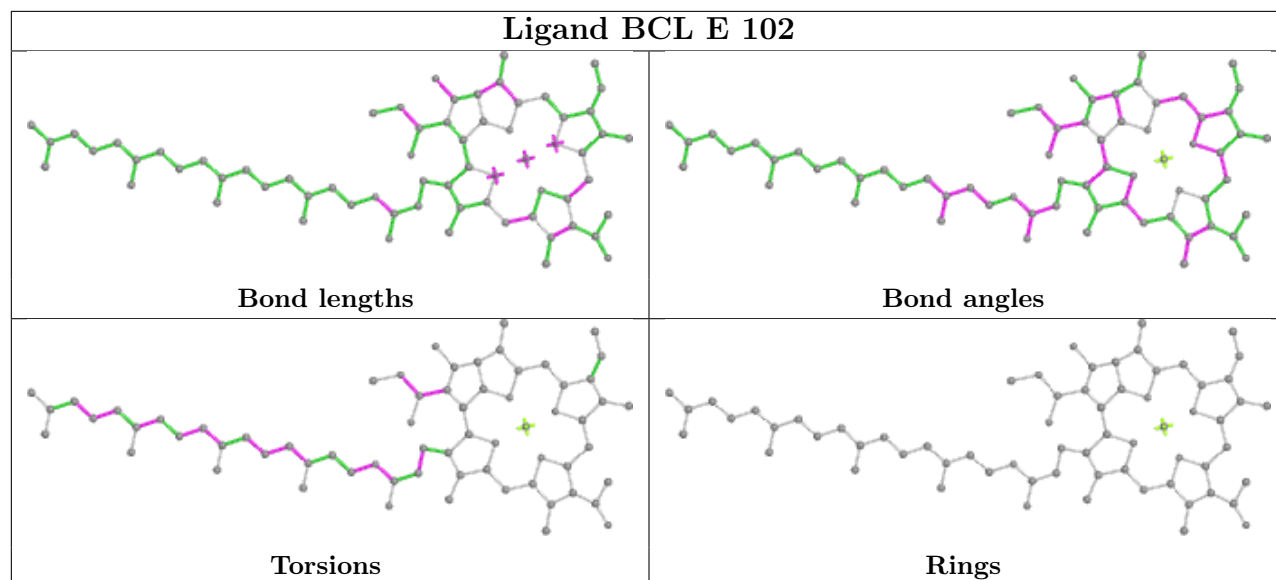
Mol	Chain	Res	Type	Atoms
10	L	309	BCL	C11-C10-C8-C9
10	Y	101	BCL	C14-C13-C15-C16
10	3	102	BCL	C11-C12-C13-C14
10	5	102	BCL	C14-C13-C15-C16
8	C	401	HEC	CAD-CBD-CGD-O1D
9	L	311	PGV	O04-C19-O03-C01
8	C	403	HEC	CAA-CBA-CGA-O1A
10	A	102	BCL	C11-C12-C13-C15
10	B	101	BCL	C11-C10-C8-C7
10	O	101	BCL	C3A-C2A-CAA-CBA
10	S	101	BCL	C2C-C3C-CAC-CBC
10	Z	101	BCL	C11-C12-C13-C15
10	6	103	BCL	C2C-C3C-CAC-CBC
11	L	302	BPH	C11-C12-C13-C15
18	M	409	PEE	O4-C10-C11-C12
9	M	410	PGV	C25-C26-C27-C28
9	H	302	PGV	O01-C1-C2-C3
10	I	102	BCL	CAA-CBA-CGA-O2A
9	C	406	PGV	C23-C24-C25-C26
13	I	103	LMT	C2-C3-C4-C5
9	5	104	PGV	O03-C19-C20-C21
17	H	303	CDL	C32-C31-CA7-OA9
17	M	408	CDL	O1-C1-CB2-OB2
13	I	103	LMT	C4B-C5B-C6B-O6B
17	A	101	CDL	C75-C76-C77-C78
10	I	102	BCL	CAA-CBA-CGA-O1A

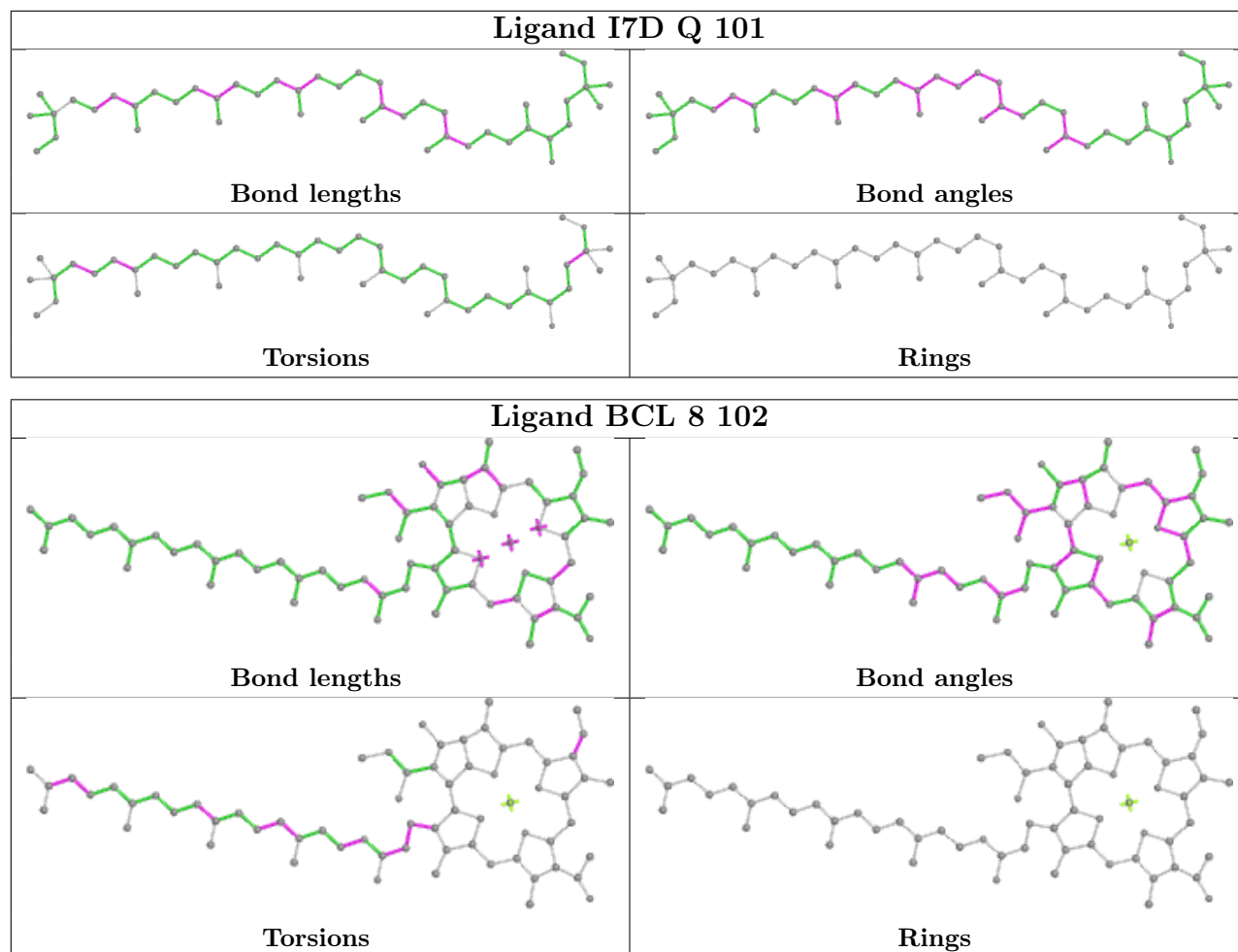
There are no ring outliers.

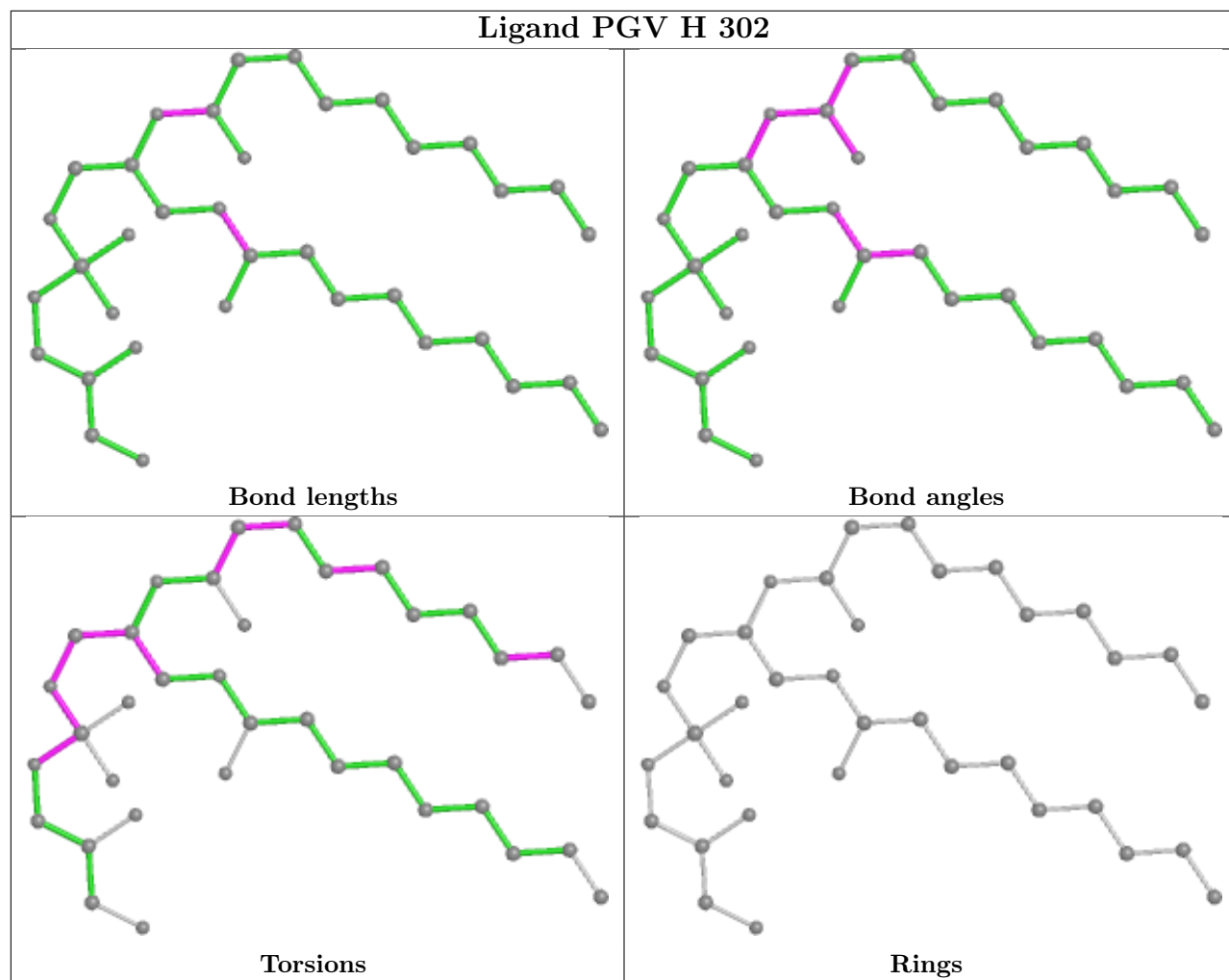
No monomer is involved in short contacts.

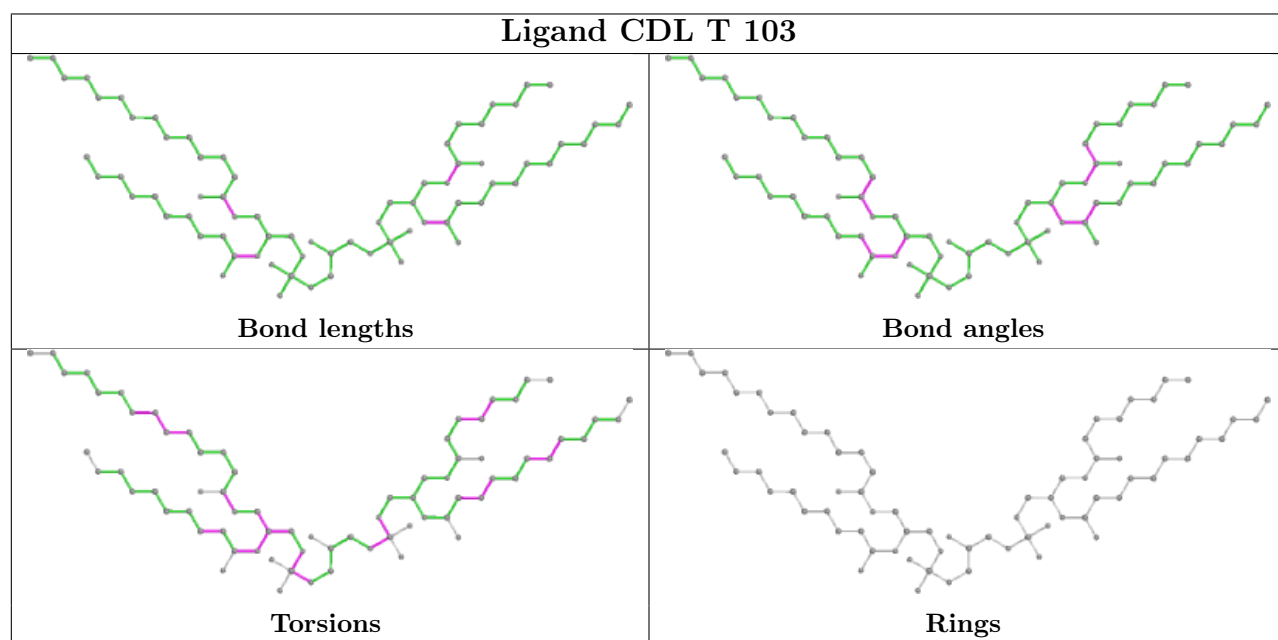
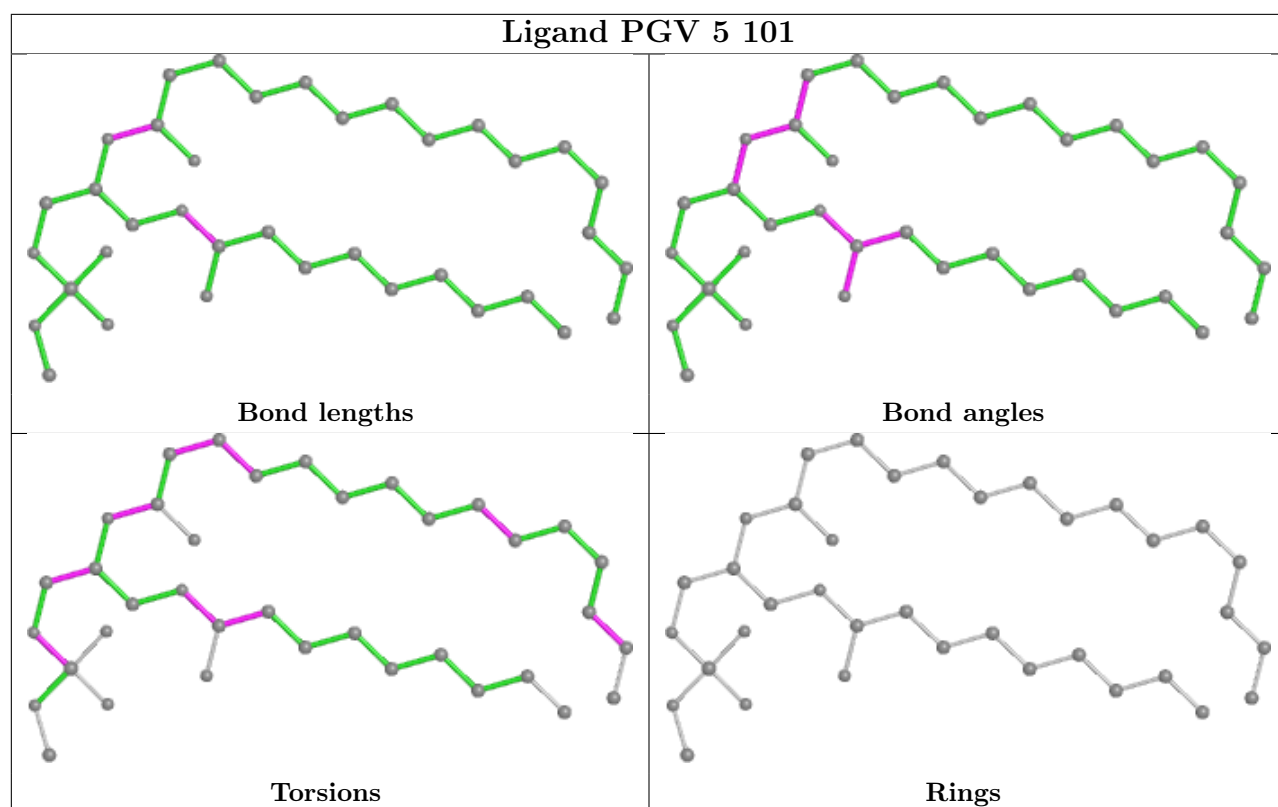
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

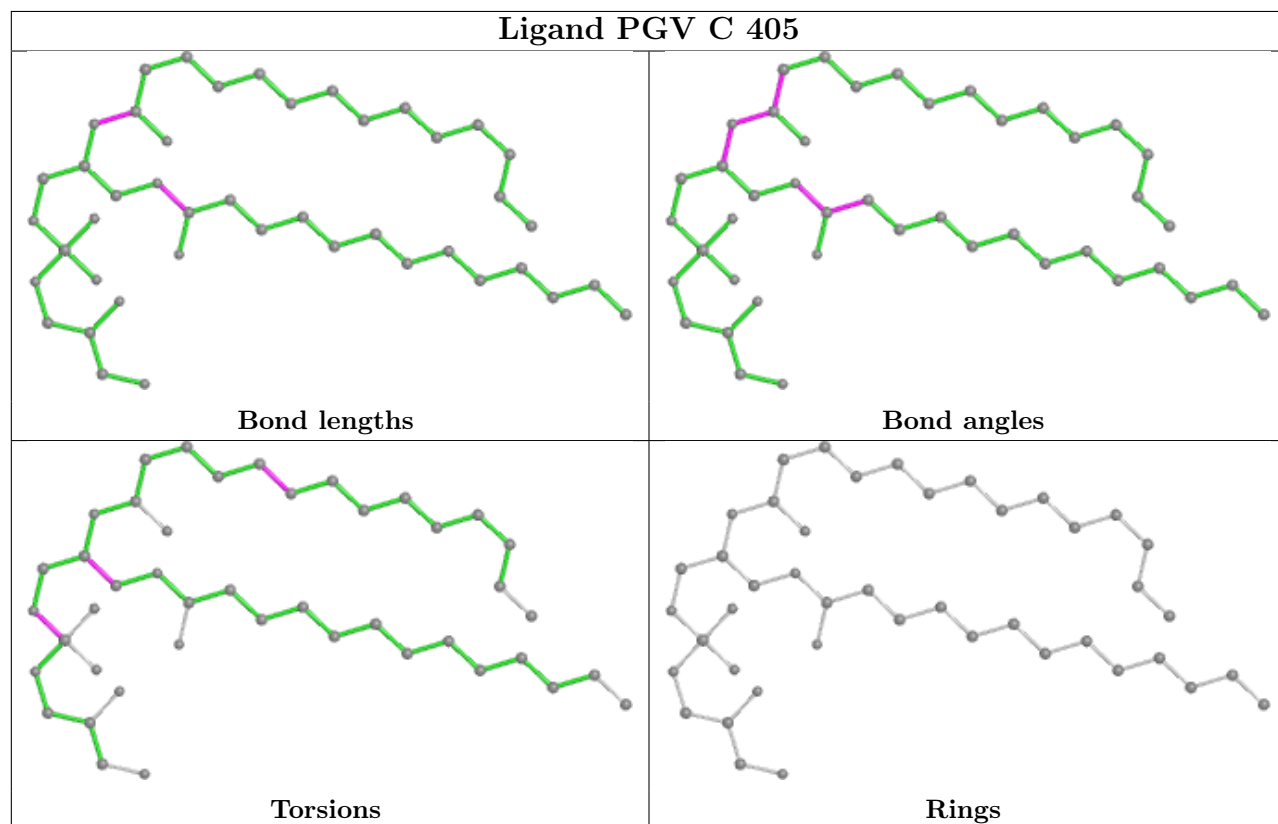
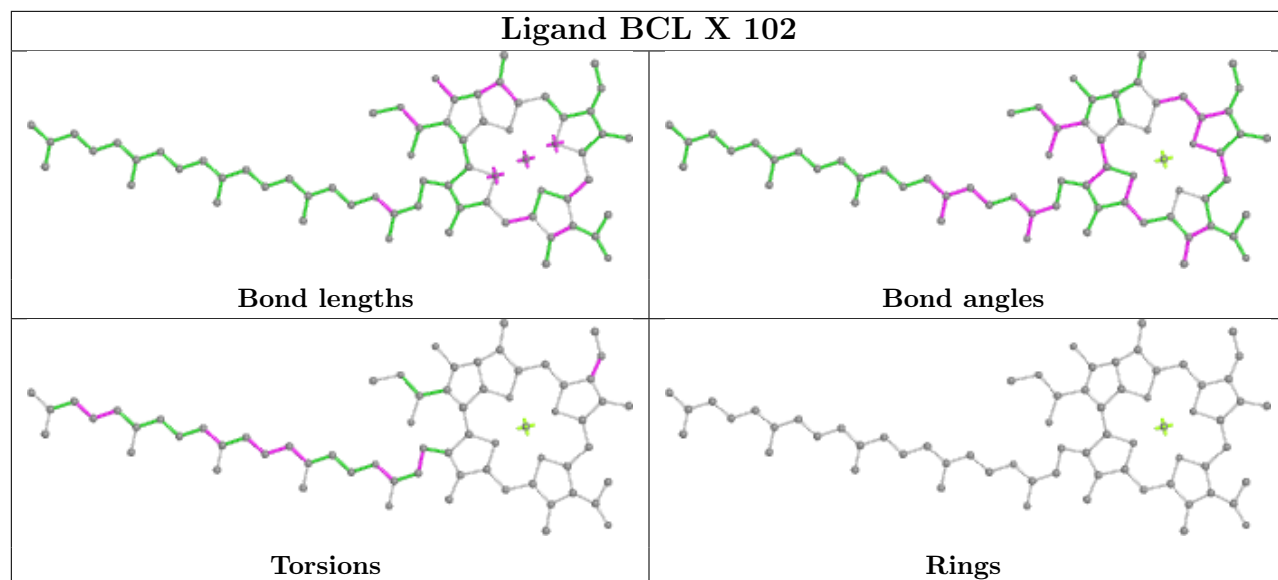


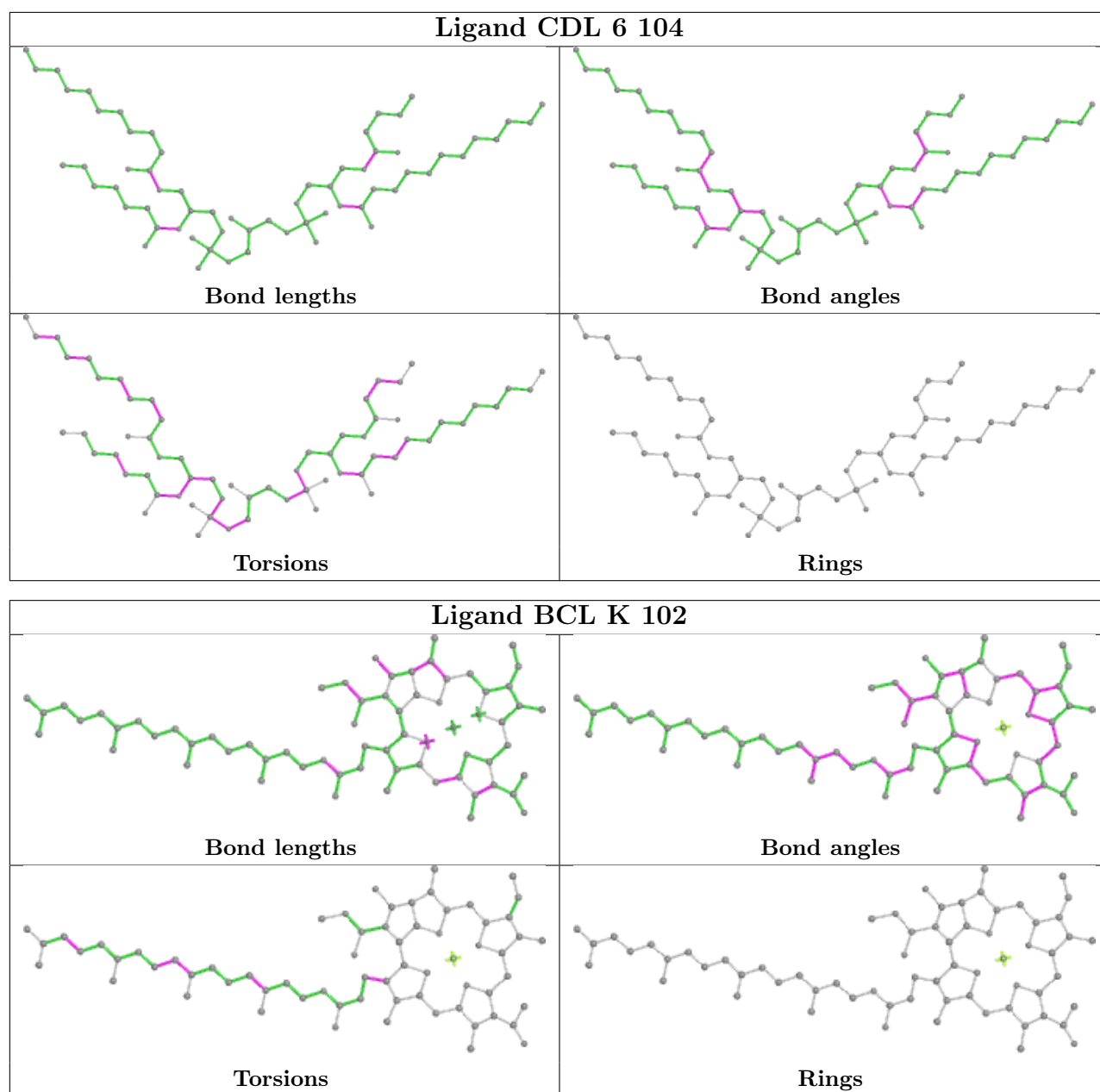


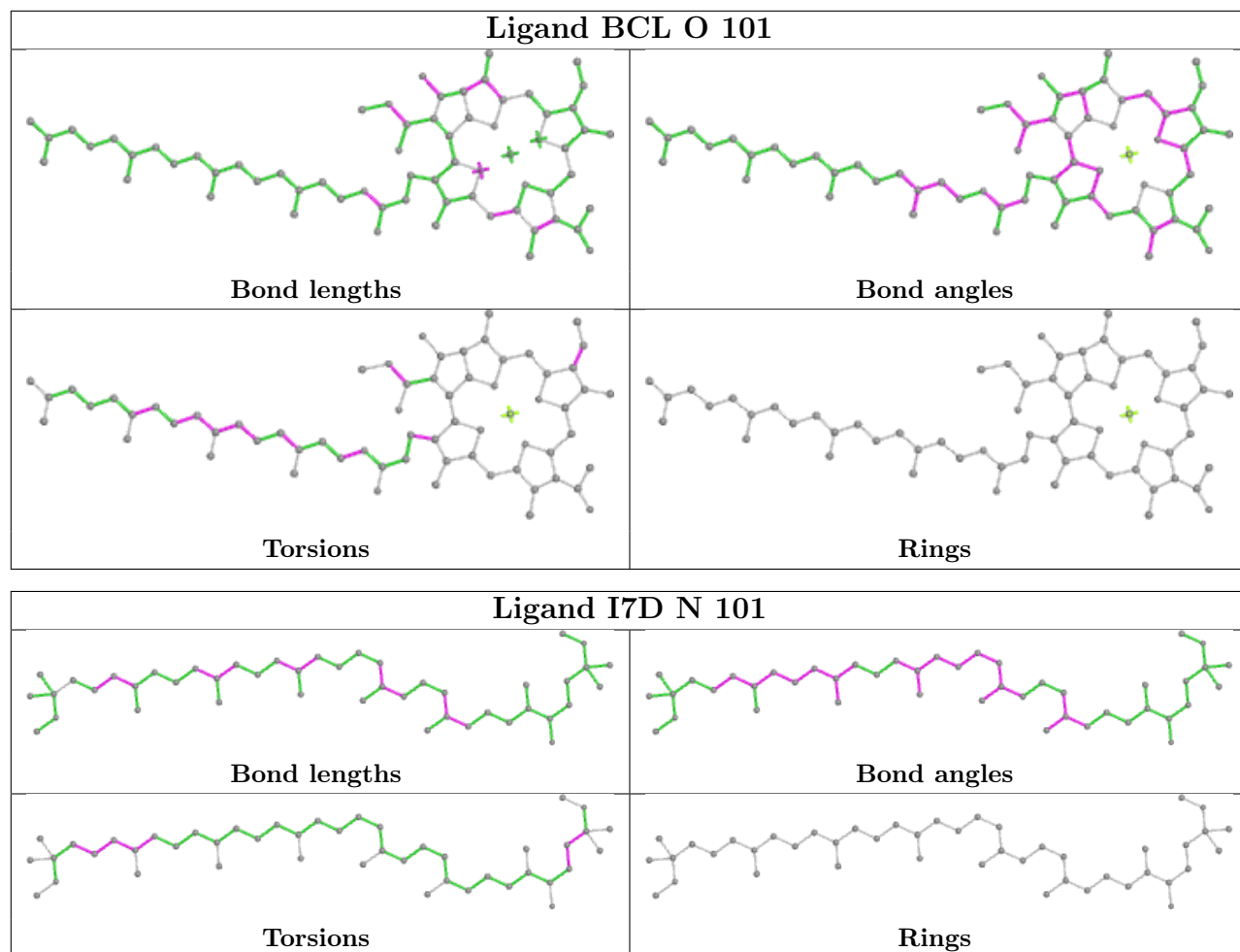


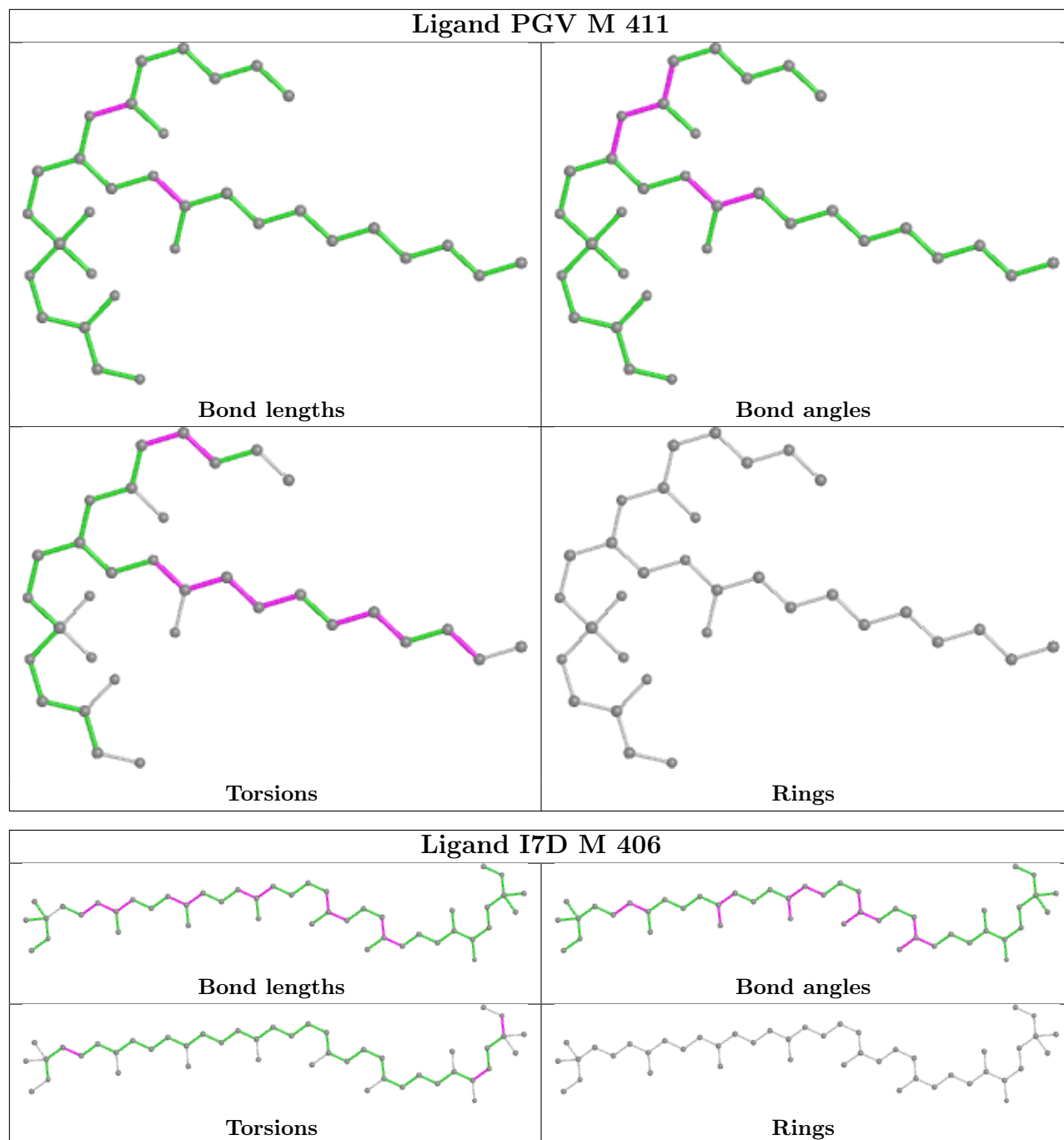


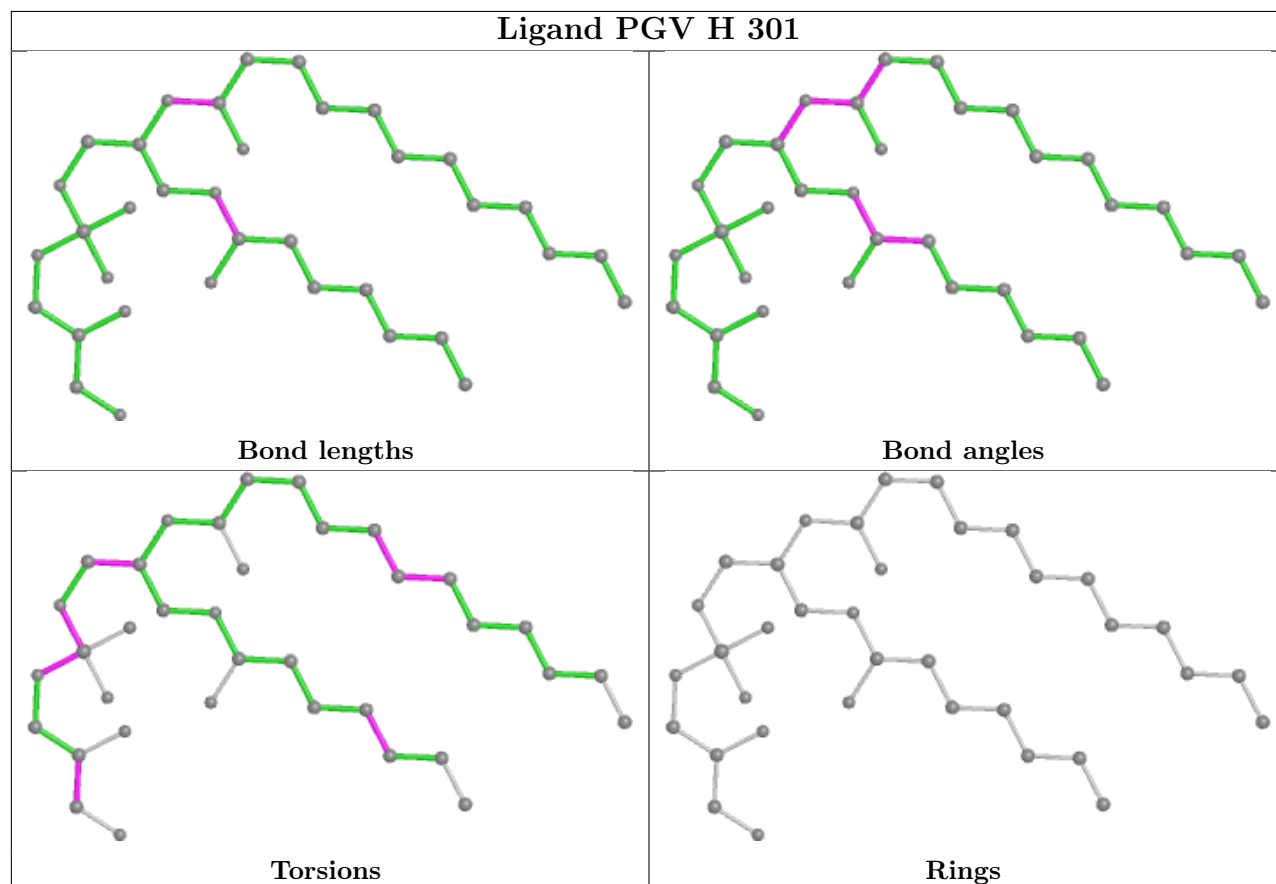
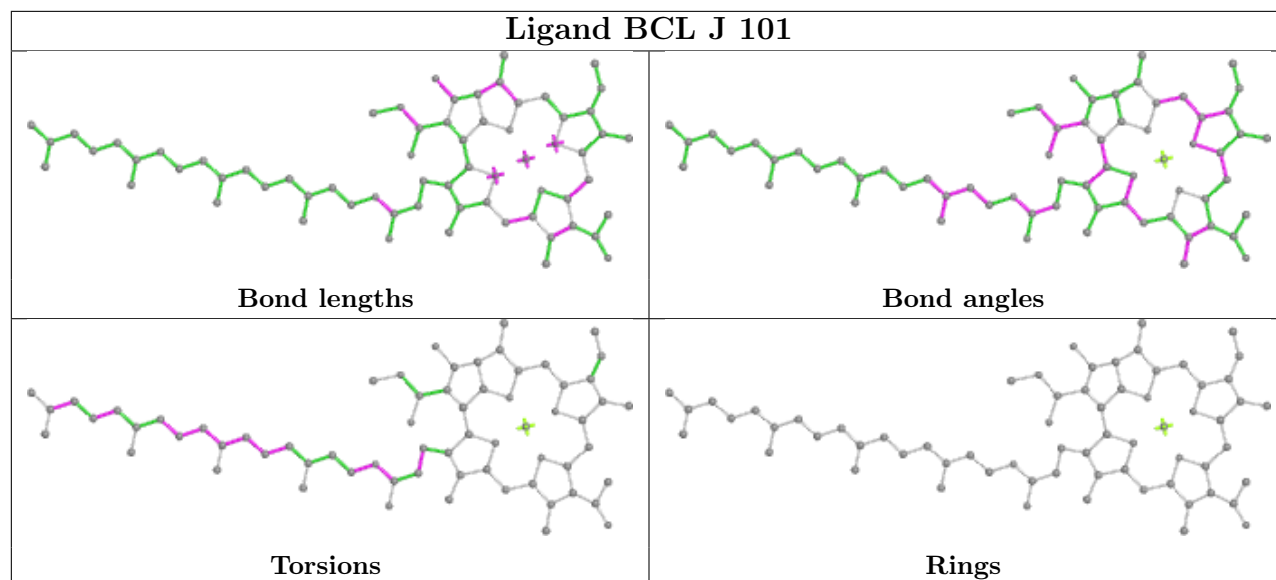


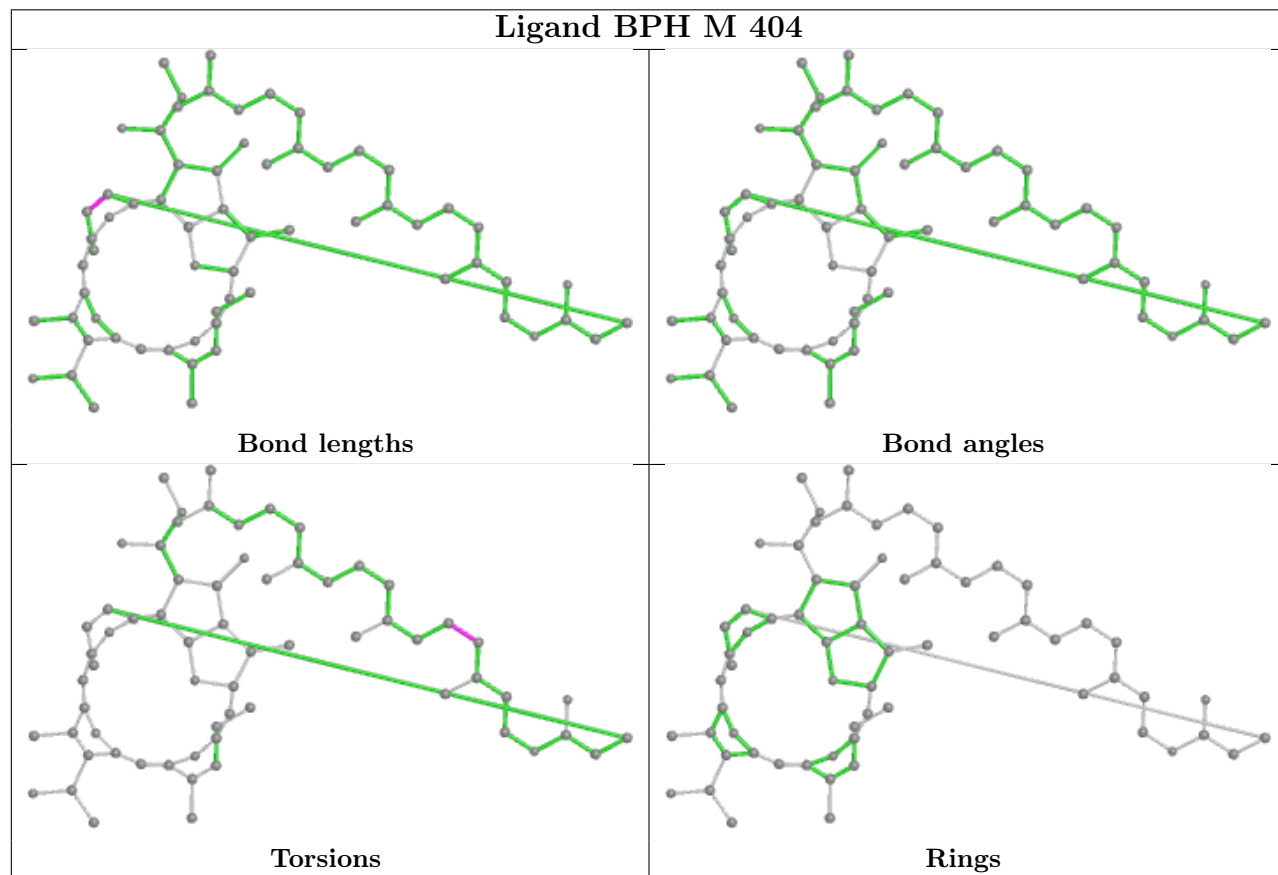
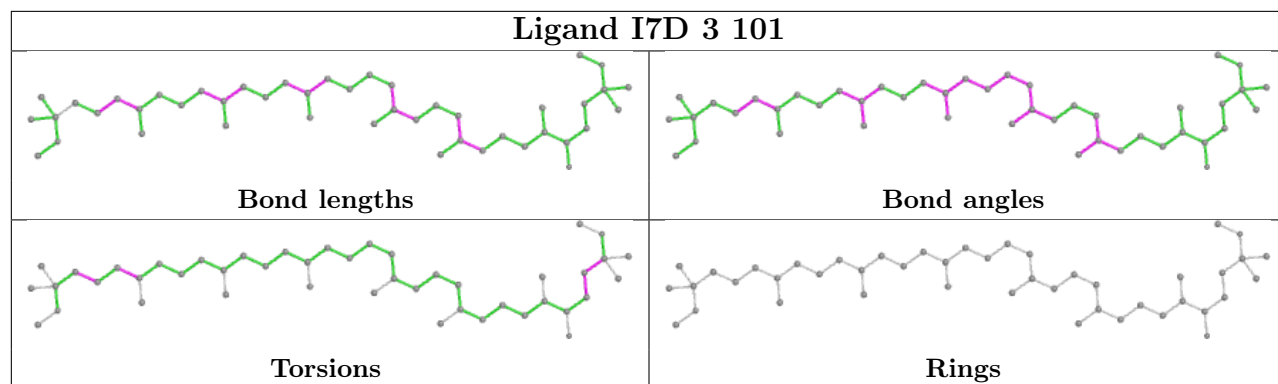


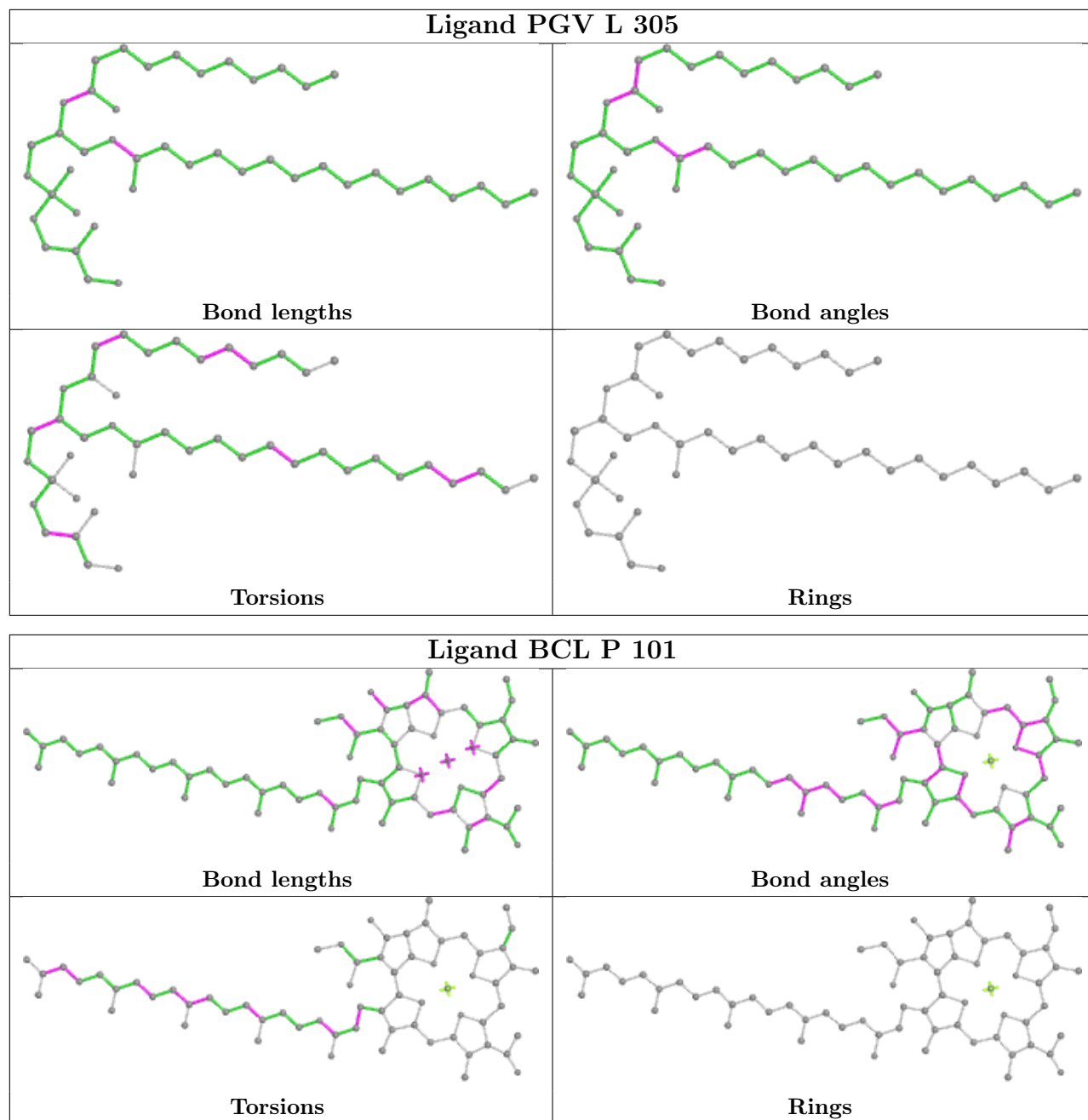


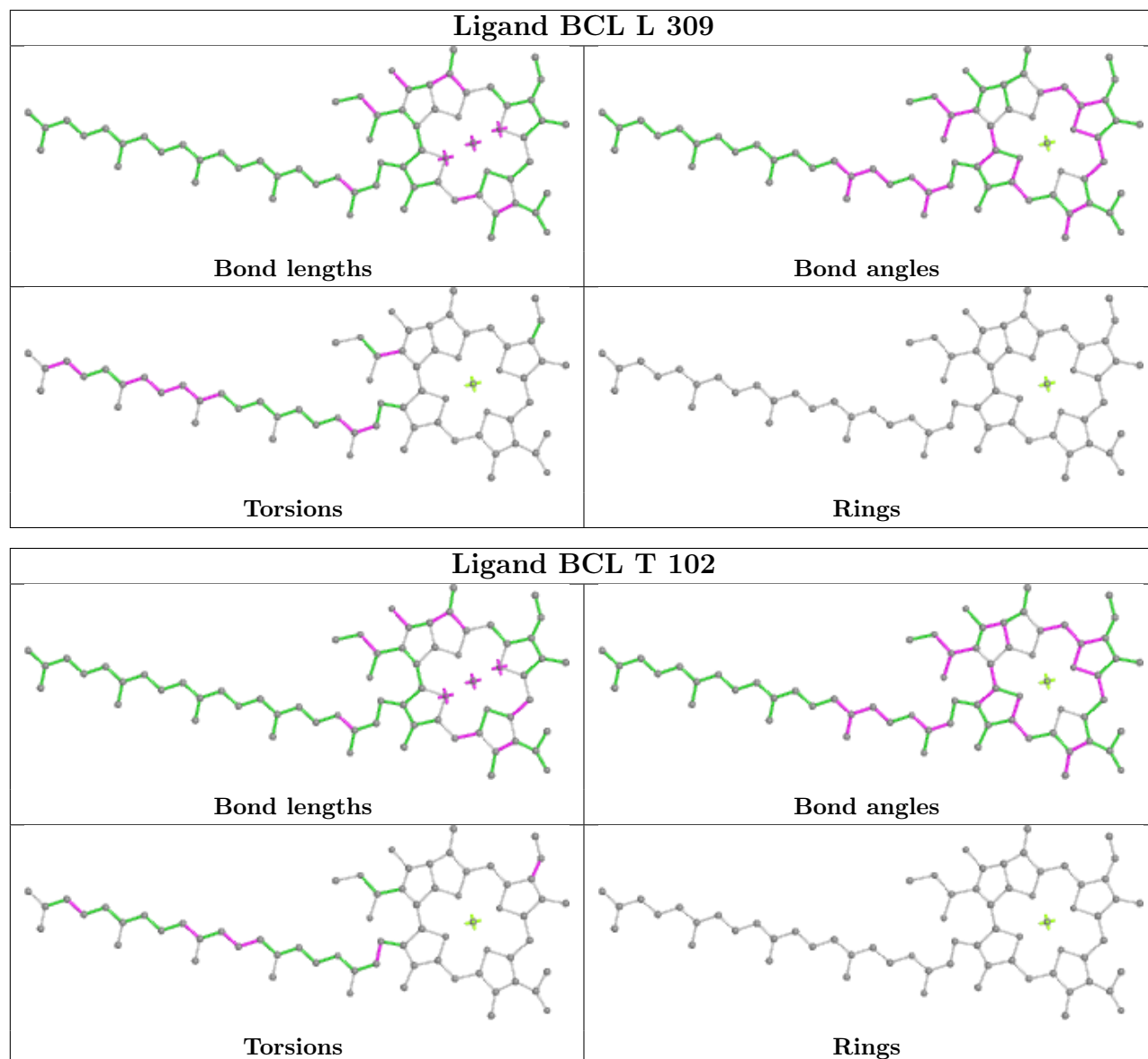


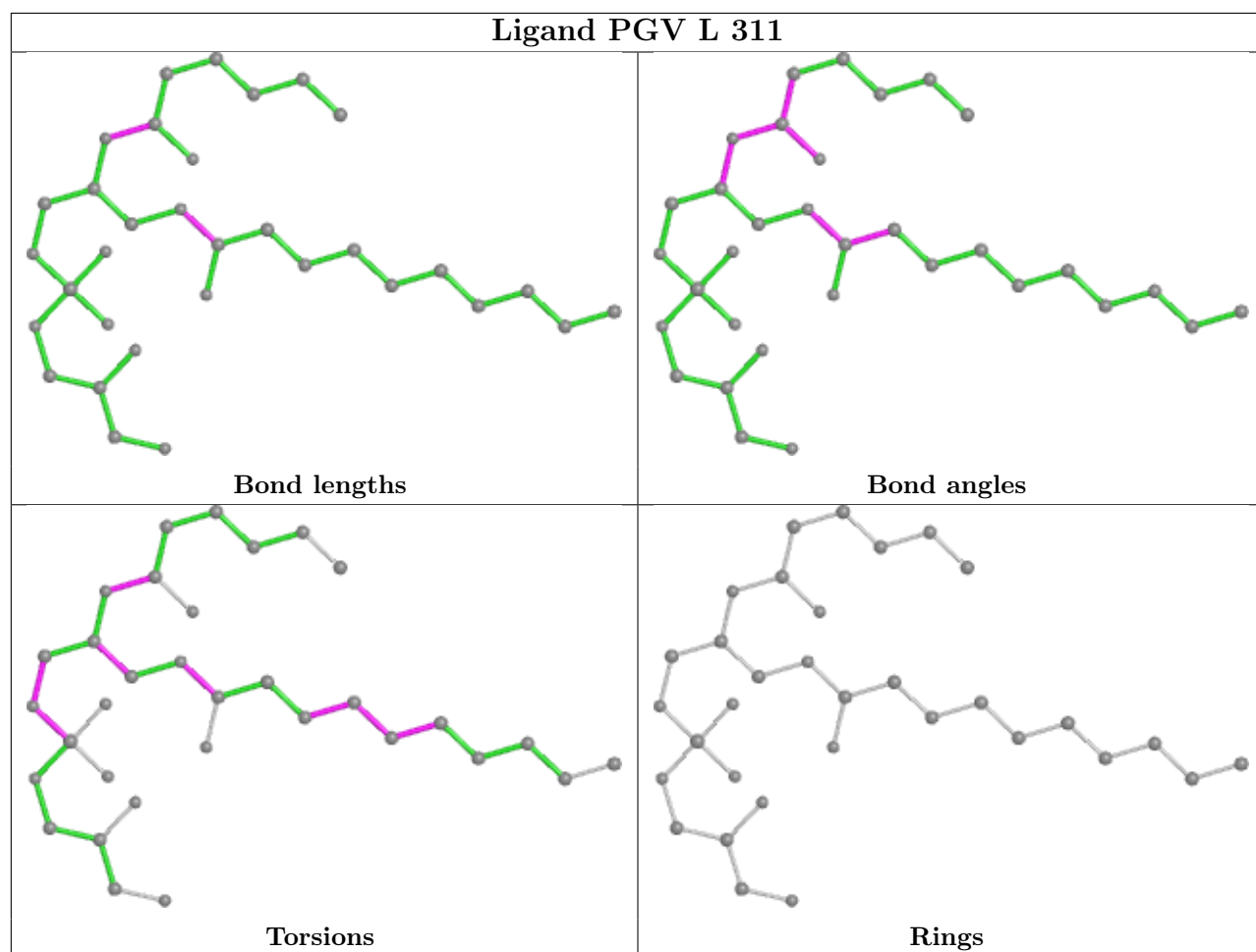
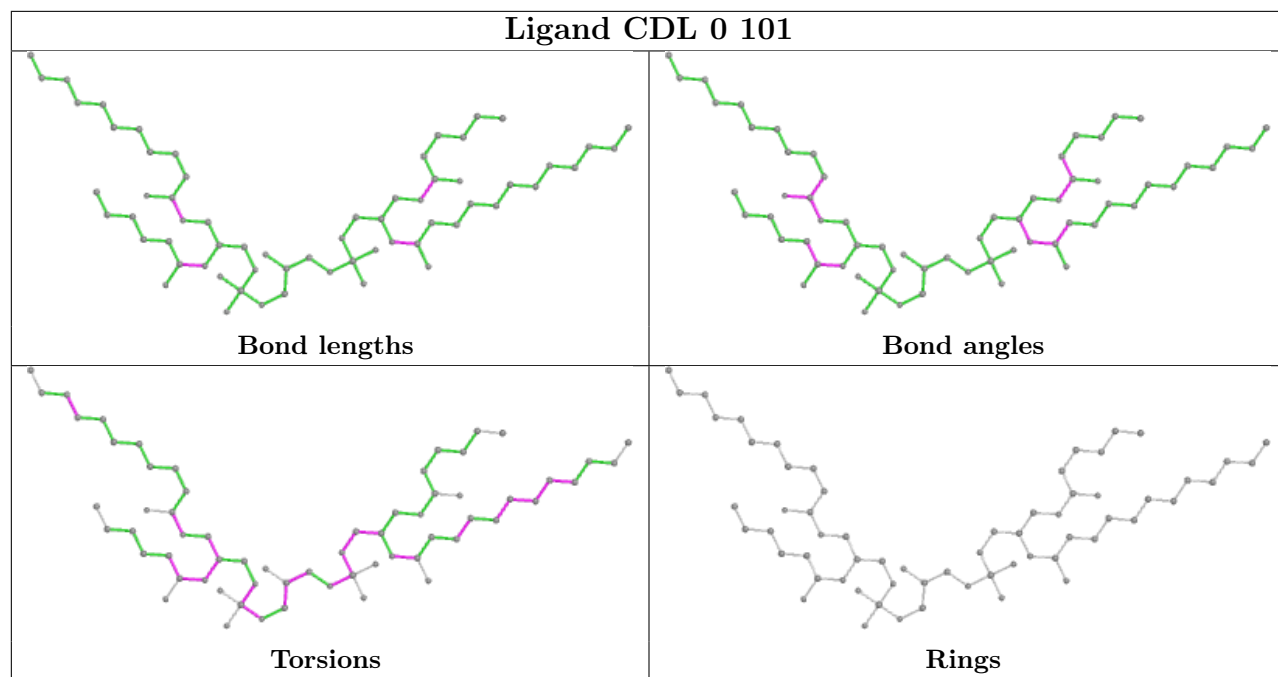


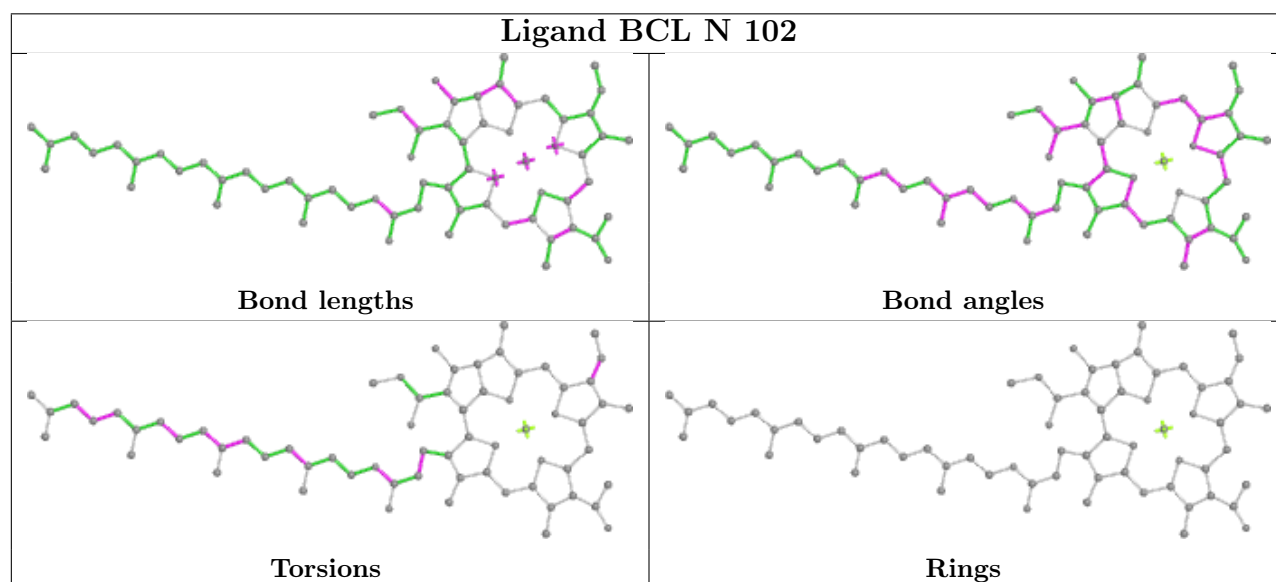
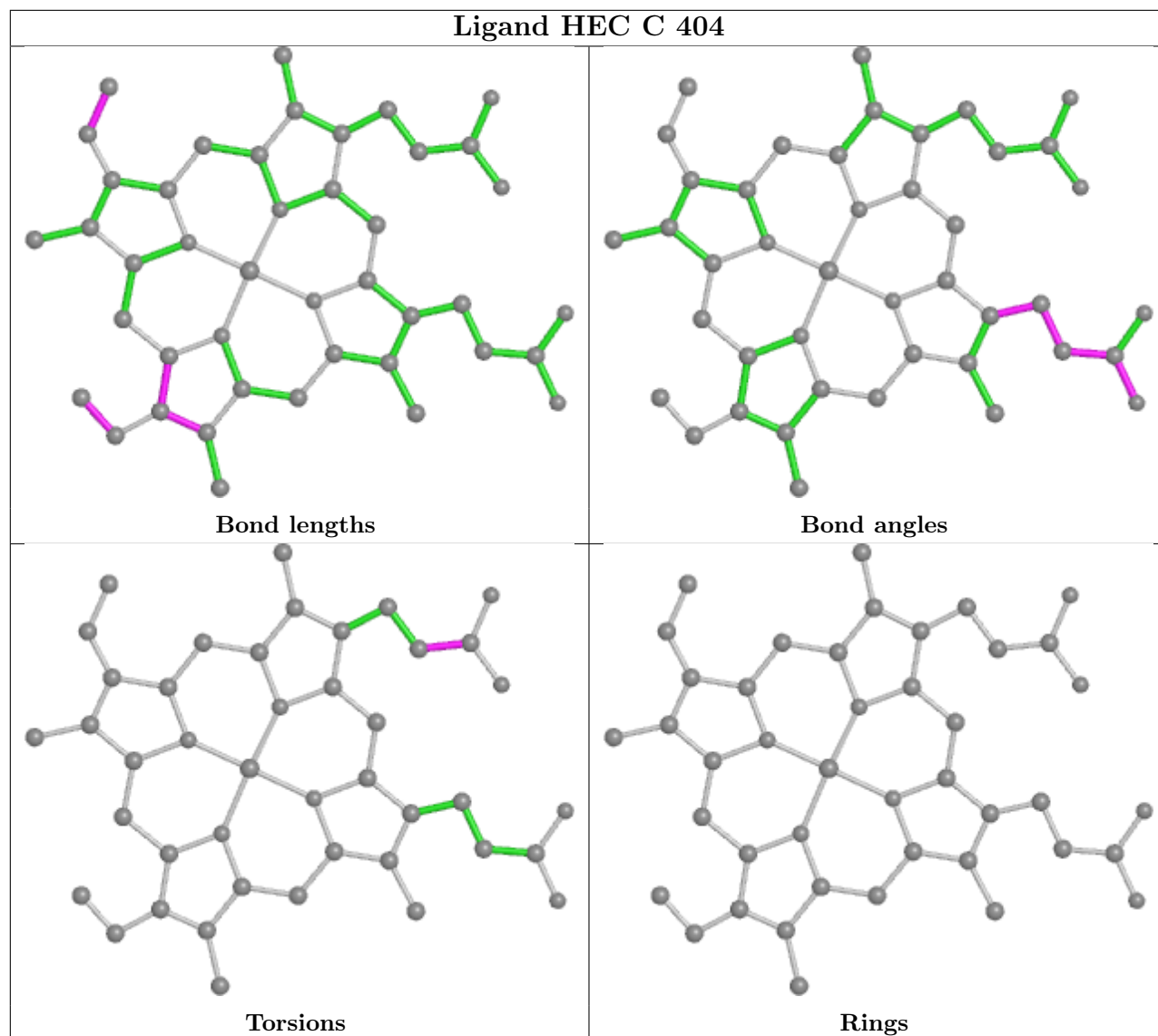


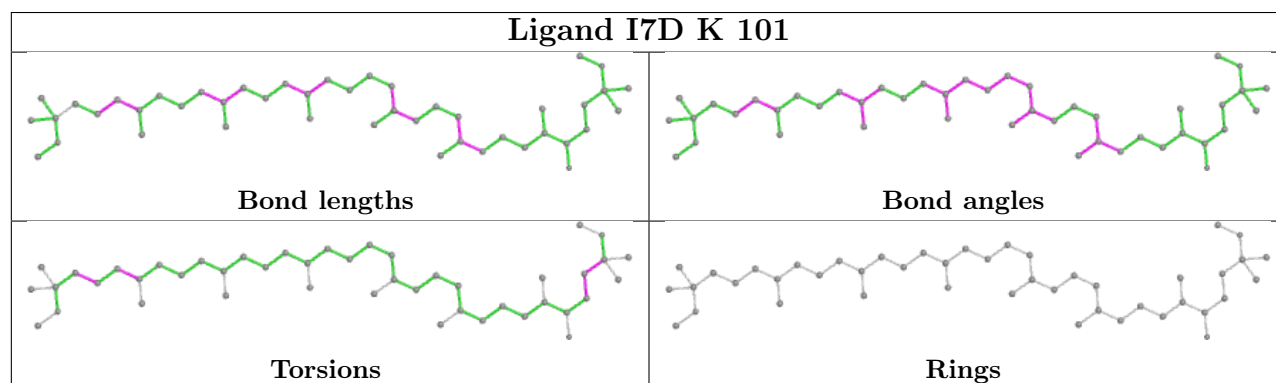
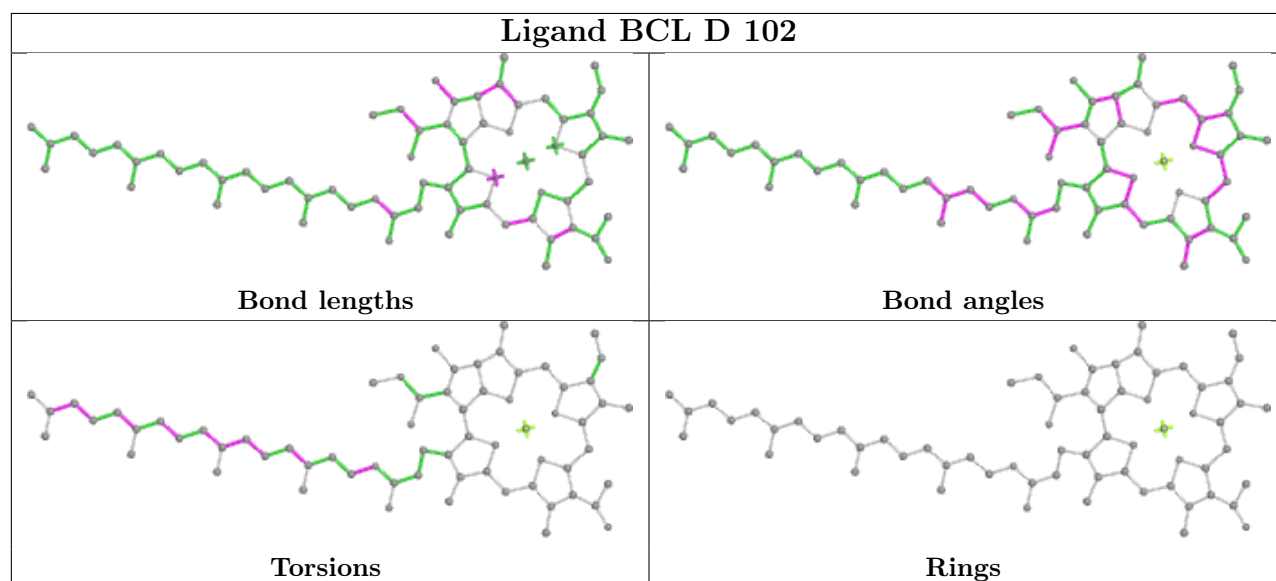
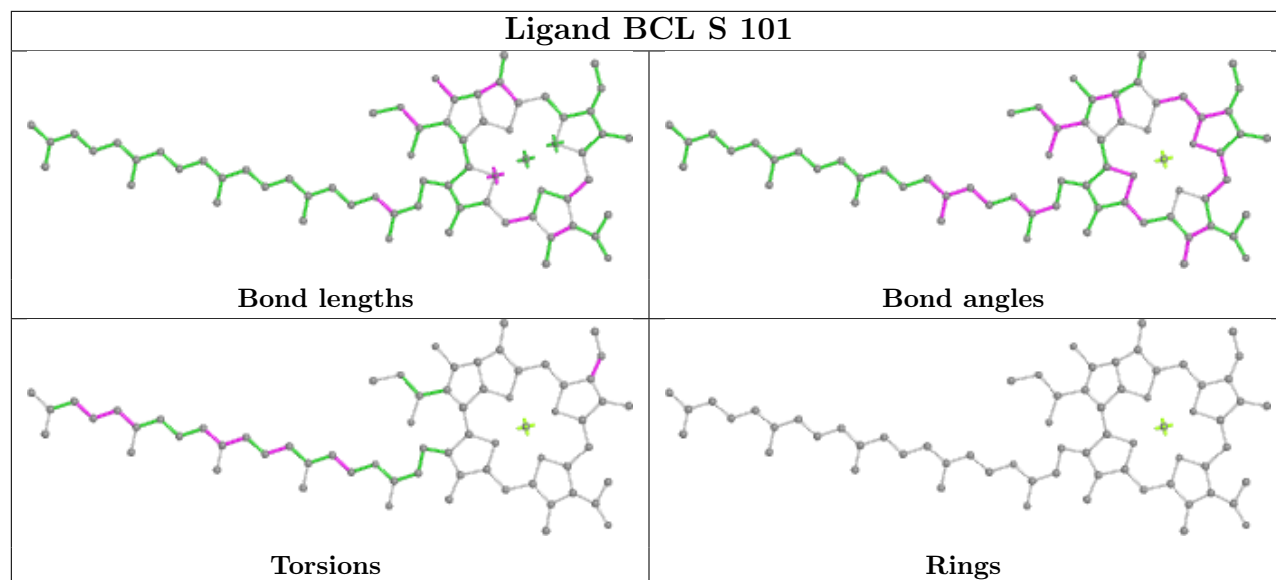


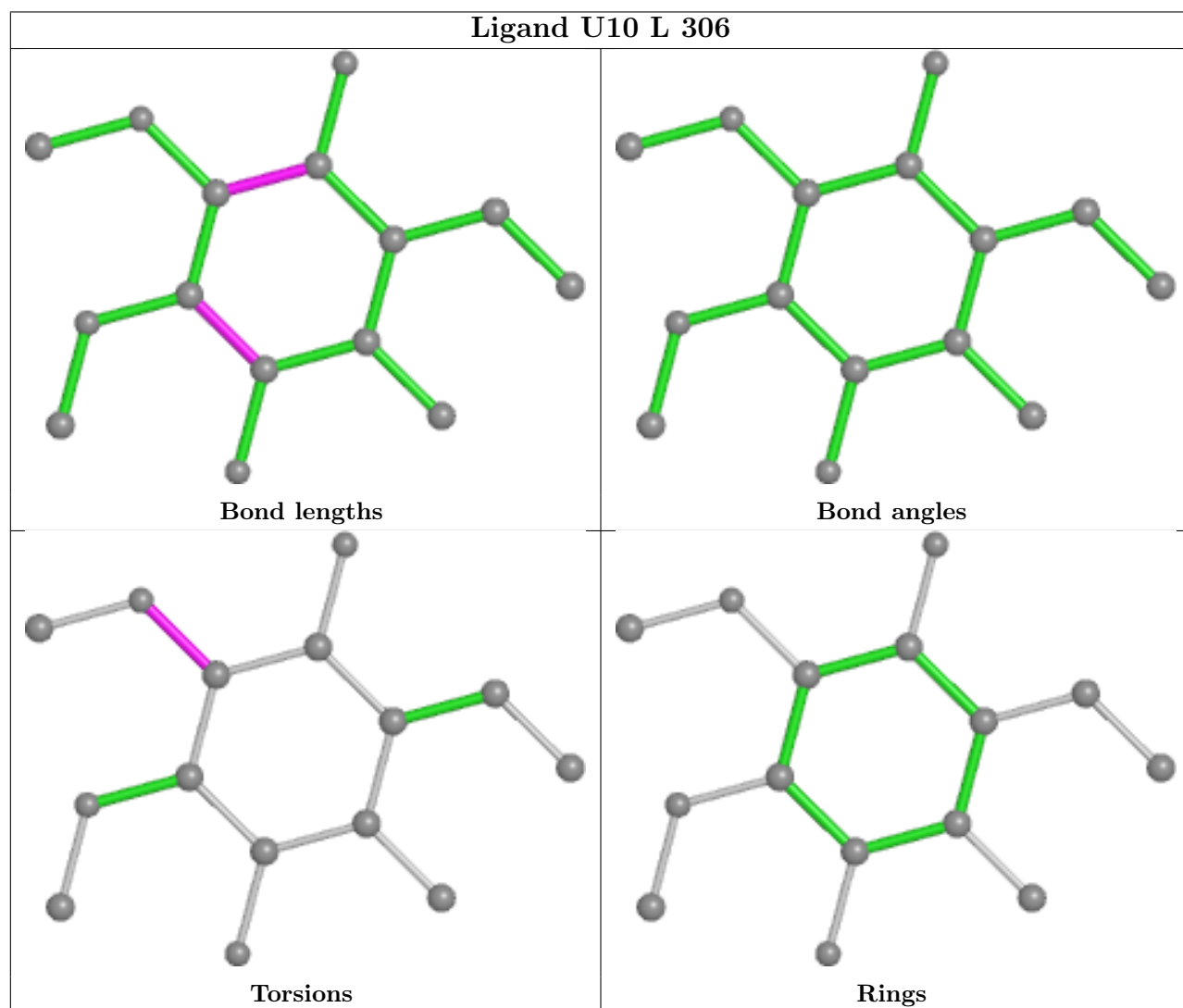
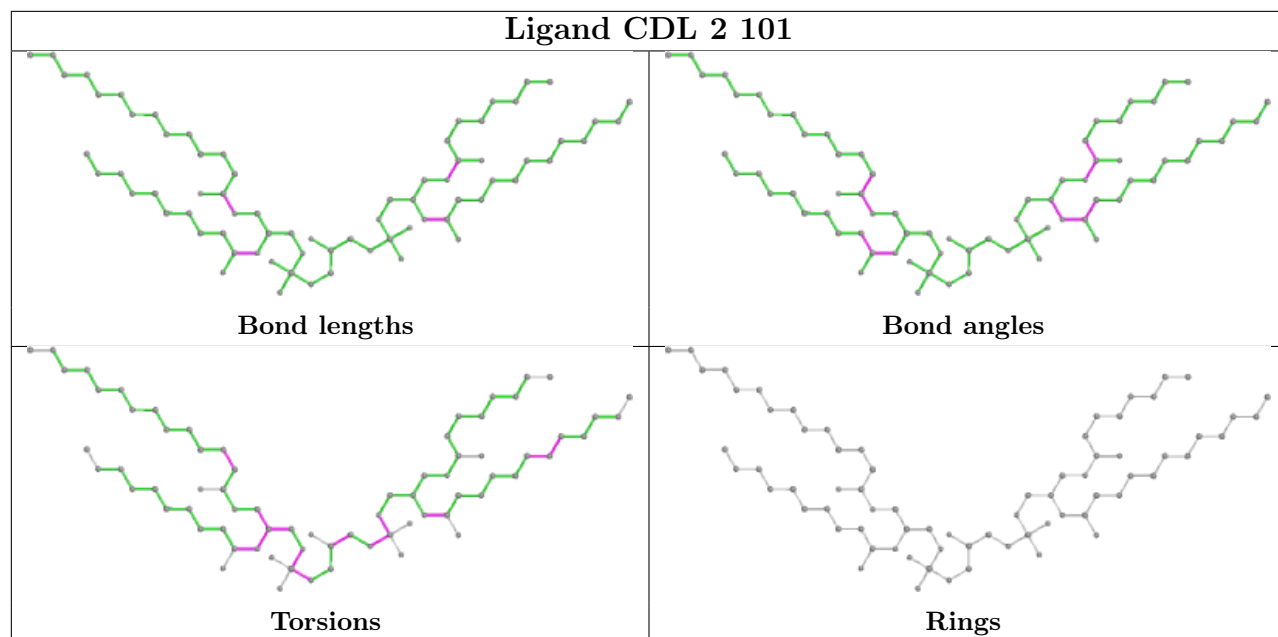


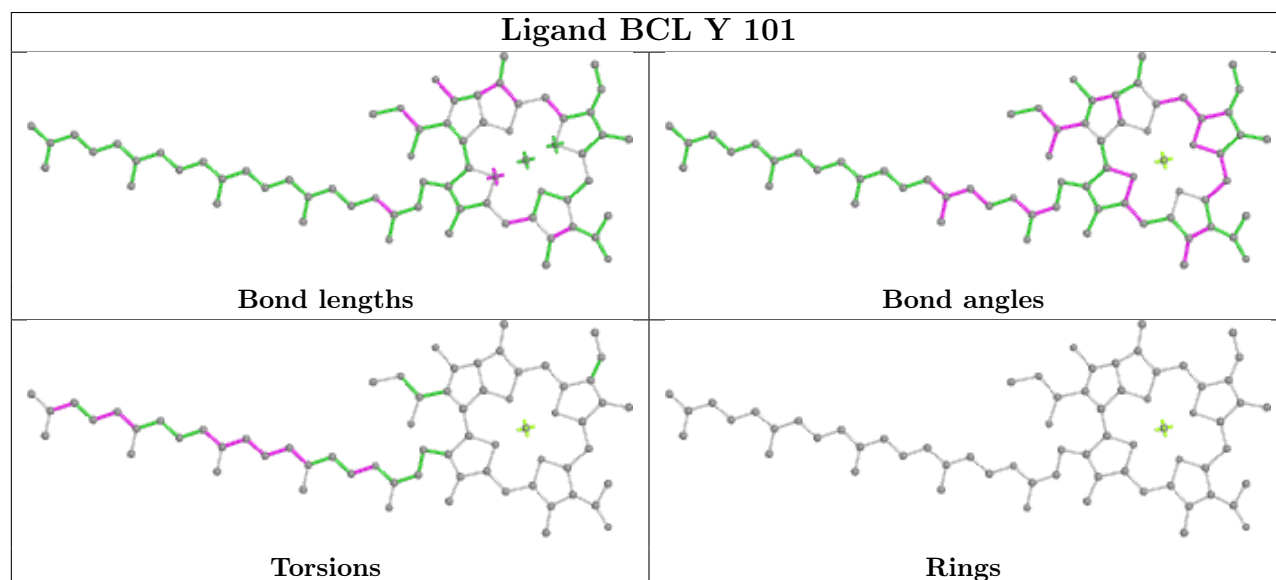
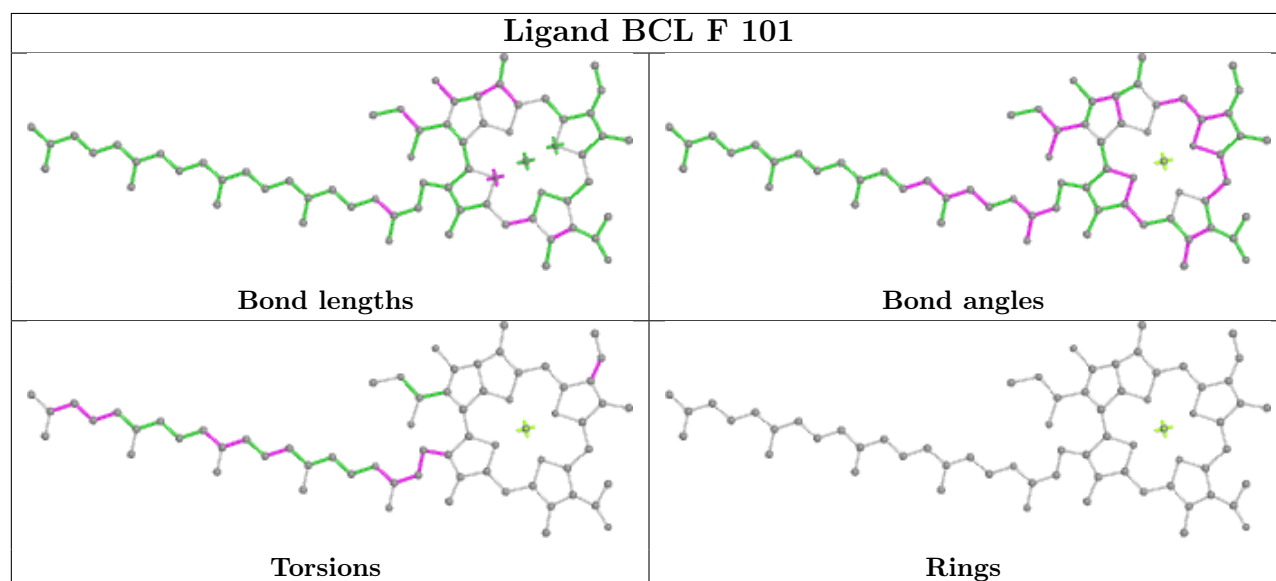
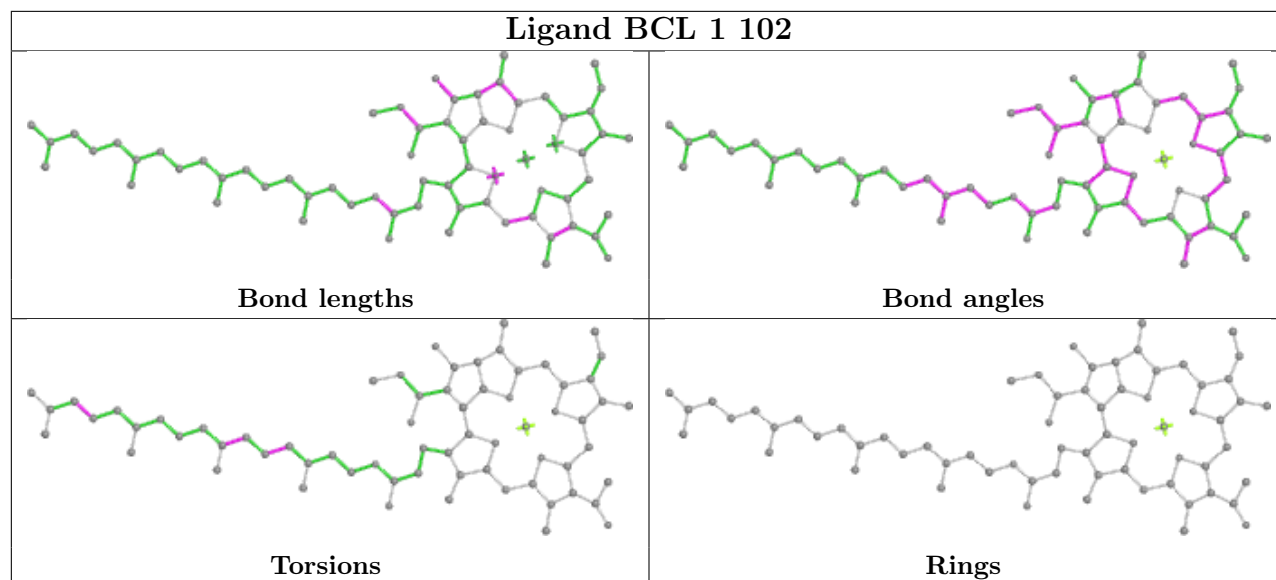


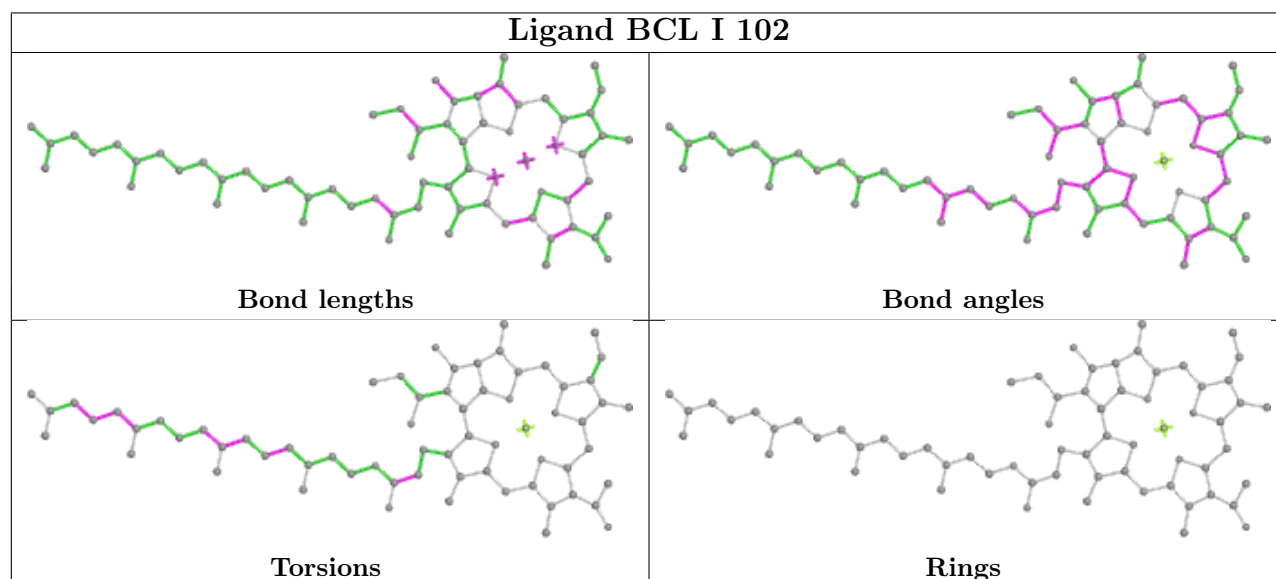
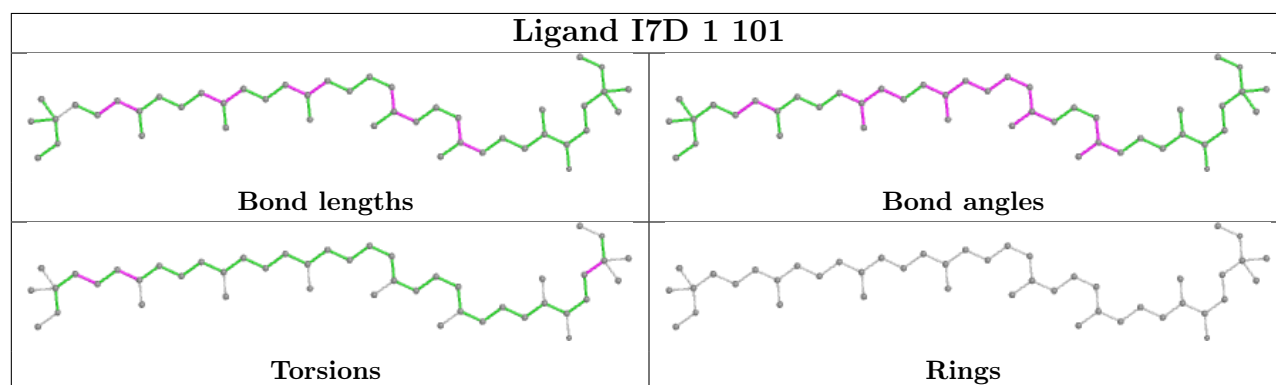
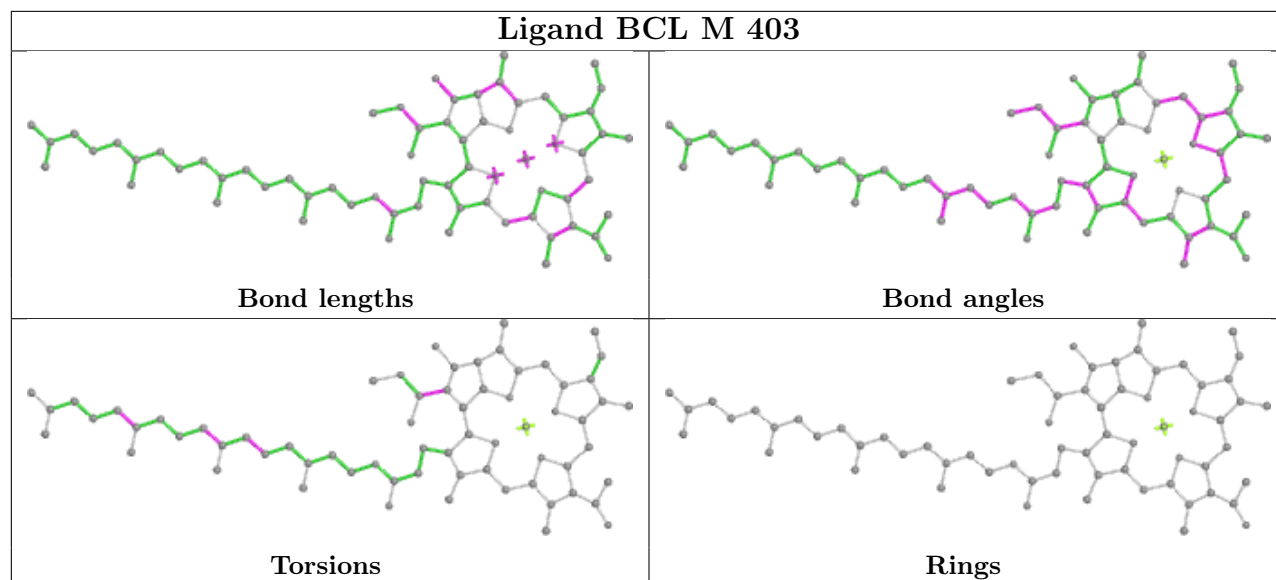


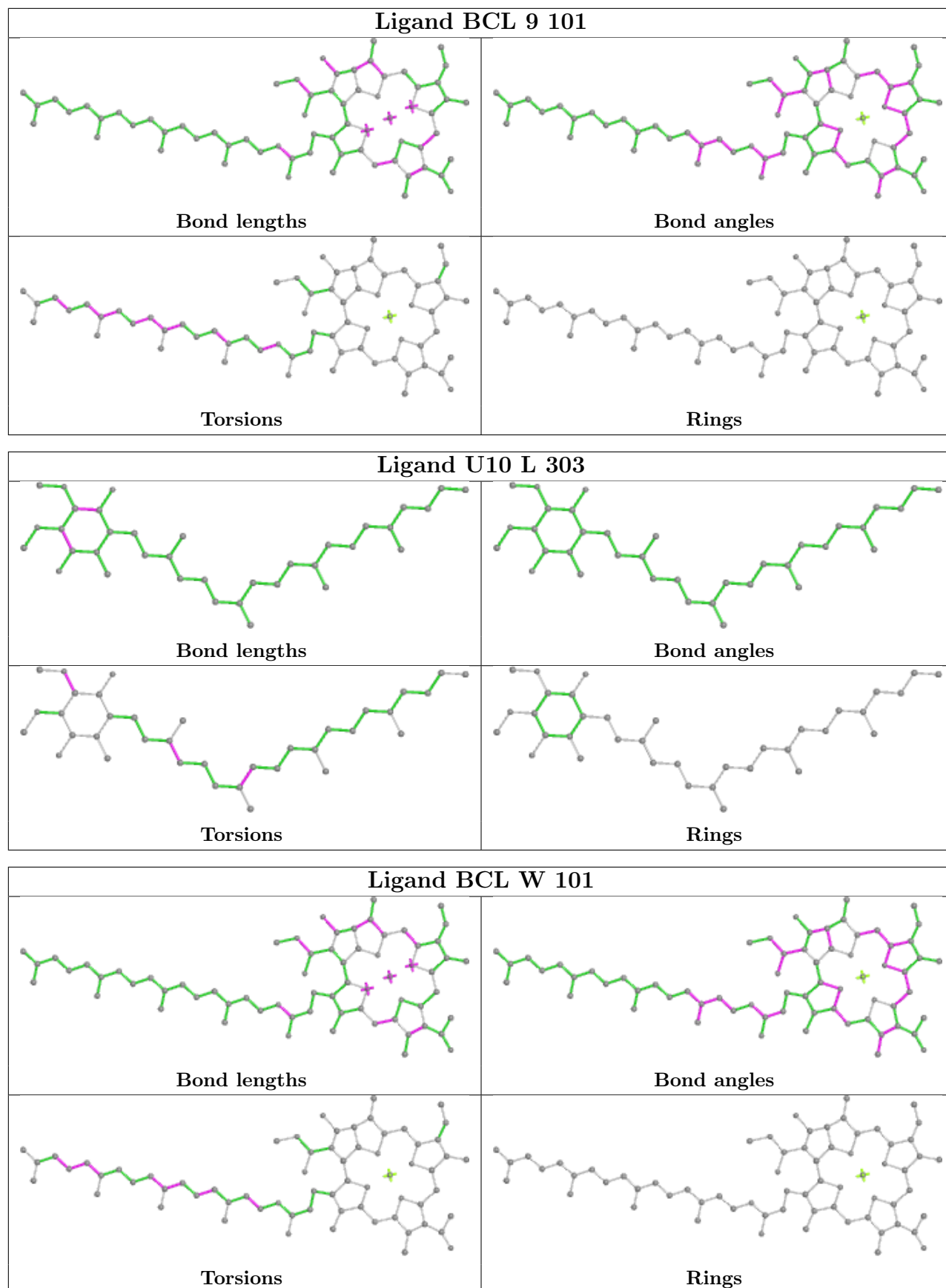


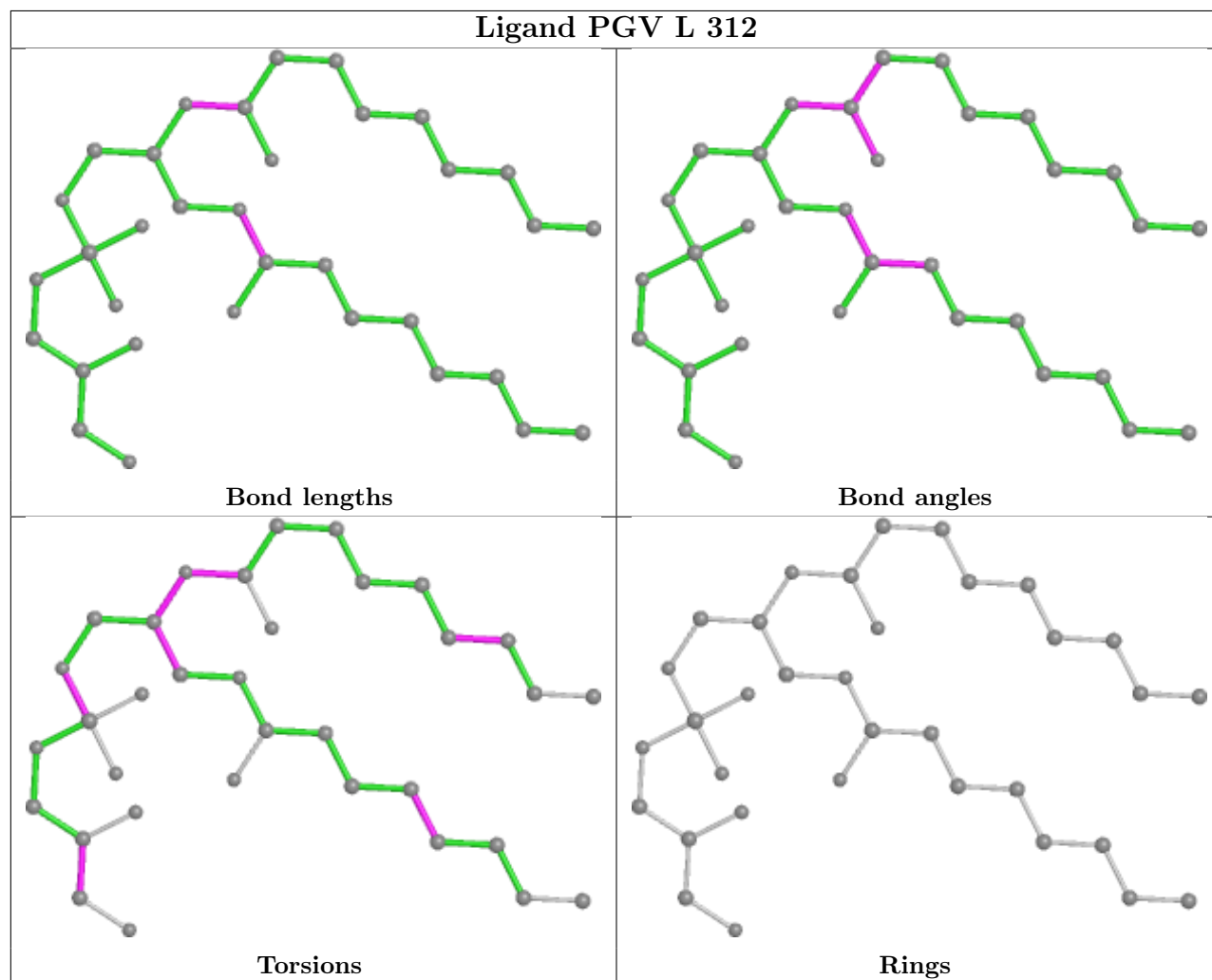
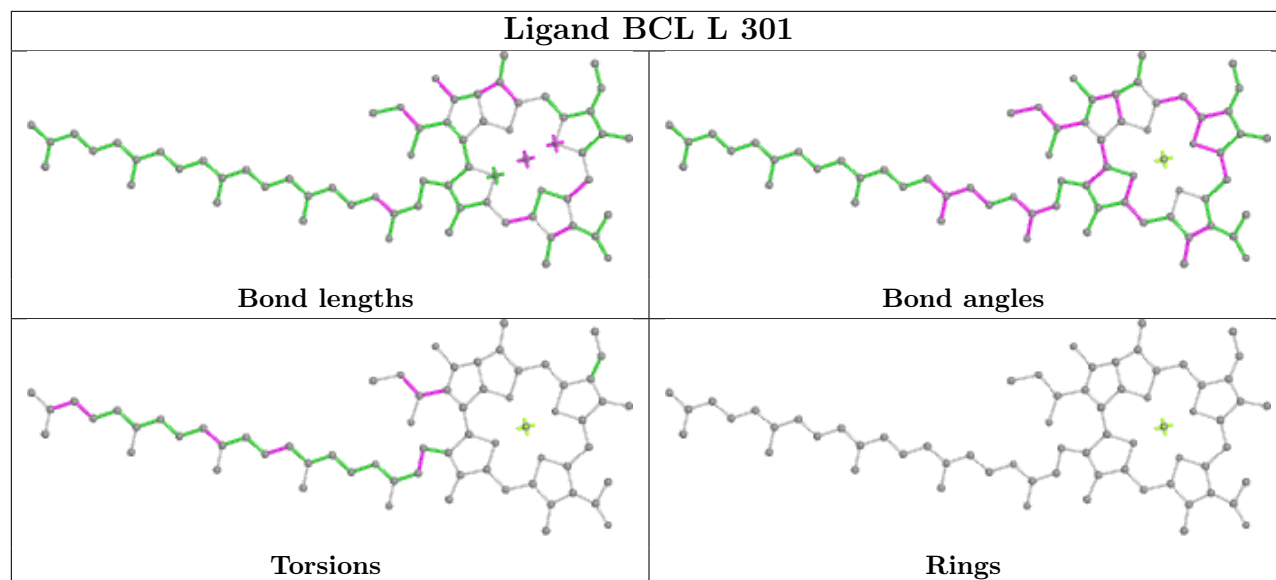


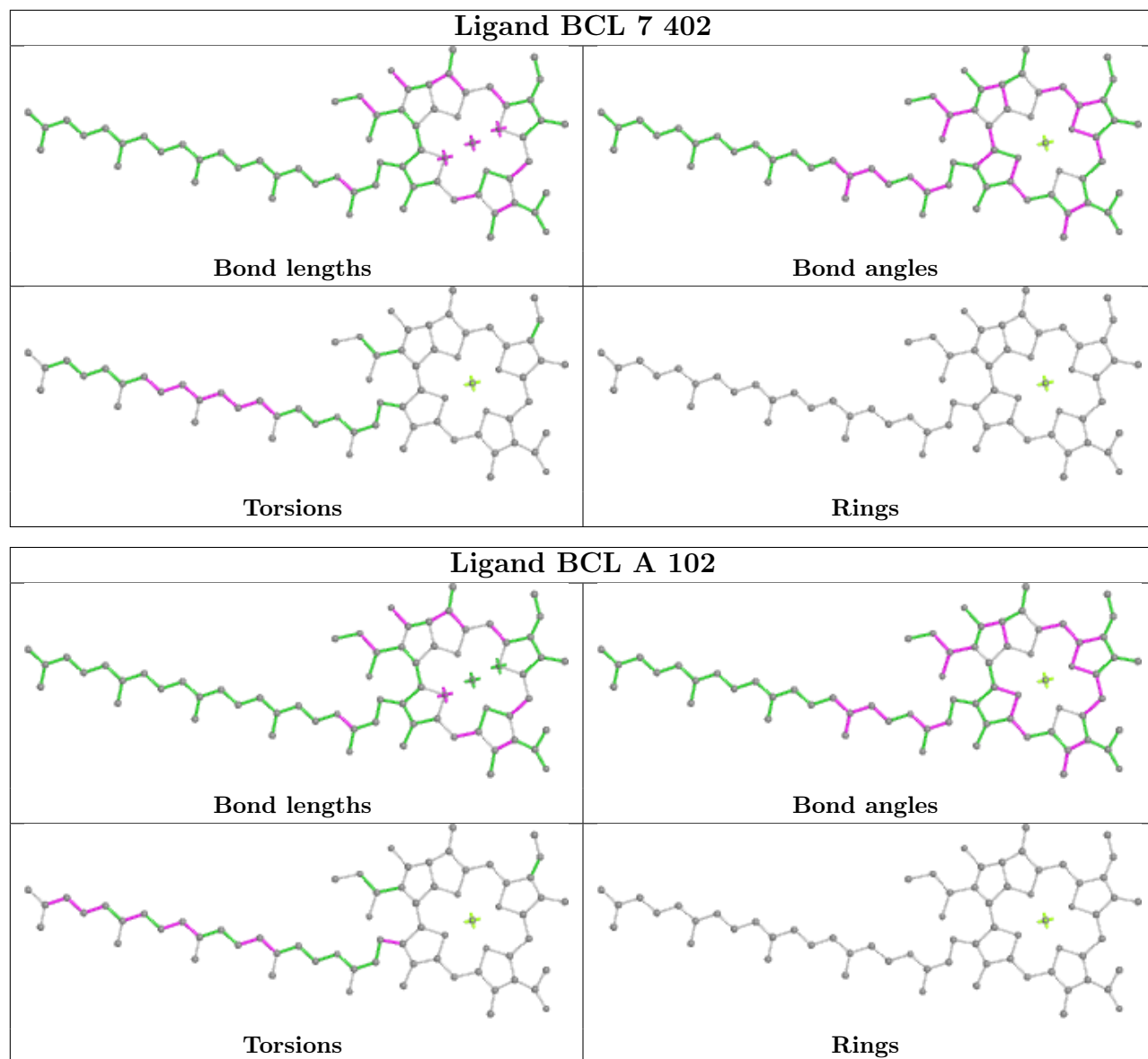


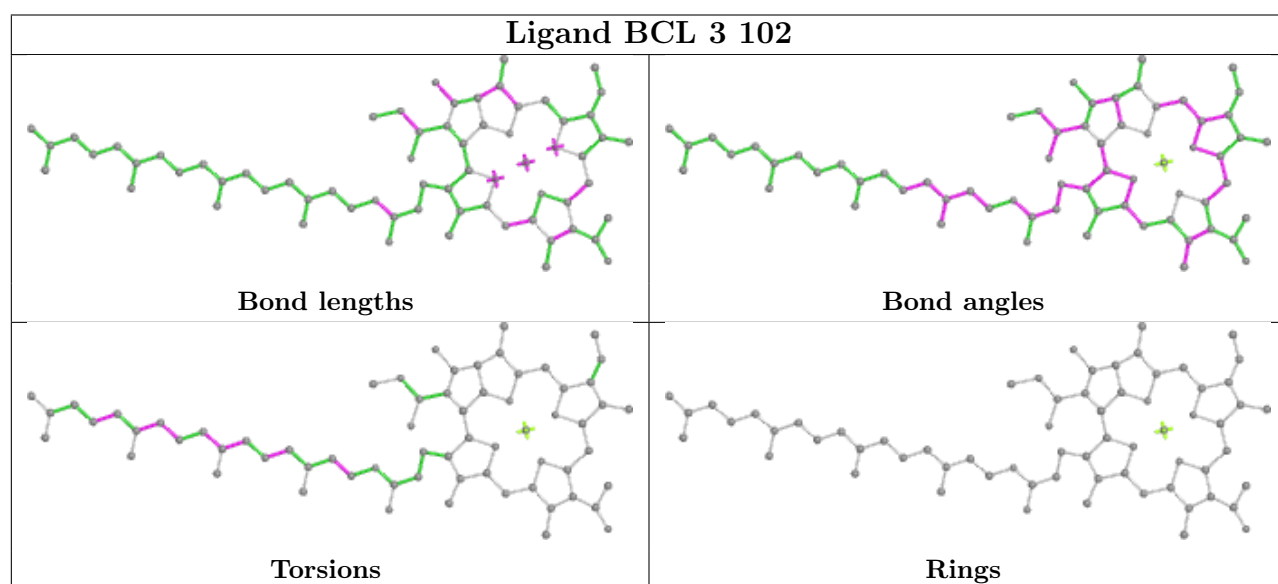
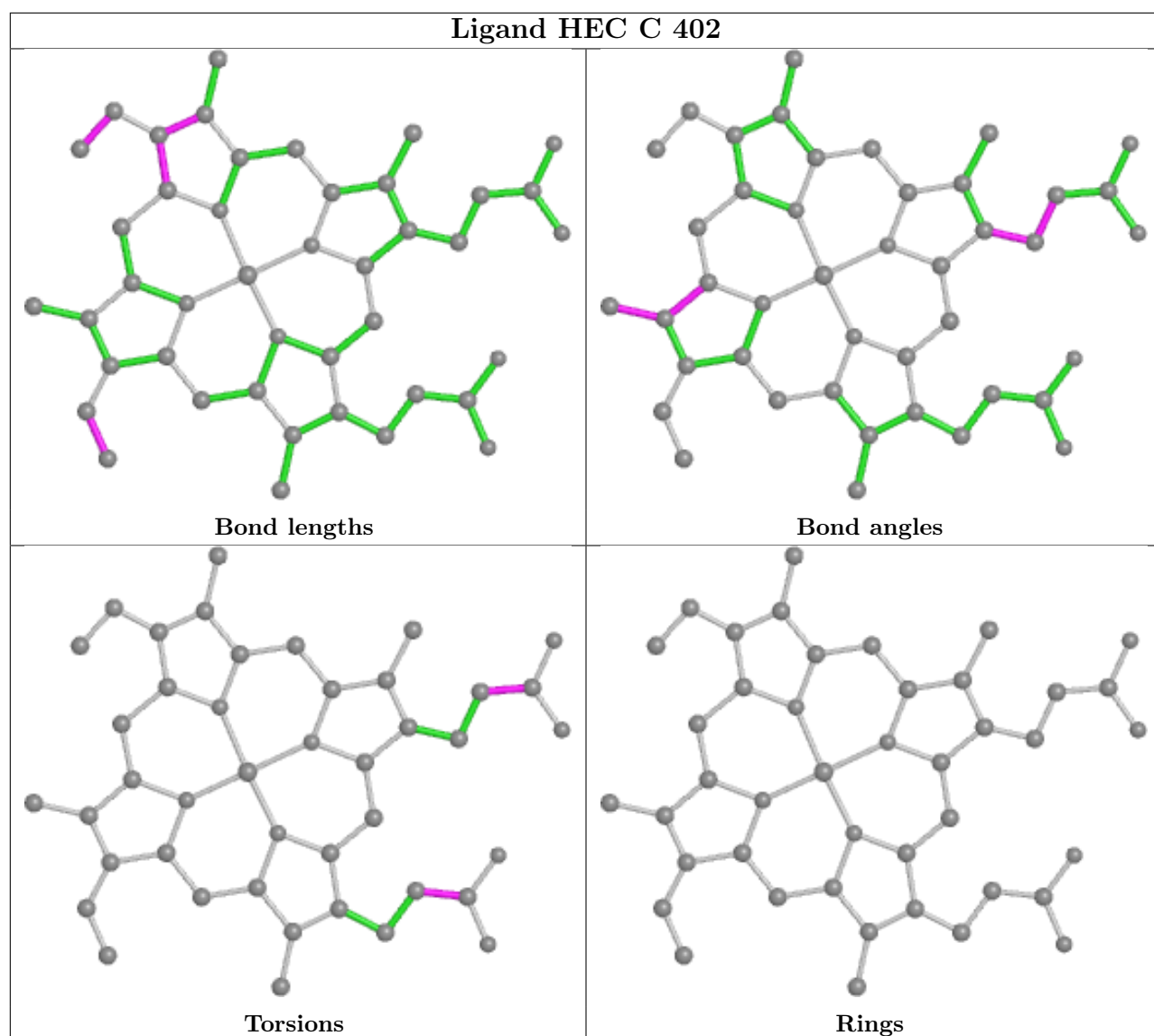


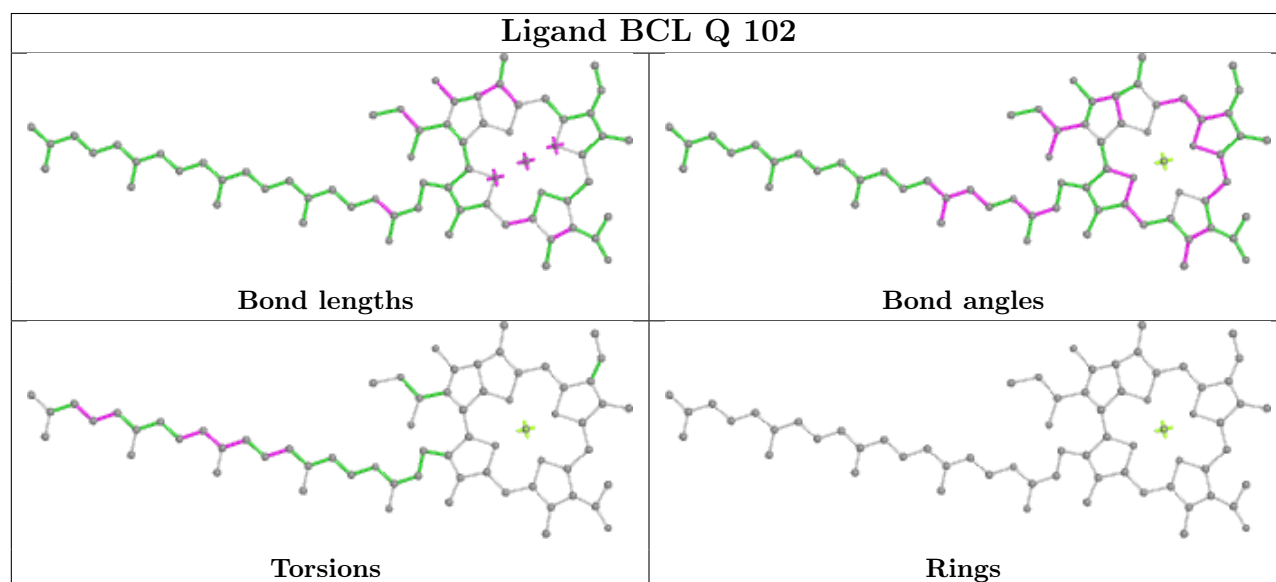
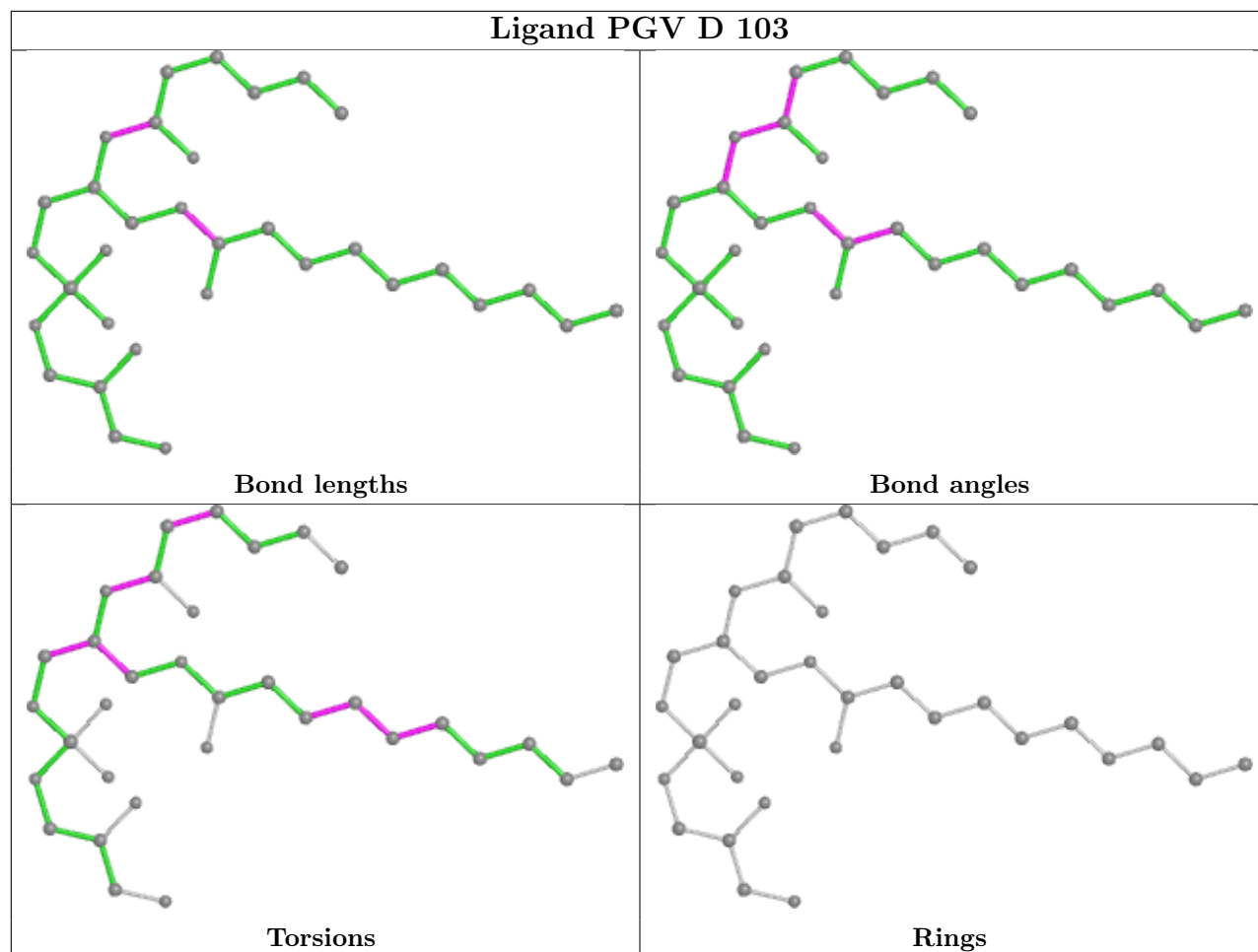


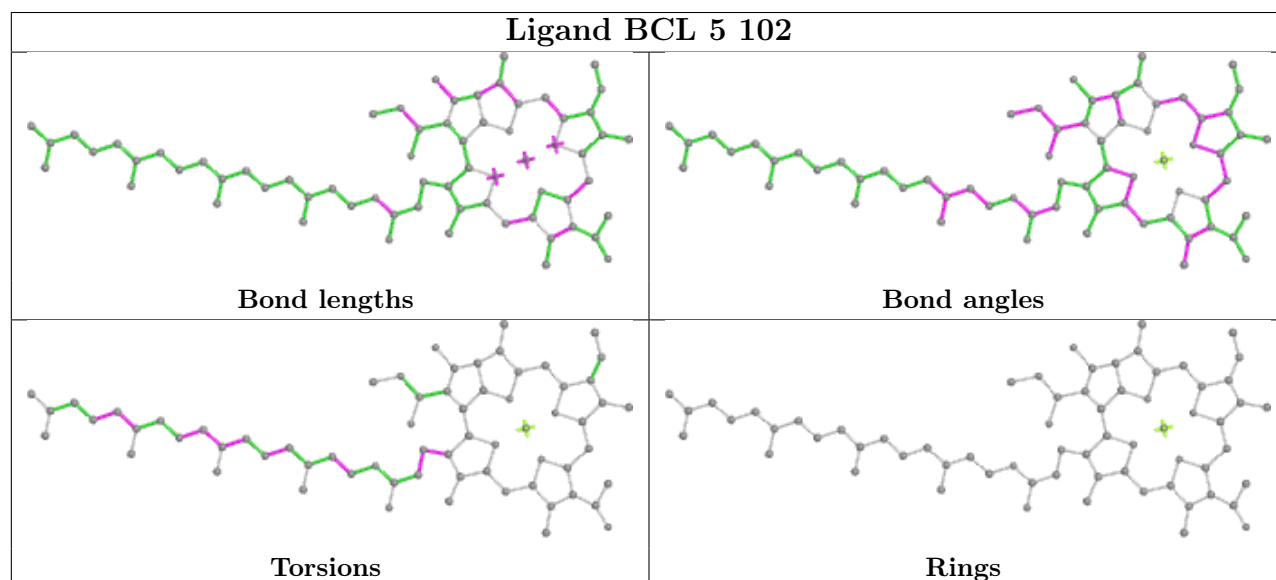
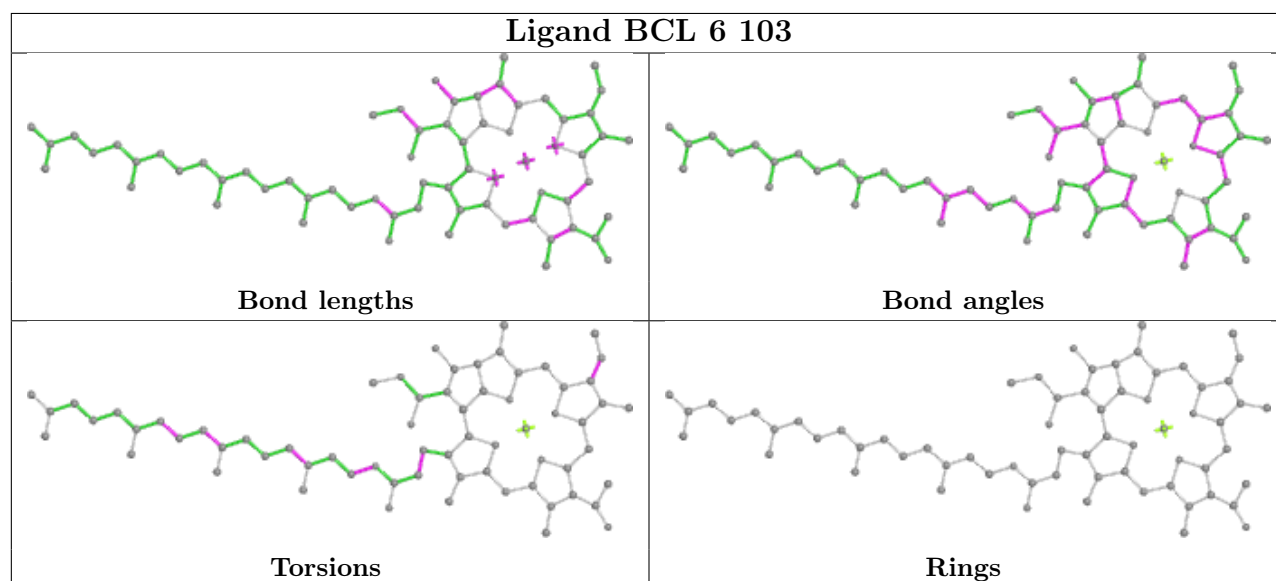
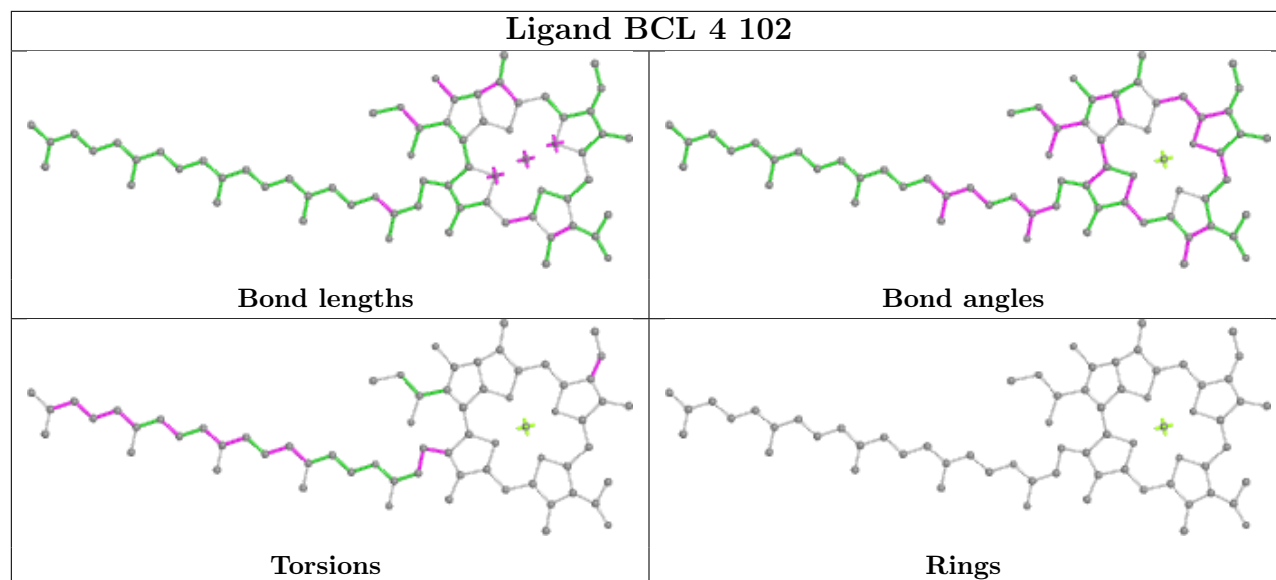


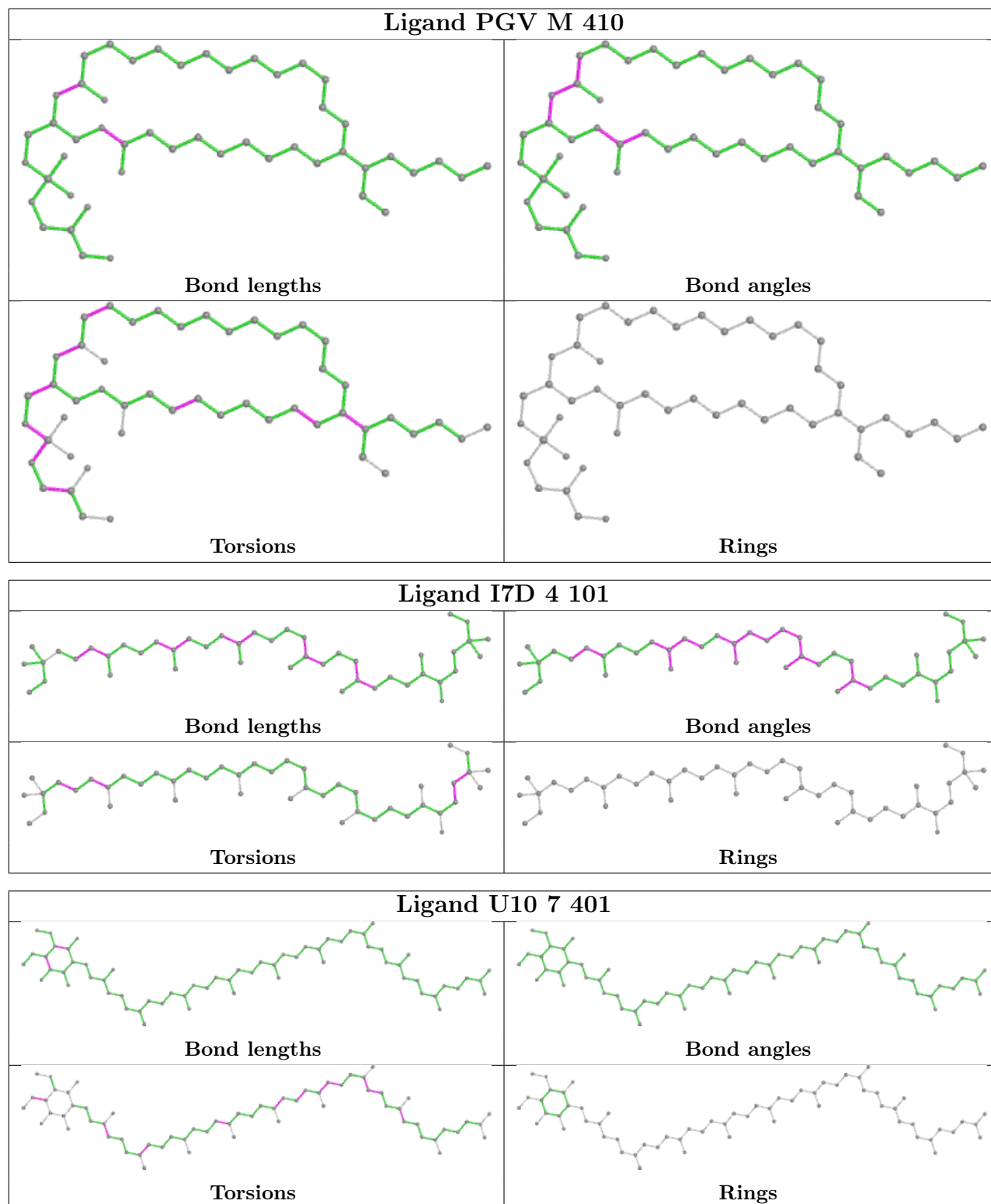


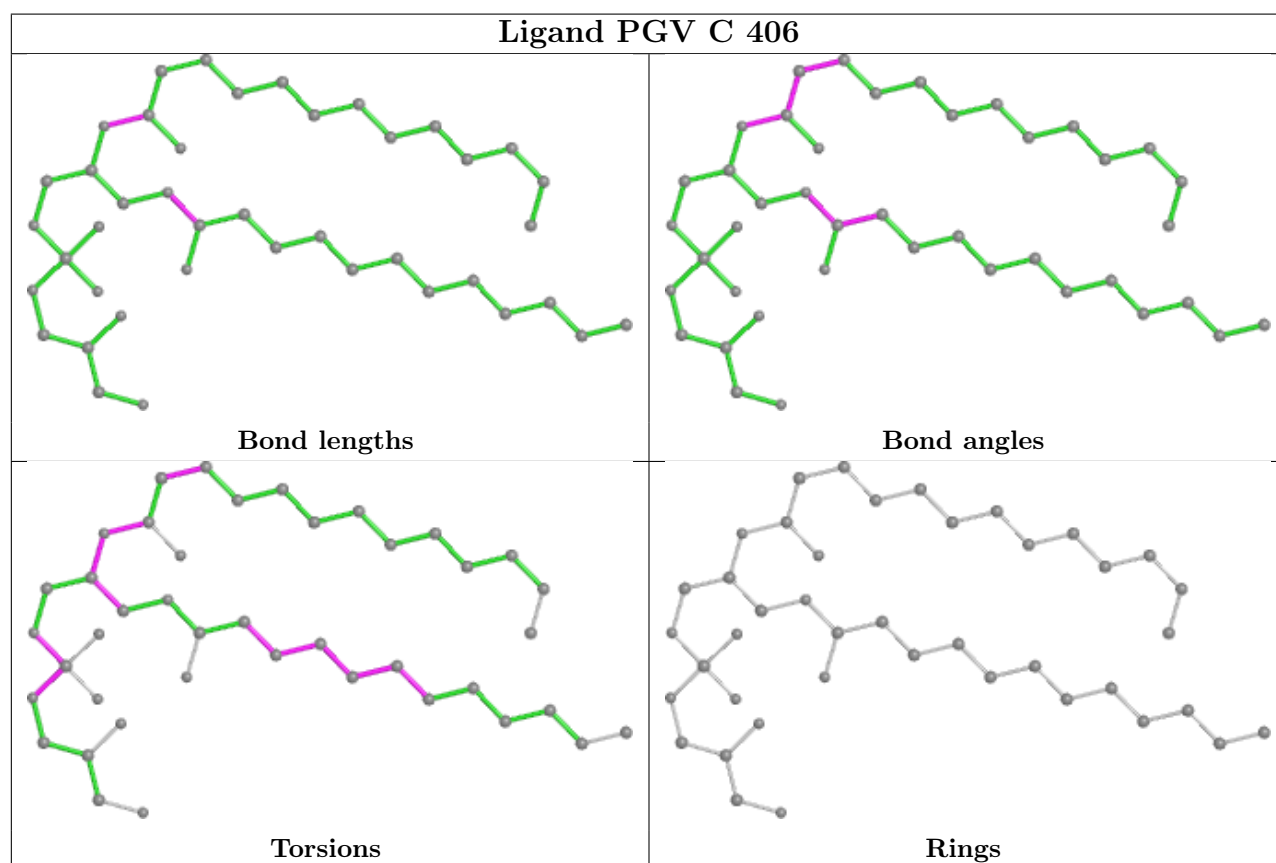
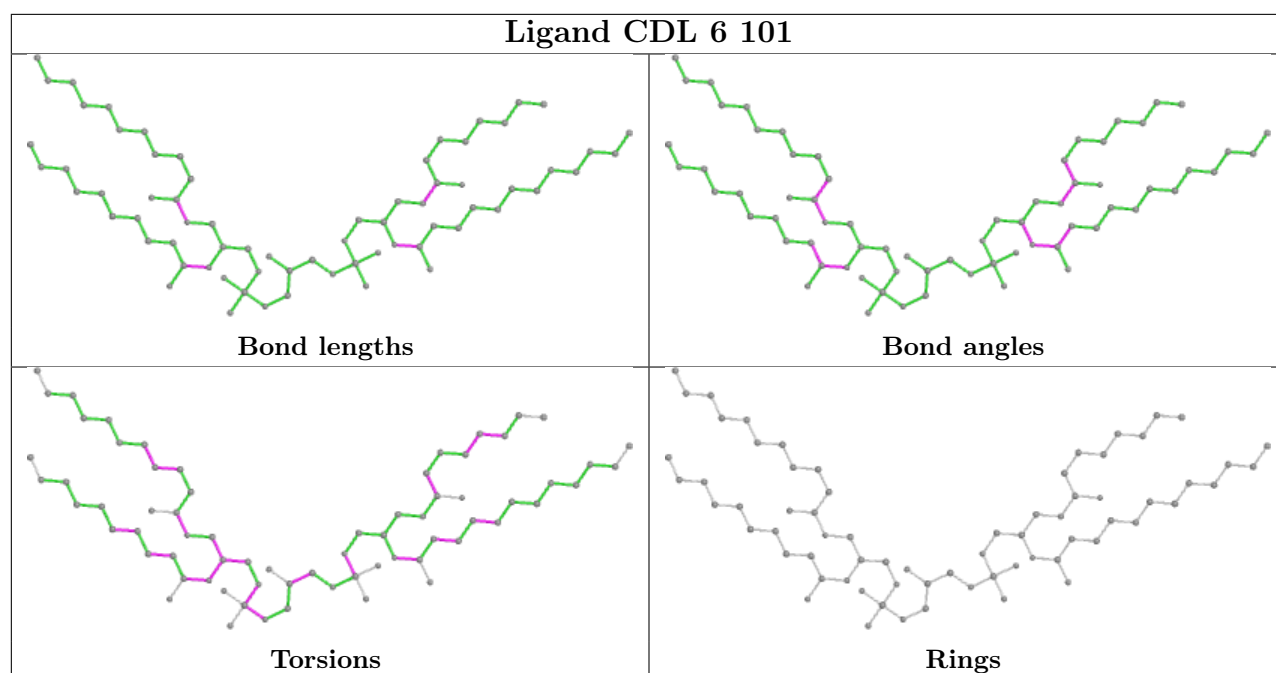


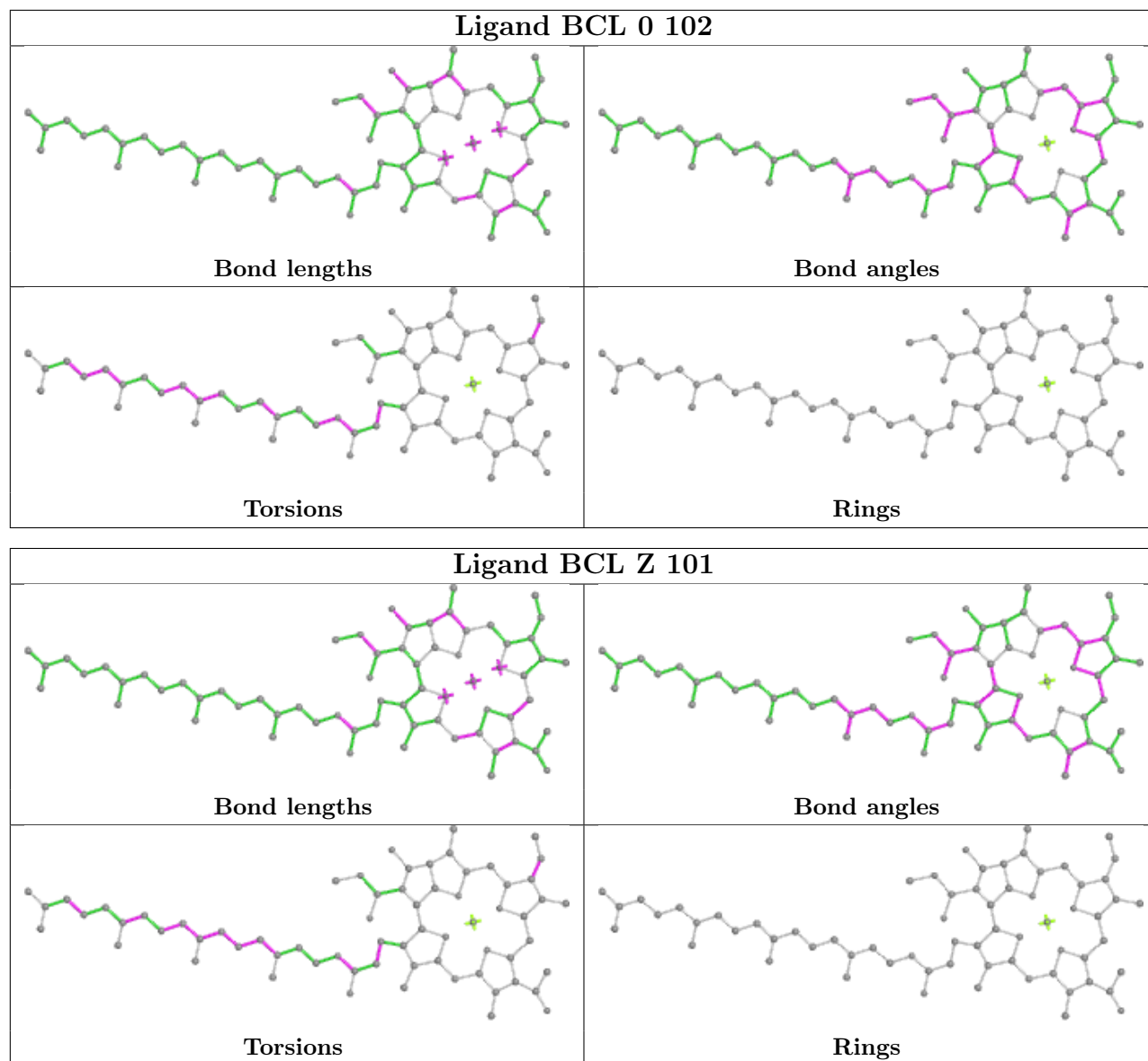


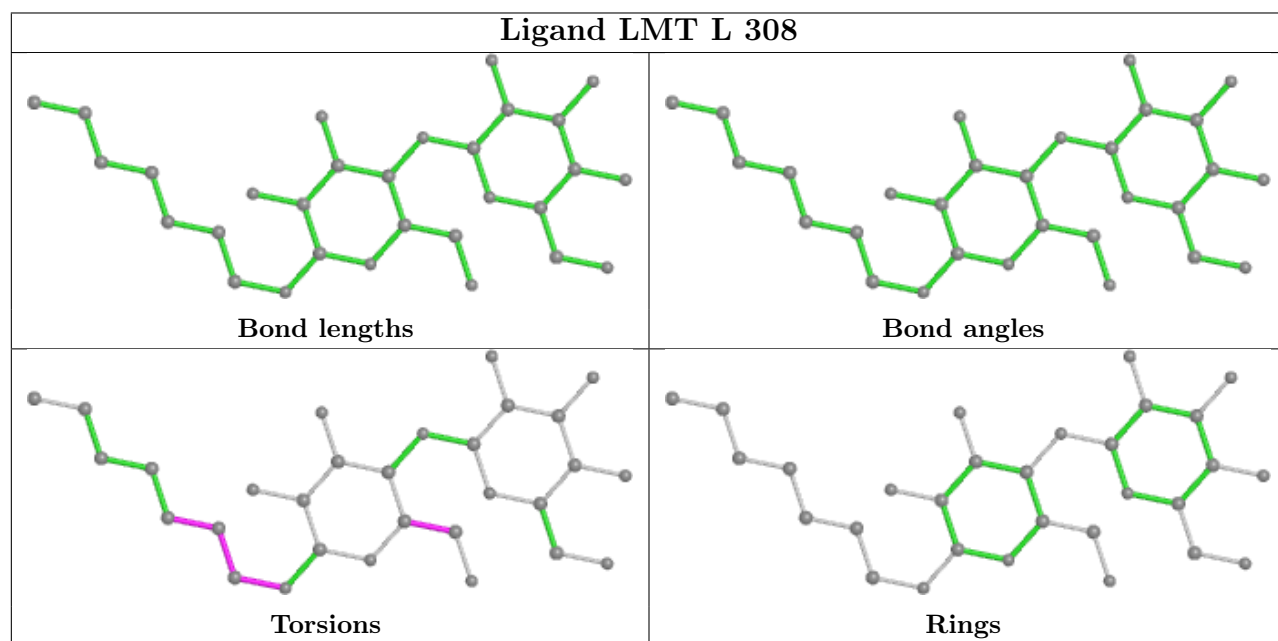
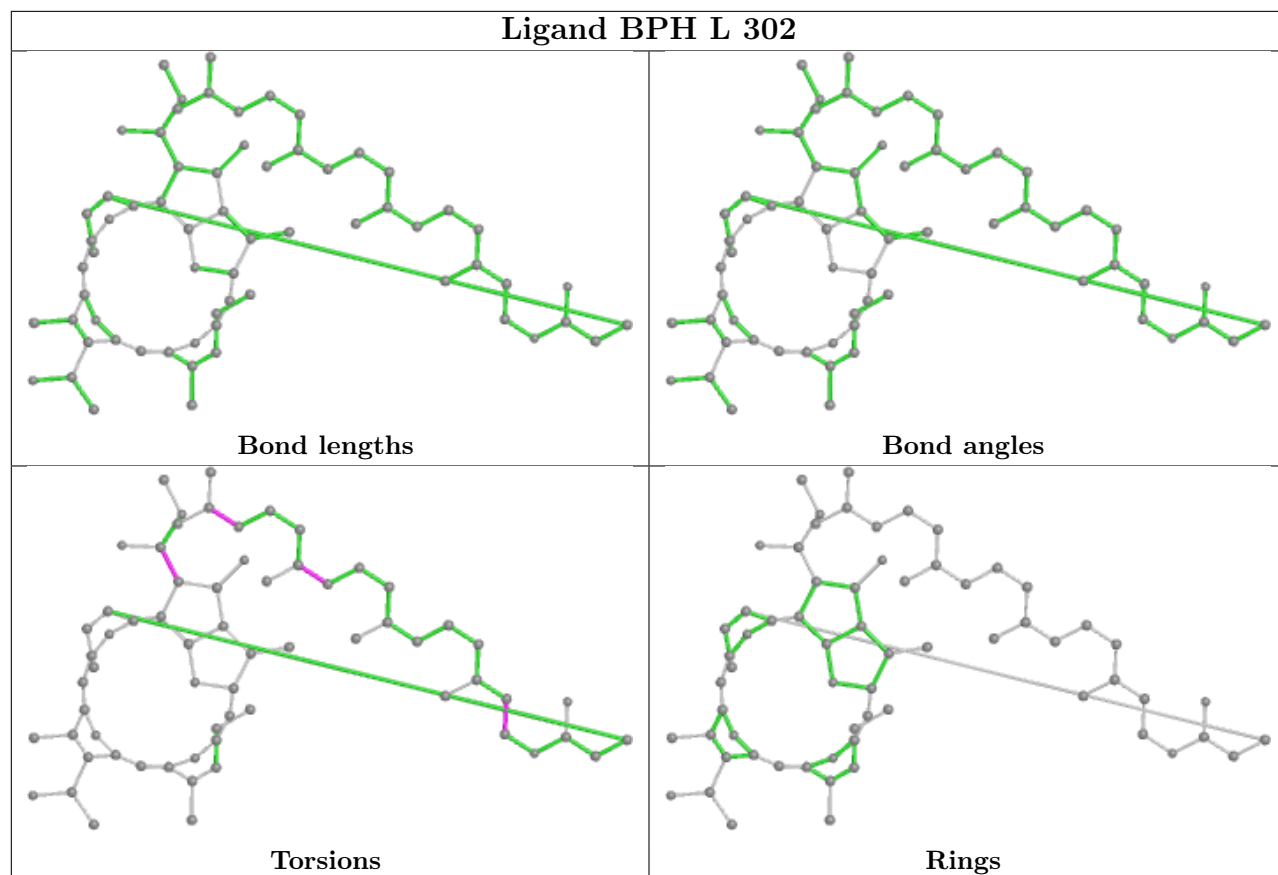


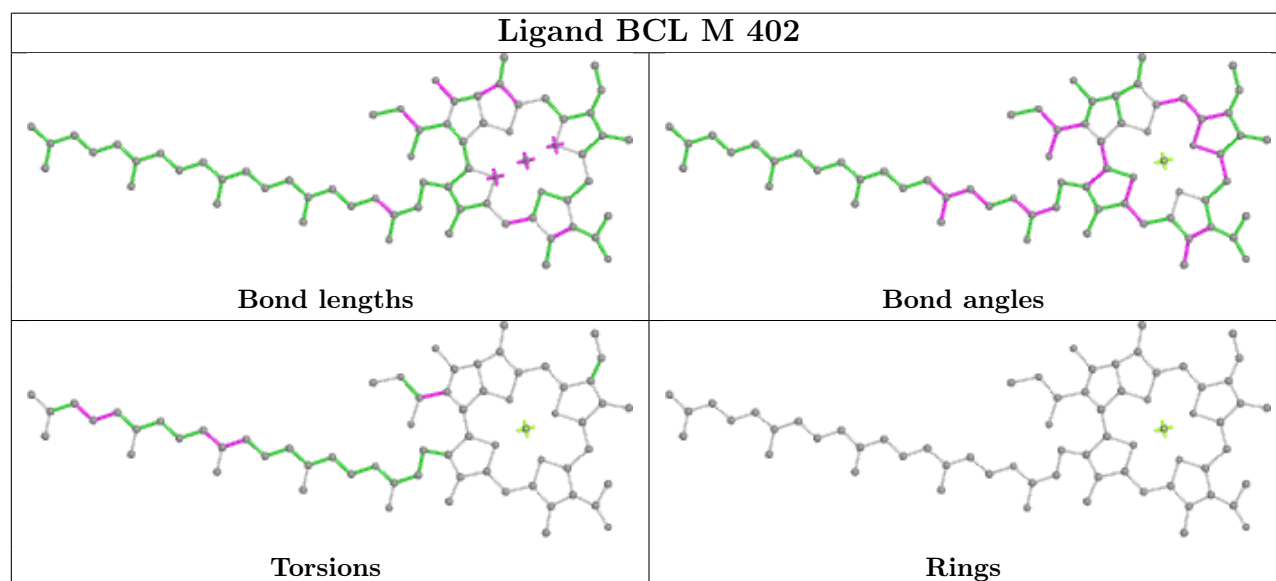
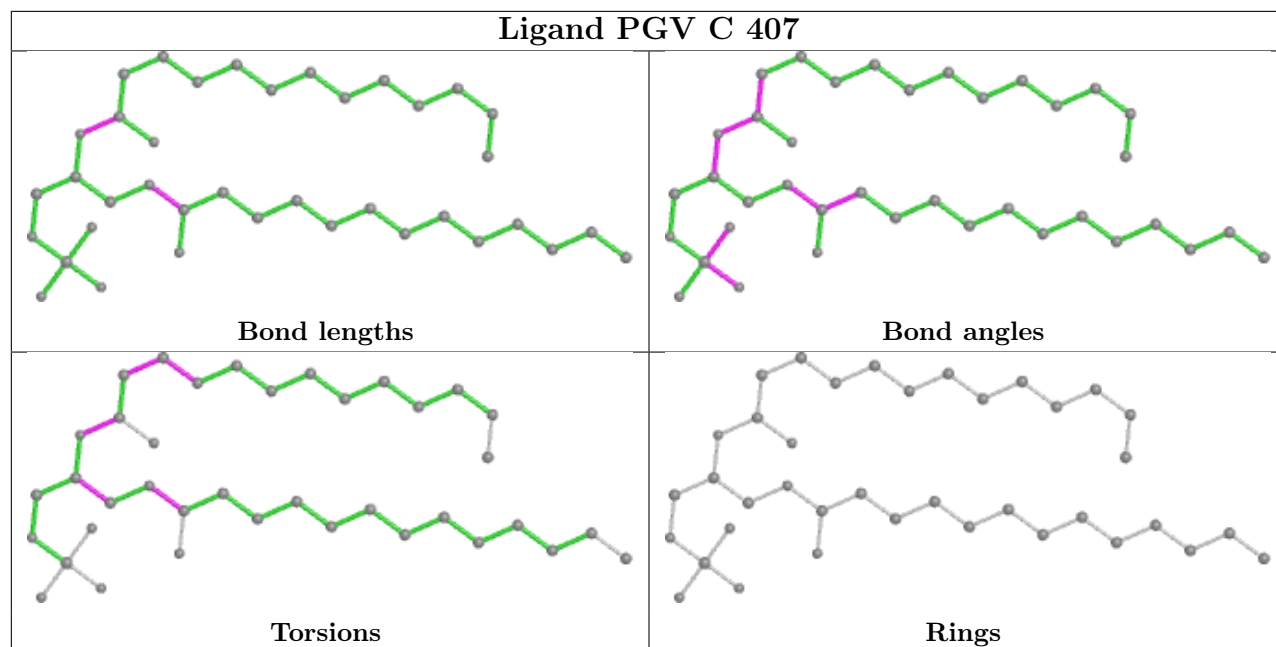


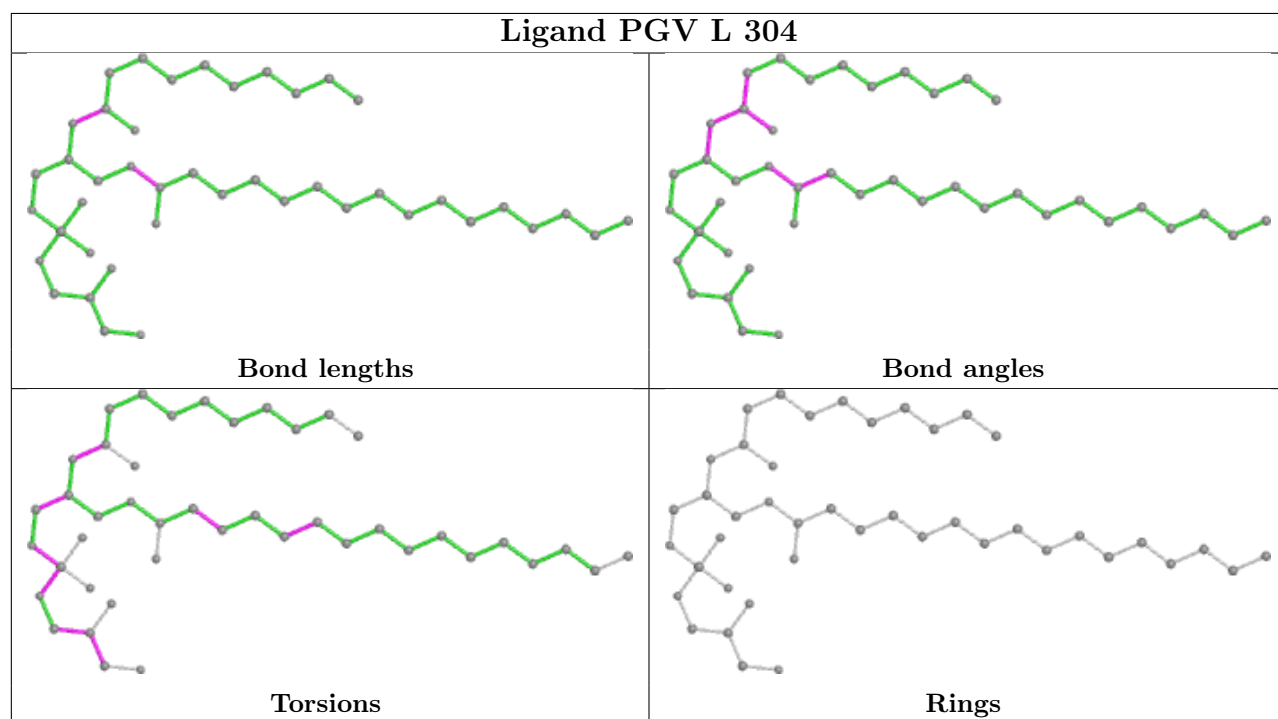
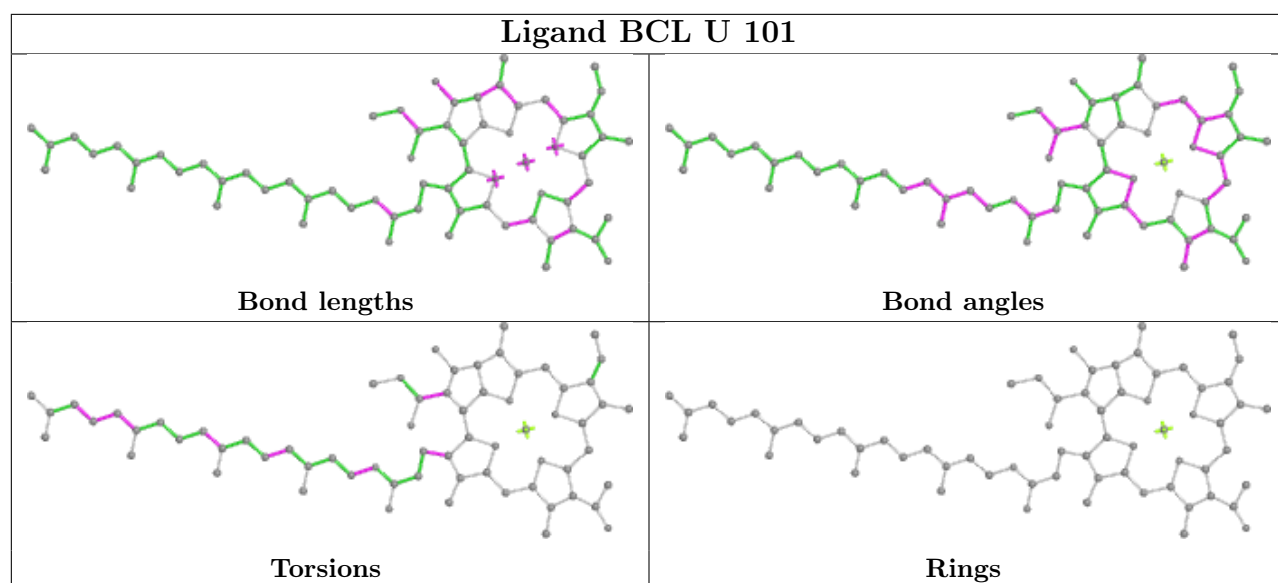


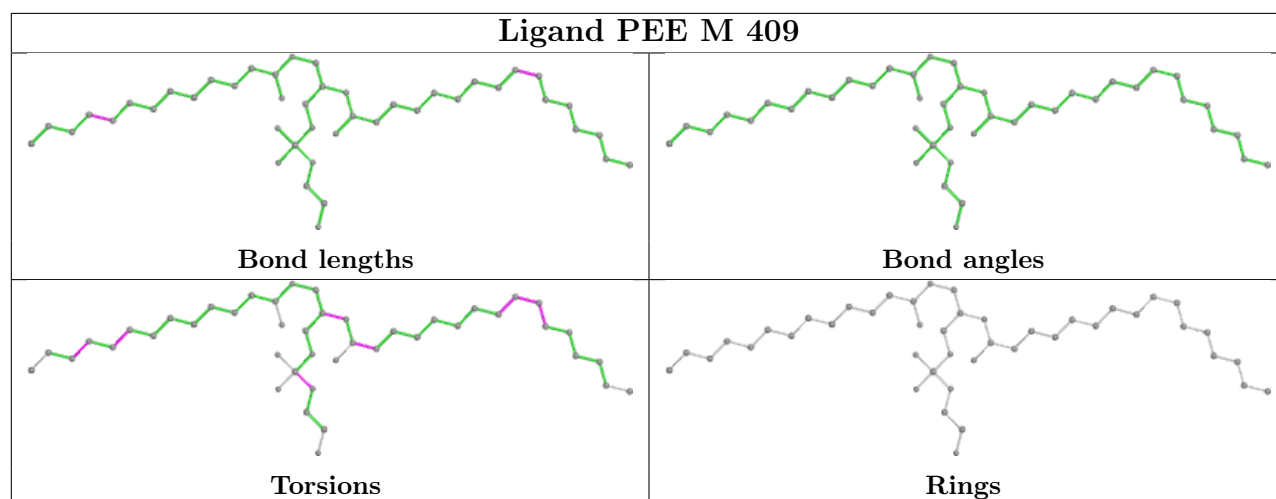
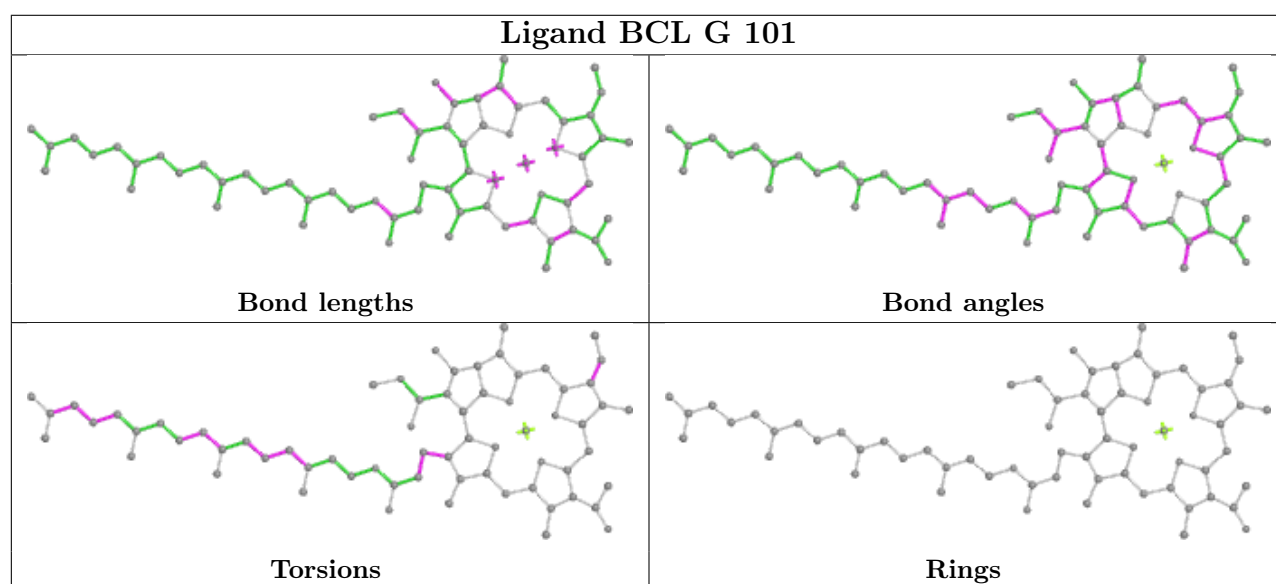
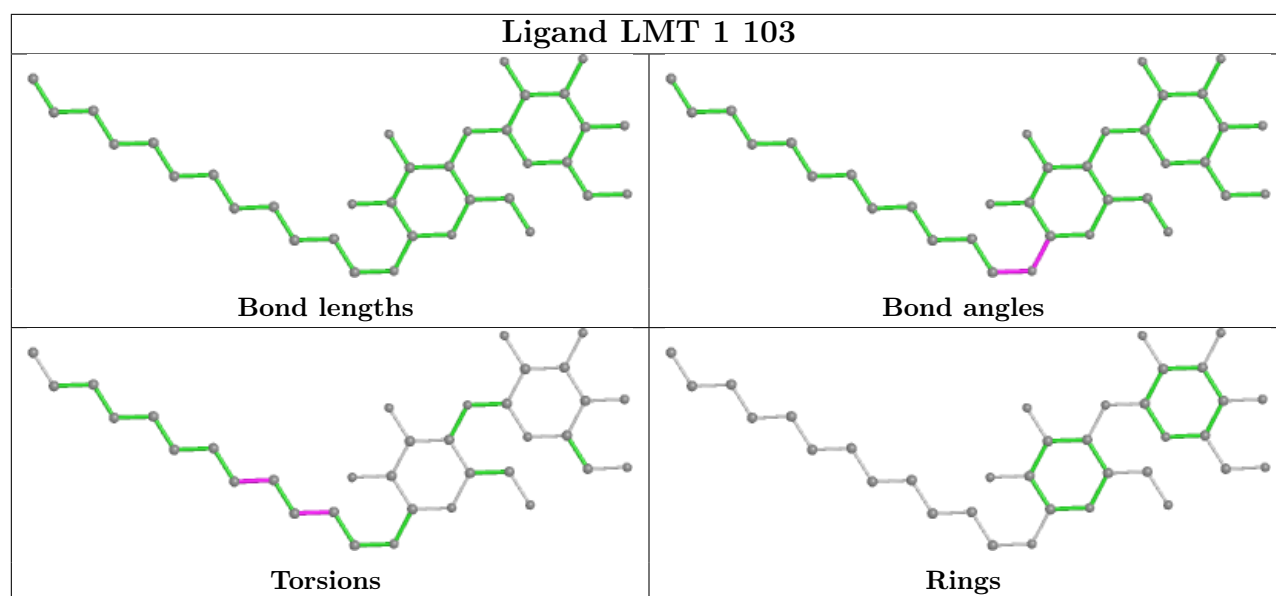


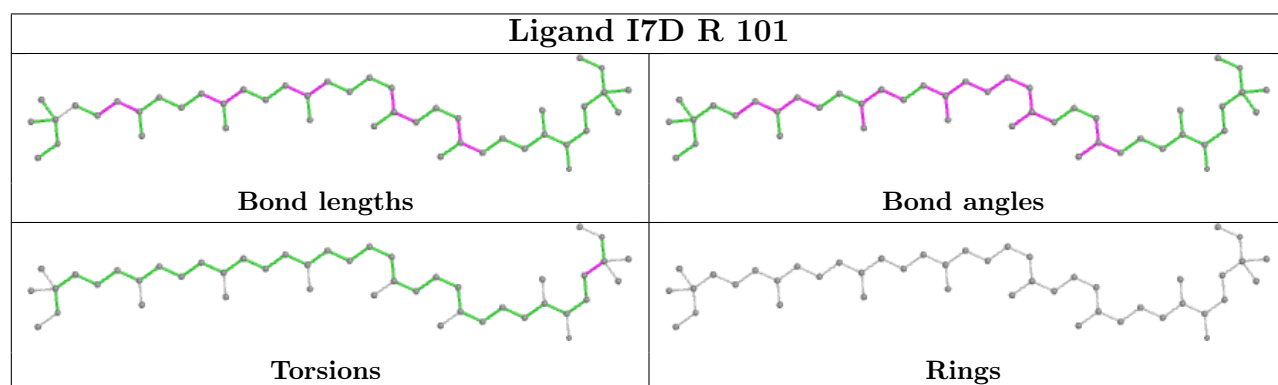
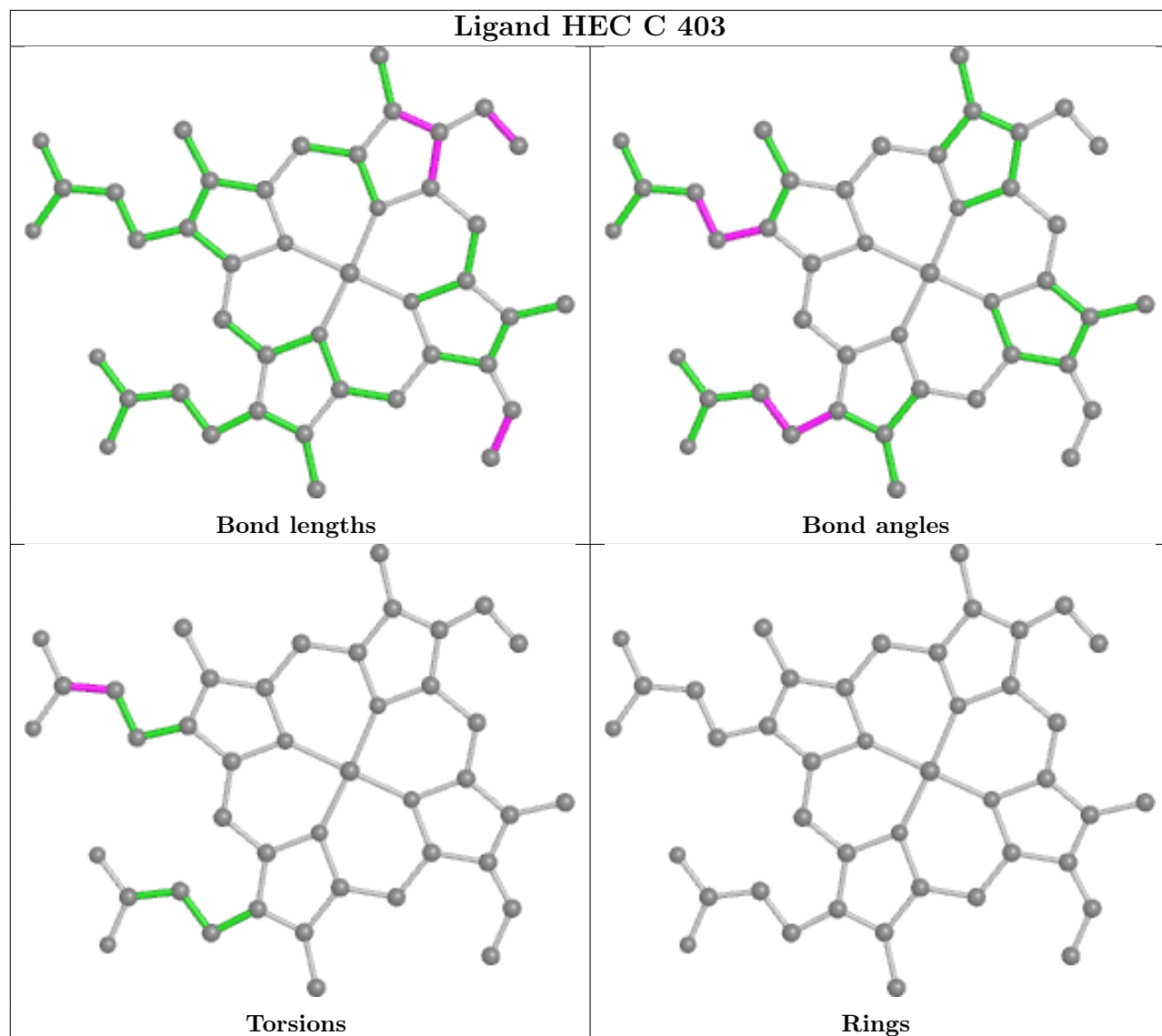


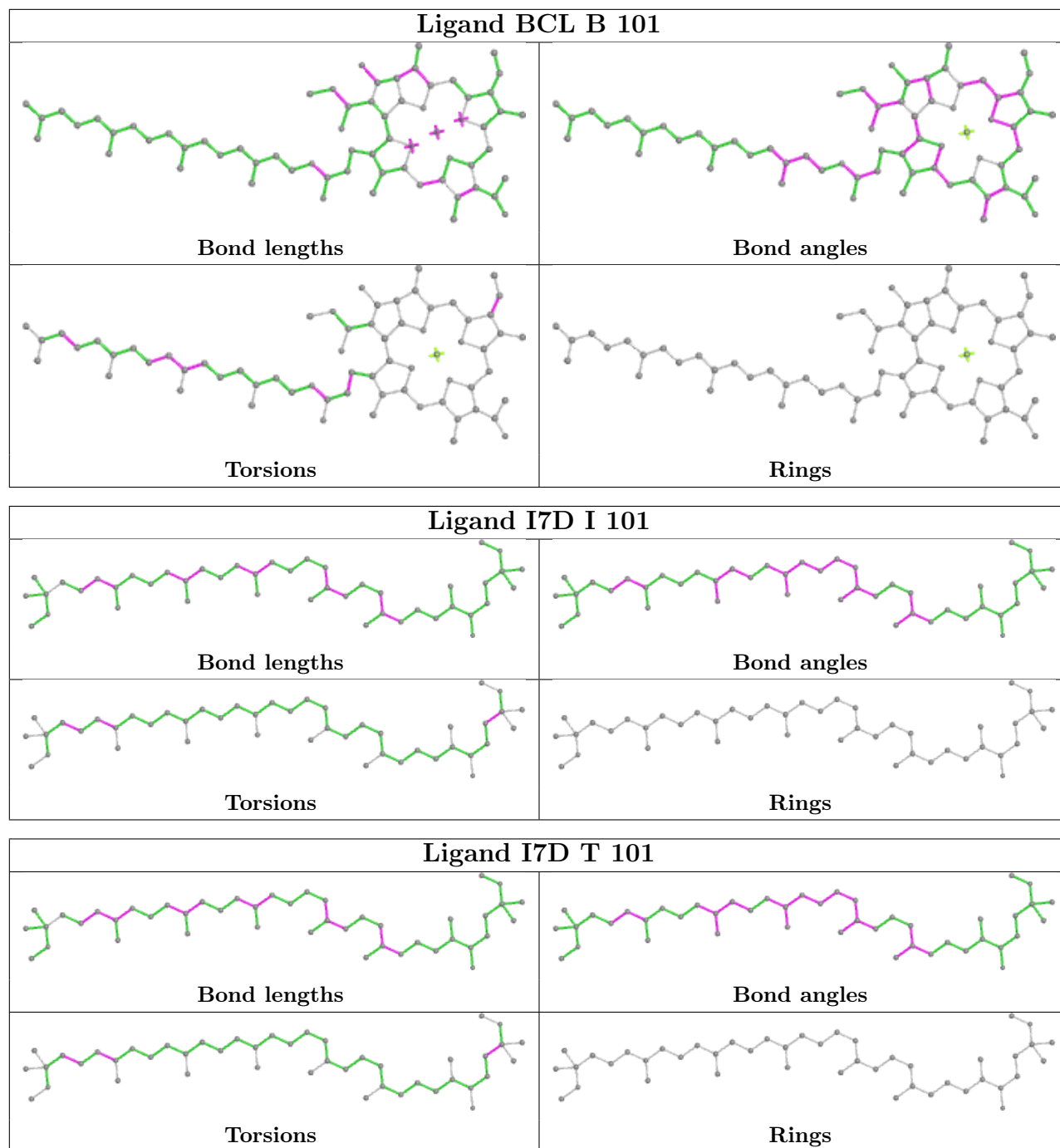


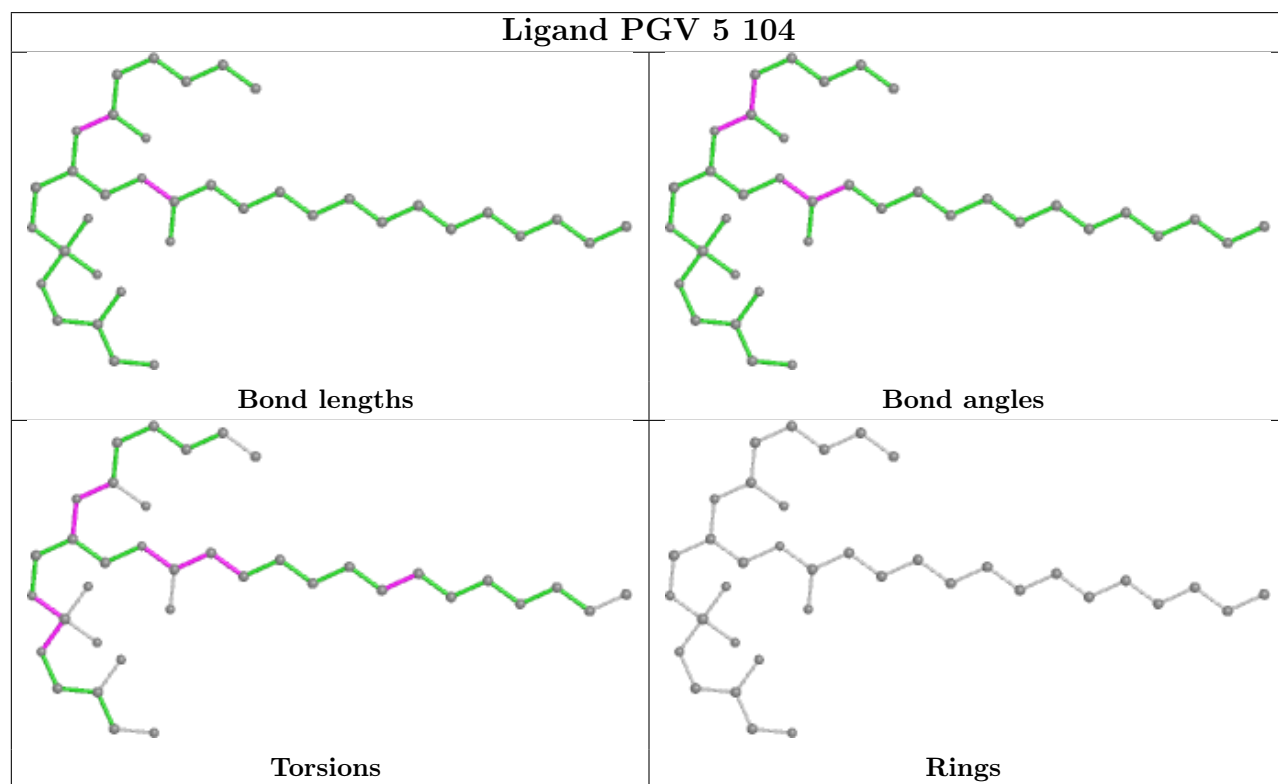
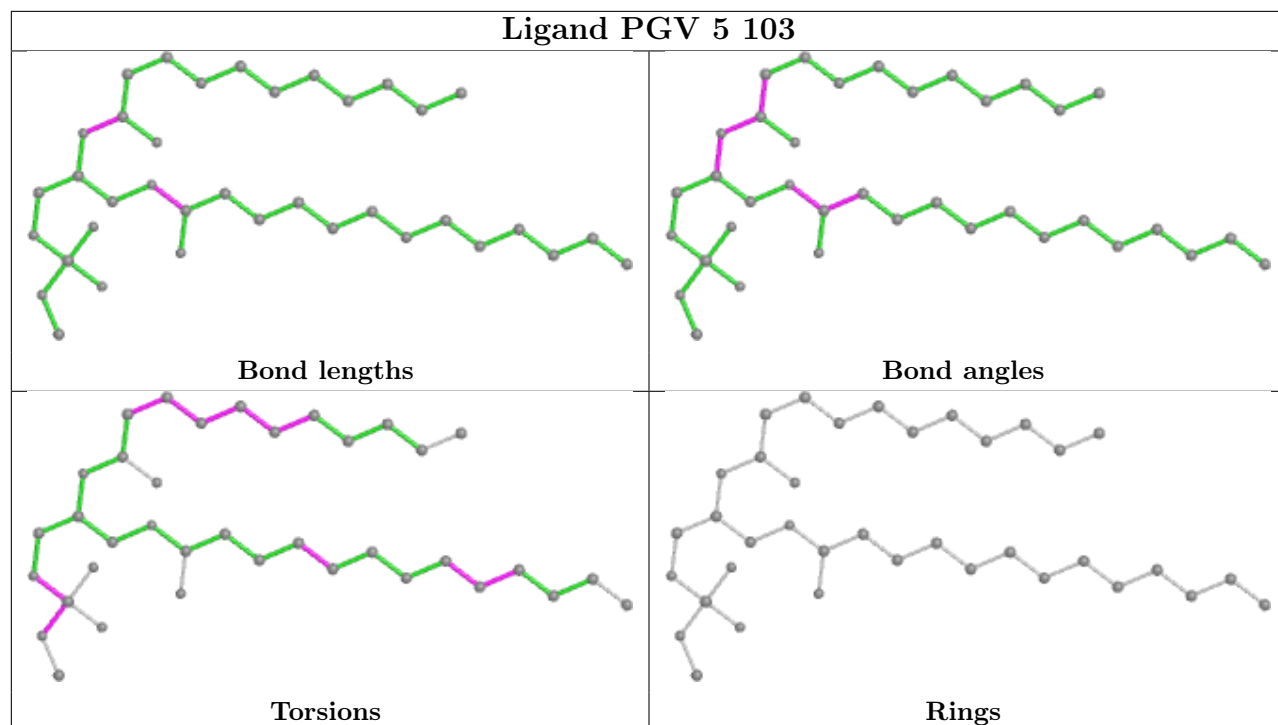


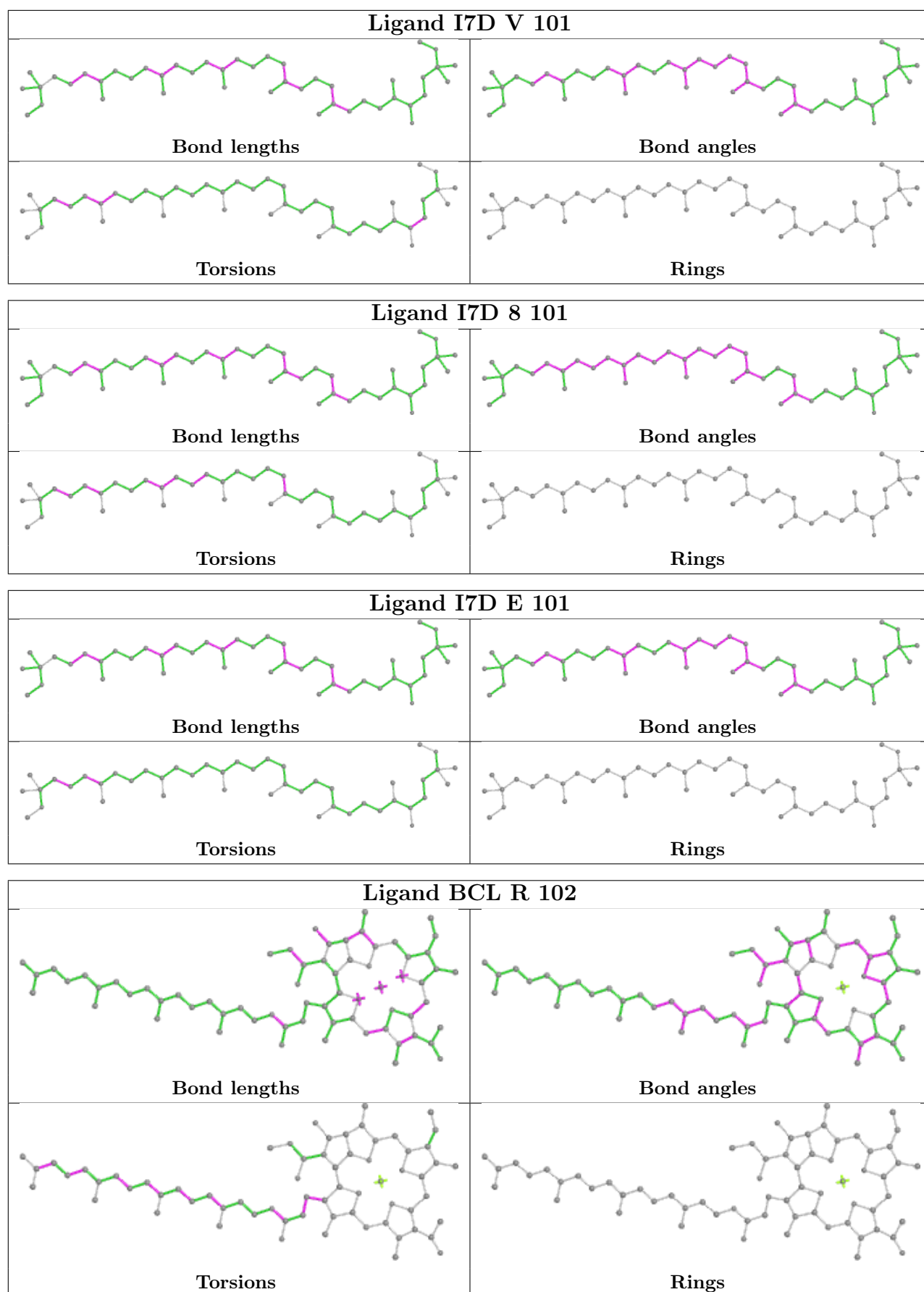


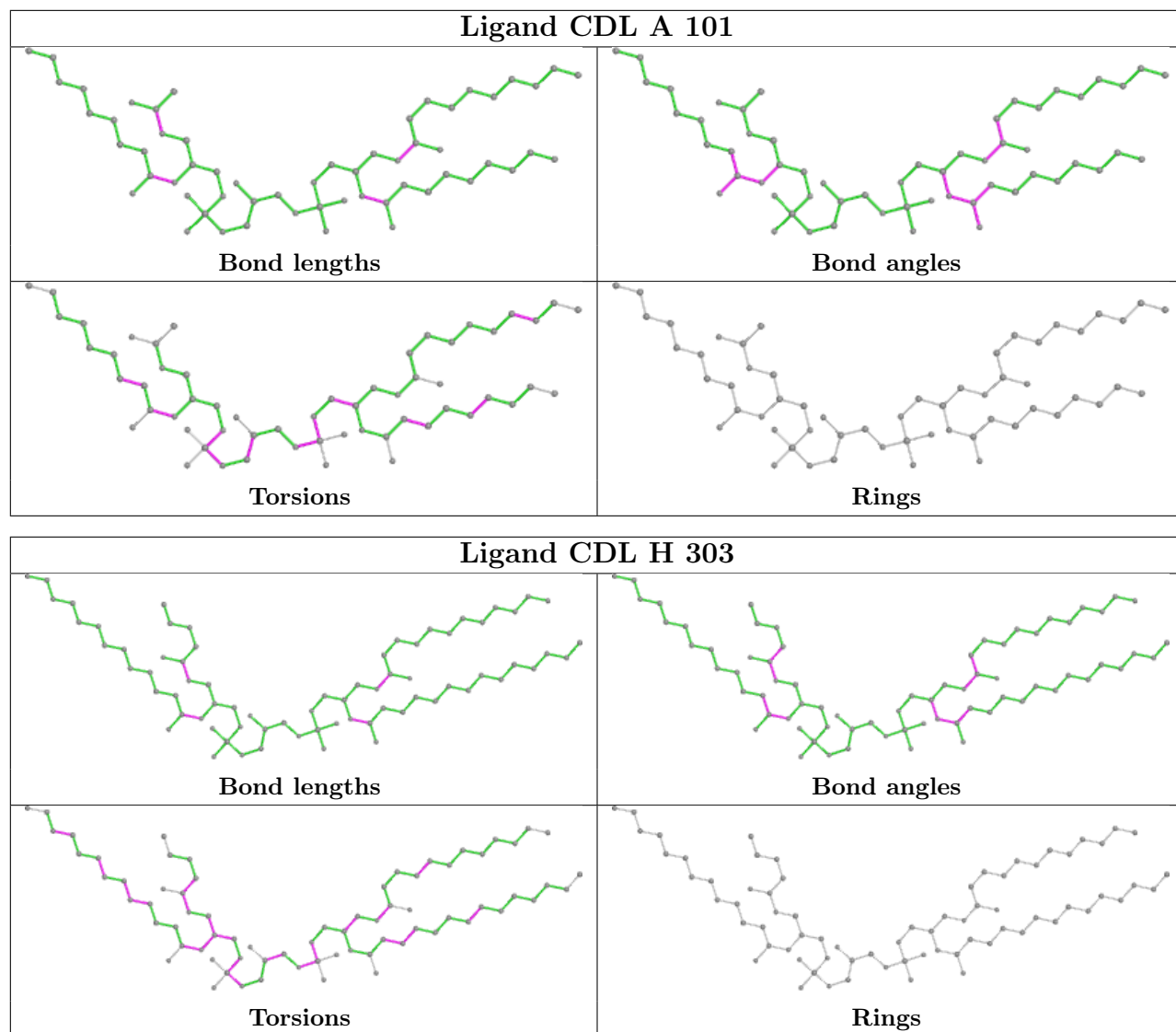


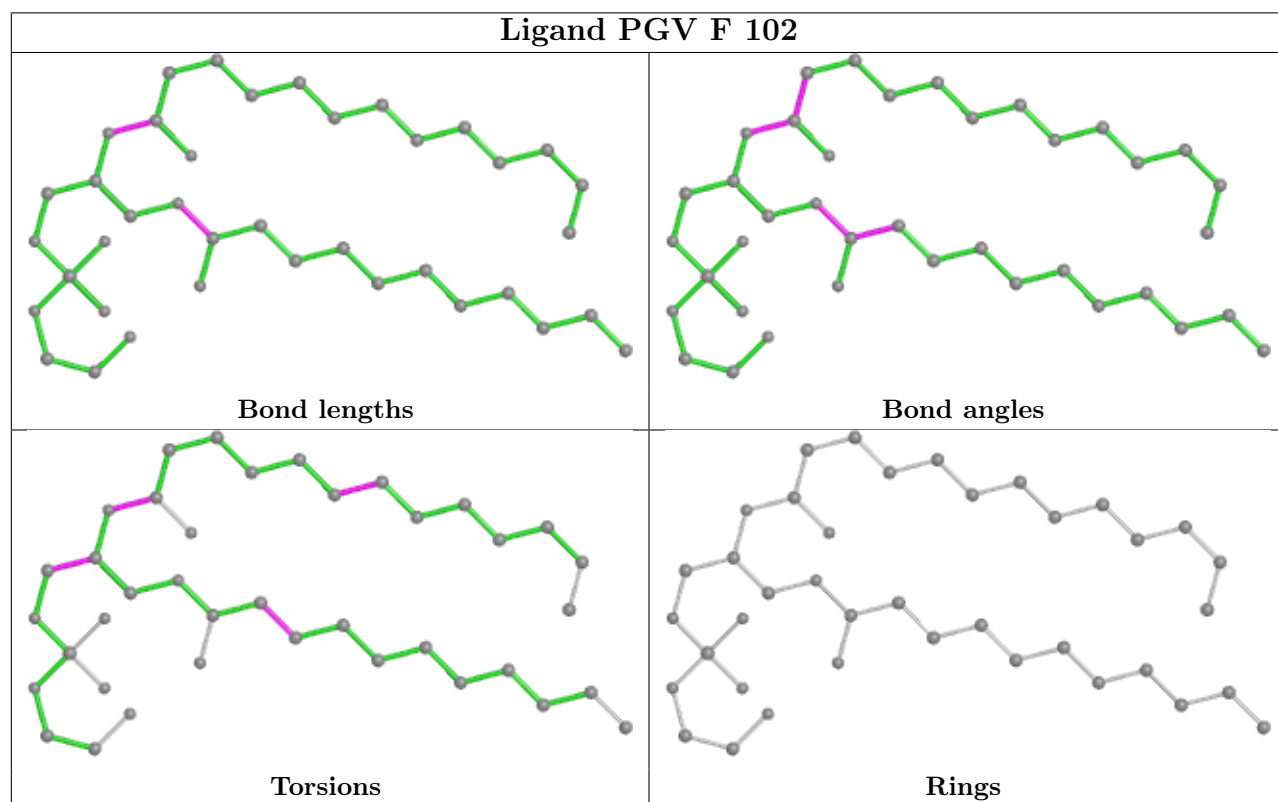
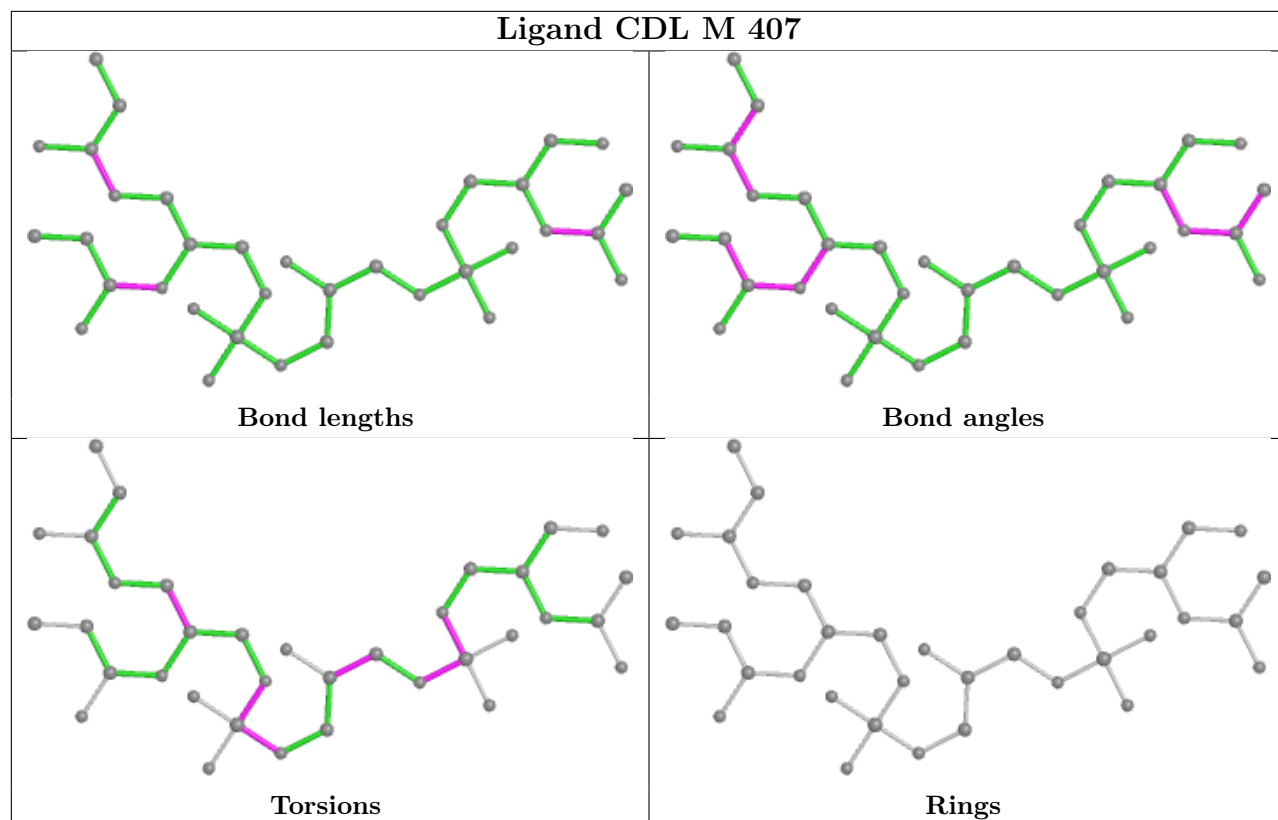


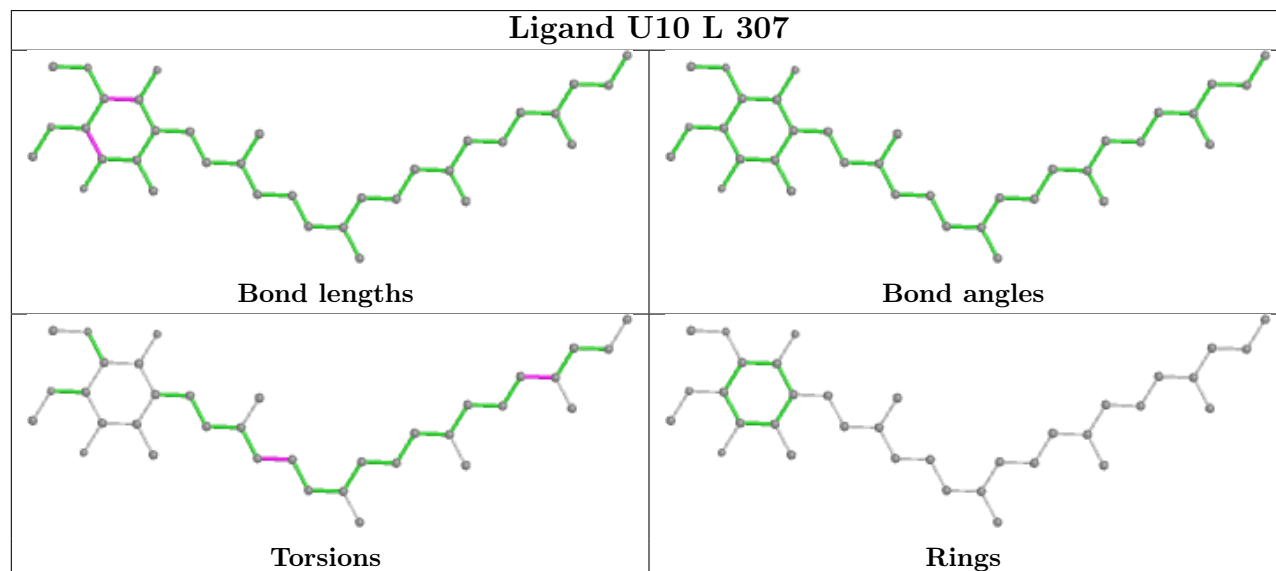
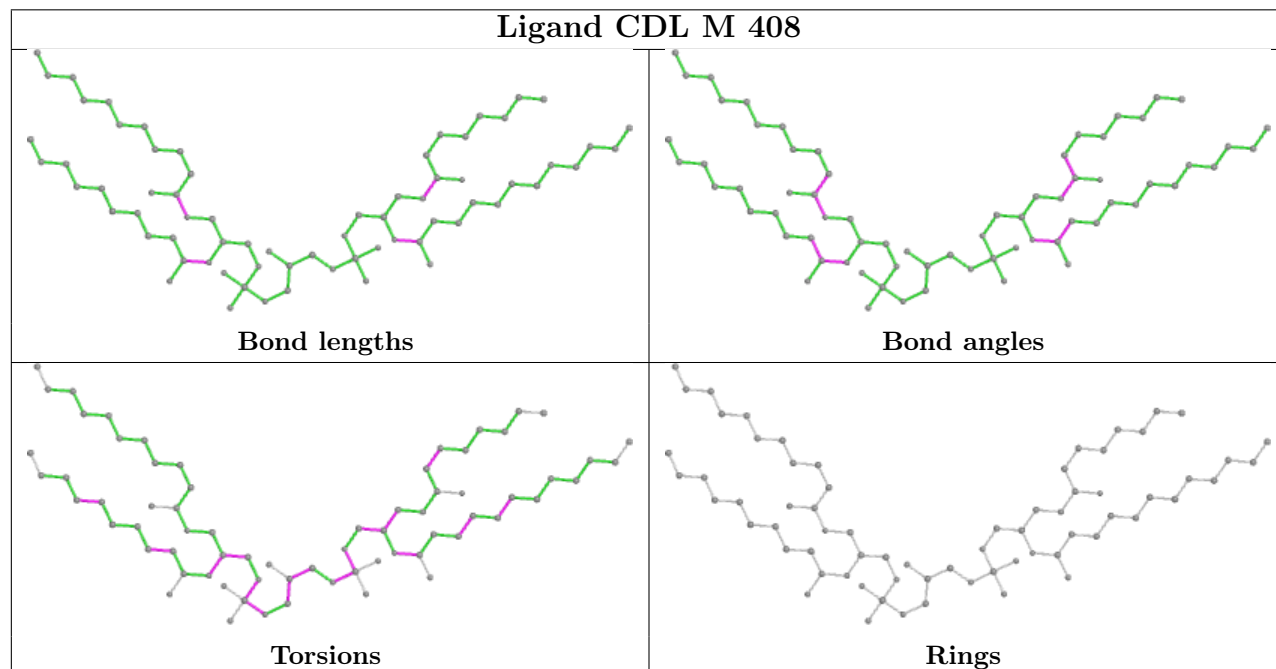
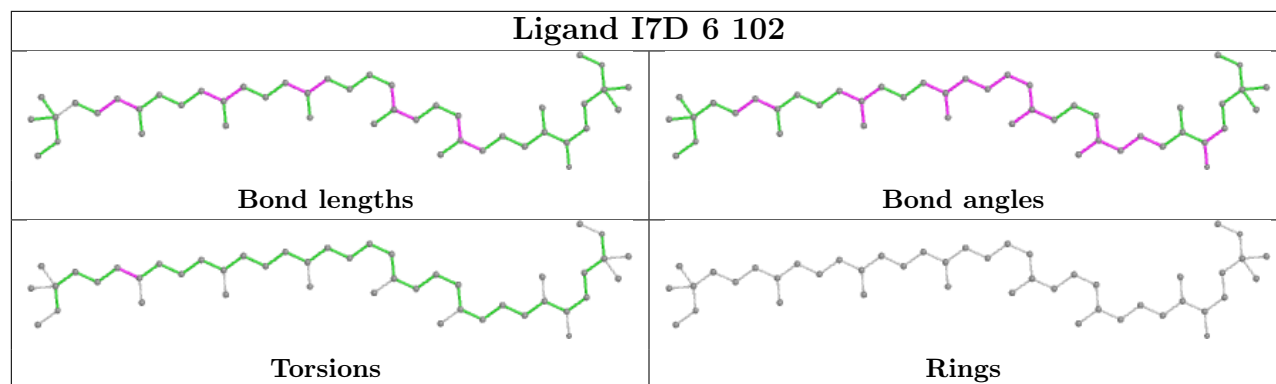


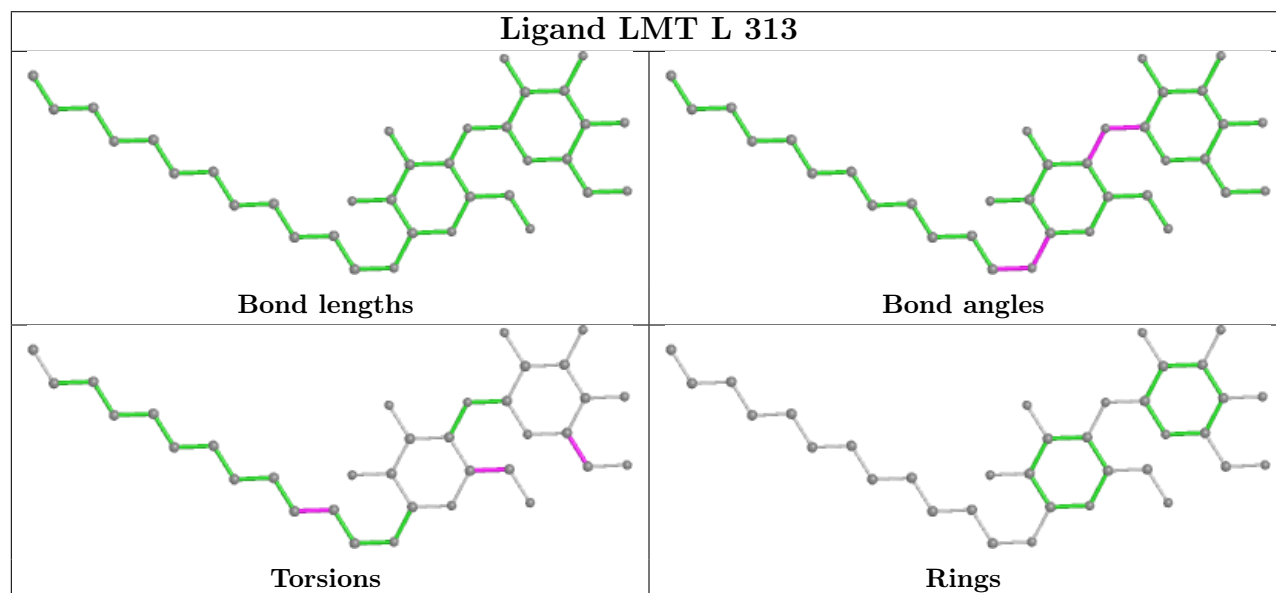
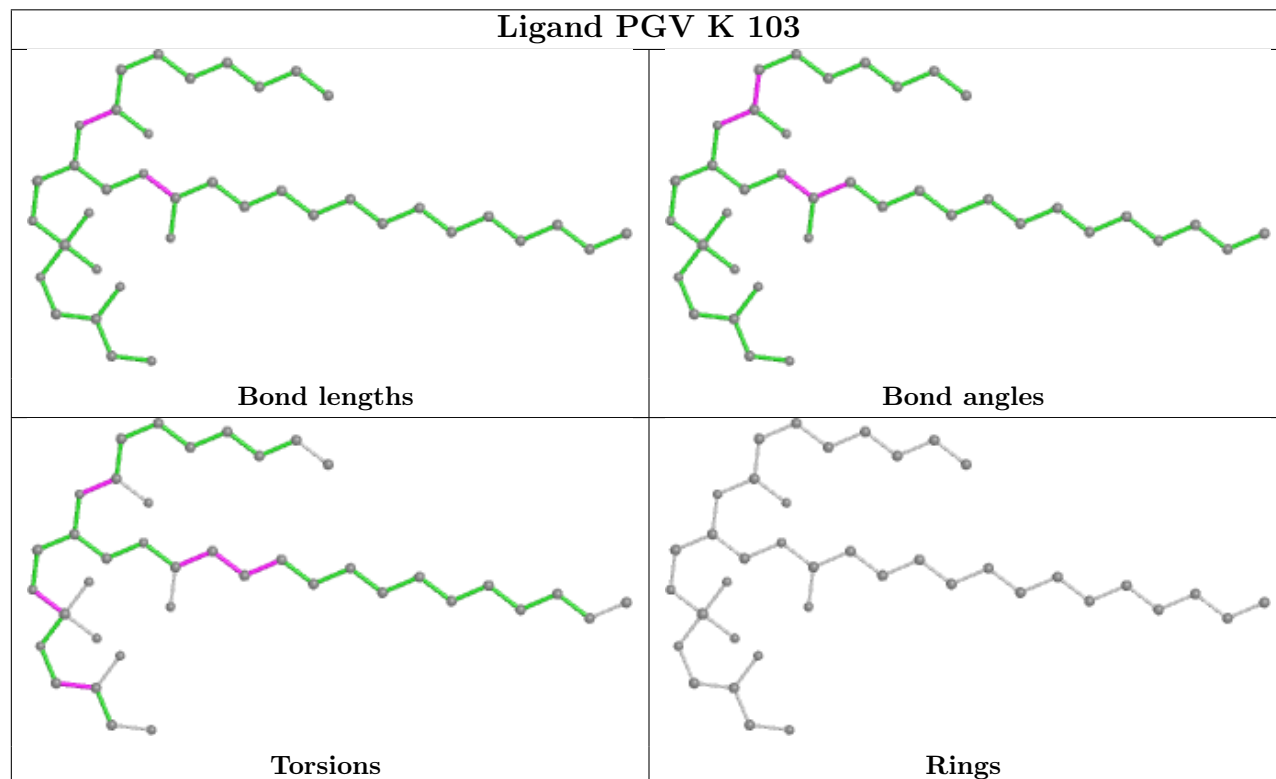
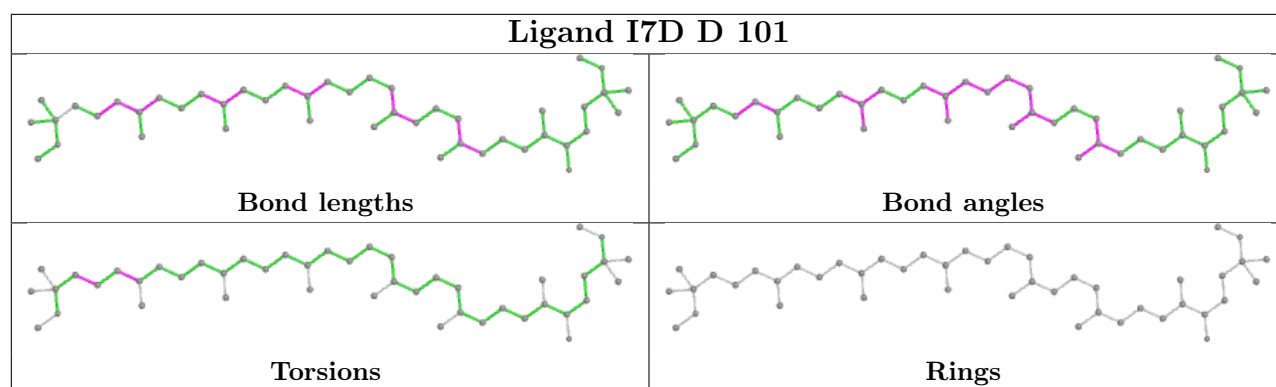


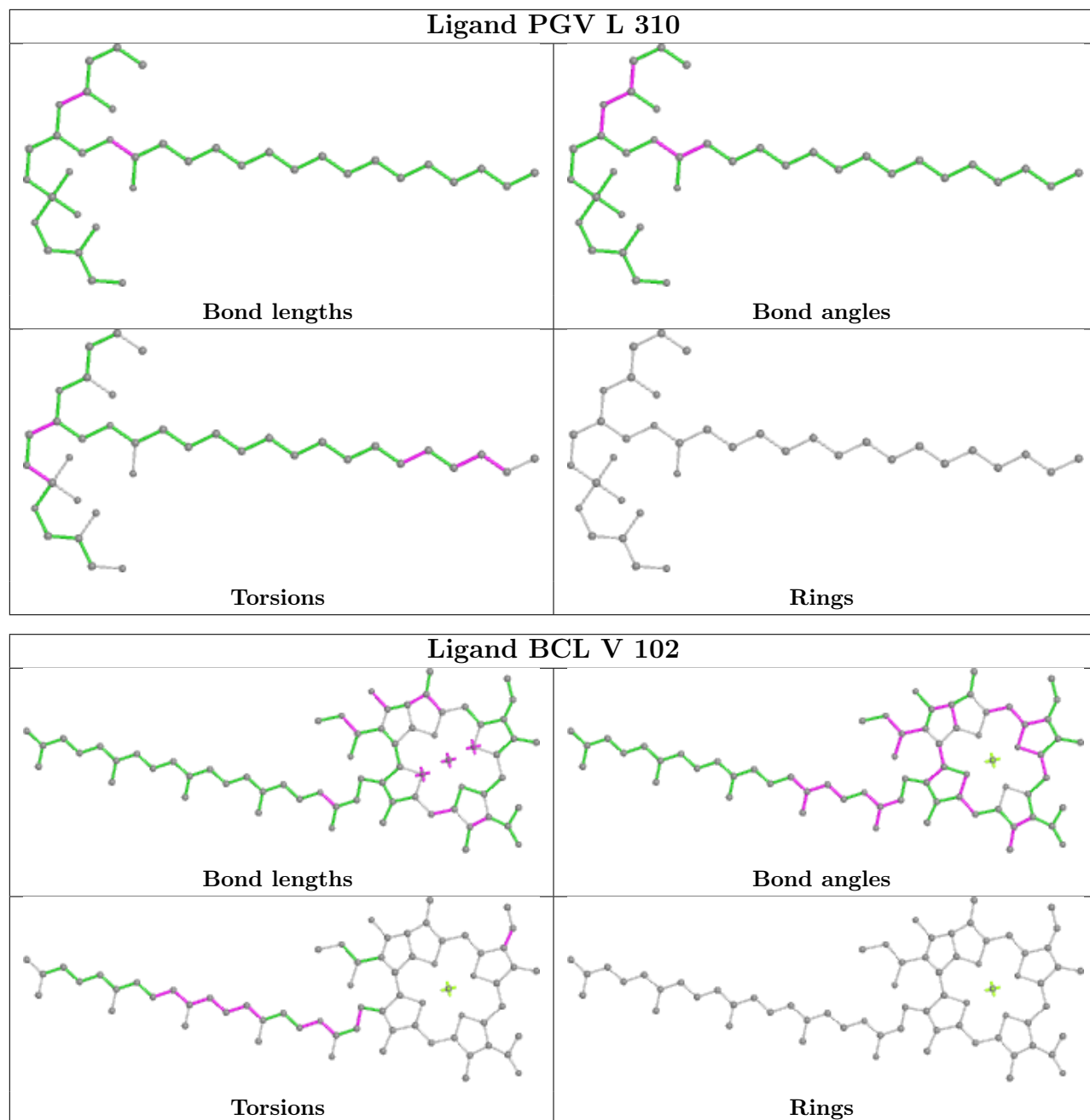


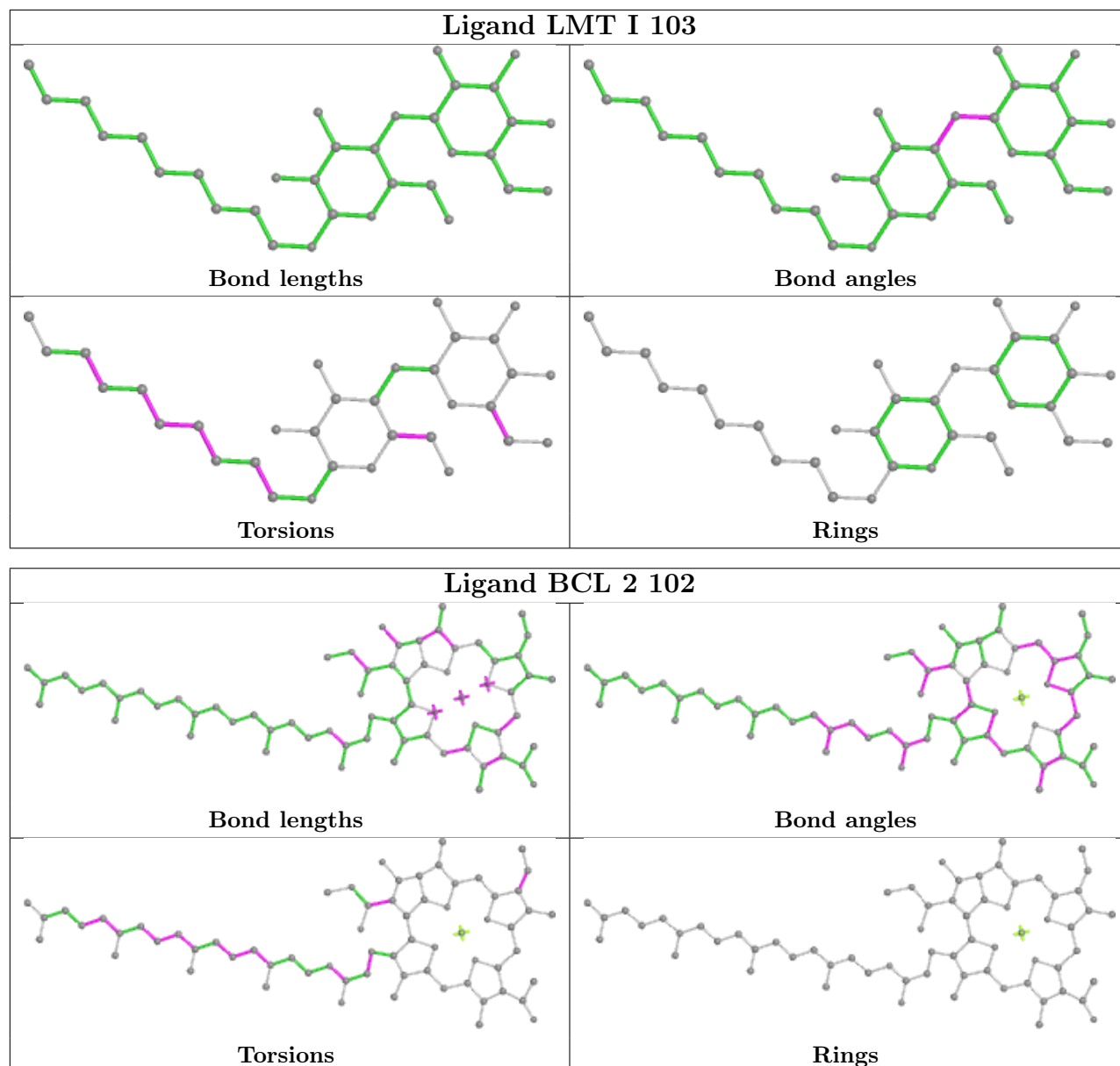












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

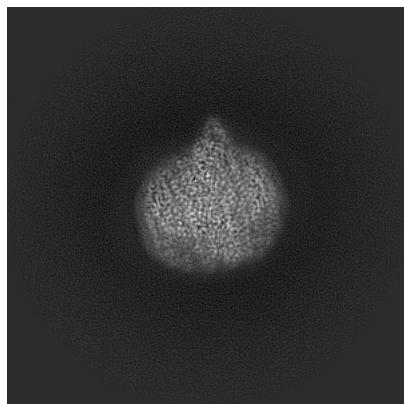
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-33501. These allow visual inspection of the internal detail of the map and identification of artifacts.

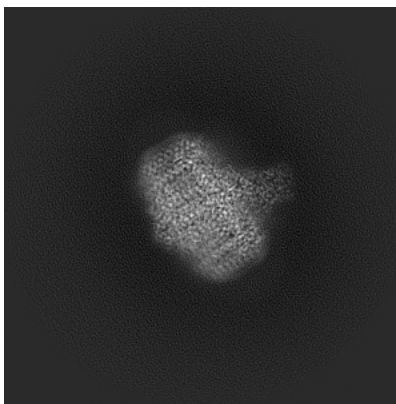
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

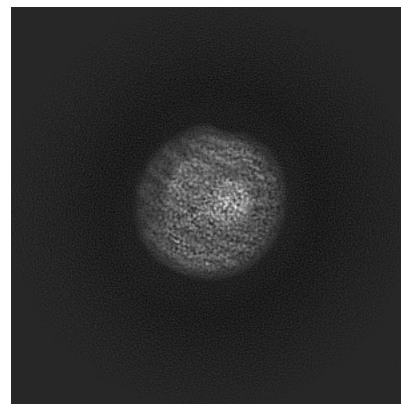
6.1.1 Primary map



X

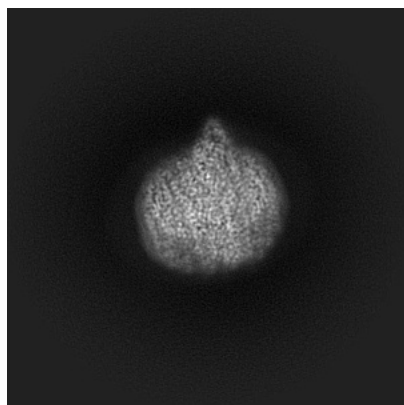


Y

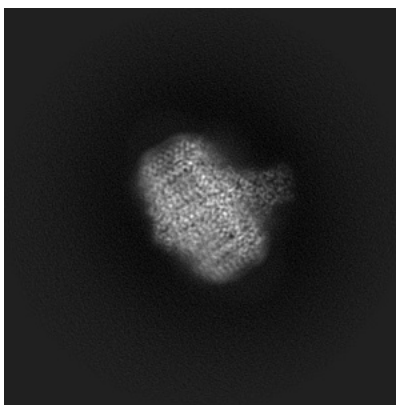


Z

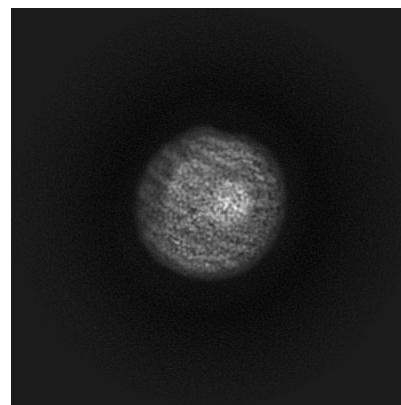
6.1.2 Raw map



X



Y

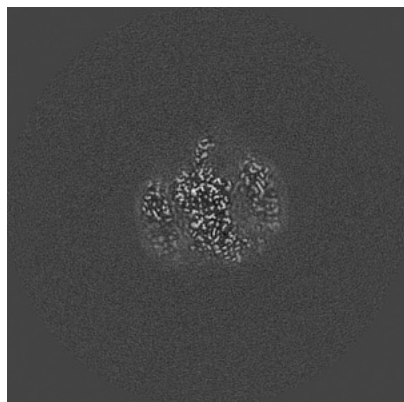


Z

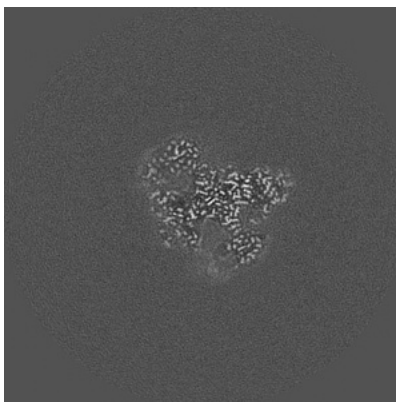
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

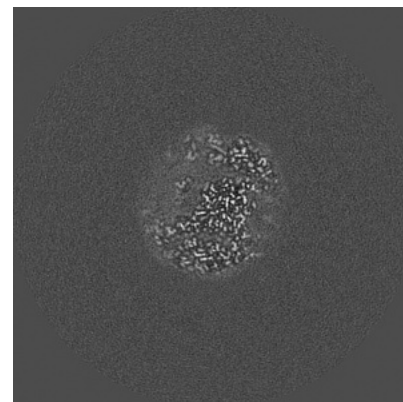
6.2.1 Primary map



X Index: 200

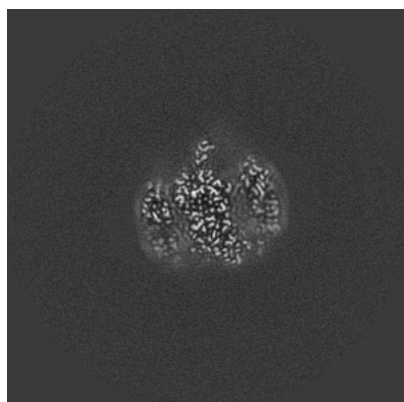


Y Index: 200

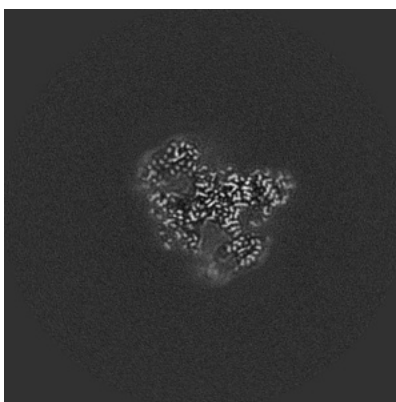


Z Index: 200

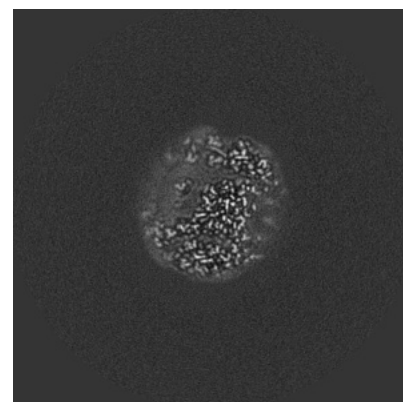
6.2.2 Raw map



X Index: 200



Y Index: 200

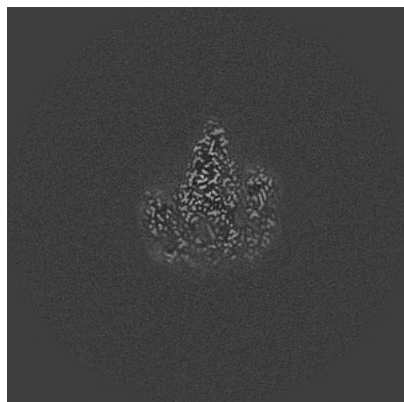


Z Index: 200

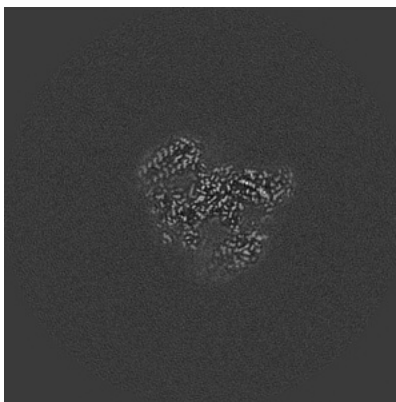
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

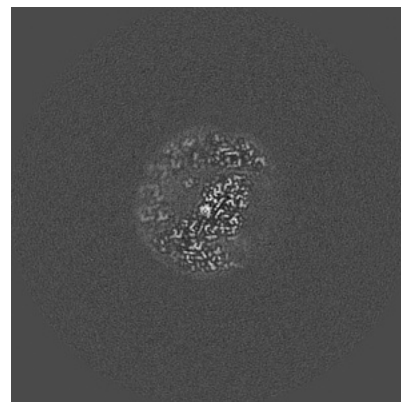
6.3.1 Primary map



X Index: 217

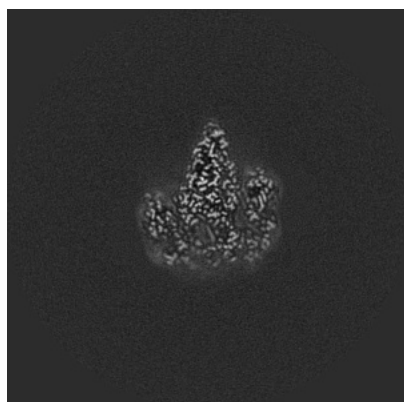


Y Index: 203

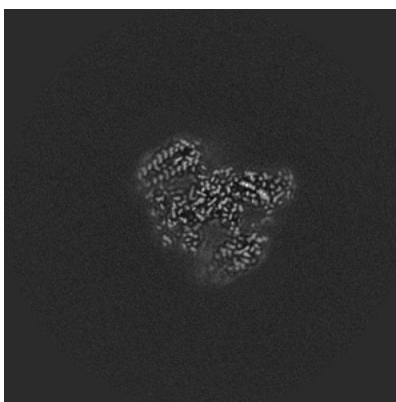


Z Index: 209

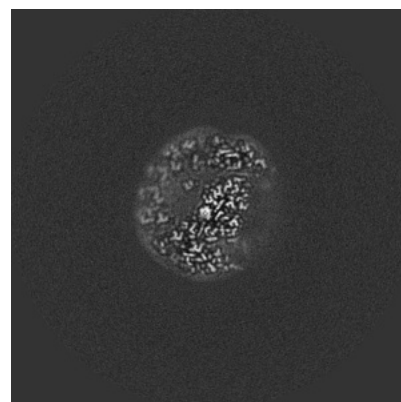
6.3.2 Raw map



X Index: 217



Y Index: 203

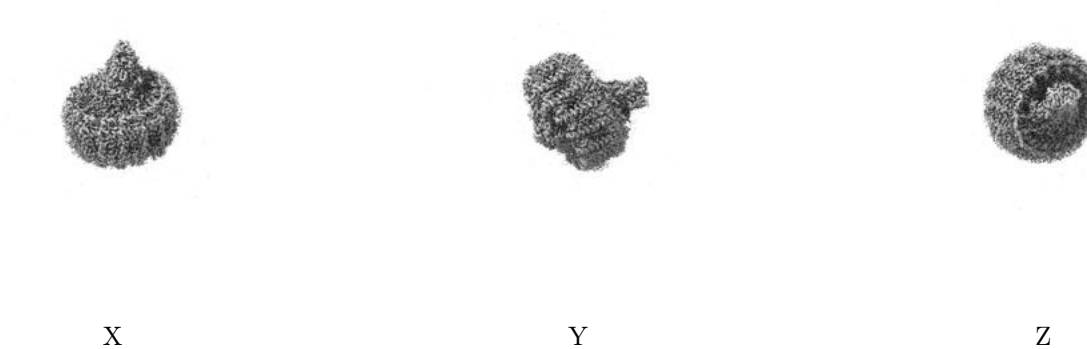


Z Index: 209

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

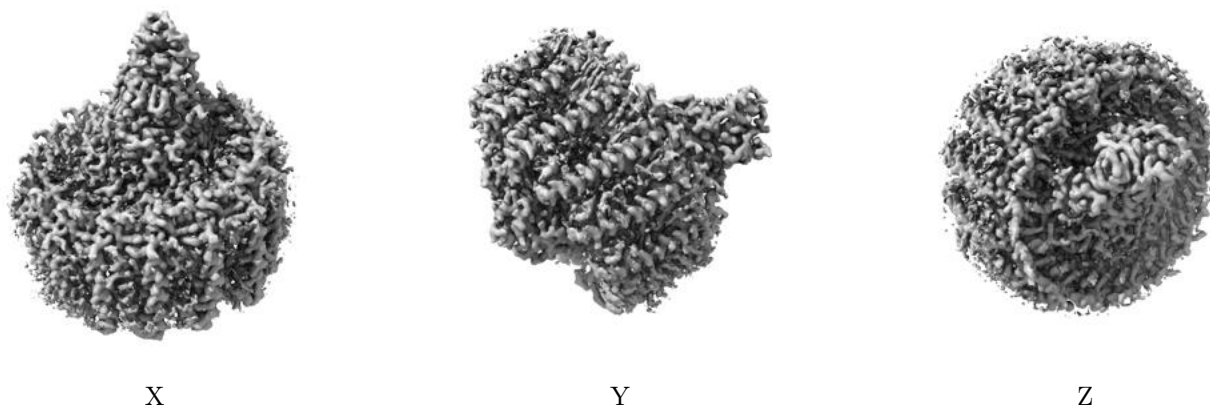
6.4 Orthogonal surface views [i](#)

6.4.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.4.2 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.

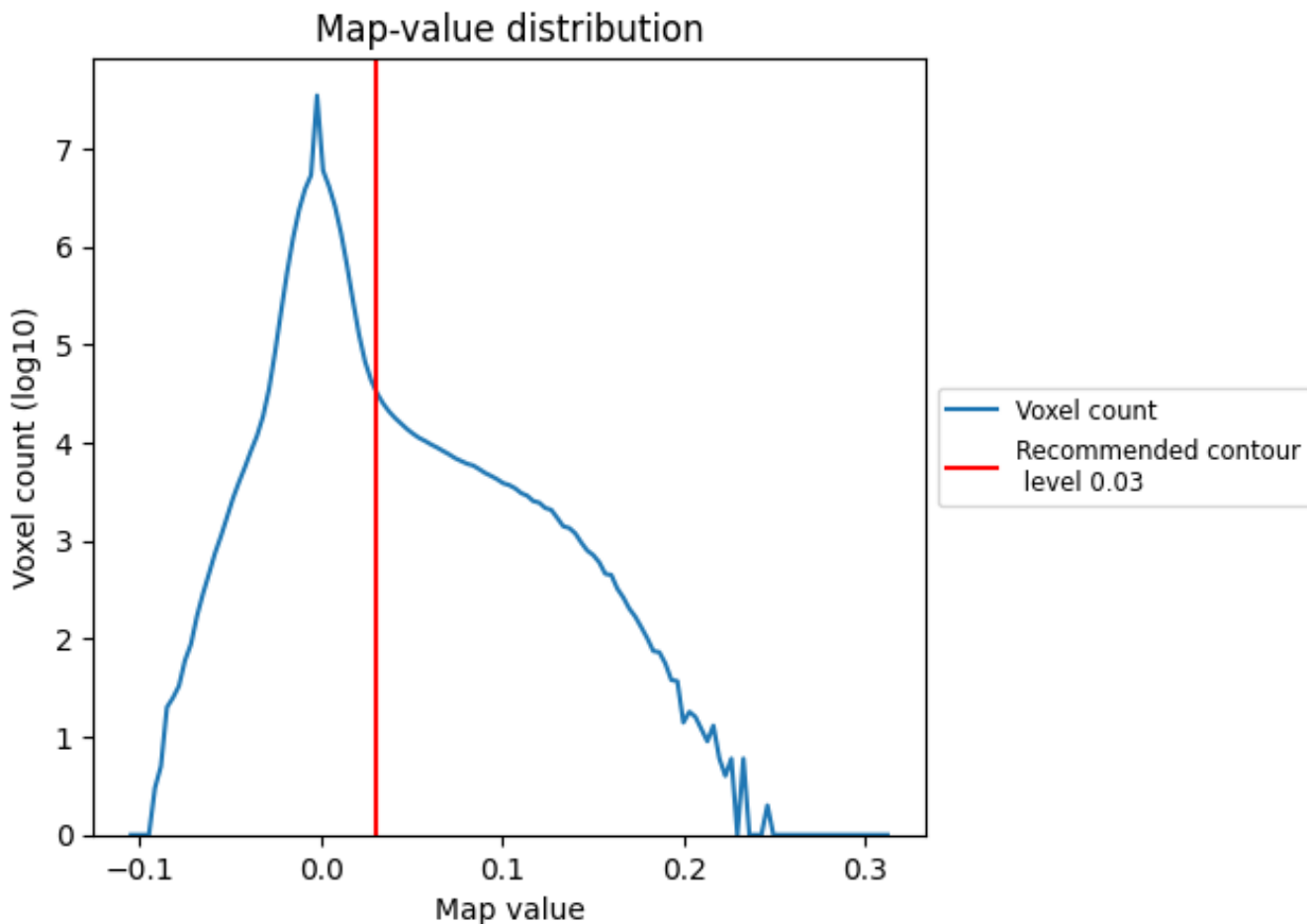
6.5 Mask visualisation [i](#)

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

7 Map analysis [i](#)

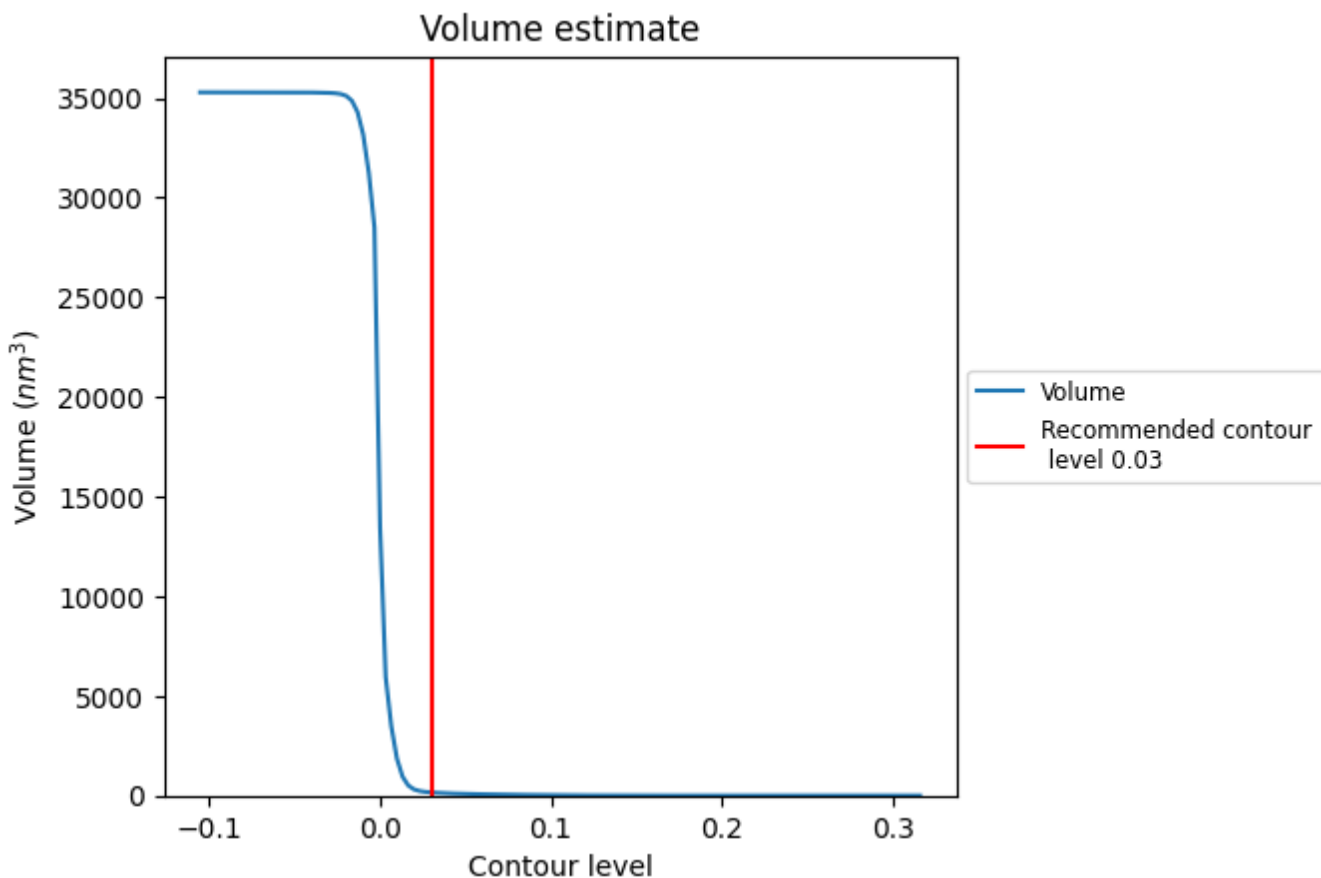
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

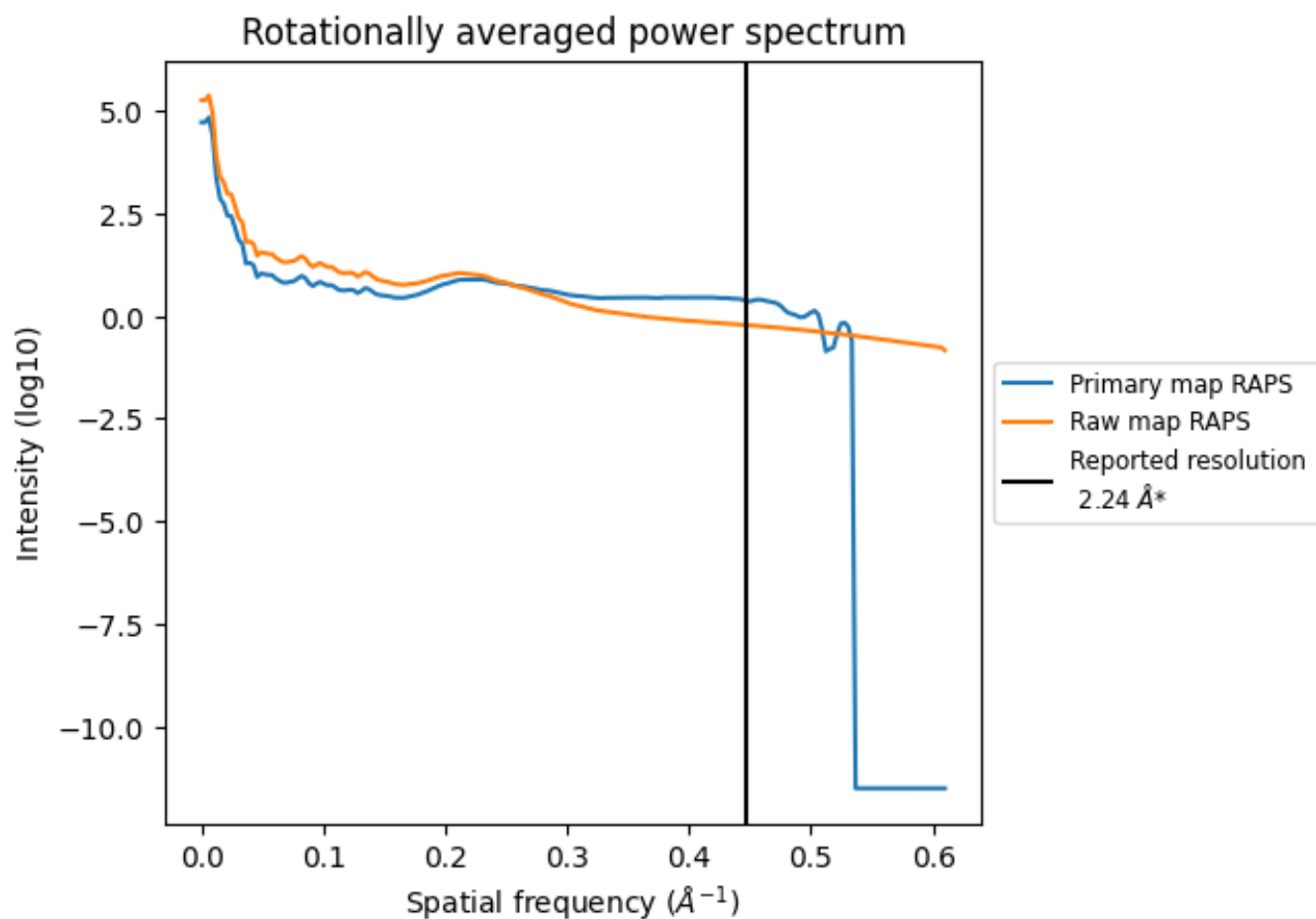
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 157 nm³; this corresponds to an approximate mass of 142 kDa.

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

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

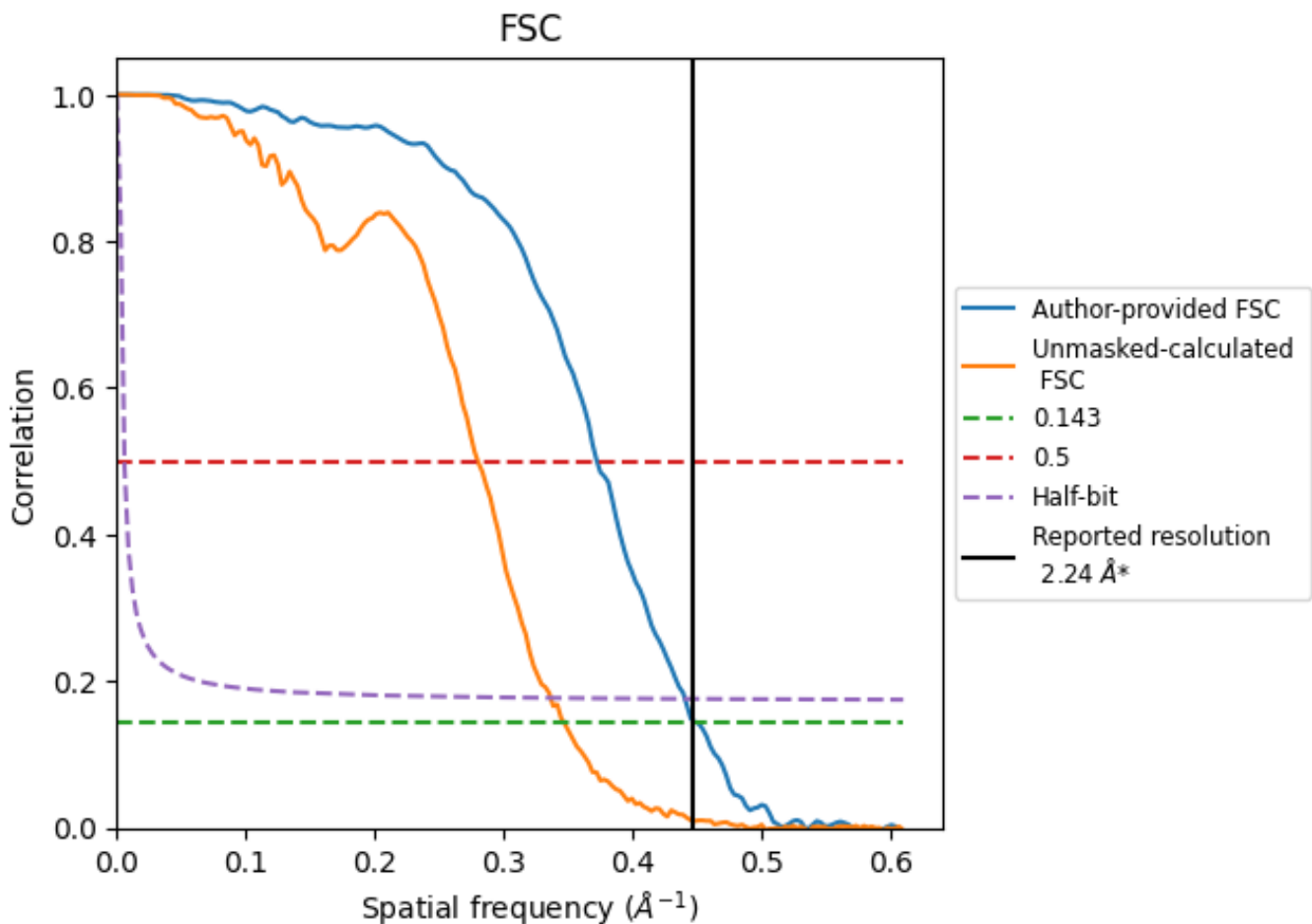


*Reported resolution corresponds to spatial frequency of 0.446 Å⁻¹

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 0.446 Å⁻¹

8.2 Resolution estimates [i](#)

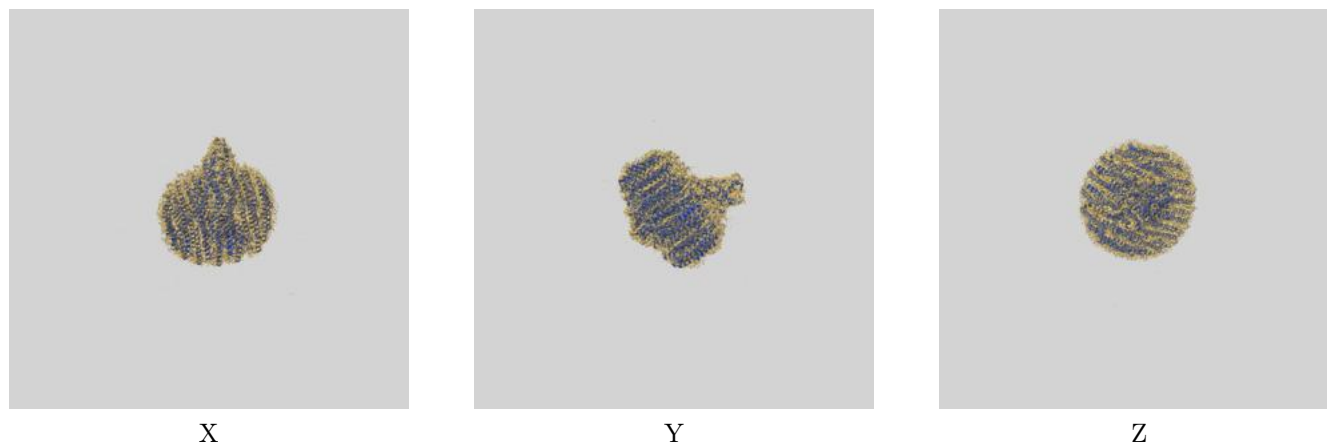
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.24	-	-
Author-provided FSC curve	2.22	2.69	2.27
Unmasked-calculated*	2.88	3.57	2.97

*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 2.88 differs from the reported value 2.24 by more than 10 %

9 Map-model fit [i](#)

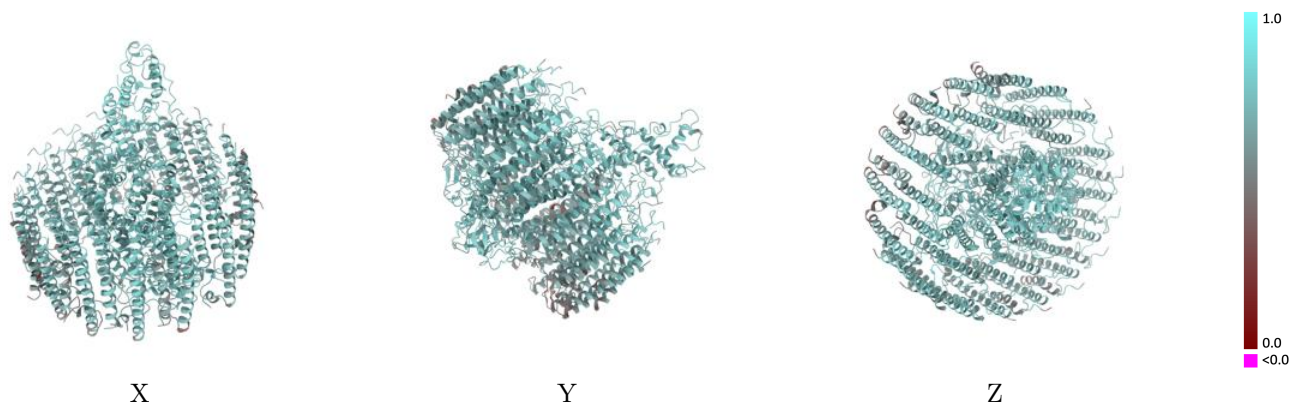
This section contains information regarding the fit between EMDB map EMD-33501 and PDB model 7XXF. Per-residue inclusion information can be found in section 3 on page 20.

9.1 Map-model overlay [i](#)



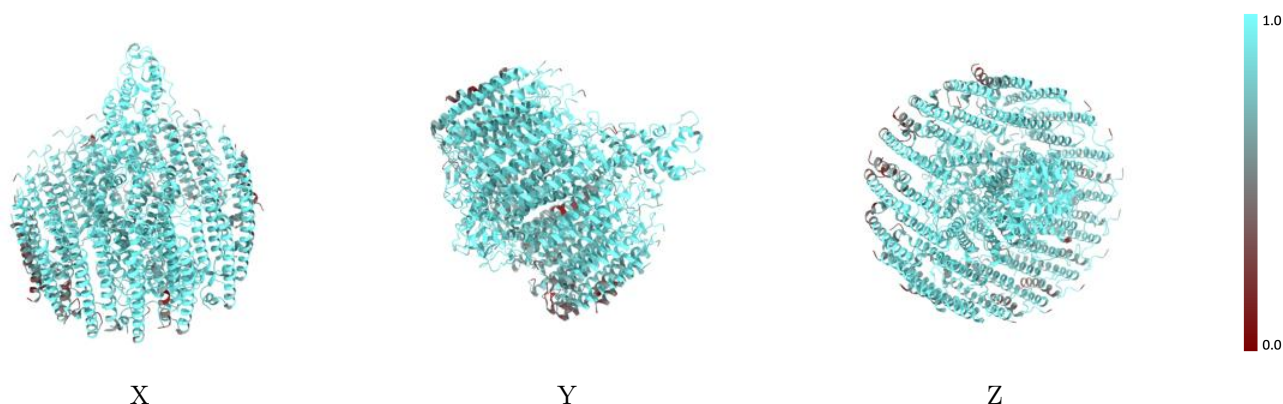
The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



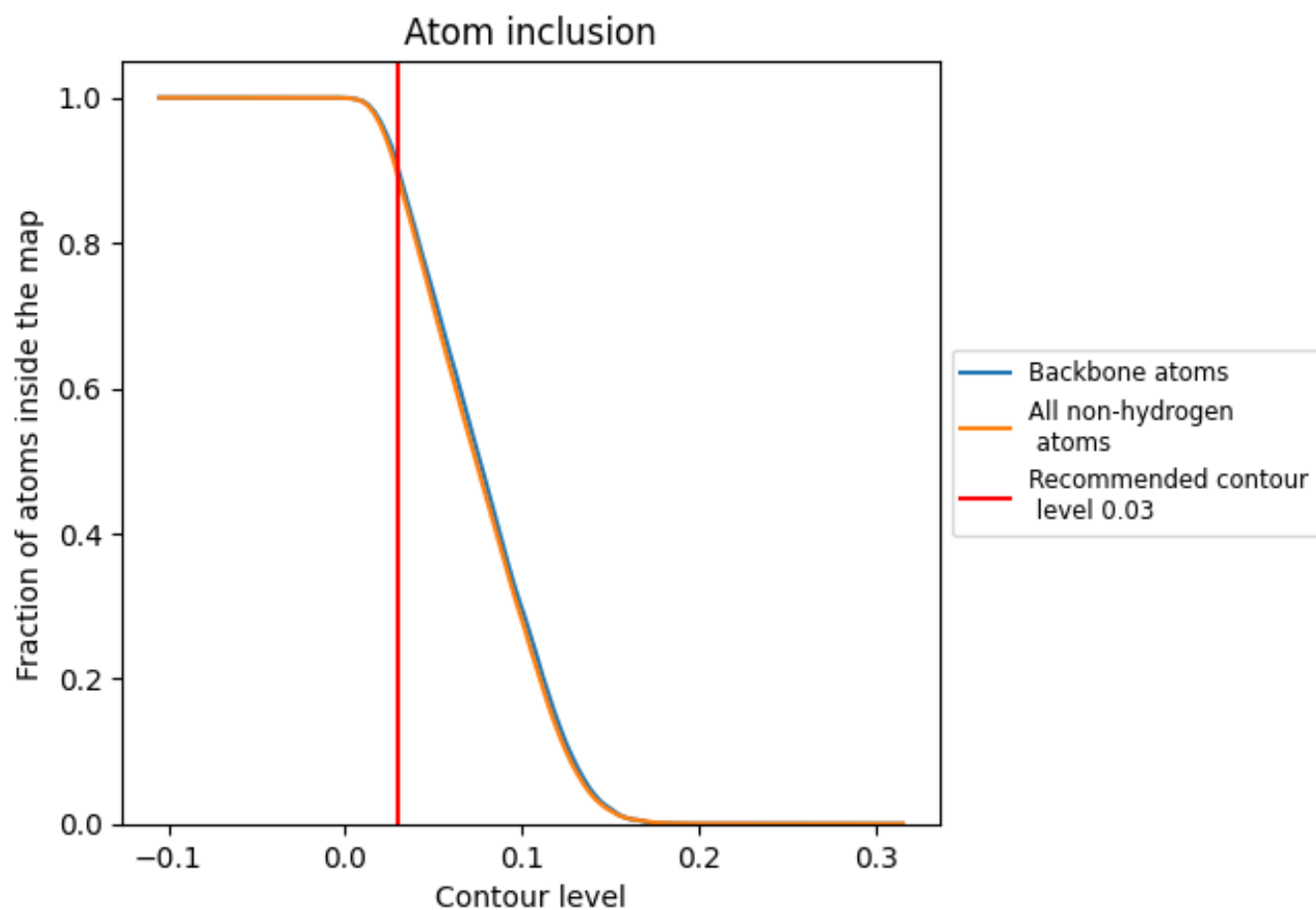
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.03).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 89% 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 (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8918	 0.6760
0	 0.8835	 0.6580
1	 0.8969	 0.6610
2	 0.7996	 0.6200
3	 0.8765	 0.6530
4	 0.8551	 0.6490
5	 0.9020	 0.6750
6	 0.8410	 0.6380
7	 0.9085	 0.6750
8	 0.8692	 0.6580
9	 0.9379	 0.7020
A	 0.8922	 0.6700
B	 0.9049	 0.6820
C	 0.9677	 0.7240
D	 0.9045	 0.6730
E	 0.8753	 0.6610
F	 0.9388	 0.6820
G	 0.8717	 0.6590
H	 0.9373	 0.6960
I	 0.8910	 0.6690
J	 0.8451	 0.6430
K	 0.8863	 0.6530
L	 0.9616	 0.7280
M	 0.9682	 0.7290
N	 0.8612	 0.6580
O	 0.9432	 0.6890
P	 0.9115	 0.6720
Q	 0.9299	 0.6860
R	 0.8954	 0.6780
S	 0.9084	 0.6710
T	 0.7891	 0.6170
U	 0.8659	 0.6510
V	 0.8129	 0.6360
W	 0.8632	 0.6590
X	 0.8189	 0.6330



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Chain	Atom inclusion	Q-score
Y	 0.8874	 0.6590
Z	 0.8562	 0.6430
a	 0.5780	 0.5470
b	 0.8150	 0.6400
c	 0.6012	 0.5570
d	 0.4509	 0.5070
e	 0.4971	 0.5040
f	 0.8208	 0.6180
g	 0.6879	 0.5940
h	 0.8266	 0.6330
i	 0.5665	 0.5550
j	 0.6474	 0.5740
k	 0.5145	 0.4980