



Full wwPDB EM Validation Report ⓘ

Dec 12, 2022 – 11:10 PM EST

PDB ID : 3JCU
EMDB ID : EMD-6617
Title : Cryo-EM structure of spinach PSII-LHCII supercomplex at 3.2 Angstrom resolution
Authors : Wei, X.P.; Zhang, X.Z.; Su, X.D.; Cao, P.; Liu, X.Y.; Li, M.; Chang, W.R.; Liu, Z.F.
Deposited on : 2016-03-10
Resolution : 3.20 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

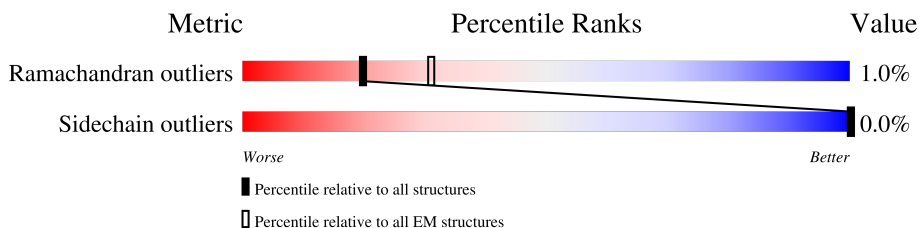
EMDB validation analysis : 0.0.1.dev43
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry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

1 Overall quality at a glance i

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

The reported resolution of this entry is 3.20 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
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	A	344	9% (red), 97% (green), 5% (grey)
1	a	344	9% (red), 97% (green), 5% (grey)
2	B	508	8% (red), 95% (green), 5% (grey)
2	b	508	8% (red), 95% (green), 5% (grey)
3	C	473	10% (red), 95% (green), 5% (grey)
3	c	473	10% (red), 95% (green), 5% (grey)
4	D	353	9% (red), 96% (green), 5% (grey)
4	d	353	10% (red), 96% (green), 5% (grey)
5	E	83	28% (red), 95% (green), 5% (grey)

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Mol	Chain	Length	Quality of chain
5	e	83	28% 95% 5%
6	F	39	13% 82% 18%
6	f	39	13% 82% 18%
7	G	267	21% 81% 18%
7	N	267	16% 81% 18%
7	Y	267	5% 81% 18%
7	g	267	21% 81% 18%
7	n	267	16% 81% 18%
7	y	267	6% 81% 18%
8	H	73	5% 81% 19%
8	h	73	• 81% 19%
9	I	36	14% 97% •
9	i	36	14% 97% •
10	J	40	80% 85% 15%
10	j	40	80% 85% 15%
11	K	59	12% 63% 37%
11	k	59	12% 63% 37%
12	L	38	8% 97% •
12	l	38	8% 97% •
13	M	34	32% 97% •
13	m	34	32% 97% •
14	O	332	34% 72% • 27%
14	o	332	35% 72% • 27%
15	P	267	64% 64% • 36%
15	p	267	64% 64% • 36%

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Mol	Chain	Length	Quality of chain
16	Q	232	64% 62% 36%
16	q	232	64% 62% 36%
17	R	243	37% 92% 5%
17	r	243	37% 92% 5%
18	S	295	30% 69% 27%
18	s	295	29% 69% 27%
19	T	33	15% 91% 9%
19	t	33	15% 91% 9%
20	U	99	24% 75%
20	u	99	24% 75%
21	W	137	13% 39% 61%
21	w	137	13% 39% 61%
22	X	117	6% 30% 70%
22	x	117	6% 30% 70%
23	Z	62	40% 98%
23	z	62	40% 98%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
27	CLA	A	405	X	-	-	-
27	CLA	A	406	X	-	-	-
27	CLA	A	407	X	-	-	-
27	CLA	A	410	X	-	-	-
27	CLA	B	602	X	-	-	-
27	CLA	B	603	X	-	-	-
27	CLA	B	604	X	-	-	-
27	CLA	B	605	X	-	-	-
27	CLA	B	606	X	-	-	-
27	CLA	B	607	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
27	CLA	B	608	X	-	-	-
27	CLA	B	609	X	-	-	-
27	CLA	B	610	X	-	-	-
27	CLA	B	611	X	-	-	-
27	CLA	B	612	X	-	-	-
27	CLA	B	613	X	-	-	-
27	CLA	B	614	X	-	-	-
27	CLA	B	615	X	-	-	-
27	CLA	B	616	X	-	-	-
27	CLA	B	617	X	-	-	-
27	CLA	C	501	X	-	-	-
27	CLA	C	502	X	-	-	-
27	CLA	C	503	X	-	-	-
27	CLA	C	504	X	-	-	-
27	CLA	C	505	X	-	-	-
27	CLA	C	506	X	-	-	-
27	CLA	C	507	X	-	-	-
27	CLA	C	508	X	-	-	-
27	CLA	C	509	X	-	-	-
27	CLA	C	510	X	-	-	-
27	CLA	C	511	X	-	-	-
27	CLA	C	512	X	-	-	-
27	CLA	C	513	X	-	-	-
27	CLA	D	402	X	-	-	-
27	CLA	D	403	X	-	-	-
27	CLA	G	602	X	-	-	-
27	CLA	G	603	X	-	-	-
27	CLA	G	604	X	-	-	-
27	CLA	G	610	X	-	-	-
27	CLA	G	611	X	-	-	-
27	CLA	G	612	X	-	-	-
27	CLA	G	613	X	-	-	-
27	CLA	G	614	X	-	-	-
27	CLA	N	602	X	-	-	-
27	CLA	N	603	X	-	-	-
27	CLA	N	604	X	-	-	-
27	CLA	N	610	X	-	-	-
27	CLA	N	611	X	-	-	-
27	CLA	N	612	X	-	-	-
27	CLA	N	613	X	-	-	-
27	CLA	N	614	X	-	-	-
27	CLA	R	601	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
27	CLA	R	602	X	-	-	-
27	CLA	R	603	X	-	-	-
27	CLA	R	604	X	-	-	-
27	CLA	R	609	X	-	-	-
27	CLA	R	610	X	-	-	-
27	CLA	R	611	X	-	-	-
27	CLA	R	612	X	-	-	-
27	CLA	R	613	X	-	-	-
27	CLA	R	616	X	-	-	-
27	CLA	S	602	X	-	-	-
27	CLA	S	604	X	-	-	-
27	CLA	S	609	X	-	-	-
27	CLA	S	610	X	-	-	-
27	CLA	S	611	X	-	-	-
27	CLA	S	612	X	-	-	-
27	CLA	S	613	X	-	-	-
27	CLA	S	614	X	-	-	-
27	CLA	Y	602	X	-	-	-
27	CLA	Y	603	X	-	-	-
27	CLA	Y	604	X	-	-	-
27	CLA	Y	610	X	-	-	-
27	CLA	Y	611	X	-	-	-
27	CLA	Y	612	X	-	-	-
27	CLA	Y	613	X	-	-	-
27	CLA	Y	614	X	-	-	-
27	CLA	a	405	X	-	-	-
27	CLA	a	406	X	-	-	-
27	CLA	a	407	X	-	-	-
27	CLA	a	410	X	-	-	-
27	CLA	b	602	X	-	-	-
27	CLA	b	603	X	-	-	-
27	CLA	b	604	X	-	-	-
27	CLA	b	605	X	-	-	-
27	CLA	b	606	X	-	-	-
27	CLA	b	607	X	-	-	-
27	CLA	b	608	X	-	-	-
27	CLA	b	609	X	-	-	-
27	CLA	b	610	X	-	-	-
27	CLA	b	611	X	-	-	-
27	CLA	b	612	X	-	-	-
27	CLA	b	613	X	-	-	-
27	CLA	b	614	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
27	CLA	b	615	X	-	-	-
27	CLA	b	616	X	-	-	-
27	CLA	b	617	X	-	-	-
27	CLA	c	501	X	-	-	-
27	CLA	c	502	X	-	-	-
27	CLA	c	503	X	-	-	-
27	CLA	c	504	X	-	-	-
27	CLA	c	505	X	-	-	-
27	CLA	c	506	X	-	-	-
27	CLA	c	507	X	-	-	-
27	CLA	c	508	X	-	-	-
27	CLA	c	509	X	-	-	-
27	CLA	c	510	X	-	-	-
27	CLA	c	511	X	-	-	-
27	CLA	c	512	X	-	-	-
27	CLA	c	513	X	-	-	-
27	CLA	d	402	X	-	-	-
27	CLA	d	403	X	-	-	-
27	CLA	g	602	X	-	-	-
27	CLA	g	603	X	-	-	-
27	CLA	g	604	X	-	-	-
27	CLA	g	610	X	-	-	-
27	CLA	g	611	X	-	-	-
27	CLA	g	612	X	-	-	-
27	CLA	g	613	X	-	-	-
27	CLA	g	614	X	-	-	-
27	CLA	n	602	X	-	-	-
27	CLA	n	603	X	-	-	-
27	CLA	n	604	X	-	-	-
27	CLA	n	610	X	-	-	-
27	CLA	n	611	X	-	-	-
27	CLA	n	612	X	-	-	-
27	CLA	n	613	X	-	-	-
27	CLA	n	614	X	-	-	-
27	CLA	r	601	X	-	-	-
27	CLA	r	602	X	-	-	-
27	CLA	r	603	X	-	-	-
27	CLA	r	604	X	-	-	-
27	CLA	r	609	X	-	-	-
27	CLA	r	610	X	-	-	-
27	CLA	r	611	X	-	-	-
27	CLA	r	612	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
27	CLA	r	613	X	-	-	-
27	CLA	r	616	X	-	-	-
27	CLA	s	602	X	-	-	-
27	CLA	s	604	X	-	-	-
27	CLA	s	609	X	-	-	-
27	CLA	s	610	X	-	-	-
27	CLA	s	611	X	-	-	-
27	CLA	s	612	X	-	-	-
27	CLA	s	613	X	-	-	-
27	CLA	s	614	X	-	-	-
27	CLA	y	602	X	-	-	-
27	CLA	y	603	X	-	-	-
27	CLA	y	604	X	-	-	-
27	CLA	y	610	X	-	-	-
27	CLA	y	611	X	-	-	-
27	CLA	y	612	X	-	-	-
27	CLA	y	613	X	-	-	-
27	CLA	y	614	X	-	-	-
37	CHL	G	601	X	-	-	-
37	CHL	G	605	X	-	-	-
37	CHL	G	606	X	-	-	-
37	CHL	G	607	X	-	-	-
37	CHL	G	608	X	-	-	-
37	CHL	G	609	X	-	-	-
37	CHL	N	601	X	-	-	-
37	CHL	N	605	X	-	-	-
37	CHL	N	606	X	-	-	-
37	CHL	N	607	X	-	-	-
37	CHL	N	608	X	-	-	-
37	CHL	N	609	X	-	-	-
37	CHL	R	606	X	-	-	-
37	CHL	R	607	X	-	-	-
37	CHL	R	608	X	-	-	-
37	CHL	S	601	X	-	-	-
37	CHL	S	606	X	-	-	-
37	CHL	S	607	X	-	-	-
37	CHL	S	608	X	-	-	-
37	CHL	Y	601	X	-	-	-
37	CHL	Y	605	X	-	-	-
37	CHL	Y	606	X	-	-	-
37	CHL	Y	607	X	-	-	-
37	CHL	Y	608	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
37	CHL	Y	609	X	-	-	-
37	CHL	g	601	X	-	-	-
37	CHL	g	605	X	-	-	-
37	CHL	g	606	X	-	-	-
37	CHL	g	607	X	-	-	-
37	CHL	g	608	X	-	-	-
37	CHL	g	609	X	-	-	-
37	CHL	n	601	X	-	-	-
37	CHL	n	605	X	-	-	-
37	CHL	n	606	X	-	-	-
37	CHL	n	607	X	-	-	-
37	CHL	n	608	X	-	-	-
37	CHL	n	609	X	-	-	-
37	CHL	r	606	X	-	-	-
37	CHL	r	607	X	-	-	-
37	CHL	r	608	X	-	-	-
37	CHL	s	601	X	-	-	-
37	CHL	s	606	X	-	-	-
37	CHL	s	607	X	-	-	-
37	CHL	s	608	X	-	-	-
37	CHL	y	601	X	-	-	-
37	CHL	y	605	X	-	-	-
37	CHL	y	606	X	-	-	-
37	CHL	y	607	X	-	-	-
37	CHL	y	608	X	-	-	-
37	CHL	y	609	X	-	-	-

2 Entry composition [i](#)

There are 40 unique types of molecules in this entry. The entry contains 75994 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 Photosystem II protein D1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	334	Total	C	N	O	S	0	0
			2614	1707	430	464	13		
1	a	334	Total	C	N	O	S	0	0
			2614	1707	430	464	13		

- Molecule 2 is a protein called Photosystem II CP47 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	487	Total	C	N	O	S	0	0
			3820	2501	640	667	12		
2	b	487	Total	C	N	O	S	0	0
			3820	2501	640	667	12		

- Molecule 3 is a protein called Photosystem II CP43 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	C	449	Total	C	N	O	S	0	0
			3475	2284	581	599	11		
3	c	449	Total	C	N	O	S	0	0
			3475	2284	581	599	11		

- Molecule 4 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	D	340	Total	C	N	O	S	0	0
			2703	1786	443	462	12		
4	d	340	Total	C	N	O	S	0	0
			2703	1786	443	462	12		

- Molecule 5 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	E	79	Total	C	N	O	0	0
			636	412	104	120		
5	e	79	Total	C	N	O	0	0
			636	412	104	120		

- Molecule 6 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	32	Total	C	N	O	S	0	0
			257	174	43	39	1		
6	f	32	Total	C	N	O	S	0	0
			257	174	43	39	1		

- Molecule 7 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	218	Total	C	N	O	S	0	0
			1661	1079	270	305	7		
7	N	218	Total	C	N	O	S	0	0
			1661	1079	270	305	7		
7	Y	218	Total	C	N	O	S	0	0
			1661	1079	270	305	7		
7	g	218	Total	C	N	O	S	0	0
			1661	1079	270	305	7		
7	n	218	Total	C	N	O	S	0	0
			1661	1079	270	305	7		
7	y	218	Total	C	N	O	S	0	0
			1661	1079	270	305	7		

- Molecule 8 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	59	Total	C	N	O	S	0	0
			434	288	65	78	3		
8	h	59	Total	C	N	O	S	0	0
			434	288	65	78	3		

- Molecule 9 is a protein called Protein Photosystem II reaction center protein I.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	I	35	Total	C	N	O	S	0	0
			286	195	44	46	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
9	i	35	Total	C	N	O	S	0	0
			286	195	44	46	1		

- Molecule 10 is a protein called Photosystem II reaction center protein J.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	J	34	Total	C	N	O	0	0	
			247	168	38	41			
10	j	34	Total	C	N	O	0	0	
			247	168	38	41			

- Molecule 11 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	K	37	Total	C	N	O	S	0	0
			307	217	43	46	1		
11	k	37	Total	C	N	O	S	0	0
			307	217	43	46	1		

- Molecule 12 is a protein called Protein Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	37	Total	C	N	O	0	0	
			311	205	49	57			
12	l	37	Total	C	N	O	0	0	
			311	205	49	57			

- Molecule 13 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	M	33	Total	C	N	O	0	0	
			258	176	37	45			
13	m	33	Total	C	N	O	0	0	
			258	176	37	45			

- Molecule 14 is a protein called Oxygen-evolving enhancer protein 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	O	243	Total	C	N	O	S	0	0
			1844	1164	301	376	3		
14	o	243	Total	C	N	O	S	0	0
			1844	1164	301	376	3		

- Molecule 15 is a protein called Oxygen-evolving enhancer protein 2, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	P	172	Total	C	N	O	S	0	0
			1324	841	215	266	2		
15	p	172	Total	C	N	O	S	0	0
			1324	841	215	266	2		

- Molecule 16 is a protein called Oxygen-evolving enhancer protein 3, chloroplastic.

Mol	Chain	Residues	Atoms				AltConf	Trace
16	Q	148	Total	C	N	O	0	0
			1162	736	202	224		
16	q	148	Total	C	N	O	0	0
			1162	736	202	224		

- Molecule 17 is a protein called Chlorophyll A-B Binding protein 29 kD (CP29).

Mol	Chain	Residues	Atoms					AltConf	Trace
17	R	232	Total	C	N	O	S	0	0
			1806	1170	293	339	4		
17	r	232	Total	C	N	O	S	0	0
			1806	1170	293	339	4		

- Molecule 18 is a protein called Chlorophyll A-B Binding protein 26 kD (CP26).

Mol	Chain	Residues	Atoms					AltConf	Trace
18	S	214	Total	C	N	O	S	0	0
			1653	1080	269	299	5		
18	s	214	Total	C	N	O	S	0	0
			1653	1080	269	299	5		

- Molecule 19 is a protein called Photosystem II Reaction Center protein Tc.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	T	30	Total	C	N	O	S	0	0
			245	171	34	39	1		
19	t	30	Total	C	N	O	S	0	0
			245	171	34	39	1		

- Molecule 20 is a protein called Photosystem II Reaction Center Tn protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	U	25	Total	C	N	O	S	0	0
			193	123	35	32	3		
20	u	25	Total	C	N	O	S	0	0
			193	123	35	32	3		

- Molecule 21 is a protein called Photosystem II reaction center W protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	W	54	Total	C	N	O	S	0	0
			419	276	61	81	1		
21	w	54	Total	C	N	O	S	0	0
			419	276	61	81	1		

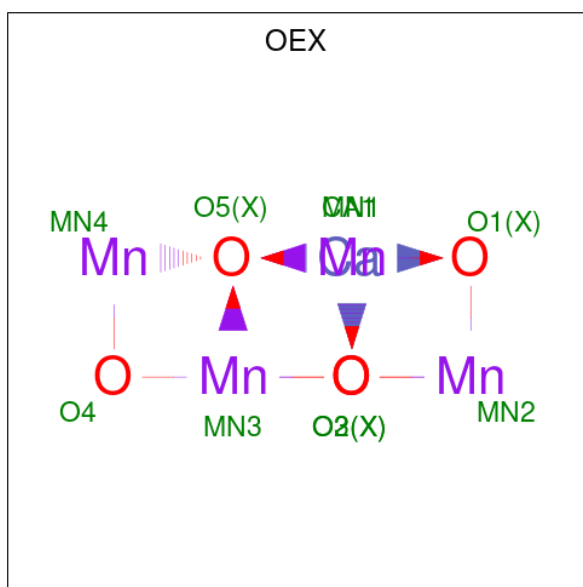
- Molecule 22 is a protein called Photosystem II Reaction Center X protein.

Mol	Chain	Residues	Atoms				AltConf	Trace
22	X	35	Total	C	N	O	0	0
			246	163	38	45		
22	x	35	Total	C	N	O	0	0
			246	163	38	45		

- Molecule 23 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms				AltConf	Trace
23	Z	61	Total	C	N	O	0	0
			454	306	68	80		
23	z	61	Total	C	N	O	0	0
			454	306	68	80		

- Molecule 24 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn_4O_5).



Mol	Chain	Residues	Atoms				AltConf
			Total	Ca	Mn	O	
24	A	1	10	1	4	5	0
24	a	1	10	1	4	5	0

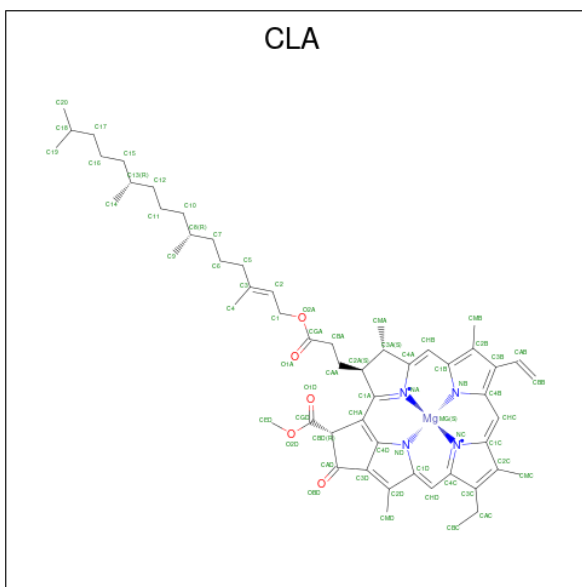
- Molecule 25 is FE (II) ION (three-letter code: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		AltConf
			Total	Fe	
25	A	1	1	1	0
25	a	1	1	1	0

- Molecule 26 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		AltConf
			Total	Cl	
26	A	2	2	2	0
26	a	2	2	2	0

- Molecule 27 is CHLOROPHYLL A (three-letter code: CLA) (formula: C₅₅H₇₂MgN₄O₅).



Mol	Chain	Residues	Atoms				AltConf	
			Total	C	Mg	N		O
27	A	1	Total	C	Mg	N	O	0
			239	199	4	16	20	
27	A	1	Total	C	Mg	N	O	0
			239	199	4	16	20	
27	A	1	Total	C	Mg	N	O	0
			239	199	4	16	20	
27	A	1	Total	C	Mg	N	O	0
			239	199	4	16	20	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	
27	B	1	Total	C	Mg	N	O	0
			1040	880	16	64	80	

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	B	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	B	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	B	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	B	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	B	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	B	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	C	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	D	1	Total 130	C 110	Mg 2	N 8	O 10	0
27	D	1	Total 130	C 110	Mg 2	N 8	O 10	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	G	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	N	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	R	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	S	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	Y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	a	1	Total 239	C 199	Mg 4	N 16	O 20	0
27	a	1	Total 239	C 199	Mg 4	N 16	O 20	0
27	a	1	Total 239	C 199	Mg 4	N 16	O 20	0
27	a	1	Total 239	C 199	Mg 4	N 16	O 20	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0
27	b	1	Total 1040	C 880	Mg 16	N 64	O 80	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	c	1	Total 829	C 699	Mg 13	N 52	O 65	0
27	d	1	Total 130	C 110	Mg 2	N 8	O 10	0
27	d	1	Total 130	C 110	Mg 2	N 8	O 10	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0

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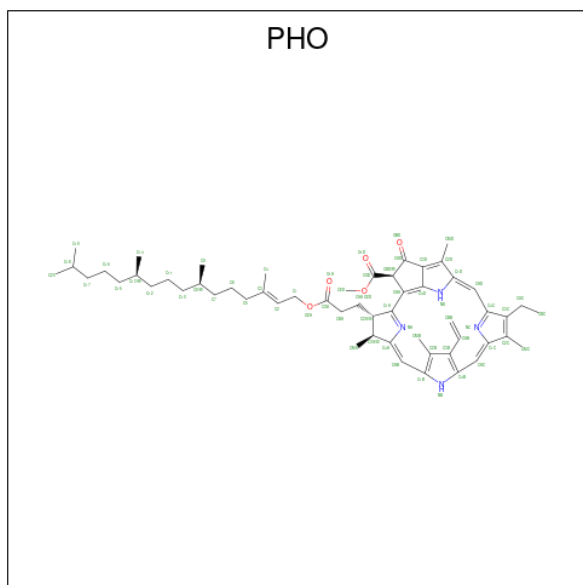
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	g	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	n	1	Total 424	C 344	Mg 8	N 32	O 40	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	r	1	Total 522	C 422	Mg 10	N 40	O 50	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0

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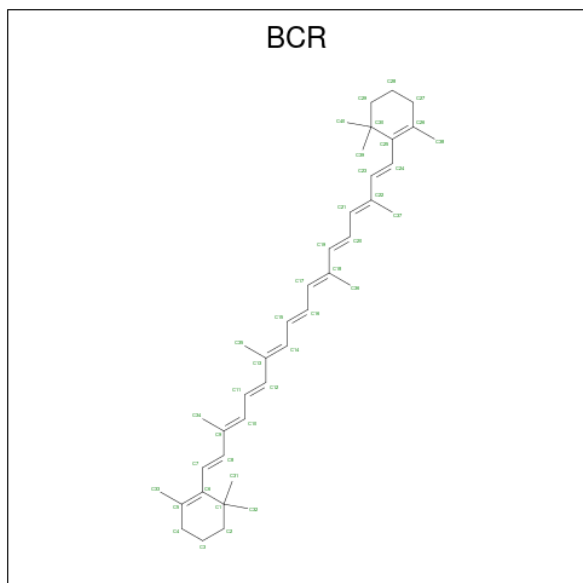
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	s	1	Total 441	C 351	Mg 9	N 36	O 45	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0
27	y	1	Total 472	C 392	Mg 8	N 32	O 40	0

- Molecule 28 is PHEOPHYTIN A (three-letter code: PHO) (formula: C₅₅H₇₄N₄O₅).



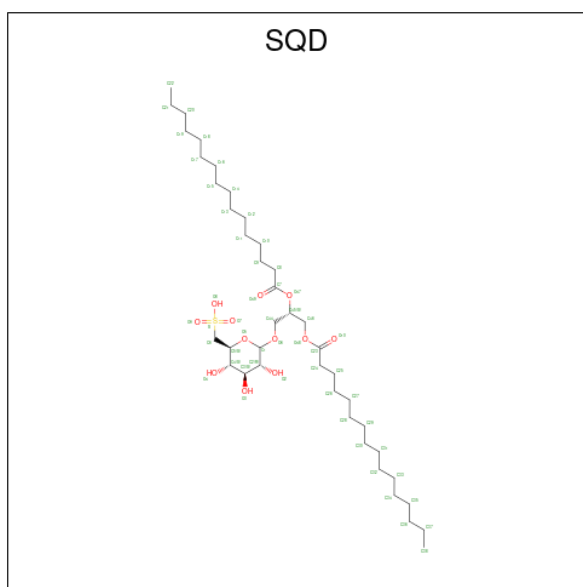
Mol	Chain	Residues	Atoms				AltConf
			Total	C	N	O	
28	A	1	Total	C	N	O	0
			128	110	8	10	
28	A	1	Total	C	N	O	0
			128	110	8	10	
28	a	1	Total	C	N	O	0
			128	110	8	10	
28	a	1	Total	C	N	O	0
			128	110	8	10	

- Molecule 29 is BETA-CAROTENE (three-letter code: BCR) (formula: C₄₀H₅₆).



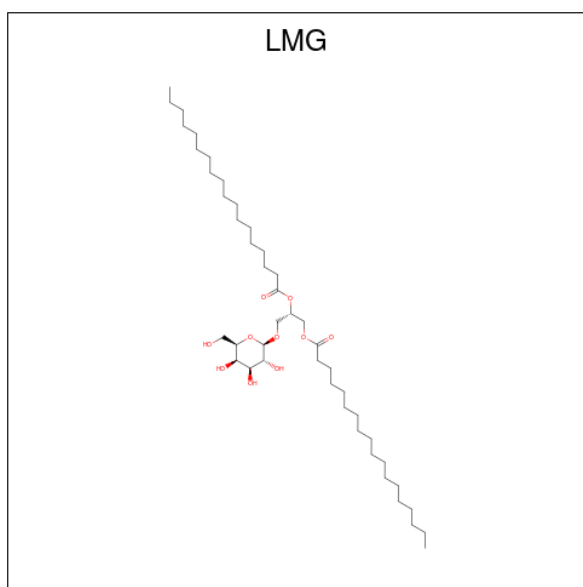
Mol	Chain	Residues	Atoms	AltConf
29	A	1	Total C 40 40	0
29	B	1	Total C 120 120	0
29	B	1	Total C 120 120	0
29	B	1	Total C 120 120	0
29	C	1	Total C 160 160	0
29	C	1	Total C 160 160	0
29	C	1	Total C 160 160	0
29	C	1	Total C 160 160	0
29	C	1	Total C 160 160	0
29	D	1	Total C 40 40	0
29	H	1	Total C 40 40	0
29	a	1	Total C 40 40	0
29	b	1	Total C 120 120	0
29	b	1	Total C 120 120	0
29	b	1	Total C 120 120	0
29	c	1	Total C 160 160	0
29	c	1	Total C 160 160	0
29	c	1	Total C 160 160	0
29	c	1	Total C 160 160	0
29	d	1	Total C 40 40	0
29	h	1	Total C 40 40	0

- Molecule 30 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: C₄₁H₇₈O₁₂S).



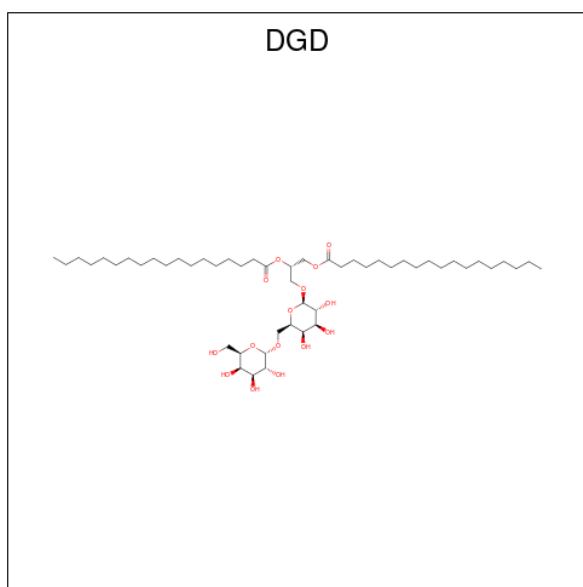
Mol	Chain	Residues	Atoms			AltConf	
			Total	C	O		S
30	A	1	108	82	24	2	0
30	A	1	108	82	24	2	0
30	B	1	54	41	12	1	0
30	a	1	108	82	24	2	0
30	a	1	108	82	24	2	0
30	b	1	54	41	12	1	0

- Molecule 31 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



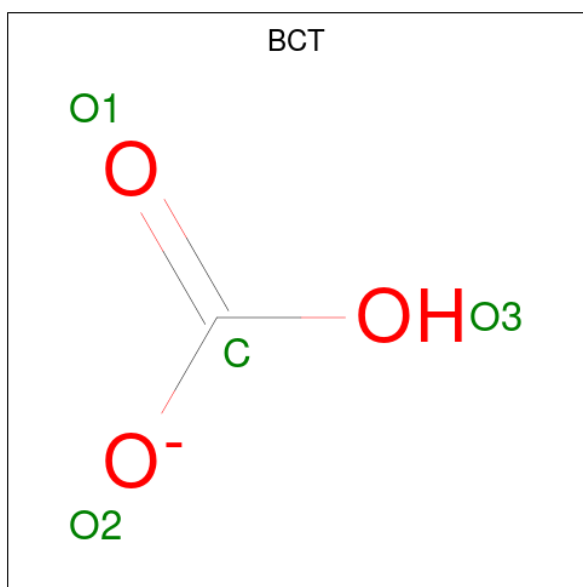
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
31	A	1	48	38	10	0
31	B	1	51	41	10	0
31	C	1	51	41	10	0
31	D	1	46	36	10	0
31	Z	1	51	41	10	0
31	a	1	48	38	10	0
31	b	1	51	41	10	0
31	c	1	51	41	10	0
31	d	1	46	36	10	0
31	z	1	51	41	10	0

- Molecule 32 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



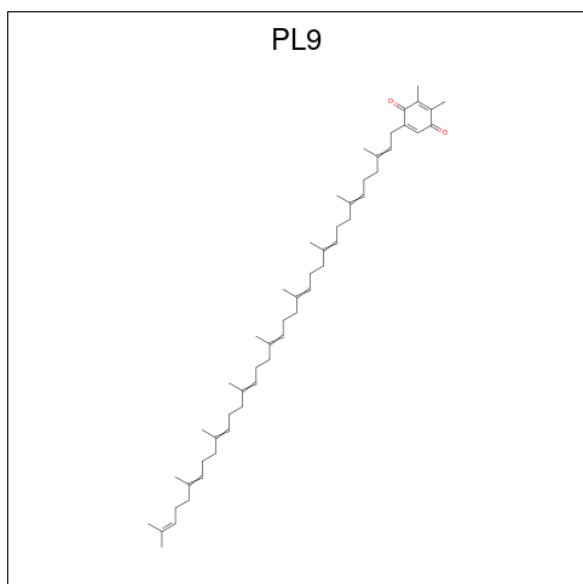
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
32	C	1	179	134	45	0
32	C	1	179	134	45	0
32	C	1	179	134	45	0
32	H	1	62	47	15	0
32	c	1	179	134	45	0
32	c	1	179	134	45	0
32	c	1	179	134	45	0
32	h	1	62	47	15	0

- Molecule 33 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



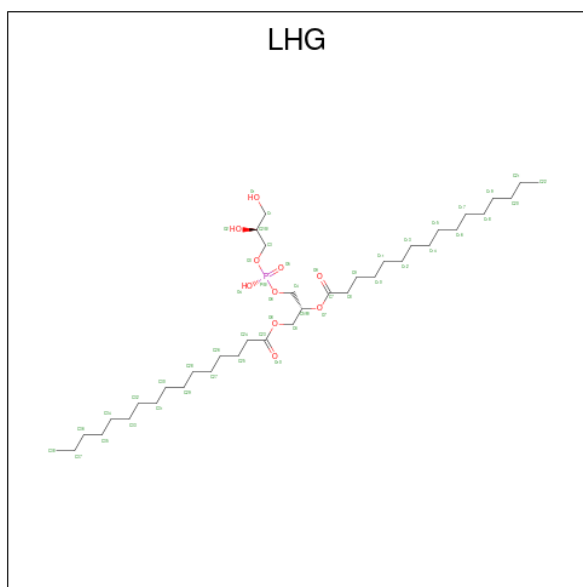
Mol	Chain	Residues	Atoms			AltConf
33	D	1	Total	C	O	0
			4	1	3	
33	d	1	Total	C	O	0
			4	1	3	

- Molecule 34 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (three-letter code: PL9) (formula: $C_{53}H_{80}O_2$).



Mol	Chain	Residues	Atoms			AltConf
34	D	1	Total	C	O	0
			55	53	2	
34	d	1	Total	C	O	0
			55	53	2	

- Molecule 35 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{76}O_{10}P$).



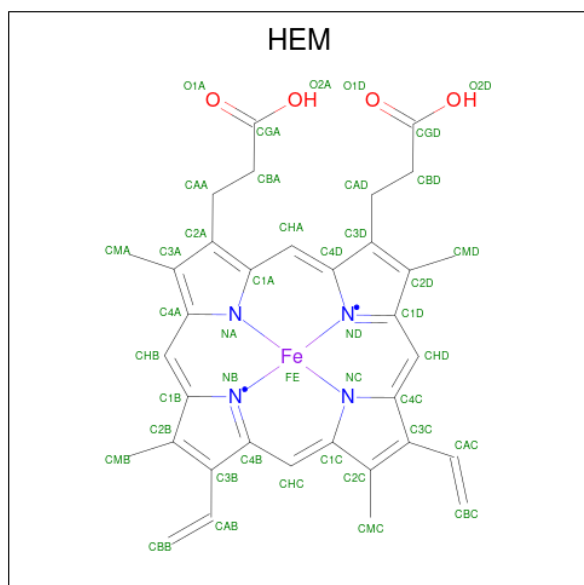
Mol	Chain	Residues	Atoms				AltConf
35	D	1	Total	C	O	P	0
			129	96	30	3	
35	D	1	Total	C	O	P	0
			129	96	30	3	
35	D	1	Total	C	O	P	0
			129	96	30	3	
35	G	1	Total	C	O	P	0
			49	38	10	1	
35	L	1	Total	C	O	P	0
			49	38	10	1	
35	N	1	Total	C	O	P	0
			49	38	10	1	
35	R	1	Total	C	O	P	0
			49	38	10	1	
35	S	1	Total	C	O	P	0
			49	38	10	1	
35	Y	1	Total	C	O	P	0
			49	38	10	1	

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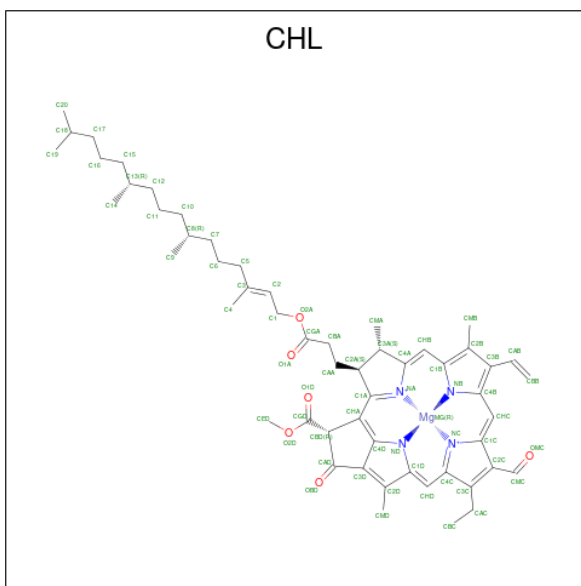
Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
35	d	1	Total 129	C 96	O 30	P 3	0
35	d	1	Total 129	C 96	O 30	P 3	0
35	d	1	Total 129	C 96	O 30	P 3	0
35	g	1	Total 49	C 38	O 10	P 1	0
35	l	1	Total 49	C 38	O 10	P 1	0
35	n	1	Total 49	C 38	O 10	P 1	0
35	r	1	Total 49	C 38	O 10	P 1	0
35	s	1	Total 49	C 38	O 10	P 1	0
35	y	1	Total 49	C 38	O 10	P 1	0

- Molecule 36 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



Mol	Chain	Residues	Atoms				AltConf	
			Total	C	Fe	N		O
36	F	1	Total 43	C 34	Fe 1	N 4	O 4	0
36	f	1	Total 43	C 34	Fe 1	N 4	O 4	0

- Molecule 37 is CHLOROPHYLL B (three-letter code: CHL) (formula: $C_{55}H_{70}MgN_4O_6$).



Mol	Chain	Residues	Atoms				AltConf	
			Total	C	Mg	N		O
37	G	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	G	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	G	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	G	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	G	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	G	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	N	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	N	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	N	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	N	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	N	1	Total	C	Mg	N	O	0
			314	248	6	24	36	
37	R	1	Total	C	Mg	N	O	0
			150	117	3	12	18	

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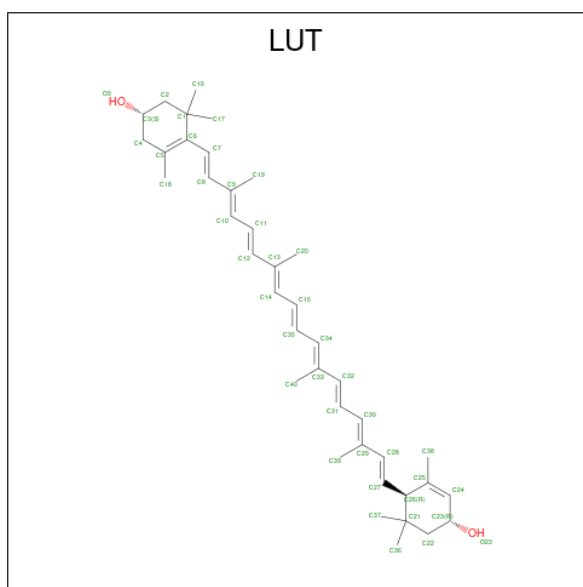
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
37	R	1	Total 150	C 117	Mg 3	N 12	O 18	0
37	R	1	Total 150	C 117	Mg 3	N 12	O 18	0
37	S	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	S	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	S	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	S	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	Y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	Y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	Y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	Y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	Y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	Y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	g	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	g	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	g	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	g	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	g	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	g	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	n	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	n	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	n	1	Total 314	C 248	Mg 6	N 24	O 36	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
37	n	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	n	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	n	1	Total 314	C 248	Mg 6	N 24	O 36	0
37	r	1	Total 150	C 117	Mg 3	N 12	O 18	0
37	r	1	Total 150	C 117	Mg 3	N 12	O 18	0
37	r	1	Total 150	C 117	Mg 3	N 12	O 18	0
37	s	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	s	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	s	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	s	1	Total 201	C 157	Mg 4	N 16	O 24	0
37	y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	y	1	Total 330	C 264	Mg 6	N 24	O 36	0
37	y	1	Total 330	C 264	Mg 6	N 24	O 36	0

- Molecule 38 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (three-letter code: LUT) (formula: C₄₀H₅₆O₂).



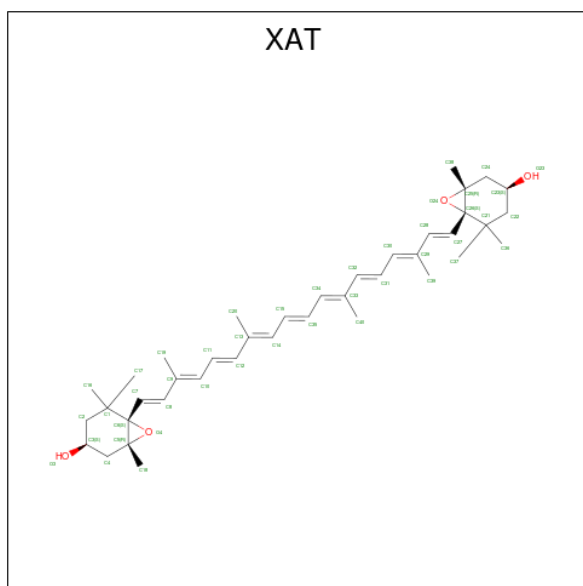
Mol	Chain	Residues	Atoms			AltConf
38	G	1	Total	C	O	0
			84	80	4	
38	G	1	Total	C	O	0
			84	80	4	
38	N	1	Total	C	O	0
			84	80	4	
38	N	1	Total	C	O	0
			84	80	4	
38	R	1	Total	C	O	0
			42	40	2	
38	S	1	Total	C	O	0
			84	80	4	
38	S	1	Total	C	O	0
			84	80	4	
38	Y	1	Total	C	O	0
			84	80	4	
38	Y	1	Total	C	O	0
			84	80	4	
38	g	1	Total	C	O	0
			84	80	4	
38	g	1	Total	C	O	0
			84	80	4	
38	n	1	Total	C	O	0
			84	80	4	
38	n	1	Total	C	O	0
			84	80	4	
38	r	1	Total	C	O	0
			42	40	2	

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Mol	Chain	Residues	Atoms			AltConf
38	s	1	Total	C	O	0
			84	80	4	
38	s	1	Total	C	O	0
			84	80	4	
38	y	1	Total	C	O	0
			84	80	4	
38	y	1	Total	C	O	0
			84	80	4	

- Molecule 39 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'-TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (three-letter code: XAT) (formula: C₄₀H₅₆O₄).



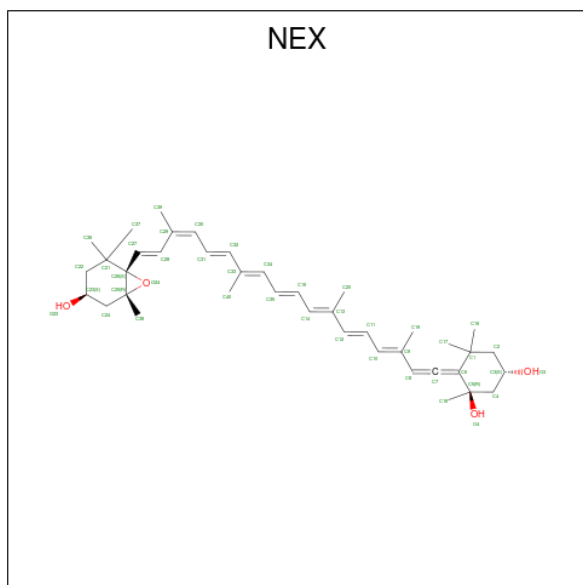
Mol	Chain	Residues	Atoms			AltConf
39	G	1	Total	C	O	0
			44	40	4	
39	N	1	Total	C	O	0
			44	40	4	
39	R	1	Total	C	O	0
			44	40	4	
39	Y	1	Total	C	O	0
			44	40	4	
39	g	1	Total	C	O	0
			44	40	4	
39	n	1	Total	C	O	0
			44	40	4	
39	r	1	Total	C	O	0
			44	40	4	

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Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
39	y	1	44	40	4	0

- Molecule 40 is (1R,3R)-6-[(3E,5E,7E,9E,11E,13E,15E,17E)-18-[(1S,4R,6R)-4-HYDROXY-2,6-TRIMETHYL-7-OXABICYCLO[4.1.0]HEPT-1-YL]-3,7,12,16-TETRAMETHYLOCTA DECA-1,3,5,7,9,11,13,15,17-NONAENYLIDENE]-1,5,5-TRIMETHYLCYCLOHEXANE-1,3-DIOL (three-letter code: NEX) (formula: C₄₀H₅₆O₄).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
40	G	1	44	40	4	0
40	N	1	44	40	4	0
40	R	1	44	40	4	0
40	S	1	44	40	4	0
40	Y	1	44	40	4	0
40	g	1	44	40	4	0
40	n	1	44	40	4	0
40	r	1	44	40	4	0
40	s	1	44	40	4	0

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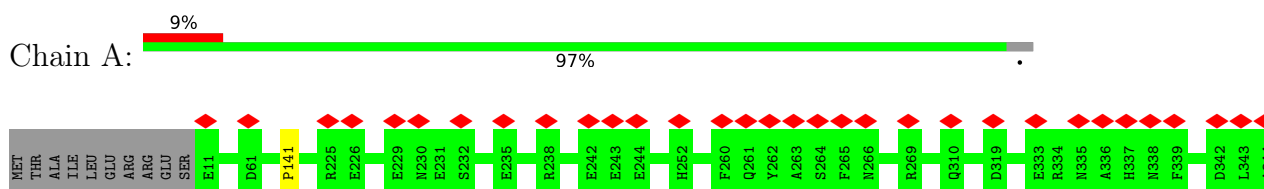
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Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
40	y	1	44	40	4	0

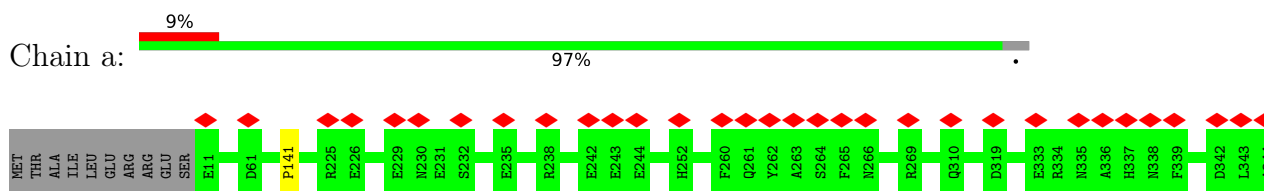
3 Residue-property plots

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.

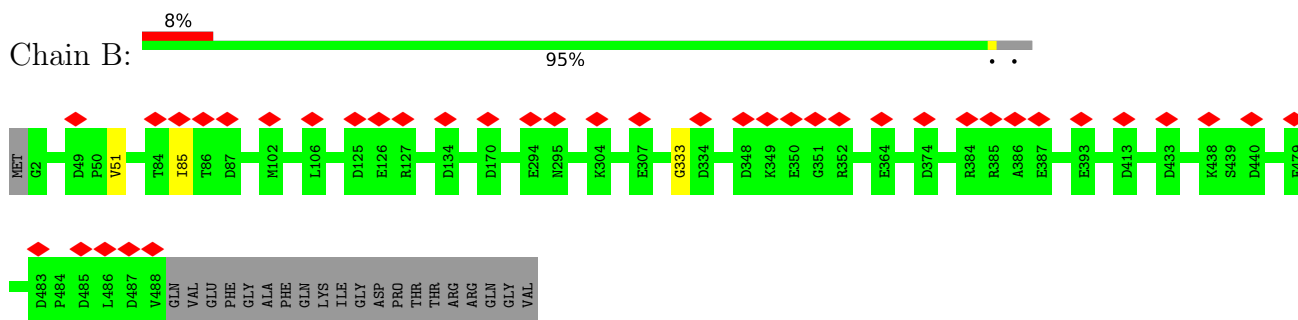
- Molecule 1: Photosystem II protein D1



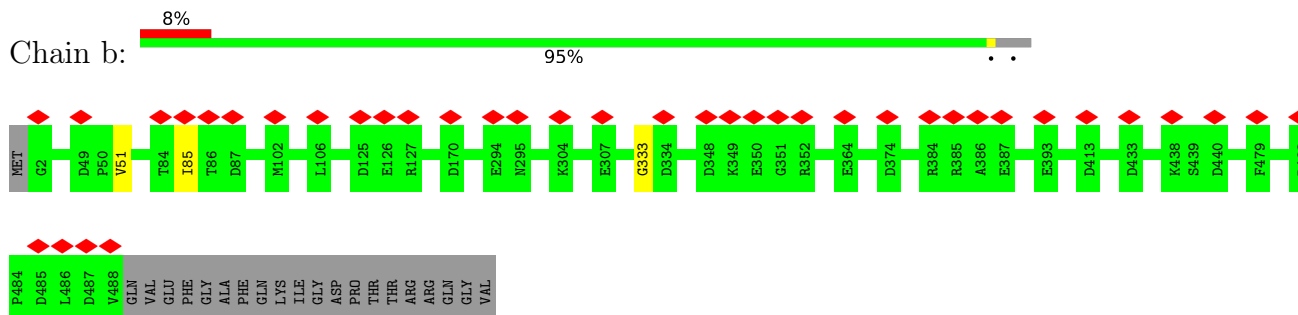
- Molecule 1: Photosystem II protein D1



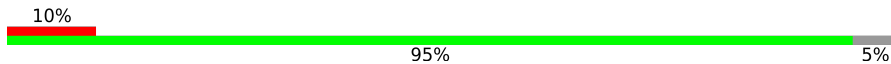
- Molecule 2: Photosystem II CP47 reaction center protein

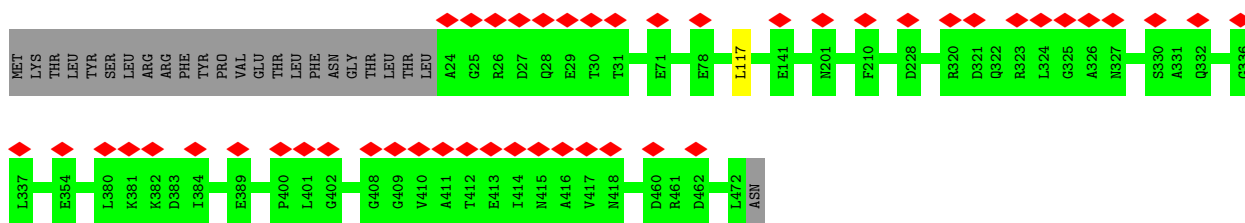


- Molecule 2: Photosystem II CP47 reaction center protein

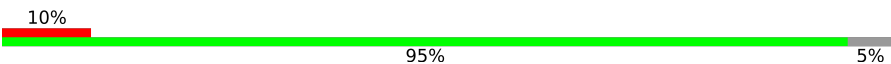


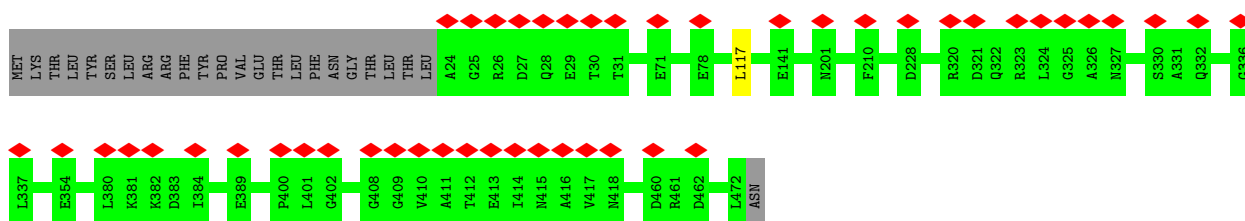
- Molecule 3: Photosystem II CP43 reaction center protein

Chain C: 



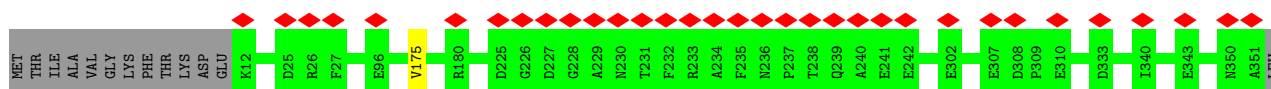
- Molecule 3: Photosystem II CP43 reaction center protein

Chain c: 



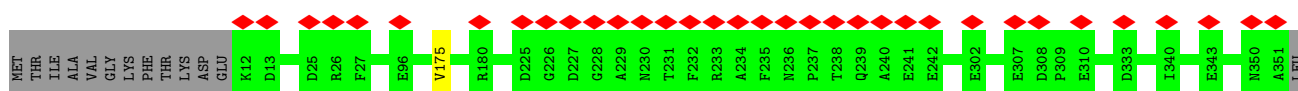
- Molecule 4: Photosystem II D2 protein

Chain D: 



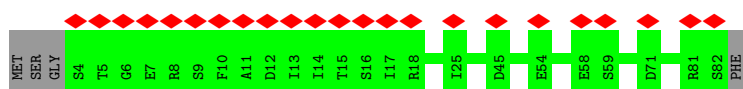
- Molecule 4: Photosystem II D2 protein

Chain d: 

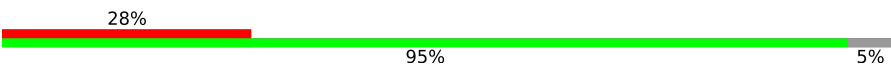


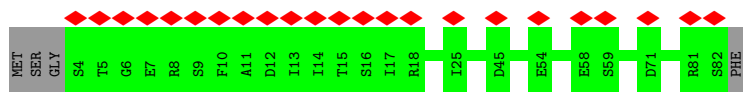
- Molecule 5: Cytochrome b559 subunit alpha

Chain E: 

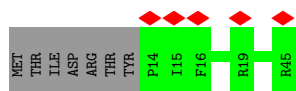
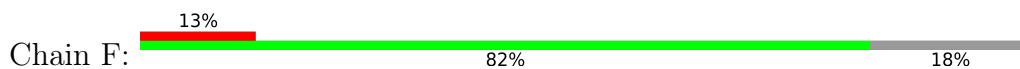


- Molecule 5: Cytochrome b559 subunit alpha

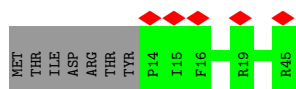
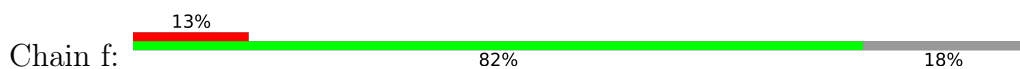
Chain e: 



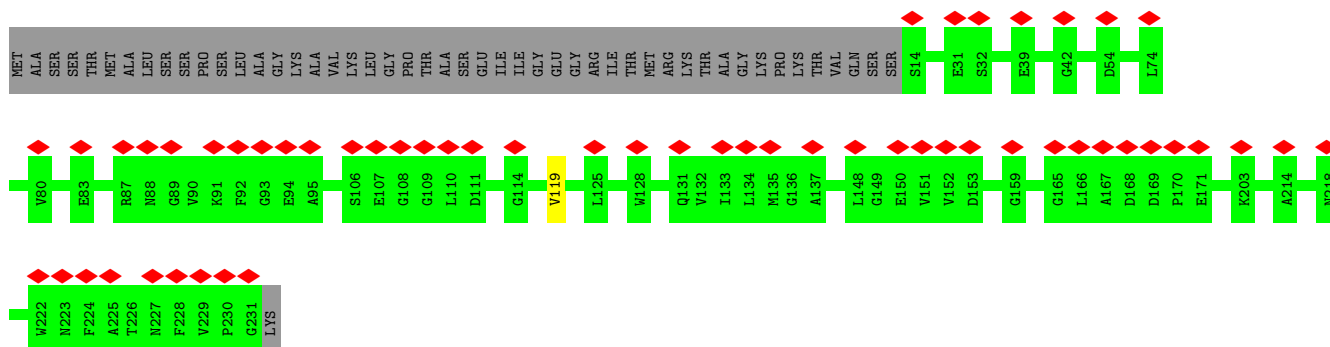
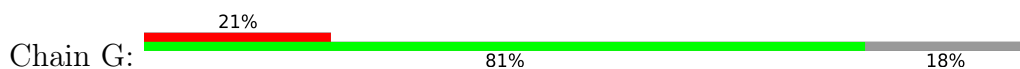
- Molecule 6: Cytochrome b559 subunit beta



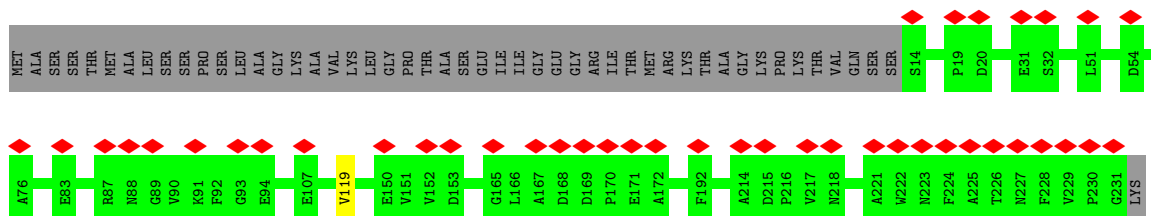
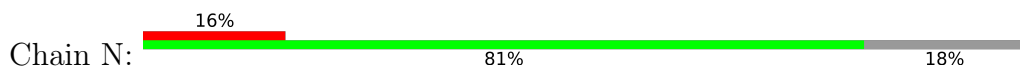
- Molecule 6: Cytochrome b559 subunit beta



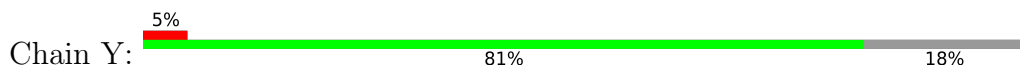
- Molecule 7: Chlorophyll a-b binding protein, chloroplastic

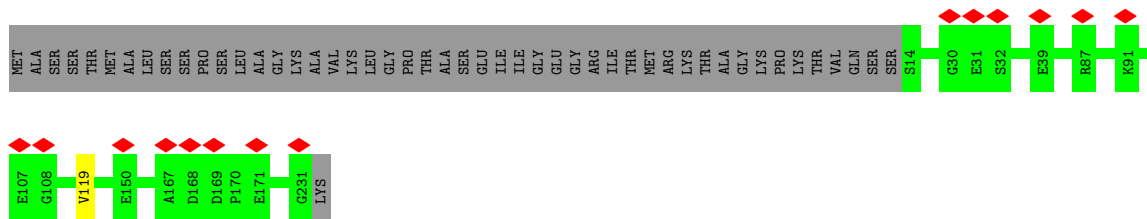


- Molecule 7: Chlorophyll a-b binding protein, chloroplastic

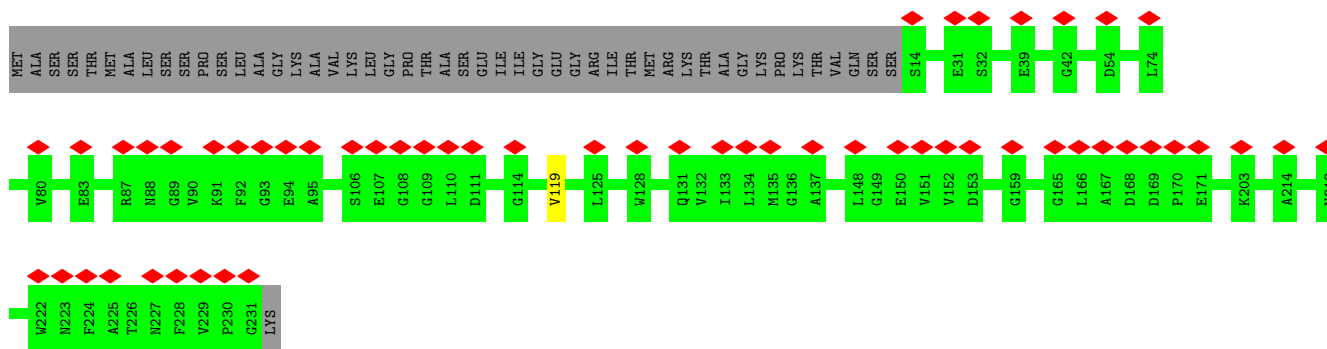
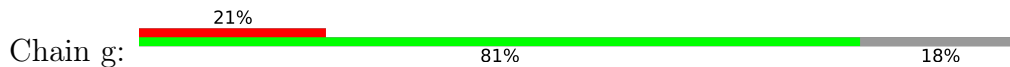


- Molecule 7: Chlorophyll a-b binding protein, chloroplastic

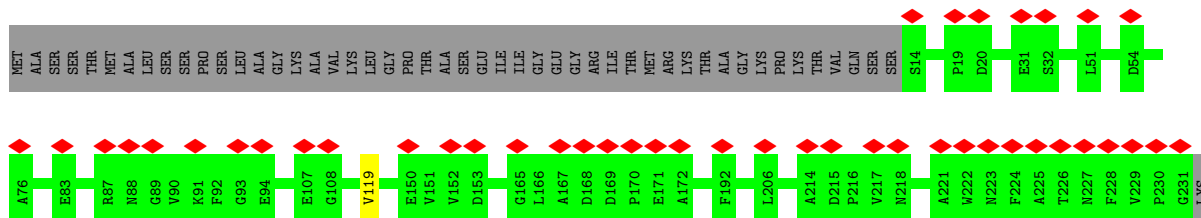
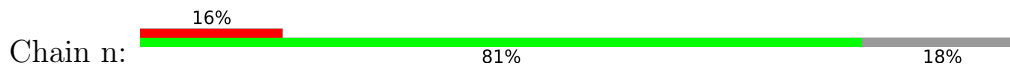




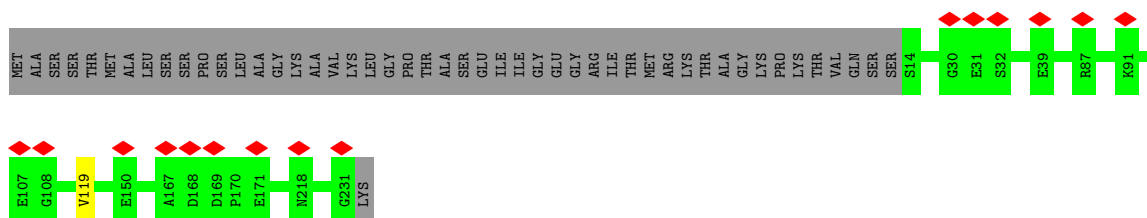
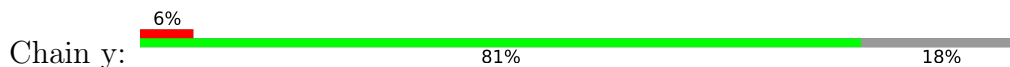
• Molecule 7: Chlorophyll a-b binding protein, chloroplastic



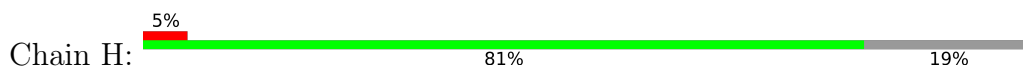
• Molecule 7: Chlorophyll a-b binding protein, chloroplastic

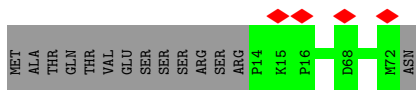


• Molecule 7: Chlorophyll a-b binding protein, chloroplastic

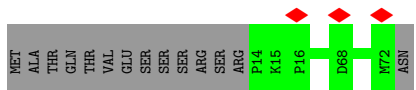
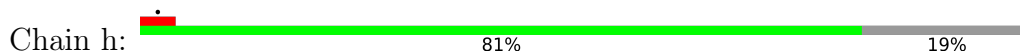


• Molecule 8: Photosystem II reaction center protein H

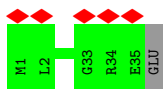




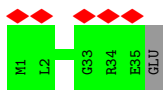
• Molecule 8: Photosystem II reaction center protein H



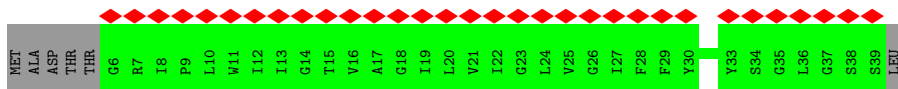
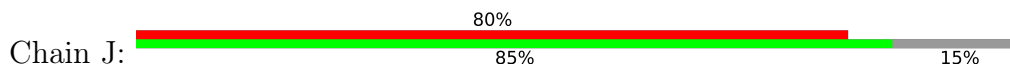
• Molecule 9: Protein Photosystem II reaction center protein I



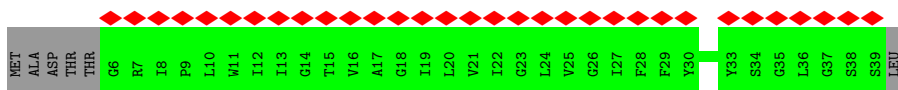
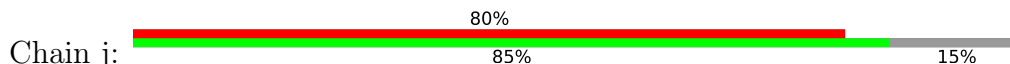
• Molecule 9: Protein Photosystem II reaction center protein I



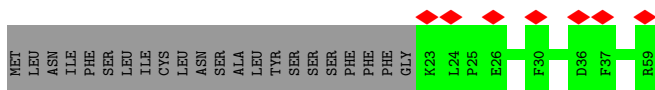
• Molecule 10: Photosystem II reaction center protein J



• Molecule 10: Photosystem II reaction center protein J



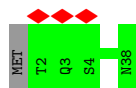
• Molecule 11: Photosystem II reaction center protein K



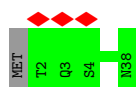
• Molecule 11: Photosystem II reaction center protein K



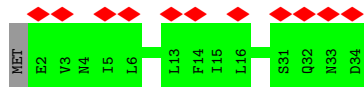
• Molecule 12: Protein Photosystem II reaction center protein L



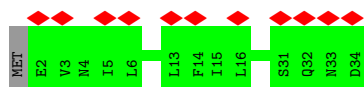
• Molecule 12: Protein Photosystem II reaction center protein L



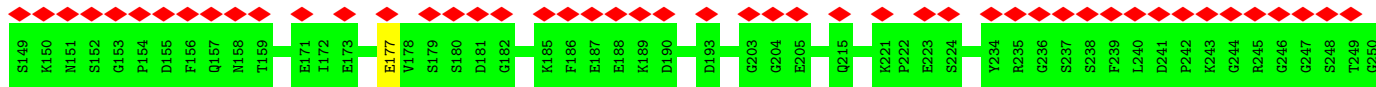
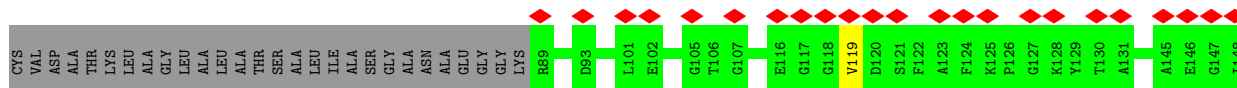
• Molecule 13: Photosystem II reaction center protein M

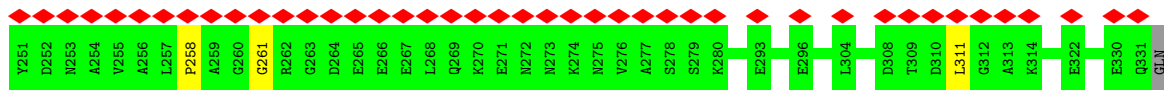


• Molecule 13: Photosystem II reaction center protein M

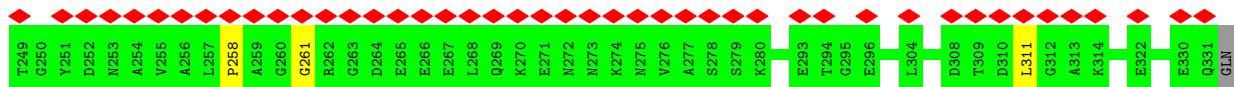
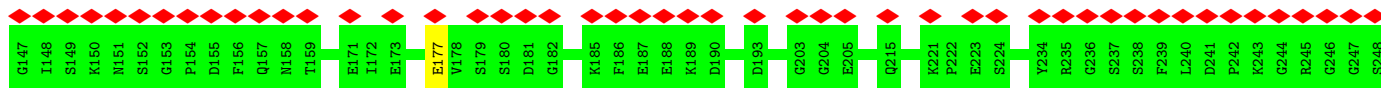
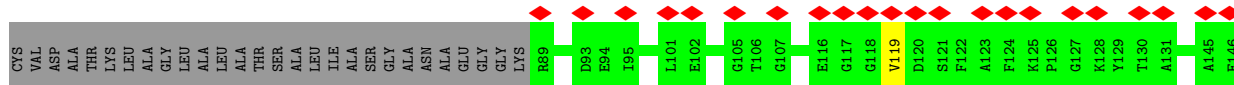
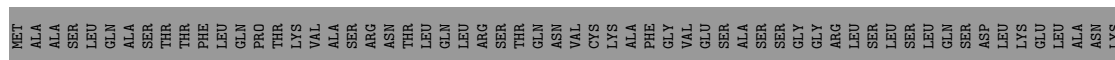


• Molecule 14: Oxygen-evolving enhancer protein 1, chloroplastic

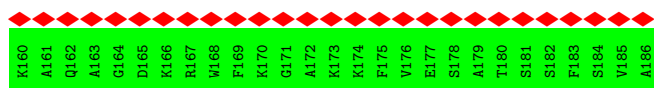
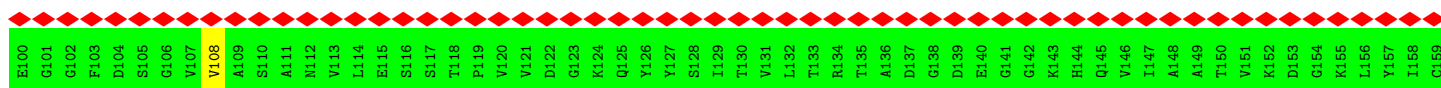
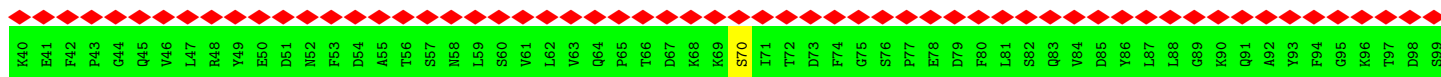
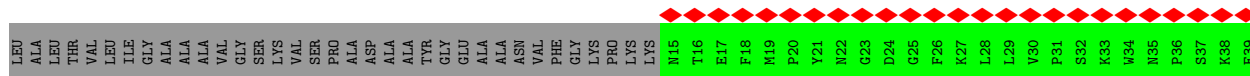
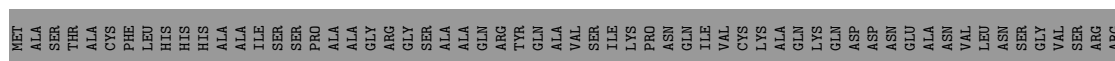




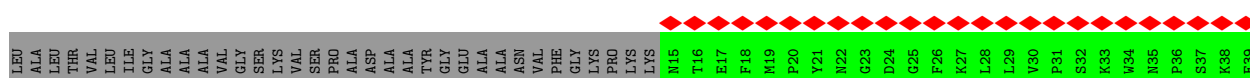
• Molecule 14: Oxygen-evolving enhancer protein 1, chloroplastic

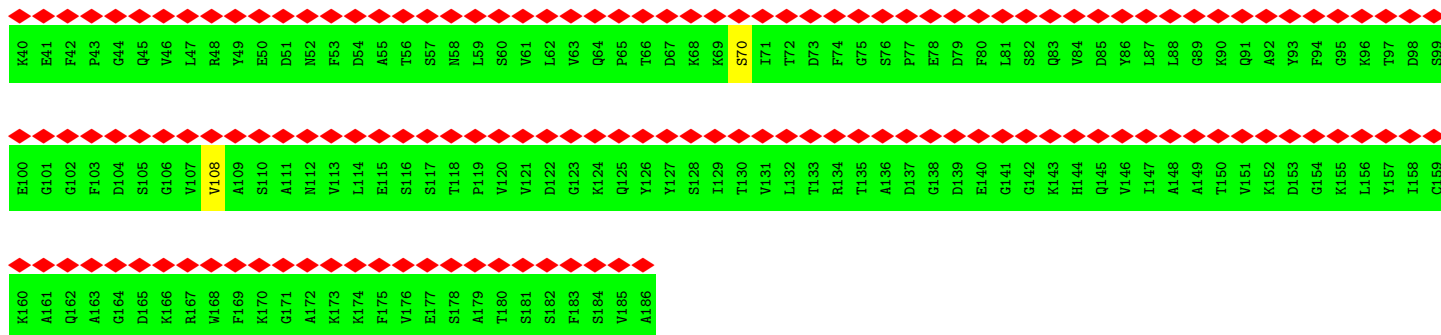


• Molecule 15: Oxygen-evolving enhancer protein 2, chloroplastic

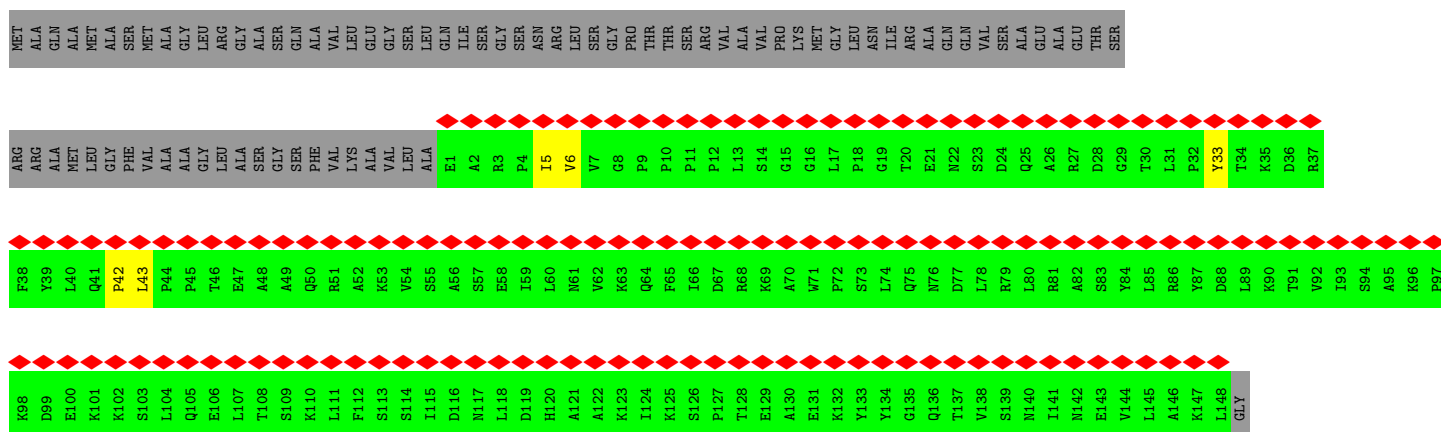


• Molecule 15: Oxygen-evolving enhancer protein 2, chloroplastic

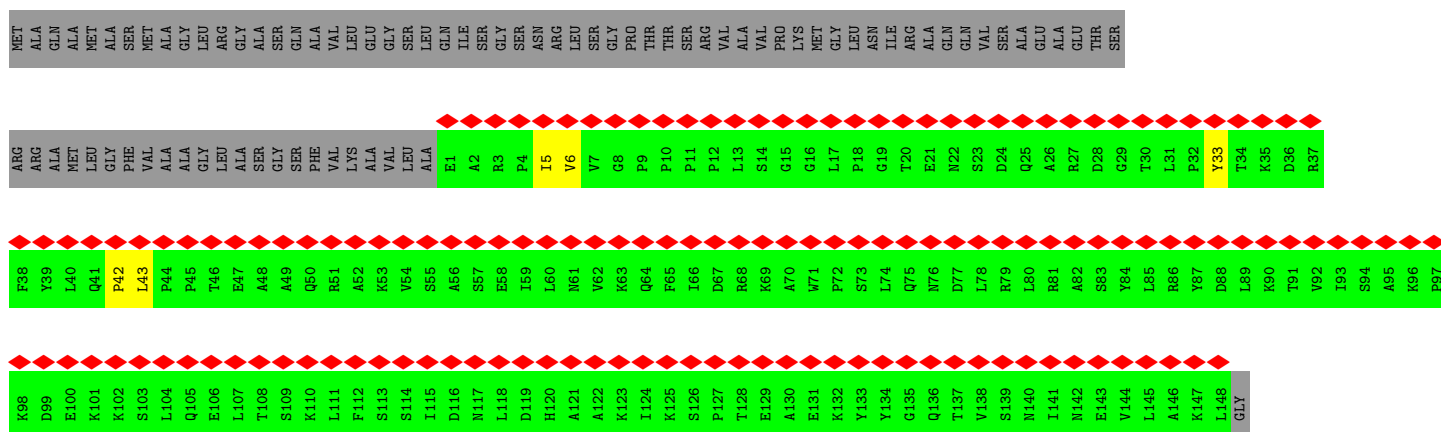




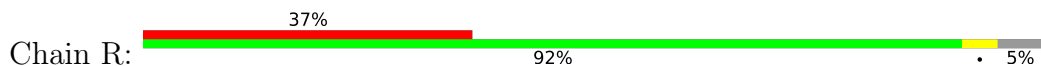
● Molecule 16: Oxygen-evolving enhancer protein 3, chloroplastic

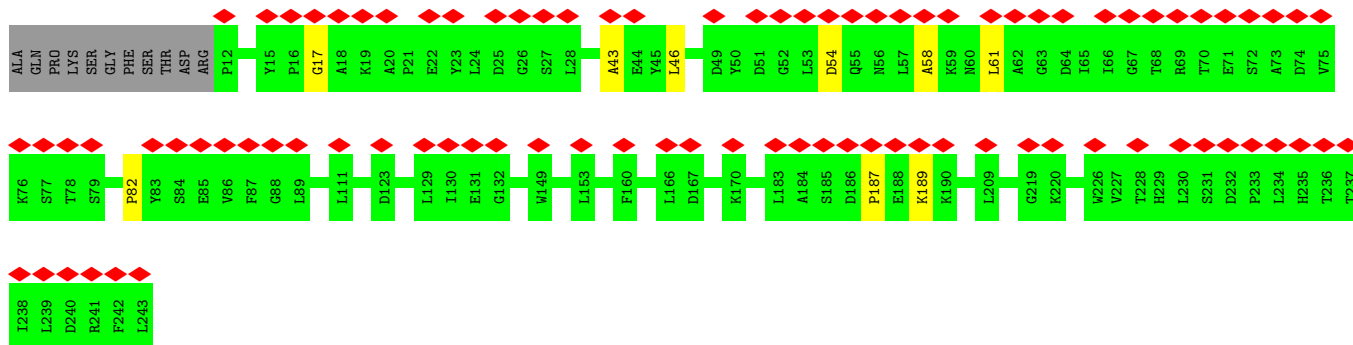


● Molecule 16: Oxygen-evolving enhancer protein 3, chloroplastic

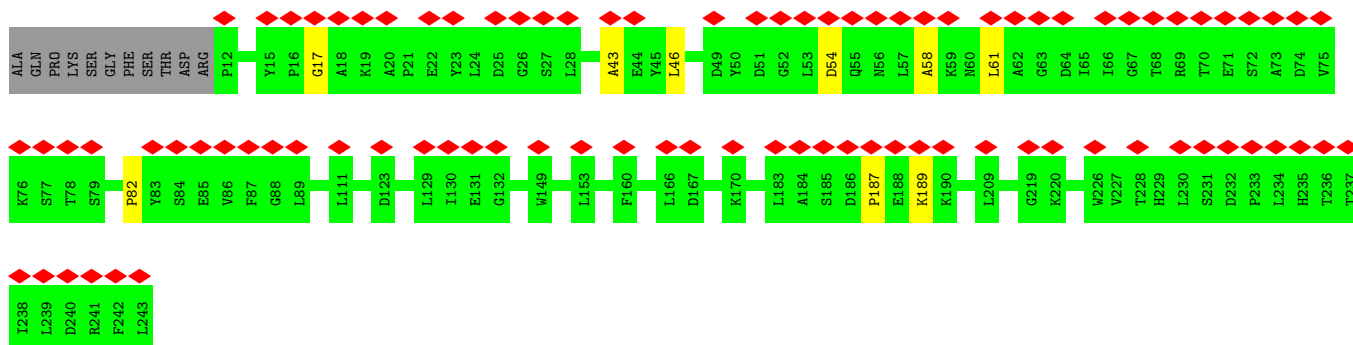


● Molecule 17: Chlorophyll A-B Binding protein 29 kD (CP29)

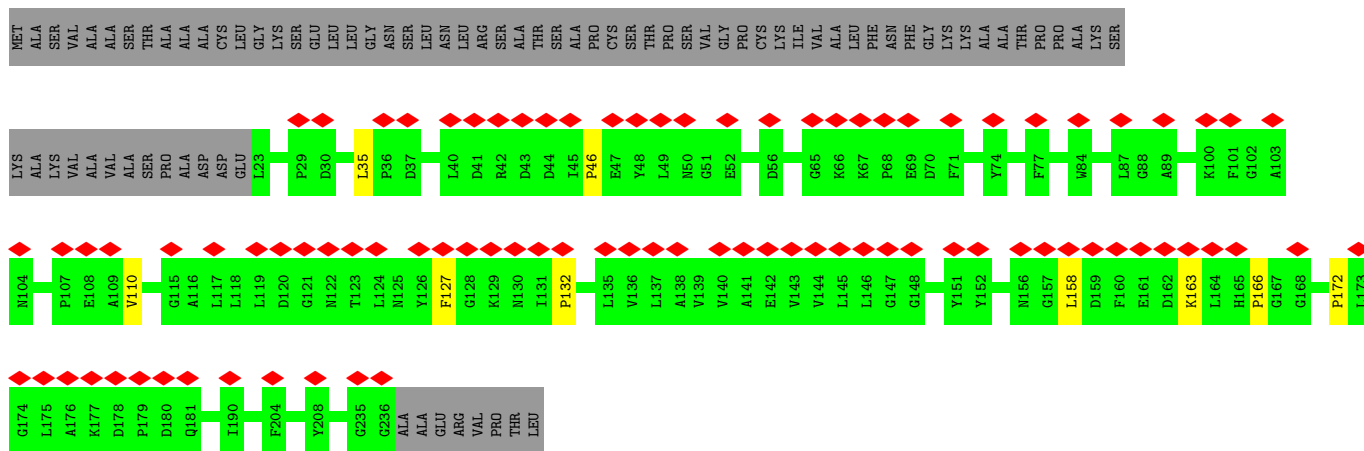




• Molecule 17: Chlorophyll A-B Binding protein 29 kD (CP29)

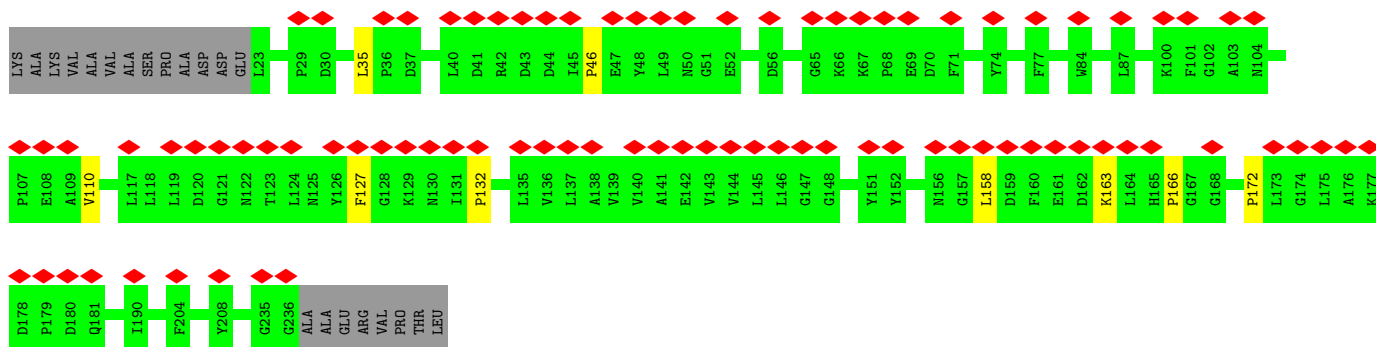


• Molecule 18: Chlorophyll A-B Binding protein 26 kD (CP26)

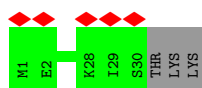


• Molecule 18: Chlorophyll A-B Binding protein 26 kD (CP26)

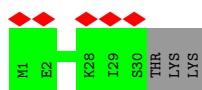
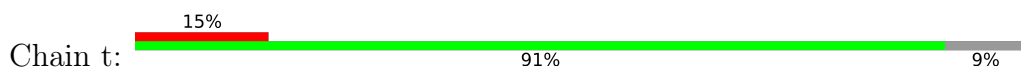




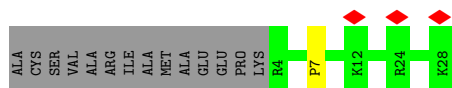
• Molecule 19: Photosystem II Reaction Center protein Tc



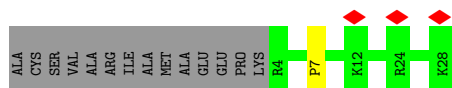
• Molecule 19: Photosystem II Reaction Center protein Tc



• Molecule 20: Photosystem II Reaction Center Tn protein



• Molecule 20: Photosystem II Reaction Center Tn protein



• Molecule 21: Photosystem II reaction center W protein, chloroplastic



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	109042	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Each micrograph	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	59000	Depositor
Image detector	OTHER	Depositor
Maximum map value	0.393	Depositor
Minimum map value	-0.161	Depositor
Average map value	0.004	Depositor
Map value standard deviation	0.021	Depositor
Recommended contour level	0.1	Depositor
Map size (\AA)	337.5, 337.5, 216.0	wwPDB
Map dimensions	250, 250, 160	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.35, 1.35, 1.35	Depositor

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: PHO, BCT, FE2, LHG, LMG, XAT, PL9, DGD, SQD, CLA, CHL, LUT, NEX, HEM, OEX, CL, BCR

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.60	0/2695	0.59	0/3674
1	a	0.60	0/2695	0.59	0/3674
2	B	0.59	0/3951	0.55	0/5379
2	b	0.59	0/3951	0.55	0/5379
3	C	0.56	0/3589	0.55	0/4891
3	c	0.56	0/3589	0.55	0/4891
4	D	0.62	0/2796	0.56	0/3811
4	d	0.62	0/2796	0.56	0/3811
5	E	0.42	0/654	0.48	0/889
5	e	0.42	0/654	0.48	0/889
6	F	0.42	0/265	0.48	0/358
6	f	0.43	0/265	0.48	0/358
7	G	0.42	0/1713	0.49	0/2333
7	N	0.42	0/1713	0.49	0/2333
7	Y	0.51	0/1713	0.51	0/2333
7	g	0.42	0/1713	0.49	0/2333
7	n	0.41	0/1713	0.49	0/2333
7	y	0.51	0/1713	0.51	0/2333
8	H	0.49	0/444	0.53	0/605
8	h	0.49	0/444	0.53	0/605
9	I	0.62	0/294	0.57	0/397
9	i	0.62	0/294	0.58	0/397
10	J	0.28	0/253	0.45	0/343
10	j	0.29	0/253	0.45	0/343
11	K	0.49	0/320	0.49	0/436
11	k	0.49	0/320	0.49	0/436
12	L	0.60	0/319	0.49	0/434
12	l	0.60	0/319	0.49	0/434
13	M	0.52	0/262	0.55	0/359
13	m	0.52	0/262	0.55	0/359
14	O	0.39	0/1880	0.51	0/2541

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
14	o	0.39	0/1880	0.51	0/2541
15	P	0.28	0/1353	0.49	0/1828
15	p	0.28	0/1353	0.49	0/1828
16	Q	0.28	0/1186	0.57	2/1609 (0.1%)
16	q	0.28	0/1186	0.57	2/1609 (0.1%)
17	R	0.41	0/1853	0.55	0/2522
17	r	0.41	0/1853	0.55	0/2522
18	S	0.39	0/1700	0.62	0/2310
18	s	0.39	0/1700	0.62	0/2310
19	T	0.56	0/252	0.55	0/341
19	t	0.56	0/252	0.55	0/341
20	U	0.44	0/197	0.55	0/264
20	u	0.44	0/197	0.55	0/264
21	W	0.49	0/429	0.60	0/582
21	w	0.49	0/429	0.60	0/582
22	X	0.42	0/250	0.50	0/342
22	x	0.43	0/250	0.50	0/342
23	Z	0.38	0/464	0.53	0/636
23	z	0.38	0/464	0.53	0/636
All	All	0.50	0/61090	0.54	4/83100 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	a	0	1
18	S	0	1
18	s	0	1
All	All	0	4

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	q	42	PRO	CA-C-N	5.67	129.68	117.20
16	Q	42	PRO	CA-C-N	5.67	129.67	117.20
16	Q	42	PRO	C-N-CA	5.03	134.26	121.70
16	q	42	PRO	C-N-CA	5.01	134.22	121.70

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	141	PRO	Peptide
18	S	35	LEU	Peptide
1	a	141	PRO	Peptide
18	s	35	LEU	Peptide

5.2 Too-close contacts [i](#)

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

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	332/344 (96%)	321 (97%)	11 (3%)	0	100	100
1	a	332/344 (96%)	321 (97%)	11 (3%)	0	100	100
2	B	485/508 (96%)	469 (97%)	13 (3%)	3 (1%)	25	64
2	b	485/508 (96%)	469 (97%)	13 (3%)	3 (1%)	25	64
3	C	447/473 (94%)	424 (95%)	23 (5%)	0	100	100
3	c	447/473 (94%)	424 (95%)	23 (5%)	0	100	100
4	D	338/353 (96%)	317 (94%)	20 (6%)	1 (0%)	41	74
4	d	338/353 (96%)	317 (94%)	20 (6%)	1 (0%)	41	74
5	E	77/83 (93%)	75 (97%)	2 (3%)	0	100	100
5	e	77/83 (93%)	75 (97%)	2 (3%)	0	100	100
6	F	30/39 (77%)	30 (100%)	0	0	100	100
6	f	30/39 (77%)	30 (100%)	0	0	100	100
7	G	216/267 (81%)	208 (96%)	7 (3%)	1 (0%)	29	67

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
7	N	216/267 (81%)	210 (97%)	5 (2%)	1 (0%)	29	67
7	Y	216/267 (81%)	205 (95%)	10 (5%)	1 (0%)	29	67
7	g	216/267 (81%)	208 (96%)	7 (3%)	1 (0%)	29	67
7	n	216/267 (81%)	210 (97%)	5 (2%)	1 (0%)	29	67
7	y	216/267 (81%)	205 (95%)	10 (5%)	1 (0%)	29	67
8	H	57/73 (78%)	56 (98%)	1 (2%)	0	100	100
8	h	57/73 (78%)	56 (98%)	1 (2%)	0	100	100
9	I	33/36 (92%)	30 (91%)	3 (9%)	0	100	100
9	i	33/36 (92%)	30 (91%)	3 (9%)	0	100	100
10	J	32/40 (80%)	32 (100%)	0	0	100	100
10	j	32/40 (80%)	32 (100%)	0	0	100	100
11	K	35/59 (59%)	35 (100%)	0	0	100	100
11	k	35/59 (59%)	35 (100%)	0	0	100	100
12	L	35/38 (92%)	34 (97%)	1 (3%)	0	100	100
12	l	35/38 (92%)	34 (97%)	1 (3%)	0	100	100
13	M	31/34 (91%)	30 (97%)	1 (3%)	0	100	100
13	m	31/34 (91%)	30 (97%)	1 (3%)	0	100	100
14	O	241/332 (73%)	210 (87%)	26 (11%)	5 (2%)	7	37
14	o	241/332 (73%)	210 (87%)	26 (11%)	5 (2%)	7	37
15	P	170/267 (64%)	148 (87%)	20 (12%)	2 (1%)	13	49
15	p	170/267 (64%)	148 (87%)	20 (12%)	2 (1%)	13	49
16	Q	146/232 (63%)	134 (92%)	8 (6%)	4 (3%)	5	30
16	q	146/232 (63%)	134 (92%)	8 (6%)	4 (3%)	5	30
17	R	230/243 (95%)	211 (92%)	10 (4%)	9 (4%)	3	22
17	r	230/243 (95%)	211 (92%)	10 (4%)	9 (4%)	3	22
18	S	212/295 (72%)	187 (88%)	17 (8%)	8 (4%)	3	22
18	s	212/295 (72%)	187 (88%)	17 (8%)	8 (4%)	3	22
19	T	28/33 (85%)	28 (100%)	0	0	100	100
19	t	28/33 (85%)	28 (100%)	0	0	100	100
20	U	23/99 (23%)	21 (91%)	1 (4%)	1 (4%)	2	20
20	u	23/99 (23%)	21 (91%)	1 (4%)	1 (4%)	2	20

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
21	W	52/137 (38%)	46 (88%)	5 (10%)	1 (2%)	8	39
21	w	52/137 (38%)	46 (88%)	5 (10%)	1 (2%)	8	39
22	X	33/117 (28%)	33 (100%)	0	0	100	100
22	x	33/117 (28%)	33 (100%)	0	0	100	100
23	Z	59/62 (95%)	56 (95%)	3 (5%)	0	100	100
23	z	59/62 (95%)	56 (95%)	3 (5%)	0	100	100
All	All	7548/9396 (80%)	7100 (94%)	374 (5%)	74 (1%)	20	54

All (74) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	85	ILE
14	O	258	PRO
14	O	311	LEU
15	P	108	VAL
18	S	110	VAL
18	S	163	LYS
2	b	85	ILE
14	o	258	PRO
14	o	311	LEU
15	p	108	VAL
18	s	110	VAL
18	s	163	LYS
7	G	119	VAL
14	O	261	GLY
16	Q	5	ILE
17	R	43	ALA
17	R	58	ALA
18	S	166	PRO
21	W	86	ASP
7	g	119	VAL
14	o	261	GLY
16	q	5	ILE
17	r	43	ALA
17	r	58	ALA
18	s	166	PRO
21	w	86	ASP
2	B	51	VAL
17	R	17	GLY
17	R	189	LYS

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Mol	Chain	Res	Type
18	S	127	PHE
2	b	51	VAL
17	r	17	GLY
17	r	189	LYS
18	s	127	PHE
14	O	119	VAL
15	P	70	SER
17	R	54	ASP
17	R	61	LEU
18	S	158	LEU
14	o	119	VAL
15	p	70	SER
17	r	54	ASP
17	r	61	LEU
18	s	158	LEU
2	B	333	GLY
7	N	119	VAL
14	O	177	GLU
16	Q	33	TYR
17	R	46	LEU
17	R	82	PRO
18	S	46	PRO
18	S	132	PRO
2	b	333	GLY
7	n	119	VAL
16	q	33	TYR
17	r	46	LEU
17	r	82	PRO
18	s	46	PRO
18	s	132	PRO
17	R	187	PRO
7	Y	119	VAL
14	o	177	GLU
17	r	187	PRO
7	y	119	VAL
4	D	175	VAL
16	Q	43	LEU
4	d	175	VAL
16	q	43	LEU
16	Q	6	VAL
18	S	172	PRO
20	U	7	PRO

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Mol	Chain	Res	Type
16	q	6	VAL
18	s	172	PRO
20	u	7	PRO

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	A	270/279 (97%)	270 (100%)	0	100	100
1	a	270/279 (97%)	270 (100%)	0	100	100
2	B	389/406 (96%)	389 (100%)	0	100	100
2	b	389/406 (96%)	389 (100%)	0	100	100
3	C	351/374 (94%)	350 (100%)	1 (0%)	92	96
3	c	351/374 (94%)	350 (100%)	1 (0%)	92	96
4	D	272/283 (96%)	272 (100%)	0	100	100
4	d	272/283 (96%)	272 (100%)	0	100	100
5	E	70/73 (96%)	70 (100%)	0	100	100
5	e	70/73 (96%)	70 (100%)	0	100	100
6	F	27/34 (79%)	27 (100%)	0	100	100
6	f	27/34 (79%)	27 (100%)	0	100	100
7	G	168/206 (82%)	168 (100%)	0	100	100
7	N	168/206 (82%)	168 (100%)	0	100	100
7	Y	168/206 (82%)	168 (100%)	0	100	100
7	g	168/206 (82%)	168 (100%)	0	100	100
7	n	168/206 (82%)	168 (100%)	0	100	100
7	y	168/206 (82%)	168 (100%)	0	100	100
8	H	48/61 (79%)	48 (100%)	0	100	100
8	h	48/61 (79%)	48 (100%)	0	100	100
9	I	32/33 (97%)	32 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	i	32/33 (97%)	32 (100%)	0	100	100
10	J	25/30 (83%)	25 (100%)	0	100	100
10	j	25/30 (83%)	25 (100%)	0	100	100
11	K	32/52 (62%)	32 (100%)	0	100	100
11	k	32/52 (62%)	32 (100%)	0	100	100
12	L	35/36 (97%)	35 (100%)	0	100	100
12	l	35/36 (97%)	35 (100%)	0	100	100
13	M	29/30 (97%)	29 (100%)	0	100	100
13	m	29/30 (97%)	29 (100%)	0	100	100
14	O	202/269 (75%)	202 (100%)	0	100	100
14	o	202/269 (75%)	202 (100%)	0	100	100
15	P	144/212 (68%)	144 (100%)	0	100	100
15	p	144/212 (68%)	144 (100%)	0	100	100
16	Q	129/187 (69%)	129 (100%)	0	100	100
16	q	129/187 (69%)	129 (100%)	0	100	100
17	R	189/198 (96%)	189 (100%)	0	100	100
17	r	189/198 (96%)	189 (100%)	0	100	100
18	S	167/226 (74%)	167 (100%)	0	100	100
18	s	167/226 (74%)	167 (100%)	0	100	100
19	T	27/30 (90%)	27 (100%)	0	100	100
19	t	27/30 (90%)	27 (100%)	0	100	100
20	U	21/80 (26%)	21 (100%)	0	100	100
20	u	21/80 (26%)	21 (100%)	0	100	100
21	W	44/110 (40%)	44 (100%)	0	100	100
21	w	44/110 (40%)	44 (100%)	0	100	100
22	X	26/90 (29%)	26 (100%)	0	100	100
22	x	26/90 (29%)	26 (100%)	0	100	100
23	Z	52/53 (98%)	52 (100%)	0	100	100
23	z	52/53 (98%)	52 (100%)	0	100	100
All	All	6170/7528 (82%)	6168 (100%)	2 (0%)	100	100

All (2) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	C	117	LEU
3	c	117	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (74) such sidechains are listed below:

Mol	Chain	Res	Type
2	B	157	HIS
2	B	179	GLN
2	B	216	HIS
2	B	282	GLN
2	B	296	GLN
2	B	332	ASN
2	B	343	HIS
3	C	68	ASN
3	C	201	ASN
3	C	327	ASN
3	C	332	GLN
3	C	418	ASN
4	D	83	ASN
4	D	142	ASN
4	D	164	GLN
4	D	230	ASN
7	G	61	ASN
7	G	103	GLN
8	H	62	ASN
11	K	53	GLN
13	M	32	GLN
7	N	103	GLN
7	N	208	ASN
14	O	305	GLN
14	O	331	GLN
15	P	35	ASN
15	P	112	ASN
16	Q	75	GLN
17	R	55	GLN
17	R	138	GLN
17	R	194	GLN
17	R	235	HIS
18	S	81	HIS
18	S	104	ASN
7	Y	103	GLN
7	Y	208	ASN
23	Z	58	ASN

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Mol	Chain	Res	Type
1	a	304	GLN
2	b	179	GLN
2	b	216	HIS
2	b	282	GLN
2	b	296	GLN
2	b	332	ASN
2	b	343	HIS
3	c	68	ASN
3	c	201	ASN
3	c	327	ASN
3	c	332	GLN
3	c	418	ASN
4	d	83	ASN
4	d	142	ASN
4	d	164	GLN
4	d	230	ASN
7	g	61	ASN
7	g	103	GLN
8	h	62	ASN
11	k	53	GLN
13	m	32	GLN
7	n	103	GLN
7	n	208	ASN
14	o	305	GLN
14	o	331	GLN
15	p	35	ASN
15	p	112	ASN
16	q	75	GLN
17	r	55	GLN
17	r	138	GLN
17	r	194	GLN
17	r	235	HIS
18	s	81	HIS
18	s	104	ASN
7	y	103	GLN
7	y	208	ASN
23	z	58	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 322 ligands modelled in this entry, 6 are monoatomic - leaving 316 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$
27	CLA	C	513	-	49,57,73	1.63	10 (20%)	55,93,113	1.69	7 (12%)
37	CHL	r	608	-	50,58,74	2.16	16 (32%)	52,94,114	2.89	18 (34%)
27	CLA	A	407	-	49,57,73	1.63	9 (18%)	55,93,113	1.63	8 (14%)
37	CHL	y	605	7	48,56,74	2.14	13 (27%)	51,92,114	2.84	19 (37%)
37	CHL	Y	601	7	66,74,74	1.87	14 (21%)	73,114,114	2.43	23 (31%)
37	CHL	Y	605	7	48,56,74	2.15	13 (27%)	51,92,114	2.84	19 (37%)
37	CHL	s	601	18	52,60,74	2.12	15 (28%)	56,97,114	2.75	24 (42%)
27	CLA	N	610	7	65,73,73	1.44	9 (13%)	76,113,113	1.45	9 (11%)
37	CHL	r	606	-	50,58,74	2.09	14 (28%)	52,94,114	2.85	20 (38%)
37	CHL	y	609	7	66,74,74	1.84	13 (19%)	73,114,114	2.45	24 (32%)
37	CHL	G	606	-	50,58,74	2.19	14 (28%)	52,94,114	2.81	20 (38%)
27	CLA	c	503	-	65,73,73	1.45	11 (16%)	76,113,113	1.39	8 (10%)
27	CLA	y	613	7	65,73,73	1.44	10 (15%)	76,113,113	1.41	8 (10%)
37	CHL	S	601	18	52,60,74	2.11	14 (26%)	56,97,114	2.76	24 (42%)
27	CLA	C	511	3	65,73,73	1.46	10 (15%)	76,113,113	1.54	7 (9%)
37	CHL	G	608	-	50,58,74	2.16	14 (28%)	52,94,114	2.73	19 (36%)
33	BCT	d	401	-	2,3,3	0.69	0	2,3,3	1.05	0
27	CLA	N	613	7	49,57,73	1.64	9 (18%)	55,93,113	1.59	6 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	CLA	s	609	18	49,57,73	1.70	6 (12%)	55,93,113	1.54	7 (12%)
35	LHG	Y	2630	27	48,48,48	0.74	1 (2%)	51,54,54	1.31	6 (11%)
29	BCR	B	619	-	41,41,41	0.92	3 (7%)	56,56,56	2.08	17 (30%)
27	CLA	Y	610	7	65,73,73	1.45	9 (13%)	76,113,113	1.47	8 (10%)
27	CLA	G	604	-	49,57,73	1.65	10 (20%)	55,93,113	1.52	6 (10%)
27	CLA	c	510	-	65,73,73	1.42	9 (13%)	76,113,113	1.46	7 (9%)
27	CLA	r	612	-	49,57,73	1.67	7 (14%)	55,93,113	1.50	7 (12%)
27	CLA	B	604	-	65,73,73	1.46	10 (15%)	76,113,113	1.37	6 (7%)
35	LHG	L	101	-	48,48,48	0.72	1 (2%)	51,54,54	1.32	7 (13%)
37	CHL	Y	609	7	66,74,74	1.85	13 (19%)	73,114,114	2.46	24 (32%)
31	LMG	a	413	-	48,48,55	0.81	1 (2%)	56,56,63	1.56	13 (23%)
37	CHL	s	607	-	50,58,74	2.27	16 (32%)	52,94,114	2.74	22 (42%)
27	CLA	R	604	-	49,57,73	1.65	8 (16%)	55,93,113	1.65	7 (12%)
27	CLA	R	601	17	49,57,73	1.66	7 (14%)	55,93,113	1.63	9 (16%)
31	LMG	d	411	-	46,46,55	0.84	4 (8%)	54,54,63	1.41	7 (12%)
31	LMG	D	411	-	46,46,55	0.84	4 (8%)	54,54,63	1.41	6 (11%)
27	CLA	N	602	7	65,73,73	1.46	8 (12%)	76,113,113	1.39	6 (7%)
27	CLA	y	611	35	65,73,73	1.44	9 (13%)	76,113,113	1.39	7 (9%)
29	BCR	C	516	-	41,41,41	0.79	0	56,56,56	2.30	18 (32%)
35	LHG	R	2630	27	48,48,48	0.61	1 (2%)	51,54,54	1.25	6 (11%)
30	SQD	A	418	-	53,54,54	0.98	5 (9%)	62,65,65	1.49	10 (16%)
37	CHL	n	601	7	50,58,74	2.23	15 (30%)	52,94,114	2.77	21 (40%)
37	CHL	g	608	-	50,58,74	2.17	15 (30%)	52,94,114	2.73	19 (36%)
27	CLA	n	603	-	49,57,73	1.67	9 (18%)	55,93,113	1.60	6 (10%)
27	CLA	G	611	35	49,57,73	1.67	9 (18%)	55,93,113	1.60	9 (16%)
37	CHL	N	601	7	50,58,74	2.23	15 (30%)	52,94,114	2.78	21 (40%)
27	CLA	a	406	-	65,73,73	1.42	10 (15%)	76,113,113	1.52	8 (10%)
38	LUT	G	1621	-	42,43,43	0.92	1 (2%)	51,60,60	1.86	17 (33%)
38	LUT	N	1621	-	42,43,43	0.91	2 (4%)	51,60,60	1.76	15 (29%)
27	CLA	c	511	3	65,73,73	1.45	10 (15%)	76,113,113	1.53	7 (9%)
27	CLA	G	614	-	49,57,73	1.68	6 (12%)	55,93,113	1.57	7 (12%)
27	CLA	S	614	-	49,57,73	1.65	10 (20%)	55,93,113	1.54	7 (12%)
29	BCR	d	404	-	41,41,41	0.81	0	56,56,56	2.20	14 (25%)
27	CLA	S	612	18	49,57,73	1.64	9 (18%)	55,93,113	1.53	7 (12%)
28	PHO	a	408	-	51,69,69	1.14	6 (11%)	47,99,99	1.26	5 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	CLA	Y	611	35	65,73,73	1.44	9 (13%)	76,113,113	1.39	7 (9%)
35	LHG	S	2630	27	48,48,48	0.64	1 (2%)	51,54,54	1.28	6 (11%)
32	DGD	h	102	-	63,63,67	0.99	4 (6%)	77,77,81	1.48	8 (10%)
27	CLA	N	604	-	49,57,73	1.64	9 (18%)	55,93,113	1.63	6 (10%)
29	BCR	B	618	-	41,41,41	0.91	3 (7%)	56,56,56	2.19	18 (32%)
35	LHG	d	409	-	48,48,48	0.76	1 (2%)	51,54,54	1.36	9 (17%)
27	CLA	C	512	-	65,73,73	1.41	10 (15%)	76,113,113	1.43	7 (9%)
27	CLA	B	607	-	65,73,73	1.46	10 (15%)	76,113,113	1.46	11 (14%)
27	CLA	s	612	18	49,57,73	1.65	9 (18%)	55,93,113	1.53	7 (12%)
27	CLA	G	602	7	65,73,73	1.44	9 (13%)	76,113,113	1.43	6 (7%)
27	CLA	n	612	7	49,57,73	1.66	7 (14%)	55,93,113	1.59	8 (14%)
29	BCR	C	517	-	41,41,41	0.96	4 (9%)	56,56,56	2.33	16 (28%)
31	LMG	b	622	-	51,51,55	0.80	2 (3%)	59,59,63	1.45	8 (13%)
27	CLA	n	614	-	49,57,73	1.64	6 (12%)	55,93,113	1.61	7 (12%)
27	CLA	C	508	-	65,73,73	1.47	11 (16%)	76,113,113	1.57	8 (10%)
37	CHL	n	605	7	48,56,74	2.25	15 (31%)	51,92,114	2.82	21 (41%)
38	LUT	s	1620	-	42,43,43	0.86	1 (2%)	51,60,60	1.89	15 (29%)
37	CHL	G	605	7	48,56,74	2.28	16 (33%)	51,92,114	2.75	19 (37%)
37	CHL	S	607	-	50,58,74	2.26	16 (32%)	52,94,114	2.74	22 (42%)
27	CLA	Y	602	7	65,73,73	1.44	10 (15%)	76,113,113	1.48	8 (10%)
37	CHL	R	607	-	50,58,74	2.16	15 (30%)	52,94,114	2.80	21 (40%)
29	BCR	B	620	-	41,41,41	0.96	2 (4%)	56,56,56	2.12	17 (30%)
27	CLA	s	602	18	49,57,73	1.68	7 (14%)	55,93,113	1.59	8 (14%)
27	CLA	r	604	-	49,57,73	1.63	8 (16%)	55,93,113	1.64	7 (12%)
27	CLA	R	616	17	49,57,73	1.67	7 (14%)	55,93,113	1.60	9 (16%)
27	CLA	d	403	-	65,73,73	1.40	9 (13%)	76,113,113	1.47	8 (10%)
27	CLA	B	605	-	65,73,73	1.45	12 (18%)	76,113,113	1.60	9 (11%)
38	LUT	S	1620	-	42,43,43	0.87	1 (2%)	51,60,60	1.89	15 (29%)
37	CHL	N	607	-	66,74,74	1.86	13 (19%)	73,114,114	2.43	23 (31%)
37	CHL	n	609	7	50,58,74	2.16	14 (28%)	52,94,114	2.81	22 (42%)
31	LMG	z	101	-	51,51,55	0.72	0	59,59,63	1.35	6 (10%)
27	CLA	C	506	-	65,73,73	1.46	10 (15%)	76,113,113	1.47	8 (10%)
27	CLA	g	604	-	49,57,73	1.65	10 (20%)	55,93,113	1.52	6 (10%)
27	CLA	S	609	18	49,57,73	1.71	6 (12%)	55,93,113	1.54	7 (12%)
27	CLA	b	603	-	65,73,73	1.44	10 (15%)	76,113,113	1.38	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	CLA	B	609	-	65,73,73	1.41	9 (13%)	76,113,113	1.44	9 (11%)
40	NEX	N	1623	-	38,46,46	1.03	2 (5%)	50,70,70	2.51	15 (30%)
27	CLA	s	603	-	49,57,73	1.64	7 (14%)	55,93,113	1.56	6 (10%)
27	CLA	c	513	-	49,57,73	1.64	10 (20%)	55,93,113	1.70	7 (12%)
27	CLA	D	403	-	65,73,73	1.41	8 (12%)	76,113,113	1.47	8 (10%)
27	CLA	C	502	-	65,73,73	1.42	10 (15%)	76,113,113	1.45	7 (9%)
29	BCR	c	517	-	41,41,41	0.96	3 (7%)	56,56,56	2.33	16 (28%)
27	CLA	c	505	-	65,73,73	1.45	9 (13%)	76,113,113	1.55	8 (10%)
40	NEX	R	623	-	38,46,46	1.09	2 (5%)	50,70,70	2.41	21 (42%)
27	CLA	b	606	-	65,73,73	1.50	10 (15%)	76,113,113	1.37	9 (11%)
27	CLA	c	508	-	65,73,73	1.48	11 (16%)	76,113,113	1.58	8 (10%)
27	CLA	Y	603	-	49,57,73	1.68	9 (18%)	55,93,113	1.53	6 (10%)
28	PHO	a	409	-	51,69,69	1.14	7 (13%)	47,99,99	1.38	6 (12%)
27	CLA	Y	613	7	65,73,73	1.45	10 (15%)	76,113,113	1.40	7 (9%)
34	PL9	D	405	-	55,55,55	1.88	12 (21%)	68,69,69	1.57	15 (22%)
35	LHG	s	2630	27	48,48,48	0.64	1 (2%)	51,54,54	1.28	6 (11%)
27	CLA	s	611	35	49,57,73	1.65	10 (20%)	55,93,113	1.58	8 (14%)
32	DGD	c	518	-	56,56,67	1.14	9 (16%)	70,70,81	1.71	16 (22%)
39	XAT	R	622	-	39,47,47	0.98	1 (2%)	54,74,74	2.85	22 (40%)
27	CLA	N	612	7	49,57,73	1.66	9 (18%)	55,93,113	1.60	8 (14%)
27	CLA	R	609	17	49,57,73	1.64	7 (14%)	55,93,113	1.57	7 (12%)
37	CHL	G	601	7	66,74,74	1.86	14 (21%)	73,114,114	2.44	24 (32%)
37	CHL	N	605	7	48,56,74	2.24	15 (31%)	51,92,114	2.82	21 (41%)
35	LHG	N	2630	27	48,48,48	0.61	1 (2%)	51,54,54	1.28	6 (11%)
38	LUT	y	1620	-	42,43,43	0.93	2 (4%)	51,60,60	1.83	18 (35%)
27	CLA	A	410	-	60,68,73	1.46	11 (18%)	70,107,113	1.57	8 (11%)
27	CLA	b	611	-	65,73,73	1.44	10 (15%)	76,113,113	1.45	8 (10%)
27	CLA	c	512	-	65,73,73	1.41	10 (15%)	76,113,113	1.43	7 (9%)
27	CLA	G	610	7	65,73,73	1.45	7 (10%)	76,113,113	1.45	8 (10%)
27	CLA	y	612	7	65,73,73	1.43	10 (15%)	76,113,113	1.37	8 (10%)
29	BCR	D	404	-	41,41,41	0.80	0	56,56,56	2.20	14 (25%)
32	DGD	C	518	-	56,56,67	1.14	8 (14%)	70,70,81	1.71	16 (22%)
28	PHO	A	408	-	51,69,69	1.14	6 (11%)	47,99,99	1.26	5 (10%)
24	OEX	A	401	3,1	0,15,15	-	-	-	-	-
27	CLA	g	603	-	49,57,73	1.67	8 (16%)	55,93,113	1.59	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	CLA	R	610	17	65,73,73	1.45	7 (10%)	76,113,113	1.44	7 (9%)
38	LUT	G	1620	-	42,43,43	0.87	1 (2%)	51,60,60	1.78	15 (29%)
27	CLA	C	504	-	65,73,73	1.44	10 (15%)	76,113,113	1.44	6 (7%)
27	CLA	B	610	-	65,73,73	1.45	10 (15%)	76,113,113	1.42	8 (10%)
27	CLA	R	603	-	49,57,73	1.66	9 (18%)	55,93,113	1.53	7 (12%)
27	CLA	r	613	17	49,57,73	1.64	8 (16%)	55,93,113	1.63	7 (12%)
37	CHL	R	606	-	50,58,74	2.09	14 (28%)	52,94,114	2.85	20 (38%)
27	CLA	N	611	35	49,57,73	1.65	7 (14%)	55,93,113	1.63	8 (14%)
27	CLA	c	509	-	65,73,73	1.45	10 (15%)	76,113,113	1.56	12 (15%)
35	LHG	n	2630	27	48,48,48	0.61	1 (2%)	51,54,54	1.28	6 (11%)
27	CLA	b	617	-	65,73,73	1.47	9 (13%)	76,113,113	1.43	7 (9%)
27	CLA	B	615	-	65,73,73	1.42	10 (15%)	76,113,113	1.38	7 (9%)
27	CLA	n	604	-	49,57,73	1.63	9 (18%)	55,93,113	1.63	6 (10%)
27	CLA	g	613	7	49,57,73	1.68	10 (20%)	55,93,113	1.57	7 (12%)
37	CHL	y	606	-	50,58,74	2.11	14 (28%)	52,94,114	2.82	20 (38%)
27	CLA	R	613	17	49,57,73	1.64	8 (16%)	55,93,113	1.61	7 (12%)
27	CLA	G	612	7	49,57,73	1.70	10 (20%)	55,93,113	1.55	7 (12%)
30	SQD	b	621	-	53,54,54	0.95	5 (9%)	62,65,65	1.56	10 (16%)
27	CLA	g	610	7	65,73,73	1.45	7 (10%)	76,113,113	1.45	9 (11%)
39	XAT	n	1622	-	39,47,47	1.00	1 (2%)	54,74,74	3.05	23 (42%)
32	DGD	H	102	-	63,63,67	0.99	4 (6%)	77,77,81	1.48	8 (10%)
27	CLA	Y	604	-	49,57,73	1.67	10 (20%)	55,93,113	1.64	7 (12%)
32	DGD	c	519	-	63,63,67	0.98	4 (6%)	77,77,81	1.51	13 (16%)
37	CHL	G	609	7	50,58,74	2.20	15 (30%)	52,94,114	2.80	19 (36%)
37	CHL	g	607	-	50,58,74	2.12	14 (28%)	52,94,114	2.78	19 (36%)
27	CLA	B	611	-	65,73,73	1.43	10 (15%)	76,113,113	1.45	8 (10%)
27	CLA	D	402	-	65,73,73	1.46	10 (15%)	76,113,113	1.49	8 (10%)
27	CLA	c	507	-	65,73,73	1.49	10 (15%)	76,113,113	1.35	8 (10%)
27	CLA	c	501	-	65,73,73	1.46	10 (15%)	76,113,113	1.40	8 (10%)
27	CLA	B	617	-	65,73,73	1.47	9 (13%)	76,113,113	1.43	7 (9%)
29	BCR	C	514	-	41,41,41	0.91	1 (2%)	56,56,56	2.02	18 (32%)
27	CLA	R	611	35	49,57,73	1.66	6 (12%)	55,93,113	1.53	7 (12%)
27	CLA	C	507	-	65,73,73	1.49	10 (15%)	76,113,113	1.36	8 (10%)
29	BCR	a	411	-	41,41,41	0.91	2 (4%)	56,56,56	2.09	17 (30%)
27	CLA	Y	614	-	49,57,73	1.60	8 (16%)	55,93,113	1.56	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
37	CHL	R	608	-	50,58,74	2.16	16 (32%)	52,94,114	2.88	19 (36%)
27	CLA	S	604	-	49,57,73	1.62	8 (16%)	55,93,113	1.69	7 (12%)
27	CLA	b	616	-	65,73,73	1.45	9 (13%)	76,113,113	1.38	6 (7%)
27	CLA	r	611	35	49,57,73	1.66	6 (12%)	55,93,113	1.53	8 (14%)
37	CHL	S	608	-	49,57,74	2.34	15 (30%)	52,93,114	2.65	21 (40%)
38	LUT	g	1620	-	42,43,43	0.85	1 (2%)	51,60,60	1.79	15 (29%)
27	CLA	N	603	-	49,57,73	1.68	9 (18%)	55,93,113	1.59	6 (10%)
27	CLA	c	504	-	65,73,73	1.44	10 (15%)	76,113,113	1.43	6 (7%)
40	NEX	n	1623	-	38,46,46	1.02	1 (2%)	50,70,70	2.50	16 (32%)
38	LUT	N	1620	-	42,43,43	0.85	1 (2%)	51,60,60	1.83	16 (31%)
29	BCR	b	619	-	41,41,41	0.92	3 (7%)	56,56,56	2.09	17 (30%)
37	CHL	s	608	-	49,57,74	2.34	15 (30%)	52,93,114	2.65	20 (38%)
37	CHL	g	601	7	66,74,74	1.86	13 (19%)	73,114,114	2.44	22 (30%)
27	CLA	d	402	-	65,73,73	1.46	10 (15%)	76,113,113	1.49	8 (10%)
27	CLA	r	601	17	49,57,73	1.66	6 (12%)	55,93,113	1.62	9 (16%)
30	SQD	a	412	-	53,54,54	0.97	5 (9%)	62,65,65	1.45	9 (14%)
37	CHL	Y	606	-	50,58,74	2.11	14 (28%)	52,94,114	2.82	20 (38%)
37	CHL	n	607	-	66,74,74	1.86	14 (21%)	73,114,114	2.44	22 (30%)
27	CLA	s	614	-	49,57,73	1.65	10 (20%)	55,93,113	1.53	7 (12%)
39	XAT	r	622	-	39,47,47	0.99	1 (2%)	54,74,74	2.84	21 (38%)
27	CLA	r	616	17	49,57,73	1.67	7 (14%)	55,93,113	1.59	9 (16%)
29	BCR	c	515	-	41,41,41	0.90	1 (2%)	56,56,56	2.15	18 (32%)
37	CHL	s	606	-	50,58,74	2.22	16 (32%)	52,94,114	2.74	20 (38%)
27	CLA	c	506	-	65,73,73	1.46	10 (15%)	76,113,113	1.48	8 (10%)
27	CLA	b	609	-	65,73,73	1.41	10 (15%)	76,113,113	1.44	9 (11%)
40	NEX	Y	1623	-	38,46,46	1.10	2 (5%)	50,70,70	2.50	16 (32%)
27	CLA	b	605	-	65,73,73	1.45	12 (18%)	76,113,113	1.60	10 (13%)
39	XAT	N	1622	-	39,47,47	1.00	1 (2%)	54,74,74	3.06	23 (42%)
29	BCR	C	515	-	41,41,41	0.90	1 (2%)	56,56,56	2.15	18 (32%)
27	CLA	S	602	18	49,57,73	1.68	7 (14%)	55,93,113	1.60	7 (12%)
27	CLA	R	602	17	65,73,73	1.44	8 (12%)	76,113,113	1.40	7 (9%)
27	CLA	B	602	-	65,73,73	1.45	10 (15%)	76,113,113	1.39	8 (10%)
37	CHL	n	608	-	50,58,74	2.09	14 (28%)	52,94,114	2.87	20 (38%)
27	CLA	G	613	7	49,57,73	1.68	10 (20%)	55,93,113	1.57	7 (12%)
38	LUT	g	1621	-	42,43,43	0.91	1 (2%)	51,60,60	1.87	17 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
40	NEX	S	1623	-	38,46,46	0.99	2 (5%)	50,70,70	2.42	14 (28%)
38	LUT	r	620	-	42,43,43	0.82	1 (2%)	51,60,60	1.66	15 (29%)
37	CHL	y	607	-	50,58,74	2.09	15 (30%)	52,94,114	2.77	21 (40%)
27	CLA	r	609	17	49,57,73	1.65	7 (14%)	55,93,113	1.57	7 (12%)
27	CLA	B	608	-	65,73,73	1.43	10 (15%)	76,113,113	1.46	8 (10%)
35	LHG	D	409	-	48,48,48	0.76	1 (2%)	51,54,54	1.36	8 (15%)
27	CLA	Y	612	7	65,73,73	1.43	10 (15%)	76,113,113	1.38	8 (10%)
39	XAT	g	1622	-	39,47,47	0.96	2 (5%)	54,74,74	2.99	19 (35%)
27	CLA	a	410	-	60,68,73	1.47	11 (18%)	70,107,113	1.57	8 (11%)
27	CLA	B	614	-	65,73,73	1.46	10 (15%)	76,113,113	1.37	8 (10%)
27	CLA	g	602	7	65,73,73	1.44	9 (13%)	76,113,113	1.43	6 (7%)
29	BCR	A	411	-	41,41,41	0.92	2 (4%)	56,56,56	2.09	17 (30%)
27	CLA	B	612	-	65,73,73	1.47	10 (15%)	76,113,113	1.52	9 (11%)
39	XAT	Y	1622	-	39,47,47	0.90	0	54,74,74	3.05	20 (37%)
35	LHG	d	410	-	36,36,48	0.70	0	39,42,54	1.27	4 (10%)
35	LHG	D	410	-	36,36,48	0.70	0	39,42,54	1.27	4 (10%)
38	LUT	y	1621	-	42,43,43	1.01	3 (7%)	51,60,60	1.94	18 (35%)
27	CLA	b	610	-	65,73,73	1.45	10 (15%)	76,113,113	1.42	8 (10%)
27	CLA	a	407	-	49,57,73	1.64	10 (20%)	55,93,113	1.63	8 (14%)
31	LMG	C	521	-	51,51,55	0.74	0	59,59,63	1.39	8 (13%)
40	NEX	r	623	-	38,46,46	1.09	1 (2%)	50,70,70	2.41	21 (42%)
29	BCR	h	101	-	41,41,41	0.87	1 (2%)	56,56,56	2.00	19 (33%)
27	CLA	b	613	-	65,73,73	1.43	9 (13%)	76,113,113	1.55	8 (10%)
37	CHL	g	609	7	50,58,74	2.20	15 (30%)	52,94,114	2.80	19 (36%)
27	CLA	b	615	-	65,73,73	1.43	10 (15%)	76,113,113	1.38	7 (9%)
27	CLA	b	614	-	65,73,73	1.46	10 (15%)	76,113,113	1.36	9 (11%)
27	CLA	n	613	7	49,57,73	1.64	9 (18%)	55,93,113	1.59	6 (10%)
31	LMG	c	521	-	51,51,55	0.74	0	59,59,63	1.39	7 (11%)
40	NEX	y	1623	-	38,46,46	1.09	2 (5%)	50,70,70	2.50	16 (32%)
37	CHL	n	606	-	50,58,74	2.11	14 (28%)	52,94,114	2.92	20 (38%)
36	HEM	F	101	5,6	41,50,50	1.92	5 (12%)	45,82,82	1.43	5 (11%)
33	BCT	D	401	-	2,3,3	0.69	0	2,3,3	1.05	0
27	CLA	n	610	7	65,73,73	1.45	10 (15%)	76,113,113	1.44	9 (11%)
37	CHL	g	605	7	48,56,74	2.28	16 (33%)	51,92,114	2.74	19 (37%)
27	CLA	r	603	-	49,57,73	1.67	9 (18%)	55,93,113	1.55	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
31	LMG	A	413	-	48,48,55	0.81	1 (2%)	56,56,63	1.56	13 (23%)
37	CHL	N	609	7	50,58,74	2.15	13 (26%)	52,94,114	2.81	22 (42%)
37	CHL	Y	607	-	50,58,74	2.09	15 (30%)	52,94,114	2.77	20 (38%)
37	CHL	y	608	-	50,58,74	2.11	13 (26%)	52,94,114	2.77	18 (34%)
36	HEM	f	101	5,6	41,50,50	1.91	5 (12%)	45,82,82	1.42	5 (11%)
35	LHG	G	2630	27	48,48,48	0.61	1 (2%)	51,54,54	1.28	7 (13%)
27	CLA	b	604	-	65,73,73	1.45	10 (15%)	76,113,113	1.37	6 (7%)
27	CLA	a	405	-	65,73,73	1.46	9 (13%)	76,113,113	1.51	8 (10%)
27	CLA	S	603	-	49,57,73	1.64	7 (14%)	55,93,113	1.56	6 (10%)
35	LHG	d	408	-	42,42,48	0.77	1 (2%)	45,48,54	1.28	5 (11%)
30	SQD	A	412	-	53,54,54	0.98	5 (9%)	62,65,65	1.44	10 (16%)
27	CLA	B	616	-	65,73,73	1.44	9 (13%)	76,113,113	1.38	6 (7%)
32	DGD	c	520	-	63,63,67	0.97	4 (6%)	77,77,81	1.51	11 (14%)
27	CLA	N	614	-	49,57,73	1.63	7 (14%)	55,93,113	1.62	7 (12%)
40	NEX	s	1623	-	38,46,46	0.99	2 (5%)	50,70,70	2.43	14 (28%)
27	CLA	n	611	35	49,57,73	1.64	8 (16%)	55,93,113	1.63	8 (14%)
38	LUT	s	1621	-	42,43,43	0.87	1 (2%)	51,60,60	1.76	17 (33%)
27	CLA	r	610	17	65,73,73	1.46	7 (10%)	76,113,113	1.44	7 (9%)
27	CLA	B	606	-	65,73,73	1.51	10 (15%)	76,113,113	1.36	9 (11%)
27	CLA	S	613	18	49,57,73	1.63	9 (18%)	55,93,113	1.58	6 (10%)
38	LUT	Y	1620	-	42,43,43	0.93	2 (4%)	51,60,60	1.83	18 (35%)
27	CLA	y	614	-	49,57,73	1.61	8 (16%)	55,93,113	1.58	7 (12%)
27	CLA	b	607	-	65,73,73	1.46	10 (15%)	76,113,113	1.46	11 (14%)
37	CHL	Y	608	-	50,58,74	2.11	13 (26%)	52,94,114	2.77	19 (36%)
27	CLA	S	610	18	49,57,73	1.63	7 (14%)	55,93,113	1.63	7 (12%)
35	LHG	D	408	-	42,42,48	0.77	1 (2%)	45,48,54	1.28	5 (11%)
37	CHL	S	606	-	50,58,74	2.22	16 (32%)	52,94,114	2.74	19 (36%)
37	CHL	g	606	-	50,58,74	2.18	15 (30%)	52,94,114	2.81	20 (38%)
40	NEX	g	1623	-	38,46,46	1.01	2 (5%)	50,70,70	2.59	16 (32%)
27	CLA	R	612	-	49,57,73	1.65	6 (12%)	55,93,113	1.50	7 (12%)
29	BCR	c	516	-	41,41,41	0.78	0	56,56,56	2.30	18 (32%)
27	CLA	b	602	-	65,73,73	1.45	10 (15%)	76,113,113	1.39	8 (10%)
38	LUT	n	1621	-	42,43,43	0.90	2 (4%)	51,60,60	1.77	15 (29%)
27	CLA	B	603	-	65,73,73	1.44	10 (15%)	76,113,113	1.38	7 (9%)
27	CLA	y	610	7	65,73,73	1.45	9 (13%)	76,113,113	1.46	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
34	PL9	d	405	-	55,55,55	1.88	12 (21%)	68,69,69	1.57	15 (22%)
27	CLA	y	603	-	49,57,73	1.68	9 (18%)	55,93,113	1.54	6 (10%)
27	CLA	C	505	-	65,73,73	1.45	9 (13%)	76,113,113	1.55	8 (10%)
29	BCR	H	101	-	41,41,41	0.86	1 (2%)	56,56,56	2.01	18 (32%)
29	BCR	b	618	-	41,41,41	0.92	3 (7%)	56,56,56	2.20	18 (32%)
35	LHG	r	2630	27	48,48,48	0.61	1 (2%)	51,54,54	1.25	6 (11%)
27	CLA	c	502	-	65,73,73	1.41	10 (15%)	76,113,113	1.45	7 (9%)
27	CLA	b	608	-	65,73,73	1.43	10 (15%)	76,113,113	1.46	9 (11%)
27	CLA	g	612	7	49,57,73	1.69	10 (20%)	55,93,113	1.56	7 (12%)
27	CLA	S	611	35	49,57,73	1.66	10 (20%)	55,93,113	1.57	7 (12%)
30	SQD	B	621	-	53,54,54	0.95	5 (9%)	62,65,65	1.56	10 (16%)
35	LHG	g	2630	27	48,48,48	0.61	1 (2%)	51,54,54	1.29	7 (13%)
27	CLA	g	611	35	49,57,73	1.68	9 (18%)	55,93,113	1.61	9 (16%)
27	CLA	n	602	7	65,73,73	1.48	8 (12%)	76,113,113	1.38	6 (7%)
27	CLA	b	612	-	65,73,73	1.48	10 (15%)	76,113,113	1.52	9 (11%)
28	PHO	A	409	-	51,69,69	1.14	7 (13%)	47,99,99	1.37	6 (12%)
27	CLA	r	602	17	65,73,73	1.43	8 (12%)	76,113,113	1.40	7 (9%)
38	LUT	R	620	-	42,43,43	0.82	1 (2%)	51,60,60	1.65	15 (29%)
38	LUT	Y	1621	-	42,43,43	1.01	3 (7%)	51,60,60	1.93	18 (35%)
35	LHG	y	2630	27	48,48,48	0.74	1 (2%)	51,54,54	1.31	6 (11%)
37	CHL	G	607	-	50,58,74	2.12	14 (28%)	52,94,114	2.78	19 (36%)
24	OEX	a	401	3,1	0,15,15	-	-	-	-	-
27	CLA	C	509	-	65,73,73	1.45	10 (15%)	76,113,113	1.56	12 (15%)
37	CHL	y	601	7	66,74,74	1.87	14 (21%)	73,114,114	2.42	23 (31%)
32	DGD	C	519	-	63,63,67	0.99	4 (6%)	77,77,81	1.51	14 (18%)
40	NEX	G	1623	-	38,46,46	1.01	2 (5%)	50,70,70	2.60	16 (32%)
27	CLA	C	510	-	65,73,73	1.41	9 (13%)	76,113,113	1.46	7 (9%)
39	XAT	y	1622	-	39,47,47	0.90	0	54,74,74	3.05	21 (38%)
37	CHL	N	608	-	50,58,74	2.09	14 (28%)	52,94,114	2.87	20 (38%)
27	CLA	y	602	7	65,73,73	1.44	10 (15%)	76,113,113	1.48	7 (9%)
27	CLA	y	604	-	49,57,73	1.65	10 (20%)	55,93,113	1.64	7 (12%)
32	DGD	C	520	-	63,63,67	0.97	4 (6%)	77,77,81	1.51	11 (14%)
29	BCR	c	514	-	41,41,41	0.90	1 (2%)	56,56,56	2.03	18 (32%)
38	LUT	S	1621	-	42,43,43	0.86	1 (2%)	51,60,60	1.76	17 (33%)
30	SQD	a	418	-	53,54,54	0.98	5 (9%)	62,65,65	1.48	10 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	CLA	s	610	18	49,57,73	1.63	7 (14%)	55,93,113	1.63	7 (12%)
27	CLA	A	405	-	65,73,73	1.46	10 (15%)	76,113,113	1.50	8 (10%)
27	CLA	C	503	-	65,73,73	1.45	11 (16%)	76,113,113	1.38	8 (10%)
27	CLA	C	501	-	65,73,73	1.46	10 (15%)	76,113,113	1.40	8 (10%)
39	XAT	G	1622	-	39,47,47	0.97	2 (5%)	54,74,74	2.99	18 (33%)
27	CLA	B	613	-	65,73,73	1.43	9 (13%)	76,113,113	1.55	8 (10%)
37	CHL	N	606	-	50,58,74	2.11	14 (28%)	52,94,114	2.92	20 (38%)
29	BCR	b	620	-	41,41,41	0.96	3 (7%)	56,56,56	2.12	17 (30%)
37	CHL	r	607	-	50,58,74	2.16	15 (30%)	52,94,114	2.80	21 (40%)
31	LMG	Z	101	-	51,51,55	0.72	0	59,59,63	1.35	6 (10%)
27	CLA	G	603	-	49,57,73	1.67	8 (16%)	55,93,113	1.59	7 (12%)
27	CLA	s	613	18	49,57,73	1.64	9 (18%)	55,93,113	1.58	6 (10%)
38	LUT	n	1620	-	42,43,43	0.83	1 (2%)	51,60,60	1.84	16 (31%)
27	CLA	g	614	-	49,57,73	1.67	6 (12%)	55,93,113	1.57	7 (12%)
35	LHG	l	101	-	48,48,48	0.72	1 (2%)	51,54,54	1.32	7 (13%)
31	LMG	B	622	-	51,51,55	0.80	2 (3%)	59,59,63	1.45	8 (13%)
27	CLA	A	406	-	65,73,73	1.41	9 (13%)	76,113,113	1.53	8 (10%)
27	CLA	s	604	-	49,57,73	1.62	9 (18%)	55,93,113	1.68	7 (12%)

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
27	CLA	C	513	-	1/1/11/20	6/18/96/115	-
37	CHL	r	608	-	3/3/16/26	12/20/118/137	-
27	CLA	A	407	-	1/1/11/20	6/18/96/115	-
37	CHL	y	605	7	3/3/16/26	8/18/116/137	-
37	CHL	Y	601	7	4/4/20/26	17/39/137/137	-
37	CHL	Y	605	7	3/3/16/26	8/18/116/137	-
37	CHL	s	601	18	3/3/17/26	9/23/121/137	-
27	CLA	N	610	7	1/1/15/20	10/37/115/115	-
37	CHL	r	606	-	3/3/16/26	10/20/118/137	-
37	CHL	y	609	7	4/4/20/26	19/39/137/137	-
37	CHL	G	606	-	3/3/16/26	3/20/118/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	CLA	c	503	-	1/1/15/20	12/37/115/115	-
27	CLA	y	613	7	1/1/15/20	14/37/115/115	-
37	CHL	S	601	18	3/3/17/26	9/23/121/137	-
27	CLA	C	511	3	1/1/15/20	9/37/115/115	-
37	CHL	G	608	-	3/3/16/26	10/20/118/137	-
27	CLA	N	613	7	1/1/11/20	7/18/96/115	-
27	CLA	s	609	18	1/1/11/20	8/18/96/115	-
35	LHG	Y	2630	27	-	20/53/53/53	-
29	BCR	B	619	-	-	0/29/63/63	0/2/2/2
27	CLA	Y	610	7	1/1/15/20	15/37/115/115	-
27	CLA	G	604	-	1/1/11/20	9/18/96/115	-
27	CLA	c	510	-	1/1/15/20	18/37/115/115	-
27	CLA	r	612	-	1/1/11/20	4/18/96/115	-
27	CLA	B	604	-	1/1/15/20	13/37/115/115	-
35	LHG	L	101	-	-	27/53/53/53	-
37	CHL	Y	609	7	4/4/20/26	19/39/137/137	-
37	CHL	s	607	-	3/3/16/26	9/20/118/137	-
31	LMG	a	413	-	-	15/43/63/70	0/1/1/1
27	CLA	R	604	-	1/1/11/20	9/18/96/115	-
27	CLA	R	601	17	1/1/11/20	13/18/96/115	-
31	LMG	d	411	-	-	13/41/61/70	0/1/1/1
31	LMG	D	411	-	-	13/41/61/70	0/1/1/1
27	CLA	N	602	7	1/1/15/20	10/37/115/115	-
27	CLA	y	611	35	1/1/15/20	9/37/115/115	-
29	BCR	C	516	-	-	7/29/63/63	0/2/2/2
35	LHG	R	2630	27	-	13/53/53/53	-
30	SQD	A	418	-	-	20/49/69/69	0/1/1/1
37	CHL	n	601	7	3/3/16/26	6/20/118/137	-
37	CHL	g	608	-	3/3/16/26	10/20/118/137	-
27	CLA	n	603	-	1/1/11/20	11/18/96/115	-
27	CLA	G	611	35	1/1/11/20	6/18/96/115	-
37	CHL	N	601	7	3/3/16/26	6/20/118/137	-
27	CLA	a	406	-	1/1/15/20	12/37/115/115	-
38	LUT	G	1621	-	-	1/29/67/67	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	LUT	N	1621	-	-	3/29/67/67	0/2/2/2
27	CLA	c	511	3	1/1/15/20	9/37/115/115	-
27	CLA	G	614	-	1/1/11/20	7/18/96/115	-
27	CLA	S	614	-	1/1/11/20	7/18/96/115	-
29	BCR	d	404	-	-	9/29/63/63	0/2/2/2
27	CLA	S	612	18	1/1/11/20	5/18/96/115	-
28	PHO	a	408	-	-	10/37/103/103	0/5/6/6
27	CLA	Y	611	35	1/1/15/20	9/37/115/115	-
35	LHG	S	2630	27	-	23/53/53/53	-
32	DGD	h	102	-	-	19/51/91/95	0/2/2/2
27	CLA	N	604	-	1/1/11/20	4/18/96/115	-
29	BCR	B	618	-	-	4/29/63/63	0/2/2/2
35	LHG	d	409	-	-	15/53/53/53	-
27	CLA	C	512	-	1/1/15/20	17/37/115/115	-
27	CLA	B	607	-	1/1/15/20	5/37/115/115	-
27	CLA	s	612	18	1/1/11/20	5/18/96/115	-
27	CLA	G	602	7	1/1/15/20	15/37/115/115	-
27	CLA	n	612	7	1/1/11/20	9/18/96/115	-
29	BCR	C	517	-	-	1/29/63/63	0/2/2/2
31	LMG	b	622	-	-	23/46/66/70	0/1/1/1
27	CLA	n	614	-	1/1/11/20	10/18/96/115	-
27	CLA	C	508	-	1/1/15/20	11/37/115/115	-
37	CHL	n	605	7	3/3/16/26	9/18/116/137	-
38	LUT	s	1620	-	-	2/29/67/67	0/2/2/2
37	CHL	G	605	7	3/3/16/26	5/18/116/137	-
37	CHL	S	607	-	3/3/16/26	9/20/118/137	-
27	CLA	Y	602	7	1/1/15/20	12/37/115/115	-
37	CHL	R	607	-	3/3/16/26	9/20/118/137	-
29	BCR	B	620	-	-	6/29/63/63	0/2/2/2
27	CLA	s	602	18	1/1/11/20	7/18/96/115	-
27	CLA	r	604	-	1/1/11/20	9/18/96/115	-
27	CLA	R	616	17	1/1/11/20	9/18/96/115	-
27	CLA	d	403	-	1/1/15/20	12/37/115/115	-
27	CLA	B	605	-	1/1/15/20	17/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	LUT	S	1620	-	-	2/29/67/67	0/2/2/2
37	CHL	N	607	-	4/4/20/26	16/39/137/137	-
37	CHL	n	609	7	3/3/16/26	7/20/118/137	-
31	LMG	z	101	-	-	22/46/66/70	0/1/1/1
27	CLA	C	506	-	1/1/15/20	18/37/115/115	-
27	CLA	g	604	-	1/1/11/20	9/18/96/115	-
27	CLA	S	609	18	1/1/11/20	8/18/96/115	-
27	CLA	b	603	-	1/1/15/20	16/37/115/115	-
27	CLA	B	609	-	1/1/15/20	16/37/115/115	-
40	NEX	N	1623	-	-	5/27/83/83	0/3/3/3
27	CLA	s	603	-	-	11/18/96/115	-
27	CLA	c	513	-	1/1/11/20	6/18/96/115	-
27	CLA	D	403	-	1/1/15/20	12/37/115/115	-
27	CLA	C	502	-	1/1/15/20	14/37/115/115	-
29	BCR	c	517	-	-	1/29/63/63	0/2/2/2
27	CLA	c	505	-	1/1/15/20	10/37/115/115	-
40	NEX	R	623	-	-	3/27/83/83	0/3/3/3
27	CLA	b	606	-	1/1/15/20	14/37/115/115	-
27	CLA	c	508	-	1/1/15/20	11/37/115/115	-
27	CLA	Y	603	-	1/1/11/20	4/18/96/115	-
28	PHO	a	409	-	-	17/37/103/103	0/5/6/6
27	CLA	Y	613	7	1/1/15/20	14/37/115/115	-
34	PL9	D	405	-	-	14/53/73/73	0/1/1/1
35	LHG	s	2630	27	-	23/53/53/53	-
27	CLA	s	611	35	1/1/11/20	7/18/96/115	-
32	DGD	c	518	-	-	17/44/84/95	0/2/2/2
39	XAT	R	622	-	-	2/31/93/93	0/4/4/4
27	CLA	N	612	7	1/1/11/20	9/18/96/115	-
27	CLA	R	609	17	1/1/11/20	8/18/96/115	-
37	CHL	G	601	7	4/4/20/26	20/39/137/137	-
37	CHL	N	605	7	3/3/16/26	9/18/116/137	-
35	LHG	N	2630	27	-	24/53/53/53	-
38	LUT	y	1620	-	-	0/29/67/67	0/2/2/2
27	CLA	A	410	-	1/1/14/20	11/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	CLA	b	611	-	1/1/15/20	10/37/115/115	-
27	CLA	c	512	-	1/1/15/20	17/37/115/115	-
27	CLA	G	610	7	1/1/15/20	15/37/115/115	-
27	CLA	y	612	7	1/1/15/20	10/37/115/115	-
29	BCR	D	404	-	-	9/29/63/63	0/2/2/2
32	DGD	C	518	-	-	17/44/84/95	0/2/2/2
28	PHO	A	408	-	-	10/37/103/103	0/5/6/6
27	CLA	g	603	-	1/1/11/20	6/18/96/115	-
27	CLA	R	610	17	1/1/15/20	15/37/115/115	-
38	LUT	G	1620	-	-	2/29/67/67	0/2/2/2
27	CLA	C	504	-	1/1/15/20	14/37/115/115	-
27	CLA	B	610	-	1/1/15/20	13/37/115/115	-
27	CLA	R	603	-	1/1/11/20	6/18/96/115	-
27	CLA	r	613	17	1/1/11/20	7/18/96/115	-
37	CHL	R	606	-	3/3/16/26	10/20/118/137	-
27	CLA	N	611	35	1/1/11/20	6/18/96/115	-
27	CLA	c	509	-	1/1/15/20	9/37/115/115	-
35	LHG	n	2630	27	-	24/53/53/53	-
27	CLA	b	617	-	1/1/15/20	15/37/115/115	-
27	CLA	B	615	-	1/1/15/20	14/37/115/115	-
27	CLA	n	604	-	1/1/11/20	4/18/96/115	-
27	CLA	g	613	7	1/1/11/20	6/18/96/115	-
37	CHL	y	606	-	3/3/16/26	6/20/118/137	-
27	CLA	R	613	17	1/1/11/20	7/18/96/115	-
27	CLA	G	612	7	1/1/11/20	6/18/96/115	-
30	SQD	b	621	-	-	24/49/69/69	0/1/1/1
27	CLA	g	610	7	1/1/15/20	15/37/115/115	-
39	XAT	n	1622	-	-	1/31/93/93	0/4/4/4
32	DGD	H	102	-	-	19/51/91/95	0/2/2/2
27	CLA	Y	604	-	1/1/11/20	6/18/96/115	-
32	DGD	c	519	-	-	23/51/91/95	0/2/2/2
37	CHL	G	609	7	3/3/16/26	11/20/118/137	-
37	CHL	g	607	-	3/3/16/26	9/20/118/137	-
27	CLA	B	611	-	1/1/15/20	10/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	CLA	D	402	-	1/1/15/20	10/37/115/115	-
27	CLA	c	507	-	1/1/15/20	15/37/115/115	-
27	CLA	c	501	-	1/1/15/20	12/37/115/115	-
27	CLA	B	617	-	1/1/15/20	15/37/115/115	-
29	BCR	C	514	-	-	4/29/63/63	0/2/2/2
27	CLA	R	611	35	1/1/11/20	9/18/96/115	-
27	CLA	C	507	-	1/1/15/20	15/37/115/115	-
29	BCR	a	411	-	-	0/29/63/63	0/2/2/2
27	CLA	Y	614	-	1/1/11/20	8/18/96/115	-
37	CHL	R	608	-	3/3/16/26	12/20/118/137	-
27	CLA	S	604	-	1/1/11/20	11/18/96/115	-
27	CLA	b	616	-	1/1/15/20	11/37/115/115	-
27	CLA	r	611	35	1/1/11/20	9/18/96/115	-
37	CHL	S	608	-	3/3/16/26	5/19/117/137	-
38	LUT	g	1620	-	-	2/29/67/67	0/2/2/2
27	CLA	N	603	-	1/1/11/20	11/18/96/115	-
27	CLA	c	504	-	1/1/15/20	14/37/115/115	-
40	NEX	n	1623	-	-	5/27/83/83	0/3/3/3
38	LUT	N	1620	-	-	2/29/67/67	0/2/2/2
29	BCR	b	619	-	-	0/29/63/63	0/2/2/2
37	CHL	s	608	-	3/3/16/26	5/19/117/137	-
37	CHL	g	601	7	4/4/20/26	20/39/137/137	-
27	CLA	d	402	-	1/1/15/20	10/37/115/115	-
27	CLA	r	601	17	1/1/11/20	13/18/96/115	-
30	SQD	a	412	-	-	28/49/69/69	0/1/1/1
37	CHL	Y	606	-	3/3/16/26	6/20/118/137	-
37	CHL	n	607	-	4/4/20/26	16/39/137/137	-
27	CLA	s	614	-	1/1/11/20	7/18/96/115	-
39	XAT	r	622	-	-	2/31/93/93	0/4/4/4
27	CLA	r	616	17	1/1/11/20	9/18/96/115	-
37	CHL	s	606	-	3/3/16/26	10/20/118/137	-
29	BCR	c	515	-	-	0/29/63/63	0/2/2/2
27	CLA	c	506	-	1/1/15/20	18/37/115/115	-
27	CLA	b	609	-	1/1/15/20	16/37/115/115	-
40	NEX	Y	1623	-	-	3/27/83/83	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	CLA	b	605	-	1/1/15/20	17/37/115/115	-
39	XAT	N	1622	-	-	1/31/93/93	0/4/4/4
29	BCR	C	515	-	-	0/29/63/63	0/2/2/2
27	CLA	S	602	18	1/1/11/20	7/18/96/115	-
27	CLA	R	602	17	1/1/15/20	15/37/115/115	-
27	CLA	B	602	-	1/1/15/20	19/37/115/115	-
37	CHL	n	608	-	3/3/16/26	7/20/118/137	-
27	CLA	G	613	7	1/1/11/20	6/18/96/115	-
38	LUT	g	1621	-	-	1/29/67/67	0/2/2/2
40	NEX	S	1623	-	-	5/27/83/83	0/3/3/3
38	LUT	r	620	-	-	2/29/67/67	0/2/2/2
37	CHL	y	607	-	3/3/16/26	8/20/118/137	-
27	CLA	r	609	17	1/1/11/20	8/18/96/115	-
27	CLA	B	608	-	1/1/15/20	8/37/115/115	-
35	LHG	D	409	-	-	15/53/53/53	-
27	CLA	Y	612	7	1/1/15/20	10/37/115/115	-
39	XAT	g	1622	-	-	3/31/93/93	0/4/4/4
27	CLA	a	410	-	1/1/14/20	11/31/109/115	-
27	CLA	B	614	-	1/1/15/20	9/37/115/115	-
27	CLA	g	602	7	1/1/15/20	15/37/115/115	-
29	BCR	A	411	-	-	0/29/63/63	0/2/2/2
27	CLA	B	612	-	1/1/15/20	15/37/115/115	-
39	XAT	Y	1622	-	-	3/31/93/93	0/4/4/4
35	LHG	d	410	-	-	21/41/41/53	-
35	LHG	D	410	-	-	21/41/41/53	-
38	LUT	y	1621	-	-	1/29/67/67	0/2/2/2
27	CLA	b	610	-	1/1/15/20	13/37/115/115	-
27	CLA	a	407	-	1/1/11/20	6/18/96/115	-
31	LMG	C	521	-	-	20/46/66/70	0/1/1/1
40	NEX	r	623	-	-	3/27/83/83	0/3/3/3
29	BCR	h	101	-	-	4/29/63/63	0/2/2/2
27	CLA	b	613	-	1/1/15/20	17/37/115/115	-
37	CHL	g	609	7	3/3/16/26	11/20/118/137	-
27	CLA	b	615	-	1/1/15/20	14/37/115/115	-
27	CLA	b	614	-	1/1/15/20	9/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	CLA	n	613	7	1/1/11/20	7/18/96/115	-
31	LMG	c	521	-	-	20/46/66/70	0/1/1/1
40	NEX	y	1623	-	-	3/27/83/83	0/3/3/3
37	CHL	n	606	-	3/3/16/26	4/20/118/137	-
36	HEM	F	101	5,6	-	0/12/54/54	-
27	CLA	n	610	7	1/1/15/20	10/37/115/115	-
37	CHL	g	605	7	3/3/16/26	5/18/116/137	-
27	CLA	r	603	-	1/1/11/20	6/18/96/115	-
31	LMG	A	413	-	-	15/43/63/70	0/1/1/1
37	CHL	N	609	7	3/3/16/26	7/20/118/137	-
37	CHL	Y	607	-	3/3/16/26	8/20/118/137	-
37	CHL	y	608	-	3/3/16/26	9/20/118/137	-
36	HEM	f	101	5,6	-	0/12/54/54	-
35	LHG	G	2630	27	-	30/53/53/53	-
27	CLA	b	604	-	1/1/15/20	13/37/115/115	-
27	CLA	a	405	-	1/1/15/20	14/37/115/115	-
27	CLA	S	603	-	-	11/18/96/115	-
35	LHG	d	408	-	-	20/47/47/53	-
30	SQD	A	412	-	-	28/49/69/69	0/1/1/1
27	CLA	B	616	-	1/1/15/20	11/37/115/115	-
32	DGD	c	520	-	-	14/51/91/95	0/2/2/2
27	CLA	N	614	-	1/1/11/20	11/18/96/115	-
40	NEX	s	1623	-	-	5/27/83/83	0/3/3/3
27	CLA	n	611	35	1/1/11/20	6/18/96/115	-
38	LUT	s	1621	-	-	3/29/67/67	0/2/2/2
27	CLA	r	610	17	1/1/15/20	15/37/115/115	-
27	CLA	B	606	-	1/1/15/20	14/37/115/115	-
27	CLA	S	613	18	1/1/11/20	6/18/96/115	-
38	LUT	Y	1620	-	-	0/29/67/67	0/2/2/2
27	CLA	y	614	-	1/1/11/20	8/18/96/115	-
27	CLA	b	607	-	1/1/15/20	4/37/115/115	-
37	CHL	Y	608	-	3/3/16/26	9/20/118/137	-
27	CLA	S	610	18	1/1/11/20	5/18/96/115	-
35	LHG	D	408	-	-	20/47/47/53	-
37	CHL	S	606	-	3/3/16/26	10/20/118/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
37	CHL	g	606	-	3/3/16/26	3/20/118/137	-
40	NEX	g	1623	-	-	5/27/83/83	0/3/3/3
27	CLA	R	612	-	1/1/11/20	4/18/96/115	-
29	BCR	c	516	-	-	7/29/63/63	0/2/2/2
27	CLA	b	602	-	1/1/15/20	19/37/115/115	-
38	LUT	n	1621	-	-	3/29/67/67	0/2/2/2
27	CLA	B	603	-	1/1/15/20	15/37/115/115	-
27	CLA	y	610	7	1/1/15/20	15/37/115/115	-
34	PL9	d	405	-	-	14/53/73/73	0/1/1/1
27	CLA	y	603	-	1/1/11/20	4/18/96/115	-
27	CLA	C	505	-	1/1/15/20	10/37/115/115	-
29	BCR	H	101	-	-	4/29/63/63	0/2/2/2
29	BCR	b	618	-	-	4/29/63/63	0/2/2/2
35	LHG	r	2630	27	-	13/53/53/53	-
27	CLA	c	502	-	1/1/15/20	14/37/115/115	-
27	CLA	b	608	-	1/1/15/20	8/37/115/115	-
27	CLA	g	612	7	1/1/11/20	6/18/96/115	-
27	CLA	S	611	35	1/1/11/20	7/18/96/115	-
30	SQD	B	621	-	-	24/49/69/69	0/1/1/1
35	LHG	g	2630	27	-	30/53/53/53	-
27	CLA	g	611	35	1/1/11/20	6/18/96/115	-
27	CLA	n	602	7	1/1/15/20	10/37/115/115	-
27	CLA	b	612	-	1/1/15/20	15/37/115/115	-
28	PHO	A	409	-	-	17/37/103/103	0/5/6/6
27	CLA	r	602	17	1/1/15/20	15/37/115/115	-
38	LUT	R	620	-	-	2/29/67/67	0/2/2/2
38	LUT	Y	1621	-	-	1/29/67/67	0/2/2/2
35	LHG	y	2630	27	-	20/53/53/53	-
37	CHL	G	607	-	3/3/16/26	9/20/118/137	-
27	CLA	C	509	-	1/1/15/20	10/37/115/115	-
37	CHL	y	601	7	4/4/20/26	17/39/137/137	-
32	DGD	C	519	-	-	23/51/91/95	0/2/2/2
40	NEX	G	1623	-	-	5/27/83/83	0/3/3/3
27	CLA	C	510	-	1/1/15/20	18/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
39	XAT	y	1622	-	-	3/31/93/93	0/4/4/4
37	CHL	N	608	-	3/3/16/26	7/20/118/137	-
27	CLA	y	602	7	1/1/15/20	12/37/115/115	-
27	CLA	y	604	-	1/1/11/20	6/18/96/115	-
32	DGD	C	520	-	-	14/51/91/95	0/2/2/2
29	BCR	c	514	-	-	4/29/63/63	0/2/2/2
38	LUT	S	1621	-	-	3/29/67/67	0/2/2/2
30	SQD	a	418	-	-	20/49/69/69	0/1/1/1
27	CLA	s	610	18	1/1/11/20	5/18/96/115	-
27	CLA	A	405	-	1/1/15/20	14/37/115/115	-
27	CLA	C	503	-	1/1/15/20	12/37/115/115	-
27	CLA	C	501	-	1/1/15/20	12/37/115/115	-
39	XAT	G	1622	-	-	3/31/93/93	0/4/4/4
27	CLA	B	613	-	1/1/15/20	17/37/115/115	-
37	CHL	N	606	-	3/3/16/26	4/20/118/137	-
29	BCR	b	620	-	-	6/29/63/63	0/2/2/2
37	CHL	r	607	-	3/3/16/26	9/20/118/137	-
31	LMG	Z	101	-	-	22/46/66/70	0/1/1/1
27	CLA	G	603	-	1/1/11/20	6/18/96/115	-
27	CLA	s	613	18	1/1/11/20	6/18/96/115	-
38	LUT	n	1620	-	-	2/29/67/67	0/2/2/2
27	CLA	g	614	-	1/1/11/20	7/18/96/115	-
35	LHG	l	101	-	-	27/53/53/53	-
31	LMG	B	622	-	-	23/46/66/70	0/1/1/1
27	CLA	A	406	-	1/1/15/20	12/37/115/115	-
27	CLA	s	604	-	1/1/11/20	11/18/96/115	-

All (2376) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	F	101	HEM	C3D-C2D	7.74	1.53	1.36
36	f	101	HEM	C3D-C2D	7.73	1.53	1.36
27	S	609	CLA	C4B-NB	7.39	1.41	1.35
27	s	609	CLA	C4B-NB	7.33	1.41	1.35
27	R	601	CLA	C4B-NB	7.11	1.41	1.35
27	r	601	CLA	C4B-NB	7.11	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	n	602	CLA	C4B-NB	7.09	1.41	1.35
27	r	611	CLA	C4B-NB	7.09	1.41	1.35
27	R	611	CLA	C4B-NB	7.08	1.41	1.35
27	g	611	CLA	C4B-NB	7.07	1.41	1.35
27	G	612	CLA	C4B-NB	7.06	1.41	1.35
27	S	602	CLA	C4B-NB	7.05	1.41	1.35
27	s	602	CLA	C4B-NB	7.05	1.41	1.35
27	G	614	CLA	C4B-NB	7.04	1.41	1.35
27	g	614	CLA	C4B-NB	7.04	1.41	1.35
27	R	616	CLA	C4B-NB	7.03	1.41	1.35
27	r	616	CLA	C4B-NB	7.01	1.41	1.35
27	n	614	CLA	C4B-NB	7.00	1.41	1.35
27	N	611	CLA	C4B-NB	6.99	1.41	1.35
27	N	602	CLA	C4B-NB	6.98	1.41	1.35
27	G	611	CLA	C4B-NB	6.97	1.41	1.35
27	g	612	CLA	C4B-NB	6.96	1.41	1.35
27	r	612	CLA	C4B-NB	6.96	1.41	1.35
27	n	611	CLA	C4B-NB	6.93	1.41	1.35
27	r	610	CLA	C4B-NB	6.93	1.41	1.35
27	G	603	CLA	C4B-NB	6.92	1.41	1.35
27	G	613	CLA	C4B-NB	6.92	1.41	1.35
27	g	603	CLA	C4B-NB	6.92	1.41	1.35
27	g	613	CLA	C4B-NB	6.92	1.41	1.35
27	G	610	CLA	C4B-NB	6.89	1.41	1.35
27	B	606	CLA	C4B-NB	6.88	1.41	1.35
27	R	610	CLA	C4B-NB	6.88	1.41	1.35
27	g	610	CLA	C4B-NB	6.88	1.41	1.35
27	N	612	CLA	C4B-NB	6.87	1.41	1.35
27	R	613	CLA	C4B-NB	6.87	1.41	1.35
27	N	614	CLA	C4B-NB	6.86	1.41	1.35
27	R	612	CLA	C4B-NB	6.86	1.41	1.35
27	n	612	CLA	C4B-NB	6.85	1.41	1.35
27	N	603	CLA	C4B-NB	6.85	1.41	1.35
27	n	603	CLA	C4B-NB	6.85	1.41	1.35
27	s	612	CLA	C4B-NB	6.82	1.41	1.35
27	B	602	CLA	C4B-NB	6.81	1.41	1.35
27	b	602	CLA	C4B-NB	6.81	1.41	1.35
27	R	604	CLA	C4B-NB	6.81	1.41	1.35
27	y	603	CLA	C4B-NB	6.80	1.41	1.35
27	r	613	CLA	C4B-NB	6.79	1.41	1.35
27	Y	603	CLA	C4B-NB	6.79	1.41	1.35
27	b	606	CLA	C4B-NB	6.78	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	N	604	CLA	C4B-NB	6.78	1.41	1.35
27	R	609	CLA	C4B-NB	6.78	1.41	1.35
27	r	609	CLA	C4B-NB	6.78	1.41	1.35
27	r	603	CLA	C4B-NB	6.78	1.41	1.35
27	G	604	CLA	C4B-NB	6.76	1.41	1.35
27	g	604	CLA	C4B-NB	6.76	1.41	1.35
27	S	612	CLA	C4B-NB	6.75	1.41	1.35
27	s	603	CLA	C4B-NB	6.75	1.41	1.35
27	s	610	CLA	C4B-NB	6.74	1.41	1.35
27	B	617	CLA	C4B-NB	6.72	1.41	1.35
27	b	617	CLA	C4B-NB	6.72	1.41	1.35
27	S	603	CLA	C4B-NB	6.72	1.41	1.35
27	r	604	CLA	C4B-NB	6.70	1.41	1.35
27	S	610	CLA	C4B-NB	6.68	1.41	1.35
27	n	613	CLA	C4B-NB	6.67	1.41	1.35
27	R	603	CLA	C4B-NB	6.67	1.41	1.35
27	n	604	CLA	C4B-NB	6.67	1.41	1.35
27	y	611	CLA	C4B-NB	6.66	1.41	1.35
27	R	602	CLA	C4B-NB	6.66	1.41	1.35
27	r	602	CLA	C4B-NB	6.66	1.41	1.35
27	Y	611	CLA	C4B-NB	6.65	1.41	1.35
27	S	611	CLA	C4B-NB	6.64	1.41	1.35
27	s	611	CLA	C4B-NB	6.64	1.41	1.35
27	y	610	CLA	C4B-NB	6.64	1.41	1.35
27	Y	610	CLA	C4B-NB	6.60	1.41	1.35
27	N	613	CLA	C4B-NB	6.60	1.41	1.35
27	n	610	CLA	C4B-NB	6.59	1.41	1.35
27	C	501	CLA	C4B-NB	6.59	1.41	1.35
27	c	501	CLA	C4B-NB	6.59	1.41	1.35
27	S	614	CLA	C4B-NB	6.56	1.41	1.35
27	Y	604	CLA	C4B-NB	6.56	1.41	1.35
27	s	614	CLA	C4B-NB	6.56	1.41	1.35
27	s	613	CLA	C4B-NB	6.55	1.41	1.35
27	B	605	CLA	C4B-NB	6.53	1.41	1.35
27	S	613	CLA	C4B-NB	6.53	1.41	1.35
27	b	605	CLA	C4B-NB	6.53	1.41	1.35
27	N	610	CLA	C4B-NB	6.52	1.41	1.35
27	g	602	CLA	C4B-NB	6.51	1.41	1.35
27	c	507	CLA	C4B-NB	6.47	1.41	1.35
34	D	405	PL9	C7-C3	-6.45	1.44	1.51
27	C	511	CLA	C4B-NB	6.44	1.41	1.35
27	B	616	CLA	C4B-NB	6.43	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	616	CLA	C4B-NB	6.43	1.40	1.35
27	C	504	CLA	C4B-NB	6.43	1.40	1.35
27	c	504	CLA	C4B-NB	6.43	1.40	1.35
27	y	604	CLA	C4B-NB	6.42	1.40	1.35
27	S	604	CLA	C4B-NB	6.42	1.40	1.35
27	s	604	CLA	C4B-NB	6.42	1.40	1.35
27	C	507	CLA	C4B-NB	6.41	1.40	1.35
27	b	607	CLA	C4B-NB	6.40	1.40	1.35
27	G	602	CLA	C4B-NB	6.40	1.40	1.35
27	c	511	CLA	C4B-NB	6.40	1.40	1.35
34	d	405	PL9	C7-C3	-6.40	1.44	1.51
27	B	610	CLA	C4B-NB	6.40	1.40	1.35
27	b	610	CLA	C4B-NB	6.40	1.40	1.35
27	a	407	CLA	C4B-NB	6.34	1.40	1.35
27	B	607	CLA	C4B-NB	6.32	1.40	1.35
27	C	503	CLA	C4B-NB	6.32	1.40	1.35
27	c	503	CLA	C4B-NB	6.32	1.40	1.35
27	y	614	CLA	C4B-NB	6.29	1.40	1.35
27	C	512	CLA	C4B-NB	6.27	1.40	1.35
27	A	407	CLA	C4B-NB	6.25	1.40	1.35
27	Y	613	CLA	C4B-NB	6.24	1.40	1.35
27	b	608	CLA	C4B-NB	6.24	1.40	1.35
27	C	506	CLA	C4B-NB	6.24	1.40	1.35
27	c	506	CLA	C4B-NB	6.24	1.40	1.35
27	B	608	CLA	C4B-NB	6.22	1.40	1.35
27	a	405	CLA	C4B-NB	6.22	1.40	1.35
27	b	612	CLA	C4B-NB	6.22	1.40	1.35
27	c	505	CLA	C4B-NB	6.22	1.40	1.35
27	C	505	CLA	C4B-NB	6.22	1.40	1.35
27	c	512	CLA	C4B-NB	6.20	1.40	1.35
27	d	402	CLA	C4B-NB	6.19	1.40	1.35
27	A	405	CLA	C4B-NB	6.17	1.40	1.35
27	B	609	CLA	C4B-NB	6.17	1.40	1.35
27	b	609	CLA	C4B-NB	6.17	1.40	1.35
27	B	614	CLA	C4B-NB	6.15	1.40	1.35
27	B	604	CLA	C4B-NB	6.14	1.40	1.35
27	b	614	CLA	C4B-NB	6.14	1.40	1.35
27	Y	614	CLA	C4B-NB	6.14	1.40	1.35
27	y	612	CLA	C4B-NB	6.13	1.40	1.35
27	y	602	CLA	C4B-NB	6.13	1.40	1.35
27	Y	602	CLA	C4B-NB	6.13	1.40	1.35
27	y	613	CLA	C4B-NB	6.12	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	604	CLA	C4B-NB	6.12	1.40	1.35
27	D	402	CLA	C4B-NB	6.09	1.40	1.35
27	B	612	CLA	C4B-NB	6.08	1.40	1.35
34	D	405	PL9	C3-C4	-6.07	1.39	1.49
27	c	513	CLA	C4B-NB	6.07	1.40	1.35
27	C	502	CLA	C4B-NB	6.06	1.40	1.35
34	d	405	PL9	C3-C4	-6.05	1.39	1.49
27	C	513	CLA	C4B-NB	6.04	1.40	1.35
27	D	403	CLA	C4B-NB	6.04	1.40	1.35
27	C	509	CLA	C4B-NB	6.04	1.40	1.35
27	Y	612	CLA	C4B-NB	6.03	1.40	1.35
27	c	510	CLA	C4B-NB	6.01	1.40	1.35
27	c	502	CLA	C4B-NB	6.00	1.40	1.35
27	d	403	CLA	C4B-NB	5.99	1.40	1.35
27	c	508	CLA	C4B-NB	5.98	1.40	1.35
27	C	510	CLA	C4B-NB	5.98	1.40	1.35
27	c	509	CLA	C4B-NB	5.98	1.40	1.35
27	b	603	CLA	C4B-NB	5.94	1.40	1.35
27	a	406	CLA	C4B-NB	5.92	1.40	1.35
27	B	603	CLA	C4B-NB	5.91	1.40	1.35
27	B	611	CLA	C4B-NB	5.91	1.40	1.35
27	b	611	CLA	C4B-NB	5.91	1.40	1.35
27	b	615	CLA	C4B-NB	5.89	1.40	1.35
27	B	615	CLA	C4B-NB	5.88	1.40	1.35
27	A	406	CLA	C4B-NB	5.88	1.40	1.35
27	B	613	CLA	C4B-NB	5.84	1.40	1.35
27	C	508	CLA	C4B-NB	5.83	1.40	1.35
27	a	410	CLA	C4B-NB	5.83	1.40	1.35
27	b	613	CLA	C4B-NB	5.81	1.40	1.35
27	A	410	CLA	C4B-NB	5.73	1.40	1.35
37	S	608	CHL	C3B-C2B	5.33	1.47	1.40
37	s	608	CHL	C3B-C2B	5.33	1.47	1.40
37	s	608	CHL	CHC-C1C	5.29	1.48	1.35
37	S	608	CHL	CHC-C1C	5.28	1.48	1.35
37	G	601	CHL	C3D-C4D	-5.19	1.32	1.44
37	g	601	CHL	C3D-C4D	-5.18	1.32	1.44
37	R	608	CHL	C3D-C4D	-5.14	1.32	1.44
37	r	608	CHL	C3D-C4D	-5.14	1.32	1.44
37	Y	608	CHL	C3D-C4D	-5.14	1.32	1.44
37	Y	601	CHL	C3D-C4D	-5.13	1.32	1.44
37	y	601	CHL	C3D-C4D	-5.13	1.32	1.44
37	n	605	CHL	C3D-C4D	-5.12	1.32	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	S	608	CHL	O2D-CGD	5.12	1.45	1.33
37	y	608	CHL	C3D-C4D	-5.12	1.32	1.44
37	y	609	CHL	C3D-C4D	-5.11	1.32	1.44
37	s	608	CHL	O2D-CGD	5.10	1.45	1.33
37	y	606	CHL	C3D-C4D	-5.10	1.32	1.44
37	n	608	CHL	C3D-C4D	-5.10	1.32	1.44
37	g	608	CHL	C3D-C4D	-5.10	1.32	1.44
37	Y	606	CHL	C3D-C4D	-5.09	1.32	1.44
37	Y	609	CHL	C3D-C4D	-5.09	1.32	1.44
37	N	607	CHL	C3D-C4D	-5.08	1.32	1.44
37	S	607	CHL	O2D-CGD	5.08	1.45	1.33
37	s	607	CHL	O2D-CGD	5.08	1.45	1.33
37	S	606	CHL	O2D-CGD	5.08	1.45	1.33
37	n	607	CHL	C3D-C4D	-5.07	1.32	1.44
37	N	609	CHL	C3D-C4D	-5.07	1.32	1.44
37	n	609	CHL	C3D-C4D	-5.07	1.32	1.44
37	N	608	CHL	C3D-C4D	-5.07	1.32	1.44
37	Y	607	CHL	C3D-C4D	-5.07	1.32	1.44
37	G	605	CHL	O2D-CGD	5.06	1.45	1.33
37	y	607	CHL	C3D-C4D	-5.06	1.32	1.44
37	N	605	CHL	C3D-C4D	-5.06	1.32	1.44
37	s	606	CHL	O2D-CGD	5.06	1.45	1.33
37	G	608	CHL	C3D-C4D	-5.05	1.32	1.44
37	G	609	CHL	C3D-C4D	-5.04	1.32	1.44
37	S	601	CHL	C3D-C4D	-5.04	1.32	1.44
37	G	606	CHL	C3D-C4D	-5.04	1.32	1.44
37	N	601	CHL	C3D-C4D	-5.03	1.32	1.44
37	g	605	CHL	O2D-CGD	5.03	1.45	1.33
37	n	601	CHL	C3D-C4D	-5.02	1.32	1.44
37	g	609	CHL	C3D-C4D	-5.02	1.32	1.44
37	s	601	CHL	C3D-C4D	-5.01	1.32	1.44
37	g	606	CHL	C3D-C4D	-5.00	1.32	1.44
37	R	607	CHL	C3D-C4D	-5.00	1.32	1.44
37	r	607	CHL	C3D-C4D	-5.00	1.32	1.44
37	S	606	CHL	C3D-C4D	-5.00	1.32	1.44
37	s	606	CHL	C3D-C4D	-5.00	1.32	1.44
37	g	601	CHL	O2D-CGD	4.99	1.45	1.33
37	N	606	CHL	C3D-C4D	-4.99	1.32	1.44
37	G	608	CHL	O2D-CGD	4.98	1.45	1.33
37	g	608	CHL	O2D-CGD	4.98	1.45	1.33
37	G	607	CHL	O2D-CGD	4.97	1.45	1.33
37	g	607	CHL	O2D-CGD	4.97	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	r	607	CHL	O2D-CGD	4.96	1.45	1.33
37	S	607	CHL	CHC-C1C	4.96	1.47	1.35
37	n	606	CHL	C3D-C4D	-4.96	1.33	1.44
37	g	606	CHL	O2D-CGD	4.96	1.45	1.33
37	S	601	CHL	O2D-CGD	4.96	1.45	1.33
37	s	601	CHL	O2D-CGD	4.96	1.45	1.33
37	R	606	CHL	C3D-C4D	-4.95	1.33	1.44
37	G	606	CHL	O2D-CGD	4.95	1.45	1.33
37	n	605	CHL	O2D-CGD	4.95	1.45	1.33
37	R	608	CHL	O2D-CGD	4.94	1.45	1.33
37	G	606	CHL	CHC-C1C	4.94	1.47	1.35
37	g	606	CHL	CHC-C1C	4.94	1.47	1.35
37	Y	605	CHL	O2D-CGD	4.94	1.45	1.33
37	r	608	CHL	O2D-CGD	4.93	1.45	1.33
37	S	607	CHL	C3D-C4D	-4.93	1.33	1.44
37	R	607	CHL	O2D-CGD	4.93	1.45	1.33
37	s	607	CHL	CHC-C1C	4.93	1.47	1.35
37	G	605	CHL	CHC-C1C	4.92	1.47	1.35
37	G	609	CHL	O2D-CGD	4.92	1.45	1.33
37	g	609	CHL	O2D-CGD	4.92	1.45	1.33
37	y	601	CHL	O2D-CGD	4.92	1.45	1.33
37	G	601	CHL	O2D-CGD	4.92	1.45	1.33
37	s	607	CHL	C3D-C4D	-4.92	1.33	1.44
37	Y	601	CHL	O2D-CGD	4.91	1.45	1.33
37	S	608	CHL	C3D-C4D	-4.90	1.33	1.44
37	s	608	CHL	C3D-C4D	-4.90	1.33	1.44
37	r	606	CHL	C3D-C4D	-4.90	1.33	1.44
37	N	601	CHL	O2D-CGD	4.90	1.45	1.33
37	N	605	CHL	O2D-CGD	4.90	1.45	1.33
37	y	605	CHL	O2D-CGD	4.89	1.45	1.33
37	N	609	CHL	O2D-CGD	4.89	1.45	1.33
37	n	609	CHL	O2D-CGD	4.89	1.45	1.33
37	g	605	CHL	CHC-C1C	4.89	1.47	1.35
37	n	601	CHL	O2D-CGD	4.88	1.45	1.33
37	Y	606	CHL	O2D-CGD	4.86	1.45	1.33
37	y	606	CHL	O2D-CGD	4.86	1.45	1.33
37	y	605	CHL	C3D-C4D	-4.86	1.33	1.44
37	N	601	CHL	CHC-C1C	4.86	1.47	1.35
37	G	605	CHL	C3D-C4D	-4.85	1.33	1.44
37	G	607	CHL	C3D-C4D	-4.85	1.33	1.44
37	g	607	CHL	C3D-C4D	-4.85	1.33	1.44
37	Y	605	CHL	C3D-C4D	-4.85	1.33	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	n	601	CHL	CHC-C1C	4.85	1.47	1.35
37	s	606	CHL	CHC-C1C	4.85	1.47	1.35
37	N	607	CHL	O2D-CGD	4.84	1.45	1.33
37	n	607	CHL	O2D-CGD	4.84	1.45	1.33
37	y	606	CHL	CHC-C1C	4.83	1.47	1.35
37	s	607	CHL	C3B-C2B	4.83	1.47	1.40
37	g	605	CHL	C3D-C4D	-4.83	1.33	1.44
37	S	606	CHL	CHC-C1C	4.83	1.47	1.35
37	N	605	CHL	CHC-C1C	4.81	1.47	1.35
37	n	605	CHL	CHC-C1C	4.81	1.47	1.35
37	N	601	CHL	C3B-C2B	4.80	1.47	1.40
37	N	606	CHL	CHC-C1C	4.80	1.47	1.35
37	n	601	CHL	C3B-C2B	4.79	1.47	1.40
37	n	606	CHL	O2D-CGD	4.79	1.44	1.33
37	r	606	CHL	O2D-CGD	4.78	1.44	1.33
37	n	608	CHL	O2D-CGD	4.78	1.44	1.33
37	Y	606	CHL	CHC-C1C	4.78	1.47	1.35
37	y	609	CHL	O2D-CGD	4.78	1.44	1.33
37	n	606	CHL	CHC-C1C	4.77	1.47	1.35
37	R	606	CHL	O2D-CGD	4.77	1.44	1.33
37	S	607	CHL	C3B-C2B	4.77	1.47	1.40
37	N	608	CHL	O2D-CGD	4.77	1.44	1.33
37	y	607	CHL	O2D-CGD	4.76	1.44	1.33
37	Y	607	CHL	O2D-CGD	4.76	1.44	1.33
37	N	606	CHL	O2D-CGD	4.76	1.44	1.33
37	Y	609	CHL	O2D-CGD	4.76	1.44	1.33
37	R	606	CHL	CHC-C1C	4.76	1.47	1.35
37	g	609	CHL	C3B-C2B	4.74	1.46	1.40
37	r	606	CHL	CHC-C1C	4.74	1.47	1.35
37	G	608	CHL	CHC-C1C	4.73	1.47	1.35
37	g	608	CHL	CHC-C1C	4.73	1.47	1.35
37	r	607	CHL	CHC-C1C	4.71	1.47	1.35
37	R	607	CHL	CHC-C1C	4.71	1.47	1.35
37	Y	608	CHL	O2D-CGD	4.70	1.44	1.33
37	y	608	CHL	O2D-CGD	4.70	1.44	1.33
37	Y	609	CHL	CHC-C1C	4.69	1.47	1.35
37	s	601	CHL	CHC-C1C	4.67	1.46	1.35
37	S	601	CHL	CHC-C1C	4.67	1.46	1.35
37	y	609	CHL	CHC-C1C	4.67	1.46	1.35
37	S	608	CHL	C2C-C3C	4.67	1.46	1.36
37	G	609	CHL	CHC-C1C	4.66	1.46	1.35
37	G	609	CHL	C3B-C2B	4.66	1.46	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	s	608	CHL	C2C-C3C	4.66	1.46	1.36
37	R	608	CHL	CHC-C1C	4.65	1.46	1.35
37	r	608	CHL	CHC-C1C	4.65	1.46	1.35
37	g	601	CHL	CHC-C1C	4.63	1.46	1.35
37	g	609	CHL	CHC-C1C	4.63	1.46	1.35
37	G	605	CHL	C2C-C3C	4.63	1.46	1.36
37	g	605	CHL	C2C-C3C	4.63	1.46	1.36
37	N	607	CHL	CHC-C1C	4.62	1.46	1.35
37	n	608	CHL	CHC-C1C	4.61	1.46	1.35
37	G	601	CHL	CHC-C1C	4.60	1.46	1.35
37	S	607	CHL	CHD-C1D	4.60	1.47	1.38
37	G	605	CHL	C3B-C2B	4.60	1.46	1.40
37	g	605	CHL	C3B-C2B	4.60	1.46	1.40
37	N	601	CHL	C2C-C3C	4.60	1.46	1.36
37	n	601	CHL	C2C-C3C	4.60	1.46	1.36
37	N	608	CHL	CHC-C1C	4.58	1.46	1.35
37	s	606	CHL	CHD-C1D	4.58	1.47	1.38
37	n	607	CHL	CHC-C1C	4.58	1.46	1.35
37	N	609	CHL	CHC-C1C	4.57	1.46	1.35
37	n	609	CHL	CHC-C1C	4.57	1.46	1.35
37	s	607	CHL	CHD-C1D	4.56	1.47	1.38
37	y	601	CHL	CHC-C1C	4.54	1.46	1.35
37	S	606	CHL	CHD-C1D	4.54	1.47	1.38
37	r	608	CHL	C3B-C2B	4.54	1.46	1.40
37	Y	601	CHL	CHC-C1C	4.54	1.46	1.35
36	F	101	HEM	C3C-C2C	-4.53	1.34	1.40
36	f	101	HEM	C3C-C2C	-4.53	1.34	1.40
37	g	607	CHL	CHC-C1C	4.52	1.46	1.35
37	G	607	CHL	CHC-C1C	4.51	1.46	1.35
37	g	608	CHL	C3B-C2B	4.50	1.46	1.40
37	Y	608	CHL	CHC-C1C	4.50	1.46	1.35
37	y	608	CHL	CHC-C1C	4.50	1.46	1.35
37	Y	605	CHL	CHC-C1C	4.49	1.46	1.35
37	R	608	CHL	C3B-C2B	4.48	1.46	1.40
37	G	608	CHL	C3B-C2B	4.46	1.46	1.40
37	y	605	CHL	CHC-C1C	4.46	1.46	1.35
37	Y	606	CHL	O2A-CGA	4.44	1.46	1.33
37	y	606	CHL	O2A-CGA	4.44	1.46	1.33
37	R	608	CHL	C2C-C3C	4.42	1.46	1.36
37	s	606	CHL	O2A-CGA	4.41	1.46	1.33
37	Y	607	CHL	CHC-C1C	4.40	1.46	1.35
37	y	607	CHL	CHC-C1C	4.40	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	r	608	CHL	C2C-C3C	4.40	1.46	1.36
37	R	607	CHL	C3B-C2B	4.39	1.46	1.40
37	S	606	CHL	O2A-CGA	4.39	1.46	1.33
37	r	607	CHL	C3B-C2B	4.39	1.46	1.40
37	g	608	CHL	C2C-C3C	4.39	1.46	1.36
37	N	607	CHL	O2A-CGA	4.38	1.46	1.33
37	N	605	CHL	C2C-C3C	4.38	1.46	1.36
37	G	608	CHL	C2C-C3C	4.38	1.46	1.36
37	G	607	CHL	O2A-CGA	4.38	1.46	1.33
37	g	607	CHL	O2A-CGA	4.38	1.46	1.33
37	n	605	CHL	C2C-C3C	4.38	1.46	1.36
37	s	607	CHL	O2A-CGA	4.37	1.46	1.33
34	D	405	PL9	C6-C1	-4.36	1.40	1.48
37	g	605	CHL	CHD-C1D	4.36	1.46	1.38
37	S	608	CHL	O2A-CGA	4.36	1.46	1.33
37	r	607	CHL	O2A-CGA	4.36	1.46	1.33
37	G	609	CHL	O2A-CGA	4.35	1.46	1.33
37	y	607	CHL	O2A-CGA	4.35	1.46	1.33
37	n	607	CHL	O2A-CGA	4.35	1.46	1.33
37	S	608	CHL	CHD-C1D	4.35	1.46	1.38
37	N	609	CHL	O2A-CGA	4.35	1.46	1.33
37	n	609	CHL	O2A-CGA	4.35	1.46	1.33
37	g	609	CHL	O2A-CGA	4.34	1.46	1.33
34	d	405	PL9	C6-C1	-4.34	1.40	1.48
37	Y	607	CHL	O2A-CGA	4.34	1.46	1.33
37	n	606	CHL	O2A-CGA	4.34	1.46	1.33
37	s	607	CHL	C2C-C3C	4.34	1.46	1.36
37	S	607	CHL	O2A-CGA	4.33	1.46	1.33
37	G	605	CHL	CHD-C1D	4.33	1.46	1.38
37	g	609	CHL	C2C-C3C	4.33	1.46	1.36
37	G	608	CHL	CHD-C1D	4.33	1.46	1.38
37	R	607	CHL	O2A-CGA	4.33	1.46	1.33
37	s	608	CHL	CHD-C1D	4.33	1.46	1.38
37	s	608	CHL	O2A-CGA	4.32	1.46	1.33
37	N	606	CHL	O2A-CGA	4.32	1.46	1.33
37	G	609	CHL	C2C-C3C	4.31	1.46	1.36
37	n	601	CHL	O2A-CGA	4.31	1.45	1.33
37	Y	608	CHL	O2A-CGA	4.31	1.45	1.33
37	y	608	CHL	O2A-CGA	4.31	1.45	1.33
37	N	607	CHL	C3B-C2B	4.31	1.46	1.40
37	G	605	CHL	O2A-CGA	4.30	1.45	1.33
37	g	605	CHL	O2A-CGA	4.30	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	c	509	CLA	C4D-ND	-4.30	1.31	1.37
37	S	607	CHL	C2C-C3C	4.30	1.46	1.36
37	S	608	CHL	CHD-C4C	4.30	1.49	1.39
37	N	608	CHL	O2A-CGA	4.30	1.45	1.33
37	Y	605	CHL	O2A-CGA	4.30	1.45	1.33
37	s	608	CHL	CHD-C4C	4.30	1.49	1.39
37	N	601	CHL	O2A-CGA	4.30	1.45	1.33
37	s	601	CHL	C3B-C2B	4.29	1.46	1.40
37	S	601	CHL	O2A-CGA	4.28	1.45	1.33
37	n	608	CHL	O2A-CGA	4.28	1.45	1.33
37	S	606	CHL	C3B-C2B	4.28	1.46	1.40
37	s	606	CHL	C3B-C2B	4.28	1.46	1.40
37	n	607	CHL	C3B-C2B	4.28	1.46	1.40
37	s	601	CHL	O2A-CGA	4.28	1.45	1.33
37	G	606	CHL	O2A-CGA	4.27	1.45	1.33
37	g	606	CHL	O2A-CGA	4.27	1.45	1.33
37	y	605	CHL	O2A-CGA	4.27	1.45	1.33
37	N	608	CHL	C2C-C3C	4.27	1.45	1.36
37	G	601	CHL	O2A-CGA	4.27	1.45	1.33
37	G	606	CHL	C3B-C2B	4.27	1.46	1.40
37	G	609	CHL	CHD-C1D	4.26	1.46	1.38
37	g	609	CHL	CHD-C1D	4.26	1.46	1.38
37	G	607	CHL	C2C-C3C	4.26	1.45	1.36
37	g	607	CHL	C2C-C3C	4.26	1.45	1.36
37	g	608	CHL	O2A-CGA	4.26	1.45	1.33
37	Y	609	CHL	O2A-CGA	4.25	1.45	1.33
37	y	609	CHL	O2A-CGA	4.25	1.45	1.33
37	g	606	CHL	C3B-C2B	4.25	1.46	1.40
37	G	606	CHL	CHD-C1D	4.25	1.46	1.38
37	g	608	CHL	CHD-C1D	4.24	1.46	1.38
27	C	509	CLA	C4D-ND	-4.24	1.31	1.37
37	g	601	CHL	O2A-CGA	4.24	1.45	1.33
37	y	605	CHL	C2C-C3C	4.24	1.45	1.36
37	R	606	CHL	O2A-CGA	4.24	1.45	1.33
37	G	608	CHL	O2A-CGA	4.23	1.45	1.33
37	G	606	CHL	C2C-C3C	4.23	1.45	1.36
37	g	606	CHL	C2C-C3C	4.23	1.45	1.36
37	r	606	CHL	O2A-CGA	4.23	1.45	1.33
37	r	607	CHL	C2C-C3C	4.23	1.45	1.36
37	N	605	CHL	O2A-CGA	4.23	1.45	1.33
37	n	605	CHL	O2A-CGA	4.23	1.45	1.33
37	Y	601	CHL	O2A-CGA	4.23	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	y	601	CHL	O2A-CGA	4.23	1.45	1.33
37	R	607	CHL	C2C-C3C	4.23	1.45	1.36
37	y	601	CHL	C3B-C2B	4.22	1.46	1.40
37	Y	601	CHL	C3B-C2B	4.22	1.46	1.40
37	S	601	CHL	C3B-C2B	4.22	1.46	1.40
37	Y	605	CHL	C2C-C3C	4.22	1.45	1.36
37	g	606	CHL	CHD-C1D	4.22	1.46	1.38
37	g	607	CHL	C3B-C2B	4.22	1.46	1.40
37	n	605	CHL	C3B-C2B	4.21	1.46	1.40
37	S	606	CHL	C2C-C3C	4.21	1.45	1.36
37	s	606	CHL	C2C-C3C	4.21	1.45	1.36
37	n	605	CHL	CHD-C1D	4.20	1.46	1.38
37	G	607	CHL	C3B-C2B	4.19	1.46	1.40
37	n	608	CHL	C2C-C3C	4.19	1.45	1.36
37	N	605	CHL	CHD-C1D	4.19	1.46	1.38
37	N	606	CHL	C2C-C3C	4.19	1.45	1.36
37	n	606	CHL	C2C-C3C	4.19	1.45	1.36
37	N	601	CHL	CHD-C1D	4.17	1.46	1.38
37	n	601	CHL	CHD-C1D	4.17	1.46	1.38
37	G	601	CHL	C3B-C2B	4.16	1.46	1.40
37	N	609	CHL	C2C-C3C	4.15	1.45	1.36
37	n	609	CHL	C2C-C3C	4.15	1.45	1.36
37	N	608	CHL	C3B-C2B	4.15	1.46	1.40
37	y	609	CHL	C3B-C2B	4.15	1.46	1.40
37	Y	609	CHL	C3B-C2B	4.15	1.46	1.40
37	N	607	CHL	C2C-C3C	4.14	1.45	1.36
37	N	605	CHL	C3B-C2B	4.14	1.46	1.40
37	y	608	CHL	C3B-C2B	4.13	1.46	1.40
37	n	609	CHL	CHD-C1D	4.13	1.46	1.38
37	n	607	CHL	C2C-C3C	4.13	1.45	1.36
37	r	608	CHL	O2A-CGA	4.13	1.45	1.33
37	y	608	CHL	C2C-C3C	4.12	1.45	1.36
37	n	608	CHL	C3B-C2B	4.12	1.46	1.40
37	g	601	CHL	C3B-C2B	4.11	1.46	1.40
37	Y	608	CHL	C3B-C2B	4.11	1.46	1.40
37	N	609	CHL	CHD-C1D	4.11	1.46	1.38
37	Y	608	CHL	C2C-C3C	4.10	1.45	1.36
37	Y	605	CHL	C3B-C2B	4.10	1.46	1.40
37	y	605	CHL	C3B-C2B	4.10	1.46	1.40
37	R	608	CHL	O2A-CGA	4.09	1.45	1.33
37	N	606	CHL	C3B-C2B	4.09	1.46	1.40
37	n	606	CHL	C3B-C2B	4.09	1.46	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	s	607	CHL	CHD-C4C	4.08	1.48	1.39
27	A	405	CLA	C4D-ND	-4.07	1.32	1.37
27	a	405	CLA	C4D-ND	-4.07	1.32	1.37
37	G	605	CHL	CHD-C4C	4.07	1.48	1.39
37	n	609	CHL	C3B-C2B	4.07	1.46	1.40
37	R	607	CHL	CHD-C1D	4.07	1.46	1.38
37	r	607	CHL	CHD-C1D	4.07	1.46	1.38
37	g	601	CHL	C2C-C3C	4.06	1.45	1.36
37	Y	601	CHL	CHD-C1D	4.05	1.46	1.38
37	N	609	CHL	C3B-C2B	4.05	1.46	1.40
37	S	601	CHL	CHD-C1D	4.04	1.46	1.38
37	s	601	CHL	CHD-C1D	4.04	1.46	1.38
37	Y	606	CHL	C3B-C2B	4.04	1.46	1.40
37	G	601	CHL	C2C-C3C	4.04	1.45	1.36
37	g	605	CHL	CHD-C4C	4.04	1.48	1.39
37	S	601	CHL	C2C-C3C	4.04	1.45	1.36
37	S	607	CHL	CHD-C4C	4.04	1.48	1.39
37	Y	605	CHL	CHD-C1D	4.03	1.46	1.38
37	y	605	CHL	CHD-C1D	4.03	1.46	1.38
37	n	607	CHL	CHD-C1D	4.03	1.46	1.38
27	D	402	CLA	C4D-ND	-4.02	1.32	1.37
27	d	402	CLA	C4D-ND	-4.02	1.32	1.37
37	y	601	CHL	CHD-C1D	4.02	1.46	1.38
37	R	606	CHL	C2C-C3C	4.02	1.45	1.36
37	r	606	CHL	C2C-C3C	4.02	1.45	1.36
37	s	601	CHL	C2C-C3C	4.01	1.45	1.36
37	Y	607	CHL	C3B-C2B	4.00	1.45	1.40
37	y	607	CHL	C3B-C2B	4.00	1.45	1.40
40	Y	1623	NEX	C7-C8	-4.00	1.25	1.32
27	b	613	CLA	C4D-ND	-4.00	1.32	1.37
37	y	606	CHL	C3B-C2B	4.00	1.45	1.40
37	S	606	CHL	CHD-C4C	3.99	1.48	1.39
27	C	513	CLA	C4D-ND	-3.98	1.32	1.37
27	C	506	CLA	C4D-ND	-3.98	1.32	1.37
37	s	606	CHL	CHD-C4C	3.97	1.48	1.39
37	n	605	CHL	CHD-C4C	3.97	1.48	1.39
27	B	613	CLA	C4D-ND	-3.97	1.32	1.37
37	N	605	CHL	CHD-C4C	3.97	1.48	1.39
37	Y	608	CHL	CHD-C1D	3.97	1.46	1.38
37	y	608	CHL	CHD-C1D	3.97	1.46	1.38
37	Y	601	CHL	C2C-C3C	3.97	1.45	1.36
37	y	601	CHL	C2C-C3C	3.97	1.45	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	Y	607	CHL	CHD-C1D	3.97	1.46	1.38
37	y	607	CHL	CHD-C1D	3.97	1.46	1.38
27	C	511	CLA	C4D-ND	-3.96	1.32	1.37
37	Y	609	CHL	C2C-C3C	3.96	1.45	1.36
27	b	603	CLA	C4D-ND	-3.96	1.32	1.37
27	B	603	CLA	C4D-ND	-3.96	1.32	1.37
37	G	601	CHL	CHD-C1D	3.96	1.46	1.38
37	G	607	CHL	CHD-C1D	3.96	1.46	1.38
37	g	607	CHL	CHD-C1D	3.96	1.46	1.38
37	Y	609	CHL	CHD-C1D	3.96	1.46	1.38
37	N	607	CHL	CHD-C1D	3.95	1.46	1.38
37	R	606	CHL	CHD-C1D	3.94	1.46	1.38
37	g	601	CHL	CHD-C1D	3.94	1.46	1.38
37	y	609	CHL	CHD-C1D	3.94	1.46	1.38
27	c	506	CLA	C4D-ND	-3.94	1.32	1.37
37	y	607	CHL	C2C-C3C	3.93	1.45	1.36
37	g	608	CHL	CHD-C4C	3.93	1.48	1.39
37	Y	607	CHL	C2C-C3C	3.93	1.45	1.36
40	y	1623	NEX	C7-C8	-3.93	1.25	1.32
27	b	610	CLA	C4D-ND	-3.92	1.32	1.37
27	c	511	CLA	C4D-ND	-3.92	1.32	1.37
27	c	513	CLA	C4D-ND	-3.92	1.32	1.37
37	G	608	CHL	CHD-C4C	3.90	1.48	1.39
37	y	609	CHL	C2C-C3C	3.90	1.45	1.36
27	B	612	CLA	C4D-ND	-3.90	1.32	1.37
37	r	606	CHL	C3B-C2B	3.89	1.45	1.40
27	B	611	CLA	C4D-ND	-3.89	1.32	1.37
27	b	611	CLA	C4D-ND	-3.89	1.32	1.37
37	Y	606	CHL	C2C-C3C	3.88	1.45	1.36
37	y	606	CHL	C2C-C3C	3.88	1.45	1.36
37	r	606	CHL	CHD-C1D	3.88	1.45	1.38
27	B	610	CLA	C4D-ND	-3.87	1.32	1.37
37	N	601	CHL	CHD-C4C	3.85	1.48	1.39
27	D	403	CLA	C4D-ND	-3.85	1.32	1.37
27	d	403	CLA	C4D-ND	-3.85	1.32	1.37
37	n	601	CHL	CHD-C4C	3.85	1.48	1.39
37	r	608	CHL	CHD-C1D	3.84	1.45	1.38
27	Y	612	CLA	C4D-ND	-3.84	1.32	1.37
37	R	606	CHL	C3B-C2B	3.84	1.45	1.40
37	N	608	CHL	CHD-C1D	3.83	1.45	1.38
37	n	608	CHL	CHD-C1D	3.83	1.45	1.38
27	C	505	CLA	C4D-ND	-3.83	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	612	CLA	C4D-ND	-3.83	1.32	1.37
27	N	603	CLA	C4D-ND	-3.83	1.32	1.37
27	C	507	CLA	C4D-ND	-3.83	1.32	1.37
27	c	505	CLA	C4D-ND	-3.83	1.32	1.37
27	c	507	CLA	C4D-ND	-3.83	1.32	1.37
27	A	407	CLA	C4D-ND	-3.82	1.32	1.37
27	a	407	CLA	C4D-ND	-3.82	1.32	1.37
37	Y	606	CHL	CHD-C1D	3.81	1.45	1.38
27	y	612	CLA	C4D-ND	-3.81	1.32	1.37
27	C	502	CLA	C4D-ND	-3.79	1.32	1.37
27	Y	613	CLA	C4D-ND	-3.79	1.32	1.37
27	y	613	CLA	C4D-ND	-3.79	1.32	1.37
37	G	606	CHL	CHD-C4C	3.79	1.47	1.39
37	g	606	CHL	CHD-C4C	3.79	1.47	1.39
27	a	410	CLA	C4D-ND	-3.79	1.32	1.37
37	N	606	CHL	CHD-C1D	3.79	1.45	1.38
37	n	606	CHL	CHD-C1D	3.79	1.45	1.38
27	c	508	CLA	C4D-ND	-3.79	1.32	1.37
37	R	608	CHL	CHD-C1D	3.79	1.45	1.38
37	y	606	CHL	CHD-C1D	3.79	1.45	1.38
27	a	406	CLA	C4D-ND	-3.77	1.32	1.37
37	G	609	CHL	CHD-C4C	3.77	1.47	1.39
37	g	609	CHL	CHD-C4C	3.77	1.47	1.39
27	n	603	CLA	C4D-ND	-3.77	1.32	1.37
37	Y	601	CHL	CHD-C4C	3.76	1.47	1.39
40	R	623	NEX	C7-C8	-3.76	1.25	1.32
27	c	503	CLA	C4D-ND	-3.74	1.32	1.37
27	c	502	CLA	C4D-ND	-3.73	1.32	1.37
27	Y	614	CLA	C4D-ND	-3.73	1.32	1.37
27	A	406	CLA	C4D-ND	-3.73	1.32	1.37
40	r	623	NEX	C7-C8	-3.73	1.25	1.32
27	A	410	CLA	C4D-ND	-3.73	1.32	1.37
27	C	512	CLA	C4D-ND	-3.73	1.32	1.37
27	c	512	CLA	C4D-ND	-3.73	1.32	1.37
27	C	508	CLA	C4D-ND	-3.72	1.32	1.37
27	R	611	CLA	C1D-ND	3.72	1.42	1.37
37	y	601	CHL	CHD-C4C	3.71	1.47	1.39
27	C	510	CLA	C4D-ND	-3.71	1.32	1.37
27	S	613	CLA	C4D-ND	-3.71	1.32	1.37
27	G	602	CLA	C4D-ND	-3.71	1.32	1.37
37	r	607	CHL	CHD-C4C	3.70	1.47	1.39
37	R	607	CHL	CHD-C4C	3.70	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	R	603	CLA	C4D-ND	-3.69	1.32	1.37
27	r	603	CLA	C4D-ND	-3.69	1.32	1.37
27	S	603	CLA	C1D-ND	3.69	1.42	1.37
27	b	604	CLA	C4D-ND	-3.69	1.32	1.37
27	r	611	CLA	C1D-ND	3.68	1.42	1.37
27	s	603	CLA	C1D-ND	3.68	1.42	1.37
37	n	608	CHL	CHD-C4C	3.68	1.47	1.39
27	B	605	CLA	C4D-ND	-3.67	1.32	1.37
27	b	605	CLA	C4D-ND	-3.67	1.32	1.37
27	C	503	CLA	C4D-ND	-3.67	1.32	1.37
37	N	609	CHL	CHD-C4C	3.67	1.47	1.39
37	S	601	CHL	CHD-C4C	3.67	1.47	1.39
37	n	609	CHL	CHD-C4C	3.66	1.47	1.39
27	B	614	CLA	C4D-ND	-3.66	1.32	1.37
27	S	609	CLA	C1D-ND	3.65	1.42	1.37
27	B	604	CLA	C4D-ND	-3.65	1.32	1.37
27	b	614	CLA	C4D-ND	-3.65	1.32	1.37
37	N	608	CHL	CHD-C4C	3.65	1.47	1.39
27	S	614	CLA	C4D-ND	-3.65	1.32	1.37
27	c	510	CLA	C4D-ND	-3.65	1.32	1.37
27	s	614	CLA	C4D-ND	-3.65	1.32	1.37
37	R	607	CHL	OBD-CAD	3.65	1.28	1.22
37	Y	608	CHL	CHD-C4C	3.64	1.47	1.39
37	y	608	CHL	CHD-C4C	3.64	1.47	1.39
27	s	613	CLA	C4D-ND	-3.64	1.32	1.37
27	G	613	CLA	C4D-ND	-3.64	1.32	1.37
27	g	613	CLA	C4D-ND	-3.64	1.32	1.37
37	s	601	CHL	CHD-C4C	3.64	1.47	1.39
37	g	601	CHL	CHD-C4C	3.64	1.47	1.39
27	Y	602	CLA	C4D-ND	-3.64	1.32	1.37
27	y	602	CLA	C4D-ND	-3.64	1.32	1.37
27	g	602	CLA	C4D-ND	-3.64	1.32	1.37
27	B	607	CLA	C4D-ND	-3.63	1.32	1.37
37	r	607	CHL	OBD-CAD	3.63	1.28	1.22
37	s	606	CHL	OBD-CAD	3.63	1.28	1.22
27	y	614	CLA	C4D-ND	-3.62	1.32	1.37
37	Y	609	CHL	CHD-C4C	3.62	1.47	1.39
37	y	609	CHL	CHD-C4C	3.62	1.47	1.39
27	b	606	CLA	C4D-ND	-3.61	1.32	1.37
37	S	606	CHL	OBD-CAD	3.61	1.28	1.22
27	b	607	CLA	C4D-ND	-3.61	1.32	1.37
37	G	601	CHL	CHD-C4C	3.60	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	s	609	CLA	C1D-ND	3.60	1.42	1.37
27	R	601	CLA	C1D-ND	3.60	1.42	1.37
27	r	601	CLA	C1D-ND	3.60	1.42	1.37
27	N	611	CLA	C1D-ND	3.60	1.42	1.37
27	B	608	CLA	C4D-ND	-3.59	1.32	1.37
27	b	608	CLA	C4D-ND	-3.59	1.32	1.37
27	Y	611	CLA	C4D-ND	-3.59	1.32	1.37
27	Y	603	CLA	C4D-ND	-3.59	1.32	1.37
27	y	603	CLA	C4D-ND	-3.59	1.32	1.37
37	N	606	CHL	CHD-C4C	3.58	1.47	1.39
37	n	606	CHL	CHD-C4C	3.58	1.47	1.39
37	G	607	CHL	CHD-C4C	3.57	1.47	1.39
27	y	611	CLA	C4D-ND	-3.57	1.32	1.37
37	g	607	CHL	CHD-C4C	3.56	1.47	1.39
27	B	617	CLA	C4D-ND	-3.56	1.32	1.37
27	b	617	CLA	C4D-ND	-3.56	1.32	1.37
36	F	101	HEM	C3C-CAC	3.56	1.55	1.47
27	B	616	CLA	C4D-ND	-3.56	1.32	1.37
27	b	616	CLA	C4D-ND	-3.56	1.32	1.37
37	s	607	CHL	OBD-CAD	3.55	1.28	1.22
37	G	607	CHL	OBD-CAD	3.55	1.28	1.22
27	B	615	CLA	C4D-ND	-3.55	1.32	1.37
27	b	615	CLA	C4D-ND	-3.55	1.32	1.37
36	f	101	HEM	C3C-CAC	3.55	1.55	1.47
37	g	607	CHL	OBD-CAD	3.55	1.28	1.22
37	G	605	CHL	OBD-CAD	3.55	1.28	1.22
37	g	605	CHL	OBD-CAD	3.55	1.28	1.22
27	N	613	CLA	C4D-ND	-3.55	1.32	1.37
27	B	606	CLA	C4D-ND	-3.54	1.32	1.37
27	b	609	CLA	C4D-ND	-3.54	1.32	1.37
27	y	610	CLA	C4D-ND	-3.54	1.32	1.37
37	y	605	CHL	CHD-C4C	3.54	1.47	1.39
27	C	501	CLA	C4D-ND	-3.54	1.32	1.37
37	S	607	CHL	OBD-CAD	3.53	1.28	1.22
27	B	609	CLA	C4D-ND	-3.53	1.32	1.37
37	N	607	CHL	CHD-C4C	3.52	1.47	1.39
37	r	606	CHL	CHD-C4C	3.52	1.47	1.39
35	D	409	LHG	O7-C5	-3.52	1.37	1.46
35	d	409	LHG	O7-C5	-3.52	1.37	1.46
27	G	611	CLA	C4D-ND	-3.52	1.32	1.37
27	g	611	CLA	C4D-ND	-3.52	1.32	1.37
27	r	610	CLA	C4D-ND	-3.52	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	r	608	CHL	CHD-C4C	3.52	1.47	1.39
27	c	501	CLA	C4D-ND	-3.52	1.32	1.37
37	R	606	CHL	CHD-C4C	3.51	1.47	1.39
37	Y	605	CHL	CHD-C4C	3.51	1.47	1.39
27	r	612	CLA	C4D-ND	-3.51	1.32	1.37
27	G	610	CLA	C1D-ND	3.51	1.42	1.37
27	g	610	CLA	C1D-ND	3.51	1.42	1.37
27	n	612	CLA	C1D-ND	3.51	1.42	1.37
37	R	608	CHL	CHD-C4C	3.50	1.47	1.39
37	G	606	CHL	OBD-CAD	3.50	1.28	1.22
37	n	607	CHL	CHD-C4C	3.50	1.47	1.39
27	B	602	CLA	C4D-ND	-3.50	1.32	1.37
27	S	612	CLA	C4D-ND	-3.50	1.32	1.37
27	b	602	CLA	C4D-ND	-3.50	1.32	1.37
37	N	609	CHL	OBD-CAD	3.49	1.28	1.22
37	n	609	CHL	OBD-CAD	3.49	1.28	1.22
27	r	609	CLA	C4D-ND	-3.49	1.32	1.37
27	n	611	CLA	C1D-ND	3.49	1.42	1.37
27	R	602	CLA	C4D-ND	-3.48	1.32	1.37
27	G	612	CLA	C4D-ND	-3.48	1.32	1.37
27	R	616	CLA	C1D-ND	3.48	1.42	1.37
27	r	616	CLA	C1D-ND	3.48	1.42	1.37
27	Y	610	CLA	C4D-ND	-3.48	1.32	1.37
40	g	1623	NEX	C7-C8	-3.48	1.26	1.32
27	n	613	CLA	C4D-ND	-3.48	1.32	1.37
27	R	609	CLA	C4D-ND	-3.47	1.32	1.37
27	S	602	CLA	C4D-ND	-3.47	1.32	1.37
40	N	1623	NEX	C7-C8	-3.47	1.26	1.32
40	G	1623	NEX	C7-C8	-3.47	1.26	1.32
37	Y	609	CHL	OBD-CAD	3.46	1.28	1.22
37	y	609	CHL	OBD-CAD	3.46	1.28	1.22
27	s	612	CLA	C4D-ND	-3.46	1.32	1.37
27	G	610	CLA	C4D-ND	-3.46	1.32	1.37
27	Y	604	CLA	C4D-ND	-3.46	1.32	1.37
27	R	610	CLA	C4D-ND	-3.46	1.32	1.37
27	N	614	CLA	C1D-ND	3.46	1.42	1.37
27	g	610	CLA	C4D-ND	-3.45	1.32	1.37
37	g	606	CHL	OBD-CAD	3.45	1.28	1.22
27	r	602	CLA	C4D-ND	-3.45	1.33	1.37
27	R	612	CLA	C4D-ND	-3.45	1.33	1.37
37	y	607	CHL	CHD-C4C	3.44	1.47	1.39
27	n	610	CLA	C1D-ND	3.44	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	N	606	CHL	OBD-CAD	3.44	1.28	1.22
27	s	604	CLA	C1D-ND	3.44	1.42	1.37
37	Y	606	CHL	CHD-C4C	3.44	1.47	1.39
27	N	612	CLA	C1D-ND	3.44	1.42	1.37
27	S	604	CLA	C1D-ND	3.44	1.42	1.37
37	G	609	CHL	OBD-CAD	3.44	1.28	1.22
37	g	609	CHL	OBD-CAD	3.44	1.28	1.22
37	n	607	CHL	OBD-CAD	3.44	1.28	1.22
27	g	612	CLA	C4D-ND	-3.43	1.33	1.37
27	n	602	CLA	C4D-ND	-3.43	1.33	1.37
40	n	1623	NEX	C7-C8	-3.43	1.26	1.32
27	C	508	CLA	CMB-C2B	-3.43	1.44	1.51
37	Y	607	CHL	CHD-C4C	3.43	1.47	1.39
37	N	605	CHL	OBD-CAD	3.43	1.28	1.22
37	s	601	CHL	OBD-CAD	3.43	1.28	1.22
27	s	602	CLA	C4D-ND	-3.42	1.33	1.37
27	N	612	CLA	C4D-ND	-3.42	1.33	1.37
37	y	606	CHL	CHD-C4C	3.42	1.47	1.39
27	n	610	CLA	C4D-ND	-3.42	1.33	1.37
27	n	614	CLA	C1D-ND	3.42	1.42	1.37
27	N	604	CLA	C4D-ND	-3.42	1.33	1.37
27	R	613	CLA	C1D-ND	3.41	1.42	1.37
27	s	611	CLA	C4D-ND	-3.41	1.33	1.37
37	N	607	CHL	OBD-CAD	3.41	1.28	1.22
27	R	604	CLA	C1D-ND	3.41	1.42	1.37
27	r	613	CLA	C1D-ND	3.41	1.42	1.37
27	c	508	CLA	CMB-C2B	-3.41	1.44	1.51
27	n	612	CLA	C4D-ND	-3.41	1.33	1.37
37	G	601	CHL	OBD-CAD	3.41	1.28	1.22
27	r	609	CLA	C1D-ND	3.41	1.42	1.37
27	G	611	CLA	C1D-ND	3.40	1.42	1.37
37	S	601	CHL	OBD-CAD	3.40	1.28	1.22
37	Y	607	CHL	OBD-CAD	3.40	1.28	1.22
27	R	610	CLA	C1D-ND	3.40	1.42	1.37
27	r	610	CLA	C1D-ND	3.40	1.42	1.37
37	n	605	CHL	OBD-CAD	3.40	1.28	1.22
27	G	614	CLA	C1D-ND	3.40	1.42	1.37
27	g	614	CLA	C1D-ND	3.40	1.42	1.37
37	N	601	CHL	OBD-CAD	3.40	1.28	1.22
27	y	604	CLA	C4D-ND	-3.39	1.33	1.37
27	s	604	CLA	C4D-ND	-3.39	1.33	1.37
37	n	601	CHL	OBD-CAD	3.39	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	C	504	CLA	C4D-ND	-3.39	1.33	1.37
27	S	610	CLA	C1D-ND	3.38	1.41	1.37
37	n	606	CHL	OBD-CAD	3.38	1.28	1.22
27	g	603	CLA	C1D-ND	3.38	1.41	1.37
27	N	602	CLA	C4D-ND	-3.38	1.33	1.37
37	y	608	CHL	OBD-CAD	3.37	1.28	1.22
37	y	607	CHL	OBD-CAD	3.37	1.28	1.22
27	G	603	CLA	C4D-ND	-3.37	1.33	1.37
37	g	601	CHL	OBD-CAD	3.37	1.28	1.22
27	R	602	CLA	C1D-ND	3.37	1.41	1.37
27	R	609	CLA	C1D-ND	3.37	1.41	1.37
37	y	606	CHL	OBD-CAD	3.36	1.28	1.22
37	r	606	CHL	OBD-CAD	3.36	1.28	1.22
27	G	603	CLA	C1D-ND	3.36	1.41	1.37
27	S	611	CLA	C4D-ND	-3.36	1.33	1.37
27	R	604	CLA	C4D-ND	-3.36	1.33	1.37
27	r	612	CLA	C1D-ND	3.36	1.41	1.37
37	R	606	CHL	OBD-CAD	3.35	1.28	1.22
27	N	610	CLA	C4D-ND	-3.35	1.33	1.37
27	S	604	CLA	C4D-ND	-3.35	1.33	1.37
27	g	611	CLA	C1D-ND	3.35	1.41	1.37
27	n	604	CLA	C4D-ND	-3.35	1.33	1.37
27	g	603	CLA	C4D-ND	-3.35	1.33	1.37
27	R	612	CLA	C1D-ND	3.35	1.41	1.37
27	S	611	CLA	C1D-ND	3.34	1.41	1.37
27	s	610	CLA	C1D-ND	3.34	1.41	1.37
27	N	610	CLA	C1D-ND	3.33	1.41	1.37
37	Y	606	CHL	OBD-CAD	3.33	1.28	1.22
27	r	604	CLA	C1D-ND	3.33	1.41	1.37
27	Y	602	CLA	C1D-ND	3.32	1.41	1.37
27	c	504	CLA	C4D-ND	-3.32	1.33	1.37
27	s	611	CLA	C1D-ND	3.32	1.41	1.37
37	Y	608	CHL	OBD-CAD	3.32	1.28	1.22
27	r	602	CLA	C1D-ND	3.31	1.41	1.37
27	G	604	CLA	C4D-ND	-3.31	1.33	1.37
27	g	604	CLA	C4D-ND	-3.31	1.33	1.37
27	G	614	CLA	C4D-ND	-3.31	1.33	1.37
27	s	602	CLA	C1D-ND	3.30	1.41	1.37
37	s	608	CHL	OBD-CAD	3.29	1.28	1.22
27	r	604	CLA	C4D-ND	-3.29	1.33	1.37
37	y	601	CHL	OBD-CAD	3.29	1.28	1.22
27	g	612	CLA	C1D-ND	3.29	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	n	613	CLA	C1D-ND	3.29	1.41	1.37
27	R	603	CLA	C1D-ND	3.28	1.41	1.37
27	r	603	CLA	C1D-ND	3.28	1.41	1.37
27	r	613	CLA	C4D-ND	-3.28	1.33	1.37
27	S	602	CLA	C1D-ND	3.28	1.41	1.37
27	G	613	CLA	C1D-ND	3.27	1.41	1.37
27	N	613	CLA	C1D-ND	3.26	1.41	1.37
27	b	612	CLA	CMC-C2C	-3.26	1.43	1.50
37	g	608	CHL	OBD-CAD	3.25	1.28	1.22
27	g	614	CLA	C4D-ND	-3.24	1.33	1.37
27	y	602	CLA	C1D-ND	3.24	1.41	1.37
37	S	608	CHL	OBD-CAD	3.24	1.28	1.22
37	Y	605	CHL	OBD-CAD	3.24	1.28	1.22
37	y	605	CHL	OBD-CAD	3.24	1.28	1.22
27	S	603	CLA	C4D-ND	-3.24	1.33	1.37
27	n	614	CLA	C4D-ND	-3.24	1.33	1.37
27	s	603	CLA	C4D-ND	-3.24	1.33	1.37
27	R	613	CLA	C4D-ND	-3.24	1.33	1.37
27	B	612	CLA	CMC-C2C	-3.24	1.43	1.50
27	N	611	CLA	C4D-ND	-3.24	1.33	1.37
27	n	611	CLA	C4D-ND	-3.24	1.33	1.37
27	s	610	CLA	C4D-ND	-3.23	1.33	1.37
30	a	412	SQD	O48-C23	3.23	1.42	1.33
27	S	610	CLA	C4D-ND	-3.23	1.33	1.37
27	g	613	CLA	C1D-ND	3.22	1.41	1.37
30	a	418	SQD	O48-C23	3.22	1.42	1.33
27	C	501	CLA	C1D-ND	3.22	1.41	1.37
27	c	501	CLA	C1D-ND	3.22	1.41	1.37
37	Y	601	CHL	OBD-CAD	3.22	1.28	1.22
27	s	612	CLA	C1D-ND	3.22	1.41	1.37
27	N	614	CLA	C4D-ND	-3.22	1.33	1.37
27	b	604	CLA	CMB-C2B	-3.22	1.44	1.51
27	Y	610	CLA	C1D-ND	3.22	1.41	1.37
37	G	608	CHL	OBD-CAD	3.22	1.28	1.22
27	G	612	CLA	C1D-ND	3.22	1.41	1.37
27	C	504	CLA	C1D-ND	3.22	1.41	1.37
37	n	608	CHL	OBD-CAD	3.21	1.28	1.22
28	A	409	PHO	CAC-C3C	-3.21	1.46	1.52
27	C	507	CLA	C3B-C2B	-3.21	1.35	1.40
30	A	412	SQD	O48-C23	3.21	1.42	1.33
30	A	418	SQD	O48-C23	3.21	1.42	1.33
27	r	601	CLA	C4D-ND	-3.20	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	N	608	CHL	OBD-CAD	3.20	1.28	1.22
27	B	602	CLA	C1D-ND	3.19	1.41	1.37
27	b	602	CLA	C1D-ND	3.19	1.41	1.37
27	b	608	CLA	C1D-ND	3.19	1.41	1.37
27	S	612	CLA	C1D-ND	3.19	1.41	1.37
27	R	601	CLA	C4D-ND	-3.18	1.33	1.37
27	R	616	CLA	C4D-ND	-3.18	1.33	1.37
27	r	616	CLA	C4D-ND	-3.18	1.33	1.37
27	s	613	CLA	C1D-ND	3.17	1.41	1.37
27	y	610	CLA	C1D-ND	3.17	1.41	1.37
27	c	504	CLA	C1D-ND	3.16	1.41	1.37
27	S	609	CLA	C4D-ND	-3.16	1.33	1.37
27	s	609	CLA	C4D-ND	-3.16	1.33	1.37
27	B	604	CLA	CMB-C2B	-3.16	1.45	1.51
28	a	409	PHO	CAC-C3C	-3.16	1.46	1.52
40	s	1623	NEX	C7-C8	-3.15	1.26	1.32
32	C	519	DGD	O2G-C2G	-3.15	1.38	1.46
27	c	507	CLA	C3B-C2B	-3.14	1.36	1.40
37	s	608	CHL	MG-NA	-3.14	1.98	2.06
40	S	1623	NEX	C7-C8	-3.14	1.26	1.32
27	Y	611	CLA	C1D-ND	3.14	1.41	1.37
27	G	614	CLA	CHC-C1C	3.13	1.43	1.35
27	c	506	CLA	CMB-C2B	-3.13	1.45	1.51
27	G	604	CLA	C1D-ND	3.13	1.41	1.37
27	B	612	CLA	CMB-C2B	-3.12	1.45	1.51
27	B	608	CLA	C1D-ND	3.12	1.41	1.37
32	c	519	DGD	O2G-C2G	-3.12	1.38	1.46
35	d	408	LHG	O7-C5	-3.11	1.38	1.46
27	Y	604	CLA	C1D-ND	3.11	1.41	1.37
27	B	609	CLA	C1D-ND	3.10	1.41	1.37
27	b	609	CLA	C1D-ND	3.10	1.41	1.37
27	g	614	CLA	CHC-C1C	3.10	1.42	1.35
27	g	604	CLA	C1D-ND	3.10	1.41	1.37
37	S	608	CHL	MG-NA	-3.10	1.98	2.06
27	b	612	CLA	CMB-C2B	-3.09	1.45	1.51
28	A	408	PHO	CAC-C3C	-3.09	1.46	1.52
28	a	408	PHO	CAC-C3C	-3.09	1.46	1.52
35	D	408	LHG	O7-C5	-3.09	1.38	1.46
27	S	602	CLA	CHC-C1C	3.09	1.42	1.35
27	N	602	CLA	C1D-ND	3.08	1.41	1.37
27	b	617	CLA	C1D-ND	3.08	1.41	1.37
27	y	611	CLA	C1D-ND	3.08	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	C	506	CLA	CMB-C2B	-3.08	1.45	1.51
27	c	508	CLA	C1D-ND	3.08	1.41	1.37
32	c	518	DGD	O1G-C1G	-3.08	1.38	1.45
27	C	511	CLA	C1D-ND	3.08	1.41	1.37
37	s	607	CHL	MG-NA	-3.07	1.99	2.06
32	C	518	DGD	O1G-C1G	-3.07	1.38	1.45
27	S	613	CLA	C1D-ND	3.07	1.41	1.37
27	n	602	CLA	C1D-ND	3.06	1.41	1.37
27	c	511	CLA	C1D-ND	3.06	1.41	1.37
27	b	615	CLA	C1D-ND	3.05	1.41	1.37
32	H	102	DGD	O1G-C1G	-3.05	1.38	1.45
32	h	102	DGD	O1G-C1G	-3.05	1.38	1.45
27	R	601	CLA	CHC-C1C	3.05	1.42	1.35
27	r	601	CLA	CHC-C1C	3.05	1.42	1.35
27	R	611	CLA	C4D-ND	-3.05	1.33	1.37
37	S	607	CHL	C3D-C2D	3.05	1.47	1.39
34	d	405	PL9	C52-C5	-3.04	1.44	1.50
27	Y	603	CLA	C1D-ND	3.04	1.41	1.37
27	y	603	CLA	C1D-ND	3.04	1.41	1.37
37	S	607	CHL	MG-NA	-3.04	1.99	2.06
34	D	405	PL9	C52-C5	-3.04	1.44	1.50
27	S	614	CLA	C1D-ND	3.04	1.41	1.37
27	s	614	CLA	C1D-ND	3.04	1.41	1.37
27	C	513	CLA	C1D-ND	3.04	1.41	1.37
27	c	513	CLA	C1D-ND	3.04	1.41	1.37
27	B	617	CLA	C1D-ND	3.03	1.41	1.37
37	s	607	CHL	C3D-C2D	3.03	1.47	1.39
27	s	602	CLA	CHC-C1C	3.03	1.42	1.35
27	C	508	CLA	C1D-ND	3.03	1.41	1.37
27	y	604	CLA	C1D-ND	3.03	1.41	1.37
27	r	611	CLA	C4D-ND	-3.03	1.33	1.37
27	G	612	CLA	CHC-C1C	3.02	1.42	1.35
27	a	406	CLA	C1D-ND	3.02	1.41	1.37
37	S	608	CHL	C3D-C2D	3.02	1.47	1.39
37	R	608	CHL	OBD-CAD	3.02	1.27	1.22
27	Y	613	CLA	C1D-ND	3.01	1.41	1.37
27	y	613	CLA	C1D-ND	3.01	1.41	1.37
27	C	502	CLA	C1D-ND	3.01	1.41	1.37
37	r	608	CHL	OBD-CAD	3.01	1.27	1.22
37	s	608	CHL	C3D-C2D	3.00	1.47	1.39
27	B	617	CLA	CHC-C1C	3.00	1.42	1.35
27	b	606	CLA	C1D-ND	3.00	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	g	612	CLA	CHC-C1C	3.00	1.42	1.35
27	Y	610	CLA	CMB-C2B	-2.99	1.45	1.51
27	n	610	CLA	CHC-C1C	2.99	1.42	1.35
30	B	621	SQD	O48-C23	2.99	1.42	1.33
34	d	405	PL9	C53-C6	-2.99	1.44	1.50
27	b	614	CLA	C1D-ND	2.99	1.41	1.37
27	Y	612	CLA	C1D-ND	2.98	1.41	1.37
27	N	610	CLA	CHC-C1C	2.98	1.42	1.35
27	S	609	CLA	CHC-C1C	2.98	1.42	1.35
27	s	609	CLA	CHC-C1C	2.98	1.42	1.35
27	b	617	CLA	CHC-C1C	2.98	1.42	1.35
27	N	614	CLA	CHC-C1C	2.98	1.42	1.35
27	n	614	CLA	CHC-C1C	2.98	1.42	1.35
27	y	610	CLA	CMB-C2B	-2.98	1.45	1.51
27	B	615	CLA	C1D-ND	2.98	1.41	1.37
35	l	101	LHG	O7-C5	-2.97	1.39	1.46
27	S	611	CLA	CHC-C1C	2.97	1.42	1.35
27	g	602	CLA	C1D-ND	2.97	1.41	1.37
27	Y	604	CLA	CMB-C2B	-2.97	1.45	1.51
27	B	614	CLA	C1D-ND	2.97	1.41	1.37
27	G	611	CLA	CHC-C1C	2.97	1.42	1.35
35	L	101	LHG	O7-C5	-2.97	1.39	1.46
30	b	621	SQD	O48-C23	2.97	1.42	1.33
27	R	612	CLA	CHC-C1C	2.97	1.42	1.35
27	r	612	CLA	CHC-C1C	2.97	1.42	1.35
29	B	620	BCR	C1-C6	-2.96	1.49	1.53
27	n	603	CLA	C1D-ND	2.96	1.41	1.37
27	y	612	CLA	C1D-ND	2.96	1.41	1.37
27	y	604	CLA	CMB-C2B	-2.96	1.45	1.51
27	c	509	CLA	CHC-C1C	2.95	1.42	1.35
27	c	503	CLA	C1D-ND	2.95	1.41	1.37
27	b	610	CLA	C1D-ND	2.95	1.41	1.37
27	c	502	CLA	C1D-ND	2.95	1.41	1.37
27	B	606	CLA	C1D-ND	2.95	1.41	1.37
27	a	405	CLA	C1D-ND	2.95	1.41	1.37
34	D	405	PL9	C53-C6	-2.95	1.44	1.50
29	b	620	BCR	C1-C6	-2.94	1.49	1.53
27	B	612	CLA	CHC-C1C	2.94	1.42	1.35
27	b	612	CLA	CHC-C1C	2.94	1.42	1.35
27	S	614	CLA	CHC-C1C	2.94	1.42	1.35
27	G	602	CLA	C1D-ND	2.94	1.41	1.37
27	s	610	CLA	CHC-C1C	2.94	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	N	602	CLA	CHC-C1C	2.94	1.42	1.35
27	g	611	CLA	CHC-C1C	2.94	1.42	1.35
27	s	611	CLA	CHC-C1C	2.93	1.42	1.35
27	R	611	CLA	CHC-C1C	2.93	1.42	1.35
27	r	611	CLA	CHC-C1C	2.93	1.42	1.35
27	N	603	CLA	C1D-ND	2.93	1.41	1.37
27	R	616	CLA	CHC-C1C	2.93	1.42	1.35
27	n	602	CLA	CHC-C1C	2.93	1.42	1.35
27	B	610	CLA	C1D-ND	2.93	1.41	1.37
27	g	610	CLA	CHC-C1C	2.92	1.42	1.35
27	s	603	CLA	CHC-C1C	2.92	1.42	1.35
27	R	613	CLA	CHC-C1C	2.92	1.42	1.35
27	r	613	CLA	CHC-C1C	2.92	1.42	1.35
27	y	611	CLA	CHC-C1C	2.92	1.42	1.35
27	B	605	CLA	CMB-C2B	-2.92	1.45	1.51
27	b	605	CLA	CMB-C2B	-2.92	1.45	1.51
27	B	608	CLA	CHC-C1C	2.92	1.42	1.35
27	b	608	CLA	CHC-C1C	2.92	1.42	1.35
27	s	614	CLA	CHC-C1C	2.92	1.42	1.35
30	A	418	SQD	O47-C7	2.92	1.42	1.34
27	A	406	CLA	C1D-ND	2.92	1.41	1.37
27	c	506	CLA	C1D-ND	2.92	1.41	1.37
27	A	410	CLA	CMB-C2B	-2.92	1.45	1.51
27	a	410	CLA	CMB-C2B	-2.92	1.45	1.51
27	B	605	CLA	C1D-ND	2.91	1.41	1.37
27	b	605	CLA	C1D-ND	2.91	1.41	1.37
27	C	509	CLA	CHC-C1C	2.91	1.42	1.35
27	C	505	CLA	CHC-C1C	2.91	1.42	1.35
27	B	606	CLA	CHC-C1C	2.91	1.42	1.35
27	S	613	CLA	CHC-C1C	2.91	1.42	1.35
27	C	512	CLA	C1D-ND	2.91	1.41	1.37
27	c	512	CLA	C1D-ND	2.91	1.41	1.37
27	S	603	CLA	CHC-C1C	2.91	1.42	1.35
27	G	610	CLA	CHC-C1C	2.91	1.42	1.35
27	b	606	CLA	CMB-C2B	-2.91	1.45	1.51
27	B	607	CLA	C1D-ND	2.91	1.41	1.37
27	C	506	CLA	C1D-ND	2.91	1.41	1.37
27	c	505	CLA	CHC-C1C	2.90	1.42	1.35
27	R	603	CLA	CHC-C1C	2.90	1.42	1.35
27	r	603	CLA	CHC-C1C	2.90	1.42	1.35
37	G	609	CHL	C1D-C2D	2.90	1.51	1.45
37	N	605	CHL	MG-NA	-2.90	1.99	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	C	503	CLA	C1D-ND	2.90	1.41	1.37
27	Y	611	CLA	CHC-C1C	2.90	1.42	1.35
27	C	507	CLA	CMB-C2B	-2.90	1.45	1.51
30	a	418	SQD	O47-C7	2.90	1.42	1.34
27	R	602	CLA	CHC-C1C	2.90	1.42	1.35
27	C	507	CLA	C1D-ND	2.90	1.41	1.37
27	s	613	CLA	CHC-C1C	2.90	1.42	1.35
27	R	610	CLA	CHC-C1C	2.90	1.42	1.35
27	r	616	CLA	CHC-C1C	2.89	1.42	1.35
27	y	603	CLA	CHC-C1C	2.89	1.42	1.35
27	b	607	CLA	C1D-ND	2.89	1.41	1.37
37	n	605	CHL	MG-NA	-2.89	1.99	2.06
37	n	601	CHL	MG-NA	-2.88	1.99	2.06
27	Y	603	CLA	CHC-C1C	2.88	1.42	1.35
37	G	605	CHL	C3D-C2D	2.88	1.47	1.39
27	S	610	CLA	CHC-C1C	2.88	1.42	1.35
27	s	612	CLA	CHC-C1C	2.88	1.42	1.35
37	N	601	CHL	MG-NA	-2.88	1.99	2.06
37	g	605	CHL	C3D-C2D	2.88	1.47	1.39
37	G	605	CHL	C1D-C2D	2.88	1.51	1.45
27	a	407	CLA	C1D-ND	2.88	1.41	1.37
27	c	507	CLA	CMB-C2B	-2.88	1.45	1.51
27	b	606	CLA	CHC-C1C	2.88	1.42	1.35
27	c	509	CLA	CMB-C2B	-2.88	1.45	1.51
27	C	510	CLA	C1D-ND	2.88	1.41	1.37
27	N	604	CLA	CHC-C1C	2.87	1.42	1.35
27	c	507	CLA	C1D-ND	2.87	1.41	1.37
27	b	603	CLA	C1D-ND	2.87	1.41	1.37
27	B	603	CLA	C1D-ND	2.87	1.41	1.37
27	r	602	CLA	CHC-C1C	2.87	1.42	1.35
27	S	612	CLA	CHC-C1C	2.87	1.42	1.35
27	n	611	CLA	CHC-C1C	2.87	1.42	1.35
27	A	405	CLA	C1D-ND	2.87	1.41	1.37
37	g	609	CHL	C1D-C2D	2.87	1.51	1.45
36	F	101	HEM	CAB-C3B	2.86	1.55	1.47
27	b	616	CLA	C1D-ND	2.86	1.41	1.37
27	B	604	CLA	CHC-C1C	2.86	1.42	1.35
27	b	604	CLA	CHC-C1C	2.86	1.42	1.35
37	S	606	CHL	C1D-C2D	2.86	1.51	1.45
37	R	608	CHL	C1D-ND	-2.86	1.34	1.37
37	r	608	CHL	C1D-ND	-2.86	1.34	1.37
27	n	604	CLA	CHC-C1C	2.86	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	R	604	CLA	CHC-C1C	2.85	1.42	1.35
27	B	607	CLA	CHC-C1C	2.85	1.42	1.35
27	b	607	CLA	CHC-C1C	2.85	1.42	1.35
27	Y	610	CLA	CHC-C1C	2.84	1.42	1.35
27	c	501	CLA	CHC-C1C	2.84	1.42	1.35
27	c	510	CLA	C1D-ND	2.84	1.41	1.37
27	B	606	CLA	CMB-C2B	-2.84	1.45	1.51
27	Y	612	CLA	CHC-C1C	2.84	1.42	1.35
27	y	612	CLA	CHC-C1C	2.84	1.42	1.35
27	C	501	CLA	CHC-C1C	2.84	1.42	1.35
27	r	610	CLA	CHC-C1C	2.84	1.42	1.35
27	G	602	CLA	CHC-C1C	2.84	1.42	1.35
27	g	602	CLA	CHC-C1C	2.84	1.42	1.35
27	N	604	CLA	C1D-ND	2.84	1.41	1.37
27	b	615	CLA	C3B-C2B	-2.84	1.36	1.40
27	G	603	CLA	CHC-C1C	2.84	1.42	1.35
27	g	603	CLA	CHC-C1C	2.84	1.42	1.35
27	r	604	CLA	CHC-C1C	2.83	1.42	1.35
27	n	604	CLA	C1D-ND	2.83	1.41	1.37
27	D	402	CLA	CMB-C2B	-2.83	1.45	1.51
27	d	402	CLA	CMB-C2B	-2.83	1.45	1.51
27	r	609	CLA	CHC-C1C	2.83	1.42	1.35
27	A	407	CLA	C1D-ND	2.83	1.41	1.37
27	B	614	CLA	CMB-C2B	-2.83	1.45	1.51
27	G	604	CLA	CHC-C1C	2.83	1.42	1.35
27	g	604	CLA	CHC-C1C	2.83	1.42	1.35
27	C	509	CLA	CMB-C2B	-2.83	1.45	1.51
30	B	621	SQD	O47-C7	2.83	1.42	1.34
30	b	621	SQD	O47-C7	2.83	1.42	1.34
27	N	611	CLA	CHC-C1C	2.83	1.42	1.35
27	Y	614	CLA	CHC-C1C	2.83	1.42	1.35
27	C	504	CLA	CMB-C2B	-2.83	1.45	1.51
27	c	504	CLA	CMB-C2B	-2.83	1.45	1.51
36	f	101	HEM	CAB-C3B	2.83	1.55	1.47
37	S	601	CHL	C3D-C2D	2.83	1.46	1.39
27	b	609	CLA	CHC-C1C	2.83	1.42	1.35
27	n	604	CLA	CMB-C2B	-2.82	1.45	1.51
27	y	613	CLA	CMB-C2B	-2.82	1.45	1.51
35	Y	2630	LHG	O7-C5	-2.82	1.39	1.46
35	y	2630	LHG	O7-C5	-2.82	1.39	1.46
27	D	403	CLA	C1D-ND	2.82	1.41	1.37
27	d	403	CLA	C1D-ND	2.82	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	n	610	CLA	CMB-C2B	-2.82	1.45	1.51
27	C	502	CLA	CMB-C2B	-2.82	1.45	1.51
27	b	614	CLA	CMB-C2B	-2.82	1.45	1.51
37	s	606	CHL	C1D-C2D	2.82	1.50	1.45
27	b	610	CLA	CHC-C1C	2.81	1.42	1.35
27	B	616	CLA	C1D-ND	2.81	1.41	1.37
27	c	511	CLA	CHC-C1C	2.81	1.42	1.35
37	G	606	CHL	C1D-C2D	2.81	1.50	1.45
27	n	612	CLA	CHC-C1C	2.81	1.42	1.35
27	A	407	CLA	CHC-C1C	2.81	1.42	1.35
37	g	605	CHL	C1D-C2D	2.81	1.50	1.45
27	y	610	CLA	CHC-C1C	2.81	1.42	1.35
27	B	609	CLA	CHC-C1C	2.81	1.42	1.35
27	y	614	CLA	CHC-C1C	2.81	1.42	1.35
27	Y	614	CLA	C1D-ND	2.81	1.41	1.37
27	D	402	CLA	CHC-C1C	2.81	1.42	1.35
27	B	606	CLA	C3B-C2B	-2.81	1.36	1.40
27	B	613	CLA	CHC-C1C	2.81	1.42	1.35
27	Y	604	CLA	CHC-C1C	2.81	1.42	1.35
27	b	613	CLA	CHC-C1C	2.81	1.42	1.35
34	D	405	PL9	C36-C34	-2.81	1.45	1.51
34	d	405	PL9	C36-C34	-2.81	1.45	1.51
27	d	402	CLA	CHC-C1C	2.81	1.42	1.35
27	C	508	CLA	C3B-C2B	-2.81	1.36	1.40
27	a	407	CLA	CMB-C2B	-2.80	1.45	1.51
27	y	614	CLA	C1D-ND	2.80	1.41	1.37
27	B	604	CLA	C3B-C2B	-2.80	1.36	1.40
27	b	604	CLA	C3B-C2B	-2.80	1.36	1.40
27	C	511	CLA	CHC-C1C	2.80	1.42	1.35
27	d	403	CLA	CHC-C1C	2.80	1.42	1.35
27	D	403	CLA	CHC-C1C	2.80	1.42	1.35
27	N	612	CLA	CHC-C1C	2.80	1.42	1.35
27	c	502	CLA	CMB-C2B	-2.80	1.45	1.51
27	B	603	CLA	CHC-C1C	2.80	1.42	1.35
27	b	603	CLA	CHC-C1C	2.80	1.42	1.35
37	s	601	CHL	C3D-C2D	2.80	1.46	1.39
27	B	602	CLA	CHC-C1C	2.80	1.42	1.35
27	b	602	CLA	CHC-C1C	2.80	1.42	1.35
37	g	606	CHL	C1D-C2D	2.80	1.50	1.45
27	B	615	CLA	C3B-C2B	-2.80	1.36	1.40
27	a	407	CLA	CHC-C1C	2.80	1.42	1.35
37	s	606	CHL	C3D-C2D	2.79	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	615	CLA	CMB-C2B	-2.79	1.45	1.51
27	B	610	CLA	CHC-C1C	2.79	1.42	1.35
27	B	611	CLA	C1D-ND	2.79	1.41	1.37
27	b	611	CLA	C1D-ND	2.79	1.41	1.37
27	C	501	CLA	CMB-C2B	-2.79	1.45	1.51
27	N	604	CLA	CMB-C2B	-2.79	1.45	1.51
27	N	610	CLA	CMB-C2B	-2.79	1.45	1.51
27	c	501	CLA	CMB-C2B	-2.79	1.45	1.51
37	n	605	CHL	C1D-C2D	2.79	1.50	1.45
27	y	604	CLA	CHC-C1C	2.79	1.42	1.35
32	C	518	DGD	O2G-C2G	-2.78	1.39	1.46
32	c	518	DGD	O2G-C2G	-2.78	1.39	1.46
27	C	510	CLA	CHC-C1C	2.78	1.42	1.35
27	c	510	CLA	CHC-C1C	2.78	1.42	1.35
27	B	615	CLA	CMB-C2B	-2.78	1.45	1.51
27	Y	602	CLA	CMB-C2B	-2.78	1.45	1.51
27	B	615	CLA	CHC-C1C	2.78	1.42	1.35
27	b	615	CLA	CHC-C1C	2.78	1.42	1.35
37	S	606	CHL	C3D-C2D	2.78	1.46	1.39
27	N	603	CLA	CHC-C1C	2.78	1.42	1.35
27	c	503	CLA	CMB-C2B	-2.78	1.45	1.51
27	s	604	CLA	CMB-C2B	-2.78	1.45	1.51
27	R	609	CLA	CHC-C1C	2.78	1.42	1.35
30	A	412	SQD	O47-C7	2.78	1.42	1.34
30	a	412	SQD	O47-C7	2.78	1.42	1.34
37	Y	601	CHL	C3D-C2D	2.77	1.46	1.39
37	N	601	CHL	C3D-C2D	2.77	1.46	1.39
27	D	402	CLA	CMD-C2D	-2.77	1.44	1.50
27	C	502	CLA	CHC-C1C	2.77	1.42	1.35
37	N	605	CHL	C1D-C2D	2.77	1.50	1.45
27	a	405	CLA	CMB-C2B	-2.77	1.45	1.51
27	c	502	CLA	CHC-C1C	2.77	1.42	1.35
38	G	1621	LUT	C22-C21	-2.77	1.51	1.54
27	y	602	CLA	CMB-C2B	-2.77	1.45	1.51
27	C	505	CLA	C1D-ND	2.77	1.41	1.37
37	y	601	CHL	C3D-C2D	2.77	1.46	1.39
27	S	604	CLA	CMB-C2B	-2.77	1.45	1.51
27	b	611	CLA	CMB-C2B	-2.77	1.45	1.51
27	C	506	CLA	CHC-C1C	2.77	1.42	1.35
27	n	603	CLA	CHC-C1C	2.77	1.42	1.35
27	Y	613	CLA	CMB-C2B	-2.77	1.45	1.51
37	g	605	CHL	MG-NA	-2.76	1.99	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	c	506	CLA	CHC-C1C	2.76	1.42	1.35
27	Y	602	CLA	CHC-C1C	2.76	1.42	1.35
27	C	503	CLA	CHC-C1C	2.76	1.42	1.35
27	G	613	CLA	CHC-C1C	2.76	1.42	1.35
27	c	510	CLA	CMB-C2B	-2.76	1.45	1.51
37	G	606	CHL	C3D-C2D	2.76	1.46	1.39
37	g	609	CHL	C3D-C2D	2.76	1.46	1.39
27	y	602	CLA	CHC-C1C	2.76	1.42	1.35
27	b	607	CLA	CMB-C2B	-2.76	1.45	1.51
37	n	601	CHL	C3D-C2D	2.76	1.46	1.39
27	B	613	CLA	CMB-C2B	-2.76	1.45	1.51
27	b	610	CLA	CMB-C2B	-2.76	1.45	1.51
27	B	607	CLA	CMB-C2B	-2.75	1.45	1.51
27	B	607	CLA	C3B-C2B	-2.75	1.36	1.40
27	b	607	CLA	C3B-C2B	-2.75	1.36	1.40
37	g	607	CHL	C3D-C2D	2.75	1.46	1.39
37	n	605	CHL	C3D-C2D	2.75	1.46	1.39
27	A	407	CLA	CMB-C2B	-2.75	1.45	1.51
27	C	504	CLA	CHC-C1C	2.75	1.42	1.35
27	c	504	CLA	CHC-C1C	2.75	1.42	1.35
37	G	609	CHL	C3D-C2D	2.75	1.46	1.39
37	s	607	CHL	C1D-C2D	2.75	1.50	1.45
27	Y	613	CLA	C3B-C2B	-2.75	1.36	1.40
27	y	613	CLA	C3B-C2B	-2.75	1.36	1.40
27	B	616	CLA	C3B-C2B	-2.75	1.36	1.40
27	c	503	CLA	CHC-C1C	2.75	1.42	1.35
27	C	510	CLA	CMB-C2B	-2.75	1.45	1.51
37	G	605	CHL	MG-NA	-2.75	1.99	2.06
27	c	508	CLA	C3B-C2B	-2.74	1.36	1.40
37	Y	601	CHL	MG-NA	-2.74	1.99	2.06
37	y	601	CHL	MG-NA	-2.74	1.99	2.06
27	b	616	CLA	CMB-C2B	-2.74	1.45	1.51
37	G	607	CHL	C3D-C2D	2.74	1.46	1.39
37	s	608	CHL	C1D-C2D	2.74	1.50	1.45
37	N	605	CHL	C3D-C2D	2.74	1.46	1.39
27	A	406	CLA	CHC-C1C	2.73	1.42	1.35
27	b	613	CLA	CMB-C2B	-2.73	1.46	1.51
37	R	607	CHL	C3D-C2D	2.73	1.46	1.39
37	r	607	CHL	C3D-C2D	2.73	1.46	1.39
27	C	507	CLA	CHC-C1C	2.73	1.42	1.35
27	c	507	CLA	CHC-C1C	2.73	1.42	1.35
27	b	612	CLA	C3B-C2B	-2.73	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	d	402	CLA	CMD-C2D	-2.73	1.45	1.50
37	g	601	CHL	MG-NA	-2.73	1.99	2.06
27	B	616	CLA	CMB-C2B	-2.73	1.46	1.51
27	g	612	CLA	CMB-C2B	-2.73	1.46	1.51
37	S	608	CHL	C1D-C2D	2.73	1.50	1.45
27	A	405	CLA	CMB-C2B	-2.73	1.46	1.51
27	c	505	CLA	C1D-ND	2.73	1.41	1.37
27	Y	603	CLA	CMB-C2B	-2.73	1.46	1.51
27	N	613	CLA	CHC-C1C	2.73	1.42	1.35
27	B	611	CLA	CMB-C2B	-2.72	1.46	1.51
27	y	603	CLA	CMB-C2B	-2.72	1.46	1.51
27	B	603	CLA	CMB-C2B	-2.72	1.46	1.51
27	g	613	CLA	CHC-C1C	2.72	1.41	1.35
27	b	606	CLA	C3B-C2B	-2.72	1.36	1.40
37	s	601	CHL	MG-NA	-2.72	1.99	2.06
27	R	603	CLA	CMB-C2B	-2.72	1.46	1.51
27	r	603	CLA	CMB-C2B	-2.72	1.46	1.51
28	a	409	PHO	CBD-CGD	-2.71	1.48	1.52
27	B	612	CLA	C1D-ND	2.71	1.41	1.37
27	b	612	CLA	C1D-ND	2.71	1.41	1.37
27	B	610	CLA	CMB-C2B	-2.71	1.46	1.51
27	c	505	CLA	CMD-C2D	-2.71	1.45	1.50
27	C	512	CLA	CHC-C1C	2.71	1.41	1.35
37	g	606	CHL	C3D-C2D	2.71	1.46	1.39
32	C	518	DGD	O5D-C6D	-2.71	1.38	1.43
37	S	607	CHL	C1D-C2D	2.71	1.50	1.45
27	n	613	CLA	CHC-C1C	2.71	1.41	1.35
27	a	406	CLA	CHC-C1C	2.71	1.41	1.35
27	C	503	CLA	CMB-C2B	-2.70	1.46	1.51
38	g	1621	LUT	C22-C21	-2.70	1.51	1.54
27	B	611	CLA	CHC-C1C	2.70	1.41	1.35
27	b	611	CLA	CHC-C1C	2.70	1.41	1.35
27	a	405	CLA	CHC-C1C	2.70	1.41	1.35
27	A	405	CLA	CHC-C1C	2.70	1.41	1.35
27	N	602	CLA	CMB-C2B	-2.70	1.46	1.51
27	n	602	CLA	CMB-C2B	-2.70	1.46	1.51
27	A	410	CLA	C1D-ND	2.70	1.41	1.37
27	a	410	CLA	C1D-ND	2.70	1.41	1.37
37	y	608	CHL	C1D-ND	-2.70	1.34	1.37
27	B	616	CLA	CHC-C1C	2.70	1.41	1.35
27	b	616	CLA	CHC-C1C	2.70	1.41	1.35
27	S	604	CLA	CHC-C1C	2.70	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	s	604	CLA	CHC-C1C	2.70	1.41	1.35
27	B	612	CLA	C3B-C2B	-2.70	1.36	1.40
27	s	610	CLA	CMB-C2B	-2.69	1.46	1.51
27	C	505	CLA	CMD-C2D	-2.69	1.45	1.50
27	G	613	CLA	CMB-C2B	-2.69	1.46	1.51
27	B	613	CLA	CMD-C2D	-2.69	1.45	1.50
37	S	601	CHL	MG-NA	-2.69	1.99	2.06
27	B	617	CLA	CMB-C2B	-2.69	1.46	1.51
27	b	617	CLA	CMB-C2B	-2.69	1.46	1.51
27	a	410	CLA	CHC-C1C	2.69	1.41	1.35
37	Y	608	CHL	C1D-ND	-2.69	1.34	1.37
27	B	613	CLA	C1D-ND	2.68	1.41	1.37
27	A	410	CLA	CHC-C1C	2.68	1.41	1.35
27	B	608	CLA	CMB-C2B	-2.68	1.46	1.51
27	G	604	CLA	CMB-C2B	-2.68	1.46	1.51
27	g	604	CLA	CMB-C2B	-2.68	1.46	1.51
37	G	601	CHL	MG-NA	-2.68	1.99	2.06
27	B	609	CLA	CMB-C2B	-2.68	1.46	1.51
27	b	609	CLA	CMB-C2B	-2.68	1.46	1.51
37	Y	607	CHL	C1D-ND	-2.67	1.34	1.37
37	y	607	CHL	C1D-ND	-2.67	1.34	1.37
37	Y	606	CHL	C1D-ND	-2.67	1.34	1.37
37	y	606	CHL	C1D-ND	-2.67	1.34	1.37
27	b	613	CLA	CMD-C2D	-2.67	1.45	1.50
27	y	614	CLA	CMB-C2B	-2.67	1.46	1.51
27	b	613	CLA	C1D-ND	2.67	1.41	1.37
27	c	511	CLA	CMB-C2B	-2.67	1.46	1.51
37	n	601	CHL	C1D-C2D	2.67	1.50	1.45
27	c	513	CLA	CHC-C1C	2.67	1.41	1.35
27	G	602	CLA	CMB-C2B	-2.67	1.46	1.51
27	g	602	CLA	CMB-C2B	-2.67	1.46	1.51
27	c	512	CLA	CHC-C1C	2.66	1.41	1.35
27	C	505	CLA	CMB-C2B	-2.66	1.46	1.51
27	c	505	CLA	CMB-C2B	-2.66	1.46	1.51
37	N	601	CHL	C1D-C2D	2.66	1.50	1.45
27	G	612	CLA	CMB-C2B	-2.66	1.46	1.51
37	R	606	CHL	C3D-C2D	2.66	1.46	1.39
34	d	405	PL9	C31-C29	-2.66	1.45	1.51
27	b	603	CLA	CMB-C2B	-2.66	1.46	1.51
27	C	513	CLA	CHC-C1C	2.66	1.41	1.35
27	B	602	CLA	CMB-C2B	-2.66	1.46	1.51
27	b	602	CLA	CMB-C2B	-2.66	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	G	609	CHL	MG-NA	-2.66	2.00	2.06
27	y	613	CLA	CHC-C1C	2.66	1.41	1.35
37	N	609	CHL	C3D-C2D	2.66	1.46	1.39
37	n	609	CHL	C3D-C2D	2.66	1.46	1.39
37	y	605	CHL	C3D-C2D	2.65	1.46	1.39
27	Y	613	CLA	CHC-C1C	2.65	1.41	1.35
27	b	608	CLA	CMB-C2B	-2.65	1.46	1.51
27	S	610	CLA	CMB-C2B	-2.65	1.46	1.51
37	s	601	CHL	C1D-C2D	2.65	1.50	1.45
27	g	613	CLA	CMB-C2B	-2.65	1.46	1.51
37	Y	605	CHL	C1D-C2D	2.65	1.50	1.45
37	y	605	CHL	C1D-C2D	2.65	1.50	1.45
27	b	616	CLA	C3B-C2B	-2.65	1.36	1.40
27	C	512	CLA	CMB-C2B	-2.64	1.46	1.51
27	c	512	CLA	CMB-C2B	-2.64	1.46	1.51
27	A	405	CLA	CMD-C2D	-2.64	1.45	1.50
27	B	614	CLA	CHC-C1C	2.64	1.41	1.35
27	b	614	CLA	CHC-C1C	2.64	1.41	1.35
27	g	611	CLA	CMB-C2B	-2.64	1.46	1.51
37	Y	609	CHL	C3D-C2D	2.64	1.46	1.39
37	y	609	CHL	C3D-C2D	2.64	1.46	1.39
27	G	611	CLA	CMB-C2B	-2.64	1.46	1.51
28	A	409	PHO	CBD-CGD	-2.64	1.48	1.52
27	s	614	CLA	CMB-C2B	-2.64	1.46	1.51
37	y	601	CHL	C1D-ND	-2.64	1.34	1.37
27	S	613	CLA	CMB-C2B	-2.64	1.46	1.51
27	s	613	CLA	CMB-C2B	-2.64	1.46	1.51
37	g	609	CHL	MG-NA	-2.64	2.00	2.06
27	c	501	CLA	C3B-C2B	-2.64	1.36	1.40
32	c	518	DGD	O5D-C6D	-2.63	1.38	1.43
37	r	606	CHL	C3D-C2D	2.63	1.46	1.39
34	D	405	PL9	C31-C29	-2.63	1.45	1.51
27	R	609	CLA	CMB-C2B	-2.63	1.46	1.51
27	r	609	CLA	CMB-C2B	-2.63	1.46	1.51
37	R	606	CHL	C1D-ND	-2.63	1.34	1.37
37	n	607	CHL	C1D-ND	-2.63	1.34	1.37
37	r	606	CHL	C1D-ND	-2.63	1.34	1.37
27	Y	614	CLA	CMB-C2B	-2.63	1.46	1.51
37	Y	605	CHL	C3D-C2D	2.63	1.46	1.39
37	R	607	CHL	C1D-ND	-2.62	1.34	1.37
37	r	607	CHL	C1D-ND	-2.62	1.34	1.37
27	A	406	CLA	CMB-C2B	-2.62	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	N	613	CLA	CMB-C2B	-2.62	1.46	1.51
27	c	508	CLA	CMC-C2C	-2.62	1.45	1.50
27	C	511	CLA	CMB-C2B	-2.62	1.46	1.51
37	N	606	CHL	C1D-C2D	2.62	1.50	1.45
37	n	606	CHL	C1D-C2D	2.62	1.50	1.45
37	g	608	CHL	C1D-C2D	2.61	1.50	1.45
32	C	520	DGD	O2G-C2G	-2.61	1.40	1.46
32	c	520	DGD	O6D-C5D	-2.61	1.38	1.44
27	N	611	CLA	CMB-C2B	-2.61	1.46	1.51
27	B	604	CLA	C1D-ND	2.61	1.41	1.37
27	b	604	CLA	C1D-ND	2.61	1.41	1.37
27	Y	612	CLA	CMB-C2B	-2.61	1.46	1.51
27	y	612	CLA	CMB-C2B	-2.61	1.46	1.51
27	A	406	CLA	CMD-C2D	-2.61	1.45	1.50
32	c	520	DGD	O2G-C2G	-2.61	1.40	1.46
27	d	403	CLA	CMB-C2B	-2.61	1.46	1.51
27	C	513	CLA	CMB-C2B	-2.61	1.46	1.51
37	N	606	CHL	C3D-C2D	2.60	1.46	1.39
27	C	501	CLA	C3B-C2B	-2.60	1.36	1.40
27	a	405	CLA	CMD-C2D	-2.60	1.45	1.50
37	N	607	CHL	C3D-C2D	2.60	1.46	1.39
37	n	607	CHL	C3D-C2D	2.60	1.46	1.39
27	b	603	CLA	C3B-C2B	-2.60	1.36	1.40
27	a	406	CLA	CMD-C2D	-2.60	1.45	1.50
27	S	611	CLA	CMB-C2B	-2.60	1.46	1.51
27	s	611	CLA	CMB-C2B	-2.60	1.46	1.51
32	C	520	DGD	O5D-C6D	-2.60	1.39	1.43
32	C	520	DGD	O6D-C5D	-2.59	1.38	1.44
27	c	513	CLA	CMB-C2B	-2.59	1.46	1.51
37	n	609	CHL	MG-NA	-2.59	2.00	2.06
27	G	614	CLA	CMB-C2B	-2.59	1.46	1.51
27	S	612	CLA	CMB-C2B	-2.59	1.46	1.51
27	R	602	CLA	CMB-C2B	-2.59	1.46	1.51
27	r	602	CLA	CMB-C2B	-2.59	1.46	1.51
27	D	403	CLA	CMB-C2B	-2.59	1.46	1.51
27	C	509	CLA	C1D-ND	2.59	1.41	1.37
27	c	509	CLA	C1D-ND	2.59	1.41	1.37
37	N	607	CHL	C1D-ND	-2.59	1.34	1.37
27	s	612	CLA	CMB-C2B	-2.59	1.46	1.51
37	N	609	CHL	MG-NA	-2.59	2.00	2.06
27	N	603	CLA	CMB-C2B	-2.59	1.46	1.51
27	R	604	CLA	CMB-C2B	-2.59	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	n	603	CLA	CMB-C2B	-2.59	1.46	1.51
27	r	604	CLA	CMB-C2B	-2.59	1.46	1.51
27	S	614	CLA	CMB-C2B	-2.59	1.46	1.51
27	N	612	CLA	CMB-C2B	-2.58	1.46	1.51
37	Y	601	CHL	C1D-ND	-2.58	1.34	1.37
37	S	601	CHL	C1D-C2D	2.58	1.50	1.45
27	C	508	CLA	CMC-C2C	-2.58	1.45	1.50
32	c	520	DGD	O5D-C6D	-2.58	1.39	1.43
27	g	610	CLA	CMB-C2B	-2.58	1.46	1.51
27	n	611	CLA	CMB-C2B	-2.57	1.46	1.51
37	n	606	CHL	C3D-C2D	2.57	1.46	1.39
27	g	614	CLA	CMB-C2B	-2.57	1.46	1.51
37	G	608	CHL	C3D-C2D	2.57	1.46	1.39
37	S	607	CHL	C1D-ND	-2.57	1.34	1.37
37	s	607	CHL	C1D-ND	-2.57	1.34	1.37
38	Y	1621	LUT	C1-C6	-2.57	1.50	1.53
38	y	1621	LUT	C1-C6	-2.57	1.50	1.53
27	a	406	CLA	CMB-C2B	-2.57	1.46	1.51
37	y	601	CHL	C1D-C2D	2.57	1.50	1.45
27	Y	611	CLA	CMB-C2B	-2.57	1.46	1.51
27	y	611	CLA	CMB-C2B	-2.57	1.46	1.51
27	Y	604	CLA	C3B-C2B	-2.56	1.36	1.40
27	g	603	CLA	CMB-C2B	-2.56	1.46	1.51
37	g	608	CHL	C3D-C2D	2.56	1.46	1.39
27	G	610	CLA	CMB-C2B	-2.56	1.46	1.51
27	n	613	CLA	CMB-C2B	-2.56	1.46	1.51
27	r	612	CLA	CMB-C2B	-2.56	1.46	1.51
27	r	610	CLA	CMB-C2B	-2.55	1.46	1.51
27	R	612	CLA	CMB-C2B	-2.55	1.46	1.51
27	C	508	CLA	CHC-C1C	2.55	1.41	1.35
37	S	606	CHL	MG-NA	-2.55	2.00	2.06
27	y	604	CLA	C3B-C2B	-2.54	1.36	1.40
37	Y	607	CHL	C3D-C2D	2.54	1.46	1.39
37	y	607	CHL	C3D-C2D	2.54	1.46	1.39
27	G	603	CLA	CMB-C2B	-2.54	1.46	1.51
27	n	612	CLA	CMB-C2B	-2.54	1.46	1.51
37	S	608	CHL	C4B-CHC	2.54	1.48	1.41
37	G	608	CHL	C1D-C2D	2.54	1.50	1.45
37	r	608	CHL	C3D-C2D	2.54	1.46	1.39
27	B	605	CLA	CHC-C1C	2.54	1.41	1.35
27	b	605	CLA	CHC-C1C	2.54	1.41	1.35
27	B	603	CLA	C3B-C2B	-2.54	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	B	617	CLA	CMD-C2D	-2.54	1.45	1.50
27	b	617	CLA	CMD-C2D	-2.54	1.45	1.50
27	R	610	CLA	CMB-C2B	-2.54	1.46	1.51
37	g	601	CHL	C1D-C2D	2.54	1.50	1.45
37	s	606	CHL	MG-NA	-2.54	2.00	2.06
27	D	402	CLA	MG-ND	-2.53	2.00	2.05
27	d	402	CLA	MG-ND	-2.53	2.00	2.05
27	c	513	CLA	CMC-C2C	-2.53	1.45	1.50
37	r	608	CHL	MG-NA	-2.53	2.00	2.06
37	R	608	CHL	MG-NA	-2.53	2.00	2.06
37	N	608	CHL	C1D-C2D	2.53	1.50	1.45
37	Y	609	CHL	MG-NA	-2.53	2.00	2.06
37	g	608	CHL	MG-NA	-2.53	2.00	2.06
37	y	609	CHL	MG-NA	-2.53	2.00	2.06
37	N	607	CHL	MG-NA	-2.53	2.00	2.06
35	n	2630	LHG	O7-C5	-2.53	1.40	1.46
27	S	609	CLA	CMB-C2B	-2.53	1.46	1.51
27	c	508	CLA	CHC-C1C	2.52	1.41	1.35
37	R	608	CHL	C3D-C2D	2.52	1.46	1.39
27	C	513	CLA	CMC-C2C	-2.52	1.45	1.50
37	n	607	CHL	MG-NA	-2.52	2.00	2.06
27	G	602	CLA	CMD-C2D	-2.52	1.45	1.50
37	G	608	CHL	MG-NA	-2.52	2.00	2.06
28	a	408	PHO	CMC-C2C	-2.51	1.45	1.51
37	S	601	CHL	C1D-ND	-2.51	1.34	1.37
37	G	601	CHL	C3D-C2D	2.51	1.46	1.39
27	N	614	CLA	CMB-C2B	-2.51	1.46	1.51
27	n	614	CLA	CMB-C2B	-2.51	1.46	1.51
27	r	616	CLA	CMB-C2B	-2.51	1.46	1.51
37	s	608	CHL	C4B-CHC	2.51	1.48	1.41
27	g	602	CLA	CMD-C2D	-2.51	1.45	1.50
35	N	2630	LHG	O7-C5	-2.50	1.40	1.46
27	B	603	CLA	MG-ND	-2.50	2.00	2.05
27	b	603	CLA	MG-ND	-2.50	2.00	2.05
27	R	616	CLA	CMB-C2B	-2.50	1.46	1.51
37	S	608	CHL	C1D-ND	-2.50	1.34	1.37
37	s	608	CHL	C1D-ND	-2.50	1.34	1.37
37	g	601	CHL	C3D-C2D	2.50	1.45	1.39
37	Y	601	CHL	C1D-C2D	2.50	1.50	1.45
27	c	513	CLA	MG-ND	-2.50	2.00	2.05
37	n	609	CHL	C1D-ND	-2.50	1.34	1.37
27	Y	603	CLA	C3B-C2B	-2.50	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	G	601	CHL	C1D-C2D	2.50	1.50	1.45
27	A	410	CLA	CMD-C2D	-2.49	1.45	1.50
27	a	410	CLA	CMD-C2D	-2.49	1.45	1.50
37	g	607	CHL	C1D-C2D	2.49	1.50	1.45
28	A	408	PHO	CMC-C2C	-2.49	1.45	1.51
37	Y	609	CHL	C1D-ND	-2.49	1.34	1.37
27	C	501	CLA	CMD-C2D	-2.49	1.45	1.50
27	c	501	CLA	CMD-C2D	-2.49	1.45	1.50
37	G	601	CHL	C1D-ND	-2.49	1.34	1.37
27	B	617	CLA	CMC-C2C	-2.49	1.45	1.50
37	y	609	CHL	C1D-ND	-2.49	1.34	1.37
27	A	407	CLA	CMD-C2D	-2.49	1.45	1.50
37	n	608	CHL	C1D-C2D	2.48	1.50	1.45
31	D	411	LMG	O7-C8	-2.48	1.40	1.46
31	d	411	LMG	O7-C8	-2.48	1.40	1.46
27	y	603	CLA	C3B-C2B	-2.48	1.36	1.40
37	G	607	CHL	C1D-C2D	2.48	1.50	1.45
27	C	513	CLA	MG-ND	-2.48	2.00	2.05
27	B	604	CLA	MG-ND	-2.48	2.00	2.05
27	Y	602	CLA	CMD-C2D	-2.48	1.45	1.50
37	N	609	CHL	C1D-ND	-2.48	1.34	1.37
37	G	606	CHL	C1D-ND	-2.47	1.34	1.37
37	g	606	CHL	C1D-ND	-2.47	1.34	1.37
37	s	601	CHL	C1D-ND	-2.47	1.34	1.37
27	r	613	CLA	CMB-C2B	-2.47	1.46	1.51
37	y	606	CHL	C3D-C2D	2.47	1.45	1.39
27	R	611	CLA	CMB-C2B	-2.47	1.46	1.51
27	r	611	CLA	CMB-C2B	-2.47	1.46	1.51
37	R	607	CHL	C1D-C2D	2.47	1.50	1.45
37	r	607	CHL	C1D-C2D	2.47	1.50	1.45
27	C	505	CLA	MG-ND	-2.47	2.00	2.05
27	c	505	CLA	MG-ND	-2.47	2.00	2.05
27	b	617	CLA	CMC-C2C	-2.47	1.45	1.50
37	N	601	CHL	C1D-ND	-2.47	1.34	1.37
27	S	602	CLA	CMB-C2B	-2.47	1.46	1.51
27	s	602	CLA	CMB-C2B	-2.47	1.46	1.51
27	s	609	CLA	CMB-C2B	-2.46	1.46	1.51
27	B	607	CLA	C3B-CAB	-2.46	1.42	1.47
27	b	607	CLA	C3B-CAB	-2.46	1.42	1.47
31	A	413	LMG	O8-C9	-2.46	1.39	1.45
27	a	407	CLA	CMD-C2D	-2.46	1.45	1.50
27	y	602	CLA	CMD-C2D	-2.46	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	h	102	DGD	O2G-C2G	-2.46	1.40	1.46
27	c	504	CLA	C3B-C2B	-2.45	1.37	1.40
37	G	606	CHL	MG-NA	-2.45	2.00	2.06
27	Y	602	CLA	C3B-CAB	-2.45	1.42	1.47
37	g	607	CHL	C1D-ND	-2.45	1.34	1.37
37	r	606	CHL	C1D-C2D	2.45	1.50	1.45
37	N	606	CHL	C1D-ND	-2.45	1.34	1.37
38	N	1621	LUT	C22-C21	-2.45	1.51	1.54
37	n	606	CHL	C1D-ND	-2.45	1.34	1.37
37	R	606	CHL	C1D-C2D	2.45	1.50	1.45
28	A	408	PHO	C3B-C2B	-2.45	1.37	1.40
28	a	408	PHO	C3B-C2B	-2.45	1.37	1.40
35	S	2630	LHG	O7-C5	-2.45	1.40	1.46
31	a	413	LMG	O8-C9	-2.45	1.39	1.45
37	Y	609	CHL	C1D-C2D	2.45	1.50	1.45
27	a	405	CLA	CMC-C2C	-2.45	1.45	1.50
27	S	614	CLA	CMD-C2D	-2.44	1.45	1.50
27	s	614	CLA	CMD-C2D	-2.44	1.45	1.50
27	b	613	CLA	CMC-C2C	-2.44	1.45	1.50
38	y	1621	LUT	C22-C21	-2.44	1.51	1.54
37	n	601	CHL	C1D-ND	-2.44	1.34	1.37
32	H	102	DGD	O2G-C2G	-2.44	1.40	1.46
37	Y	608	CHL	C3D-C2D	2.44	1.45	1.39
38	Y	1621	LUT	C22-C21	-2.44	1.51	1.54
27	B	606	CLA	CMC-C2C	-2.44	1.45	1.50
27	b	606	CLA	CMC-C2C	-2.44	1.45	1.50
37	n	605	CHL	C1D-ND	-2.44	1.34	1.37
37	y	609	CHL	C1D-C2D	2.44	1.50	1.45
37	R	606	CHL	MG-NA	-2.43	2.00	2.06
37	r	606	CHL	MG-NA	-2.43	2.00	2.06
27	C	507	CLA	MG-ND	-2.43	2.01	2.05
27	c	507	CLA	MG-ND	-2.43	2.01	2.05
27	b	604	CLA	MG-ND	-2.43	2.01	2.05
37	g	606	CHL	MG-NA	-2.43	2.00	2.06
37	N	609	CHL	C1D-C2D	2.43	1.50	1.45
27	C	507	CLA	C3B-CAB	-2.43	1.43	1.47
27	a	407	CLA	MG-ND	-2.43	2.01	2.05
37	N	608	CHL	C3D-C2D	2.43	1.45	1.39
37	n	608	CHL	C3D-C2D	2.43	1.45	1.39
28	a	409	PHO	CMC-C2C	-2.43	1.45	1.51
27	c	509	CLA	CMD-C2D	-2.43	1.45	1.50
29	c	515	BCR	C30-C25	-2.43	1.50	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	Y	606	CHL	C3D-C2D	2.42	1.45	1.39
27	c	506	CLA	CMD-C2D	-2.42	1.45	1.50
28	A	409	PHO	CMC-C2C	-2.42	1.45	1.51
27	R	613	CLA	CMB-C2B	-2.42	1.46	1.51
37	y	608	CHL	C3D-C2D	2.42	1.45	1.39
27	A	405	CLA	CMC-C2C	-2.42	1.45	1.50
27	C	509	CLA	CMD-C2D	-2.42	1.45	1.50
35	s	2630	LHG	O7-C5	-2.42	1.40	1.46
37	y	605	CHL	MG-NA	-2.42	2.00	2.06
27	C	503	CLA	C3B-C2B	-2.42	1.37	1.40
29	C	515	BCR	C30-C25	-2.42	1.50	1.53
27	b	614	CLA	MG-ND	-2.42	2.01	2.05
37	n	609	CHL	C1D-C2D	2.42	1.50	1.45
37	r	607	CHL	MG-NA	-2.42	2.00	2.06
27	C	511	CLA	CMD-C2D	-2.41	1.45	1.50
27	B	603	CLA	C3B-CAB	-2.41	1.43	1.47
27	b	603	CLA	C3B-CAB	-2.41	1.43	1.47
37	G	607	CHL	C1D-ND	-2.41	1.34	1.37
31	B	622	LMG	O7-C8	-2.41	1.40	1.46
31	b	622	LMG	O7-C8	-2.41	1.40	1.46
37	Y	605	CHL	C1D-ND	-2.41	1.34	1.37
37	s	608	CHL	C1B-CHB	2.41	1.47	1.41
27	y	602	CLA	C3B-CAB	-2.41	1.43	1.47
27	B	613	CLA	CMC-C2C	-2.41	1.45	1.50
37	r	608	CHL	C1D-C2D	2.41	1.50	1.45
38	n	1621	LUT	C22-C21	-2.41	1.51	1.54
27	C	507	CLA	CMD-C2D	-2.41	1.45	1.50
27	C	513	CLA	CMD-C2D	-2.41	1.45	1.50
27	b	607	CLA	CMC-C2C	-2.41	1.45	1.50
27	c	513	CLA	CMD-C2D	-2.41	1.45	1.50
37	Y	605	CHL	MG-NA	-2.41	2.00	2.06
37	y	608	CHL	MG-NA	-2.41	2.00	2.06
27	B	604	CLA	CMD-C2D	-2.41	1.45	1.50
27	b	604	CLA	CMD-C2D	-2.41	1.45	1.50
37	R	608	CHL	C1D-C2D	2.40	1.50	1.45
27	C	504	CLA	CMD-C2D	-2.40	1.45	1.50
32	c	519	DGD	O6D-C5D	-2.40	1.38	1.44
37	N	605	CHL	C1D-ND	-2.40	1.34	1.37
38	N	1621	LUT	C1-C6	-2.40	1.50	1.53
32	c	519	DGD	O1G-C1G	-2.40	1.39	1.45
27	n	610	CLA	C3B-C2B	-2.40	1.37	1.40
27	s	602	CLA	CMD-C2D	-2.40	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	c	507	CLA	C3B-CAB	-2.40	1.43	1.47
32	C	519	DGD	O6D-C5D	-2.39	1.38	1.44
27	b	607	CLA	CMD-C2D	-2.39	1.45	1.50
28	A	409	PHO	C3B-C2B	-2.39	1.37	1.40
27	B	605	CLA	MG-ND	-2.39	2.01	2.05
27	b	605	CLA	MG-ND	-2.39	2.01	2.05
27	B	615	CLA	C3B-CAB	-2.39	1.43	1.47
27	b	615	CLA	C3B-CAB	-2.39	1.43	1.47
37	Y	608	CHL	MG-NA	-2.39	2.00	2.06
27	b	604	CLA	C3B-CAB	-2.39	1.43	1.47
27	r	601	CLA	CMB-C2B	-2.39	1.46	1.51
32	C	519	DGD	O1G-C1G	-2.39	1.39	1.45
27	A	407	CLA	MG-ND	-2.38	2.01	2.05
27	N	603	CLA	C3B-C2B	-2.38	1.37	1.40
27	n	603	CLA	C3B-C2B	-2.38	1.37	1.40
27	b	614	CLA	CMC-C2C	-2.38	1.45	1.50
28	A	408	PHO	CBD-CGD	-2.38	1.49	1.52
28	a	408	PHO	CBD-CGD	-2.38	1.49	1.52
27	C	508	CLA	CMD-C2D	-2.38	1.45	1.50
27	c	508	CLA	CMD-C2D	-2.38	1.45	1.50
27	B	609	CLA	CMD-C2D	-2.38	1.45	1.50
27	y	612	CLA	MG-ND	-2.38	2.01	2.05
27	r	603	CLA	C3B-C2B	-2.38	1.37	1.40
27	C	506	CLA	CMD-C2D	-2.38	1.45	1.50
27	R	601	CLA	CMB-C2B	-2.38	1.46	1.51
27	b	616	CLA	CMD-C2D	-2.38	1.45	1.50
37	R	607	CHL	MG-NA	-2.38	2.00	2.06
27	c	511	CLA	CMD-C2D	-2.38	1.45	1.50
27	c	504	CLA	CMD-C2D	-2.37	1.45	1.50
27	B	614	CLA	MG-ND	-2.37	2.01	2.05
28	a	409	PHO	C3B-C2B	-2.37	1.37	1.40
37	g	601	CHL	C1D-ND	-2.37	1.34	1.37
27	B	604	CLA	C3B-CAB	-2.37	1.43	1.47
27	c	510	CLA	CMD-C2D	-2.37	1.45	1.50
27	C	508	CLA	MG-ND	-2.37	2.01	2.05
27	B	607	CLA	CMC-C2C	-2.37	1.45	1.50
28	A	408	PHO	CMB-C2B	-2.37	1.45	1.51
28	a	408	PHO	CMB-C2B	-2.37	1.45	1.51
27	C	504	CLA	C3B-C2B	-2.37	1.37	1.40
27	Y	612	CLA	MG-ND	-2.37	2.01	2.05
27	c	507	CLA	CMD-C2D	-2.37	1.45	1.50
27	C	508	CLA	C3B-CAB	-2.36	1.43	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	c	508	CLA	C3B-CAB	-2.36	1.43	1.47
27	b	609	CLA	CMD-C2D	-2.36	1.45	1.50
27	Y	610	CLA	CMC-C2C	-2.36	1.45	1.50
27	y	610	CLA	CMC-C2C	-2.36	1.45	1.50
27	Y	612	CLA	C3B-CAB	-2.36	1.43	1.47
37	S	608	CHL	C1B-CHB	2.36	1.47	1.41
27	B	614	CLA	C3B-C2B	-2.36	1.37	1.40
32	h	102	DGD	O5D-C6D	-2.36	1.39	1.43
27	B	614	CLA	CMD-C2D	-2.36	1.45	1.50
27	b	614	CLA	CMD-C2D	-2.36	1.45	1.50
27	B	611	CLA	MG-ND	-2.36	2.01	2.05
27	b	611	CLA	MG-ND	-2.36	2.01	2.05
27	B	617	CLA	C3B-C2B	-2.36	1.37	1.40
27	b	617	CLA	C3B-C2B	-2.36	1.37	1.40
27	b	613	CLA	MG-ND	-2.35	2.01	2.05
27	B	614	CLA	CMC-C2C	-2.35	1.45	1.50
37	N	606	CHL	C4B-CHC	2.35	1.47	1.41
32	C	518	DGD	O3E-C3E	-2.35	1.37	1.43
27	D	403	CLA	CMD-C2D	-2.35	1.45	1.50
27	G	612	CLA	C3B-C2B	-2.35	1.37	1.40
27	y	612	CLA	C3B-CAB	-2.35	1.43	1.47
27	c	511	CLA	CMC-C2C	-2.35	1.45	1.50
27	B	604	CLA	CMC-C2C	-2.35	1.45	1.50
27	b	614	CLA	C3B-CAB	-2.35	1.43	1.47
37	S	606	CHL	C1D-ND	-2.35	1.34	1.37
31	D	411	LMG	O8-C9	-2.35	1.39	1.45
31	d	411	LMG	O8-C9	-2.35	1.39	1.45
27	B	607	CLA	CMD-C2D	-2.35	1.45	1.50
27	S	602	CLA	CMD-C2D	-2.35	1.45	1.50
27	A	410	CLA	MG-ND	-2.35	2.01	2.05
27	B	616	CLA	CMD-C2D	-2.35	1.45	1.50
37	s	606	CHL	C1D-ND	-2.35	1.34	1.37
37	Y	606	CHL	MG-NA	-2.35	2.00	2.06
27	C	512	CLA	CMD-C2D	-2.34	1.45	1.50
27	B	610	CLA	CMD-C2D	-2.34	1.45	1.50
27	c	506	CLA	MG-ND	-2.34	2.01	2.05
27	C	506	CLA	C3B-C2B	-2.34	1.37	1.40
27	b	610	CLA	CMD-C2D	-2.34	1.45	1.50
34	d	405	PL9	C46-C44	-2.34	1.46	1.51
29	C	517	BCR	C1-C6	-2.34	1.50	1.53
27	c	508	CLA	MG-ND	-2.34	2.01	2.05
27	b	611	CLA	CMD-C2D	-2.34	1.45	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	G	602	CLA	MG-ND	-2.34	2.01	2.05
27	g	602	CLA	MG-ND	-2.34	2.01	2.05
27	Y	602	CLA	CMC-C2C	-2.34	1.45	1.50
37	g	607	CHL	MG-NA	-2.33	2.00	2.06
27	b	614	CLA	C3B-C2B	-2.33	1.37	1.40
37	y	607	CHL	MG-NA	-2.33	2.00	2.06
27	Y	603	CLA	CMD-C2D	-2.33	1.45	1.50
34	D	405	PL9	C7-C8	-2.33	1.47	1.50
34	d	405	PL9	C7-C8	-2.33	1.47	1.50
27	n	610	CLA	CMD-C2D	-2.33	1.45	1.50
27	B	611	CLA	C3B-CAB	-2.33	1.43	1.47
27	c	503	CLA	C3B-C2B	-2.33	1.37	1.40
27	b	605	CLA	CMC-C2C	-2.33	1.45	1.50
27	C	511	CLA	CMC-C2C	-2.33	1.45	1.50
38	n	1621	LUT	C1-C6	-2.33	1.50	1.53
27	D	402	CLA	C3B-C2B	-2.33	1.37	1.40
37	g	606	CHL	C4B-CHC	2.33	1.47	1.41
27	a	410	CLA	MG-ND	-2.32	2.01	2.05
32	C	520	DGD	O1G-C1G	-2.32	1.39	1.45
32	c	520	DGD	O1G-C1G	-2.32	1.39	1.45
27	B	605	CLA	CMC-C2C	-2.32	1.45	1.50
27	B	605	CLA	CMD-C2D	-2.32	1.45	1.50
27	b	605	CLA	CMD-C2D	-2.32	1.45	1.50
27	C	512	CLA	MG-ND	-2.32	2.01	2.05
27	y	614	CLA	CMD-C2D	-2.32	1.45	1.50
32	H	102	DGD	O5D-C6D	-2.32	1.39	1.43
37	n	601	CHL	C4B-CHC	2.32	1.47	1.41
27	B	611	CLA	C3B-C2B	-2.32	1.37	1.40
27	b	611	CLA	C3B-C2B	-2.32	1.37	1.40
27	s	603	CLA	CMB-C2B	-2.32	1.46	1.51
27	Y	612	CLA	C3B-C2B	-2.32	1.37	1.40
27	y	612	CLA	C3B-C2B	-2.32	1.37	1.40
37	G	606	CHL	C4B-CHC	2.32	1.47	1.41
27	R	603	CLA	C3B-C2B	-2.32	1.37	1.40
27	y	602	CLA	CMC-C2C	-2.32	1.45	1.50
37	y	605	CHL	C1D-ND	-2.32	1.34	1.37
27	B	615	CLA	CMD-C2D	-2.32	1.45	1.50
27	Y	612	CLA	CMD-C2D	-2.32	1.45	1.50
27	b	615	CLA	CMD-C2D	-2.32	1.45	1.50
27	y	612	CLA	CMD-C2D	-2.32	1.45	1.50
27	y	613	CLA	MG-ND	-2.32	2.01	2.05
27	B	613	CLA	MG-ND	-2.32	2.01	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	Y	614	CLA	CMD-C2D	-2.32	1.45	1.50
27	b	612	CLA	CMD-C2D	-2.32	1.45	1.50
27	b	611	CLA	C3B-CAB	-2.31	1.43	1.47
32	c	518	DGD	O3E-C3E	-2.31	1.37	1.43
27	b	604	CLA	CMC-C2C	-2.31	1.45	1.50
37	y	606	CHL	MG-NA	-2.31	2.00	2.06
34	D	405	PL9	C46-C44	-2.31	1.46	1.51
27	N	610	CLA	CMC-C2C	-2.31	1.45	1.50
27	S	603	CLA	CMB-C2B	-2.31	1.46	1.51
27	B	611	CLA	CMD-C2D	-2.31	1.45	1.50
27	B	614	CLA	C3B-CAB	-2.31	1.43	1.47
27	N	610	CLA	C3B-C2B	-2.31	1.37	1.40
27	C	506	CLA	MG-ND	-2.31	2.01	2.05
34	D	405	PL9	C21-C19	-2.31	1.46	1.51
37	n	606	CHL	C4B-CHC	2.31	1.47	1.41
37	G	607	CHL	MG-NA	-2.31	2.00	2.06
37	s	606	CHL	C4B-CHC	2.31	1.47	1.41
27	c	512	CLA	CMD-C2D	-2.31	1.45	1.50
27	d	402	CLA	CMC-C2C	-2.31	1.45	1.50
27	d	403	CLA	CMD-C2D	-2.31	1.45	1.50
28	A	408	PHO	CMD-C2D	-2.31	1.46	1.51
27	y	613	CLA	C3B-CAB	-2.31	1.43	1.47
27	C	510	CLA	CMD-C2D	-2.31	1.45	1.50
27	A	410	CLA	C3B-C2B	-2.31	1.37	1.40
27	B	612	CLA	CMD-C2D	-2.31	1.45	1.50
27	b	606	CLA	CMD-C2D	-2.31	1.45	1.50
27	c	506	CLA	C3B-C2B	-2.31	1.37	1.40
27	D	402	CLA	CMC-C2C	-2.31	1.45	1.50
27	D	403	CLA	MG-ND	-2.30	2.01	2.05
27	d	403	CLA	MG-ND	-2.30	2.01	2.05
27	B	616	CLA	CMC-C2C	-2.30	1.45	1.50
27	b	616	CLA	CMC-C2C	-2.30	1.45	1.50
27	C	509	CLA	C3B-CAB	-2.30	1.43	1.47
27	g	612	CLA	C3B-C2B	-2.30	1.37	1.40
27	c	509	CLA	MG-ND	-2.30	2.01	2.05
27	B	602	CLA	MG-ND	-2.30	2.01	2.05
27	a	410	CLA	C3B-CAB	-2.30	1.43	1.47
27	C	503	CLA	C3B-CAB	-2.30	1.43	1.47
27	Y	613	CLA	C3B-CAB	-2.30	1.43	1.47
37	Y	607	CHL	MG-NA	-2.30	2.00	2.06
27	B	606	CLA	CMD-C2D	-2.30	1.45	1.50
27	c	503	CLA	C3B-CAB	-2.30	1.43	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	N	601	CHL	C4B-CHC	2.30	1.47	1.41
27	G	603	CLA	C3B-C2B	-2.30	1.37	1.40
27	n	602	CLA	CMD-C2D	-2.30	1.45	1.50
37	S	606	CHL	C4B-CHC	2.29	1.47	1.41
27	r	602	CLA	CMC-C2C	-2.29	1.45	1.50
28	A	409	PHO	CMD-C2D	-2.29	1.46	1.51
37	Y	606	CHL	C1D-C2D	2.29	1.49	1.45
37	y	606	CHL	C1D-C2D	2.29	1.49	1.45
28	a	409	PHO	CMD-C2D	-2.29	1.46	1.51
27	S	611	CLA	CMD-C2D	-2.29	1.46	1.50
27	s	611	CLA	CMD-C2D	-2.29	1.46	1.50
27	y	603	CLA	CMD-C2D	-2.29	1.46	1.50
27	y	602	CLA	C3B-C2B	-2.29	1.37	1.40
29	c	517	BCR	C1-C6	-2.29	1.50	1.53
37	Y	608	CHL	C1D-C2D	2.28	1.49	1.45
37	y	608	CHL	C1D-C2D	2.28	1.49	1.45
29	C	514	BCR	C30-C25	-2.28	1.50	1.53
27	R	602	CLA	CMC-C2C	-2.28	1.46	1.50
27	n	604	CLA	CMD-C2D	-2.28	1.46	1.50
27	g	610	CLA	CMD-C2D	-2.28	1.46	1.50
27	Y	613	CLA	MG-ND	-2.28	2.01	2.05
27	c	512	CLA	C3B-C2B	-2.28	1.37	1.40
27	B	606	CLA	MG-ND	-2.28	2.01	2.05
34	d	405	PL9	C21-C19	-2.28	1.46	1.51
27	a	410	CLA	C3B-C2B	-2.28	1.37	1.40
27	N	610	CLA	CMD-C2D	-2.28	1.46	1.50
28	a	408	PHO	CMD-C2D	-2.28	1.46	1.51
37	S	606	CHL	C4C-C3C	2.28	1.49	1.45
27	B	613	CLA	C3B-CAB	-2.28	1.43	1.47
37	S	607	CHL	C4B-CHC	2.27	1.47	1.41
37	s	607	CHL	C4B-CHC	2.27	1.47	1.41
27	a	406	CLA	CMC-C2C	-2.27	1.46	1.50
27	B	610	CLA	MG-ND	-2.27	2.01	2.05
27	c	512	CLA	MG-ND	-2.27	2.01	2.05
27	c	504	CLA	CMC-C2C	-2.27	1.46	1.50
27	S	611	CLA	C3B-C2B	-2.27	1.37	1.40
27	N	602	CLA	CMD-C2D	-2.27	1.46	1.50
37	R	608	CHL	C4C-C3C	2.27	1.49	1.45
27	N	604	CLA	CMD-C2D	-2.27	1.46	1.50
27	b	615	CLA	CMC-C2C	-2.27	1.46	1.50
27	G	610	CLA	CMD-C2D	-2.27	1.46	1.50
27	Y	611	CLA	CMC-C2C	-2.27	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	Y	606	CHL	C4B-CHC	2.27	1.47	1.41
37	y	606	CHL	C4B-CHC	2.27	1.47	1.41
27	b	602	CLA	CMD-C2D	-2.27	1.46	1.50
27	Y	610	CLA	CMD-C2D	-2.27	1.46	1.50
27	C	509	CLA	MG-ND	-2.27	2.01	2.05
29	b	620	BCR	C30-C25	-2.27	1.50	1.53
27	B	615	CLA	CMC-C2C	-2.27	1.46	1.50
27	A	410	CLA	C3B-CAB	-2.27	1.43	1.47
27	y	610	CLA	CMD-C2D	-2.27	1.46	1.50
27	N	602	CLA	C3B-C2B	-2.26	1.37	1.40
27	n	602	CLA	C3B-C2B	-2.26	1.37	1.40
37	G	605	CHL	C1D-ND	-2.26	1.35	1.37
27	d	402	CLA	C3B-C2B	-2.26	1.37	1.40
29	B	620	BCR	C30-C25	-2.26	1.50	1.53
27	N	603	CLA	CMD-C2D	-2.26	1.46	1.50
27	Y	611	CLA	CMD-C2D	-2.26	1.46	1.50
27	b	602	CLA	MG-ND	-2.26	2.01	2.05
29	a	411	BCR	C1-C6	-2.26	1.50	1.53
37	G	609	CHL	C1D-ND	-2.26	1.35	1.37
27	R	610	CLA	CMD-C2D	-2.26	1.46	1.50
27	G	602	CLA	CMC-C2C	-2.26	1.46	1.50
27	g	602	CLA	CMC-C2C	-2.26	1.46	1.50
38	G	1620	LUT	C1-C6	-2.26	1.50	1.53
38	g	1620	LUT	C1-C6	-2.26	1.50	1.53
27	b	606	CLA	C3B-CAB	-2.25	1.43	1.47
27	n	610	CLA	CMC-C2C	-2.25	1.46	1.50
27	c	509	CLA	C3B-CAB	-2.25	1.43	1.47
27	A	406	CLA	CMC-C2C	-2.25	1.46	1.50
27	B	605	CLA	C3B-C2B	-2.25	1.37	1.40
27	b	605	CLA	C3B-C2B	-2.25	1.37	1.40
27	C	510	CLA	CMC-C2C	-2.25	1.46	1.50
27	Y	604	CLA	CMC-C2C	-2.25	1.46	1.50
27	c	510	CLA	CMC-C2C	-2.25	1.46	1.50
37	g	609	CHL	C1D-ND	-2.25	1.35	1.37
39	n	1622	XAT	O4-C5	-2.25	1.43	1.46
37	n	608	CHL	MG-NA	-2.25	2.00	2.06
27	B	610	CLA	C3B-C2B	-2.25	1.37	1.40
32	C	518	DGD	O3D-C3D	-2.25	1.37	1.43
27	B	606	CLA	C3B-CAB	-2.25	1.43	1.47
27	c	502	CLA	MG-ND	-2.25	2.01	2.05
27	C	509	CLA	CMC-C2C	-2.25	1.46	1.50
27	c	509	CLA	CMC-C2C	-2.25	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	B	608	CLA	CMD-C2D	-2.25	1.46	1.50
27	B	603	CLA	CMC-C2C	-2.25	1.46	1.50
27	b	603	CLA	CMC-C2C	-2.25	1.46	1.50
27	g	603	CLA	C3B-C2B	-2.25	1.37	1.40
37	g	605	CHL	C4B-CHC	2.24	1.47	1.41
38	Y	1620	LUT	C22-C21	-2.24	1.51	1.54
27	b	603	CLA	CMD-C2D	-2.24	1.46	1.50
37	r	608	CHL	C4C-C3C	2.24	1.48	1.45
37	s	606	CHL	C4C-C3C	2.24	1.48	1.45
27	C	503	CLA	MG-ND	-2.24	2.01	2.05
27	y	603	CLA	CMC-C2C	-2.24	1.46	1.50
29	h	101	BCR	C1-C6	-2.24	1.50	1.53
27	b	610	CLA	MG-ND	-2.24	2.01	2.05
29	c	514	BCR	C30-C25	-2.24	1.50	1.53
27	r	616	CLA	CMD-C2D	-2.24	1.46	1.50
27	G	613	CLA	C3B-C2B	-2.24	1.37	1.40
27	g	613	CLA	C3B-C2B	-2.24	1.37	1.40
27	R	609	CLA	CMD-C2D	-2.24	1.46	1.50
27	b	609	CLA	MG-ND	-2.24	2.01	2.05
27	Y	611	CLA	MG-ND	-2.24	2.01	2.05
27	y	611	CLA	MG-ND	-2.24	2.01	2.05
27	c	505	CLA	CMC-C2C	-2.24	1.46	1.50
27	Y	613	CLA	CMD-C2D	-2.24	1.46	1.50
27	c	503	CLA	CMD-C2D	-2.24	1.46	1.50
32	c	518	DGD	O3D-C3D	-2.24	1.37	1.43
27	c	506	CLA	C3B-CAB	-2.24	1.43	1.47
27	s	611	CLA	C3B-C2B	-2.24	1.37	1.40
27	b	608	CLA	CMD-C2D	-2.24	1.46	1.50
27	c	503	CLA	MG-ND	-2.24	2.01	2.05
27	r	610	CLA	CMD-C2D	-2.24	1.46	1.50
27	s	613	CLA	CMD-C2D	-2.24	1.46	1.50
27	B	602	CLA	CMD-C2D	-2.24	1.46	1.50
27	B	616	CLA	MG-ND	-2.24	2.01	2.05
27	b	616	CLA	MG-ND	-2.24	2.01	2.05
27	C	513	CLA	C3B-CAB	-2.23	1.43	1.47
29	C	517	BCR	C30-C25	-2.23	1.50	1.53
29	A	411	BCR	C1-C6	-2.23	1.50	1.53
37	N	608	CHL	MG-NA	-2.23	2.01	2.06
27	C	505	CLA	CMC-C2C	-2.23	1.46	1.50
27	C	512	CLA	CMC-C2C	-2.23	1.46	1.50
27	S	602	CLA	CMC-C2C	-2.23	1.46	1.50
27	y	611	CLA	CMC-C2C	-2.23	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	G	605	CHL	C4B-CHC	2.23	1.47	1.41
27	S	613	CLA	CMD-C2D	-2.23	1.46	1.50
27	y	611	CLA	CMD-C2D	-2.23	1.46	1.50
27	R	616	CLA	CMD-C2D	-2.23	1.46	1.50
27	C	511	CLA	MG-ND	-2.23	2.01	2.05
29	c	517	BCR	C30-C25	-2.23	1.50	1.53
27	B	607	CLA	MG-ND	-2.23	2.01	2.05
27	c	510	CLA	MG-ND	-2.23	2.01	2.05
27	y	613	CLA	CMD-C2D	-2.23	1.46	1.50
27	C	506	CLA	C3B-CAB	-2.23	1.43	1.47
27	b	606	CLA	MG-ND	-2.22	2.01	2.05
27	B	603	CLA	CMD-C2D	-2.22	1.46	1.50
38	S	1620	LUT	C1-C6	-2.22	1.50	1.53
38	s	1620	LUT	C1-C6	-2.22	1.50	1.53
27	Y	602	CLA	C3B-C2B	-2.22	1.37	1.40
39	N	1622	XAT	O4-C5	-2.22	1.43	1.46
27	c	503	CLA	CMC-C2C	-2.22	1.46	1.50
27	n	603	CLA	CMD-C2D	-2.22	1.46	1.50
27	Y	604	CLA	C3B-CAB	-2.22	1.43	1.47
27	A	407	CLA	C3B-C2B	-2.22	1.37	1.40
27	B	610	CLA	C3B-CAB	-2.22	1.43	1.47
27	b	610	CLA	C3B-CAB	-2.22	1.43	1.47
27	C	502	CLA	MG-ND	-2.22	2.01	2.05
27	b	613	CLA	C3B-CAB	-2.22	1.43	1.47
37	N	606	CHL	MG-NA	-2.22	2.01	2.06
37	n	606	CHL	MG-NA	-2.22	2.01	2.06
27	C	503	CLA	CMD-C2D	-2.22	1.46	1.50
27	Y	603	CLA	CMC-C2C	-2.22	1.46	1.50
27	A	410	CLA	CMC-C2C	-2.22	1.46	1.50
27	a	410	CLA	CMC-C2C	-2.22	1.46	1.50
27	B	609	CLA	MG-ND	-2.22	2.01	2.05
27	r	609	CLA	CMD-C2D	-2.22	1.46	1.50
27	y	604	CLA	CMD-C2D	-2.22	1.46	1.50
27	C	504	CLA	CMC-C2C	-2.22	1.46	1.50
27	g	604	CLA	CMD-C2D	-2.22	1.46	1.50
27	n	613	CLA	MG-ND	-2.21	2.01	2.05
27	c	513	CLA	C3B-CAB	-2.21	1.43	1.47
27	D	402	CLA	C1D-ND	2.21	1.40	1.37
27	d	402	CLA	C1D-ND	2.21	1.40	1.37
31	D	411	LMG	O4-C4	-2.21	1.37	1.43
31	d	411	LMG	O4-C4	-2.21	1.37	1.43
27	R	610	CLA	CMC-C2C	-2.21	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	r	610	CLA	CMC-C2C	-2.21	1.46	1.50
27	Y	614	CLA	MG-ND	-2.21	2.01	2.05
27	n	603	CLA	MG-ND	-2.21	2.01	2.05
27	y	614	CLA	MG-ND	-2.21	2.01	2.05
27	y	604	CLA	C3B-CAB	-2.21	1.43	1.47
29	b	618	BCR	C30-C25	-2.21	1.50	1.53
27	G	603	CLA	CMD-C2D	-2.21	1.46	1.50
27	g	603	CLA	CMD-C2D	-2.21	1.46	1.50
39	G	1622	XAT	O4-C5	-2.21	1.43	1.46
30	B	621	SQD	O2-C2	-2.21	1.37	1.43
27	r	604	CLA	CMD-C2D	-2.21	1.46	1.50
27	N	603	CLA	MG-ND	-2.20	2.01	2.05
27	B	611	CLA	CMC-C2C	-2.20	1.46	1.50
27	b	611	CLA	CMC-C2C	-2.20	1.46	1.50
27	r	613	CLA	CMD-C2D	-2.20	1.46	1.50
27	c	507	CLA	CMC-C2C	-2.20	1.46	1.50
27	b	607	CLA	MG-ND	-2.20	2.01	2.05
27	C	503	CLA	CMC-C2C	-2.20	1.46	1.50
37	g	605	CHL	C1D-ND	-2.20	1.35	1.37
27	c	512	CLA	CMC-C2C	-2.20	1.46	1.50
27	Y	610	CLA	MG-ND	-2.20	2.01	2.05
27	B	602	CLA	C3B-CAB	-2.20	1.43	1.47
27	b	602	CLA	C3B-CAB	-2.20	1.43	1.47
30	A	412	SQD	O2-C2	-2.20	1.37	1.43
30	a	412	SQD	O2-C2	-2.20	1.37	1.43
27	y	604	CLA	CMC-C2C	-2.19	1.46	1.50
27	b	610	CLA	C3B-C2B	-2.19	1.37	1.40
27	G	604	CLA	C3B-CAB	-2.19	1.43	1.47
27	n	602	CLA	CMC-C2C	-2.19	1.46	1.50
39	g	1622	XAT	O4-C5	-2.19	1.43	1.46
27	c	511	CLA	MG-ND	-2.19	2.01	2.05
27	B	608	CLA	C3B-CAB	-2.19	1.43	1.47
27	b	608	CLA	C3B-CAB	-2.19	1.43	1.47
27	c	502	CLA	CMD-C2D	-2.19	1.46	1.50
27	C	510	CLA	MG-ND	-2.19	2.01	2.05
27	C	512	CLA	C3B-C2B	-2.19	1.37	1.40
27	R	613	CLA	CMD-C2D	-2.19	1.46	1.50
27	g	602	CLA	C3B-CAB	-2.19	1.43	1.47
27	A	407	CLA	CMC-C2C	-2.19	1.46	1.50
27	G	604	CLA	CMD-C2D	-2.19	1.46	1.50
29	H	101	BCR	C1-C6	-2.19	1.50	1.53
27	g	613	CLA	C3B-CAB	-2.18	1.43	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	n	603	CLA	CMC-C2C	-2.18	1.46	1.50
27	N	614	CLA	CMD-C2D	-2.18	1.46	1.50
37	R	608	CHL	C1B-CHB	2.18	1.47	1.41
27	R	603	CLA	CMD-C2D	-2.18	1.46	1.50
27	B	608	CLA	C3B-C2B	-2.18	1.37	1.40
27	Y	604	CLA	CMD-C2D	-2.18	1.46	1.50
27	R	602	CLA	CMD-C2D	-2.18	1.46	1.50
27	C	502	CLA	CMD-C2D	-2.18	1.46	1.50
27	r	609	CLA	CMC-C2C	-2.18	1.46	1.50
27	y	610	CLA	MG-ND	-2.18	2.01	2.05
27	S	613	CLA	CMC-C2C	-2.18	1.46	1.50
27	C	507	CLA	CMC-C2C	-2.18	1.46	1.50
30	b	621	SQD	O2-C2	-2.18	1.37	1.43
27	C	508	CLA	C4B-CHC	-2.18	1.34	1.41
27	b	612	CLA	MG-ND	-2.18	2.01	2.05
27	G	611	CLA	C3B-C2B	-2.18	1.37	1.40
27	g	611	CLA	C3B-C2B	-2.18	1.37	1.40
27	Y	613	CLA	CMC-C2C	-2.18	1.46	1.50
38	y	1620	LUT	C22-C21	-2.17	1.52	1.54
27	C	501	CLA	CMC-C2C	-2.17	1.46	1.50
27	G	604	CLA	MG-ND	-2.17	2.01	2.05
27	g	604	CLA	MG-ND	-2.17	2.01	2.05
29	b	619	BCR	C1-C6	-2.17	1.50	1.53
27	s	613	CLA	CMC-C2C	-2.17	1.46	1.50
37	y	607	CHL	C1D-C2D	2.17	1.49	1.45
27	R	604	CLA	CMD-C2D	-2.17	1.46	1.50
27	s	602	CLA	CMC-C2C	-2.17	1.46	1.50
27	B	608	CLA	CMC-C2C	-2.17	1.46	1.50
37	G	608	CHL	C1D-ND	-2.17	1.35	1.37
27	N	613	CLA	MG-ND	-2.17	2.01	2.05
27	C	502	CLA	CMC-C2C	-2.17	1.46	1.50
27	c	502	CLA	CMC-C2C	-2.17	1.46	1.50
27	r	603	CLA	CMD-C2D	-2.17	1.46	1.50
27	B	610	CLA	CMC-C2C	-2.17	1.46	1.50
27	c	508	CLA	C4B-CHC	-2.17	1.35	1.41
27	s	612	CLA	CMC-C2C	-2.17	1.46	1.50
27	C	501	CLA	C3B-CAB	-2.17	1.43	1.47
37	Y	607	CHL	C1D-C2D	2.16	1.49	1.45
27	N	603	CLA	CMC-C2C	-2.16	1.46	1.50
27	s	613	CLA	MG-ND	-2.16	2.01	2.05
27	B	612	CLA	MG-ND	-2.16	2.01	2.05
27	B	609	CLA	CMC-C2C	-2.16	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	608	CLA	CMC-C2C	-2.16	1.46	1.50
27	G	602	CLA	C3B-CAB	-2.16	1.43	1.47
27	b	610	CLA	CMC-C2C	-2.16	1.46	1.50
37	n	605	CHL	C4C-C3C	2.16	1.48	1.45
37	N	608	CHL	C1D-ND	-2.16	1.35	1.37
37	n	608	CHL	C1D-ND	-2.16	1.35	1.37
37	N	601	CHL	C1B-CHB	2.16	1.47	1.41
37	n	601	CHL	C1B-CHB	2.16	1.47	1.41
27	c	501	CLA	CMC-C2C	-2.16	1.46	1.50
29	B	618	BCR	C30-C25	-2.16	1.50	1.53
27	G	611	CLA	MG-ND	-2.16	2.01	2.05
27	N	602	CLA	CMC-C2C	-2.15	1.46	1.50
27	S	604	CLA	CMC-C2C	-2.15	1.46	1.50
37	N	605	CHL	C4C-C3C	2.15	1.48	1.45
35	G	2630	LHG	O7-C5	-2.15	1.41	1.46
28	A	409	PHO	CMB-C2B	-2.15	1.46	1.51
27	y	604	CLA	MG-ND	-2.15	2.01	2.05
27	d	402	CLA	C3B-CAB	-2.15	1.43	1.47
27	C	506	CLA	CMC-C2C	-2.15	1.46	1.50
27	g	604	CLA	C3B-C2B	-2.15	1.37	1.40
27	y	613	CLA	CMC-C2C	-2.15	1.46	1.50
32	C	519	DGD	O5D-C6D	-2.15	1.39	1.43
27	N	610	CLA	C3B-CAB	-2.15	1.43	1.47
30	b	621	SQD	O3-C3	-2.15	1.37	1.43
27	Y	612	CLA	CMC-C2C	-2.15	1.46	1.50
27	y	612	CLA	CMC-C2C	-2.15	1.46	1.50
27	B	608	CLA	MG-ND	-2.15	2.01	2.05
27	b	608	CLA	MG-ND	-2.15	2.01	2.05
27	S	612	CLA	CMC-C2C	-2.15	1.46	1.50
27	b	608	CLA	C3B-C2B	-2.15	1.37	1.40
27	a	407	CLA	CMC-C2C	-2.15	1.46	1.50
27	g	604	CLA	C3B-CAB	-2.15	1.43	1.47
27	c	501	CLA	C3B-CAB	-2.15	1.43	1.47
27	s	604	CLA	CMD-C2D	-2.15	1.46	1.50
30	a	418	SQD	O4-C4	-2.15	1.37	1.43
27	G	612	CLA	CMC-C2C	-2.14	1.46	1.50
27	G	614	CLA	CMD-C2D	-2.14	1.46	1.50
27	R	612	CLA	CMD-C2D	-2.14	1.46	1.50
37	r	608	CHL	C1B-CHB	2.14	1.46	1.41
27	g	612	CLA	CMD-C2D	-2.14	1.46	1.50
27	R	609	CLA	CMC-C2C	-2.14	1.46	1.50
27	r	602	CLA	CMD-C2D	-2.14	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	B	621	SQD	O3-C3	-2.14	1.37	1.43
37	G	607	CHL	C4C-C3C	2.14	1.48	1.45
32	C	518	DGD	O2E-C2E	-2.14	1.37	1.43
27	D	402	CLA	C3B-CAB	-2.14	1.43	1.47
27	G	613	CLA	C3B-CAB	-2.14	1.43	1.47
27	C	509	CLA	C3B-C2B	-2.14	1.37	1.40
27	C	511	CLA	C3B-C2B	-2.14	1.37	1.40
37	n	607	CHL	C1D-C2D	2.14	1.49	1.45
27	s	612	CLA	CMD-C2D	-2.14	1.46	1.50
27	A	406	CLA	C3B-CAB	-2.14	1.43	1.47
37	g	609	CHL	C1B-CHB	2.14	1.46	1.41
27	n	612	CLA	C3B-C2B	-2.13	1.37	1.40
27	s	612	CLA	MG-ND	-2.13	2.01	2.05
28	a	409	PHO	CMB-C2B	-2.13	1.46	1.51
27	S	604	CLA	CMD-C2D	-2.13	1.46	1.50
29	B	618	BCR	C21-C22	-2.13	1.33	1.35
29	b	618	BCR	C21-C22	-2.13	1.33	1.35
29	B	619	BCR	C1-C6	-2.13	1.50	1.53
27	N	604	CLA	CMC-C2C	-2.13	1.46	1.50
27	s	603	CLA	CMD-C2D	-2.13	1.46	1.50
27	a	406	CLA	C3B-CAB	-2.13	1.43	1.47
27	G	610	CLA	CMC-C2C	-2.13	1.46	1.50
37	g	608	CHL	C1D-ND	-2.13	1.35	1.37
27	S	612	CLA	C3B-C2B	-2.13	1.37	1.40
27	S	611	CLA	MG-ND	-2.13	2.01	2.05
40	S	1623	NEX	C1-C6	-2.13	1.51	1.54
27	a	407	CLA	C3B-C2B	-2.13	1.37	1.40
27	C	510	CLA	C3B-CAB	-2.13	1.43	1.47
27	c	504	CLA	C3B-CAB	-2.13	1.43	1.47
27	c	510	CLA	C3B-CAB	-2.13	1.43	1.47
27	Y	611	CLA	C3B-C2B	-2.13	1.37	1.40
27	y	611	CLA	C3B-C2B	-2.13	1.37	1.40
27	s	610	CLA	CMC-C2C	-2.13	1.46	1.50
30	A	418	SQD	O4-C4	-2.13	1.38	1.43
27	s	614	CLA	CMC-C2C	-2.13	1.46	1.50
27	C	501	CLA	MG-ND	-2.13	2.01	2.05
27	c	501	CLA	MG-ND	-2.13	2.01	2.05
27	n	604	CLA	CMC-C2C	-2.13	1.46	1.50
27	g	611	CLA	MG-ND	-2.12	2.01	2.05
27	a	405	CLA	MG-ND	-2.12	2.01	2.05
27	G	613	CLA	CMD-C2D	-2.12	1.46	1.50
27	g	613	CLA	CMD-C2D	-2.12	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	s	604	CLA	CMC-C2C	-2.12	1.46	1.50
37	G	605	CHL	C4C-C3C	2.12	1.48	1.45
37	g	607	CHL	C4C-C3C	2.12	1.48	1.45
37	N	607	CHL	C1D-C2D	2.12	1.49	1.45
27	g	613	CLA	CMC-C2C	-2.12	1.46	1.50
27	s	609	CLA	CMD-C2D	-2.12	1.46	1.50
27	R	604	CLA	CMC-C2C	-2.12	1.46	1.50
27	g	610	CLA	CMC-C2C	-2.12	1.46	1.50
27	g	614	CLA	CMD-C2D	-2.12	1.46	1.50
37	s	606	CHL	C1B-CHB	2.12	1.46	1.41
27	S	612	CLA	CMD-C2D	-2.12	1.46	1.50
27	Y	604	CLA	MG-ND	-2.12	2.01	2.05
30	a	418	SQD	O2-C2	-2.12	1.38	1.43
27	c	505	CLA	C3B-CAB	-2.12	1.43	1.47
37	g	605	CHL	C4C-C3C	2.12	1.48	1.45
27	N	604	CLA	C3B-C2B	-2.12	1.37	1.40
27	c	509	CLA	C3B-C2B	-2.12	1.37	1.40
27	G	603	CLA	CMC-C2C	-2.12	1.46	1.50
27	S	603	CLA	CMD-C2D	-2.12	1.46	1.50
27	g	603	CLA	CMC-C2C	-2.12	1.46	1.50
27	n	614	CLA	CMD-C2D	-2.12	1.46	1.50
27	b	609	CLA	CMC-C2C	-2.12	1.46	1.50
27	c	506	CLA	CMC-C2C	-2.12	1.46	1.50
40	s	1623	NEX	C1-C6	-2.12	1.51	1.54
27	B	602	CLA	CMC-C2C	-2.12	1.46	1.50
27	N	613	CLA	CMD-C2D	-2.12	1.46	1.50
27	b	602	CLA	CMC-C2C	-2.12	1.46	1.50
27	G	613	CLA	CMC-C2C	-2.12	1.46	1.50
29	b	619	BCR	C30-C25	-2.12	1.50	1.53
27	A	405	CLA	MG-ND	-2.12	2.01	2.05
30	A	412	SQD	O3-C3	-2.11	1.38	1.43
39	r	622	XAT	O4-C5	-2.11	1.43	1.46
27	s	612	CLA	C3B-C2B	-2.11	1.37	1.40
37	G	605	CHL	C1B-CHB	2.11	1.46	1.41
37	G	609	CHL	C1B-CHB	2.11	1.46	1.41
35	R	2630	LHG	O7-C5	-2.11	1.41	1.46
27	R	602	CLA	C3B-CAB	-2.11	1.43	1.47
27	N	611	CLA	CMD-C2D	-2.11	1.46	1.50
27	n	611	CLA	CMD-C2D	-2.11	1.46	1.50
27	C	505	CLA	C3B-CAB	-2.11	1.43	1.47
27	S	613	CLA	MG-ND	-2.11	2.01	2.05
32	C	518	DGD	O6D-C5D	-2.11	1.39	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	c	518	DGD	O6D-C5D	-2.11	1.39	1.44
27	G	613	CLA	MG-ND	-2.11	2.01	2.05
27	S	612	CLA	MG-ND	-2.11	2.01	2.05
27	g	613	CLA	MG-ND	-2.11	2.01	2.05
35	r	2630	LHG	O7-C5	-2.11	1.41	1.46
32	c	518	DGD	O2E-C2E	-2.11	1.38	1.43
27	C	504	CLA	C3B-CAB	-2.11	1.43	1.47
27	r	604	CLA	MG-ND	-2.11	2.01	2.05
27	N	612	CLA	C3B-CAB	-2.11	1.43	1.47
27	n	610	CLA	C3B-CAB	-2.11	1.43	1.47
27	G	604	CLA	C3B-C2B	-2.11	1.37	1.40
27	S	610	CLA	CMC-C2C	-2.11	1.46	1.50
27	c	511	CLA	C3B-C2B	-2.11	1.37	1.40
37	R	606	CHL	C4B-CHC	2.10	1.46	1.41
27	r	612	CLA	CMD-C2D	-2.10	1.46	1.50
27	g	612	CLA	MG-ND	-2.10	2.01	2.05
27	G	612	CLA	CMD-C2D	-2.10	1.46	1.50
37	N	608	CHL	C4B-CHC	2.10	1.46	1.41
27	B	602	CLA	C3B-C2B	-2.10	1.37	1.40
27	b	602	CLA	C3B-C2B	-2.10	1.37	1.40
32	c	519	DGD	O5D-C6D	-2.10	1.39	1.43
37	r	606	CHL	C4B-CHC	2.10	1.46	1.41
30	A	418	SQD	O2-C2	-2.10	1.38	1.43
35	g	2630	LHG	O7-C5	-2.10	1.41	1.46
27	R	611	CLA	CMD-C2D	-2.10	1.46	1.50
37	g	605	CHL	C1B-CHB	2.10	1.46	1.41
27	N	613	CLA	C3B-CAB	-2.10	1.43	1.47
37	R	608	CHL	C4B-CHC	2.10	1.46	1.41
27	N	613	CLA	CMC-C2C	-2.10	1.46	1.50
38	N	1620	LUT	C22-C21	-2.09	1.52	1.54
27	S	609	CLA	CMD-C2D	-2.09	1.46	1.50
27	g	611	CLA	CMD-C2D	-2.09	1.46	1.50
30	a	412	SQD	O4-C4	-2.09	1.38	1.43
27	B	609	CLA	C3B-CAB	-2.09	1.43	1.47
40	g	1623	NEX	O24-C25	-2.09	1.43	1.46
27	A	406	CLA	MG-ND	-2.09	2.01	2.05
27	a	406	CLA	MG-ND	-2.09	2.01	2.05
27	S	614	CLA	CMC-C2C	-2.09	1.46	1.50
29	B	619	BCR	C30-C25	-2.09	1.50	1.53
27	S	614	CLA	C3B-C2B	-2.09	1.37	1.40
27	B	615	CLA	MG-ND	-2.09	2.01	2.05
27	b	615	CLA	MG-ND	-2.09	2.01	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	S	614	CLA	MG-ND	-2.09	2.01	2.05
27	s	614	CLA	MG-ND	-2.09	2.01	2.05
27	s	611	CLA	MG-ND	-2.09	2.01	2.05
27	Y	610	CLA	C3B-CAB	-2.09	1.43	1.47
27	y	610	CLA	C3B-CAB	-2.09	1.43	1.47
37	N	605	CHL	C4B-CHC	2.09	1.46	1.41
37	n	605	CHL	C4B-CHC	2.09	1.46	1.41
31	b	622	LMG	O4-C4	-2.08	1.38	1.43
37	Y	601	CHL	C4B-CHC	2.08	1.46	1.41
37	y	601	CHL	C4B-CHC	2.08	1.46	1.41
39	R	622	XAT	O4-C5	-2.08	1.43	1.46
37	R	607	CHL	C4C-C3C	2.08	1.48	1.45
27	G	611	CLA	CMD-C2D	-2.08	1.46	1.50
27	D	403	CLA	C3B-CAB	-2.08	1.43	1.47
27	C	513	CLA	C4B-CHC	-2.08	1.35	1.41
37	S	607	CHL	C1B-CHB	2.08	1.46	1.41
37	s	607	CHL	C1B-CHB	2.08	1.46	1.41
40	G	1623	NEX	O24-C25	-2.08	1.43	1.46
30	B	621	SQD	O4-C4	-2.08	1.38	1.43
27	C	502	CLA	C3B-CAB	-2.08	1.43	1.47
38	Y	1621	LUT	C10-C9	-2.08	1.33	1.35
38	y	1621	LUT	C10-C9	-2.08	1.33	1.35
37	r	607	CHL	C4C-C3C	2.08	1.48	1.45
37	s	601	CHL	C4B-CHC	2.08	1.46	1.41
27	n	612	CLA	C3B-CAB	-2.08	1.43	1.47
27	Y	614	CLA	C3B-CAB	-2.08	1.43	1.47
27	r	611	CLA	CMD-C2D	-2.08	1.46	1.50
27	S	603	CLA	CMC-C2C	-2.08	1.46	1.50
27	G	612	CLA	MG-ND	-2.08	2.01	2.05
27	N	611	CLA	CMC-C2C	-2.07	1.46	1.50
27	g	612	CLA	CMC-C2C	-2.07	1.46	1.50
27	n	611	CLA	CMC-C2C	-2.07	1.46	1.50
27	G	604	CLA	CMC-C2C	-2.07	1.46	1.50
37	S	606	CHL	C1B-CHB	2.07	1.46	1.41
38	n	1620	LUT	C22-C21	-2.07	1.52	1.54
27	R	604	CLA	MG-ND	-2.07	2.01	2.05
27	d	403	CLA	C3B-CAB	-2.07	1.43	1.47
30	A	412	SQD	O4-C4	-2.07	1.38	1.43
27	R	613	CLA	CMC-C2C	-2.07	1.46	1.50
27	n	611	CLA	C3B-C2B	-2.07	1.37	1.40
27	g	611	CLA	CMC-C2C	-2.07	1.46	1.50
27	r	603	CLA	CMC-C2C	-2.07	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	r	604	CLA	CMC-C2C	-2.07	1.46	1.50
27	g	612	CLA	C3B-CAB	-2.07	1.43	1.47
27	R	613	CLA	MG-ND	-2.07	2.01	2.05
30	a	412	SQD	O3-C3	-2.07	1.38	1.43
27	B	617	CLA	MG-ND	-2.06	2.01	2.05
27	b	617	CLA	MG-ND	-2.06	2.01	2.05
27	s	603	CLA	CMC-C2C	-2.06	1.46	1.50
37	r	608	CHL	C4B-CHC	2.06	1.46	1.41
27	C	504	CLA	MG-ND	-2.06	2.01	2.05
27	c	504	CLA	MG-ND	-2.06	2.01	2.05
37	g	609	CHL	C4B-CHC	2.06	1.46	1.41
27	C	502	CLA	C3B-C2B	-2.06	1.37	1.40
27	g	604	CLA	CMC-C2C	-2.06	1.46	1.50
37	n	608	CHL	C4B-CHC	2.06	1.46	1.41
27	S	611	CLA	C3B-CAB	-2.06	1.43	1.47
27	C	511	CLA	C3B-CAB	-2.06	1.43	1.47
27	c	511	CLA	C3B-CAB	-2.06	1.43	1.47
27	c	512	CLA	C3B-CAB	-2.06	1.43	1.47
31	B	622	LMG	O4-C4	-2.06	1.38	1.43
29	b	618	BCR	C1-C6	-2.06	1.50	1.53
27	N	612	CLA	CMD-C2D	-2.06	1.46	1.50
27	s	614	CLA	C3B-C2B	-2.06	1.37	1.40
37	Y	607	CHL	C4C-C3C	2.06	1.48	1.45
27	s	614	CLA	C3B-CAB	-2.06	1.43	1.47
27	N	612	CLA	C3B-C2B	-2.05	1.37	1.40
27	C	512	CLA	C3B-CAB	-2.05	1.43	1.47
27	B	605	CLA	C4B-CHC	-2.05	1.35	1.41
27	r	601	CLA	CMD-C2D	-2.05	1.46	1.50
27	b	609	CLA	C3B-CAB	-2.05	1.43	1.47
37	y	607	CHL	C4C-C3C	2.05	1.48	1.45
27	Y	603	CLA	MG-ND	-2.05	2.01	2.05
27	y	603	CLA	MG-ND	-2.05	2.01	2.05
37	S	601	CHL	C4B-CHC	2.05	1.46	1.41
27	B	605	CLA	C3B-CAB	-2.05	1.43	1.47
27	b	605	CLA	C3B-CAB	-2.05	1.43	1.47
27	R	603	CLA	CMC-C2C	-2.05	1.46	1.50
29	A	411	BCR	C21-C22	-2.05	1.33	1.35
29	a	411	BCR	C21-C22	-2.05	1.33	1.35
27	R	601	CLA	CMD-C2D	-2.05	1.46	1.50
27	s	610	CLA	CMD-C2D	-2.05	1.46	1.50
27	S	614	CLA	C3B-CAB	-2.05	1.43	1.47
27	s	611	CLA	C3B-CAB	-2.05	1.43	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	609	CLA	C3B-C2B	-2.05	1.37	1.40
27	r	602	CLA	C3B-CAB	-2.05	1.43	1.47
32	c	518	DGD	O2D-C2D	-2.05	1.38	1.43
27	A	405	CLA	C3B-C2B	-2.05	1.37	1.40
37	g	608	CHL	C4B-CHC	2.05	1.46	1.41
27	s	611	CLA	CMC-C2C	-2.05	1.46	1.50
38	R	620	LUT	C22-C21	-2.05	1.52	1.54
27	b	605	CLA	C4B-CHC	-2.05	1.35	1.41
27	S	604	CLA	MG-ND	-2.04	2.01	2.05
27	s	604	CLA	MG-ND	-2.04	2.01	2.05
27	S	611	CLA	CMC-C2C	-2.04	1.46	1.50
34	D	405	PL9	C16-C14	-2.04	1.47	1.51
34	d	405	PL9	C16-C14	-2.04	1.47	1.51
27	n	613	CLA	CMD-C2D	-2.04	1.46	1.50
37	G	609	CHL	C4B-CHC	2.04	1.46	1.41
39	g	1622	XAT	O24-C25	-2.04	1.43	1.46
27	n	613	CLA	C3B-CAB	-2.04	1.43	1.47
37	S	607	CHL	C4C-C3C	2.04	1.48	1.45
36	F	101	HEM	FE-ND	2.04	2.07	1.96
27	n	604	CLA	C3B-C2B	-2.04	1.37	1.40
27	G	611	CLA	CMC-C2C	-2.04	1.46	1.50
27	n	613	CLA	CMC-C2C	-2.04	1.46	1.50
27	R	603	CLA	MG-ND	-2.04	2.01	2.05
27	r	603	CLA	MG-ND	-2.04	2.01	2.05
30	b	621	SQD	O4-C4	-2.04	1.38	1.43
32	C	518	DGD	O2D-C2D	-2.04	1.38	1.43
37	G	601	CHL	C4B-CHC	2.04	1.46	1.41
27	c	502	CLA	C3B-CAB	-2.04	1.43	1.47
37	n	607	CHL	C4B-CHC	2.04	1.46	1.41
27	N	612	CLA	CMC-C2C	-2.04	1.46	1.50
29	B	619	BCR	C10-C9	-2.04	1.33	1.35
29	b	619	BCR	C10-C9	-2.04	1.33	1.35
27	Y	602	CLA	MG-ND	-2.03	2.01	2.05
31	d	411	LMG	O1-C7	-2.03	1.40	1.43
37	R	607	CHL	C4B-CHC	2.03	1.46	1.41
27	a	405	CLA	C3B-CAB	-2.03	1.43	1.47
37	Y	607	CHL	C1C-NC	-2.03	1.34	1.37
37	y	607	CHL	C1C-NC	-2.03	1.34	1.37
27	c	513	CLA	C4B-CHC	-2.03	1.35	1.41
31	D	411	LMG	O1-C7	-2.03	1.40	1.43
37	r	607	CHL	C4B-CHC	2.03	1.46	1.41
27	N	604	CLA	MG-ND	-2.03	2.01	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	n	604	CLA	MG-ND	-2.03	2.01	2.05
32	H	102	DGD	O6D-C5D	-2.03	1.39	1.44
32	h	102	DGD	O6D-C5D	-2.03	1.39	1.44
28	A	409	PHO	C3B-CAB	-2.03	1.43	1.47
36	f	101	HEM	FE-ND	2.03	2.06	1.96
29	b	620	BCR	C21-C22	-2.03	1.33	1.35
39	G	1622	XAT	O24-C25	-2.03	1.43	1.46
34	D	405	PL9	C35-C34	-2.03	1.45	1.50
37	n	609	CHL	C4B-CHC	2.03	1.46	1.41
27	r	613	CLA	CMC-C2C	-2.02	1.46	1.50
27	B	612	CLA	CAC-C3C	-2.02	1.45	1.51
27	b	612	CLA	CAC-C3C	-2.02	1.45	1.51
29	B	618	BCR	C1-C6	-2.02	1.51	1.53
27	G	612	CLA	C3B-CAB	-2.02	1.43	1.47
38	Y	1620	LUT	C1-C6	-2.02	1.51	1.53
38	y	1620	LUT	C1-C6	-2.02	1.51	1.53
27	A	405	CLA	C3B-CAB	-2.02	1.43	1.47
27	R	616	CLA	CMC-C2C	-2.02	1.46	1.50
27	c	503	CLA	C4B-CHC	-2.02	1.35	1.41
27	S	613	CLA	C3B-CAB	-2.02	1.43	1.47
37	s	601	CHL	C1C-NC	-2.02	1.34	1.37
27	s	613	CLA	C3B-CAB	-2.02	1.43	1.47
27	a	407	CLA	C3B-CAB	-2.02	1.43	1.47
34	d	405	PL9	C35-C34	-2.02	1.45	1.50
27	S	610	CLA	CMD-C2D	-2.02	1.46	1.50
27	n	610	CLA	MG-ND	-2.02	2.01	2.05
37	G	608	CHL	C4B-CHC	2.02	1.46	1.41
27	b	605	CLA	CAC-C3C	-2.01	1.45	1.51
40	R	623	NEX	O24-C25	-2.01	1.43	1.46
37	g	608	CHL	C4C-C3C	2.01	1.48	1.45
30	a	418	SQD	O3-C3	-2.01	1.38	1.43
27	y	602	CLA	MG-ND	-2.01	2.01	2.05
27	y	614	CLA	C3B-CAB	-2.01	1.43	1.47
27	R	601	CLA	CMC-C2C	-2.01	1.46	1.50
27	r	616	CLA	CMC-C2C	-2.01	1.46	1.50
40	N	1623	NEX	O24-C25	-2.01	1.43	1.46
40	Y	1623	NEX	O24-C25	-2.01	1.43	1.46
40	y	1623	NEX	O24-C25	-2.01	1.43	1.46
27	B	605	CLA	CAC-C3C	-2.01	1.46	1.51
27	r	612	CLA	CMC-C2C	-2.01	1.46	1.50
27	r	613	CLA	MG-ND	-2.01	2.01	2.05
30	A	418	SQD	O3-C3	-2.01	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	a	410	CLA	C4B-CHC	-2.01	1.35	1.41
29	C	517	BCR	C17-C18	-2.01	1.33	1.35
37	g	606	CHL	C4C-C3C	2.01	1.48	1.45
32	c	518	DGD	O4E-C4E	-2.01	1.38	1.43
29	C	517	BCR	C21-C22	-2.01	1.33	1.35
29	c	517	BCR	C21-C22	-2.01	1.33	1.35
27	N	614	CLA	MG-ND	-2.01	2.01	2.05
28	a	409	PHO	C3B-CAB	-2.01	1.43	1.47
27	s	604	CLA	C3B-CAB	-2.01	1.43	1.47
27	c	502	CLA	C3B-C2B	-2.00	1.37	1.40
37	s	607	CHL	C4C-C3C	2.00	1.48	1.45
38	r	620	LUT	C22-C21	-2.00	1.52	1.54
27	a	406	CLA	C3B-C2B	-2.00	1.37	1.40
27	C	503	CLA	C4B-CHC	-2.00	1.35	1.41
27	A	410	CLA	C4B-CHC	-2.00	1.35	1.41
27	d	403	CLA	C3B-C2B	-2.00	1.37	1.40
38	S	1621	LUT	C1-C6	-2.00	1.51	1.53
38	s	1621	LUT	C1-C6	-2.00	1.51	1.53

All (3583) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	Y	1622	XAT	O4-C5-C4	11.88	122.31	113.38
39	y	1622	XAT	O4-C5-C4	11.85	122.28	113.38
39	G	1622	XAT	O4-C5-C4	10.80	121.50	113.38
39	g	1622	XAT	O4-C5-C4	10.77	121.47	113.38
40	G	1623	NEX	O24-C25-C24	9.46	120.49	113.38
39	g	1622	XAT	O24-C25-C24	9.42	120.45	113.38
40	g	1623	NEX	O24-C25-C24	9.42	120.45	113.38
39	G	1622	XAT	O24-C25-C24	9.35	120.41	113.38
39	N	1622	XAT	O4-C5-C4	9.31	120.37	113.38
39	n	1622	XAT	O4-C5-C4	9.30	120.37	113.38
37	n	608	CHL	CMD-C2D-C1D	9.00	140.58	124.71
37	N	608	CHL	CMD-C2D-C1D	9.00	140.57	124.71
37	s	606	CHL	CMD-C2D-C1D	8.83	140.28	124.71
37	S	606	CHL	CMD-C2D-C1D	8.83	140.27	124.71
37	r	608	CHL	CMD-C2D-C1D	8.65	139.97	124.71
37	g	608	CHL	CMD-C2D-C1D	8.65	139.96	124.71
37	R	608	CHL	CMD-C2D-C1D	8.65	139.95	124.71
37	G	608	CHL	CMD-C2D-C1D	8.64	139.95	124.71
37	G	609	CHL	CMD-C2D-C1D	8.58	139.83	124.71
37	g	609	CHL	CMD-C2D-C1D	8.58	139.83	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	G	601	CHL	CMD-C2D-C1D	8.55	139.79	124.71
37	g	601	CHL	CMD-C2D-C1D	8.52	139.73	124.71
37	Y	605	CHL	CMD-C2D-C1D	8.48	139.66	124.71
37	y	605	CHL	CMD-C2D-C1D	8.48	139.66	124.71
37	Y	608	CHL	CMD-C2D-C1D	8.48	139.65	124.71
37	y	608	CHL	CMD-C2D-C1D	8.48	139.65	124.71
37	N	601	CHL	CMD-C2D-C1D	8.45	139.60	124.71
37	N	606	CHL	CMD-C2D-C1D	8.45	139.60	124.71
37	n	606	CHL	CMD-C2D-C1D	8.45	139.60	124.71
37	n	601	CHL	CMD-C2D-C1D	8.43	139.57	124.71
37	r	608	CHL	C2C-C3C-C4C	-8.41	100.49	106.49
37	R	608	CHL	C2C-C3C-C4C	-8.39	100.51	106.49
37	n	605	CHL	CMD-C2D-C1D	8.36	139.45	124.71
37	G	606	CHL	CMD-C2D-C1D	8.36	139.45	124.71
37	N	605	CHL	CMD-C2D-C1D	8.35	139.43	124.71
37	g	606	CHL	CMD-C2D-C1D	8.34	139.41	124.71
37	n	609	CHL	CMD-C2D-C1D	8.30	139.35	124.71
37	N	609	CHL	CMD-C2D-C1D	8.29	139.33	124.71
37	Y	607	CHL	C2C-C3C-C4C	-8.27	100.59	106.49
37	y	607	CHL	C2C-C3C-C4C	-8.27	100.60	106.49
37	S	601	CHL	CMD-C2D-C1D	8.25	139.26	124.71
37	s	601	CHL	CMD-C2D-C1D	8.23	139.21	124.71
37	N	607	CHL	C2C-C3C-C4C	-8.22	100.63	106.49
37	Y	601	CHL	CMD-C2D-C1D	8.22	139.19	124.71
37	N	606	CHL	C2C-C3C-C4C	-8.21	100.64	106.49
37	n	606	CHL	C2C-C3C-C4C	-8.21	100.64	106.49
37	n	607	CHL	C2C-C3C-C4C	-8.21	100.64	106.49
37	y	606	CHL	CMD-C2D-C1D	8.21	139.18	124.71
37	Y	609	CHL	CMD-C2D-C1D	8.20	139.17	124.71
37	Y	606	CHL	CMD-C2D-C1D	8.20	139.16	124.71
37	S	607	CHL	CMD-C2D-C1D	8.20	139.16	124.71
37	y	609	CHL	CMD-C2D-C1D	8.19	139.15	124.71
37	G	605	CHL	CMD-C2D-C1D	8.18	139.13	124.71
37	y	601	CHL	CMD-C2D-C1D	8.17	139.12	124.71
37	s	607	CHL	CMD-C2D-C1D	8.16	139.09	124.71
37	g	605	CHL	CMD-C2D-C1D	8.15	139.09	124.71
37	R	606	CHL	CMD-C2D-C1D	8.15	139.08	124.71
37	G	607	CHL	C2C-C3C-C4C	-8.13	100.69	106.49
37	g	607	CHL	C2C-C3C-C4C	-8.11	100.71	106.49
37	r	606	CHL	CMD-C2D-C1D	8.11	139.00	124.71
37	R	606	CHL	C2C-C3C-C4C	-8.04	100.76	106.49
37	r	606	CHL	C2C-C3C-C4C	-8.04	100.76	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	R	607	CHL	C2C-C3C-C4C	-8.00	100.79	106.49
37	r	607	CHL	C2C-C3C-C4C	-8.00	100.79	106.49
37	S	608	CHL	CMD-C2D-C1D	7.98	138.78	124.71
37	Y	605	CHL	C2C-C3C-C4C	-7.97	100.81	106.49
37	s	608	CHL	CMD-C2D-C1D	7.96	138.75	124.71
37	y	605	CHL	C2C-C3C-C4C	-7.91	100.85	106.49
27	B	605	CLA	C4A-NA-C1A	7.90	110.26	106.71
27	b	605	CLA	C4A-NA-C1A	7.90	110.26	106.71
37	R	607	CHL	CMD-C2D-C1D	7.88	138.61	124.71
37	r	607	CHL	CMD-C2D-C1D	7.88	138.61	124.71
37	g	606	CHL	C2C-C3C-C4C	-7.85	100.89	106.49
37	n	607	CHL	CMD-C2D-C1D	7.83	138.51	124.71
37	G	606	CHL	C2C-C3C-C4C	-7.81	100.92	106.49
37	N	607	CHL	CMD-C2D-C1D	7.78	138.42	124.71
37	g	607	CHL	CMD-C2D-C1D	7.77	138.41	124.71
37	N	608	CHL	C2C-C3C-C4C	-7.76	100.95	106.49
37	G	607	CHL	CMD-C2D-C1D	7.76	138.39	124.71
37	n	608	CHL	C2C-C3C-C4C	-7.71	101.00	106.49
37	Y	607	CHL	CMD-C2D-C1D	7.62	138.14	124.71
37	y	607	CHL	CMD-C2D-C1D	7.61	138.13	124.71
27	S	604	CLA	C4A-NA-C1A	7.58	110.11	106.71
40	N	1623	NEX	O24-C25-C24	7.58	119.08	113.38
37	y	608	CHL	C2C-C3C-C4C	-7.57	101.09	106.49
40	n	1623	NEX	O24-C25-C24	7.55	119.06	113.38
37	N	601	CHL	C2C-C3C-C4C	-7.55	101.11	106.49
37	n	601	CHL	C2C-C3C-C4C	-7.55	101.11	106.49
37	y	606	CHL	C2C-C3C-C4C	-7.55	101.11	106.49
39	R	622	XAT	O24-C25-C24	7.55	119.05	113.38
39	r	622	XAT	O24-C25-C24	7.54	119.05	113.38
27	d	402	CLA	C4A-NA-C1A	7.54	110.10	106.71
37	n	605	CHL	C2C-C3C-C4C	-7.50	101.14	106.49
27	D	402	CLA	C4A-NA-C1A	7.50	110.08	106.71
27	s	604	CLA	C4A-NA-C1A	7.49	110.07	106.71
37	Y	606	CHL	C2C-C3C-C4C	-7.47	101.16	106.49
37	N	605	CHL	C2C-C3C-C4C	-7.47	101.17	106.49
27	C	511	CLA	C4A-NA-C1A	7.46	110.06	106.71
37	S	601	CHL	C2C-C3C-C4C	-7.46	101.17	106.49
37	Y	608	CHL	C2C-C3C-C4C	-7.45	101.18	106.49
37	s	608	CHL	CHD-C1D-ND	-7.43	117.62	124.45
37	S	608	CHL	CHD-C1D-ND	-7.43	117.63	124.45
37	g	608	CHL	C2C-C3C-C4C	-7.41	101.20	106.49
37	s	601	CHL	C2C-C3C-C4C	-7.40	101.22	106.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	410	CLA	C4A-NA-C1A	7.40	110.03	106.71
37	G	609	CHL	C2C-C3C-C4C	-7.37	101.24	106.49
37	G	608	CHL	C2C-C3C-C4C	-7.37	101.24	106.49
37	g	609	CHL	C2C-C3C-C4C	-7.35	101.25	106.49
27	A	410	CLA	C4A-NA-C1A	7.35	110.01	106.71
27	R	610	CLA	C4A-NA-C1A	7.33	110.00	106.71
27	r	610	CLA	C4A-NA-C1A	7.33	110.00	106.71
27	c	508	CLA	C4A-NA-C1A	7.29	109.98	106.71
27	c	511	CLA	C4A-NA-C1A	7.28	109.98	106.71
27	B	613	CLA	C4A-NA-C1A	7.22	109.95	106.71
27	A	406	CLA	C4A-NA-C1A	7.22	109.95	106.71
27	b	613	CLA	C4A-NA-C1A	7.21	109.95	106.71
37	G	605	CHL	C2C-C3C-C4C	-7.21	101.35	106.49
27	n	604	CLA	C4A-NA-C1A	7.18	109.93	106.71
39	r	622	XAT	O4-C5-C4	7.17	118.77	113.38
27	Y	604	CLA	C4A-NA-C1A	7.17	109.93	106.71
27	y	604	CLA	C4A-NA-C1A	7.17	109.93	106.71
27	C	504	CLA	C4A-NA-C1A	7.17	109.93	106.71
27	a	405	CLA	C4A-NA-C1A	7.17	109.93	106.71
39	R	622	XAT	O4-C5-C4	7.16	118.76	113.38
37	g	605	CHL	C2C-C3C-C4C	-7.15	101.39	106.49
37	S	606	CHL	C2C-C3C-C4C	-7.15	101.39	106.49
27	C	508	CLA	C4A-NA-C1A	7.15	109.92	106.71
27	c	513	CLA	C4A-NA-C1A	7.14	109.91	106.71
39	y	1622	XAT	O24-C25-C24	7.12	118.73	113.38
37	g	609	CHL	CHD-C1D-ND	-7.12	117.91	124.45
37	s	606	CHL	C2C-C3C-C4C	-7.11	101.42	106.49
27	c	512	CLA	C4A-NA-C1A	7.10	109.90	106.71
27	r	613	CLA	C4A-NA-C1A	7.09	109.89	106.71
27	N	604	CLA	C4A-NA-C1A	7.09	109.89	106.71
27	r	609	CLA	C4A-NA-C1A	7.09	109.89	106.71
37	G	609	CHL	CHD-C1D-ND	-7.09	117.94	124.45
27	c	504	CLA	C4A-NA-C1A	7.08	109.89	106.71
27	g	611	CLA	C4A-NA-C1A	7.08	109.89	106.71
37	s	606	CHL	CHD-C1D-ND	-7.08	117.95	124.45
39	Y	1622	XAT	O24-C25-C24	7.07	118.70	113.38
27	C	512	CLA	C4A-NA-C1A	7.07	109.88	106.71
27	N	602	CLA	C4A-NA-C1A	7.06	109.88	106.71
39	N	1622	XAT	C31-C30-C29	-7.05	117.25	127.31
39	n	1622	XAT	C31-C30-C29	-7.04	117.26	127.31
27	n	603	CLA	C4A-NA-C1A	7.04	109.87	106.71
27	S	602	CLA	C4A-NA-C1A	7.03	109.87	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	y	602	CLA	C4A-NA-C1A	7.03	109.87	106.71
37	n	609	CHL	C2C-C3C-C4C	-7.03	101.48	106.49
37	N	609	CHL	C2C-C3C-C4C	-7.02	101.48	106.49
27	C	513	CLA	C4A-NA-C1A	7.02	109.86	106.71
37	S	606	CHL	CHD-C1D-ND	-7.02	118.01	124.45
27	A	405	CLA	C4A-NA-C1A	7.01	109.86	106.71
27	R	613	CLA	C4A-NA-C1A	7.01	109.86	106.71
27	N	614	CLA	C4A-NA-C1A	7.00	109.85	106.71
27	N	612	CLA	C4A-NA-C1A	7.00	109.85	106.71
27	R	609	CLA	C4A-NA-C1A	6.98	109.84	106.71
27	c	509	CLA	C4A-NA-C1A	6.98	109.84	106.71
27	r	602	CLA	C4A-NA-C1A	6.98	109.84	106.71
27	R	602	CLA	C4A-NA-C1A	6.98	109.84	106.71
37	Y	609	CHL	C2C-C3C-C4C	-6.97	101.52	106.49
27	G	611	CLA	C4A-NA-C1A	6.96	109.84	106.71
27	a	406	CLA	C4A-NA-C1A	6.96	109.84	106.71
39	R	622	XAT	C18-C5-C6	-6.96	110.59	122.26
27	R	604	CLA	C4A-NA-C1A	6.96	109.83	106.71
27	r	604	CLA	C4A-NA-C1A	6.96	109.83	106.71
27	G	614	CLA	C4A-NA-C1A	6.96	109.83	106.71
27	C	509	CLA	C4A-NA-C1A	6.95	109.83	106.71
27	g	614	CLA	C4A-NA-C1A	6.95	109.83	106.71
40	S	1623	NEX	C38-C25-C26	-6.95	110.61	122.26
40	s	1623	NEX	C38-C25-C26	-6.95	110.61	122.26
39	r	622	XAT	C18-C5-C6	-6.95	110.62	122.26
27	n	614	CLA	C4A-NA-C1A	6.94	109.83	106.71
27	N	603	CLA	C4A-NA-C1A	6.93	109.82	106.71
39	N	1622	XAT	C38-C25-C26	-6.92	110.66	122.26
39	n	1622	XAT	C38-C25-C26	-6.92	110.66	122.26
27	n	611	CLA	C4A-NA-C1A	6.92	109.82	106.71
27	n	612	CLA	C4A-NA-C1A	6.91	109.81	106.71
37	y	609	CHL	C2C-C3C-C4C	-6.90	101.57	106.49
37	s	607	CHL	C2C-C3C-C4C	-6.90	101.57	106.49
40	r	623	NEX	C38-C25-C26	-6.90	110.69	122.26
27	s	602	CLA	C4A-NA-C1A	6.90	109.81	106.71
37	S	607	CHL	CHD-C1D-ND	-6.90	118.12	124.45
37	S	607	CHL	C2C-C3C-C4C	-6.90	101.57	106.49
27	n	602	CLA	C4A-NA-C1A	6.90	109.81	106.71
40	R	623	NEX	C38-C25-C26	-6.89	110.71	122.26
27	Y	602	CLA	C4A-NA-C1A	6.89	109.81	106.71
27	N	611	CLA	C4A-NA-C1A	6.89	109.80	106.71
27	Y	610	CLA	C4A-NA-C1A	6.89	109.80	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	g	601	CHL	C2C-C3C-C4C	-6.88	101.58	106.49
37	s	607	CHL	CHD-C1D-ND	-6.87	118.14	124.45
40	R	623	NEX	O24-C25-C24	6.87	118.54	113.38
27	y	614	CLA	C4A-NA-C1A	6.84	109.78	106.71
27	n	613	CLA	C4A-NA-C1A	6.81	109.77	106.71
37	r	608	CHL	CHD-C1D-ND	-6.81	118.19	124.45
37	R	608	CHL	CHD-C1D-ND	-6.80	118.20	124.45
27	y	610	CLA	C4A-NA-C1A	6.80	109.76	106.71
40	y	1623	NEX	C38-C25-C26	-6.80	110.87	122.26
40	Y	1623	NEX	C38-C25-C26	-6.79	110.88	122.26
27	N	613	CLA	C4A-NA-C1A	6.78	109.76	106.71
40	r	623	NEX	O24-C25-C24	6.78	118.48	113.38
37	G	601	CHL	C2C-C3C-C4C	-6.77	101.67	106.49
40	N	1623	NEX	C38-C25-C26	-6.77	110.92	122.26
39	y	1622	XAT	C38-C25-C26	-6.76	110.92	122.26
40	y	1623	NEX	O24-C25-C24	6.76	118.46	113.38
27	g	610	CLA	C4A-NA-C1A	6.76	109.75	106.71
37	N	601	CHL	CHD-C1D-ND	-6.76	118.25	124.45
27	A	407	CLA	C4A-NA-C1A	6.75	109.74	106.71
37	n	601	CHL	CHD-C1D-ND	-6.75	118.25	124.45
39	Y	1622	XAT	C38-C25-C26	-6.74	110.96	122.26
27	G	610	CLA	C4A-NA-C1A	6.74	109.74	106.71
27	g	603	CLA	C4A-NA-C1A	6.74	109.73	106.71
27	B	611	CLA	C4A-NA-C1A	6.73	109.73	106.71
27	b	611	CLA	C4A-NA-C1A	6.73	109.73	106.71
40	Y	1623	NEX	O24-C25-C24	6.73	118.44	113.38
40	n	1623	NEX	C38-C25-C26	-6.72	111.00	122.26
27	g	612	CLA	C4A-NA-C1A	6.71	109.72	106.71
27	G	603	CLA	C4A-NA-C1A	6.70	109.72	106.71
27	S	610	CLA	C4A-NA-C1A	6.68	109.71	106.71
27	B	617	CLA	C4A-NA-C1A	6.67	109.71	106.71
39	R	622	XAT	C38-C25-C26	-6.67	111.08	122.26
37	Y	601	CHL	CHD-C1D-ND	-6.65	118.34	124.45
27	s	610	CLA	C4A-NA-C1A	6.65	109.69	106.71
39	r	622	XAT	C38-C25-C26	-6.64	111.12	122.26
37	Y	601	CHL	C2C-C3C-C4C	-6.64	101.76	106.49
27	Y	611	CLA	C4A-NA-C1A	6.64	109.69	106.71
27	a	407	CLA	C4A-NA-C1A	6.64	109.69	106.71
27	y	611	CLA	C4A-NA-C1A	6.64	109.69	106.71
27	Y	614	CLA	C4A-NA-C1A	6.62	109.68	106.71
27	G	612	CLA	C4A-NA-C1A	6.62	109.68	106.71
37	y	601	CHL	CHD-C1D-ND	-6.62	118.37	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	b	617	CLA	C4A-NA-C1A	6.61	109.68	106.71
27	C	505	CLA	C4A-NA-C1A	6.59	109.67	106.71
37	y	601	CHL	C2C-C3C-C4C	-6.59	101.79	106.49
29	C	516	BCR	C24-C23-C22	-6.57	116.30	126.23
29	D	404	BCR	C11-C10-C9	-6.57	117.94	127.31
29	d	404	BCR	C11-C10-C9	-6.57	117.94	127.31
27	B	609	CLA	C4A-NA-C1A	6.56	109.65	106.71
29	c	516	BCR	C24-C23-C22	-6.55	116.33	126.23
39	n	1622	XAT	O24-C25-C24	6.55	118.30	113.38
40	S	1623	NEX	O24-C25-C24	6.55	118.30	113.38
27	b	602	CLA	C4A-NA-C1A	6.54	109.65	106.71
37	g	605	CHL	CHD-C1D-ND	-6.54	118.44	124.45
39	N	1622	XAT	O24-C25-C24	6.53	118.29	113.38
37	g	606	CHL	CHD-C1D-ND	-6.53	118.45	124.45
27	B	602	CLA	C4A-NA-C1A	6.53	109.64	106.71
27	B	615	CLA	C4A-NA-C1A	6.53	109.64	106.71
27	b	615	CLA	C4A-NA-C1A	6.52	109.64	106.71
27	R	611	CLA	C4A-NA-C1A	6.52	109.64	106.71
27	r	611	CLA	C4A-NA-C1A	6.52	109.64	106.71
37	r	606	CHL	CHD-C1D-ND	-6.52	118.46	124.45
27	B	612	CLA	C4A-NA-C1A	6.52	109.64	106.71
27	N	610	CLA	C4A-NA-C1A	6.52	109.64	106.71
27	b	612	CLA	C4A-NA-C1A	6.52	109.64	106.71
27	c	505	CLA	C4A-NA-C1A	6.52	109.64	106.71
39	Y	1622	XAT	C35-C34-C33	-6.52	118.01	127.31
27	b	609	CLA	C4A-NA-C1A	6.51	109.64	106.71
40	s	1623	NEX	O24-C25-C24	6.51	118.27	113.38
37	y	609	CHL	CHD-C1D-ND	-6.50	118.48	124.45
37	G	606	CHL	CHD-C1D-ND	-6.50	118.48	124.45
37	R	606	CHL	CHD-C1D-ND	-6.50	118.48	124.45
29	C	516	BCR	C16-C17-C18	-6.49	118.05	127.31
39	y	1622	XAT	C35-C34-C33	-6.48	118.06	127.31
27	S	614	CLA	C4A-NA-C1A	6.48	109.62	106.71
37	n	609	CHL	CHD-C1D-ND	-6.48	118.50	124.45
37	N	605	CHL	CHD-C1D-ND	-6.47	118.51	124.45
37	G	605	CHL	CHD-C1D-ND	-6.47	118.51	124.45
27	s	614	CLA	C4A-NA-C1A	6.47	109.61	106.71
37	N	609	CHL	CHD-C1D-ND	-6.46	118.52	124.45
37	n	606	CHL	CHD-C1D-ND	-6.46	118.52	124.45
27	G	602	CLA	C4A-NA-C1A	6.45	109.61	106.71
37	Y	609	CHL	CHD-C1D-ND	-6.45	118.53	124.45
37	n	605	CHL	CHD-C1D-ND	-6.45	118.53	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	c	516	BCR	C16-C17-C18	-6.45	118.11	127.31
27	C	507	CLA	C4A-NA-C1A	6.43	109.60	106.71
27	g	602	CLA	C4A-NA-C1A	6.43	109.60	106.71
39	g	1622	XAT	C38-C25-C26	-6.43	111.49	122.26
27	r	603	CLA	C4A-NA-C1A	6.43	109.59	106.71
37	N	606	CHL	CHD-C1D-ND	-6.42	118.56	124.45
27	s	612	CLA	C4A-NA-C1A	6.41	109.59	106.71
39	G	1622	XAT	C38-C25-C26	-6.41	111.52	122.26
27	B	616	CLA	C4A-NA-C1A	6.40	109.58	106.71
27	D	403	CLA	C4A-NA-C1A	6.39	109.58	106.71
27	R	612	CLA	C4A-NA-C1A	6.39	109.58	106.71
27	d	403	CLA	C4A-NA-C1A	6.39	109.58	106.71
29	C	517	BCR	C7-C8-C9	-6.39	116.58	126.23
29	c	517	BCR	C7-C8-C9	-6.38	116.59	126.23
27	c	507	CLA	C4A-NA-C1A	6.38	109.57	106.71
27	n	610	CLA	C4A-NA-C1A	6.38	109.57	106.71
27	S	612	CLA	C4A-NA-C1A	6.37	109.57	106.71
27	B	610	CLA	C4A-NA-C1A	6.35	109.56	106.71
27	c	502	CLA	C4A-NA-C1A	6.34	109.56	106.71
27	G	604	CLA	C4A-NA-C1A	6.33	109.55	106.71
27	g	604	CLA	C4A-NA-C1A	6.33	109.55	106.71
27	R	616	CLA	C4A-NA-C1A	6.32	109.55	106.71
27	b	610	CLA	C4A-NA-C1A	6.31	109.54	106.71
27	r	612	CLA	C4A-NA-C1A	6.30	109.54	106.71
27	r	601	CLA	C4A-NA-C1A	6.30	109.54	106.71
27	b	616	CLA	C4A-NA-C1A	6.29	109.53	106.71
27	S	613	CLA	C4A-NA-C1A	6.28	109.53	106.71
27	s	613	CLA	C4A-NA-C1A	6.28	109.53	106.71
27	C	502	CLA	C4A-NA-C1A	6.26	109.52	106.71
27	R	601	CLA	C4A-NA-C1A	6.26	109.52	106.71
27	R	603	CLA	C4A-NA-C1A	6.25	109.52	106.71
40	G	1623	NEX	C38-C25-C26	-6.24	111.81	122.26
27	b	608	CLA	C4A-NA-C1A	6.23	109.51	106.71
27	s	611	CLA	C4A-NA-C1A	6.23	109.51	106.71
37	S	601	CHL	CHD-C1D-ND	-6.22	118.73	124.45
27	B	608	CLA	C4A-NA-C1A	6.22	109.50	106.71
27	S	611	CLA	C4A-NA-C1A	6.22	109.50	106.71
37	G	608	CHL	CHD-C1D-ND	-6.21	118.75	124.45
27	c	506	CLA	C4A-NA-C1A	6.20	109.49	106.71
40	g	1623	NEX	C38-C25-C26	-6.20	111.87	122.26
27	c	510	CLA	C4A-NA-C1A	6.19	109.49	106.71
27	r	616	CLA	C4A-NA-C1A	6.19	109.49	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	s	601	CHL	CHD-C1D-ND	-6.19	118.77	124.45
37	Y	605	CHL	CHD-C1D-ND	-6.19	118.77	124.45
27	C	510	CLA	C4A-NA-C1A	6.18	109.48	106.71
37	y	605	CHL	CHD-C1D-ND	-6.16	118.79	124.45
27	y	613	CLA	C4A-NA-C1A	6.16	109.48	106.71
37	N	608	CHL	CHD-C1D-ND	-6.15	118.80	124.45
37	n	608	CHL	CHD-C1D-ND	-6.15	118.80	124.45
37	g	608	CHL	CHD-C1D-ND	-6.14	118.81	124.45
27	s	609	CLA	C4A-NA-C1A	6.13	109.46	106.71
27	b	607	CLA	C4A-NA-C1A	6.13	109.46	106.71
27	B	607	CLA	C4A-NA-C1A	6.12	109.46	106.71
37	G	601	CHL	CHD-C1D-ND	-6.11	118.83	124.45
27	S	609	CLA	C4A-NA-C1A	6.11	109.45	106.71
27	y	603	CLA	C4A-NA-C1A	6.09	109.44	106.71
37	g	601	CHL	CHD-C1D-ND	-6.08	118.86	124.45
27	C	506	CLA	C4A-NA-C1A	6.07	109.43	106.71
27	Y	613	CLA	C4A-NA-C1A	6.05	109.42	106.71
27	C	501	CLA	C4A-NA-C1A	6.04	109.42	106.71
27	c	501	CLA	C4A-NA-C1A	6.04	109.42	106.71
27	s	603	CLA	C4A-NA-C1A	6.01	109.41	106.71
39	G	1622	XAT	C18-C5-C6	-6.01	112.18	122.26
27	Y	603	CLA	C4A-NA-C1A	6.01	109.41	106.71
27	S	603	CLA	C4A-NA-C1A	6.01	109.41	106.71
27	g	613	CLA	C4A-NA-C1A	5.99	109.40	106.71
39	g	1622	XAT	C18-C5-C6	-5.98	112.24	122.26
27	G	613	CLA	C4A-NA-C1A	5.98	109.39	106.71
40	G	1623	NEX	C15-C14-C13	-5.98	118.78	127.31
37	R	607	CHL	CHD-C1D-ND	-5.96	118.98	124.45
37	r	607	CHL	CHD-C1D-ND	-5.96	118.98	124.45
39	r	622	XAT	C26-C27-C28	-5.95	113.41	125.99
27	Y	612	CLA	C4A-NA-C1A	5.94	109.38	106.71
39	R	622	XAT	C26-C27-C28	-5.94	113.44	125.99
40	g	1623	NEX	C15-C14-C13	-5.94	118.84	127.31
37	R	607	CHL	O2D-CGD-CBD	5.86	121.68	111.27
27	y	612	CLA	C4A-NA-C1A	5.86	109.34	106.71
29	C	515	BCR	C15-C14-C13	-5.86	118.95	127.31
37	r	607	CHL	O2D-CGD-CBD	5.85	121.66	111.27
29	c	515	BCR	C15-C14-C13	-5.83	118.99	127.31
40	s	1623	NEX	C15-C14-C13	-5.83	119.00	127.31
37	y	606	CHL	CHD-C1D-ND	-5.81	119.11	124.45
39	Y	1622	XAT	C18-C5-C6	-5.80	112.53	122.26
39	y	1622	XAT	C18-C5-C6	-5.80	112.53	122.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	S	1623	NEX	C15-C14-C13	-5.80	119.03	127.31
39	g	1622	XAT	C15-C14-C13	-5.79	119.05	127.31
39	G	1622	XAT	C15-C14-C13	-5.78	119.06	127.31
37	Y	606	CHL	CHD-C1D-ND	-5.77	119.15	124.45
37	N	606	CHL	C3C-C4C-NC	5.77	117.05	110.57
37	n	606	CHL	C3C-C4C-NC	5.77	117.05	110.57
37	y	601	CHL	O2D-CGD-CBD	5.77	121.52	111.27
27	c	503	CLA	C4A-NA-C1A	5.77	109.30	106.71
37	S	608	CHL	C2C-C3C-C4C	-5.73	102.40	106.49
37	G	607	CHL	CHD-C1D-ND	-5.73	119.19	124.45
37	g	607	CHL	CHD-C1D-ND	-5.73	119.19	124.45
37	Y	601	CHL	O2D-CGD-CBD	5.73	121.44	111.27
37	s	608	CHL	C2C-C3C-C4C	-5.71	102.42	106.49
37	Y	608	CHL	CHD-C1D-ND	-5.70	119.22	124.45
37	N	606	CHL	O2D-CGD-CBD	5.68	121.35	111.27
29	H	101	BCR	C16-C17-C18	-5.67	119.22	127.31
37	n	606	CHL	O2D-CGD-CBD	5.66	121.32	111.27
37	y	608	CHL	CHD-C1D-ND	-5.65	119.26	124.45
27	C	503	CLA	C4A-NA-C1A	5.64	109.24	106.71
29	h	101	BCR	C16-C17-C18	-5.64	119.26	127.31
29	c	517	BCR	C11-C10-C9	-5.63	119.27	127.31
39	N	1622	XAT	C18-C5-C6	-5.63	112.82	122.26
29	C	517	BCR	C11-C10-C9	-5.63	119.28	127.31
39	n	1622	XAT	C18-C5-C6	-5.62	112.83	122.26
27	b	603	CLA	C4A-NA-C1A	5.61	109.23	106.71
29	D	404	BCR	C7-C8-C9	-5.60	117.77	126.23
27	B	603	CLA	C4A-NA-C1A	5.60	109.22	106.71
29	d	404	BCR	C7-C8-C9	-5.60	117.77	126.23
27	b	604	CLA	C4A-NA-C1A	5.60	109.22	106.71
29	D	404	BCR	C24-C23-C22	-5.58	117.80	126.23
29	d	404	BCR	C24-C23-C22	-5.58	117.80	126.23
40	Y	1623	NEX	C15-C14-C13	-5.57	119.35	127.31
29	b	620	BCR	C16-C17-C18	-5.56	119.37	127.31
27	B	604	CLA	C4A-NA-C1A	5.56	109.21	106.71
29	C	517	BCR	C15-C14-C13	-5.52	119.44	127.31
29	c	517	BCR	C15-C14-C13	-5.52	119.44	127.31
29	B	620	BCR	C16-C17-C18	-5.52	119.44	127.31
40	y	1623	NEX	C15-C14-C13	-5.51	119.44	127.31
32	c	518	DGD	O3G-C3G-C2G	-5.49	97.65	110.90
32	C	518	DGD	O3G-C3G-C2G	-5.49	97.65	110.90
37	R	606	CHL	C3C-C4C-NC	5.48	116.72	110.57
37	r	606	CHL	C3C-C4C-NC	5.48	116.72	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	r	623	NEX	C15-C14-C13	-5.48	119.49	127.31
40	R	623	NEX	C15-C14-C13	-5.48	119.49	127.31
37	Y	607	CHL	O2D-CGD-CBD	5.47	120.98	111.27
27	B	614	CLA	C4A-NA-C1A	5.46	109.16	106.71
40	G	1623	NEX	C11-C10-C9	-5.46	119.52	127.31
40	g	1623	NEX	C11-C10-C9	-5.46	119.52	127.31
27	b	614	CLA	C4A-NA-C1A	5.45	109.16	106.71
37	y	607	CHL	O2D-CGD-CBD	5.45	120.95	111.27
37	r	608	CHL	C3C-C4C-NC	5.44	116.67	110.57
37	y	605	CHL	C3C-C4C-NC	5.43	116.66	110.57
29	B	620	BCR	C7-C8-C9	-5.42	118.05	126.23
29	b	620	BCR	C7-C8-C9	-5.42	118.05	126.23
37	y	607	CHL	C3C-C4C-NC	5.41	116.64	110.57
29	b	619	BCR	C15-C14-C13	-5.41	119.59	127.31
29	B	619	BCR	C15-C14-C13	-5.41	119.59	127.31
37	Y	607	CHL	C3C-C4C-NC	5.41	116.64	110.57
29	a	411	BCR	C15-C14-C13	-5.40	119.60	127.31
37	R	608	CHL	C3C-C4C-NC	5.39	116.62	110.57
29	A	411	BCR	C15-C14-C13	-5.39	119.61	127.31
37	N	607	CHL	CHD-C1D-ND	-5.39	119.50	124.45
37	Y	605	CHL	C3C-C4C-NC	5.39	116.62	110.57
37	n	607	CHL	CHD-C1D-ND	-5.39	119.50	124.45
37	Y	606	CHL	C3C-C4C-NC	5.35	116.57	110.57
37	y	606	CHL	C3C-C4C-NC	5.34	116.56	110.57
29	C	517	BCR	C24-C23-C22	-5.33	118.18	126.23
29	c	517	BCR	C24-C23-C22	-5.33	118.18	126.23
37	N	601	CHL	O2D-CGD-CBD	5.33	120.74	111.27
37	n	601	CHL	O2D-CGD-CBD	5.31	120.70	111.27
37	S	607	CHL	C1B-CHB-C4A	-5.31	119.60	130.12
37	s	607	CHL	C1B-CHB-C4A	-5.31	119.60	130.12
37	n	605	CHL	O2D-CGD-CBD	5.30	120.69	111.27
36	F	101	HEM	C4D-ND-C1D	5.29	110.54	105.07
39	n	1622	XAT	C15-C14-C13	-5.29	119.76	127.31
37	N	605	CHL	O2D-CGD-CBD	5.29	120.67	111.27
36	f	101	HEM	C4D-ND-C1D	5.29	110.54	105.07
38	S	1620	LUT	C35-C34-C33	-5.27	119.79	127.31
37	g	601	CHL	O2D-CGD-CBD	5.27	120.63	111.27
37	G	601	CHL	O2D-CGD-CBD	5.26	120.62	111.27
27	b	606	CLA	C4A-NA-C1A	5.26	109.07	106.71
38	s	1620	LUT	C35-C34-C33	-5.25	119.81	127.31
37	Y	607	CHL	CHD-C1D-ND	-5.25	119.63	124.45
37	y	607	CHL	CHD-C1D-ND	-5.25	119.63	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	G	605	CHL	O2D-CGD-CBD	5.25	120.59	111.27
37	n	607	CHL	C3C-C4C-NC	5.24	116.45	110.57
39	N	1622	XAT	C15-C14-C13	-5.24	119.83	127.31
37	S	601	CHL	O2D-CGD-CBD	5.24	120.58	111.27
37	N	608	CHL	C3C-C4C-NC	5.24	116.44	110.57
37	N	607	CHL	C3C-C4C-NC	5.23	116.44	110.57
37	g	605	CHL	O2D-CGD-CBD	5.23	120.56	111.27
30	B	621	SQD	O9-S-C6	5.23	113.16	106.94
37	s	601	CHL	O2D-CGD-CBD	5.22	120.54	111.27
37	n	608	CHL	C3C-C4C-NC	5.21	116.41	110.57
30	b	621	SQD	O9-S-C6	5.20	113.12	106.94
29	C	516	BCR	C20-C21-C22	-5.19	119.90	127.31
37	y	608	CHL	C3C-C4C-NC	5.19	116.39	110.57
29	b	618	BCR	C28-C27-C26	-5.19	104.81	114.08
37	r	608	CHL	C3D-C2D-C1D	-5.19	98.75	105.83
27	B	606	CLA	C4A-NA-C1A	5.19	109.04	106.71
37	G	607	CHL	C3C-C4C-NC	5.18	116.38	110.57
29	B	618	BCR	C28-C27-C26	-5.17	104.84	114.08
37	r	607	CHL	C3C-C4C-NC	5.17	116.37	110.57
37	R	607	CHL	C3C-C4C-NC	5.17	116.37	110.57
37	g	607	CHL	C3C-C4C-NC	5.17	116.36	110.57
29	b	618	BCR	C7-C8-C9	-5.17	118.43	126.23
40	n	1623	NEX	C11-C10-C9	-5.16	119.94	127.31
29	c	516	BCR	C20-C21-C22	-5.15	119.96	127.31
40	N	1623	NEX	C11-C10-C9	-5.15	119.96	127.31
37	Y	608	CHL	C3C-C4C-NC	5.14	116.33	110.57
37	R	608	CHL	C3D-C2D-C1D	-5.13	98.83	105.83
27	C	505	CLA	CMB-C2B-C1B	-5.13	120.58	128.46
27	c	505	CLA	CMB-C2B-C1B	-5.13	120.58	128.46
29	c	514	BCR	C15-C14-C13	-5.13	119.99	127.31
29	B	618	BCR	C7-C8-C9	-5.12	118.50	126.23
37	S	607	CHL	O2D-CGD-CBD	5.11	120.34	111.27
37	s	607	CHL	O2D-CGD-CBD	5.10	120.32	111.27
29	C	514	BCR	C15-C14-C13	-5.09	120.05	127.31
37	N	606	CHL	CHD-C4C-C3C	-5.07	117.39	124.84
37	n	606	CHL	CHD-C4C-C3C	-5.07	117.39	124.84
37	G	607	CHL	O2D-CGD-CBD	5.07	120.27	111.27
38	S	1620	LUT	C7-C8-C9	-5.06	118.59	126.23
37	g	607	CHL	O2D-CGD-CBD	5.05	120.25	111.27
37	Y	609	CHL	C3C-C4C-NC	5.04	116.22	110.57
37	n	607	CHL	O2D-CGD-CBD	5.04	120.22	111.27
37	g	606	CHL	C3C-C4C-NC	5.03	116.21	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	s	1620	LUT	C7-C8-C9	-5.03	118.64	126.23
37	N	607	CHL	O2D-CGD-CBD	5.02	120.20	111.27
37	Y	606	CHL	O2D-CGD-CBD	5.01	120.18	111.27
37	y	606	CHL	O2D-CGD-CBD	5.01	120.18	111.27
37	G	606	CHL	C3C-C4C-NC	5.01	116.19	110.57
37	Y	609	CHL	O2D-CGD-CBD	5.01	120.17	111.27
37	y	609	CHL	C3C-C4C-NC	5.01	116.19	110.57
37	y	609	CHL	O2D-CGD-CBD	4.98	120.11	111.27
29	a	411	BCR	C16-C17-C18	-4.97	120.22	127.31
37	N	608	CHL	O2D-CGD-CBD	4.96	120.08	111.27
37	n	608	CHL	O2D-CGD-CBD	4.95	120.06	111.27
29	A	411	BCR	C16-C17-C18	-4.95	120.25	127.31
37	N	609	CHL	O2D-CGD-CBD	4.92	120.01	111.27
37	n	609	CHL	O2D-CGD-CBD	4.92	120.01	111.27
29	c	515	BCR	C11-C10-C9	-4.91	120.30	127.31
37	S	601	CHL	C3C-C4C-NC	4.89	116.06	110.57
29	c	515	BCR	C3-C4-C5	-4.88	105.36	114.08
29	C	515	BCR	C11-C10-C9	-4.88	120.35	127.31
37	N	609	CHL	C3C-C4C-NC	4.87	116.04	110.57
39	n	1622	XAT	C27-C28-C29	-4.87	117.98	125.53
37	s	601	CHL	C3C-C4C-NC	4.87	116.03	110.57
37	n	609	CHL	C3C-C4C-NC	4.87	116.03	110.57
40	N	1623	NEX	C35-C34-C33	-4.86	120.37	127.31
29	C	515	BCR	C3-C4-C5	-4.86	105.39	114.08
40	n	1623	NEX	C15-C14-C13	-4.85	120.39	127.31
37	G	609	CHL	C3C-C4C-NC	4.85	116.00	110.57
37	g	609	CHL	C3C-C4C-NC	4.85	116.00	110.57
37	n	608	CHL	C3D-C2D-C1D	-4.84	99.22	105.83
39	N	1622	XAT	C27-C28-C29	-4.84	118.02	125.53
37	N	608	CHL	C3D-C2D-C1D	-4.84	99.23	105.83
29	C	514	BCR	C16-C17-C18	-4.83	120.41	127.31
40	s	1623	NEX	O24-C25-C38	4.83	120.84	115.06
39	N	1622	XAT	O24-C25-C38	4.83	120.84	115.06
37	Y	606	CHL	CHD-C4C-C3C	-4.83	117.75	124.84
40	g	1623	NEX	C27-C28-C29	-4.82	118.05	125.53
32	c	519	DGD	O3G-C3G-C2G	-4.82	99.28	110.90
37	N	601	CHL	C3C-C4C-NC	4.82	115.97	110.57
37	n	601	CHL	C3C-C4C-NC	4.82	115.97	110.57
39	n	1622	XAT	O24-C25-C38	4.82	120.83	115.06
27	Y	610	CLA	CMB-C2B-C1B	-4.81	121.07	128.46
40	n	1623	NEX	C35-C34-C33	-4.81	120.44	127.31
29	c	514	BCR	C16-C17-C18	-4.81	120.44	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	y	606	CHL	CHD-C4C-C3C	-4.80	117.78	124.84
40	G	1623	NEX	C27-C28-C29	-4.80	118.08	125.53
40	S	1623	NEX	O24-C25-C38	4.80	120.80	115.06
32	C	519	DGD	O3G-C3G-C2G	-4.79	99.33	110.90
40	N	1623	NEX	C15-C14-C13	-4.79	120.47	127.31
37	G	609	CHL	C3D-C2D-C1D	-4.79	99.30	105.83
27	y	610	CLA	CMB-C2B-C1B	-4.78	121.11	128.46
37	g	606	CHL	O2D-CGD-CBD	4.78	119.76	111.27
37	G	606	CHL	O2D-CGD-CBD	4.77	119.75	111.27
37	g	609	CHL	C3D-C2D-C1D	-4.77	99.32	105.83
39	R	622	XAT	C6-C7-C8	-4.77	115.91	125.99
37	N	606	CHL	C3D-C2D-C1D	-4.77	99.32	105.83
39	r	622	XAT	C6-C7-C8	-4.77	115.92	125.99
37	g	608	CHL	C3C-C4C-NC	4.76	115.91	110.57
37	G	608	CHL	C3C-C4C-NC	4.76	115.90	110.57
37	n	606	CHL	C3D-C2D-C1D	-4.75	99.34	105.83
37	s	608	CHL	C1B-CHB-C4A	-4.73	120.74	130.12
27	s	610	CLA	CMB-C2B-C1B	-4.72	121.20	128.46
37	g	601	CHL	C3C-C4C-NC	4.72	115.86	110.57
37	S	606	CHL	CAC-C3C-C4C	4.71	130.93	124.81
37	S	608	CHL	C1B-CHB-C4A	-4.71	120.78	130.12
27	S	610	CLA	CMB-C2B-C1B	-4.71	121.23	128.46
27	d	403	CLA	CMB-C2B-C1B	-4.71	121.23	128.46
37	r	606	CHL	O2D-CGD-CBD	4.70	119.62	111.27
37	y	601	CHL	C3D-C2D-C1D	-4.70	99.42	105.83
40	y	1623	NEX	C27-C28-C29	-4.69	118.25	125.53
32	c	520	DGD	O3G-C3G-C2G	-4.69	99.58	110.90
37	R	606	CHL	O2D-CGD-CBD	4.68	119.59	111.27
37	Y	601	CHL	C3D-C2D-C1D	-4.68	99.44	105.83
32	C	520	DGD	O3G-C3G-C2G	-4.68	99.61	110.90
27	D	403	CLA	CMB-C2B-C1B	-4.68	121.27	128.46
37	y	605	CHL	C3D-C2D-C1D	-4.67	99.46	105.83
37	Y	605	CHL	C3D-C2D-C1D	-4.66	99.47	105.83
40	Y	1623	NEX	C27-C28-C29	-4.66	118.29	125.53
37	s	606	CHL	CAC-C3C-C4C	4.66	130.86	124.81
37	r	608	CHL	CAC-C3C-C4C	4.66	130.86	124.81
37	Y	609	CHL	C3D-C2D-C1D	-4.66	99.47	105.83
37	Y	608	CHL	C3D-C2D-C1D	-4.65	99.48	105.83
37	G	601	CHL	C3C-C4C-NC	4.65	115.78	110.57
37	y	609	CHL	C3D-C2D-C1D	-4.64	99.50	105.83
40	Y	1623	NEX	O24-C25-C38	4.63	120.61	115.06
40	y	1623	NEX	O24-C25-C38	4.63	120.61	115.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	G	605	CHL	C3C-C4C-NC	4.63	115.76	110.57
29	b	618	BCR	C11-C10-C9	-4.63	120.71	127.31
38	n	1620	LUT	C15-C14-C13	-4.63	120.71	127.31
37	R	608	CHL	CAC-C3C-C4C	4.62	130.80	124.81
37	y	608	CHL	C3D-C2D-C1D	-4.62	99.53	105.83
37	Y	601	CHL	C3C-C4C-NC	4.62	115.75	110.57
37	R	606	CHL	CHD-C4C-C3C	-4.61	118.06	124.84
29	B	618	BCR	C11-C10-C9	-4.60	120.74	127.31
38	N	1620	LUT	C15-C14-C13	-4.60	120.74	127.31
37	R	606	CHL	C3D-C2D-C1D	-4.60	99.55	105.83
37	n	608	CHL	CHD-C4C-C3C	-4.60	118.08	124.84
37	g	607	CHL	C3D-C2D-C1D	-4.60	99.56	105.83
29	B	618	BCR	C15-C14-C13	-4.60	120.75	127.31
29	b	618	BCR	C15-C14-C13	-4.60	120.75	127.31
38	G	1620	LUT	C35-C34-C33	-4.59	120.76	127.31
38	g	1620	LUT	C35-C34-C33	-4.59	120.76	127.31
39	R	622	XAT	O4-C5-C18	4.59	120.55	115.06
37	g	605	CHL	C3C-C4C-NC	4.58	115.71	110.57
37	N	608	CHL	CHD-C4C-C3C	-4.58	118.10	124.84
37	n	605	CHL	C3D-C2D-C1D	-4.58	99.58	105.83
39	r	622	XAT	O4-C5-C18	4.58	120.55	115.06
37	n	605	CHL	C3C-C4C-NC	4.58	115.71	110.57
37	r	606	CHL	CHD-C4C-C3C	-4.58	118.11	124.84
37	G	609	CHL	O2D-CGD-CBD	4.58	119.40	111.27
37	g	609	CHL	O2D-CGD-CBD	4.58	119.40	111.27
37	G	607	CHL	C3D-C2D-C1D	-4.58	99.59	105.83
37	s	608	CHL	O2D-CGD-CBD	4.57	119.39	111.27
37	R	608	CHL	O2D-CGD-CBD	4.57	119.39	111.27
37	N	605	CHL	C3C-C4C-NC	4.56	115.69	110.57
37	n	609	CHL	C3D-C2D-C1D	-4.56	99.61	105.83
37	S	608	CHL	C3D-C2D-C1D	-4.56	99.61	105.83
37	r	606	CHL	C3D-C2D-C1D	-4.55	99.62	105.83
37	s	608	CHL	C3D-C2D-C1D	-4.55	99.62	105.83
37	N	605	CHL	C3D-C2D-C1D	-4.55	99.62	105.83
37	N	609	CHL	C3D-C2D-C1D	-4.55	99.62	105.83
37	y	601	CHL	C3C-C4C-NC	4.55	115.67	110.57
37	S	608	CHL	O2D-CGD-CBD	4.54	119.34	111.27
29	b	619	BCR	C24-C23-C22	-4.54	119.37	126.23
40	Y	1623	NEX	C35-C34-C33	-4.54	120.83	127.31
40	y	1623	NEX	C35-C34-C33	-4.54	120.83	127.31
40	n	1623	NEX	O24-C25-C38	4.54	120.49	115.06
37	g	608	CHL	C3D-C2D-C1D	-4.53	99.64	105.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	G	606	CHL	C3D-C2D-C1D	-4.53	99.65	105.83
27	C	508	CLA	CMB-C2B-C1B	-4.53	121.50	128.46
29	C	516	BCR	C33-C5-C6	-4.53	119.44	124.53
29	c	516	BCR	C33-C5-C6	-4.53	119.44	124.53
38	n	1620	LUT	C35-C34-C33	-4.52	120.85	127.31
37	r	608	CHL	O2D-CGD-CBD	4.52	119.31	111.27
38	s	1621	LUT	C35-C34-C33	-4.52	120.85	127.31
29	B	620	BCR	C15-C14-C13	-4.52	120.86	127.31
29	b	620	BCR	C15-C14-C13	-4.52	120.86	127.31
37	s	601	CHL	C3D-C2D-C1D	-4.52	99.67	105.83
37	g	606	CHL	C3D-C2D-C1D	-4.52	99.67	105.83
27	A	405	CLA	CMB-C2B-C1B	-4.51	121.53	128.46
37	S	601	CHL	C3D-C2D-C1D	-4.51	99.68	105.83
37	y	608	CHL	CHD-C4C-C3C	-4.51	118.22	124.84
27	c	508	CLA	CMB-C2B-C1B	-4.50	121.54	128.46
27	C	511	CLA	CMB-C2B-C1B	-4.50	121.54	128.46
27	a	405	CLA	CMB-C2B-C1B	-4.50	121.54	128.46
38	N	1620	LUT	C35-C34-C33	-4.50	120.89	127.31
27	b	612	CLA	CMB-C2B-C1B	-4.50	121.55	128.46
40	N	1623	NEX	O24-C25-C38	4.50	120.44	115.06
37	G	608	CHL	C3D-C2D-C1D	-4.50	99.69	105.83
39	Y	1622	XAT	O24-C25-C38	4.50	120.44	115.06
39	y	1622	XAT	O24-C25-C38	4.50	120.44	115.06
29	B	619	BCR	C24-C23-C22	-4.49	119.45	126.23
37	Y	606	CHL	C3D-C2D-C1D	-4.49	99.70	105.83
37	y	605	CHL	CHD-C4C-C3C	-4.49	118.24	124.84
37	y	606	CHL	C3D-C2D-C1D	-4.48	99.72	105.83
37	Y	605	CHL	CHD-C4C-C3C	-4.48	118.26	124.84
27	B	612	CLA	CMB-C2B-C1B	-4.48	121.58	128.46
38	S	1621	LUT	C35-C34-C33	-4.47	120.93	127.31
29	b	619	BCR	C20-C21-C22	-4.47	120.93	127.31
37	Y	608	CHL	CHD-C4C-C3C	-4.47	118.27	124.84
27	A	407	CLA	CMB-C2B-C1B	-4.47	121.60	128.46
40	s	1623	NEX	C27-C28-C29	-4.47	118.60	125.53
29	B	619	BCR	C20-C21-C22	-4.46	120.94	127.31
29	C	515	BCR	C7-C8-C9	-4.46	119.50	126.23
27	c	511	CLA	CMB-C2B-C1B	-4.45	121.62	128.46
40	S	1623	NEX	C27-C28-C29	-4.45	118.63	125.53
37	G	605	CHL	C3D-C2D-C1D	-4.44	99.77	105.83
27	a	407	CLA	CMB-C2B-C1B	-4.44	121.64	128.46
29	C	517	BCR	C20-C21-C22	-4.44	120.98	127.31
29	c	517	BCR	C20-C21-C22	-4.44	120.98	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	c	515	BCR	C7-C8-C9	-4.43	119.53	126.23
27	c	506	CLA	CMB-C2B-C1B	-4.43	121.65	128.46
37	n	607	CHL	C3D-C2D-C1D	-4.43	99.78	105.83
27	C	506	CLA	CMB-C2B-C1B	-4.43	121.66	128.46
39	N	1622	XAT	C6-C7-C8	-4.42	116.64	125.99
29	b	618	BCR	C33-C5-C6	-4.40	119.59	124.53
37	N	607	CHL	C3D-C2D-C1D	-4.40	99.83	105.83
37	g	605	CHL	C3D-C2D-C1D	-4.40	99.83	105.83
37	R	607	CHL	C3D-C2D-C1D	-4.39	99.84	105.83
37	r	607	CHL	C3D-C2D-C1D	-4.39	99.84	105.83
29	C	515	BCR	C24-C23-C22	-4.39	119.60	126.23
29	B	618	BCR	C33-C5-C6	-4.39	119.60	124.53
38	Y	1621	LUT	C15-C14-C13	-4.39	121.05	127.31
38	y	1621	LUT	C15-C14-C13	-4.39	121.05	127.31
39	n	1622	XAT	C6-C7-C8	-4.38	116.73	125.99
37	Y	608	CHL	O2D-CGD-CBD	4.37	119.03	111.27
37	y	608	CHL	O2D-CGD-CBD	4.37	119.03	111.27
29	c	515	BCR	C24-C23-C22	-4.37	119.63	126.23
40	R	623	NEX	C27-C28-C29	-4.37	118.75	125.53
29	B	619	BCR	C16-C17-C18	-4.37	121.08	127.31
29	b	619	BCR	C16-C17-C18	-4.36	121.08	127.31
40	N	1623	NEX	C27-C28-C29	-4.36	118.76	125.53
37	Y	609	CHL	CHD-C4C-C3C	-4.36	118.43	124.84
35	S	2630	LHG	O4-P-O5	4.36	133.79	112.24
35	s	2630	LHG	O4-P-O5	4.35	133.76	112.24
37	S	607	CHL	C3D-C2D-C1D	-4.35	99.89	105.83
37	g	601	CHL	C3D-C2D-C1D	-4.35	99.90	105.83
37	s	607	CHL	C3D-C2D-C1D	-4.34	99.90	105.83
37	G	601	CHL	C3D-C2D-C1D	-4.34	99.90	105.83
40	r	623	NEX	C27-C28-C29	-4.34	118.79	125.53
40	n	1623	NEX	C27-C28-C29	-4.34	118.80	125.53
37	y	609	CHL	CHD-C4C-C3C	-4.34	118.47	124.84
40	R	623	NEX	O24-C25-C38	4.33	120.25	115.06
37	s	606	CHL	C3C-C4C-NC	4.33	115.42	110.57
34	D	405	PL9	C7-C3-C4	4.32	120.39	116.88
39	Y	1622	XAT	C7-C8-C9	-4.32	118.83	125.53
40	r	623	NEX	O24-C25-C38	4.32	120.23	115.06
27	C	510	CLA	CMB-C2B-C1B	-4.31	121.83	128.46
37	S	606	CHL	C3C-C4C-NC	4.31	115.41	110.57
37	g	601	CHL	CHD-C4C-C3C	-4.30	118.52	124.84
29	c	514	BCR	C11-C10-C9	-4.30	121.17	127.31
39	y	1622	XAT	C7-C8-C9	-4.29	118.87	125.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	d	408	LHG	O4-P-O5	4.29	133.45	112.24
37	G	608	CHL	O2D-CGD-CBD	4.28	118.88	111.27
37	g	608	CHL	O2D-CGD-CBD	4.28	118.88	111.27
29	C	514	BCR	C11-C10-C9	-4.28	121.20	127.31
29	b	618	BCR	C24-C23-C22	-4.28	119.77	126.23
35	D	408	LHG	O4-P-O5	4.28	133.39	112.24
27	c	510	CLA	CMB-C2B-C1B	-4.28	121.89	128.46
35	g	2630	LHG	O4-P-O5	4.27	133.37	112.24
37	G	601	CHL	CHD-C4C-C3C	-4.27	118.56	124.84
37	S	606	CHL	O2D-CGD-CBD	4.27	118.86	111.27
35	y	2630	LHG	O4-P-O5	4.27	133.36	112.24
37	s	606	CHL	O2D-CGD-CBD	4.27	118.86	111.27
35	Y	2630	LHG	O4-P-O5	4.27	133.35	112.24
37	N	601	CHL	C3D-C2D-C1D	-4.27	100.01	105.83
35	G	2630	LHG	O4-P-O5	4.26	133.32	112.24
37	S	606	CHL	C3D-C2D-C1D	-4.26	100.02	105.83
37	s	606	CHL	C3D-C2D-C1D	-4.26	100.02	105.83
27	G	610	CLA	CMB-C2B-C1B	-4.26	121.92	128.46
35	R	2630	LHG	O4-P-O5	4.26	133.28	112.24
27	c	513	CLA	CMB-C2B-C1B	-4.26	121.92	128.46
37	y	607	CHL	CHD-C4C-C3C	-4.25	118.59	124.84
37	n	601	CHL	C3D-C2D-C1D	-4.25	100.03	105.83
35	r	2630	LHG	O4-P-O5	4.25	133.27	112.24
37	R	606	CHL	C2D-C1D-ND	4.25	113.24	110.10
29	B	618	BCR	C24-C23-C22	-4.25	119.81	126.23
27	B	604	CLA	CMB-C2B-C1B	-4.25	121.93	128.46
35	D	409	LHG	O4-P-O5	4.25	133.25	112.24
35	d	409	LHG	O4-P-O5	4.25	133.23	112.24
39	y	1622	XAT	C31-C30-C29	-4.24	121.25	127.31
27	C	509	CLA	CMB-C2B-C1B	-4.24	121.94	128.46
27	b	604	CLA	CMB-C2B-C1B	-4.24	121.94	128.46
27	B	617	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
27	b	617	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
35	l	101	LHG	O4-P-O5	4.24	133.18	112.24
34	d	405	PL9	C7-C3-C4	4.23	120.32	116.88
27	C	513	CLA	CMB-C2B-C1B	-4.23	121.96	128.46
37	Y	607	CHL	CHD-C4C-C3C	-4.23	118.62	124.84
35	L	101	LHG	O4-P-O5	4.23	133.14	112.24
39	Y	1622	XAT	C31-C30-C29	-4.23	121.28	127.31
29	C	516	BCR	C7-C8-C9	-4.23	119.85	126.23
37	n	607	CHL	CHD-C4C-C3C	-4.22	118.63	124.84
37	r	608	CHL	C2D-C1D-ND	4.22	113.21	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	g	610	CLA	CMB-C2B-C1B	-4.22	121.98	128.46
35	D	410	LHG	O4-P-O5	4.21	133.07	112.24
35	d	410	LHG	O4-P-O5	4.21	133.07	112.24
29	c	516	BCR	C7-C8-C9	-4.21	119.87	126.23
38	N	1621	LUT	C15-C14-C13	-4.21	121.30	127.31
38	n	1621	LUT	C15-C14-C13	-4.21	121.31	127.31
29	a	411	BCR	C33-C5-C6	-4.20	119.81	124.53
29	A	411	BCR	C7-C8-C9	-4.20	119.89	126.23
37	r	606	CHL	C2D-C1D-ND	4.20	113.20	110.10
37	r	607	CHL	CHD-C4C-C3C	-4.19	118.67	124.84
27	C	502	CLA	CMB-C2B-C1B	-4.19	122.02	128.46
37	Y	607	CHL	C3D-C2D-C1D	-4.18	100.12	105.83
27	c	509	CLA	CMB-C2B-C1B	-4.18	122.03	128.46
29	B	619	BCR	C11-C10-C9	-4.18	121.34	127.31
37	y	607	CHL	C3D-C2D-C1D	-4.18	100.12	105.83
37	N	607	CHL	CHD-C4C-C3C	-4.18	118.69	124.84
37	R	608	CHL	C2D-C1D-ND	4.18	113.19	110.10
40	g	1623	NEX	C35-C34-C33	-4.18	121.34	127.31
30	a	418	SQD	O7-S-C6	4.18	111.91	106.94
29	a	411	BCR	C7-C8-C9	-4.18	119.92	126.23
27	c	502	CLA	CMB-C2B-C1B	-4.18	122.04	128.46
39	G	1622	XAT	C31-C30-C29	-4.17	121.35	127.31
40	G	1623	NEX	C35-C34-C33	-4.17	121.36	127.31
37	R	607	CHL	CHD-C4C-C3C	-4.17	118.72	124.84
29	b	619	BCR	C11-C10-C9	-4.17	121.36	127.31
30	A	418	SQD	O7-S-C6	4.16	111.89	106.94
37	y	605	CHL	O2D-CGD-CBD	4.16	118.66	111.27
35	N	2630	LHG	O4-P-O5	4.15	132.78	112.24
35	n	2630	LHG	O4-P-O5	4.15	132.78	112.24
29	A	411	BCR	C33-C5-C6	-4.15	119.87	124.53
37	n	609	CHL	CHD-C4C-C3C	-4.15	118.74	124.84
37	Y	605	CHL	O2D-CGD-CBD	4.14	118.63	111.27
39	g	1622	XAT	C31-C30-C29	-4.14	121.40	127.31
37	g	606	CHL	CAC-C3C-C4C	4.14	130.18	124.81
37	N	609	CHL	CHD-C4C-C3C	-4.14	118.76	124.84
37	g	605	CHL	C1B-CHB-C4A	-4.13	121.93	130.12
37	y	607	CHL	CAC-C3C-C4C	4.12	130.15	124.81
37	G	605	CHL	C1B-CHB-C4A	-4.12	121.96	130.12
37	Y	605	CHL	C2D-C1D-ND	4.12	113.14	110.10
37	Y	607	CHL	CAC-C3C-C4C	4.11	130.15	124.81
29	c	517	BCR	C33-C5-C6	-4.11	119.91	124.53
27	A	410	CLA	CMB-C2B-C1B	-4.10	122.16	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	410	CLA	CMB-C2B-C1B	-4.10	122.16	128.46
27	C	505	CLA	CMB-C2B-C3B	4.10	132.34	124.68
27	c	505	CLA	CMB-C2B-C3B	4.10	132.34	124.68
39	R	622	XAT	C35-C15-C14	-4.09	115.09	123.47
37	s	601	CHL	CHD-C4C-C3C	-4.09	118.83	124.84
37	y	605	CHL	C2D-C1D-ND	4.09	113.12	110.10
39	r	622	XAT	C35-C15-C14	-4.09	115.10	123.47
37	G	606	CHL	CAC-C3C-C4C	4.09	130.11	124.81
39	Y	1622	XAT	C26-C27-C28	-4.09	117.35	125.99
27	a	406	CLA	CMB-C2B-C1B	-4.09	122.18	128.46
29	C	517	BCR	C33-C5-C6	-4.08	119.94	124.53
27	A	406	CLA	CMB-C2B-C1B	-4.08	122.20	128.46
27	b	613	CLA	CMB-C2B-C1B	-4.08	122.20	128.46
37	g	606	CHL	CHD-C4C-C3C	-4.08	118.85	124.84
39	y	1622	XAT	C26-C27-C28	-4.08	117.38	125.99
37	G	607	CHL	CHD-C4C-C3C	-4.07	118.85	124.84
37	S	601	CHL	CHD-C4C-C3C	-4.07	118.86	124.84
27	g	602	CLA	CMB-C2B-C1B	-4.07	122.21	128.46
27	s	613	CLA	CMB-C2B-C1B	-4.07	122.22	128.46
37	n	606	CHL	C2D-C1D-ND	4.06	113.10	110.10
38	n	1621	LUT	C35-C34-C33	-4.06	121.51	127.31
38	N	1621	LUT	C35-C34-C33	-4.06	121.52	127.31
37	G	606	CHL	CHD-C4C-C3C	-4.06	118.88	124.84
37	g	607	CHL	CHD-C4C-C3C	-4.05	118.88	124.84
27	G	602	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
27	B	608	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
37	g	607	CHL	C2D-C1D-ND	4.05	113.09	110.10
27	S	613	CLA	CMB-C2B-C1B	-4.04	122.25	128.46
37	s	607	CHL	C3C-C4C-NC	4.04	115.10	110.57
32	H	102	DGD	O3G-C3G-C2G	-4.04	101.16	110.90
27	B	609	CLA	CMB-C2B-C1B	-4.03	122.26	128.46
32	h	102	DGD	O3G-C3G-C2G	-4.03	101.17	110.90
29	d	404	BCR	C33-C5-C6	-4.03	120.00	124.53
27	B	613	CLA	CMB-C2B-C1B	-4.03	122.27	128.46
37	G	607	CHL	C2D-C1D-ND	4.03	113.07	110.10
29	h	101	BCR	C20-C21-C22	-4.03	121.56	127.31
29	d	404	BCR	C38-C26-C25	-4.03	120.01	124.53
27	b	609	CLA	CMB-C2B-C1B	-4.02	122.28	128.46
37	g	607	CHL	C3B-C4B-NB	4.02	114.41	109.21
29	B	618	BCR	C20-C21-C22	-4.01	121.58	127.31
29	b	618	BCR	C20-C21-C22	-4.01	121.58	127.31
37	N	606	CHL	C2D-C1D-ND	4.01	113.06	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	g	1622	XAT	C26-C27-C28	-4.01	117.51	125.99
29	H	101	BCR	C20-C21-C22	-4.01	121.59	127.31
27	y	604	CLA	CMB-C2B-C1B	-4.01	122.31	128.46
29	D	404	BCR	C38-C26-C25	-4.01	120.03	124.53
39	G	1622	XAT	C26-C27-C28	-4.01	117.52	125.99
37	S	607	CHL	C3C-C4C-NC	4.00	115.06	110.57
37	s	608	CHL	C4A-NA-C1A	4.00	108.51	106.71
29	D	404	BCR	C16-C17-C18	-4.00	121.60	127.31
27	b	608	CLA	CMB-C2B-C1B	-4.00	122.32	128.46
29	D	404	BCR	C33-C5-C6	-4.00	120.04	124.53
38	y	1621	LUT	C21-C26-C27	-3.99	107.65	112.70
29	H	101	BCR	C24-C23-C22	-3.99	120.20	126.23
39	R	622	XAT	C35-C34-C33	-3.99	121.61	127.31
29	d	404	BCR	C16-C17-C18	-3.98	121.62	127.31
37	G	607	CHL	C3B-C4B-NB	3.98	114.35	109.21
38	Y	1621	LUT	C21-C26-C27	-3.97	107.68	112.70
27	Y	604	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
27	r	601	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
27	R	601	CLA	CMB-C2B-C1B	-3.97	122.37	128.46
37	G	607	CHL	CAC-C3C-C4C	3.97	129.96	124.81
39	Y	1622	XAT	C11-C10-C9	-3.96	121.66	127.31
29	h	101	BCR	C24-C23-C22	-3.96	120.25	126.23
37	Y	608	CHL	C2D-C1D-ND	3.96	113.02	110.10
27	c	512	CLA	CMB-C2B-C1B	-3.96	122.38	128.46
37	S	608	CHL	C4A-NA-C1A	3.95	108.48	106.71
37	g	607	CHL	CAC-C3C-C4C	3.95	129.94	124.81
27	C	512	CLA	CMB-C2B-C1B	-3.95	122.39	128.46
39	r	622	XAT	C35-C34-C33	-3.94	121.68	127.31
27	N	604	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
39	y	1622	XAT	C11-C10-C9	-3.94	121.69	127.31
27	S	603	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
39	r	622	XAT	O24-C25-C38	3.94	119.78	115.06
37	n	609	CHL	C3B-C4B-NB	3.94	114.30	109.21
38	R	620	LUT	C15-C14-C13	-3.92	121.72	127.31
38	r	620	LUT	C15-C14-C13	-3.92	121.72	127.31
30	B	621	SQD	O7-S-C6	3.92	111.60	106.94
30	b	621	SQD	O7-S-C6	3.91	111.59	106.94
27	d	403	CLA	CMB-C2B-C3B	3.91	132.00	124.68
27	n	604	CLA	CMB-C2B-C1B	-3.91	122.45	128.46
37	n	608	CHL	C2D-C1D-ND	3.91	112.99	110.10
37	r	607	CHL	CAC-C3C-C4C	3.91	129.88	124.81
29	a	411	BCR	C11-C10-C9	-3.91	121.73	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	R	607	CHL	CAC-C3C-C4C	3.90	129.88	124.81
37	N	608	CHL	C2D-C1D-ND	3.90	112.98	110.10
27	s	603	CLA	CMB-C2B-C1B	-3.90	122.47	128.46
37	R	606	CHL	C1D-ND-C4D	-3.90	103.56	106.33
37	y	608	CHL	C2D-C1D-ND	3.90	112.98	110.10
37	y	605	CHL	C1D-ND-C4D	-3.90	103.57	106.33
37	Y	605	CHL	C3B-C4B-NB	3.89	114.24	109.21
37	g	608	CHL	CHD-C4C-C3C	-3.88	119.13	124.84
37	N	609	CHL	C3B-C4B-NB	3.88	114.23	109.21
29	H	101	BCR	C7-C8-C9	-3.88	120.37	126.23
29	h	101	BCR	C7-C8-C9	-3.88	120.37	126.23
38	y	1621	LUT	C35-C34-C33	-3.88	121.78	127.31
39	R	622	XAT	O24-C25-C38	3.88	119.70	115.06
37	G	608	CHL	CHD-C4C-C3C	-3.88	119.14	124.84
27	D	403	CLA	CMB-C2B-C3B	3.87	131.92	124.68
37	R	606	CHL	CAC-C3C-C4C	3.87	129.83	124.81
37	r	606	CHL	CAC-C3C-C4C	3.87	129.83	124.81
37	Y	605	CHL	C1D-ND-C4D	-3.86	103.59	106.33
40	y	1623	NEX	C11-C10-C9	-3.86	121.80	127.31
40	Y	1623	NEX	C11-C10-C9	-3.86	121.80	127.31
27	s	604	CLA	CMB-C2B-C1B	-3.86	122.54	128.46
37	n	607	CHL	CAC-C3C-C4C	3.85	129.81	124.81
38	Y	1621	LUT	C35-C34-C33	-3.85	121.81	127.31
29	A	411	BCR	C11-C10-C9	-3.85	121.81	127.31
37	r	606	CHL	C1D-ND-C4D	-3.84	103.60	106.33
37	y	609	CHL	C3B-C4B-NB	3.84	114.18	109.21
37	N	607	CHL	CAC-C3C-C4C	3.84	129.79	124.81
27	r	604	CLA	CMB-C2B-C1B	-3.83	122.57	128.46
37	y	605	CHL	C3B-C4B-NB	3.83	114.16	109.21
29	B	619	BCR	C33-C5-C6	-3.82	120.23	124.53
29	b	619	BCR	C33-C5-C6	-3.82	120.23	124.53
37	Y	601	CHL	CHD-C4C-C3C	-3.82	119.23	124.84
37	Y	606	CHL	CAC-C3C-C4C	3.82	129.76	124.81
37	y	606	CHL	CAC-C3C-C4C	3.82	129.76	124.81
27	B	605	CLA	CMB-C2B-C1B	-3.81	122.60	128.46
27	b	605	CLA	CMB-C2B-C1B	-3.81	122.60	128.46
27	S	604	CLA	CMB-C2B-C1B	-3.81	122.60	128.46
37	Y	609	CHL	C3B-C4B-NB	3.81	114.14	109.21
27	R	604	CLA	CMB-C2B-C1B	-3.81	122.61	128.46
29	c	517	BCR	C16-C17-C18	-3.81	121.87	127.31
27	B	610	CLA	CMB-C2B-C1B	-3.80	122.62	128.46
37	y	601	CHL	CHD-C4C-C3C	-3.80	119.26	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	s	1623	NEX	C11-C10-C9	-3.80	121.89	127.31
27	s	610	CLA	CMB-C2B-C3B	3.80	131.78	124.68
40	S	1623	NEX	C11-C10-C9	-3.80	121.89	127.31
27	C	504	CLA	CMB-C2B-C1B	-3.79	122.63	128.46
27	c	504	CLA	CMB-C2B-C1B	-3.79	122.63	128.46
37	s	601	CHL	CAC-C3C-C4C	3.79	129.73	124.81
37	n	601	CHL	CHD-C4C-C3C	-3.79	119.27	124.84
30	B	621	SQD	O9-S-O7	-3.79	100.84	113.95
29	B	618	BCR	C16-C17-C18	-3.79	121.91	127.31
29	b	618	BCR	C16-C17-C18	-3.79	121.91	127.31
27	R	610	CLA	CMB-C2B-C1B	-3.78	122.65	128.46
30	b	621	SQD	O9-S-O7	-3.78	100.86	113.95
30	A	418	SQD	O47-C7-C8	3.78	119.65	111.50
30	a	418	SQD	O9-S-O7	-3.78	100.87	113.95
30	A	418	SQD	O9-S-O7	-3.78	100.88	113.95
29	C	517	BCR	C16-C17-C18	-3.78	121.92	127.31
38	Y	1620	LUT	C18-C5-C6	-3.77	120.29	124.53
38	y	1620	LUT	C18-C5-C6	-3.77	120.29	124.53
37	N	601	CHL	CHD-C4C-C3C	-3.77	119.29	124.84
29	c	514	BCR	C24-C23-C22	-3.77	120.53	126.23
38	N	1620	LUT	C8-C7-C6	-3.77	116.60	127.20
29	c	516	BCR	C15-C14-C13	-3.77	121.93	127.31
27	b	610	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
37	S	601	CHL	CAC-C3C-C4C	3.77	129.70	124.81
27	N	614	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
27	n	610	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
27	n	614	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
30	a	418	SQD	O47-C7-C8	3.77	119.62	111.50
28	a	408	PHO	CMC-C2C-C3C	3.77	132.04	124.94
40	r	623	NEX	C11-C10-C9	-3.77	121.93	127.31
29	B	619	BCR	C8-C7-C6	-3.76	116.64	127.20
38	n	1620	LUT	C8-C7-C6	-3.76	116.64	127.20
27	r	610	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
37	y	608	CHL	C3B-C4B-NB	3.76	114.07	109.21
29	b	619	BCR	C8-C7-C6	-3.76	116.65	127.20
37	G	601	CHL	C3B-C4B-NB	3.76	114.06	109.21
29	C	516	BCR	C15-C14-C13	-3.75	121.95	127.31
27	S	610	CLA	CMB-C2B-C3B	3.75	131.70	124.68
29	C	514	BCR	C24-C23-C22	-3.75	120.56	126.23
37	n	606	CHL	C1D-ND-C4D	-3.75	103.67	106.33
29	C	517	BCR	C38-C26-C25	-3.75	120.32	124.53
38	G	1621	LUT	C35-C34-C33	-3.75	121.97	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	R	623	NEX	C11-C10-C9	-3.74	121.97	127.31
27	n	613	CLA	CMB-C2B-C1B	-3.74	122.72	128.46
37	g	608	CHL	C3B-C4B-NB	3.74	114.04	109.21
37	n	605	CHL	C3B-C4B-NB	3.74	114.04	109.21
28	A	408	PHO	CMC-C2C-C3C	3.74	131.99	124.94
37	G	605	CHL	CHD-C4C-C3C	-3.74	119.35	124.84
38	g	1621	LUT	C35-C34-C33	-3.73	121.98	127.31
27	y	611	CLA	CMB-C2B-C1B	-3.73	122.73	128.46
27	N	610	CLA	CMB-C2B-C1B	-3.73	122.73	128.46
29	c	517	BCR	C38-C26-C25	-3.73	120.34	124.53
37	g	601	CHL	C3B-C4B-NB	3.73	114.03	109.21
37	Y	606	CHL	C2D-C1D-ND	3.72	112.85	110.10
37	y	606	CHL	C2D-C1D-ND	3.72	112.85	110.10
29	A	411	BCR	C20-C21-C22	-3.72	122.00	127.31
29	a	411	BCR	C20-C21-C22	-3.72	122.00	127.31
37	Y	608	CHL	C3B-C4B-NB	3.72	114.02	109.21
39	G	1622	XAT	C6-C7-C8	-3.72	118.13	125.99
27	c	513	CLA	CMB-C2B-C3B	3.72	131.63	124.68
27	s	602	CLA	CMB-C2B-C1B	-3.72	122.75	128.46
39	g	1622	XAT	C6-C7-C8	-3.72	118.13	125.99
29	H	101	BCR	C10-C11-C12	-3.71	111.62	123.22
27	Y	611	CLA	CMB-C2B-C1B	-3.71	122.76	128.46
37	G	608	CHL	C3B-C4B-NB	3.71	114.01	109.21
37	G	609	CHL	CHD-C4C-C3C	-3.71	119.38	124.84
37	g	609	CHL	CHD-C4C-C3C	-3.71	119.38	124.84
27	C	513	CLA	CMB-C2B-C3B	3.71	131.62	124.68
37	N	605	CHL	C3B-C4B-NB	3.71	114.00	109.21
27	n	611	CLA	O2D-CGD-O1D	-3.71	116.59	123.84
28	A	409	PHO	CMB-C2B-C3B	3.71	131.61	124.68
29	h	101	BCR	C10-C11-C12	-3.71	111.65	123.22
30	a	412	SQD	O9-S-O7	-3.70	101.13	113.95
38	G	1621	LUT	C21-C26-C27	-3.70	108.02	112.70
27	N	613	CLA	CMB-C2B-C1B	-3.70	122.77	128.46
37	s	601	CHL	C3B-C4B-NB	3.70	114.00	109.21
37	g	605	CHL	CHD-C4C-C3C	-3.70	119.40	124.84
27	N	611	CLA	O2D-CGD-O1D	-3.70	116.61	123.84
37	n	609	CHL	C2D-C1D-ND	3.69	112.83	110.10
32	C	520	DGD	O6D-C1D-O3G	-3.69	101.23	109.97
37	N	605	CHL	CHD-C4C-C3C	-3.69	119.42	124.84
27	S	612	CLA	CMB-C2B-C1B	-3.69	122.79	128.46
37	g	609	CHL	C3B-C4B-NB	3.69	113.98	109.21
27	S	602	CLA	CMB-C2B-C1B	-3.69	122.80	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	N	606	CHL	C1D-ND-C4D	-3.69	103.72	106.33
38	g	1621	LUT	C21-C26-C27	-3.69	108.04	112.70
39	N	1622	XAT	C15-C35-C34	-3.69	115.92	123.47
27	b	613	CLA	CMB-C2B-C3B	3.69	131.57	124.68
29	H	101	BCR	C15-C14-C13	-3.68	122.05	127.31
29	h	101	BCR	C15-C14-C13	-3.68	122.05	127.31
32	c	520	DGD	O6D-C1D-O3G	-3.68	101.25	109.97
30	A	412	SQD	O9-S-O7	-3.68	101.22	113.95
37	S	601	CHL	C3B-C4B-NB	3.67	113.96	109.21
37	y	609	CHL	C2D-C1D-ND	3.67	112.81	110.10
30	a	412	SQD	O7-S-C6	3.67	111.30	106.94
28	a	409	PHO	CMB-C2B-C3B	3.67	131.54	124.68
37	Y	609	CHL	C2D-C1D-ND	3.67	112.81	110.10
30	A	412	SQD	O7-S-C6	3.67	111.30	106.94
37	R	607	CHL	C3B-C4B-NB	3.66	113.95	109.21
37	r	607	CHL	C3B-C4B-NB	3.66	113.94	109.21
27	a	407	CLA	CMB-C2B-C3B	3.66	131.52	124.68
27	c	506	CLA	CMB-C2B-C3B	3.66	131.52	124.68
27	s	612	CLA	CMB-C2B-C1B	-3.66	122.84	128.46
37	n	605	CHL	CHD-C4C-C3C	-3.65	119.47	124.84
27	s	609	CLA	CMB-C2B-C1B	-3.65	122.85	128.46
37	N	608	CHL	C1D-ND-C4D	-3.65	103.74	106.33
37	n	608	CHL	C1D-ND-C4D	-3.65	103.74	106.33
39	N	1622	XAT	C26-C27-C28	-3.65	118.28	125.99
37	N	609	CHL	C2D-C1D-ND	3.65	112.79	110.10
38	S	1620	LUT	C11-C10-C9	-3.65	122.11	127.31
27	Y	610	CLA	CMB-C2B-C3B	3.65	131.50	124.68
38	n	1621	LUT	C8-C7-C6	-3.64	116.97	127.20
37	G	609	CHL	C3B-C4B-NB	3.64	113.92	109.21
37	Y	601	CHL	C2D-C1D-ND	3.64	112.79	110.10
39	n	1622	XAT	C15-C35-C34	-3.64	116.02	123.47
27	S	609	CLA	CMB-C2B-C1B	-3.64	122.87	128.46
38	Y	1620	LUT	C35-C34-C33	-3.64	122.12	127.31
38	y	1620	LUT	C35-C34-C33	-3.64	122.12	127.31
37	n	607	CHL	C3B-C4B-NB	3.64	113.92	109.21
27	A	407	CLA	CMB-C2B-C3B	3.64	131.48	124.68
39	n	1622	XAT	C26-C27-C28	-3.64	118.30	125.99
40	R	623	NEX	C26-C27-C28	-3.63	118.31	125.99
37	N	607	CHL	C3B-C4B-NB	3.63	113.90	109.21
27	B	613	CLA	CMB-C2B-C3B	3.63	131.47	124.68
27	C	511	CLA	CMB-C2B-C3B	3.63	131.47	124.68
32	C	519	DGD	O6D-C1D-O3G	-3.63	101.39	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	y	607	CHL	C3B-C4B-NB	3.63	113.90	109.21
27	g	613	CLA	CMB-C2B-C1B	-3.63	122.89	128.46
27	S	611	CLA	CMB-C2B-C1B	-3.62	122.89	128.46
27	s	611	CLA	CMB-C2B-C1B	-3.62	122.89	128.46
27	C	506	CLA	CMB-C2B-C3B	3.62	131.46	124.68
37	G	607	CHL	C1D-ND-C4D	-3.62	103.76	106.33
27	G	613	CLA	CMB-C2B-C1B	-3.62	122.90	128.46
32	c	519	DGD	O6D-C1D-O3G	-3.62	101.40	109.97
37	Y	608	CHL	C1D-ND-C4D	-3.62	103.77	106.33
38	N	1621	LUT	C8-C7-C6	-3.62	117.04	127.20
37	r	608	CHL	CHD-C4C-C3C	-3.62	119.52	124.84
29	d	404	BCR	C20-C21-C22	-3.62	122.15	127.31
37	Y	607	CHL	C3B-C4B-NB	3.62	113.88	109.21
27	C	510	CLA	CMB-C2B-C3B	3.61	131.44	124.68
40	r	623	NEX	C26-C27-C28	-3.61	118.35	125.99
27	A	406	CLA	CMB-C2B-C3B	3.61	131.44	124.68
27	c	510	CLA	CMB-C2B-C3B	3.61	131.44	124.68
27	a	405	CLA	CMB-C2B-C3B	3.61	131.43	124.68
27	y	610	CLA	CMB-C2B-C3B	3.61	131.43	124.68
38	g	1620	LUT	C7-C8-C9	-3.61	120.78	126.23
38	G	1620	LUT	C7-C8-C9	-3.61	120.78	126.23
37	Y	606	CHL	C1D-ND-C4D	-3.61	103.77	106.33
37	y	606	CHL	C1D-ND-C4D	-3.61	103.77	106.33
27	A	405	CLA	CMB-C2B-C3B	3.61	131.43	124.68
27	r	613	CLA	CMB-C2B-C1B	-3.61	122.92	128.46
37	N	605	CHL	CAC-C3C-C4C	3.61	129.49	124.81
27	B	614	CLA	CMB-C2B-C1B	-3.60	122.93	128.46
27	c	511	CLA	CMB-C2B-C3B	3.60	131.42	124.68
27	B	608	CLA	CMB-C2B-C3B	3.60	131.41	124.68
37	S	601	CHL	C2D-C1D-ND	3.60	112.75	110.10
38	s	1620	LUT	C11-C10-C9	-3.59	122.18	127.31
30	A	412	SQD	O47-C7-C8	3.59	119.25	111.50
30	a	412	SQD	O47-C7-C8	3.59	119.25	111.50
37	R	607	CHL	C2D-C1D-ND	3.59	112.75	110.10
37	r	607	CHL	C2D-C1D-ND	3.59	112.75	110.10
37	g	607	CHL	C1D-ND-C4D	-3.59	103.78	106.33
27	a	406	CLA	CMB-C2B-C3B	3.59	131.39	124.68
30	a	412	SQD	O9-S-C6	3.59	111.20	106.94
27	R	602	CLA	CMB-C2B-C1B	-3.59	122.95	128.46
37	G	606	CHL	C3D-C4D-ND	3.59	116.04	110.24
29	c	514	BCR	C20-C21-C22	-3.58	122.19	127.31
27	b	614	CLA	CMB-C2B-C1B	-3.58	122.96	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B	620	BCR	C24-C23-C22	-3.58	120.82	126.23
30	A	412	SQD	O9-S-C6	3.58	111.19	106.94
37	R	608	CHL	CHD-C4C-C3C	-3.58	119.58	124.84
27	R	613	CLA	CMB-C2B-C1B	-3.58	122.96	128.46
37	y	601	CHL	C2D-C1D-ND	3.58	112.74	110.10
29	b	620	BCR	C24-C23-C22	-3.58	120.83	126.23
27	r	602	CLA	CMB-C2B-C1B	-3.57	122.97	128.46
37	n	605	CHL	CAC-C3C-C4C	3.57	129.44	124.81
29	C	514	BCR	C20-C21-C22	-3.57	122.22	127.31
29	D	404	BCR	C20-C21-C22	-3.57	122.22	127.31
27	B	603	CLA	CAA-C2A-C3A	-3.57	103.01	112.78
37	y	608	CHL	C1D-ND-C4D	-3.56	103.80	106.33
38	Y	1620	LUT	C15-C14-C13	-3.56	122.23	127.31
38	y	1620	LUT	C15-C14-C13	-3.56	122.23	127.31
37	S	601	CHL	C3D-C4D-ND	3.56	116.00	110.24
27	g	611	CLA	CMB-C2B-C1B	-3.56	122.99	128.46
27	C	509	CLA	CMB-C2B-C3B	3.56	131.34	124.68
27	G	611	CLA	CMB-C2B-C1B	-3.56	123.00	128.46
27	c	509	CLA	CMB-C2B-C3B	3.55	131.33	124.68
29	C	516	BCR	C16-C15-C14	-3.55	116.21	123.47
29	c	516	BCR	C16-C15-C14	-3.55	116.21	123.47
29	B	620	BCR	C33-C5-C4	3.55	120.43	113.62
29	b	620	BCR	C33-C5-C4	3.55	120.43	113.62
27	b	608	CLA	CMB-C2B-C3B	3.54	131.31	124.68
27	y	612	CLA	CMB-C2B-C1B	-3.54	123.02	128.46
27	b	603	CLA	CAA-C2A-C3A	-3.54	103.08	112.78
37	N	609	CHL	CAC-C3C-C4C	3.54	129.40	124.81
37	s	601	CHL	C2D-C1D-ND	3.54	112.71	110.10
37	n	609	CHL	CAC-C3C-C4C	3.54	129.40	124.81
37	g	606	CHL	C3D-C4D-ND	3.53	115.96	110.24
37	s	601	CHL	C3D-C4D-ND	3.53	115.95	110.24
38	n	1621	LUT	C18-C5-C6	-3.53	120.56	124.53
27	Y	612	CLA	CMB-C2B-C1B	-3.53	123.04	128.46
27	g	614	CLA	CMB-C2B-C1B	-3.53	123.04	128.46
37	S	608	CHL	C3C-C4C-NC	3.53	114.53	110.57
37	y	605	CHL	C3D-C4D-ND	3.53	115.94	110.24
38	N	1621	LUT	C18-C5-C6	-3.52	120.57	124.53
37	s	608	CHL	C3C-C4C-NC	3.52	114.52	110.57
27	B	602	CLA	CMB-C2B-C1B	-3.52	123.05	128.46
27	b	602	CLA	CMB-C2B-C1B	-3.52	123.05	128.46
27	C	502	CLA	CMB-C2B-C3B	3.52	131.26	124.68
27	S	614	CLA	CMB-C2B-C1B	-3.52	123.06	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	y	1620	LUT	C7-C8-C9	-3.52	120.92	126.23
37	y	606	CHL	C3D-C4D-ND	3.51	115.92	110.24
27	c	502	CLA	CMB-C2B-C3B	3.51	131.24	124.68
27	B	611	CLA	CMB-C2B-C1B	-3.51	123.08	128.46
27	G	614	CLA	CMB-C2B-C1B	-3.51	123.08	128.46
37	G	601	CHL	C3D-C4D-ND	3.51	115.91	110.24
27	y	602	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
39	G	1622	XAT	C35-C34-C33	-3.50	122.31	127.31
27	r	612	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
39	N	1622	XAT	C11-C10-C9	-3.50	122.32	127.31
37	R	607	CHL	C3D-C4D-ND	3.50	115.90	110.24
37	r	607	CHL	C3D-C4D-ND	3.50	115.90	110.24
38	Y	1620	LUT	C7-C8-C9	-3.50	120.95	126.23
29	c	516	BCR	C28-C27-C26	-3.50	107.83	114.08
37	n	607	CHL	C2D-C1D-ND	3.50	112.68	110.10
37	Y	609	CHL	CAC-C3C-C4C	3.49	129.34	124.81
27	B	605	CLA	CAA-C2A-C3A	-3.49	103.22	112.78
27	b	605	CLA	CAA-C2A-C3A	-3.49	103.22	112.78
37	N	607	CHL	C1-C2-C3	-3.49	120.01	126.04
39	g	1622	XAT	C35-C34-C33	-3.49	122.33	127.31
37	Y	605	CHL	C3D-C4D-ND	3.48	115.87	110.24
27	R	609	CLA	CMB-C2B-C1B	-3.48	123.11	128.46
27	r	609	CLA	CMB-C2B-C1B	-3.48	123.11	128.46
27	B	607	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
29	C	516	BCR	C28-C27-C26	-3.48	107.87	114.08
37	Y	606	CHL	C3D-C4D-ND	3.48	115.86	110.24
27	B	606	CLA	CMB-C2B-C1B	-3.47	123.12	128.46
37	g	601	CHL	C3D-C4D-ND	3.47	115.86	110.24
37	G	609	CHL	CAC-C3C-C4C	3.47	129.31	124.81
37	g	609	CHL	CAC-C3C-C4C	3.47	129.31	124.81
37	G	601	CHL	C1D-ND-C4D	-3.47	103.87	106.33
27	R	611	CLA	CMB-C2B-C1B	-3.47	123.13	128.46
27	r	611	CLA	CMB-C2B-C1B	-3.47	123.13	128.46
37	N	601	CHL	C3D-C4D-ND	3.47	115.85	110.24
29	B	619	BCR	C15-C16-C17	-3.47	116.37	123.47
27	b	611	CLA	CMB-C2B-C1B	-3.47	123.13	128.46
29	a	411	BCR	C24-C23-C22	-3.47	121.00	126.23
27	s	614	CLA	CMB-C2B-C1B	-3.47	123.14	128.46
29	b	619	BCR	C15-C16-C17	-3.47	116.38	123.47
27	G	612	CLA	CMB-C2B-C1B	-3.46	123.14	128.46
27	r	603	CLA	CMB-C2B-C1B	-3.46	123.14	128.46
27	B	617	CLA	CMB-C2B-C3B	3.46	131.15	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	b	617	CLA	CMB-C2B-C3B	3.46	131.15	124.68
37	y	609	CHL	CAC-C3C-C4C	3.46	129.30	124.81
37	n	601	CHL	C3D-C4D-ND	3.46	115.83	110.24
27	R	612	CLA	CMB-C2B-C1B	-3.46	123.15	128.46
27	B	607	CLA	O2D-CGD-O1D	-3.45	117.09	123.84
29	A	411	BCR	C38-C26-C25	-3.45	120.65	124.53
37	N	606	CHL	C3D-C4D-ND	3.45	115.82	110.24
29	c	517	BCR	C15-C16-C17	-3.45	116.41	123.47
27	b	607	CLA	CMB-C2B-C1B	-3.45	123.16	128.46
39	n	1622	XAT	C11-C10-C9	-3.45	122.39	127.31
27	g	612	CLA	CMB-C2B-C1B	-3.45	123.17	128.46
37	n	607	CHL	C1-C2-C3	-3.45	120.08	126.04
27	Y	602	CLA	CMB-C2B-C1B	-3.45	123.17	128.46
29	A	411	BCR	C24-C23-C22	-3.45	121.03	126.23
27	R	603	CLA	CMB-C2B-C1B	-3.44	123.17	128.46
27	G	610	CLA	CMB-C2B-C3B	3.44	131.12	124.68
37	G	606	CHL	C2D-C1D-ND	3.44	112.64	110.10
37	s	606	CHL	CMD-C2D-C3D	-3.44	119.70	127.61
38	S	1621	LUT	C8-C7-C6	-3.44	117.54	127.20
37	s	607	CHL	CAC-C3C-C4C	3.44	129.27	124.81
37	n	606	CHL	C3D-C4D-ND	3.44	115.80	110.24
37	R	606	CHL	C3D-C4D-ND	3.44	115.80	110.24
29	H	101	BCR	C28-C27-C26	-3.44	107.94	114.08
27	Y	614	CLA	CMB-C2B-C1B	-3.44	123.18	128.46
37	S	606	CHL	CMD-C2D-C3D	-3.43	119.71	127.61
27	b	609	CLA	CMB-C2B-C3B	3.43	131.10	124.68
27	b	607	CLA	O2D-CGD-O1D	-3.43	117.12	123.84
38	s	1621	LUT	C8-C7-C6	-3.43	117.56	127.20
32	C	518	DGD	O6D-C1D-O3G	-3.43	101.85	109.97
27	R	604	CLA	O2D-CGD-O1D	-3.43	117.13	123.84
29	C	517	BCR	C15-C16-C17	-3.43	116.45	123.47
37	G	607	CHL	C3D-C4D-ND	3.43	115.78	110.24
27	b	606	CLA	CMB-C2B-C1B	-3.42	123.20	128.46
37	n	609	CHL	C1D-ND-C4D	-3.42	103.91	106.33
27	n	611	CLA	CMB-C2B-C1B	-3.42	123.21	128.46
29	c	515	BCR	C21-C20-C19	-3.42	112.55	123.22
37	g	601	CHL	C1D-ND-C4D	-3.42	103.91	106.33
27	y	614	CLA	CMB-C2B-C1B	-3.42	123.21	128.46
32	c	518	DGD	O6D-C1D-O3G	-3.42	101.89	109.97
37	g	607	CHL	C3D-C4D-ND	3.41	115.76	110.24
29	h	101	BCR	C28-C27-C26	-3.41	107.98	114.08
27	N	612	CLA	CMB-C2B-C1B	-3.41	123.22	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	D	405	PL9	C40-C39-C41	3.41	121.01	115.27
27	A	410	CLA	CMB-C2B-C3B	3.41	131.06	124.68
37	N	607	CHL	C2D-C1D-ND	3.41	112.62	110.10
37	n	605	CHL	C3D-C4D-ND	3.41	115.75	110.24
27	B	609	CLA	CMB-C2B-C3B	3.41	131.06	124.68
27	g	610	CLA	CMB-C2B-C3B	3.41	131.06	124.68
38	y	1621	LUT	C8-C7-C6	-3.41	117.63	127.20
29	C	515	BCR	C21-C20-C19	-3.41	112.58	123.22
27	n	612	CLA	CMB-C2B-C1B	-3.41	123.23	128.46
27	S	603	CLA	CMB-C2B-C3B	3.41	131.05	124.68
37	r	606	CHL	C3D-C4D-ND	3.41	115.75	110.24
27	C	512	CLA	CMB-C2B-C3B	3.40	131.04	124.68
37	R	606	CHL	C3B-C4B-NB	3.40	113.61	109.21
27	y	603	CLA	CMB-C2B-C1B	-3.40	123.24	128.46
37	N	605	CHL	C3D-C4D-ND	3.40	115.73	110.24
37	r	606	CHL	C3B-C4B-NB	3.40	113.60	109.21
37	r	608	CHL	C3B-C4B-NB	3.40	113.60	109.21
32	C	520	DGD	O5D-C6D-C5D	-3.40	102.76	109.05
37	g	606	CHL	C2D-C1D-ND	3.40	112.61	110.10
27	b	603	CLA	CMB-C2B-C1B	-3.39	123.25	128.46
27	r	604	CLA	O2D-CGD-O1D	-3.39	117.20	123.84
27	c	512	CLA	CMB-C2B-C3B	3.39	131.03	124.68
37	N	609	CHL	C1D-ND-C4D	-3.39	103.92	106.33
37	S	607	CHL	CAC-C3C-C4C	3.39	129.21	124.81
27	a	410	CLA	CMB-C2B-C3B	3.39	131.02	124.68
38	Y	1621	LUT	C8-C7-C6	-3.39	117.68	127.20
29	a	411	BCR	C38-C26-C25	-3.39	120.72	124.53
38	S	1620	LUT	C35-C15-C14	-3.39	116.53	123.47
37	N	608	CHL	C3B-C4B-NB	3.39	113.59	109.21
27	n	610	CLA	O2D-CGD-O1D	-3.38	117.22	123.84
27	B	603	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
27	Y	603	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
37	N	609	CHL	C3D-C4D-ND	3.38	115.71	110.24
37	n	609	CHL	C3D-C4D-ND	3.38	115.71	110.24
27	N	610	CLA	O2D-CGD-O1D	-3.38	117.23	123.84
27	s	603	CLA	CMB-C2B-C3B	3.38	131.00	124.68
27	B	612	CLA	CMB-C2B-C3B	3.38	131.00	124.68
27	c	501	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
27	C	503	CLA	CMB-C2B-C1B	-3.37	123.28	128.46
37	R	608	CHL	C3B-C4B-NB	3.37	113.57	109.21
34	d	405	PL9	C40-C39-C41	3.37	120.94	115.27
27	b	612	CLA	CMB-C2B-C3B	3.37	130.99	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	501	CLA	CMB-C2B-C1B	-3.37	123.29	128.46
29	C	515	BCR	C15-C16-C17	-3.37	116.58	123.47
37	n	608	CHL	C3B-C4B-NB	3.36	113.56	109.21
29	d	404	BCR	C16-C15-C14	-3.36	116.59	123.47
32	c	520	DGD	O5D-C6D-C5D	-3.36	102.83	109.05
27	N	611	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
27	G	604	CLA	CMB-C2B-C1B	-3.36	123.31	128.46
27	g	604	CLA	CMB-C2B-C1B	-3.36	123.31	128.46
29	c	515	BCR	C15-C16-C17	-3.36	116.60	123.47
40	y	1623	NEX	C26-C27-C28	-3.36	118.90	125.99
27	R	616	CLA	CMB-C2B-C1B	-3.35	123.31	128.46
37	S	601	CHL	C1D-ND-C4D	-3.35	103.95	106.33
37	y	601	CHL	C3B-C4B-NB	3.35	113.54	109.21
37	R	607	CHL	C1D-ND-C4D	-3.35	103.95	106.33
37	r	607	CHL	C1D-ND-C4D	-3.35	103.95	106.33
29	c	514	BCR	C3-C4-C5	-3.35	108.09	114.08
37	g	601	CHL	CAC-C3C-C4C	3.35	129.16	124.81
37	G	606	CHL	C1D-ND-C4D	-3.34	103.96	106.33
27	c	508	CLA	O2D-CGD-O1D	-3.34	117.31	123.84
38	y	1621	LUT	C10-C11-C12	-3.34	112.79	123.22
38	Y	1621	LUT	C10-C11-C12	-3.34	112.79	123.22
39	N	1622	XAT	O4-C5-C18	3.34	119.06	115.06
38	s	1620	LUT	C35-C15-C14	-3.34	116.63	123.47
27	n	603	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
37	G	601	CHL	CAC-C3C-C4C	3.34	129.14	124.81
38	g	1621	LUT	C15-C14-C13	-3.34	122.55	127.31
38	G	1621	LUT	C8-C7-C6	-3.33	117.84	127.20
29	c	515	BCR	C28-C27-C26	-3.33	108.12	114.08
40	Y	1623	NEX	C26-C27-C28	-3.33	118.95	125.99
29	C	514	BCR	C3-C4-C5	-3.33	108.13	114.08
38	s	1621	LUT	C21-C26-C27	-3.33	108.49	112.70
27	c	503	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
27	r	601	CLA	CMB-C2B-C3B	3.33	130.91	124.68
37	n	601	CHL	C1B-CHB-C4A	-3.33	123.53	130.12
38	g	1621	LUT	C8-C7-C6	-3.33	117.86	127.20
27	R	601	CLA	CMB-C2B-C3B	3.33	130.90	124.68
37	Y	601	CHL	C3B-C4B-NB	3.33	113.51	109.21
27	N	603	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
29	C	515	BCR	C28-C27-C26	-3.32	108.14	114.08
37	g	601	CHL	C1-C2-C3	-3.32	120.30	126.04
37	Y	601	CHL	C3D-C4D-ND	3.32	115.61	110.24
29	B	620	BCR	C1-C6-C5	-3.32	117.94	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	508	CLA	O2D-CGD-O1D	-3.32	117.35	123.84
27	D	402	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
27	d	402	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
29	D	404	BCR	C16-C15-C14	-3.32	116.68	123.47
29	b	620	BCR	C1-C6-C5	-3.31	117.95	122.61
27	A	410	CLA	O2D-CGD-O1D	-3.31	117.36	123.84
27	a	410	CLA	O2D-CGD-O1D	-3.31	117.36	123.84
40	s	1623	NEX	C26-C27-C28	-3.31	118.99	125.99
37	N	601	CHL	C1B-CHB-C4A	-3.31	123.56	130.12
38	G	1621	LUT	C15-C14-C13	-3.31	122.59	127.31
39	r	622	XAT	C15-C14-C13	-3.31	122.59	127.31
37	s	601	CHL	C1D-ND-C4D	-3.30	103.99	106.33
27	r	616	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
37	G	601	CHL	C1-C2-C3	-3.30	120.33	126.04
27	S	613	CLA	CMB-C2B-C3B	3.30	130.85	124.68
27	s	613	CLA	CMB-C2B-C3B	3.30	130.85	124.68
38	S	1621	LUT	C21-C26-C27	-3.30	108.53	112.70
37	y	609	CHL	C3D-C4D-ND	3.30	115.58	110.24
37	n	605	CHL	C2D-C1D-ND	3.30	112.53	110.10
27	G	603	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
30	B	621	SQD	O47-C7-C8	3.30	118.61	111.50
37	G	601	CHL	C2D-C1D-ND	3.30	112.53	110.10
40	S	1623	NEX	C26-C27-C28	-3.30	119.03	125.99
29	b	620	BCR	C11-C10-C9	-3.29	122.61	127.31
39	R	622	XAT	C15-C14-C13	-3.29	122.61	127.31
37	y	601	CHL	C1-C2-C3	-3.29	120.35	126.04
39	n	1622	XAT	O4-C5-C18	3.29	119.00	115.06
40	y	1623	NEX	C24-C23-C22	-3.29	104.42	110.77
37	Y	608	CHL	C3D-C4D-ND	3.29	115.56	110.24
37	Y	609	CHL	C3D-C4D-ND	3.28	115.55	110.24
37	N	605	CHL	C2D-C1D-ND	3.28	112.52	110.10
38	G	1620	LUT	C18-C5-C6	-3.28	120.84	124.53
30	b	621	SQD	O47-C7-C8	3.28	118.57	111.50
40	Y	1623	NEX	C24-C23-C22	-3.28	104.44	110.77
37	y	601	CHL	C3D-C4D-ND	3.28	115.54	110.24
27	G	602	CLA	CMB-C2B-C3B	3.28	130.81	124.68
27	g	602	CLA	CMB-C2B-C3B	3.28	130.81	124.68
38	g	1620	LUT	C18-C5-C6	-3.28	120.85	124.53
29	C	516	BCR	C11-C10-C9	-3.28	122.64	127.31
37	y	608	CHL	C3D-C4D-ND	3.28	115.54	110.24
38	S	1621	LUT	C15-C14-C13	-3.28	122.64	127.31
27	g	603	CLA	CMB-C2B-C1B	-3.27	123.43	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	C	518	DGD	C3G-C2G-C1G	-3.27	104.05	111.79
32	c	518	DGD	C3G-C2G-C1G	-3.27	104.05	111.79
37	y	609	CHL	C1D-ND-C4D	-3.27	104.01	106.33
27	B	614	CLA	CMB-C2B-C3B	3.27	130.80	124.68
37	N	608	CHL	CAC-C3C-C4C	3.27	129.06	124.81
37	Y	601	CHL	C1-C2-C3	-3.27	120.39	126.04
31	D	411	LMG	C1-C2-C3	-3.27	103.19	110.00
37	g	606	CHL	C1D-ND-C4D	-3.27	104.01	106.33
29	c	516	BCR	C11-C10-C9	-3.27	122.64	127.31
29	B	620	BCR	C38-C26-C25	-3.27	120.86	124.53
29	b	620	BCR	C38-C26-C25	-3.27	120.86	124.53
29	B	620	BCR	C11-C10-C9	-3.27	122.65	127.31
31	d	411	LMG	C1-C2-C3	-3.26	103.20	110.00
38	s	1621	LUT	C15-C14-C13	-3.26	122.66	127.31
29	c	516	BCR	C3-C4-C5	-3.26	108.26	114.08
37	g	608	CHL	CAC-C3C-C4C	3.26	129.04	124.81
37	g	609	CHL	C2D-C1D-ND	3.26	112.50	110.10
29	H	101	BCR	C16-C15-C14	-3.26	116.80	123.47
29	h	101	BCR	C16-C15-C14	-3.26	116.80	123.47
29	B	619	BCR	C7-C8-C9	-3.26	121.31	126.23
29	b	619	BCR	C7-C8-C9	-3.26	121.31	126.23
27	B	613	CLA	O2D-CGD-O1D	-3.25	117.48	123.84
37	Y	601	CHL	CAC-C3C-C4C	3.25	129.03	124.81
37	G	605	CHL	C3B-C4B-NB	3.25	113.41	109.21
38	S	1620	LUT	C18-C5-C6	-3.24	120.89	124.53
27	b	614	CLA	CMB-C2B-C3B	3.24	130.74	124.68
38	n	1620	LUT	C18-C5-C6	-3.24	120.89	124.53
38	s	1620	LUT	C18-C5-C6	-3.24	120.89	124.53
27	b	615	CLA	O2D-CGD-O1D	-3.24	117.51	123.84
37	g	605	CHL	C3B-C4B-NB	3.24	113.39	109.21
37	y	608	CHL	CAC-C3C-C4C	3.24	129.01	124.81
29	C	516	BCR	C3-C4-C5	-3.23	108.30	114.08
37	N	608	CHL	C3D-C4D-ND	3.23	115.47	110.24
31	A	413	LMG	O6-C5-C4	3.23	115.56	109.69
38	g	1621	LUT	C18-C5-C6	-3.23	120.90	124.53
37	G	605	CHL	CAC-C3C-C4C	3.23	129.00	124.81
37	Y	609	CHL	C1D-ND-C4D	-3.23	104.04	106.33
29	C	516	BCR	C38-C26-C25	-3.23	120.91	124.53
37	n	606	CHL	CAC-C3C-C4C	3.23	129.00	124.81
37	N	608	CHL	CMD-C2D-C3D	-3.22	120.20	127.61
37	n	608	CHL	CMD-C2D-C3D	-3.22	120.20	127.61
39	G	1622	XAT	O24-C25-C38	3.22	118.92	115.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	n	608	CHL	CAC-C3C-C4C	3.22	128.99	124.81
30	A	418	SQD	C44-O6-C1	3.22	120.03	113.74
37	G	608	CHL	CAC-C3C-C4C	3.22	128.99	124.81
37	y	601	CHL	CAC-C3C-C4C	3.22	128.99	124.81
27	B	615	CLA	O2D-CGD-O1D	-3.22	117.54	123.84
37	n	608	CHL	C3D-C4D-ND	3.22	115.44	110.24
37	g	601	CHL	C2D-C1D-ND	3.22	112.47	110.10
37	n	605	CHL	C1B-CHB-C4A	-3.22	123.75	130.12
27	b	613	CLA	O2D-CGD-O1D	-3.22	117.55	123.84
37	s	606	CHL	C3D-C4D-ND	3.22	115.44	110.24
37	S	606	CHL	C3D-C4D-ND	3.22	115.44	110.24
31	a	413	LMG	O6-C5-C4	3.21	115.53	109.69
37	y	606	CHL	C3B-C4B-NB	3.21	113.36	109.21
39	g	1622	XAT	O24-C25-C38	3.21	118.91	115.06
27	C	504	CLA	CMB-C2B-C3B	3.21	130.68	124.68
37	G	609	CHL	C2D-C1D-ND	3.21	112.47	110.10
27	R	604	CLA	CMB-C2B-C3B	3.21	130.68	124.68
27	b	610	CLA	CMB-C2B-C3B	3.21	130.68	124.68
37	g	605	CHL	C3D-C4D-ND	3.21	115.43	110.24
37	N	601	CHL	C3B-C4B-NB	3.20	113.35	109.21
37	n	601	CHL	C3B-C4B-NB	3.20	113.35	109.21
27	B	610	CLA	CMB-C2B-C3B	3.20	130.67	124.68
37	N	606	CHL	CAC-C3C-C4C	3.20	128.97	124.81
38	y	1621	LUT	C11-C10-C9	-3.20	122.74	127.31
38	N	1620	LUT	C18-C5-C6	-3.20	120.93	124.53
38	g	1620	LUT	C11-C10-C9	-3.20	122.74	127.31
37	g	605	CHL	CAC-C3C-C4C	3.20	128.96	124.81
30	a	418	SQD	C44-O6-C1	3.20	119.99	113.74
37	g	609	CHL	C3D-C4D-ND	3.20	115.41	110.24
27	C	508	CLA	CMB-C2B-C3B	3.20	130.66	124.68
37	N	605	CHL	C1B-CHB-C4A	-3.20	123.79	130.12
29	c	516	BCR	C38-C26-C25	-3.20	120.94	124.53
38	G	1621	LUT	C18-C5-C6	-3.20	120.94	124.53
27	c	504	CLA	CMB-C2B-C3B	3.19	130.65	124.68
27	r	604	CLA	CMB-C2B-C3B	3.19	130.65	124.68
37	Y	607	CHL	C2D-C1D-ND	3.19	112.45	110.10
37	G	609	CHL	C3D-C4D-ND	3.19	115.39	110.24
27	S	604	CLA	O2D-CGD-O1D	-3.18	117.61	123.84
38	Y	1621	LUT	C11-C10-C9	-3.18	122.77	127.31
37	y	607	CHL	C2D-C1D-ND	3.18	112.45	110.10
40	n	1623	NEX	C24-C23-C22	-3.18	104.63	110.77
40	s	1623	NEX	C31-C30-C29	-3.18	122.77	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	c	501	CLA	O2D-CGD-O1D	-3.18	117.62	123.84
37	Y	606	CHL	C3B-C4B-NB	3.18	113.32	109.21
38	g	1620	LUT	C15-C14-C13	-3.18	122.77	127.31
37	G	601	CHL	CMD-C2D-C3D	-3.18	120.31	127.61
27	B	603	CLA	CMB-C2B-C3B	3.18	130.62	124.68
37	G	605	CHL	C3D-C4D-ND	3.18	115.38	110.24
27	s	604	CLA	O2D-CGD-O1D	-3.18	117.63	123.84
27	Y	604	CLA	CMB-C2B-C3B	3.18	130.62	124.68
38	R	620	LUT	C8-C7-C6	-3.18	118.28	127.20
27	C	501	CLA	O2D-CGD-O1D	-3.17	117.63	123.84
37	Y	608	CHL	CAC-C3C-C4C	3.17	128.93	124.81
27	B	603	CLA	O2D-CGD-O1D	-3.17	117.64	123.84
27	b	603	CLA	O2D-CGD-O1D	-3.17	117.64	123.84
38	r	620	LUT	C8-C7-C6	-3.17	118.30	127.20
27	c	508	CLA	CMB-C2B-C3B	3.17	130.61	124.68
40	N	1623	NEX	C24-C23-C22	-3.17	104.66	110.77
27	y	613	CLA	CMB-C2B-C1B	-3.17	123.60	128.46
38	y	1620	LUT	C21-C26-C27	-3.17	108.70	112.70
27	y	604	CLA	CMB-C2B-C3B	3.16	130.60	124.68
37	y	607	CHL	C3D-C4D-ND	3.16	115.36	110.24
38	Y	1620	LUT	C10-C11-C12	-3.16	113.35	123.22
27	N	614	CLA	CMB-C2B-C3B	3.16	130.59	124.68
27	n	614	CLA	CMB-C2B-C3B	3.16	130.59	124.68
29	d	404	BCR	C3-C4-C5	-3.16	108.43	114.08
37	Y	607	CHL	C3D-C4D-ND	3.16	115.35	110.24
40	S	1623	NEX	C31-C30-C29	-3.16	122.80	127.31
27	Y	612	CLA	CMB-C2B-C3B	3.16	130.59	124.68
27	y	612	CLA	CMB-C2B-C3B	3.16	130.59	124.68
38	y	1620	LUT	C10-C11-C12	-3.16	113.37	123.22
38	G	1620	LUT	C11-C10-C9	-3.16	122.81	127.31
37	G	608	CHL	CMD-C2D-C3D	-3.16	120.35	127.61
27	b	603	CLA	CMB-C2B-C3B	3.15	130.58	124.68
38	n	1620	LUT	C21-C26-C27	-3.15	108.72	112.70
29	D	404	BCR	C3-C4-C5	-3.15	108.45	114.08
37	g	601	CHL	CMD-C2D-C3D	-3.15	120.37	127.61
38	R	620	LUT	C31-C30-C29	-3.15	122.82	127.31
37	R	608	CHL	C1B-CHB-C4A	-3.15	123.89	130.12
27	Y	613	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
27	n	604	CLA	CMB-C2B-C3B	3.15	130.56	124.68
29	c	514	BCR	C28-C27-C26	-3.14	108.46	114.08
37	n	601	CHL	CAC-C3C-C4C	3.14	128.89	124.81
27	N	604	CLA	CMB-C2B-C3B	3.14	130.56	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	N	601	CHL	CMD-C2D-C3D	-3.14	120.39	127.61
27	g	602	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
27	Y	614	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
37	g	608	CHL	CMD-C2D-C3D	-3.14	120.40	127.61
38	G	1620	LUT	C15-C14-C13	-3.14	122.83	127.31
37	n	601	CHL	CMD-C2D-C3D	-3.14	120.40	127.61
32	h	102	DGD	O6D-C1D-O3G	-3.13	102.55	109.97
37	r	608	CHL	C1B-CHB-C4A	-3.13	123.91	130.12
32	H	102	DGD	O6D-C1D-O3G	-3.13	102.55	109.97
37	S	608	CHL	C2D-C1D-ND	3.13	112.41	110.10
29	C	514	BCR	C28-C27-C26	-3.13	108.48	114.08
27	R	616	CLA	O2D-CGD-O1D	-3.13	117.72	123.84
27	r	616	CLA	O2D-CGD-O1D	-3.13	117.72	123.84
31	A	413	LMG	C1-C2-C3	-3.13	103.48	110.00
31	a	413	LMG	C1-C2-C3	-3.13	103.48	110.00
27	b	604	CLA	CMB-C2B-C3B	3.13	130.53	124.68
37	G	608	CHL	C1B-CHB-C4A	-3.13	123.93	130.12
27	B	604	CLA	CMB-C2B-C3B	3.13	130.53	124.68
37	g	608	CHL	C1B-CHB-C4A	-3.13	123.93	130.12
38	N	1620	LUT	C21-C26-C27	-3.13	108.75	112.70
32	c	518	DGD	C4E-C3E-C2E	-3.12	105.37	110.82
32	C	518	DGD	C4E-C3E-C2E	-3.12	105.37	110.82
37	S	608	CHL	CHD-C4C-C3C	-3.12	120.25	124.84
38	r	620	LUT	C31-C30-C29	-3.12	122.86	127.31
29	B	620	BCR	C33-C5-C6	-3.12	121.02	124.53
29	b	620	BCR	C33-C5-C6	-3.12	121.02	124.53
34	D	405	PL9	C7-C3-C2	-3.12	119.20	123.30
37	S	601	CHL	C4-C3-C5	3.12	119.55	115.98
38	Y	1620	LUT	C11-C10-C9	-3.12	122.86	127.31
37	N	601	CHL	CAC-C3C-C4C	3.11	128.85	124.81
27	G	602	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
37	g	605	CHL	C2D-C1D-ND	3.11	112.40	110.10
37	S	606	CHL	CHD-C4C-C3C	-3.11	120.27	124.84
37	Y	601	CHL	C1D-ND-C4D	-3.11	104.12	106.33
37	s	608	CHL	C2D-C1D-ND	3.11	112.40	110.10
38	y	1620	LUT	C11-C10-C9	-3.11	122.88	127.31
37	G	605	CHL	C2D-C1D-ND	3.11	112.39	110.10
37	G	608	CHL	C2D-C1D-ND	3.11	112.39	110.10
37	s	608	CHL	CHD-C4C-C3C	-3.11	120.27	124.84
38	Y	1620	LUT	C21-C26-C27	-3.11	108.77	112.70
27	Y	611	CLA	CMB-C2B-C3B	3.11	130.49	124.68
27	y	611	CLA	CMB-C2B-C3B	3.11	130.49	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	s	601	CHL	C4-C3-C5	3.11	119.53	115.98
29	b	619	BCR	C28-C27-C26	-3.10	108.54	114.08
37	N	607	CHL	C3D-C4D-ND	3.10	115.25	110.24
27	Y	612	CLA	C1-C2-C3	-3.10	120.68	126.04
40	N	1623	NEX	C26-C27-C28	-3.10	119.44	125.99
37	S	608	CHL	C3D-C4D-ND	3.10	115.25	110.24
37	n	607	CHL	C3D-C4D-ND	3.10	115.25	110.24
27	C	507	CLA	O2D-CGD-O1D	-3.10	117.78	123.84
27	c	507	CLA	O2D-CGD-O1D	-3.10	117.78	123.84
34	d	405	PL9	C7-C3-C2	-3.10	119.23	123.30
38	g	1621	LUT	C22-C23-C24	-3.10	108.22	111.74
27	y	614	CLA	O2D-CGD-O1D	-3.10	117.79	123.84
27	n	614	CLA	O2D-CGD-O1D	-3.09	117.79	123.84
34	D	405	PL9	C7-C8-C9	-3.09	121.64	126.79
34	d	405	PL9	C7-C8-C9	-3.09	121.64	126.79
40	n	1623	NEX	C26-C27-C28	-3.09	119.45	125.99
27	n	613	CLA	CMB-C2B-C3B	3.09	130.46	124.68
27	N	613	CLA	CMB-C2B-C3B	3.09	130.46	124.68
28	a	409	PHO	O1D-CGD-CBD	3.09	129.88	124.74
37	y	605	CHL	CAC-C3C-C4C	3.09	128.81	124.81
27	N	614	CLA	O2D-CGD-O1D	-3.09	117.81	123.84
29	B	619	BCR	C28-C27-C26	-3.08	108.57	114.08
30	a	412	SQD	O8-S-C6	3.08	110.65	105.74
27	D	403	CLA	O2D-CGD-O1D	-3.08	117.81	123.84
27	d	403	CLA	O2D-CGD-O1D	-3.08	117.81	123.84
38	G	1621	LUT	C22-C23-C24	-3.08	108.23	111.74
27	s	604	CLA	CMB-C2B-C3B	3.08	130.44	124.68
37	s	608	CHL	C3D-C4D-ND	3.08	115.22	110.24
37	s	606	CHL	C1B-CHB-C4A	-3.08	124.02	130.12
27	y	612	CLA	C1-C2-C3	-3.08	120.72	126.04
37	Y	605	CHL	CAC-C3C-C4C	3.08	128.80	124.81
40	G	1623	NEX	C31-C30-C29	-3.08	122.92	127.31
37	n	605	CHL	C1D-ND-C4D	-3.08	104.15	106.33
37	Y	607	CHL	CHB-C4A-NA	3.08	128.76	124.51
37	y	607	CHL	CHB-C4A-NA	3.07	128.76	124.51
39	R	622	XAT	C4-C3-C2	-3.07	104.84	110.77
27	s	611	CLA	CMB-C2B-C3B	3.07	130.42	124.68
27	Y	611	CLA	O2D-CGD-O1D	-3.07	117.84	123.84
27	y	611	CLA	O2D-CGD-O1D	-3.07	117.84	123.84
37	S	606	CHL	C1B-CHB-C4A	-3.07	124.04	130.12
39	G	1622	XAT	C15-C35-C34	-3.07	117.19	123.47
37	s	606	CHL	CHD-C4C-C3C	-3.07	120.33	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	S	612	CLA	CMB-C2B-C3B	3.06	130.41	124.68
37	N	606	CHL	C3B-C4B-NB	3.06	113.17	109.21
37	N	605	CHL	C1D-ND-C4D	-3.06	104.16	106.33
30	A	412	SQD	O8-S-C6	3.06	110.61	105.74
27	r	613	CLA	CMB-C2B-C3B	3.06	130.40	124.68
27	S	611	CLA	CMB-C2B-C3B	3.06	130.39	124.68
40	Y	1623	NEX	C19-C9-C10	-3.05	118.65	122.92
40	y	1623	NEX	C19-C9-C10	-3.05	118.65	122.92
40	g	1623	NEX	C31-C30-C29	-3.05	122.96	127.31
27	S	604	CLA	CMB-C2B-C3B	3.05	130.38	124.68
37	s	606	CHL	C3B-C4B-NB	3.05	113.15	109.21
37	R	608	CHL	C1D-ND-C4D	-3.04	104.17	106.33
27	g	613	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
39	r	622	XAT	C4-C3-C2	-3.04	104.89	110.77
39	r	622	XAT	C10-C11-C12	-3.04	113.72	123.22
27	b	605	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
37	g	608	CHL	C2D-C1D-ND	3.04	112.35	110.10
38	S	1621	LUT	C10-C11-C12	-3.04	113.72	123.22
27	R	613	CLA	CMB-C2B-C3B	3.04	130.37	124.68
38	s	1621	LUT	C10-C11-C12	-3.04	113.73	123.22
39	g	1622	XAT	C15-C35-C34	-3.04	117.25	123.47
29	C	517	BCR	C21-C20-C19	-3.04	113.73	123.22
29	c	517	BCR	C21-C20-C19	-3.04	113.73	123.22
27	B	612	CLA	O2D-CGD-O1D	-3.04	117.90	123.84
39	R	622	XAT	C10-C11-C12	-3.04	113.74	123.22
37	S	607	CHL	C3B-C4B-NB	3.04	113.13	109.21
37	s	607	CHL	C3B-C4B-NB	3.04	113.13	109.21
30	a	412	SQD	C44-O6-C1	3.03	119.67	113.74
27	s	612	CLA	CMB-C2B-C3B	3.03	130.35	124.68
27	N	610	CLA	C1B-CHB-C4A	-3.03	124.11	130.12
28	A	409	PHO	O1D-CGD-CBD	3.03	129.79	124.74
37	g	609	CHL	C1B-CHB-C4A	-3.03	124.11	130.12
27	B	605	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
27	B	611	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
35	D	409	LHG	C11-C10-C9	-3.03	99.06	114.42
32	c	518	DGD	C1D-C2D-C3D	-3.03	103.69	110.00
35	d	409	LHG	C11-C10-C9	-3.03	99.07	114.42
27	G	613	CLA	O2D-CGD-O1D	-3.02	117.92	123.84
27	g	614	CLA	CMB-C2B-C3B	3.02	130.34	124.68
27	b	612	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
27	B	616	CLA	CMB-C2B-C1B	-3.02	123.82	128.46
32	C	518	DGD	C1D-C2D-C3D	-3.02	103.70	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	g	606	CHL	C3B-C4B-NB	3.02	113.11	109.21
37	g	608	CHL	C3D-C4D-ND	3.02	115.12	110.24
27	C	507	CLA	CMB-C2B-C1B	-3.02	123.83	128.46
37	G	606	CHL	C3B-C4B-NB	3.02	113.11	109.21
30	A	412	SQD	C44-O6-C1	3.02	119.63	113.74
37	S	606	CHL	C3B-C4B-NB	3.02	113.11	109.21
38	y	1621	LUT	C7-C8-C9	-3.02	121.68	126.23
29	B	620	BCR	C3-C4-C5	-3.01	108.70	114.08
37	G	608	CHL	C3D-C4D-ND	3.01	115.11	110.24
27	D	402	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
37	G	609	CHL	C1B-CHB-C4A	-3.01	124.16	130.12
37	G	606	CHL	CMB-C2B-C3B	3.01	130.31	124.68
37	g	606	CHL	CMB-C2B-C3B	3.01	130.31	124.68
37	n	606	CHL	C3B-C4B-NB	3.01	113.10	109.21
37	r	608	CHL	C1D-ND-C4D	-3.01	104.20	106.33
27	y	614	CLA	CMB-C2B-C3B	3.00	130.30	124.68
38	R	620	LUT	C18-C5-C6	-3.00	121.16	124.53
38	r	620	LUT	C18-C5-C6	-3.00	121.16	124.53
27	G	614	CLA	CMB-C2B-C3B	3.00	130.29	124.68
27	c	507	CLA	CMB-C2B-C1B	-3.00	123.86	128.46
27	b	603	CLA	C1B-CHB-C4A	-3.00	124.18	130.12
29	b	620	BCR	C3-C4-C5	-2.99	108.73	114.08
37	n	609	CHL	CHB-C4A-NA	2.99	128.65	124.51
29	B	620	BCR	C21-C20-C19	-2.99	113.88	123.22
27	n	610	CLA	C1B-CHB-C4A	-2.99	124.19	130.12
39	Y	1622	XAT	C15-C14-C13	-2.99	123.04	127.31
37	y	601	CHL	C1D-ND-C4D	-2.99	104.21	106.33
38	Y	1621	LUT	C7-C8-C9	-2.99	121.72	126.23
38	n	1620	LUT	C30-C31-C32	-2.99	113.89	123.22
27	d	402	CLA	O2D-CGD-O1D	-2.99	117.99	123.84
40	S	1623	NEX	C24-C23-C22	-2.99	105.00	110.77
40	s	1623	NEX	C24-C23-C22	-2.99	105.00	110.77
29	b	620	BCR	C21-C20-C19	-2.99	113.89	123.22
27	b	616	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
27	c	510	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
38	r	620	LUT	C21-C26-C27	-2.99	108.93	112.70
40	R	623	NEX	C15-C35-C34	-2.99	117.36	123.47
37	y	607	CHL	CMB-C2B-C3B	2.99	130.26	124.68
40	S	1623	NEX	C15-C35-C34	-2.98	117.36	123.47
38	G	1621	LUT	C31-C30-C29	-2.98	123.05	127.31
38	g	1621	LUT	C31-C30-C29	-2.98	123.05	127.31
27	C	506	CLA	O2D-CGD-O1D	-2.98	118.00	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	s	1623	NEX	C15-C35-C34	-2.98	117.36	123.47
27	Y	614	CLA	CMB-C2B-C3B	2.98	130.25	124.68
27	B	607	CLA	CMB-C2B-C3B	2.98	130.25	124.68
27	S	602	CLA	CMB-C2B-C3B	2.98	130.25	124.68
27	s	602	CLA	CMB-C2B-C3B	2.98	130.25	124.68
27	B	603	CLA	C1B-CHB-C4A	-2.98	124.22	130.12
40	G	1623	NEX	C39-C29-C30	-2.98	118.75	122.92
37	N	609	CHL	CHB-C4A-NA	2.98	128.63	124.51
27	c	505	CLA	O2D-CGD-O1D	-2.98	118.02	123.84
40	N	1623	NEX	C39-C29-C30	-2.98	118.75	122.92
27	c	506	CLA	O2D-CGD-O1D	-2.98	118.02	123.84
27	b	607	CLA	CMB-C2B-C3B	2.98	130.25	124.68
38	g	1620	LUT	C35-C15-C14	-2.98	117.38	123.47
31	c	521	LMG	O6-C1-O1	-2.98	102.93	109.97
27	b	611	CLA	O2D-CGD-O1D	-2.98	118.02	123.84
31	C	521	LMG	O6-C1-O1	-2.97	102.93	109.97
29	c	514	BCR	C33-C5-C6	-2.97	121.19	124.53
39	y	1622	XAT	C15-C14-C13	-2.97	123.07	127.31
27	B	609	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
27	S	603	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
27	s	603	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
27	C	510	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
40	s	1623	NEX	C35-C34-C33	-2.97	123.07	127.31
27	S	602	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
27	s	602	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
27	c	503	CLA	CMB-C2B-C3B	2.97	130.23	124.68
27	B	611	CLA	CMB-C2B-C3B	2.97	130.23	124.68
27	b	609	CLA	O2D-CGD-O1D	-2.97	118.04	123.84
37	Y	607	CHL	CMB-C2B-C3B	2.96	130.22	124.68
27	b	616	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
27	g	613	CLA	CMB-C2B-C3B	2.96	130.22	124.68
27	N	602	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
27	c	513	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
27	B	616	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
38	N	1620	LUT	C30-C31-C32	-2.96	113.99	123.22
27	G	613	CLA	CMB-C2B-C3B	2.96	130.21	124.68
27	R	610	CLA	CMB-C2B-C3B	2.96	130.21	124.68
27	g	611	CLA	CMB-C2B-C3B	2.96	130.21	124.68
27	Y	602	CLA	O2D-CGD-O1D	-2.96	118.06	123.84
27	b	611	CLA	CMB-C2B-C3B	2.96	130.21	124.68
27	n	610	CLA	CMB-C2B-C3B	2.96	130.21	124.68
40	r	623	NEX	C15-C35-C34	-2.96	117.42	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	y	1620	LUT	C30-C31-C32	-2.96	113.99	123.22
27	C	503	CLA	CMB-C2B-C3B	2.95	130.21	124.68
34	d	405	PL9	C27-C28-C29	-2.95	120.55	127.66
27	C	505	CLA	O2D-CGD-O1D	-2.95	118.06	123.84
37	y	608	CHL	CMD-C2D-C3D	-2.95	120.82	127.61
38	Y	1620	LUT	C30-C31-C32	-2.95	114.00	123.22
39	N	1622	XAT	C24-C23-C22	-2.95	105.07	110.77
40	S	1623	NEX	C35-C34-C33	-2.95	123.10	127.31
39	G	1622	XAT	C27-C28-C29	-2.95	120.95	125.53
40	g	1623	NEX	C39-C29-C30	-2.95	118.79	122.92
29	C	515	BCR	C20-C21-C22	-2.95	123.10	127.31
29	c	515	BCR	C20-C21-C22	-2.95	123.10	127.31
32	C	519	DGD	O3G-C1D-C2D	-2.95	103.70	108.30
32	c	519	DGD	O3G-C1D-C2D	-2.95	103.70	108.30
38	G	1620	LUT	C35-C15-C14	-2.95	117.44	123.47
27	g	610	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
27	y	602	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
27	G	610	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
27	n	602	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
40	n	1623	NEX	C39-C29-C30	-2.94	118.80	122.92
39	n	1622	XAT	C24-C23-C22	-2.94	105.09	110.77
27	G	611	CLA	CMB-C2B-C3B	2.94	130.18	124.68
29	a	411	BCR	C23-C24-C25	-2.94	118.94	127.20
39	g	1622	XAT	C27-C28-C29	-2.94	120.97	125.53
37	g	609	CHL	CMD-C2D-C3D	-2.94	120.85	127.61
40	g	1623	NEX	O24-C25-C38	2.94	118.58	115.06
37	Y	606	CHL	C2A-C1A-CHA	-2.94	118.72	123.86
37	y	606	CHL	C2A-C1A-CHA	-2.94	118.72	123.86
29	H	101	BCR	C38-C26-C25	-2.94	121.23	124.53
27	N	610	CLA	CMB-C2B-C3B	2.94	130.18	124.68
27	S	614	CLA	CMB-C2B-C3B	2.94	130.18	124.68
37	Y	601	CHL	C1C-C2C-C3C	-2.94	104.78	107.11
37	y	601	CHL	C1C-C2C-C3C	-2.94	104.78	107.11
27	b	607	CLA	C1B-CHB-C4A	-2.93	124.31	130.12
34	D	405	PL9	C27-C28-C29	-2.93	120.59	127.66
37	Y	608	CHL	CMD-C2D-C3D	-2.93	120.87	127.61
30	B	621	SQD	O5-C5-C4	2.93	115.02	109.69
30	b	621	SQD	O5-C5-C4	2.93	115.02	109.69
37	Y	609	CHL	C4-C3-C5	2.93	120.20	115.27
27	r	610	CLA	CMB-C2B-C3B	2.93	130.16	124.68
37	G	609	CHL	CMD-C2D-C3D	-2.93	120.87	127.61
29	A	411	BCR	C23-C24-C25	-2.93	118.97	127.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	N	601	CHL	C2D-C1D-ND	2.93	112.26	110.10
37	Y	605	CHL	CMD-C2D-C3D	-2.93	120.87	127.61
32	H	102	DGD	C3G-C2G-C1G	-2.93	104.86	111.79
37	y	605	CHL	CMD-C2D-C3D	-2.93	120.88	127.61
35	S	2630	LHG	O8-C23-C24	2.93	121.09	111.91
29	C	514	BCR	C33-C5-C6	-2.93	121.24	124.53
29	C	514	BCR	C15-C16-C17	-2.93	117.48	123.47
29	c	514	BCR	C15-C16-C17	-2.93	117.48	123.47
27	C	513	CLA	O2D-CGD-O1D	-2.93	118.12	123.84
37	n	607	CHL	C1D-ND-C4D	-2.93	104.26	106.33
29	B	620	BCR	C4-C5-C6	-2.92	118.48	122.73
29	b	620	BCR	C4-C5-C6	-2.92	118.48	122.73
27	S	612	CLA	O2D-CGD-O1D	-2.92	118.12	123.84
27	B	607	CLA	C1B-CHB-C4A	-2.92	124.33	130.12
35	s	2630	LHG	O8-C23-C24	2.92	121.08	111.91
38	R	620	LUT	C21-C26-C27	-2.92	109.01	112.70
37	S	607	CHL	C3D-C4D-ND	2.92	114.96	110.24
37	S	608	CHL	O2A-CGA-CBA	2.92	121.06	111.91
37	r	607	CHL	O2A-CGA-CBA	2.92	121.06	111.91
37	G	606	CHL	CMD-C2D-C3D	-2.92	120.90	127.61
38	y	1621	LUT	C18-C5-C6	-2.92	121.25	124.53
37	R	608	CHL	C3D-C4D-ND	2.92	114.95	110.24
27	s	609	CLA	CMB-C2B-C3B	2.92	130.13	124.68
38	Y	1620	LUT	C31-C30-C29	-2.91	123.15	127.31
37	y	609	CHL	C4-C3-C5	2.91	120.17	115.27
27	G	611	CLA	O2D-CGD-O1D	-2.91	118.14	123.84
32	h	102	DGD	C3G-C2G-C1G	-2.91	104.90	111.79
37	g	606	CHL	CMD-C2D-C3D	-2.91	120.92	127.61
27	s	614	CLA	CMB-C2B-C3B	2.91	130.12	124.68
37	N	609	CHL	C1C-C2C-C3C	-2.91	104.81	107.11
37	n	609	CHL	C1C-C2C-C3C	-2.91	104.81	107.11
31	B	622	LMG	O6-C1-O1	-2.91	103.09	109.97
27	g	611	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
38	Y	1621	LUT	C18-C5-C6	-2.91	121.26	124.53
27	S	609	CLA	CMB-C2B-C3B	2.91	130.12	124.68
38	G	1621	LUT	C10-C11-C12	-2.91	114.15	123.22
38	g	1621	LUT	C10-C11-C12	-2.91	114.15	123.22
37	s	608	CHL	O2A-CGA-CBA	2.91	121.03	111.91
27	R	613	CLA	O2D-CGD-O1D	-2.91	118.16	123.84
38	Y	1620	LUT	C35-C15-C14	-2.91	117.52	123.47
38	y	1620	LUT	C35-C15-C14	-2.91	117.52	123.47
29	B	618	BCR	C27-C26-C25	-2.90	118.51	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	b	622	LMG	O6-C1-O1	-2.90	103.10	109.97
27	Y	610	CLA	O2D-CGD-O1D	-2.90	118.16	123.84
27	y	610	CLA	O2D-CGD-O1D	-2.90	118.16	123.84
37	G	601	CHL	C4-C3-C5	2.90	120.16	115.27
29	h	101	BCR	C38-C26-C25	-2.90	121.27	124.53
27	r	602	CLA	CMB-C2B-C3B	2.90	130.11	124.68
27	r	602	CLA	C1B-CHB-C4A	-2.90	124.37	130.12
37	S	607	CHL	CMD-C2D-C3D	-2.90	120.94	127.61
37	r	608	CHL	C3D-C4D-ND	2.90	114.93	110.24
31	A	413	LMG	C4-C3-C2	-2.90	105.76	110.82
31	a	413	LMG	C4-C3-C2	-2.90	105.76	110.82
37	R	607	CHL	O2A-CGA-CBA	2.90	121.00	111.91
37	N	605	CHL	CMD-C2D-C3D	-2.90	120.95	127.61
27	R	601	CLA	CAC-C3C-C4C	2.90	128.57	124.81
29	d	404	BCR	C33-C5-C4	2.90	119.18	113.62
38	G	1621	LUT	C11-C10-C9	-2.90	123.18	127.31
38	g	1621	LUT	C11-C10-C9	-2.90	123.18	127.31
37	n	601	CHL	C2D-C1D-ND	2.90	112.24	110.10
27	s	612	CLA	O2D-CGD-O1D	-2.90	118.18	123.84
38	S	1620	LUT	C15-C14-C13	-2.89	123.18	127.31
27	r	610	CLA	O2D-CGD-O1D	-2.89	118.18	123.84
27	S	614	CLA	O2D-CGD-O1D	-2.89	118.18	123.84
27	s	614	CLA	O2D-CGD-O1D	-2.89	118.18	123.84
30	A	418	SQD	O8-S-C6	2.89	110.35	105.74
30	a	418	SQD	O8-S-C6	2.89	110.35	105.74
29	b	618	BCR	C27-C26-C25	-2.89	118.54	122.73
37	s	607	CHL	CHD-C4C-C3C	-2.89	120.59	124.84
27	Y	613	CLA	O2D-CGD-O1D	-2.89	118.19	123.84
37	N	607	CHL	C1D-ND-C4D	-2.89	104.28	106.33
37	n	605	CHL	CMD-C2D-C3D	-2.89	120.97	127.61
27	g	611	CLA	CHB-C4A-NA	2.89	128.50	124.51
37	s	607	CHL	C3D-C4D-ND	2.89	114.91	110.24
38	s	1620	LUT	C15-C14-C13	-2.89	123.19	127.31
27	c	505	CLA	C1-C2-C3	-2.89	121.05	126.04
37	Y	607	CHL	C1D-ND-C4D	-2.88	104.29	106.33
37	y	607	CHL	C1D-ND-C4D	-2.88	104.29	106.33
37	s	608	CHL	C1C-C2C-C3C	-2.88	104.83	107.11
27	b	615	CLA	CMB-C2B-C1B	-2.88	124.03	128.46
37	g	601	CHL	C4-C3-C5	2.88	120.12	115.27
38	y	1620	LUT	C31-C30-C29	-2.88	123.20	127.31
37	G	601	CHL	CHB-C4A-NA	2.88	128.50	124.51
37	N	607	CHL	CMB-C2B-C3B	2.88	130.07	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	r	613	CLA	O2D-CGD-O1D	-2.88	118.21	123.84
37	S	607	CHL	CHD-C4C-C3C	-2.88	120.61	124.84
39	Y	1622	XAT	C35-C15-C14	-2.88	117.58	123.47
37	S	608	CHL	C1C-C2C-C3C	-2.88	104.83	107.11
27	Y	610	CLA	C1B-CHB-C4A	-2.87	124.42	130.12
27	R	602	CLA	CMB-C2B-C3B	2.87	130.06	124.68
40	G	1623	NEX	O24-C25-C38	2.87	118.50	115.06
27	N	612	CLA	CMB-C2B-C3B	2.87	130.05	124.68
37	s	607	CHL	CMD-C2D-C3D	-2.87	121.01	127.61
27	s	613	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
27	S	611	CLA	C1B-CHB-C4A	-2.87	124.43	130.12
27	B	615	CLA	CMB-C2B-C1B	-2.87	124.05	128.46
37	n	607	CHL	CMB-C2B-C3B	2.87	130.05	124.68
27	s	611	CLA	C1B-CHB-C4A	-2.87	124.43	130.12
27	B	607	CLA	CHB-C4A-NA	2.87	128.48	124.51
29	B	620	BCR	C20-C21-C22	-2.87	123.22	127.31
27	n	610	CLA	C1-C2-C3	-2.87	121.08	126.04
27	N	610	CLA	C1-C2-C3	-2.87	121.08	126.04
28	A	408	PHO	CMB-C2B-C3B	2.87	130.04	124.68
28	a	408	PHO	CMB-C2B-C3B	2.87	130.04	124.68
38	G	1620	LUT	C21-C26-C27	-2.87	109.08	112.70
37	N	609	CHL	CMD-C2D-C3D	-2.87	121.02	127.61
37	n	609	CHL	CMD-C2D-C3D	-2.87	121.02	127.61
29	D	404	BCR	C33-C5-C4	2.87	119.12	113.62
39	N	1622	XAT	C35-C34-C33	-2.87	123.22	127.31
27	N	602	CLA	CMB-C2B-C1B	-2.86	124.06	128.46
27	n	602	CLA	CMB-C2B-C1B	-2.86	124.06	128.46
38	n	1621	LUT	C21-C26-C27	-2.86	109.08	112.70
37	S	601	CHL	C1B-CHB-C4A	-2.86	124.44	130.12
37	s	601	CHL	C1B-CHB-C4A	-2.86	124.44	130.12
27	n	612	CLA	CMB-C2B-C3B	2.86	130.03	124.68
27	R	610	CLA	O2D-CGD-O1D	-2.86	118.24	123.84
27	C	505	CLA	C1-C2-C3	-2.86	121.09	126.04
39	y	1622	XAT	C35-C15-C14	-2.86	117.61	123.47
27	R	602	CLA	C1B-CHB-C4A	-2.86	124.45	130.12
27	b	613	CLA	CHB-C4A-NA	2.86	128.47	124.51
39	Y	1622	XAT	C24-C23-C22	-2.86	105.25	110.77
27	y	610	CLA	C1B-CHB-C4A	-2.86	124.45	130.12
27	S	613	CLA	O2D-CGD-O1D	-2.86	118.25	123.84
27	b	607	CLA	CHB-C4A-NA	2.86	128.46	124.51
37	S	607	CHL	C4A-NA-C1A	2.86	107.99	106.71
37	s	607	CHL	C4A-NA-C1A	2.86	107.99	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B	617	CLA	O2D-CGD-O1D	-2.86	118.26	123.84
27	b	617	CLA	O2D-CGD-O1D	-2.86	118.26	123.84
29	a	411	BCR	C16-C15-C14	-2.85	117.63	123.47
31	B	622	LMG	O1-C7-C8	-2.85	104.01	110.90
38	g	1620	LUT	C21-C26-C27	-2.85	109.09	112.70
27	s	610	CLA	C1B-CHB-C4A	-2.85	124.47	130.12
37	S	601	CHL	CMD-C2D-C3D	-2.85	121.05	127.61
37	n	606	CHL	CMD-C2D-C3D	-2.85	121.06	127.61
40	Y	1623	NEX	C39-C29-C30	-2.85	118.93	122.92
27	R	601	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
38	N	1621	LUT	C21-C26-C27	-2.85	109.10	112.70
37	r	606	CHL	C2A-C1A-CHA	-2.85	118.88	123.86
37	R	606	CHL	C2A-C1A-CHA	-2.85	118.88	123.86
27	B	602	CLA	CMB-C2B-C3B	2.85	130.00	124.68
27	b	602	CLA	CMB-C2B-C3B	2.85	130.00	124.68
27	y	613	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
37	N	606	CHL	CMD-C2D-C3D	-2.84	121.08	127.61
31	b	622	LMG	O1-C7-C8	-2.84	104.04	110.90
27	r	601	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
29	A	411	BCR	C16-C15-C14	-2.84	117.65	123.47
27	n	611	CLA	CMB-C2B-C3B	2.84	129.99	124.68
38	n	1621	LUT	C10-C11-C12	-2.84	114.35	123.22
37	g	605	CHL	CMD-C2D-C3D	-2.84	121.08	127.61
37	n	609	CHL	CMB-C2B-C3B	2.84	129.99	124.68
39	y	1622	XAT	C24-C23-C22	-2.84	105.29	110.77
27	r	602	CLA	O2D-CGD-O1D	-2.84	118.29	123.84
27	r	603	CLA	CMB-C2B-C3B	2.84	129.99	124.68
40	G	1623	NEX	C11-C12-C13	-2.84	118.44	126.42
29	b	618	BCR	C23-C24-C25	-2.84	119.23	127.20
37	y	606	CHL	O2A-CGA-CBA	2.84	120.81	111.91
29	B	618	BCR	C21-C20-C19	-2.83	114.37	123.22
40	g	1623	NEX	C11-C12-C13	-2.83	118.46	126.42
37	g	601	CHL	CHB-C4A-NA	2.83	128.43	124.51
37	y	608	CHL	O2A-CGA-CBA	2.83	120.80	111.91
29	b	618	BCR	C21-C20-C19	-2.83	114.38	123.22
32	C	519	DGD	CDB-CCB-CBB	-2.83	100.05	114.42
27	B	613	CLA	CHB-C4A-NA	2.83	128.43	124.51
32	c	519	DGD	CDB-CCB-CBB	-2.83	100.05	114.42
27	B	604	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
39	n	1622	XAT	C35-C34-C33	-2.83	123.27	127.31
37	Y	606	CHL	O2A-CGA-CBA	2.83	120.79	111.91
37	N	609	CHL	CMB-C2B-C3B	2.83	129.97	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	N	605	CHL	C2A-C3A-C4A	-2.83	97.30	101.87
27	y	602	CLA	CMB-C2B-C3B	2.83	129.97	124.68
27	R	603	CLA	CMB-C2B-C3B	2.83	129.97	124.68
37	y	606	CHL	CMD-C2D-C3D	-2.83	121.11	127.61
27	r	601	CLA	CAC-C3C-C4C	2.83	128.48	124.81
37	G	605	CHL	CMD-C2D-C3D	-2.83	121.11	127.61
27	C	511	CLA	CHB-C4A-NA	2.83	128.42	124.51
27	R	602	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
40	y	1623	NEX	C39-C29-C30	-2.83	118.96	122.92
28	a	408	PHO	O1D-CGD-CBD	2.83	129.45	124.74
29	b	620	BCR	C20-C21-C22	-2.83	123.28	127.31
29	B	618	BCR	C23-C24-C25	-2.83	119.26	127.20
29	b	620	BCR	C16-C15-C14	-2.83	117.68	123.47
37	N	601	CHL	C1D-ND-C4D	-2.83	104.33	106.33
37	s	601	CHL	CMD-C2D-C3D	-2.83	121.11	127.61
27	r	611	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
37	Y	608	CHL	O2A-CGA-CBA	2.83	120.78	111.91
38	N	1621	LUT	C10-C11-C12	-2.82	114.41	123.22
27	C	504	CLA	CHB-C4A-NA	2.82	128.42	124.51
27	S	610	CLA	C1B-CHB-C4A	-2.82	124.53	130.12
27	B	605	CLA	C1-C2-C3	-2.82	121.16	126.04
29	B	618	BCR	C15-C16-C17	-2.82	117.69	123.47
29	b	618	BCR	C15-C16-C17	-2.82	117.69	123.47
27	s	611	CLA	O2D-CGD-O1D	-2.82	118.32	123.84
27	R	609	CLA	CHB-C4A-NA	2.82	128.41	124.51
27	r	609	CLA	CHB-C4A-NA	2.82	128.41	124.51
40	R	623	NEX	C24-C23-C22	-2.82	105.33	110.77
27	g	612	CLA	CMB-C2B-C3B	2.82	129.95	124.68
27	b	605	CLA	C1-C2-C3	-2.82	121.17	126.04
28	A	408	PHO	O1D-CGD-CBD	2.82	129.43	124.74
37	Y	606	CHL	CMD-C2D-C3D	-2.82	121.13	127.61
27	S	611	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
37	G	608	CHL	CMB-C2B-C3B	2.82	129.95	124.68
27	A	406	CLA	CHB-C4A-NA	2.82	128.41	124.51
27	R	611	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
29	C	517	BCR	C10-C11-C12	-2.81	114.44	123.22
37	n	601	CHL	C1D-ND-C4D	-2.81	104.34	106.33
27	B	605	CLA	CMB-C2B-C3B	2.81	129.94	124.68
27	b	605	CLA	CMB-C2B-C3B	2.81	129.94	124.68
29	c	517	BCR	C10-C11-C12	-2.81	114.44	123.22
27	r	610	CLA	C1B-CHB-C4A	-2.81	124.55	130.12
27	R	610	CLA	C1B-CHB-C4A	-2.81	124.55	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	g	607	CHL	CHB-C4A-NA	2.81	128.40	124.51
27	b	606	CLA	C1-C2-C3	-2.81	121.18	126.04
27	c	511	CLA	CHB-C4A-NA	2.81	128.40	124.51
27	G	611	CLA	CHB-C4A-NA	2.81	128.40	124.51
37	S	607	CHL	OMC-CMC-C2C	-2.81	119.33	125.69
37	s	607	CHL	OMC-CMC-C2C	-2.81	119.33	125.69
40	S	1623	NEX	C38-C25-C24	2.81	117.44	114.28
40	s	1623	NEX	C38-C25-C24	2.81	117.44	114.28
37	G	607	CHL	CHB-C4A-NA	2.81	128.40	124.51
37	n	605	CHL	C2A-C3A-C4A	-2.81	97.33	101.87
29	B	620	BCR	C16-C15-C14	-2.81	117.72	123.47
40	r	623	NEX	C24-C23-C22	-2.81	105.35	110.77
27	b	604	CLA	O2D-CGD-O1D	-2.81	118.35	123.84
38	S	1620	LUT	C18-C5-C4	2.81	119.55	114.36
38	s	1620	LUT	C18-C5-C4	2.81	119.55	114.36
37	g	601	CHL	O2A-CGA-CBA	2.80	120.71	111.91
27	Y	602	CLA	CMB-C2B-C3B	2.80	129.92	124.68
27	R	603	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
27	G	612	CLA	CMB-C2B-C3B	2.80	129.92	124.68
27	y	604	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
27	R	604	CLA	CHB-C4A-NA	2.80	128.38	124.51
27	r	604	CLA	CHB-C4A-NA	2.80	128.38	124.51
35	D	408	LHG	O8-C23-C24	2.80	120.69	111.91
27	C	508	CLA	C1B-CHB-C4A	-2.80	124.58	130.12
27	c	504	CLA	CHB-C4A-NA	2.80	128.38	124.51
27	r	612	CLA	CMB-C2B-C3B	2.79	129.91	124.68
35	d	408	LHG	O8-C23-C24	2.79	120.67	111.91
27	c	501	CLA	CMB-C2B-C3B	2.79	129.90	124.68
27	N	611	CLA	CMB-C2B-C3B	2.79	129.90	124.68
27	c	508	CLA	C1B-CHB-C4A	-2.79	124.59	130.12
27	Y	613	CLA	C1B-CHB-C4A	-2.79	124.59	130.12
27	y	613	CLA	C1B-CHB-C4A	-2.79	124.59	130.12
37	G	601	CHL	O2A-CGA-CBA	2.79	120.66	111.91
27	R	611	CLA	CMB-C2B-C3B	2.79	129.90	124.68
27	r	611	CLA	CMB-C2B-C3B	2.79	129.90	124.68
27	r	603	CLA	O2D-CGD-O1D	-2.79	118.39	123.84
27	C	501	CLA	CMB-C2B-C3B	2.79	129.89	124.68
37	n	608	CHL	O2A-CGA-CBA	2.79	120.66	111.91
32	c	519	DGD	O5D-C6D-C5D	-2.79	103.89	109.05
37	S	607	CHL	O2A-CGA-CBA	2.79	120.65	111.91
39	N	1622	XAT	C38-C25-C24	2.78	117.41	114.28
39	n	1622	XAT	C38-C25-C24	2.78	117.41	114.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	s	607	CHL	O2A-CGA-CBA	2.78	120.65	111.91
27	B	608	CLA	CHB-C4A-NA	2.78	128.36	124.51
32	C	519	DGD	O5D-C6D-C5D	-2.78	103.90	109.05
27	Y	604	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
27	N	611	CLA	C1B-CHB-C4A	-2.78	124.61	130.12
27	b	608	CLA	CHB-C4A-NA	2.78	128.36	124.51
32	c	520	DGD	C3G-C2G-C1G	-2.78	105.21	111.79
27	S	602	CLA	C1B-CHB-C4A	-2.78	124.61	130.12
37	R	608	CHL	CMD-C2D-C3D	-2.78	121.22	127.61
40	Y	1623	NEX	C31-C30-C29	-2.78	123.34	127.31
35	D	410	LHG	O8-C23-C24	2.78	120.63	111.91
35	d	410	LHG	O8-C23-C24	2.78	120.63	111.91
27	c	506	CLA	C1B-CHB-C4A	-2.78	124.61	130.12
37	g	608	CHL	O2A-CGA-CBA	2.78	120.62	111.91
37	g	608	CHL	CMB-C2B-C3B	2.78	129.87	124.68
32	C	520	DGD	C3G-C2G-C1G	-2.78	105.22	111.79
27	C	506	CLA	C1B-CHB-C4A	-2.78	124.62	130.12
27	b	604	CLA	C1B-CHB-C4A	-2.78	124.62	130.12
37	G	605	CHL	O2A-CGA-CBA	2.78	120.62	111.91
37	g	605	CHL	O2A-CGA-CBA	2.78	120.62	111.91
27	b	606	CLA	O2D-CGD-O1D	-2.77	118.41	123.84
37	G	608	CHL	O2A-CGA-CBA	2.77	120.61	111.91
37	N	608	CHL	O2A-CGA-CBA	2.77	120.61	111.91
38	r	620	LUT	C35-C34-C33	-2.77	123.35	127.31
29	C	517	BCR	C33-C5-C4	2.77	118.94	113.62
29	c	517	BCR	C33-C5-C4	2.77	118.94	113.62
29	A	411	BCR	C8-C7-C6	-2.77	119.42	127.20
27	B	604	CLA	C1B-CHB-C4A	-2.77	124.63	130.12
27	C	507	CLA	CHB-C4A-NA	2.77	128.34	124.51
32	C	518	DGD	CDB-CCB-CBB	-2.77	100.37	114.42
27	B	606	CLA	C1-C2-C3	-2.77	121.26	126.04
27	r	613	CLA	CHB-C4A-NA	2.77	128.34	124.51
27	s	602	CLA	C1B-CHB-C4A	-2.76	124.64	130.12
40	r	623	NEX	C38-C25-C24	2.76	117.39	114.28
38	G	1620	LUT	C8-C7-C6	-2.76	119.44	127.20
37	N	606	CHL	CHB-C4A-NA	2.76	128.33	124.51
32	c	518	DGD	CDB-CCB-CBB	-2.76	100.40	114.42
37	G	608	CHL	C1D-ND-C4D	-2.76	104.37	106.33
27	C	512	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
27	y	614	CLA	CHB-C4A-NA	2.76	128.33	124.51
27	c	512	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
39	N	1622	XAT	C4-C3-C2	-2.76	105.45	110.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	g	608	CHL	C1D-ND-C4D	-2.76	104.38	106.33
37	r	608	CHL	CMD-C2D-C3D	-2.76	121.27	127.61
27	a	406	CLA	CHB-C4A-NA	2.76	128.32	124.51
37	n	606	CHL	CHB-C4A-NA	2.75	128.32	124.51
27	S	609	CLA	C1B-CHB-C4A	-2.75	124.66	130.12
29	a	411	BCR	C8-C7-C6	-2.75	119.47	127.20
38	g	1620	LUT	C8-C7-C6	-2.75	119.47	127.20
27	R	609	CLA	CMB-C2B-C3B	2.75	129.83	124.68
27	R	612	CLA	CMB-C2B-C3B	2.75	129.83	124.68
27	R	610	CLA	CHB-C4A-NA	2.75	128.32	124.51
27	r	610	CLA	CHB-C4A-NA	2.75	128.32	124.51
27	n	611	CLA	C1B-CHB-C4A	-2.75	124.67	130.12
27	s	609	CLA	C1B-CHB-C4A	-2.75	124.67	130.12
40	g	1623	NEX	C26-C27-C28	-2.75	120.18	125.99
37	Y	606	CHL	CHB-C4A-NA	2.75	128.32	124.51
27	B	606	CLA	O2D-CGD-O1D	-2.75	118.46	123.84
37	Y	601	CHL	C4-C3-C5	2.75	119.90	115.27
27	B	606	CLA	C1B-CHB-C4A	-2.75	124.67	130.12
38	g	1620	LUT	C31-C30-C29	-2.75	123.39	127.31
27	N	612	CLA	O2D-CGD-O1D	-2.75	118.47	123.84
27	n	612	CLA	O2D-CGD-O1D	-2.75	118.47	123.84
37	y	601	CHL	C4-C3-C5	2.74	119.89	115.27
40	y	1623	NEX	C31-C30-C29	-2.74	123.39	127.31
27	g	604	CLA	CMB-C2B-C3B	2.74	129.81	124.68
27	g	612	CLA	CHB-C4A-NA	2.74	128.30	124.51
27	r	609	CLA	CMB-C2B-C3B	2.74	129.81	124.68
37	Y	609	CHL	CMB-C2B-C3B	2.74	129.81	124.68
27	b	606	CLA	C1B-CHB-C4A	-2.74	124.69	130.12
27	N	614	CLA	CHB-C4A-NA	2.74	128.30	124.51
27	G	604	CLA	O2D-CGD-O1D	-2.74	118.48	123.84
29	c	514	BCR	C7-C8-C9	-2.74	122.10	126.23
29	C	514	BCR	C21-C20-C19	-2.74	114.67	123.22
40	G	1623	NEX	C24-C23-C22	-2.74	105.49	110.77
40	g	1623	NEX	C24-C23-C22	-2.74	105.49	110.77
27	n	603	CLA	CMB-C2B-C3B	2.74	129.80	124.68
37	y	606	CHL	CMB-C2B-C3B	2.74	129.80	124.68
37	Y	609	CHL	C1-C2-C3	-2.73	121.31	126.04
27	d	402	CLA	CMB-C2B-C3B	2.73	129.79	124.68
38	R	620	LUT	C35-C34-C33	-2.73	123.41	127.31
37	y	609	CHL	C1-C2-C3	-2.73	121.32	126.04
27	S	604	CLA	CHB-C4A-NA	2.73	128.29	124.51
27	c	508	CLA	CHB-C4A-NA	2.73	128.29	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	n	614	CLA	CHB-C4A-NA	2.73	128.29	124.51
27	y	603	CLA	CMB-C2B-C3B	2.73	129.79	124.68
27	B	610	CLA	C1B-CHB-C4A	-2.73	124.71	130.12
27	b	610	CLA	C1B-CHB-C4A	-2.73	124.71	130.12
37	G	609	CHL	O2A-CGA-CBA	2.73	120.47	111.91
27	B	615	CLA	C1B-CHB-C4A	-2.73	124.71	130.12
37	G	601	CHL	C2A-C1A-CHA	-2.73	119.09	123.86
37	g	609	CHL	C1D-ND-C4D	-2.73	104.40	106.33
27	y	613	CLA	CMB-C2B-C3B	2.73	129.78	124.68
27	R	613	CLA	CHB-C4A-NA	2.73	128.28	124.51
39	n	1622	XAT	C4-C3-C2	-2.73	105.51	110.77
29	c	514	BCR	C21-C20-C19	-2.73	114.71	123.22
27	G	604	CLA	CMB-C2B-C3B	2.73	129.78	124.68
29	C	514	BCR	C7-C8-C9	-2.72	122.12	126.23
27	N	603	CLA	CMB-C2B-C3B	2.72	129.78	124.68
27	D	402	CLA	CMB-C2B-C3B	2.72	129.77	124.68
27	c	507	CLA	CHB-C4A-NA	2.72	128.28	124.51
27	Y	603	CLA	CMB-C2B-C3B	2.72	129.77	124.68
27	b	615	CLA	C1B-CHB-C4A	-2.72	124.72	130.12
38	G	1620	LUT	C31-C30-C29	-2.72	123.42	127.31
27	c	505	CLA	C1B-CHB-C4A	-2.72	124.73	130.12
37	Y	609	CHL	CMD-C2D-C3D	-2.72	121.36	127.61
37	y	609	CHL	CMD-C2D-C3D	-2.72	121.36	127.61
27	g	604	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
37	y	606	CHL	CHB-C4A-NA	2.72	128.27	124.51
37	g	609	CHL	O2A-CGA-CBA	2.72	120.44	111.91
37	Y	601	CHL	CMD-C2D-C3D	-2.72	121.36	127.61
37	g	601	CHL	C2A-C1A-CHA	-2.72	119.11	123.86
27	C	511	CLA	O2D-CGD-O1D	-2.72	118.53	123.84
39	N	1622	XAT	C10-C11-C12	-2.72	114.74	123.22
37	R	606	CHL	CMD-C2D-C3D	-2.72	121.37	127.61
27	A	410	CLA	C1B-CHB-C4A	-2.72	124.74	130.12
37	Y	606	CHL	CMB-C2B-C3B	2.72	129.76	124.68
39	R	622	XAT	C38-C25-C24	2.71	117.33	114.28
27	r	616	CLA	C1B-CHB-C4A	-2.71	124.75	130.12
40	G	1623	NEX	C26-C27-C28	-2.71	120.26	125.99
27	Y	613	CLA	CMB-C2B-C3B	2.71	129.75	124.68
37	r	606	CHL	CMD-C2D-C3D	-2.71	121.38	127.61
37	N	601	CHL	O2A-CGA-CBA	2.71	120.41	111.91
37	y	609	CHL	CMB-C2B-C3B	2.71	129.75	124.68
27	a	406	CLA	O2D-CGD-O1D	-2.71	118.54	123.84
39	N	1622	XAT	C40-C33-C32	2.71	122.34	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	505	CLA	C1B-CHB-C4A	-2.71	124.76	130.12
27	r	603	CLA	C1B-CHB-C4A	-2.71	124.76	130.12
27	g	610	CLA	C1B-CHB-C4A	-2.70	124.76	130.12
27	s	604	CLA	CHB-C4A-NA	2.70	128.25	124.51
27	C	508	CLA	CHB-C4A-NA	2.70	128.25	124.51
27	a	410	CLA	C1B-CHB-C4A	-2.70	124.77	130.12
27	c	509	CLA	C1B-CHB-C4A	-2.70	124.77	130.12
27	A	406	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
39	n	1622	XAT	C10-C11-C12	-2.70	114.80	123.22
37	R	606	CHL	OMC-CMC-C2C	-2.70	119.59	125.69
38	N	1620	LUT	C10-C11-C12	-2.70	114.80	123.22
27	a	410	CLA	CHB-C4A-NA	2.70	128.24	124.51
27	G	610	CLA	C1B-CHB-C4A	-2.70	124.78	130.12
38	N	1621	LUT	C18-C5-C4	2.70	119.35	114.36
29	C	514	BCR	C8-C7-C6	-2.70	119.63	127.20
27	c	511	CLA	O2D-CGD-O1D	-2.69	118.57	123.84
37	g	605	CHL	C1D-ND-C4D	-2.69	104.42	106.33
29	c	514	BCR	C8-C7-C6	-2.69	119.64	127.20
27	R	616	CLA	C1B-CHB-C4A	-2.69	124.78	130.12
37	n	601	CHL	O2A-CGA-CBA	2.69	120.35	111.91
37	r	606	CHL	OMC-CMC-C2C	-2.69	119.60	125.69
27	R	603	CLA	C1B-CHB-C4A	-2.69	124.79	130.12
39	r	622	XAT	C24-C23-C22	-2.69	105.58	110.77
27	R	616	CLA	CMB-C2B-C3B	2.69	129.71	124.68
27	G	612	CLA	CHB-C4A-NA	2.69	128.23	124.51
37	N	607	CHL	CHB-C4A-NA	2.69	128.23	124.51
27	d	402	CLA	C1B-CHB-C4A	-2.69	124.79	130.12
37	G	609	CHL	C1D-ND-C4D	-2.69	104.43	106.33
37	r	607	CHL	CMB-C2B-C3B	2.69	129.70	124.68
27	s	611	CLA	CHB-C4A-NA	2.68	128.22	124.51
38	n	1620	LUT	C10-C11-C12	-2.68	114.84	123.22
27	C	501	CLA	C1B-CHB-C4A	-2.68	124.80	130.12
27	b	602	CLA	O2D-CGD-O1D	-2.68	118.59	123.84
40	N	1623	NEX	C31-C30-C29	-2.68	123.48	127.31
27	A	410	CLA	CHB-C4A-NA	2.68	128.22	124.51
27	C	509	CLA	C1B-CHB-C4A	-2.68	124.81	130.12
27	N	611	CLA	CHB-C4A-NA	2.68	128.22	124.51
27	n	611	CLA	CHB-C4A-NA	2.68	128.22	124.51
27	c	503	CLA	C1B-CHB-C4A	-2.68	124.81	130.12
38	n	1621	LUT	C18-C5-C4	2.68	119.32	114.36
27	c	513	CLA	CHB-C4A-NA	2.68	128.21	124.51
40	R	623	NEX	C38-C25-C24	2.68	117.29	114.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	Y	609	CHL	C2A-C1A-CHA	-2.68	119.18	123.86
27	Y	614	CLA	CHB-C4A-NA	2.68	128.21	124.51
27	y	603	CLA	CHB-C4A-NA	2.68	128.21	124.51
37	y	601	CHL	CMD-C2D-C3D	-2.68	121.46	127.61
27	G	603	CLA	CMB-C2B-C3B	2.68	129.68	124.68
37	G	606	CHL	C2A-C1A-CHA	-2.67	119.18	123.86
37	g	606	CHL	C2A-C1A-CHA	-2.67	119.18	123.86
27	C	503	CLA	C1B-CHB-C4A	-2.67	124.82	130.12
27	a	405	CLA	C1B-CHB-C4A	-2.67	124.82	130.12
27	r	609	CLA	C1B-CHB-C4A	-2.67	124.82	130.12
37	n	608	CHL	CHB-C4A-NA	2.67	128.21	124.51
35	y	2630	LHG	O8-C23-C24	2.67	120.30	111.91
37	R	607	CHL	CMB-C2B-C3B	2.67	129.68	124.68
27	C	509	CLA	C11-C12-C13	-2.67	107.28	115.92
27	c	509	CLA	C11-C12-C13	-2.67	107.28	115.92
35	Y	2630	LHG	O8-C23-C24	2.67	120.29	111.91
37	N	608	CHL	CHB-C4A-NA	2.67	128.20	124.51
37	y	609	CHL	C2A-C1A-CHA	-2.67	119.19	123.86
40	n	1623	NEX	C31-C30-C29	-2.67	123.50	127.31
39	n	1622	XAT	C40-C33-C32	2.67	122.28	118.08
38	s	1621	LUT	C3-C4-C5	-2.67	106.54	111.85
27	D	402	CLA	C1B-CHB-C4A	-2.67	124.83	130.12
27	C	513	CLA	CHB-C4A-NA	2.67	128.20	124.51
39	r	622	XAT	C38-C25-C24	2.67	117.28	114.28
39	R	622	XAT	C24-C23-C22	-2.67	105.62	110.77
38	S	1621	LUT	C3-C4-C5	-2.67	106.54	111.85
30	a	418	SQD	C4-C3-C2	2.66	115.47	110.82
27	R	612	CLA	O2D-CGD-O1D	-2.66	118.63	123.84
38	y	1621	LUT	C22-C23-C24	-2.66	108.71	111.74
27	A	405	CLA	C1B-CHB-C4A	-2.66	124.84	130.12
31	A	413	LMG	O3-C3-C2	-2.66	104.19	110.35
27	R	609	CLA	C1B-CHB-C4A	-2.66	124.84	130.12
27	S	611	CLA	CHB-C4A-NA	2.66	128.19	124.51
37	S	606	CHL	O2A-CGA-CBA	2.66	120.26	111.91
32	H	102	DGD	CDB-CCB-CBB	-2.66	100.92	114.42
27	c	501	CLA	C1B-CHB-C4A	-2.66	124.85	130.12
37	n	607	CHL	CHB-C4A-NA	2.66	128.19	124.51
27	b	606	CLA	CMB-C2B-C3B	2.66	129.65	124.68
27	r	616	CLA	CMB-C2B-C3B	2.66	129.65	124.68
27	g	603	CLA	CMB-C2B-C3B	2.66	129.65	124.68
27	B	606	CLA	CMB-C2B-C3B	2.65	129.64	124.68
27	B	616	CLA	CHB-C4A-NA	2.65	128.18	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	r	612	CLA	O2D-CGD-O1D	-2.65	118.65	123.84
37	n	605	CHL	O2A-CGA-CBA	2.65	120.23	111.91
32	h	102	DGD	CDB-CCB-CBB	-2.65	100.97	114.42
38	Y	1621	LUT	C22-C23-C24	-2.65	108.72	111.74
37	N	605	CHL	O2A-CGA-CBA	2.65	120.22	111.91
37	s	606	CHL	O2A-CGA-CBA	2.65	120.22	111.91
30	A	418	SQD	C4-C3-C2	2.65	115.44	110.82
37	R	606	CHL	CHB-C4A-NA	2.65	128.17	124.51
27	c	504	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
31	a	413	LMG	O3-C3-C2	-2.65	104.23	110.35
38	s	1620	LUT	C21-C26-C27	-2.65	109.36	112.70
37	G	601	CHL	C1C-C2C-C3C	-2.64	105.02	107.11
27	Y	604	CLA	C1B-CHB-C4A	-2.64	124.88	130.12
37	G	609	CHL	CMB-C2B-C3B	2.64	129.63	124.68
27	G	614	CLA	O2D-CGD-O1D	-2.64	118.67	123.84
35	N	2630	LHG	C11-C10-C9	-2.64	101.01	114.42
38	S	1621	LUT	C31-C30-C29	-2.64	123.54	127.31
38	s	1621	LUT	C31-C30-C29	-2.64	123.54	127.31
27	C	509	CLA	O2D-CGD-O1D	-2.64	118.67	123.84
38	y	1620	LUT	C20-C13-C12	2.64	122.24	118.08
28	a	409	PHO	C4A-C3A-C2A	-2.64	100.33	102.84
27	S	602	CLA	CHB-C4A-NA	2.64	128.16	124.51
37	Y	601	CHL	O2A-CGA-CBA	2.64	120.19	111.91
37	y	601	CHL	O2A-CGA-CBA	2.64	120.19	111.91
27	B	605	CLA	CHB-C4A-NA	2.64	128.16	124.51
27	b	605	CLA	CHB-C4A-NA	2.64	128.16	124.51
27	R	609	CLA	O2D-CGD-O1D	-2.64	118.68	123.84
27	r	609	CLA	O2D-CGD-O1D	-2.64	118.68	123.84
27	n	604	CLA	O2D-CGD-O1D	-2.64	118.68	123.84
27	n	613	CLA	O2D-CGD-O1D	-2.64	118.68	123.84
27	g	614	CLA	CHB-C4A-NA	2.64	128.16	124.51
27	Y	603	CLA	CHB-C4A-NA	2.64	128.16	124.51
35	n	2630	LHG	C11-C10-C9	-2.64	101.04	114.42
37	Y	609	CHL	O2A-CGA-CBA	2.64	120.18	111.91
32	c	520	DGD	C4E-C3E-C2E	-2.64	106.22	110.82
29	B	619	BCR	C38-C26-C25	-2.64	121.57	124.53
37	R	607	CHL	CMD-C2D-C3D	-2.63	121.56	127.61
37	r	607	CHL	CMD-C2D-C3D	-2.63	121.56	127.61
39	y	1622	XAT	C31-C32-C33	-2.63	119.02	126.42
29	C	516	BCR	C33-C5-C4	2.63	118.67	113.62
37	Y	609	CHL	C1C-C2C-C3C	-2.63	105.03	107.11
37	G	605	CHL	C1D-ND-C4D	-2.63	104.47	106.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	G	614	CLA	CHB-C4A-NA	2.63	128.15	124.51
40	r	623	NEX	C39-C29-C30	-2.63	119.24	122.92
27	y	604	CLA	C1B-CHB-C4A	-2.63	124.91	130.12
37	R	606	CHL	CMB-C2B-C3B	2.63	129.59	124.68
27	r	611	CLA	C1B-CHB-C4A	-2.63	124.92	130.12
29	c	516	BCR	C33-C5-C4	2.62	118.66	113.62
37	y	609	CHL	O2A-CGA-CBA	2.62	120.14	111.91
27	b	616	CLA	CHB-C4A-NA	2.62	128.14	124.51
39	Y	1622	XAT	C31-C32-C33	-2.62	119.05	126.42
32	C	520	DGD	C4E-C3E-C2E	-2.62	106.24	110.82
27	g	614	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
27	N	603	CLA	C1B-CHB-C4A	-2.62	124.92	130.12
27	n	603	CLA	C1B-CHB-C4A	-2.62	124.92	130.12
38	Y	1620	LUT	C20-C13-C12	2.62	122.21	118.08
27	B	602	CLA	CHB-C4A-NA	2.62	128.14	124.51
27	c	503	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
27	c	509	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
27	A	406	CLA	C1B-CHB-C4A	-2.62	124.93	130.12
27	B	614	CLA	C1B-CHB-C4A	-2.62	124.93	130.12
27	n	604	CLA	CHB-C4A-NA	2.62	128.13	124.51
27	N	613	CLA	O2D-CGD-O1D	-2.62	118.72	123.84
40	g	1623	NEX	C20-C13-C14	-2.62	119.25	122.92
27	N	604	CLA	O2D-CGD-O1D	-2.62	118.72	123.84
27	g	611	CLA	C1B-CHB-C4A	-2.62	124.93	130.12
37	Y	601	CHL	CMB-C2B-C3B	2.62	129.57	124.68
27	B	602	CLA	O2D-CGD-O1D	-2.62	118.72	123.84
27	C	504	CLA	O2D-CGD-O1D	-2.62	118.72	123.84
27	B	615	CLA	CHB-C4A-NA	2.62	128.13	124.51
27	b	614	CLA	C1B-CHB-C4A	-2.61	124.94	130.12
29	C	515	BCR	C16-C17-C18	-2.61	123.58	127.31
29	c	515	BCR	C16-C17-C18	-2.61	123.58	127.31
37	r	606	CHL	CHB-C4A-NA	2.61	128.13	124.51
29	b	619	BCR	C38-C26-C25	-2.61	121.59	124.53
37	g	609	CHL	CMB-C2B-C3B	2.61	129.57	124.68
37	s	608	CHL	C3B-C4B-NB	2.61	112.59	109.21
37	S	608	CHL	C3B-C4B-NB	2.61	112.59	109.21
37	r	607	CHL	O2D-CGD-O1D	-2.61	118.73	123.84
37	Y	608	CHL	C1C-C2C-C3C	-2.61	105.04	107.11
37	s	606	CHL	C2D-C1D-ND	2.61	112.03	110.10
35	R	2630	LHG	O8-C23-C24	2.61	120.10	111.91
27	B	608	CLA	O2D-CGD-O1D	-2.61	118.73	123.84
37	y	609	CHL	C1C-C2C-C3C	-2.61	105.04	107.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	S	608	CHL	CMD-C2D-C3D	-2.61	121.61	127.61
27	A	407	CLA	O2D-CGD-O1D	-2.61	118.74	123.84
27	b	608	CLA	O2D-CGD-O1D	-2.61	118.74	123.84
27	b	602	CLA	CHB-C4A-NA	2.61	128.12	124.51
28	A	409	PHO	C4A-C3A-C2A	-2.61	100.36	102.84
27	R	611	CLA	C1B-CHB-C4A	-2.61	124.95	130.12
35	r	2630	LHG	O8-C23-C24	2.61	120.09	111.91
37	n	601	CHL	CMB-C2B-C3B	2.61	129.56	124.68
40	R	623	NEX	C39-C29-C30	-2.60	119.28	122.92
37	Y	608	CHL	CMB-C2B-C3B	2.60	129.55	124.68
27	Y	604	CLA	CHB-C4A-NA	2.60	128.11	124.51
27	y	604	CLA	CHB-C4A-NA	2.60	128.11	124.51
37	S	608	CHL	CMB-C2B-C3B	2.60	129.54	124.68
37	s	608	CHL	CMB-C2B-C3B	2.60	129.54	124.68
31	D	411	LMG	O6-C1-O1	-2.60	103.81	109.97
37	g	607	CHL	CMB-C2B-C3B	2.60	129.54	124.68
39	N	1622	XAT	C7-C8-C9	-2.60	121.50	125.53
27	N	604	CLA	CHB-C4A-NA	2.60	128.11	124.51
37	s	608	CHL	CMD-C2D-C3D	-2.60	121.63	127.61
37	y	601	CHL	CMB-C2B-C3B	2.60	129.54	124.68
27	s	602	CLA	CHB-C4A-NA	2.60	128.10	124.51
27	a	407	CLA	O2D-CGD-O1D	-2.60	118.76	123.84
27	a	406	CLA	C1B-CHB-C4A	-2.60	124.97	130.12
27	C	503	CLA	O2D-CGD-O1D	-2.60	118.76	123.84
37	R	607	CHL	O2D-CGD-O1D	-2.60	118.76	123.84
38	Y	1621	LUT	C18-C5-C4	2.60	119.17	114.36
38	g	1621	LUT	C30-C31-C32	-2.60	115.11	123.22
37	S	607	CHL	C2D-C1D-ND	2.60	112.02	110.10
27	B	612	CLA	C1B-CHB-C4A	-2.60	124.98	130.12
37	Y	607	CHL	O2A-CGA-CBA	2.60	120.05	111.91
27	b	613	CLA	C1B-CHB-C4A	-2.59	124.98	130.12
27	r	602	CLA	CHB-C4A-NA	2.59	128.10	124.51
39	n	1622	XAT	C39-C29-C30	-2.59	119.29	122.92
37	N	606	CHL	C2A-C1A-CHA	-2.59	119.33	123.86
37	n	606	CHL	C2A-C1A-CHA	-2.59	119.33	123.86
27	N	612	CLA	CHB-C4A-NA	2.59	128.10	124.51
27	r	603	CLA	CHB-C4A-NA	2.59	128.10	124.51
28	A	409	PHO	CMC-C2C-C3C	2.59	129.82	124.94
38	G	1621	LUT	C18-C5-C4	2.59	119.15	114.36
38	g	1621	LUT	C18-C5-C4	2.59	119.15	114.36
38	G	1621	LUT	C30-C31-C32	-2.59	115.14	123.22
38	y	1621	LUT	C15-C35-C34	-2.59	118.17	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	d	411	LMG	O6-C1-O1	-2.59	103.85	109.97
27	A	407	CLA	CHB-C4A-NA	2.59	128.09	124.51
39	g	1622	XAT	O4-C5-C18	2.59	118.16	115.06
37	g	601	CHL	C1C-C2C-C3C	-2.59	105.06	107.11
27	G	610	CLA	CHB-C4A-NA	2.59	128.09	124.51
37	G	607	CHL	CMB-C2B-C3B	2.59	129.52	124.68
37	r	606	CHL	CMB-C2B-C3B	2.59	129.52	124.68
38	S	1620	LUT	C21-C26-C27	-2.59	109.43	112.70
27	b	615	CLA	CHB-C4A-NA	2.59	128.09	124.51
37	s	607	CHL	CMB-C2B-C3B	2.58	129.51	124.68
27	g	610	CLA	CHB-C4A-NA	2.58	128.09	124.51
27	b	612	CLA	C1B-CHB-C4A	-2.58	125.00	130.12
37	S	607	CHL	CMB-C2B-C3B	2.58	129.51	124.68
37	G	605	CHL	CMB-C2B-C3B	2.58	129.51	124.68
37	g	605	CHL	CMB-C2B-C3B	2.58	129.51	124.68
27	b	608	CLA	C1B-CHB-C4A	-2.58	125.00	130.12
38	g	1621	LUT	C38-C25-C24	-2.58	118.03	123.56
37	G	606	CHL	O2A-CGA-CBA	2.58	120.01	111.91
27	Y	602	CLA	C1B-CHB-C4A	-2.58	125.01	130.12
39	N	1622	XAT	C39-C29-C30	-2.58	119.31	122.92
27	S	609	CLA	O2D-CGD-O1D	-2.58	118.79	123.84
27	a	407	CLA	CHB-C4A-NA	2.58	128.08	124.51
38	y	1621	LUT	C18-C5-C4	2.58	119.13	114.36
39	y	1622	XAT	C40-C33-C34	-2.58	119.31	122.92
29	a	411	BCR	C33-C5-C4	2.58	118.57	113.62
37	Y	605	CHL	OMC-CMC-C2C	-2.58	119.86	125.69
37	N	601	CHL	CMB-C2B-C3B	2.58	129.50	124.68
30	B	621	SQD	O48-C23-C24	2.57	119.99	111.91
37	g	606	CHL	O2A-CGA-CBA	2.57	119.99	111.91
37	Y	608	CHL	CHB-C4A-NA	2.57	128.07	124.51
39	G	1622	XAT	O4-C5-C18	2.57	118.14	115.06
27	R	616	CLA	CHB-C4A-NA	2.57	128.07	124.51
27	N	603	CLA	O2D-CGD-O1D	-2.57	118.81	123.84
40	G	1623	NEX	C20-C13-C14	-2.57	119.32	122.92
31	b	622	LMG	C38-C37-C36	-2.57	101.37	114.42
28	a	409	PHO	CMC-C2C-C3C	2.57	129.79	124.94
31	B	622	LMG	C38-C37-C36	-2.57	101.37	114.42
27	B	608	CLA	C1B-CHB-C4A	-2.57	125.02	130.12
27	B	613	CLA	C1B-CHB-C4A	-2.57	125.02	130.12
27	G	611	CLA	C1B-CHB-C4A	-2.57	125.02	130.12
29	c	517	BCR	C36-C18-C19	2.57	122.13	118.08
37	S	601	CHL	CMB-C2B-C3B	2.57	129.48	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	y	608	CHL	CMB-C2B-C3B	2.57	129.48	124.68
38	G	1621	LUT	C38-C25-C24	-2.57	118.06	123.56
37	y	607	CHL	O2A-CGA-CBA	2.57	119.97	111.91
38	R	620	LUT	C10-C11-C12	-2.57	115.20	123.22
38	r	620	LUT	C10-C11-C12	-2.57	115.20	123.22
37	y	605	CHL	OMC-CMC-C2C	-2.57	119.88	125.69
38	n	1621	LUT	C38-C25-C24	-2.57	118.07	123.56
27	n	603	CLA	CHB-C4A-NA	2.57	128.06	124.51
37	n	607	CHL	CMD-C2D-C3D	-2.57	121.71	127.61
37	N	609	CHL	C2A-C1A-CHA	-2.57	119.37	123.86
37	n	609	CHL	C2A-C1A-CHA	-2.57	119.37	123.86
36	F	101	HEM	CMC-C2C-C3C	2.56	129.48	124.68
36	f	101	HEM	CMC-C2C-C3C	2.56	129.48	124.68
27	n	612	CLA	CHB-C4A-NA	2.56	128.06	124.51
38	N	1620	LUT	C19-C9-C8	2.56	122.11	118.08
38	Y	1621	LUT	C15-C35-C34	-2.56	118.23	123.47
27	B	611	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
27	b	611	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
29	A	411	BCR	C33-C5-C4	2.56	118.53	113.62
27	s	609	CLA	O2D-CGD-O1D	-2.56	118.84	123.84
30	b	621	SQD	O48-C23-C24	2.56	119.93	111.91
27	y	612	CLA	O2D-CGD-O1D	-2.56	118.84	123.84
27	y	614	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
27	C	502	CLA	CHB-C4A-NA	2.56	128.05	124.51
27	y	602	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
37	Y	607	CHL	CMD-C2D-C3D	-2.55	121.74	127.61
37	y	605	CHL	CHB-C4A-NA	2.55	128.04	124.51
38	S	1620	LUT	C10-C11-C12	-2.55	115.25	123.22
27	N	603	CLA	CHB-C4A-NA	2.55	128.04	124.51
37	N	607	CHL	CMD-C2D-C3D	-2.55	121.74	127.61
30	B	621	SQD	C1-O5-C5	2.55	118.70	113.69
27	G	603	CLA	O2D-CGD-O1D	-2.55	118.85	123.84
37	y	607	CHL	CMD-C2D-C3D	-2.55	121.74	127.61
38	N	1621	LUT	C38-C25-C24	-2.55	118.10	123.56
27	S	609	CLA	CHD-C1D-ND	-2.55	122.11	124.45
37	s	601	CHL	O2A-CGA-CBA	2.55	119.91	111.91
27	r	616	CLA	CHB-C4A-NA	2.55	128.04	124.51
37	y	608	CHL	CHB-C4A-NA	2.55	128.04	124.51
38	S	1620	LUT	C16-C1-C6	-2.55	106.17	110.30
38	s	1620	LUT	C16-C1-C6	-2.55	106.17	110.30
39	Y	1622	XAT	C40-C33-C34	-2.55	119.35	122.92
29	C	517	BCR	C36-C18-C19	2.55	122.09	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	s	1620	LUT	C10-C11-C12	-2.55	115.27	123.22
30	b	621	SQD	C1-O5-C5	2.55	118.68	113.69
37	S	601	CHL	O2A-CGA-CBA	2.54	119.89	111.91
27	c	504	CLA	C1B-CHB-C4A	-2.54	125.08	130.12
37	S	606	CHL	C2D-C1D-ND	2.54	111.98	110.10
38	y	1621	LUT	C31-C30-C29	-2.54	123.68	127.31
37	N	608	CHL	C2A-C1A-CHA	-2.54	119.41	123.86
27	N	613	CLA	CHB-C4A-NA	2.54	128.03	124.51
27	n	603	CLA	O2D-CGD-O1D	-2.54	118.87	123.84
40	y	1623	NEX	C11-C12-C13	-2.54	119.28	126.42
27	C	504	CLA	C1B-CHB-C4A	-2.54	125.08	130.12
37	g	605	CHL	C1C-C2C-C3C	-2.54	105.10	107.11
38	n	1620	LUT	C19-C9-C8	2.54	122.08	118.08
32	C	518	DGD	C1E-C2E-C3E	-2.54	104.71	110.00
32	c	518	DGD	C1E-C2E-C3E	-2.54	104.71	110.00
27	s	609	CLA	CHD-C1D-ND	-2.54	122.12	124.45
27	g	603	CLA	O2D-CGD-O1D	-2.54	118.88	123.84
32	h	102	DGD	C1D-C2D-C3D	-2.54	104.71	110.00
29	H	101	BCR	C23-C24-C25	-2.54	120.08	127.20
37	s	607	CHL	C2D-C1D-ND	2.54	111.97	110.10
27	N	610	CLA	CHB-C4A-NA	2.54	128.02	124.51
27	c	502	CLA	CHB-C4A-NA	2.54	128.02	124.51
39	r	622	XAT	C31-C30-C29	-2.54	123.69	127.31
39	n	1622	XAT	C7-C8-C9	-2.53	121.60	125.53
37	Y	609	CHL	CHB-C4A-NA	2.53	128.02	124.51
35	g	2630	LHG	C20-C19-C18	-2.53	101.56	114.42
27	Y	612	CLA	O2D-CGD-O1D	-2.53	118.88	123.84
38	s	1620	LUT	C30-C31-C32	-2.53	115.31	123.22
37	y	605	CHL	C1C-C2C-C3C	-2.53	105.10	107.11
27	g	613	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
27	G	603	CLA	CHB-C4A-NA	2.53	128.01	124.51
37	s	601	CHL	CMB-C2B-C3B	2.53	129.42	124.68
27	s	612	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
27	g	612	CLA	O2D-CGD-O1D	-2.53	118.89	123.84
27	R	603	CLA	CHB-C4A-NA	2.53	128.01	124.51
28	a	409	PHO	C1-C2-C3	-2.53	121.67	126.04
37	y	605	CHL	C2A-C1A-CHA	-2.53	119.43	123.86
37	g	609	CHL	C1C-C2C-C3C	-2.53	105.11	107.11
27	b	611	CLA	CAA-CBA-CGA	-2.53	105.86	113.25
35	G	2630	LHG	C20-C19-C18	-2.53	101.59	114.42
38	S	1620	LUT	C30-C31-C32	-2.53	115.33	123.22
34	d	405	PL9	C31-C32-C33	-2.53	103.58	111.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	A	409	PHO	C1-C2-C3	-2.53	121.67	126.04
37	y	609	CHL	CHB-C4A-NA	2.53	128.01	124.51
37	y	608	CHL	C1C-C2C-C3C	-2.53	105.11	107.11
32	H	102	DGD	C1D-C2D-C3D	-2.53	104.73	110.00
27	s	610	CLA	CHB-C4A-NA	2.53	128.00	124.51
37	n	608	CHL	C2A-C1A-CHA	-2.53	119.44	123.86
27	b	609	CLA	CHB-C4A-NA	2.53	128.00	124.51
34	D	405	PL9	C31-C32-C33	-2.53	103.58	111.88
29	h	101	BCR	C23-C24-C25	-2.52	120.11	127.20
27	S	612	CLA	C1B-CHB-C4A	-2.52	125.12	130.12
27	B	609	CLA	CHB-C4A-NA	2.52	128.00	124.51
35	d	409	LHG	C20-C19-C18	-2.52	101.61	114.42
27	B	614	CLA	O2D-CGD-O1D	-2.52	118.91	123.84
37	S	601	CHL	C1-C2-C3	-2.52	121.68	126.04
27	g	603	CLA	CHB-C4A-NA	2.52	128.00	124.51
37	y	601	CHL	O1D-CGD-CBD	-2.52	119.32	124.48
27	R	602	CLA	CHB-C4A-NA	2.52	128.00	124.51
35	G	2630	LHG	C11-C10-C9	-2.52	101.63	114.42
35	D	410	LHG	C11-C10-C9	-2.52	101.63	114.42
35	d	410	LHG	C11-C10-C9	-2.52	101.63	114.42
40	r	623	NEX	C16-C1-C6	-2.52	108.22	110.47
37	N	606	CHL	CMB-C2B-C3B	2.52	129.39	124.68
37	Y	605	CHL	CHB-C4A-NA	2.52	127.99	124.51
35	g	2630	LHG	C11-C10-C9	-2.52	101.64	114.42
27	B	611	CLA	CAA-CBA-CGA	-2.52	105.90	113.25
31	d	411	LMG	O1-C7-C8	-2.52	104.83	110.90
27	G	612	CLA	O2D-CGD-O1D	-2.52	118.92	123.84
31	B	622	LMG	C40-C39-C38	-2.52	101.65	114.42
37	Y	605	CHL	C2A-C1A-CHA	-2.51	119.46	123.86
37	G	605	CHL	C1C-C2C-C3C	-2.51	105.12	107.11
38	y	1621	LUT	C38-C25-C24	-2.51	118.18	123.56
38	N	1621	LUT	C30-C31-C32	-2.51	115.37	123.22
40	Y	1623	NEX	C11-C12-C13	-2.51	119.36	126.42
35	D	409	LHG	C20-C19-C18	-2.51	101.67	114.42
27	Y	602	CLA	CHB-C4A-NA	2.51	127.99	124.51
27	g	612	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
37	N	607	CHL	C1-O2A-CGA	2.51	123.03	116.44
31	b	622	LMG	C40-C39-C38	-2.51	101.67	114.42
27	G	613	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
27	g	614	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
40	s	1623	NEX	C39-C29-C30	-2.51	119.41	122.92
40	G	1623	NEX	C15-C35-C34	-2.51	118.33	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	b	614	CLA	O2D-CGD-O1D	-2.51	118.93	123.84
39	R	622	XAT	C31-C30-C29	-2.51	123.73	127.31
27	Y	614	CLA	C1B-CHB-C4A	-2.51	125.15	130.12
37	n	607	CHL	C1-O2A-CGA	2.51	123.02	116.44
27	R	604	CLA	O2D-CGD-CBD	2.51	115.72	111.27
29	d	404	BCR	C8-C7-C6	-2.51	120.16	127.20
29	B	618	BCR	C16-C15-C14	-2.50	118.34	123.47
29	b	618	BCR	C16-C15-C14	-2.50	118.34	123.47
27	G	614	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
27	y	602	CLA	CHB-C4A-NA	2.50	127.97	124.51
37	Y	601	CHL	O1D-CGD-CBD	-2.50	119.36	124.48
38	S	1621	LUT	C18-C5-C6	-2.50	121.72	124.53
27	b	610	CLA	CHB-C4A-NA	2.50	127.97	124.51
37	n	606	CHL	CMB-C2B-C3B	2.50	129.36	124.68
27	S	610	CLA	CHB-C4A-NA	2.50	127.97	124.51
38	Y	1621	LUT	C38-C25-C24	-2.50	118.20	123.56
31	D	411	LMG	O1-C7-C8	-2.50	104.86	110.90
29	b	618	BCR	C33-C5-C4	2.50	118.42	113.62
39	Y	1622	XAT	C38-C25-C24	2.50	117.09	114.28
37	y	605	CHL	O2A-CGA-CBA	2.50	119.76	111.91
27	B	610	CLA	CHB-C4A-NA	2.50	127.97	124.51
40	R	623	NEX	C16-C1-C6	-2.50	108.23	110.47
27	a	407	CLA	C1B-CHB-C4A	-2.50	125.17	130.12
29	B	618	BCR	C38-C26-C27	2.50	118.42	113.62
27	s	609	CLA	CHB-C4A-NA	2.50	127.97	124.51
40	g	1623	NEX	C15-C35-C34	-2.50	118.36	123.47
38	n	1620	LUT	C35-C15-C14	-2.50	118.36	123.47
35	l	101	LHG	C5-O7-C7	-2.50	111.64	117.79
38	Y	1621	LUT	C31-C30-C29	-2.50	123.75	127.31
38	n	1621	LUT	C30-C31-C32	-2.50	115.43	123.22
27	N	613	CLA	C1B-CHB-C4A	-2.50	125.17	130.12
27	D	402	CLA	O2A-CGA-O1A	-2.50	117.29	123.59
27	C	513	CLA	C1B-CHB-C4A	-2.50	125.17	130.12
35	l	101	LHG	C11-C10-C9	-2.50	101.76	114.42
37	G	609	CHL	C1C-C2C-C3C	-2.50	105.13	107.11
29	D	404	BCR	C8-C7-C6	-2.49	120.19	127.20
37	n	606	CHL	O2A-CGA-CBA	2.49	119.73	111.91
35	L	101	LHG	C11-C10-C9	-2.49	101.76	114.42
37	N	606	CHL	O2A-CGA-CBA	2.49	119.73	111.91
27	A	407	CLA	C1B-CHB-C4A	-2.49	125.18	130.12
27	c	513	CLA	C1B-CHB-C4A	-2.49	125.18	130.12
38	g	1621	LUT	C19-C9-C8	2.49	122.00	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	n	613	CLA	CHB-C4A-NA	2.49	127.96	124.51
32	C	520	DGD	CDB-CCB-CBB	-2.49	101.79	114.42
40	S	1623	NEX	C39-C29-C30	-2.49	119.44	122.92
37	R	607	CHL	C2A-C1A-CHA	-2.49	119.51	123.86
35	L	101	LHG	C5-O7-C7	-2.49	111.67	117.79
27	A	405	CLA	O2D-CGD-O1D	-2.49	118.97	123.84
27	S	609	CLA	CHB-C4A-NA	2.49	127.95	124.51
37	n	605	CHL	O2D-CGD-O1D	-2.49	118.98	123.84
27	N	614	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
27	n	614	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
27	R	601	CLA	CHB-C4A-NA	2.49	127.95	124.51
38	s	1621	LUT	C18-C5-C6	-2.49	121.74	124.53
37	Y	605	CHL	O2A-CGA-CBA	2.48	119.71	111.91
27	c	511	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
32	c	520	DGD	CDB-CCB-CBB	-2.48	101.81	114.42
27	r	604	CLA	O2D-CGD-CBD	2.48	115.68	111.27
37	n	608	CHL	CMB-C2B-C3B	2.48	129.32	124.68
27	A	410	CLA	C1-C2-C3	-2.48	121.75	126.04
37	g	607	CHL	C2A-C1A-CHA	-2.48	119.52	123.86
37	Y	605	CHL	C1C-C2C-C3C	-2.48	105.14	107.11
37	n	607	CHL	O2A-CGA-CBA	2.48	119.70	111.91
37	s	601	CHL	C1-C2-C3	-2.48	121.75	126.04
35	l	101	LHG	C20-C19-C18	-2.48	101.83	114.42
38	N	1620	LUT	C35-C15-C14	-2.48	118.39	123.47
29	B	618	BCR	C33-C5-C4	2.48	118.38	113.62
27	G	612	CLA	C1B-CHB-C4A	-2.48	125.21	130.12
37	N	606	CHL	O2D-CGD-O1D	-2.48	118.99	123.84
27	D	403	CLA	C1B-CHB-C4A	-2.48	125.21	130.12
37	r	608	CHL	OMC-CMC-C2C	-2.48	120.08	125.69
27	C	511	CLA	C1B-CHB-C4A	-2.48	125.21	130.12
27	Y	611	CLA	C1B-CHB-C4A	-2.48	125.21	130.12
37	N	607	CHL	O2A-CGA-CBA	2.48	119.68	111.91
31	A	413	LMG	C38-C37-C36	-2.48	101.85	114.42
27	n	610	CLA	CHB-C4A-NA	2.48	127.94	124.51
27	a	410	CLA	C1-C2-C3	-2.48	121.76	126.04
30	a	418	SQD	O48-C23-C24	2.48	119.68	111.91
35	D	409	LHG	C5-O7-C7	-2.48	111.70	117.79
35	d	409	LHG	C5-O7-C7	-2.48	111.70	117.79
37	G	607	CHL	C2A-C1A-CHA	-2.48	119.53	123.86
29	b	618	BCR	C3-C4-C5	-2.47	109.66	114.08
29	C	517	BCR	C8-C7-C6	-2.47	120.25	127.20
29	b	618	BCR	C38-C26-C27	2.47	118.37	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B	620	BCR	C23-C24-C25	-2.47	120.26	127.20
38	S	1620	LUT	C31-C30-C29	-2.47	123.78	127.31
35	L	101	LHG	C20-C19-C18	-2.47	101.87	114.42
29	H	101	BCR	C8-C7-C6	-2.47	120.26	127.20
39	y	1622	XAT	C38-C25-C24	2.47	117.06	114.28
37	n	606	CHL	O2D-CGD-O1D	-2.47	119.00	123.84
27	C	509	CLA	CHB-C4A-NA	2.47	127.93	124.51
27	c	509	CLA	CHB-C4A-NA	2.47	127.93	124.51
29	h	101	BCR	C8-C7-C6	-2.47	120.26	127.20
27	s	603	CLA	CHB-C4A-NA	2.47	127.93	124.51
37	R	608	CHL	CMB-C2B-C3B	2.47	129.30	124.68
29	b	620	BCR	C23-C24-C25	-2.47	120.27	127.20
40	R	623	NEX	C31-C30-C29	-2.47	123.78	127.31
38	R	620	LUT	C18-C5-C4	2.47	118.93	114.36
27	s	610	CLA	O2D-CGD-O1D	-2.47	119.01	123.84
31	A	413	LMG	C40-C39-C38	-2.47	101.89	114.42
35	S	2630	LHG	C11-C10-C9	-2.47	101.89	114.42
38	G	1621	LUT	C19-C9-C8	2.47	121.97	118.08
27	y	603	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
31	a	413	LMG	C38-C37-C36	-2.47	101.90	114.42
37	N	608	CHL	CMB-C2B-C3B	2.47	129.29	124.68
27	a	405	CLA	O2D-CGD-O1D	-2.47	119.02	123.84
38	r	620	LUT	C18-C5-C4	2.47	118.92	114.36
35	s	2630	LHG	C11-C10-C9	-2.47	101.91	114.42
29	c	517	BCR	C8-C7-C6	-2.46	120.28	127.20
30	A	418	SQD	O48-C23-C24	2.46	119.64	111.91
27	S	614	CLA	CHB-C4A-NA	2.46	127.92	124.51
38	S	1621	LUT	C30-C31-C32	-2.46	115.53	123.22
38	s	1621	LUT	C30-C31-C32	-2.46	115.53	123.22
27	a	406	CLA	CHD-C1D-ND	-2.46	122.19	124.45
27	n	613	CLA	C1B-CHB-C4A	-2.46	125.24	130.12
38	S	1621	LUT	C35-C15-C14	-2.46	118.44	123.47
35	S	2630	LHG	C20-C19-C18	-2.46	101.94	114.42
40	r	623	NEX	C31-C30-C29	-2.46	123.80	127.31
31	a	413	LMG	C40-C39-C38	-2.46	101.94	114.42
37	G	605	CHL	O2D-CGD-O1D	-2.46	119.03	123.84
29	B	618	BCR	C3-C4-C5	-2.46	109.69	114.08
27	Y	603	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
37	R	608	CHL	OMC-CMC-C2C	-2.46	120.13	125.69
27	s	612	CLA	CHB-C4A-NA	2.46	127.91	124.51
27	y	611	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
27	d	403	CLA	C1B-CHB-C4A	-2.46	125.25	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	d	402	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
37	G	606	CHL	C1B-CHB-C4A	-2.46	125.25	130.12
37	r	606	CHL	O2A-CGA-CBA	2.46	119.61	111.91
34	D	405	PL9	C36-C34-C33	-2.45	116.15	121.12
34	d	405	PL9	C36-C34-C33	-2.45	116.15	121.12
37	g	605	CHL	O2D-CGD-O1D	-2.45	119.04	123.84
40	R	623	NEX	C30-C31-C32	-2.45	115.56	123.22
27	g	604	CLA	C1B-CHB-C4A	-2.45	125.26	130.12
37	N	607	CHL	C1B-CHB-C4A	-2.45	125.26	130.12
38	s	1620	LUT	C31-C30-C29	-2.45	123.81	127.31
27	s	614	CLA	C1B-CHB-C4A	-2.45	125.26	130.12
36	f	101	HEM	CBA-CAA-C2A	-2.45	108.44	112.62
39	n	1622	XAT	C30-C31-C32	-2.45	115.58	123.22
27	y	603	CLA	O2D-CGD-O1D	-2.45	119.05	123.84
39	N	1622	XAT	C30-C31-C32	-2.45	115.58	123.22
27	C	502	CLA	C1B-CHB-C4A	-2.45	125.27	130.12
40	r	623	NEX	C30-C31-C32	-2.45	115.58	123.22
35	s	2630	LHG	C20-C19-C18	-2.45	102.01	114.42
27	C	506	CLA	C1-C2-C3	-2.45	121.81	126.04
27	s	614	CLA	CHB-C4A-NA	2.44	127.89	124.51
36	F	101	HEM	CBA-CAA-C2A	-2.44	108.45	112.62
27	S	612	CLA	CHB-C4A-NA	2.44	127.89	124.51
37	R	606	CHL	O2A-CGA-CBA	2.44	119.58	111.91
37	N	605	CHL	O2D-CGD-O1D	-2.44	119.06	123.84
37	r	607	CHL	C2A-C1A-CHA	-2.44	119.59	123.86
37	g	608	CHL	C1C-C2C-C3C	-2.44	105.18	107.11
37	r	608	CHL	CMB-C2B-C3B	2.44	129.25	124.68
27	c	505	CLA	CHB-C4A-NA	2.44	127.89	124.51
35	Y	2630	LHG	C11-C10-C9	-2.44	102.03	114.42
27	B	616	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
27	Y	603	CLA	O2D-CGD-O1D	-2.44	119.07	123.84
27	R	616	CLA	O2A-CGA-O1A	-2.44	117.43	123.59
27	S	614	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
35	y	2630	LHG	C11-C10-C9	-2.44	102.04	114.42
27	N	602	CLA	CHB-C4A-NA	2.44	127.88	124.51
29	h	101	BCR	C21-C20-C19	-2.44	115.61	123.22
40	Y	1623	NEX	C38-C25-C24	2.44	117.02	114.28
27	r	601	CLA	CHB-C4A-NA	2.44	127.88	124.51
35	D	408	LHG	C11-C10-C9	-2.44	102.06	114.42
35	d	408	LHG	C11-C10-C9	-2.44	102.06	114.42
38	g	1620	LUT	C16-C1-C6	-2.44	106.35	110.30
35	y	2630	LHG	C20-C19-C18	-2.44	102.06	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	c	502	CLA	C1B-CHB-C4A	-2.43	125.30	130.12
37	R	607	CHL	C1B-CHB-C4A	-2.43	125.30	130.12
37	r	607	CHL	C1B-CHB-C4A	-2.43	125.30	130.12
27	A	406	CLA	CHD-C1D-ND	-2.43	122.22	124.45
27	S	610	CLA	O2D-CGD-O1D	-2.43	119.08	123.84
29	C	516	BCR	C8-C7-C6	-2.43	120.37	127.20
29	c	516	BCR	C8-C7-C6	-2.43	120.37	127.20
37	n	607	CHL	C1B-CHB-C4A	-2.43	125.30	130.12
27	c	510	CLA	CHD-C1D-ND	-2.43	122.22	124.45
37	G	607	CHL	CMD-C2D-C3D	-2.43	122.03	127.61
32	c	519	DGD	CBB-CAB-C9B	-2.43	102.09	114.42
27	S	603	CLA	CHB-C4A-NA	2.43	127.87	124.51
27	Y	611	CLA	CHB-C4A-NA	2.43	127.87	124.51
37	Y	609	CHL	C1B-CHB-C4A	-2.43	125.31	130.12
37	y	609	CHL	C1B-CHB-C4A	-2.43	125.31	130.12
37	g	607	CHL	CMD-C2D-C3D	-2.43	122.03	127.61
37	s	606	CHL	CMB-C2B-C3B	2.43	129.22	124.68
37	s	601	CHL	C1C-C2C-C3C	-2.43	105.19	107.11
27	r	616	CLA	O2A-CGA-O1A	-2.42	117.47	123.59
27	B	615	CLA	CMB-C2B-C3B	2.42	129.21	124.68
37	g	601	CHL	CMB-C2B-C3B	2.42	129.21	124.68
32	C	519	DGD	CBB-CAB-C9B	-2.42	102.12	114.42
32	C	520	DGD	O2D-C2D-C1D	-2.42	104.16	110.05
27	B	616	CLA	CMB-C2B-C3B	2.42	129.21	124.68
35	Y	2630	LHG	C20-C19-C18	-2.42	102.12	114.42
40	R	623	NEX	C17-C1-C6	-2.42	108.31	110.47
27	C	505	CLA	CHB-C4A-NA	2.42	127.86	124.51
29	H	101	BCR	C21-C20-C19	-2.42	115.66	123.22
27	c	506	CLA	C1-C2-C3	-2.42	121.86	126.04
29	h	101	BCR	C35-C13-C12	2.42	121.89	118.08
37	Y	601	CHL	CHB-C4A-NA	2.42	127.86	124.51
31	A	413	LMG	C1-O6-C5	2.42	118.44	113.69
31	a	413	LMG	C1-O6-C5	2.42	118.44	113.69
35	N	2630	LHG	O8-C23-C24	2.42	119.50	111.91
27	G	604	CLA	C1B-CHB-C4A	-2.42	125.33	130.12
27	b	616	CLA	C1B-CHB-C4A	-2.42	125.33	130.12
37	G	608	CHL	C1C-C2C-C3C	-2.42	105.19	107.11
37	Y	607	CHL	O2D-CGD-O1D	-2.42	119.11	123.84
37	N	601	CHL	OMC-CMC-C2C	-2.42	120.22	125.69
29	H	101	BCR	C35-C13-C12	2.42	121.89	118.08
38	G	1620	LUT	C16-C1-C6	-2.42	106.38	110.30
38	s	1621	LUT	C35-C15-C14	-2.42	118.52	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	N	605	CHL	CMB-C2B-C3B	2.42	129.20	124.68
29	C	516	BCR	C38-C26-C27	2.42	118.26	113.62
27	C	511	CLA	CAA-CBA-CGA	-2.42	106.19	113.25
37	S	601	CHL	O1D-CGD-CBD	-2.41	119.54	124.48
38	N	1621	LUT	C16-C1-C6	-2.41	106.38	110.30
37	n	605	CHL	CMB-C2B-C3B	2.41	129.19	124.68
38	Y	1621	LUT	C2-C3-C4	2.41	113.61	110.30
38	y	1621	LUT	C2-C3-C4	2.41	113.61	110.30
27	g	602	CLA	CHB-C4A-NA	2.41	127.84	124.51
40	y	1623	NEX	C38-C25-C24	2.41	116.99	114.28
27	Y	610	CLA	CHB-C4A-NA	2.41	127.84	124.51
27	n	602	CLA	CHB-C4A-NA	2.41	127.84	124.51
37	R	607	CHL	O1D-CGD-CBD	-2.41	119.56	124.48
37	g	606	CHL	C1B-CHB-C4A	-2.41	125.35	130.12
40	r	623	NEX	C17-C1-C6	-2.41	108.32	110.47
37	s	601	CHL	OMC-CMC-C2C	-2.41	120.25	125.69
32	C	520	DGD	C3D-C4D-C5D	-2.41	105.95	110.24
27	c	511	CLA	CAA-CBA-CGA	-2.41	106.22	113.25
37	g	607	CHL	O2D-CGD-O1D	-2.41	119.13	123.84
31	C	521	LMG	C40-C39-C38	-2.41	102.21	114.42
32	c	520	DGD	O2D-C2D-C1D	-2.41	104.20	110.05
37	S	606	CHL	CMB-C2B-C3B	2.41	129.18	124.68
28	a	409	PHO	O2D-CGD-O1D	-2.40	119.14	123.84
27	b	615	CLA	CMB-C2B-C3B	2.40	129.18	124.68
37	n	601	CHL	OMC-CMC-C2C	-2.40	120.25	125.69
35	l	101	LHG	O8-C23-C24	2.40	119.45	111.91
27	y	611	CLA	CHB-C4A-NA	2.40	127.84	124.51
31	c	521	LMG	C40-C39-C38	-2.40	102.22	114.42
37	S	601	CHL	OMC-CMC-C2C	-2.40	120.25	125.69
27	G	602	CLA	CHB-C4A-NA	2.40	127.83	124.51
37	y	601	CHL	CHB-C4A-NA	2.40	127.83	124.51
39	R	622	XAT	C18-C5-C4	2.40	116.98	114.28
35	n	2630	LHG	O8-C23-C24	2.40	119.44	111.91
39	r	622	XAT	C30-C31-C32	-2.40	115.72	123.22
37	y	601	CHL	C1B-CHB-C4A	-2.40	125.36	130.12
27	a	410	CLA	O2D-CGD-CBD	2.40	115.53	111.27
32	c	519	DGD	C3G-C2G-C1G	-2.40	106.11	111.79
37	s	601	CHL	O1D-CGD-CBD	-2.40	119.58	124.48
37	G	607	CHL	O2D-CGD-O1D	-2.40	119.15	123.84
35	D	409	LHG	C18-C17-C16	-2.40	102.25	114.42
37	y	601	CHL	O2D-CGD-O1D	-2.40	119.15	123.84
35	d	409	LHG	C18-C17-C16	-2.40	102.25	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B	614	CLA	CHB-C4A-NA	2.40	127.83	124.51
37	G	609	CHL	C2A-C1A-CHA	-2.40	119.67	123.86
32	C	519	DGD	C3G-C2G-C1G	-2.40	106.12	111.79
37	n	608	CHL	O2D-CGD-O1D	-2.39	119.16	123.84
37	Y	601	CHL	C1B-CHB-C4A	-2.39	125.38	130.12
27	b	610	CLA	O2A-CGA-O1A	-2.39	117.55	123.59
27	c	508	CLA	C2D-C1D-ND	-2.39	108.34	110.10
27	N	604	CLA	C1B-CHB-C4A	-2.39	125.38	130.12
27	C	512	CLA	CHB-C4A-NA	2.39	127.82	124.51
27	C	510	CLA	CHD-C1D-ND	-2.39	122.25	124.45
31	B	622	LMG	C1-C2-C3	-2.39	105.01	110.00
38	n	1621	LUT	C16-C1-C6	-2.39	106.42	110.30
29	H	101	BCR	C11-C10-C9	-2.39	123.90	127.31
29	C	517	BCR	C3-C4-C5	-2.39	109.81	114.08
29	A	411	BCR	C28-C27-C26	-2.39	109.81	114.08
29	c	517	BCR	C3-C4-C5	-2.39	109.81	114.08
27	b	614	CLA	CHB-C4A-NA	2.39	127.82	124.51
40	N	1623	NEX	C11-C12-C13	-2.39	119.70	126.42
37	G	601	CHL	CMB-C2B-C3B	2.39	129.15	124.68
38	Y	1620	LUT	C15-C35-C34	-2.39	118.58	123.47
38	y	1620	LUT	C15-C35-C34	-2.39	118.58	123.47
27	n	611	CLA	O2D-CGD-CBD	2.39	115.51	111.27
27	r	613	CLA	C1B-CHB-C4A	-2.39	125.39	130.12
31	b	622	LMG	O7-C10-O9	-2.39	117.93	123.70
37	y	607	CHL	O2D-CGD-O1D	-2.39	119.17	123.84
37	S	601	CHL	C1C-C2C-C3C	-2.39	105.22	107.11
27	R	612	CLA	CHB-C4A-NA	2.39	127.81	124.51
35	L	101	LHG	O8-C23-C24	2.39	119.40	111.91
27	C	510	CLA	C1B-CHB-C4A	-2.39	125.39	130.12
32	c	520	DGD	C3D-C4D-C5D	-2.39	105.98	110.24
29	c	516	BCR	C38-C26-C27	2.39	118.20	113.62
32	C	520	DGD	O3G-C1D-C2D	-2.39	104.58	108.30
27	b	616	CLA	CMB-C2B-C3B	2.38	129.14	124.68
27	S	604	CLA	C1B-CHB-C4A	-2.38	125.40	130.12
27	c	510	CLA	C1B-CHB-C4A	-2.38	125.40	130.12
27	s	604	CLA	C1B-CHB-C4A	-2.38	125.40	130.12
27	b	610	CLA	CAA-CBA-CGA	-2.38	106.29	113.25
29	a	411	BCR	C28-C27-C26	-2.38	109.82	114.08
39	R	622	XAT	C40-C33-C32	2.38	121.83	118.08
40	n	1623	NEX	C11-C12-C13	-2.38	119.72	126.42
37	r	607	CHL	O1D-CGD-CBD	-2.38	119.61	124.48
31	b	622	LMG	C1-C2-C3	-2.38	105.04	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	g	609	CHL	C2A-C1A-CHA	-2.38	119.69	123.86
27	Y	610	CLA	O2A-CGA-O1A	-2.38	117.58	123.59
27	y	610	CLA	O2A-CGA-O1A	-2.38	117.58	123.59
27	R	613	CLA	C1B-CHB-C4A	-2.38	125.40	130.12
27	Y	611	CLA	O2D-CGD-CBD	2.38	115.50	111.27
27	B	606	CLA	CHD-C1D-ND	-2.38	122.27	124.45
35	D	408	LHG	C27-C26-C25	-2.38	102.35	114.42
37	Y	601	CHL	O2D-CGD-O1D	-2.38	119.19	123.84
27	y	611	CLA	O2D-CGD-CBD	2.38	115.50	111.27
27	d	402	CLA	CHB-C4A-NA	2.38	127.80	124.51
37	Y	605	CHL	CMB-C2B-C3B	2.38	129.13	124.68
27	c	503	CLA	CHB-C4A-NA	2.38	127.80	124.51
27	R	601	CLA	C1B-CHB-C4A	-2.38	125.41	130.12
35	d	408	LHG	C27-C26-C25	-2.38	102.36	114.42
27	r	611	CLA	CHB-C4A-NA	2.38	127.80	124.51
37	s	606	CHL	C1D-ND-C4D	-2.38	104.65	106.33
37	N	609	CHL	C1B-CHB-C4A	-2.38	125.41	130.12
37	n	609	CHL	C1B-CHB-C4A	-2.38	125.41	130.12
31	B	622	LMG	O3-C3-C2	-2.38	104.86	110.35
31	B	622	LMG	O7-C10-O9	-2.37	117.97	123.70
38	g	1620	LUT	C10-C11-C12	-2.37	115.81	123.22
39	R	622	XAT	C30-C31-C32	-2.37	115.81	123.22
37	N	609	CHL	O2A-CGA-CBA	2.37	119.35	111.91
37	N	608	CHL	O2D-CGD-O1D	-2.37	119.20	123.84
37	g	607	CHL	O2A-CGA-CBA	2.37	119.35	111.91
27	b	606	CLA	CHD-C1D-ND	-2.37	122.28	124.45
32	c	520	DGD	O3G-C1D-C2D	-2.37	104.60	108.30
27	B	610	CLA	O2A-CGA-O1A	-2.37	117.61	123.59
27	A	410	CLA	O2D-CGD-CBD	2.37	115.48	111.27
29	b	619	BCR	C38-C26-C27	2.37	118.17	113.62
31	b	622	LMG	O3-C3-C2	-2.37	104.88	110.35
34	D	405	PL9	O1-C4-C3	-2.37	118.11	120.72
31	a	413	LMG	O7-C10-O9	-2.37	117.98	123.70
27	C	508	CLA	C2D-C1D-ND	-2.37	108.36	110.10
27	C	507	CLA	C1B-CHB-C4A	-2.37	125.43	130.12
37	g	608	CHL	OMC-CMC-C2C	-2.37	120.34	125.69
29	C	514	BCR	C23-C24-C25	-2.36	120.56	127.20
29	h	101	BCR	C11-C10-C9	-2.36	123.94	127.31
37	N	607	CHL	C4-C3-C5	2.36	119.25	115.27
37	n	607	CHL	C4-C3-C5	2.36	119.25	115.27
27	B	610	CLA	CAA-CBA-CGA	-2.36	106.34	113.25
37	r	608	CHL	O2A-CGA-CBA	2.36	119.33	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	R	611	CLA	CHB-C4A-NA	2.36	127.78	124.51
35	r	2630	LHG	C11-C10-C9	-2.36	102.43	114.42
27	C	509	CLA	C1-C2-C3	-2.36	121.96	126.04
27	c	509	CLA	C1-C2-C3	-2.36	121.96	126.04
37	y	605	CHL	CMB-C2B-C3B	2.36	129.10	124.68
38	G	1620	LUT	C30-C31-C32	-2.36	115.84	123.22
39	r	622	XAT	C18-C5-C4	2.36	116.94	114.28
37	R	608	CHL	O2A-CGA-CBA	2.36	119.32	111.91
27	C	501	CLA	CHB-C4A-NA	2.36	127.78	124.51
27	S	613	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
27	n	604	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
37	n	609	CHL	O2A-CGA-CBA	2.36	119.32	111.91
39	r	622	XAT	C40-C33-C32	2.36	121.80	118.08
27	N	611	CLA	O2D-CGD-CBD	2.36	115.46	111.27
37	N	606	CHL	O1D-CGD-CBD	-2.36	119.65	124.48
27	b	609	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
35	R	2630	LHG	C11-C10-C9	-2.36	102.45	114.42
27	c	512	CLA	CHB-C4A-NA	2.36	127.77	124.51
37	G	607	CHL	O2A-CGA-CBA	2.36	119.31	111.91
35	R	2630	LHG	C20-C19-C18	-2.36	102.45	114.42
28	A	409	PHO	O2D-CGD-O1D	-2.36	119.23	123.84
35	r	2630	LHG	C20-C19-C18	-2.36	102.45	114.42
27	D	403	CLA	CHB-C4A-NA	2.36	127.77	124.51
37	G	608	CHL	OMC-CMC-C2C	-2.36	120.36	125.69
27	c	506	CLA	CHB-C4A-NA	2.36	127.77	124.51
27	y	610	CLA	CHB-C4A-NA	2.36	127.77	124.51
27	N	614	CLA	O2A-CGA-O1A	-2.36	117.64	123.59
27	c	501	CLA	CHB-C4A-NA	2.36	127.77	124.51
32	c	518	DGD	O2D-C2D-C1D	-2.36	104.32	110.05
27	b	603	CLA	CHB-C4A-NA	2.36	127.77	124.51
29	c	514	BCR	C23-C24-C25	-2.36	120.59	127.20
37	Y	609	CHL	O2D-CGD-O1D	-2.35	119.23	123.84
32	c	518	DGD	O3E-C3E-C2E	-2.35	104.91	110.35
27	g	602	CLA	C1B-CHB-C4A	-2.35	125.45	130.12
38	g	1620	LUT	C30-C31-C32	-2.35	115.87	123.22
31	C	521	LMG	C38-C37-C36	-2.35	102.47	114.42
27	G	602	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
27	B	603	CLA	CHB-C4A-NA	2.35	127.76	124.51
37	n	606	CHL	O1D-CGD-CBD	-2.35	119.67	124.48
27	B	610	CLA	O2D-CGD-O1D	-2.35	119.24	123.84
32	C	518	DGD	O3E-C3E-C2E	-2.35	104.92	110.35
27	g	604	CLA	CHB-C4A-NA	2.35	127.76	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	y	613	CLA	CHB-C4A-NA	2.35	127.76	124.51
27	r	612	CLA	CHB-C4A-NA	2.35	127.76	124.51
40	N	1623	NEX	C30-C31-C32	-2.35	115.89	123.22
38	S	1620	LUT	C8-C7-C6	-2.35	120.61	127.20
27	N	612	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
27	b	608	CLA	C1-C2-C3	-2.35	121.98	126.04
27	s	613	CLA	C1B-CHB-C4A	-2.34	125.47	130.12
31	c	521	LMG	C38-C37-C36	-2.34	102.52	114.42
27	B	612	CLA	CHB-C4A-NA	2.34	127.75	124.51
29	B	619	BCR	C38-C26-C27	2.34	118.12	113.62
27	n	614	CLA	O2A-CGA-O1A	-2.34	117.68	123.59
27	Y	612	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
37	y	601	CHL	C2A-C1A-CHA	-2.34	119.76	123.86
29	b	618	BCR	C8-C7-C6	-2.34	120.62	127.20
27	C	503	CLA	CHB-C4A-NA	2.34	127.75	124.51
27	y	612	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
27	b	614	CLA	C1-C2-C3	-2.34	122.00	126.04
27	B	617	CLA	CHB-C4A-NA	2.34	127.74	124.51
27	b	617	CLA	CHB-C4A-NA	2.34	127.74	124.51
31	A	413	LMG	O7-C10-O9	-2.34	118.06	123.70
27	C	506	CLA	CHB-C4A-NA	2.34	127.74	124.51
27	D	402	CLA	CHB-C4A-NA	2.34	127.74	124.51
29	C	515	BCR	C33-C5-C4	2.34	118.10	113.62
27	r	601	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
38	G	1620	LUT	C10-C11-C12	-2.34	115.93	123.22
27	n	612	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
34	d	405	PL9	O1-C4-C3	-2.33	118.15	120.72
27	c	507	CLA	C1B-CHB-C4A	-2.33	125.49	130.12
27	N	611	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
27	b	610	CLA	O2D-CGD-O1D	-2.33	119.28	123.84
30	b	621	SQD	C44-O6-C1	2.33	118.30	113.74
29	c	515	BCR	C33-C5-C4	2.33	118.10	113.62
37	N	607	CHL	O2D-CGD-O1D	-2.33	119.28	123.84
40	n	1623	NEX	C30-C31-C32	-2.33	115.94	123.22
27	S	613	CLA	CHB-C4A-NA	2.33	127.73	124.51
27	s	613	CLA	CHB-C4A-NA	2.33	127.73	124.51
27	B	609	CLA	C1B-CHB-C4A	-2.33	125.50	130.12
27	B	611	CLA	CHB-C4A-NA	2.33	127.73	124.51
27	b	611	CLA	CHB-C4A-NA	2.33	127.73	124.51
38	s	1620	LUT	C8-C7-C6	-2.33	120.66	127.20
37	n	607	CHL	O2D-CGD-O1D	-2.33	119.28	123.84
27	c	508	CLA	CHC-C1C-NC	2.33	127.74	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	b	605	CLA	O2A-CGA-O1A	-2.33	117.72	123.59
32	C	518	DGD	O2D-C2D-C1D	-2.33	104.39	110.05
27	Y	612	CLA	CHB-C4A-NA	2.33	127.73	124.51
32	C	519	DGD	O2D-C2D-C1D	-2.33	104.39	110.05
32	c	519	DGD	O2D-C2D-C1D	-2.33	104.39	110.05
30	a	418	SQD	O9-S-C6	2.33	109.70	106.94
37	S	601	CHL	C2A-C1A-CHA	-2.33	119.79	123.86
27	R	604	CLA	C1B-CHB-C4A	-2.33	125.51	130.12
27	B	606	CLA	CHB-C4A-NA	2.32	127.73	124.51
27	b	606	CLA	CHB-C4A-NA	2.32	127.73	124.51
27	d	403	CLA	CHB-C4A-NA	2.32	127.72	124.51
27	b	612	CLA	CHB-C4A-NA	2.32	127.72	124.51
27	B	605	CLA	O2A-CGA-O1A	-2.32	117.73	123.59
27	n	611	CLA	O2A-CGA-O1A	-2.32	117.73	123.59
29	a	411	BCR	C15-C16-C17	-2.32	118.72	123.47
37	N	605	CHL	OMC-CMC-C2C	-2.32	120.44	125.69
27	G	604	CLA	CHB-C4A-NA	2.32	127.72	124.51
37	S	606	CHL	C1D-ND-C4D	-2.32	104.69	106.33
37	S	606	CHL	O2D-CGD-O1D	-2.32	119.30	123.84
27	B	608	CLA	C1-C2-C3	-2.32	122.03	126.04
30	B	621	SQD	C44-O6-C1	2.32	118.27	113.74
37	S	608	CHL	CAC-C3C-C4C	2.32	127.82	124.81
29	C	515	BCR	C33-C5-C6	-2.32	121.92	124.53
29	c	514	BCR	C34-C9-C8	2.32	121.73	118.08
29	c	515	BCR	C38-C26-C25	-2.32	121.92	124.53
27	C	507	CLA	CMB-C2B-C3B	2.32	129.02	124.68
27	B	614	CLA	C1-C2-C3	-2.32	122.03	126.04
39	r	622	XAT	C19-C9-C8	2.32	121.73	118.08
32	c	518	DGD	O6D-C5D-C6D	-2.32	101.99	106.67
29	C	517	BCR	C16-C15-C14	-2.32	118.73	123.47
29	c	517	BCR	C16-C15-C14	-2.32	118.73	123.47
38	N	1620	LUT	C39-C29-C28	2.32	121.72	118.08
27	B	614	CLA	C2D-C1D-ND	-2.31	108.40	110.10
37	y	609	CHL	O2D-CGD-O1D	-2.31	119.31	123.84
35	L	101	LHG	C18-C17-C16	-2.31	102.68	114.42
37	s	608	CHL	CAC-C3C-C4C	2.31	127.81	124.81
29	A	411	BCR	C15-C16-C17	-2.31	118.74	123.47
27	Y	613	CLA	CHB-C4A-NA	2.31	127.71	124.51
29	B	618	BCR	C8-C7-C6	-2.31	120.71	127.20
39	R	622	XAT	C19-C9-C8	2.31	121.72	118.08
30	A	418	SQD	O9-S-C6	2.31	109.69	106.94
27	B	607	CLA	C1-C2-C3	-2.31	122.05	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	C	514	BCR	C34-C9-C8	2.31	121.72	118.08
29	B	619	BCR	C10-C11-C12	-2.31	116.01	123.22
37	N	601	CHL	C1C-C2C-C3C	-2.31	105.28	107.11
37	n	601	CHL	C1C-C2C-C3C	-2.31	105.28	107.11
27	c	507	CLA	CMB-C2B-C3B	2.31	129.00	124.68
27	r	604	CLA	C1B-CHB-C4A	-2.31	125.55	130.12
27	C	508	CLA	CHC-C1C-NC	2.31	127.70	124.20
27	b	612	CLA	CHD-C1D-ND	-2.31	122.33	124.45
29	b	619	BCR	C10-C11-C12	-2.31	116.02	123.22
34	D	405	PL9	C22-C23-C24	-2.30	122.11	127.66
34	d	405	PL9	C22-C23-C24	-2.30	122.11	127.66
38	S	1621	LUT	C15-C35-C34	-2.30	118.75	123.47
37	n	605	CHL	OMC-CMC-C2C	-2.30	120.48	125.69
32	C	518	DGD	O6D-C5D-C6D	-2.30	102.02	106.67
31	Z	101	LMG	C40-C39-C38	-2.30	102.74	114.42
35	l	101	LHG	C18-C17-C16	-2.30	102.74	114.42
29	C	515	BCR	C23-C24-C25	-2.30	120.74	127.20
29	C	515	BCR	C38-C26-C25	-2.30	121.94	124.53
27	b	607	CLA	C1-C2-C3	-2.30	122.07	126.04
29	c	514	BCR	C37-C22-C23	2.30	121.69	118.08
31	Z	101	LMG	O3-C3-C2	-2.30	105.04	110.35
38	n	1620	LUT	C39-C29-C28	2.29	121.69	118.08
31	z	101	LMG	O3-C3-C2	-2.29	105.05	110.35
37	Y	601	CHL	C2A-C1A-CHA	-2.29	119.85	123.86
31	z	101	LMG	C40-C39-C38	-2.29	102.79	114.42
28	a	408	PHO	O2D-CGD-O1D	-2.29	119.36	123.84
38	s	1621	LUT	C15-C35-C34	-2.29	118.78	123.47
30	A	418	SQD	C1-C2-C3	2.29	114.77	110.00
29	b	619	BCR	C23-C24-C25	-2.29	120.77	127.20
29	c	515	BCR	C23-C24-C25	-2.29	120.78	127.20
27	b	607	CLA	O2A-CGA-O1A	-2.29	117.82	123.59
27	r	612	CLA	C1B-CHB-C4A	-2.29	125.59	130.12
27	R	612	CLA	C1B-CHB-C4A	-2.29	125.59	130.12
35	s	2630	LHG	C18-C17-C16	-2.29	102.82	114.42
29	B	619	BCR	C23-C24-C25	-2.29	120.78	127.20
29	C	515	BCR	C8-C7-C6	-2.29	120.78	127.20
29	c	515	BCR	C8-C7-C6	-2.29	120.78	127.20
37	g	606	CHL	O2D-CGD-O1D	-2.29	119.37	123.84
38	G	1621	LUT	C15-C35-C34	-2.29	118.79	123.47
38	g	1621	LUT	C15-C35-C34	-2.29	118.79	123.47
38	g	1620	LUT	C20-C13-C12	2.28	121.68	118.08
31	c	521	LMG	O3-C3-C2	-2.28	105.07	110.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	y	612	CLA	CHB-C4A-NA	2.28	127.67	124.51
37	Y	607	CHL	OMC-CMC-C2C	-2.28	120.53	125.69
29	c	515	BCR	C33-C5-C6	-2.28	121.97	124.53
27	B	607	CLA	O2A-CGA-O1A	-2.28	117.84	123.59
35	S	2630	LHG	C18-C17-C16	-2.28	102.85	114.42
38	G	1621	LUT	C35-C15-C14	-2.28	118.80	123.47
38	g	1621	LUT	C35-C15-C14	-2.28	118.80	123.47
30	a	418	SQD	C1-C2-C3	2.28	114.74	110.00
27	B	617	CLA	C1B-CHB-C4A	-2.28	125.60	130.12
27	b	617	CLA	C1B-CHB-C4A	-2.28	125.60	130.12
27	R	616	CLA	CHD-C1D-ND	-2.28	122.36	124.45
27	r	616	CLA	CHD-C1D-ND	-2.28	122.36	124.45
35	l	101	LHG	C27-C26-C25	-2.28	102.86	114.42
37	G	606	CHL	O2D-CGD-O1D	-2.28	119.39	123.84
29	a	411	BCR	C21-C20-C19	-2.28	116.11	123.22
37	Y	608	CHL	C2A-C1A-CHA	-2.28	119.88	123.86
35	n	2630	LHG	C20-C19-C18	-2.28	102.87	114.42
37	s	606	CHL	O2D-CGD-O1D	-2.28	119.39	123.84
37	g	601	CHL	O2D-CGD-O1D	-2.28	119.39	123.84
37	N	601	CHL	O1D-CGD-CBD	-2.28	119.83	124.48
37	n	601	CHL	O1D-CGD-CBD	-2.28	119.83	124.48
29	c	514	BCR	C10-C11-C12	-2.28	116.12	123.22
29	C	514	BCR	C10-C11-C12	-2.28	116.12	123.22
35	L	101	LHG	C27-C26-C25	-2.27	102.88	114.42
37	s	601	CHL	C2A-C1A-CHA	-2.27	119.88	123.86
28	A	408	PHO	O2D-CGD-O1D	-2.27	119.39	123.84
29	A	411	BCR	C21-C20-C19	-2.27	116.12	123.22
35	N	2630	LHG	C27-C26-C25	-2.27	102.89	114.42
35	n	2630	LHG	C27-C26-C25	-2.27	102.89	114.42
29	H	101	BCR	C39-C30-C25	-2.27	106.61	110.30
37	G	601	CHL	O2D-CGD-O1D	-2.27	119.40	123.84
35	D	409	LHG	C27-C26-C25	-2.27	102.90	114.42
35	d	409	LHG	C27-C26-C25	-2.27	102.90	114.42
27	s	603	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
35	d	409	LHG	O8-C23-C24	2.27	119.03	111.91
38	S	1621	LUT	C19-C9-C8	2.27	121.65	118.08
27	B	612	CLA	CHD-C1D-ND	-2.27	122.37	124.45
35	N	2630	LHG	C20-C19-C18	-2.27	102.92	114.42
31	C	521	LMG	O3-C3-C2	-2.27	105.11	110.35
27	R	601	CLA	O2A-CGA-O1A	-2.27	117.87	123.59
38	Y	1621	LUT	C39-C29-C28	2.27	121.65	118.08
29	C	514	BCR	C37-C22-C23	2.26	121.64	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	n	1620	LUT	C31-C30-C29	-2.26	124.08	127.31
37	R	607	CHL	OMC-CMC-C2C	-2.26	120.58	125.69
35	D	409	LHG	O8-C23-C24	2.26	119.00	111.91
37	y	608	CHL	C2A-C1A-CHA	-2.26	119.91	123.86
40	G	1623	NEX	C38-C25-C24	2.26	116.82	114.28
35	g	2630	LHG	O8-C23-C24	2.26	118.99	111.91
27	C	503	CLA	O2A-CGA-O1A	-2.26	117.89	123.59
38	G	1620	LUT	C20-C13-C12	2.26	121.63	118.08
27	r	601	CLA	O2A-CGA-O1A	-2.26	117.90	123.59
37	y	607	CHL	OMC-CMC-C2C	-2.26	120.59	125.69
37	N	605	CHL	C1C-C2C-C3C	-2.26	105.32	107.11
37	y	609	CHL	C11-C10-C8	-2.26	108.63	115.92
37	r	606	CHL	O2D-CGD-O1D	-2.25	119.43	123.84
38	s	1621	LUT	C19-C9-C8	2.25	121.63	118.08
37	N	601	CHL	O2D-CGD-O1D	-2.25	119.43	123.84
37	s	607	CHL	O2D-CGD-O1D	-2.25	119.44	123.84
27	y	610	CLA	C1-C2-C3	-2.25	122.15	126.04
38	r	620	LUT	C15-C35-C34	-2.25	118.86	123.47
37	G	606	CHL	OMC-CMC-C2C	-2.25	120.60	125.69
37	y	607	CHL	O1D-CGD-CBD	-2.25	119.88	124.48
37	G	609	CHL	CED-O2D-CGD	2.25	121.02	115.94
38	s	1620	LUT	C39-C29-C28	2.25	121.62	118.08
38	R	620	LUT	C30-C31-C32	-2.25	116.20	123.22
38	R	620	LUT	C16-C1-C6	-2.25	106.65	110.30
29	a	411	BCR	C10-C11-C12	-2.25	116.20	123.22
37	Y	609	CHL	C11-C10-C8	-2.25	108.66	115.92
37	y	607	CHL	C2A-C1A-CHA	-2.25	119.93	123.86
38	r	620	LUT	C30-C31-C32	-2.25	116.21	123.22
27	b	614	CLA	C2D-C1D-ND	-2.25	108.45	110.10
38	Y	1620	LUT	C8-C7-C6	-2.25	120.89	127.20
38	y	1620	LUT	C8-C7-C6	-2.25	120.89	127.20
35	G	2630	LHG	O8-C23-C24	2.25	118.95	111.91
27	S	603	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
40	S	1623	NEX	C30-C31-C32	-2.24	116.22	123.22
37	S	607	CHL	O2D-CGD-O1D	-2.24	119.45	123.84
37	r	607	CHL	OMC-CMC-C2C	-2.24	120.62	125.69
38	R	620	LUT	C15-C35-C34	-2.24	118.88	123.47
38	S	1620	LUT	C39-C29-C28	2.24	121.61	118.08
39	r	622	XAT	C20-C13-C12	2.24	121.61	118.08
37	Y	607	CHL	O1D-CGD-CBD	-2.24	119.90	124.48
27	C	510	CLA	CHB-C4A-NA	2.24	127.61	124.51
27	N	602	CLA	CMB-C2B-C3B	2.24	128.87	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	n	602	CLA	CMB-C2B-C3B	2.24	128.87	124.68
36	F	101	HEM	C4C-CHD-C1D	2.24	125.51	122.56
36	f	101	HEM	C4C-CHD-C1D	2.24	125.51	122.56
27	c	503	CLA	O2A-CGA-O1A	-2.24	117.94	123.59
29	h	101	BCR	C39-C30-C25	-2.24	106.67	110.30
29	H	101	BCR	C3-C4-C5	-2.24	110.08	114.08
29	h	101	BCR	C3-C4-C5	-2.24	110.08	114.08
29	B	619	BCR	C33-C5-C4	2.24	117.92	113.62
27	c	510	CLA	CHB-C4A-NA	2.24	127.61	124.51
37	n	601	CHL	O2D-CGD-O1D	-2.24	119.47	123.84
29	b	619	BCR	C33-C5-C4	2.24	117.91	113.62
27	Y	610	CLA	C1-C2-C3	-2.23	122.18	126.04
37	Y	607	CHL	C2A-C1A-CHA	-2.23	119.95	123.86
35	r	2630	LHG	C27-C26-C25	-2.23	103.09	114.42
29	b	619	BCR	C21-C20-C19	-2.23	116.25	123.22
40	s	1623	NEX	C30-C31-C32	-2.23	116.25	123.22
37	g	609	CHL	CED-O2D-CGD	2.23	120.99	115.94
29	A	411	BCR	C10-C11-C12	-2.23	116.25	123.22
40	g	1623	NEX	C38-C25-C24	2.23	116.79	114.28
37	R	606	CHL	O2D-CGD-O1D	-2.23	119.47	123.84
37	S	608	CHL	C1D-ND-C4D	-2.23	104.75	106.33
38	r	620	LUT	C16-C1-C6	-2.23	106.68	110.30
35	R	2630	LHG	C27-C26-C25	-2.23	103.10	114.42
27	c	509	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
37	g	606	CHL	OMC-CMC-C2C	-2.23	120.65	125.69
27	C	509	CLA	O2A-CGA-O1A	-2.23	117.97	123.59
40	r	623	NEX	C11-C12-C13	-2.23	120.16	126.42
40	R	623	NEX	C11-C12-C13	-2.23	120.16	126.42
38	Y	1620	LUT	C16-C1-C6	-2.23	106.69	110.30
38	y	1620	LUT	C16-C1-C6	-2.23	106.69	110.30
37	G	608	CHL	O2D-CGD-O1D	-2.23	119.49	123.84
37	g	608	CHL	O2D-CGD-O1D	-2.23	119.49	123.84
34	d	405	PL9	C36-C37-C38	-2.22	104.57	111.88
38	N	1620	LUT	C31-C30-C29	-2.22	124.14	127.31
27	b	607	CLA	CHD-C1D-ND	-2.22	122.41	124.45
27	B	607	CLA	CHD-C1D-ND	-2.22	122.41	124.45
30	a	412	SQD	O48-C23-C24	2.22	118.88	111.91
29	B	619	BCR	C21-C20-C19	-2.22	116.29	123.22
37	N	608	CHL	OMC-CMC-C2C	-2.22	120.67	125.69
30	A	412	SQD	O48-C23-C24	2.22	118.87	111.91
37	s	608	CHL	C1D-ND-C4D	-2.22	104.76	106.33
34	D	405	PL9	C36-C37-C38	-2.22	104.59	111.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	G	613	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
27	g	613	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
29	H	101	BCR	C33-C5-C6	-2.22	122.04	124.53
27	B	602	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
27	B	604	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
38	y	1621	LUT	C39-C29-C28	2.22	121.57	118.08
27	g	614	CLA	CHD-C1D-ND	-2.21	122.42	124.45
27	N	602	CLA	C1B-CHB-C4A	-2.21	125.73	130.12
27	n	602	CLA	C1B-CHB-C4A	-2.21	125.73	130.12
27	b	602	CLA	O2A-CGA-O1A	-2.21	118.01	123.59
27	G	614	CLA	CHD-C1D-ND	-2.21	122.42	124.45
27	B	608	CLA	C2D-C1D-ND	-2.21	108.47	110.10
32	c	518	DGD	CBB-CAB-C9B	-2.21	103.19	114.42
39	R	622	XAT	C20-C13-C12	2.21	121.56	118.08
32	C	519	DGD	C5B-C4B-C3B	-2.21	103.19	114.42
37	Y	609	CHL	CBC-CAC-C3C	-2.21	106.33	112.43
37	y	609	CHL	CBC-CAC-C3C	-2.21	106.33	112.43
38	G	1621	LUT	C40-C33-C32	2.21	121.56	118.08
32	c	519	DGD	C5B-C4B-C3B	-2.21	103.20	114.42
37	n	608	CHL	OMC-CMC-C2C	-2.21	120.69	125.69
38	Y	1621	LUT	C16-C1-C6	-2.21	106.71	110.30
38	y	1621	LUT	C16-C1-C6	-2.21	106.71	110.30
32	C	518	DGD	O3G-C1D-C2D	-2.21	104.85	108.30
32	C	518	DGD	CBB-CAB-C9B	-2.21	103.21	114.42
27	b	604	CLA	O2A-CGA-O1A	-2.21	118.02	123.59
37	n	605	CHL	C1C-C2C-C3C	-2.21	105.36	107.11
38	S	1621	LUT	C39-C29-C28	2.21	121.55	118.08
37	G	601	CHL	O1D-CGD-CBD	-2.21	119.97	124.48
37	g	601	CHL	O1D-CGD-CBD	-2.21	119.97	124.48
31	D	411	LMG	O3-C3-C2	-2.20	105.26	110.35
27	N	610	CLA	O2D-CGD-CBD	2.20	115.18	111.27
39	N	1622	XAT	C19-C9-C8	2.20	121.54	118.08
32	c	518	DGD	O3G-C1D-C2D	-2.20	104.87	108.30
35	D	410	LHG	C27-C26-C25	-2.20	103.27	114.42
27	B	602	CLA	C1B-CHB-C4A	-2.20	125.76	130.12
27	b	602	CLA	C1B-CHB-C4A	-2.20	125.76	130.12
38	g	1621	LUT	C40-C33-C32	2.20	121.54	118.08
38	n	1620	LUT	C11-C10-C9	-2.20	124.18	127.31
27	R	603	CLA	O2A-CGA-O1A	-2.20	118.05	123.59
35	d	410	LHG	C27-C26-C25	-2.20	103.28	114.42
35	y	2630	LHG	C18-C17-C16	-2.20	103.28	114.42
35	Y	2630	LHG	C18-C17-C16	-2.20	103.28	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	R	611	CLA	O2A-CGA-O1A	-2.20	118.05	123.59
27	y	602	CLA	C16-C15-C13	-2.20	108.82	115.92
27	r	603	CLA	O2A-CGA-O1A	-2.19	118.05	123.59
31	d	411	LMG	O3-C3-C2	-2.19	105.28	110.35
27	b	613	CLA	CAA-CBA-CGA	-2.19	106.84	113.25
31	c	521	LMG	O2-C2-C1	-2.19	104.72	110.05
34	d	405	PL9	C37-C38-C39	-2.19	122.38	127.66
29	d	404	BCR	C15-C14-C13	-2.19	124.18	127.31
38	s	1621	LUT	C39-C29-C28	2.19	121.53	118.08
31	C	521	LMG	O2-C2-C1	-2.19	104.73	110.05
27	c	512	CLA	C1-C2-C3	-2.19	122.26	126.04
37	y	606	CHL	O1D-CGD-CBD	-2.19	120.01	124.48
31	z	101	LMG	O6-C1-O1	-2.19	104.80	109.97
37	S	601	CHL	CHB-C4A-NA	2.19	127.53	124.51
37	s	607	CHL	C1C-C2C-C3C	-2.19	105.38	107.11
27	C	501	CLA	O2A-CGA-O1A	-2.18	118.08	123.59
29	B	620	BCR	C37-C22-C23	2.18	121.52	118.08
32	C	520	DGD	O6E-C1E-O5D	-2.18	104.80	109.97
32	c	520	DGD	O6E-C1E-O5D	-2.18	104.80	109.97
27	c	501	CLA	O2A-CGA-O1A	-2.18	118.08	123.59
40	Y	1623	NEX	C15-C35-C34	-2.18	119.01	123.47
40	y	1623	NEX	C15-C35-C34	-2.18	119.01	123.47
38	y	1620	LUT	C19-C9-C8	2.18	121.51	118.08
37	Y	606	CHL	O1D-CGD-CBD	-2.18	120.02	124.48
34	D	405	PL9	C37-C38-C39	-2.18	122.41	127.66
27	C	502	CLA	O2D-CGD-O1D	-2.18	119.58	123.84
27	b	606	CLA	C2D-C1D-ND	-2.18	108.50	110.10
31	Z	101	LMG	O6-C1-O1	-2.18	104.82	109.97
27	B	613	CLA	CAA-CBA-CGA	-2.18	106.89	113.25
27	Y	602	CLA	C16-C15-C13	-2.18	108.88	115.92
35	g	2630	LHG	O8-C23-O10	-2.18	118.10	123.59
31	Z	101	LMG	O2-C2-C1	-2.18	104.76	110.05
31	C	521	LMG	O1-C1-C2	-2.18	104.91	108.30
37	n	608	CHL	C1C-C2C-C3C	-2.18	105.39	107.11
31	c	521	LMG	O1-C7-C8	-2.17	105.65	110.90
31	c	521	LMG	O1-C1-C2	-2.17	104.91	108.30
39	G	1622	XAT	C19-C9-C8	2.17	121.50	118.08
27	g	603	CLA	C1B-CHB-C4A	-2.17	125.81	130.12
29	h	101	BCR	C33-C5-C6	-2.17	122.09	124.53
27	n	610	CLA	O2D-CGD-CBD	2.17	115.13	111.27
32	c	518	DGD	CAB-C9B-C8B	-2.17	103.40	114.42
27	S	610	CLA	O2A-CGA-O1A	-2.17	118.11	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	S	2630	LHG	C27-C26-C25	-2.17	103.40	114.42
35	s	2630	LHG	C27-C26-C25	-2.17	103.40	114.42
37	S	607	CHL	C1C-C2C-C3C	-2.17	105.39	107.11
29	b	620	BCR	C10-C11-C12	-2.17	116.44	123.22
38	N	1620	LUT	C11-C10-C9	-2.17	124.21	127.31
27	G	603	CLA	C1B-CHB-C4A	-2.17	125.82	130.12
39	g	1622	XAT	C19-C9-C8	2.17	121.49	118.08
27	s	614	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
27	b	608	CLA	C2D-C1D-ND	-2.17	108.51	110.10
38	n	1621	LUT	C15-C35-C34	-2.17	119.03	123.47
27	r	611	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
32	C	518	DGD	CAB-C9B-C8B	-2.17	103.43	114.42
39	g	1622	XAT	C24-C23-C22	-2.16	106.59	110.77
27	s	610	CLA	O2A-CGA-O1A	-2.16	118.13	123.59
37	s	601	CHL	CHB-C4A-NA	2.16	127.50	124.51
32	C	518	DGD	O5D-C6D-C5D	-2.16	105.05	109.05
27	b	612	CLA	CAC-C3C-C4C	2.16	127.62	124.81
37	Y	606	CHL	C1C-C2C-C3C	-2.16	105.40	107.11
27	C	512	CLA	C1-C2-C3	-2.16	122.30	126.04
35	g	2630	LHG	C27-C26-C25	-2.16	103.45	114.42
29	B	620	BCR	C10-C11-C12	-2.16	116.47	123.22
35	G	2630	LHG	O8-C23-O10	-2.16	118.14	123.59
32	H	102	DGD	O3E-C3E-C2E	-2.16	105.35	110.35
27	N	610	CLA	O2A-CGA-O1A	-2.16	118.14	123.59
38	R	620	LUT	C19-C9-C8	2.16	121.48	118.08
38	r	620	LUT	C19-C9-C8	2.16	121.48	118.08
38	N	1621	LUT	C15-C35-C34	-2.16	119.05	123.47
29	D	404	BCR	C15-C14-C13	-2.16	124.23	127.31
27	y	612	CLA	O2A-CGA-O1A	-2.16	118.14	123.59
27	B	606	CLA	C2D-C1D-ND	-2.16	108.51	110.10
27	c	502	CLA	O2D-CGD-O1D	-2.16	119.62	123.84
37	s	606	CHL	CHD-C1D-C2D	2.16	130.01	125.48
35	G	2630	LHG	C18-C17-C16	-2.16	103.47	114.42
35	g	2630	LHG	C18-C17-C16	-2.16	103.47	114.42
40	Y	1623	NEX	C28-C29-C30	2.16	122.25	118.94
27	Y	612	CLA	O2A-CGA-O1A	-2.16	118.15	123.59
35	G	2630	LHG	C27-C26-C25	-2.16	103.47	114.42
27	n	612	CLA	O2A-CGA-O1A	-2.16	118.15	123.59
38	s	1620	LUT	C20-C13-C12	2.16	121.47	118.08
37	S	606	CHL	CHD-C1D-C2D	2.16	130.00	125.48
27	c	502	CLA	CHD-C1D-ND	-2.15	122.47	124.45
37	N	608	CHL	C1C-C2C-C3C	-2.15	105.41	107.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	502	CLA	CHD-C1D-ND	-2.15	122.47	124.45
27	S	614	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
27	Y	614	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
37	G	606	CHL	CHB-C4A-NA	2.15	127.49	124.51
27	n	610	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
32	c	518	DGD	O5D-C6D-C5D	-2.15	105.06	109.05
27	B	602	CLA	CHD-C1D-ND	-2.15	122.48	124.45
27	b	602	CLA	CHD-C1D-ND	-2.15	122.48	124.45
31	z	101	LMG	O2-C2-C1	-2.15	104.82	110.05
39	n	1622	XAT	C19-C9-C8	2.15	121.47	118.08
27	B	605	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
27	b	605	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
39	g	1622	XAT	C10-C11-C12	-2.15	116.50	123.22
38	R	620	LUT	C3-C4-C5	-2.15	107.57	111.85
29	b	620	BCR	C37-C22-C23	2.15	121.47	118.08
38	n	1621	LUT	C19-C9-C8	2.15	121.47	118.08
38	N	1620	LUT	C18-C5-C4	2.15	118.33	114.36
27	N	612	CLA	O2A-CGA-O1A	-2.15	118.17	123.59
32	h	102	DGD	O3E-C3E-C2E	-2.15	105.39	110.35
38	S	1620	LUT	C20-C13-C12	2.15	121.46	118.08
31	C	521	LMG	O1-C7-C8	-2.15	105.72	110.90
39	G	1622	XAT	C10-C11-C12	-2.15	116.52	123.22
38	N	1620	LUT	C38-C25-C24	-2.15	118.97	123.56
40	N	1623	NEX	C38-C25-C24	2.15	116.69	114.28
29	c	514	BCR	C16-C15-C14	-2.15	119.08	123.47
37	s	608	CHL	CHD-C1D-C2D	2.15	129.98	125.48
31	a	413	LMG	O6-C1-C2	2.14	114.89	110.35
38	Y	1620	LUT	C39-C29-C28	2.14	121.46	118.08
39	G	1622	XAT	C24-C23-C22	-2.14	106.63	110.77
29	C	514	BCR	C11-C12-C13	-2.14	120.39	126.42
27	A	405	CLA	CAA-CBA-CGA	-2.14	106.99	113.25
27	C	505	CLA	C2D-C1D-ND	-2.14	108.53	110.10
32	C	519	DGD	C3D-C4D-C5D	-2.14	106.42	110.24
32	c	519	DGD	C3D-C4D-C5D	-2.14	106.42	110.24
38	Y	1620	LUT	C19-C9-C8	2.14	121.45	118.08
40	y	1623	NEX	C28-C29-C30	2.14	122.22	118.94
29	c	516	BCR	C35-C13-C12	2.14	121.45	118.08
27	a	405	CLA	CAA-CBA-CGA	-2.14	107.00	113.25
27	c	513	CLA	O2A-CGA-O1A	-2.14	118.19	123.59
38	y	1621	LUT	C30-C31-C32	-2.14	116.54	123.22
31	Z	101	LMG	C38-C37-C36	-2.14	103.57	114.42
39	Y	1622	XAT	C6-C7-C8	-2.14	121.47	125.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	405	CLA	CHB-C4A-NA	2.14	127.47	124.51
31	z	101	LMG	C38-C37-C36	-2.14	103.58	114.42
38	Y	1620	LUT	C38-C25-C24	-2.14	118.99	123.56
27	y	614	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
27	c	509	CLA	CAA-CBA-CGA	-2.14	107.01	113.25
27	C	509	CLA	CAA-CBA-CGA	-2.14	107.01	113.25
31	A	413	LMG	O6-C1-C2	2.14	114.87	110.35
37	S	608	CHL	CHD-C1D-C2D	2.13	129.96	125.48
27	B	612	CLA	CAC-C3C-C4C	2.13	127.58	124.81
35	n	2630	LHG	C18-C17-C16	-2.13	103.59	114.42
27	B	607	CLA	C2D-C1D-ND	-2.13	108.53	110.10
38	n	1620	LUT	C16-C1-C6	-2.13	106.84	110.30
29	d	404	BCR	C21-C20-C19	-2.13	116.56	123.22
27	g	612	CLA	O2A-CGA-O1A	-2.13	118.21	123.59
35	N	2630	LHG	C18-C17-C16	-2.13	103.60	114.42
38	r	620	LUT	C3-C4-C5	-2.13	107.61	111.85
29	C	514	BCR	C16-C15-C14	-2.13	119.11	123.47
38	n	1620	LUT	C18-C5-C4	2.13	118.30	114.36
38	n	1620	LUT	C38-C25-C24	-2.13	119.00	123.56
38	Y	1621	LUT	C30-C31-C32	-2.13	116.57	123.22
38	n	1620	LUT	C15-C35-C34	-2.13	119.11	123.47
38	R	620	LUT	C11-C10-C9	-2.13	124.27	127.31
38	r	620	LUT	C11-C10-C9	-2.13	124.27	127.31
29	c	515	BCR	C37-C22-C23	2.13	121.43	118.08
39	y	1622	XAT	C6-C7-C8	-2.13	121.50	125.99
29	C	516	BCR	C35-C13-C12	2.12	121.42	118.08
29	c	514	BCR	C11-C12-C13	-2.12	120.45	126.42
35	y	2630	LHG	C5-O7-C7	-2.12	112.56	117.79
31	z	101	LMG	C1-C2-C3	-2.12	105.57	110.00
38	N	1620	LUT	C16-C1-C6	-2.12	106.85	110.30
38	N	1621	LUT	C39-C29-C28	2.12	121.42	118.08
38	n	1621	LUT	C39-C29-C28	2.12	121.42	118.08
38	y	1620	LUT	C38-C25-C24	-2.12	119.01	123.56
27	C	512	CLA	C1B-CHB-C4A	-2.12	125.91	130.12
35	Y	2630	LHG	C5-O7-C7	-2.12	112.56	117.79
37	g	606	CHL	CHB-C4A-NA	2.12	127.45	124.51
29	D	404	BCR	C21-C20-C19	-2.12	116.59	123.22
38	y	1620	LUT	C39-C29-C28	2.12	121.42	118.08
38	N	1621	LUT	C19-C9-C8	2.12	121.42	118.08
29	C	516	BCR	C10-C11-C12	-2.12	116.60	123.22
38	S	1621	LUT	C18-C5-C4	2.12	118.28	114.36
29	c	515	BCR	C11-C12-C13	-2.12	120.46	126.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	c	518	DGD	C5B-C4B-C3B	-2.12	103.67	114.42
29	C	515	BCR	C11-C12-C13	-2.12	120.47	126.42
37	y	606	CHL	C1C-C2C-C3C	-2.12	105.43	107.11
38	S	1621	LUT	C7-C8-C9	-2.12	123.04	126.23
29	c	516	BCR	C10-C11-C12	-2.12	116.61	123.22
29	D	404	BCR	C28-C27-C26	-2.12	110.30	114.08
32	C	518	DGD	C5B-C4B-C3B	-2.11	103.69	114.42
27	b	613	CLA	C11-C12-C13	-2.11	109.09	115.92
27	C	513	CLA	O2A-CGA-O1A	-2.11	118.26	123.59
30	a	412	SQD	O5-C5-C4	2.11	113.53	109.69
27	c	512	CLA	C1B-CHB-C4A	-2.11	125.93	130.12
30	a	412	SQD	C1-O5-C5	2.11	117.83	113.69
27	G	612	CLA	O2A-CGA-O1A	-2.11	118.26	123.59
38	N	1620	LUT	C15-C35-C34	-2.11	119.15	123.47
38	g	1620	LUT	C18-C5-C4	2.11	118.26	114.36
40	G	1623	NEX	C19-C9-C10	-2.11	119.97	122.92
37	N	607	CHL	OMC-CMC-C2C	-2.11	120.92	125.69
27	s	612	CLA	O2A-CGA-O1A	-2.11	118.28	123.59
27	c	507	CLA	O2A-CGA-O1A	-2.11	118.28	123.59
31	Z	101	LMG	C1-C2-C3	-2.11	105.61	110.00
40	n	1623	NEX	C38-C25-C24	2.10	116.65	114.28
27	S	612	CLA	O2A-CGA-O1A	-2.10	118.28	123.59
37	N	609	CHL	O1D-CGD-CBD	-2.10	120.18	124.48
37	n	609	CHL	O1D-CGD-CBD	-2.10	120.18	124.48
30	A	412	SQD	C1-O5-C5	2.10	117.82	113.69
27	C	506	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
37	S	607	CHL	CBC-CAC-C3C	-2.10	106.64	112.43
27	a	407	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
30	A	412	SQD	O5-C5-C4	2.10	113.51	109.69
37	s	607	CHL	CHD-C1D-C2D	2.10	129.88	125.48
27	B	611	CLA	O1D-CGD-CBD	2.10	128.78	124.48
39	Y	1622	XAT	C27-C28-C29	-2.10	122.27	125.53
27	g	610	CLA	O2A-CGA-O1A	-2.10	118.30	123.59
37	n	606	CHL	OMC-CMC-C2C	-2.10	120.94	125.69
37	s	607	CHL	CBC-CAC-C3C	-2.10	106.65	112.43
27	n	612	CLA	CHD-C1D-ND	-2.10	122.53	124.45
27	B	613	CLA	C11-C12-C13	-2.10	109.14	115.92
40	R	623	NEX	C19-C9-C10	-2.10	119.99	122.92
37	n	607	CHL	OMC-CMC-C2C	-2.09	120.95	125.69
29	C	515	BCR	C37-C22-C23	2.09	121.38	118.08
40	g	1623	NEX	C19-C9-C10	-2.09	119.99	122.92
40	R	623	NEX	C2-C1-C6	2.09	111.25	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	S	607	CHL	O1D-CGD-CBD	-2.09	120.20	124.48
30	a	418	SQD	O5-C5-C4	2.09	113.49	109.69
27	G	610	CLA	O2A-CGA-O1A	-2.09	118.31	123.59
37	S	607	CHL	CHD-C1D-C2D	2.09	129.86	125.48
30	B	621	SQD	O48-C23-O10	-2.09	118.32	123.59
38	s	1621	LUT	C7-C8-C9	-2.09	123.08	126.23
40	r	623	NEX	C2-C1-C6	2.09	111.24	109.21
40	r	623	NEX	C5-C4-C3	-2.09	109.27	111.75
27	b	609	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
31	A	413	LMG	O2-C2-C1	-2.09	104.97	110.05
27	C	509	CLA	CHD-C1D-ND	-2.09	122.53	124.45
27	c	509	CLA	CHD-C1D-ND	-2.09	122.53	124.45
37	S	608	CHL	C4D-CHA-C1A	-2.09	118.71	121.25
27	d	403	CLA	O2A-CGA-O1A	-2.09	118.33	123.59
38	G	1620	LUT	C18-C5-C4	2.09	118.22	114.36
27	A	407	CLA	O2A-CGA-O1A	-2.09	118.33	123.59
27	A	405	CLA	C1-C2-C3	-2.09	122.44	126.04
27	R	610	CLA	CHD-C1D-ND	-2.09	122.54	124.45
27	r	610	CLA	CHD-C1D-ND	-2.09	122.54	124.45
29	d	404	BCR	C28-C27-C26	-2.09	110.35	114.08
27	R	616	CLA	O2D-CGD-CBD	2.08	114.97	111.27
27	r	616	CLA	O2D-CGD-CBD	2.08	114.97	111.27
27	g	613	CLA	CHB-C4A-NA	2.08	127.39	124.51
27	B	609	CLA	O2A-CGA-O1A	-2.08	118.33	123.59
39	g	1622	XAT	C11-C10-C9	-2.08	124.33	127.31
38	s	1621	LUT	C18-C5-C4	2.08	118.22	114.36
31	A	413	LMG	O1-C7-C8	-2.08	105.87	110.90
40	R	623	NEX	C5-C4-C3	-2.08	109.28	111.75
27	c	505	CLA	C2D-C1D-ND	-2.08	108.57	110.10
27	A	405	CLA	CHB-C4A-NA	2.08	127.39	124.51
27	C	507	CLA	O2A-CGA-O1A	-2.08	118.34	123.59
31	a	413	LMG	O1-C7-C8	-2.08	105.88	110.90
27	c	506	CLA	O2A-CGA-O1A	-2.08	118.34	123.59
35	d	409	LHG	O8-C6-C5	-2.08	102.38	108.43
29	A	411	BCR	C37-C22-C23	2.08	121.36	118.08
40	r	623	NEX	C40-C33-C32	2.08	121.36	118.08
29	H	101	BCR	C38-C26-C27	2.08	117.61	113.62
37	N	606	CHL	OMC-CMC-C2C	-2.08	120.98	125.69
38	S	1621	LUT	C40-C33-C32	2.08	121.35	118.08
27	Y	613	CLA	C3C-C4C-NC	-2.08	108.24	110.57
37	N	601	CHL	C2A-C1A-CHA	-2.08	120.23	123.86
37	n	601	CHL	C2A-C1A-CHA	-2.08	120.23	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	c	518	DGD	O5E-C6E-C5E	-2.08	104.16	111.29
35	D	409	LHG	O8-C6-C5	-2.08	102.39	108.43
27	b	611	CLA	O1D-CGD-CBD	2.08	128.73	124.48
37	s	608	CHL	C4D-CHA-C1A	-2.08	118.72	121.25
31	a	413	LMG	O2-C2-C1	-2.08	105.00	110.05
39	Y	1622	XAT	O4-C5-C18	2.07	117.54	115.06
39	y	1622	XAT	O4-C5-C18	2.07	117.54	115.06
39	G	1622	XAT	C7-C8-C9	-2.07	122.31	125.53
29	h	101	BCR	C38-C26-C27	2.07	117.60	113.62
27	s	602	CLA	CHD-C1D-ND	-2.07	122.55	124.45
37	s	607	CHL	O1D-CGD-CBD	-2.07	120.24	124.48
27	G	613	CLA	CHB-C4A-NA	2.07	127.38	124.51
37	n	609	CHL	C1-O2A-CGA	2.07	121.88	116.44
27	D	403	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
32	C	518	DGD	O5E-C6E-C5E	-2.07	104.19	111.29
31	D	411	LMG	C1-O6-C5	-2.07	109.63	113.69
31	d	411	LMG	C1-O6-C5	-2.07	109.63	113.69
27	G	610	CLA	CHD-C1D-ND	-2.07	122.55	124.45
27	a	407	CLA	CHD-C1D-ND	-2.07	122.55	124.45
32	h	102	DGD	O3D-C3D-C4D	-2.07	105.57	110.35
34	D	405	PL9	C12-C13-C14	-2.07	122.68	127.66
34	d	405	PL9	C12-C13-C14	-2.07	122.68	127.66
38	s	1621	LUT	C40-C33-C32	2.07	121.33	118.08
38	y	1620	LUT	C40-C33-C32	2.07	121.33	118.08
27	B	615	CLA	C3C-C4C-NC	-2.07	108.25	110.57
27	b	615	CLA	C3C-C4C-NC	-2.07	108.25	110.57
37	Y	606	CHL	O2D-CGD-O1D	-2.07	119.80	123.84
27	S	602	CLA	O1D-CGD-CBD	2.07	128.71	124.48
38	Y	1621	LUT	C39-C29-C30	-2.07	120.03	122.92
27	b	607	CLA	C2D-C1D-ND	-2.07	108.58	110.10
35	D	408	LHG	O8-C6-C5	-2.07	102.42	108.43
30	b	621	SQD	O48-C23-O10	-2.07	118.38	123.59
31	B	622	LMG	C6-C5-C4	-2.07	108.17	113.00
31	b	622	LMG	C6-C5-C4	-2.07	108.17	113.00
27	s	602	CLA	O1D-CGD-CBD	2.07	128.71	124.48
39	g	1622	XAT	C7-C8-C9	-2.06	122.33	125.53
35	R	2630	LHG	C18-C17-C16	-2.06	103.94	114.42
27	c	503	CLA	CAA-CBA-CGA	-2.06	107.22	113.25
37	g	607	CHL	C1C-C2C-C3C	-2.06	105.48	107.11
37	N	609	CHL	O2D-CGD-O1D	-2.06	119.81	123.84
37	n	609	CHL	O2D-CGD-O1D	-2.06	119.81	123.84
34	d	405	PL9	O2-C1-C6	2.06	124.16	120.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	b	618	BCR	C29-C30-C25	2.06	113.65	110.48
39	y	1622	XAT	C27-C28-C29	-2.06	122.33	125.53
27	R	601	CLA	CHD-C1D-ND	-2.06	122.56	124.45
27	r	601	CLA	CHD-C1D-ND	-2.06	122.56	124.45
27	B	607	CLA	O2D-CGD-CBD	2.06	114.93	111.27
37	R	608	CHL	C1C-C2C-C3C	-2.06	105.48	107.11
27	C	509	CLA	C11-C10-C8	-2.06	109.26	115.92
37	y	606	CHL	O2D-CGD-O1D	-2.06	119.81	123.84
37	N	605	CHL	O1D-CGD-CBD	-2.06	120.27	124.48
27	a	405	CLA	C1-C2-C3	-2.06	122.48	126.04
38	G	1621	LUT	C20-C13-C12	2.06	121.32	118.08
27	G	603	CLA	CHD-C1D-ND	-2.06	122.56	124.45
38	R	620	LUT	C38-C25-C24	-2.06	119.15	123.56
32	c	519	DGD	C7B-C6B-C5B	-2.06	103.98	114.42
27	r	609	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
38	S	1621	LUT	C11-C10-C9	-2.06	124.37	127.31
32	c	519	DGD	O6E-C1E-O5D	-2.06	105.10	109.97
38	Y	1620	LUT	C40-C33-C32	2.06	121.32	118.08
38	g	1621	LUT	C20-C13-C12	2.06	121.32	118.08
27	R	612	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
37	r	606	CHL	C4D-CHA-C1A	-2.06	118.75	121.25
37	S	606	CHL	OMC-CMC-C2C	-2.06	121.04	125.69
37	s	606	CHL	OMC-CMC-C2C	-2.06	121.04	125.69
31	A	413	LMG	C9-C8-C7	-2.06	106.92	111.79
37	N	609	CHL	C1-O2A-CGA	2.06	121.84	116.44
37	R	606	CHL	C4D-CHA-C1A	-2.06	118.75	121.25
32	C	519	DGD	C7B-C6B-C5B	-2.05	104.00	114.42
27	D	403	CLA	CHD-C1D-ND	-2.05	122.57	124.45
27	d	403	CLA	CHD-C1D-ND	-2.05	122.57	124.45
35	r	2630	LHG	C18-C17-C16	-2.05	104.00	114.42
30	A	418	SQD	O5-C5-C4	2.05	113.42	109.69
27	g	611	CLA	O2A-CGA-O1A	-2.05	118.41	123.59
29	C	516	BCR	C21-C20-C19	-2.05	116.81	123.22
27	c	509	CLA	C11-C10-C8	-2.05	109.29	115.92
27	r	602	CLA	O1D-CGD-CBD	2.05	128.68	124.48
30	B	621	SQD	O8-S-C6	2.05	109.01	105.74
27	B	617	CLA	CHD-C1D-ND	-2.05	122.57	124.45
29	B	618	BCR	C29-C30-C25	2.05	113.64	110.48
38	N	1621	LUT	C22-C23-C24	-2.05	109.41	111.74
29	a	411	BCR	C37-C22-C23	2.05	121.31	118.08
37	G	607	CHL	C1C-C2C-C3C	-2.05	105.49	107.11
38	N	1621	LUT	C31-C30-C29	-2.05	124.39	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	n	1621	LUT	C31-C30-C29	-2.05	124.39	127.31
27	b	607	CLA	O2D-CGD-CBD	2.05	114.91	111.27
40	R	623	NEX	C40-C33-C32	2.05	121.30	118.08
27	R	609	CLA	O2A-CGA-O1A	-2.05	118.42	123.59
37	R	607	CHL	CHB-C4A-NA	2.05	127.34	124.51
27	g	603	CLA	CHD-C1D-ND	-2.05	122.57	124.45
40	r	623	NEX	C19-C9-C10	-2.05	120.06	122.92
32	c	519	DGD	C8B-C7B-C6B	-2.05	104.03	114.42
32	h	102	DGD	C5B-C4B-C3B	-2.05	104.03	114.42
32	C	519	DGD	O6E-C1E-O5D	-2.05	105.13	109.97
27	b	617	CLA	CHD-C1D-ND	-2.05	122.57	124.45
32	C	519	DGD	C8B-C7B-C6B	-2.05	104.04	114.42
38	r	620	LUT	C38-C25-C24	-2.04	119.18	123.56
38	s	1621	LUT	C11-C10-C9	-2.04	124.39	127.31
27	S	611	CLA	O2A-CGA-O1A	-2.04	118.43	123.59
27	s	611	CLA	O2A-CGA-O1A	-2.04	118.43	123.59
34	D	405	PL9	C50-C49-C48	-2.04	116.74	122.65
34	d	405	PL9	C50-C49-C48	-2.04	116.74	122.65
27	D	402	CLA	C1-C2-C3	-2.04	122.51	126.04
29	c	516	BCR	C21-C20-C19	-2.04	116.84	123.22
39	R	622	XAT	C39-C29-C28	2.04	121.30	118.08
31	a	413	LMG	O6-C1-O1	-2.04	105.14	109.97
29	c	516	BCR	C39-C30-C25	-2.04	106.99	110.30
39	y	1622	XAT	C10-C11-C12	-2.04	116.84	123.22
37	s	606	CHL	C1C-C2C-C3C	-2.04	105.49	107.11
27	c	501	CLA	C11-C10-C8	-2.04	109.32	115.92
31	A	413	LMG	O6-C1-O1	-2.04	105.14	109.97
30	b	621	SQD	O8-S-C6	2.04	108.99	105.74
27	C	503	CLA	CAA-CBA-CGA	-2.04	107.29	113.25
35	d	408	LHG	O8-C6-C5	-2.04	102.49	108.43
27	y	613	CLA	C3C-C4C-NC	-2.04	108.28	110.57
31	a	413	LMG	C9-C8-C7	-2.04	106.96	111.79
27	B	609	CLA	O2D-CGD-CBD	2.04	114.89	111.27
27	r	612	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
32	H	102	DGD	C5B-C4B-C3B	-2.04	104.08	114.42
27	N	612	CLA	CHD-C1D-ND	-2.04	122.58	124.45
34	D	405	PL9	O2-C1-C6	2.04	124.12	120.59
27	b	609	CLA	O2D-CGD-CBD	2.04	114.89	111.27
27	C	501	CLA	C11-C10-C8	-2.04	109.34	115.92
39	G	1622	XAT	C11-C10-C9	-2.04	124.41	127.31
32	H	102	DGD	O3D-C3D-C4D	-2.03	105.65	110.35
31	D	411	LMG	C4-C3-C2	-2.03	107.27	110.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	r	607	CHL	CHB-C4A-NA	2.03	127.32	124.51
40	N	1623	NEX	C15-C35-C34	-2.03	119.31	123.47
30	A	412	SQD	O5-C1-C2	2.03	114.65	110.35
27	Y	604	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
27	d	402	CLA	C1-C2-C3	-2.03	122.53	126.04
37	Y	608	CHL	C1B-CHB-C4A	-2.03	126.09	130.12
27	r	613	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
39	Y	1622	XAT	C10-C11-C12	-2.03	116.88	123.22
32	C	520	DGD	C5B-C4B-C3B	-2.03	104.12	114.42
27	G	611	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
37	n	605	CHL	O1D-CGD-CBD	-2.03	120.33	124.48
27	g	611	CLA	O2D-CGD-CBD	2.03	114.87	111.27
27	S	604	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
29	b	619	BCR	C11-C12-C13	-2.03	120.72	126.42
27	g	610	CLA	CHD-C1D-ND	-2.03	122.59	124.45
27	B	609	CLA	C3C-C4C-NC	-2.03	108.30	110.57
37	N	607	CHL	C2A-C1A-CHA	-2.03	120.32	123.86
32	c	520	DGD	C5B-C4B-C3B	-2.03	104.14	114.42
27	y	604	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
37	S	601	CHL	O2D-CGD-O1D	-2.02	119.88	123.84
37	s	601	CHL	O2D-CGD-O1D	-2.02	119.88	123.84
29	B	619	BCR	C11-C12-C13	-2.02	120.73	126.42
27	g	610	CLA	C1-C2-C3	-2.02	122.54	126.04
27	A	407	CLA	CHD-C1D-ND	-2.02	122.59	124.45
27	R	602	CLA	O1D-CGD-CBD	2.02	128.62	124.48
27	A	406	CLA	C1-C2-C3	-2.02	122.55	126.04
39	g	1622	XAT	C39-C29-C30	-2.02	120.09	122.92
36	F	101	HEM	CMA-C3A-C4A	-2.02	125.36	128.46
37	R	608	CHL	O2D-CGD-O1D	-2.02	119.89	123.84
40	n	1623	NEX	O24-C25-C26	-2.02	57.29	58.96
29	C	515	BCR	C36-C18-C19	2.02	121.26	118.08
38	n	1621	LUT	C22-C23-C24	-2.02	109.44	111.74
29	c	515	BCR	C2-C1-C6	2.02	113.59	110.48
37	r	608	CHL	C1C-C2C-C3C	-2.02	105.51	107.11
36	f	101	HEM	CMA-C3A-C4A	-2.02	125.36	128.46
27	b	609	CLA	C3C-C4C-NC	-2.02	108.31	110.57
31	d	411	LMG	C4-C3-C2	-2.02	107.30	110.82
27	G	611	CLA	CHD-C1D-ND	-2.02	122.60	124.45
31	d	411	LMG	O8-C28-O10	-2.02	118.51	123.59
37	G	601	CHL	C4D-CHA-C1A	-2.01	118.80	121.25
27	c	507	CLA	C1-C2-C3	-2.01	122.56	126.04
34	D	405	PL9	O2-C1-C2	-2.01	117.17	121.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	y	1622	XAT	C5-C4-C3	2.01	116.73	112.75
27	s	611	CLA	C2D-C1D-ND	-2.01	108.62	110.10
29	C	516	BCR	C39-C30-C25	-2.01	107.03	110.30
38	g	1620	LUT	C39-C29-C28	2.01	121.25	118.08
27	G	611	CLA	O2D-CGD-CBD	2.01	114.84	111.27
27	b	612	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
37	S	608	CHL	OMC-CMC-C2C	-2.01	121.14	125.69
37	G	605	CHL	O1D-CGD-CBD	-2.01	120.37	124.48
27	C	507	CLA	C1-C2-C3	-2.01	122.57	126.04
28	a	408	PHO	CBA-CAA-C2A	-2.01	107.94	113.81
27	a	406	CLA	C1-C2-C3	-2.01	122.57	126.04
27	b	614	CLA	O2A-CGA-O1A	-2.01	118.53	123.59
27	y	613	CLA	CHD-C1D-ND	-2.01	122.61	124.45
38	G	1620	LUT	C3-C4-C5	-2.01	107.86	111.85
37	G	601	CHL	CBC-CAC-C3C	-2.01	106.90	112.43
27	R	613	CLA	O2A-CGA-O1A	-2.01	118.53	123.59
29	h	101	BCR	C29-C30-C25	2.01	113.57	110.48
28	A	408	PHO	CBA-CAA-C2A	-2.01	107.95	113.81
27	b	608	CLA	O1D-CGD-CBD	2.00	128.59	124.48
27	B	612	CLA	O2A-CGA-O1A	-2.00	118.53	123.59
34	d	405	PL9	O2-C1-C2	-2.00	117.19	121.78
27	Y	602	CLA	CHD-C1D-ND	-2.00	122.61	124.45
31	C	521	LMG	C1-C2-C3	-2.00	105.82	110.00
37	y	607	CHL	C1C-C2C-C3C	-2.00	105.53	107.11
40	R	623	NEX	C20-C13-C14	-2.00	120.12	122.92
27	g	611	CLA	CHD-C1D-ND	-2.00	122.61	124.45
35	d	409	LHG	C29-C28-C27	-2.00	104.26	114.42
27	b	605	CLA	O1D-CGD-CBD	2.00	128.58	124.48
37	g	605	CHL	O1D-CGD-CBD	-2.00	120.39	124.48
32	C	519	DGD	CAB-C9B-C8B	-2.00	104.26	114.42
27	r	611	CLA	O1D-CGD-CBD	2.00	128.58	124.48
40	n	1623	NEX	C15-C35-C34	-2.00	119.38	123.47
38	y	1621	LUT	C39-C29-C30	-2.00	120.12	122.92
27	s	604	CLA	O2A-CGA-O1A	-2.00	118.54	123.59
40	r	623	NEX	C20-C13-C14	-2.00	120.12	122.92

All (312) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
27	A	405	CLA	ND
27	A	406	CLA	ND
27	A	407	CLA	ND

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Mol	Chain	Res	Type	Atom
27	A	410	CLA	ND
27	B	602	CLA	ND
27	B	603	CLA	ND
27	B	604	CLA	ND
27	B	605	CLA	ND
27	B	606	CLA	ND
27	B	607	CLA	ND
27	B	608	CLA	ND
27	B	609	CLA	ND
27	B	610	CLA	ND
27	B	611	CLA	ND
27	B	612	CLA	ND
27	B	613	CLA	ND
27	B	614	CLA	ND
27	B	615	CLA	ND
27	B	616	CLA	ND
27	B	617	CLA	ND
27	C	502	CLA	ND
27	C	503	CLA	ND
27	C	501	CLA	ND
27	C	504	CLA	ND
27	C	505	CLA	ND
27	C	506	CLA	ND
27	C	507	CLA	ND
27	C	508	CLA	ND
27	C	509	CLA	ND
27	C	510	CLA	ND
27	C	511	CLA	ND
27	C	512	CLA	ND
27	C	513	CLA	ND
27	D	402	CLA	ND
27	D	403	CLA	ND
27	G	602	CLA	ND
27	G	603	CLA	ND
27	G	604	CLA	ND
27	G	610	CLA	ND
27	G	611	CLA	ND
27	G	612	CLA	ND
27	G	613	CLA	ND
27	G	614	CLA	ND
27	N	602	CLA	ND
27	N	603	CLA	ND

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Mol	Chain	Res	Type	Atom
27	N	604	CLA	ND
27	N	610	CLA	ND
27	N	611	CLA	ND
27	N	612	CLA	ND
27	N	613	CLA	ND
27	N	614	CLA	ND
27	R	601	CLA	ND
27	R	602	CLA	ND
27	R	603	CLA	ND
27	R	604	CLA	ND
27	R	609	CLA	ND
27	R	610	CLA	ND
27	R	611	CLA	ND
27	R	612	CLA	ND
27	R	613	CLA	ND
27	R	616	CLA	ND
27	S	602	CLA	ND
27	S	604	CLA	ND
27	S	609	CLA	ND
27	S	610	CLA	ND
27	S	611	CLA	ND
27	S	612	CLA	ND
27	S	613	CLA	ND
27	S	614	CLA	ND
27	Y	602	CLA	ND
27	Y	603	CLA	ND
27	Y	604	CLA	ND
27	Y	610	CLA	ND
27	Y	611	CLA	ND
27	Y	612	CLA	ND
27	Y	613	CLA	ND
27	Y	614	CLA	ND
27	a	405	CLA	ND
27	a	406	CLA	ND
27	a	407	CLA	ND
27	a	410	CLA	ND
27	b	602	CLA	ND
27	b	603	CLA	ND
27	b	604	CLA	ND
27	b	605	CLA	ND
27	b	606	CLA	ND
27	b	607	CLA	ND

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Mol	Chain	Res	Type	Atom
27	b	608	CLA	ND
27	b	609	CLA	ND
27	b	610	CLA	ND
27	b	611	CLA	ND
27	b	612	CLA	ND
27	b	613	CLA	ND
27	b	614	CLA	ND
27	b	615	CLA	ND
27	b	616	CLA	ND
27	b	617	CLA	ND
27	c	502	CLA	ND
27	c	503	CLA	ND
27	c	501	CLA	ND
27	c	504	CLA	ND
27	c	505	CLA	ND
27	c	506	CLA	ND
27	c	507	CLA	ND
27	c	508	CLA	ND
27	c	509	CLA	ND
27	c	510	CLA	ND
27	c	511	CLA	ND
27	c	512	CLA	ND
27	c	513	CLA	ND
27	d	402	CLA	ND
27	d	403	CLA	ND
27	g	602	CLA	ND
27	g	603	CLA	ND
27	g	604	CLA	ND
27	g	610	CLA	ND
27	g	611	CLA	ND
27	g	612	CLA	ND
27	g	613	CLA	ND
27	g	614	CLA	ND
27	n	602	CLA	ND
27	n	603	CLA	ND
27	n	604	CLA	ND
27	n	610	CLA	ND
27	n	611	CLA	ND
27	n	612	CLA	ND
27	n	613	CLA	ND
27	n	614	CLA	ND
27	r	601	CLA	ND

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Mol	Chain	Res	Type	Atom
27	r	602	CLA	ND
27	r	603	CLA	ND
27	r	604	CLA	ND
27	r	609	CLA	ND
27	r	610	CLA	ND
27	r	611	CLA	ND
27	r	612	CLA	ND
27	r	613	CLA	ND
27	r	616	CLA	ND
27	s	602	CLA	ND
27	s	604	CLA	ND
27	s	609	CLA	ND
27	s	610	CLA	ND
27	s	611	CLA	ND
27	s	612	CLA	ND
27	s	613	CLA	ND
27	s	614	CLA	ND
27	y	602	CLA	ND
27	y	603	CLA	ND
27	y	604	CLA	ND
27	y	610	CLA	ND
27	y	611	CLA	ND
27	y	612	CLA	ND
27	y	613	CLA	ND
27	y	614	CLA	ND
37	G	601	CHL	NA
37	G	601	CHL	ND
37	G	601	CHL	C8
37	G	601	CHL	NC
37	G	605	CHL	NA
37	G	605	CHL	ND
37	G	605	CHL	NC
37	G	606	CHL	NA
37	G	606	CHL	ND
37	G	606	CHL	NC
37	G	607	CHL	NA
37	G	607	CHL	ND
37	G	607	CHL	NC
37	G	608	CHL	NA
37	G	608	CHL	ND
37	G	608	CHL	NC
37	G	609	CHL	NA

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Mol	Chain	Res	Type	Atom
37	G	609	CHL	ND
37	G	609	CHL	NC
37	N	601	CHL	NA
37	N	601	CHL	ND
37	N	601	CHL	NC
37	N	605	CHL	NA
37	N	605	CHL	ND
37	N	605	CHL	NC
37	N	606	CHL	NA
37	N	606	CHL	ND
37	N	606	CHL	NC
37	N	607	CHL	NA
37	N	607	CHL	ND
37	N	607	CHL	C8
37	N	607	CHL	NC
37	N	608	CHL	NA
37	N	608	CHL	ND
37	N	608	CHL	NC
37	N	609	CHL	NA
37	N	609	CHL	ND
37	N	609	CHL	NC
37	R	606	CHL	NA
37	R	606	CHL	ND
37	R	606	CHL	NC
37	R	607	CHL	NA
37	R	607	CHL	ND
37	R	607	CHL	NC
37	R	608	CHL	NA
37	R	608	CHL	ND
37	R	608	CHL	NC
37	S	601	CHL	NA
37	S	601	CHL	ND
37	S	601	CHL	NC
37	S	606	CHL	NA
37	S	606	CHL	ND
37	S	606	CHL	NC
37	S	607	CHL	NA
37	S	607	CHL	ND
37	S	607	CHL	NC
37	S	608	CHL	NA
37	S	608	CHL	ND
37	S	608	CHL	NC

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Mol	Chain	Res	Type	Atom
37	Y	601	CHL	NA
37	Y	601	CHL	ND
37	Y	601	CHL	C8
37	Y	601	CHL	NC
37	Y	605	CHL	NA
37	Y	605	CHL	ND
37	Y	605	CHL	NC
37	Y	606	CHL	NA
37	Y	606	CHL	ND
37	Y	606	CHL	NC
37	Y	607	CHL	NA
37	Y	607	CHL	ND
37	Y	607	CHL	NC
37	Y	608	CHL	NA
37	Y	608	CHL	ND
37	Y	608	CHL	NC
37	Y	609	CHL	NA
37	Y	609	CHL	ND
37	Y	609	CHL	C8
37	Y	609	CHL	NC
37	g	601	CHL	NA
37	g	601	CHL	ND
37	g	601	CHL	C8
37	g	601	CHL	NC
37	g	605	CHL	NA
37	g	605	CHL	ND
37	g	605	CHL	NC
37	g	606	CHL	NA
37	g	606	CHL	ND
37	g	606	CHL	NC
37	g	607	CHL	NA
37	g	607	CHL	ND
37	g	607	CHL	NC
37	g	608	CHL	NA
37	g	608	CHL	ND
37	g	608	CHL	NC
37	g	609	CHL	NA
37	g	609	CHL	ND
37	g	609	CHL	NC
37	n	601	CHL	NA
37	n	601	CHL	ND
37	n	601	CHL	NC

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Mol	Chain	Res	Type	Atom
37	n	605	CHL	NA
37	n	605	CHL	ND
37	n	605	CHL	NC
37	n	606	CHL	NA
37	n	606	CHL	ND
37	n	606	CHL	NC
37	n	607	CHL	NA
37	n	607	CHL	ND
37	n	607	CHL	C8
37	n	607	CHL	NC
37	n	608	CHL	NA
37	n	608	CHL	ND
37	n	608	CHL	NC
37	n	609	CHL	NA
37	n	609	CHL	ND
37	n	609	CHL	NC
37	r	606	CHL	NA
37	r	606	CHL	ND
37	r	606	CHL	NC
37	r	607	CHL	NA
37	r	607	CHL	ND
37	r	607	CHL	NC
37	r	608	CHL	NA
37	r	608	CHL	ND
37	r	608	CHL	NC
37	s	601	CHL	NA
37	s	601	CHL	ND
37	s	601	CHL	NC
37	s	606	CHL	NA
37	s	606	CHL	ND
37	s	606	CHL	NC
37	s	607	CHL	NA
37	s	607	CHL	ND
37	s	607	CHL	NC
37	s	608	CHL	NA
37	s	608	CHL	ND
37	s	608	CHL	NC
37	y	601	CHL	NA
37	y	601	CHL	ND
37	y	601	CHL	C8
37	y	601	CHL	NC
37	y	605	CHL	NA

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Mol	Chain	Res	Type	Atom
37	y	605	CHL	ND
37	y	605	CHL	NC
37	y	606	CHL	NA
37	y	606	CHL	ND
37	y	606	CHL	NC
37	y	607	CHL	NA
37	y	607	CHL	ND
37	y	607	CHL	NC
37	y	608	CHL	NA
37	y	608	CHL	ND
37	y	608	CHL	NC
37	y	609	CHL	NA
37	y	609	CHL	ND
37	y	609	CHL	C8
37	y	609	CHL	NC

All (3220) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
27	A	405	CLA	CBD-CGD-O2D-CED
27	A	406	CLA	CHA-CBD-CGD-O1D
27	A	406	CLA	CHA-CBD-CGD-O2D
27	A	407	CLA	CBD-CGD-O2D-CED
27	B	602	CLA	C1A-C2A-CAA-CBA
27	B	602	CLA	C3A-C2A-CAA-CBA
27	B	603	CLA	C2-C3-C5-C6
27	B	603	CLA	C4-C3-C5-C6
27	B	604	CLA	C4-C3-C5-C6
27	B	605	CLA	C2A-CAA-CBA-CGA
27	B	608	CLA	CBD-CGD-O2D-CED
27	B	610	CLA	CHA-CBD-CGD-O1D
27	B	610	CLA	CHA-CBD-CGD-O2D
27	B	610	CLA	CAD-CBD-CGD-O1D
27	B	610	CLA	C6-C7-C8-C9
27	B	613	CLA	C1A-C2A-CAA-CBA
27	B	613	CLA	C3A-C2A-CAA-CBA
27	B	614	CLA	CBD-CGD-O2D-CED
27	B	615	CLA	C2A-CAA-CBA-CGA
27	B	616	CLA	CHA-CBD-CGD-O1D
27	B	616	CLA	CHA-CBD-CGD-O2D
27	C	505	CLA	CHA-CBD-CGD-O1D
27	C	505	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
27	C	506	CLA	CHA-CBD-CGD-O1D
27	C	506	CLA	CHA-CBD-CGD-O2D
27	C	506	CLA	CAD-CBD-CGD-O1D
27	C	506	CLA	CAD-CBD-CGD-O2D
27	C	508	CLA	CHA-CBD-CGD-O1D
27	C	508	CLA	CHA-CBD-CGD-O2D
27	C	510	CLA	CBD-CGD-O2D-CED
27	C	512	CLA	C1A-C2A-CAA-CBA
27	C	512	CLA	C3A-C2A-CAA-CBA
27	G	604	CLA	CBD-CGD-O2D-CED
27	G	610	CLA	C1A-C2A-CAA-CBA
27	G	610	CLA	C4-C3-C5-C6
27	G	611	CLA	C1A-C2A-CAA-CBA
27	G	611	CLA	C3A-C2A-CAA-CBA
27	G	612	CLA	CBD-CGD-O2D-CED
27	N	611	CLA	CAD-CBD-CGD-O1D
27	N	611	CLA	CAD-CBD-CGD-O2D
27	N	612	CLA	CHA-CBD-CGD-O2D
27	N	613	CLA	CBD-CGD-O2D-CED
27	N	614	CLA	CAD-CBD-CGD-O1D
27	N	614	CLA	CAD-CBD-CGD-O2D
27	R	601	CLA	C1A-C2A-CAA-CBA
27	R	601	CLA	C3A-C2A-CAA-CBA
27	R	604	CLA	C1A-C2A-CAA-CBA
27	R	609	CLA	C1A-C2A-CAA-CBA
27	R	609	CLA	C3A-C2A-CAA-CBA
27	R	610	CLA	C2-C3-C5-C6
27	R	610	CLA	C4-C3-C5-C6
27	R	611	CLA	C1A-C2A-CAA-CBA
27	R	611	CLA	C3A-C2A-CAA-CBA
27	R	612	CLA	CBD-CGD-O2D-CED
27	R	616	CLA	CBA-CGA-O2A-C1
27	R	616	CLA	O1A-CGA-O2A-C1
27	R	616	CLA	CHA-CBD-CGD-O1D
27	R	616	CLA	CHA-CBD-CGD-O2D
27	S	604	CLA	C1A-C2A-CAA-CBA
27	S	604	CLA	CAD-CBD-CGD-O1D
27	S	604	CLA	CAD-CBD-CGD-O2D
27	S	609	CLA	C1A-C2A-CAA-CBA
27	S	609	CLA	C3A-C2A-CAA-CBA
27	S	609	CLA	CBD-CGD-O2D-CED
27	S	610	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
27	S	610	CLA	CHA-CBD-CGD-O2D
27	S	611	CLA	CHA-CBD-CGD-O1D
27	S	611	CLA	CHA-CBD-CGD-O2D
27	S	612	CLA	CBD-CGD-O2D-CED
27	a	405	CLA	CBD-CGD-O2D-CED
27	a	406	CLA	CHA-CBD-CGD-O1D
27	a	406	CLA	CHA-CBD-CGD-O2D
27	a	407	CLA	CBD-CGD-O2D-CED
27	b	602	CLA	C1A-C2A-CAA-CBA
27	b	602	CLA	C3A-C2A-CAA-CBA
27	b	603	CLA	C2-C3-C5-C6
27	b	603	CLA	C4-C3-C5-C6
27	b	604	CLA	C4-C3-C5-C6
27	b	605	CLA	C2A-CAA-CBA-CGA
27	b	608	CLA	CBD-CGD-O2D-CED
27	b	610	CLA	CHA-CBD-CGD-O1D
27	b	610	CLA	CHA-CBD-CGD-O2D
27	b	610	CLA	CAD-CBD-CGD-O1D
27	b	610	CLA	C6-C7-C8-C9
27	b	613	CLA	C1A-C2A-CAA-CBA
27	b	613	CLA	C3A-C2A-CAA-CBA
27	b	614	CLA	CBD-CGD-O2D-CED
27	b	615	CLA	C2A-CAA-CBA-CGA
27	b	616	CLA	CHA-CBD-CGD-O1D
27	b	616	CLA	CHA-CBD-CGD-O2D
27	c	505	CLA	CHA-CBD-CGD-O1D
27	c	505	CLA	CHA-CBD-CGD-O2D
27	c	506	CLA	CHA-CBD-CGD-O1D
27	c	506	CLA	CHA-CBD-CGD-O2D
27	c	506	CLA	CAD-CBD-CGD-O1D
27	c	506	CLA	CAD-CBD-CGD-O2D
27	c	508	CLA	CHA-CBD-CGD-O1D
27	c	508	CLA	CHA-CBD-CGD-O2D
27	c	510	CLA	CBD-CGD-O2D-CED
27	c	512	CLA	C1A-C2A-CAA-CBA
27	c	512	CLA	C3A-C2A-CAA-CBA
27	g	604	CLA	CBD-CGD-O2D-CED
27	g	610	CLA	C1A-C2A-CAA-CBA
27	g	610	CLA	C4-C3-C5-C6
27	g	611	CLA	C1A-C2A-CAA-CBA
27	g	611	CLA	C3A-C2A-CAA-CBA
27	g	612	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
27	n	611	CLA	CAD-CBD-CGD-O1D
27	n	611	CLA	CAD-CBD-CGD-O2D
27	n	612	CLA	CHA-CBD-CGD-O2D
27	n	613	CLA	CBD-CGD-O2D-CED
27	n	614	CLA	CAD-CBD-CGD-O1D
27	n	614	CLA	CAD-CBD-CGD-O2D
27	r	601	CLA	C1A-C2A-CAA-CBA
27	r	601	CLA	C3A-C2A-CAA-CBA
27	r	604	CLA	C1A-C2A-CAA-CBA
27	r	609	CLA	C1A-C2A-CAA-CBA
27	r	609	CLA	C3A-C2A-CAA-CBA
27	r	610	CLA	C2-C3-C5-C6
27	r	610	CLA	C4-C3-C5-C6
27	r	611	CLA	C1A-C2A-CAA-CBA
27	r	611	CLA	C3A-C2A-CAA-CBA
27	r	612	CLA	CBD-CGD-O2D-CED
27	r	616	CLA	CBA-CGA-O2A-C1
27	r	616	CLA	O1A-CGA-O2A-C1
27	r	616	CLA	CHA-CBD-CGD-O1D
27	r	616	CLA	CHA-CBD-CGD-O2D
27	s	604	CLA	C1A-C2A-CAA-CBA
27	s	604	CLA	CAD-CBD-CGD-O1D
27	s	604	CLA	CAD-CBD-CGD-O2D
27	s	609	CLA	C1A-C2A-CAA-CBA
27	s	609	CLA	C3A-C2A-CAA-CBA
27	s	609	CLA	CBD-CGD-O2D-CED
27	s	610	CLA	CHA-CBD-CGD-O1D
27	s	610	CLA	CHA-CBD-CGD-O2D
27	s	611	CLA	CHA-CBD-CGD-O1D
27	s	611	CLA	CHA-CBD-CGD-O2D
27	s	612	CLA	CBD-CGD-O2D-CED
28	A	409	PHO	C1A-C2A-CAA-CBA
28	a	409	PHO	C1A-C2A-CAA-CBA
29	B	618	BCR	C36-C18-C19-C20
29	B	620	BCR	C7-C8-C9-C10
29	B	620	BCR	C7-C8-C9-C34
29	C	516	BCR	C7-C8-C9-C10
29	C	516	BCR	C7-C8-C9-C34
29	C	516	BCR	C19-C20-C21-C22
29	C	514	BCR	C37-C22-C23-C24
29	D	404	BCR	C7-C8-C9-C10
29	D	404	BCR	C7-C8-C9-C34

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Mol	Chain	Res	Type	Atoms
29	D	404	BCR	C21-C22-C23-C24
29	D	404	BCR	C37-C22-C23-C24
29	b	618	BCR	C36-C18-C19-C20
29	b	620	BCR	C7-C8-C9-C10
29	b	620	BCR	C7-C8-C9-C34
29	c	516	BCR	C7-C8-C9-C10
29	c	516	BCR	C7-C8-C9-C34
29	c	516	BCR	C19-C20-C21-C22
29	c	514	BCR	C37-C22-C23-C24
29	d	404	BCR	C7-C8-C9-C10
29	d	404	BCR	C7-C8-C9-C34
29	d	404	BCR	C21-C22-C23-C24
29	d	404	BCR	C37-C22-C23-C24
30	A	412	SQD	O5-C1-O6-C44
30	A	412	SQD	O5-C5-C6-S
30	A	418	SQD	C2-C1-O6-C44
30	A	418	SQD	O5-C1-O6-C44
30	A	418	SQD	C24-C23-O48-C46
30	B	621	SQD	C2-C1-O6-C44
30	B	621	SQD	O5-C1-O6-C44
30	B	621	SQD	O5-C5-C6-S
30	a	412	SQD	O5-C1-O6-C44
30	a	412	SQD	O5-C5-C6-S
30	a	418	SQD	C2-C1-O6-C44
30	a	418	SQD	O5-C1-O6-C44
30	a	418	SQD	C24-C23-O48-C46
30	b	621	SQD	C2-C1-O6-C44
30	b	621	SQD	O5-C1-O6-C44
30	b	621	SQD	O5-C5-C6-S
31	A	413	LMG	C2-C1-O1-C7
31	A	413	LMG	O6-C1-O1-C7
31	C	521	LMG	C11-C10-O7-C8
31	Z	101	LMG	C8-C7-O1-C1
31	a	413	LMG	C2-C1-O1-C7
31	a	413	LMG	O6-C1-O1-C7
31	c	521	LMG	C11-C10-O7-C8
31	z	101	LMG	C8-C7-O1-C1
32	C	519	DGD	C2E-C1E-O5D-C6D
32	C	519	DGD	O6E-C1E-O5D-C6D
32	c	519	DGD	C2E-C1E-O5D-C6D
32	c	519	DGD	O6E-C1E-O5D-C6D
34	D	405	PL9	C7-C8-C9-C11

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Mol	Chain	Res	Type	Atoms
34	D	405	PL9	C12-C11-C9-C10
34	D	405	PL9	C40-C39-C41-C42
34	D	405	PL9	C42-C43-C44-C46
34	d	405	PL9	C7-C8-C9-C11
34	d	405	PL9	C12-C11-C9-C10
34	d	405	PL9	C40-C39-C41-C42
34	d	405	PL9	C42-C43-C44-C46
35	D	408	LHG	O1-C1-C2-O2
35	D	408	LHG	O1-C1-C2-C3
35	D	408	LHG	C4-O6-P-O4
35	D	409	LHG	C3-O3-P-O5
35	D	409	LHG	C4-O6-P-O4
35	D	410	LHG	C3-O3-P-O5
35	D	410	LHG	C3-O3-P-O6
35	G	2630	LHG	C4-O6-P-O5
35	G	2630	LHG	O7-C5-C6-O8
35	L	101	LHG	O1-C1-C2-O2
35	L	101	LHG	O1-C1-C2-C3
35	L	101	LHG	C4-O6-P-O5
35	L	101	LHG	O6-C4-C5-O7
35	N	2630	LHG	O1-C1-C2-C3
35	N	2630	LHG	C3-O3-P-O4
35	N	2630	LHG	C4-O6-P-O3
35	R	2630	LHG	C8-C7-O7-C5
35	S	2630	LHG	C3-O3-P-O4
35	Y	2630	LHG	O1-C1-C2-C3
35	Y	2630	LHG	O7-C5-C6-O8
35	d	408	LHG	O1-C1-C2-O2
35	d	408	LHG	O1-C1-C2-C3
35	d	408	LHG	C4-O6-P-O4
35	d	409	LHG	C3-O3-P-O5
35	d	409	LHG	C4-O6-P-O4
35	d	410	LHG	C3-O3-P-O5
35	d	410	LHG	C3-O3-P-O6
35	g	2630	LHG	C4-O6-P-O5
35	g	2630	LHG	O7-C5-C6-O8
35	l	101	LHG	O1-C1-C2-O2
35	l	101	LHG	O1-C1-C2-C3
35	l	101	LHG	C4-O6-P-O5
35	l	101	LHG	O6-C4-C5-O7
35	n	2630	LHG	O1-C1-C2-C3
35	n	2630	LHG	C3-O3-P-O4

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Mol	Chain	Res	Type	Atoms
35	n	2630	LHG	C4-O6-P-O3
35	r	2630	LHG	C8-C7-O7-C5
35	s	2630	LHG	C3-O3-P-O4
35	y	2630	LHG	O1-C1-C2-C3
35	y	2630	LHG	O7-C5-C6-O8
37	G	601	CHL	CHA-CBD-CGD-O1D
37	G	601	CHL	CHA-CBD-CGD-O2D
37	G	608	CHL	C3C-C2C-CMC-OMC
37	G	608	CHL	CBD-CGD-O2D-CED
37	N	605	CHL	C3C-C2C-CMC-OMC
37	N	606	CHL	C1A-C2A-CAA-CBA
37	N	607	CHL	C11-C12-C13-C15
37	N	608	CHL	CBD-CGD-O2D-CED
37	R	606	CHL	C1A-C2A-CAA-CBA
37	R	606	CHL	C3C-C2C-CMC-OMC
37	R	608	CHL	CBD-CGD-O2D-CED
37	S	601	CHL	C3C-C2C-CMC-OMC
37	S	606	CHL	C1A-C2A-CAA-CBA
37	S	606	CHL	CHA-CBD-CGD-O1D
37	S	606	CHL	CHA-CBD-CGD-O2D
37	S	606	CHL	CAD-CBD-CGD-O1D
37	S	606	CHL	CAD-CBD-CGD-O2D
37	S	607	CHL	C1A-C2A-CAA-CBA
37	S	607	CHL	C3C-C2C-CMC-OMC
37	S	608	CHL	CBD-CGD-O2D-CED
37	Y	605	CHL	C3C-C2C-CMC-OMC
37	Y	608	CHL	CBD-CGD-O2D-CED
37	g	601	CHL	CHA-CBD-CGD-O1D
37	g	601	CHL	CHA-CBD-CGD-O2D
37	g	608	CHL	C3C-C2C-CMC-OMC
37	g	608	CHL	CBD-CGD-O2D-CED
37	n	605	CHL	C3C-C2C-CMC-OMC
37	n	606	CHL	C1A-C2A-CAA-CBA
37	n	607	CHL	C11-C12-C13-C15
37	n	608	CHL	CBD-CGD-O2D-CED
37	r	606	CHL	C1A-C2A-CAA-CBA
37	r	606	CHL	C3C-C2C-CMC-OMC
37	r	608	CHL	CBD-CGD-O2D-CED
37	s	601	CHL	C3C-C2C-CMC-OMC
37	s	606	CHL	C1A-C2A-CAA-CBA
37	s	606	CHL	CHA-CBD-CGD-O1D
37	s	606	CHL	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
37	s	606	CHL	CAD-CBD-CGD-O1D
37	s	606	CHL	CAD-CBD-CGD-O2D
37	s	607	CHL	C1A-C2A-CAA-CBA
37	s	607	CHL	C3C-C2C-CMC-OMC
37	s	608	CHL	CBD-CGD-O2D-CED
37	y	605	CHL	C3C-C2C-CMC-OMC
37	y	608	CHL	CBD-CGD-O2D-CED
38	N	1620	LUT	C1-C6-C7-C8
38	N	1621	LUT	C1-C6-C7-C8
38	n	1620	LUT	C1-C6-C7-C8
38	n	1621	LUT	C1-C6-C7-C8
40	G	1623	NEX	C7-C8-C9-C10
40	G	1623	NEX	O24-C26-C27-C28
40	N	1623	NEX	C11-C12-C13-C20
40	S	1623	NEX	O24-C26-C27-C28
40	g	1623	NEX	C7-C8-C9-C10
40	g	1623	NEX	O24-C26-C27-C28
40	n	1623	NEX	C11-C12-C13-C20
40	s	1623	NEX	O24-C26-C27-C28
27	A	405	CLA	O1D-CGD-O2D-CED
27	C	504	CLA	O1D-CGD-O2D-CED
27	N	612	CLA	O1D-CGD-O2D-CED
27	N	613	CLA	O1D-CGD-O2D-CED
27	R	602	CLA	O1D-CGD-O2D-CED
27	R	612	CLA	O1D-CGD-O2D-CED
27	S	614	CLA	O1D-CGD-O2D-CED
27	a	405	CLA	O1D-CGD-O2D-CED
27	c	504	CLA	O1D-CGD-O2D-CED
27	n	612	CLA	O1D-CGD-O2D-CED
27	n	613	CLA	O1D-CGD-O2D-CED
27	r	602	CLA	O1D-CGD-O2D-CED
27	r	612	CLA	O1D-CGD-O2D-CED
27	s	614	CLA	O1D-CGD-O2D-CED
27	A	407	CLA	O1D-CGD-O2D-CED
27	B	612	CLA	O1D-CGD-O2D-CED
27	B	614	CLA	O1D-CGD-O2D-CED
27	G	604	CLA	O1D-CGD-O2D-CED
27	G	612	CLA	O1D-CGD-O2D-CED
27	S	604	CLA	O1D-CGD-O2D-CED
27	a	407	CLA	O1D-CGD-O2D-CED
27	b	612	CLA	O1D-CGD-O2D-CED
27	b	614	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
27	g	604	CLA	O1D-CGD-O2D-CED
27	g	612	CLA	O1D-CGD-O2D-CED
27	s	604	CLA	O1D-CGD-O2D-CED
27	B	606	CLA	CBD-CGD-O2D-CED
27	B	610	CLA	CBD-CGD-O2D-CED
27	B	612	CLA	CBD-CGD-O2D-CED
27	B	615	CLA	CBD-CGD-O2D-CED
27	C	503	CLA	CBD-CGD-O2D-CED
27	C	501	CLA	CBD-CGD-O2D-CED
27	C	504	CLA	CBD-CGD-O2D-CED
27	C	511	CLA	CBD-CGD-O2D-CED
27	G	610	CLA	CBD-CGD-O2D-CED
27	G	614	CLA	CBD-CGD-O2D-CED
27	N	602	CLA	CBD-CGD-O2D-CED
27	N	612	CLA	CBD-CGD-O2D-CED
27	N	614	CLA	CBD-CGD-O2D-CED
27	R	601	CLA	CBD-CGD-O2D-CED
27	R	602	CLA	CBD-CGD-O2D-CED
27	R	609	CLA	CBD-CGD-O2D-CED
27	R	611	CLA	CBD-CGD-O2D-CED
27	S	603	CLA	CBD-CGD-O2D-CED
27	S	604	CLA	CBD-CGD-O2D-CED
27	S	614	CLA	CBD-CGD-O2D-CED
27	Y	604	CLA	CBD-CGD-O2D-CED
27	Y	610	CLA	CBD-CGD-O2D-CED
27	b	606	CLA	CBD-CGD-O2D-CED
27	b	610	CLA	CBD-CGD-O2D-CED
27	b	612	CLA	CBD-CGD-O2D-CED
27	b	615	CLA	CBD-CGD-O2D-CED
27	c	503	CLA	CBD-CGD-O2D-CED
27	c	501	CLA	CBD-CGD-O2D-CED
27	c	504	CLA	CBD-CGD-O2D-CED
27	c	511	CLA	CBD-CGD-O2D-CED
27	g	610	CLA	CBD-CGD-O2D-CED
27	g	614	CLA	CBD-CGD-O2D-CED
27	n	602	CLA	CBD-CGD-O2D-CED
27	n	612	CLA	CBD-CGD-O2D-CED
27	n	614	CLA	CBD-CGD-O2D-CED
27	r	601	CLA	CBD-CGD-O2D-CED
27	r	602	CLA	CBD-CGD-O2D-CED
27	r	609	CLA	CBD-CGD-O2D-CED
27	r	611	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
27	s	603	CLA	CBD-CGD-O2D-CED
27	s	604	CLA	CBD-CGD-O2D-CED
27	s	614	CLA	CBD-CGD-O2D-CED
27	y	604	CLA	CBD-CGD-O2D-CED
27	y	610	CLA	CBD-CGD-O2D-CED
37	S	606	CHL	CBD-CGD-O2D-CED
37	s	606	CHL	CBD-CGD-O2D-CED
27	B	615	CLA	O1A-CGA-O2A-C1
27	R	611	CLA	O1A-CGA-O2A-C1
27	b	615	CLA	O1A-CGA-O2A-C1
27	r	611	CLA	O1A-CGA-O2A-C1
30	A	418	SQD	O10-C23-O48-C46
30	a	418	SQD	O10-C23-O48-C46
27	B	610	CLA	O1D-CGD-O2D-CED
27	N	614	CLA	O1D-CGD-O2D-CED
27	b	610	CLA	O1D-CGD-O2D-CED
27	n	614	CLA	O1D-CGD-O2D-CED
27	C	510	CLA	O1D-CGD-O2D-CED
27	G	614	CLA	O1D-CGD-O2D-CED
27	R	601	CLA	O1D-CGD-O2D-CED
27	S	609	CLA	O1D-CGD-O2D-CED
27	c	510	CLA	O1D-CGD-O2D-CED
27	g	614	CLA	O1D-CGD-O2D-CED
27	r	601	CLA	O1D-CGD-O2D-CED
27	s	609	CLA	O1D-CGD-O2D-CED
37	G	608	CHL	O1D-CGD-O2D-CED
37	N	608	CHL	O1D-CGD-O2D-CED
37	R	608	CHL	O1D-CGD-O2D-CED
37	Y	608	CHL	O1D-CGD-O2D-CED
37	g	608	CHL	O1D-CGD-O2D-CED
37	n	608	CHL	O1D-CGD-O2D-CED
37	r	608	CHL	O1D-CGD-O2D-CED
37	y	608	CHL	O1D-CGD-O2D-CED
27	B	615	CLA	CBA-CGA-O2A-C1
27	R	611	CLA	CBA-CGA-O2A-C1
27	b	615	CLA	CBA-CGA-O2A-C1
27	r	611	CLA	CBA-CGA-O2A-C1
34	D	405	PL9	C47-C48-C49-C50
34	D	405	PL9	C47-C48-C49-C51
34	d	405	PL9	C47-C48-C49-C50
34	d	405	PL9	C47-C48-C49-C51
27	B	602	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
27	C	502	CLA	CBD-CGD-O2D-CED
27	C	506	CLA	CBD-CGD-O2D-CED
27	C	513	CLA	CBD-CGD-O2D-CED
27	D	402	CLA	CBD-CGD-O2D-CED
27	D	403	CLA	CBD-CGD-O2D-CED
27	G	602	CLA	CBD-CGD-O2D-CED
27	N	610	CLA	CBD-CGD-O2D-CED
27	R	610	CLA	CBD-CGD-O2D-CED
27	S	602	CLA	CBD-CGD-O2D-CED
27	S	613	CLA	CBD-CGD-O2D-CED
27	Y	602	CLA	CBD-CGD-O2D-CED
27	Y	603	CLA	CBD-CGD-O2D-CED
27	Y	611	CLA	CBD-CGD-O2D-CED
27	Y	613	CLA	CBD-CGD-O2D-CED
27	b	602	CLA	CBD-CGD-O2D-CED
27	c	502	CLA	CBD-CGD-O2D-CED
27	c	506	CLA	CBD-CGD-O2D-CED
27	c	513	CLA	CBD-CGD-O2D-CED
27	d	402	CLA	CBD-CGD-O2D-CED
27	d	403	CLA	CBD-CGD-O2D-CED
27	g	602	CLA	CBD-CGD-O2D-CED
27	n	610	CLA	CBD-CGD-O2D-CED
27	r	610	CLA	CBD-CGD-O2D-CED
27	s	602	CLA	CBD-CGD-O2D-CED
27	s	613	CLA	CBD-CGD-O2D-CED
27	y	602	CLA	CBD-CGD-O2D-CED
27	y	603	CLA	CBD-CGD-O2D-CED
27	y	611	CLA	CBD-CGD-O2D-CED
27	y	613	CLA	CBD-CGD-O2D-CED
28	A	409	PHO	CBD-CGD-O2D-CED
28	a	409	PHO	CBD-CGD-O2D-CED
37	Y	607	CHL	CBD-CGD-O2D-CED
37	y	607	CHL	CBD-CGD-O2D-CED
27	G	604	CLA	O1A-CGA-O2A-C1
27	G	613	CLA	O1A-CGA-O2A-C1
27	G	614	CLA	O1A-CGA-O2A-C1
27	N	611	CLA	O1A-CGA-O2A-C1
27	R	601	CLA	O1A-CGA-O2A-C1
27	g	604	CLA	O1A-CGA-O2A-C1
27	g	613	CLA	O1A-CGA-O2A-C1
27	g	614	CLA	O1A-CGA-O2A-C1
27	n	611	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
27	r	601	CLA	O1A-CGA-O2A-C1
31	B	622	LMG	O10-C28-O8-C9
31	Z	101	LMG	O10-C28-O8-C9
31	b	622	LMG	O10-C28-O8-C9
31	z	101	LMG	O10-C28-O8-C9
35	N	2630	LHG	O10-C23-O8-C6
35	S	2630	LHG	O10-C23-O8-C6
35	n	2630	LHG	O10-C23-O8-C6
35	s	2630	LHG	O10-C23-O8-C6
27	B	608	CLA	O1D-CGD-O2D-CED
27	S	612	CLA	O1D-CGD-O2D-CED
27	s	612	CLA	O1D-CGD-O2D-CED
37	S	608	CHL	O1D-CGD-O2D-CED
37	s	608	CHL	O1D-CGD-O2D-CED
27	b	608	CLA	O1D-CGD-O2D-CED
37	R	606	CHL	CBD-CGD-O2D-CED
37	r	606	CHL	CBD-CGD-O2D-CED
27	B	606	CLA	O1D-CGD-O2D-CED
27	b	606	CLA	O1D-CGD-O2D-CED
30	A	412	SQD	O49-C7-O47-C45
30	B	621	SQD	O49-C7-O47-C45
30	a	412	SQD	O49-C7-O47-C45
30	b	621	SQD	O49-C7-O47-C45
31	C	521	LMG	O9-C10-O7-C8
31	c	521	LMG	O9-C10-O7-C8
35	R	2630	LHG	O9-C7-O7-C5
35	r	2630	LHG	O9-C7-O7-C5
27	C	512	CLA	C3-C5-C6-C7
27	Y	613	CLA	C3-C5-C6-C7
27	c	512	CLA	C3-C5-C6-C7
27	y	613	CLA	C3-C5-C6-C7
28	A	408	PHO	C3-C5-C6-C7
28	A	409	PHO	C3-C5-C6-C7
28	a	408	PHO	C3-C5-C6-C7
28	a	409	PHO	C3-C5-C6-C7
27	G	604	CLA	CBA-CGA-O2A-C1
27	g	604	CLA	CBA-CGA-O2A-C1
31	B	622	LMG	C29-C28-O8-C9
31	Z	101	LMG	C29-C28-O8-C9
31	b	622	LMG	C29-C28-O8-C9
31	z	101	LMG	C29-C28-O8-C9
35	S	2630	LHG	C24-C23-O8-C6

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Mol	Chain	Res	Type	Atoms
35	s	2630	LHG	C24-C23-O8-C6
30	A	412	SQD	C8-C7-O47-C45
30	a	412	SQD	C8-C7-O47-C45
31	B	622	LMG	C11-C10-O7-C8
31	b	622	LMG	C11-C10-O7-C8
27	R	609	CLA	O1D-CGD-O2D-CED
27	r	609	CLA	O1D-CGD-O2D-CED
27	B	611	CLA	CBD-CGD-O2D-CED
27	R	613	CLA	CBD-CGD-O2D-CED
27	b	611	CLA	CBD-CGD-O2D-CED
27	r	613	CLA	CBD-CGD-O2D-CED
37	Y	605	CHL	CBD-CGD-O2D-CED
37	y	605	CHL	CBD-CGD-O2D-CED
32	C	519	DGD	O6E-C5E-C6E-O5E
32	C	520	DGD	O6E-C5E-C6E-O5E
32	c	519	DGD	O6E-C5E-C6E-O5E
32	c	520	DGD	O6E-C5E-C6E-O5E
27	R	601	CLA	C2C-C3C-CAC-CBC
27	r	601	CLA	C2C-C3C-CAC-CBC
27	B	609	CLA	C4-C3-C5-C6
27	G	602	CLA	C4-C3-C5-C6
27	b	609	CLA	C4-C3-C5-C6
27	g	602	CLA	C4-C3-C5-C6
27	B	604	CLA	C2-C3-C5-C6
27	B	609	CLA	C2-C3-C5-C6
27	G	610	CLA	C2-C3-C5-C6
27	b	604	CLA	C2-C3-C5-C6
27	b	609	CLA	C2-C3-C5-C6
27	g	610	CLA	C2-C3-C5-C6
37	N	605	CHL	CBD-CGD-O2D-CED
37	n	605	CHL	CBD-CGD-O2D-CED
27	B	607	CLA	C2A-CAA-CBA-CGA
27	B	611	CLA	C2A-CAA-CBA-CGA
27	C	504	CLA	C2A-CAA-CBA-CGA
27	C	507	CLA	C2A-CAA-CBA-CGA
27	Y	614	CLA	C2A-CAA-CBA-CGA
27	b	607	CLA	C2A-CAA-CBA-CGA
27	b	611	CLA	C2A-CAA-CBA-CGA
27	c	504	CLA	C2A-CAA-CBA-CGA
27	c	507	CLA	C2A-CAA-CBA-CGA
27	y	614	CLA	C2A-CAA-CBA-CGA
37	N	608	CHL	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
37	Y	606	CHL	C2A-CAA-CBA-CGA
37	Y	608	CHL	C2A-CAA-CBA-CGA
37	n	608	CHL	C2A-CAA-CBA-CGA
37	y	606	CHL	C2A-CAA-CBA-CGA
37	y	608	CHL	C2A-CAA-CBA-CGA
27	S	603	CLA	O1D-CGD-O2D-CED
27	s	603	CLA	O1D-CGD-O2D-CED
27	G	602	CLA	C3-C5-C6-C7
27	g	602	CLA	C3-C5-C6-C7
27	B	603	CLA	CBA-CGA-O2A-C1
27	C	510	CLA	CBA-CGA-O2A-C1
27	G	613	CLA	CBA-CGA-O2A-C1
27	G	614	CLA	CBA-CGA-O2A-C1
27	N	611	CLA	CBA-CGA-O2A-C1
27	R	601	CLA	CBA-CGA-O2A-C1
27	S	614	CLA	CBA-CGA-O2A-C1
27	b	603	CLA	CBA-CGA-O2A-C1
27	c	510	CLA	CBA-CGA-O2A-C1
27	g	613	CLA	CBA-CGA-O2A-C1
27	g	614	CLA	CBA-CGA-O2A-C1
27	n	611	CLA	CBA-CGA-O2A-C1
27	r	601	CLA	CBA-CGA-O2A-C1
27	s	614	CLA	CBA-CGA-O2A-C1
35	G	2630	LHG	C24-C23-O8-C6
35	N	2630	LHG	C24-C23-O8-C6
35	g	2630	LHG	C24-C23-O8-C6
35	n	2630	LHG	C24-C23-O8-C6
27	C	503	CLA	O1D-CGD-O2D-CED
27	C	511	CLA	O1D-CGD-O2D-CED
27	R	611	CLA	O1D-CGD-O2D-CED
27	c	503	CLA	O1D-CGD-O2D-CED
27	c	511	CLA	O1D-CGD-O2D-CED
27	r	611	CLA	O1D-CGD-O2D-CED
27	B	615	CLA	O1D-CGD-O2D-CED
27	b	615	CLA	O1D-CGD-O2D-CED
37	S	606	CHL	O1D-CGD-O2D-CED
37	s	606	CHL	O1D-CGD-O2D-CED
27	B	603	CLA	O1A-CGA-O2A-C1
27	R	604	CLA	O1A-CGA-O2A-C1
27	S	614	CLA	O1A-CGA-O2A-C1
27	b	603	CLA	O1A-CGA-O2A-C1
27	r	604	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
27	s	614	CLA	O1A-CGA-O2A-C1
35	R	2630	LHG	O10-C23-O8-C6
35	r	2630	LHG	O10-C23-O8-C6
31	Z	101	LMG	O6-C5-C6-O5
31	z	101	LMG	O6-C5-C6-O5
27	Y	614	CLA	CBD-CGD-O2D-CED
27	y	614	CLA	CBD-CGD-O2D-CED
37	G	607	CHL	CBD-CGD-O2D-CED
37	G	609	CHL	CBD-CGD-O2D-CED
37	g	607	CHL	CBD-CGD-O2D-CED
37	g	609	CHL	CBD-CGD-O2D-CED
35	D	409	LHG	O2-C2-C3-O3
35	G	2630	LHG	O2-C2-C3-O3
35	d	409	LHG	O2-C2-C3-O3
35	g	2630	LHG	O2-C2-C3-O3
37	Y	601	CHL	C3-C5-C6-C7
37	y	601	CHL	C3-C5-C6-C7
27	S	611	CLA	CBA-CGA-O2A-C1
27	s	611	CLA	CBA-CGA-O2A-C1
27	C	510	CLA	O1A-CGA-O2A-C1
27	c	510	CLA	O1A-CGA-O2A-C1
27	Y	604	CLA	O1D-CGD-O2D-CED
27	y	604	CLA	O1D-CGD-O2D-CED
30	B	621	SQD	C8-C7-O47-C45
30	b	621	SQD	C8-C7-O47-C45
27	C	508	CLA	CBD-CGD-O2D-CED
27	c	508	CLA	CBD-CGD-O2D-CED
37	R	607	CHL	CBD-CGD-O2D-CED
37	r	607	CHL	CBD-CGD-O2D-CED
31	Z	101	LMG	C4-C5-C6-O5
31	z	101	LMG	C4-C5-C6-O5
32	C	520	DGD	C4E-C5E-C6E-O5E
32	c	520	DGD	C4E-C5E-C6E-O5E
27	G	610	CLA	O1D-CGD-O2D-CED
27	g	610	CLA	O1D-CGD-O2D-CED
27	Y	612	CLA	CBD-CGD-O2D-CED
27	y	612	CLA	CBD-CGD-O2D-CED
27	C	506	CLA	C3-C5-C6-C7
27	c	506	CLA	C3-C5-C6-C7
27	R	604	CLA	CBA-CGA-O2A-C1
27	r	604	CLA	CBA-CGA-O2A-C1
27	S	611	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
27	s	611	CLA	O1A-CGA-O2A-C1
35	Y	2630	LHG	O10-C23-O8-C6
35	y	2630	LHG	O10-C23-O8-C6
32	H	102	DGD	O6E-C5E-C6E-O5E
32	h	102	DGD	O6E-C5E-C6E-O5E
34	D	405	PL9	C38-C39-C41-C42
34	d	405	PL9	C38-C39-C41-C42
37	G	608	CHL	C2A-CAA-CBA-CGA
37	R	607	CHL	C2A-CAA-CBA-CGA
37	Y	607	CHL	C2A-CAA-CBA-CGA
37	g	608	CHL	C2A-CAA-CBA-CGA
37	r	607	CHL	C2A-CAA-CBA-CGA
37	y	607	CHL	C2A-CAA-CBA-CGA
27	N	602	CLA	O1D-CGD-O2D-CED
27	n	602	CLA	O1D-CGD-O2D-CED
27	C	502	CLA	O1A-CGA-O2A-C1
27	c	502	CLA	O1A-CGA-O2A-C1
32	C	519	DGD	C4E-C5E-C6E-O5E
32	c	519	DGD	C4E-C5E-C6E-O5E
27	C	502	CLA	CBA-CGA-O2A-C1
27	c	502	CLA	CBA-CGA-O2A-C1
27	C	501	CLA	O1D-CGD-O2D-CED
27	D	402	CLA	O1D-CGD-O2D-CED
27	N	610	CLA	O1D-CGD-O2D-CED
27	Y	610	CLA	O1D-CGD-O2D-CED
27	c	501	CLA	O1D-CGD-O2D-CED
27	d	402	CLA	O1D-CGD-O2D-CED
27	n	610	CLA	O1D-CGD-O2D-CED
27	y	610	CLA	O1D-CGD-O2D-CED
27	Y	611	CLA	O1D-CGD-O2D-CED
27	y	611	CLA	O1D-CGD-O2D-CED
28	A	409	PHO	O1D-CGD-O2D-CED
28	a	409	PHO	O1D-CGD-O2D-CED
35	D	408	LHG	C1-C2-C3-O3
35	d	408	LHG	C1-C2-C3-O3
27	B	602	CLA	O1D-CGD-O2D-CED
27	C	513	CLA	O1D-CGD-O2D-CED
27	Y	603	CLA	O1D-CGD-O2D-CED
27	b	602	CLA	O1D-CGD-O2D-CED
27	c	513	CLA	O1D-CGD-O2D-CED
27	y	603	CLA	O1D-CGD-O2D-CED
37	Y	607	CHL	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
37	y	607	CHL	O1D-CGD-O2D-CED
27	A	410	CLA	CBA-CGA-O2A-C1
27	C	505	CLA	CBA-CGA-O2A-C1
27	G	611	CLA	CBA-CGA-O2A-C1
27	S	603	CLA	CBA-CGA-O2A-C1
27	S	609	CLA	CBA-CGA-O2A-C1
27	Y	612	CLA	CBA-CGA-O2A-C1
27	a	410	CLA	CBA-CGA-O2A-C1
27	c	505	CLA	CBA-CGA-O2A-C1
27	g	611	CLA	CBA-CGA-O2A-C1
27	s	603	CLA	CBA-CGA-O2A-C1
27	s	609	CLA	CBA-CGA-O2A-C1
27	y	612	CLA	CBA-CGA-O2A-C1
35	R	2630	LHG	C24-C23-O8-C6
35	Y	2630	LHG	C24-C23-O8-C6
35	r	2630	LHG	C24-C23-O8-C6
35	y	2630	LHG	C24-C23-O8-C6
37	N	607	CHL	CBA-CGA-O2A-C1
37	n	607	CHL	CBA-CGA-O2A-C1
27	B	605	CLA	CBD-CGD-O2D-CED
27	b	605	CLA	CBD-CGD-O2D-CED
27	G	602	CLA	O1D-CGD-O2D-CED
27	g	602	CLA	O1D-CGD-O2D-CED
27	r	610	CLA	O1D-CGD-O2D-CED
35	D	409	LHG	C32-C33-C34-C35
35	d	409	LHG	C32-C33-C34-C35
27	Y	612	CLA	C8-C10-C11-C12
27	y	612	CLA	C8-C10-C11-C12
37	Y	601	CHL	C5-C6-C7-C8
37	y	601	CHL	C5-C6-C7-C8
32	H	102	DGD	C4E-C5E-C6E-O5E
32	h	102	DGD	C4E-C5E-C6E-O5E
27	D	403	CLA	O1D-CGD-O2D-CED
27	R	610	CLA	O1D-CGD-O2D-CED
27	d	403	CLA	O1D-CGD-O2D-CED
27	Y	611	CLA	C10-C11-C12-C13
27	y	611	CLA	C10-C11-C12-C13
37	Y	609	CHL	C13-C15-C16-C17
37	y	609	CHL	C13-C15-C16-C17
35	D	408	LHG	O2-C2-C3-O3
35	d	408	LHG	O2-C2-C3-O3
35	L	101	LHG	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
35	l	101	LHG	C7-C8-C9-C10
35	Y	2630	LHG	C24-C25-C26-C27
35	y	2630	LHG	C24-C25-C26-C27
27	A	410	CLA	O1A-CGA-O2A-C1
27	a	410	CLA	O1A-CGA-O2A-C1
27	C	508	CLA	C4-C3-C5-C6
27	c	508	CLA	C4-C3-C5-C6
27	A	405	CLA	C11-C12-C13-C14
27	A	410	CLA	C11-C10-C8-C9
27	B	602	CLA	C14-C13-C15-C16
27	B	603	CLA	C6-C7-C8-C9
27	B	605	CLA	C6-C7-C8-C9
27	B	606	CLA	C14-C13-C15-C16
27	B	609	CLA	C11-C10-C8-C9
27	B	609	CLA	C14-C13-C15-C16
27	B	611	CLA	C11-C12-C13-C14
27	B	615	CLA	C11-C10-C8-C9
27	C	502	CLA	C11-C10-C8-C9
27	C	507	CLA	C11-C12-C13-C14
27	C	509	CLA	C6-C7-C8-C9
27	a	405	CLA	C11-C12-C13-C14
27	a	410	CLA	C11-C10-C8-C9
27	b	602	CLA	C14-C13-C15-C16
27	b	603	CLA	C6-C7-C8-C9
27	b	605	CLA	C6-C7-C8-C9
27	b	606	CLA	C14-C13-C15-C16
27	b	609	CLA	C11-C10-C8-C9
27	b	609	CLA	C14-C13-C15-C16
27	b	611	CLA	C11-C12-C13-C14
27	b	615	CLA	C11-C10-C8-C9
27	c	502	CLA	C11-C10-C8-C9
27	c	507	CLA	C11-C12-C13-C14
27	c	509	CLA	C6-C7-C8-C9
28	A	409	PHO	C11-C12-C13-C14
28	a	409	PHO	C11-C12-C13-C14
37	G	601	CHL	C11-C12-C13-C14
37	Y	601	CHL	C11-C10-C8-C9
37	g	601	CHL	C11-C12-C13-C14
37	y	601	CHL	C11-C10-C8-C9
27	S	602	CLA	O1D-CGD-O2D-CED
27	S	613	CLA	O1D-CGD-O2D-CED
27	s	602	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
27	B	615	CLA	C10-C11-C12-C13
27	b	615	CLA	C10-C11-C12-C13
37	N	605	CHL	C2A-CAA-CBA-CGA
37	S	607	CHL	C2A-CAA-CBA-CGA
37	n	605	CHL	C2A-CAA-CBA-CGA
37	s	607	CHL	C2A-CAA-CBA-CGA
29	B	620	BCR	C37-C22-C23-C24
29	C	516	BCR	C37-C22-C23-C24
29	b	620	BCR	C37-C22-C23-C24
29	c	516	BCR	C37-C22-C23-C24
39	g	1622	XAT	C31-C32-C33-C40
29	C	516	BCR	C21-C22-C23-C24
29	c	516	BCR	C21-C22-C23-C24
27	s	613	CLA	O1D-CGD-O2D-CED
37	R	608	CHL	C2C-C3C-CAC-CBC
37	r	608	CHL	C2C-C3C-CAC-CBC
27	S	603	CLA	O1A-CGA-O2A-C1
27	Y	612	CLA	O1A-CGA-O2A-C1
27	s	603	CLA	O1A-CGA-O2A-C1
27	y	612	CLA	O1A-CGA-O2A-C1
27	A	405	CLA	C13-C15-C16-C17
27	Y	610	CLA	C5-C6-C7-C8
27	a	405	CLA	C13-C15-C16-C17
27	b	605	CLA	C15-C16-C17-C18
27	g	602	CLA	C8-C10-C11-C12
27	y	610	CLA	C5-C6-C7-C8
27	Y	613	CLA	O1D-CGD-O2D-CED
27	y	613	CLA	O1D-CGD-O2D-CED
27	G	613	CLA	CBD-CGD-O2D-CED
27	g	613	CLA	CBD-CGD-O2D-CED
27	Y	602	CLA	O1D-CGD-O2D-CED
28	a	409	PHO	CBA-CGA-O2A-C1
27	B	603	CLA	C5-C6-C7-C8
27	B	605	CLA	C15-C16-C17-C18
27	C	506	CLA	C15-C16-C17-C18
27	G	602	CLA	C8-C10-C11-C12
27	R	602	CLA	C8-C10-C11-C12
27	b	603	CLA	C5-C6-C7-C8
27	r	602	CLA	C8-C10-C11-C12
37	Y	609	CHL	C15-C16-C17-C18
37	y	609	CHL	C15-C16-C17-C18
35	S	2630	LHG	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
35	s	2630	LHG	C23-C24-C25-C26
27	y	602	CLA	O1D-CGD-O2D-CED
31	B	622	LMG	O6-C5-C6-O5
31	b	622	LMG	O6-C5-C6-O5
27	A	410	CLA	C10-C11-C12-C13
27	B	614	CLA	C10-C11-C12-C13
27	C	510	CLA	C13-C15-C16-C17
27	G	602	CLA	C5-C6-C7-C8
27	N	602	CLA	C10-C11-C12-C13
27	a	410	CLA	C10-C11-C12-C13
27	b	614	CLA	C10-C11-C12-C13
27	c	506	CLA	C15-C16-C17-C18
27	c	510	CLA	C13-C15-C16-C17
27	g	602	CLA	C5-C6-C7-C8
27	n	602	CLA	C10-C11-C12-C13
37	G	601	CHL	C5-C6-C7-C8
37	G	601	CHL	C8-C10-C11-C12
37	g	601	CHL	C5-C6-C7-C8
37	g	601	CHL	C8-C10-C11-C12
35	Y	2630	LHG	O1-C1-C2-O2
35	y	2630	LHG	O1-C1-C2-O2
30	A	412	SQD	C7-C8-C9-C10
30	a	412	SQD	C7-C8-C9-C10
35	D	408	LHG	C23-C24-C25-C26
35	D	410	LHG	C7-C8-C9-C10
35	G	2630	LHG	C7-C8-C9-C10
35	Y	2630	LHG	C23-C24-C25-C26
35	d	408	LHG	C23-C24-C25-C26
35	d	410	LHG	C7-C8-C9-C10
35	y	2630	LHG	C23-C24-C25-C26
27	R	603	CLA	CBD-CGD-O2D-CED
27	r	603	CLA	CBD-CGD-O2D-CED
27	B	606	CLA	C5-C6-C7-C8
27	B	610	CLA	C15-C16-C17-C18
27	b	606	CLA	C5-C6-C7-C8
27	b	610	CLA	C15-C16-C17-C18
28	A	409	PHO	CBA-CGA-O2A-C1
27	R	601	CLA	C4C-C3C-CAC-CBC
27	A	405	CLA	C15-C16-C17-C18
27	C	503	CLA	C15-C16-C17-C18
27	c	503	CLA	C15-C16-C17-C18
37	G	601	CHL	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
37	Y	601	CHL	C13-C15-C16-C17
37	g	601	CHL	C13-C15-C16-C17
37	y	601	CHL	C13-C15-C16-C17
35	D	408	LHG	C7-C8-C9-C10
35	d	408	LHG	C7-C8-C9-C10
35	g	2630	LHG	C7-C8-C9-C10
27	r	601	CLA	C4C-C3C-CAC-CBC
27	a	405	CLA	C15-C16-C17-C18
27	C	502	CLA	O1D-CGD-O2D-CED
27	B	603	CLA	C11-C12-C13-C15
27	B	612	CLA	C12-C13-C15-C16
27	B	616	CLA	C11-C12-C13-C15
27	C	503	CLA	C12-C13-C15-C16
27	G	610	CLA	C11-C12-C13-C15
27	b	603	CLA	C11-C12-C13-C15
27	b	612	CLA	C12-C13-C15-C16
27	b	616	CLA	C11-C12-C13-C15
27	c	503	CLA	C12-C13-C15-C16
27	g	610	CLA	C11-C12-C13-C15
37	Y	609	CHL	C11-C12-C13-C15
37	y	609	CHL	C11-C12-C13-C15
27	C	505	CLA	O1A-CGA-O2A-C1
27	S	609	CLA	O1A-CGA-O2A-C1
27	c	505	CLA	O1A-CGA-O2A-C1
27	s	609	CLA	O1A-CGA-O2A-C1
39	N	1622	XAT	C29-C30-C31-C32
39	n	1622	XAT	C29-C30-C31-C32
37	s	607	CHL	CBD-CGD-O2D-CED
27	A	406	CLA	C2A-CAA-CBA-CGA
27	A	407	CLA	C2A-CAA-CBA-CGA
27	B	602	CLA	C2A-CAA-CBA-CGA
27	B	608	CLA	C2A-CAA-CBA-CGA
27	C	505	CLA	C2A-CAA-CBA-CGA
27	Y	604	CLA	C2A-CAA-CBA-CGA
27	a	406	CLA	C2A-CAA-CBA-CGA
27	a	407	CLA	C2A-CAA-CBA-CGA
27	b	602	CLA	C2A-CAA-CBA-CGA
27	b	608	CLA	C2A-CAA-CBA-CGA
27	c	505	CLA	C2A-CAA-CBA-CGA
27	y	604	CLA	C2A-CAA-CBA-CGA
37	G	606	CHL	C2A-CAA-CBA-CGA
37	g	606	CHL	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
27	C	506	CLA	O1D-CGD-O2D-CED
27	c	502	CLA	O1D-CGD-O2D-CED
27	c	506	CLA	O1D-CGD-O2D-CED
27	B	612	CLA	C8-C10-C11-C12
27	b	612	CLA	C8-C10-C11-C12
37	N	607	CHL	C15-C16-C17-C18
37	n	607	CHL	C15-C16-C17-C18
27	G	611	CLA	O1A-CGA-O2A-C1
27	g	611	CLA	O1A-CGA-O2A-C1
37	N	607	CHL	O1A-CGA-O2A-C1
37	n	607	CHL	O1A-CGA-O2A-C1
37	S	607	CHL	CBD-CGD-O2D-CED
31	B	622	LMG	O6-C1-O1-C7
31	b	622	LMG	O6-C1-O1-C7
32	C	519	DGD	O6D-C1D-O3G-C3G
32	c	519	DGD	O6D-C1D-O3G-C3G
27	C	503	CLA	C8-C10-C11-C12
27	c	503	CLA	C8-C10-C11-C12
37	y	605	CHL	O1D-CGD-O2D-CED
35	G	2630	LHG	O10-C23-O8-C6
35	g	2630	LHG	O10-C23-O8-C6
27	C	510	CLA	C15-C16-C17-C18
27	Y	602	CLA	C10-C11-C12-C13
27	c	510	CLA	C15-C16-C17-C18
27	y	602	CLA	C10-C11-C12-C13
37	Y	609	CHL	C8-C10-C11-C12
37	R	606	CHL	O1D-CGD-O2D-CED
37	Y	605	CHL	O1D-CGD-O2D-CED
37	r	606	CHL	O1D-CGD-O2D-CED
31	B	622	LMG	C4-C5-C6-O5
31	b	622	LMG	C4-C5-C6-O5
27	B	613	CLA	C10-C11-C12-C13
27	b	613	CLA	C10-C11-C12-C13
37	y	609	CHL	C8-C10-C11-C12
35	D	408	LHG	C3-O3-P-O6
35	D	408	LHG	C4-O6-P-O3
35	N	2630	LHG	C3-O3-P-O6
35	d	408	LHG	C3-O3-P-O6
35	d	408	LHG	C4-O6-P-O3
35	n	2630	LHG	C3-O3-P-O6
31	C	521	LMG	C28-C29-C30-C31
31	c	521	LMG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
27	B	609	CLA	C3-C5-C6-C7
27	B	617	CLA	C3-C5-C6-C7
27	b	617	CLA	C3-C5-C6-C7
27	B	613	CLA	CBA-CGA-O2A-C1
27	C	511	CLA	CBA-CGA-O2A-C1
27	N	603	CLA	CBA-CGA-O2A-C1
27	b	613	CLA	CBA-CGA-O2A-C1
27	c	511	CLA	CBA-CGA-O2A-C1
27	n	603	CLA	CBA-CGA-O2A-C1
37	s	601	CHL	CBD-CGD-O2D-CED
35	r	2630	LHG	C28-C29-C30-C31
28	A	409	PHO	C8-C10-C11-C12
28	a	409	PHO	C8-C10-C11-C12
37	Y	609	CHL	C10-C11-C12-C13
37	y	609	CHL	C10-C11-C12-C13
28	a	409	PHO	O1A-CGA-O2A-C1
35	R	2630	LHG	C28-C29-C30-C31
35	S	2630	LHG	C28-C29-C30-C31
35	s	2630	LHG	C28-C29-C30-C31
35	D	409	LHG	C1-C2-C3-O3
35	d	409	LHG	C1-C2-C3-O3
27	C	512	CLA	C4-C3-C5-C6
27	c	512	CLA	C4-C3-C5-C6
27	G	602	CLA	C2-C3-C5-C6
27	g	602	CLA	C2-C3-C5-C6
27	R	613	CLA	O1D-CGD-O2D-CED
27	r	613	CLA	O1D-CGD-O2D-CED
28	A	409	PHO	O1A-CGA-O2A-C1
27	Y	610	CLA	C16-C17-C18-C20
27	y	610	CLA	C16-C17-C18-C20
27	D	403	CLA	C3-C5-C6-C7
27	b	609	CLA	C3-C5-C6-C7
27	d	403	CLA	C3-C5-C6-C7
37	N	605	CHL	O1D-CGD-O2D-CED
37	n	605	CHL	O1D-CGD-O2D-CED
27	B	617	CLA	CBA-CGA-O2A-C1
27	C	504	CLA	CBA-CGA-O2A-C1
27	C	512	CLA	CBA-CGA-O2A-C1
27	C	513	CLA	CBA-CGA-O2A-C1
27	N	604	CLA	CBA-CGA-O2A-C1
27	b	617	CLA	CBA-CGA-O2A-C1
27	c	504	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
27	c	512	CLA	CBA-CGA-O2A-C1
27	c	513	CLA	CBA-CGA-O2A-C1
27	n	604	CLA	CBA-CGA-O2A-C1
31	z	101	LMG	C18-C19-C20-C21
37	S	601	CHL	CBD-CGD-O2D-CED
35	L	101	LHG	C8-C7-O7-C5
35	l	101	LHG	C8-C7-O7-C5
27	b	607	CLA	C5-C6-C7-C8
31	Z	101	LMG	C18-C19-C20-C21
35	D	408	LHG	C27-C28-C29-C30
35	D	408	LHG	C29-C30-C31-C32
35	R	2630	LHG	C25-C26-C27-C28
35	d	408	LHG	C27-C28-C29-C30
35	d	408	LHG	C29-C30-C31-C32
35	g	2630	LHG	C12-C13-C14-C15
35	r	2630	LHG	C25-C26-C27-C28
27	N	610	CLA	C16-C17-C18-C20
27	n	610	CLA	C16-C17-C18-C20
27	Y	604	CLA	CBA-CGA-O2A-C1
27	y	604	CLA	CBA-CGA-O2A-C1
31	C	521	LMG	C33-C34-C35-C36
31	c	521	LMG	C33-C34-C35-C36
32	C	520	DGD	C6A-C7A-C8A-C9A
32	c	520	DGD	C6A-C7A-C8A-C9A
35	G	2630	LHG	C12-C13-C14-C15
35	g	2630	LHG	C32-C33-C34-C35
30	A	412	SQD	C46-C45-O47-C7
30	a	412	SQD	C46-C45-O47-C7
27	B	611	CLA	O1D-CGD-O2D-CED
27	b	611	CLA	O1D-CGD-O2D-CED
27	B	607	CLA	C5-C6-C7-C8
37	Y	601	CHL	C8-C10-C11-C12
37	y	601	CHL	C8-C10-C11-C12
31	A	413	LMG	C31-C32-C33-C34
31	a	413	LMG	C31-C32-C33-C34
32	C	519	DGD	C5B-C6B-C7B-C8B
32	c	519	DGD	C5B-C6B-C7B-C8B
35	G	2630	LHG	C32-C33-C34-C35
30	B	621	SQD	C11-C10-C9-C8
30	b	621	SQD	C11-C10-C9-C8
31	B	622	LMG	C31-C32-C33-C34
31	b	622	LMG	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
35	D	408	LHG	C26-C27-C28-C29
35	D	409	LHG	C16-C17-C18-C19
35	d	408	LHG	C26-C27-C28-C29
35	d	409	LHG	C16-C17-C18-C19
27	N	610	CLA	C13-C15-C16-C17
27	n	610	CLA	C13-C15-C16-C17
35	Y	2630	LHG	O2-C2-C3-O3
35	y	2630	LHG	O2-C2-C3-O3
30	A	412	SQD	C16-C17-C18-C19
30	B	621	SQD	C17-C18-C19-C20
30	a	412	SQD	C16-C17-C18-C19
31	B	622	LMG	C19-C20-C21-C22
31	b	622	LMG	C19-C20-C21-C22
32	H	102	DGD	CCA-CDA-CEA-CFA
32	c	520	DGD	C8A-C9A-CAA-CBA
32	h	102	DGD	CCA-CDA-CEA-CFA
35	D	410	LHG	C27-C28-C29-C30
35	d	410	LHG	C27-C28-C29-C30
30	A	412	SQD	C2-C1-O6-C44
30	a	412	SQD	C2-C1-O6-C44
32	C	519	DGD	C2D-C1D-O3G-C3G
32	c	519	DGD	C2D-C1D-O3G-C3G
30	A	412	SQD	O6-C44-C45-O47
30	a	412	SQD	O6-C44-C45-O47
30	b	621	SQD	C17-C18-C19-C20
31	C	521	LMG	C31-C32-C33-C34
31	c	521	LMG	C31-C32-C33-C34
32	C	520	DGD	C8A-C9A-CAA-CBA
32	C	520	DGD	C5B-C6B-C7B-C8B
35	L	101	LHG	C27-C28-C29-C30
35	l	101	LHG	C27-C28-C29-C30
27	B	612	CLA	C10-C11-C12-C13
27	C	509	CLA	C13-C15-C16-C17
27	b	612	CLA	C10-C11-C12-C13
27	c	509	CLA	C13-C15-C16-C17
37	Y	601	CHL	C15-C16-C17-C18
37	y	601	CHL	C15-C16-C17-C18
27	C	511	CLA	O1A-CGA-O2A-C1
27	N	603	CLA	O1A-CGA-O2A-C1
27	A	405	CLA	C16-C17-C18-C20
27	C	508	CLA	C16-C17-C18-C20
27	a	405	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
27	c	508	CLA	C16-C17-C18-C20
37	N	607	CHL	C16-C17-C18-C19
37	n	607	CHL	C16-C17-C18-C19
37	G	609	CHL	O1D-CGD-O2D-CED
37	g	609	CHL	O1D-CGD-O2D-CED
27	Y	613	CLA	C4-C3-C5-C6
27	y	613	CLA	C4-C3-C5-C6
28	A	408	PHO	C4-C3-C5-C6
28	a	408	PHO	C4-C3-C5-C6
30	A	418	SQD	C11-C12-C13-C14
30	a	418	SQD	C11-C12-C13-C14
32	c	520	DGD	C5B-C6B-C7B-C8B
27	C	510	CLA	C2-C3-C5-C6
27	c	510	CLA	C2-C3-C5-C6
27	B	617	CLA	C6-C7-C8-C9
27	C	501	CLA	C11-C10-C8-C9
27	b	617	CLA	C6-C7-C8-C9
27	c	501	CLA	C11-C10-C8-C9
32	C	519	DGD	C7B-C8B-C9B-CAB
32	H	102	DGD	C5B-C6B-C7B-C8B
32	c	519	DGD	C7B-C8B-C9B-CAB
32	h	102	DGD	C5B-C6B-C7B-C8B
35	G	2630	LHG	C33-C34-C35-C36
35	g	2630	LHG	C33-C34-C35-C36
27	D	402	CLA	C10-C11-C12-C13
27	d	402	CLA	C10-C11-C12-C13
27	A	405	CLA	C2A-CAA-CBA-CGA
27	B	613	CLA	C2A-CAA-CBA-CGA
27	R	610	CLA	C2A-CAA-CBA-CGA
27	a	405	CLA	C2A-CAA-CBA-CGA
27	b	613	CLA	C2A-CAA-CBA-CGA
27	r	610	CLA	C2A-CAA-CBA-CGA
37	G	607	CHL	C2A-CAA-CBA-CGA
37	g	607	CHL	C2A-CAA-CBA-CGA
27	C	504	CLA	O1A-CGA-O2A-C1
27	c	511	CLA	O1A-CGA-O2A-C1
27	n	603	CLA	O1A-CGA-O2A-C1
39	G	1622	XAT	C31-C32-C33-C40
30	A	412	SQD	C26-C27-C28-C29
31	B	622	LMG	C32-C33-C34-C35
31	b	622	LMG	C32-C33-C34-C35
35	R	2630	LHG	C29-C30-C31-C32

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Mol	Chain	Res	Type	Atoms
35	r	2630	LHG	C29-C30-C31-C32
40	N	1623	NEX	C11-C12-C13-C14
40	n	1623	NEX	C11-C12-C13-C14
35	G	2630	LHG	O9-C7-O7-C5
35	g	2630	LHG	O9-C7-O7-C5
27	C	506	CLA	C8-C10-C11-C12
27	Y	602	CLA	C8-C10-C11-C12
27	c	506	CLA	C8-C10-C11-C12
27	y	602	CLA	C8-C10-C11-C12
30	A	412	SQD	C29-C30-C31-C32
30	a	412	SQD	C26-C27-C28-C29
30	a	412	SQD	C29-C30-C31-C32
32	C	518	DGD	CBB-CCB-CDB-CEB
32	C	520	DGD	C4A-C5A-C6A-C7A
32	c	518	DGD	CBB-CCB-CDB-CEB
32	c	520	DGD	C4A-C5A-C6A-C7A
35	Y	2630	LHG	C29-C30-C31-C32
35	y	2630	LHG	C29-C30-C31-C32
30	B	621	SQD	C33-C34-C35-C36
30	b	621	SQD	C33-C34-C35-C36
31	C	521	LMG	C32-C33-C34-C35
35	L	101	LHG	C24-C25-C26-C27
35	L	101	LHG	C32-C33-C34-C35
35	S	2630	LHG	C25-C26-C27-C28
35	l	101	LHG	C24-C25-C26-C27
35	l	101	LHG	C32-C33-C34-C35
35	s	2630	LHG	C25-C26-C27-C28
27	c	504	CLA	O1A-CGA-O2A-C1
37	G	601	CHL	C16-C17-C18-C19
37	Y	609	CHL	C16-C17-C18-C19
37	Y	609	CHL	C16-C17-C18-C20
37	g	601	CHL	C16-C17-C18-C19
37	y	609	CHL	C16-C17-C18-C19
31	c	521	LMG	C32-C33-C34-C35
32	C	519	DGD	C6B-C7B-C8B-C9B
32	c	519	DGD	C6B-C7B-C8B-C9B
35	G	2630	LHG	C27-C28-C29-C30
35	N	2630	LHG	C32-C33-C34-C35
35	S	2630	LHG	C31-C32-C33-C34
35	g	2630	LHG	C27-C28-C29-C30
35	n	2630	LHG	C32-C33-C34-C35
35	s	2630	LHG	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
27	N	604	CLA	O1A-CGA-O2A-C1
27	n	604	CLA	O1A-CGA-O2A-C1
31	a	413	LMG	C13-C14-C15-C16
32	C	518	DGD	C7B-C8B-C9B-CAB
32	c	518	DGD	C7B-C8B-C9B-CAB
37	G	608	CHL	CBA-CGA-O2A-C1
37	g	608	CHL	CBA-CGA-O2A-C1
31	A	413	LMG	C13-C14-C15-C16
31	B	622	LMG	C38-C39-C40-C41
31	C	521	LMG	C37-C38-C39-C40
31	b	622	LMG	C38-C39-C40-C41
31	c	521	LMG	C37-C38-C39-C40
37	G	607	CHL	O1D-CGD-O2D-CED
37	g	607	CHL	O1D-CGD-O2D-CED
27	B	605	CLA	C3A-C2A-CAA-CBA
27	D	402	CLA	C3A-C2A-CAA-CBA
27	G	603	CLA	C3A-C2A-CAA-CBA
27	G	610	CLA	C3A-C2A-CAA-CBA
27	N	603	CLA	C3A-C2A-CAA-CBA
27	S	604	CLA	C3A-C2A-CAA-CBA
27	b	605	CLA	C3A-C2A-CAA-CBA
27	d	402	CLA	C3A-C2A-CAA-CBA
27	g	603	CLA	C3A-C2A-CAA-CBA
27	g	610	CLA	C3A-C2A-CAA-CBA
27	n	603	CLA	C3A-C2A-CAA-CBA
27	s	604	CLA	C3A-C2A-CAA-CBA
28	A	409	PHO	C3A-C2A-CAA-CBA
28	a	409	PHO	C3A-C2A-CAA-CBA
37	R	606	CHL	C3A-C2A-CAA-CBA
37	S	607	CHL	C3A-C2A-CAA-CBA
37	r	606	CHL	C3A-C2A-CAA-CBA
37	s	607	CHL	C3A-C2A-CAA-CBA
27	B	609	CLA	C13-C15-C16-C17
27	C	502	CLA	C13-C15-C16-C17
27	C	503	CLA	C13-C15-C16-C17
27	C	507	CLA	C15-C16-C17-C18
27	b	609	CLA	C13-C15-C16-C17
27	c	502	CLA	C13-C15-C16-C17
27	c	503	CLA	C13-C15-C16-C17
27	c	507	CLA	C15-C16-C17-C18
32	H	102	DGD	C4D-C5D-C6D-O5D
32	h	102	DGD	C4D-C5D-C6D-O5D

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Mol	Chain	Res	Type	Atoms
35	D	410	LHG	C25-C26-C27-C28
35	G	2630	LHG	C24-C25-C26-C27
35	d	410	LHG	C25-C26-C27-C28
35	g	2630	LHG	C24-C25-C26-C27
27	C	508	CLA	C16-C17-C18-C19
27	c	508	CLA	C16-C17-C18-C19
28	A	408	PHO	C16-C17-C18-C20
28	a	408	PHO	C16-C17-C18-C20
37	y	609	CHL	C16-C17-C18-C20
30	A	412	SQD	C13-C14-C15-C16
30	B	621	SQD	C31-C32-C33-C34
30	a	412	SQD	C13-C14-C15-C16
30	b	621	SQD	C31-C32-C33-C34
31	C	521	LMG	C17-C18-C19-C20
31	a	413	LMG	C36-C37-C38-C39
31	c	521	LMG	C11-C12-C13-C14
31	c	521	LMG	C17-C18-C19-C20
32	H	102	DGD	CBA-CCA-CDA-CEA
35	N	2630	LHG	C14-C15-C16-C17
35	R	2630	LHG	C32-C33-C34-C35
35	r	2630	LHG	C32-C33-C34-C35
37	G	607	CHL	C2C-C3C-CAC-CBC
37	g	607	CHL	C2C-C3C-CAC-CBC
37	S	608	CHL	O2A-C1-C2-C3
37	s	608	CHL	O2A-C1-C2-C3
27	C	508	CLA	O1D-CGD-O2D-CED
31	A	413	LMG	C36-C37-C38-C39
31	C	521	LMG	C11-C12-C13-C14
32	h	102	DGD	CBA-CCA-CDA-CEA
35	Y	2630	LHG	C15-C16-C17-C18
35	n	2630	LHG	C14-C15-C16-C17
35	y	2630	LHG	C15-C16-C17-C18
35	L	101	LHG	C23-C24-C25-C26
35	l	101	LHG	C23-C24-C25-C26
31	A	413	LMG	C37-C38-C39-C40
27	B	613	CLA	O1A-CGA-O2A-C1
27	b	613	CLA	O1A-CGA-O2A-C1
27	B	610	CLA	C4-C3-C5-C6
27	C	510	CLA	C4-C3-C5-C6
27	b	610	CLA	C4-C3-C5-C6
27	c	510	CLA	C4-C3-C5-C6
27	A	405	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
27	a	405	CLA	CBA-CGA-O2A-C1
27	B	610	CLA	C2-C3-C5-C6
28	A	408	PHO	C2-C3-C5-C6
28	a	408	PHO	C2-C3-C5-C6
35	N	2630	LHG	C8-C7-O7-C5
35	n	2630	LHG	C8-C7-O7-C5
27	c	508	CLA	O1D-CGD-O2D-CED
31	a	413	LMG	C37-C38-C39-C40
37	S	601	CHL	C2A-CAA-CBA-CGA
37	s	601	CHL	C2A-CAA-CBA-CGA
35	N	2630	LHG	O1-C1-C2-O2
35	n	2630	LHG	O1-C1-C2-O2
30	A	412	SQD	C30-C31-C32-C33
30	a	412	SQD	C30-C31-C32-C33
31	A	413	LMG	C16-C17-C18-C19
31	a	413	LMG	C16-C17-C18-C19
32	C	520	DGD	C5A-C6A-C7A-C8A
32	c	520	DGD	C5A-C6A-C7A-C8A
27	C	513	CLA	O1A-CGA-O2A-C1
27	c	513	CLA	O1A-CGA-O2A-C1
31	D	411	LMG	C18-C19-C20-C21
31	d	411	LMG	C18-C19-C20-C21
35	Y	2630	LHG	C34-C35-C36-C37
35	y	2630	LHG	C34-C35-C36-C37
32	c	520	DGD	CBA-CCA-CDA-CEA
27	B	617	CLA	O1A-CGA-O2A-C1
27	b	617	CLA	O1A-CGA-O2A-C1
30	A	412	SQD	C12-C13-C14-C15
30	a	412	SQD	C12-C13-C14-C15
31	B	622	LMG	C29-C30-C31-C32
31	D	411	LMG	C30-C31-C32-C33
31	b	622	LMG	C29-C30-C31-C32
31	d	411	LMG	C30-C31-C32-C33
32	C	520	DGD	CBA-CCA-CDA-CEA
35	S	2630	LHG	C32-C33-C34-C35
31	B	622	LMG	C13-C14-C15-C16
31	b	622	LMG	C13-C14-C15-C16
35	s	2630	LHG	C32-C33-C34-C35
27	C	512	CLA	O1A-CGA-O2A-C1
27	Y	604	CLA	O1A-CGA-O2A-C1
27	c	512	CLA	O1A-CGA-O2A-C1
27	y	604	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
30	B	621	SQD	C26-C27-C28-C29
30	b	621	SQD	C26-C27-C28-C29
27	N	610	CLA	C16-C17-C18-C19
27	n	610	CLA	C16-C17-C18-C19
29	B	618	BCR	C1-C6-C7-C8
29	B	618	BCR	C5-C6-C7-C8
29	B	620	BCR	C5-C6-C7-C8
29	D	404	BCR	C1-C6-C7-C8
29	D	404	BCR	C5-C6-C7-C8
29	b	618	BCR	C1-C6-C7-C8
29	b	618	BCR	C5-C6-C7-C8
29	b	620	BCR	C5-C6-C7-C8
29	d	404	BCR	C1-C6-C7-C8
29	d	404	BCR	C5-C6-C7-C8
38	S	1621	LUT	C1-C6-C7-C8
38	s	1621	LUT	C1-C6-C7-C8
35	y	2630	LHG	C32-C33-C34-C35
27	C	502	CLA	C5-C6-C7-C8
27	N	602	CLA	C8-C10-C11-C12
27	c	502	CLA	C5-C6-C7-C8
27	n	602	CLA	C8-C10-C11-C12
35	G	2630	LHG	C8-C7-O7-C5
35	g	2630	LHG	C8-C7-O7-C5
35	G	2630	LHG	C28-C29-C30-C31
35	G	2630	LHG	C30-C31-C32-C33
35	L	101	LHG	C13-C14-C15-C16
35	Y	2630	LHG	C32-C33-C34-C35
35	g	2630	LHG	C28-C29-C30-C31
35	g	2630	LHG	C30-C31-C32-C33
35	l	101	LHG	C13-C14-C15-C16
35	l	101	LHG	C14-C15-C16-C17
30	B	621	SQD	C27-C28-C29-C30
30	b	621	SQD	C27-C28-C29-C30
35	G	2630	LHG	C17-C18-C19-C20
35	L	101	LHG	C14-C15-C16-C17
35	g	2630	LHG	C17-C18-C19-C20
27	A	405	CLA	C5-C6-C7-C8
27	A	406	CLA	C15-C16-C17-C18
27	C	507	CLA	C13-C15-C16-C17
27	a	405	CLA	C5-C6-C7-C8
27	a	406	CLA	C15-C16-C17-C18
27	c	507	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
35	Y	2630	LHG	C14-C15-C16-C17
35	y	2630	LHG	C14-C15-C16-C17
27	A	410	CLA	C11-C10-C8-C7
27	B	602	CLA	C12-C13-C15-C16
27	B	603	CLA	C6-C7-C8-C10
27	B	609	CLA	C11-C10-C8-C7
27	B	612	CLA	C2-C3-C5-C6
27	B	613	CLA	C12-C13-C15-C16
27	B	615	CLA	C11-C10-C8-C7
27	B	617	CLA	C6-C7-C8-C10
27	C	501	CLA	C11-C10-C8-C7
27	C	506	CLA	C11-C12-C13-C15
27	C	509	CLA	C6-C7-C8-C10
27	C	512	CLA	C11-C10-C8-C7
27	Y	613	CLA	C2-C3-C5-C6
27	a	410	CLA	C11-C10-C8-C7
27	b	602	CLA	C12-C13-C15-C16
27	b	603	CLA	C6-C7-C8-C10
27	b	609	CLA	C11-C10-C8-C7
27	b	610	CLA	C2-C3-C5-C6
27	b	612	CLA	C2-C3-C5-C6
27	b	613	CLA	C12-C13-C15-C16
27	b	615	CLA	C11-C10-C8-C7
27	b	617	CLA	C6-C7-C8-C10
27	c	501	CLA	C11-C10-C8-C7
27	c	506	CLA	C11-C12-C13-C15
27	c	509	CLA	C6-C7-C8-C10
27	c	512	CLA	C11-C10-C8-C7
27	y	613	CLA	C2-C3-C5-C6
37	G	601	CHL	C12-C13-C15-C16
37	Y	601	CHL	C11-C10-C8-C7
37	g	601	CHL	C12-C13-C15-C16
37	y	601	CHL	C11-C10-C8-C7
27	A	405	CLA	O1A-CGA-O2A-C1
27	a	405	CLA	O1A-CGA-O2A-C1
37	G	608	CHL	O1A-CGA-O2A-C1
37	g	608	CHL	O1A-CGA-O2A-C1
30	A	412	SQD	C14-C15-C16-C17
30	a	412	SQD	C14-C15-C16-C17
27	A	405	CLA	C16-C17-C18-C19
27	a	405	CLA	C16-C17-C18-C19
27	Y	614	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
27	y	614	CLA	O1D-CGD-O2D-CED
31	B	622	LMG	O9-C10-O7-C8
31	b	622	LMG	O9-C10-O7-C8
30	B	621	SQD	C24-C23-O48-C46
30	b	621	SQD	C24-C23-O48-C46
32	H	102	DGD	C4A-C5A-C6A-C7A
32	h	102	DGD	C4A-C5A-C6A-C7A
27	C	501	CLA	C2A-CAA-CBA-CGA
27	G	610	CLA	C2A-CAA-CBA-CGA
27	G	613	CLA	C2A-CAA-CBA-CGA
27	N	611	CLA	C2A-CAA-CBA-CGA
27	N	614	CLA	C2A-CAA-CBA-CGA
27	c	501	CLA	C2A-CAA-CBA-CGA
27	g	610	CLA	C2A-CAA-CBA-CGA
27	g	613	CLA	C2A-CAA-CBA-CGA
27	n	611	CLA	C2A-CAA-CBA-CGA
27	n	614	CLA	C2A-CAA-CBA-CGA
37	R	608	CHL	C2A-CAA-CBA-CGA
37	r	608	CHL	C2A-CAA-CBA-CGA
32	C	518	DGD	C2A-C3A-C4A-C5A
32	c	518	DGD	C2A-C3A-C4A-C5A
31	a	413	LMG	C11-C12-C13-C14
35	s	2630	LHG	C7-C8-C9-C10
27	r	602	CLA	C10-C11-C12-C13
31	A	413	LMG	C11-C12-C13-C14
31	A	413	LMG	C34-C35-C36-C37
32	C	518	DGD	C4A-C5A-C6A-C7A
32	c	518	DGD	C4A-C5A-C6A-C7A
31	a	413	LMG	C34-C35-C36-C37
35	d	408	LHG	C34-C35-C36-C37
27	n	603	CLA	CBD-CGD-O2D-CED
27	N	613	CLA	CBA-CGA-O2A-C1
27	n	613	CLA	CBA-CGA-O2A-C1
37	R	607	CHL	CBA-CGA-O2A-C1
37	r	607	CHL	CBA-CGA-O2A-C1
27	Y	613	CLA	C16-C17-C18-C19
27	y	613	CLA	C16-C17-C18-C19
37	N	607	CHL	C16-C17-C18-C20
37	Y	601	CHL	C16-C17-C18-C19
37	n	607	CHL	C16-C17-C18-C20
37	y	601	CHL	C16-C17-C18-C19
27	R	602	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
37	r	607	CHL	O1D-CGD-O2D-CED
32	C	520	DGD	C9B-CAB-CBB-CCB
32	c	520	DGD	C9B-CAB-CBB-CCB
35	D	408	LHG	C34-C35-C36-C37
35	D	409	LHG	C24-C25-C26-C27
35	d	409	LHG	C24-C25-C26-C27
35	S	2630	LHG	C7-C8-C9-C10
35	S	2630	LHG	C8-C7-O7-C5
35	s	2630	LHG	C8-C7-O7-C5
27	Y	612	CLA	C15-C16-C17-C18
27	y	612	CLA	C15-C16-C17-C18
27	N	603	CLA	CBD-CGD-O2D-CED
37	N	607	CHL	CBD-CGD-O2D-CED
37	Y	609	CHL	CBD-CGD-O2D-CED
37	n	607	CHL	CBD-CGD-O2D-CED
37	y	609	CHL	CBD-CGD-O2D-CED
35	S	2630	LHG	O9-C7-O7-C5
35	s	2630	LHG	O9-C7-O7-C5
30	B	621	SQD	C11-C12-C13-C14
30	b	621	SQD	C11-C12-C13-C14
37	R	607	CHL	O1D-CGD-O2D-CED
30	a	412	SQD	C15-C16-C17-C18
32	C	518	DGD	C2B-C3B-C4B-C5B
32	C	519	DGD	C9A-CAA-CBA-CCA
32	c	518	DGD	C2B-C3B-C4B-C5B
32	c	519	DGD	C9A-CAA-CBA-CCA
32	c	520	DGD	C7A-C8A-C9A-CAA
27	Y	610	CLA	C16-C17-C18-C19
27	y	610	CLA	C16-C17-C18-C19
30	A	412	SQD	C15-C16-C17-C18
32	C	520	DGD	C7A-C8A-C9A-CAA
35	Y	2630	LHG	C28-C29-C30-C31
35	y	2630	LHG	C28-C29-C30-C31
27	C	501	CLA	C8-C10-C11-C12
27	c	501	CLA	C8-C10-C11-C12
27	C	508	CLA	C2-C3-C5-C6
27	C	512	CLA	C2-C3-C5-C6
27	c	508	CLA	C2-C3-C5-C6
27	c	512	CLA	C2-C3-C5-C6
31	A	413	LMG	C35-C36-C37-C38
27	B	605	CLA	C11-C10-C8-C9
27	B	609	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
27	B	614	CLA	C14-C13-C15-C16
27	C	503	CLA	C14-C13-C15-C16
27	C	506	CLA	C11-C12-C13-C14
27	C	512	CLA	C11-C10-C8-C9
27	D	403	CLA	C11-C10-C8-C9
27	G	602	CLA	C11-C10-C8-C9
27	b	605	CLA	C11-C10-C8-C9
27	b	609	CLA	C6-C7-C8-C9
27	b	614	CLA	C14-C13-C15-C16
27	c	503	CLA	C14-C13-C15-C16
27	c	506	CLA	C11-C12-C13-C14
27	c	512	CLA	C11-C10-C8-C9
27	d	403	CLA	C11-C10-C8-C9
27	g	602	CLA	C11-C10-C8-C9
37	N	607	CHL	C11-C12-C13-C14
37	n	607	CHL	C11-C12-C13-C14
27	Y	612	CLA	O1D-CGD-O2D-CED
27	y	612	CLA	O1D-CGD-O2D-CED
31	a	413	LMG	C35-C36-C37-C38
35	L	101	LHG	C30-C31-C32-C33
27	B	604	CLA	C2A-CAA-CBA-CGA
27	C	512	CLA	C2A-CAA-CBA-CGA
27	G	604	CLA	C2A-CAA-CBA-CGA
27	S	611	CLA	C2A-CAA-CBA-CGA
27	S	614	CLA	C2A-CAA-CBA-CGA
27	Y	602	CLA	C2A-CAA-CBA-CGA
27	b	604	CLA	C2A-CAA-CBA-CGA
27	c	512	CLA	C2A-CAA-CBA-CGA
27	g	604	CLA	C2A-CAA-CBA-CGA
27	s	611	CLA	C2A-CAA-CBA-CGA
27	s	614	CLA	C2A-CAA-CBA-CGA
27	y	602	CLA	C2A-CAA-CBA-CGA
31	D	411	LMG	C32-C33-C34-C35
31	d	411	LMG	C32-C33-C34-C35
35	l	101	LHG	C30-C31-C32-C33
39	Y	1622	XAT	C31-C32-C33-C40
39	y	1622	XAT	C31-C32-C33-C40
27	y	613	CLA	C5-C6-C7-C8
31	B	622	LMG	C14-C15-C16-C17
31	b	622	LMG	C14-C15-C16-C17
29	B	618	BCR	C17-C18-C19-C20
29	b	618	BCR	C17-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
27	A	406	CLA	C1A-C2A-CAA-CBA
27	B	605	CLA	C1A-C2A-CAA-CBA
27	B	615	CLA	C1A-C2A-CAA-CBA
27	C	501	CLA	C1A-C2A-CAA-CBA
27	G	603	CLA	C1A-C2A-CAA-CBA
27	G	604	CLA	C1A-C2A-CAA-CBA
27	N	603	CLA	C1A-C2A-CAA-CBA
27	N	610	CLA	C1A-C2A-CAA-CBA
27	R	610	CLA	C1A-C2A-CAA-CBA
27	S	610	CLA	C1A-C2A-CAA-CBA
27	a	406	CLA	C1A-C2A-CAA-CBA
27	b	605	CLA	C1A-C2A-CAA-CBA
27	b	615	CLA	C1A-C2A-CAA-CBA
27	c	501	CLA	C1A-C2A-CAA-CBA
27	g	603	CLA	C1A-C2A-CAA-CBA
27	g	604	CLA	C1A-C2A-CAA-CBA
27	n	603	CLA	C1A-C2A-CAA-CBA
27	n	610	CLA	C1A-C2A-CAA-CBA
27	r	610	CLA	C1A-C2A-CAA-CBA
27	s	610	CLA	C1A-C2A-CAA-CBA
37	Y	605	CHL	C1A-C2A-CAA-CBA
37	Y	608	CHL	C1A-C2A-CAA-CBA
37	y	605	CHL	C1A-C2A-CAA-CBA
37	y	608	CHL	C1A-C2A-CAA-CBA
27	B	616	CLA	C16-C17-C18-C19
27	C	504	CLA	C16-C17-C18-C20
27	b	616	CLA	C16-C17-C18-C19
27	c	504	CLA	C16-C17-C18-C20
30	B	621	SQD	C32-C33-C34-C35
31	z	101	LMG	C15-C16-C17-C18
35	N	2630	LHG	C13-C14-C15-C16
35	n	2630	LHG	C13-C14-C15-C16
27	Y	613	CLA	C5-C6-C7-C8
35	D	409	LHG	C4-O6-P-O3
35	L	101	LHG	C4-O6-P-O3
35	d	409	LHG	C4-O6-P-O3
35	l	101	LHG	C4-O6-P-O3
30	b	621	SQD	C9-C10-C11-C12
30	b	621	SQD	C32-C33-C34-C35
31	Z	101	LMG	C15-C16-C17-C18
30	B	621	SQD	C9-C10-C11-C12
27	B	602	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
27	B	605	CLA	C13-C15-C16-C17
27	b	602	CLA	C13-C15-C16-C17
35	L	101	LHG	O6-C4-C5-C6
35	N	2630	LHG	O6-C4-C5-C6
35	l	101	LHG	O6-C4-C5-C6
35	n	2630	LHG	O6-C4-C5-C6
35	D	409	LHG	C17-C18-C19-C20
35	N	2630	LHG	C24-C25-C26-C27
35	d	409	LHG	C17-C18-C19-C20
35	n	2630	LHG	C24-C25-C26-C27
27	b	605	CLA	C13-C15-C16-C17
27	B	612	CLA	C16-C17-C18-C19
27	b	612	CLA	C16-C17-C18-C19
31	A	413	LMG	C30-C31-C32-C33
31	a	413	LMG	C30-C31-C32-C33
27	B	612	CLA	C4-C3-C5-C6
27	b	612	CLA	C4-C3-C5-C6
27	B	615	CLA	C5-C6-C7-C8
27	b	615	CLA	C5-C6-C7-C8
30	A	412	SQD	C28-C29-C30-C31
30	a	412	SQD	C28-C29-C30-C31
35	y	2630	LHG	C13-C14-C15-C16
30	b	621	SQD	C24-C25-C26-C27
31	Z	101	LMG	C11-C12-C13-C14
31	z	101	LMG	C11-C12-C13-C14
35	Y	2630	LHG	C13-C14-C15-C16
27	B	616	CLA	C16-C17-C18-C20
27	b	616	CLA	C16-C17-C18-C20
30	A	412	SQD	O6-C44-C45-C46
30	B	621	SQD	C24-C25-C26-C27
30	a	412	SQD	O6-C44-C45-C46
31	B	622	LMG	C7-C8-C9-O8
31	Z	101	LMG	O1-C7-C8-C9
31	b	622	LMG	C7-C8-C9-O8
31	z	101	LMG	O1-C7-C8-C9
35	D	410	LHG	C4-C5-C6-O8
35	G	2630	LHG	C4-C5-C6-O8
35	d	410	LHG	C4-C5-C6-O8
35	g	2630	LHG	C4-C5-C6-O8
35	n	2630	LHG	C15-C16-C17-C18
32	C	518	DGD	CCB-CDB-CEB-CFB
32	c	518	DGD	CCB-CDB-CEB-CFB

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Mol	Chain	Res	Type	Atoms
35	N	2630	LHG	C15-C16-C17-C18
35	N	2630	LHG	C28-C29-C30-C31
35	d	410	LHG	C32-C33-C34-C35
35	n	2630	LHG	C28-C29-C30-C31
37	r	607	CHL	O1A-CGA-O2A-C1
35	D	410	LHG	C32-C33-C34-C35
31	C	521	LMG	C14-C15-C16-C17
31	c	521	LMG	C14-C15-C16-C17
37	R	607	CHL	O1A-CGA-O2A-C1
37	G	609	CHL	C2C-C3C-CAC-CBC
37	g	609	CHL	C2C-C3C-CAC-CBC
37	y	606	CHL	CBD-CGD-O2D-CED
31	D	411	LMG	C17-C18-C19-C20
31	d	411	LMG	C17-C18-C19-C20
32	c	519	DGD	C2B-C3B-C4B-C5B
35	L	101	LHG	C11-C10-C9-C8
35	l	101	LHG	C11-C10-C9-C8
32	C	519	DGD	C2B-C3B-C4B-C5B
31	B	622	LMG	C30-C31-C32-C33
37	N	601	CHL	CBA-CGA-O2A-C1
37	Y	605	CHL	CBA-CGA-O2A-C1
37	n	601	CHL	CBA-CGA-O2A-C1
37	y	605	CHL	CBA-CGA-O2A-C1
31	b	622	LMG	C30-C31-C32-C33
35	D	410	LHG	C9-C10-C11-C12
35	G	2630	LHG	C31-C32-C33-C34
35	Y	2630	LHG	C11-C10-C9-C8
35	g	2630	LHG	C31-C32-C33-C34
35	y	2630	LHG	C11-C10-C9-C8
37	Y	606	CHL	CBD-CGD-O2D-CED
35	d	410	LHG	C9-C10-C11-C12
27	R	603	CLA	O1D-CGD-O2D-CED
27	B	609	CLA	C15-C16-C17-C18
27	b	609	CLA	C15-C16-C17-C18
37	S	606	CHL	C2-C1-O2A-CGA
37	s	606	CHL	C2-C1-O2A-CGA
30	a	412	SQD	C23-C24-C25-C26
27	r	603	CLA	O1D-CGD-O2D-CED
27	G	613	CLA	O1D-CGD-O2D-CED
27	g	613	CLA	O1D-CGD-O2D-CED
27	C	510	CLA	C16-C17-C18-C20
27	c	510	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
37	Y	601	CHL	C16-C17-C18-C20
37	y	601	CHL	C16-C17-C18-C20
30	A	412	SQD	C23-C24-C25-C26
27	B	605	CLA	O1D-CGD-O2D-CED
27	b	605	CLA	O1D-CGD-O2D-CED
37	S	607	CHL	O1D-CGD-O2D-CED
37	s	607	CHL	O1D-CGD-O2D-CED
27	N	613	CLA	O1A-CGA-O2A-C1
27	n	613	CLA	O1A-CGA-O2A-C1
31	Z	101	LMG	C31-C32-C33-C34
35	G	2630	LHG	C23-C24-C25-C26
35	g	2630	LHG	C23-C24-C25-C26
31	z	101	LMG	C31-C32-C33-C34
35	D	410	LHG	O7-C5-C6-O8
35	d	410	LHG	O7-C5-C6-O8
31	A	413	LMG	C19-C20-C21-C22
31	a	413	LMG	C19-C20-C21-C22
34	D	405	PL9	C45-C44-C46-C47
34	d	405	PL9	C45-C44-C46-C47
27	C	502	CLA	C10-C11-C12-C13
27	Y	610	CLA	C15-C16-C17-C18
27	y	610	CLA	C15-C16-C17-C18
27	B	604	CLA	C11-C10-C8-C7
27	B	605	CLA	C11-C10-C8-C7
27	B	606	CLA	C11-C12-C13-C15
27	B	609	CLA	C6-C7-C8-C10
27	B	614	CLA	C12-C13-C15-C16
27	B	617	CLA	C12-C13-C15-C16
27	C	504	CLA	C12-C13-C15-C16
27	C	507	CLA	C12-C13-C15-C16
27	C	509	CLA	C11-C12-C13-C15
27	C	511	CLA	C11-C12-C13-C15
27	D	403	CLA	C11-C10-C8-C7
27	R	602	CLA	C11-C12-C13-C15
27	Y	602	CLA	C6-C7-C8-C10
27	Y	612	CLA	C11-C12-C13-C15
27	b	604	CLA	C11-C10-C8-C7
27	b	605	CLA	C11-C10-C8-C7
27	b	606	CLA	C11-C12-C13-C15
27	b	609	CLA	C6-C7-C8-C10
27	b	612	CLA	C6-C7-C8-C10
27	b	614	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
27	b	617	CLA	C12-C13-C15-C16
27	c	504	CLA	C12-C13-C15-C16
27	c	507	CLA	C12-C13-C15-C16
27	c	509	CLA	C11-C12-C13-C15
27	c	511	CLA	C11-C12-C13-C15
27	d	403	CLA	C11-C10-C8-C7
27	r	602	CLA	C11-C12-C13-C15
27	y	602	CLA	C6-C7-C8-C10
27	y	612	CLA	C11-C12-C13-C15
37	G	601	CHL	C6-C7-C8-C10
37	G	601	CHL	C11-C12-C13-C15
37	Y	601	CHL	C6-C7-C8-C10
37	Y	601	CHL	C11-C12-C13-C15
37	g	601	CHL	C6-C7-C8-C10
37	g	601	CHL	C11-C12-C13-C15
37	y	601	CHL	C6-C7-C8-C10
37	y	601	CHL	C11-C12-C13-C15
27	A	406	CLA	C14-C13-C15-C16
27	A	410	CLA	C6-C7-C8-C9
27	B	604	CLA	C6-C7-C8-C9
27	B	604	CLA	C11-C10-C8-C9
27	B	606	CLA	C11-C12-C13-C14
27	B	608	CLA	C6-C7-C8-C9
27	B	608	CLA	C14-C13-C15-C16
27	B	612	CLA	C14-C13-C15-C16
27	B	617	CLA	C14-C13-C15-C16
27	C	507	CLA	C14-C13-C15-C16
27	G	602	CLA	C6-C7-C8-C9
27	R	602	CLA	C6-C7-C8-C9
27	Y	602	CLA	C6-C7-C8-C9
27	Y	610	CLA	C6-C7-C8-C9
27	Y	610	CLA	C11-C12-C13-C14
27	Y	612	CLA	C11-C12-C13-C14
27	a	406	CLA	C14-C13-C15-C16
27	a	410	CLA	C6-C7-C8-C9
27	b	604	CLA	C6-C7-C8-C9
27	b	604	CLA	C11-C10-C8-C9
27	b	606	CLA	C11-C12-C13-C14
27	b	608	CLA	C6-C7-C8-C9
27	b	608	CLA	C14-C13-C15-C16
27	b	612	CLA	C14-C13-C15-C16
27	b	617	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
27	c	507	CLA	C14-C13-C15-C16
27	g	602	CLA	C6-C7-C8-C9
27	r	602	CLA	C6-C7-C8-C9
27	y	602	CLA	C6-C7-C8-C9
27	y	610	CLA	C6-C7-C8-C9
27	y	610	CLA	C11-C12-C13-C14
27	y	612	CLA	C11-C12-C13-C14
28	A	408	PHO	C6-C7-C8-C9
28	A	409	PHO	C6-C7-C8-C9
28	a	408	PHO	C6-C7-C8-C9
28	a	409	PHO	C6-C7-C8-C9
37	G	601	CHL	C6-C7-C8-C9
37	G	601	CHL	C14-C13-C15-C16
37	Y	601	CHL	C11-C12-C13-C14
37	g	601	CHL	C6-C7-C8-C9
37	g	601	CHL	C14-C13-C15-C16
37	y	601	CHL	C11-C12-C13-C14
30	A	412	SQD	C34-C35-C36-C37
27	c	502	CLA	C10-C11-C12-C13
27	R	604	CLA	C2A-CAA-CBA-CGA
27	r	604	CLA	C2A-CAA-CBA-CGA
30	a	412	SQD	C34-C35-C36-C37
31	a	413	LMG	C40-C41-C42-C43
30	a	412	SQD	C19-C20-C21-C22
31	A	413	LMG	C40-C41-C42-C43
29	C	514	BCR	C21-C22-C23-C24
29	c	514	BCR	C21-C22-C23-C24
30	A	412	SQD	C19-C20-C21-C22
30	A	418	SQD	C25-C26-C27-C28
30	a	418	SQD	C25-C26-C27-C28
27	Y	611	CLA	CBA-CGA-O2A-C1
27	y	611	CLA	CBA-CGA-O2A-C1
37	N	605	CHL	CBA-CGA-O2A-C1
37	n	605	CHL	CBA-CGA-O2A-C1
37	N	609	CHL	CBD-CGD-O2D-CED
37	n	609	CHL	CBD-CGD-O2D-CED
27	B	605	CLA	C8-C10-C11-C12
27	b	605	CLA	C8-C10-C11-C12
35	G	2630	LHG	O6-C4-C5-C6
35	g	2630	LHG	O6-C4-C5-C6
37	s	601	CHL	O1D-CGD-O2D-CED
27	B	605	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
27	C	512	CLA	C10-C11-C12-C13
27	b	605	CLA	C5-C6-C7-C8
27	c	512	CLA	C10-C11-C12-C13
37	S	601	CHL	O1D-CGD-O2D-CED
32	H	102	DGD	C6A-C7A-C8A-C9A
32	h	102	DGD	C6A-C7A-C8A-C9A
27	B	616	CLA	C15-C16-C17-C18
31	D	411	LMG	C33-C34-C35-C36
31	d	411	LMG	C33-C34-C35-C36
35	G	2630	LHG	C25-C26-C27-C28
35	g	2630	LHG	C25-C26-C27-C28
30	A	418	SQD	C9-C10-C11-C12
30	a	418	SQD	C9-C10-C11-C12
35	G	2630	LHG	C9-C10-C11-C12
35	g	2630	LHG	C9-C10-C11-C12
37	R	608	CHL	C4C-C3C-CAC-CBC
27	b	616	CLA	C15-C16-C17-C18
37	N	607	CHL	O1D-CGD-O2D-CED
27	D	403	CLA	CBA-CGA-O2A-C1
27	S	604	CLA	CBA-CGA-O2A-C1
27	d	403	CLA	CBA-CGA-O2A-C1
27	s	604	CLA	CBA-CGA-O2A-C1
35	L	101	LHG	C24-C23-O8-C6
35	l	101	LHG	C24-C23-O8-C6
32	C	520	DGD	C1A-C2A-C3A-C4A
32	c	520	DGD	C1A-C2A-C3A-C4A
35	D	410	LHG	C11-C10-C9-C8
35	d	410	LHG	C11-C10-C9-C8
37	N	606	CHL	C3A-C2A-CAA-CBA
37	R	608	CHL	C3A-C2A-CAA-CBA
37	Y	608	CHL	C3A-C2A-CAA-CBA
37	n	606	CHL	C3A-C2A-CAA-CBA
37	r	608	CHL	C3A-C2A-CAA-CBA
37	y	608	CHL	C3A-C2A-CAA-CBA
32	C	519	DGD	CBA-CCA-CDA-CEA
32	c	519	DGD	CBA-CCA-CDA-CEA
37	n	607	CHL	O1D-CGD-O2D-CED
31	B	622	LMG	C37-C38-C39-C40
31	b	622	LMG	C37-C38-C39-C40
27	R	610	CLA	C16-C17-C18-C20
37	r	608	CHL	C4C-C3C-CAC-CBC
27	Y	611	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
27	y	611	CLA	C8-C10-C11-C12
31	Z	101	LMG	C7-C8-C9-O8
31	z	101	LMG	C7-C8-C9-O8
35	Y	2630	LHG	C4-C5-C6-O8
35	y	2630	LHG	C4-C5-C6-O8
31	C	521	LMG	C39-C40-C41-C42
31	Z	101	LMG	C33-C34-C35-C36
31	z	101	LMG	C33-C34-C35-C36
31	c	521	LMG	C39-C40-C41-C42
35	D	410	LHG	C10-C11-C12-C13
35	d	410	LHG	C10-C11-C12-C13
32	C	520	DGD	CCA-CDA-CEA-CFA
32	c	520	DGD	CCA-CDA-CEA-CFA
37	Y	605	CHL	O1A-CGA-O2A-C1
37	y	605	CHL	O1A-CGA-O2A-C1
27	b	615	CLA	C15-C16-C17-C18
27	C	506	CLA	C4-C3-C5-C6
27	c	506	CLA	C4-C3-C5-C6
27	r	610	CLA	C16-C17-C18-C20
27	B	615	CLA	C15-C16-C17-C18
37	G	607	CHL	C3C-C2C-CMC-OMC
37	G	609	CHL	C3C-C2C-CMC-OMC
37	R	608	CHL	C3C-C2C-CMC-OMC
37	g	607	CHL	C3C-C2C-CMC-OMC
37	g	609	CHL	C3C-C2C-CMC-OMC
37	r	608	CHL	C3C-C2C-CMC-OMC
30	A	418	SQD	C23-C24-C25-C26
30	a	418	SQD	C23-C24-C25-C26
30	A	418	SQD	C16-C17-C18-C19
30	a	418	SQD	C16-C17-C18-C19
27	a	406	CLA	CBA-CGA-O2A-C1
37	Y	601	CHL	CBA-CGA-O2A-C1
37	y	601	CHL	CBA-CGA-O2A-C1
37	N	601	CHL	O1A-CGA-O2A-C1
37	n	601	CHL	O1A-CGA-O2A-C1
27	B	612	CLA	C16-C17-C18-C20
27	C	502	CLA	C16-C17-C18-C19
27	b	612	CLA	C16-C17-C18-C20
27	c	502	CLA	C16-C17-C18-C19
27	Y	611	CLA	O1A-CGA-O2A-C1
27	y	611	CLA	O1A-CGA-O2A-C1
37	N	605	CHL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
37	n	605	CHL	O1A-CGA-O2A-C1
30	A	418	SQD	C10-C11-C12-C13
31	B	622	LMG	O7-C8-C9-O8
31	Z	101	LMG	O1-C7-C8-O7
31	b	622	LMG	O7-C8-C9-O8
31	z	101	LMG	O1-C7-C8-O7
35	S	2630	LHG	O7-C5-C6-O8
35	s	2630	LHG	O7-C5-C6-O8
27	B	604	CLA	CBD-CGD-O2D-CED
27	B	616	CLA	CBD-CGD-O2D-CED
27	b	616	CLA	CBD-CGD-O2D-CED
27	A	406	CLA	CBA-CGA-O2A-C1
27	B	606	CLA	C13-C15-C16-C17
27	C	506	CLA	C5-C6-C7-C8
27	b	606	CLA	C13-C15-C16-C17
27	c	506	CLA	C5-C6-C7-C8
27	y	602	CLA	C15-C16-C17-C18
30	a	418	SQD	C10-C11-C12-C13
32	h	102	DGD	CCB-CDB-CEB-CFB
32	C	518	DGD	O6E-C1E-O5D-C6D
32	c	518	DGD	O6E-C1E-O5D-C6D
27	Y	602	CLA	C15-C16-C17-C18
37	N	607	CHL	C13-C15-C16-C17
27	b	604	CLA	CBD-CGD-O2D-CED
32	C	520	DGD	C3A-C4A-C5A-C6A
32	H	102	DGD	CCB-CDB-CEB-CFB
32	c	520	DGD	C3A-C4A-C5A-C6A
37	Y	609	CHL	C2-C1-O2A-CGA
37	y	609	CHL	C2-C1-O2A-CGA
27	n	603	CLA	O1D-CGD-O2D-CED
27	B	602	CLA	C11-C10-C8-C9
27	B	602	CLA	C11-C12-C13-C14
27	B	603	CLA	C11-C12-C13-C14
27	C	504	CLA	C6-C7-C8-C9
27	C	508	CLA	C11-C10-C8-C9
27	C	510	CLA	C6-C7-C8-C9
27	N	602	CLA	C6-C7-C8-C9
27	b	602	CLA	C11-C10-C8-C9
27	b	602	CLA	C11-C12-C13-C14
27	b	603	CLA	C11-C12-C13-C14
27	c	504	CLA	C6-C7-C8-C9
27	c	508	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
27	c	510	CLA	C6-C7-C8-C9
27	n	602	CLA	C6-C7-C8-C9
35	S	2630	LHG	C26-C27-C28-C29
35	s	2630	LHG	C26-C27-C28-C29
32	C	519	DGD	CCA-CDA-CEA-CFA
32	c	519	DGD	CCA-CDA-CEA-CFA
37	n	607	CHL	C13-C15-C16-C17
35	D	410	LHG	C2-C3-O3-P
35	S	2630	LHG	C2-C3-O3-P
35	d	410	LHG	C2-C3-O3-P
35	s	2630	LHG	C2-C3-O3-P
35	n	2630	LHG	C11-C10-C9-C8
27	G	602	CLA	C2A-CAA-CBA-CGA
27	N	602	CLA	C2A-CAA-CBA-CGA
27	g	602	CLA	C2A-CAA-CBA-CGA
27	n	602	CLA	C2A-CAA-CBA-CGA
27	Y	613	CLA	C16-C17-C18-C20
27	y	613	CLA	C16-C17-C18-C20
28	A	408	PHO	C16-C17-C18-C19
28	a	408	PHO	C16-C17-C18-C19
37	G	601	CHL	C16-C17-C18-C20
37	g	601	CHL	C16-C17-C18-C20
35	R	2630	LHG	C23-C24-C25-C26
35	r	2630	LHG	C23-C24-C25-C26
27	S	603	CLA	O2A-C1-C2-C3
27	s	603	CLA	O2A-C1-C2-C3
29	B	620	BCR	C1-C6-C7-C8
29	D	404	BCR	C23-C24-C25-C26
29	H	101	BCR	C23-C24-C25-C26
29	H	101	BCR	C23-C24-C25-C30
29	b	620	BCR	C1-C6-C7-C8
29	d	404	BCR	C23-C24-C25-C26
29	h	101	BCR	C23-C24-C25-C26
29	h	101	BCR	C23-C24-C25-C30
38	G	1620	LUT	C1-C6-C7-C8
38	G	1620	LUT	C5-C6-C7-C8
38	N	1621	LUT	C5-C6-C7-C8
38	R	620	LUT	C1-C6-C7-C8
38	R	620	LUT	C5-C6-C7-C8
38	S	1620	LUT	C1-C6-C7-C8
38	S	1620	LUT	C5-C6-C7-C8
38	S	1621	LUT	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
38	g	1620	LUT	C1-C6-C7-C8
38	g	1620	LUT	C5-C6-C7-C8
38	n	1621	LUT	C5-C6-C7-C8
38	r	620	LUT	C1-C6-C7-C8
38	r	620	LUT	C5-C6-C7-C8
38	s	1620	LUT	C1-C6-C7-C8
38	s	1620	LUT	C5-C6-C7-C8
38	s	1621	LUT	C5-C6-C7-C8
35	N	2630	LHG	C11-C10-C9-C8
35	R	2630	LHG	C10-C11-C12-C13
35	d	410	LHG	C30-C31-C32-C33
35	r	2630	LHG	C10-C11-C12-C13
32	h	102	DGD	O2G-C1B-C2B-C3B
31	D	411	LMG	C19-C20-C21-C22
31	d	411	LMG	C19-C20-C21-C22
35	D	410	LHG	C30-C31-C32-C33
35	G	2630	LHG	C35-C36-C37-C38
35	g	2630	LHG	C35-C36-C37-C38
27	N	603	CLA	O1D-CGD-O2D-CED
27	C	502	CLA	C16-C17-C18-C20
27	C	504	CLA	C16-C17-C18-C19
27	C	510	CLA	C16-C17-C18-C19
27	c	502	CLA	C16-C17-C18-C20
27	c	504	CLA	C16-C17-C18-C19
27	c	510	CLA	C16-C17-C18-C19
27	b	607	CLA	C8-C10-C11-C12
31	Z	101	LMG	C39-C40-C41-C42
32	C	518	DGD	CAB-CBB-CCB-CDB
32	c	518	DGD	CAB-CBB-CCB-CDB
37	Y	606	CHL	O1D-CGD-O2D-CED
37	y	606	CHL	O1D-CGD-O2D-CED
27	B	607	CLA	C8-C10-C11-C12
32	H	102	DGD	O2G-C1B-C2B-C3B
31	z	101	LMG	C39-C40-C41-C42
27	A	410	CLA	C6-C7-C8-C10
27	B	602	CLA	C11-C12-C13-C15
27	B	604	CLA	C6-C7-C8-C10
27	B	608	CLA	C12-C13-C15-C16
27	B	610	CLA	C6-C7-C8-C10
27	B	612	CLA	C6-C7-C8-C10
27	B	613	CLA	C11-C10-C8-C7
27	C	508	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
27	C	510	CLA	C6-C7-C8-C10
27	N	602	CLA	C6-C7-C8-C10
27	N	610	CLA	C12-C13-C15-C16
27	R	602	CLA	C6-C7-C8-C10
27	a	410	CLA	C6-C7-C8-C10
27	b	602	CLA	C11-C12-C13-C15
27	b	604	CLA	C6-C7-C8-C10
27	b	608	CLA	C12-C13-C15-C16
27	b	610	CLA	C6-C7-C8-C10
27	b	613	CLA	C11-C10-C8-C7
27	c	508	CLA	C11-C10-C8-C7
27	c	510	CLA	C6-C7-C8-C10
27	n	602	CLA	C6-C7-C8-C10
27	n	610	CLA	C12-C13-C15-C16
27	r	602	CLA	C6-C7-C8-C10
28	A	409	PHO	C6-C7-C8-C10
28	a	409	PHO	C6-C7-C8-C10
37	G	601	CHL	C11-C10-C8-C7
37	N	607	CHL	C12-C13-C15-C16
37	Y	609	CHL	C11-C10-C8-C7
37	g	601	CHL	C11-C10-C8-C7
37	n	607	CHL	C12-C13-C15-C16
37	y	609	CHL	C11-C10-C8-C7
29	H	101	BCR	C9-C10-C11-C12
29	h	101	BCR	C9-C10-C11-C12
27	B	605	CLA	CBA-CGA-O2A-C1
27	b	605	CLA	CBA-CGA-O2A-C1
27	R	603	CLA	C2A-CAA-CBA-CGA
27	r	603	CLA	C2A-CAA-CBA-CGA
35	D	408	LHG	C12-C13-C14-C15
35	d	408	LHG	C12-C13-C14-C15
31	B	622	LMG	C17-C18-C19-C20
31	b	622	LMG	C17-C18-C19-C20
32	H	102	DGD	CBB-CCB-CDB-CEB
27	R	610	CLA	C16-C17-C18-C19
27	r	610	CLA	C16-C17-C18-C19
31	D	411	LMG	C16-C17-C18-C19
31	d	411	LMG	C16-C17-C18-C19
32	h	102	DGD	CBB-CCB-CDB-CEB
37	Y	609	CHL	O1D-CGD-O2D-CED
37	G	601	CHL	C15-C16-C17-C18
37	g	601	CHL	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
32	C	519	DGD	C6A-C7A-C8A-C9A
32	c	519	DGD	C6A-C7A-C8A-C9A
27	B	602	CLA	CAD-CBD-CGD-O2D
27	B	606	CLA	CAD-CBD-CGD-O2D
27	B	611	CLA	CAD-CBD-CGD-O2D
27	C	502	CLA	CAD-CBD-CGD-O2D
27	C	509	CLA	CAD-CBD-CGD-O2D
27	G	602	CLA	CAD-CBD-CGD-O2D
27	G	614	CLA	CAD-CBD-CGD-O2D
27	N	603	CLA	CAD-CBD-CGD-O2D
27	R	601	CLA	CAD-CBD-CGD-O2D
27	R	613	CLA	CAD-CBD-CGD-O2D
27	S	603	CLA	CAD-CBD-CGD-O2D
27	Y	611	CLA	CAD-CBD-CGD-O2D
27	Y	612	CLA	CAD-CBD-CGD-O2D
27	Y	613	CLA	CAD-CBD-CGD-O2D
27	b	602	CLA	CAD-CBD-CGD-O2D
27	b	606	CLA	CAD-CBD-CGD-O2D
27	b	611	CLA	CAD-CBD-CGD-O2D
27	c	502	CLA	CAD-CBD-CGD-O2D
27	c	509	CLA	CAD-CBD-CGD-O2D
27	g	602	CLA	CAD-CBD-CGD-O2D
27	g	614	CLA	CAD-CBD-CGD-O2D
27	n	603	CLA	CAD-CBD-CGD-O2D
27	r	601	CLA	CAD-CBD-CGD-O2D
27	r	613	CLA	CAD-CBD-CGD-O2D
27	s	603	CLA	CAD-CBD-CGD-O2D
27	y	611	CLA	CAD-CBD-CGD-O2D
27	y	612	CLA	CAD-CBD-CGD-O2D
27	y	613	CLA	CAD-CBD-CGD-O2D
37	N	607	CHL	CAD-CBD-CGD-O2D
37	R	606	CHL	CAD-CBD-CGD-O2D
37	Y	608	CHL	CAD-CBD-CGD-O2D
37	n	607	CHL	CAD-CBD-CGD-O2D
37	r	606	CHL	CAD-CBD-CGD-O2D
37	y	608	CHL	CAD-CBD-CGD-O2D
40	S	1623	NEX	C7-C8-C9-C19
40	s	1623	NEX	C7-C8-C9-C19
35	y	2630	LHG	C33-C34-C35-C36
27	C	507	CLA	C10-C11-C12-C13
27	c	507	CLA	C10-C11-C12-C13
37	y	609	CHL	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
35	Y	2630	LHG	C33-C34-C35-C36
35	D	409	LHG	C24-C23-O8-C6
37	N	609	CHL	CBA-CGA-O2A-C1
37	n	609	CHL	CBA-CGA-O2A-C1
27	A	406	CLA	C16-C17-C18-C20
27	a	406	CLA	C16-C17-C18-C20
30	A	418	SQD	C32-C33-C34-C35
30	a	418	SQD	C32-C33-C34-C35
32	C	518	DGD	C4B-C5B-C6B-C7B
32	c	518	DGD	C4B-C5B-C6B-C7B
30	A	412	SQD	C44-C45-C46-O48
30	a	412	SQD	C44-C45-C46-O48
35	S	2630	LHG	C4-C5-C6-O8
35	s	2630	LHG	C4-C5-C6-O8
27	b	605	CLA	O1A-CGA-O2A-C1
35	D	408	LHG	O6-C4-C5-O7
35	G	2630	LHG	O6-C4-C5-O7
35	d	408	LHG	O6-C4-C5-O7
35	g	2630	LHG	O6-C4-C5-O7
27	Y	613	CLA	C8-C10-C11-C12
27	y	613	CLA	C8-C10-C11-C12
27	G	611	CLA	O2A-C1-C2-C3
27	R	604	CLA	O2A-C1-C2-C3
27	R	613	CLA	O2A-C1-C2-C3
27	S	613	CLA	O2A-C1-C2-C3
27	g	611	CLA	O2A-C1-C2-C3
27	r	604	CLA	O2A-C1-C2-C3
27	r	613	CLA	O2A-C1-C2-C3
27	s	613	CLA	O2A-C1-C2-C3
35	N	2630	LHG	C30-C31-C32-C33
35	n	2630	LHG	C30-C31-C32-C33
35	d	409	LHG	C24-C23-O8-C6
27	b	603	CLA	C2A-CAA-CBA-CGA
37	Y	605	CHL	C2A-CAA-CBA-CGA
37	y	605	CHL	C2A-CAA-CBA-CGA
31	A	413	LMG	C32-C33-C34-C35
37	G	607	CHL	C4C-C3C-CAC-CBC
37	g	607	CHL	C4C-C3C-CAC-CBC
27	A	407	CLA	CHA-CBD-CGD-O1D
27	B	613	CLA	CHA-CBD-CGD-O1D
27	B	615	CLA	CHA-CBD-CGD-O1D
27	B	615	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
27	C	504	CLA	CHA-CBD-CGD-O1D
27	C	504	CLA	CHA-CBD-CGD-O2D
27	N	612	CLA	CHA-CBD-CGD-O1D
27	R	603	CLA	CHA-CBD-CGD-O1D
27	R	603	CLA	CHA-CBD-CGD-O2D
27	R	604	CLA	CHA-CBD-CGD-O1D
27	R	604	CLA	CHA-CBD-CGD-O2D
27	a	407	CLA	CHA-CBD-CGD-O1D
27	b	613	CLA	CHA-CBD-CGD-O1D
27	b	615	CLA	CHA-CBD-CGD-O1D
27	b	615	CLA	CHA-CBD-CGD-O2D
27	c	504	CLA	CHA-CBD-CGD-O1D
27	c	504	CLA	CHA-CBD-CGD-O2D
27	n	612	CLA	CHA-CBD-CGD-O1D
27	r	603	CLA	CHA-CBD-CGD-O1D
27	r	603	CLA	CHA-CBD-CGD-O2D
27	r	604	CLA	CHA-CBD-CGD-O1D
27	r	604	CLA	CHA-CBD-CGD-O2D
37	G	601	CHL	C3-C5-C6-C7
37	g	601	CHL	C3-C5-C6-C7
27	B	605	CLA	O1A-CGA-O2A-C1
27	D	403	CLA	O1A-CGA-O2A-C1
27	a	406	CLA	O1A-CGA-O2A-C1
27	d	403	CLA	O1A-CGA-O2A-C1
37	y	601	CHL	O1A-CGA-O2A-C1
31	a	413	LMG	C32-C33-C34-C35
35	D	409	LHG	C14-C15-C16-C17
35	d	409	LHG	C14-C15-C16-C17
31	Z	101	LMG	O7-C8-C9-O8
31	z	101	LMG	O7-C8-C9-O8
35	D	410	LHG	C23-C24-C25-C26
35	d	410	LHG	C23-C24-C25-C26
27	A	406	CLA	O1A-CGA-O2A-C1
37	Y	601	CHL	O1A-CGA-O2A-C1
31	z	101	LMG	C34-C35-C36-C37
32	c	518	DGD	C5B-C6B-C7B-C8B
31	Z	101	LMG	C34-C35-C36-C37
27	S	604	CLA	O1A-CGA-O2A-C1
27	s	604	CLA	O1A-CGA-O2A-C1
32	C	518	DGD	C5B-C6B-C7B-C8B
27	B	614	CLA	C6-C7-C8-C9
27	C	509	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
27	N	610	CLA	C14-C13-C15-C16
27	b	614	CLA	C6-C7-C8-C9
27	c	509	CLA	C11-C10-C8-C9
27	n	610	CLA	C14-C13-C15-C16
37	Y	601	CHL	O1D-CGD-O2D-CED
37	y	601	CHL	O1D-CGD-O2D-CED
35	D	408	LHG	C25-C26-C27-C28
35	d	408	LHG	C25-C26-C27-C28
35	l	101	LHG	C11-C12-C13-C14
37	n	607	CHL	C8-C10-C11-C12
27	B	603	CLA	C2A-CAA-CBA-CGA
27	Y	613	CLA	C2A-CAA-CBA-CGA
27	y	613	CLA	C2A-CAA-CBA-CGA
37	N	607	CHL	C8-C10-C11-C12
30	A	412	SQD	C17-C18-C19-C20
30	a	412	SQD	C17-C18-C19-C20
35	L	101	LHG	C11-C12-C13-C14
27	B	602	CLA	C5-C6-C7-C8
27	b	602	CLA	C5-C6-C7-C8
32	C	519	DGD	C8B-C9B-CAB-CBB
39	G	1622	XAT	C31-C32-C33-C34
39	g	1622	XAT	C31-C32-C33-C34
32	c	519	DGD	C8B-C9B-CAB-CBB
27	C	503	CLA	C1A-C2A-CAA-CBA
27	N	602	CLA	C1A-C2A-CAA-CBA
27	c	503	CLA	C1A-C2A-CAA-CBA
27	n	602	CLA	C1A-C2A-CAA-CBA
27	A	406	CLA	C16-C17-C18-C19
27	B	617	CLA	C16-C17-C18-C20
27	a	406	CLA	C16-C17-C18-C19
27	b	617	CLA	C16-C17-C18-C20
32	C	518	DGD	C4D-C5D-C6D-O5D
32	c	518	DGD	C4D-C5D-C6D-O5D
27	S	604	CLA	C2-C1-O2A-CGA
27	s	604	CLA	C2-C1-O2A-CGA
37	R	608	CHL	CBA-CGA-O2A-C1
37	r	608	CHL	CBA-CGA-O2A-C1
31	c	521	LMG	C12-C13-C14-C15
35	D	410	LHG	C29-C30-C31-C32
35	d	410	LHG	C29-C30-C31-C32
29	C	517	BCR	C9-C10-C11-C12
29	c	517	BCR	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
35	G	2630	LHG	C4-O6-P-O3
35	g	2630	LHG	C4-O6-P-O3
31	C	521	LMG	C12-C13-C14-C15
27	b	616	CLA	O1D-CGD-O2D-CED
35	D	408	LHG	C3-O3-P-O5
35	D	410	LHG	C3-O3-P-O4
35	N	2630	LHG	C4-O6-P-O4
35	d	408	LHG	C3-O3-P-O5
35	d	410	LHG	C3-O3-P-O4
35	n	2630	LHG	C4-O6-P-O4
27	N	612	CLA	O2A-C1-C2-C3
27	N	613	CLA	O2A-C1-C2-C3
27	S	602	CLA	O2A-C1-C2-C3
27	n	612	CLA	O2A-C1-C2-C3
27	n	613	CLA	O2A-C1-C2-C3
27	s	602	CLA	O2A-C1-C2-C3
32	H	102	DGD	O6E-C1E-O5D-C6D
32	h	102	DGD	O6E-C1E-O5D-C6D
37	g	605	CHL	CBD-CGD-O2D-CED
35	D	408	LHG	O6-C4-C5-C6
35	d	408	LHG	O6-C4-C5-C6
37	G	605	CHL	O1D-CGD-O2D-CED
37	N	609	CHL	O1D-CGD-O2D-CED
37	n	609	CHL	O1D-CGD-O2D-CED
37	g	605	CHL	O1D-CGD-O2D-CED
35	S	2630	LHG	C13-C14-C15-C16
35	s	2630	LHG	C13-C14-C15-C16
27	B	613	CLA	CAD-CBD-CGD-O1D
27	B	615	CLA	CAD-CBD-CGD-O1D
27	C	505	CLA	CAD-CBD-CGD-O1D
27	b	613	CLA	CAD-CBD-CGD-O1D
27	b	615	CLA	CAD-CBD-CGD-O1D
27	c	505	CLA	CAD-CBD-CGD-O1D
30	A	418	SQD	C5-C6-S-O9
30	B	621	SQD	C5-C6-S-O9
30	a	418	SQD	C5-C6-S-O9
30	b	621	SQD	C5-C6-S-O9
40	S	1623	NEX	C7-C8-C9-C10
40	s	1623	NEX	C7-C8-C9-C10
31	z	101	LMG	C37-C38-C39-C40
27	B	616	CLA	O1D-CGD-O2D-CED
37	n	609	CHL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
31	Z	101	LMG	C37-C38-C39-C40
27	B	602	CLA	C3-C5-C6-C7
27	b	602	CLA	C3-C5-C6-C7
37	Y	609	CHL	C3-C5-C6-C7
27	r	609	CLA	C2C-C3C-CAC-CBC
37	Y	609	CHL	CBA-CGA-O2A-C1
37	y	609	CHL	CBA-CGA-O2A-C1
35	G	2630	LHG	C1-C2-C3-O3
35	g	2630	LHG	C1-C2-C3-O3
32	H	102	DGD	C8A-C9A-CAA-CBA
27	D	403	CLA	C4-C3-C5-C6
27	b	606	CLA	C4-C3-C5-C6
27	d	403	CLA	C4-C3-C5-C6
27	B	613	CLA	C11-C12-C13-C15
27	C	507	CLA	C11-C12-C13-C15
27	C	509	CLA	C11-C10-C8-C7
27	C	512	CLA	C11-C12-C13-C15
27	Y	610	CLA	C11-C10-C8-C7
27	b	613	CLA	C11-C12-C13-C15
27	c	507	CLA	C11-C12-C13-C15
27	c	509	CLA	C11-C10-C8-C7
27	c	512	CLA	C11-C12-C13-C15
27	y	610	CLA	C11-C10-C8-C7
35	N	2630	LHG	O6-C4-C5-O7
35	S	2630	LHG	O6-C4-C5-O7
35	n	2630	LHG	O6-C4-C5-O7
35	s	2630	LHG	O6-C4-C5-O7
32	H	102	DGD	C3A-C4A-C5A-C6A
32	h	102	DGD	C3A-C4A-C5A-C6A
32	h	102	DGD	C8A-C9A-CAA-CBA
37	y	609	CHL	C3-C5-C6-C7
37	N	609	CHL	O1A-CGA-O2A-C1
31	C	521	LMG	C29-C30-C31-C32
35	D	408	LHG	C32-C33-C34-C35
27	R	609	CLA	C2C-C3C-CAC-CBC
31	a	413	LMG	C12-C13-C14-C15
31	c	521	LMG	C29-C30-C31-C32
35	d	408	LHG	C32-C33-C34-C35
37	G	605	CHL	CBD-CGD-O2D-CED
31	A	413	LMG	C12-C13-C14-C15
32	C	518	DGD	C5A-C6A-C7A-C8A
32	c	518	DGD	C5A-C6A-C7A-C8A

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Mol	Chain	Res	Type	Atoms
30	B	621	SQD	C23-C24-C25-C26
32	C	519	DGD	C1G-C2G-C3G-O3G
32	H	102	DGD	C2E-C1E-O5D-C6D
32	c	519	DGD	C1G-C2G-C3G-O3G
32	h	102	DGD	C2E-C1E-O5D-C6D
37	G	607	CHL	C1C-C2C-CMC-OMC
37	G	608	CHL	C1C-C2C-CMC-OMC
37	G	609	CHL	C1C-C2C-CMC-OMC
37	N	605	CHL	C1C-C2C-CMC-OMC
37	R	606	CHL	C1C-C2C-CMC-OMC
37	S	601	CHL	C1C-C2C-CMC-OMC
37	S	607	CHL	C1C-C2C-CMC-OMC
37	S	608	CHL	C1C-C2C-CMC-OMC
37	Y	605	CHL	C1C-C2C-CMC-OMC
37	g	607	CHL	C1C-C2C-CMC-OMC
37	g	608	CHL	C1C-C2C-CMC-OMC
37	g	609	CHL	C1C-C2C-CMC-OMC
37	n	605	CHL	C1C-C2C-CMC-OMC
37	r	606	CHL	C1C-C2C-CMC-OMC
37	s	601	CHL	C1C-C2C-CMC-OMC
37	s	607	CHL	C1C-C2C-CMC-OMC
37	s	608	CHL	C1C-C2C-CMC-OMC
37	y	605	CHL	C1C-C2C-CMC-OMC
30	A	412	SQD	O47-C45-C46-O48
30	a	412	SQD	O47-C45-C46-O48
27	C	508	CLA	C5-C6-C7-C8
27	c	508	CLA	C5-C6-C7-C8
30	A	412	SQD	C11-C12-C13-C14
37	r	608	CHL	O1A-CGA-O2A-C1
30	a	412	SQD	C11-C12-C13-C14
32	C	519	DGD	C2G-C3G-O3G-C1D
32	c	519	DGD	C2G-C3G-O3G-C1D
27	C	507	CLA	C8-C10-C11-C12
27	N	610	CLA	C15-C16-C17-C18
27	c	507	CLA	C8-C10-C11-C12
27	n	610	CLA	C15-C16-C17-C18
35	N	2630	LHG	C5-C4-O6-P
35	n	2630	LHG	C5-C4-O6-P
30	b	621	SQD	C23-C24-C25-C26
37	R	608	CHL	O1A-CGA-O2A-C1
27	B	606	CLA	C4-C3-C5-C6
34	D	405	PL9	C43-C44-C46-C47

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Mol	Chain	Res	Type	Atoms
34	d	405	PL9	C43-C44-C46-C47
37	N	605	CHL	CAA-CBA-CGA-O2A
37	n	605	CHL	CAA-CBA-CGA-O2A
27	B	612	CLA	C6-C7-C8-C9
27	B	613	CLA	C11-C10-C8-C9
27	B	616	CLA	C11-C10-C8-C9
27	B	616	CLA	C11-C12-C13-C14
27	B	617	CLA	C11-C10-C8-C9
27	C	512	CLA	C6-C7-C8-C9
27	b	612	CLA	C6-C7-C8-C9
27	b	613	CLA	C11-C10-C8-C9
27	b	616	CLA	C11-C10-C8-C9
27	b	616	CLA	C11-C12-C13-C14
27	b	617	CLA	C11-C10-C8-C9
27	c	512	CLA	C6-C7-C8-C9
37	G	601	CHL	C11-C10-C8-C9
37	N	607	CHL	C14-C13-C15-C16
37	g	601	CHL	C11-C10-C8-C9
37	n	607	CHL	C14-C13-C15-C16
37	Y	601	CHL	CBD-CGD-O2D-CED
27	c	505	CLA	C3-C5-C6-C7
31	C	521	LMG	C16-C17-C18-C19
31	c	521	LMG	C16-C17-C18-C19
32	H	102	DGD	CDB-CEB-CFB-CGB
32	h	102	DGD	CDB-CEB-CFB-CGB
35	R	2630	LHG	C34-C35-C36-C37
35	r	2630	LHG	C34-C35-C36-C37
27	Y	603	CLA	C2A-CAA-CBA-CGA
27	y	603	CLA	C2A-CAA-CBA-CGA
31	b	622	LMG	C34-C35-C36-C37
31	B	622	LMG	C34-C35-C36-C37
37	y	601	CHL	CBD-CGD-O2D-CED
37	G	609	CHL	C4C-C3C-CAC-CBC
37	g	609	CHL	C4C-C3C-CAC-CBC
27	C	505	CLA	C3-C5-C6-C7
27	B	604	CLA	C16-C17-C18-C19
27	b	604	CLA	C16-C17-C18-C19
27	B	616	CLA	C13-C15-C16-C17
27	b	616	CLA	C13-C15-C16-C17
27	A	407	CLA	C1-C2-C3-C4
27	C	513	CLA	C1-C2-C3-C4
27	G	603	CLA	C1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
27	G	604	CLA	C1-C2-C3-C4
27	G	611	CLA	C1-C2-C3-C4
27	G	612	CLA	C1-C2-C3-C4
27	G	613	CLA	C1-C2-C3-C4
27	G	614	CLA	C1-C2-C3-C4
27	N	603	CLA	C1-C2-C3-C4
27	N	604	CLA	C1-C2-C3-C4
27	N	611	CLA	C1-C2-C3-C4
27	N	612	CLA	C1-C2-C3-C4
27	N	613	CLA	C1-C2-C3-C4
27	N	614	CLA	C1-C2-C3-C4
27	R	601	CLA	C1-C2-C3-C4
27	R	603	CLA	C1-C2-C3-C4
27	R	604	CLA	C1-C2-C3-C4
27	R	609	CLA	C1-C2-C3-C4
27	R	611	CLA	C1-C2-C3-C4
27	R	612	CLA	C1-C2-C3-C4
27	R	613	CLA	C1-C2-C3-C4
27	R	616	CLA	C1-C2-C3-C4
27	S	602	CLA	C1-C2-C3-C4
27	S	603	CLA	C1-C2-C3-C4
27	S	604	CLA	C1-C2-C3-C4
27	S	609	CLA	C1-C2-C3-C4
27	S	610	CLA	C1-C2-C3-C4
27	S	611	CLA	C1-C2-C3-C4
27	S	612	CLA	C1-C2-C3-C4
27	S	613	CLA	C1-C2-C3-C4
27	S	614	CLA	C1-C2-C3-C4
27	Y	603	CLA	C1-C2-C3-C4
27	Y	604	CLA	C1-C2-C3-C4
27	Y	614	CLA	C1-C2-C3-C4
27	a	407	CLA	C1-C2-C3-C4
27	c	513	CLA	C1-C2-C3-C4
27	g	603	CLA	C1-C2-C3-C4
27	g	604	CLA	C1-C2-C3-C4
27	g	611	CLA	C1-C2-C3-C4
27	g	612	CLA	C1-C2-C3-C4
27	g	613	CLA	C1-C2-C3-C4
27	g	614	CLA	C1-C2-C3-C4
27	n	603	CLA	C1-C2-C3-C4
27	n	604	CLA	C1-C2-C3-C4
27	n	611	CLA	C1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
27	n	612	CLA	C1-C2-C3-C4
27	n	613	CLA	C1-C2-C3-C4
27	n	614	CLA	C1-C2-C3-C4
27	r	601	CLA	C1-C2-C3-C4
27	r	603	CLA	C1-C2-C3-C4
27	r	604	CLA	C1-C2-C3-C4
27	r	609	CLA	C1-C2-C3-C4
27	r	611	CLA	C1-C2-C3-C4
27	r	612	CLA	C1-C2-C3-C4
27	r	613	CLA	C1-C2-C3-C4
27	r	616	CLA	C1-C2-C3-C4
27	s	602	CLA	C1-C2-C3-C4
27	s	603	CLA	C1-C2-C3-C4
27	s	604	CLA	C1-C2-C3-C4
27	s	609	CLA	C1-C2-C3-C4
27	s	610	CLA	C1-C2-C3-C4
27	s	611	CLA	C1-C2-C3-C4
27	s	612	CLA	C1-C2-C3-C4
27	s	613	CLA	C1-C2-C3-C4
27	s	614	CLA	C1-C2-C3-C4
27	y	603	CLA	C1-C2-C3-C4
27	y	604	CLA	C1-C2-C3-C4
27	y	614	CLA	C1-C2-C3-C4
37	G	606	CHL	C1-C2-C3-C4
37	G	607	CHL	C1-C2-C3-C4
37	G	608	CHL	C1-C2-C3-C4
37	G	609	CHL	C1-C2-C3-C4
37	N	601	CHL	C1-C2-C3-C4
37	N	606	CHL	C1-C2-C3-C4
37	N	608	CHL	C1-C2-C3-C4
37	N	609	CHL	C1-C2-C3-C4
37	R	606	CHL	C1-C2-C3-C4
37	R	607	CHL	C1-C2-C3-C4
37	R	608	CHL	C1-C2-C3-C4
37	S	606	CHL	C1-C2-C3-C4
37	S	607	CHL	C1-C2-C3-C4
37	Y	606	CHL	C1-C2-C3-C4
37	Y	607	CHL	C1-C2-C3-C4
37	Y	608	CHL	C1-C2-C3-C4
37	g	606	CHL	C1-C2-C3-C4
37	g	607	CHL	C1-C2-C3-C4
37	g	608	CHL	C1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
37	g	609	CHL	C1-C2-C3-C4
37	n	601	CHL	C1-C2-C3-C4
37	n	606	CHL	C1-C2-C3-C4
37	n	608	CHL	C1-C2-C3-C4
37	n	609	CHL	C1-C2-C3-C4
37	r	606	CHL	C1-C2-C3-C4
37	r	607	CHL	C1-C2-C3-C4
37	r	608	CHL	C1-C2-C3-C4
37	s	606	CHL	C1-C2-C3-C4
37	s	607	CHL	C1-C2-C3-C4
37	y	606	CHL	C1-C2-C3-C4
37	y	607	CHL	C1-C2-C3-C4
37	y	608	CHL	C1-C2-C3-C4
27	B	612	CLA	O1A-CGA-O2A-C1
30	B	621	SQD	C46-C45-O47-C7
30	b	621	SQD	C46-C45-O47-C7
35	S	2630	LHG	O6-C4-C5-C6
35	s	2630	LHG	O6-C4-C5-C6
30	a	418	SQD	C26-C27-C28-C29
35	N	2630	LHG	O9-C7-O7-C5
35	n	2630	LHG	O9-C7-O7-C5
27	b	612	CLA	O1A-CGA-O2A-C1
27	C	505	CLA	C2-C1-O2A-CGA
27	C	511	CLA	C2-C1-O2A-CGA
27	G	602	CLA	C2-C1-O2A-CGA
27	c	505	CLA	C2-C1-O2A-CGA
27	c	511	CLA	C2-C1-O2A-CGA
27	g	602	CLA	C2-C1-O2A-CGA
37	N	601	CHL	C2-C1-O2A-CGA
37	N	607	CHL	C2-C1-O2A-CGA
37	N	609	CHL	C2-C1-O2A-CGA
37	R	607	CHL	C2-C1-O2A-CGA
37	n	601	CHL	C2-C1-O2A-CGA
37	n	607	CHL	C2-C1-O2A-CGA
37	n	609	CHL	C2-C1-O2A-CGA
37	r	607	CHL	C2-C1-O2A-CGA
30	A	418	SQD	C26-C27-C28-C29
35	d	410	LHG	C28-C29-C30-C31
31	D	411	LMG	C10-C11-C12-C13
31	d	411	LMG	C10-C11-C12-C13
35	N	2630	LHG	C33-C34-C35-C36
37	Y	609	CHL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
37	y	609	CHL	O1A-CGA-O2A-C1
35	D	410	LHG	C28-C29-C30-C31
35	n	2630	LHG	C33-C34-C35-C36
27	B	612	CLA	CBA-CGA-O2A-C1
27	b	612	CLA	CBA-CGA-O2A-C1
30	A	412	SQD	C9-C10-C11-C12
30	a	412	SQD	C9-C10-C11-C12
27	b	604	CLA	O1D-CGD-O2D-CED
29	C	516	BCR	C5-C6-C7-C8
29	D	404	BCR	C23-C24-C25-C30
29	c	516	BCR	C5-C6-C7-C8
29	d	404	BCR	C23-C24-C25-C30
38	N	1620	LUT	C5-C6-C7-C8
38	n	1620	LUT	C5-C6-C7-C8
32	c	518	DGD	C3A-C4A-C5A-C6A
27	C	507	CLA	C5-C6-C7-C8
27	c	507	CLA	C5-C6-C7-C8
32	C	518	DGD	C3A-C4A-C5A-C6A
37	G	605	CHL	C2A-CAA-CBA-CGA
37	g	605	CHL	C2A-CAA-CBA-CGA
27	B	604	CLA	O1D-CGD-O2D-CED
35	L	101	LHG	O7-C5-C6-O8
35	l	101	LHG	O7-C5-C6-O8
27	Y	613	CLA	CBA-CGA-O2A-C1
27	y	613	CLA	CBA-CGA-O2A-C1
35	D	409	LHG	C3-O3-P-O6
35	L	101	LHG	C3-O3-P-O6
35	S	2630	LHG	C3-O3-P-O6
35	d	409	LHG	C3-O3-P-O6
35	l	101	LHG	C3-O3-P-O6
27	A	406	CLA	C13-C15-C16-C17
27	C	512	CLA	C16-C17-C18-C20
27	c	512	CLA	C16-C17-C18-C20
27	N	610	CLA	C5-C6-C7-C8
30	A	418	SQD	C33-C34-C35-C36
30	a	418	SQD	C33-C34-C35-C36
35	L	101	LHG	C4-C5-C6-O8
35	l	101	LHG	C4-C5-C6-O8
31	Z	101	LMG	C16-C17-C18-C19
31	z	101	LMG	C16-C17-C18-C19
27	n	610	CLA	C5-C6-C7-C8
27	C	502	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
27	C	505	CLA	C11-C10-C8-C7
27	G	602	CLA	C11-C10-C8-C7
27	Y	610	CLA	C11-C12-C13-C15
27	Y	611	CLA	C11-C10-C8-C7
27	c	502	CLA	C11-C10-C8-C7
27	c	505	CLA	C11-C10-C8-C7
27	g	602	CLA	C11-C10-C8-C7
27	y	610	CLA	C11-C12-C13-C15
27	y	611	CLA	C11-C10-C8-C7
35	L	101	LHG	C33-C34-C35-C36
35	l	101	LHG	C33-C34-C35-C36
27	B	613	CLA	C14-C13-C15-C16
27	C	504	CLA	C14-C13-C15-C16
27	C	509	CLA	C11-C12-C13-C14
27	R	602	CLA	C11-C12-C13-C14
27	Y	610	CLA	C11-C10-C8-C9
27	b	613	CLA	C14-C13-C15-C16
27	c	504	CLA	C14-C13-C15-C16
27	c	509	CLA	C11-C12-C13-C14
27	r	602	CLA	C11-C12-C13-C14
27	r	610	CLA	C11-C12-C13-C14
27	y	610	CLA	C11-C10-C8-C9
27	B	604	CLA	C5-C6-C7-C8
27	G	610	CLA	C16-C17-C18-C20
31	B	622	LMG	C18-C19-C20-C21
27	a	406	CLA	C13-C15-C16-C17
27	b	604	CLA	C5-C6-C7-C8
31	b	622	LMG	C18-C19-C20-C21
27	g	610	CLA	C16-C17-C18-C20
27	C	503	CLA	CBA-CGA-O2A-C1
27	c	503	CLA	CBA-CGA-O2A-C1
27	Y	613	CLA	C13-C15-C16-C17
27	y	613	CLA	C13-C15-C16-C17
37	G	601	CHL	C10-C11-C12-C13
37	g	601	CHL	C10-C11-C12-C13
29	B	620	BCR	C21-C22-C23-C24
29	b	620	BCR	C21-C22-C23-C24
27	R	602	CLA	C4-C3-C5-C6
27	r	602	CLA	C4-C3-C5-C6
27	R	609	CLA	C4C-C3C-CAC-CBC
27	r	609	CLA	C4C-C3C-CAC-CBC
31	C	521	LMG	C29-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
31	c	521	LMG	C29-C28-O8-C9
34	D	405	PL9	C7-C8-C9-C10
34	d	405	PL9	C7-C8-C9-C10
32	C	518	DGD	C6A-C7A-C8A-C9A
32	c	518	DGD	C6A-C7A-C8A-C9A
27	Y	614	CLA	CBA-CGA-O2A-C1
27	y	614	CLA	CBA-CGA-O2A-C1
37	G	609	CHL	CBA-CGA-O2A-C1
37	g	609	CHL	CBA-CGA-O2A-C1
39	Y	1622	XAT	C13-C14-C15-C35
39	y	1622	XAT	C13-C14-C15-C35
34	D	405	PL9	C34-C36-C37-C38
34	d	405	PL9	C34-C36-C37-C38
32	C	518	DGD	O6D-C5D-C6D-O5D
32	c	518	DGD	O6D-C5D-C6D-O5D
27	B	602	CLA	C15-C16-C17-C18
27	b	602	CLA	C15-C16-C17-C18
31	C	521	LMG	C30-C31-C32-C33
31	c	521	LMG	C30-C31-C32-C33
27	y	613	CLA	O1A-CGA-O2A-C1
30	A	412	SQD	C35-C36-C37-C38
27	Y	610	CLA	O1A-CGA-O2A-C1
27	Y	613	CLA	O1A-CGA-O2A-C1
27	y	610	CLA	O1A-CGA-O2A-C1
30	a	412	SQD	C35-C36-C37-C38
27	B	611	CLA	C2-C1-O2A-CGA
27	C	502	CLA	C2-C1-O2A-CGA
27	R	610	CLA	C2-C1-O2A-CGA
27	b	611	CLA	C2-C1-O2A-CGA
27	c	502	CLA	C2-C1-O2A-CGA
27	r	610	CLA	C2-C1-O2A-CGA
27	R	610	CLA	C5-C6-C7-C8
27	b	613	CLA	C15-C16-C17-C18
27	r	602	CLA	C15-C16-C17-C18
27	r	610	CLA	C5-C6-C7-C8
27	B	613	CLA	C15-C16-C17-C18
30	a	418	SQD	O6-C44-C45-O47
27	R	602	CLA	C15-C16-C17-C18
37	S	606	CHL	C3A-C2A-CAA-CBA
37	s	606	CHL	C3A-C2A-CAA-CBA
35	G	2630	LHG	C11-C10-C9-C8
27	N	603	CLA	O2A-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
27	R	616	CLA	O2A-C1-C2-C3
27	n	603	CLA	O2A-C1-C2-C3
27	r	616	CLA	O2A-C1-C2-C3
37	R	608	CHL	O2A-C1-C2-C3
37	r	608	CHL	O2A-C1-C2-C3
29	D	404	BCR	C9-C10-C11-C12
29	d	404	BCR	C9-C10-C11-C12
39	r	622	XAT	C33-C34-C35-C15
30	B	621	SQD	C12-C13-C14-C15
31	B	622	LMG	C36-C37-C38-C39
31	b	622	LMG	C36-C37-C38-C39
35	g	2630	LHG	C11-C10-C9-C8
27	A	410	CLA	C4-C3-C5-C6
27	a	410	CLA	C4-C3-C5-C6
30	b	621	SQD	C12-C13-C14-C15
34	D	405	PL9	C4-C3-C7-C8
34	d	405	PL9	C4-C3-C7-C8
32	C	519	DGD	O6D-C5D-C6D-O5D
32	c	519	DGD	O6D-C5D-C6D-O5D
27	B	603	CLA	C14-C13-C15-C16
27	B	613	CLA	C11-C12-C13-C14
27	C	501	CLA	C14-C13-C15-C16
27	C	504	CLA	C11-C12-C13-C14
27	G	610	CLA	C11-C12-C13-C14
27	R	610	CLA	C11-C12-C13-C14
27	b	603	CLA	C14-C13-C15-C16
27	b	613	CLA	C11-C12-C13-C14
27	c	501	CLA	C14-C13-C15-C16
27	c	504	CLA	C11-C12-C13-C14
27	g	610	CLA	C11-C12-C13-C14
37	Y	609	CHL	C11-C12-C13-C14
37	y	609	CHL	C11-C12-C13-C14
27	b	617	CLA	C13-C15-C16-C17
30	A	418	SQD	C44-C45-C46-O48
30	a	418	SQD	C44-C45-C46-O48
40	G	1623	NEX	C39-C29-C30-C31
40	N	1623	NEX	C39-C29-C30-C31
40	R	623	NEX	C39-C29-C30-C31
40	S	1623	NEX	C39-C29-C30-C31
40	Y	1623	NEX	C39-C29-C30-C31
40	g	1623	NEX	C39-C29-C30-C31
40	n	1623	NEX	C39-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
40	r	623	NEX	C39-C29-C30-C31
40	s	1623	NEX	C39-C29-C30-C31
40	y	1623	NEX	C39-C29-C30-C31
31	D	411	LMG	C12-C13-C14-C15
31	d	411	LMG	C12-C13-C14-C15
27	B	617	CLA	C13-C15-C16-C17
27	B	605	CLA	C16-C17-C18-C19
27	b	605	CLA	C16-C17-C18-C19
28	A	408	PHO	O2A-C1-C2-C3
28	a	408	PHO	O2A-C1-C2-C3
27	Y	610	CLA	CBA-CGA-O2A-C1
27	y	610	CLA	CBA-CGA-O2A-C1
39	Y	1622	XAT	C31-C32-C33-C34
39	y	1622	XAT	C31-C32-C33-C34
35	G	2630	LHG	C14-C15-C16-C17
32	C	519	DGD	C1G-C2G-O2G-C1B
32	c	519	DGD	C1G-C2G-O2G-C1B
27	B	604	CLA	C1A-C2A-CAA-CBA
27	B	612	CLA	C1A-C2A-CAA-CBA
27	C	511	CLA	C1A-C2A-CAA-CBA
27	D	402	CLA	C1A-C2A-CAA-CBA
27	S	603	CLA	C1A-C2A-CAA-CBA
27	Y	610	CLA	C1A-C2A-CAA-CBA
27	b	604	CLA	C1A-C2A-CAA-CBA
27	b	612	CLA	C1A-C2A-CAA-CBA
27	c	511	CLA	C1A-C2A-CAA-CBA
27	d	402	CLA	C1A-C2A-CAA-CBA
27	s	603	CLA	C1A-C2A-CAA-CBA
27	y	610	CLA	C1A-C2A-CAA-CBA
37	R	608	CHL	C1A-C2A-CAA-CBA
37	r	608	CHL	C1A-C2A-CAA-CBA
35	g	2630	LHG	C14-C15-C16-C17
27	B	606	CLA	C12-C13-C15-C16
27	b	606	CLA	C12-C13-C15-C16
39	R	622	XAT	C33-C34-C35-C15
35	s	2630	LHG	C3-O3-P-O6
37	N	601	CHL	C3C-C2C-CMC-OMC
37	S	608	CHL	C3C-C2C-CMC-OMC
37	Y	607	CHL	C3C-C2C-CMC-OMC
37	Y	608	CHL	C3C-C2C-CMC-OMC
37	n	601	CHL	C3C-C2C-CMC-OMC
37	s	608	CHL	C3C-C2C-CMC-OMC

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Mol	Chain	Res	Type	Atoms
37	y	607	CHL	C3C-C2C-CMC-OMC
37	y	608	CHL	C3C-C2C-CMC-OMC
27	C	503	CLA	O1A-CGA-O2A-C1
27	Y	614	CLA	O1A-CGA-O2A-C1
27	c	503	CLA	O1A-CGA-O2A-C1
27	B	611	CLA	C15-C16-C17-C18
37	R	606	CHL	C2A-CAA-CBA-CGA
37	r	606	CHL	C2A-CAA-CBA-CGA
35	l	101	LHG	O9-C7-O7-C5
37	g	608	CHL	O2A-C1-C2-C3
27	b	611	CLA	C15-C16-C17-C18
37	g	609	CHL	O1A-CGA-O2A-C1
35	R	2630	LHG	C26-C27-C28-C29
35	r	2630	LHG	C26-C27-C28-C29
27	B	617	CLA	C15-C16-C17-C18
27	b	617	CLA	C15-C16-C17-C18
27	A	410	CLA	C8-C10-C11-C12
27	a	410	CLA	C8-C10-C11-C12
27	y	614	CLA	O1A-CGA-O2A-C1
37	G	609	CHL	O1A-CGA-O2A-C1
31	Z	101	LMG	C32-C33-C34-C35
35	L	101	LHG	O9-C7-O7-C5
31	z	101	LMG	C32-C33-C34-C35
40	G	1623	NEX	C28-C29-C30-C31
40	N	1623	NEX	C28-C29-C30-C31
40	R	623	NEX	C28-C29-C30-C31
40	S	1623	NEX	C28-C29-C30-C31
40	Y	1623	NEX	C28-C29-C30-C31
40	g	1623	NEX	C28-C29-C30-C31
40	n	1623	NEX	C28-C29-C30-C31
40	r	623	NEX	C28-C29-C30-C31
40	s	1623	NEX	C28-C29-C30-C31
40	y	1623	NEX	C28-C29-C30-C31
30	A	418	SQD	O6-C44-C45-O47
32	h	102	DGD	C1B-C2B-C3B-C4B
38	N	1621	LUT	C29-C30-C31-C32
38	n	1621	LUT	C29-C30-C31-C32
27	b	611	CLA	C13-C15-C16-C17
32	H	102	DGD	C1B-C2B-C3B-C4B
27	B	611	CLA	C13-C15-C16-C17
27	A	406	CLA	C2C-C3C-CAC-CBC
35	D	410	LHG	C1-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
35	L	101	LHG	C1-C2-C3-O3
35	d	410	LHG	C1-C2-C3-O3
35	l	101	LHG	C1-C2-C3-O3
37	Y	609	CHL	C4-C3-C5-C6
37	y	609	CHL	C4-C3-C5-C6
27	R	616	CLA	C2-C1-O2A-CGA
27	r	616	CLA	C2-C1-O2A-CGA
37	Y	606	CHL	C2-C1-O2A-CGA
37	Y	607	CHL	C2-C1-O2A-CGA
37	s	601	CHL	C2-C1-O2A-CGA
37	y	606	CHL	C2-C1-O2A-CGA
37	y	607	CHL	C2-C1-O2A-CGA
27	A	410	CLA	C2-C3-C5-C6
27	a	410	CLA	C2-C3-C5-C6
32	h	102	DGD	C9B-CAB-CBB-CCB
32	H	102	DGD	C9B-CAB-CBB-CCB
27	R	602	CLA	C2A-CAA-CBA-CGA
27	r	602	CLA	C2A-CAA-CBA-CGA
37	G	608	CHL	O2A-C1-C2-C3
29	C	516	BCR	C1-C6-C7-C8
29	C	514	BCR	C23-C24-C25-C30
29	H	101	BCR	C1-C6-C7-C8
29	c	516	BCR	C1-C6-C7-C8
29	c	514	BCR	C23-C24-C25-C30
29	h	101	BCR	C1-C6-C7-C8
38	G	1621	LUT	C1-C6-C7-C8
38	Y	1621	LUT	C1-C6-C7-C8
38	g	1621	LUT	C1-C6-C7-C8
38	y	1621	LUT	C1-C6-C7-C8
27	a	406	CLA	C2C-C3C-CAC-CBC
30	A	418	SQD	O47-C7-C8-C9
30	a	418	SQD	O47-C7-C8-C9
30	B	621	SQD	C13-C14-C15-C16
30	b	621	SQD	C13-C14-C15-C16
27	c	507	CLA	C16-C17-C18-C20
35	D	409	LHG	C12-C13-C14-C15
35	d	409	LHG	C12-C13-C14-C15
27	C	507	CLA	C16-C17-C18-C20
27	C	510	CLA	C8-C10-C11-C12
27	c	510	CLA	C8-C10-C11-C12
37	R	607	CHL	CAA-CBA-CGA-O2A
27	B	605	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
27	S	604	CLA	CAA-CBA-CGA-O2A
27	s	604	CLA	CAA-CBA-CGA-O2A
37	r	607	CHL	CAA-CBA-CGA-O2A
27	Y	612	CLA	C4-C3-C5-C6
27	y	612	CLA	C4-C3-C5-C6
27	B	602	CLA	C11-C10-C8-C7
27	B	614	CLA	C11-C10-C8-C7
27	D	402	CLA	C11-C12-C13-C15
27	b	602	CLA	C11-C10-C8-C7
27	b	614	CLA	C11-C10-C8-C7
27	d	402	CLA	C11-C12-C13-C15
27	b	605	CLA	C10-C11-C12-C13
32	C	518	DGD	C2E-C1E-O5D-C6D
32	c	518	DGD	C2E-C1E-O5D-C6D
32	C	519	DGD	O2G-C2G-C3G-O3G
32	c	519	DGD	O2G-C2G-C3G-O3G
27	B	606	CLA	CBA-CGA-O2A-C1
27	b	606	CLA	CBA-CGA-O2A-C1
27	G	612	CLA	O2A-C1-C2-C3
27	R	609	CLA	O2A-C1-C2-C3
27	R	612	CLA	O2A-C1-C2-C3
27	g	612	CLA	O2A-C1-C2-C3
27	r	609	CLA	O2A-C1-C2-C3
27	r	612	CLA	O2A-C1-C2-C3
37	G	606	CHL	O2A-C1-C2-C3
37	G	609	CHL	O2A-C1-C2-C3
37	N	606	CHL	O2A-C1-C2-C3
37	N	608	CHL	O2A-C1-C2-C3
37	N	609	CHL	O2A-C1-C2-C3
37	S	607	CHL	O2A-C1-C2-C3
37	Y	608	CHL	O2A-C1-C2-C3
37	g	606	CHL	O2A-C1-C2-C3
37	g	609	CHL	O2A-C1-C2-C3
37	n	606	CHL	O2A-C1-C2-C3
37	n	608	CHL	O2A-C1-C2-C3
37	n	609	CHL	O2A-C1-C2-C3
37	y	608	CHL	O2A-C1-C2-C3
27	R	610	CLA	CAA-CBA-CGA-O2A
27	r	610	CLA	CAA-CBA-CGA-O2A
35	g	2630	LHG	O8-C23-C24-C25
27	C	505	CLA	C5-C6-C7-C8
27	c	505	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
27	G	610	CLA	C16-C17-C18-C19
27	g	610	CLA	C16-C17-C18-C19
31	D	411	LMG	C29-C28-O8-C9
31	d	411	LMG	C29-C28-O8-C9
28	A	409	PHO	CAA-CBA-CGA-O2A
28	a	409	PHO	CAA-CBA-CGA-O2A
35	G	2630	LHG	O8-C23-C24-C25
35	S	2630	LHG	O8-C23-C24-C25
35	s	2630	LHG	O8-C23-C24-C25
27	C	506	CLA	C2-C3-C5-C6
27	c	506	CLA	C2-C3-C5-C6
27	G	610	CLA	CAA-CBA-CGA-O2A
27	C	507	CLA	C11-C10-C8-C9
27	C	512	CLA	C11-C12-C13-C14
27	D	402	CLA	C11-C12-C13-C14
27	Y	611	CLA	C6-C7-C8-C9
27	c	507	CLA	C11-C10-C8-C9
27	c	512	CLA	C11-C12-C13-C14
27	d	402	CLA	C11-C12-C13-C14
27	y	611	CLA	C6-C7-C8-C9
27	B	613	CLA	C8-C10-C11-C12
27	b	613	CLA	C8-C10-C11-C12
27	B	609	CLA	C3A-C2A-CAA-CBA
27	C	504	CLA	C3A-C2A-CAA-CBA
27	S	603	CLA	C3A-C2A-CAA-CBA
27	b	609	CLA	C3A-C2A-CAA-CBA
27	c	504	CLA	C3A-C2A-CAA-CBA
27	s	603	CLA	C3A-C2A-CAA-CBA
37	N	608	CHL	C3A-C2A-CAA-CBA
37	n	608	CHL	C3A-C2A-CAA-CBA
27	g	610	CLA	CAA-CBA-CGA-O2A
27	B	610	CLA	CAD-CBD-CGD-O2D
27	C	501	CLA	CAD-CBD-CGD-O2D
27	C	513	CLA	CAD-CBD-CGD-O2D
27	D	402	CLA	CAD-CBD-CGD-O2D
27	D	403	CLA	CAD-CBD-CGD-O2D
27	R	610	CLA	CAD-CBD-CGD-O2D
27	R	611	CLA	CAD-CBD-CGD-O2D
27	S	612	CLA	CAD-CBD-CGD-O2D
27	Y	610	CLA	CAD-CBD-CGD-O2D
27	b	608	CLA	CAD-CBD-CGD-O2D
27	b	610	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
27	c	501	CLA	CAD-CBD-CGD-O2D
27	c	513	CLA	CAD-CBD-CGD-O2D
27	d	402	CLA	CAD-CBD-CGD-O2D
27	d	403	CLA	CAD-CBD-CGD-O2D
27	r	610	CLA	CAD-CBD-CGD-O2D
27	r	611	CLA	CAD-CBD-CGD-O2D
27	s	612	CLA	CAD-CBD-CGD-O2D
27	y	610	CLA	CAD-CBD-CGD-O2D
37	G	605	CHL	CAD-CBD-CGD-O2D
37	G	608	CHL	CAD-CBD-CGD-O2D
37	G	609	CHL	CAD-CBD-CGD-O2D
37	g	605	CHL	CAD-CBD-CGD-O2D
37	g	608	CHL	CAD-CBD-CGD-O2D
37	g	609	CHL	CAD-CBD-CGD-O2D
40	G	1623	NEX	C7-C8-C9-C19
40	g	1623	NEX	C7-C8-C9-C19
27	N	613	CLA	C2A-CAA-CBA-CGA
27	n	613	CLA	C2A-CAA-CBA-CGA
31	D	411	LMG	O9-C10-O7-C8
31	d	411	LMG	O9-C10-O7-C8
32	C	519	DGD	O1B-C1B-O2G-C2G
32	c	519	DGD	O1B-C1B-O2G-C2G
37	S	601	CHL	C2-C1-O2A-CGA
27	B	617	CLA	CAA-CBA-CGA-O2A
27	C	501	CLA	CAA-CBA-CGA-O2A
27	N	603	CLA	CAA-CBA-CGA-O2A
27	R	601	CLA	CAA-CBA-CGA-O2A
27	b	617	CLA	CAA-CBA-CGA-O2A
27	c	501	CLA	CAA-CBA-CGA-O2A
27	r	601	CLA	CAA-CBA-CGA-O2A
32	H	102	DGD	O1B-C1B-C2B-C3B
27	a	410	CLA	C11-C12-C13-C15
32	h	102	DGD	O1B-C1B-C2B-C3B
27	N	612	CLA	CAA-CBA-CGA-O2A
27	n	603	CLA	CAA-CBA-CGA-O2A
27	n	612	CLA	CAA-CBA-CGA-O2A
28	A	408	PHO	C2C-C3C-CAC-CBC
28	a	408	PHO	C2C-C3C-CAC-CBC
39	G	1622	XAT	O4-C6-C7-C8
39	R	622	XAT	O24-C26-C27-C28
39	g	1622	XAT	O4-C6-C7-C8
39	r	622	XAT	O24-C26-C27-C28

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Mol	Chain	Res	Type	Atoms
40	N	1623	NEX	O24-C26-C27-C28
40	R	623	NEX	O24-C26-C27-C28
40	Y	1623	NEX	O24-C26-C27-C28
40	n	1623	NEX	O24-C26-C27-C28
40	r	623	NEX	O24-C26-C27-C28
40	y	1623	NEX	O24-C26-C27-C28
27	g	603	CLA	CAA-CBA-CGA-O2A
32	c	520	DGD	O2G-C1B-C2B-C3B
37	S	601	CHL	CAA-CBA-CGA-O2A
37	s	601	CHL	CAA-CBA-CGA-O2A
27	A	410	CLA	C11-C12-C13-C15
27	S	609	CLA	O2A-C1-C2-C3
27	s	609	CLA	O2A-C1-C2-C3
37	Y	607	CHL	O2A-C1-C2-C3
37	s	607	CHL	O2A-C1-C2-C3
37	y	607	CHL	O2A-C1-C2-C3
27	B	603	CLA	O2A-C1-C2-C3
27	C	512	CLA	O2A-C1-C2-C3
27	D	402	CLA	O2A-C1-C2-C3
27	b	603	CLA	O2A-C1-C2-C3
27	c	512	CLA	O2A-C1-C2-C3
27	d	402	CLA	O2A-C1-C2-C3
28	A	409	PHO	O2A-C1-C2-C3
28	a	409	PHO	O2A-C1-C2-C3
37	G	601	CHL	O2A-C1-C2-C3
37	S	601	CHL	O2A-C1-C2-C3
37	g	601	CHL	O2A-C1-C2-C3
37	s	601	CHL	O2A-C1-C2-C3
35	S	2630	LHG	C16-C17-C18-C19
35	s	2630	LHG	C16-C17-C18-C19
27	R	611	CLA	C2A-CAA-CBA-CGA
27	r	611	CLA	C2A-CAA-CBA-CGA
28	a	408	PHO	O1D-CGD-O2D-CED
27	G	603	CLA	CAA-CBA-CGA-O2A
27	S	603	CLA	CAA-CBA-CGA-O2A
32	C	520	DGD	O2G-C1B-C2B-C3B
30	b	621	SQD	C10-C11-C12-C13
28	A	408	PHO	O1D-CGD-O2D-CED
30	B	621	SQD	C10-C11-C12-C13
27	A	407	CLA	CHA-CBD-CGD-O2D
27	B	613	CLA	CHA-CBD-CGD-O2D
27	B	617	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
27	B	617	CLA	CHA-CBD-CGD-O2D
27	C	503	CLA	CHA-CBD-CGD-O1D
27	C	503	CLA	CHA-CBD-CGD-O2D
27	C	507	CLA	CHA-CBD-CGD-O1D
27	C	507	CLA	CHA-CBD-CGD-O2D
27	C	509	CLA	CHA-CBD-CGD-O2D
27	C	510	CLA	CHA-CBD-CGD-O1D
27	G	604	CLA	CHA-CBD-CGD-O2D
27	G	612	CLA	CHA-CBD-CGD-O1D
27	G	612	CLA	CHA-CBD-CGD-O2D
27	N	614	CLA	CHA-CBD-CGD-O1D
27	N	614	CLA	CHA-CBD-CGD-O2D
27	R	602	CLA	CHA-CBD-CGD-O1D
27	R	602	CLA	CHA-CBD-CGD-O2D
27	S	602	CLA	CHA-CBD-CGD-O1D
27	S	602	CLA	CHA-CBD-CGD-O2D
27	Y	602	CLA	CHA-CBD-CGD-O1D
27	Y	602	CLA	CHA-CBD-CGD-O2D
27	a	407	CLA	CHA-CBD-CGD-O2D
27	b	613	CLA	CHA-CBD-CGD-O2D
27	b	617	CLA	CHA-CBD-CGD-O1D
27	b	617	CLA	CHA-CBD-CGD-O2D
27	c	503	CLA	CHA-CBD-CGD-O1D
27	c	503	CLA	CHA-CBD-CGD-O2D
27	c	507	CLA	CHA-CBD-CGD-O1D
27	c	507	CLA	CHA-CBD-CGD-O2D
27	c	510	CLA	CHA-CBD-CGD-O1D
27	g	604	CLA	CHA-CBD-CGD-O2D
27	g	612	CLA	CHA-CBD-CGD-O1D
27	g	612	CLA	CHA-CBD-CGD-O2D
27	n	614	CLA	CHA-CBD-CGD-O1D
27	n	614	CLA	CHA-CBD-CGD-O2D
27	r	602	CLA	CHA-CBD-CGD-O1D
27	r	602	CLA	CHA-CBD-CGD-O2D
27	s	602	CLA	CHA-CBD-CGD-O1D
27	s	602	CLA	CHA-CBD-CGD-O2D
27	y	602	CLA	CHA-CBD-CGD-O1D
27	y	602	CLA	CHA-CBD-CGD-O2D
27	G	602	CLA	CAA-CBA-CGA-O2A
27	N	602	CLA	CAA-CBA-CGA-O2A
27	g	602	CLA	CAA-CBA-CGA-O2A
27	n	602	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
31	C	521	LMG	O7-C10-C11-C12
31	c	521	LMG	O7-C10-C11-C12
27	r	602	CLA	C13-C15-C16-C17
35	S	2630	LHG	C33-C34-C35-C36
27	B	609	CLA	CAA-CBA-CGA-O2A
27	b	609	CLA	CAA-CBA-CGA-O2A
27	s	603	CLA	CAA-CBA-CGA-O2A
35	s	2630	LHG	C33-C34-C35-C36
31	C	521	LMG	O7-C8-C9-O8
31	c	521	LMG	O7-C8-C9-O8
35	N	2630	LHG	O7-C5-C6-O8
35	n	2630	LHG	O7-C5-C6-O8
27	R	602	CLA	C13-C15-C16-C17
35	l	101	LHG	C35-C36-C37-C38
27	B	606	CLA	O1A-CGA-O2A-C1
27	b	606	CLA	O1A-CGA-O2A-C1
27	Y	602	CLA	CAA-CBA-CGA-O2A
27	y	602	CLA	CAA-CBA-CGA-O2A
31	C	521	LMG	O8-C28-C29-C30
31	c	521	LMG	O8-C28-C29-C30
35	L	101	LHG	C35-C36-C37-C38
28	A	409	PHO	CHA-CBD-CGD-O1D
28	A	409	PHO	CHA-CBD-CGD-O2D
28	a	409	PHO	CHA-CBD-CGD-O1D
28	a	409	PHO	CHA-CBD-CGD-O2D
32	C	518	DGD	CDB-CEB-CFB-CGB
32	c	518	DGD	CDB-CEB-CFB-CGB
27	A	405	CLA	C11-C12-C13-C15
27	a	405	CLA	C11-C12-C13-C15
27	d	403	CLA	C2-C3-C5-C6
37	Y	609	CHL	C12-C13-C15-C16
37	y	609	CHL	C12-C13-C15-C16
27	C	506	CLA	C11-C10-C8-C9
27	C	510	CLA	C11-C10-C8-C9
27	D	403	CLA	C11-C12-C13-C14
27	c	506	CLA	C11-C10-C8-C9
27	c	510	CLA	C11-C10-C8-C9
27	d	403	CLA	C11-C12-C13-C14
37	Y	609	CHL	C11-C10-C8-C9
37	Y	609	CHL	C14-C13-C15-C16
37	y	609	CHL	C11-C10-C8-C9
37	y	609	CHL	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
35	D	409	LHG	C23-C24-C25-C26
35	d	409	LHG	C23-C24-C25-C26
35	l	101	LHG	O2-C2-C3-O3
27	G	603	CLA	O2A-C1-C2-C3
27	G	614	CLA	O2A-C1-C2-C3
27	N	614	CLA	O2A-C1-C2-C3
27	R	601	CLA	O2A-C1-C2-C3
27	S	611	CLA	O2A-C1-C2-C3
27	S	614	CLA	O2A-C1-C2-C3
27	Y	614	CLA	O2A-C1-C2-C3
27	g	614	CLA	O2A-C1-C2-C3
27	n	614	CLA	O2A-C1-C2-C3
27	r	601	CLA	O2A-C1-C2-C3
27	s	614	CLA	O2A-C1-C2-C3
27	y	614	CLA	O2A-C1-C2-C3
37	G	607	CHL	O2A-C1-C2-C3
37	R	606	CHL	O2A-C1-C2-C3
37	g	607	CHL	O2A-C1-C2-C3
37	r	606	CHL	O2A-C1-C2-C3
27	B	602	CLA	CBA-CGA-O2A-C1
27	B	608	CLA	CBA-CGA-O2A-C1
27	b	602	CLA	CBA-CGA-O2A-C1
27	b	608	CLA	CBA-CGA-O2A-C1
27	R	616	CLA	CAA-CBA-CGA-O2A
27	r	616	CLA	CAA-CBA-CGA-O2A
35	N	2630	LHG	O10-C23-C24-C25
30	A	418	SQD	C5-C6-S-O8
30	B	621	SQD	C5-C6-S-O8
30	a	418	SQD	C5-C6-S-O8
30	b	621	SQD	C5-C6-S-O8
27	a	405	CLA	C8-C10-C11-C12
37	N	607	CHL	C2A-CAA-CBA-CGA
37	n	607	CHL	C2A-CAA-CBA-CGA
35	n	2630	LHG	O10-C23-C24-C25
30	A	418	SQD	O48-C23-C24-C25
30	a	418	SQD	O48-C23-C24-C25
27	R	601	CLA	CAA-CBA-CGA-O1A
27	r	601	CLA	CAA-CBA-CGA-O1A
27	A	405	CLA	C8-C10-C11-C12
35	R	2630	LHG	C11-C12-C13-C14
35	r	2630	LHG	C11-C12-C13-C14
27	b	602	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
27	B	606	CLA	C2-C3-C5-C6
27	D	403	CLA	C2-C3-C5-C6
27	b	606	CLA	C2-C3-C5-C6
32	C	519	DGD	C8A-C9A-CAA-CBA
32	c	519	DGD	C8A-C9A-CAA-CBA
28	A	409	PHO	CAA-CBA-CGA-O1A
28	a	409	PHO	CAA-CBA-CGA-O1A
35	D	408	LHG	C11-C10-C9-C8
35	d	408	LHG	C11-C10-C9-C8
27	B	603	CLA	C1A-C2A-CAA-CBA
27	B	607	CLA	C1A-C2A-CAA-CBA
27	B	609	CLA	C1A-C2A-CAA-CBA
27	C	509	CLA	C1A-C2A-CAA-CBA
27	N	612	CLA	C1A-C2A-CAA-CBA
27	S	602	CLA	C1A-C2A-CAA-CBA
27	b	603	CLA	C1A-C2A-CAA-CBA
27	b	609	CLA	C1A-C2A-CAA-CBA
27	c	509	CLA	C1A-C2A-CAA-CBA
27	n	612	CLA	C1A-C2A-CAA-CBA
27	s	602	CLA	C1A-C2A-CAA-CBA
37	G	601	CHL	C1A-C2A-CAA-CBA
37	N	608	CHL	C1A-C2A-CAA-CBA
37	R	607	CHL	C1A-C2A-CAA-CBA
37	g	601	CHL	C1A-C2A-CAA-CBA
37	n	608	CHL	C1A-C2A-CAA-CBA
37	r	607	CHL	C1A-C2A-CAA-CBA
27	R	610	CLA	CAA-CBA-CGA-O1A
31	c	521	LMG	O9-C10-C11-C12
27	B	602	CLA	O1A-CGA-O2A-C1
27	G	610	CLA	O1A-CGA-O2A-C1
27	g	610	CLA	O1A-CGA-O2A-C1
27	b	603	CLA	O1D-CGD-O2D-CED
27	C	506	CLA	C2-C1-O2A-CGA
27	c	506	CLA	C2-C1-O2A-CGA
27	N	614	CLA	CBA-CGA-O2A-C1
27	G	610	CLA	CAA-CBA-CGA-O1A
27	b	617	CLA	CAA-CBA-CGA-O1A
27	g	610	CLA	CAA-CBA-CGA-O1A
27	r	610	CLA	CAA-CBA-CGA-O1A
31	C	521	LMG	O9-C10-C11-C12
31	Z	101	LMG	C21-C22-C23-C24
30	A	418	SQD	O6-C44-C45-C46

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Mol	Chain	Res	Type	Atoms
30	a	418	SQD	O6-C44-C45-C46
32	C	519	DGD	O1G-C1G-C2G-C3G
32	c	519	DGD	O1G-C1G-C2G-C3G
27	C	510	CLA	C2A-CAA-CBA-CGA
27	R	613	CLA	C2A-CAA-CBA-CGA
27	c	510	CLA	C2A-CAA-CBA-CGA
27	r	613	CLA	C2A-CAA-CBA-CGA
35	L	101	LHG	O2-C2-C3-O3
27	D	402	CLA	C16-C17-C18-C19
27	d	402	CLA	C16-C17-C18-C19
27	B	617	CLA	CAA-CBA-CGA-O1A
27	N	602	CLA	CAA-CBA-CGA-O1A
35	Y	2630	LHG	O10-C23-C24-C25
35	y	2630	LHG	O10-C23-C24-C25
31	z	101	LMG	C21-C22-C23-C24
35	Y	2630	LHG	C5-C4-O6-P
35	y	2630	LHG	C5-C4-O6-P
27	N	603	CLA	CAA-CBA-CGA-O1A
27	n	603	CLA	CAA-CBA-CGA-O1A
37	S	601	CHL	CAA-CBA-CGA-O1A
37	s	601	CHL	CAA-CBA-CGA-O1A
27	R	602	CLA	C2-C3-C5-C6
27	r	602	CLA	C2-C3-C5-C6
27	C	506	CLA	C10-C11-C12-C13
27	c	506	CLA	C10-C11-C12-C13
34	D	405	PL9	C3-C7-C8-C9
34	d	405	PL9	C3-C7-C8-C9
35	D	409	LHG	C4-O6-P-O5
35	L	101	LHG	C3-O3-P-O5
35	S	2630	LHG	C3-O3-P-O5
35	d	409	LHG	C4-O6-P-O5
35	l	101	LHG	C3-O3-P-O5
35	s	2630	LHG	C3-O3-P-O5
31	Z	101	LMG	C14-C15-C16-C17
31	z	101	LMG	C14-C15-C16-C17
27	G	602	CLA	CAA-CBA-CGA-O1A
27	G	603	CLA	CAA-CBA-CGA-O1A
27	N	612	CLA	CAA-CBA-CGA-O1A
27	g	602	CLA	CAA-CBA-CGA-O1A
27	g	603	CLA	CAA-CBA-CGA-O1A
27	n	602	CLA	CAA-CBA-CGA-O1A
31	D	411	LMG	O9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
31	d	411	LMG	O9-C10-C11-C12
27	G	604	CLA	O2A-C1-C2-C3
27	N	604	CLA	O2A-C1-C2-C3
27	S	610	CLA	O2A-C1-C2-C3
27	g	603	CLA	O2A-C1-C2-C3
27	g	604	CLA	O2A-C1-C2-C3
27	n	604	CLA	O2A-C1-C2-C3
27	s	610	CLA	O2A-C1-C2-C3
27	s	611	CLA	O2A-C1-C2-C3
29	C	514	BCR	C23-C24-C25-C26
29	c	514	BCR	C23-C24-C25-C26
27	B	603	CLA	O1D-CGD-O2D-CED
27	B	609	CLA	C5-C6-C7-C8
27	b	609	CLA	C5-C6-C7-C8
27	C	501	CLA	CAA-CBA-CGA-O1A
27	n	612	CLA	CAA-CBA-CGA-O1A
27	y	602	CLA	CAA-CBA-CGA-O1A
27	C	501	CLA	O1A-CGA-O2A-C1
27	R	613	CLA	CAA-CBA-CGA-O2A
27	r	613	CLA	CAA-CBA-CGA-O2A
27	n	614	CLA	CBA-CGA-O2A-C1
27	B	609	CLA	C2A-CAA-CBA-CGA
27	S	613	CLA	C2A-CAA-CBA-CGA
27	b	609	CLA	C2A-CAA-CBA-CGA
27	s	613	CLA	C2A-CAA-CBA-CGA
27	Y	602	CLA	CAA-CBA-CGA-O1A
27	c	501	CLA	O1A-CGA-O2A-C1
31	D	411	LMG	O7-C10-C11-C12
31	d	411	LMG	O7-C10-C11-C12
37	Y	601	CHL	CAA-CBA-CGA-O2A
37	Y	607	CHL	CAA-CBA-CGA-O2A
37	y	601	CHL	CAA-CBA-CGA-O2A
37	y	607	CHL	CAA-CBA-CGA-O2A
27	c	501	CLA	CAA-CBA-CGA-O1A
34	D	405	PL9	C15-C14-C16-C17
34	d	405	PL9	C15-C14-C16-C17
31	B	622	LMG	C15-C16-C17-C18
37	G	605	CHL	C2-C1-O2A-CGA
27	B	604	CLA	CAD-CBD-CGD-O1D
27	C	510	CLA	CAD-CBD-CGD-O1D
27	C	512	CLA	CAD-CBD-CGD-O1D
27	Y	614	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
27	b	604	CLA	CAD-CBD-CGD-O1D
27	c	510	CLA	CAD-CBD-CGD-O1D
27	c	512	CLA	CAD-CBD-CGD-O1D
27	y	614	CLA	CAD-CBD-CGD-O1D
37	N	601	CHL	CAD-CBD-CGD-O1D
37	n	601	CHL	CAD-CBD-CGD-O1D
27	r	616	CLA	CAA-CBA-CGA-O1A
31	b	622	LMG	C15-C16-C17-C18
37	g	605	CHL	C2-C1-O2A-CGA
27	B	606	CLA	C11-C10-C8-C9
27	C	507	CLA	C6-C7-C8-C9
27	C	511	CLA	C6-C7-C8-C9
27	b	606	CLA	C11-C10-C8-C9
27	c	507	CLA	C6-C7-C8-C9
27	c	511	CLA	C6-C7-C8-C9
27	R	616	CLA	CAA-CBA-CGA-O1A
35	D	410	LHG	C24-C25-C26-C27
35	d	410	LHG	C24-C25-C26-C27
27	B	610	CLA	C3-C5-C6-C7
27	b	610	CLA	C3-C5-C6-C7
30	A	412	SQD	C33-C34-C35-C36
30	a	412	SQD	C33-C34-C35-C36
27	b	603	CLA	CBD-CGD-O2D-CED
27	B	611	CLA	CAA-CBA-CGA-O2A
27	B	614	CLA	CAA-CBA-CGA-O2A
27	S	612	CLA	CAA-CBA-CGA-O2A
27	b	611	CLA	CAA-CBA-CGA-O2A
27	b	614	CLA	CAA-CBA-CGA-O2A
27	s	612	CLA	CAA-CBA-CGA-O2A
27	S	603	CLA	CAA-CBA-CGA-O1A
27	s	603	CLA	CAA-CBA-CGA-O1A
35	G	2630	LHG	C34-C35-C36-C37
35	g	2630	LHG	C34-C35-C36-C37
28	a	408	PHO	CBD-CGD-O2D-CED
27	B	603	CLA	C3A-C2A-CAA-CBA
27	B	605	CLA	C6-C7-C8-C10
27	B	607	CLA	C6-C7-C8-C10
27	B	610	CLA	C11-C12-C13-C15
27	B	611	CLA	C11-C12-C13-C15
27	C	506	CLA	C11-C10-C8-C7
27	C	510	CLA	C11-C10-C8-C7
27	C	511	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
27	D	403	CLA	C11-C12-C13-C15
27	R	604	CLA	C3A-C2A-CAA-CBA
27	R	610	CLA	C11-C12-C13-C15
27	b	603	CLA	C3A-C2A-CAA-CBA
27	b	605	CLA	C6-C7-C8-C10
27	b	607	CLA	C6-C7-C8-C10
27	b	610	CLA	C11-C12-C13-C15
27	b	611	CLA	C11-C12-C13-C15
27	c	506	CLA	C11-C10-C8-C7
27	c	510	CLA	C11-C10-C8-C7
27	c	511	CLA	C6-C7-C8-C10
27	d	403	CLA	C11-C12-C13-C15
27	r	604	CLA	C3A-C2A-CAA-CBA
27	r	610	CLA	C11-C12-C13-C15
28	A	409	PHO	C11-C12-C13-C15
28	a	409	PHO	C11-C12-C13-C15
27	B	609	CLA	CAA-CBA-CGA-O1A
30	B	621	SQD	O49-C7-C8-C9
30	b	621	SQD	O49-C7-C8-C9
27	S	613	CLA	CAA-CBA-CGA-O2A
27	s	613	CLA	CAA-CBA-CGA-O2A
28	A	408	PHO	CBD-CGD-O2D-CED
27	b	609	CLA	CAA-CBA-CGA-O1A
38	S	1621	LUT	C29-C30-C31-C32
38	s	1621	LUT	C29-C30-C31-C32
27	C	502	CLA	C15-C16-C17-C18
27	c	502	CLA	C15-C16-C17-C18
37	N	605	CHL	C2-C1-O2A-CGA
37	n	605	CHL	C2-C1-O2A-CGA
27	G	610	CLA	CBA-CGA-O2A-C1
27	g	610	CLA	CBA-CGA-O2A-C1
27	N	614	CLA	O1A-CGA-O2A-C1
35	D	410	LHG	O2-C2-C3-O3
35	d	410	LHG	O2-C2-C3-O3
35	D	410	LHG	O8-C23-C24-C25
35	d	410	LHG	O8-C23-C24-C25
27	B	614	CLA	CAA-CBA-CGA-O1A
27	b	614	CLA	CAA-CBA-CGA-O1A
27	B	608	CLA	O1A-CGA-O2A-C1
31	Z	101	LMG	C20-C21-C22-C23
31	z	101	LMG	C20-C21-C22-C23
27	A	405	CLA	CAA-CBA-CGA-O2A

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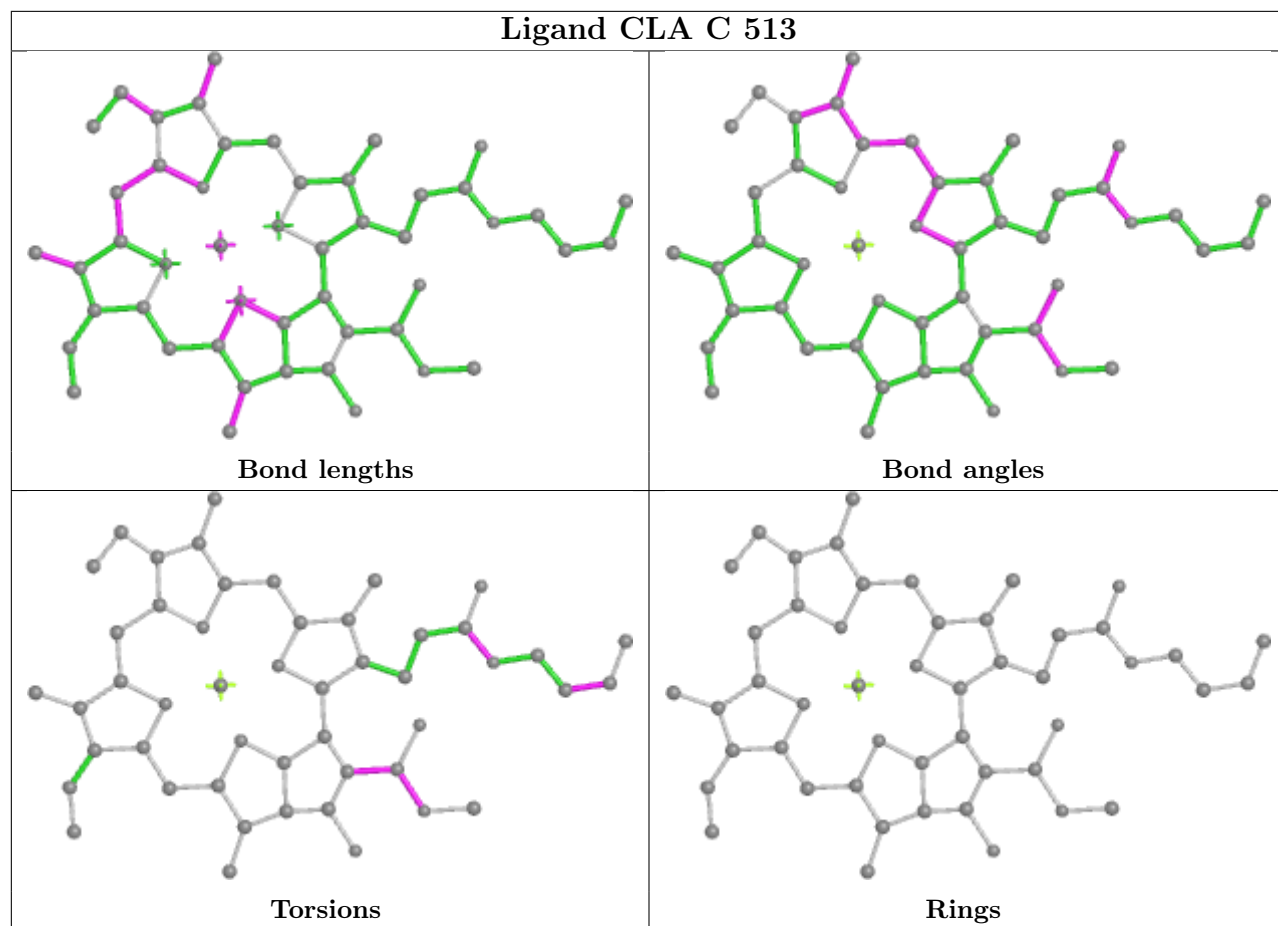
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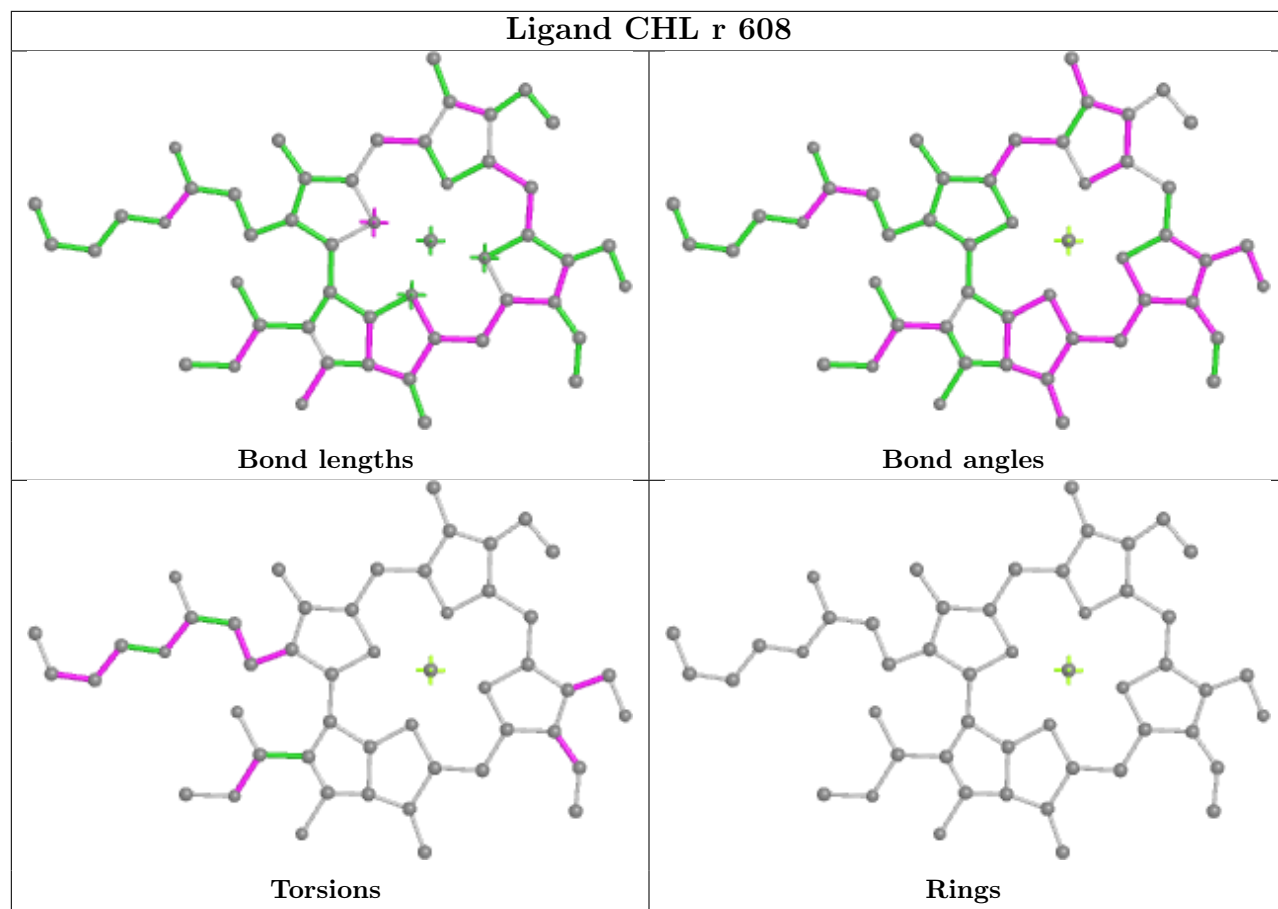
Mol	Chain	Res	Type	Atoms
27	B	602	CLA	CAA-CBA-CGA-O2A
27	a	405	CLA	CAA-CBA-CGA-O2A
27	b	602	CLA	CAA-CBA-CGA-O2A
37	Y	606	CHL	CAA-CBA-CGA-O2A
37	y	606	CHL	CAA-CBA-CGA-O2A

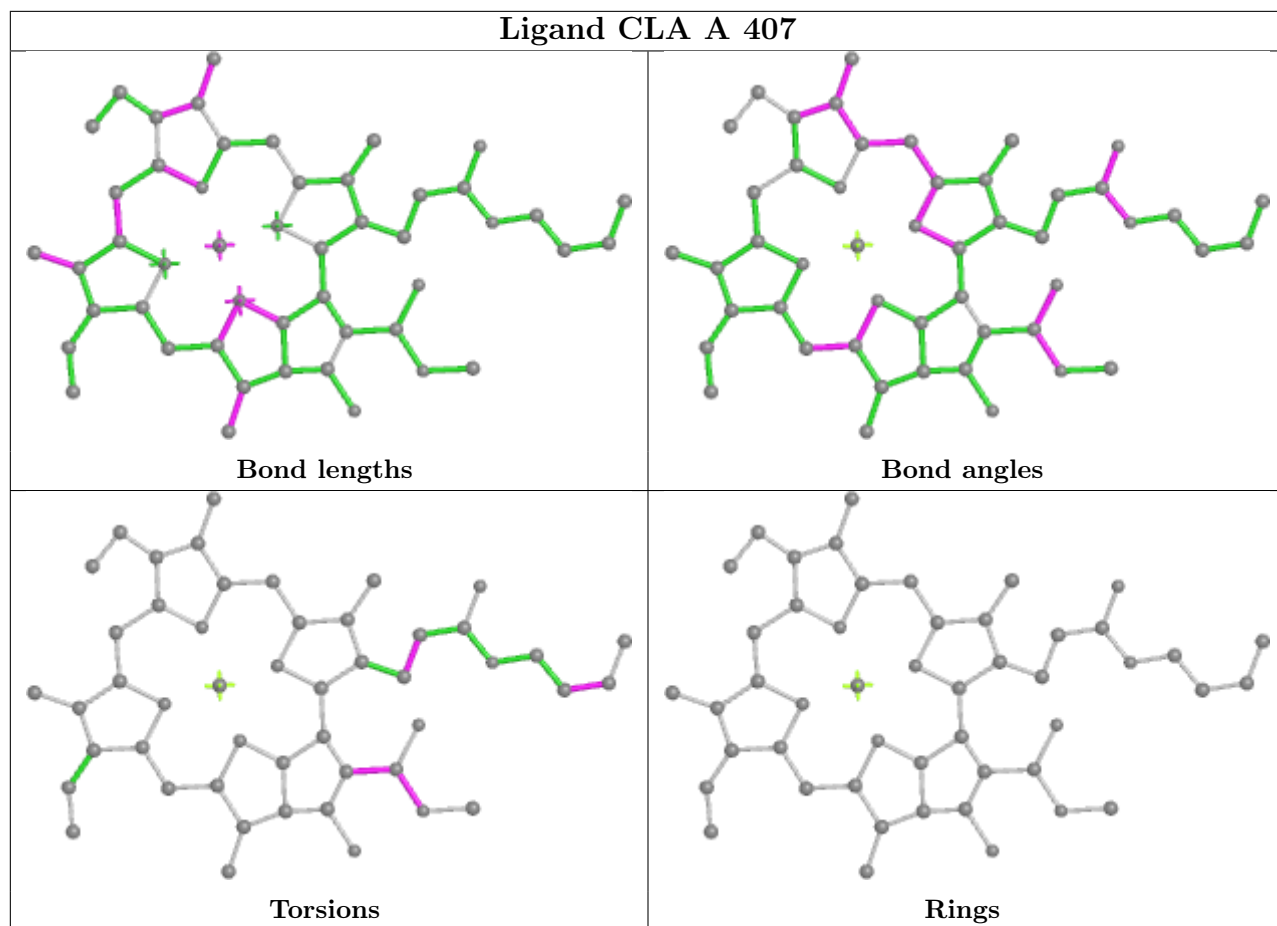
There are no ring outliers.

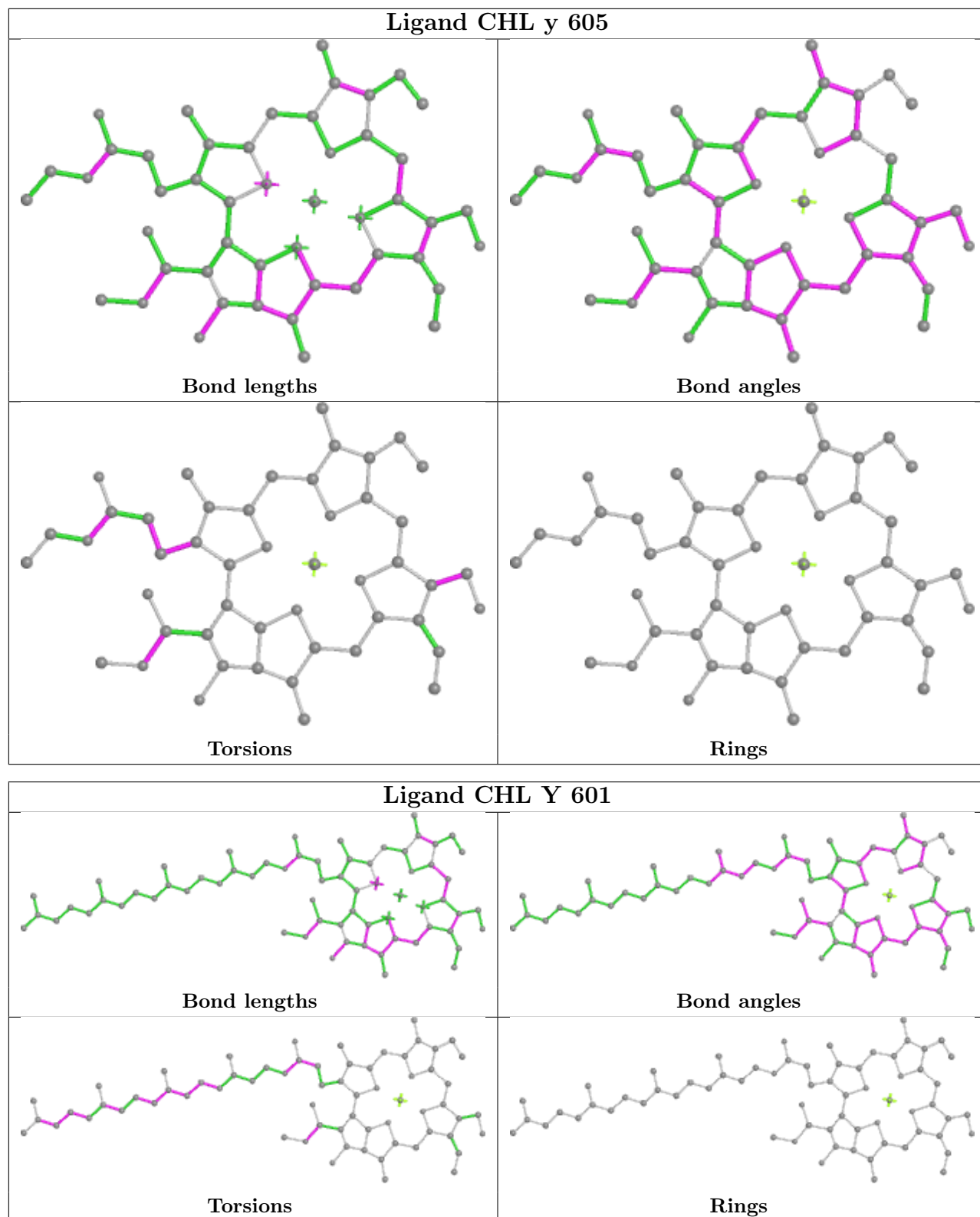
No monomer is involved in short contacts.

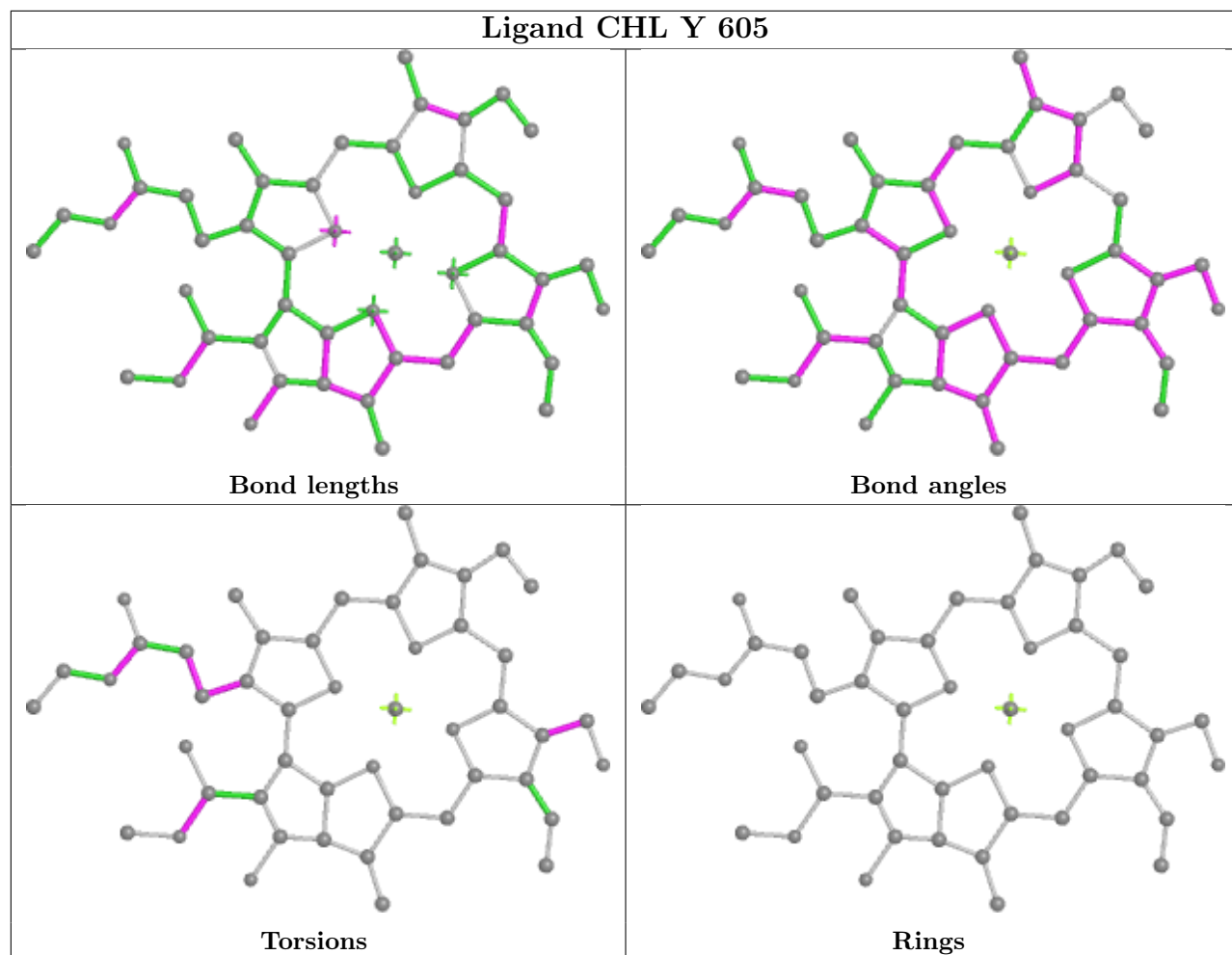
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

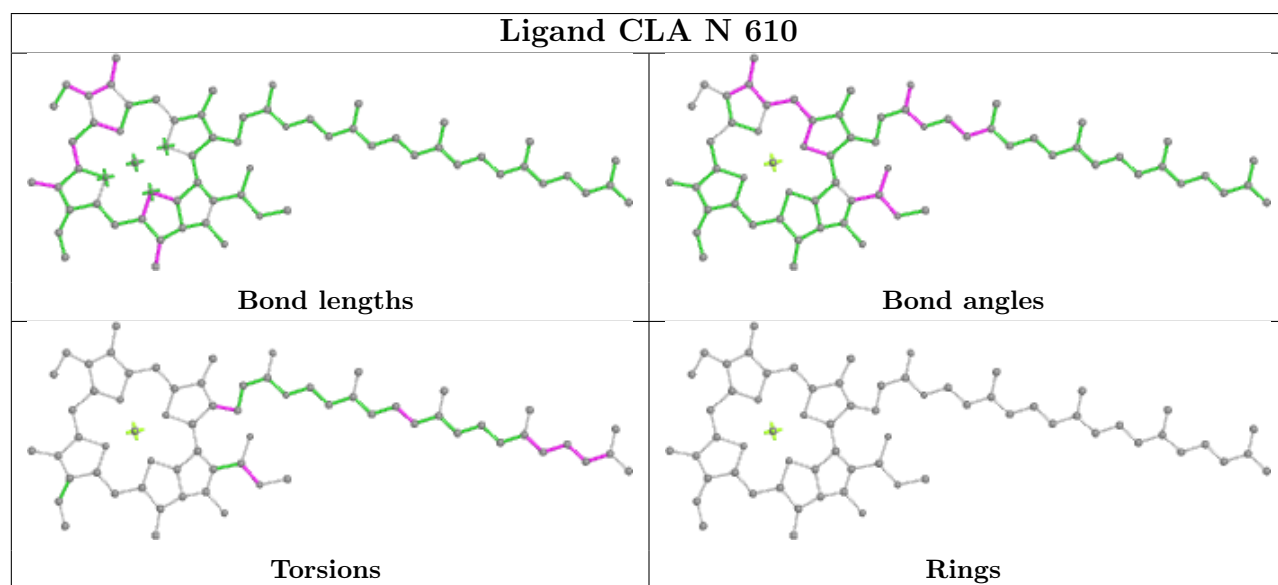
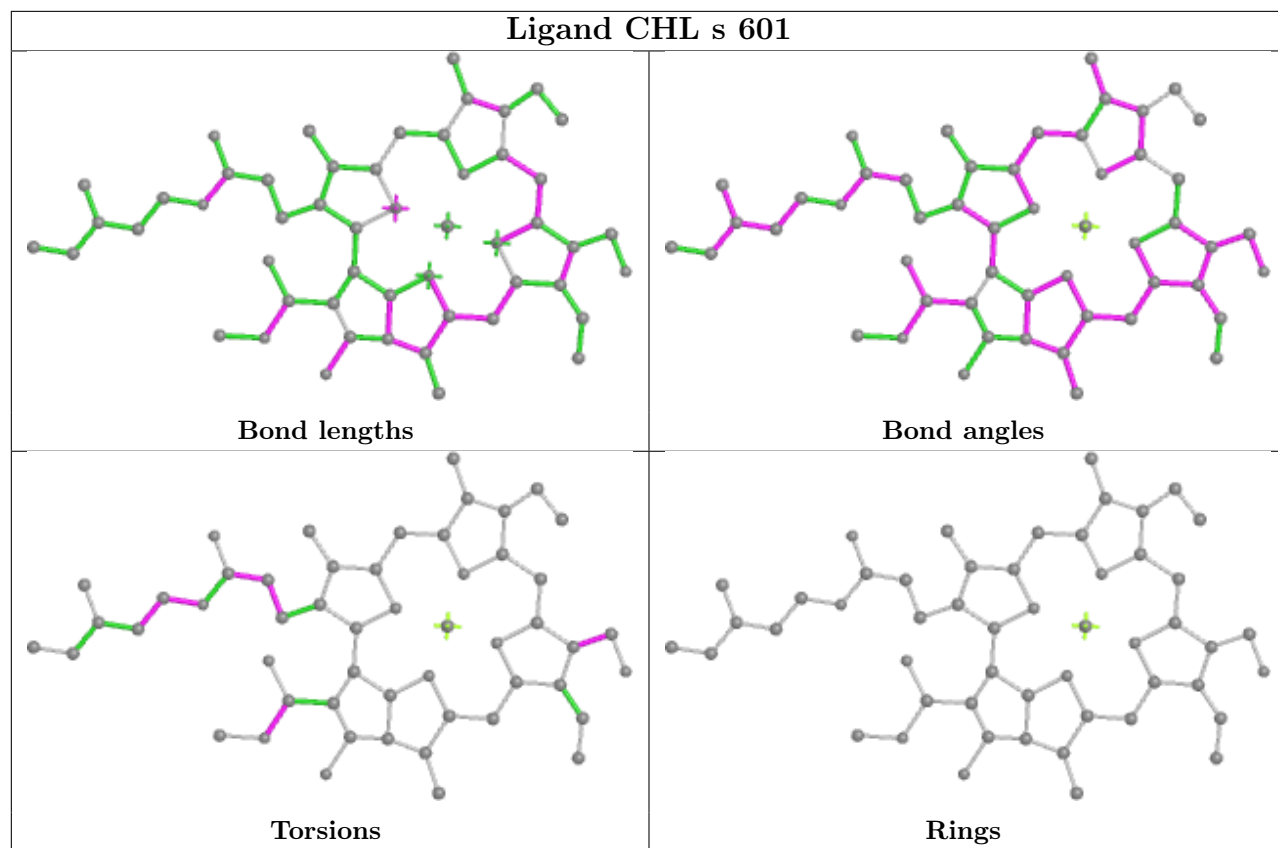


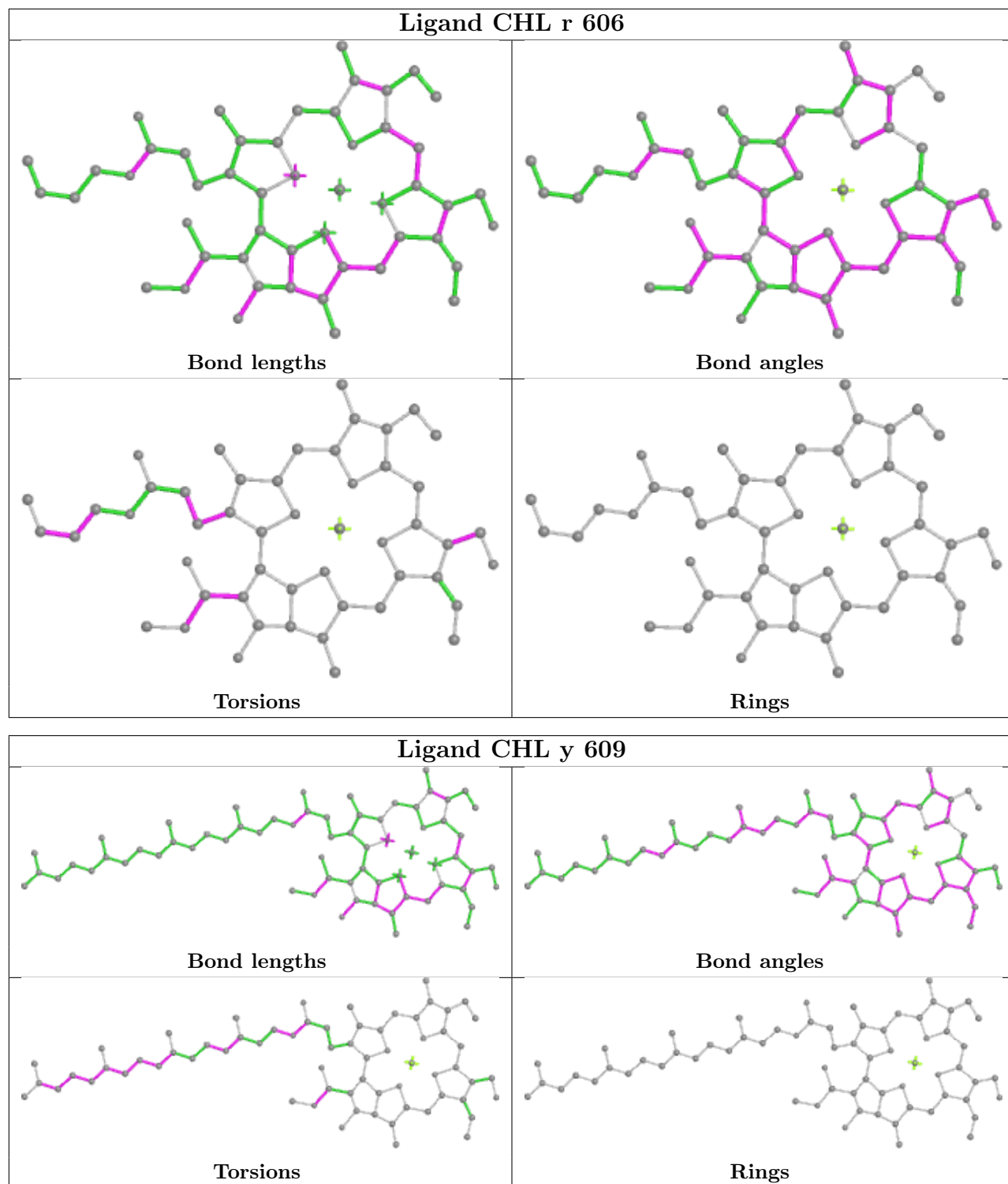


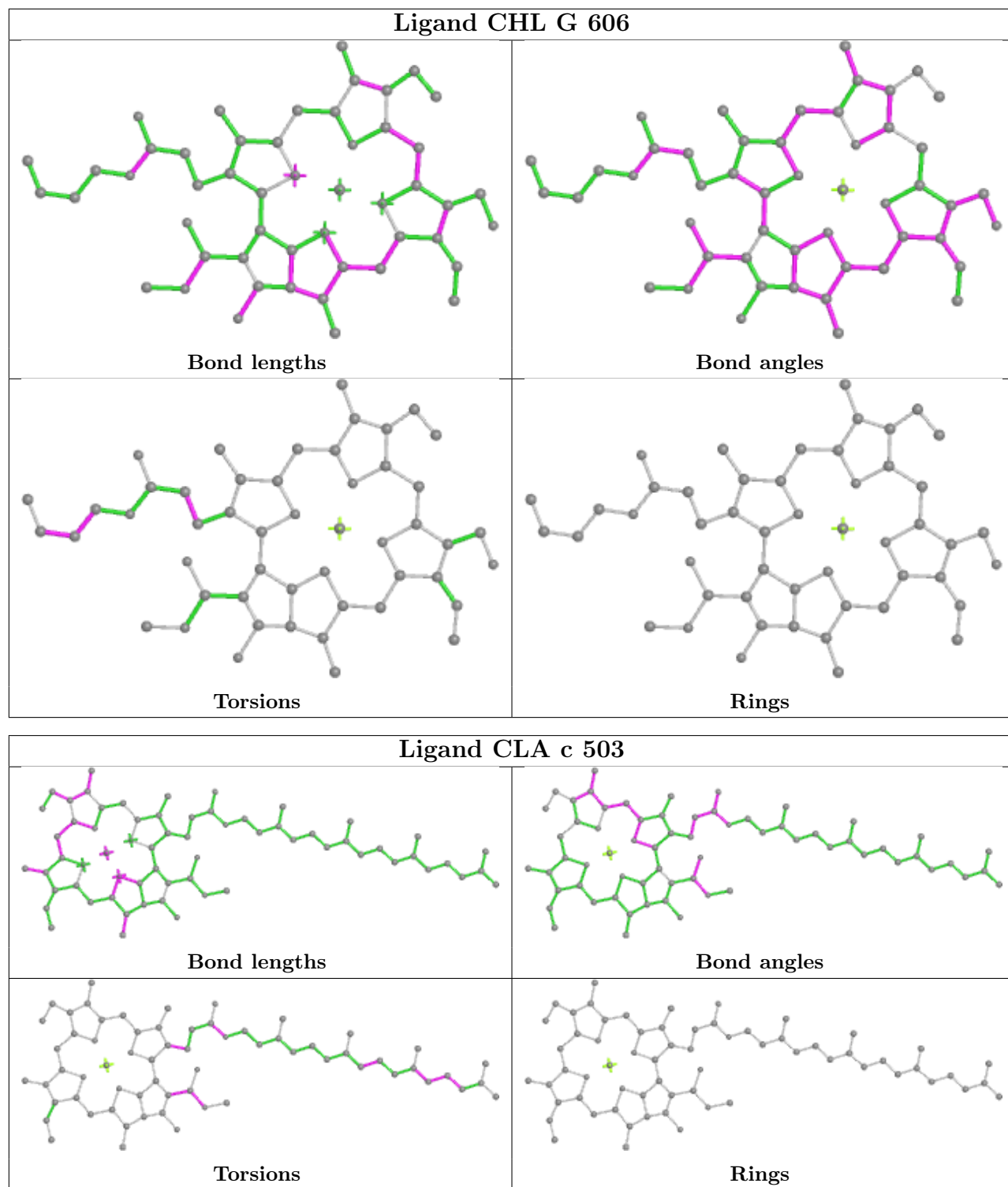


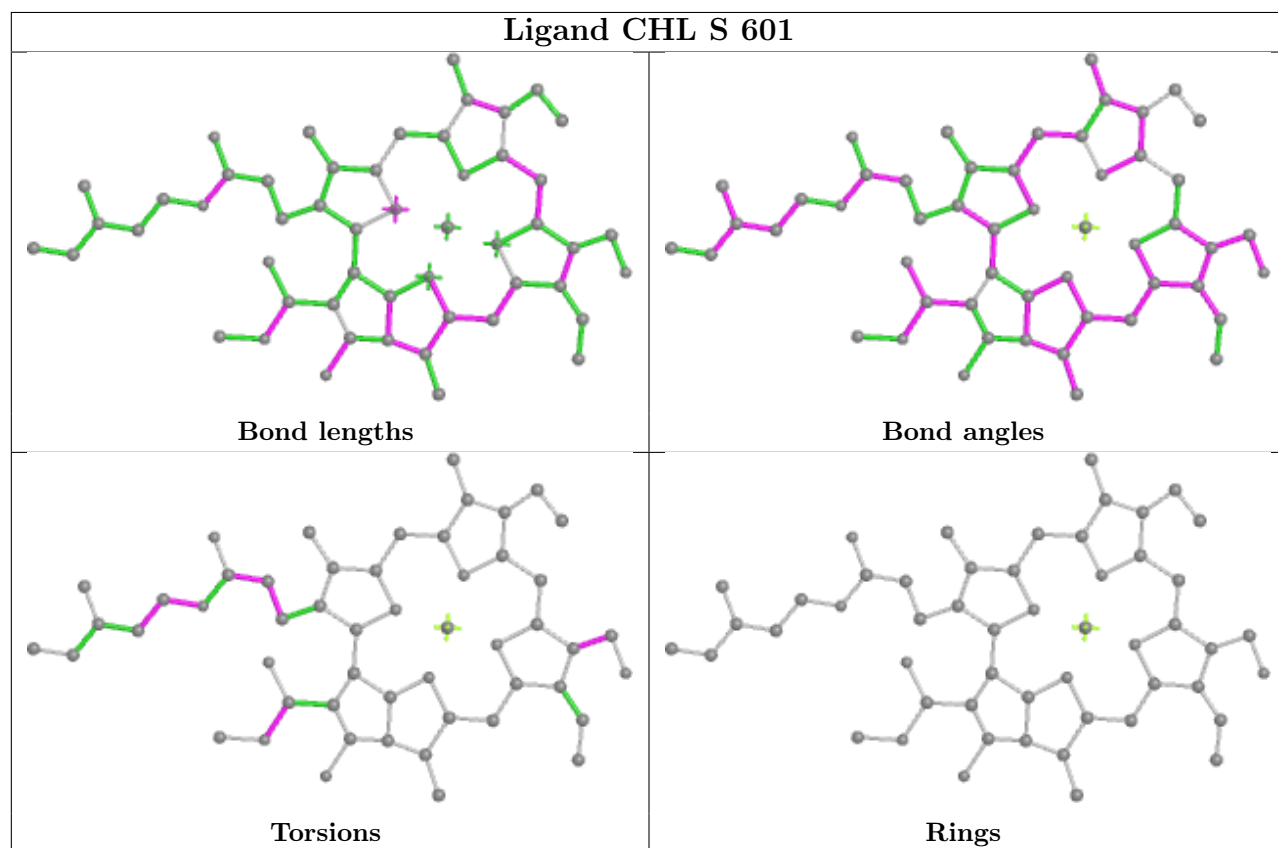
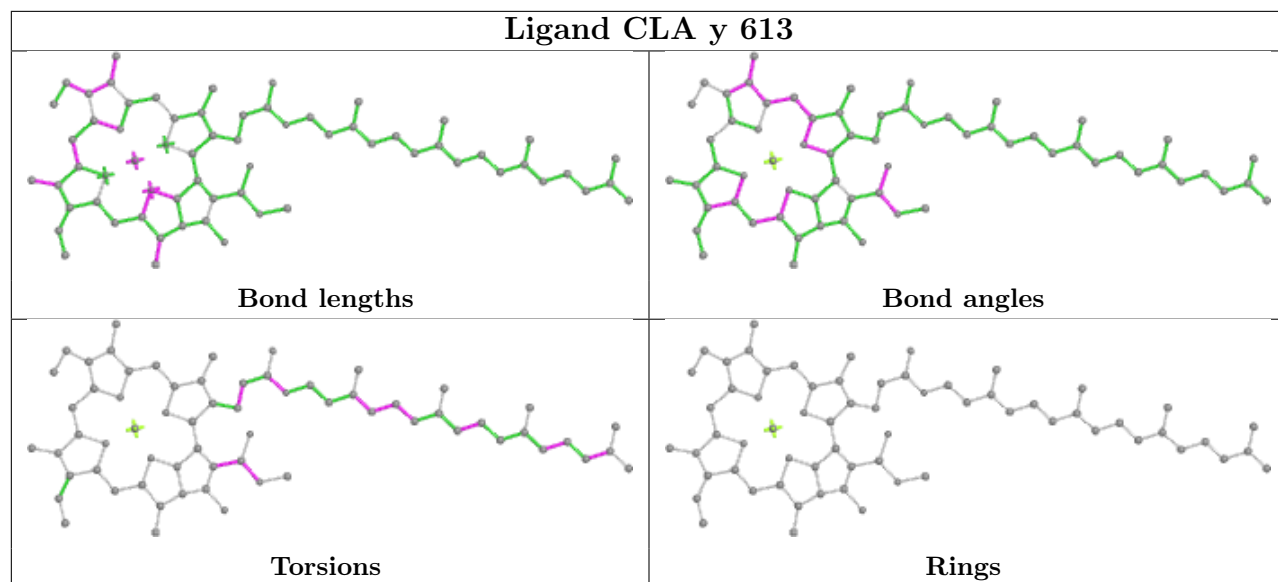


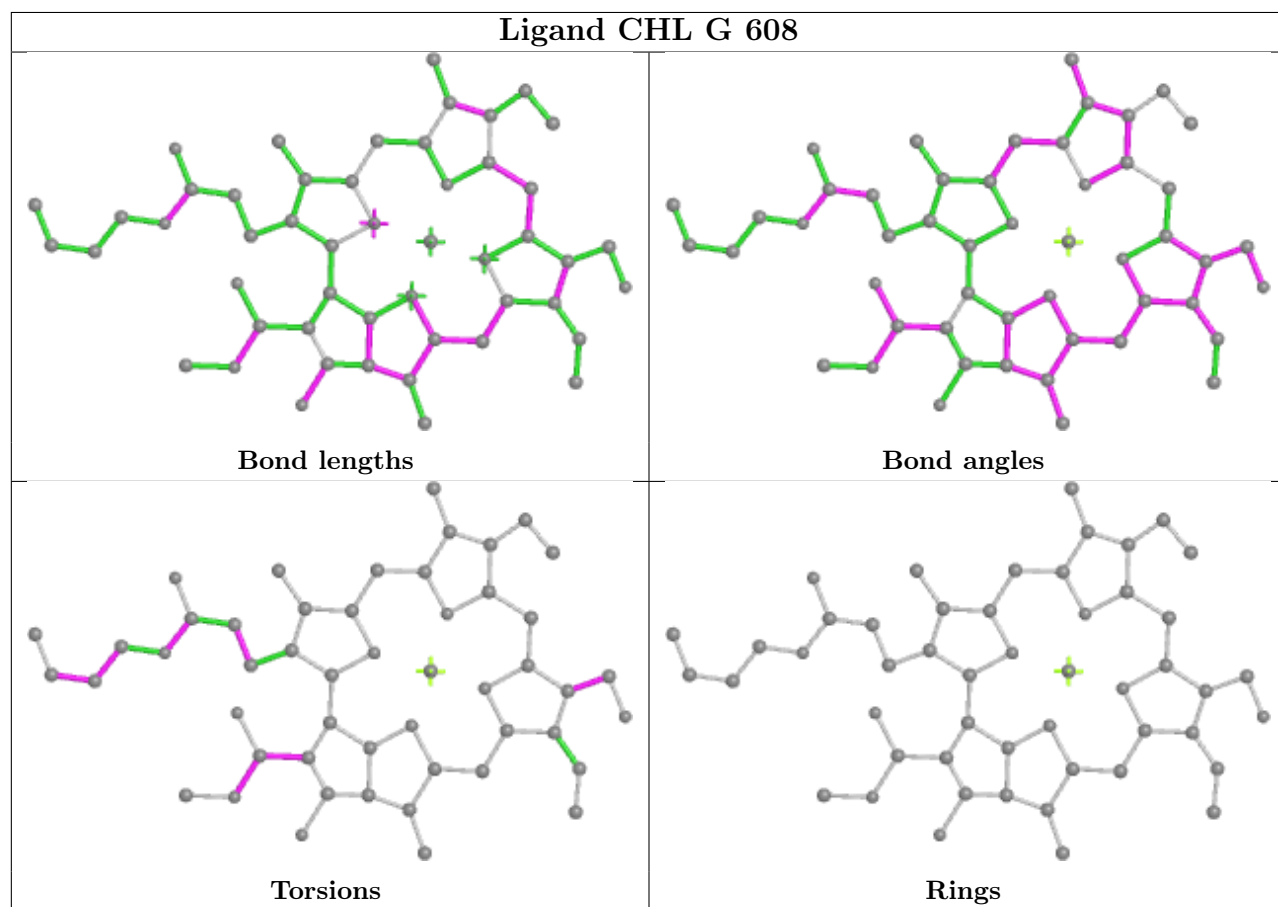
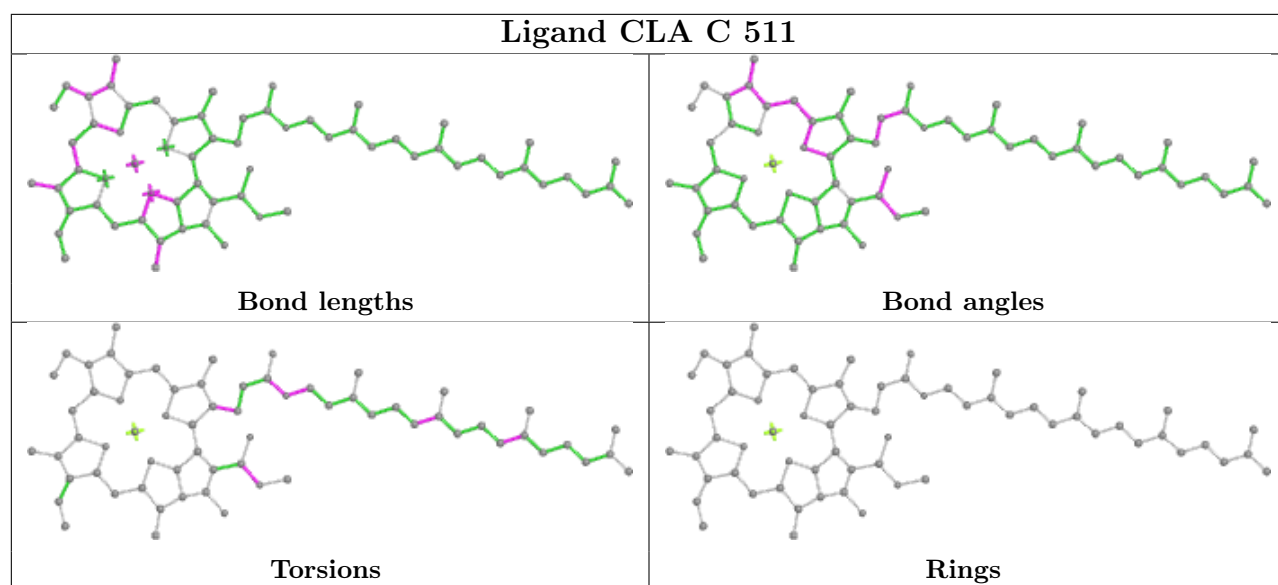


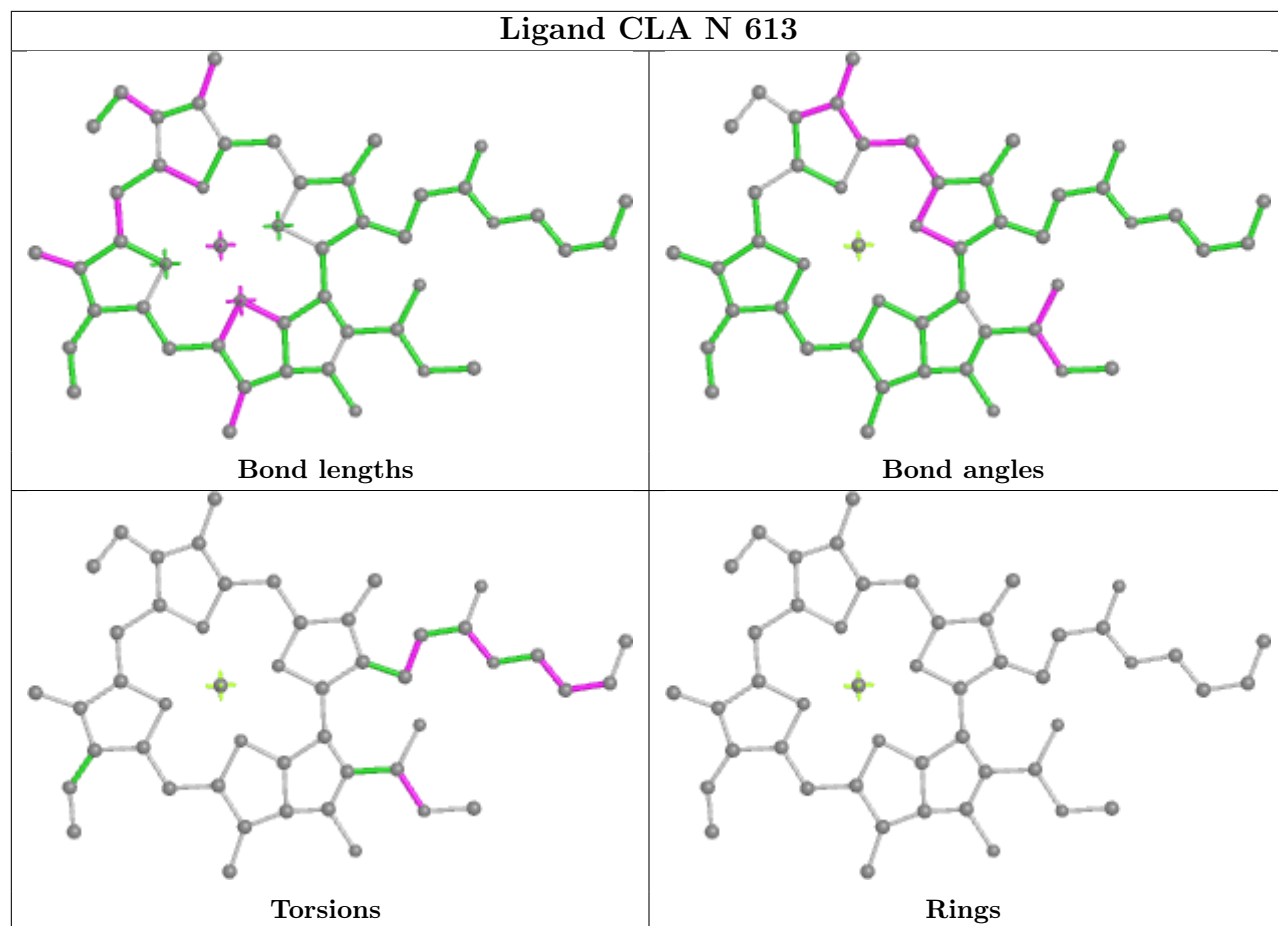


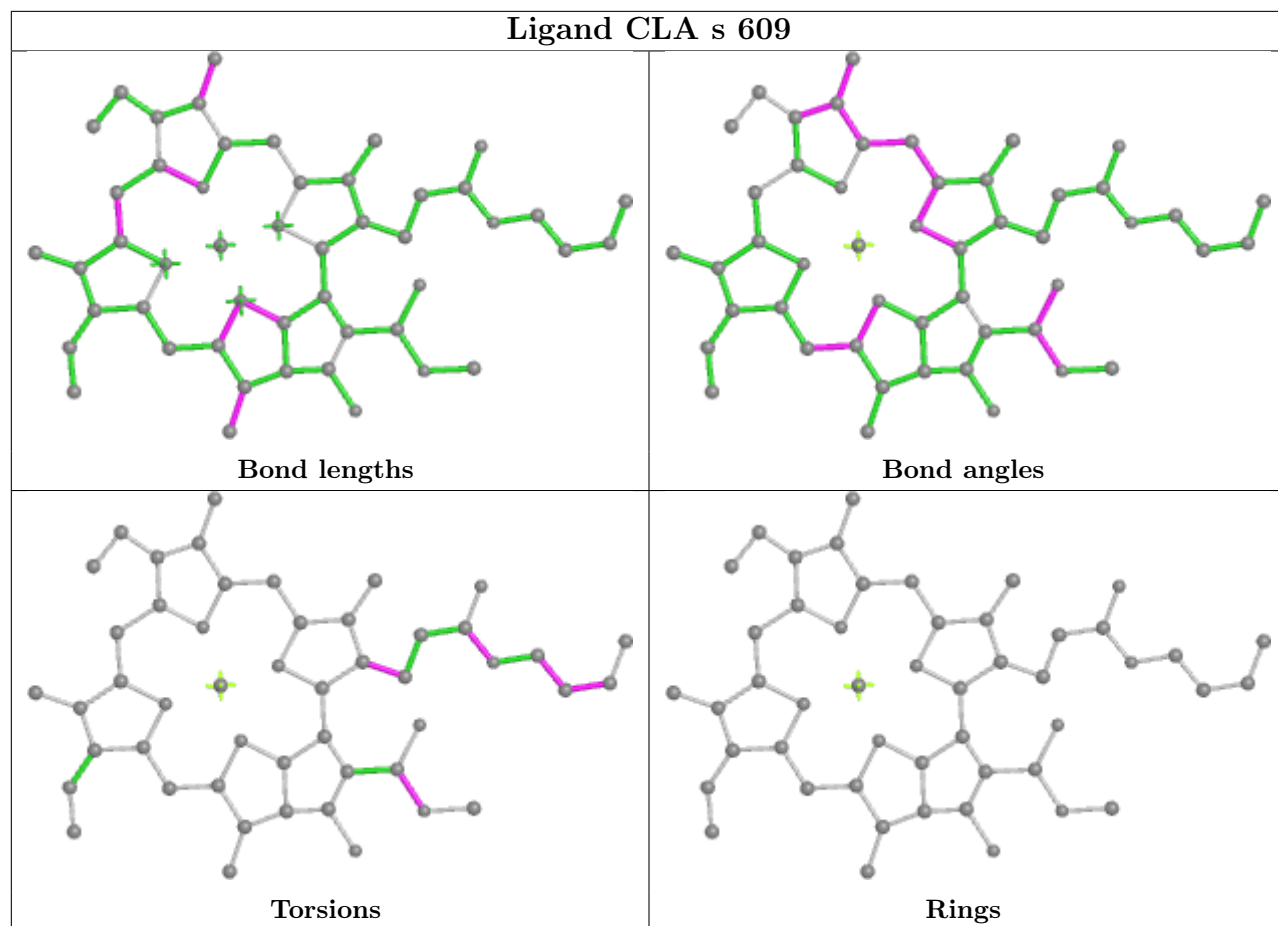


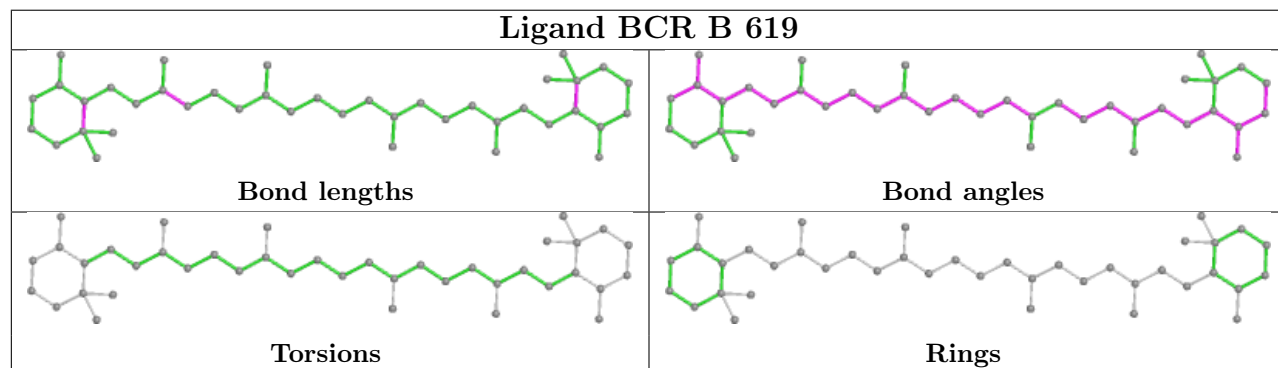
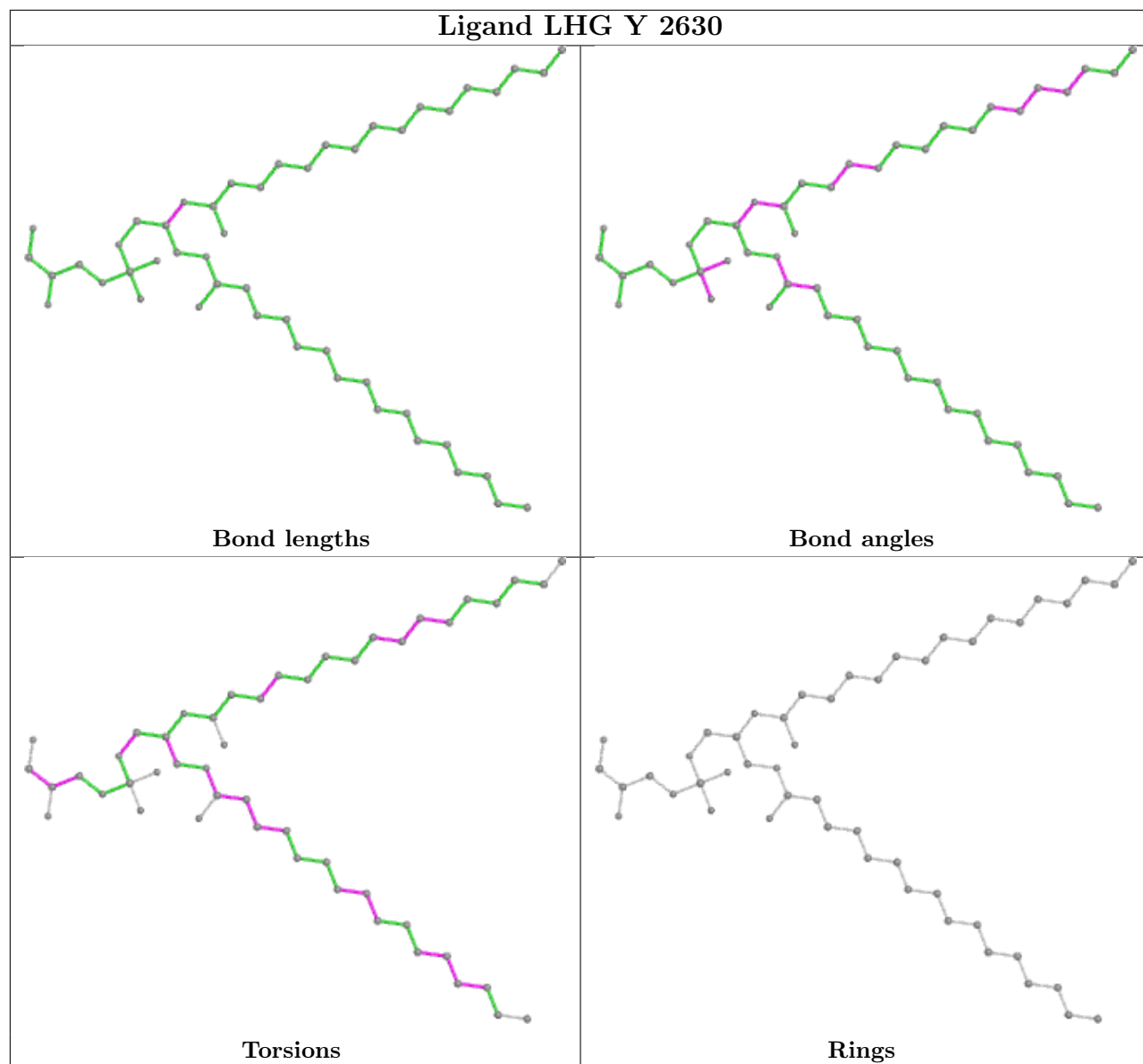


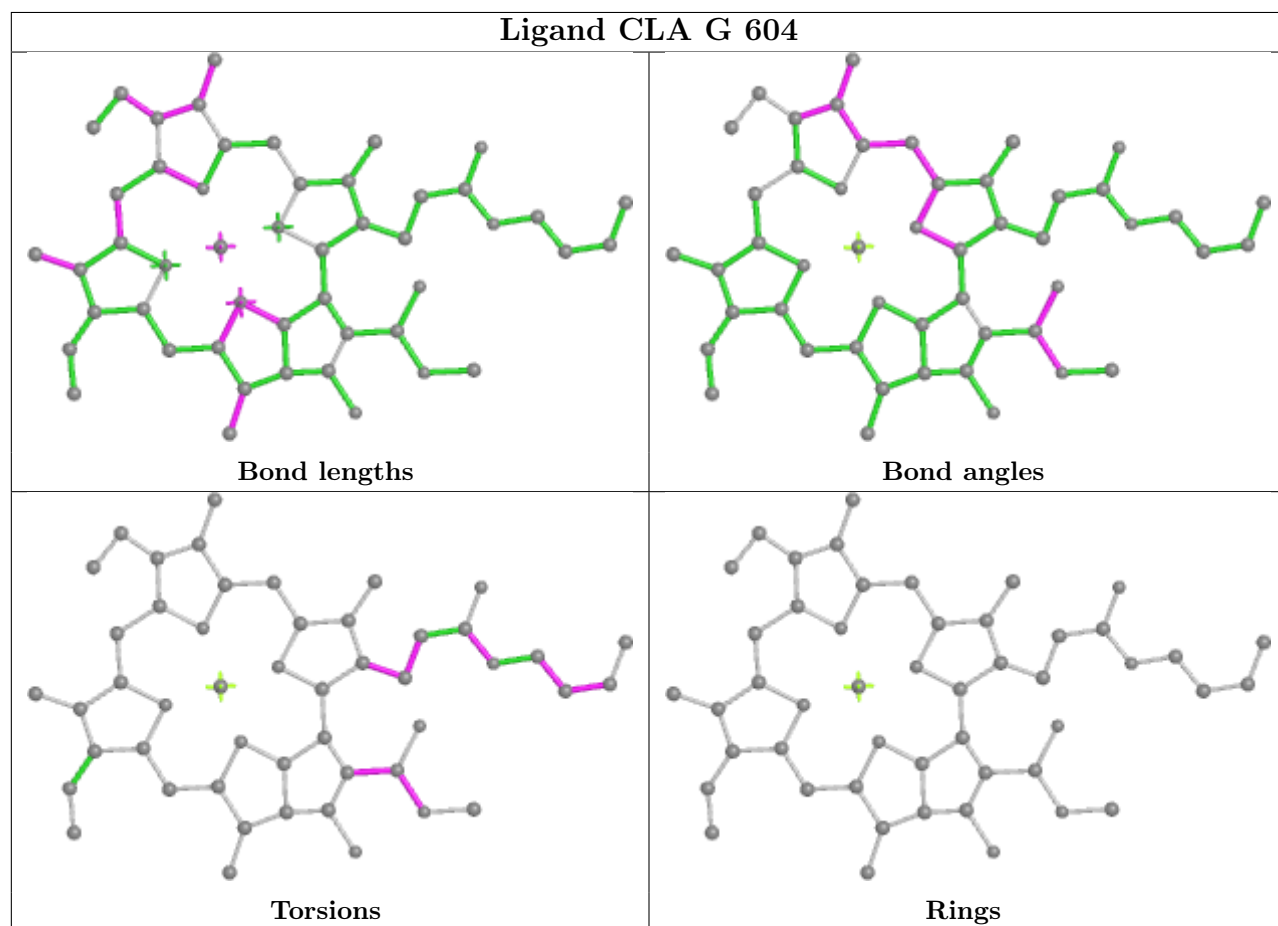
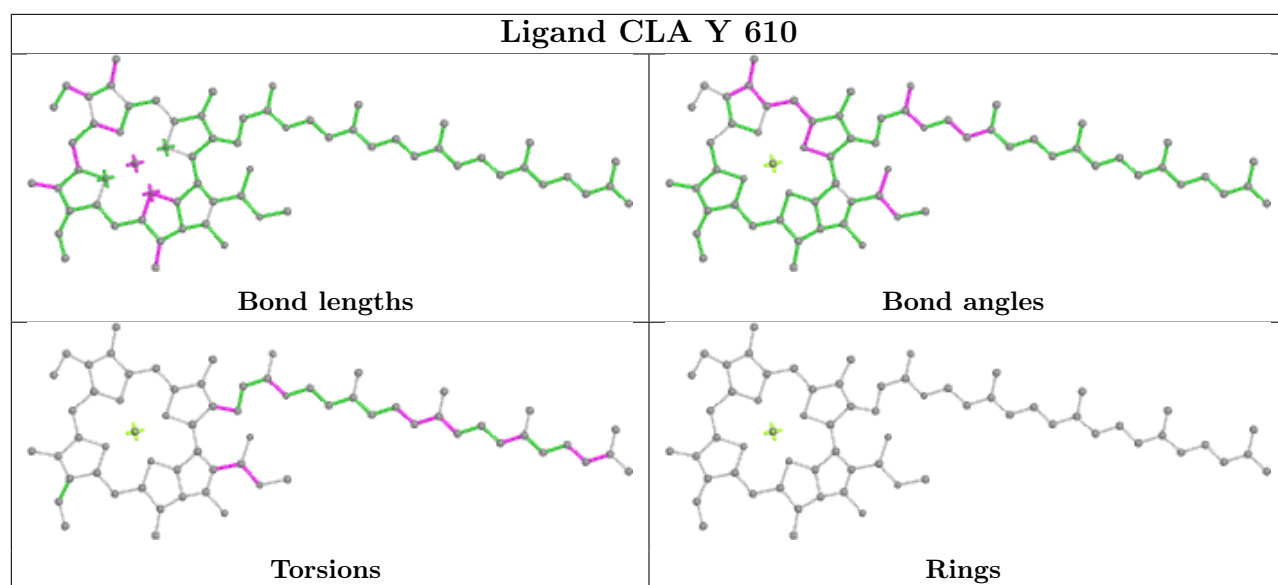


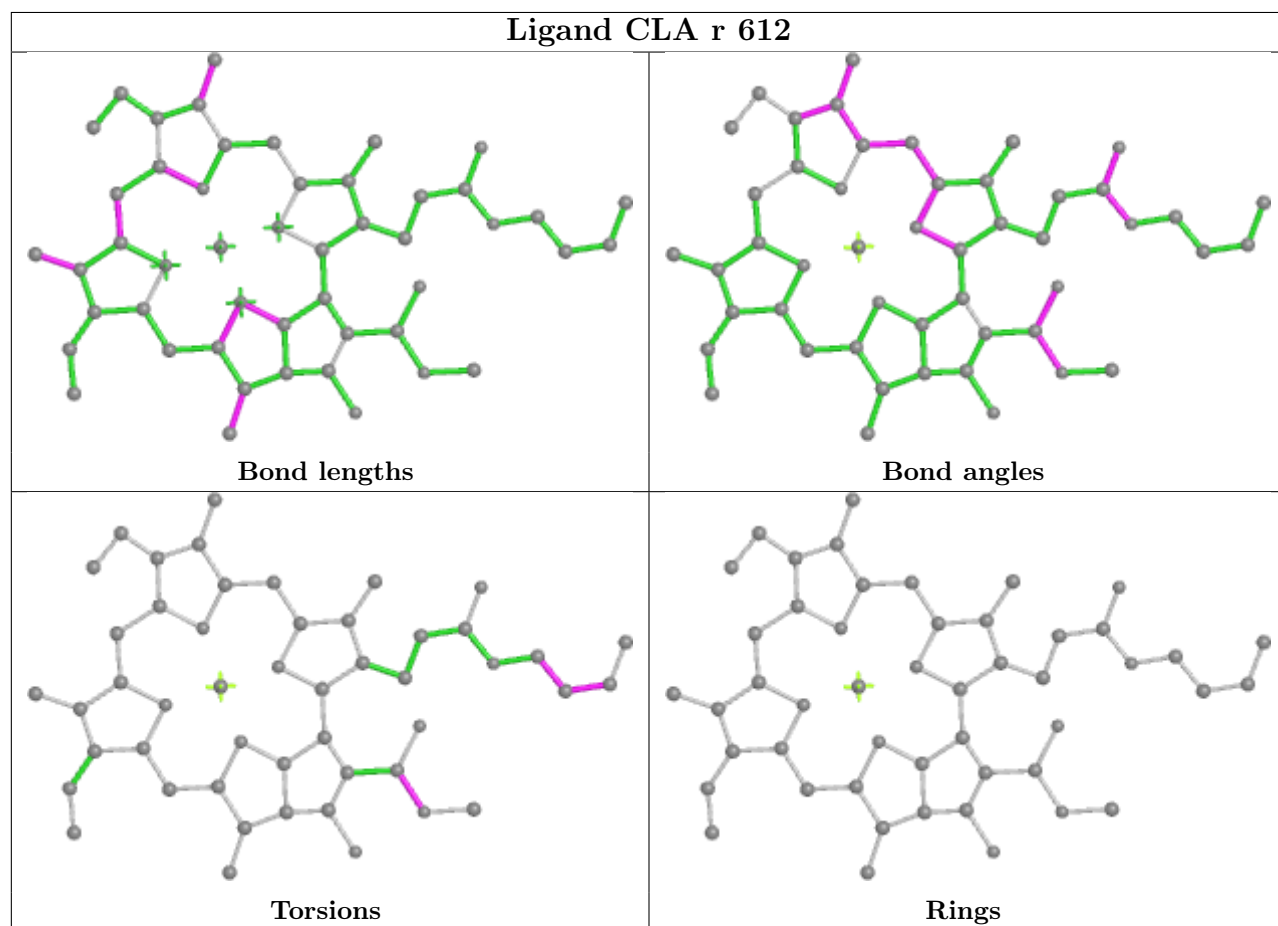
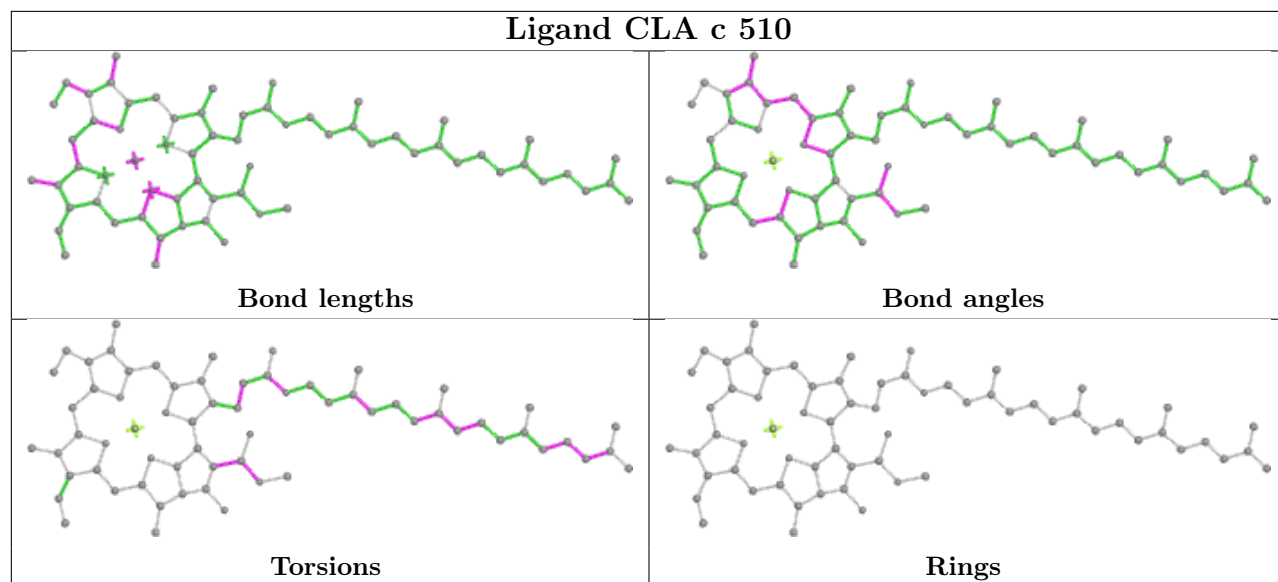


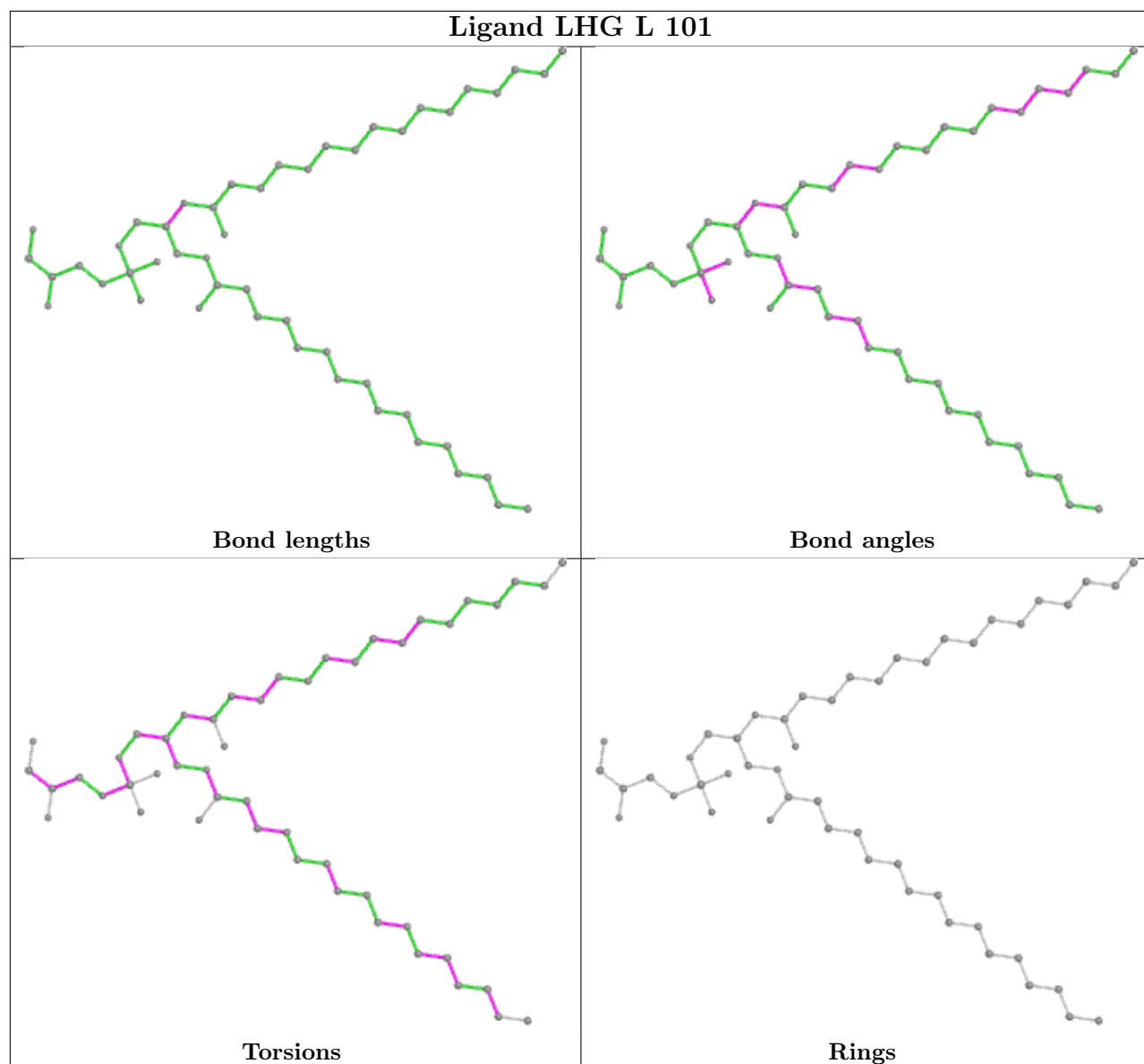
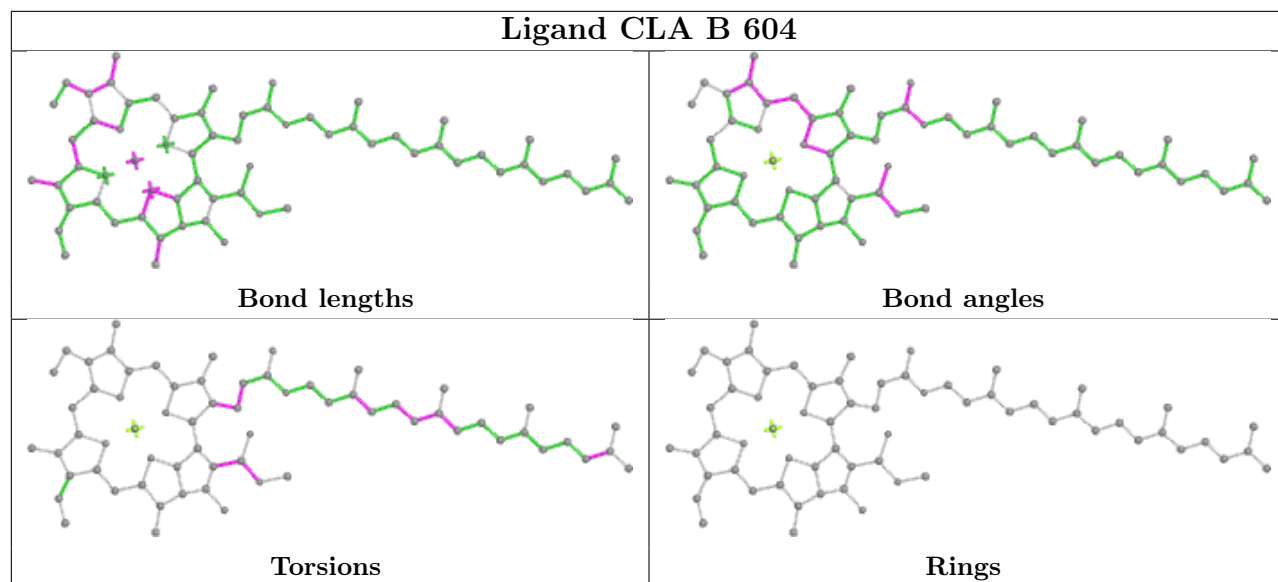


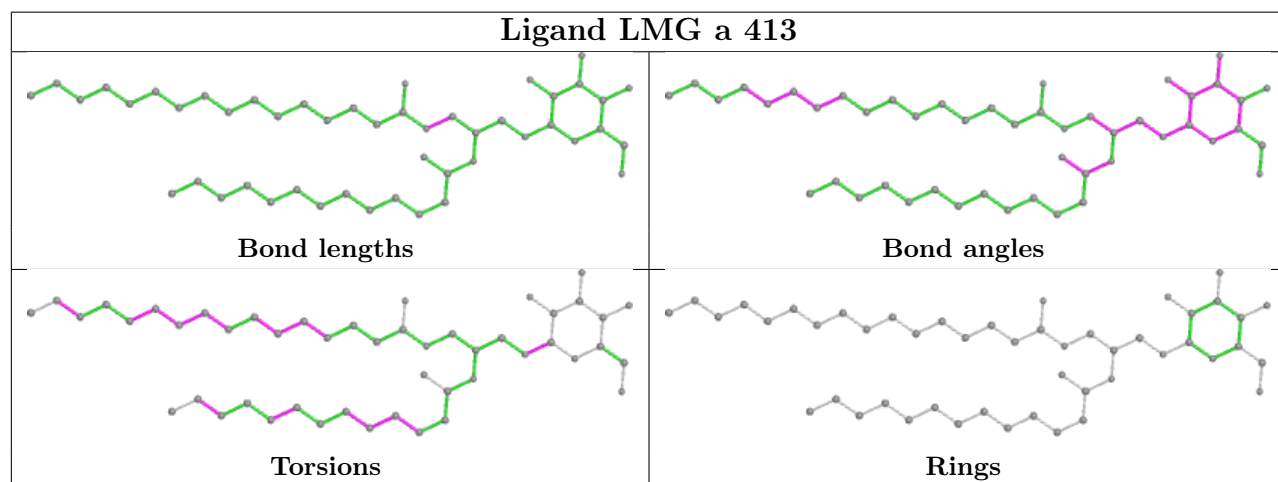
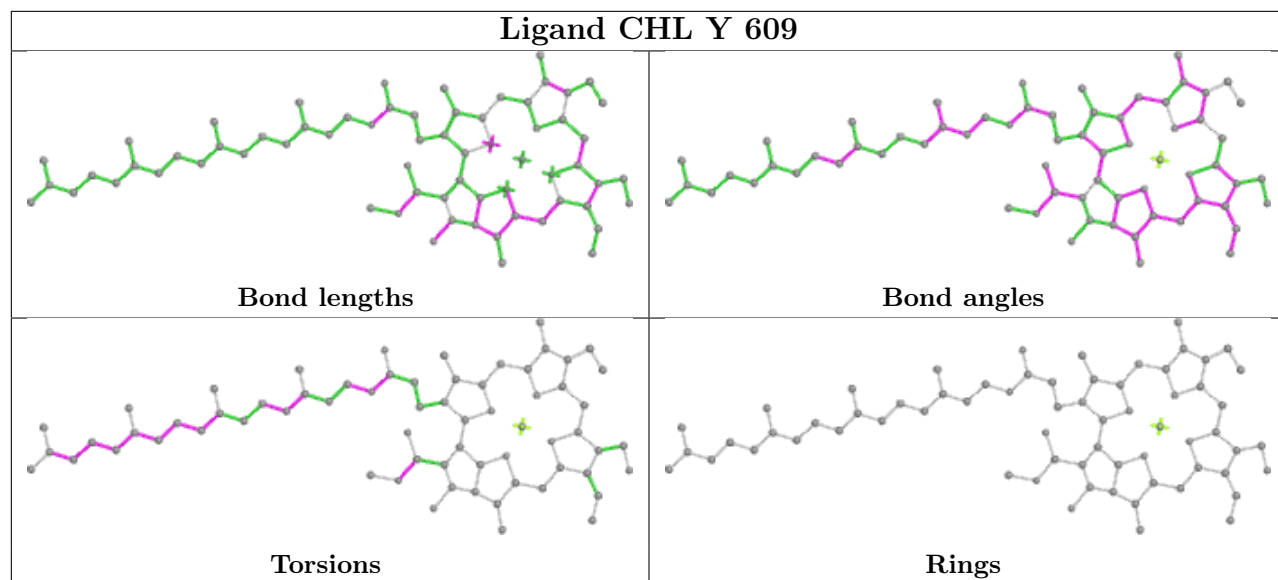


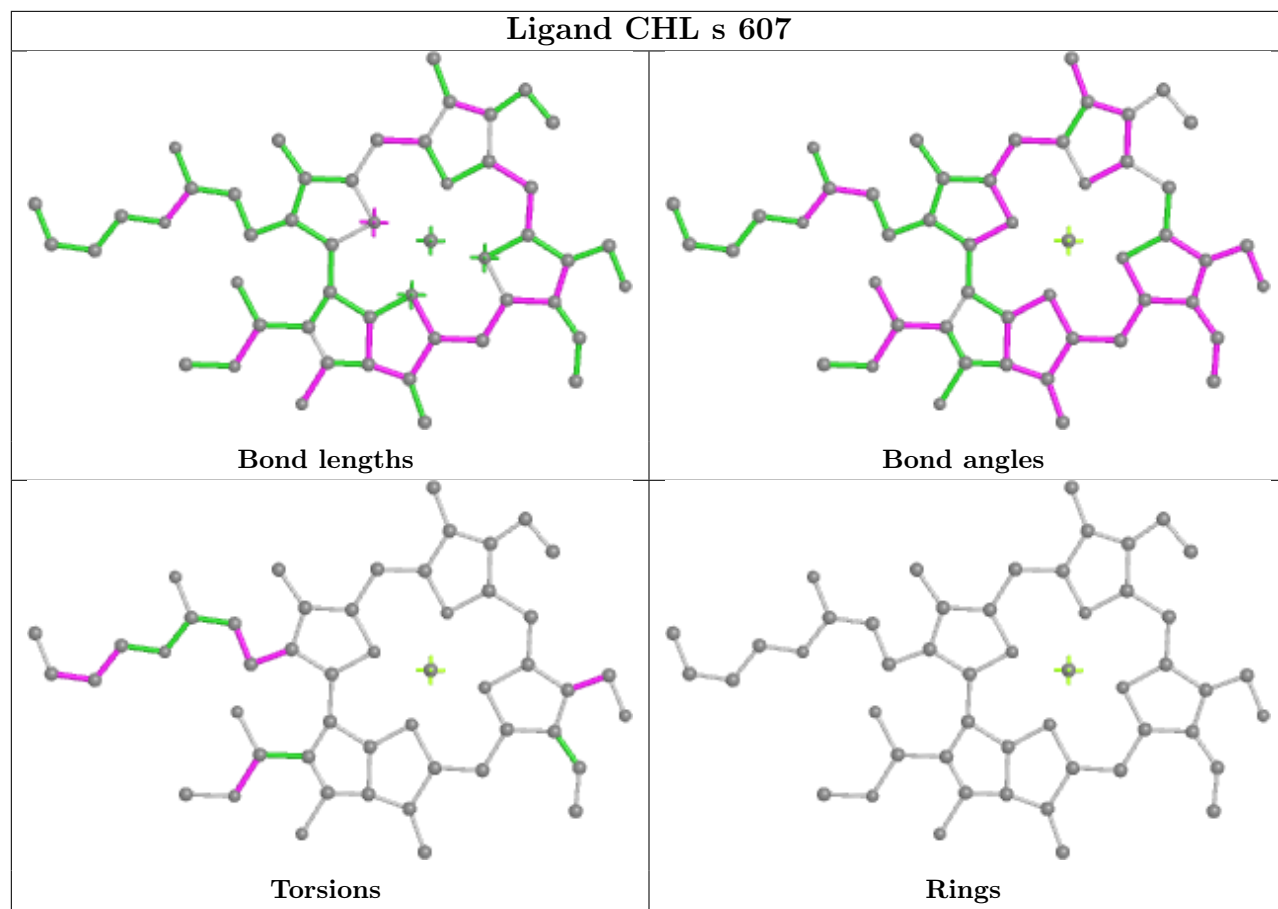


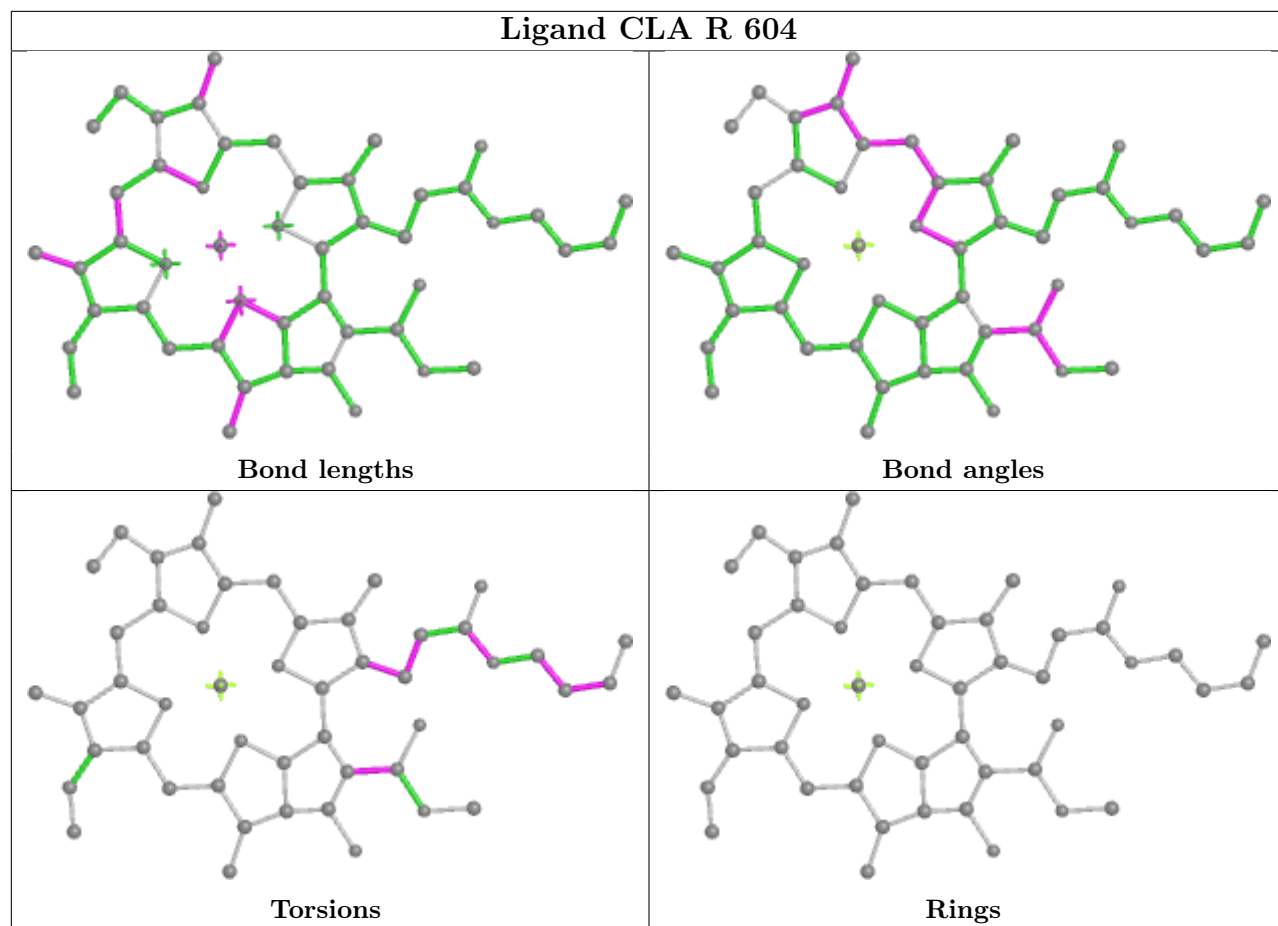


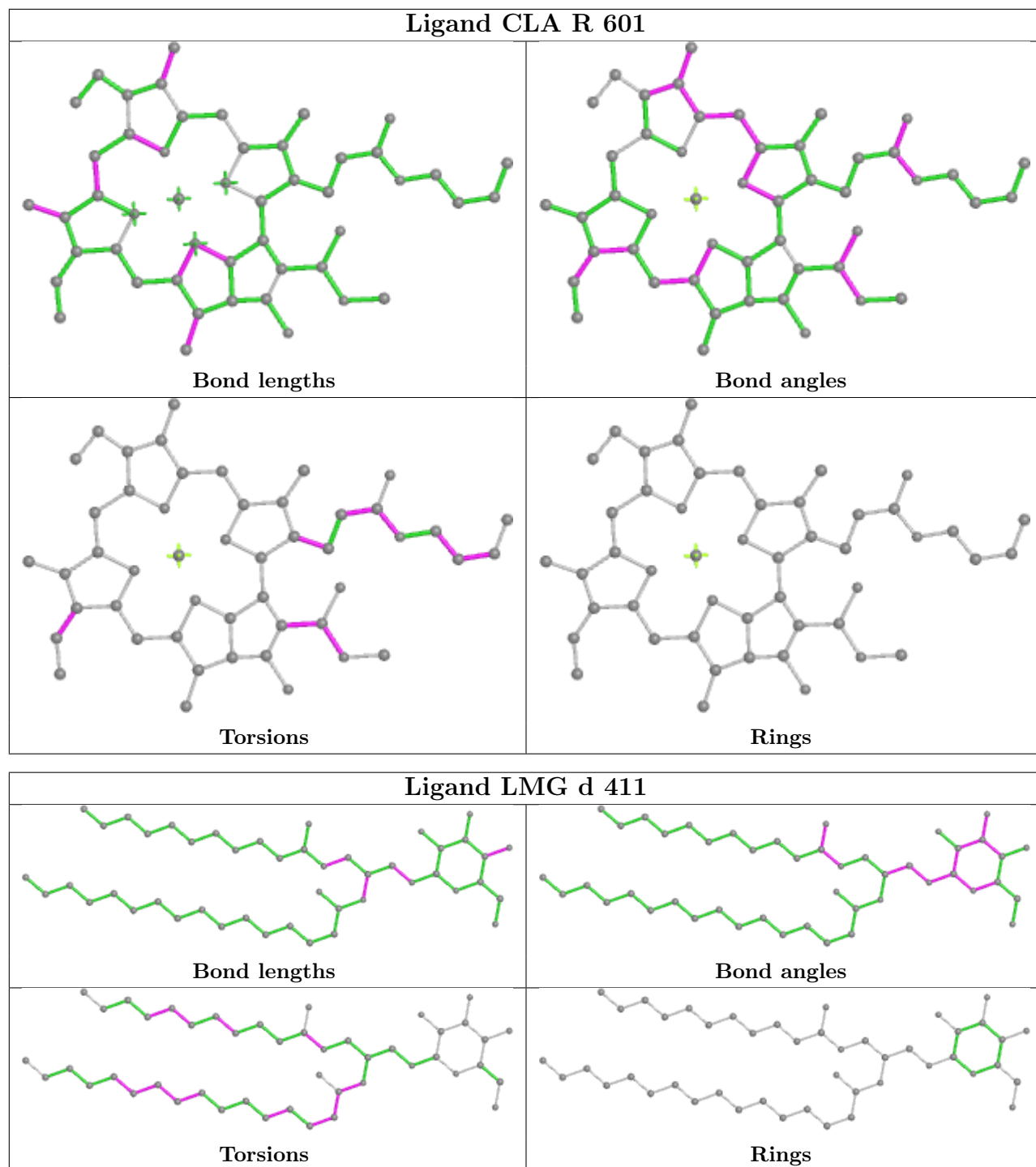


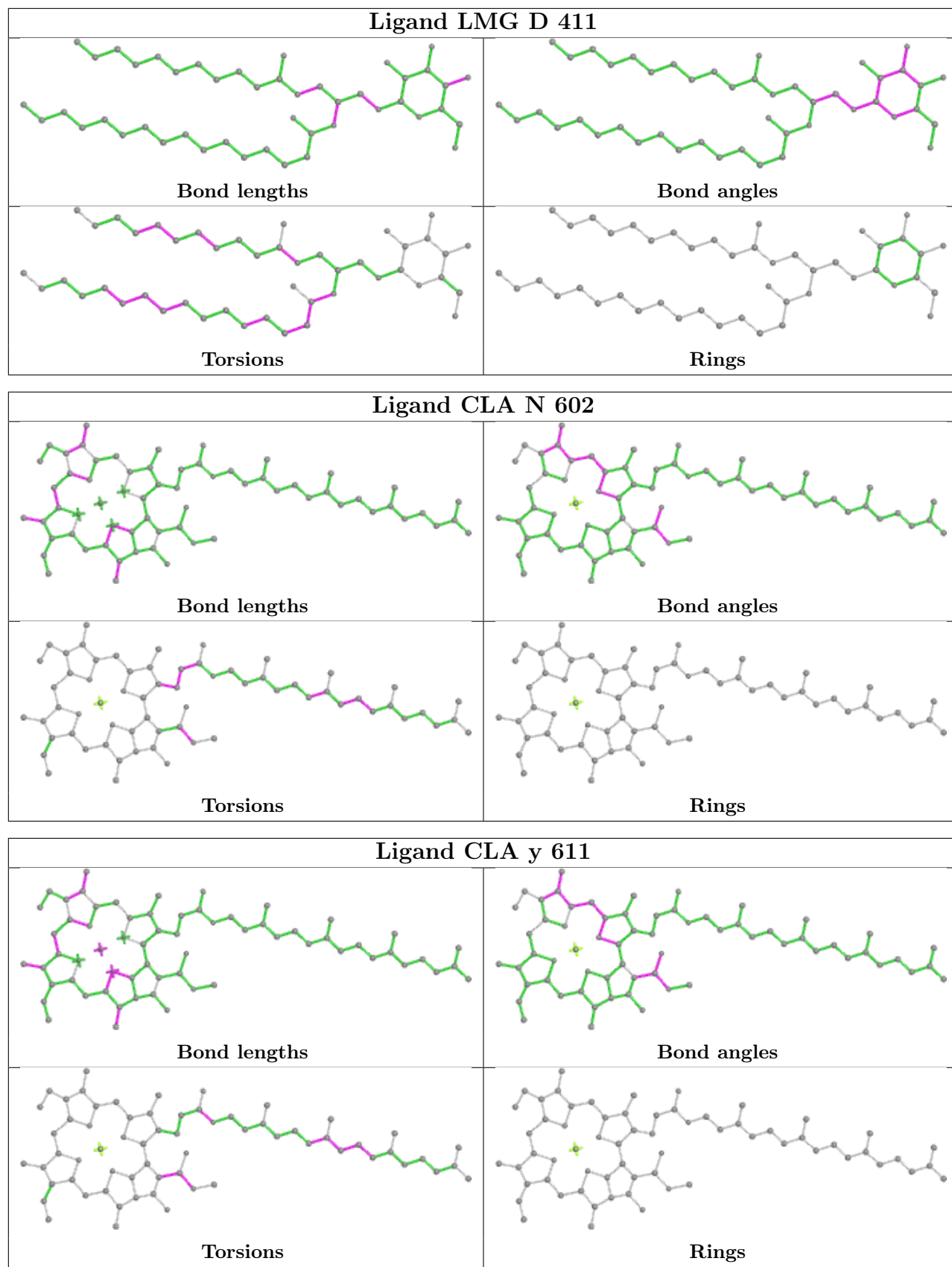


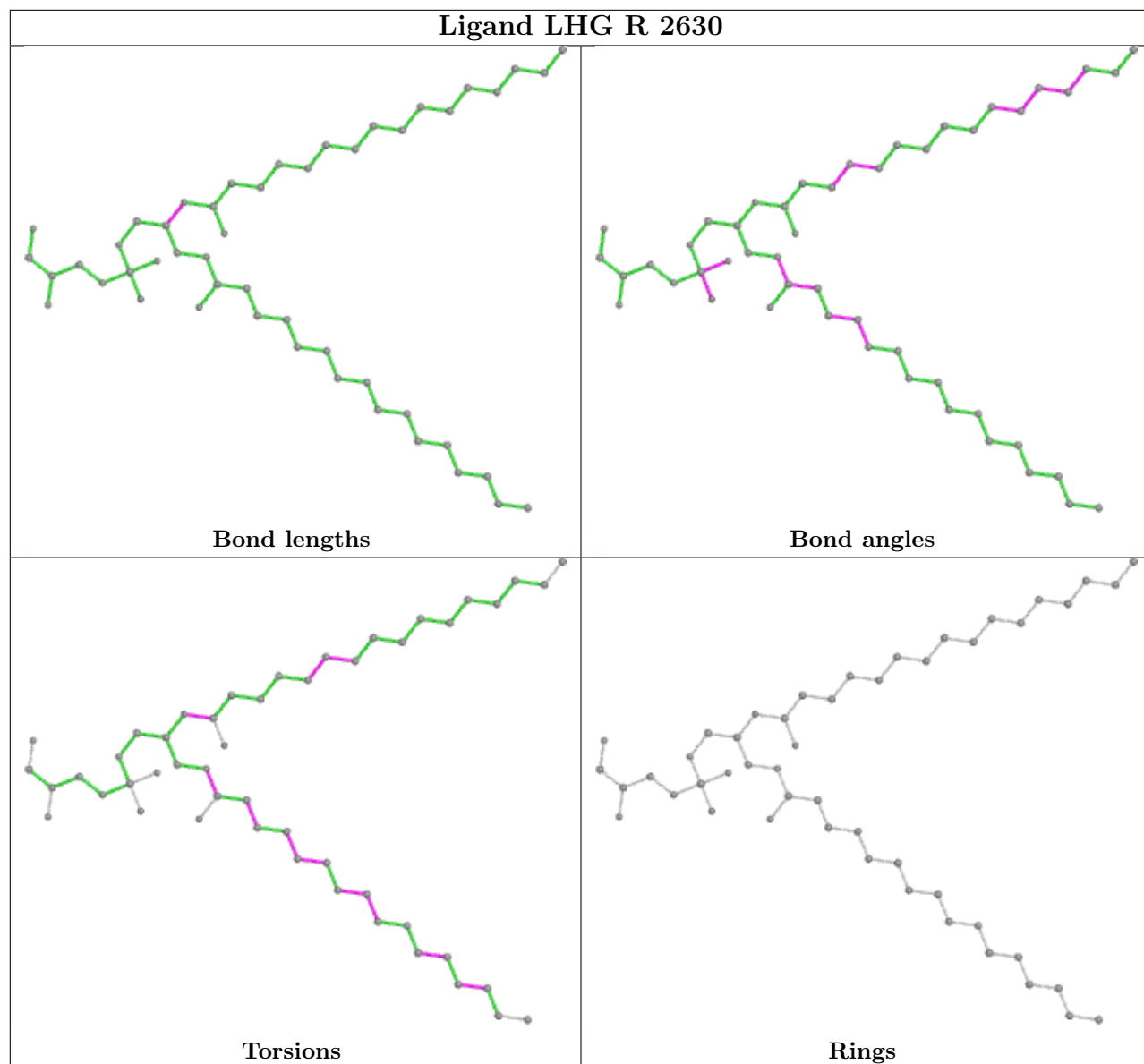
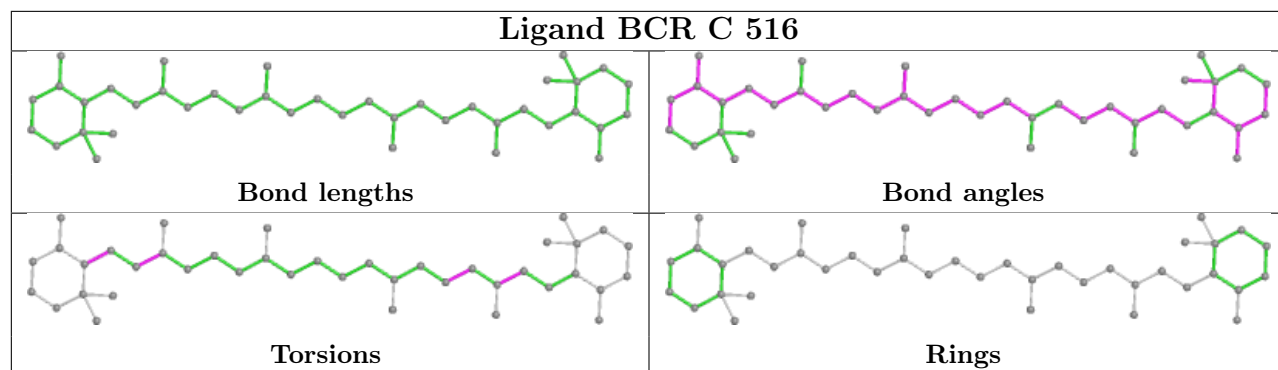


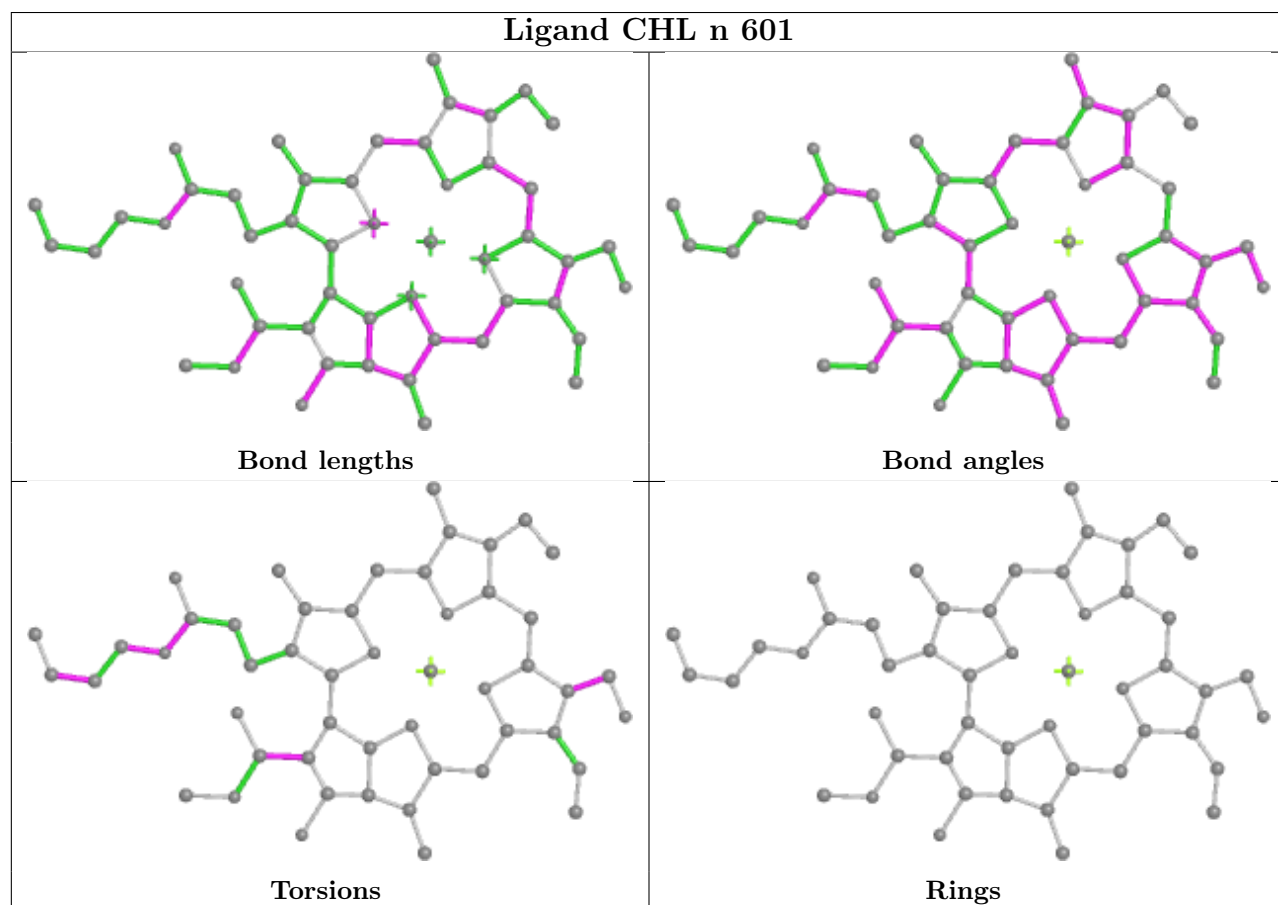
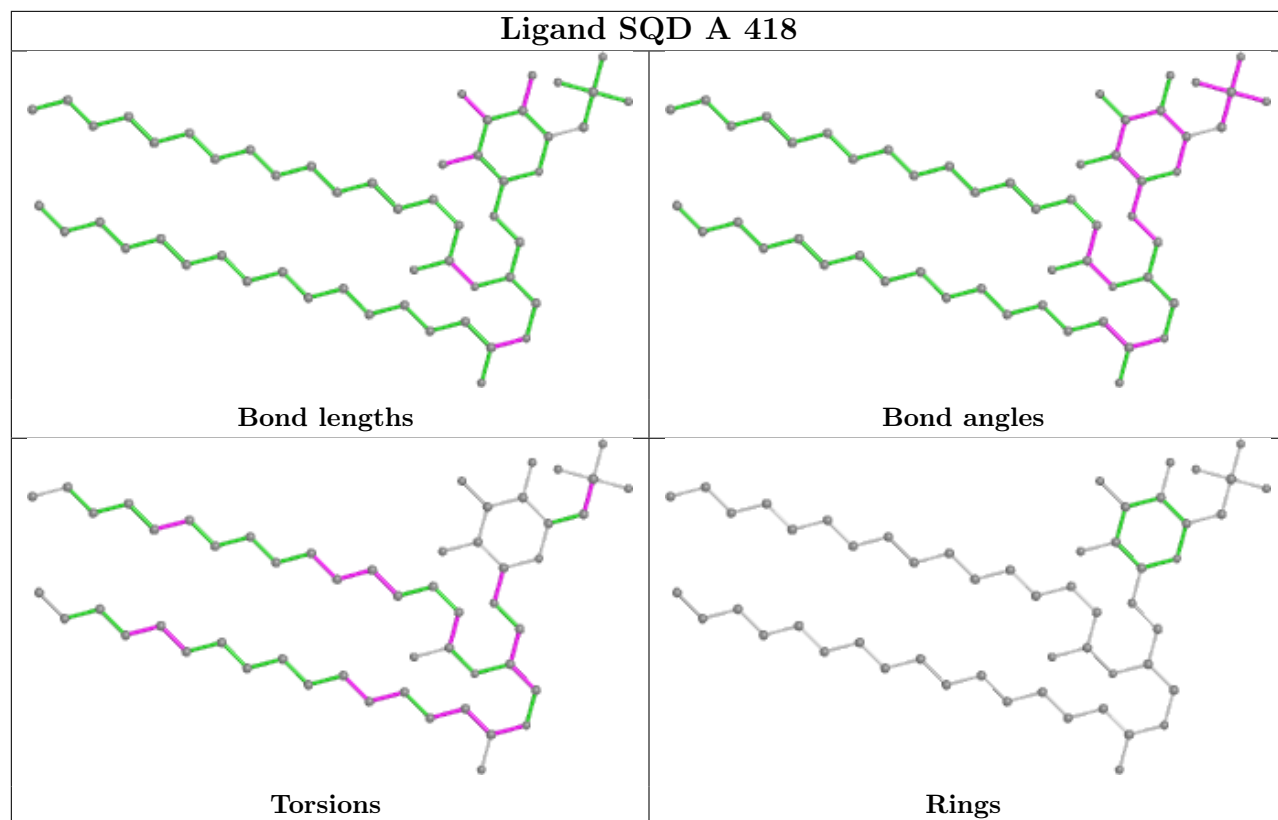


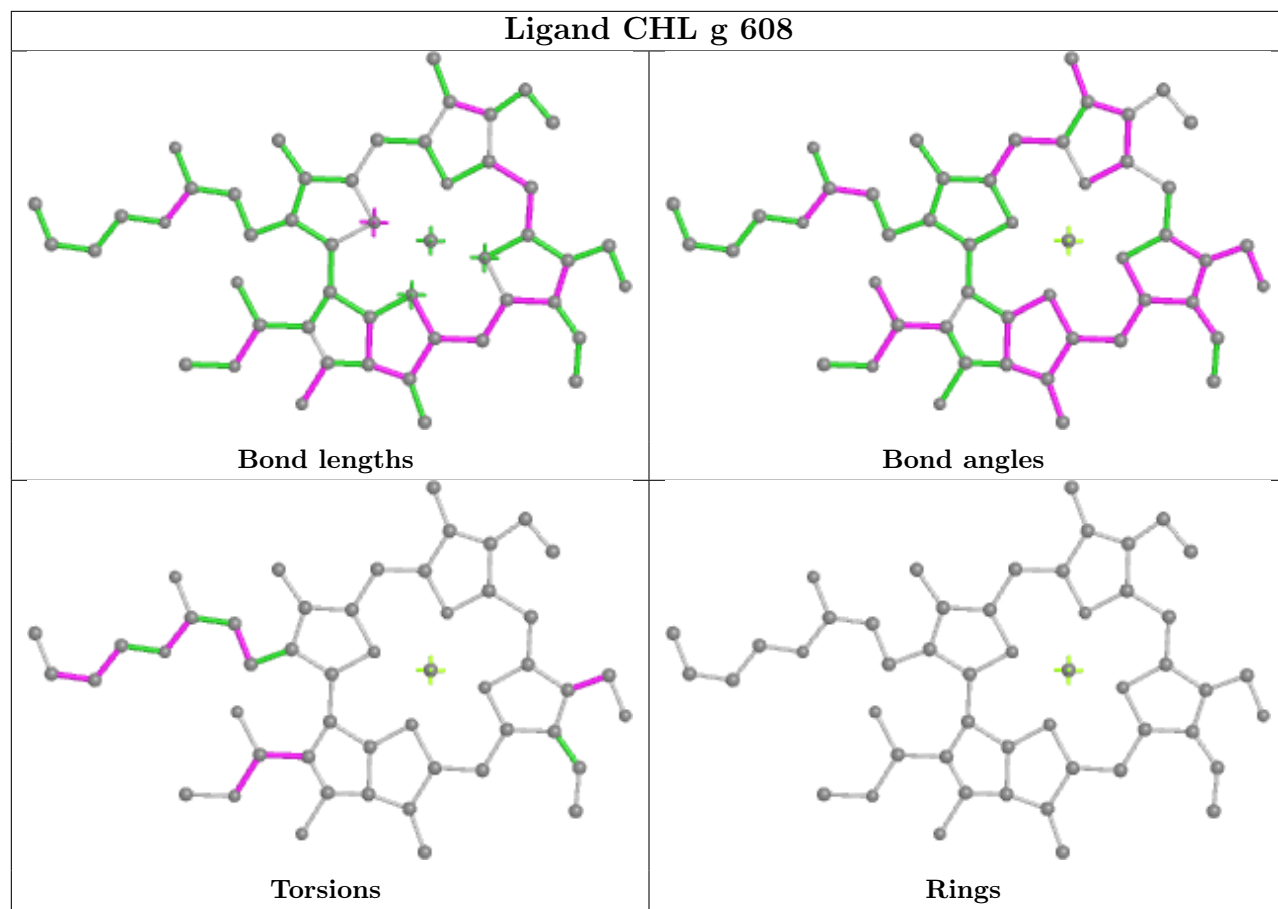


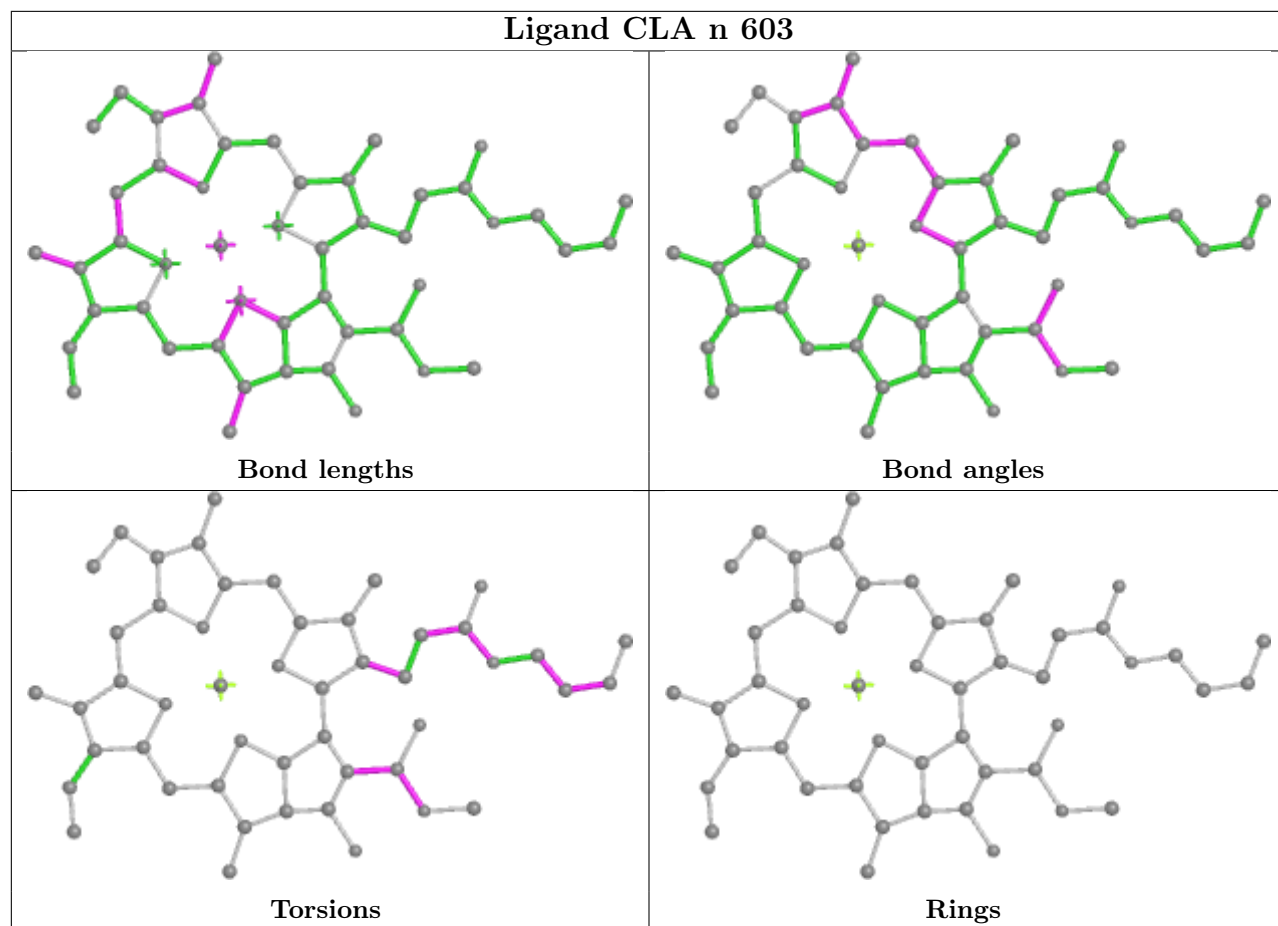


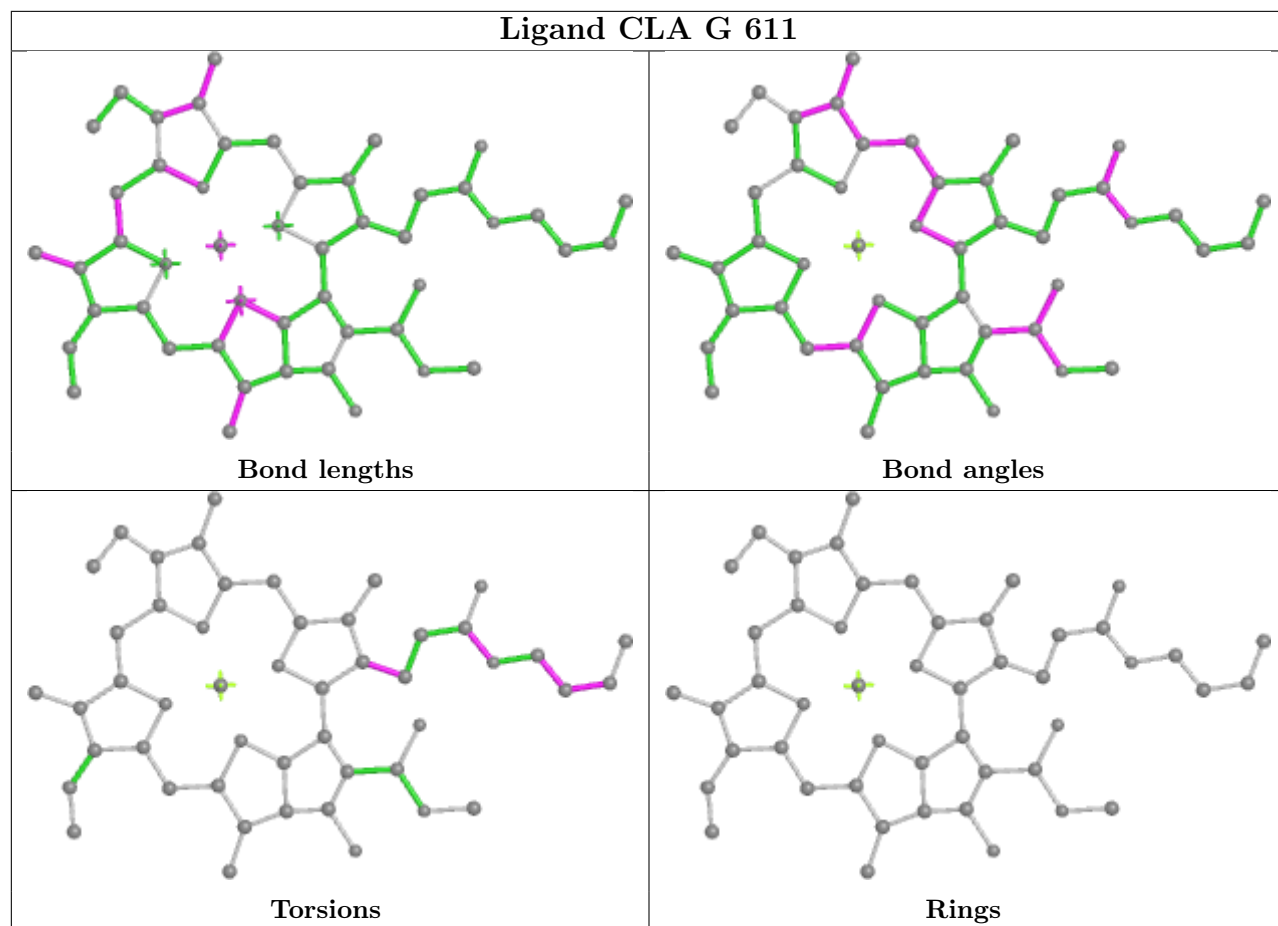


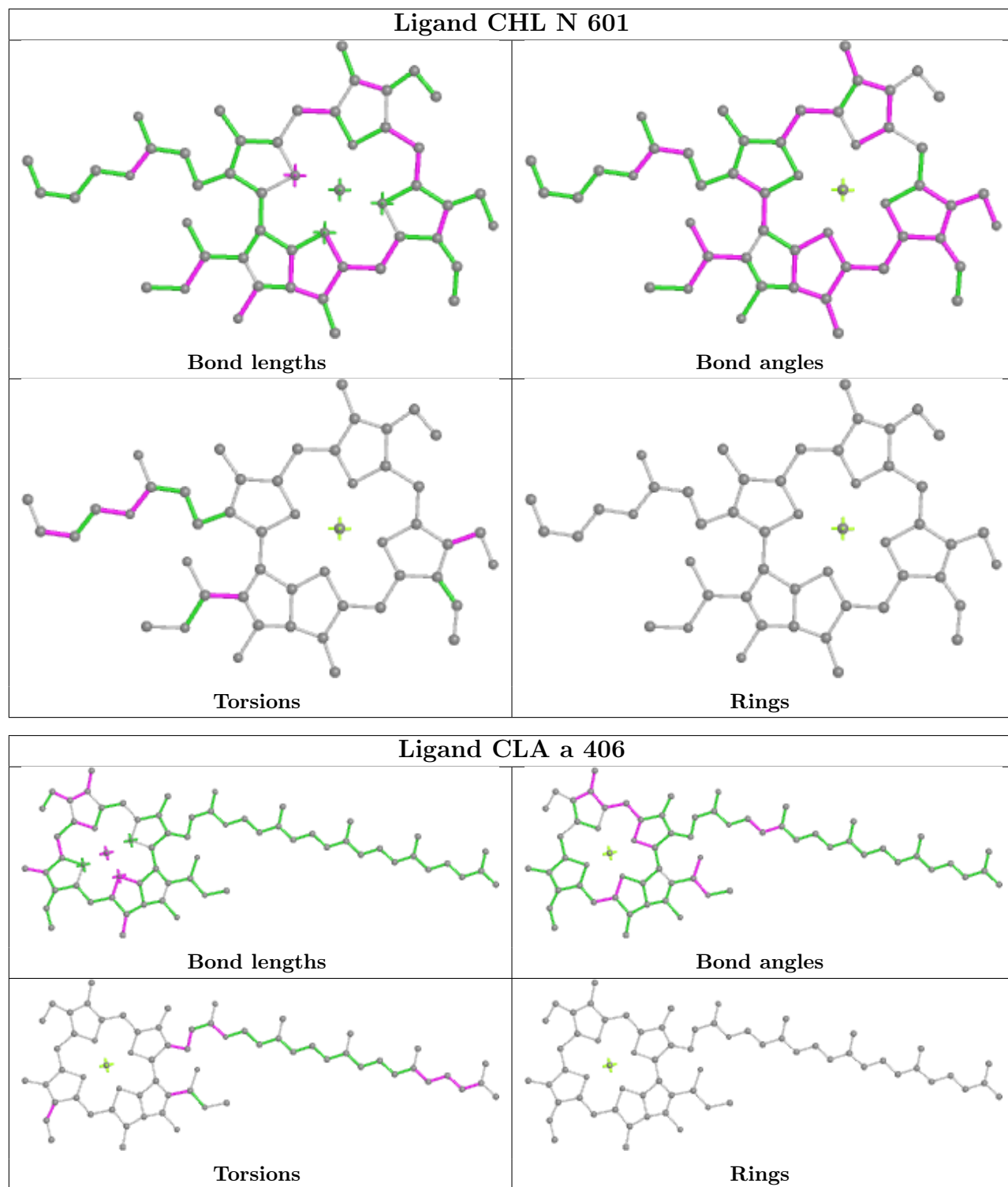


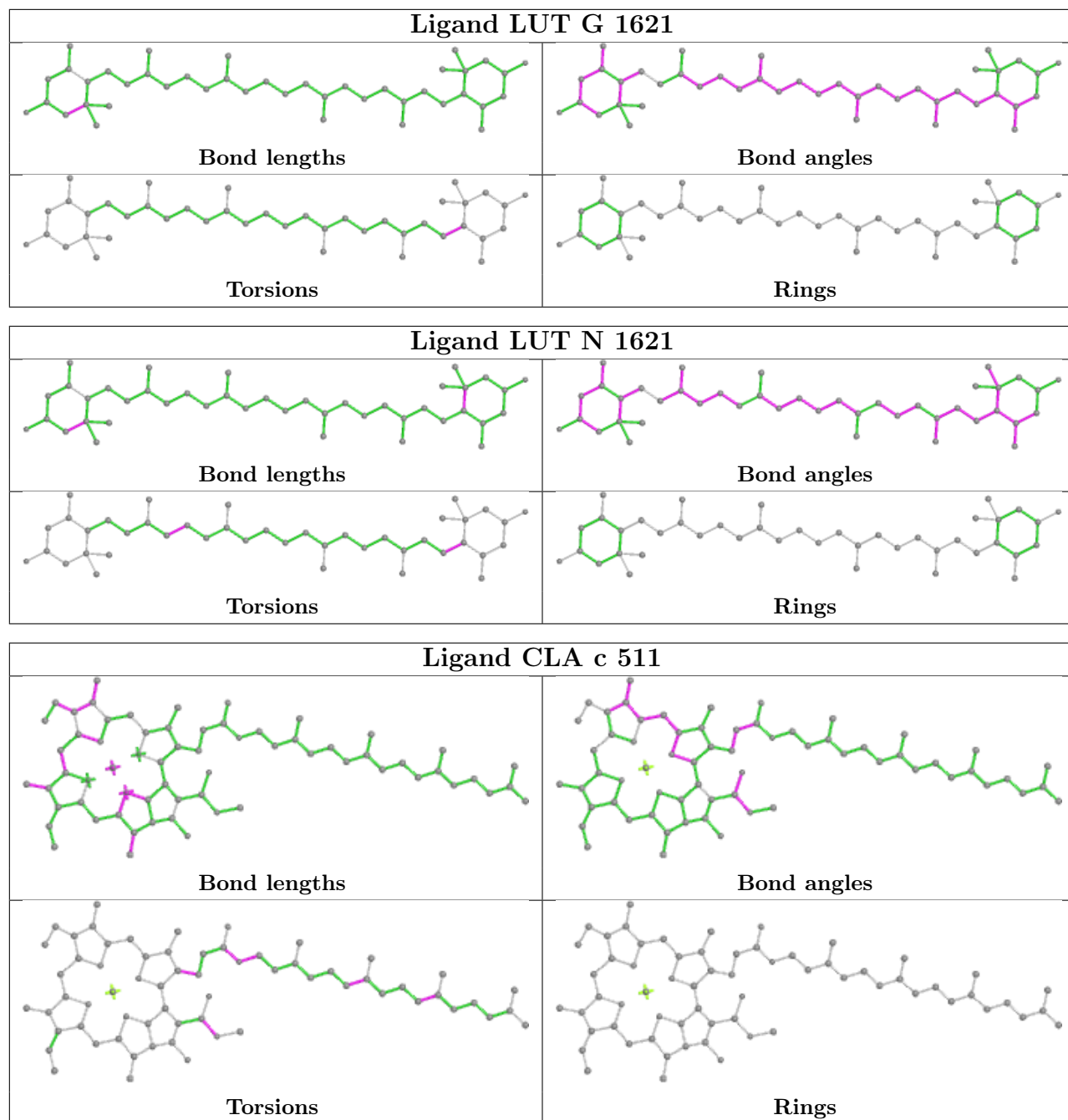


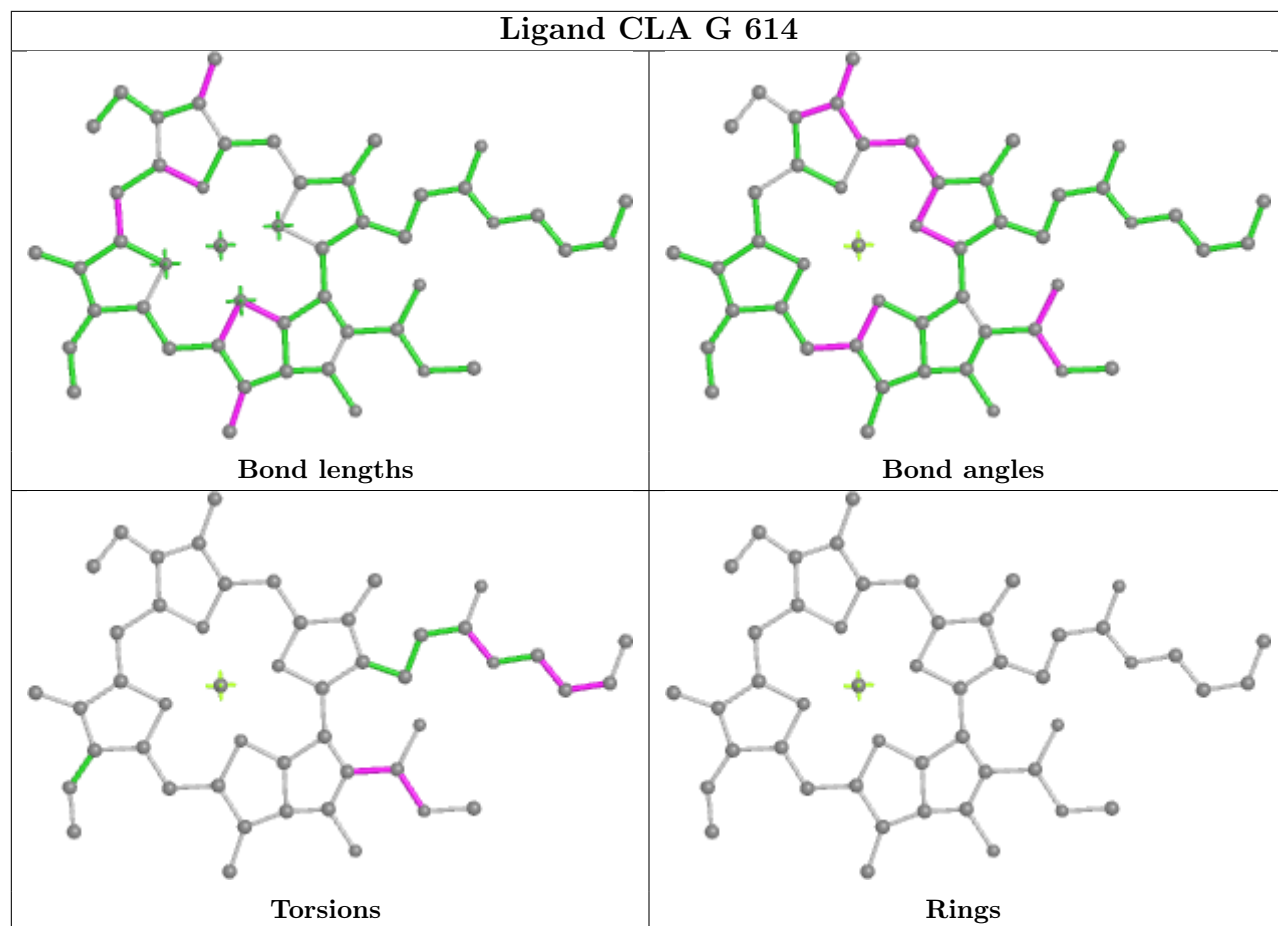


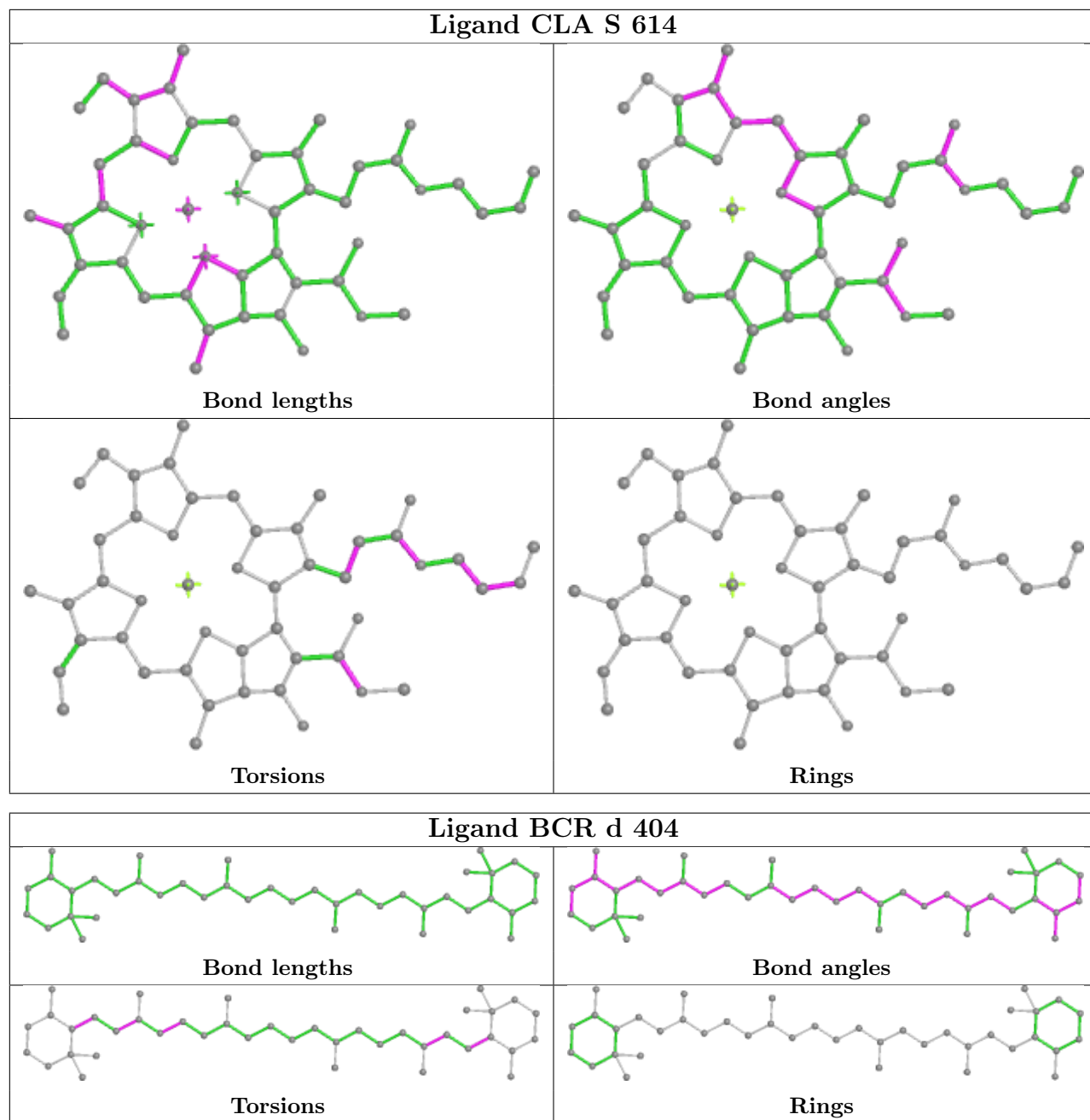


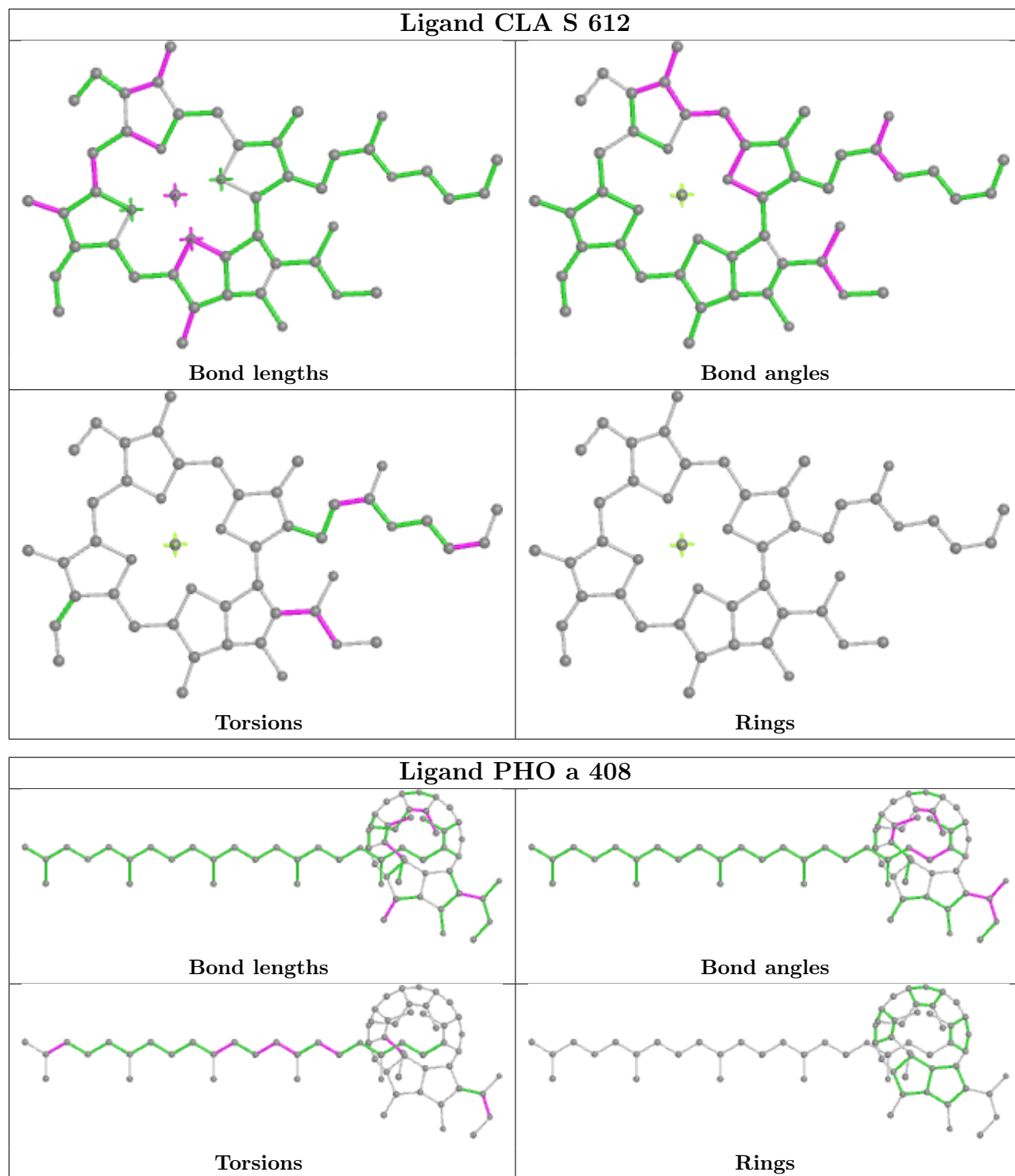


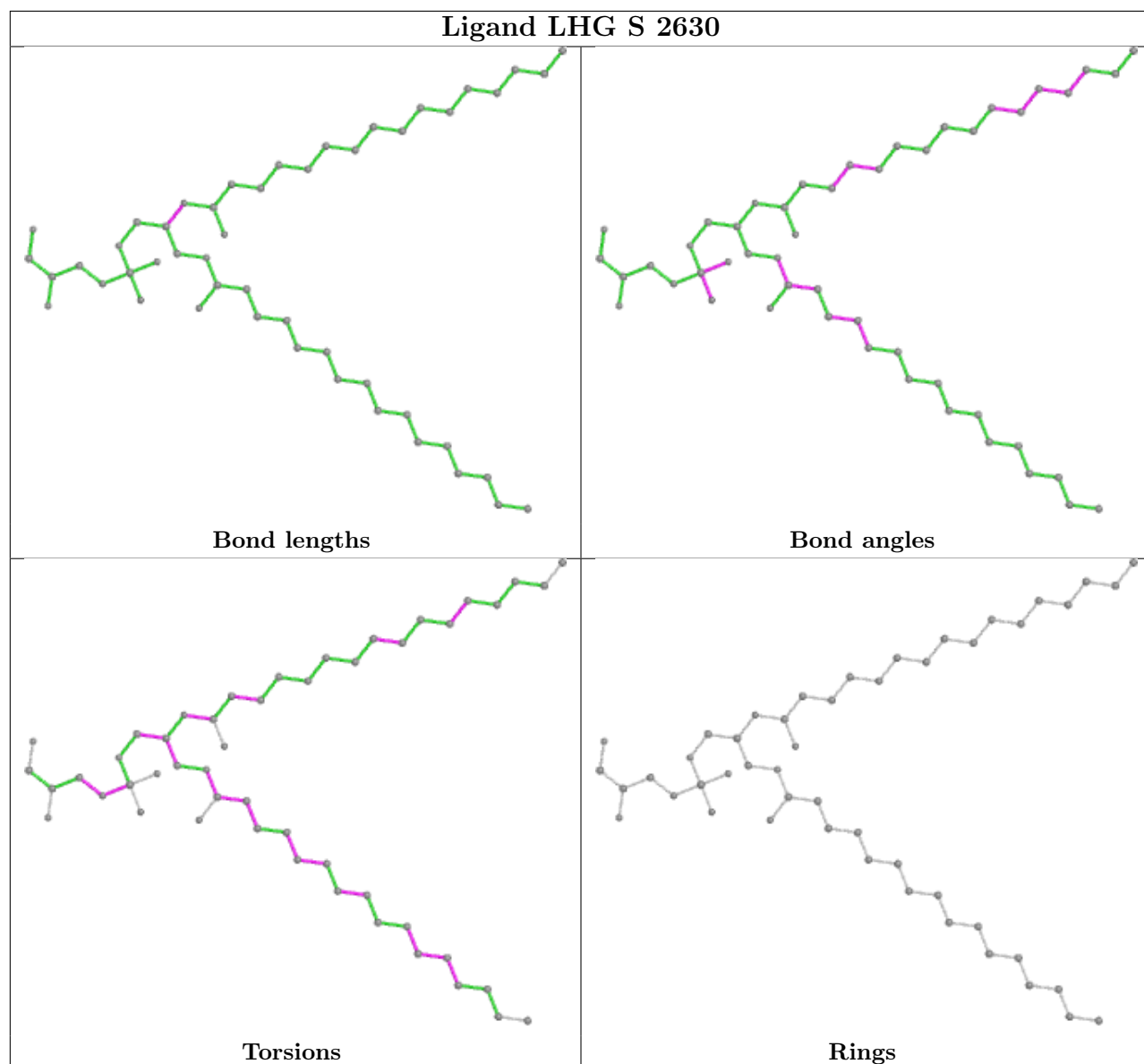
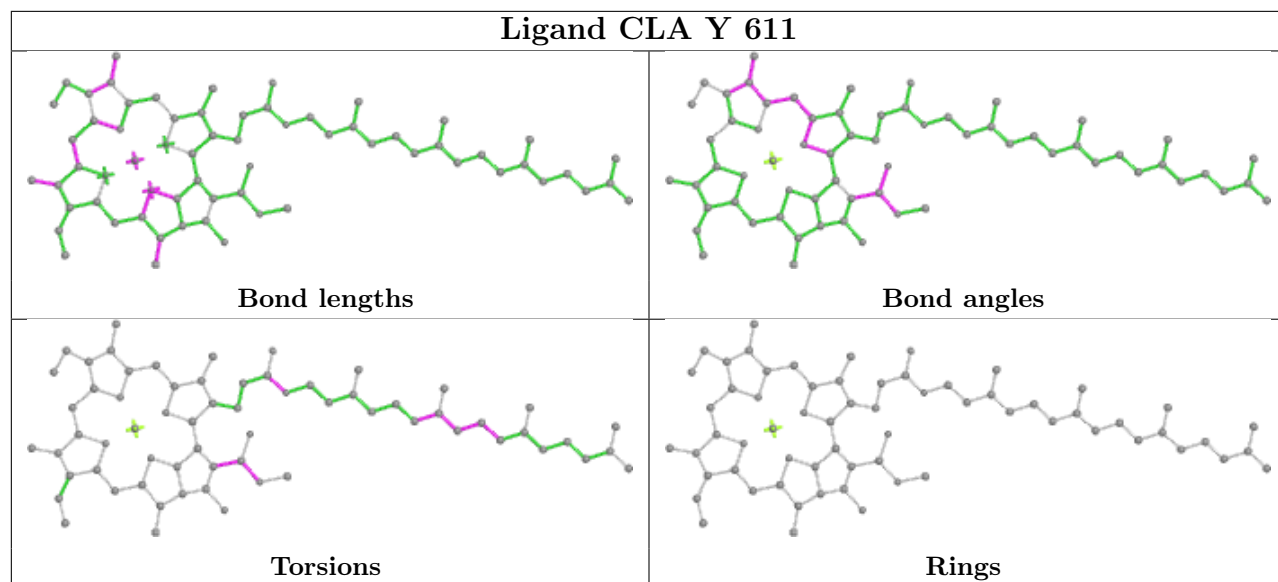


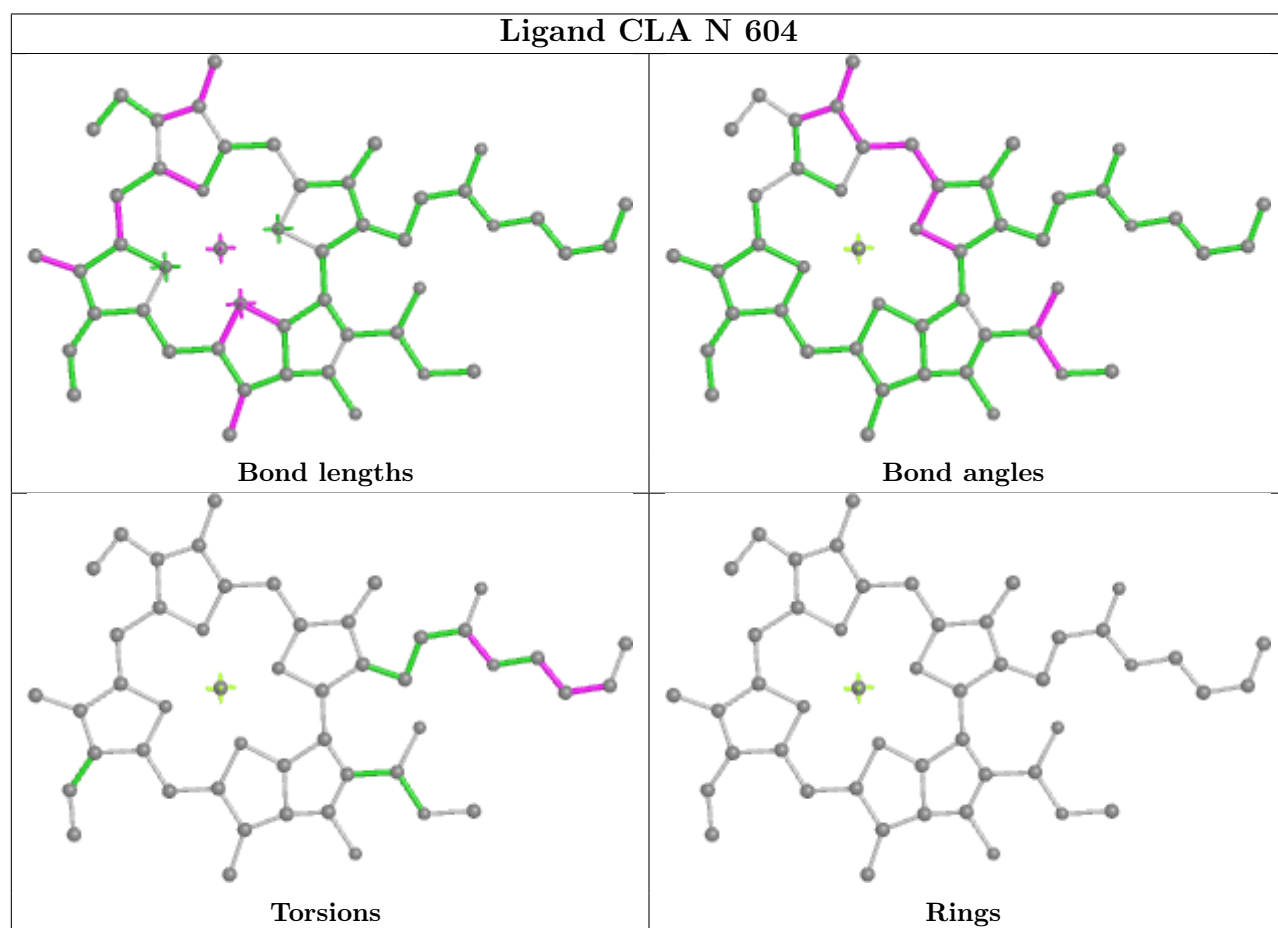
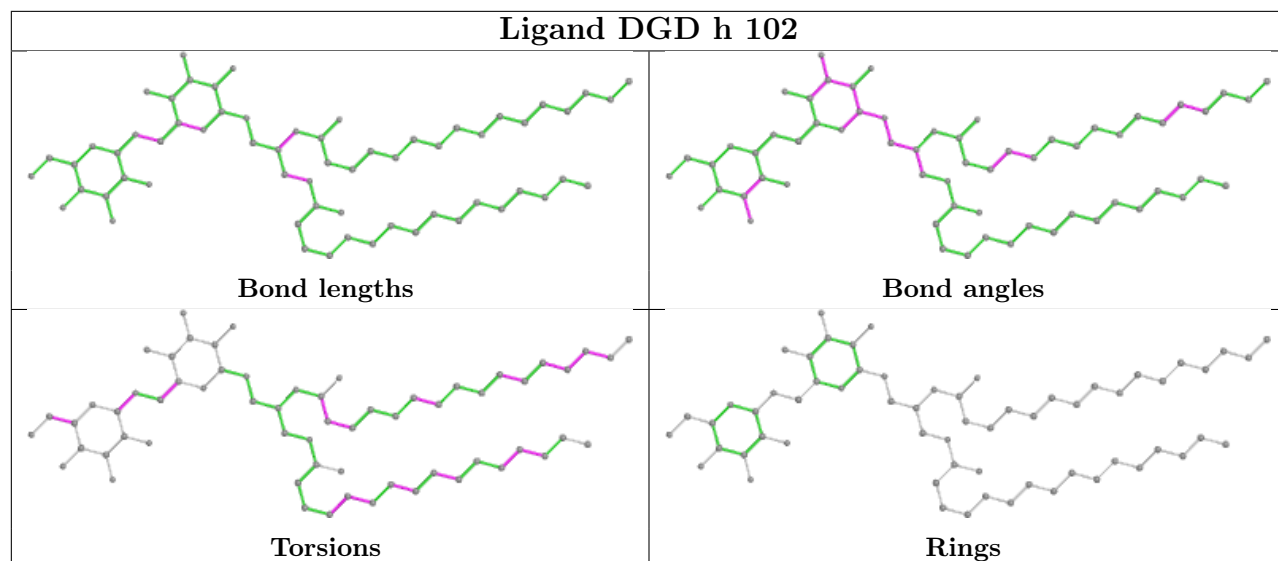


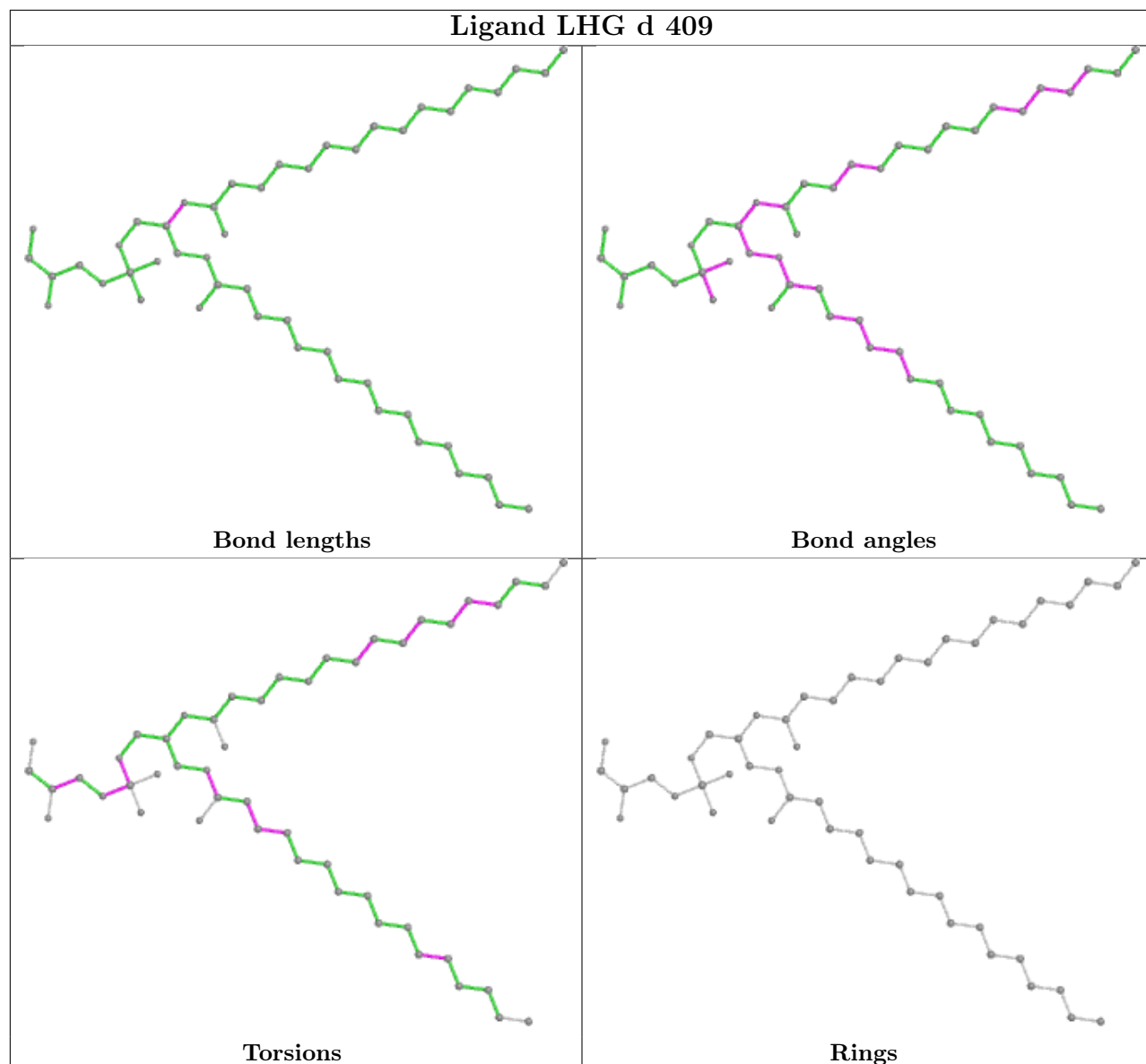
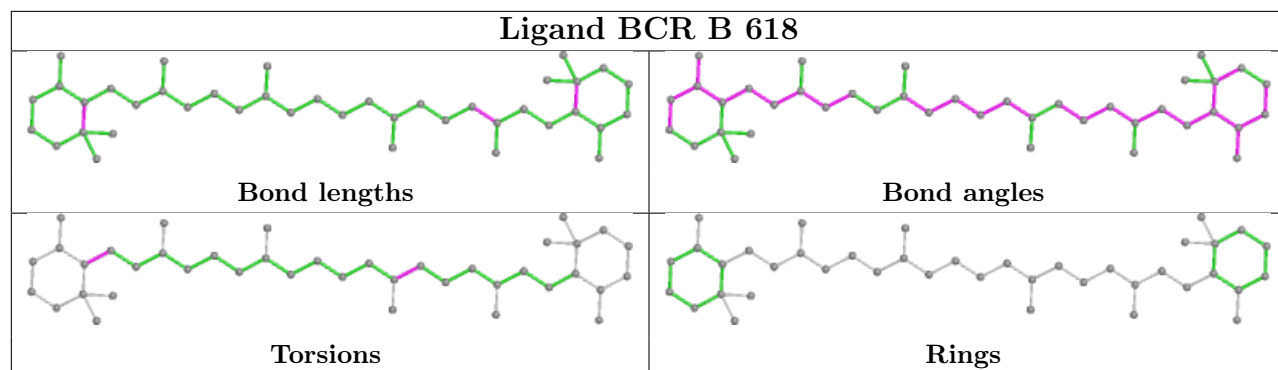


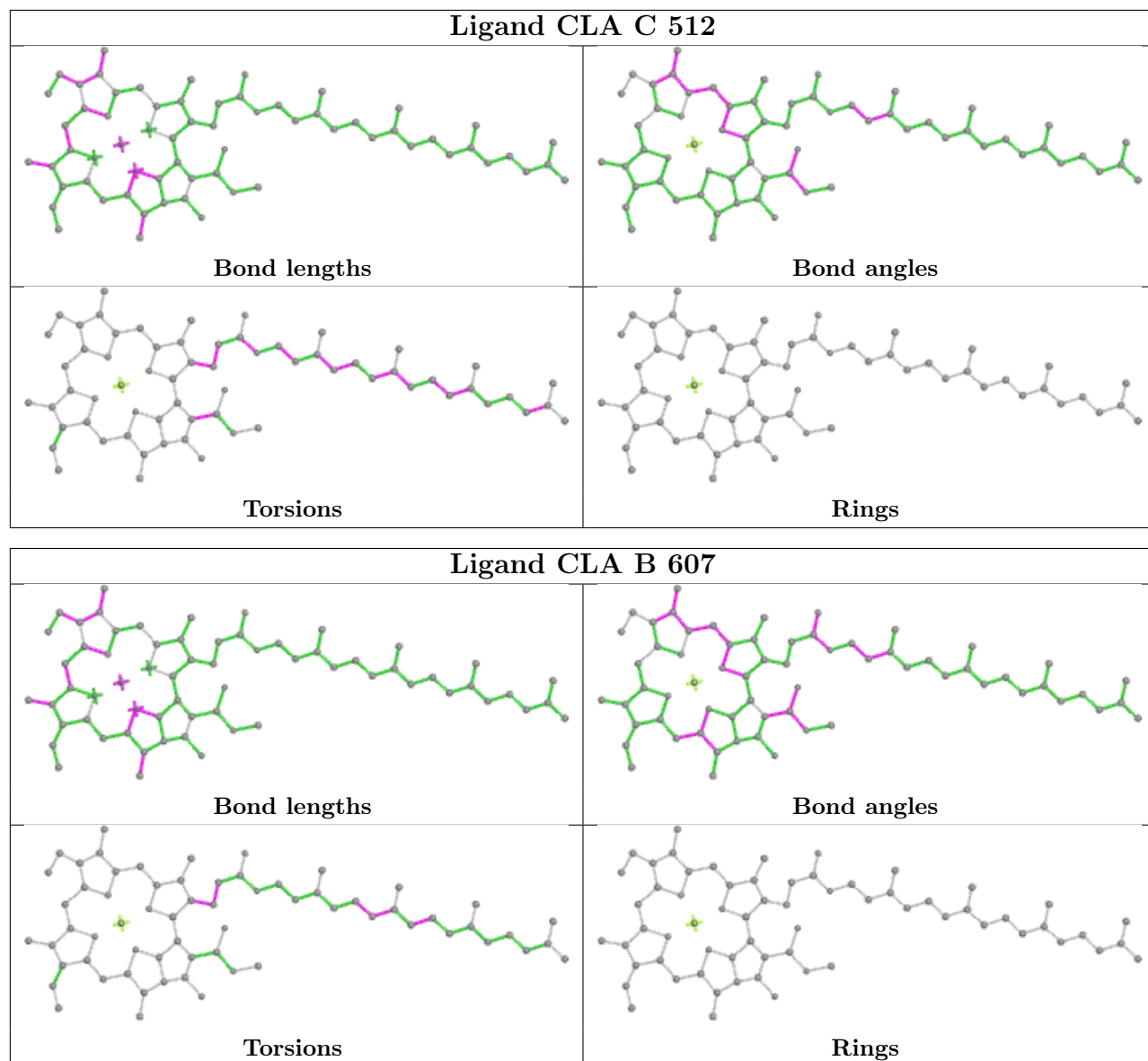


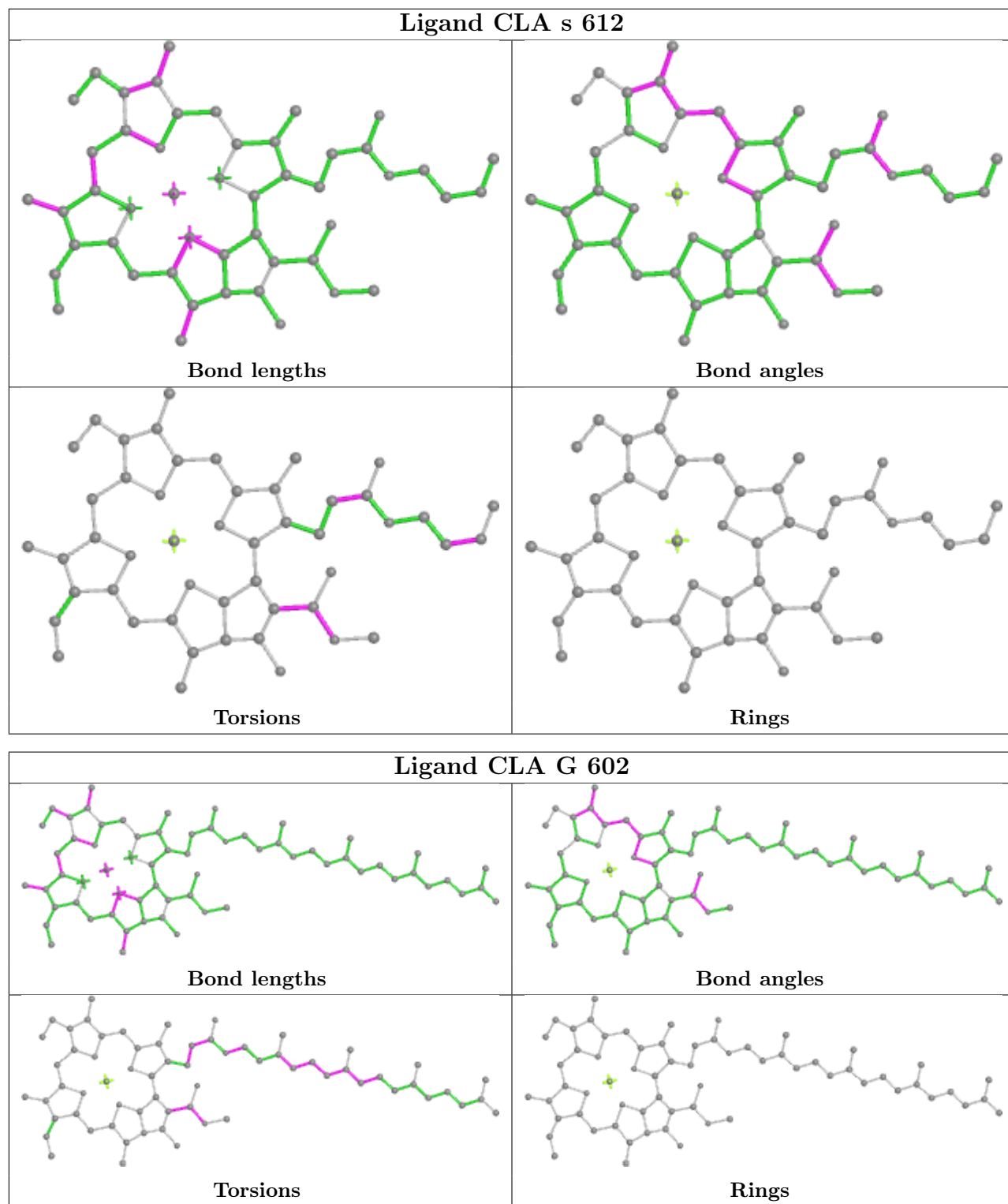


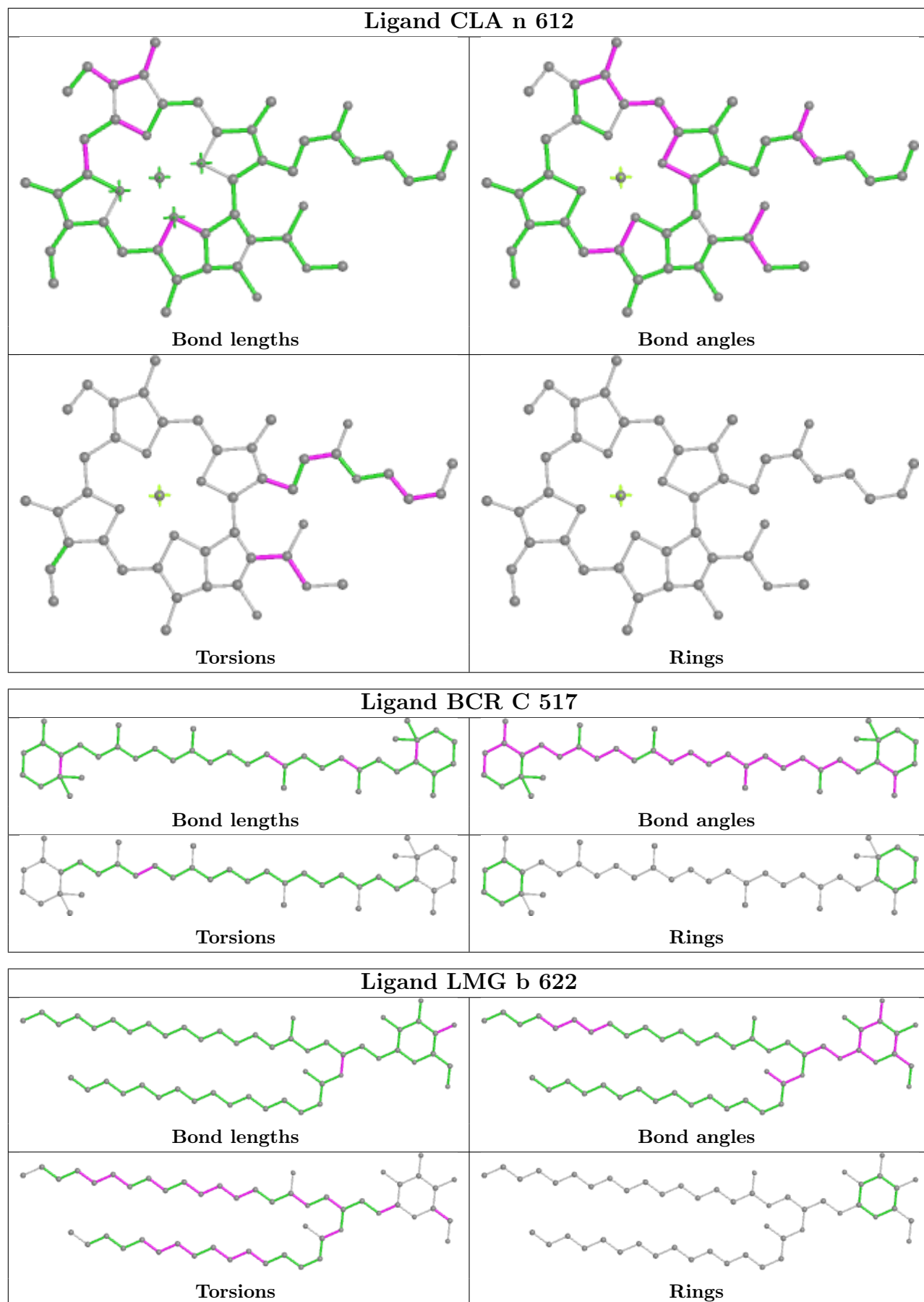


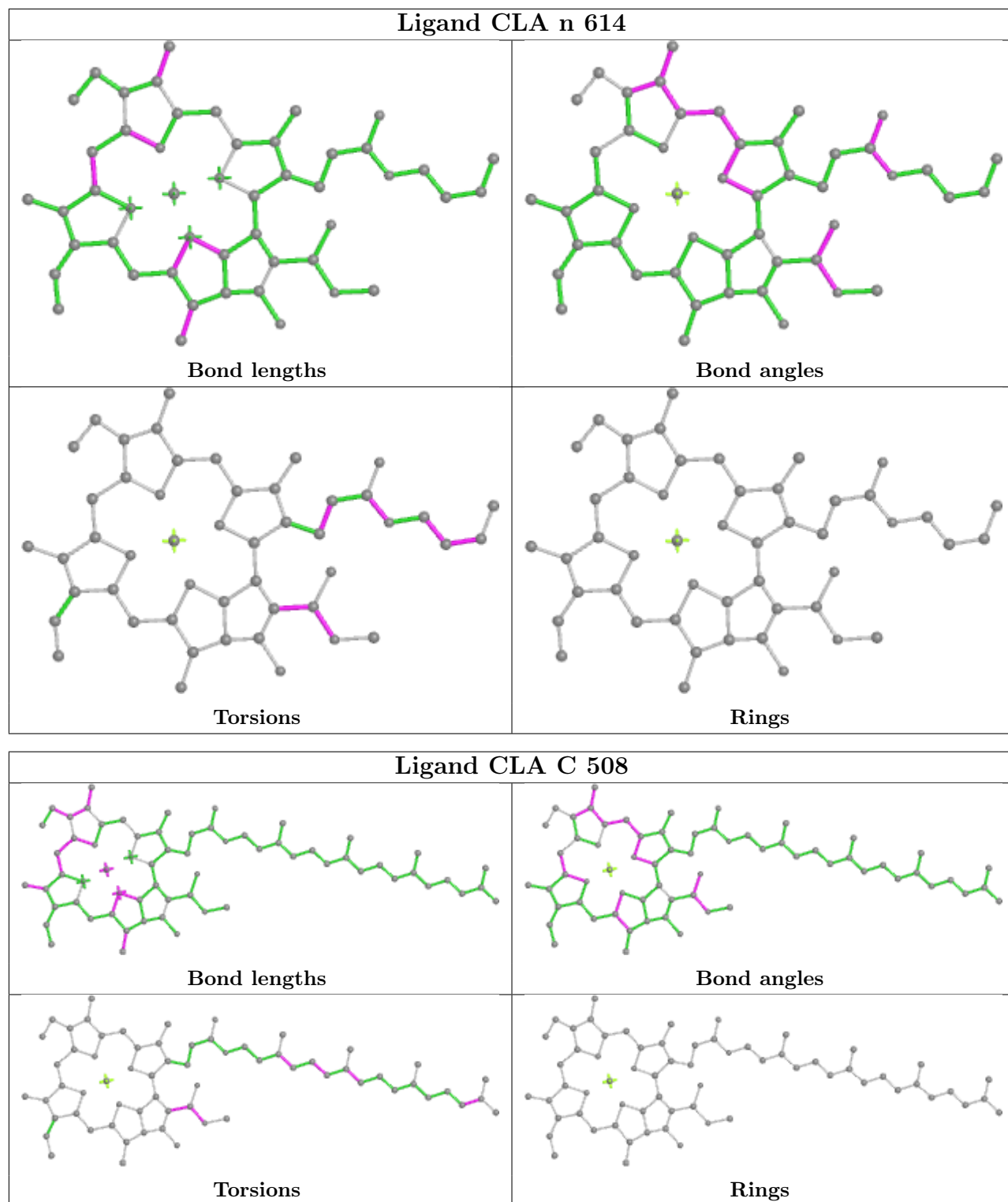


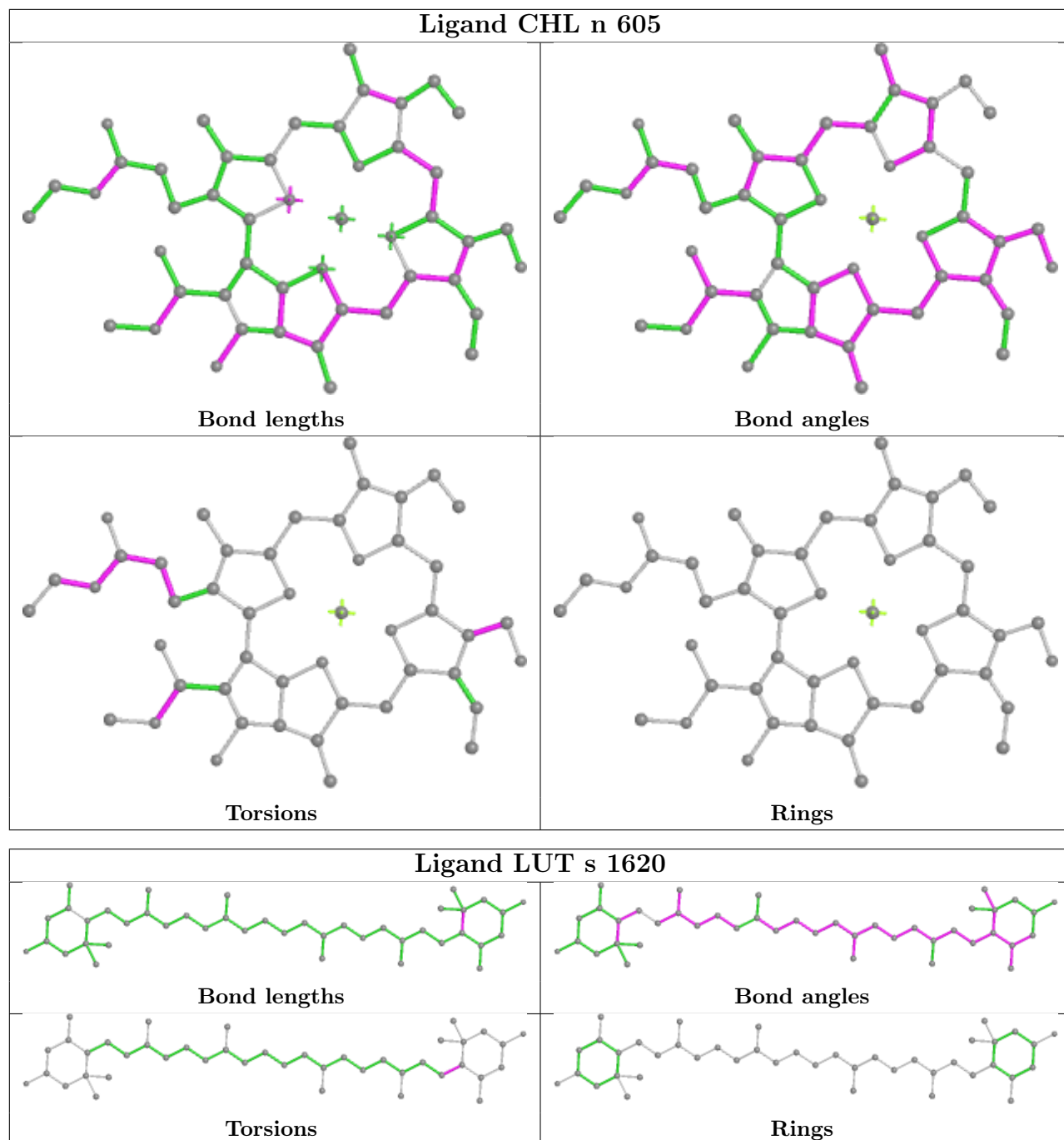


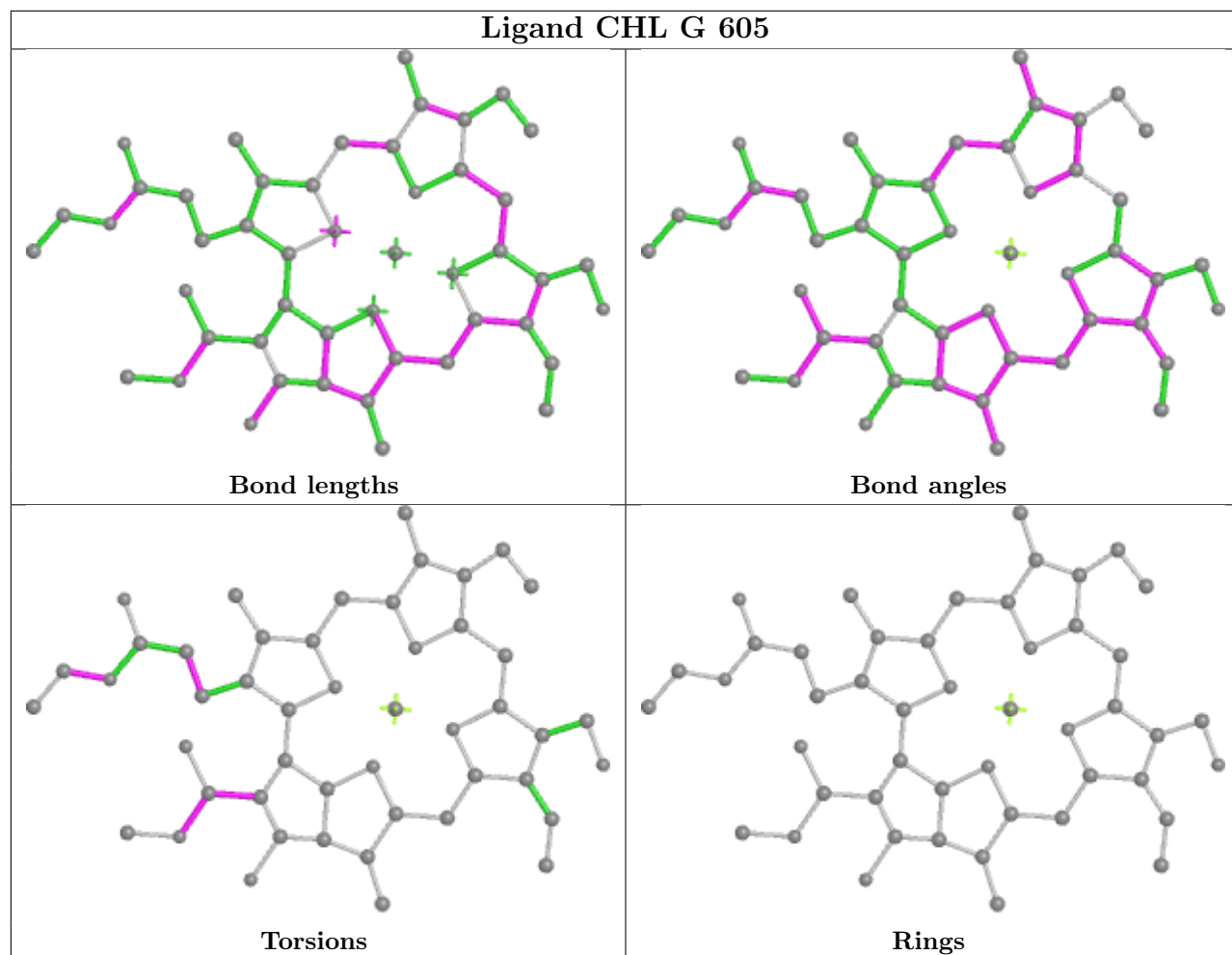


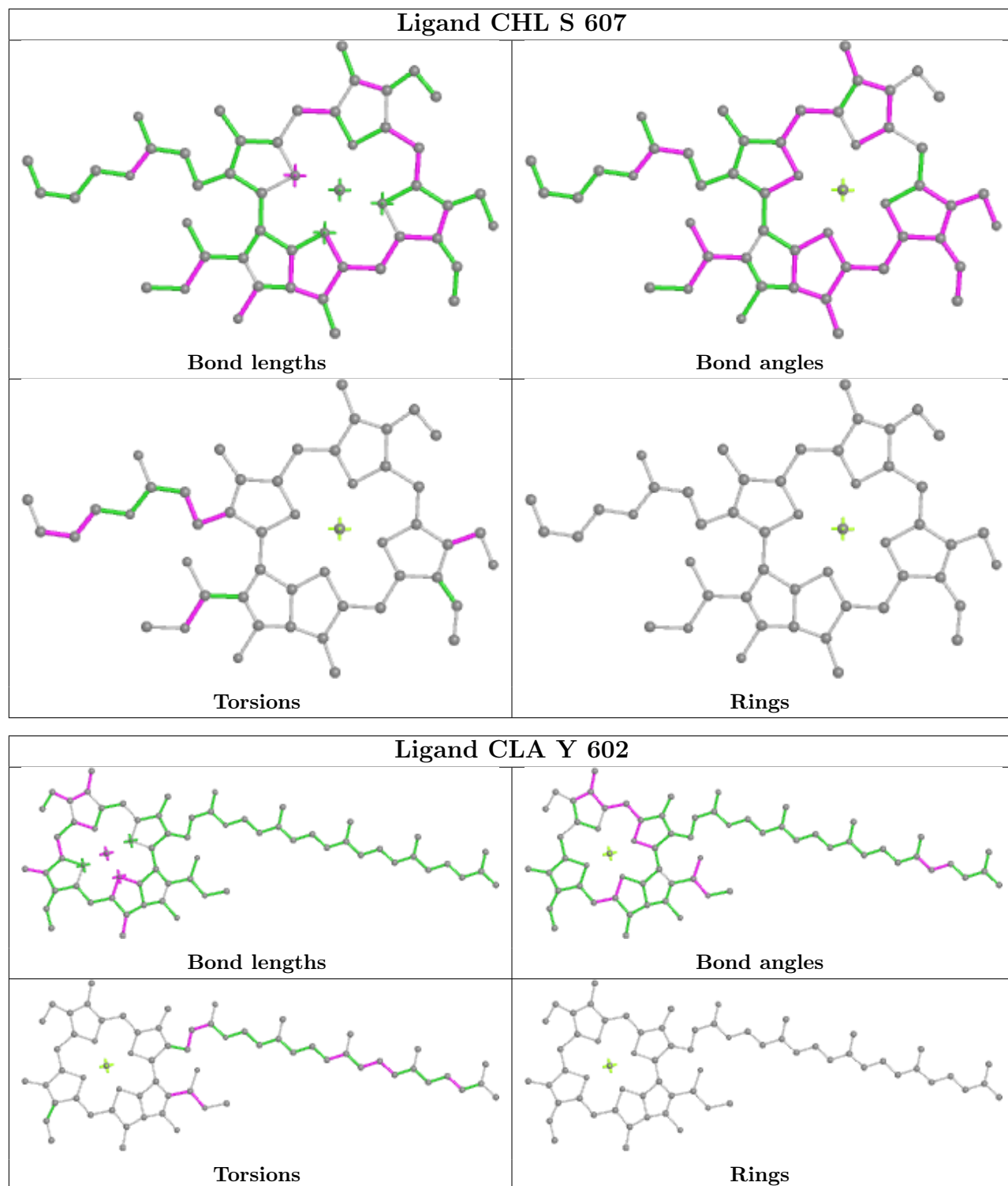


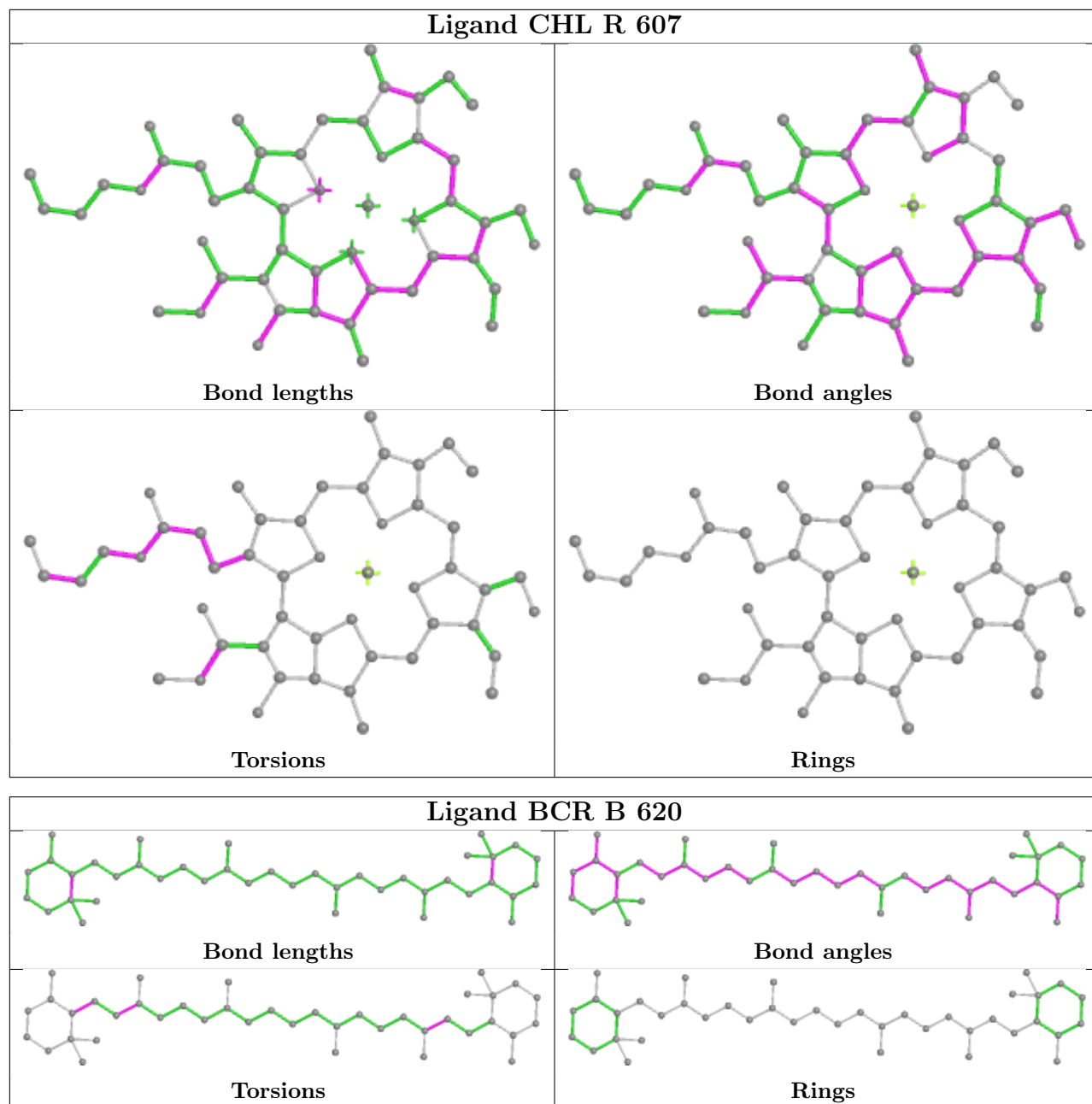


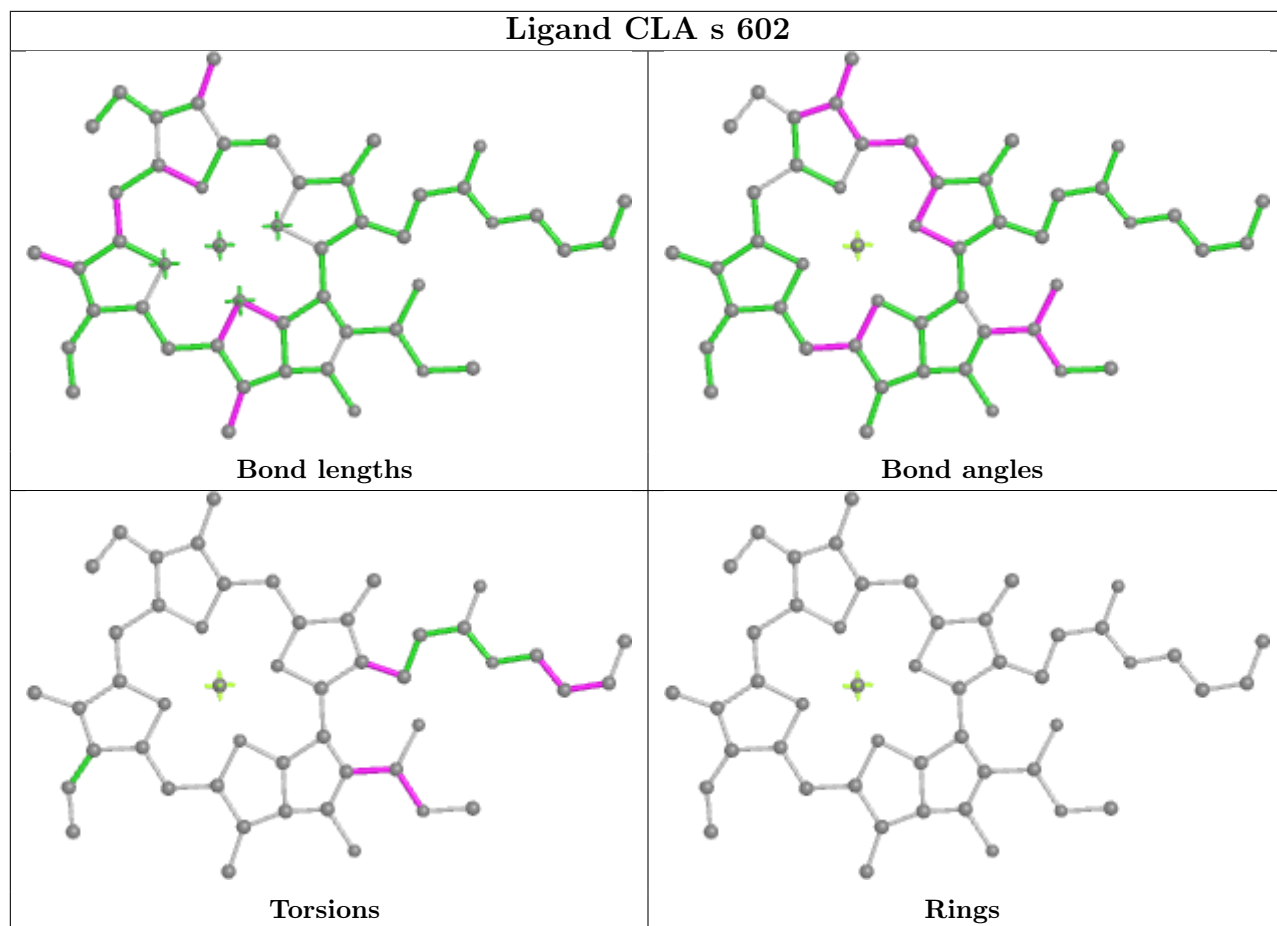


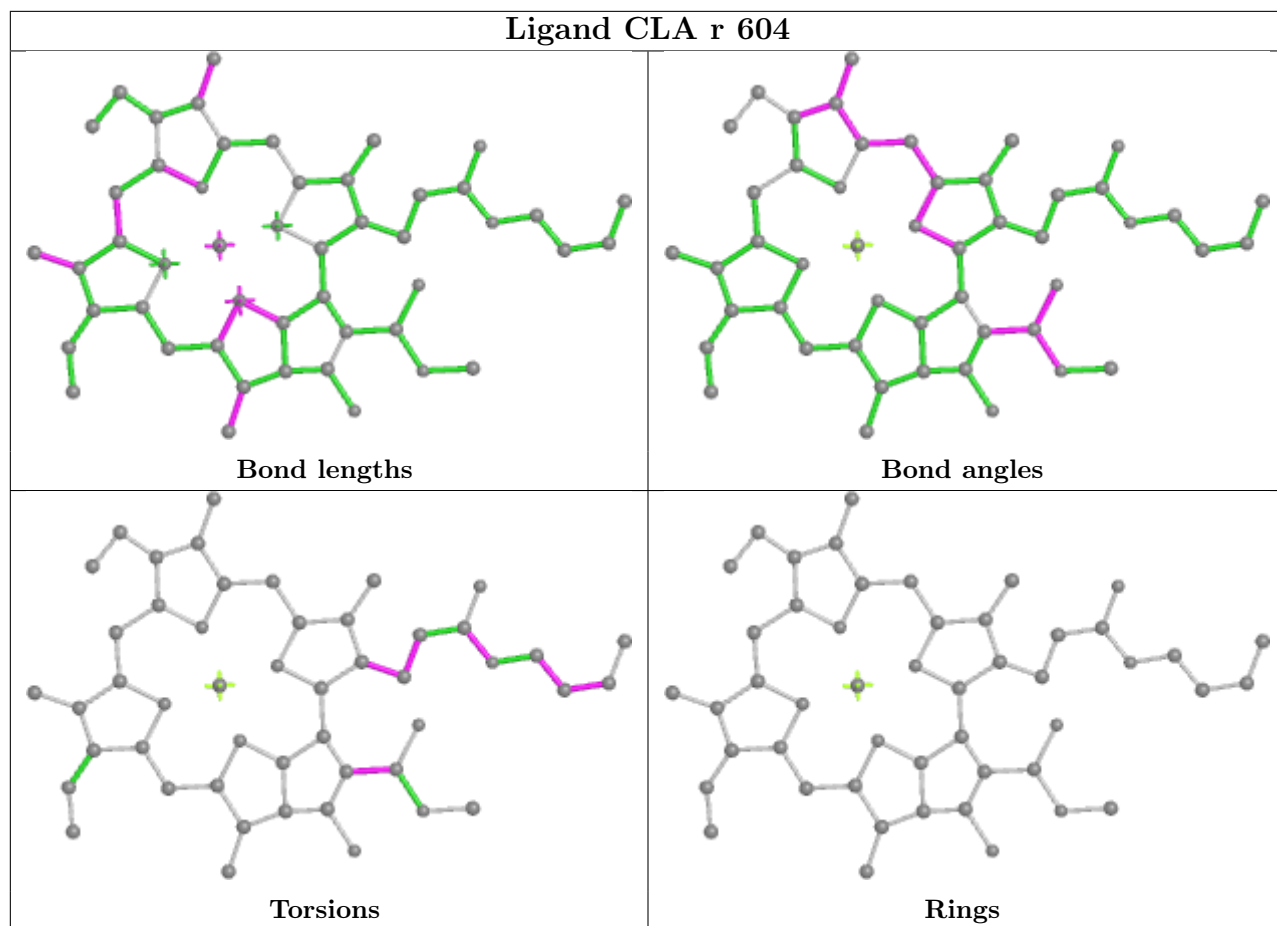


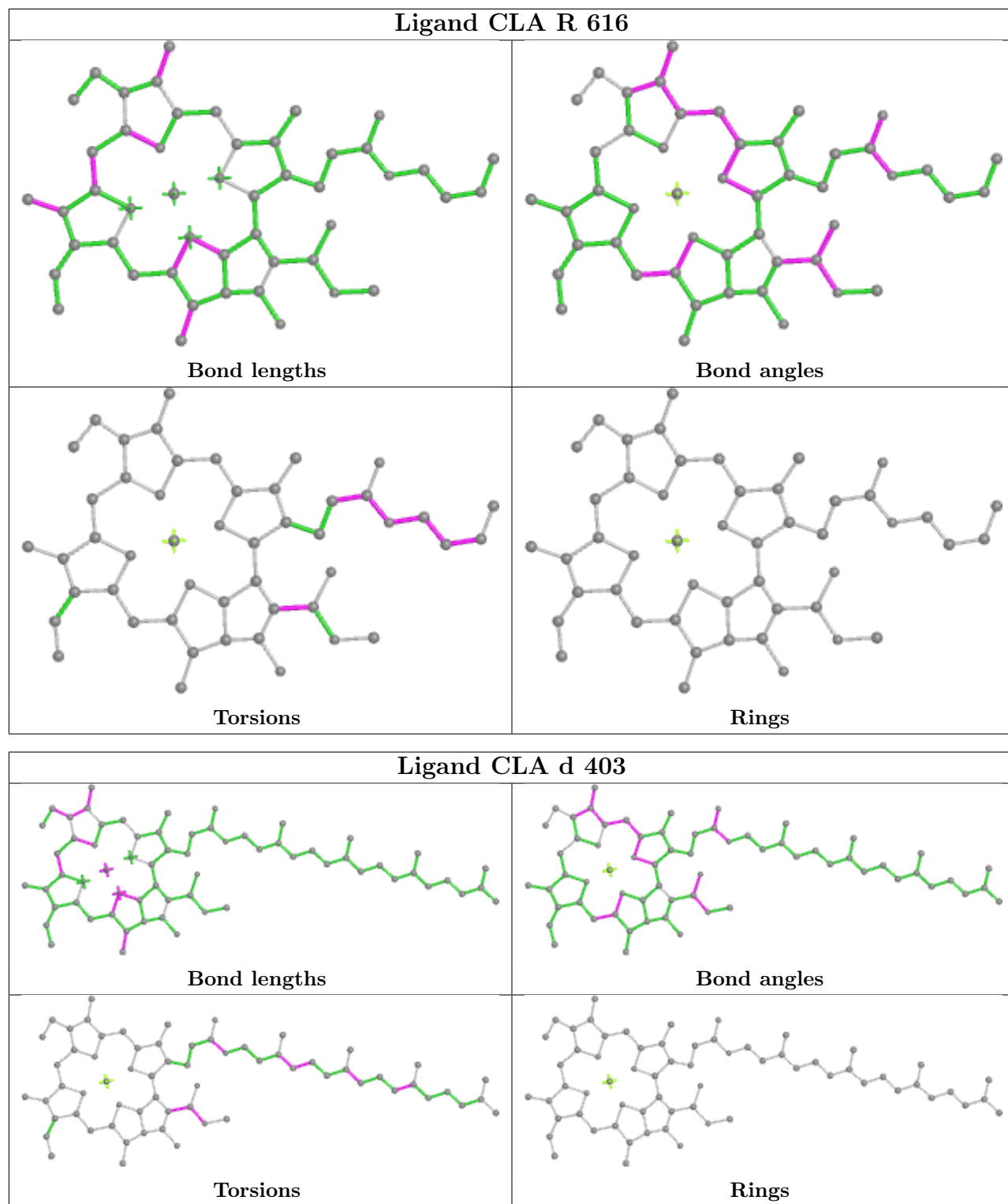


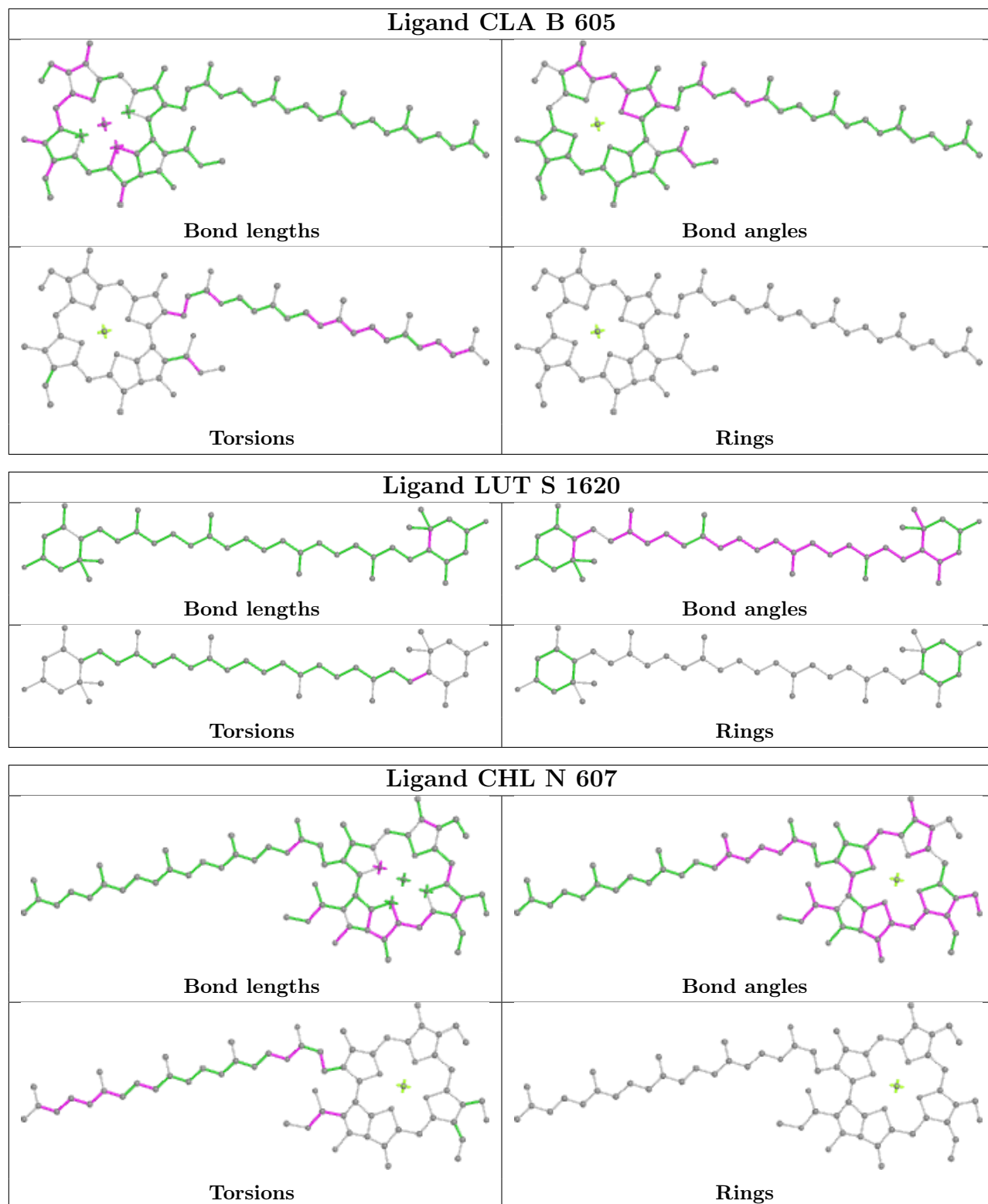


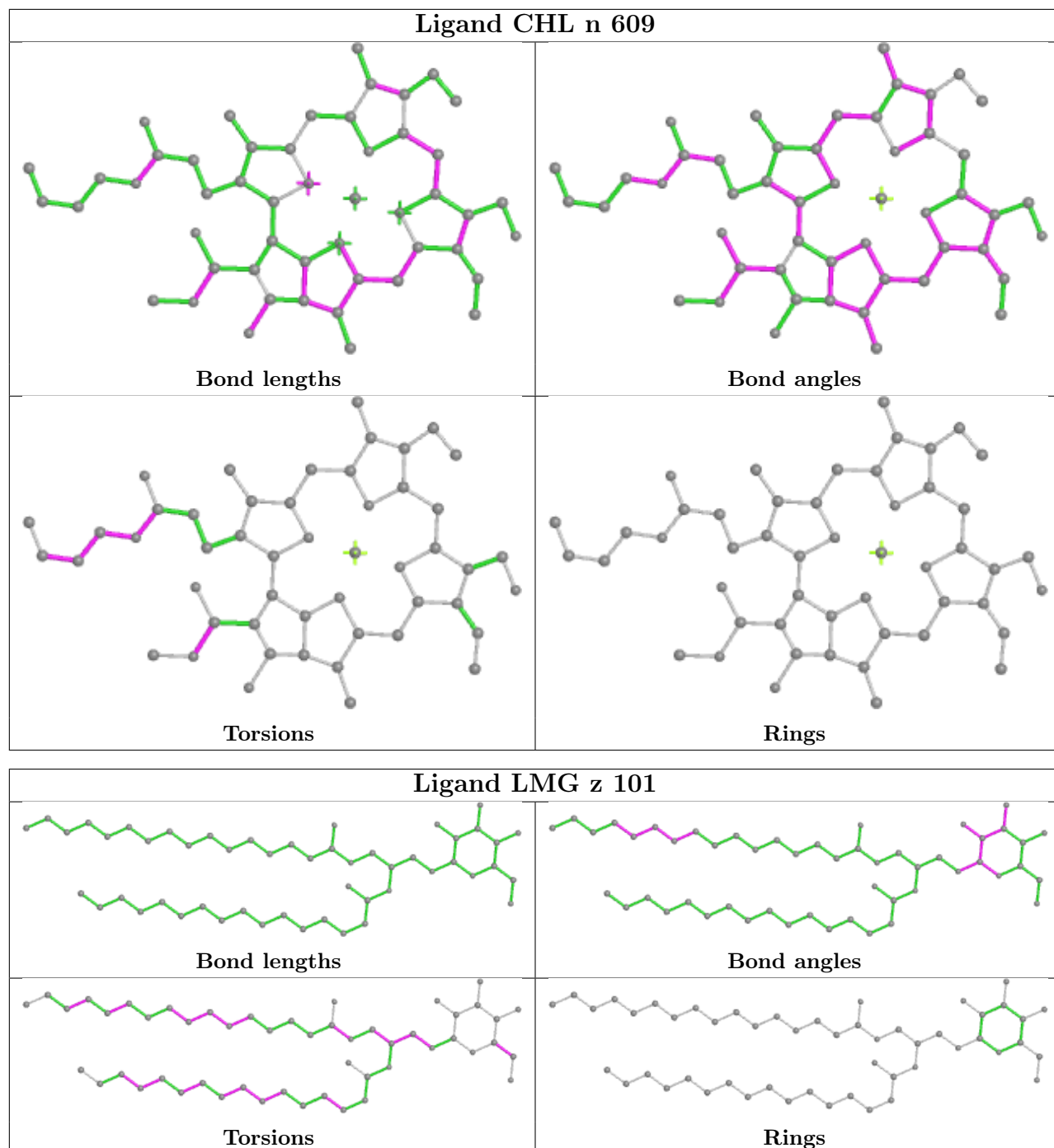


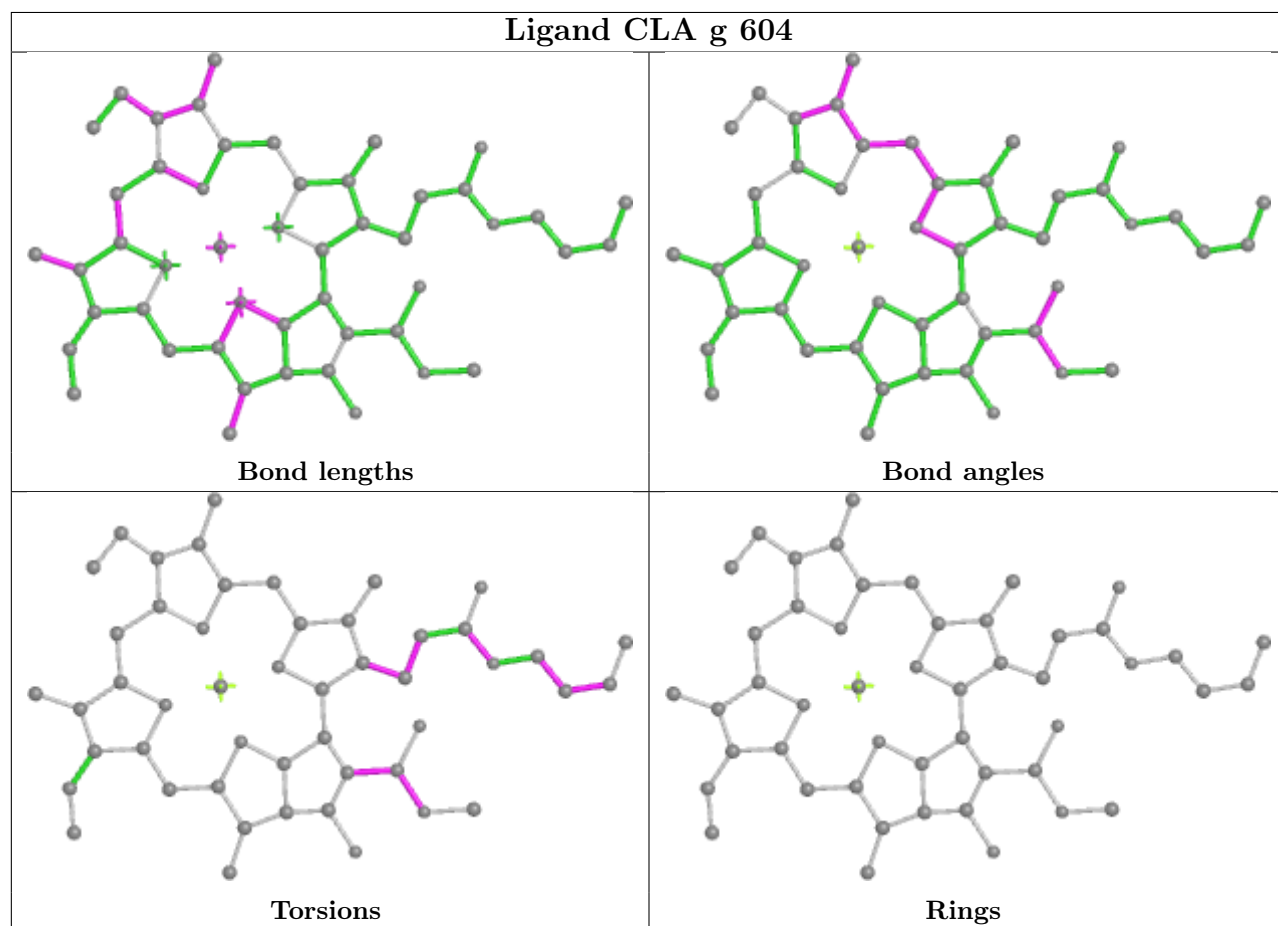
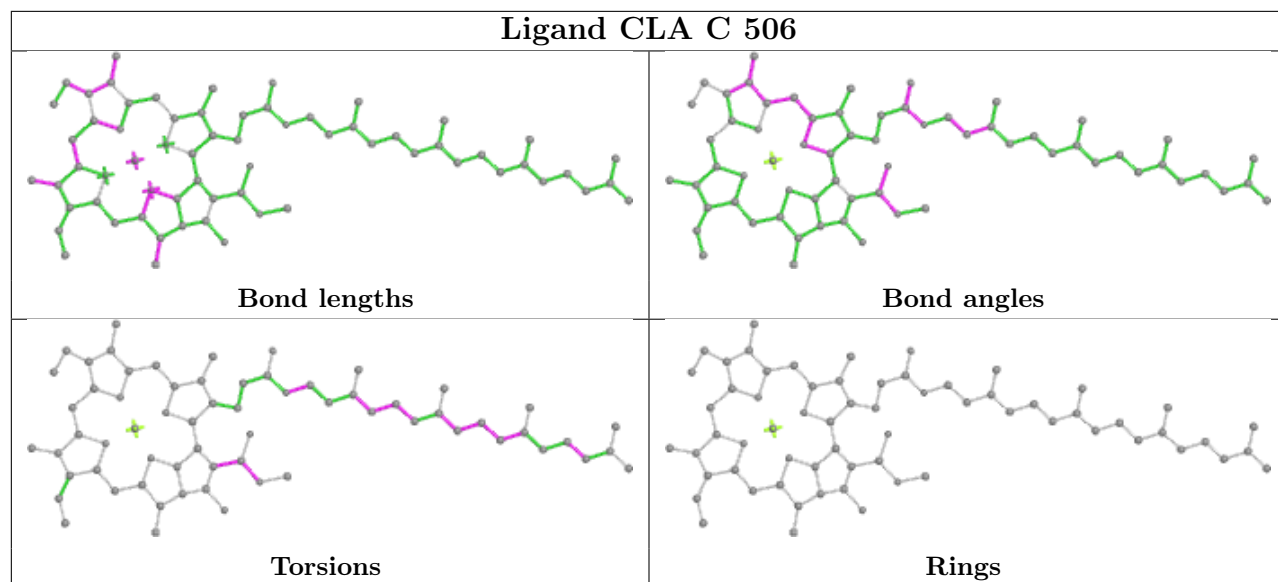


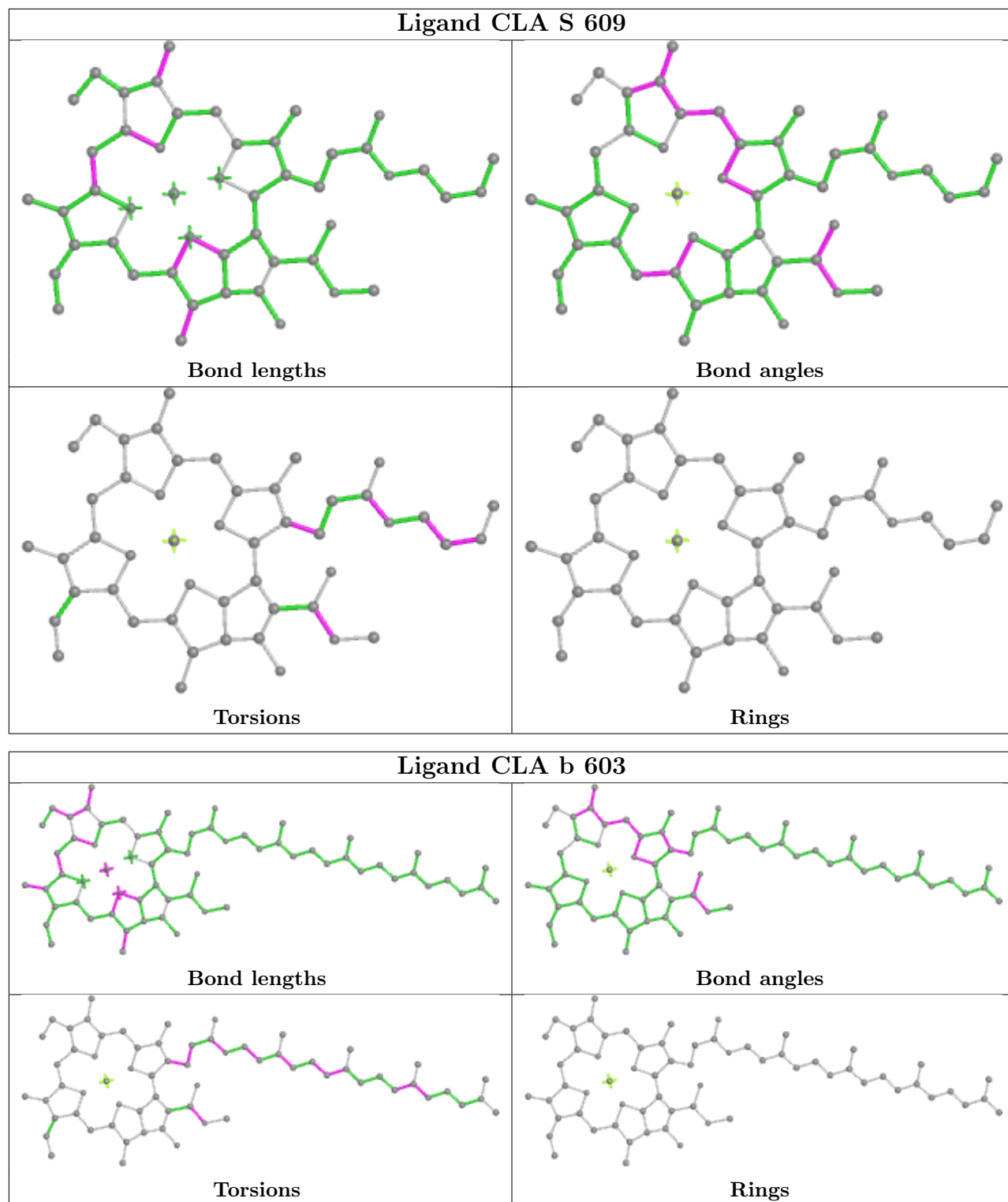


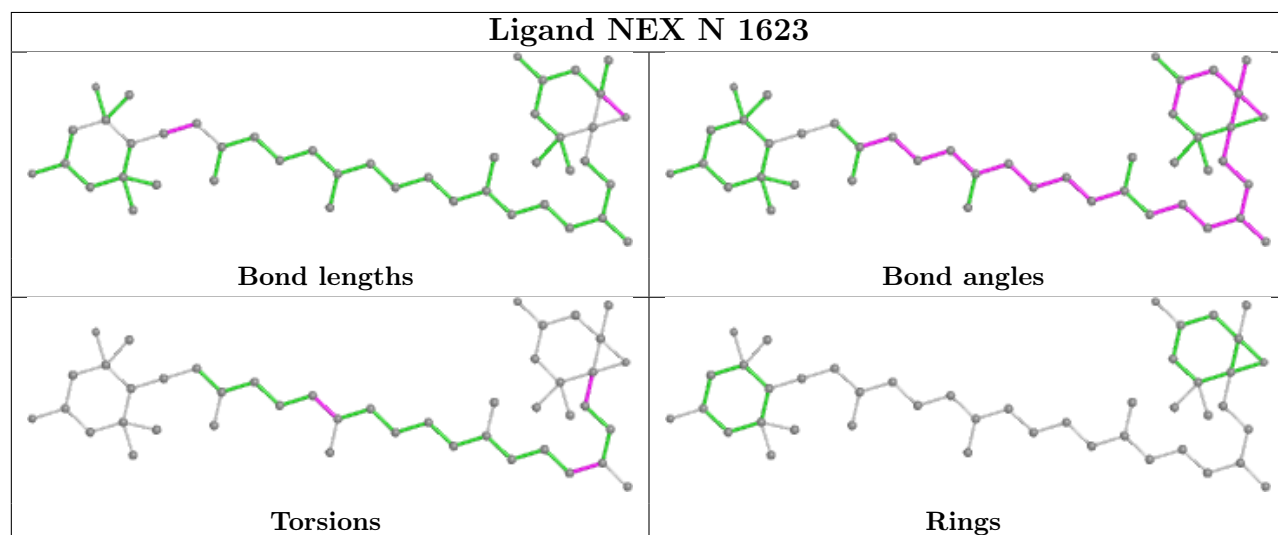
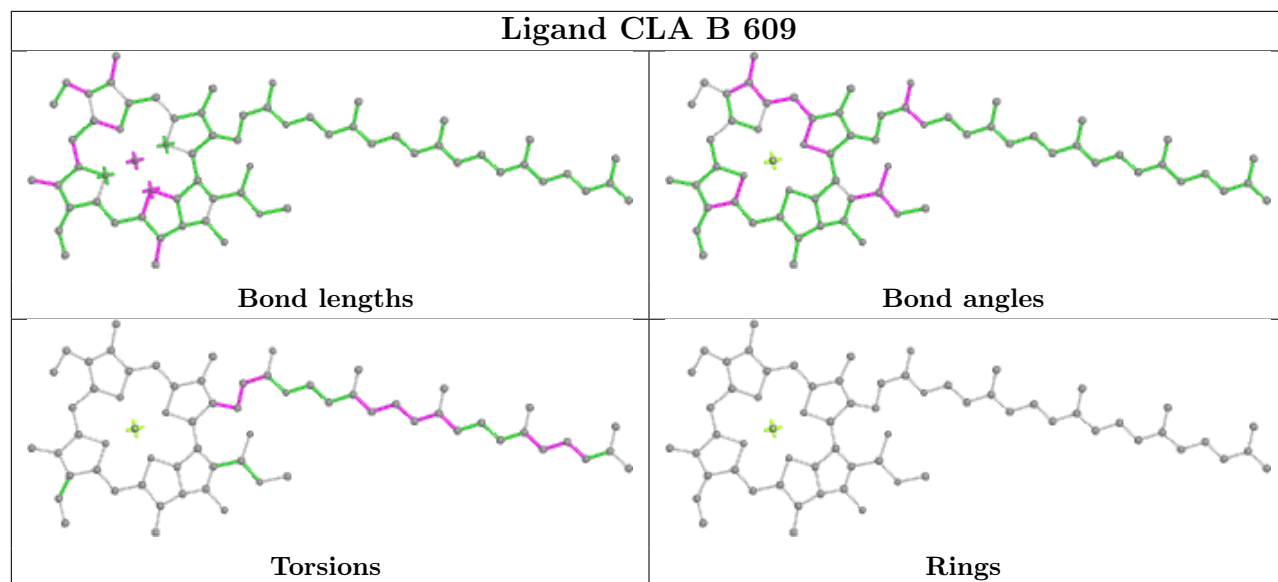


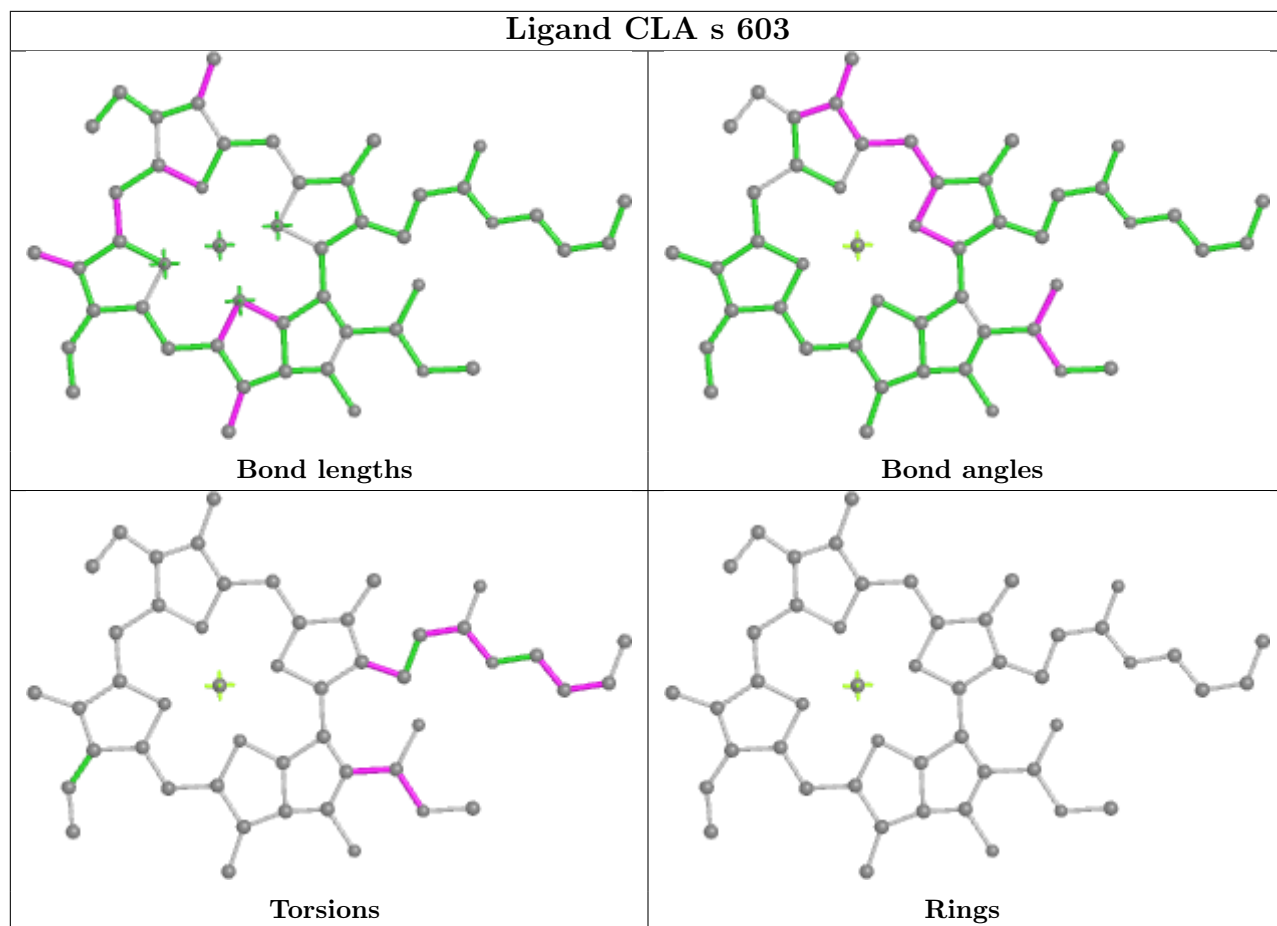


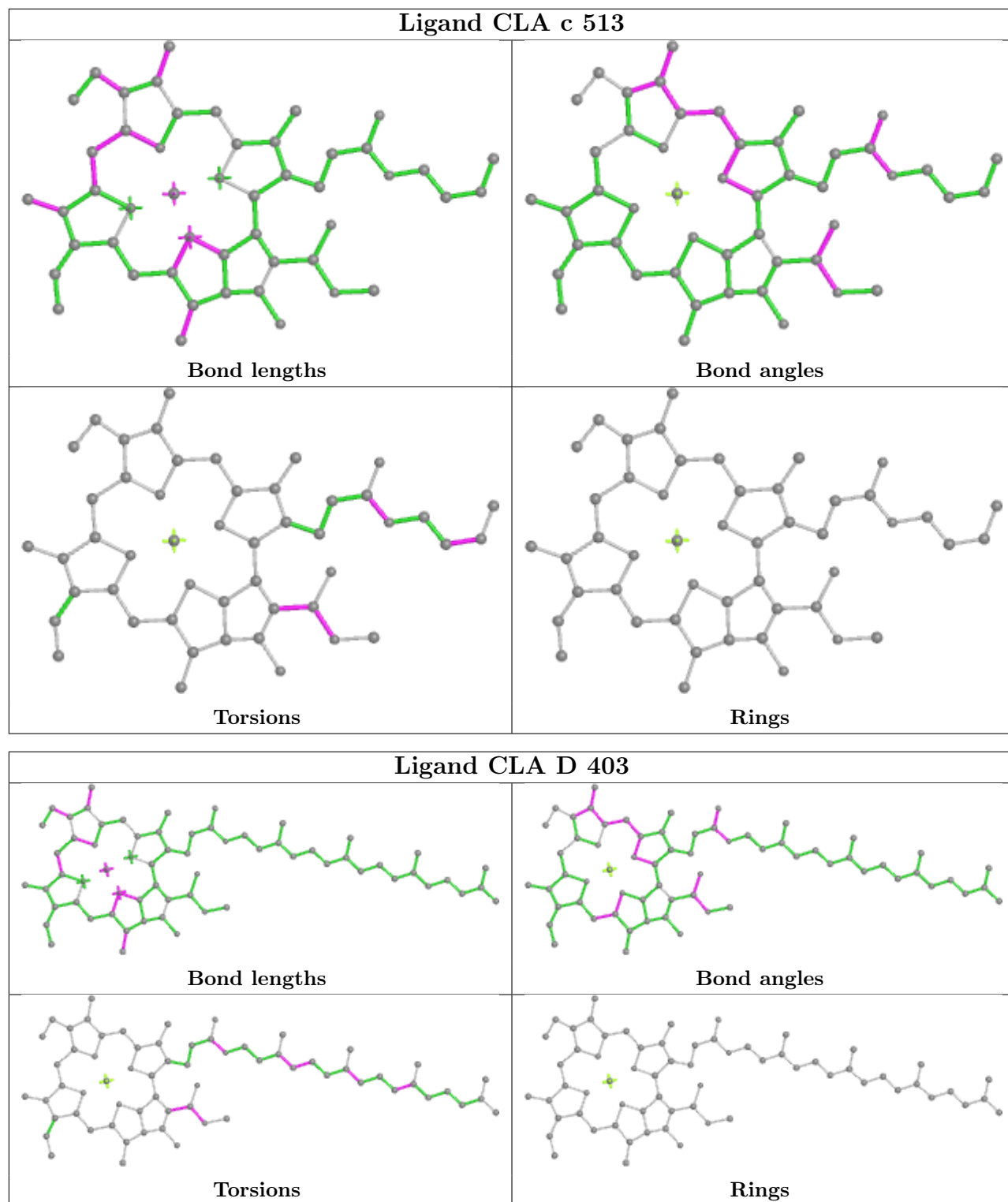


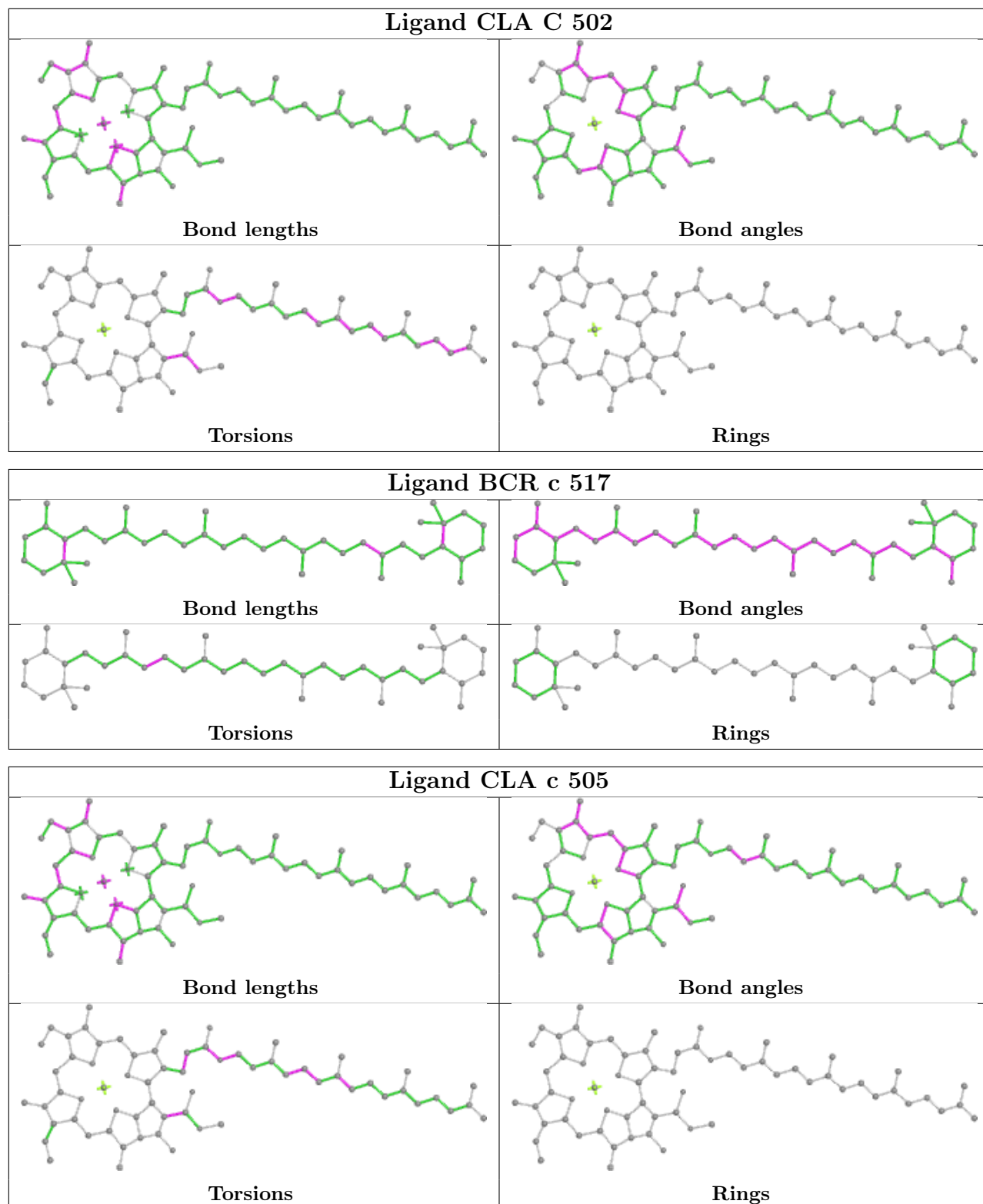


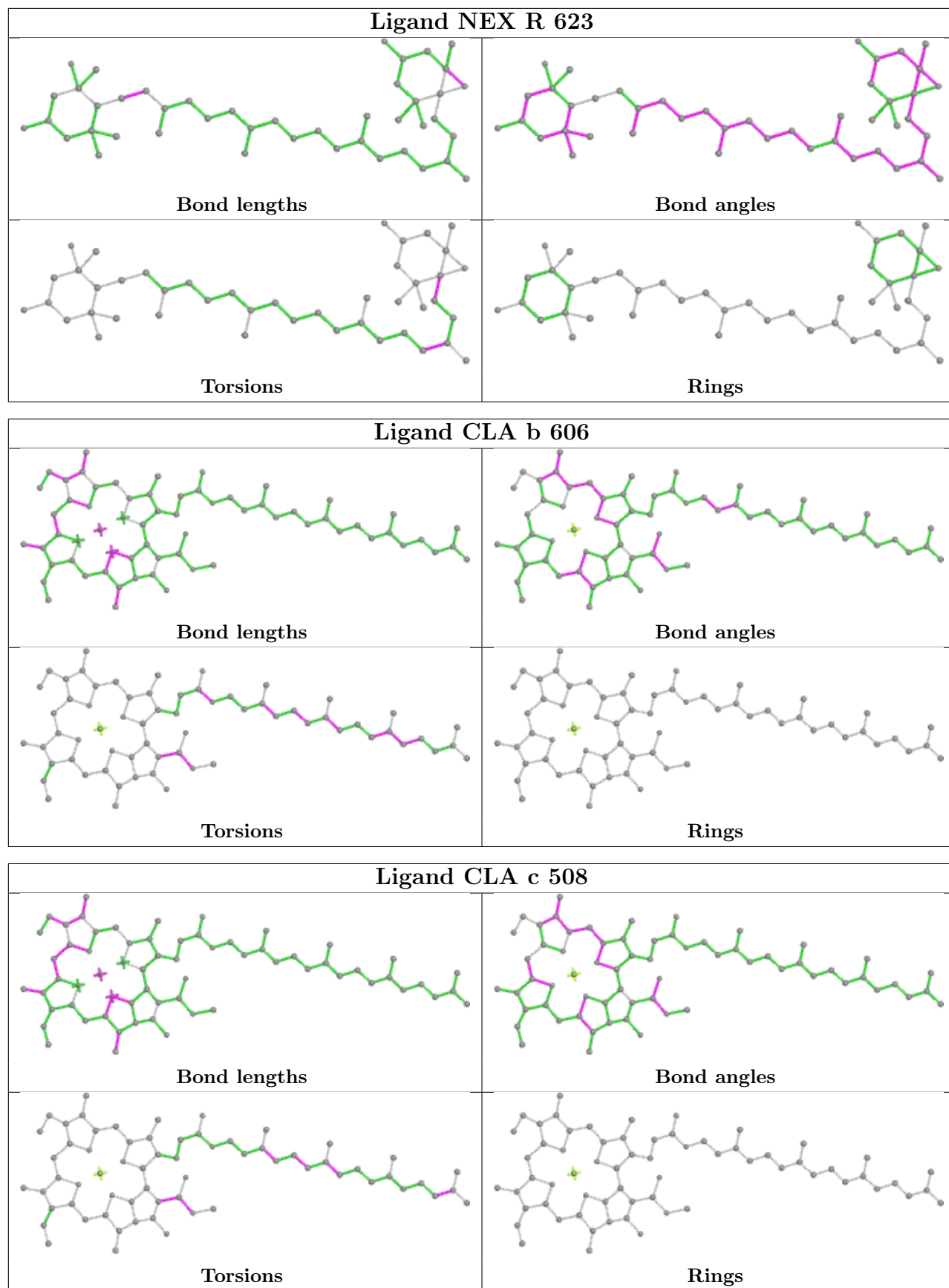


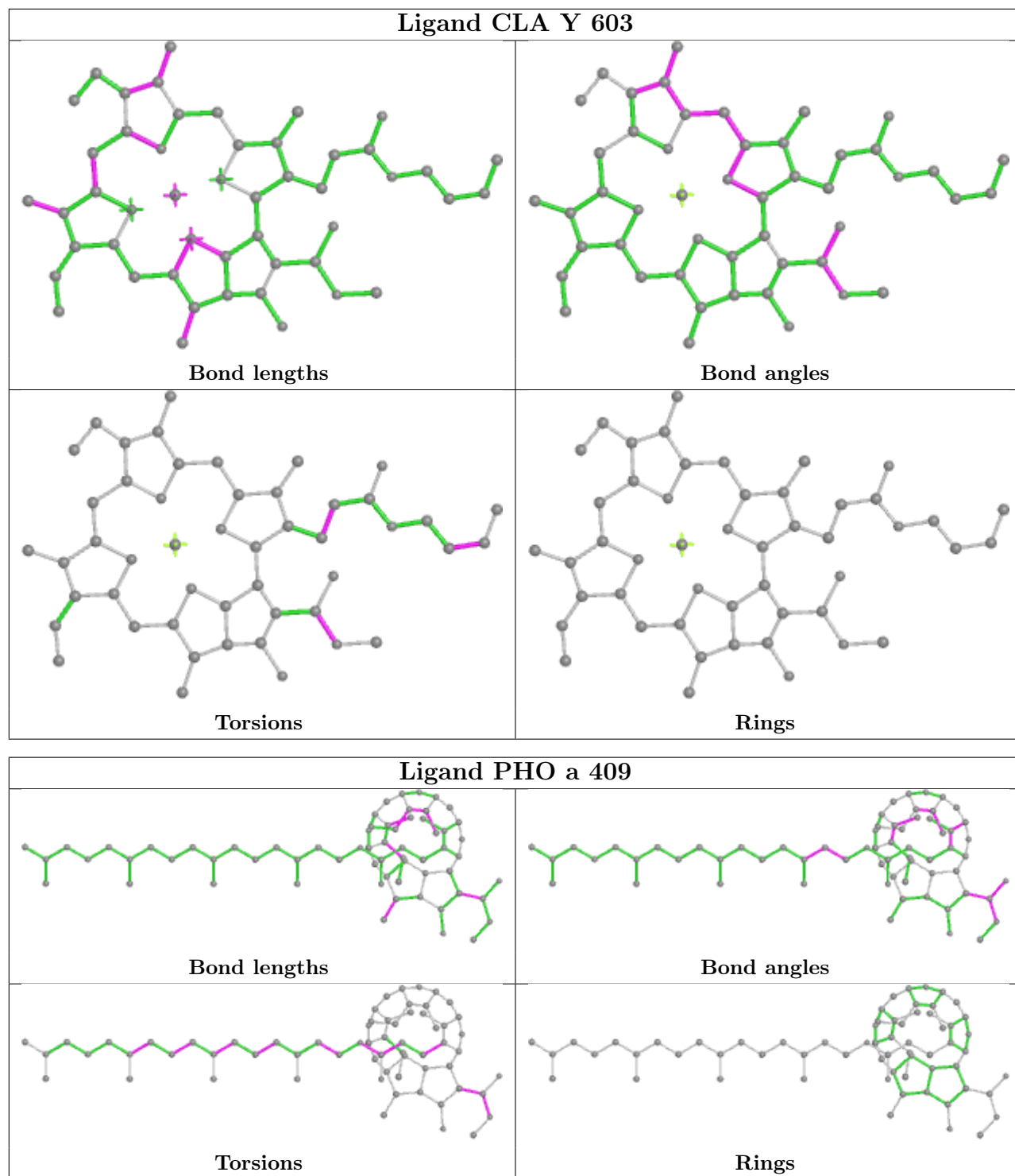


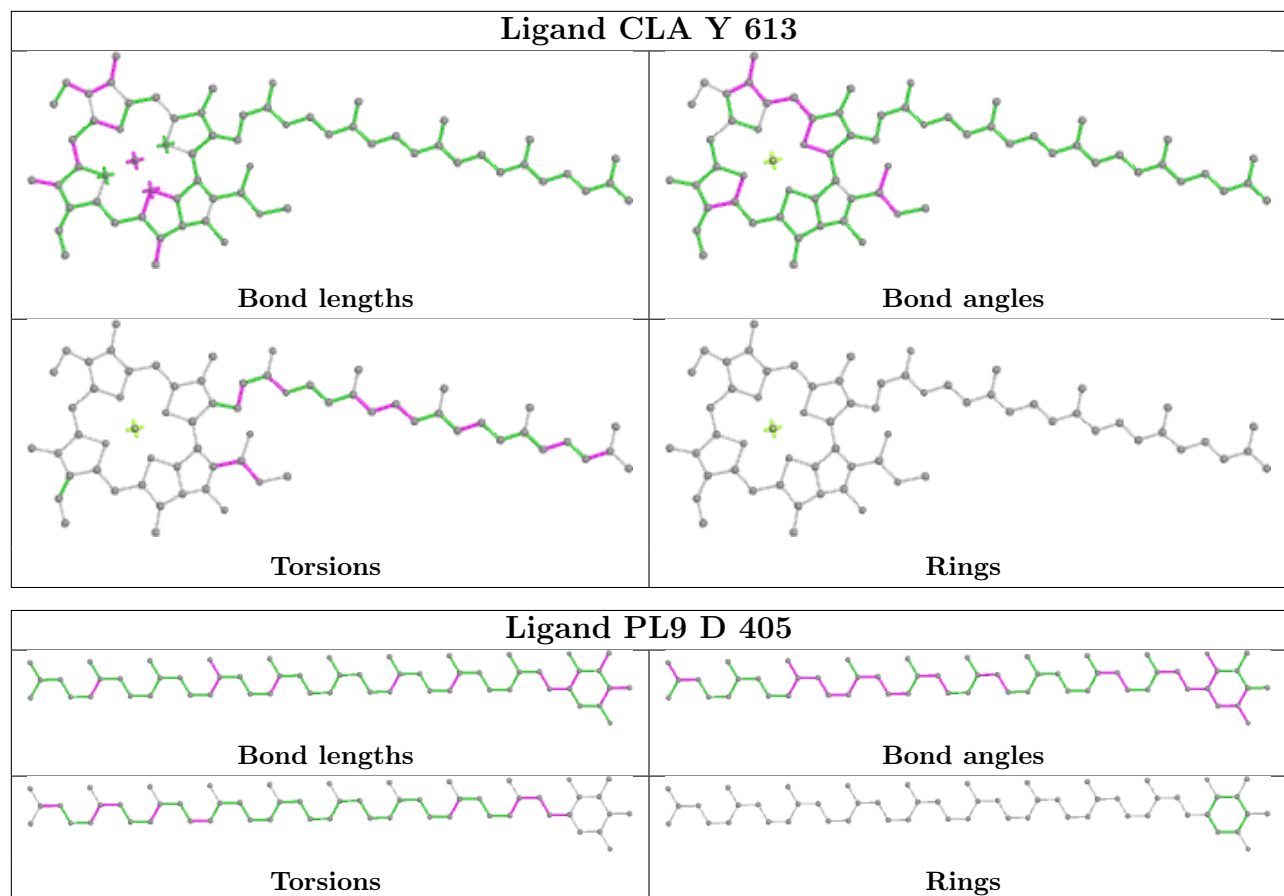


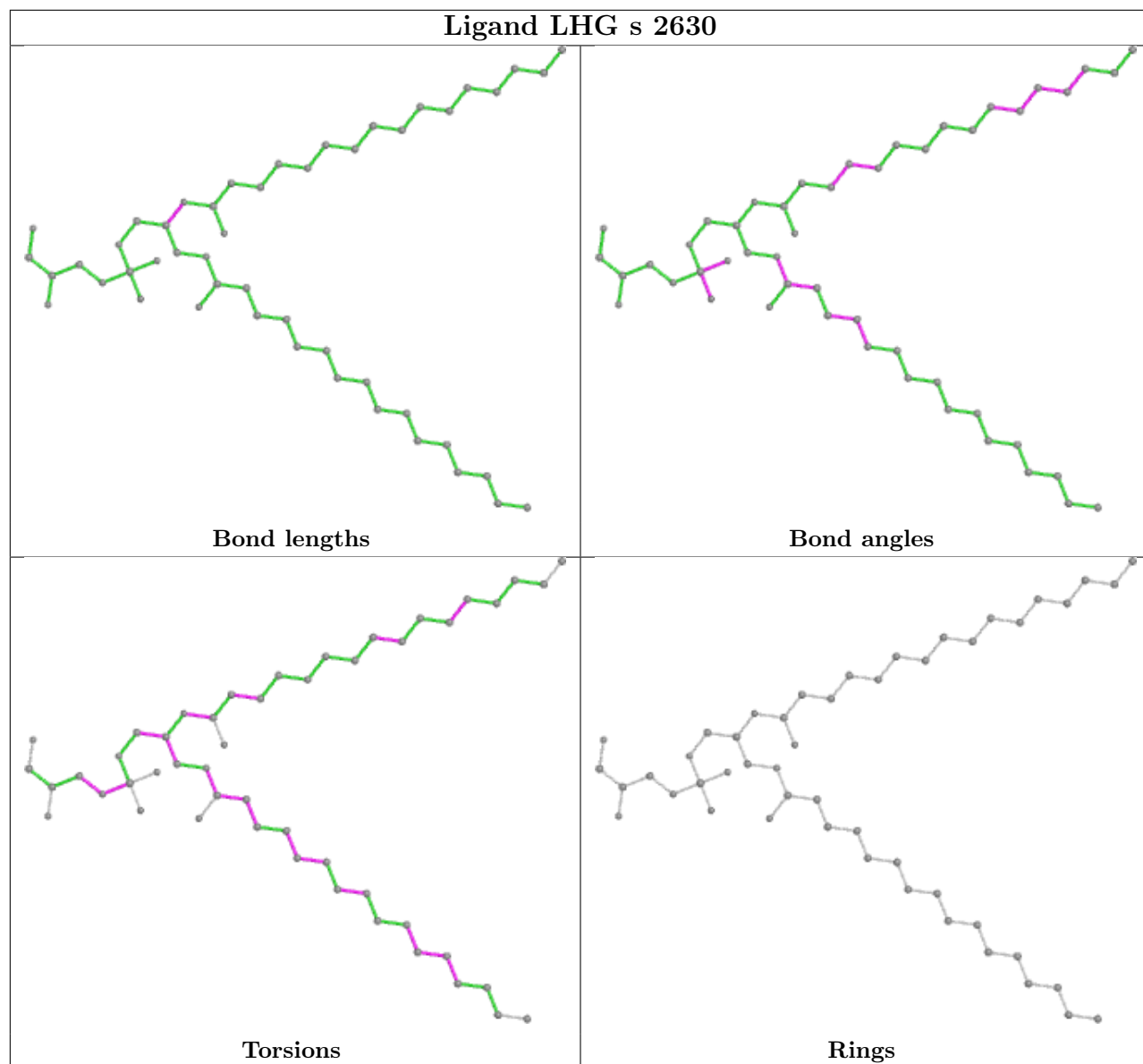


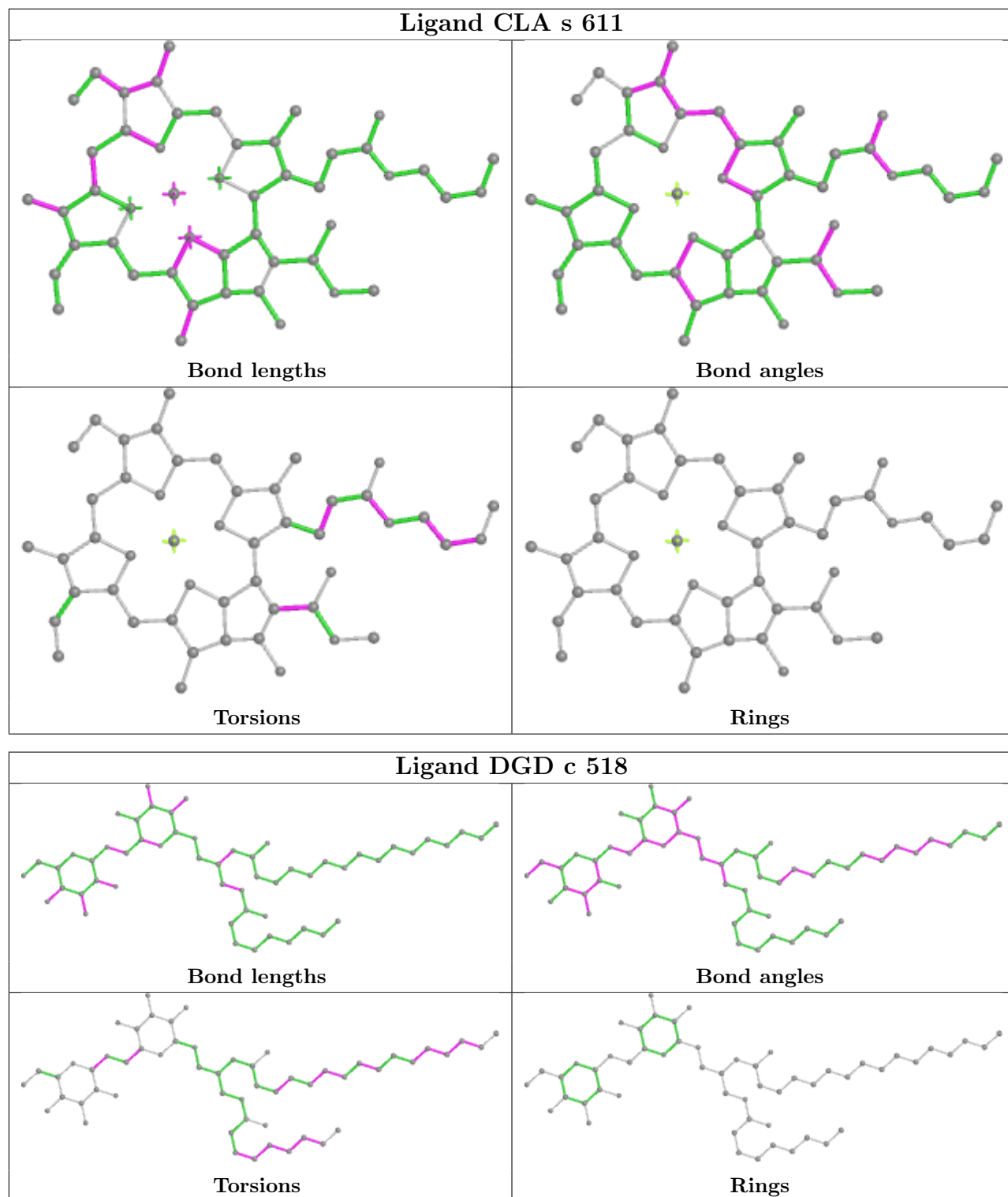


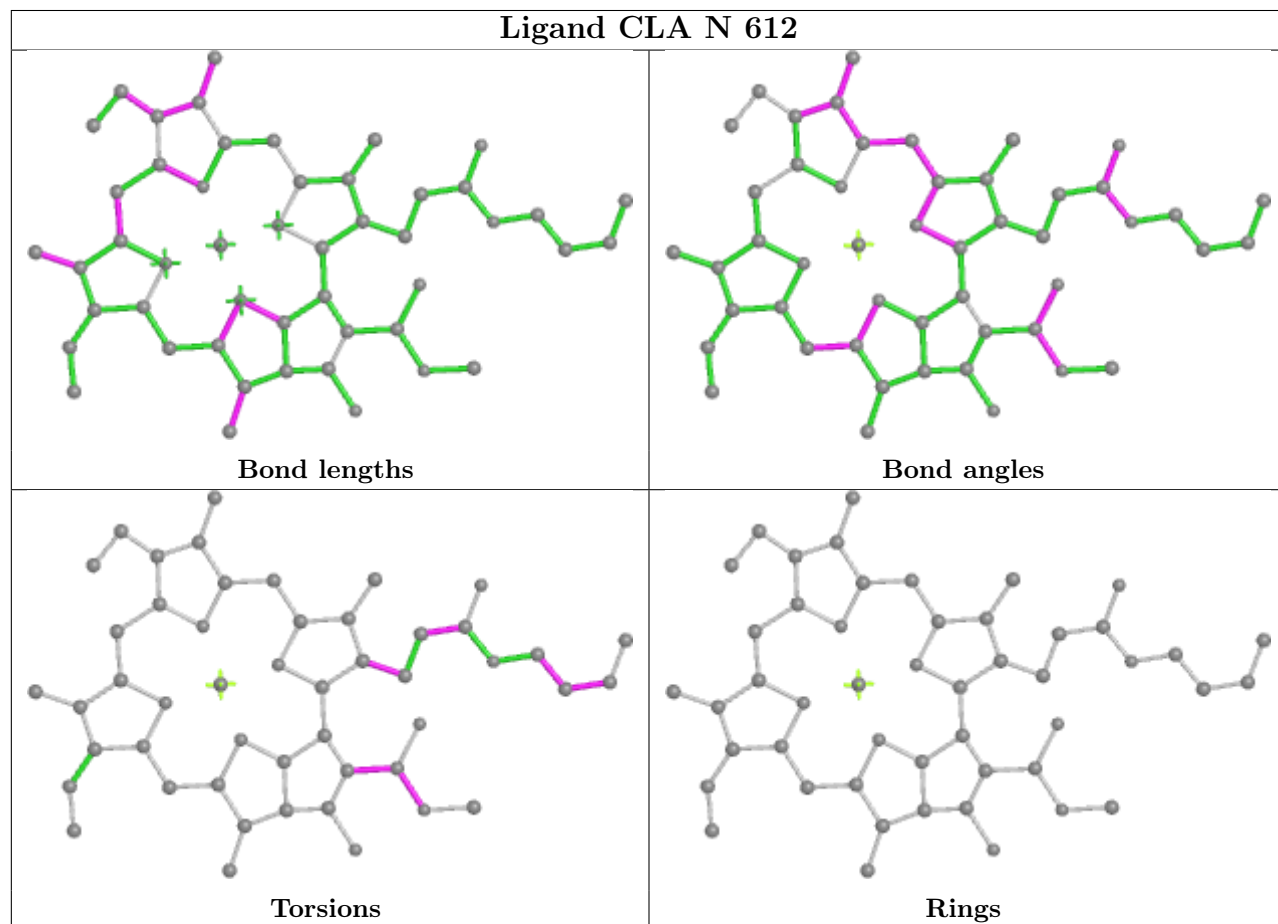
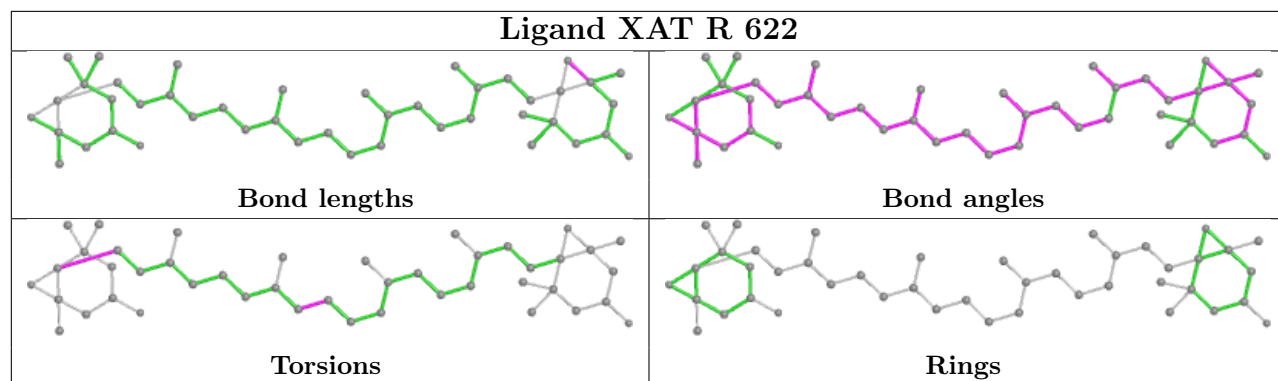


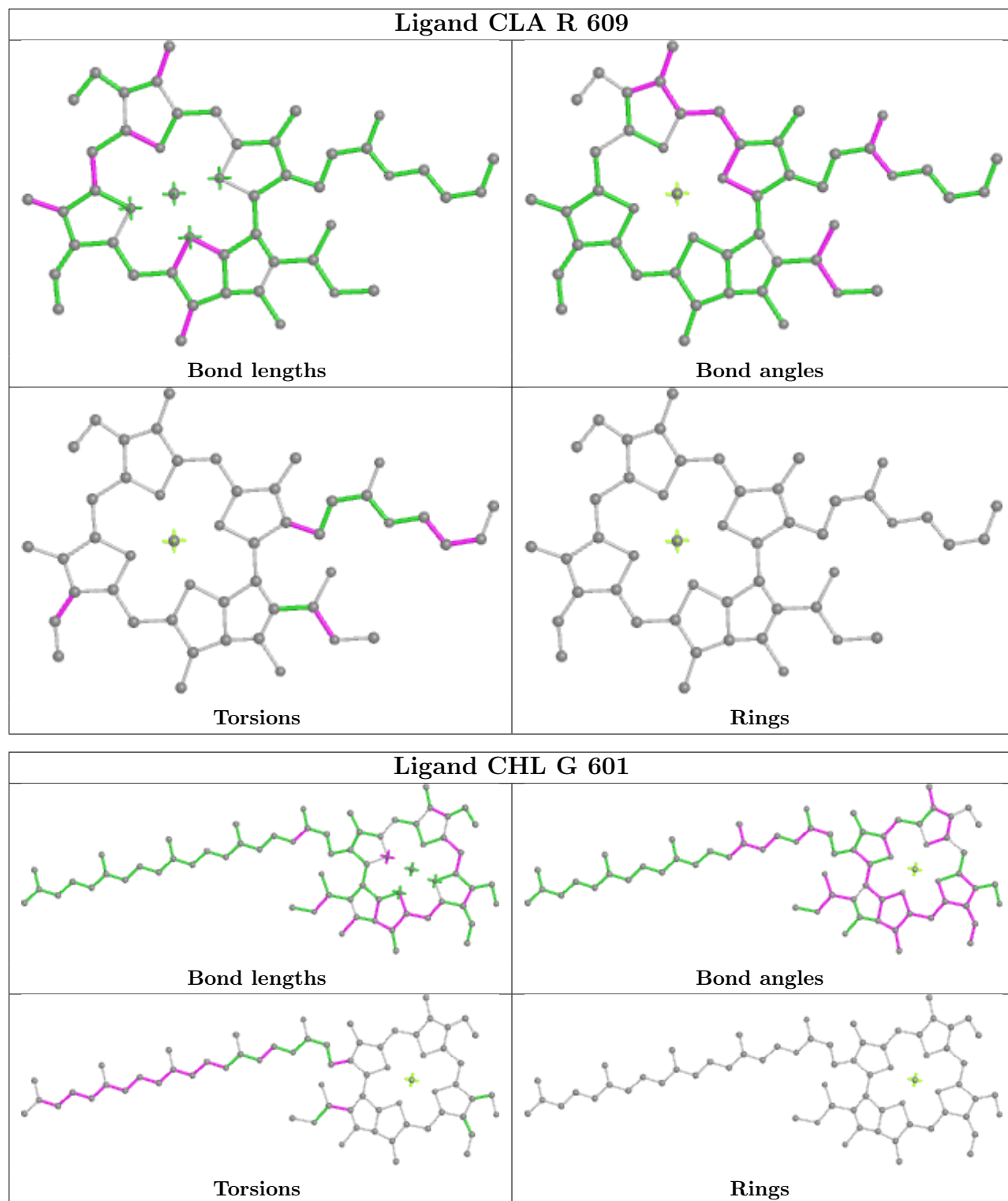


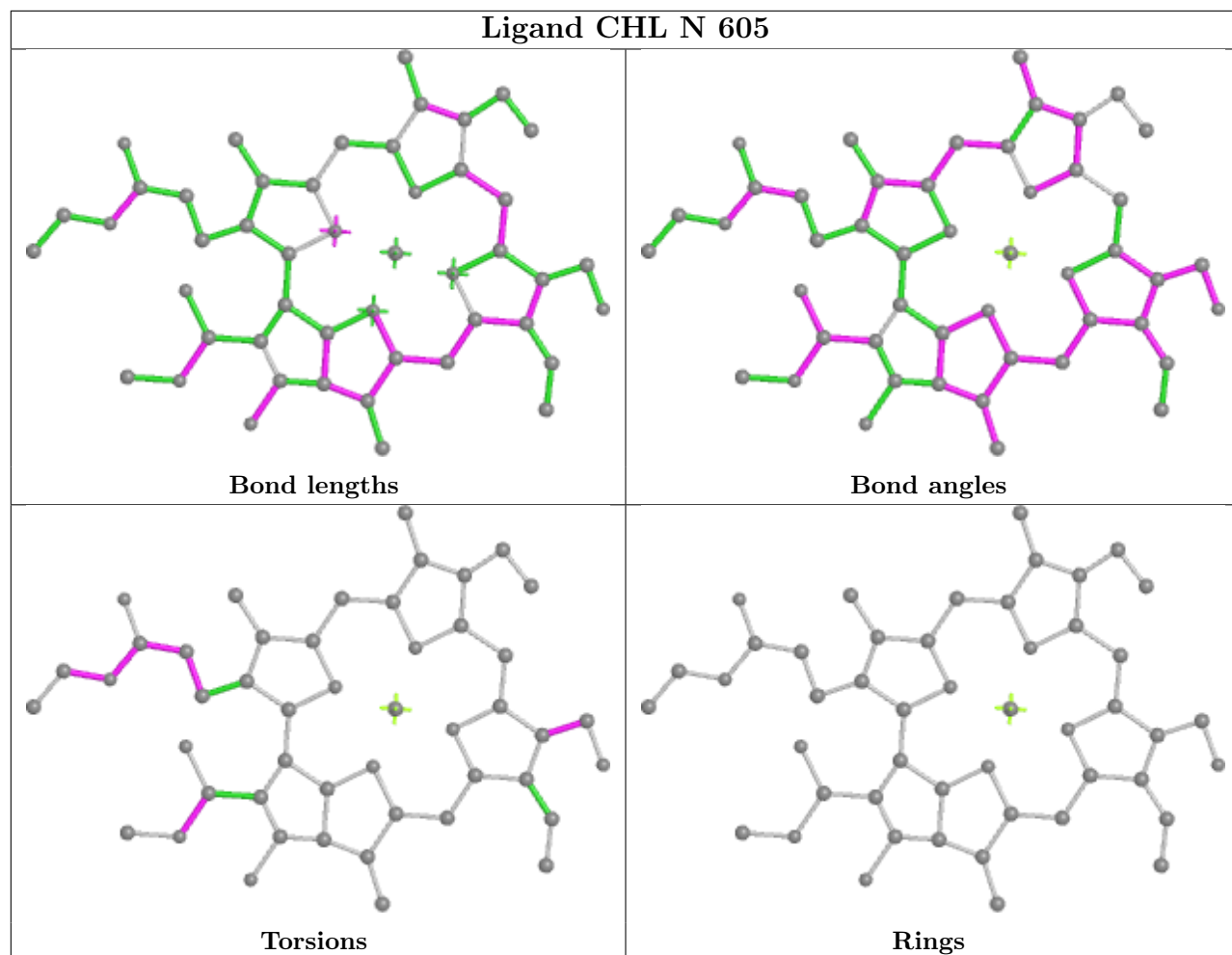


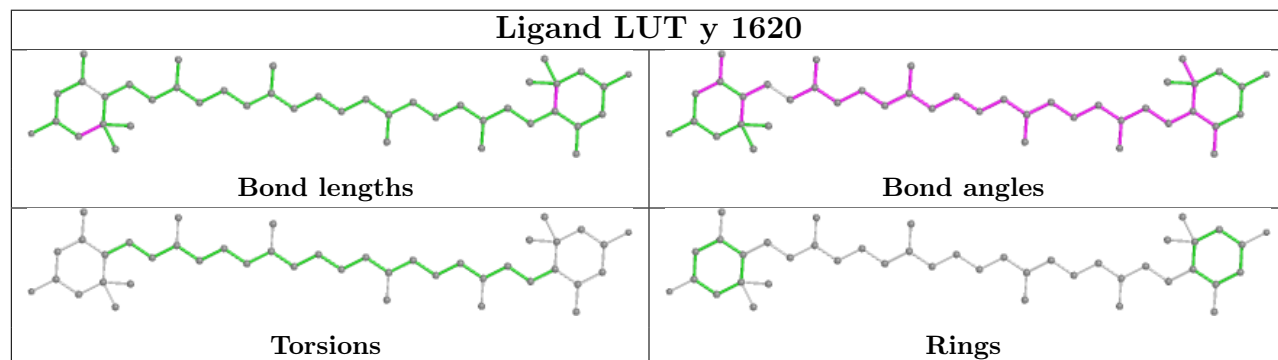
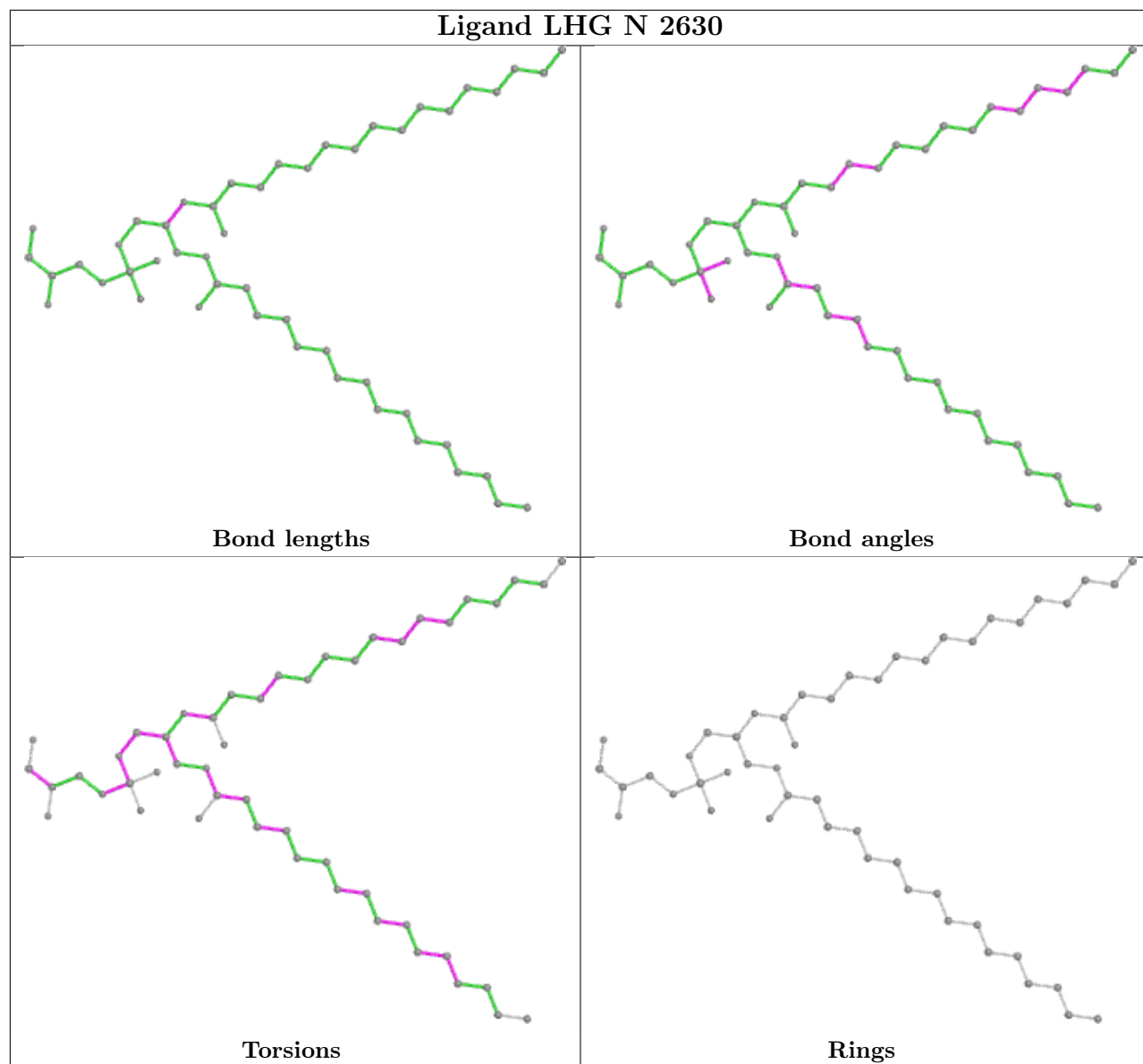


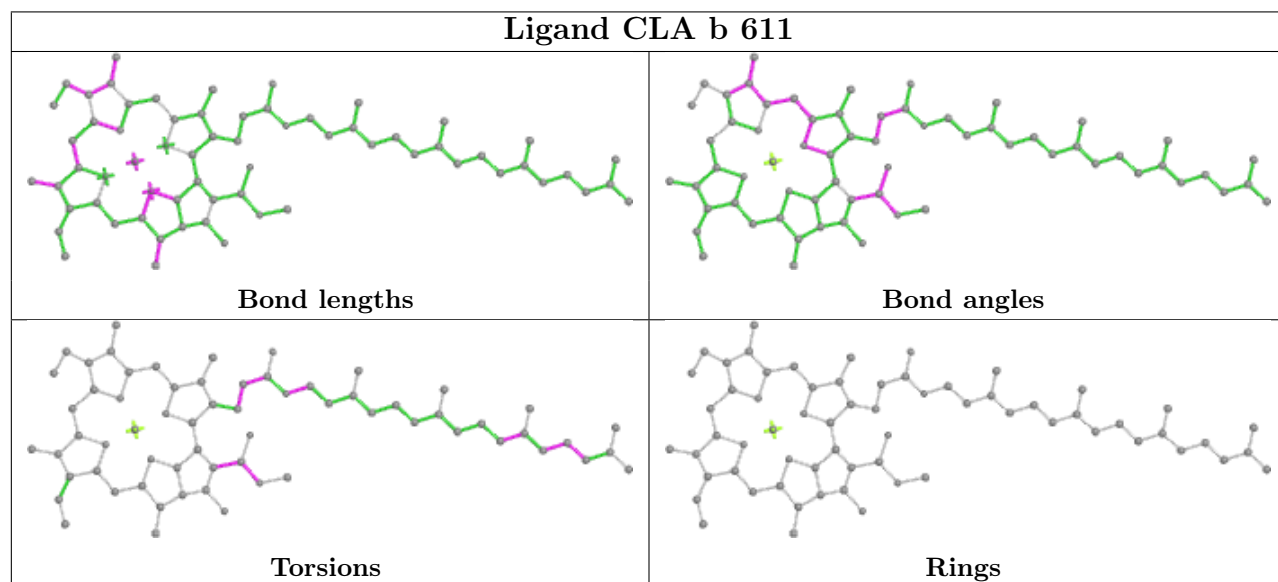
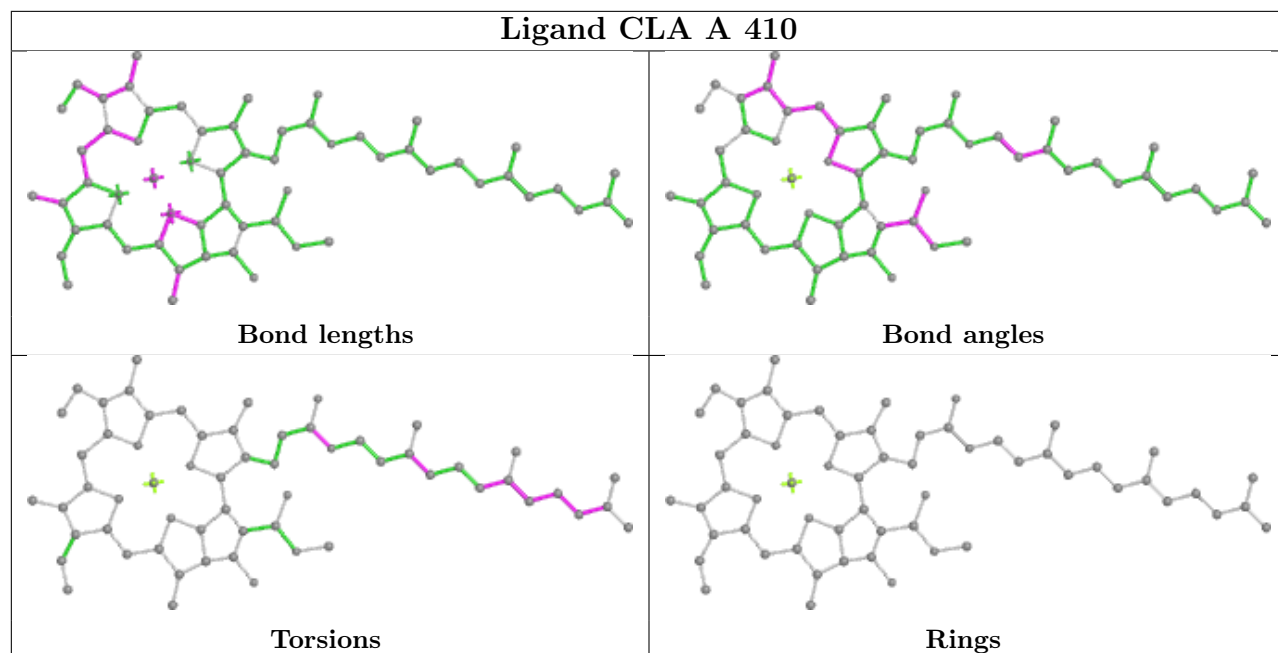


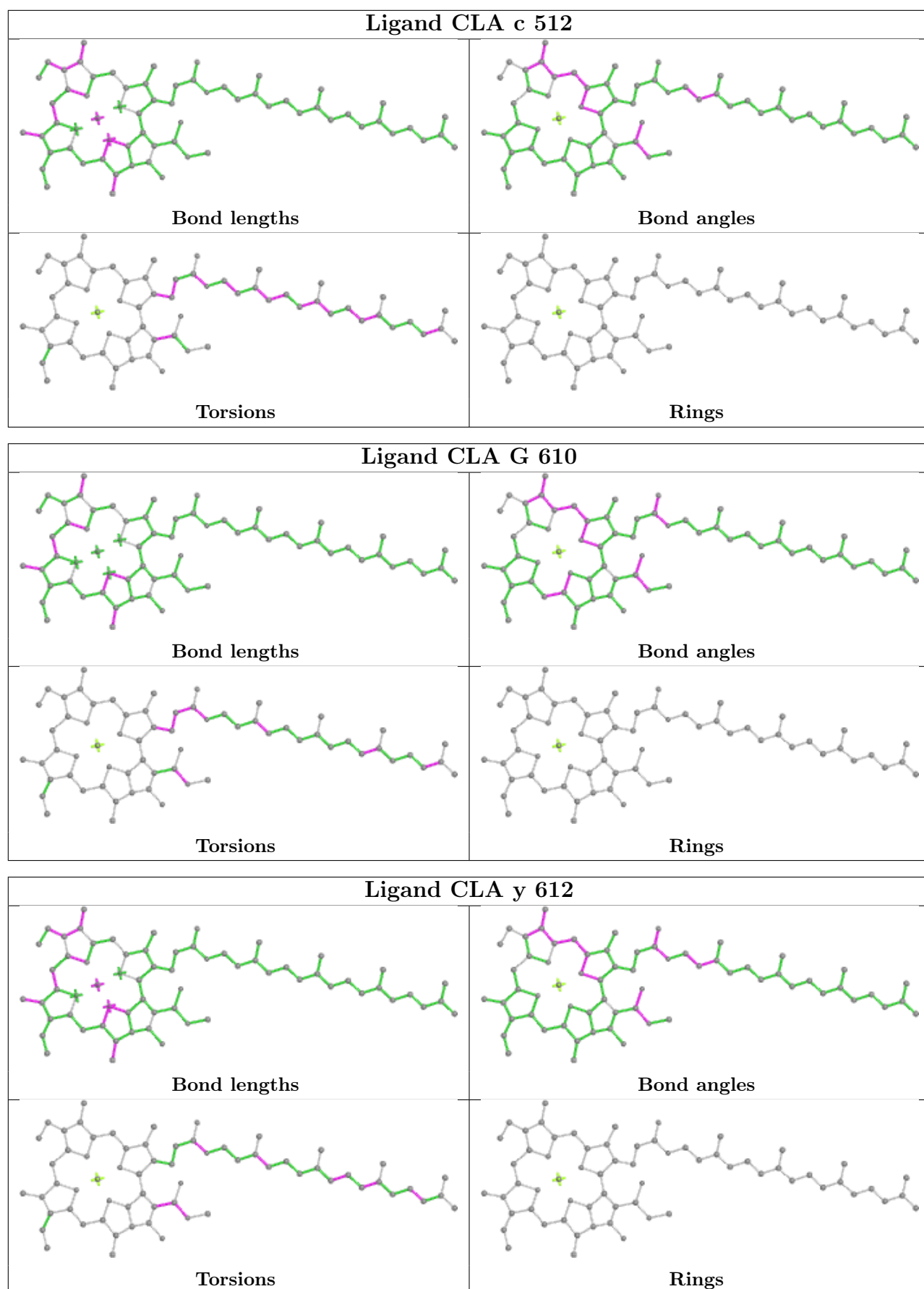


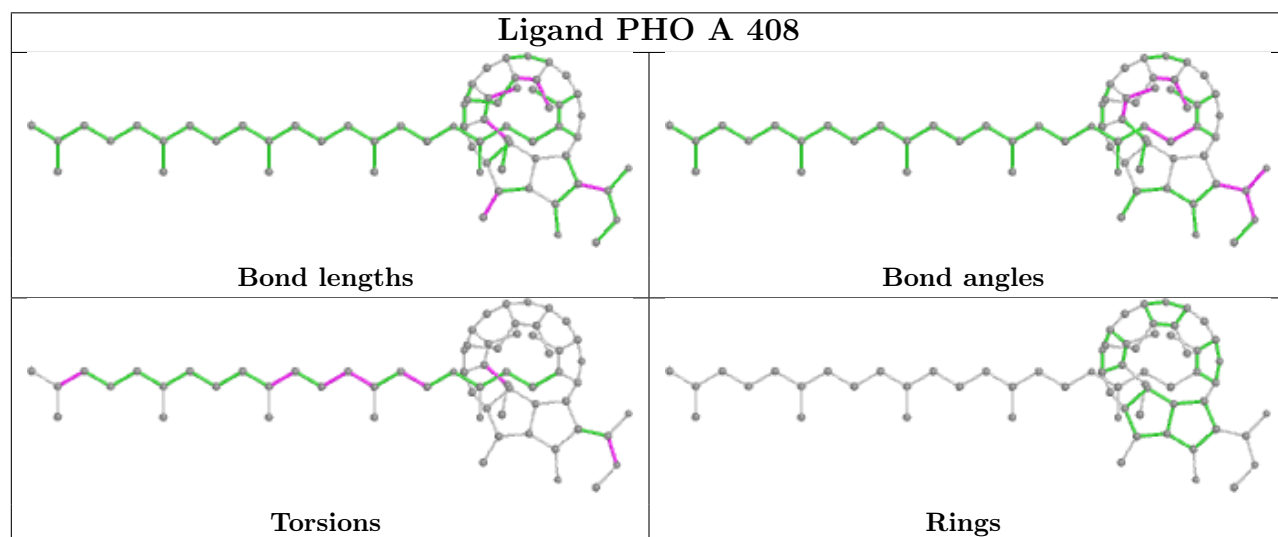
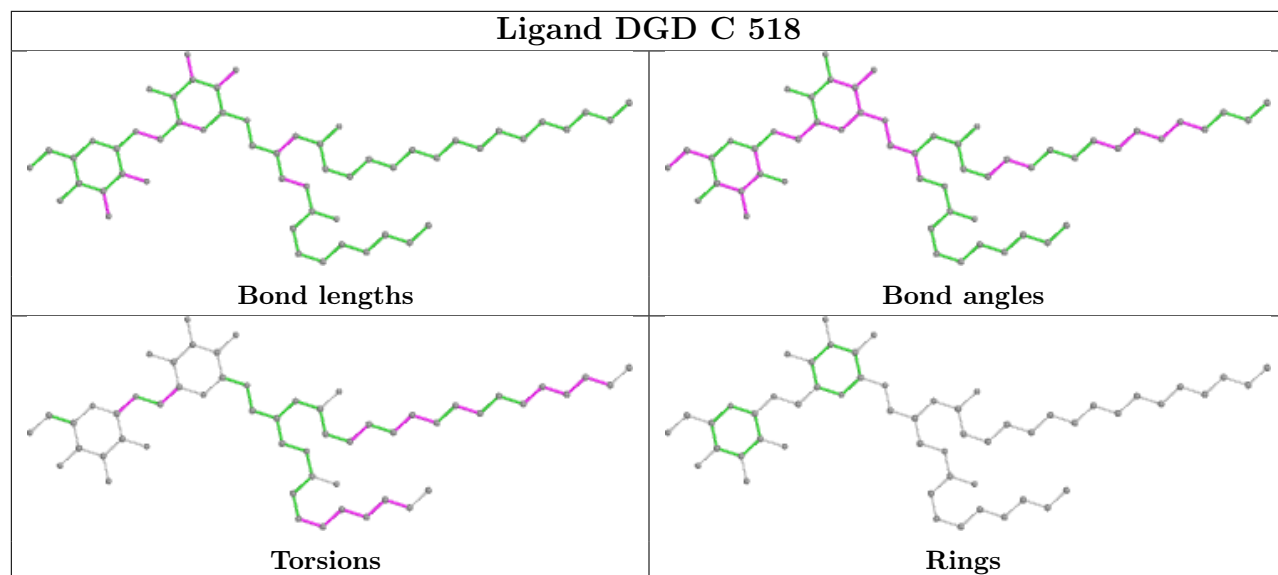
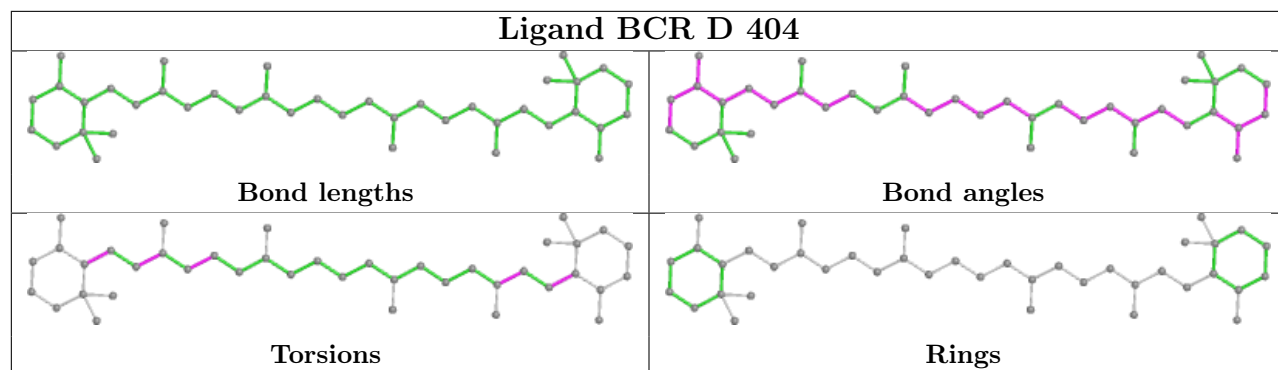


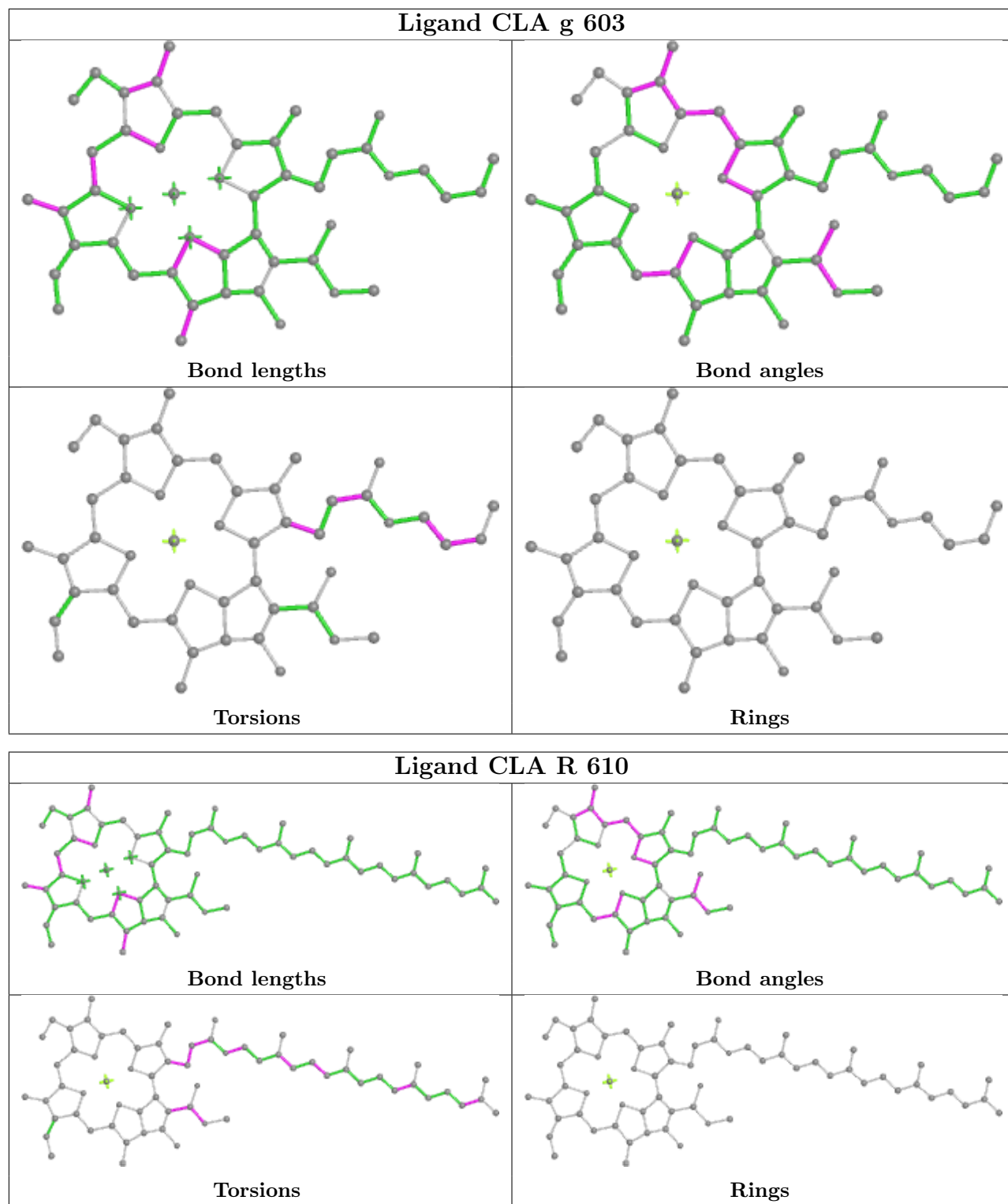


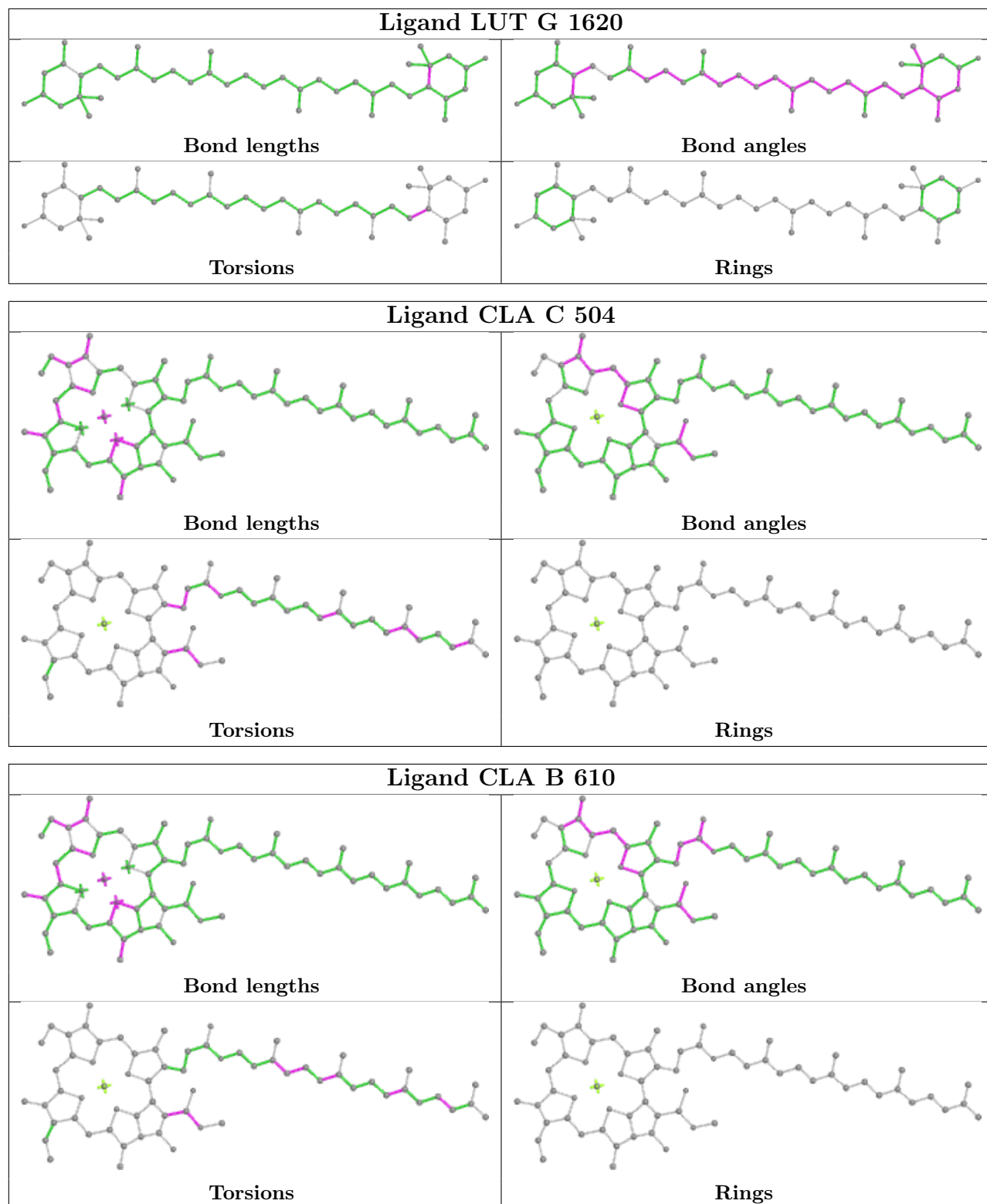


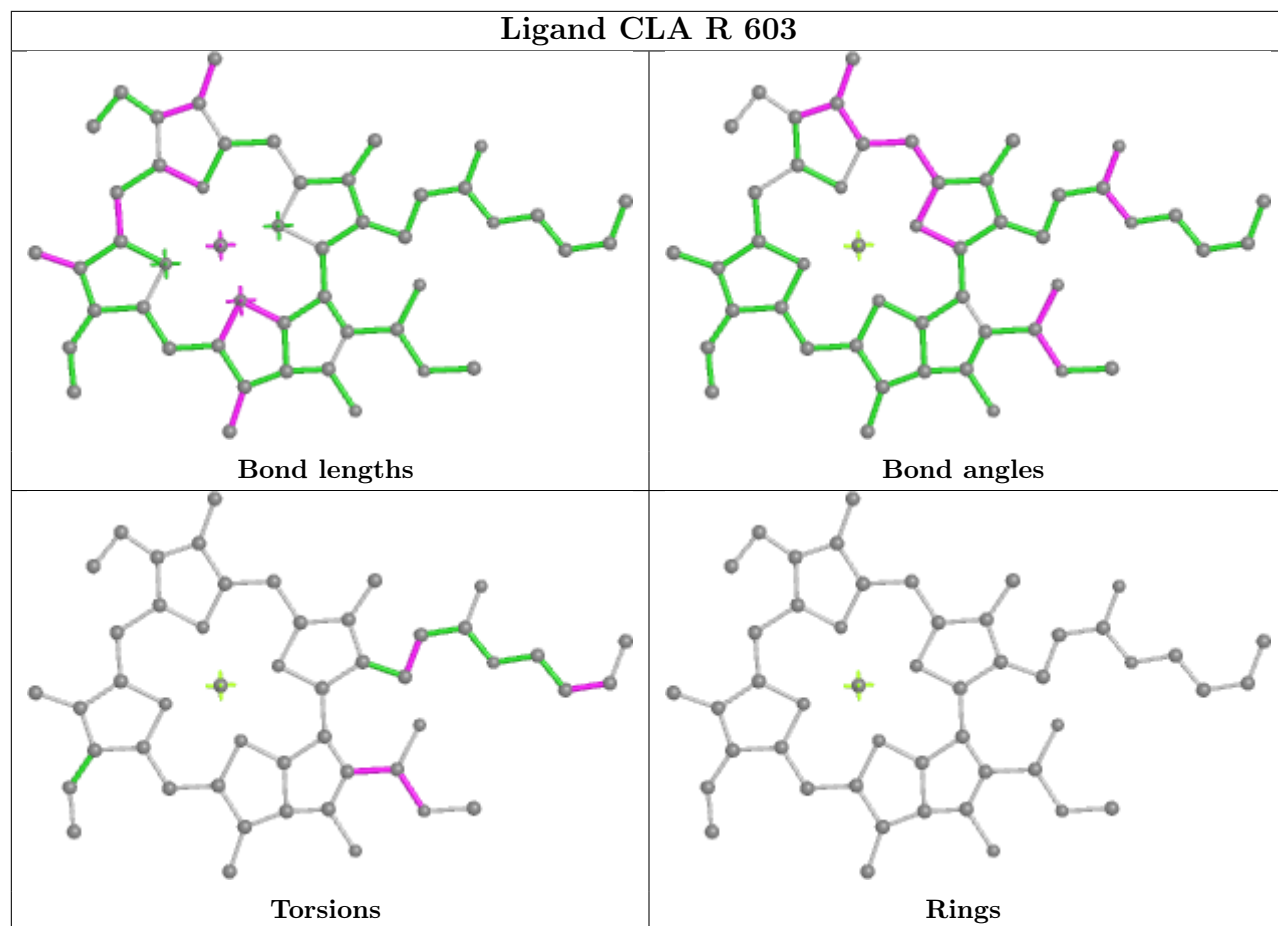


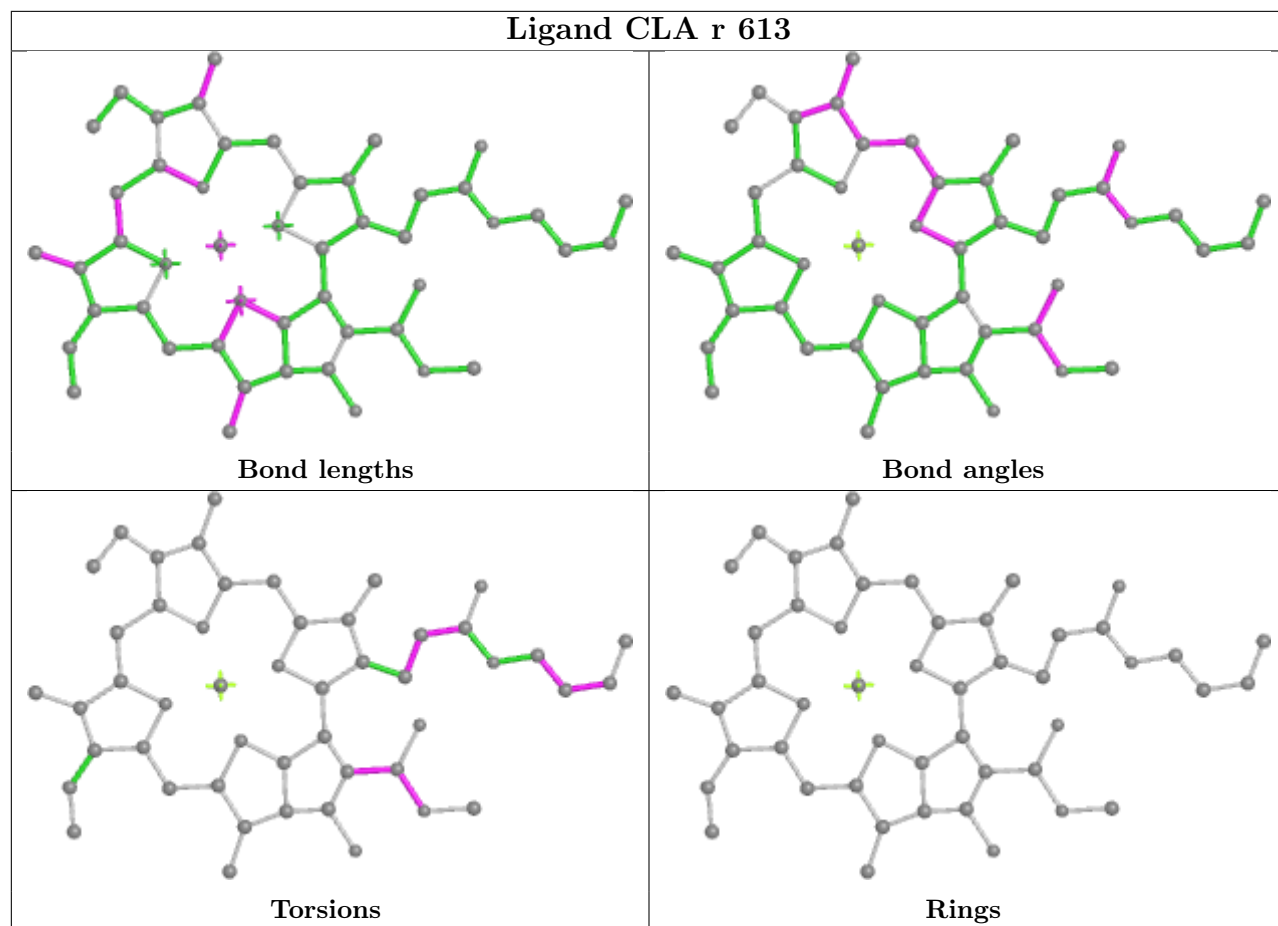


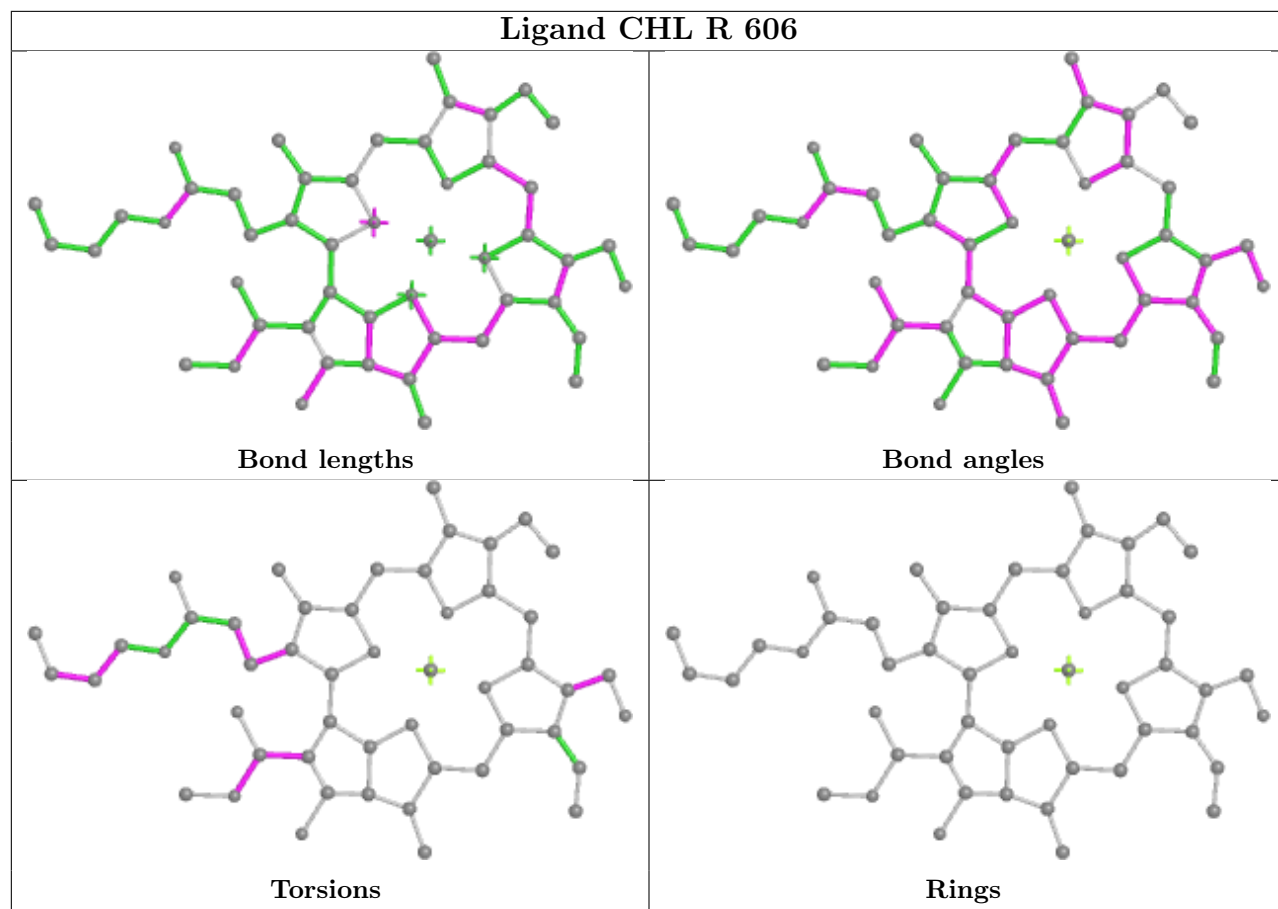


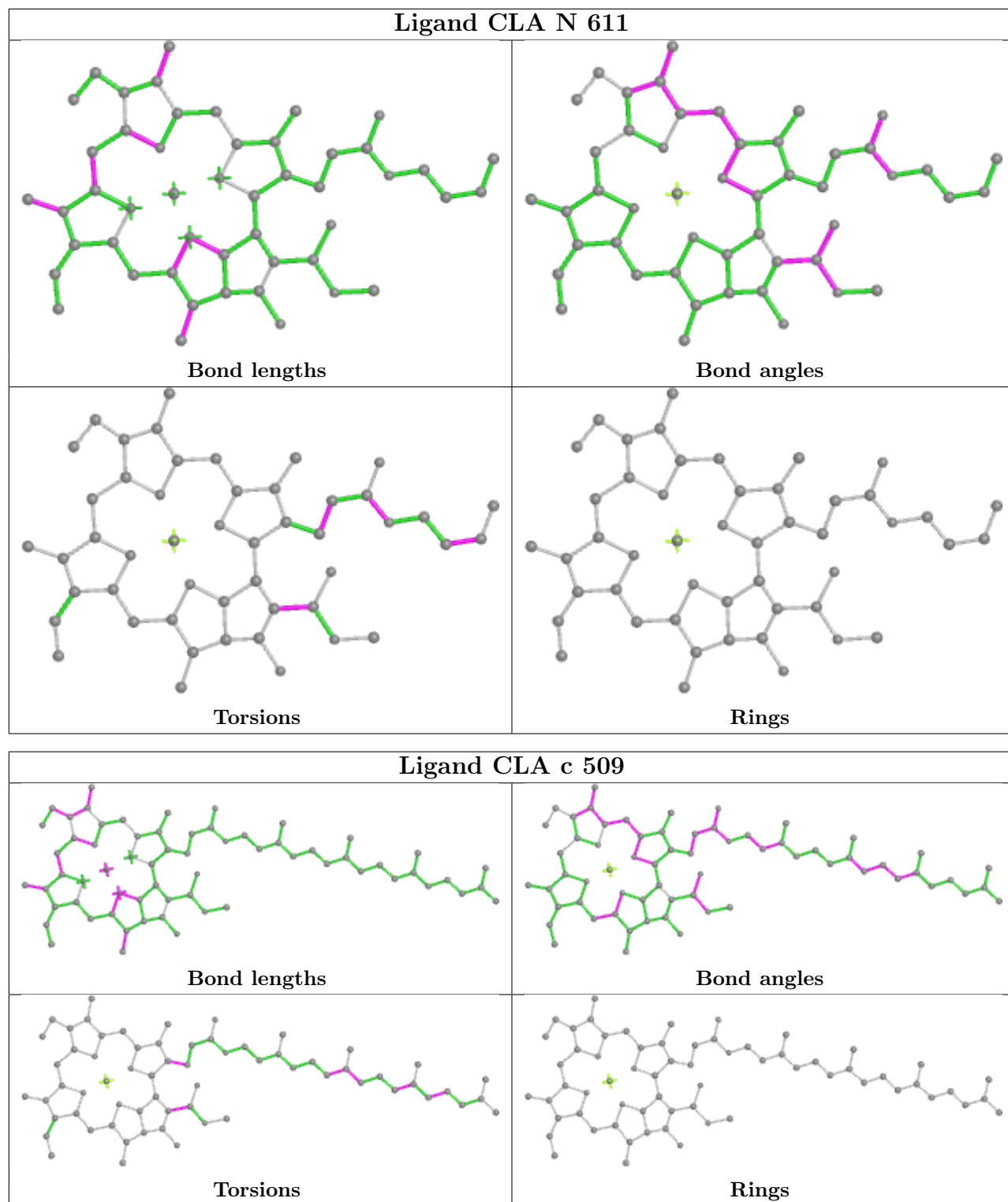


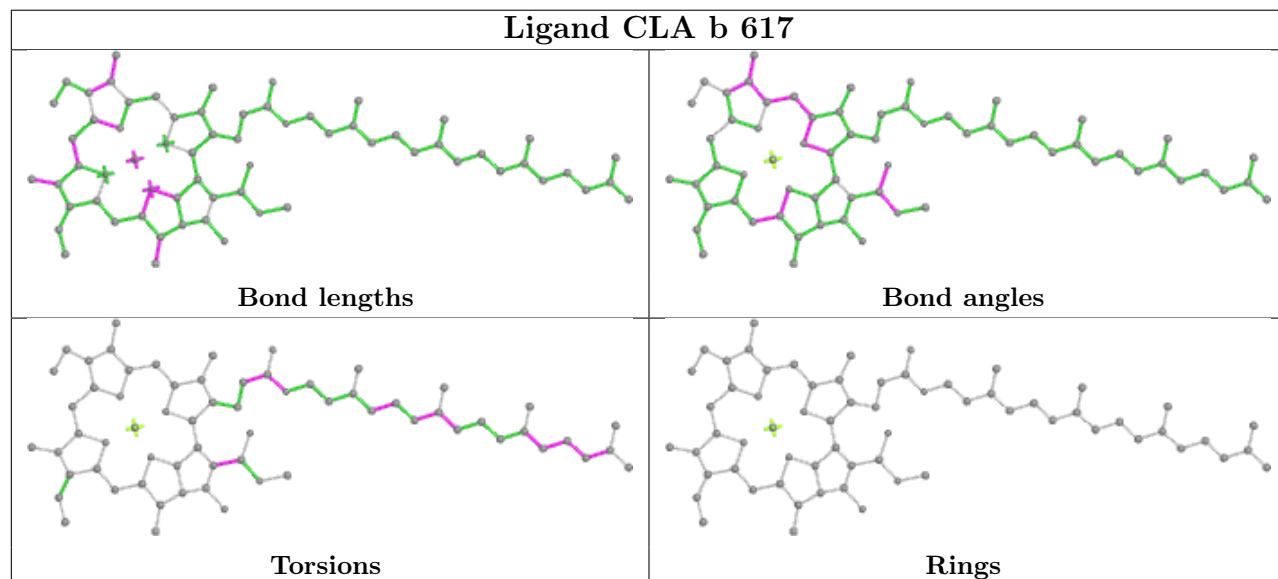
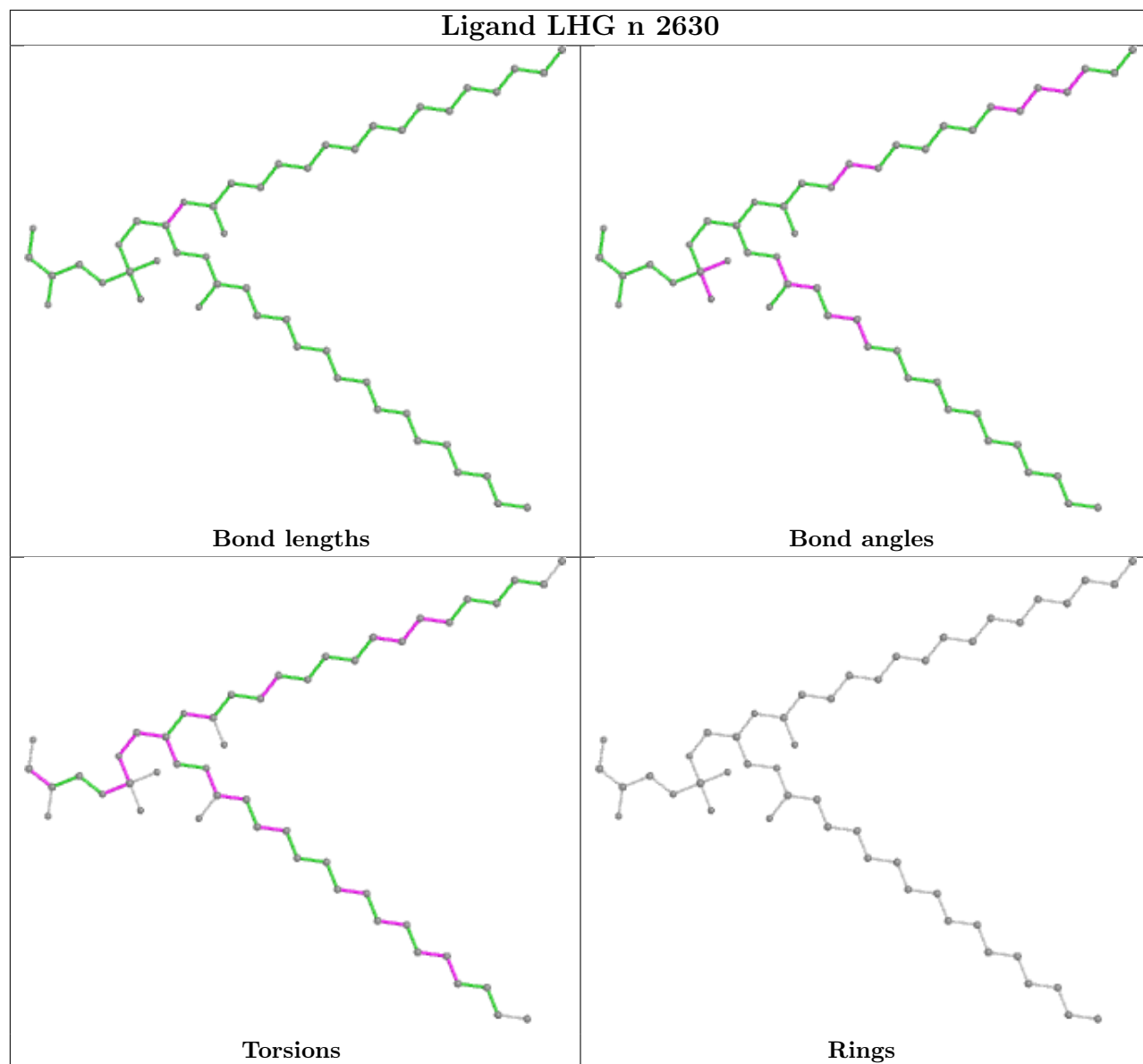


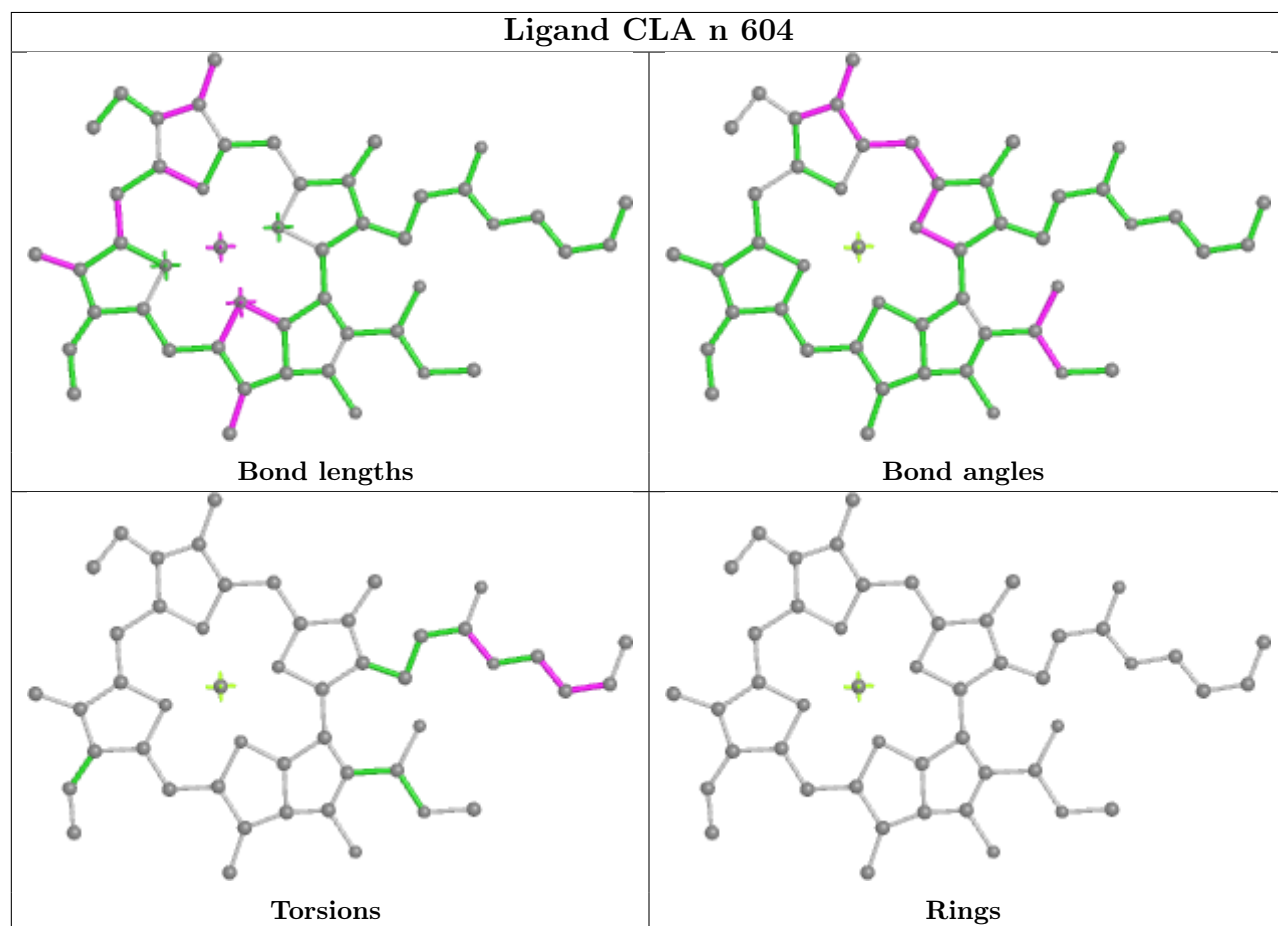
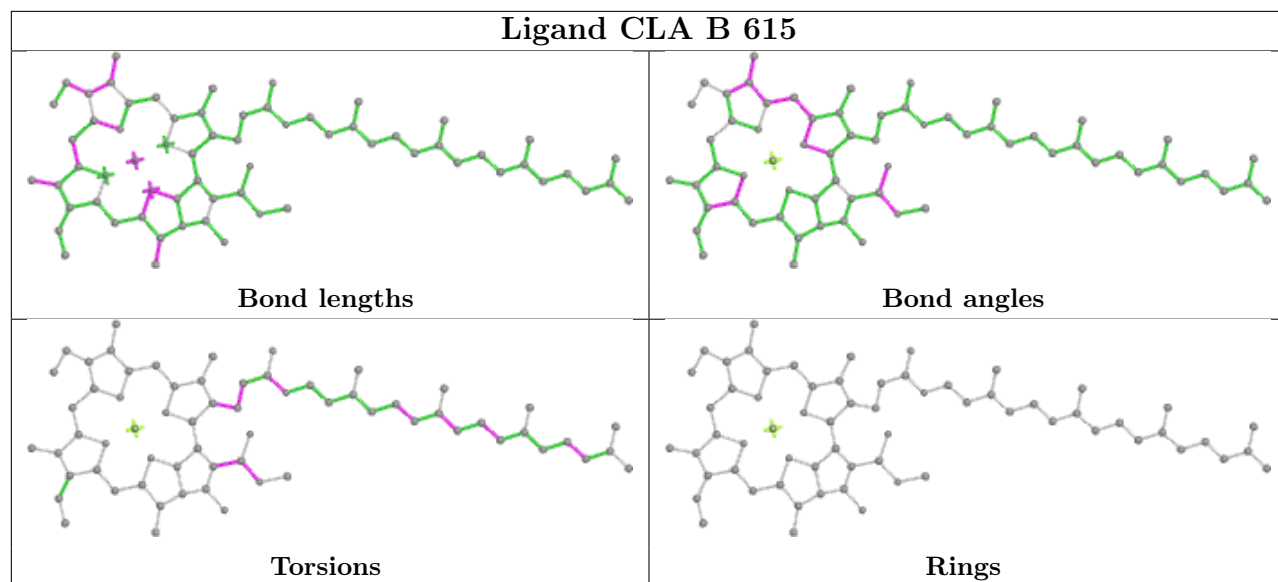


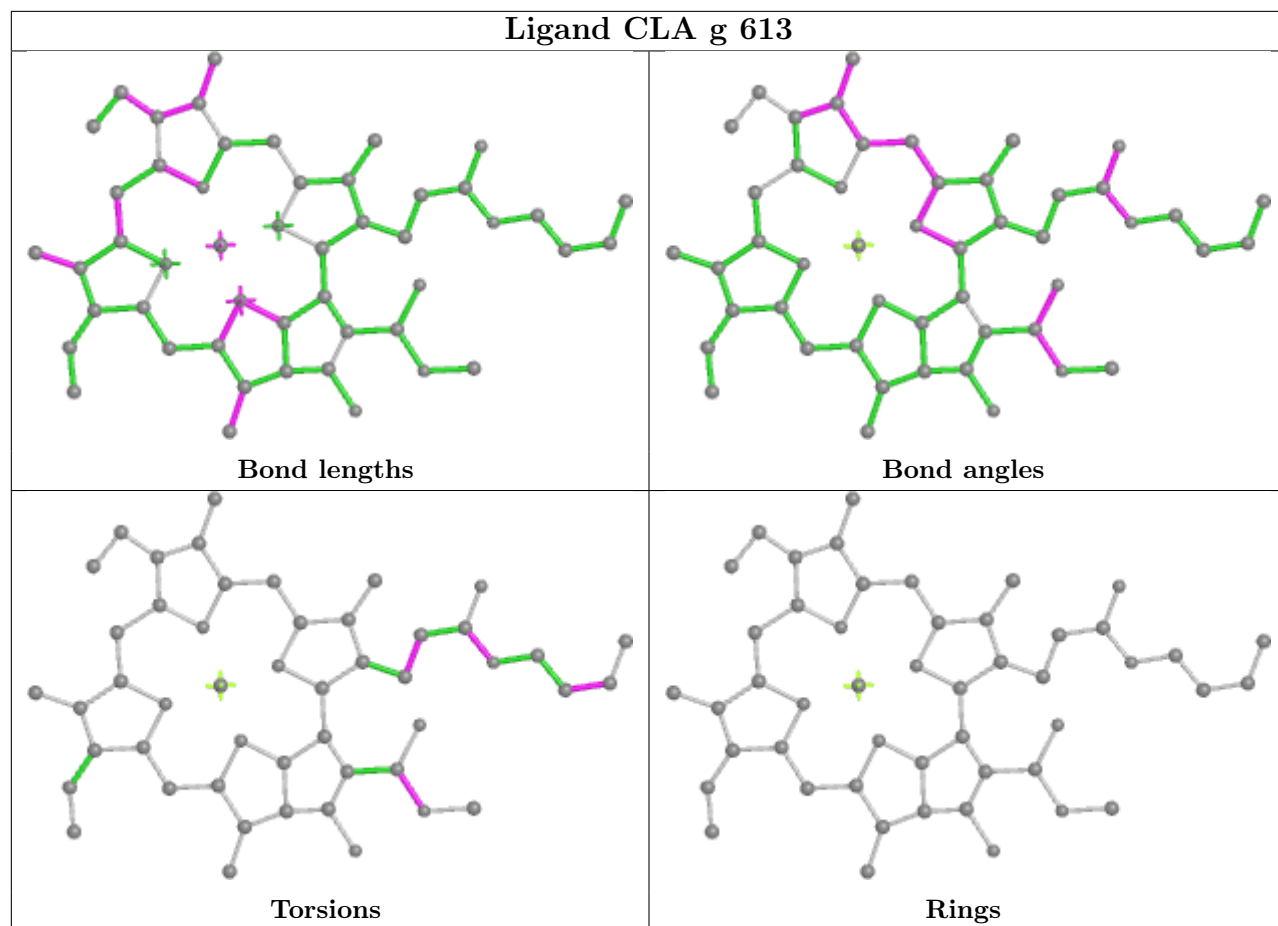


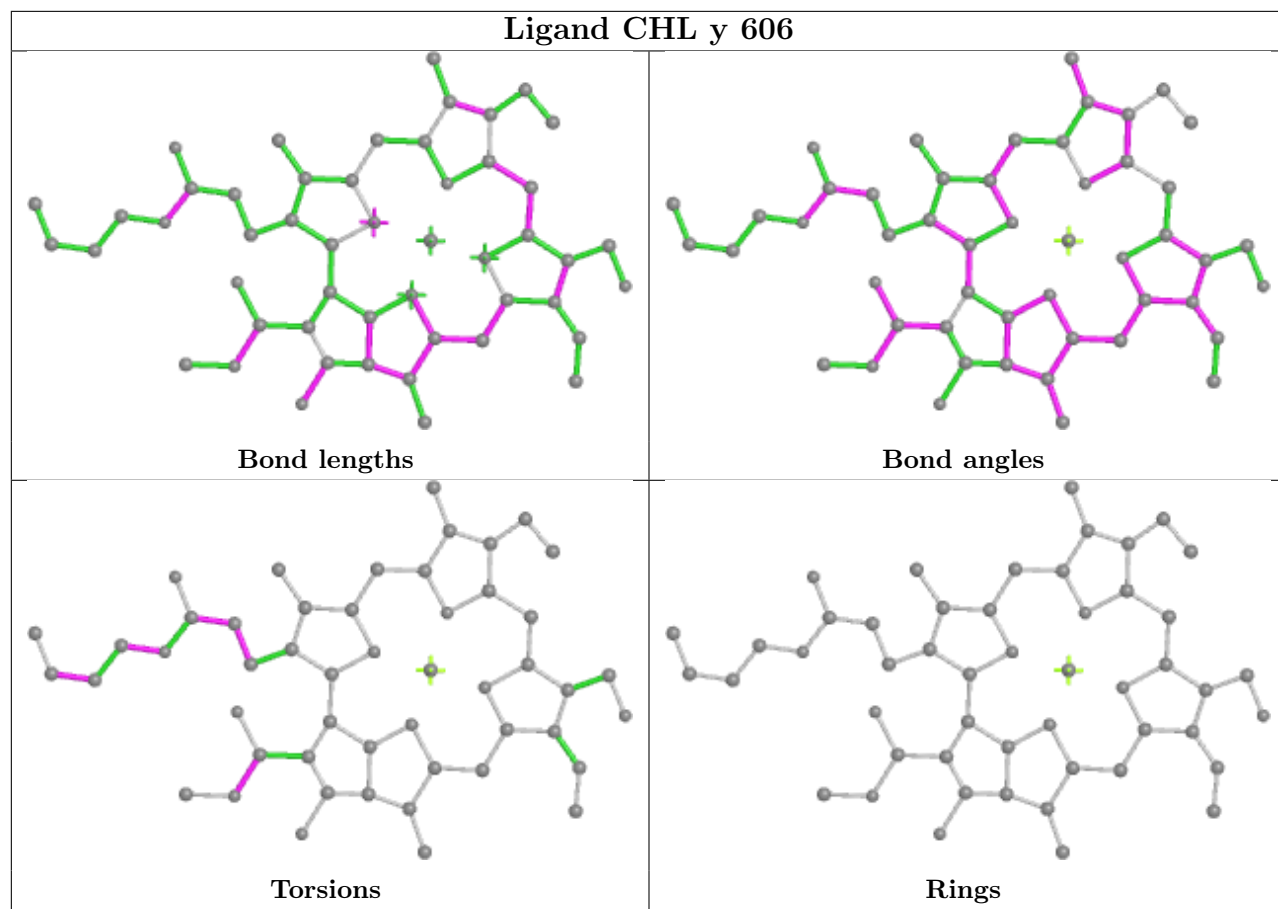


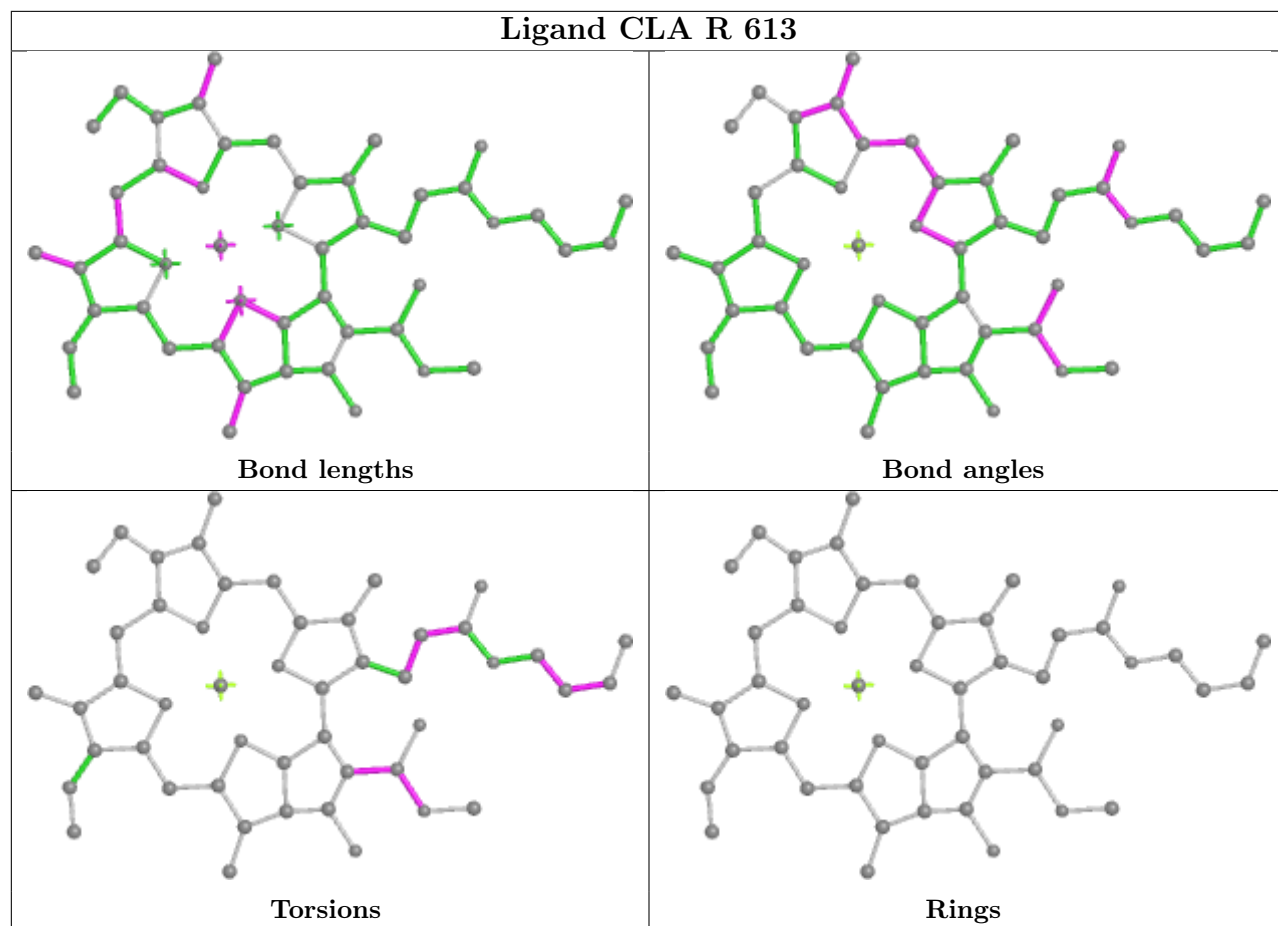


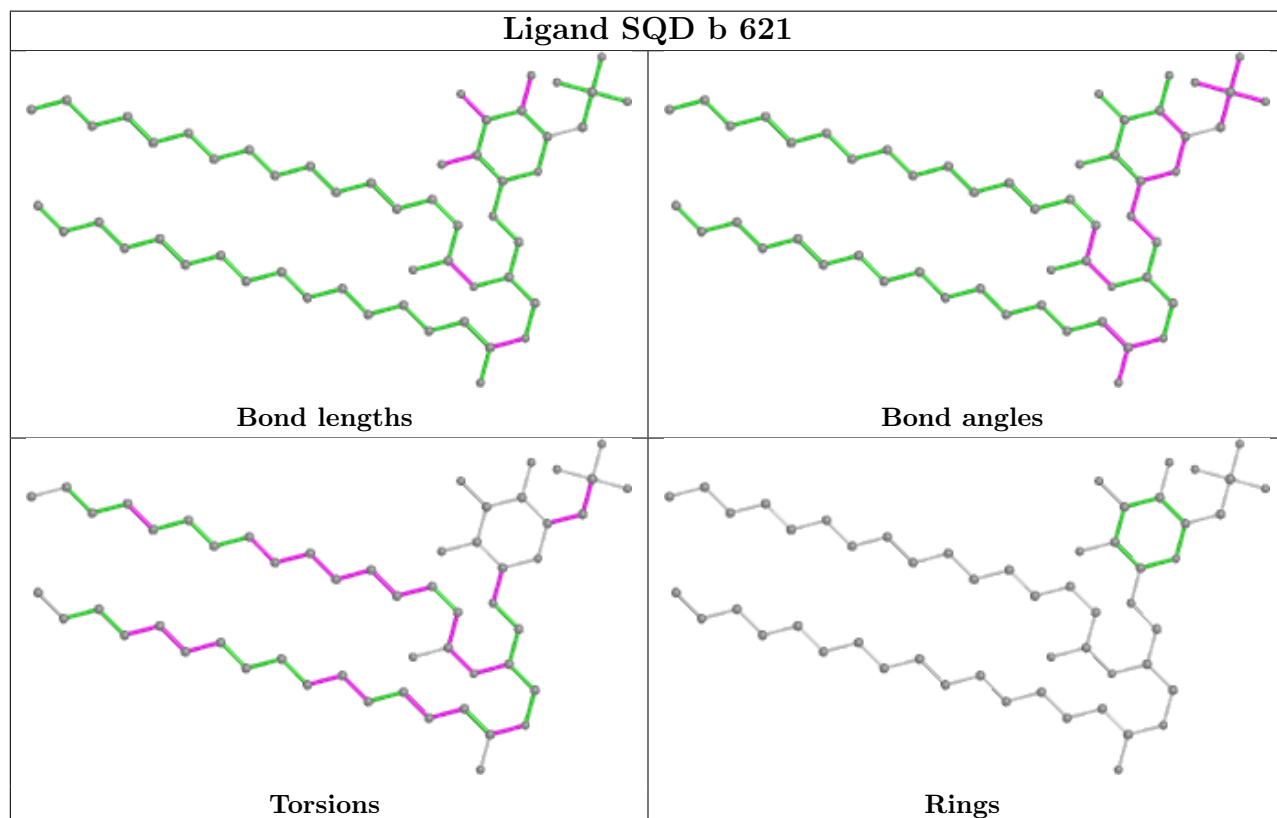
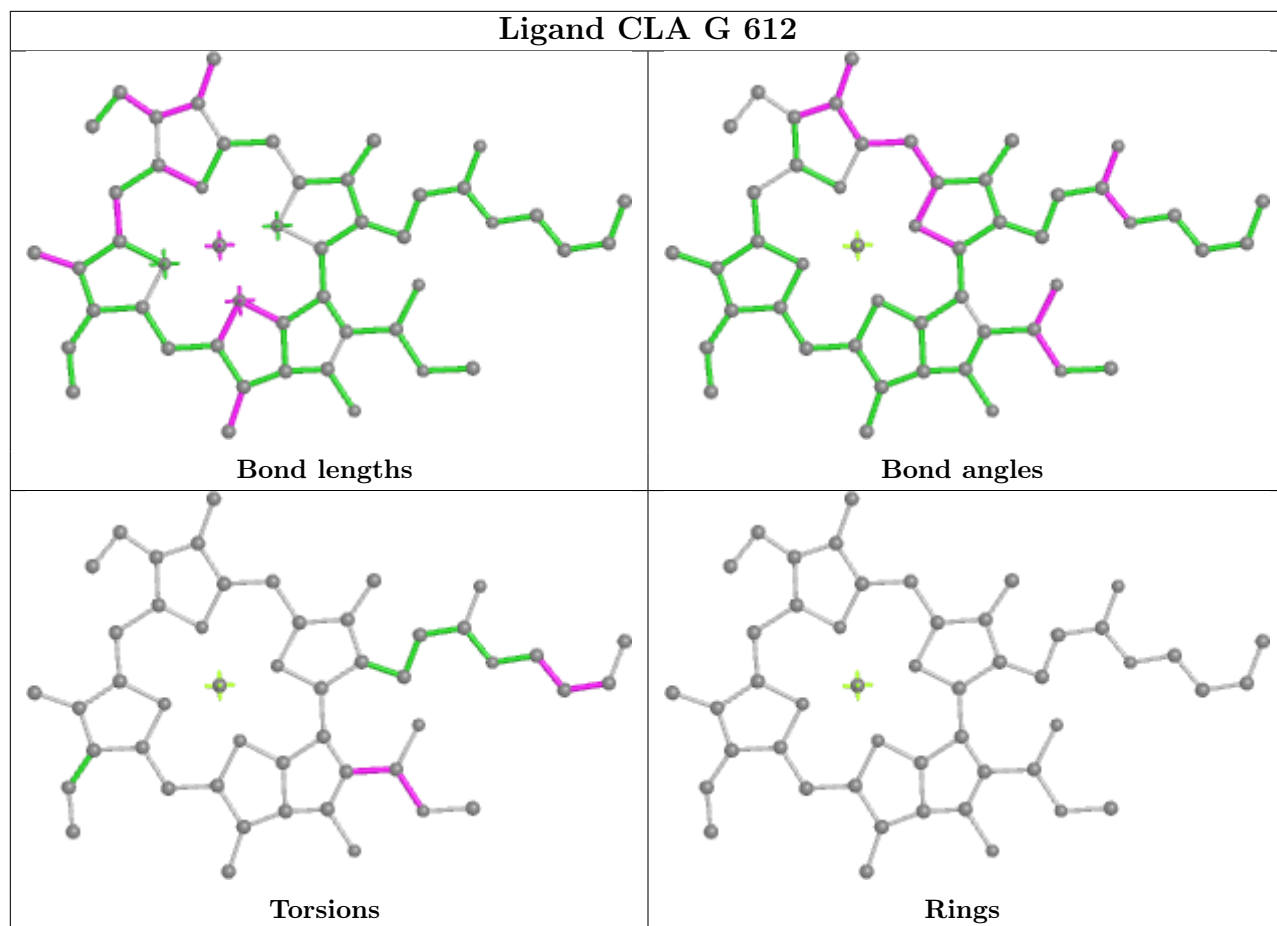


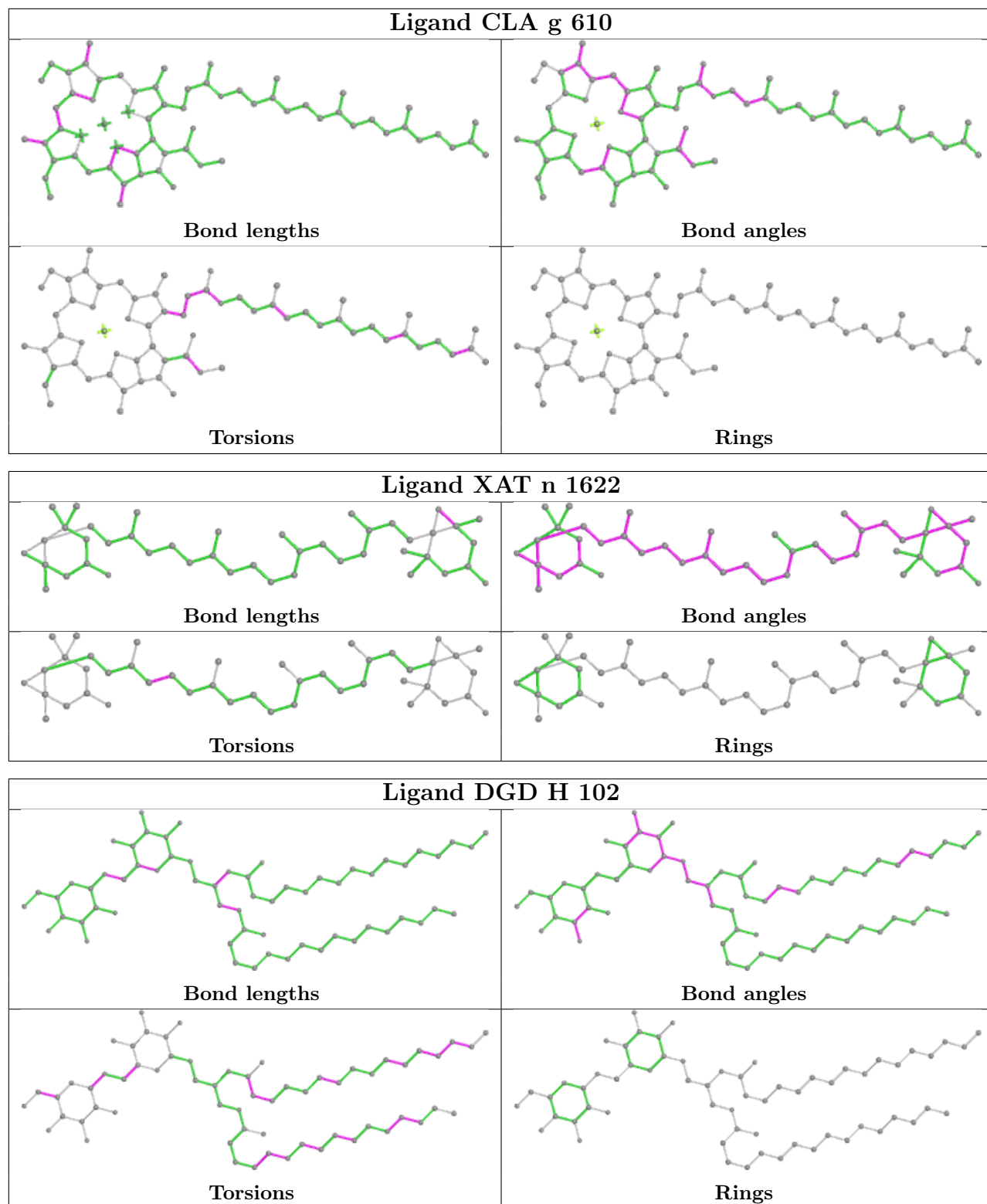


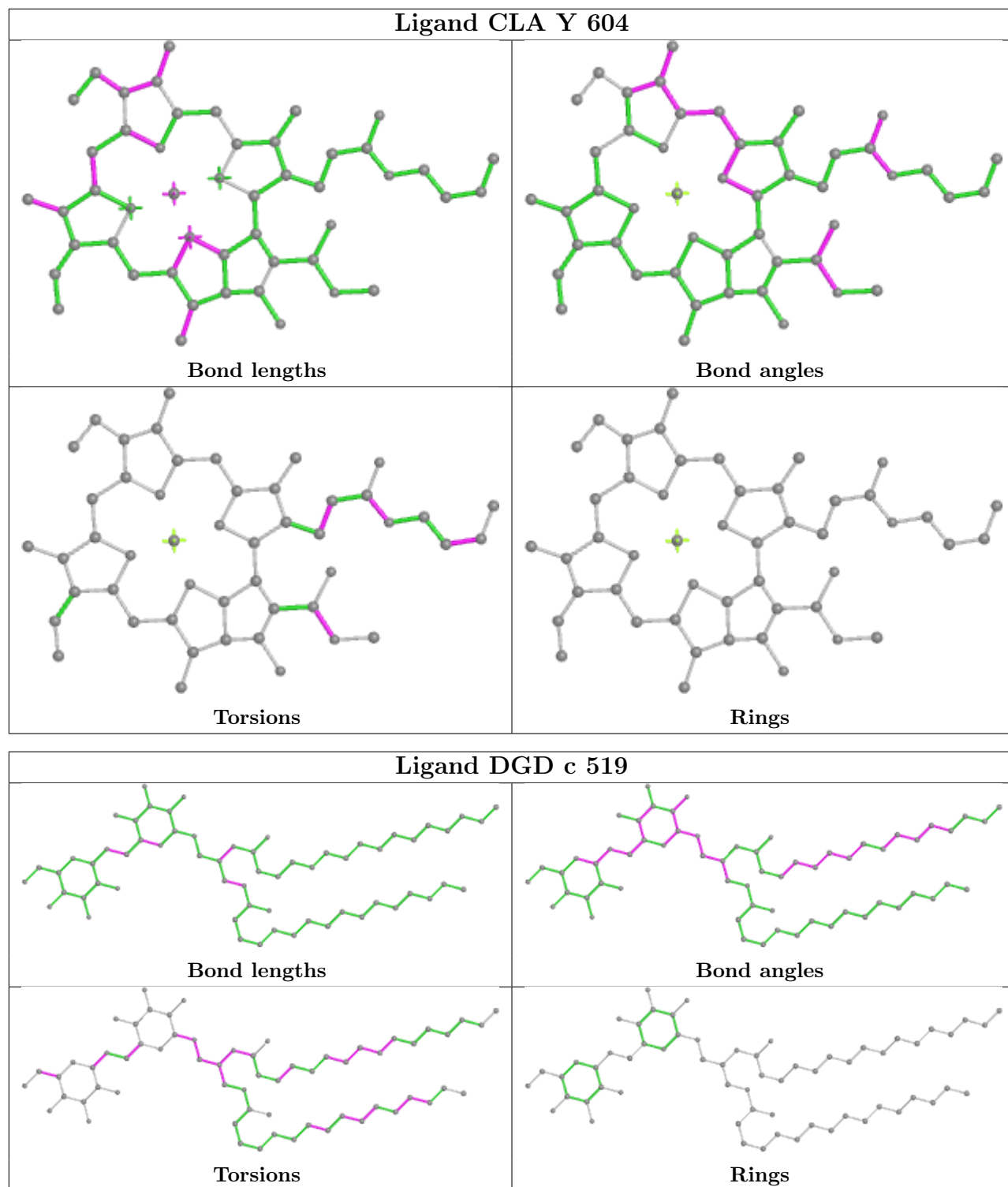


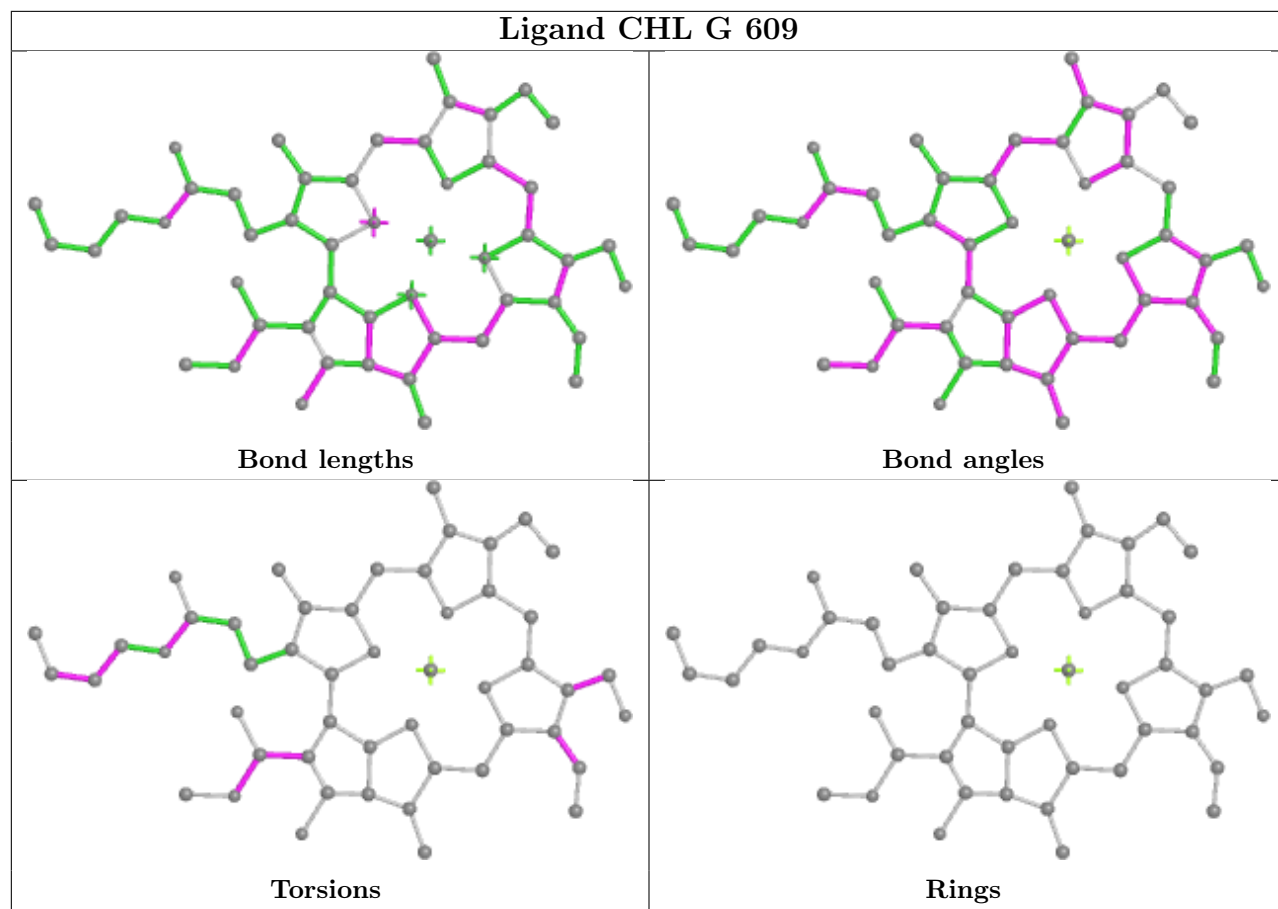


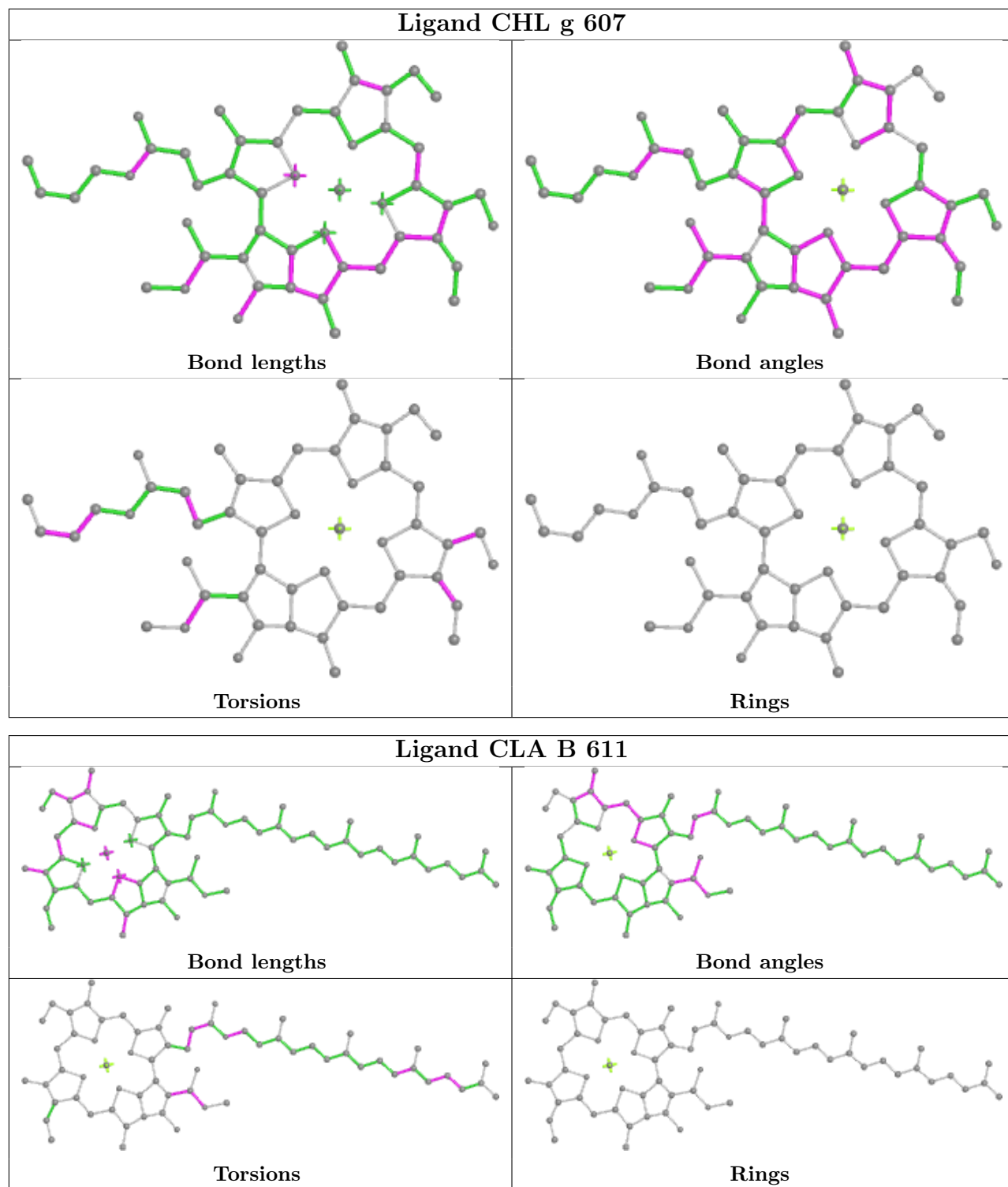


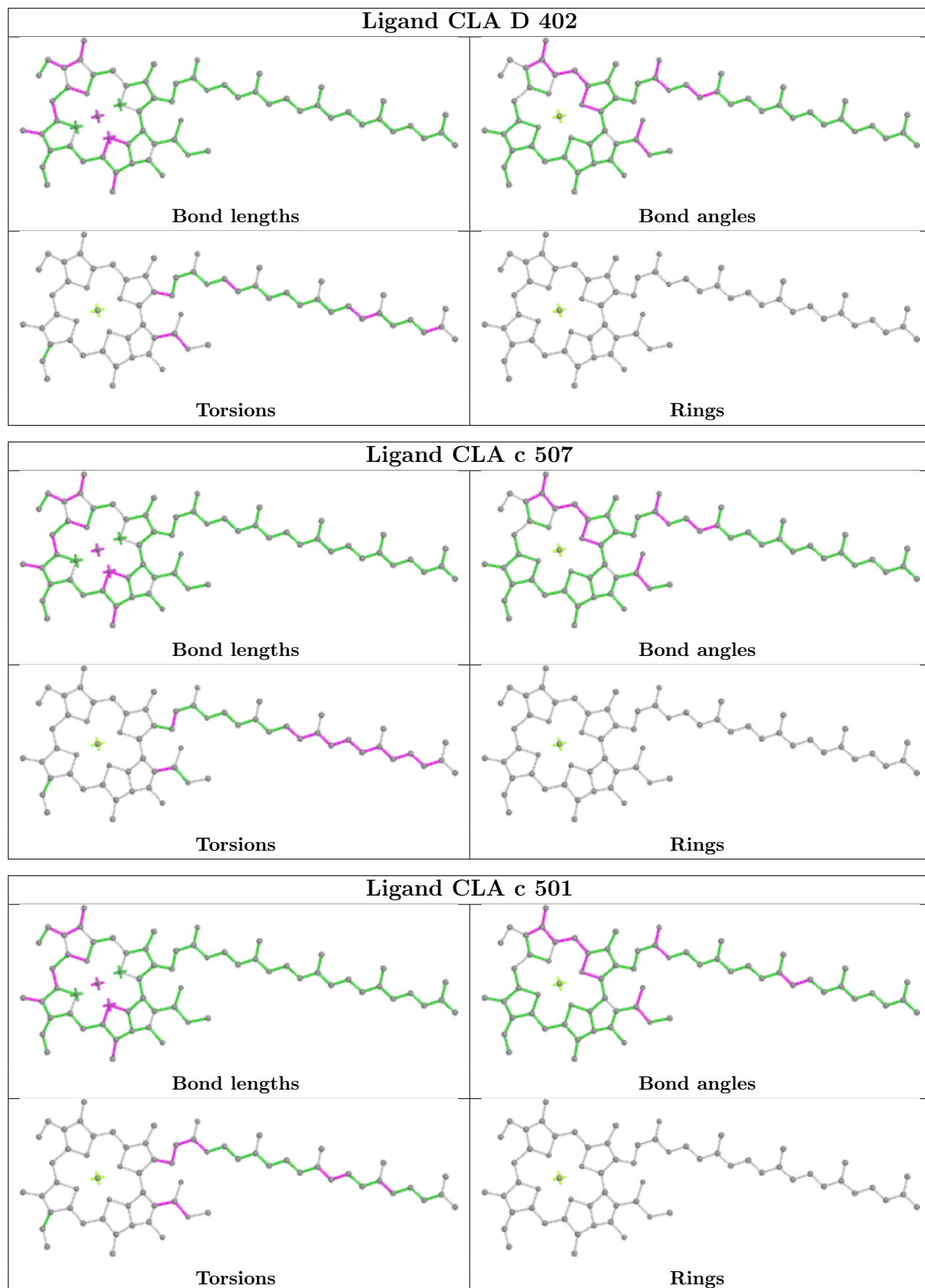


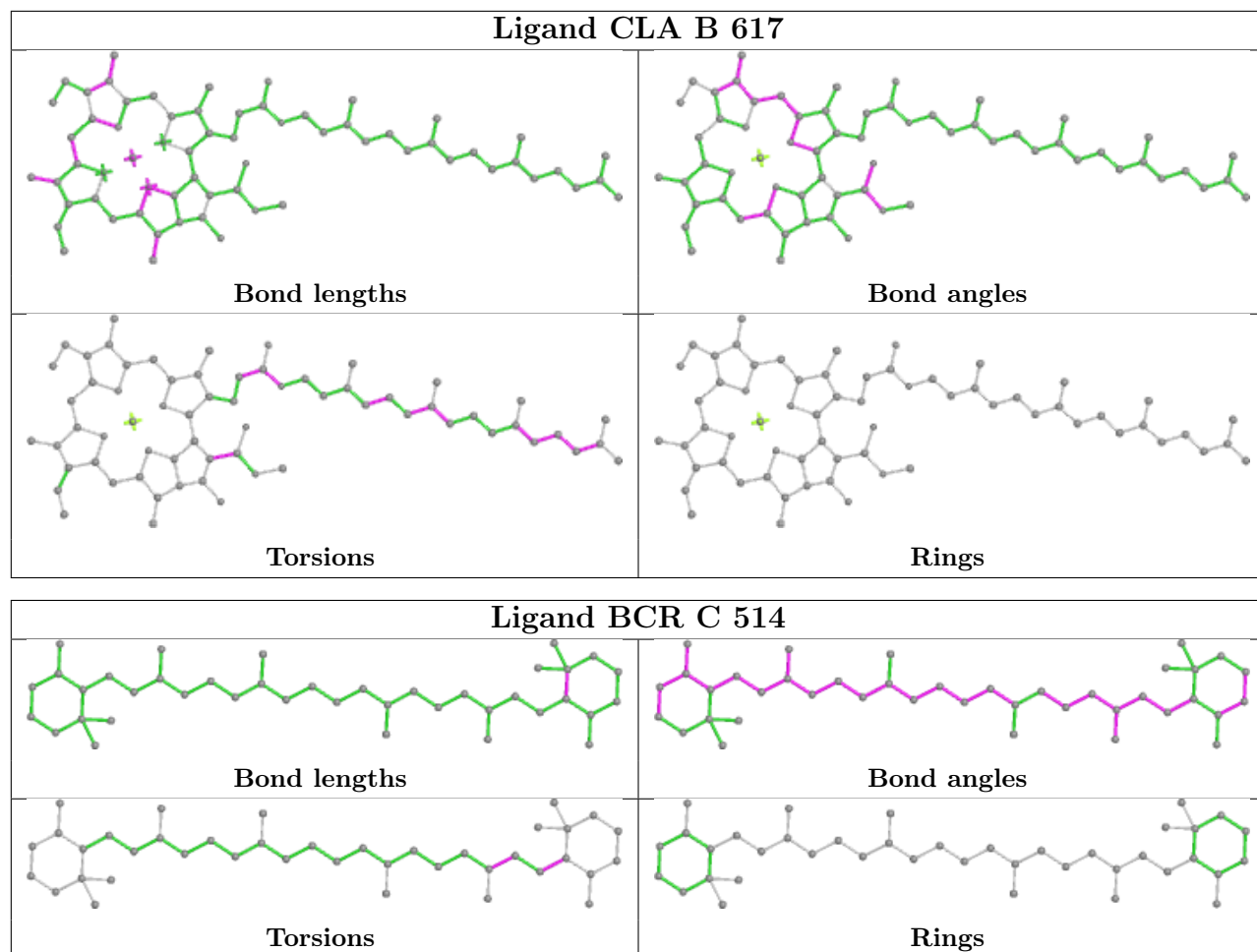


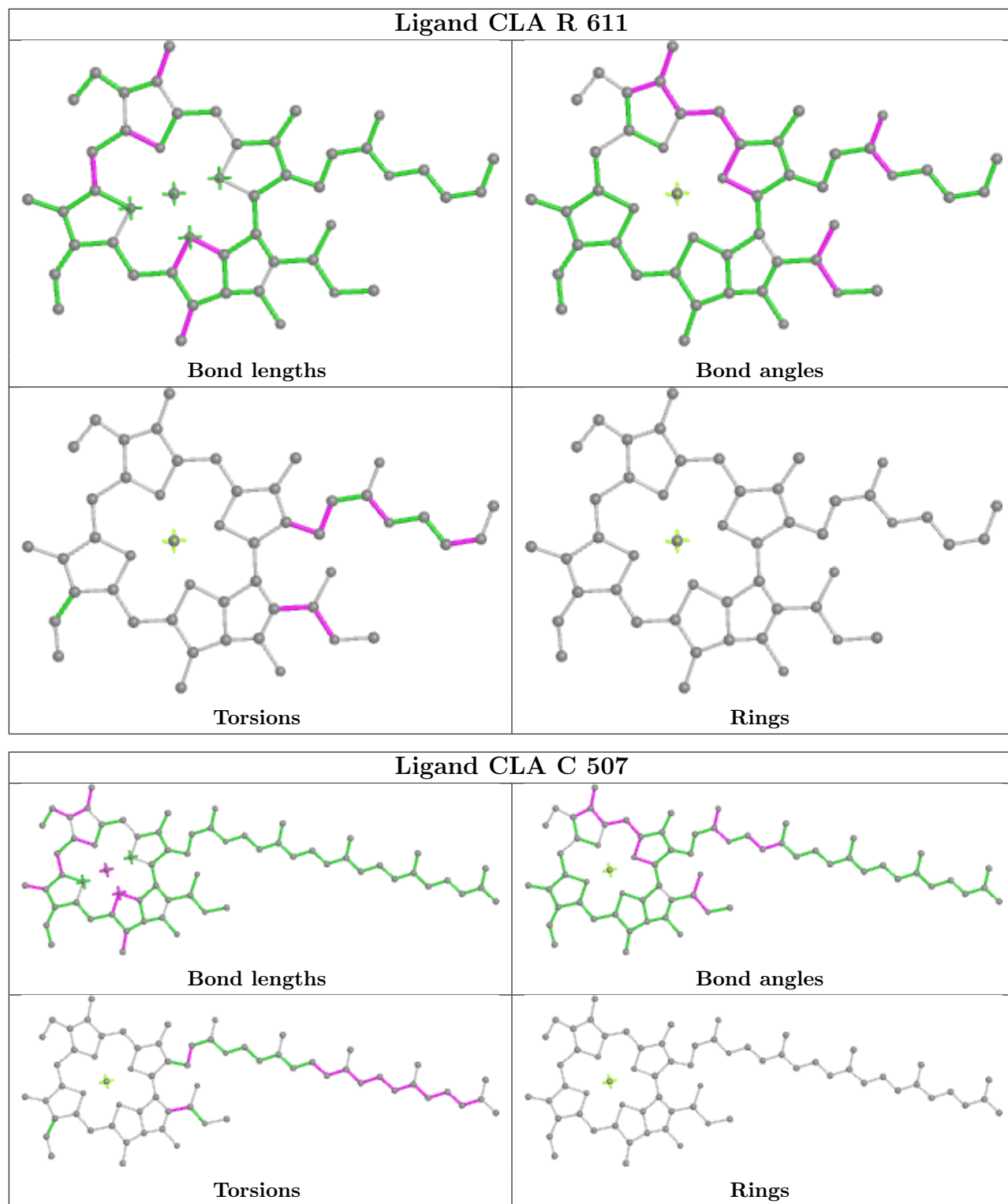


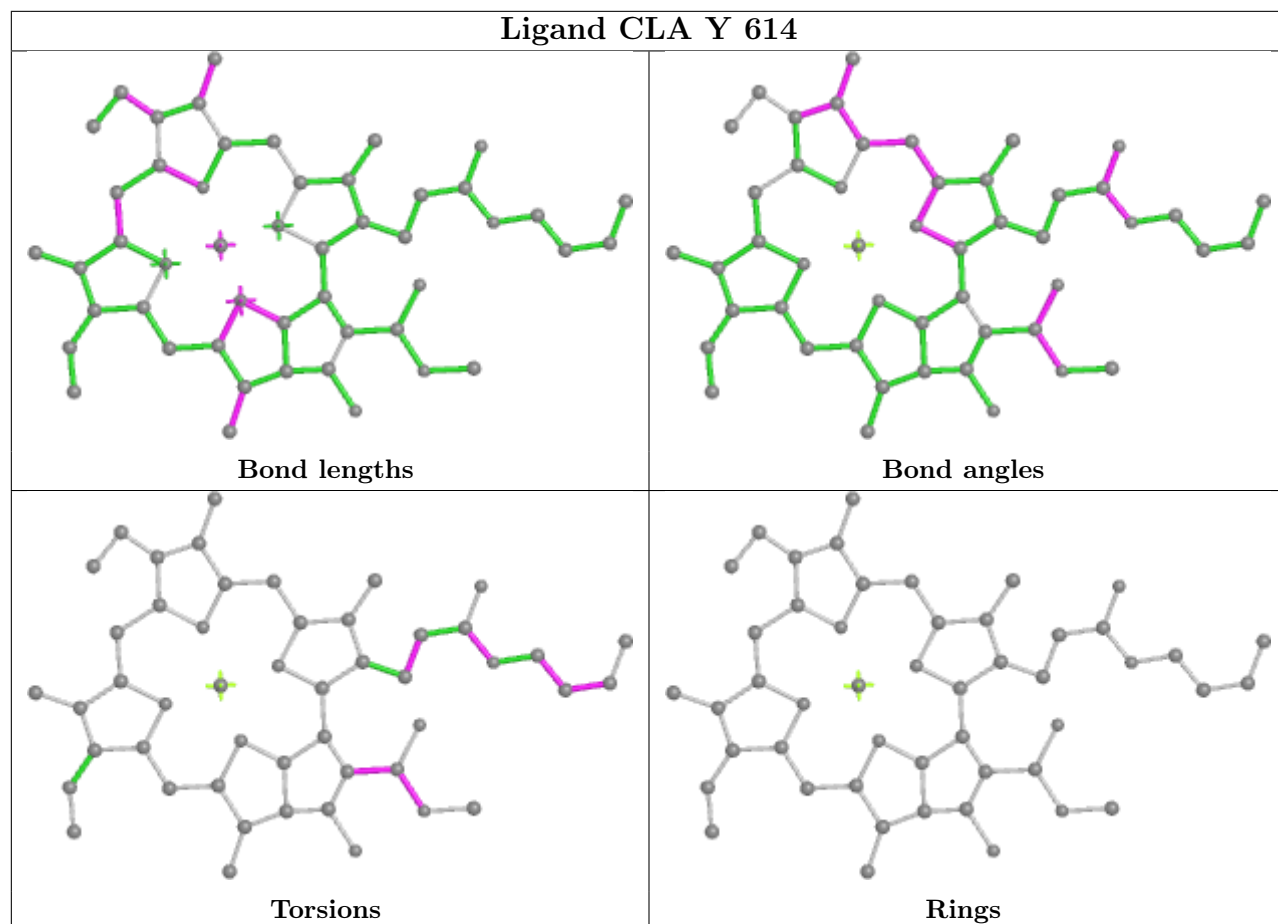
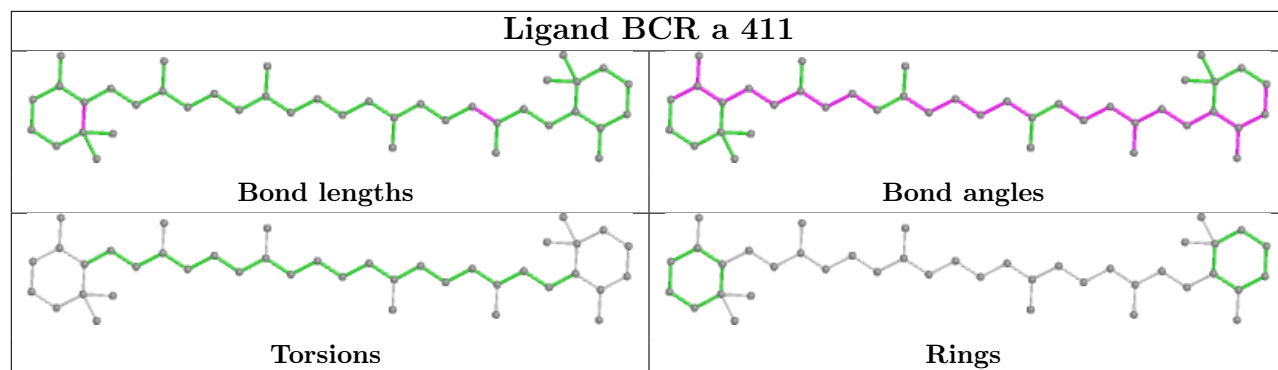


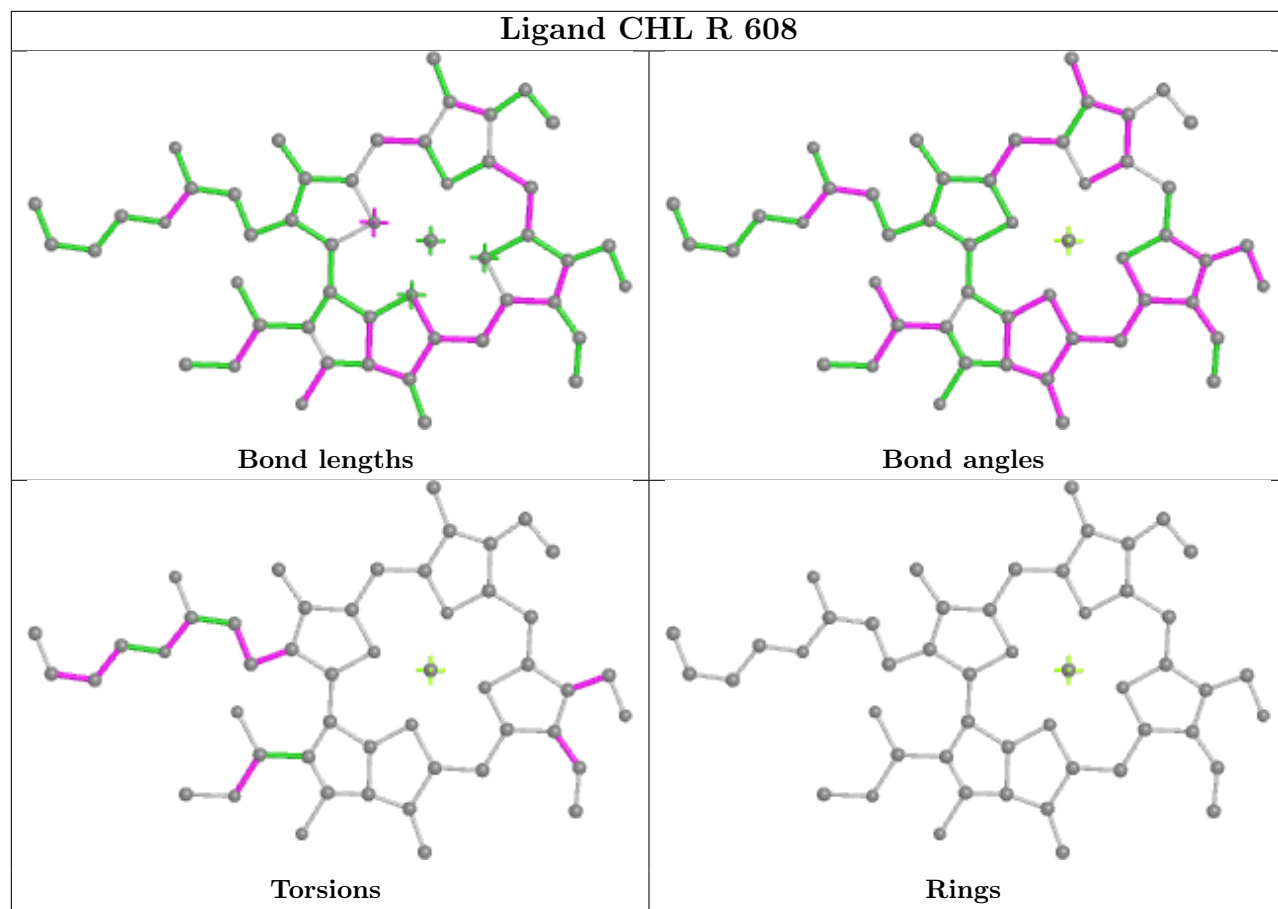


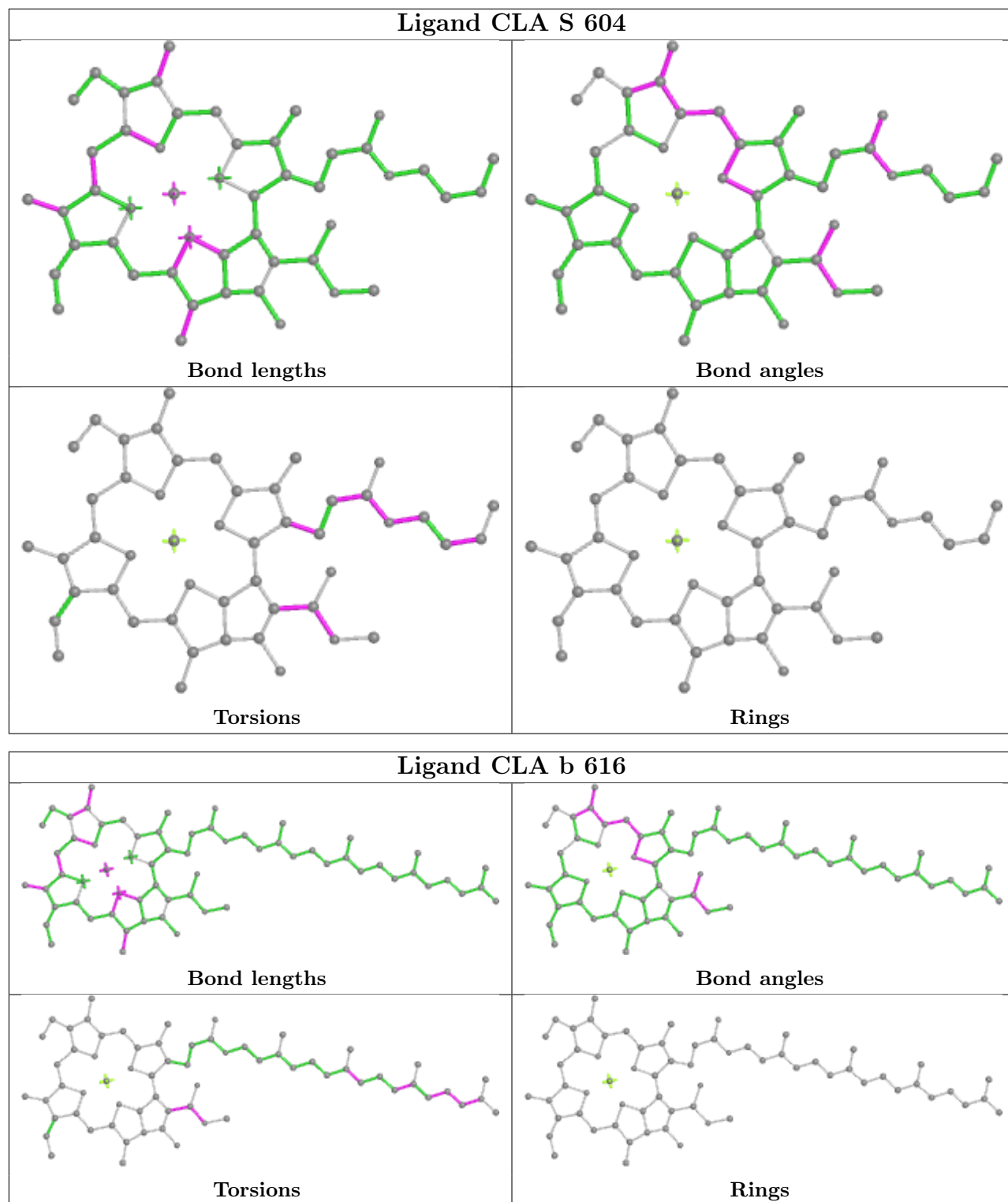


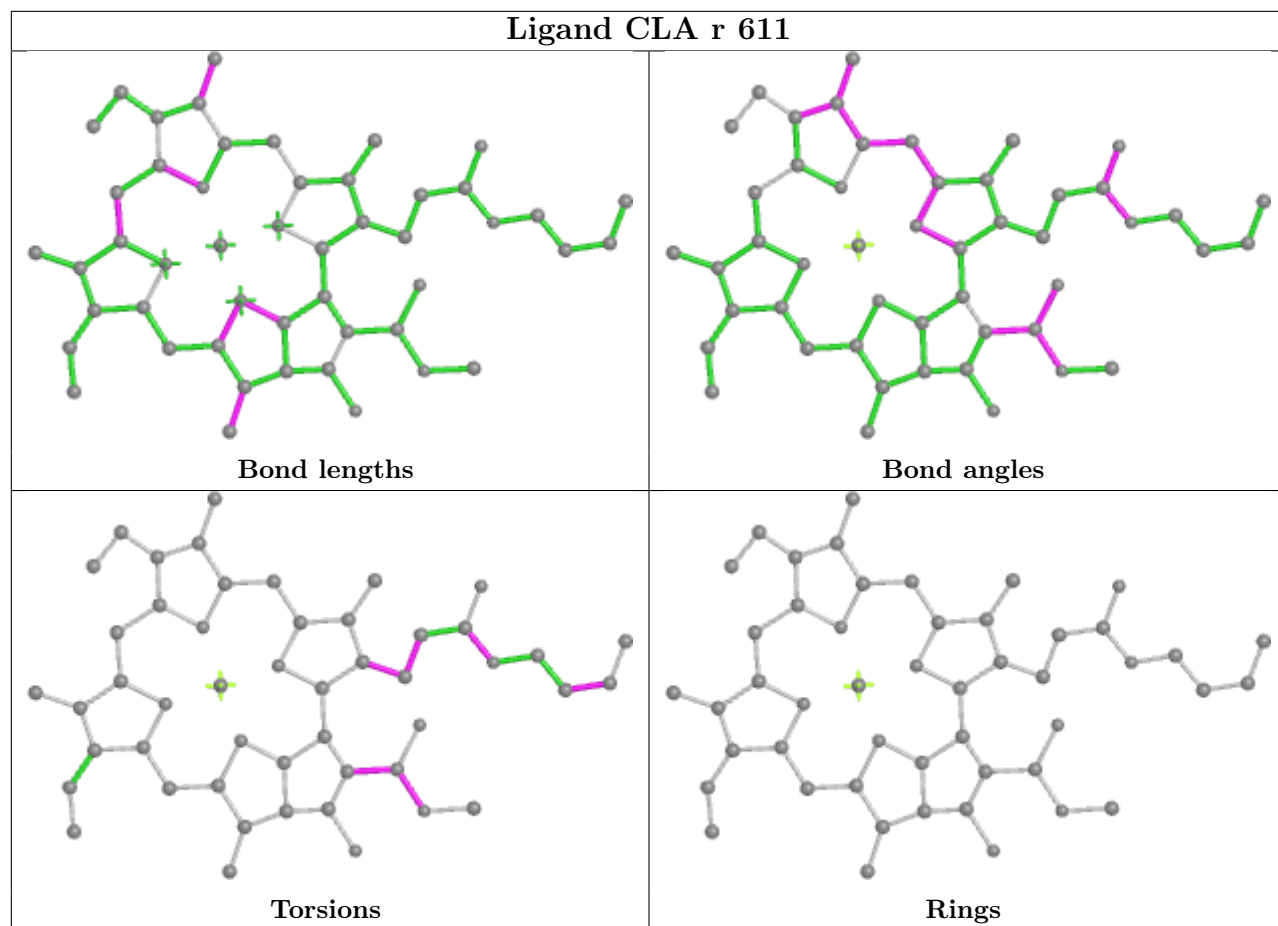


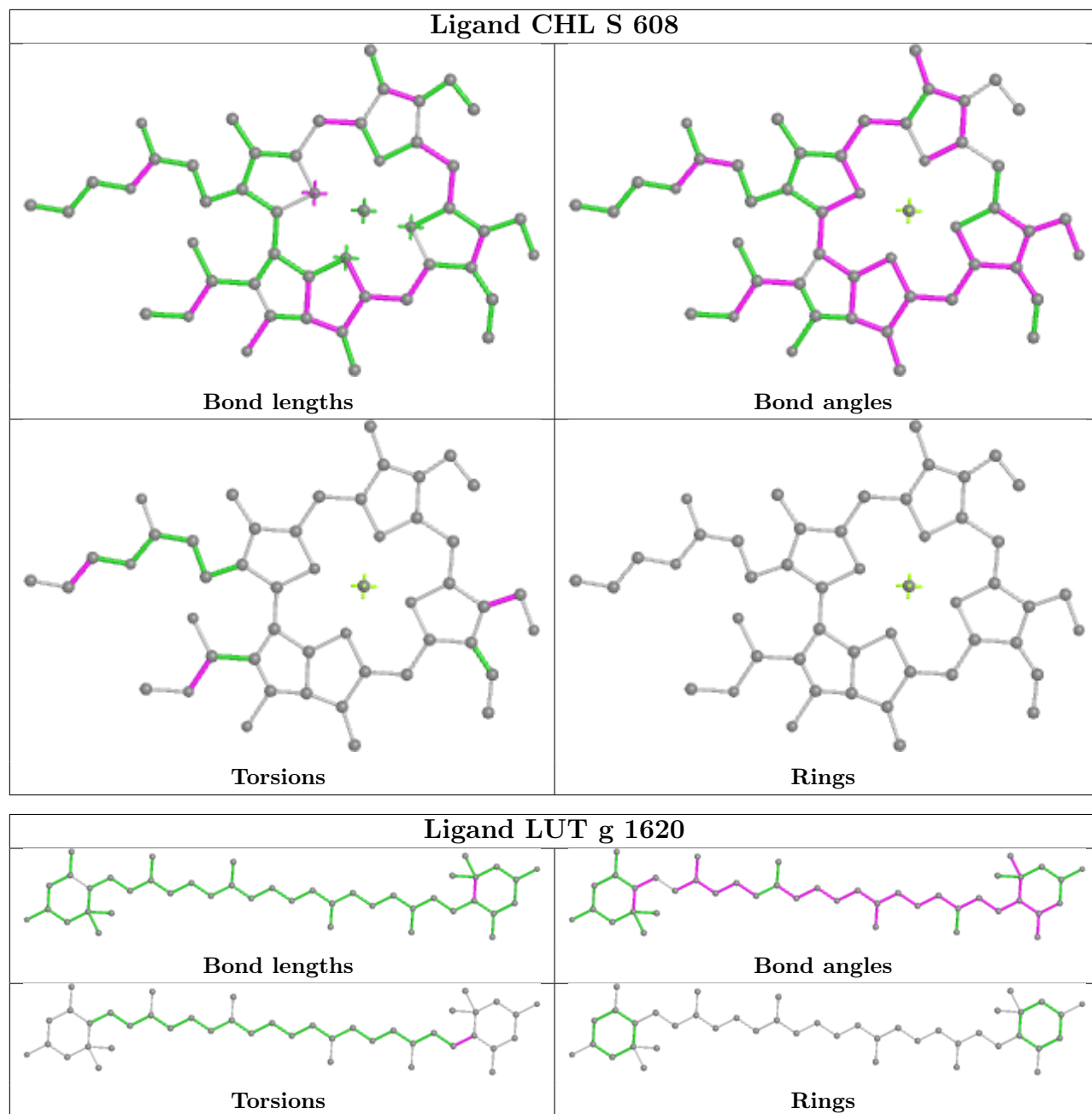


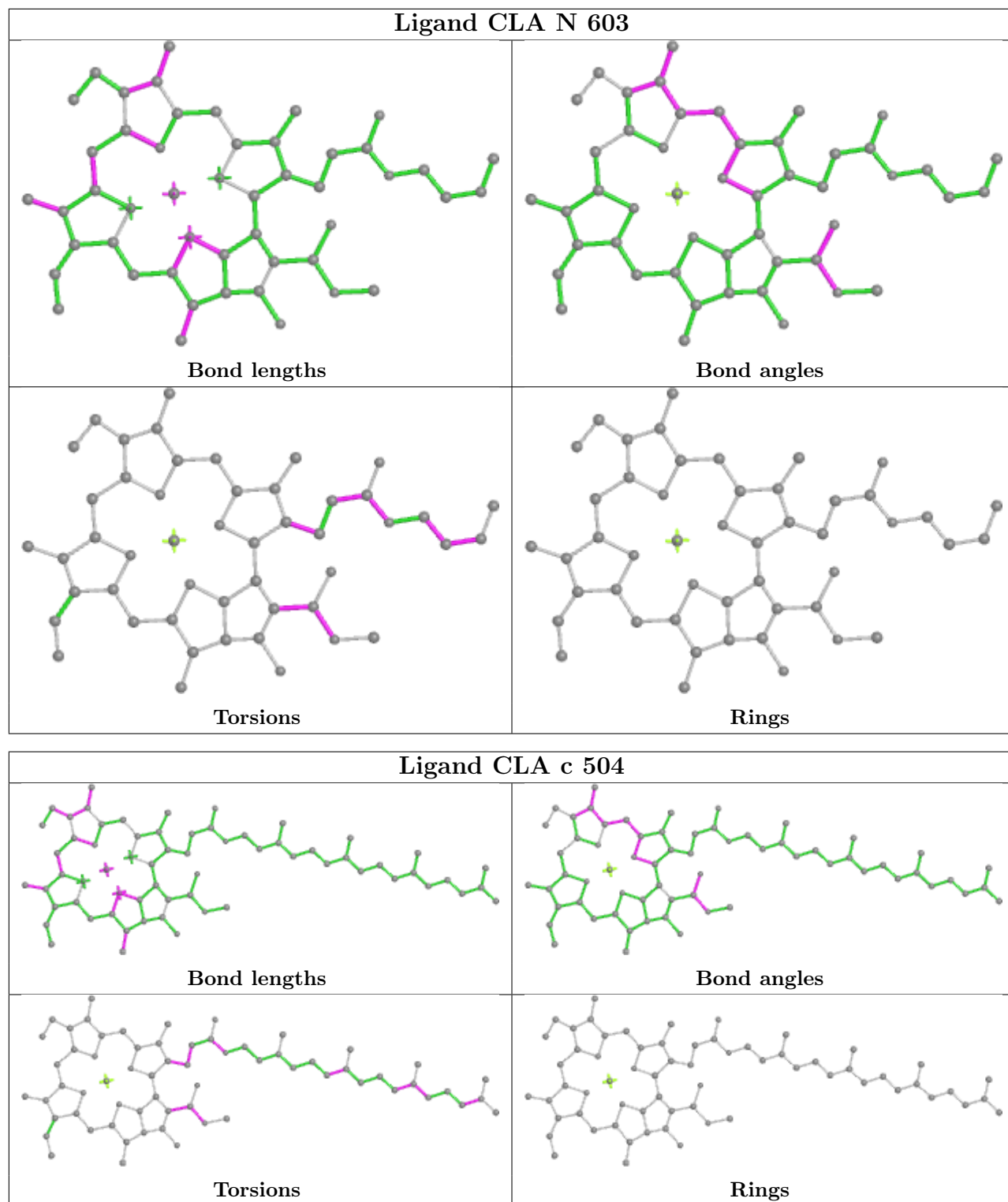


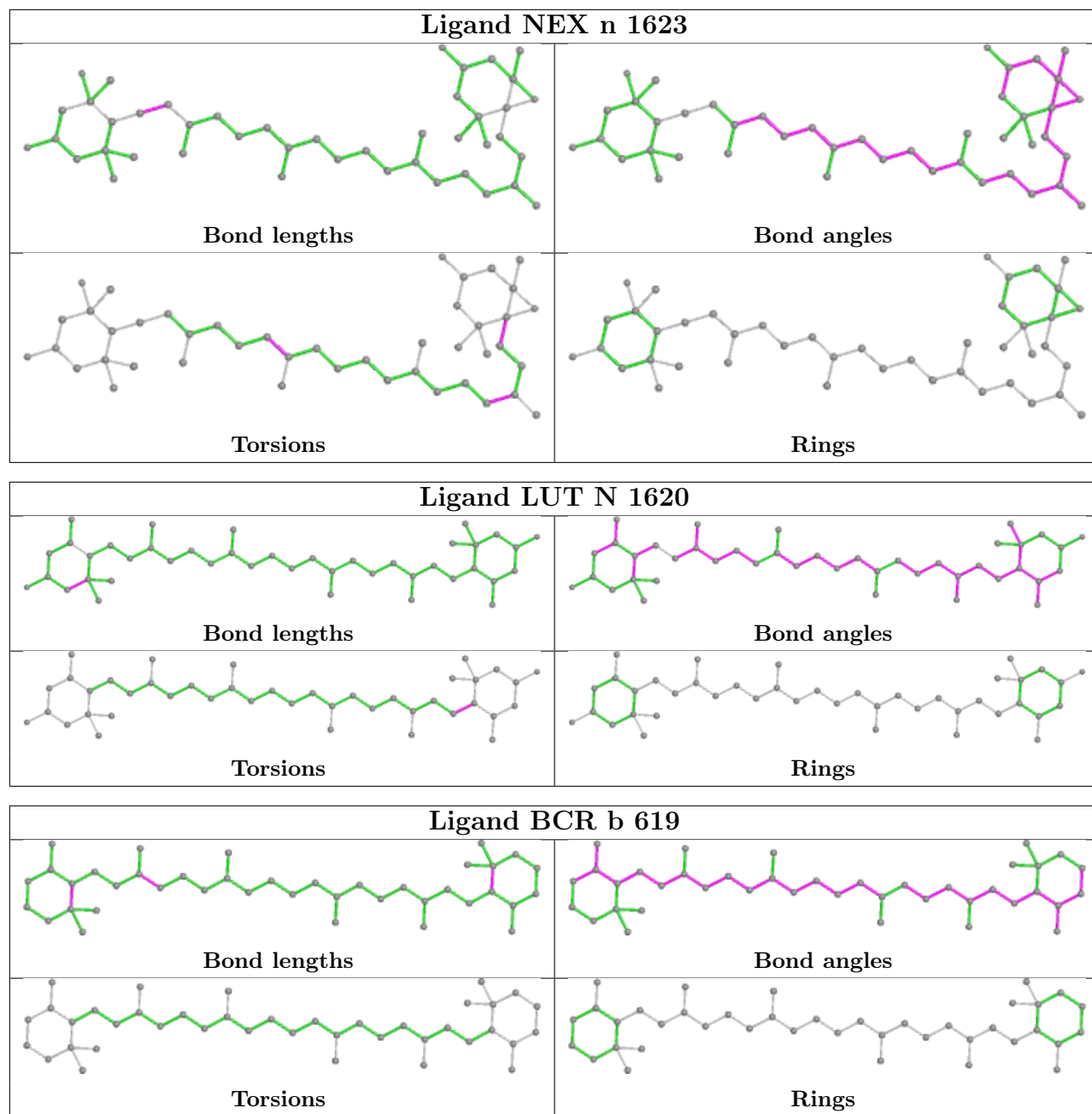


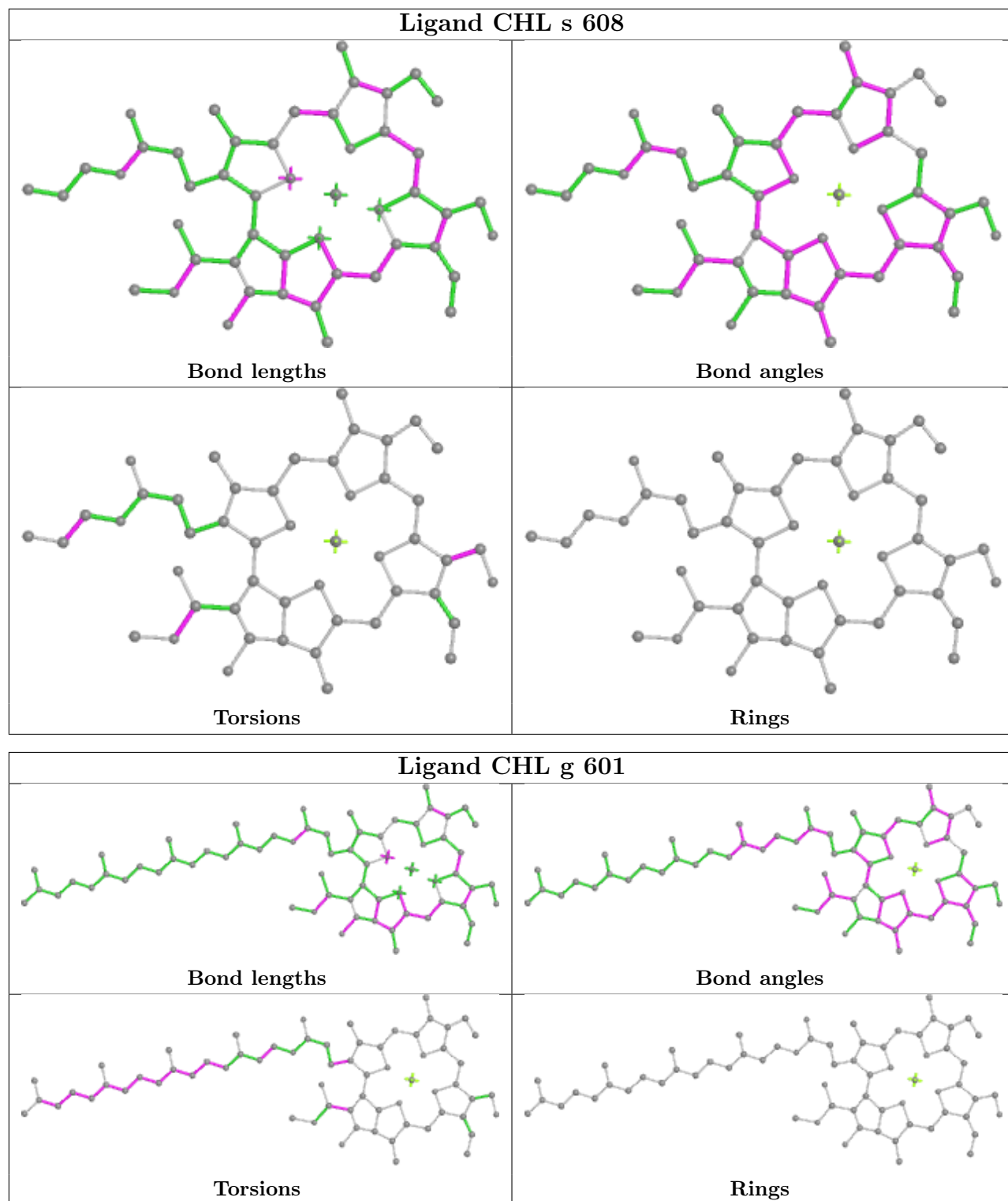


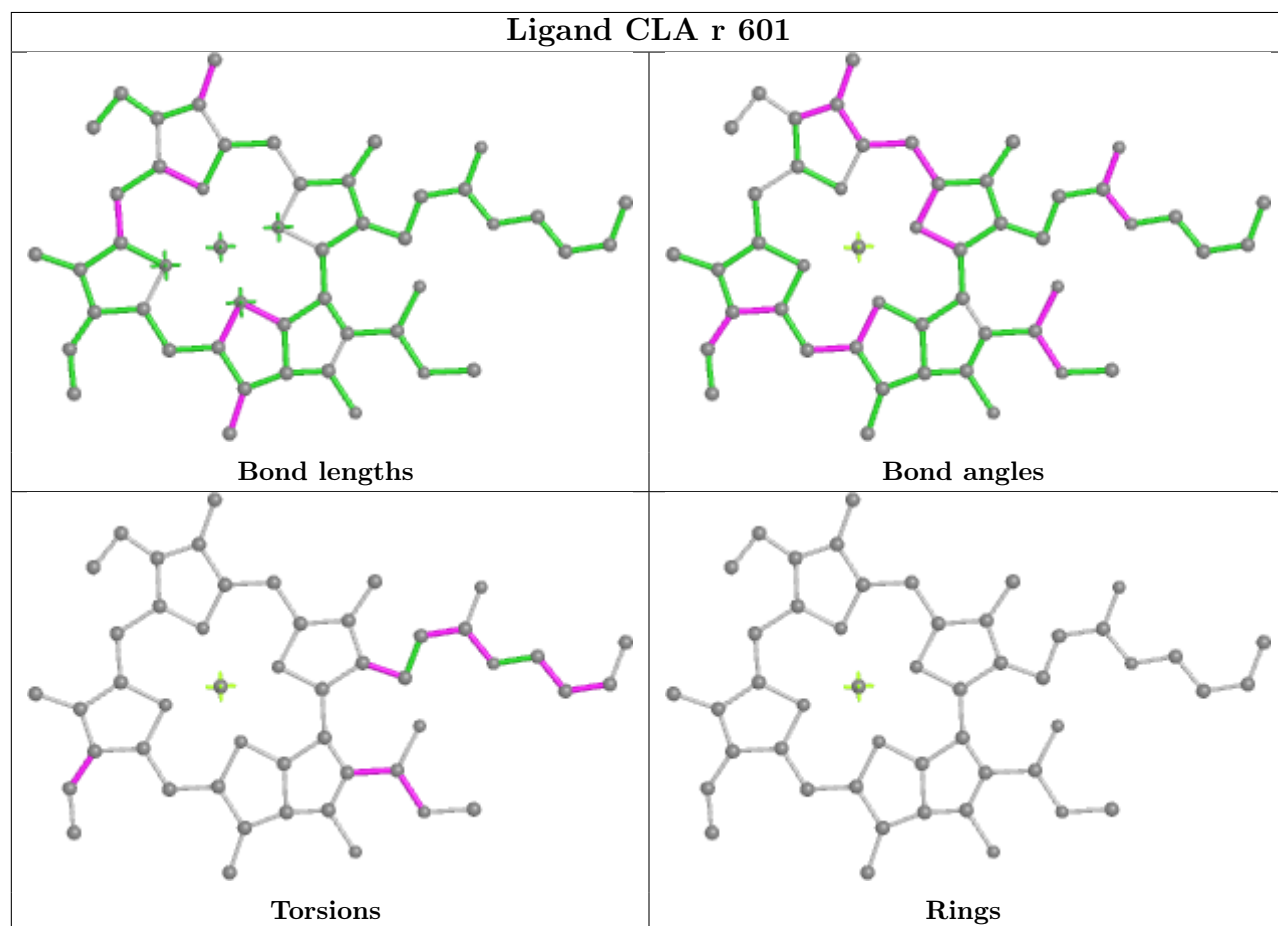
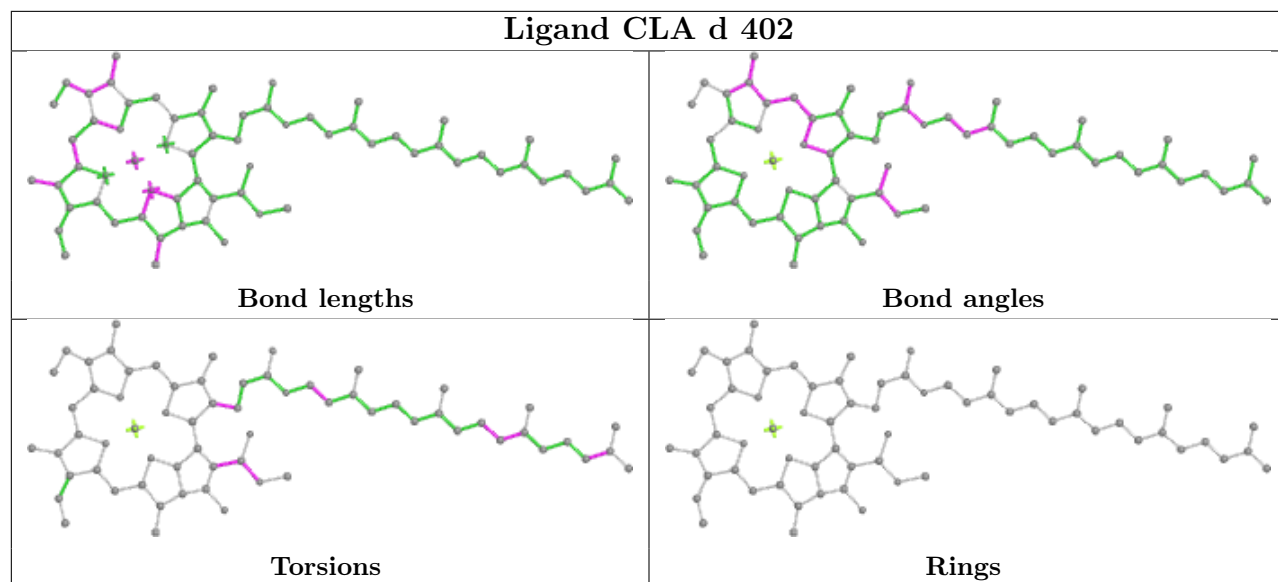


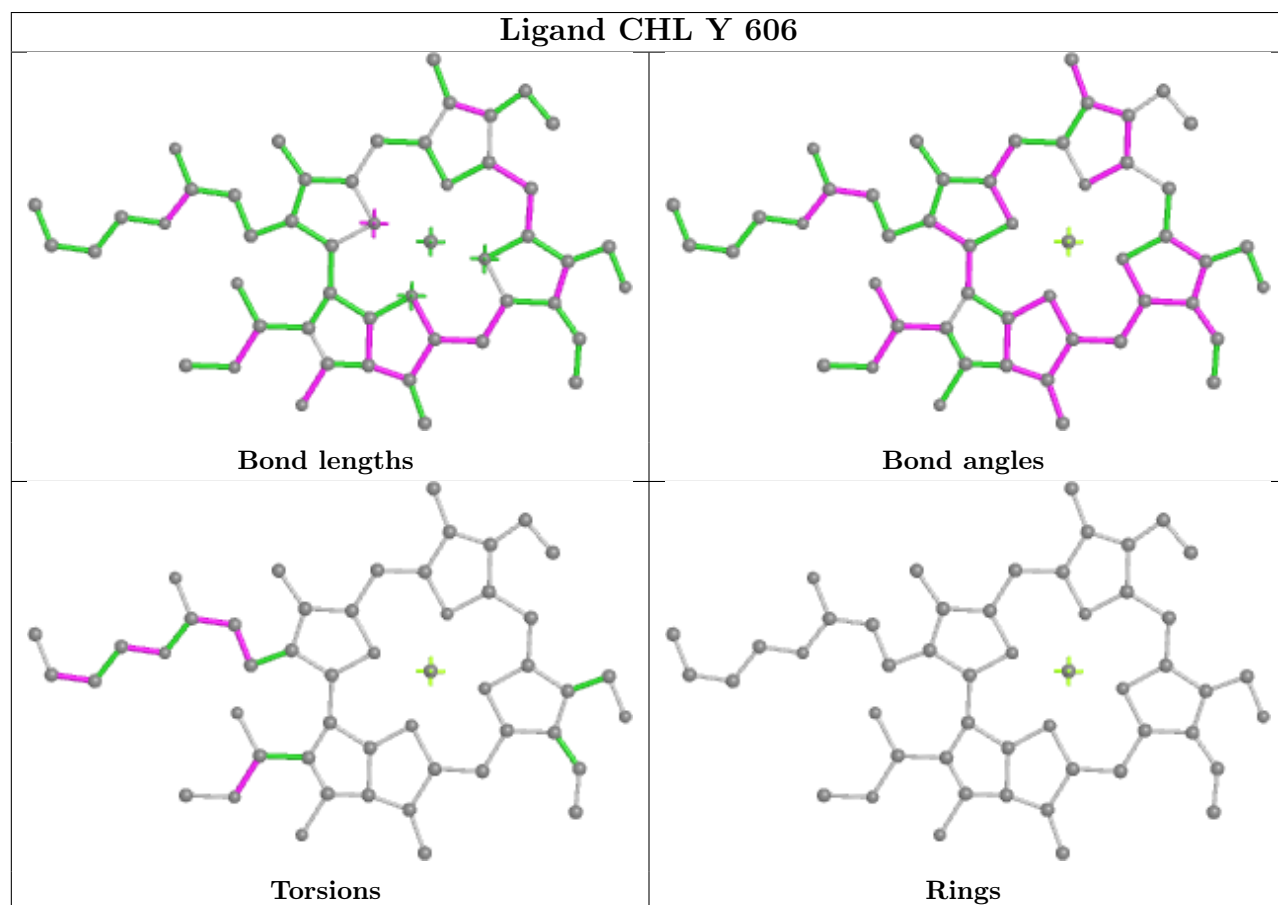
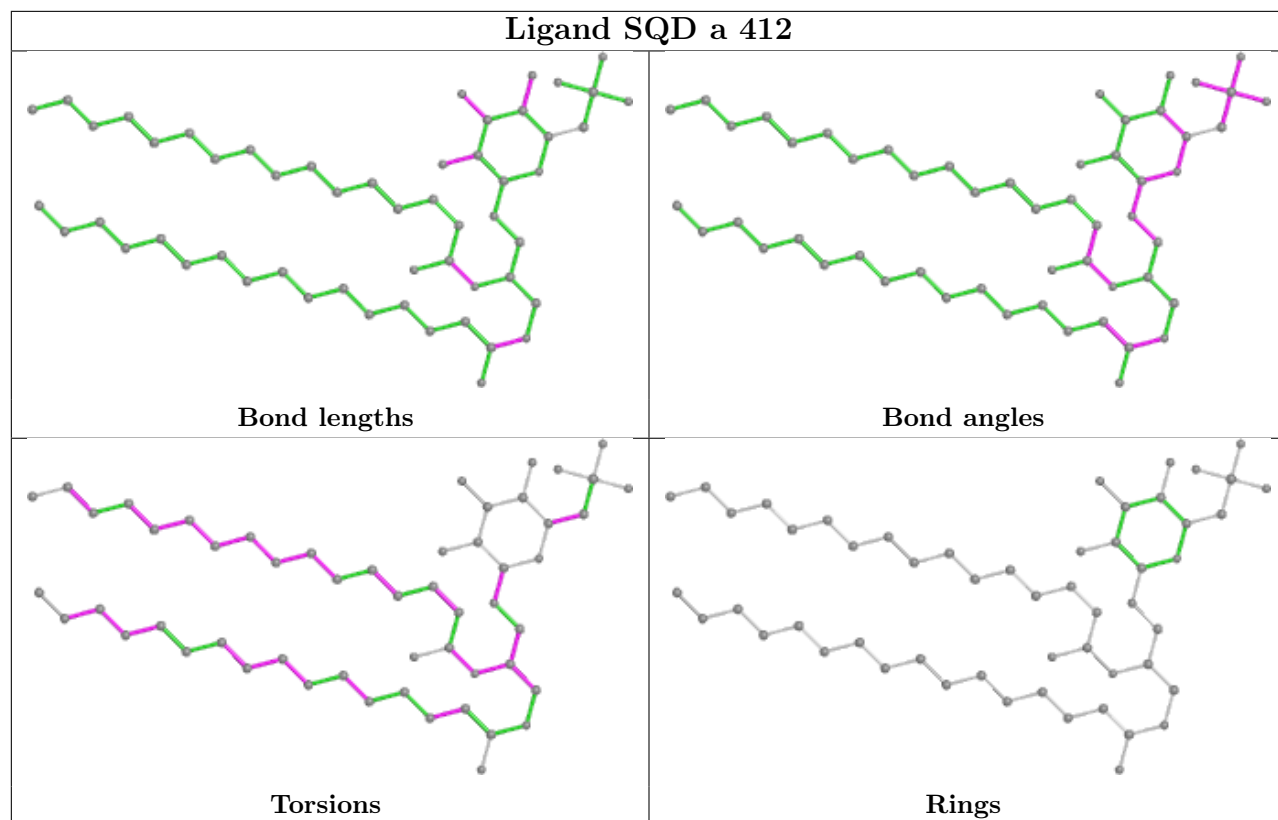


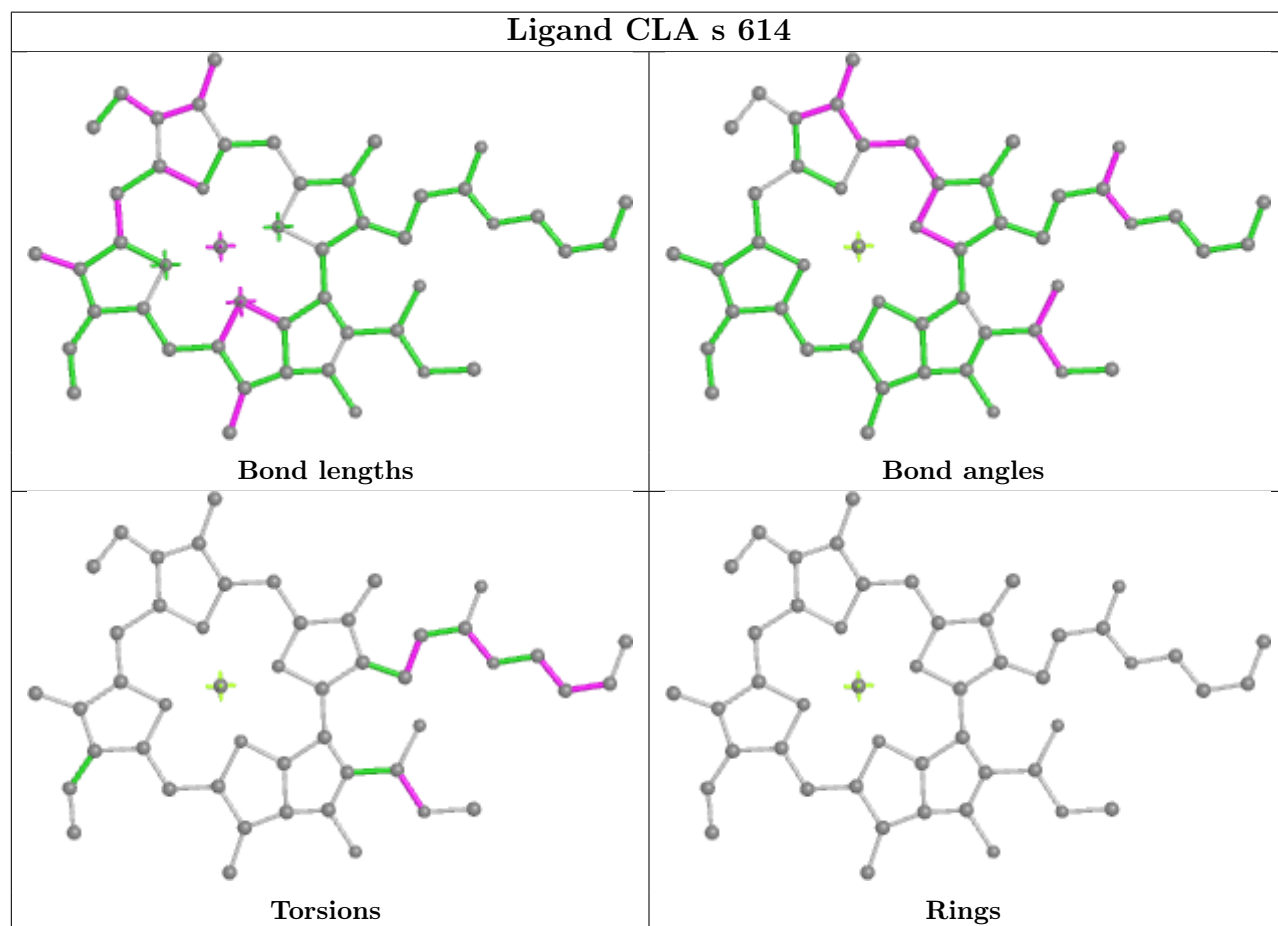
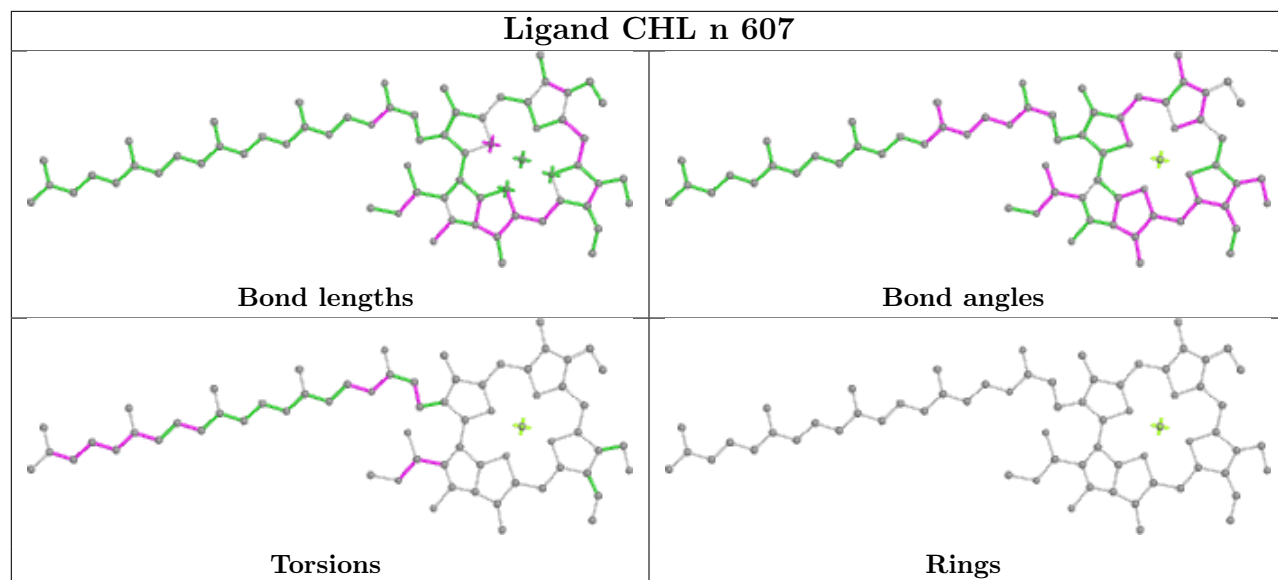


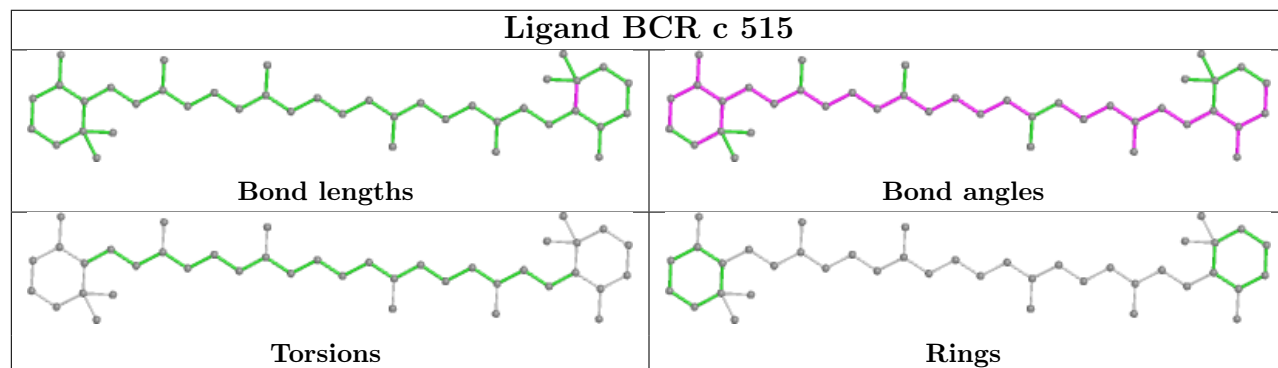
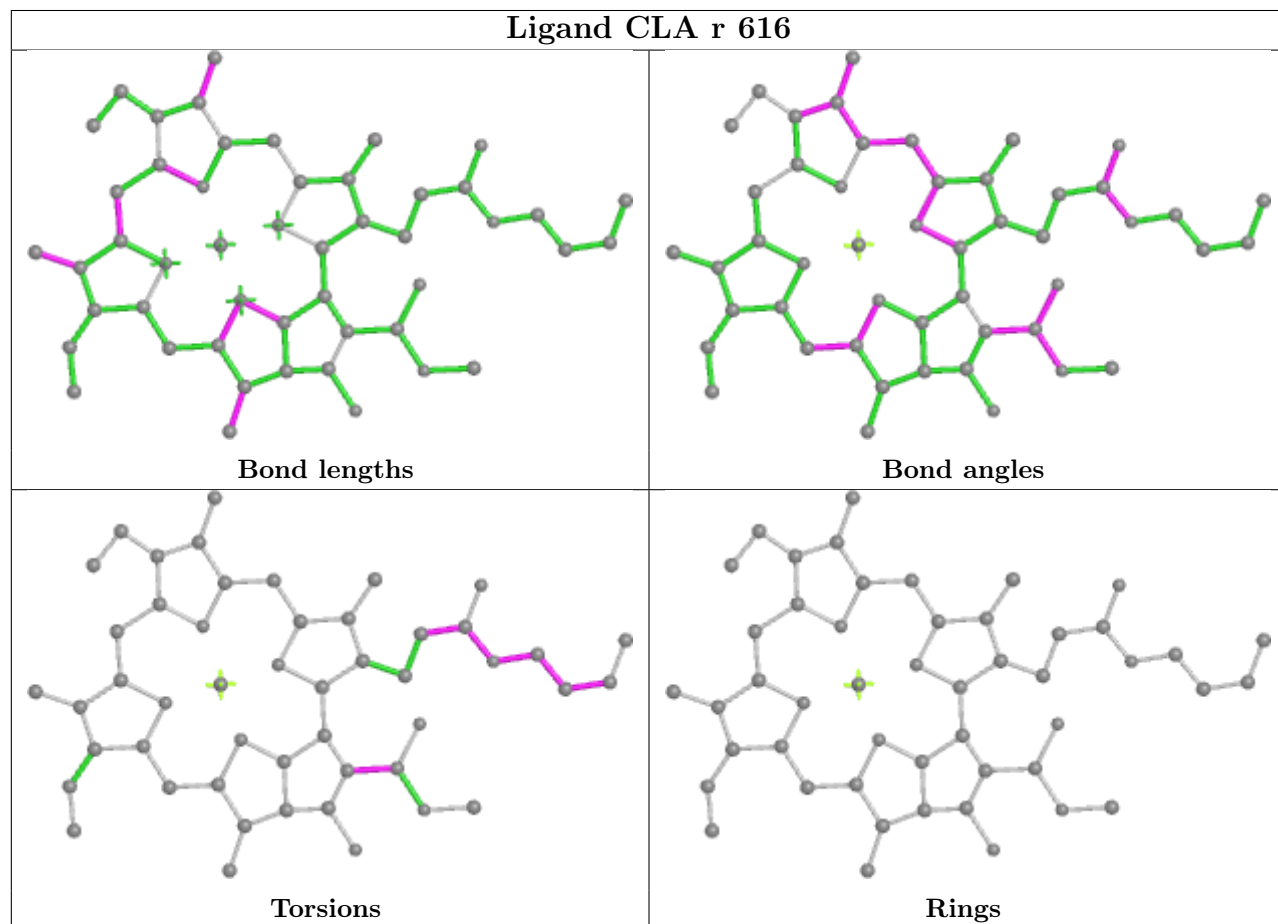
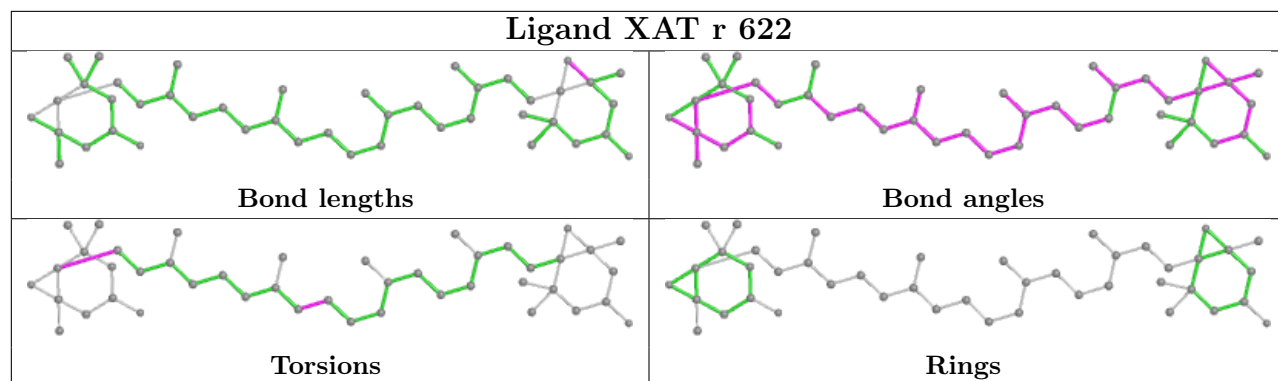


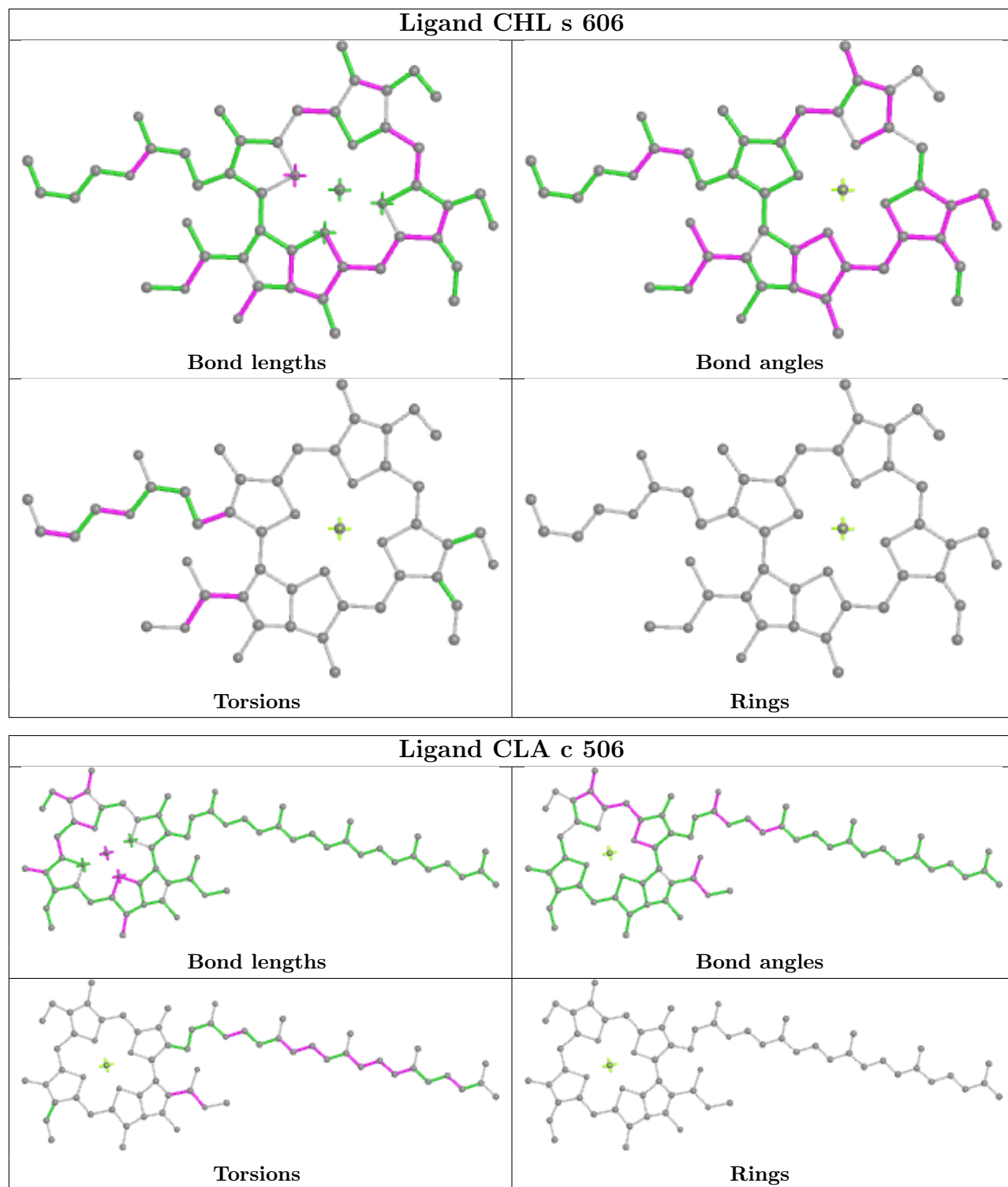


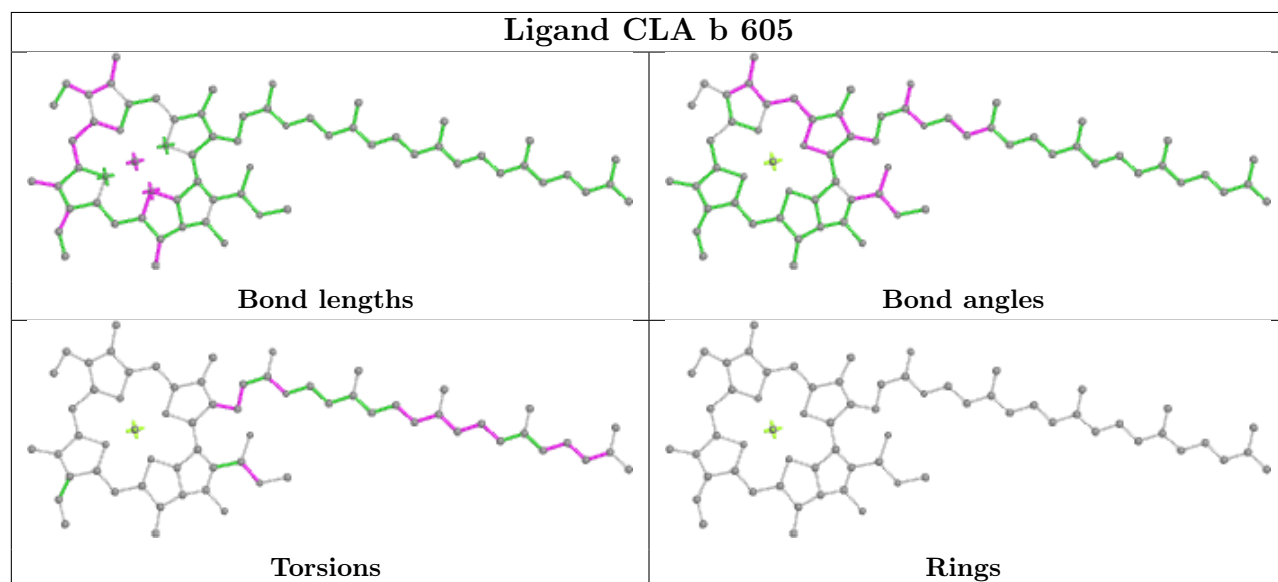
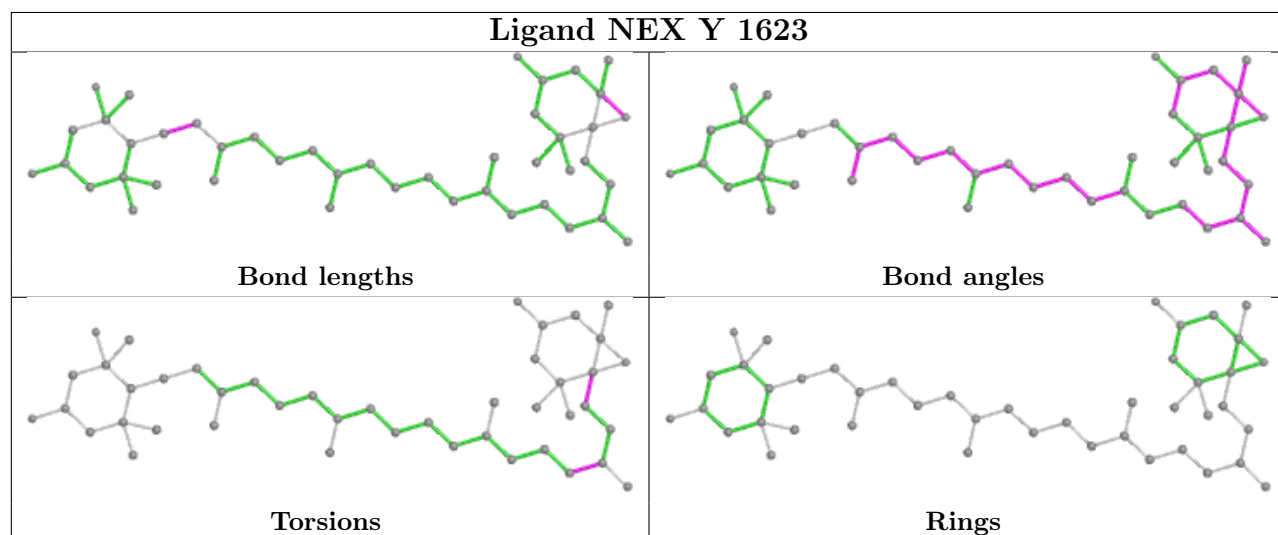
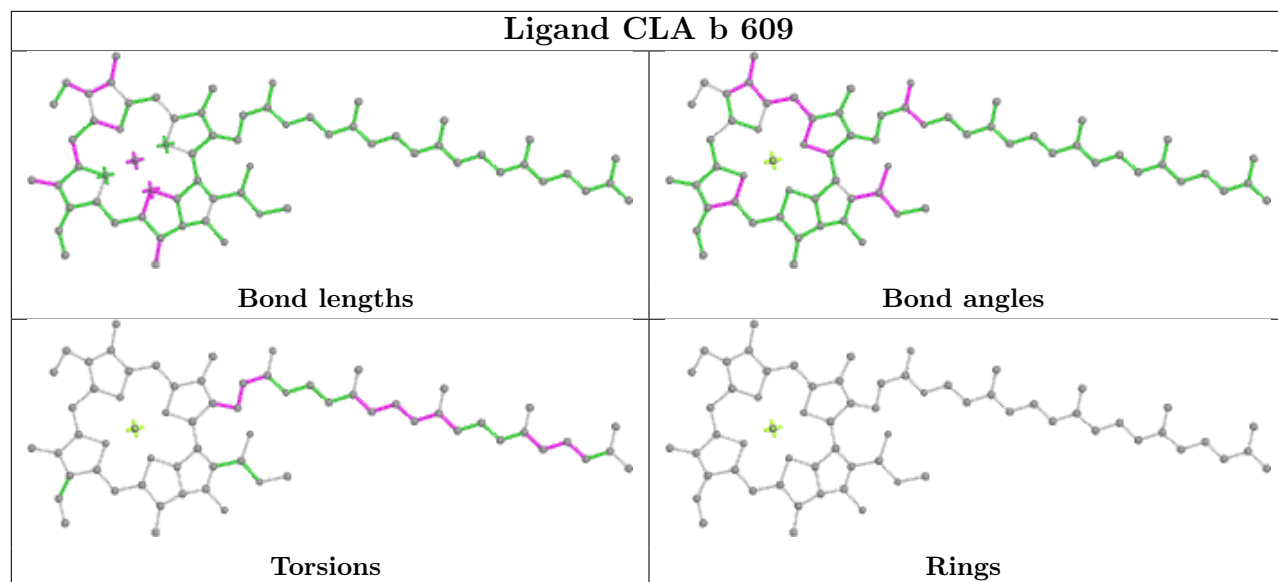


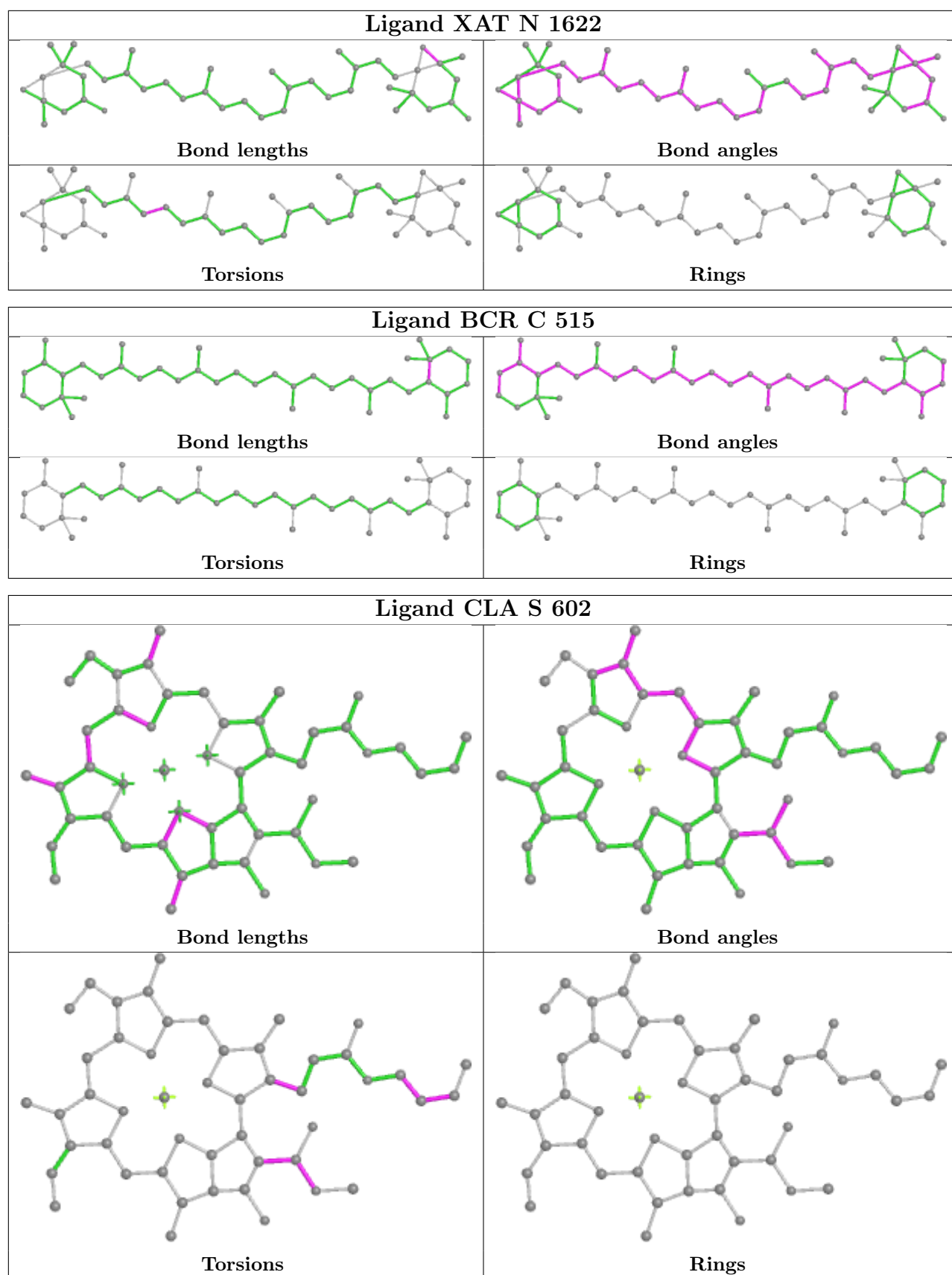


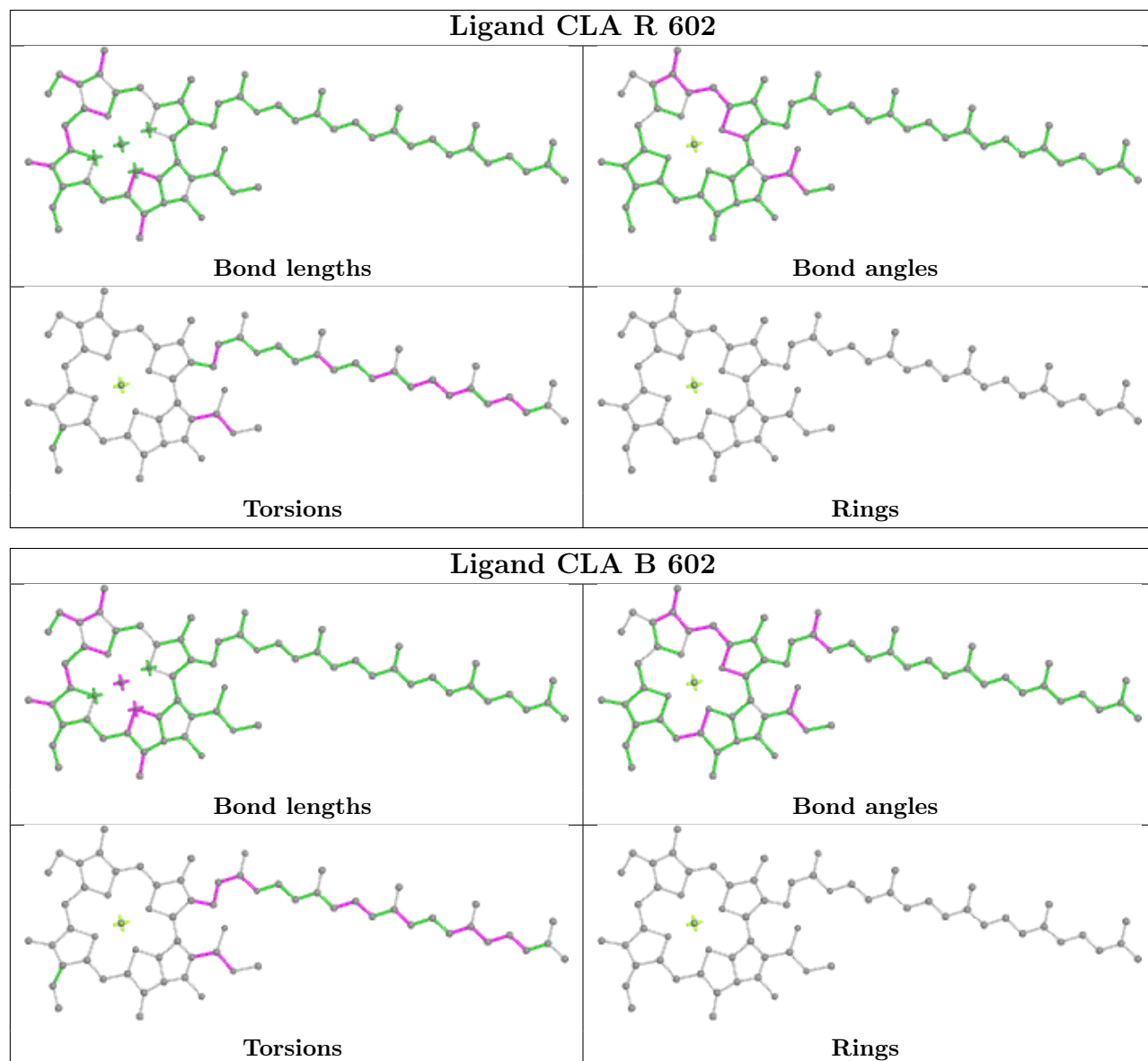


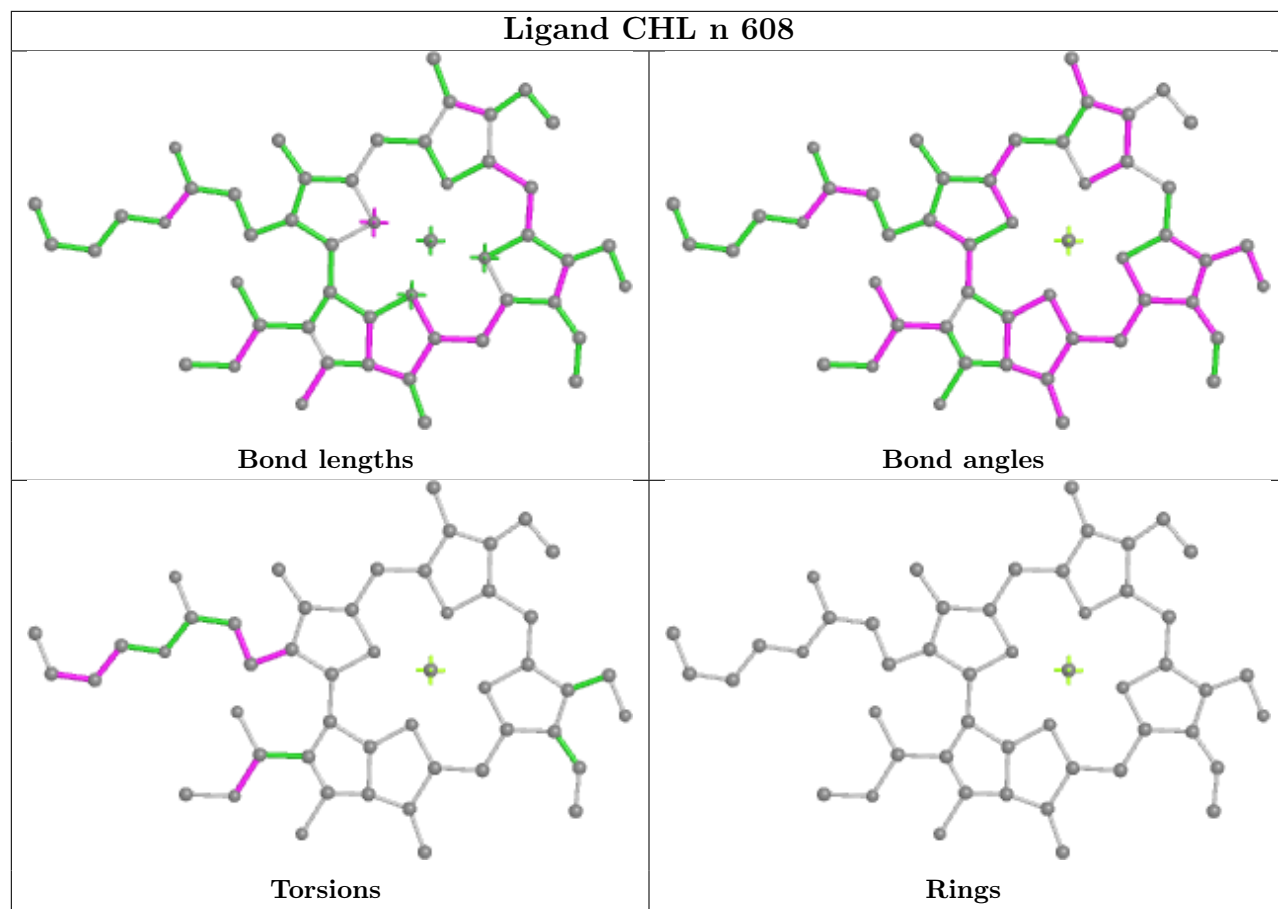


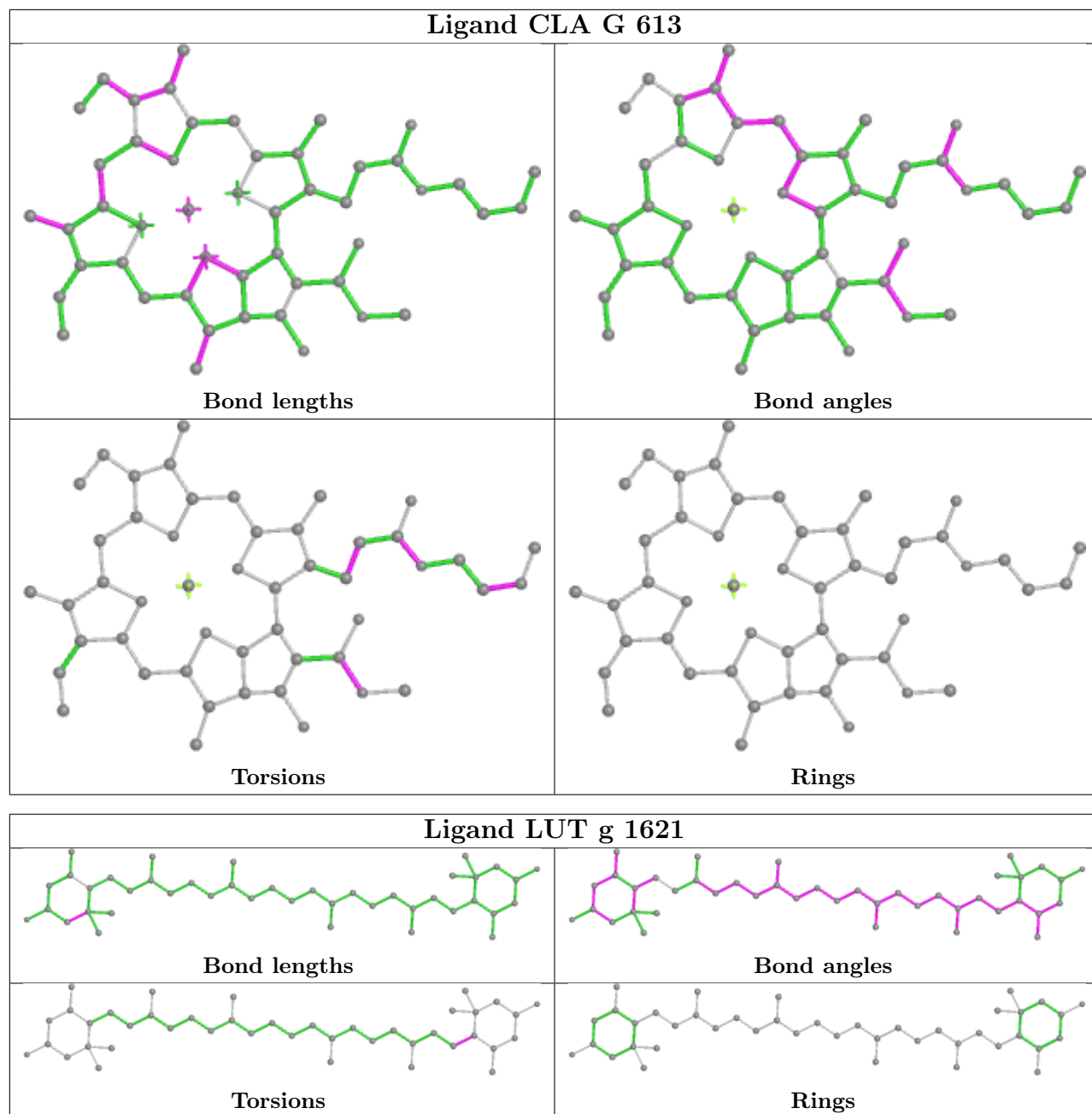


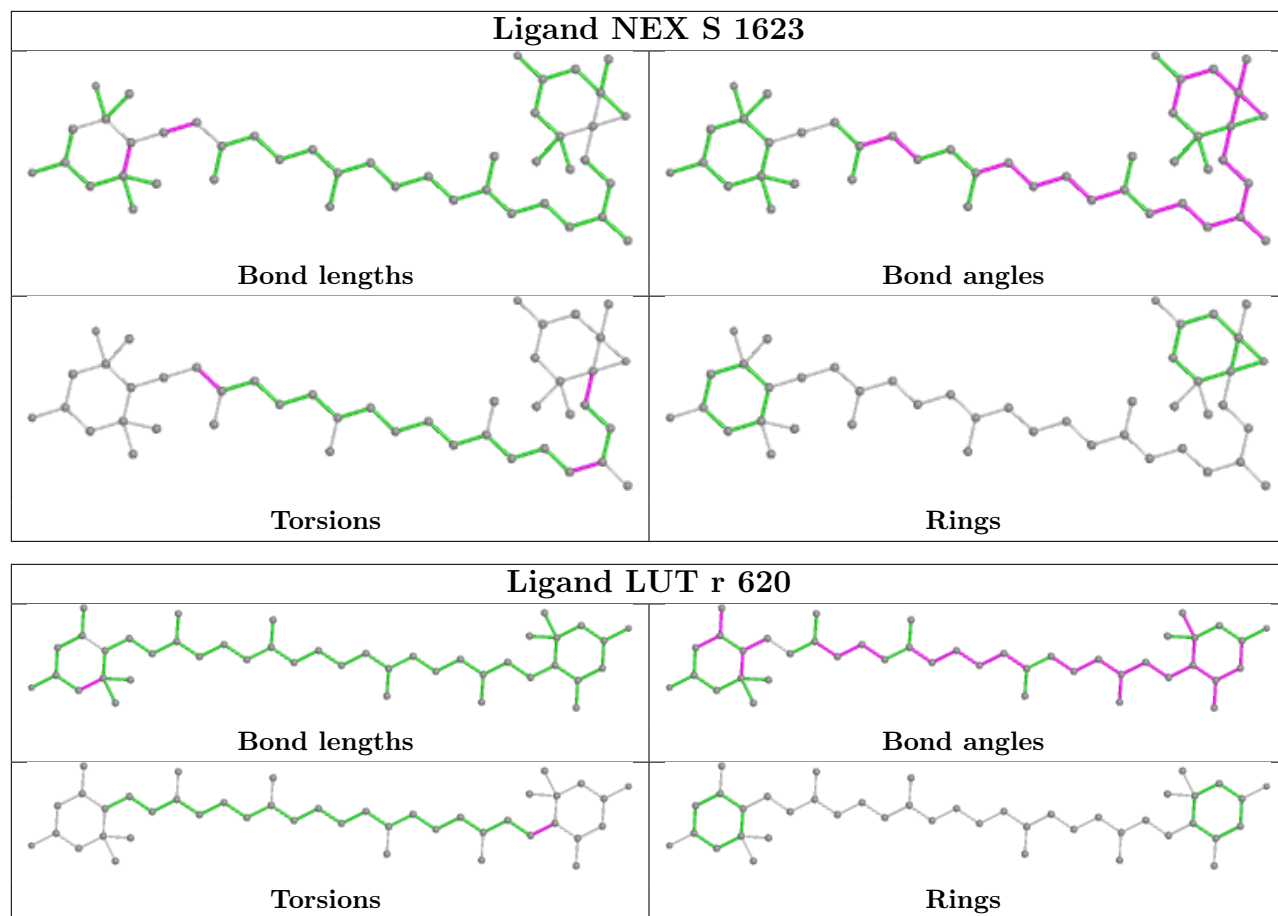


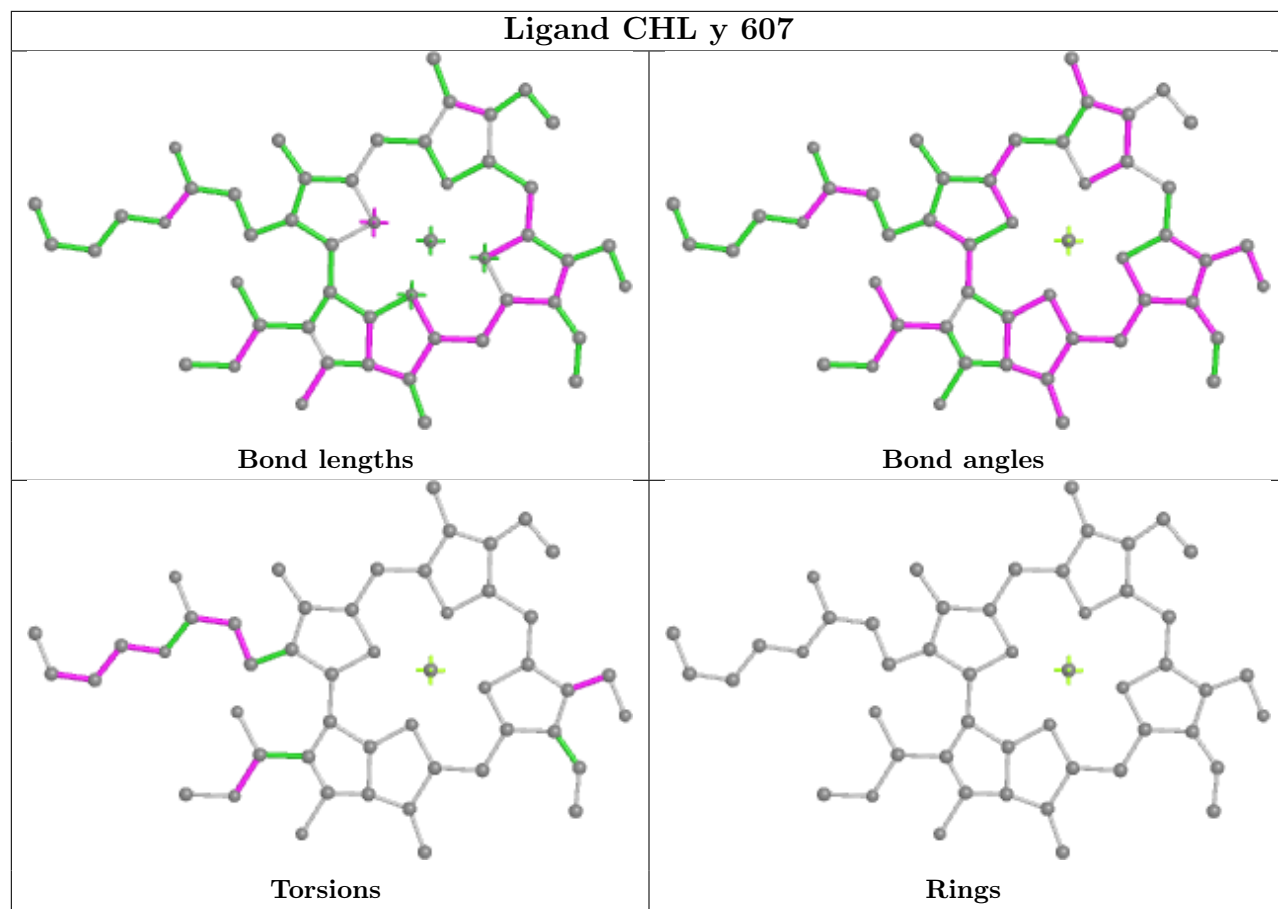


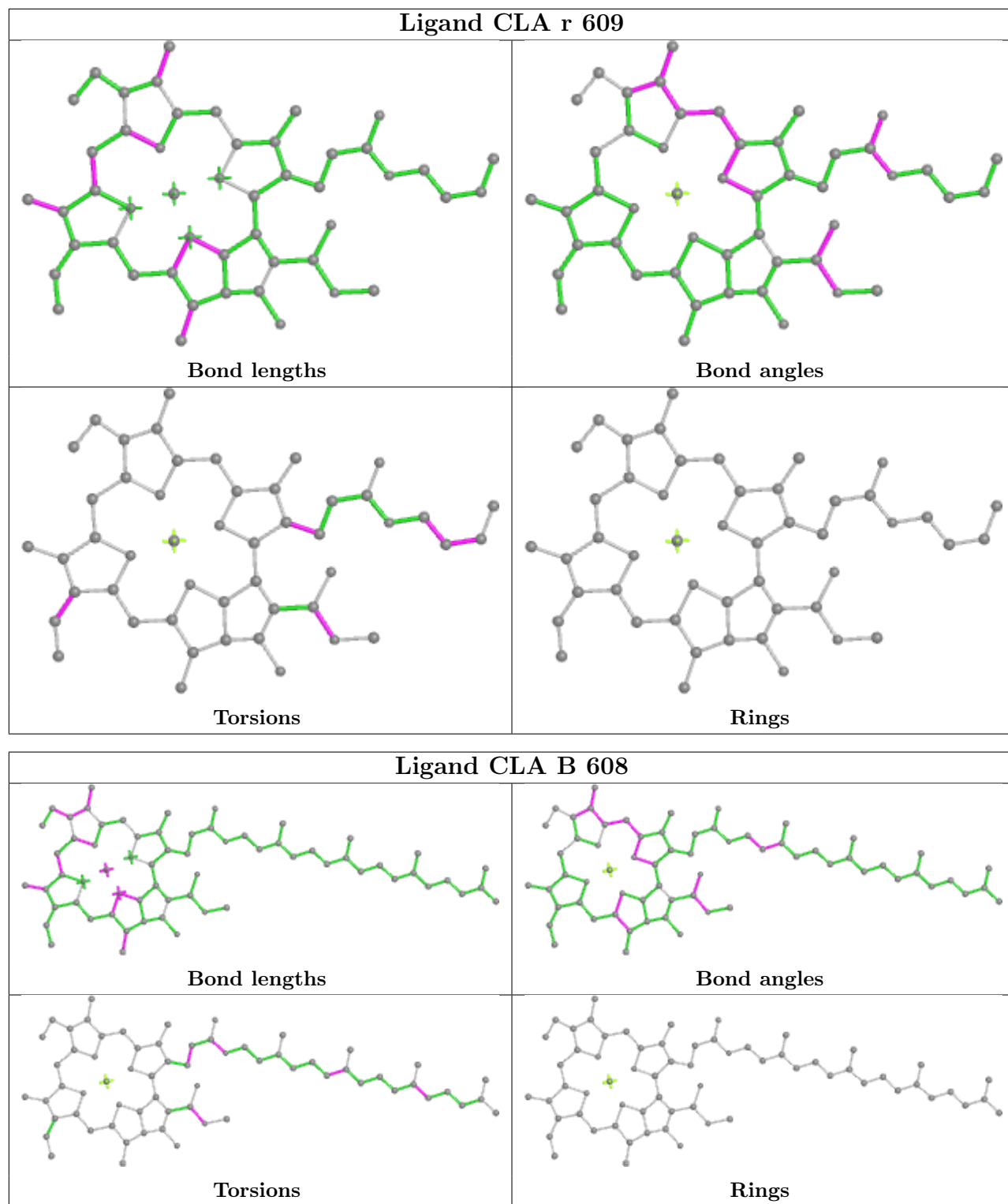


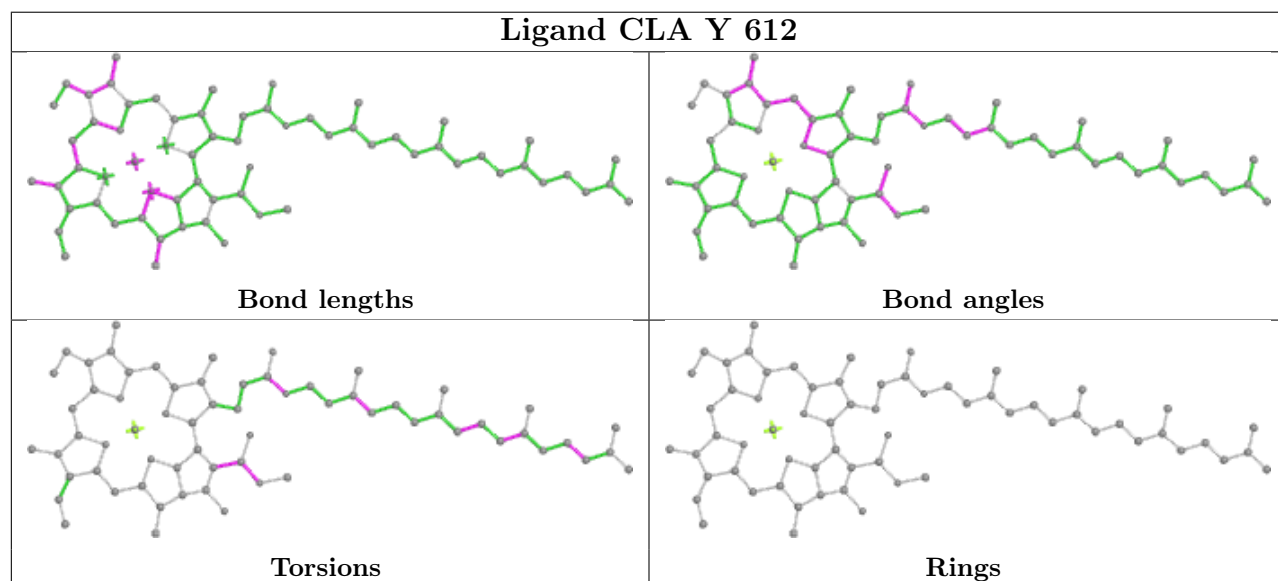
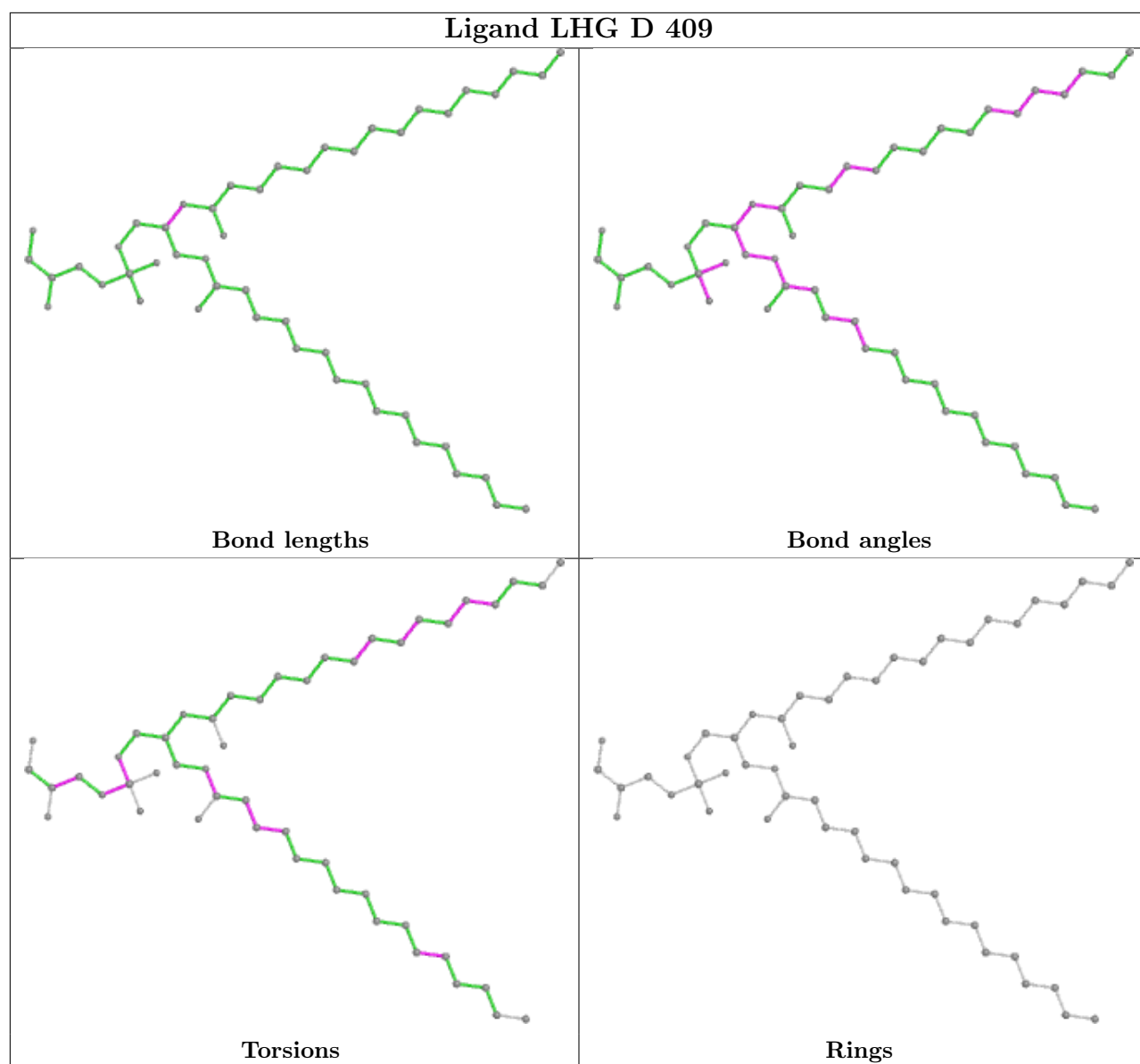


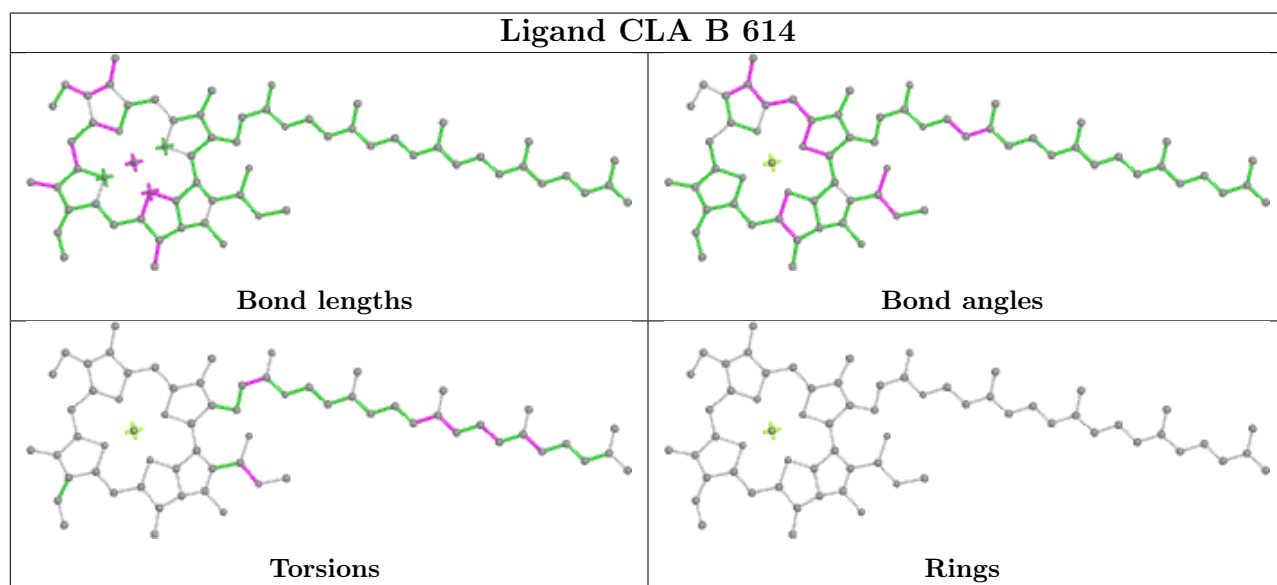
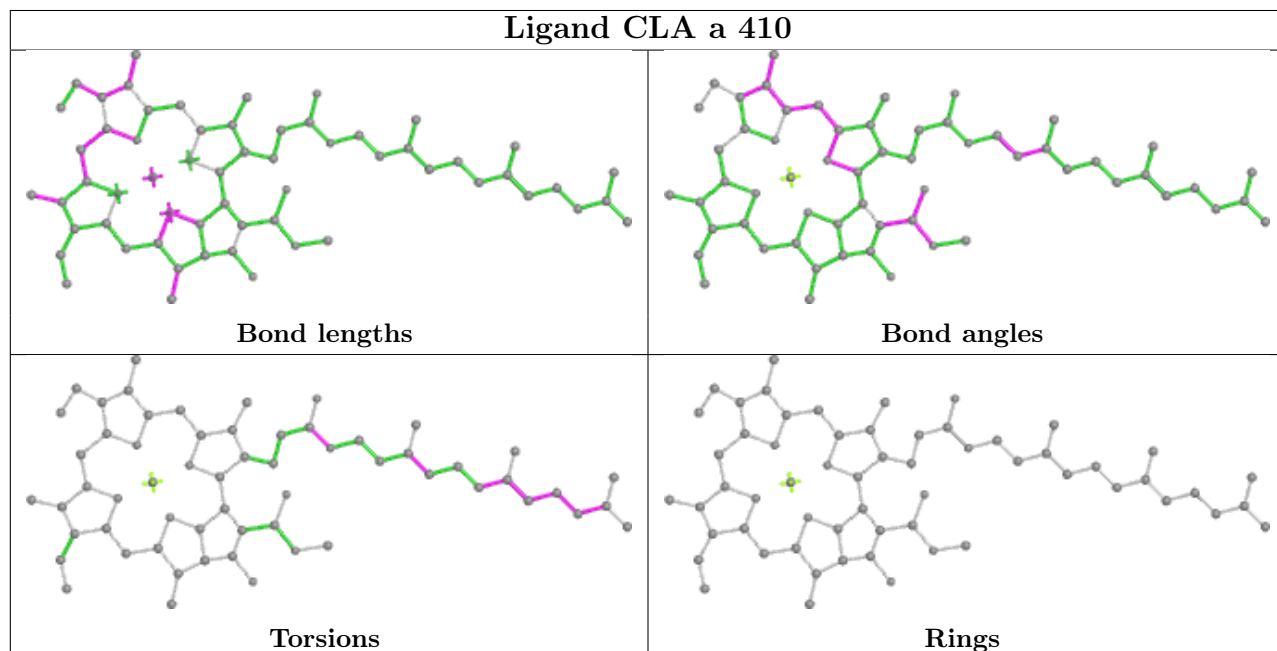
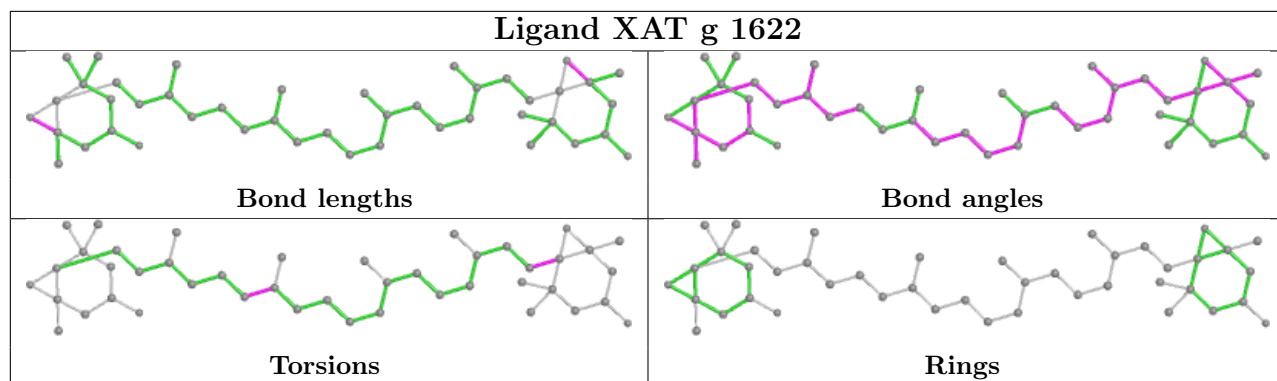


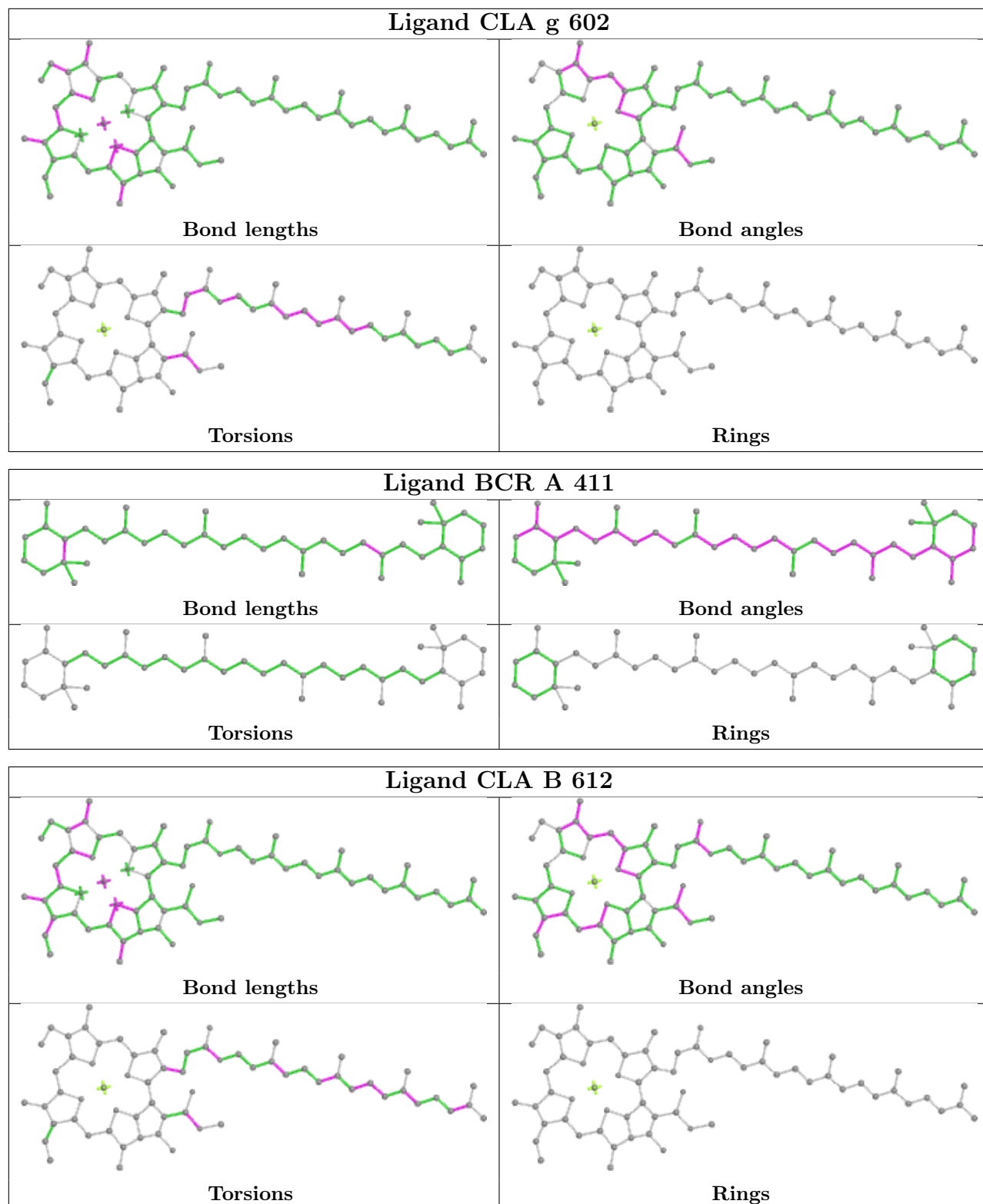


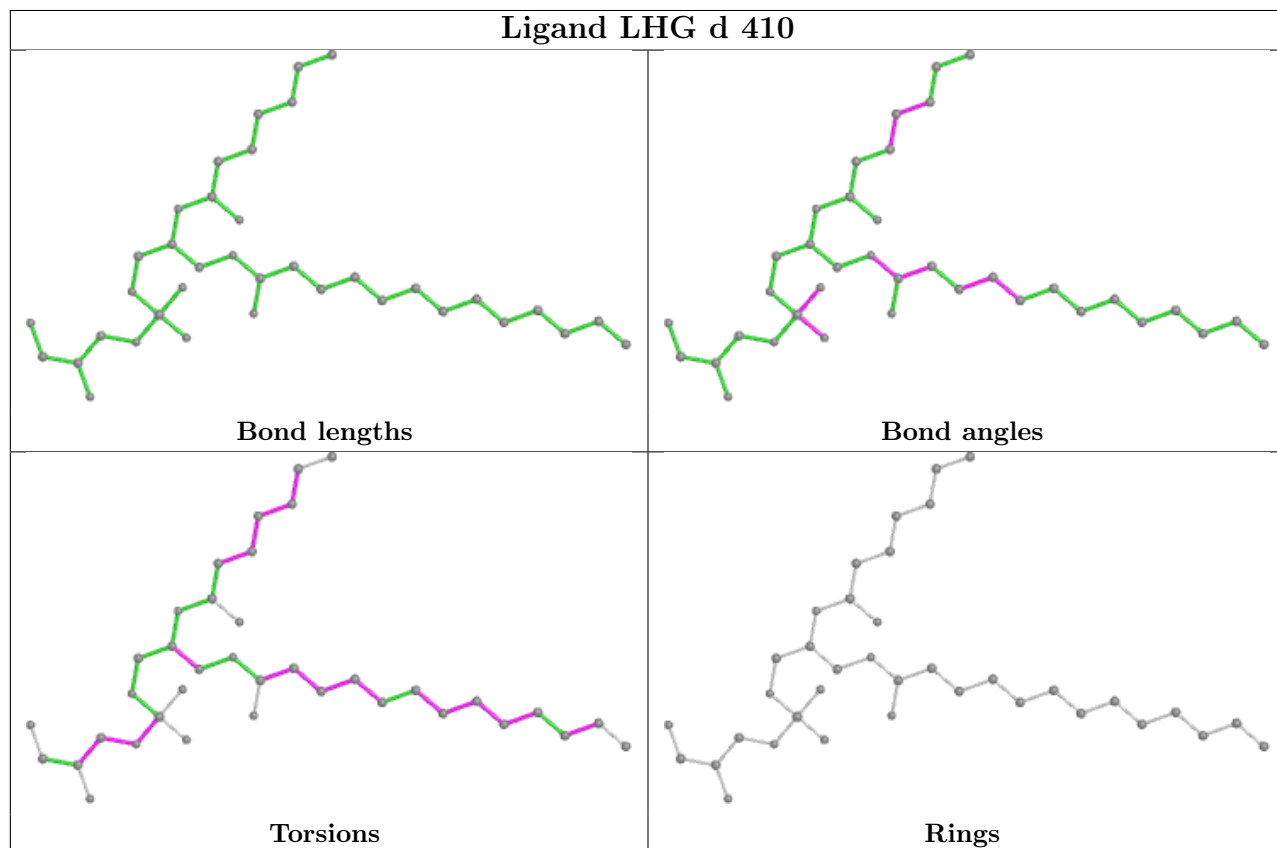
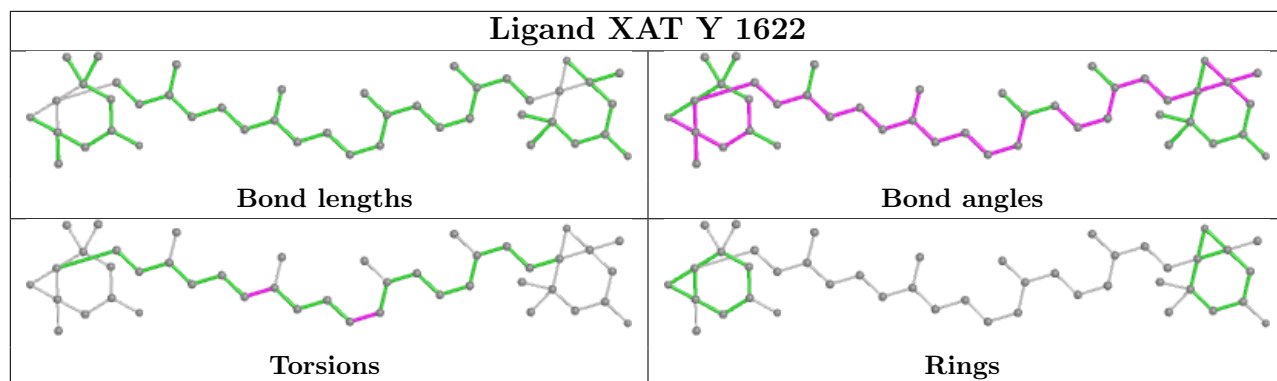


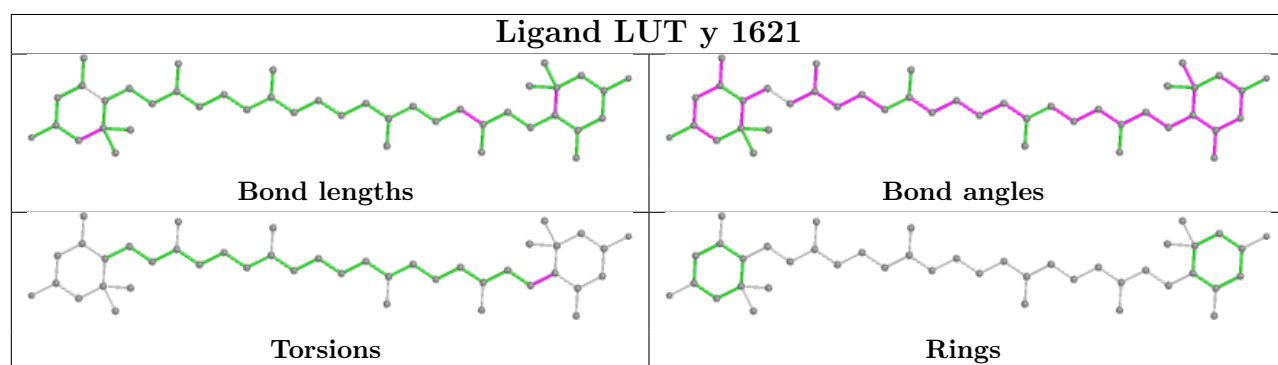
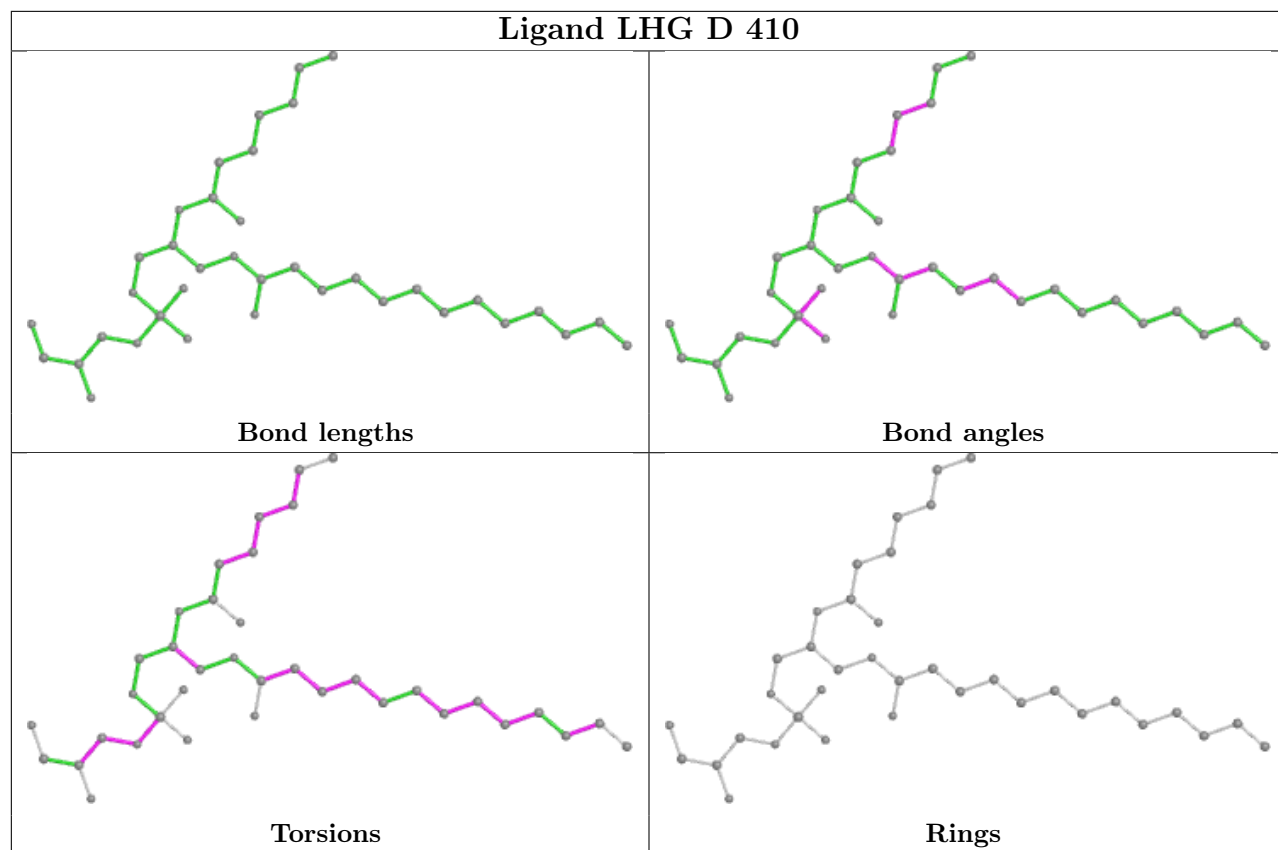


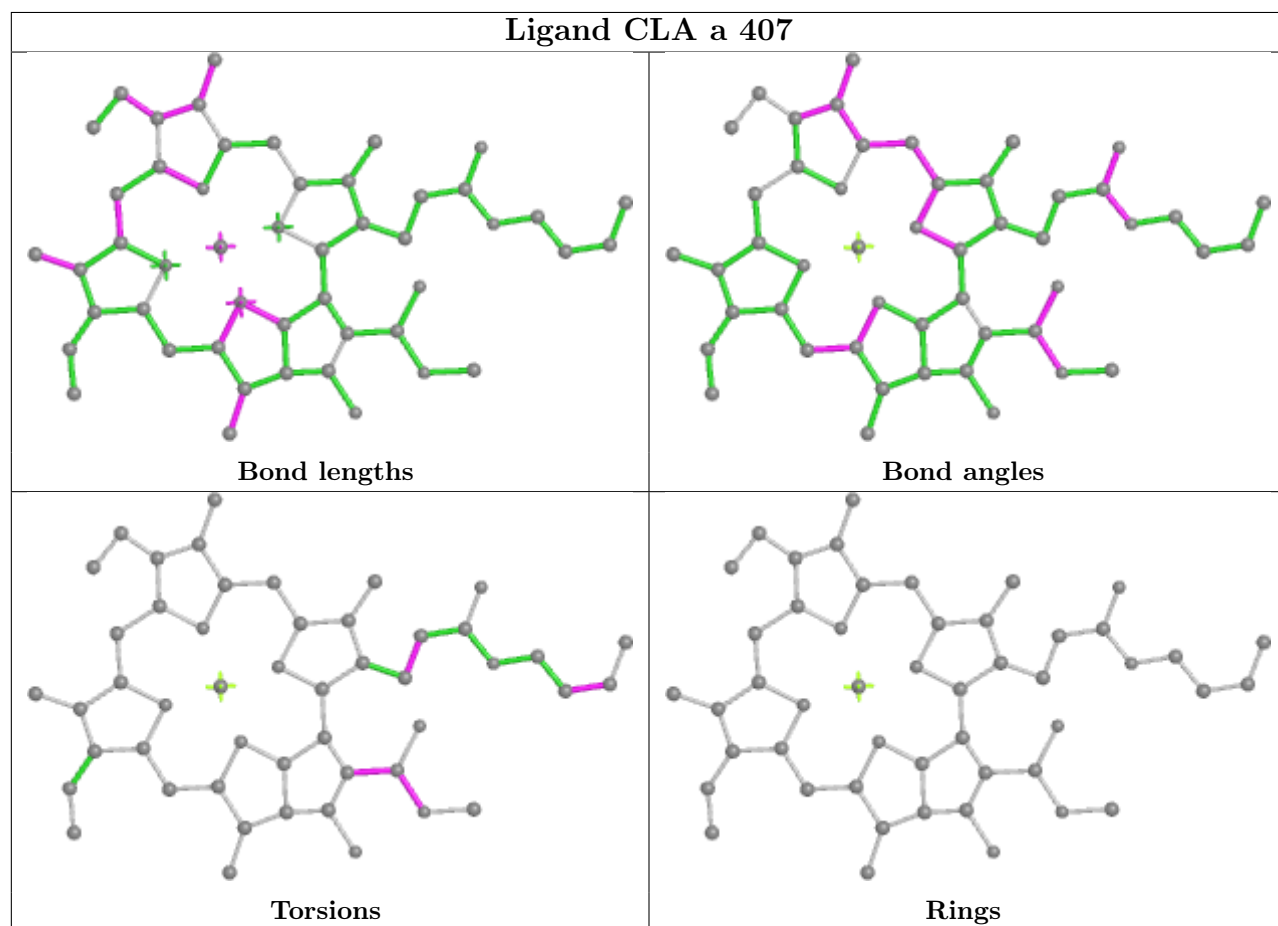
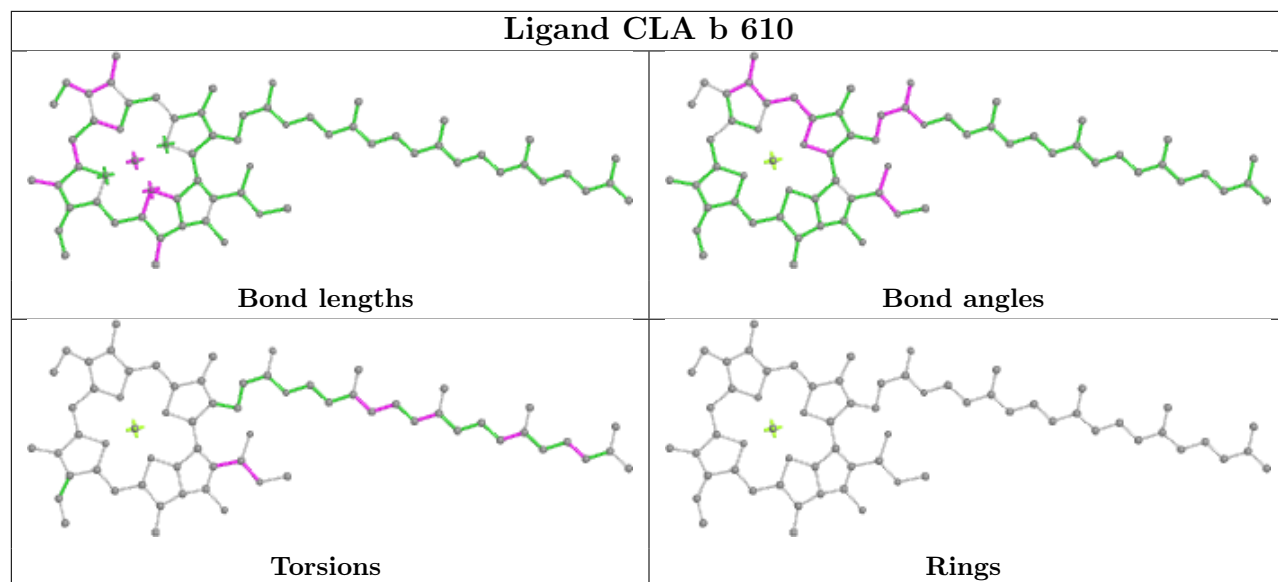


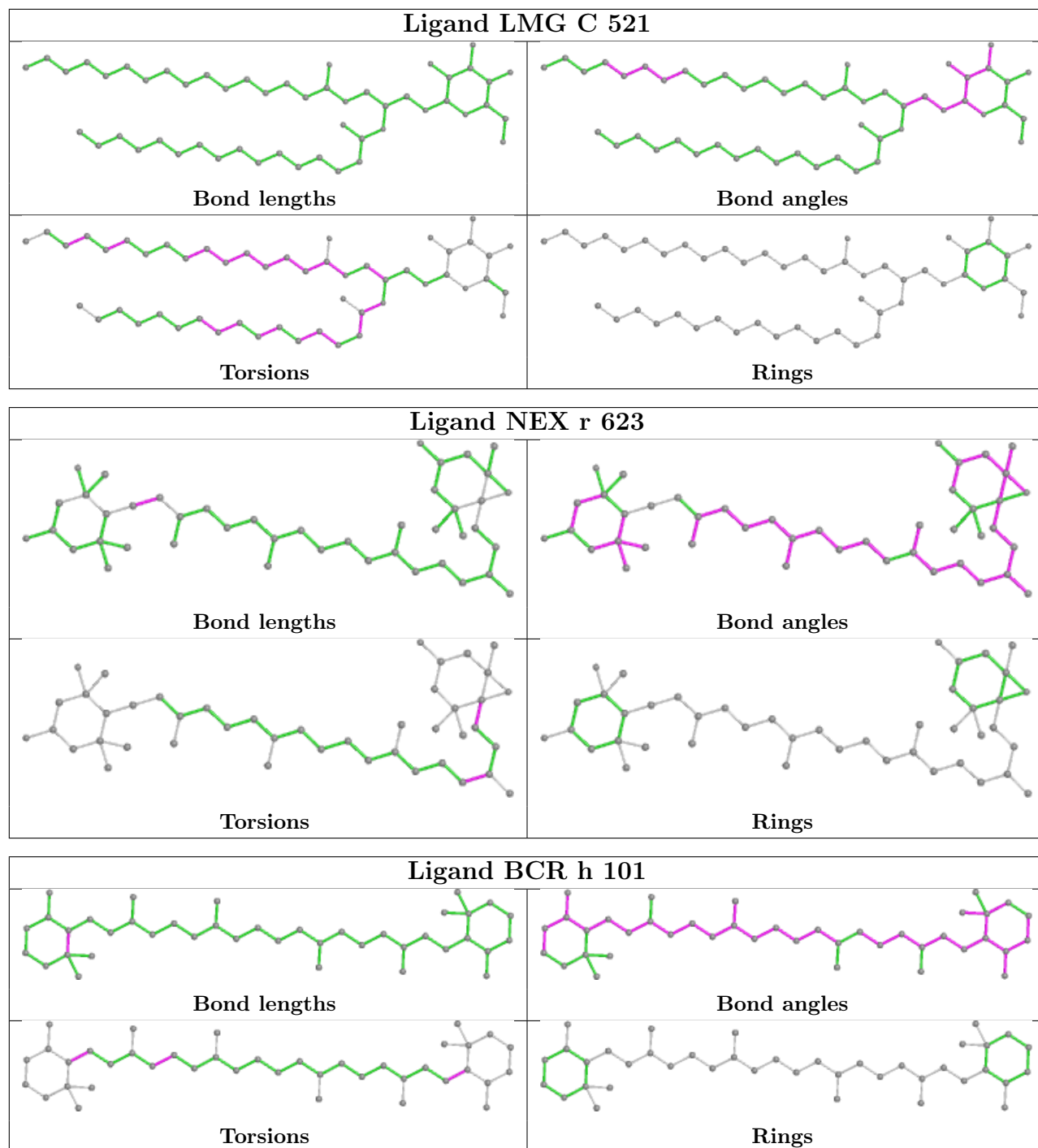


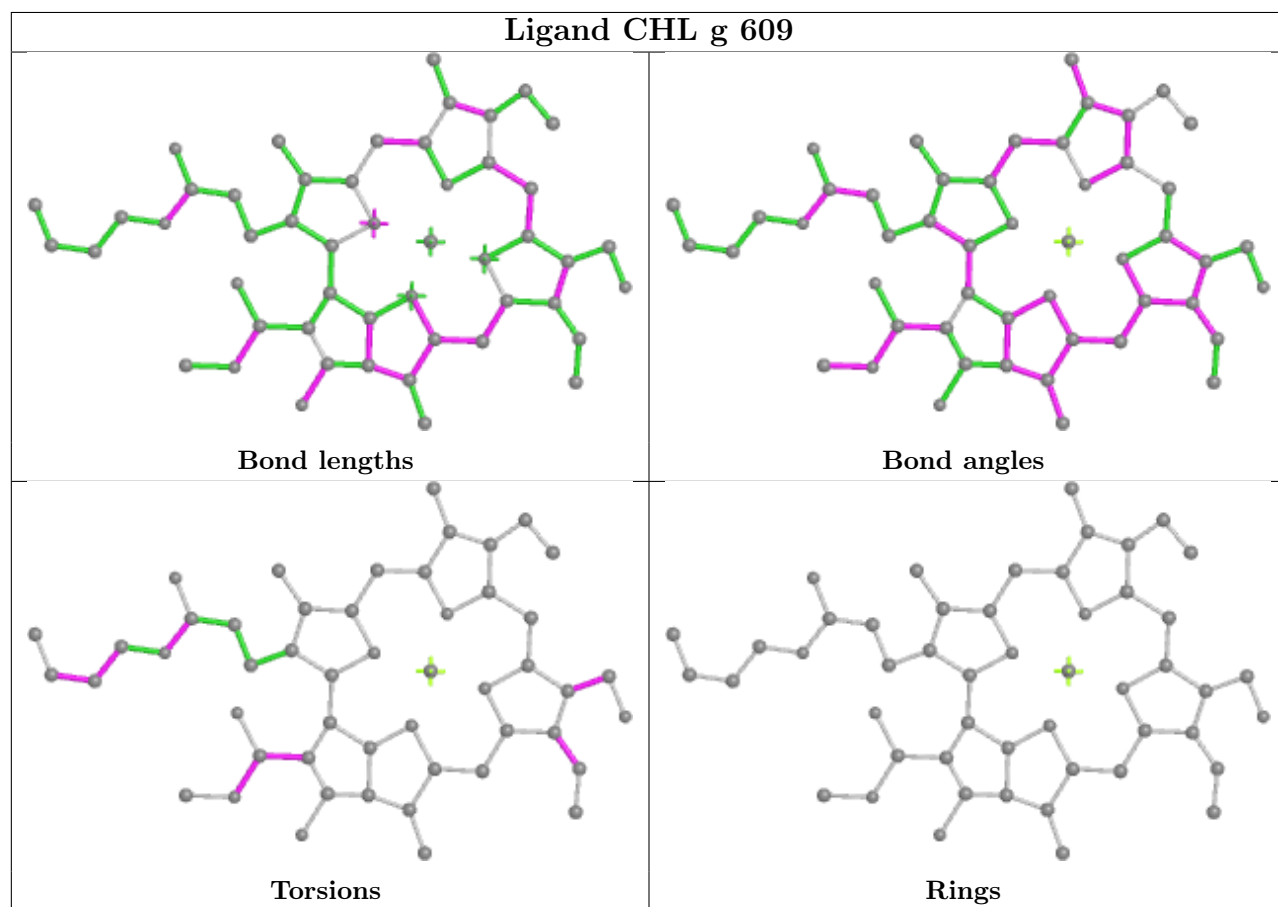
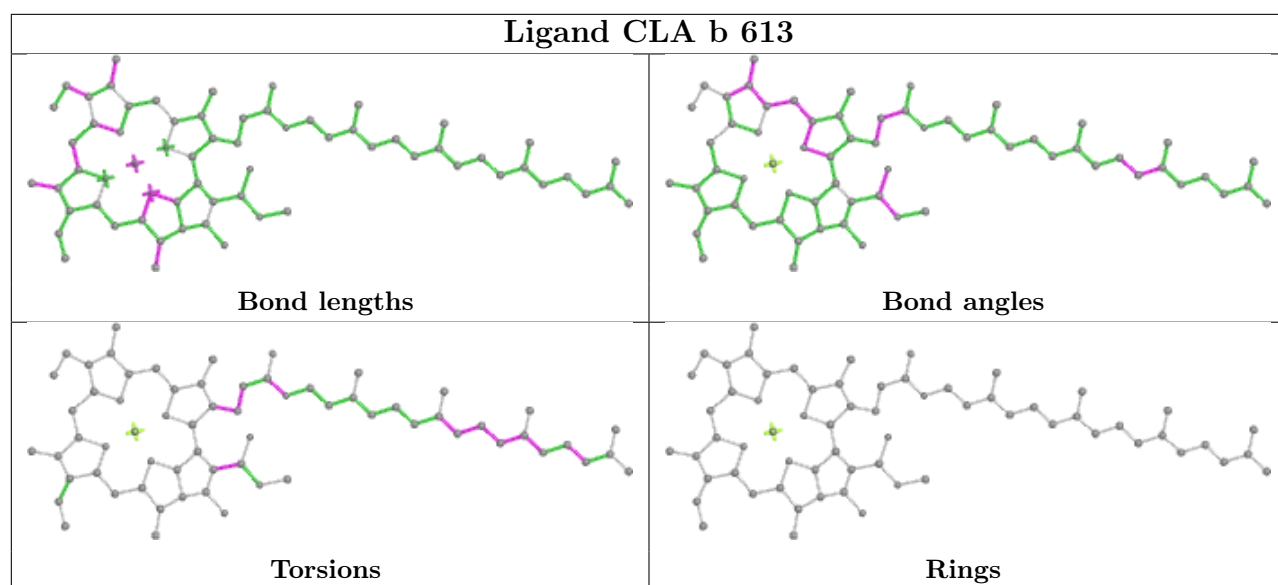


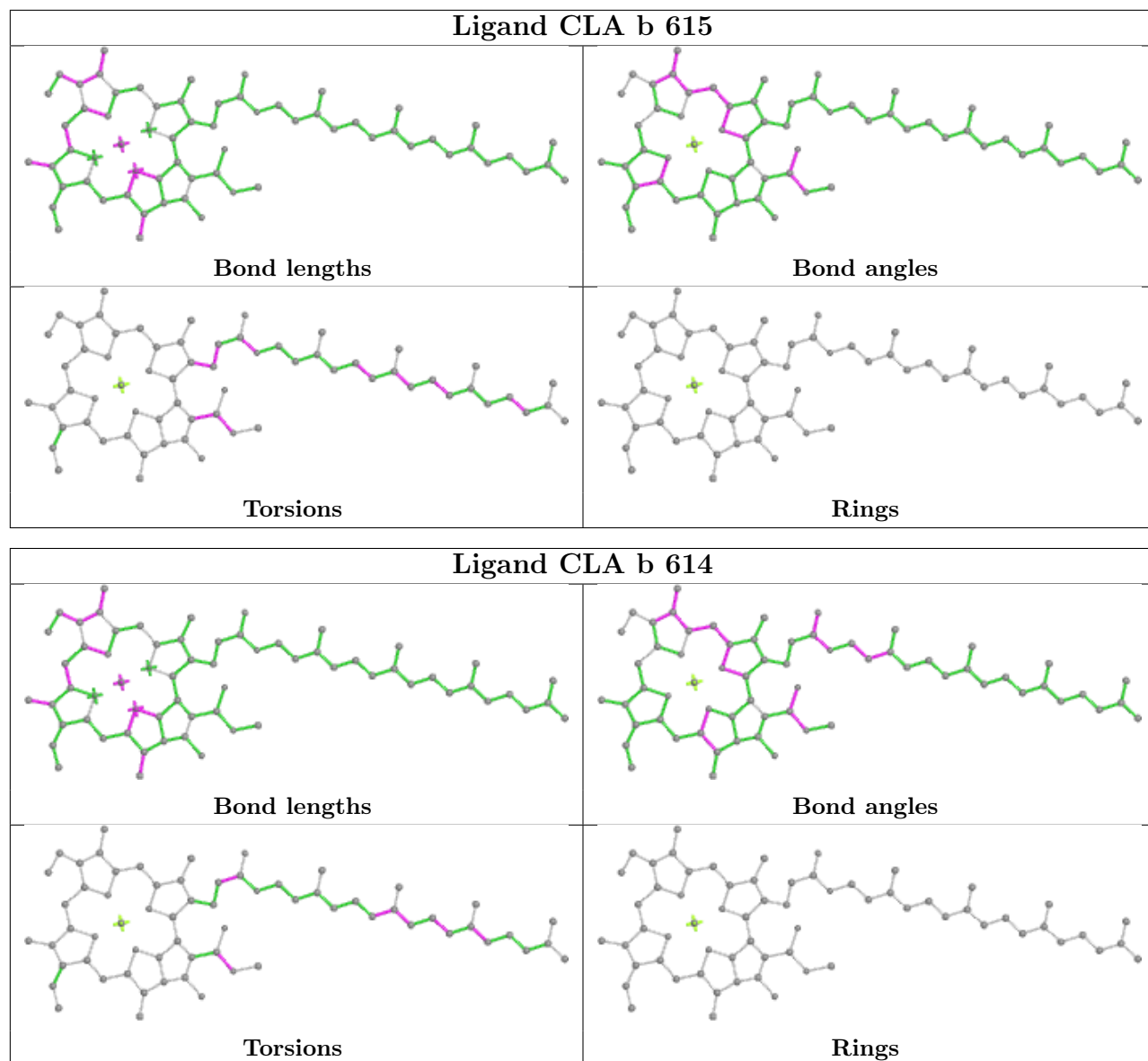


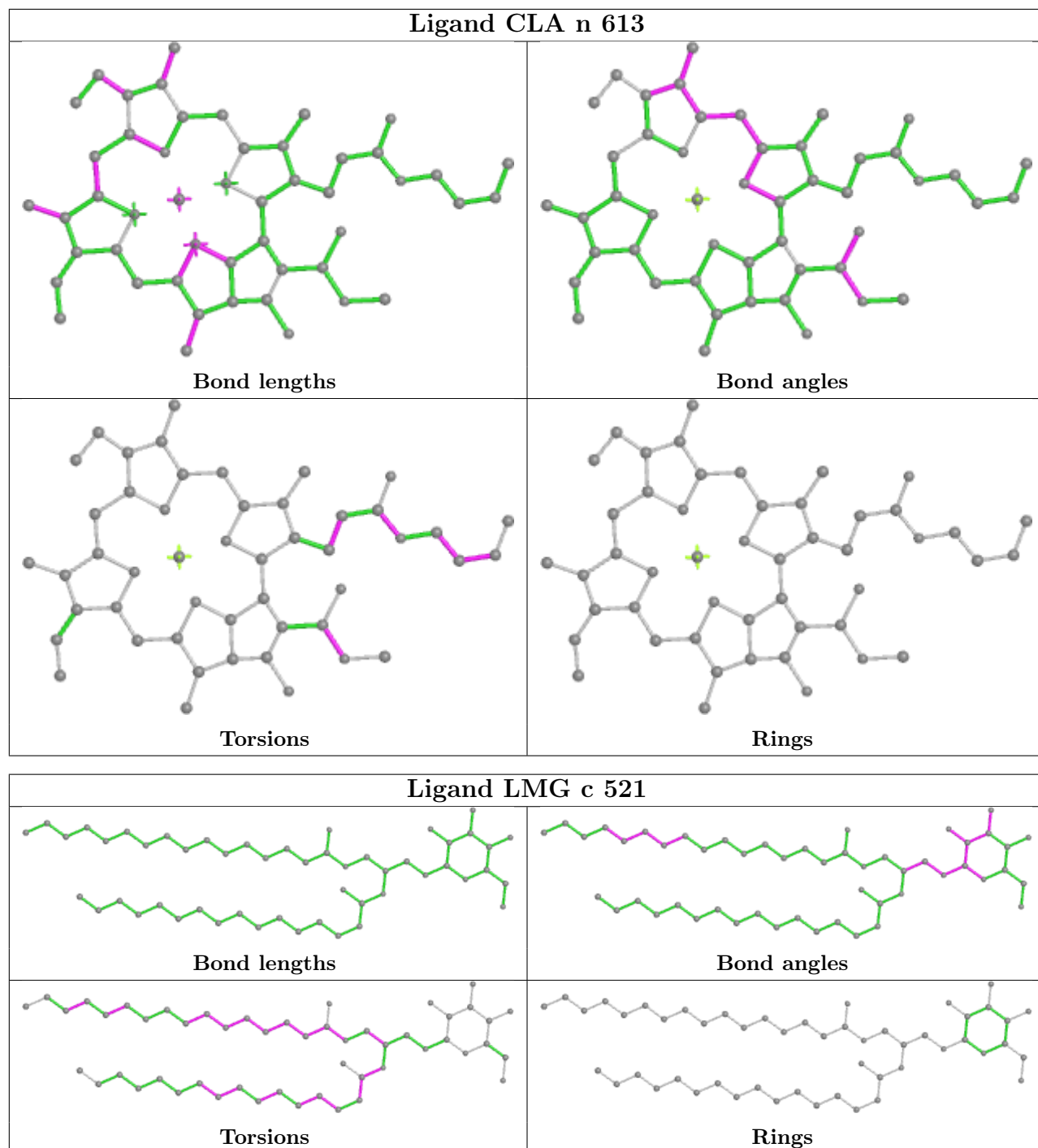


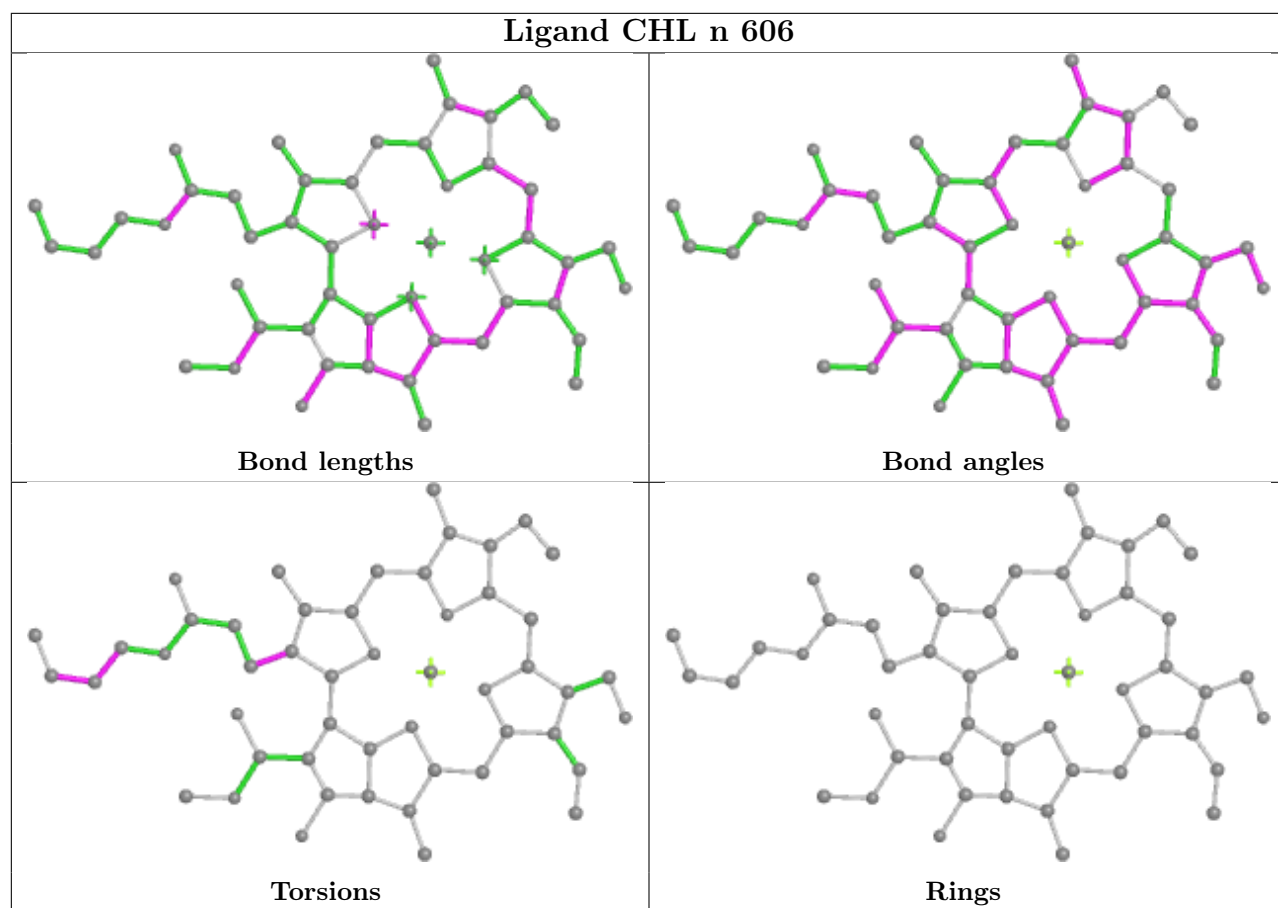
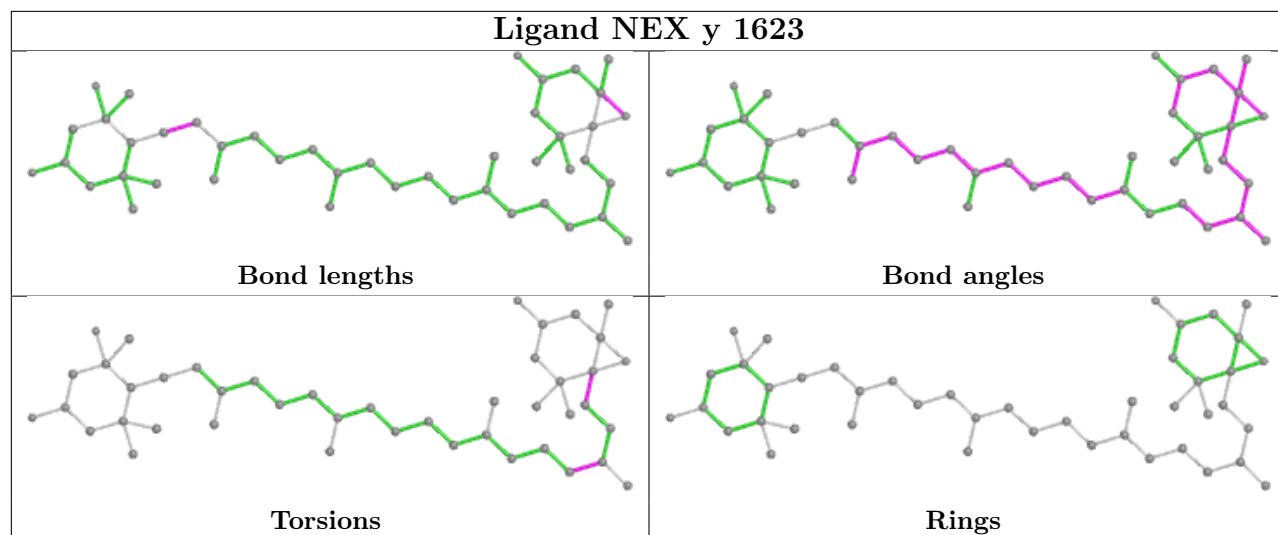


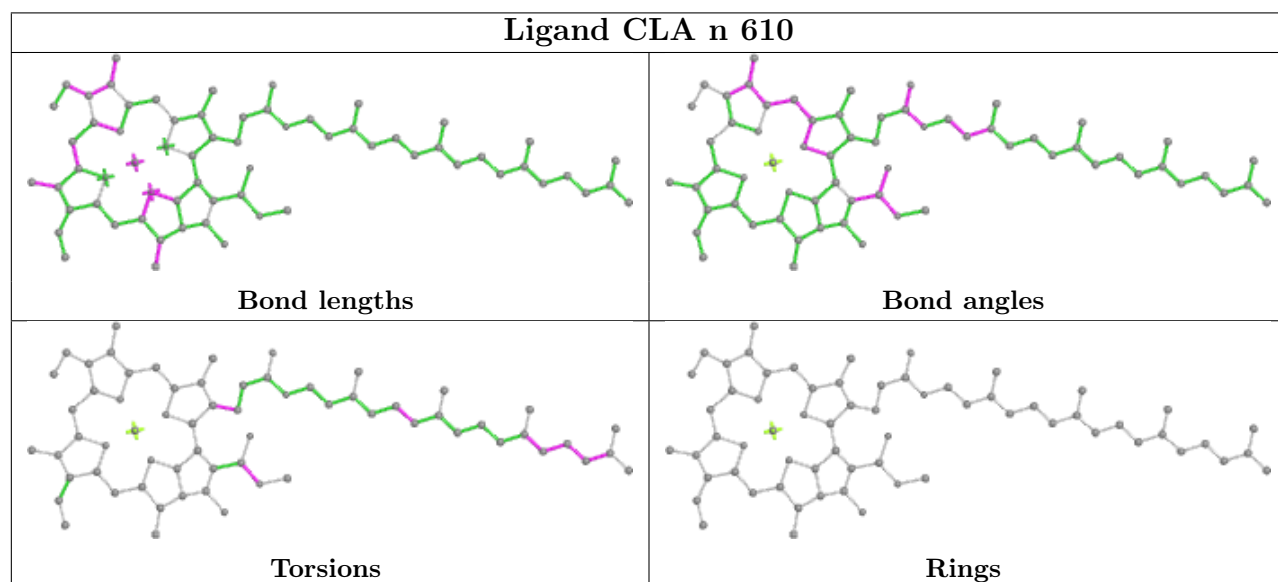
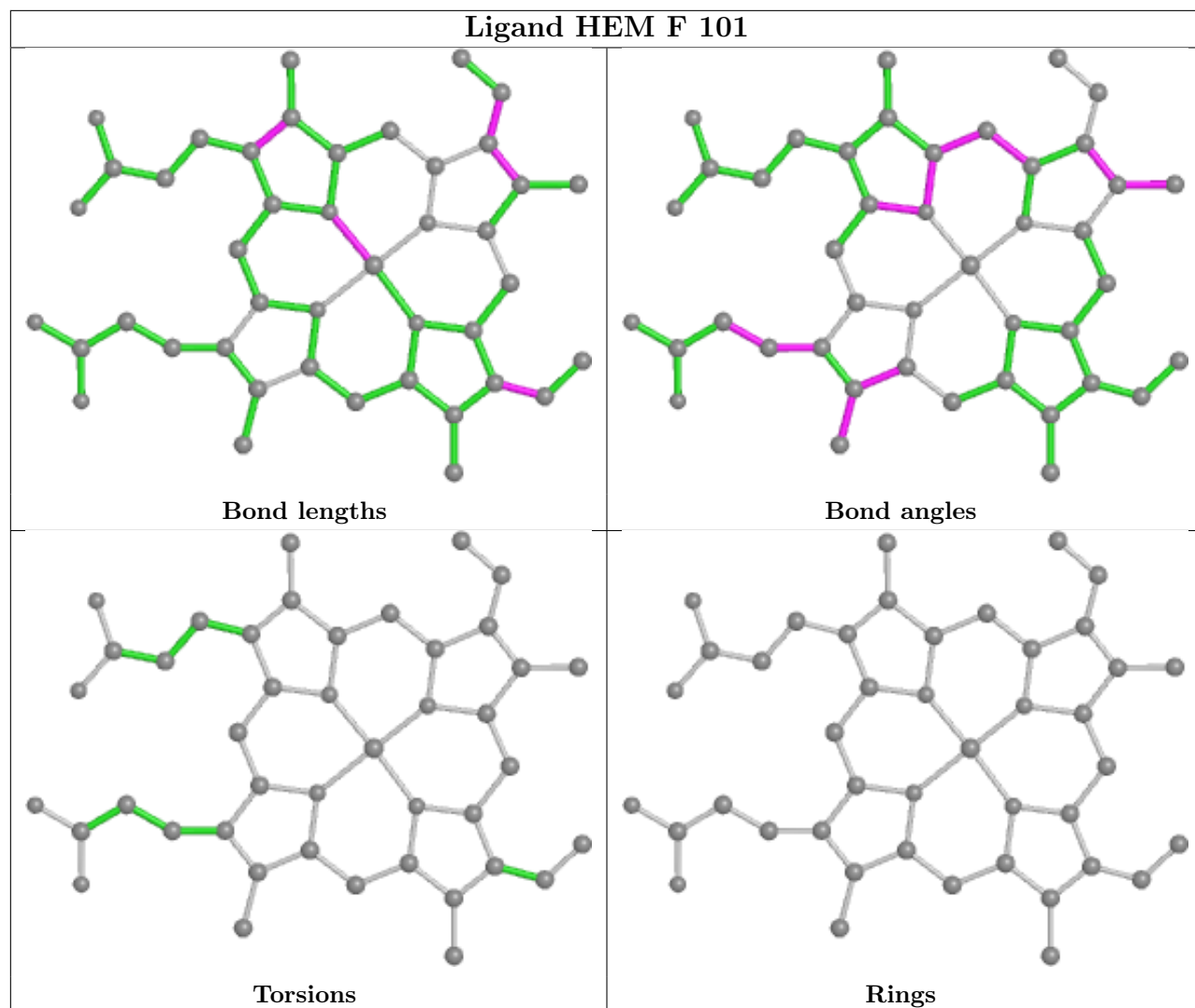


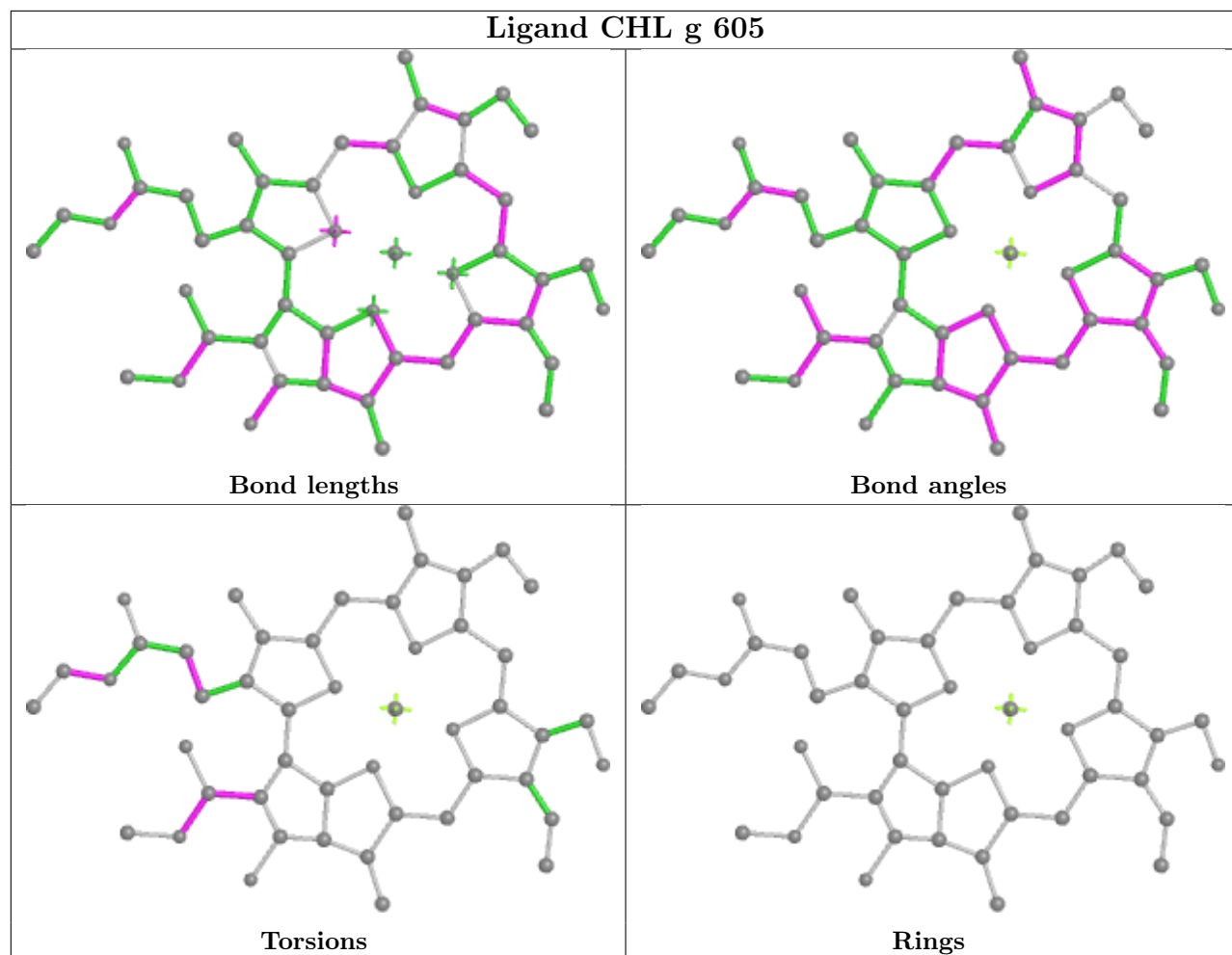


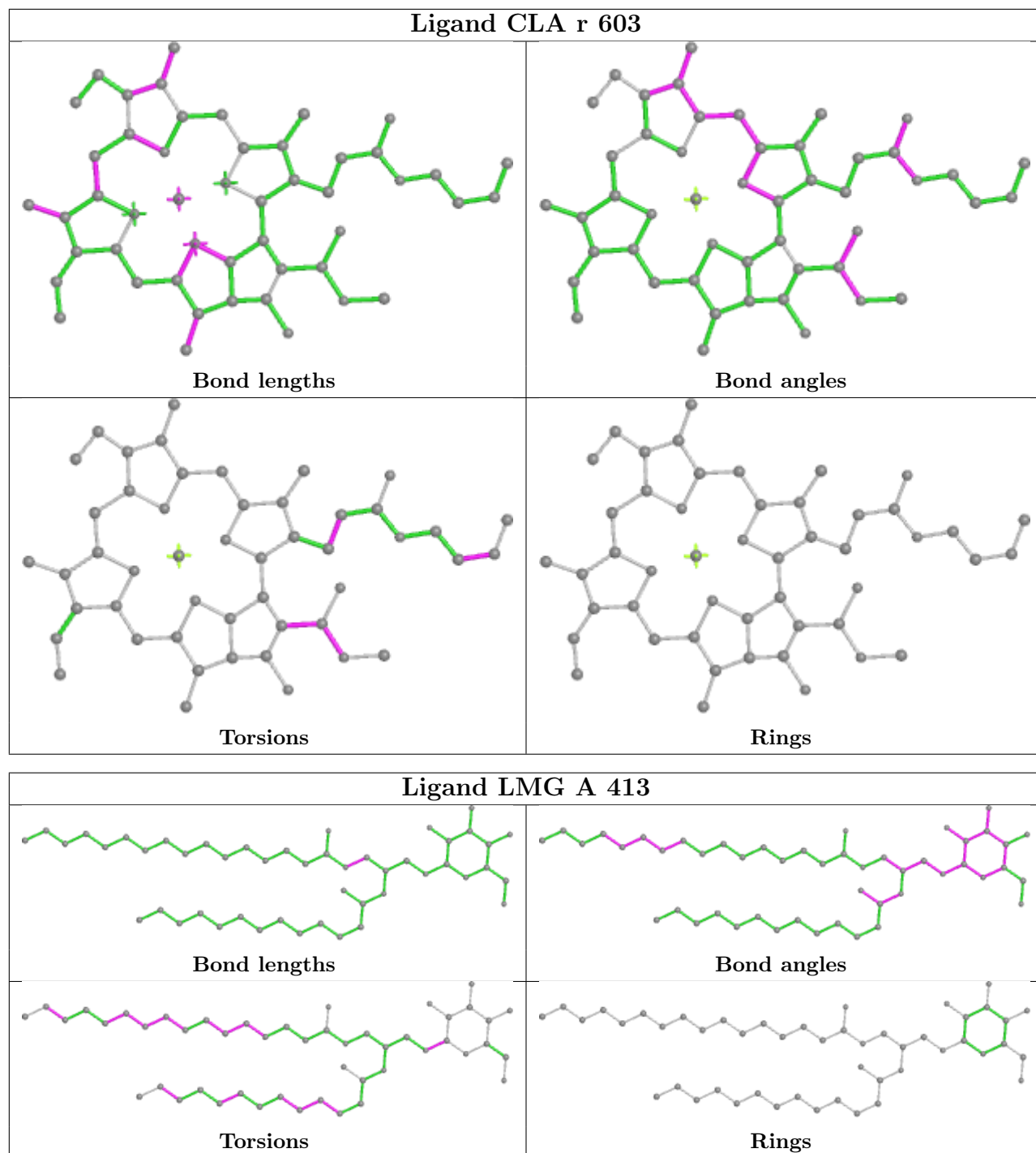


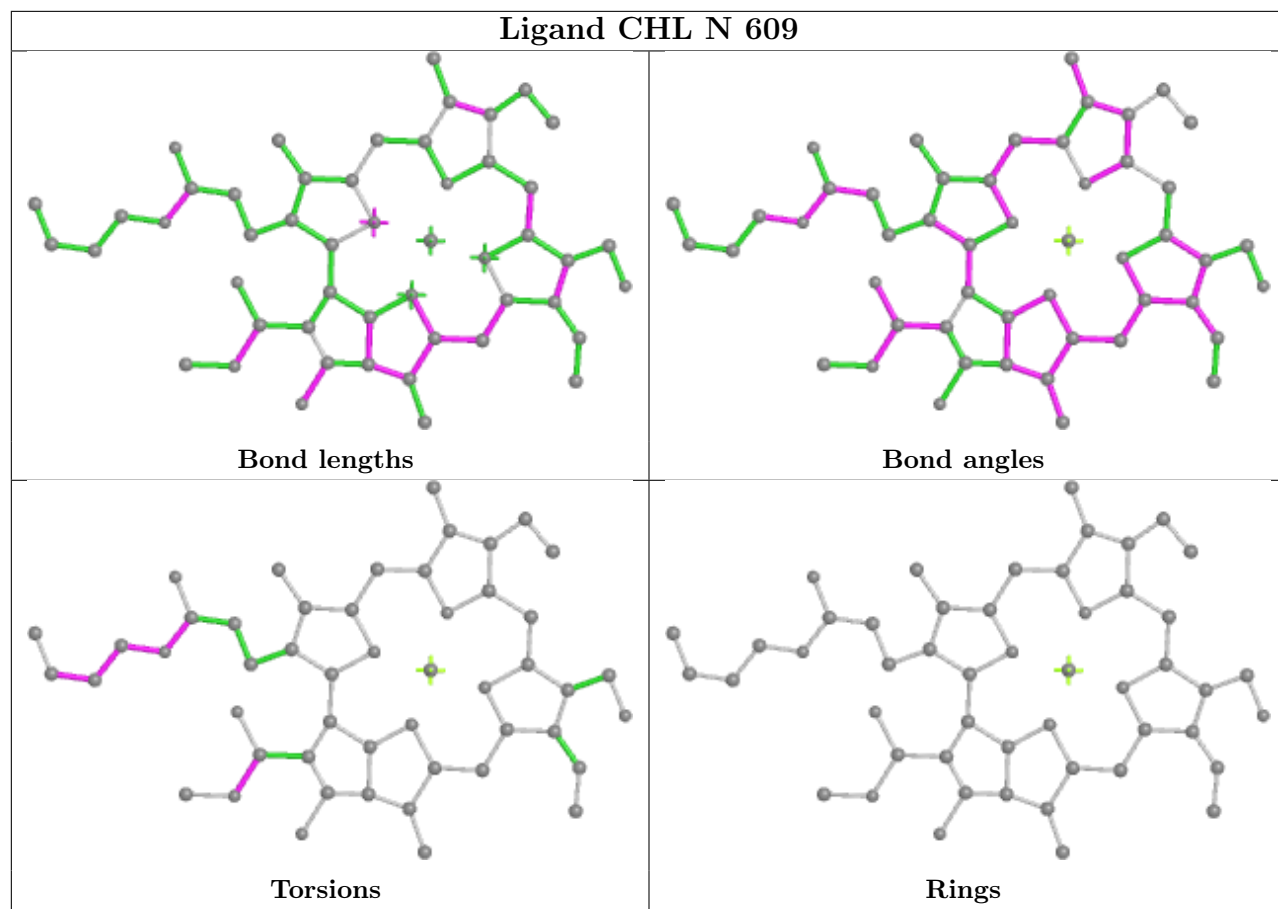


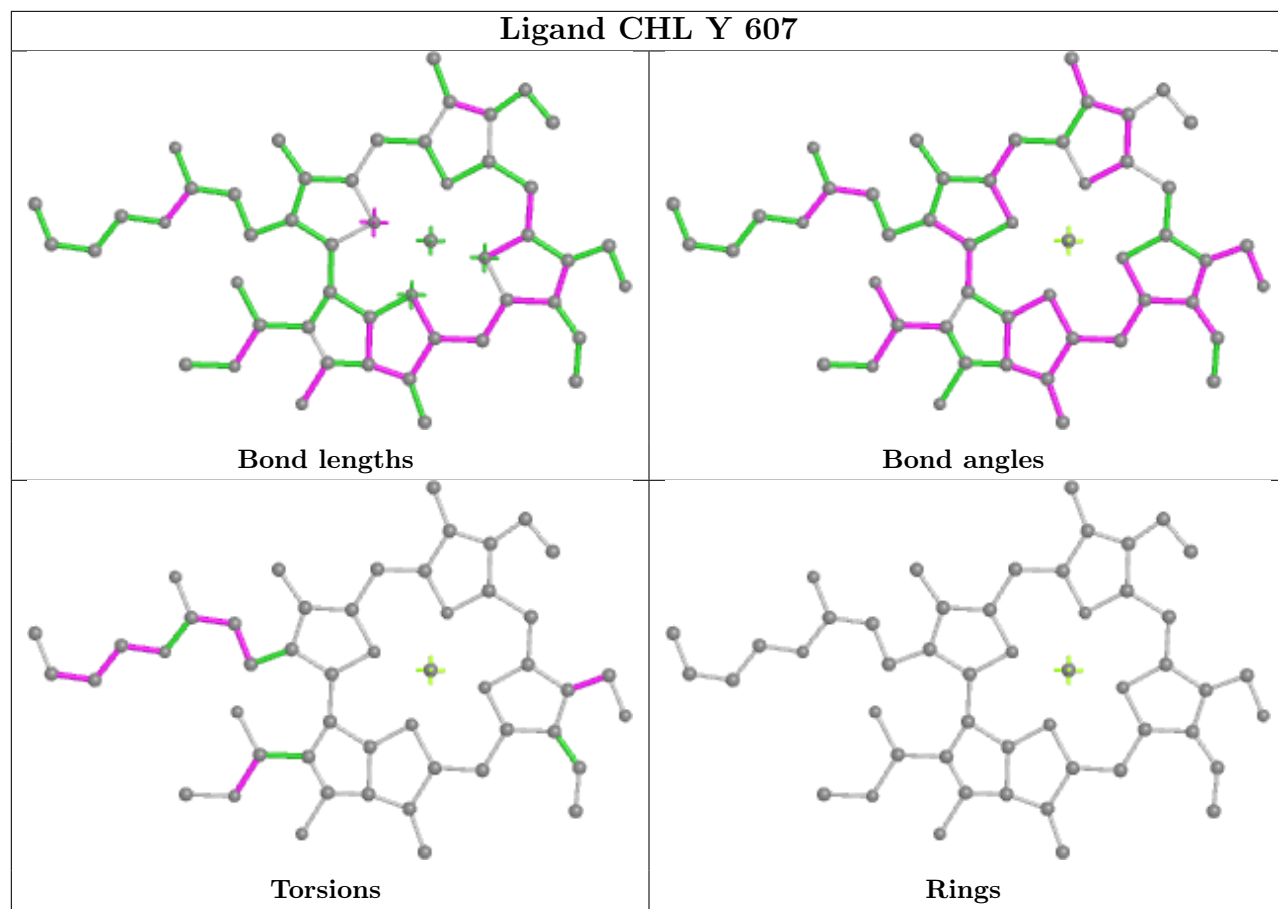


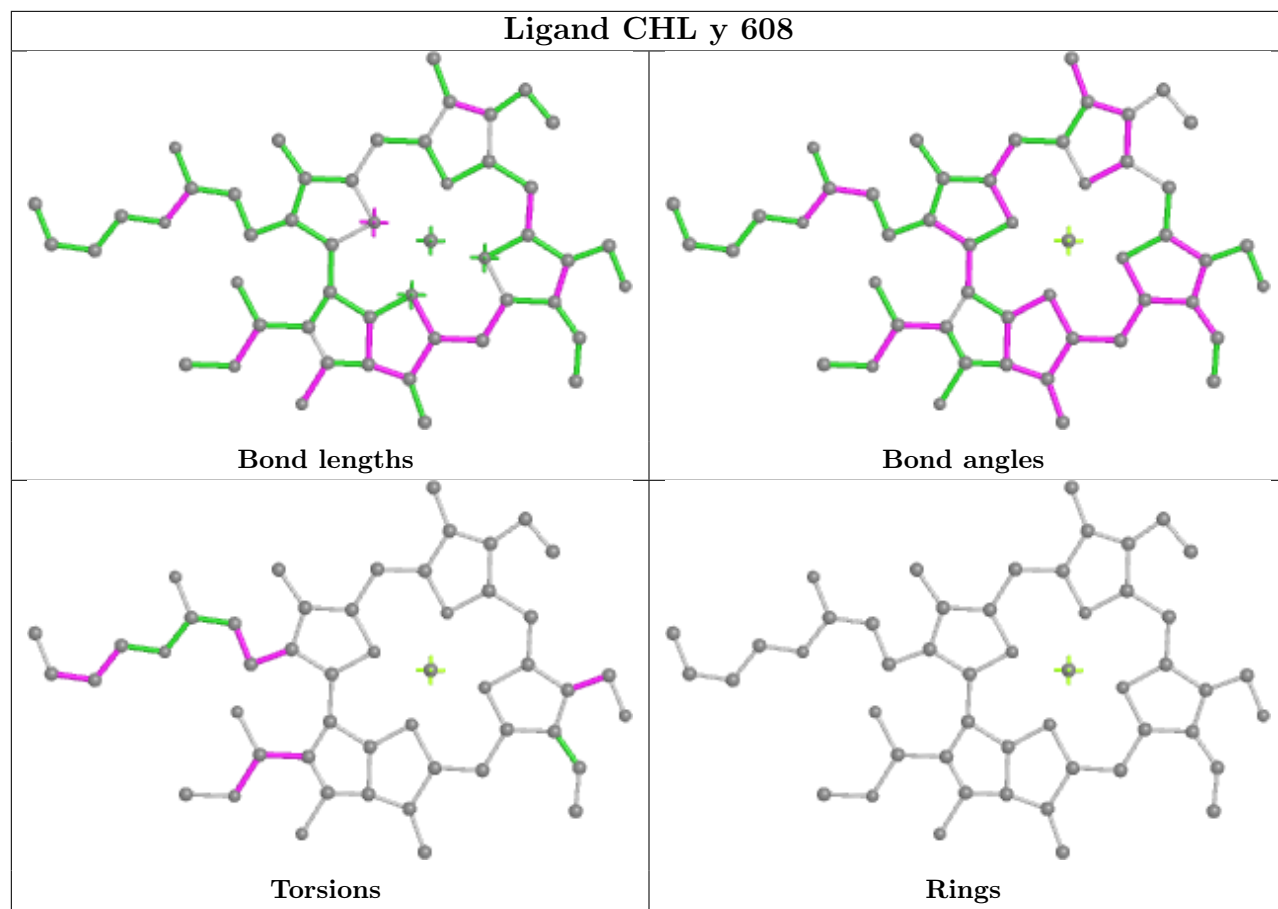


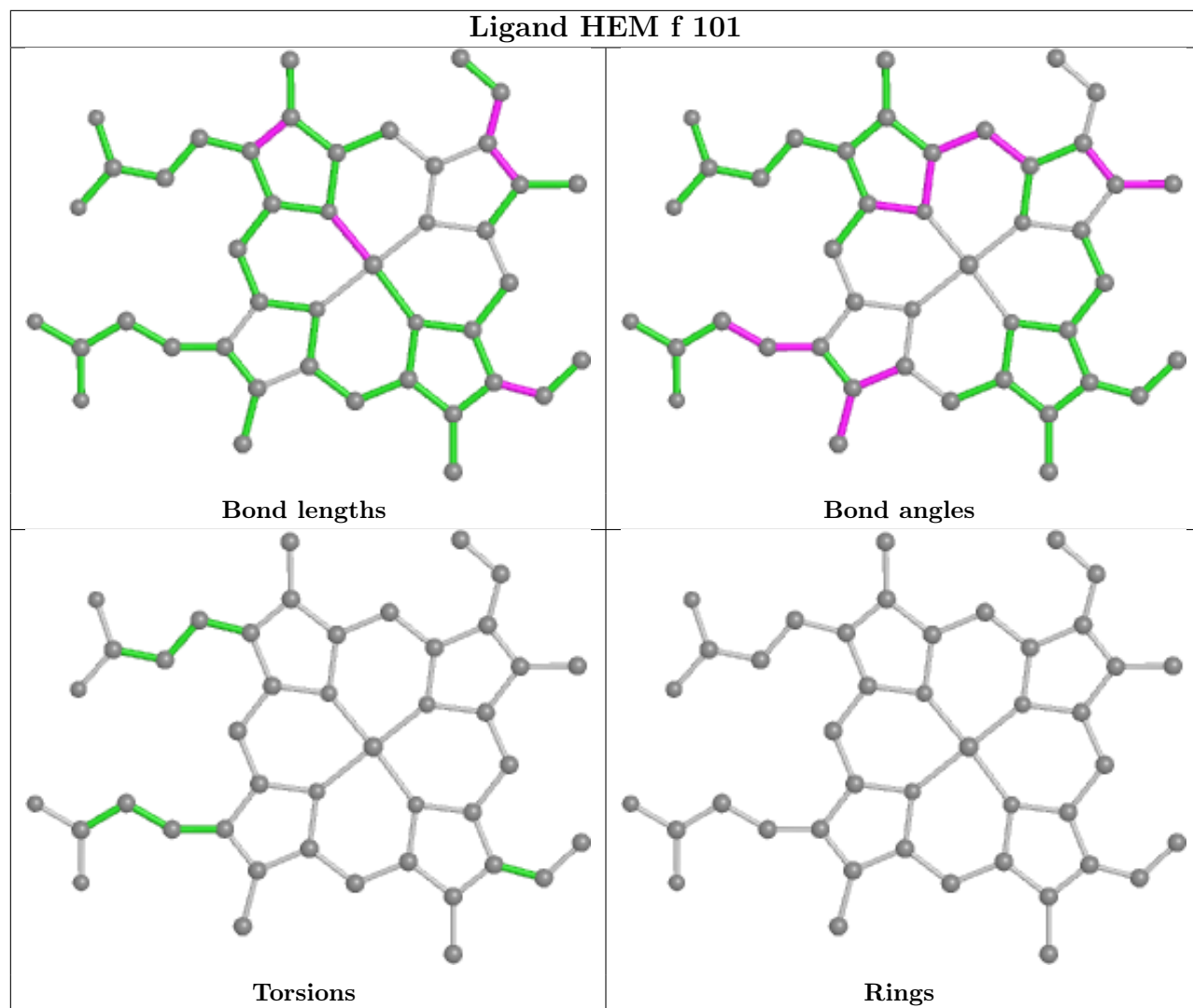


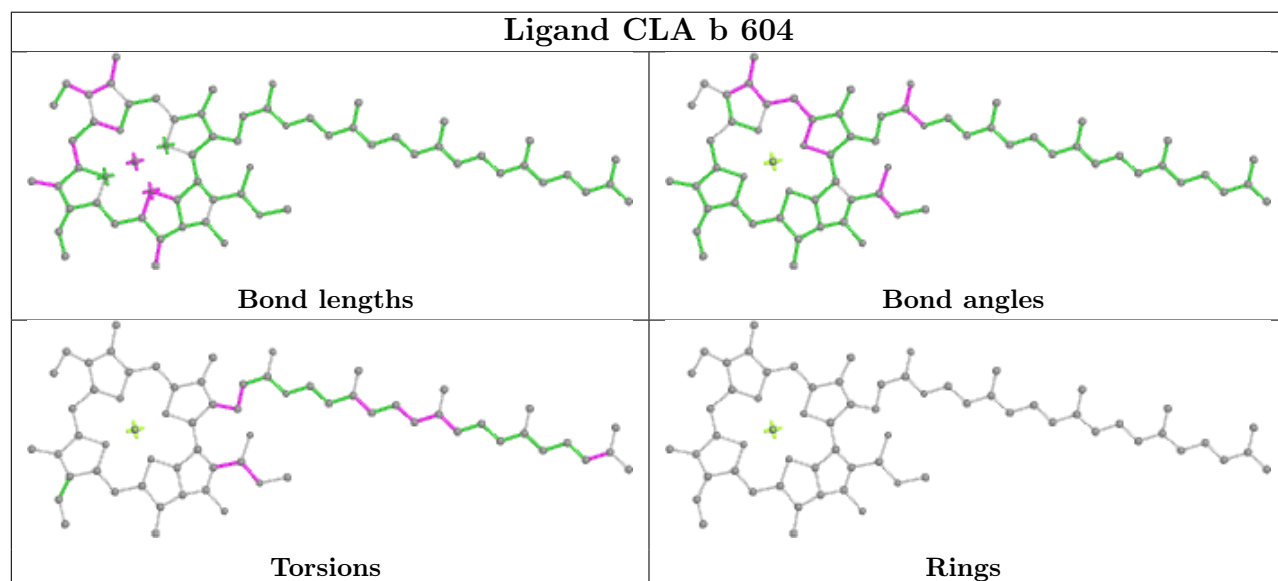
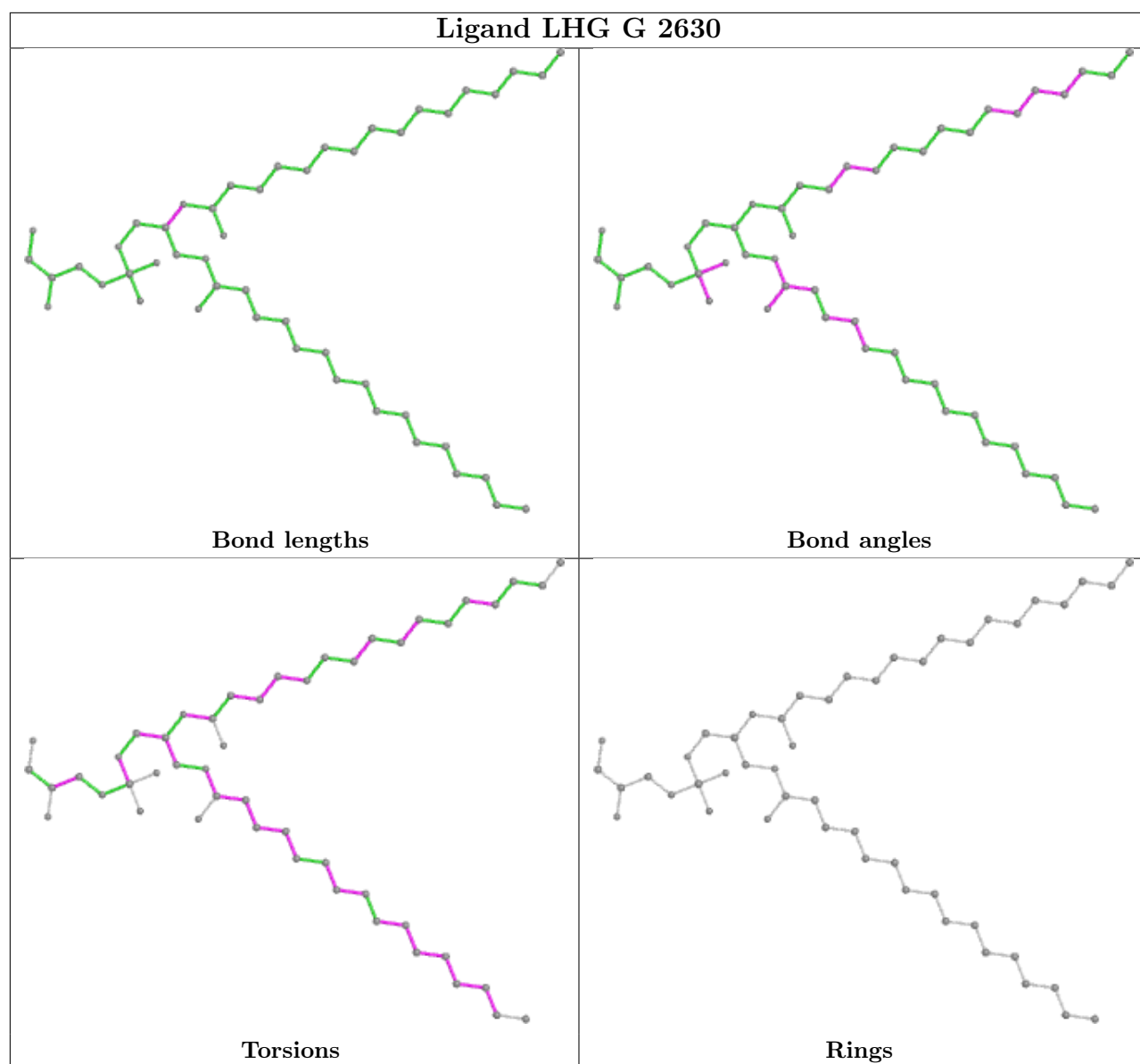


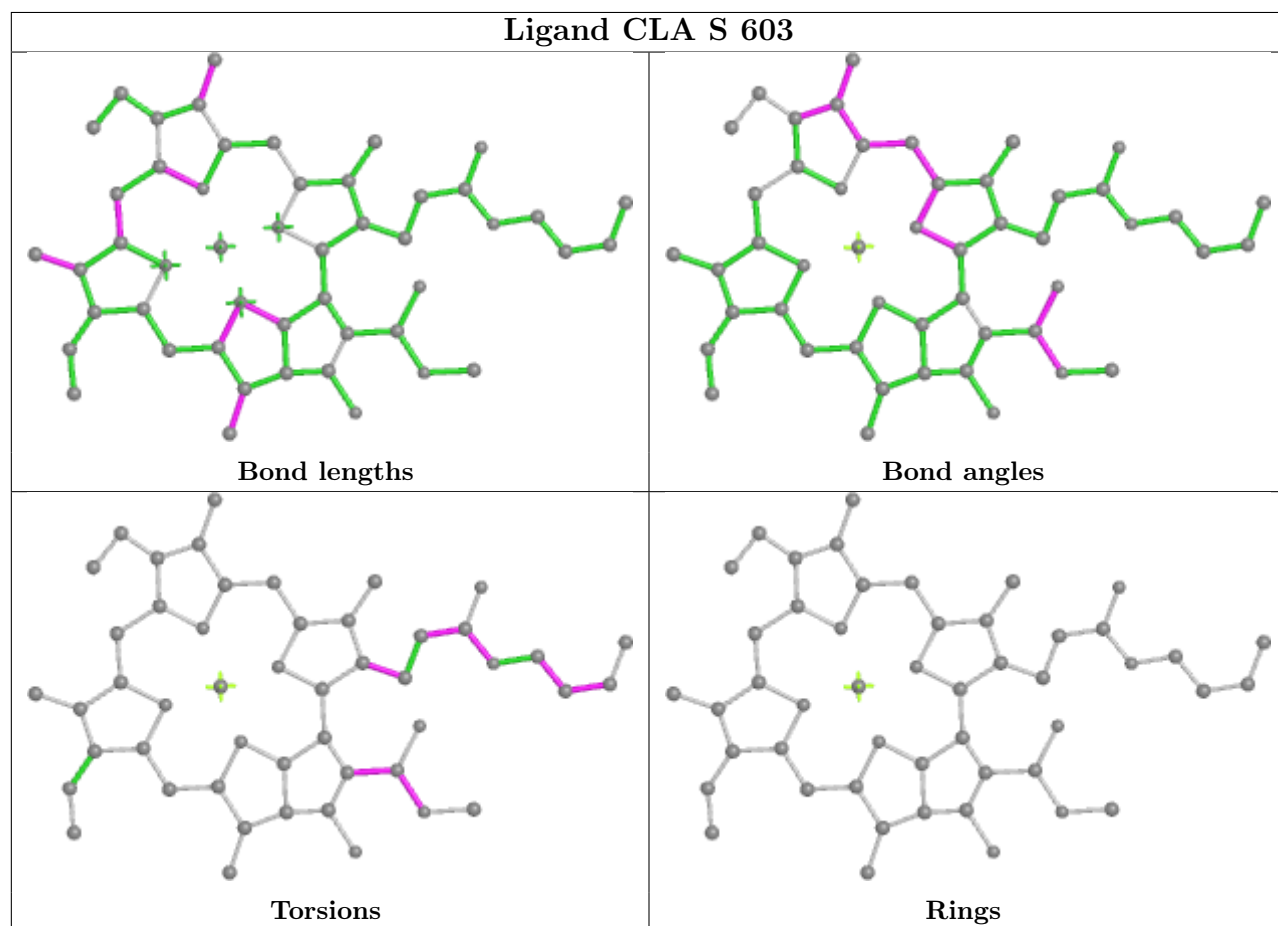
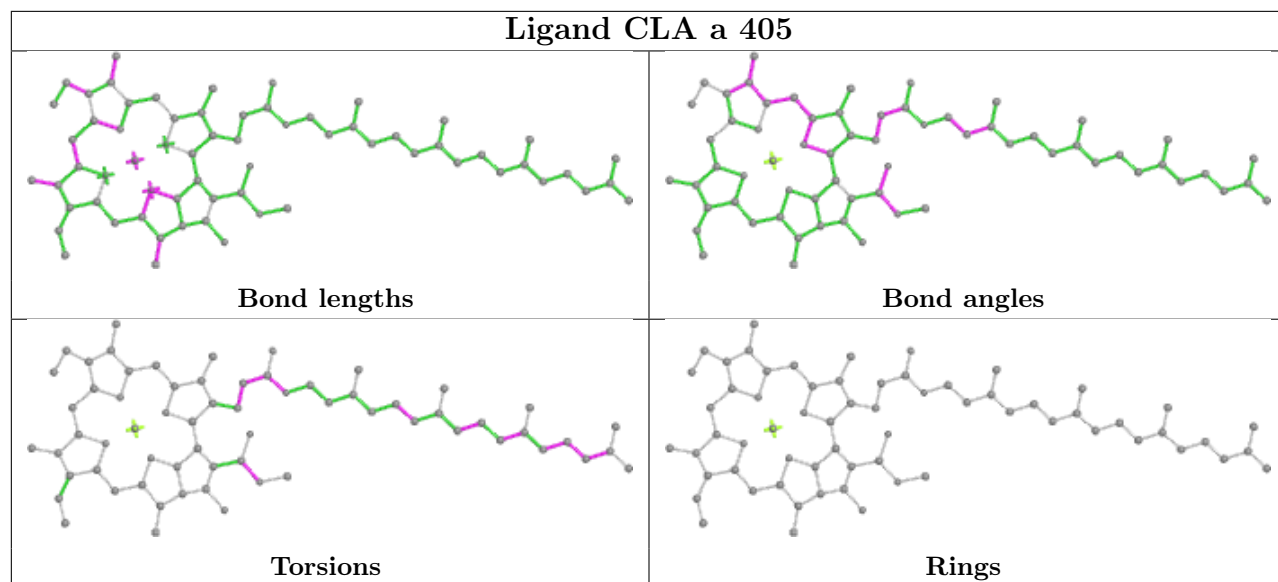


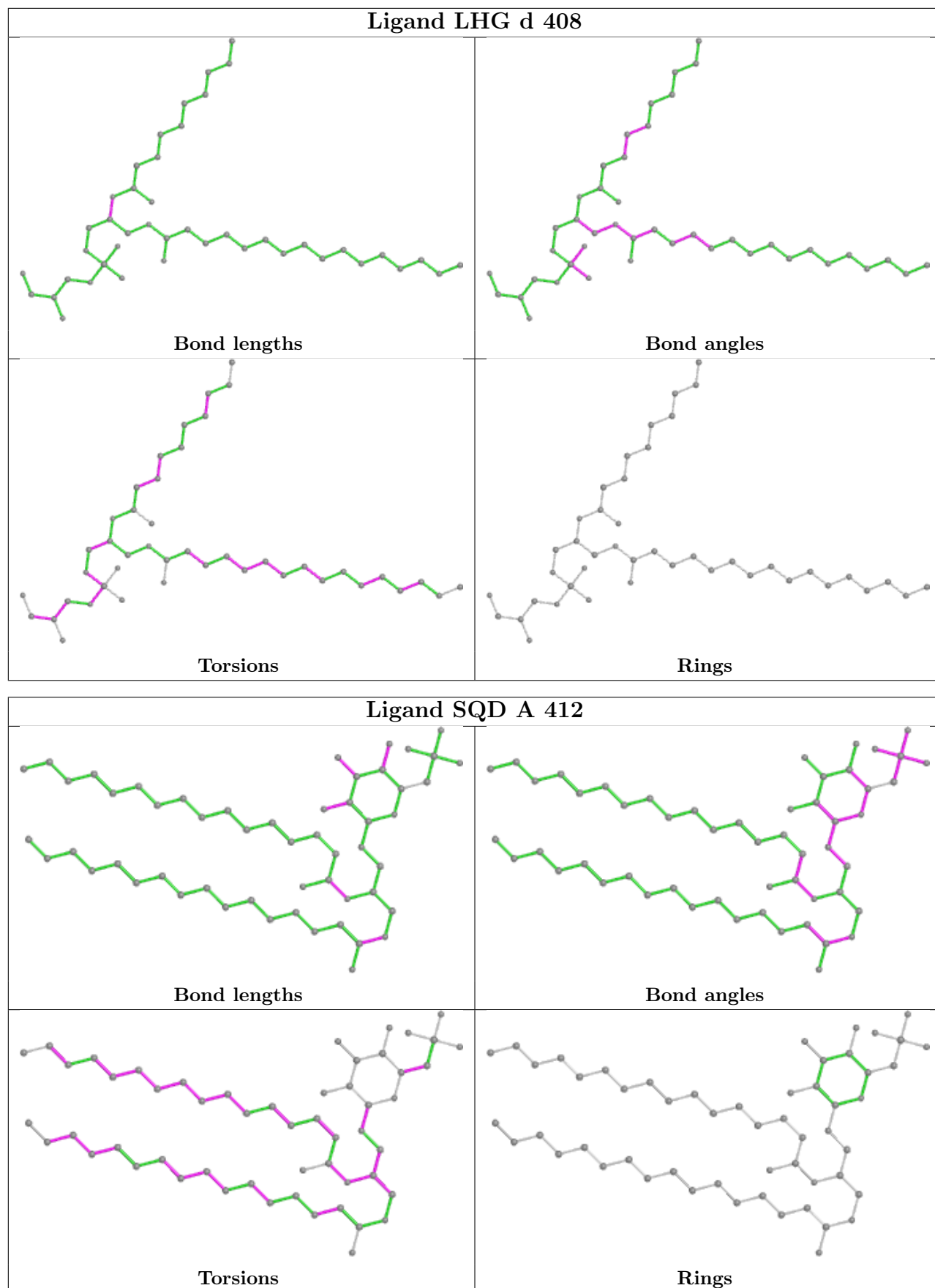


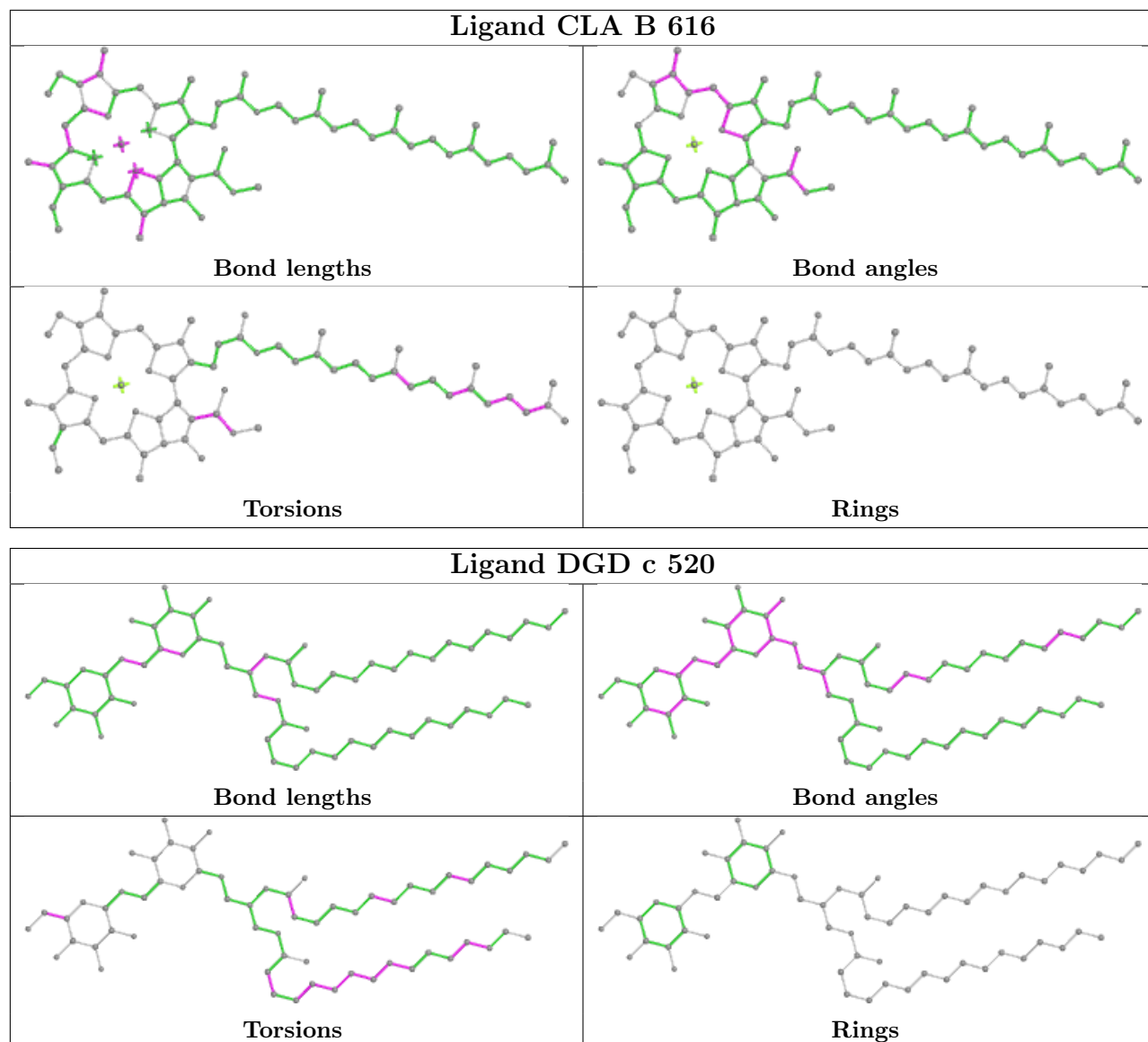


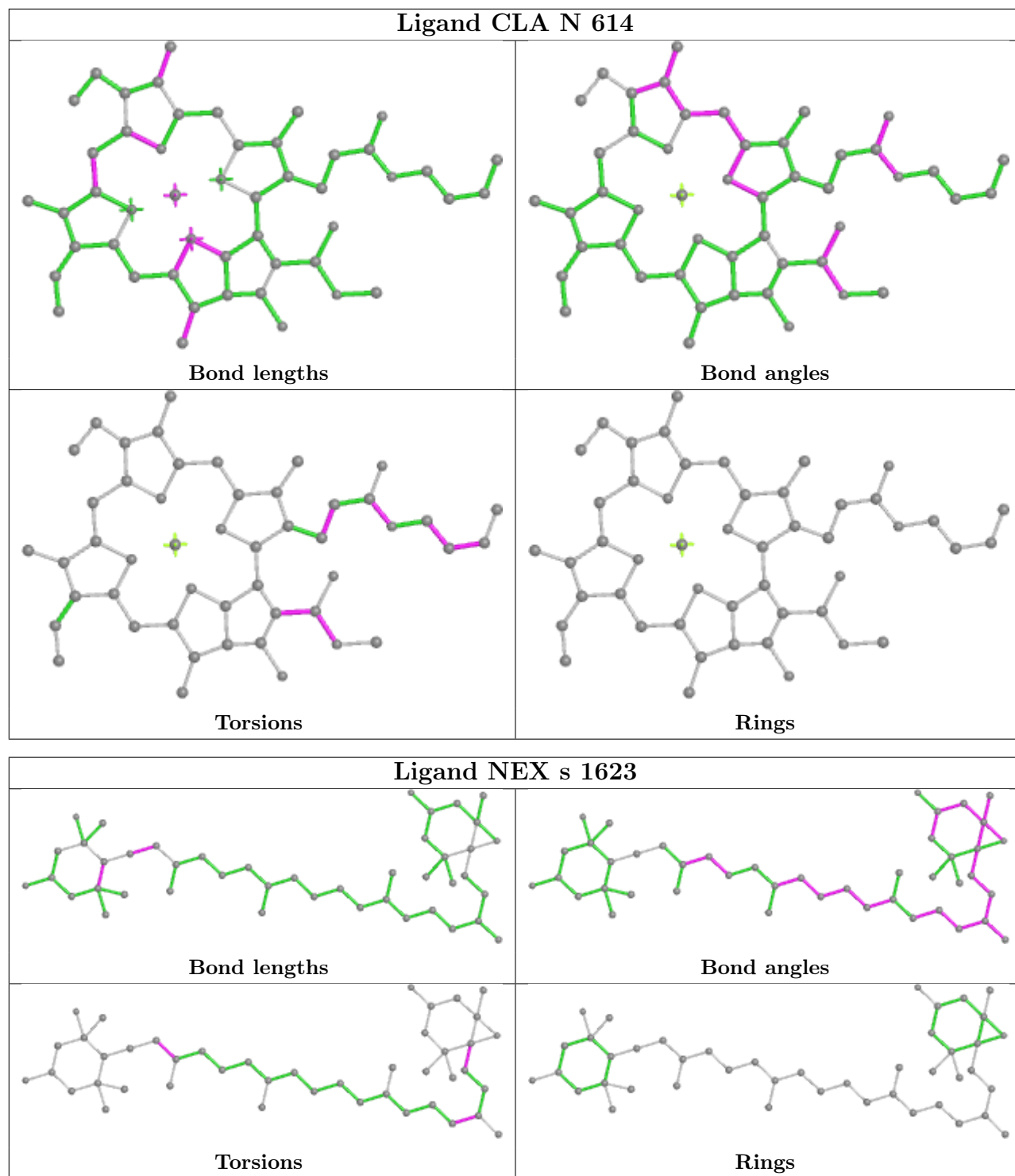


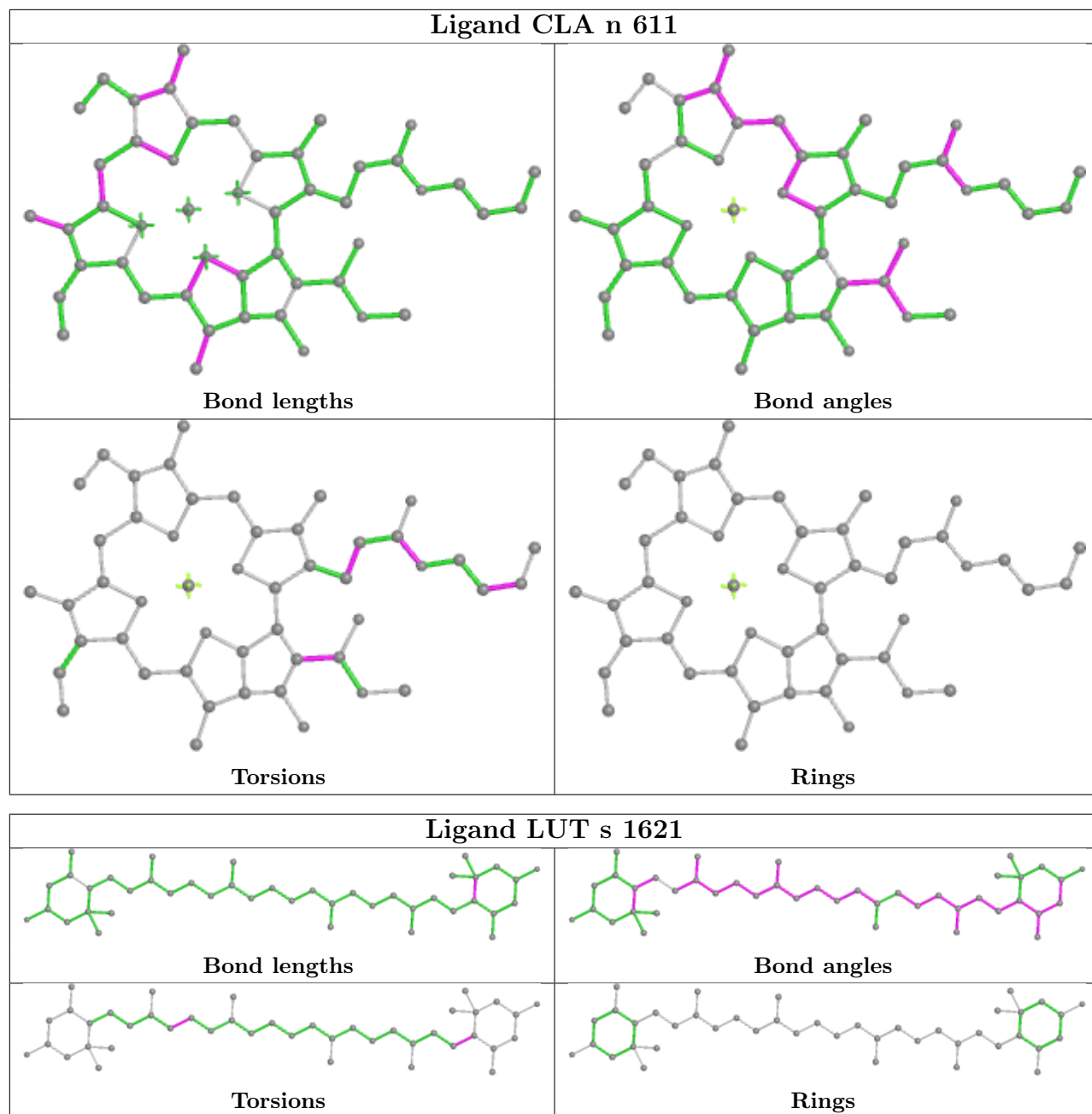


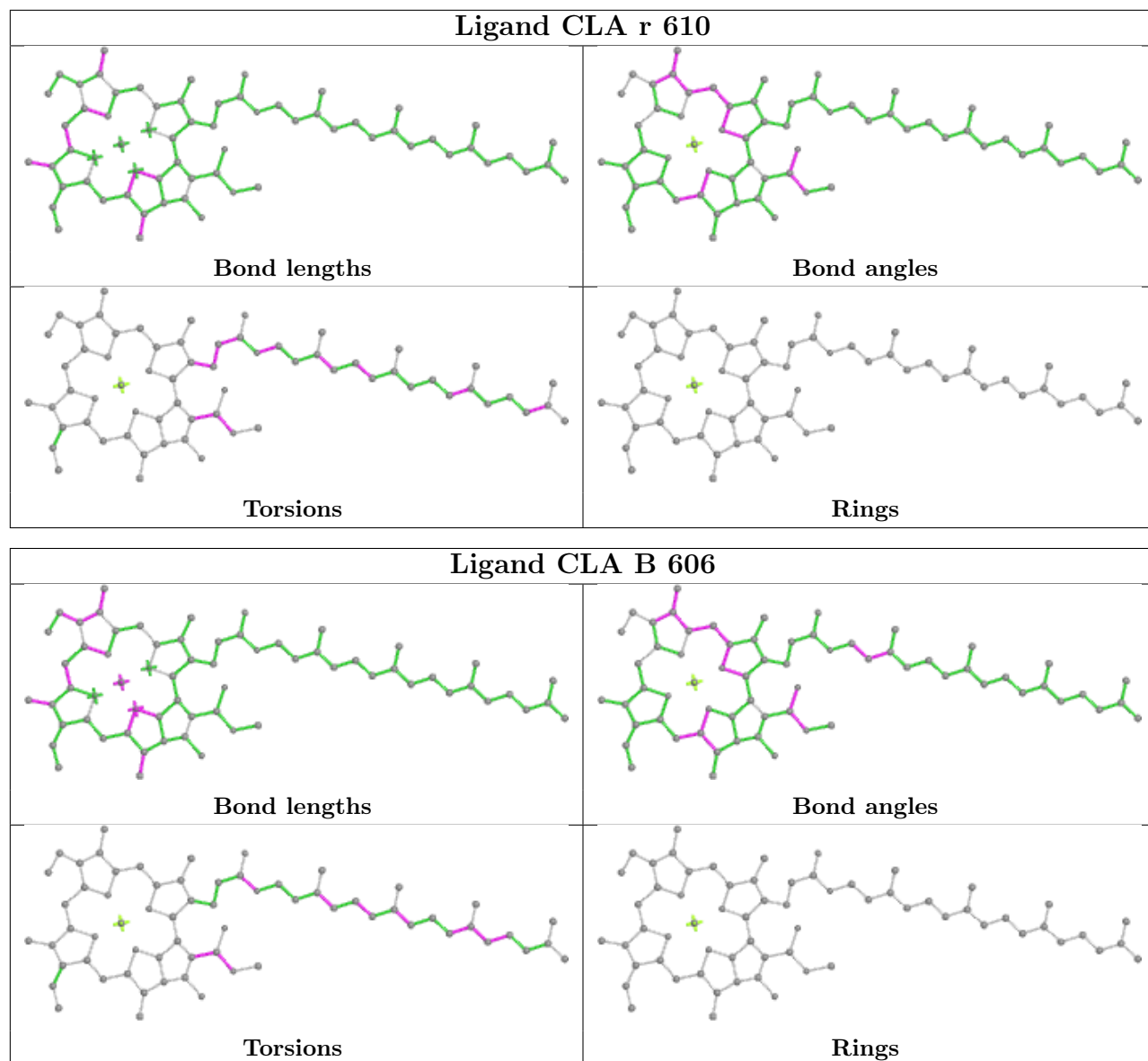


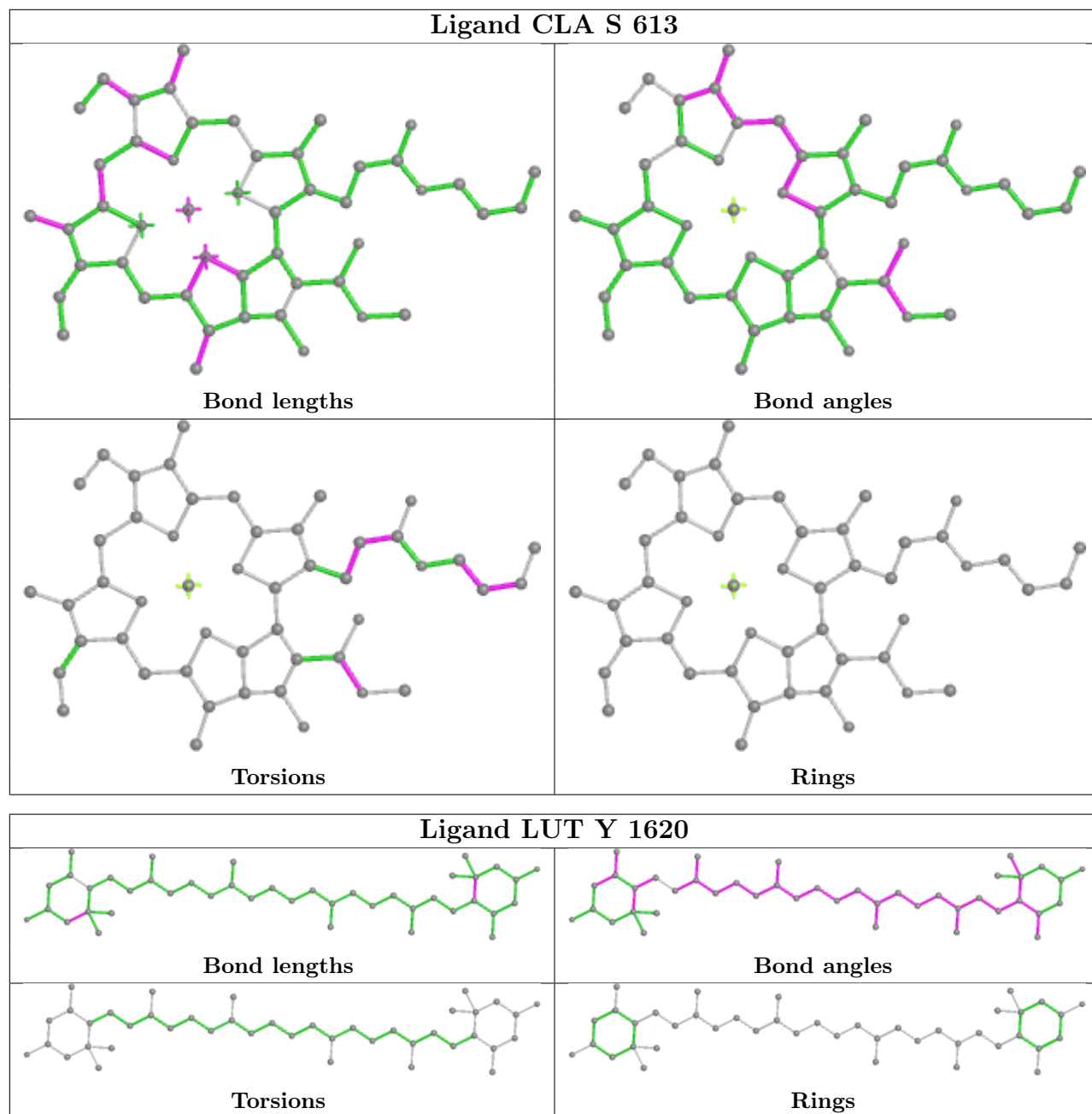


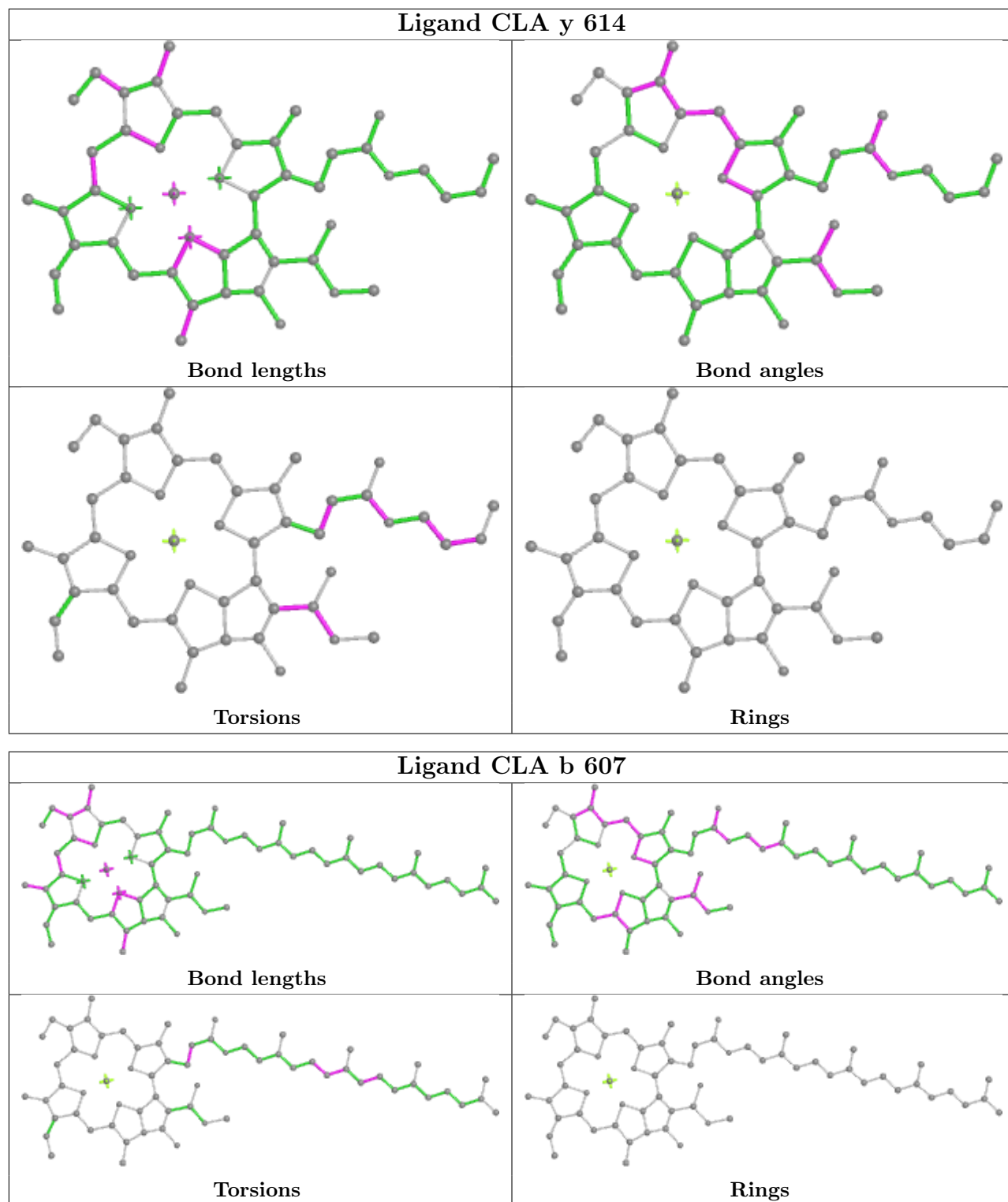


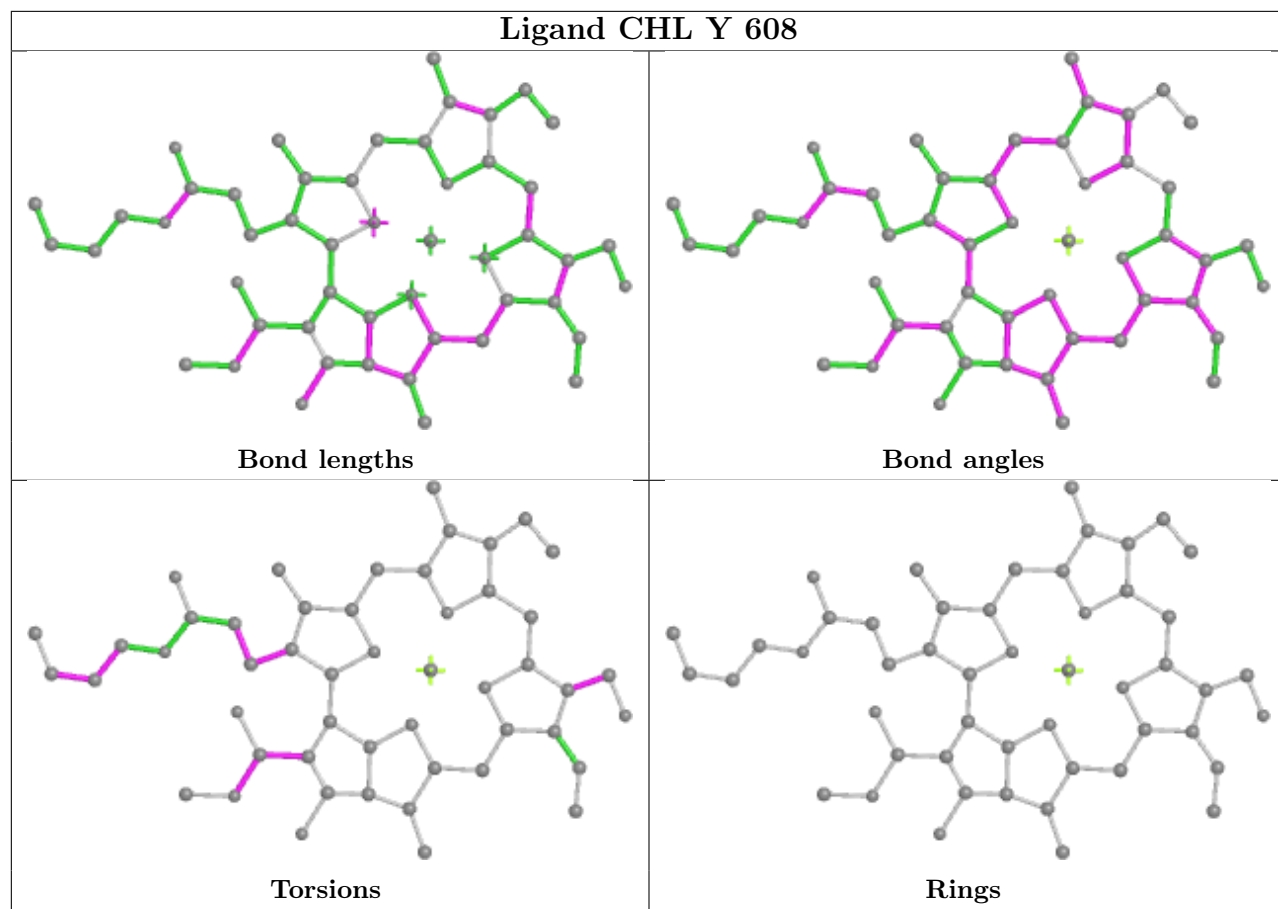


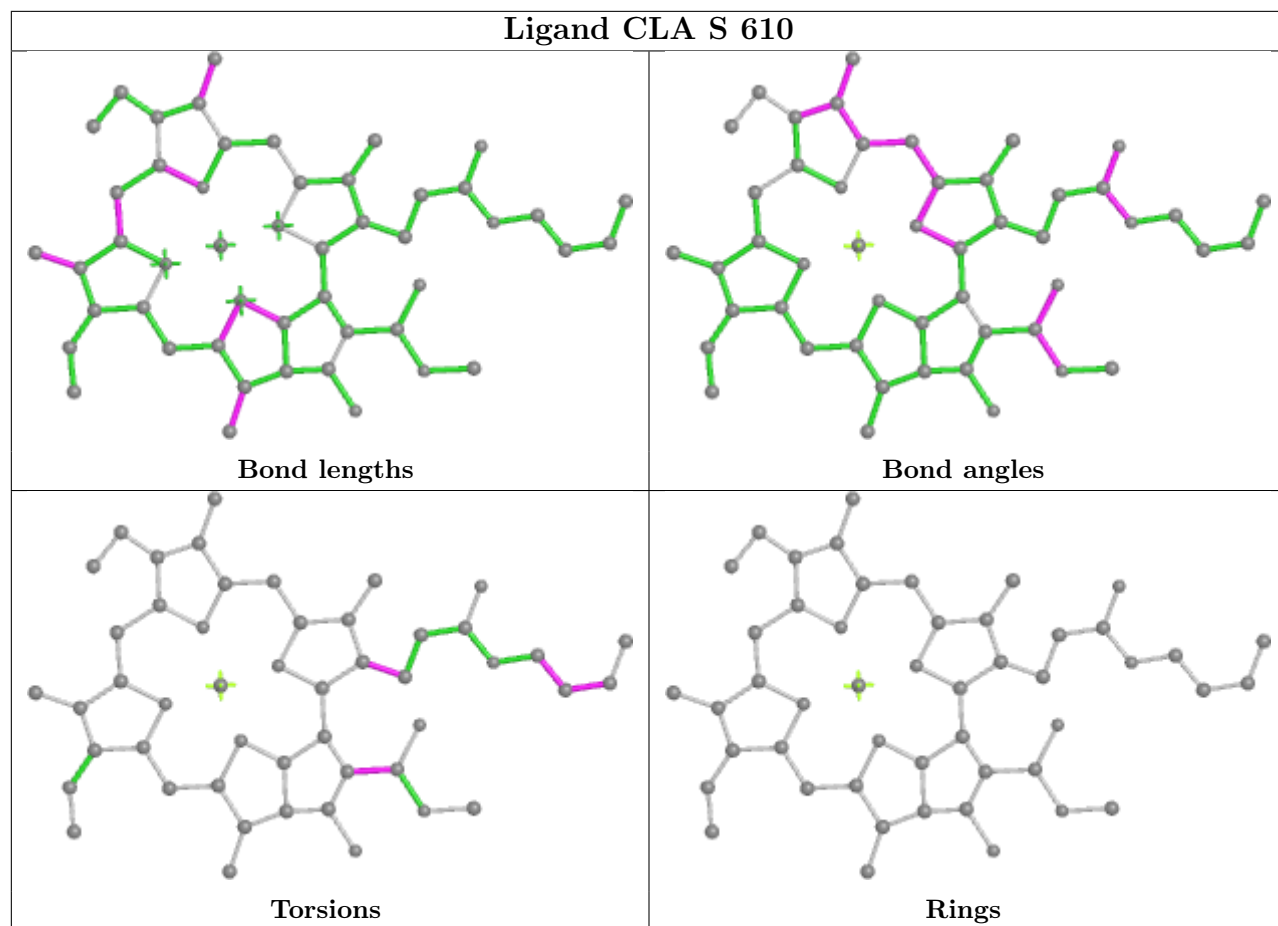


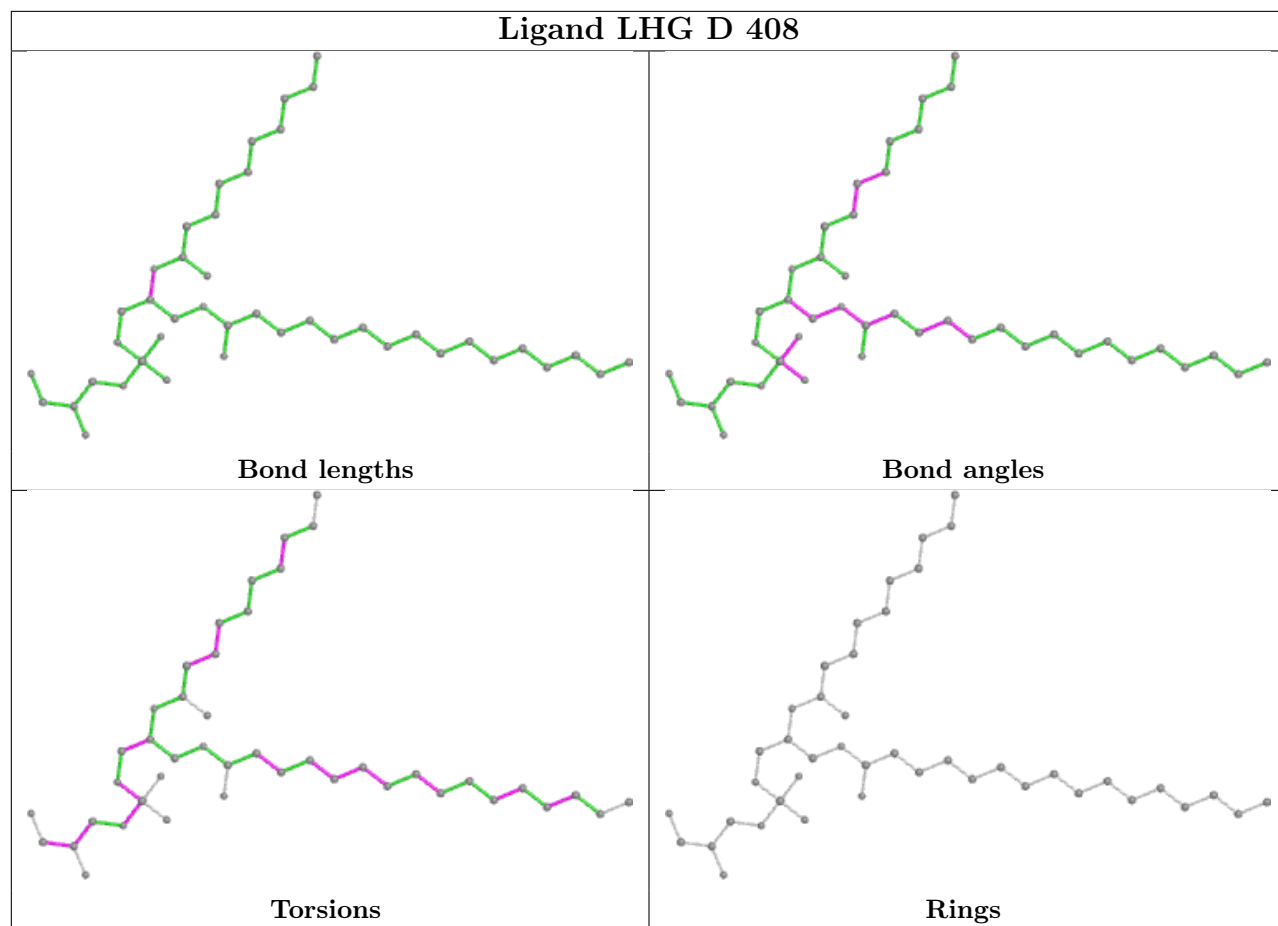


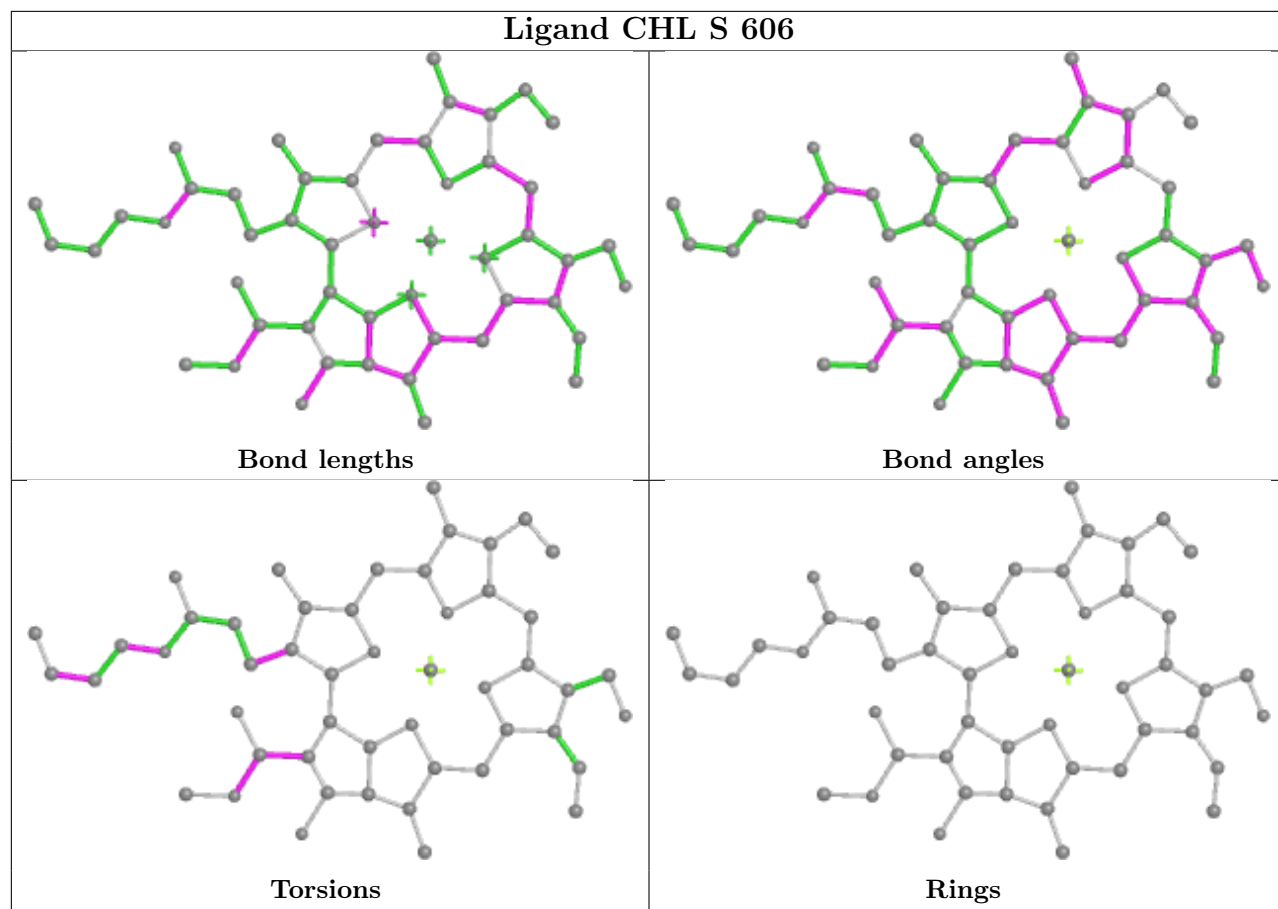


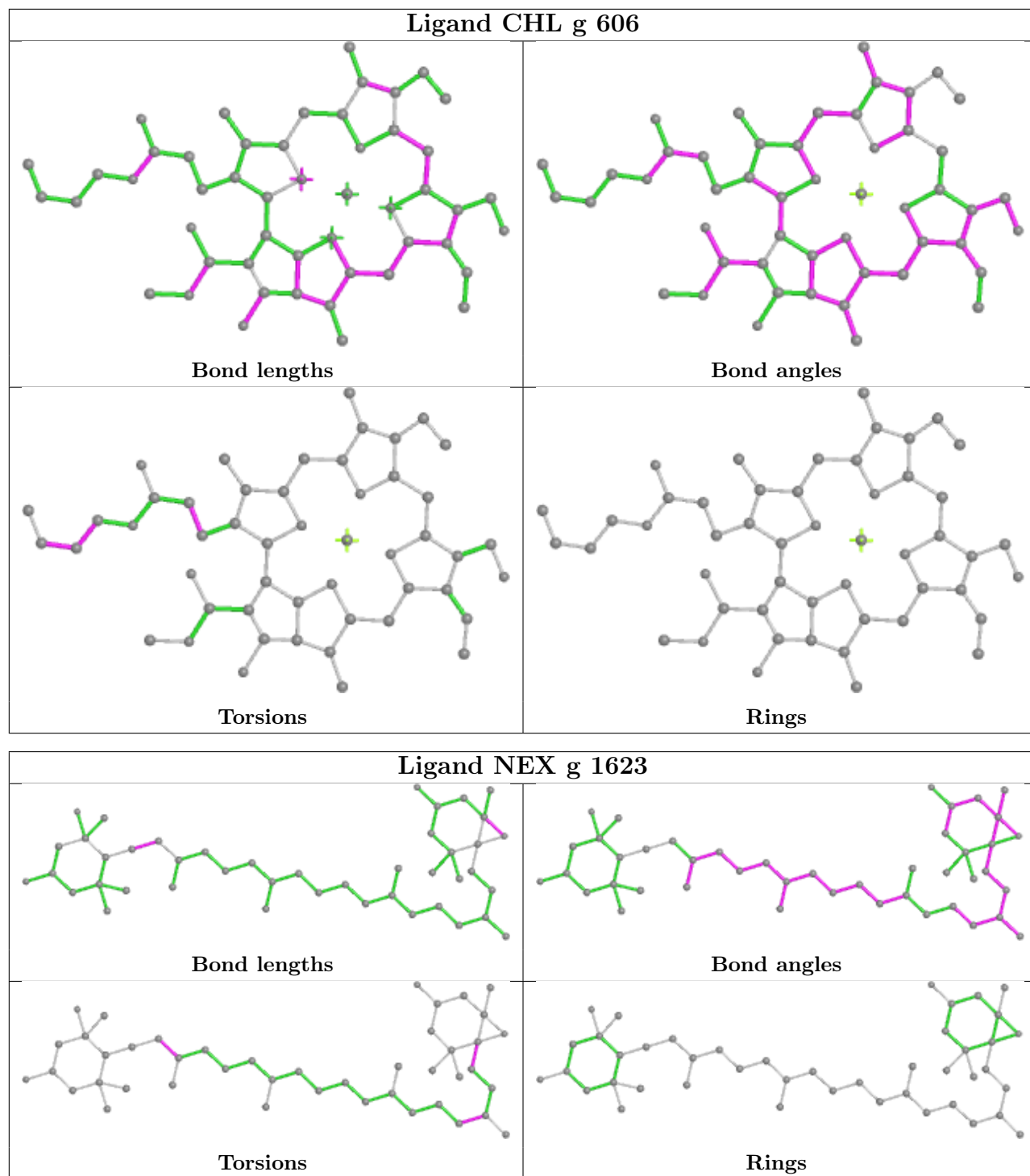


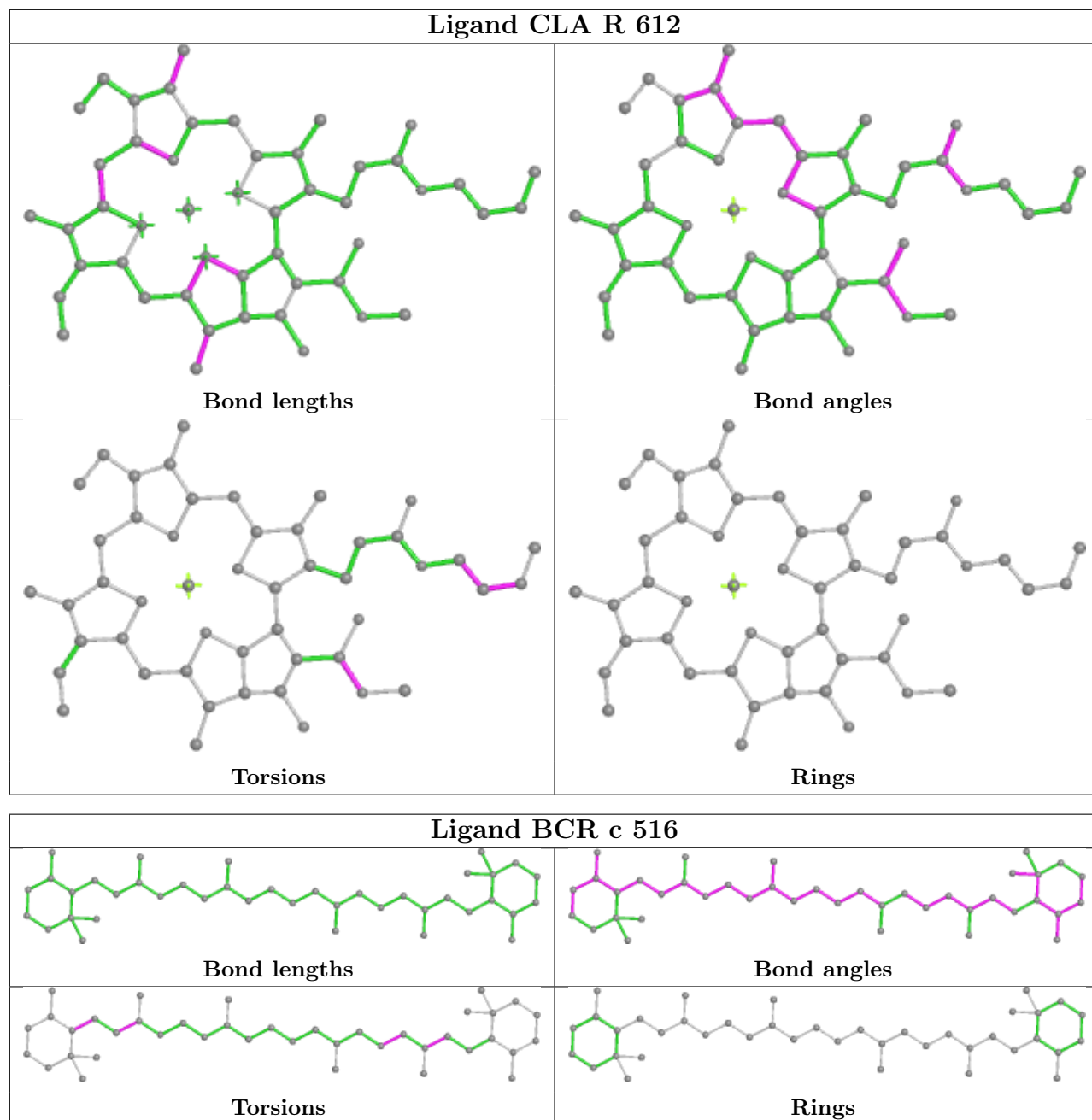


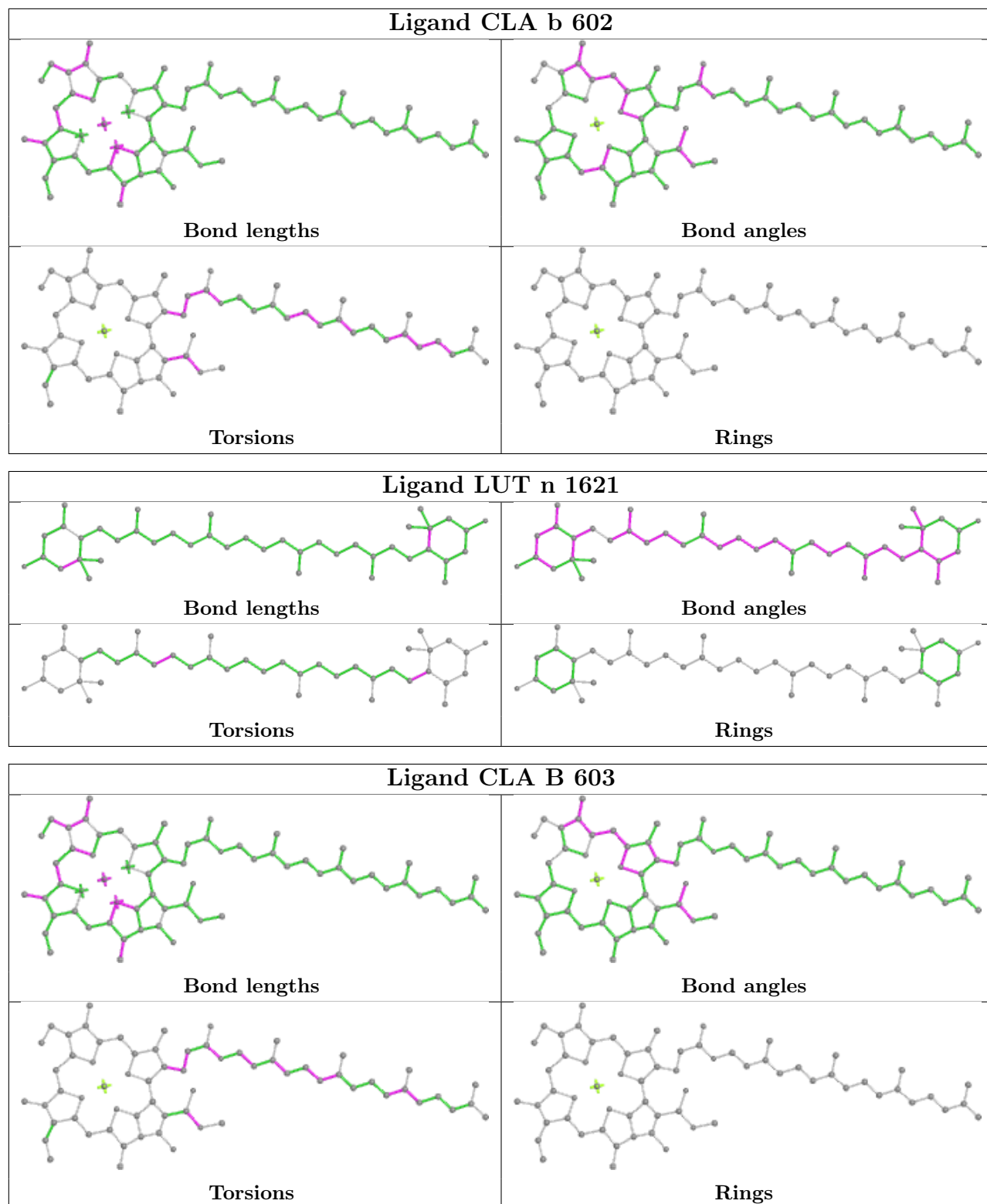


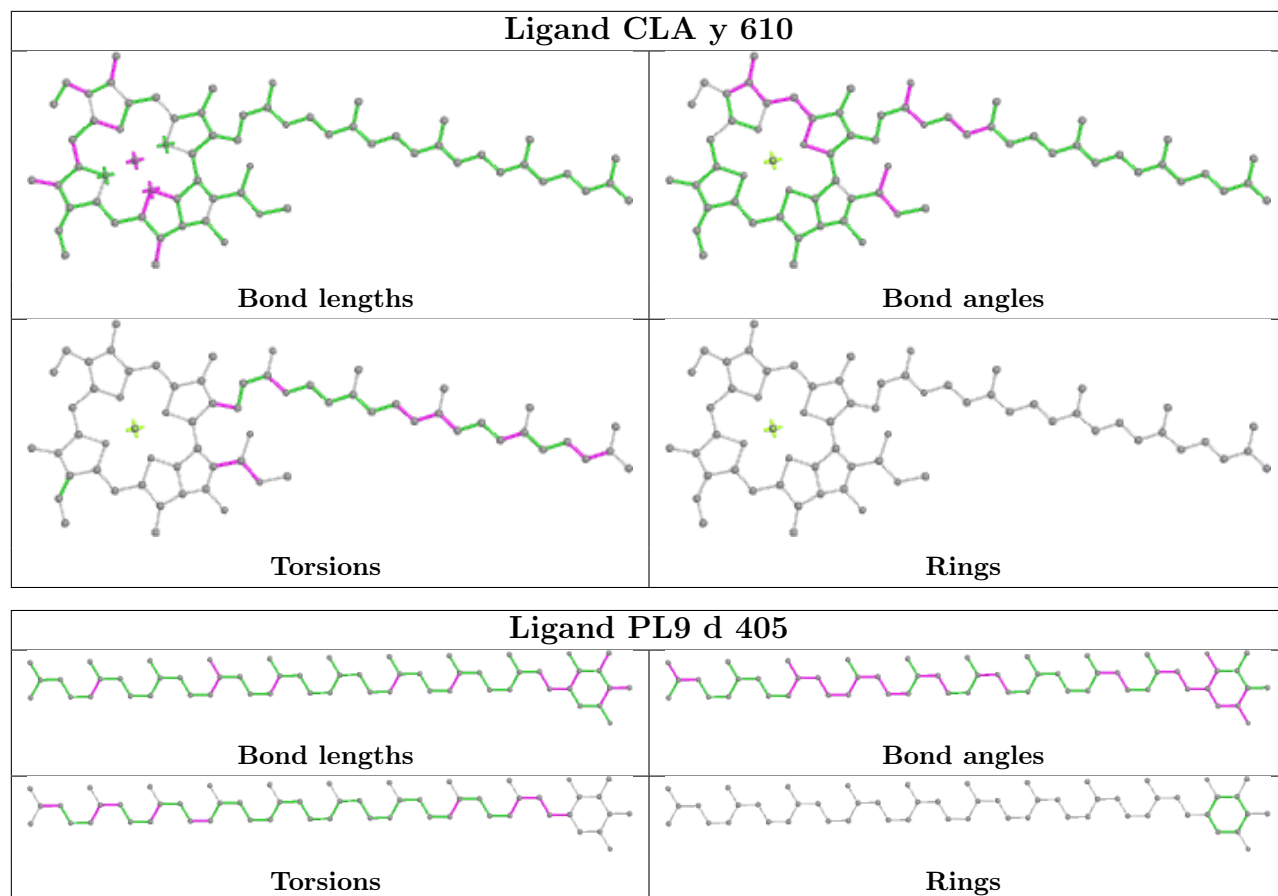


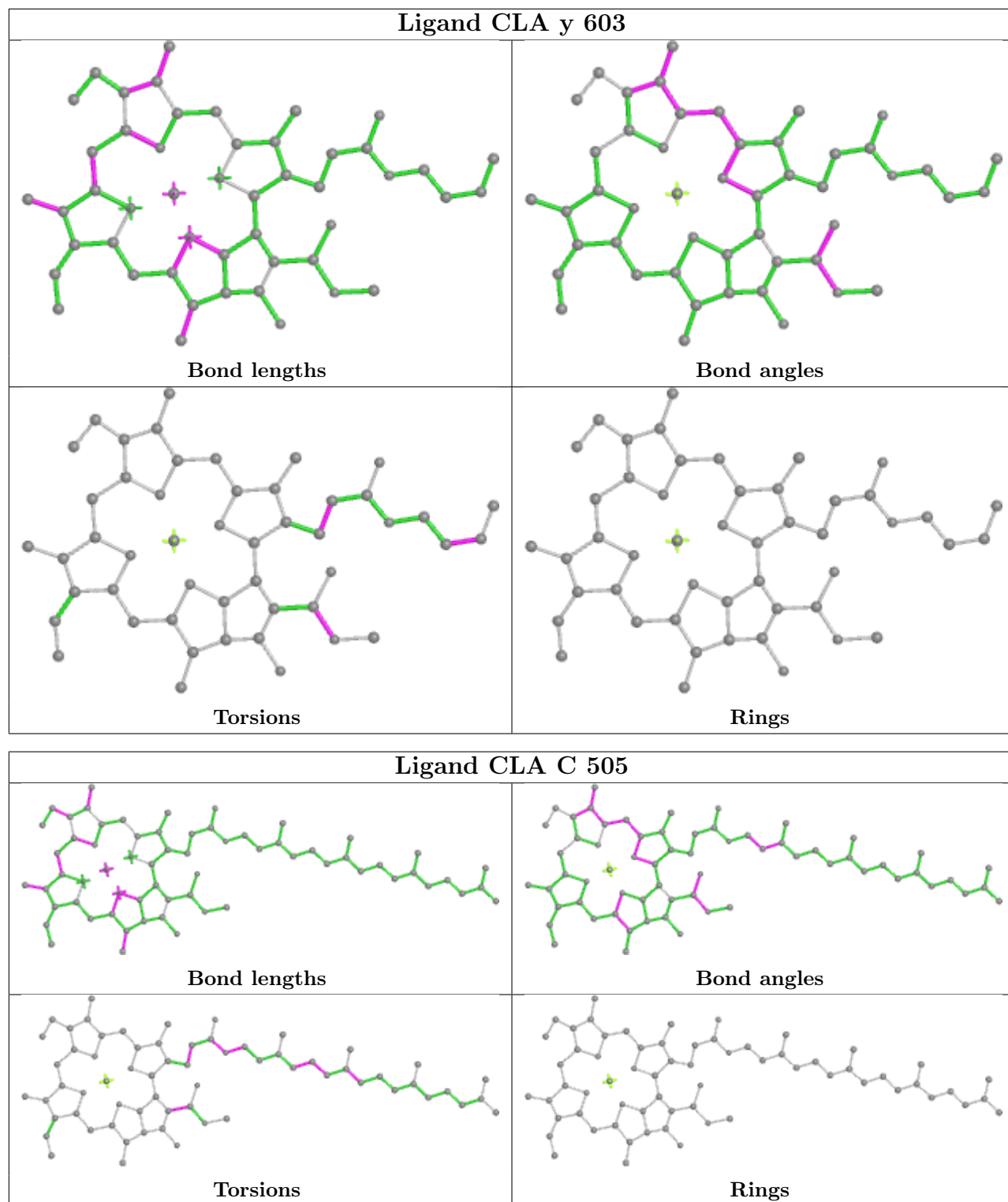


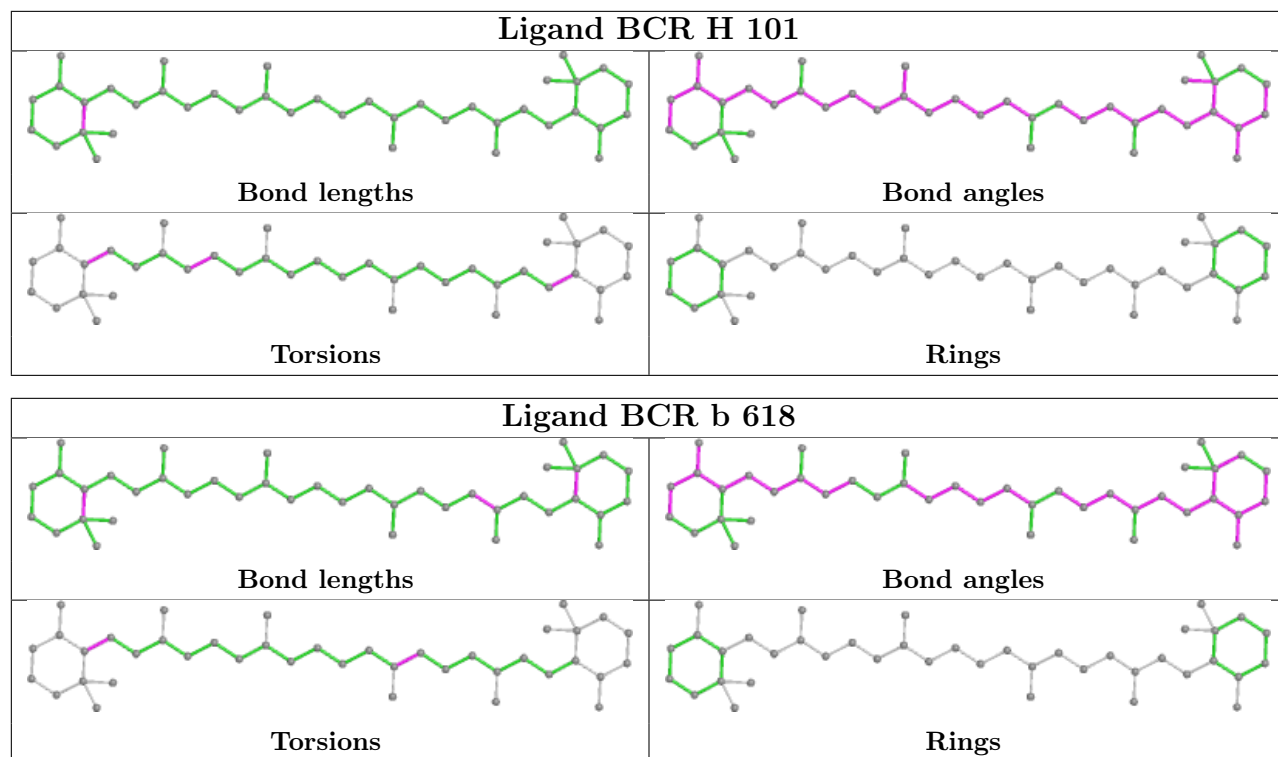


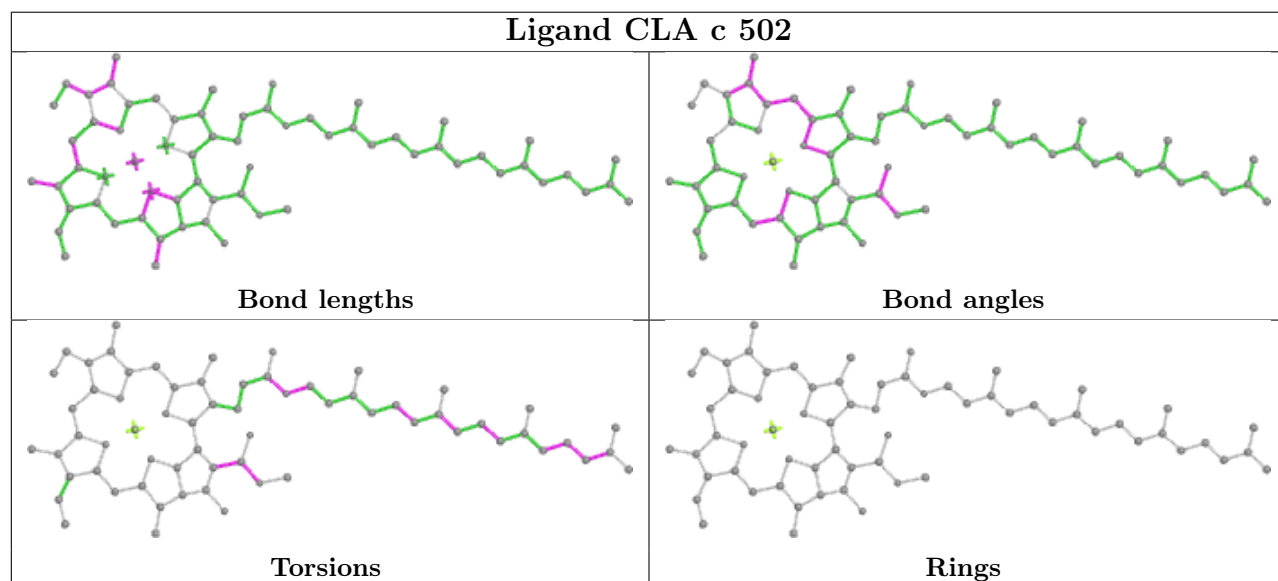
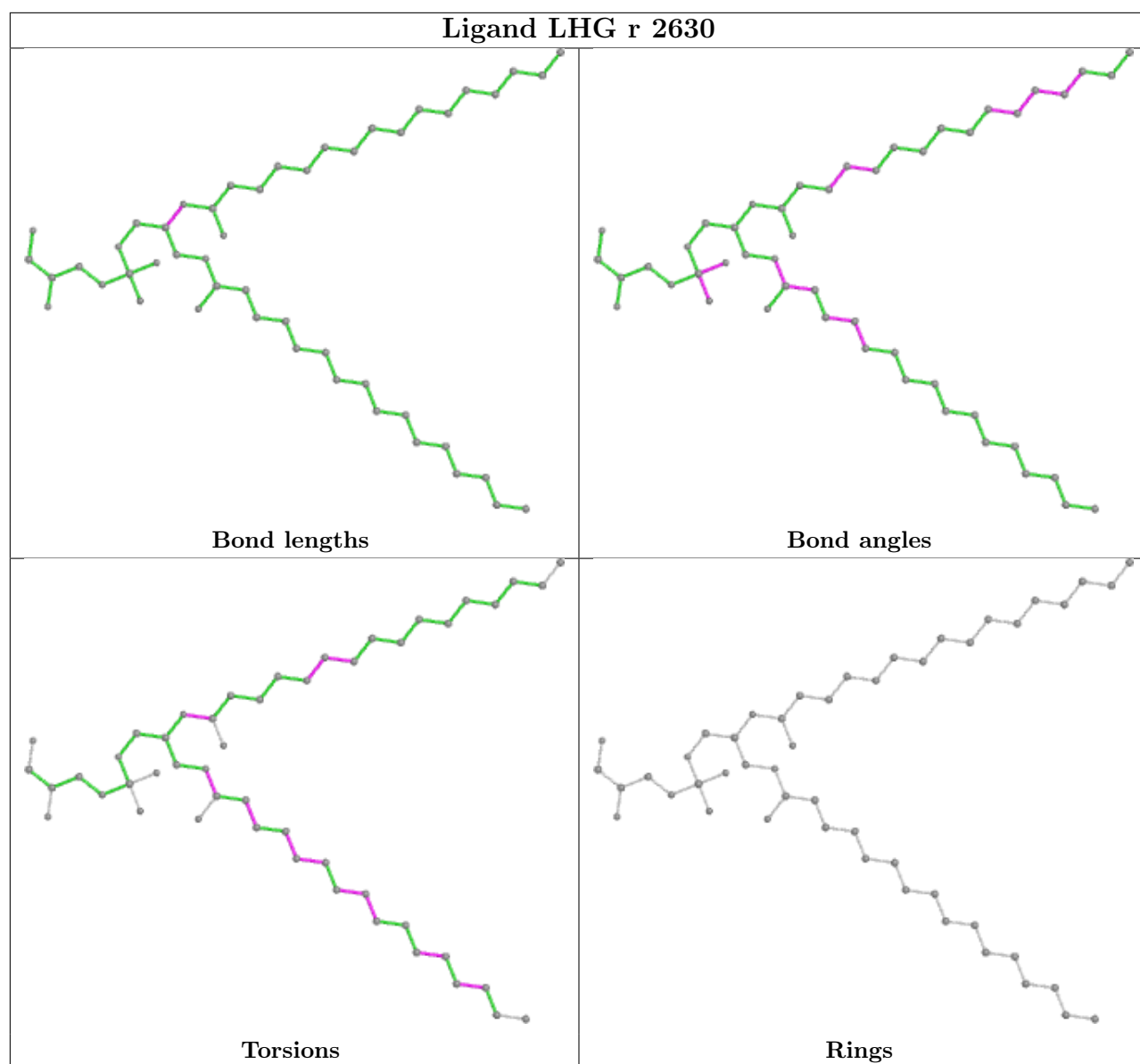


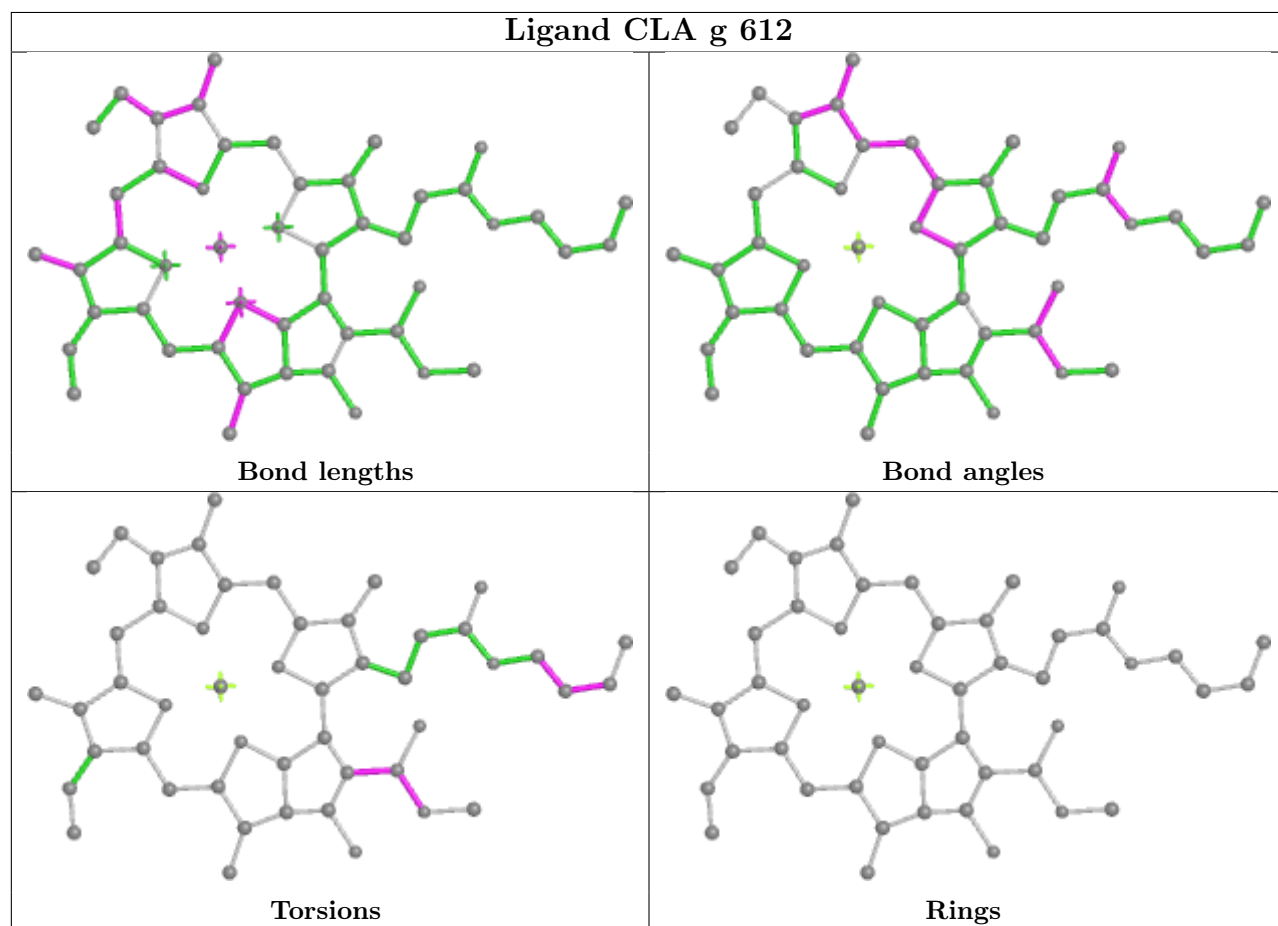
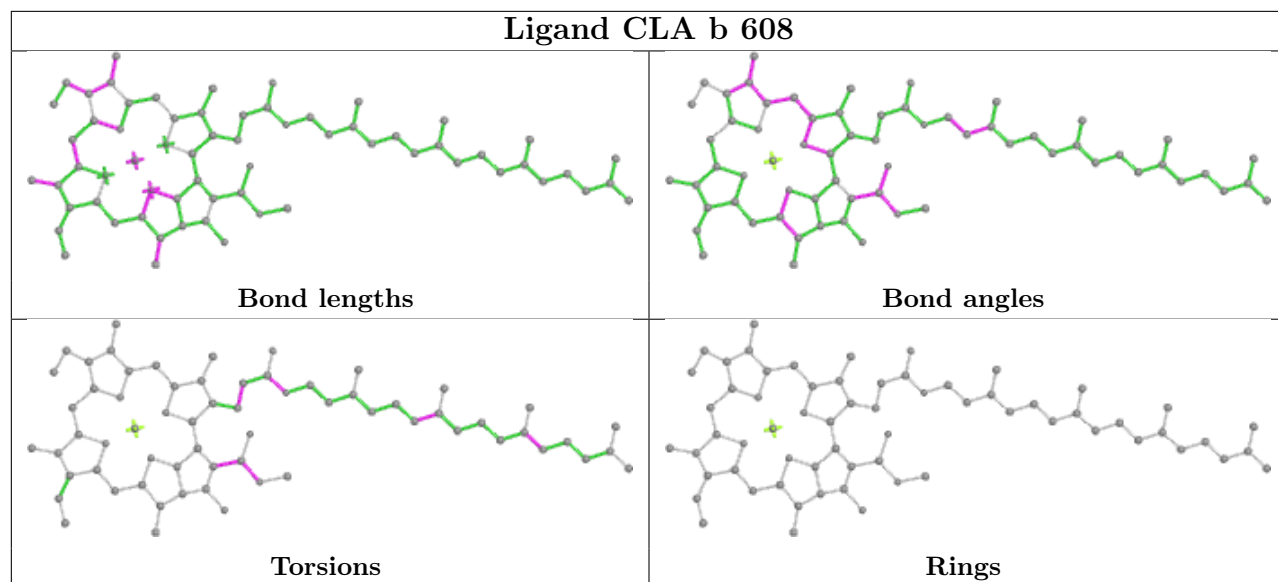


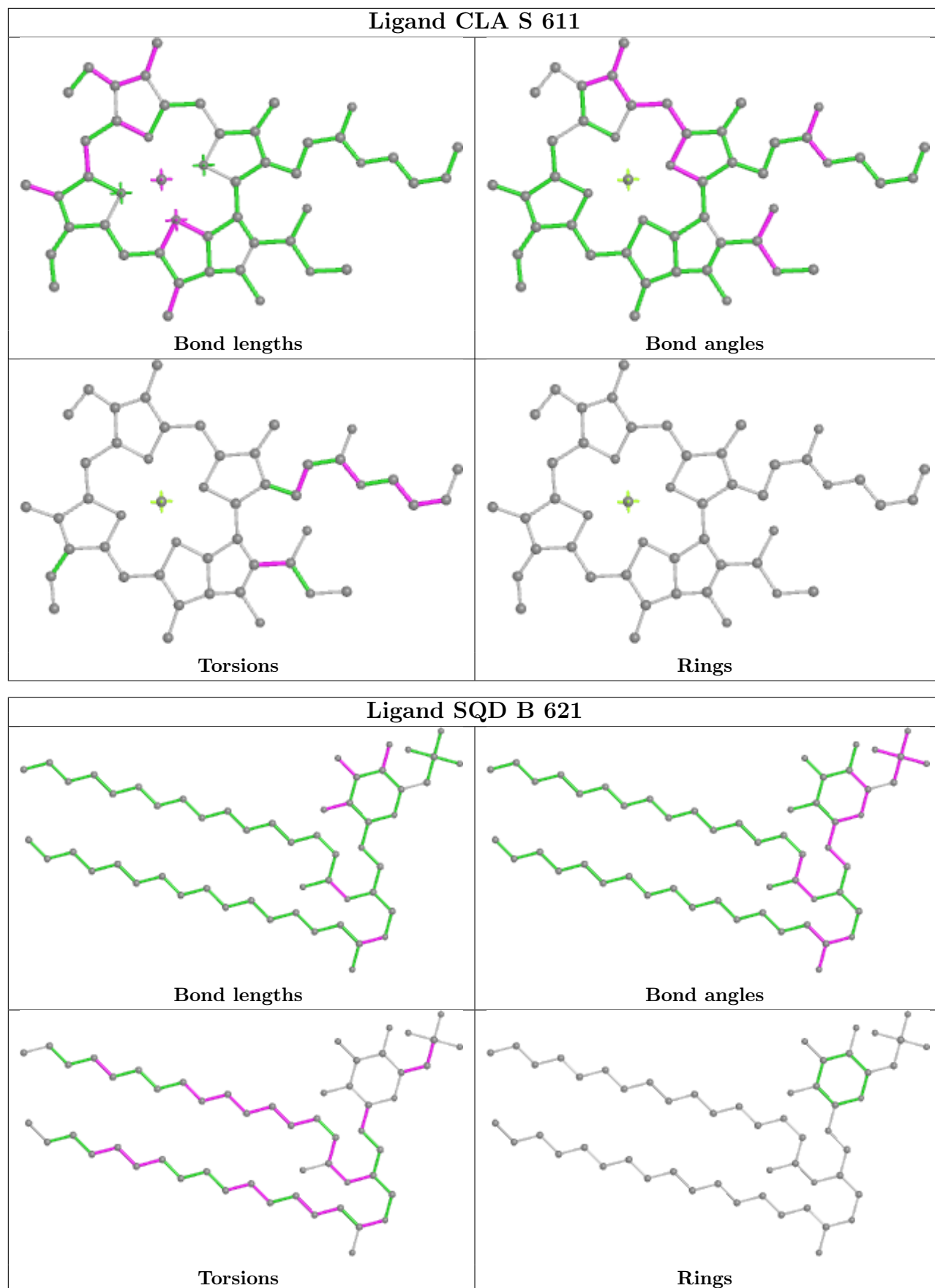


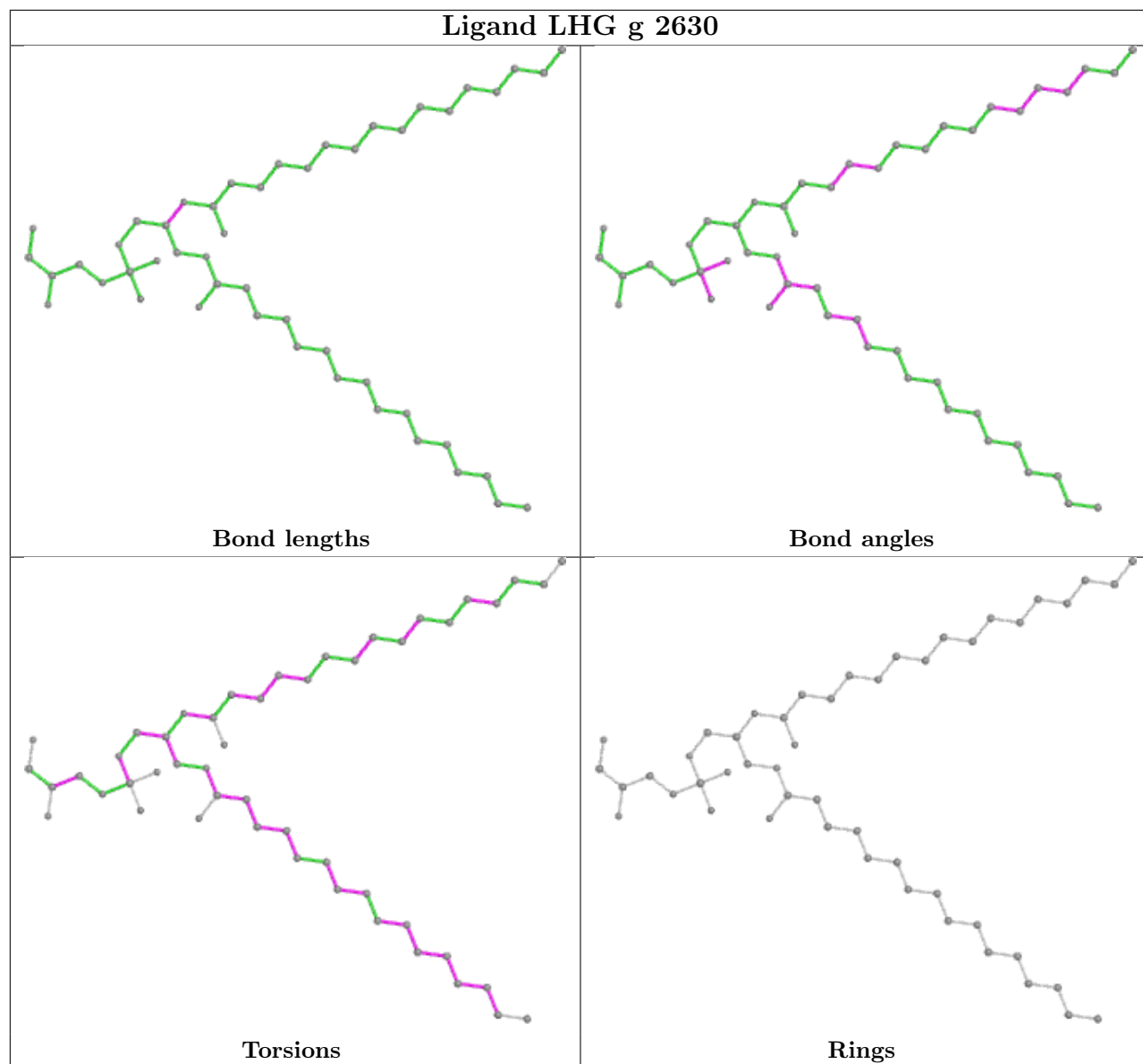


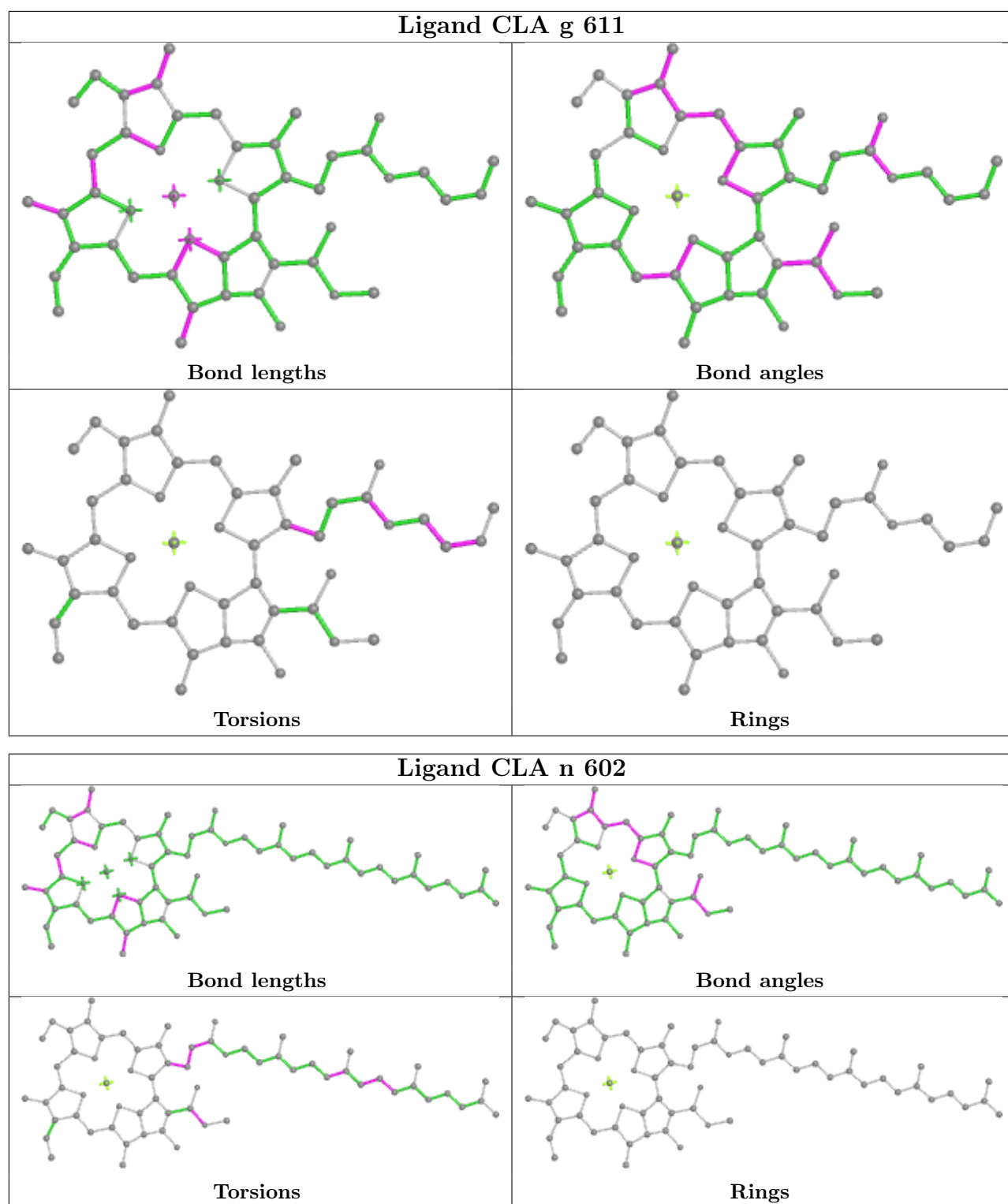


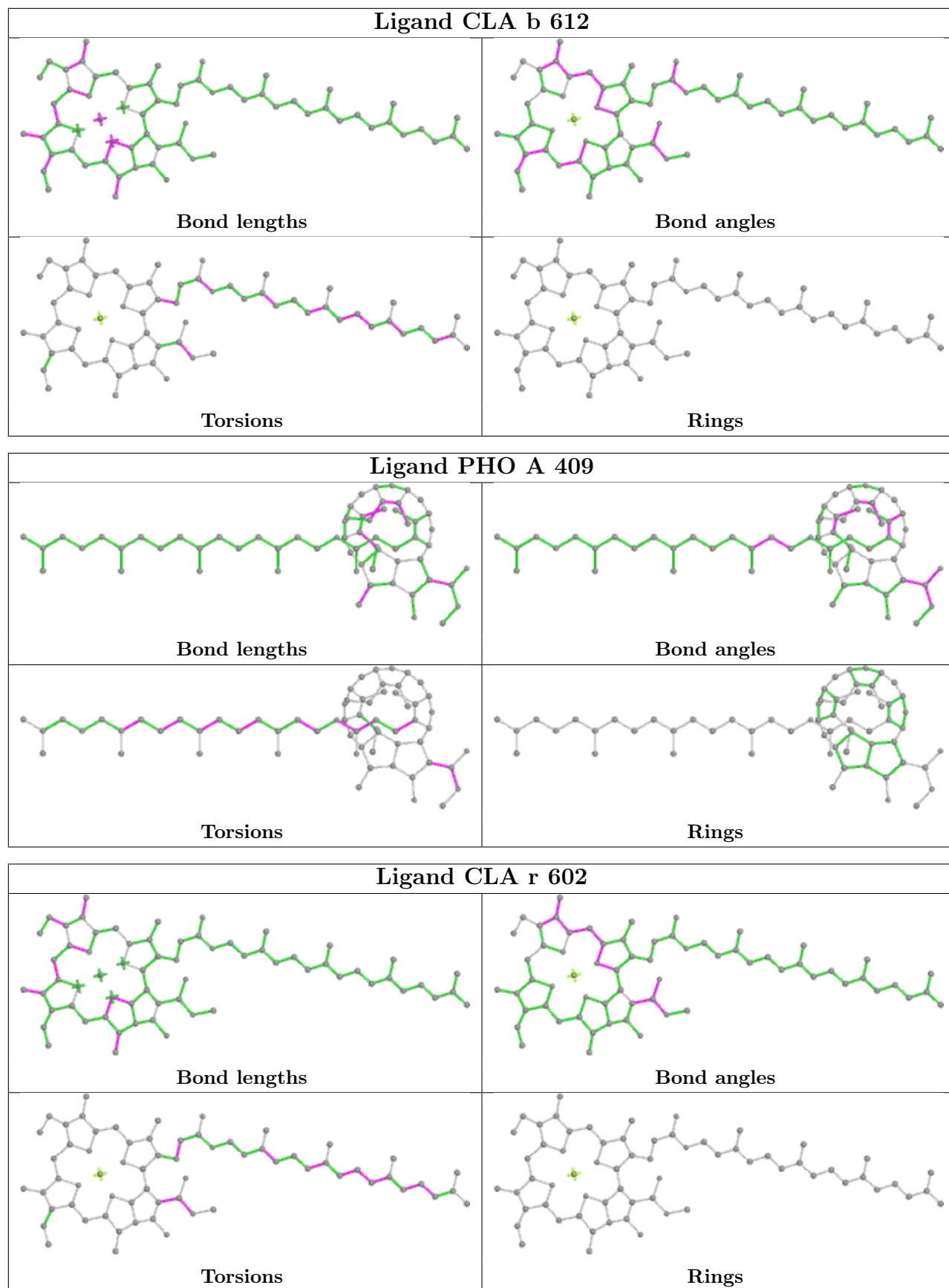


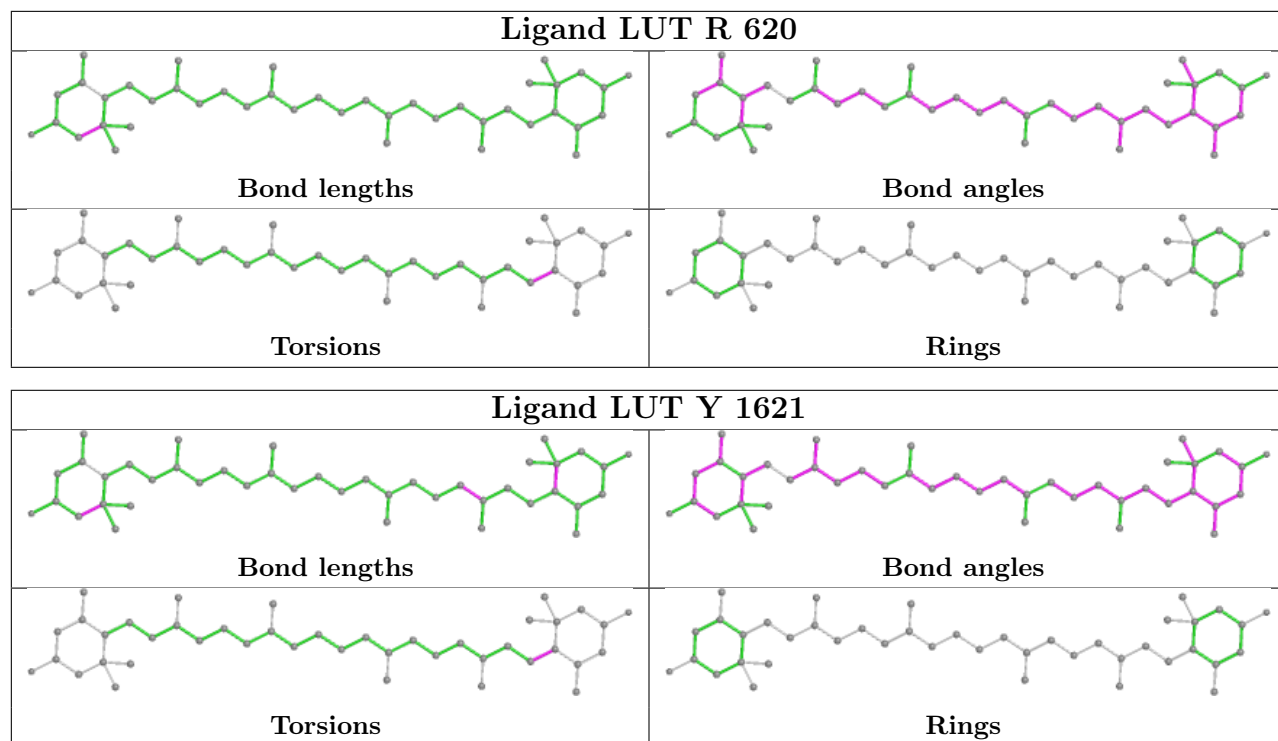


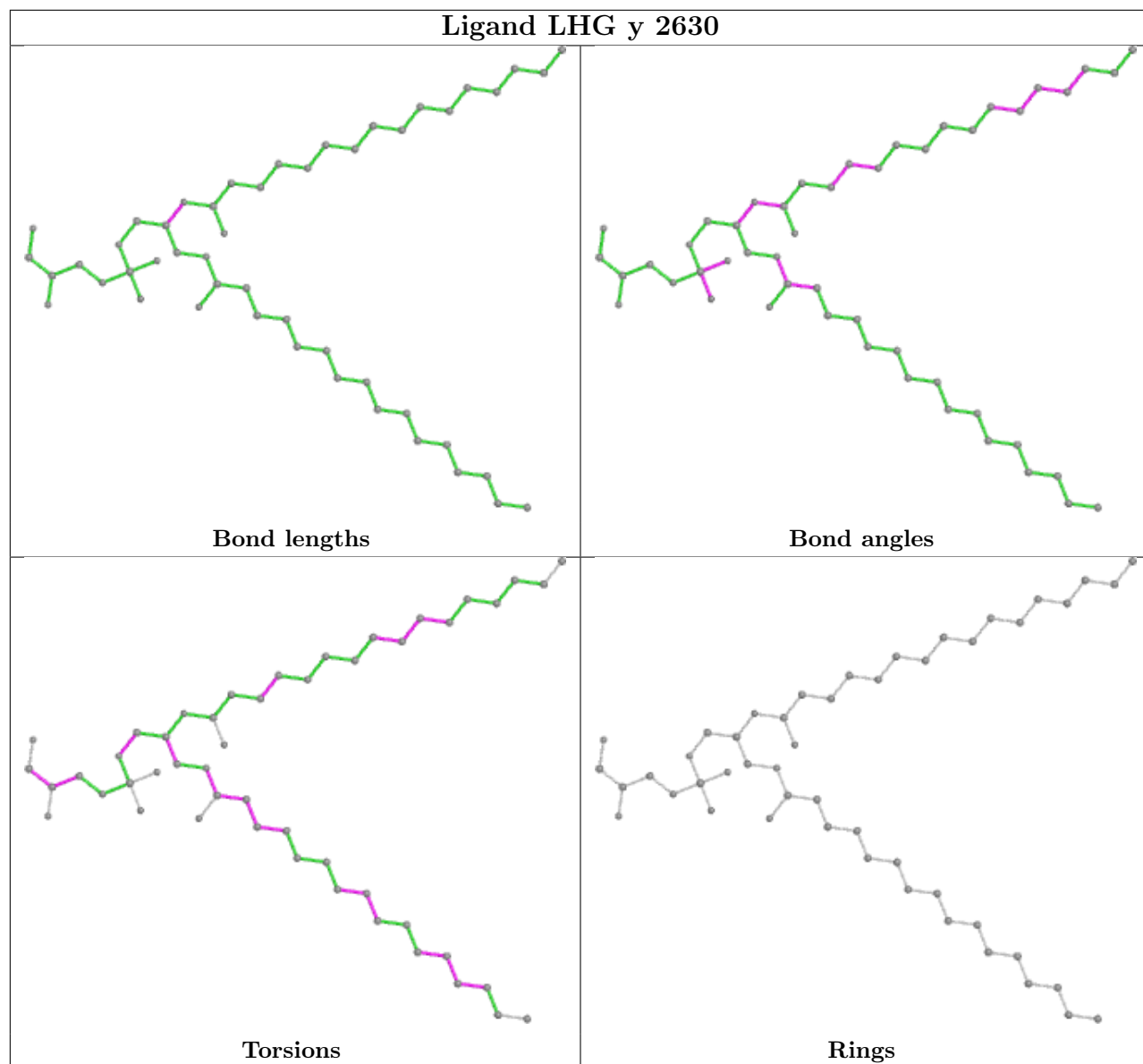


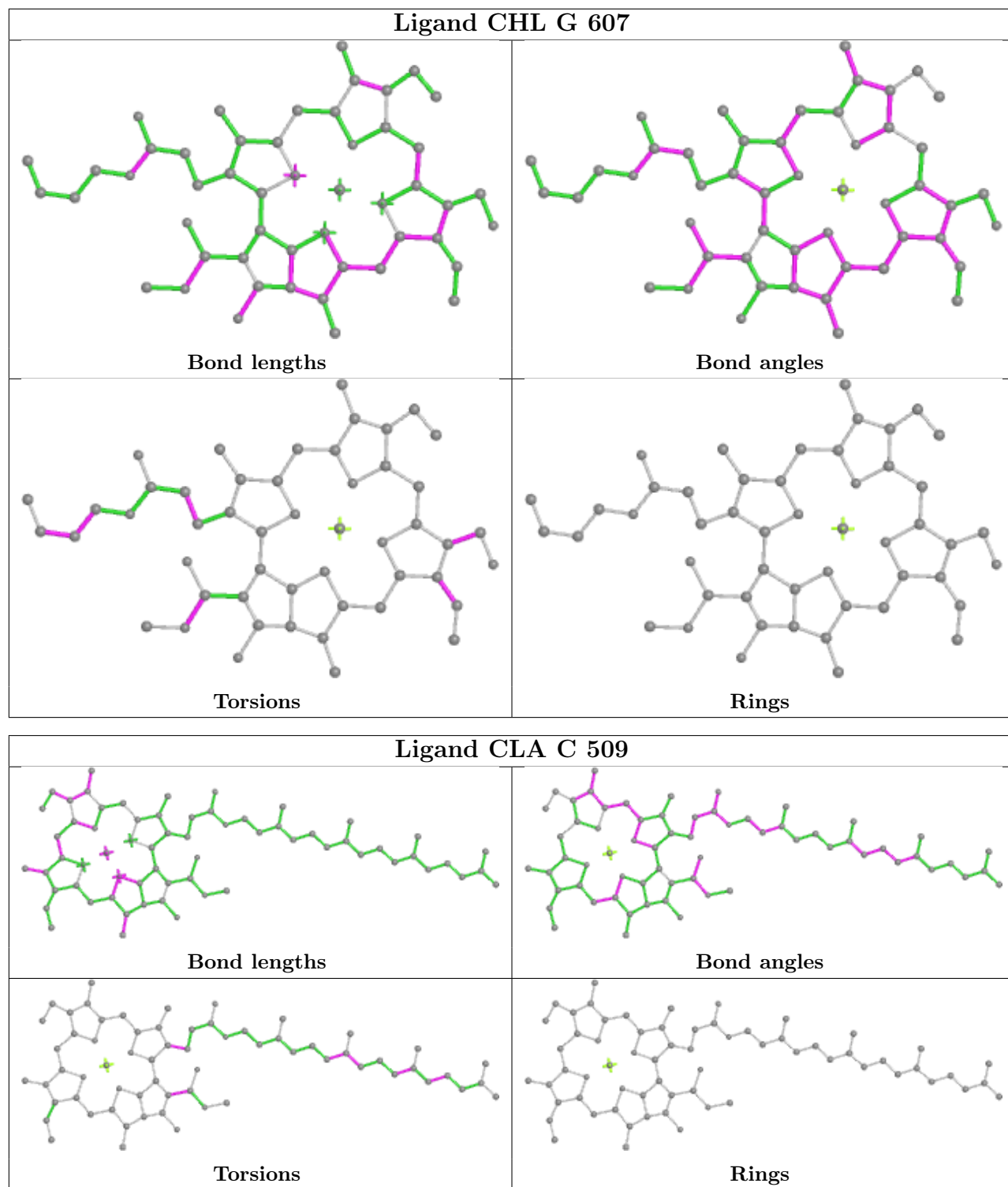


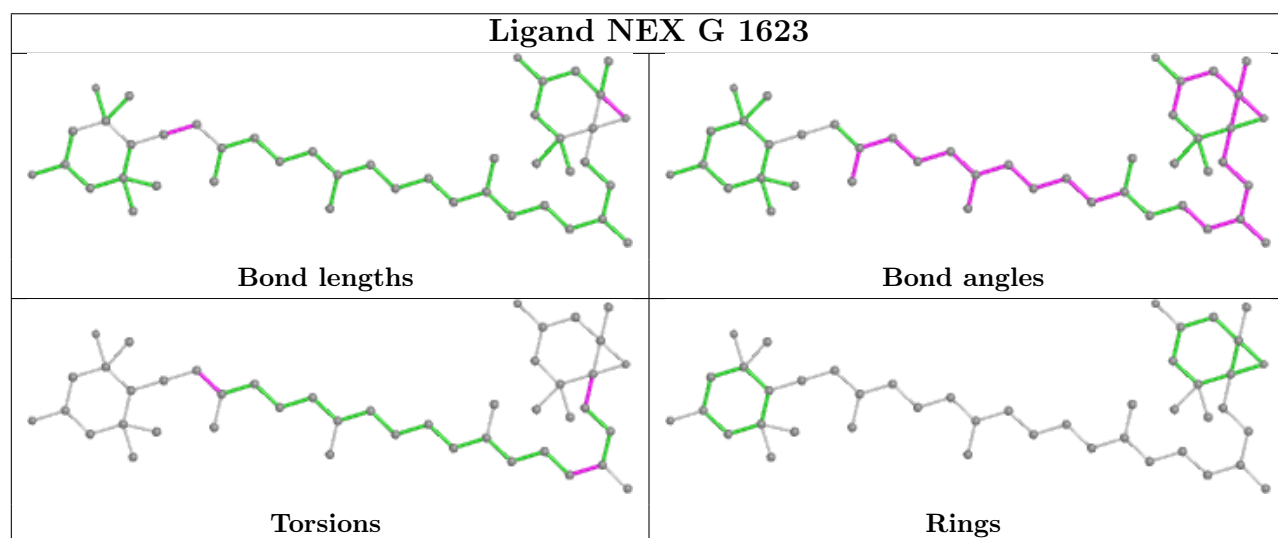
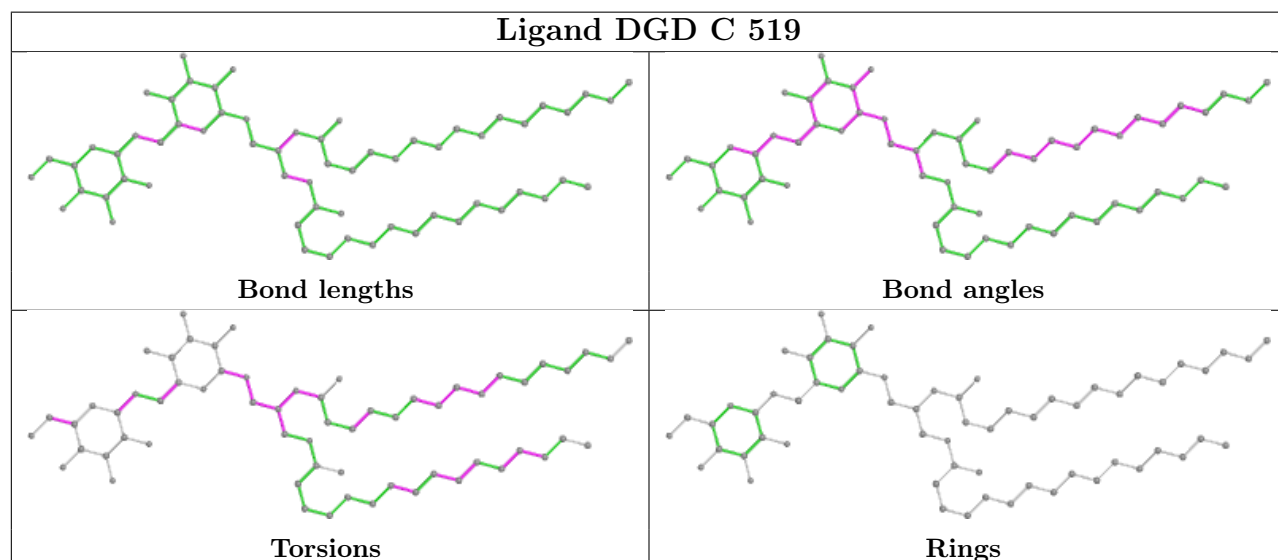
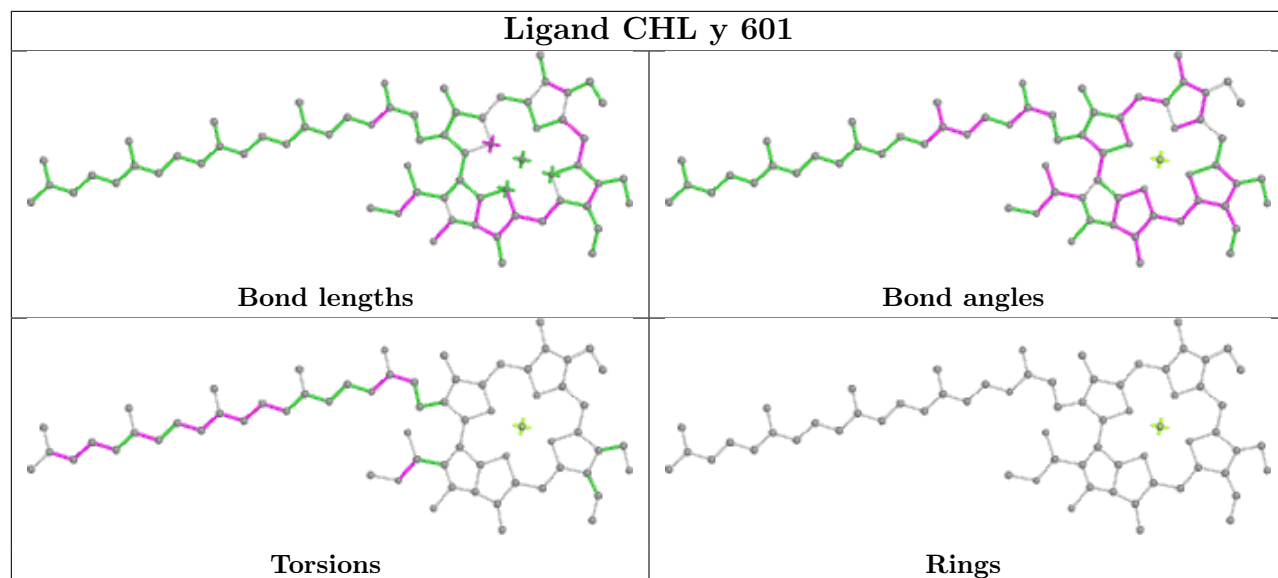


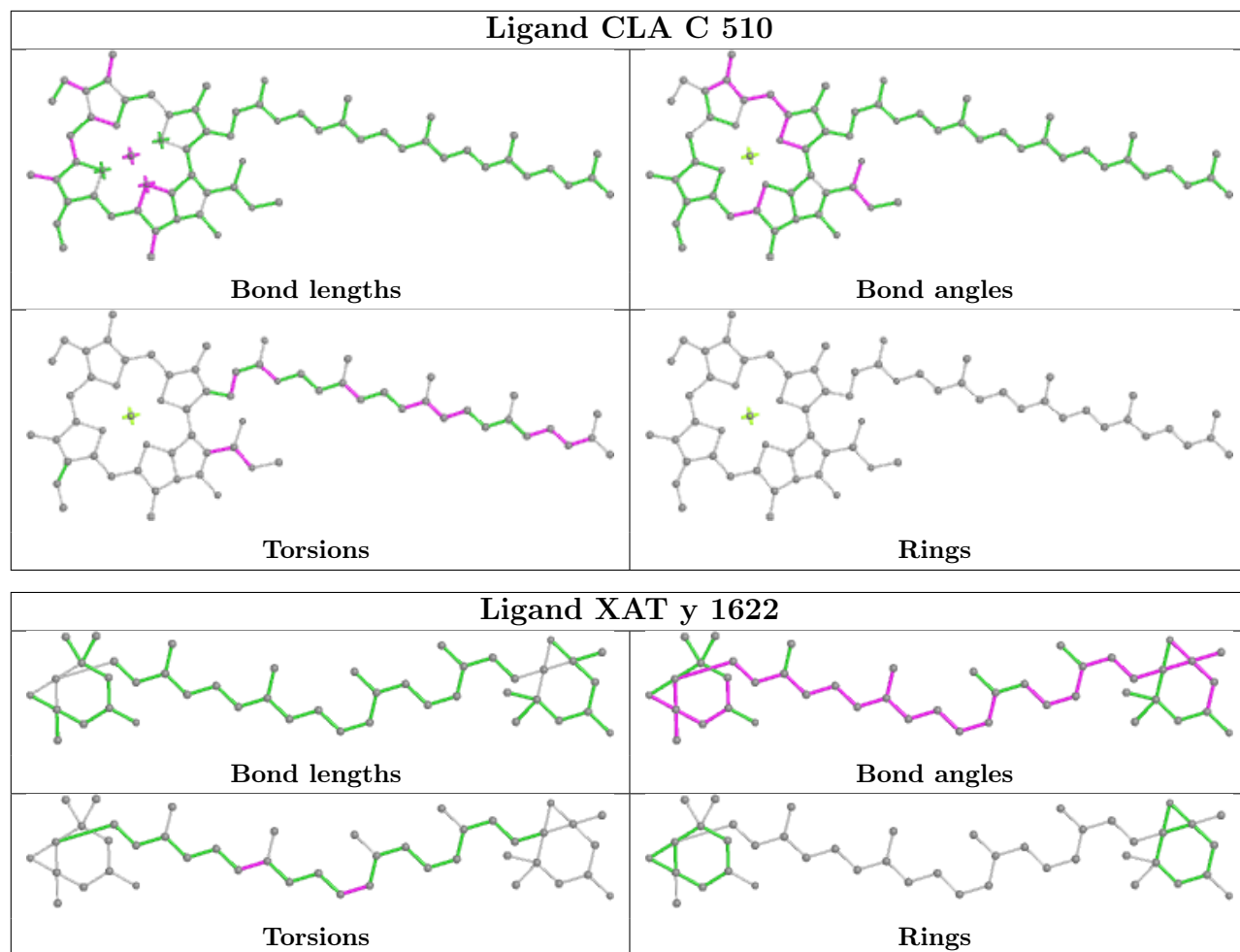


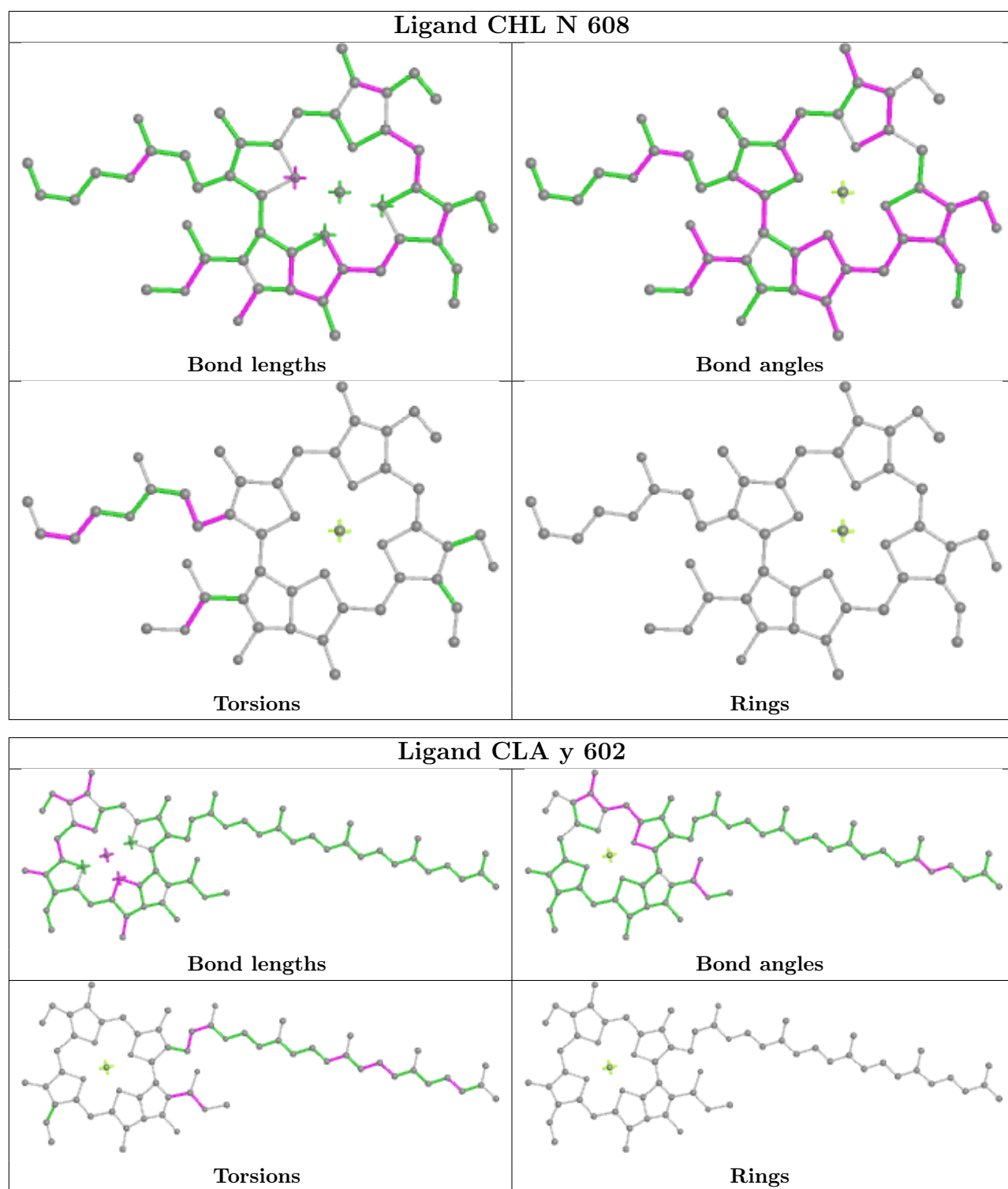


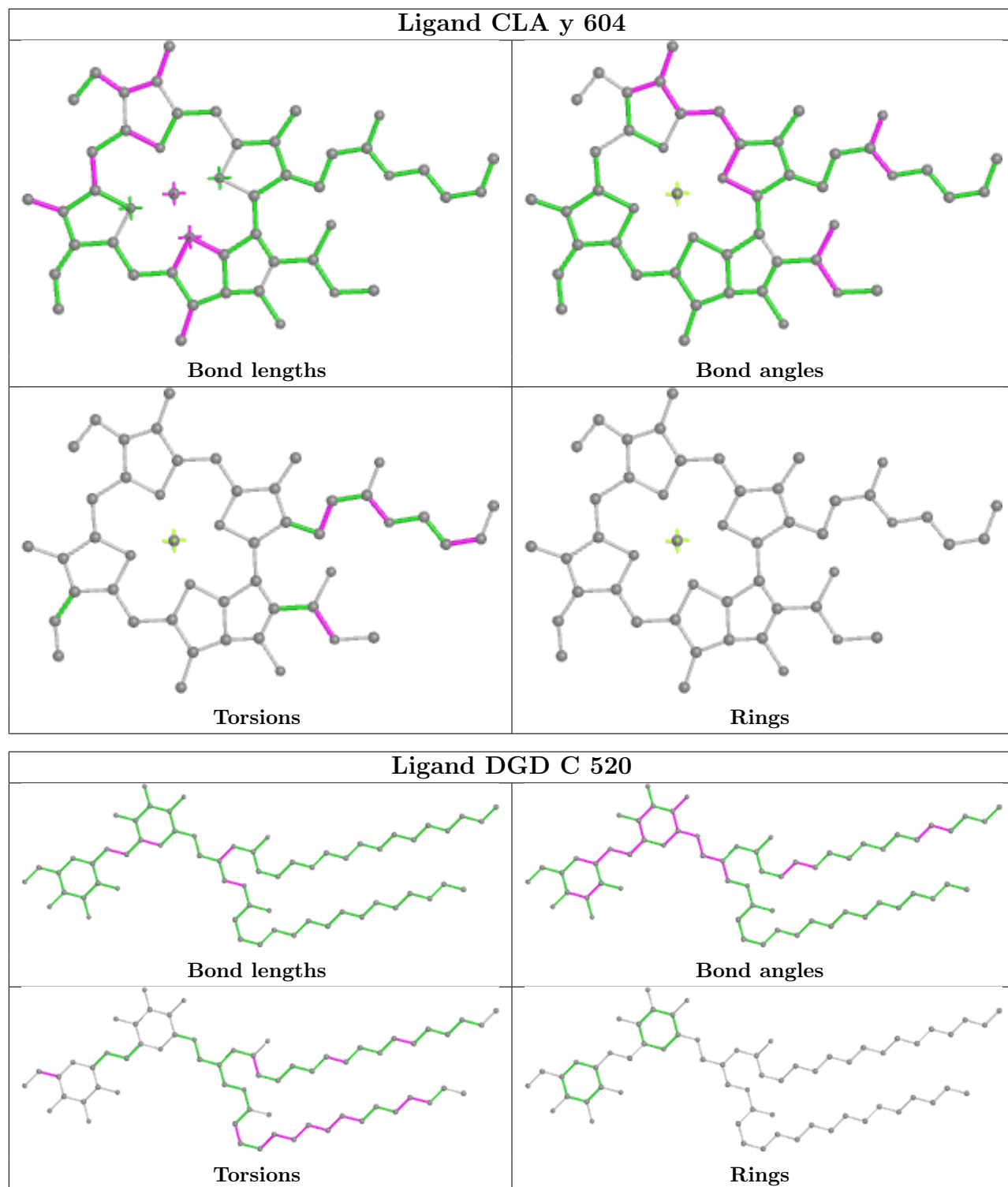


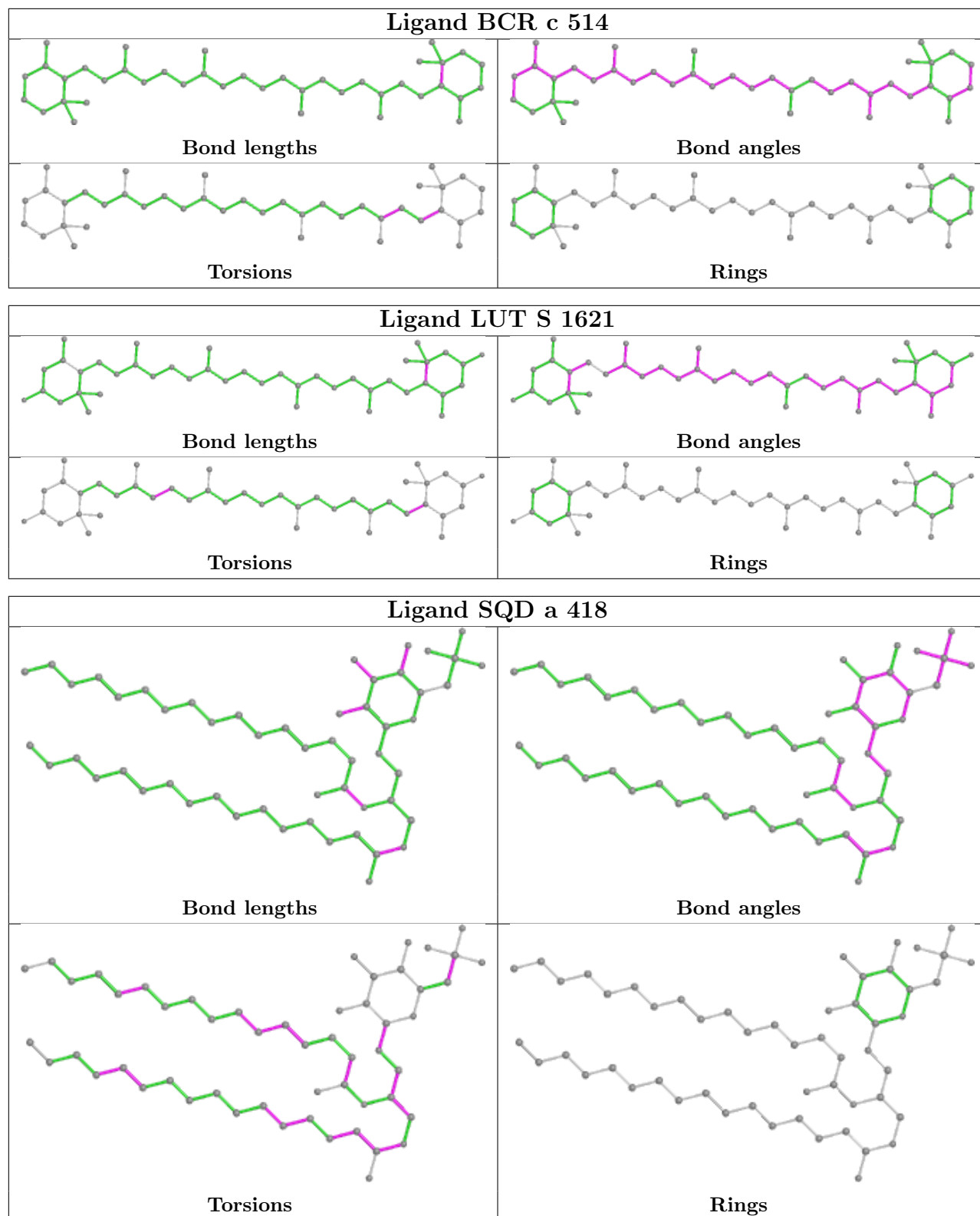


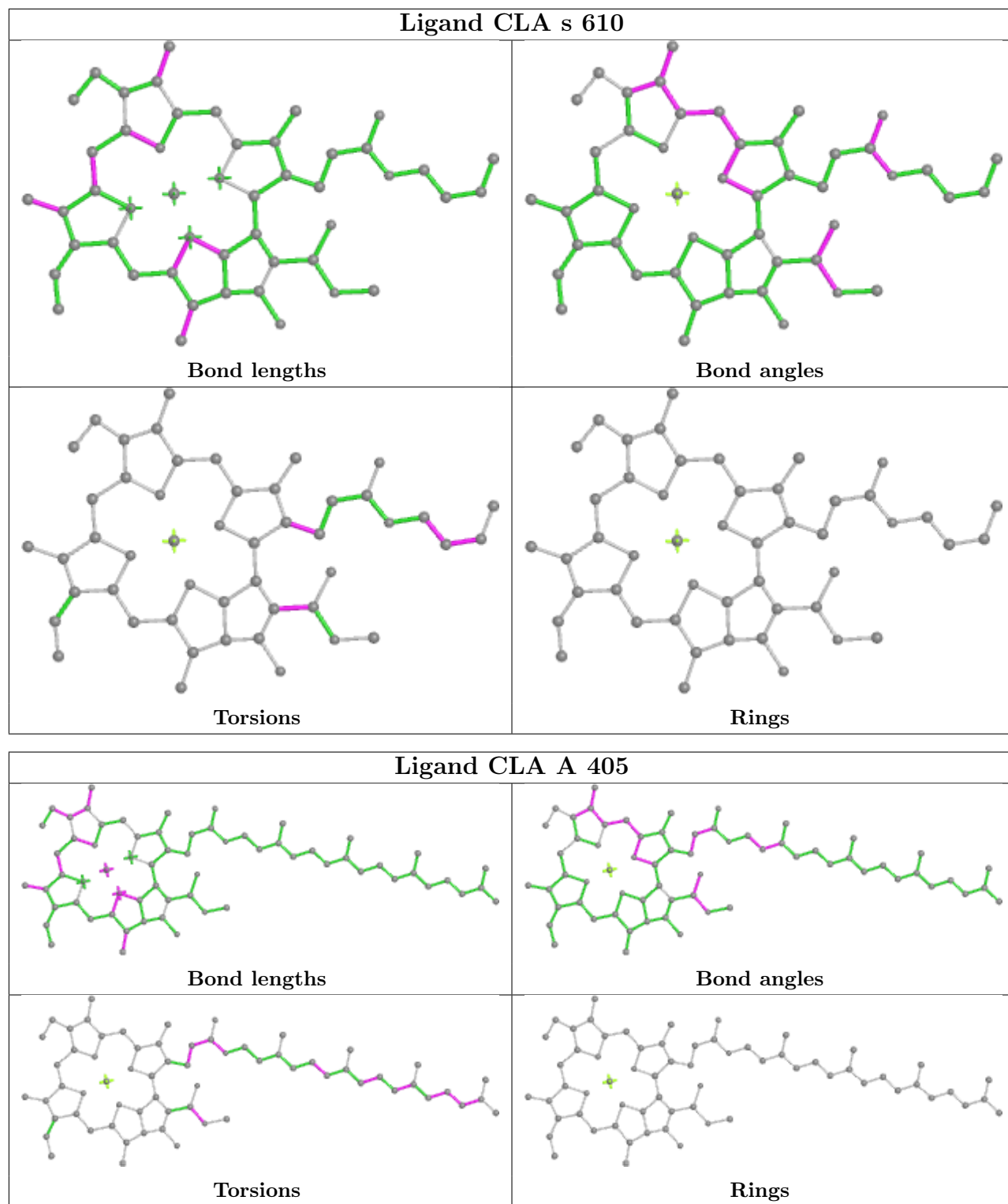


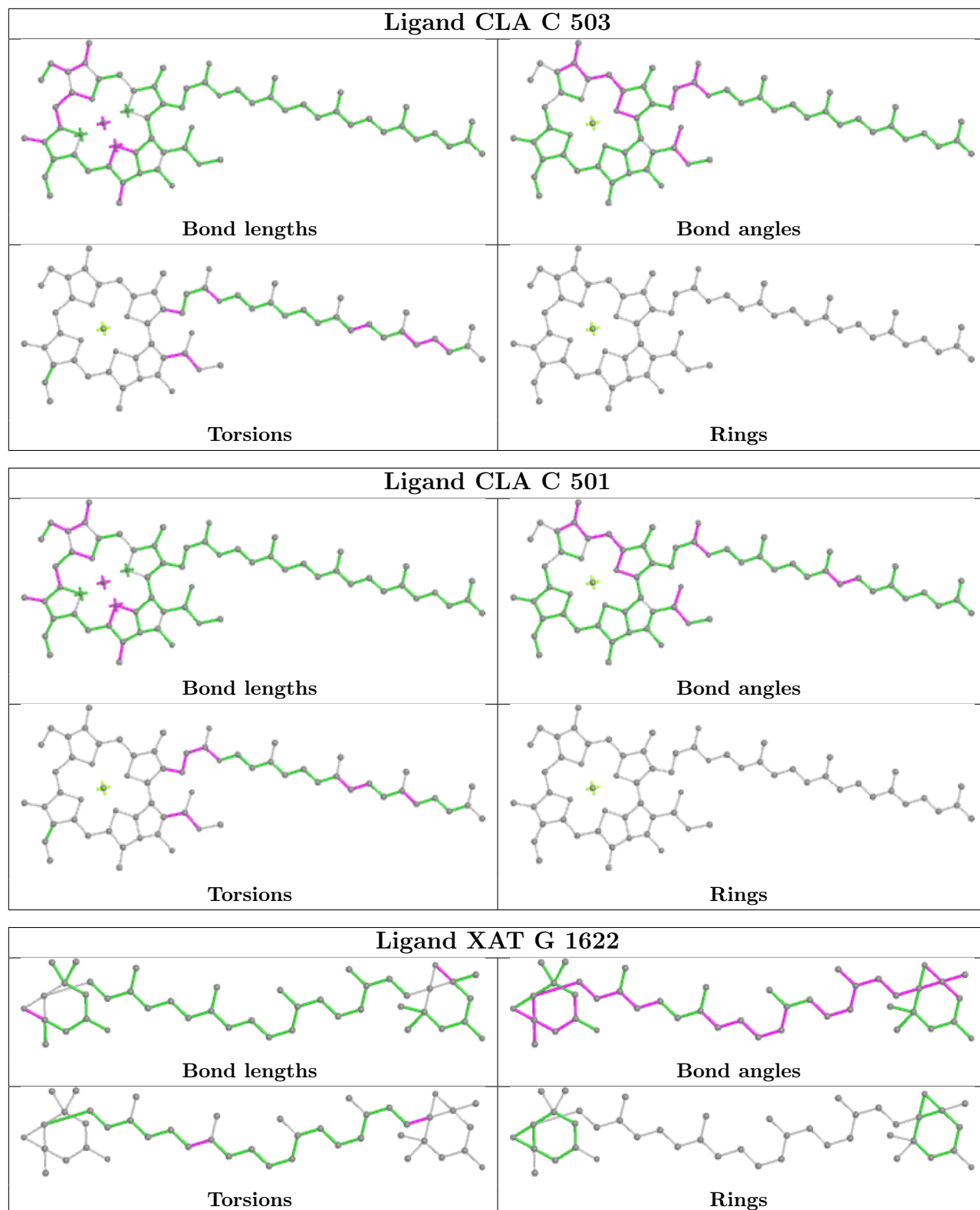


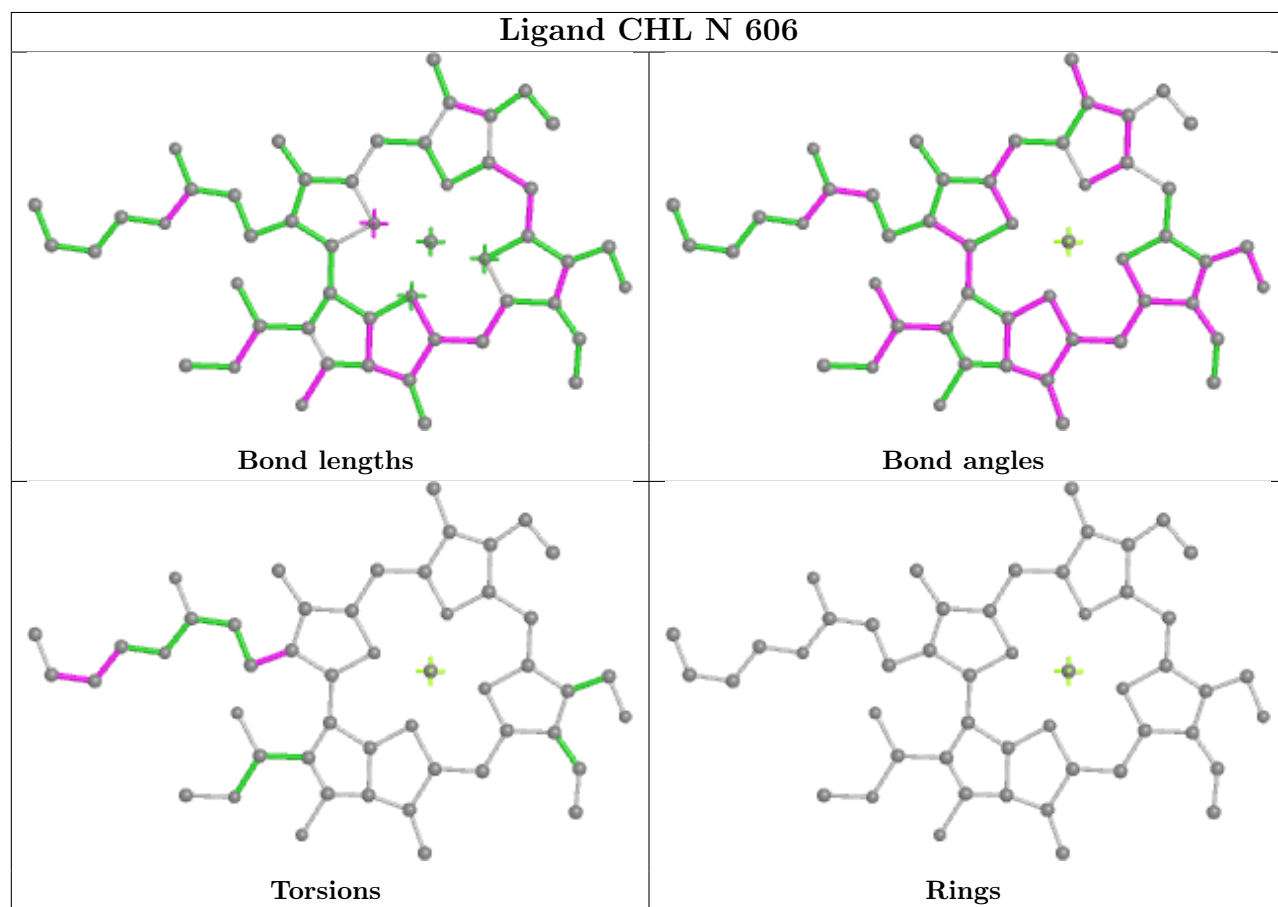
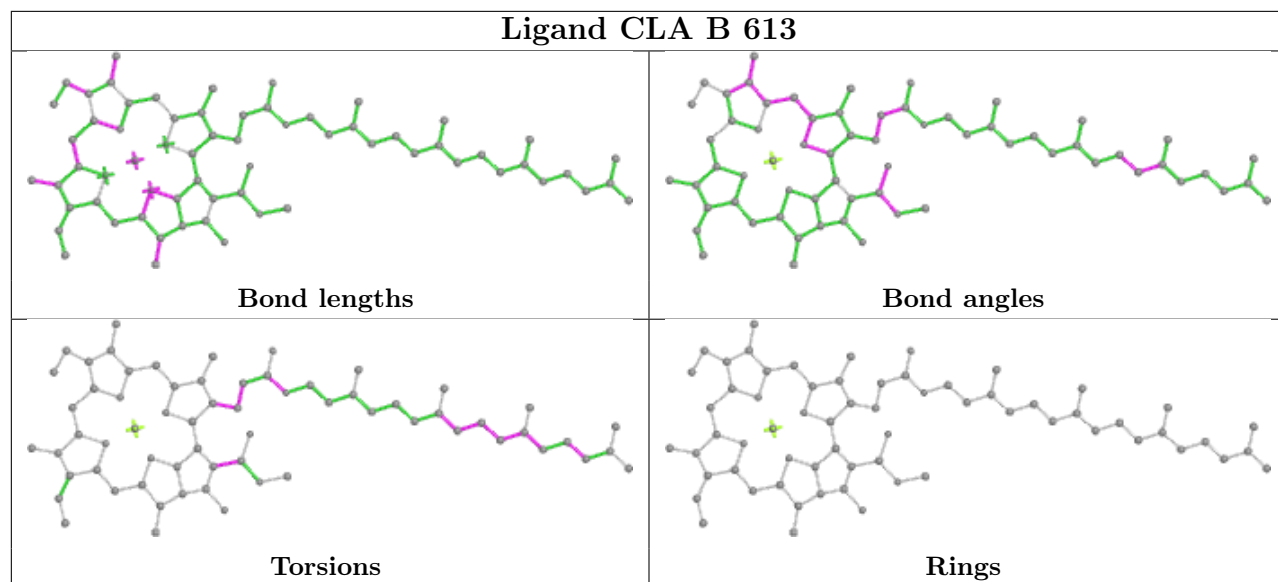


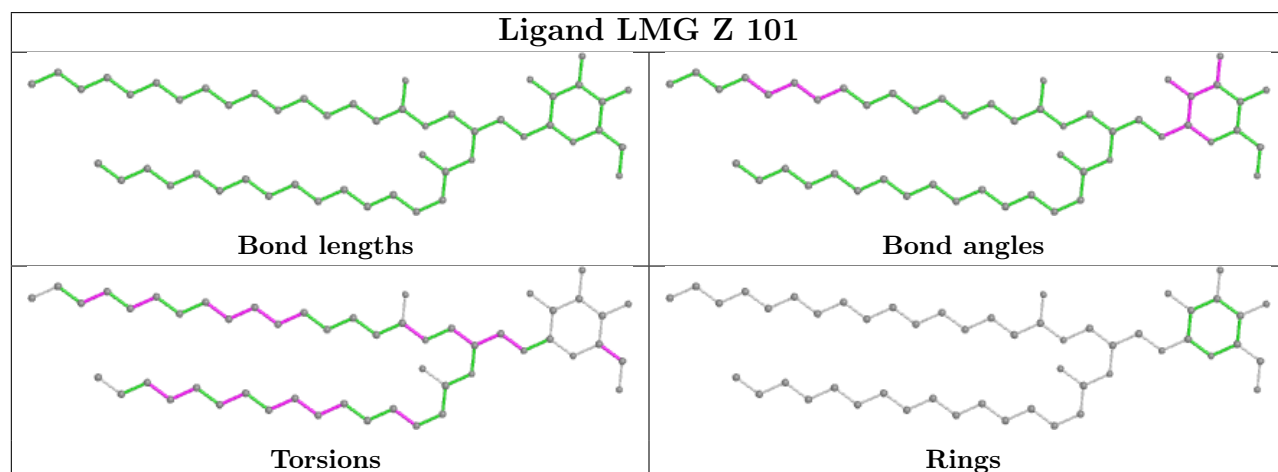
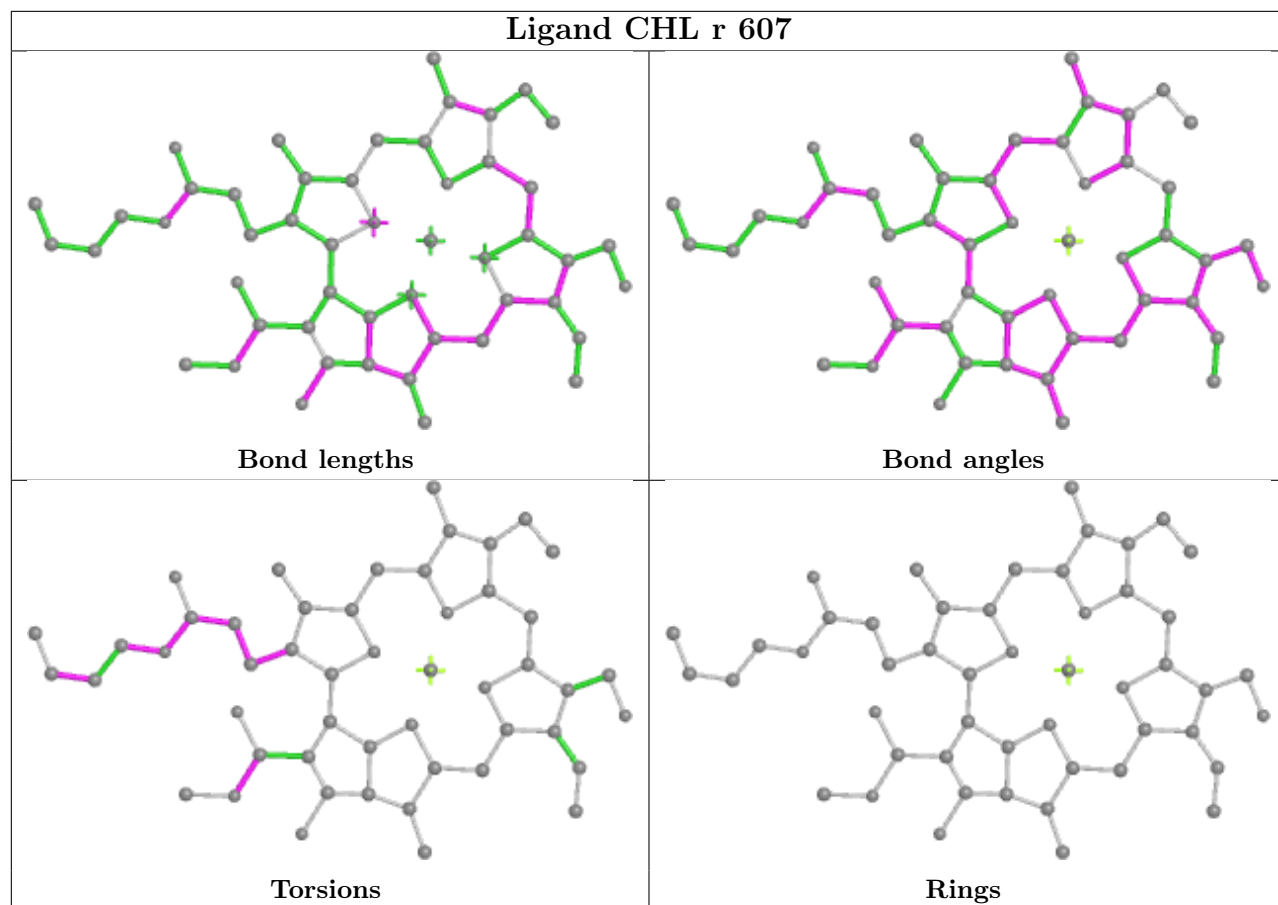
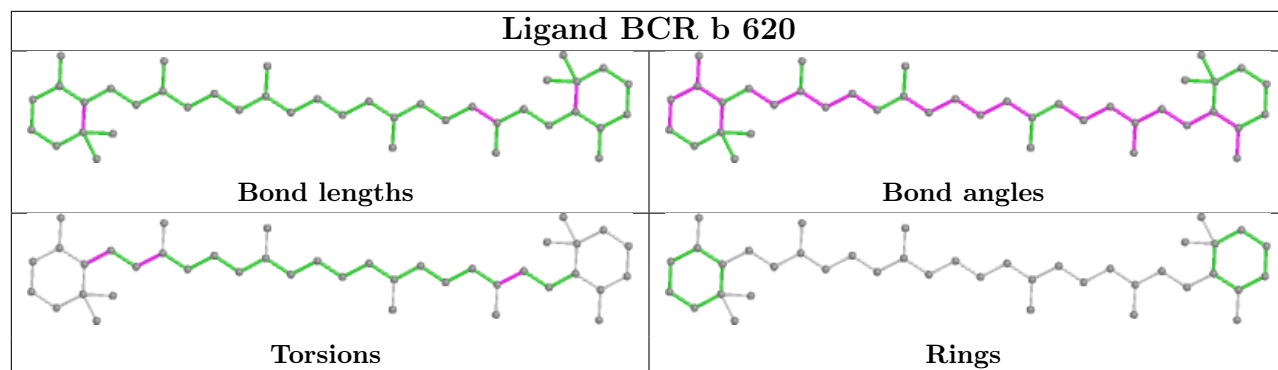


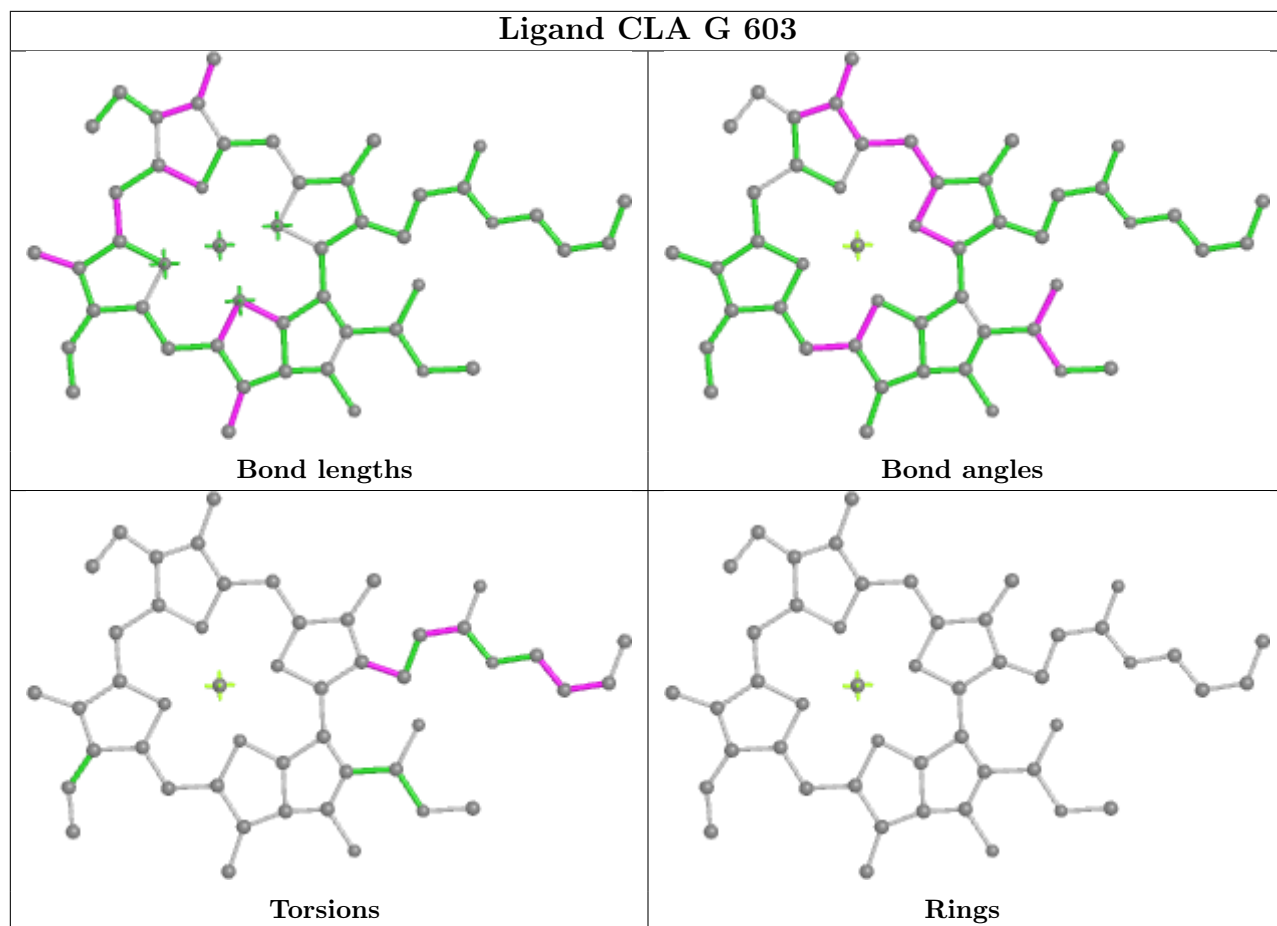


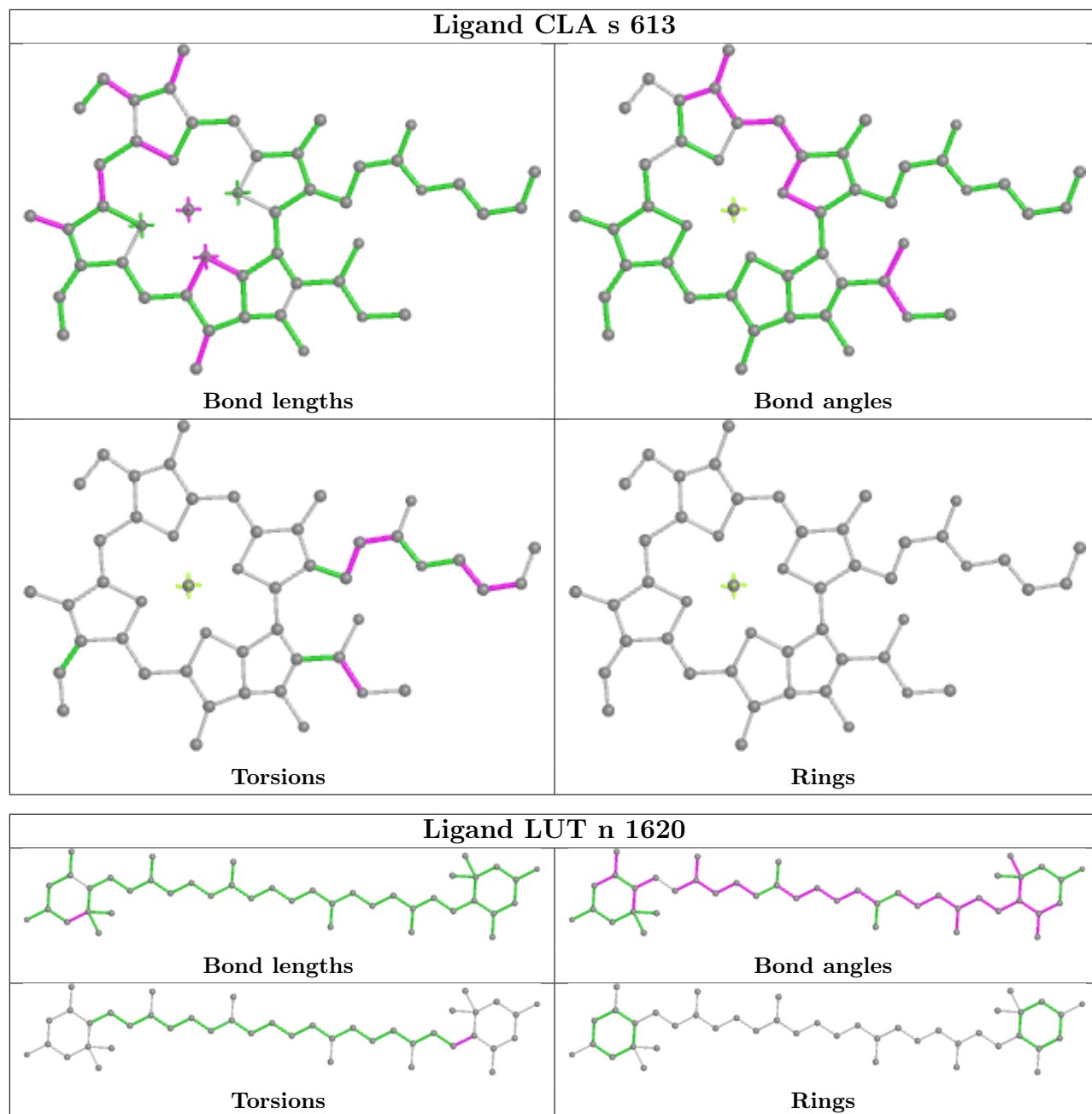


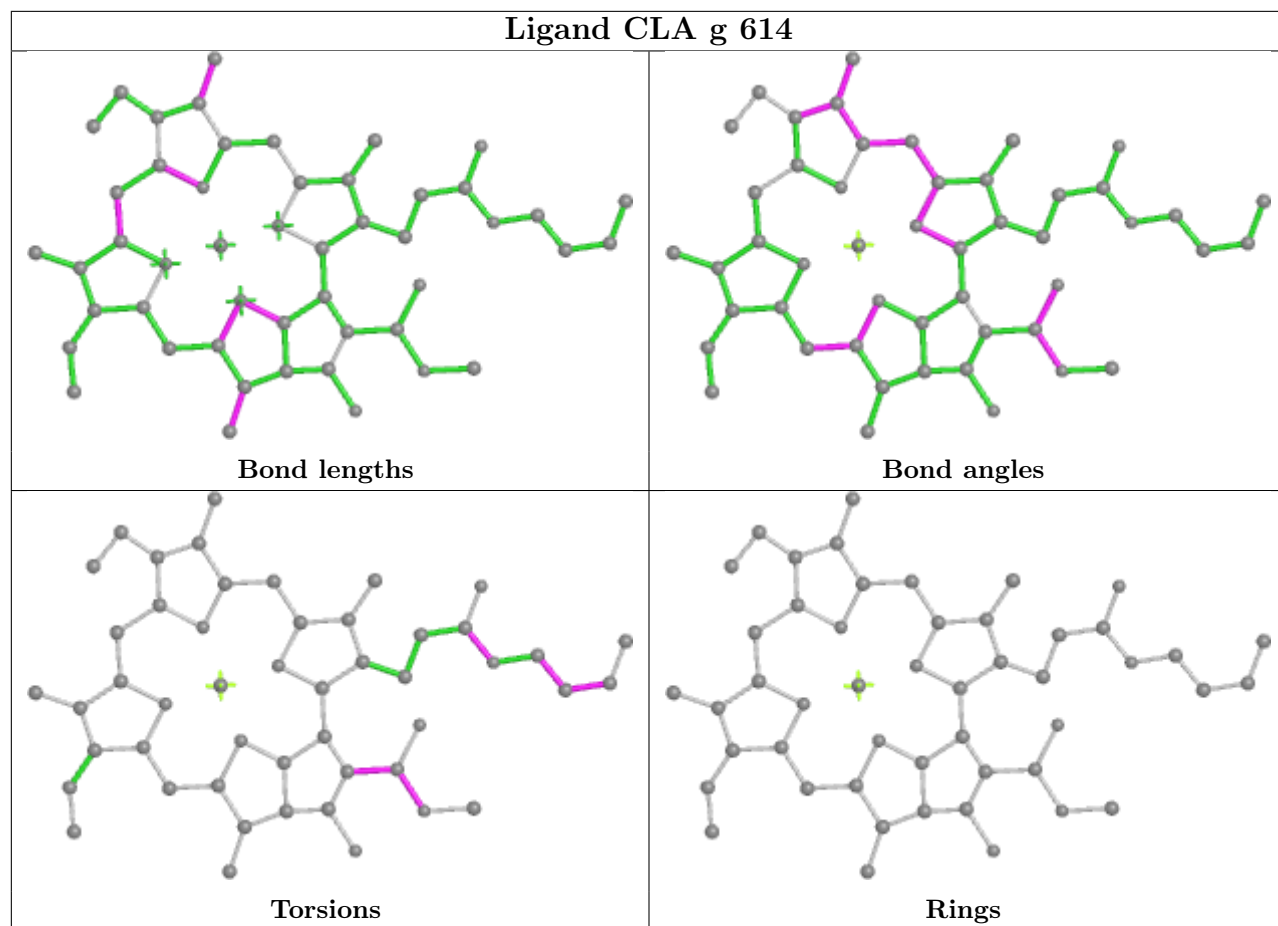


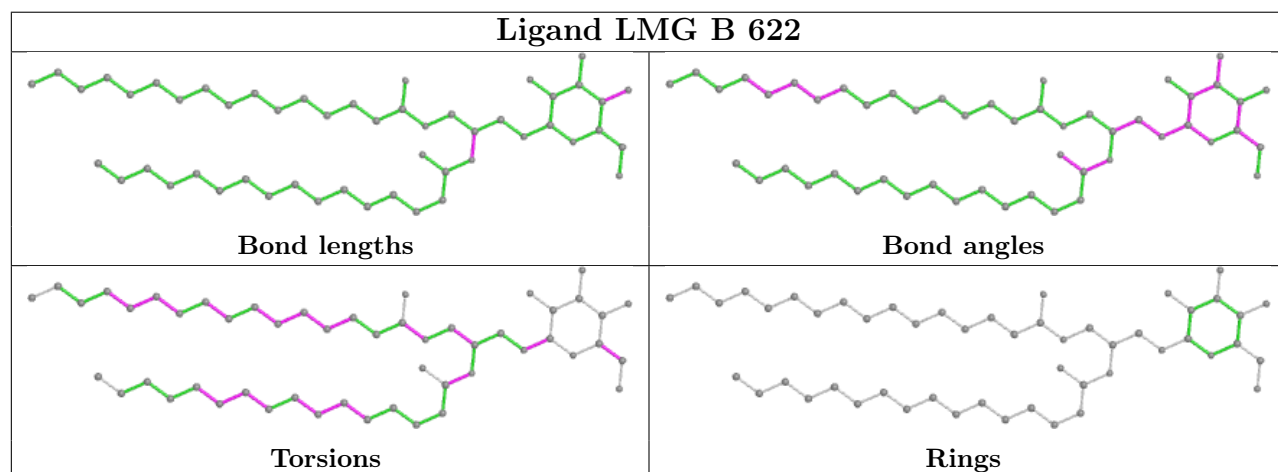
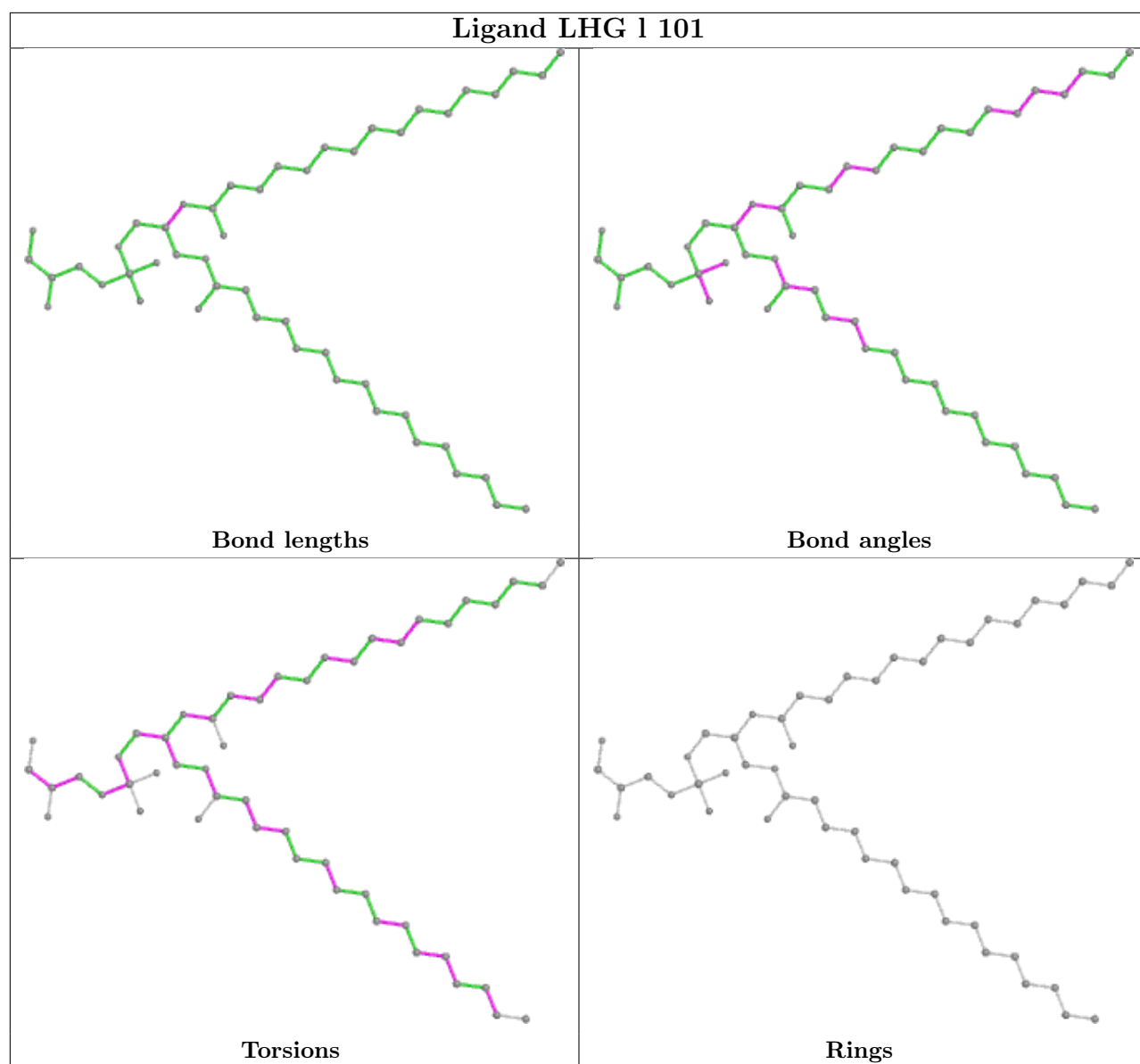


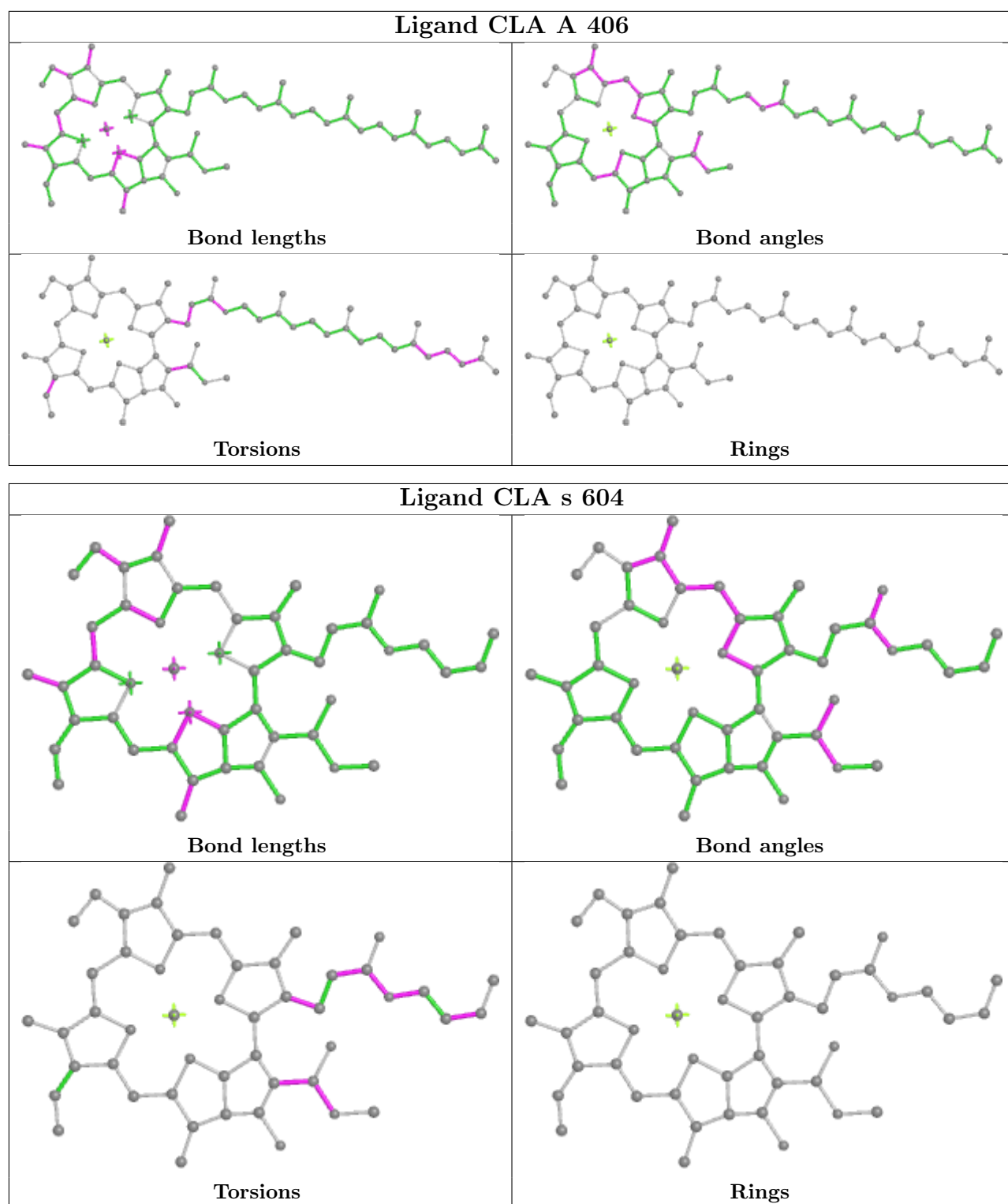












5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

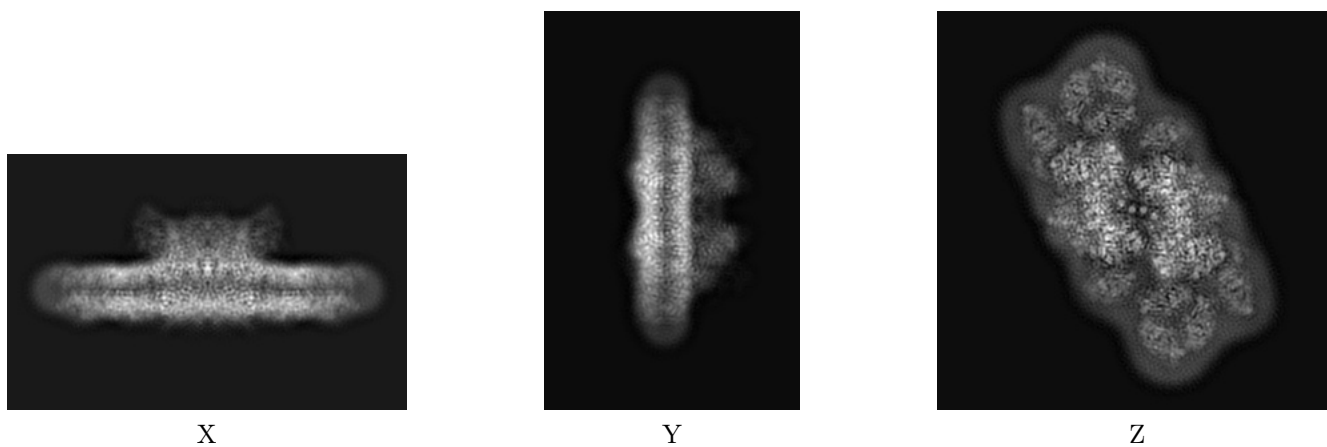
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-6617. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections [i](#)

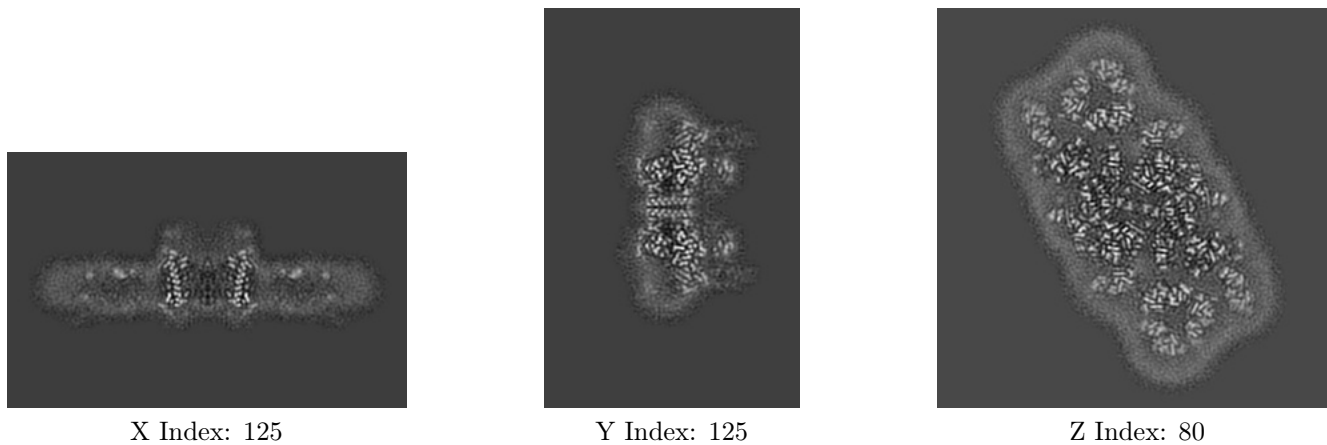
6.1.1 Primary map



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

6.2 Central slices [i](#)

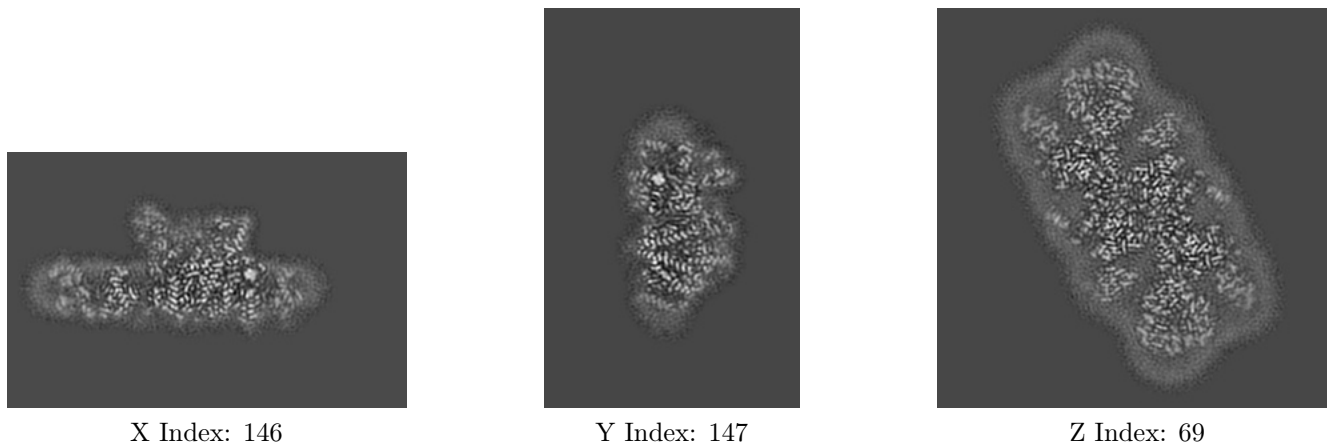
6.2.1 Primary map



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

6.3 Largest variance slices [i](#)

6.3.1 Primary map



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 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

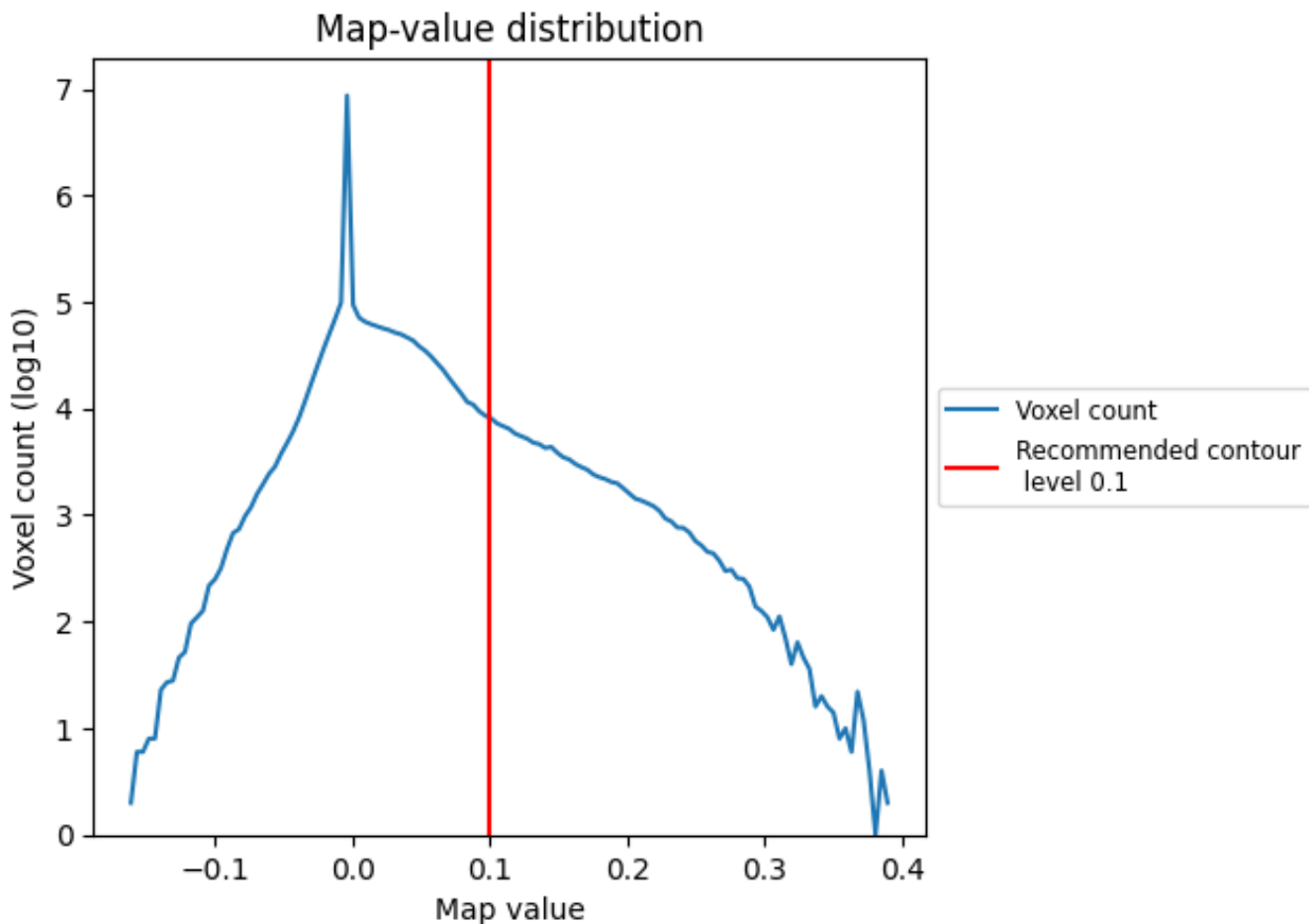
6.5 Mask visualisation

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

7 Map analysis [i](#)

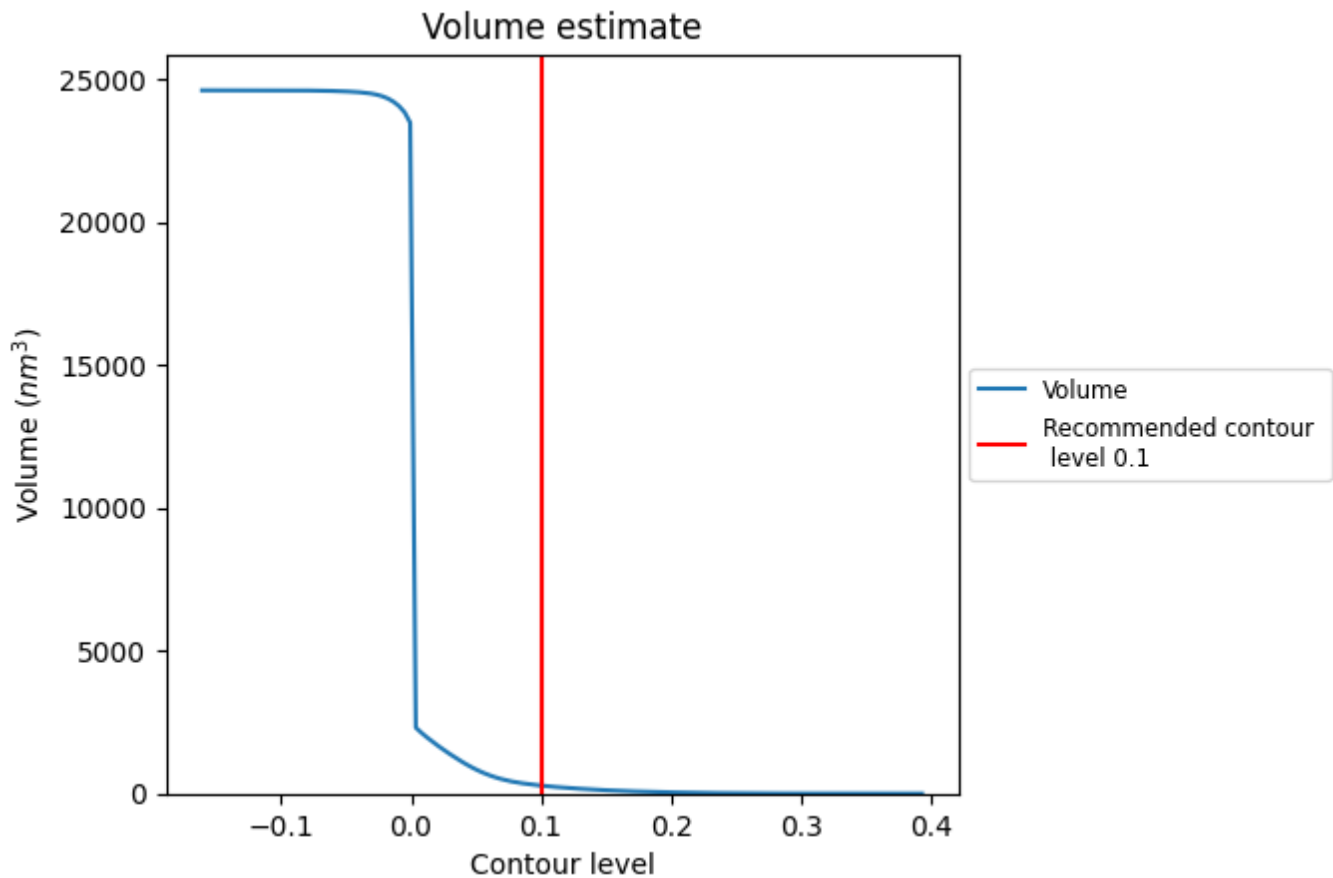
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

7.2 Volume estimate [\(i\)](#)



The volume at the recommended contour level is 279 nm³; this corresponds to an approximate mass of 252 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 [\(i\)](#)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

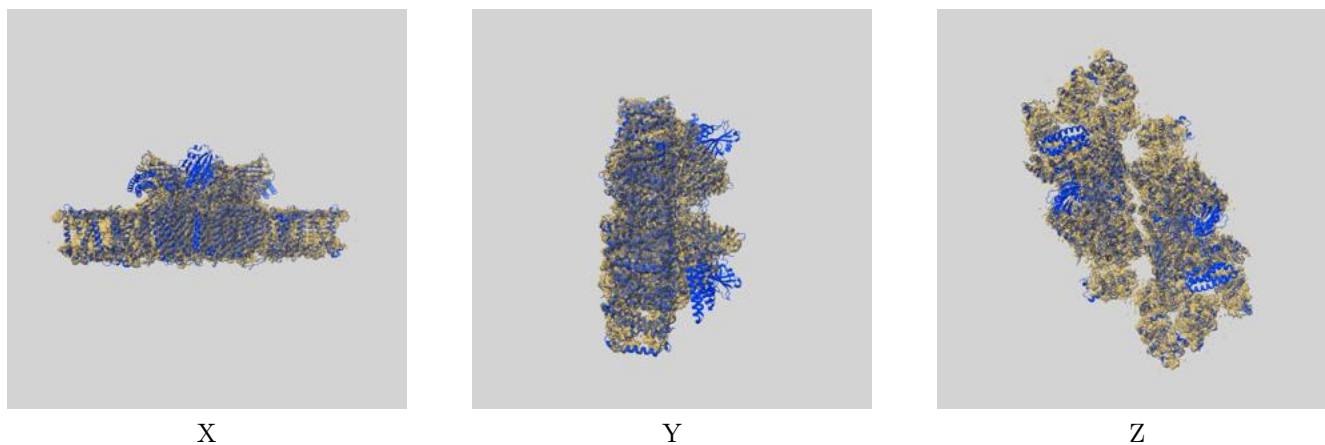
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

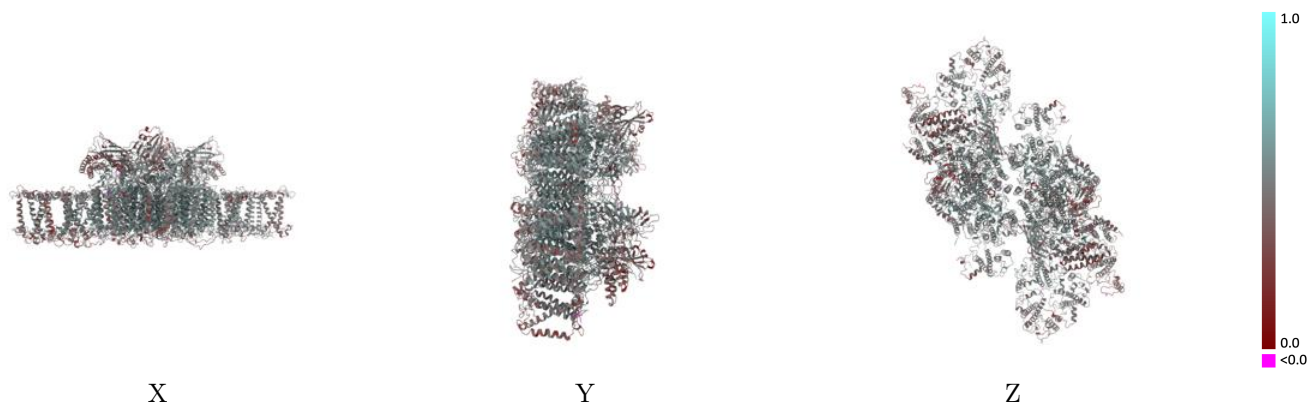
This section contains information regarding the fit between EMDB map EMD-6617 and PDB model 3JCU. Per-residue inclusion information can be found in section 3 on page 39.

9.1 Map-model overlay [i](#)



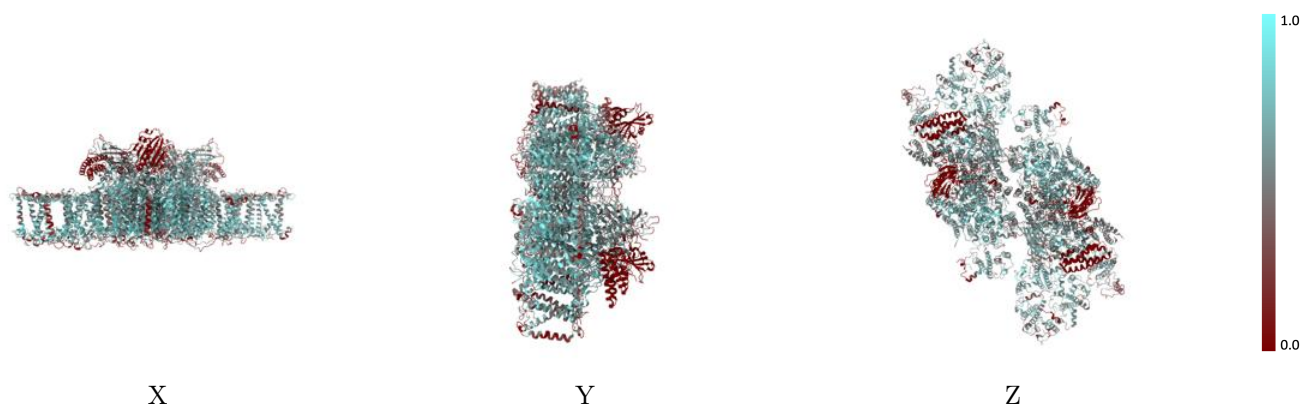
The images above show the 3D surface view of the map at the recommended contour level 0.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



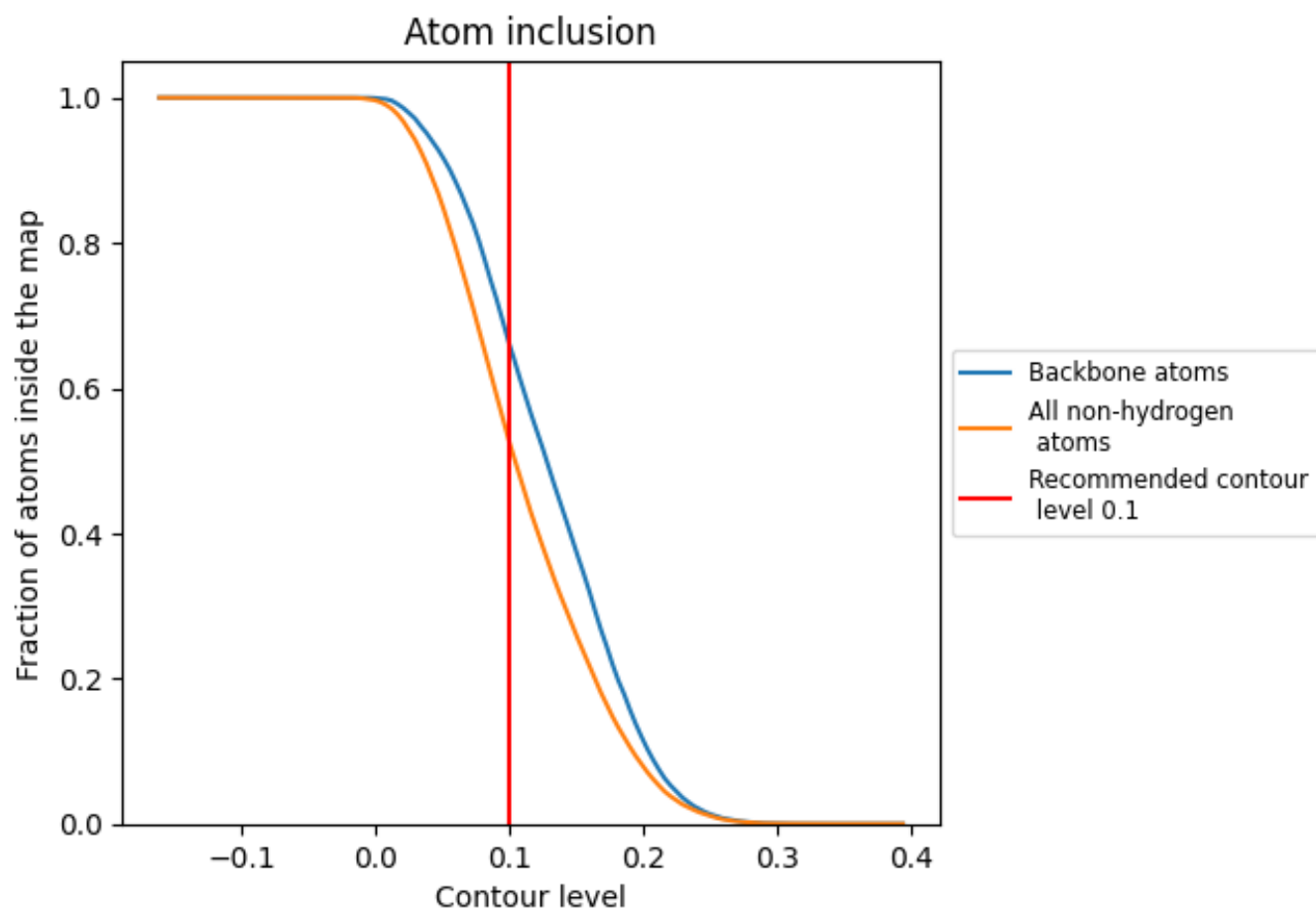
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.1).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 66% of all backbone atoms, 53% 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 (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5257	 0.4830
A	 0.6232	 0.5310
B	 0.6539	 0.5350
C	 0.6198	 0.5220
D	 0.6447	 0.5370
E	 0.5347	 0.4210
F	 0.5601	 0.4540
G	 0.5187	 0.4420
H	 0.5947	 0.5320
I	 0.6192	 0.5090
J	 0.1116	 0.3960
K	 0.5578	 0.4630
L	 0.5746	 0.5270
M	 0.4669	 0.4960
N	 0.5451	 0.4720
O	 0.3670	 0.4340
P	 0.0023	 0.3960
Q	 0.0044	 0.3390
R	 0.4518	 0.4510
S	 0.4441	 0.3950
T	 0.5579	 0.5170
U	 0.6310	 0.4660
W	 0.4915	 0.4880
X	 0.4959	 0.4600
Y	 0.6293	 0.5190
Z	 0.3897	 0.4340
a	 0.6235	 0.5310
b	 0.6543	 0.5350
c	 0.6185	 0.5210
d	 0.6450	 0.5360
e	 0.5363	 0.4210
f	 0.5601	 0.4530
g	 0.5175	 0.4440
h	 0.5947	 0.5310
i	 0.6192	 0.5140



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Chain	Atom inclusion	Q-score
j	 0.1116	 0.3980
k	 0.5611	 0.4620
l	 0.5746	 0.5280
m	 0.4669	 0.4950
n	 0.5427	 0.4720
o	 0.3664	 0.4350
p	 0.0023	 0.3950
q	 0.0044	 0.3370
r	 0.4518	 0.4510
s	 0.4441	 0.3940
t	 0.5579	 0.5200
u	 0.6310	 0.4680
w	 0.4939	 0.4870
x	 0.4959	 0.4640
y	 0.6297	 0.5180
z	 0.3897	 0.4340