



# Full wwPDB X-ray Structure Validation Report ⓘ

Aug 9, 2023 – 01:59 PM EDT

PDB ID : 8F4H  
Title : RT XFEL structure of Photosystem II 1200 microseconds after the third illumination at 2.10 Angstrom resolution  
Authors : Bhowmick, A.; Hussein, R.; Bogacz, I.; Simon, P.S.; Ibrahim, M.; Chatterjee, R.; Doyle, M.D.; Cheah, M.H.; Fransson, T.; Chernev, P.; Kim, I.-S.; Makita, H.; Dasgupta, M.; Kaminsky, C.J.; Zhang, M.; Gatcke, J.; Haupt, S.; Nangca, I.I.; Keable, S.M.; Aydin, O.; Tono, K.; Owada, S.; Gee, L.B.; Fuller, F.D.; Batyuk, A.; Alonso-Mori, R.; Holton, J.M.; Paley, D.W.; Moriarty, N.W.; Mamedov, F.; Adams, P.D.; Brewster, A.S.; Dobbek, H.; Sauter, N.K.; Bergmann, U.; Zouni, A.; Messinger, J.; Kern, J.; Yano, J.; Yachandra, V.K.  
Deposited on : 2022-11-10  
Resolution : 2.10 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

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>.

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : 2.35

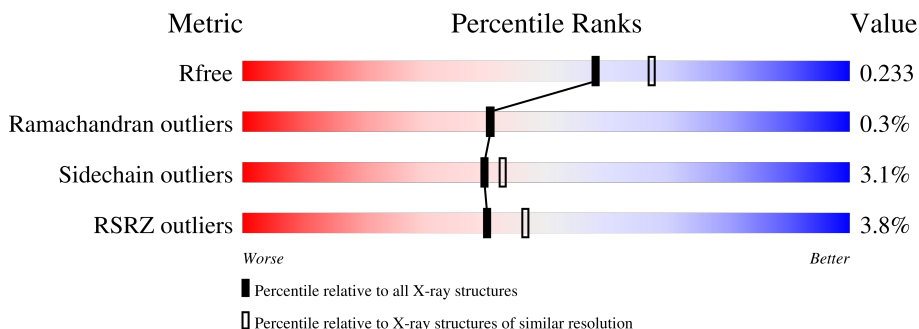
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.10 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)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	5197 (2.10-2.10)
Ramachandran outliers	138981	5647 (2.10-2.10)
Sidechain outliers	138945	5648 (2.10-2.10)
RSRZ outliers	127900	5083 (2.10-2.10)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	344	
1	a	344	

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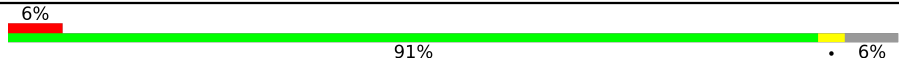
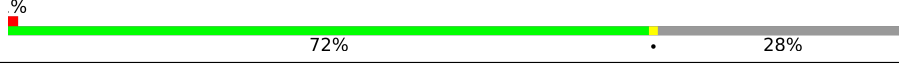
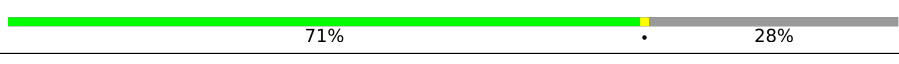


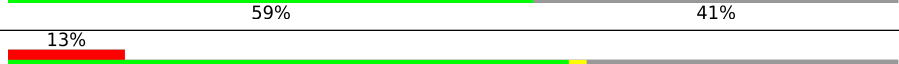
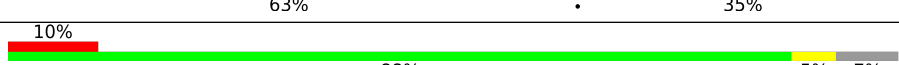
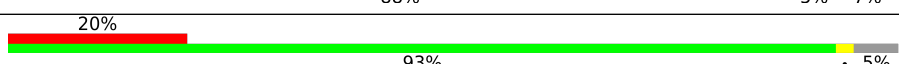
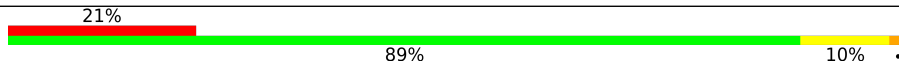
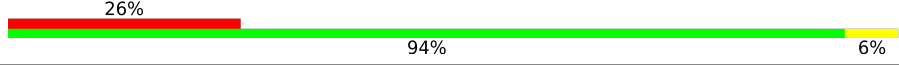

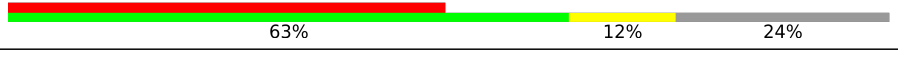

buster-report : 1.1.7 (2018)  
 Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
 Refmac : 5.8.0158  
 CCP4 : 7.0.044 (Gargrove)  
 Ideal geometry (proteins) : Engh & Huber (2001)  
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
 Validation Pipeline (wwPDB-VP) : 2.35

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Mol	Chain	Length	Quality of chain
2	B	510	2% 97%
2	b	510	3% 97%
3	C	461	94%
3	c	461	% 95%
4	D	352	% 96%
4	d	352	% 95%
5	E	84	10% 95%
5	e	84	5% 94%
6	F	45	7% 76% 24%
6	f	45	2% 76% 24%
7	H	66	5% 95%
7	h	66	5% 88% 8% 5%
8	I	38	3% 84% 11% 5%
8	i	38	3% 92% 5%
9	J	40	10% 88% 10%
9	j	40	18% 88% 10%
10	K	46	2% 78% 20%
10	k	46	74% 7% 20%
11	L	37	3% 100%
11	l	37	89% 8%
12	M	36	3% 89% 8%
12	m	36	86% 11%
13	O	272	4% 86% 10%
13	o	272	4% 87% 10%
14	T	32	3% 91% 6%

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Mol	Chain	Length	Quality of chain
14	t	32	
15	U	134	
15	u	134	
16	V	163	
16	v	163	
17	Y	46	
17	y	46	
18	X	41	
18	x	41	
19	Z	62	
19	z	62	
20	R	41	
20	r	41	

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
26	CLA	A	607	X	-	-	-
26	CLA	A	608	X	-	-	-
26	CLA	A	610	X	-	-	-
26	CLA	A	613	X	-	-	-
26	CLA	B	601	X	-	-	-
26	CLA	B	602	X	-	-	-
26	CLA	B	603	X	-	-	-
26	CLA	B	604	X	-	-	-
26	CLA	B	605	X	-	-	-
26	CLA	B	606	X	-	-	-
26	CLA	B	607	X	-	-	-
26	CLA	B	608	X	-	-	-
26	CLA	B	610	X	-	-	-
26	CLA	B	611	X	-	-	-
26	CLA	B	612	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
26	CLA	B	613	X	-	-	-
26	CLA	B	614	X	-	-	-
26	CLA	B	615	X	-	-	-
26	CLA	B	616	X	-	-	-
26	CLA	C	501	X	-	-	-
26	CLA	C	502	X	-	-	-
26	CLA	C	503	X	-	-	-
26	CLA	C	504	X	-	-	-
26	CLA	C	505	X	-	-	-
26	CLA	C	506	X	-	-	-
26	CLA	C	507	X	-	-	-
26	CLA	C	509	X	-	-	-
26	CLA	C	510	X	-	-	-
26	CLA	C	511	X	-	-	-
26	CLA	C	512	X	-	-	-
26	CLA	C	513	X	-	-	-
26	CLA	D	402	X	-	-	-
26	CLA	a	606	X	-	-	-
26	CLA	a	607	X	-	-	-
26	CLA	a	609	X	-	-	-
26	CLA	a	612	X	-	-	-
26	CLA	b	601	X	-	-	-
26	CLA	b	602	X	-	-	-
26	CLA	b	603	X	-	-	-
26	CLA	b	605	X	-	-	-
26	CLA	b	606	X	-	-	-
26	CLA	b	607	X	-	-	-
26	CLA	b	609	X	-	-	-
26	CLA	b	610	X	-	-	-
26	CLA	b	611	X	-	-	-
26	CLA	b	612	X	-	-	-
26	CLA	b	613	X	-	-	-
26	CLA	b	614	X	-	-	-
26	CLA	b	615	X	-	-	-
26	CLA	c	501	X	-	-	-
26	CLA	c	502	X	-	-	-
26	CLA	c	503	X	-	-	-
26	CLA	c	504	X	-	-	-
26	CLA	c	505	X	-	-	-
26	CLA	c	506	X	-	-	-
26	CLA	c	507	X	-	-	-
26	CLA	c	509	X	-	-	-

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<b>Mol</b>	<b>Type</b>	<b>Chain</b>	<b>Res</b>	<b>Chirality</b>	<b>Geometry</b>	<b>Clashes</b>	<b>Electron density</b>
26	CLA	c	510	X	-	-	-
26	CLA	c	511	X	-	-	-
26	CLA	c	512	X	-	-	-
26	CLA	c	513	X	-	-	-
26	CLA	d	403	X	-	-	-
26	CLA	d	404	X	-	-	-
26	CLA	h	101	X	-	-	-
34	STE	F	103	-	-	-	X

## 2 Entry composition [i](#)

There are 37 unique types of molecules in this entry. The entry contains 54161 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	334	Total 3604	C 2343	N 595	O 643	S 23	0	64	0
1	a	334	Total 3601	C 2340	N 595	O 643	S 23	0	64	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	505	Total 4005	C 2631	N 666	O 695	S 13	0	4	0
2	b	505	Total 3978	C 2610	N 665	O 690	S 13	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	442	Total 3592	C 2355	N 601	O 621	S 15	0	11	0
3	c	451	Total 3666	C 2396	N 617	O 638	S 15	0	12	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	341	Total 2745	C 1818	N 448	O 467	S 12	0	2	0
4	d	341	Total 2751	C 1822	N 448	O 469	S 12	0	3	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	82	Total	C	N	O	0	1	0
			666	436	107	123			
5	e	82	Total	C	N	O	0	0	0
			664	434	108	122			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			
6	f	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			

- Molecule 7 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	65	Total	C	N	O	S	0	0	0
			510	341	82	85	2			
7	h	63	Total	C	N	O	S	0	0	0
			498	333	80	83	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	36	Total	C	N	O	S	0	0	0
			296	200	46	49	1			
8	i	36	Total	C	N	O	S	0	0	0
			296	200	46	49	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	36	Total	C	N	O	S	0	0	0
			257	174	40	42	1			
9	j	36	Total	C	N	O	S	0	0	0
			257	174	40	42	1			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	37	Total	C	N	O	0	0	0
			293	204	43	46			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	k	37	Total	C	N	O	0	0	0
			293	204	43	46			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	S	0	0	0
			304	202	48	53	1			
11	l	36	Total	C	N	O	0	0	0	
			296	197	47	52				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	33	Total	C	N	O	S	0	0	0
			256	171	37	47	1			
12	m	32	Total	C	N	O	S	0	0	0
			251	168	36	46	1			

- Molecule 13 is a protein called Photosystem II manganese-stabilizing polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	244	Total	C	N	O	S	0	1	0
			1870	1168	313	385	4			
13	o	244	Total	C	N	O	S	0	0	0
			1874	1170	317	383	4			

- Molecule 14 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	0	0
			258	181	36	39	2			
14	t	30	Total	C	N	O	S	0	0	0
			256	180	36	38	2			

- Molecule 15 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	U	97	Total	C	N	O	0	0	0
			774	491	129	154			
15	u	97	Total	C	N	O	0	0	0
			774	491	129	154			

- Molecule 16 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			
16	v	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			

- Molecule 17 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y	27	Total	C	N	O	S	0	0	0
			196	128	35	30	3			
17	y	30	Total	C	N	O	S	0	0	0
			218	144	35	36	3			

- Molecule 18 is a protein called Photosystem II reaction center X protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	38	Total	C	N	O	S	0	0	0
			281	188	45	48				
18	x	39	Total	C	N	O	S	0	0	0
			286	191	46	49				

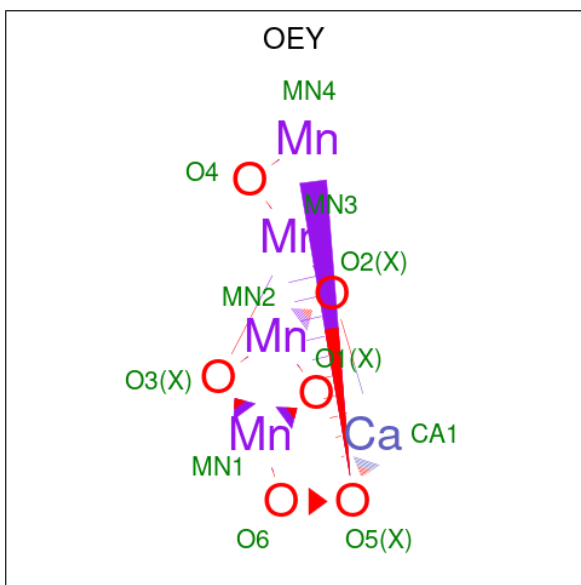
- Molecule 19 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	Z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			
19	z	62	Total	C	N	O	S	0	0	0
			477	326	72	77	2			

- Molecule 20 is a protein called Photosystem II protein Y.

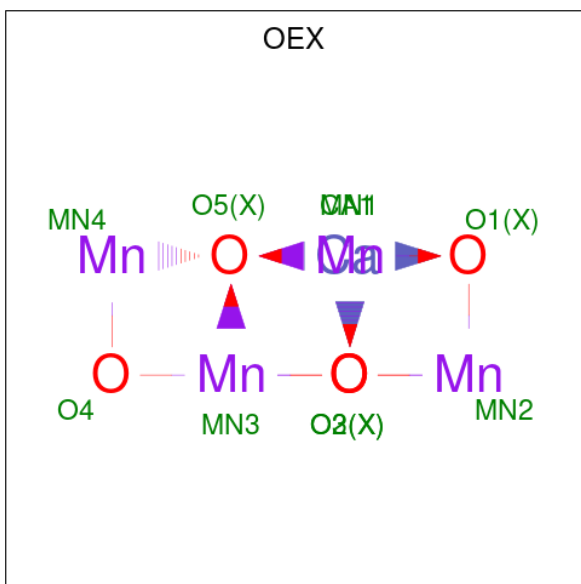
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	34	Total	C	N	O	S	0	0	0
			271	184	47	40				
20	r	31	Total	C	N	O	S	0	0	0
			246	166	43	37				

- Molecule 21 is CA-MN4-O6 CLUSTER (three-letter code: OEY) (formula: CaMn<sub>4</sub>O<sub>6</sub>) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
21	A	1	22	2	8	12	0	1
21	a	1	22	2	8	12	0	1

- Molecule 22 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn<sub>4</sub>O<sub>5</sub>) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
22	A	1	10	1	4	5	0	1

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
22	a	1	10	1	4	5	0	1

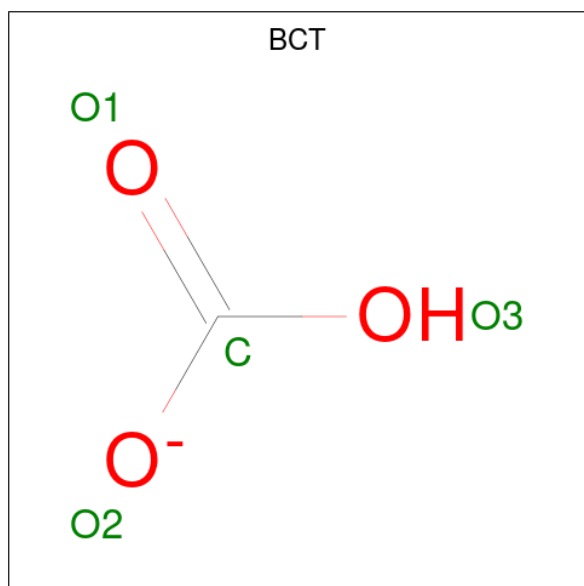
- Molecule 23 is FE (II) ION (three-letter code: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Fe		
23	A	1	1	1	0	0
23	a	1	1	1	0	0

- Molecule 24 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

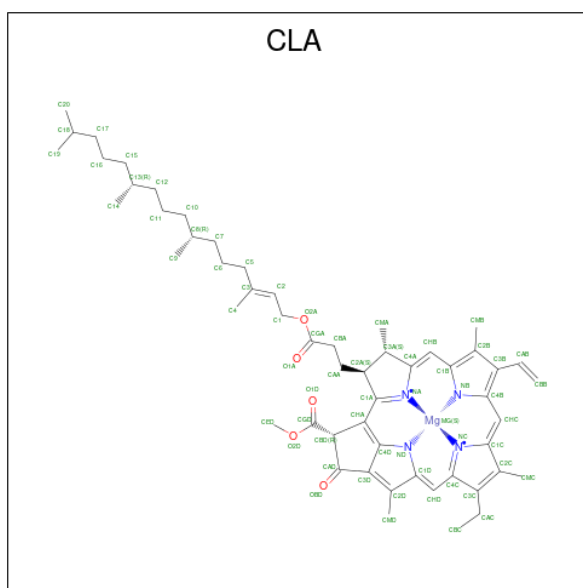
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Cl		
24	A	2	2	2	0	0
24	a	2	2	2	0	0

- Molecule 25 is BICARBONATE ION (three-letter code: BCT) (formula: CHO<sub>3</sub>).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
25	A	1	4	1	3	0	0
25	d	1	4	1	3	0	0

- Molecule 26 is CHLOROPHYLL A (three-letter code: CLA) (formula:  $C_{55}H_{72}MgN_4O_5$ ).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
			Total	C	Mg	N	O		
26	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
26	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
26	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

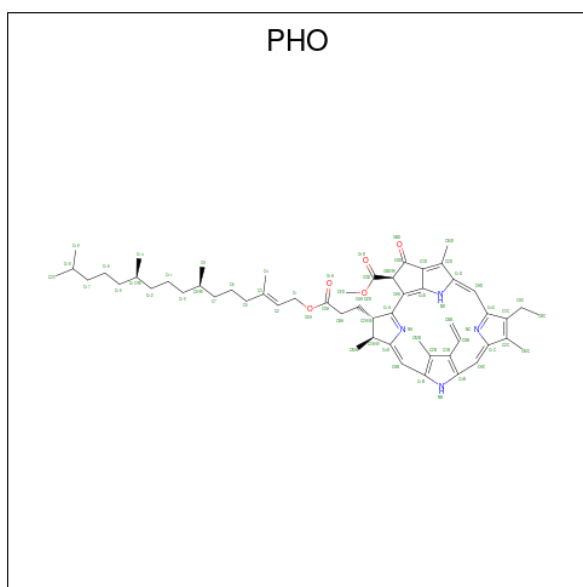
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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
			Total	C	Mg	N	O		
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	60	50	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	64	54	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	c	1	65	55	1	4	5	0	0
26	d	1	65	55	1	4	5	0	0
26	d	1	65	55	1	4	5	0	0
26	h	1	65	55	1	4	5	0	0

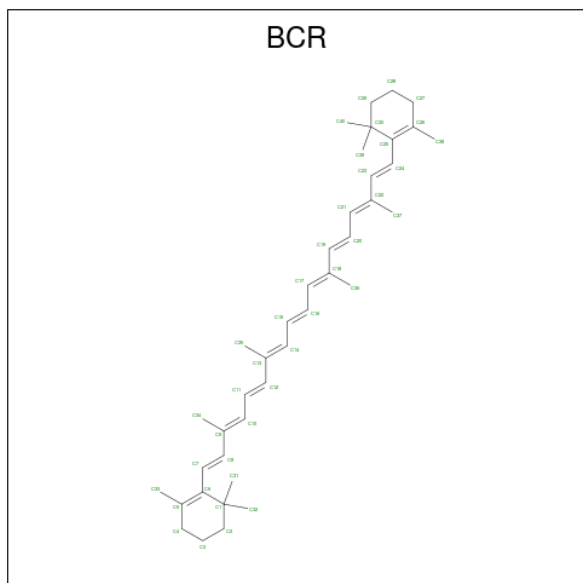
- Molecule 27 is PHEOPHYTIN A (three-letter code: PHO) (formula:  $C_{55}H_{74}N_4O_5$ ).





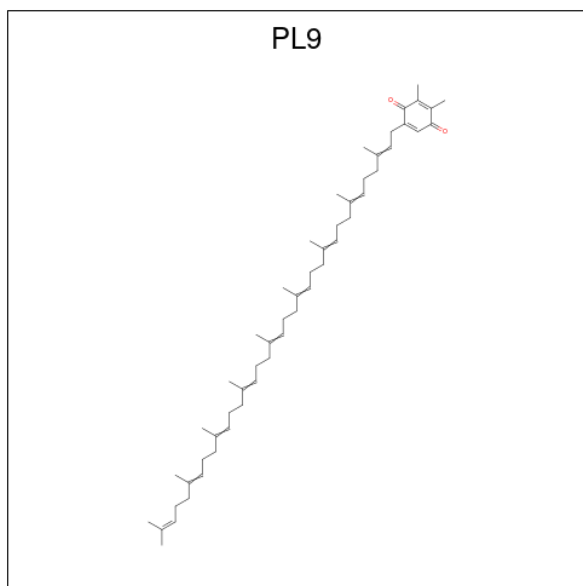
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
27	A	1	64	55	4	5	0	0
27	D	1	64	55	4	5	0	0
27	a	1	64	55	4	5	0	0
27	d	1	64	55	4	5	0	0

- Molecule 28 is BETA-CAROTENE (three-letter code: BCR) (formula:  $C_{40}H_{56}$ ).



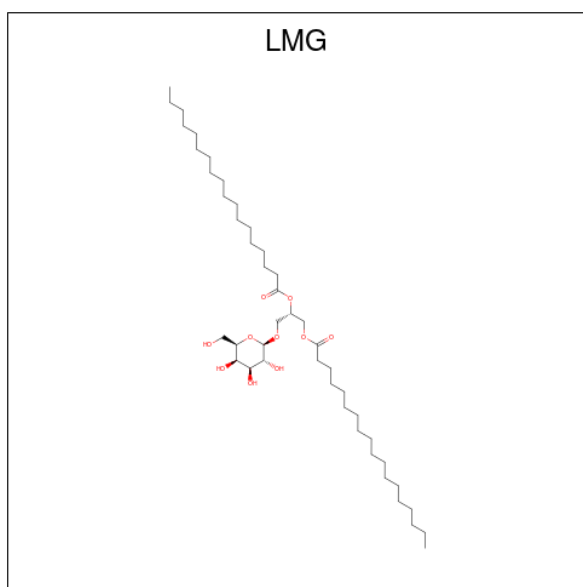
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C 40 40	0	0
28	B	1	Total C 40 40	0	0
28	B	1	Total C 40 40	0	0
28	B	1	Total C 40 40	0	0
28	C	1	Total C 40 40	0	0
28	D	1	Total C 40 40	0	0
28	K	1	Total C 40 40	0	0
28	K	1	Total C 40 40	0	0
28	T	1	Total C 40 40	0	0
28	X	1	Total C 40 40	0	0
28	Z	1	Total C 40 40	0	0
28	a	1	Total C 40 40	0	0
28	b	1	Total C 40 40	0	0
28	b	1	Total C 40 40	0	0
28	b	1	Total C 40 40	0	0
28	c	1	Total C 40 40	0	0
28	c	1	Total C 40 40	0	0
28	c	1	Total C 40 40	0	0
28	d	1	Total C 40 40	0	0
28	h	1	Total C 40 40	0	0
28	k	1	Total C 40 40	0	0
28	t	1	Total C 40 40	0	0

- Molecule 29 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			ZeroOcc	AltConf
29	A	1	Total	C	O	0	0
			55	53	2		
29	D	1	Total	C	O	0	0
			55	53	2		
29	a	1	Total	C	O	0	0
			55	53	2		
29	d	1	Total	C	O	0	0
			55	53	2		

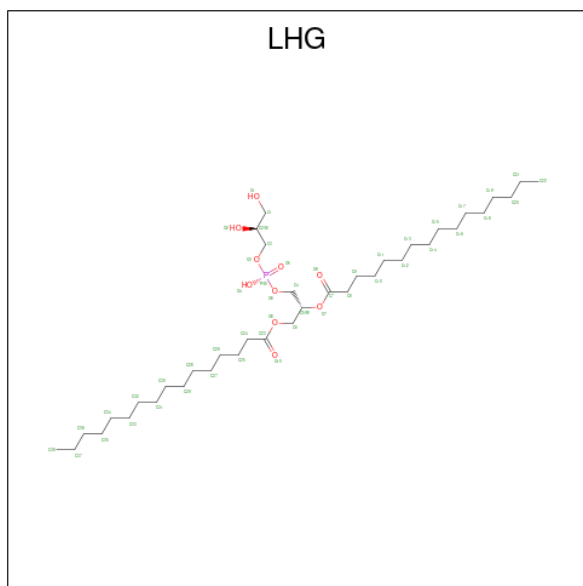
- Molecule 30 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula:  $C_{45}H_{86}O_{10}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
30	A	1	48	38	10	0	0
30	B	1	28	24	4	0	0
30	C	1	48	38	10	0	0
30	D	1	51	41	10	0	0
30	D	1	33	27	6	0	0
30	M	1	51	41	10	0	0
30	b	1	55	45	10	0	0
30	c	1	37	27	10	0	0
30	c	1	48	38	10	0	0
30	c	1	49	39	10	0	0
30	d	1	23	21	2	0	0
30	d	1	44	34	10	0	0
30	m	1	51	41	10	0	0

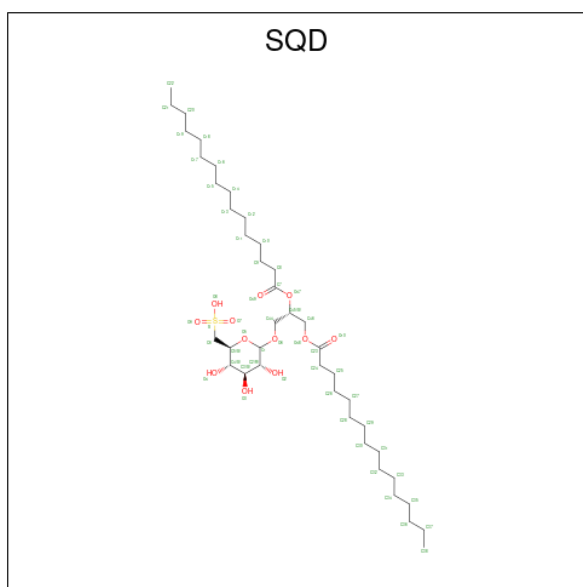
- Molecule 31 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code:

LHG) (formula: C<sub>38</sub>H<sub>75</sub>O<sub>10</sub>P).



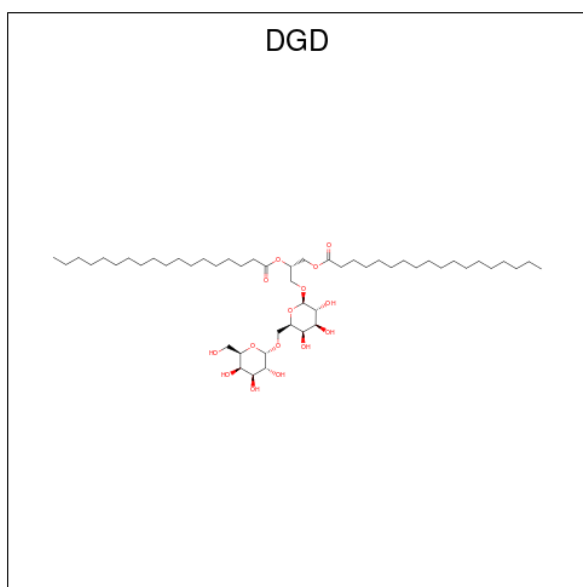
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
31	A	1	Total	C	O	P	0	0
			47	36	10	1		
31	A	1	Total	C	O	P	0	0
			49	38	10	1		
31	D	1	Total	C	O	P	0	0
			49	38	10	1		
31	D	1	Total	C	O	P	0	0
			49	38	10	1		
31	L	1	Total	C	O	P	0	0
			49	38	10	1		
31	d	1	Total	C	O	P	0	0
			49	38	10	1		
31	d	1	Total	C	O	P	0	0
			49	38	10	1		
31	d	1	Total	C	O	P	0	0
			39	28	10	1		
31	e	1	Total	C	O	P	0	0
			42	31	10	1		
31	l	1	Total	C	O	P	0	0
			49	38	10	1		

- Molecule 32 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: C<sub>41</sub>H<sub>78</sub>O<sub>12</sub>S).



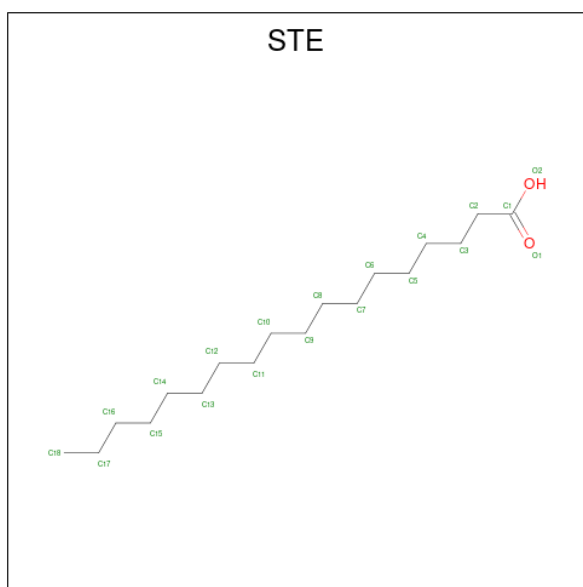
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
32	A	1	Total	C	O	S	0	0
			52	39	12	1		
32	A	1	Total	C	O		0	0
			39	35	4			
32	B	1	Total	C	O	S	0	0
			54	41	12	1		
32	F	1	Total	C	O	S	0	0
			36	25	10	1		
32	a	1	Total	C	O	S	0	0
			54	41	12	1		
32	b	1	Total	C	O	S	0	0
			49	36	12	1		
32	f	1	Total	C	O	S	0	0
			41	28	12	1		
32	t	1	Total	C	O		0	0
			36	31	5			

- Molecule 33 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula:  $C_{51}H_{96}O_{15}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
33	A	1	Total	C	O	0	0
			66	51	15		
33	C	1	Total	C	O	0	0
			62	47	15		
33	C	1	Total	C	O	0	0
			62	47	15		
33	C	1	Total	C	O	0	0
			62	47	15		
33	H	1	Total	C	O	0	0
			62	47	15		
33	a	1	Total	C	O	0	0
			44	39	5		
33	c	1	Total	C	O	0	0
			62	47	15		
33	c	1	Total	C	O	0	0
			62	47	15		
33	c	1	Total	C	O	0	0
			62	47	15		
33	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 34 is STEARIC ACID (three-letter code: STE) (formula: C<sub>18</sub>H<sub>36</sub>O<sub>2</sub>).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	B	1	Total C O 17 15 2	0	0
34	B	1	Total C O 12 10 2	0	0
34	B	1	Total C O 12 10 2	0	0
34	B	1	Total C 16 16	0	0
34	C	1	Total C O 12 10 2	0	0
34	C	1	Total C O 12 10 2	0	0
34	C	1	Total C 16 16	0	0
34	F	1	Total C O 12 10 2	0	0
34	H	1	Total C 18 18	0	0
34	I	1	Total C 15 15	0	0
34	J	1	Total C O 12 10 2	0	0
34	L	1	Total C O 12 10 2	0	0
34	M	1	Total C O 15 13 2	0	0
34	M	1	Total C 10 10	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	T	1	Total C 16 16	0	0
34	T	1	Total C 15 15	0	0
34	X	1	Total C O 20 18 2	0	0
34	a	1	Total C O 12 10 2	0	0
34	b	1	Total C O 20 18 2	0	0
34	b	1	Total C O 20 18 2	0	0
34	b	1	Total C 10 10	0	0
34	c	1	Total C O 20 18 2	0	0
34	d	1	Total C O 16 14 2	0	0
34	d	1	Total C O 17 15 2	0	0
34	d	1	Total C O 20 18 2	0	0
34	j	1	Total C O 12 10 2	0	0
34	k	1	Total C O 12 10 2	0	0
34	l	1	Total C 18 18	0	0
34	t	1	Total C O 14 12 2	0	0
34	t	1	Total C 10 10	0	0
34	t	1	Total C O 18 16 2	0	0

- Molecule 35 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula:  $C_{34}H_{32}FeN_4O_4$ ).



- Molecule 37 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	A	121	Total O 129 129	0	4
37	B	171	Total O 171 171	0	0
37	C	149	Total O 149 149	0	0
37	D	105	Total O 105 105	0	0
37	E	16	Total O 16 16	0	0
37	F	8	Total O 8 8	0	0
37	H	26	Total O 26 26	0	0
37	I	13	Total O 13 13	0	0
37	J	11	Total O 11 11	0	0
37	K	4	Total O 4 4	0	0
37	L	10	Total O 10 10	0	0
37	M	3	Total O 3 3	0	0
37	O	68	Total O 68 68	0	0
37	T	6	Total O 6 6	0	0
37	U	33	Total O 33 33	0	0
37	V	54	Total O 54 54	0	0
37	X	7	Total O 7 7	0	0
37	Z	5	Total O 5 5	0	0
37	a	109	Total O 117 117	0	4
37	b	142	Total O 142 142	0	0
37	c	132	Total O 132 132	0	0

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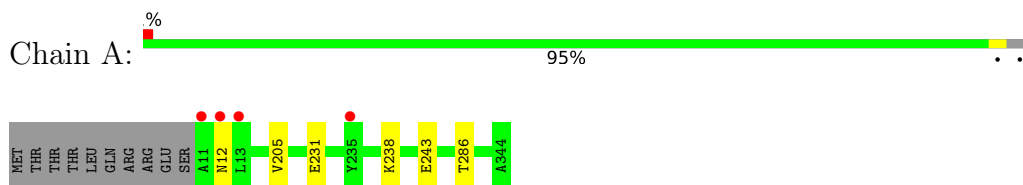
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	d	92	Total O 92 92	0	0
37	e	13	Total O 13 13	0	0
37	f	4	Total O 4 4	0	0
37	h	16	Total O 16 16	0	0
37	i	12	Total O 12 12	0	0
37	j	9	Total O 9 9	0	0
37	k	6	Total O 6 6	0	0
37	l	8	Total O 8 8	0	0
37	m	7	Total O 7 7	0	0
37	o	77	Total O 77 77	0	0
37	t	10	Total O 10 10	0	0
37	u	38	Total O 38 38	0	0
37	v	39	Total O 39 39	0	0
37	x	4	Total O 4 4	0	0
37	z	5	Total O 5 5	0	0
37	r	7	Total O 7 7	0	0

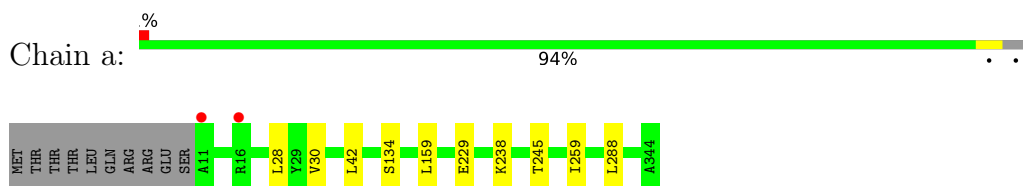
### 3 Residue-property plots [i](#)

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 electron 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 dot above a residue indicates a poor fit to the electron density ( $RSRZ > 2$ ). 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.

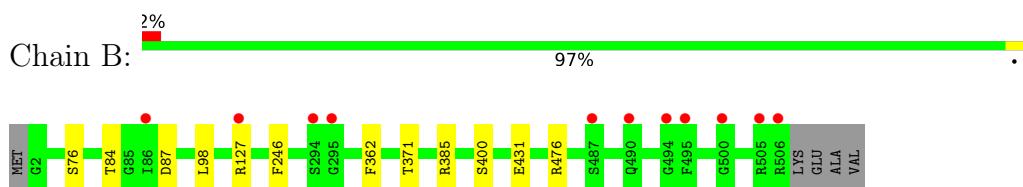
- Molecule 1: Photosystem II protein D1 1



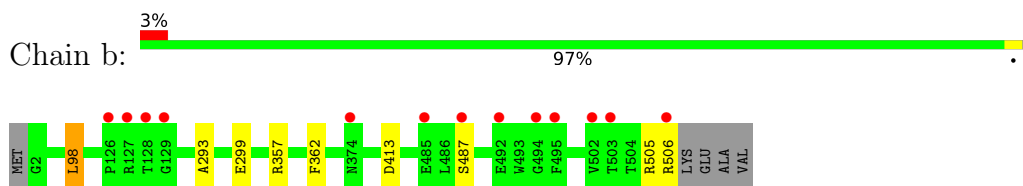
- Molecule 1: Photosystem II protein D1 1



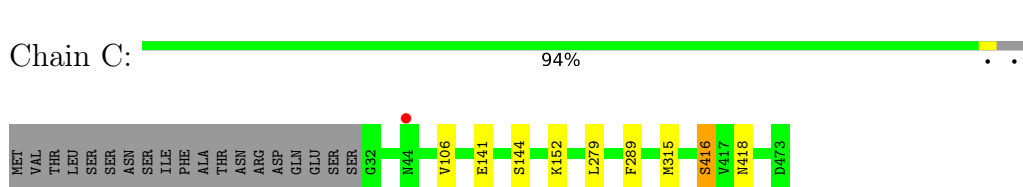
- Molecule 2: Photosystem II CP47 reaction center protein



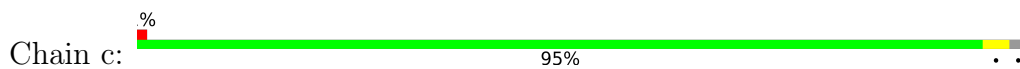
- Molecule 2: Photosystem II CP47 reaction center protein



- Molecule 3: Photosystem II CP43 reaction center protein



- Molecule 3: Photosystem II CP43 reaction center protein



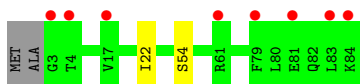
- Molecule 4: Photosystem II D2 protein



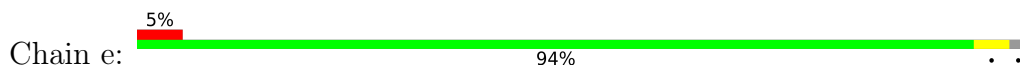
- Molecule 4: Photosystem II D2 protein



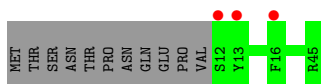
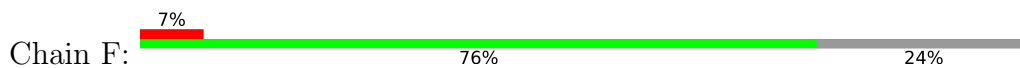
- Molecule 5: Cytochrome b559 subunit alpha



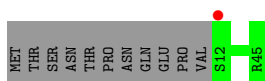
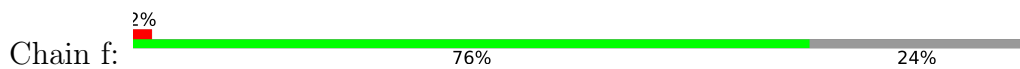
- Molecule 5: Cytochrome b559 subunit alpha



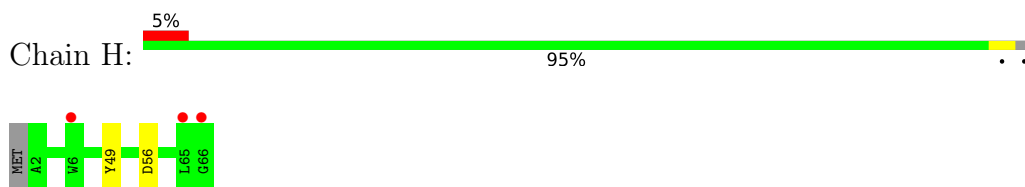
- Molecule 6: Cytochrome b559 subunit beta



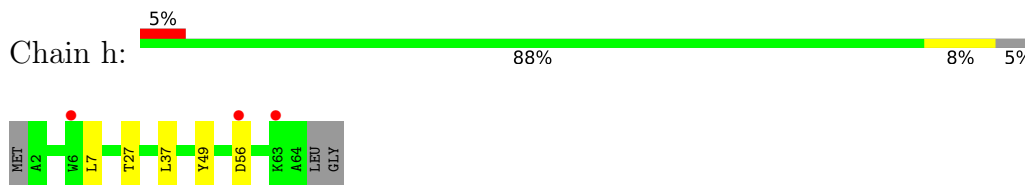
- Molecule 6: Cytochrome b559 subunit beta



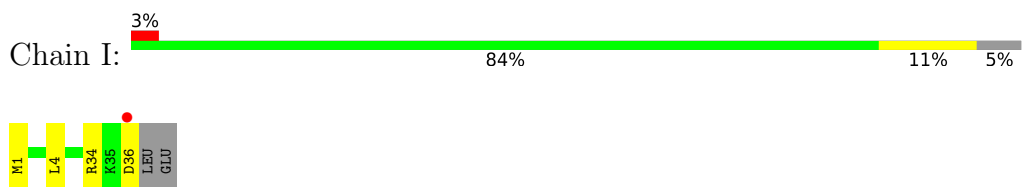
- Molecule 7: Photosystem II reaction center protein H



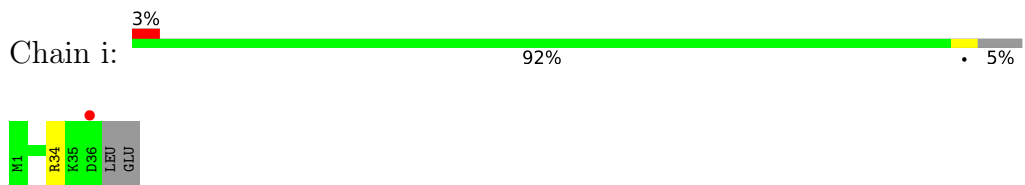
- Molecule 7: Photosystem II reaction center protein H



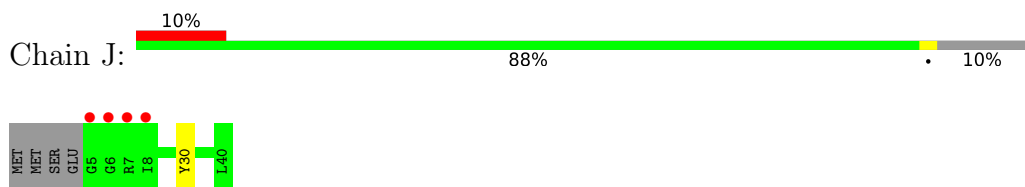
- Molecule 8: Photosystem II reaction center protein I



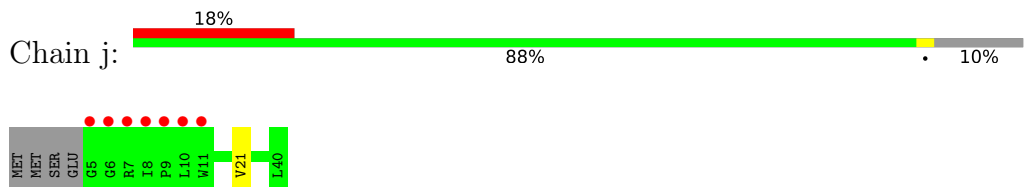
- Molecule 8: Photosystem II reaction center protein I



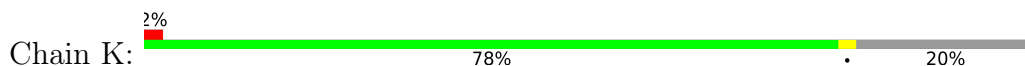
- Molecule 9: Photosystem II reaction center protein J

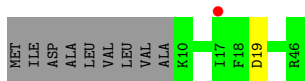


- Molecule 9: Photosystem II reaction center protein J

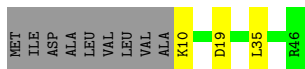


- Molecule 10: Photosystem II reaction center protein K





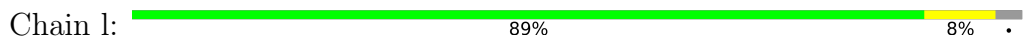
- Molecule 10: Photosystem II reaction center protein K



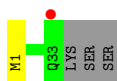
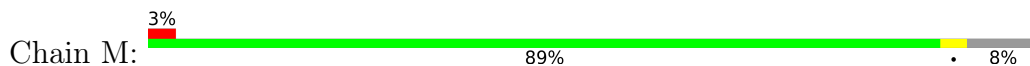
- Molecule 11: Photosystem II reaction center protein L



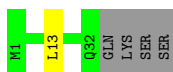
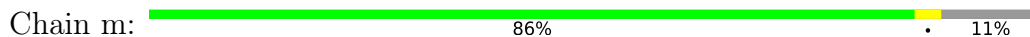
- Molecule 11: Photosystem II reaction center protein L



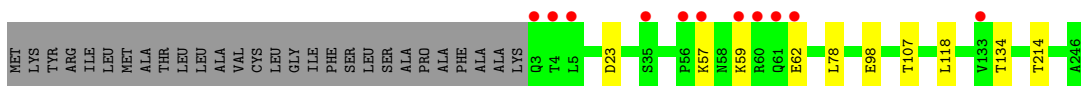
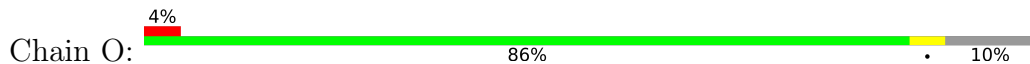
- Molecule 12: Photosystem II reaction center protein M



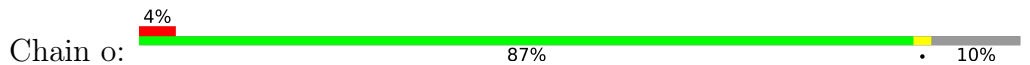
- Molecule 12: Photosystem II reaction center protein M



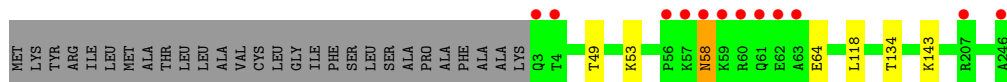
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



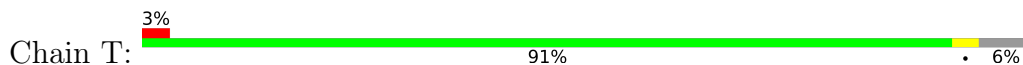
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



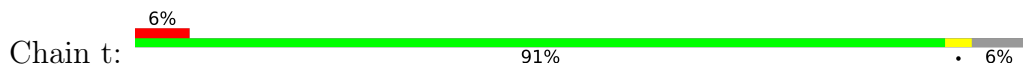




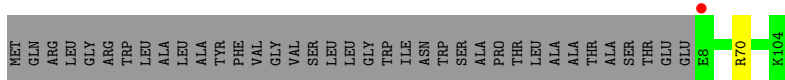
- Molecule 14: Photosystem II reaction center protein T



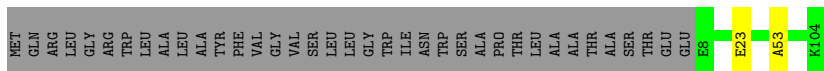
- Molecule 14: Photosystem II reaction center protein T



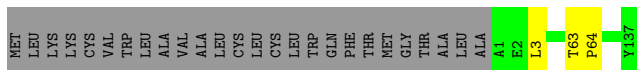
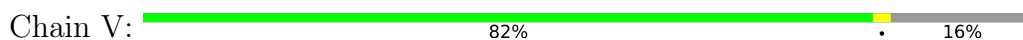
- Molecule 15: Photosystem II 12 kDa extrinsic protein



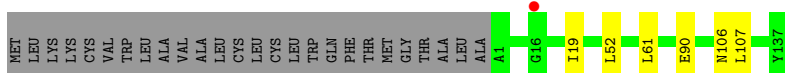
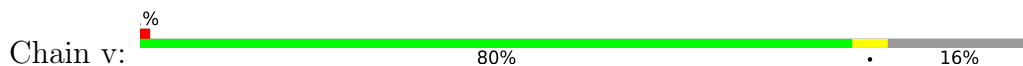
- Molecule 15: Photosystem II 12 kDa extrinsic protein



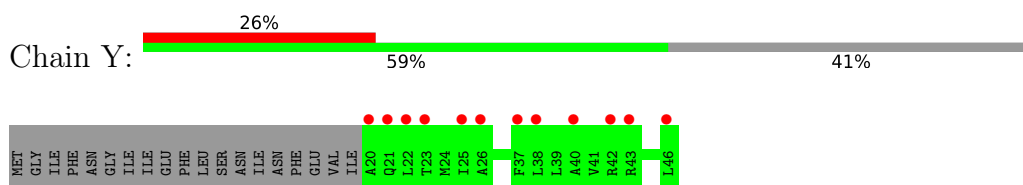
- Molecule 16: Cytochrome c-550



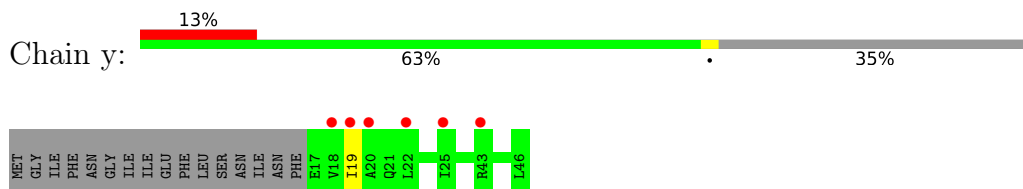
- Molecule 16: Cytochrome c-550



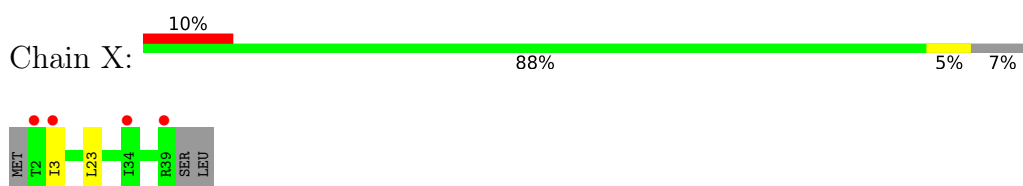
- Molecule 17: Photosystem II reaction center protein Ycf12



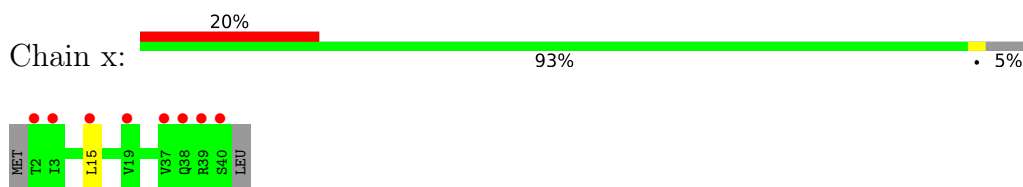
- Molecule 17: Photosystem II reaction center protein Ycf12



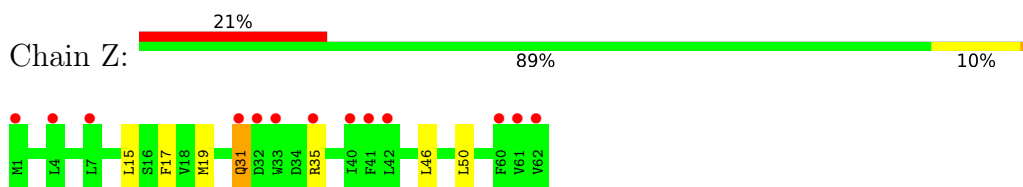
- Molecule 18: Photosystem II reaction center X protein



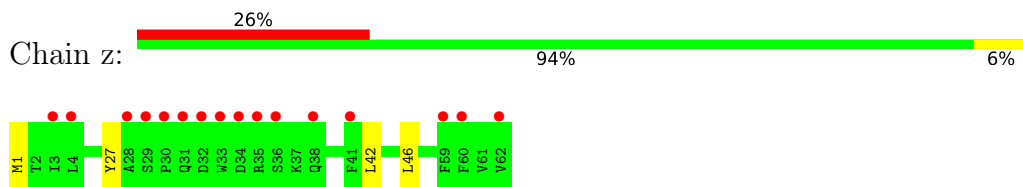
- Molecule 18: Photosystem II reaction center X protein



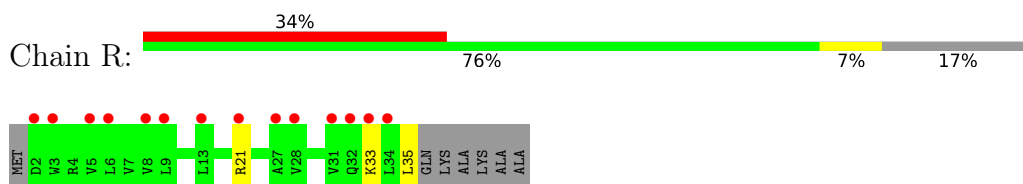
- Molecule 19: Photosystem II reaction center protein Z



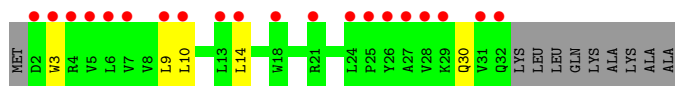
- Molecule 19: Photosystem II reaction center protein Z



- Molecule 20: Photosystem II protein Y



## ● Molecule 20: Photosystem II protein Y



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	117.56Å 223.17Å 310.26Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	29.48 – 2.10 29.48 – 2.10	Depositor EDS
% Data completeness (in resolution range)	98.3 (29.48-2.10) 82.7 (29.48-2.10)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	0.34 (at 2.10Å)	Xtrriage
Refinement program	PHENIX 1.19.2_4158	Depositor
R, $R_{free}$	0.188 , 0.232 0.188 , 0.233	Depositor DCC
$R_{free}$ test set	4187 reflections (0.89%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	27.6	Xtrriage
Anisotropy	0.226	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.29 , 73.7	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.95	EDS
Total number of atoms	54161	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	45.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.68% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 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: FE2, HEC, PHO, BCT, PL9, DGD, LMG, OEY, STE, CL, BCR, CLA, LHG, HEM, SQD, FME, OEX

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	0.43	0/3717	0.56	0/5060
1	a	0.41	0/3714	0.57	0/5056
2	B	0.40	0/4155	0.57	0/5661
2	b	0.41	0/4118	0.57	1/5611 (0.0%)
3	C	0.40	0/3711	0.57	0/5051
3	c	0.39	0/3791	0.55	0/5158
4	D	0.43	0/2838	0.58	0/3862
4	d	0.42	0/2847	0.58	1/3874 (0.0%)
5	E	0.36	0/688	0.52	0/940
5	e	0.33	0/683	0.54	0/932
6	F	0.36	0/284	0.48	0/387
6	f	0.31	0/284	0.52	0/387
7	H	0.41	0/523	0.57	0/713
7	h	0.38	0/511	0.57	0/697
8	I	0.43	0/293	0.59	0/396
8	i	0.42	0/293	0.55	0/396
9	J	0.39	0/263	0.54	0/356
9	j	0.35	0/263	0.50	0/356
10	K	0.35	0/303	0.53	0/416
10	k	0.32	0/303	0.52	0/416
11	L	0.42	0/311	0.57	0/422
11	l	0.43	0/303	0.57	0/412
12	M	0.37	0/249	0.48	0/341
12	m	0.39	0/244	0.54	0/334
13	O	0.39	0/1904	0.63	0/2585
13	o	0.39	0/1905	0.62	0/2583
14	T	0.49	0/257	0.60	0/349
14	t	0.43	0/255	0.57	0/346
15	U	0.36	0/785	0.56	0/1064
15	u	0.37	0/785	0.58	0/1064
16	V	0.37	0/1085	0.59	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
16	v	0.33	0/1085	0.56	0/1473
17	Y	0.27	0/197	0.49	0/264
17	y	0.28	0/219	0.46	0/294
18	X	0.35	0/284	0.49	0/384
18	x	0.32	0/289	0.45	0/391
19	Z	0.33	0/490	0.49	0/669
19	z	0.31	0/488	0.42	0/666
20	R	0.30	0/277	0.49	0/380
20	r	0.32	0/252	0.52	0/347
All	All	0.40	0/45246	0.57	2/61566 (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
16	V	0	1

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	98	LEU	CA-CB-CG	6.25	129.68	115.30
4	d	297	ASP	CB-CG-OD1	5.34	123.11	118.30

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	V	63	THR	Peptide

## 5.2 Too-close contacts

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 X-ray entries followed by that with respect to entries of similar resolution.

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	458/344 (133%)	449 (98%)	9 (2%)	0	100	100
1	a	458/344 (133%)	448 (98%)	8 (2%)	2 (0%)	34	32
2	B	507/510 (99%)	499 (98%)	8 (2%)	0	100	100
2	b	503/510 (99%)	491 (98%)	11 (2%)	1 (0%)	47	49
3	C	461/461 (100%)	451 (98%)	9 (2%)	1 (0%)	47	49
3	c	471/461 (102%)	457 (97%)	13 (3%)	1 (0%)	47	49
4	D	341/352 (97%)	333 (98%)	8 (2%)	0	100	100
4	d	342/352 (97%)	331 (97%)	11 (3%)	0	100	100
5	E	81/84 (96%)	81 (100%)	0	0	100	100
5	e	80/84 (95%)	80 (100%)	0	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	32/45 (71%)	32 (100%)	0	0	100	100
7	H	63/66 (96%)	61 (97%)	2 (3%)	0	100	100
7	h	61/66 (92%)	57 (93%)	4 (7%)	0	100	100
8	I	34/38 (90%)	33 (97%)	1 (3%)	0	100	100
8	i	34/38 (90%)	31 (91%)	3 (9%)	0	100	100
9	J	34/40 (85%)	31 (91%)	3 (9%)	0	100	100
9	j	34/40 (85%)	32 (94%)	2 (6%)	0	100	100
10	K	35/46 (76%)	34 (97%)	1 (3%)	0	100	100
10	k	35/46 (76%)	35 (100%)	0	0	100	100
11	L	35/37 (95%)	35 (100%)	0	0	100	100
11	l	34/37 (92%)	34 (100%)	0	0	100	100
12	M	31/36 (86%)	30 (97%)	1 (3%)	0	100	100
12	m	30/36 (83%)	29 (97%)	1 (3%)	0	100	100
13	O	243/272 (89%)	227 (93%)	12 (5%)	4 (2%)	9	5

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	o	242/272 (89%)	236 (98%)	5 (2%)	1 (0%)	34	32
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	28/32 (88%)	27 (96%)	1 (4%)	0	100	100
15	U	95/134 (71%)	93 (98%)	2 (2%)	0	100	100
15	u	95/134 (71%)	90 (95%)	4 (4%)	1 (1%)	14	9
16	V	135/163 (83%)	129 (96%)	5 (4%)	1 (1%)	22	18
16	v	135/163 (83%)	130 (96%)	5 (4%)	0	100	100
17	Y	25/46 (54%)	24 (96%)	1 (4%)	0	100	100
17	y	28/46 (61%)	26 (93%)	2 (7%)	0	100	100
18	X	36/41 (88%)	35 (97%)	1 (3%)	0	100	100
18	x	37/41 (90%)	36 (97%)	1 (3%)	0	100	100
19	Z	60/62 (97%)	57 (95%)	2 (3%)	1 (2%)	9	4
19	z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
20	R	32/41 (78%)	31 (97%)	1 (3%)	0	100	100
20	r	29/41 (71%)	28 (97%)	0	1 (3%)	3	1
All	All	5534/5700 (97%)	5381 (97%)	139 (2%)	14 (0%)	41	41

All (14) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
13	O	59	LYS
16	V	64	PRO
13	o	58	ASN
3	C	416	SER
19	Z	31	GLN
3	c	416	SER
15	u	53	ALA
13	O	57	LYS
13	O	62	GLU
13	O	134	THR
2	b	293	ALA
20	r	30	GLN
1	a	259	ILE
1	a	30	VAL



### 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 X-ray entries followed by that with respect to entries of similar resolution.

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	374/280 (134%)	368 (98%)	6 (2%)	62	69
1	a	373/280 (133%)	363 (97%)	10 (3%)	44	48
2	B	407/407 (100%)	395 (97%)	12 (3%)	42	46
2	b	402/407 (99%)	394 (98%)	8 (2%)	55	60
3	C	361/362 (100%)	352 (98%)	9 (2%)	47	52
3	c	370/362 (102%)	357 (96%)	13 (4%)	36	38
4	D	278/283 (98%)	275 (99%)	3 (1%)	73	79
4	d	279/283 (99%)	273 (98%)	6 (2%)	52	57
5	E	72/73 (99%)	69 (96%)	3 (4%)	30	30
5	e	71/73 (97%)	68 (96%)	3 (4%)	30	30
6	F	28/39 (72%)	28 (100%)	0	100	100
6	f	28/39 (72%)	28 (100%)	0	100	100
7	H	54/55 (98%)	52 (96%)	2 (4%)	34	35
7	h	53/55 (96%)	48 (91%)	5 (9%)	8	5
8	I	32/34 (94%)	29 (91%)	3 (9%)	8	5
8	i	32/34 (94%)	31 (97%)	1 (3%)	40	43
9	J	24/28 (86%)	23 (96%)	1 (4%)	30	30
9	j	24/28 (86%)	23 (96%)	1 (4%)	30	30
10	K	30/37 (81%)	29 (97%)	1 (3%)	38	40
10	k	30/37 (81%)	27 (90%)	3 (10%)	7	5
11	L	35/35 (100%)	35 (100%)	0	100	100
11	l	34/35 (97%)	31 (91%)	3 (9%)	10	6
12	M	28/32 (88%)	28 (100%)	0	100	100
12	m	28/32 (88%)	27 (96%)	1 (4%)	35	36
13	O	206/228 (90%)	200 (97%)	6 (3%)	42	46
13	o	207/228 (91%)	200 (97%)	7 (3%)	37	39

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	T	26/28 (93%)	26 (100%)	0	100	100
14	t	25/28 (89%)	25 (100%)	0	100	100
15	U	84/112 (75%)	83 (99%)	1 (1%)	71	77
15	u	84/112 (75%)	83 (99%)	1 (1%)	71	77
16	V	117/138 (85%)	116 (99%)	1 (1%)	78	84
16	v	117/138 (85%)	111 (95%)	6 (5%)	24	22
17	Y	19/37 (51%)	19 (100%)	0	100	100
17	y	22/37 (60%)	21 (96%)	1 (4%)	27	27
18	X	31/34 (91%)	29 (94%)	2 (6%)	17	14
18	x	31/34 (91%)	30 (97%)	1 (3%)	39	41
19	Z	52/52 (100%)	45 (86%)	7 (14%)	4	2
19	z	51/52 (98%)	47 (92%)	4 (8%)	12	9
20	R	28/33 (85%)	25 (89%)	3 (11%)	6	3
20	r	25/33 (76%)	21 (84%)	4 (16%)	2	1
All	All	4572/4654 (98%)	4434 (97%)	138 (3%)	40	44

All (138) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	12	ASN
1	A	205	VAL
1	A	231	GLU
1	A	238	LYS
1	A	243	GLU
1	A	286	THR
2	B	76	SER
2	B	84	THR
2	B	87	ASP
2	B	98	LEU
2	B	127	ARG
2	B	246	PHE
2	B	362	PHE
2	B	371	THR
2	B	385	ARG
2	B	400	SER
2	B	431	GLU
2	B	476	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
3	C	106	VAL
3	C	141	GLU
3	C	144	SER
3	C	152	LYS
3	C	279	LEU
3	C	289	PHE
3	C	315	MET
3	C	416	SER
3	C	418	ASN
4	D	43	LEU
4	D	154	VAL
4	D	180	ARG
5	E	22[A]	ILE
5	E	22[B]	ILE
5	E	54	SER
7	H	49	TYR
7	H	56	ASP
8	I	4	LEU
8	I	34	ARG
8	I	36	ASP
9	J	30	TYR
10	K	19	ASP
13	O	23	ASP
13	O	78	LEU
13	O	98	GLU
13	O	107	THR
13	O	118	LEU
13	O	214	THR
15	U	70	ARG
16	V	3	LEU
18	X	3	ILE
18	X	23	LEU
19	Z	15	LEU
19	Z	17	PHE
19	Z	19	MET
19	Z	31	GLN
19	Z	35	ARG
19	Z	46	LEU
19	Z	50	LEU
20	R	21	ARG
20	R	33	LYS
20	R	35	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	a	28	LEU
1	a	42	LEU
1	a	134	SER
1	a	159[A]	LEU
1	a	159[B]	LEU
1	a	159[C]	LEU
1	a	229	GLU
1	a	238	LYS
1	a	245	THR
1	a	288	LEU
2	b	98	LEU
2	b	299	GLU
2	b	357	ARG
2	b	362	PHE
2	b	413	ASP
2	b	487	SER
2	b	505	ARG
2	b	506	ARG
3	c	24	THR
3	c	29	GLU
3	c	30	SER
3	c	72	LEU
3	c	124	VAL
3	c	125	LEU
3	c	135	ARG
3	c	165	LEU
3	c	289	PHE
3	c	315	MET
3	c	391[A]	ARG
3	c	391[B]	ARG
3	c	396	MET
4	d	180	ARG
4	d	233	ARG
4	d	259	ILE
4	d	264	LYS
4	d	291	LEU
4	d	321	LEU
5	e	4	THR
5	e	66	VAL
5	e	83	LEU
7	h	7	LEU
7	h	27	THR

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
7	h	37	LEU
7	h	49	TYR
7	h	56	ASP
8	i	34	ARG
9	j	21	VAL
10	k	10	LYS
10	k	19	ASP
10	k	35	LEU
11	l	7	ARG
11	l	21	LEU
11	l	30	LEU
12	m	13	LEU
13	o	49	THR
13	o	53	LYS
13	o	58	ASN
13	o	64	GLU
13	o	118	LEU
13	o	134	THR
13	o	143	LYS
15	u	23	GLU
16	v	19	ILE
16	v	52	LEU
16	v	61	LEU
16	v	90	GLU
16	v	106	ASN
16	v	107	LEU
17	y	19	ILE
18	x	15	LEU
19	z	1	MET
19	z	27	TYR
19	z	42	LEU
19	z	46	LEU
20	r	3	TRP
20	r	9	LEU
20	r	10	LEU
20	r	14	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (19) such sidechains are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	325	ASN
3	C	311	GLN

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Mol	Chain	Res	Type
7	H	59	ASN
13	O	88	ASN
16	V	86	GLN
18	X	38	GLN
19	Z	31	GLN
20	R	22	ASN
1	a	234	ASN
1	a	325	ASN
3	c	311	GLN
3	c	378	ASN
4	d	236	ASN
5	e	60	GLN
12	m	5	GLN
16	v	106	ASN
18	x	33	GLN
19	z	31	GLN
20	r	30	GLN

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

## 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

6 non-standard protein/DNA/RNA residues are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	FME	t	1	14	8,9,10	1.22	1 (12%)	7,9,11	0.71	0
12	FME	m	1	12	8,9,10	0.94	0	7,9,11	0.65	0
8	FME	I	1	8	8,9,10	1.04	1 (12%)	7,9,11	1.44	1 (14%)
14	FME	T	1	14	8,9,10	1.09	1 (12%)	7,9,11	0.85	0
12	FME	M	1	12	8,9,10	1.09	1 (12%)	7,9,11	1.77	1 (14%)
8	FME	i	1	8	8,9,10	1.02	0	7,9,11	0.71	0

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
14	FME	t	1	14	-	4/7/9/11	-
12	FME	m	1	12	-	1/7/9/11	-
8	FME	I	1	8	-	0/7/9/11	-
14	FME	T	1	14	-	1/7/9/11	-
12	FME	M	1	12	-	1/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	t	1	FME	CA-N	-2.63	1.42	1.46
14	T	1	FME	CA-N	-2.36	1.43	1.46
12	M	1	FME	CA-N	-2.33	1.43	1.46
8	I	1	FME	CA-N	-2.14	1.43	1.46

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	M	1	FME	CA-N-CN	-3.88	116.86	122.82
8	I	1	FME	CA-N-CN	-3.32	117.71	122.82

There are no chirality outliers.

All (8) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
12	M	1	FME	O-C-CA-CB
12	m	1	FME	O-C-CA-CB
14	t	1	FME	N-CA-CB-CG
14	t	1	FME	O-C-CA-CB
14	T	1	FME	CB-CG-SD-CE
14	t	1	FME	CB-CG-SD-CE
14	t	1	FME	C-CA-CB-CG
8	i	1	FME	CB-CG-SD-CE

There are no ring outliers.

No monomer is involved in short contacts.

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 190 ligands modelled in this entry, 6 are monoatomic - leaving 184 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$
33	DGD	h	103	-	63,63,67	0.96	3 (4%)	77,77,81	1.48	13 (16%)
26	CLA	b	615	-	60,68,73	1.52	6 (10%)	70,107,113	1.63	9 (12%)
26	CLA	C	503	-	65,73,73	1.70	8 (12%)	76,113,113	1.67	14 (18%)
28	BCR	B	619	-	41,41,41	0.93	1 (2%)	56,56,56	1.21	5 (8%)
30	LMG	b	621	-	55,55,55	0.94	5 (9%)	63,63,63	1.32	7 (11%)
26	CLA	C	511	3	65,73,73	1.50	7 (10%)	76,113,113	1.50	7 (9%)
26	CLA	b	602	-	65,73,73	1.67	8 (12%)	76,113,113	1.50	11 (14%)
28	BCR	Z	101	-	41,41,41	1.06	2 (4%)	56,56,56	1.25	7 (12%)
26	CLA	b	610	-	65,73,73	1.52	6 (9%)	76,113,113	1.53	9 (11%)
21	OEY	a	601[A]	1,3,37	0,16,16	-	-	-	-	-
28	BCR	A	611	-	41,41,41	0.97	2 (4%)	56,56,56	1.25	5 (8%)
31	LHG	A	617	-	48,48,48	0.83	3 (6%)	51,54,54	1.18	6 (11%)
26	CLA	B	608	-	65,73,73	1.53	7 (10%)	76,113,113	1.53	9 (11%)
33	DGD	c	519	-	63,63,67	0.90	3 (4%)	77,77,81	1.39	6 (7%)
34	STE	t	103	-	13,13,19	0.64	0	13,13,19	1.23	1 (7%)
26	CLA	c	510	-	65,73,73	1.65	9 (13%)	76,113,113	1.34	8 (10%)
35	HEM	e	101	5,6	41,50,50	1.45	5 (12%)	45,82,82	1.68	9 (20%)
26	CLA	c	505	-	65,73,73	1.49	6 (9%)	76,113,113	1.40	8 (10%)
26	CLA	B	603	-	65,73,73	1.58	7 (10%)	76,113,113	1.49	11 (14%)
26	CLA	B	609	-	65,73,73	1.57	7 (10%)	76,113,113	1.35	8 (10%)
28	BCR	X	101	-	41,41,41	0.93	2 (4%)	56,56,56	1.28	7 (12%)
27	PHO	A	609	-	51,69,69	1.00	3 (5%)	47,99,99	1.17	3 (6%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
26	CLA	B	604	-	65,73,73	1.49	7 (10%)	76,113,113	1.50	10 (13%)
34	STE	M	103	-	9,9,19	0.34	0	8,8,19	0.78	0
32	SQD	F	102	-	35,36,54	1.54	5 (14%)	42,45,65	1.85	10 (23%)
30	LMG	c	520	-	37,37,55	0.97	1 (2%)	45,45,63	1.30	5 (11%)
34	STE	a	615	-	11,11,19	0.79	0	11,11,19	1.03	0
26	CLA	b	604	-	65,73,73	1.68	6 (9%)	76,113,113	1.55	10 (13%)
34	STE	J	101	-	11,11,19	0.69	0	11,11,19	1.31	2 (18%)
27	PHO	d	402	-	51,69,69	0.97	2 (3%)	47,99,99	1.42	7 (14%)
26	CLA	C	508	-	65,73,73	1.56	7 (10%)	76,113,113	1.50	6 (7%)
21	OEY	a	601[C]	1,3,37	0,16,16	-	-	-	-	-
26	CLA	b	608	-	65,73,73	1.60	7 (10%)	76,113,113	1.35	7 (9%)
26	CLA	b	614	-	65,73,73	1.59	9 (13%)	76,113,113	1.35	7 (9%)
26	CLA	b	601	-	65,73,73	1.52	9 (13%)	76,113,113	1.50	10 (13%)
30	LMG	B	621	-	26,26,55	0.61	0	26,26,63	1.20	2 (7%)
28	BCR	d	405	-	41,41,41	0.98	2 (4%)	56,56,56	1.21	7 (12%)
34	STE	M	102	-	14,14,19	0.71	0	14,14,19	1.24	2 (14%)
34	STE	d	414	-	19,19,19	0.61	0	19,19,19	1.02	1 (5%)
26	CLA	c	501	-	65,73,73	1.51	6 (9%)	76,113,113	1.58	9 (11%)
34	STE	B	620	-	16,16,19	0.64	0	16,16,19	1.05	0
32	SQD	A	618	-	38,38,54	1.74	5 (13%)	40,40,65	1.11	2 (5%)
26	CLA	B	607	37	65,73,73	1.43	8 (12%)	76,113,113	1.40	10 (13%)
26	CLA	c	503	-	65,73,73	1.63	7 (10%)	76,113,113	1.55	8 (10%)
30	LMG	m	101	-	51,51,55	0.76	1 (1%)	59,59,63	1.44	8 (13%)
34	STE	B	623	-	11,11,19	0.71	0	11,11,19	1.38	1 (9%)
26	CLA	C	504	37	59,67,73	1.68	7 (11%)	68,105,113	1.45	10 (14%)
30	LMG	M	101	-	51,51,55	0.83	3 (5%)	59,59,63	1.41	7 (11%)
28	BCR	b	616	-	41,41,41	0.98	1 (2%)	56,56,56	1.33	7 (12%)
34	STE	F	103	-	11,11,19	0.74	0	11,11,19	1.17	1 (9%)
34	STE	b	623	-	9,9,19	0.38	0	8,8,19	0.63	0
26	CLA	c	509	-	65,73,73	1.50	6 (9%)	76,113,113	1.55	9 (11%)
33	DGD	C	516	-	63,63,67	1.02	5 (7%)	77,77,81	1.42	9 (11%)
31	LHG	d	408	-	48,48,48	0.59	0	51,54,54	1.26	6 (11%)
28	BCR	B	617	-	41,41,41	0.92	1 (2%)	56,56,56	1.29	6 (10%)
28	BCR	t	101	-	41,41,41	0.91	1 (2%)	56,56,56	1.27	8 (14%)
30	LMG	D	408	-	31,31,55	0.74	2 (6%)	33,33,63	1.18	3 (9%)
26	CLA	C	506	-	65,73,73	1.57	6 (9%)	76,113,113	1.36	5 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
26	CLA	a	607	37	65,73,73	1.56	7 (10%)	76,113,113	1.49	11 (14%)
29	PL9	A	612	-	55,55,55	0.88	2 (3%)	68,69,69	1.44	12 (17%)
33	DGD	H	101	-	63,63,67	1.18	6 (9%)	77,77,81	1.36	10 (12%)
22	OEX	A	602[B]	1,3,37	0,15,15	-	-	-		
26	CLA	d	404	-	65,73,73	1.50	8 (12%)	76,113,113	1.32	8 (10%)
26	CLA	C	512	-	65,73,73	1.52	7 (10%)	76,113,113	1.55	10 (13%)
31	LHG	l	101	-	48,48,48	0.64	0	51,54,54	1.22	9 (17%)
28	BCR	c	514	-	41,41,41	1.04	2 (4%)	56,56,56	1.16	4 (7%)
28	BCR	k	101	-	41,41,41	1.02	3 (7%)	56,56,56	1.08	2 (3%)
34	STE	k	102	-	11,11,19	0.73	0	11,11,19	1.15	0
26	CLA	a	606	-	65,73,73	1.55	9 (13%)	76,113,113	1.36	8 (10%)
26	CLA	b	605	-	65,73,73	1.62	7 (10%)	76,113,113	1.55	8 (10%)
26	CLA	B	611	-	65,73,73	1.56	6 (9%)	76,113,113	1.63	9 (11%)
26	CLA	B	601	37	65,73,73	1.68	7 (10%)	76,113,113	1.38	9 (11%)
33	DGD	a	614	-	43,43,67	0.89	3 (6%)	45,45,81	1.41	6 (13%)
29	PL9	d	406	-	55,55,55	0.99	3 (5%)	68,69,69	1.60	15 (22%)
33	DGD	A	619	-	67,67,67	1.09	5 (7%)	81,81,81	1.33	12 (14%)
28	BCR	c	516	-	41,41,41	1.04	2 (4%)	56,56,56	1.08	2 (3%)
28	BCR	b	618	-	41,41,41	0.93	2 (4%)	56,56,56	1.07	4 (7%)
34	STE	T	103	-	14,14,19	0.31	0	13,13,19	0.97	0
28	BCR	K	101	-	41,41,41	1.03	3 (7%)	56,56,56	1.10	2 (3%)
34	STE	X	102	-	19,19,19	0.60	0	19,19,19	1.14	0
31	LHG	L	101	-	48,48,48	0.72	1 (2%)	51,54,54	1.21	4 (7%)
26	CLA	c	511	3	65,73,73	1.67	8 (12%)	76,113,113	1.65	9 (11%)
34	STE	b	620	-	19,19,19	0.57	0	19,19,19	1.16	0
29	PL9	a	611	-	55,55,55	0.78	2 (3%)	68,69,69	1.48	11 (16%)
26	CLA	b	607	-	65,73,73	1.67	7 (10%)	76,113,113	1.45	10 (13%)
34	STE	T	102	-	15,15,19	0.39	0	14,14,19	0.72	0
26	CLA	C	507	37	65,73,73	1.60	6 (9%)	76,113,113	1.50	8 (10%)
26	CLA	D	402	-	65,73,73	1.58	7 (10%)	76,113,113	1.44	9 (11%)
26	CLA	a	612	37	65,73,73	1.51	8 (12%)	76,113,113	1.45	9 (11%)
26	CLA	A	613	37	65,73,73	1.64	9 (13%)	76,113,113	1.46	10 (13%)
26	CLA	C	501	-	65,73,73	1.50	7 (10%)	76,113,113	1.48	9 (11%)
26	CLA	b	606	37	65,73,73	1.38	5 (7%)	76,113,113	1.38	7 (9%)
34	STE	B	624	-	11,11,19	0.69	0	11,11,19	1.18	0
26	CLA	B	602	-	65,73,73	1.62	6 (9%)	76,113,113	1.50	10 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	BCT	d	401	23	2,3,3	1.25	0	2,3,3	2.92	1 (50%)
21	OEY	A	601[A]	1,3,37	0,16,16	-	-	-		
36	HEC	v	201	16	32,50,50	2.06	3 (9%)	24,82,82	1.82	7 (29%)
28	BCR	K	102	-	41,41,41	1.00	2 (4%)	56,56,56	1.10	3 (5%)
27	PHO	D	401	-	51,69,69	0.98	3 (5%)	47,99,99	1.45	7 (14%)
26	CLA	c	506	-	65,73,73	1.62	7 (10%)	76,113,113	1.43	7 (9%)
26	CLA	c	513	-	65,73,73	1.63	7 (10%)	76,113,113	1.32	7 (9%)
32	SQD	b	619	-	48,49,54	1.68	11 (22%)	57,60,65	1.86	13 (22%)
26	CLA	a	609	-	65,73,73	1.45	6 (9%)	76,113,113	1.37	9 (11%)
26	CLA	A	610	-	54,62,73	1.67	6 (11%)	62,99,113	1.56	9 (14%)
26	CLA	c	512	-	65,73,73	1.50	9 (13%)	76,113,113	1.43	10 (13%)
32	SQD	a	613	-	53,54,54	1.54	6 (11%)	62,65,65	1.90	11 (17%)
35	HEM	F	101	5,6	41,50,50	1.52	5 (12%)	45,82,82	1.32	4 (8%)
25	BCT	A	606	23	2,3,3	1.32	0	2,3,3	2.83	1 (50%)
26	CLA	B	614	-	65,73,73	1.63	7 (10%)	76,113,113	1.43	9 (11%)
30	LMG	C	518	-	48,48,55	0.84	2 (4%)	56,56,63	1.34	6 (10%)
33	DGD	c	518	-	63,63,67	0.99	3 (4%)	77,77,81	1.46	12 (15%)
34	STE	d	412	-	15,15,19	0.76	0	15,15,19	0.98	1 (6%)
28	BCR	C	514	-	41,41,41	1.05	3 (7%)	56,56,56	1.06	3 (5%)
28	BCR	T	101	-	41,41,41	1.05	2 (4%)	56,56,56	1.27	7 (12%)
34	STE	t	105	-	17,17,19	0.60	0	17,17,19	1.10	0
34	STE	j	101	-	11,11,19	0.82	0	11,11,19	1.11	2 (18%)
26	CLA	C	510	-	65,73,73	1.65	7 (10%)	76,113,113	1.55	9 (11%)
30	LMG	d	411	-	44,44,55	0.91	2 (4%)	52,52,63	1.30	5 (9%)
34	STE	C	521	-	15,15,19	0.37	0	14,14,19	0.70	0
26	CLA	C	505	-	65,73,73	1.52	7 (10%)	76,113,113	1.44	9 (11%)
21	OEY	A	601[C]	1,3,37	0,16,16	-	-	-		
26	CLA	B	610	37	65,73,73	1.64	8 (12%)	76,113,113	1.45	9 (11%)
28	BCR	h	102	-	41,41,41	0.93	2 (4%)	56,56,56	1.13	4 (7%)
34	STE	L	102	-	11,11,19	0.71	0	11,11,19	1.21	2 (18%)
26	CLA	C	502	-	65,73,73	1.68	8 (12%)	76,113,113	1.33	9 (11%)
31	LHG	d	409	-	38,38,48	0.78	1 (2%)	41,44,54	1.11	3 (7%)
30	LMG	c	522	-	48,48,55	0.91	3 (6%)	56,56,63	1.29	9 (16%)
34	STE	B	625	-	15,15,19	0.38	0	14,14,19	0.75	0
26	CLA	B	605	-	65,73,73	1.48	5 (7%)	76,113,113	1.32	7 (9%)
28	BCR	a	610	-	41,41,41	0.95	3 (7%)	56,56,56	1.17	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
26	CLA	B	616	-	60,68,73	1.60	8 (13%)	70,107,113	1.61	11 (15%)
26	CLA	D	403	-	65,73,73	1.51	11 (16%)	76,113,113	1.31	10 (13%)
26	CLA	c	508	-	64,72,73	1.85	10 (15%)	74,111,113	1.57	12 (16%)
36	HEC	V	201	16	32,50,50	2.04	3 (9%)	24,82,82	2.00	6 (25%)
26	CLA	B	612	-	65,73,73	1.46	6 (9%)	76,113,113	1.64	11 (14%)
26	CLA	h	101	37	65,73,73	1.64	9 (13%)	76,113,113	1.51	8 (10%)
34	STE	b	622	-	19,19,19	0.62	0	19,19,19	1.02	1 (5%)
28	BCR	c	515	-	41,41,41	1.08	2 (4%)	56,56,56	1.27	9 (16%)
26	CLA	c	504	37	60,68,73	1.59	5 (8%)	70,107,113	1.50	8 (11%)
33	DGD	C	517	-	63,63,67	0.98	3 (4%)	77,77,81	1.35	7 (9%)
28	BCR	D	404	-	41,41,41	1.03	2 (4%)	56,56,56	1.26	6 (10%)
30	LMG	D	406	-	51,51,55	0.79	0	59,59,63	1.33	8 (13%)
32	SQD	f	101	-	40,41,54	1.66	9 (22%)	49,52,65	1.65	11 (22%)
26	CLA	b	612	-	65,73,73	1.56	7 (10%)	76,113,113	1.52	8 (10%)
26	CLA	C	513	-	65,73,73	1.60	8 (12%)	76,113,113	1.53	9 (11%)
29	PL9	D	405	-	55,55,55	1.06	2 (3%)	68,69,69	1.56	13 (19%)
34	STE	d	413	-	16,16,19	0.62	0	16,16,19	1.12	1 (6%)
31	LHG	A	615	-	46,46,48	0.80	1 (2%)	49,52,54	1.19	4 (8%)
26	CLA	A	608	37	65,73,73	1.59	7 (10%)	76,113,113	1.48	12 (15%)
26	CLA	C	509	-	65,73,73	1.60	8 (12%)	76,113,113	1.60	8 (10%)
33	DGD	c	517	-	63,63,67	0.93	3 (4%)	77,77,81	1.45	12 (15%)
28	BCR	B	618	-	41,41,41	0.98	1 (2%)	56,56,56	1.24	6 (10%)
26	CLA	b	609	37	65,73,73	1.45	7 (10%)	76,113,113	1.46	10 (13%)
34	STE	C	520	-	11,11,19	0.72	0	11,11,19	1.17	1 (9%)
34	STE	t	104	-	9,9,19	0.38	0	8,8,19	0.70	0
32	SQD	B	622	-	53,54,54	1.55	9 (16%)	62,65,65	1.85	13 (20%)
26	CLA	B	615	-	65,73,73	1.65	9 (13%)	76,113,113	1.33	8 (10%)
32	SQD	A	616	-	51,52,54	1.53	8 (15%)	60,63,65	1.89	13 (21%)
30	LMG	A	614	-	48,48,55	0.95	5 (10%)	56,56,63	1.25	5 (8%)
34	STE	c	521	-	19,19,19	0.61	0	19,19,19	0.97	0
26	CLA	c	502	-	65,73,73	1.56	6 (9%)	76,113,113	1.51	9 (11%)
28	BCR	b	617	-	41,41,41	0.98	2 (4%)	56,56,56	1.15	4 (7%)
30	LMG	c	523	-	49,49,55	1.04	4 (8%)	57,57,63	1.27	4 (7%)
31	LHG	d	407	-	48,48,48	0.73	1 (2%)	51,54,54	1.39	7 (13%)
34	STE	H	102	-	17,17,19	0.40	0	16,16,19	0.69	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	LHG	D	409	-	48,48,48	0.90	2 (4%)	51,54,54	1.33	7 (13%)
26	CLA	B	606	-	65,73,73	1.77	7 (10%)	76,113,113	1.53	10 (13%)
26	CLA	d	403	-	65,73,73	1.53	8 (12%)	76,113,113	1.34	6 (7%)
32	SQD	t	102	-	35,35,54	1.73	6 (17%)	37,37,65	1.38	4 (10%)
31	LHG	D	407	-	48,48,48	0.71	1 (2%)	51,54,54	1.20	5 (9%)
34	STE	I	101	-	14,14,19	0.38	0	13,13,19	0.79	0
30	LMG	d	410	-	21,21,55	0.52	0	20,20,63	1.15	2 (10%)
31	LHG	e	102	-	41,41,48	0.78	1 (2%)	44,47,54	1.27	6 (13%)
26	CLA	c	507	37	65,73,73	1.66	10 (15%)	76,113,113	1.39	9 (11%)
34	STE	C	519	-	11,11,19	0.60	0	11,11,19	1.86	3 (27%)
26	CLA	B	613	-	65,73,73	1.49	7 (10%)	76,113,113	1.57	12 (15%)
27	PHO	a	608	-	51,69,69	0.99	4 (7%)	47,99,99	1.07	4 (8%)
26	CLA	b	603	-	65,73,73	1.52	6 (9%)	76,113,113	1.65	13 (17%)
34	STE	l	102	-	17,17,19	0.30	0	16,16,19	0.97	0
26	CLA	A	607	-	65,73,73	1.50	7 (10%)	76,113,113	1.40	11 (14%)
33	DGD	C	515	-	63,63,67	1.04	5 (7%)	77,77,81	1.32	9 (11%)
22	OEX	a	602[B]	1,3,37	0,15,15	-	-	-	-	-
26	CLA	b	611	-	65,73,73	1.54	6 (9%)	76,113,113	1.44	11 (14%)
26	CLA	b	613	-	65,73,73	1.63	7 (10%)	76,113,113	1.40	10 (13%)

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
33	DGD	h	103	-	-	15/51/91/95	0/2/2/2
26	CLA	b	615	-	1/1/14/20	7/31/109/115	-
26	CLA	C	503	-	1/1/15/20	4/37/115/115	-
28	BCR	B	619	-	-	4/29/63/63	0/2/2/2
30	LMG	b	621	-	-	25/50/70/70	0/1/1/1
26	CLA	C	511	3	1/1/15/20	5/37/115/115	-
26	CLA	b	602	-	1/1/15/20	8/37/115/115	-
28	BCR	Z	101	-	-	6/29/63/63	0/2/2/2
26	CLA	b	610	-	1/1/15/20	8/37/115/115	-
28	BCR	A	611	-	-	6/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	LHG	A	617	-	-	24/53/53/53	-
26	CLA	B	608	-	1/1/15/20	5/37/115/115	-
33	DGD	c	519	-	-	17/51/91/95	0/2/2/2
34	STE	t	103	-	-	3/11/11/17	-
26	CLA	c	510	-	1/1/15/20	9/37/115/115	-
35	HEM	e	101	5,6	-	3/12/54/54	-
26	CLA	c	505	-	1/1/15/20	10/37/115/115	-
26	CLA	B	603	-	1/1/15/20	17/37/115/115	-
26	CLA	B	609	-	-	6/37/115/115	-
28	BCR	X	101	-	-	8/29/63/63	0/2/2/2
27	PHO	A	609	-	-	4/37/103/103	0/5/6/6
26	CLA	B	604	-	1/1/15/20	15/37/115/115	-
34	STE	M	103	-	-	2/7/7/17	-
32	SQD	F	102	-	-	16/28/48/69	0/1/1/1
30	LMG	c	520	-	-	13/31/51/70	0/1/1/1
34	STE	a	615	-	-	7/9/9/17	-
26	CLA	b	604	-	-	10/37/115/115	-
34	STE	J	101	-	-	6/9/9/17	-
27	PHO	d	402	-	-	5/37/103/103	0/5/6/6
26	CLA	C	508	-	-	8/37/115/115	-
26	CLA	b	608	-	-	9/37/115/115	-
26	CLA	b	614	-	1/1/15/20	9/37/115/115	-
26	CLA	b	601	-	1/1/15/20	10/37/115/115	-
30	LMG	B	621	-	-	8/22/22/70	-
28	BCR	d	405	-	-	4/29/63/63	0/2/2/2
34	STE	M	102	-	-	6/12/12/17	-
34	STE	d	414	-	-	7/17/17/17	-
26	CLA	c	501	-	1/1/15/20	7/37/115/115	-
34	STE	B	620	-	-	7/14/14/17	-
32	SQD	A	618	-	-	17/39/39/69	-
26	CLA	B	607	37	1/1/15/20	19/37/115/115	-
26	CLA	c	503	-	1/1/15/20	9/37/115/115	-
30	LMG	m	101	-	-	20/46/66/70	0/1/1/1
34	STE	B	623	-	-	7/9/9/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	CLA	C	504	37	1/1/13/20	7/30/108/115	-
30	LMG	M	101	-	-	26/46/66/70	0/1/1/1
28	BCR	b	616	-	-	5/29/63/63	0/2/2/2
34	STE	F	103	-	-	7/9/9/17	-
34	STE	b	623	-	-	6/7/7/17	-
26	CLA	c	509	-	1/1/15/20	10/37/115/115	-
33	DGD	C	516	-	-	20/51/91/95	0/2/2/2
31	LHG	d	408	-	-	24/53/53/53	-
28	BCR	B	617	-	-	6/29/63/63	0/2/2/2
28	BCR	t	101	-	-	5/29/63/63	0/2/2/2
30	LMG	D	408	-	-	18/33/33/70	-
26	CLA	C	506	-	1/1/15/20	11/37/115/115	-
26	CLA	a	607	37	1/1/15/20	10/37/115/115	-
29	PL9	A	612	-	-	23/53/73/73	0/1/1/1
33	DGD	H	101	-	-	18/51/91/95	0/2/2/2
26	CLA	d	404	-	1/1/15/20	10/37/115/115	-
26	CLA	C	512	-	1/1/15/20	13/37/115/115	-
31	LHG	l	101	-	-	15/53/53/53	-
28	BCR	c	514	-	-	3/29/63/63	0/2/2/2
28	BCR	k	101	-	-	6/29/63/63	0/2/2/2
34	STE	k	102	-	-	3/9/9/17	-
26	CLA	a	606	-	1/1/15/20	6/37/115/115	-
26	CLA	b	605	-	1/1/15/20	7/37/115/115	-
26	CLA	B	611	-	1/1/15/20	6/37/115/115	-
26	CLA	B	601	37	1/1/15/20	16/37/115/115	-
33	DGD	a	614	-	-	18/45/45/95	-
29	PL9	d	406	-	-	11/53/73/73	0/1/1/1
33	DGD	A	619	-	-	25/55/95/95	0/2/2/2
28	BCR	c	516	-	-	6/29/63/63	0/2/2/2
28	BCR	b	618	-	-	4/29/63/63	0/2/2/2
34	STE	T	103	-	-	9/12/12/17	-
28	BCR	K	101	-	-	7/29/63/63	0/2/2/2
34	STE	X	102	-	-	11/17/17/17	-
31	LHG	L	101	-	-	21/53/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	CLA	c	511	3	1/1/15/20	6/37/115/115	-
34	STE	b	620	-	-	6/17/17/17	-
29	PL9	a	611	-	-	20/53/73/73	0/1/1/1
26	CLA	b	607	-	1/1/15/20	7/37/115/115	-
34	STE	T	102	-	-	7/13/13/17	-
26	CLA	C	507	37	1/1/15/20	7/37/115/115	-
26	CLA	D	402	-	1/1/15/20	7/37/115/115	-
26	CLA	a	612	37	1/1/15/20	7/37/115/115	-
26	CLA	A	613	37	1/1/15/20	6/37/115/115	-
26	CLA	C	501	-	1/1/15/20	6/37/115/115	-
26	CLA	b	606	37	1/1/15/20	14/37/115/115	-
34	STE	B	624	-	-	1/9/9/17	-
26	CLA	B	602	-	1/1/15/20	7/37/115/115	-
36	HEC	v	201	16	-	2/10/54/54	-
28	BCR	K	102	-	-	4/29/63/63	0/2/2/2
27	PHO	D	401	-	-	4/37/103/103	0/5/6/6
26	CLA	c	506	-	1/1/15/20	14/37/115/115	-
26	CLA	c	513	-	1/1/15/20	14/37/115/115	-
32	SQD	b	619	-	-	24/44/64/69	0/1/1/1
26	CLA	a	609	-	1/1/15/20	11/37/115/115	-
26	CLA	A	610	-	1/1/12/20	5/24/102/115	-
26	CLA	c	512	-	1/1/15/20	17/37/115/115	-
32	SQD	a	613	-	-	27/49/69/69	0/1/1/1
35	HEM	F	101	5,6	-	2/12/54/54	-
33	DGD	c	518	-	-	22/51/91/95	0/2/2/2
26	CLA	B	614	-	1/1/15/20	10/37/115/115	-
30	LMG	C	518	-	-	18/43/63/70	0/1/1/1
34	STE	d	412	-	-	4/13/13/17	-
28	BCR	C	514	-	-	7/29/63/63	0/2/2/2
28	BCR	T	101	-	-	7/29/63/63	0/2/2/2
34	STE	t	105	-	-	8/15/15/17	-
34	STE	j	101	-	-	5/9/9/17	-
26	CLA	C	510	-	1/1/15/20	8/37/115/115	-
30	LMG	d	411	-	-	10/39/59/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	STE	C	521	-	-	10/13/13/17	-
26	CLA	C	505	-	1/1/15/20	10/37/115/115	-
26	CLA	B	610	37	1/1/15/20	8/37/115/115	-
28	BCR	h	102	-	-	6/29/63/63	0/2/2/2
34	STE	L	102	-	-	7/9/9/17	-
26	CLA	C	502	-	1/1/15/20	9/37/115/115	-
31	LHG	d	409	-	-	9/43/43/53	-
30	LMG	c	522	-	-	22/43/63/70	0/1/1/1
34	STE	B	625	-	-	5/13/13/17	-
26	CLA	B	605	-	1/1/15/20	13/37/115/115	-
28	BCR	a	610	-	-	4/29/63/63	0/2/2/2
26	CLA	B	616	-	1/1/14/20	16/31/109/115	-
26	CLA	D	403	-	-	11/37/115/115	-
26	CLA	c	508	-	-	8/36/114/115	-
36	HEC	V	201	16	-	2/10/54/54	-
26	CLA	B	612	-	1/1/15/20	6/37/115/115	-
26	CLA	h	101	37	1/1/15/20	16/37/115/115	-
34	STE	b	622	-	-	12/17/17/17	-
28	BCR	c	515	-	-	5/29/63/63	0/2/2/2
26	CLA	c	504	37	1/1/14/20	12/31/109/115	-
33	DGD	C	517	-	-	15/51/91/95	0/2/2/2
28	BCR	D	404	-	-	7/29/63/63	0/2/2/2
30	LMG	D	406	-	-	19/46/66/70	0/1/1/1
32	SQD	f	101	-	-	18/36/56/69	0/1/1/1
26	CLA	b	612	-	1/1/15/20	8/37/115/115	-
26	CLA	C	513	-	1/1/15/20	12/37/115/115	-
29	PL9	D	405	-	-	8/53/73/73	0/1/1/1
34	STE	d	413	-	-	8/14/14/17	-
31	LHG	A	615	-	-	24/51/51/53	-
26	CLA	A	608	37	1/1/15/20	8/37/115/115	-
26	CLA	C	509	-	1/1/15/20	10/37/115/115	-
33	DGD	c	517	-	-	25/51/91/95	0/2/2/2
28	BCR	B	618	-	-	4/29/63/63	0/2/2/2
26	CLA	b	609	37	1/1/15/20	9/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	STE	C	520	-	-	5/9/9/17	-
34	STE	t	104	-	-	3/7/7/17	-
32	SQD	B	622	-	-	25/49/69/69	0/1/1/1
26	CLA	B	615	-	1/1/15/20	9/37/115/115	-
32	SQD	A	616	-	-	23/47/67/69	0/1/1/1
30	LMG	A	614	-	-	19/43/63/70	0/1/1/1
34	STE	c	521	-	-	8/17/17/17	-
26	CLA	c	502	-	1/1/15/20	9/37/115/115	-
28	BCR	b	617	-	-	2/29/63/63	0/2/2/2
30	LMG	c	523	-	-	22/44/64/70	0/1/1/1
31	LHG	d	407	-	-	18/53/53/53	-
34	STE	H	102	-	-	7/15/15/17	-
31	LHG	D	409	-	-	18/53/53/53	-
26	CLA	B	606	-	1/1/15/20	15/37/115/115	-
26	CLA	d	403	-	1/1/15/20	4/37/115/115	-
32	SQD	t	102	-	-	19/37/37/69	-
31	LHG	D	407	-	-	26/53/53/53	-
34	STE	I	101	-	-	4/12/12/17	-
30	LMG	d	410	-	-	11/17/17/70	-
31	LHG	e	102	-	-	25/46/46/53	-
26	CLA	c	507	37	1/1/15/20	9/37/115/115	-
34	STE	C	519	-	-	4/9/9/17	-
26	CLA	B	613	-	1/1/15/20	8/37/115/115	-
27	PHO	a	608	-	-	3/37/103/103	0/5/6/6
26	CLA	b	603	-	1/1/15/20	7/37/115/115	-
34	STE	l	102	-	-	9/15/15/17	-
26	CLA	A	607	-	1/1/15/20	4/37/115/115	-
33	DGD	C	515	-	-	17/51/91/95	0/2/2/2
26	CLA	b	611	-	1/1/15/20	15/37/115/115	-
26	CLA	b	613	-	1/1/15/20	18/37/115/115	-

All (723) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	B	601	CLA	C4B-NB	8.33	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	c	504	CLA	C4B-NB	8.30	1.42	1.35
26	B	606	CLA	MG-NA	8.29	2.26	2.06
26	B	610	CLA	C4B-NB	8.29	1.42	1.35
26	b	604	CLA	C4B-NB	8.29	1.42	1.35
26	h	101	CLA	C4B-NB	8.08	1.42	1.35
26	C	507	CLA	C4B-NB	8.07	1.42	1.35
26	C	504	CLA	C4B-NB	7.93	1.42	1.35
26	B	602	CLA	C4B-NB	7.85	1.42	1.35
26	b	611	CLA	C4B-NB	7.84	1.42	1.35
26	A	610	CLA	C4B-NB	7.83	1.42	1.35
26	c	507	CLA	C4B-NB	7.66	1.42	1.35
26	c	508	CLA	C4B-NB	7.66	1.42	1.35
26	b	602	CLA	C4B-NB	7.60	1.42	1.35
26	B	614	CLA	C4B-NB	7.56	1.42	1.35
26	a	609	CLA	C4B-NB	7.55	1.41	1.35
26	B	609	CLA	C4B-NB	7.52	1.41	1.35
26	b	613	CLA	C4B-NB	7.50	1.41	1.35
26	C	502	CLA	C4B-NB	7.44	1.41	1.35
26	B	608	CLA	C4B-NB	7.40	1.41	1.35
26	c	513	CLA	C4B-NB	7.34	1.41	1.35
26	C	503	CLA	MG-NA	7.33	2.23	2.06
26	d	404	CLA	C4B-NB	7.32	1.41	1.35
26	c	512	CLA	C4B-NB	7.32	1.41	1.35
26	A	608	CLA	C4B-NB	7.32	1.41	1.35
26	C	506	CLA	C4B-NB	7.31	1.41	1.35
26	b	601	CLA	C4B-NB	7.30	1.41	1.35
26	b	603	CLA	C4B-NB	7.27	1.41	1.35
26	c	511	CLA	C4B-NB	7.25	1.41	1.35
26	C	510	CLA	C4B-NB	7.24	1.41	1.35
26	b	607	CLA	C4B-NB	7.24	1.41	1.35
26	c	509	CLA	C4B-NB	7.23	1.41	1.35
26	b	608	CLA	C4B-NB	7.21	1.41	1.35
26	a	607	CLA	C4B-NB	7.21	1.41	1.35
26	C	513	CLA	C4B-NB	7.19	1.41	1.35
26	b	612	CLA	C4B-NB	7.18	1.41	1.35
26	D	402	CLA	C4B-NB	7.14	1.41	1.35
26	c	506	CLA	C4B-NB	7.14	1.41	1.35
26	C	508	CLA	C4B-NB	7.13	1.41	1.35
26	c	502	CLA	C4B-NB	7.06	1.41	1.35
26	B	616	CLA	C4B-NB	7.04	1.41	1.35
26	B	615	CLA	C4B-NB	7.02	1.41	1.35
26	b	614	CLA	C4B-NB	7.01	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	B	606	CLA	C4B-NB	6.97	1.41	1.35
26	b	615	CLA	C4B-NB	6.96	1.41	1.35
26	c	505	CLA	C4B-NB	6.95	1.41	1.35
26	C	501	CLA	C4B-NB	6.94	1.41	1.35
26	c	503	CLA	C4B-NB	6.94	1.41	1.35
26	C	505	CLA	C4B-NB	6.92	1.41	1.35
26	C	503	CLA	C4B-NB	6.91	1.41	1.35
26	b	610	CLA	C4B-NB	6.89	1.41	1.35
26	A	613	CLA	C4B-NB	6.87	1.41	1.35
26	b	606	CLA	C4B-NB	6.87	1.41	1.35
26	c	510	CLA	C4B-NB	6.86	1.41	1.35
26	C	511	CLA	C4B-NB	6.70	1.41	1.35
26	C	509	CLA	C4B-NB	6.68	1.41	1.35
26	c	501	CLA	C4B-NB	6.68	1.41	1.35
26	a	612	CLA	C4B-NB	6.63	1.41	1.35
26	B	607	CLA	C4B-NB	6.60	1.41	1.35
26	a	606	CLA	C4B-NB	6.51	1.41	1.35
26	A	607	CLA	C4B-NB	6.51	1.41	1.35
26	C	512	CLA	C4B-NB	6.51	1.41	1.35
26	B	605	CLA	C4B-NB	6.49	1.41	1.35
26	B	611	CLA	C4B-NB	6.49	1.41	1.35
26	b	607	CLA	MG-NA	6.47	2.21	2.06
26	b	609	CLA	C4B-NB	6.45	1.41	1.35
26	C	510	CLA	MG-NA	6.38	2.21	2.06
26	D	403	CLA	C4B-NB	6.35	1.40	1.35
26	B	603	CLA	C4B-NB	6.35	1.40	1.35
26	B	613	CLA	C4B-NB	6.34	1.40	1.35
26	B	612	CLA	C4B-NB	6.32	1.40	1.35
26	d	403	CLA	C4B-NB	6.30	1.40	1.35
36	v	201	HEC	C2B-C3B	-6.27	1.34	1.40
26	b	605	CLA	C4B-NB	6.27	1.40	1.35
26	b	602	CLA	MG-NA	6.18	2.21	2.06
26	b	604	CLA	MG-NA	6.17	2.20	2.06
26	B	615	CLA	MG-NA	6.16	2.20	2.06
26	c	511	CLA	MG-NA	6.14	2.20	2.06
36	V	201	HEC	C2B-C3B	-6.12	1.34	1.40
26	B	611	CLA	MG-NA	6.06	2.20	2.06
26	B	604	CLA	C4B-NB	5.99	1.40	1.35
26	B	603	CLA	MG-NA	5.90	2.20	2.06
26	c	508	CLA	MG-ND	5.77	2.17	2.05
26	C	509	CLA	MG-NA	5.56	2.19	2.06
32	A	618	SQD	O47-C45	-5.46	1.37	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	b	605	CLA	MG-NA	5.43	2.19	2.06
26	b	608	CLA	MG-NA	5.41	2.19	2.06
26	c	503	CLA	MG-NA	5.41	2.19	2.06
26	C	513	CLA	MG-NA	5.41	2.19	2.06
26	C	506	CLA	MG-NA	5.18	2.18	2.06
36	V	201	HEC	C3D-C2D	5.17	1.53	1.37
26	B	602	CLA	MG-NA	5.10	2.18	2.06
36	v	201	HEC	C3C-C2C	-5.05	1.35	1.40
32	F	102	SQD	O48-C23	5.02	1.48	1.33
36	V	201	HEC	C3C-C2C	-4.98	1.35	1.40
32	B	622	SQD	O48-C23	4.92	1.47	1.33
26	C	508	CLA	MG-NA	4.88	2.17	2.06
32	a	613	SQD	O48-C23	4.88	1.47	1.33
32	t	102	SQD	O48-C23	4.87	1.47	1.33
32	A	618	SQD	O48-C23	4.86	1.47	1.33
26	B	612	CLA	MG-NA	4.84	2.17	2.06
36	v	201	HEC	C3D-C2D	4.84	1.52	1.37
26	c	513	CLA	MG-ND	-4.79	1.96	2.05
26	c	502	CLA	MG-NA	4.76	2.17	2.06
26	b	613	CLA	C1D-ND	4.75	1.43	1.37
35	F	101	HEM	C3C-C2C	-4.73	1.33	1.40
26	C	512	CLA	MG-NA	4.72	2.17	2.06
26	c	507	CLA	MG-NA	4.70	2.17	2.06
26	B	601	CLA	MG-NA	4.69	2.17	2.06
26	C	502	CLA	MG-NA	4.69	2.17	2.06
32	f	101	SQD	O48-C23	4.68	1.47	1.33
26	B	609	CLA	MG-NA	4.68	2.17	2.06
26	A	613	CLA	C1D-ND	4.64	1.43	1.37
32	b	619	SQD	O48-C23	4.63	1.46	1.33
26	c	510	CLA	MG-ND	-4.58	1.96	2.05
32	A	616	SQD	O48-C23	4.56	1.46	1.33
26	c	508	CLA	MG-NA	4.54	2.17	2.06
26	b	613	CLA	MG-NA	4.53	2.17	2.06
26	C	507	CLA	MG-NA	4.51	2.17	2.06
26	d	403	CLA	MG-NC	4.49	2.16	2.06
26	c	510	CLA	MG-NA	4.47	2.16	2.06
26	c	501	CLA	MG-NA	4.46	2.16	2.06
26	B	614	CLA	MG-NC	4.46	2.16	2.06
26	b	601	CLA	C1D-ND	4.45	1.43	1.37
26	c	506	CLA	MG-ND	-4.44	1.97	2.05
26	b	612	CLA	MG-NA	4.43	2.16	2.06
26	B	616	CLA	C1D-ND	4.43	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	B	610	CLA	MG-NA	4.43	2.16	2.06
26	B	613	CLA	MG-NA	4.41	2.16	2.06
26	D	402	CLA	MG-NA	4.39	2.16	2.06
26	A	607	CLA	MG-NA	4.37	2.16	2.06
26	d	403	CLA	C1D-ND	4.35	1.43	1.37
26	a	612	CLA	MG-NA	4.32	2.16	2.06
26	b	610	CLA	MG-NA	4.31	2.16	2.06
26	b	614	CLA	MG-NA	4.27	2.16	2.06
26	C	504	CLA	MG-NA	4.25	2.16	2.06
26	a	606	CLA	MG-NA	4.25	2.16	2.06
26	b	605	CLA	MG-ND	4.24	2.14	2.05
26	c	508	CLA	C1D-ND	4.20	1.42	1.37
26	C	502	CLA	C1D-ND	4.19	1.42	1.37
26	b	611	CLA	C1D-ND	4.18	1.42	1.37
26	B	605	CLA	MG-NA	4.12	2.16	2.06
26	A	610	CLA	C1D-ND	4.11	1.42	1.37
26	c	513	CLA	C1D-ND	4.08	1.42	1.37
26	A	613	CLA	MG-NA	4.05	2.15	2.06
26	D	403	CLA	C1D-ND	4.03	1.42	1.37
26	h	101	CLA	MG-NA	4.03	2.15	2.06
26	A	608	CLA	C1D-ND	4.02	1.42	1.37
26	c	503	CLA	C1D-ND	4.00	1.42	1.37
32	b	619	SQD	O47-C7	3.97	1.45	1.34
26	c	506	CLA	MG-NA	3.97	2.15	2.06
26	B	614	CLA	C1D-ND	3.97	1.42	1.37
26	A	608	CLA	MG-NA	3.97	2.15	2.06
26	c	511	CLA	C1D-ND	3.95	1.42	1.37
26	A	613	CLA	MG-NC	3.93	2.15	2.06
26	C	513	CLA	C1D-ND	3.91	1.42	1.37
26	c	510	CLA	C1D-ND	3.88	1.42	1.37
26	B	605	CLA	C1D-ND	3.88	1.42	1.37
26	B	606	CLA	C1D-ND	3.86	1.42	1.37
26	D	402	CLA	C1D-ND	3.85	1.42	1.37
26	C	511	CLA	C1D-ND	3.82	1.42	1.37
32	B	622	SQD	O47-C7	3.82	1.45	1.34
26	a	609	CLA	C1D-ND	3.82	1.42	1.37
26	B	604	CLA	C1D-ND	3.82	1.42	1.37
26	h	101	CLA	C1D-ND	3.82	1.42	1.37
26	c	502	CLA	C1D-ND	3.81	1.42	1.37
26	B	601	CLA	C1D-ND	3.80	1.42	1.37
26	B	604	CLA	MG-NA	3.79	2.15	2.06
26	a	606	CLA	C1D-ND	3.78	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	c	507	CLA	CHC-C1C	3.78	1.44	1.35
26	a	607	CLA	C4D-ND	-3.78	1.32	1.37
26	B	608	CLA	MG-NA	3.76	2.15	2.06
26	B	613	CLA	C1D-ND	3.76	1.42	1.37
28	C	514	BCR	C1-C6	-3.76	1.48	1.53
26	C	505	CLA	MG-NA	3.76	2.15	2.06
26	b	603	CLA	C1D-ND	3.75	1.42	1.37
31	D	409	LHG	O7-C5	-3.73	1.37	1.46
32	t	102	SQD	O47-C7	3.73	1.44	1.34
26	C	512	CLA	C1D-ND	3.72	1.42	1.37
26	C	501	CLA	CHC-C1C	3.72	1.44	1.35
26	C	501	CLA	C1D-ND	3.72	1.42	1.37
26	C	507	CLA	C1D-ND	3.72	1.42	1.37
30	c	523	LMG	C3-C2	3.71	1.61	1.52
26	B	609	CLA	C1D-ND	3.71	1.42	1.37
26	b	609	CLA	MG-ND	3.70	2.13	2.05
35	e	101	HEM	C3C-CAC	3.69	1.55	1.47
26	B	611	CLA	C1D-ND	3.69	1.42	1.37
26	A	607	CLA	C1D-ND	3.69	1.42	1.37
26	B	604	CLA	C4D-ND	-3.68	1.32	1.37
26	c	508	CLA	CHC-C1C	3.67	1.44	1.35
26	C	509	CLA	C1D-ND	3.66	1.42	1.37
26	C	510	CLA	C1D-ND	3.66	1.42	1.37
26	B	602	CLA	C1D-ND	3.64	1.42	1.37
26	b	614	CLA	C1D-ND	3.64	1.42	1.37
26	C	505	CLA	C1D-ND	3.64	1.42	1.37
29	D	405	PL9	C6-C1	-3.62	1.42	1.48
26	b	607	CLA	C1D-ND	3.62	1.42	1.37
28	c	515	BCR	C1-C6	-3.61	1.48	1.53
26	c	506	CLA	C1D-ND	3.61	1.42	1.37
26	c	505	CLA	MG-NA	3.61	2.14	2.06
26	a	606	CLA	CHC-C1C	3.60	1.44	1.35
26	c	509	CLA	MG-NA	3.60	2.14	2.06
26	C	504	CLA	C1D-ND	3.60	1.42	1.37
26	b	605	CLA	CHC-C1C	3.60	1.44	1.35
26	B	610	CLA	C1D-ND	3.58	1.42	1.37
26	a	612	CLA	C1D-ND	3.56	1.42	1.37
35	F	101	HEM	C3C-CAC	3.56	1.55	1.47
26	B	601	CLA	CHC-C1C	3.56	1.44	1.35
26	b	612	CLA	C1D-ND	3.55	1.42	1.37
26	B	603	CLA	C1D-ND	3.55	1.42	1.37
26	a	607	CLA	CHC-C1C	3.54	1.44	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	b	606	CLA	CHC-C1C	3.54	1.44	1.35
26	C	504	CLA	CHC-C1C	3.53	1.44	1.35
26	c	512	CLA	CHC-C1C	3.53	1.44	1.35
32	f	101	SQD	O47-C7	3.51	1.44	1.34
32	b	619	SQD	O5-C1	3.51	1.50	1.41
26	C	510	CLA	CHC-C1C	3.50	1.43	1.35
26	b	613	CLA	CHC-C1C	3.50	1.43	1.35
26	c	505	CLA	CHC-C1C	3.50	1.43	1.35
26	c	509	CLA	C1D-ND	3.49	1.42	1.37
26	b	603	CLA	MG-NA	3.49	2.14	2.06
32	t	102	SQD	C24-C23	3.49	1.60	1.50
26	b	607	CLA	CHC-C1C	3.49	1.43	1.35
26	B	602	CLA	CHC-C1C	3.49	1.43	1.35
26	c	508	CLA	MG-NC	3.48	2.14	2.06
26	a	607	CLA	C1D-ND	3.48	1.42	1.37
35	e	101	HEM	C3C-C2C	-3.48	1.35	1.40
26	A	607	CLA	MG-ND	-3.47	1.98	2.05
26	C	509	CLA	CHC-C1C	3.47	1.43	1.35
26	C	506	CLA	CHC-C1C	3.47	1.43	1.35
26	b	602	CLA	C1D-ND	3.46	1.42	1.37
26	B	607	CLA	C1D-ND	3.46	1.42	1.37
32	a	613	SQD	O47-C7	3.46	1.44	1.34
26	B	615	CLA	CHC-C1C	3.45	1.43	1.35
26	B	605	CLA	CHC-C1C	3.44	1.43	1.35
26	h	101	CLA	CHC-C1C	3.44	1.43	1.35
28	b	616	BCR	C1-C6	-3.43	1.49	1.53
32	A	616	SQD	O47-C45	-3.42	1.38	1.46
26	b	610	CLA	C1D-ND	3.41	1.42	1.37
26	C	507	CLA	CHC-C1C	3.41	1.43	1.35
32	A	618	SQD	O47-C7	3.41	1.43	1.34
26	b	603	CLA	C4D-ND	-3.41	1.33	1.37
26	c	513	CLA	CHC-C1C	3.40	1.43	1.35
26	b	609	CLA	C1D-ND	3.40	1.42	1.37
26	B	610	CLA	CHC-C1C	3.39	1.43	1.35
33	H	101	DGD	O5D-C1E	3.39	1.46	1.40
26	B	608	CLA	C1D-ND	3.39	1.41	1.37
26	c	501	CLA	C1D-ND	3.38	1.41	1.37
26	c	504	CLA	CHC-C1C	3.37	1.43	1.35
26	c	511	CLA	CHC-C1C	3.36	1.43	1.35
26	b	604	CLA	CHC-C1C	3.35	1.43	1.35
26	b	611	CLA	CHC-C1C	3.35	1.43	1.35
26	c	512	CLA	C1D-ND	3.35	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	b	608	CLA	C1D-ND	3.34	1.41	1.37
32	a	613	SQD	O47-C45	-3.34	1.38	1.46
26	b	604	CLA	C1D-ND	3.34	1.41	1.37
26	A	608	CLA	C4D-ND	-3.33	1.33	1.37
26	B	616	CLA	CHC-C1C	3.33	1.43	1.35
26	A	608	CLA	CHC-C1C	3.32	1.43	1.35
26	c	507	CLA	C1D-ND	3.32	1.41	1.37
26	C	503	CLA	CHC-C1C	3.32	1.43	1.35
26	b	605	CLA	C4D-ND	-3.32	1.33	1.37
26	C	506	CLA	C1D-ND	3.31	1.41	1.37
26	C	503	CLA	C1D-ND	3.30	1.41	1.37
26	b	615	CLA	C4D-ND	-3.30	1.33	1.37
26	B	614	CLA	CHC-C1C	3.29	1.43	1.35
26	c	507	CLA	C4D-ND	-3.29	1.33	1.37
26	a	606	CLA	MG-ND	-3.28	1.99	2.05
26	B	608	CLA	CHC-C1C	3.28	1.43	1.35
26	C	505	CLA	CHC-C1C	3.28	1.43	1.35
26	d	404	CLA	CHC-C1C	3.28	1.43	1.35
26	c	513	CLA	MG-NA	3.28	2.14	2.06
26	C	511	CLA	C4D-ND	-3.27	1.33	1.37
28	c	514	BCR	C1-C6	-3.27	1.49	1.53
26	B	608	CLA	C4D-ND	-3.27	1.33	1.37
26	B	615	CLA	C1D-ND	3.27	1.41	1.37
26	b	614	CLA	CHC-C1C	3.26	1.43	1.35
32	A	618	SQD	C24-C23	3.26	1.60	1.50
26	B	604	CLA	CHC-C1C	3.25	1.43	1.35
32	F	102	SQD	C24-C23	3.24	1.60	1.50
26	A	610	CLA	C4D-ND	-3.24	1.33	1.37
26	D	402	CLA	C4D-ND	-3.24	1.33	1.37
26	B	607	CLA	C4D-ND	-3.24	1.33	1.37
26	c	508	CLA	C4D-ND	-3.24	1.33	1.37
30	b	621	LMG	C4-C3	3.23	1.60	1.52
26	b	615	CLA	C1D-ND	3.22	1.41	1.37
28	K	101	BCR	C1-C6	-3.21	1.49	1.53
26	d	404	CLA	C4D-ND	-3.21	1.33	1.37
26	B	611	CLA	CHC-C1C	3.21	1.43	1.35
26	C	511	CLA	MG-NC	3.21	2.13	2.06
26	c	506	CLA	CHC-C1C	3.21	1.43	1.35
26	c	504	CLA	C1D-ND	3.20	1.41	1.37
28	Z	101	BCR	C1-C6	-3.20	1.49	1.53
26	c	503	CLA	CHC-C1C	3.20	1.43	1.35
26	D	402	CLA	MG-NC	3.20	2.13	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	c	516	BCR	C1-C6	-3.19	1.49	1.53
26	C	512	CLA	CHC-C1C	3.19	1.43	1.35
26	c	509	CLA	C4D-ND	-3.19	1.33	1.37
26	b	605	CLA	C1D-ND	3.19	1.41	1.37
26	c	501	CLA	CHC-C1C	3.18	1.43	1.35
26	a	607	CLA	MG-NA	3.16	2.13	2.06
26	b	614	CLA	MG-ND	-3.16	1.99	2.05
26	B	612	CLA	C4D-ND	-3.16	1.33	1.37
26	A	613	CLA	CHC-C1C	3.15	1.43	1.35
26	B	612	CLA	CHC-C1C	3.15	1.43	1.35
26	B	614	CLA	C4D-ND	-3.14	1.33	1.37
26	b	612	CLA	CHC-C1C	3.12	1.43	1.35
26	c	510	CLA	CHC-C1C	3.12	1.43	1.35
32	f	101	SQD	O47-C45	-3.11	1.38	1.46
26	c	505	CLA	C4D-ND	-3.11	1.33	1.37
26	C	511	CLA	CHC-C1C	3.10	1.42	1.35
26	b	603	CLA	CHC-C1C	3.09	1.42	1.35
33	A	619	DGD	C4D-C5D	3.09	1.59	1.53
32	A	616	SQD	C24-C23	3.09	1.59	1.50
26	B	616	CLA	MG-NC	3.08	2.13	2.06
26	B	613	CLA	CHC-C1C	3.07	1.42	1.35
32	A	616	SQD	O47-C7	3.07	1.43	1.34
31	A	615	LHG	P-O6	3.07	1.71	1.59
32	a	613	SQD	C24-C23	3.07	1.59	1.50
32	B	622	SQD	O5-C1	3.06	1.49	1.41
28	k	101	BCR	C1-C6	-3.06	1.49	1.53
26	B	606	CLA	CHC-C1C	3.06	1.42	1.35
26	c	509	CLA	CHC-C1C	3.05	1.42	1.35
26	b	610	CLA	CHC-C1C	3.05	1.42	1.35
26	B	603	CLA	CHC-C1C	3.05	1.42	1.35
32	b	619	SQD	C24-C23	3.05	1.59	1.50
26	c	502	CLA	CHC-C1C	3.04	1.42	1.35
26	b	609	CLA	C4D-ND	-3.04	1.33	1.37
26	B	613	CLA	C4D-ND	-3.04	1.33	1.37
26	A	607	CLA	CHC-C1C	3.04	1.42	1.35
32	B	622	SQD	C24-C23	3.04	1.59	1.50
26	c	505	CLA	C1D-ND	3.03	1.41	1.37
26	C	513	CLA	CHC-C1C	3.03	1.42	1.35
32	a	613	SQD	O5-C1	3.02	1.49	1.41
28	K	102	BCR	C1-C6	-3.02	1.49	1.53
32	f	101	SQD	C24-C23	3.02	1.59	1.50
33	H	101	DGD	C1E-C2E	3.01	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	C	502	CLA	C4D-ND	-3.00	1.33	1.37
26	a	609	CLA	CHC-C1C	3.00	1.42	1.35
35	F	101	HEM	CAB-C3B	3.00	1.55	1.47
28	T	101	BCR	C30-C25	-3.00	1.49	1.53
26	b	615	CLA	CHC-C1C	2.99	1.42	1.35
26	b	604	CLA	C4D-ND	-2.99	1.33	1.37
28	B	618	BCR	C30-C25	-2.99	1.49	1.53
26	B	614	CLA	MG-NA	2.98	2.13	2.06
26	C	508	CLA	CHC-C1C	2.98	1.42	1.35
26	C	501	CLA	MG-NA	2.98	2.13	2.06
28	b	617	BCR	C30-C25	-2.98	1.49	1.53
26	C	508	CLA	C4D-ND	-2.97	1.33	1.37
26	c	502	CLA	C4D-ND	-2.97	1.33	1.37
26	C	503	CLA	C4D-ND	-2.97	1.33	1.37
28	c	516	BCR	C30-C25	-2.97	1.49	1.53
26	d	403	CLA	CHC-C1C	2.96	1.42	1.35
26	C	506	CLA	C4D-ND	-2.96	1.33	1.37
26	c	504	CLA	C4D-ND	-2.96	1.33	1.37
28	T	101	BCR	C1-C6	-2.95	1.49	1.53
33	C	516	DGD	O2G-C2G	-2.94	1.39	1.46
33	C	517	DGD	C6D-C5D	2.94	1.60	1.51
26	D	402	CLA	CHC-C1C	2.94	1.42	1.35
26	b	612	CLA	C4D-ND	-2.93	1.33	1.37
26	C	502	CLA	CHC-C1C	2.93	1.42	1.35
26	b	602	CLA	CHC-C1C	2.93	1.42	1.35
31	A	617	LHG	P-O6	2.93	1.71	1.59
32	t	102	SQD	O47-C45	-2.93	1.39	1.46
26	A	610	CLA	CHC-C1C	2.92	1.42	1.35
33	c	517	DGD	O2G-C2G	-2.92	1.39	1.46
26	B	616	CLA	C4D-ND	-2.92	1.33	1.37
26	a	612	CLA	CHC-C1C	2.91	1.42	1.35
30	c	522	LMG	C3-C2	2.90	1.59	1.52
26	b	601	CLA	CHC-C1C	2.89	1.42	1.35
28	A	611	BCR	C1-C6	-2.89	1.49	1.53
32	F	102	SQD	O5-C1	2.89	1.49	1.41
33	a	614	DGD	O2G-C1B	2.88	1.42	1.34
26	c	512	CLA	C4D-ND	-2.88	1.33	1.37
26	b	603	CLA	MG-NC	2.88	2.13	2.06
32	f	101	SQD	O5-C1	2.88	1.49	1.41
28	Z	101	BCR	C30-C25	-2.88	1.49	1.53
26	c	513	CLA	C4D-ND	-2.88	1.33	1.37
33	H	101	DGD	C4D-C5D	2.88	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	C	501	CLA	C4D-ND	-2.87	1.33	1.37
31	D	407	LHG	O7-C5	-2.87	1.39	1.46
26	B	612	CLA	C1D-ND	2.86	1.41	1.37
26	b	607	CLA	C4D-ND	-2.86	1.33	1.37
26	c	503	CLA	C4D-ND	-2.86	1.33	1.37
32	B	622	SQD	O47-C45	-2.86	1.39	1.46
26	b	608	CLA	C4D-ND	-2.85	1.33	1.37
33	a	614	DGD	O1G-C1A	2.85	1.41	1.33
26	b	608	CLA	MG-ND	2.84	2.11	2.05
26	B	605	CLA	C4D-ND	-2.84	1.33	1.37
26	c	501	CLA	C4D-ND	-2.84	1.33	1.37
29	d	406	PL9	C6-C1	-2.83	1.43	1.48
35	F	101	HEM	FE-NB	2.83	2.10	1.96
26	D	403	CLA	MG-NA	2.83	2.13	2.06
28	K	102	BCR	C30-C25	-2.83	1.49	1.53
26	C	512	CLA	C4D-ND	-2.83	1.33	1.37
26	b	608	CLA	CHC-C1C	2.82	1.42	1.35
32	A	616	SQD	O5-C1	2.82	1.49	1.41
26	b	609	CLA	CHC-C1C	2.81	1.42	1.35
28	d	405	BCR	C30-C25	-2.81	1.49	1.53
33	a	614	DGD	C1G-C2G	2.80	1.59	1.50
26	C	510	CLA	C4D-ND	-2.80	1.33	1.37
28	D	404	BCR	C30-C25	-2.79	1.49	1.53
26	C	508	CLA	C1D-ND	2.79	1.41	1.37
26	B	611	CLA	C4D-ND	-2.79	1.33	1.37
30	A	614	LMG	C4-C5	2.78	1.58	1.53
26	B	616	CLA	MG-NA	2.78	2.12	2.06
29	A	612	PL9	C3-C4	-2.78	1.45	1.49
26	B	603	CLA	C4D-ND	-2.77	1.33	1.37
26	c	510	CLA	C4D-ND	-2.76	1.33	1.37
26	b	615	CLA	MG-NA	2.76	2.12	2.06
26	a	609	CLA	C4D-ND	-2.76	1.33	1.37
28	K	101	BCR	C30-C25	-2.76	1.50	1.53
26	D	403	CLA	C4D-ND	-2.75	1.33	1.37
31	d	409	LHG	P-O6	2.75	1.70	1.59
28	X	101	BCR	C30-C25	-2.74	1.50	1.53
33	C	515	DGD	C4E-C3E	2.74	1.59	1.52
26	b	606	CLA	C1D-ND	2.74	1.41	1.37
26	a	607	CLA	MG-ND	-2.73	2.00	2.05
26	b	611	CLA	C4D-ND	-2.72	1.33	1.37
29	d	406	PL9	C53-C6	-2.72	1.45	1.50
26	b	613	CLA	C4D-ND	-2.72	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	c	503	CLA	MG-NC	2.71	2.12	2.06
28	D	404	BCR	C1-C6	-2.71	1.50	1.53
26	B	609	CLA	CHC-C1C	2.70	1.41	1.35
26	A	613	CLA	C4D-ND	-2.70	1.34	1.37
26	C	507	CLA	C4D-ND	-2.70	1.34	1.37
33	C	516	DGD	C1G-C2G	2.69	1.59	1.50
26	d	403	CLA	MG-ND	-2.69	2.00	2.05
26	C	502	CLA	MG-ND	-2.69	2.00	2.05
33	c	519	DGD	C6D-C5D	2.68	1.60	1.51
26	c	510	CLA	CMB-C2B	-2.68	1.46	1.51
26	C	511	CLA	MG-NA	2.68	2.12	2.06
26	A	613	CLA	MG-ND	-2.68	2.00	2.05
26	b	610	CLA	C4D-ND	-2.68	1.34	1.37
30	b	621	LMG	C9-C8	2.68	1.58	1.50
26	b	602	CLA	CMB-C2B	-2.66	1.46	1.51
26	B	610	CLA	C4D-ND	-2.65	1.34	1.37
26	B	615	CLA	C3B-C2B	-2.65	1.36	1.40
26	d	404	CLA	C1D-ND	2.64	1.41	1.37
26	B	615	CLA	CMB-C2B	-2.64	1.46	1.51
28	c	514	BCR	C30-C25	-2.63	1.50	1.53
26	b	601	CLA	C4D-ND	-2.63	1.34	1.37
30	b	621	LMG	C4-C5	2.63	1.58	1.53
26	c	509	CLA	CMB-C2B	-2.63	1.46	1.51
26	b	614	CLA	CMB-C2B	-2.62	1.46	1.51
26	B	607	CLA	CHC-C1C	2.62	1.41	1.35
28	B	617	BCR	C1-C6	-2.62	1.50	1.53
28	c	515	BCR	C30-C25	-2.62	1.50	1.53
26	a	612	CLA	C1B-NB	2.62	1.37	1.35
26	b	606	CLA	C4D-ND	-2.61	1.34	1.37
26	c	511	CLA	C4D-ND	-2.61	1.34	1.37
30	d	411	LMG	C4-C5	2.61	1.58	1.53
26	B	609	CLA	C4D-ND	-2.61	1.34	1.37
26	B	604	CLA	MG-ND	2.61	2.11	2.05
30	c	523	LMG	C1-C2	2.61	1.60	1.52
33	H	101	DGD	C6D-C5D	2.60	1.59	1.51
28	B	619	BCR	C1-C6	-2.58	1.50	1.53
26	C	504	CLA	C4D-ND	-2.58	1.34	1.37
26	C	505	CLA	C4D-ND	-2.58	1.34	1.37
26	b	614	CLA	C4D-ND	-2.58	1.34	1.37
33	h	103	DGD	C4D-C3D	2.58	1.58	1.52
32	b	619	SQD	O47-C45	-2.58	1.40	1.46
31	d	407	LHG	O7-C5	-2.57	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	C	508	CLA	MG-NC	2.57	2.12	2.06
26	C	509	CLA	C4D-ND	-2.57	1.34	1.37
30	A	614	LMG	C7-C8	2.56	1.58	1.50
26	C	513	CLA	C4D-ND	-2.56	1.34	1.37
28	h	102	BCR	C30-C25	-2.56	1.50	1.53
26	a	606	CLA	MG-NC	2.55	2.12	2.06
26	A	607	CLA	C4D-ND	-2.55	1.34	1.37
28	t	101	BCR	C30-C25	-2.55	1.50	1.53
26	B	613	CLA	MG-ND	-2.54	2.00	2.05
26	B	602	CLA	C4D-ND	-2.54	1.34	1.37
26	B	610	CLA	CMB-C2B	-2.53	1.46	1.51
26	C	509	CLA	MG-NC	-2.52	2.00	2.06
33	A	619	DGD	O2G-C2G	-2.52	1.40	1.46
26	B	606	CLA	C4D-ND	-2.52	1.34	1.37
28	a	610	BCR	C1-C6	-2.51	1.50	1.53
30	D	408	LMG	C9-C8	2.50	1.58	1.50
26	D	403	CLA	CHC-C1C	2.49	1.41	1.35
26	C	502	CLA	CMB-C2B	-2.49	1.46	1.51
26	C	504	CLA	CMB-C2B	-2.48	1.46	1.51
27	d	402	PHO	CAC-C3C	-2.48	1.47	1.52
26	C	512	CLA	CMB-C2B	-2.48	1.46	1.51
26	B	607	CLA	CMB-C2B	-2.47	1.46	1.51
26	c	512	CLA	CMB-C2B	-2.47	1.46	1.51
27	D	401	PHO	CAC-C3C	-2.47	1.47	1.52
32	b	619	SQD	O9-S	2.47	1.52	1.45
33	A	619	DGD	C4D-C3D	2.47	1.58	1.52
26	A	608	CLA	CMB-C2B	-2.47	1.46	1.51
33	C	515	DGD	O2G-C2G	-2.47	1.40	1.46
33	A	619	DGD	C3G-C2G	2.46	1.58	1.50
26	c	506	CLA	C4D-ND	-2.46	1.34	1.37
26	h	101	CLA	C4D-ND	-2.46	1.34	1.37
28	k	101	BCR	C30-C25	-2.45	1.50	1.53
30	c	523	LMG	C4-C3	2.45	1.58	1.52
26	b	602	CLA	CMD-C2D	-2.45	1.45	1.50
26	D	403	CLA	MG-ND	-2.45	2.00	2.05
26	d	404	CLA	CMB-C2B	-2.45	1.46	1.51
33	A	619	DGD	C1E-C2E	2.44	1.59	1.52
28	d	405	BCR	C1-C6	-2.44	1.50	1.53
35	e	101	HEM	CAB-C3B	2.43	1.54	1.47
26	b	614	CLA	C3B-C2B	-2.43	1.37	1.40
35	e	101	HEM	FE-NB	2.43	2.08	1.96
28	b	618	BCR	C1-C6	-2.43	1.50	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	101	LHG	O7-C5	-2.42	1.40	1.46
26	c	503	CLA	CMB-C2B	-2.42	1.46	1.51
26	D	403	CLA	MG-NC	2.41	2.12	2.06
26	B	615	CLA	C4D-ND	-2.41	1.34	1.37
30	b	621	LMG	C3-C2	2.41	1.58	1.52
32	f	101	SQD	O7-S	2.41	1.52	1.45
27	a	608	PHO	CAC-C3C	-2.41	1.48	1.52
26	b	608	CLA	CMB-C2B	-2.41	1.46	1.51
26	a	612	CLA	CMB-C2B	-2.40	1.46	1.51
26	B	601	CLA	CMB-C2B	-2.40	1.46	1.51
30	C	518	LMG	O7-C8	-2.40	1.40	1.46
35	e	101	HEM	C3B-C2B	-2.40	1.32	1.37
26	B	616	CLA	CMC-C2C	-2.39	1.45	1.50
26	c	511	CLA	CMB-C2B	-2.39	1.46	1.51
26	c	512	CLA	MG-NC	2.39	2.11	2.06
31	e	102	LHG	P-O6	2.38	1.69	1.59
26	b	602	CLA	C4D-ND	-2.38	1.34	1.37
26	B	615	CLA	C3B-CAB	-2.38	1.43	1.47
29	d	406	PL9	C31-C29	-2.38	1.46	1.51
31	D	409	LHG	C24-C23	2.38	1.57	1.50
26	B	601	CLA	MG-NC	2.38	2.11	2.06
26	C	511	CLA	CMB-C2B	-2.37	1.46	1.51
26	D	402	CLA	CMB-C2B	-2.37	1.46	1.51
26	B	607	CLA	MG-ND	-2.37	2.01	2.05
26	c	505	CLA	CMB-C2B	-2.37	1.46	1.51
32	b	619	SQD	O5-C5	2.36	1.50	1.44
27	D	401	PHO	CMB-C2B	-2.36	1.45	1.51
26	C	510	CLA	CMB-C2B	-2.36	1.46	1.51
26	c	511	CLA	MG-NC	2.35	2.11	2.06
27	A	609	PHO	CAC-C3C	-2.35	1.48	1.52
26	B	601	CLA	C4D-ND	-2.35	1.34	1.37
26	D	403	CLA	CMB-C2B	-2.34	1.46	1.51
33	c	519	DGD	O2E-C2E	-2.34	1.37	1.43
33	C	515	DGD	O1G-C1A	2.34	1.40	1.33
26	C	502	CLA	C3B-C2B	-2.34	1.37	1.40
26	B	608	CLA	CMB-C2B	-2.33	1.46	1.51
26	d	404	CLA	C1D-C2D	2.33	1.49	1.45
26	C	513	CLA	CMB-C2B	-2.33	1.46	1.51
26	b	601	CLA	MG-NA	2.33	2.11	2.06
26	C	508	CLA	CMB-C2B	-2.32	1.46	1.51
32	b	619	SQD	C6-S	2.32	1.85	1.77
30	m	101	LMG	C4-C3	2.32	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	B	614	CLA	CMB-C2B	-2.31	1.46	1.51
30	M	101	LMG	C4-C3	2.31	1.58	1.52
26	a	609	CLA	CMB-C2B	-2.31	1.46	1.51
26	B	604	CLA	CMB-C2B	-2.31	1.46	1.51
30	A	614	LMG	C4-C3	2.31	1.58	1.52
26	a	607	CLA	CMB-C2B	-2.31	1.46	1.51
26	c	507	CLA	CMB-C2B	-2.31	1.46	1.51
32	A	618	SQD	C46-C45	2.31	1.55	1.50
33	C	517	DGD	C4D-C5D	2.31	1.57	1.53
26	c	504	CLA	CMB-C2B	-2.30	1.46	1.51
26	C	503	CLA	CMB-C2B	-2.30	1.46	1.51
30	c	520	LMG	C4-C5	2.30	1.57	1.53
33	c	518	DGD	C1G-C2G	2.30	1.57	1.50
26	d	403	CLA	C4D-ND	-2.29	1.34	1.37
26	a	612	CLA	C4D-ND	-2.29	1.34	1.37
33	C	516	DGD	O6D-C5D	-2.28	1.38	1.44
26	b	611	CLA	CMB-C2B	-2.28	1.46	1.51
26	b	613	CLA	CMB-C2B	-2.28	1.46	1.51
30	C	518	LMG	C4-C5	2.28	1.57	1.53
26	b	609	CLA	CMB-C2B	-2.28	1.46	1.51
26	B	606	CLA	CMB-C2B	-2.28	1.46	1.51
26	C	509	CLA	CMB-C2B	-2.27	1.46	1.51
26	C	501	CLA	CMC-C2C	-2.27	1.46	1.50
32	f	101	SQD	O9-S	2.27	1.51	1.45
26	b	601	CLA	C1D-C2D	2.27	1.49	1.45
33	C	515	DGD	C3D-C2D	2.26	1.58	1.52
26	C	505	CLA	CMB-C2B	-2.26	1.46	1.51
27	a	608	PHO	CMC-C2C	-2.26	1.46	1.51
32	b	619	SQD	C44-C45	2.26	1.57	1.50
26	B	616	CLA	C1D-C2D	2.26	1.49	1.45
30	A	614	LMG	C1-C2	2.25	1.59	1.52
26	C	513	CLA	MG-ND	2.25	2.10	2.05
33	c	519	DGD	O2G-C2G	-2.25	1.41	1.46
26	d	403	CLA	CMD-C2D	-2.25	1.46	1.50
30	b	621	LMG	C7-C8	2.25	1.57	1.50
26	b	610	CLA	CMB-C2B	-2.25	1.47	1.51
26	B	610	CLA	C3B-C2B	-2.24	1.37	1.40
26	c	506	CLA	CMB-C2B	-2.24	1.47	1.51
26	h	101	CLA	CMB-C2B	-2.24	1.47	1.51
26	C	503	CLA	MG-ND	2.24	2.10	2.05
26	b	612	CLA	MG-ND	2.23	2.10	2.05
30	c	523	LMG	O6-C5	-2.23	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	b	611	CLA	CMC-C2C	-2.23	1.46	1.50
30	M	101	LMG	C9-C8	2.23	1.57	1.50
28	C	514	BCR	C30-C25	-2.23	1.50	1.53
33	c	517	DGD	O4D-C4D	-2.23	1.37	1.43
26	C	509	CLA	CMD-C2D	-2.23	1.46	1.50
32	A	616	SQD	O9-S	2.23	1.51	1.45
26	c	510	CLA	CMD-C2D	-2.22	1.46	1.50
32	b	619	SQD	O7-S	2.22	1.51	1.45
33	C	515	DGD	C4D-C3D	2.21	1.58	1.52
26	B	602	CLA	CMB-C2B	-2.21	1.47	1.51
26	c	512	CLA	C3B-C2B	-2.21	1.37	1.40
32	t	102	SQD	C44-C45	2.21	1.56	1.51
26	b	609	CLA	CMD-C2D	-2.21	1.46	1.50
32	B	622	SQD	O9-S	2.21	1.51	1.45
26	C	507	CLA	CMB-C2B	-2.21	1.47	1.51
26	C	501	CLA	C1D-C2D	2.20	1.49	1.45
26	c	513	CLA	CMB-C2B	-2.20	1.47	1.51
26	c	507	CLA	MG-NC	-2.20	2.01	2.06
27	A	609	PHO	O2D-CGD	2.20	1.38	1.33
32	F	102	SQD	O9-S	2.20	1.51	1.45
26	c	512	CLA	C1D-C2D	2.19	1.49	1.45
32	F	102	SQD	C6-S	2.19	1.85	1.77
33	C	516	DGD	C1E-C2E	2.19	1.58	1.52
32	t	102	SQD	C46-C45	2.19	1.57	1.50
28	K	101	BCR	C38-C26	-2.19	1.47	1.50
29	a	611	PL9	C7-C3	-2.18	1.49	1.51
26	A	613	CLA	C1D-C2D	2.18	1.49	1.45
26	h	101	CLA	C3D-C4D	2.18	1.49	1.44
26	c	507	CLA	C3D-C4D	2.18	1.49	1.44
28	X	101	BCR	C1-C6	-2.17	1.50	1.53
26	B	611	CLA	MG-ND	2.17	2.10	2.05
28	b	618	BCR	C30-C25	-2.17	1.50	1.53
26	C	505	CLA	C3B-CAB	-2.17	1.43	1.47
26	C	512	CLA	CMD-C2D	-2.17	1.46	1.50
26	A	610	CLA	C1D-C2D	2.16	1.49	1.45
26	B	610	CLA	MG-NC	-2.16	2.01	2.06
26	b	607	CLA	C3C-C2C	2.16	1.41	1.36
26	d	403	CLA	CMB-C2B	-2.16	1.47	1.51
26	B	606	CLA	C3B-CAB	-2.16	1.43	1.47
28	a	610	BCR	C30-C25	-2.15	1.50	1.53
29	A	612	PL9	C7-C3	-2.15	1.49	1.51
26	c	512	CLA	C3B-CAB	-2.15	1.43	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	A	616	SQD	C8-C7	2.14	1.57	1.50
26	c	508	CLA	CMB-C2B	-2.14	1.47	1.51
27	D	401	PHO	CMD-C2D	-2.14	1.46	1.51
26	A	607	CLA	CMB-C2B	-2.14	1.47	1.51
26	c	502	CLA	CMC-C2C	-2.14	1.46	1.50
26	A	608	CLA	C3B-CAB	-2.14	1.43	1.47
27	d	402	PHO	CMC-C2C	-2.13	1.46	1.51
26	a	612	CLA	C1D-C2D	2.13	1.49	1.45
32	A	616	SQD	O7-S	2.13	1.51	1.45
26	b	601	CLA	CMB-C2B	-2.13	1.47	1.51
26	B	603	CLA	CMC-C2C	-2.13	1.46	1.50
31	A	617	LHG	C24-C23	2.12	1.56	1.50
26	b	612	CLA	CMB-C2B	-2.12	1.47	1.51
32	a	613	SQD	O7-S	2.12	1.51	1.45
26	B	607	CLA	O2D-CGD	2.11	1.38	1.33
32	B	622	SQD	C46-C45	2.11	1.57	1.50
33	c	518	DGD	O2G-C2G	-2.11	1.41	1.46
30	c	522	LMG	C1-C2	2.11	1.58	1.52
33	H	101	DGD	O2G-C2G	-2.11	1.41	1.46
30	A	614	LMG	O8-C9	-2.11	1.40	1.45
26	B	615	CLA	CMD-C2D	-2.11	1.46	1.50
26	b	601	CLA	CMD-C2D	-2.11	1.46	1.50
29	D	405	PL9	C7-C3	2.11	1.53	1.51
31	A	617	LHG	O8-C23	2.10	1.39	1.33
26	A	613	CLA	CMB-C2B	-2.10	1.47	1.51
26	b	607	CLA	CMB-C2B	-2.10	1.47	1.51
27	a	608	PHO	O2D-CGD	2.10	1.38	1.33
26	a	606	CLA	C4D-ND	-2.10	1.34	1.37
28	h	102	BCR	C1-C6	-2.10	1.50	1.53
26	b	602	CLA	C1D-C2D	2.09	1.49	1.45
28	A	611	BCR	C33-C5	-2.09	1.47	1.50
26	c	508	CLA	C3C-C2C	2.09	1.41	1.36
29	a	611	PL9	C53-C6	-2.09	1.46	1.50
26	c	508	CLA	CMC-C2C	-2.09	1.46	1.50
26	B	603	CLA	CMB-C2B	-2.09	1.47	1.51
26	a	606	CLA	CMB-C2B	-2.08	1.47	1.51
26	b	601	CLA	MG-NC	2.08	2.11	2.06
26	C	504	CLA	O2D-CGD	2.08	1.38	1.33
27	a	608	PHO	CMB-C2B	-2.08	1.46	1.51
26	a	609	CLA	CMC-C2C	-2.08	1.46	1.50
26	d	404	CLA	C3B-CAB	-2.08	1.43	1.47
28	b	617	BCR	C1-C6	-2.08	1.50	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	a	606	CLA	C3D-C4D	2.07	1.48	1.44
32	f	101	SQD	C46-C45	2.07	1.57	1.50
33	h	103	DGD	O2G-C1B	2.07	1.40	1.34
26	b	605	CLA	C1B-NB	2.07	1.37	1.35
30	M	101	LMG	C4-C5	2.07	1.57	1.53
26	C	506	CLA	CMB-C2B	-2.07	1.47	1.51
33	C	516	DGD	C4D-C5D	2.07	1.57	1.53
32	B	622	SQD	O7-S	2.06	1.51	1.45
26	c	510	CLA	CMC-C2C	-2.06	1.46	1.50
26	b	604	CLA	CMB-C2B	-2.06	1.47	1.51
26	D	403	CLA	C4B-CHC	-2.06	1.35	1.41
26	B	609	CLA	CMD-C2D	-2.06	1.46	1.50
26	B	608	CLA	C3C-C2C	2.06	1.41	1.36
30	c	522	LMG	O7-C8	-2.06	1.41	1.46
26	c	507	CLA	C3B-C2B	-2.05	1.37	1.40
33	c	517	DGD	C3G-C2G	2.05	1.57	1.50
26	D	403	CLA	C3B-CAB	-2.05	1.43	1.47
26	h	101	CLA	CMC-C2C	-2.05	1.46	1.50
26	c	511	CLA	CMD-C2D	-2.04	1.46	1.50
26	c	507	CLA	C3B-CAB	-2.04	1.43	1.47
33	H	101	DGD	C4E-C5E	2.04	1.57	1.53
26	A	610	CLA	CMD-C2D	-2.04	1.46	1.50
26	b	613	CLA	CMC-C2C	-2.04	1.46	1.50
26	d	404	CLA	CMD-C2D	-2.04	1.46	1.50
32	f	101	SQD	O5-C5	2.03	1.49	1.44
27	A	609	PHO	CMC-C2C	-2.03	1.46	1.51
26	C	513	CLA	CMC-C2C	-2.03	1.46	1.50
26	b	615	CLA	CMB-C2B	-2.03	1.47	1.51
30	D	408	LMG	C7-C8	2.03	1.56	1.51
32	b	619	SQD	O6-C44	2.03	1.47	1.43
26	h	101	CLA	C1D-C2D	2.03	1.49	1.45
26	C	503	CLA	CMC-C2C	-2.03	1.46	1.50
28	C	514	BCR	C33-C5	-2.02	1.47	1.50
33	C	517	DGD	O2G-C2G	-2.02	1.41	1.46
26	B	612	CLA	C3C-C2C	2.02	1.41	1.36
28	a	610	BCR	C38-C26	-2.02	1.47	1.50
33	h	103	DGD	C3D-C2D	2.02	1.57	1.52
28	k	101	BCR	C33-C5	-2.02	1.47	1.50
30	d	411	LMG	C7-C8	2.02	1.56	1.50
26	D	403	CLA	C1D-C2D	2.02	1.49	1.45
35	F	101	HEM	CAA-C2A	2.02	1.55	1.52
26	c	501	CLA	CMB-C2B	-2.01	1.47	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	B	607	CLA	C4B-CHC	-2.01	1.35	1.41
26	b	606	CLA	CMD-C2D	-2.01	1.46	1.50
32	B	622	SQD	C6-S	2.01	1.84	1.77
26	C	510	CLA	CMD-C2D	-2.01	1.46	1.50
26	B	613	CLA	CMB-C2B	-2.00	1.47	1.51
26	B	609	CLA	CMB-C2B	-2.00	1.47	1.51
26	b	614	CLA	CMD-C2D	-2.00	1.46	1.50
33	c	518	DGD	O4E-C4E	-2.00	1.38	1.43

All (1172) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	511	CLA	C4A-NA-C1A	10.14	111.27	106.71
26	C	511	CLA	C4A-NA-C1A	8.92	110.72	106.71
26	b	603	CLA	C4A-NA-C1A	8.82	110.67	106.71
26	B	611	CLA	C4A-NA-C1A	8.59	110.57	106.71
26	C	503	CLA	C4A-NA-C1A	8.40	110.48	106.71
26	b	615	CLA	C4A-NA-C1A	8.15	110.37	106.71
26	c	503	CLA	C4A-NA-C1A	8.09	110.34	106.71
26	b	610	CLA	C4A-NA-C1A	8.03	110.31	106.71
26	B	612	CLA	C4A-NA-C1A	7.91	110.26	106.71
26	C	508	CLA	C4A-NA-C1A	7.91	110.26	106.71
26	c	509	CLA	C4A-NA-C1A	7.91	110.26	106.71
26	c	501	CLA	C4A-NA-C1A	7.83	110.22	106.71
26	C	510	CLA	C4A-NA-C1A	7.71	110.17	106.71
26	c	508	CLA	C4A-NA-C1A	7.68	110.16	106.71
26	C	507	CLA	C4A-NA-C1A	7.62	110.13	106.71
32	a	613	SQD	O6-C1-C2	7.60	120.17	108.30
26	C	513	CLA	C4A-NA-C1A	7.48	110.07	106.71
26	B	616	CLA	C4A-NA-C1A	7.47	110.06	106.71
26	b	612	CLA	C4A-NA-C1A	7.19	109.94	106.71
26	C	509	CLA	C4A-NA-C1A	7.13	109.91	106.71
26	A	613	CLA	C4A-NA-C1A	7.03	109.87	106.71
26	b	605	CLA	C4A-NA-C1A	7.01	109.86	106.71
26	h	101	CLA	C4A-NA-C1A	7.01	109.86	106.71
26	c	505	CLA	C4A-NA-C1A	6.96	109.83	106.71
26	B	606	CLA	C4A-NA-C1A	6.95	109.83	106.71
26	c	502	CLA	C4A-NA-C1A	6.76	109.75	106.71
26	C	505	CLA	C4A-NA-C1A	6.72	109.73	106.71
26	b	604	CLA	C4A-NA-C1A	6.56	109.66	106.71
26	c	510	CLA	C4A-NA-C1A	6.56	109.66	106.71
26	C	501	CLA	C4A-NA-C1A	6.43	109.60	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	614	CLA	C4A-NA-C1A	6.42	109.59	106.71
26	b	614	CLA	C4A-NA-C1A	6.40	109.58	106.71
26	B	601	CLA	C4A-NA-C1A	6.29	109.53	106.71
26	D	402	CLA	C4A-NA-C1A	6.28	109.53	106.71
26	B	603	CLA	C4A-NA-C1A	6.26	109.52	106.71
26	A	610	CLA	C4A-NA-C1A	6.22	109.50	106.71
26	B	615	CLA	C4A-NA-C1A	6.19	109.49	106.71
26	c	507	CLA	C4A-NA-C1A	6.17	109.48	106.71
26	B	604	CLA	C4A-NA-C1A	6.08	109.44	106.71
26	C	512	CLA	C4A-NA-C1A	6.06	109.43	106.71
26	C	506	CLA	C4A-NA-C1A	6.06	109.43	106.71
26	b	601	CLA	C4A-NA-C1A	6.05	109.43	106.71
32	F	102	SQD	O6-C1-C2	6.02	117.70	108.30
32	b	619	SQD	O47-C7-C8	5.87	124.16	111.50
26	B	609	CLA	C4A-NA-C1A	5.82	109.32	106.71
26	c	504	CLA	C4A-NA-C1A	5.80	109.31	106.71
26	a	606	CLA	C4A-NA-C1A	5.79	109.31	106.71
26	d	403	CLA	C4A-NA-C1A	5.65	109.25	106.71
26	c	506	CLA	C4A-NA-C1A	5.61	109.23	106.71
26	B	613	CLA	C1-C2-C3	-5.60	116.36	126.04
26	A	607	CLA	C4A-NA-C1A	5.58	109.22	106.71
32	a	613	SQD	C1-O5-C5	-5.58	102.73	113.69
26	b	608	CLA	C4A-NA-C1A	5.56	109.21	106.71
26	B	608	CLA	C4A-NA-C1A	5.46	109.16	106.71
26	B	610	CLA	C4A-NA-C1A	5.40	109.14	106.71
32	A	616	SQD	O6-C1-C2	5.31	116.59	108.30
32	B	622	SQD	O7-S-C6	5.30	113.23	106.94
36	V	201	HEC	CBD-CAD-C3D	-5.29	103.60	112.62
26	C	502	CLA	C4A-NA-C1A	5.26	109.07	106.71
29	d	406	PL9	C7-C3-C4	5.23	121.13	116.88
32	B	622	SQD	O47-C7-C8	5.19	122.68	111.50
26	B	602	CLA	C4A-NA-C1A	5.17	109.03	106.71
26	a	607	CLA	C4A-NA-C1A	5.12	109.01	106.71
26	B	608	CLA	CMB-C2B-C1B	-5.10	120.62	128.46
26	A	608	CLA	C4A-NA-C1A	5.10	109.00	106.71
26	c	512	CLA	C4A-NA-C1A	5.06	108.98	106.71
32	t	102	SQD	O47-C7-C8	5.05	122.39	111.50
29	D	405	PL9	C7-C3-C4	5.02	120.96	116.88
26	d	404	CLA	C4A-NA-C1A	4.98	108.95	106.71
33	c	518	DGD	O3G-C3G-C2G	-4.95	98.95	110.90
26	c	504	CLA	CMB-C2B-C1B	-4.94	120.86	128.46
26	C	509	CLA	CMB-C2B-C1B	-4.91	120.92	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	D	401	PHO	C1-C2-C3	-4.88	117.60	126.04
26	b	602	CLA	C4A-NA-C1A	4.83	108.88	106.71
26	B	605	CLA	C4A-NA-C1A	4.80	108.87	106.71
26	c	501	CLA	O2D-CGD-O1D	-4.75	114.55	123.84
32	A	616	SQD	O7-S-C6	4.74	112.58	106.94
26	b	609	CLA	C4A-NA-C1A	4.72	108.83	106.71
26	a	612	CLA	C4A-NA-C1A	4.70	108.82	106.71
26	B	602	CLA	CMB-C2B-C1B	-4.69	121.25	128.46
26	B	611	CLA	O2D-CGD-O1D	-4.61	114.82	123.84
26	b	612	CLA	CMB-C2B-C1B	-4.61	121.38	128.46
26	b	605	CLA	O2D-CGD-O1D	-4.58	114.88	123.84
32	b	619	SQD	O5-C5-C4	4.58	118.01	109.69
26	c	513	CLA	C4A-NA-C1A	4.56	108.76	106.71
26	b	604	CLA	O2D-CGD-O1D	-4.54	114.97	123.84
26	B	613	CLA	C4A-NA-C1A	4.53	108.74	106.71
26	b	613	CLA	C4A-NA-C1A	4.53	108.74	106.71
26	C	504	CLA	C4A-NA-C1A	4.48	108.72	106.71
26	b	611	CLA	C4A-NA-C1A	4.48	108.72	106.71
26	b	606	CLA	CMB-C2B-C1B	-4.47	121.59	128.46
32	B	622	SQD	O6-C1-C2	4.44	115.23	108.30
26	C	510	CLA	CMB-C2B-C1B	-4.43	121.65	128.46
32	A	616	SQD	C1-C2-C3	-4.41	100.80	110.00
26	B	613	CLA	CMB-C2B-C1B	-4.39	121.72	128.46
26	b	613	CLA	C1-C2-C3	-4.38	118.47	126.04
26	B	606	CLA	CMB-C2B-C1B	-4.38	121.73	128.46
33	C	516	DGD	O3G-C3G-C2G	-4.38	100.34	110.90
26	C	504	CLA	CMB-C2B-C1B	-4.35	121.78	128.46
26	B	610	CLA	O2D-CGD-O1D	-4.34	115.34	123.84
32	A	616	SQD	O47-C7-C8	4.34	120.85	111.50
26	b	611	CLA	CMB-C2B-C1B	-4.30	121.85	128.46
26	c	506	CLA	CMB-C2B-C1B	-4.30	121.86	128.46
26	C	513	CLA	O2D-CGD-O1D	-4.28	115.47	123.84
36	V	201	HEC	CMC-C2C-C1C	-4.26	121.91	128.46
32	a	613	SQD	O8-S-C6	4.25	112.51	105.74
28	b	616	BCR	C2-C1-C6	4.25	117.02	110.48
26	c	512	CLA	C1-C2-C3	-4.24	118.71	126.04
29	a	611	PL9	C7-C3-C4	4.24	120.32	116.88
26	C	509	CLA	CMB-C2B-C3B	4.23	132.59	124.68
26	b	615	CLA	O2D-CGD-O1D	-4.22	115.59	123.84
26	B	608	CLA	CMB-C2B-C3B	4.22	132.57	124.68
31	D	409	LHG	O4-P-O5	4.18	132.92	112.24
26	A	610	CLA	CMB-C2B-C1B	-4.16	122.06	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	A	616	SQD	C1-O5-C5	-4.16	105.52	113.69
26	A	608	CLA	O2D-CGD-O1D	-4.16	115.70	123.84
26	D	402	CLA	O2D-CGD-O1D	-4.15	115.72	123.84
26	b	606	CLA	CMB-C2B-C3B	4.15	132.44	124.68
31	A	615	LHG	O4-P-O5	4.15	132.74	112.24
31	d	408	LHG	O4-P-O5	4.14	132.70	112.24
27	d	402	PHO	C1-C2-C3	-4.12	118.91	126.04
31	e	102	LHG	O4-P-O5	4.12	132.61	112.24
26	b	605	CLA	O2D-CGD-CBD	4.12	118.59	111.27
26	C	505	CLA	CMB-C2B-C1B	-4.10	122.17	128.46
26	C	506	CLA	CMB-C2B-C1B	-4.09	122.17	128.46
32	F	102	SQD	O8-S-C6	4.07	112.23	105.74
26	b	601	CLA	CMB-C2B-C1B	-4.07	122.21	128.46
26	c	513	CLA	CMB-C2B-C1B	-4.06	122.22	128.46
33	h	103	DGD	O3G-C3G-C2G	-4.06	101.11	110.90
32	b	619	SQD	O6-C1-C2	4.04	114.61	108.30
33	H	101	DGD	O3G-C3G-C2G	-4.03	101.17	110.90
26	b	607	CLA	C4A-NA-C1A	4.03	108.52	106.71
26	B	611	CLA	O2D-CGD-CBD	4.03	118.43	111.27
31	d	407	LHG	O4-P-O5	4.03	132.14	112.24
31	A	617	LHG	O4-P-O5	4.01	132.09	112.24
26	b	608	CLA	CMB-C2B-C1B	-4.01	122.30	128.46
26	c	504	CLA	CMB-C2B-C3B	4.00	132.17	124.68
31	l	101	LHG	O4-P-O5	4.00	132.01	112.24
26	B	602	CLA	CMB-C2B-C3B	4.00	132.16	124.68
26	B	607	CLA	CMB-C2B-C1B	-4.00	122.32	128.46
26	a	612	CLA	CMB-C2B-C1B	-3.99	122.33	128.46
26	b	607	CLA	CMB-C2B-C1B	-3.99	122.33	128.46
31	D	407	LHG	O4-P-O5	3.98	131.93	112.24
26	B	602	CLA	O2D-CGD-CBD	3.95	118.30	111.27
31	L	101	LHG	O4-P-O5	3.95	131.75	112.24
26	a	609	CLA	O2D-CGD-O1D	-3.94	116.14	123.84
26	C	512	CLA	O2D-CGD-O1D	-3.93	116.15	123.84
26	b	611	CLA	CMB-C2B-C3B	3.93	132.03	124.68
26	C	513	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
32	A	616	SQD	O9-S-O7	-3.93	100.36	113.95
31	d	409	LHG	O4-P-O5	3.92	131.62	112.24
26	d	403	CLA	CMB-C2B-C1B	-3.91	122.45	128.46
30	b	621	LMG	C1-O6-C5	-3.91	106.01	113.69
26	b	607	CLA	O2D-CGD-O1D	-3.91	116.20	123.84
26	D	403	CLA	C4A-NA-C1A	3.90	108.46	106.71
25	d	401	BCT	O2-C-O1	3.90	129.65	119.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	609	CLA	CMB-C2B-C1B	-3.89	122.48	128.46
32	f	101	SQD	O5-C5-C4	3.89	116.75	109.69
26	b	615	CLA	CMB-C2B-C1B	-3.88	122.50	128.46
26	b	602	CLA	O2D-CGD-O1D	-3.88	116.25	123.84
26	b	602	CLA	CMB-C2B-C1B	-3.86	122.53	128.46
32	f	101	SQD	O7-S-C6	3.85	111.52	106.94
32	b	619	SQD	O8-S-C6	3.85	111.88	105.74
33	C	517	DGD	O3G-C3G-C2G	-3.84	101.64	110.90
26	B	605	CLA	O2D-CGD-O1D	-3.82	116.36	123.84
25	A	606	BCT	O2-C-O1	3.82	129.46	119.55
26	C	512	CLA	CMB-C2B-C1B	-3.80	122.62	128.46
27	A	609	PHO	CMB-C2B-C3B	3.80	131.79	124.68
26	c	502	CLA	O2D-CGD-O1D	-3.79	116.43	123.84
26	B	607	CLA	C4A-NA-C1A	3.79	108.41	106.71
26	B	613	CLA	CMB-C2B-C3B	3.78	131.75	124.68
33	c	517	DGD	O3G-C3G-C2G	-3.78	101.79	110.90
26	a	607	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
30	M	101	LMG	C1-C2-C3	-3.76	102.16	110.00
26	C	508	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
32	a	613	SQD	C1-C2-C3	-3.74	102.21	110.00
26	B	614	CLA	CMB-C2B-C1B	-3.72	122.74	128.46
33	c	519	DGD	O6D-C1D-O3G	-3.72	101.17	109.97
26	c	509	CLA	CMB-C2B-C1B	-3.71	122.76	128.46
28	T	101	BCR	C3-C4-C5	-3.71	107.45	114.08
26	b	606	CLA	C4A-NA-C1A	3.69	108.37	106.71
34	C	519	STE	C3-C2-C1	-3.69	105.16	114.47
32	f	101	SQD	O9-S-O7	-3.69	101.19	113.95
26	B	603	CLA	CMB-C2B-C1B	-3.68	122.80	128.46
26	B	602	CLA	O2D-CGD-O1D	-3.67	116.66	123.84
26	b	613	CLA	CMB-C2B-C1B	-3.67	122.82	128.46
26	C	501	CLA	O2D-CGD-O1D	-3.66	116.67	123.84
26	C	507	CLA	CMB-C2B-C1B	-3.66	122.85	128.46
29	d	406	PL9	C22-C23-C24	-3.65	118.87	127.66
26	d	404	CLA	CHD-C1D-ND	-3.65	121.10	124.45
26	c	502	CLA	C1-C2-C3	-3.63	119.76	126.04
26	C	510	CLA	CMB-C2B-C3B	3.63	131.47	124.68
26	c	511	CLA	CMB-C2B-C1B	-3.62	122.90	128.46
26	c	510	CLA	CMB-C2B-C1B	-3.62	122.90	128.46
26	B	612	CLA	CMB-C2B-C1B	-3.62	122.90	128.46
26	b	613	CLA	O2D-CGD-O1D	-3.62	116.77	123.84
26	b	607	CLA	CMB-C2B-C3B	3.61	131.44	124.68
26	C	505	CLA	CMB-C2B-C3B	3.58	131.38	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	606	CLA	CMB-C2B-C3B	3.58	131.38	124.68
26	a	609	CLA	CMB-C2B-C1B	-3.58	122.97	128.46
36	v	201	HEC	CMC-C2C-C1C	-3.57	122.97	128.46
33	c	519	DGD	O3G-C3G-C2G	-3.57	102.29	110.90
26	B	612	CLA	O2D-CGD-O1D	-3.57	116.86	123.84
26	A	608	CLA	O2D-CGD-CBD	3.57	117.61	111.27
26	B	608	CLA	O2D-CGD-O1D	-3.57	116.87	123.84
33	h	103	DGD	C4E-C3E-C2E	-3.56	104.60	110.82
32	B	622	SQD	C3-C4-C5	3.56	116.59	110.24
26	C	503	CLA	CMB-C2B-C1B	-3.56	122.99	128.46
32	t	102	SQD	O48-C23-C24	3.56	123.08	111.91
26	b	609	CLA	CMB-C2B-C3B	3.55	131.33	124.68
26	B	604	CLA	CMB-C2B-C1B	-3.55	123.01	128.46
32	a	613	SQD	O47-C7-C8	3.55	119.14	111.50
26	c	512	CLA	O2D-CGD-O1D	-3.54	116.91	123.84
26	c	509	CLA	O2A-CGA-O1A	-3.54	114.66	123.59
26	D	402	CLA	O2D-CGD-CBD	3.54	117.55	111.27
26	b	609	CLA	O2D-CGD-O1D	-3.53	116.93	123.84
26	c	513	CLA	CMB-C2B-C3B	3.53	131.28	124.68
28	T	101	BCR	C2-C1-C6	3.52	115.90	110.48
26	c	506	CLA	CMB-C2B-C3B	3.51	131.25	124.68
26	D	402	CLA	CMB-C2B-C1B	-3.51	123.07	128.46
26	b	612	CLA	CMB-C2B-C3B	3.51	131.24	124.68
32	F	102	SQD	O9-S-C6	3.51	111.11	106.94
26	C	512	CLA	C1-C2-C3	-3.49	120.00	126.04
29	A	612	PL9	C7-C8-C9	-3.49	120.99	126.79
27	d	402	PHO	CMB-C2B-C3B	3.48	131.20	124.68
26	B	616	CLA	CMB-C2B-C1B	-3.48	123.11	128.46
26	h	101	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
26	b	615	CLA	CMB-C2B-C3B	3.48	131.19	124.68
26	a	609	CLA	O2D-CGD-CBD	3.48	117.45	111.27
26	C	506	CLA	CMB-C2B-C3B	3.48	131.18	124.68
26	h	101	CLA	O2D-CGD-O1D	-3.47	117.05	123.84
28	D	404	BCR	C2-C1-C6	3.47	115.82	110.48
26	C	503	CLA	O2D-CGD-O1D	-3.46	117.07	123.84
26	A	610	CLA	O2D-CGD-O1D	-3.46	117.08	123.84
26	B	604	CLA	O2D-CGD-O1D	-3.46	117.08	123.84
32	A	618	SQD	O47-C7-C8	3.45	118.94	111.50
33	C	515	DGD	O3G-C3G-C2G	-3.45	102.58	110.90
26	C	502	CLA	CHD-C1D-ND	-3.45	121.29	124.45
26	c	502	CLA	CMB-C2B-C1B	-3.44	123.17	128.46
26	B	603	CLA	CMB-C2B-C3B	3.44	131.11	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	604	CLA	C1-C2-C3	-3.43	120.11	126.04
26	c	503	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
26	b	601	CLA	O2D-CGD-O1D	-3.43	117.14	123.84
36	v	201	HEC	CBA-CAA-C2A	-3.43	106.83	112.60
26	B	603	CLA	O2D-CGD-O1D	-3.42	117.15	123.84
26	b	603	CLA	CMB-C2B-C1B	-3.42	123.21	128.46
26	b	601	CLA	CMB-C2B-C3B	3.42	131.07	124.68
26	b	602	CLA	O2D-CGD-CBD	3.41	117.33	111.27
26	B	607	CLA	CMB-C2B-C3B	3.41	131.05	124.68
29	A	612	PL9	O1-C4-C3	-3.40	116.97	120.72
26	b	606	CLA	O2D-CGD-O1D	-3.40	117.19	123.84
32	b	619	SQD	O7-S-C6	3.40	110.98	106.94
26	A	610	CLA	CMB-C2B-C3B	3.40	131.03	124.68
26	B	606	CLA	O2D-CGD-O1D	-3.39	117.22	123.84
32	f	101	SQD	O47-C7-C8	3.37	120.21	110.80
26	C	508	CLA	O2D-CGD-O1D	-3.37	117.25	123.84
26	c	507	CLA	CHD-C1D-ND	-3.37	121.36	124.45
32	A	616	SQD	O9-S-C6	3.36	110.93	106.94
26	a	612	CLA	CMB-C2B-C3B	3.36	130.97	124.68
26	D	403	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
33	h	103	DGD	C1D-C2D-C3D	-3.35	103.01	110.00
26	A	607	CLA	CHB-C4A-NA	3.35	129.14	124.51
35	F	101	HEM	CBD-CAD-C3D	-3.35	103.33	112.63
26	d	403	CLA	O2D-CGD-O1D	-3.35	117.30	123.84
26	D	403	CLA	CMB-C2B-C3B	3.33	130.90	124.68
29	a	611	PL9	C7-C8-C9	-3.33	121.26	126.79
26	d	403	CLA	CMB-C2B-C3B	3.32	130.89	124.68
32	a	613	SQD	O48-C23-C24	3.32	122.32	111.91
26	a	606	CLA	CMB-C2B-C1B	-3.31	123.37	128.46
26	c	508	CLA	CMB-C2B-C1B	-3.31	123.38	128.46
26	b	608	CLA	CMB-C2B-C3B	3.31	130.87	124.68
26	c	512	CLA	CHD-C1D-ND	-3.31	121.41	124.45
26	B	612	CLA	O2A-CGA-O1A	-3.31	115.24	123.59
26	B	612	CLA	CMB-C2B-C3B	3.31	130.86	124.68
26	a	609	CLA	CMB-C2B-C3B	3.30	130.85	124.68
26	B	609	CLA	CMB-C2B-C1B	-3.29	123.40	128.46
26	A	613	CLA	O2D-CGD-O1D	-3.29	117.40	123.84
26	b	610	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
32	B	622	SQD	O48-C23-C24	3.29	122.23	111.91
26	b	601	CLA	O2D-CGD-CBD	3.28	117.10	111.27
26	C	510	CLA	O2D-CGD-O1D	-3.28	117.42	123.84
26	b	602	CLA	CHD-C1D-ND	-3.28	121.44	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	611	CLA	O2D-CGD-O1D	-3.27	117.44	123.84
29	D	405	PL9	C20-C19-C21	3.27	120.78	115.27
32	A	616	SQD	O8-S-C6	3.27	110.95	105.74
26	c	512	CLA	CHB-C4A-NA	3.27	129.03	124.51
26	a	609	CLA	C4A-NA-C1A	3.27	108.17	106.71
26	B	616	CLA	CMB-C2B-C3B	3.26	130.78	124.68
26	C	504	CLA	CMB-C2B-C3B	3.26	130.78	124.68
26	B	615	CLA	CMB-C2B-C1B	-3.26	123.46	128.46
26	b	609	CLA	CAA-CBA-CGA	-3.25	103.75	113.25
30	b	621	LMG	C1-C2-C3	-3.25	103.23	110.00
33	c	518	DGD	O6D-C1D-O3G	-3.25	102.28	109.97
26	C	513	CLA	CMB-C2B-C3B	3.25	130.75	124.68
32	a	613	SQD	O9-S-O7	-3.24	102.72	113.95
28	B	617	BCR	C2-C1-C6	3.24	115.47	110.48
26	b	606	CLA	CHD-C1D-ND	-3.24	121.48	124.45
26	C	512	CLA	CMB-C2B-C3B	3.22	130.71	124.68
26	B	614	CLA	O2D-CGD-O1D	-3.21	117.56	123.84
30	m	101	LMG	O1-C7-C8	-3.21	103.15	110.90
28	B	617	BCR	C11-C10-C9	-3.20	122.74	127.31
26	A	610	CLA	CHD-C1D-ND	-3.20	121.51	124.45
26	c	501	CLA	CMB-C2B-C1B	-3.19	123.56	128.46
26	C	507	CLA	CHB-C4A-NA	3.19	128.93	124.51
29	d	406	PL9	C7-C8-C9	-3.19	121.48	126.79
26	c	508	CLA	CHD-C1D-ND	-3.19	121.53	124.45
32	b	619	SQD	O9-S-C6	3.19	110.72	106.94
35	e	101	HEM	CBD-CAD-C3D	-3.19	103.78	112.63
36	V	201	HEC	C1D-C2D-C3D	-3.18	104.78	107.00
26	b	607	CLA	O2D-CGD-CBD	3.17	116.91	111.27
28	D	404	BCR	C3-C4-C5	-3.17	108.42	114.08
26	b	615	CLA	O2D-CGD-CBD	3.17	116.90	111.27
26	c	501	CLA	O2D-CGD-CBD	3.17	116.90	111.27
26	b	604	CLA	CHD-C1D-ND	-3.17	121.54	124.45
26	a	607	CLA	O2D-CGD-CBD	3.17	116.90	111.27
26	B	610	CLA	CHB-C4A-NA	3.16	128.89	124.51
26	a	607	CLA	CMB-C2B-C3B	3.16	130.59	124.68
26	B	612	CLA	CHD-C1D-ND	-3.16	121.55	124.45
33	a	614	DGD	O3G-C3G-C2G	-3.15	103.43	111.78
29	D	405	PL9	C37-C38-C39	-3.15	120.08	127.66
28	t	101	BCR	C2-C1-C6	3.14	115.31	110.48
32	B	622	SQD	C46-C45-C44	-3.14	104.37	111.79
26	A	607	CLA	O2A-CGA-O1A	-3.13	115.69	123.59
26	c	508	CLA	C1-C2-C3	-3.13	120.63	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	d	406	PL9	C40-C39-C41	3.13	120.53	115.27
26	c	509	CLA	CMB-C2B-C3B	3.12	130.52	124.68
33	C	516	DGD	O6D-C1D-O3G	-3.12	102.58	109.97
26	A	607	CLA	CMB-C2B-C1B	-3.12	123.67	128.46
28	t	101	BCR	C3-C4-C5	-3.12	108.51	114.08
32	B	622	SQD	O9-S-O7	-3.11	103.17	113.95
29	a	611	PL9	C22-C23-C24	-3.11	120.17	127.66
26	C	507	CLA	CMB-C2B-C3B	3.11	130.49	124.68
31	d	407	LHG	C11-C10-C9	-3.11	98.66	114.42
26	B	612	CLA	C1-C2-C3	-3.11	120.67	126.04
26	a	606	CLA	O2D-CGD-O1D	-3.11	117.77	123.84
26	B	611	CLA	C1-C2-C3	-3.10	120.68	126.04
26	d	404	CLA	CHB-C4A-NA	3.10	128.80	124.51
31	d	407	LHG	O8-C23-C24	3.10	121.62	111.91
26	b	601	CLA	CHB-C4A-NA	3.10	128.79	124.51
26	B	609	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
26	b	603	CLA	C1-C2-C3	-3.09	120.70	126.04
33	C	517	DGD	O6D-C1D-O3G	-3.09	102.67	109.97
26	b	607	CLA	CHB-C4A-NA	3.08	128.78	124.51
36	V	201	HEC	CBA-CAA-C2A	-3.08	107.42	112.60
26	B	603	CLA	O2D-CGD-CBD	3.08	116.73	111.27
26	b	602	CLA	CMB-C2B-C3B	3.07	130.43	124.68
26	C	501	CLA	CMB-C2B-C1B	-3.07	123.74	128.46
26	a	607	CLA	O2A-CGA-O1A	-3.07	115.84	123.59
29	a	611	PL9	C7-C3-C2	-3.06	119.27	123.30
29	a	611	PL9	O1-C4-C3	-3.06	117.35	120.72
30	c	523	LMG	O6-C1-O1	-3.05	102.74	109.97
26	C	511	CLA	CHB-C4A-NA	3.05	128.73	124.51
36	v	201	HEC	CBD-CAD-C3D	-3.05	107.42	112.62
31	D	409	LHG	O8-C23-C24	3.05	121.47	111.91
26	C	509	CLA	CHD-C1D-ND	-3.04	121.66	124.45
26	h	101	CLA	CHD-C1D-ND	-3.04	121.66	124.45
27	D	401	PHO	CMB-C2B-C3B	3.03	130.34	124.68
26	b	609	CLA	CHB-C4A-NA	3.03	128.70	124.51
36	v	201	HEC	CMB-C2B-C1B	-3.03	123.81	128.46
26	B	604	CLA	CHB-C4A-NA	3.02	128.69	124.51
26	B	603	CLA	CHD-C1D-ND	-3.02	121.68	124.45
26	C	511	CLA	CMB-C2B-C1B	-3.01	123.83	128.46
33	c	517	DGD	O5D-C6D-C5D	-3.01	103.47	109.05
29	D	405	PL9	C8-C7-C3	3.01	120.49	111.98
26	a	607	CLA	O2D-CGD-O1D	-3.01	117.96	123.84
26	A	613	CLA	CMB-C2B-C1B	-3.01	123.84	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	a	609	CLA	CHB-C4A-NA	3.00	128.66	124.51
26	c	511	CLA	O2D-CGD-O1D	-3.00	117.98	123.84
29	d	406	PL9	C7-C3-C2	-3.00	119.36	123.30
26	B	607	CLA	CED-O2D-CGD	3.00	122.71	115.94
27	d	402	PHO	O2D-CGD-O1D	-3.00	117.98	123.84
26	B	607	CLA	C4-C3-C5	2.99	120.31	115.27
26	c	502	CLA	CMB-C2B-C3B	2.98	130.26	124.68
30	c	520	LMG	O6-C1-O1	-2.98	102.92	109.97
26	b	603	CLA	CMB-C2B-C3B	2.98	130.25	124.68
33	h	103	DGD	C1E-O6E-C5E	2.98	119.53	113.69
33	c	519	DGD	CDB-CCB-CBB	-2.98	99.32	114.42
33	A	619	DGD	C3G-C2G-C1G	-2.97	104.76	111.79
26	a	612	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
26	d	404	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
29	A	612	PL9	C7-C3-C4	2.97	119.29	116.88
28	c	515	BCR	C27-C26-C25	2.97	127.04	122.73
35	e	101	HEM	C1B-NB-C4B	2.97	108.14	105.07
26	B	601	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
26	c	507	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
26	a	606	CLA	CMB-C2B-C3B	2.96	130.21	124.68
32	B	622	SQD	O8-S-C6	2.96	110.45	105.74
33	c	517	DGD	C3G-C2G-C1G	-2.95	104.80	111.79
26	c	501	CLA	CMB-C2B-C3B	2.95	130.20	124.68
26	c	513	CLA	O2D-CGD-O1D	-2.95	118.07	123.84
26	C	501	CLA	CHD-C1D-ND	-2.95	121.74	124.45
26	C	512	CLA	CHB-C4A-NA	2.95	128.59	124.51
26	B	616	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
26	C	507	CLA	O2D-CGD-O1D	-2.94	118.08	123.84
28	X	101	BCR	C35-C13-C14	-2.94	118.80	122.92
33	c	518	DGD	C3D-C4D-C5D	-2.94	104.99	110.24
26	C	503	CLA	CMB-C2B-C3B	2.94	130.18	124.68
30	D	406	LMG	O2-C2-C1	-2.94	102.90	110.05
32	F	102	SQD	O9-S-O7	-2.94	103.77	113.95
31	d	408	LHG	O8-C23-C24	2.94	121.12	111.91
31	D	407	LHG	O8-C23-C24	2.93	121.11	111.91
26	B	602	CLA	CHB-C4A-NA	2.93	128.56	124.51
26	B	614	CLA	CMB-C2B-C3B	2.93	130.15	124.68
26	b	610	CLA	O2D-CGD-O1D	-2.92	118.12	123.84
26	c	503	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
32	B	622	SQD	O5-C5-C4	2.92	115.00	109.69
26	b	609	CLA	C1B-CHB-C4A	-2.92	124.33	130.12
26	B	608	CLA	CHD-C1D-ND	-2.92	121.77	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	h	101	CLA	CHB-C4A-NA	2.92	128.54	124.51
33	C	515	DGD	O6D-C1D-O3G	-2.91	103.08	109.97
26	B	610	CLA	CHD-C1D-ND	-2.91	121.78	124.45
26	C	509	CLA	CHB-C4A-NA	2.91	128.54	124.51
26	B	614	CLA	O2D-CGD-CBD	2.91	116.44	111.27
27	D	401	PHO	O1D-CGD-CBD	2.91	129.58	124.74
26	c	507	CLA	CHB-C4A-NA	2.91	128.53	124.51
33	a	614	DGD	C1G-C2G-C3G	-2.90	105.01	111.80
26	A	608	CLA	C1-C2-C3	-2.90	121.02	126.04
26	A	608	CLA	O2A-CGA-O1A	-2.90	116.28	123.59
26	c	508	CLA	O2A-CGA-O1A	-2.89	116.29	123.59
28	K	101	BCR	C27-C26-C25	2.89	126.93	122.73
28	A	611	BCR	C11-C10-C9	-2.89	123.19	127.31
32	b	619	SQD	O9-S-O7	-2.89	103.95	113.95
26	c	509	CLA	CHB-C4A-NA	2.89	128.50	124.51
35	e	101	HEM	C3B-C2B-C1B	2.89	108.63	106.49
26	b	613	CLA	CMB-C2B-C3B	2.89	130.08	124.68
26	c	511	CLA	CMB-C2B-C3B	2.89	130.08	124.68
26	b	605	CLA	CMB-C2B-C1B	-2.88	124.03	128.46
26	b	604	CLA	O2A-CGA-O1A	-2.88	116.31	123.59
29	D	405	PL9	C7-C8-C9	-2.88	122.00	126.79
27	d	402	PHO	CMC-C2C-C3C	2.87	130.36	124.94
28	A	611	BCR	C2-C1-C6	2.87	114.90	110.48
26	A	613	CLA	CHB-C4A-NA	2.87	128.48	124.51
29	D	405	PL9	C27-C28-C29	-2.86	120.77	127.66
32	a	613	SQD	O9-S-C6	2.86	110.34	106.94
26	b	615	CLA	CHB-C4A-NA	2.85	128.45	124.51
32	F	102	SQD	O5-C1-C2	-2.85	104.33	110.35
26	B	604	CLA	CMB-C2B-C3B	2.85	130.00	124.68
30	m	101	LMG	O3-C3-C2	-2.84	103.77	110.35
32	F	102	SQD	C1-O5-C5	-2.84	108.11	113.69
31	e	102	LHG	O8-C23-C24	2.84	120.82	111.91
26	B	605	CLA	CHD-C1D-ND	-2.84	121.84	124.45
26	A	613	CLA	CMB-C2B-C3B	2.84	129.99	124.68
28	Z	101	BCR	C11-C10-C9	-2.84	123.26	127.31
26	a	606	CLA	O2A-CGA-O1A	-2.84	116.44	123.59
26	B	610	CLA	O2A-CGA-O1A	-2.83	116.44	123.59
26	c	505	CLA	CMB-C2B-C1B	-2.83	124.11	128.46
26	B	609	CLA	O2A-CGA-O1A	-2.83	116.45	123.59
26	c	507	CLA	CHD-C4C-NC	2.83	128.66	124.20
28	B	617	BCR	C29-C30-C25	2.82	114.83	110.48
26	A	608	CLA	CHB-C4A-NA	2.82	128.41	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	609	CLA	CMB-C2B-C3B	2.82	129.96	124.68
26	B	607	CLA	O2A-C1-C2	-2.82	101.22	108.64
26	B	616	CLA	CHB-C4A-NA	2.81	128.40	124.51
26	D	403	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
35	e	101	HEM	C4D-ND-C1D	2.81	107.97	105.07
33	c	517	DGD	O6D-C1D-O3G	-2.81	103.32	109.97
26	b	606	CLA	CHB-C4A-NA	2.81	128.39	124.51
26	c	504	CLA	O2A-CGA-O1A	-2.80	116.51	123.59
26	h	101	CLA	CMB-C2B-C3B	2.80	129.93	124.68
26	a	612	CLA	C1B-CHB-C4A	-2.80	124.56	130.12
26	C	508	CLA	CMB-C2B-C3B	2.80	129.91	124.68
26	c	508	CLA	O2D-CGD-O1D	-2.80	118.37	123.84
26	A	613	CLA	O2D-CGD-CBD	2.80	116.24	111.27
29	D	405	PL9	C42-C43-C44	-2.79	120.94	127.66
26	a	612	CLA	C1-C2-C3	-2.79	121.22	126.04
26	b	611	CLA	CHB-C4A-NA	2.78	128.36	124.51
28	b	617	BCR	C2-C1-C6	2.78	114.76	110.48
28	c	515	BCR	C7-C8-C9	-2.78	122.03	126.23
32	f	101	SQD	O9-S-C6	2.78	110.24	106.94
33	C	516	DGD	O3G-C1D-C2D	-2.78	103.97	108.30
26	c	503	CLA	CMB-C2B-C3B	2.77	129.87	124.68
26	B	601	CLA	O2D-CGD-O1D	-2.77	118.42	123.84
28	k	101	BCR	C33-C5-C6	-2.77	121.42	124.53
26	D	402	CLA	CMB-C2B-C3B	2.77	129.86	124.68
27	D	401	PHO	O2D-CGD-O1D	-2.77	118.42	123.84
26	D	402	CLA	O2A-CGA-O1A	-2.77	116.60	123.59
26	C	504	CLA	C1-C2-C3	-2.77	121.25	126.04
26	B	615	CLA	CMB-C2B-C3B	2.77	129.85	124.68
26	b	604	CLA	CMB-C2B-C1B	-2.77	124.21	128.46
26	c	508	CLA	CMB-C2B-C3B	2.77	129.85	124.68
26	A	610	CLA	C1B-CHB-C4A	-2.76	124.64	130.12
26	A	610	CLA	CHB-C4A-NA	2.76	128.33	124.51
36	v	201	HEC	CAD-CBD-CGD	-2.76	106.03	113.76
28	d	405	BCR	C24-C23-C22	-2.76	122.07	126.23
28	d	405	BCR	C27-C26-C25	2.76	126.73	122.73
26	a	606	CLA	CHB-C4A-NA	2.75	128.32	124.51
26	A	608	CLA	C2D-C1D-ND	-2.75	108.08	110.10
26	b	614	CLA	CMB-C2B-C1B	-2.75	124.24	128.46
26	b	615	CLA	C1B-CHB-C4A	-2.75	124.67	130.12
35	e	101	HEM	CBA-CAA-C2A	-2.75	107.93	112.62
26	C	505	CLA	C2D-C1D-ND	-2.74	108.08	110.10
30	C	518	LMG	O6-C1-O1	-2.74	103.49	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	F	101	HEM	C4B-CHC-C1C	2.74	126.17	122.56
33	C	515	DGD	CDB-CCB-CBB	-2.74	100.53	114.42
29	A	612	PL9	C22-C23-C24	-2.74	121.07	127.66
31	A	617	LHG	O8-C23-C24	2.74	120.49	111.91
32	A	616	SQD	O5-C1-C2	-2.73	104.57	110.35
26	C	508	CLA	CHD-C1D-ND	-2.73	121.95	124.45
26	c	506	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
26	b	605	CLA	C1-C2-C3	-2.73	121.33	126.04
26	C	512	CLA	O2D-CGD-CBD	2.73	116.11	111.27
26	h	101	CLA	O2D-CGD-CBD	2.72	116.09	111.27
26	B	610	CLA	O2D-CGD-CBD	2.72	116.09	111.27
26	c	504	CLA	CHD-C1D-ND	-2.71	121.96	124.45
33	A	619	DGD	C4E-C3E-C2E	-2.71	106.09	110.82
26	C	509	CLA	C1-C2-C3	-2.71	121.36	126.04
28	K	102	BCR	C27-C26-C25	2.71	126.66	122.73
32	b	619	SQD	O48-C23-C24	2.71	120.40	111.91
26	C	512	CLA	O2A-CGA-O1A	-2.70	116.77	123.59
32	F	102	SQD	O7-S-C6	2.70	110.15	106.94
33	H	101	DGD	C1D-C2D-C3D	-2.70	104.37	110.00
35	F	101	HEM	C4D-ND-C1D	2.70	107.86	105.07
26	C	506	CLA	O2A-CGA-O1A	-2.70	116.79	123.59
26	c	505	CLA	O2D-CGD-CBD	2.70	116.06	111.27
26	C	502	CLA	O2D-CGD-O1D	-2.69	118.57	123.84
26	C	509	CLA	O2D-CGD-O1D	-2.69	118.57	123.84
26	B	605	CLA	CMB-C2B-C3B	2.69	129.72	124.68
31	d	407	LHG	C20-C19-C18	-2.69	100.76	114.42
26	b	605	CLA	CMB-C2B-C3B	2.69	129.71	124.68
26	c	510	CLA	CMB-C2B-C3B	2.69	129.71	124.68
26	d	404	CLA	CMB-C2B-C3B	2.69	129.71	124.68
26	C	504	CLA	C2D-C1D-ND	-2.69	108.12	110.10
26	c	502	CLA	CHD-C1D-ND	-2.69	121.98	124.45
26	b	611	CLA	C1B-CHB-C4A	-2.69	124.80	130.12
28	A	611	BCR	C3-C4-C5	-2.69	109.28	114.08
32	f	101	SQD	O6-C1-C2	2.68	112.49	108.30
28	B	618	BCR	C2-C1-C6	2.68	114.61	110.48
30	c	522	LMG	O6-C1-O1	-2.68	103.62	109.97
26	A	607	CLA	C1B-CHB-C4A	-2.68	124.81	130.12
28	X	101	BCR	C2-C1-C6	2.68	114.61	110.48
32	f	101	SQD	C3-C4-C5	2.68	115.01	110.24
26	D	403	CLA	C1B-CHB-C4A	-2.68	124.82	130.12
28	a	610	BCR	C2-C1-C6	2.67	114.60	110.48
28	D	404	BCR	C27-C26-C25	2.67	126.61	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	b	616	BCR	C27-C26-C25	2.67	126.61	122.73
33	A	619	DGD	CDB-CCB-CBB	-2.67	100.89	114.42
26	c	513	CLA	CHB-C4A-NA	2.67	128.20	124.51
26	C	503	CLA	O1D-CGD-CBD	2.67	129.94	124.48
26	a	612	CLA	CHB-C4A-NA	2.66	128.19	124.51
26	b	603	CLA	CHB-C4A-NA	2.66	128.19	124.51
33	C	515	DGD	C6D-O5D-C1E	2.66	118.94	113.74
26	c	509	CLA	O2D-CGD-O1D	-2.66	118.64	123.84
26	b	607	CLA	C1B-CHB-C4A	-2.65	124.86	130.12
26	B	601	CLA	CHB-C4A-NA	2.65	128.18	124.51
34	b	622	STE	C3-C2-C1	-2.65	107.81	114.47
30	d	411	LMG	O7-C10-O9	-2.64	117.31	123.70
26	c	504	CLA	O2D-CGD-O1D	-2.64	118.67	123.84
30	c	522	LMG	O7-C10-O9	-2.64	117.32	123.70
29	d	406	PL9	C20-C19-C21	2.64	119.72	115.27
32	f	101	SQD	O48-C23-C24	2.64	120.20	111.91
26	b	611	CLA	O2A-CGA-O1A	-2.64	116.93	123.59
26	B	610	CLA	C1-C2-C3	-2.64	121.48	126.04
26	b	610	CLA	CHB-C4A-NA	2.64	128.16	124.51
26	B	606	CLA	O2A-CGA-O1A	-2.64	116.94	123.59
26	C	503	CLA	O2A-C1-C2	-2.63	101.71	108.64
27	d	402	PHO	O1D-CGD-CBD	2.63	129.13	124.74
30	m	101	LMG	O8-C28-O10	-2.63	116.95	123.59
30	m	101	LMG	O1-C1-C2	-2.63	104.19	108.30
26	b	610	CLA	O2D-CGD-CBD	2.63	115.94	111.27
26	C	504	CLA	O2A-CGA-O1A	-2.63	116.96	123.59
26	C	503	CLA	C2D-C1D-ND	-2.63	108.17	110.10
26	b	601	CLA	C1B-CHB-C4A	-2.63	124.91	130.12
26	C	502	CLA	CMB-C2B-C1B	-2.63	124.43	128.46
26	a	609	CLA	O2A-C1-C2	-2.62	101.74	108.64
26	B	601	CLA	CAA-C2A-C3A	-2.62	105.60	112.78
26	b	610	CLA	CMB-C2B-C3B	2.62	129.58	124.68
28	B	619	BCR	C2-C1-C6	2.62	114.52	110.48
26	a	607	CLA	CHB-C4A-NA	2.62	128.13	124.51
28	B	618	BCR	C35-C13-C14	-2.62	119.26	122.92
34	B	623	STE	C3-C2-C1	-2.62	107.88	114.47
28	B	618	BCR	C3-C4-C5	-2.61	109.41	114.08
31	L	101	LHG	O8-C23-C24	2.61	120.11	111.91
32	F	102	SQD	O48-C23-C24	2.61	120.11	111.91
26	A	608	CLA	CMB-C2B-C1B	-2.61	124.46	128.46
26	c	509	CLA	CHD-C1D-ND	-2.61	122.06	124.45
30	d	411	LMG	O6-C1-O1	-2.60	103.81	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	A	616	SQD	O48-C23-C24	2.60	120.08	111.91
26	h	101	CLA	O2A-CGA-O1A	-2.60	117.03	123.59
26	c	504	CLA	C1-C2-C3	-2.60	121.55	126.04
26	c	511	CLA	O2A-CGA-O1A	-2.60	117.04	123.59
26	B	612	CLA	CHB-C4A-NA	2.59	128.10	124.51
33	C	516	DGD	O2D-C2D-C1D	-2.59	103.75	110.05
33	C	516	DGD	O5D-C6D-C5D	-2.59	104.25	109.05
26	b	610	CLA	CHD-C1D-ND	-2.59	122.08	124.45
26	B	616	CLA	CHD-C1D-ND	-2.59	122.08	124.45
26	b	607	CLA	C2D-C1D-ND	-2.59	108.20	110.10
26	a	607	CLA	C2D-C1D-ND	-2.58	108.20	110.10
26	B	613	CLA	CED-O2D-CGD	2.58	121.78	115.94
26	A	607	CLA	CHD-C1D-ND	-2.58	122.08	124.45
26	B	608	CLA	O2D-CGD-CBD	2.58	115.85	111.27
26	b	603	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
32	f	101	SQD	C1-O5-C5	-2.57	108.64	113.69
31	D	409	LHG	O8-C23-O10	-2.57	117.10	123.59
26	C	513	CLA	O2A-CGA-O1A	-2.57	117.10	123.59
33	a	614	DGD	CDB-CCB-CBB	-2.57	101.38	114.42
29	d	406	PL9	C37-C38-C39	-2.57	121.47	127.66
28	K	101	BCR	C33-C5-C6	-2.57	121.64	124.53
26	b	612	CLA	C7-C6-C5	-2.57	106.39	113.36
33	A	619	DGD	O5D-C1E-C2E	2.56	112.31	108.30
26	b	613	CLA	O2A-CGA-O1A	-2.56	117.12	123.59
27	A	609	PHO	C1-C2-C3	-2.56	121.61	126.04
26	c	505	CLA	O2D-CGD-O1D	-2.56	118.83	123.84
32	b	619	SQD	C3-C4-C5	2.56	114.81	110.24
28	b	618	BCR	C27-C26-C25	2.56	126.45	122.73
33	c	518	DGD	CDB-CCB-CBB	-2.56	101.44	114.42
30	m	101	LMG	C38-C37-C36	-2.56	101.45	114.42
33	h	103	DGD	C3G-C2G-C1G	-2.55	105.75	111.79
28	Z	101	BCR	C27-C26-C25	2.55	126.43	122.73
26	c	503	CLA	CHB-C4A-NA	2.55	128.04	124.51
26	A	607	CLA	CMB-C2B-C3B	2.55	129.44	124.68
28	A	611	BCR	C27-C26-C25	2.55	126.43	122.73
26	C	511	CLA	O2A-CGA-O1A	-2.55	117.17	123.59
27	A	609	PHO	CMC-C2C-C3C	2.55	129.74	124.94
29	d	406	PL9	C27-C28-C29	-2.55	121.53	127.66
26	b	611	CLA	C1-C2-C3	-2.54	121.64	126.04
28	c	516	BCR	C27-C26-C25	2.54	126.42	122.73
33	c	517	DGD	CDB-CCB-CBB	-2.54	101.51	114.42
26	b	605	CLA	CHB-C4A-NA	2.54	128.03	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	603	CLA	O2A-CGA-O1A	-2.54	117.17	123.59
30	M	101	LMG	O1-C7-C8	-2.54	104.76	110.90
31	D	407	LHG	O8-C23-O10	-2.54	117.18	123.59
26	b	604	CLA	O1D-CGD-CBD	2.54	129.68	124.48
33	C	516	DGD	CDB-CCB-CBB	-2.54	101.54	114.42
32	b	619	SQD	C1-C2-C3	-2.54	104.71	110.00
31	D	409	LHG	C11-C10-C9	-2.53	101.56	114.42
30	c	522	LMG	C3-C4-C5	-2.53	105.72	110.24
26	D	402	CLA	C2D-C1D-ND	-2.53	108.24	110.10
33	C	515	DGD	O5D-C6D-C5D	-2.53	104.36	109.05
33	C	517	DGD	CDB-CCB-CBB	-2.53	101.57	114.42
26	d	404	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
30	C	518	LMG	O1-C7-C8	-2.53	104.80	110.90
31	e	102	LHG	C11-C10-C9	-2.53	101.61	114.42
26	b	611	CLA	O1D-CGD-CBD	2.52	129.65	124.48
26	C	503	CLA	CHD-C1D-ND	-2.52	122.14	124.45
29	D	405	PL9	C22-C23-C24	-2.52	121.59	127.66
26	b	607	CLA	C1D-ND-C4D	2.52	108.13	106.33
28	X	101	BCR	C27-C26-C25	2.52	126.39	122.73
33	C	516	DGD	C1D-C2D-C3D	-2.52	104.75	110.00
34	C	519	STE	O2-C1-C2	2.52	122.11	114.03
26	C	501	CLA	O2A-CGA-O1A	-2.52	117.24	123.59
28	c	516	BCR	C33-C5-C6	-2.51	121.71	124.53
28	h	102	BCR	C27-C26-C25	2.51	126.37	122.73
26	B	602	CLA	C16-C15-C13	-2.51	107.82	115.92
26	c	508	CLA	CHB-C4A-NA	2.51	127.98	124.51
26	b	602	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
26	C	501	CLA	CMB-C2B-C3B	2.50	129.35	124.68
26	a	607	CLA	C1D-ND-C4D	2.50	108.11	106.33
27	a	608	PHO	OBD-CAD-CBD	-2.49	122.17	125.82
26	b	602	CLA	C2D-C1D-ND	-2.49	108.27	110.10
26	B	607	CLA	C1B-CHB-C4A	-2.49	125.18	130.12
26	b	606	CLA	C1B-CHB-C4A	-2.49	125.18	130.12
26	b	604	CLA	CHB-C4A-NA	2.49	127.96	124.51
30	M	101	LMG	C40-C39-C38	-2.49	101.79	114.42
26	C	501	CLA	C1-C2-C3	-2.49	121.74	126.04
28	B	617	BCR	C33-C5-C6	-2.49	121.73	124.53
35	e	101	HEM	CHB-C1B-NB	2.49	127.45	124.38
28	X	101	BCR	C16-C17-C18	-2.49	123.76	127.31
26	B	613	CLA	CHD-C1D-ND	-2.49	122.17	124.45
26	d	403	CLA	O2A-CGA-O1A	-2.49	117.32	123.59
35	e	101	HEM	CAB-C3B-C2B	-2.48	120.42	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	505	CLA	CHB-C4A-NA	2.48	127.95	124.51
26	B	615	CLA	CHB-C4A-NA	2.48	127.94	124.51
33	H	101	DGD	C4E-C3E-C2E	-2.48	106.49	110.82
31	d	409	LHG	O8-C23-C24	2.48	119.70	111.91
28	a	610	BCR	C7-C8-C9	-2.48	122.49	126.23
26	c	511	CLA	O2D-CGD-CBD	2.48	115.67	111.27
26	a	612	CLA	C2D-C1D-ND	-2.48	108.28	110.10
26	B	607	CLA	CHB-C4A-NA	2.48	127.94	124.51
30	d	411	LMG	O1-C7-C8	-2.48	104.92	110.90
34	C	520	STE	C3-C2-C1	-2.48	108.23	114.47
28	b	618	BCR	C2-C1-C6	2.47	114.29	110.48
26	C	502	CLA	O1D-CGD-CBD	2.47	129.54	124.48
26	c	505	CLA	CMB-C2B-C3B	2.47	129.30	124.68
26	b	611	CLA	CHD-C1D-ND	-2.47	122.18	124.45
36	V	201	HEC	CMB-C2B-C1B	-2.47	124.67	128.46
26	B	612	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
26	A	608	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
26	a	612	CLA	O2D-CGD-CBD	2.47	115.65	111.27
26	b	612	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
34	M	102	STE	C3-C2-C1	-2.47	108.26	114.47
26	c	505	CLA	O2A-CGA-O1A	-2.46	117.38	123.59
26	B	604	CLA	C6-C7-C8	-2.46	107.97	115.92
26	C	502	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
28	c	514	BCR	C27-C26-C25	2.46	126.30	122.73
26	B	608	CLA	CHB-C4A-NA	2.46	127.91	124.51
30	D	406	LMG	C38-C37-C36	-2.46	101.96	114.42
30	D	408	LMG	O1-C7-C8	-2.45	105.27	111.78
31	d	407	LHG	C18-C17-C16	-2.45	101.97	114.42
30	m	101	LMG	C1-O6-C5	-2.45	108.87	113.69
26	B	610	CLA	C1B-CHB-C4A	-2.45	125.26	130.12
28	b	617	BCR	C35-C13-C14	-2.45	119.49	122.92
30	M	101	LMG	C38-C37-C36	-2.45	101.98	114.42
26	c	506	CLA	C2D-C1D-ND	-2.45	108.30	110.10
28	d	405	BCR	C2-C1-C6	2.45	114.25	110.48
26	d	404	CLA	O2D-CGD-O1D	-2.45	119.05	123.84
31	d	408	LHG	C18-C17-C16	-2.45	102.00	114.42
34	J	101	STE	C3-C2-C1	-2.45	108.30	114.47
35	e	101	HEM	C4B-CHC-C1C	2.45	125.79	122.56
33	H	101	DGD	O6D-C1D-O3G	-2.45	104.18	109.97
32	B	622	SQD	O9-S-C6	2.44	109.84	106.94
28	c	514	BCR	C33-C5-C6	-2.44	121.79	124.53
26	B	611	CLA	CMB-C2B-C1B	-2.44	124.71	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	612	CLA	O1D-CGD-CBD	2.44	129.47	124.48
26	B	606	CLA	C1B-CHB-C4A	-2.44	125.29	130.12
26	B	616	CLA	C1B-CHB-C4A	-2.44	125.29	130.12
32	A	616	SQD	O47-C7-O49	-2.44	117.81	123.70
26	c	508	CLA	CHD-C4C-NC	2.43	128.04	124.20
33	a	614	DGD	C5B-C4B-C3B	-2.43	102.07	114.42
26	C	513	CLA	O2D-CGD-CBD	2.43	115.59	111.27
26	b	612	CLA	CHB-C4A-NA	2.43	127.88	124.51
26	b	603	CLA	O2A-CGA-O1A	-2.43	117.45	123.59
26	A	608	CLA	CMB-C2B-C3B	2.43	129.22	124.68
28	c	515	BCR	C35-C13-C14	-2.43	119.52	122.92
26	B	604	CLA	C2D-C1D-ND	-2.43	108.31	110.10
29	a	611	PL9	C12-C13-C14	-2.43	121.81	127.66
29	D	405	PL9	C12-C13-C14	-2.43	121.81	127.66
26	C	505	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
26	b	603	CLA	O2D-CGD-CBD	2.43	115.58	111.27
26	B	606	CLA	CGD-CBD-CAD	-2.43	102.88	110.73
26	C	509	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
27	D	401	PHO	OBD-CAD-CBD	-2.43	122.27	125.82
26	b	610	CLA	C2D-C1D-ND	-2.42	108.32	110.10
30	A	614	LMG	C38-C37-C36	-2.42	102.13	114.42
30	m	101	LMG	O7-C10-O9	-2.42	117.85	123.70
30	M	101	LMG	O6-C1-O1	-2.42	104.24	109.97
26	c	512	CLA	C1B-CHB-C4A	-2.42	125.32	130.12
27	a	608	PHO	CMB-C2B-C3B	2.42	129.21	124.68
29	d	406	PL9	C8-C7-C3	2.42	118.81	111.98
26	A	613	CLA	C1-C2-C3	-2.42	121.86	126.04
31	d	407	LHG	O8-C23-O10	-2.42	117.49	123.59
32	B	622	SQD	C9-C8-C7	-2.42	104.83	113.62
26	B	614	CLA	CHB-C4A-NA	2.41	127.85	124.51
26	B	605	CLA	O2A-CGA-O1A	-2.41	117.50	123.59
26	B	616	CLA	C2D-C1D-ND	-2.41	108.33	110.10
26	B	609	CLA	C1B-CHB-C4A	-2.41	125.35	130.12
33	h	103	DGD	CDB-CCB-CBB	-2.40	102.22	114.42
30	D	406	LMG	C40-C39-C38	-2.40	102.22	114.42
26	b	609	CLA	CHD-C1D-ND	-2.40	122.25	124.45
31	A	617	LHG	C11-C10-C9	-2.40	102.22	114.42
33	c	517	DGD	C6D-O5D-C1E	2.40	118.43	113.74
26	C	504	CLA	CHB-C4A-NA	2.40	127.83	124.51
26	b	612	CLA	O2D-CGD-O1D	-2.40	119.14	123.84
26	B	609	CLA	C1-C2-C3	-2.40	121.89	126.04
34	j	101	STE	O2-C1-O1	-2.40	117.31	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	A	615	LHG	O8-C6-C5	-2.40	101.45	108.43
26	C	512	CLA	C2D-C1D-ND	-2.40	108.34	110.10
28	b	616	BCR	C3-C4-C5	-2.40	109.80	114.08
30	c	522	LMG	O2-C2-C1	-2.39	104.23	110.05
33	h	103	DGD	C1D-O6D-C5D	-2.39	108.99	113.69
26	B	605	CLA	O1D-CGD-CBD	2.39	129.38	124.48
28	a	610	BCR	C27-C26-C25	2.39	126.20	122.73
26	B	611	CLA	CMB-C2B-C3B	2.39	129.15	124.68
26	B	615	CLA	O2D-CGD-O1D	-2.39	119.17	123.84
30	c	523	LMG	C1-O6-C5	-2.39	109.00	113.69
29	d	406	PL9	C36-C34-C33	-2.38	116.29	121.12
29	D	405	PL9	C7-C3-C2	-2.38	120.16	123.30
26	c	501	CLA	C1B-CHB-C4A	-2.38	125.40	130.12
26	b	614	CLA	C1B-CHB-C4A	-2.38	125.40	130.12
28	T	101	BCR	C35-C13-C14	-2.38	119.59	122.92
34	d	414	STE	O2-C1-C2	2.38	121.67	114.03
26	B	601	CLA	CAA-CBA-CGA	-2.38	106.31	113.25
32	f	101	SQD	O5-C1-C2	-2.37	105.32	110.35
26	c	503	CLA	CHD-C1D-ND	-2.37	122.27	124.45
28	a	610	BCR	C30-C25-C26	-2.37	119.27	122.61
33	A	619	DGD	CBB-CAB-C9B	-2.37	102.37	114.42
26	A	610	CLA	O2D-CGD-CBD	2.37	115.49	111.27
26	c	507	CLA	CMB-C2B-C3B	2.37	129.12	124.68
26	A	613	CLA	C2D-C1D-ND	-2.37	108.36	110.10
29	a	611	PL9	C37-C38-C39	-2.37	121.95	127.66
26	a	607	CLA	C1-C2-C3	-2.37	121.94	126.04
26	B	615	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
26	a	609	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
27	a	608	PHO	O2A-CGA-O1A	-2.37	117.61	123.59
36	V	201	HEC	CMC-C2C-C3C	2.37	128.61	125.82
26	b	612	CLA	O2A-CGA-O1A	-2.37	117.62	123.59
26	B	608	CLA	C1-O2A-CGA	2.36	122.64	116.44
26	C	506	CLA	O2D-CGD-O1D	-2.36	119.22	123.84
30	d	411	LMG	C40-C39-C38	-2.36	102.44	114.42
33	h	103	DGD	O6E-C5E-C4E	2.36	113.97	109.69
26	c	509	CLA	C1B-CHB-C4A	-2.36	125.45	130.12
31	A	615	LHG	C11-C10-C9	-2.36	102.46	114.42
28	C	514	BCR	C27-C26-C25	2.36	126.15	122.73
28	c	515	BCR	C2-C1-C6	2.36	114.11	110.48
31	d	408	LHG	C20-C19-C18	-2.36	102.47	114.42
33	A	619	DGD	O6D-C1D-O3G	-2.35	104.40	109.97
32	A	616	SQD	O5-C5-C4	2.35	113.97	109.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	c	519	DGD	CBB-CAB-C9B	-2.35	102.49	114.42
33	h	103	DGD	CBB-CAB-C9B	-2.35	102.49	114.42
31	l	101	LHG	C11-C10-C9	-2.35	102.50	114.42
29	a	611	PL9	C40-C39-C41	2.35	119.22	115.27
26	C	503	CLA	C7-C6-C5	-2.35	106.98	113.36
33	c	518	DGD	C6D-C5D-C4D	2.35	116.99	112.09
28	B	619	BCR	C29-C30-C25	2.34	114.09	110.48
31	l	101	LHG	C5-O7-C7	-2.34	112.03	117.79
28	b	616	BCR	C15-C14-C13	-2.34	123.97	127.31
26	B	603	CLA	C7-C6-C5	-2.34	107.02	113.36
26	c	513	CLA	O2A-CGA-O1A	-2.34	117.70	123.59
32	A	618	SQD	O48-C23-C24	2.34	119.24	111.91
26	B	602	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
26	b	608	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
33	c	517	DGD	C4E-C3E-C2E	-2.33	106.75	110.82
26	b	608	CLA	C1B-CHB-C4A	-2.33	125.50	130.12
26	B	611	CLA	C2D-C1D-ND	-2.33	108.39	110.10
33	c	519	DGD	C6D-O5D-C1E	2.33	118.29	113.74
26	C	513	CLA	CHD-C1D-ND	-2.33	122.31	124.45
26	c	511	CLA	CHB-C4A-NA	2.33	127.73	124.51
29	A	612	PL9	C7-C3-C2	-2.33	120.24	123.30
26	b	613	CLA	C1B-CHB-C4A	-2.32	125.52	130.12
31	d	408	LHG	C11-C10-C9	-2.32	102.64	114.42
28	b	617	BCR	C15-C14-C13	-2.32	124.00	127.31
26	b	614	CLA	CHD-C1D-ND	-2.32	122.32	124.45
26	B	614	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
26	B	611	CLA	CHD-C1D-ND	-2.31	122.33	124.45
29	A	612	PL9	C27-C28-C29	-2.31	122.09	127.66
26	C	503	CLA	CHB-C4A-NA	2.31	127.71	124.51
29	A	612	PL9	O2-C1-C2	-2.31	116.48	121.78
26	c	510	CLA	C2D-C1D-ND	-2.31	108.40	110.10
33	c	517	DGD	O3G-C1D-C2D	-2.31	104.70	108.30
29	D	405	PL9	C50-C49-C48	-2.31	115.98	122.65
26	C	510	CLA	C11-C10-C8	-2.31	108.46	115.92
26	C	511	CLA	CMB-C2B-C3B	2.31	128.99	124.68
30	C	518	LMG	C40-C39-C38	-2.31	102.72	114.42
26	c	512	CLA	O2A-CGA-O1A	-2.31	117.77	123.59
26	B	605	CLA	CMB-C2B-C1B	-2.31	124.92	128.46
26	b	604	CLA	C1-C2-C3	-2.30	122.07	126.04
26	C	505	CLA	CHB-C4A-NA	2.30	127.69	124.51
31	L	101	LHG	C11-C10-C9	-2.30	102.76	114.42
31	D	407	LHG	C27-C26-C25	-2.30	102.77	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	505	CLA	CHD-C1D-ND	-2.30	122.34	124.45
26	C	507	CLA	CHD-C1D-ND	-2.29	122.34	124.45
29	A	612	PL9	C20-C19-C21	2.29	119.13	115.27
28	Z	101	BCR	C7-C8-C9	-2.29	122.77	126.23
32	a	613	SQD	O5-C1-C2	-2.29	105.50	110.35
26	b	604	CLA	O2D-CGD-CBD	2.29	115.34	111.27
30	b	621	LMG	C40-C39-C38	-2.29	102.80	114.42
26	b	603	CLA	C2D-C1D-ND	-2.29	108.42	110.10
28	b	616	BCR	C11-C10-C9	-2.29	124.04	127.31
27	D	401	PHO	CMC-C2C-C3C	2.29	129.26	124.94
26	C	504	CLA	O2D-CGD-O1D	-2.29	119.37	123.84
28	X	101	BCR	C15-C14-C13	-2.28	124.05	127.31
29	A	612	PL9	C40-C39-C41	2.28	119.11	115.27
27	d	402	PHO	O2A-CGA-O1A	-2.28	117.83	123.59
26	c	501	CLA	O2A-CGA-O1A	-2.28	117.83	123.59
31	d	407	LHG	C27-C26-C25	-2.28	102.84	114.42
26	b	602	CLA	CHD-C1D-C2D	2.28	130.26	125.48
27	a	608	PHO	CMD-C2D-C3D	2.28	128.95	124.68
32	b	619	SQD	C9-C8-C7	-2.28	105.33	113.62
34	C	519	STE	O1-C1-C2	-2.28	115.76	123.08
26	C	507	CLA	C2A-C1A-CHA	2.28	127.84	123.86
33	h	103	DGD	C3D-C4D-C5D	-2.28	106.18	110.24
28	h	102	BCR	C35-C13-C14	-2.28	119.74	122.92
28	t	101	BCR	C28-C27-C26	-2.27	110.02	114.08
28	C	514	BCR	C33-C5-C6	-2.27	121.97	124.53
26	D	403	CLA	CHB-C4A-NA	2.27	127.66	124.51
33	c	518	DGD	O2D-C2D-C1D	-2.27	104.52	110.05
26	B	601	CLA	C2A-C1A-CHA	2.27	127.83	123.86
26	b	601	CLA	C2D-C1D-ND	-2.27	108.43	110.10
28	t	101	BCR	C11-C10-C9	-2.27	124.07	127.31
28	Z	101	BCR	C15-C14-C13	-2.27	124.07	127.31
30	c	522	LMG	C40-C39-C38	-2.27	102.92	114.42
26	A	607	CLA	O2D-CGD-O1D	-2.27	119.41	123.84
26	B	607	CLA	CHD-C1D-ND	-2.26	122.37	124.45
26	C	504	CLA	CHD-C1D-ND	-2.26	122.37	124.45
26	c	512	CLA	CMB-C2B-C3B	2.26	128.91	124.68
26	C	505	CLA	O2A-CGA-O1A	-2.26	117.88	123.59
33	h	103	DGD	O6D-C1D-O3G	-2.26	104.62	109.97
35	e	101	HEM	CHC-C4B-C3B	2.26	128.03	124.57
26	A	607	CLA	CED-O2D-CGD	2.26	121.04	115.94
26	c	507	CLA	O2A-CGA-O1A	-2.26	117.90	123.59
26	C	510	CLA	CHD-C1D-ND	-2.26	122.38	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	b	619	SQD	C1-O5-C5	2.25	118.11	113.69
26	c	501	CLA	CHB-C4A-NA	2.25	127.63	124.51
26	B	606	CLA	CHA-C4D-ND	2.25	137.21	132.50
28	B	618	BCR	C11-C10-C9	-2.25	124.10	127.31
26	B	613	CLA	C16-C15-C13	-2.25	108.64	115.92
33	c	517	DGD	O3E-C3E-C2E	-2.25	105.15	110.35
28	c	514	BCR	C15-C16-C17	-2.25	118.87	123.47
28	T	101	BCR	C15-C14-C13	-2.25	124.10	127.31
26	b	605	CLA	C11-C12-C13	-2.25	108.66	115.92
29	d	406	PL9	C42-C43-C44	-2.25	122.25	127.66
30	c	523	LMG	C38-C37-C36	-2.24	103.05	114.42
33	H	101	DGD	C6D-C5D-C4D	2.24	116.77	112.09
32	t	102	SQD	O48-C23-O10	-2.24	117.94	123.59
28	K	102	BCR	C24-C23-C22	-2.24	122.85	126.23
29	D	405	PL9	C32-C33-C34	-2.24	122.27	127.66
30	C	518	LMG	C38-C37-C36	-2.24	103.06	114.42
33	c	518	DGD	CBB-CAB-C9B	-2.24	103.07	114.42
32	B	622	SQD	C1-O5-C5	-2.24	109.30	113.69
30	c	523	LMG	C40-C39-C38	-2.24	103.07	114.42
31	L	101	LHG	C27-C26-C25	-2.24	103.08	114.42
27	D	401	PHO	O2A-CGA-O1A	-2.23	117.95	123.59
33	A	619	DGD	O3G-C3G-C2G	-2.23	105.51	110.90
31	l	101	LHG	C20-C19-C18	-2.23	103.09	114.42
26	a	606	CLA	C1B-CHB-C4A	-2.23	125.69	130.12
26	C	507	CLA	C1-C2-C3	-2.23	122.18	126.04
32	B	622	SQD	O5-C1-C2	-2.23	105.62	110.35
26	c	509	CLA	O1D-CGD-CBD	2.23	129.05	124.48
26	C	508	CLA	O2D-CGD-CBD	2.23	115.23	111.27
30	d	411	LMG	C38-C37-C36	-2.23	103.11	114.42
26	C	502	CLA	C1B-CHB-C4A	-2.23	125.70	130.12
29	a	611	PL9	O2-C1-C2	-2.23	116.68	121.78
28	T	101	BCR	C29-C30-C25	2.23	113.91	110.48
28	B	618	BCR	C27-C26-C25	2.23	125.96	122.73
26	c	508	CLA	O2D-CGD-CBD	2.22	115.22	111.27
28	A	611	BCR	C7-C8-C9	-2.22	122.87	126.23
28	B	617	BCR	C15-C16-C17	-2.22	118.92	123.47
33	h	103	DGD	C6D-C5D-C4D	2.22	116.73	112.09
28	b	617	BCR	C27-C26-C25	2.22	125.96	122.73
29	d	406	PL9	C31-C32-C33	-2.22	104.58	111.88
28	X	101	BCR	C16-C15-C14	-2.22	118.92	123.47
26	B	616	CLA	C3C-C4C-NC	-2.22	108.08	110.57
28	C	514	BCR	C2-C1-C6	2.22	113.90	110.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	603	CLA	C11-C10-C8	-2.22	108.75	115.92
30	A	614	LMG	C40-C39-C38	-2.22	103.16	114.42
30	m	101	LMG	C9-C8-C7	-2.22	106.55	111.79
29	d	406	PL9	C46-C47-C48	-2.22	104.60	111.88
33	H	101	DGD	C1D-O6D-C5D	-2.22	109.34	113.69
30	D	406	LMG	O6-C1-O1	-2.21	104.73	109.97
26	b	601	CLA	CHD-C1D-ND	-2.21	122.42	124.45
30	b	621	LMG	C38-C37-C36	-2.21	103.19	114.42
26	b	602	CLA	O2A-CGA-O1A	-2.21	118.01	123.59
26	c	510	CLA	C16-C15-C13	-2.21	108.77	115.92
30	D	408	LMG	C38-C37-C36	-2.21	103.20	114.42
33	c	517	DGD	CBB-CAB-C9B	-2.21	103.20	114.42
26	c	504	CLA	CHB-C4A-NA	2.21	127.57	124.51
31	D	409	LHG	C20-C19-C18	-2.21	103.21	114.42
26	D	402	CLA	CHB-C4A-NA	2.21	127.56	124.51
26	C	512	CLA	C1B-CHB-C4A	-2.21	125.75	130.12
28	c	515	BCR	C11-C10-C9	-2.20	124.16	127.31
34	j	101	STE	O2-C1-C2	2.20	121.11	114.03
30	D	406	LMG	O1-C1-C2	-2.20	104.86	108.30
26	B	615	CLA	CHD-C1D-ND	-2.20	122.43	124.45
36	v	201	HEC	CMC-C2C-C3C	2.20	128.41	125.82
26	c	503	CLA	C11-C12-C13	-2.20	108.82	115.92
30	c	520	LMG	O3-C3-C2	-2.19	105.28	110.35
26	c	506	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
30	A	614	LMG	C1-C2-C3	-2.19	105.43	110.00
26	C	505	CLA	O2D-CGD-O1D	-2.19	119.56	123.84
30	c	520	LMG	C40-C39-C38	-2.19	103.31	114.42
26	b	614	CLA	O2D-CGD-O1D	-2.19	119.56	123.84
26	B	603	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
26	B	610	CLA	CAA-C2A-C3A	-2.19	106.78	112.78
26	B	609	CLA	CHA-C1A-NA	-2.19	121.39	126.40
26	d	404	CLA	CHD-C1D-C2D	2.19	130.07	125.48
29	a	611	PL9	C26-C24-C23	-2.18	116.70	121.12
32	F	102	SQD	O4-C4-C3	-2.18	105.31	110.35
30	c	520	LMG	C38-C37-C36	-2.18	103.36	114.42
28	Z	101	BCR	C15-C16-C17	-2.18	119.01	123.47
26	c	508	CLA	C3C-C4C-NC	-2.18	108.13	110.57
26	C	513	CLA	O1D-CGD-CBD	2.18	128.94	124.48
26	C	502	CLA	CMB-C2B-C3B	2.18	128.75	124.68
26	B	602	CLA	C11-C12-C13	-2.17	108.89	115.92
26	B	614	CLA	C2A-C1A-CHA	2.17	127.66	123.86
26	B	606	CLA	O2D-CGD-CBD	2.17	115.13	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	511	CLA	C2A-C1A-CHA	2.17	127.66	123.86
26	b	608	CLA	C7-C6-C5	-2.17	107.46	113.36
26	c	502	CLA	CHB-C4A-NA	2.17	127.51	124.51
28	t	101	BCR	C33-C5-C6	-2.17	122.09	124.53
33	H	101	DGD	CDB-CCB-CBB	-2.17	103.42	114.42
33	c	518	DGD	C1D-C2D-C3D	-2.17	105.48	110.00
26	C	501	CLA	CHB-C4A-NA	2.17	127.51	124.51
26	C	503	CLA	C1-O2A-CGA	2.17	122.13	116.44
28	b	618	BCR	C29-C30-C25	2.16	113.81	110.48
31	l	101	LHG	C18-C17-C16	-2.16	103.44	114.42
28	k	101	BCR	C24-C23-C22	-2.16	122.97	126.23
26	a	609	CLA	O2A-CGA-O1A	-2.16	118.13	123.59
30	b	621	LMG	C8-O7-C10	2.16	123.11	117.79
28	c	514	BCR	C2-C1-C6	2.16	113.81	110.48
28	D	404	BCR	C38-C26-C25	-2.16	122.11	124.53
32	f	101	SQD	O8-S-C6	2.16	109.18	105.74
32	A	616	SQD	C44-O6-C1	-2.16	109.53	113.74
26	c	502	CLA	O1D-CGD-CBD	2.15	128.89	124.48
28	T	101	BCR	C38-C26-C27	-2.15	109.48	113.62
33	A	619	DGD	C8B-C7B-C6B	-2.15	103.50	114.42
33	a	614	DGD	C2G-O2G-C1B	2.15	123.09	117.79
30	c	522	LMG	C38-C37-C36	-2.15	103.51	114.42
26	B	601	CLA	C2D-C1D-ND	-2.15	108.52	110.10
33	c	518	DGD	C2G-O2G-C1B	-2.15	112.51	117.79
26	b	602	CLA	O2A-C1-C2	-2.14	103.00	108.64
28	X	101	BCR	C24-C23-C22	-2.14	123.00	126.23
26	B	613	CLA	CHB-C4A-NA	2.14	127.48	124.51
26	B	613	CLA	CHC-C1C-NC	2.14	127.45	124.20
26	c	502	CLA	C1B-CHB-C4A	-2.14	125.87	130.12
26	b	609	CLA	C1-C2-C3	-2.14	122.34	126.04
26	a	606	CLA	C1-C2-C3	-2.14	122.34	126.04
26	C	510	CLA	C2D-C1D-ND	-2.14	108.53	110.10
30	d	410	LMG	C38-C37-C36	-2.14	103.56	114.42
26	B	607	CLA	C5-C3-C2	-2.14	116.79	121.12
34	t	103	STE	O2-C1-C2	2.14	120.91	114.03
29	A	612	PL9	C12-C13-C14	-2.14	122.51	127.66
26	c	512	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
30	C	518	LMG	C6-C5-C4	-2.14	108.00	113.00
26	B	604	CLA	O2D-CGD-CBD	2.14	115.06	111.27
26	c	512	CLA	O1D-CGD-CBD	2.14	128.85	124.48
30	D	406	LMG	O1-C7-C8	-2.14	105.75	110.90
26	B	606	CLA	CHD-C1D-ND	-2.13	122.49	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	K	102	BCR	C15-C16-C17	-2.13	119.10	123.47
26	B	615	CLA	O2A-CGA-O1A	-2.13	118.21	123.59
26	A	608	CLA	C1D-ND-C4D	2.13	107.85	106.33
33	C	517	DGD	C8B-C7B-C6B	-2.13	103.61	114.42
31	e	102	LHG	C20-C19-C18	-2.13	103.61	114.42
31	l	101	LHG	C29-C28-C27	-2.13	103.63	114.42
28	t	101	BCR	C7-C8-C9	-2.13	123.02	126.23
31	d	409	LHG	C27-C26-C25	-2.13	103.64	114.42
33	C	516	DGD	C3E-C4E-C5E	-2.12	106.45	110.24
28	b	616	BCR	C38-C26-C27	-2.12	109.53	113.62
28	h	102	BCR	C7-C8-C9	-2.12	123.03	126.23
33	C	517	DGD	CAB-C9B-C8B	-2.12	103.64	114.42
26	B	602	CLA	C1B-CHB-C4A	-2.12	125.91	130.12
33	H	101	DGD	CAB-C9B-C8B	-2.12	103.66	114.42
26	d	403	CLA	CHB-C4A-NA	2.12	127.44	124.51
33	c	518	DGD	O6E-C1E-O5D	-2.12	104.96	109.97
31	d	408	LHG	O8-C23-O10	-2.12	118.25	123.59
26	B	616	CLA	CHC-C1C-NC	2.12	127.41	124.20
26	c	510	CLA	C7-C6-C5	-2.11	107.62	113.36
26	b	608	CLA	CHD-C1D-ND	-2.11	122.51	124.45
26	b	613	CLA	CHD-C1D-ND	-2.11	122.51	124.45
26	C	502	CLA	C1-C2-C3	-2.11	122.39	126.04
26	b	610	CLA	C7-C6-C5	-2.11	107.62	113.36
29	A	612	PL9	C36-C34-C33	-2.11	116.84	121.12
26	D	403	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
28	T	101	BCR	C27-C26-C25	2.11	125.79	122.73
26	c	503	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
26	b	607	CLA	CHD-C1D-ND	-2.11	122.52	124.45
28	B	619	BCR	C33-C5-C6	-2.11	122.16	124.53
33	a	614	DGD	CBB-CAB-C9B	-2.11	103.72	114.42
34	J	101	STE	O2-C1-C2	2.11	120.80	114.03
26	b	614	CLA	CHB-C4A-NA	2.11	127.43	124.51
26	D	403	CLA	CAC-C3C-C4C	2.11	127.54	124.81
26	a	607	CLA	C3C-C4C-NC	-2.11	108.21	110.57
31	A	617	LHG	C20-C19-C18	-2.11	103.74	114.42
26	B	603	CLA	C2A-C1A-CHA	2.10	127.54	123.86
26	b	614	CLA	CMB-C2B-C3B	2.10	128.61	124.68
28	h	102	BCR	C2-C1-C6	2.10	113.72	110.48
28	d	405	BCR	C33-C5-C6	-2.10	122.17	124.53
26	b	604	CLA	C4-C3-C5	2.10	118.80	115.27
26	D	403	CLA	C1-C2-C3	-2.10	122.41	126.04
26	A	613	CLA	C1B-CHB-C4A	-2.10	125.96	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	C	513	CLA	CHB-C4A-NA	2.10	127.41	124.51
28	b	616	BCR	C30-C25-C26	-2.10	119.66	122.61
30	B	621	LMG	C38-C37-C36	-2.10	103.78	114.42
30	A	614	LMG	O6-C1-O1	-2.10	105.01	109.97
32	a	613	SQD	O7-S-C6	2.10	109.43	106.94
34	d	412	STE	O2-C1-C2	2.10	120.77	114.03
26	A	613	CLA	C3C-C4C-NC	-2.10	108.22	110.57
26	c	513	CLA	C1B-CHB-C4A	-2.10	125.97	130.12
34	F	103	STE	C3-C2-C1	-2.10	109.19	114.47
26	b	615	CLA	O2A-CGA-O1A	-2.09	118.31	123.59
26	B	601	CLA	CMB-C2B-C3B	2.09	128.60	124.68
26	C	501	CLA	O2D-CGD-CBD	2.09	114.99	111.27
32	a	613	SQD	C44-O6-C1	-2.09	109.65	113.74
26	b	603	CLA	C11-C12-C13	-2.09	109.16	115.92
29	A	612	PL9	C11-C12-C13	-2.09	105.01	111.88
28	d	405	BCR	C30-C25-C26	-2.09	119.67	122.61
33	c	518	DGD	O2G-C1B-O1B	-2.09	118.65	123.70
26	c	510	CLA	CHB-C4A-NA	2.09	127.40	124.51
28	B	619	BCR	C11-C10-C9	-2.09	124.33	127.31
28	D	404	BCR	C24-C23-C22	-2.09	123.08	126.23
26	B	608	CLA	C1B-CHB-C4A	-2.09	125.98	130.12
26	c	511	CLA	C2D-C1D-ND	-2.09	108.57	110.10
28	c	515	BCR	C37-C22-C21	-2.09	120.00	122.92
33	C	515	DGD	CBB-CAB-C9B	-2.09	103.84	114.42
30	M	101	LMG	O5-C6-C5	-2.08	104.14	111.29
33	c	519	DGD	C1D-C2D-C3D	-2.08	105.66	110.00
26	c	506	CLA	CHB-C4A-NA	2.08	127.39	124.51
28	c	515	BCR	C15-C16-C17	-2.08	119.21	123.47
33	c	517	DGD	O5E-C6E-C5E	-2.08	104.16	111.29
26	A	608	CLA	CAC-C3C-C4C	2.08	127.51	124.81
26	A	607	CLA	O1D-CGD-CBD	2.08	128.73	124.48
26	B	603	CLA	CHB-C4A-NA	2.08	127.38	124.51
31	l	101	LHG	O8-C23-C24	2.08	118.42	111.91
33	H	101	DGD	C3E-C4E-C5E	-2.07	106.54	110.24
26	C	503	CLA	C4-C3-C5	2.07	118.76	115.27
31	A	615	LHG	C27-C26-C25	-2.07	103.90	114.42
28	c	515	BCR	C33-C5-C6	-2.07	122.20	124.53
33	C	515	DGD	C8B-C7B-C6B	-2.07	103.91	114.42
33	A	619	DGD	O5D-C6D-C5D	-2.07	105.22	109.05
26	c	507	CLA	O2D-CGD-O1D	-2.07	119.79	123.84
33	c	517	DGD	C5B-C4B-C3B	-2.07	103.93	114.42
35	F	101	HEM	CHC-C4B-NB	2.07	126.68	124.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	B	618	BCR	C15-C14-C13	-2.06	124.36	127.31
33	C	515	DGD	CAB-C9B-C8B	-2.06	103.95	114.42
26	b	611	CLA	CAC-C3C-C4C	2.06	127.49	124.81
30	d	410	LMG	O7-C10-O9	-2.06	118.17	123.30
34	L	102	STE	O2-C1-C2	2.06	120.64	114.03
33	c	518	DGD	C7B-C6B-C5B	-2.06	103.98	114.42
26	b	615	CLA	CHD-C1D-ND	-2.06	122.56	124.45
28	D	404	BCR	C33-C5-C6	-2.06	122.22	124.53
26	B	616	CLA	O2A-CGA-O1A	-2.05	118.41	123.59
26	A	607	CLA	C7-C6-C5	-2.05	107.78	113.36
28	B	617	BCR	C34-C9-C10	-2.05	120.05	122.92
33	C	515	DGD	C6B-C5B-C4B	-2.05	104.01	114.42
31	A	617	LHG	C18-C17-C16	-2.05	104.01	114.42
28	Z	101	BCR	C2-C1-C6	2.05	113.64	110.48
26	B	604	CLA	C1D-ND-C4D	2.05	107.79	106.33
31	D	407	LHG	C11-C10-C9	-2.05	104.03	114.42
28	Z	101	BCR	C33-C5-C6	-2.05	122.23	124.53
26	b	603	CLA	CHD-C1D-ND	-2.05	122.57	124.45
26	C	504	CLA	C3C-C4C-NC	-2.05	108.28	110.57
26	C	510	CLA	C3C-C4C-NC	-2.05	108.28	110.57
33	A	619	DGD	CFB-CEB-CDB	-2.04	104.04	114.42
26	B	612	CLA	C11-C12-C13	-2.04	109.31	115.92
32	b	619	SQD	O49-C7-C8	-2.04	115.76	123.73
26	D	402	CLA	CHA-C4D-ND	2.04	136.77	132.50
26	c	510	CLA	CHA-C1A-NA	-2.04	121.72	126.40
31	A	617	LHG	C27-C26-C25	-2.04	104.07	114.42
28	t	101	BCR	C27-C26-C25	2.04	125.69	122.73
26	b	613	CLA	CHB-C4A-NA	2.04	127.33	124.51
26	B	613	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
30	B	621	LMG	O8-C28-O10	-2.04	118.22	123.30
30	b	621	LMG	O2-C2-C1	-2.04	105.10	110.05
26	C	510	CLA	CHB-C4A-NA	2.03	127.33	124.51
29	D	405	PL9	C36-C34-C33	-2.03	117.00	121.12
26	B	611	CLA	CHB-C4A-NA	2.03	127.32	124.51
34	M	102	STE	O2-C1-O1	-2.03	118.24	123.30
33	C	516	DGD	CBB-CAB-C9B	-2.03	104.12	114.42
30	c	522	LMG	C9-C8-C7	-2.03	106.99	111.79
30	c	520	LMG	O1-C7-C8	-2.03	106.00	110.90
26	D	403	CLA	CHA-C1A-NA	-2.03	121.75	126.40
30	A	614	LMG	O3-C3-C2	-2.03	105.66	110.35
26	A	610	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
34	L	102	STE	O2-C1-O1	-2.03	118.25	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	F	102	SQD	C3-C4-C5	2.03	113.85	110.24
28	t	101	BCR	C35-C13-C14	-2.03	120.08	122.92
32	t	102	SQD	C9-C8-C7	-2.02	106.26	113.62
26	c	507	CLA	C2A-C1A-CHA	2.02	127.40	123.86
26	C	511	CLA	C1B-CHB-C4A	-2.02	126.11	130.12
34	d	413	STE	O2-C1-C2	2.02	120.53	114.03
27	d	402	PHO	C1B-NB-C4B	2.02	111.25	107.09
30	D	408	LMG	O7-C10-O9	-2.02	118.81	123.70
30	D	406	LMG	C1-C2-C3	-2.02	105.78	110.00
33	A	619	DGD	C1D-C2D-C3D	-2.02	105.78	110.00
28	B	619	BCR	C27-C26-C25	2.02	125.67	122.73
26	B	614	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
26	b	609	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
29	a	611	PL9	C42-C43-C44	-2.02	122.80	127.66
33	C	517	DGD	O3E-C3E-C2E	-2.02	105.68	110.35
26	C	505	CLA	C1D-ND-C4D	2.02	107.77	106.33
26	c	508	CLA	CHD-C1D-C2D	2.02	129.72	125.48
26	b	613	CLA	CHA-C4D-ND	2.02	136.72	132.50
29	d	406	PL9	O2-C1-C2	-2.02	117.16	121.78
26	B	613	CLA	CHA-C1A-NA	-2.02	121.78	126.40
26	c	501	CLA	CHD-C1D-ND	-2.02	122.60	124.45
31	e	102	LHG	C18-C17-C16	-2.01	104.20	114.42
30	c	522	LMG	O8-C28-O10	-2.01	118.51	123.59
30	D	406	LMG	O8-C28-O10	-2.01	118.51	123.59
28	a	610	BCR	C11-C10-C9	-2.01	124.44	127.31
31	D	409	LHG	C27-C26-C25	-2.01	104.21	114.42
33	h	103	DGD	C3E-C4E-C5E	-2.01	106.65	110.24
28	d	405	BCR	C11-C10-C9	-2.01	124.44	127.31
28	c	515	BCR	C8-C9-C10	2.01	122.03	118.94
29	d	406	PL9	C11-C12-C13	-2.01	105.27	111.88
26	b	603	CLA	C1B-CHB-C4A	-2.01	126.13	130.12
33	H	101	DGD	C3G-C2G-C1G	-2.01	107.03	111.79
31	D	409	LHG	C18-C17-C16	-2.01	104.22	114.42
30	M	101	LMG	O7-C10-O9	-2.01	118.84	123.70
26	b	601	CLA	CAC-C3C-C4C	2.01	127.42	124.81
33	A	619	DGD	CAB-C9B-C8B	-2.01	104.23	114.42
31	e	102	LHG	C5-O7-C7	-2.01	112.85	117.79
26	C	503	CLA	C1D-ND-C4D	2.01	107.76	106.33
30	C	518	LMG	O7-C10-O9	-2.01	118.85	123.70
33	C	517	DGD	CBB-CAB-C9B	-2.01	104.24	114.42
30	c	522	LMG	C42-C41-C40	-2.01	104.24	114.42
28	b	618	BCR	C30-C25-C26	-2.01	119.79	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	b	621	LMG	C42-C41-C40	-2.01	104.25	114.42
28	d	405	BCR	C38-C26-C25	-2.00	122.28	124.53
26	C	503	CLA	CHD-C1D-C2D	2.00	129.68	125.48
36	v	201	HEC	C1D-C2D-C3D	-2.00	105.60	107.00
26	C	511	CLA	C4-C3-C5	2.00	118.64	115.27
26	B	613	CLA	O2D-CGD-O1D	-2.00	119.92	123.84
31	l	101	LHG	C27-C26-C25	-2.00	104.26	114.42
31	l	101	LHG	O8-C23-O10	-2.00	118.54	123.59

All (64) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
26	A	607	CLA	ND
26	A	608	CLA	ND
26	A	610	CLA	ND
26	A	613	CLA	ND
26	B	601	CLA	ND
26	B	602	CLA	ND
26	B	603	CLA	ND
26	B	604	CLA	ND
26	B	605	CLA	ND
26	B	606	CLA	ND
26	B	607	CLA	ND
26	B	608	CLA	ND
26	B	610	CLA	ND
26	B	611	CLA	ND
26	B	612	CLA	ND
26	B	613	CLA	ND
26	B	614	CLA	ND
26	B	615	CLA	ND
26	B	616	CLA	ND
26	C	501	CLA	ND
26	C	502	CLA	ND
26	C	503	CLA	ND
26	C	504	CLA	ND
26	C	505	CLA	ND
26	C	506	CLA	ND
26	C	507	CLA	ND
26	C	509	CLA	ND
26	C	510	CLA	ND
26	C	511	CLA	ND
26	C	512	CLA	ND

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Mol	Chain	Res	Type	Atom
26	C	513	CLA	ND
26	D	402	CLA	ND
26	a	606	CLA	ND
26	a	607	CLA	ND
26	a	609	CLA	ND
26	a	612	CLA	ND
26	b	601	CLA	ND
26	b	602	CLA	ND
26	b	603	CLA	ND
26	b	605	CLA	ND
26	b	606	CLA	ND
26	b	607	CLA	ND
26	b	609	CLA	ND
26	b	610	CLA	ND
26	b	611	CLA	ND
26	b	612	CLA	ND
26	b	613	CLA	ND
26	b	614	CLA	ND
26	b	615	CLA	ND
26	c	501	CLA	ND
26	c	502	CLA	ND
26	c	503	CLA	ND
26	c	504	CLA	ND
26	c	505	CLA	ND
26	c	506	CLA	ND
26	c	507	CLA	ND
26	c	509	CLA	ND
26	c	510	CLA	ND
26	c	511	CLA	ND
26	c	512	CLA	ND
26	c	513	CLA	ND
26	d	403	CLA	ND
26	d	404	CLA	ND
26	h	101	CLA	ND

All (1864) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
26	A	613	CLA	CHA-CBD-CGD-O1D
26	A	613	CLA	CHA-CBD-CGD-O2D
26	B	602	CLA	C6-C7-C8-C9
26	B	605	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
26	B	605	CLA	C4-C3-C5-C6
26	B	607	CLA	C2-C3-C5-C6
26	B	607	CLA	C4-C3-C5-C6
26	B	614	CLA	CHA-CBD-CGD-O1D
26	B	614	CLA	CHA-CBD-CGD-O2D
26	B	614	CLA	CAD-CBD-CGD-O1D
26	C	508	CLA	CHA-CBD-CGD-O1D
26	D	403	CLA	C2-C3-C5-C6
26	D	403	CLA	C4-C3-C5-C6
26	a	612	CLA	CHA-CBD-CGD-O1D
26	a	612	CLA	CHA-CBD-CGD-O2D
26	a	612	CLA	C14-C13-C15-C16
26	b	605	CLA	C14-C13-C15-C16
26	b	613	CLA	CAD-CBD-CGD-O1D
26	b	613	CLA	CAD-CBD-CGD-O2D
26	b	613	CLA	C11-C12-C13-C15
26	c	507	CLA	C2-C3-C5-C6
26	c	507	CLA	C4-C3-C5-C6
26	c	508	CLA	CHA-CBD-CGD-O1D
26	c	508	CLA	CHA-CBD-CGD-O2D
26	h	101	CLA	C1A-C2A-CAA-CBA
28	A	611	BCR	C12-C13-C14-C15
28	A	611	BCR	C35-C13-C14-C15
28	B	619	BCR	C37-C22-C23-C24
28	D	404	BCR	C7-C8-C9-C34
28	D	404	BCR	C23-C24-C25-C26
28	K	101	BCR	C5-C6-C7-C8
28	K	101	BCR	C7-C8-C9-C34
28	K	101	BCR	C21-C22-C23-C24
28	K	101	BCR	C37-C22-C23-C24
28	T	101	BCR	C5-C6-C7-C8
28	T	101	BCR	C6-C7-C8-C9
28	T	101	BCR	C7-C8-C9-C10
28	X	101	BCR	C11-C12-C13-C35
28	Z	101	BCR	C7-C8-C9-C34
28	Z	101	BCR	C16-C17-C18-C19
28	Z	101	BCR	C16-C17-C18-C36
28	d	405	BCR	C23-C24-C25-C26
28	d	405	BCR	C23-C24-C25-C30
28	h	102	BCR	C11-C10-C9-C8
28	k	101	BCR	C7-C8-C9-C34
28	t	101	BCR	C7-C8-C9-C34

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Mol	Chain	Res	Type	Atoms
29	A	612	PL9	C9-C11-C12-C13
29	A	612	PL9	C12-C13-C14-C16
29	A	612	PL9	C18-C19-C21-C22
29	A	612	PL9	C25-C24-C26-C27
29	A	612	PL9	C34-C36-C37-C38
29	A	612	PL9	C37-C38-C39-C40
29	A	612	PL9	C40-C39-C41-C42
29	A	612	PL9	C45-C44-C46-C47
29	D	405	PL9	C32-C33-C34-C36
29	D	405	PL9	C42-C43-C44-C46
29	a	611	PL9	C22-C23-C24-C26
29	a	611	PL9	C24-C26-C27-C28
29	a	611	PL9	C39-C41-C42-C43
29	a	611	PL9	C47-C48-C49-C50
29	d	406	PL9	C32-C33-C34-C36
29	d	406	PL9	C38-C39-C41-C42
29	d	406	PL9	C40-C39-C41-C42
30	A	614	LMG	O9-C10-O7-C8
30	A	614	LMG	C11-C10-O7-C8
30	C	518	LMG	C11-C10-O7-C8
30	D	408	LMG	O1-C7-C8-O7
30	b	621	LMG	C2-C1-O1-C7
30	b	621	LMG	O6-C1-O1-C7
30	c	523	LMG	O6-C1-O1-C7
31	A	615	LHG	O1-C1-C2-O2
31	A	615	LHG	O1-C1-C2-C3
31	A	615	LHG	C3-O3-P-O6
31	D	407	LHG	C1-C2-C3-O3
31	D	407	LHG	C3-O3-P-O4
31	D	407	LHG	C3-O3-P-O5
31	D	407	LHG	C3-O3-P-O6
31	D	407	LHG	C4-O6-P-O4
31	D	407	LHG	C4-O6-P-O5
31	D	409	LHG	C1-C2-C3-O3
31	D	409	LHG	C3-O3-P-O5
31	D	409	LHG	C3-O3-P-O6
31	d	408	LHG	C1-C2-C3-O3
31	d	408	LHG	C3-O3-P-O5
31	d	408	LHG	C4-O6-P-O4
31	e	102	LHG	O1-C1-C2-C3
31	e	102	LHG	C4-O6-P-O3
31	e	102	LHG	C4-O6-P-O4

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Mol	Chain	Res	Type	Atoms
32	B	622	SQD	C2-C1-O6-C44
32	B	622	SQD	O5-C1-O6-C44
32	B	622	SQD	O49-C7-O47-C45
32	B	622	SQD	C8-C7-O47-C45
32	F	102	SQD	C45-C44-O6-C1
32	F	102	SQD	O5-C1-O6-C44
32	a	613	SQD	O6-C44-C45-O47
32	b	619	SQD	O5-C1-O6-C44
32	b	619	SQD	O49-C7-O47-C45
32	b	619	SQD	C5-C6-S-O7
32	b	619	SQD	C5-C6-S-O8
32	b	619	SQD	C5-C6-S-O9
32	f	101	SQD	C2-C1-O6-C44
32	f	101	SQD	O5-C1-O6-C44
32	t	102	SQD	O6-C44-C45-C46
32	t	102	SQD	O6-C44-C45-O47
32	t	102	SQD	O49-C7-O47-C45
32	t	102	SQD	C8-C7-O47-C45
33	A	619	DGD	C2B-C1B-O2G-C2G
33	A	619	DGD	O1B-C1B-O2G-C2G
33	A	619	DGD	O2G-C2G-C3G-O3G
26	h	101	CLA	O1D-CGD-O2D-CED
26	c	513	CLA	CBD-CGD-O2D-CED
26	h	101	CLA	CBD-CGD-O2D-CED
30	A	614	LMG	O10-C28-O8-C9
30	c	522	LMG	O10-C28-O8-C9
30	c	523	LMG	O10-C28-O8-C9
29	a	611	PL9	C47-C48-C49-C51
26	C	501	CLA	CBD-CGD-O2D-CED
26	b	606	CLA	CBD-CGD-O2D-CED
27	d	402	PHO	CBD-CGD-O2D-CED
31	A	617	LHG	O10-C23-O8-C6
31	e	102	LHG	O10-C23-O8-C6
32	f	101	SQD	O10-C23-O48-C46
26	c	503	CLA	CBD-CGD-O2D-CED
30	D	408	LMG	O9-C10-O7-C8
30	c	522	LMG	O9-C10-O7-C8
26	A	610	CLA	C3-C5-C6-C7
26	B	616	CLA	C3-C5-C6-C7
26	C	512	CLA	C3-C5-C6-C7
26	b	613	CLA	C3-C5-C6-C7
30	A	614	LMG	C29-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
30	c	523	LMG	C29-C28-O8-C9
31	A	617	LHG	C24-C23-O8-C6
31	e	102	LHG	C24-C23-O8-C6
30	D	408	LMG	C11-C10-O7-C8
32	b	619	SQD	C8-C7-O47-C45
26	B	604	CLA	C4-C3-C5-C6
26	C	504	CLA	C4-C3-C5-C6
26	b	602	CLA	C4-C3-C5-C6
26	b	613	CLA	C4-C3-C5-C6
26	b	602	CLA	C2-C3-C5-C6
26	b	605	CLA	C2A-CAA-CBA-CGA
26	h	101	CLA	C2A-CAA-CBA-CGA
32	F	102	SQD	C24-C23-O48-C46
32	f	101	SQD	C24-C23-O48-C46
29	D	405	PL9	C32-C33-C34-C35
29	a	611	PL9	C22-C23-C24-C25
30	C	518	LMG	O9-C10-O7-C8
29	A	612	PL9	C32-C33-C34-C36
29	A	612	PL9	C37-C38-C39-C41
29	a	611	PL9	C42-C43-C44-C46
26	c	513	CLA	O1D-CGD-O2D-CED
31	D	407	LHG	O2-C2-C3-O3
26	b	603	CLA	C3-C5-C6-C7
26	h	101	CLA	C3-C5-C6-C7
26	B	601	CLA	CBA-CGA-O2A-C1
30	c	522	LMG	C29-C28-O8-C9
32	F	102	SQD	O10-C23-O48-C46
26	b	611	CLA	C8-C10-C11-C12
30	c	522	LMG	C11-C10-O7-C8
26	B	615	CLA	CBD-CGD-O2D-CED
30	c	520	LMG	C4-C5-C6-O5
30	c	520	LMG	O6-C5-C6-O5
32	B	622	SQD	C29-C30-C31-C32
26	B	601	CLA	O1A-CGA-O2A-C1
31	d	409	LHG	C24-C25-C26-C27
29	D	405	PL9	C47-C48-C49-C51
26	B	614	CLA	C4-C3-C5-C6
26	b	604	CLA	C4-C3-C5-C6
29	a	611	PL9	C30-C29-C31-C32
29	a	611	PL9	C35-C34-C36-C37
26	B	614	CLA	C2-C3-C5-C6
26	b	604	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
29	A	612	PL9	C23-C24-C26-C27
29	A	612	PL9	C43-C44-C46-C47
29	a	611	PL9	C33-C34-C36-C37
26	B	606	CLA	C2A-CAA-CBA-CGA
30	A	614	LMG	O6-C1-O1-C7
29	A	612	PL9	C24-C26-C27-C28
29	A	612	PL9	C29-C31-C32-C33
29	a	611	PL9	C19-C21-C22-C23
32	A	618	SQD	C9-C10-C11-C12
26	b	611	CLA	CBD-CGD-O2D-CED
26	c	512	CLA	CBD-CGD-O2D-CED
29	a	611	PL9	C42-C43-C44-C45
26	B	614	CLA	CBD-CGD-O2D-CED
31	e	102	LHG	C1-C2-C3-O3
26	c	506	CLA	CBA-CGA-O2A-C1
32	b	619	SQD	C24-C23-O48-C46
26	A	613	CLA	C13-C15-C16-C17
26	C	503	CLA	C5-C6-C7-C8
26	C	505	CLA	C15-C16-C17-C18
26	b	614	CLA	C15-C16-C17-C18
26	c	511	CLA	C13-C15-C16-C17
31	D	409	LHG	O2-C2-C3-O3
31	d	408	LHG	O2-C2-C3-O3
31	e	102	LHG	O2-C2-C3-O3
31	d	407	LHG	C23-C24-C25-C26
34	B	620	STE	C1-C2-C3-C4
30	c	523	LMG	C2-C1-O1-C7
32	F	102	SQD	C2-C1-O6-C44
32	B	622	SQD	O6-C44-C45-O47
33	c	519	DGD	O1A-C1A-O1G-C1G
26	C	504	CLA	C2-C3-C5-C6
26	A	608	CLA	C14-C13-C15-C16
26	B	606	CLA	C11-C10-C8-C9
26	B	607	CLA	C6-C7-C8-C9
26	C	503	CLA	C11-C10-C8-C9
26	C	509	CLA	C11-C10-C8-C9
26	C	512	CLA	C6-C7-C8-C9
26	C	512	CLA	C14-C13-C15-C16
26	D	403	CLA	C11-C12-C13-C14
26	b	601	CLA	C11-C10-C8-C9
26	b	603	CLA	C6-C7-C8-C9
26	b	604	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
26	b	609	CLA	C14-C13-C15-C16
26	b	615	CLA	C6-C7-C8-C9
26	c	502	CLA	C6-C7-C8-C9
26	c	509	CLA	C6-C7-C8-C9
26	c	512	CLA	C6-C7-C8-C9
26	h	101	CLA	C11-C10-C8-C9
26	b	606	CLA	O1D-CGD-O2D-CED
28	C	514	BCR	C11-C12-C13-C35
30	B	621	LMG	C10-C11-C12-C13
30	M	101	LMG	O10-C28-O8-C9
26	B	615	CLA	C5-C6-C7-C8
26	b	608	CLA	C15-C16-C17-C18
30	b	621	LMG	O6-C5-C6-O5
27	d	402	PHO	O1D-CGD-O2D-CED
26	B	613	CLA	C15-C16-C17-C18
26	a	606	CLA	C15-C16-C17-C18
33	C	515	DGD	O6E-C5E-C6E-O5E
32	f	101	SQD	C23-C24-C25-C26
33	c	519	DGD	C1A-C2A-C3A-C4A
34	C	520	STE	C1-C2-C3-C4
26	c	506	CLA	O1A-CGA-O2A-C1
26	B	601	CLA	C13-C15-C16-C17
26	B	603	CLA	C15-C16-C17-C18
26	B	607	CLA	C8-C10-C11-C12
26	C	506	CLA	C15-C16-C17-C18
26	C	512	CLA	C13-C15-C16-C17
26	b	601	CLA	C10-C11-C12-C13
26	b	614	CLA	C10-C11-C12-C13
26	c	502	CLA	C13-C15-C16-C17
26	c	503	CLA	C5-C6-C7-C8
26	c	508	CLA	C13-C15-C16-C17
26	c	511	CLA	C15-C16-C17-C18
26	c	513	CLA	C10-C11-C12-C13
26	h	101	CLA	C15-C16-C17-C18
29	A	612	PL9	C47-C48-C49-C51
31	e	102	LHG	O1-C1-C2-O2
29	A	612	PL9	C12-C13-C14-C15
29	d	406	PL9	C37-C38-C39-C40
30	D	408	LMG	C28-C29-C30-C31
30	c	522	LMG	C10-C11-C12-C13
32	A	616	SQD	C7-C8-C9-C10
32	A	616	SQD	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
32	A	618	SQD	C23-C24-C25-C26
32	F	102	SQD	C23-C24-C25-C26
34	d	412	STE	C1-C2-C3-C4
26	C	502	CLA	CBD-CGD-O2D-CED
26	C	505	CLA	C10-C11-C12-C13
26	b	610	CLA	C8-C10-C11-C12
34	b	620	STE	C14-C15-C16-C17
26	c	503	CLA	O1D-CGD-O2D-CED
33	a	614	DGD	O1B-C1B-O2G-C2G
26	C	509	CLA	C5-C6-C7-C8
26	b	606	CLA	C5-C6-C7-C8
26	b	607	CLA	C5-C6-C7-C8
26	b	613	CLA	C5-C6-C7-C8
30	M	101	LMG	C28-C29-C30-C31
34	c	521	STE	C1-C2-C3-C4
26	A	613	CLA	C15-C16-C17-C18
26	C	512	CLA	C15-C16-C17-C18
26	h	101	CLA	C10-C11-C12-C13
26	C	506	CLA	C12-C13-C15-C16
26	C	511	CLA	C11-C12-C13-C15
26	C	512	CLA	C11-C10-C8-C7
26	a	607	CLA	C6-C7-C8-C10
26	b	601	CLA	C11-C10-C8-C7
26	b	614	CLA	C11-C12-C13-C15
26	c	505	CLA	C11-C10-C8-C7
26	c	509	CLA	C6-C7-C8-C10
26	c	510	CLA	C11-C12-C13-C15
26	c	512	CLA	C6-C7-C8-C10
26	d	404	CLA	C11-C12-C13-C15
26	C	504	CLA	C8-C10-C11-C12
26	C	509	CLA	C8-C10-C11-C12
26	b	610	CLA	C13-C15-C16-C17
32	b	619	SQD	O10-C23-O48-C46
26	B	613	CLA	C8-C10-C11-C12
26	C	502	CLA	C13-C15-C16-C17
30	D	406	LMG	C10-C11-C12-C13
28	c	516	BCR	C10-C11-C12-C13
28	t	101	BCR	C18-C19-C20-C21
31	A	617	LHG	O2-C2-C3-O3
26	B	611	CLA	C8-C10-C11-C12
26	b	606	CLA	C8-C10-C11-C12
26	b	609	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
26	b	613	CLA	C15-C16-C17-C18
26	c	503	CLA	C10-C11-C12-C13
34	t	105	STE	C11-C12-C13-C14
32	F	102	SQD	C45-C46-O48-C23
34	C	519	STE	C1-C2-C3-C4
26	B	606	CLA	C15-C16-C17-C18
26	C	507	CLA	C5-C6-C7-C8
26	c	503	CLA	C15-C16-C17-C18
26	c	507	CLA	C5-C6-C7-C8
26	c	509	CLA	C13-C15-C16-C17
26	C	501	CLA	O1D-CGD-O2D-CED
32	f	101	SQD	C8-C7-O47-C45
26	B	605	CLA	C13-C15-C16-C17
26	B	616	CLA	C5-C6-C7-C8
26	B	616	CLA	C8-C10-C11-C12
26	C	507	CLA	C13-C15-C16-C17
26	a	609	CLA	C13-C15-C16-C17
26	b	611	CLA	C10-C11-C12-C13
31	D	407	LHG	C4-O6-P-O3
31	L	101	LHG	C4-O6-P-O3
31	l	101	LHG	C4-O6-P-O3
30	M	101	LMG	C29-C28-O8-C9
32	t	102	SQD	C24-C23-O48-C46
26	C	508	CLA	C13-C15-C16-C17
32	b	619	SQD	C7-C8-C9-C10
34	j	101	STE	C1-C2-C3-C4
31	A	617	LHG	C1-C2-C3-O3
32	f	101	SQD	O49-C7-O47-C45
26	B	604	CLA	C2-C3-C5-C6
32	A	618	SQD	C11-C12-C13-C14
26	b	612	CLA	C16-C17-C18-C20
30	d	411	LMG	C11-C12-C13-C14
31	e	102	LHG	C11-C10-C9-C8
32	t	102	SQD	C16-C17-C18-C19
33	A	619	DGD	C7A-C8A-C9A-CAA
33	c	517	DGD	C4B-C5B-C6B-C7B
34	b	620	STE	C3-C4-C5-C6
26	B	606	CLA	CBD-CGD-O2D-CED
27	D	401	PHO	CBD-CGD-O2D-CED
33	a	614	DGD	C2B-C1B-O2G-C2G
26	B	604	CLA	C10-C11-C12-C13
26	C	508	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
26	b	612	CLA	C10-C11-C12-C13
28	B	617	BCR	C35-C13-C14-C15
28	C	514	BCR	C35-C13-C14-C15
28	D	404	BCR	C20-C21-C22-C37
28	T	101	BCR	C20-C21-C22-C37
28	a	610	BCR	C16-C17-C18-C36
28	b	616	BCR	C20-C21-C22-C37
28	b	617	BCR	C20-C21-C22-C37
28	b	618	BCR	C20-C21-C22-C37
28	c	515	BCR	C16-C17-C18-C36
28	c	515	BCR	C20-C21-C22-C37
30	D	406	LMG	C16-C17-C18-C19
30	M	101	LMG	C33-C34-C35-C36
30	c	523	LMG	C33-C34-C35-C36
30	d	410	LMG	C35-C36-C37-C38
30	m	101	LMG	C32-C33-C34-C35
31	D	407	LHG	C18-C19-C20-C21
31	L	101	LHG	C31-C32-C33-C34
31	d	409	LHG	C30-C31-C32-C33
31	e	102	LHG	C27-C28-C29-C30
32	a	613	SQD	C10-C11-C12-C13
32	t	102	SQD	C11-C12-C13-C14
33	c	517	DGD	CAB-CBB-CCB-CDB
33	c	518	DGD	CBB-CCB-CDB-CEB
33	c	519	DGD	C9B-CAB-CBB-CCB
33	h	103	DGD	C7B-C8B-C9B-CAB
33	h	103	DGD	C9B-CAB-CBB-CCB
34	H	102	STE	C11-C12-C13-C14
34	T	103	STE	C13-C14-C15-C16
34	b	622	STE	C2-C3-C4-C5
34	c	521	STE	C9-C10-C11-C12
34	d	414	STE	C12-C13-C14-C15
26	A	608	CLA	C16-C17-C18-C20
26	B	601	CLA	C16-C17-C18-C19
26	B	615	CLA	C16-C17-C18-C20
26	b	613	CLA	C16-C17-C18-C20
30	b	621	LMG	C40-C41-C42-C43
30	m	101	LMG	C34-C35-C36-C37
31	A	617	LHG	C26-C27-C28-C29
31	D	407	LHG	C12-C13-C14-C15
31	D	409	LHG	C27-C28-C29-C30
32	A	618	SQD	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
33	A	619	DGD	C4B-C5B-C6B-C7B
33	C	517	DGD	C5A-C6A-C7A-C8A
33	H	101	DGD	C7B-C8B-C9B-CAB
33	a	614	DGD	C2B-C3B-C4B-C5B
33	c	519	DGD	C2B-C3B-C4B-C5B
34	C	521	STE	C5-C6-C7-C8
34	k	102	STE	C2-C3-C4-C5
30	C	518	LMG	C17-C18-C19-C20
30	C	518	LMG	C31-C32-C33-C34
31	d	409	LHG	C27-C28-C29-C30
31	e	102	LHG	C16-C17-C18-C19
34	T	102	STE	C5-C6-C7-C8
34	a	615	STE	C2-C3-C4-C5
30	C	518	LMG	C11-C12-C13-C14
30	C	518	LMG	C30-C31-C32-C33
30	c	520	LMG	C31-C32-C33-C34
30	c	522	LMG	C30-C31-C32-C33
31	A	615	LHG	C11-C12-C13-C14
31	A	617	LHG	C28-C29-C30-C31
31	D	407	LHG	C28-C29-C30-C31
32	B	622	SQD	C13-C14-C15-C16
32	a	613	SQD	C12-C13-C14-C15
33	C	515	DGD	CCB-CDB-CEB-CFB
33	c	519	DGD	C3B-C4B-C5B-C6B
34	C	521	STE	C6-C7-C8-C9
26	b	614	CLA	C5-C6-C7-C8
26	c	506	CLA	C13-C15-C16-C17
31	A	617	LHG	C16-C17-C18-C19
31	A	617	LHG	C18-C19-C20-C21
32	t	102	SQD	C13-C14-C15-C16
32	t	102	SQD	C18-C19-C20-C21
33	c	519	DGD	C5A-C6A-C7A-C8A
34	B	623	STE	C5-C6-C7-C8
34	I	101	STE	C11-C10-C9-C8
34	T	102	STE	C7-C8-C9-C10
34	b	622	STE	C3-C4-C5-C6
34	d	414	STE	C6-C7-C8-C9
31	A	615	LHG	C7-C8-C9-C10
28	B	617	BCR	C20-C21-C22-C23
28	C	514	BCR	C11-C10-C9-C8
28	C	514	BCR	C12-C13-C14-C15
30	C	518	LMG	C2-C1-O1-C7

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Mol	Chain	Res	Type	Atoms
33	c	518	DGD	C2E-C1E-O5D-C6D
30	D	406	LMG	C20-C21-C22-C23
30	d	410	LMG	C31-C32-C33-C34
31	d	407	LHG	C30-C31-C32-C33
31	d	408	LHG	C18-C19-C20-C21
31	d	408	LHG	C30-C31-C32-C33
31	d	409	LHG	C26-C27-C28-C29
32	a	613	SQD	C11-C10-C9-C8
32	f	101	SQD	C27-C28-C29-C30
32	t	102	SQD	C10-C11-C12-C13
33	C	517	DGD	C7B-C8B-C9B-CAB
33	h	103	DGD	C5B-C6B-C7B-C8B
34	j	101	STE	C2-C3-C4-C5
26	B	603	CLA	C16-C17-C18-C19
26	B	605	CLA	C16-C17-C18-C20
26	B	611	CLA	C16-C17-C18-C20
26	b	610	CLA	C16-C17-C18-C20
26	c	503	CLA	C16-C17-C18-C20
26	C	506	CLA	C4-C3-C5-C6
27	A	609	PHO	C4-C3-C5-C6
30	D	406	LMG	C15-C16-C17-C18
30	c	523	LMG	C14-C15-C16-C17
31	A	617	LHG	C29-C30-C31-C32
31	L	101	LHG	C26-C27-C28-C29
31	L	101	LHG	C30-C31-C32-C33
32	f	101	SQD	C24-C25-C26-C27
32	t	102	SQD	C14-C15-C16-C17
33	a	614	DGD	C3B-C4B-C5B-C6B
34	T	102	STE	C12-C13-C14-C15
34	d	412	STE	C5-C6-C7-C8
29	a	611	PL9	C23-C24-C26-C27
26	C	502	CLA	C11-C12-C13-C14
26	C	511	CLA	C11-C12-C13-C14
26	b	604	CLA	C11-C12-C13-C14
26	c	511	CLA	C6-C7-C8-C9
26	d	404	CLA	C6-C7-C8-C9
30	M	101	LMG	C13-C14-C15-C16
30	b	621	LMG	C16-C17-C18-C19
30	m	101	LMG	C38-C39-C40-C41
32	A	616	SQD	C16-C17-C18-C19
32	a	613	SQD	C18-C19-C20-C21
32	b	619	SQD	C26-C27-C28-C29

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Mol	Chain	Res	Type	Atoms
33	a	614	DGD	CDB-CEB-CFB-CGB
33	c	519	DGD	C6A-C7A-C8A-C9A
34	B	620	STE	C9-C10-C11-C12
34	C	519	STE	C5-C6-C7-C8
34	C	520	STE	C6-C7-C8-C9
34	F	103	STE	C3-C4-C5-C6
34	c	521	STE	C11-C12-C13-C14
28	T	101	BCR	C7-C8-C9-C34
28	d	405	BCR	C37-C22-C23-C24
30	D	406	LMG	C18-C19-C20-C21
30	d	411	LMG	C38-C39-C40-C41
31	A	615	LHG	C30-C31-C32-C33
31	D	407	LHG	C15-C16-C17-C18
31	D	409	LHG	C18-C19-C20-C21
33	A	619	DGD	C2B-C3B-C4B-C5B
33	A	619	DGD	CCB-CDB-CEB-CFB
31	d	407	LHG	O1-C1-C2-C3
31	d	408	LHG	O1-C1-C2-C3
31	d	409	LHG	O1-C1-C2-C3
26	B	613	CLA	C5-C6-C7-C8
26	D	403	CLA	C10-C11-C12-C13
26	b	615	CLA	C5-C6-C7-C8
30	A	614	LMG	C35-C36-C37-C38
30	D	406	LMG	C21-C22-C23-C24
30	D	406	LMG	C37-C38-C39-C40
30	D	408	LMG	C11-C12-C13-C14
30	c	523	LMG	C18-C19-C20-C21
32	F	102	SQD	C34-C35-C36-C37
32	a	613	SQD	C29-C30-C31-C32
32	a	613	SQD	C32-C33-C34-C35
33	A	619	DGD	CCA-CDA-CEA-CFA
34	T	102	STE	C14-C15-C16-C17
34	T	103	STE	C9-C10-C11-C12
34	d	413	STE	C10-C11-C12-C13
32	A	618	SQD	C7-C8-C9-C10
30	D	406	LMG	C36-C37-C38-C39
30	M	101	LMG	C15-C16-C17-C18
30	b	621	LMG	C17-C18-C19-C20
30	c	523	LMG	C32-C33-C34-C35
30	d	411	LMG	C39-C40-C41-C42
30	m	101	LMG	C16-C17-C18-C19
31	A	615	LHG	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
31	A	615	LHG	C25-C26-C27-C28
31	A	615	LHG	C34-C35-C36-C37
31	D	409	LHG	C14-C15-C16-C17
31	D	409	LHG	C29-C30-C31-C32
31	d	407	LHG	C16-C17-C18-C19
32	B	622	SQD	C11-C12-C13-C14
32	F	102	SQD	C25-C26-C27-C28
33	A	619	DGD	C2A-C3A-C4A-C5A
33	a	614	DGD	C5A-C6A-C7A-C8A
33	h	103	DGD	C2B-C3B-C4B-C5B
34	C	521	STE	C10-C11-C12-C13
34	a	615	STE	C4-C5-C6-C7
26	A	607	CLA	C16-C17-C18-C19
26	A	608	CLA	C16-C17-C18-C19
26	B	606	CLA	C16-C17-C18-C19
26	B	611	CLA	C16-C17-C18-C19
26	C	505	CLA	C16-C17-C18-C20
26	a	609	CLA	C16-C17-C18-C19
26	a	609	CLA	C16-C17-C18-C20
30	C	518	LMG	O6-C1-O1-C7
30	c	520	LMG	O6-C1-O1-C7
33	c	518	DGD	O6E-C1E-O5D-C6D
26	c	509	CLA	C8-C10-C11-C12
26	d	404	CLA	C5-C6-C7-C8
29	A	612	PL9	C44-C46-C47-C48
30	d	410	LMG	C32-C33-C34-C35
31	d	408	LHG	C12-C13-C14-C15
32	B	622	SQD	C25-C26-C27-C28
32	a	613	SQD	C16-C17-C18-C19
33	c	519	DGD	C4A-C5A-C6A-C7A
33	h	103	DGD	C7A-C8A-C9A-CAA
34	b	620	STE	C12-C13-C14-C15
34	d	413	STE	C3-C4-C5-C6
31	l	101	LHG	C32-C33-C34-C35
31	l	101	LHG	C34-C35-C36-C37
32	F	102	SQD	C31-C32-C33-C34
32	b	619	SQD	C11-C12-C13-C14
33	a	614	DGD	C8A-C9A-CAA-CBA
33	c	517	DGD	CBB-CCB-CDB-CEB
34	C	520	STE	C5-C6-C7-C8
34	j	101	STE	C5-C6-C7-C8
30	d	411	LMG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
32	a	613	SQD	C23-C24-C25-C26
26	a	609	CLA	C5-C6-C7-C8
26	a	609	CLA	C15-C16-C17-C18
26	c	512	CLA	C13-C15-C16-C17
33	C	517	DGD	O1A-C1A-O1G-C1G
30	A	614	LMG	C12-C13-C14-C15
30	M	101	LMG	C34-C35-C36-C37
31	A	615	LHG	C9-C10-C11-C12
31	d	407	LHG	C32-C33-C34-C35
32	A	616	SQD	C29-C30-C31-C32
33	A	619	DGD	C5B-C6B-C7B-C8B
33	C	516	DGD	C7A-C8A-C9A-CAA
33	h	103	DGD	CCA-CDA-CEA-CFA
26	B	601	CLA	C3-C5-C6-C7
30	c	520	LMG	C29-C28-O8-C9
31	L	101	LHG	C18-C19-C20-C21
31	L	101	LHG	C29-C30-C31-C32
31	d	407	LHG	C27-C28-C29-C30
33	c	518	DGD	C8B-C9B-CAB-CBB
33	h	103	DGD	CBA-CCA-CDA-CEA
26	h	101	CLA	C3A-C2A-CAA-CBA
26	C	506	CLA	C8-C10-C11-C12
26	b	615	CLA	C10-C11-C12-C13
30	c	522	LMG	C31-C32-C33-C34
30	m	101	LMG	C13-C14-C15-C16
30	m	101	LMG	C18-C19-C20-C21
31	A	615	LHG	C27-C28-C29-C30
31	D	407	LHG	C16-C17-C18-C19
31	L	101	LHG	C17-C18-C19-C20
31	L	101	LHG	C32-C33-C34-C35
33	h	103	DGD	CAB-CBB-CCB-CDB
34	c	521	STE	C12-C13-C14-C15
26	B	601	CLA	C16-C17-C18-C20
26	B	603	CLA	C16-C17-C18-C20
26	b	612	CLA	C16-C17-C18-C19
26	b	613	CLA	C16-C17-C18-C19
30	c	522	LMG	C33-C34-C35-C36
33	C	516	DGD	C4A-C5A-C6A-C7A
33	C	516	DGD	C6A-C7A-C8A-C9A
34	C	521	STE	C7-C8-C9-C10
34	I	101	STE	C11-C12-C13-C14
34	d	413	STE	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
34	t	103	STE	C6-C7-C8-C9
26	B	616	CLA	CBD-CGD-O2D-CED
31	d	408	LHG	C15-C16-C17-C18
32	B	622	SQD	C15-C16-C17-C18
34	t	105	STE	C7-C8-C9-C10
28	b	618	BCR	C14-C15-C16-C17
34	B	623	STE	C1-C2-C3-C4
30	D	406	LMG	C17-C18-C19-C20
30	D	406	LMG	C31-C32-C33-C34
30	c	523	LMG	C17-C18-C19-C20
34	B	625	STE	C11-C12-C13-C14
33	a	614	DGD	O1A-C1A-O1G-C1G
26	b	608	CLA	C13-C15-C16-C17
26	C	510	CLA	C4-C3-C5-C6
29	D	405	PL9	C30-C29-C31-C32
33	c	519	DGD	C2A-C1A-O1G-C1G
26	C	510	CLA	C2-C3-C5-C6
29	D	405	PL9	C28-C29-C31-C32
29	a	611	PL9	C13-C14-C16-C17
29	d	406	PL9	C33-C34-C36-C37
31	d	407	LHG	C10-C11-C12-C13
33	c	517	DGD	C6B-C7B-C8B-C9B
34	L	102	STE	C6-C7-C8-C9
34	T	103	STE	C6-C7-C8-C9
31	A	615	LHG	C32-C33-C34-C35
32	B	622	SQD	C18-C19-C20-C21
32	b	619	SQD	C9-C10-C11-C12
33	C	517	DGD	C3A-C4A-C5A-C6A
33	H	101	DGD	C3B-C4B-C5B-C6B
33	c	517	DGD	C7A-C8A-C9A-CAA
26	B	605	CLA	C16-C17-C18-C19
26	B	609	CLA	C16-C17-C18-C20
26	b	610	CLA	C16-C17-C18-C19
26	c	504	CLA	C11-C12-C13-C14
30	D	408	LMG	C31-C32-C33-C34
30	c	523	LMG	C36-C37-C38-C39
26	C	509	CLA	C13-C15-C16-C17
26	b	613	CLA	C13-C15-C16-C17
30	c	522	LMG	C12-C13-C14-C15
33	C	516	DGD	CCA-CDA-CEA-CFA
34	T	103	STE	C12-C13-C14-C15
26	C	509	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
30	m	101	LMG	C29-C28-O8-C9
31	A	617	LHG	C25-C26-C27-C28
31	L	101	LHG	C14-C15-C16-C17
32	t	102	SQD	O10-C23-O48-C46
30	D	406	LMG	C30-C31-C32-C33
30	c	522	LMG	C36-C37-C38-C39
30	d	410	LMG	C30-C31-C32-C33
31	A	617	LHG	C33-C34-C35-C36
31	d	407	LHG	C26-C27-C28-C29
33	C	515	DGD	C4B-C5B-C6B-C7B
33	H	101	DGD	C5A-C6A-C7A-C8A
33	c	519	DGD	C2A-C3A-C4A-C5A
34	X	102	STE	C5-C6-C7-C8
30	M	101	LMG	C39-C40-C41-C42
30	b	621	LMG	C15-C16-C17-C18
30	c	520	LMG	C34-C35-C36-C37
30	d	411	LMG	C32-C33-C34-C35
32	t	102	SQD	C15-C16-C17-C18
34	L	102	STE	C5-C6-C7-C8
30	B	621	LMG	C31-C32-C33-C34
30	b	621	LMG	C32-C33-C34-C35
33	C	515	DGD	C5A-C6A-C7A-C8A
33	C	516	DGD	CCB-CDB-CEB-CFB
33	C	517	DGD	C4B-C5B-C6B-C7B
33	H	101	DGD	C9B-CAB-CBB-CCB
33	c	517	DGD	CBA-CCA-CDA-CEA
34	C	521	STE	C11-C10-C9-C8
31	A	617	LHG	C23-C24-C25-C26
26	B	604	CLA	C3-C5-C6-C7
28	B	617	BCR	C1-C6-C7-C8
28	D	404	BCR	C23-C24-C25-C30
28	K	101	BCR	C1-C6-C7-C8
28	K	102	BCR	C1-C6-C7-C8
28	K	102	BCR	C5-C6-C7-C8
28	T	101	BCR	C1-C6-C7-C8
28	k	101	BCR	C1-C6-C7-C8
28	k	101	BCR	C5-C6-C7-C8
30	D	408	LMG	C30-C31-C32-C33
31	e	102	LHG	C17-C18-C19-C20
32	t	102	SQD	C17-C18-C19-C20
34	H	102	STE	C2-C3-C4-C5
34	X	102	STE	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
26	C	513	CLA	C15-C16-C17-C18
26	D	403	CLA	C15-C16-C17-C18
26	d	404	CLA	C10-C11-C12-C13
26	A	610	CLA	C5-C6-C7-C8
31	L	101	LHG	C15-C16-C17-C18
32	A	616	SQD	C30-C31-C32-C33
33	c	517	DGD	C2A-C3A-C4A-C5A
30	c	523	LMG	C10-C11-C12-C13
30	D	406	LMG	C19-C20-C21-C22
34	C	521	STE	C11-C12-C13-C14
30	d	410	LMG	C33-C34-C35-C36
29	A	612	PL9	C20-C19-C21-C22
26	A	608	CLA	C12-C13-C15-C16
26	C	502	CLA	C11-C12-C13-C15
26	C	506	CLA	C2-C3-C5-C6
26	C	506	CLA	C11-C12-C13-C15
26	a	609	CLA	C11-C10-C8-C7
26	a	609	CLA	C12-C13-C15-C16
26	b	604	CLA	C11-C12-C13-C15
26	b	611	CLA	C6-C7-C8-C10
26	b	611	CLA	C11-C10-C8-C7
26	b	613	CLA	C2-C3-C5-C6
26	c	511	CLA	C6-C7-C8-C10
26	c	511	CLA	C12-C13-C15-C16
26	d	403	CLA	C6-C7-C8-C10
26	h	101	CLA	C11-C12-C13-C15
29	d	406	PL9	C13-C14-C16-C17
29	d	406	PL9	C28-C29-C31-C32
32	A	618	SQD	C12-C13-C14-C15
33	H	101	DGD	C6B-C7B-C8B-C9B
34	d	413	STE	C9-C10-C11-C12
26	C	513	CLA	C10-C11-C12-C13
26	c	502	CLA	C15-C16-C17-C18
31	d	408	LHG	O9-C7-O7-C5
30	m	101	LMG	C28-C29-C30-C31
26	b	606	CLA	CBA-CGA-O2A-C1
30	b	621	LMG	C22-C23-C24-C25
26	b	609	CLA	C2A-CAA-CBA-CGA
30	A	614	LMG	C36-C37-C38-C39
30	c	522	LMG	C41-C42-C43-C44
31	L	101	LHG	C10-C11-C12-C13
33	c	518	DGD	CBA-CCA-CDA-CEA

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Mol	Chain	Res	Type	Atoms
33	c	518	DGD	O6E-C5E-C6E-O5E
34	T	103	STE	C11-C12-C13-C14
26	B	606	CLA	O1D-CGD-O2D-CED
32	a	613	SQD	C31-C32-C33-C34
33	H	101	DGD	C1A-C2A-C3A-C4A
26	B	614	CLA	O1D-CGD-O2D-CED
26	c	512	CLA	O1D-CGD-O2D-CED
34	H	102	STE	C9-C10-C11-C12
34	X	102	STE	C2-C3-C4-C5
34	j	101	STE	C4-C5-C6-C7
34	B	623	STE	C3-C4-C5-C6
33	a	614	DGD	C2A-C1A-O1G-C1G
33	c	518	DGD	O6D-C1D-O3G-C3G
26	B	601	CLA	C5-C6-C7-C8
26	b	609	CLA	C2C-C3C-CAC-CBC
30	c	520	LMG	C35-C36-C37-C38
33	H	101	DGD	C7A-C8A-C9A-CAA
34	C	519	STE	C6-C7-C8-C9
34	F	103	STE	C5-C6-C7-C8
34	d	414	STE	C14-C15-C16-C17
30	m	101	LMG	C10-C11-C12-C13
30	b	621	LMG	C11-C10-O7-C8
31	d	408	LHG	C8-C7-O7-C5
32	A	616	SQD	C8-C7-O47-C45
32	a	613	SQD	C8-C7-O47-C45
28	B	617	BCR	C10-C11-C12-C13
30	D	408	LMG	C16-C17-C18-C19
30	b	621	LMG	C38-C39-C40-C41
31	D	407	LHG	C11-C12-C13-C14
34	d	412	STE	C3-C4-C5-C6
26	b	612	CLA	C13-C15-C16-C17
26	B	607	CLA	CBD-CGD-O2D-CED
26	c	509	CLA	CBD-CGD-O2D-CED
32	t	102	SQD	C19-C20-C21-C22
31	D	409	LHG	C23-C24-C25-C26
31	d	408	LHG	C29-C30-C31-C32
32	A	618	SQD	C24-C25-C26-C27
33	H	101	DGD	CCB-CDB-CEB-CFB
33	c	517	DGD	C3B-C4B-C5B-C6B
26	b	611	CLA	O1D-CGD-O2D-CED
33	C	516	DGD	C2E-C1E-O5D-C6D
32	A	616	SQD	O6-C44-C45-O47

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Mol	Chain	Res	Type	Atoms
33	A	619	DGD	O6E-C5E-C6E-O5E
30	M	101	LMG	C37-C38-C39-C40
32	b	619	SQD	C18-C19-C20-C21
34	X	102	STE	C11-C10-C9-C8
26	C	505	CLA	C16-C17-C18-C19
30	b	621	LMG	C29-C30-C31-C32
30	m	101	LMG	C17-C18-C19-C20
26	b	606	CLA	C10-C11-C12-C13
26	b	610	CLA	C15-C16-C17-C18
26	c	503	CLA	C8-C10-C11-C12
26	c	507	CLA	C10-C11-C12-C13
31	d	408	LHG	C7-C8-C9-C10
27	A	609	PHO	C2-C3-C5-C6
31	A	615	LHG	C10-C11-C12-C13
31	l	101	LHG	C15-C16-C17-C18
32	t	102	SQD	C30-C31-C32-C33
26	B	606	CLA	C11-C12-C13-C14
26	C	506	CLA	C11-C12-C13-C14
26	C	506	CLA	C14-C13-C15-C16
26	C	507	CLA	C11-C10-C8-C9
26	C	511	CLA	C6-C7-C8-C9
26	C	513	CLA	C11-C10-C8-C9
26	a	607	CLA	C6-C7-C8-C9
26	a	609	CLA	C14-C13-C15-C16
26	b	601	CLA	C6-C7-C8-C9
26	b	601	CLA	C14-C13-C15-C16
26	b	611	CLA	C6-C7-C8-C9
26	c	505	CLA	C11-C10-C8-C9
26	c	508	CLA	C14-C13-C15-C16
26	c	511	CLA	C14-C13-C15-C16
26	d	403	CLA	C6-C7-C8-C9
26	d	404	CLA	C11-C12-C13-C14
26	h	101	CLA	C11-C12-C13-C14
30	m	101	LMG	C29-C30-C31-C32
31	L	101	LHG	C28-C29-C30-C31
32	A	618	SQD	C18-C19-C20-C21
26	C	501	CLA	C2A-CAA-CBA-CGA
30	D	406	LMG	C35-C36-C37-C38
31	l	101	LHG	C13-C14-C15-C16
32	A	616	SQD	C10-C11-C12-C13
30	d	411	LMG	O6-C5-C6-O5
33	c	519	DGD	C1B-C2B-C3B-C4B

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Mol	Chain	Res	Type	Atoms
26	B	615	CLA	O1D-CGD-O2D-CED
30	c	522	LMG	C29-C30-C31-C32
30	c	522	LMG	C35-C36-C37-C38
33	c	518	DGD	C5A-C6A-C7A-C8A
34	I	101	STE	C6-C7-C8-C9
34	J	101	STE	C2-C3-C4-C5
26	a	609	CLA	C1A-C2A-CAA-CBA
26	c	508	CLA	C1A-C2A-CAA-CBA
26	c	513	CLA	C1A-C2A-CAA-CBA
30	d	410	LMG	C37-C38-C39-C40
31	e	102	LHG	C14-C15-C16-C17
32	B	622	SQD	C17-C18-C19-C20
32	a	613	SQD	C26-C27-C28-C29
34	H	102	STE	C7-C8-C9-C10
26	c	513	CLA	C8-C10-C11-C12
30	M	101	LMG	C18-C19-C20-C21
30	c	523	LMG	C12-C13-C14-C15
33	c	517	DGD	C5B-C6B-C7B-C8B
34	t	105	STE	C11-C10-C9-C8
30	m	101	LMG	O6-C5-C6-O5
30	m	101	LMG	C15-C16-C17-C18
33	C	517	DGD	C6A-C7A-C8A-C9A
31	L	101	LHG	O6-C4-C5-C6
33	A	619	DGD	C7B-C8B-C9B-CAB
34	X	102	STE	C14-C15-C16-C17
30	M	101	LMG	C35-C36-C37-C38
31	L	101	LHG	C9-C10-C11-C12
30	m	101	LMG	C31-C32-C33-C34
32	A	616	SQD	C11-C10-C9-C8
32	B	622	SQD	C31-C32-C33-C34
33	c	518	DGD	CCB-CDB-CEB-CFB
31	A	615	LHG	C11-C10-C9-C8
33	C	517	DGD	C3B-C4B-C5B-C6B
32	f	101	SQD	C26-C27-C28-C29
34	l	102	STE	C14-C15-C16-C17
34	L	102	STE	C3-C4-C5-C6
26	b	606	CLA	O1A-CGA-O2A-C1
32	f	101	SQD	C29-C30-C31-C32
33	C	516	DGD	C3A-C4A-C5A-C6A
30	D	406	LMG	O6-C5-C6-O5
30	b	621	LMG	O1-C7-C8-C9
31	e	102	LHG	C4-C5-C6-O8

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Mol	Chain	Res	Type	Atoms
32	B	622	SQD	O6-C44-C45-C46
32	a	613	SQD	O6-C44-C45-C46
33	A	619	DGD	O1G-C1G-C2G-C3G
33	C	515	DGD	C5B-C6B-C7B-C8B
26	D	402	CLA	C13-C15-C16-C17
30	A	614	LMG	C29-C30-C31-C32
31	A	615	LHG	C29-C30-C31-C32
33	C	516	DGD	CDA-CEA-CFA-CGA
33	H	101	DGD	C6A-C7A-C8A-C9A
31	D	409	LHG	C7-C8-C9-C10
33	C	516	DGD	C5D-C6D-O5D-C1E
33	c	518	DGD	C5D-C6D-O5D-C1E
30	D	408	LMG	C34-C35-C36-C37
33	C	515	DGD	CAB-CBB-CCB-CDB
33	c	517	DGD	O6E-C5E-C6E-O5E
31	l	101	LHG	C19-C20-C21-C22
32	b	619	SQD	C11-C10-C9-C8
33	c	518	DGD	CAB-CBB-CCB-CDB
34	L	102	STE	C7-C8-C9-C10
30	B	621	LMG	C13-C14-C15-C16
31	A	615	LHG	C17-C18-C19-C20
33	A	619	DGD	CFA-CGA-CHA-CIA
34	t	105	STE	C13-C14-C15-C16
33	c	518	DGD	C4E-C5E-C6E-O5E
33	C	516	DGD	O6E-C1E-O5D-C6D
29	a	611	PL9	C34-C36-C37-C38
32	a	613	SQD	C14-C15-C16-C17
34	b	623	STE	C5-C6-C7-C8
31	d	407	LHG	O1-C1-C2-O2
33	C	516	DGD	C3B-C4B-C5B-C6B
33	c	519	DGD	C7B-C8B-C9B-CAB
34	t	105	STE	C5-C6-C7-C8
30	c	520	LMG	C32-C33-C34-C35
30	d	410	LMG	C29-C30-C31-C32
31	d	407	LHG	C12-C13-C14-C15
33	H	101	DGD	C9A-CAA-CBA-CCA
28	A	611	BCR	C16-C17-C18-C36
28	b	618	BCR	C16-C17-C18-C36
33	c	517	DGD	O6D-C5D-C6D-O5D
26	b	608	CLA	C4-C3-C5-C6
29	A	612	PL9	C12-C11-C9-C10
31	d	409	LHG	C32-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
33	C	517	DGD	C9A-CAA-CBA-CCA
26	c	503	CLA	C16-C17-C18-C19
32	B	622	SQD	C24-C23-O48-C46
31	D	407	LHG	C10-C11-C12-C13
34	J	101	STE	C7-C8-C9-C10
26	C	506	CLA	C13-C15-C16-C17
26	C	513	CLA	C8-C10-C11-C12
26	b	601	CLA	C5-C6-C7-C8
26	b	607	CLA	C13-C15-C16-C17
32	B	622	SQD	C26-C27-C28-C29
34	l	102	STE	C15-C16-C17-C18
30	D	408	LMG	C9-C8-O7-C10
32	b	619	SQD	C46-C45-O47-C7
33	a	614	DGD	C1G-C2G-O2G-C1B
26	B	616	CLA	O1D-CGD-O2D-CED
26	C	508	CLA	C5-C6-C7-C8
26	b	602	CLA	C13-C15-C16-C17
26	c	506	CLA	C2-C1-O2A-CGA
34	C	519	STE	C2-C3-C4-C5
30	A	614	LMG	C38-C39-C40-C41
31	D	407	LHG	C11-C10-C9-C8
32	F	102	SQD	C27-C28-C29-C30
34	X	102	STE	C10-C11-C12-C13
26	C	502	CLA	O1D-CGD-O2D-CED
27	D	401	PHO	O1D-CGD-O2D-CED
30	d	411	LMG	C35-C36-C37-C38
34	M	103	STE	C4-C5-C6-C7
26	B	606	CLA	C16-C17-C18-C20
31	d	407	LHG	C9-C10-C11-C12
33	c	518	DGD	C5B-C6B-C7B-C8B
34	F	103	STE	C2-C3-C4-C5
34	T	103	STE	C15-C16-C17-C18
34	t	105	STE	C12-C13-C14-C15
33	c	518	DGD	C3A-C4A-C5A-C6A
33	h	103	DGD	C3B-C4B-C5B-C6B
26	a	609	CLA	C10-C11-C12-C13
28	a	610	BCR	C16-C17-C18-C19
28	b	616	BCR	C20-C21-C22-C23
28	k	101	BCR	C20-C21-C22-C23
30	c	520	LMG	C2-C1-O1-C7
33	H	101	DGD	CBB-CCB-CDB-CEB
34	T	103	STE	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
33	H	101	DGD	O2G-C1B-C2B-C3B
30	b	621	LMG	O7-C8-C9-O8
32	A	616	SQD	O49-C7-O47-C45
32	a	613	SQD	O49-C7-O47-C45
30	D	408	LMG	C33-C34-C35-C36
30	c	522	LMG	C14-C15-C16-C17
30	c	522	LMG	C39-C40-C41-C42
32	A	618	SQD	C19-C20-C21-C22
33	H	101	DGD	C8B-C9B-CAB-CBB
32	A	616	SQD	C17-C18-C19-C20
33	c	519	DGD	C6B-C7B-C8B-C9B
34	F	103	STE	C7-C8-C9-C10
26	B	602	CLA	C11-C12-C13-C15
26	B	604	CLA	C11-C10-C8-C7
26	B	606	CLA	C11-C12-C13-C15
26	B	615	CLA	C12-C13-C15-C16
26	B	616	CLA	C6-C7-C8-C10
26	C	503	CLA	C11-C10-C8-C7
26	C	507	CLA	C11-C10-C8-C7
26	C	508	CLA	C11-C10-C8-C7
26	C	509	CLA	C12-C13-C15-C16
26	C	510	CLA	C6-C7-C8-C10
26	C	511	CLA	C6-C7-C8-C10
26	C	512	CLA	C11-C12-C13-C15
26	C	513	CLA	C11-C10-C8-C7
26	a	607	CLA	C11-C10-C8-C7
26	b	601	CLA	C6-C7-C8-C10
26	b	601	CLA	C12-C13-C15-C16
26	b	603	CLA	C6-C7-C8-C10
26	b	605	CLA	C11-C10-C8-C7
26	b	605	CLA	C12-C13-C15-C16
26	b	606	CLA	C6-C7-C8-C10
26	b	608	CLA	C12-C13-C15-C16
26	b	609	CLA	C12-C13-C15-C16
26	b	614	CLA	C11-C10-C8-C7
26	c	506	CLA	C11-C12-C13-C15
26	c	508	CLA	C12-C13-C15-C16
26	c	512	CLA	C11-C10-C8-C7
26	c	513	CLA	C11-C12-C13-C15
26	c	513	CLA	C12-C13-C15-C16
26	d	404	CLA	C6-C7-C8-C10
26	h	101	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
32	f	101	SQD	C32-C33-C34-C35
34	C	521	STE	C4-C5-C6-C7
26	B	604	CLA	C11-C10-C8-C9
26	B	604	CLA	C14-C13-C15-C16
26	B	605	CLA	C11-C10-C8-C9
26	B	615	CLA	C14-C13-C15-C16
26	B	616	CLA	C11-C10-C8-C9
26	C	508	CLA	C11-C10-C8-C9
26	C	510	CLA	C6-C7-C8-C9
26	C	512	CLA	C11-C12-C13-C14
26	a	607	CLA	C11-C10-C8-C9
26	a	609	CLA	C11-C10-C8-C9
26	b	602	CLA	C11-C10-C8-C9
26	b	603	CLA	C14-C13-C15-C16
26	b	606	CLA	C6-C7-C8-C9
26	b	606	CLA	C11-C10-C8-C9
26	b	613	CLA	C6-C7-C8-C9
26	b	614	CLA	C11-C10-C8-C9
26	b	614	CLA	C11-C12-C13-C14
26	c	504	CLA	C11-C10-C8-C9
26	c	505	CLA	C6-C7-C8-C9
26	c	506	CLA	C11-C12-C13-C14
26	c	508	CLA	C11-C12-C13-C14
26	c	510	CLA	C11-C12-C13-C14
26	c	513	CLA	C14-C13-C15-C16
33	c	518	DGD	CAA-CBA-CCA-CDA
34	l	102	STE	C4-C5-C6-C7
26	B	601	CLA	C15-C16-C17-C18
26	B	608	CLA	C15-C16-C17-C18
26	B	607	CLA	O1D-CGD-O2D-CED
26	B	602	CLA	C16-C17-C18-C20
31	A	617	LHG	C10-C11-C12-C13
28	D	404	BCR	C7-C8-C9-C10
33	c	519	DGD	CCA-CDA-CEA-CFA
34	F	103	STE	C4-C5-C6-C7
34	j	101	STE	C3-C4-C5-C6
26	h	101	CLA	C8-C10-C11-C12
34	b	623	STE	C7-C8-C9-C10
32	a	613	SQD	C34-C35-C36-C37
26	B	603	CLA	C8-C10-C11-C12
26	C	509	CLA	C10-C11-C12-C13
26	a	607	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
26	c	512	CLA	C15-C16-C17-C18
31	D	409	LHG	C28-C29-C30-C31
30	d	410	LMG	C34-C35-C36-C37
34	l	102	STE	C7-C8-C9-C10
26	B	607	CLA	C16-C17-C18-C20
31	l	101	LHG	O6-C4-C5-C6
32	f	101	SQD	C30-C31-C32-C33
34	k	102	STE	C1-C2-C3-C4
30	D	406	LMG	C14-C15-C16-C17
30	d	410	LMG	C36-C37-C38-C39
34	B	625	STE	C11-C10-C9-C8
34	X	102	STE	C4-C5-C6-C7
30	C	518	LMG	C29-C28-O8-C9
32	b	619	SQD	C12-C13-C14-C15
33	c	517	DGD	C8A-C9A-CAA-CBA
34	k	102	STE	C4-C5-C6-C7
26	b	608	CLA	C2-C3-C5-C6
30	D	406	LMG	C28-C29-C30-C31
32	b	619	SQD	C27-C28-C29-C30
30	B	621	LMG	C30-C31-C32-C33
31	D	407	LHG	C25-C26-C27-C28
32	A	616	SQD	C25-C26-C27-C28
26	B	616	CLA	C11-C12-C13-C14
26	b	609	CLA	C4C-C3C-CAC-CBC
31	L	101	LHG	C19-C20-C21-C22
34	l	102	STE	C9-C10-C11-C12
31	e	102	LHG	C7-C8-C9-C10
26	B	616	CLA	C10-C11-C12-C13
31	A	617	LHG	C17-C18-C19-C20
34	d	413	STE	C2-C3-C4-C5
30	B	621	LMG	C35-C36-C37-C38
30	d	411	LMG	C30-C31-C32-C33
31	d	407	LHG	C19-C20-C21-C22
32	A	618	SQD	C16-C17-C18-C19
30	c	520	LMG	C40-C41-C42-C43
31	D	409	LHG	C24-C25-C26-C27
33	a	614	DGD	CCA-CDA-CEA-CFA
26	c	513	CLA	C2C-C3C-CAC-CBC
34	J	101	STE	C6-C7-C8-C9
34	b	623	STE	C1-C2-C3-C4
30	b	621	LMG	C7-C8-C9-O8
30	c	522	LMG	C7-C8-C9-O8

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Mol	Chain	Res	Type	Atoms
32	A	616	SQD	O6-C44-C45-C46
33	C	515	DGD	O1G-C1G-C2G-C3G
32	B	622	SQD	O10-C23-O48-C46
30	M	101	LMG	C11-C12-C13-C14
31	A	617	LHG	C27-C28-C29-C30
32	F	102	SQD	C30-C31-C32-C33
26	C	513	CLA	O2A-C1-C2-C3
28	A	611	BCR	C14-C15-C16-C17
32	A	618	SQD	C27-C28-C29-C30
34	B	620	STE	C5-C6-C7-C8
31	A	615	LHG	C28-C29-C30-C31
32	t	102	SQD	C31-C32-C33-C34
26	B	605	CLA	C10-C11-C12-C13
31	d	408	LHG	C4-O6-P-O3
30	d	411	LMG	C10-C11-C12-C13
34	b	622	STE	C1-C2-C3-C4
31	D	407	LHG	O1-C1-C2-O2
26	A	607	CLA	C15-C16-C17-C18
30	D	408	LMG	C35-C36-C37-C38
33	C	516	DGD	C6B-C7B-C8B-C9B
34	M	102	STE	C11-C10-C9-C8
26	c	504	CLA	C11-C12-C13-C15
34	b	622	STE	C6-C7-C8-C9
34	l	102	STE	C5-C6-C7-C8
33	A	619	DGD	CEB-CFB-CGB-CHB
34	B	623	STE	C2-C3-C4-C5
31	A	617	LHG	O7-C5-C6-O8
31	e	102	LHG	O7-C5-C6-O8
32	a	613	SQD	O47-C45-C46-O48
30	D	408	LMG	C29-C28-O8-C9
30	C	518	LMG	C12-C13-C14-C15
30	D	406	LMG	C38-C39-C40-C41
31	d	407	LHG	C29-C30-C31-C32
32	a	613	SQD	C30-C31-C32-C33
30	c	522	LMG	O6-C1-O1-C7
26	B	612	CLA	C8-C10-C11-C12
30	D	408	LMG	O1-C7-C8-C9
31	d	407	LHG	C1-C2-C3-O3
30	b	621	LMG	C13-C14-C15-C16
26	d	403	CLA	C2-C1-O2A-CGA
26	B	606	CLA	C14-C13-C15-C16
26	C	504	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
26	C	510	CLA	C11-C10-C8-C9
26	b	602	CLA	C6-C7-C8-C9
33	C	516	DGD	CBB-CCB-CDB-CEB
26	B	607	CLA	C10-C11-C12-C13
26	b	613	CLA	C8-C10-C11-C12
30	C	518	LMG	C32-C33-C34-C35
33	C	515	DGD	C2A-C3A-C4A-C5A
33	a	614	DGD	C6B-C7B-C8B-C9B
34	X	102	STE	C11-C12-C13-C14
26	A	607	CLA	C16-C17-C18-C20
26	B	607	CLA	C16-C17-C18-C19
26	B	609	CLA	C16-C17-C18-C19
26	B	615	CLA	C16-C17-C18-C19
26	C	510	CLA	C16-C17-C18-C20
26	d	404	CLA	C16-C17-C18-C19
28	B	618	BCR	C23-C24-C25-C26
28	B	618	BCR	C23-C24-C25-C30
28	K	101	BCR	C23-C24-C25-C26
28	K	101	BCR	C23-C24-C25-C30
28	Z	101	BCR	C23-C24-C25-C26
28	Z	101	BCR	C23-C24-C25-C30
28	b	616	BCR	C1-C6-C7-C8
28	b	616	BCR	C5-C6-C7-C8
28	c	516	BCR	C1-C6-C7-C8
28	c	516	BCR	C23-C24-C25-C26
28	h	102	BCR	C23-C24-C25-C26
28	h	102	BCR	C23-C24-C25-C30
28	t	101	BCR	C1-C6-C7-C8
28	t	101	BCR	C5-C6-C7-C8
33	C	516	DGD	C2A-C3A-C4A-C5A
33	a	614	DGD	CAA-CBA-CCA-CDA
34	J	101	STE	C5-C6-C7-C8
33	h	103	DGD	O2G-C1B-C2B-C3B
29	A	612	PL9	C47-C48-C49-C50
31	l	101	LHG	C18-C19-C20-C21
34	t	104	STE	C4-C5-C6-C7
28	k	101	BCR	C17-C18-C19-C20
26	B	609	CLA	C15-C16-C17-C18
26	a	607	CLA	C8-C10-C11-C12
28	D	404	BCR	C14-C15-C16-C17
26	c	513	CLA	C4C-C3C-CAC-CBC
30	D	408	LMG	C36-C37-C38-C39

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Mol	Chain	Res	Type	Atoms
32	A	618	SQD	C14-C15-C16-C17
32	B	622	SQD	C9-C10-C11-C12
32	a	613	SQD	C25-C26-C27-C28
34	T	102	STE	C11-C12-C13-C14
26	B	608	CLA	C16-C17-C18-C19
30	c	522	LMG	C38-C39-C40-C41
33	C	515	DGD	CBB-CCB-CDB-CEB
34	B	624	STE	C2-C3-C4-C5
33	C	515	DGD	O1G-C1A-C2A-C3A
30	A	614	LMG	C18-C19-C20-C21
34	b	622	STE	C9-C10-C11-C12
26	B	603	CLA	C11-C10-C8-C7
26	B	604	CLA	C11-C12-C13-C15
26	B	604	CLA	C12-C13-C15-C16
26	B	605	CLA	C11-C10-C8-C7
26	B	606	CLA	C11-C10-C8-C7
26	B	606	CLA	C12-C13-C15-C16
26	C	505	CLA	C12-C13-C15-C16
26	C	510	CLA	C11-C10-C8-C7
26	D	403	CLA	C11-C12-C13-C15
26	a	607	CLA	C12-C13-C15-C16
26	a	612	CLA	C12-C13-C15-C16
26	b	601	CLA	C11-C12-C13-C15
26	b	602	CLA	C6-C7-C8-C10
26	b	602	CLA	C11-C10-C8-C7
26	b	603	CLA	C11-C12-C13-C15
26	b	603	CLA	C12-C13-C15-C16
26	b	604	CLA	C12-C13-C15-C16
26	b	607	CLA	C11-C12-C13-C15
26	c	501	CLA	C11-C12-C13-C15
26	c	502	CLA	C6-C7-C8-C10
26	c	504	CLA	C11-C10-C8-C7
26	c	505	CLA	C6-C7-C8-C10
26	c	506	CLA	C6-C7-C8-C10
31	l	101	LHG	C9-C10-C11-C12
26	B	610	CLA	C2C-C3C-CAC-CBC
30	C	518	LMG	C14-C15-C16-C17
31	A	617	LHG	C11-C12-C13-C14
31	d	409	LHG	C23-C24-C25-C26
26	B	608	CLA	CBA-CGA-O2A-C1
32	t	102	SQD	C12-C13-C14-C15
26	b	604	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
26	c	512	CLA	C2A-CAA-CBA-CGA
31	D	409	LHG	C19-C20-C21-C22
28	B	617	BCR	C20-C21-C22-C37
28	B	619	BCR	C35-C13-C14-C15
28	C	514	BCR	C16-C17-C18-C36
28	h	102	BCR	C16-C17-C18-C36
31	L	101	LHG	C24-C25-C26-C27
32	a	613	SQD	C9-C10-C11-C12
33	H	101	DGD	CBA-CCA-CDA-CEA
34	B	620	STE	C7-C8-C9-C10
26	c	505	CLA	C16-C17-C18-C20
26	b	605	CLA	C15-C16-C17-C18
26	A	610	CLA	CBA-CGA-O2A-C1
33	C	517	DGD	C2A-C1A-O1G-C1G
31	A	617	LHG	C19-C20-C21-C22
31	e	102	LHG	C28-C29-C30-C31
31	l	101	LHG	C16-C17-C18-C19
34	L	102	STE	C4-C5-C6-C7
31	A	615	LHG	C14-C15-C16-C17
32	A	618	SQD	C17-C18-C19-C20
31	d	407	LHG	C11-C10-C9-C8
26	B	610	CLA	CAD-CBD-CGD-O2D
26	B	614	CLA	CAD-CBD-CGD-O2D
26	C	501	CLA	CAD-CBD-CGD-O2D
26	C	509	CLA	CAD-CBD-CGD-O2D
26	D	403	CLA	CAD-CBD-CGD-O2D
26	b	609	CLA	CAD-CBD-CGD-O2D
26	b	611	CLA	CAD-CBD-CGD-O2D
26	c	501	CLA	CAD-CBD-CGD-O2D
26	c	503	CLA	CAD-CBD-CGD-O2D
26	c	512	CLA	CAD-CBD-CGD-O2D
26	h	101	CLA	CAD-CBD-CGD-O2D
27	A	609	PHO	CAD-CBD-CGD-O2D
31	D	407	LHG	C31-C32-C33-C34
34	l	102	STE	C2-C3-C4-C5
26	B	616	CLA	CBA-CGA-O2A-C1
26	b	607	CLA	C4-C3-C5-C6
26	B	602	CLA	C16-C17-C18-C19
26	b	609	CLA	C16-C17-C18-C20
34	t	103	STE	C9-C10-C11-C12
29	a	611	PL9	C28-C29-C31-C32
33	H	101	DGD	C8A-C9A-CAA-CBA

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
30	C	518	LMG	O1-C7-C8-C9
30	M	101	LMG	O1-C7-C8-C9
31	A	617	LHG	C4-C5-C6-O8
31	d	409	LHG	C2-C3-O3-P
33	A	619	DGD	C1G-C2G-C3G-O3G
30	c	520	LMG	O10-C28-O8-C9
33	C	516	DGD	C8B-C9B-CAB-CBB
31	L	101	LHG	O6-C4-C5-O7
31	l	101	LHG	O6-C4-C5-O7
26	b	611	CLA	C15-C16-C17-C18
34	B	620	STE	C11-C12-C13-C14
35	e	101	HEM	C4B-C3B-CAB-CBB
26	c	504	CLA	C8-C10-C11-C12
34	t	103	STE	C3-C4-C5-C6
26	B	616	CLA	C11-C12-C13-C15
26	C	510	CLA	C16-C17-C18-C19
26	a	606	CLA	C16-C17-C18-C19
31	D	409	LHG	C32-C33-C34-C35
34	d	414	STE	C9-C10-C11-C12
33	C	515	DGD	O1B-C1B-O2G-C2G
26	B	601	CLA	CHA-CBD-CGD-O1D
26	B	607	CLA	CHA-CBD-CGD-O1D
26	B	607	CLA	CHA-CBD-CGD-O2D
26	B	612	CLA	CHA-CBD-CGD-O1D
26	B	612	CLA	CHA-CBD-CGD-O2D
26	C	502	CLA	CHA-CBD-CGD-O1D
26	C	502	CLA	CHA-CBD-CGD-O2D
26	C	508	CLA	CHA-CBD-CGD-O2D
26	C	512	CLA	CHA-CBD-CGD-O1D
26	a	607	CLA	CHA-CBD-CGD-O1D
26	c	502	CLA	CHA-CBD-CGD-O1D
26	c	502	CLA	CHA-CBD-CGD-O2D
33	c	517	DGD	C1B-C2B-C3B-C4B
26	A	610	CLA	O1A-CGA-O2A-C1
33	C	517	DGD	C5B-C6B-C7B-C8B
30	b	621	LMG	O1-C7-C8-O7
30	M	101	LMG	C36-C37-C38-C39
31	d	408	LHG	C32-C33-C34-C35
26	B	616	CLA	O1A-CGA-O2A-C1
33	A	619	DGD	CDB-CEB-CFB-CGB
33	c	518	DGD	CDB-CEB-CFB-CGB
31	d	408	LHG	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
26	c	509	CLA	O1D-CGD-O2D-CED
32	A	616	SQD	C28-C29-C30-C31
33	H	101	DGD	C2B-C3B-C4B-C5B
34	b	622	STE	C7-C8-C9-C10
34	J	101	STE	C3-C4-C5-C6
26	B	608	CLA	O1A-CGA-O2A-C1
29	a	611	PL9	C4-C3-C7-C8
32	a	613	SQD	C19-C20-C21-C22
26	B	603	CLA	C11-C10-C8-C9
26	B	603	CLA	C14-C13-C15-C16
26	B	604	CLA	C11-C12-C13-C14
26	a	607	CLA	C14-C13-C15-C16
26	b	601	CLA	C11-C12-C13-C14
26	b	606	CLA	C11-C12-C13-C14
26	b	611	CLA	C11-C10-C8-C9
26	b	611	CLA	C11-C12-C13-C14
26	b	613	CLA	C11-C12-C13-C14
26	c	506	CLA	C11-C10-C8-C9
33	c	517	DGD	C4D-C5D-C6D-O5D
30	m	101	LMG	C14-C15-C16-C17
31	A	615	LHG	C16-C17-C18-C19
30	A	614	LMG	C19-C20-C21-C22
30	c	523	LMG	C16-C17-C18-C19
26	c	505	CLA	C15-C16-C17-C18
33	a	614	DGD	CBA-CCA-CDA-CEA
28	h	102	BCR	C7-C8-C9-C34
33	C	517	DGD	CBB-CCB-CDB-CEB
33	A	619	DGD	C1B-C2B-C3B-C4B
26	c	509	CLA	C16-C17-C18-C19
26	C	513	CLA	C13-C15-C16-C17
29	A	612	PL9	C22-C23-C24-C26
31	d	408	LHG	C26-C27-C28-C29
34	T	102	STE	C13-C14-C15-C16
30	C	518	LMG	C28-C29-C30-C31
31	D	409	LHG	C31-C32-C33-C34
34	C	521	STE	C9-C10-C11-C12
30	c	523	LMG	C37-C38-C39-C40
34	b	622	STE	C4-C5-C6-C7
31	A	615	LHG	C3-O3-P-O5
31	L	101	LHG	C4-O6-P-O5
31	e	102	LHG	C4-O6-P-O5
31	l	101	LHG	C4-O6-P-O5

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Mol	Chain	Res	Type	Atoms
26	C	513	CLA	C16-C17-C18-C19
30	M	101	LMG	O6-C1-O1-C7
33	A	619	DGD	C6B-C7B-C8B-C9B
33	C	516	DGD	C2B-C3B-C4B-C5B
31	D	407	LHG	C19-C20-C21-C22
33	c	517	DGD	C6A-C7A-C8A-C9A
30	d	411	LMG	C36-C37-C38-C39
26	a	606	CLA	C16-C17-C18-C20
26	b	614	CLA	C16-C17-C18-C20
26	B	605	CLA	CAD-CBD-CGD-O1D
26	B	607	CLA	CAD-CBD-CGD-O1D
26	B	612	CLA	CAD-CBD-CGD-O1D
26	C	502	CLA	CAD-CBD-CGD-O1D
26	C	504	CLA	CAD-CBD-CGD-O1D
26	C	513	CLA	CAD-CBD-CGD-O1D
26	c	502	CLA	CAD-CBD-CGD-O1D
32	f	101	SQD	C5-C6-S-O7
26	c	510	CLA	C10-C11-C12-C13
32	B	622	SQD	C27-C28-C29-C30
34	B	625	STE	C7-C8-C9-C10
30	c	522	LMG	C11-C12-C13-C14
31	D	407	LHG	C13-C14-C15-C16
26	B	604	CLA	C13-C15-C16-C17
30	C	518	LMG	C37-C38-C39-C40
26	B	609	CLA	C4-C3-C5-C6
26	A	608	CLA	C11-C12-C13-C15
26	B	603	CLA	C6-C7-C8-C10
26	B	607	CLA	C6-C7-C8-C10
26	B	607	CLA	C11-C10-C8-C7
26	B	607	CLA	C12-C13-C15-C16
26	B	613	CLA	C6-C7-C8-C10
26	B	616	CLA	C11-C10-C8-C7
26	C	504	CLA	C11-C10-C8-C7
26	b	606	CLA	C11-C12-C13-C15
26	c	506	CLA	C11-C10-C8-C7
26	c	507	CLA	C11-C12-C13-C15
32	B	622	SQD	C11-C10-C9-C8
33	C	515	DGD	CDA-CEA-CFA-CGA
26	c	502	CLA	C3-C5-C6-C7
34	b	622	STE	C11-C12-C13-C14
26	B	610	CLA	CBD-CGD-O2D-CED
33	C	517	DGD	O6D-C5D-C6D-O5D

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Mol	Chain	Res	Type	Atoms
26	A	610	CLA	C6-C7-C8-C9
33	A	619	DGD	C5A-C6A-C7A-C8A
31	A	617	LHG	C11-C10-C9-C8
31	l	101	LHG	C12-C13-C14-C15
34	T	102	STE	C3-C4-C5-C6
30	b	621	LMG	C35-C36-C37-C38
26	d	404	CLA	C16-C17-C18-C20
26	c	510	CLA	C3-C5-C6-C7
30	A	614	LMG	O1-C7-C8-O7
30	C	518	LMG	O1-C7-C8-O7
30	M	101	LMG	O1-C7-C8-O7
30	c	522	LMG	O7-C8-C9-O8
32	b	619	SQD	O47-C45-C46-O48
33	C	515	DGD	O1G-C1G-C2G-O2G
30	c	520	LMG	C36-C37-C38-C39
33	c	517	DGD	C3A-C4A-C5A-C6A
34	H	102	STE	C1-C2-C3-C4
33	C	516	DGD	C2G-C3G-O3G-C1D
31	d	407	LHG	C15-C16-C17-C18
34	a	615	STE	C5-C6-C7-C8
33	a	614	DGD	CFA-CGA-CHA-CIA
26	b	607	CLA	C2-C3-C5-C6
26	B	603	CLA	C11-C12-C13-C14
26	B	605	CLA	C14-C13-C15-C16
26	B	607	CLA	C11-C10-C8-C9
26	B	611	CLA	C11-C12-C13-C14
26	B	613	CLA	C6-C7-C8-C9
26	B	615	CLA	C11-C10-C8-C9
26	C	505	CLA	C14-C13-C15-C16
26	C	509	CLA	C14-C13-C15-C16
26	D	402	CLA	C11-C12-C13-C14
26	b	604	CLA	C14-C13-C15-C16
26	b	607	CLA	C11-C12-C13-C14
26	c	501	CLA	C11-C12-C13-C14
26	c	506	CLA	C6-C7-C8-C9
26	c	512	CLA	C11-C12-C13-C14
26	c	513	CLA	C11-C12-C13-C14
34	t	104	STE	C7-C8-C9-C10
30	D	408	LMG	C10-C11-C12-C13
26	B	610	CLA	C4C-C3C-CAC-CBC
30	A	614	LMG	C32-C33-C34-C35
31	D	407	LHG	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
33	h	103	DGD	CDB-CEB-CFB-CGB
26	c	505	CLA	C10-C11-C12-C13
31	D	409	LHG	C11-C12-C13-C14
33	c	519	DGD	CAB-CBB-CCB-CDB
30	A	614	LMG	C37-C38-C39-C40
31	D	409	LHG	C11-C10-C9-C8
31	l	101	LHG	C25-C26-C27-C28
28	K	102	BCR	C11-C10-C9-C34
31	D	407	LHG	C17-C18-C19-C20
30	M	101	LMG	C31-C32-C33-C34
31	d	408	LHG	C25-C26-C27-C28
34	B	625	STE	C9-C10-C11-C12
26	c	508	CLA	C10-C11-C12-C13
30	D	408	LMG	C29-C30-C31-C32
30	A	614	LMG	C9-C8-O7-C10
30	b	621	LMG	C9-C8-O7-C10
32	B	622	SQD	C44-C45-O47-C7
26	c	501	CLA	C2A-CAA-CBA-CGA
30	M	101	LMG	C16-C17-C18-C19
26	b	615	CLA	C2-C1-O2A-CGA
26	c	513	CLA	C2-C1-O2A-CGA
34	J	101	STE	C1-C2-C3-C4
34	C	521	STE	C12-C13-C14-C15
26	B	614	CLA	C10-C11-C12-C13
31	D	407	LHG	C30-C31-C32-C33
32	F	102	SQD	C29-C30-C31-C32
32	A	618	SQD	C26-C27-C28-C29
28	A	611	BCR	C23-C24-C25-C26
28	B	617	BCR	C5-C6-C7-C8
28	c	514	BCR	C5-C6-C7-C8
28	c	516	BCR	C5-C6-C7-C8
28	c	516	BCR	C23-C24-C25-C30
33	a	614	DGD	C1B-C2B-C3B-C4B
26	b	612	CLA	O1D-CGD-O2D-CED
26	c	512	CLA	C3-C5-C6-C7
31	d	408	LHG	C11-C12-C13-C14
34	C	521	STE	C15-C16-C17-C18
28	X	101	BCR	C20-C21-C22-C23
33	c	518	DGD	C2D-C1D-O3G-C3G
30	m	101	LMG	O7-C8-C9-O8
33	A	619	DGD	O1G-C1G-C2G-O2G
33	c	517	DGD	O1G-C1G-C2G-O2G

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Mol	Chain	Res	Type	Atoms
33	A	619	DGD	CEA-CFA-CGA-CHA
31	d	408	LHG	C3-O3-P-O6
31	e	102	LHG	C3-O3-P-O6
32	A	616	SQD	C31-C32-C33-C34
27	d	402	PHO	CHA-CBD-CGD-O2D
32	A	616	SQD	C9-C10-C11-C12
32	B	622	SQD	C28-C29-C30-C31
30	M	101	LMG	C7-C8-C9-O8
30	c	523	LMG	C7-C8-C9-O8
32	a	613	SQD	C44-C45-C46-O48
31	d	408	LHG	C34-C35-C36-C37
26	B	605	CLA	C12-C13-C15-C16
26	B	609	CLA	C2-C3-C5-C6
30	B	621	LMG	C34-C35-C36-C37
33	c	518	DGD	C7B-C8B-C9B-CAB
26	B	602	CLA	C11-C12-C13-C14
26	B	603	CLA	C6-C7-C8-C9
26	B	616	CLA	C6-C7-C8-C9
26	C	512	CLA	C11-C10-C8-C9
26	b	605	CLA	C11-C10-C8-C9
26	b	608	CLA	C14-C13-C15-C16
26	c	512	CLA	C11-C10-C8-C9
26	b	607	CLA	C16-C17-C18-C19
30	c	522	LMG	C34-C35-C36-C37
32	f	101	SQD	C33-C34-C35-C36
26	B	610	CLA	C8-C10-C11-C12
26	C	513	CLA	C16-C17-C18-C20
32	b	619	SQD	C10-C11-C12-C13
33	C	517	DGD	C8A-C9A-CAA-CBA
26	C	505	CLA	C4-C3-C5-C6
29	D	405	PL9	C12-C13-C14-C16
32	a	613	SQD	C13-C14-C15-C16
31	L	101	LHG	C33-C34-C35-C36
33	A	619	DGD	CBB-CCB-CDB-CEB
31	A	617	LHG	C32-C33-C34-C35
26	B	610	CLA	O1D-CGD-O2D-CED
32	A	618	SQD	C11-C10-C9-C8
28	Z	101	BCR	C6-C7-C8-C9
33	c	519	DGD	O6D-C1D-O3G-C3G
28	h	102	BCR	C15-C16-C17-C18
26	B	604	CLA	C2C-C3C-CAC-CBC
33	c	518	DGD	C2A-C3A-C4A-C5A

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Mol	Chain	Res	Type	Atoms
26	c	505	CLA	C5-C6-C7-C8
35	e	101	HEM	CAD-CBD-CGD-O1D
28	C	514	BCR	C10-C11-C12-C13
28	T	101	BCR	C18-C19-C20-C21
26	B	604	CLA	CBD-CGD-O2D-CED
26	a	606	CLA	C2C-C3C-CAC-CBC
33	h	103	DGD	C4B-C5B-C6B-C7B
29	a	611	PL9	C15-C14-C16-C17
30	d	410	LMG	O9-C10-C11-C12
36	v	201	HEC	CAD-CBD-CGD-O2D
34	b	623	STE	C2-C3-C4-C5
26	C	505	CLA	C2-C3-C5-C6
26	c	501	CLA	C8-C10-C11-C12
33	h	103	DGD	C8A-C9A-CAA-CBA
34	B	625	STE	C6-C7-C8-C9
26	A	607	CLA	C2-C1-O2A-CGA
26	D	402	CLA	C2-C1-O2A-CGA
34	a	615	STE	C3-C4-C5-C6
32	B	622	SQD	C34-C35-C36-C37
26	D	402	CLA	C8-C10-C11-C12
34	b	620	STE	O1-C1-C2-C3
30	M	101	LMG	O7-C8-C9-O8
31	A	617	LHG	C34-C35-C36-C37
32	A	616	SQD	C14-C15-C16-C17
34	b	622	STE	O1-C1-C2-C3
26	c	505	CLA	C16-C17-C18-C19
34	t	105	STE	C9-C10-C11-C12
32	a	613	SQD	C24-C23-O48-C46
30	D	406	LMG	C29-C30-C31-C32
30	M	101	LMG	C30-C31-C32-C33
29	A	612	PL9	C4-C3-C7-C8
32	A	616	SQD	C24-C25-C26-C27
33	C	515	DGD	C2B-C3B-C4B-C5B
33	c	518	DGD	C9A-CAA-CBA-CCA
26	B	614	CLA	C11-C10-C8-C9
26	C	511	CLA	C14-C13-C15-C16
26	c	504	CLA	C6-C7-C8-C9
26	b	608	CLA	C16-C17-C18-C20
26	c	510	CLA	C15-C16-C17-C18
28	D	404	BCR	C16-C17-C18-C36
30	m	101	LMG	C7-C8-C9-O8
34	b	620	STE	O2-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
32	F	102	SQD	C24-C25-C26-C27
33	C	516	DGD	O6D-C1D-O3G-C3G
28	B	618	BCR	C36-C18-C19-C20
28	B	618	BCR	C37-C22-C23-C24
28	c	515	BCR	C11-C12-C13-C35
28	d	405	BCR	C7-C8-C9-C34
34	M	102	STE	O2-C1-C2-C3
34	c	521	STE	C7-C8-C9-C10
34	X	102	STE	C9-C10-C11-C12
26	a	612	CLA	C1A-C2A-CAA-CBA
34	B	623	STE	C7-C8-C9-C10
26	B	603	CLA	C11-C12-C13-C15
26	B	611	CLA	C12-C13-C15-C16
26	b	613	CLA	C6-C7-C8-C10
26	b	613	CLA	C12-C13-C15-C16
27	a	608	PHO	C6-C7-C8-C10
30	d	410	LMG	O7-C10-C11-C12
33	A	619	DGD	CBA-CCA-CDA-CEA
32	b	619	SQD	C17-C18-C19-C20
34	b	622	STE	O2-C1-C2-C3
34	d	414	STE	O1-C1-C2-C3
33	c	517	DGD	CDA-CEA-CFA-CGA
34	I	101	STE	C12-C13-C14-C15
34	M	103	STE	C6-C7-C8-C9
26	a	606	CLA	C4C-C3C-CAC-CBC
30	c	523	LMG	C19-C20-C21-C22
33	c	518	DGD	C9B-CAB-CBB-CCB
26	B	603	CLA	C2A-CAA-CBA-CGA
34	d	413	STE	O1-C1-C2-C3
30	m	101	LMG	C33-C34-C35-C36
30	m	101	LMG	C12-C13-C14-C15
31	e	102	LHG	C8-C7-O7-C5
26	D	403	CLA	C5-C6-C7-C8
34	M	102	STE	O1-C1-C2-C3
34	d	413	STE	O2-C1-C2-C3
30	b	621	LMG	C28-C29-C30-C31
29	d	406	PL9	C43-C44-C46-C47
32	F	102	SQD	O6-C44-C45-C46
31	A	615	LHG	C24-C25-C26-C27
31	d	409	LHG	C25-C26-C27-C28
26	D	402	CLA	C15-C16-C17-C18
31	D	407	LHG	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
28	X	101	BCR	C11-C10-C9-C8
35	e	101	HEM	CAD-CBD-CGD-O2D
32	f	101	SQD	O6-C44-C45-O47
28	K	102	BCR	C19-C20-C21-C22
28	k	101	BCR	C19-C20-C21-C22
33	H	101	DGD	CAB-CBB-CCB-CDB
30	m	101	LMG	C11-C12-C13-C14
32	A	618	SQD	C10-C11-C12-C13
33	h	103	DGD	CCB-CDB-CEB-CFB
32	b	619	SQD	C15-C16-C17-C18
29	D	405	PL9	C39-C41-C42-C43
33	a	614	DGD	C1G-C2G-C3G-O3G
33	C	516	DGD	C9A-CAA-CBA-CCA
26	c	512	CLA	C4-C3-C5-C6
26	a	606	CLA	C2-C1-O2A-CGA
26	c	512	CLA	C2-C1-O2A-CGA
32	a	613	SQD	O10-C23-O48-C46
26	B	603	CLA	C13-C15-C16-C17
26	B	606	CLA	C10-C11-C12-C13
33	c	517	DGD	O1G-C1A-C2A-C3A
26	B	607	CLA	C11-C12-C13-C14
26	D	403	CLA	C11-C10-C8-C9
33	C	516	DGD	C8A-C9A-CAA-CBA
30	b	621	LMG	C39-C40-C41-C42
34	C	520	STE	O1-C1-C2-C3
34	d	414	STE	O2-C1-C2-C3
36	v	201	HEC	CAD-CBD-CGD-O1D
30	C	518	LMG	C33-C34-C35-C36
28	A	611	BCR	C23-C24-C25-C30
28	B	619	BCR	C1-C6-C7-C8
28	X	101	BCR	C23-C24-C25-C26
28	X	101	BCR	C23-C24-C25-C30
28	a	610	BCR	C1-C6-C7-C8
28	a	610	BCR	C5-C6-C7-C8
28	b	617	BCR	C23-C24-C25-C30
28	c	514	BCR	C1-C6-C7-C8
28	c	514	BCR	C23-C24-C25-C30
28	c	515	BCR	C1-C6-C7-C8
26	c	504	CLA	O1D-CGD-O2D-CED
30	c	520	LMG	O1-C7-C8-C9
31	D	407	LHG	O1-C1-C2-C3
28	c	516	BCR	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
29	d	406	PL9	C45-C44-C46-C47
28	C	514	BCR	C11-C12-C13-C14
26	B	607	CLA	C13-C15-C16-C17
31	A	617	LHG	C31-C32-C33-C34
31	d	408	LHG	C16-C17-C18-C19
34	l	102	STE	C11-C10-C9-C8
34	a	615	STE	O2-C1-C2-C3
34	H	102	STE	C13-C14-C15-C16
26	c	502	CLA	C16-C17-C18-C20
32	B	622	SQD	C33-C34-C35-C36
26	b	612	CLA	CBD-CGD-O2D-CED
33	c	517	DGD	O1B-C1B-O2G-C2G
33	H	101	DGD	CDB-CEB-CFB-CGB
26	B	601	CLA	C4-C3-C5-C6
26	C	509	CLA	C11-C10-C8-C7
26	C	512	CLA	C6-C7-C8-C10
26	b	606	CLA	C11-C10-C8-C7
26	c	510	CLA	C12-C13-C15-C16
26	c	512	CLA	C11-C12-C13-C15
29	A	612	PL9	C12-C11-C9-C8
34	b	622	STE	C5-C6-C7-C8
34	t	105	STE	C6-C7-C8-C9
33	a	614	DGD	O2G-C2G-C3G-O3G
30	M	101	LMG	C2-C1-O1-C7
26	B	608	CLA	C16-C17-C18-C20
30	c	523	LMG	O7-C8-C9-O8
30	c	523	LMG	C31-C32-C33-C34
34	b	623	STE	C6-C7-C8-C9
26	a	612	CLA	C2C-C3C-CAC-CBC
30	A	614	LMG	C30-C31-C32-C33
26	B	605	CLA	C8-C10-C11-C12
26	b	615	CLA	C11-C12-C13-C15
32	t	102	SQD	C26-C27-C28-C29
34	B	623	STE	O2-C1-C2-C3
26	B	603	CLA	C10-C11-C12-C13
33	c	518	DGD	C6B-C7B-C8B-C9B
35	F	101	HEM	CAD-CBD-CGD-O1D
26	B	612	CLA	CAA-CBA-CGA-O2A
26	A	608	CLA	C11-C12-C13-C14
26	A	613	CLA	C14-C13-C15-C16
26	B	607	CLA	C14-C13-C15-C16
26	C	501	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
26	C	502	CLA	C6-C7-C8-C9
26	b	602	CLA	C14-C13-C15-C16
26	b	603	CLA	C11-C12-C13-C14
26	c	507	CLA	C11-C12-C13-C14
26	a	612	CLA	C4C-C3C-CAC-CBC
34	b	622	STE	C10-C11-C12-C13
34	L	102	STE	O2-C1-C2-C3
34	a	615	STE	O1-C1-C2-C3
34	c	521	STE	O2-C1-C2-C3
26	d	404	CLA	C3A-C2A-CAA-CBA
26	c	513	CLA	C13-C15-C16-C17
30	M	101	LMG	O8-C28-C29-C30
34	B	620	STE	O2-C1-C2-C3
26	B	604	CLA	CAD-CBD-CGD-O2D
26	B	609	CLA	CAD-CBD-CGD-O2D
26	B	616	CLA	CAD-CBD-CGD-O2D
26	C	503	CLA	CAD-CBD-CGD-O2D
26	C	512	CLA	CAD-CBD-CGD-O2D
26	c	513	CLA	CAD-CBD-CGD-O2D
32	B	622	SQD	C46-C45-O47-C7
26	C	513	CLA	CBA-CGA-O2A-C1
30	b	621	LMG	C4-C5-C6-O5
29	d	406	PL9	C32-C33-C34-C35
34	c	521	STE	C4-C5-C6-C7
34	t	104	STE	C2-C3-C4-C5
26	c	509	CLA	CAA-CBA-CGA-O2A
36	V	201	HEC	CAD-CBD-CGD-O2D
33	c	517	DGD	O6E-C1E-O5D-C6D
29	a	611	PL9	C38-C39-C41-C42
32	a	613	SQD	O47-C7-C8-C9
28	X	101	BCR	C11-C12-C13-C14
28	b	616	BCR	C21-C22-C23-C24
28	t	101	BCR	C7-C8-C9-C10
27	d	402	PHO	C2C-C3C-CAC-CBC
32	b	619	SQD	C44-C45-C46-O48
26	B	601	CLA	CAA-CBA-CGA-O2A
34	M	102	STE	C1-C2-C3-C4
34	X	102	STE	O1-C1-C2-C3
26	B	616	CLA	O2A-C1-C2-C3
26	C	512	CLA	O2A-C1-C2-C3
26	D	403	CLA	O2A-C1-C2-C3
26	h	101	CLA	O2A-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
27	a	608	PHO	O2A-C1-C2-C3
30	c	522	LMG	C15-C16-C17-C18
26	B	613	CLA	C13-C15-C16-C17
31	D	409	LHG	C30-C31-C32-C33
26	b	611	CLA	CAA-CBA-CGA-O2A
34	B	620	STE	O1-C1-C2-C3
36	V	201	HEC	CAD-CBD-CGD-O1D
26	A	613	CLA	C16-C17-C18-C19
31	A	615	LHG	C15-C16-C17-C18
26	A	608	CLA	CHA-CBD-CGD-O1D
26	A	608	CLA	CHA-CBD-CGD-O2D
26	B	601	CLA	CHA-CBD-CGD-O2D
26	B	603	CLA	CHA-CBD-CGD-O1D
26	B	605	CLA	CHA-CBD-CGD-O1D
26	B	606	CLA	CHA-CBD-CGD-O1D
26	B	606	CLA	CHA-CBD-CGD-O2D
26	C	504	CLA	CHA-CBD-CGD-O1D
26	C	507	CLA	CHA-CBD-CGD-O1D
26	C	507	CLA	CHA-CBD-CGD-O2D
26	a	607	CLA	CHA-CBD-CGD-O2D
26	b	605	CLA	CHA-CBD-CGD-O1D
26	b	615	CLA	CHA-CBD-CGD-O2D
26	c	504	CLA	CHA-CBD-CGD-O1D
26	c	504	CLA	CHA-CBD-CGD-O2D
26	c	506	CLA	CHA-CBD-CGD-O1D
26	c	507	CLA	CHA-CBD-CGD-O1D
26	c	507	CLA	CHA-CBD-CGD-O2D
26	c	509	CLA	CHA-CBD-CGD-O1D
26	c	509	CLA	CHA-CBD-CGD-O2D
34	X	102	STE	O2-C1-C2-C3
26	d	403	CLA	C4-C3-C5-C6
26	b	610	CLA	C2-C3-C5-C6
30	c	523	LMG	C13-C14-C15-C16
28	b	618	BCR	C16-C17-C18-C19
34	B	623	STE	O1-C1-C2-C3
32	f	101	SQD	C34-C35-C36-C37
33	C	517	DGD	CBA-CCA-CDA-CEA
34	d	414	STE	C15-C16-C17-C18
26	h	101	CLA	C16-C17-C18-C19
31	e	102	LHG	O8-C23-C24-C25
31	l	101	LHG	O7-C5-C6-O8
33	C	517	DGD	O1G-C1G-C2G-O2G

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Mol	Chain	Res	Type	Atoms
26	b	608	CLA	O1A-CGA-O2A-C1
30	b	621	LMG	C41-C42-C43-C44
35	F	101	HEM	CAD-CBD-CGD-O2D
31	d	407	LHG	C33-C34-C35-C36
30	b	621	LMG	O7-C10-C11-C12
26	c	507	CLA	C2A-CAA-CBA-CGA
34	c	521	STE	O1-C1-C2-C3
27	D	401	PHO	CHA-CBD-CGD-O1D
27	D	401	PHO	CHA-CBD-CGD-O2D
27	d	402	PHO	CHA-CBD-CGD-O1D
26	b	612	CLA	CAA-CBA-CGA-O2A
34	L	102	STE	O1-C1-C2-C3
26	C	507	CLA	C4-C3-C5-C6
26	B	602	CLA	C6-C7-C8-C10
26	B	610	CLA	C11-C12-C13-C15
26	B	613	CLA	C12-C13-C15-C16
26	D	403	CLA	C11-C10-C8-C7
26	b	615	CLA	C6-C7-C8-C10
29	d	406	PL9	C4-C3-C7-C8
34	a	615	STE	C6-C7-C8-C9
32	A	616	SQD	O47-C7-C8-C9
26	b	611	CLA	C3-C5-C6-C7
34	M	102	STE	C10-C11-C12-C13
26	C	506	CLA	C6-C7-C8-C9
26	c	505	CLA	C14-C13-C15-C16
27	a	608	PHO	C6-C7-C8-C9
30	M	101	LMG	C10-C11-C12-C13
30	c	523	LMG	O10-C28-C29-C30
34	M	102	STE	C5-C6-C7-C8
26	c	506	CLA	C8-C10-C11-C12
26	b	608	CLA	CBA-CGA-O2A-C1
26	B	602	CLA	C3-C5-C6-C7
33	c	519	DGD	CDB-CEB-CFB-CGB
31	d	407	LHG	C8-C7-O7-C5
34	C	520	STE	O2-C1-C2-C3
30	c	523	LMG	C39-C40-C41-C42
31	A	615	LHG	C33-C34-C35-C36
26	B	611	CLA	C2-C3-C5-C6
33	C	515	DGD	O1B-C1B-C2B-C3B
26	c	512	CLA	C1A-C2A-CAA-CBA
26	d	404	CLA	C1A-C2A-CAA-CBA
31	L	101	LHG	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
34	b	623	STE	C4-C5-C6-C7
31	L	101	LHG	C34-C35-C36-C37
33	c	517	DGD	O1B-C1B-C2B-C3B
31	d	408	LHG	C10-C11-C12-C13
33	c	517	DGD	C1G-C2G-C3G-O3G
30	D	408	LMG	C14-C15-C16-C17
26	c	506	CLA	C16-C17-C18-C20
26	b	611	CLA	CAA-CBA-CGA-O1A
26	B	603	CLA	C5-C6-C7-C8
26	b	609	CLA	C5-C6-C7-C8
32	A	616	SQD	C15-C16-C17-C18
34	T	103	STE	C7-C8-C9-C10
26	C	513	CLA	O1A-CGA-O2A-C1
26	B	615	CLA	C8-C10-C11-C12
31	A	615	LHG	C2-C3-O3-P
34	l	102	STE	C13-C14-C15-C16
26	B	601	CLA	CAA-CBA-CGA-O1A
26	b	612	CLA	CAA-CBA-CGA-O1A
30	B	621	LMG	C11-C12-C13-C14
31	d	408	LHG	C4-O6-P-O5
31	e	102	LHG	C3-O3-P-O5
30	A	614	LMG	C31-C32-C33-C34
26	B	612	CLA	CAA-CBA-CGA-O1A
28	X	101	BCR	C20-C21-C22-C37
28	B	619	BCR	C5-C6-C7-C8
28	X	101	BCR	C1-C6-C7-C8
28	c	515	BCR	C5-C6-C7-C8
26	D	402	CLA	C2C-C3C-CAC-CBC
31	A	617	LHG	C13-C14-C15-C16
26	B	613	CLA	CAA-CBA-CGA-O2A
32	a	613	SQD	O49-C7-C8-C9
26	B	604	CLA	C4C-C3C-CAC-CBC
34	F	103	STE	O1-C1-C2-C3
34	F	103	STE	O2-C1-C2-C3
30	c	523	LMG	O8-C28-C29-C30
32	f	101	SQD	O48-C23-C24-C25
26	b	611	CLA	C13-C15-C16-C17
30	A	614	LMG	C28-C29-C30-C31
26	B	601	CLA	C2-C3-C5-C6
26	c	512	CLA	C2-C3-C5-C6
33	C	515	DGD	C6B-C7B-C8B-C9B
26	B	601	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
26	B	603	CLA	CAD-CBD-CGD-O1D
26	C	506	CLA	CAD-CBD-CGD-O1D
26	b	604	CLA	CAD-CBD-CGD-O1D
26	b	610	CLA	CAD-CBD-CGD-O1D
26	c	504	CLA	CAD-CBD-CGD-O1D
26	c	506	CLA	CAD-CBD-CGD-O1D
32	A	616	SQD	C5-C6-S-O7
30	C	518	LMG	O10-C28-O8-C9
34	H	102	STE	C3-C4-C5-C6
26	c	501	CLA	CAA-CBA-CGA-O2A
26	b	614	CLA	C8-C10-C11-C12
33	A	619	DGD	O6D-C5D-C6D-O5D
26	B	601	CLA	C6-C7-C8-C9
26	C	505	CLA	C6-C7-C8-C9
26	D	402	CLA	C11-C10-C8-C9
26	b	606	CLA	C14-C13-C15-C16
26	b	613	CLA	C14-C13-C15-C16
26	c	510	CLA	C14-C13-C15-C16
27	A	609	PHO	C14-C13-C15-C16
30	B	621	LMG	O8-C28-C29-C30
32	b	619	SQD	O48-C23-C24-C25
34	d	413	STE	C6-C7-C8-C9
30	M	101	LMG	C14-C15-C16-C17
34	T	103	STE	C14-C15-C16-C17
26	c	510	CLA	CAA-CBA-CGA-O2A
29	a	611	PL9	C21-C22-C23-C24
30	b	621	LMG	C34-C35-C36-C37
26	b	610	CLA	C4-C3-C5-C6
31	e	102	LHG	C24-C25-C26-C27
33	c	517	DGD	C9B-CAB-CBB-CCB
26	C	501	CLA	C11-C10-C8-C7
26	C	505	CLA	C6-C7-C8-C10
26	C	508	CLA	C12-C13-C15-C16
26	b	613	CLA	C11-C10-C8-C7
26	c	510	CLA	C11-C10-C8-C7
34	b	620	STE	C10-C11-C12-C13
32	F	102	SQD	O48-C23-C24-C25
32	A	616	SQD	C27-C28-C29-C30
34	d	412	STE	C6-C7-C8-C9
31	e	102	LHG	O10-C23-C24-C25
33	h	103	DGD	CAA-CBA-CCA-CDA
31	e	102	LHG	C15-C16-C17-C18

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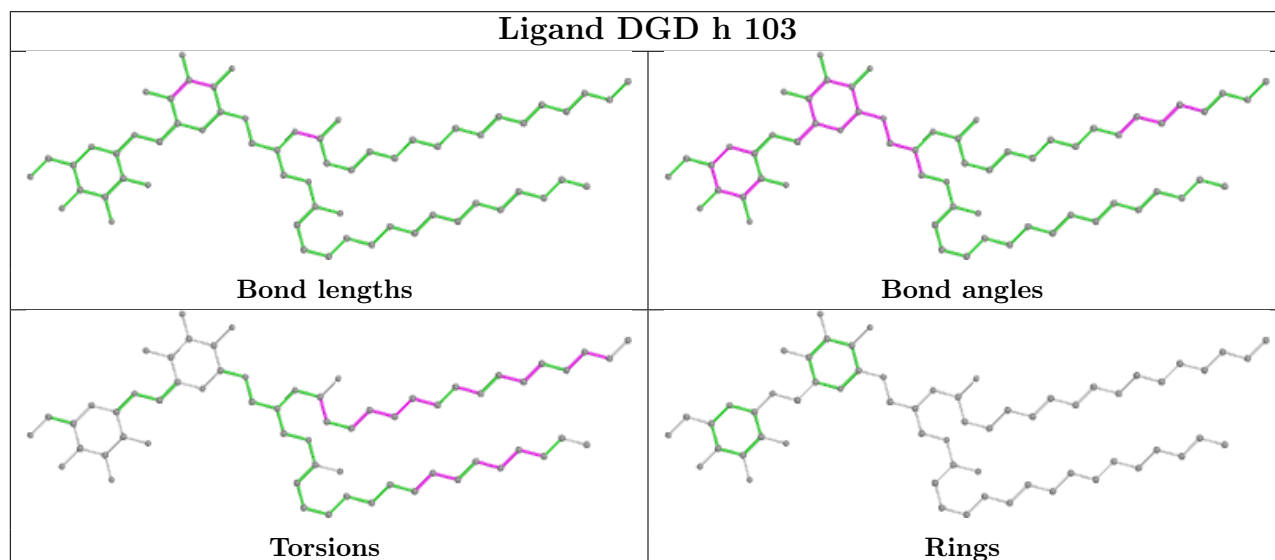
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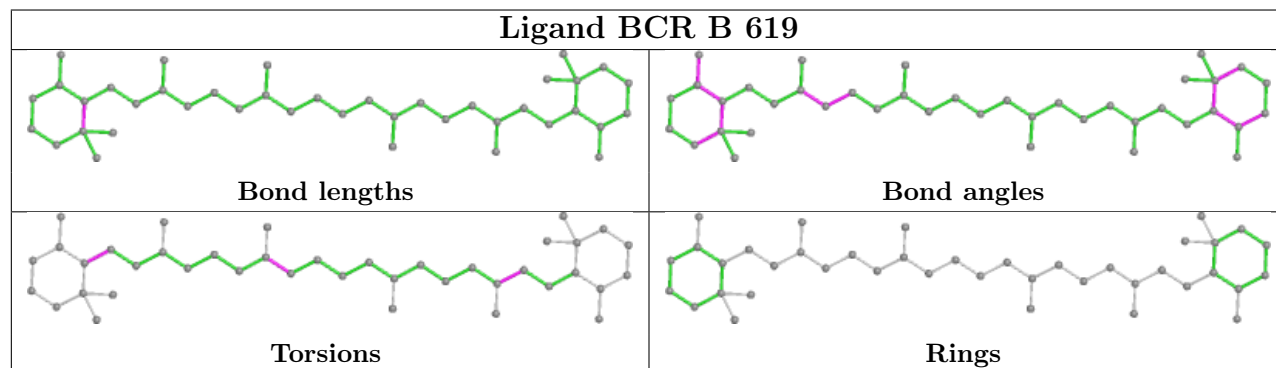
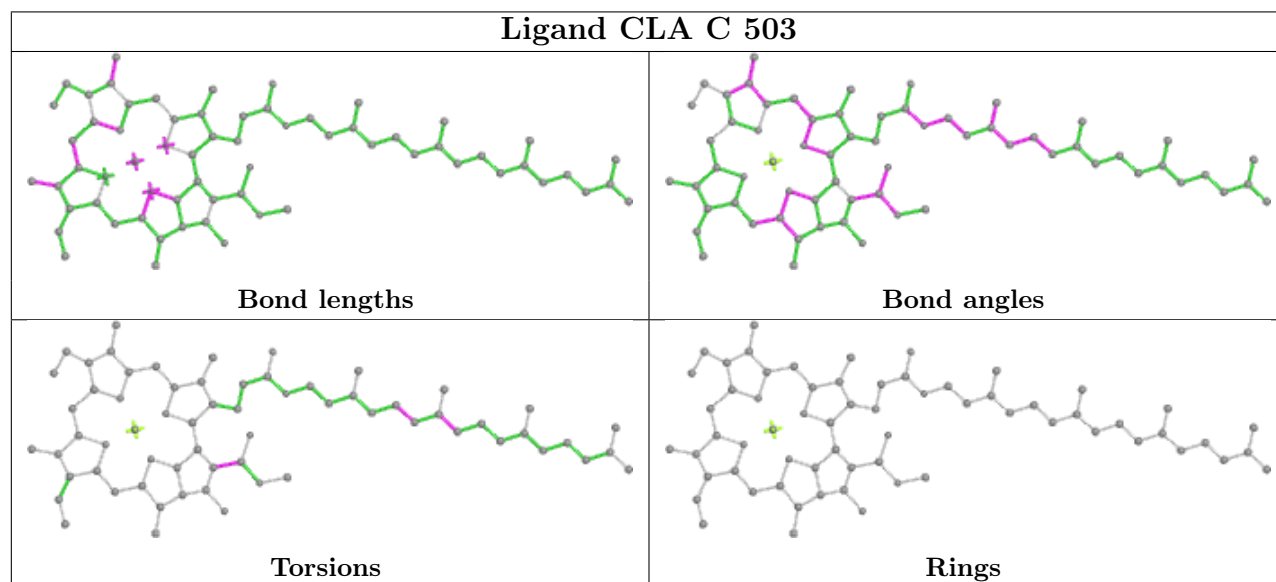
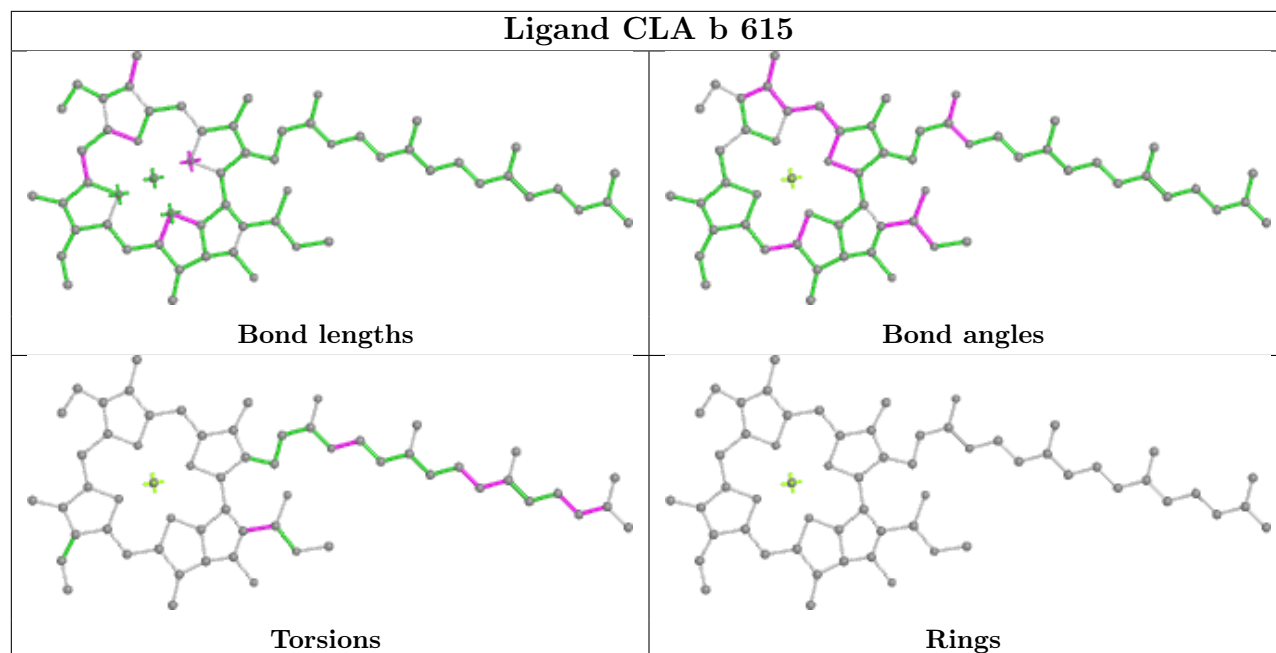
Mol	Chain	Res	Type	Atoms
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32	A	616	SQD	O49-C7-C8-C9
32	b	619	SQD	O10-C23-C24-C25
26	c	504	CLA	CBA-CGA-O2A-C1
32	A	618	SQD	C33-C34-C35-C36
30	D	406	LMG	C39-C40-C41-C42
33	C	515	DGD	O2G-C1B-C2B-C3B
26	c	501	CLA	CAA-CBA-CGA-O1A
26	B	610	CLA	C5-C6-C7-C8
26	b	604	CLA	C10-C11-C12-C13
26	c	504	CLA	C5-C6-C7-C8
33	c	517	DGD	O2G-C1B-C2B-C3B

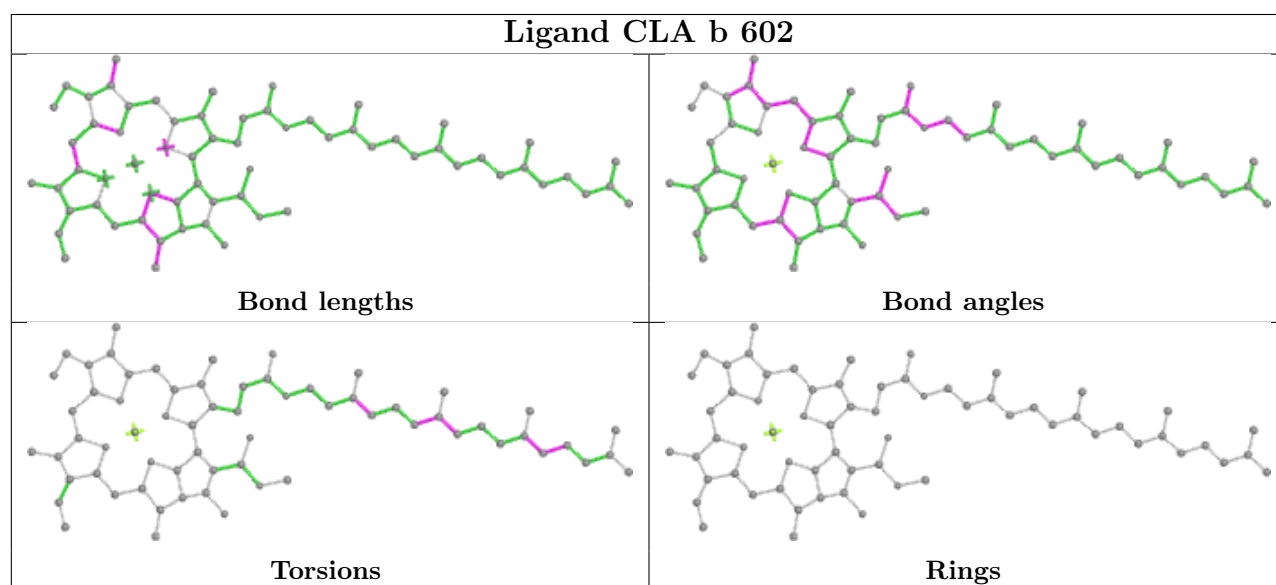
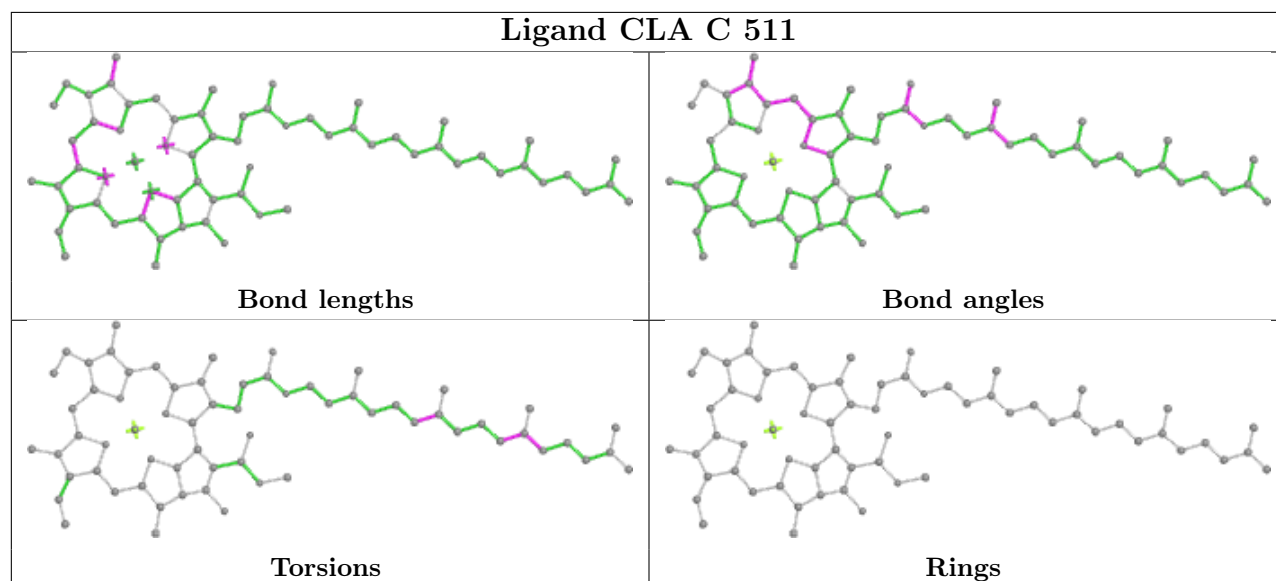
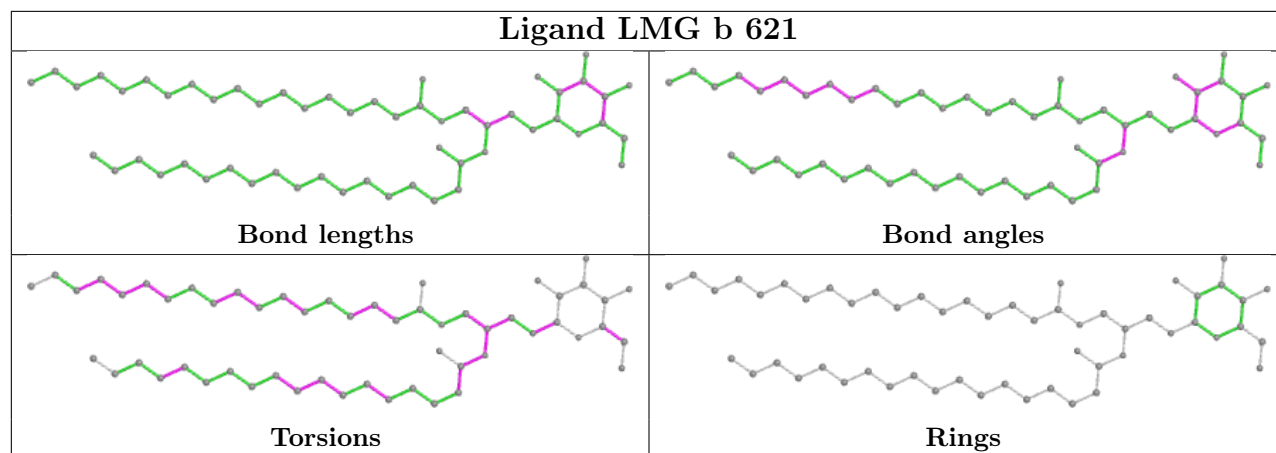
There are no ring outliers.

No monomer is involved in short contacts.

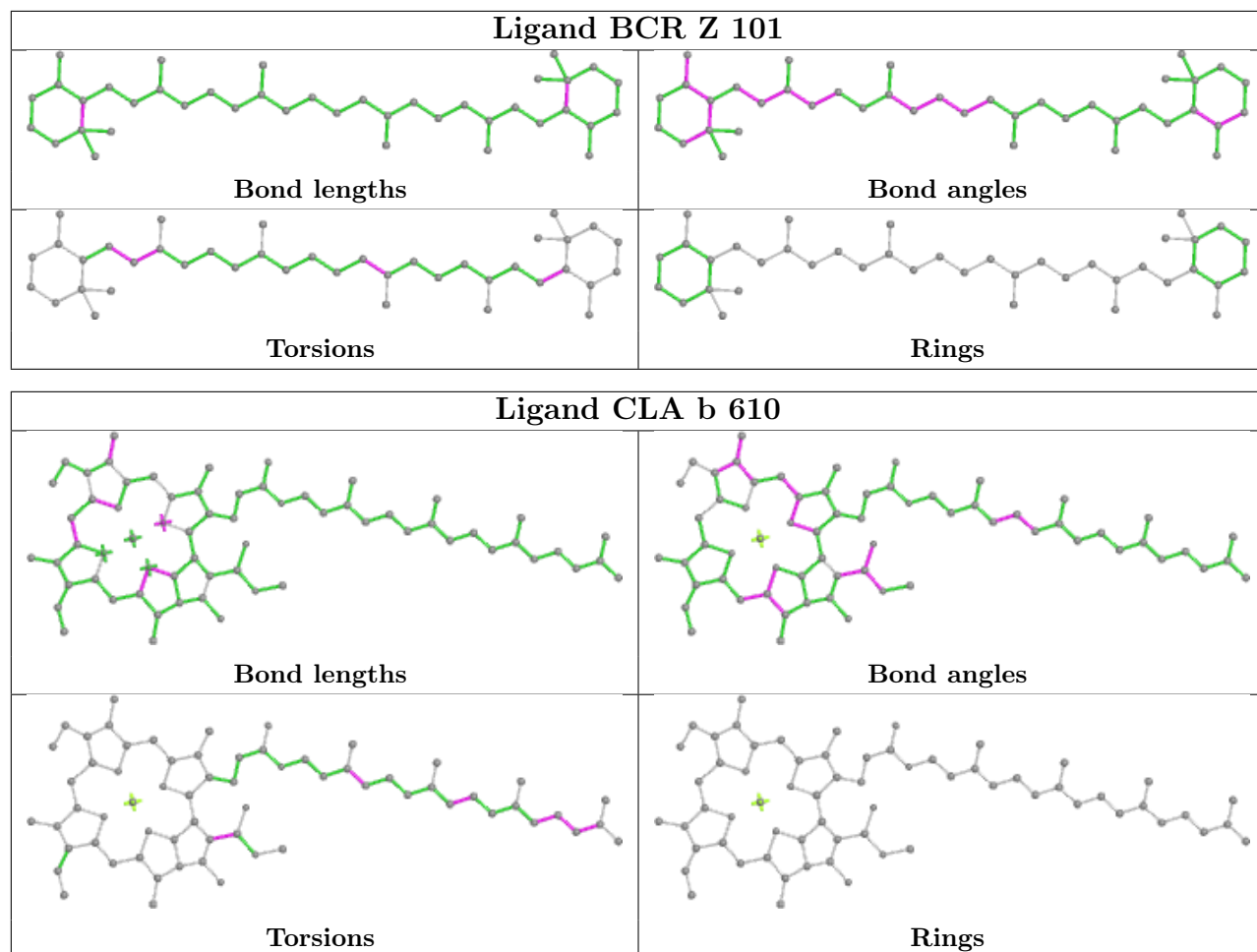
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

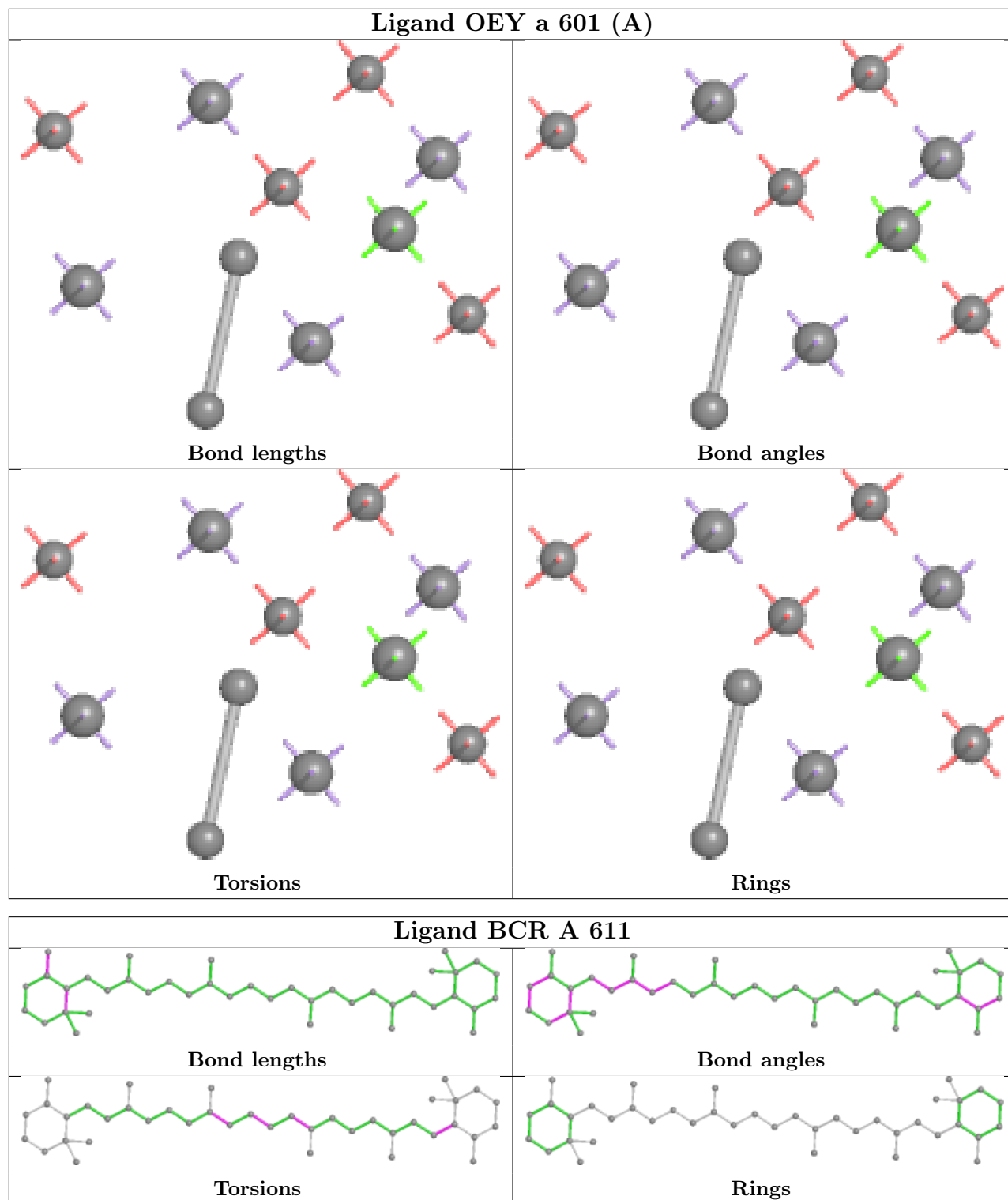


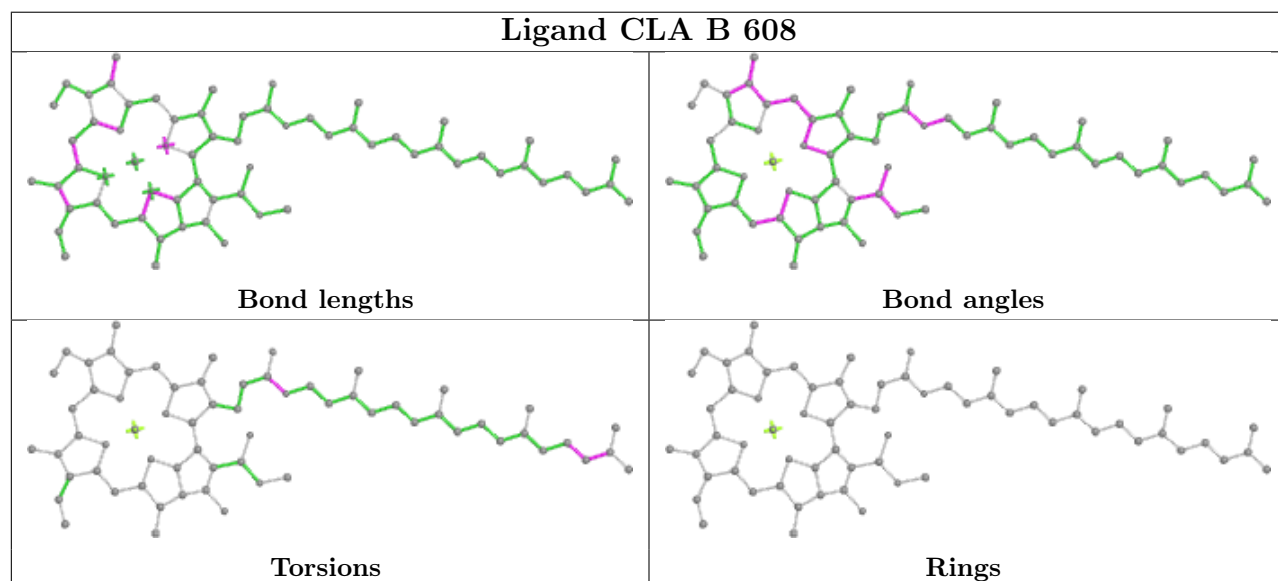
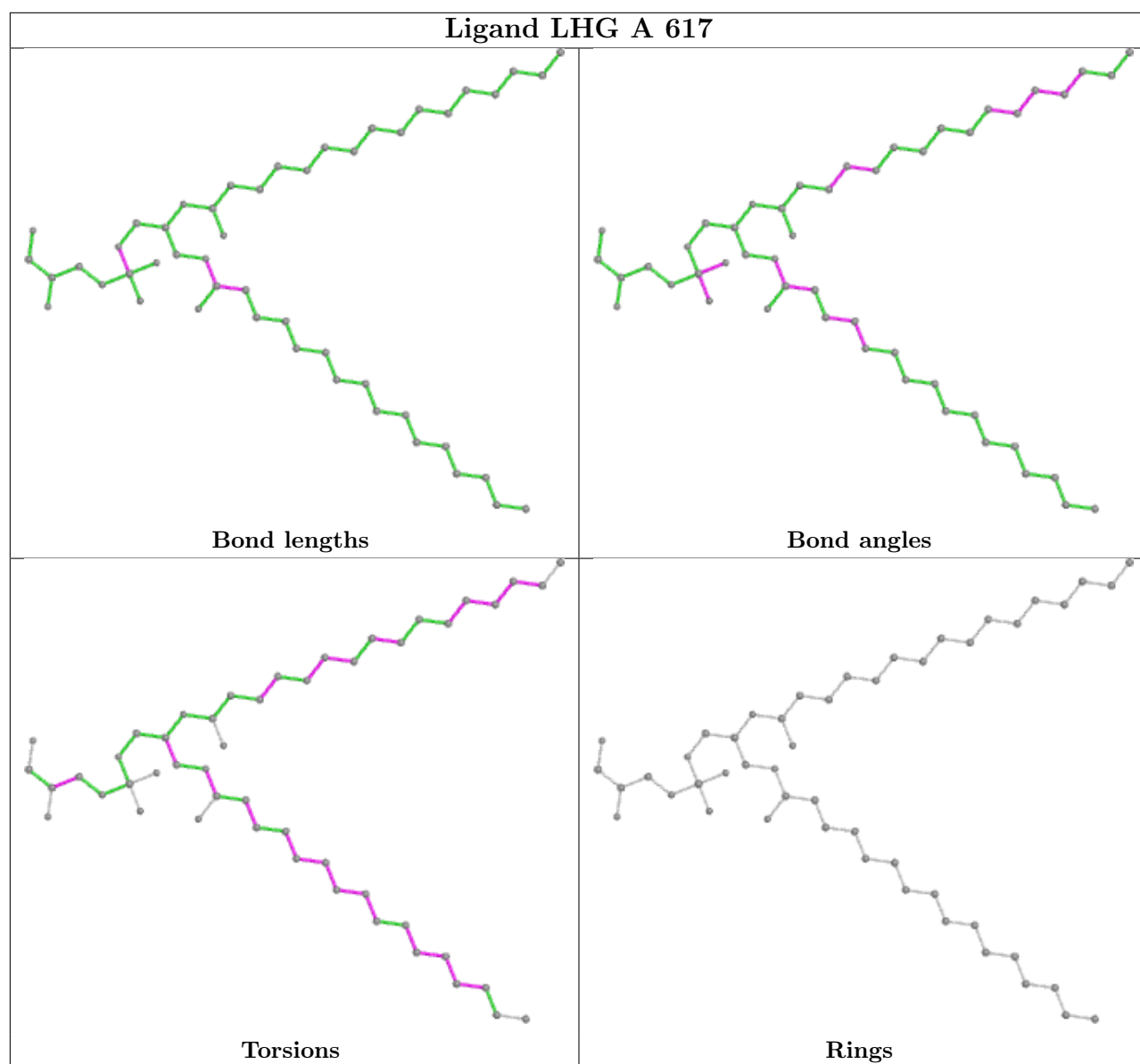


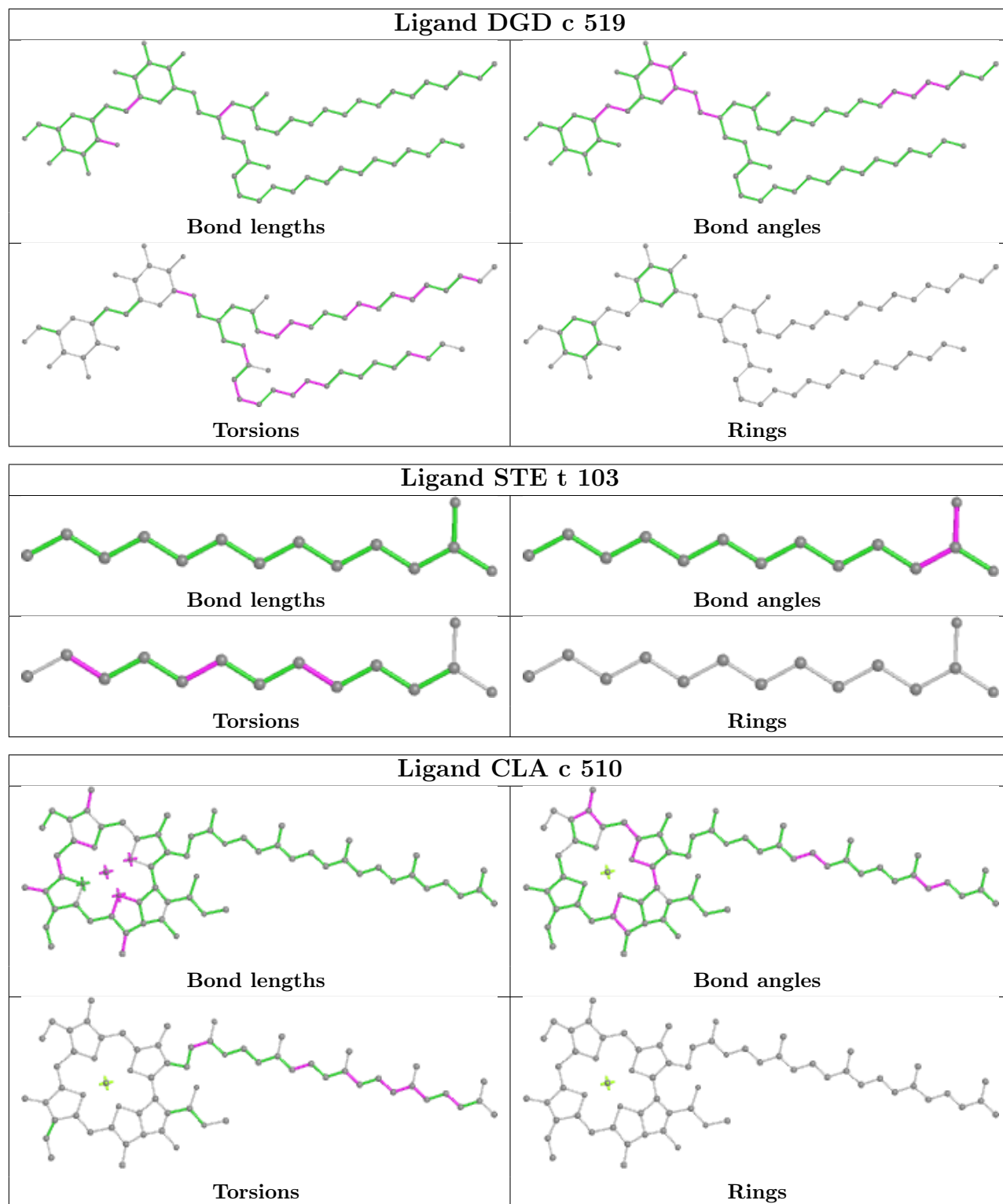


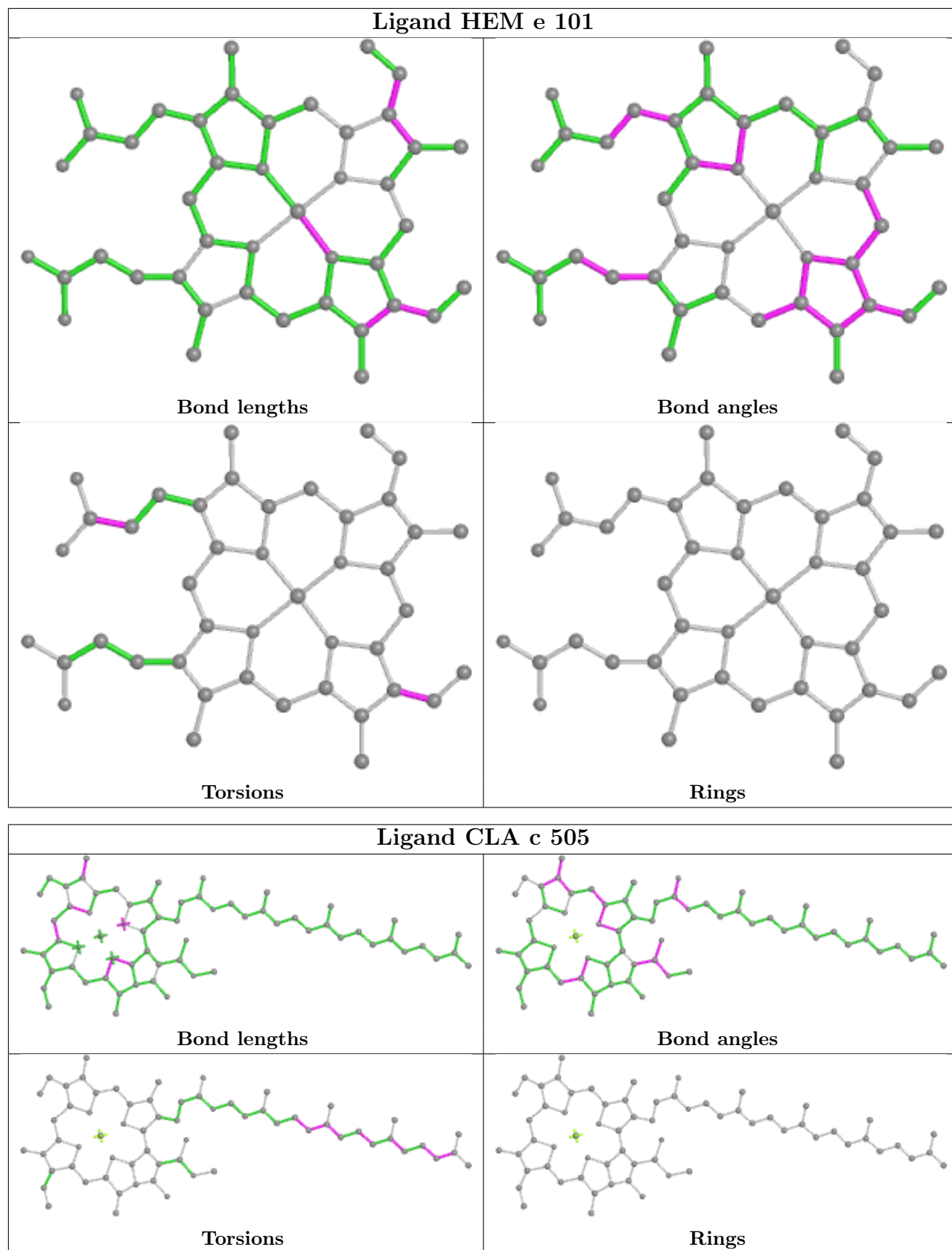


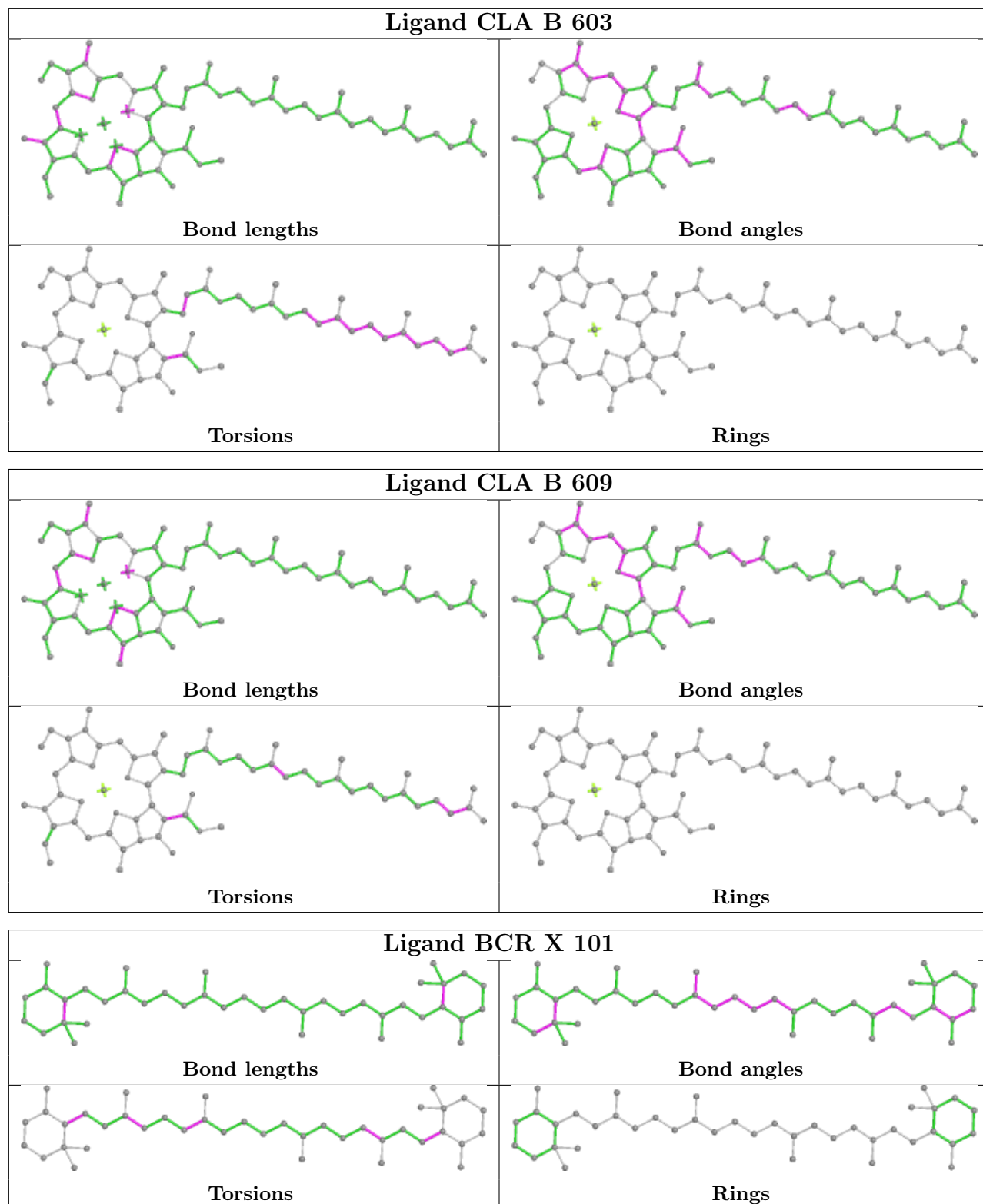


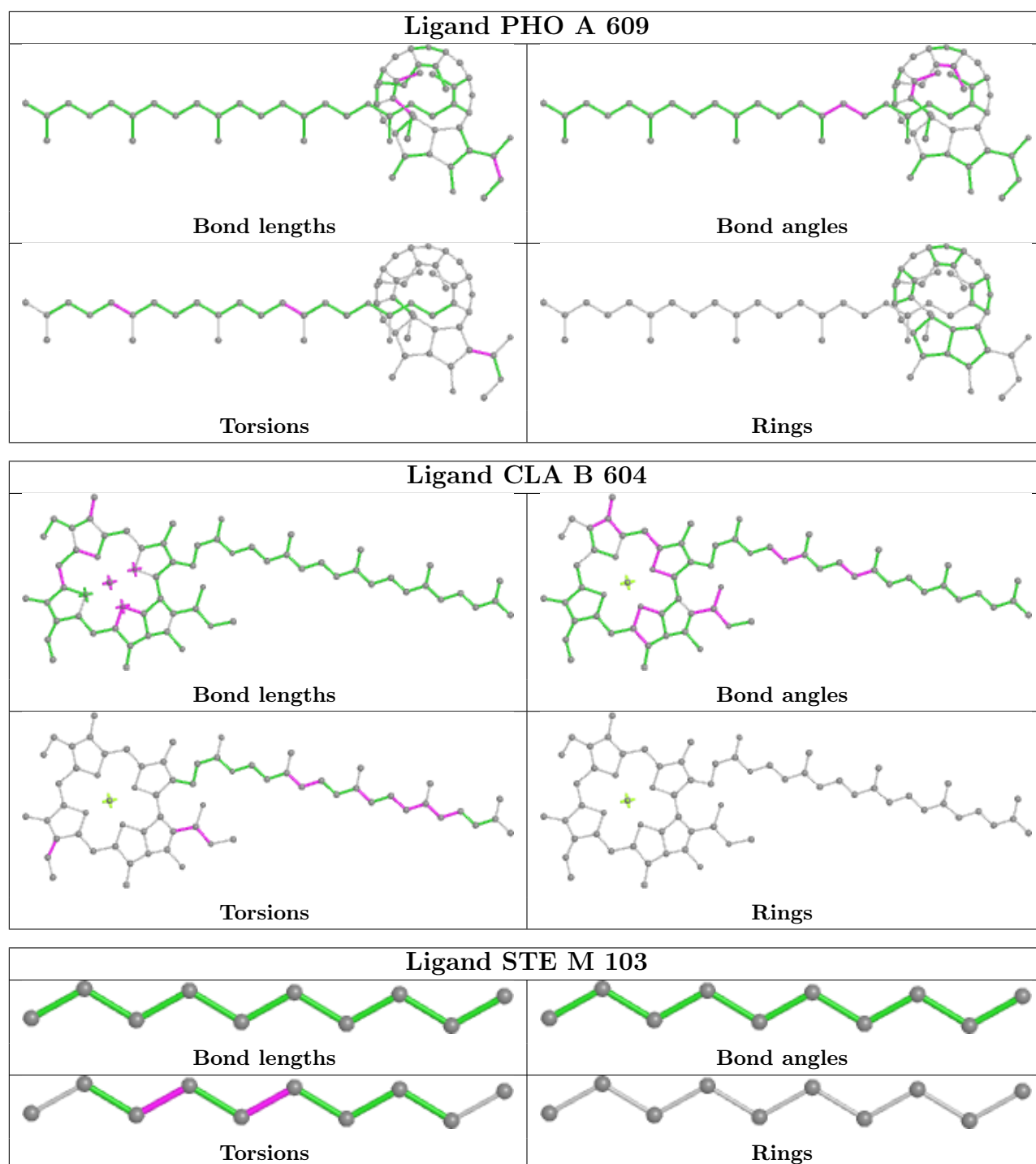


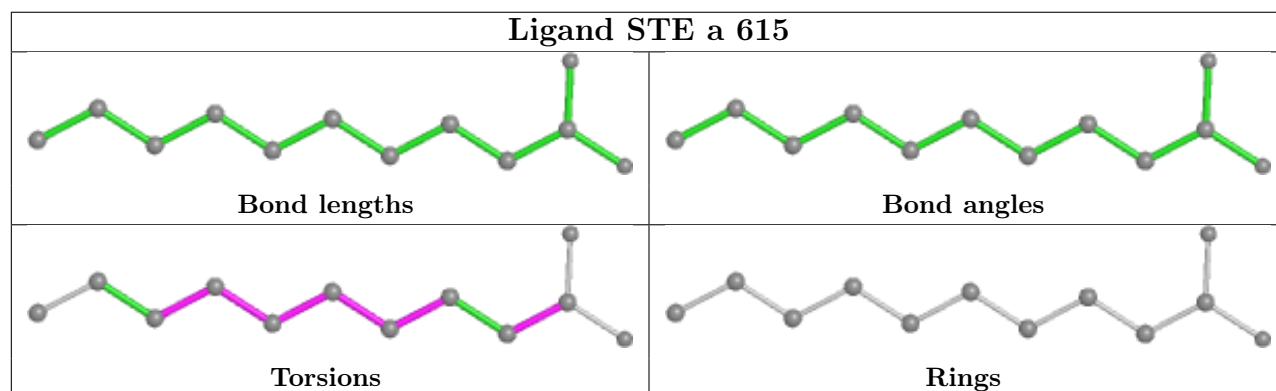
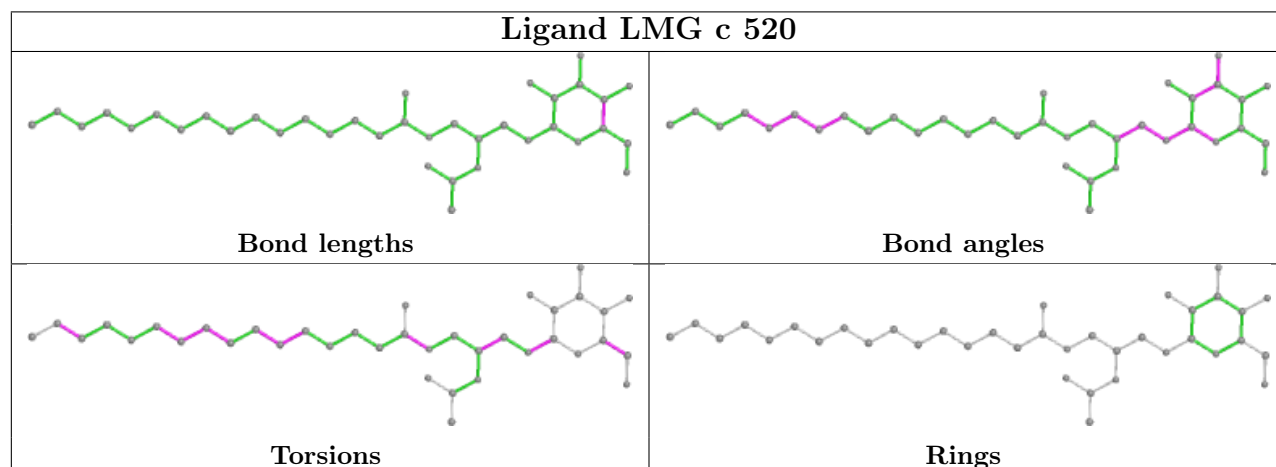
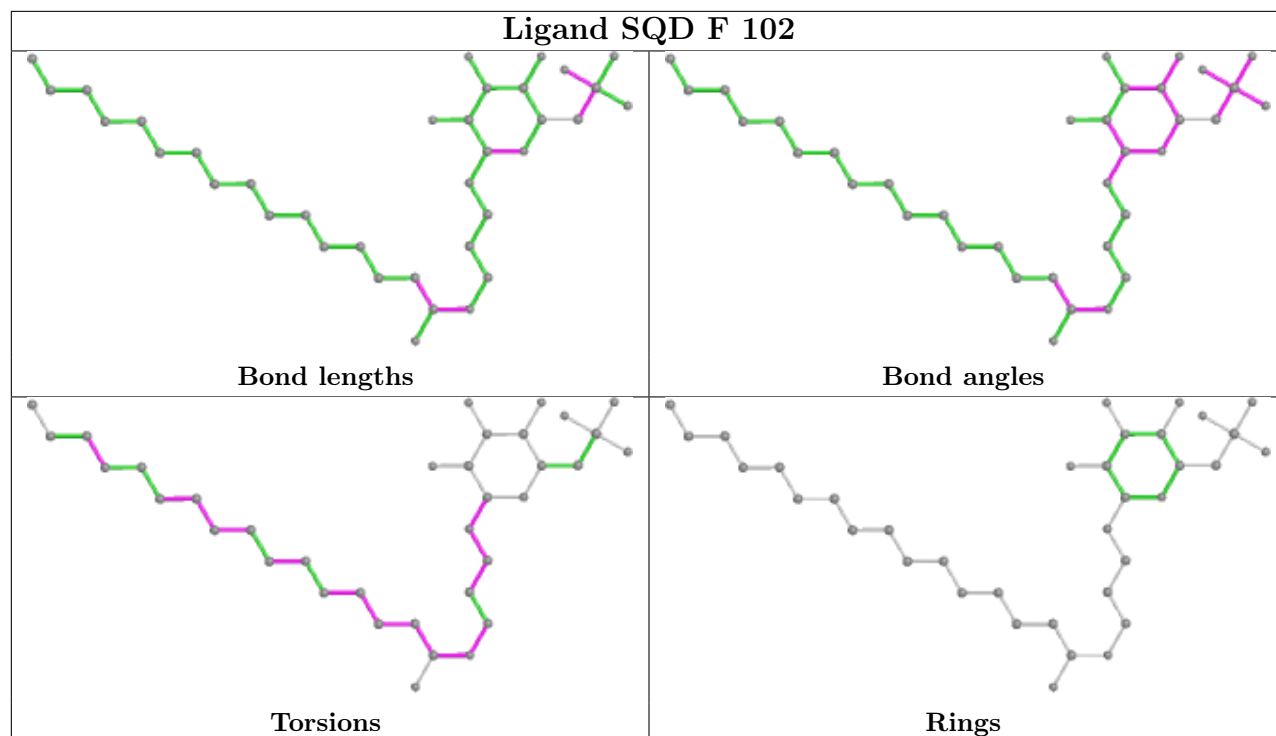




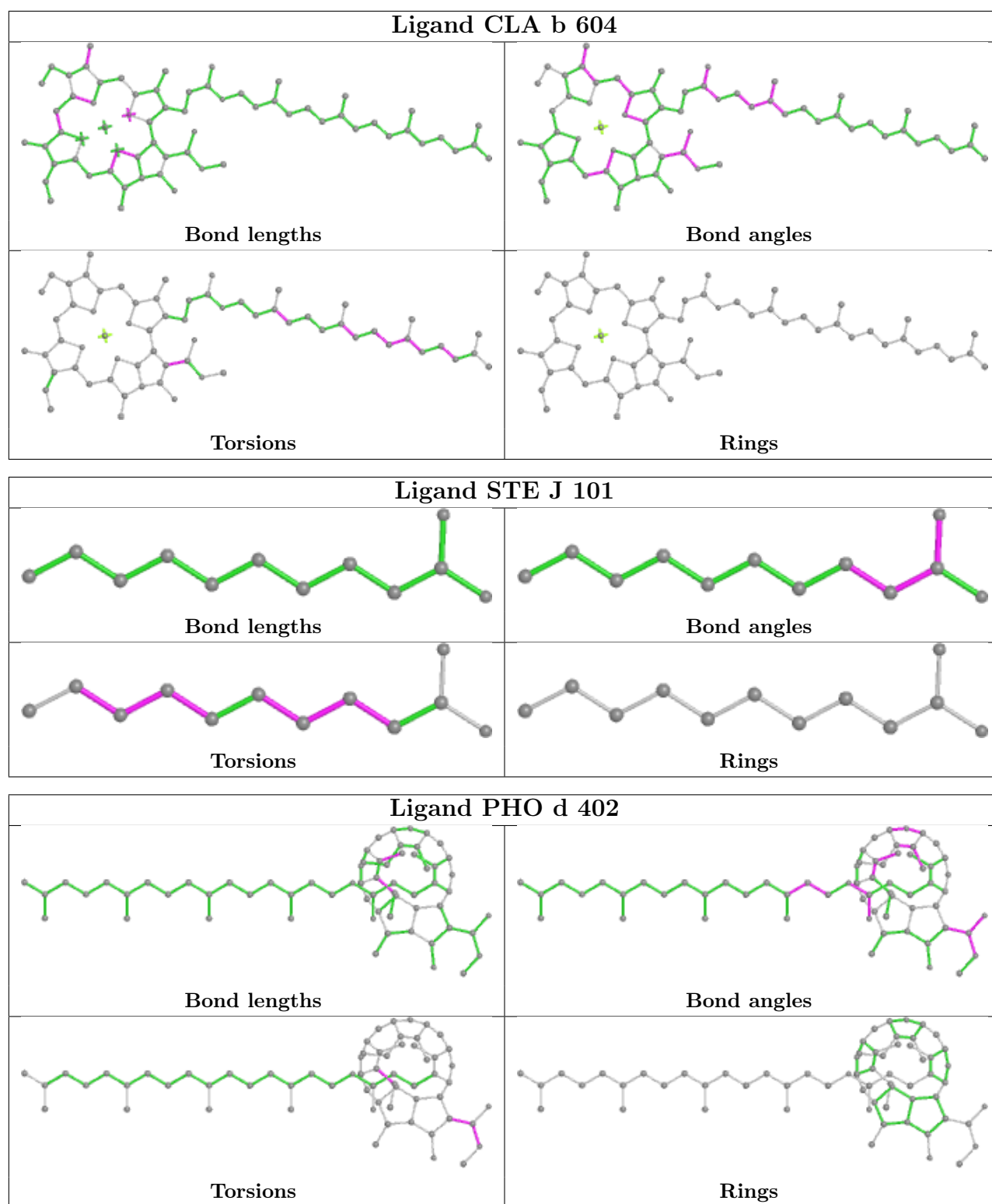


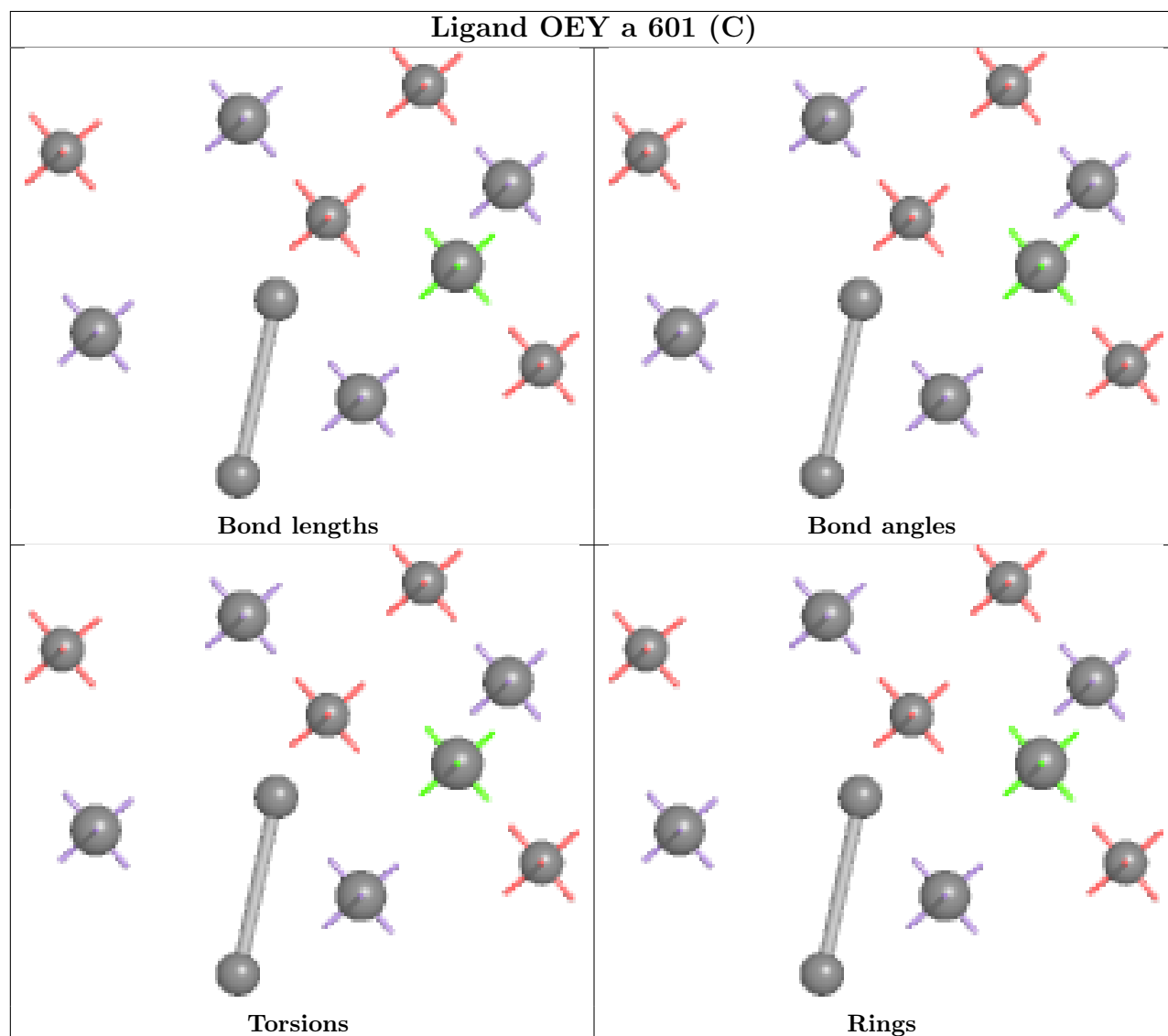
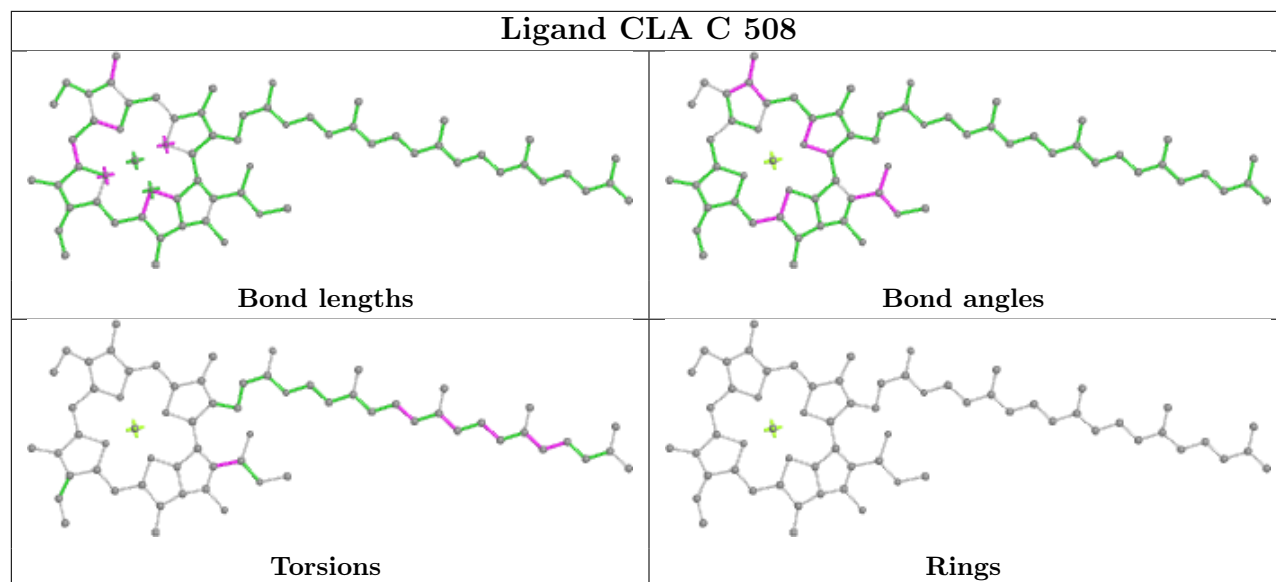


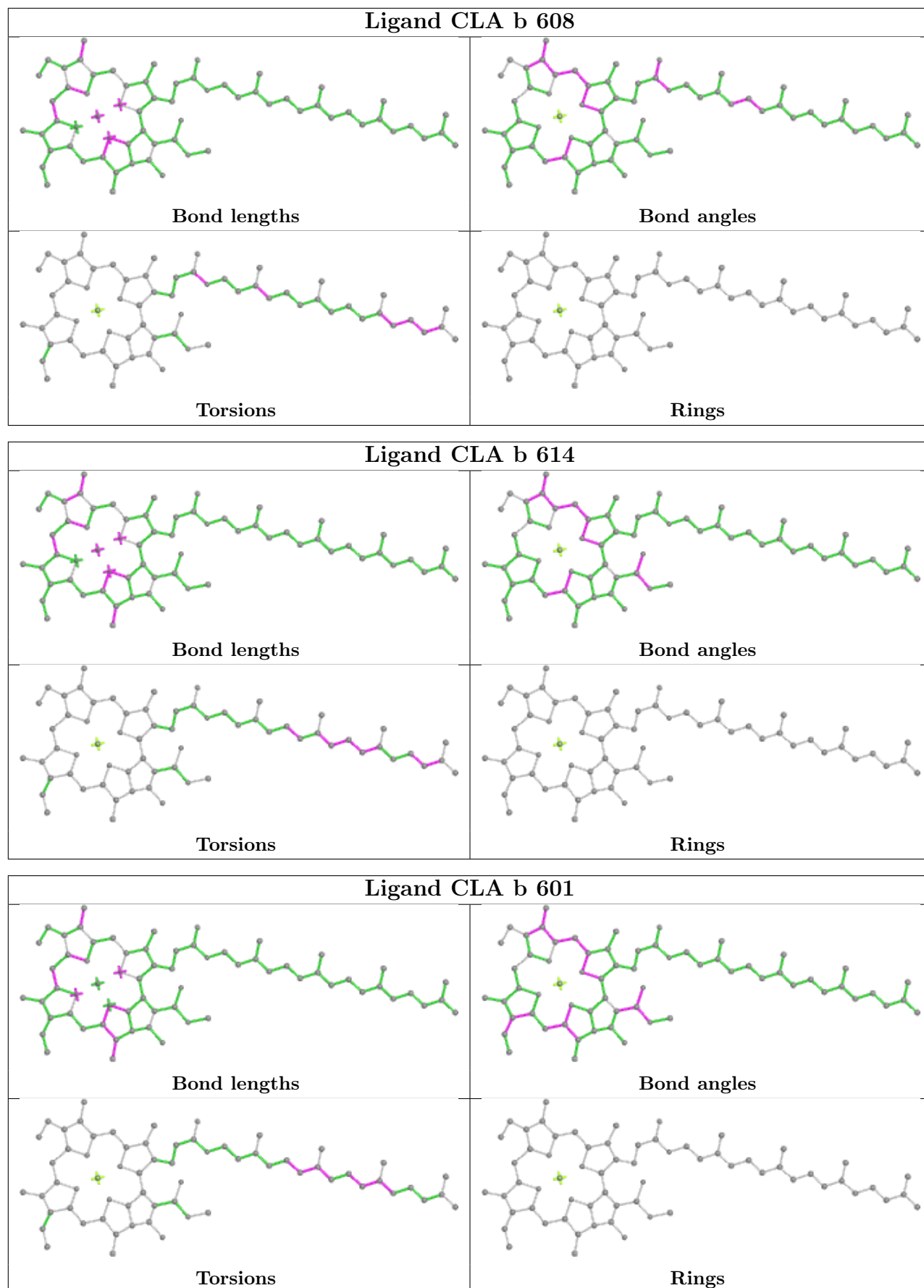


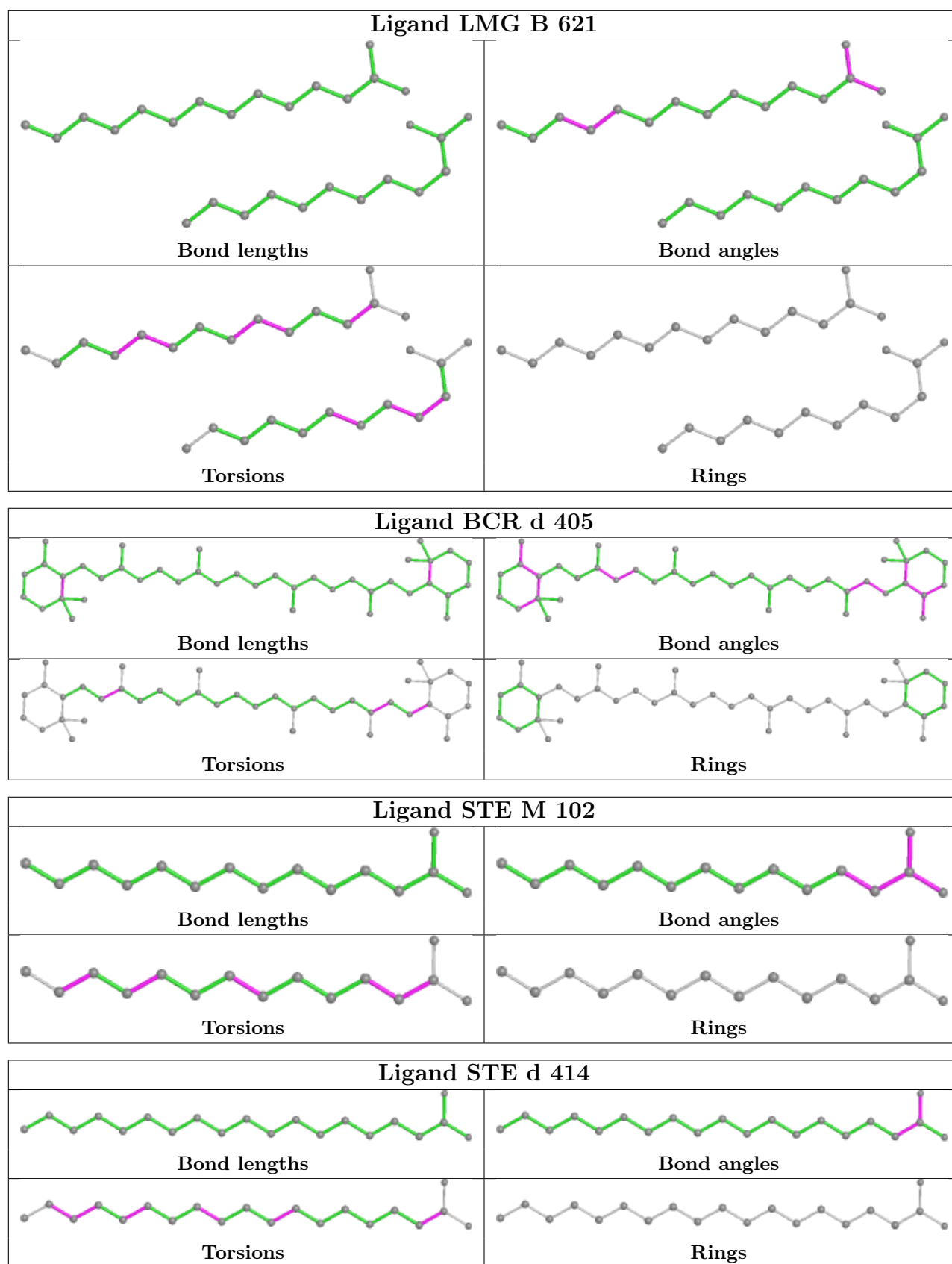


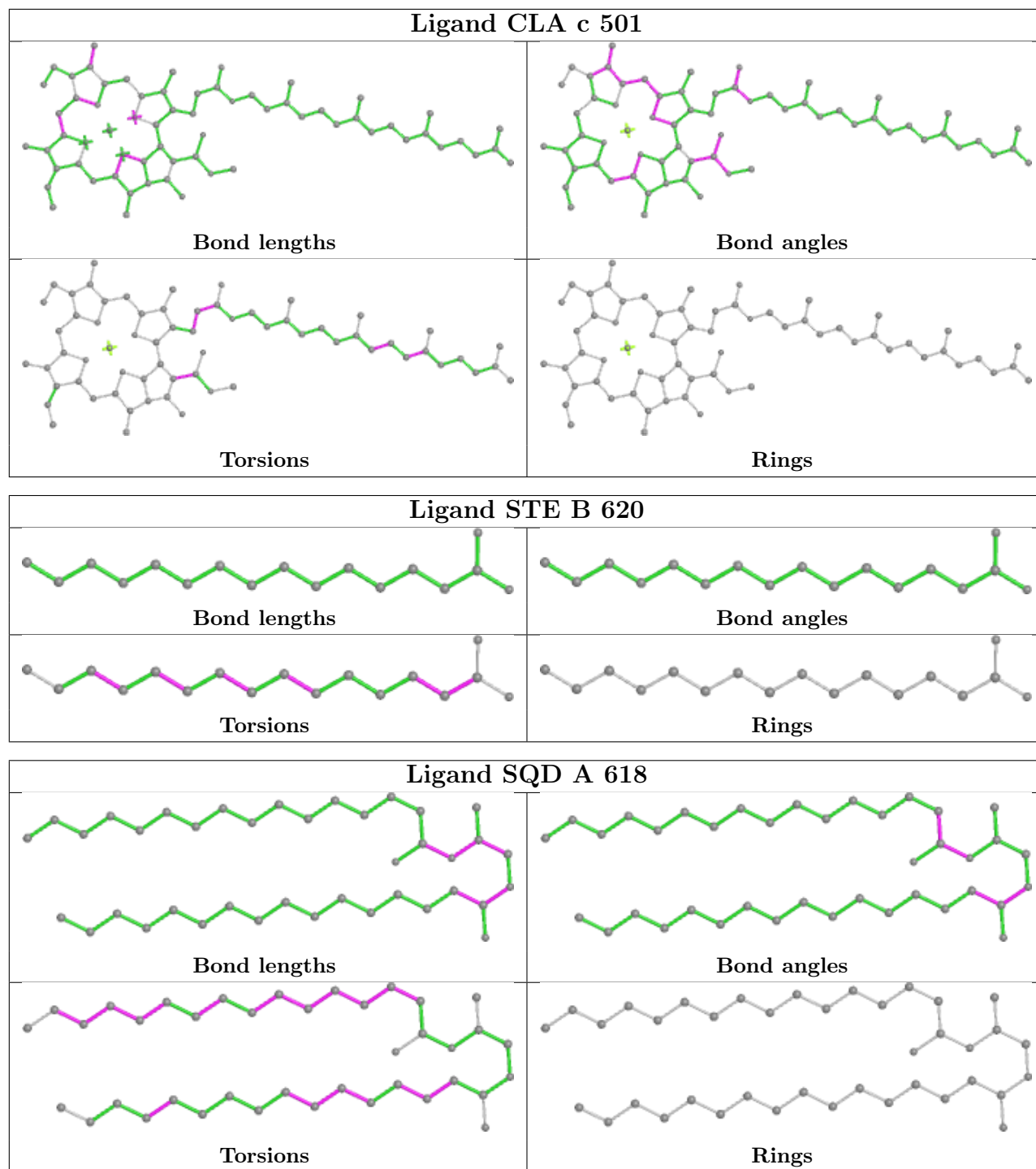


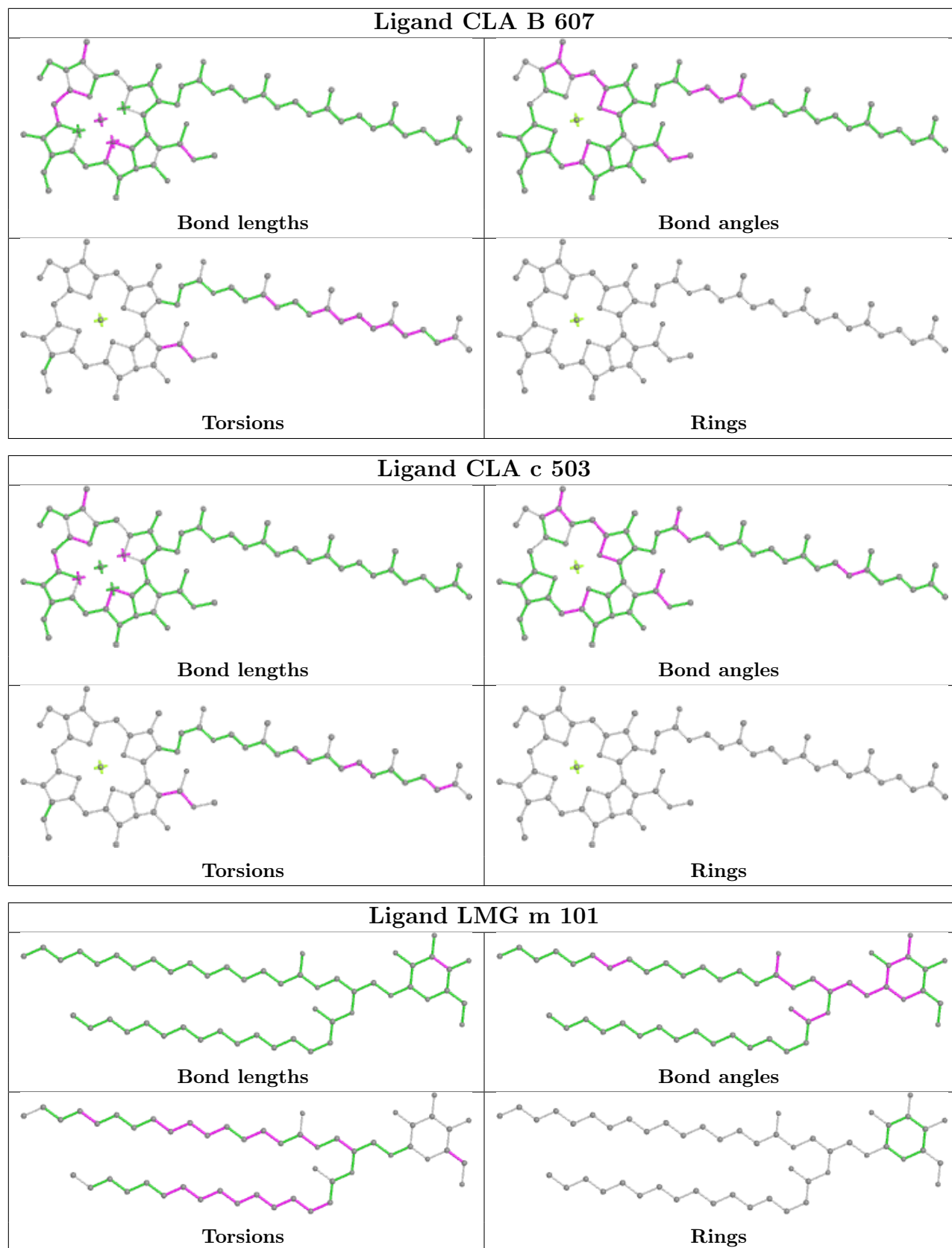


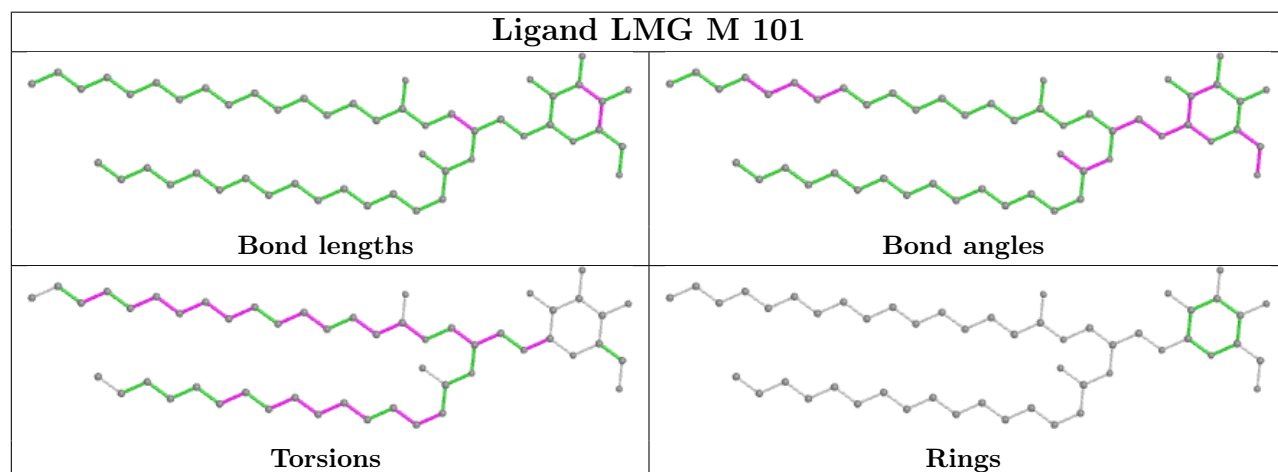
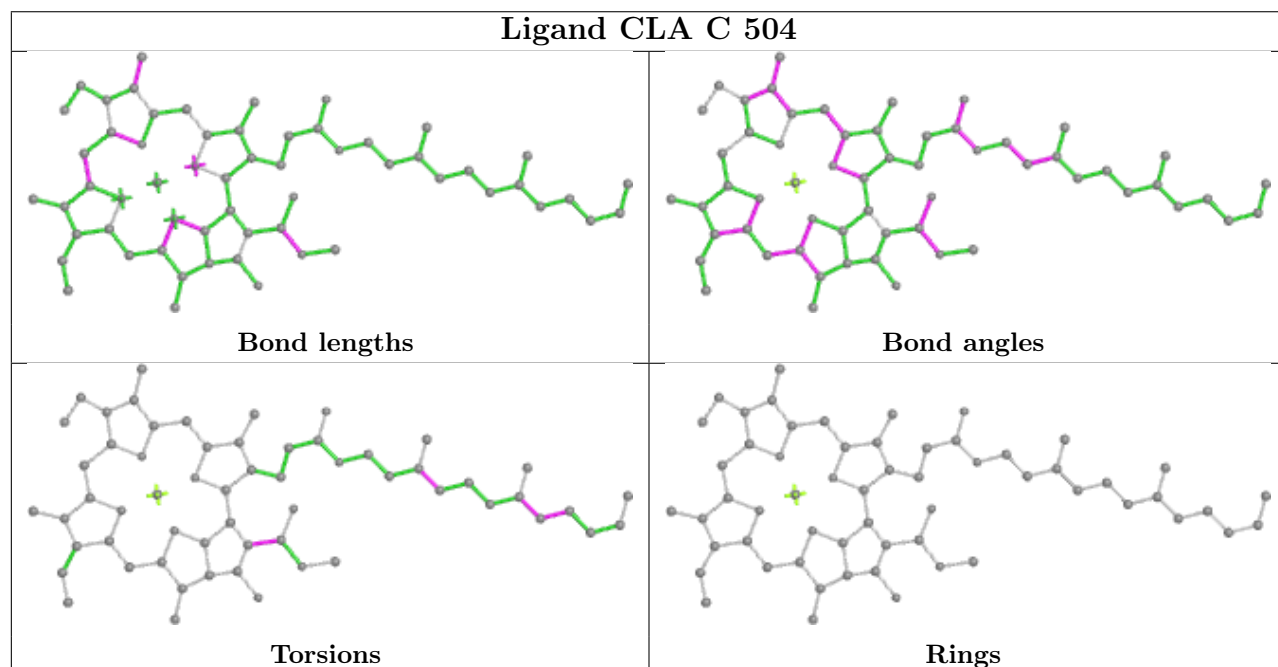
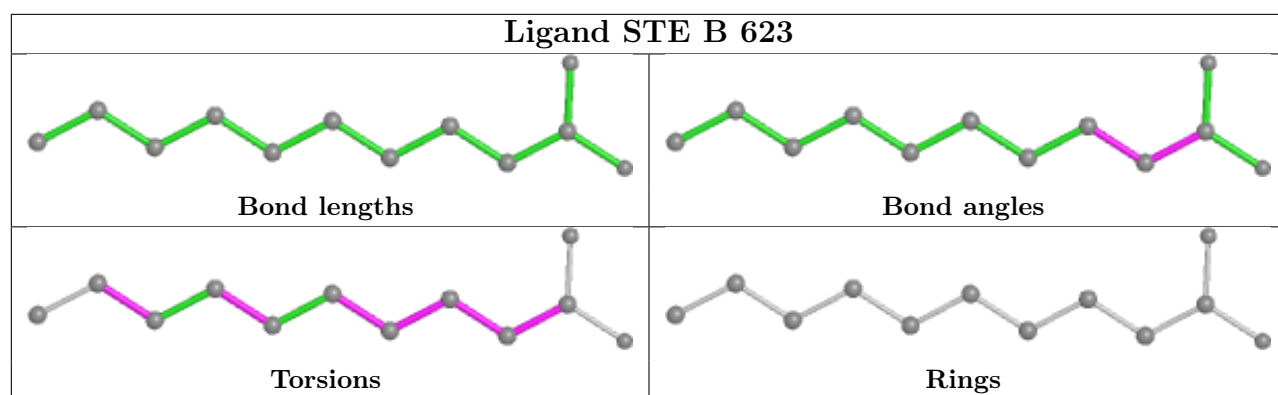


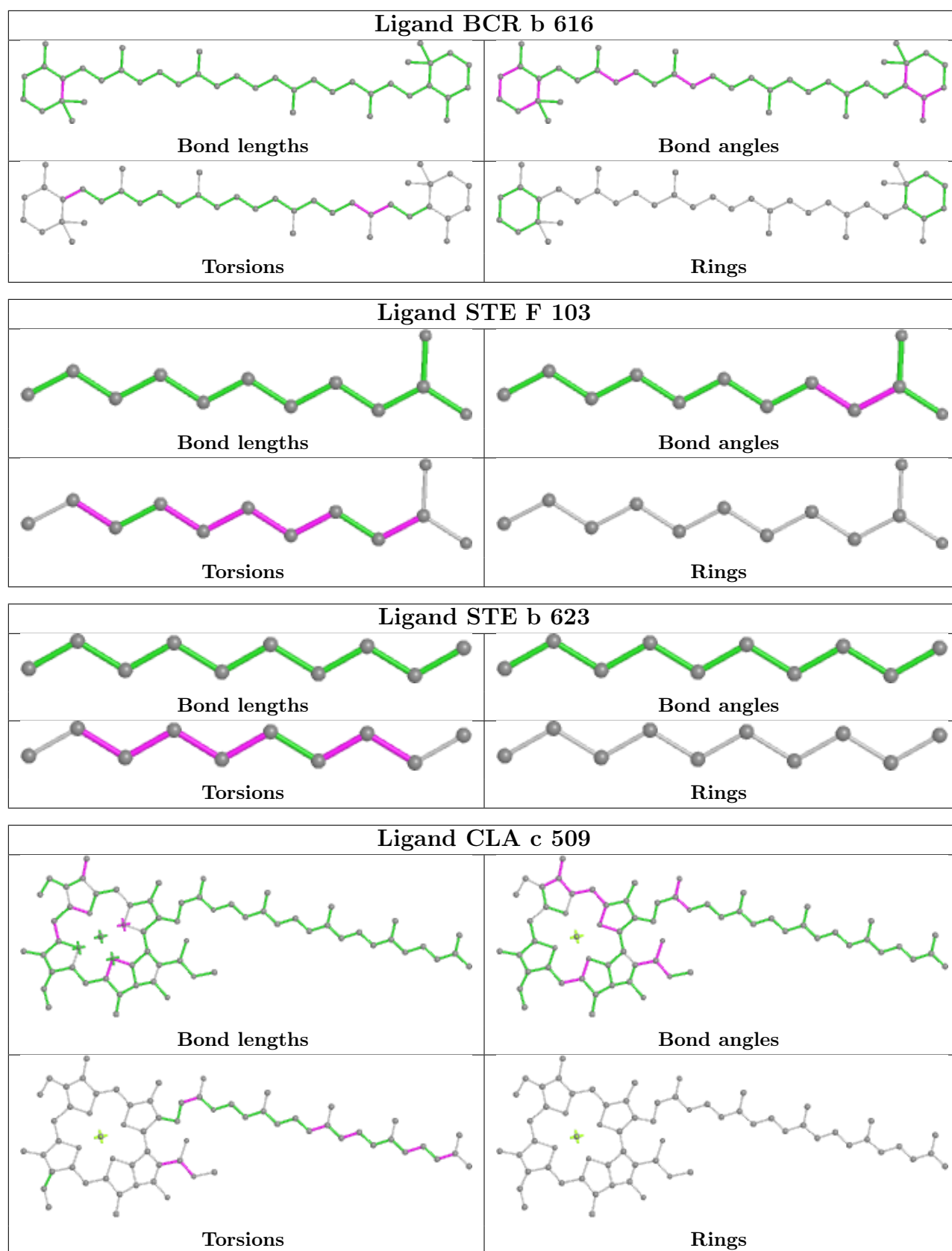




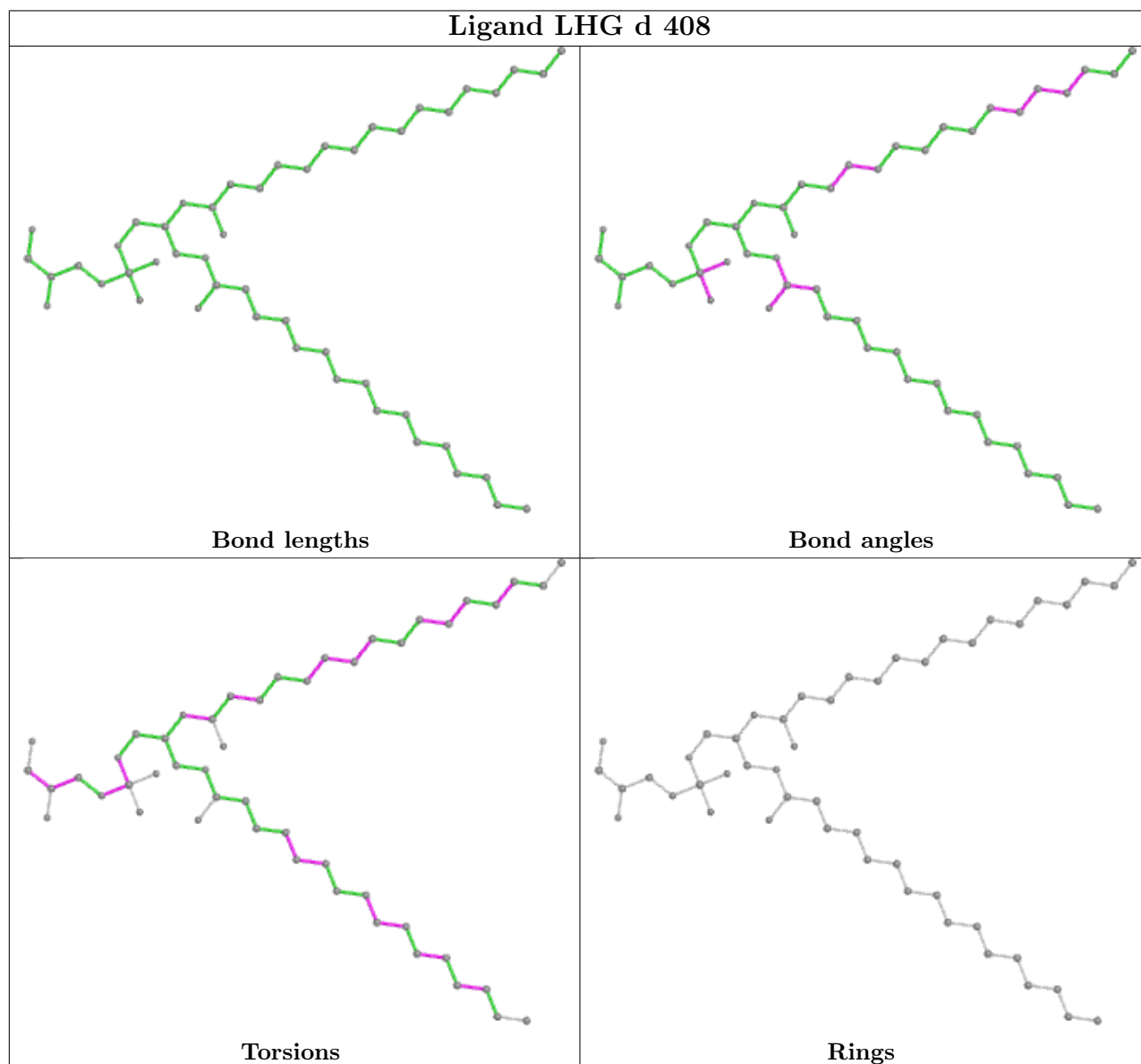
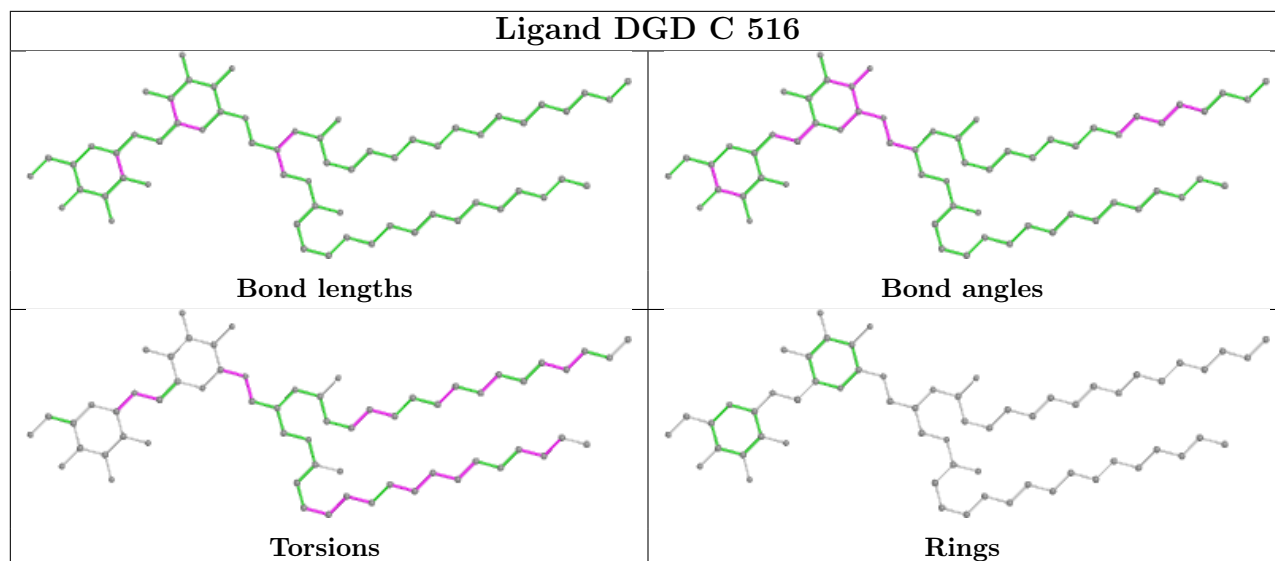


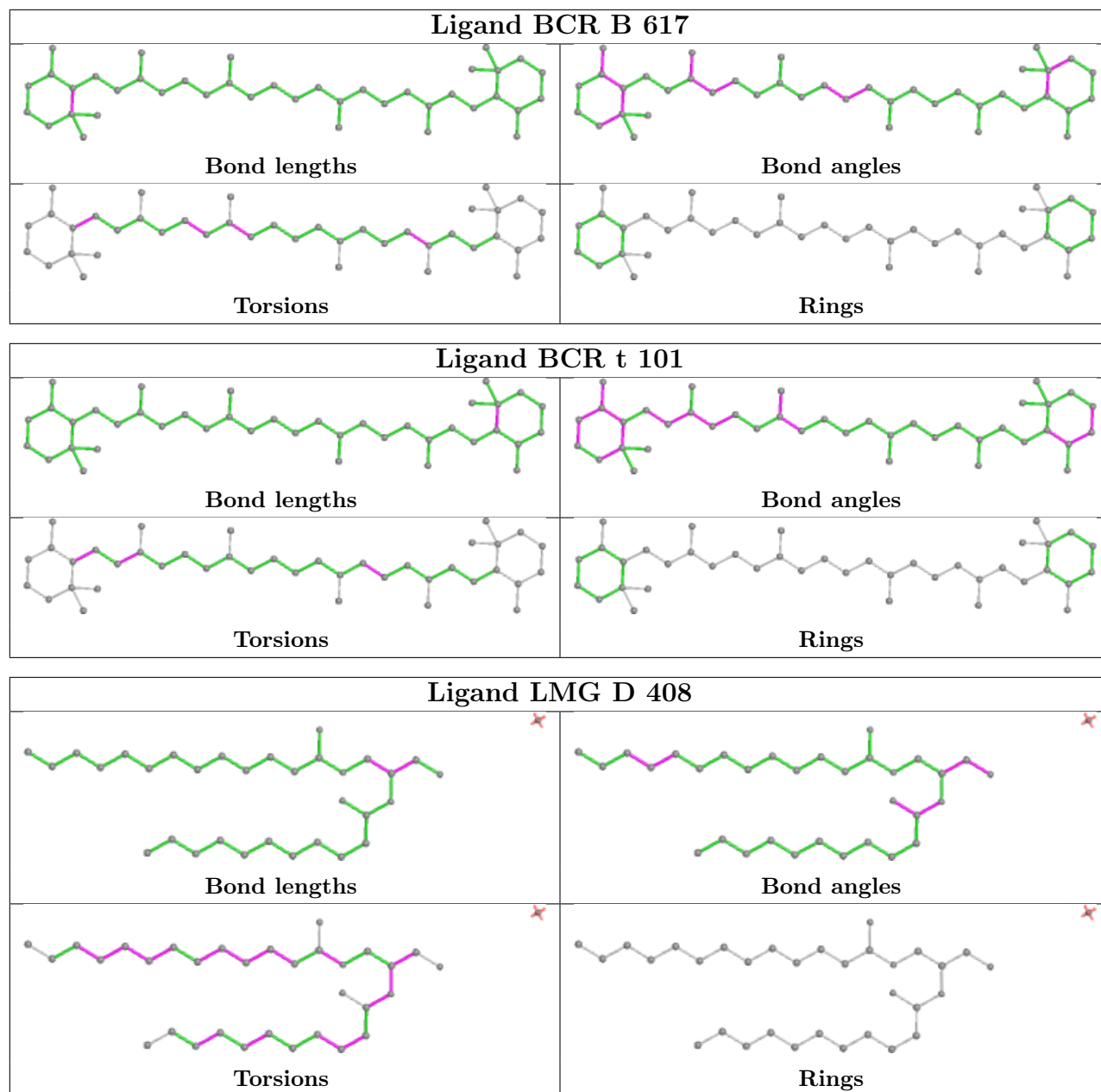


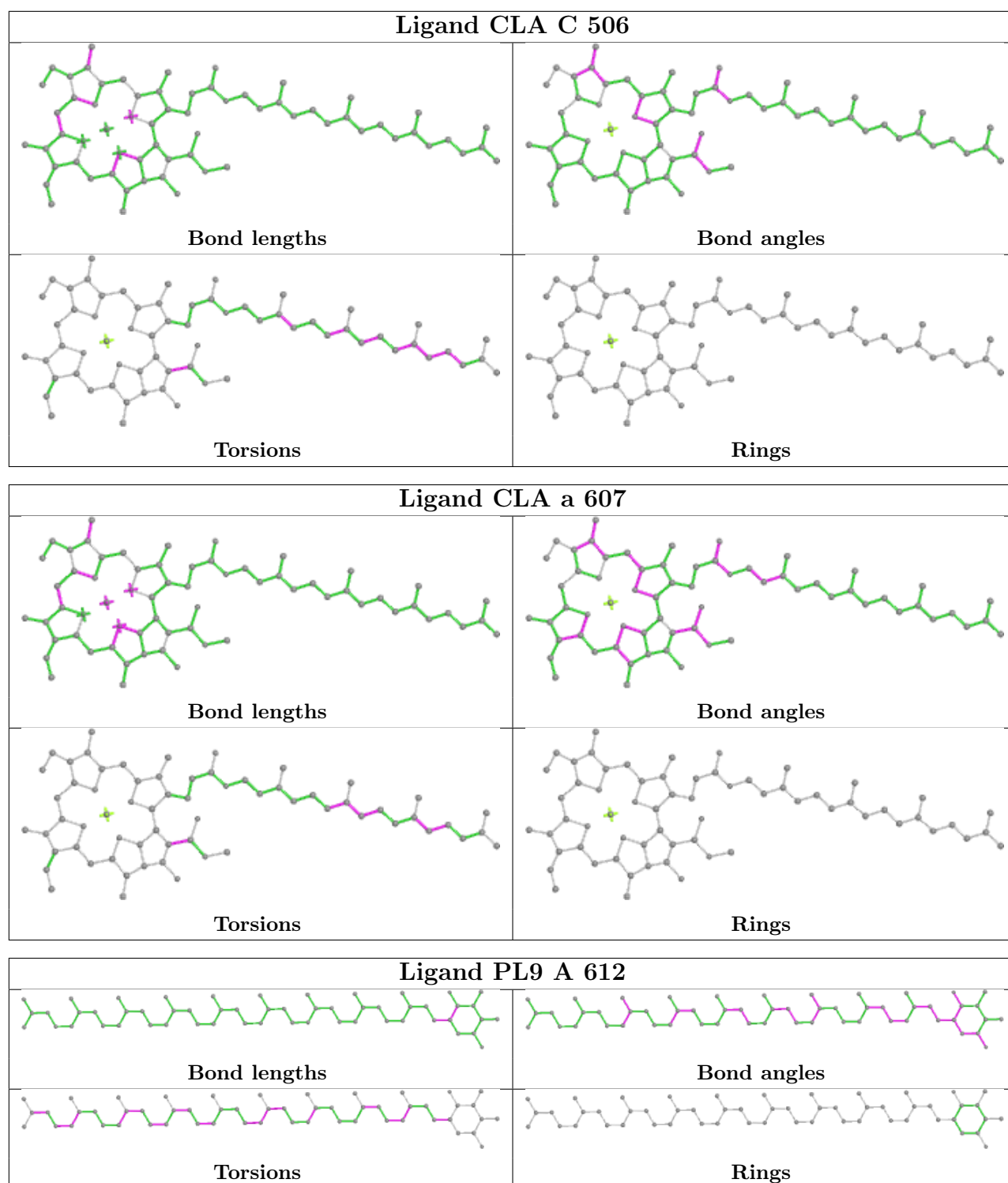


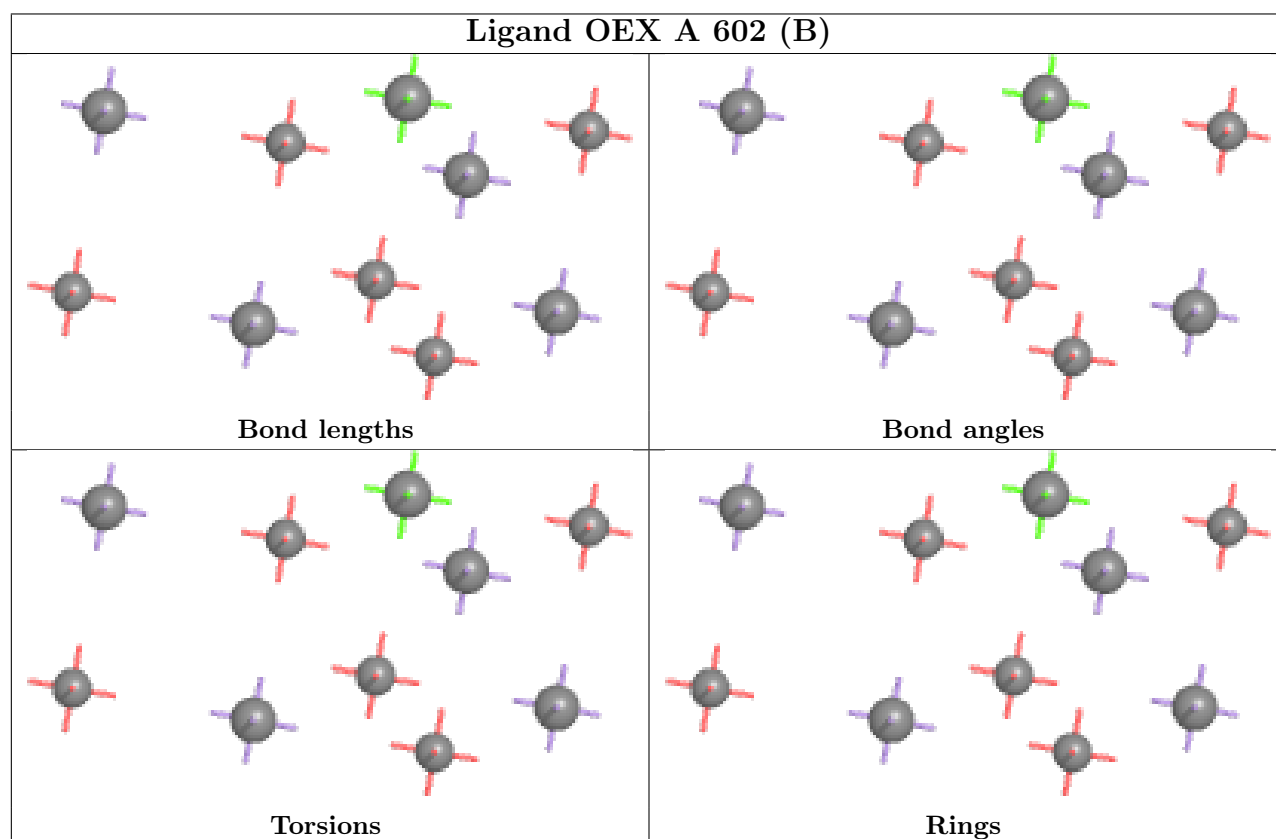
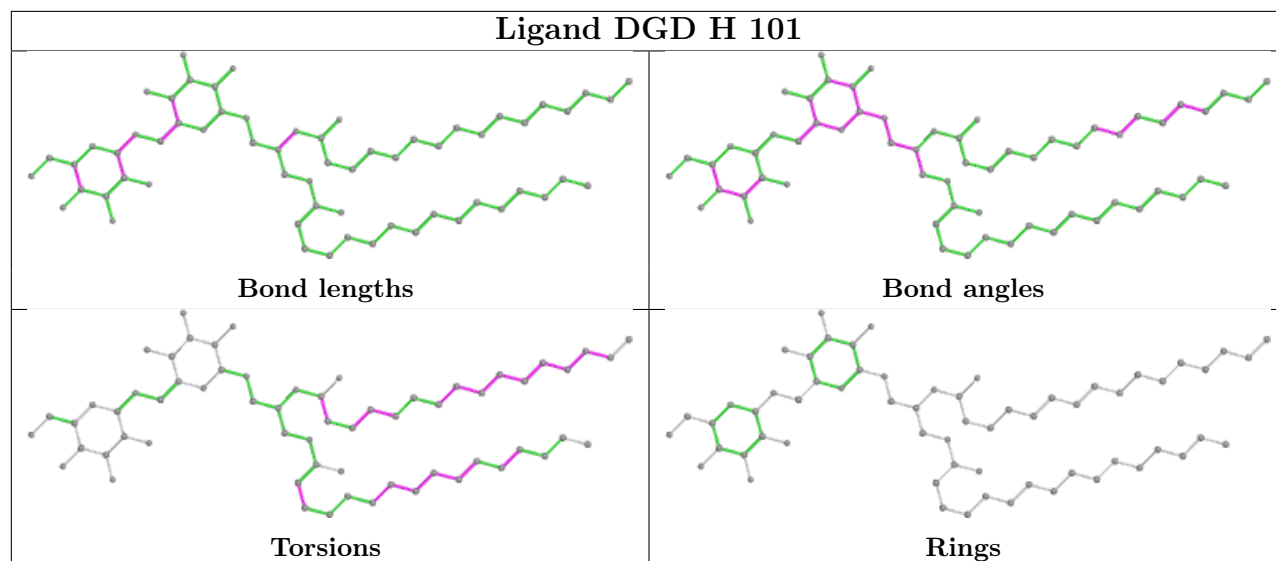


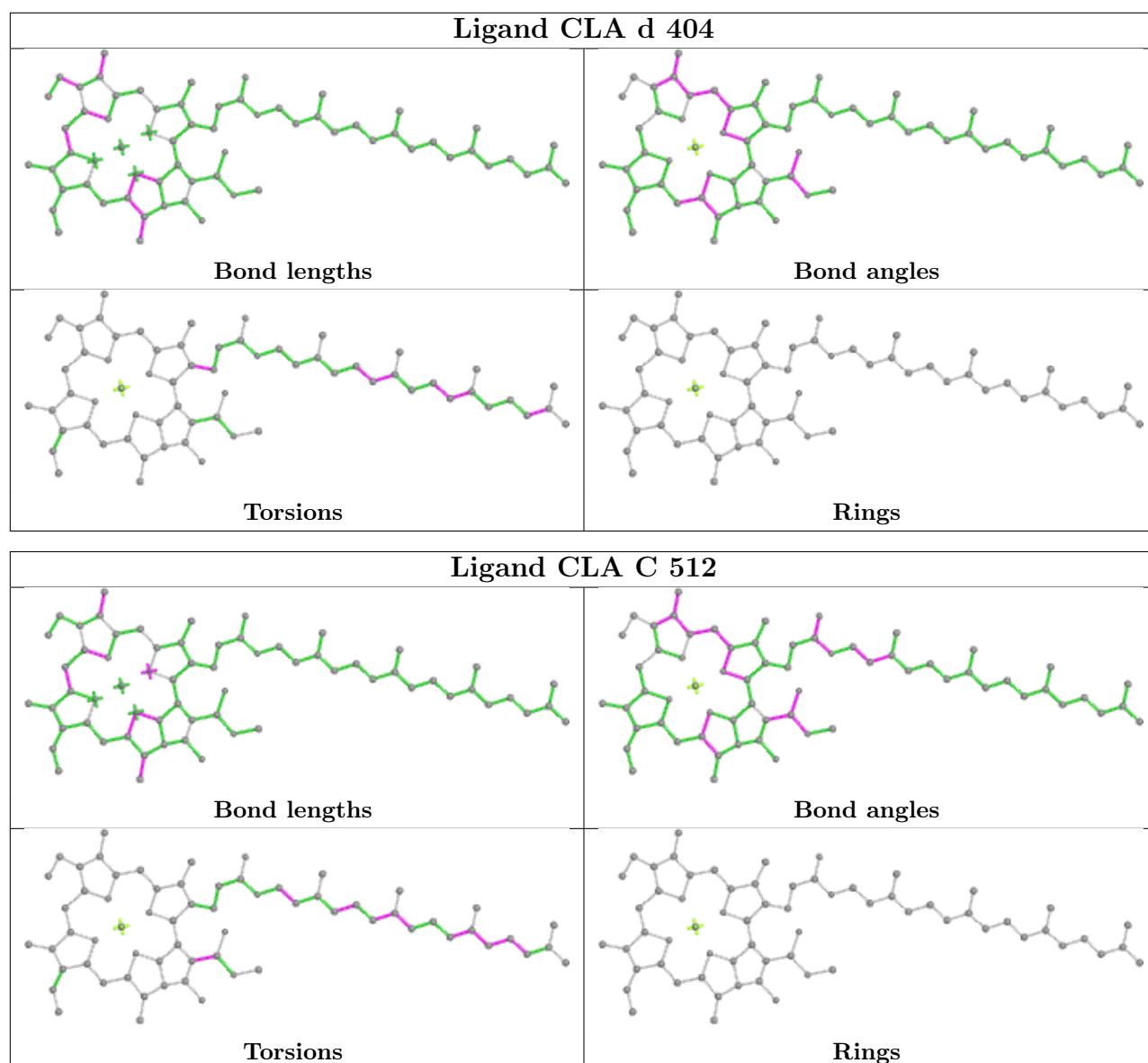


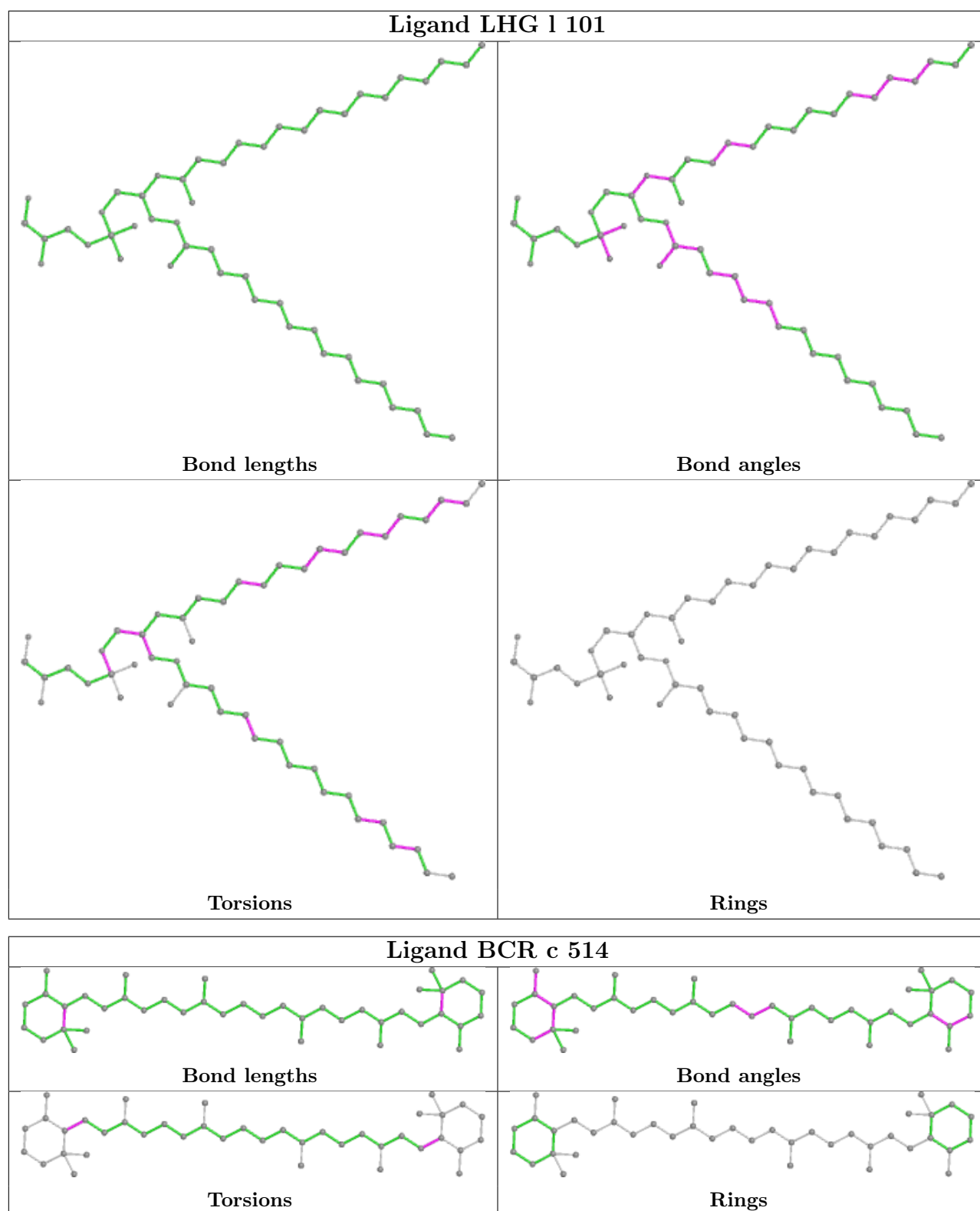


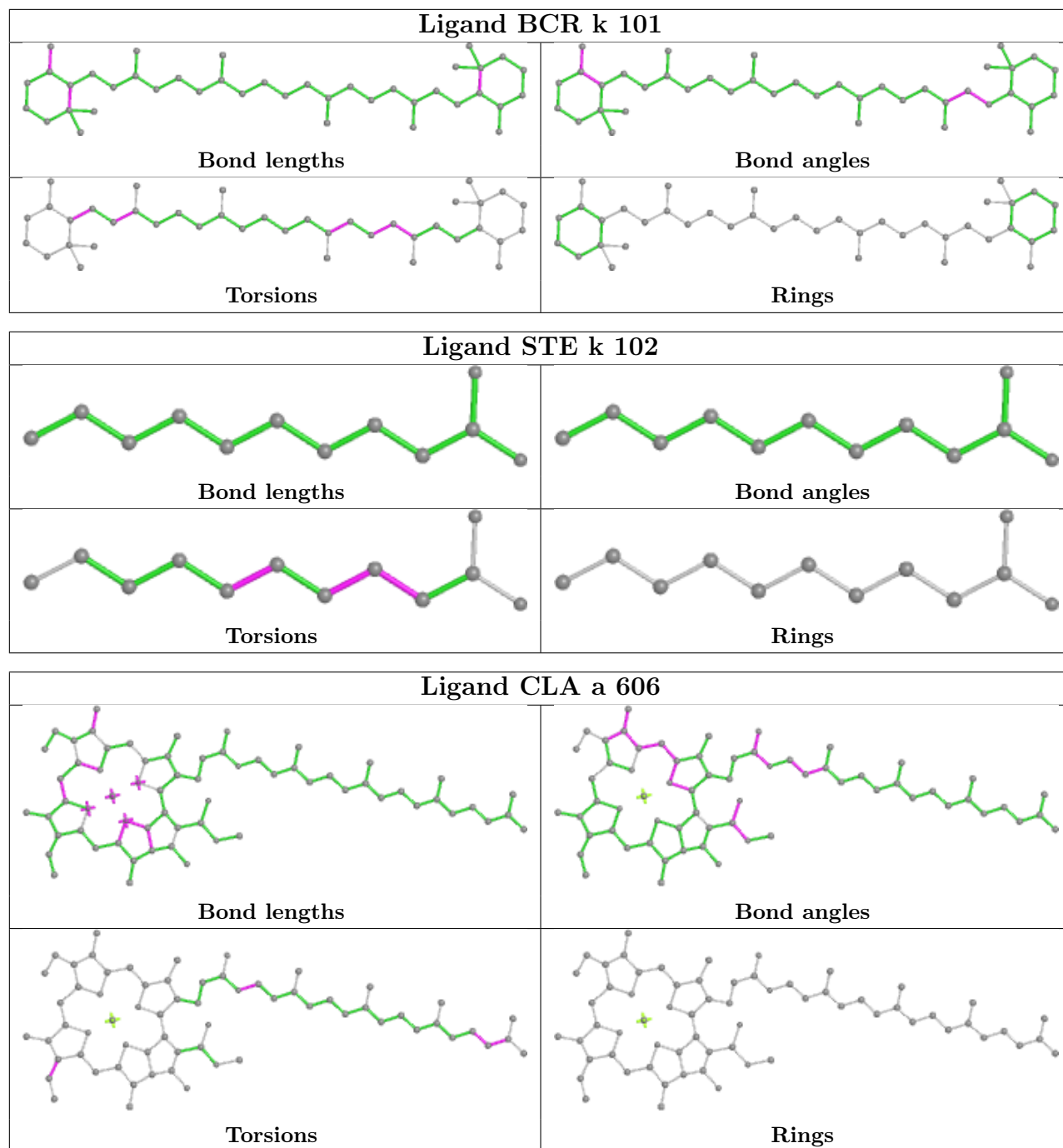


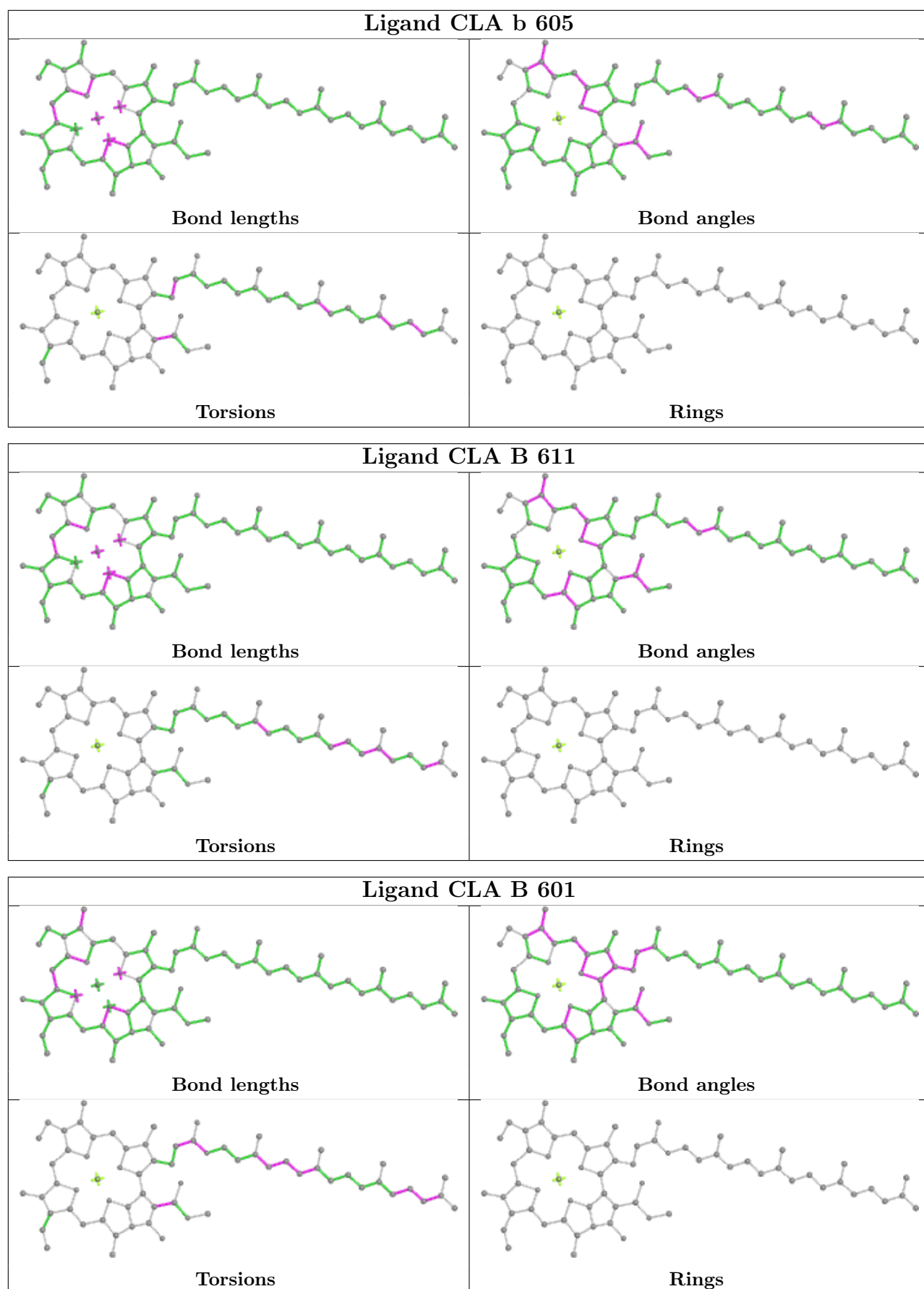




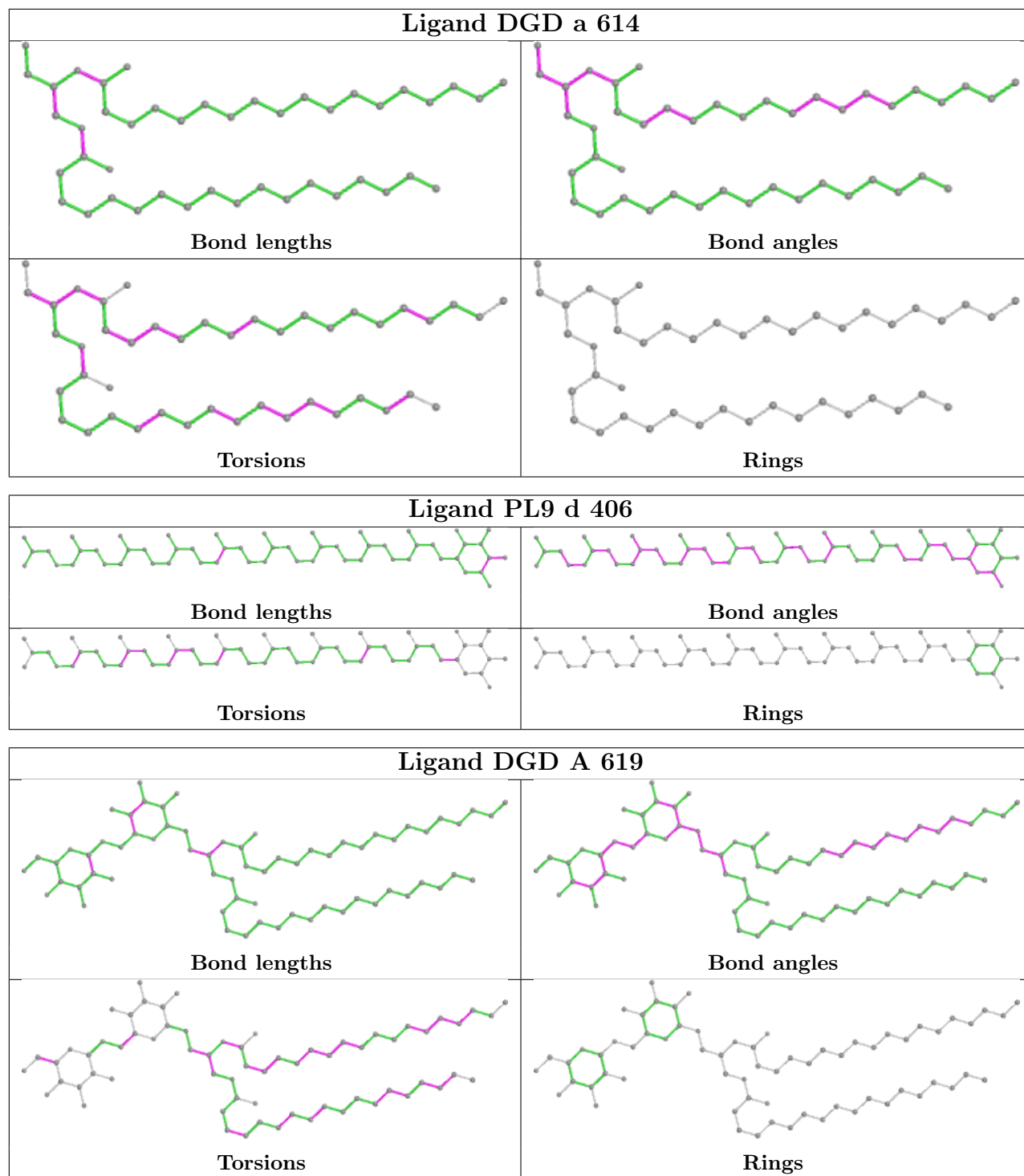


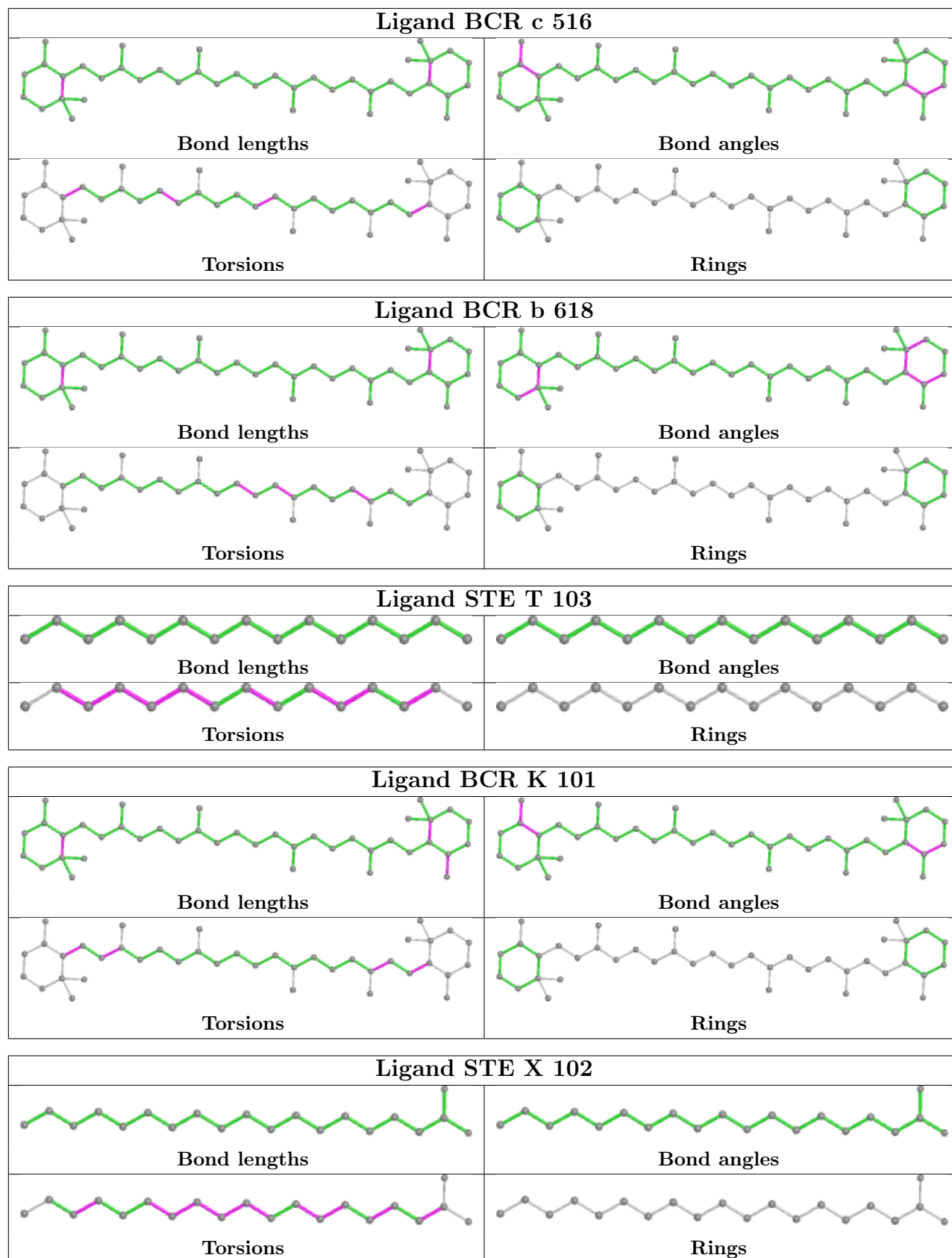


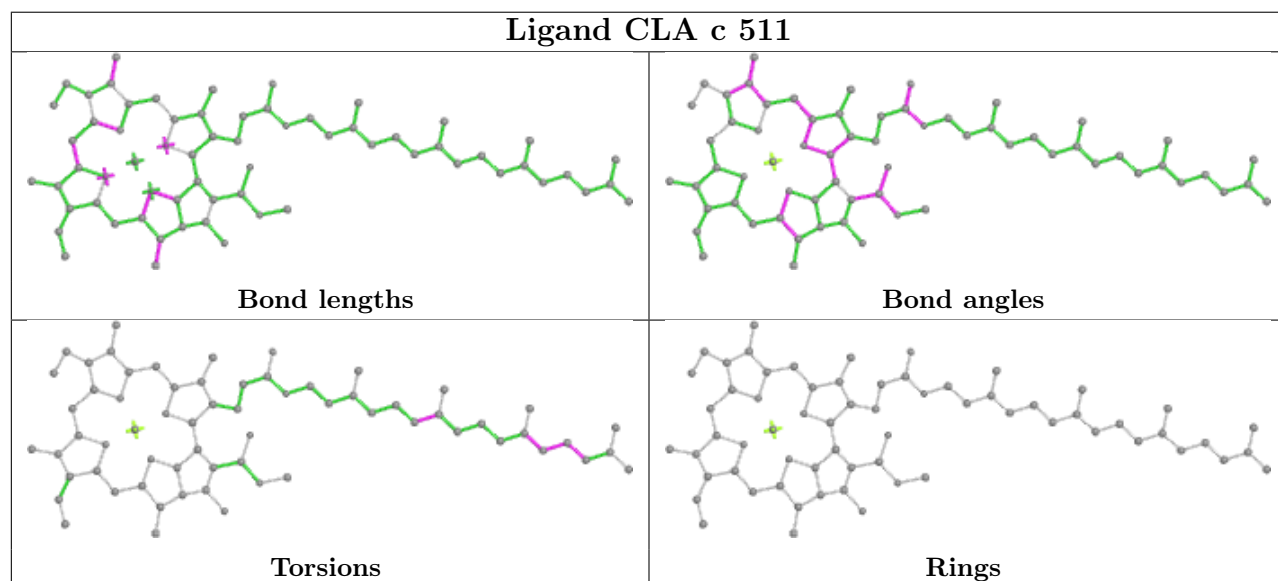
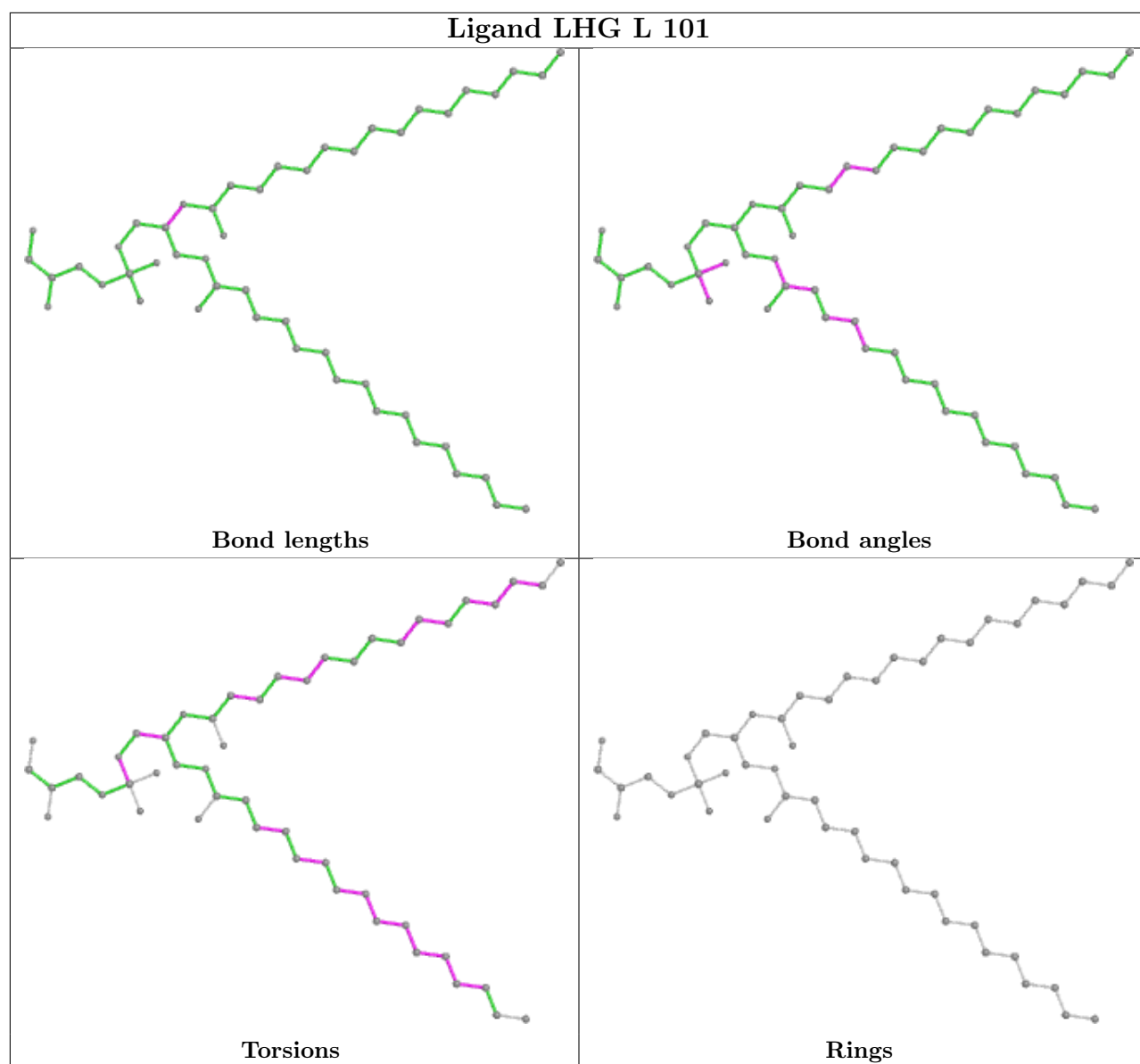


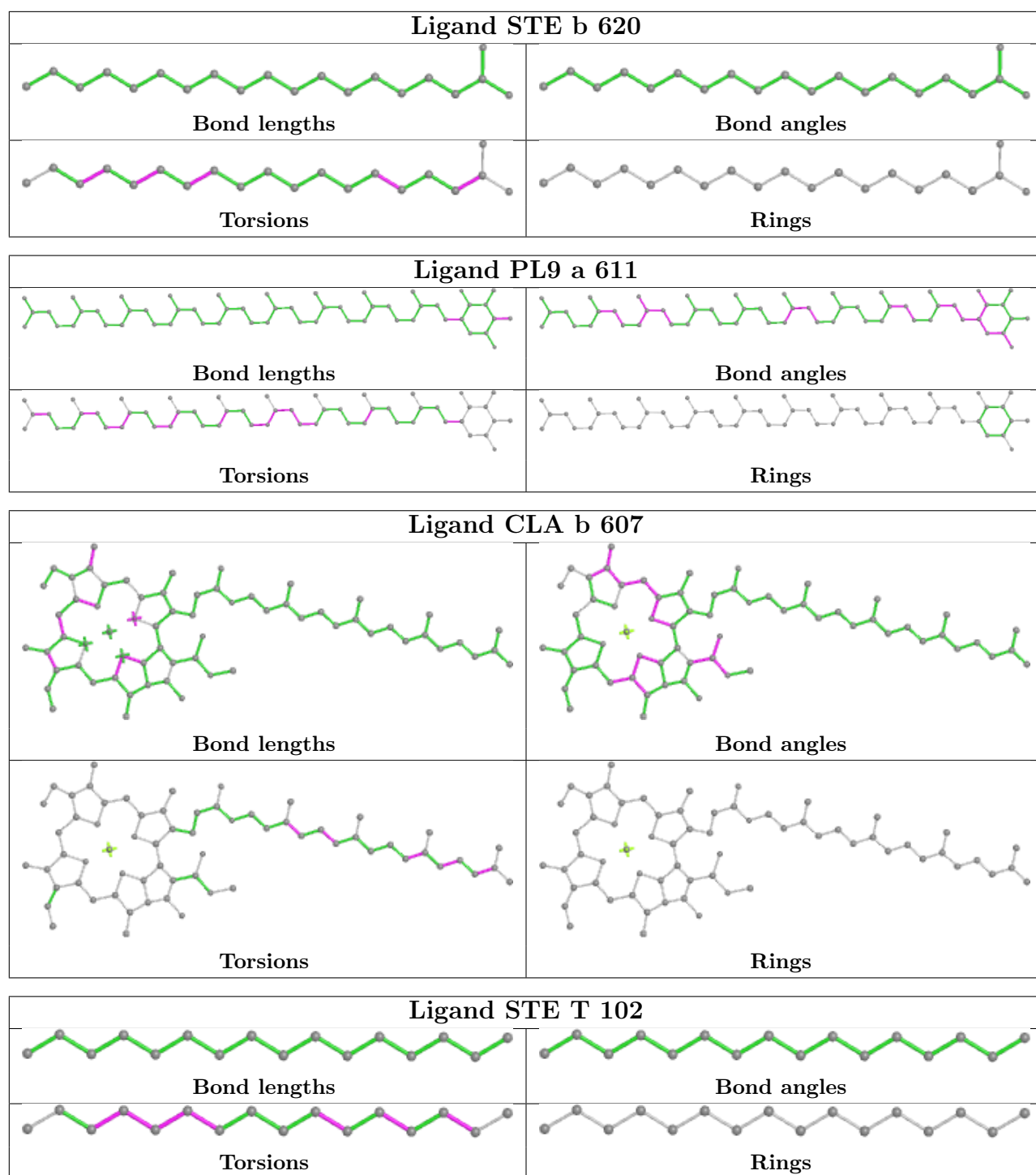


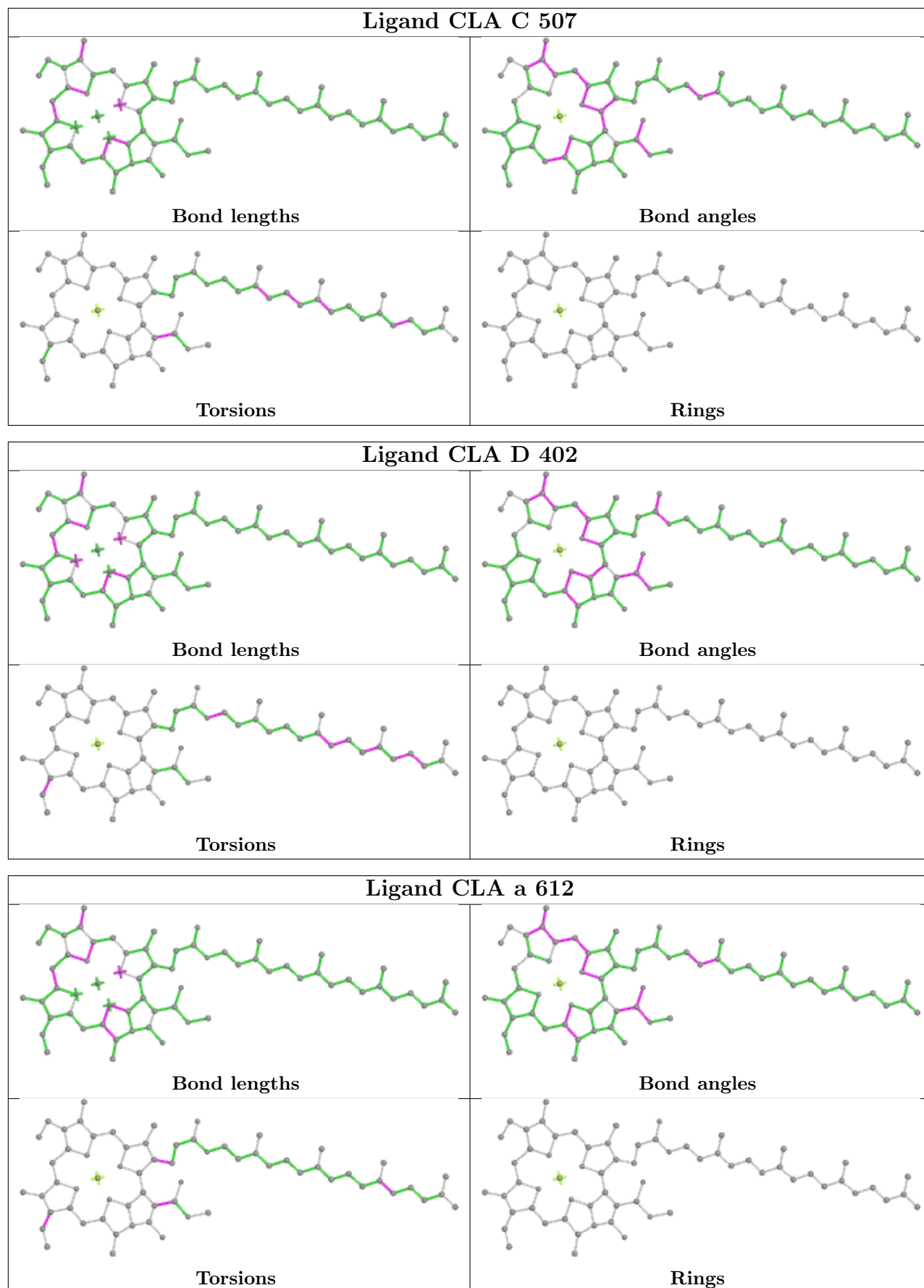


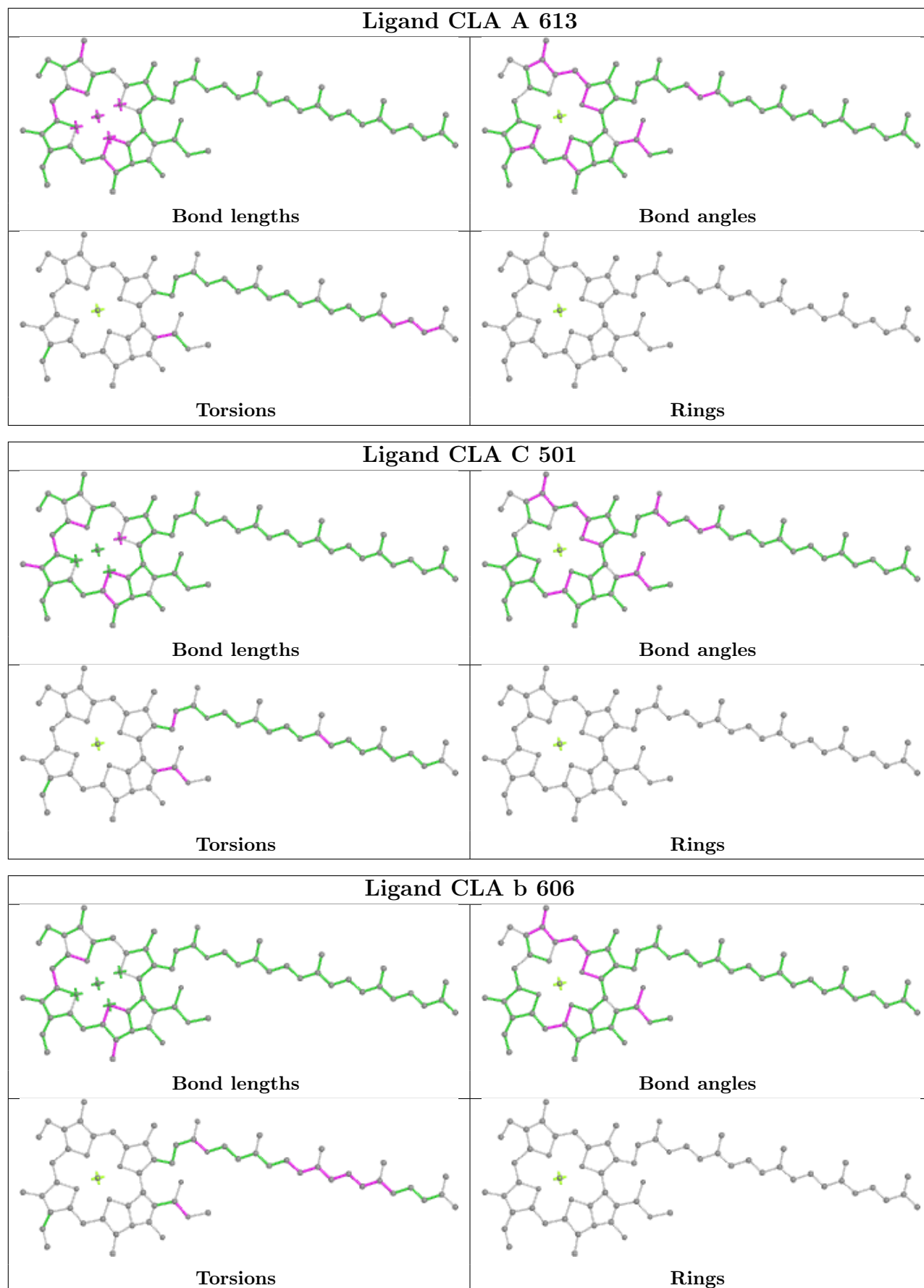


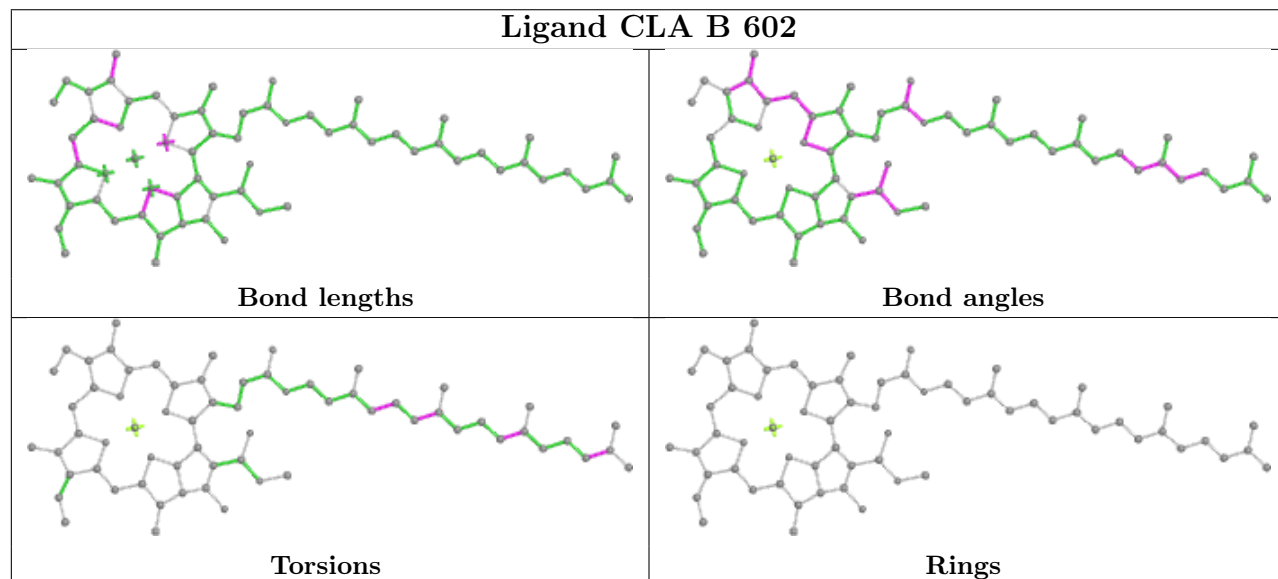
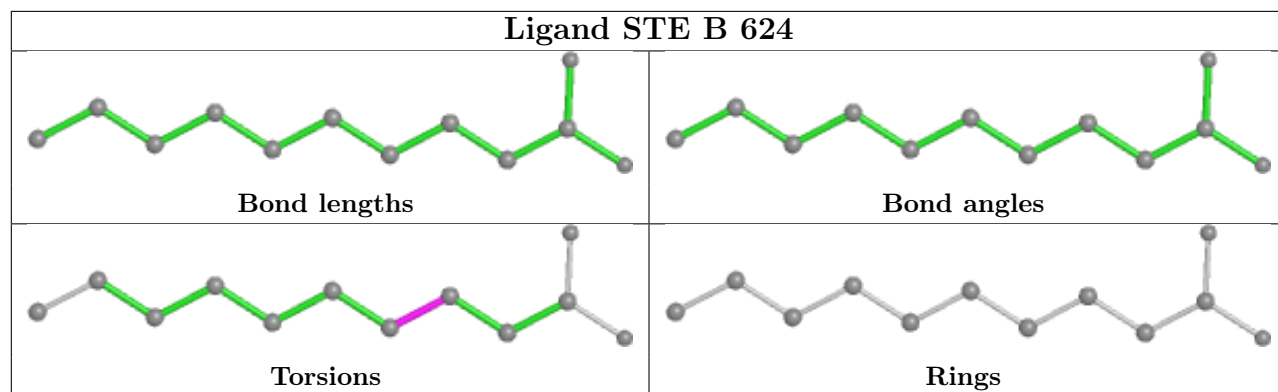


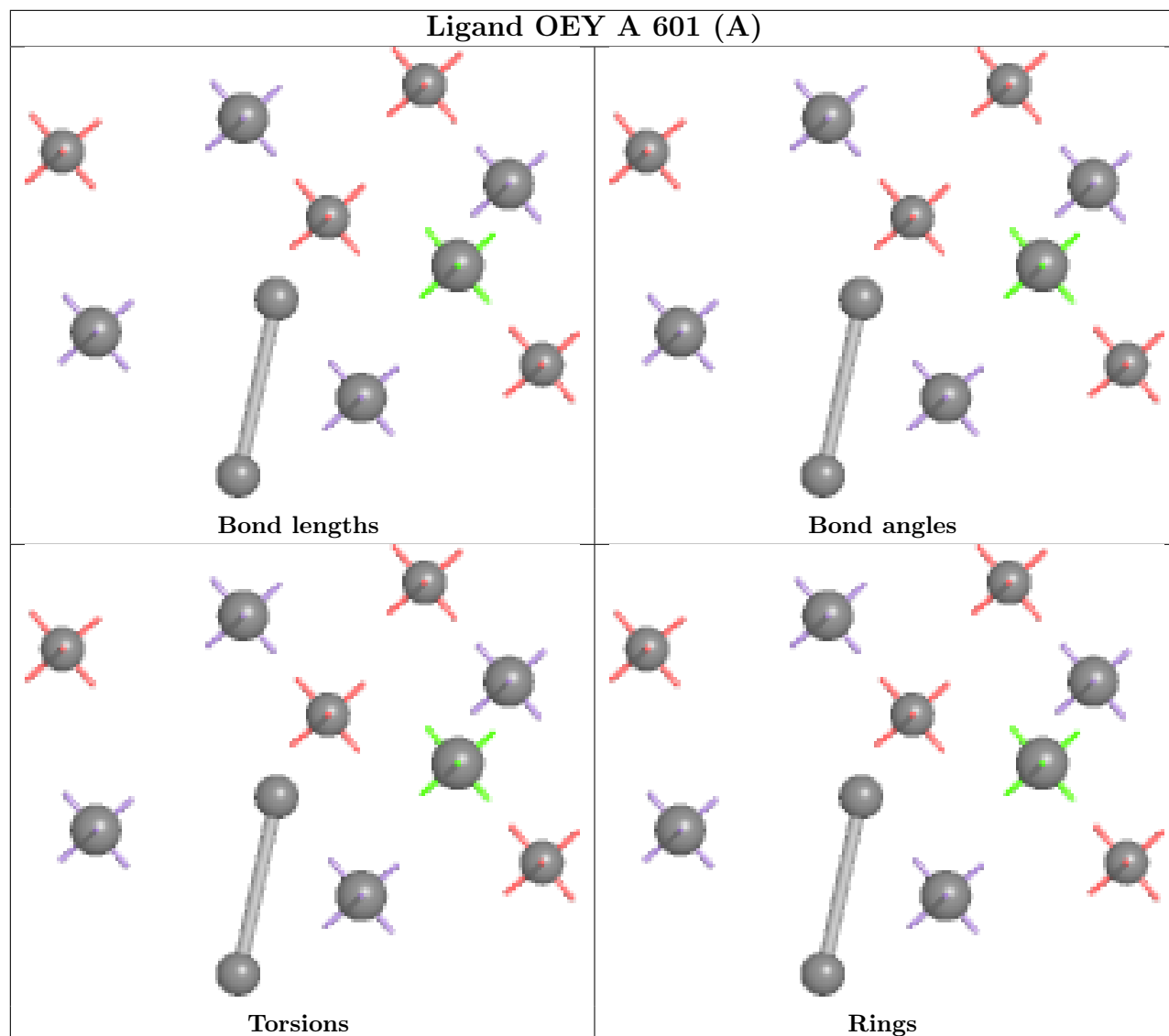




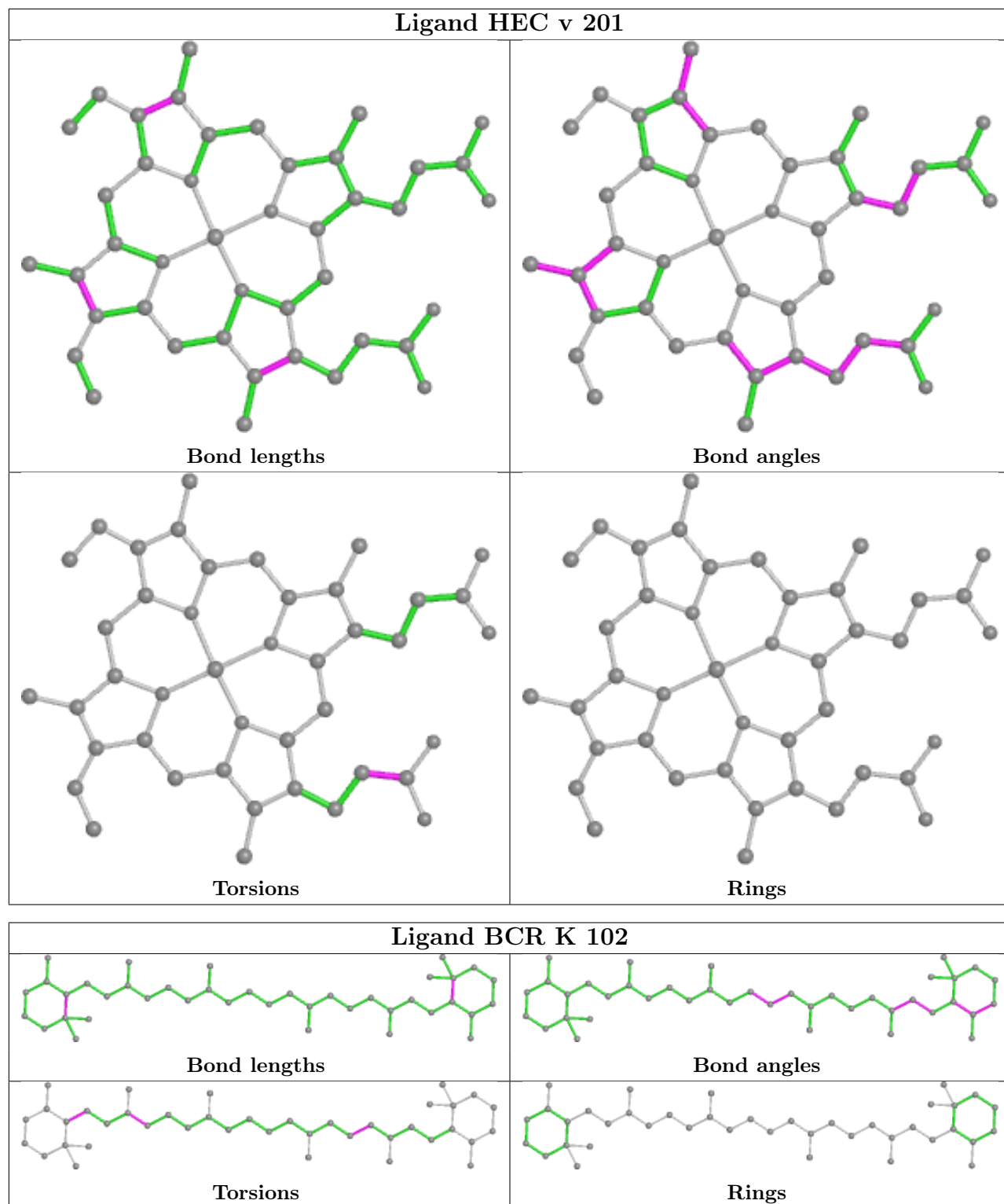


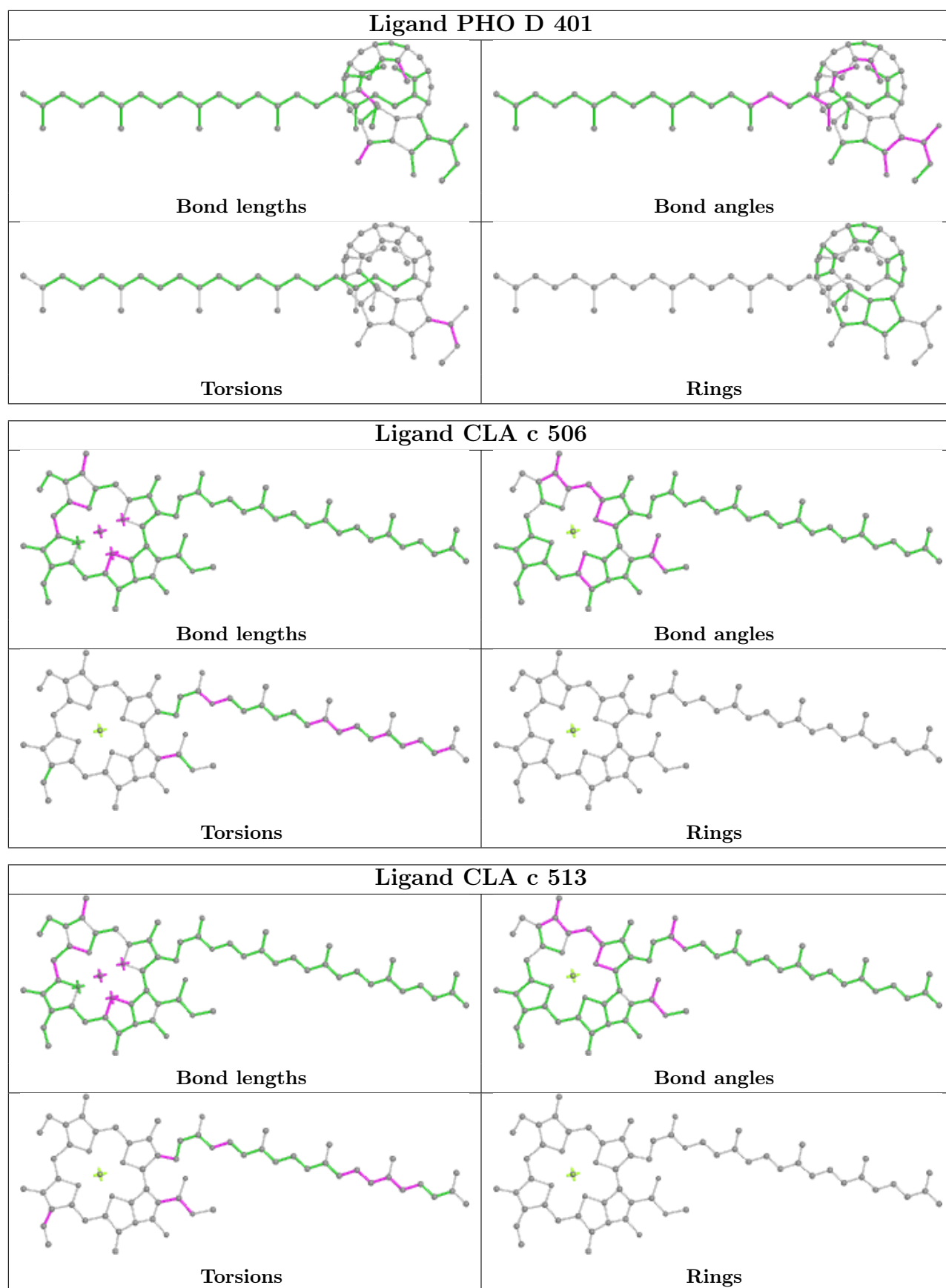


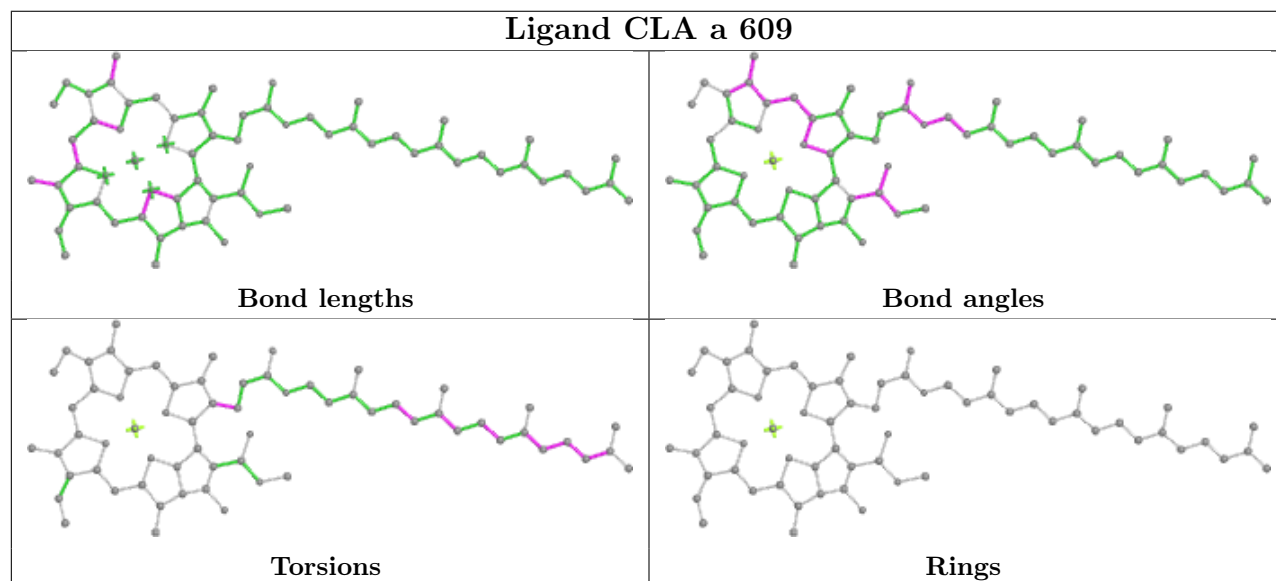
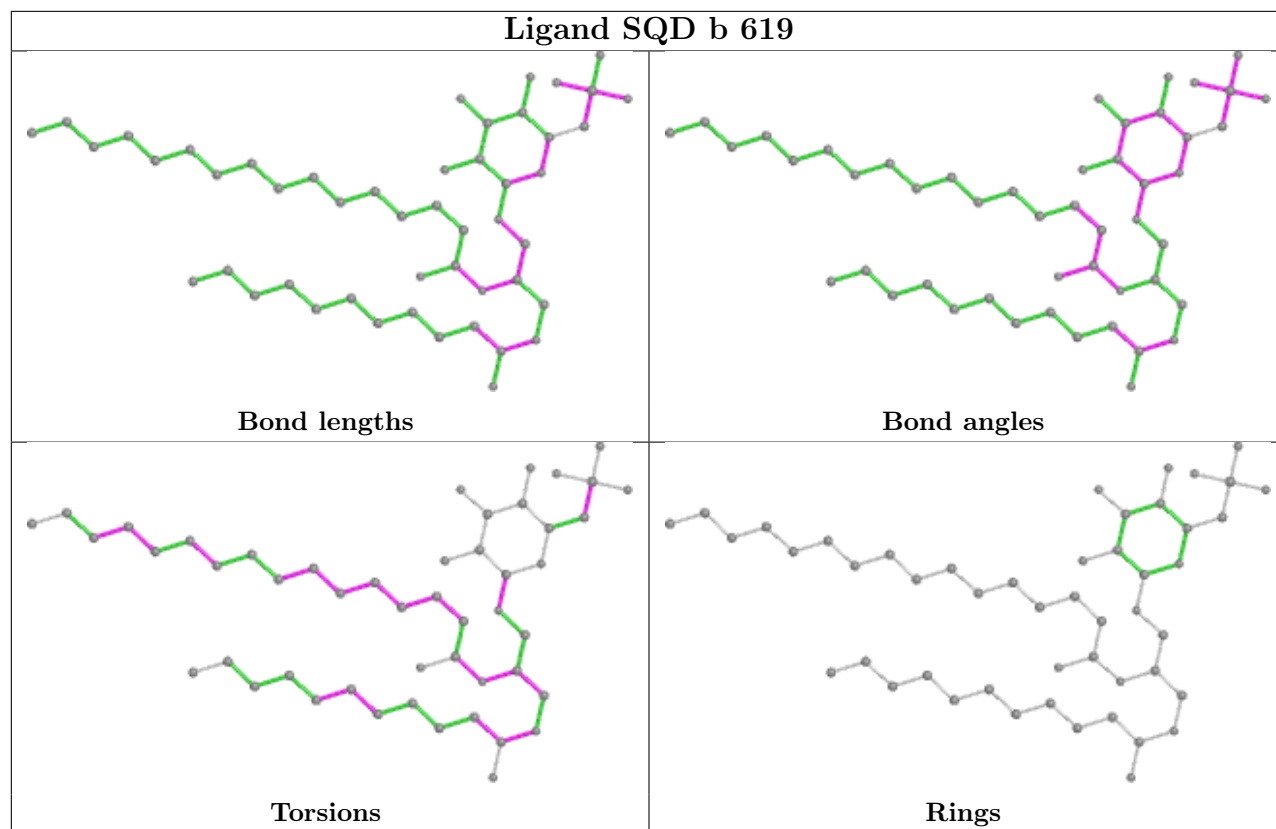


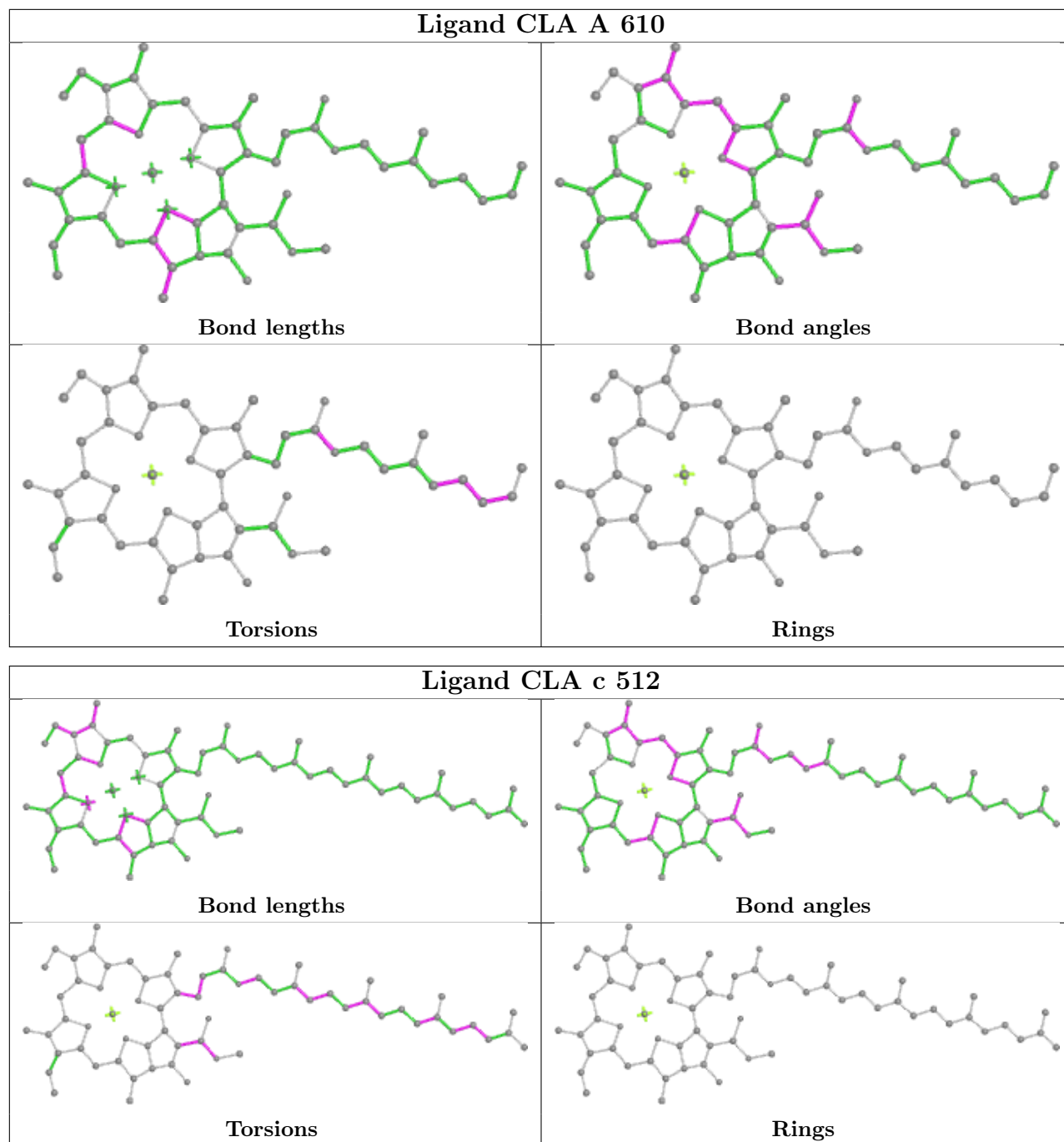


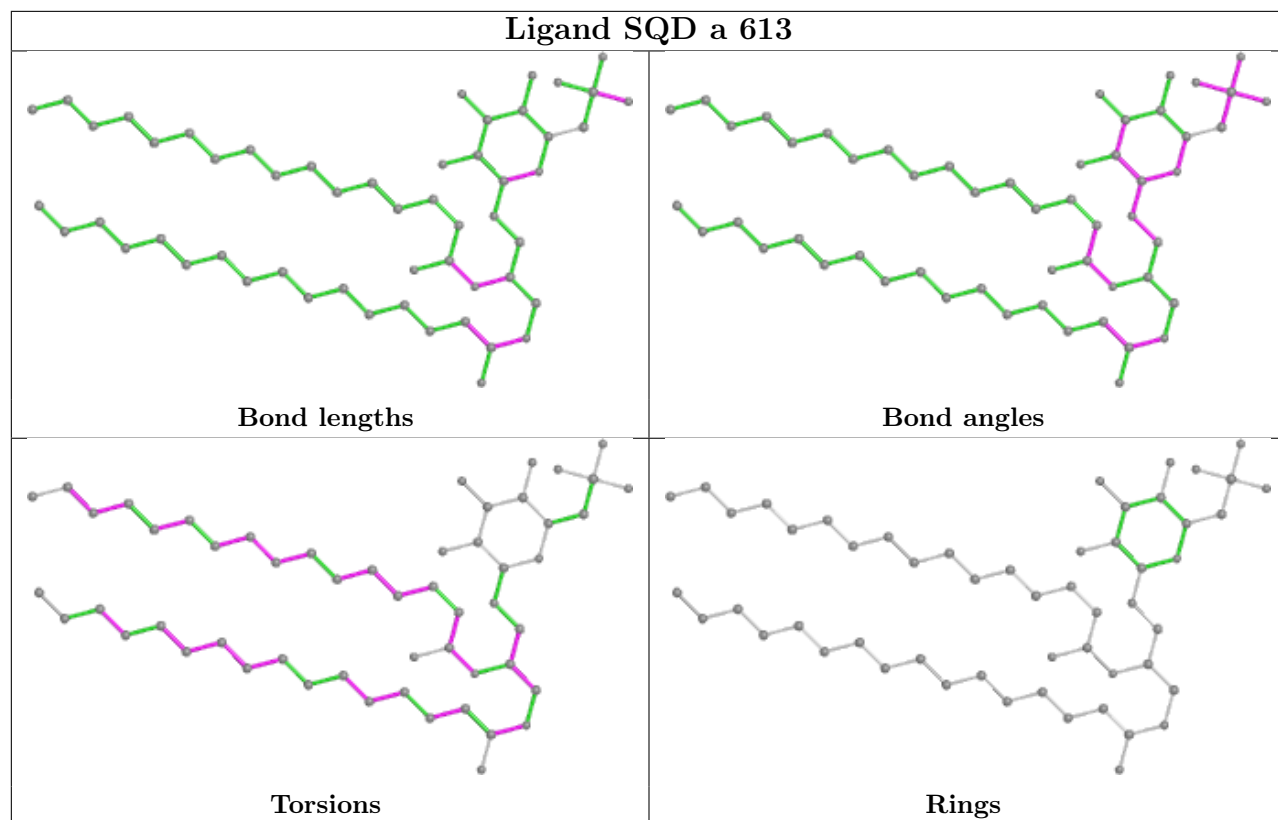


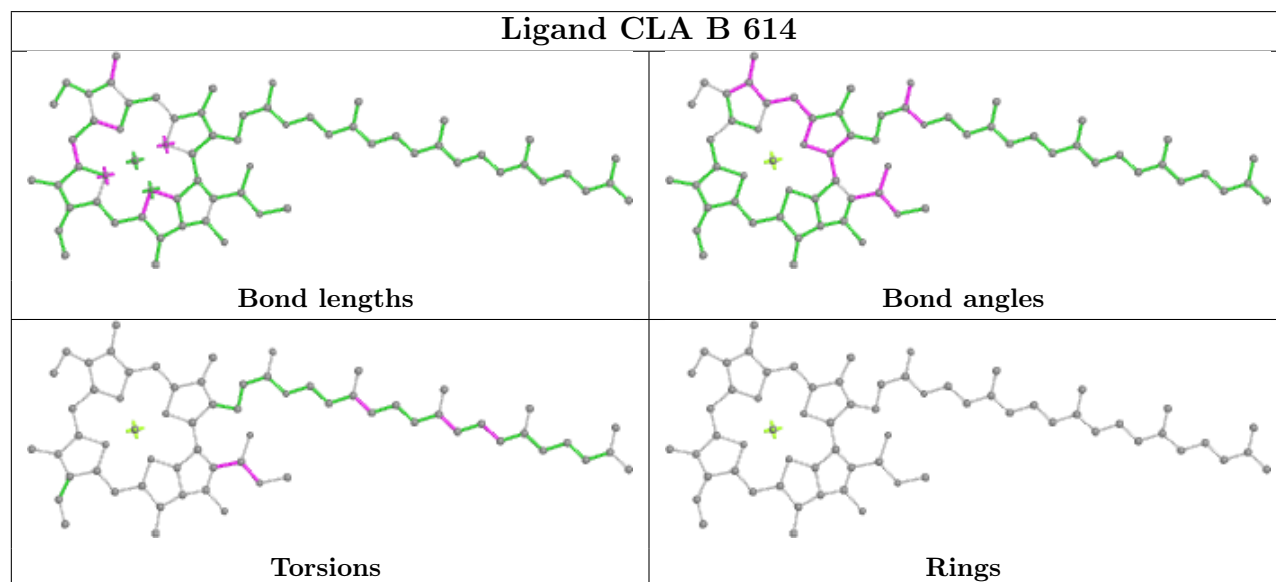
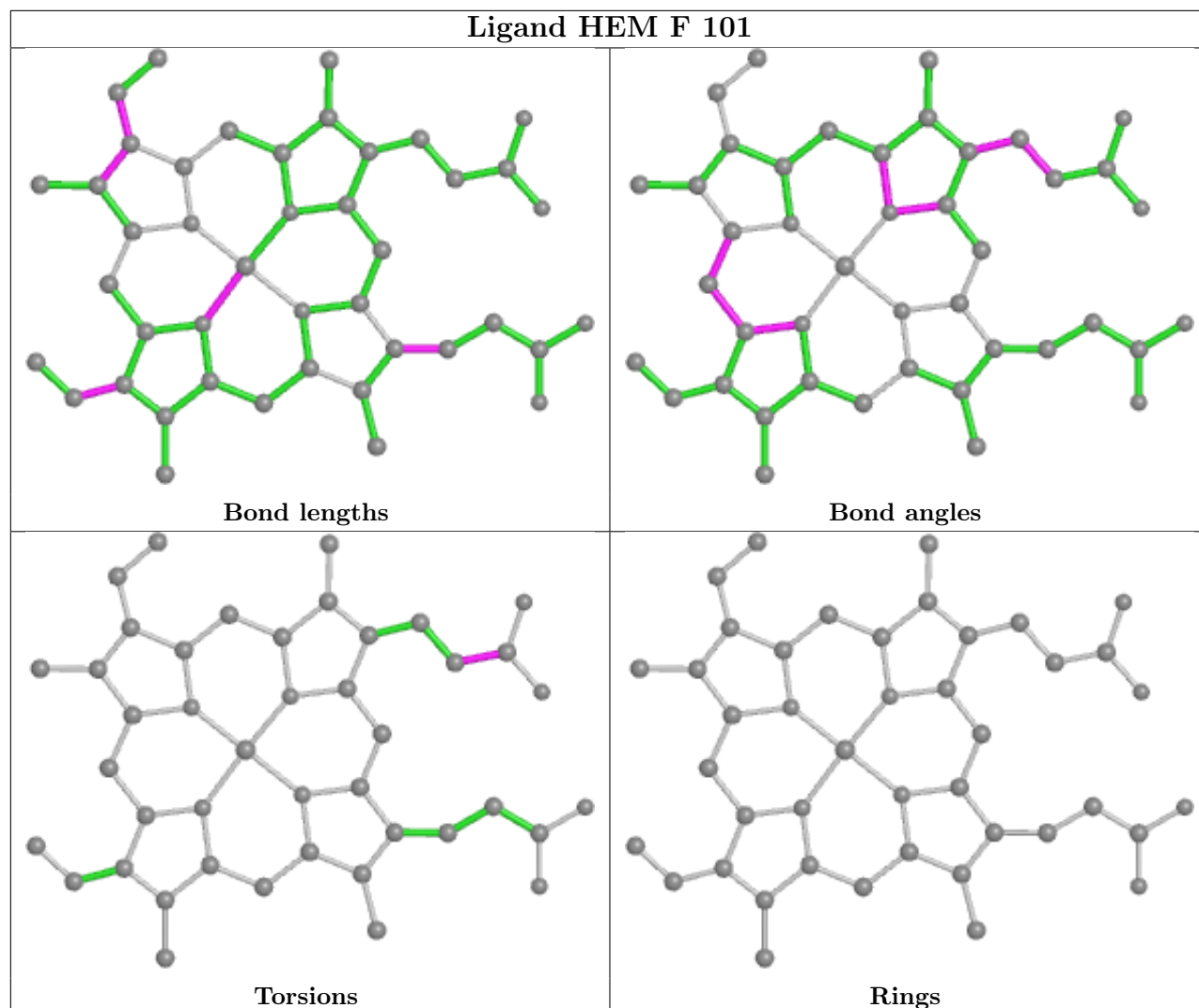


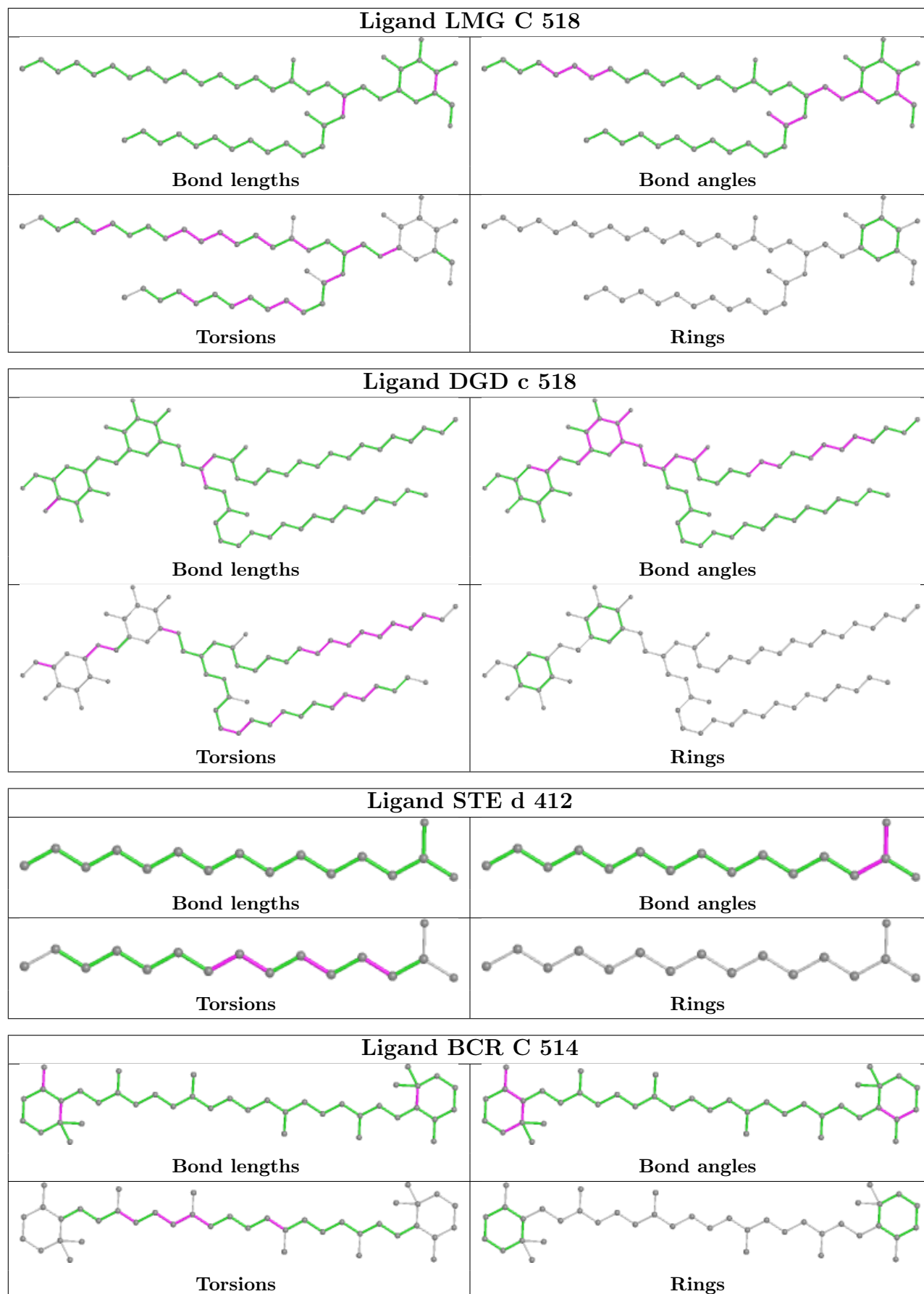


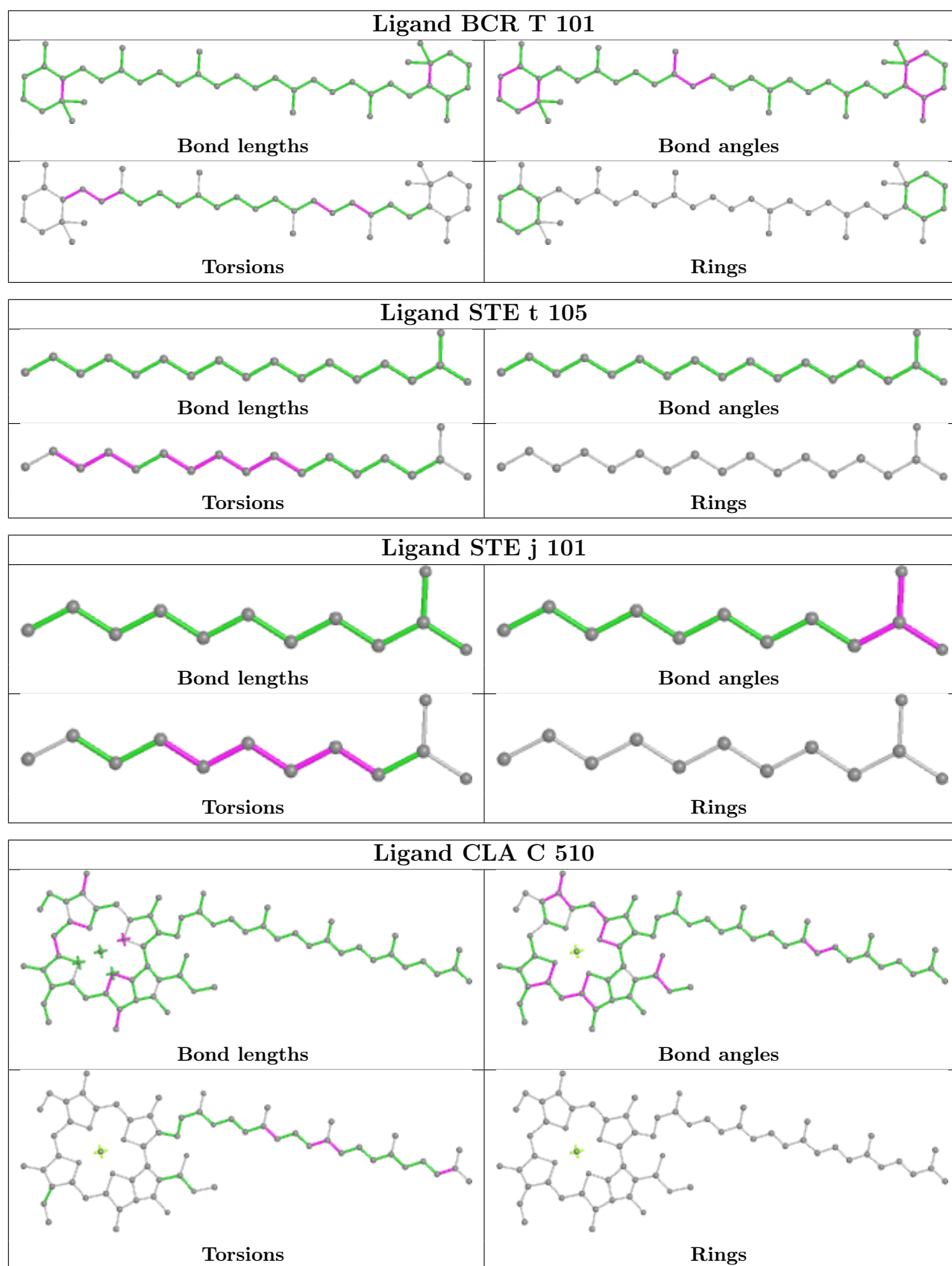




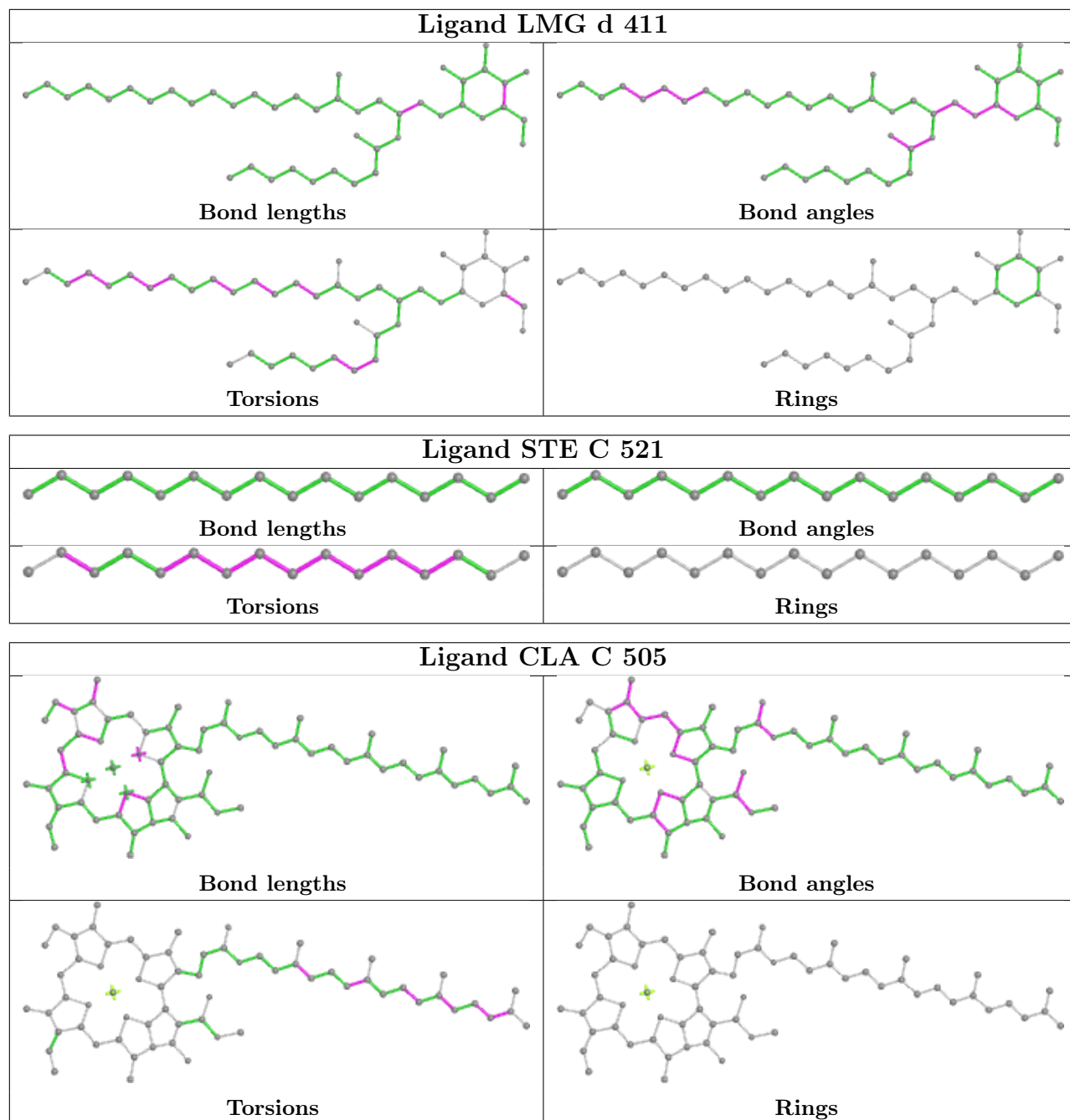


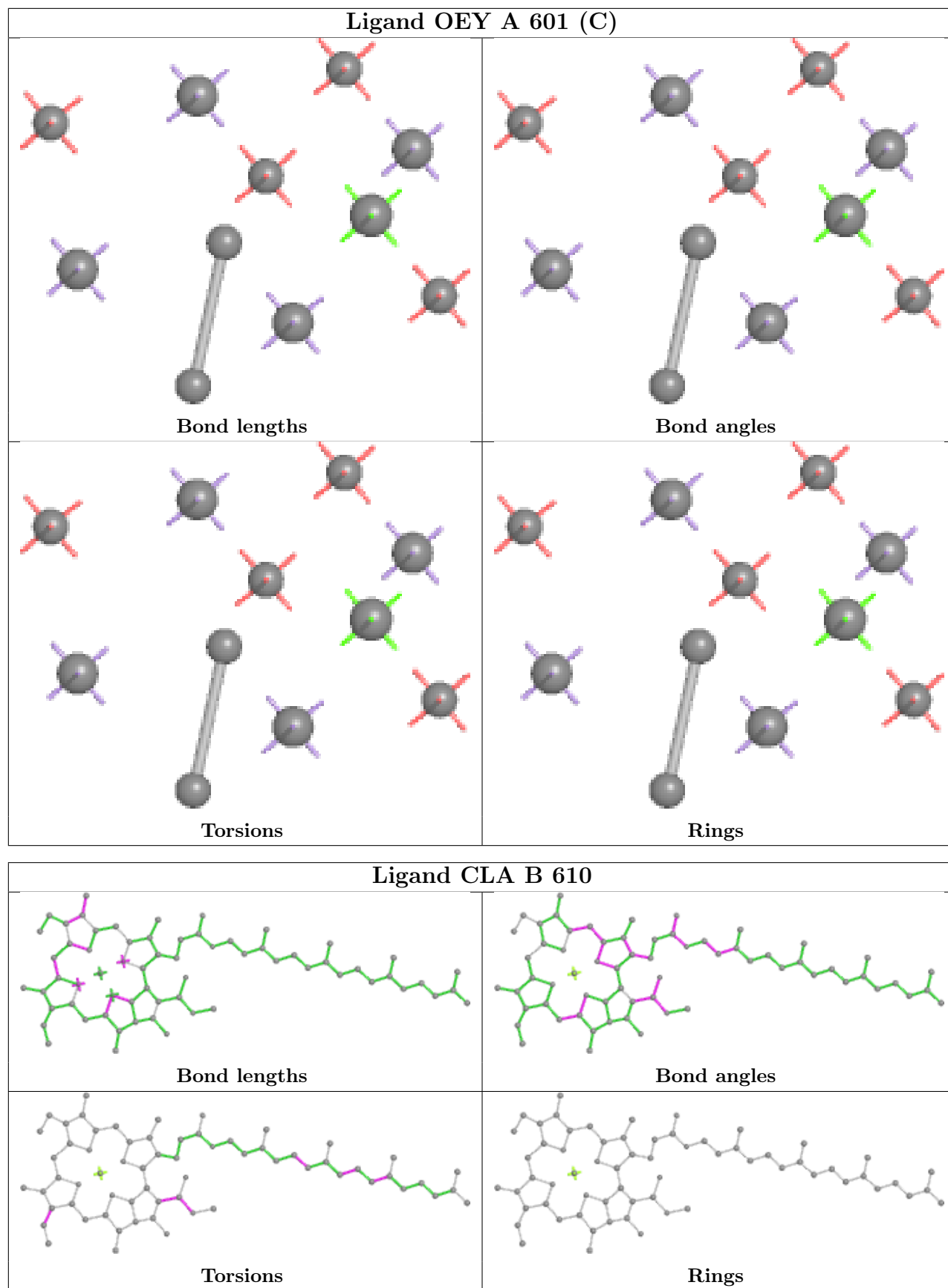


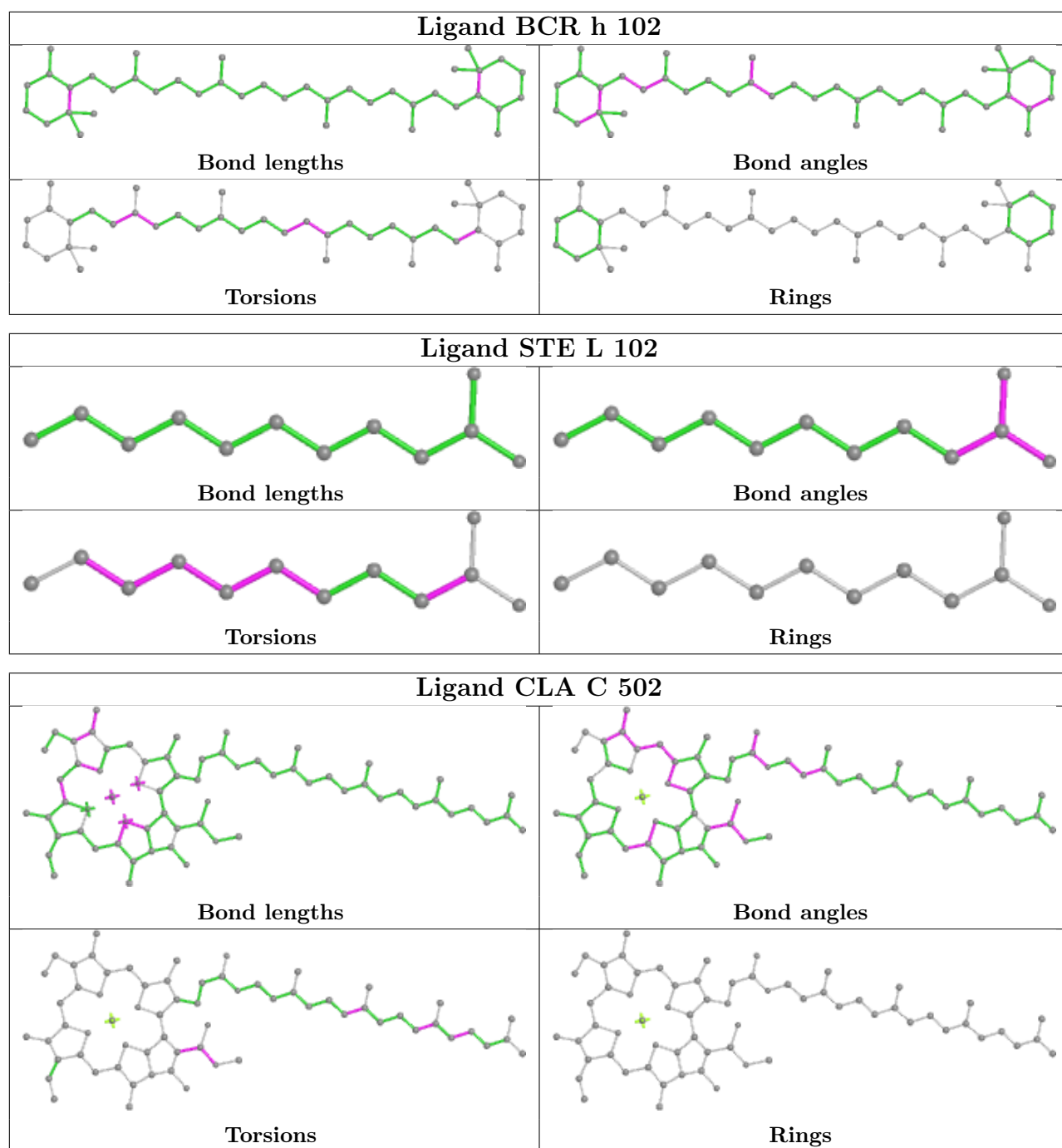


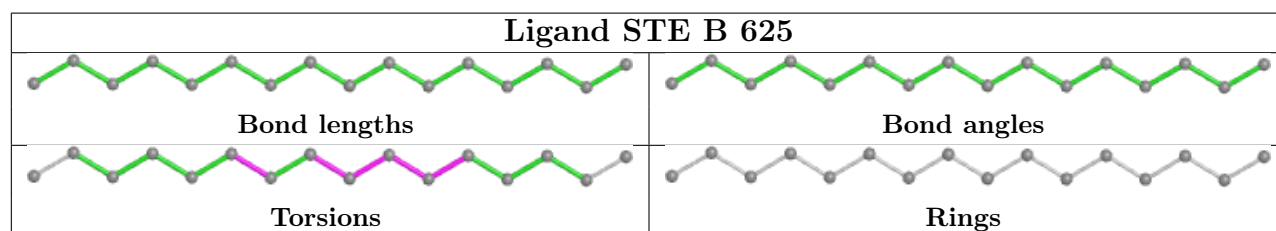
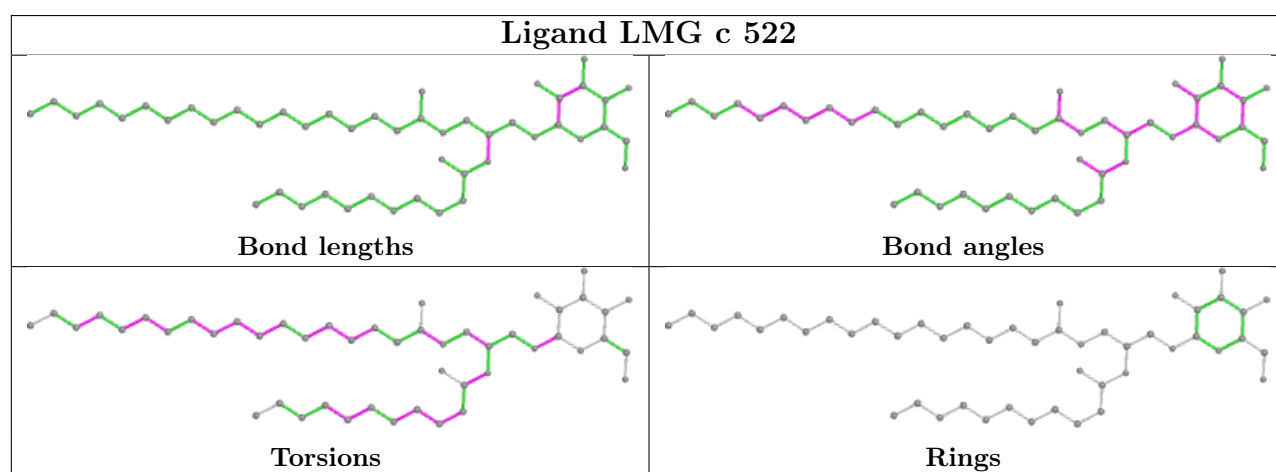
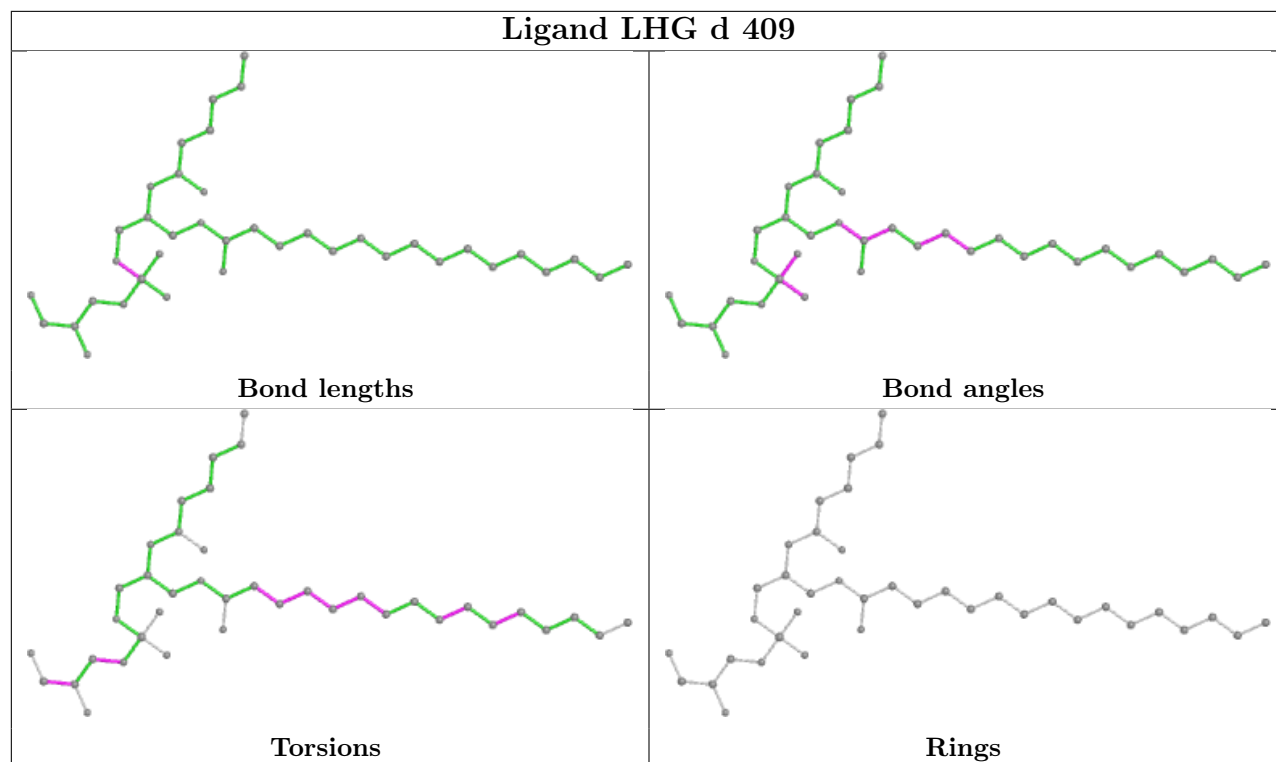


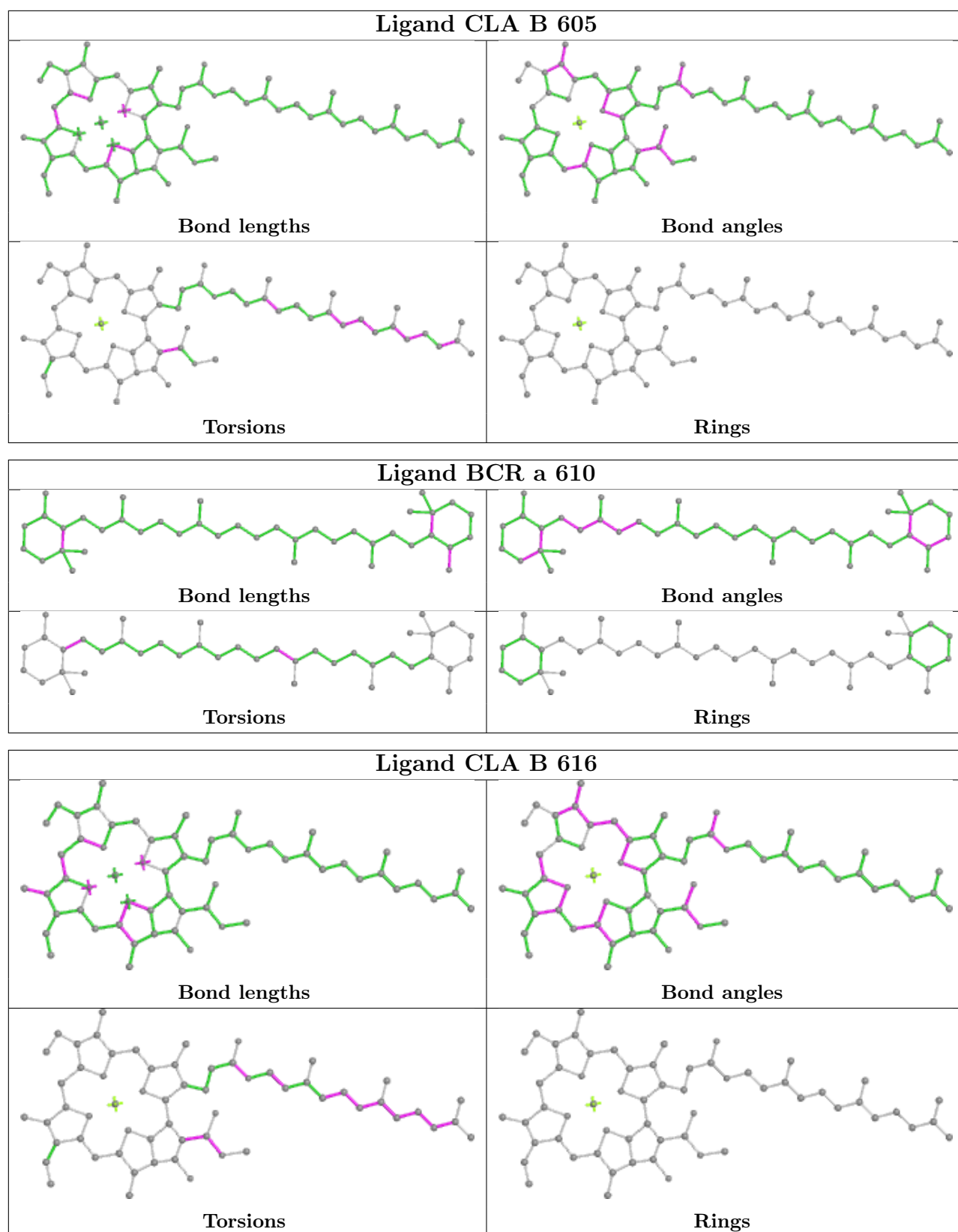


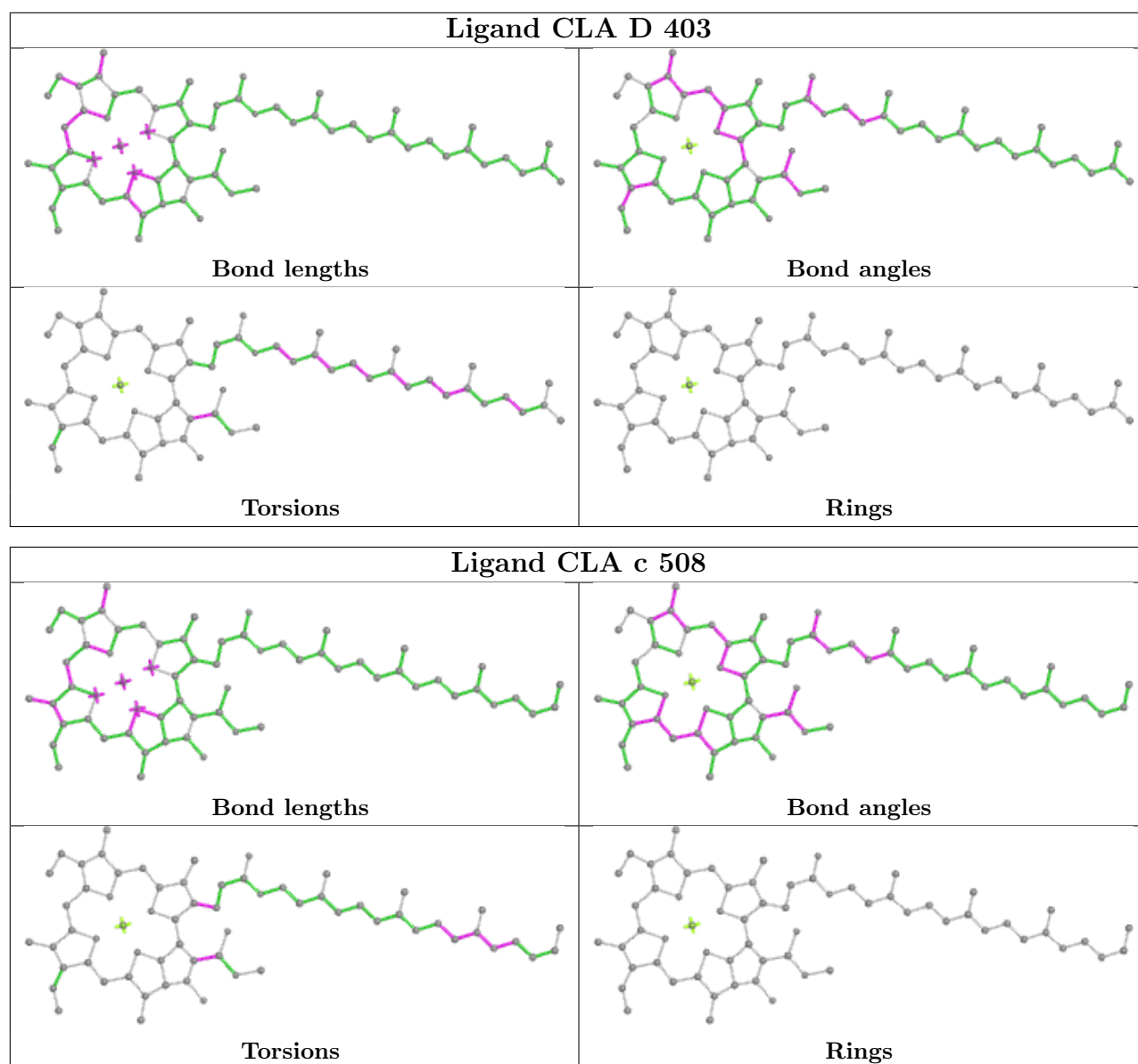


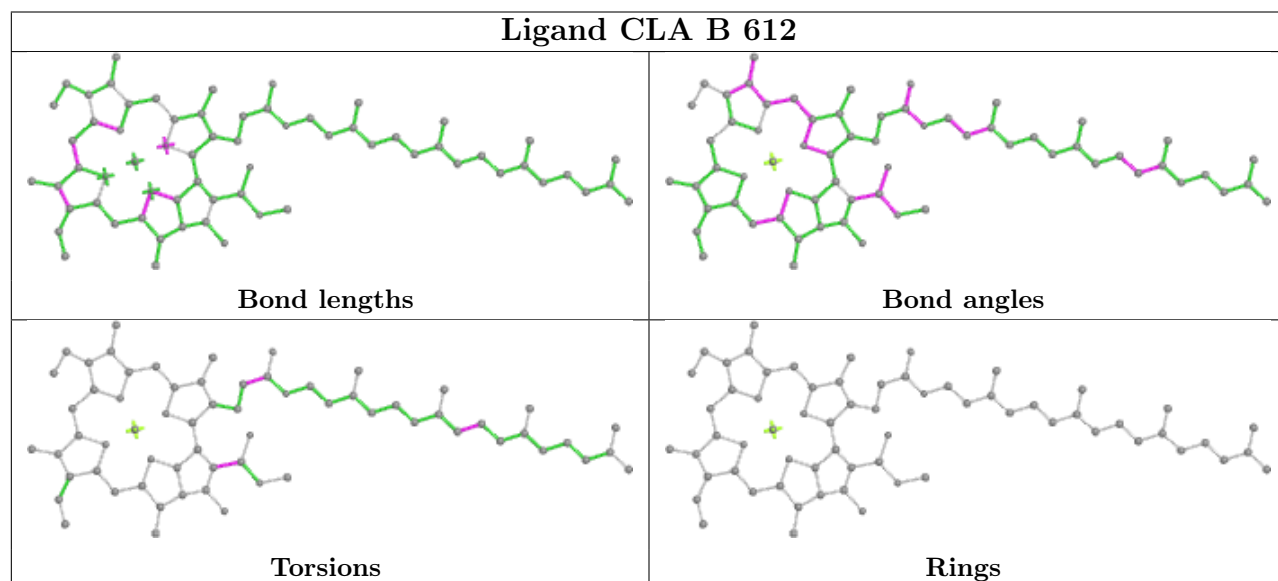
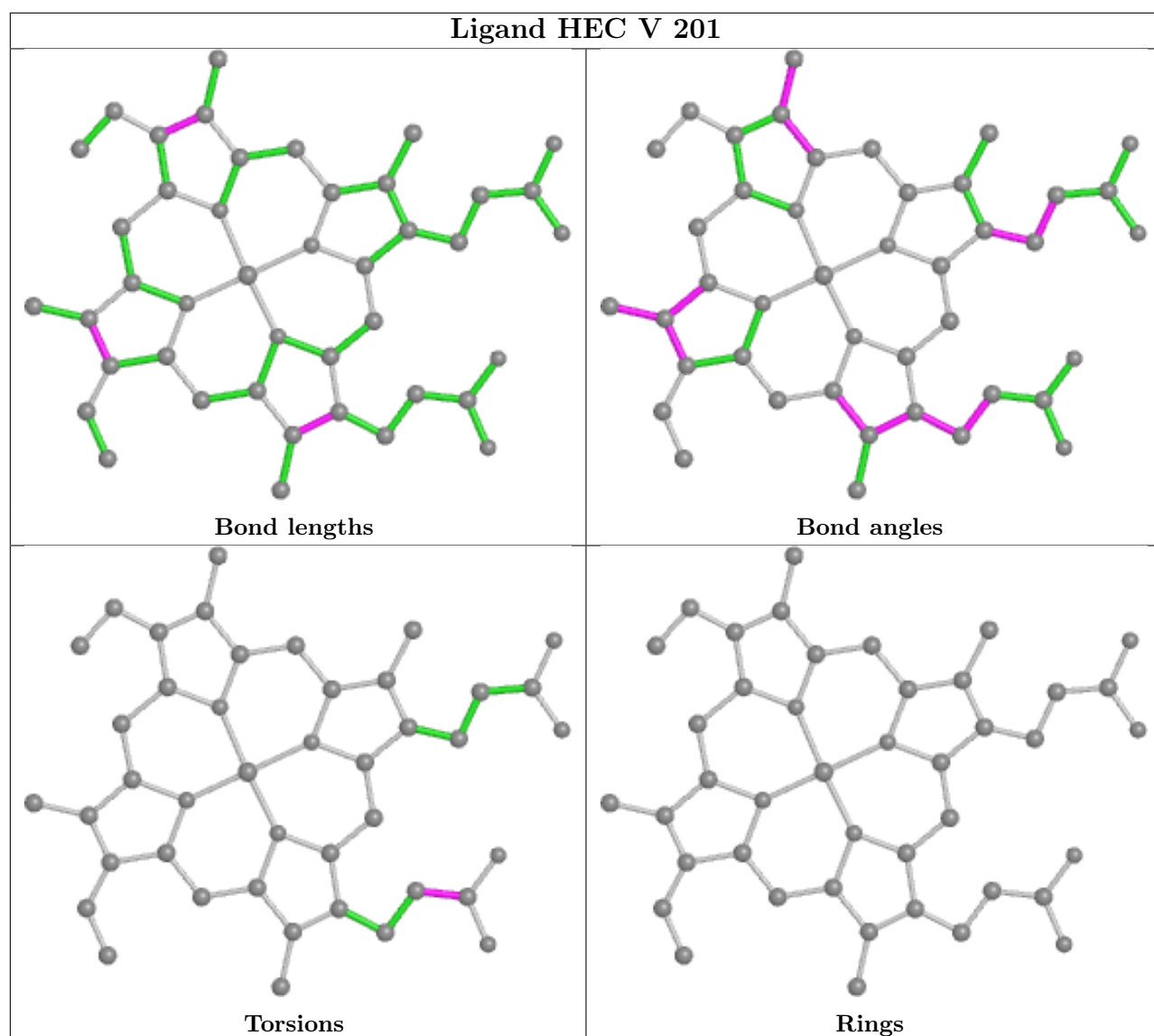


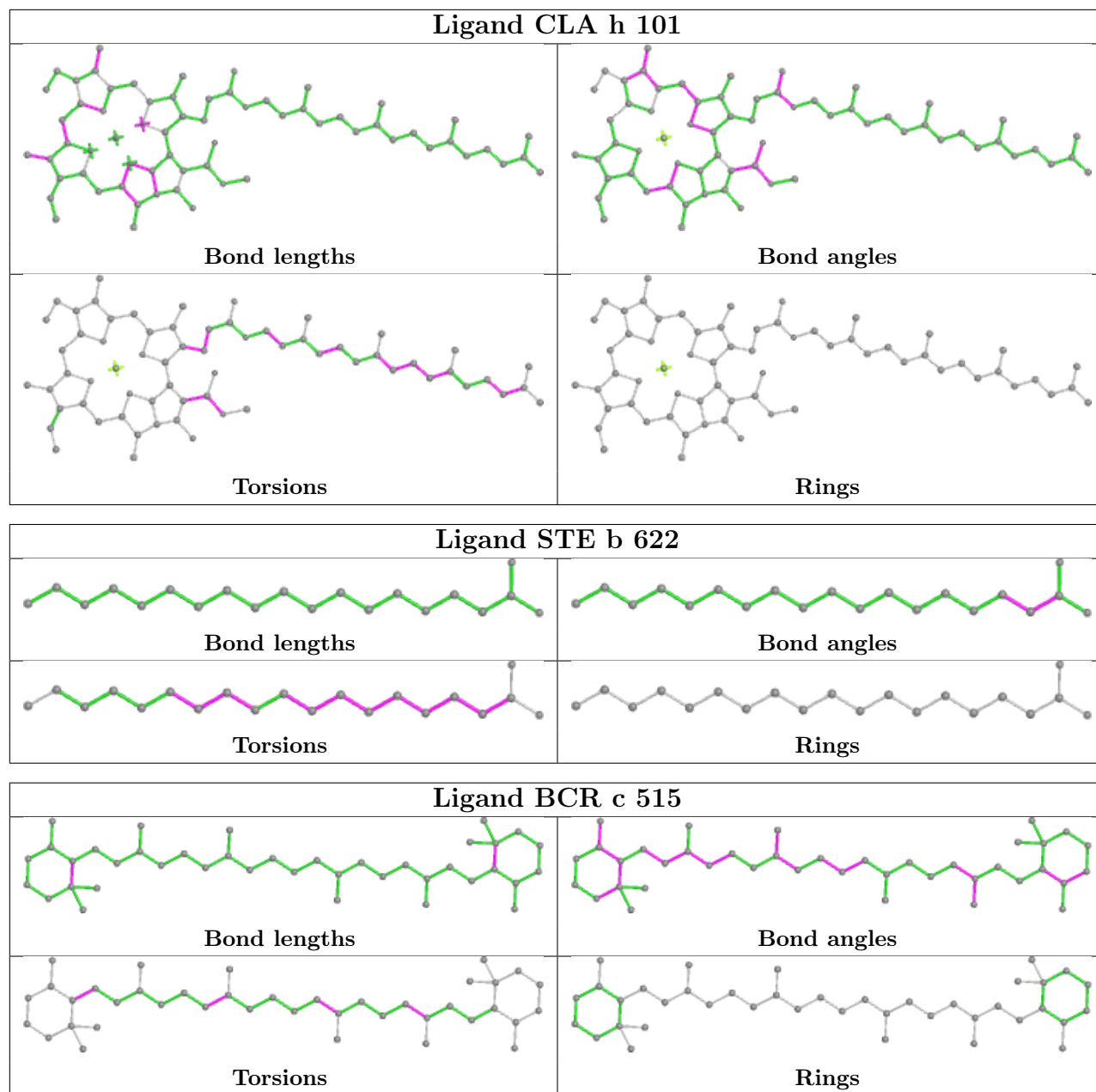




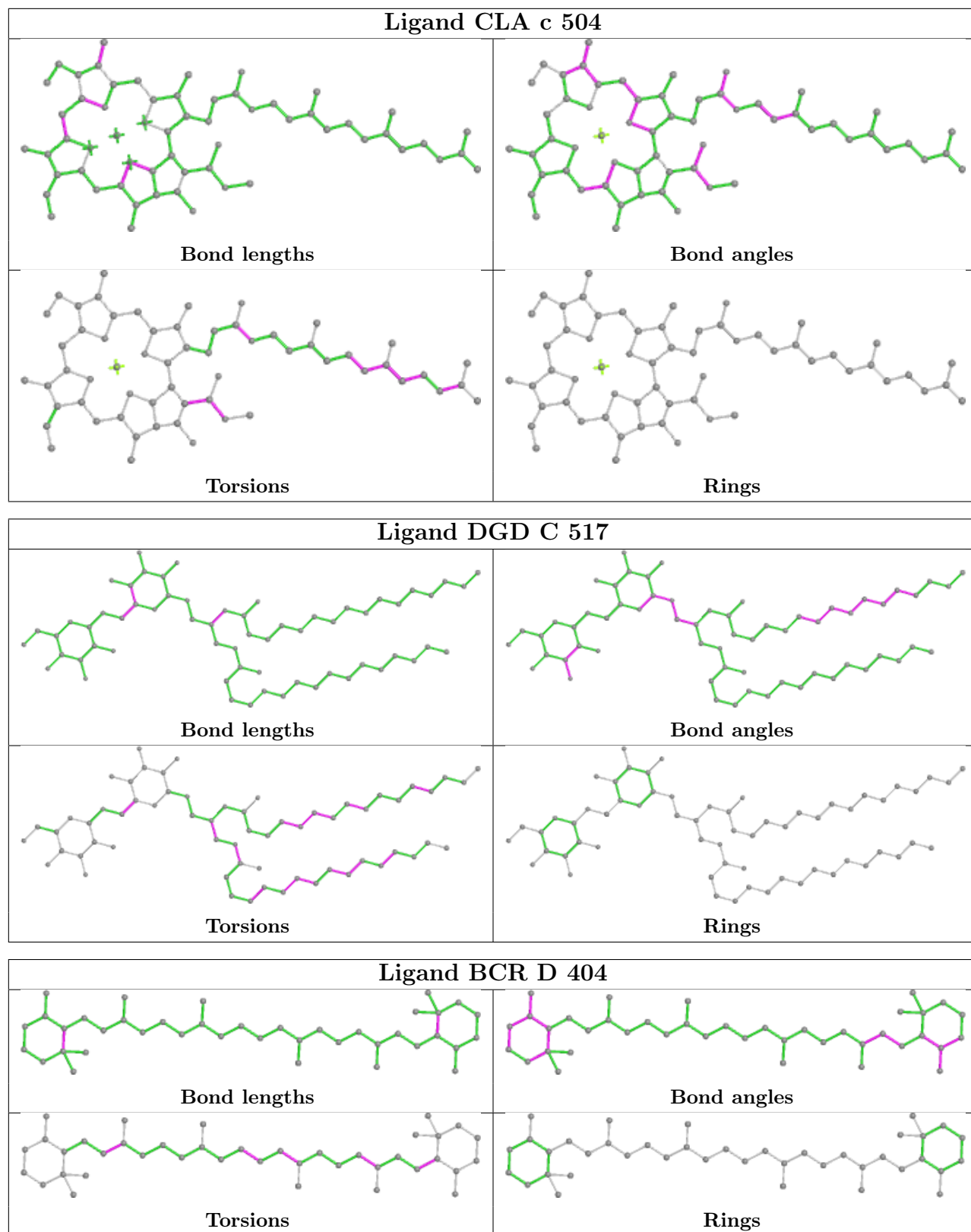


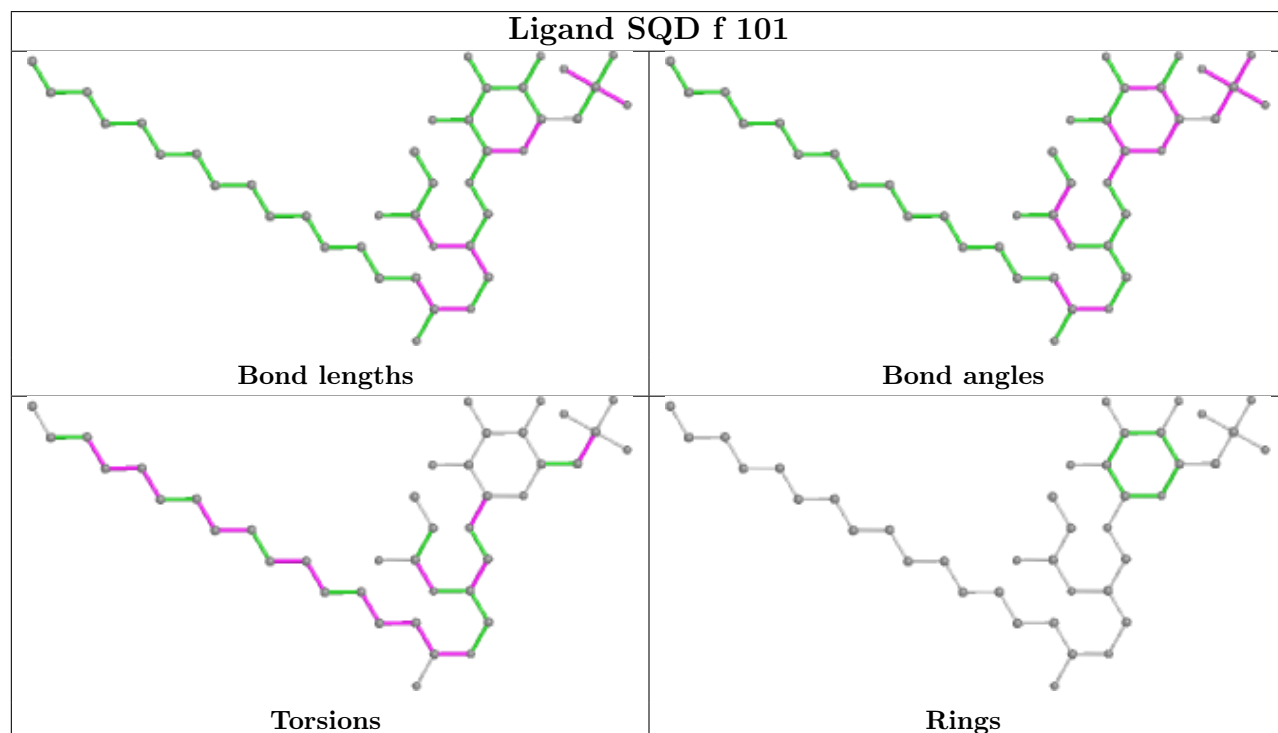
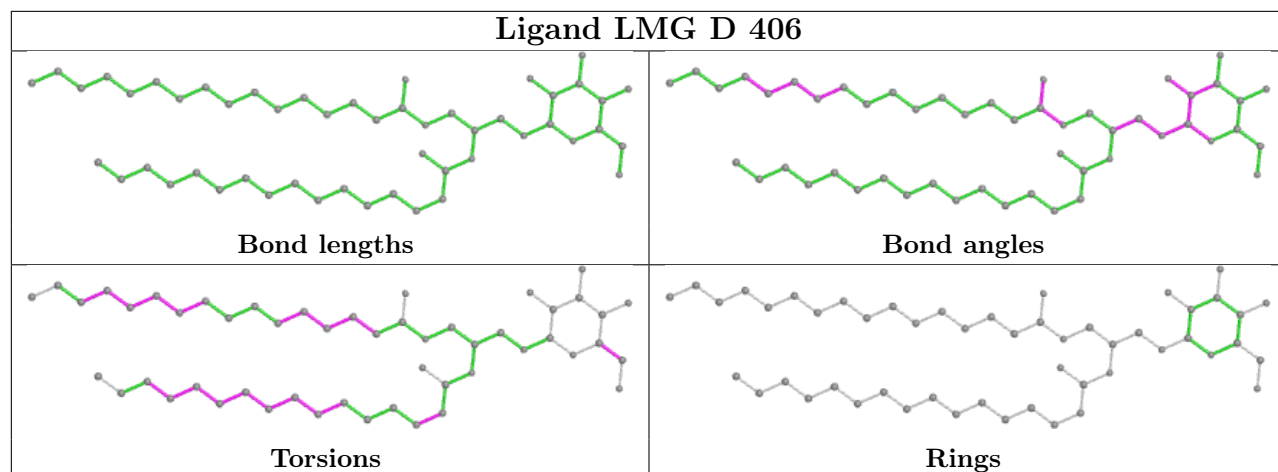


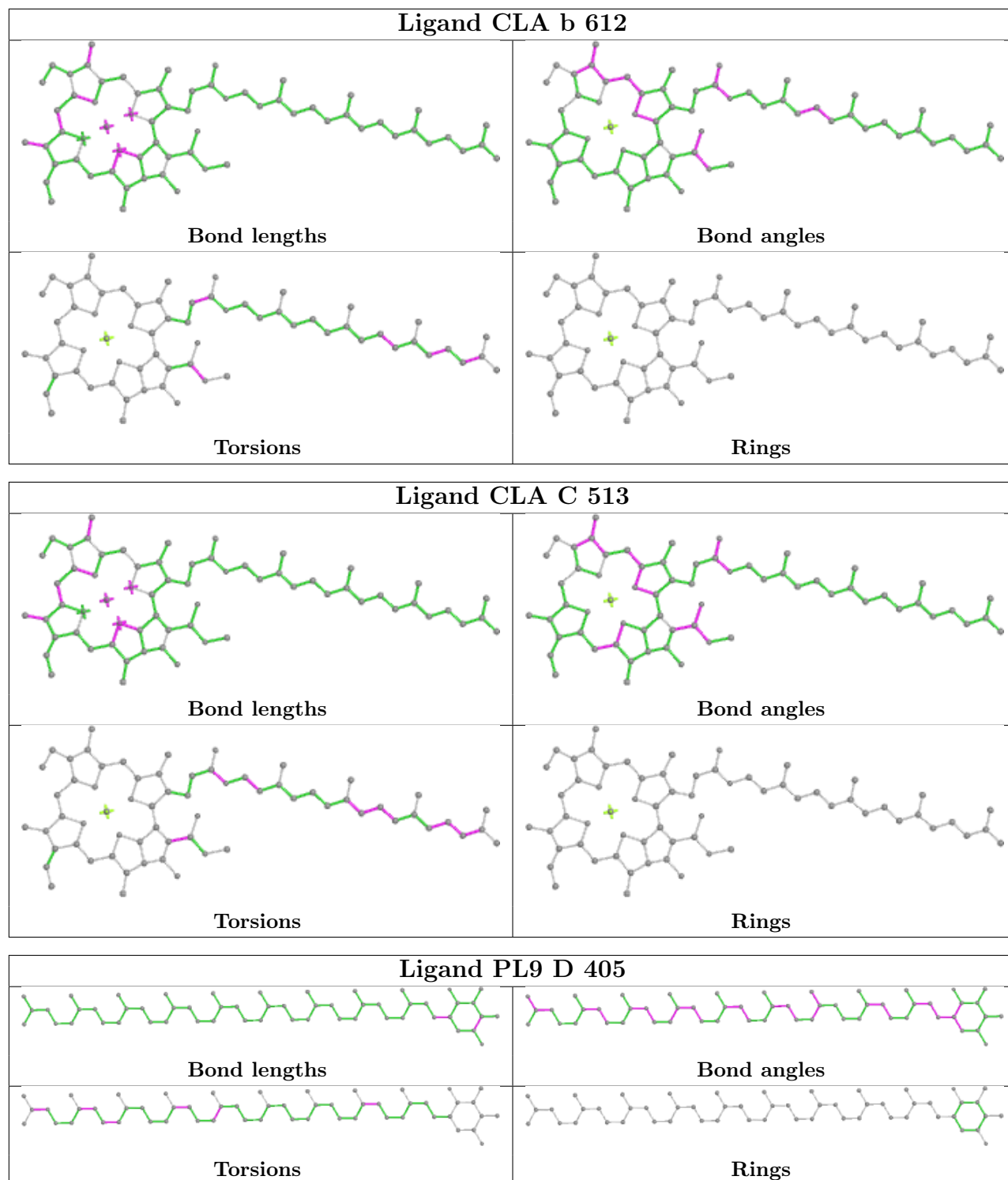


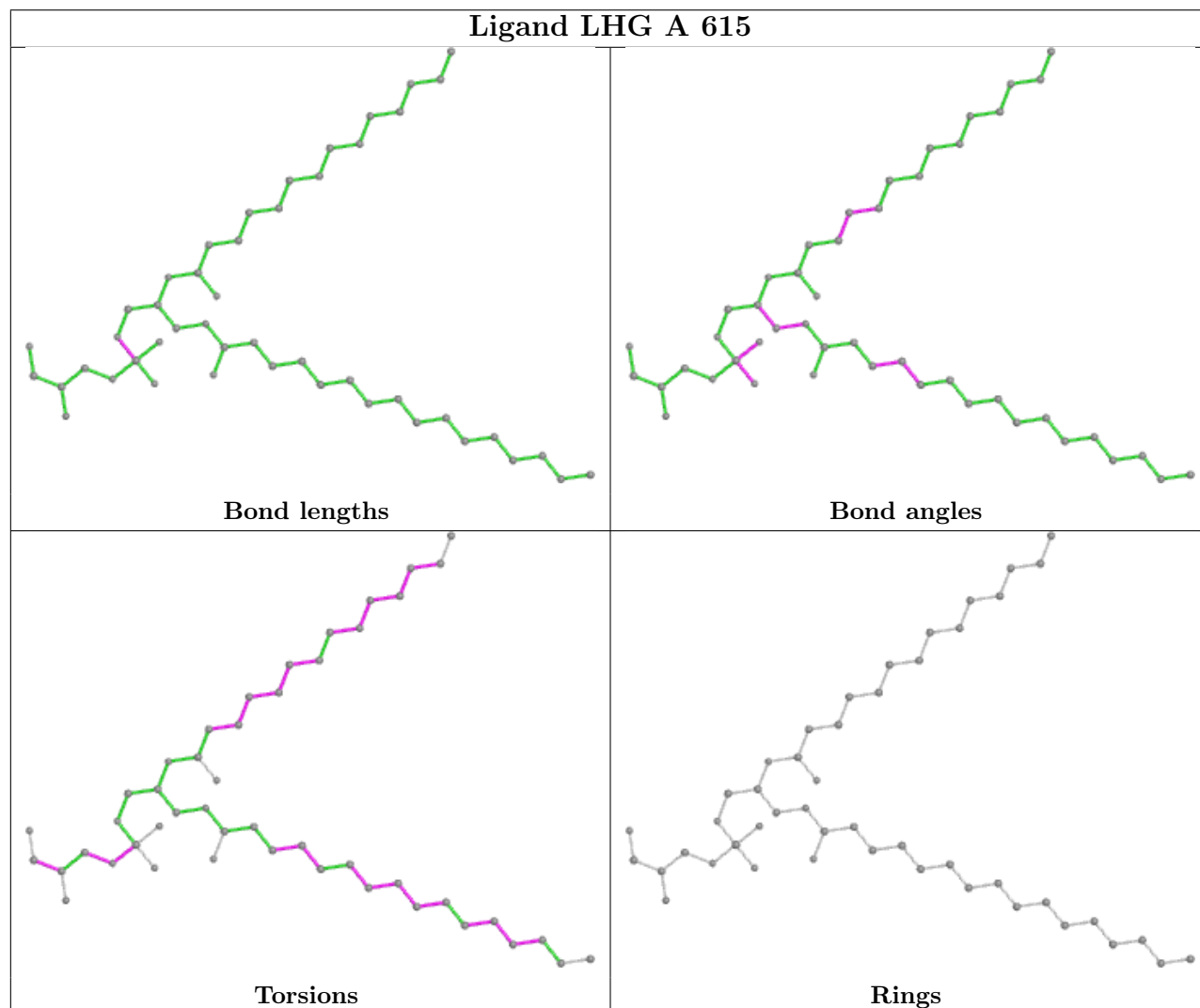
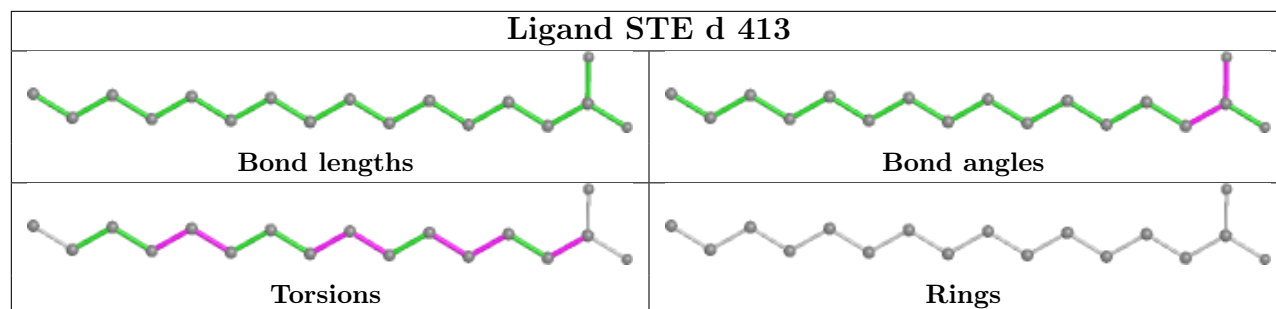


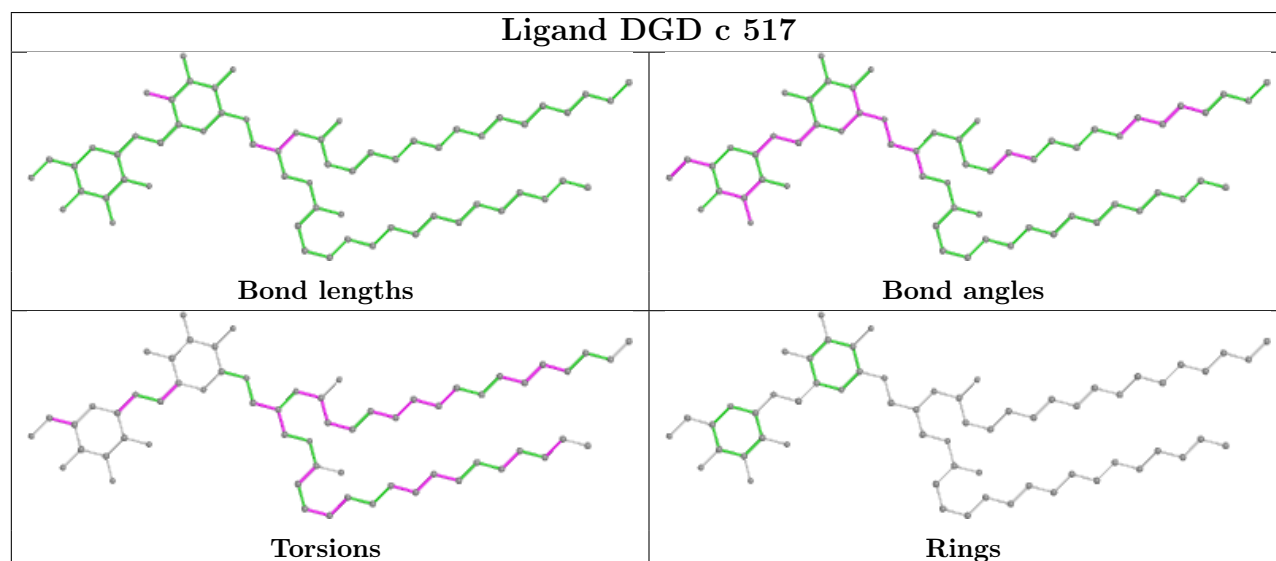
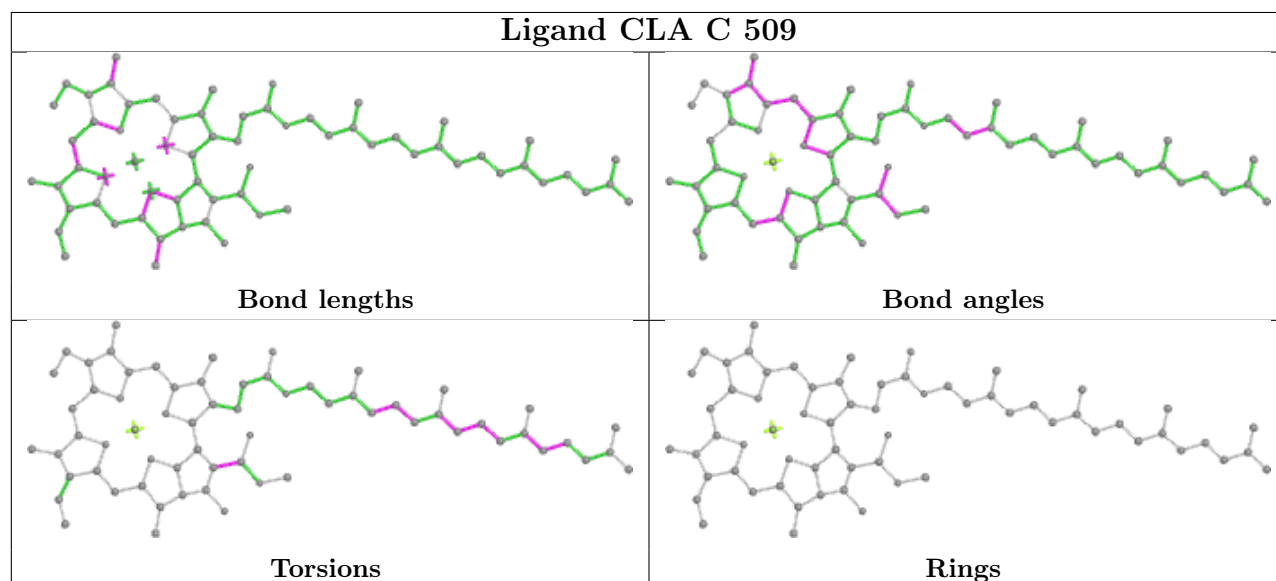
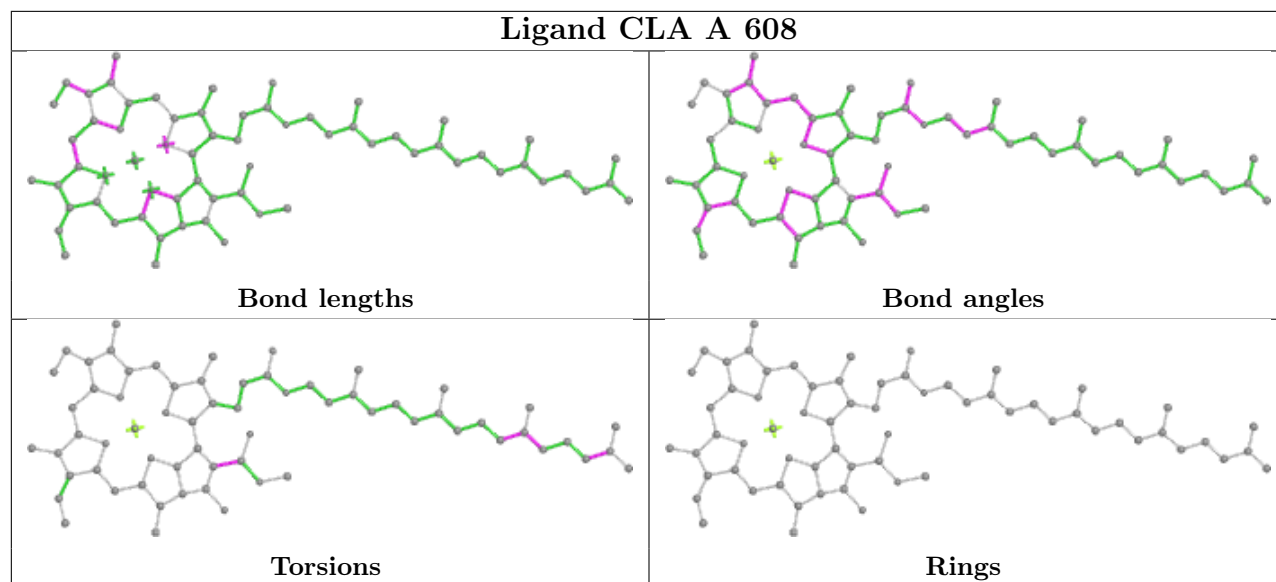


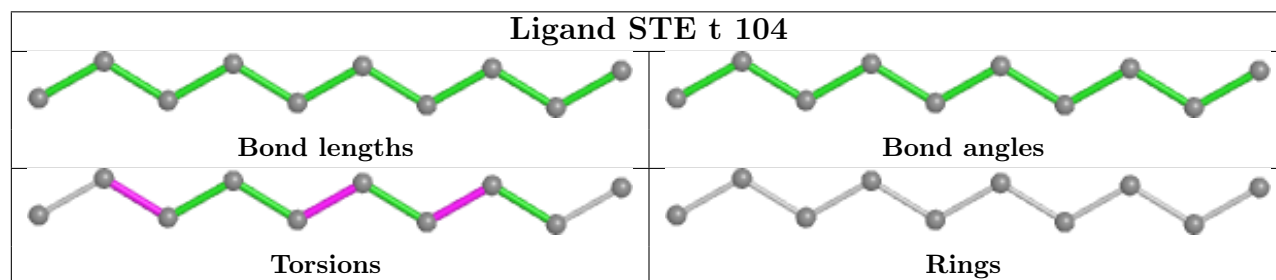
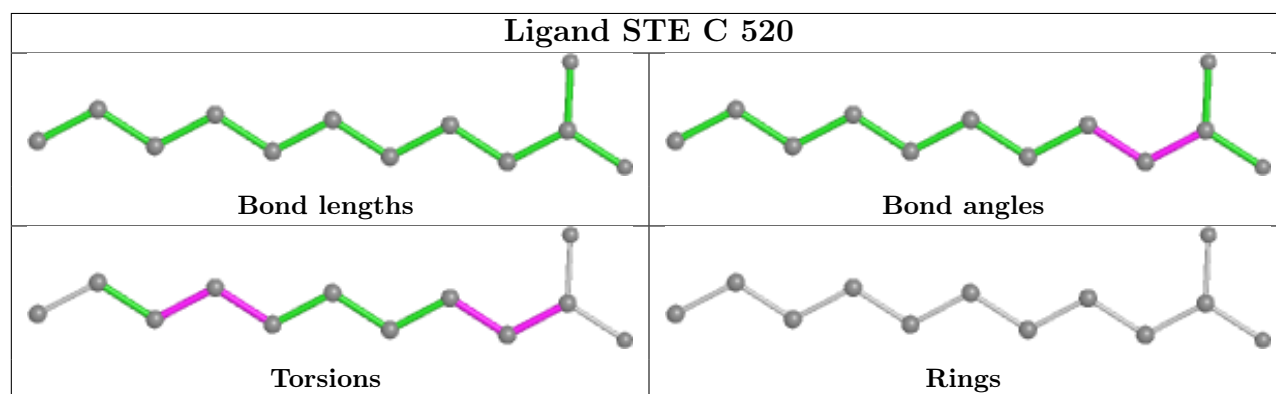
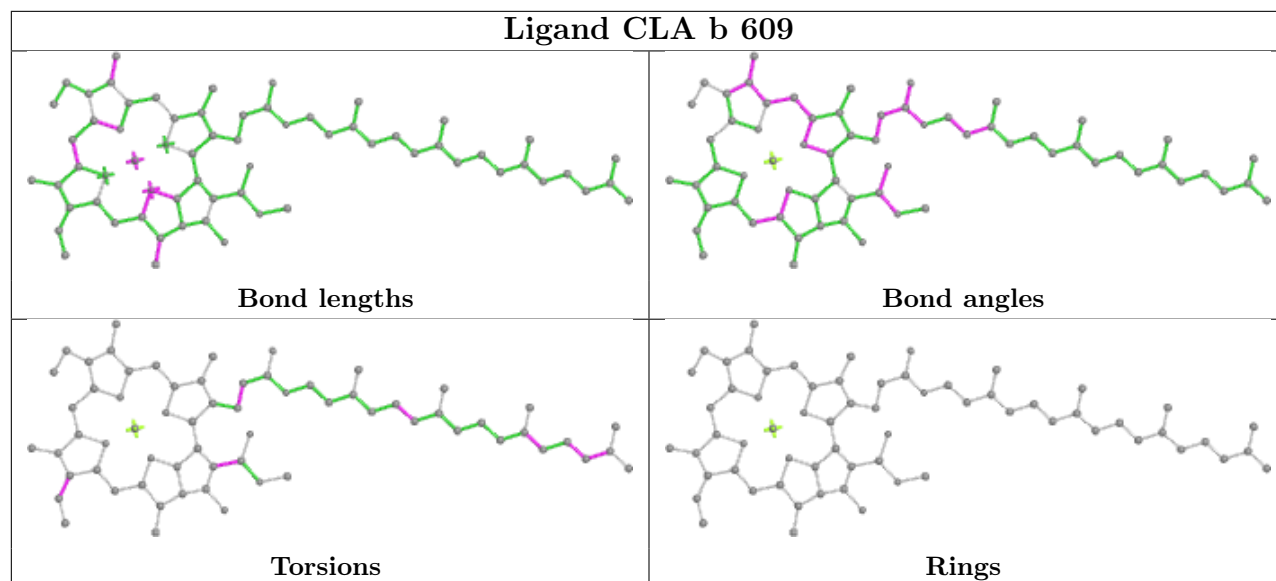
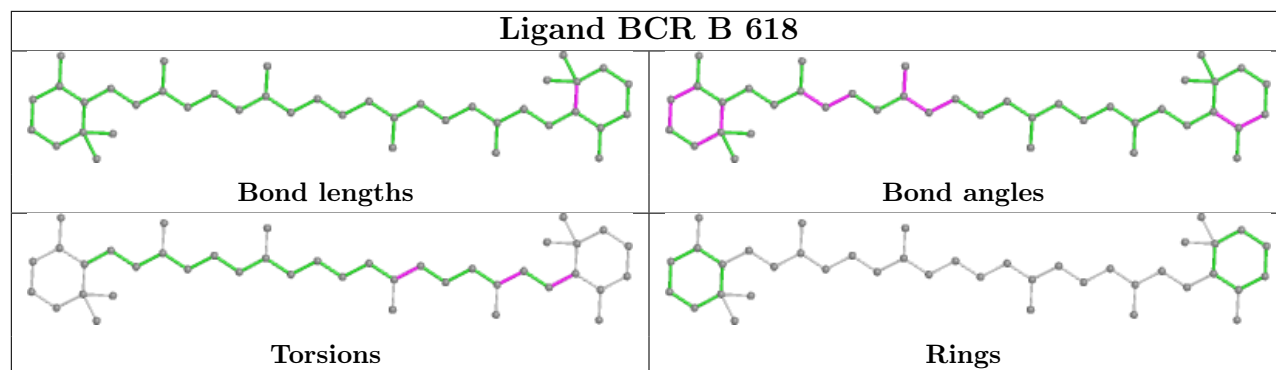


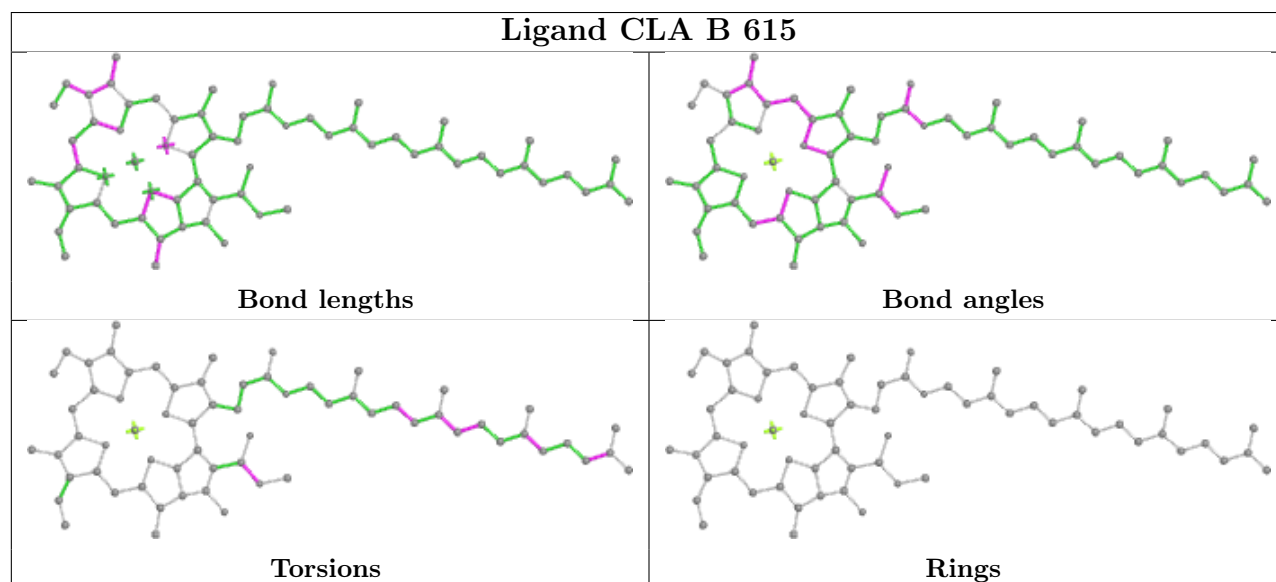
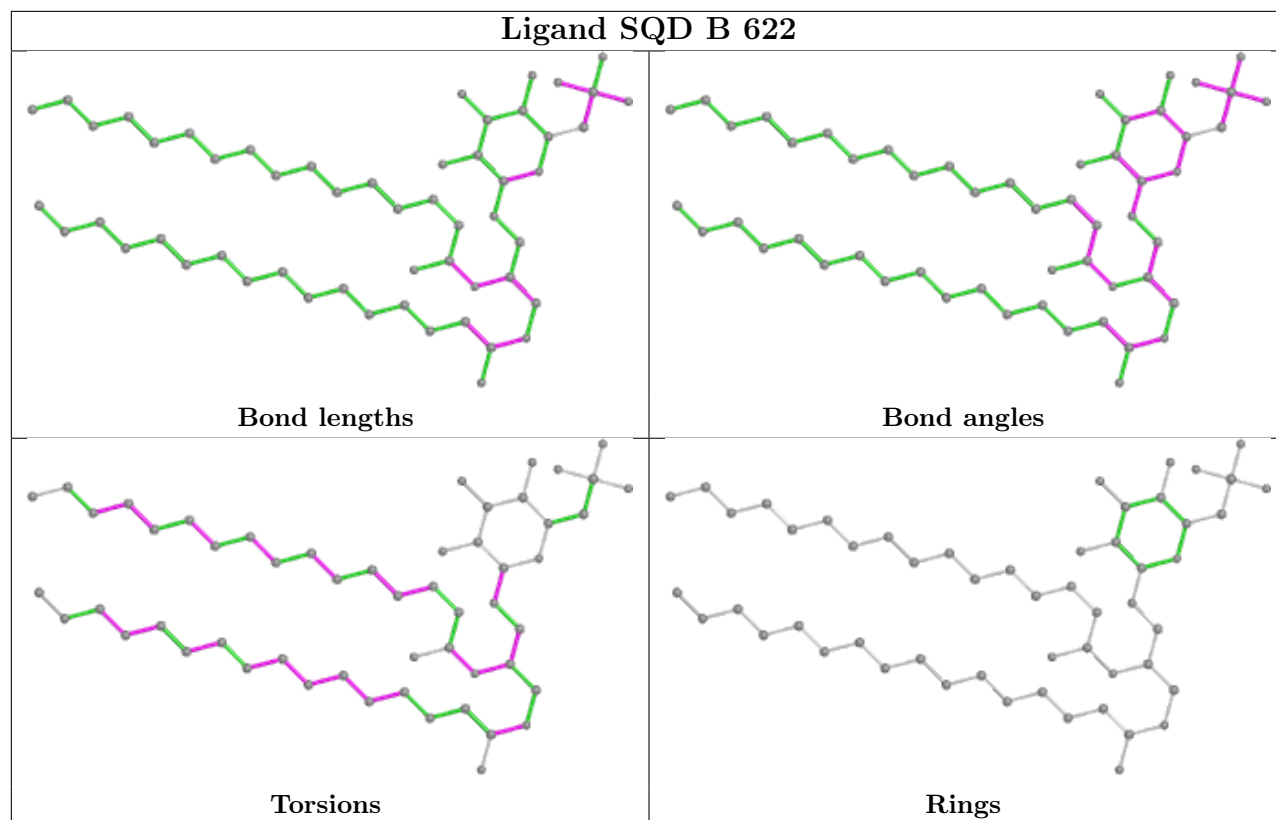


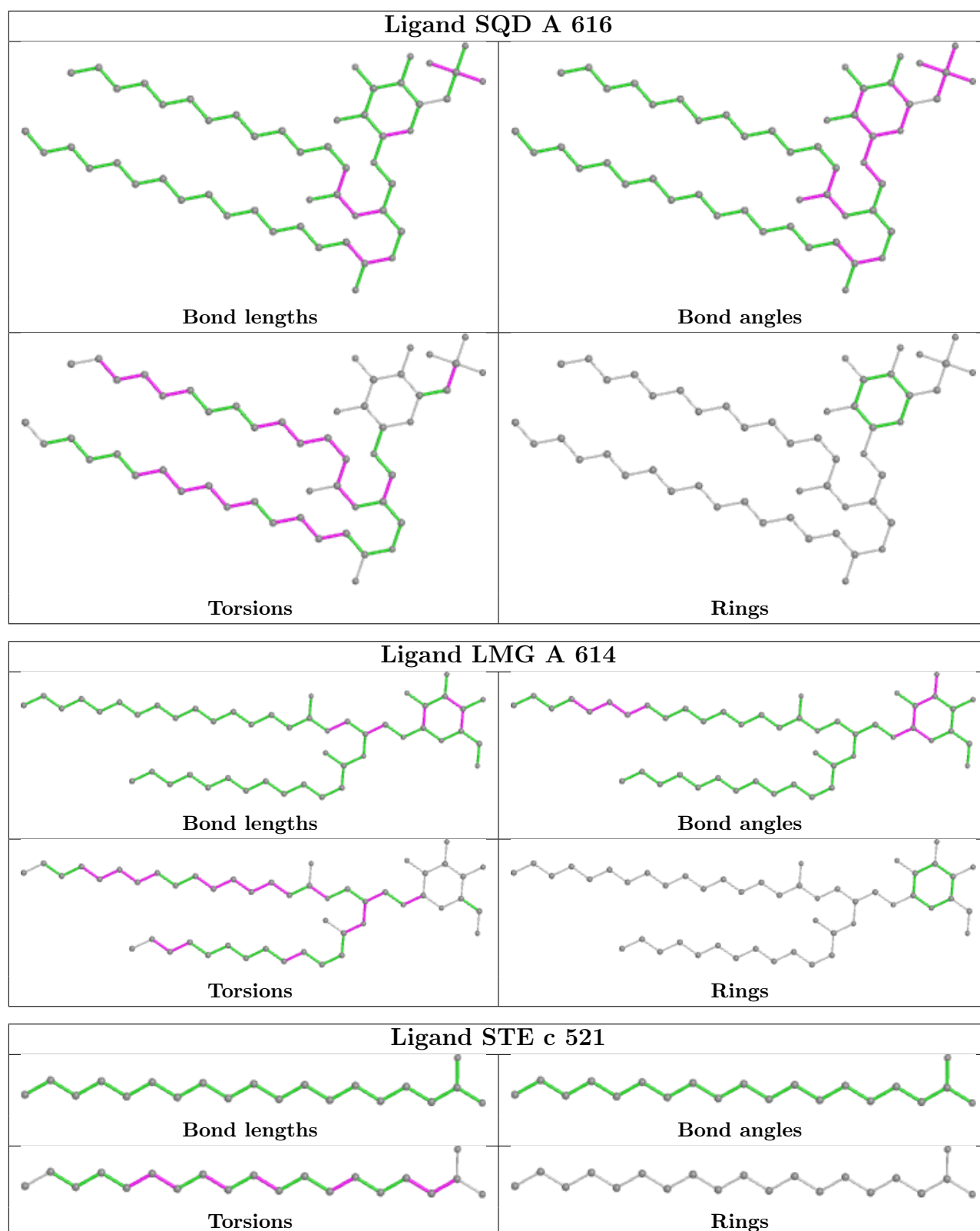




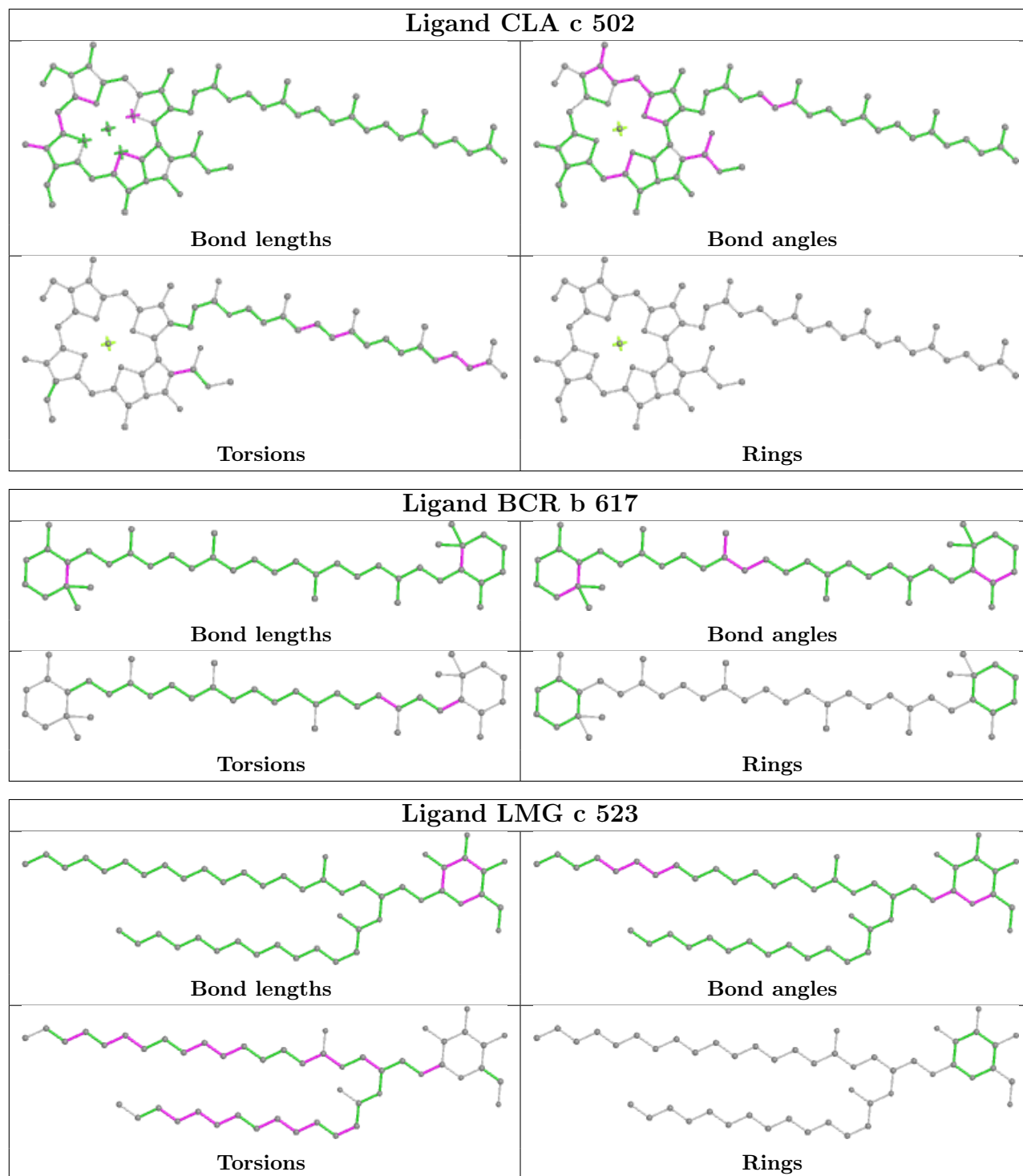


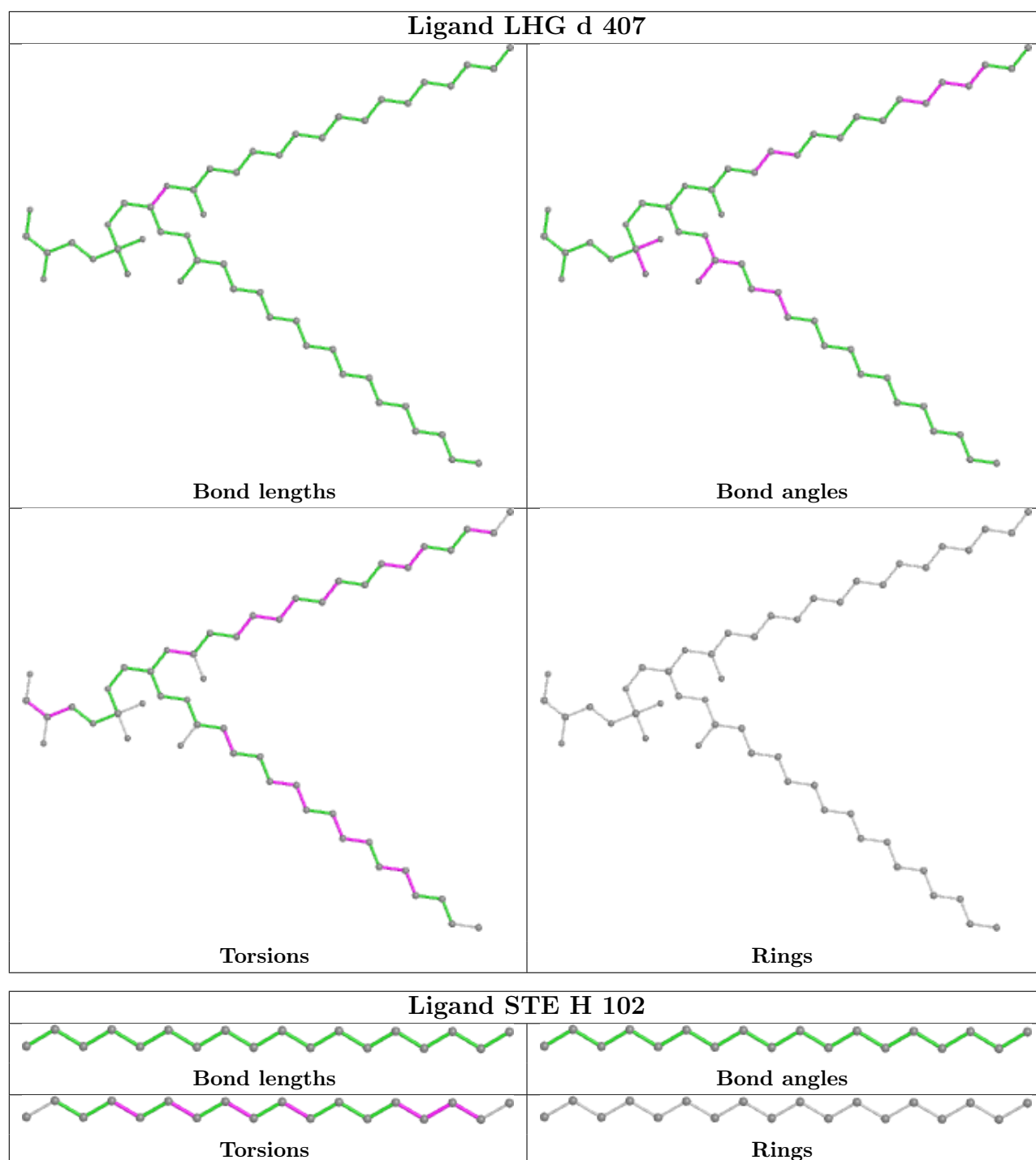


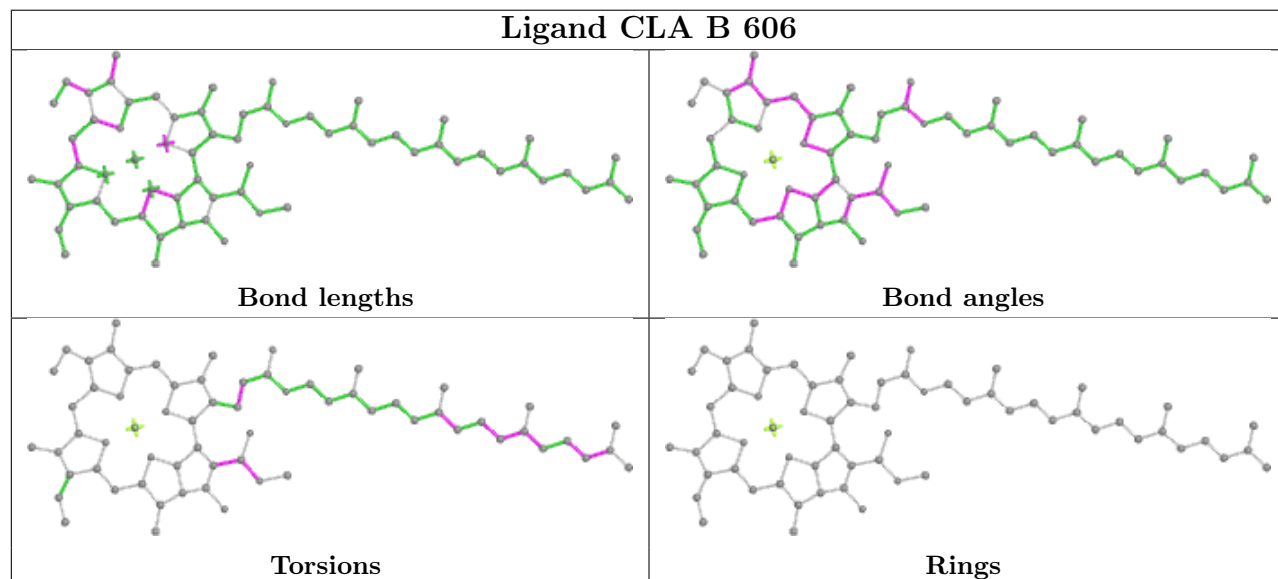
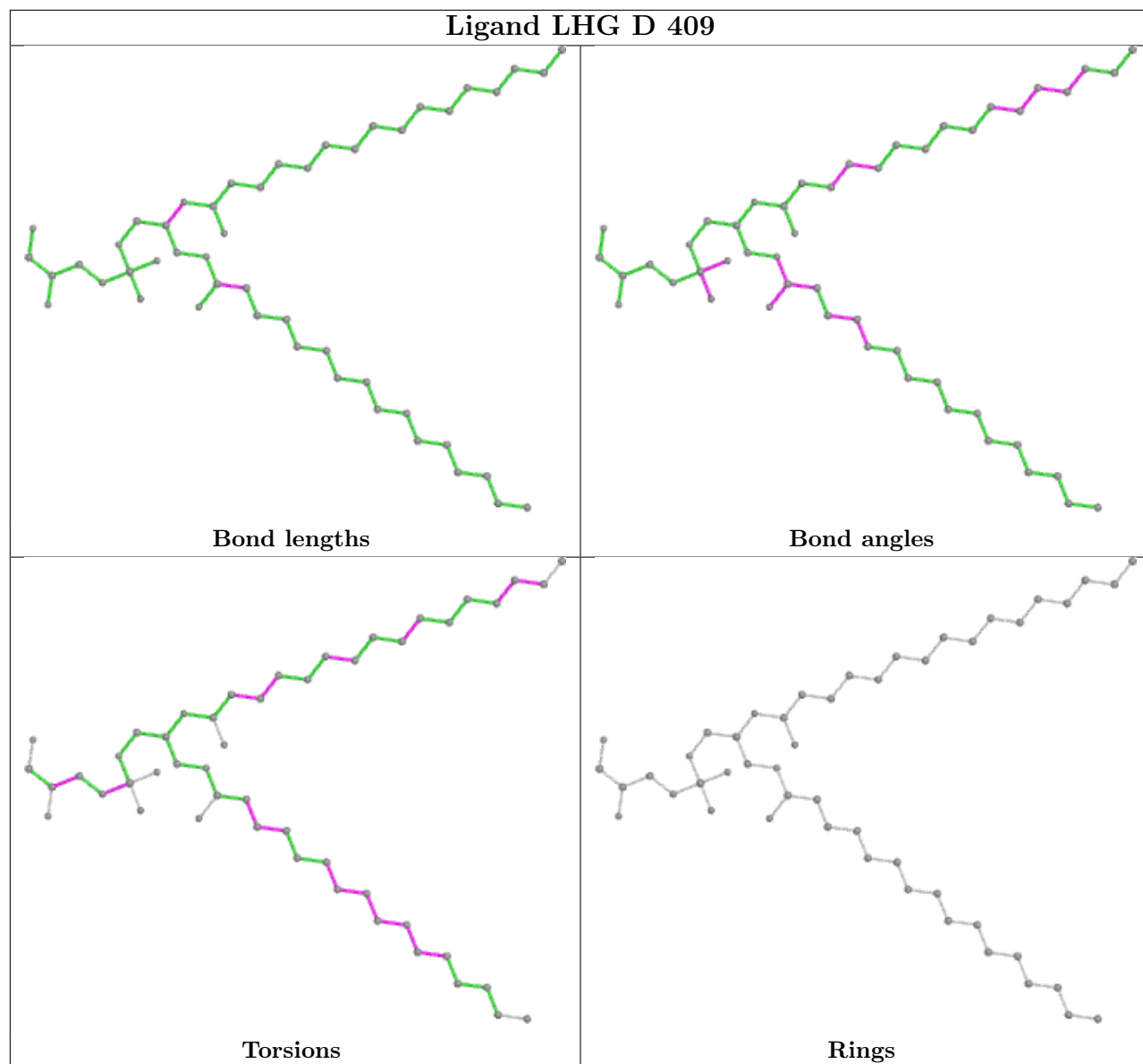


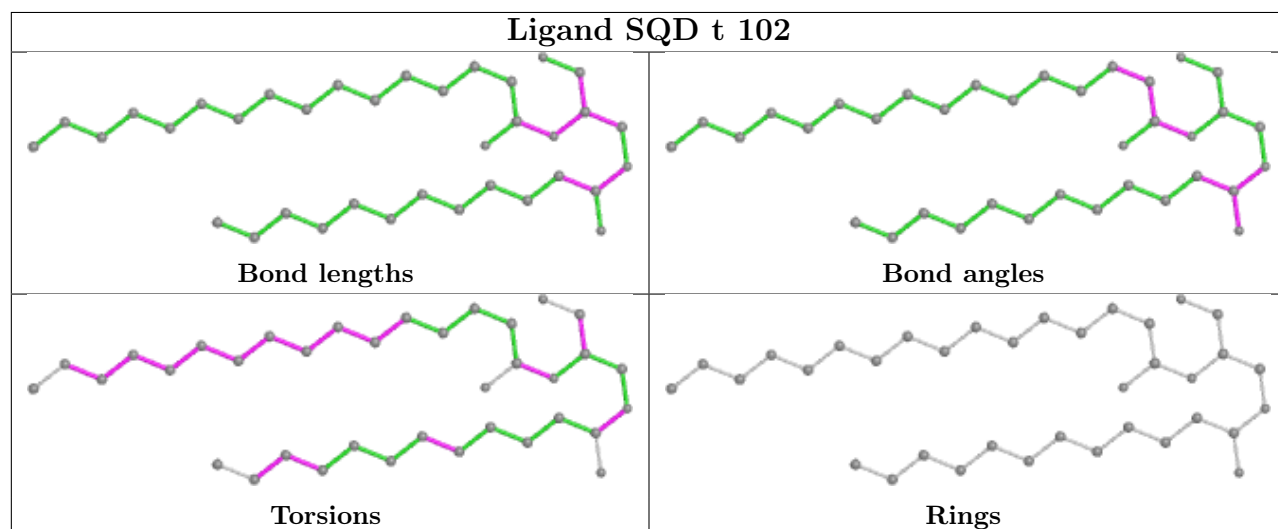
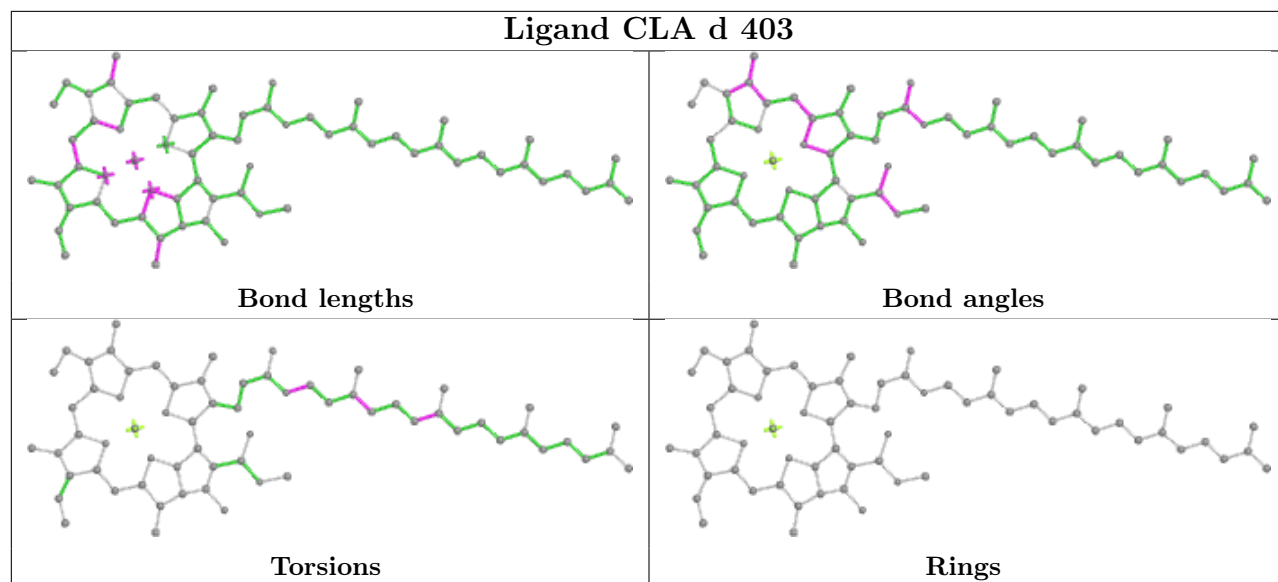


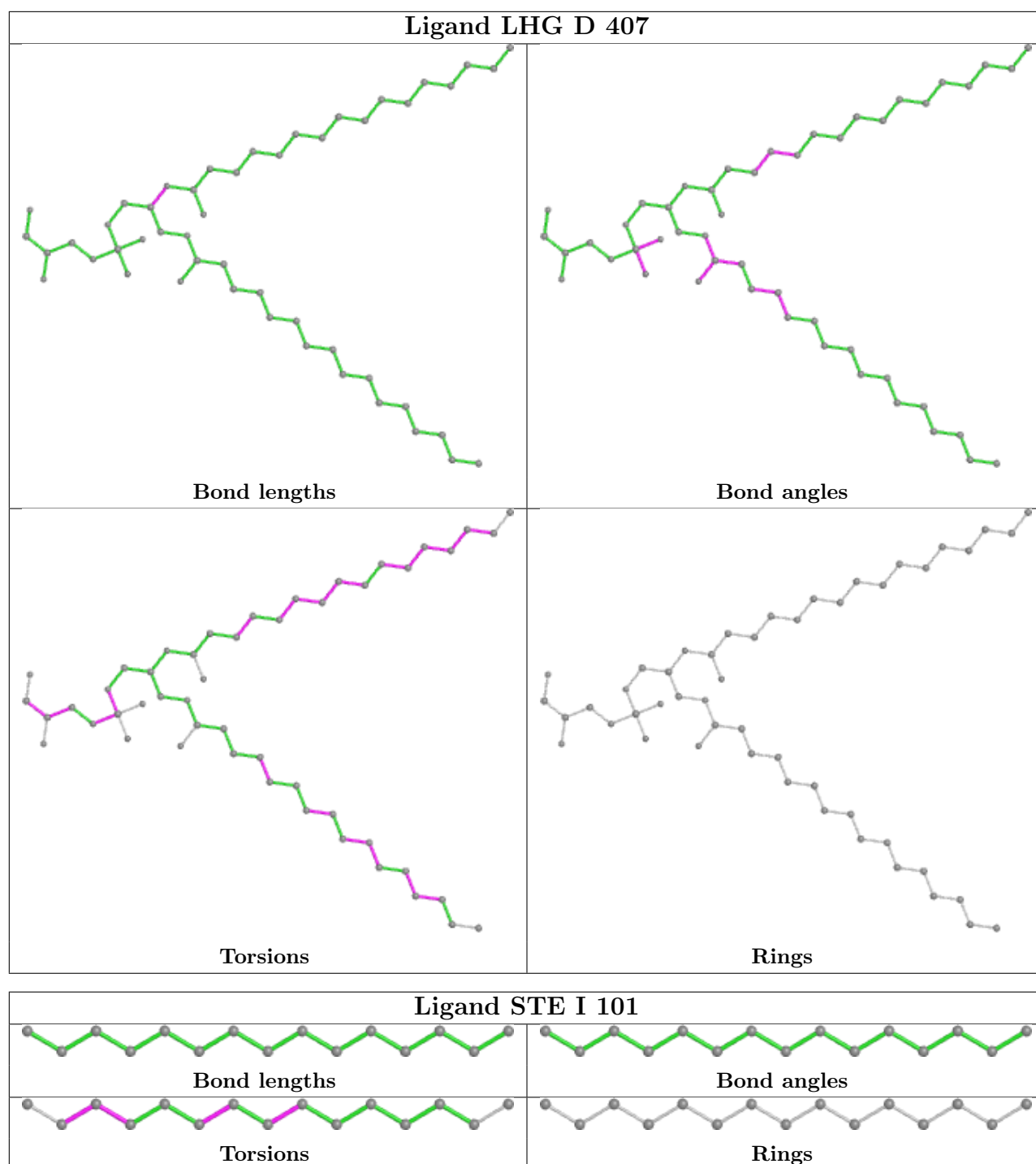


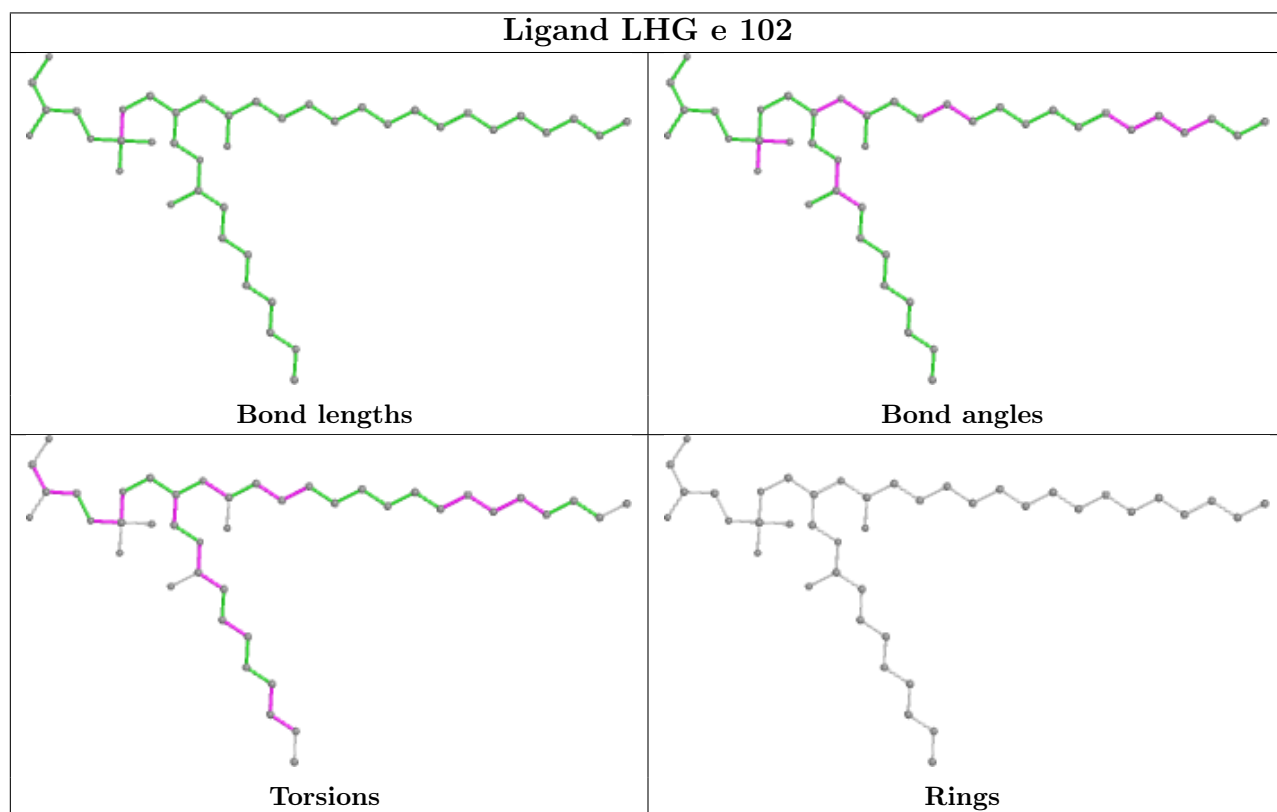
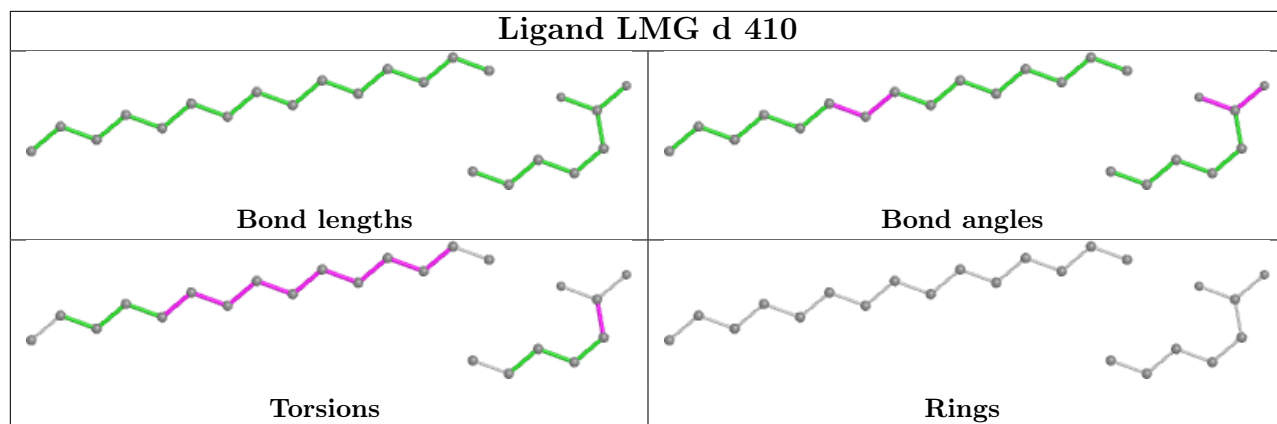


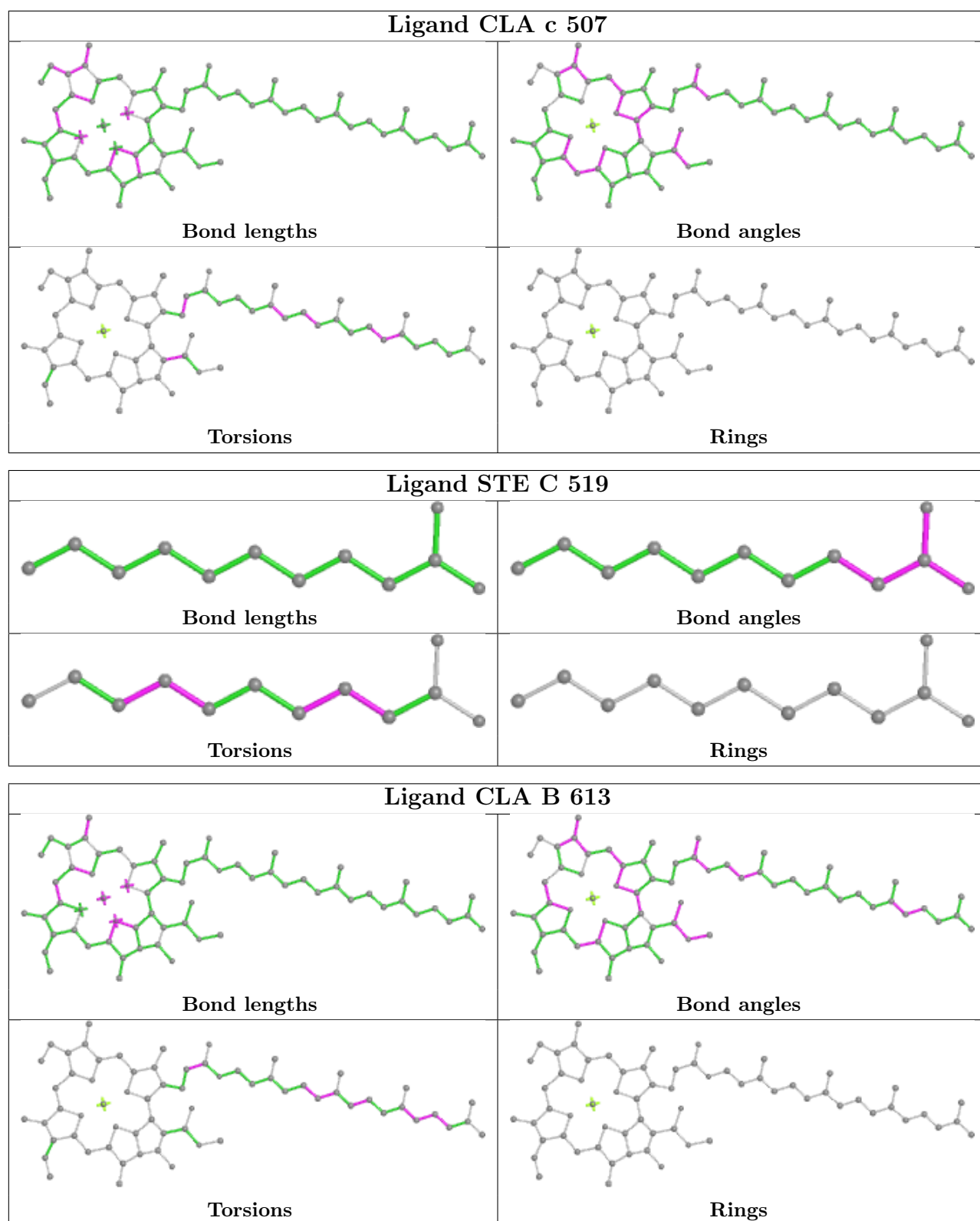


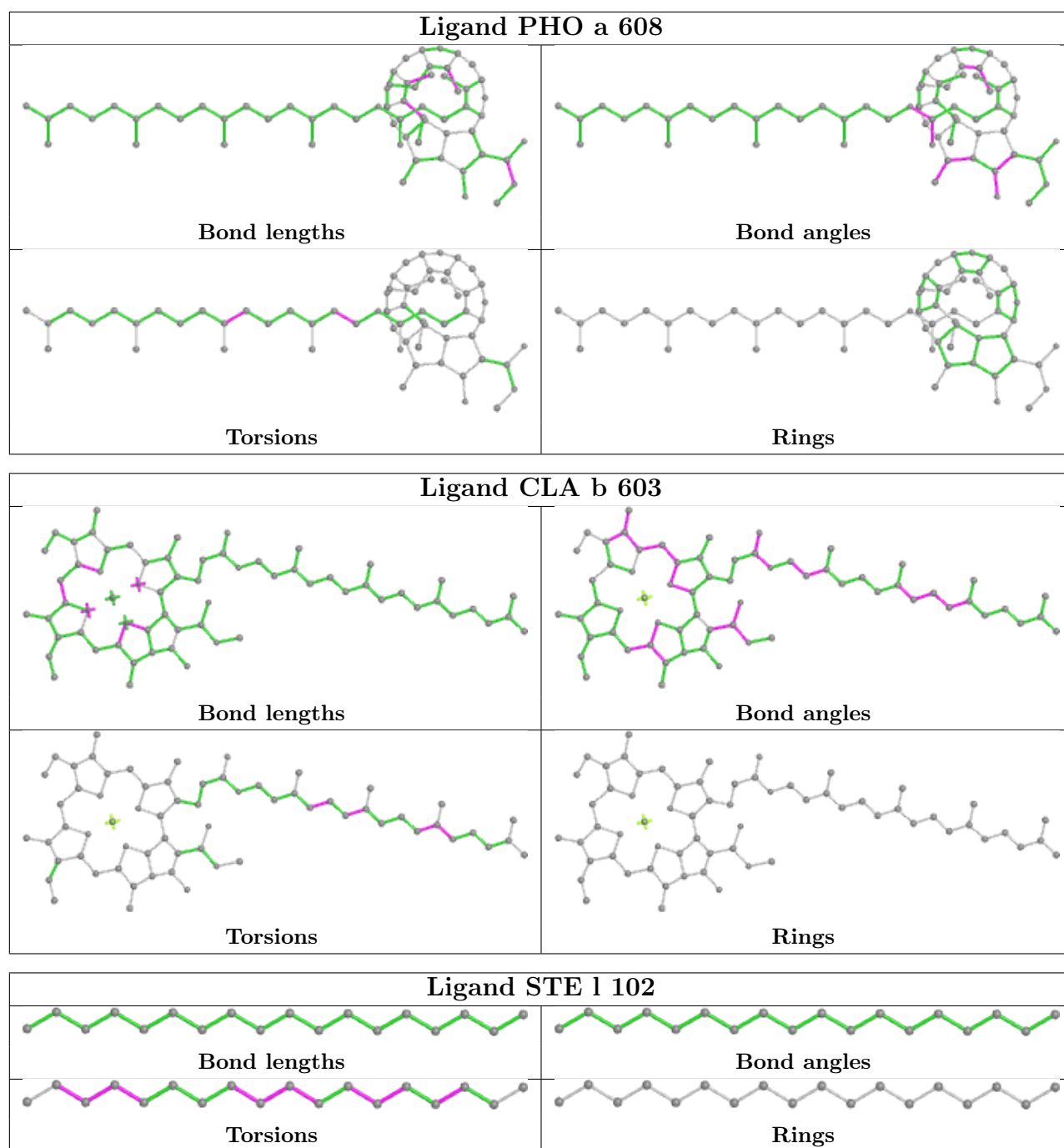




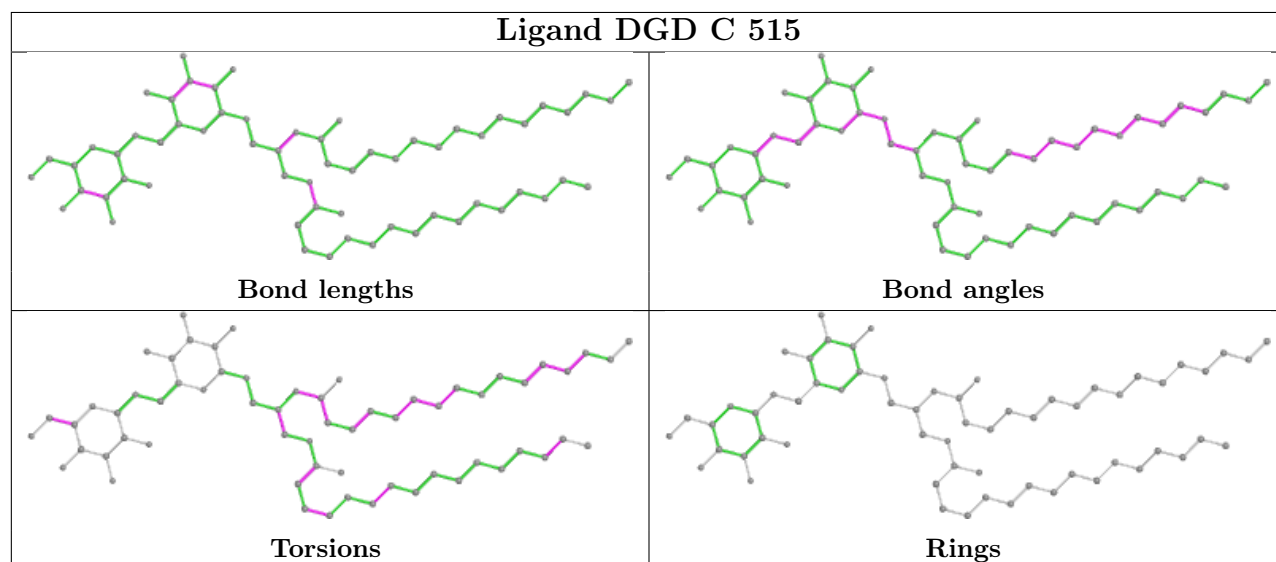
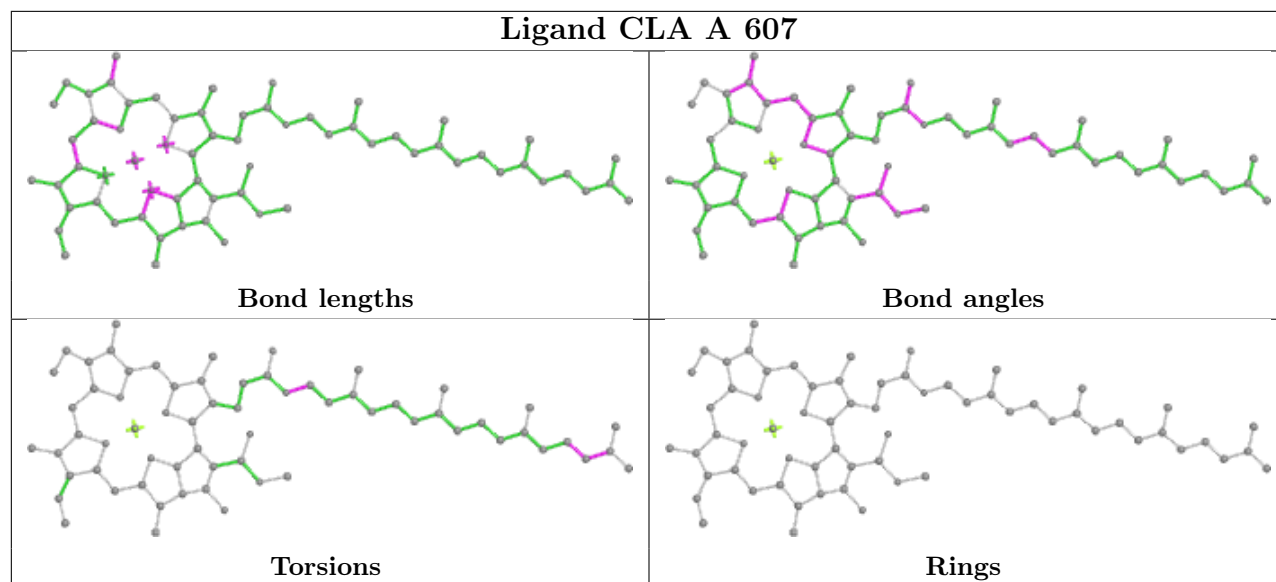


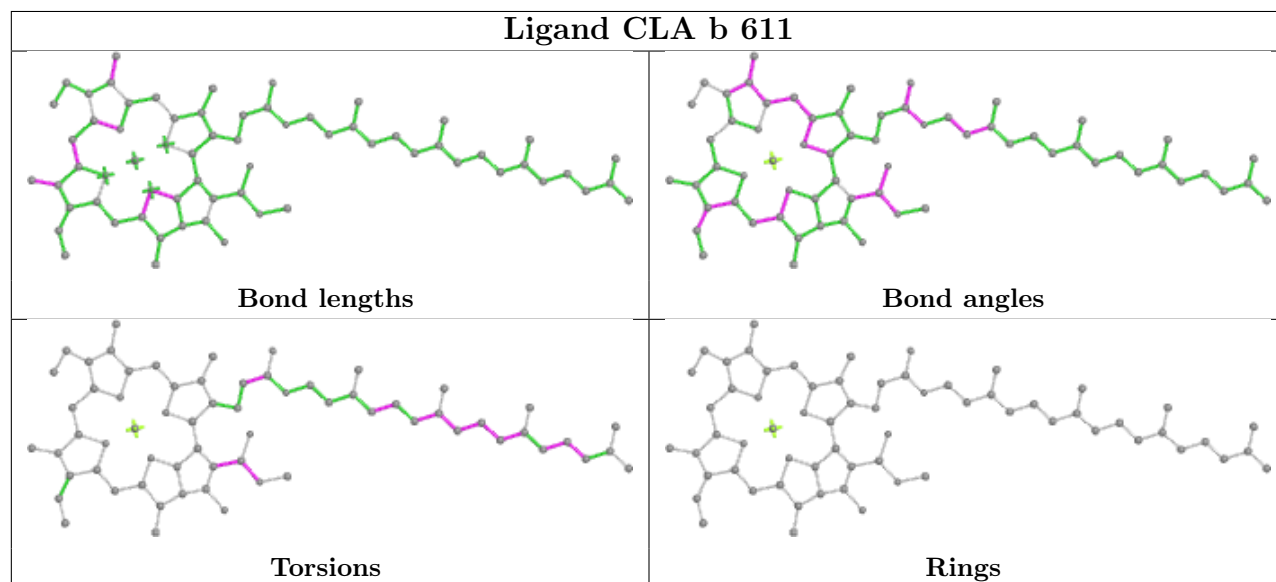
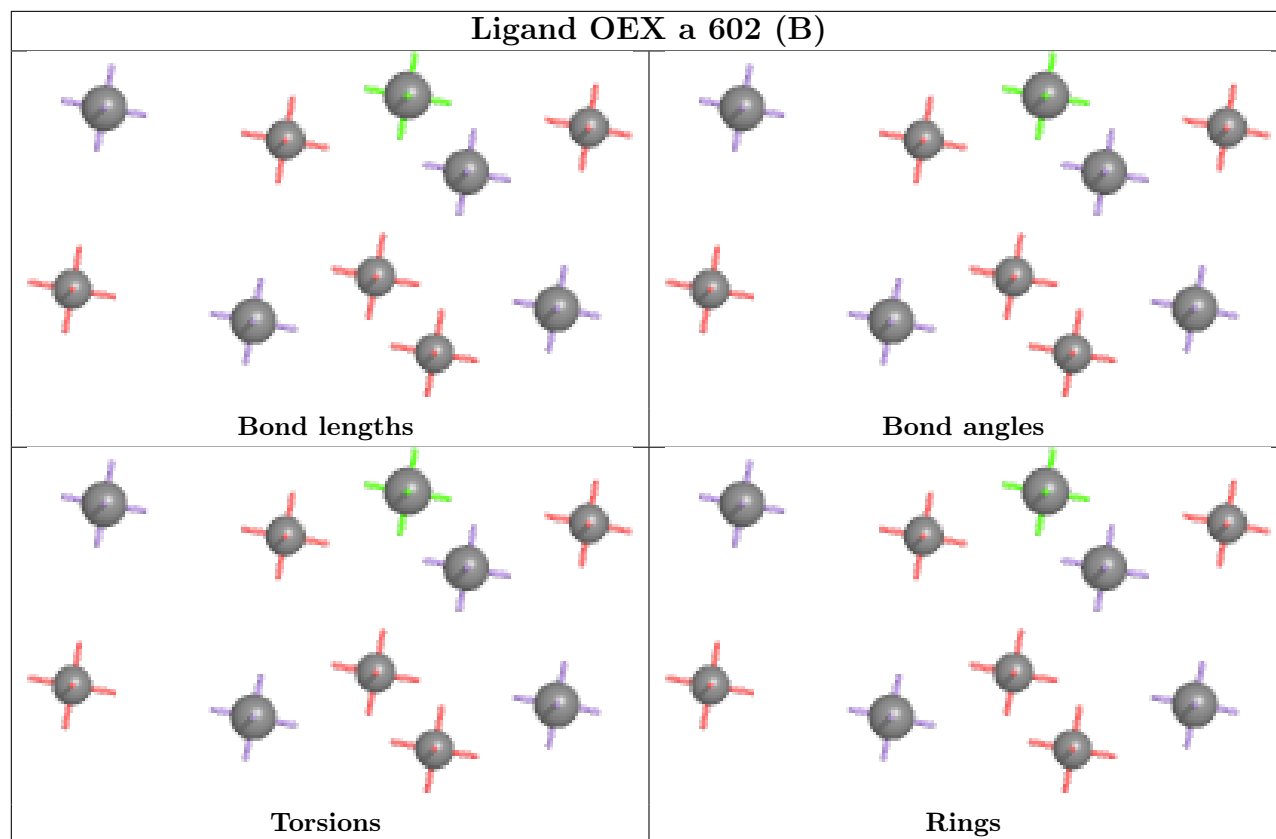


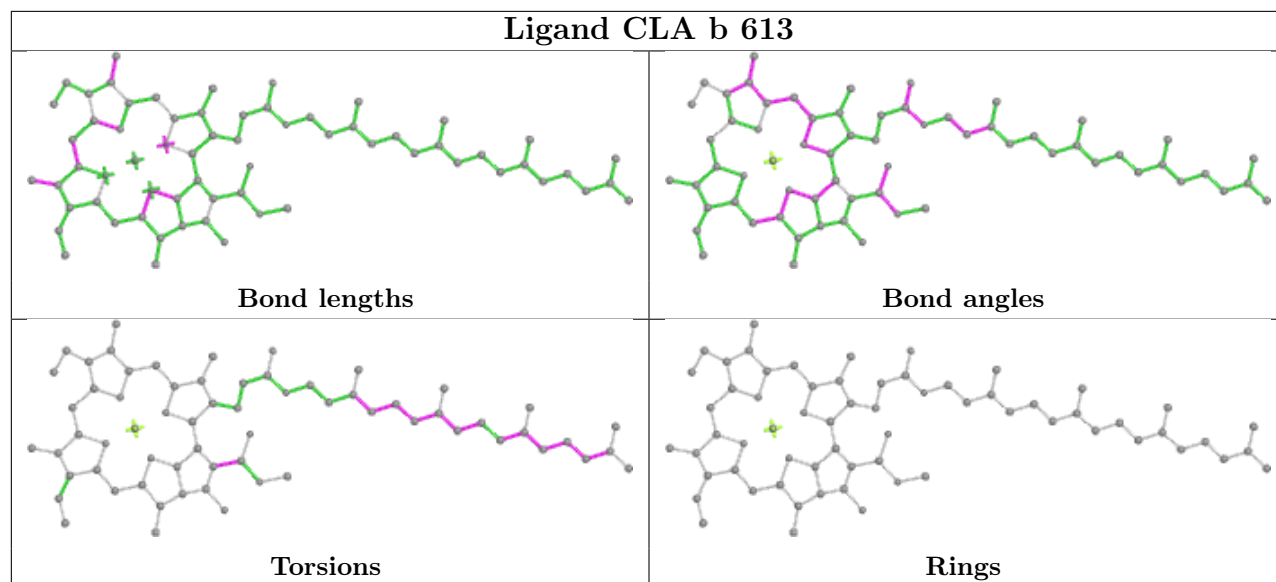












## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data [i](#)

### 6.1 Protein, DNA and RNA chains [i](#)

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	334/344 (97%)	-0.38	4 (1%) 79 82	25, 31, 53, 81	0
1	a	334/344 (97%)	-0.33	2 (0%) 89 91	25, 33, 64, 83	0
2	B	505/510 (99%)	-0.40	11 (2%) 62 66	26, 35, 65, 96	0
2	b	505/510 (99%)	-0.29	13 (2%) 56 61	27, 38, 78, 109	0
3	C	442/461 (95%)	-0.32	1 (0%) 95 95	26, 39, 55, 78	0
3	c	451/461 (97%)	-0.27	6 (1%) 77 80	29, 43, 63, 98	0
4	D	341/352 (96%)	-0.37	3 (0%) 84 86	26, 33, 52, 76	0
4	d	341/352 (96%)	-0.34	3 (0%) 84 86	27, 37, 66, 86	0
5	E	82/84 (97%)	0.27	8 (9%) 7 10	38, 57, 76, 87	0
5	e	82/84 (97%)	0.26	4 (4%) 29 35	41, 65, 86, 97	0
6	F	34/45 (75%)	-0.19	3 (8%) 10 12	41, 49, 67, 88	0
6	f	34/45 (75%)	-0.29	1 (2%) 51 57	46, 55, 89, 108	0
7	H	65/66 (98%)	0.12	3 (4%) 32 38	37, 45, 62, 78	0
7	h	63/66 (95%)	0.24	3 (4%) 30 36	48, 56, 66, 72	0
8	I	35/38 (92%)	-0.35	1 (2%) 51 57	32, 41, 65, 81	0
8	i	35/38 (92%)	-0.23	1 (2%) 51 57	34, 43, 70, 86	0
9	J	36/40 (90%)	0.37	4 (11%) 5 7	40, 54, 84, 95	0
9	j	36/40 (90%)	0.55	7 (19%) 1 1	41, 61, 97, 109	0
10	K	37/46 (80%)	-0.12	1 (2%) 54 60	48, 56, 70, 81	0
10	k	37/46 (80%)	-0.15	0 100 100	53, 60, 77, 83	0
11	L	37/37 (100%)	-0.09	1 (2%) 54 60	27, 32, 63, 71	0
11	l	36/37 (97%)	-0.29	0 100 100	27, 33, 64, 79	0
12	M	32/36 (88%)	-0.20	1 (3%) 49 55	29, 35, 61, 76	0
12	m	31/36 (86%)	-0.18	0 100 100	31, 36, 55, 66	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	O	244/272 (89%)	-0.06	11 (4%) 33 38	28, 44, 79, 137	0
13	o	244/272 (89%)	-0.13	12 (4%) 29 35	28, 42, 78, 122	0
14	T	29/32 (90%)	-0.49	1 (3%) 45 51	28, 33, 58, 77	0
14	t	29/32 (90%)	-0.12	2 (6%) 16 21	29, 35, 75, 90	0
15	U	97/134 (72%)	-0.39	1 (1%) 82 85	35, 45, 68, 90	0
15	u	97/134 (72%)	-0.52	0 100 100	33, 43, 59, 85	0
16	V	137/163 (84%)	-0.55	0 100 100	33, 42, 58, 70	0
16	v	137/163 (84%)	-0.21	1 (0%) 87 89	38, 50, 69, 86	0
17	Y	27/46 (58%)	1.77	12 (44%) 0 0	58, 76, 110, 114	0
17	y	30/46 (65%)	0.91	6 (20%) 1 1	68, 80, 98, 101	0
18	X	38/41 (92%)	0.30	4 (10%) 6 8	47, 59, 77, 83	0
18	x	39/41 (95%)	1.02	8 (20%) 1 1	59, 69, 92, 104	0
19	Z	62/62 (100%)	0.92	13 (20%) 1 0	59, 75, 112, 129	0
19	z	62/62 (100%)	0.84	16 (25%) 0 0	65, 76, 116, 122	0
20	R	34/41 (82%)	1.78	14 (41%) 0 0	68, 74, 87, 93	0
20	r	31/41 (75%)	2.86	20 (64%) 0 0	77, 89, 107, 110	0
All	All	5302/5700 (93%)	-0.18	202 (3%) 40 46	25, 41, 77, 137	0

All (202) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	O	60	ARG	7.8
9	j	5	GLY	7.2
3	c	23	ALA	6.7
19	Z	62	VAL	6.6
13	O	3	GLN	6.6
9	j	6	GLY	6.2
13	O	4	THR	6.0
18	X	2	THR	5.9
20	R	3	TRP	5.8
13	o	58	ASN	5.8
19	z	33	TRP	5.7
20	r	14	LEU	5.7
20	r	29	LYS	5.7
1	A	13	LEU	5.7
14	t	30	THR	5.6

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Mol	Chain	Res	Type	RSRZ
17	y	18	VAL	5.6
17	Y	20	ALA	5.2
20	r	28	VAL	5.2
17	Y	21	GLN	5.2
9	j	7	ARG	5.2
20	r	9	LEU	5.2
13	o	60	ARG	5.1
13	O	61	GLN	5.1
9	J	5	GLY	5.0
19	Z	32	ASP	4.8
13	o	4	THR	4.7
13	o	3	GLN	4.7
19	Z	42	LEU	4.7
9	J	8	ILE	4.7
19	z	3	ILE	4.6
18	x	38	GLN	4.6
19	Z	1	MET	4.5
14	t	29	ILE	4.5
17	Y	25	ILE	4.5
20	R	6	LEU	4.5
20	R	28	VAL	4.5
13	O	56	PRO	4.3
2	B	506	ARG	4.3
2	b	127	ARG	4.3
18	x	2	THR	4.3
20	r	24	LEU	4.3
19	z	35	ARG	4.3
13	O	59	LYS	4.3
20	R	32	GLN	4.2
9	J	7	ARG	4.2
13	o	246	ALA	4.2
19	Z	7	LEU	4.2
7	H	66	GLY	4.2
9	J	6	GLY	4.1
20	r	2	ASP	4.1
4	d	227[A]	GLU	4.1
2	B	505	ARG	4.1
2	b	495	PHE	4.0
17	Y	22	LEU	4.0
14	T	30	THR	4.0
20	r	6	LEU	4.0
18	x	40	SER	3.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	r	3	TRP	3.9
19	Z	33	TRP	3.8
6	F	12	SER	3.8
13	O	62	GLU	3.8
17	y	22	LEU	3.8
7	H	65	LEU	3.7
19	z	29	SER	3.7
11	L	2	GLU	3.7
20	R	2	ASP	3.7
17	y	19	ILE	3.7
2	b	502	VAL	3.7
6	f	12	SER	3.7
13	o	56	PRO	3.7
9	j	8	ILE	3.6
18	x	3	ILE	3.6
18	x	37	VAL	3.6
1	a	11	ALA	3.6
20	r	26	TYR	3.6
2	b	128	THR	3.6
20	R	21	ARG	3.6
1	A	11	ALA	3.5
5	e	61	ARG	3.5
13	o	207	ARG	3.5
20	r	13	LEU	3.5
20	r	18	TRP	3.5
5	E	79	PHE	3.5
12	M	33	GLN	3.5
13	o	57	LYS	3.5
20	r	31	VAL	3.5
2	B	495	PHE	3.4
17	Y	42	ARG	3.4
20	R	13	LEU	3.4
18	x	39	ARG	3.4
19	z	30	PRO	3.3
20	r	25	PRO	3.3
19	z	31	GLN	3.3
17	Y	37	PHE	3.3
20	r	21	ARG	3.3
2	B	494	GLY	3.3
20	r	10	LEU	3.3
6	F	13	TYR	3.2
20	R	33	LYS	3.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
17	Y	43	ARG	3.2
20	r	32	GLN	3.2
13	o	63	ALA	3.1
17	Y	40	ALA	3.1
5	E	84	LYS	3.1
19	Z	41	PHE	3.1
17	Y	46	LEU	3.1
19	Z	35	ARG	3.1
13	o	62	GLU	3.0
2	B	127	ARG	3.0
19	z	41	PHE	2.9
17	Y	23	THR	2.9
5	E	61	ARG	2.9
1	a	16	ARG	2.9
20	r	27	ALA	2.9
19	z	32	ASP	2.9
19	z	38	GLN	2.8
7	h	56	ASP	2.8
3	c	24	THR	2.8
20	R	31	VAL	2.8
4	d	12	ARG	2.8
2	B	295	GLY	2.8
3	c	143	TYR	2.8
13	o	61	GLN	2.7
3	c	29	GLU	2.7
19	Z	61	VAL	2.7
20	R	8	VAL	2.7
5	e	79	PHE	2.7
2	B	490	GLN	2.7
19	Z	4	LEU	2.7
18	X	39	ARG	2.7
18	X	3	ILE	2.6
19	z	4	LEU	2.6
16	v	16	GLY	2.6
2	b	485	GLU	2.6
9	j	11	TRP	2.6
1	A	12	ASN	2.6
9	j	9	PRO	2.5
19	z	60	PHE	2.5
5	E	3	GLY	2.5
20	R	27	ALA	2.5
13	o	59	LYS	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	R	9	LEU	2.4
20	R	5	VAL	2.4
17	y	25	ILE	2.4
17	y	20	ALA	2.4
2	B	487	SER	2.4
7	h	63	LYS	2.4
2	b	129	GLY	2.4
20	r	4	ARG	2.4
13	O	57	LYS	2.4
19	z	62	VAL	2.4
19	Z	40	ILE	2.4
3	c	191	PRO	2.4
8	I	36	ASP	2.4
2	B	294	SER	2.3
2	b	494	GLY	2.3
7	h	6	TRP	2.3
19	z	59	PHE	2.3
19	z	36	SER	2.3
5	E	4	THR	2.3
2	b	487	SER	2.3
3	C	44	ASN	2.3
19	Z	31	GLN	2.3
4	D	238	THR	2.3
7	H	6	TRP	2.3
20	r	7	VAL	2.3
18	X	34	ILE	2.3
1	A	235	TYR	2.2
4	D	227	GLU	2.2
17	Y	26	ALA	2.2
19	Z	60	PHE	2.2
2	B	500	GLY	2.2
19	z	34	ASP	2.2
2	b	374	ASN	2.2
2	b	126	PRO	2.2
13	O	133	VAL	2.2
2	b	506	ARG	2.2
5	e	84	LYS	2.2
3	c	147	PHE	2.2
13	O	35	SER	2.2
5	E	83	LEU	2.2
20	R	34	LEU	2.2
4	D	236	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
13	O	5	LEU	2.1
18	x	15	LEU	2.1
2	b	503	THR	2.1
17	Y	38	LEU	2.1
18	x	19	VAL	2.1
6	F	16	PHE	2.1
2	b	492	GLU	2.1
9	j	10	LEU	2.1
19	z	28	ALA	2.1
5	E	81	GLU	2.1
8	i	36	ASP	2.1
17	y	43	ARG	2.1
15	U	8	GLU	2.0
4	d	27	PHE	2.0
10	K	17	ILE	2.0
5	E	17	VAL	2.0
5	e	77	GLU	2.0
2	B	86	ILE	2.0
20	r	5	VAL	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q<0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
14	FME	t	1	10/11	0.89	0.12	33,37,56,68	0
12	FME	M	1	10/11	0.93	0.13	37,53,63,64	0
12	FME	m	1	10/11	0.94	0.15	30,49,65,66	0
8	FME	I	1	10/11	0.95	0.14	37,48,53,55	0
14	FME	T	1	10/11	0.96	0.12	33,37,51,70	0
8	FME	i	1	10/11	0.97	0.14	41,49,53,55	0

## 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 6.4 Ligands

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
34	STE	H	102	18/20	0.64	0.30	58,70,75,81	0
34	STE	a	615	12/20	0.68	0.31	54,63,79,81	0
30	LMG	D	408	33/55	0.69	0.24	44,59,81,83	0
30	LMG	d	410	23/55	0.71	0.28	52,65,73,74	0
31	LHG	A	617	49/49	0.71	0.27	55,79,98,109	0
34	STE	c	521	20/20	0.71	0.17	50,56,82,82	0
33	DGD	a	614	44/66	0.72	0.19	38,54,67,71	0
30	LMG	b	621	55/55	0.76	0.33	57,69,86,89	0
34	STE	k	102	12/20	0.76	0.22	60,70,74,75	0
34	STE	d	412	16/20	0.78	0.20	54,63,78,81	0
26	CLA	h	101	65/65	0.78	0.21	55,72,92,97	0
34	STE	F	103	12/20	0.79	0.42	58,75,86,89	0
30	LMG	c	522	48/55	0.79	0.25	60,73,85,89	0
29	PL9	a	611	55/55	0.80	0.27	50,66,78,86	0
32	SQD	t	102	36/54	0.80	0.17	40,59,75,76	0
30	LMG	B	621	28/55	0.80	0.17	40,50,64,67	0
34	STE	C	519	12/20	0.81	0.17	39,47,51,53	0
34	STE	B	625	16/20	0.81	0.23	51,55,66,69	0
34	STE	b	620	20/20	0.81	0.18	42,56,76,78	0
34	STE	B	623	12/20	0.82	0.17	47,58,66,68	0
31	LHG	e	102	42/49	0.82	0.32	60,86,104,113	0
34	STE	L	102	12/20	0.82	0.23	48,60,76,76	0
34	STE	d	414	20/20	0.82	0.18	46,52,62,65	0
34	STE	B	620	17/20	0.82	0.15	40,51,67,68	0
34	STE	T	103	15/20	0.83	0.22	46,51,67,68	0
34	STE	d	413	17/20	0.83	0.18	43,52,67,69	0
34	STE	b	623	10/20	0.83	0.22	46,56,62,65	0
34	STE	J	101	12/20	0.83	0.17	57,62,72,72	0
34	STE	t	105	18/20	0.83	0.15	44,57,86,87	0
34	STE	B	624	12/20	0.84	0.28	50,52,71,73	0
34	STE	b	622	20/20	0.84	0.23	51,60,67,70	0
34	STE	t	104	10/20	0.84	0.18	46,53,59,60	0
34	STE	T	102	16/20	0.84	0.18	38,48,58,60	0
30	LMG	c	523	49/55	0.85	0.14	41,56,78,83	0
33	DGD	A	619	66/66	0.85	0.19	47,59,67,76	0
34	STE	X	102	20/20	0.85	0.20	37,49,70,73	0
30	LMG	A	614	48/55	0.85	0.18	37,58,68,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
29	PL9	A	612	55/55	0.85	0.26	44,63,82,88	0
30	LMG	C	518	48/55	0.85	0.20	48,68,82,86	0
32	SQD	A	618	39/54	0.85	0.20	42,55,78,80	0
32	SQD	f	101	41/54	0.86	0.18	62,81,91,95	0
34	STE	C	520	12/20	0.86	0.16	48,55,59,63	0
34	STE	M	103	10/20	0.87	0.21	44,48,59,61	0
33	DGD	H	101	62/66	0.87	0.14	38,47,56,61	0
30	LMG	M	101	51/55	0.87	0.14	31,48,67,68	0
30	LMG	c	520	37/55	0.87	0.20	52,68,80,83	0
32	SQD	B	622	54/54	0.87	0.16	39,60,80,86	0
26	CLA	c	512	65/65	0.88	0.13	46,58,77,88	0
28	BCR	X	101	40/40	0.88	0.12	39,50,56,63	0
34	STE	I	101	15/20	0.88	0.12	44,52,59,62	0
30	LMG	m	101	51/55	0.88	0.12	33,48,64,66	0
32	SQD	b	619	49/54	0.89	0.14	37,56,72,77	0
28	BCR	K	101	40/40	0.89	0.12	46,55,61,68	0
26	CLA	b	615	60/65	0.89	0.14	31,41,84,91	0
28	BCR	d	405	40/40	0.89	0.11	42,50,79,84	0
28	BCR	k	101	40/40	0.89	0.12	49,61,68,73	0
34	STE	j	101	12/20	0.89	0.14	52,56,64,65	0
26	CLA	B	601	65/65	0.89	0.16	41,63,87,94	0
26	CLA	c	513	65/65	0.89	0.18	53,66,83,88	0
26	CLA	B	616	60/65	0.89	0.14	26,36,76,89	0
26	CLA	C	512	65/65	0.90	0.15	40,51,75,81	0
28	BCR	h	102	40/40	0.90	0.12	42,58,68,68	0
33	DGD	h	103	62/66	0.90	0.15	38,50,59,62	0
34	STE	l	102	18/20	0.90	0.15	36,41,68,73	0
26	CLA	C	513	65/65	0.90	0.15	50,57,77,85	0
28	BCR	c	516	40/40	0.90	0.18	52,59,63,68	0
34	STE	M	102	15/20	0.91	0.11	37,44,53,64	0
28	BCR	b	618	40/40	0.91	0.10	33,45,59,61	0
28	BCR	c	514	40/40	0.91	0.14	52,61,65,68	0
26	CLA	a	609	65/65	0.91	0.14	24,30,68,76	0
28	BCR	Z	101	40/40	0.91	0.12	50,56,62,64	0
34	STE	C	521	16/20	0.91	0.11	39,49,64,64	0
26	CLA	C	503	65/65	0.92	0.10	36,42,49,54	0
26	CLA	d	404	65/65	0.92	0.14	34,43,83,86	0
26	CLA	C	506	65/65	0.92	0.12	32,42,74,77	0
30	LMG	D	406	51/55	0.92	0.14	36,52,71,74	0
33	DGD	c	518	62/66	0.92	0.10	39,52,76,81	0
32	SQD	F	102	36/54	0.92	0.15	55,72,80,82	0
32	SQD	a	613	54/54	0.92	0.14	45,60,75,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
34	STE	t	103	14/20	0.92	0.14	38,49,60,60	0
28	BCR	C	514	40/40	0.92	0.12	31,41,51,54	0
26	CLA	D	403	65/65	0.92	0.13	30,36,90,103	0
33	DGD	C	515	62/66	0.93	0.12	25,36,63,70	0
26	CLA	b	614	65/65	0.93	0.13	31,40,53,58	0
26	CLA	B	615	65/65	0.93	0.13	25,37,51,61	0
26	CLA	c	506	65/65	0.93	0.11	39,46,72,76	0
28	BCR	B	618	40/40	0.93	0.09	26,37,46,48	0
28	BCR	B	619	40/40	0.93	0.09	33,41,54,60	0
26	CLA	c	508	64/65	0.93	0.13	36,43,81,96	0
28	BCR	D	404	40/40	0.93	0.11	37,45,79,85	0
26	CLA	c	511	65/65	0.93	0.12	44,56,70,72	0
28	BCR	K	102	40/40	0.93	0.15	38,51,62,64	0
26	CLA	b	613	65/65	0.93	0.14	28,37,66,71	0
30	LMG	d	411	44/55	0.93	0.11	41,52,72,76	0
26	CLA	b	612	65/65	0.94	0.11	25,32,62,72	0
28	BCR	A	611	40/40	0.94	0.09	25,33,38,41	0
28	BCR	B	617	40/40	0.94	0.10	30,38,48,53	0
26	CLA	C	507	65/65	0.94	0.12	31,38,51,52	0
26	CLA	C	508	65/65	0.94	0.10	34,41,87,91	0
26	CLA	C	511	65/65	0.94	0.11	33,48,60,63	0
26	CLA	c	502	65/65	0.94	0.10	34,41,53,58	0
26	CLA	c	505	65/65	0.94	0.13	33,41,56,64	0
33	DGD	C	516	62/66	0.94	0.11	36,49,88,96	0
26	CLA	C	502	65/65	0.94	0.10	30,39,51,56	0
26	CLA	c	507	65/65	0.94	0.11	33,41,50,53	0
33	DGD	c	517	62/66	0.94	0.11	30,38,60,67	0
26	CLA	B	606	65/65	0.94	0.10	27,35,61,69	0
33	DGD	c	519	62/66	0.94	0.10	33,48,71,80	0
28	BCR	b	616	40/40	0.94	0.11	30,40,48,48	0
28	BCR	b	617	40/40	0.94	0.09	27,36,46,47	0
26	CLA	c	510	65/65	0.94	0.13	34,44,56,63	0
26	CLA	C	505	65/65	0.94	0.14	24,37,56,59	0
28	BCR	c	515	40/40	0.94	0.12	33,47,53,56	0
26	CLA	a	607	65/65	0.94	0.11	29,37,86,95	0
26	CLA	B	614	65/65	0.94	0.13	23,35,64,75	0
32	SQD	A	616	52/54	0.94	0.15	35,56,80,84	0
26	CLA	b	605	65/65	0.94	0.10	31,39,60,71	0
26	CLA	B	610	65/65	0.95	0.13	24,31,40,42	0
26	CLA	B	612	65/65	0.95	0.13	22,28,35,42	0
26	CLA	B	613	65/65	0.95	0.10	22,29,60,68	0
26	CLA	c	501	65/65	0.95	0.11	28,38,47,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
26	CLA	C	509	65/65	0.95	0.13	34,42,57,59	0
26	CLA	c	503	65/65	0.95	0.11	37,45,51,53	0
28	BCR	T	101	40/40	0.95	0.09	33,39,47,52	0
26	CLA	c	504	60/65	0.95	0.10	31,45,69,74	0
26	CLA	A	613	65/65	0.95	0.10	24,29,38,46	0
28	BCR	a	610	40/40	0.95	0.08	20,34,43,45	0
31	LHG	A	615	47/49	0.95	0.11	30,45,70,80	0
26	CLA	A	608	65/65	0.95	0.10	24,33,83,90	0
31	LHG	D	409	49/49	0.95	0.12	29,40,53,59	0
31	LHG	d	407	49/49	0.95	0.11	32,45,61,66	0
31	LHG	d	409	39/49	0.95	0.10	37,43,51,54	0
26	CLA	B	602	65/65	0.95	0.10	28,37,55,57	0
31	LHG	l	101	49/49	0.95	0.11	31,41,48,56	0
26	CLA	C	501	65/65	0.95	0.10	25,35,49,53	0
26	CLA	c	509	65/65	0.95	0.13	38,45,57,61	0
26	CLA	B	604	65/65	0.95	0.11	22,30,65,68	0
26	CLA	A	610	54/65	0.95	0.11	22,28,58,60	0
26	CLA	b	601	65/65	0.95	0.12	34,42,54,60	0
26	CLA	b	603	65/65	0.95	0.12	26,33,66,79	0
26	CLA	d	403	65/65	0.95	0.10	24,32,52,56	0
28	BCR	t	101	40/40	0.95	0.08	29,38,48,51	0
26	CLA	C	504	59/65	0.95	0.10	35,43,75,82	0
29	PL9	D	405	55/55	0.95	0.11	24,31,38,39	0
26	CLA	b	609	65/65	0.95	0.13	30,37,45,49	0
33	DGD	C	517	62/66	0.95	0.09	30,44,69,75	0
29	PL9	d	406	55/55	0.95	0.09	25,33,38,41	0
27	PHO	a	608	64/64	0.95	0.10	24,29,35,40	0
26	CLA	b	611	65/65	0.95	0.14	26,32,40,42	0
26	CLA	B	609	65/65	0.95	0.11	27,40,51,62	0
27	PHO	A	609	64/64	0.96	0.09	23,27,35,38	0
27	PHO	D	401	64/64	0.96	0.09	25,33,38,43	0
26	CLA	a	612	65/65	0.96	0.09	22,30,39,44	0
27	PHO	d	402	64/64	0.96	0.09	30,39,45,49	0
26	CLA	C	510	65/65	0.96	0.11	30,43,57,73	0
26	CLA	b	602	65/65	0.96	0.11	25,34,59,70	0
26	CLA	B	608	65/65	0.96	0.10	25,34,53,56	0
26	CLA	b	604	65/65	0.96	0.10	24,35,44,49	0
31	LHG	L	101	49/49	0.96	0.12	31,38,51,54	0
26	CLA	A	607	65/65	0.96	0.09	21,29,37,41	0
31	LHG	d	408	49/49	0.96	0.12	27,39,48,55	0
26	CLA	b	606	65/65	0.96	0.11	23,30,54,62	0
26	CLA	b	607	65/65	0.96	0.11	33,41,59,66	0

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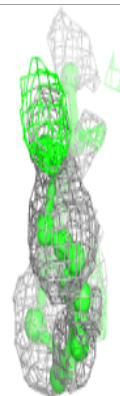
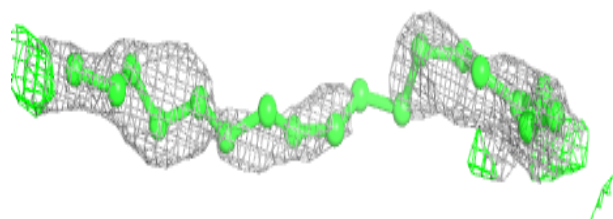
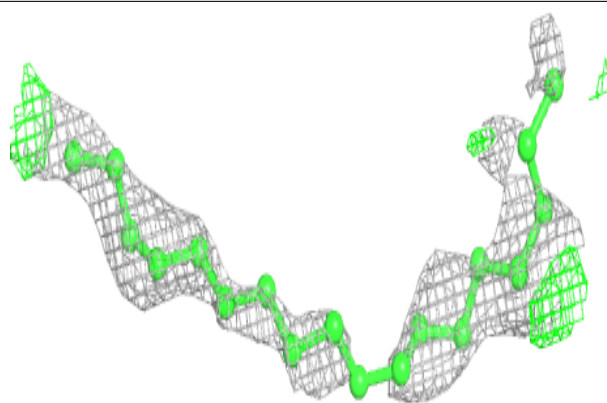
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
26	CLA	b	608	65/65	0.96	0.10	32,43,63,70	0
26	CLA	B	605	65/65	0.96	0.12	23,31,41,45	0
26	CLA	b	610	65/65	0.96	0.08	25,32,45,53	0
26	CLA	D	402	65/65	0.96	0.08	22,27,47,58	0
26	CLA	B	611	65/65	0.96	0.10	20,30,38,46	0
26	CLA	a	606	65/65	0.96	0.08	23,31,37,47	0
26	CLA	B	603	65/65	0.96	0.10	26,31,54,59	0
26	CLA	B	607	65/65	0.96	0.09	20,29,54,58	0
35	HEM	F	101	43/43	0.96	0.12	45,52,63,72	0
35	HEM	e	101	43/43	0.96	0.13	54,63,79,83	0
36	HEC	v	201	43/43	0.96	0.12	32,38,46,50	0
31	LHG	D	407	49/49	0.97	0.09	26,37,44,54	0
25	BCT	d	401	4/4	0.97	0.15	32,36,43,48	0
25	BCT	A	606	4/4	0.97	0.19	35,35,39,40	0
21	OEY	a	601[A]	11/11	0.98	0.12	31,35,39,39	11
21	OEY	a	601[C]	11/11	0.98	0.12	26,28,35,37	11
22	OEX	A	602[B]	10/10	0.98	0.10	27,31,34,34	10
22	OEX	a	602[B]	10/10	0.98	0.11	26,31,33,33	10
24	CL	a	605	1/1	0.98	0.07	30,30,30,30	0
21	OEY	A	601[A]	11/11	0.98	0.11	31,34,38,38	11
36	HEC	V	201	43/43	0.98	0.09	26,33,40,47	0
21	OEY	A	601[C]	11/11	0.98	0.11	28,30,33,36	11
24	CL	a	604	1/1	0.99	0.03	32,32,32,32	0
23	FE2	a	603	1/1	0.99	0.03	36,36,36,36	0
24	CL	A	604	1/1	0.99	0.03	34,34,34,34	0
24	CL	A	605	1/1	0.99	0.03	35,35,35,35	0
23	FE2	A	603	1/1	1.00	0.04	29,29,29,29	0

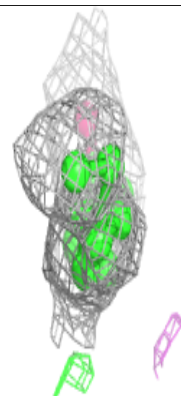
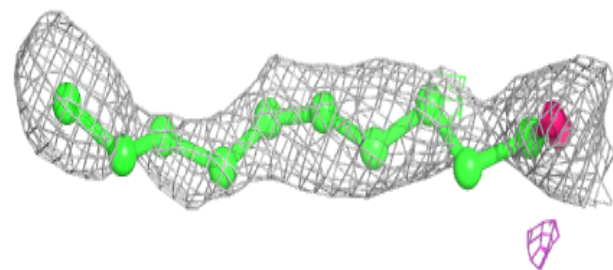
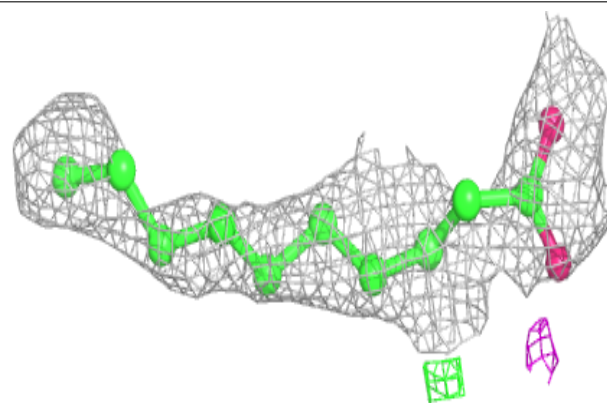
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

**Electron density around STE H 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around STE a 615:**

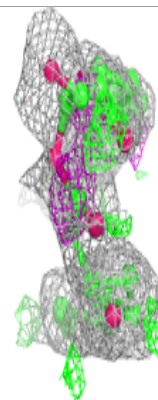
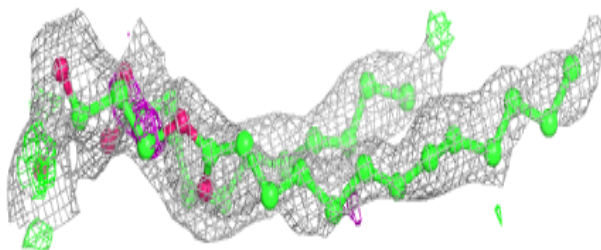
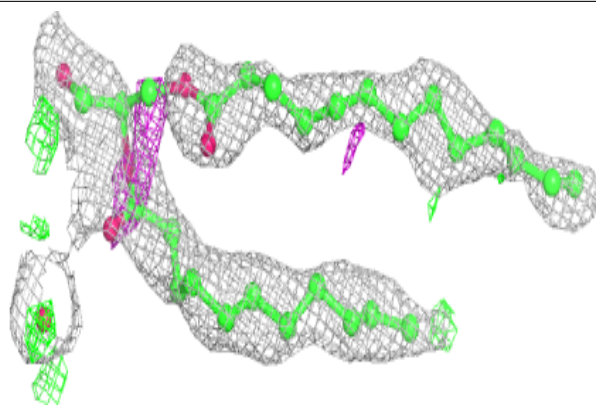
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



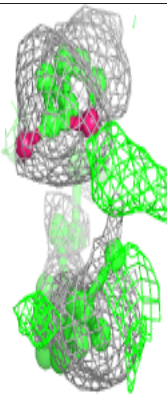
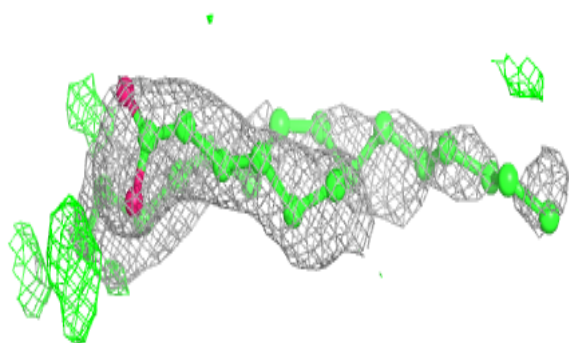
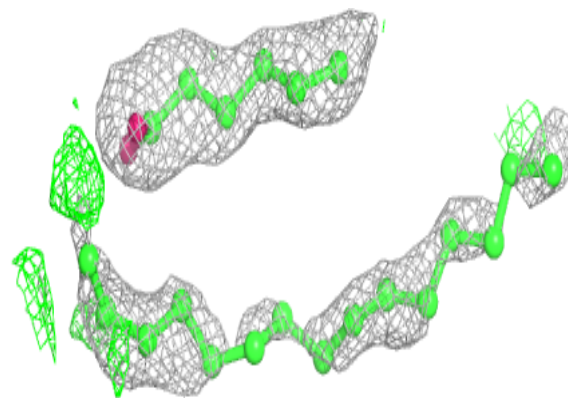


**Electron density around LMG D 408:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

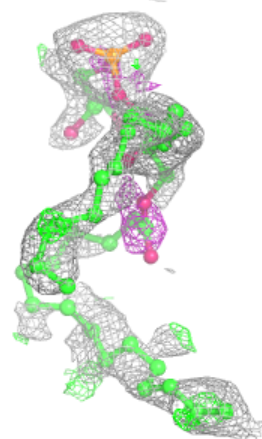
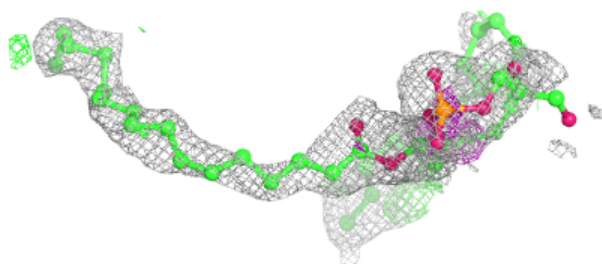
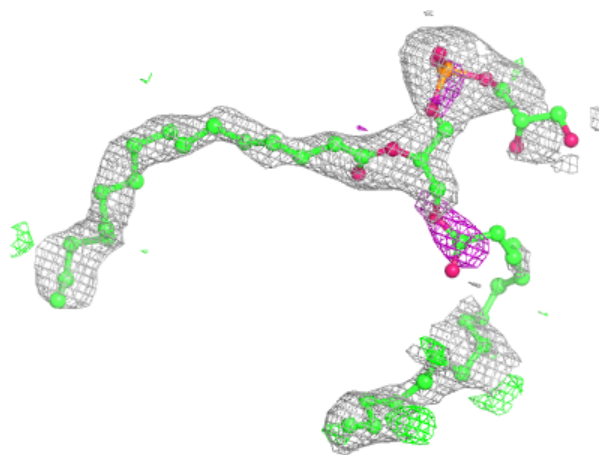
**Electron density around LMG d 410:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



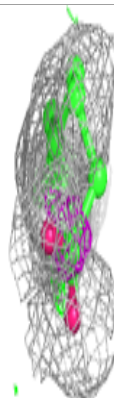
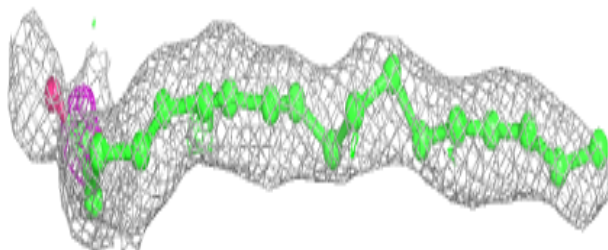
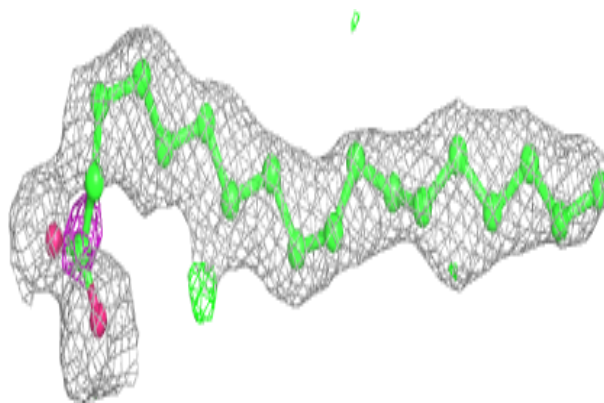
**Electron density around LHG A 617:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

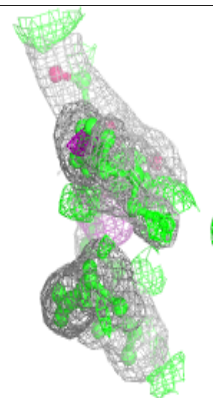
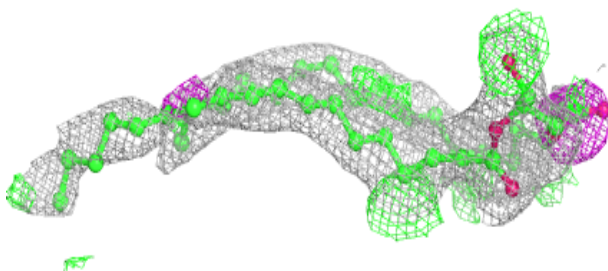
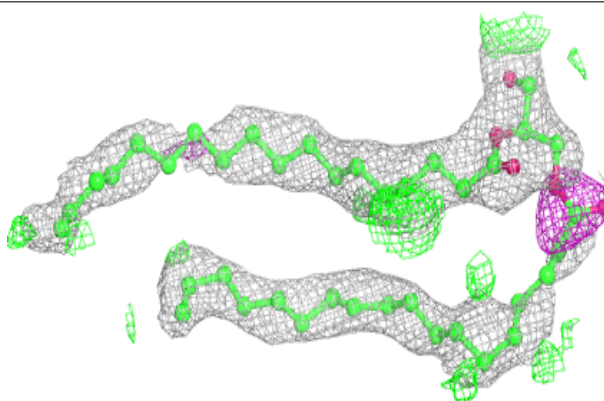


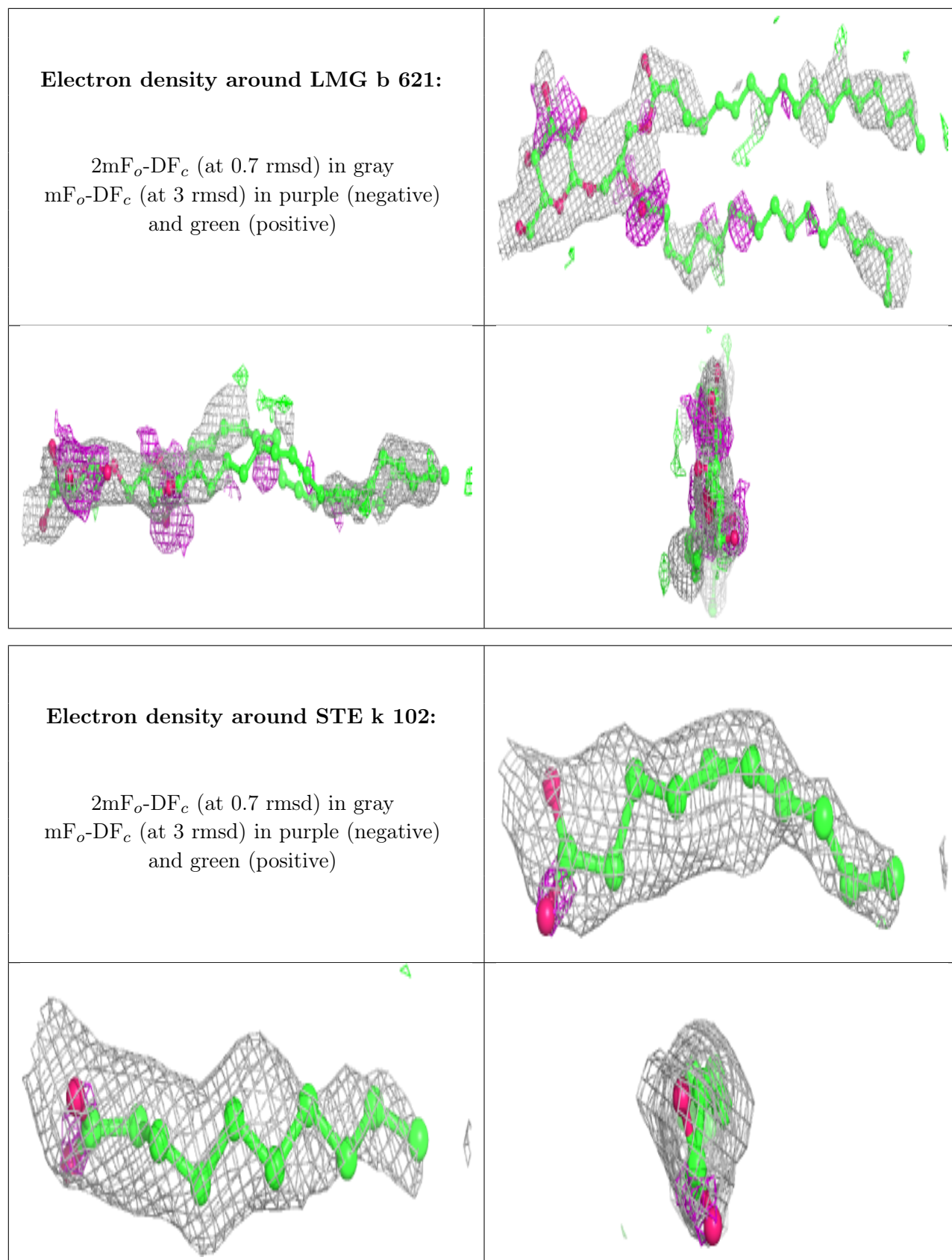
**Electron density around STE c 521:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around DGD a 614:**

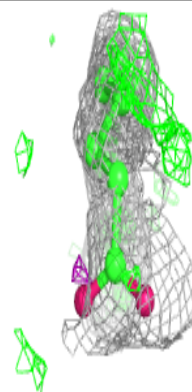
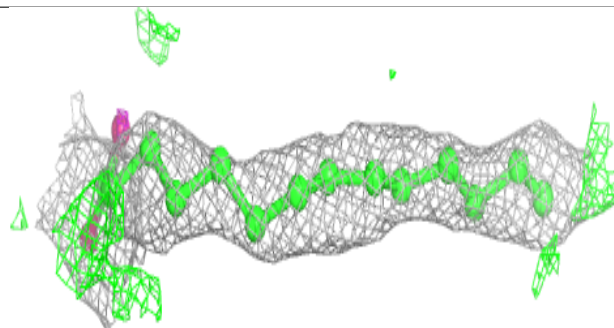
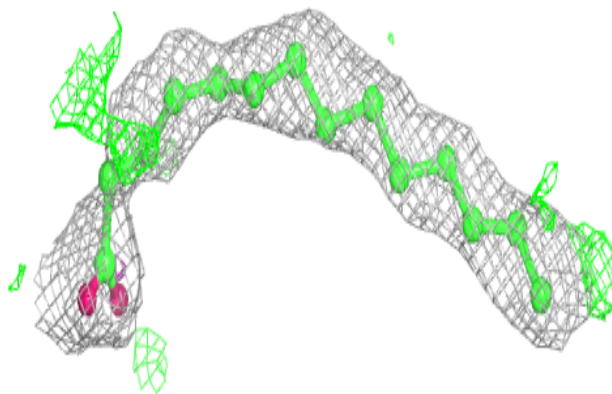
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



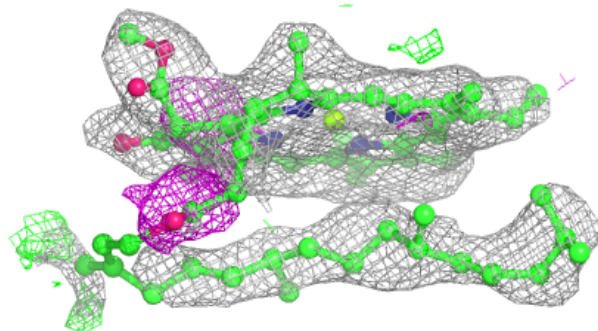
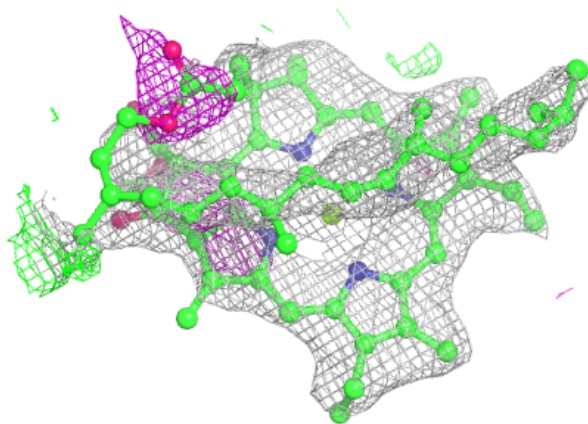


**Electron density around STE d 412:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

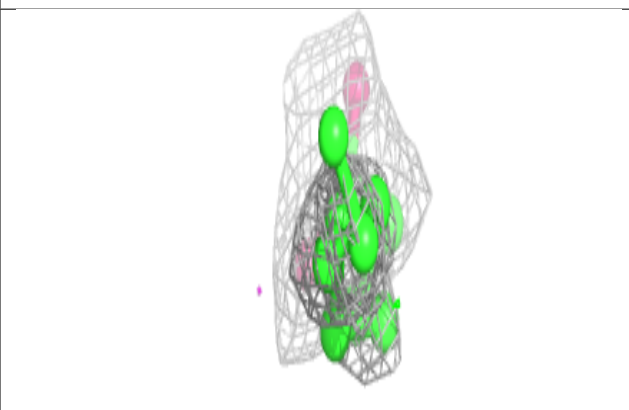
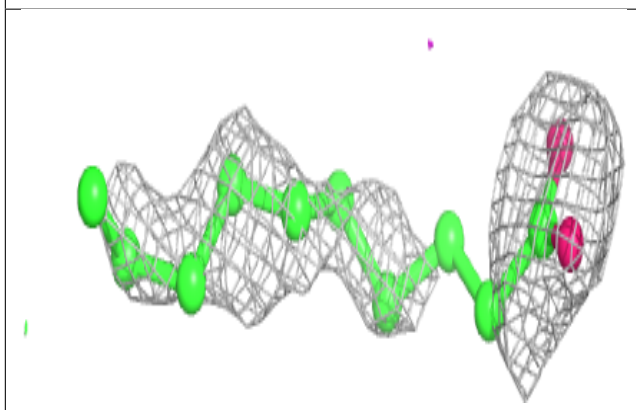
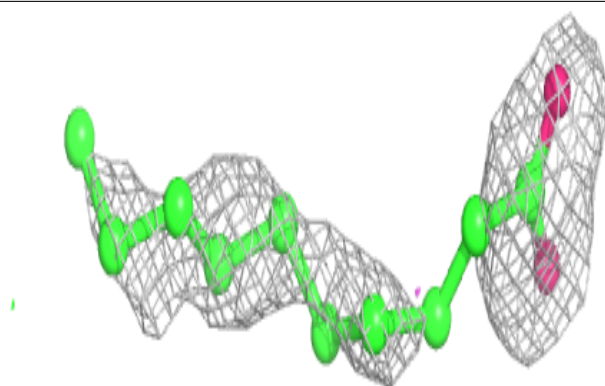
**Electron density around CLA h 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

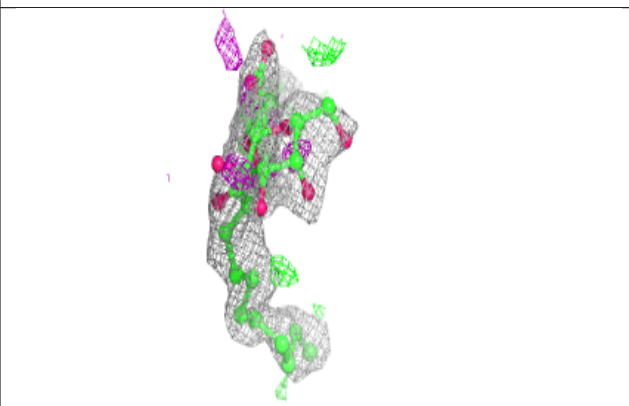
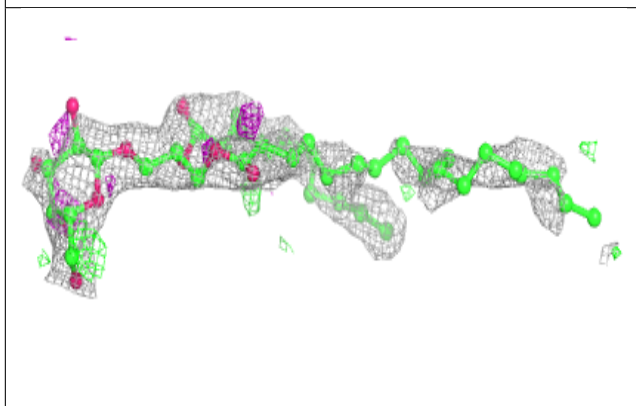
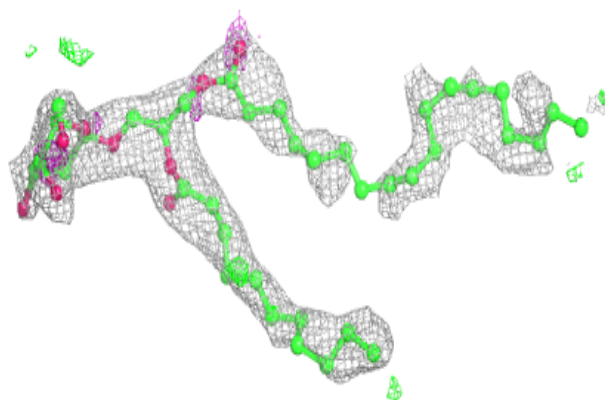


**Electron density around STE F 103:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

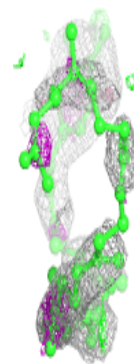
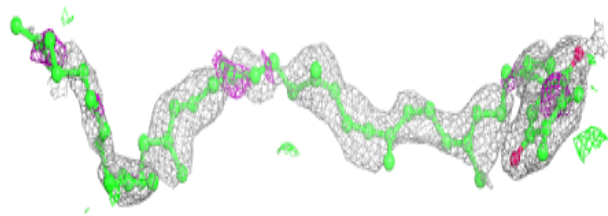
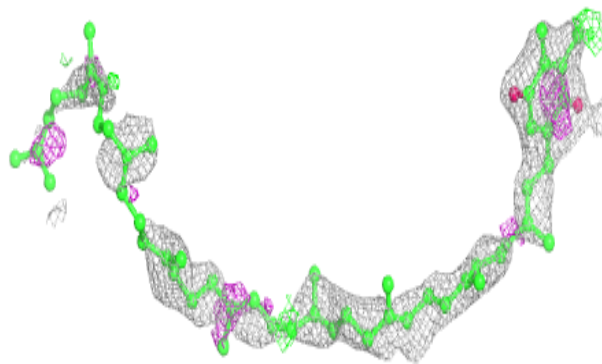
**Electron density around LMG c 522:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



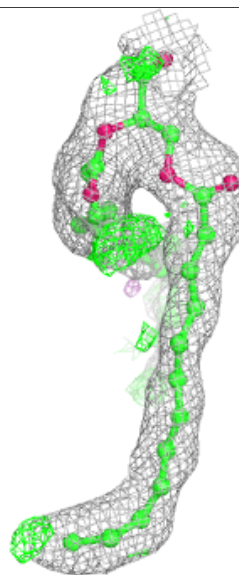
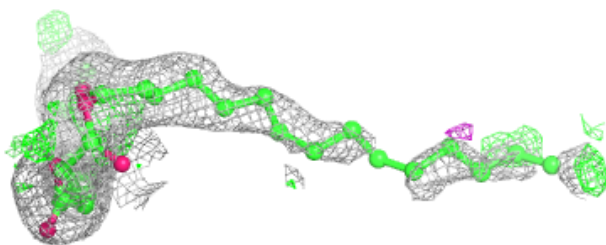
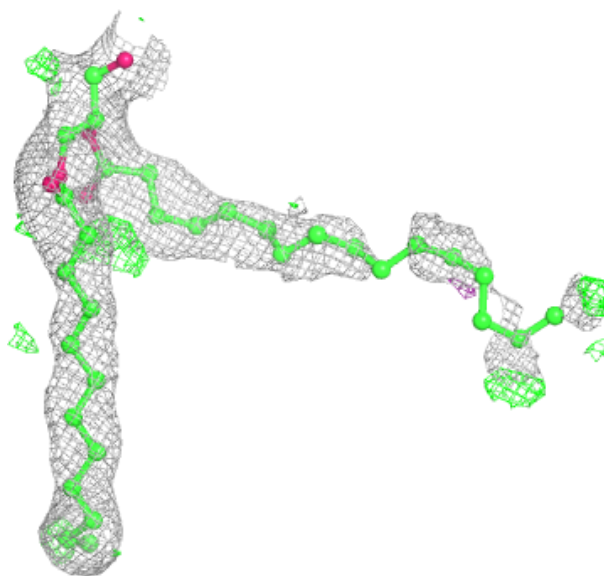
**Electron density around PL9 a 611:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around SQD t 102:**

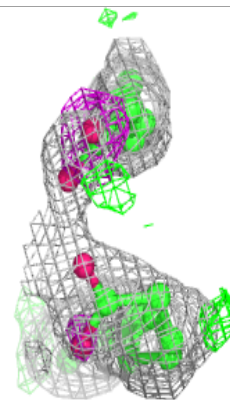
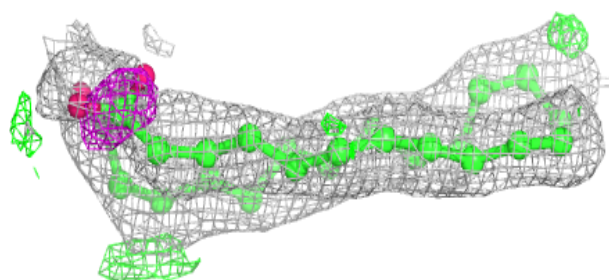
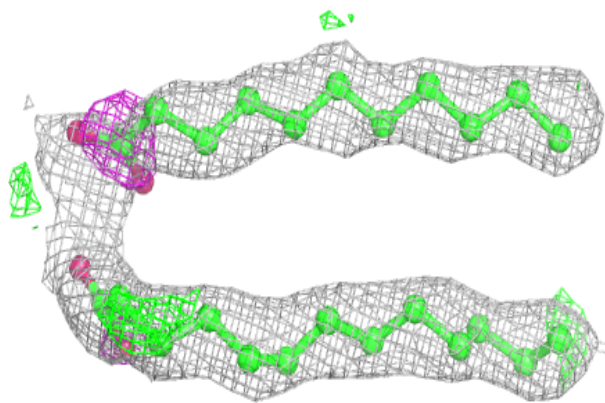
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



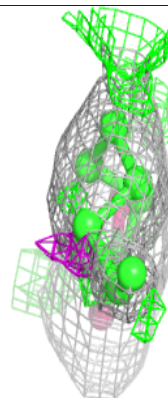
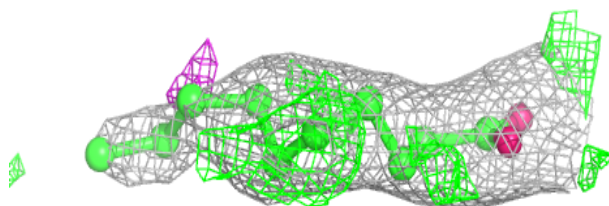
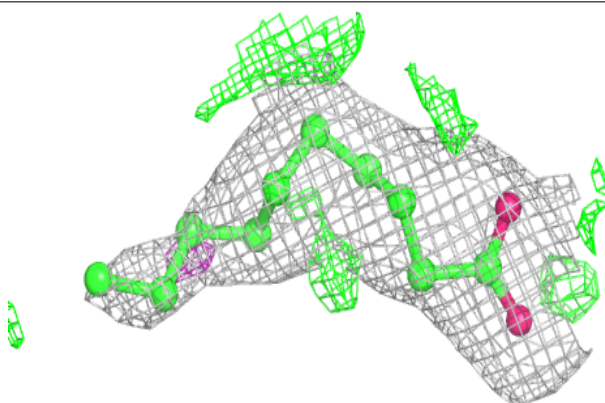


**Electron density around LMG B 621:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

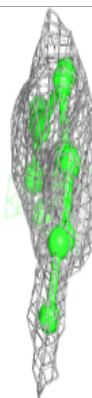
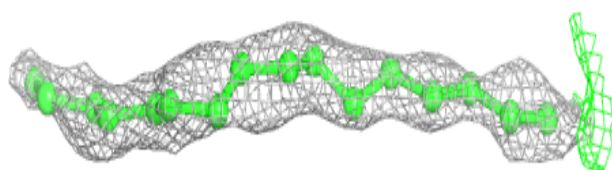
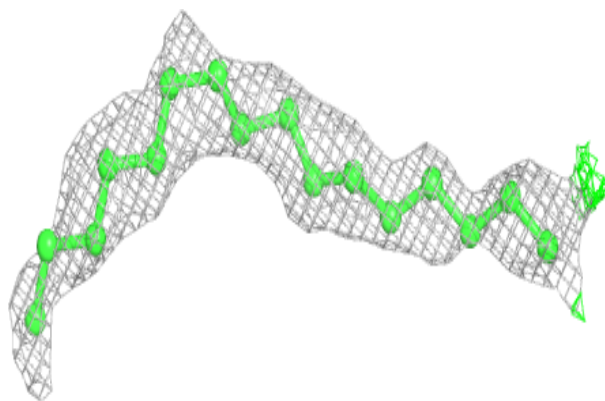
**Electron density around STE C 519:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

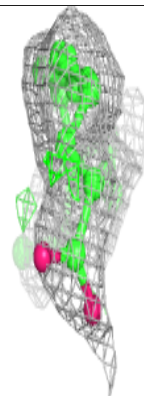
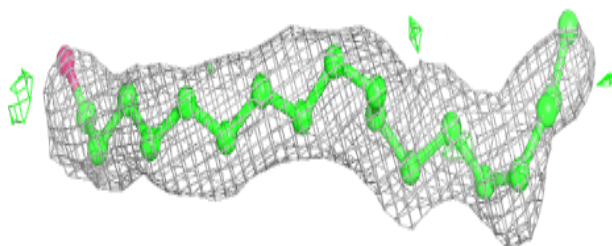
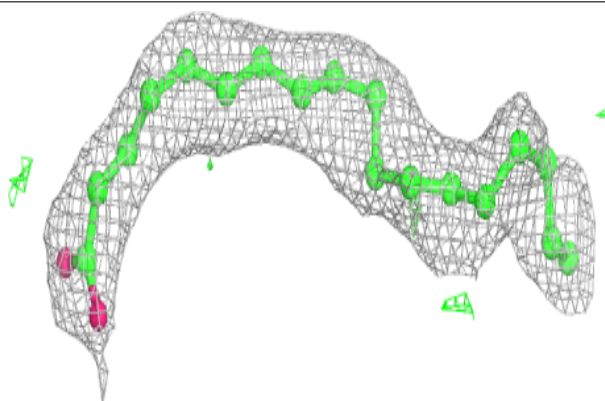


**Electron density around STE B 625:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

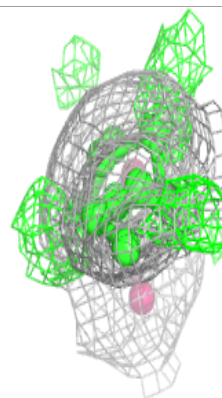
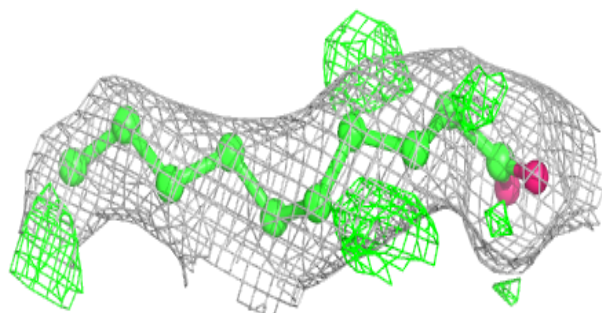
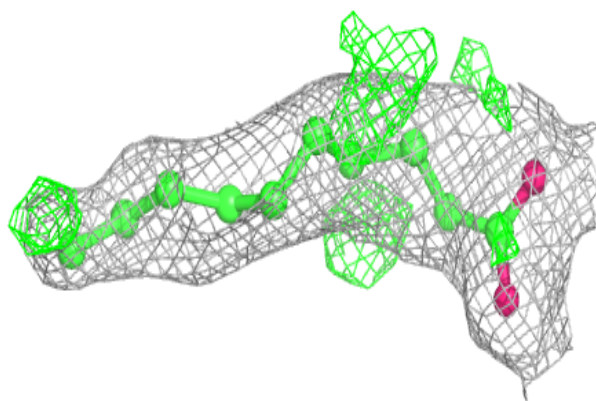
**Electron density around STE b 620:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

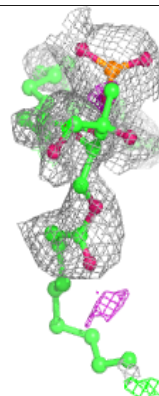
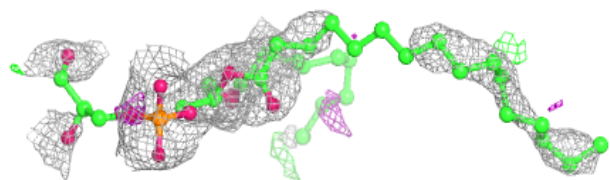
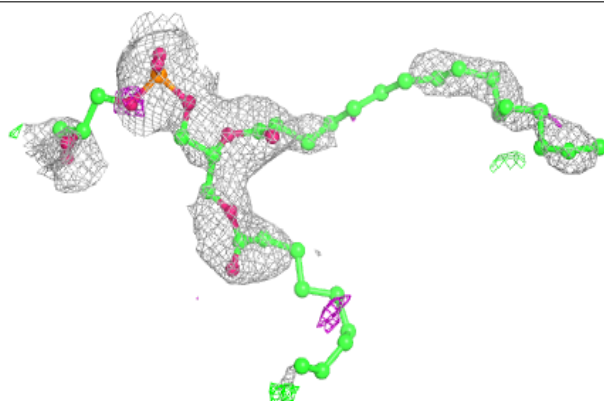


**Electron density around STE B 623:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

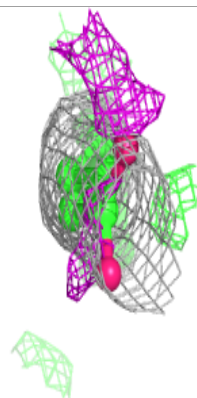
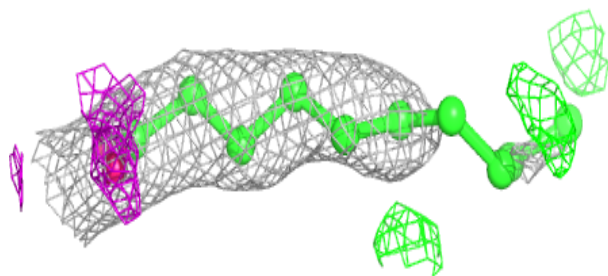
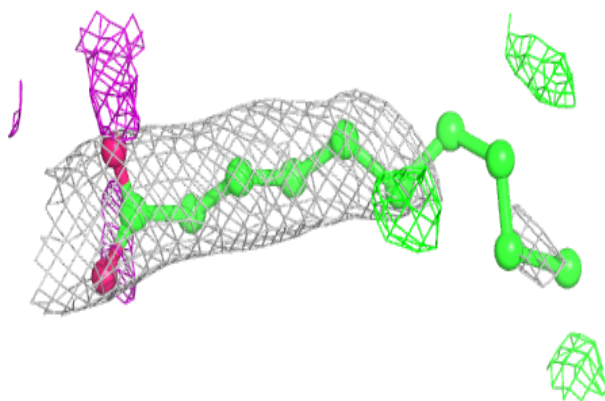
**Electron density around LHG e 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

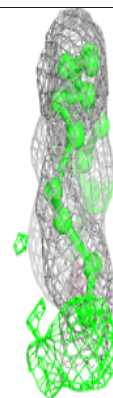
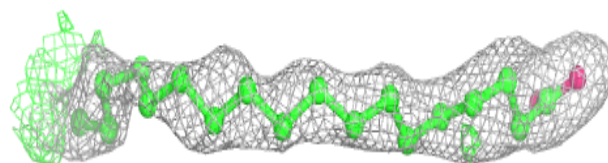
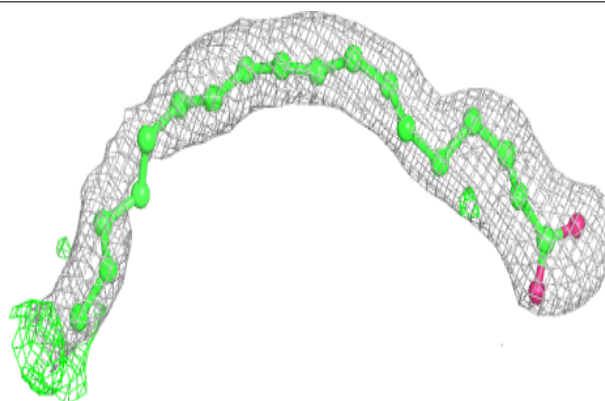


**Electron density around STE L 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

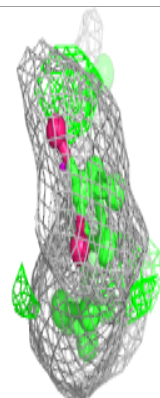
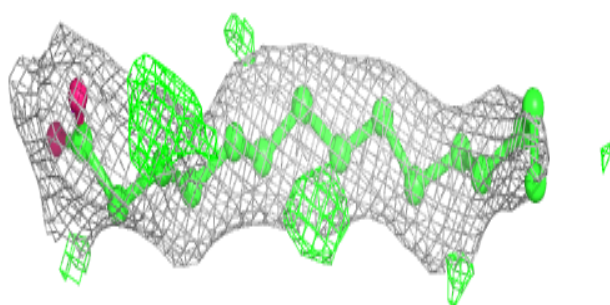
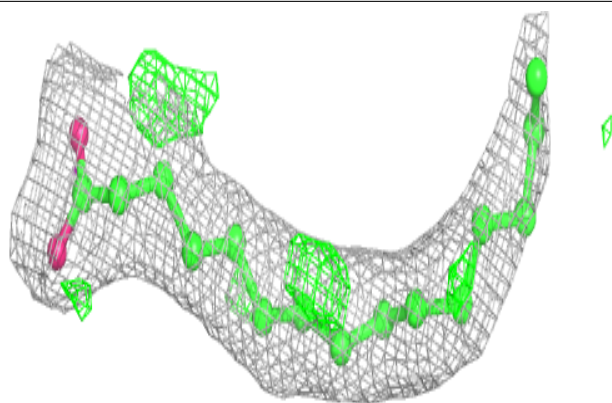
**Electron density around STE d 414:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

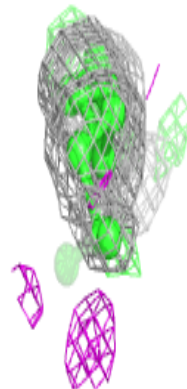
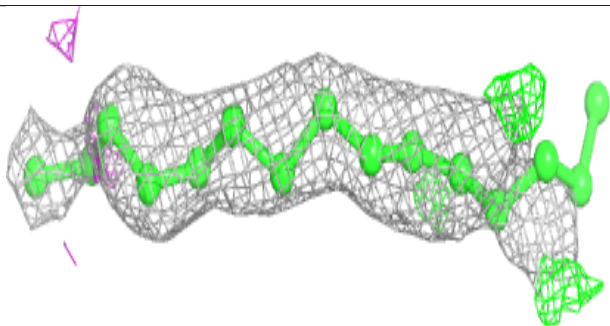
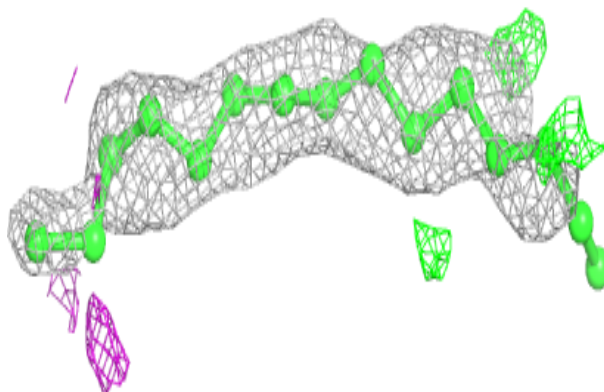


**Electron density around STE B 620:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

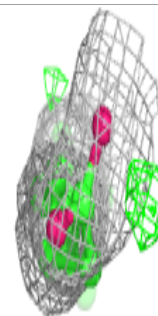
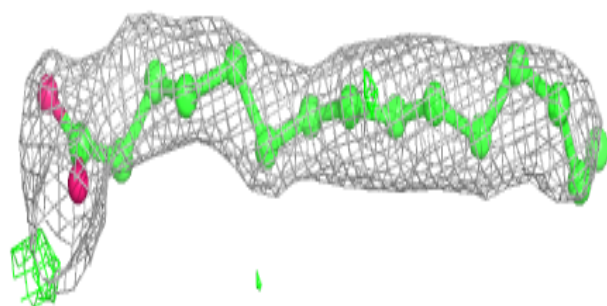
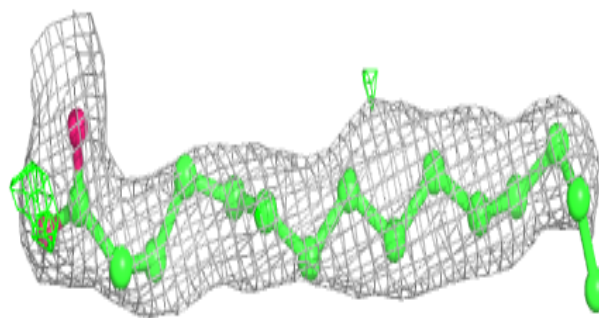
**Electron density around STE T 103:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

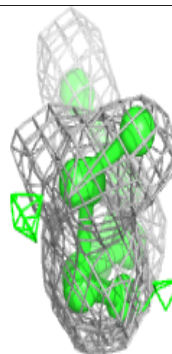
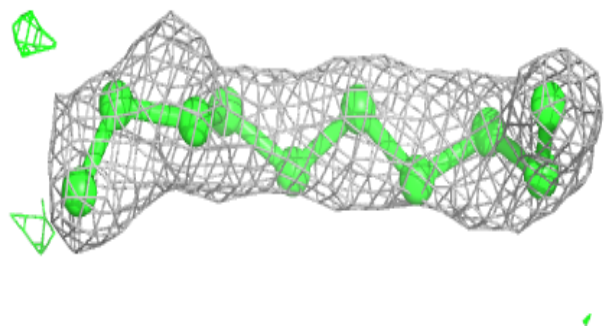
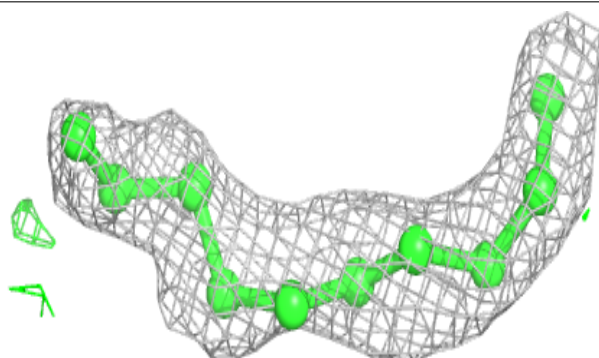


**Electron density around STE d 413:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

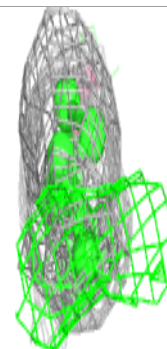
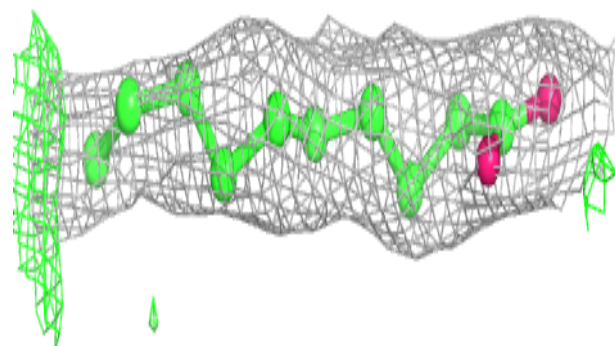
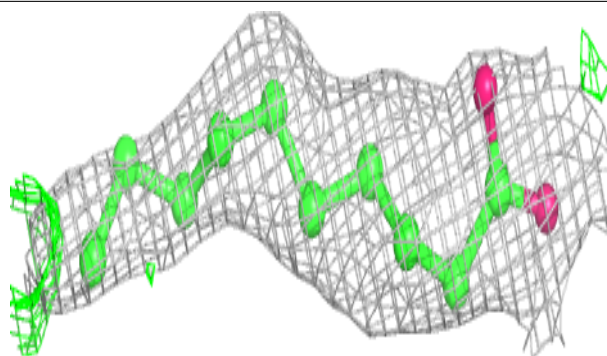
**Electron density around STE b 623:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

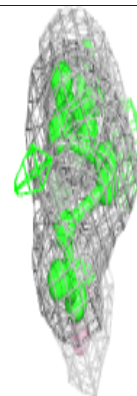
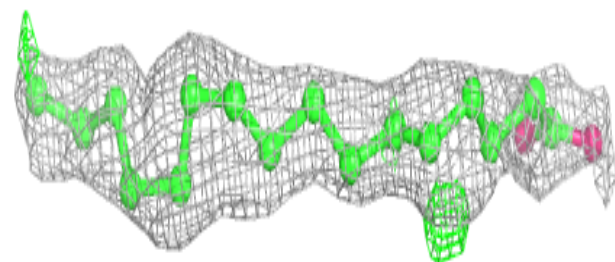
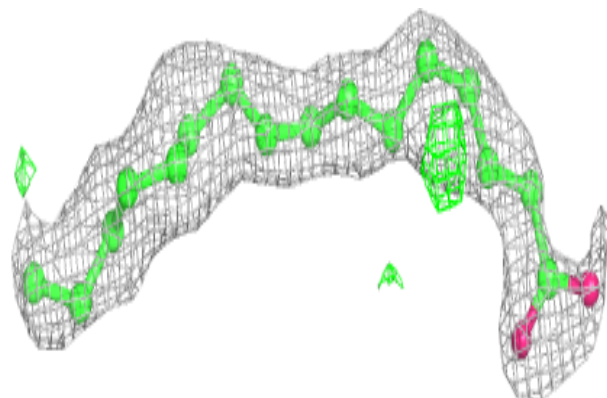


**Electron density around STE J 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

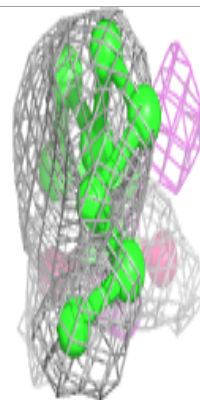
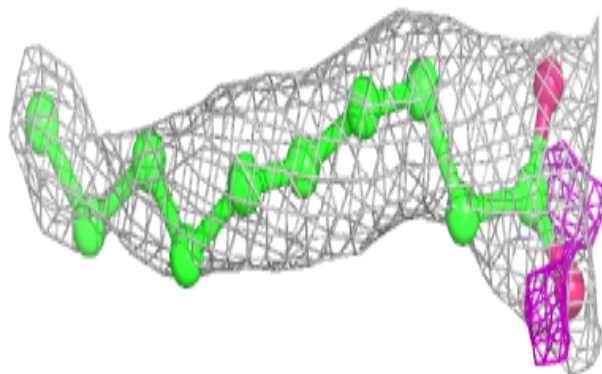
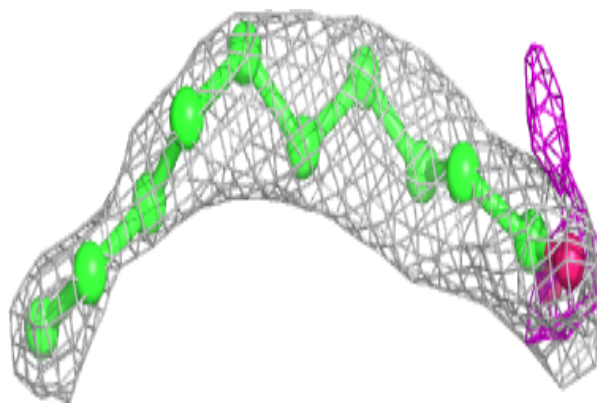
**Electron density around STE t 105:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

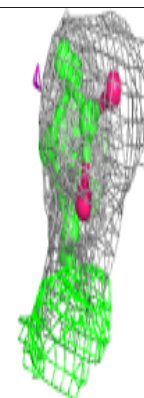
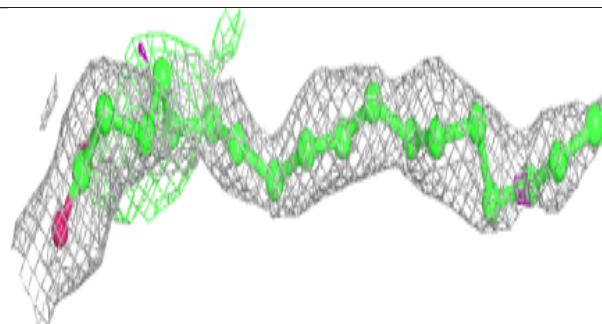
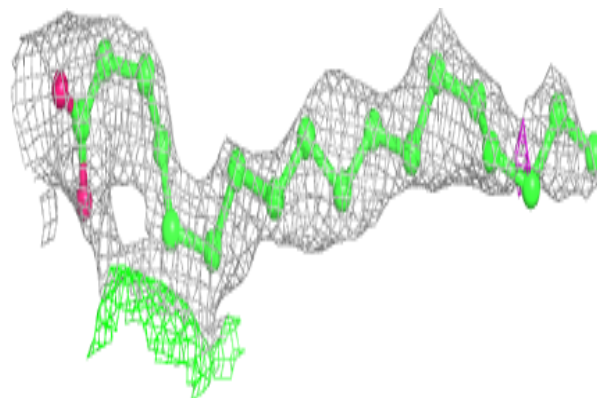


**Electron density around STE B 624:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around STE b 622:**

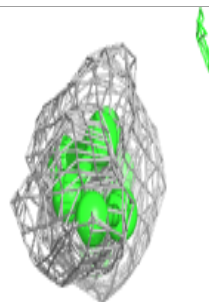
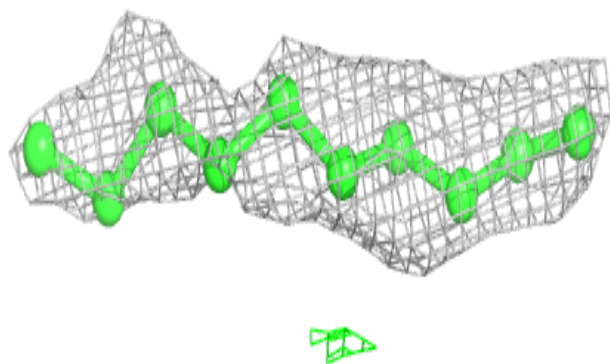
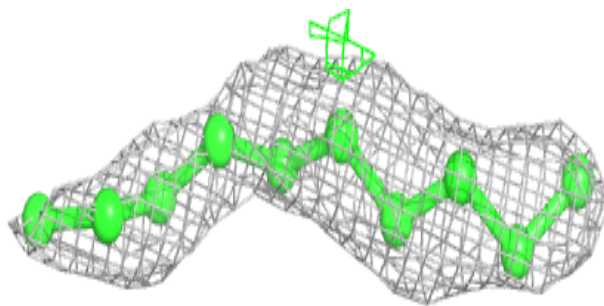
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



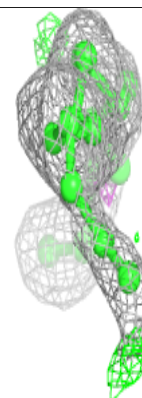
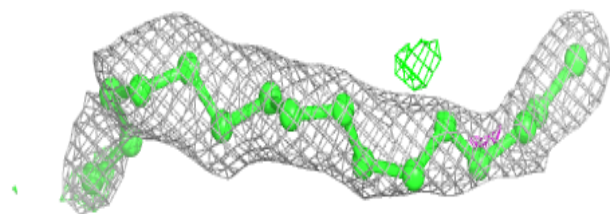
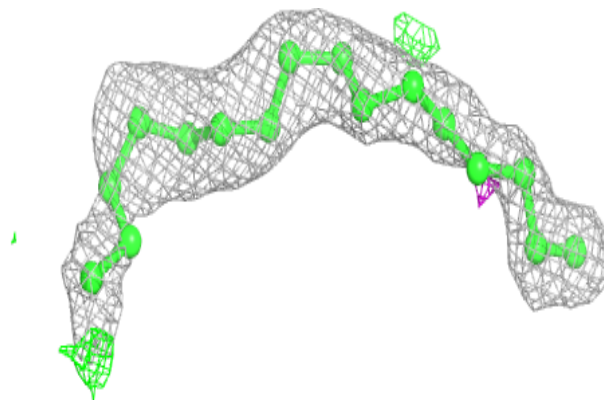


**Electron density around STE t 104:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

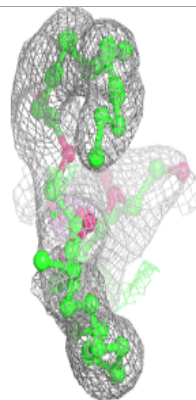
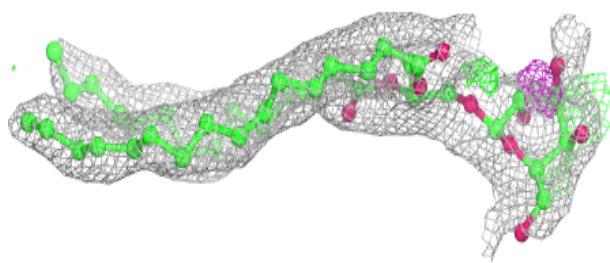
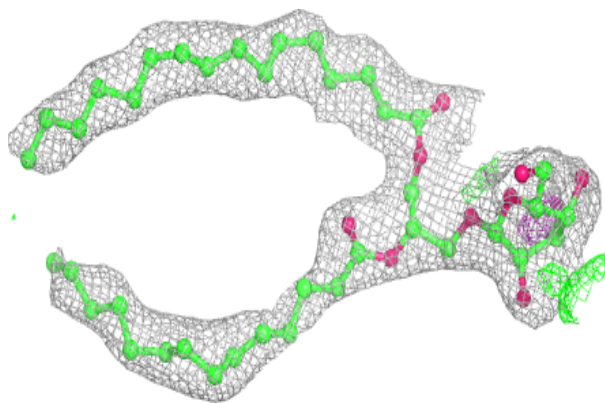
**Electron density around STE T 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

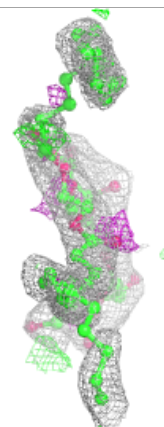
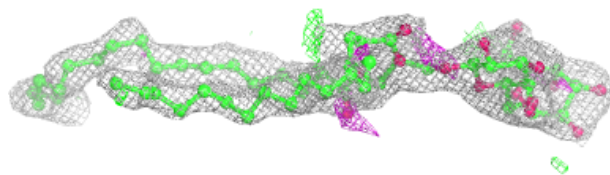
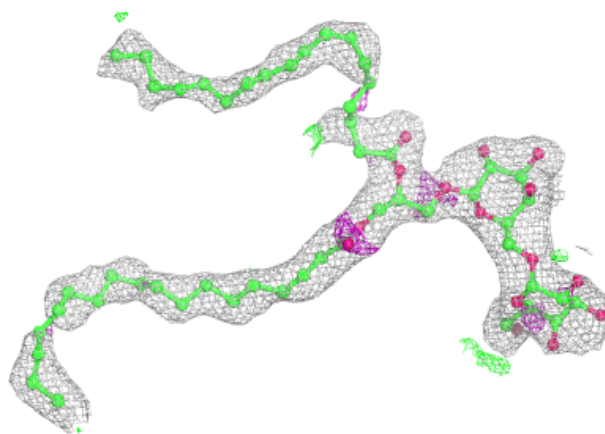


**Electron density around LMG c 523:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

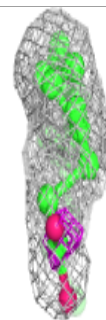
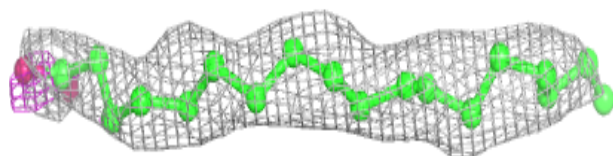
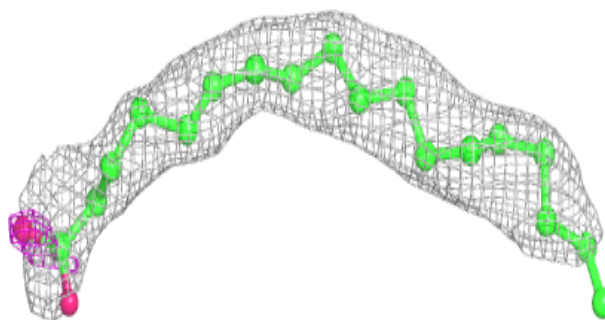
**Electron density around DGD A 619:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

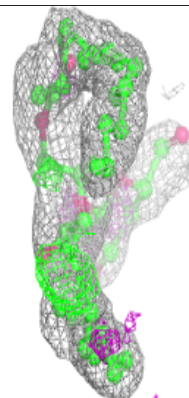
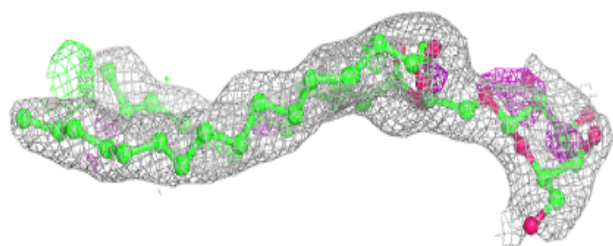
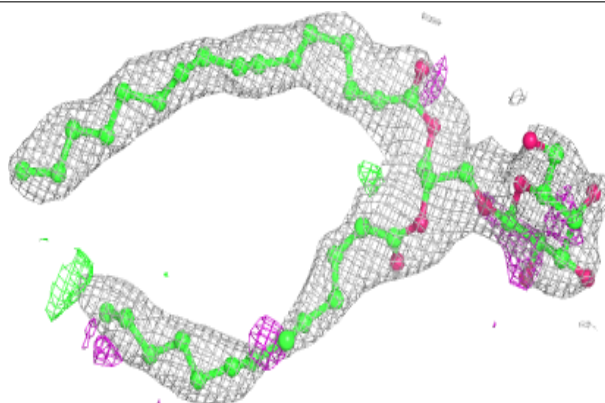


**Electron density around STE X 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

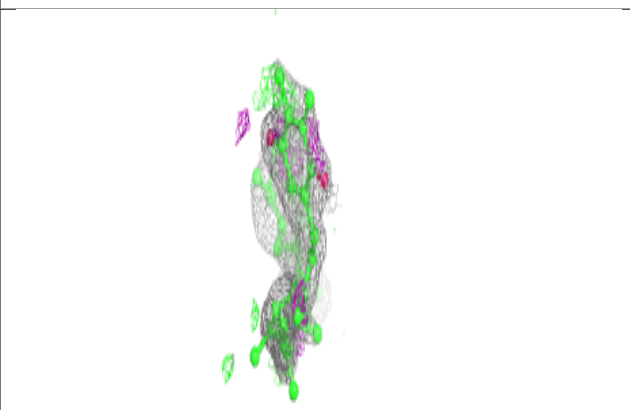
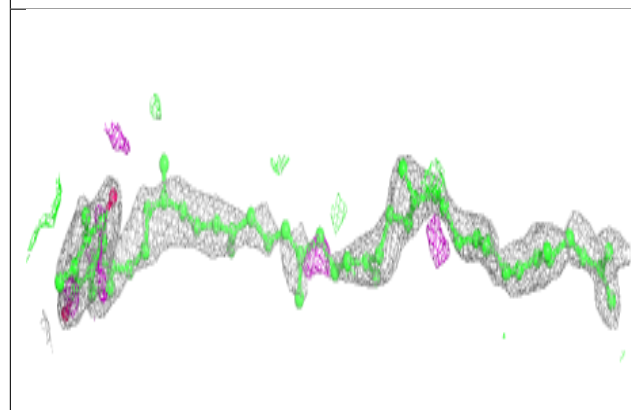
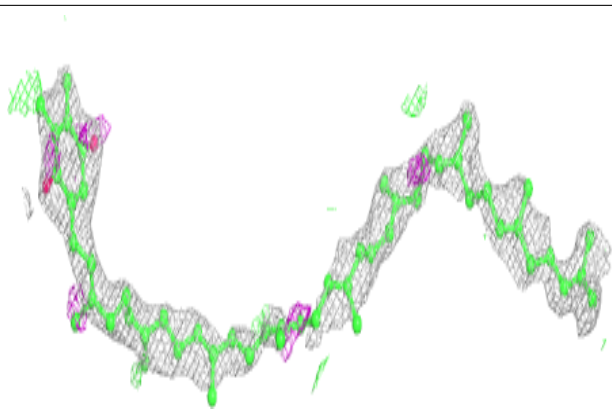
**Electron density around LMG A 614:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

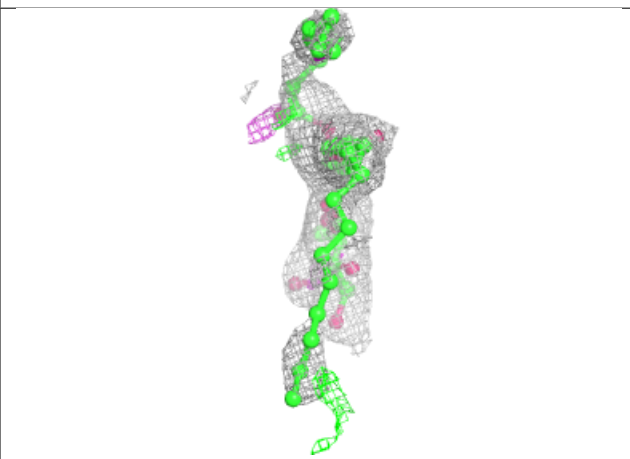
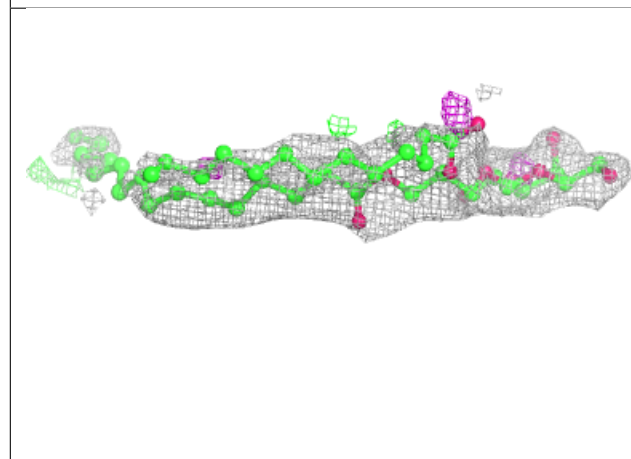
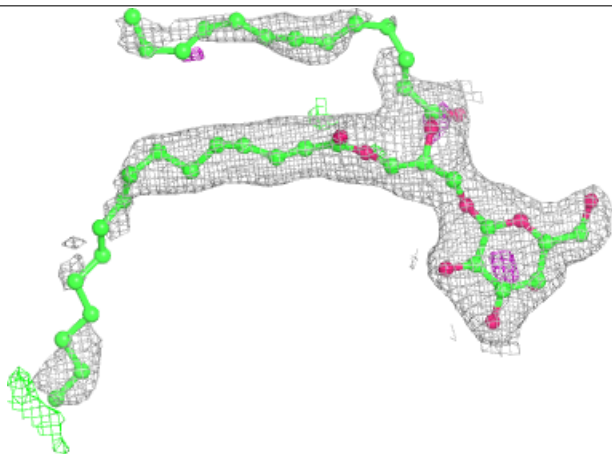


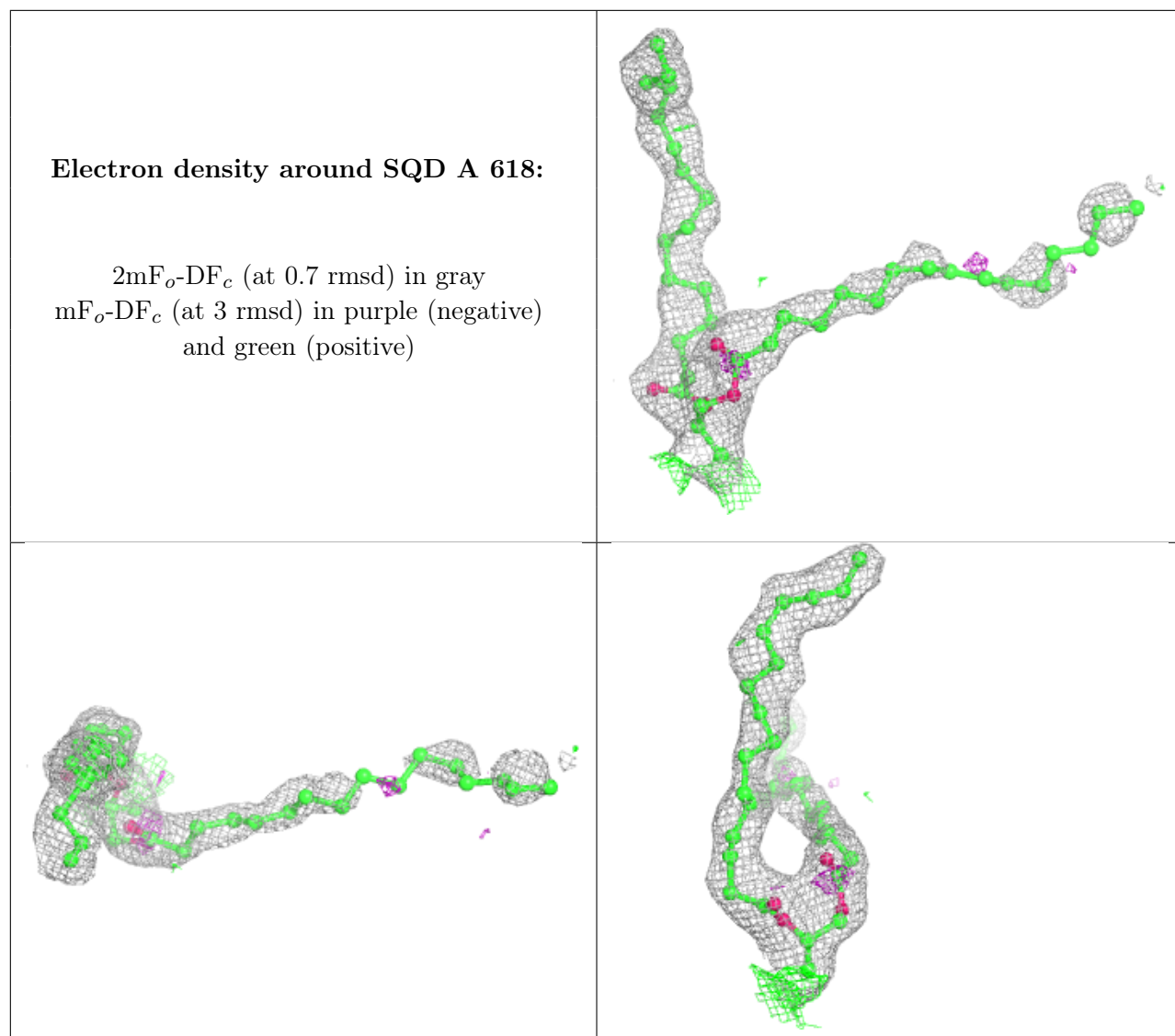
**Electron density around PL9 A 612:**

$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)

**Electron density around LMG C 518:**

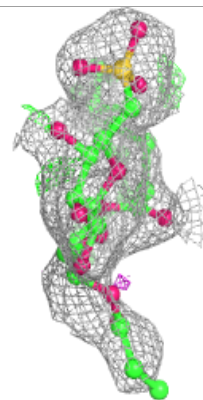
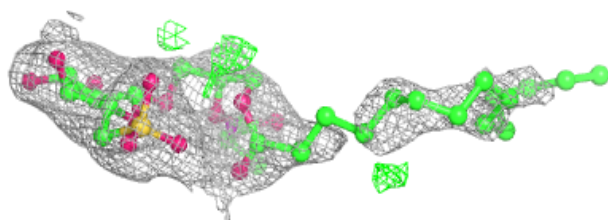
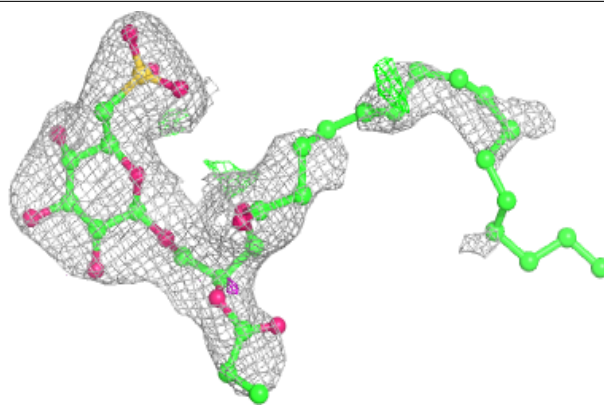
$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)



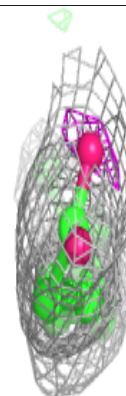
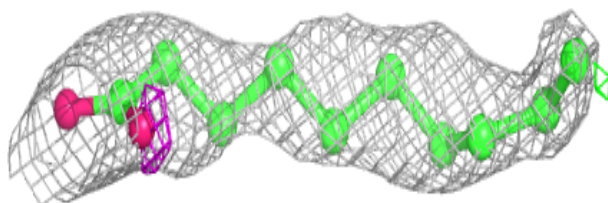
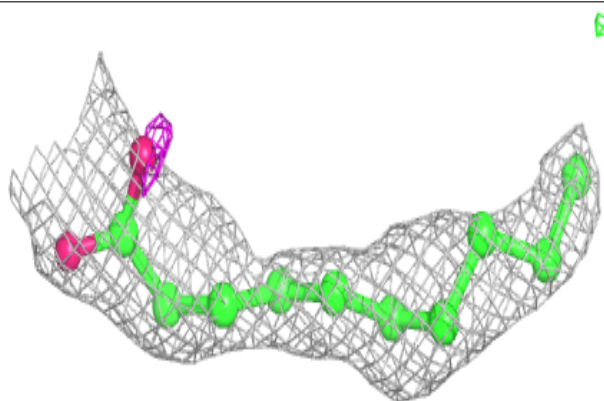


**Electron density around SQD f 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

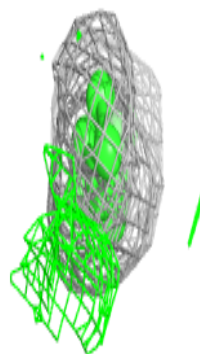
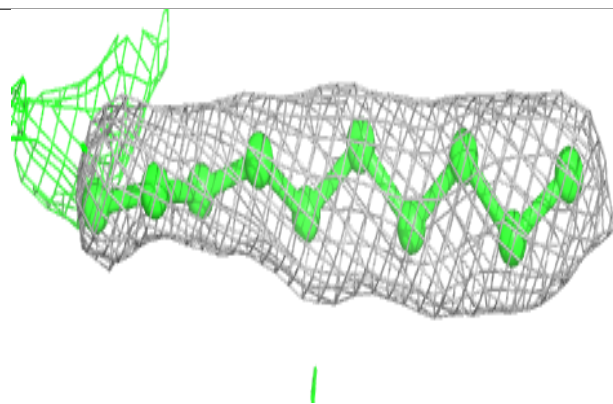
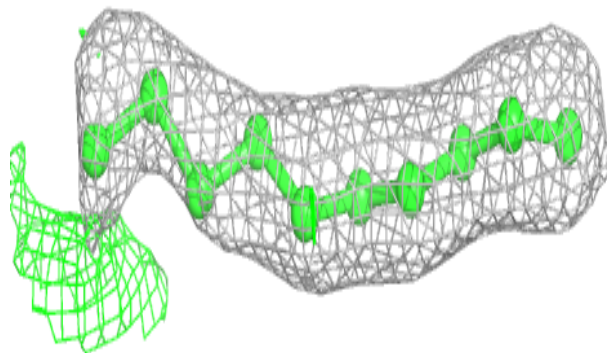
**Electron density around STE C 520:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

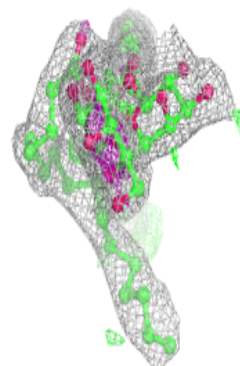
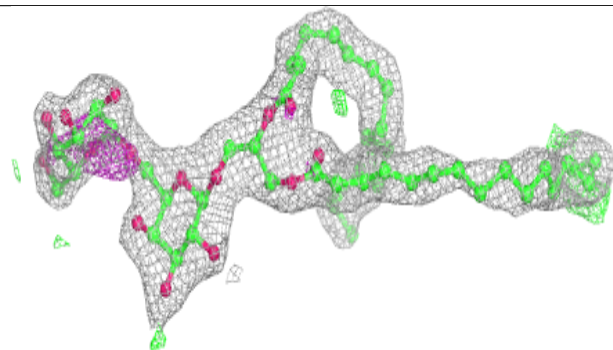
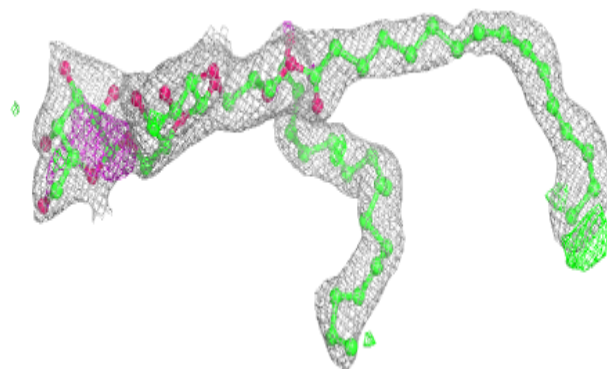


**Electron density around STE M 103:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

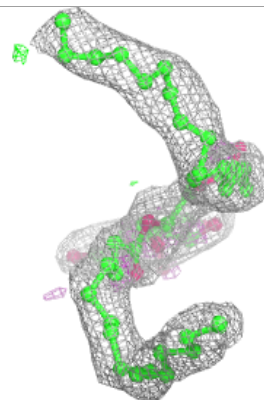
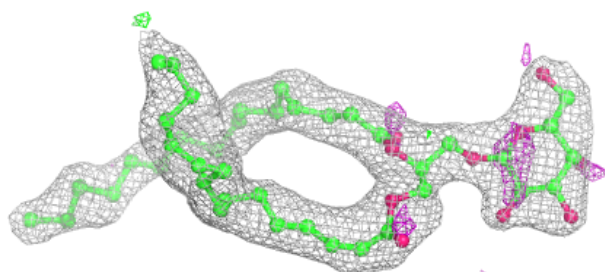
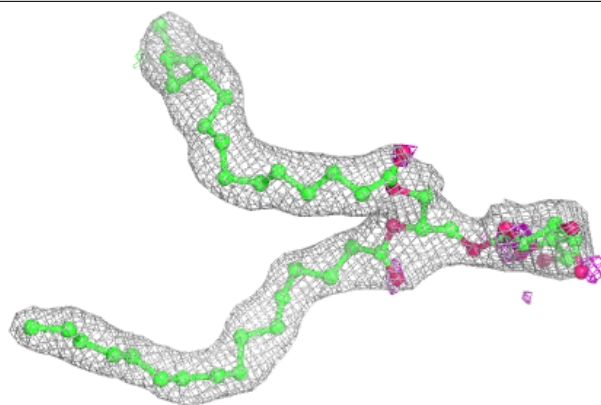
**Electron density around DGD H 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

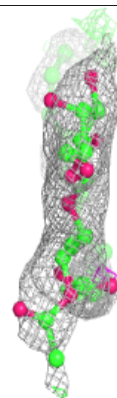
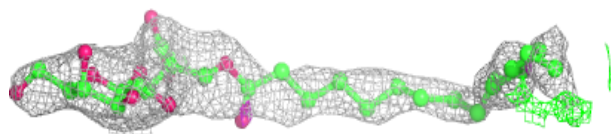
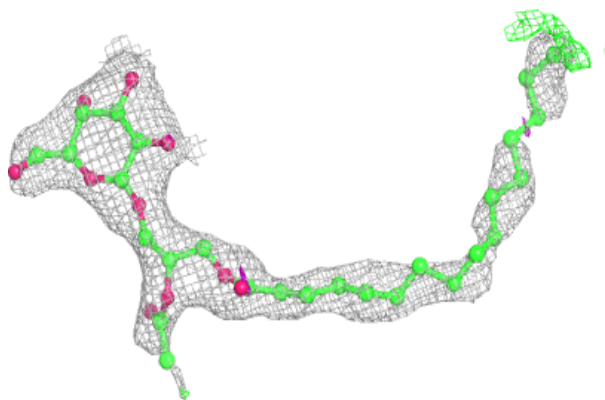


**Electron density around LMG M 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around LMG c 520:**

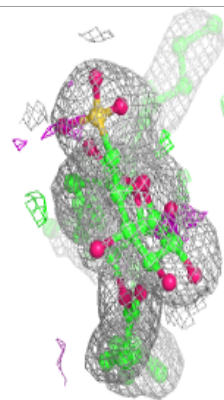
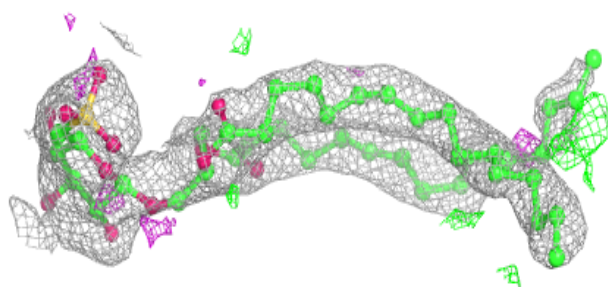
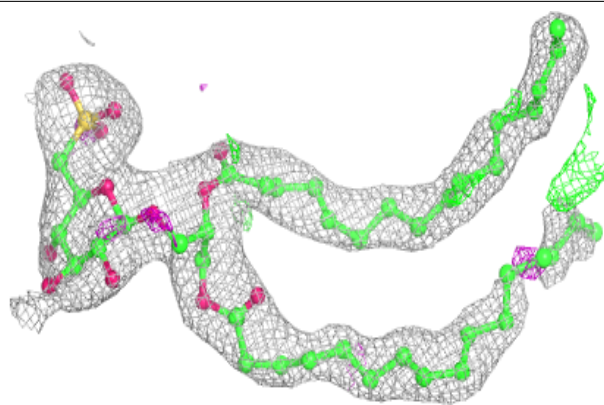
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





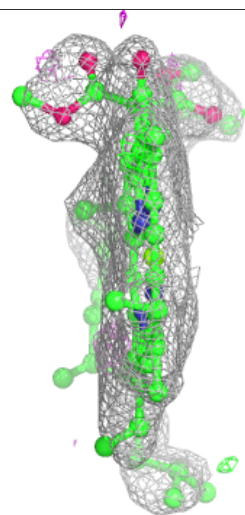
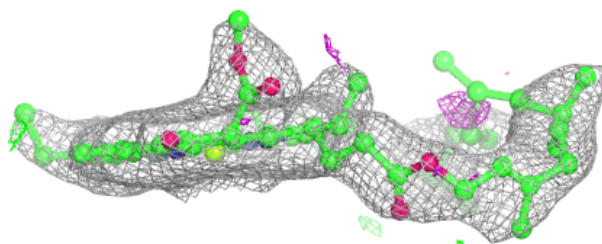
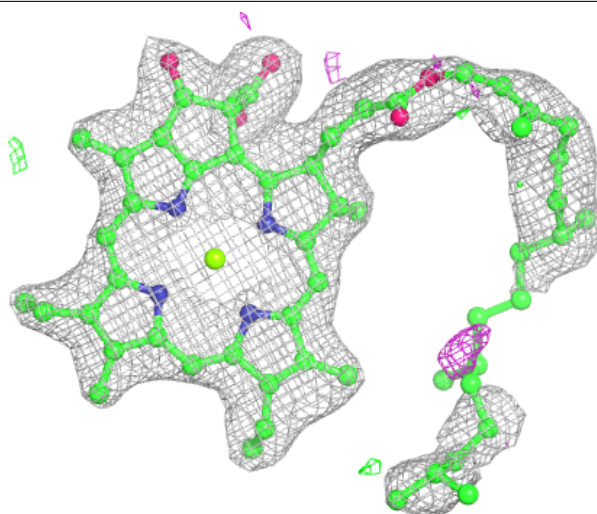
**Electron density around SQD B 622:**

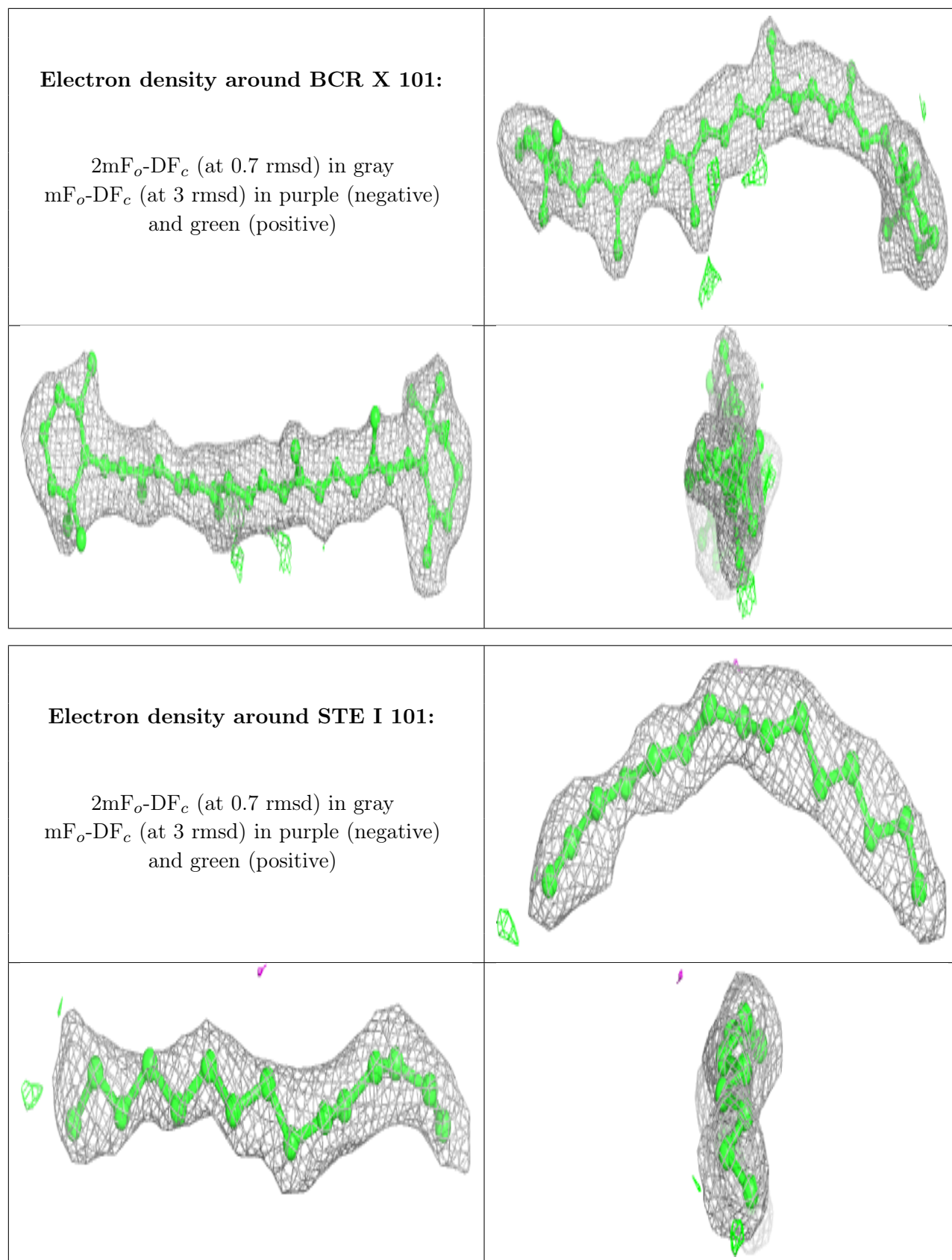
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA c 512:**

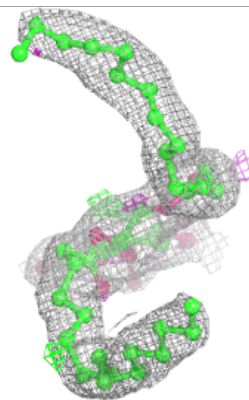
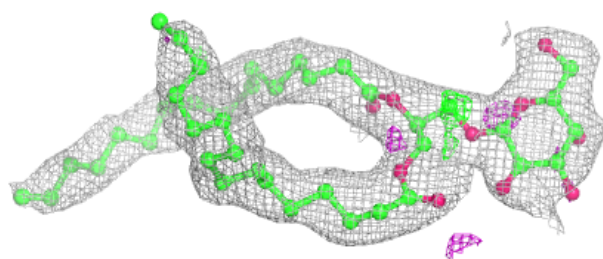
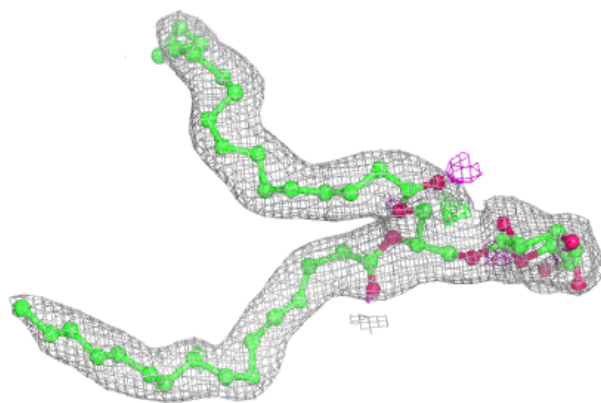
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



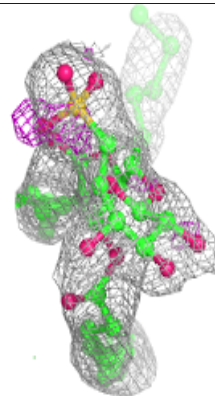
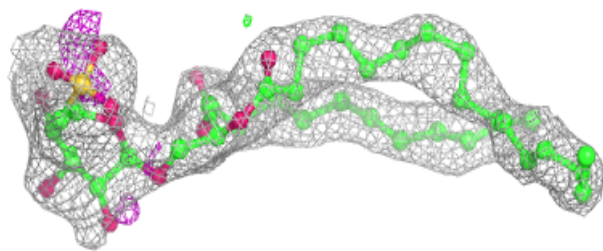
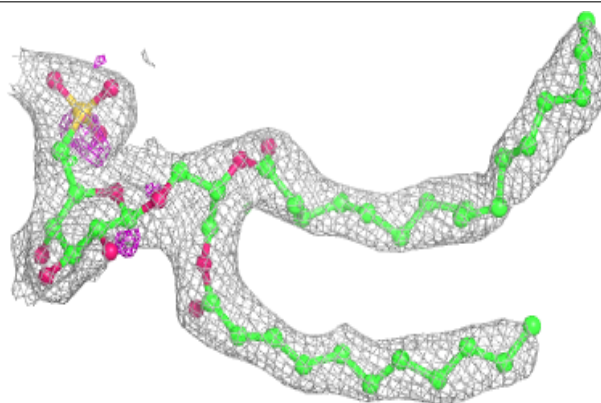


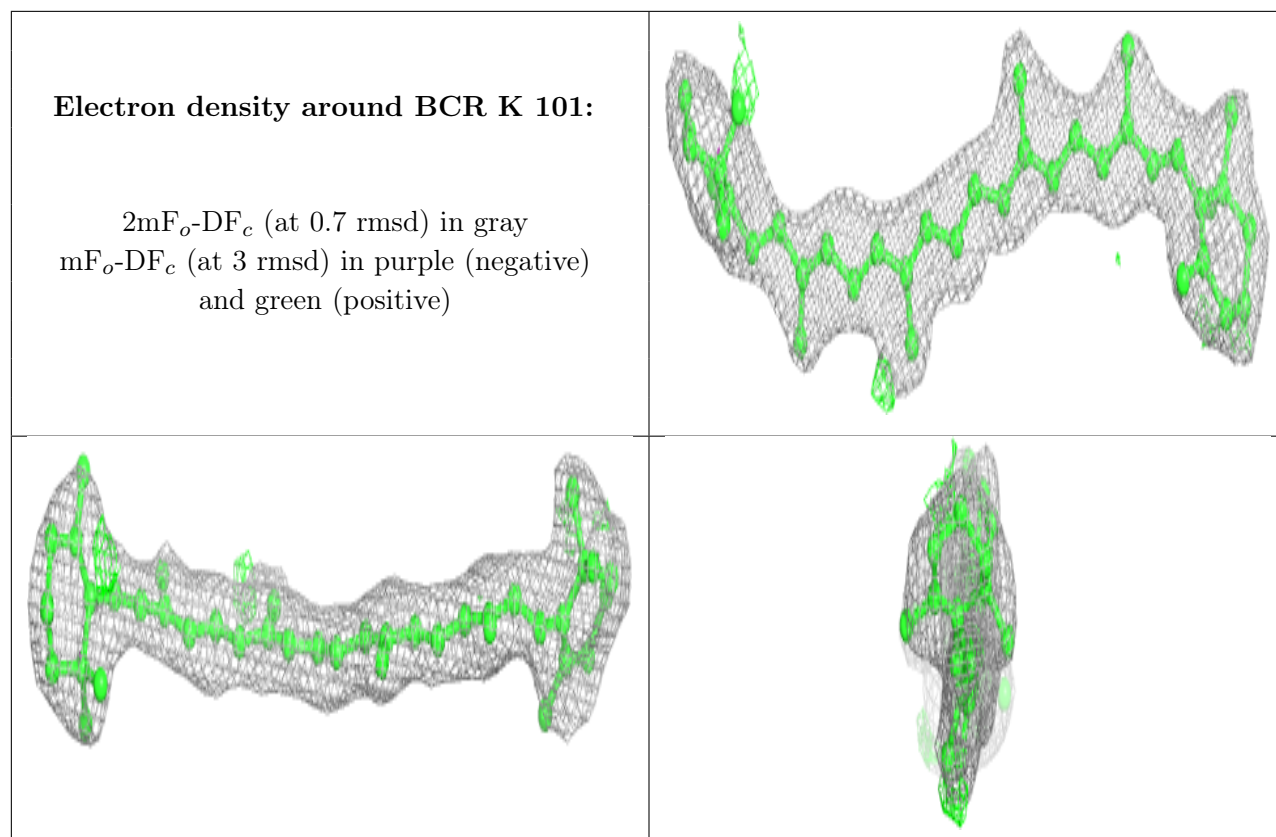
**Electron density around LMG m 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around SQD b 619:**

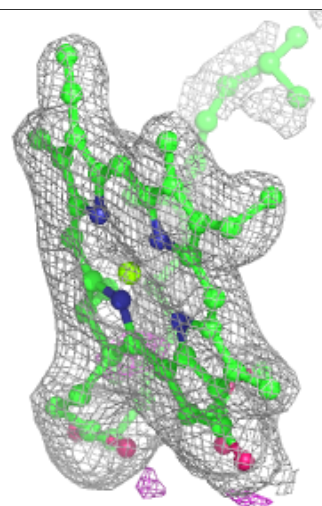
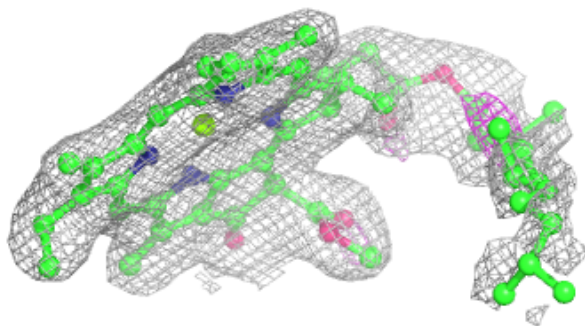
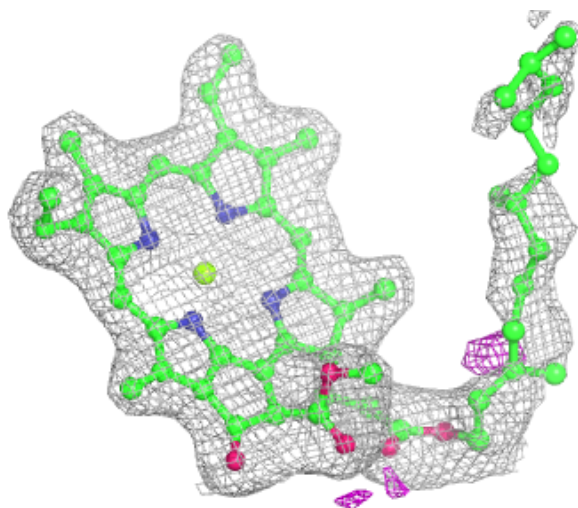
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





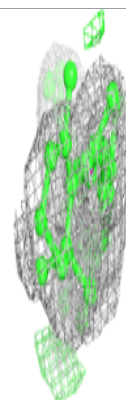
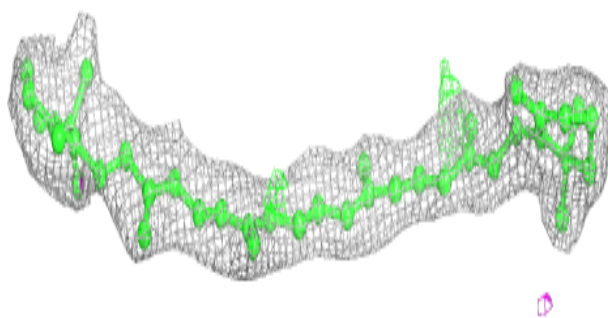
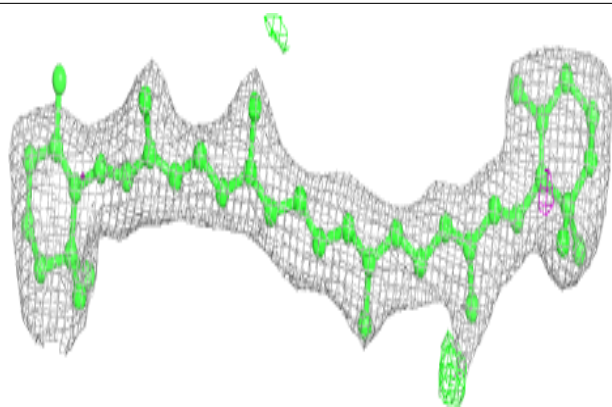
**Electron density around CLA b 615:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

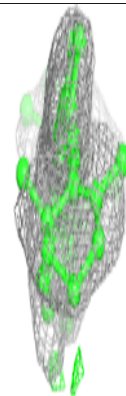
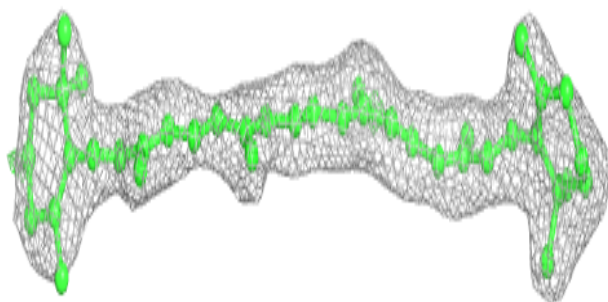
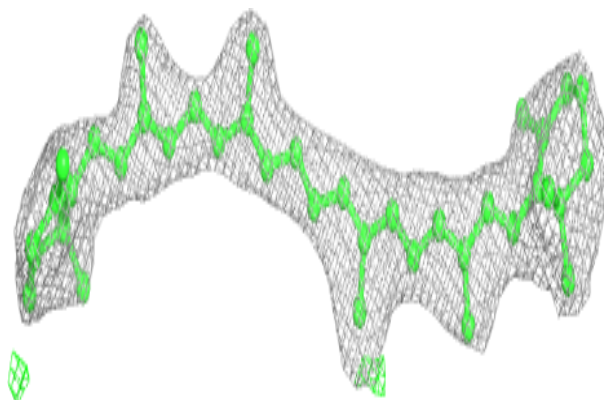


**Electron density around BCR d 405:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

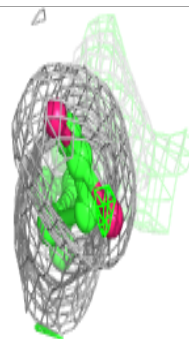
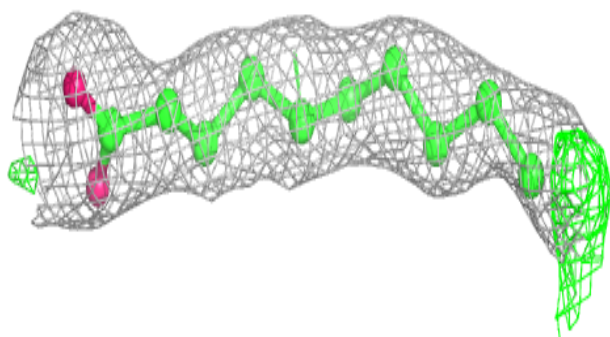
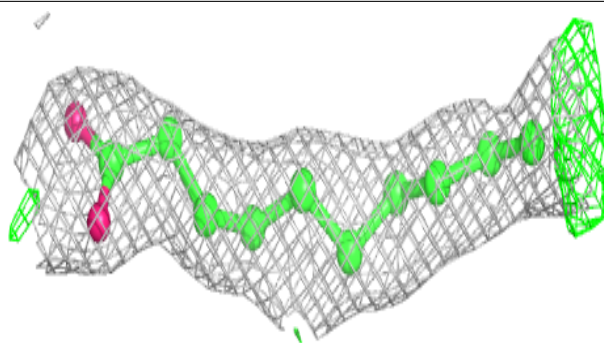
**Electron density around BCR k 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

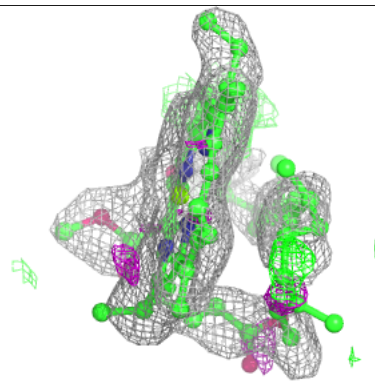
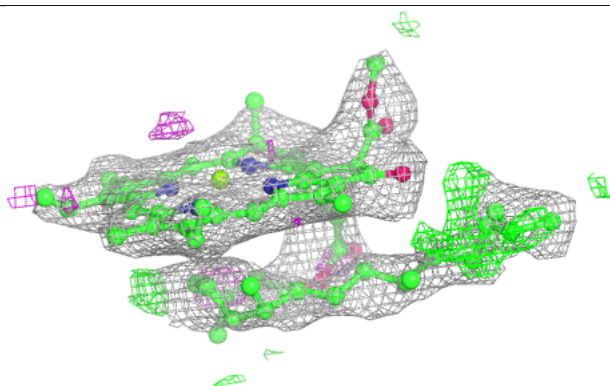
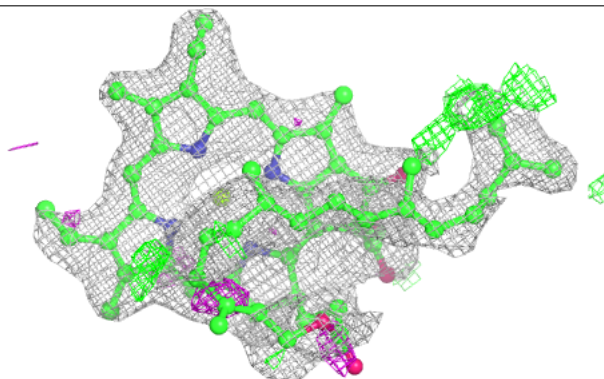


**Electron density around STE j 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around CLA B 601:**

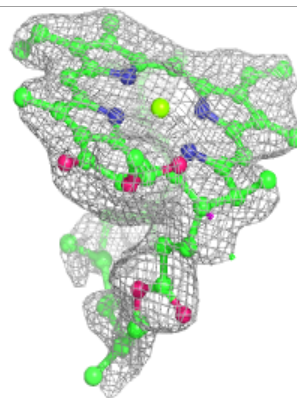
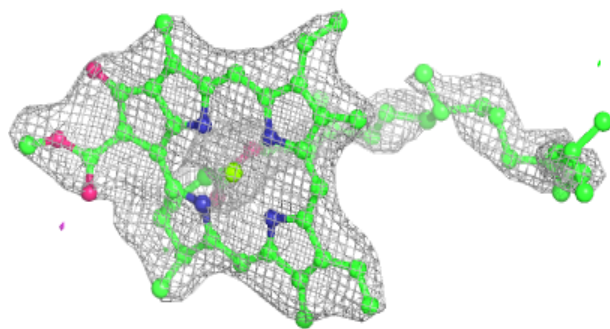
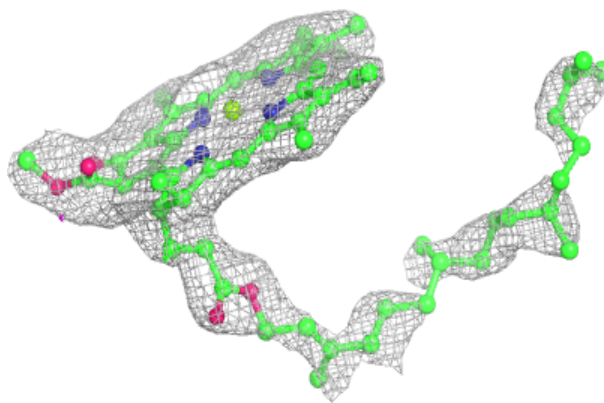
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





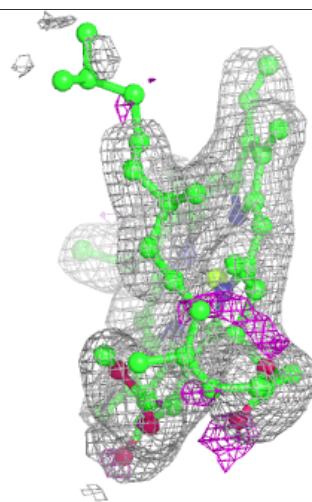
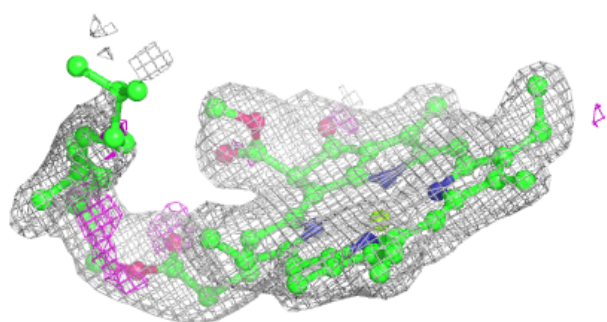
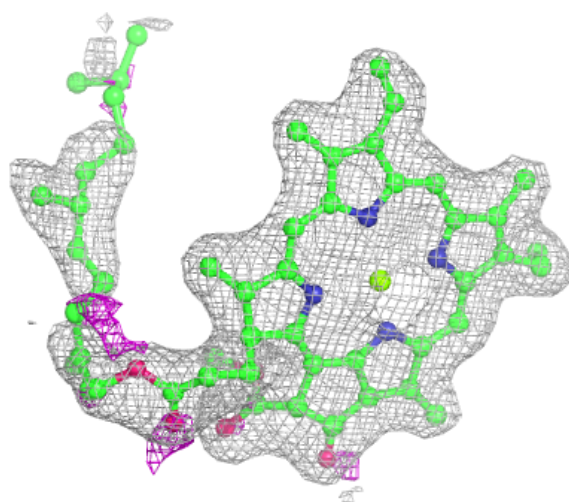
**Electron density around CLA c 513:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



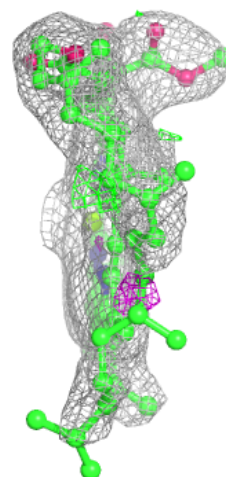
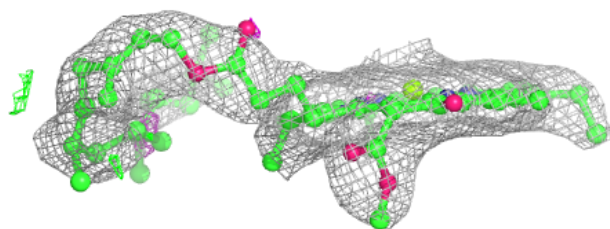
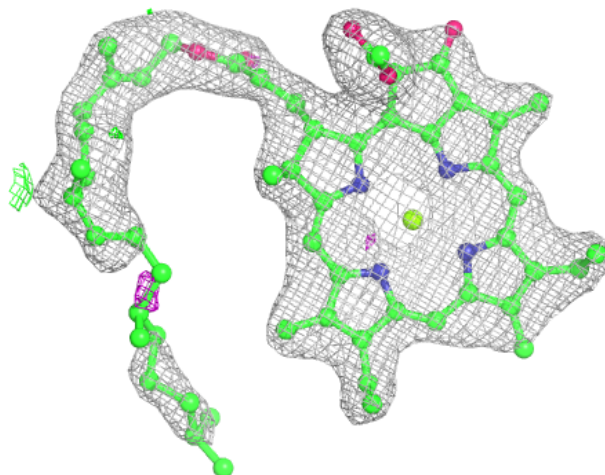
**Electron density around CLA B 616:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



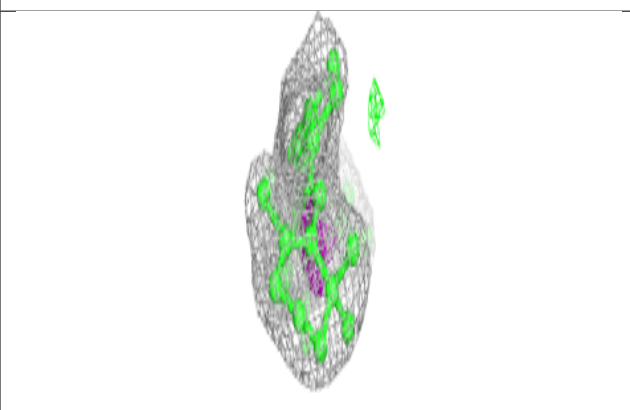
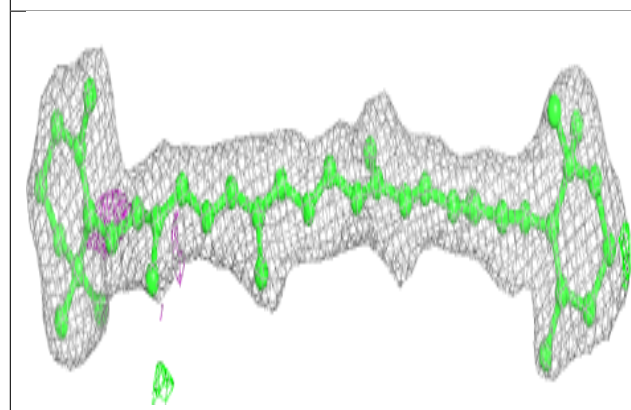
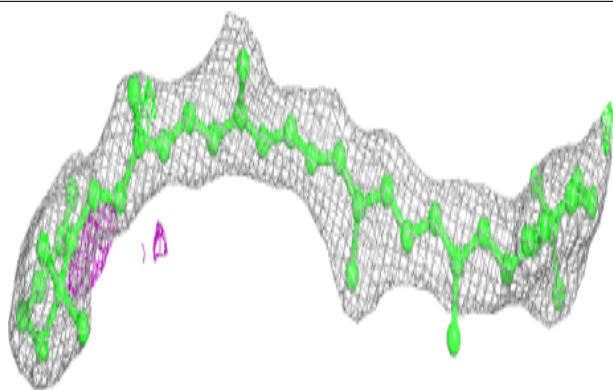
**Electron density around CLA C 512:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

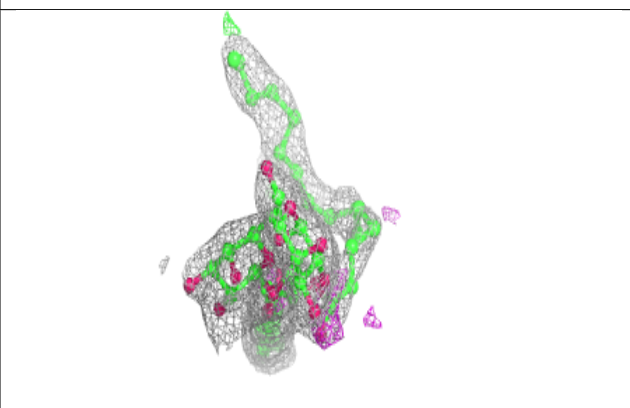
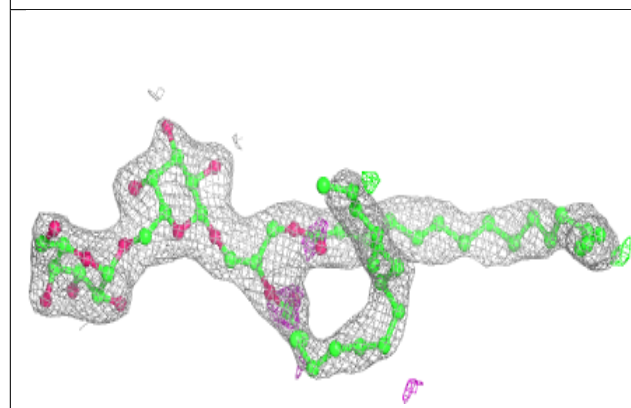
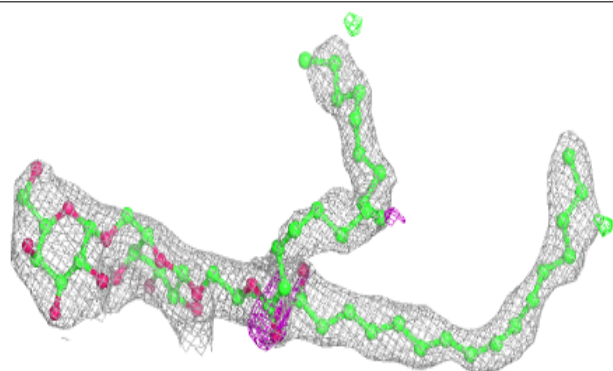


**Electron density around BCR h 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

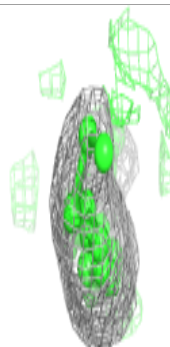
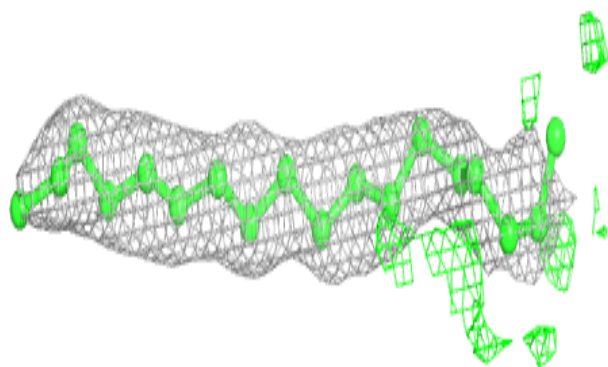
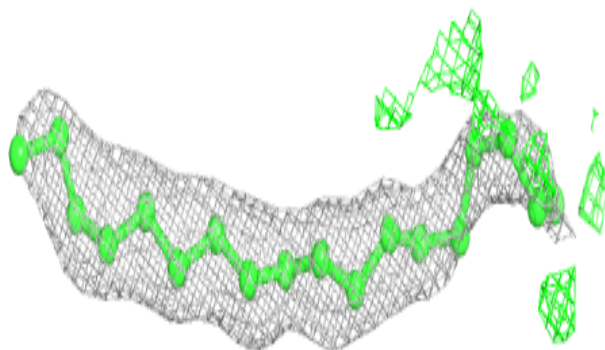
**Electron density around DGD h 103:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

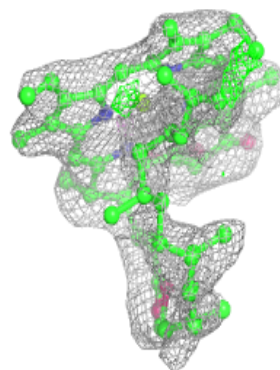
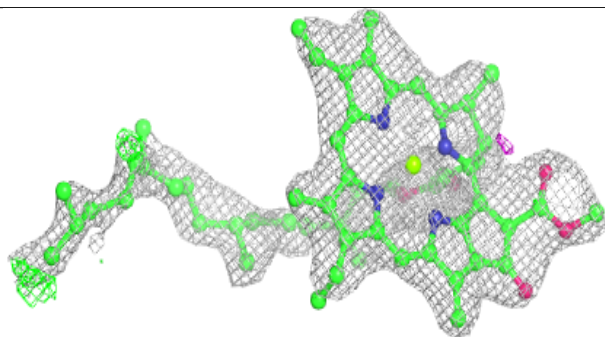
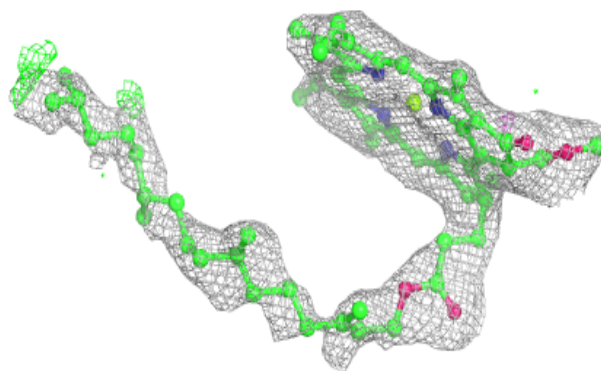


**Electron density around STE I 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

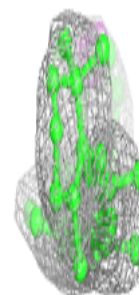
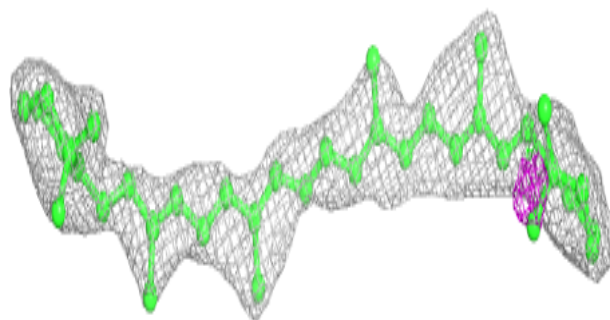
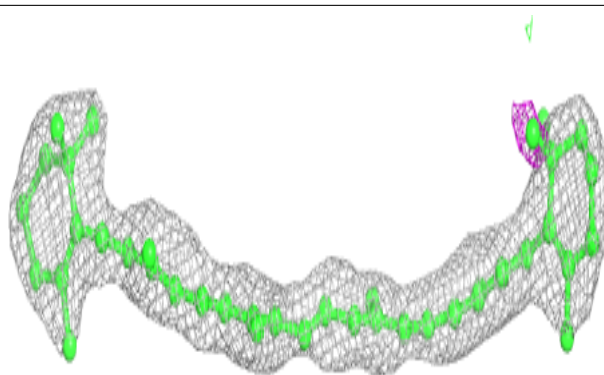
**Electron density around CLA C 513:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

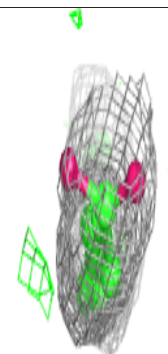
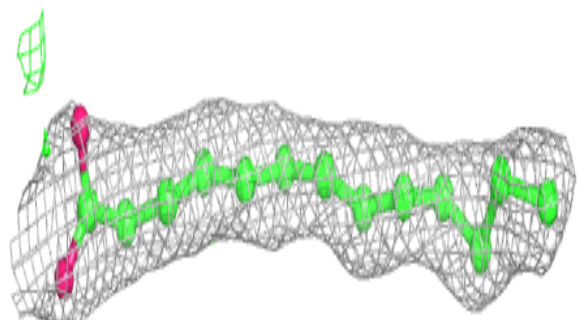
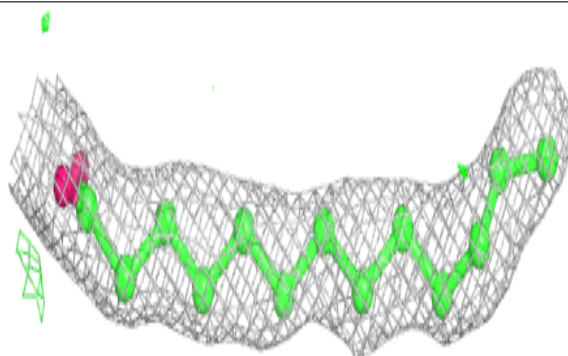


**Electron density around BCR c 516:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

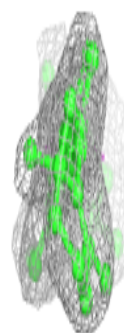
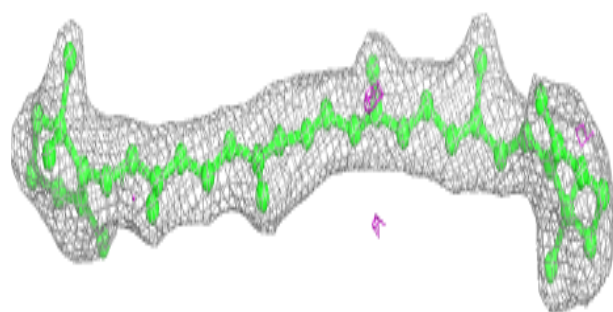
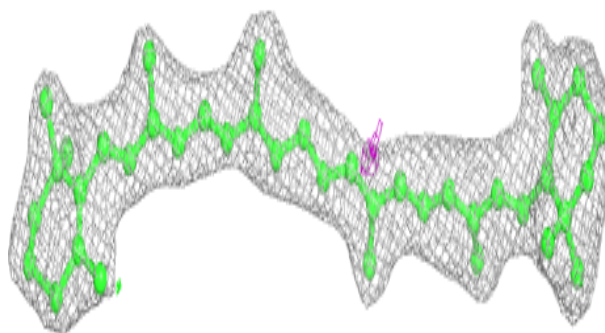
**Electron density around STE M 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

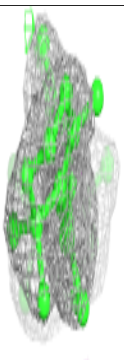
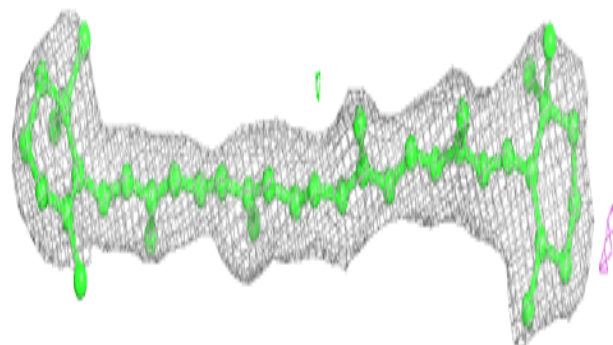
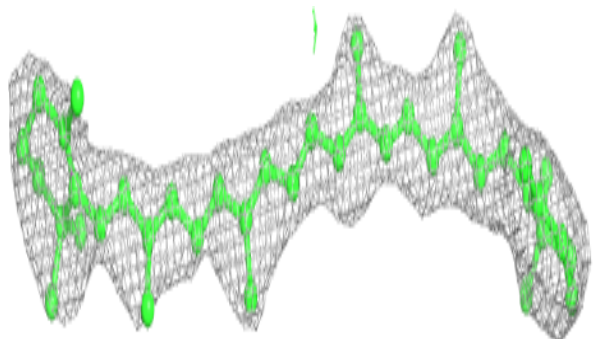


**Electron density around BCR b 618:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

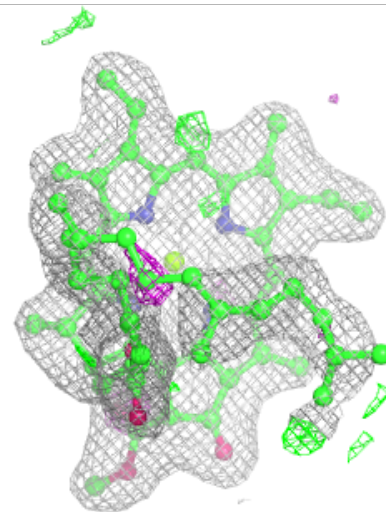
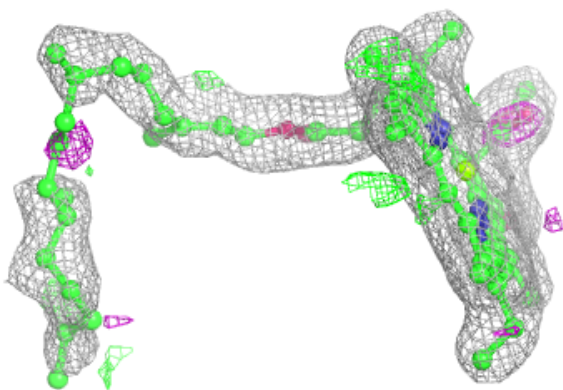
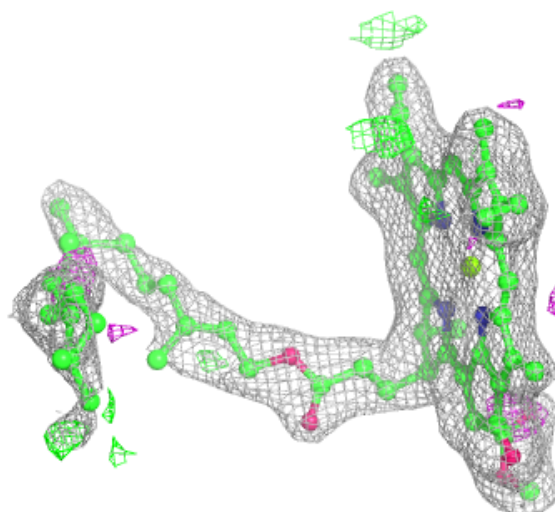
**Electron density around BCR c 514:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA a 609:**

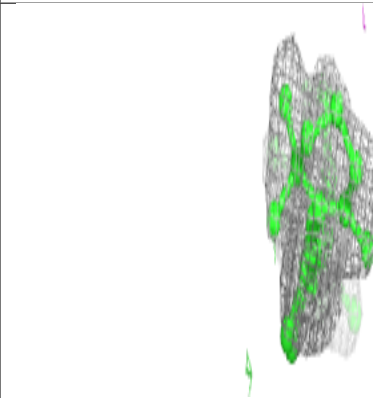
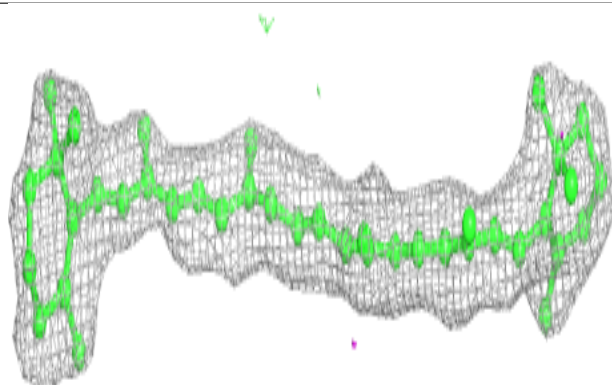
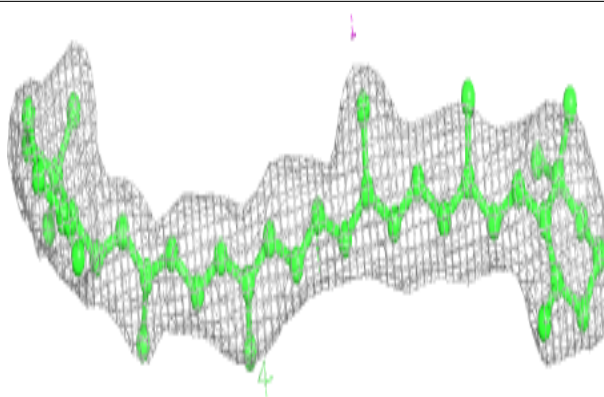
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



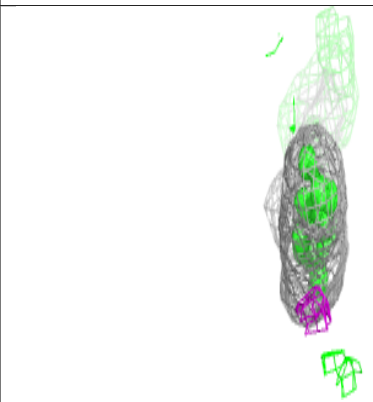
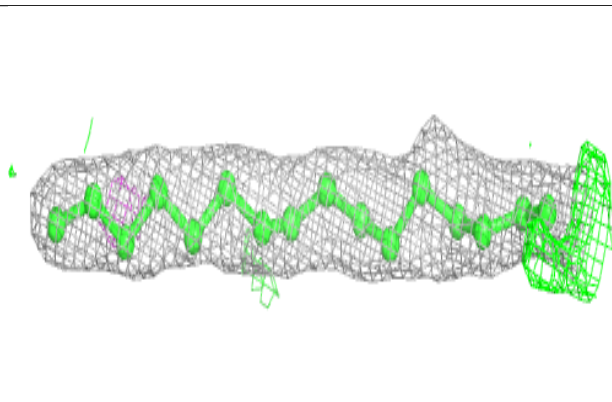
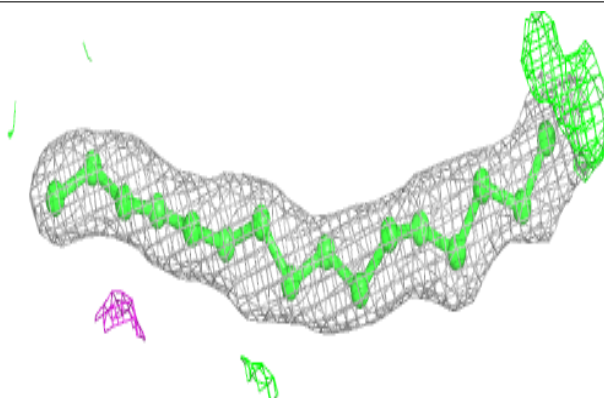


**Electron density around BCR Z 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

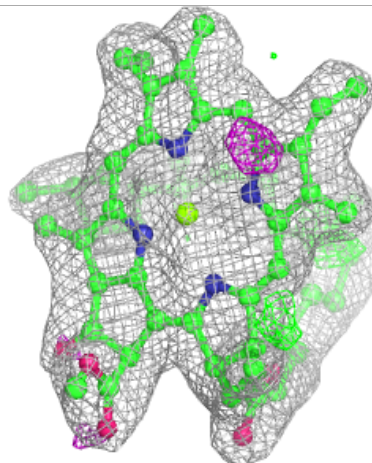
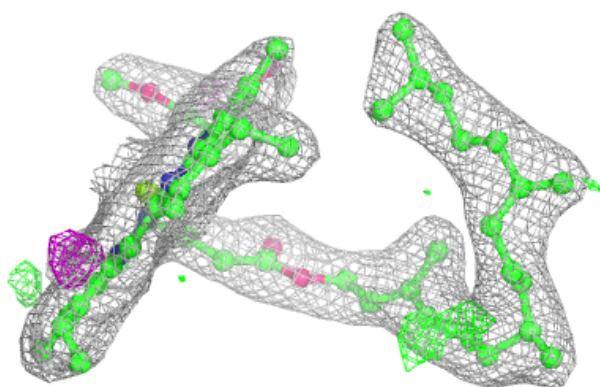
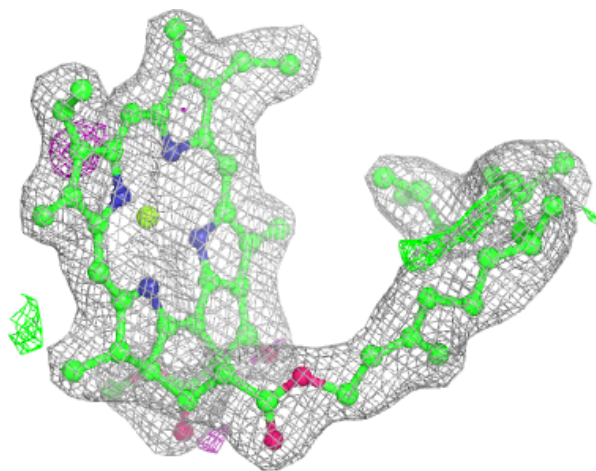
**Electron density around STE C 521:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



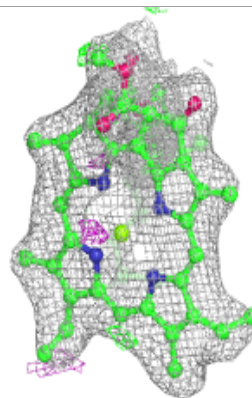
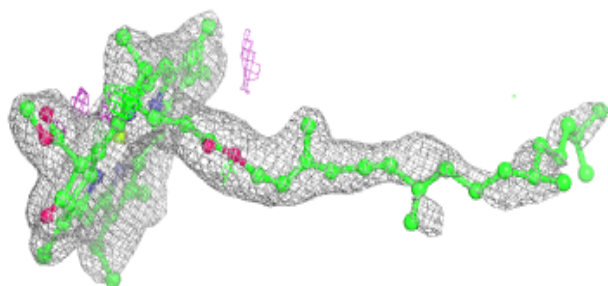
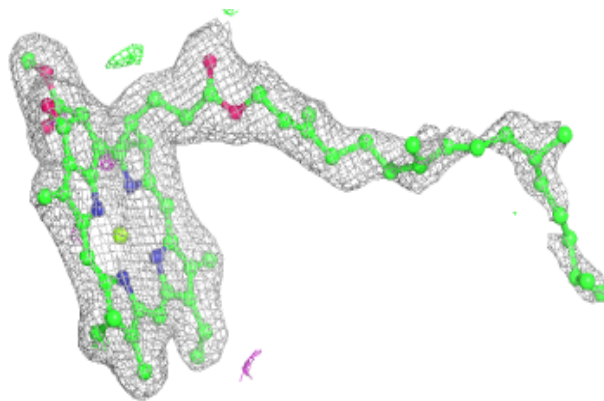
**Electron density around CLA C 503:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

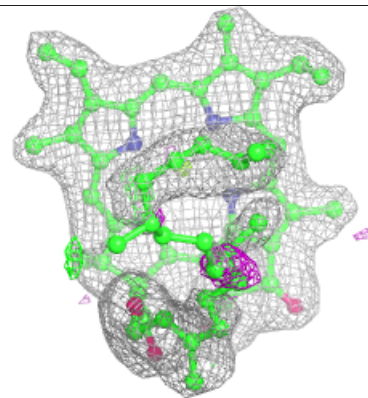
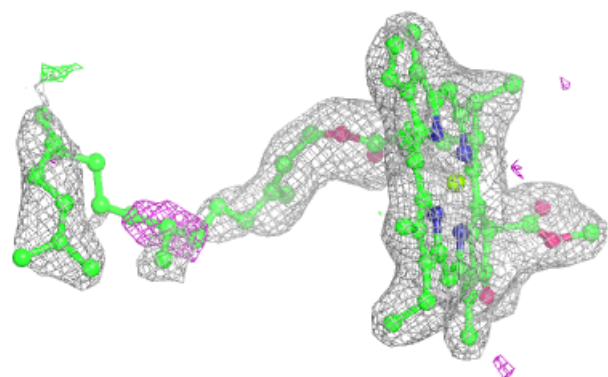
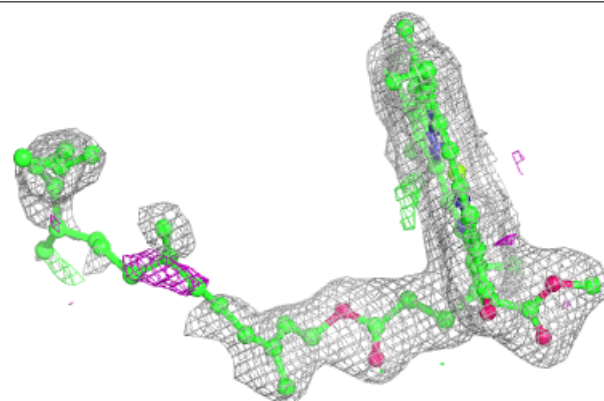


**Electron density around CLA d 404:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

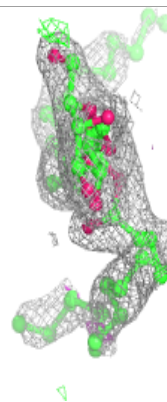
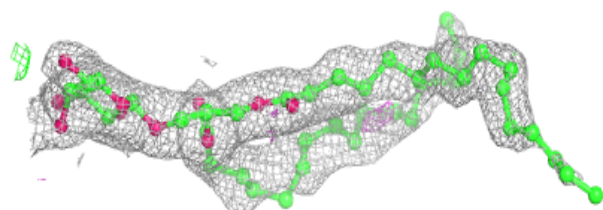
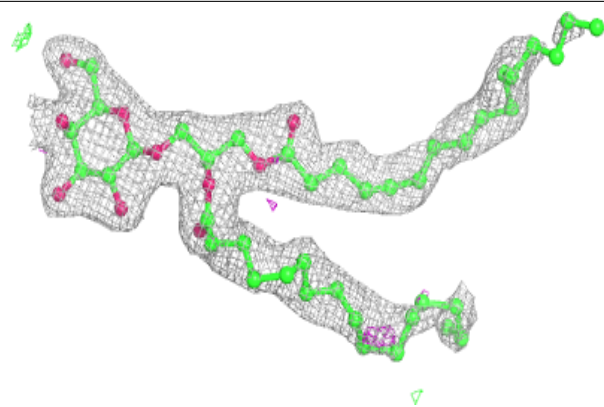
**Electron density around CLA C 506:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

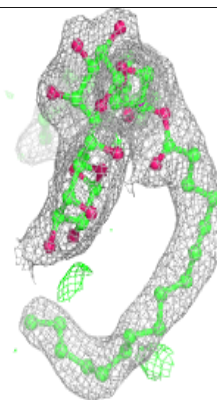
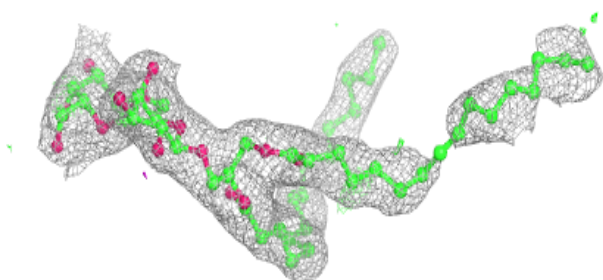
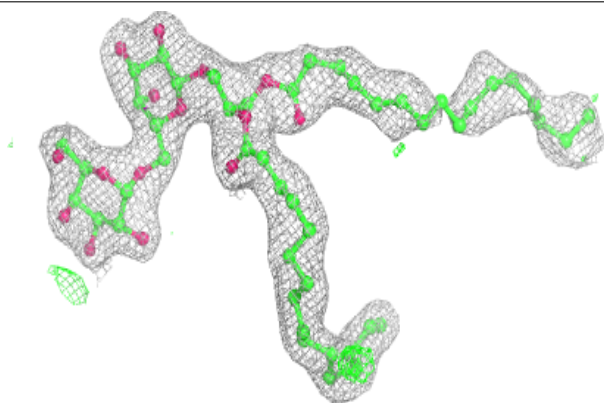


**Electron density around LMG D 406:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

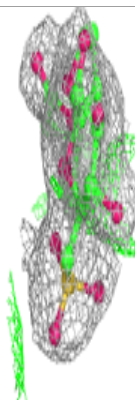
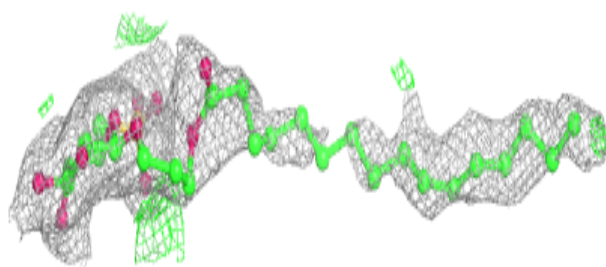
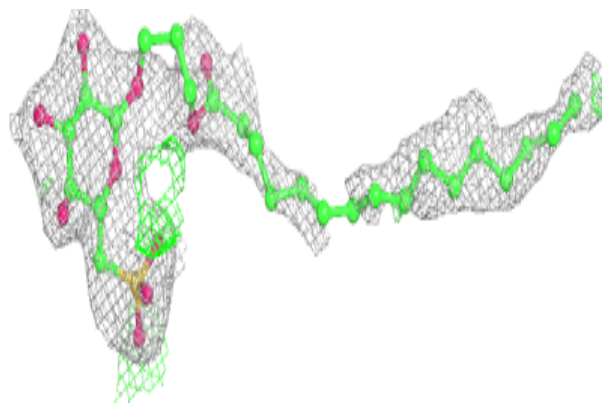
**Electron density around DGD c 518:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



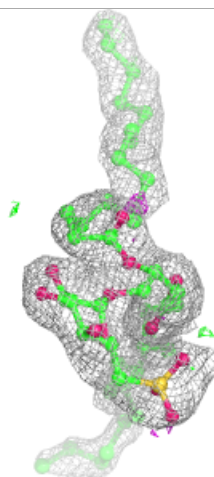
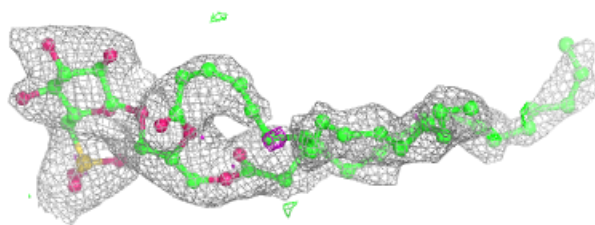
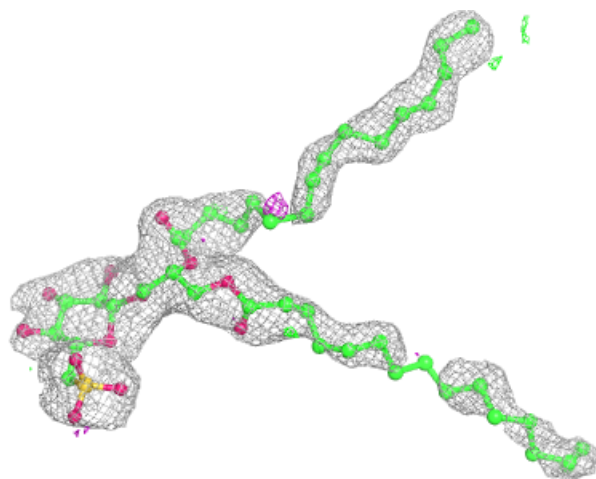
**Electron density around SQD F 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



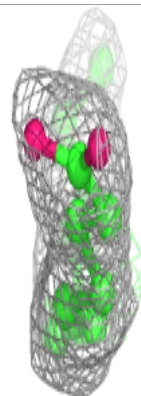
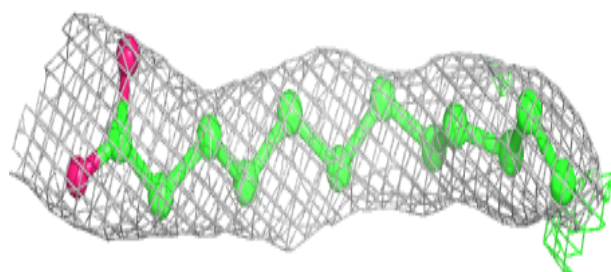
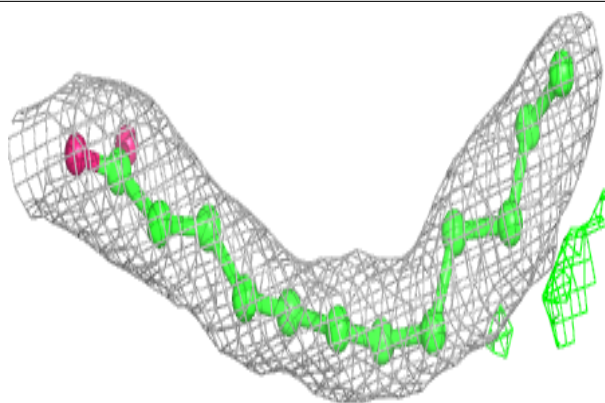
**Electron density around SQD a 613:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

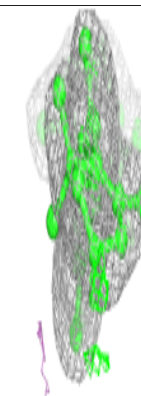
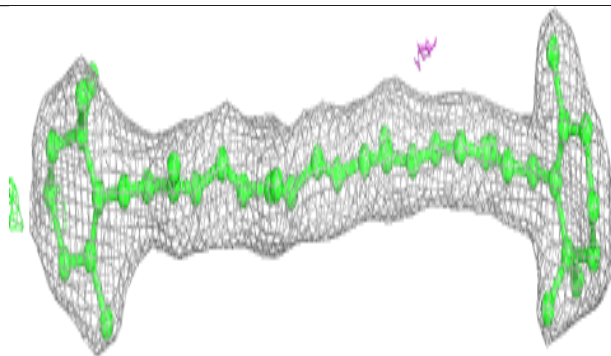
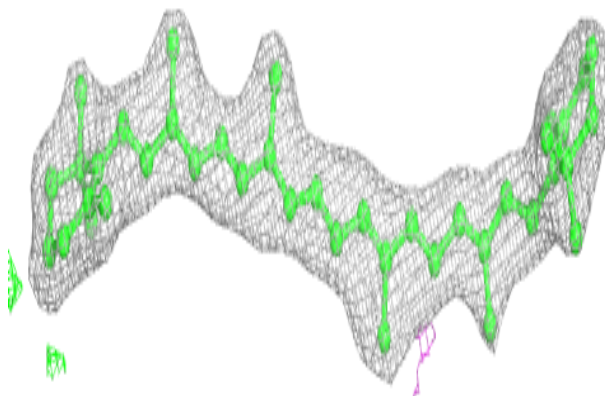


**Electron density around STE t 103:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

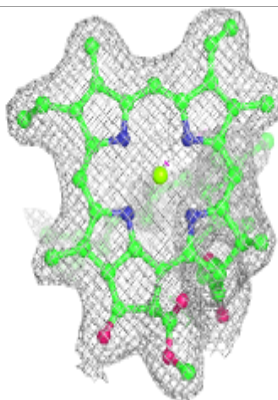
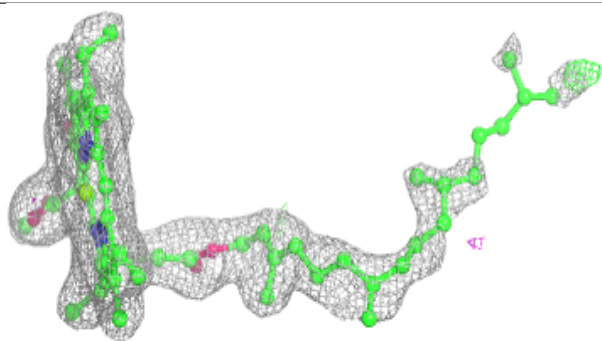
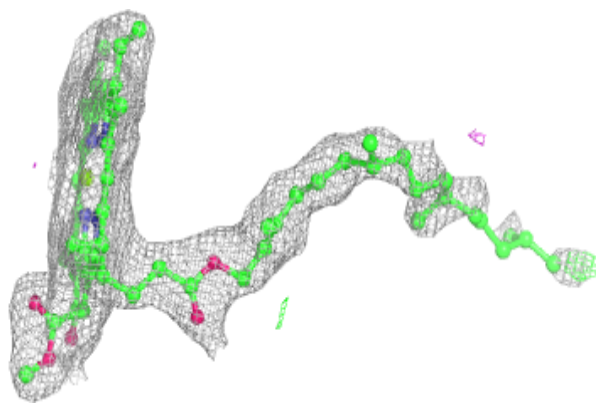
**Electron density around BCR C 514:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

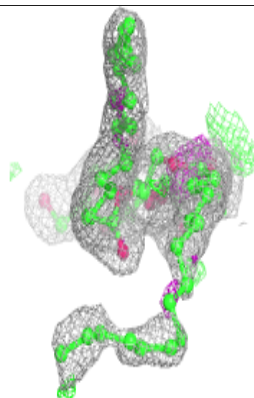
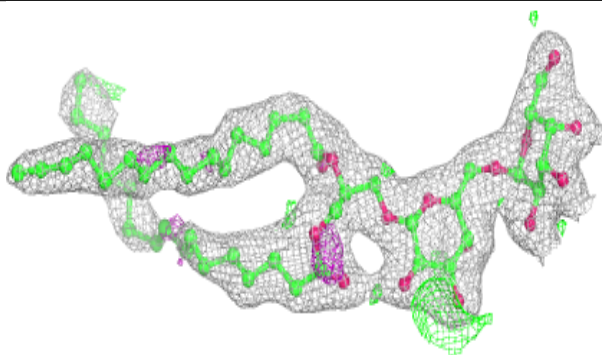
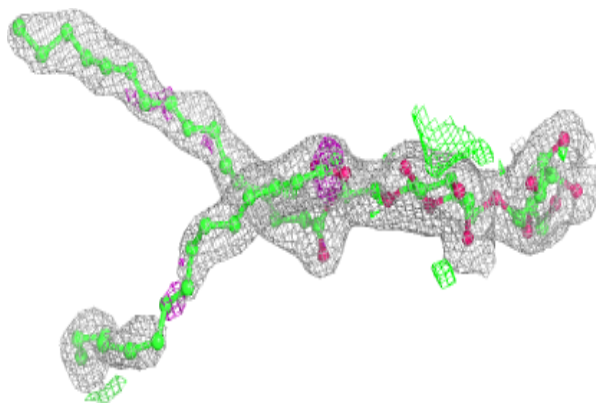


**Electron density around CLA D 403:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around DGD C 515:**

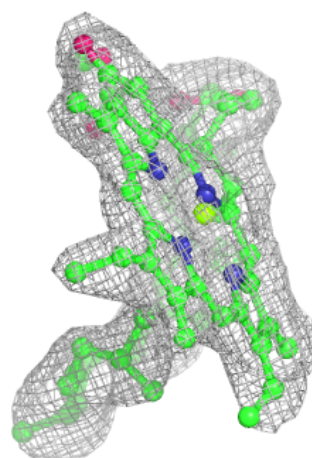
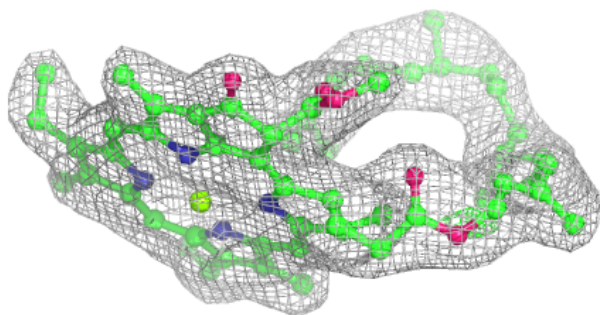
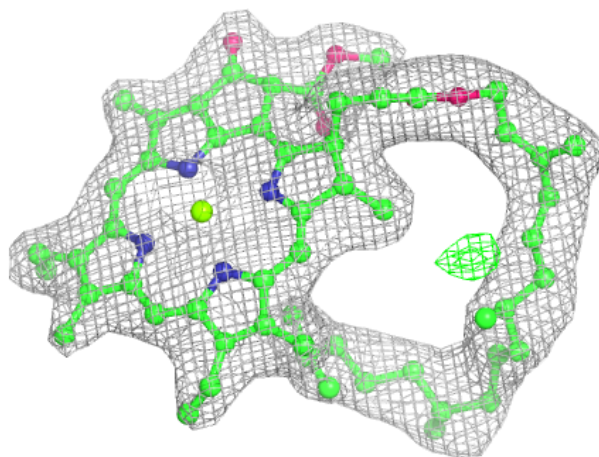
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





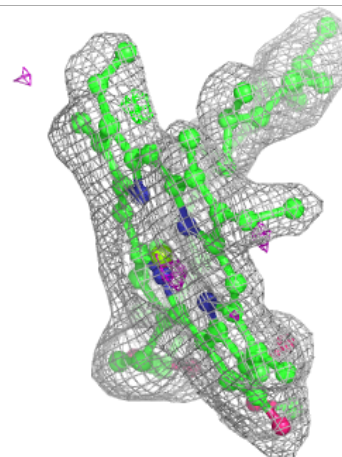
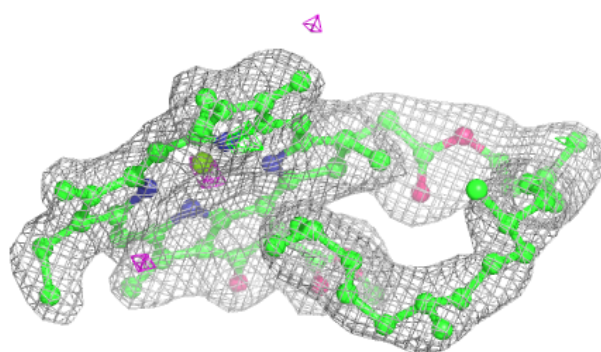
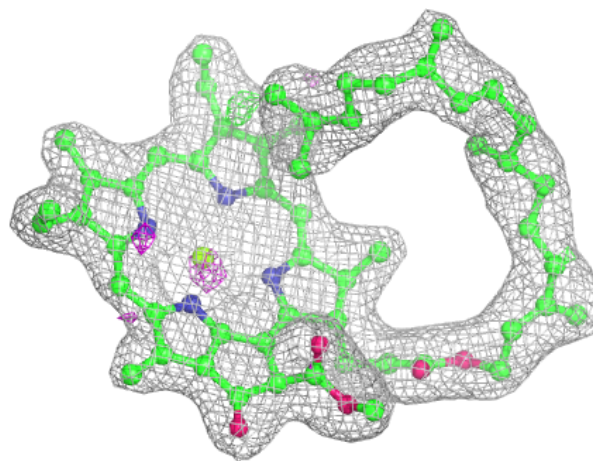
**Electron density around CLA b 614:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



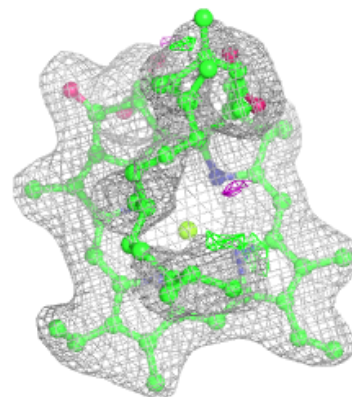
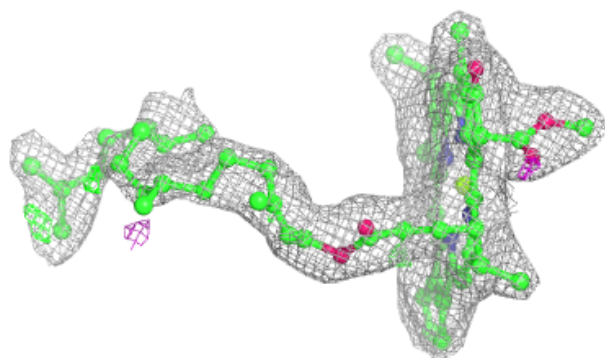
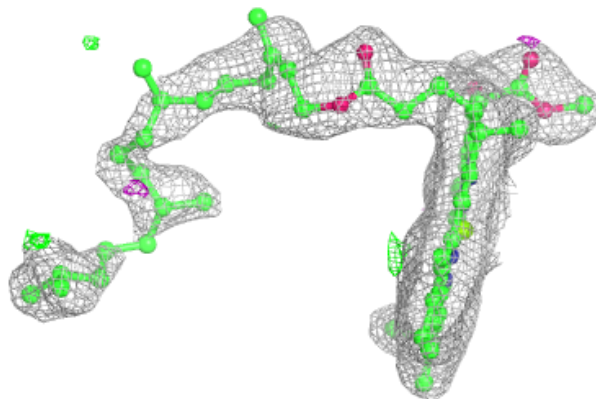
**Electron density around CLA B 615:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

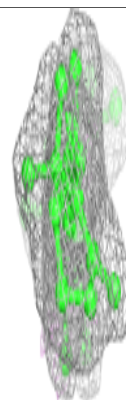
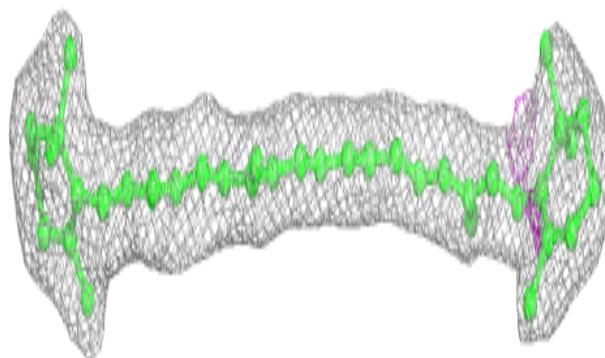
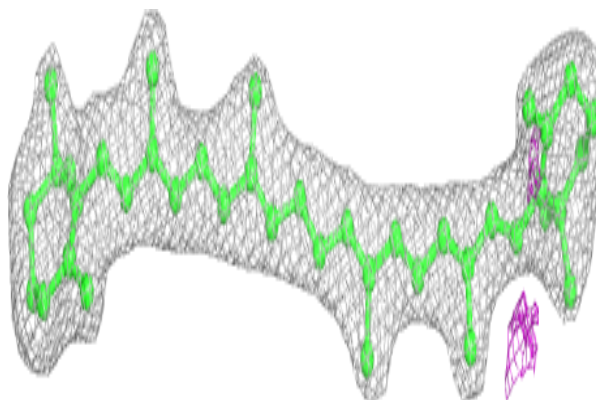


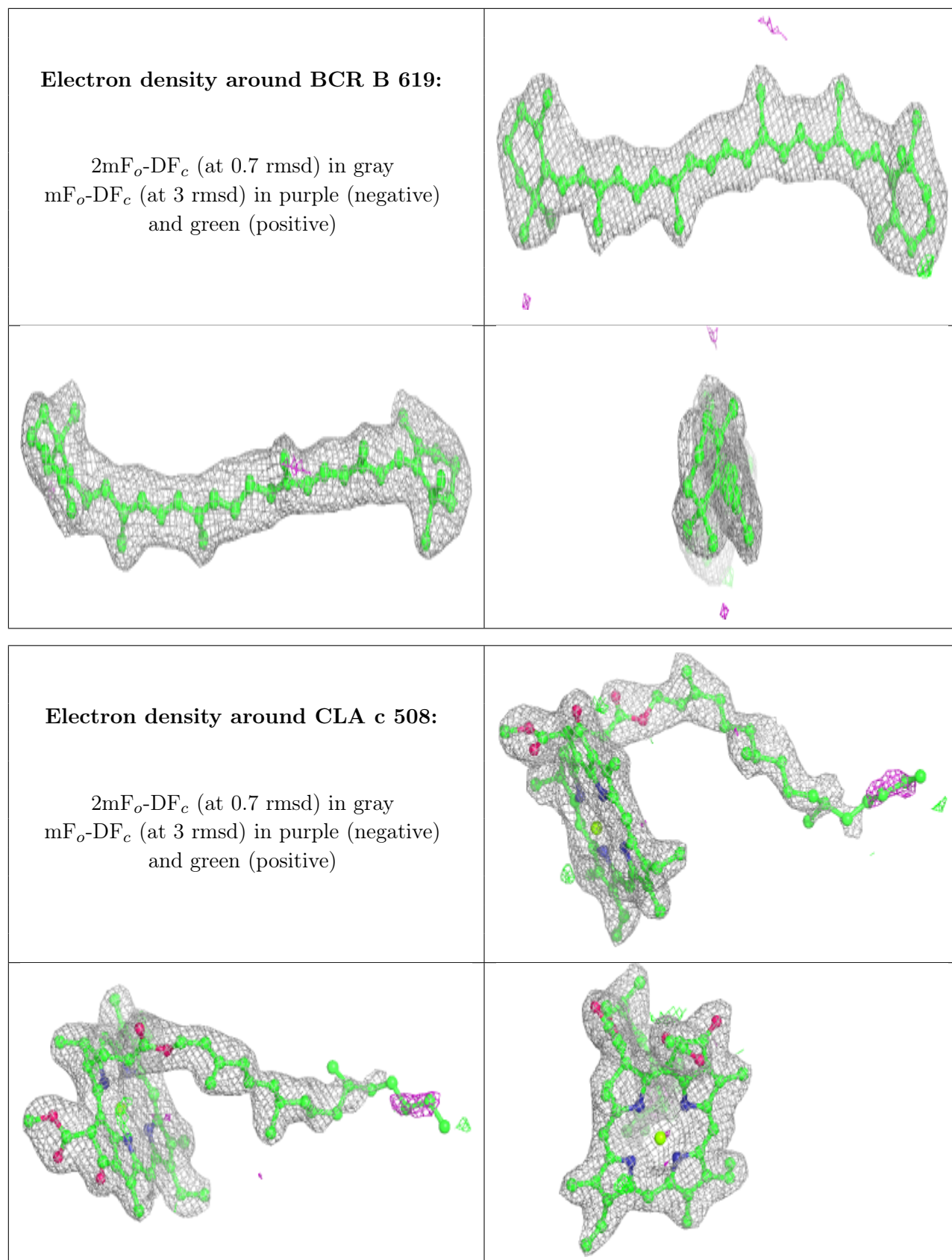
**Electron density around CLA c 506:**

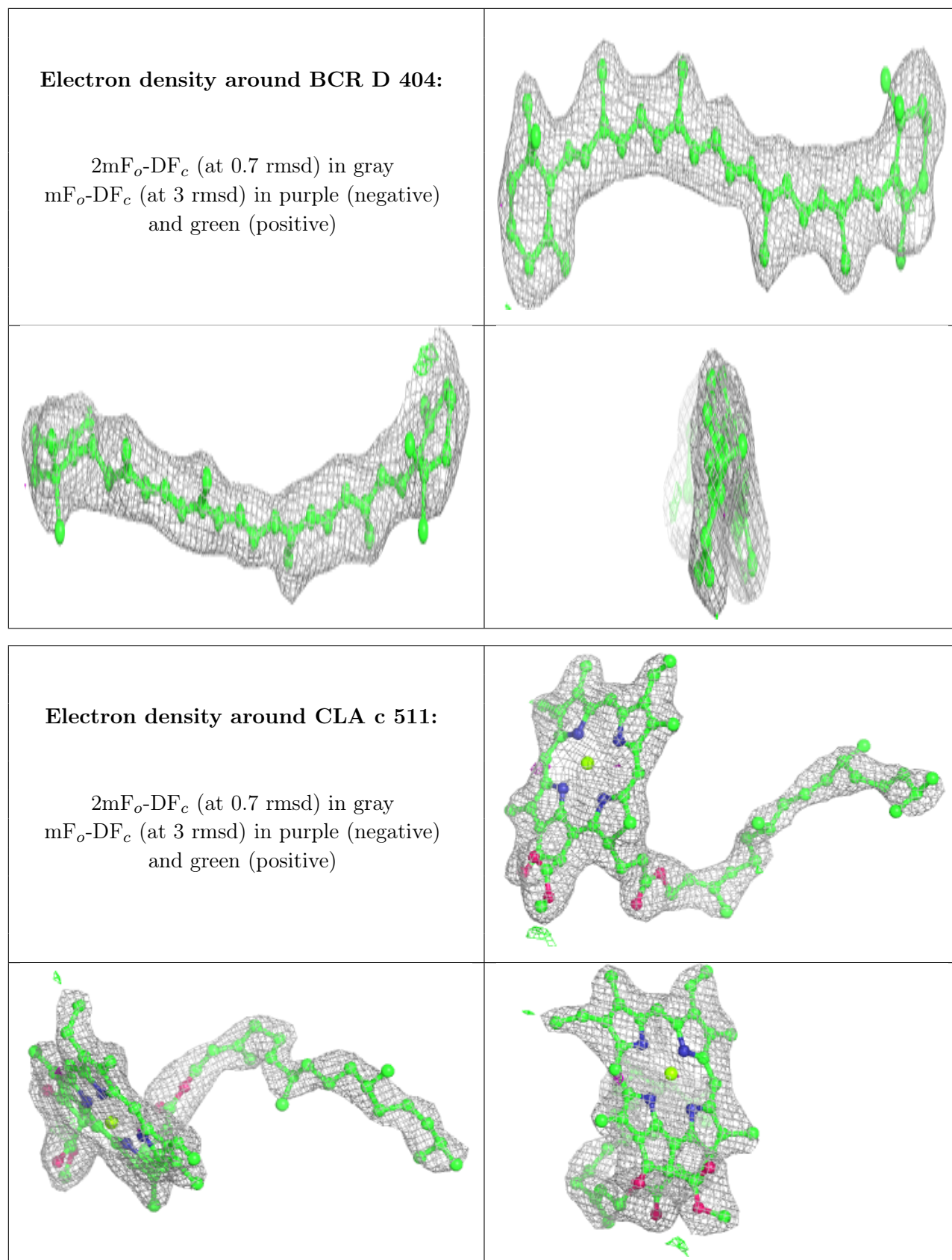
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around BCR B 618:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

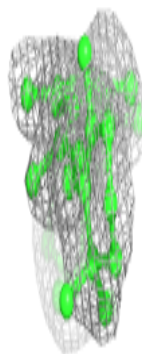
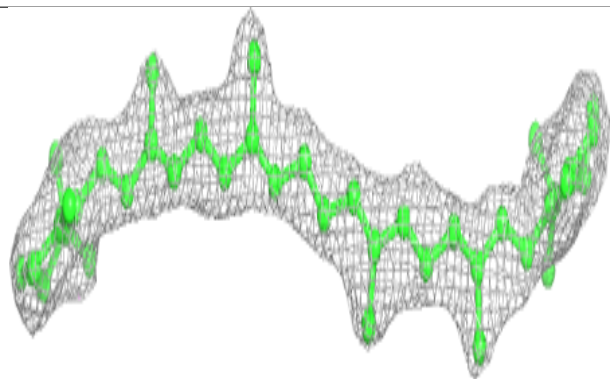
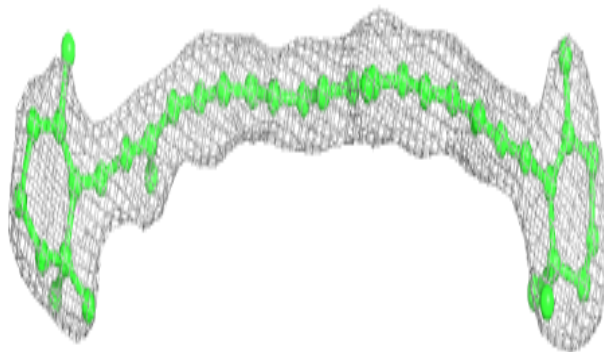




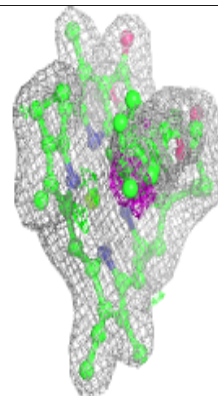
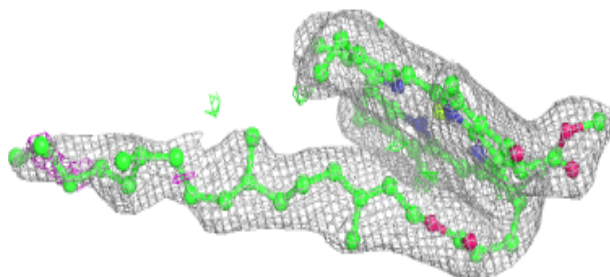
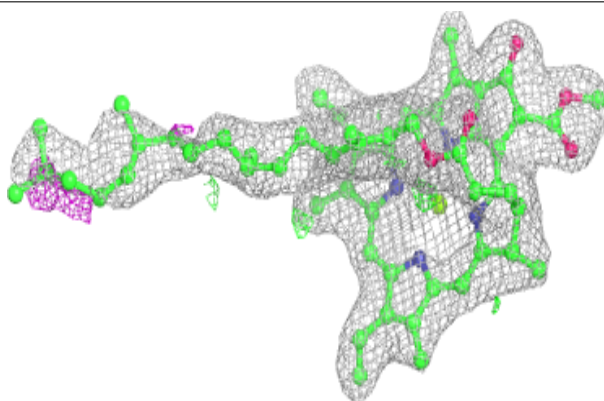


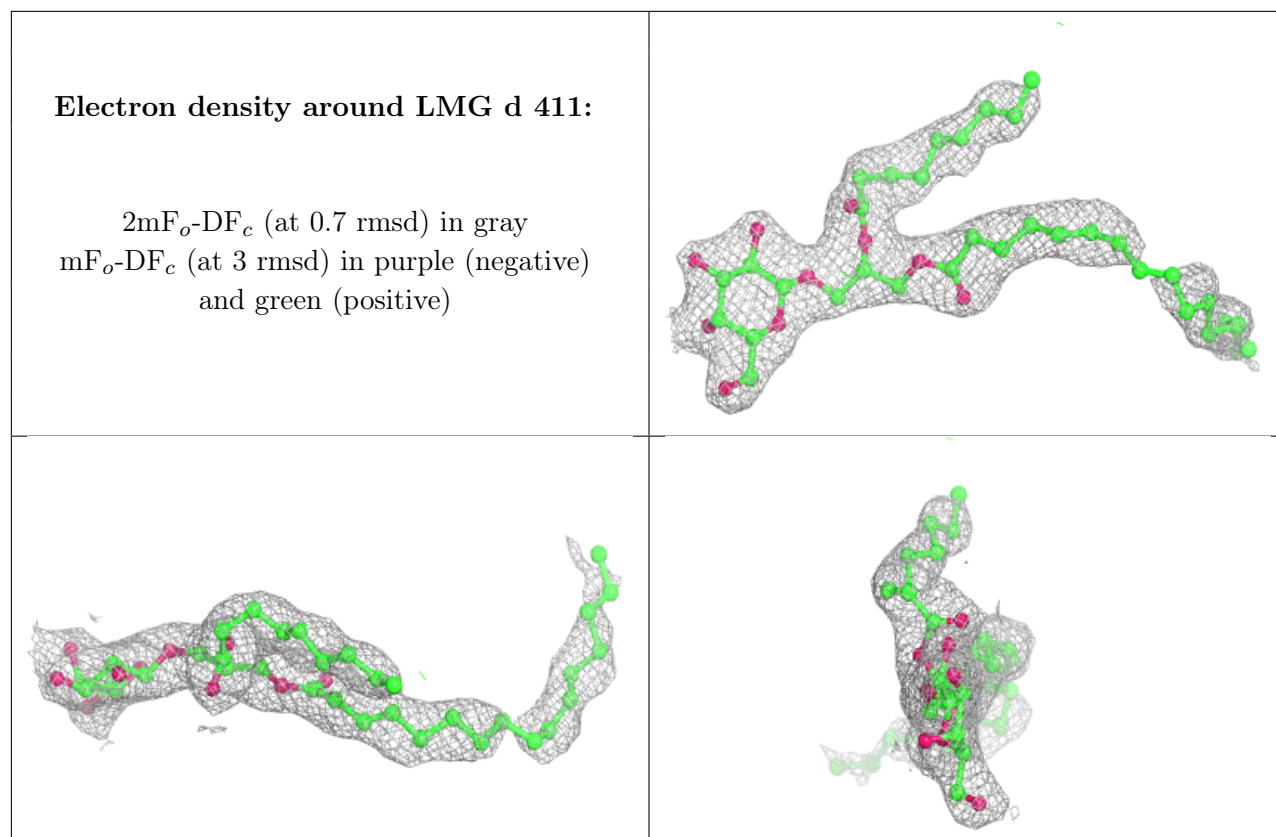
**Electron density around BCR K 102:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around CLA b 613:**

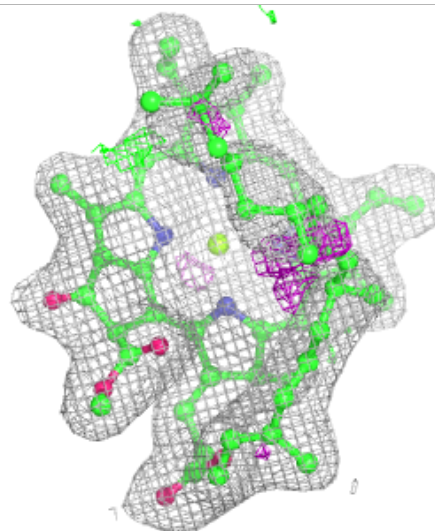
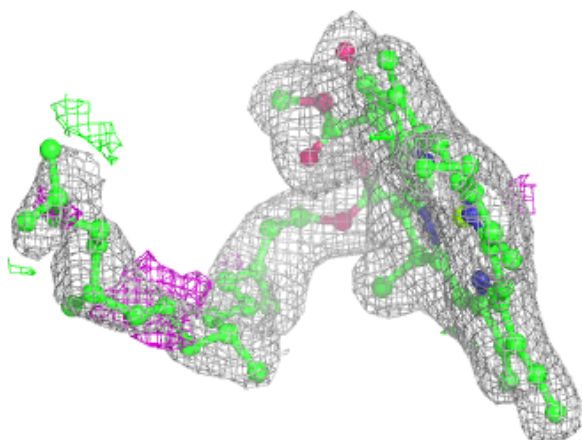
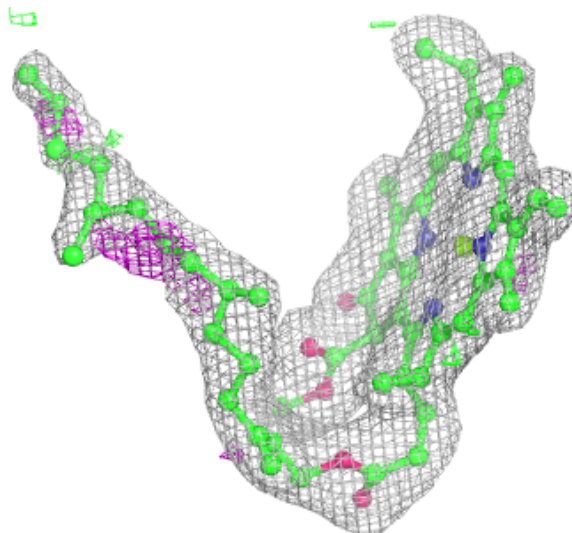
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



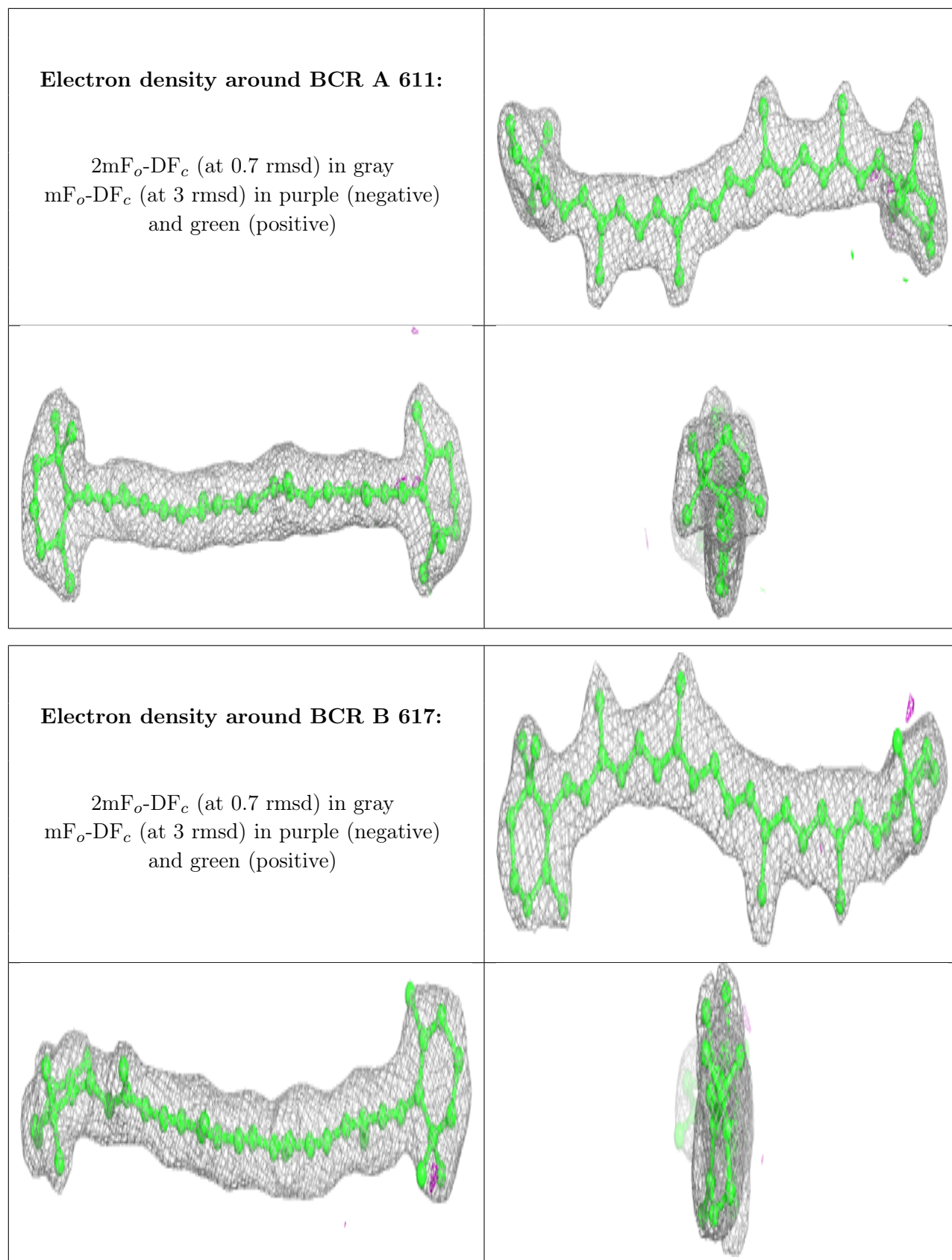


**Electron density around CLA b 612:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

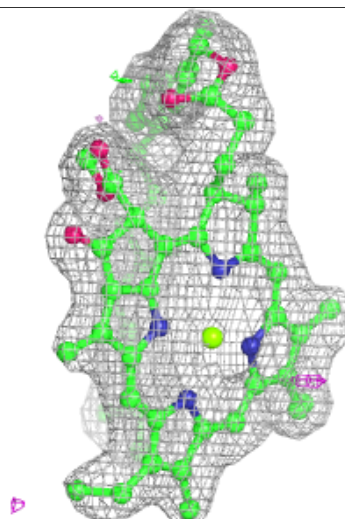
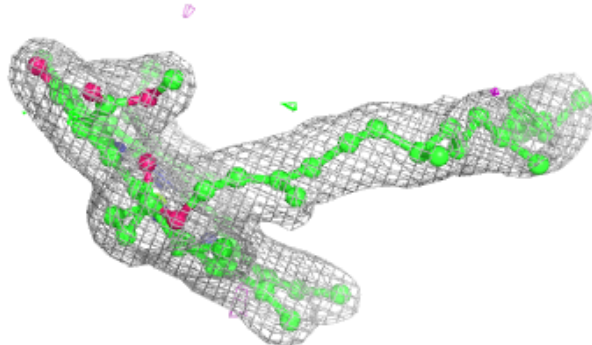
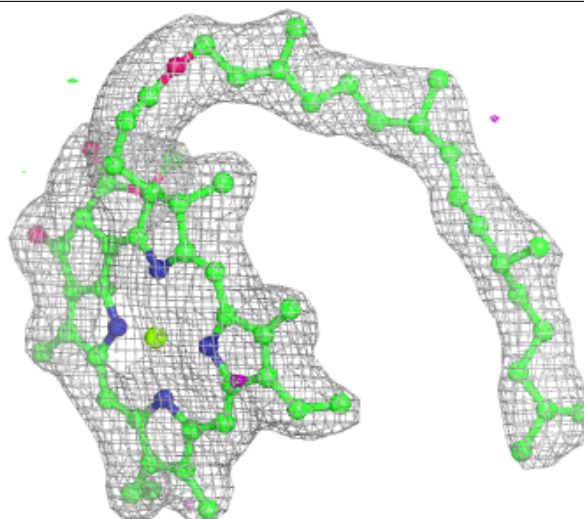






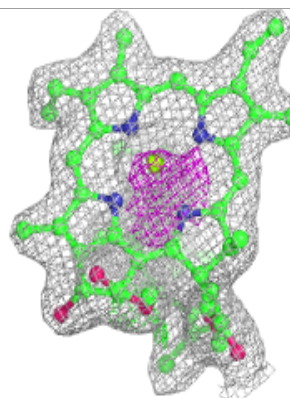
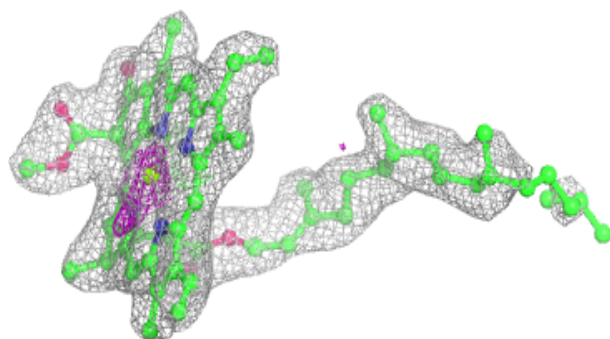
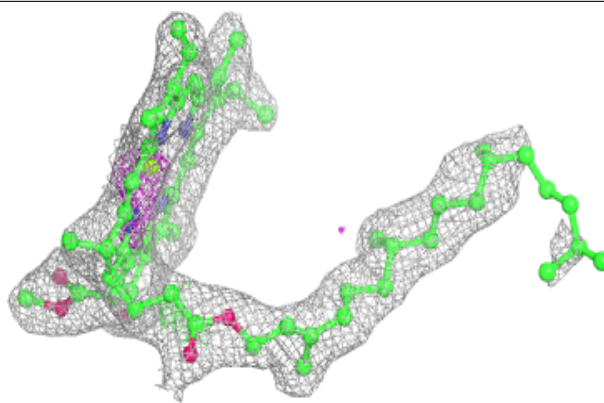
**Electron density around CLA C 507:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

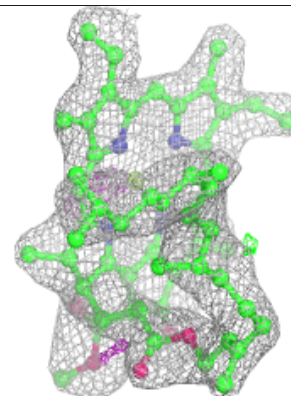
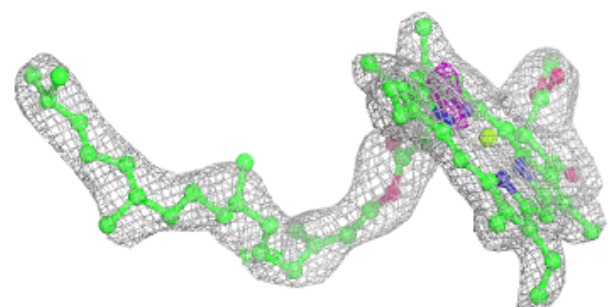
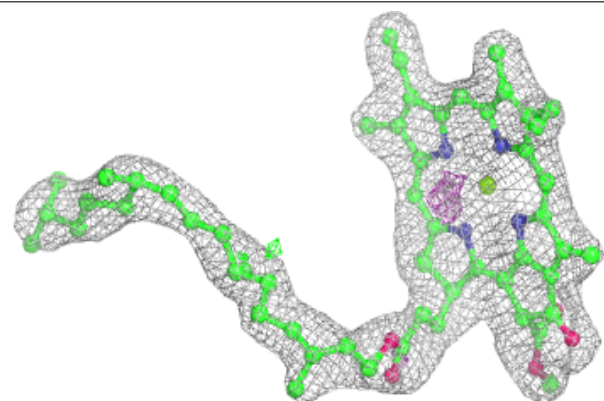


**Electron density around CLA C 508:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

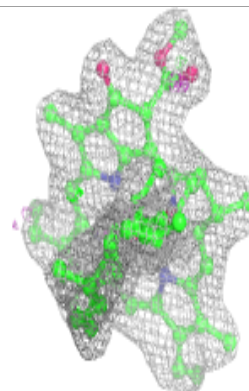
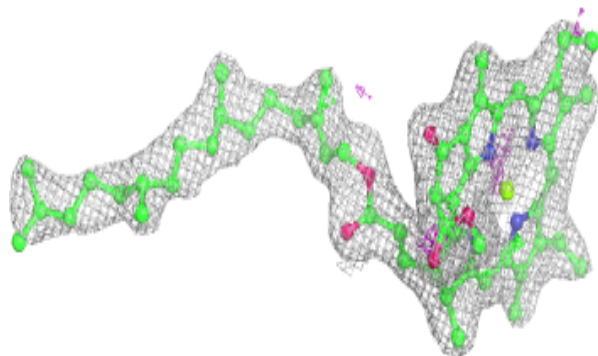
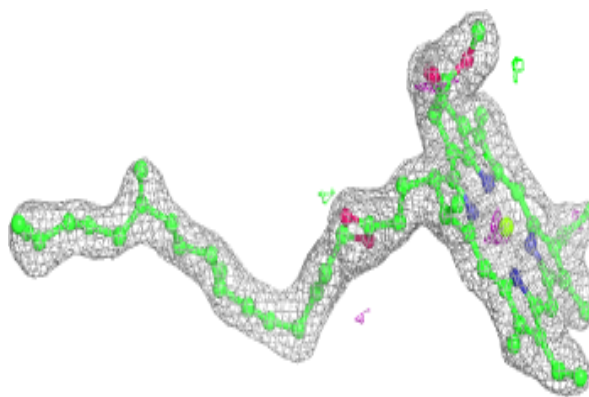
**Electron density around CLA C 511:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

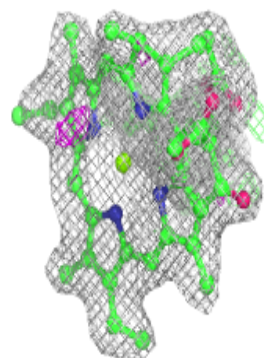
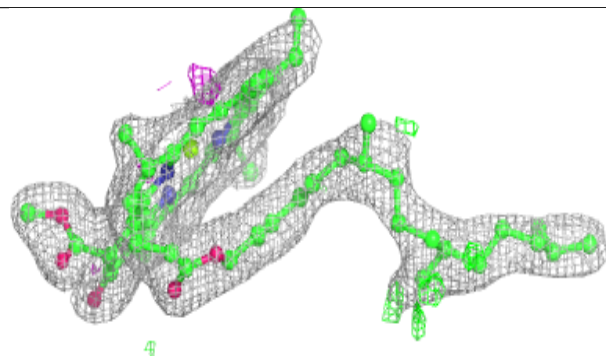
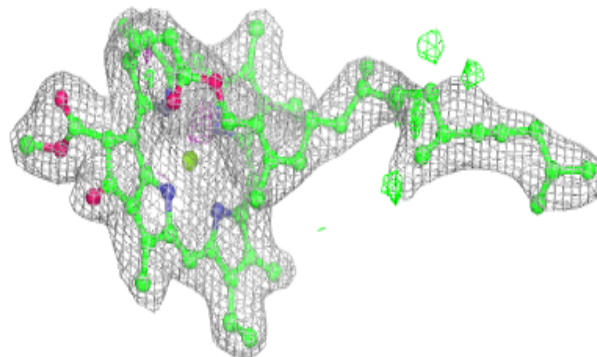


**Electron density around CLA c 502:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

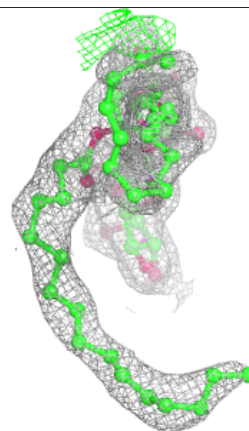
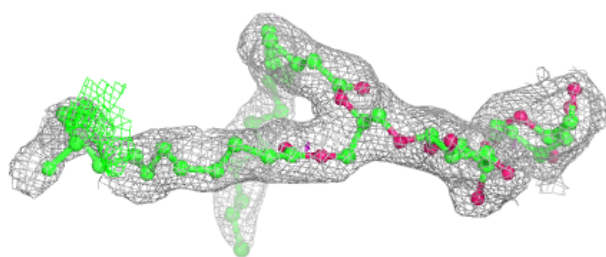
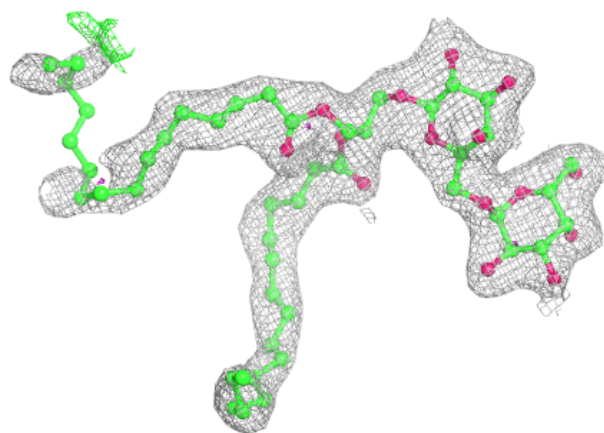
**Electron density around CLA c 505:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

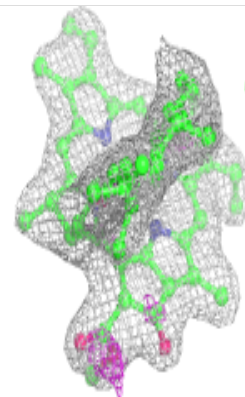
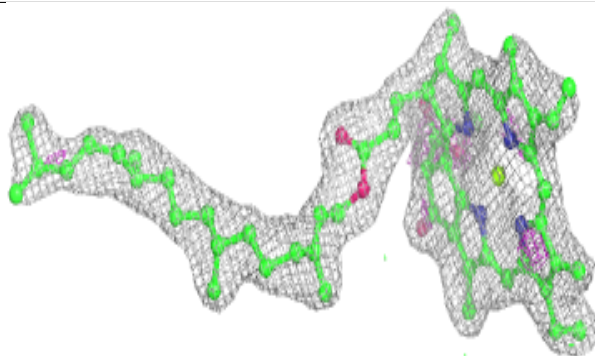
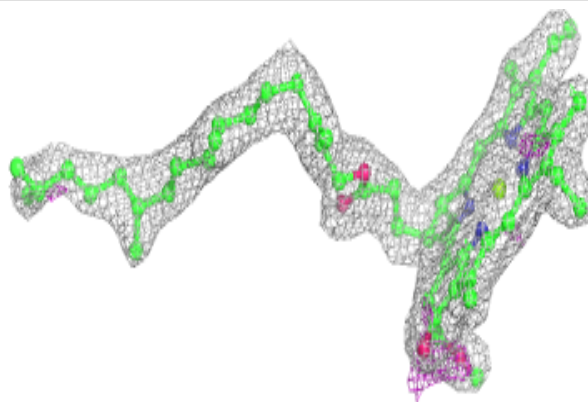


**Electron density around DGD C 516:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

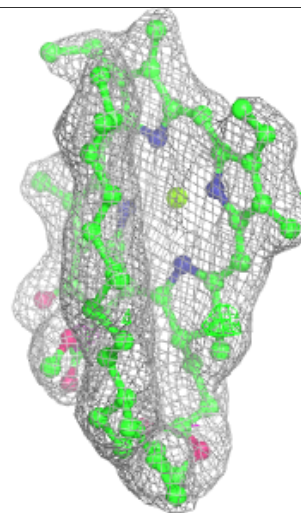
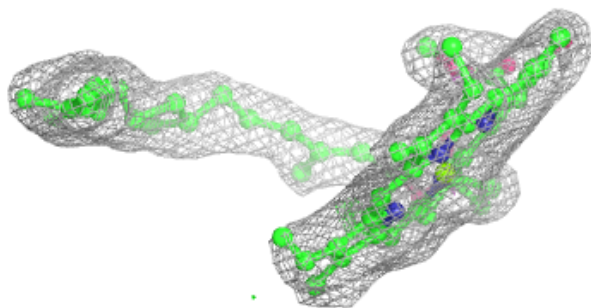
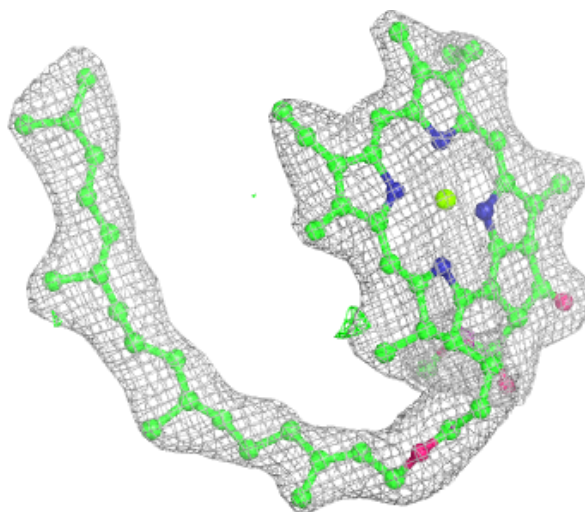
**Electron density around CLA C 502:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



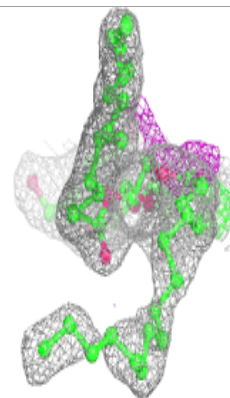
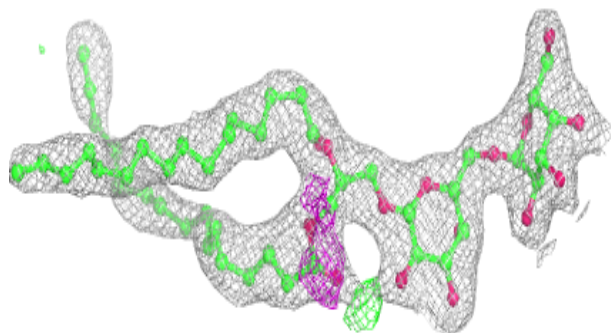
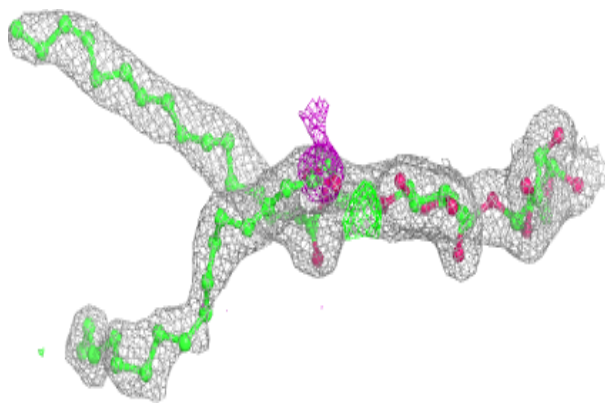
**Electron density around CLA c 507:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



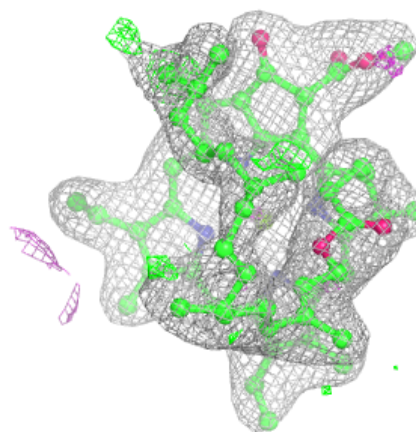
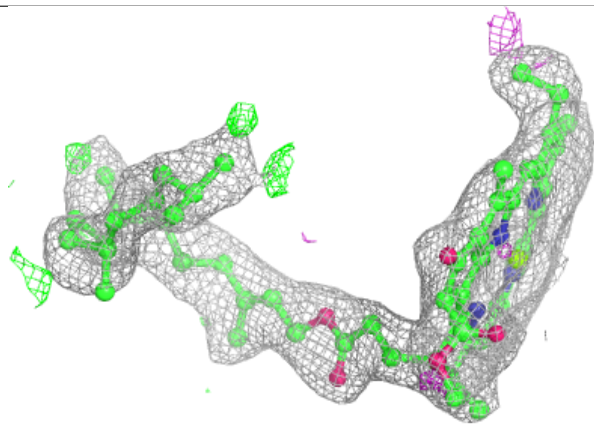
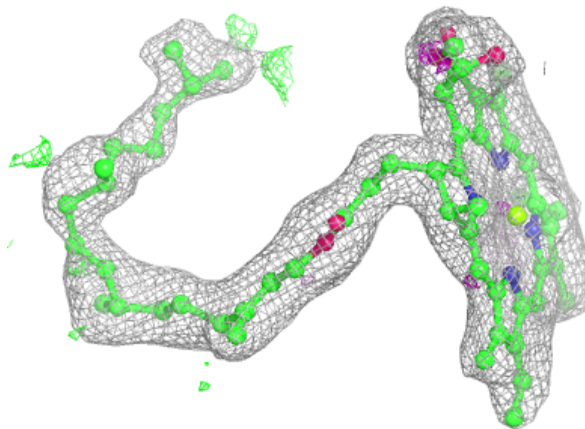
**Electron density around DGD c 517:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA B 606:**

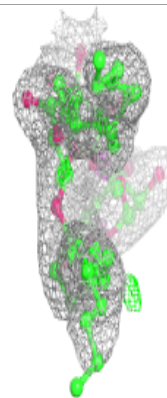
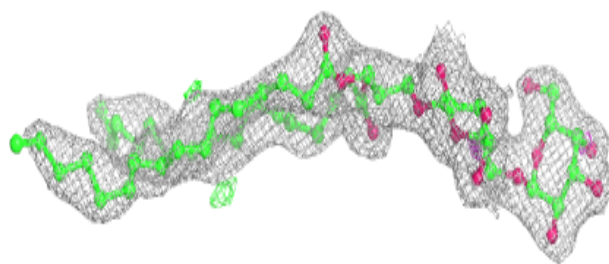
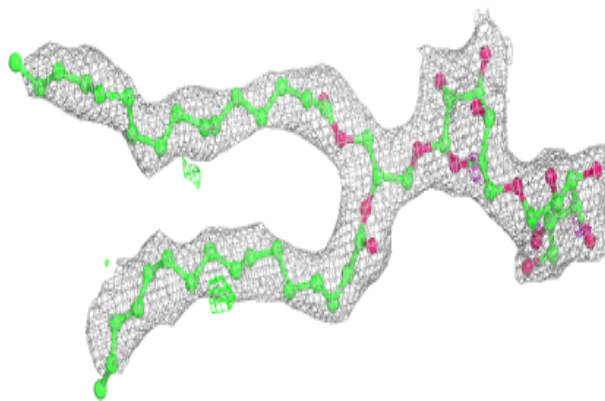
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



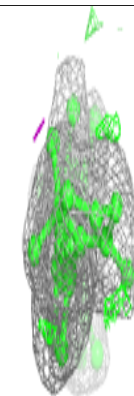
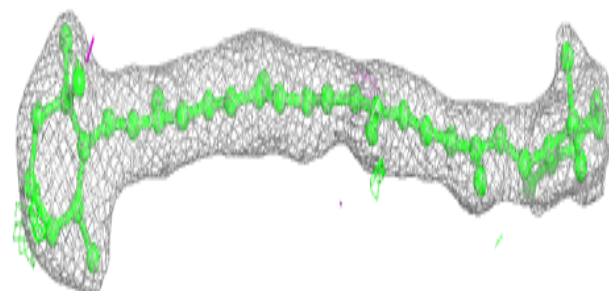
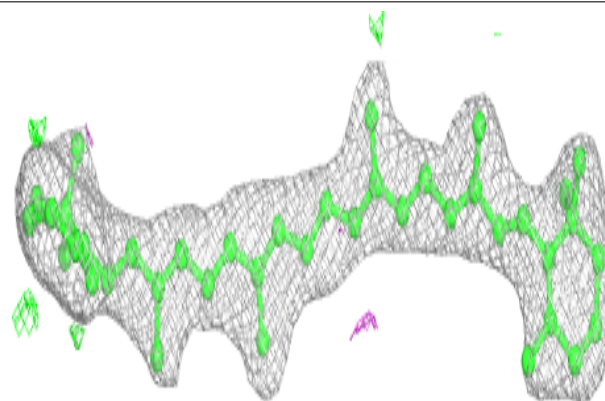


**Electron density around DGD c 519:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

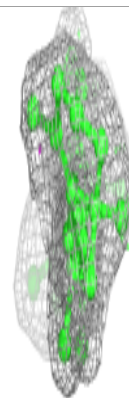
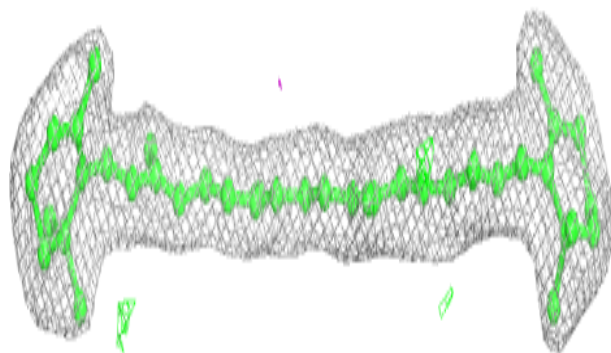
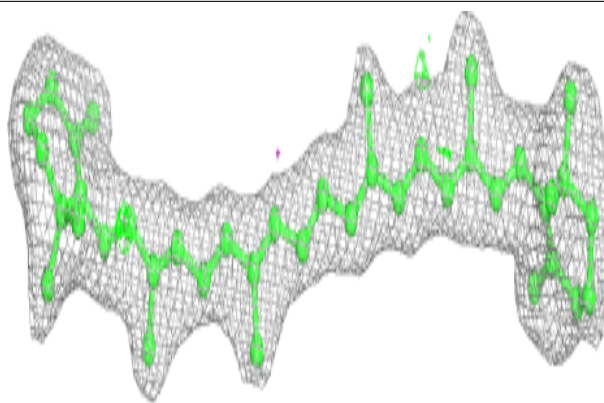
**Electron density around BCR b 616:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



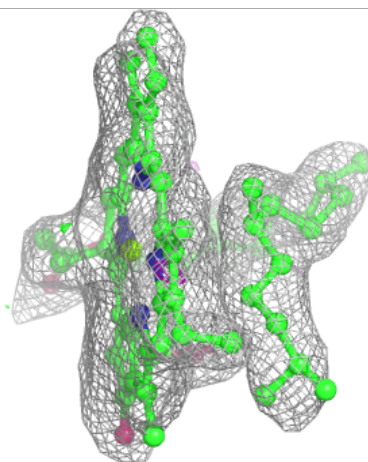
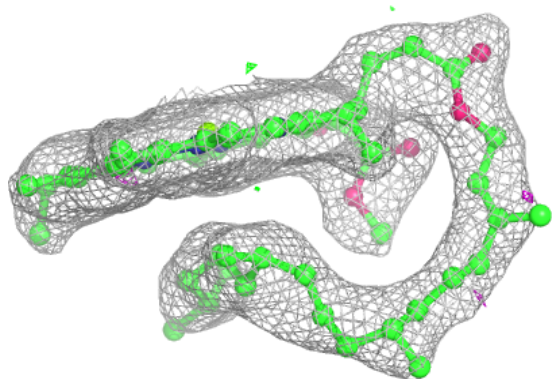
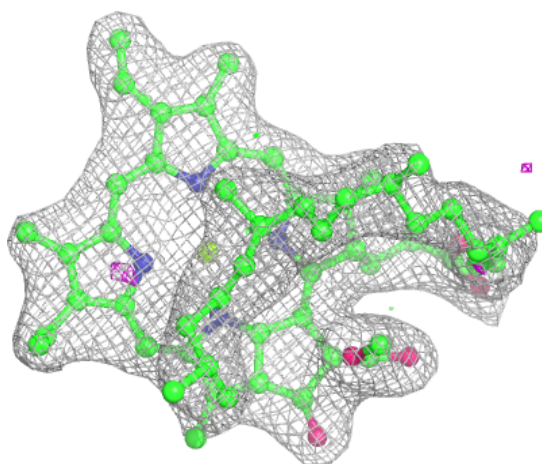
**Electron density around BCR b 617:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



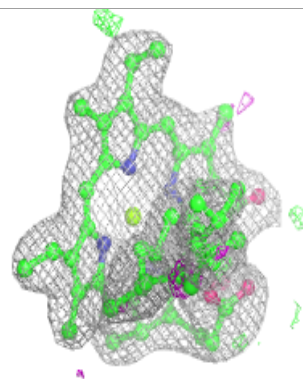
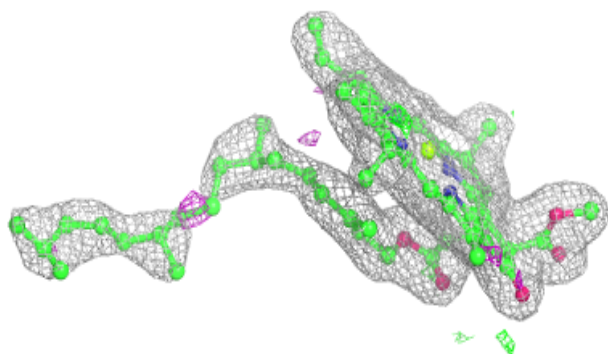
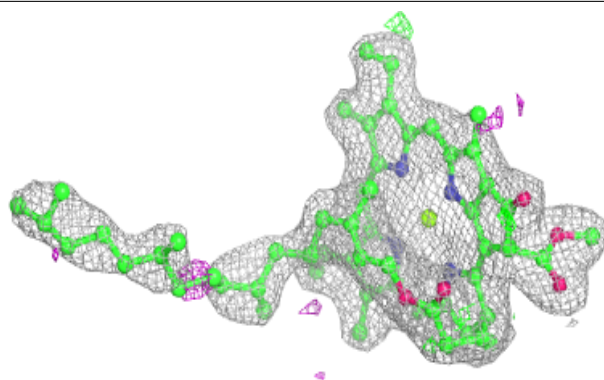
**Electron density around CLA c 510:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

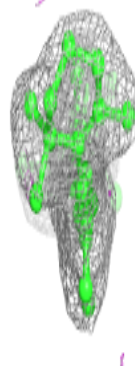
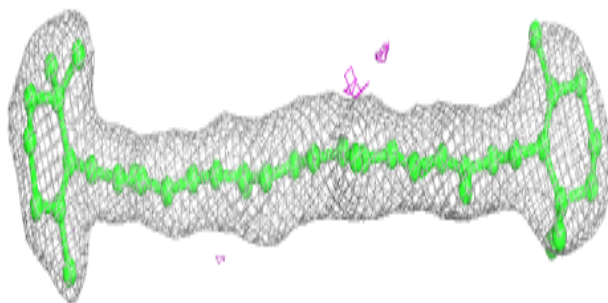
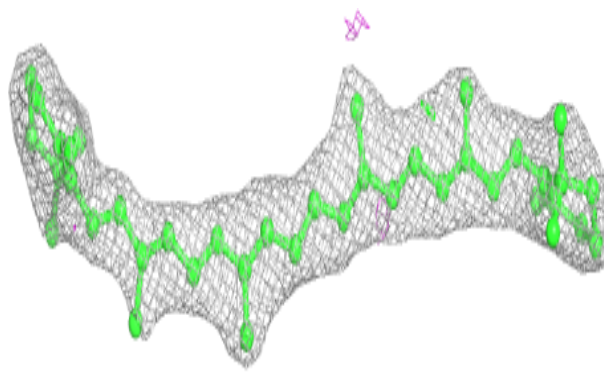


**Electron density around CLA C 505:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

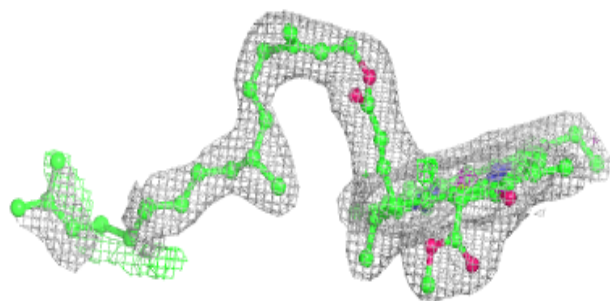
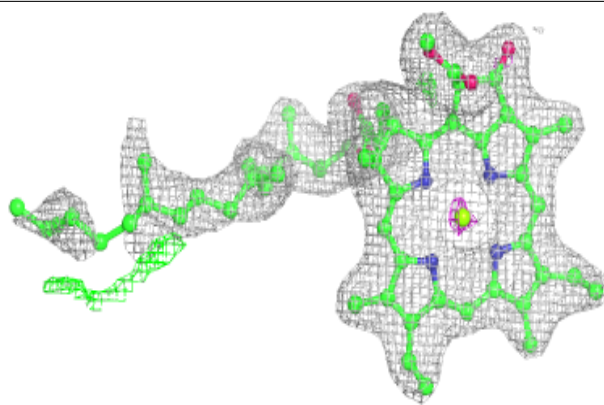
**Electron density around BCR c 515:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

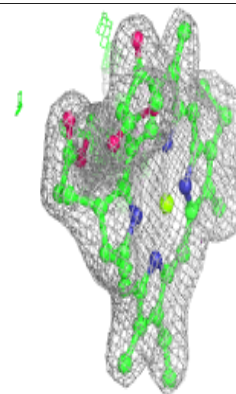
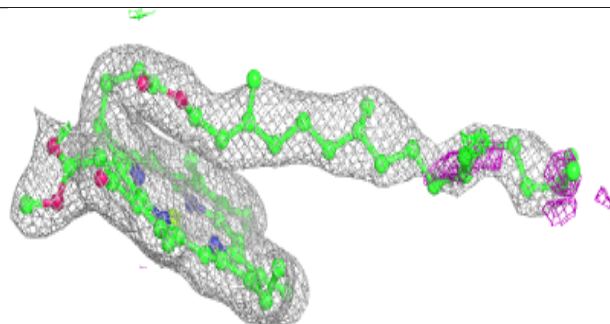
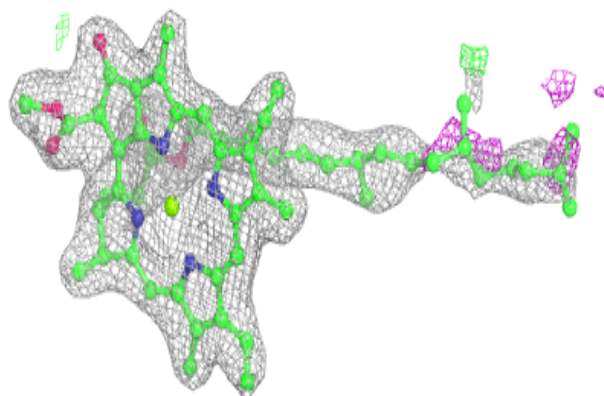


**Electron density around CLA a 607:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

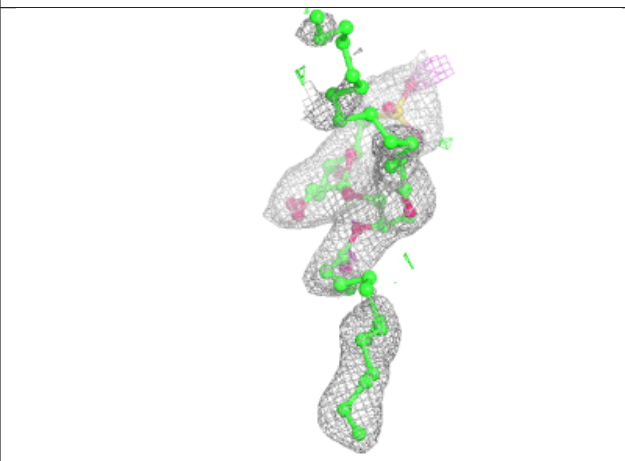
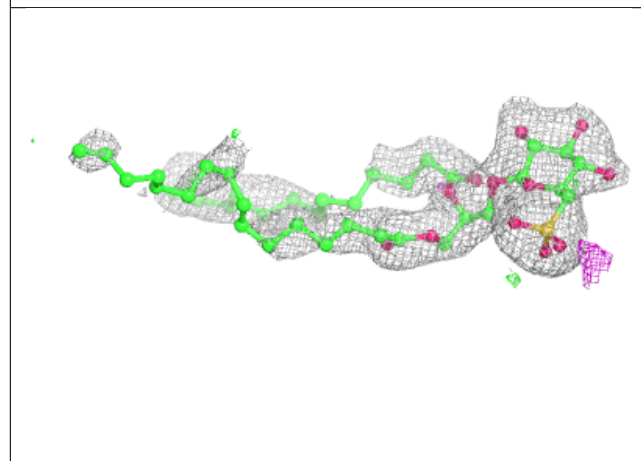
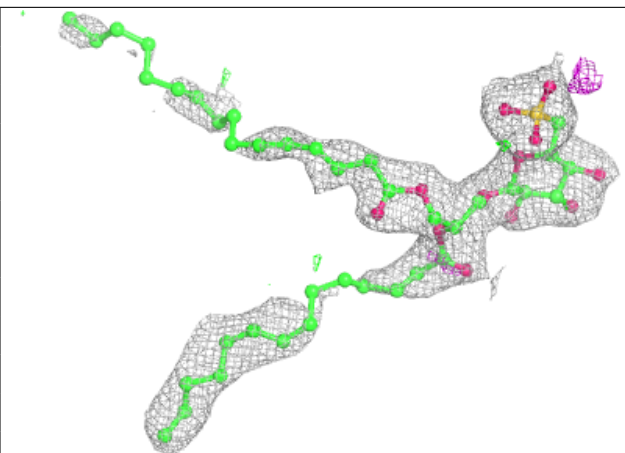
**Electron density around CLA B 614:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

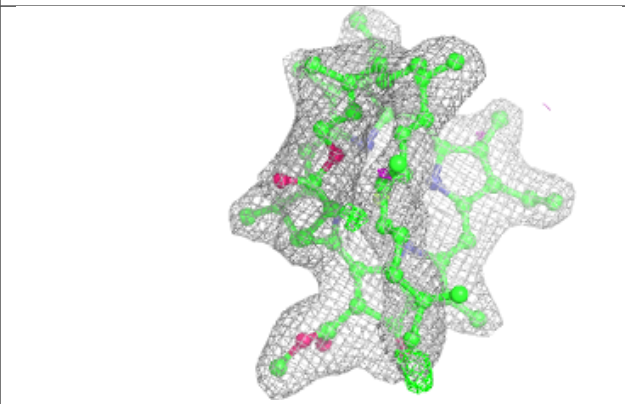
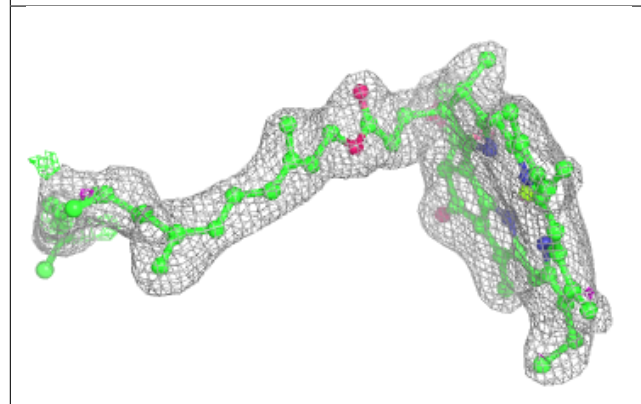
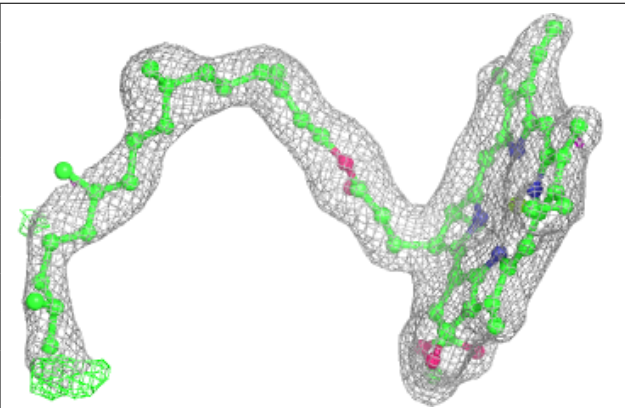


**Electron density around SQD A 616:**

$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)

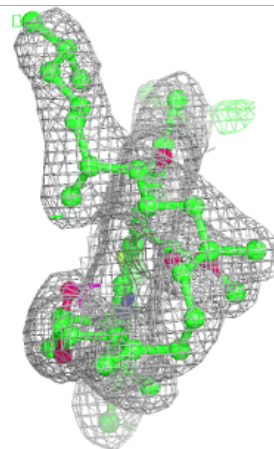
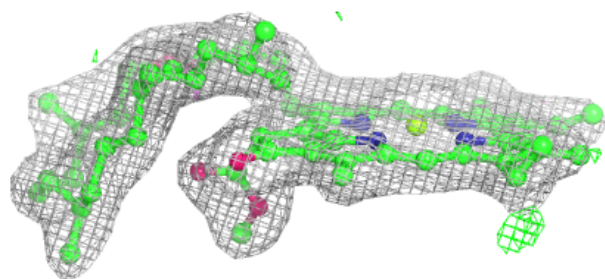
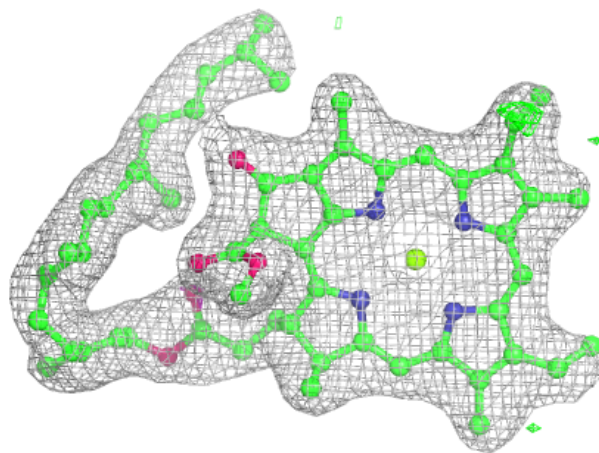
**Electron density around CLA b 605:**

$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)

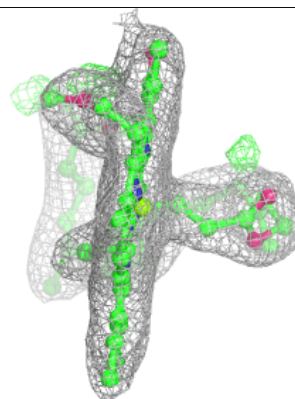
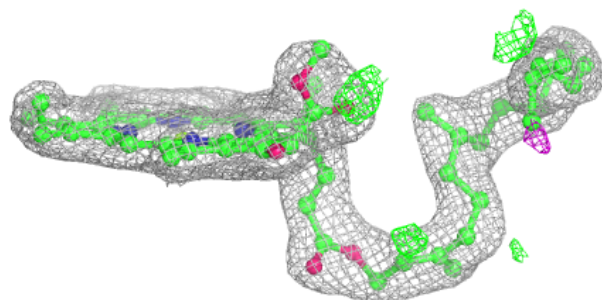
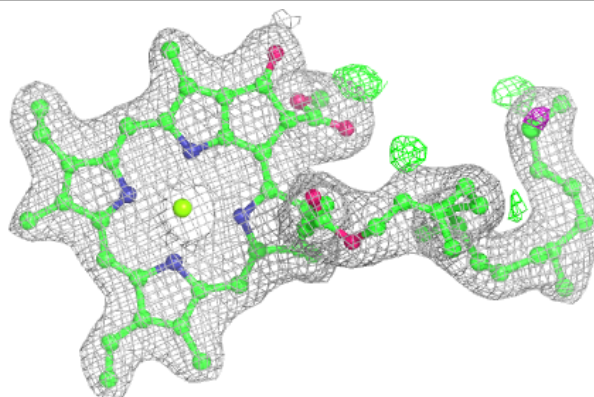


**Electron density around CLA B 610:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

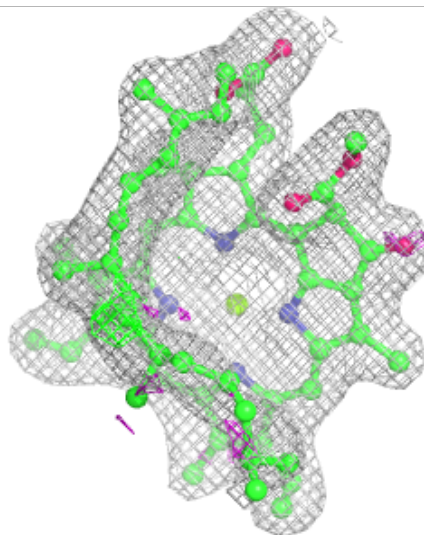
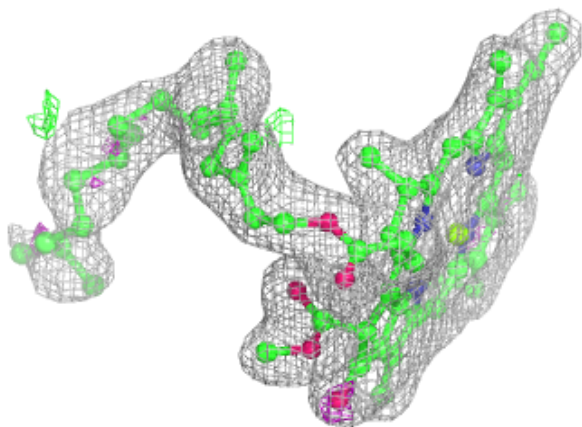
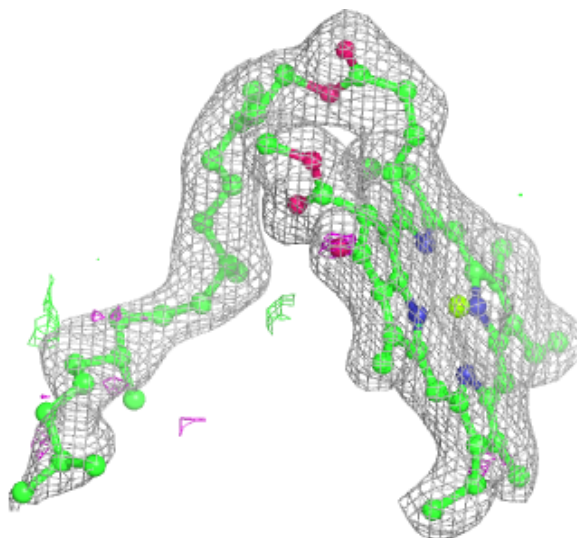
**Electron density around CLA B 612:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA B 613:**

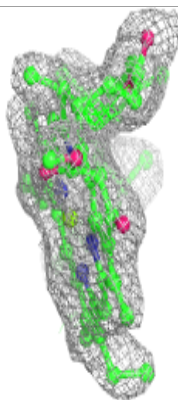
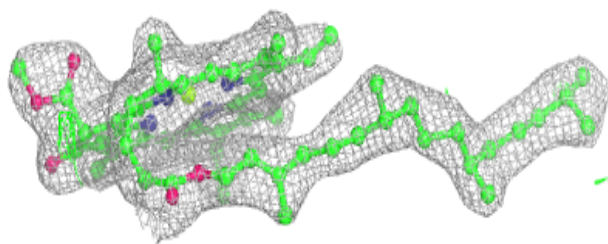
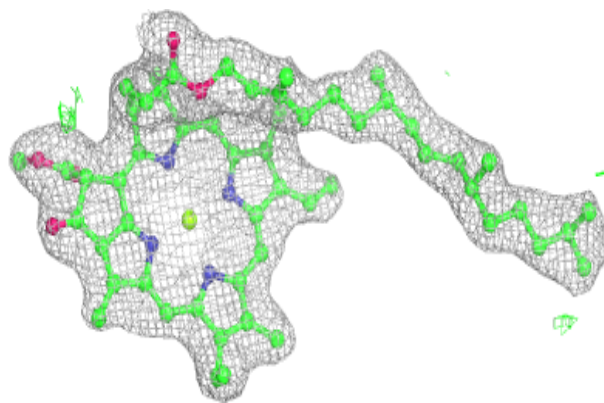
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



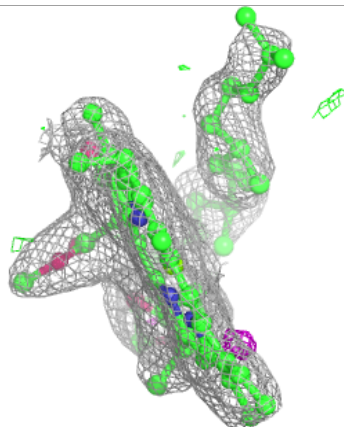
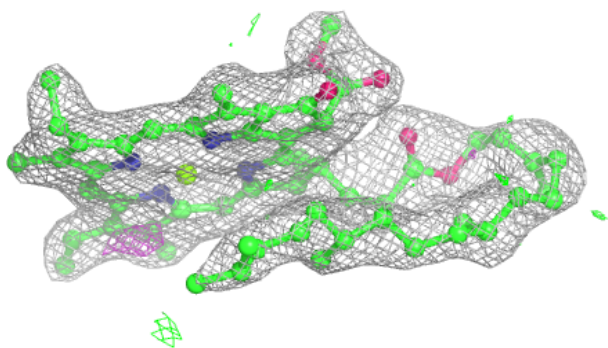
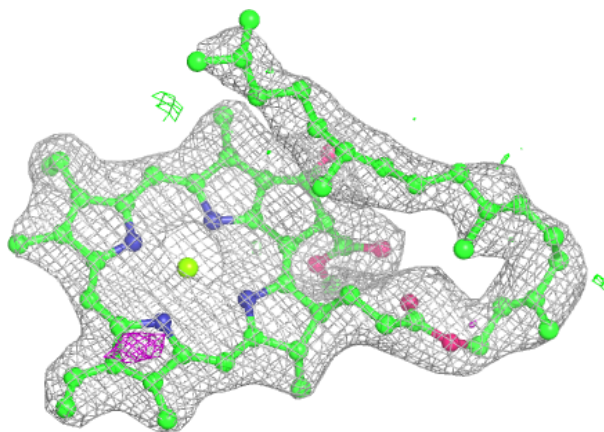


**Electron density around CLA c 501:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

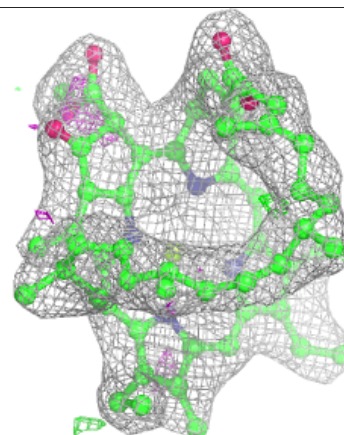
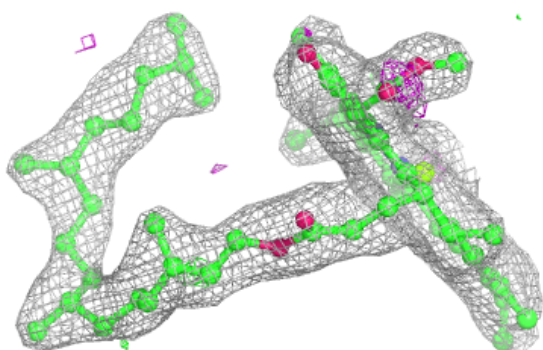
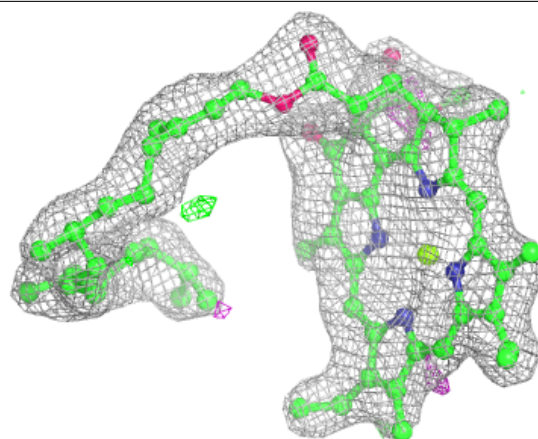
**Electron density around CLA C 509:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

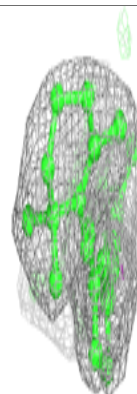
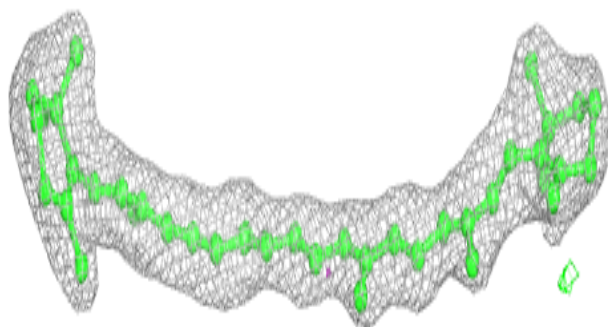
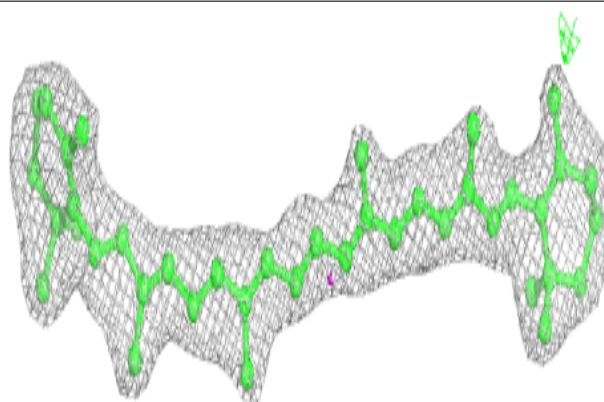


**Electron density around CLA c 503:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

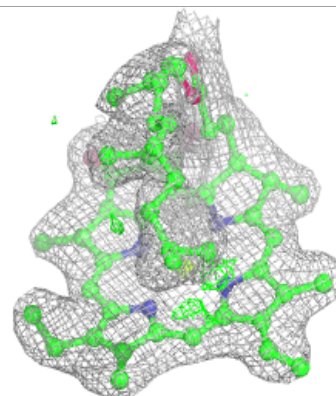
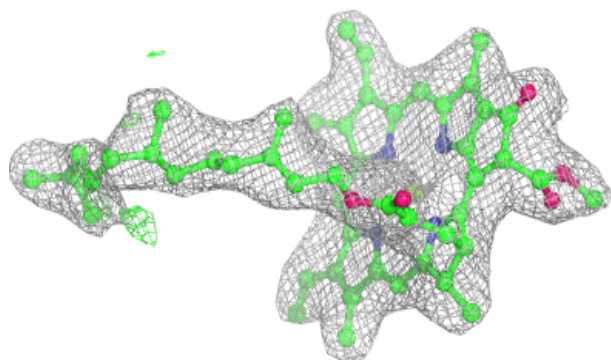
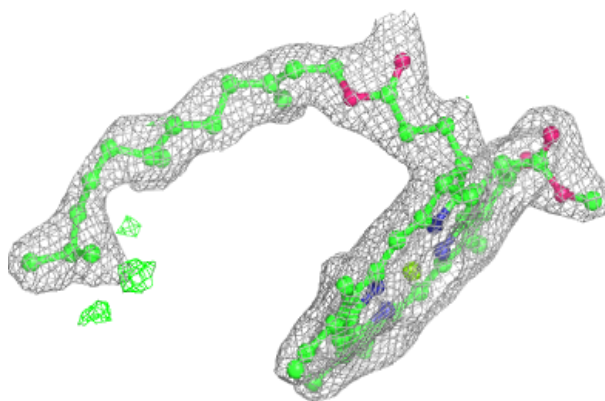
**Electron density around BCR T 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

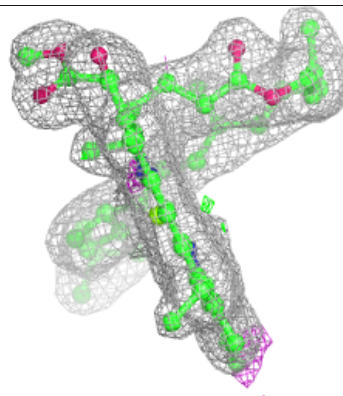
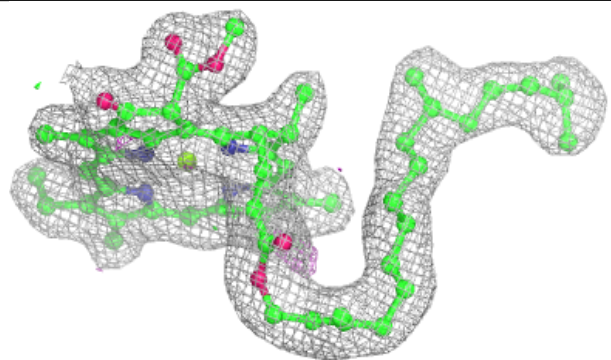
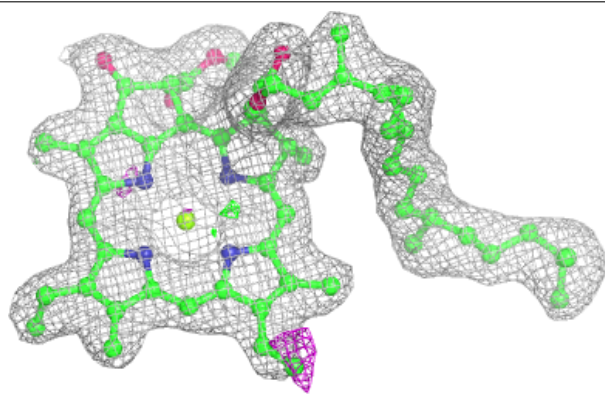


**Electron density around CLA c 504:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

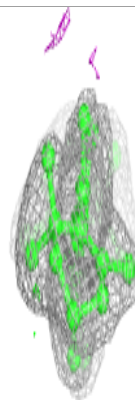
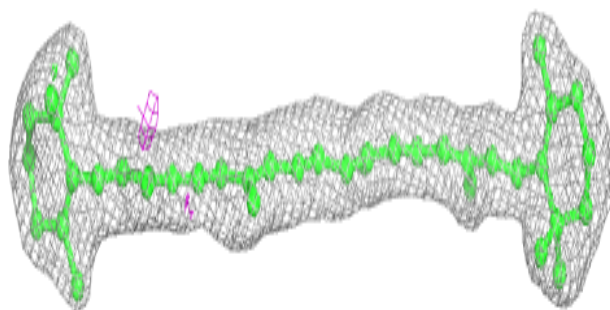
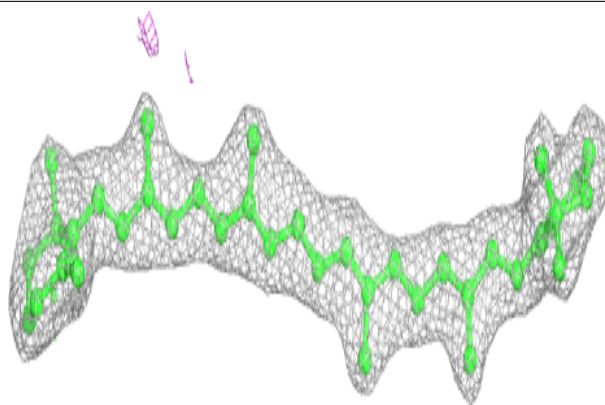
**Electron density around CLA A 613:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

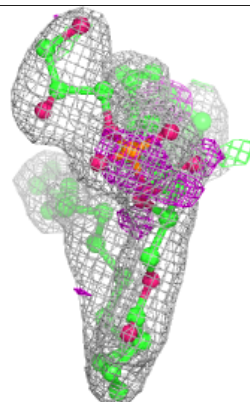
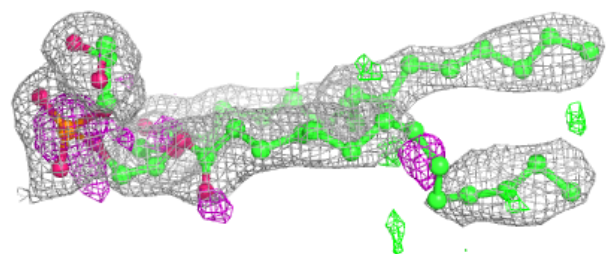
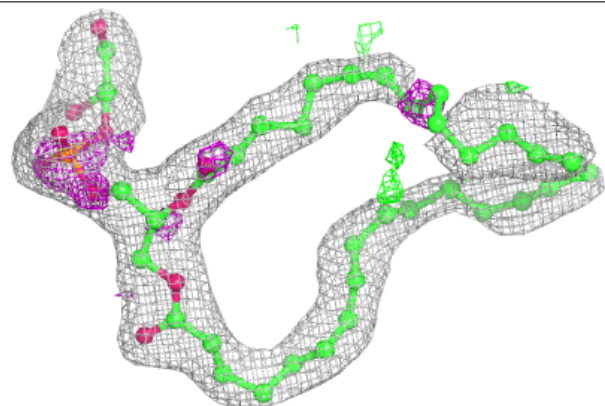


**Electron density around BCR a 610:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

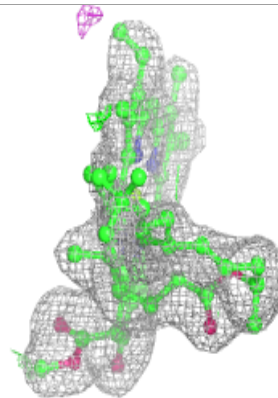
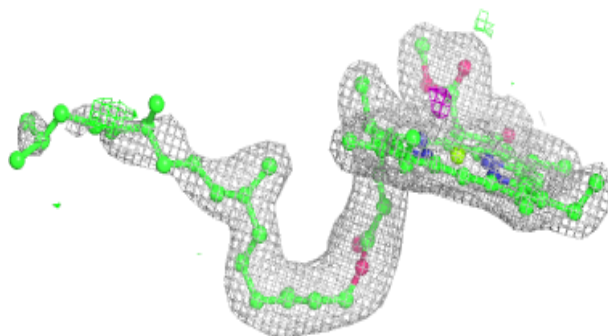
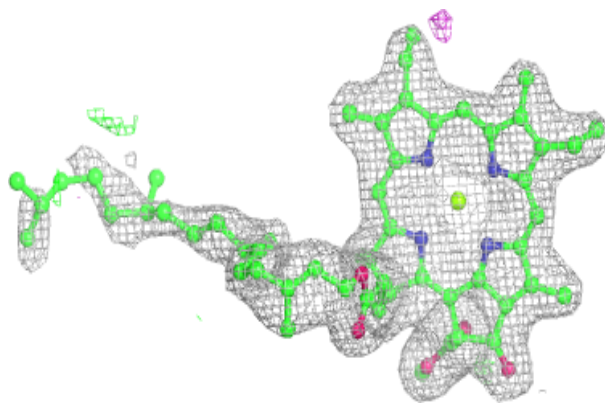
**Electron density around LHG A 615:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

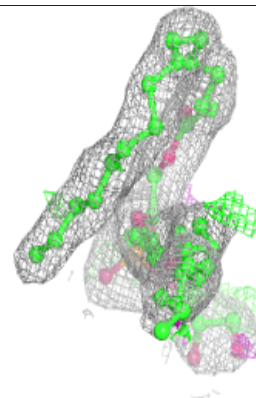
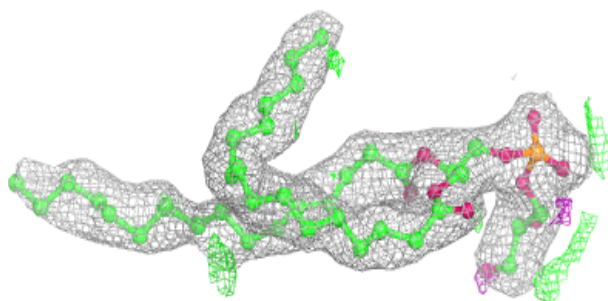
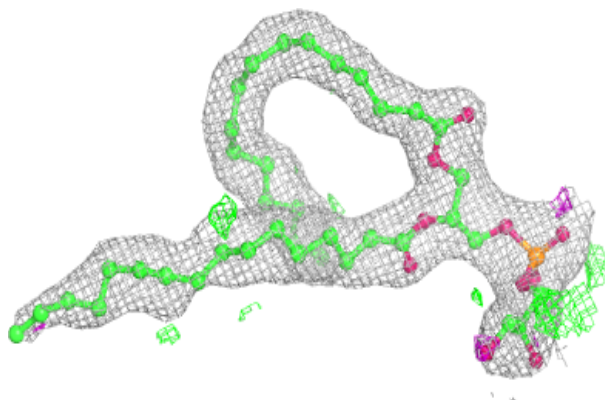


**Electron density around CLA A 608:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

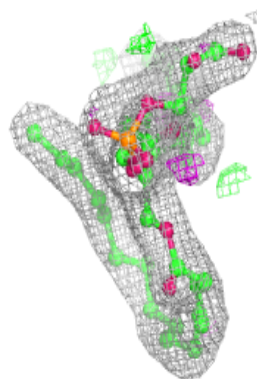
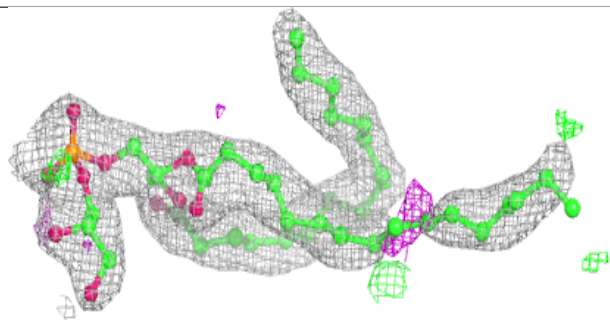
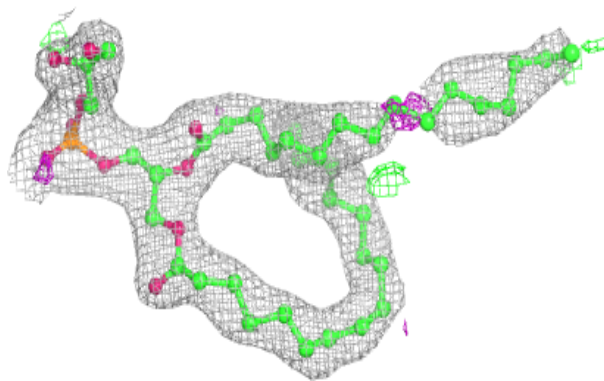
**Electron density around LHG D 409:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

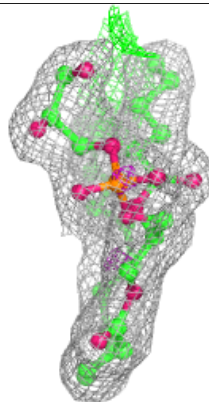
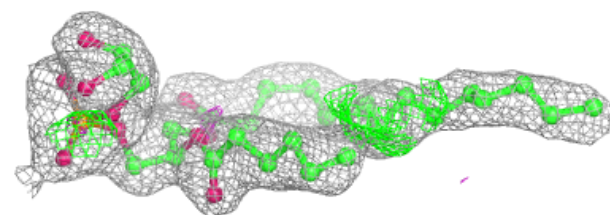
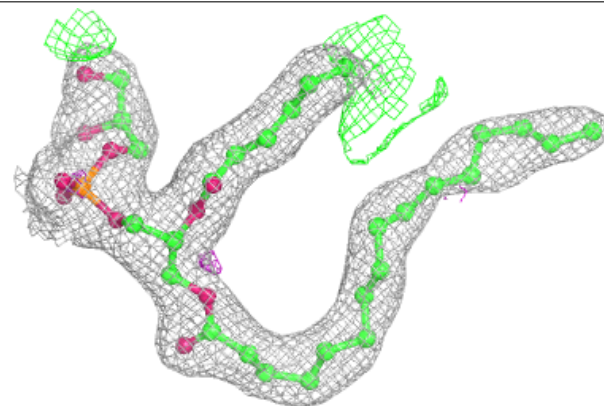


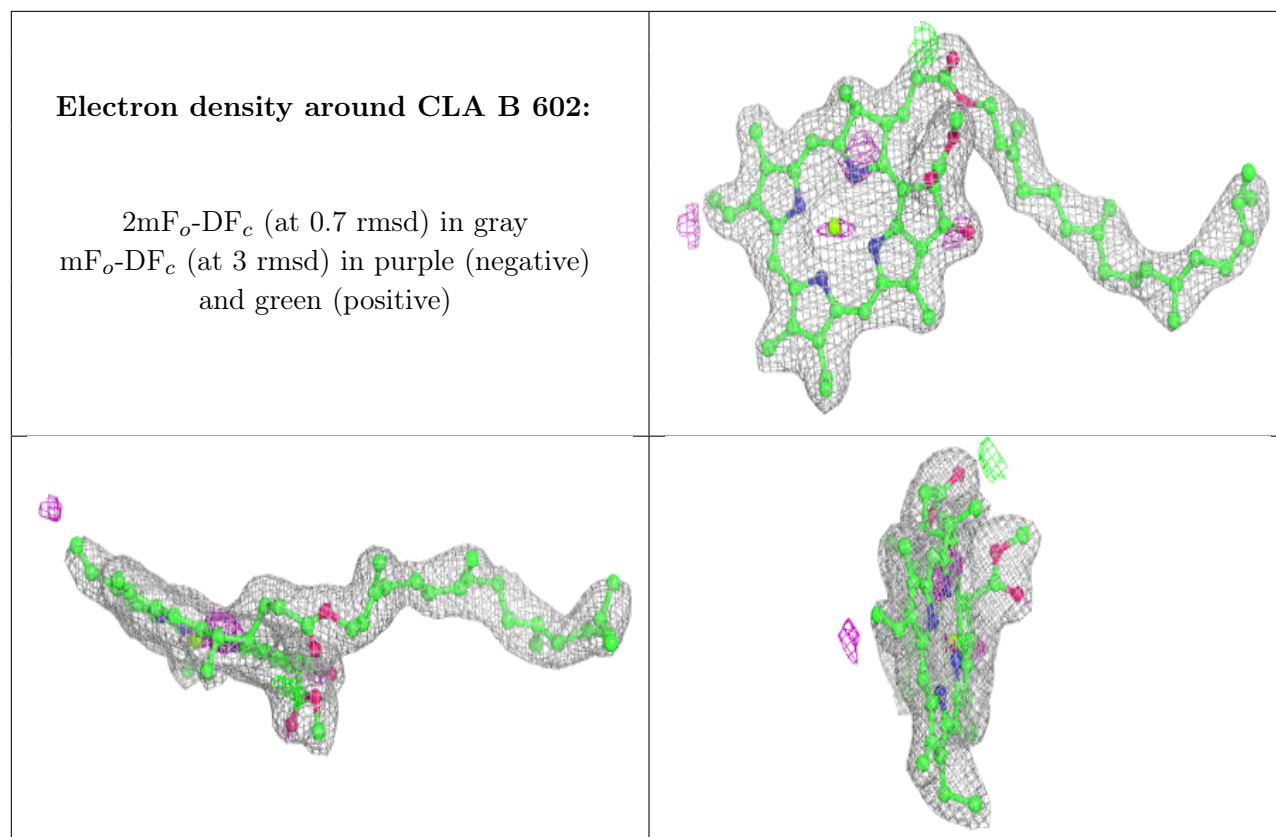
**Electron density around LHG d 407:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around LHG d 409:**

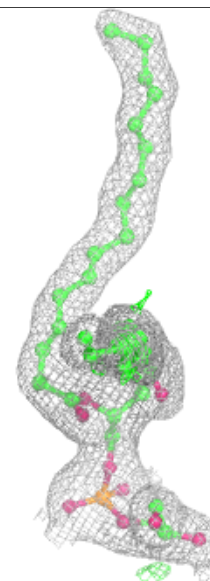
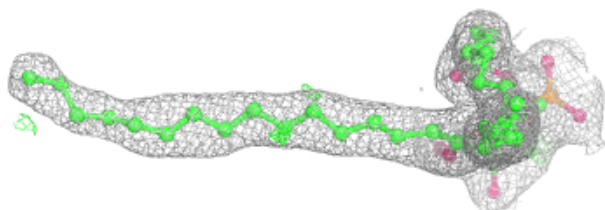
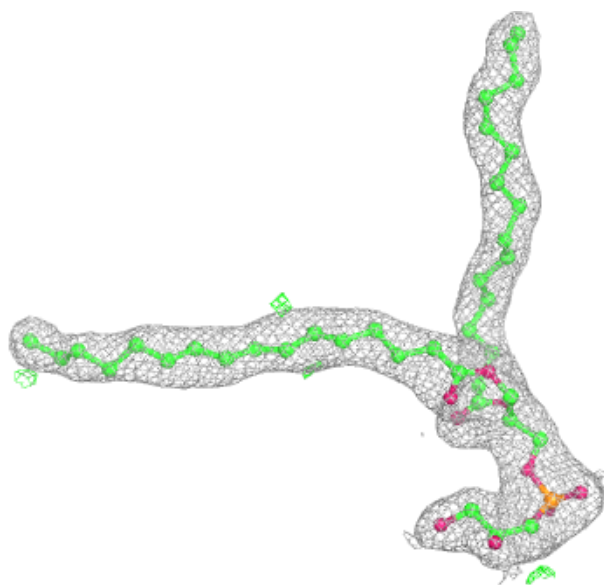
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



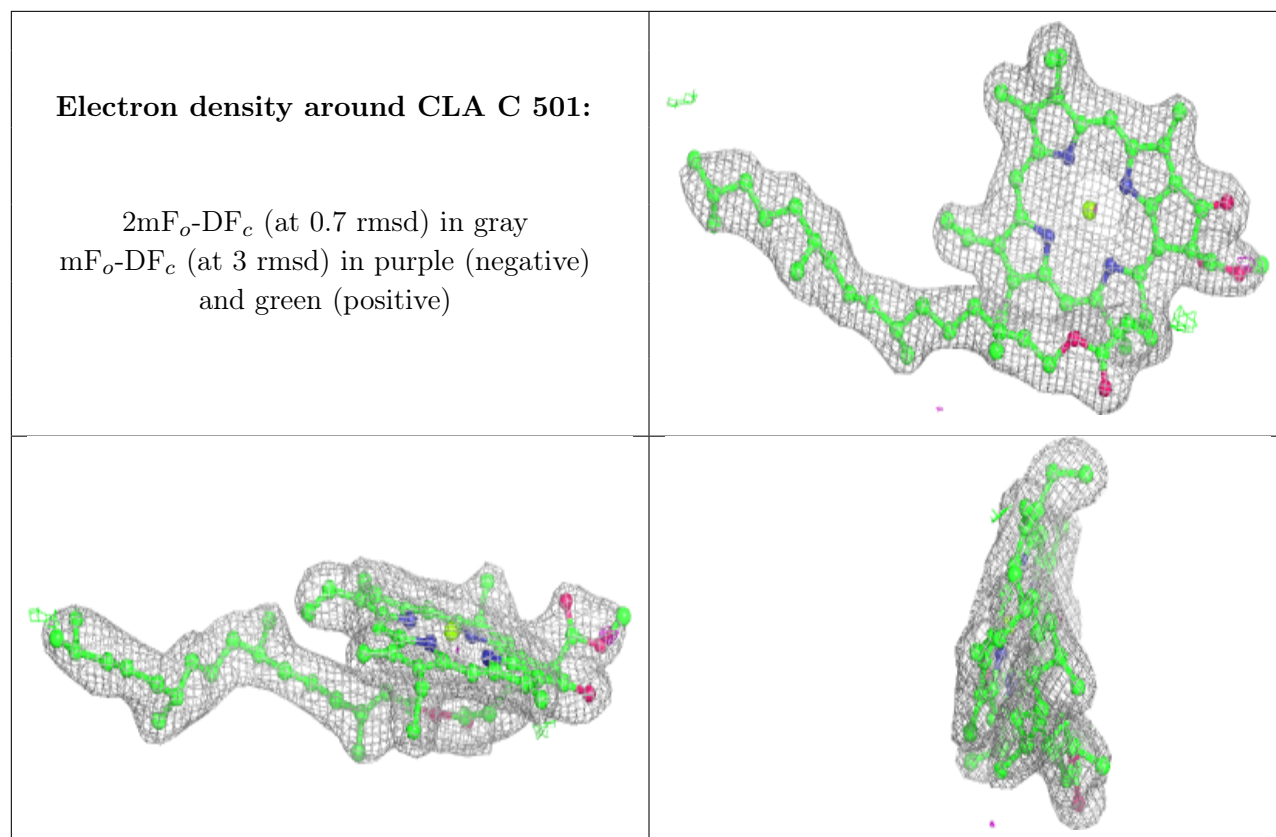


**Electron density around LHG 1 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

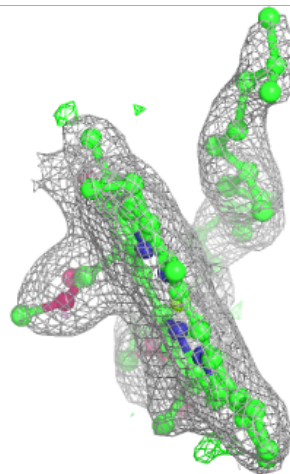
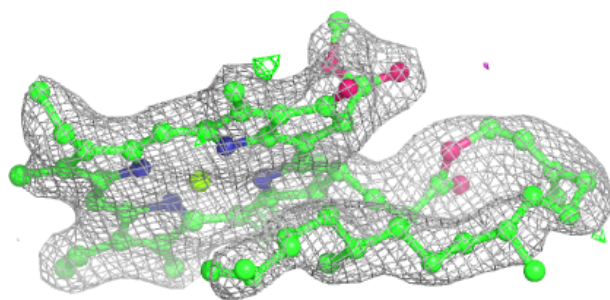
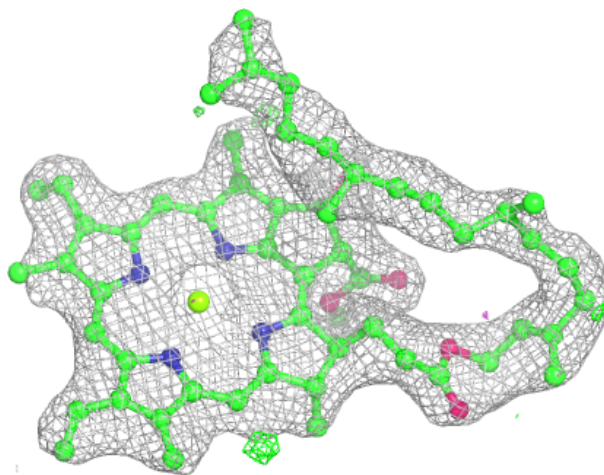






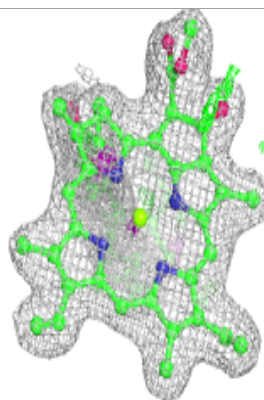
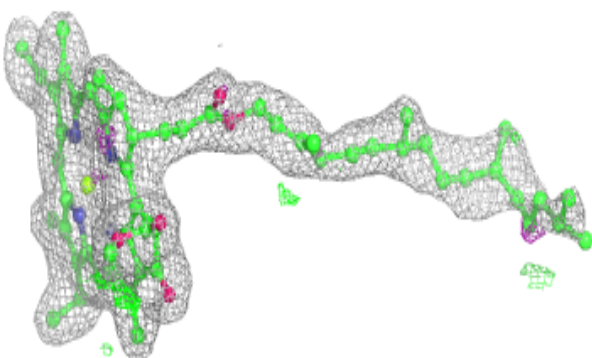
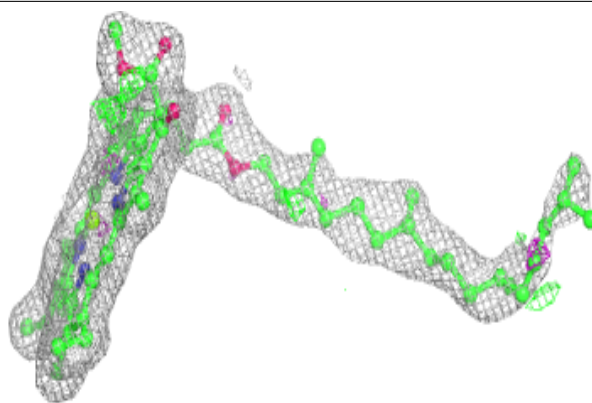
**Electron density around CLA c 509:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

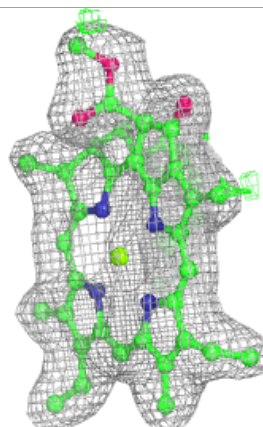
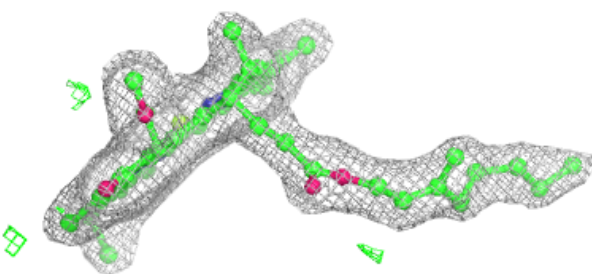
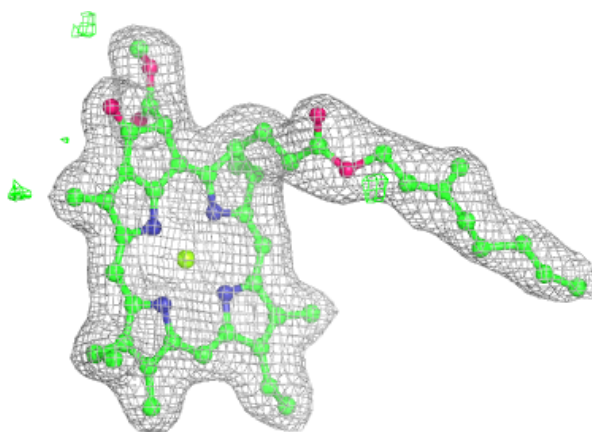


**Electron density around CLA B 604:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

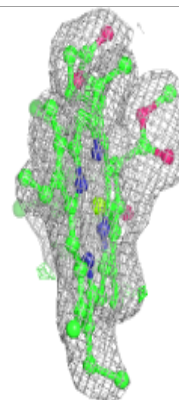
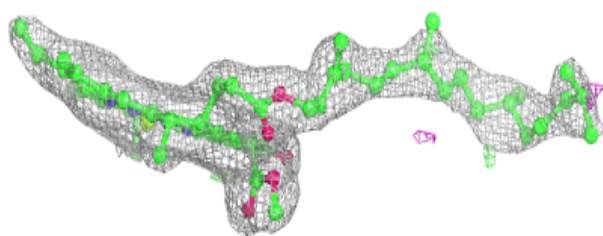
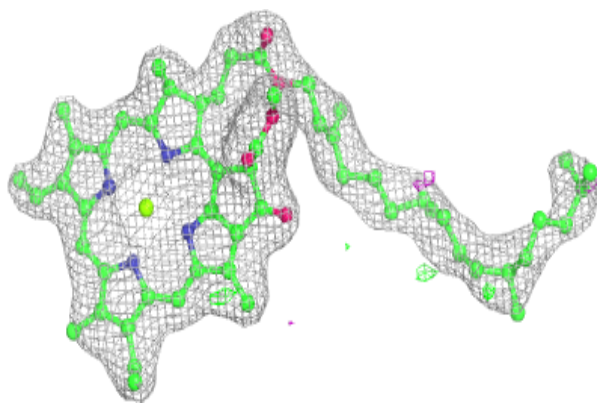
**Electron density around CLA A 610:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

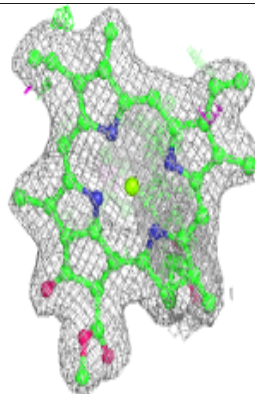
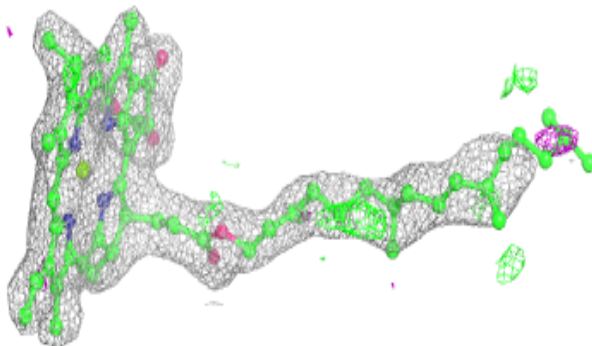
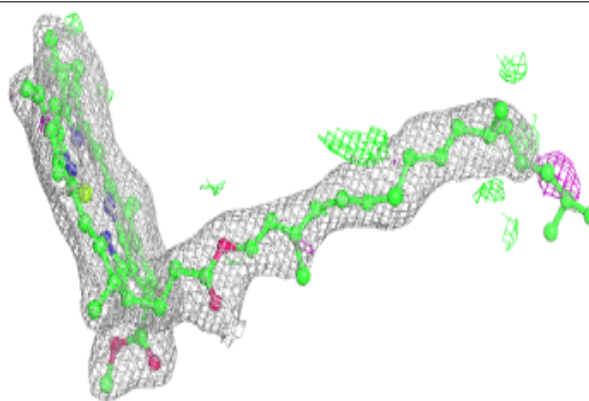


**Electron density around CLA b 601:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

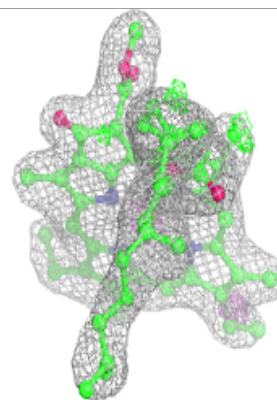
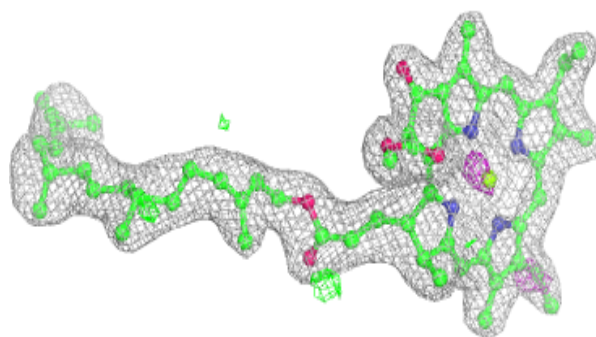
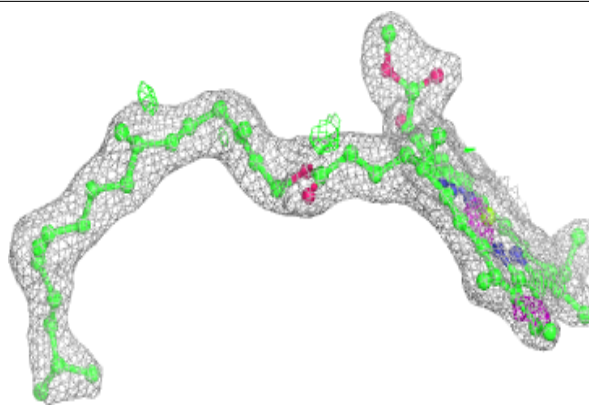
**Electron density around CLA b 603:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

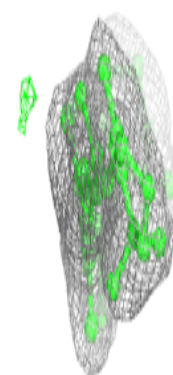
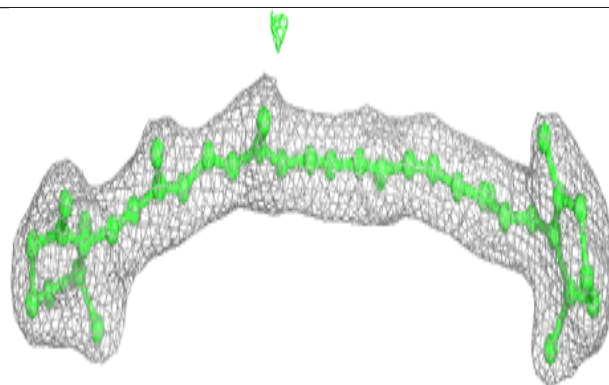
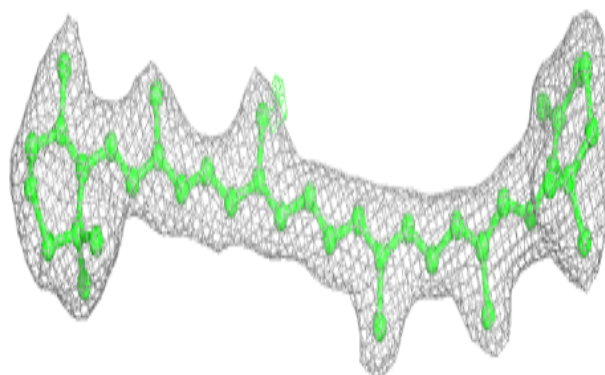


**Electron density around CLA d 403:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

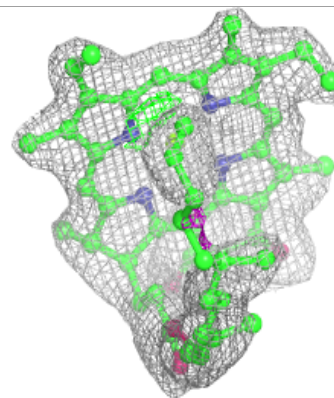
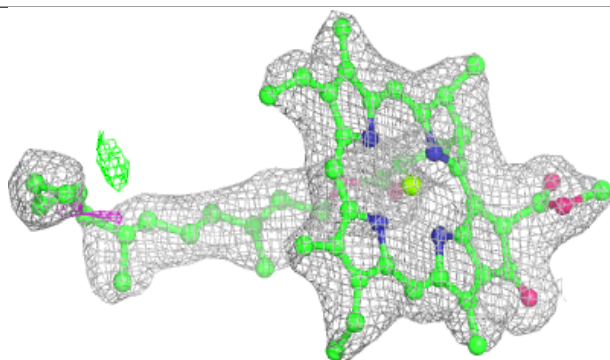
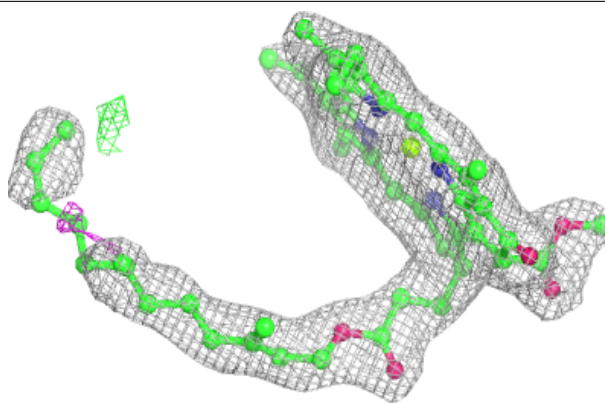
**Electron density around BCR t 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

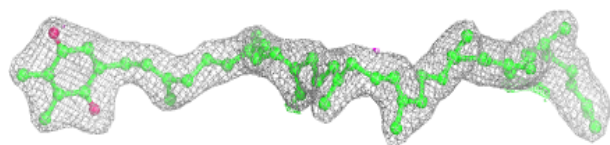
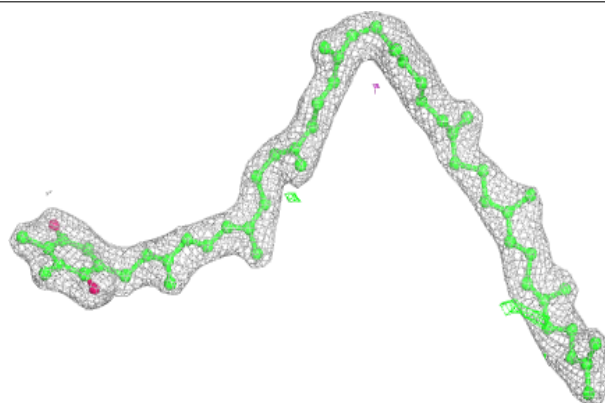


**Electron density around CLA C 504:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

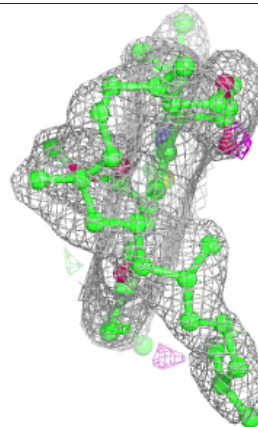
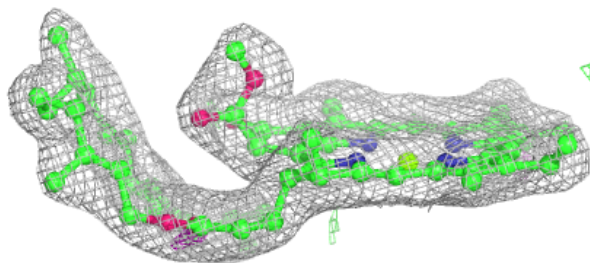
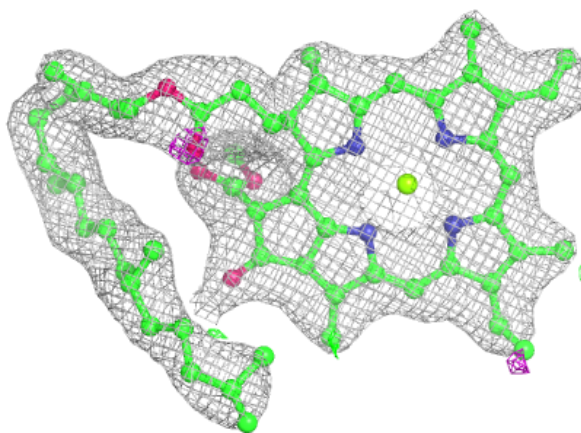
**Electron density around PL9 D 405:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

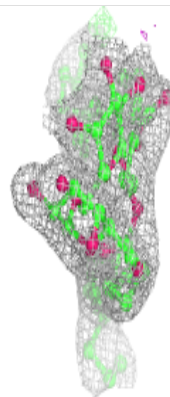
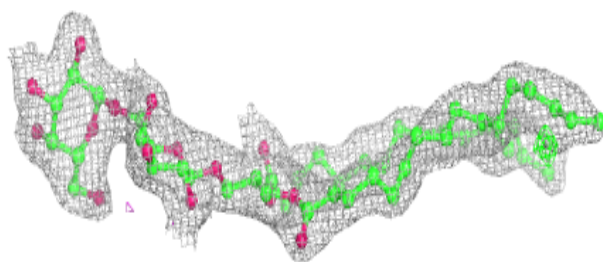
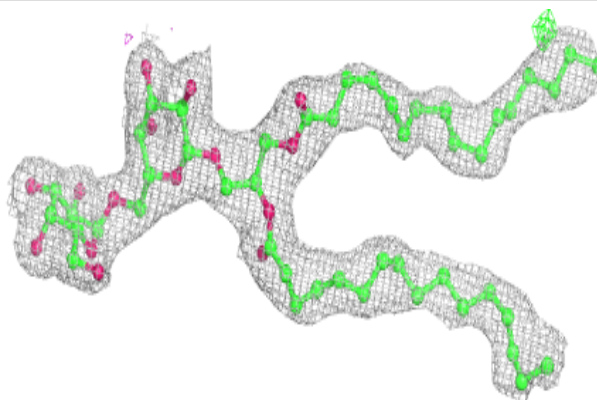


**Electron density around CLA b 609:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

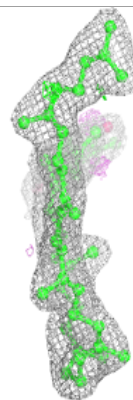
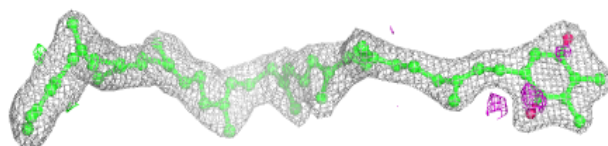
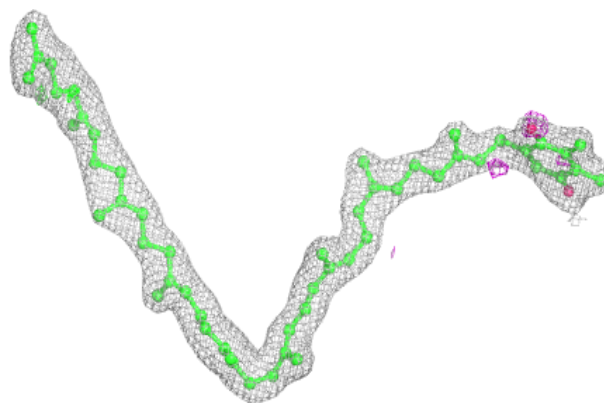
**Electron density around DGD C 517:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

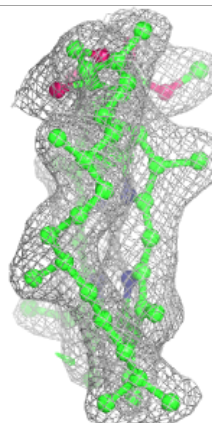
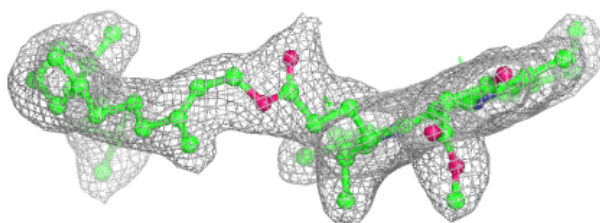
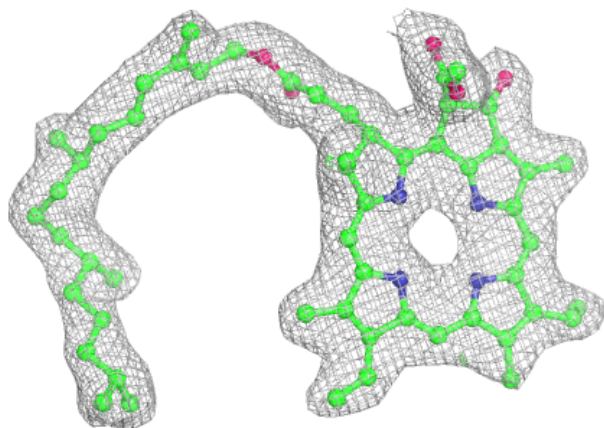


**Electron density around PL9 d 406:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around PHO a 608:**

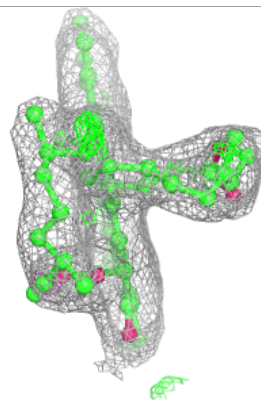
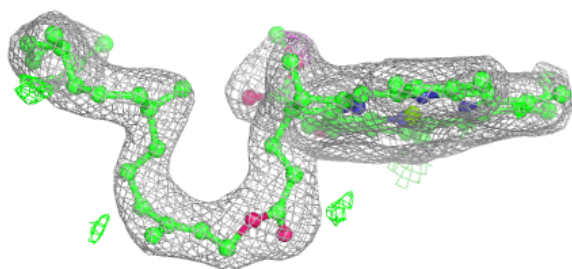
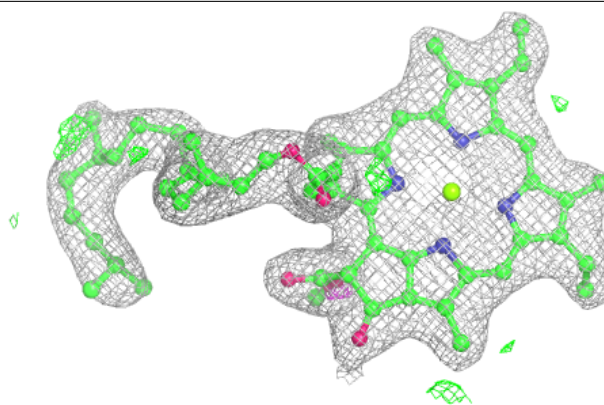
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



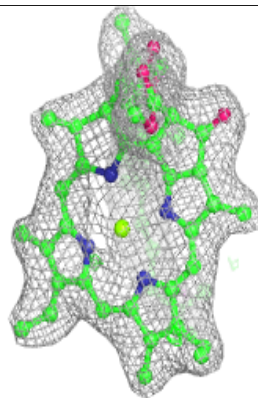
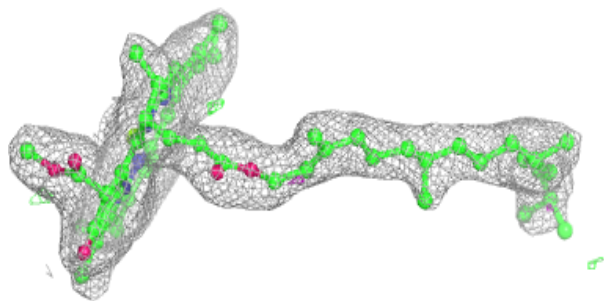
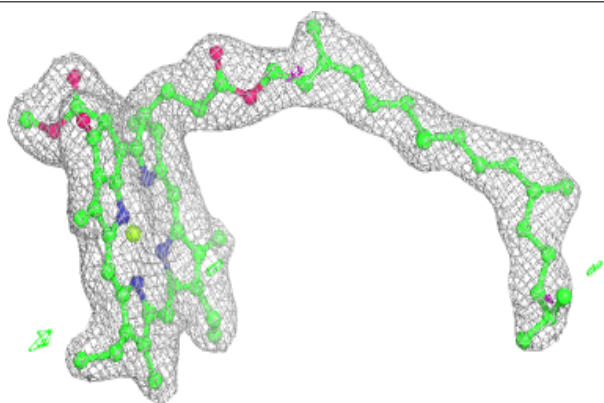


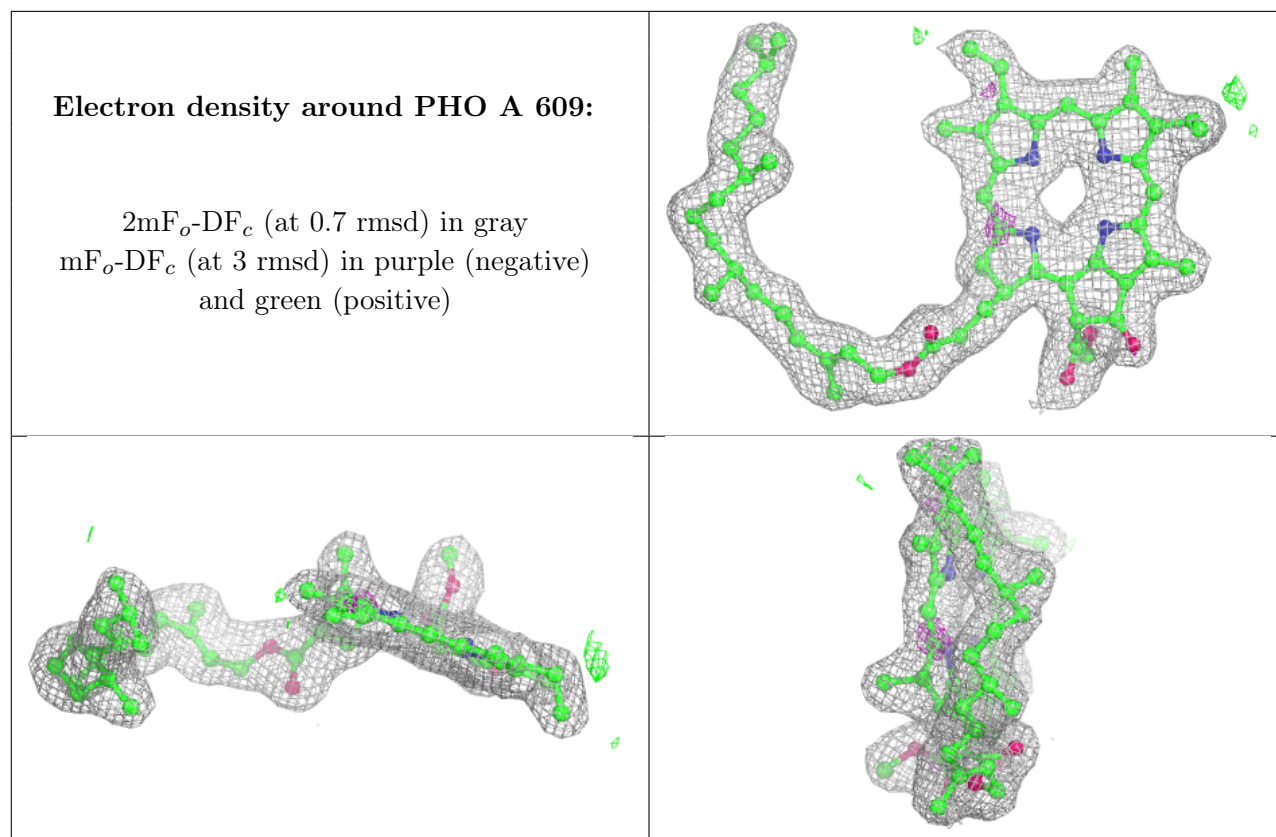
**Electron density around CLA b 611:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around CLA B 609:**

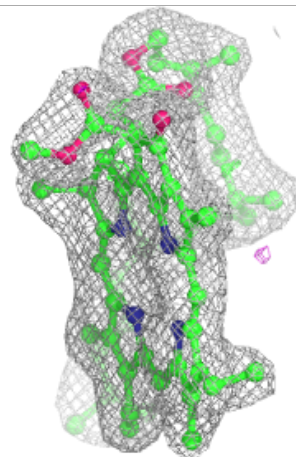
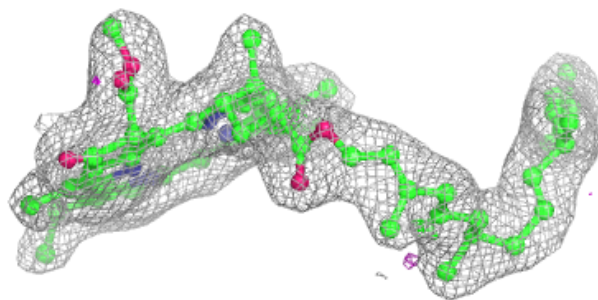
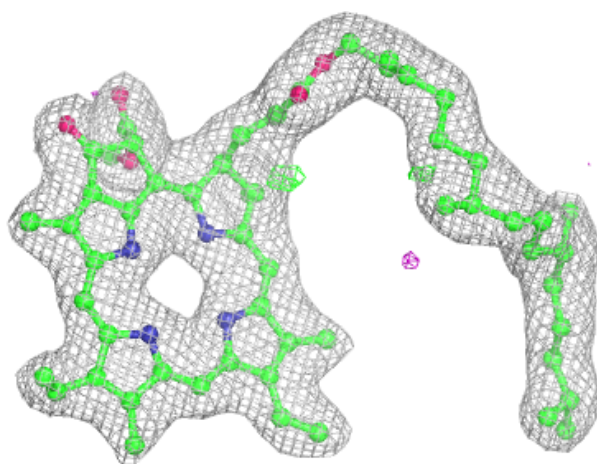
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





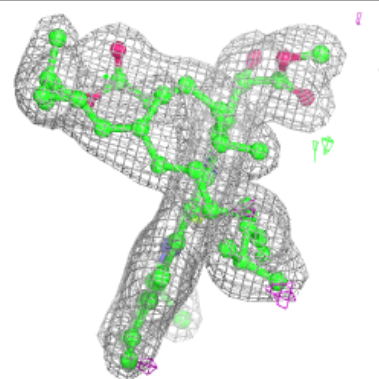
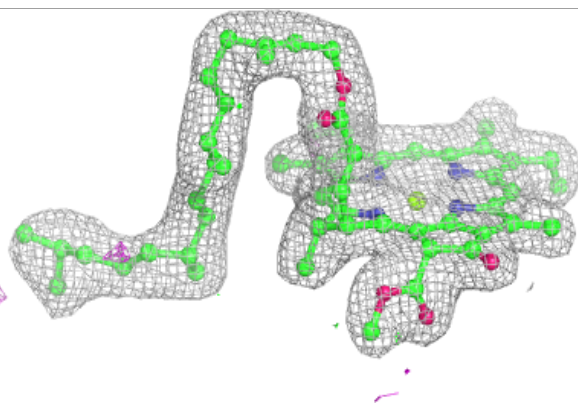
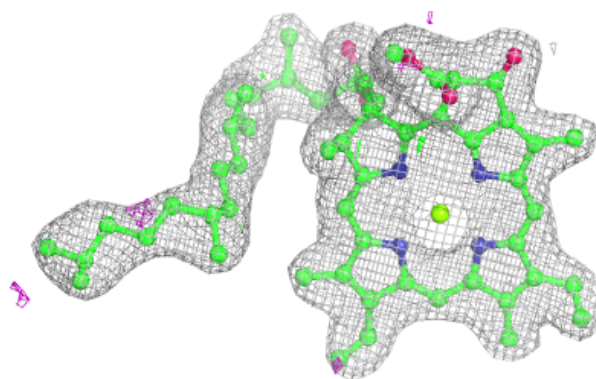
**Electron density around PHO D 401:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

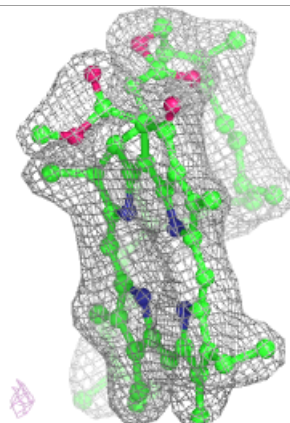
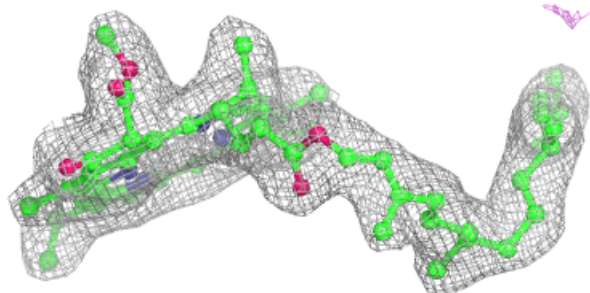
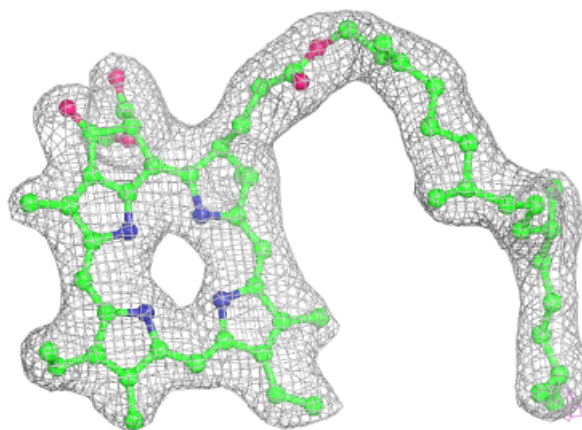


**Electron density around CLA a 612:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

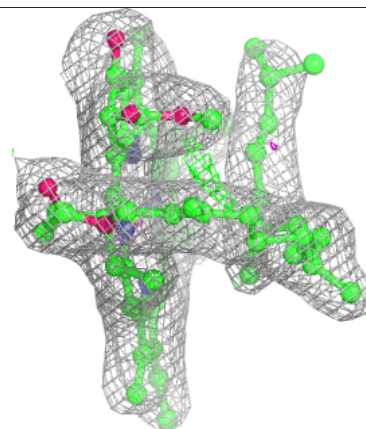
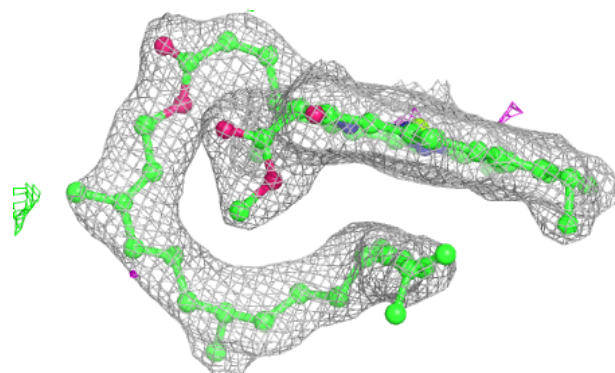
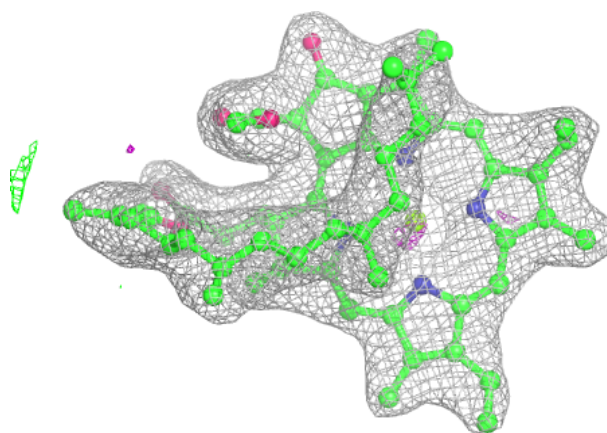
**Electron density around PHO d 402:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

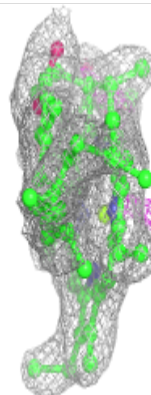
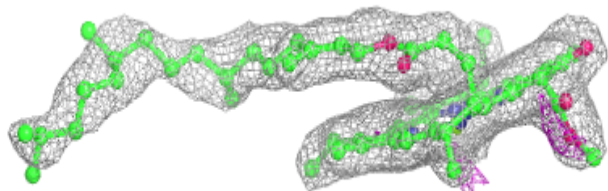
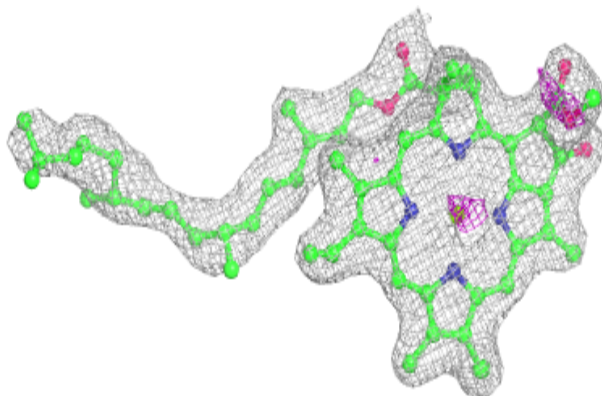


**Electron density around CLA C 510:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

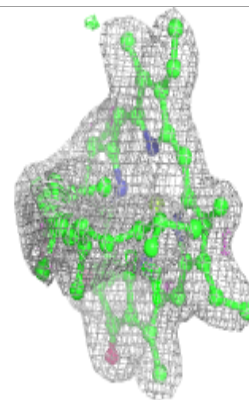
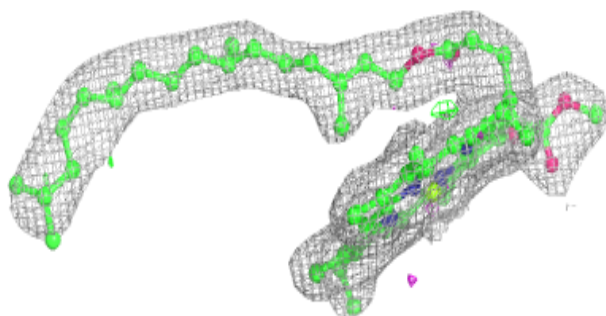
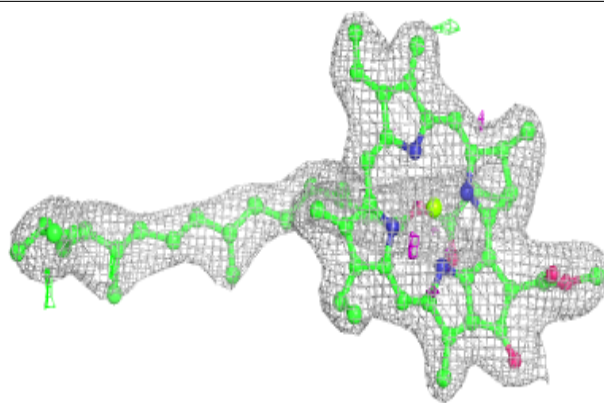
**Electron density around CLA b 602:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

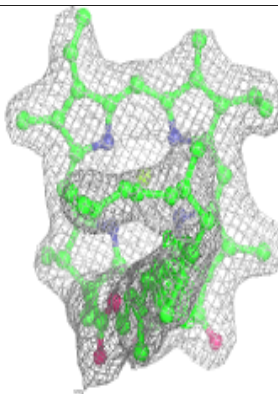
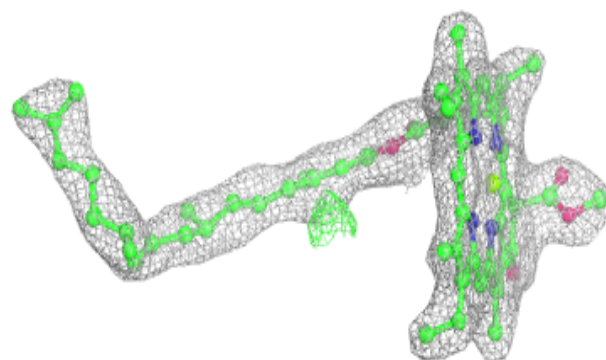
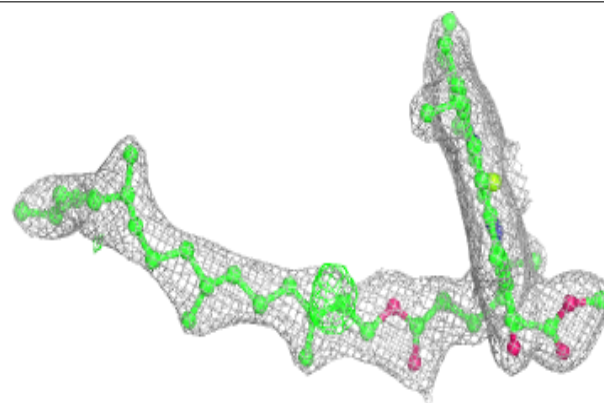


**Electron density around CLA B 608:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

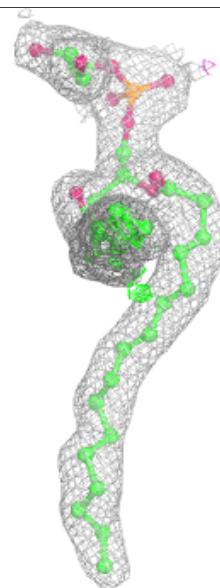
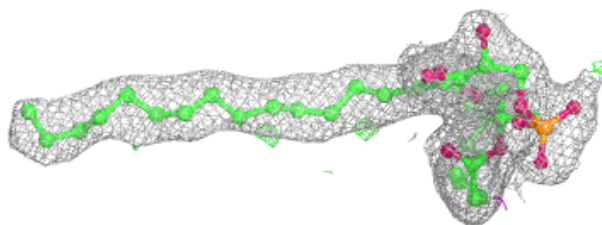
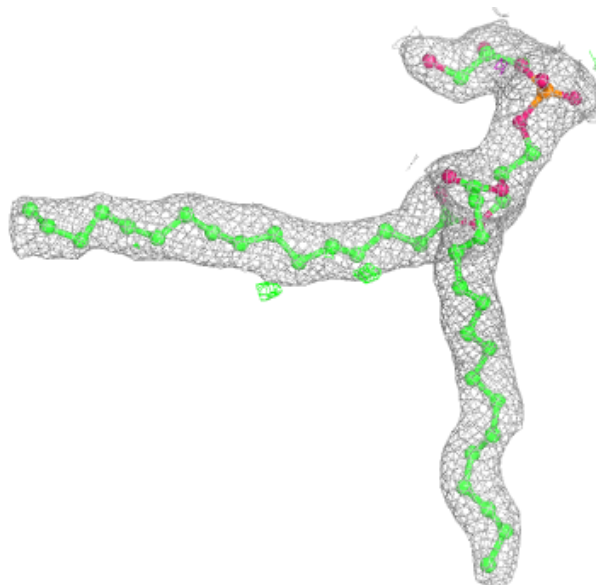
**Electron density around CLA b 604:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



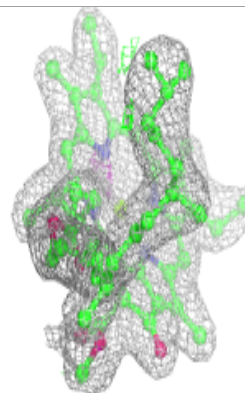
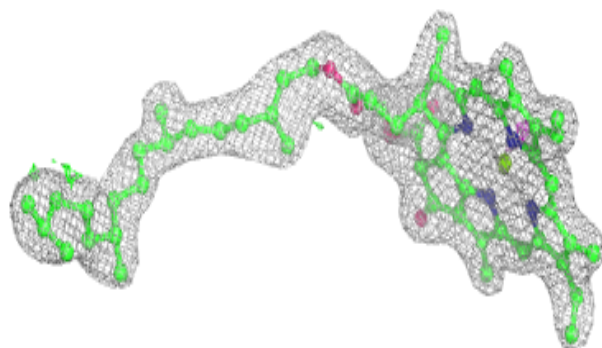
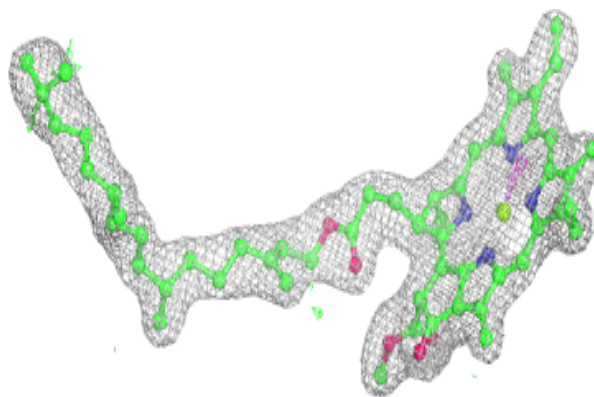
**Electron density around LHG L 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

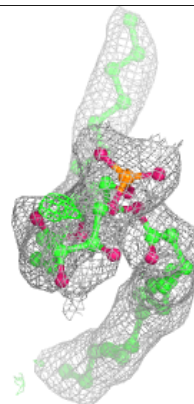
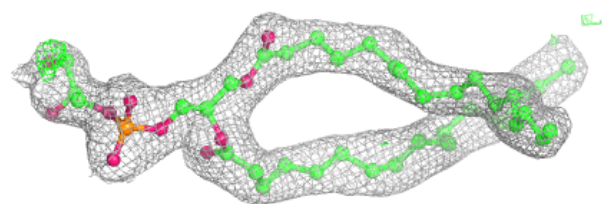
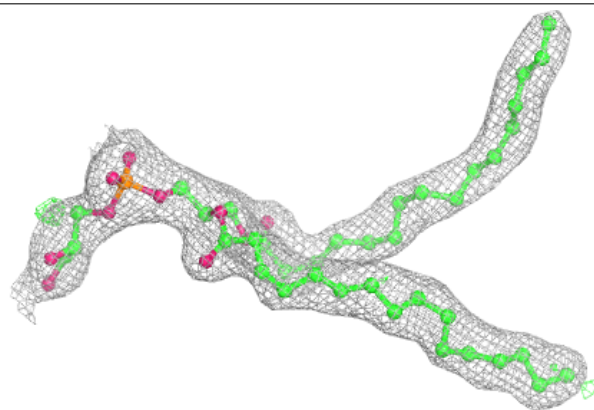


**Electron density around CLA A 607:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around LHG d 408:**

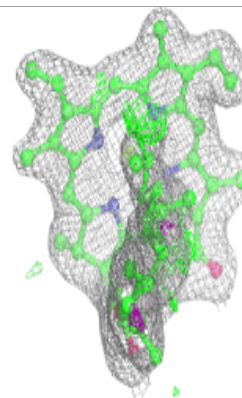
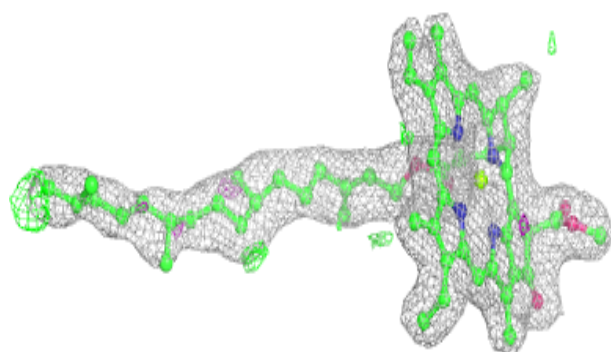
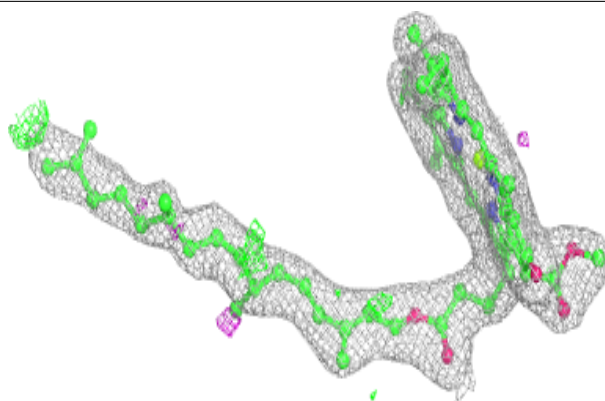
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



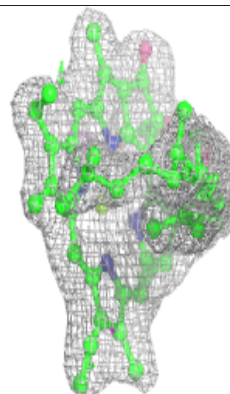
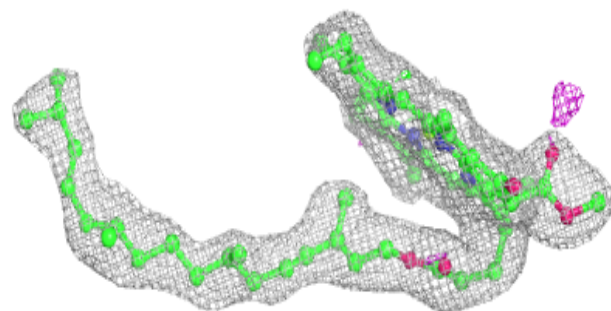
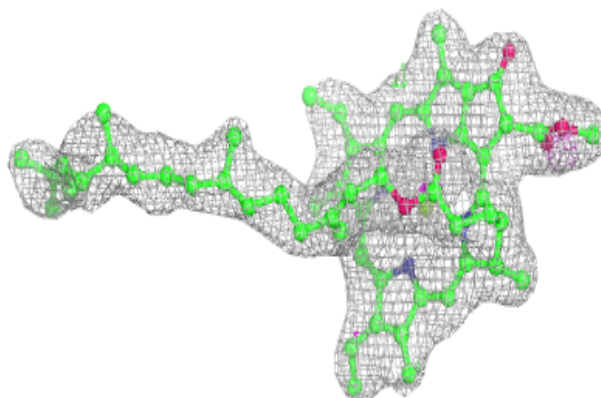


**Electron density around CLA b 606:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

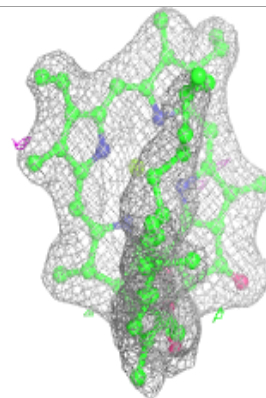
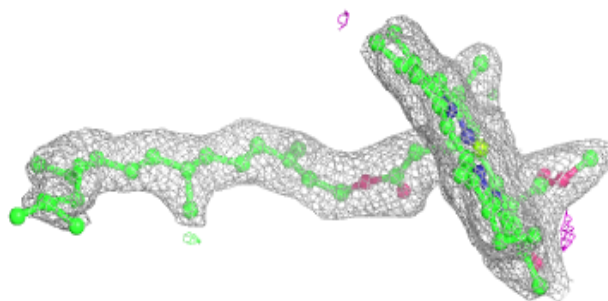
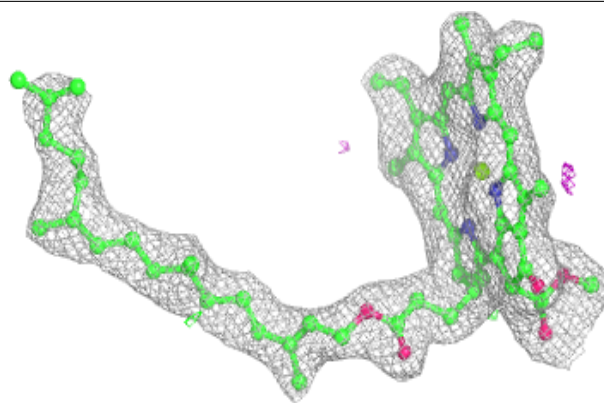
**Electron density around CLA b 607:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

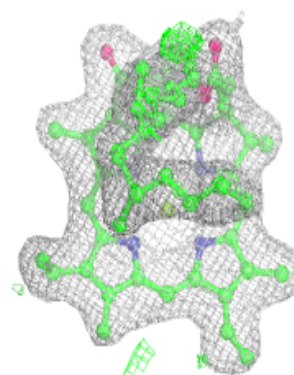
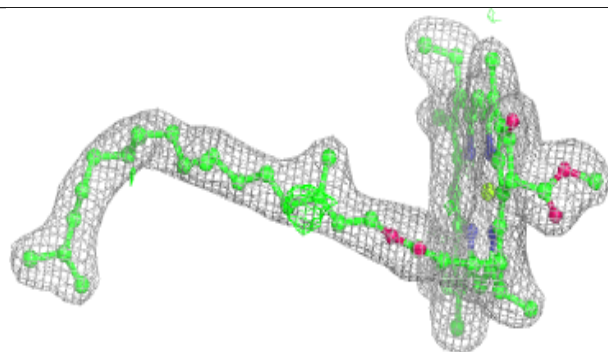
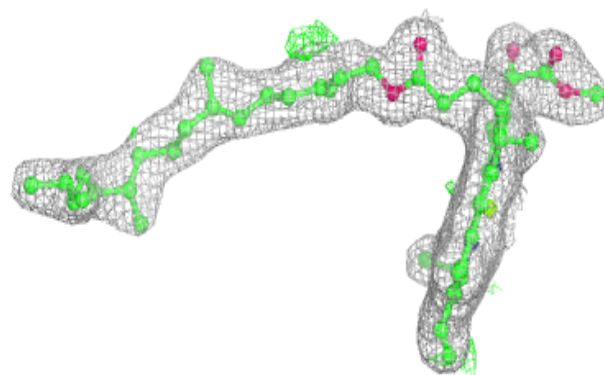


**Electron density around CLA b 608:**

$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)

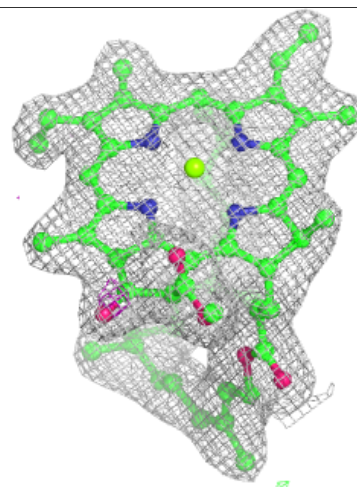
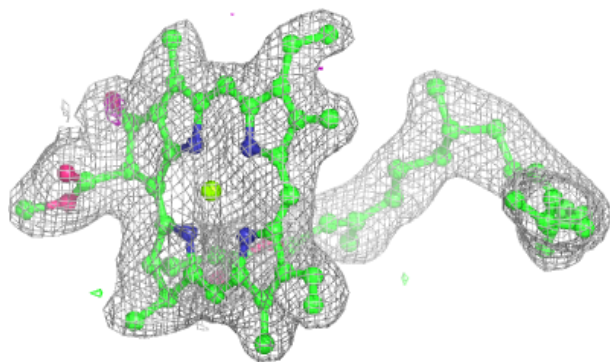
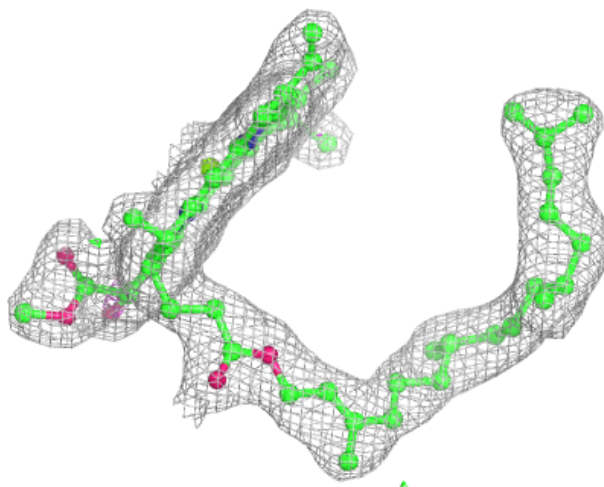
**Electron density around CLA B 605:**

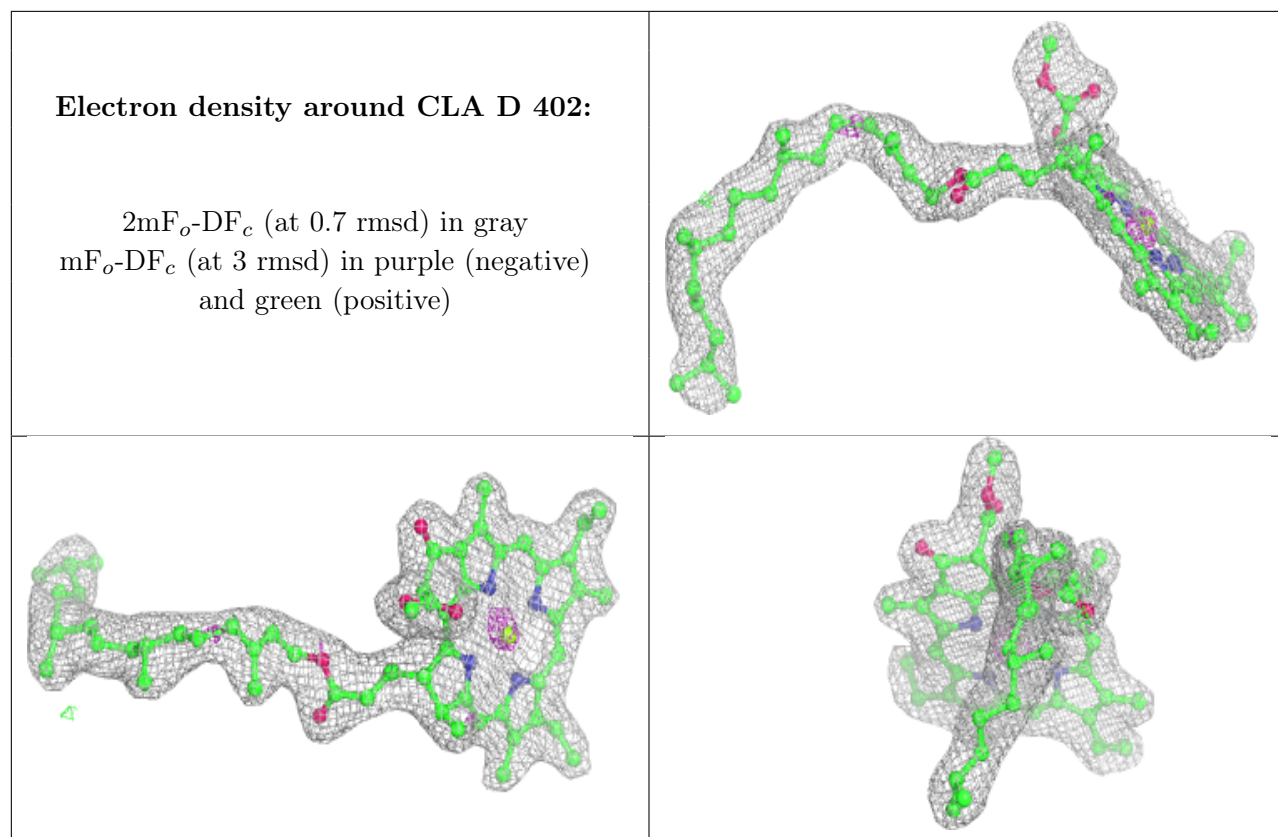
$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)



**Electron density around CLA b 610:**

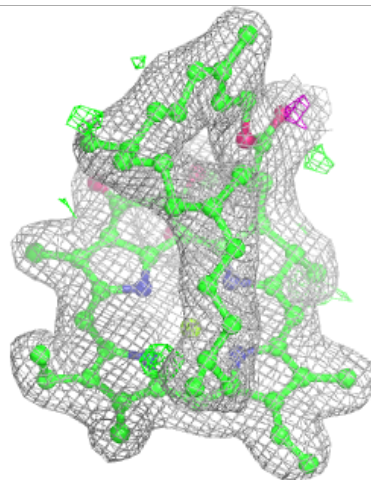
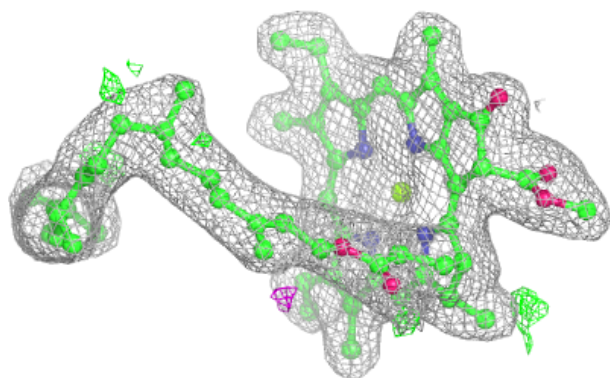
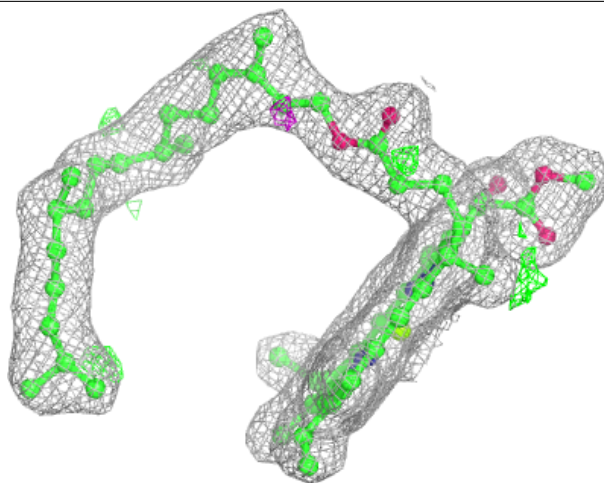
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





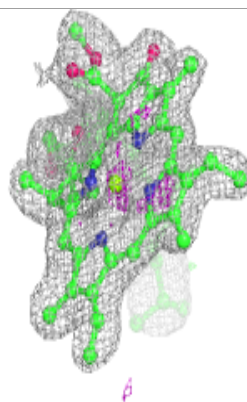
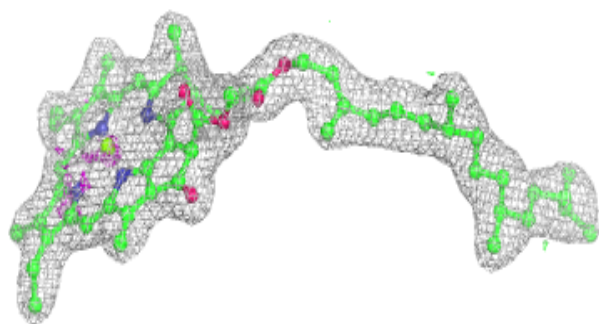
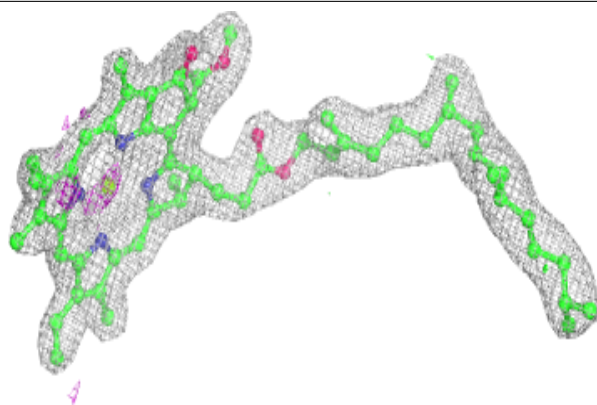
**Electron density around CLA B 611:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

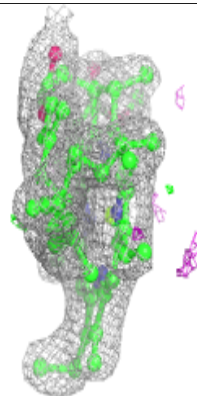
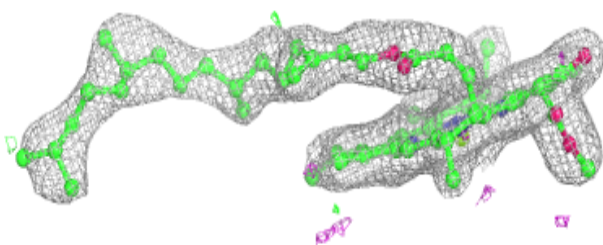
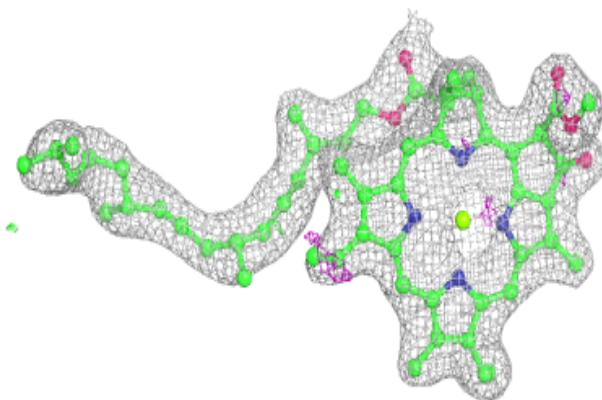


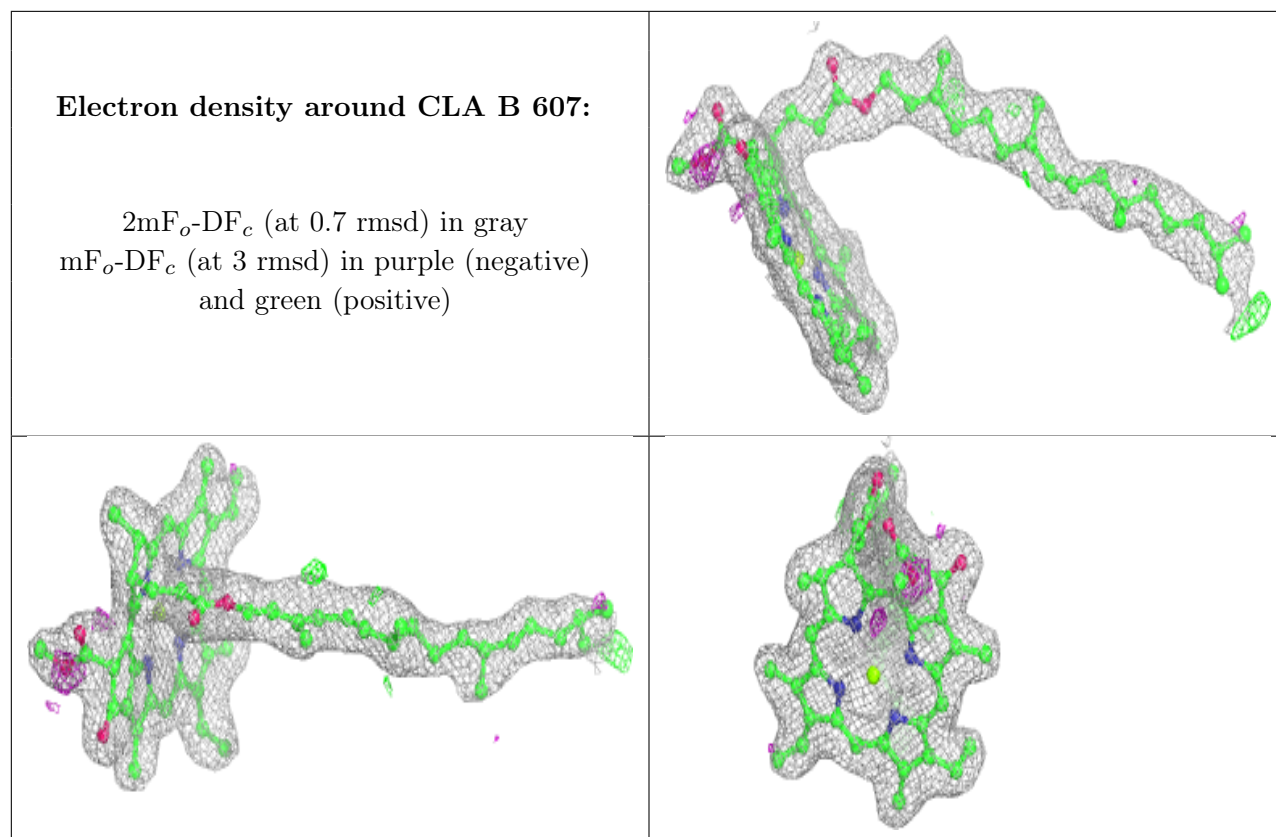
**Electron density around CLA a 606:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around CLA B 603:**

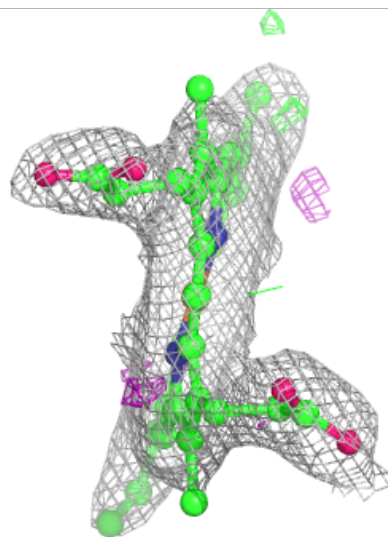
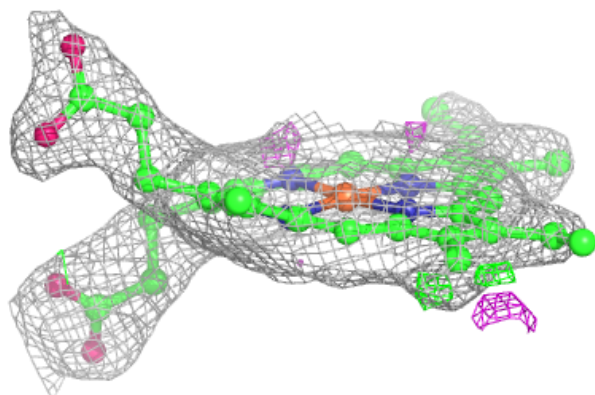
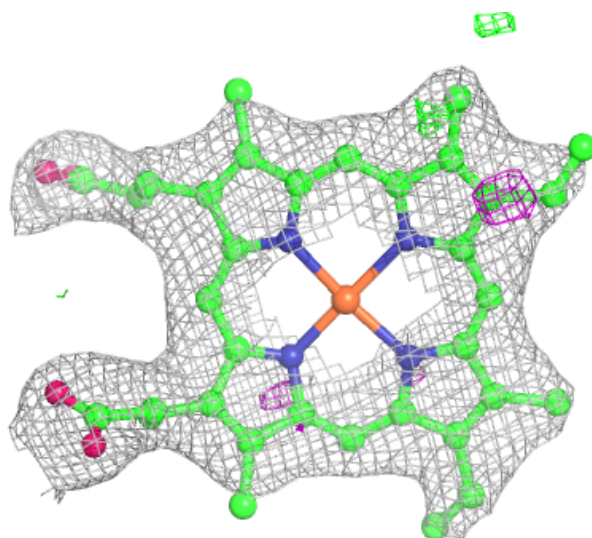
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



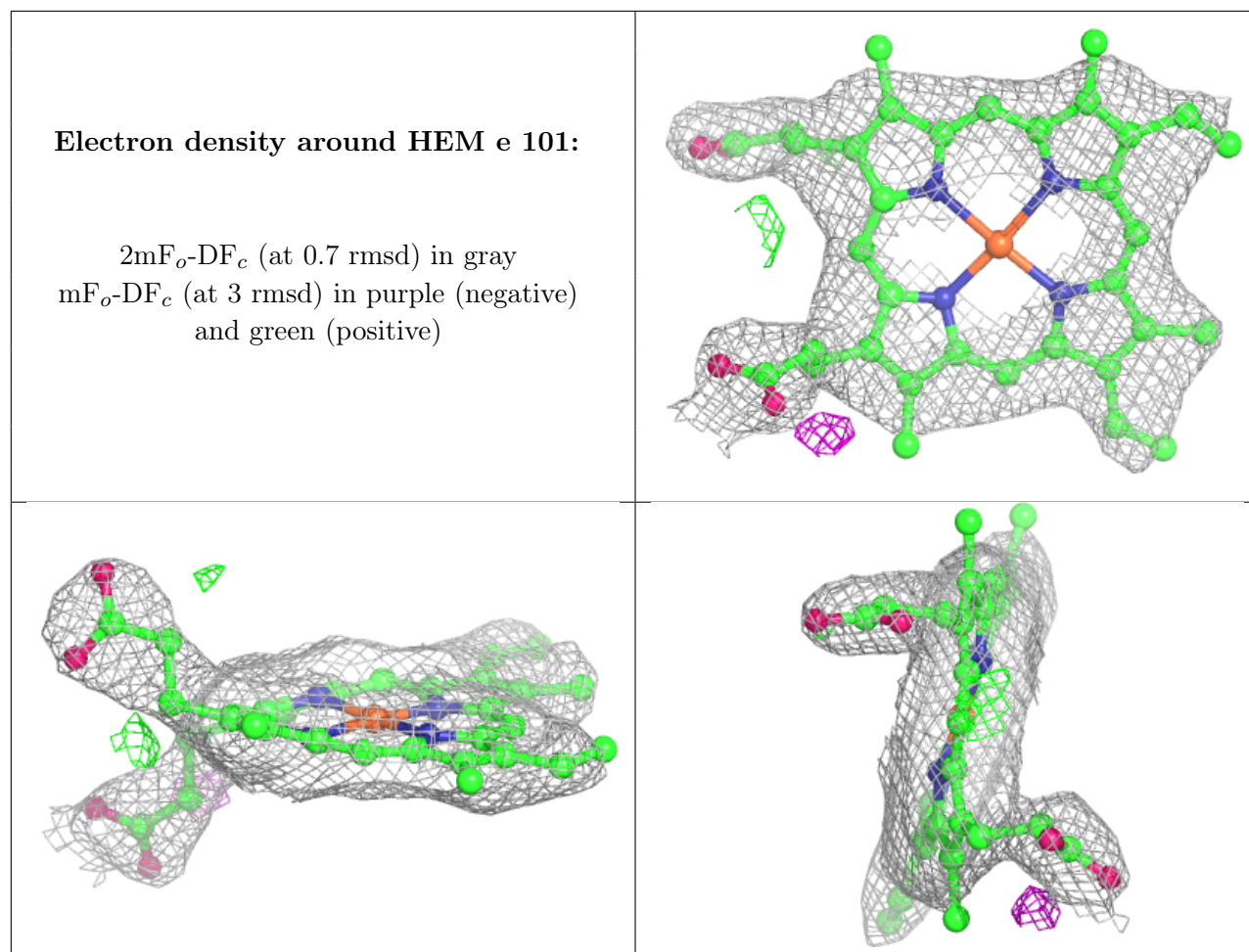


**Electron density around HEM F 101:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

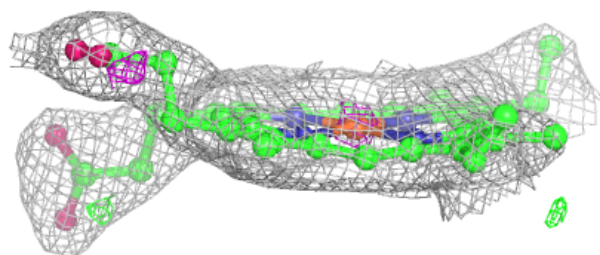
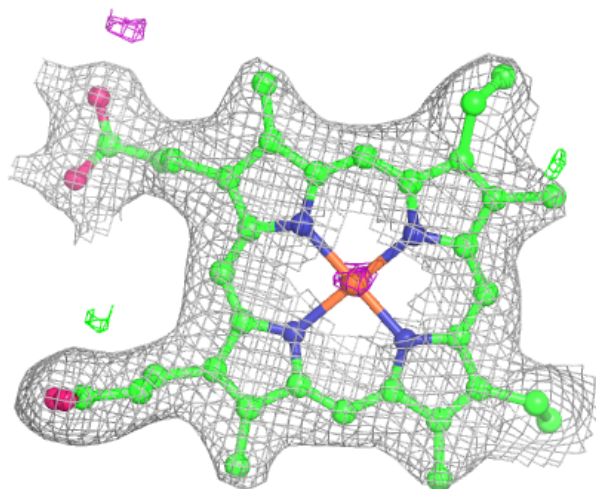


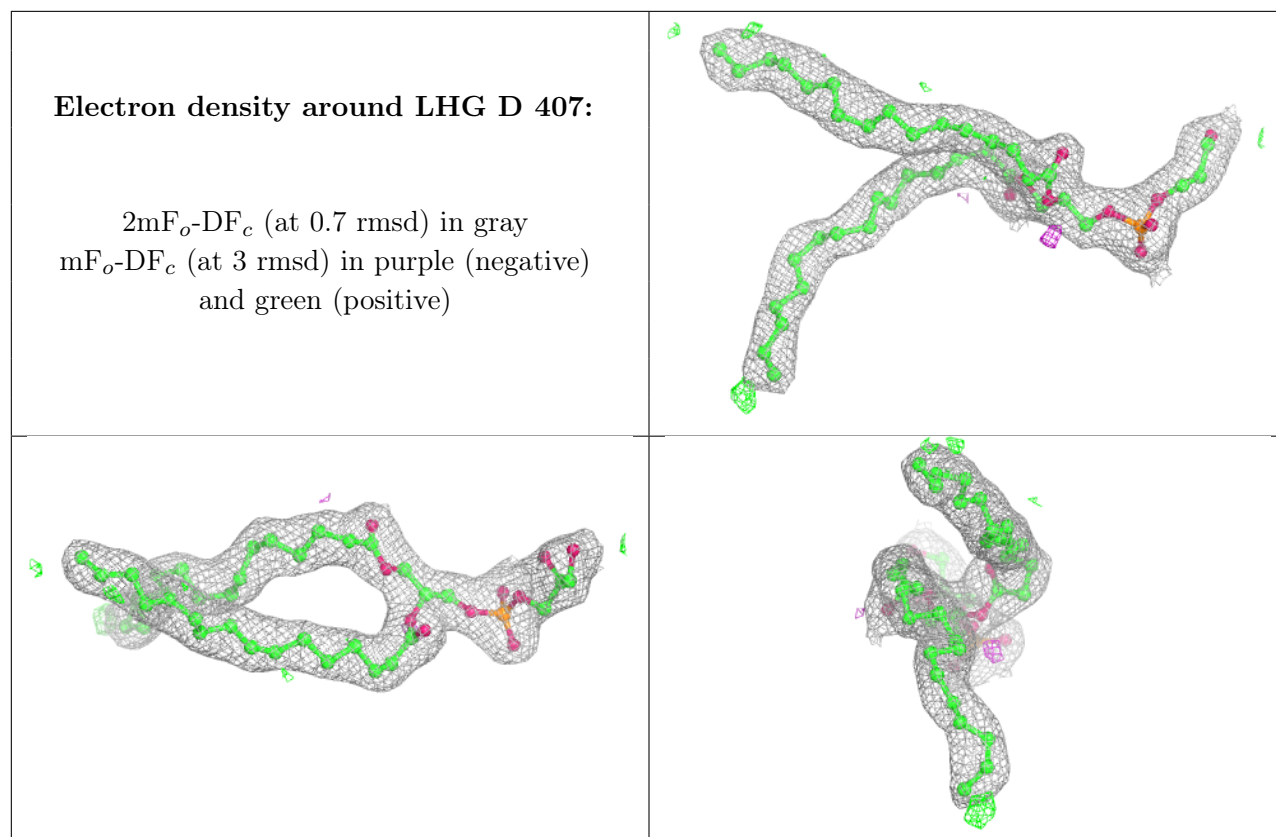




**Electron density around HEC v 201:**

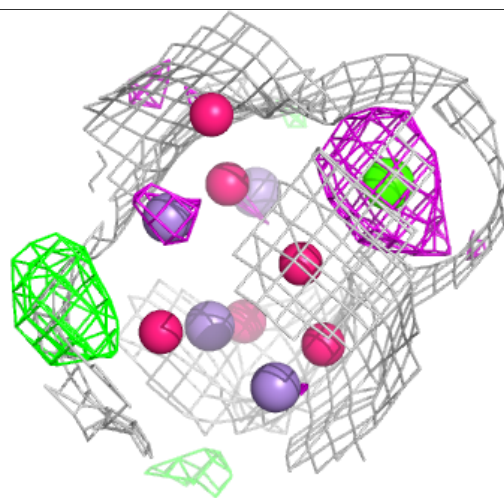
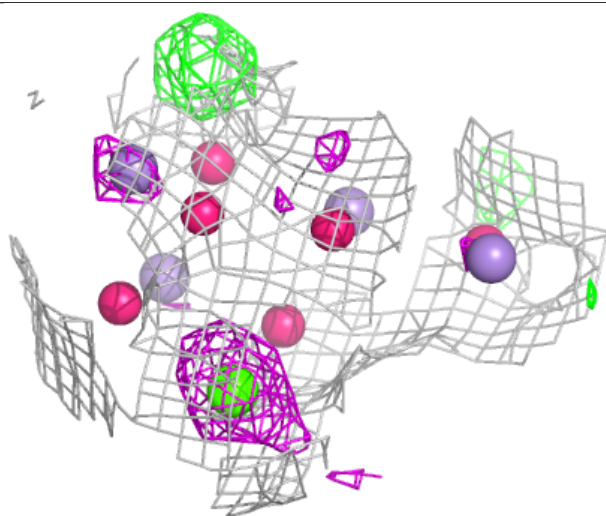
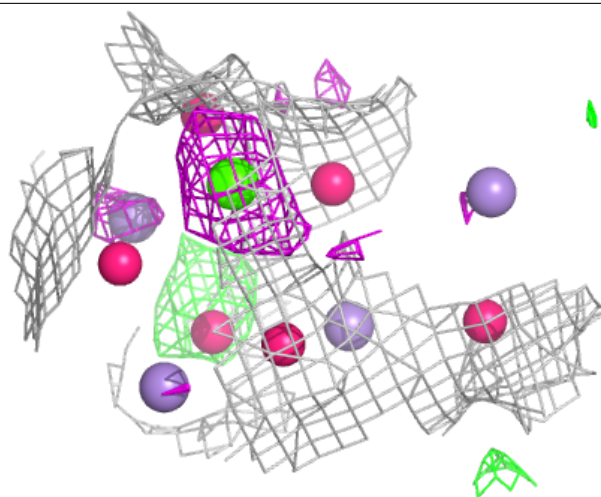
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





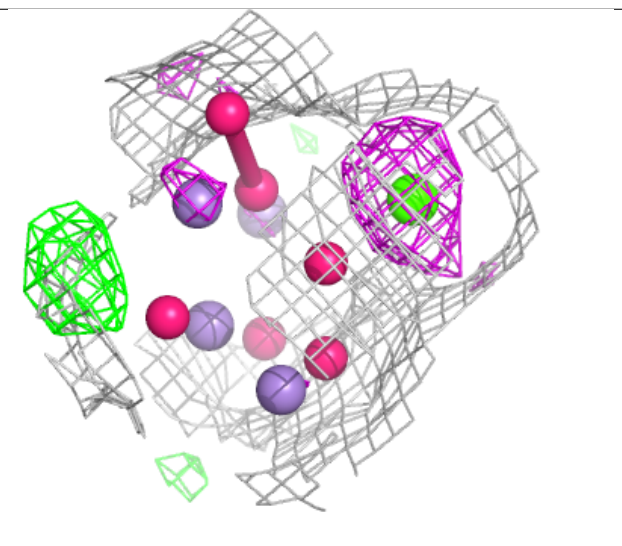
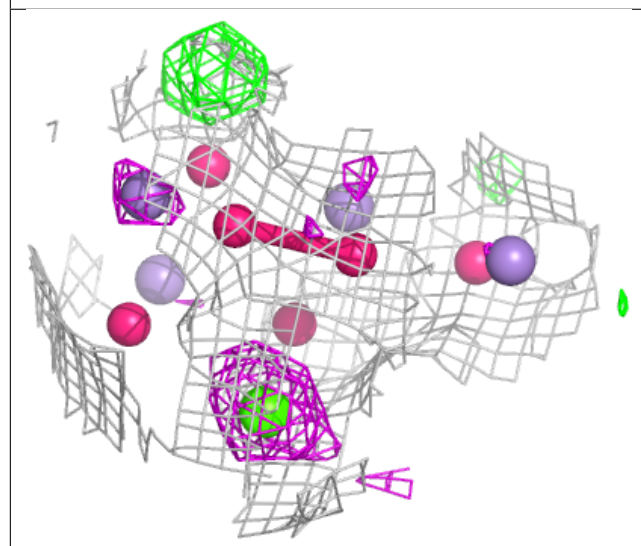
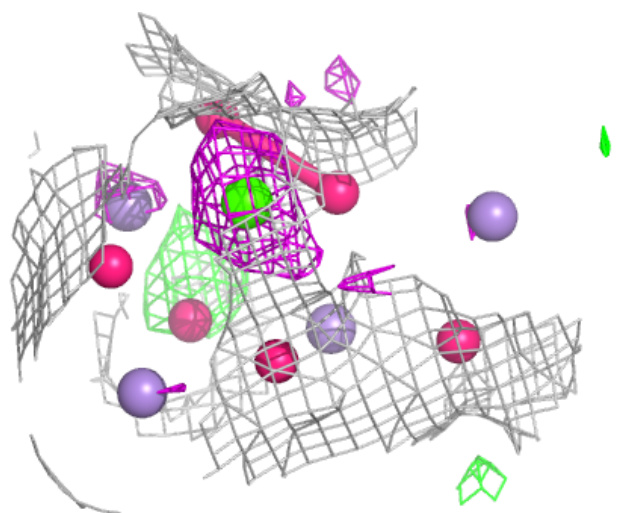
**Electron density around OEY a 601 (A):**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



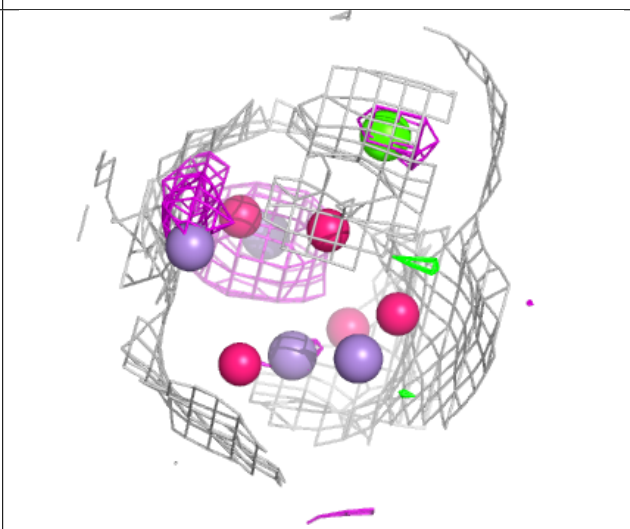
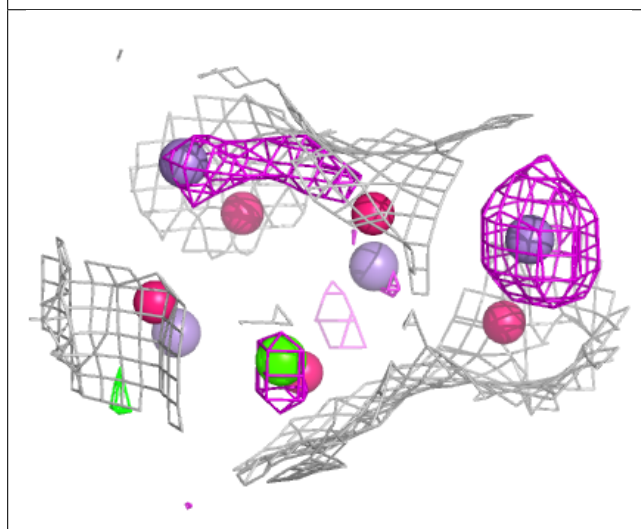
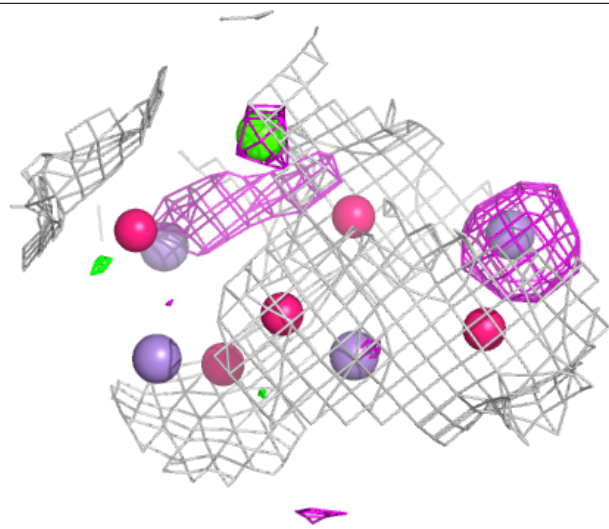
**Electron density around OEY a 601 (C):**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



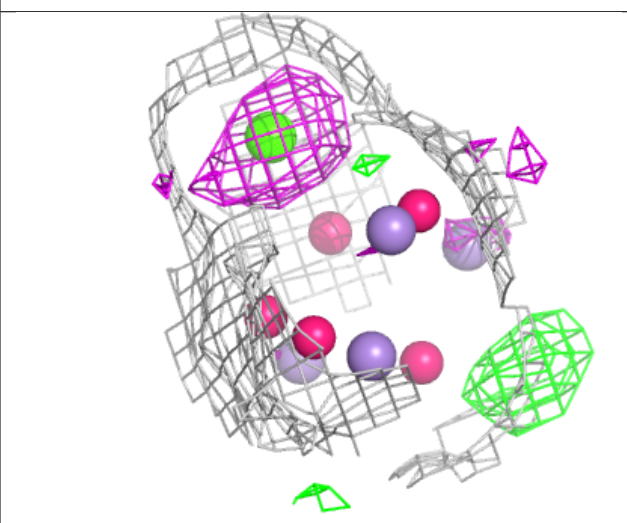
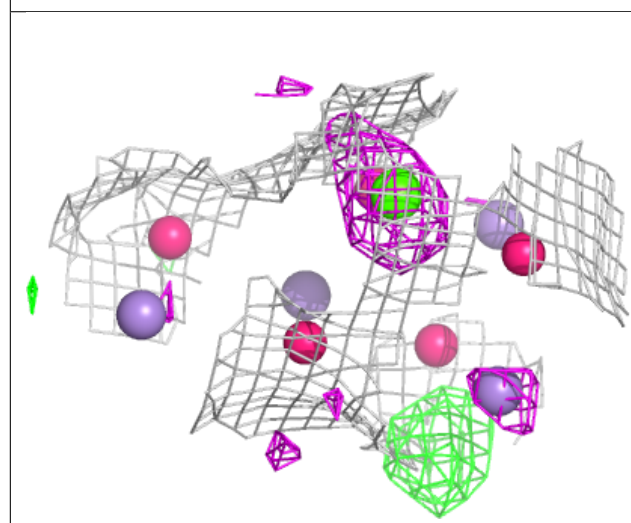
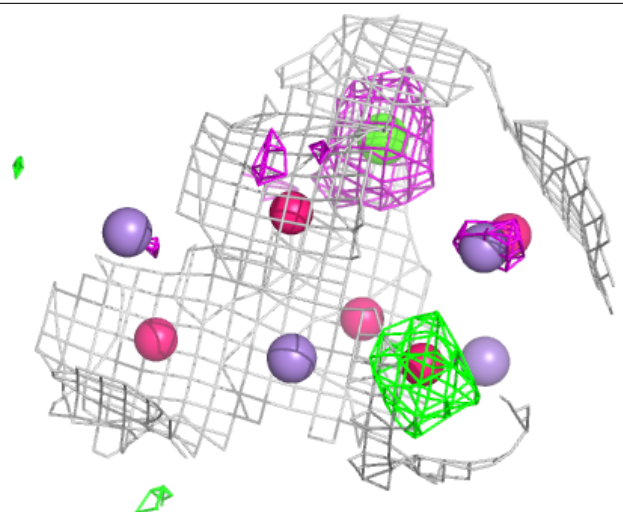
**Electron density around OEX A 602 (B):**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



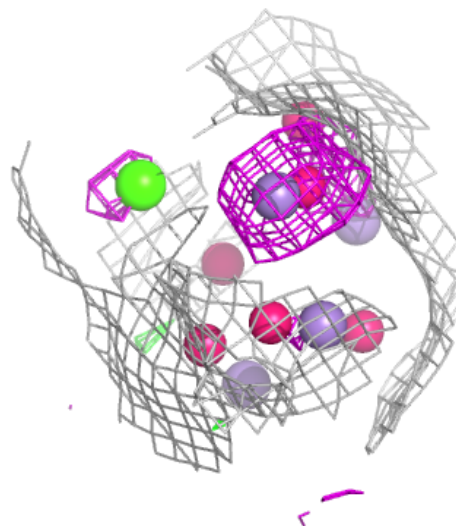
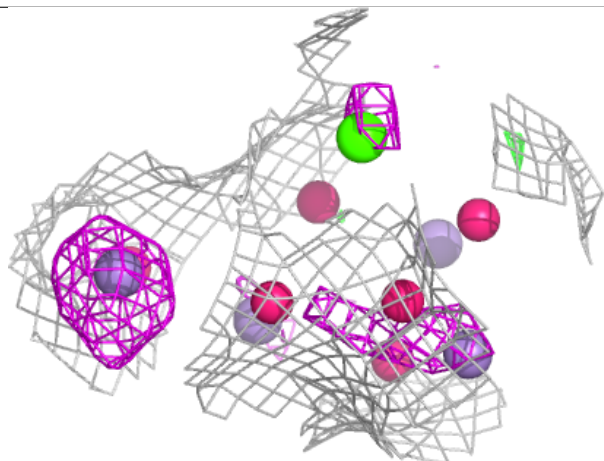
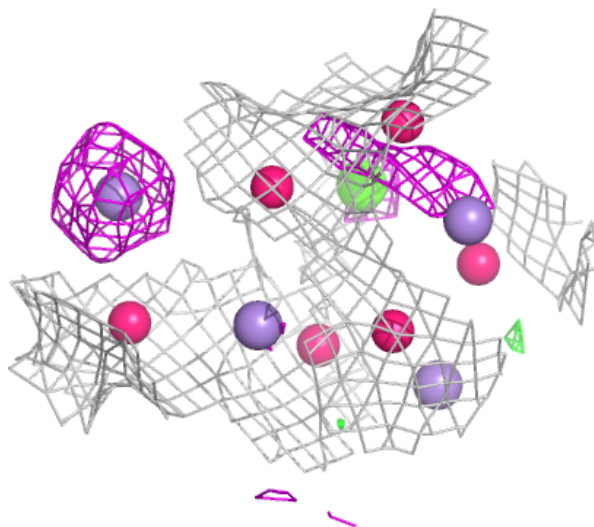
**Electron density around OEX a 602 (B):**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around OEY A 601 (A):**

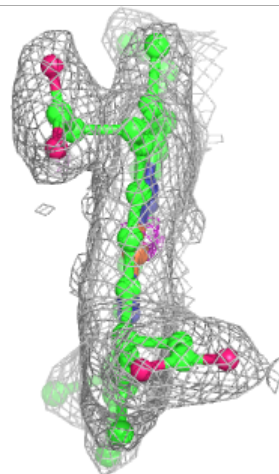
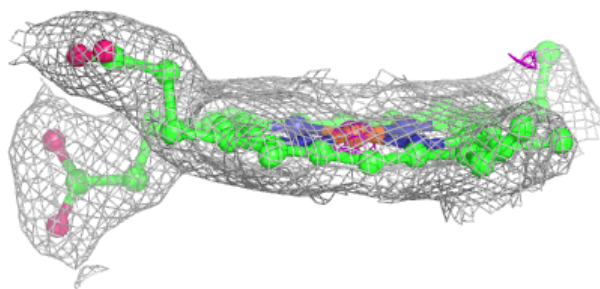
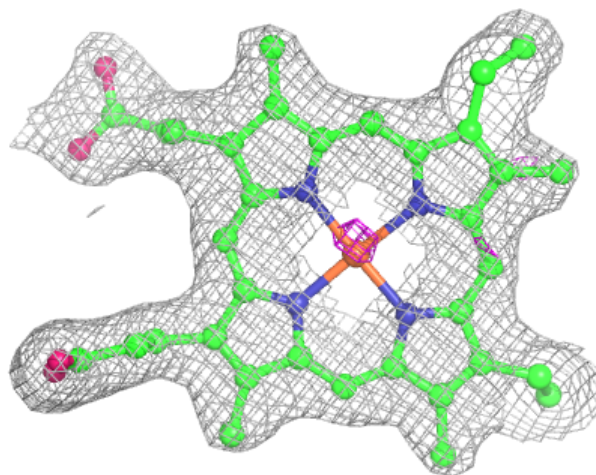
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

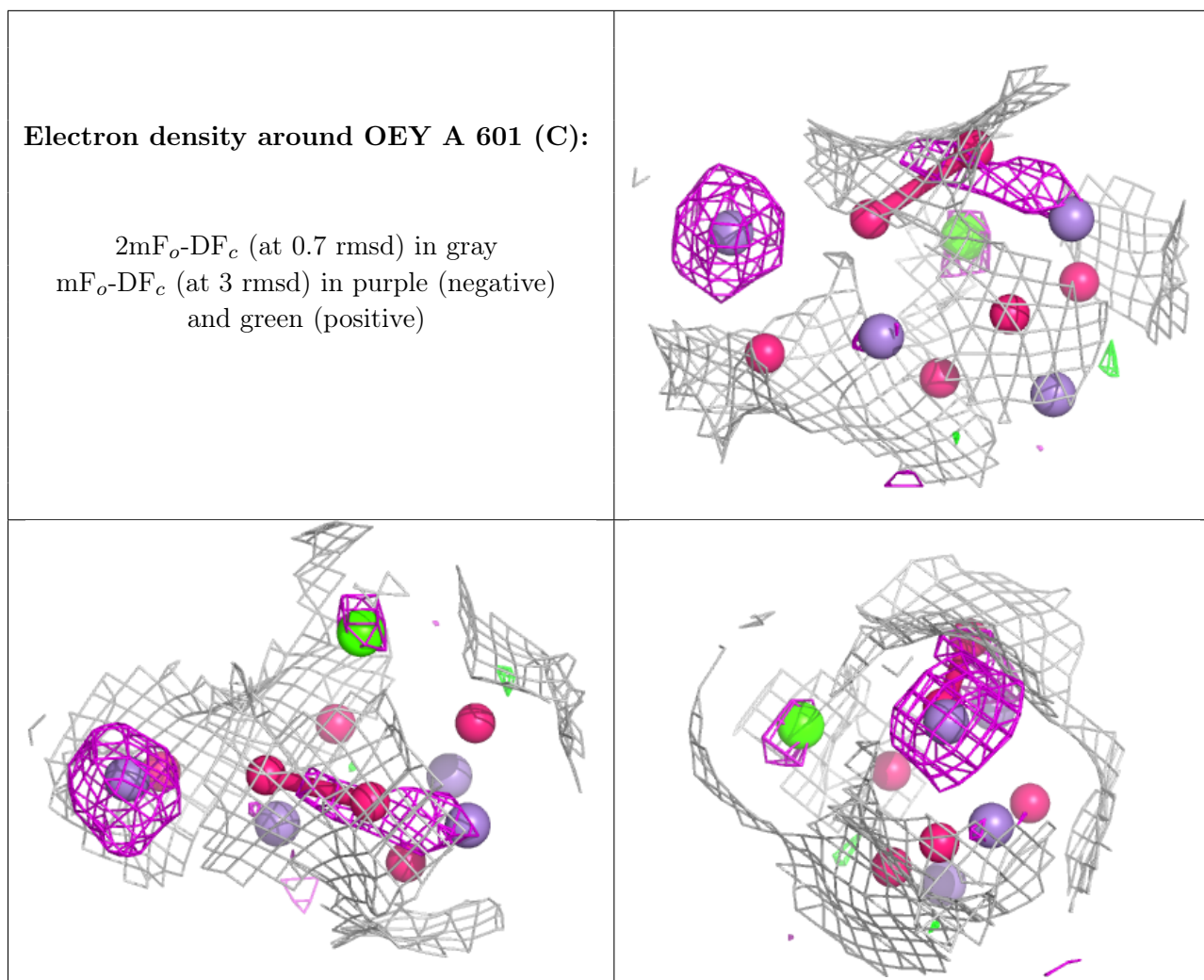




**Electron density around HEC V 201:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





## 6.5 Other polymers [i](#)

There are no such residues in this entry.